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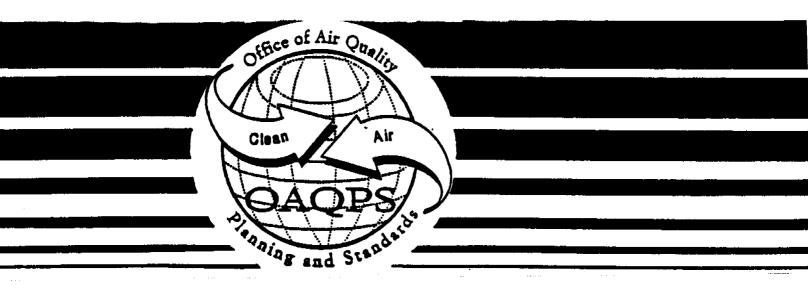


Final Report

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

Asphalt Plant C Los Angeles, California

Volume 8 of 8



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

EPA Contract No. 68-D-98-004 Work Assignment No. 3-02

Prepared for:

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May 2000

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	GLOSSARY OF TERMS
CEMS – Cont CTS – Calibra EMC – Emiss EMAD – Emi ESP – Electro FID – Flame I FTIR – Fourie HAP – Hazard	erican Society for Testing and Materials tinuous Emissions Monitoring System ation Transfer Standard ions Measurement Center ssion Monitoring and Analysis Division estatic Precipitator conization Detector er Transform Infrared Spectroscopy dous Air Pollutant thylene Chloride Extractable Matter

MRI – Midwest Research Institute PES – Pacific Environmental Services

PTE – Permanent Total Enclosure

RTFOT - Rolling Thin Film Oven Test

PM - Particulate Matter

RAP - Recycled Asphalt

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)

TRIANGLE LAUSS

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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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-d₅ and 1,4-dichlorobenzene-d₄. The surrogate standards reported are dibromofluoromethane, toluene-d₈, 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 0.3u 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

September 7, 1998 46297

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-d₈ 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.

Triangle Laboratories, Inc. Case Narrative

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

Sample Calculations:

Response Factor (RF) =

(area analyte) x (amt IS)

(area IS) x (amt analyte)

Amount (ug) =

(area analyte in sample) x (amt IS)

(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

Soud a Hull

Report Preparation Chemist

The total number of pages in this data package is $\frac{135}{135}$

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

Client Id:	TLUId:	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

			,		
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			0.157
Vinyl Chloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Bromomethane	0.116			11	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		0.002
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)
lodomethane	(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 Dilement of	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
1,2-Dibromoethane Chlorobenzene	(0.002)	(0.001)	(0.001)	(0.001)	(17.171711

()-Estimated Detection Limit

Page 1

Triangle Laboratories, Inc.

Savar v3.7

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

	FF	oject Summary 10	110,000 1020		
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 : TLI Id : Matrix : Units :	HW905 214-1-1A VOST ug	HW906 214-1-2A VOST ug	HW901 214-1-2B VOST ug	HW907 214-1-4A VOST ug	HW902 214-1-4B VOST ug
	1.752	1.292	(0.001)	0.808	(0.001)
Ethylbenzene		***************************************	0.901	4.068	(0.001)
m-/p-Xylene	10.364	7.039	#600\$400001000000000000000000000000000000	20000000000000000000000000000000000000	(0.001)
o-Xylene	2.951	2.084	(0.001)	1.203	
Styrene	(0.001)	(0.001)	0.002	(0.001)	0.001
Bromoform	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
	(0.003)	(0.002)	(0.001)	(0.001)	(0.001)
2-Hexanone	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Cumene 1,1,2,2-Tetrachloroethane	•	(0.001)	(0.001)	(0.001)	(0.001)

()-Estimated Detection Limit

Page 2

Savar v3.7

Client ID:

VOSTBLK090

498

Filename:

HW897

TLIId:

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	e (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

Page 3

8

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

Page 4

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

()-Estimated Detection Limit

Page 1

Client ID:

VOSTBLK090

498

Filename:

HW897

TLI Id:

VOSTBLK09049

Matrix :

VOST

Units:

ug

1,3-Butadiene

(0.001)

Vinyl bromide n-Hexane

(0.001)0.001

1,2-Epoxybutane

(0.034)(0.001)

Iso-Octane Ethyl acrylate

(0.001)

Savar v3.7

TRENTELE LIVES

DOCUMENT CONTROL

Triangle Laboratories, Inc. 801 Capitole Drive P.O. Bo Durham, NC 27713-4411 Resear 919-544-5729 Fax 4.9

es, Inc. P.O. Box 13485 Research Triangle Perk, NC 2770 Fax 8 919-544-5491

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

Received for Lab by.	Date 11me 1		Relingvished by:	Relinquished
Received by:	Date Time		by	Relinquished by:
				-
				,
		Tunnel Run 1 Set 4	7/24/98	T-V-1-4-R
	-	Tunnel Run 1 Set 4	7/24/98	1-V-1-3-6
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Tunnel Run 1 Set 3	7/24/98	I-V-1-3-A
	<u></u>	Tunnel Run 1 Set 2	7/24/98	I-V-1-2-B
	-	Tunnel Run 1 Set 2	7/24/98	r-V-1-2-A
		Tunnel Run 1 Set 1	7/24/98	1-V-1-1-B
		Tunnel Run 1 Set 1	7/24/98	S-V-1-4-B
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Silo 2 Run 1 Sel4	7/24/98	S-V-1-41A
	1 *	Silo 2 Run 1 Set3	7/24/98	S-V11-3-B
	7	Silo 2 Run 1 Set3	7/24/98	A-1-1-V
		Silo 2 Run 1 Set2	7/24/98	Q-V-1-2-R
	<u> </u>	Silo 2 Run 1 Set2	7/7/198	5-V-1-1-0
	→	Silo 2 Run 1 Set1	7/7//08	S-V-1-1-X
		Silo 2 Run 1 Set1	<u> </u>	O V 4 A
	Number of withite Containers organics	Sample	Collection	Sample
Analytical Request				

• }

Chain of Custody Sample Tags Sample Tag Number	Costody seal Container. Chain of Custody : Present Sample Tags : Absent Sample Tag Numbers: Not Listed on Chain of Custody	: 5	Intact , (Ma	Clie	Client: PES03 - Pa	Pacific Environmental Services	ronmental Se	rvices	214
SMO Forms			4	1 C 118	MIN JA	Date	Received	07/25/98	8 By	Khr	Page
Ice Chest		ICE/ICE PACKS Temp	6.0 C	, "	4	Carr	Carrier and Number	er FedEx/),		1
TLI Number mR/H:CPM.	Client Sample ID	Location	To IAB Date/Init	To STORAGE Date/Init	To IAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To IAB Date/Init	To STORAGE	DISPOSED Date/Init
214-1-17	S-V-1-1-N	TENAX									
214-1-1B	S-V-1-1-8 S-V-1-1-8	RO3/XITI									
214-1-2A	S-V-1-2-A S-V-1-2-A	TENAX ROJ									******
314-1-2B	S-V-1-2-B S-V-1-2-B	THX/CHAR									
214-1-3A	S-V-1-3-A	TENAX R03									
214-1-38	S-V-1-3-B	TNX/CHAR									
214-1-47	S-V-1-4-A S-V-1-4-A	TENAX									
214-1-4B	S-V-1-4-B S-V-1-4-B	THX/CHAR									
214-1-5A	S-V-1-3-A (Typed label) S-V-1-3-A (Typed label)	TENAX R03									
214-1-58	9-V-1-3-B (Typed label) 9-V-1-3-B (Typed label)	THX/CHAR									· · · · · · · · · · · · · · · · · · ·
214-1-6A	T-V-1-1-A T-V-1-1-A	TENAX RO3									
214-1-6B	/ T-V-1-1-B T-V-1-1-9	THX/CHAR									·
214-1-7A	I T-V-1-2-A T-V-1-2-A	TENAX RO3									
214-1-7B	T-V-1-2-B	TNX/CHAR					-				
Receiving Remarks:	p 2	set of samples labelled S-V-1-3-A ϵ S ² V-1-3-B arrived ID'S were hand rinted on 1 set and Typed on the other.	. S-V-1-3-8 a	rrived.ID'S	were hand						
Archive Remarks:	emarks:		Form Po	Form Prvised 05/27/1997		Page 1 OF 2					

Custody Seal Chain of Custody		. 0	Intact			CIT	Client: Pasos -	PACIFIC ENV	ENGITTE PHATECONNECTOR		7-22
Sample Tags :: Sample Tag Numbers:	; Absent 1: Not Listed on Chain of Custody ; N/A	hain of Custody	-			Date	Received	07/25/98	B By	Long	L Page
Ice Chest		ICE/ICE PACKS Temp	6.0 C			Car	Carrier and Number	er FedEx/	77	ìl	- 1
: :	.Client Sample ID	* Location	To IAB Date/Init	To STORAGE Date/Init.	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To IAB Date/Init	Date/Init E	Date/Init
	T-V-1-3-A T-V-1-3-A	TENAX RO3									-
214-1-8B	T-V-1-3-B T-V-1-3-B	THK/CHAR									*
214-1-9A	T-V-1-4-A T-V-1-4-A	TENAX RO3					+				-
214-1-9B	T-V-1-4-B T-V-1-4-B	THX/CHAR					+				
-											
									- 		
											• • • • • • • • •
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Receiving Remarks:		2 set of samples labelled S-V-1-3-A & S-V-1-3-B arrived.ID`S printed on 1 set and Typed on the other.	& S-V-1-3-B ther.	arrived.ID`S	were hand						
Archive Remarks:				5 77/1097		Page 2 OF 2					

16

1718617	1. Co . 2. 20	16711:36	18:01 PUM	1/68 10:06	14/28/25-17	Hhx 08:29	1/4 kyns 46	4/58 05:1B	13/18/18:30	73/18 17:48	// Date** Time**	VS1-76-22	Internal / Surro	2624	Column Type	
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7. 1.1.10	12.46. 1 12.46. 1	12-19-7(CV	1 - 2 - 3 (-3) (A)	87/1/2.04.2 2.04.2	25/1/28	13/11/20 S	35-100-Kd	12-36-5	3/14/68	1 41/18 1	Sample# C	24 - (VO-1	Standards Internal / Surrogal	056	mn #	
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SRVP4\APMSPLY.FIRUNLOG.DOC (10/16/97)

Volatile Data Only

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Transcribed Data

*** Dated Signature/Initials Required

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Transcribed Data	46297 214-1-4B S-V-1-4-B T/C	46297 214-1-28 5-V-1-2-B TIC	46297 214-1-18 SV-1-1-B TIC	46323 21427.128 5-V-3-3-8 F/C	214-27.48 5-4-2-4-8 T/C				5	p. 4/16/48 VOSTOU SO TITC	Client ID	the applied to was	Internal / Surrogate / Recovery	ahra ahra			
ed D	1	1	1-	1-3	1-2-	VOSTBIK TITC	Vor BIK TITC	1051B1K 1/1C	VOIDOIS TIFC	2003		0)	gale		4260	A I	
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Dated Signature/Initials Required	N/R	~ ~ ·	2	NA	7	2/10	N/A	NA LA AVGY	MA	Wh	뭐			ļ			
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Volatile Data Only

SRVHANAPWISHLYLRRUNLOG.DOC (10/18/97)

17

Ve Page 30	MFT-Maisture from tube	Required	Dated Signature/Initials	Transcribed Data	-	* Volatile Data Only	3 *
-							
	4						
	1	W/a In 5/4/58	Alv Losma	5-V-1-4-A T	46297214-1-44 5-V-1-4-A T	16 32:01 H	1
	Idner with	WA Sil Olika	HW506 N/A "		1 V-2-1-1-5 V2-1-110 L629TF 72.16 XXA	TO TO RIA	$\overline{}$
	IN MET SHAN	Mr Sol 9/4/48	HWGOS NA	S-V-1-1-AT	1/98 20:57 46297 244-1-1A S-V-1-1-A 7	1/98 DU: 57 Hb	2 2
NATT reduced is the civile	Litt of All	In apply	HWGOY NA	214-27-121 5-V-3-3-A T	323 214-27-121	MGK 20:21 46323	
Mastire From tube the	A Mashine F	1 ship 18	HW 903 NA	16323 45-V-2-4A T		1 1259/ 12:38 Me25	
•	Signature Date Backup* Proc Comments***	Operator/Date Backu	Filename pH*	Client ID		Older Time Project	
Physp	C. Shoull	Marie		est 5/16/28/02544/ml	report	- I	_
Circle unit	Extract / Sample volume	Extract / S	Analyte	Standards Internal / Surrogate / Recovery	4-1	Internal / Surrogate / Recovery	
224 QX	82606	W/3	VOA	8160	2017036	27074	
Other* •	Find DBs*	GC Method*	Method	Analysis*	Column #	Column Type	
- ₁₈	6		Hun Log				
3		iic.	Dim I -	•			

TRIGINGE SIES

SAMPLE DATA

Triangle Laboratories, Inc.

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

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

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
Pentafluorobenzene	ug			ug	ug
Chloromethane		IS 1	5.04		
Vinyl Chloride	0.025	J	0.96		0.05
Bromomethane		U		0.001	0.05
Chloroethane	0.022	J	1.46		0.05
		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0,05
1.1-Dichloroethene		U		0.001	0.05
lodomethane	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	
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone	0.003	J	4.50	0.001	0.05
Chloroform	0.001	J	4.75		0.05
1,1,1-Trichloroethane		Ŭ	•••	0.001	0.05
1.4-Difluorobenzene		IS 2	5.77	0.001	0.05
Carbon tetrachloride		U	7.77	0.001	
Benzene	0.027	J	5.24	0.001	0.05
1.2-Dichloroethane	3.0 2 ,	U	J.47	0.001	0.05
Frichloroethene		U		0.001	0.05
.2-Dichloropropane		U		0.001	0.05
• •		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit 1S: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.

20

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

Project Number: 46297 Sample File: HW897 Method 8260 VOST Sample ID: VOSTBLK090498

Client Project: Hotmix TLI ID: VOSTBLK090498 Date Received: 11

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit	Quan. Limit
	ug			ug	ng
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 _s		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		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

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 (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.280	4.91	1	C 1 T
Toluene-d	0.273	7.64	2	109
4-Bromofluorobenzene	0.314	12.22	2	126

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

Project Number: 46297 Sample File: HW897

Method 8260 VOST Sample ID: VOSTBLK090498

Client Project: Hotmix TLI ID: VOSTBLK090498 Date Received: 11

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	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	Ī	3.64		0.25
		ប		0.034	0.25
1.2-Epoxybutane Iso-Octane		บ		0.001	0.25
1,4-Difluorobenzene		IS 2	5.77		
Ethyl acrylate		U		0.001	0.25

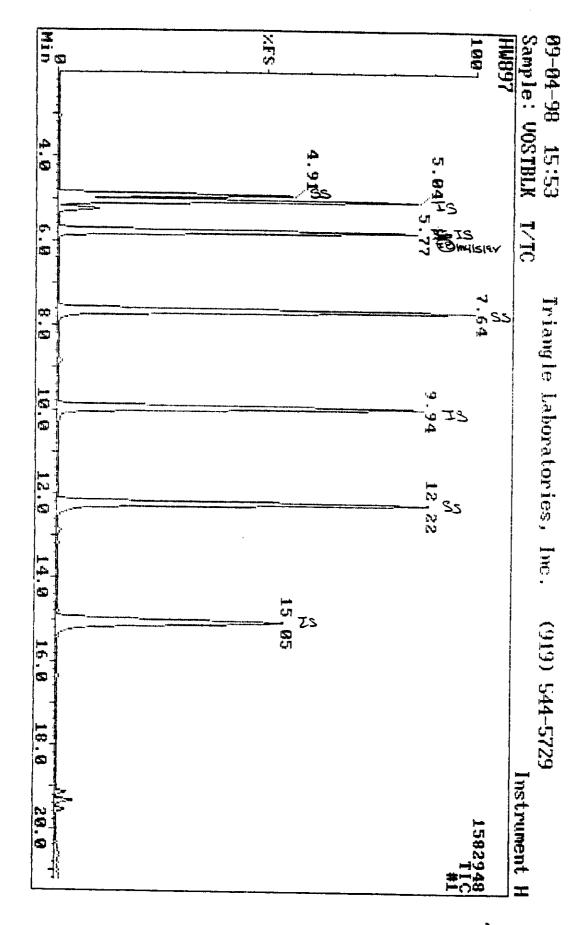
Date 9/5/96 Reviewed by

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: //_ Date: 9/5/98

No.				Delta	Area	P.Flags	RT	QM 	Name
1	100	85	99	-2 -2	3670831	bv	5.04		Pentafluorobenzene
	100	96	98	ō	4037552		5.77		1,4-Difluorobenzene
	100	95	96	-1	3878054		9.94		Chlorobenzene-d5
	100	79	98		1886261		15.05	152	1,4-Dichlorobenzene-d4
5	100	97	99		1823460		4.91		Dibromofluoromethane
ر خ	100	92	97				7.64		Toluene-d8
7	100	89	93				12.22		4-Bromofluorobenzene
8	0	Ő	, o)	0.00		Dichlorodifluoromethane
9	98	74	82			2 bv	0.96		Chloromethane
10		Ö	C			כ	0.00		Vinyl Chloride
11		91	96			o bv	1.46		Bromomethane
12		ō	Ċ			0	0.00	64	Chloroethane
13		Ô	Ċ			0	0.00		Trichlorofluoromethane
14		ő	Ç			0	0.00	_	1.1-Dichloroethene
15			84			2 bb	2.56		Iodomethane
16			77			<u>a bb</u>	2.56 FP		Carbon disulfide
17			86			0 A	2.64		Acetone
19						o	0.00		Arlyt chloride
19	_		90			4 bb	3.04		Methylene chioride
20)		o	0.00	53	Acrylonitries
21		-) (0	0.00		trans-1,2-01chioroethene
22		-		_)	o	0.00	తచె	1,1-dichiordethame
23		_)	0	0.00		Vinyi acetate
24						Ð	0.00		2.2-blohlonophopane
29				-		0	0.00		cis-1.2-Dichrorpethene
20	_					14 bb	4,50		2-Butanone
2		_				14 by	4.75		Chloroform
28			_		0	0	0.00		Bromochioromethane
2				-	0	0	0.00		1,1.1-Trichioroethane
3		Ó			o	0	0.00		Carbon tetrachloride
3.		5 0		o (0	0	0.00		1.1-Dichloropropene
3:		-				36 bv	5.24		8enzene
3		-			Ö	0	0.00		1,2-Dichloroethane
3) (0	ō	0.00		Trichloroethene
3		o c			0	0	0.00		1,2-Dichloropropane
		o d		-	0	0	0.00		Dibromomethane
) (Ó	0	0.00	41	. Methyl methacrylate
		-	5		0	0	0.00		8 Bromodichloromethane
		_)		0	0	0.00		cis-1.3-Dichloropropene
	ó 4:			6	0 232	88-bb	7.83 F		4-Methyl-2-pentanone
	1 8			38	1 473	40 bb	7.74	92	2 Toluene
			5		0	0	0.00	75	trans-1,3-Dichloroproper
			0	Ō	0	0	0.00	97	1,1,2-Trichloroethane
			Ô	Ó	0	0	0.00	69	Ethyl methacrylate
		7 5		88		36 bb	8.55	164	1 Tetrachloroethene
			0	0	Ō	Ö	0.00		3 1,3-Dichloropropane
			Ō	Ó	0	0	0.00	43	3 2-Hexanone
			o .	Ö	0	0	0.00		9 Dibromochloromethane
		•	Ŏ	Ō	0	0	0.00		7 1,2-Dibromoethane
		-	Ō	Ö	0	0	0.00	112	2 Chlorobenzene
•		-							

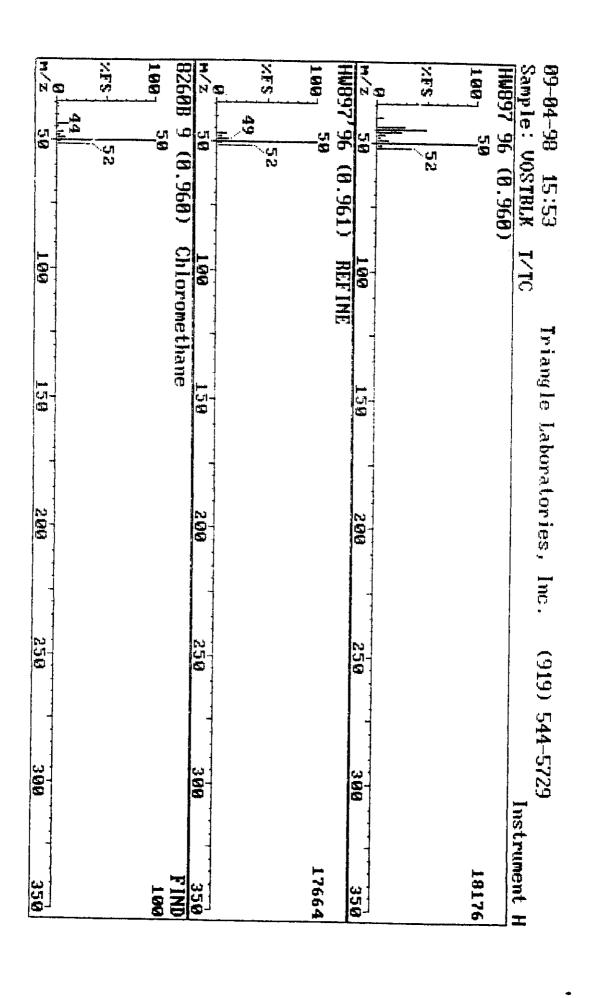
Data Review: YR Date: 915198

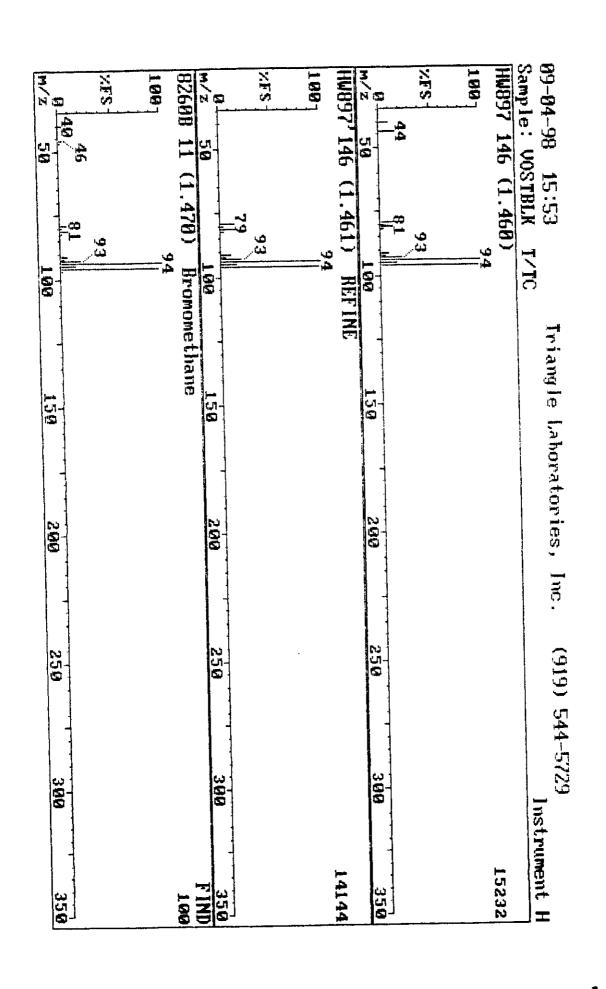
No.	MAT	FOR	REV	Delta	Area	P.F1	.ags	RT	QM	Name -
51	0	0	0	0	0		-	0.00	131	1.1,1,2-Tetrachloroetha
52	43	21	52	2	2740			10.29	106	Ethylbenzene
53	72	55	66	2	11892			10.53		m-/p-Xylene
54	62	53	55	4	6024			11.24		o-Xylene
55	69	64	64	5	23120	Α		11.28		Styrene
56	_0	0	O	0	0			0.00		Bromoform
57	74	62	62	3	15420	þν		12.01		Cumene
58	0	0	0	0	0			0.00		1,1,2,2-Tetrachloroetha
59	65	33	73	1	13000	A		12.42	156	Bromobenzene
60	-0	0	O	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			12.22	75	trans-1,4-Dichloro-2-bu
63	84	67	78	3	10632			12.90	126	2-Chlorotoluene
64	79	68	71	4	14408			13.13		4-Chlorotoluene
65	56	39	55	2	18488			13.31		1,3,5-Trimethylbenzene
66	72	59	59	O	15250	Α		14.06	112	tert-Butylbenzene
67	85	70	70	l	43296	A		14.22		1,2,4-Trimethylbenzene
68	74	56	66	0	24988	Α.		14.71	105	sec-Butylbenzene
69	0	0	0	0	Ó			0.00	119	p-Cymene
70 	92	70	81	1	37788	A		14.82		1,3-0ichtorobenzene
71	0	0	0	0	67324 0	m	15.	130-00/	146	1,4-Dichtorobenzene
72	0	0	i)	O	0		Mals198	0.00	91	Benzyl chronide
73	68	52	60	2	22716	A		16.84		n-Butylbenzene
74	31	63	75	3	53176	A		16,30	146	1,2-0ichlorobenzene
75	0	0	0	0	0			0.00	75	1,2-Dibromo-3-chloropro
76	96	91	92	6	\$5508			19.12	180	1,2,4-Trichlorobenzene
77	62	23	90	6	14016	bb		19.33	225	Hexachlorobutadiene
78	96	38	91	5	120696	A		19.32		Naphthalene
79	88	77	87	6	41368	bν		19.53		1,2,3-Trichlorobenzene

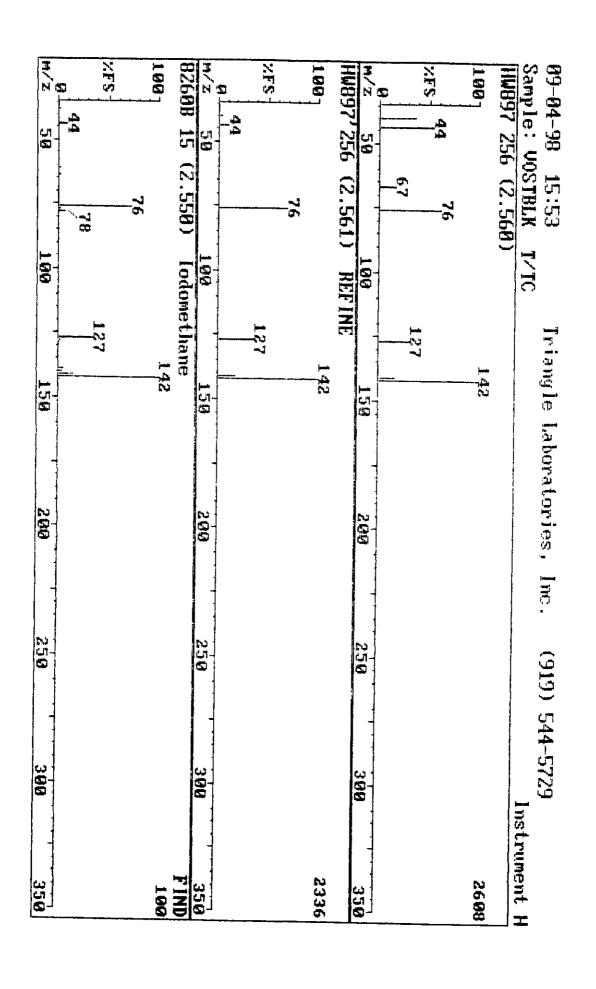
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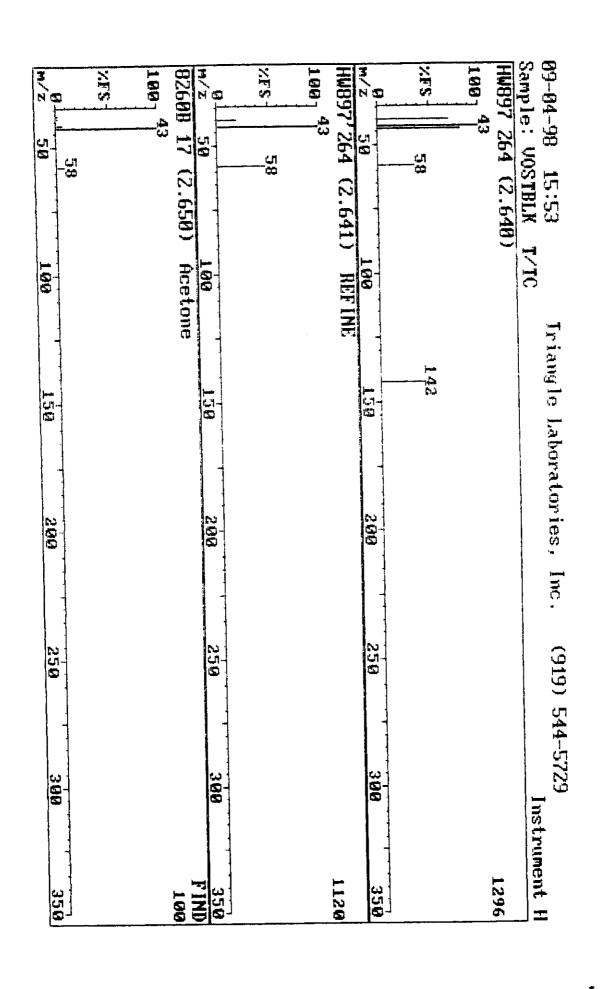
LAB-BASE QUAN

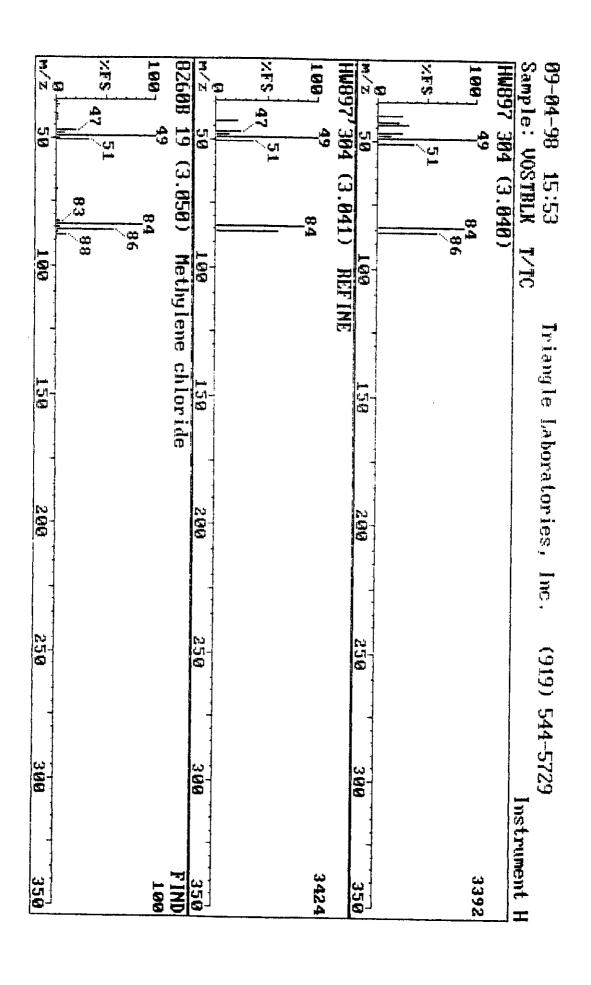
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	MO	Name
1 2 3 4 5 6 7 8 9 10 11 12	100 100 100 100 100 100 0 0 64	85 96 95 79 97 92 89 0 0	99 98 96 98 99 97 93 0 0 0	0 1 -2 3 1 -1 -1 0 0	3670831 4037552 3878054 1886261 1823460 4689891 2576768 0 0	b v b v b v b v b v b v b v b v b v b v	5.04 5.77 9.94 15.05 4.91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

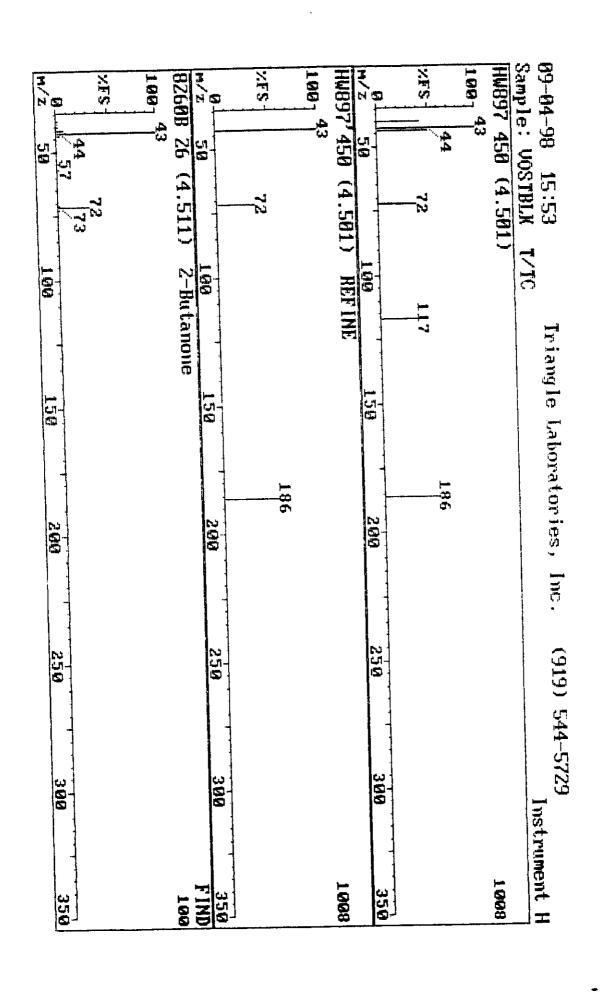


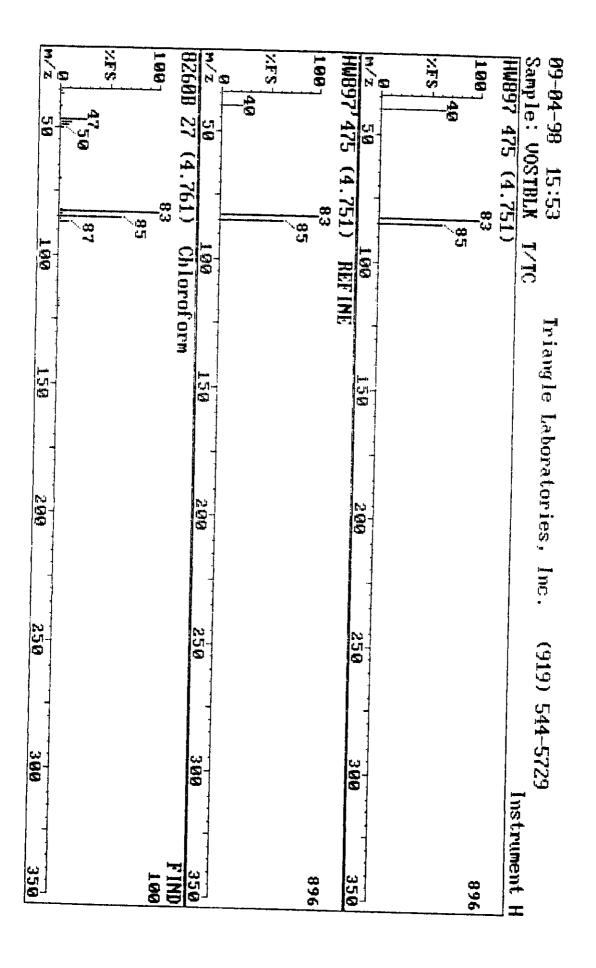


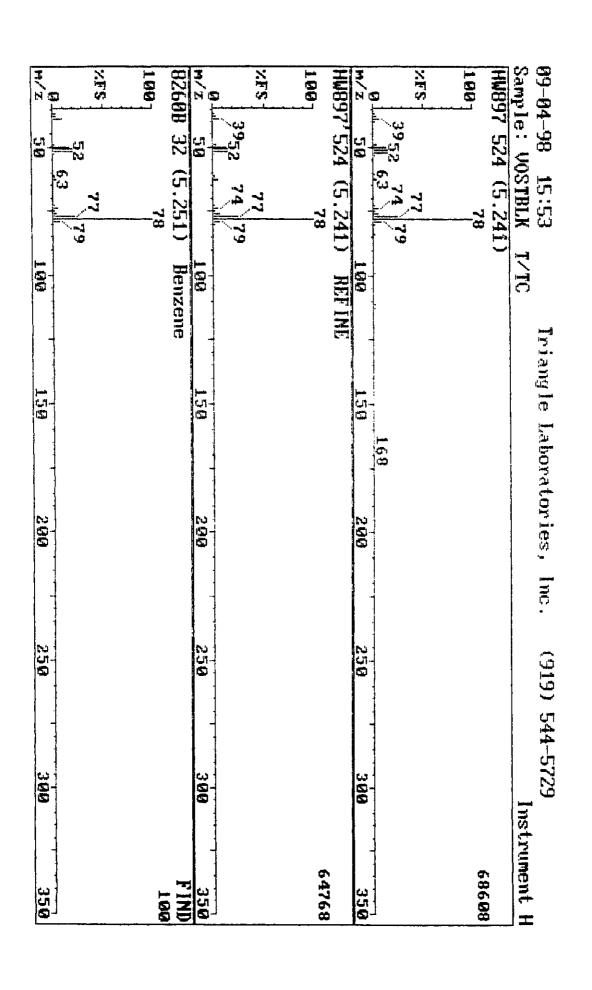


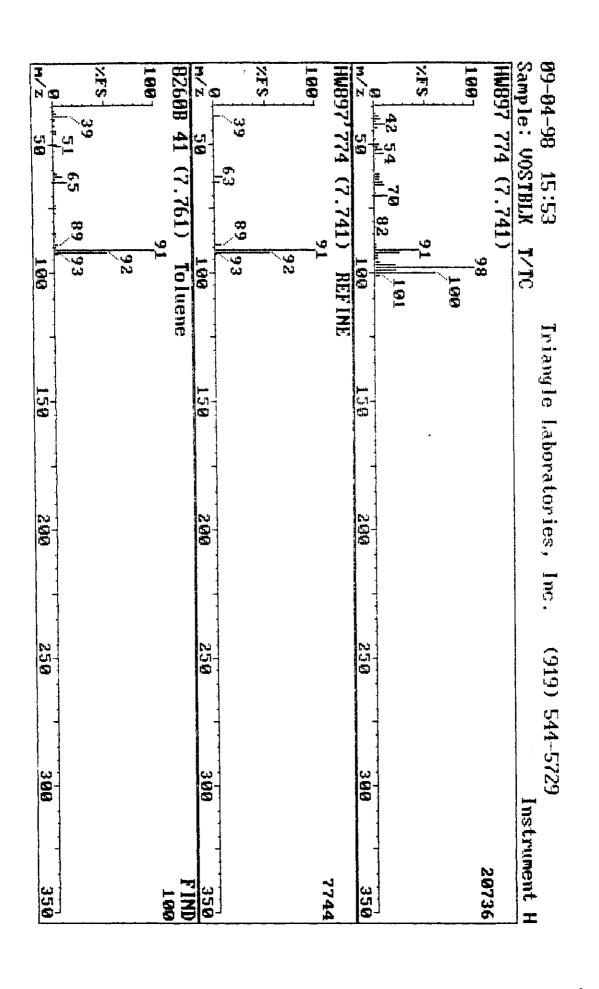


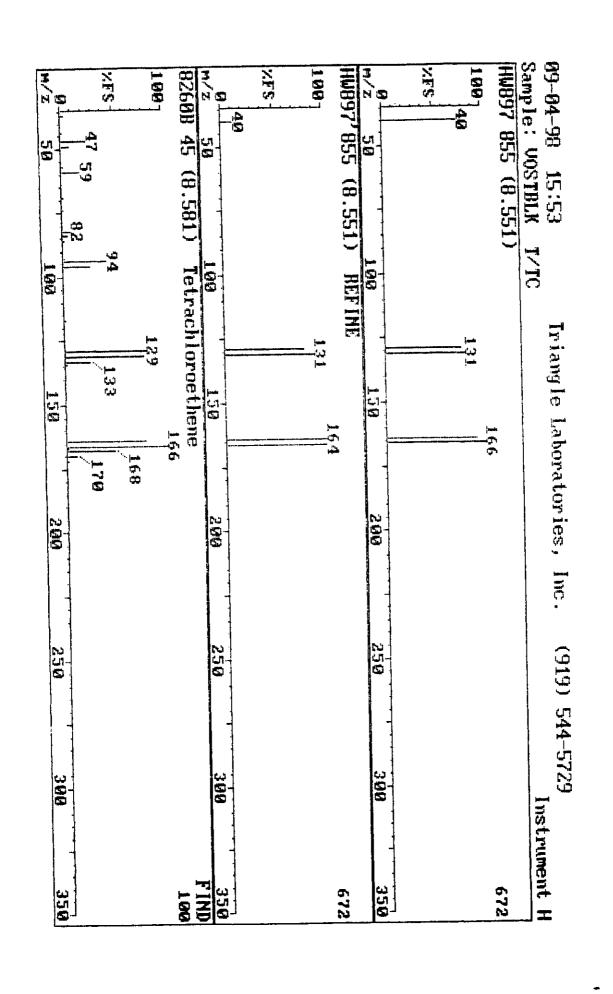


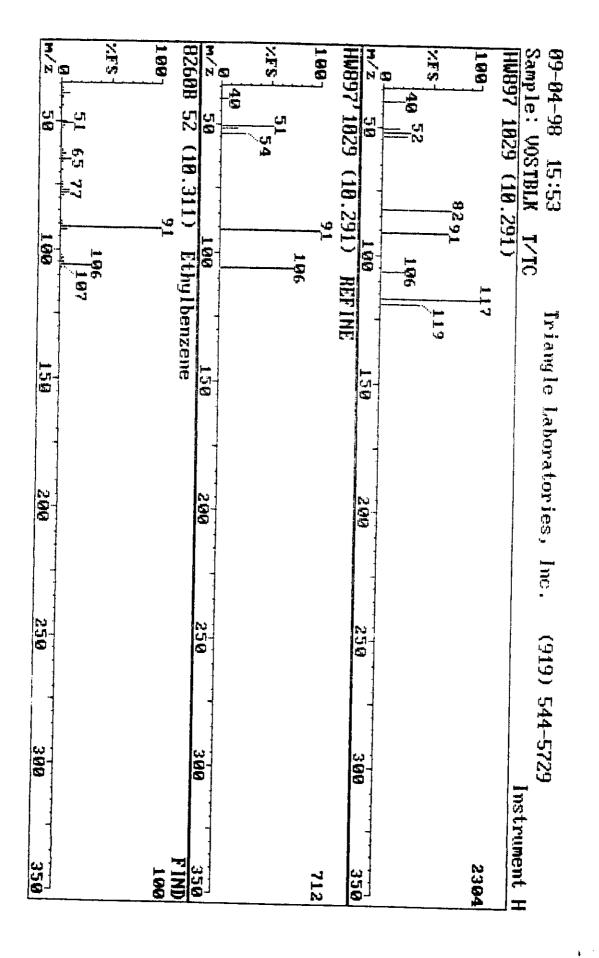


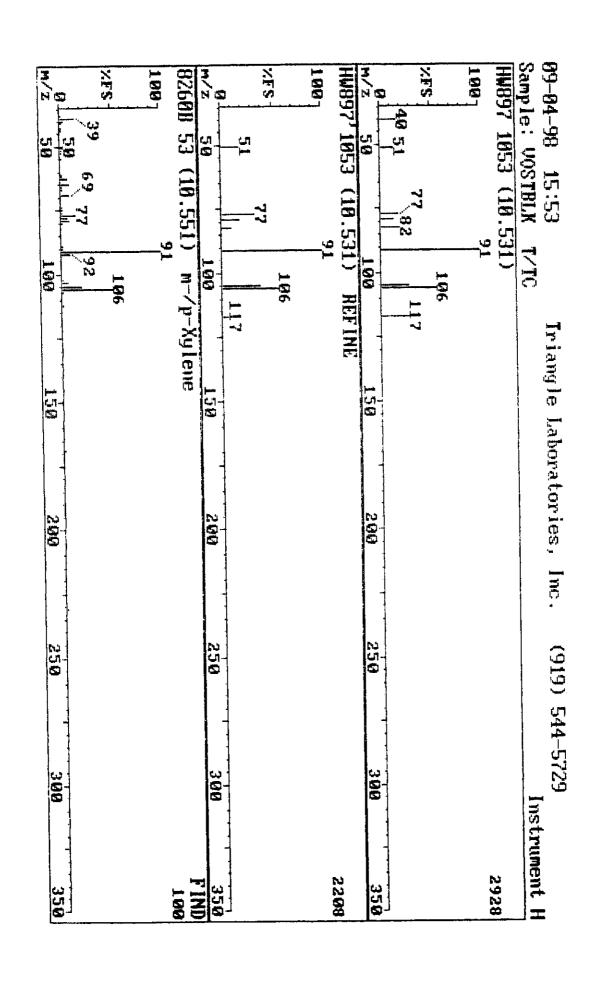


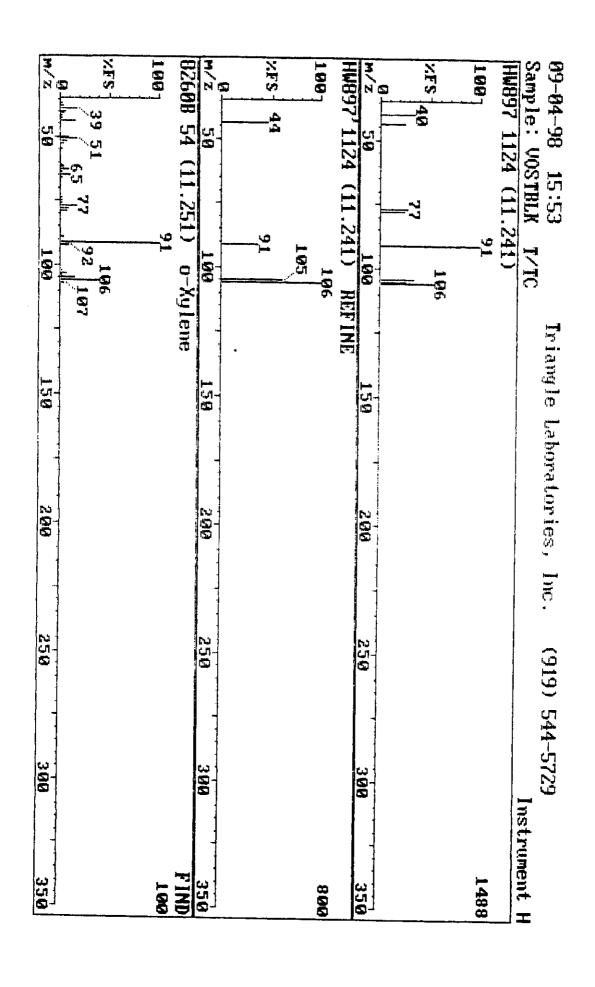


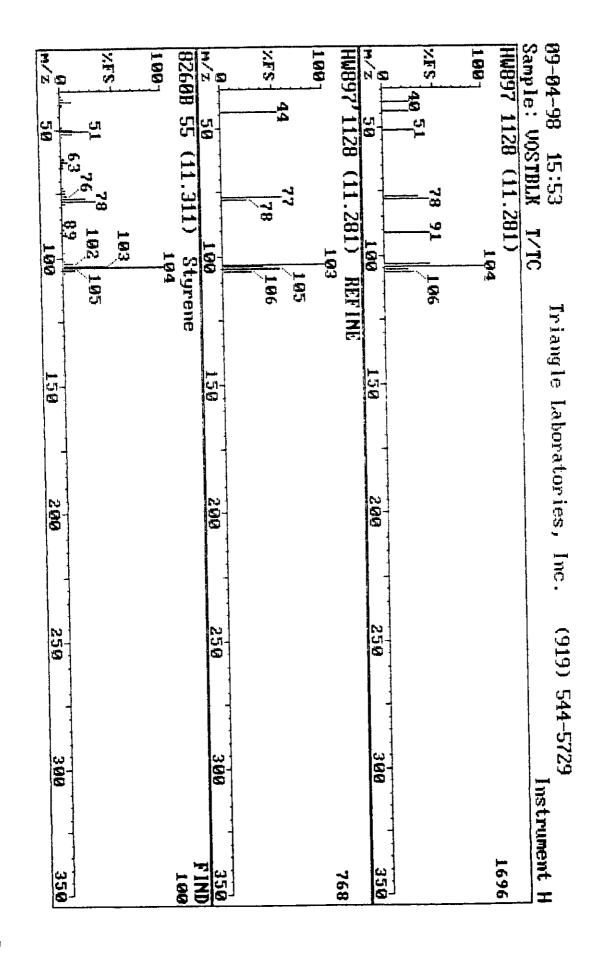


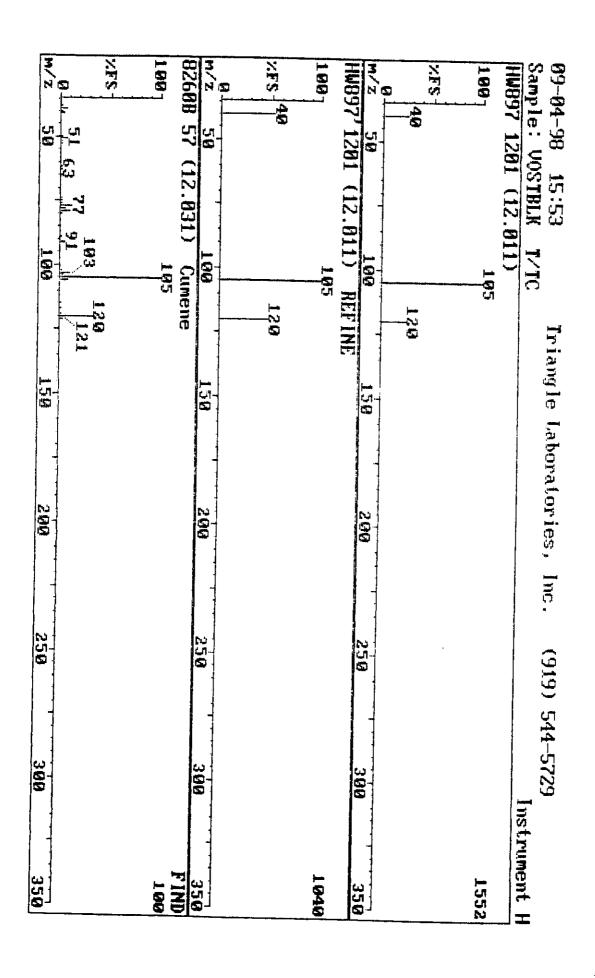


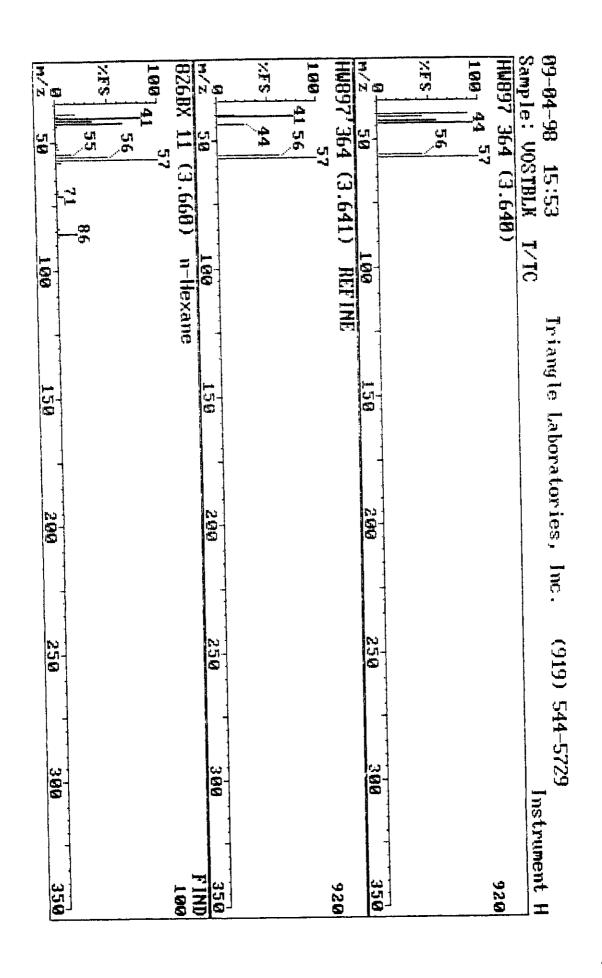












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Project Number: 46297 Sample File: HW905

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

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

Date Received: 07/25/98

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
Pentafluorobenzene	ng	IS 1 Low	5.05	ug	ug
Chloromethane	0.363	B	5.05		
Vinyl Chloride	0.505	U	0.96		0.05
Bromomethane	0.116	В		0.001	0.05
Chloroethane	0.116	ь U	1.46		0.05
Trichlorofluoromethane				0.001	0.05
1.1-Dichloroethene		U		0.001	0.05
Iodom: chane		Ü		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.670	U		0.001	0.05
Allyl chloride	0.670	В	2.62		0.05
Methylene chloride		Ŭ		0.001	0.05
Acrylonitrile		Ŭ		0.001	0.05
rans-1,2-Dichloroethene		U		0.008	0.05
1.1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
tis-1.2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.001	0.05
Chloroform		U		0.002	0.05
J.1-Trichloroethane		U		0.001	0.05
.4-Difluorobenzene		U		0.001	0.05
		IS 2 Low	5.79		****
Carbon tetrachloride		U		0.001	0.05
enzene	1.206	BE	5.25		0.05
,2-Dichloroethane		U		0.001	0.05
richloroethene		U		0.001	0.05
.2-Di- iloropropane		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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801 Capitola Drive • Durham, North Carolina 27713 Phone: (919) 544-5729 • Fax: (919) 544-5491

Printed: 13:41 09/07/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit	Quan. Limit
analyse	ug			ug	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 _s		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		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

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

Response File: ICALH904

Date Analyzed: 09/04/98

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

VR 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

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

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

Response File: ICALH904

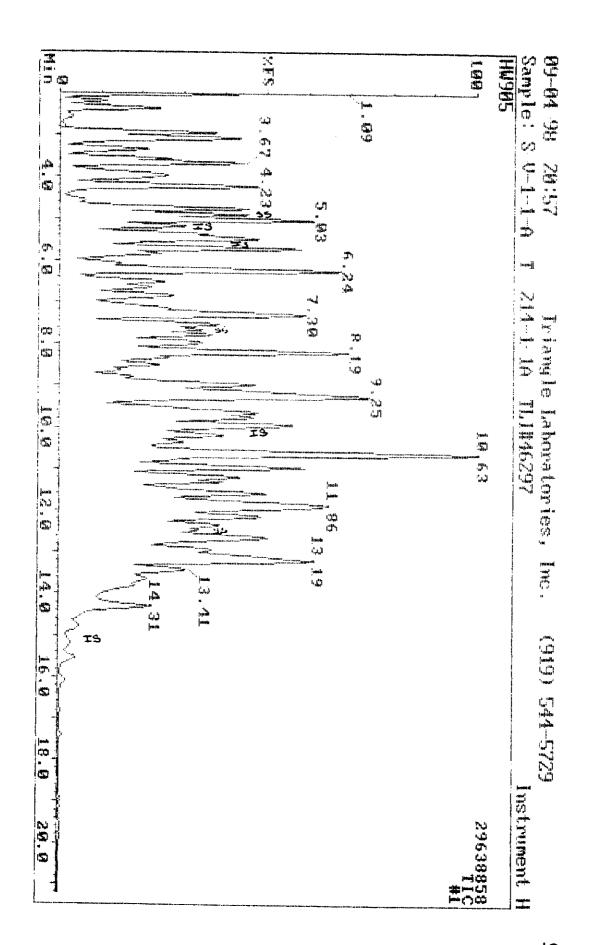
Date Analyzed: 09/04/98

Analyte	Amount	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
, and the second	7.610	BE	3.67		0.25
n-Hexane	, , , , ,	U		0.065	0.25
1,2-Epoxybutane		U		0.001	0.25
Iso-Octane		IS 2 Low	5.79		
1,4-Difluorobenzene Ethyl acrylate			<i>7.17</i>	0.001	0.25

Date 9 / 8/96 Bat Reviewed by .

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

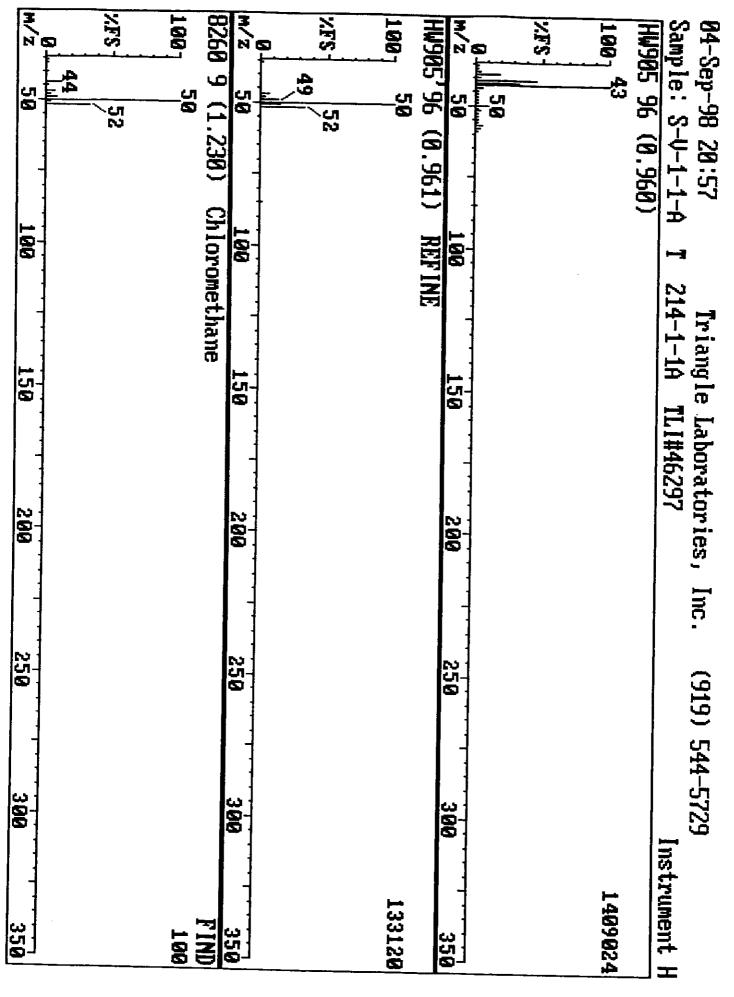
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

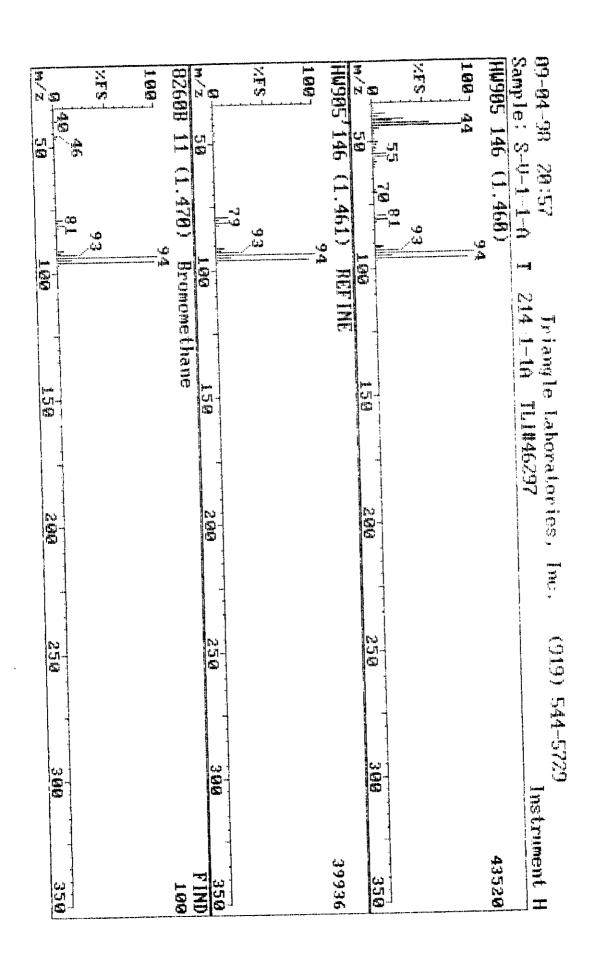


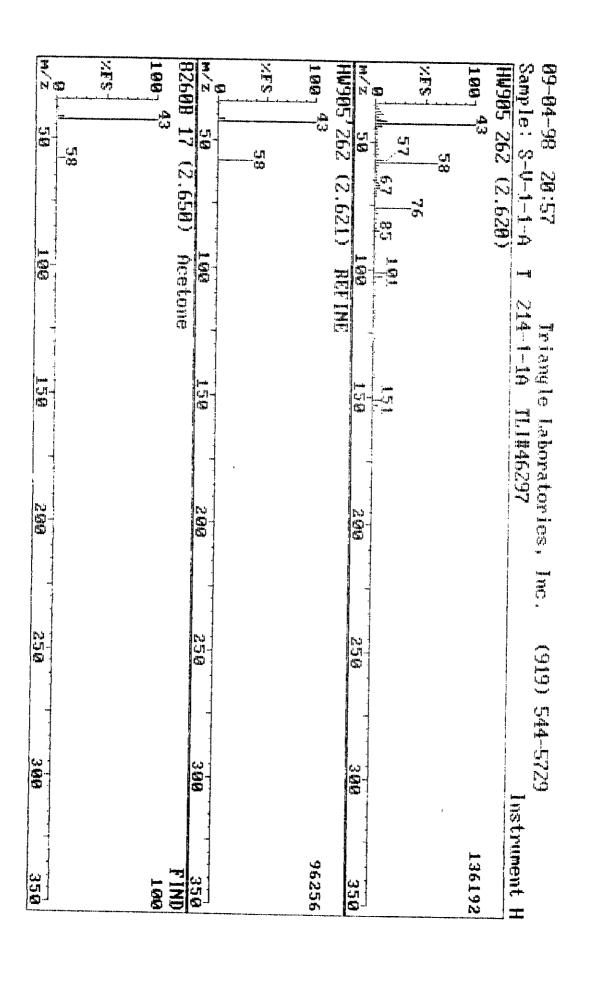
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	۵м	Name
51	0	0	0	0	o		0.00	131	l,1,1.2-Tetrachloroethan
52	72	44	80	3	3444998	VV	10.35	106	Ethylbenzene
53	77	56	83	5	25052920		10.61		m-/p-Xylene
54	73	53	83	5	6672621	bv	11.31		o-Xylene
55	0	О	O	0	0		0.00	104	Styrene
56	0	Q	()	0	0		0.00		8romoform
57	0	O	0	O	0		0.00		Cumerie
38	0	ij	O	0	r)		000		1.1.2.2-Tetrachloroethan
59	O	О	0	0	O		0.00	156	Bromobenzene
50	0	0	0	O	0		0.00		1.2.3-Trichloropropane
61	O	0	O	0	0		0.00	120	n-Propylbenzene
62	O	9	O	O	0		0.00	75	trans-1,4-Dichloro-2-but
63	О	O	0	0	0		0.00	126	2-Chiorotoluene
04	0	O	0	0	O		0.00		4-Chlorotoluene
65	61	44	91	-13	31266880	VV	13.21		1.3,5-Trimethylbenzene
66	0	0	O	O	O		0.00	119	tert-Butylbenzene
67	94	72	98	4	19109240		i4 31	105	1,2,4-Trumethylbenzene
68	66	30	83	3	2033408	bv	14.80	105	sec-Butylbensene
69	78	45	80	<u>T</u>	1072076	A	15.36	1.10	p-Cymene
70	0	0	O	O	()		0.00		1.3-Dichlorobenzene
71	0	O	0	0	O		0.00	1.46	L.4-Dichtorobenzene
72	0	O	0	O	Ó		0.00		Benzyl chloride
73	O	()	0	O	0		0.00		n-Butytbenzene
7.4	0	0	O	O	O		0.00		1,2-D(chlorobenzene
75	O	0	0	0	0		0.00	75	1.2-0ibromo-3-chlocopror
76	О	O	0	0	()		06.0	130	1.2.4-Trichtorobenzene
77	O	O	0	O	0		0.00	225	Hexachlorobutadiene
78	0	0	0	0	O		0.00		Naphthalene
79	0	O	0	О	0		0.00		1,2,3-Trichtorobenzene

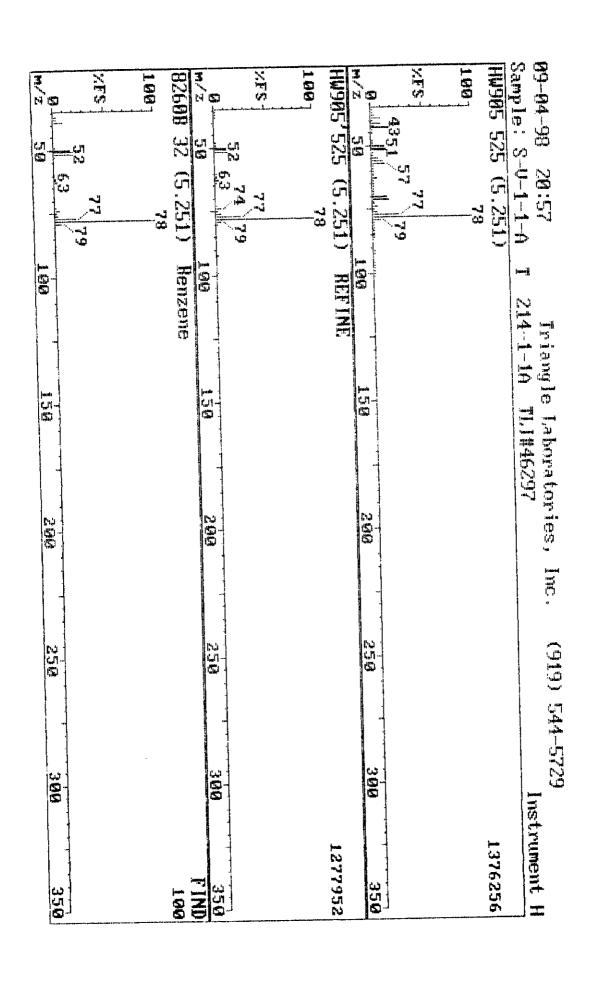
MOHIS	UW .	, , , .							
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	ДМ 	Name
No. 1 2 3 4 5 6 7 8 9 10 11 12	0 0 33 65 0 35 0 62 0 59	0 0 20 21 0 24 0 36 0 47 97	0 0 34 84 0 37 0 68 0 50 50	0 0 5 1 0 4 0 -2 0 -2 1 -2	1932344 1815364 1024240 333526 1337984 3367072 7264060 20308810 0 310904 26997230	A A bv A bv A	5.05 5.79 9.99 15.11 4.91 7.68 12.32 1.09 0.00 3.38 3.67	168 114 117 152 113 98 95 7 39 106 7 73	Pentafluorobenzene 1.4-Difluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4 Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene 1.3-Butadiene Vinyl bromide MTBE n-Hexane 1,2-Epoxybutane
13 14					2847587 0	mey?	4 21 0.24		Ethyl acrylate

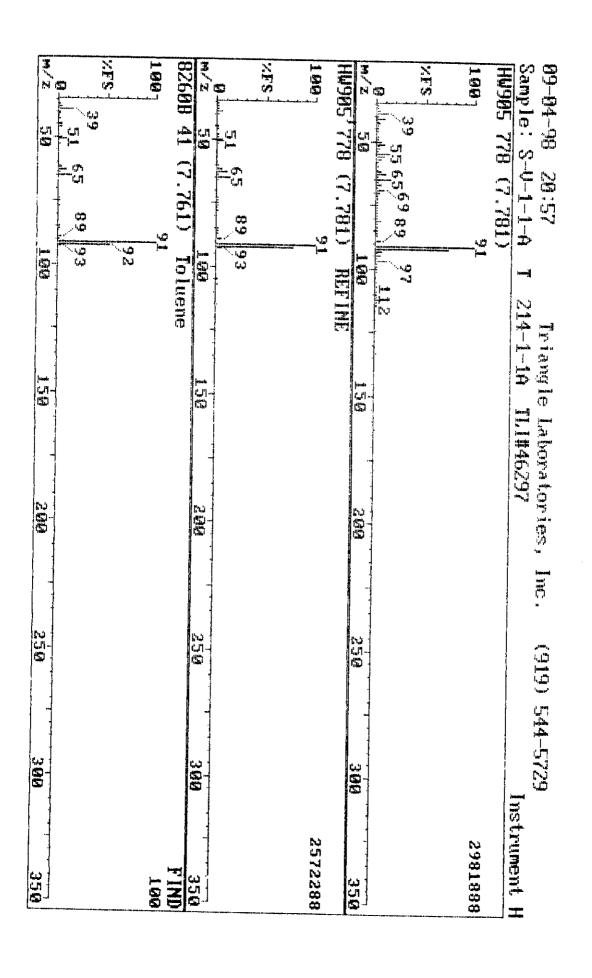
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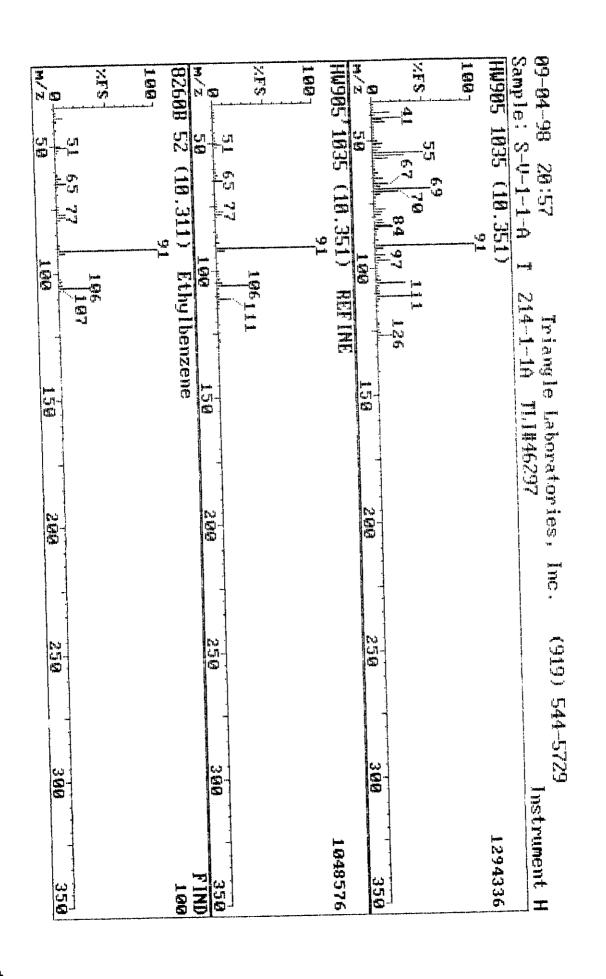


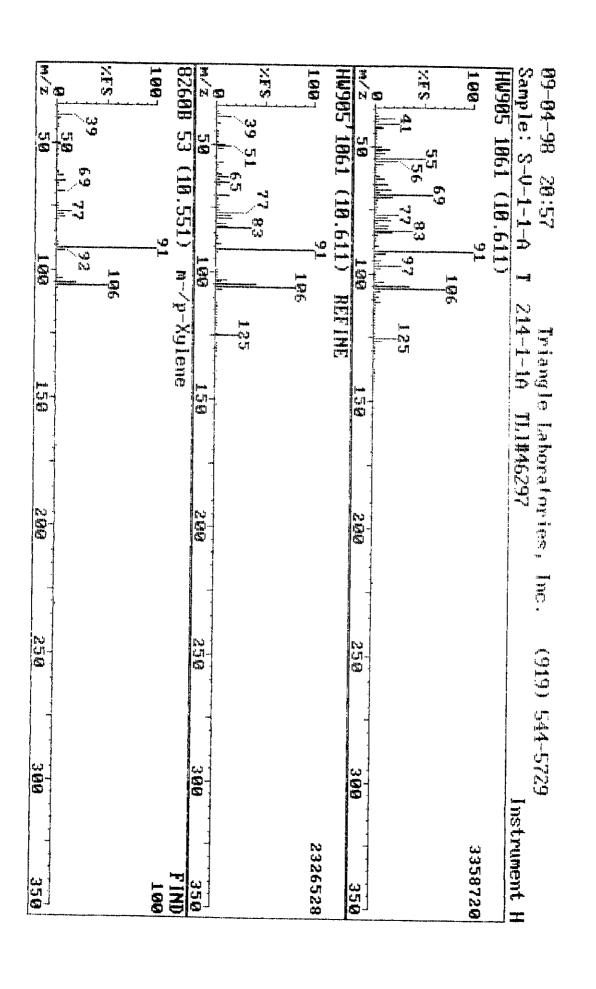


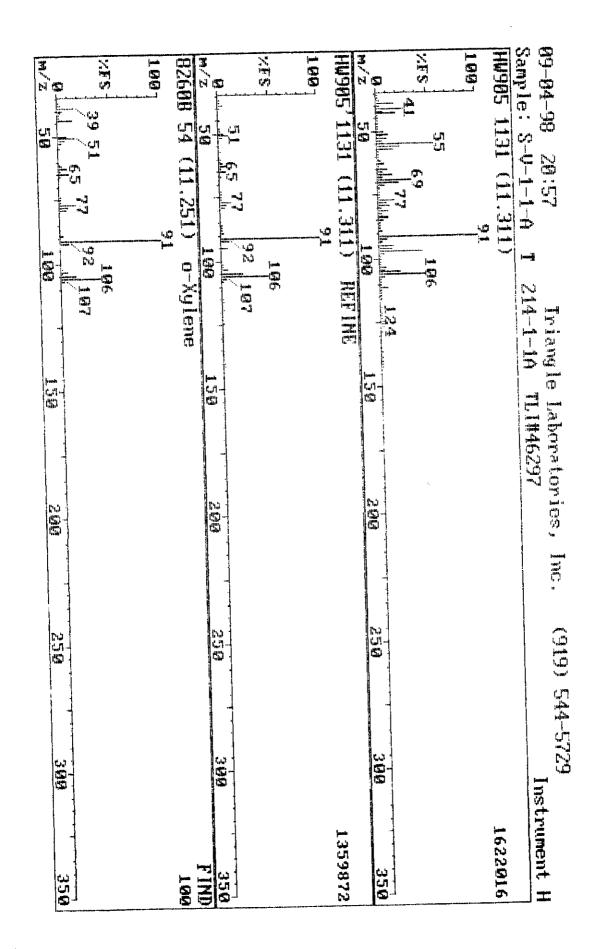


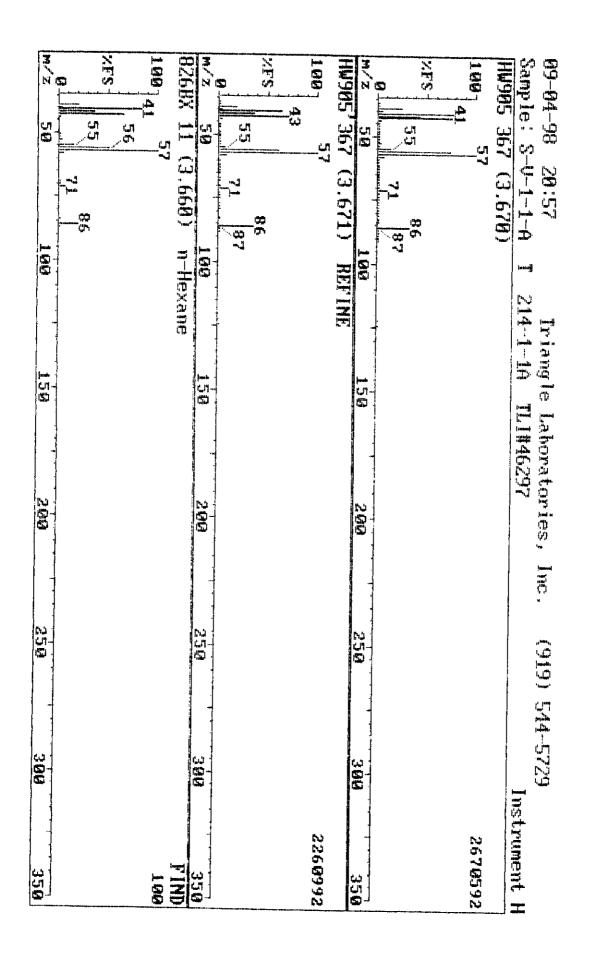












Project Number: 46297 Sample File: HW906 Method 8260 VOST Sample ID: S-V-1-2-A

Client Project: Hotmix TLI ID: 214-1-2A Date Received: 07/25/98

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene	ug	IS 1	5.04	-5	
Chloromethane	0.160	В	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.033	ВЈ	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	В	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	В	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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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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
Methyl methacrylate	ng			ug	ug
Bromodichloromethane		Ŭ		0.002	0.05
		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 _s		IS 3 Low	9.98		0.05
Tetrachloroethene		U	, , , _	0.001	0.05
2-Hexanone		Ū			0.05
Dibromochloromethane		Ū		0.002	0.05
1.2-Dibromoethane		U		0.001	0.05
Chlorobenzene		Ŭ		0.001	0.05
Ethylbenzene	1.292	BE	10.22	0.001	0.05
m-/p-Xylene			10.33		0.05
o-Xylene	7.039	BE	10.59		0.10
Styrene	2.084	BE	11.29		0.05
Bromoform		U		0.001	0.05
		U		0.002	0.05
1.4-Dichlorobenzene-d		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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62

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

Response File: ICALH904

Date Analyzed: 09/04/98

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

Reviewed by 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

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
Pentafluorobenzene	ug	IS 1	5.04	ug	ug
1,3-Butadiene		U	5.04	0.001	0.25
Vinyl bromide		U		0.001	0.25 0.25
n-Hexane	3.320	BE	3.65		0.25
1.2-Epoxybutane Iso-Octane		U		0.049	0.25
I.4-Difluorobenzene		U	. 7 0	0.001	0.25
Ethyl acrylate		IS 2 U	5.78	0.001	
		U		0.001	0.25

Sat Reviewed by _ 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

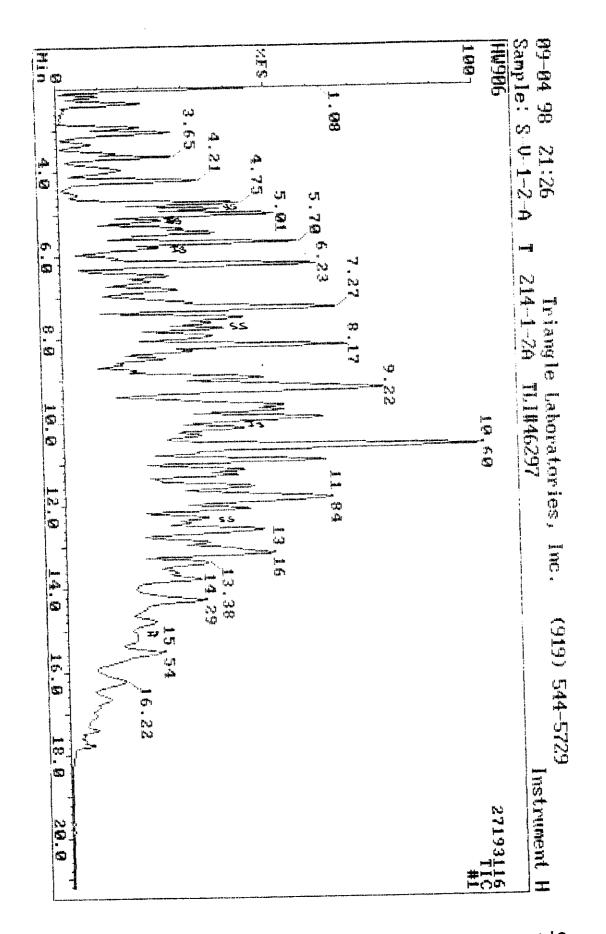
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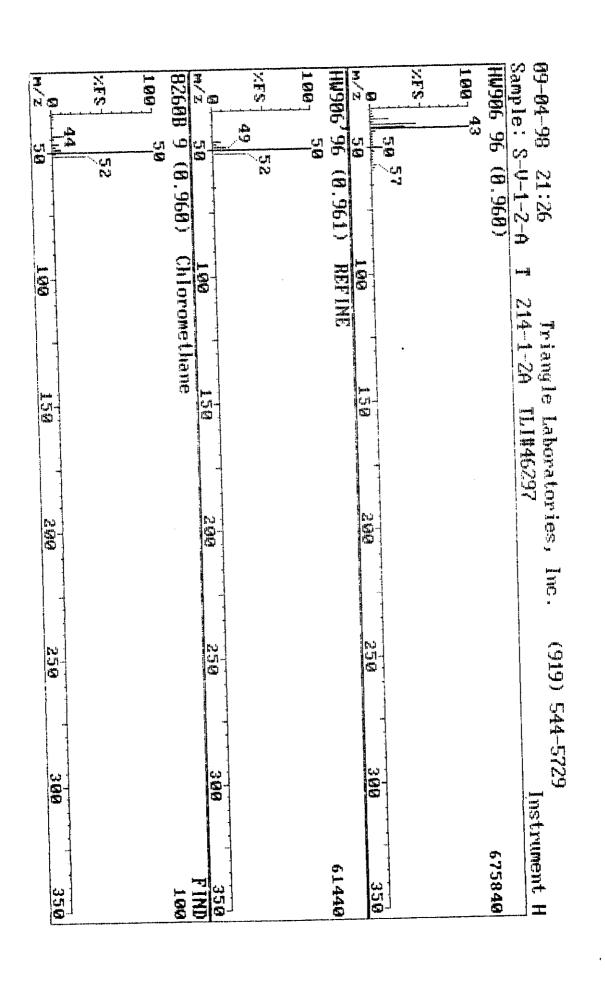
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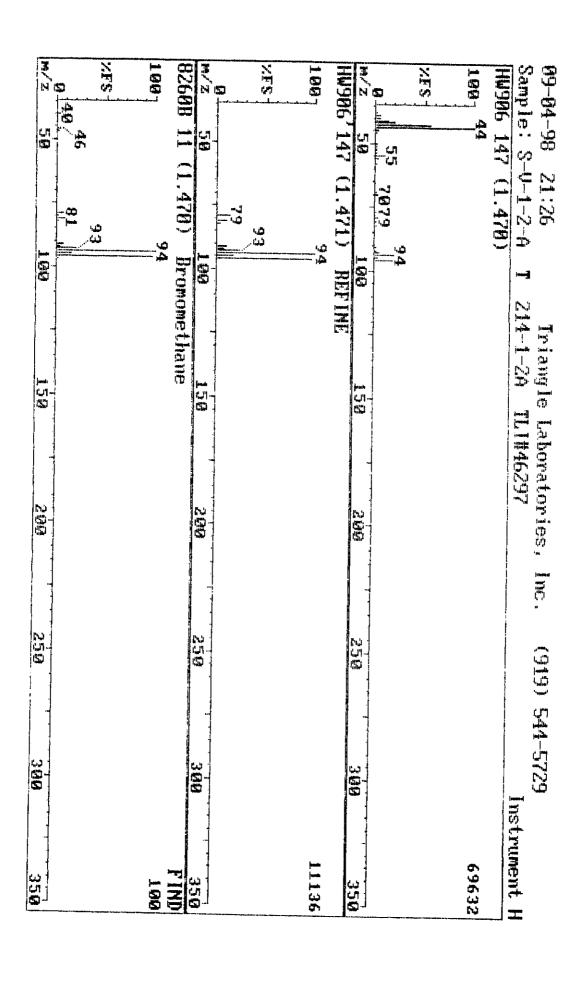


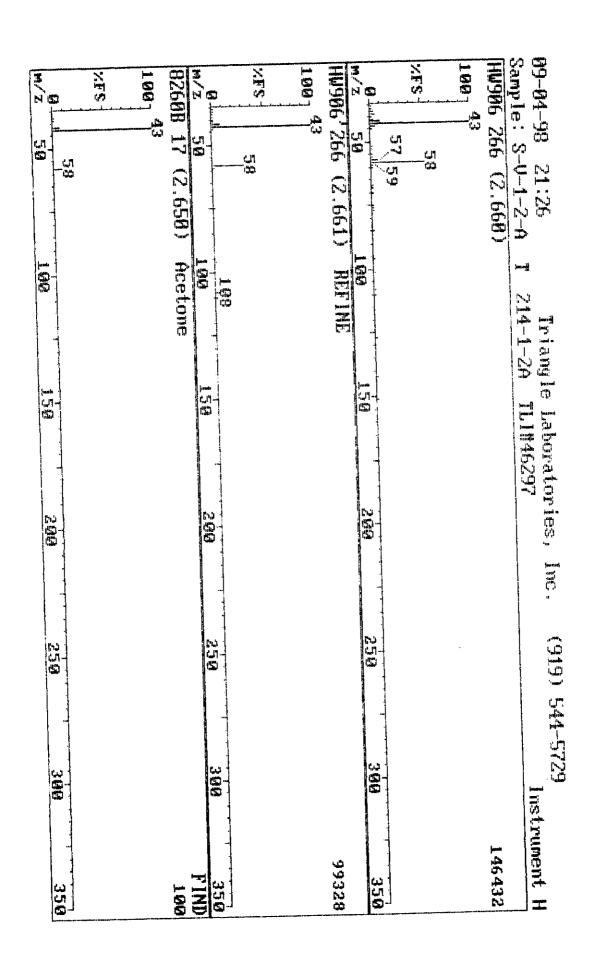
									3 v 00 vo 11:00
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	AM	Name
1.	40	14	51	-2	2564508	bv	5.04	140	The same the same of the same
2	57	J 4	57	.L	2745284		5.78	110	Pentafluorobenzene
3	37	22	38	2	1483892		9.98	上上件	1.4-Difluorobenzene
4	0	0	Ö	ō	1082912			LL.	Chlorobenzene-d5
5	0	o	Ó	ō	1509688		15.14	102	1.4-Dichlorobenzene-d4
6	45	29	45	Õ	4212693		4.91	و الما	Dibromofluoromethane
7	Ö	0	Ö	ő	5776848		7.66		Toluene-d8
3	ó	ő	ö	0	0	m	12.30	75	4-Bromofluorobenzene
9	o	Ô	Ö	ő		· wa	0.00	35 31 es	Dichlorodifluoromethane
10	0	0	ő	ñ	418980	111			Chloromethane
1.1	O	O	0	ó	112533 🍝	m	0,00 0,00 1,4		Vinyl Chloride
12	0	O	0	ō	112535	•	0.00	•	Bromomethane
13	0	O	0	ó	ő		0.00		Chloroethane
14	0	0	0	ó	ŏ		0.00	11.07 T	Trichlorofluoromethane
15	O	()	()	0	o o		0.00		L.L-Dichloroethene
16	O	O	0	Ö	ŏ		0.00		Iodomethane
17	98	77	88	2		vb	2.66	7 (D) 21 (T)	Carbon disulfide Acetone
18	0	0	O	0	0		0.60		
19	O	()	0	0	ñ		0.00		Activit chloride
20	28	9	41	-4	178169	ــــــــــــــــــــــــــــــــــــــ	ं , ऽऽ	୍ଷ୍ୟ ପ୍ର	Methylene chioride
21	0	\odot	O	0	0		0.00		Acrylonitrile
22	O	O	0	O	O		0.00	2 C) 3 C T	trans-1,2-Dichtoroethene
23	O	0	()	O	Ö		0,00		i.t-Dichloroethane Vinyi acetate
24	O	O	(+	()	O		0.00	77	2.2-0ichloropropane
25	O	O	O	O	0		0.00	94	circl 2-05 ablamate
26	0	0	O	O	Ö		0.00	a.3	cis-1,2-Dichloroethene 2-Sutanone
27	O	0	O	Ó.	0		0.00		Chioroform
28	0	O.	0	0	0		0.00		Sromochloromethane
29	0	O	0	O	0		0.00		1,1.1-Trichtoroethane
30	Ò	()	()	0	0		0.00	1.1.7	Carbon tetrachloride
3.L	0	0	0	0	0		0.00	75	1.1-Dichloropropene
32	100	77	99	()	9262927	bv	5.24	78	Benzene
33	0	О	0	0	0		0.00		1,2-Dichloroethane
34	0	Ò	0	0	О		0.00		Trichloroethene
35 37	0	O.	O	O	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	23	Dibromomethane
37	46	48	55	-13	···	 	<u> </u>	41	Methyl methacrylate
38 3 8	0	0	0	0	0		0.00	33	Bromodichloromethane
39 40	() 77	0	0	0	0		0,00	75	cis-1,3-Dichloropropene
	37	29	66 07	-10	8 796029 -		-7.49 -F6	43	4-Methyl-2-pentanone
42	100	78	97	1	16621800	VV	7.76	92	Toluene
43	0	0	0	O .	O		0.00	75	trans-1.3-Dichloroproper
43	0	0	0	0	O		0.00	97	1,1,2-Trichloroethane
45	0	0	0	0	O O		0.00	69	Ethyl methacrylate
46	0	0	0	0	0		0.00	164	Tetrachloroethene
47	47	24	63	() _7	0		0.00	76	1.3-Dichloropropane
48	70	- 44 - 0	0	-7 0	1 3448700 -	~~	- 3.75 F		2-Hexanone
49	0	0	0	. 0	0		0.00	129	Dibromochioromethane
50	o	o	Ö	0	0		0.00	107	1,2-Dibromoethane
-	~		~		0		0.00	112	Chlorobenzene

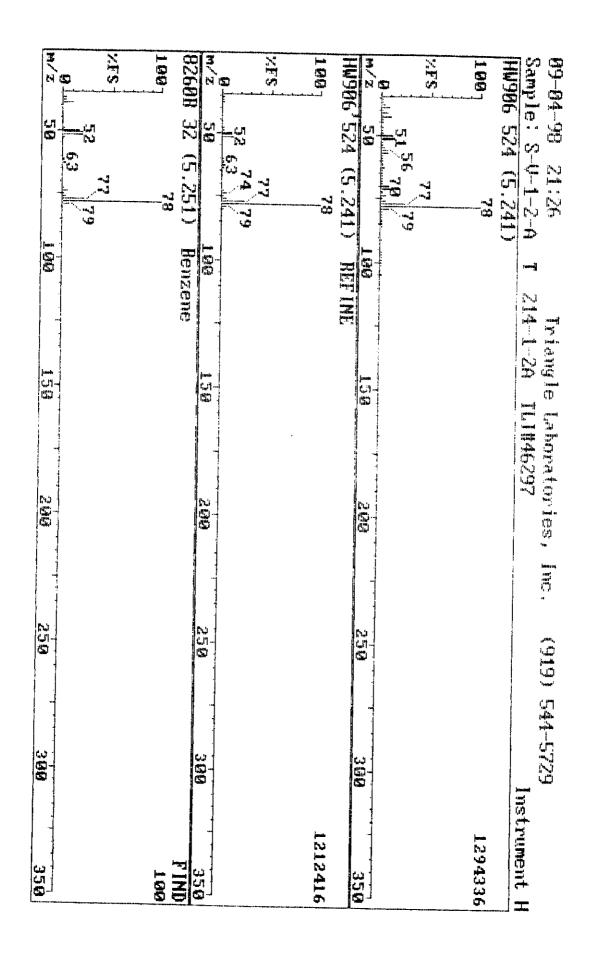
· No. i	MAT F	FOR F	REV	Delta	Area P.Flags	RT	ุ ผูห	Name
					جه به من شر من	0.00	131	1,1,1,2-Tetrachloroethan
51	O	0	0	0	0 3680059 vv	10.33	106	Ethylbenzene
52	75	47	82	2		10.59		m-/p-Xylene
53	80	57	84	4	24651810 VV 6829438 bV	11.29		o-Xylane
54	77	55	85	4	6827400 PY 0	0.00		Styrene
55	0	0	0	O	0	0.00		Sromoform
56	0	О	O	0	0	0.00	105	Cumene
57	0	О	0	0	Ö	0,00	83	1,1,2,2-Tetrachloroethan
58	O	O	О	()	Ö	0.00	156	Bromobenzene
59	0	α	0	0	Ö	0.00	75	1,2,3-Trichloropropane
60	O	i)	0	0	0	0.00	120	n-Propylbenzene
61	O	O	0	0	o o	0.00	75	trans-1,4-Dichloro-2-but
62	O	O	0	0	0	0.00	126	. 2-Chiorotoluene
63	O	0	0	0	0	0.00	126	, 4-Chiorotoluene
54	O	O	0	. 0	26444870 VV	13.18	105	, L,3.5-Trimethylbenzene
65	55	48	92		26444870 VV	0.00	1.17) tert-Butylbenzene
66	O	0	0		·	14.30	105	
67	85	52	95		16700410 by	14.79 F		5 sec-Autylbenzene
68	42	1.1.	59 -		6252059 bv	15.40	111) p-Cymene
69	62	32	74		() 6252057 by	0.00	1.40	5 l.3 Dichiorobenzene
70	0	0	ť,		0	0.00	140	S Lie-Dichlorobenzene
71	0		(0	0.00	9	t Benzyt chloride
72		0	(2042602 VV	16.88	9	l n-Butylbenzene
73		43	83		0	0.00	L-4-	6 1.2-01chtorobenzene
74			(ő	0.00	7	5 1.2-Dibrome-3-chloroprop
75					0	0.00	1.8	o 1,2,4-Trichlorobenzene 🦠
76) 0	0	0,00	22	5 Hexachtorobutadiene
77) 0	Ö	0,00	1.2	8 Maphthalene
78	•) 0	0	0.00	1.8	0 1.2,3-Trichlorobenzene
79	9 C) ()	1	5 6	~			17198

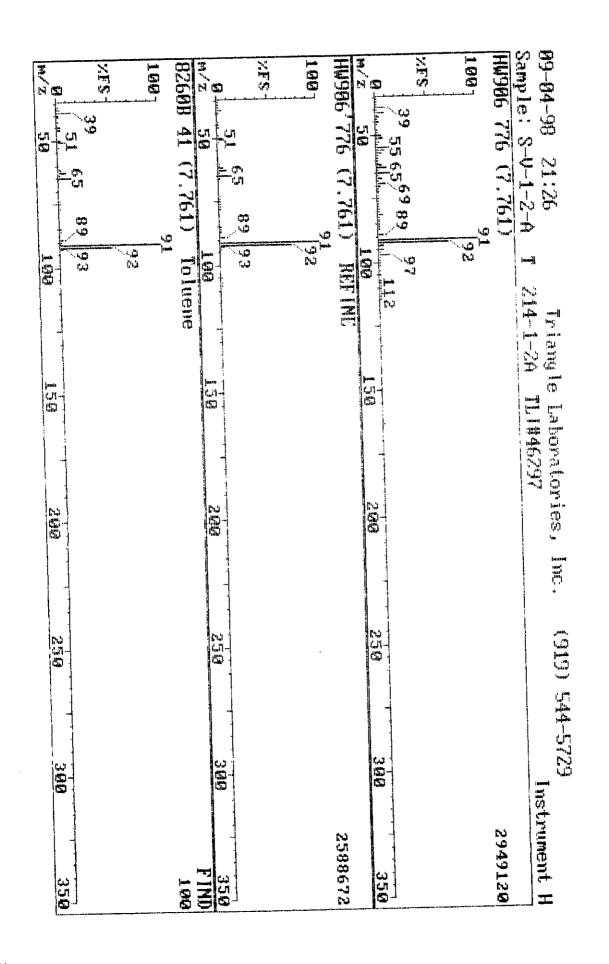
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
No. 12344567891011121314	MAT 40 57 37 0 46 0 63 0 70 100 64 51 43	FOR 14 34 22 0 29 0 40 0 54 96 46 61 28	51 37 38 0 0 45 0 73 0 60 99 62 65 68	Oelta 0 2 1 0 -1 0 7 0 1 -1 -4 -23 -12	2564508 2745284 1483892 1082912 0 4212693 0 3183327 0 55776 15633420	by by by A by !y	5.04 5.78 9.98 15.14 0.00 7.66 0.00	168 114 117 152 113 98 95 39 106 73 57 42 457	Pentafluorobenzene 1,4-Difluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4 Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene 1,3-Butadiene Vinyl bromide MTBE n-Hexane 1,2-Epoxybutane Iso-Octane
				الديد	4 9207200	100	2416 - 23 F	55	Ethyl acrylate

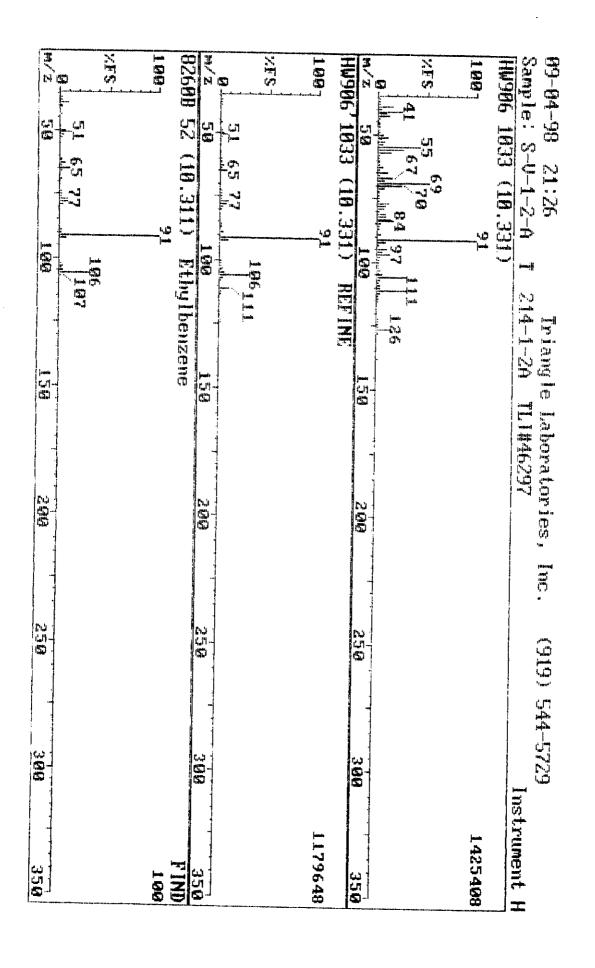


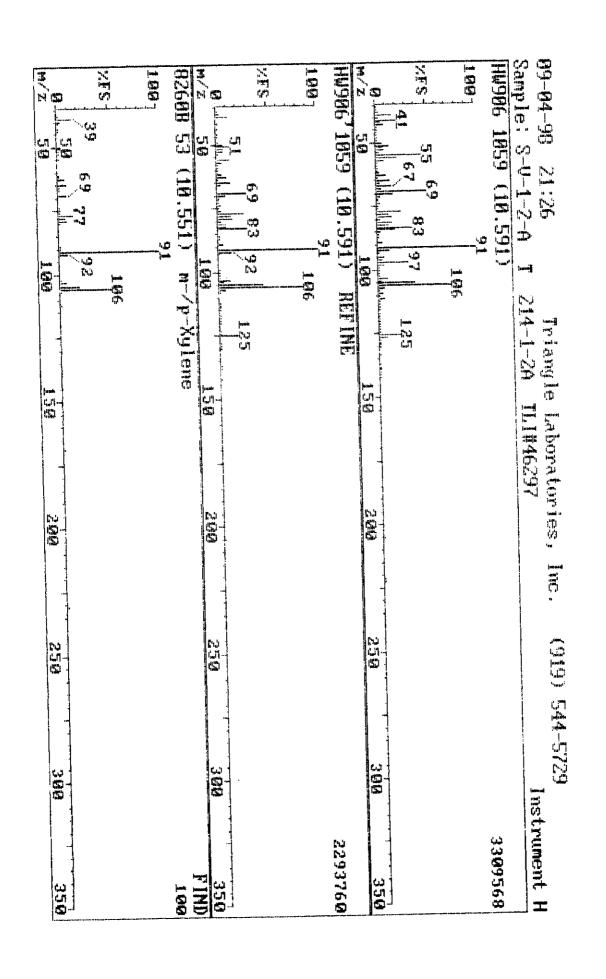


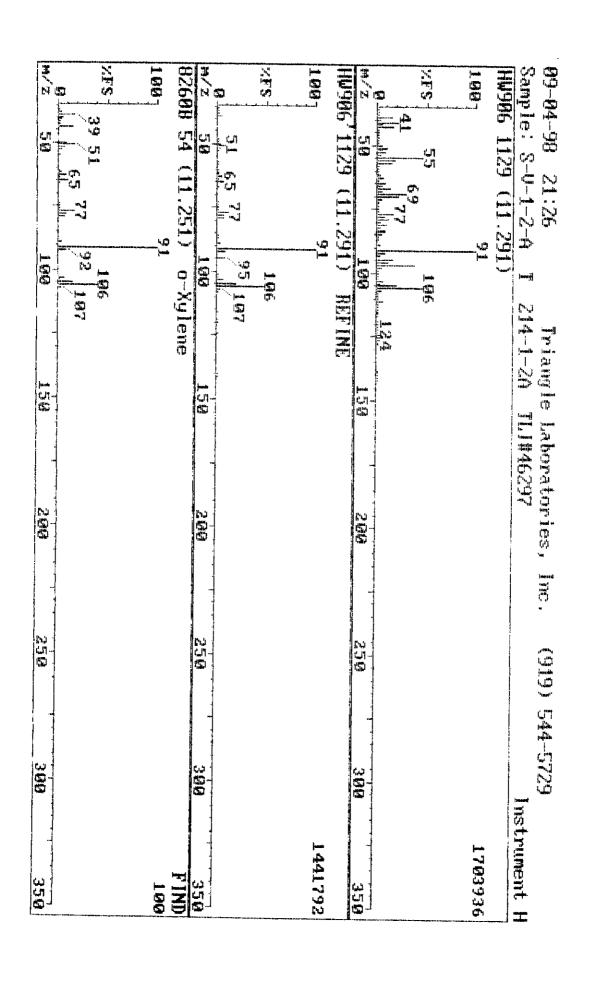


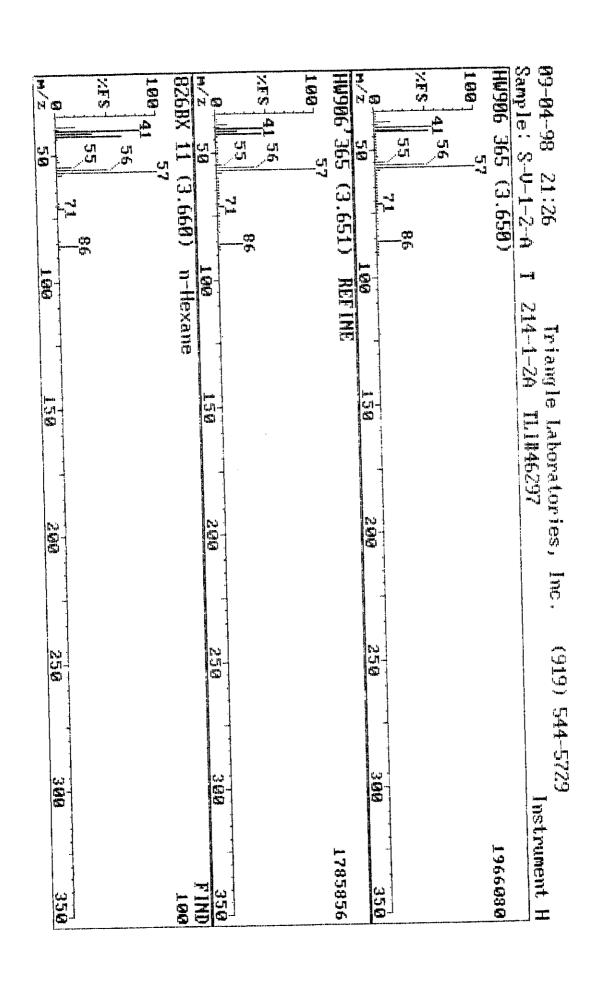












Project Number: 46297 Sample File: HW901

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

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

Date Received: 07/25/98

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
Pentafluorobenzene	ug	IC 1		ug	ug
Chloromethane	0.299	IS 1	5.04		
Vinyl Chloride	0.299	B U	0.96		0.05
Bromomethane	0.091	В		0.001	0.05
Chloroethane	0.091	U	1.48		0.05
Trichlorofluoromethane		U		0.001	0.05
1.1-Dichloroethene		U		0.001	0.05
lodomethane				0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.007	U		0.001	0.05
Allyl chioride	0.007	BJ	2.67		0.05
Methylene chloride	0.004	U		0.001	0.05
Acrylonitrile	0.004	ВЈ	3.05		0.05
rans-1.2-Dichloroethene		U U		0.005	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
is-1,2-Dichloroethene		•		0.001	0.05
2-Butanone		Ŭ		0.001	0.05
Chloroform	•	U U		0.001	0.05
.1.1-Trichloroethane				0.001	0.05
.4-Difluorobenzene		U		0.001	0.05
arbon tetrachloride		IS 2	5.77		
enzene		U		0.001	0.05
.2-Dichloroethane		BJ	5.24		0.05
richloroethene		U		0.001	0.05
2-Dichloropropane		U		0.001	0.05
1 (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: 13:53 09/07/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
	ug			ug	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 _.		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		Ū		0.001	0.05
m-/p-Xylene	0.001	ВЈ	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		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

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

Response File: ICALH904

Date Analyzed : 09/04/98

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.286	4.91	1	116
Foluene-d _a 4-Bromofluorobenzene	0.285	7.64	2	114
r-bromonuorooenzene	0.331	12.22	2	132

VR Date 9,7,98 Reviewed by

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

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	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		Ū		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

__ Date _9/ \$ / 99

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

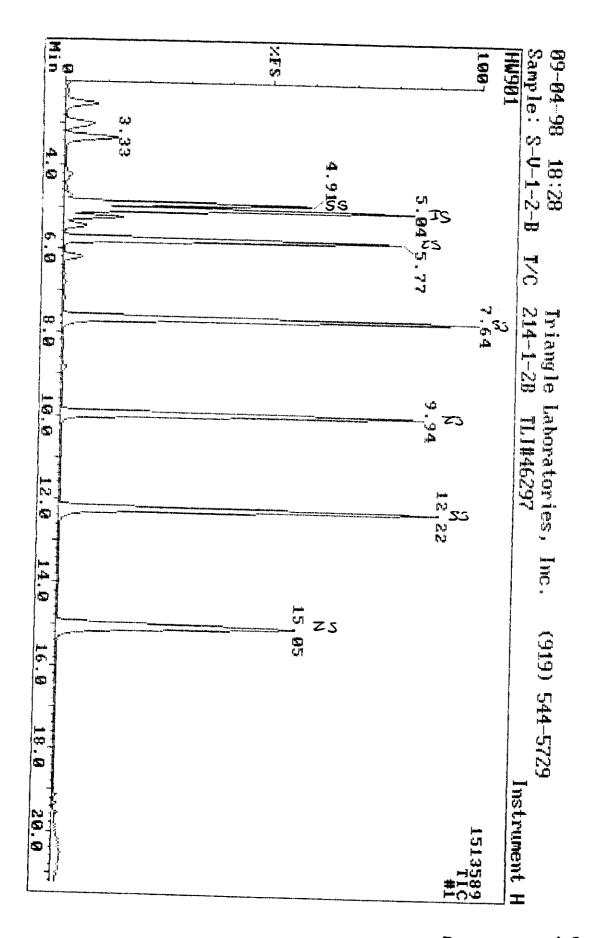
Triangle Laboratories, Inc.

Savar v3.7

801 Capitola Drive • Durham, North Carolina 27713

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

Printed: 14:51 09/08/1998



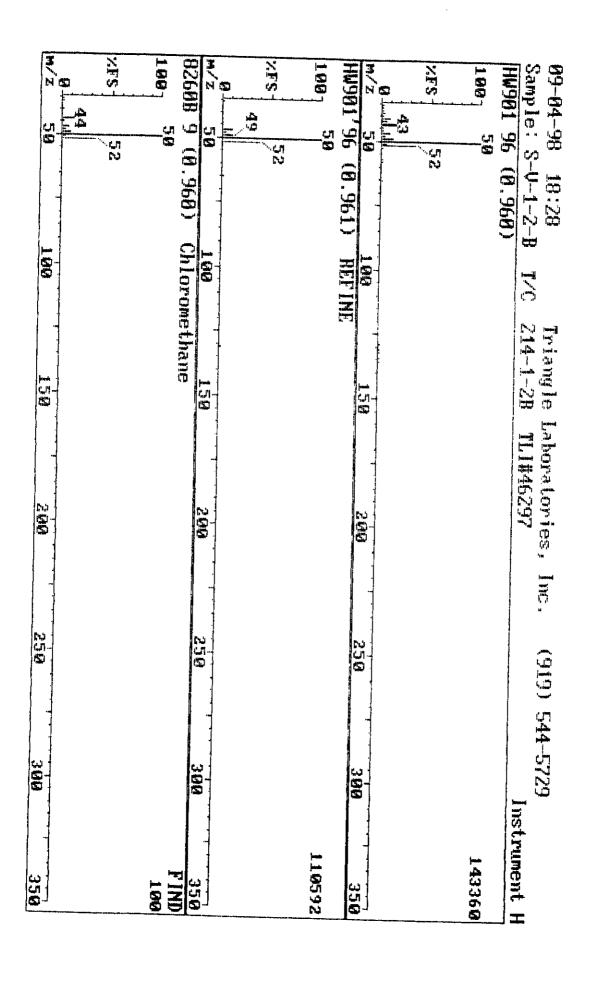
QUAN DB : HW901	LAR-RASE	WOHR
No. MAT FOR REV Delta	Area P.Flags	RT QM Name
1 100 81 99 -2	3214290 bv	5.04 168 Pentafluorobenzene
	3672276 by	5.77 114 1.4-Difluorobenzene
2 100 ,0	3588320 bv	9.94 117 Chlorobenzene-d5
Q 100 10 · ·	1892685 bv	15.04 152 1,4-Dichlorobenzene-d4
7 200	1626872 by	4.91 113 Dibromofluoromethane
3 2 3 3	4475694 by	7.64 98 Toluene-dS
0.100	2479848 bv	12_22 95 4-Bromofluorobenzene
1 1100	0	0.00 85 Dichlorodifluoromethane
	985143 by	0.96 50 Chloromethane
, 200	0	0.00 62 Vinyl Chloride
+	387988 bv	1.48 94 Bromomethane
<u></u>	0	0.00 64 Chloruethane
1	ő	0.00 101 Trichtorofluoromethane
1.0	Ö	0.00 96 l.l-Dichloroethene
14 0 0	ŏ	0.00 142 Iodomethane
10 0 3	0	0.00 76 Carbon disulfide
100	12552 VV	2.67 43 Acetone
The contract of the contract o	0	0.00 41 Aliyi chloride
10 0	17136 é m	0.00 30584 Methylene chloride
1.7	9556 A	3 ZA FO 53 Acrylonitrile .
<u> </u>	0	0.00 96 trans-1,2-Dichloroethene
*** A A	õ	0.00 63 1,1-Dichloroethane
Garden V	Õ	0.00 43 Vinyl acetate
20 0 0	õ	0.00 77 2.2-Dichloropropane
44 0 0	Ö	0.00 96 cis-1,2-Dichloroethene
25 0 0 0 0 26 22 19 33 -14	62286 A	4 <u>-21</u> ኖዶ 43 2-8utanone
27 0 0 0 0	0	0.00 83 Chloroform
28 0 0 0 0	O	0.00, 128 Bromochioromethane
29 0 0 0 0	0	0.00 97 1.1.1-Trichloroethane
30 0 0 0	0	0.00 117 Carbon tetrachloride
31 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	0.00 62 1,2-Dichloroethane
34 0 0 0 0	O	0.00 130 Trichloroethene
35 0 0 0	0	0.00 63 1,2-Dichloropropane
36 0 0 0	O	0.00 93 Dibromomethane
37 51 41 41 1	12028 A	6.62 PP 41 Methyl methacrylate
38 0 0 0 0	0	0.00 83 Bromodichloromethane
39 0 0 0		0.00 75 cis-1,3-Dichloropropene
40 43 3 69 2	22920 bv	
41 91 60 89 1		
42 0 0 0 0		
43 0 0 0 C		
44 0 0 0 0		4 9 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
45 0 0 0 0		12 Mar 27 & M. 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
46 0 0 0 0		
47 0 0 0 0		and the second of the second o
48 0 0 0		0.00 129 Dibromochloromethane 0.00 107 1,2-Dibromoethane
49 0 0 0		0.00 112 Chlorobenzene
50 0 0 0	0	O a OO a a a a a a a a a a a a a a a a

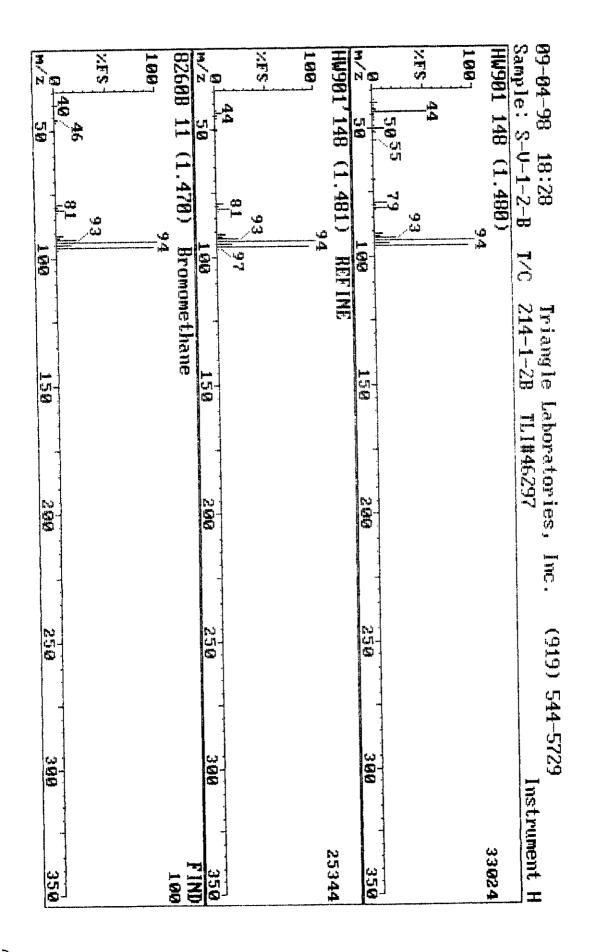
No.	MAT	FOR	REV	Delta	Area P.Flags	RT	QM	· Name
51	0	0	0	O	0	0.00	1 . 2 .	
52	0	0	0	0	ō	0.00	101	1.1,1,2-Tetrachloroethar
53	0	0	0	0	31990m		106	Ethylbenzene
54	0	0	0	0	0	0.00	⇔/ τ∩€	m-/p-Xylene
55	92	79	79	3	21660 by	$0.00 \\ 11.29$	106	o-Xylene
56	O	0	0	0	0		704	Styrene
57	47	44	44	6	7 68 bb	0.00	اگ/⊥ عمد 07	Bromoform
58	0	O	0	0	0	0.00		Cumene
59	0	0	0	O	Õ	0.00	া বিভ	1.1,2,2-Tetrachloroethar
60	0	0	0	O	ő	0.00	T.20	Bromobenzene
61	0	0	O	O	Ö	0.00	/3	1.2.3-Trichloropropane
62	O	0	0	O	Ō	0.00	$\pm ZQ$	n-Propylbenzene
63	0	0	0	0	ó	0.00	107	trans-1.4-Dichloro-2-but
64	0	0	0	0	o o	0.00	146	2-Chiorotoluene
65	O	0	0	0	Ô	0.00	126	4-Chlorotoluene
66	0	0	O	0	Ö	0.00	エカン	1,3,5-Trimethylbenzene
67	60	52	52	4	1 1604 A		∀ 10≈ 173	tert-Butylbenzene
68	54	35	54	-1	7584 A			1.2,4-Trimethylbenzene
69 70	0	0	0	0	0	0.00	110	sec-Butylbenzene
70	63	42	64	2	8732 A	14.82	ままげ	p-Cymene
71	O	Q	0	0	0	0.00	1.40	1.3-Dichtorobenzene
72	0	1)	O	O	O	0.00	T40	1.4-Dichlorobenzene
73	0	0	0	0	O	0.00	7 L	Benzyl chloride
74	0	O	0	O	0	0.00	71	n-Butylbenzene
75	0	0	0	O	Ō	0.00	140 76	1.2-Dichlorobenzene
76	60	50	69	8	16496 bv	19.13	190	1,2-Dibromo-3-chloroprop
77	51	24	73	7	5896 bb	19.33	200 200	1.2.4-Trichlorobenzene
78	50	36	65	10	23396 bv	19.35	120	Hexachlorobutadiene
79	61	47	73	8	14240 by	19.54	180	Naphthalene 1,2,3-Trichlorobenzene

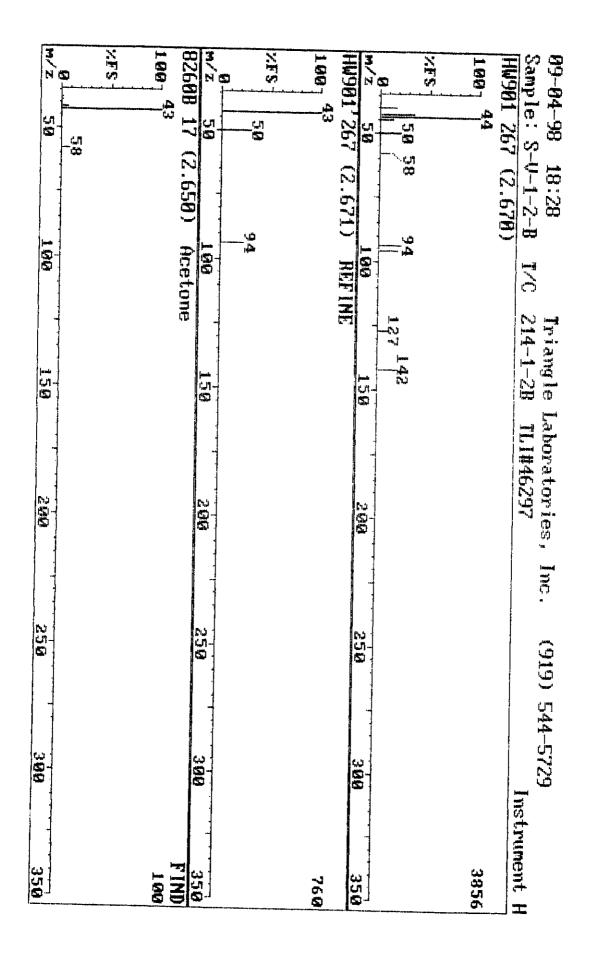
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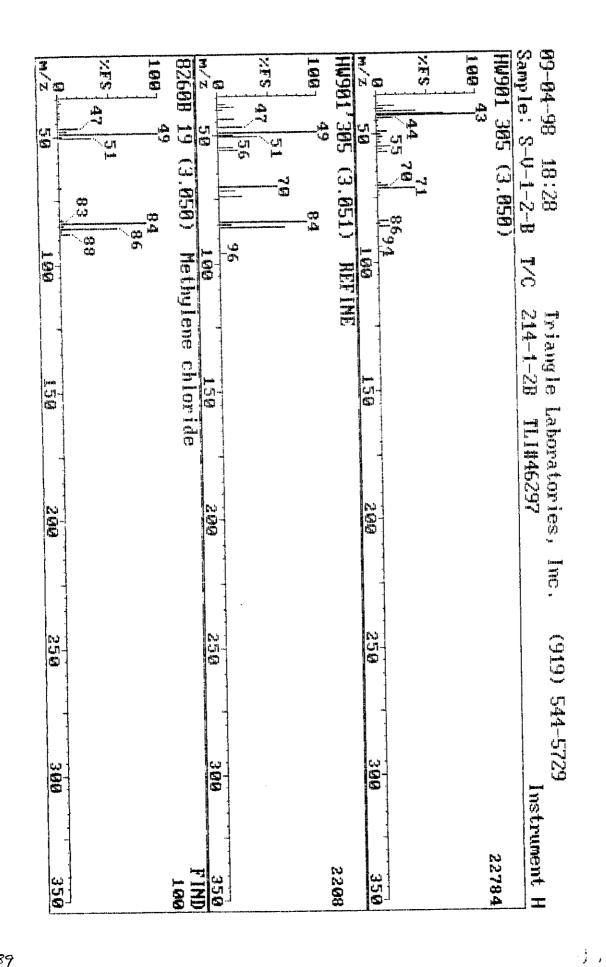
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1 2	100 100 100 100 100 100 62 0 44 62 76 56	81 96 95 79 88 92 89 37 0 36 47 56	99 98 95 98 99 97 93 71 0 41 56 67	0 1 -2 2 1 -1 -1 5 0 -5 -1 -1	3214290 3692276 3588320 1892685 1626872 4475694 2479848 1265738 0 23564 6016 16500 31886	bv bv bv bv bv	5.04 5.77 9.94 15.04 4.91 7.64 12.22 1.05 PP 0.00 	114 117 152 113 98 95 39 106 73 42 757	1,3-Butadiene Vinyl bromide MTBE
							non tech		

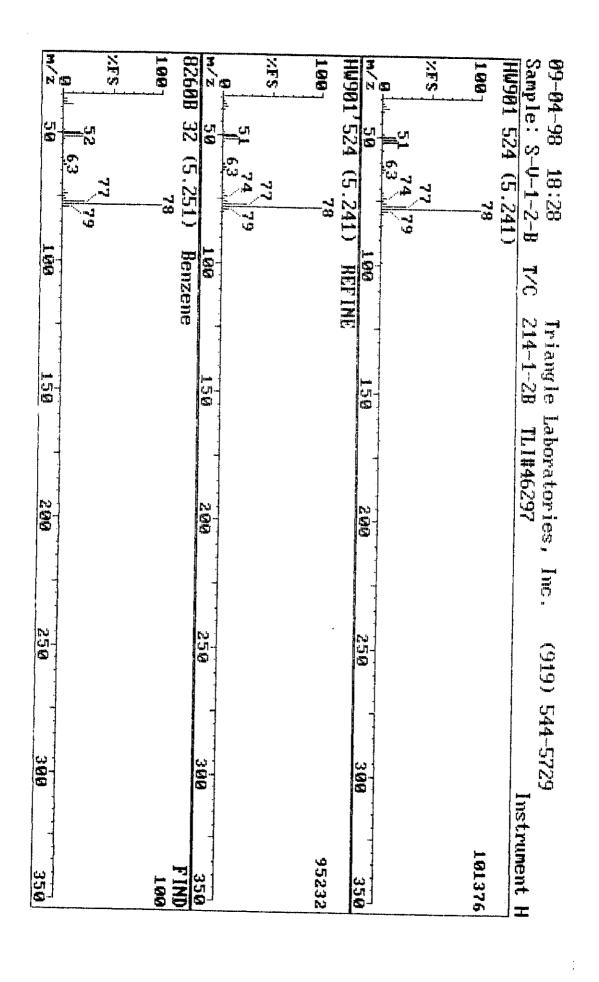
7 Isoortone is FP

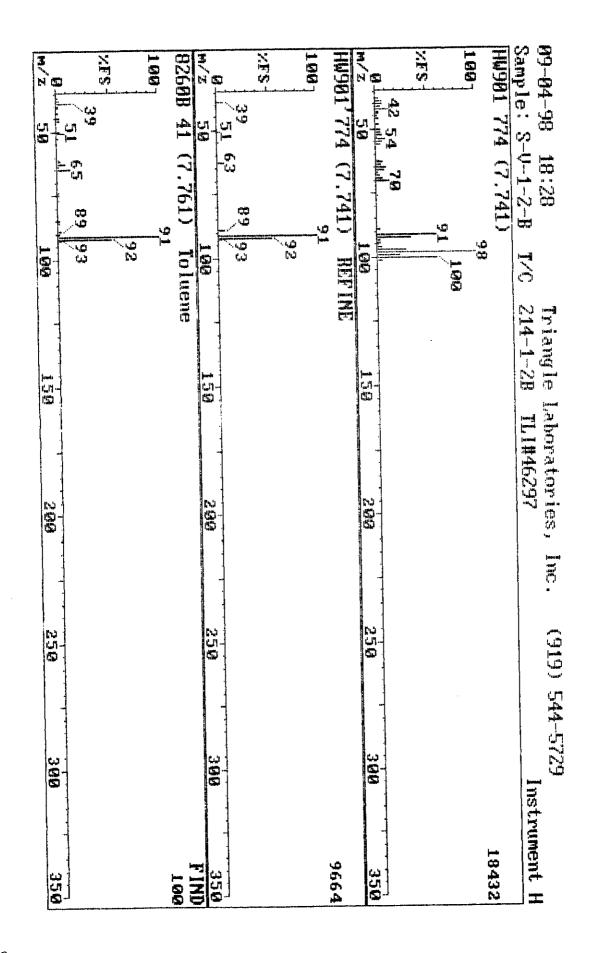


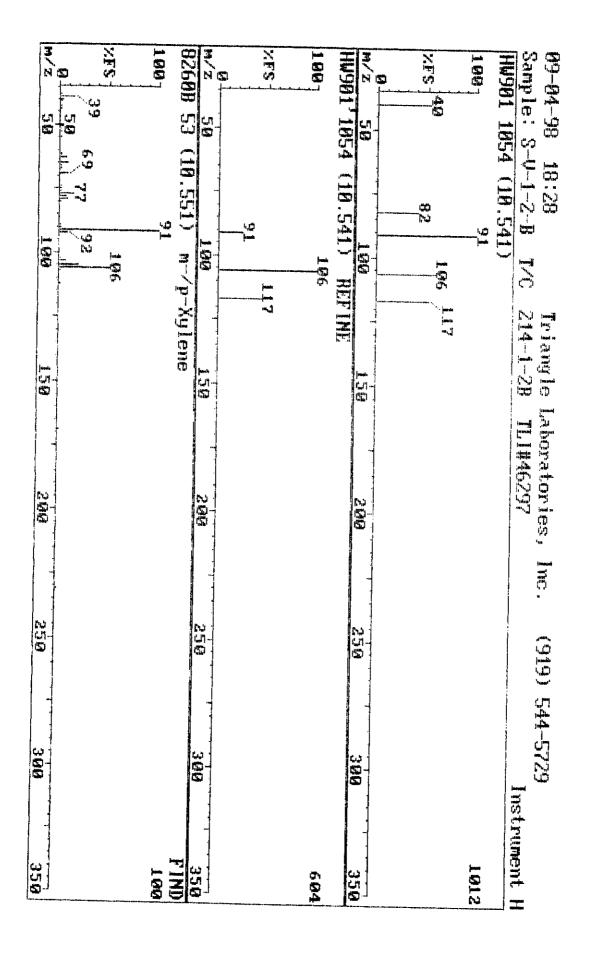


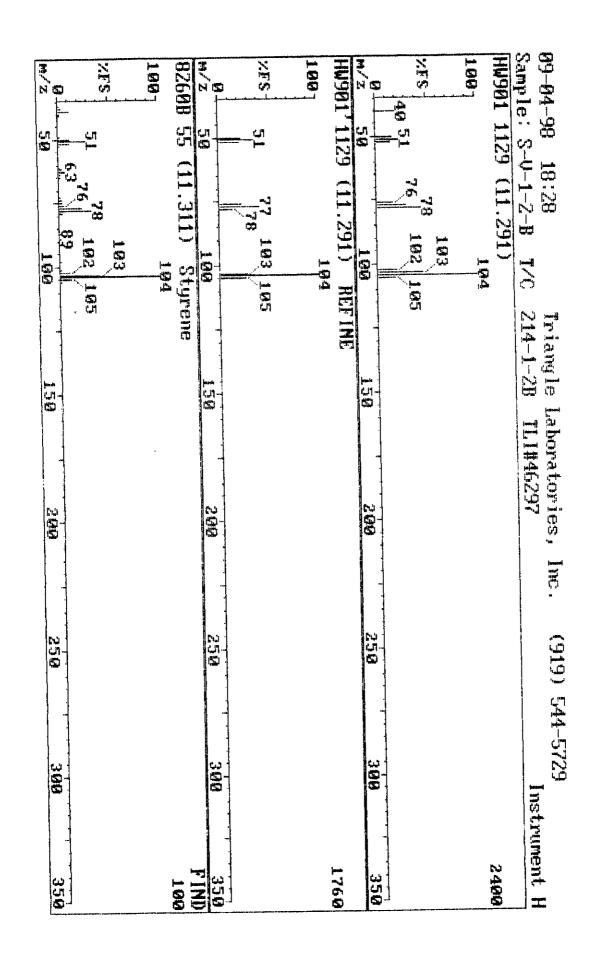


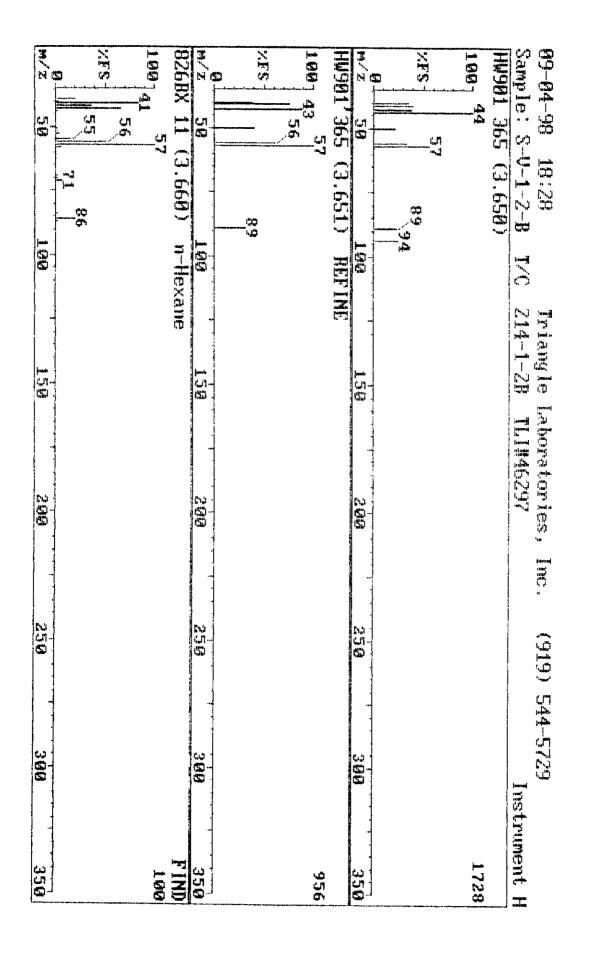












Project Number: 46297 Sample File: HW907 Method 8260 VOST Sample ID: S-V-1-4-A

Client Project: Hotmix TLI ID: 214-1-4A Date Received: 07/25/98

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
	ug			ug	ug
Pentafluorobenzene		IS 1	5.05		0.05
Chloromethane	0.098	В	0.97		0.05 0.05
Vinyl Chloride		Ŭ		0.001	
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	В	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		ប		0.001	0.05
1.4-Difluorobenzene		IS 2	5.78		
Carbon tetrachloride		U		0.001	0.05
Benzene	1.043	*	5.25		0.05
1,2-Dichloroethane		Ŭ		0.001	0.05
Trichloroethene		Ū.		0.001	0.05
1,2-Dichloropropane		Ū		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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801 Capitola Drive • Durham, North Carolina 27713

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

Printed: 13:41 09/07/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
	ug			ug	ng Zumit famit
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 _s		IS 3	9.97	0.001	0.05
Tetrachloroethene		U	2.2.	0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1.2-Dibromoethane		Ū		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.808	В	10.32	0.001	0.05
m-/p-Xylene	4.068	BE	10.57		0.05
o-Xylene	1.203	BE	11.27		0.10
Styrene	1.200	U	11.27	0.001	0.05
Bromoform		U			0.05
1,4-Dichlorobenzene-d		IS 4	15.12	0.001	0.05
Cumene		U	13.12	0.001	
1,1,2,2-Tetrachloroethane		Ŭ		0.001	0.05
		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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96

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

Response File: ICALH904

Date Analyzed: 09/04/98

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

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

1S: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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

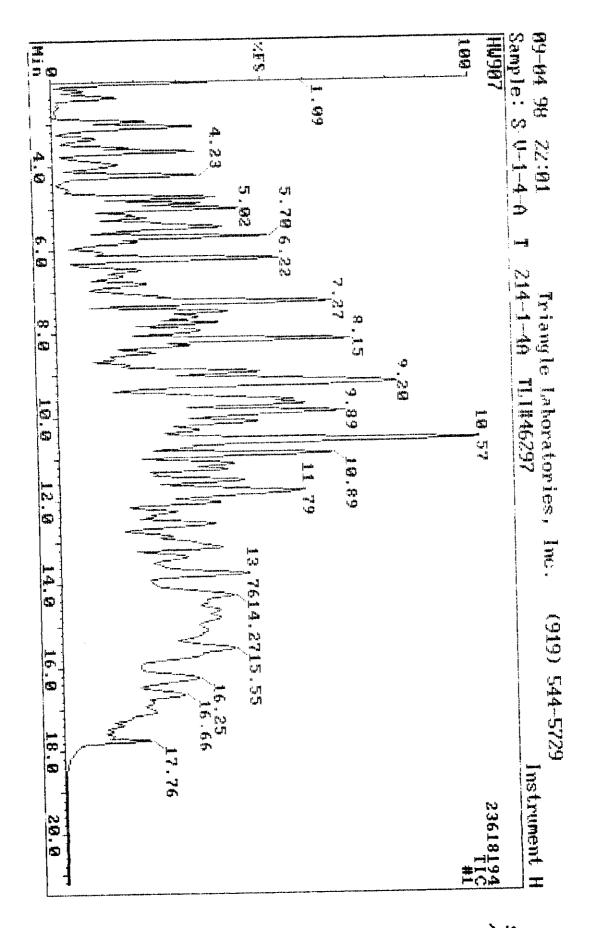
Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
Pentafluorobenzene	ug	IS 1	5.05	ug	ug
1.3-Butadiene		U.	7.07	0.001	0.3-
Vinyl bromide		Ū		0.001	0.25
n-Hexane	2.661	BE	3.67	0.001	0.25 0.25
1.2-Epoxybutane		U	,	0.036	0.25
Iso-Octane	0.085	J	5.47	0.030	0.25
1.4-Difluorobenzene		IS 2	5.78		0.2)
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

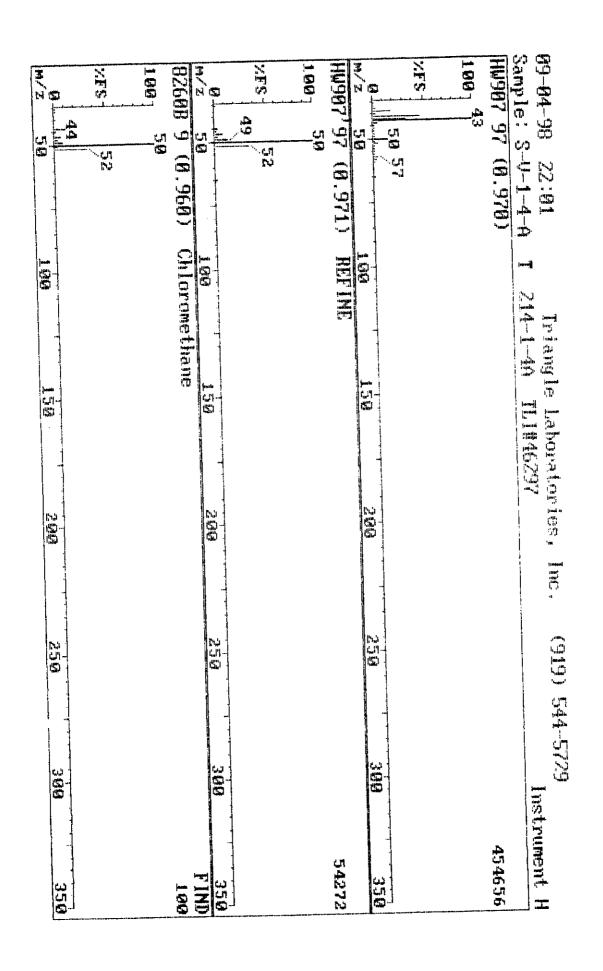


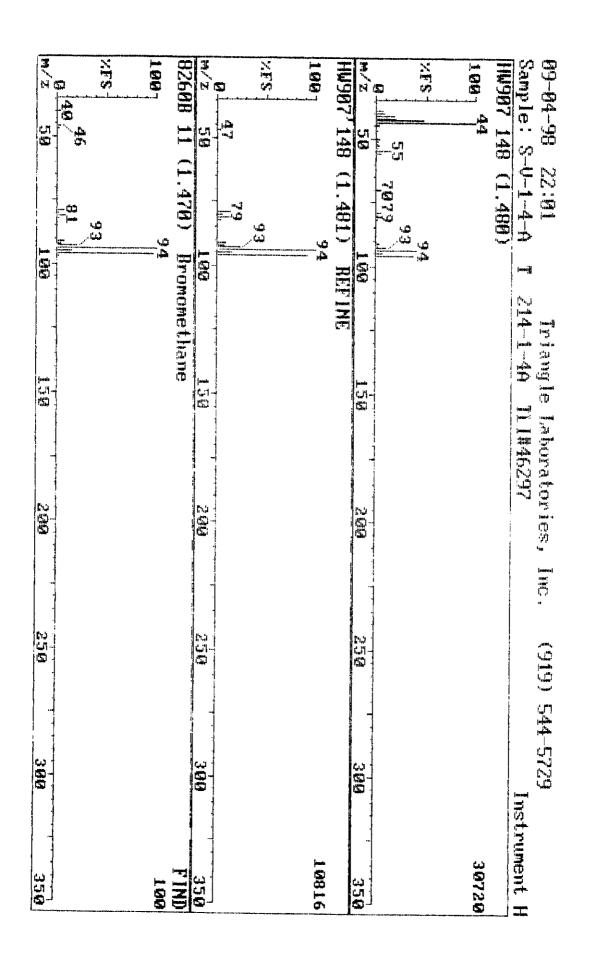
Data Review: YL Date: 9179-917198

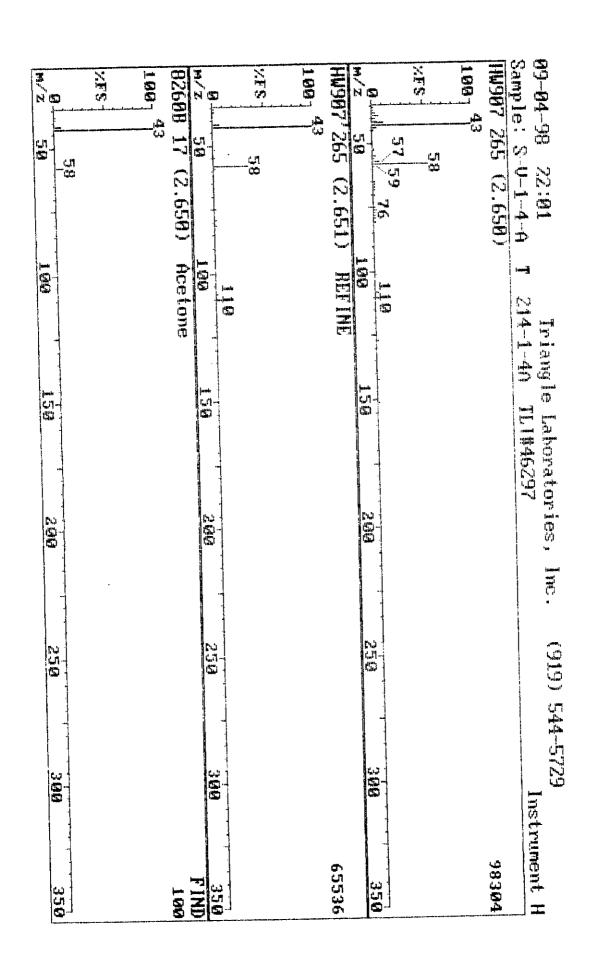
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	MC	Name
1	54	21	66	-1	3509064	bγ	5.05	168	Pentafluorobenzene
2	68	44	65	Q	3400036		5.78		1.4-Diftuorobenzene
3	45	27	45	1	2213572		9.97		Chlorobenzene-d5
4	O	()	O.	0	1462560		15.12		1.4-Dichlorobenzene-d4
5	0	0	0	0	1986252		4.92		Dibromofluoromethane
6	56	36	54	0	4826672		7.66		Totuene-d8
7	43	25	47	2	2062421		12.26		4-Bromoftuorobenzene
3	0	0	0	O	· o		0.00	85	
9	O	O	O	0	350681 A	m	0.00 0	97.50	
10	0	t)	O	0	9		0.00		Vinyl Chloride
1.1	78	33	95	L.	103776	bv	1.48	94	
12	0	()	Θ	0	0		0.00	64	Chioroethane
13	O	O	O	O	0		0.00		Trichiorofiuoromethane
14	0	:)	O	L)	0		0.00		L.1-Dichloroethene
1.5	0	0	()	O	0		0.00		Todomethane
16	0	0	O	()	0		0.00		Carbon dismifide
17	97	75	88	1.	725179	∨b	2 65		Acetone
រេន	0	r).	()	1)	0		0.00	41.	Atlyl chioride
19	0	()	0	()	0		0.00		Methy:ene chloride
20	28	9	40	-3	177475	- داه		70 53	Acrylonitrite .
21	O	O	()	O	Ó		0.00	96.	trans-1,2-Dichloroethene
22	0	()	O	O	0		0.90		1.1-0(ch:oroethane
23	O	Ü	0	O	Ó		0.00		Vinyt acetate
24	O	O	0	t)	O		0.00		2.2-0ichtoropropane
25	O	()	O	0	O		0.00		dis-1,2-Dichloroethene
26	0	0	()	()	O		0.00		C-8utanone
27	0	()	O	O	О		0.00	83	Chioroform
28	0	0	O	O	0		0.00	1.28	3romochloromethane
29	O	0	O	0	0		0.00	97	1.1.1-Trichtoroethame
30	O	Ö	0	0	0		0.00		Carbon tetrachioride
3 L	0	O	0	0	0		0.00	7.5	1,1-Dichloropropene
32	100	90	98	L.	16427150	VV	5,25	7.3	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	O.	O	O.	0	Ü		0.00	130	Trichloroethene
35	0	0	Ò	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	47	48	56	-12	<u>4766819</u>	-13-!	 6.50 7		Methyl methacrylate
38 38	0	0	()	0	0		0.00		8romodichlorometha ne
39		() ****	0	0	0		0.00		cis-1,3-Dichloropropene
40	34 100	30	68	-13	6 837175		7.47		4-Methyl-2-pentanone
41	100	80	97	1.	14093560	VV	7.76		Toluene
42	9	0	()	0	0		0.00		trans-1,3-Dichloroprope:
43	0	0	0	0	0		0.00		1,1,2-Trichloroethane
44	0	0	0	0	0		0,00		Ethyl methacrylate
45	0	0	0	0	0		0.00		Tetrachloroethene
46	0	0.7	0	0	0		0.00		1,3-Dichloropropane
47	44	23	63	-8	1 <u>1278480</u>		 ६. २३ ह		2-Hexanone
48 49	0	0	0	0	0		0.00		Dibromochloromethane
419 50	0	0	0	0	0		0.00		1.2-Dipromoethane
50	U	U	0	0	0		0.00	112	Chlorobenzene

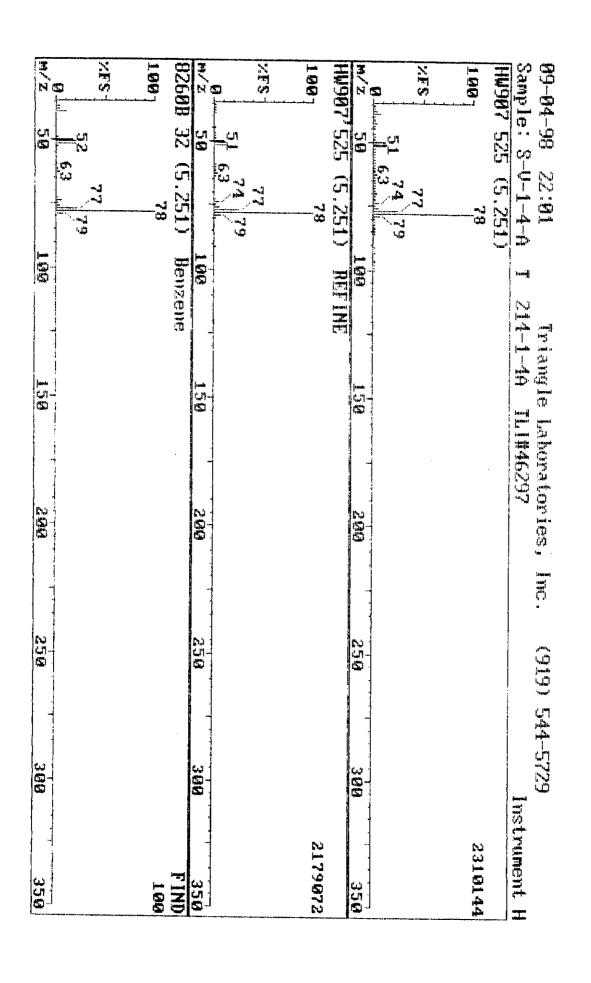
No.	MAT	FOR	REV	Delta	Area P.Flags	RT	QM	Name
.,	0		0	0	0	0.00		1,1,1,2-Tetrachloroethan
51 52		48		$\tilde{2}$	3432497 VV	10.32		Ethylbenzene
53 53				3	21252240 VV	10.57		m-/p-Xylene
54		56		3	5881031 VV	11.27		o-Xylene
55 55				Ō	ο	0.00		Styrene
56 56		-	-	0	Ö	0.00		Bromoform
57 57			_		0	0.00	105	Cumene
58		-		_	o	0.00		1,1,2,2-Tetrachloroethan
59 59		~	_		O	0.00		Bromobenzene
60 60	-				O	0.00	75	1.2,3-Trichloropropane
63	•			. 0	O	000	120	n-Propylbenzene
61				0	O	0.00		trans-1.4-Dichloro-2-but
63				0	О	0.00		2-Chlorotoluene
6) 0) 0	O	0.00		4-Chiorotoluene
6.5	•		5 91	-20	16403070 VV	13.14	1.05	1,3,5-Trimethylbenzene
6) () (0	0	0.00	11.3	tent-Butylbenzene
6	•		9 89	1.	12901730 bv	14.28		1,2,4-Trimethylbenzene
5) 1	o (0	0	00.0		sec-Butylbenzene
6) (о с) 0	О	0.00		p-Cymene
7)	0 0) 0	0	0.00	1.46	1,3-0ichtorobenzene
7) (0 0	0 0	O	0.00	146	, 1,4-Dichlorobenzene
7		2	0 1) 0	Ö	0.00		Benzyl chloride
7		9 3	4 7	9 0	4002304 VV	15.89		L n-Rutylbenzene
		0	0 (о с	9	0.00	7.46	5 L.2-Dichtorobenzene
7	5	0	0 4	o o	0	0.00	/:	1,2-Dibromo-3-chioroprop
		0	0 (0 0	О	0.00	130) L.2.4-frichlorobenzene 5 Hexachtorobutadiene
		0	0	0 0	Θ	0.00		
		0	Ō	0 0		0.00		3 Naphthalene 5 1,2,3-Trichlorobenzene
7	'9	0	0	o o	0	0.00	上西) 1,2,0~11 tolltor openzen-

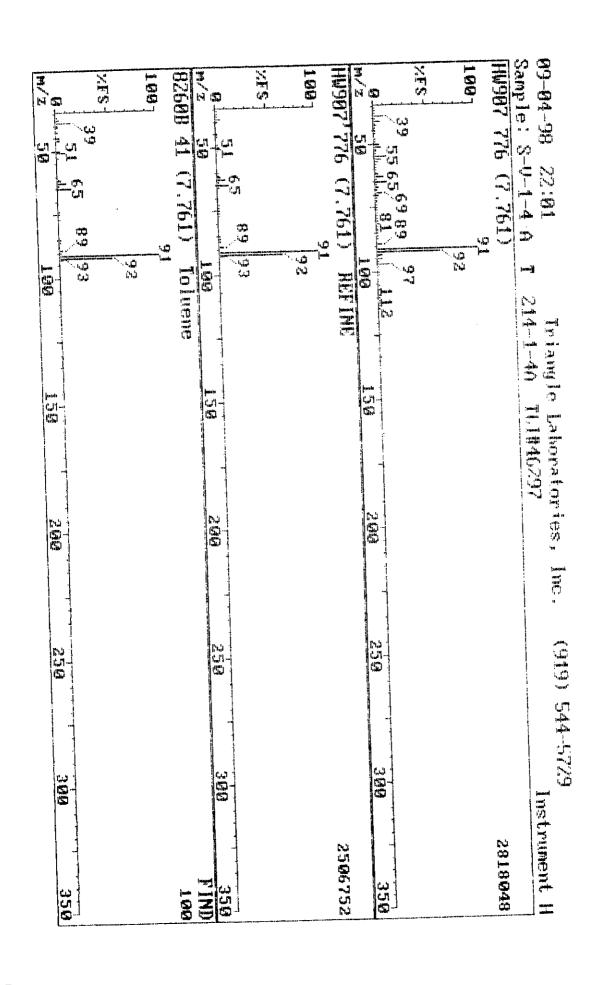
No.	MAT	FOR	REV	Oelta	Area	P.Flags	RT	MÇ.	Name
1.	54	21	66	1.	3509064	by	5.05	168	Pentafluorobenzene
2	68	44	65	1	3400036	bv	5.78		1,4-Difluorobenzene
3	45	27	45	0	2213572	bv	9.97		Chlorobenzene-d5
4	0	0	0	0	1462560	A	15.12		1,4-Dichlorobenzene-d4
5	0	0	0	0	0		0.00		Dibromofluoromethane
6	55	36	54	-1	4826672	bv	7.66		Toluene-d8
7	44	25	47	1	2062421	VV	12.26		4-Bromofluorobenzene
8	63	41	74	8	2 021655		1.1950		1,3-Butadiene
9	0	O	0	0	0		0.00		Vinyl bromide
10	64	50	54	-1	1 26950	bv	3,40 F	1/	MTBE
11	100	97	99	0	17146230	VV	3.67		n-Hexane
12	65	47	62	-3	3 515968		4.23.FP		1,2-Epoxybutane
13	5.5	43	55	7	3102000	WASSING A	WINGH STEA	· 57	Iso-Octane
14	42	28	69	-13	1 68 75520	bb	FP		Ethyl acrylate

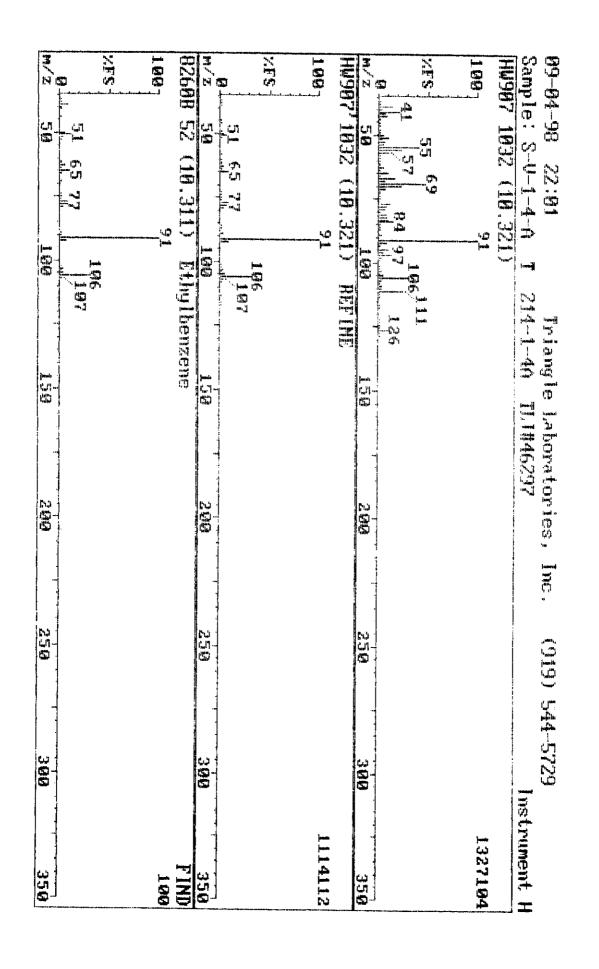


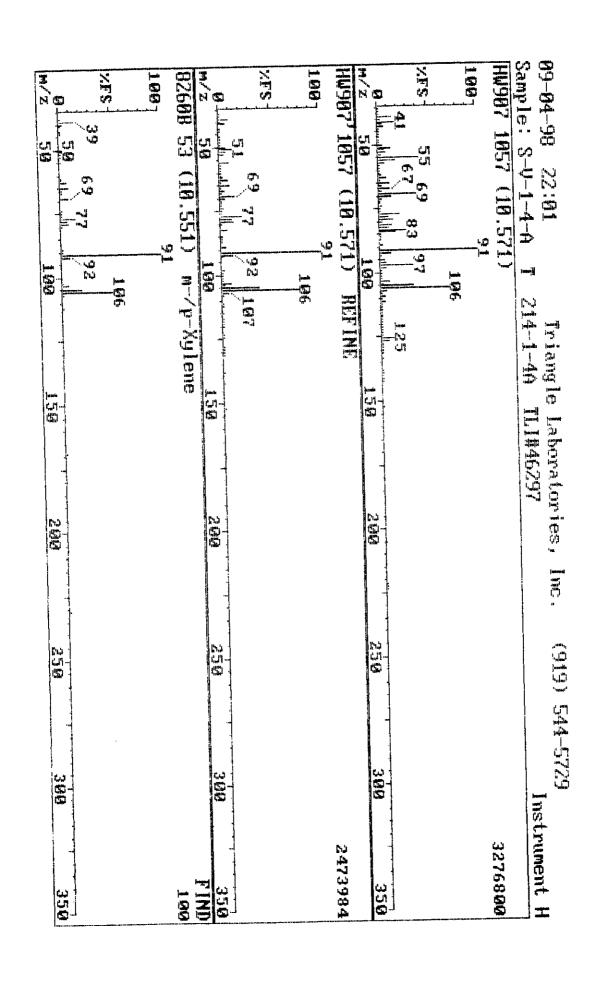


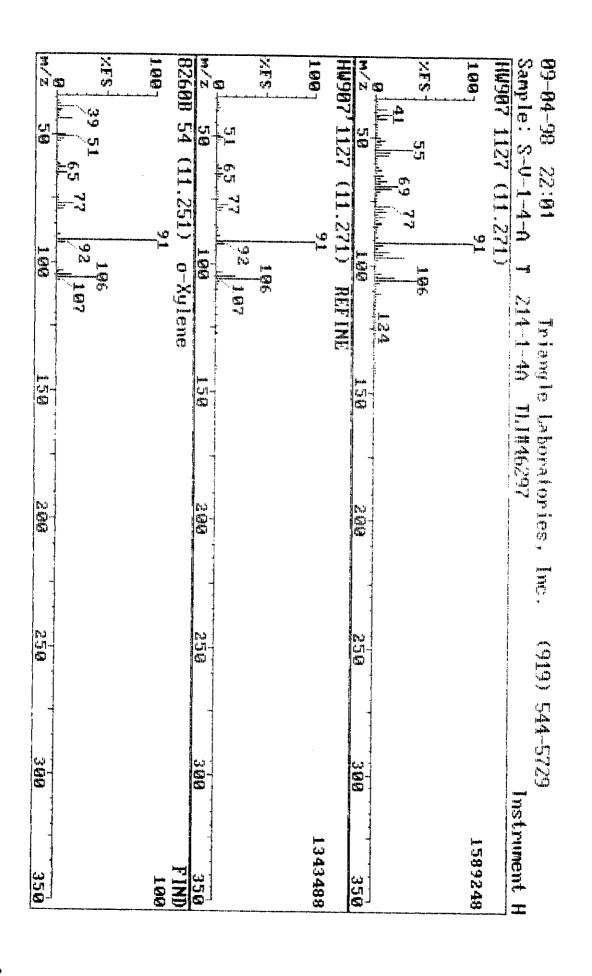


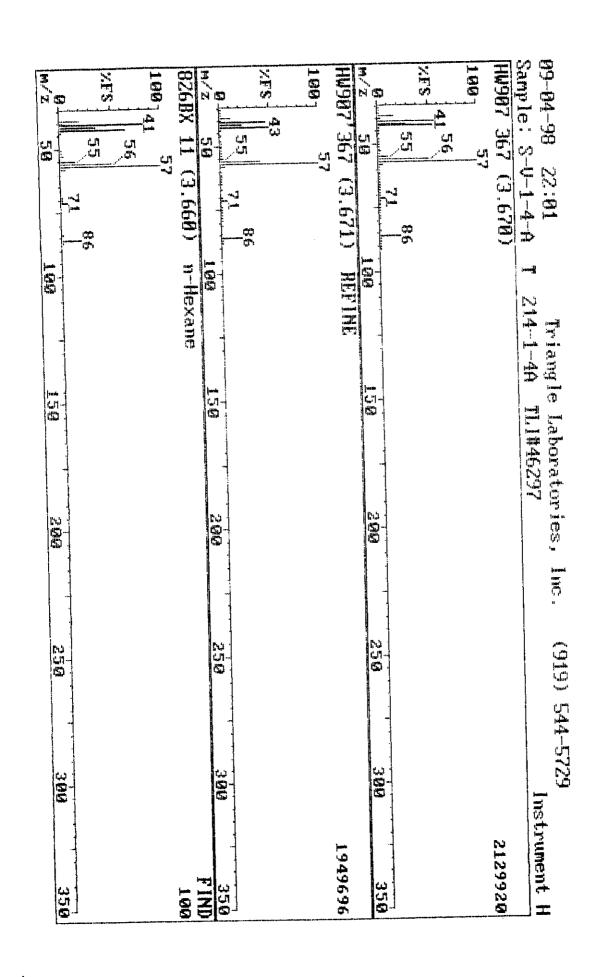


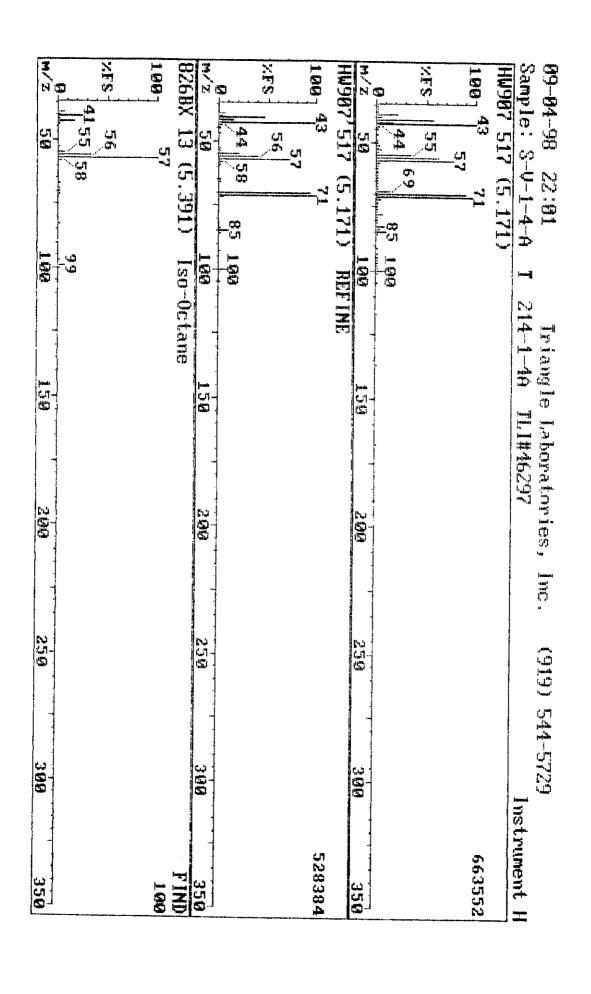












Project Number: 46297 Sample File: HW902 Method 8260 VOST Sample ID: S-V-1-4-B

Client Project: Hotmix TLI ID: 214-1-4B Date Received: 07/25/98

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
. The state of the	ug			ug	ug
Pentafluorobenzene		IS 1	5.04		A
Chloromethane	0.157	В	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	ВЈ	5.24		0.05
1,2-Dichloroethane		Ū		0.001	0.09
Trichloroethene		Ŭ		0.001	0.09
1,2-Dichloropropane		Ü		0.001	0.0

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.

Savar v3.7

801 Capitola Drive • Durham, North Carolina 27713

Printed: 13:41 09/07/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
Market I	ug			ug	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 Toluene	0.004	BJ	7.74		0.05
rans-1,3-Dichloropropene		U		0.001	0.05
,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d _s		IS 3	9.94		0.09
Tetrachloroethene		U		0.001	0.05
-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	
,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene		U		0.001	0.05
1-/p-Xylene		U			0.05
-Xylene		U		0.001	0.10
tyrene	0.001	BJ	11.21	0.001	0.05
romoform	0.001	· ·	11.31		0.05
.4-Dichlorobenzene-d		U		0.001	0.05
Sumene		IS 4	15.06		
.1,2,2-Tetrachloroethane		U		0.001	0.05
		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.

Savar v3.7

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

Response File: ICALH904

Date Analyzed: 09/04/98

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

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

Savar v3.7

Triangle Laboratories, Inc.

Printed: 13:41 09/07/1998

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

Response File: ICALH904

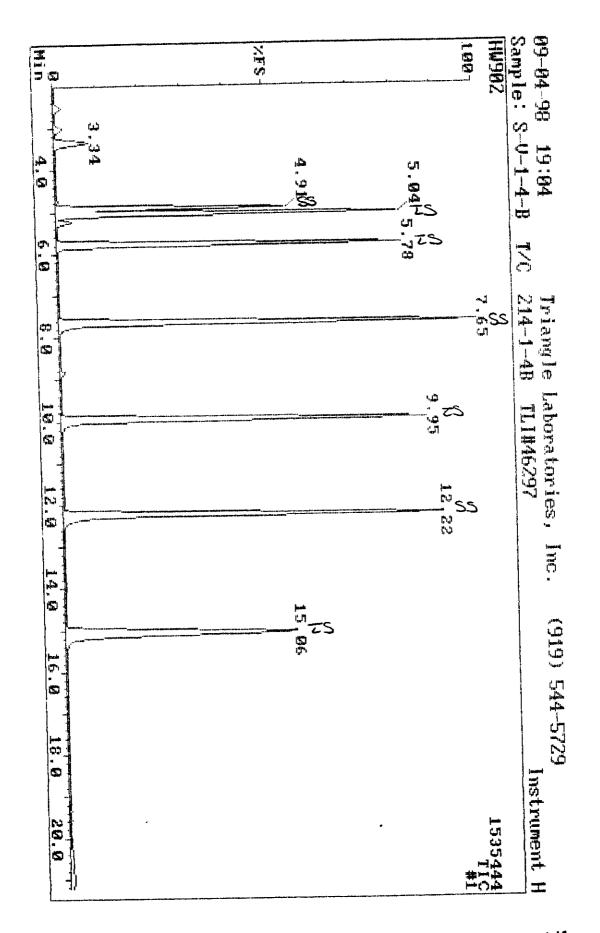
Date Analyzed : 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
Pentafluorobenzene	ug	IS 1	5.04	ug	ug
1.3-Butadiene		U).U 4	0.001	N 25
Vinyl bromide		U		0.001	0.25 0.25
n-Hexane	0.001	ВЈ	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 9/5/98

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

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



Data Review: W. Date: 9/7/98

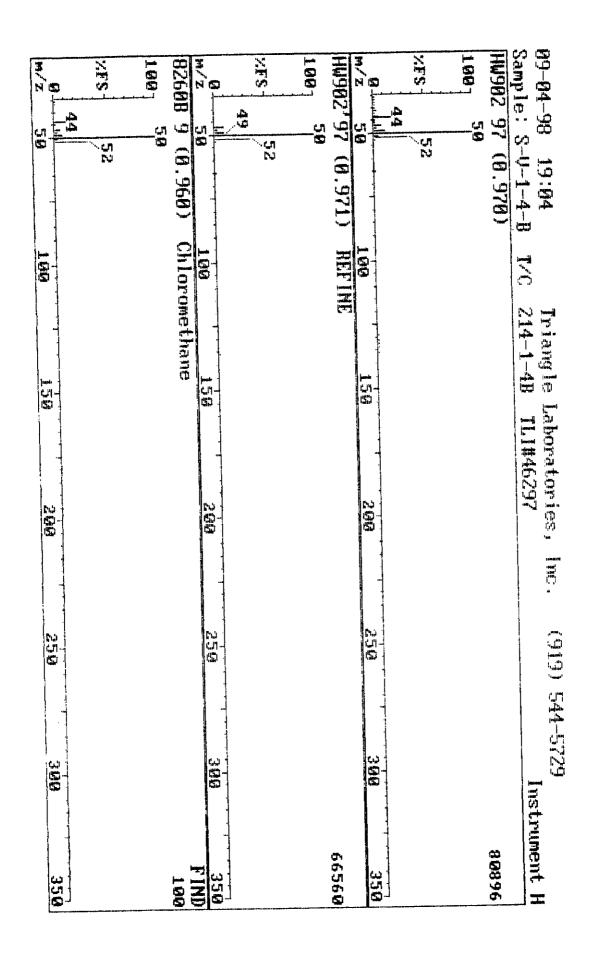
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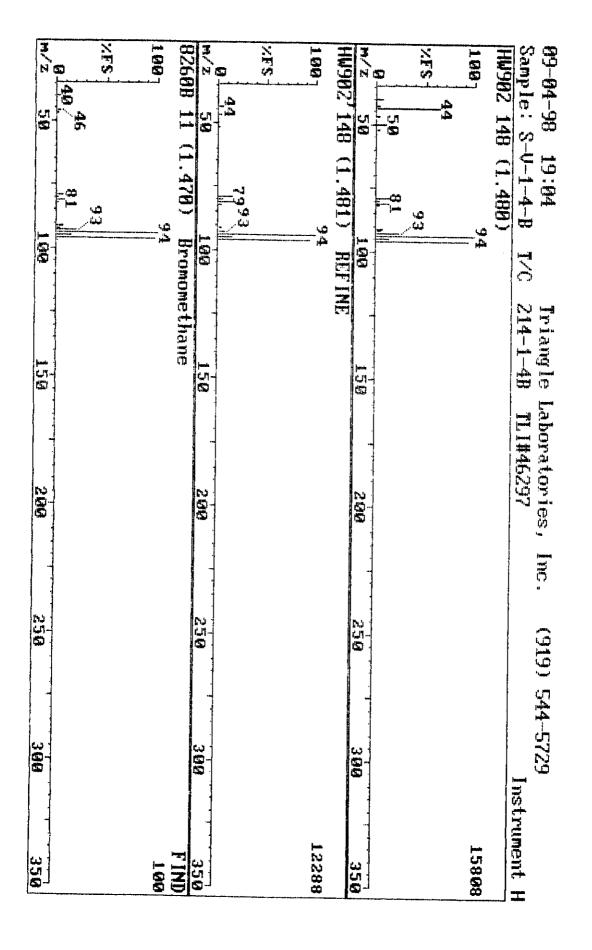
									27 04 7/3 I F 141
No.	MAT	FOR	REV	Delta	Area	P.Flags	R	r am	Name
1	100	84	99	-2	3304903	bv	5.04	4 168	Pentafluorobenzene
2	100	96	98	L	3804952	bv	5.78	3 114	1.4-Difluorobenzene
3	100	95	95	-2	3721945	bv	9.94	1 117	Chlorobenzene-d5
4	100	79	98	1	1911209	bv	15.06		1.4-Dichiorobenzene-d4
5	100	96	99	1	1683240	by	4.91	l 113	Dibromofluoromethane
6	100	92	97	-2	4626886	bv	7.64		Toluene-d8
7	100	89	93	-2	2540335	bv	12.22		4-Bromofluorobenzene
ន	0	0	0	0	0		0.00		Dichlorodifluoromethana
9	100	91	99	1	530920	bv	0.97		Chloromethane
10	0	0	0	0	0		0.00		Vinyl Chloride
11	100	75	97	2	182477	by	1.48		8romomethane
12	0	0	0	0	0	-	0.00		Chloroethane
13	0	0	O	O	0		0.00		Trichlorofluoromethane
14	0	0	0	0	0		0.00		1.1-Dichloroethene
15	0	0	0	0	0		0.00		Iodomethane
16	0	O	O	Q	Ö		0.00		Carbon disulfide
17	70	33	87	3	12712	VV	2.67		Acetone
18	0	0	0	O	0		0.00		Allyt chroride
19	0	0	0	0	8472 9	m			Methylene chioride
20	0	0	0	0	34 +2	• • •	0.00	•	Acrylonitalia -
21	0	0	О	O	0		0.00		trans-1,2-Dichioroethene
22	0	0	0	O)	0		0.00		1.1-Dichtoroethane
23	0	O	0	O	Ó		000		Vinyl acetate
24	0	0	0	0	O		0.00		2,2-Dichioropropane
25	0	0	0	0	o		0,00		cis-1,2-Dichtoroethene
26	58	5.1.	51	-3	Sold	ाने	4.54		
27	О	0	0	O	0		0.00		Chloroform
28	0	0	0	O	0		0.00		Bromochioromethane
29	0	O	0	0	0		0.00		1,1,1-Trichloroethane
30	0	0	0	0	0		0.00		Carbon tetrachloride
31	0	0	0	0	0		0.00		1,1-Dichloropropene
32	100	98	99	0	192399	bv	5.24		Senzene
33	0	0	O	0	O		0.00		1,2-Dichloroethane
34	0	0	0	0	0		0.00		Trichloroethene
35	0	0	O	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0,00	93	
37	0	0	0	0	O		0.00	41	Methyl methacrylate
38	0	0	O	0	0		0.00		Bromodichloromethane
39	0	0	0	0	0		0,00		cis-1,3-Dichloropropene
40	42	3	66	l.	2 1092 -	^	7.64	LFP 43	
41.	95	63	89	-1	50484	bv	7.74		Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	O	0		0.00	97	1,1,2-Trichloroethane
44	O	0	0	0	O		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00		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

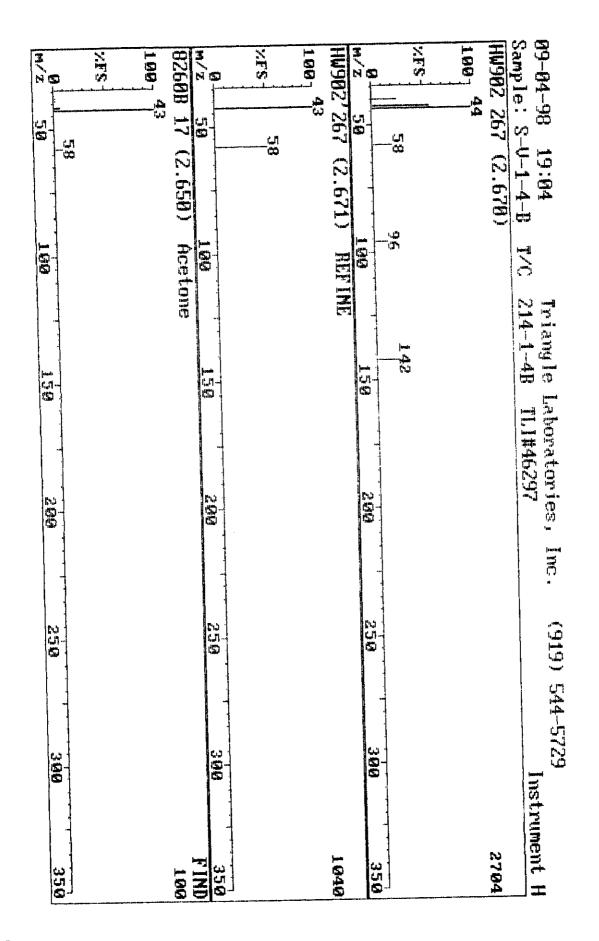
No.	MAT	FOR	REV	Delta	Area P.Flags	RT	QM	Name
51	. 0		0	0	0	0.00	131	1,1,1.2-Tetrachloroethan
52	o	ŏ	Ŏ	O	o	0.00	106	Ethylbenzene
53	ő	o O	ő	ō	0	0.00	106	m-/p-Xylene
54 54	ŏ	Ö	ŏ	ō	0	0.00	106	o-Xylene
55		52	52	5	8708 A	11.31		Styrene
56		0	0	O	o	0.00		8romoform
57		-	44	4	936 bb	12.03 FP	105	Cumene
58			0	0	0	0.00		1,1,2,2-Tetrachloroethan
59			Ö	0	o	0.00	156	Bromobenzene
50		-	ō	0	0	0.00	75	
61	-	_	0	0	. 0	0.00	120	n-Propylbenzene
62	•		Ó		0	0.00	75	trans-1,4-Dichloro-2-but
63 63		-	Ó		0	0.00		2-Chlorotoluene
64			o	0	0	0.00		4-Chiorotoluene
65			0	О	O	0.00	105	1,3,5-Trimethylbenzene
- 66			Ó	O	O	0.00		tart-Butylbenzene
67	-	_	52	-1	1 9532 A	14.21 4	105	1,2.4-Trimethylbenzene
- 68 - 68			54		6 848 A	<u> 14-73</u> FR	105	sec-Butylbenzene
69			0		О	0.00	11.9	p-Cymene
70					8220 A	14.83		1,3-Dichlorobenzene
71					0	0.00	146	1,4-Dichlorobenzene
72			C	0	0	0.00		Benzyl chloride
7.			C	0	o	0.00		n-Butylbenzene
7.			Ċ) 0	O	0.00	1.46	. 1,2-Dichlorobenzene
7:			C	0	О	0,00	7.5	1,2-Dibromo-3-chloroprop
7.			71	. 7	9772 bv	19.15	1,30	
7					5796 bb	19.33		Hexachlorobutadiene
7:					2 5032 A			Naphthalene
7					10724 by	19.56	780	1,2,3-Trichlorobenzers

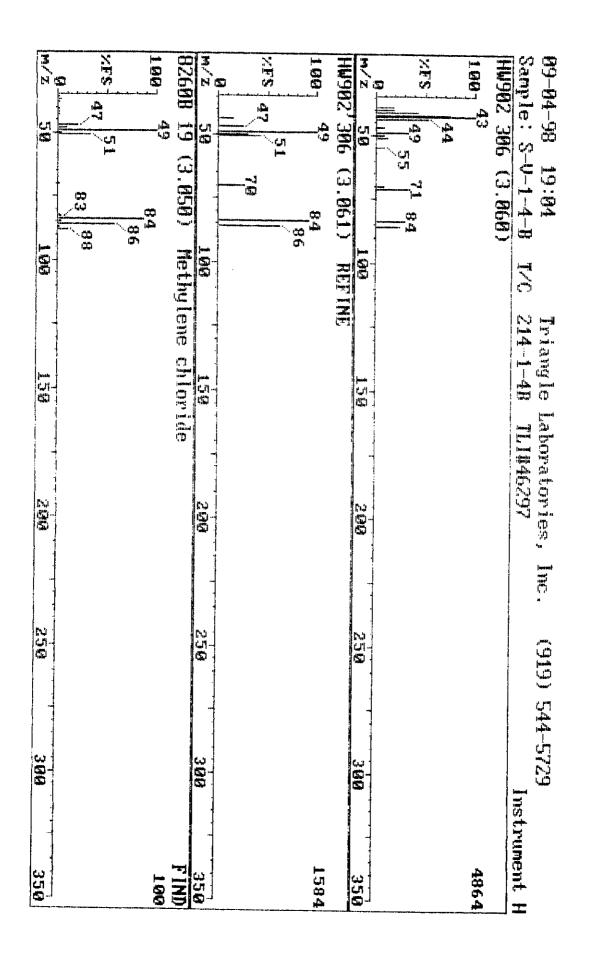
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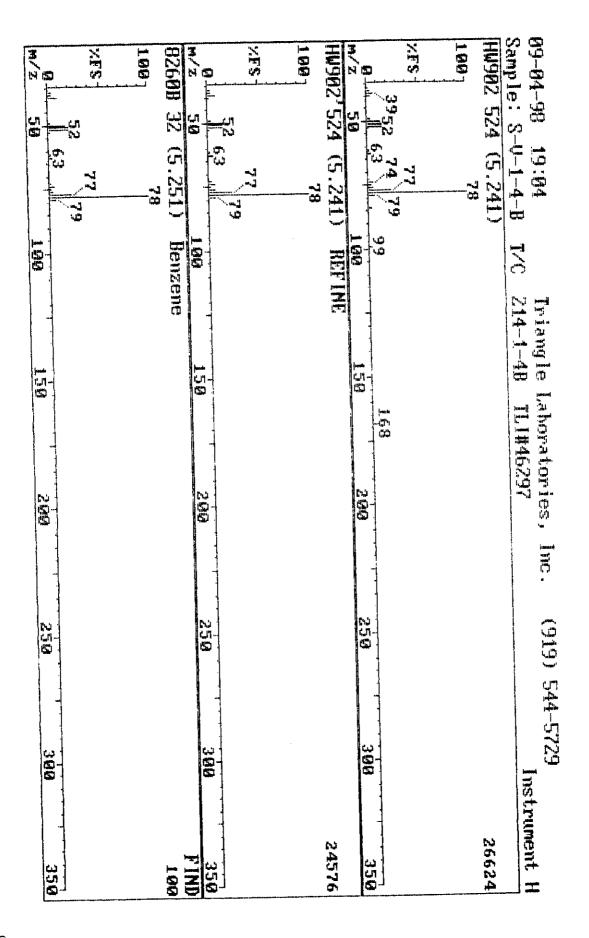
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	MD	Name
.1	100	84	99	0	3304903	bv	5.04	168	Pentafluorobenzene
2	100	96	98	2	3804952	bv	5.78		1,4-Difluorobenzene
3	100	95	75	-3	3721945	bv	9.94		Chlorobenzene-d5
4	100	79	98	4	1911209	bv	15.06		1.4-Dichlorobenzene-d4
5	100	96	99	1	1683240	bv	4.71		Dibromofluoromethane
6	100	92	97	-3	4626886	by	7.64		Toluene-d8
7	100	89	93	-3	2540335	bv	12.22		4-Bromofluorobenzene
8	58	30	69	4	444426	<u> </u>	م756. ا		1,3-Butadiene
9	0	O	0	0	0		0.00		Vinyl bromide
10	25	12	30	-4	19160	-bb	~ ઁ . ઁ ન્ભ		MTBE
1.1	64	53	53	1	5800		3.66		n-Hexane
12	0	0	0	О	0		0.00		1,2-Epoxybutane
13	23	25	35	-25	754	- bb	5-14 FP		Iso-Octane
14	27	13	53	-15	1 340		6.20 FO	· ·	Ethyl acrylate

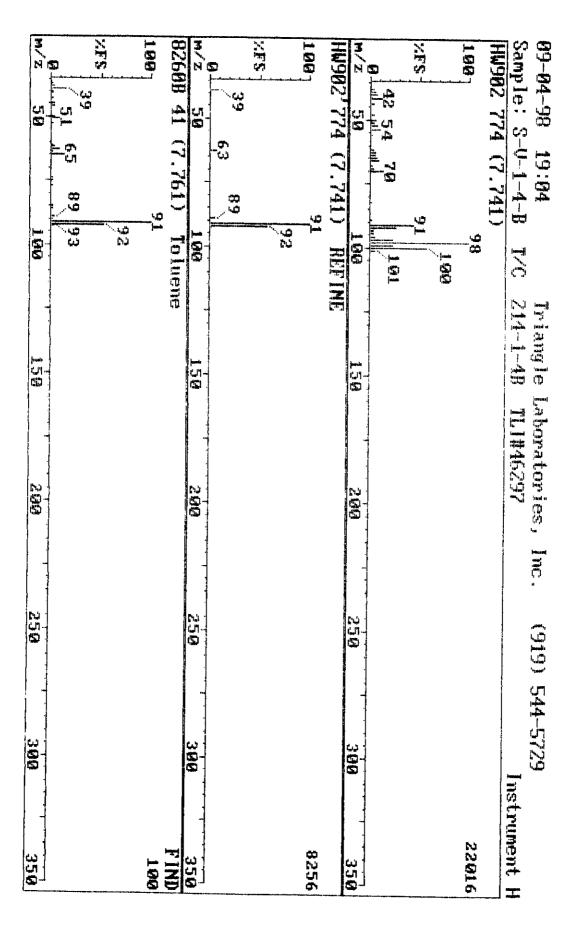


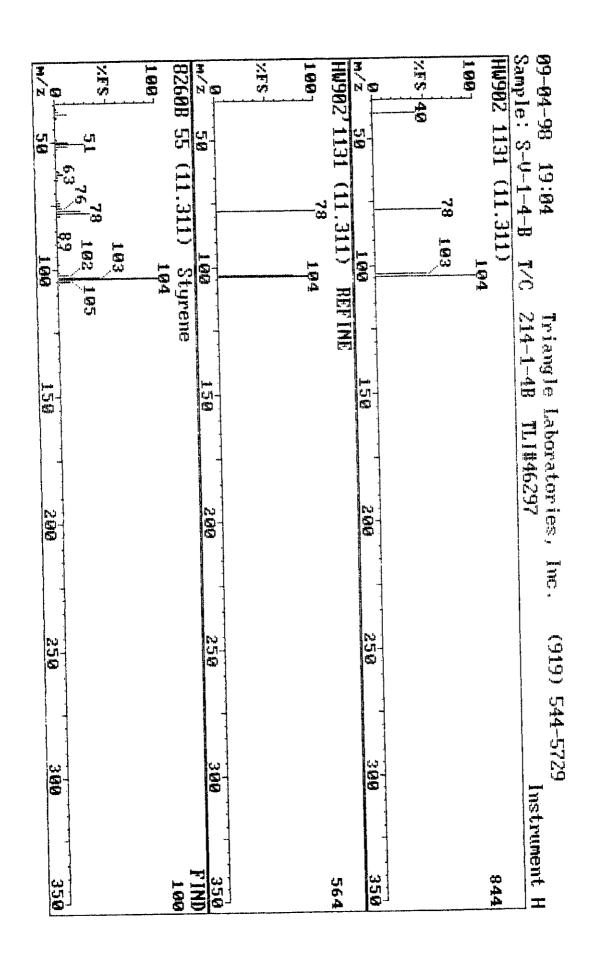


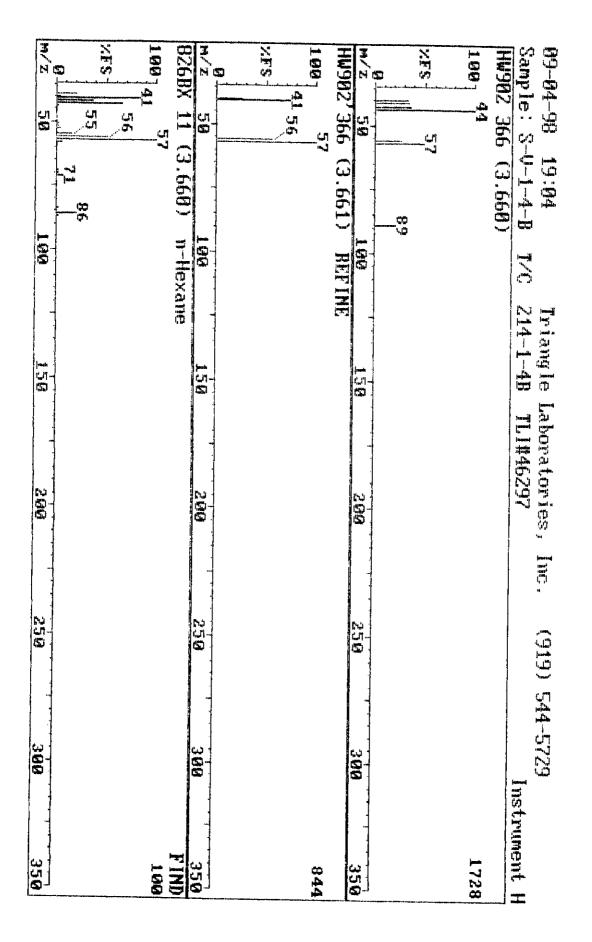












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CALIBRATION DATA

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

Triangle Laboratories, Inc. Initial Calibration Curve

ICAL File: ICALH904 RF.1 HW887

Date of Analysis:09/04/98

Analyte List: 8260 RF.50 HW889

RF.75 HW890

RF.25 HW888 RF1.00 HW891

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VOST Calibration.

Analyte	Flag	RF.1	RF.25	RF.50	RF.75	RFL00	MEAN	%RSD	
Pentafluorobenzene	I								
Chloromethane	Р	0.236	0.271	0.220	0.267	0.207	0.054	10.4	
Vinyl Chloride	С	0.303	0.367	0.338	0.360	0.287	0.256	10.6	
Bromomethane		0.305	0.354	0.312	0.334	0.380 0.353	0.350	8.6	
Chloroethane		0.199	0.213	0.207	0.334	0.333	0.332	6.9	
Trichlorofluoromethane		0.599	0.643	0.644	0.642		0.215	7.4	
1,1-Dichloroethene	С	0.301	0.324	0.330	0.247	0.761 0.382	0.658	9.3	
Iodomethane		0.633	0.633	0.674	0.500	0.382	0.317	15.4	
Carbon disulfide		0.903	0.921	0.957	0.754	0.742	0.636	13.9	
Acetone		0.043	0.186	0.177	0.734	0.199	0.900	9.5	
Allyl chloride		0.338	0.349	0.377	0.136	0.199	0.148	42.9	
Methylene chloride		0.302	0.312	0.322	0.231	0.401	0.352	11.3	
Acrylonitrile		0.029	0.028	0.031	0.029	0.037	0.310	17.3	
trans-1,2-Dichloroethene		0.324	0.350	0.363	0.307	0.037	0.031	11.2	
1,1-Dichloroethane	P	0.651	0.675	0.691	0.657	0.586	0.350	10.9	
Vinyl acetate		0.090	0.214	0.231	0.037	0.388	0.652	6.1	
cis-1,2-Dichloroethene		0.339	0.360	0.231	0.249	0.183	0.193	32.5	
2-Butanone		0.050	0.234	0.201	0.220	0.367	0.370	5.6	
Chloroform	C	0.714	0.767	0.201	0.763	0.136	0.168	45.0	
1,1,1-Trichloroethane		0.630	0.702	0.683	0.650	0.760	0.764	4.8	
1,4-Difluorobenzene	I	0.000	0.702	0.000	0.650	0.047	0.662	4.4	
Carbon tetrachloride		0.688	0.601	0.554	0.521	0.532	0.570	11.0	
Benzene		1.281	1.138	1.235	1.083	1.051	0.579	11.8	
1,2-Dichloroethane		0.357	0.368	0.363	0.356	0.331	1.158	8.5	
Trichloroethene		0.469	0.414	0.422	0.336	0.331	0.355	4.1	
1,2-Dichloropropane	C	0.406	0.419	0.413	0.405	0.427	0.431	5.0	
Methyl methacrylate		0.082	0.082	0.090	0.092	0.402	0.409	1.8	
Bromodichloromethane		0.575	0.573	0.589	0.585	0.093	0.088	6.1	
cis-1,3-Dichloropropene		0.507	0.561	0.579	0.587	0.579	0.579	1.3	
4-Methyl-2-pentanone		0.115	0.155	0.149	0.367	0.379	0.563	5.7	
Toluene	C	0.738	0.770	0.770	0.756	0.730	0.143	11.3	
trans-1,3-Dichloropropene		0.337	0.404	0.428	0.442	0.432	0.753 0.409	2.5	
1,1,2-Trichloroethane		0.255	0.248	0.255	0.264	0.452		10.4	
Chlorobenzene-d5	I		5.2.10	0.200	0.204	0.237	0.256	2.3	
Tetrachloroethene		0.418	0.411	0.427	0.427	0.430	0.422	10	
2-Hexanone	1	0.060	0.198	0.180	0.427	0.430	0.423	1.9	
Dibromochloromethane		0.407	0.385	0.414	0.190	0.174	0.160	35.5	
1,2-Dibromoethane		0.318	0.298	0.312	0.314	0.418	0.408 0.311	3.4 2.5	

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

Triangle Laboratories, Inc. Initial Calibration Curve

ICAL File: ICALH904 Date of Analysis :09/04/98 RF.1 HW887 RF.25 HW888 RF.75 HW890 RF1.00 HW891	Analyte List: 8260 RF.50 HW889
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VOST Calibration.						omaconescolos/2000				00000000
Analyte	Flag	RF.1	RF.25	RF.50	RF.75	RF1.00 N	ÆAN	%RSD		
Chlorobenzene Ethylbenzene m-/p-Xylene o-Xylene Styrene Bromoform 1,4-Dichlorobenzene-d4 Cumene 1,1,2,2-Tetrachloroethane Average %RSD	P C P I P	0.923 0.467 0.589 0.547 0.868 0.174 3.940 0.463	0.954 0.496 0.608 0.569 0.929 0.203 3.920 0.618	0.987 0.502 0.613 0.569 0.946 0.233 4.136 0.674	0.956 0.467 0.574 0.530 0.894 0.244 2.927 0.559	0.954 0.468 0.567 0.543 0.907 0.251 2.740 0.504	0.955 0.480 0.590 0.552 0.909 0.221 3.532 0.564	2.4. 3.7 3.4 3.1 3.3 14.6 18.3 15.1 10.5	-	
Surrogate	Flag	RF.1	RF.25	RF.50	RF.75	RF1.00	Mean	%RSD		
Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene	\$ \$ \$	0.423 1.024 0.498	0.489 1.072 0.524	0.436 1.078 0.516	0.438 1.087 0.502	0.427 1.062 0.500	0.443 1.065 0.508	6.0 2.3 2.3		

Approved by: $\frac{1}{12}$ Date $\frac{9}{7}$ Date

*- Fails QC Criteria for %RSD; << - 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	•	- 111y to Libe. 0200
VOCT Calibration		

VOST Calibration.

Analyte		W FO SE	RFMEAN		
ALIGI VIE	Flag	*******	CENEAU.	%D	
Pentafluorobenzene	I		· · · · · · · · · · · · · · · · · · ·		
Chloromethane	₽	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	С	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	0.550		
Vinyl acetate	•	0.190	0.032	-1.1	
cis-1,2-Dichloroethene		0.366	0.193	1.6	
2-Butanone		0.160	0.370	1.1	
Chloroform	С	0.764	0.166	4.8	
1,1,1-Trichloroethane	C	0.731	0.764	0.0	
1,4-Difluorobenzene	I	0.751	0.002	-10.4	
Carbon tetrachloride	•	0.592	0.570	2.2	
Benzene		1.599	0.579	-2.2	
1,2-Dichloroethane		0.366	1.158	-38.1	
Trichloroethene		0.487	0.355	-3.1	
1,2-Dichloropropane	С	0.415	0.431	-13.0	
Methyl methacrylate	C	0.415	0.409	-1.5	
Bromodichloromethane		0.580	0.088	-10.2	
cis-1,3-Dichloropropene		0.563	0.579	-0.2	
4-Methyl-2-pentanone		0.363	0.563	0.0	
Toluene	С	0.172	0.143	-20.3	
trans-1,3-Dichloropropene	C	0.771	0.753	-2.4	
1,1,2-Trichloroethane			0.409	-2.0	
Chlorobenzene-d5	I	0.261	0.256	-2.0	
Tetrachloroethene	1	0.400	0.455		
2-Hexanone	1	0.432	0.423	-2.1	
Dibromochloromethane	1	0.197	0.160	-23.1	
1,2-Dibromoethane		0.416	0.408	-2 .0	
-,- Owtomocularie		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	С	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	REMEAN	%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: $\frac{\sqrt{7}}{98}$

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

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

Triangle Laboratories, Inc. Continuing Calibration Curve

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

Analyte List: 8260

VOST Calibration.

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

Approved by: _______ Date 9/8/98

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

TRIANGE LAVIS

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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Triangle Laboratories, Inc. 801 Capitola Drive P.O. Bo Durham, NC 27713-4411 Researc 919-544-5729 Fax # 9

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

Triangle Laboratories, Inc. Case Narrative

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, 1,4difluorobenzene, chlorobenzene-d₅, and 1,4-dichlorobenzene-d₄, and the surrogate standards reported are dibromofluoromethane, toluene-d₈, 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 0.3u 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

J

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-d₈ 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) =

(area analyte) x (amt IS)

(area IS) x (amt analyte)

Amount (ug) =

(area analyte in sample) x (amt IS)

(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.,

Genny a. Brock

Report Preparation:

Quality Control:

Penny A. Brock

Report Preparation Chemist

Sarah A. Hubbard

Report Preparation Chemist

Band a Hulla

The total number of pages in this data package is ______

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

Client Id:	TEI 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 9 8	HW897

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

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Proj_Sum v4.0

Triangle Laboratories, Inc. Project Summary for Project 46323

	114	oject building 101			
Client ID:	S-V-2-4-A	S-V-2-4-B	S-V-3-3-A	S-V-3-3-B	VOSTBLK 09
Cheff ID.	T	TC	T	TC	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
Onto .				0.353	0.025
Chloromethane	0.390	0.766	0.253	(0.001)	(0.001)
Vinyl Chloride	(0.001)	(0.001)	(0.001)	0.071	0.022
Bromomethane	0.086	0.141	0.059		(0.001)
Chloroethane	0.311	(0.001)	(0.001)	(0.001)	(0.001)
Trichlorofluoromethane	(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)
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
cis-1,3-Dichloropropene	0.820				0.004
Toluene		700000000000000000000000000000000000000	(0.001)	(0.001)	(0.001)
trans-1,3-Dichloropropen	(0.001)	•	(0.001)	(0.001)	(0.001)
1,1,2-Trichloroethane	(0.001)	•	` .		(0.001)
Methyl methacrylate	(0.002)	,		• ,	(0.001)
4-Methyl-2-pentanone	(0.001)	•	` .		0.001
Tetrachloroethene	,	•		•	
Dibromochloromethane	(0.001)	•	•	•	•
1,2-Dibromoethane	(0.001)		•		-
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)

()-Estimated Detection Limit

Page 1

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 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 : TLI ld : Matrix : Units :	HW903 214-27-4A VOST ug	HW898 214-27-4B VOST ug	HW904 214-27-12A VOST ug	HW899 214-27-12B VOST ug	HW897 VOSTBLK 0904 VOST
Ethylbenzene m-/p-Xylene o-Xylene Styrene Bromoform 2-Hexanone Cumene 1,1,2,2-Tetrachloroethane	0.385 2.108 0.784 0.145 (0.001) (0.001) (0.001) (0.001)	0.001 0.001 (0.001) 0.001 (0.001) (0.001) (0.001)	2.716 12.924 3.540 0.490 (0.002) (0.003) (0.001) (0.003)	(0.001) (0.001) (0.001) (0.001) (0.001) (0.001) (0.001)	0.001 6.001 6.001 6.002 (0.001) (0.001) 0.001 (0.001)

Triangle Laboratories, Inc. Project Summary for Project 46323

Client ID:	S-V-2-4-A	S-V-2-4-B	S-V-3-3-A	S-V-3-3-B	VOSTBLK 09
	T	TC	T	TC	0498 T/TC
Filename: TLI Id: Matrix: Units:	HW903	HW898	HW904	HW899	HW897
	214-27-4A	214-27-4B	214-27-12A	214-27-12B	VOSTBLK 0904
	VOST	VOST	VOST	VOST	VOST
	ug	ug	ug	ug	ug
1,3-Butadiene Vinyl bromide n-Hexane 1,2-Epoxybutane Iso-Octane Ethyl acrylate	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	1.423	0.002	5.008	6.003	0.001
	(0.046)	(0.035)	(0.055)	(0.036)	(0.034)
	(0.001)	0.001	(0.001)	(0.001)	(0.001)
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

()-Estimated Detection Limit



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:	RECOVERY PERSON: Abernathy Maret	DERSON: Abernathy Maret			PROJECT NO.	NO.:	R012.001		
						weinanny, mai ci	aly, maici		
Sample					Ana	Analytical Request	uest		
Jantification	ollectic		Number of						Comments
Identification	Γ	Time Name	Containers						
T-V-3-1-B	7/27/98	Tunnel Run 3 Set 1	1						[enay/Charcon]
T-V-3-2-A	7/27/98	Tunnel Run 3 Set 2							Tellaw Cital Coal
T-V-3-2-B	7/27/98	Tunnel Run 3 Set 2						1 =	renax
T-V-3-3-A	7/27/98	Tunnel Run 3 Set 3	1						lenax/Charcoal
T-V-3-3-B	7/27/98	Tunnel Run 3 Set 3	-						lenax
S-V-FB-A	7/26/98	Silo Field Blank							l enax/Charcoal
S-V-FB-B	7/26/98	Silo Field Blank	_					-1 -	renax
T-V-4-1-A	7/26/98	Tunnel Run 4 Set 1	-					4 -	eliavellaredal
T-V-4-1-B	7/26/98	Tunnel Run 4 Set 1	_						enay/Charocal
T-V-4-2-A	7/26/98	Tunnel Run 4 Set 2						4	CHANCHAICOAL
T-V-4-2-B	7/26/98	Tunnel Run 4 Set 2						-1 -	Tenay/Chara-i
T-V-4-3-A	7/26/98	Tunnel Run 4 Set 3	→					-	Tonay Cital Coal
T-V-4-3-B	7/26/98	Tunnel Run 4 Set 3	-						Tonacion
T-V-4-4-A	7/26/98	Tunnel Run 4 Set 4	-					4 -	Tenaveriarcoal
T-V-4-4-B	7/26/98	Tunnel Run 4 Set 4	-						ienax
			-						Tenax/Charcoal
								-	
Ratinquished ly:				Date	4	Received by:	<u>۲</u>		
X	LU M	Whichma V. MAKET	,	0201 30/82/t			•		
Relinquished by:	y:			Date		Received fo	for Lab by:		
		-		7/26/14 1/200	1906/	\mathcal{C}_{i}	1	Fire	Y
							1/4	1000	



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

Sample Chain of Custody Record

V-1-1-1	PLANT: US EPA HOT MIX ASPHALT PLANT C PROJECT NO.: RECOVERY PERSON: Abernathy, Maret SAMPLERS: Abern	
A. I. Lisa I Dannat	PROJECT NO.: R012.001 SAMPLERS: Abernathy, Maret	

Ĺ				Tunnel Run 3 Set 1	7/27/98	T-V-3-1-A
i	Tenay			Silo 2 Run 3 Set 6	7/27/98	S-V-3-6-B
	Tenax/Charcoal			Silo 2 Run 3 Set b	7/27/98	S-V-3-6-A
}	Tenax		\ \ \ \	Silo 2 Kun 3 Set 3	7/27/98	S-V-3-5-B
1	Tenax/Charcoal		1	Silo 2 Run 3 Set 5	7/27/98	S-V-3-5-A
	Tenax		-	Silo 2 Run 3 Set 4	7/27/98	S-V-3-4-B
	Tenax/Charcoal		<u> </u>	Silo 2 Run 3 Set 4	7/27/98	S-V-3-4-A
	Телах		\ \ \ \	Silo 2 Run 3 Set 3	7/27/98	S-V-3-3-B
	Tenax/Charcoal		-	Silo 2 Run 3 Set 3	7/27/98	S-V-3-3-A
	Tenax		\ \ \ \	Silo 2 Run 3 Set 2	7/27/98	S-V-3-2-B
	Tenay/Charcoal			Silo 2 Run 3 Set 2	7/27/98	S-V-3-2-A
	Tenay			Silo 2 Run 3 Set 1	7/27/98	S-V-3-1-B
<u></u>	Tenay/Charcoal			Silo 2 Run 3 Set 1	7/27/98	S-V-3-1-A
	Тепах		-	Tunnel Fleid Blank	7/25/98	T-V-FB-B
	Tenax/Charcoal		-	l unnel Fleid Blank	7/25/98	T-V-FB-A
7	Tenax		<u></u>	TUNNER TWO A COCK #	//25/98	T-V-2-4-B
	Tenax/Charcoal			Tuille Nan 2 Cot 4	1/20/90	1-V-2-4-A
<u></u>	Tenax		-	Tunnel Run 2 Set 4	90/35/7	1-4-2-0
' -	Tenax/Charcoal		→	Tunnel Run 2 Set 3	807577	1-7-7-7
1	lenax			Tunnel Run 2 Set 3	80/36/7	7 () 7
	Lenax/Charcoal			Tunnel Run 2 Set 2	7/25/98	T.V-2-2-B
	1 ellax			Tunnel Run 2 Set 2	7/25/98	T-V-2-2-A
<u>. ī</u> .	Tana		-	Tunnel Run 2 Set 1	7/25/98	T-V-2-1-B
	Tongy/Chargon			Tunnel Run 2 Set 1	7/25/98	T-V-2-1-A
	Tenay			Silo 2 Run 2 Set 4	7/25/98	S-V-2-4-B
	TenayCharcoal			Silo 2 Run 2 Set 4	7/25/98	S-V-2-4-A
	TellayCilaicoai			Silo 2 Run 2 Set 3	7/25/98	S-V-2-3-B
	Tonou/Characal			Silo 2 Run 2 Set 3	7/25/98	S-V-2-3-A
	Topov		1	Silo 2 Run 2 Set 2	7/25/98	S-V-2-2-B
	Tency/Charact			Silo 2 Run 2 Set 2	7/25/98	S-V-2-2-A
	Tongy			Silo 2 Run 2 Set 1	7/25/98	S-V-2-1-B
1	TopoufChargosi			Silo 2 Run 2 Set 1	7/25/98	S-V-2-1-A
	Tongy		Containers	Name	Date Time	Identification
	Comments		Number of	Sample	Collection	Sample .
		Analytical Request				

TRENIETE LIVES

DOCUMENT CONTROL

Triangle Laboratories, Inc. 801 Capitola Drive P.O. Bo Durham, NC 27713-4411 Resear 919-544-5729 Fax # 9

es, Inc. P.O. Box 13495 Recearch Triangle Park, NC 2770: Fax # 919-544-5491

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214-27-2A 214-27-2B 214-27-3A	S-V-2-2-A S-V-2-2-B S-V-2-2-B S-V-2-3-A S-V-2-3-A		++							
214-27-4A 214-27-4B	S-V-2-4-A S-V-2-4-A S-V-2-4-B	TENAX R026 TNX/CHAR	- × - ×							
214-27-5A	T-V-2-1-A	TENAX R026	× ×							
214-27-5B	T-V-2-1-B T-V-2-1-B T-V-2-2-A T-V-2-2-A	R026 TENAX R026	<u> </u>							
214-27-6B 214-27-7A	T-V-2-2-B T-V-2-2-B T-V-2-3-A T-V-2-3-A	TMX/CHAR R026 TENAX	AX AR							
214-27-7B Receiving Remarks:	T-V-2-3-B T-V-2-3-B	TNX/CHAR R026	IAR .		y y		<u> </u>			
Archive Remarks				-Form Revised 05/27/1997		Page 1 OF 4=	Page 1	Page 1	Page 1 OF 4	Page 1 OF 4

	Archive Remarks:	Receiving Remarks:	214-27-14B	214-27-14A	214-27-13B	214-27-13A	214-27-12B	214-27-12A	214-27-11B	214-27-11A	214-27-10B	214-27-16A	214-27-98	214-27-9A	214-27-88	214-27-8A	TLI Number	: Ice Chest	. SMO Forms	'Chein of Custody : Sample Tags : Sample Tag Numbers:
	arks:	lemarke:	S-V-3-5-B S-V-3-5-B	1 S-V-3-5-A S-V-3-5-A	S-V-3-4-B	S-V-3-4-A S-V-3-4-A	S-V-3-3-B S-V-3-3-B	S-V-3-3-A	S-V-3-2-B S-V-3-2-B	S-V-3-2-A S-V-3-2-A	S-V-3-1-B S-V-3-1-B	S-V-3-1-A S-V-3-1-A	T-V-FB-B T-V-FB-B	T-V-FB-A	T-V-2-4-B T-V-2-4-B	T-V-2-4-A T-V-2-4-A	Client COC ID*			Z
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			TNX/CHAR	TENAX	TNX/CHAR	TENAX	TNX/CIUM	TENAX	INX/CHAR	TENAX	TNX/CHAR	TENAX	TNX/CHAR	ТЕНАХ	TNX/CHAR	TENAX	Location	Temp		:-
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2 OF 4				-													To STORAGE Date/Init	Car	Date	<u>-</u>
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-		-											+	+			To STORAGE Date/Init		The same	Services .
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1214-27-21B T-V-4-2-B T-V-4-2-B		214-27-21A T-V-4-2-A	214-27-20B T-V-4-1-B	214-27-20A T-V-4-1-A	214-27-19B S-V-FB-B 5-V-FB-B	214-27-19A S-V-FB-A S-V-FB-A	214-27-18B T-V-3-3-B T-V-3-3-B	214-27-18A T-V-3-3-A	214-27-17B T-V-3-2-8 T-V-3-2-8	214-27-17A T-V-3-2-A T-V-3-2-A	7-V-3-1-B T-V-3-1-B	214-27-16A T-V-3-1-A T-V-3-1-A	214-27-15B S-V-3-6-B S-V-3-6-B	>	TLI NumberClient Sample ID	Toe Chest		Custody Seal : Absent	
	2-B TNX/CHAR 2-B R026	R026	1-B TNX/CHAR 1-B R026	R026	-B RO26	A ROZE	TNX R026	-A RO26	-B R026	-A RO26	-B RO26	A RO26	R026	A ROZG TENAX	B IDMatrix ID* Location	ICE PACKS Temp	Absent Not Listed on Chain of Custody N/A	Sample Se Container	TRIANG
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Custody Seal Chain of Custody Sample Tags Sample Tag Number	: Absent : Present : Absent s: Not Listed o	Custody Seal : Absent Sample Seals: Absent Chain of Custody : Present Container: Intact Sample Tags : Absent Sample Tag Numbers: NA Listed on Chain of Custody	r: Intact Client: PES Clien			Clier	ed Numb	Pacific Environmental Services	ronmental Se	rvices	214
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	Client Sample ID*	Location	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 IAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-27-22A	T-V-4-3-A	TENAX R026									
214-27-228	T-V-4-3-B T-V-4-3-B	THX/CHAR R026									
214-27-23A	T-V-4-4-A T-V-4-4-A	TENAX R026									
214-27-238	T-V-4-4-B T-V-4-4-B	TNX/CHAR R026	· - · - -								
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Triangle Laboratories, Inc. Run Log

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'57	1	Je 3	and c	30	Jed Ical 9/4/8			Jak .	300	Backup Proc Comments***	C. Shull 9/3/88	Circl / Sample volyme Jul ml	s, Other	16

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Transcribed Data

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	10:26	16 27/K	7//98 20			Date" Th	12:00	Internal /	1)60	Column Type
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	214-1-4	42-1-ht	44-1-1A	127-121 121-121-121	214-11-44	Sample#	155-101 155-101	Internal	3274056	Column #
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SRVRAWAPMSRLYLRRUNLOG.DOC (10/18/97)

Transcribed Data

Dated Signature/Initials Required .WFT-Warsture They tute Page 32

TRIGING LIES

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

Project Number: 46323 Sample File: HW897

Method 8260 VOST Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001 TLI ID: VOSTBLK090498 Date Received: 11

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
	ug.			ug	ns
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		100.0	- 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.

Savar v3.7

801 Capitola Drive • Durham, North Carolina 27713

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

Printed: 16:29 09/08/1998

Project Number: 46323 Sample File: HW897

Method 8260 VOST Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001 TLI ID: VOSTBLK090498

Date Received: //

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
Methyl methacrylate	ng			ug	ug
		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		0.07
Tetrachloroethene	0.001	J	8.55		0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	·
1.2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.001	J	10.29	0.001	0.05
m-/p-Xylene	0.001	ı	10.53		0.05
o-Xylene	0.001	J	11.24		0.10
Styrene	0.002	J			0.05
Bromoform	0.002	J U	11.28		0.05
1,4-Dichlorobenzene-d				0.001	0.05
Cumene	0.00	IS 4	15.05		
1,1,2,2-Tetrachloroethane	0.001	J	12.01		0.05
····2- i cu'acinoroetnane		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

Project Number: 46323 Sample File: HW897 Method 8260 VOST Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001 TLI ID: VOSTBLK090498 Date Received: 11

Response File: ICALH904

Date Analyzed: 09/04/98

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

Reviewed by Date C/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

Project Number: 46323 Sample File: HW897

Method 8260 VOST Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001 TLI ID: VOSTBLK090498

Date Received: //

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit	Quan. Limit
D 6	ug			ug	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	*****	V)
Ethyl acrylate		U	- / /	0.001	0.25

Reviewed by <u>Gas</u> 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

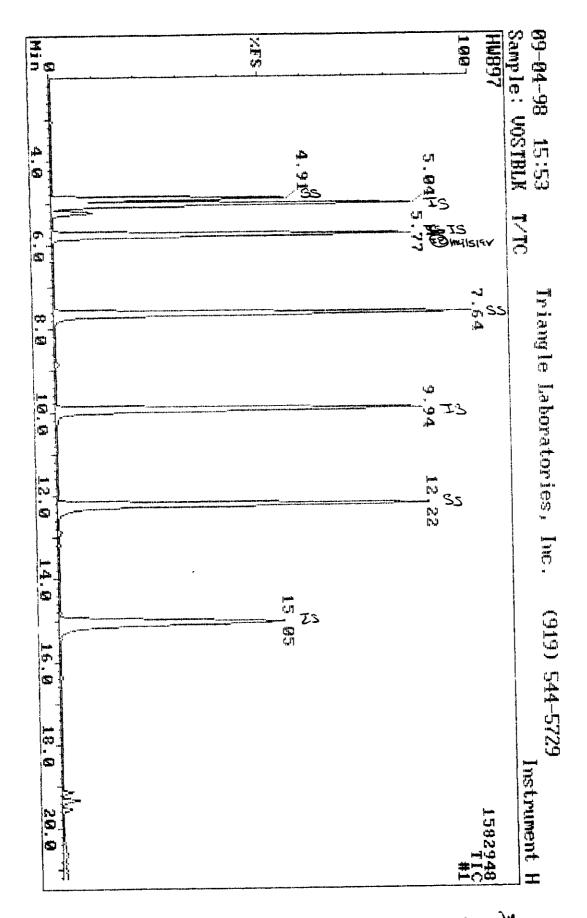
Triangle Laboratories, Inc.

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801 Capitola Drive • Durham, North Carolina 27713

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

Printed: 16:54 09/08/1998



Data Review: 1/2 Date: 9/6/98

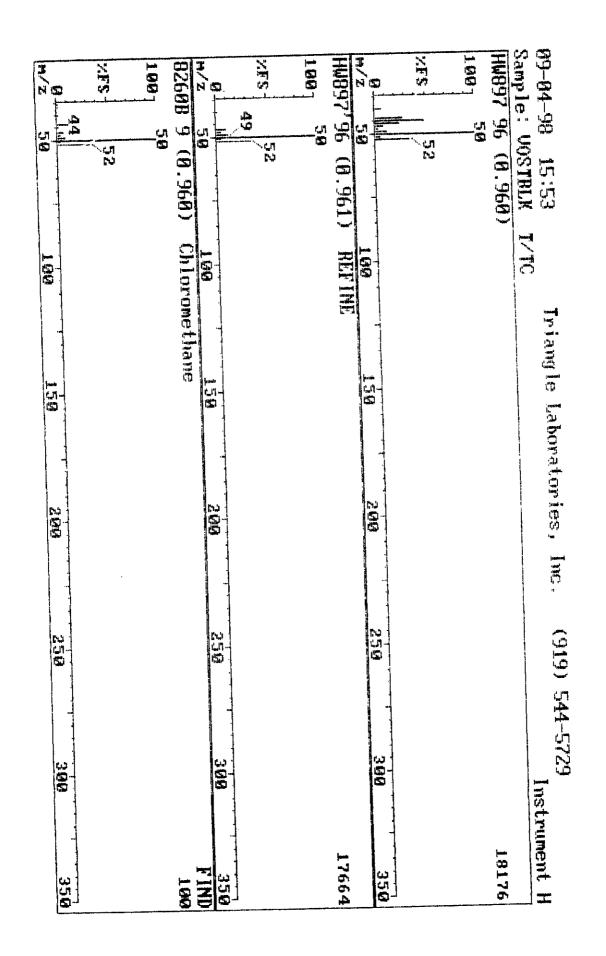
									09~04~98 L6:45
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	AM	Name
1	100	85	99	-2	3670831	bv	5.04	168	Pentafluorobenzene
2	100	96	98	Ö	4037552	bv	5.77	114	1 Ambificante
3	100	95	96	-1	3878054		9.94	117	1,4-Difluorobenzene Chlorobenzene-d5
4	100	79	98	0	1386261		15.05	150	1 4-Dishland
5	100	97	99	1	1823460		4.91	117	1,4-Dichlorobenzene-d4
6	100	92	97	0	4689891		7.64	770	Dibromofluoromethane Toluene-d8
7	100	89	93	0	2576768		12.22		
8	0	0	0	0	0		0.00	7.J Q.S	4-Bromofluorobenzene
9	98	74	82	0	92252	bν	0.96	50	Dichlorodifluoromethane Chloromethane
10	0	0	0	0	0		0.00		
11	100	91	96	0	105020	bv	1.46		Vinyl Chloride
12	0	0	0	Ó	0		0.00		Sromomethane
13	0	0	O	0	õ		0.00		Chloroephane
14	0	0	O	0	o o		0.00	10 A	Trichtorofluoromethane
15	92	70	84	2	19672	bb	2.56	700 1 440	1.1-Dichloroethene
16	73	40	7.7	ō	9020				Iodomethane
1.7	79	4.1	86	O	10200	A	2.64		Carbon disulfide Acetone
18	0	1)	Q	O	0		0.00		
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21	0	O	0	Ó	ŏ		0.00		Acrylonitrile -
22	0	0	0	0	ı)		0.00	20	trans-1,2-Dichloroethene
23	0	0	O	O.	o o		0.00		1,1-0ichtoroethane
24	0	0	0	0	5		0.00	777	Viny: acetate
25	0	O	0	0	Ō		0.00	94	2.2-Dichteropropane
26	71	49	68	1.	7204	ხხ	4.50	70 47	cis-1,2-Dichtoroethene 2-Butanone
27	70	48	67	1	3844		4.75		Chloroform
28	0	0	0	Ö	0		0.00		Sromochloromethane
29	0	O	0	0	ō		0.00		
30	0	O	0	o	Ö		0.00	117	1,1,1-Trichioroethane
31	0	O	0	0	0		0.00		Carbon tetrachionide
32	100	99	99	.1.		bv	5.24	70	1.1-Dichloropropene Benzene
33	0	0	0	0	0		0.00		
34	0	0	0	0	Ó		0.00		l,2-Dichloroethane Trichloroethene
35	0	0	0	0	Ó		0.00		
36	0	O	0	0	Ō		0.00	9.Z	1,2-Dichloropropane Dibromomethane
37	0	0	0	0	0		0.00		Methyl methacrylate
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43	0	0	0	O	o		0.00		trans-1.3-Dichloroproper
44	O	0	13	0	Ō		0.00		1,1,2-Trichloroethane Ethyl methacrylate
45	77	58	68	0	3636	bb	8.55	164	Tetrachloroethene
46	0	0	0	0	0		0.00		1,3-Dichloropropane
47	0	0	0	0	Ō		0.00	7 G 4 द	2-Hexanone
48	0	0	O	0	ó		0.00		Dibromochloromethane
49	0	0	O	0	0		0.00	107	1.2-Dibromoethane
50	0	0	0	0	O		0.00	112	Chlorobenzene
								مثاد ماد ماد	Out of openie

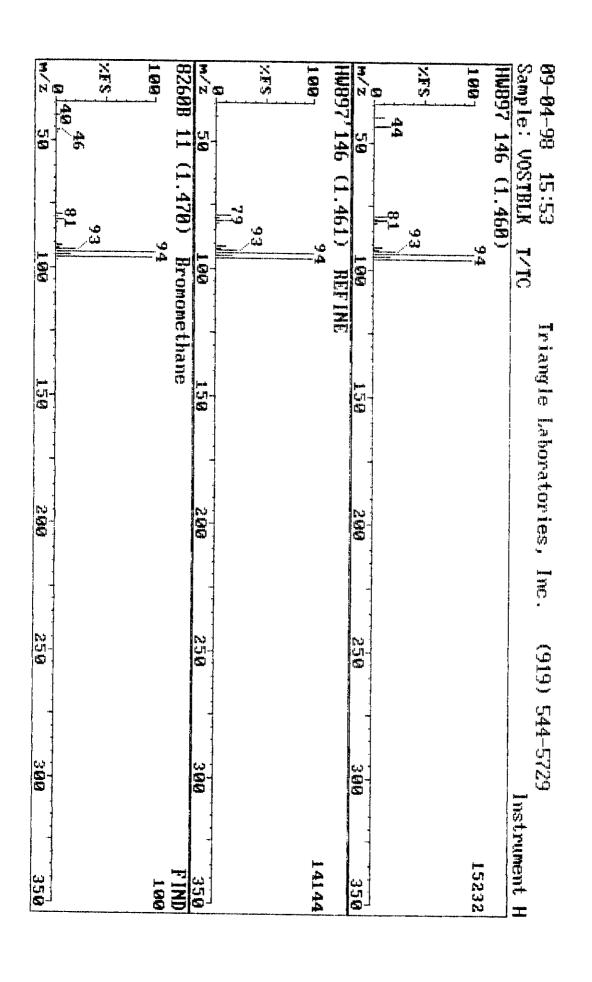
Data Review: YR Date: 915197

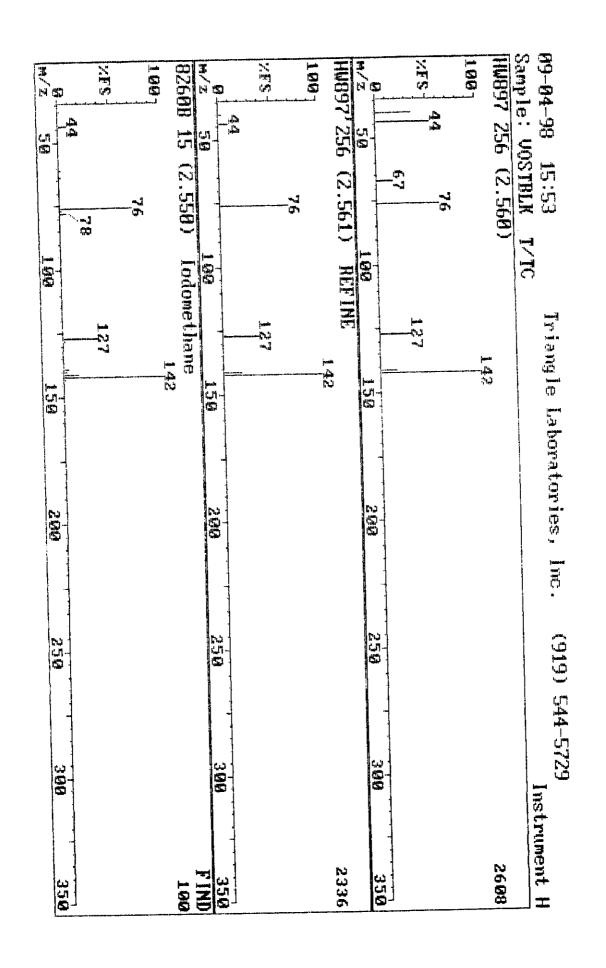
•									
No.	MAT F	FOR F	REV	Delta	Area P.Fla	gs	RT	MQ	Name
51	0			0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	43	21	52	2	2740 bb		10.29		Ethylbenzene
53	72	55	66	2	11892 by		10.53		m-/p-Xylene
54	62	55	55	4	6024 A		11.24		o-Xylene
55	69	64	64	5	23120 A		11.28		Styrene
56	0	0	ő	Ō	O		0.00		Bromoform
57	74	62	62	3	15420 bv		12.01	105	Cumene
58	0	0	0	0	О		0.00	33	1,1,2,2-Tetrachloroethan
59	65	33	73	1	13000 A		12.42	156	Bromobenzene
57 60	0	υ υ	Ö	ō	0		0.00	7.5	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 64	79	68 -	71	4	14408 by		13.18	126	4-Chlorotoluene
65	56	39	55	2	18488 by		13.31	105	1,3,5-Trimethylbenzene
66 66	72	59	59	0	15250 A		14.06	112	tert-Butylbenzene
67	85	70	70	Ţ	43296 A		14.22	105	1,2,4-Trimethylbenzene
67 68		56	66	ō	24988 A		14.71		sec-Butylbenzene
69		0	0	0	0		0.00	113	p-Cymene
70		70	81	1	37788 A		14.32		1.3-Dichlorobenzene
71		Ö	0		67324 Am	15	130-00/	1.46	5 1,4-Dichtorobenzene
72		ó	Ó	O	0	Mal5198	0.00		Benzyl chioride
73		52	60	2	29716 A		16.84	71	L n-Butylbenzene
76		63	75		53176 A		16.39	1. 10	S 1,2-0ichtorobenzene
7.5		Ö	C		0		0.00		5 1.2-Dibromo-3-chloroprop
7 č		_	92	: 6	55508 bv		19.12	1.30) 1.2.4-Trichlorobenzene
77		-	90		14016 bb		19.53		5 Hexachlorobutadiene
78			91		120696 A		12.32	1.27	B Naphthalene
79			87		41368 bv		19.53	18	0 1,2,3-Trichlorobenzene

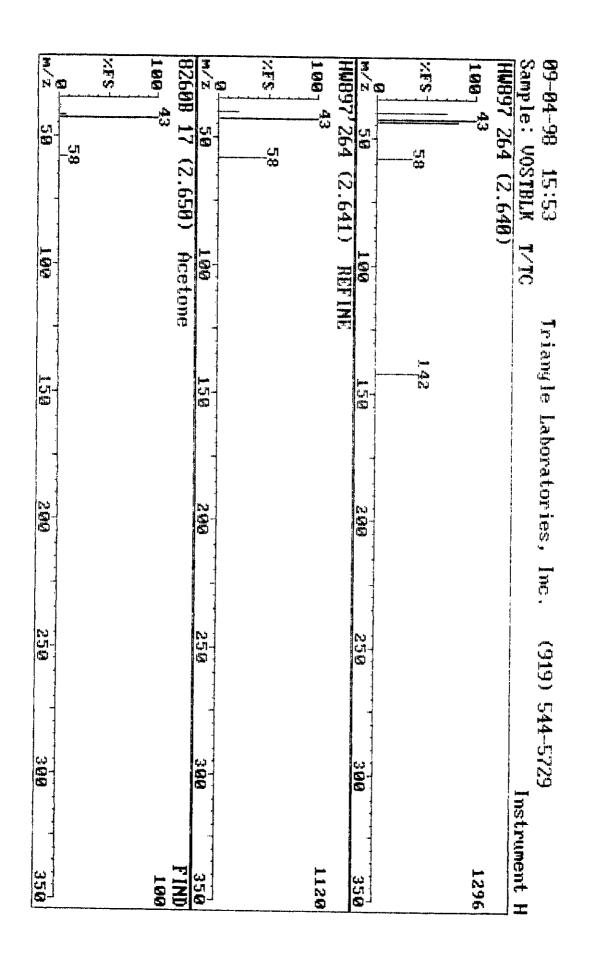
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
7	100	85	99	O	3670831	bv	5.04	168	Pentafluorobenzene
2	100	96	98	1	4037552	bv	5.77		1,4-Difluorobenzene
3	100	95	96	-2	3878054	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	Z	1886261	bv	15.05		1,4-Dichlorobenzene-d4
5	100	97	99	1	1823460	bv	4.91	113	Dibromofluoromethane
6	100	92	97	-1	4689891	bv	7.64		Toluene-d8
	100	89	93	-1	2576768	bv	12.22		4-Bromofluorobenzene
8	0	0	0	0	O		0,00		1,3-Butadiene
9	O	0	0	0	0		0.00		Vinyl bromide
10	0	0	O	0	0		0.00		MTBE
11	64	52	52	1	5940	Α	3.64		n-Hexane
12	0	О	0	0	0		0.00		1,2-Epoxybutane
13	0	0	0	0	0		0.00		Iso-Octane
14	0	0	0	0	0		0.00		Ethyl acrylate

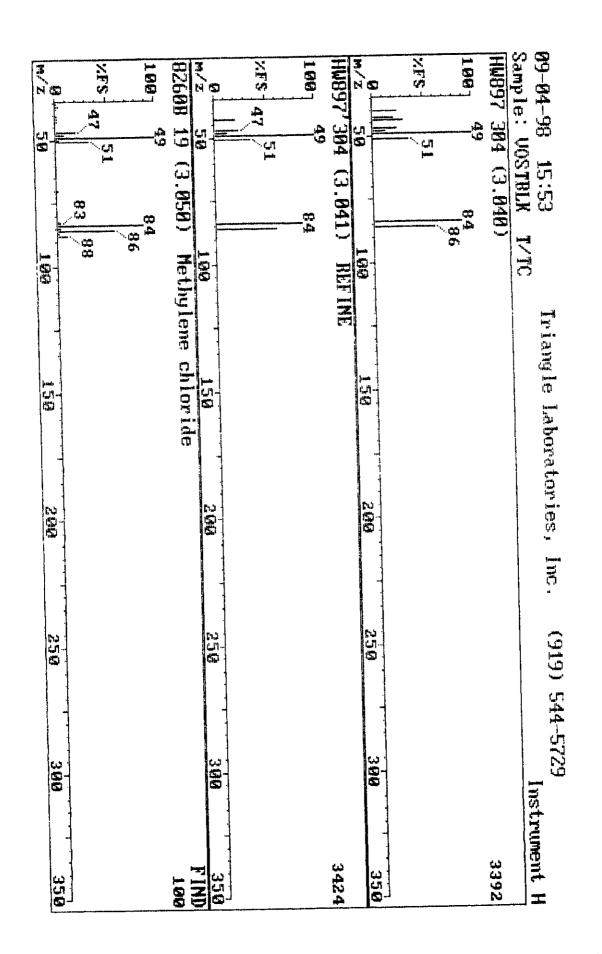
Data Review: W. Date: 915198





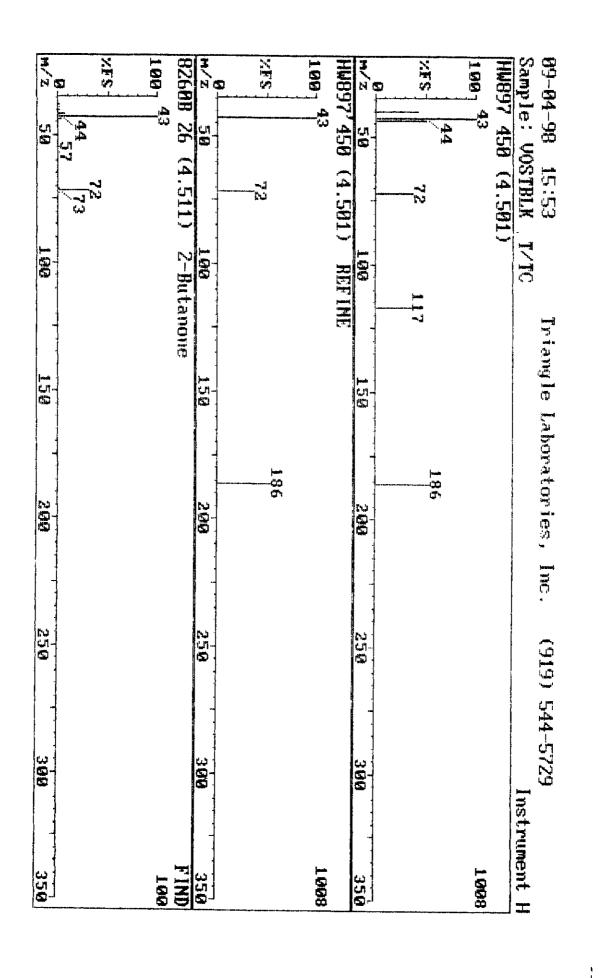


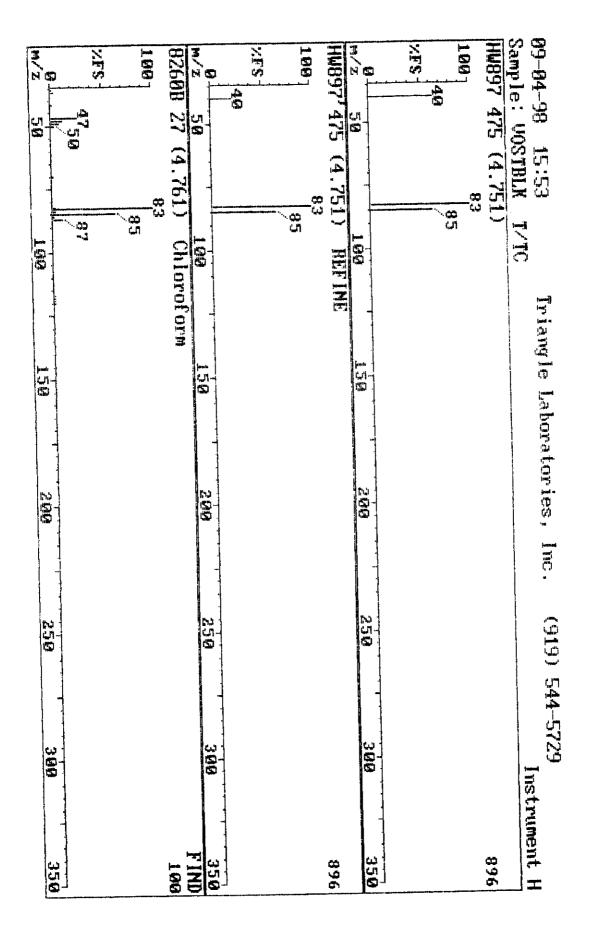


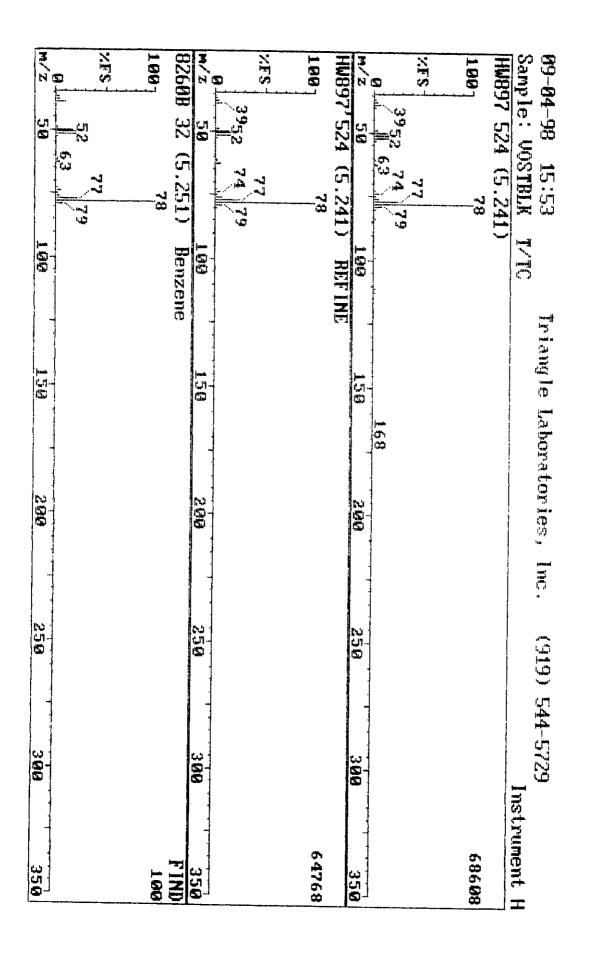


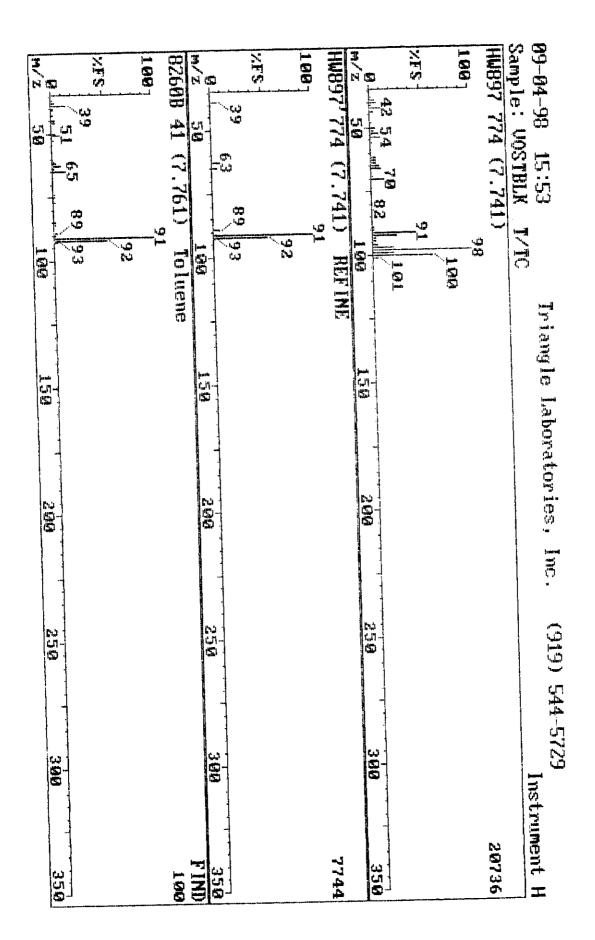
167

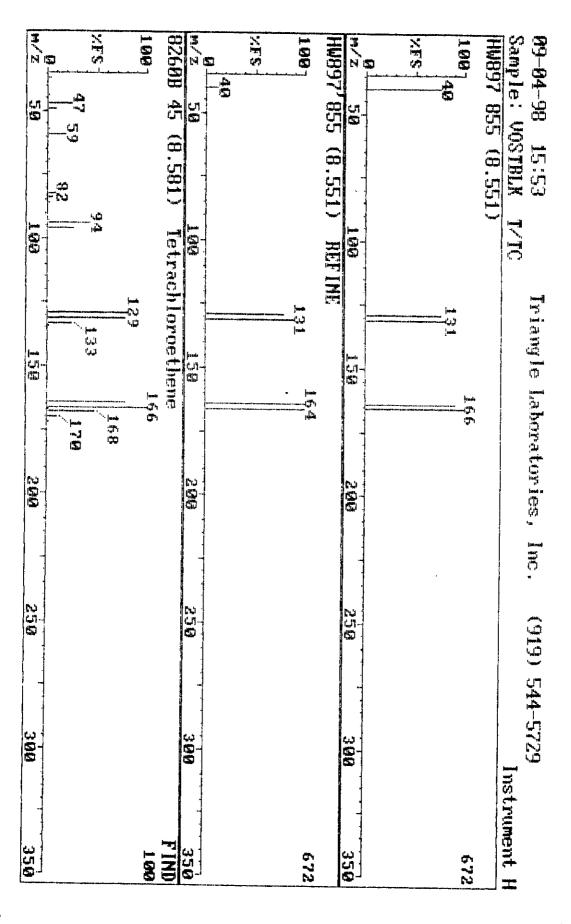
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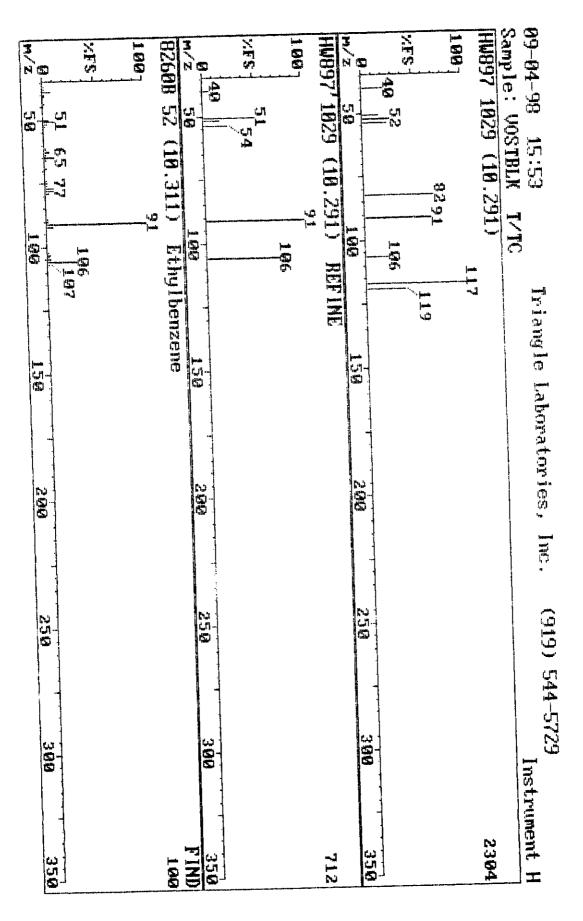


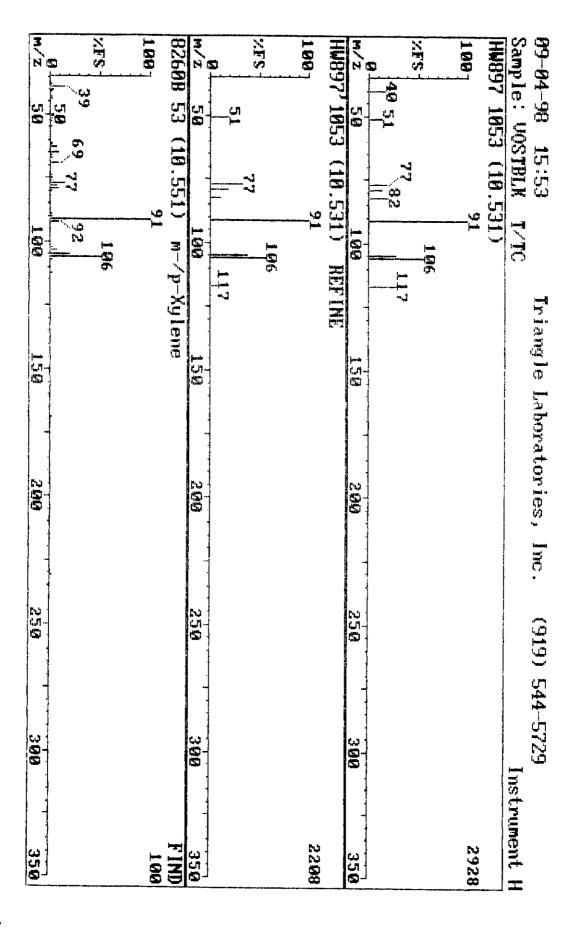


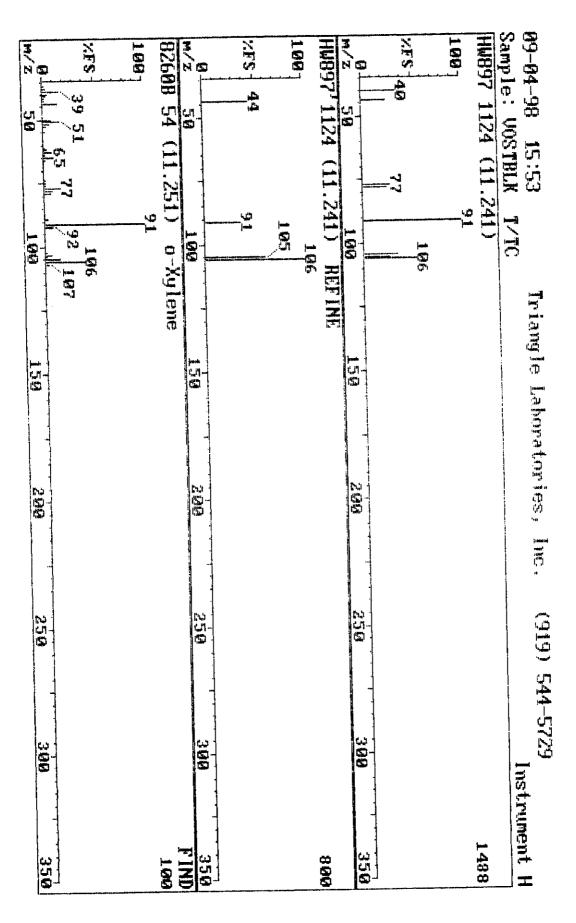


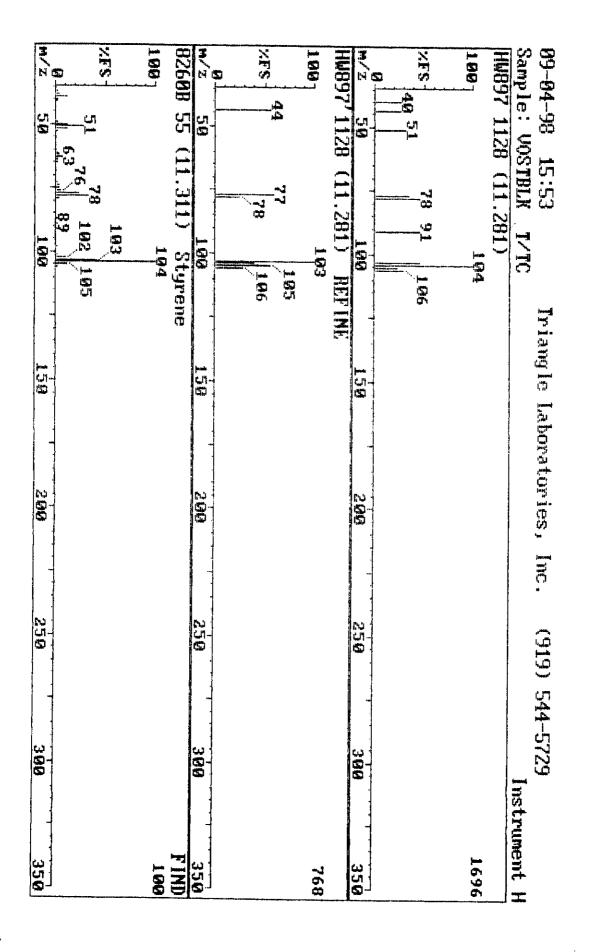


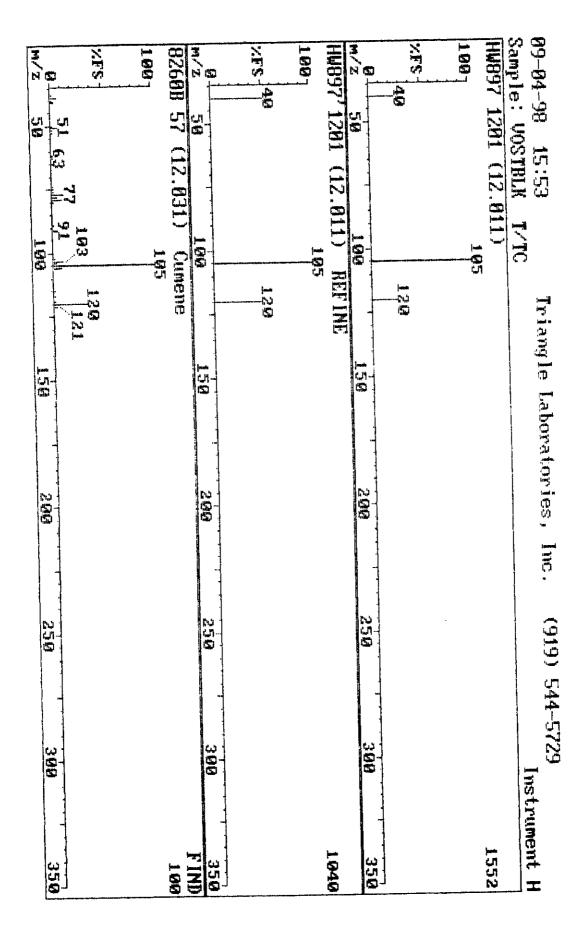


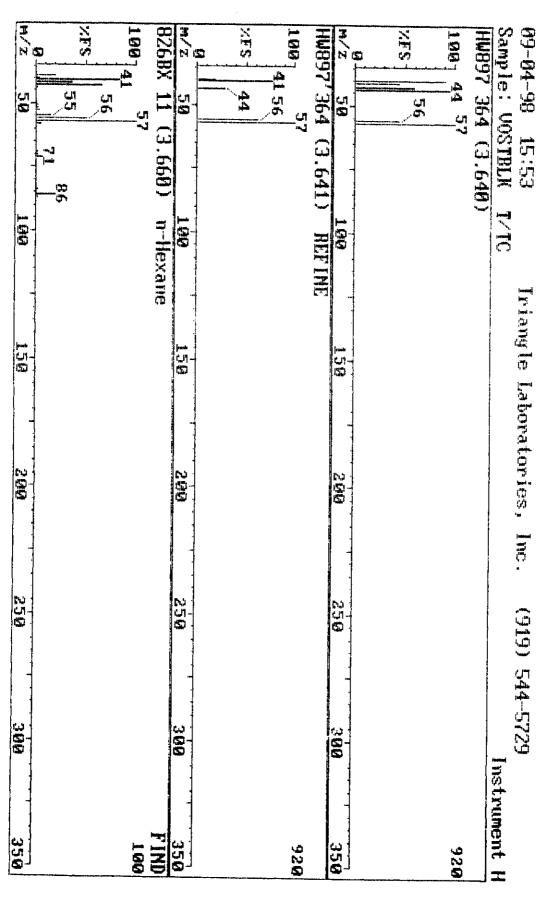












Project Number: 46323 Sample File: HW903 Method 8260 VOST Sample ID: S-V-2-4-A T

Client Project: R012.001 TLI ID: 214-27-4A Date Received: 07/29/98

Response File: ICALH904

Date Analyzed: 09/04/98

Amount FLAG R1 Det. Limit	ug 0.05 0.05 0.05
Chloromethane 0.390 B 0.96 Vinyl Chloride U 0.001 Bromomethane 0.086 B 1.47 Chloroethane 0.311 1.61 Trichlorofluoromethane U 0.001 1,1-Dichloroethene U 0.001 lodomethane U 0.001 Carbon disulfide 0.943 2.57 Acetone 2.048 BE 2.67 Allyl chloride U 0.001 Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1.2-Dichloroethene U 0.001	0.05
Vinyl Chloride U 0.001 Bromomethane 0.086 B 1.47 Chloroethane 0.311 I.61 1.61 Trichlorofluoromethane U 0.001 1,1-Dichloroethene U 0.001 lodomethane U 0.001 Carbon disulfide 0.943 I.2.57 2.57 Acetone 2.048 BE I.2.67 2.67 Allyl chloride U 0.001 Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1.2-Dichloroethene U 0.001	0.05
Bromomethane	
Bromomethane	0.05
Trichlorofluoromethane U 0.001 1,1-Dichloroethene U 0.001 lodomethane U 0.001 Carbon disulfide 0.943 2.57 Acetone 2.048 BE 2.67 Allyl chloride U 0.001 Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1.2-Dichloroethene U 0.001	
1,1-Dichloroethene U 0.001 lodomethane U 0.001 Carbon disulfide 0.943 2.57 Acetone 2.048 BE 2.67 Allyl chloride U 0.001 Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1,2-Dichloroethene U 0.001	0.05
1,1-Dichloroethene	0.05
Carbon disulfide 0.943 2.57 Acetone 2.048 BE 2.67 Allyl chloride U 0.001 Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1,2-Dichloroethene U 0.001	0.05
Acetone 2.048 BE 2.67 Allyl chloride U 0.001 Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1.2-Dichloroethene U 0.001	0.05
Allyl chloride Methylene chloride U 0.001 Methylene chloride U 0.006 U 0.006 trans-1.2-Dichloroethene U 0.001	0.05
Methylene chloride Methylene chloride U 0.001 Acrylonitrile U 0.006 trans-1,2-Dichloroethene U 0.001	0.05
Methylene chloride Acrylonitrile U 0.001 U 0.006 trans-1,2-Dichloroethene U 0.001	0.05
Acrylonitrile U 0.006 trans-1,2-Dichloroethene U 0.001	0.05
trans-1,2-Dichloroethene U 0.001	0.05
1.1-Dichloroethane U 0.001	0.05
1/1-Digitor/certaire	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.

Savar v3.7

Printed: 17:09 09/08/1998

801 Capitola Drive • Durham, North Carolina 27713

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
	ug			ug	
Methyl methacrylate		U		0.002	ug 0.05
Bromodichloromethane		U		0.001	
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.820	В	7.74	0.001	0.05
trans-1,3-Dichloropropene		U	, , , .	0.001	0.05
1.1.2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d ₂		IS 3	9.96	0.001	0.05
Tetrachloroethene		U	7.70	0.001	
2-Hexanone		U		0.001	0.05
Dibromochloromethane		Ū		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.385	В	10.00	0.001	0.05
m-/p-Xylene	2.108		10.30		0.05
o-Xylene		BE	10.54		0.10
Styrene	0.784	В	11.25		0.05
Bromoform	0.145	В	11.29		0.05
1.4-Dichlorobenzene-d		U		0.001	0.05
Cumene		IS 4	15.14		
1,1.2.2-Tetrachloroethane		U		0.001	0.05
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		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.

Savar v3.7

801 Capitola Drive • Durham, North Carolina 27713

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

Printed: 17:09 09/08/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

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

Reviewed by Bate 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

Savar v3.7

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount ng	FLAG	RT	Det Limit ug	Quan, Limit
Pentafluorobenzene		IS 1	5.05		ид
1,3-Butadiene Vinyl bromide		U	,,,,	0.001	0.25
n-Hexane	1.423	U Be	3.66	0.001	0.25 0.25
1.2-Epoxybutane Iso-Octane		U U		0.046	0.25
1.4-Difluorobenzene		IS 2	5.78	0.001	0.25
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

Triangle Laboratories, Inc.

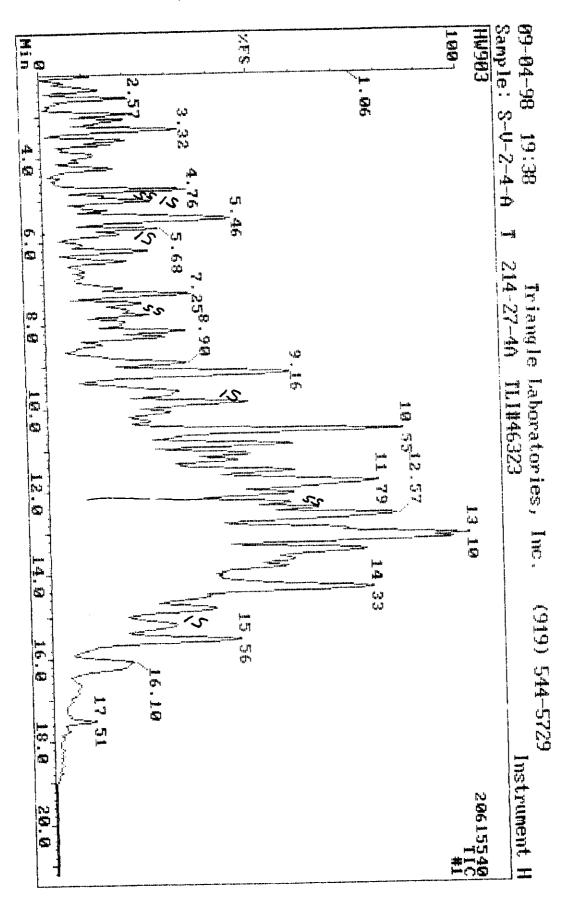
801 Capitola Drive • Durham, North Carolina 27713

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

Savar v3.7

Printed: 16:55 09/08/1998

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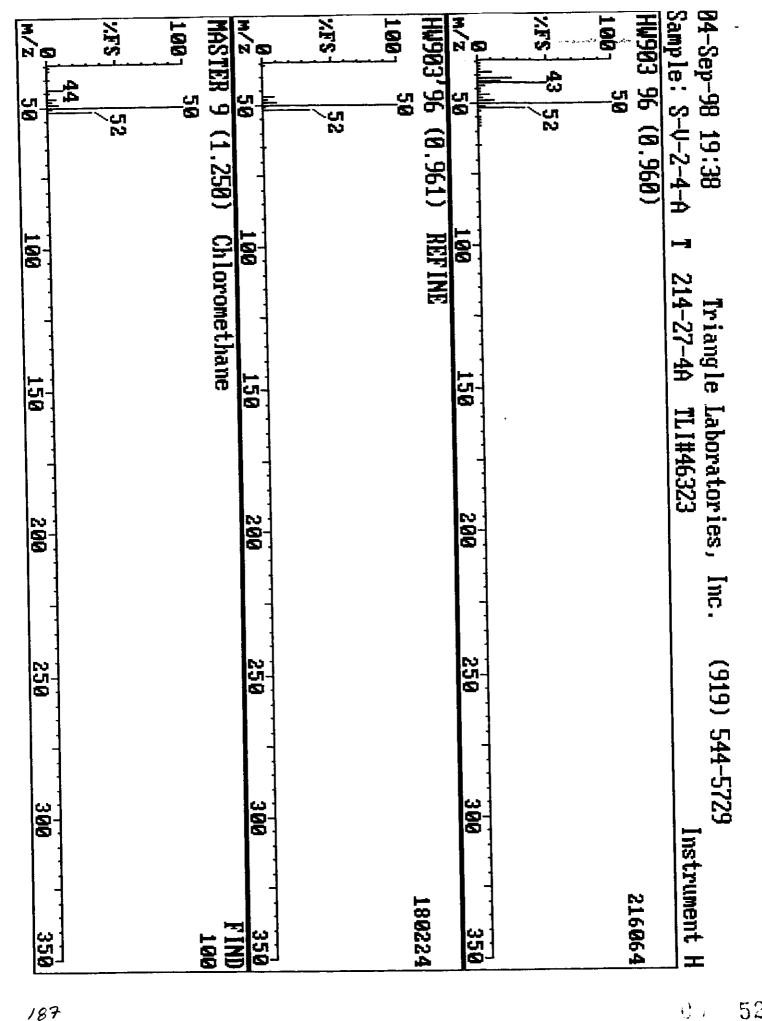
Data Review: 84B Date: 9/8/98

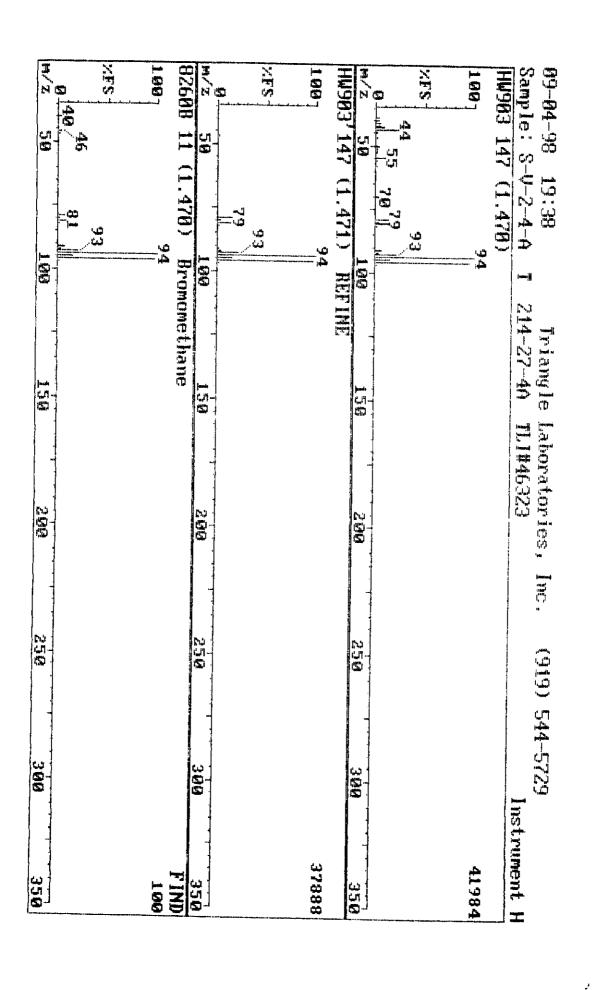
									07 04-78 20:28
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	OM	Name
						~			1.4(CH)(C)
.1.	68	30	78	- 1	2725964	bv	5.05	168	Pentafluorobenzene
2	75	49	72	0	2928352	bb	5.78	114	1.4-Diftuorobenzene
3	58	35	57	0	2800662	bv	9.96	117	Chlorobenzene-d5
4	53	14	73	6	1303168	bb	15.14	150	1.4-Dichlorobenzene-d4
5	O	0	0	Q	1309212	Α	4.92	113	Dibromofluoromethane
ర	70	44	71	-1	3957952	bb	7.65	25	Toluene-d8
7	37	21,	41	3	8650504		12.27		
8	0	O	O	O	£)		0.00	/ / 25	4-Bromofluorobenzene
9	()	O	0	0	1088378 A	(D) PaB		19650	Dichlorodifluoromethane Chloromethane
10	О	0	0	0	0	_	0.00	7 ,0 00	Vinul Omernane
1.1	100	82	99	0	310936	by	1.47		Vinyl Chloride
12	85	39	97	О	729776		1.61		Snomomethane
13	0	0	O	0	o		0.00		Chloroethane
14	0	O	0	0	Ó		0.00	TO L	Trichlorofluoromethane
15	0	0	Ð	0	0		0.00	70 1.40	1.1-Dichtoroetmene
16	77	47	82	1	925L134	by	2.57		fodomerhane
1.7	98	80	88	3	3305712		2.67		Carbon disulfide
18	O	()	0	O	()		0.00		Acetone
19	0	0	O	О	ő	_	0.00	91	Alty: chloride
20	36-		5.7		774113	SP) Pab		্ৰাৰ হ'ল	Methylane chloride
21	0	0	0	0	0		0.00		Accylon: brite .
22	0	O	\circ	0	0		0.00	70	trans-1,2-Dichloroethene
23	O	O	0	()	0		0.00	00 37	t.1-bichtoroethane
24	0	0	Ó	O	0		0.00	1994 S	Vinyl acetaha
25	Ó	0	0	O	O		0.00	73.4	2,2-Ouchloropropane
26	TOO	81	94	-2	2567383	VV	4.48	712 47	cis-1.2-Dich coroethene 2-Butanone
27	О	1)	Ċ	0	0		0.00		Chionoform
28	0	0	O	O	1)		0.00		Bromochloromethane
29	0	()	0	0	i)		0.00	37	1 1 I - To interpret
30	0	O	O	0	0		0.00	117	1.1,1-Trichtoroethane Carbon tetrachioride
31	0	\circ	0	0	()		0.00	75	t labiationide
	100	91.	90	0	9643147	VV	5.24	7.2	1.1-Dichloropropene Benzene
33	O	0	0	0	0		0.00		
34	0	0	0	0	0		0.00	130	1,2-Dichloroethane Trichloroethene
35	0	0	0	0	0		0.00	3.00 4.7	1 Contorostnens
36	O	O	0	0	O	60.0	0.00	97	1,2-0ichloropropane Dibromomethane
37	62-	+7	37		6435218	m per Pan	- 6.46-		Methyl methacrylate
38	О	O	O.	0	O		0.00	97.	Bromodichioromethane
39	0	0	0	0	0	~ -	0.00	75	cis-1.3-Dichtoropropene
40		-76_		<u>ープ</u>	3000894	(94) Pab	-7.6+	43	4-Methyl-2-pentanone
	100	80	97	- 1	7236337	VV	7.74		Toluene
42	0	0	0	O	0		0.00		trans-1,3-Dichloropropen
43	0	0	Ö	0	0		0.00	97	1,1,2-Trichtoroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	9	0	o		0.00	164	Tetrachloroethene
46	0	0	0	0	Ó	(SP) Par	0.00	76	1.3-Dichtoropropane
47	43	-22-	-05-		5536872	VY TE FOIL	3.} 1.	43	2-Hexanone
48 40	0	0	0	0	0		0.00		Dibromochloromethane
49 50	0	D)	0	0	0		0.00	107	1.2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

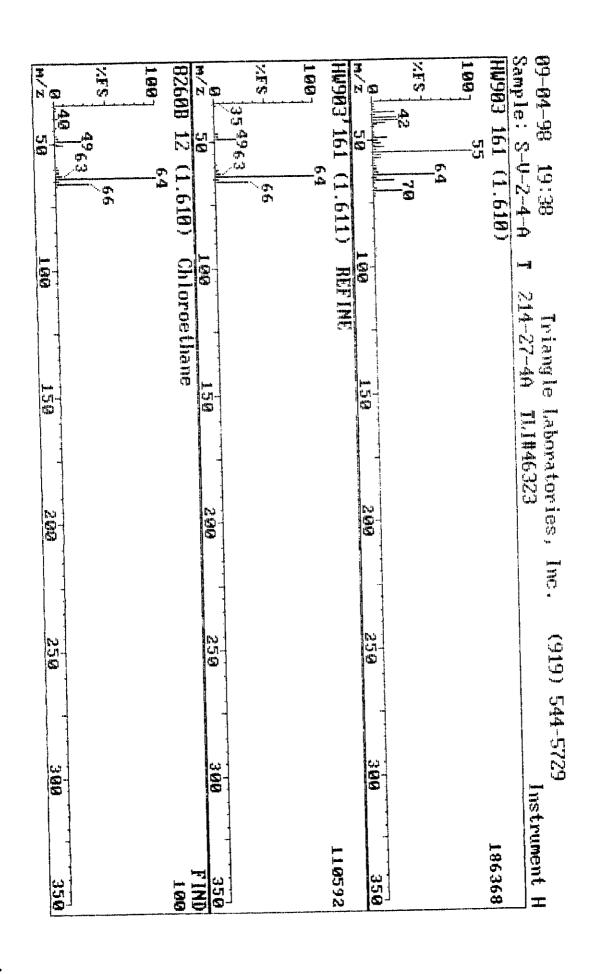
Data Review: Date:

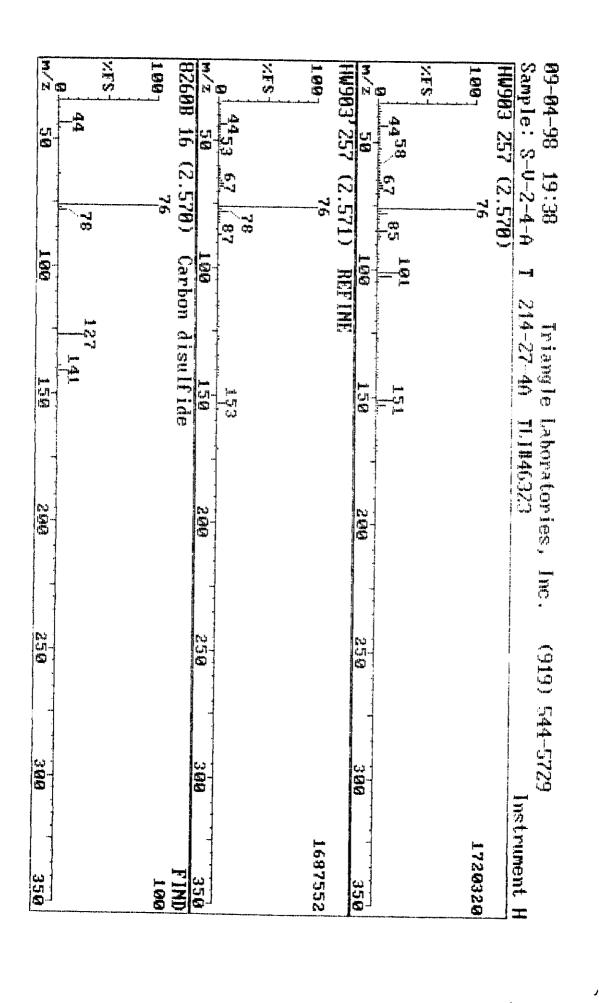
No.	MAT	FOR	REV	Delta	Area P.	Flags	s RT	а м	Name
	0	0	0	0	0.		0.00	131	1,1,1,2-Tetrachloroethan
51 52		48	-	1	2071240 by	, ∨	10.30		Ethylbenzene
53 53		59		1	13932320 V		10.54		m-/p-Xylene
54		51			1050131 N	***	11.25		o-Xylene
55 55		0			1479579	M) Pas	4/8/98 0.00 11.29	104	Styrene
56		0		_	194151 0 -	_	0.00	173	Bromoform
57		_			Ó		0.00	105	Cumene
58 58					Ó		0.00		1,1,2.2-Tetrachloroethan
59		•			Ó		0.00	156	Bromobenzene
	•				Ô		0.00	75	1,2,3-Trichloropropane
60 61				<u> </u>	ó		0.00	120	n-Propylbenzene
				•	Ö		0.00	75	trans-1,4-Dichloro-2-but
62	•	· 			õ		0.00	126	2-Chlorotoluene
63		_			ő		0,00	1.26	4-Chlorotoluene
64		•	-	_	ó		0.00	105	1.3,5-Trimethylbenzene
65		_	-		ŏ		0.00	119	tert-Butylbenzene
66		_	-		35039970 b	ნხ	14.34	105	1,2,4-Trimethylbenzene
67				•	6131470 b		14.82	105	. sec-Butylbenzane
68					11143340 6		1,5.40	119	ρ-Cymene
69					() ()	٦	0.00	146	. 1.3-Dichloropensame
70	-		•	-	Ö		0.00	146	, 1,4-Dichlorobenzene
71		•		•	•	s aks	16.09	24	. Benzyl chiorode
72							16.98	91	. n-Butylbenzene
73						A.A.	0.00	146	, 1.2-Dichtoropenzene
74				0 0			0.00	7.5	doudday - 2-0 ibromo-3-chioropcop
7.5		~ -		0 0	-		0.00	180	
7 8		••		0 0			0.00	225	
7		•		0 0	-		0.00		3 Naphthalene
78		**		0 0	_		0.00	180	
7'	9 (o o	0 '	0 0	0		9,00	بحافيها عطير	y

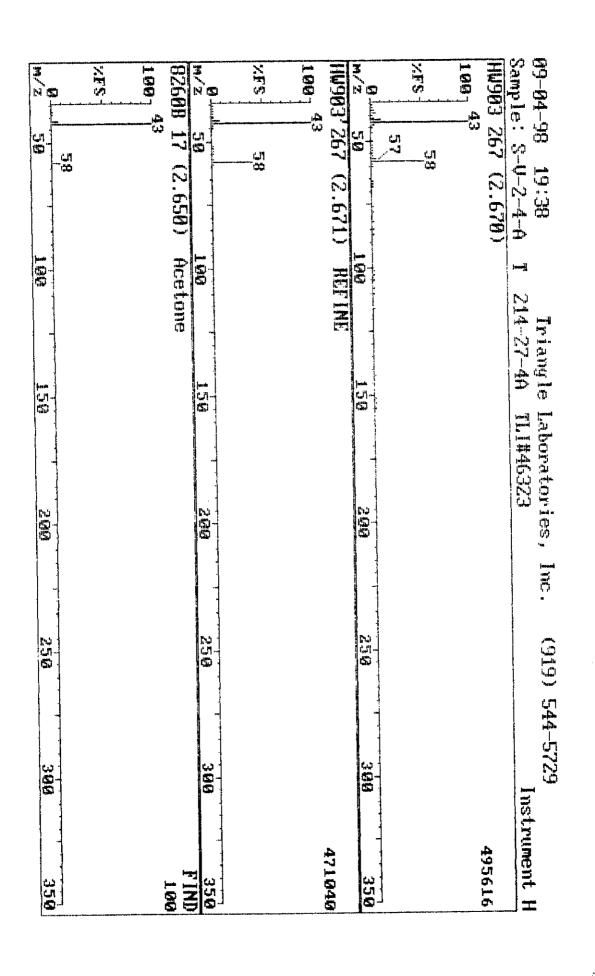
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	MD	Name
.1	67	30	78	.1	2725964	bv	5.05	168	Pentafluorobenzene
2	76	49	72	1	2928352	bb	5.78		1.4-Difluorobenzene
3	57	35	57	- 1	2800662	bv	9,96		Chlorobenzene-d5
4	53	14	73	9	1303168	bb	15.14		1,4-Dichlorobenzene-d4
5	0	0	()	0	1309212	A	4.92		Dibromofluoromethane
6	68	44	71	-2	3957952	bb	7.65		Toluene-d8
7	38	2.1	41	2	8650504	A	12.27		4-Bromofluorobenzene
8	53	44	73	7	- 2441517	PA Par	1.19-		1,3-Butadiene
9	0	0	0	0	O	_	0.00		Vinyl bromide
10	45	44	-54	16	17509	w (D) Par	2 7 27		MTBE
11	100	95	99	-1	7119674	by Se ear	3.66		n-Hexane
12	98		- 38		477547	OP Par	23		
13	54-	-45	- 42		4019839	OP Paus	5 40	57	1,2-Epoxybutane
14	41	ာရ	70		- COE 3 CE C	SP Pas	4 71		Iso-Octane
					0004000			23	Ethyl acrylate

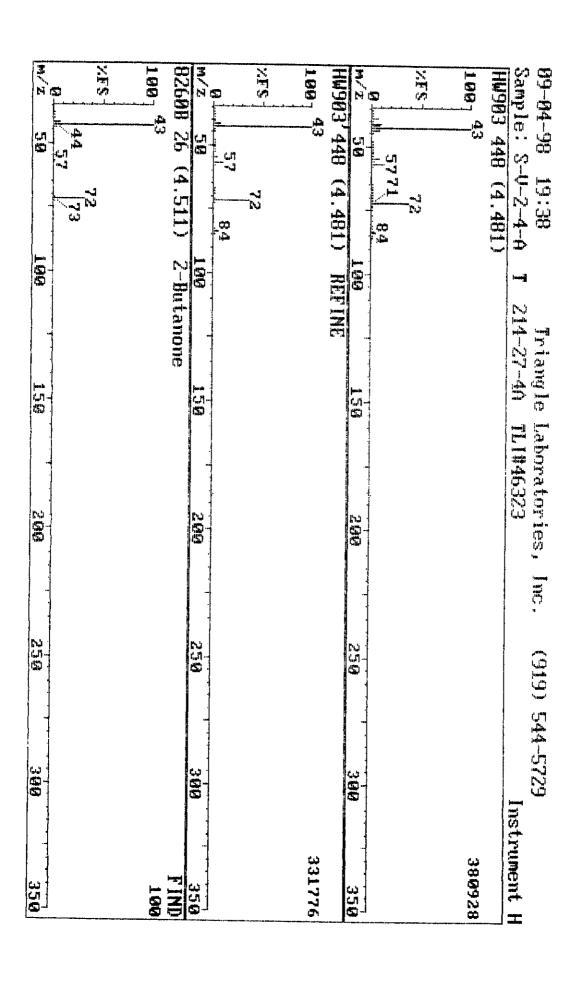


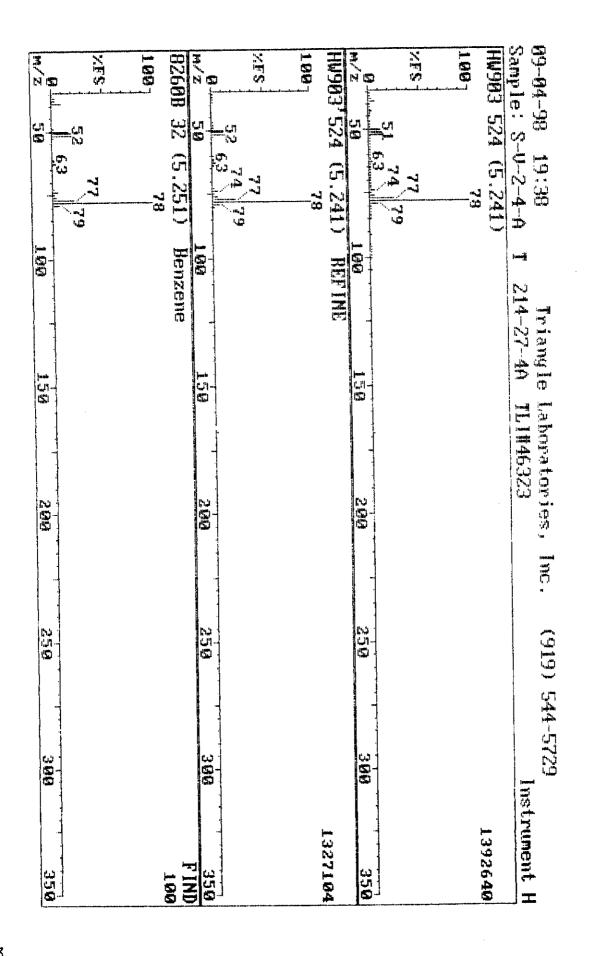


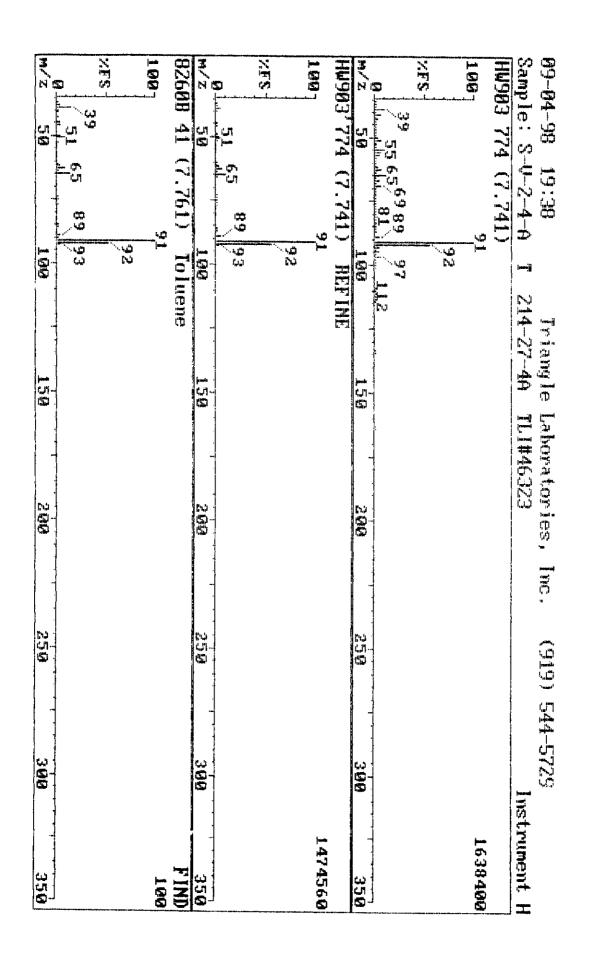


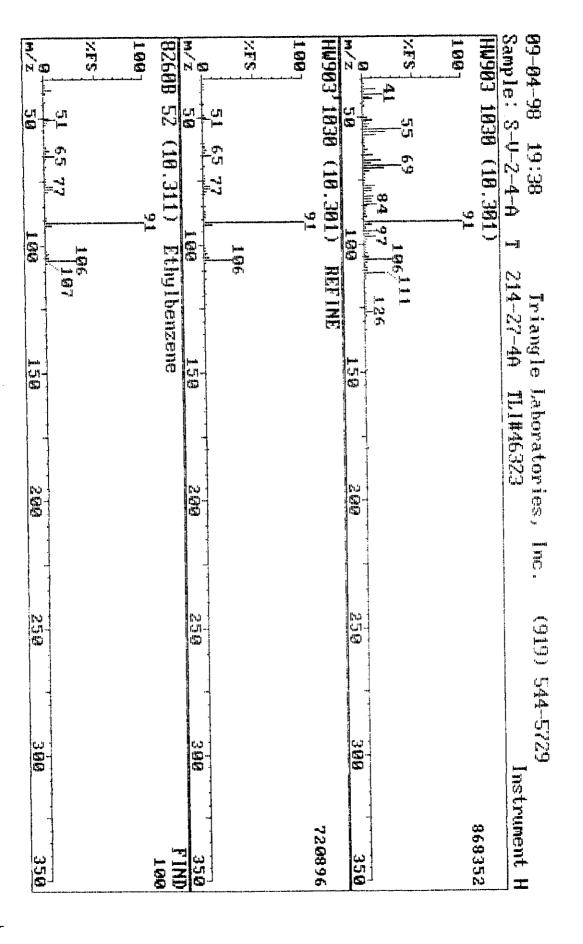


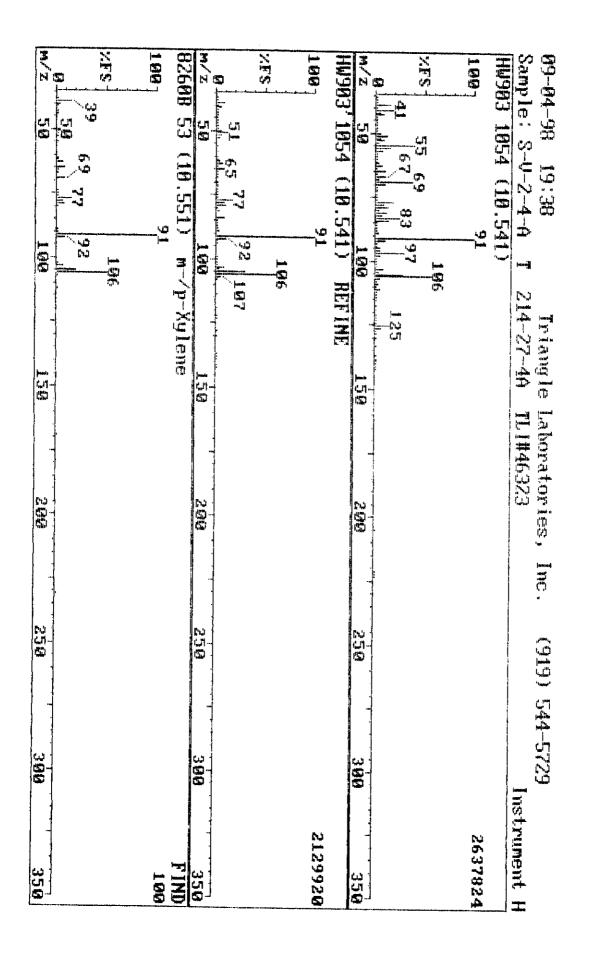


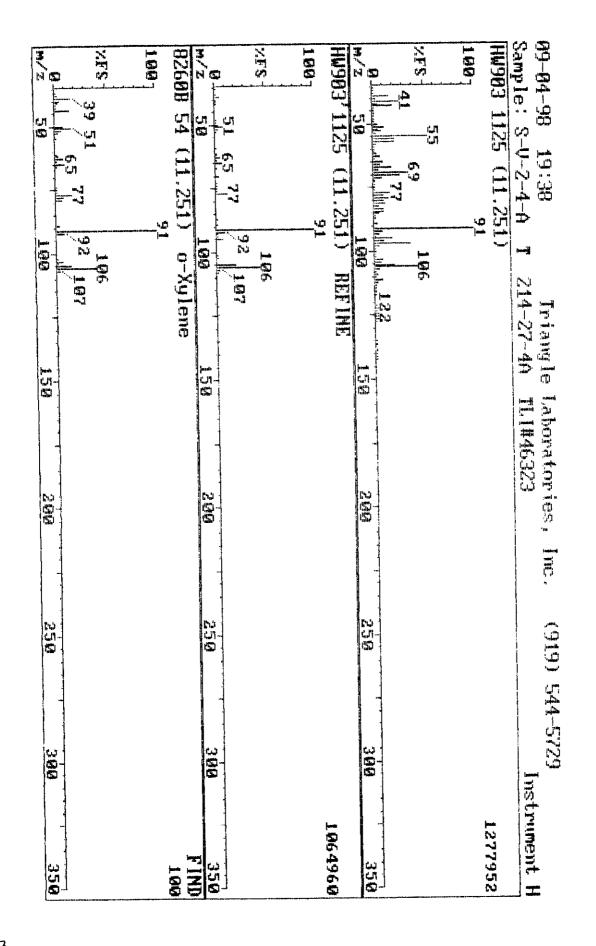


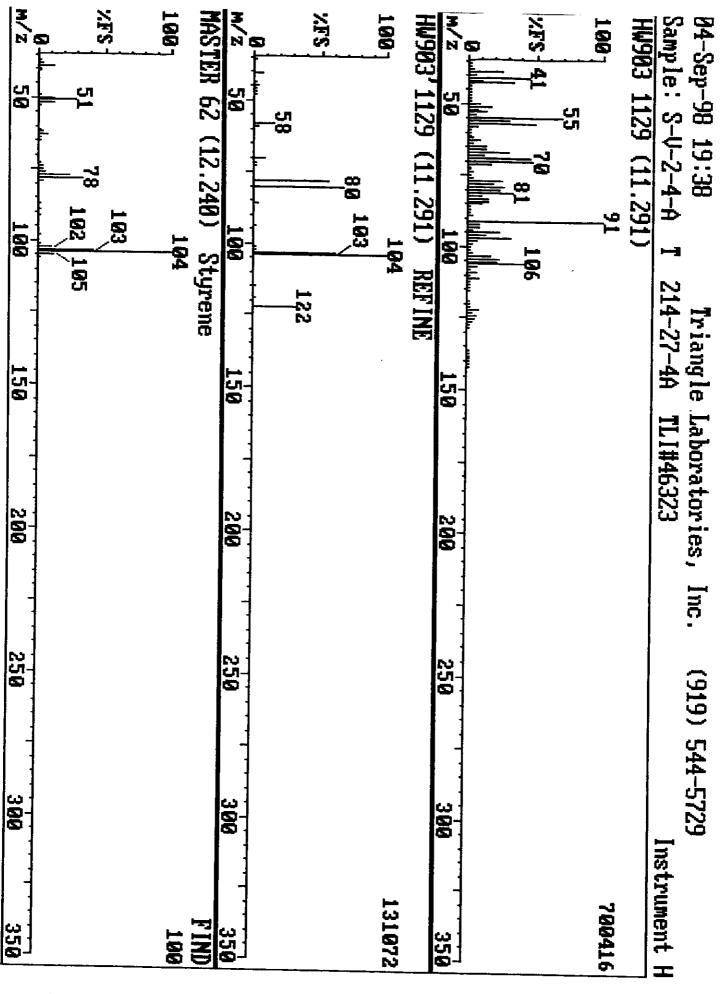


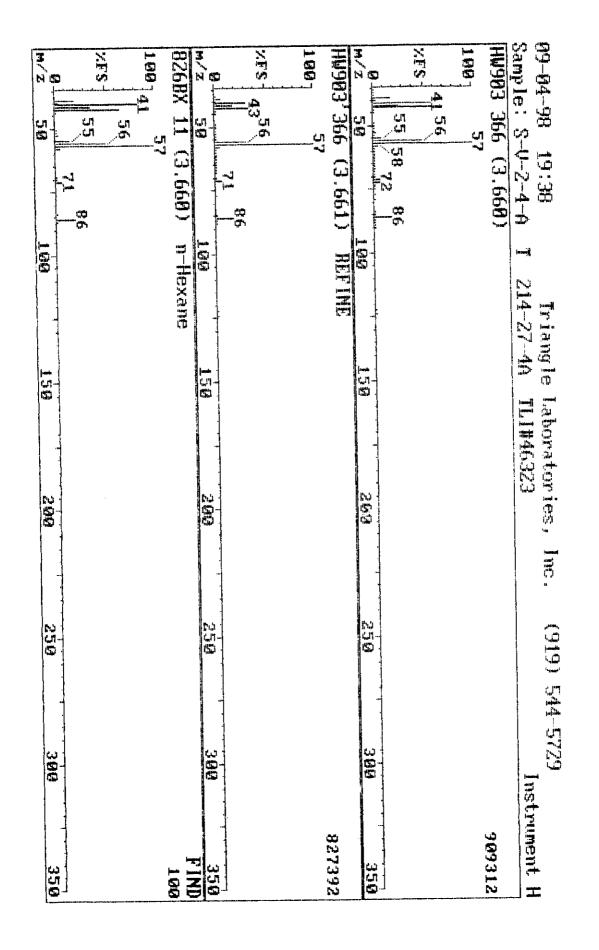












Project Number: 46323 Sample File: HW898

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit	Quan. Limit
	tig			ug	ug
Pentafluorobenzene		IS 1	5.03		
Chloromethane	0.766	В	0.95		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.141	В	1.47		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1.1-Dichloroethene		Ū		0.001	0.05
lodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.006	BJ	2.67	3.001	0.0 ₅ 0.05
Allyl chloride		Ŭ		0.001	
Methylene chloride	0.020	Вј	3.03	0.001	0.05
Acrylonitrile		U	3.03	0.005	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
l ,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		Ū		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		Ü		0.001	0.05
Chloroform		U			0.05
1.1.1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	c 77	0.001	0.05
Carbon tetrachloride		U	5.77		
Benzene	0.006		6.22	0.001	0.05
1.2-Dichloroethane	0.006	BJ U	5.23	_	0.05
Frichloroethene		U		0.001	0.05
.2-Dichloropropane				0.001	0.05
		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

Printed: 16:29 09/08/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit	Quan. Limit
· ······	ug			ug	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		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	ВJ	10.29		0.05
m-/p-Xylene	0.001	ВЈ	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		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

15: 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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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

Response File: ICALH904

Date Analyzed: 09/04/98

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

Date 9 /8 /98 Reviewed by

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

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
	ng			ug	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		บ		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 Pare 9,8,98

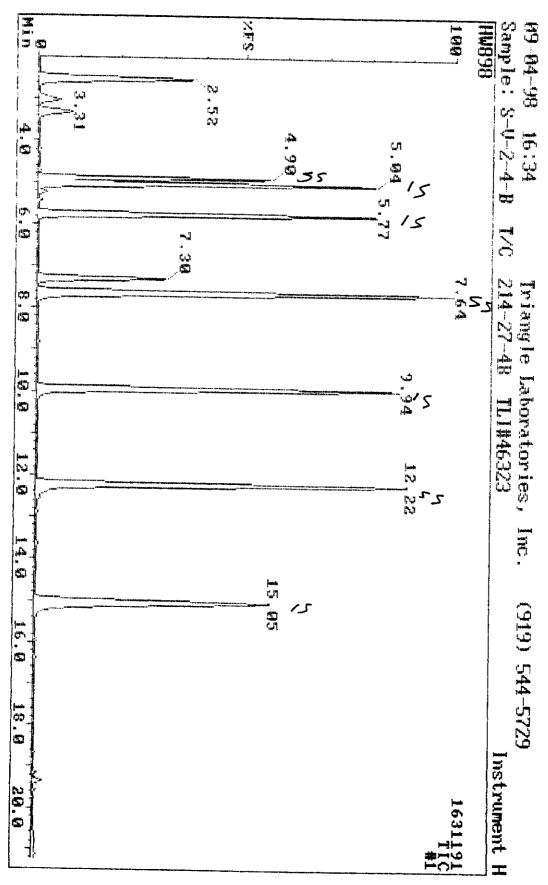
NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

1S: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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203

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Data Review: Pais Date: 9/8/98

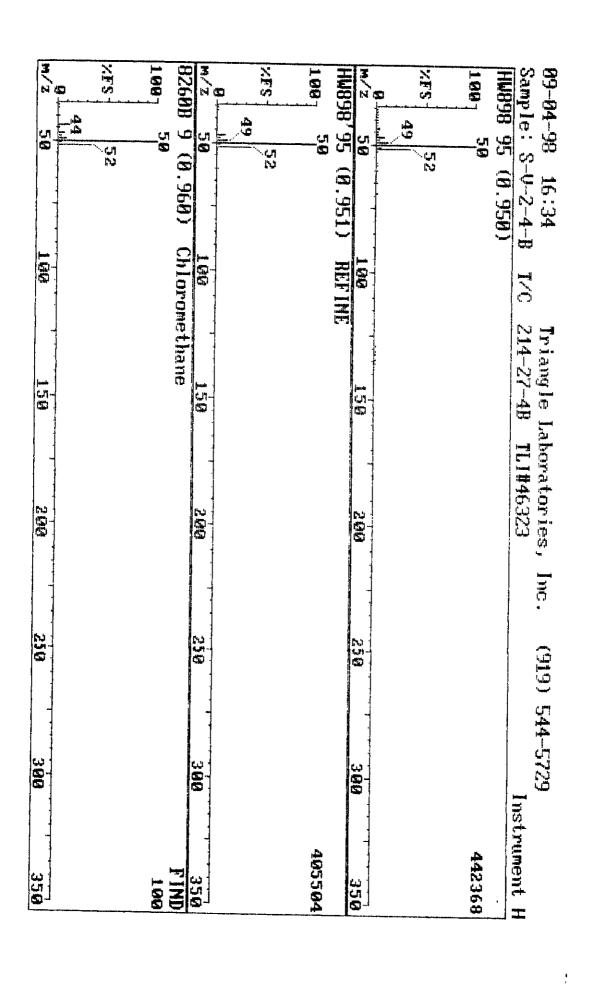
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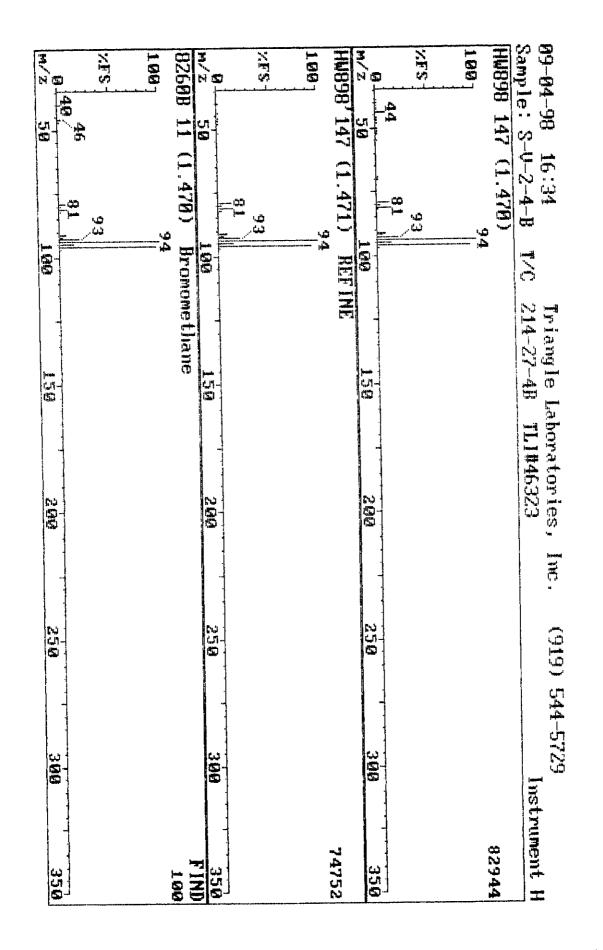
NIMC.	DO .	HMO	70						
No.	MAT	FOR	REY	Oelta	Area	P.Flags	RT		Name
	100	84	 99	-3	3528238	bv	5.03		Pentafluorobenzene
	100	96	98	1.	3984048	pA	5.77		1.4-Difluorobenzene
	100	96	96	-1	3876915	bv	9.94		Chlorobenzene-d5
4	100	79	98	0	1989388	bv	15.05		1,4-Dichlorobenzene-d4
5	100	95	99	.1.	1775368	bv	4.90		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	O	0	0	0		0.00	85	Dichlorodifluoromethane
9	100	93	98	0	2767137	VV	0.95		Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	700	9 <u>3</u>	99	Ţ	662062	bv	1.47	94	- · · · · · · · · · · · · · · · · · · ·
12	0	ō	0		0		0.00		Chloroethane
13	Õ	š	ō		0		0.00		frichlorofluoromethane
14	ő	ŏ	Ö		0		0.00		L.1-Dichloroethene
15	o	ŏ	ŏ		0		0.00		[odomethane
16	Ő	Ő	o		Ö		0.00	76	Carbon disulfide
17	66	32	84		12332	VV	2.67	43	Acetone
18		0	0		0		0.00	41	Allyt chtoride
19	92 2	63	79		85608		3.03	84	Methylene chloride
			0		0		0.00		Acrylonitrile -
20		-	Ü		Ö		0.00	96	
21			0		Ő		0.00	63	1,1-Dichloroetmane
22		-	(1		Ú		0.00		Vinyl acetate
23			, (0		0.00		2,2-Dichloropropane
24		-	·.		0		0.00		cis-1,2-Dichtoroethene
25			ب بـــــــــــــــــــــــــــــــــــ	, , , - 		1301 000	4.52	43	
26			 -(•			0.00		Chioroform
27					Č		0.00		Sromochloromethane
28					Ò		0.00		1,1,1-Trichloroethane
29					Ċ		0.00		Carbon tetrachloride
30							0.00	73	
31				•	112648		5.23	78	
32) (0.00	62	
33							0.00		Trichloroethene
34				0			0.00		3 1,2-0ichloropropane
35) 0	(0.00		S Dibromomethane
36				0 0			0.00		Methyl methacrylate
37) 0	(0.00		8 Sromodichloromethane
38		-		0)	0.00		5 cis-1.3-Dichloropropene
39				0	, m	AP) Pai	8 7.64	7 v 47	3 4-Methyl-2-pentanone
40				* 1		<i>-</i>	7.73		2 Toluene
4.					107369		0.00		5 trans-1,3-Dichtoroprope
42		9 0		0 0)		() ()	7 1,1,2-Trichloroethane
43) (0 0		0	0.00	7 .	ethyl methacrylate
	4 (0 0		0 0		O PP) Pal	9 0.00		4 Tetrachloroethene
4		4 11	<u>~—~</u>	5	221	2 A C			5 1,3-Dichloropropane
4. 4.							63 (36)	- //	
4: 4: 4:	6 (о с)	0 0		OP) Pai	0.00		
4: 4: 4: 4:	6 (7 1 .4) () 5 2	0 0 8 13	38	4 bb	7.11	4:	3 2-Hexanone
4: 4: 4: 4: 4:	6 (7 1 4 8 () ()) <u>1</u>() 5 2)	0 0 8 13 0 0	38	4 bb 0	7.11 0.00	43 12	3 2-Hexanone 9 Dibromochloromethane
4: 4: 4: 4:	6 (7 1 4 8 (0 () 1(0 ()) 3 2)	0 0 8 13	<u> </u>	4 bb	7.11	4: 12 10	3 2-Hexanone

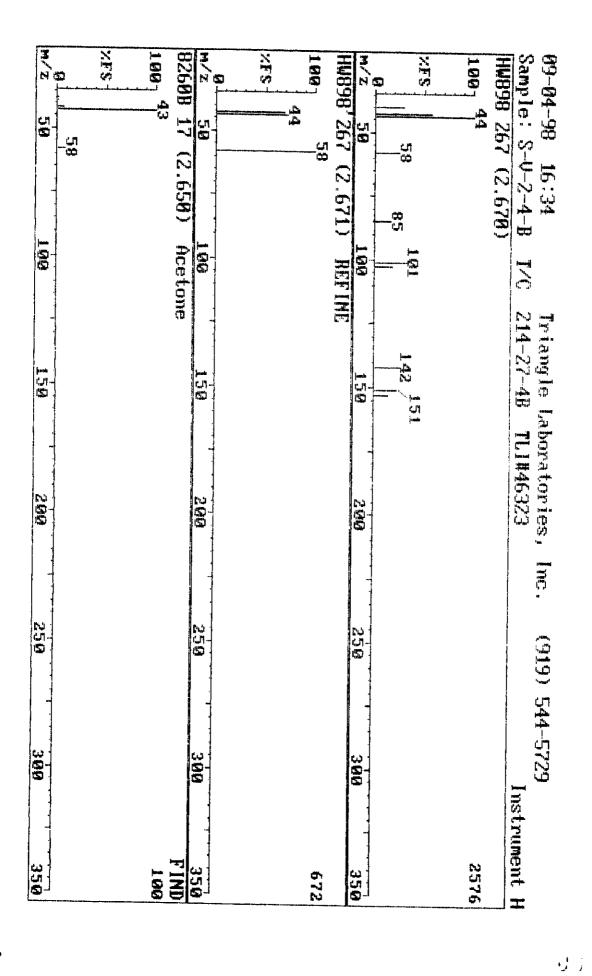
Data Review: Gars Date: 9/8/98

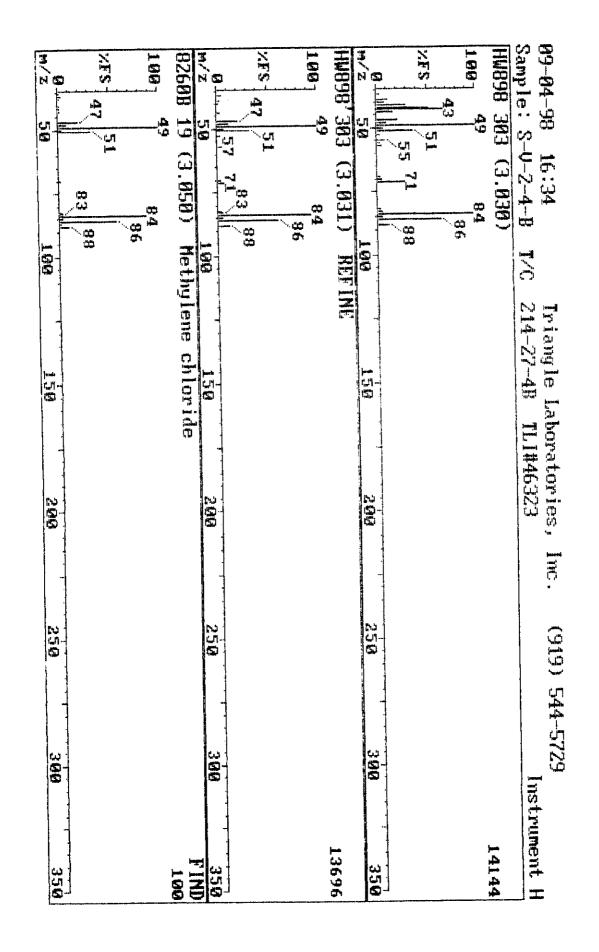
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	О	0	o	0	o		0.00	1.31	1,1,1.2-Tetrachloroethan
52	39	21	45	2	1316	bb	10.29	106	Ethylbenzene
53	72	56	65	2	12924	A	10.53		m-/p-Xylene
54	0	0	0	0	0		0.00	106	o-Xylene
55	71	64	64	4	17552	A	11.29	104	Styrene
56	0	0	O	0	0	63 000	0.00		Bromoform
57	ाव	नेव	नेय		7636	by (TP) Pau	12:00		Cumene
58	0	0	O	0	O		0.00		1,1,2,2-Tetrachloroethan
59	O	0	O	0	O		0.00	156	Bromobenzene
60	0	0	О	0	0		0.00		1,2,3-Trichloropropane
61	54	39	56	3	2280	A	12.84	120	n-Propylbenzene
62	0	0	O	0	O		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		4-Chlorotoluene
65	O	0	O	0	0		0.00		1.3,5-Trimethylbenzene
66	74	59	59	.1	7876	А	14.07	119	tert-Butylbenzene
67	66	57	57	4	28832	A	14.22	105	1.2.4-Trimethytbenzene
68	73	51	69	1.	19628	A	14.72	10%	sac-Butylbenzene
69	0	0	0	0	0		0.00	11.9	p-Cymene
70	78	55	70	1	21200	A	L4.82	146	1.3-Dichlorobenzene
71	0	O	0	0	0		0.00	146	1.4-Dichlorobenzene
72	0	O	0	0	O		0.00	(3.1	Benzy: chloride
73	45	31	5.3	S	21820	A	16.87	-31	n-Butylbenzene
74	63	39	64	1	23408	A	16.35	146	1,2-Dichlorobenzene
75	0	0	O	O	O		0.00	75	1,2-Dibromo-3-chloroprop
76	77	70	78	7	29336	bv	19.13	180	1,2,4-Trichloropenzene
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		1.2,3-Trichlorobenzene

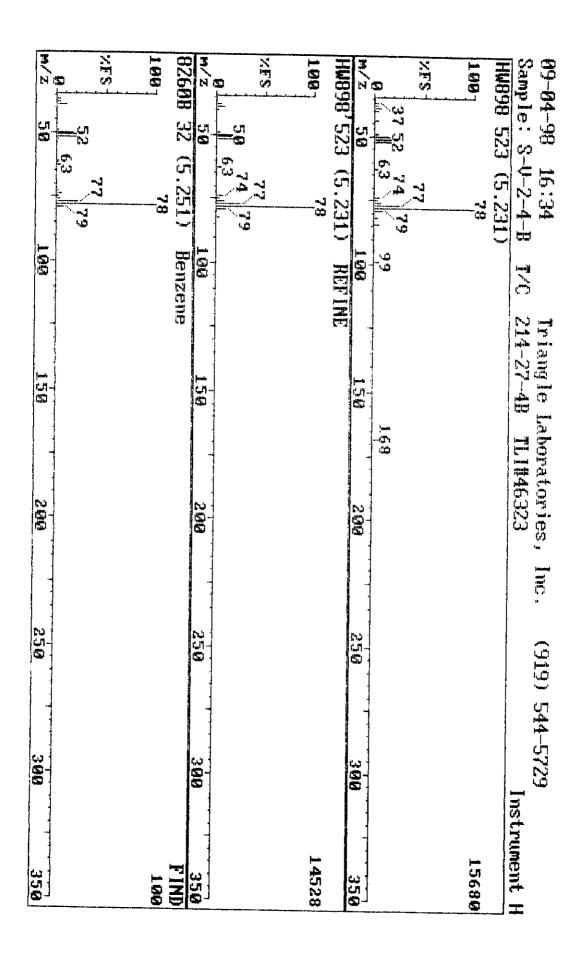
RT QM Name No. MAT FOR REV Delta Area P.Flags 168 Pentafluorobenzene 5.03 -1 3528238 bv 99 84 1 100 114 1,4-Difluorobenzene 5.77 2 3984048 by 2 100 96 98 117 Chlorobenzene-d5 9.94 96 -2 3876915 bv 3 100 96 152 1,4-Dichlorobenzene-d4 15.05 1989388 by 79 98 3 4 100 113 Dibromofluoromethane 4,90 99 1 1775368 by 95 5 100 98 Toluene-d8 7.64 4809862 by -1 6 100 97 91 95 4-Bromofluorobenzene 12.22 2620116 by -1 89 93 7 100 39 1,3-Butadiene 1421880 1.03 8 66 38 106 Vinyl bromide 0.00 0 0 0 0 9 0 73 MTBE 20736 7.31 31 36 --8 37 10 57 n-Hexane 3.64 13336 A 69 --1 69 11 86 4.22 42 1,2-Epoxybutane 4900 bl 12 82 ंदी 57 Iso-Octane 5.40 16436 bb 2 13 70 49 67 55 Ethyl acrylate -400--bb 26 14 41

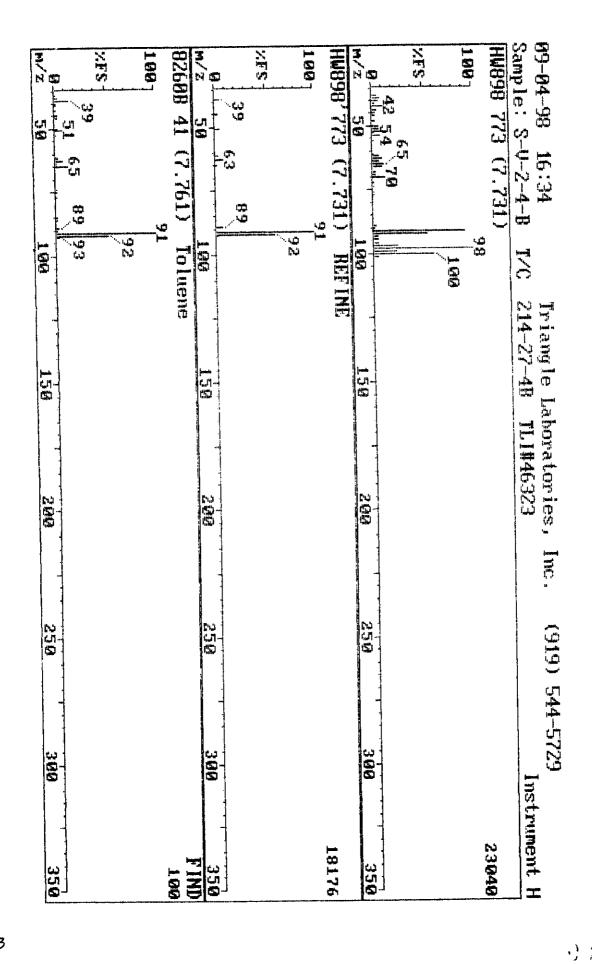


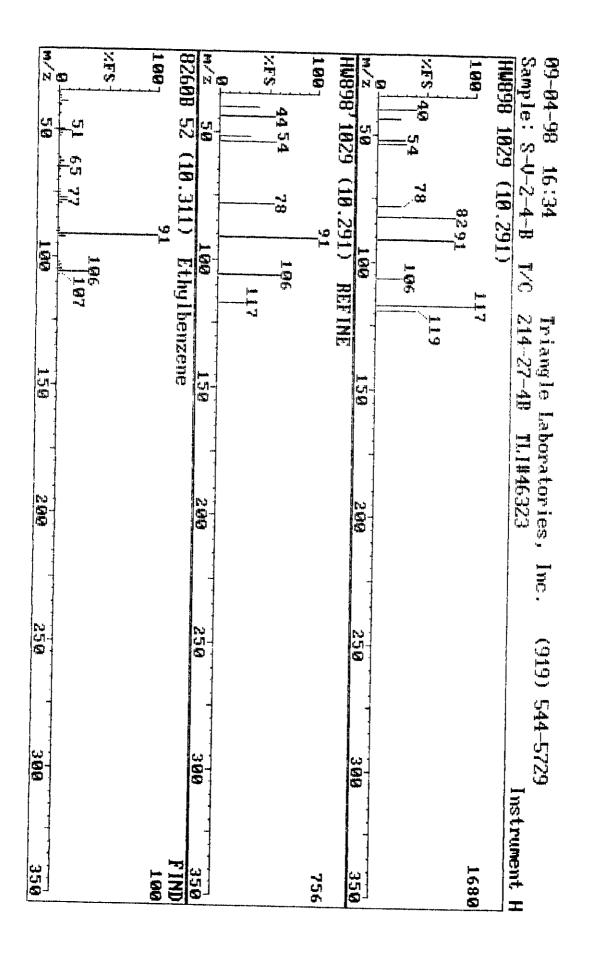


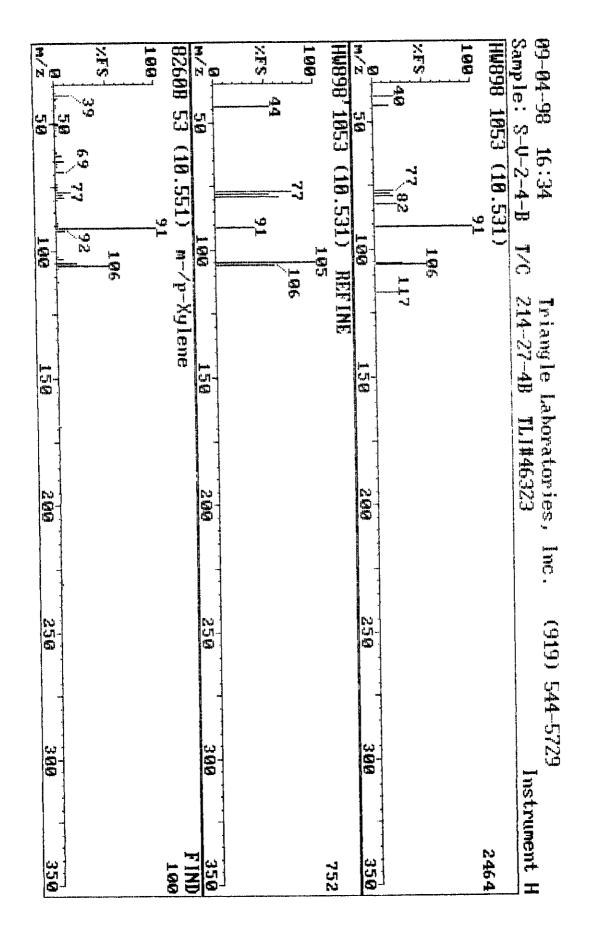


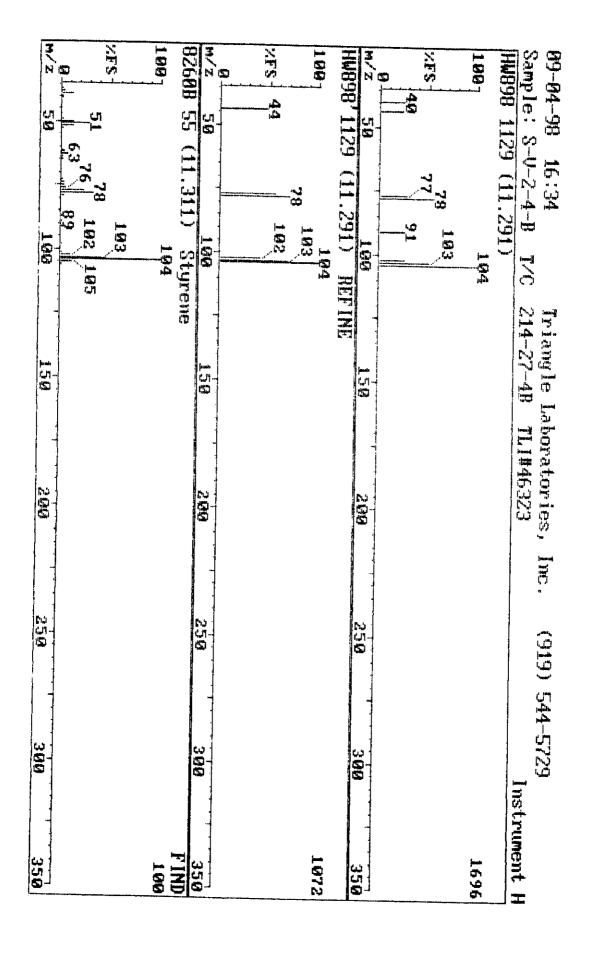


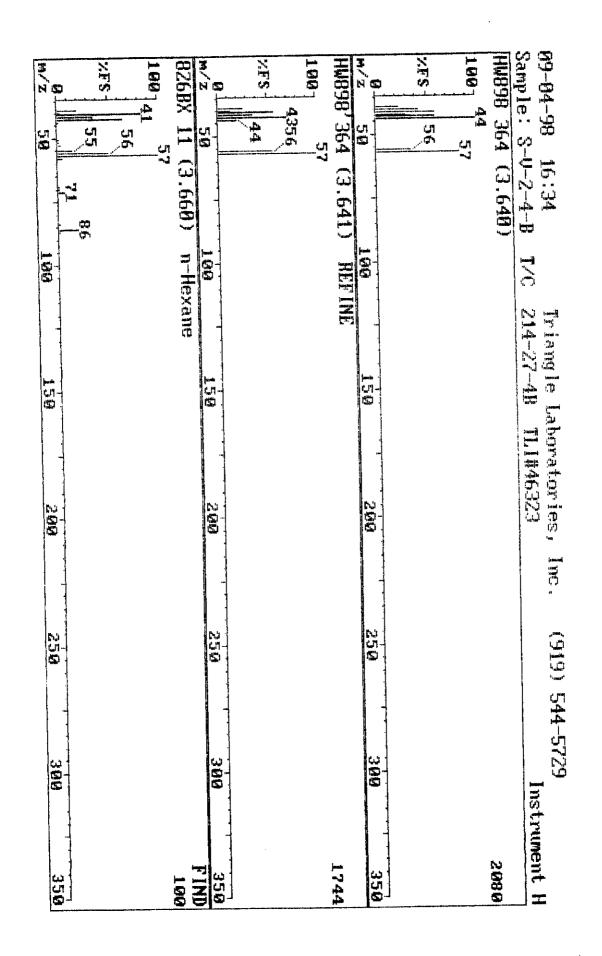


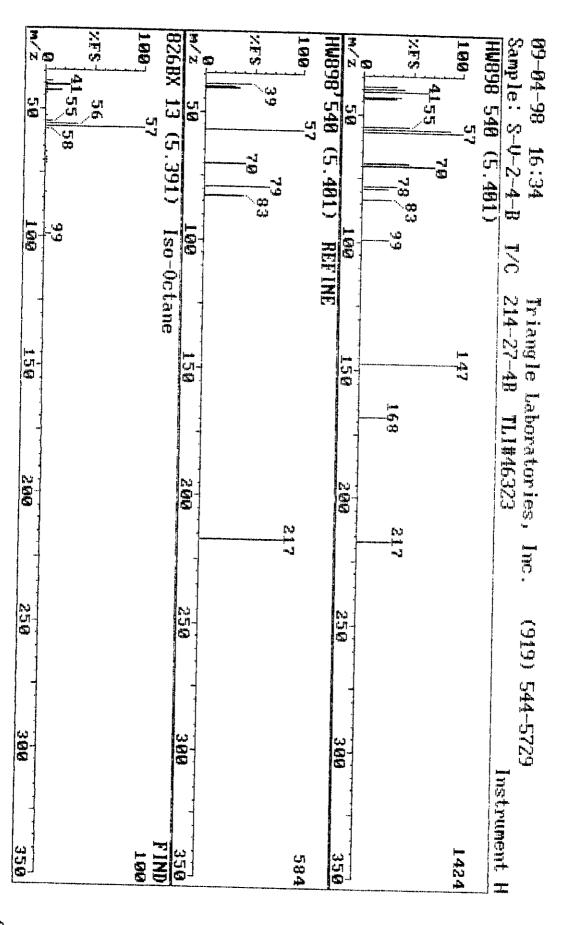












Project Number: 46323 Sample File: HW904

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
Analyte	ug			ug	ug
Pentafluorobenzene		IS 1	5.05		
Chloromethane	0.253	В	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.059	В	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 1S: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated-Below Quantitation Limit; E: Estimated-Above Calibration Range

Triangle Laboratories, Inc.

Savar v3.7

Printed: 17:09 09/08/1998

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

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan, Limit
	ug			ug	ug
Methyl methacrylate		U		0.003	0.05
Bromodichloromethane		U		0.001	0.05
is-1.3-Dichloropropene		U		0.001	0.05
-Methyl-2-pentanone		U		0.002	0.05
Toluene	3.898	BE	7.79		0.05
rans-1,3-Dichloropropene		U		0.001	0.05
.1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d _s		IS 3 Low	9.99		
Tetrachloroethene		U		0.001	0.05
-Hexanone		U		0.003	0.05
Dibromochloromethane		U		0.001	0.05
.2-Dibromoethane		U		0.002	0.05
Chlorobenzene		U		0.001	0.05
thylbenzene	2.716	BE	10.36		0.05
n-/p-Xylene	12.924	BE	10.62		0.10
-Xylene	3.540	BE	11.32		0.05
tyrene	0.490	В	11.35		0.05
Bromoform		U		0.002	0.05
.4-Dichlorobenzene-d		IS 4 Low	15.17	.	0.07
Cumene 4		U	-	0.001	0.05
.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

Triangle Laboratories, Inc.

Savar v3.7

801 Capitola Drive • Durham, North Carolina 27713

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

Printed: 17:09 09/08/1998

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

Response File: ICALH904

Date Analyzed: 09/04/98

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

Reviewed by

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

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

Response File: ICALH904

Date Analyzed: 09/04/98

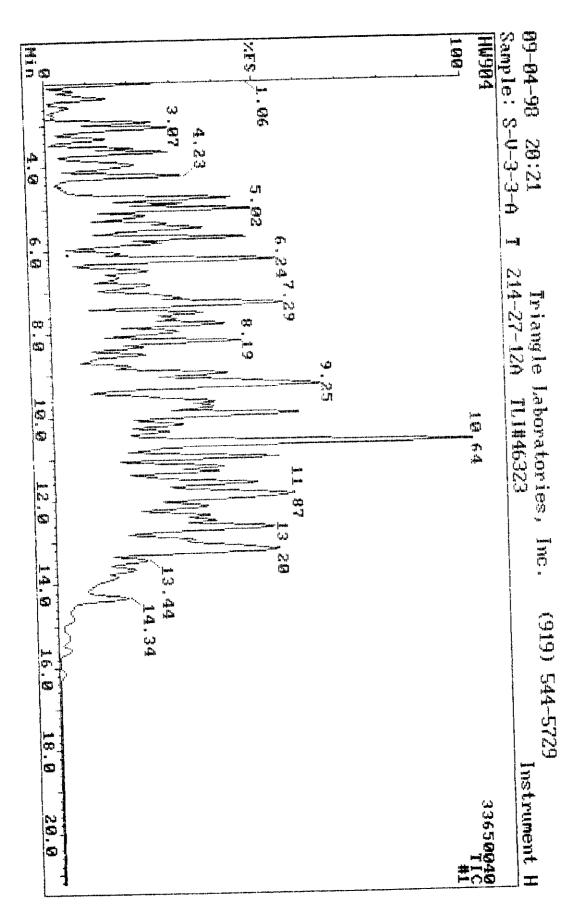
Analyte	Amount	FLAG	RT	Det: Limit ug	Quan. Limit
Pentafluorobenzene		IS 1	5.05	-6	ug
1.3-Butadiene		U	22	0.001	0.25
Vinyl bromide		U		0.001	
n-Hexane	5.008	BE	3.66	0.001	0.25
1.2-Epoxybutane		U	3.50	0.055	0.25
Iso-Octane		U			0.25
1.4-Difluorobenzene		IS 2	5.79	0.001	0.25
Ethyl acrylate		U		0.001	0.25

Date 9/8/98 Reviewed by

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

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



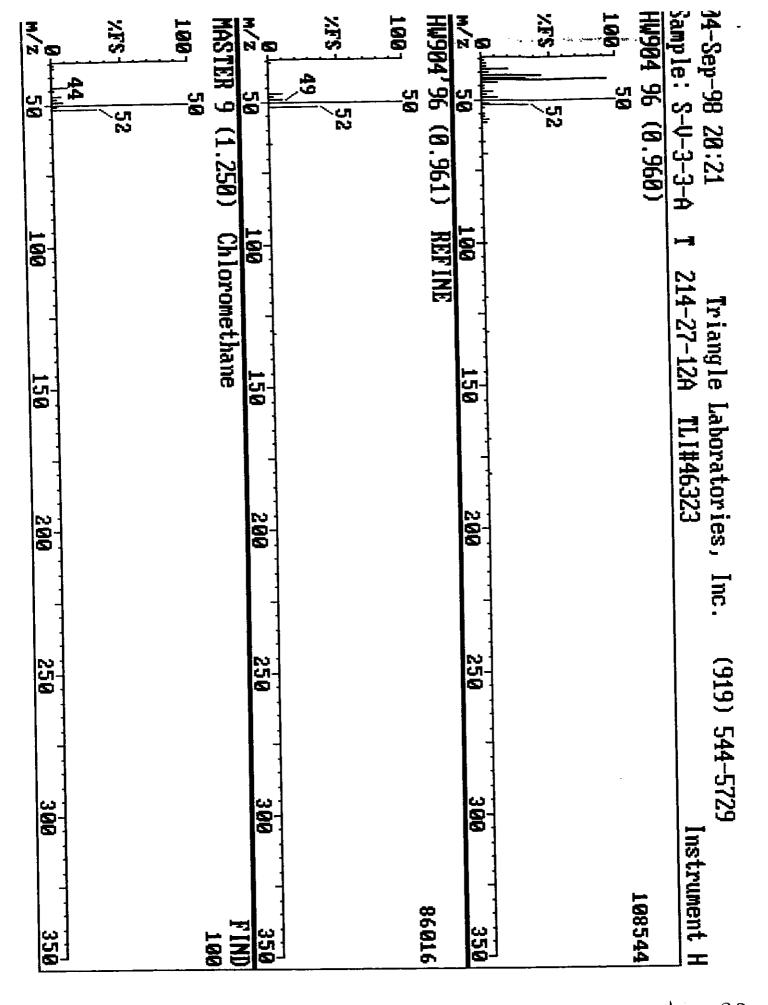
Data Review: Paß Date: 9/8/98

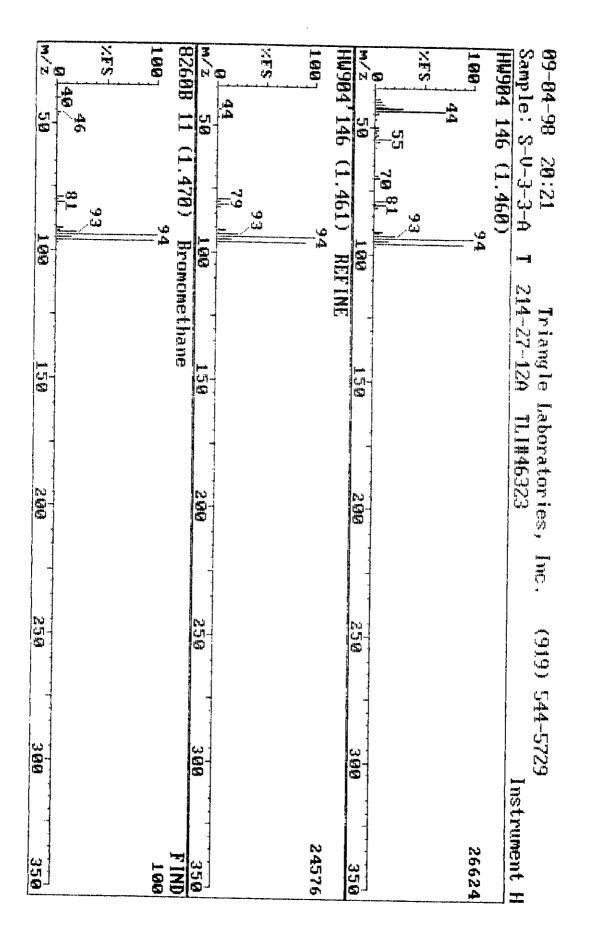
No). M	AT	FOR	REV	Delta	Area	P.Flags	RT	ฉห	Name
****	4		4 .			ر _{مدرد} بهید بیشت مید بیشت میشد میشد میشد در است. - است است.				
		35 0	11	45	-1	2280136		5.05	168	Pentafluorobenzene
	2 3 .	-0 -20	10	0	0	2186296		5.79	1.1.4	1,4-Difluorobenzene
		32 63	19	33	l,	922468		9.99	117	Chlorobenzene-d5
	4 5	და ()	20	82	4	351408		15.17	152	1.4-Dichlorobenzene-d4
		40 40	0 25	0	0	1178340		4.92	113	Dibromofluoromethane
	7	40	40 0	40	Ţ	3730528		7.68	28	Toluene-d8
	8	Ö	0	0	0	7716096	A	12.36	95	4-Bromofluorobenzene
	9	0	0	0	0	0	60 a- a	0.00	85	Dichlorodifluoromethane
1	.ó	0	o o	0	0	590752 4	W Pais	0.00. 0		
		96	60	98	-1	179017	L	0.00		Vinyl Chloride
	.2	0	00	90	0	178016	DΛ	1.46		Bromomethane
	.3	ŋ	o o	0	0	0		0.00		Chloroethane
	.4	ó	Ö	0	0	0		0.00	ror	Trichlorof Luoromethame
	.5	ŏ	ŏ	0	0	0		0.00		l.i-Dichloroethene
		32	48	86	1	0 4638861	to	0.00		Iodomethane
		0C	82	9 L	1	4217088		2.57		Carbon disutfide
	.8	Ô	0	Õ	ō	92.0000 0	ΔÜ	2.63		Acetone
	9	ő	i)	Ö	ŏ	Ö		0.00		Altyl chloride
		31					FO Pag	0.00		Methylene chioride
	1	Ō	0	o	0	02.0007	30	3.33		Acrylonitrite
	2	O	1)	Ö	ő	Ö		0.00	76	trans-1,2-Dichloroethere
	3	0	0	0	0	Ó		0.00		t,1-O(chloroethane
.2	4	0	\circ	Ó	Ó	Ö		0.00	ণা-) সংস	Vinyl acetate
2	5	0	\circ	0	0	ó		0.00	7 7 Cuz	2.2-Dichtoropi opane
2	6 1.0	00	82	26	-3	4414066	VV	4.47	26 43	cis-1.2-Dichioroethene 2-Sutanone
2	7	0	O	O	0	0	P .	0.00		Chloroform
2	8	0	i)	0	0	ó		0.00		Bromochtoromethane
2	9	O	0	0	0	0		0.00		1,1,1~Trichtoroethane
3	0	0	0	O	0	0		0,00	117	Carbon tetrachloride
3		O	0	0	0	0		0.00		1.1-Dichloropropene
		00	35	99	0	16474820	bv	5,25	78	Senzene
	3	O	0	0	0	o		0,00		1.2-Dichloroethane
	4	O	O	0	0	0		0.00	130	Trichloroethene
3		O	O	O	0	0		0.00	63	1,2-Dichloropropane
	6	0	O	0	0	O	60.4	0.00	93	Dibromomethane
3		₩-	-46	55	13-	- 9151488 -	bb (PP) Pab	4.50	41	Methyl methacrylate
3		0	0	0	0	O .		0.00	83	Bromodichloromethane
3		0	0	0	Ű	0	60	0.00	75	cis-1,3-Dichloropropene
4		10)	- 50 -	- 70	1.5	-19026660-	(JP) Pas	7.51	43	4-Methyl-2-pentanone
4			30	97	3	25665920	bv	7.79	92	Toluene
4		0	0	0	0	0		0.00	75	trans-1,3-Dichloroproper
4 4		0	0	0	0	0		0.00	97	1,1,2 Trichloroethane
4.		0	0	0	0	0		0.00	69	Ethyl methacrylate
4		o O	0	0	0	0		0.00	164	Tetrachioroethene
4		<u>.</u>	~ _≠	<u> </u>	0 5	0 17711000	Pe Pal	0.00	76	1,3-Dichloropropane
4:		Ô	0	ാ	0	- 10011000 - A		- 0.78		2-Hexanone
4.		0	0	0	0	0		0.00	129	Dibromochloromethane
5		ŏ	o	o	0	0		0.00		1.2-Dibromoethane
-		-		***	~	V		0.00	112	Chlorobenzene

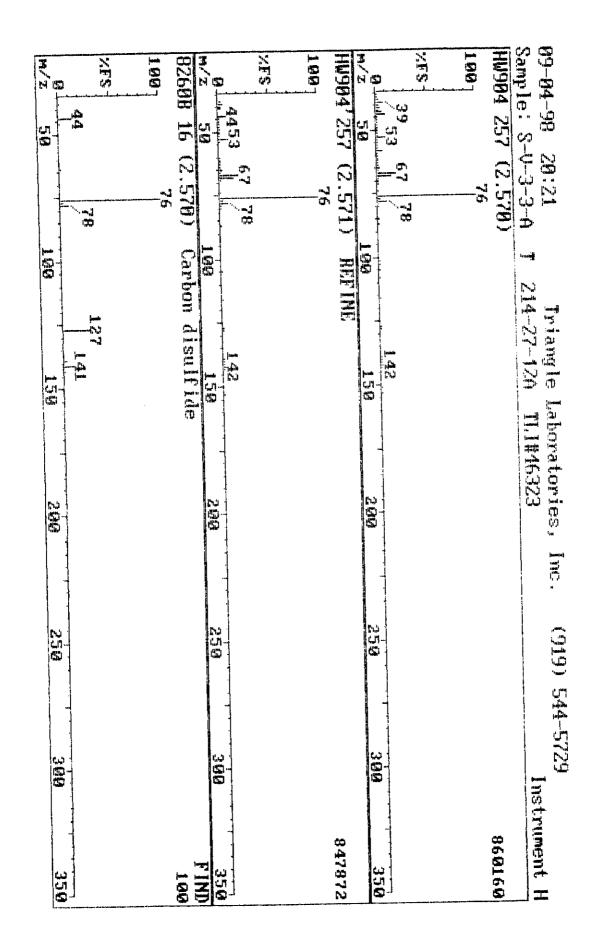
Data Review: Pas Date: 9/8/98

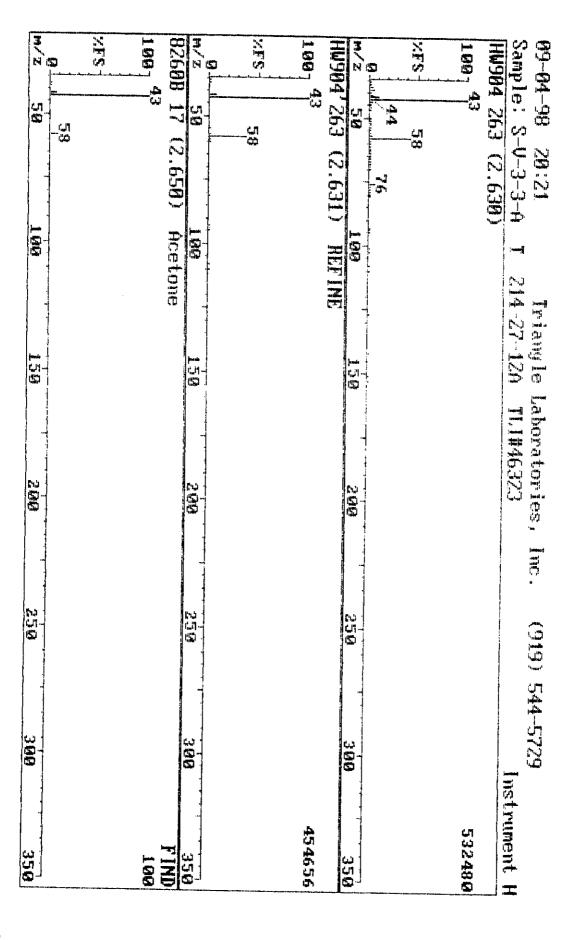
No.	MAT	FOR	REV	Del	ta	Area	P.Flags	s RT	QM.	Name
					·· ·	0		0.00	131	1,1,1,2-Tetrachlorsethan
51	0	0	0		0	4810060	by	10.36		Ethylbenzene
52	80	54	87		4	28135070		10.62		m-/p-Xylene
53	77	57			6	7210048		11.32	2 106	o-Xytene
54	71	51.			6	1642668 4	an Pas	9/8/98	1.35 104	Styrene
5.5	0	0						0.00		Bromoform
56	0	O			0	0		0.00		Cumene
57	0)	0	0		0.00		1,1.2,2-Tetrachloroethan
58	0)	O	-		0.0		Bromobenzene
59	O)	O	0		0.0	-	1,2,3-Trichloropropane
60	0		•)	0	-		0.0		n-Propylbenzene
61	0)	O ^	0		0.0		
62	0	ı .		0	0	0		0.0		5 2-Chlorotoluene
63	0) (•	0	0	0		0.0		4-Chioroboluene
64	C) 1		O	0	()		13.2		1,3.5-frimethylbenzene
65	. 56	, 4.	3 9	o -	-15	28678120		0.0		tert-Suty (benzene
66	, C) ')	0	0	0		14.3		5 1,2,4-fromethylbensame
67	1,00	7	4 9	8	1	17466980		14.8 [4.8		s sec-Bucytbendene
68	76	1 J	5 8	6	1.	2247308		15.5		7 p-Cymene
69	39	9 4	0 9	0	13	413178		გე.ა ტ.მ	10 J.	6 1,3-Dichlorobenzene
70) ()	0	O.	0	ť,	-	0.0		6 1.4-Dichlorobenzens
73	ί ()	0	O	0	(15.9		1 Senzyt chioride
70	2 3!	5 1	0 9	1	-3					i n-Butyibenzene
7:	3 (С	O.	O	0	(0.0		& 1,2-0ichtorobenzers
7.	4 (0	i)	0	0)	0.6		5 1.2-Dibromo-3-chloroprop
7	5 (o	0	0	0		9	0.0		the second secon
7	6 1	0	0	0	0		0	0.0)U 10	5 Hexachlorobutadiene
7	7	0	0	0	0		0	0.0		8 Naphthalene
7		0	0	O	0		0	0.0		
7	9	O	O	O	0	,	0	0.0	00 18	O Local Control Control

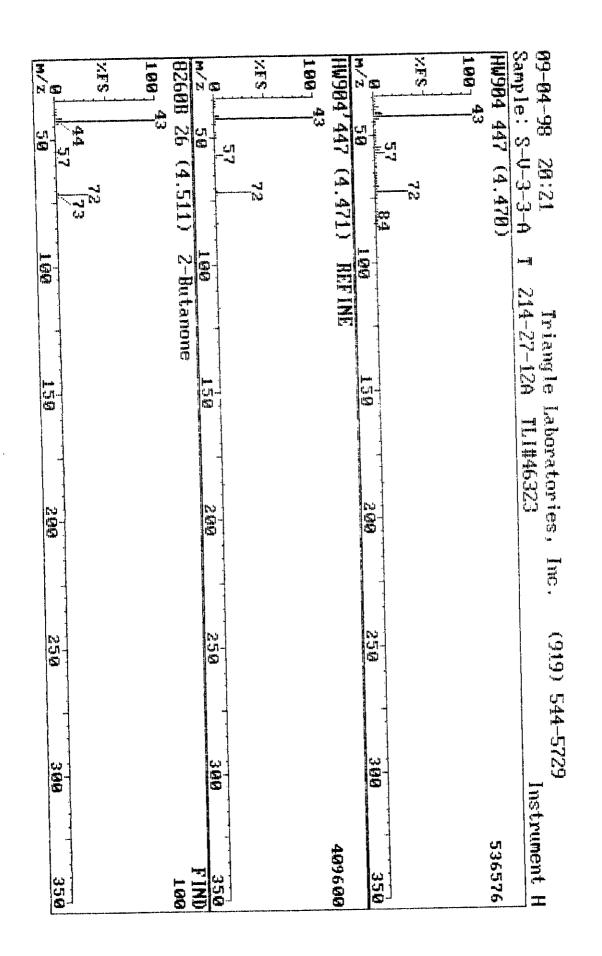
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	ฉห	Name
1	35	11	45	1	2280136	bv	5.05	168	Pentafluorobenzene
2	0	O	0	0	2186296	A	5.79		1.4-Difluorobenzene
3	32	19	33	5	922468	bv	9.99		Chlorobenzene-d5
4	62	20	82	7	351408	A	15.17		1,4-Dichlorobenzene-d4
5	O	О	0	0	139076	A	15.24	113	Dibromofluoromethane
6	37	25	40	4	3730528	bv	7.68		Toluene-d8
7	0	0	0	O	7716096	A	12.36		4-Bromofluorobenzene
8	50	30	6.7		15775496	POB	- 1.06-		1,3-Butadiene
9	0	O	Ó	O	0	~ ^	0.00		Vinyl bromide
10	43	3»	बह		96041	(Sp) Pag	-3.55		MTBE
11	100	97	99	- 1 .	20964340	VV	3.66		n-Hexane
12	70	- 50	67	- 3	5255044	by GO Pag	4 2%		1.2-Epoxybutane
13	5-2-	- 60 -	- 66		7972252	JUNGO POLK	5.16		Iso-Octane
14	ATT	- 28	2.0		269312 00	OD ALA	- 5.24-		Ethyl acrylate
									the court of the same of the s

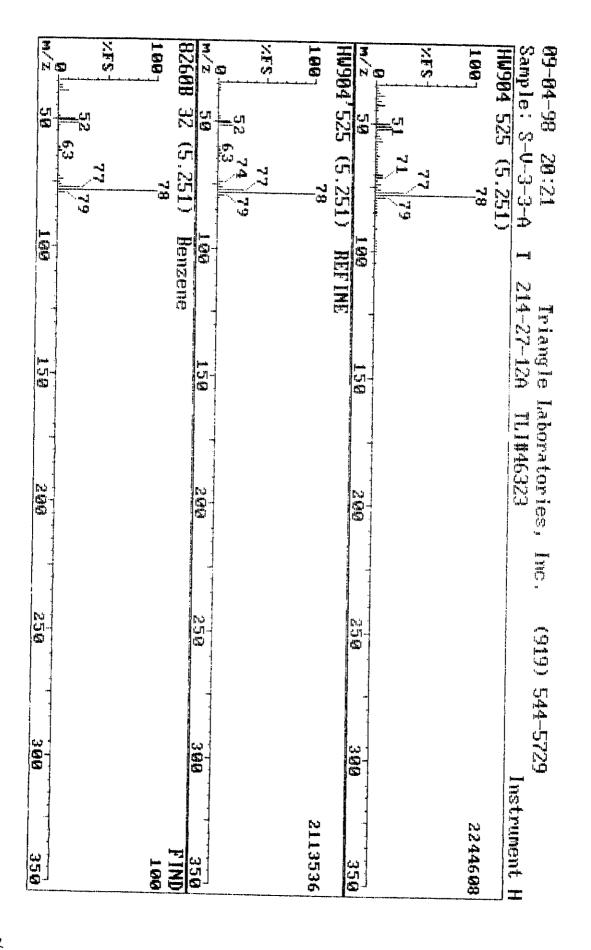


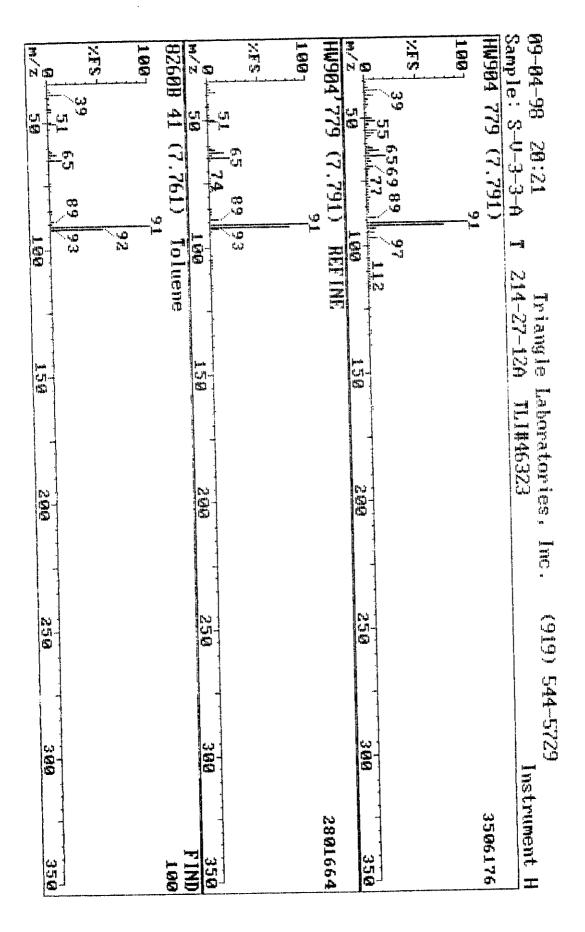


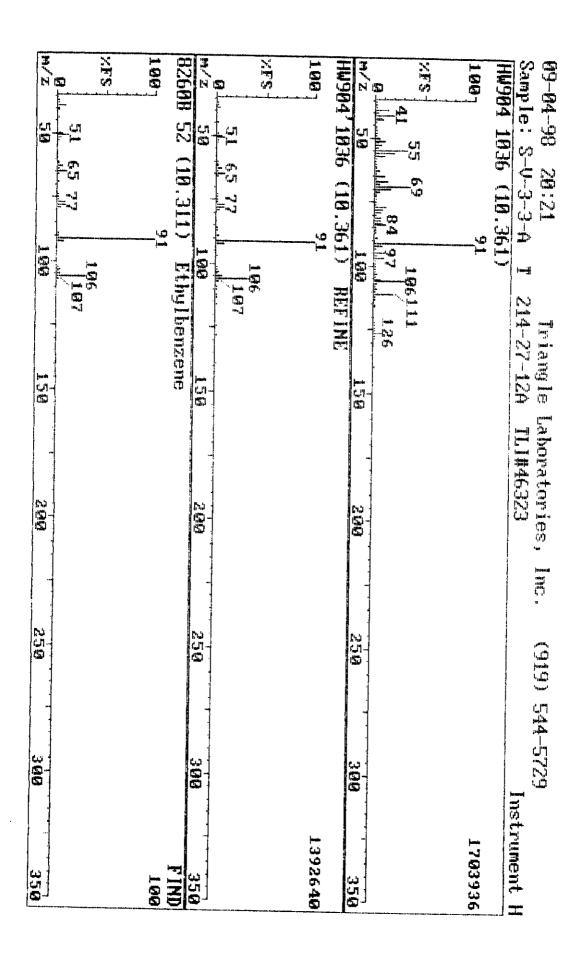


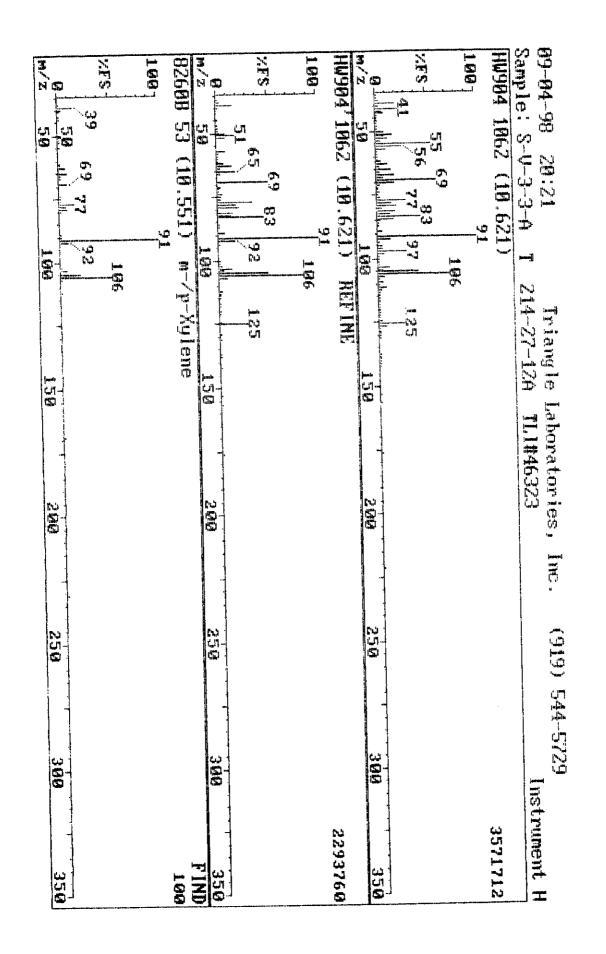


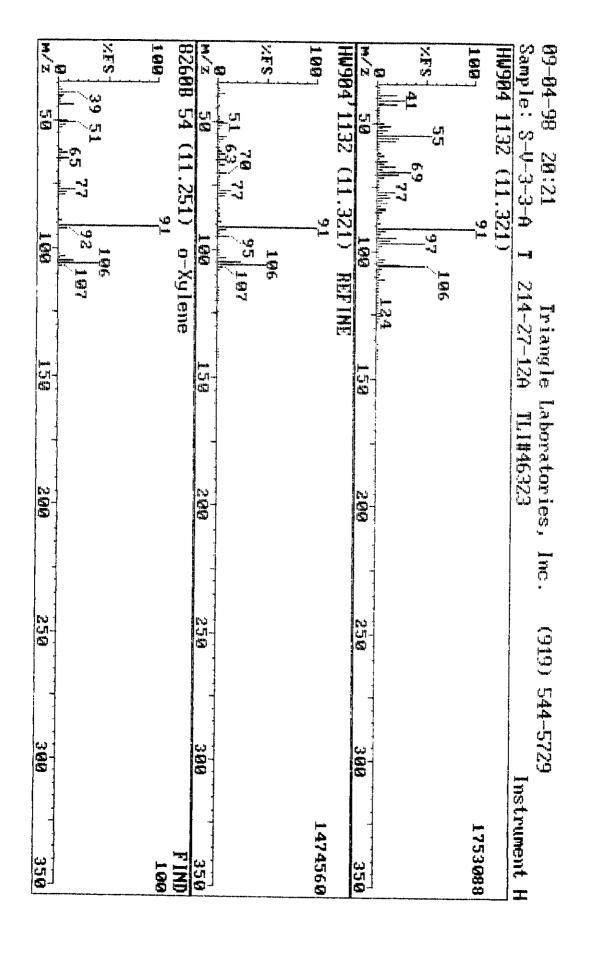


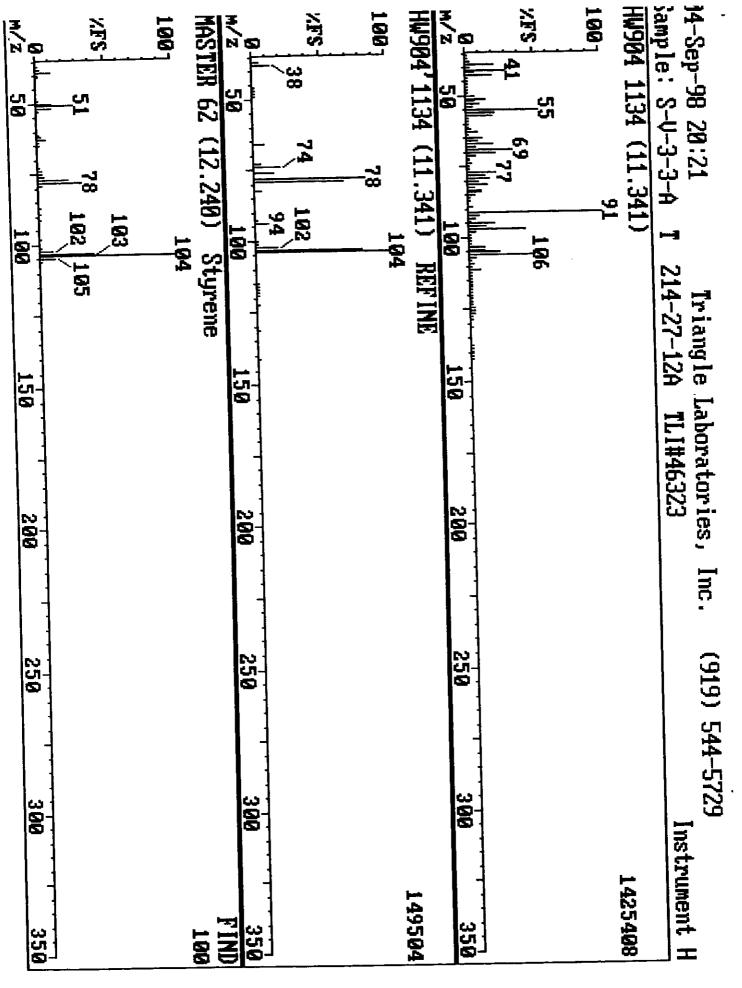


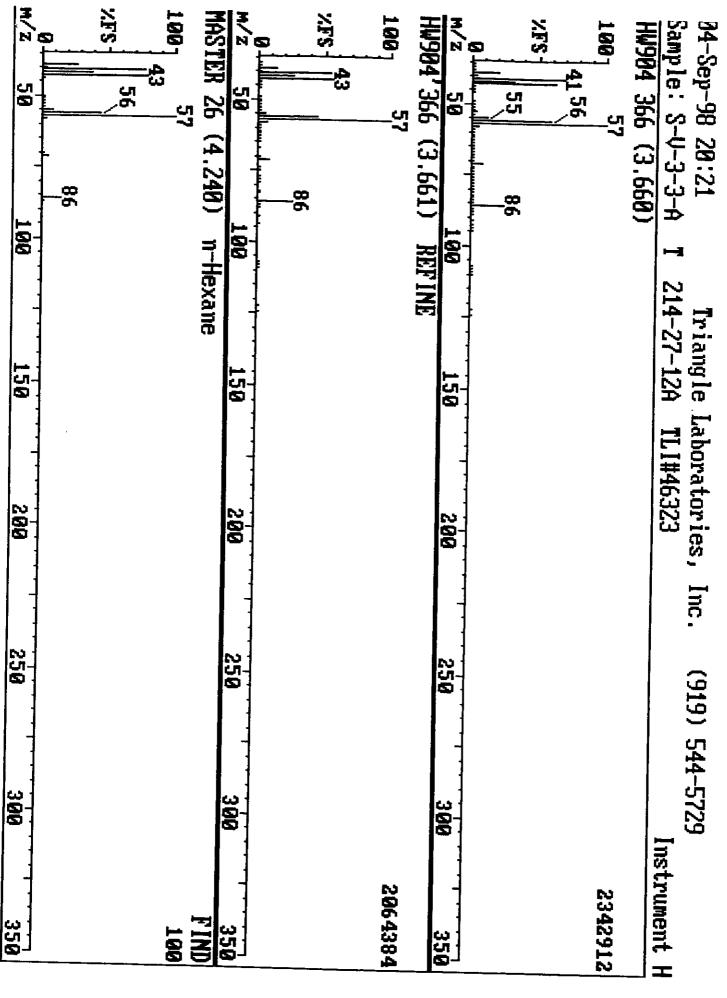












Project Number: 46323 Sample File: HW899

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
	n8			ug	ug
Pentafluorobenzene		IS 1	5.04	· · · · · · · · · · · · · · · · · · ·	
Chloromethane	0.353	В	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.071	В	1.48		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		Ŭ		0.001	0.05
Iodomethane		Ŭ		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.075	В	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	В	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.

Savar v3.7

Printed: 16:29 09/08/1998

801 Capitola Drive • Durham, North Carolina 27713

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det Limit	Quan. Limit
Methyl methacrylate	ug.			ug	ug
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		U		0.001	0.05
	0.005	ВЈ	7.74		0.05
trans-1.3-Dichloropropene 1.1.2-Trichloroethane		U		100.0	0.05
		U		0.001	0.05
Chlorobenzene-d		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	
o-Xylene		U		0.001	0.10
Styrene		U		0.001	0.05
Bromoform		U		0.001	0.05
1.4-Dichlorobenzene-d		IS 4	15.04	0.001	0.05
Cumene		U	19.01	0.001	
1,1,2,2-Tetrachloroethane		U		0.001	0.05
		•		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

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

Project Number: 46323 Sample File: HW899

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

Client Project: R012.001

Date Received: 07/29/98

Response File: ICALH904

TL1 ID: 214-27-12B

Date Analyzed: 09/04/98

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

WB Date 9,8,98 Reviewed by

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

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

Response File: ICALH904

Date Analyzed: 09/04/98

Analyte	Amount	FLAG	RT	Det. Limit	Quan. Limit
Pentafluorobenzene		IS 1	5.04	ug	118
1.3-Butadiene Vinyl bromide		U	<i>y.</i> 01	0.001	0.25
n-Hexane		U		0.001	0.25
1.2-Epoxybutane	0.003	BJ	3.66		0.25
Iso-Octane		U		0.036	0.25
1.4-Difluorobenzene		U IS 2	5.77	0.001	0.25
Ethyl acrylate		U		0.001	0.25

Date 9/8/98 Reviewed by

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

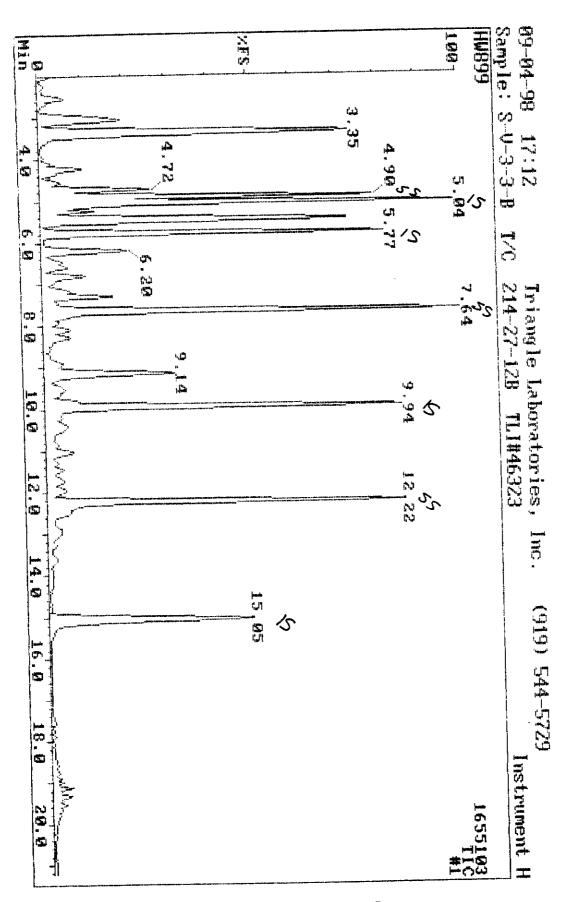
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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



Data Review: Pas Date: 9/8/98

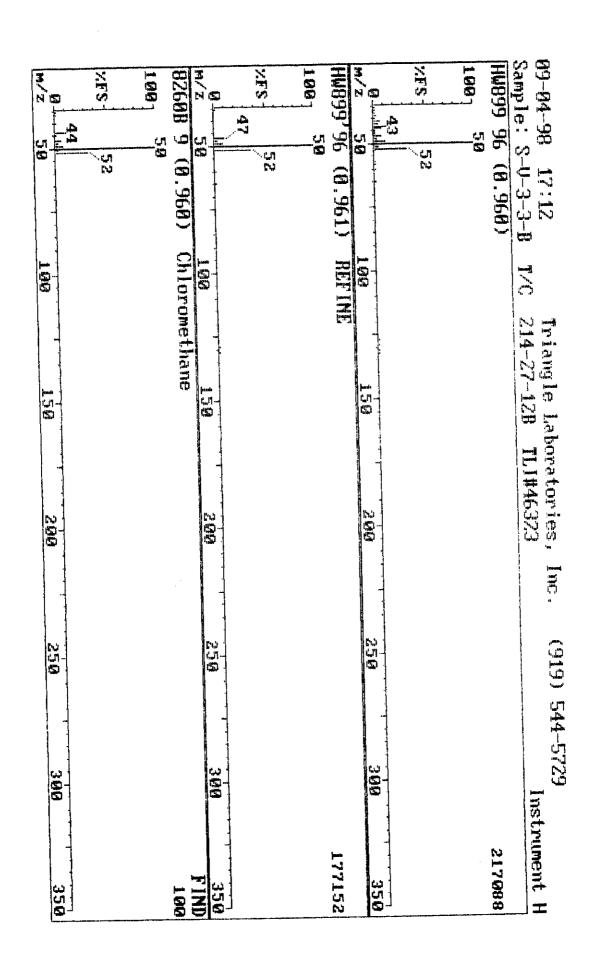
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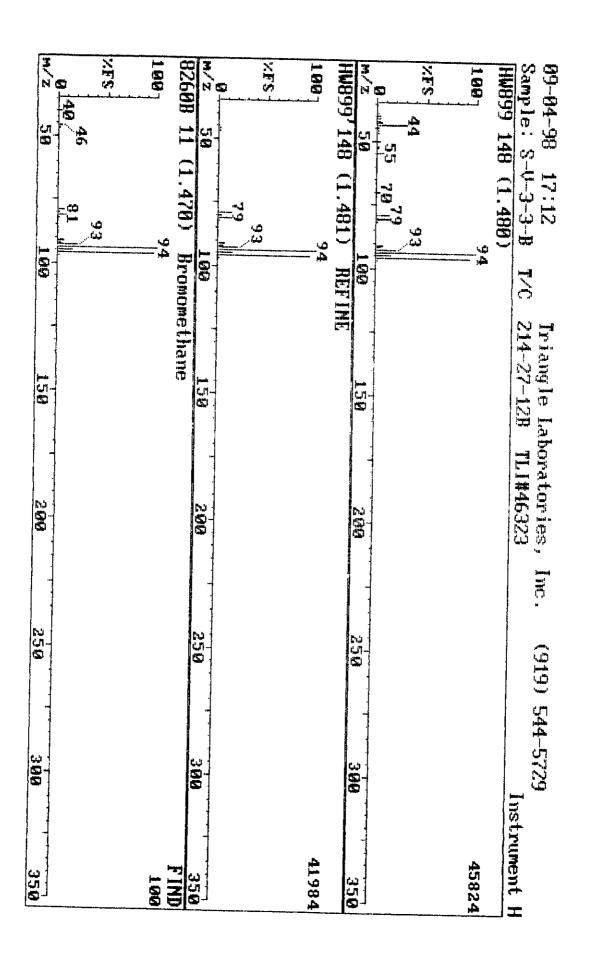
X 1	WAT.		~~	.					10:01
MO.	MA!	FUR.		Delta	Area	P.Flags	RT	QM	Name
1	100	71	97	-2	3509648	hv			
2	100	96	98	ō	3951552		5.04	168	Pentafluorobenzene
3	100	94	95	-1	3804949		5.77 9.94	114	1,4-Difluorobenzene
4	100	78	98	-1	1782907		15.04	11/	Chlorobenzene-d5
5	100	68	99	1	1854164			152	1,4-Dichlorobenzene-d4
6	100	90	97	ō	4750834		4.91 7.64	TT?	Dibromofluoromethane
7	100	88	94	Ō	2557094		12.22		Toluene-d8
8	0	0	0	Ó	0	V V	0.00	95	. a. a.a. raol openzene
9	100	90	100	0	1267996	VV	0.96	85	
10	0	0	0	ō	0	v v	0.00		Chloromethane
11	100	83	99	2	331364	hv			Vinyl Chloride
12	O	0	0	ō	0	D V	1.48 0.00		Bromomethane
13	0	0	0	Ō	ő				Chloroethane
14	O	Q	0	ō	ŏ		0.00	101	Trichlorofluoromethane
15	0	0	O	Ò	ő		0.00	96	1.1-Dichloroethene
16	O	0	O	Ŏ	ő		0.00		Iodomethane
17	1,00	74	92	1	155650	VV	0.00		Carbon disulfide
18	0	O	0	õ	0	» v	2.65		Acetone
19	0	0	0	0	o		0.00		Attyl chioride
20	3 8 -		-57	-	73826 -	FO Pap	0.00 3.34	84	Methylene chloride
21	0	0	0	õ	0	50	0.00	33	Acrylonitrile .
22	0	0	0	ő	Ö		0.00	76	trans-1,2-Dichloroethene
23	0	0	0	O	ő				1.1-Dichtoroethane
24	0	0	0	ō	ŏ		0.00	40	Vinyl acetate
25	O	0	0	Ö	ŏ		0.00	(/	2,2-Dichtoropropane
26	91	62	87	Ö	117927	vh	4.49	76	cis-L.2-Dichloroethene
27	O	Ó	0	0	0	* ***	0.00		2-Butanone
28	Q	O	0	O	Ö		0.00		Chloroform
29	0	0	0	0	ó		0.00	#473 ~~	Bromochloromethane
30	0	0	0	0	Ö		0.00	77	1,1,1-Trichloroethane
31	0	0	0	0	ŏ		0.00	/بلدناد	Carbon tetrachloride
32	100	95	99	1	683080	hv	5.24	70	1,1-Dichloropropene
33	O	0	0	Ö	0	: v			Benzene
34	0	0	O	0	ŏ		0.00	170	1.2-Dichloroethane
35	0	0	0	0	ő		0.00	100	Trichloroethene
36	0	0	0	Ó	ő	~ -	0.00	6 3	1.2-Dichloropropane
37	48	40	51	7	$-19360\tilde{z}$	· (7P) Pas	- 6.4 7	7.0 7.1	Dibromomethane
38	0	0	0	O	0		0.00	4 L	Methyl methacrylate
39	0	0	O	O	ŏ		0.00	තට 75	Bromodichloromethane
40	45	7	55		<u>52862</u>	(FP) Pan	7.64	43	cis-1,3-Dichroropropene
41	71	37	79	1	56472	A	7.74	90	4-Methyl-2-pentanone Toluene
42	0	O	0	0	ō	•	0.00		
43	0	О	0	O	o	~ .	0.00	7.0	trans-1.3-Dichloropropen
44	5 0 -	-4ਹ ੋ	-56	3	132292	(SP) PaB	8.41.	97 69	1,1,2-Trichloroethane
45	0	0	0	0	0	-	0.00	144	Ethyl methacrylate
46	0	0	0	0	ŏ		0.00	₩	Tetrachloroethene
47	83 -	15	55	-9	53338 ,	(70) Pas	- 8.89	/ O	1,3-Dichloropropane
48	0	0	0	0	0	-	0.00		2-Hexanone
49	0	0	0	0	ő		0.00	107	Dibromochloromethane
50	O	0	0	0	ŏ		0.00		1,2-Dibromoethane
					-		0.00	که بادید	Chlorobenzene

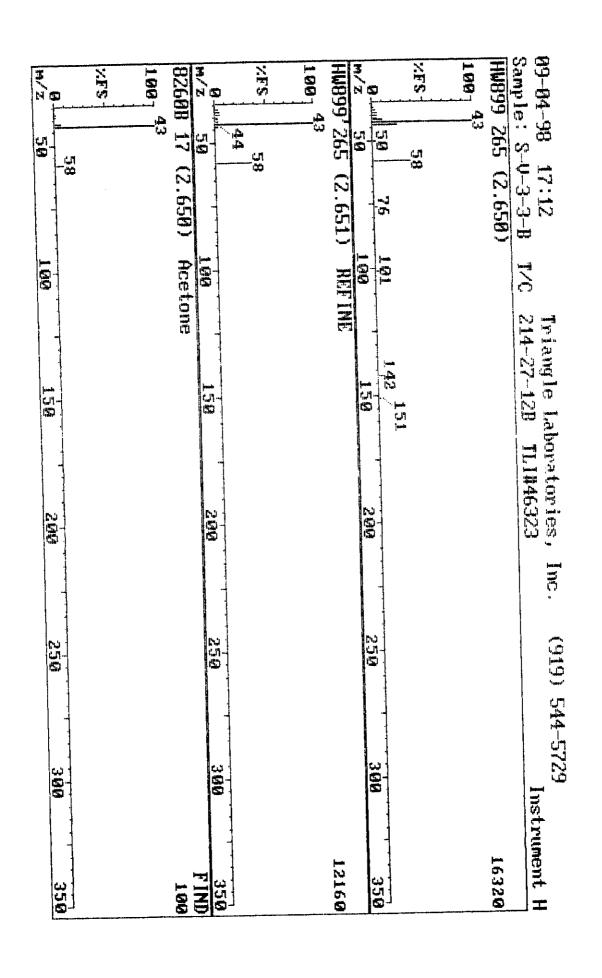
Data Review: Pag Date: 9/8/98

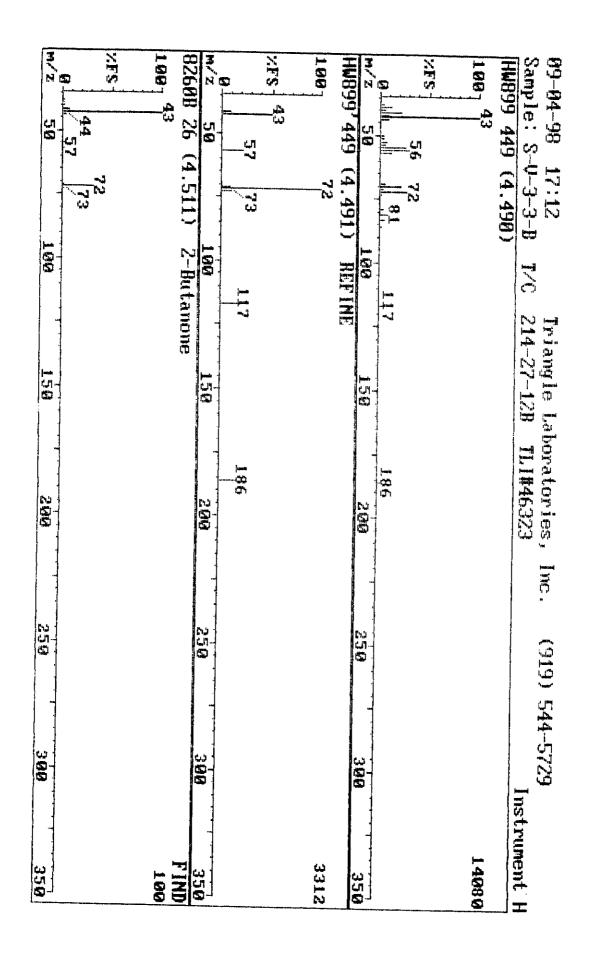
No. M	IAT F	OR R	EV D	elta	Area F	P.Flags	RT	QM	Name
	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
51 52	0	0	Ö	ŏ	ŏ		0.00	106	Ethylbenzene)
52 53	Ö	o o	o	ŏ	o		0.00	106	m-/p-Xylene / Pas 9/9/18
54	Ö	Ő	ŏ	ŏ	O		0.00		O-Xyrene
55	Ö	ő	Ö	Ö	0		0.00		Styrene
56	ŏ	ō	ŏ	ō	0		0.00		Bromoform
57	ŏ	Ö	Ō	0	0		0.00		Cumene
58	Ö	ŏ	ó	0	O		0.00	83	1,1,2,2-Tetrachloroethan
59	õ	o	0	0	0		0 00	156	Bromobenzene
60	ŏ	ō	o	0	0		0.00	75	1,2,3-Trichtoropropane
61	ŏ	Ó	0	O	0		0.00		n-Propylbenzene
62	ŏ	ō	o	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	ō	Ō	Ó	0	0		0.00		2-Chlorotoluene
64	Ö	o	0	0	0		0.00	126	4-Chlorotoluene
6.5	Ó	O	0	0	0		0.00		1.J.5-Trimethylbenzene
66	0	0	O	О	0		0.00		tent-Butylbenzene
67	64	36	69	1.	40676	A	14.21	105	1,2,4-Trimethylbenzene
68	42	13	51	Ţ	14992	A	14.71		sec-Sutylbenzene
69	O	0	0	0	0		0.00		p-Cymene
70	Ö	0	0	0	1)		0.00		1.3-Dichlorobenzene
71	Ó	O	Q	0	O		0.00		1.4-Dichlorobenzene
72	Ó	O	О	0	r)		0.00		Benzyl chioride
73	54	34	59	2	18780	A	16.85		n-Butylbenzene
74	53	34	59	4	14412	A	16.39	1.46	1,2-Dichlorobenzene
75	O	0	O	0	0		0.00		1,2-Dibromo-3-chloroprop
76	55	54	72	7	30016	bv	19.12	130	
77	47	10	80	7	6816		19.33		Hexachlorobutadiene
78	69	49	33	7	92048		19.32		Naphthalene
79	61	41	76	7	25052	bv	19.53	180) 1,2,3-Trichlorobenzene

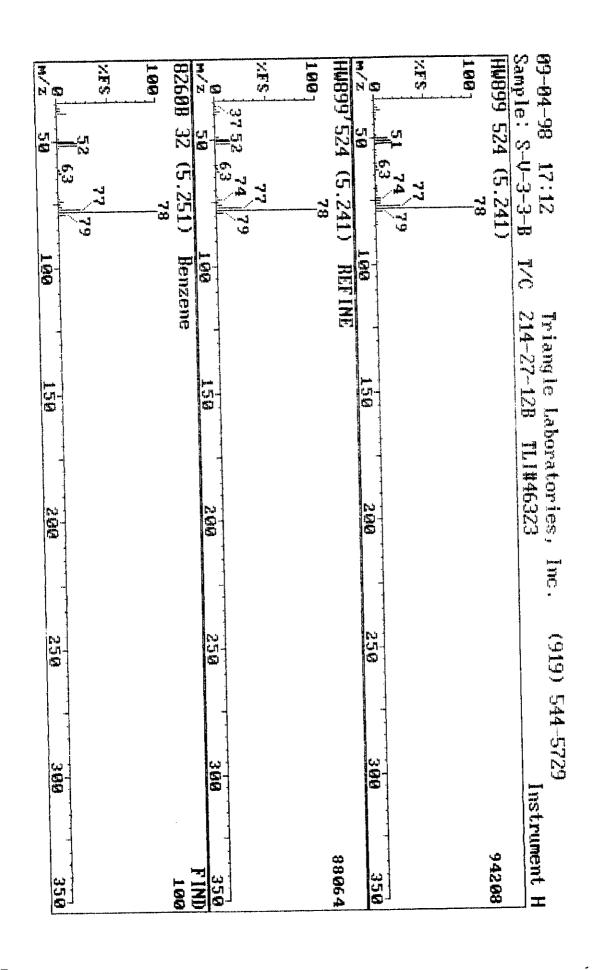
										2,335
	No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
•		100 100 100 100 100 100 64 0 41 77 92 55 39	71 96 94 78 68 90 88 39 0 34 53 68 34	97 98 95 98 99 97 94 74 0 38 70 81 60	0 1 -2 2 1 -1 -1 0 0 -5 0	3509648 3951552 3804949 1782907 1854164 4750834 2557094 4065320 0 206728 18148 81656 234306	by by by by by y A A A A A	5.04 5.77 9.94 15.04 4.91 7.64 12.22	168 114 117 152 113 98 95 39 106 73 57 42 57	Pentafluorobenzene 1,4-Difluorobenzene Chlorobenzene-d5 1,4-Dichlorobenzene-d4 Dibromofluoromethane Toluene-d8 4-Bromofluorobenzene 1,3-Butadiene Vinyl bromide MTBE n-Hexane 1,2-Epoxybutane Iso-Octane Ethyl acrylate

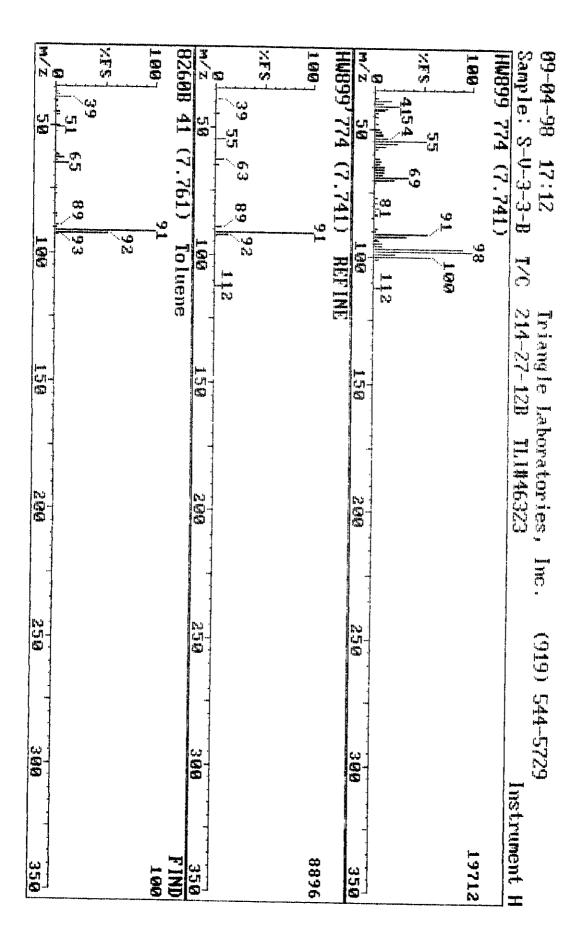


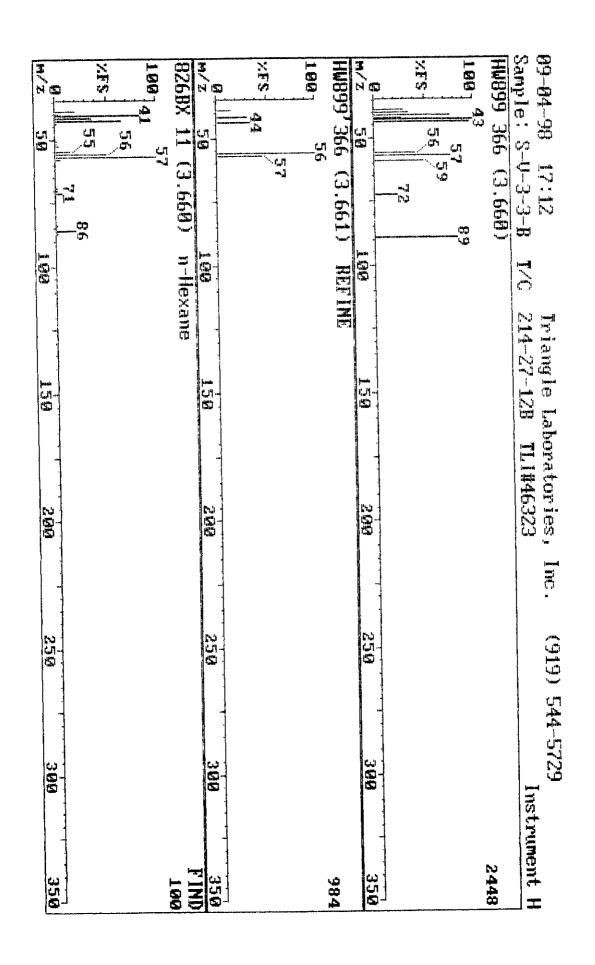












TRIVENCELELIVES

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

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 1	RF0.25	RF0.50	RF0.75	RF1.00 l	MEAN	%RSD	
Pentafluorobenzene	Ī			oog dae dae natu higas <u>bad</u>					
Chloromethane	P	0.236	0.271	0.220	0.267	0.287	0.256	10.6	
Vinyl Chloride	С	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		0.355	4.1	
Trichloroethene		0.469	0.414	0.422	0.423		0.431	5.0	
1,2-Dichloropropane	C	0.406	0.419	0.413	0.405		0.409	1.8	
Methyl methacrylate		0.082	0.082	0.090	0.092		0.088	6.1	
Bromodichloromethane		0.575	0.573	0.589	0.585		0.579	1.3	
cis-1,3-Dichloropropene		0.507	0.561	0.579	0.587		0.563	5.7	
4-Methyl-2-pentanone		0.115	0.155	0.149	0.152		0.143	11.3	
Toluene	C	0.738	0.770	0.770	0.756		0.753	2.5	
trans-1,3-Dichloropropene		0.337	0.404	0.428	0.442		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			0.423	1.9	
2-Hexanone	1	0.060	0.198				0.160		
Dibromochloromethane		0.407	0.385				0.408	3.4	
1,2-Dibromoethane		0.318	0.298	0.312	0.314	0.313	0.311	2.5	

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

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	RFL00	MEAN	%RSD
Chlorobenzene	P	0.923	0.954	0.987	0.956	0.954	0.055	2.4
Ethylbenzene	C	0.467	0.496	0.502	0.467	0.468	0.955	2.4
m-/p-Xylene		0.589	0.608		0.574		0.480	3.7
o-Xylene		0.547	0.569	0.569		0.567	0.590	3.4
Styrene		0.868	0.929		0.530	0.543	0.552	3.1
Bromoform	P	0.174	0.203	0.946	0.894	0.907	0.909	3.3
1,4-Dichlorobenzene-d4	T	0.174	0.203	0.233	0.244	0.251	0.221	14.6
Cumene	•	3.940	3.920	4.126	2.005	0.510		
1,1,2,2-Tetrachloroethane	Р	0.463		4.136	2.927	2.740	3.532	18.3
Average %RSD	•	0.403	0.618	0.674	0.559	0.504	0.564	15.1
								10.5
Surrogate	Flag	RF0.10	RF0.25	RF0.50	RF0.75	RF1.00	Mean	%RSD
Dibrand								WALLEY .
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: ______ \(\text{PaB} \) Date \(\frac{9}{8} \) / 98

*- Fails QC Criteria for %RSD; << - 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.

		RF0.25 R	EMEAN	%D	
Analyte	Flag	DEVILO N			
Pentafluorobenzene	I				
Chloromethane	P	0.195	0.256	23.8	
Vinyl Chloride	С	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	
Acryloni tr ile		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 ICAL File: ICALH904	Date of Analysis :09/04/98	Analyte List: 8260
VOST Calibration.		

•	\circ	ı	Canton	auvi	Į,

Analyte	Flag	RF0.25	RFMEAN	%D	
Chlorobenzene	Р	0.967	0.955	-1.3	
Ethylbenzene	C	0.496	0.480	-1.3 -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	
l,4-Dichlorobenzene-d4 Cumene	I				
l,1,2,2-Tetrachioroethane	n	3.901	3.532	-10.4	
	P	0.491	0.564	12.9	
Surrogate	Flag	RF0.25	RFMEAN	%D	
Dibromofluoromethane	S	0.492	0.443	11.1	
Foluene-d8	S	1.060	1.065	-11.1 0.5	
-Bromofluorobenzene	S	0.562	0.508	0.5	

Date <u>9/8/98</u> Approved by:

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

Triangle Laboratories, Inc. Initial Calibration Curve

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

Analyte List: short

VOST Calibration.

Flag	RF0.50 l	MEAN	%RSD
I I	0.455 0.375 0.459 0.004 1.767	0.455 0.375 0.459 0.004 1.767	0.0 0.0 0.0 0.0 << 0.0
	Flag I I	I 0.455 0.375 0.459 0.004 1.767	I 0.455 0.455 0.375 0.375 0.459 0.459 0.004 0.004 1.767 1.767

Approved by: Park Date 9/8/98

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

States from minutes year of minutes of processing and the designation of the states of	,		

		•	

APPENDIX G.5 EPA METHOD 18 REPORT AND DATA

	•

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

Little & Harry

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

Sample Custody

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

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

					Analytical Reguest	
Sample	Collection	tion	Sample	Number of		1
Identification	Date	Time	Name	Containers		COMMENTS
T-M18-1-Aa	7/24/98		Leg A Tube a			
T-M18-1-Ab	7/24/98		Leg A Tube b	1		
T-M18-1-Ba	7/24/98		Leg B Tube a	_		Spike Tube
T-M18-1-Bb	7/24/98		Leg B Tube b	1		Spine Tube
T-M18-2-Aa	7/25/98		Leg A Tube a	-		
T-M18-2-Ab	7/25/98		Leg A Tube b	_		
T-M18-2-Ba	7/25/98		Leg B Tube a	-		Cailto Toba
T-M18-2-Bb	7/25/98		Leg B Tube b	-		Spirke Lube
T-M18-FB-Aa	7/25/98		Leg A Tube a			100
T-M18-FB-Ab	7/25/98		Leg A Tube b	1		.1.
T-M18-FB-Ba	7/25/98		Leg B Tube a	-		Cield Diank - Spike Tube
T-M18-FB-Bb	7/25/98		Leg B Tube b	-		Civid Disact
T-M18-3-Aa	7/27/98		Leg A Tube a	_		LIGIO DIGILIA
T-M18-3-Ab	1/27/98		Leg A Tube b			Switz T.L.
T-M18-3-Ba	7/27/98		Leg B Tube a	-		opike Tube
T-M18-3-Bb	7/27/98		Leg B Tube b			
T-M18-4-Aa	1/26/98		Leg A Tube a	1		
T-M18-4-Ab	7/26/98		Leg A Tube b	-		
T-M18-4-Ba	7/26/98		Leg B Tube a	-		Spile Tuke
T-M18-4-Bb	7/26/98		Leg B Tube b	1		ann avido
S-M18-1-Aa	7/24/98		Leg A Tube a	-		
S-M18-1-Ab	7/24/98		Leg A Tube b	1		
S-M18-1-AKO	7/24/98		Leg A Knock-out Imp			
S-M18-1-Ba	7/24/98		Leg B Tube a			
S-M18-1-Bb	7/24/98		Leg B Tube b	1		Spike Tuke
S-M18-1-BKO	7/24/98		Leg B Knock-out Imp	1		Course tube
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			Spike Tube
S-M(8-2-Bb	7/25/98		Leg B Tube b	-		
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		

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

	SAMPLERS: B. Purser, T Abernathy	
R012.001	SAMPLERS: B. Purser, T Abernathy	Request
PROJECT NO.:	SAMPLERS: B. F	Analytical Request
SPHALT PLANT C		
THE EDA HOT MIX ASPHALT PLANT C	ON: B. Purser	
	RECOVERY PERSON: B. Purser	

					Anal	Analytical Request	
Sample	Collection	ction	Sample	Number of			Comments
Identification	Date	Time	Name	Containers			
S-M18-3-Ab	7/24/98		Leg A Tube b	-			
S-M18-3-AKO	7/24/98		Leg A Knock-out Imp	1			Callo Tuha
S-M18-3-Ba	7/24/98		Leg B Tube a	-			Spine tube
S-M18-3-Bb	7/24/98		Leg B Tube b	-			
S-M18-3-BKO	7/24/98		Leg B Knock-out Imp	-			
S-M18-4-Aa	7/25/98		Leg A Tube a	-			
S-M18-4-Ab	7/25/98		Leg A Tube b	-			
S-M18-4-AKO	7/25/98		Leg A Knock-out Imp	-			Owito Tuko
S-M18-4-Ba	7/25/98		Leg B Tube a	1			Spire Lube
S-M18-4-Bb	7/25/98		Leg B Tube b	-			
S-M18-4-BKO	7/25/98		Leg B Knock-out Imp	-			
1	1						
Palingusched		1	7		Date, Time	Received by:	
人		100	2) C. Has () 100	-	13 hope 1558		
	1		2		Date Time	Received for Lab by:	
Relinquished by:						L. W.	4 120/88
_						1	10.30 ac

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
n-Xvlene	9.54
m-Xvlene	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 (\sim).

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).

$$Mv = \underbrace{Ms}_{Vs} - \underbrace{Mu}_{Vu}$$

$$R = \frac{Mv * Vs}{S}$$

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

$$Mv = \underline{263} - \underline{12.8} \\ 233.2 \quad 231.9$$

$$R = 1.0726 * 233.2$$

$$Mv = 1.0726 \text{ ug/L}$$

$$R = 122\%$$

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	
	TAB	
Parameters	SW-846 8260	
1000		

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 300°C

Separator Oven Temp: 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:

ug/mL = (Area of compound) x (Volume of Extract) x (Amt of Int. Std.)

(Area of Int. Std.)



Tunnel Results

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

Compound		Sam	ple ID/Catch wei	ght (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:	Steven J. Egikard	Date: <u>9/23/9</u> 8
Analyst:		Date:
	Brian G. Purser	

R012.001	0798-19	104980229	09/23/98
Client #:	Esthaloy #:	2	Report Date:
PES	BGP	Hexane	20 CT tubes
Company	Amelyst:	Parametery:	Samples
Monu	mdd		_

	Total Catch Weight	% Rec 131	- 9.80 % Rec 131	18.4 % Rec 131	< 3.82 % Rec 131	< 3.82 % Rec 131	263	322	256	267	
	Catch Weight (up)	< 5.00	24.1	< 5.00 < 5.00		14.8	263 < 5.00 263	317 - 5 322	256 < 5.00 256	267 < 5.00 267	189
	Dibution										
	Volume (Jan)	2 2	\$ 5	20 20	80 80	20 80	8	5 5	50 50	2 2	2 5
	Carre	M.91-8670	M.61-8670	M.91-8670	M.91-8670	M.61-86-10 0798-19.M	M.61-8670	M.61-8670	0798-19D. 0798-19.M	0798-19D. 0798-19.M	0798-19D. 0798-19.M
R012.001 0798-19 104980229 09/23/98	Average Conc.	- 2.57 < 1.00	- 4.82 < 0.71	00.1 >	> 1.00 > 1.00	- 2.96 < 1.00	\$2.5 < 1.00	63.4	51.2	53.4	37.8 0 < 1.00 0
Chest A. Enthalpy A: PO A: Report Date:	% Difference of Mean	0.00	2.79	00.0	00.0	0.00	0.00	0.84	0.00	0.00	0.28
	Concentration f 1 Inj. #2	< 1.00	- 4 % < 0.70	× 1.00	000 1.00	< 1.00	52.5 < 1.00	59.9 < 1.00	50.6 < 1.00	53.2 < 1.00	37.7
PES BGP Hexane 20 CT tubes	Conroc Ital, #1	- 1.76	- 4.69 < 0.72	001 >	× 1.00	- 2.55 < 1.00	52.6	- 1.02	51.7	53.6	37.9
Company: Analyst: Parameters: # Samples:	Percent Difference	0.14 NA	0.07	0.41 NA	0.20	N A	0.07 NA	0.62	0.34 NA	0.27 NA	0.00 NA
undid undid	ine (min.) Inj. # 2	1.464 NA	1.477	1.476 NA	1.476	1.469 NA	1,469 NA	1.442	1.460 NA	1.467 NA	1.466 NA
MDL: 1.00 LOQ: 5.00 Curve range (7.34 - 388 ppm)	Retention Time (min.)	1.462 NA	1.461	1.470 NA	1.473	1.471 NA	1.470 NA	1.429	1.455 NA	1.463 NA	1.466 NA
MDL: LOQ: Curve range (Lab ID Inj. // 2	009F0901.D 009F0902.D	012F1201.D 012F1202.D	013F1301.D 013F1302.D	015F1501.D 015F1502.D 016F1602.D	025F2701.D 025F2702.D	017F1701.D 017F1702.D 016F1802.D	019F2101.D 019F2102.D	021F5501.D 021F5502.D 022F7401.D 022F2402.D	023F5601.D 023F5602.D	027F1101_D 027F1102_D 028F3001_D 028F3002_D
	ition	王品	王岳	王番	##	五番					표표
	Sample Identification	T-M16-1A	T-M18-2A T-M18-2A	T-M18-3A T-M18-3A	T-M18-4A T-M18-4A	T-M18-FB-A	T-M18-1B T-M18-1B	T-M18-28	1-M16-38	T-M18-4B	T-M18-FB-B



ENTHALPY analytical, inc.

Ä

		MDL:	1.00	wdd	Company			Clear	R012.001					
		ÖOT	2.00	mod	Analysis	BGP		8	104980229					
		Curve range	Curve range (7.85 - 416 ppm)	Œ	/ Samples:			Report Date:	09/23/98					
		2		:		Ì								
		T. 4.10	Retention	Retention Time (min.)	Percent	Conte	Concentration	% Difference	Average	j Č	Volume	Dilation	Catch Weight	Coffeth Welcohn
Sampe Identification	8	Inj. #1 Inj. #2	Inj. #1	Inj. #2	Difference	Ini.#1	Inj. #2	of Mean	Cons	CHA		200	1	
											,		8	% Rec 114
T 1140 4A	3	CORPORATION CORPORATE D	Ž	¥X	Ϋ́	< 1.00	> 1.00	000	8 1.8	M 61-86-0	^	-	200	
T-M18-1A	E 8	010F1001.D 010F1001.D	V.	Ϋ́	ΝΑ	< 1.00	> 1.00	00.00	06.1 V	0/98-19.M	<u> </u>		< 5.00	< 4.39
													138 3 -	9. Dec 114
T 1140 04	2	041E4404 D 041E1102 D	5.420	5.429	0.17	- 1.16	- 1.18	0.55	- 1.17	M 61-8670	٠,	_	> 5.00	
T-M18-2A	표	012F1201.D 012F1202.D	¥	٧٧	N.	< 1.00	00.1 >	0.00	89.	U/98-19.M	^	-	- 5.85	- 5.13
								,			,		00 \$ 2	% Rec 114
T-M18_3A	E	013F1301.D 013F1302.D	Ϋ́N	NA	Ϋ́Z	< 1.00	> 1.00	00.0	8:0	0798-19.M	-	-	< 5.00	
T-M18-3A	표	014F1401.D 014F1402.D	¥	ΥN	NA	> 1.00	× 1:00	0.00	W.I >	0/20-17.19	1		< 5.00	< 4.39
						ļ			5	M 01 0000		-	> 5.00	% Rec 114
T 1449 4A	3	015E1501 D 015E1502 D	L	ΥN	٧X	< 1.00	× 1.00	0.00	3.; V	0/96-19.m		-	> 500	!
-M18-4A	ᄩ	016F1601.D 016F1602.D	Ϋ́	ΑN	Ϋ́	< 1.00	< 1.00	00.00	8 1.80	IU/98-19.M			< 5.00	< 4.39
								•				į.	8	9. Day 134
4 000	2	0.05552701 O 102552702 D	V.	Ϋ́Z	٧X	00.1 >	> 1.00	00.00	V 1.00	M 61-8620	٠	- -	2000	20 PM
T-M18-FB-A	표	026F2801.D 026F2802.D		NA.	NA A	< 1.00	> 1.00	0.00	90.1 >	I0798-19.M	2		< 5.00	< 4.39
				į				9	44.0	M 61.36	<u>-</u>		224	
T-M18-1B	Ŧ	017F1701.D 017F1702.D		5,416	0.02	9.44.6	45.1	650	8	M.61-8670	~	1	< 5.00	
T-M18-1B	뀲	018F1801.D 018F1802.D	¥	V Z	AN.	3.1.	87.7						724	724
				376.3	8	85	51.7	> > 8	54.9	M-61-86-0			274	
T-M18-2B	ᄪ	020F2201.D 019F2102.D	AN AN	V.	NAN NA	00 T	> 1.00	0.00	v 1.00	0798-19.M	8		274	274
								į				-	346	
T-M18-3B	ŧ	021F5501.D 021F5502.D	5.378	5.395	0.32	49.8	48.7	1.17	49.7	0798-19D.	^	-	> 5.00	
T-M18-3B	표	022F2401.D 022F2402.D	¥	AZ	ž	× 1.00	00:1	3	3	27.5		 -	246	246
								ļ !	,	100		-	253	
T-M18-4B	E	023F5601.D 023F5602.D		5.407	0.13	20.9	\$0.4	0.49	90.5	0/98-19D	\ \ \	-	< 5.00	
T-M18-4B	표	024F2601 D 024F2602 D	NA N	Ϋ́	AN N	8.	N	000	3				253	253
										Co. some	٠	-	150	_
T-M18-FB-B	표	027F1101.D 027F1102.D		5.407	00.0	30.2	29.9	0.42	900	0798-19D.		-	< 5.00	
T-M18-FB-B	BH	028F3001.D 028F3002.E	¥Z	YZ.	VX.	8-	1 × 1.W	20.20					150	150

PES	BGP	Toluene	20 CT tubes
Company	Amalyst:	Parameters:	4 Semple:
uzdd	wdd		(ind
9:1	2.00	;	ange (/.// - 411 ppm)
MDL:	Ö07		/) adue caude (/

		T	
R012 001	0798-19	104980229	09/23/98
	Kenthaday 5.	2	Report Date:
PES	BGP	Toluene	20 CT tubes
Company	Amalynt	Parameter	* Samples:
udd	20.cd		

	Total Catch Weight		% Rec 117	15.2		% Rec 117	- 25.7		% Rec 117	. 10.1		% Rec 117	806		% Rec 117		- 24.5				235			308			266				270		
	Catch Weight (ng)	į	- 12.3	5.51		- 6.60	30.1		5.30	11.8		2.03	- 10.6		- 22.1	- 6.52	- 28.7		2.00	- 5.12	235	-	11.3	308		990	266		797	5.26	270	59	3 5
_	Dilution		_	-	-	-		-			-	- -			-	-			-	-		-	 		-	 			-	-	J	-	
	Volume (mL)		ر. در			7			S			7			S	2				5		•	5						S	2			٠
	Cal.		0798-19.M	100000	M 98-19 M	0798-19.M		1798-19 M	M-61-86.00		0708.19 M	M.61-86-0		7 01 0000	U/96-19.M	0798-19.M			M.61-8670	M.61-8670		0798-19 M	0798-19.M		101.8077	0798-10 M			0798-19D.	0798-19.M		0798-19D.	0798-19 M
	Average Conc.		2.47		- 4.68	1.34		1 29	90		- 1.01	1.11		- 1.43	4	0¢.1			46.0	1.02		59.4			52.1				Ī	1.05			> 1.00
	% Difference of Mean		000		1.23	18.1		2.41	2.34		0.94	0.61		1 70		0:40			0.22	1.02		3.82	25.		1.15	0.22		27.0	1	15 15 15 15 15 15 15 15 15 15 15 15 15 1		0.54	
	Concentration	100	- 1.10		- 4.74	- 1.31		- 1.32	- 1.04		1.00	11.1		1451	202	X:1			46.1	1.01		57.1	1.2.22		51.5	- 1.13		363	1 04	5.7		32.9	< 1.00
	Con Inj. #1	- 2	1.10		- 4.62	- 1.36		- 1.26	- 1.08		- 1.02	1.10		- 4.35	- 131				45.9	69.		61.7	2.30		52.7	- 1.13		53.2	101	8.1			80:I V
	Percent Difference	0.00	000		0.04	0.07		0.01	0.03		0.04	0.01		0.01	0.0				0.01	0.00		0.67	0.22		0.23	0.00		80.0	0.05	-	8	872	
	me (min.) Inj.#2	7.403	7 409		7.416	7.413		7.410	7.406		7.404	7.403		7.403	7.404			1 400	3 5). +O		7.347	1.393		7.378	7.406		7.391	7.407		7 300	AN.	VK!
	Retention Time (min.)	7.388	7.409		7.413	7.418		7.411	7.408		7.407	7.402		7.404	7.403			7 100	7.400	200		7.298	//5"/		7.361	7.406		7.385	7.403		7 390	¥	1
	Inj. f.1 Inj. f.2	009F0901.D 009F0802.D	010F1001.D 010F1001.D		011F1101.D 011F1102.D	0.50.71.70 01.07.1202.D		013F1301.D 013F1302.D	0.46-1401.0 0.46-1402.0		015F1501.D 015F1502.D	110-110-110-11002.D		025F2701.D 025F2702.D	28F2801.D 026F2802.D			017F1701.D 017F1702.D	018F1801 D 018F1802 D			03052201 D 019F2102.D	ח אחר ביין היים והיים		021F5501.D 021F5502.D	22F 2401.D [UZZF 2402.D		023F5601.D 023F5602.D	24F2601.D 024F2602.D		27F1101.D 027F1102.D	028F3001.D 028F3002.D	
	tion	Æ	ı		E			E		-	E	1	i	Ŧ.					HB HB		ſ	I]				-	FH				BH 02	1
2	Identification	T-M18-1A	1-M18-1A	F 1440 0	T-M18-2A		1 1440 24	T-M18-3A		T 1110 40	T-M18-4A			T-M18-FB-A	Y-01-0 M-1			T-M18-1B	T-M18-1B		T.M18 2B	T-M18-28		T-1418.30	T-M18.3B			T-M18-4B	I-M18-4B		T-M18-FB-B	T-M18-FB-B	



-2

	Total Catch Weight	% Rec 125	% Rec 125	% Rec 125	% Rec 125	% Rec 125	277	340	292	292	195
	Carch Weight (ug)	13.8	40.7 - 10.6 51.3	- 8.33 - 7.08 - 15.4	- 9.90 - 9.40 - 19.3	41.1	265 12.2 277	325 - 15.2 340	284 - 7.41 292	292	195 < 5.00 195
	Dilution										
	Volume (mL)	2 5	2 5	2 2	8	2 2	\$	\$ 2	8 8	8 8	w w
	Curve	M.61-8670	M.61-8670	M.61-8670	M.61-8670	M.61-8670	0798-19.M 0798-19.M	M.61-8670	0798-19D. 0798-19.M	0798-19D. 0798-19.M	0798-19D. 0798-19.M
R012.001 0798-19 104980229 09/23/98	Average Conc.	2.76	8.15 - 2.12	1.67	1.88	8.22	53.0	- 3.03	56.9	56.2	38.9
Chest #: Esthelpy #: PO #: Report Date:	% Difference of Mean	0.95	3.91	1.50	0.13	0.56	0.15	> 5 %	1.16	0.72	0.08
	Concentration	5.52	7.83	- 1.69	- 2.00	8.26	53.2	61.0	56.2	55.8	38.6
PES BGP Ethylbenzene 20 CT tubes	Concer Inj.#1	5.41	8.46 - 2.13	1.64	- 1.95	8.17	52.8	68.9	57.5	56.6	39.2
Company: Austyn: Parameters: 7 Samples:	Percent Difference	0.00	0.02	0.00	0.02	0.00	0.02	0.53	0.20	0.07	0.01 NA
u dd	ime (min.) Inj. # 2	9.193	9.205	9.199	9.192	9.191	9.188	9.136	9.167	9.179	9.178 NA
1.00 p 5.00 F 3 - 409 ppm)	Recention Time (min.)	9.177	9.203	91.6	9.194	9.191	9.187	9.088	9,149	9.173	9.177 NA
MDL: 1.00 1 LOQ: 5.00 Curve range (7.73 - 409 ppm)	Lab (D)	009F0902.D	01151101.D 01151102.D	013F1301.D 013F1302.D	015F1501.D 015F1502.D	025F2701 D 025F2702 D 026F2802.D	017F1701.D 017F1702.D 018F1801.D 018F1802.D	019F2101 D 019F2102 D 020F2202 D	021F5501.D 021F5502.D 022F2401.D 022F2402.D	023F5901.D 023F5602.D 024F2601.D 024F2602.D	027F1101.D 027F1102.D 028F3001.D 028F3002.D
		표표	FH 011 BH 012	FH 014	PH 61	РН ВН	HH BH	E E	FH 0	9 H8	표표
	Sample	T-M18-1A T-M18-1A		T-M18-3A T-M18-3A	T-M18-4A	T-M18-FB-A T-M18-FB-A	T-M18-1B	T-M18-2B T-M18-2B	T-M18-3B T-M18-3B	T-M18-4B T-M18-4B	T-M18-FB-B T-M18-FB-B

ENTHALPY analytical, inc.

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 Company:
 PES
 China #:
 R012.001

 Analysi:
 BGP
 Earthalpy #:
 0798-19

 Farameters:
 P-Xylere
 PO #:
 104980229

 # Samples:
 20 CT tubes
 Report Date:
 0972/98

5.00

MDL:

Curve range (7.79 - 412 ppm)

Maile-light Maile-light	on The	Percent	Concer	Concentration	% Difference	Average	ð	Volume	Differences	Catoli Watch	T. A. C.
FH 009F0901.D 009F0902.D BH 010F1001.D 010F1001.D BH 010F1201.D 011F1102.D BH 012F1201.D 012F1202.D BH 012F1201.D 013F1302.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1402.D BH 014F1401.D 016F1602.D BH 014F1601.D 016F1602.D BH 026F2301.D 026F2302.D BH 026F2301.D 026F2302.D BH 018F1801.D 016F1802.D FH 018F1801.D 016F1802.D BH 026F2301.D 026F2302.D BH 020F2301.D 026F2302.D BH 020F2301.D 023F5802.D BH 022F2401.D 024F5802.D BH 022F2401.D 024F5802.D BH 022F2401.D 024F5802.D	i. f. i Inj. # 2	Difference	Inj. #1	Inj. // 2	of Mean	Conse.	Curve	(mil.)	Ratio	(48)	Catch Weight
BH 010F1001.D 010F1001.D BH 012F1201.D 012F1202.D BH 012F1201.D 012F1202.D BH 012F1201.D 012F1202.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1402.D BH 016F1401.D 016F1902.D BH 016F1401.D 016F1902.D BH 016F1401.D 016F1902.D BH 026F2701.D 026F2702.D BH 026F2701.D 026F2702.D BH 018F1801.D 019F1802.D FH 017F1701.D 019F1802.D FH 027F2701.D 016F2802.D BH 020F2201.D 026F2302.D BH 020F2301.D 027F2402.D BH 022F2401.D 024F2802.D BH 022F2401.D 024F2802.D BH 022F2401.D 022F2402.D	334 9 347	0 14	- 100	56.	77 0		** 01 0000	,			
FH 011F1101.D 011F1102.D BH 012F1201.D 013F1302.D FH 013F1301.D 013F1302.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1402.D BH 016F1401.D 016F1402.D BH 016F1401.D 016F1402.D BH 016F1401.D 016F1402.D BH 016F1401.D 016F1402.D FH 017F1701.D 016F1402.D FH 017F1701.D 016F1402.D BH 016F1801.D 016F1402.D FH 017F1701.D 016F1402.D BH 020F2701.D 020F2702.D BH 020F2701.D 020F2702.D BH 020F2701.D 020F2702.D BH 020F2701.D 020F200.D FH 020F2701.D 020F2702.D BH 020F2701.D 020F2702.D		0.00	- 1.89	- 1.89	000	20.5	(7798-19 M	~	- -	15.1	% Rec 115
FH 011F1101.D 011F1102.D BH 012F1201.D 012F1202.D FH 013F1301.D 013F1302.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1402.D BH 016F1601.D 016F1602.D FH 026F2801.D 026F2802.D BH 026F2801.D 019F1802.D FH 019F1801.D 019F1802.D FH 019F1801.D 019F1802.D BH 026F2801.D 026F2802.D FH 021F5801.D 026F2802.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F301.D 022F302.D BH 022F3001.D 022F302.D BH 022F3001.D 022F302.D							W. 22 - 12 - 10			24.5	- 21.3
BH 012F1201.D 013F1202.D FH 013F1301.D 013F1302.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1402.D BH 014F1401.D 016F1602.D BH 016F1601.D 016F1602.D FH 026F2701.D 006F2702.D BH 026F2801.D 026F2702.D BH 019F1801.D 019F1802.D FH 019F1801.D 019F1802.D FH 020F2201.D 026F2702.D BH 020F2201.D 026F2702.D FH 021F5801.D 026F2702.D BH 020F2701.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D	25.1	800							,		
FH 013F1301.D 013F1302.D BH 014F1401.D 014F1402.D FH 015F1501.D 015F1502.D BH 015F1501.D 015F1502.D BH 025F2701.D 025F2702.D BH 026F2801.D 026F2802.D FH 017F1701.D 017F1702.D BH 026F2801.D 018F1802.D FH 017F1701.D 019F1802.D FH 020F2201.D 026F2802.D BH 020F2201.D 023F5802.D BH 022F2401.D 022F2402.D	+	70.07	3.03	3.07	0.28	3.08	0798-19.M	5	-	- 15.4	% Rec 115
FH 013F1301.D 013F1302.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1602.D BH 016F1601.D 016F1602.D BH 016F1601.D 016F1602.D BH 026F2801.D 036F2702.D BH 026F2801.D 036F2802.D FH 017F1701.D 017F1702.D BH 018F1801.D 018F1802.D BH 020F2201.D 019F2102.D BH 020F2201.D 020F2202.D BH 020F2301.D 020F2602.D BH 020F2801.D 020F2602.D		V.	W. >	8	000	8.1	0798-19.M	2		< 5.00	
FH 013F1301.D 013F1302.D BH 014F1401.D 014F1402.D BH 014F1401.D 014F1602.D BH 014F1601.D 016F1602.D BH 014F1601.D 016F1602.D BH 026F2801.D 026F2802.D BH 026F2801.D 036F2802.D FH 017F1701.D 017F1702.D BH 016F1801.D 016F1802.D BH 016F1801.D 016F1802.D FH 017F1701.D 016F1802.D BH 020F2201.D 020F2302.D FH 020F2301.D 020F2302.D BH 020F2301.D 020F2302.D BH 020F2301.D 024F2602.D BH 020F2301.D 024F2602.D BH 020F2301.D 024F2602.D										- 15.4	- 13.4
BH 014F1401.D 014F1402.D FH 015F1501.D 016F1502.D BH 016F1501.D 016F1502.D BH 026F2201.D 026F2302.D BH 026F2301.D 026F2302.D BH 026F2301.D 036F2302.D FH 017F1701.D 017F1702.D BH 018F1801.D 018F1802.D FH 019F2101.D 019F2102.D BH 020F2201.D 020F2202.D BH 022F2401.D 022F2402.D	AN AN	ΨZ.	00 T	9 2	000	8-1	24 01 0000	-	-		:
FH 015F1501.D 015F1502.D BH 016F1601.D 016F1602.D FH 026F2701.D 026F2702.D BH 026F2801.D 026F2802.D BH 07F1701.D 017F1702.D FH 017F1701.D 017F1702.D BH 018F1801.D 018F1802.D BH 020F2201.D 018F1802.D BH 020F2201.D 020F2202.D BH 020F2201.D 020F2202.D BH 020F2301.D 020F2302.D BH 020F2301.D 020F2602.D BH 020F2301.D 020F2602.D BH 020F2301.D 020F2602.D BH 020F2301.D 020F2602.D		Ϋ́	90.1 >	00.1	0.00	81.	0798-19.M	2	-	< 5.00 < 5.00	% Rec 115
FH 015F1501.D 015F1502.D BH 016F1601.D 016F1602.D FH 025F2701.D 026F2702.D BH 026F2801.D 026F2802.D BH 017F1701.D 017F1702.D FH 017F1701.D 018F1802.D FH 019F2201.D 019F2102.D BH 020F2201.D 020F2102.D FH 021F3601.D 020F2102.D FH 022F2401.D 022F2402.D BH 022F2401.D 022F3402.D										< 5.00	< 4.35
BH 016F1601.D 016F1902.D	NA NA	Ϋ́	× 1 00	001		8	74 01 0020		-		! !
FH 025F2701.D 025F2702.D BH 026F2801.D 026F2802.D BH 017F1701.D 017F1702.D BH 019F1801.D 019F1802.D BH 019F2701.D 019F1802.D BH 020F2201.D 020F2302.D FH 020F2201.D 020F2302.D FH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F302.D BH 022F300.D 022F300.D		NA	> 1.00	> 1.00	000	00.1	M 61-86/0	7	-	2 2 00	% Rec 115
FH 026F2701.0 026F2702.0 BH 026F2801.0 026F2802.0 FH 017F1701.0 017F1702.0 BH 019F1801.0 018F1802.0 FH 019F2101.0 019F302.0 FH 020F2201.0 030F2302.0 FH 020F2201.0 020F2202.0 FH 020F3801.0 022F302.0 BH 022F3401.0 022F302.0 BH 022F3401.0 022F302.0 FH 022F3401.0 022F302.0 BH 022F3401.0 022F302.0 BH 022F301.0 022F302.0					1					< 5.00	< 4.35
BH 026F2801.D 078F2802.D FH 017F1701.D 017F1702.D BH 019F1801.D 019F1802.D FH 019F2101.D 019F2102.D BH 020F2201.D 020F2102.D FH 020F2201.D 020F2202.D FH 021F5501.D 020F2502.D FH 022F2401.D 022F2402.D BH 022F2401.D 022F2602.D FH 022F2401.D 022F2602.D BH 022F3601.D 022F7302.D BH 022F3001.D 022F7302.D BH 022F3001.D 022F7302.D	343 0 343	000	366.	200-		, , ,	1				
FH 017F1701.D 017F1702.D BH 019F2101.D 018F1802.D FH 019F2101.D 019F2102.D BH 020F2201.D 020F2202.D FH 021F3501.D 020F2202.D FH 022F2401.D 022F2402.D BH 022F2401.D 022F2402.D BH 022F2401.D 022F2602.D BH 022F3601.D 022F2602.D BH 022F3601.D 022F3602.D BH 022F3601.D 022F3602.D		NA	00.1 >	0.1 ×	0.00	2.70 < 1.00	0798-19 M	٠ ٠		- 11.3	% Rec 115
FH 017F1701 D 017F1702 D BH 018F1801 D 018F1802 D FH 018F2101 D 018F2102 D BH 020F2201 D 020F2202 D FH 020F2201 D 020F2202 D BH 020F2301 D 020F2602 D FH 022F2401 D 022F2402 D BH 022F2401 D 022F2602 D BH 022F3601 D 022F2602 D BH 022F3601 D 022F2602 D BH 022F3601 D 022F2602 D								`		- 11.3	. 9.83
FH 017F1702.D BH 018F1801.D 018F1802.D FH 018F1801.D 018F2102.D BH 020F2201.D 020F2202.D FH 020F2201.D 020F2202.D FH 020F2301.D 020F2302.D FH 022F2301.D 022F2302.D FH 022F2301.D 022F2302.D FH 022F2301.D 022F2302.D FH 022F2301.D 022F2302.D BH 024F2001.D 024F2002.D BH 024F2001.D 024F2002.D									İ		
BH 018F1801,D 018F2102.D		0.01	46.3	46.7	0.35	46.5	M 61-8670	,	-	223	
FH 019672101.D 019672102.D BH 02067201.D 02067202.D FH 02165901.D 02165902.D FH 022673401.D 02275402.D FH 023673601.D 02375402.D FH 023673601.D 023751102.D FH 023673001.D 023751102.D	NA NA	Ϋ́	00.1 >	> 1.00	П	< 1.00	M.61-8670	S	-	< 5.00	
FH 019F2101_0 019F2102_0 BH 020F2201_D 020F2202_D FH 021F3501_D 021F3602_D BH 022F2401_D 022F2402_D FH 022F3401_D 023F3602_D FH 022F3601_D 023F3602_D FH 024F3601_D 024F3602_D BH 024F3601_D 024F3602_D										232	232
BH 020F2201.D 020F7202.D	250 9.297	0.51	58.9	665	8.0	3 2 3	10 10 10		-	500	
FH (221F5501.D) (221F5502.D) BH (22F2401.D) (22F2402.D) FH (22F3601.D) (23F5602.D) BH (224F3601.D) (224F2602.D) FH (227F1101.D) (227F1102.D) BH (228F3001.D) (228F3002.D)	.328 9.343	0.16	- 1.11	1.07	2.16	60:1	0798-19.M	7	-	8/7	
FH 02/F3501.D 02/F3602.D BH 022/F3401.D 022/F3402.D FH 022/F3401.D 023/F3602.D BH 024/F3601.D 024/F3602.D FH 027/F1101.D 024/F3602.D FH 027/F1101.D 024/F3602.D										283	283
BH 022F3401.D 022F2402.D FH 023F3601.D 023F3602.D BH 024F3601.D 024F3602.D FH 027F1101.D 027F1102.D BH 028F3001.D 028F3002.D	311 9.330	0.20	51.8	50.7	8	513	0708-10D		-	736	
FH (228F5601.D) (228F5602.D) BH (224F2601.D) (224F2602.D) FH (227F1101.D) (227F1102.D) BH (228F3001.D) (228F3002.D)	NA NA	ΥN	> 1.00	< 1.00		00.1	0798-19 M	1	-	2 20	
FH 023F3601.D 024F3602.D 024F3602.D 024F3602.D 024F3602.D 024F3602.D 024F3102.D 027F1102.D 028F3002.D 028F3002.D			•							256	256
BH (024F3801.D (024F2602.D) FH (027F1101.D (027F1102.D) BH (028F3001.D) (028F3002.D)	.336 9.342	90.0	52.3	51.6	29.0	52.0	0798.19D	•	-	950	
FH 027F1101.D 027F1102.D BH 028F3001.D 028F3002.D	NA AN	Ϋ́	00.1 >	< 1.00	00.0	1	M 61-8640	~	-	2 200	
FH 027F1101.D 027F1102.D BH 028F3001.D 028F3002.D										260	260
BH 028F3001.D 028F3002.D	339 9.340	0.01	32.6	32.1	0.76	32.3	0798-19D	,	-	631	
		NA	< 1.00	< 1.00	Γ		M 61-8620	, ~	-	200	
										162	162

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	Total	% Rec 115	% Rec 115	% Rec 115 < 4.35	% Rec 115 < 4.35	% Rec 115	225	271	233	259	159
	Cellon Walter	- 8.20 < 5.00 - 8.20	- 7.91 < 5.00 - 7.91		> 5.00 > 5.00 > 5.00	- 5.05 < 5.00 - 5.05	225 < 5.00 225	271 < 5.00 271	253 < 5.00 253	259 < 5.00 259	159 < 5.00 159
	Dilution										
	Volume (mL)	20, 20	8 8	2 2	5 5	2 2	N N	2 2	8	S S	2 2
	Cal.	M.61-8670	M.61-8670	M.91-8670	M.91-8670	M.61-8670	0798-19.M	M.91-8670	0798-19D. 0798-19.M	0798-19D. 0798-19.M	0798-19D. 0798-19.M
R012.001 0798-19 104980229 09/23/98	Average Conc.	1.64	- 1.58	00.1 > 1.00	00.1 00.1 00.1	1.01	45.1	54.1 < 1.00	50.6	51.8	31.7
Cleat f: Eathaby f: PO f: Report Date:	% Difference of Mean	00:00	0.42	00.00	0000	00.0	0.34	0.00	0.00	0.81	0.00
	Concentration #1	· 1.66	< 1.59	0001	00.1 > 1.00	- 1.00 - 1.00	45.2 < 1.00	50.8	\$0.0	> 1.00	31.5
PES BGP m-Xylene 20 CT utbes	Concer	- 1.62 < 1.00	1.57	× 1.00	00 1.00 1.00	× 1.00	44.9	57.4	51.3	\$2.2 < 1.00	32.0
Company: Amelyn: Parameters: // Samples:	Percent Difference	0.17 NA	0.02 NA	AN N	N A A	0.01 NA	10.0 AN	0.52 NA	0.20 NA	0.08 NA	0.00 NA
wdd wdd	ne (min.) Inj. # 2	9 492 NA	9.504 NA	AN AN	AN AN	9.491 NA	9.486 NA	9.435 NA	9.467 NA	9.478 NA	9.476 NA
1.00 pg 5.00 pg 74 - 409 ppm)	Retention Time (min.)	9.476 NA	9.502 NA	₹ X	YZ YZ	9.492 NA	9.485 NA	9.386 NA	9.448 NA	9.472 NA	9.476 NA
MDL: 1.00 LOQ: 5.00 Curve range (7.74 - 409 ppm)	Lab ID		011F1101.D 011F1102.D	013F1301.D 013F1302.D	015F1501.D 015F1502.D	025F2701.D 025F2702.D 026F2801.D 026F2802.D	017F1701.D 017F1702.D	019F2101.D 019F2102.D	021F5501.D 021F5502.D 022F2402.D	023F5601 D 023F5602 D 024F2602 D	027F1101 D 027F1102 D 028F3001 D 028F3002 D
	E. C.	009F0901.	011F1101.	013F1301 014F1401	015F1501	025F270 026F280	017F170	019F210	021F55K	11	
	. 5	표표	표표	표표	H H	표	표표	표표	표표	표표	표표
	Sample Identification	T-M18-1A T-M18-1A	T-M18-2A T-M18-2A	T-M18-3A T-M18-3A	T-M18-4A T-M18-4A	T-M18-FB-A	T-M18-1B	T-M18-28	T-M18-3B T-M18-3B	T-M18-4B	T-M18-FB-B

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Courte Weight	% Rec 128	% Rec 128	% Rec 128	% Rec 128	% Rec 128 24.5	262	307	282	279
Carch Weight	20.6	20.0 - 14.4 < 5.00 - 14.4	\$ 5.00 \$ 5.00	5.005.005.005.00	31.3 < 5.00 31.3	262 < 5.00 262	307 < 5.00 307	282 282	 279 5.00 279 279 5.00 203 203 203
Dietos									
Volume (mL)	8 8	8 8	2	2 2	w w	5 5	2 2	2 2	2 2
CEL	M.91-8670	M.61-8670	0798-19.M 0798-19.M	M.61-8670	M.61-86-70	0798-19.M 0798-19.M	0798-19.M	0798-19D. 0798-19.M	0798-19.M
0738-19 104980229 104980229 09723798 Average Conc.	< 1.00	- 2.88	v v 1.00	× × 1.00	6.27	\$2.5 < 1.00	61.3	\$6.3 < 1.00 \$5.9	
Ches f: Enthalpy f: PO f: Report Date: % Difference of Mean	0.00	> 5 % 0.00	00:00	0.00	0.00	0.00			00.0
Tubes Concentration 1 Inj. 72	- 2.68 < 1.00	3.06	001	00 00 1.00	6.26 < 1.00	53.3 < 1.00	56.9	\$5.7 < 1.00 \$5.5	40.1
PES BGP Chime 20 C.	5.58	2.70	00.1 >	> 1.00 > 1.00	6.28	\$1.7 < 1.00	65.8	57.0 < 1.00 56.3	40.9 40.9 1.00
Company: Amayar: Parameter: Samples: Parcent Difference	0.14 NA	0.01 NA	Y Y	Y X	0.01 NA	0.02 NA	0.46 NA	0.18 NA 0.06	0.00 NA
1.00 ppm 5.00 ppm 1 - 407 ppm) Retention Time (min.)	9666 NA	10.009 NA	NA NA	A A	866.6 AN	10.110 NA	10.060 NA	10.102	10.099 NA
MDL: 1.00 LOQ: 5.00 Curve range (7.70 - 407 ppm) D Retention Tr Inj. # 2 Inj. # 1	9.984 NA	10.008 NA	AN A	A A A	9.997 AN	10.108 NA	10.014 NA	960 OI	10.099 NA
4	009F0901.D 009F0902.D	011F1101.D 011F1102.D 012F1201.D 012F1202.D	013F1301.D 013F1302.D	015F1501.D 015F1502.D 016F1602.D	025F2701 D 025F2702 D 026F2801 D 026F2802 D	017F1701 D 017F1702 D	020F2201 D 020F2202 D	022F2401.D 022F2402.D	024F2601 D 024F2602 D 027F1101 D 027F1102 D 028F3001 D 028F3002 D
3 万	009F0901.D	011F1101.D	013F1301.D	015F1501.D	025F2701.D 026F2801.D	017F1701.D	019F2101.D 020F2201.D	022F2401.D 023F5601.D	024F2601.D 027F1101.D 028F3001.D
· · · · · · · · · · · · · · · · · · ·	Ŧ #	표표	Ŧ #	Ŧ #	표 퓲	푼폷	王 岳	H H	# # # # # # # # # # # # # # # # # # #
Scenario	T-M18-1A T-M18-1A	T-M18-2A T-M18-2A	T-M18-3A T-M18-3A	T-M18-4A T-M18-4A	T-M18-FB-A T-M18-FB-A	T-M18-1B	T-M18-28 T-M18-28	T-M18-3B	T-M18-FB-B

	Total Catch Welgh	% Rec 105	% Rec 105	% Rec 103 < 4.76	% Rec 105 < 4.76	% Rec 105	500	243	231	237	144
	Coatch Welght (US)	- 8.38 - 8.38	- 5.95 < 5.00 - 5.95	> 2.00 > 5.00 > 5.00	< 5.00 < 5.00 < 5.00	- 16.8 < 5.00 - 16.8	200 < 5.00 200	243 < 5.00 243	231 < 5.00 231	237 < 5.00 237	144 < 5.00 144
	Pilution										
	Volume (mL)	~~	~~	N N	8	8 8	20,20	8	2 2	8 8	2
	Cal	M.91-8970	M.61-8670	M.61-8670	M.91-8670	M.61-86-0	M.61-86-10 0798-19.M	M.61-8670	0798-19D. 0798-19.M	0798-19D.	0798-19D. 0798-19.M
R012.001 0798-19 104980229 09/23/98	Average Conc.	1 68 00 1 ×	1.19	00:1	× 1.00	- 3.37 < 1.00	40.11.00	48.6	46.1	47.4	28.9 < 1.00
Ches fr. Fortholy f. Report Date:	% Difference of Mean	0.00	0.00	00.0	00.0	0.00	3.02	> 5 %	0.00	0.75	00.00
	ration Inj. // 2	00.1 >	80.1 V V	001 v 001 v	× 1.00 × 1.00	< 1.00	< 1.00	44.2 < 1.00	45.6	47.0	28.6
PES BGP o-Xylene 20 CT subes	Concentration Inj. / 1 Inj.	- 2.35 < 1.00	- 1.38	00.1 >	1.001.00	< 1.00	38.9	53.0	46.7 < 1.00	47.8	29.1
Company: Aunity of: Persameters: I Samples:	Percent Difference	0.13 NA	1.60 NA	V V	YN YN	0.05 NA	0.01 NA	0.45 NA	0.17 NA	0.06 NA	0.01 NA
E E	x (min.) Inj. # 2	10.407 NA	10.424 NA	YZ YZ	AN AN	10.576 NA	10.405 NA	10.355 NA	10.386 NA	10.398 NA	10.396 NA
1.00 ppm 5.00 ppm 57 - 406 ppm)	Retention Time (min.)	10.393 NA	10.593 NA	Y X	N N	10.581 NA	10.404 NA	10.309 NA	10.368 NA	10.392 NA	10.395 NA
MDL: 1.00 LOQ: 5.00 Curve range (7.67 - 406 ppm)	Lab ID 12. #2	006F0901.D 006F0902.D 010F1001.D 010F1001.D	01/E1101.D 01/E1102.D	013F1301.D 013F1302.D	015F1501.D 015F1502.D 016F1801.D 016F1802.D	025F2701.D 025F2702.D	017F1701.D 017F1702.D 018F1802.D	019F2101 D 019F2102.D	021F5501.D 021F5502.D 022F2401.D 022F2402.D	023F5601.D 023F5602.D 024F2601.D 024F2602.D	027F1101.D 027F1102.D
		표 품	BH 6	HH BH	正番	H H8	正器	王品	표표	표표	走高
78	Sample	T-M18-1A T-M18-1A	T-M18-2A	T-M18-3A	T-M18-4A	T-M18-FB-A	T-M18-1B	T-M18-2B T-M18-2B	T-M18-3B T-M18-3B	T-M18-48	T-M18-FB-B

Tunnel Spike & Recovery

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

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-2A	Spiked Train	204	322	229.7	_
1-14110-22	Un-spiked Train		- 24.1	230.3	146
	Volume Adjusted Spike	Catch	298	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	204	256	229.3	_
1-14110-374	Un-spiked Train		< 5.00	230.7	125
	Volume Adjusted Spike C	atch	256	NA	
	Volume Majustea Spine C				

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	204	267	229.0	-
1 1140 114	Un-spiked Train		< 5.00	225.8	131
	Volume Adjusted Spike C	atch	267	NA	

131

	Benzene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	218	224	233.2	
1 11110 111	Un-spiked Train		< 5.00	231,9	103
	Volume Adjusted Spike Catch		224	NA	

	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
Sniked Train	218	274	229.7	<u>ا</u> ا
Un-spiked Train			230.3	123
Volume Adjusted Spike Catch		268	NA	

	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
Spiked Train	218	246	229.3	_
Un-spiked Train			230.7	113
Volume Adjusted Spike	Volume Adjusted Spike Catch		NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
т-м18-4А	Spiked Train	218	253	229.0	_
1-11110 4/11	Un-spiked Train		< 5.00	225.8	116
	Volume Adjusted Spike	Catch	253	NA	



T-M18-2A

T-M18-3A

	Toluene	Spike Amt	Catch (ug)	Sample Volume	T (44)	
T-M18-1A	Spiked Train	216	235	233.2	Recovery (%)	
	Un-spiked Train	Un-spiked Train		231.9	101	
	Volume Adjusted Spike	Catch	217	NA NA	_	
		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)	
T-M18-2A	Spiked Train	216	308	229.7	Radivery (%)	
	Un-spiked Train		- 30.1	230.3	129	
	Volume Adjusted Spike (Catch	278	NA		
					···	
		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)	
T-M18-3A	Spiked Train	216	266	229.3	I I	
	Un-spiked Train		- 11.8	230.7	118	
	Volume Adjusted Spike (Catch	254	NA	¬	
		Spike Amt.	Catch (ug)	Şample Volume	Recovery (%)	
T-M18-4A	Spiked Train	216	270	229.0		
	Un-spiked Train		⁻ 10.6	225.8	120	
	Volume Adjusted Spike C	atch	259	NA NA		Avg: 117
	Ethylbenzene	Spike Amt	Catch (ug)	Sample Volume	Recovery (%)	
T-M18-1A	Spiked Train	215	277	233.2	_	
	Un-spiked Train	Un-spiked Train		231.9	110	
	Volume Adjusted Spike C	atch	236	NA NA		
		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)	
T-M18-2A	Spiked Train	215	340	229.7		
	Un-spiked Train		51.3	230.3	134	
	Volume Adjusted Spike C	atch	289	NA_		
		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)	
T-M18-3A	Spiked Train	215	292	229.3	_	
	Un-spiked Train		⁻ 15.4	230.7	129	
	Volume Adjusted Spike C	atch	276	NA NA		
		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)	
T-M18-4A	Spiked Train	215	292	229.0	1	

- 19.3

225.8

127



Un-spiked Train

Volume Adjusted Spike Catch

(ylene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)	
	216	232	233.2	_	
	n	- 24.5	231.9	96.2	
Volume Adjusted Spik	e Catch	208	NA		
	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%	
Spiked Train	216	283	229.7		
	n	⁻ 15.4	230.3	124	
		268	NA NA		
	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%	
Spiked Train	216	256	229.3	_	
	in	< 5.00	230.7	119	
Volume Adjusted Spi	ke Catch	256	NA		
	Spike Amt	Catch (ug)	Sample Volume	Recovery (9	
Spiked Train	216	260	229.0		
	in	< 5.00	225.8	120	
Volume Adjusted Spike Catch		260	NA		
	Volume Adjusted Spik Spiked Train Un-spiked Train Volume Adjusted Spil Spiked Train Un-spiked Train Volume Adjusted Spil	Un-spiked Train Volume Adjusted Spike Catch Spike Amt. Spiked Train Un-spiked Train Volume Adjusted Spike Catch Spike Amt. Spiked Train Un-spiked Train Spike Amt. Spiked Train Volume Adjusted Spike Catch	Volume Adjusted Spike Catch 208	Volume Adjusted Spike Catch 208	

T-M	1	8-	۱A	

m-Xylene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (76)
Spiked Train	215	225	233.2	
Un-spiked Train		⁻ 8.20	231.9	101
Volume Adjusted Spike Catch		217	NA	<u> </u>

T-M18-2A

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

T-M18-3A

_	Spike Amt.	Catch (ug)	Sample Volume	KELOVELY (N)
Spiked Train	215	253	229.3	_
Un-spiked Train		< 5.00	230.7	118
Volume Adjusted Spike Catch		253	NA	

T-M18-4A

	Spike Amt.	Catch (ug)	Sample Volume	RECOVERY (70)
Spiked Train	215	259	229.0	
Un-spiked Train		< 5.00	225.8	121
Volume Adjusted Spike C	atch	259	NA	

Ava: 115



	Cumene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	214	262	233,2	
	Un-spiked Train Volume Adjusted Spike Catch		- 20.6	231.9	113
			242	NA	
				1 114	<u> </u>

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-2A	Spiked Train	214	307	229,7	
	Un-spiked Train		14.4	230.3	137
	Volume Adjusted Spike Catch		292	NA NA	٦ ١

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	214	282	229,3	
	Un-spiked Train		< 5.00	230.7	132
	Volume Adjusted Spike Catch		282	NA NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	214	279	229.0	
	Un-spiked Train		< 5.00	225.8	131
	Volume Adjusted Spike Catch		279	NA NA	7 !

Avg: 128

o-Xylene	Spike Amt,	Catch (ug)	Sample Volume	Recovery (%)
Spiked Train	213	200	233.2	
Un-spiked Train	Un-spiked Train		231.9	90.1
Volume Adjusted Spike Catch		192	NA	

	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
Spiked Train	213	243	229.7	
Un-spiked Train		- 5.95	230.3	111
Volume Adjusted Snike Catch		227	N/A	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	213	231	229.3	
	Un-spiked Train		< 5.00	230.7	108
	Volume Adjusted Spike Catch		231	NA	7

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	213	237	229.0	
	Un-spiked Train		< 5.00	225.8	111
	Volume Adjusted Spike Catch		_237	NA	

Avg: 105



T-M18-1A

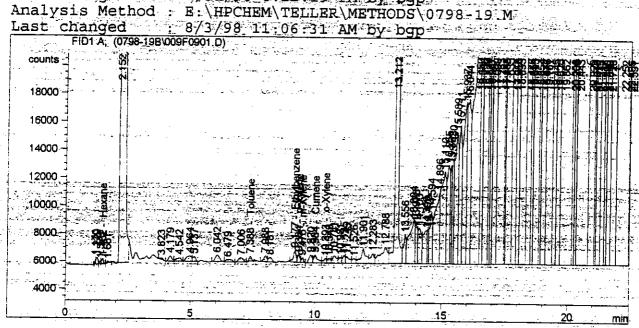
T-M18-2A

Tunnel Sample & Curve Chromatograms

Injection Date : 7/31/98 6:28:50 PM Sample Name : T-M18-R1 Aa+AbFH Acq. Operator : bgp

Inj: Inj Volume : 2 μ 1

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



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 April 100 - 100

RetTime [min]	Туре	Area	Amt/Area		Grp Name
		counts*s		[ug/kg]	
1.462 5.409	VP	1916.04797	9.19566e-4	1.76193	Hexane Benzene
7.388 9.177	-	2436.76343 6532.23438		2.02457 5.41490	Toluene Ethylbenzene
9.334	VP	1943.70435		3.00030 1.62305	p-Xylene m-Xylene
9.984 10.393		6238.51465 2900.57739	8.93826e-4 8.10200e-4	5.57615 2.35005	Cumene co-Xylene

Results obtained with enhanced integrator 2 Warnings-or Errors:

Seq. Line :

Injection Date : 7/31/98 6:59:11 PM Vial : Sample Name : T-M18-R1 Aa+AbFH Inj:Acq. Operator : bgp Inj-Volume 2 μl

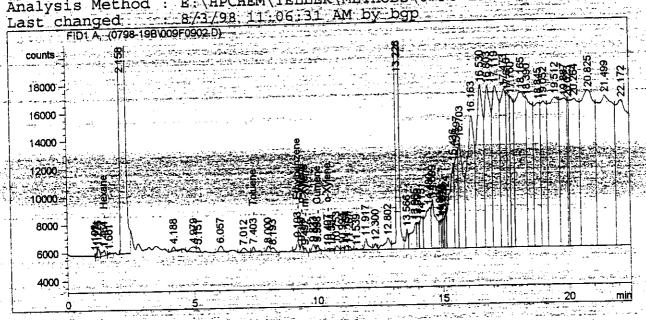
Sequence File ... E.\HECHEM\TELLER\SEQUENCE\0798-19A.S Sequence Fire E.\HECHEM\TELLER\METHODS\0.798-19A_M

Acq Method E.\HPCHEM\TELLER\METHODS\0.798-19A_M

Last changed 7/31/98 6 22.19 PM by bgp

Analysis Method : E.\HPCHEM\TELLER\METHODS\0.798-19.M

Last changed 8/3/98.11:06:31 AM by bgp



Signal Sorted By Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1:0000 1.0000

Signal 1: FID1 A,

				Control of the second s	in a complete the property	
RetTime [min]	Type	Area counts*s	Amt/Area	Amount G [ug/kg]	rp Name	
1.464	VP		9.19566e-4		Hexane Benzene	
5.409 7.403 9.193		-3499 <u>-96143</u>	8:30843e-4 8:28951e-4	2.907 9 2. 5.51857	Froyroenzen	e
9 147 9 492	VV:	3634 884 <i>47</i> .	8:36380e-4 8:35032e-4	3040174-3 1:::65538	m_Xytene	
9.998 10.407	VB ···	2000 755372	9793826e-4	2767572 7.84416E-1	. Comene	

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

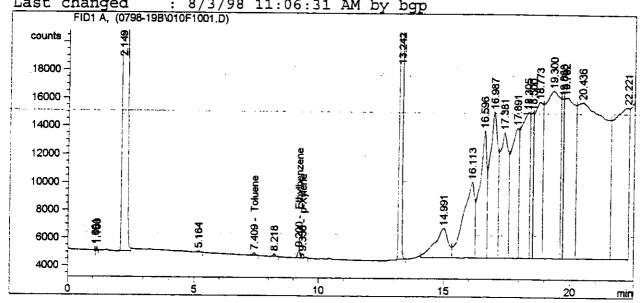
Warning : Calibrated compound(s) not found

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

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.N Last changed : 7/31/98 6:22:19 PM by bgp Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed



External Standard Report

Sorted By Signal

Calib Data Modified 873/98 11:04:16 AM

Multiplier Dilution --

Signal 1: FID1 A,

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 Cumene 0-Xylene	RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
	5.409 7.409 9.200 9.358 9.474 10.097	BV	3333.27417	8.28951e-4	2.76312	Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene

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

26

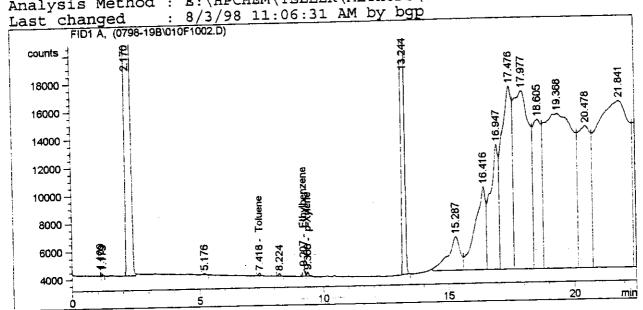
Teller 8/3/98 11:10:19 AM bgp

Seq. Line : Injection Date : 7/31/98 8:00:14 PM 10 Sample Name : T-M18-R1 AbBH Vial : Inj : 2 Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method Last changed : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A.

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

5.08594 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

288

Teller 8/3/98 11:10:31 AM bgp

Injection Date : 7/31/98 8:30:47 PM Seq. Line : Sample Name : T-M18-R2 Aa+AbFH Vial : 11 Acq. Operator : bgp Inj: 1

Inj Volume : 2 μ1

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 FID1 A, (0798-19B\011F1101.D) counts _ 18000 16000 14000 12000 10000 8000 6000

External Standard Report

10

Sorted By Signal

Calib. Data Modified : 8/3/98 11:04:16 AM

Multiplier 1.0000 Dilution 1.0000

Signal 1: FID1 A,

4000

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461 5.420 7.413 9.203 9.361 9.502 10.008 10.593	VP VP VV VP VB	1384.52429	8.30843e-4 8.23488e-4 8.36380e-4 8.35032e-4 8.93826e-4	8.46432	Section of the sectio	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 27.68545

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

min

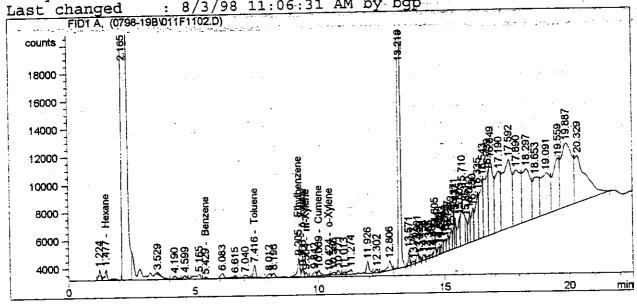
Seq. Line : Injection Date : 7/31/98 9:01:16 PM Sample Name : T-M18-R2 Aa+AbFH 11 Vial : 2 Inj: Acq. Operator : bgp

Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Last changed Acq. Method : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area	Amt/Area	Amount [ug/kg]	Grp 	Name
1.477 5.429 7.416 9.205 9.363 9.504 10.009 10.424	VB VB VV VD VB	9450.87891 3675.78320 1901.33069 3423.97729	8.40787e-4 8.30843e-4 8.28167e-4 8.36380e-4 8.35032e-4 8.93826e-4	4.73761 7.82690 3.07435 1.58767		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

26.81119 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date -: -7/31/98 9:31:43 PM Sample Name : T-M18-R2 Abpir 64 Seq. Line : Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0.798-19A.S Acq Method : E:\HPCHEM\TELLER\METHODS\0.798-19A.M Last changed : 7/31/98 6:22:19 PM by bgp Analysis Method : E:\HPCHEM\TELLER\METHODS\0.798-19-M Last changed: 8/3/98 II.06:31 AM by bgp FID1.A. (0798-198)012F1201.D) 18000 -16000

External Standard Report

Sorted By

Signal 8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier Dilution 1.0000

Signal 1: FID1 A,

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

Totals: 5.01047....

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

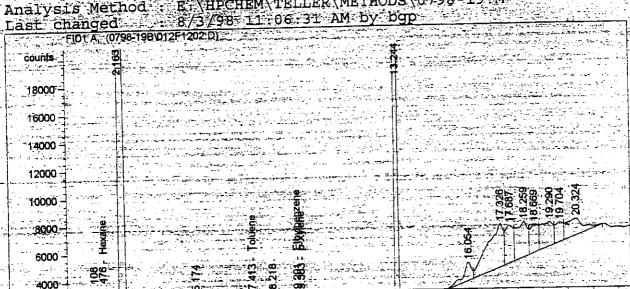
Warning: Calibrated compound(s) not found

: T-M18-R2 ADPH BH Sample Name Acq. Operator Inj Volume :

E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

7/31/98 6-22:19 PM by bgp Last changed

E; \HPCHEM\TELLER\METHODS\0798-19.M Analysis Method



8/3/98 11:04:16 AM. Calib Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A

RetTime Type [min]	Area counts*s	-Amt-/Area	Amount [ug/kg]	GrpName
1.476 PB	755.99805	9.19566e-4	6.95190e-1	Hexane Benzene
5_409. -7.413 BB	1581.86780	8.30843e-4 8.28951e-4	- 1.31428 - 2.10193	Toluene Ethylbenzene
9.201 BV 9.363 VB	.917.88214	8.36380e-4		그들 그는 그를 다고를 입하다듬다 수는 그는
9.474 10.097		elektronije projek Huma dija projek		Cumene o-Xylene
10.393				And the second s

4.87910 Totals:

Results obtained with enhanced integrator!

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

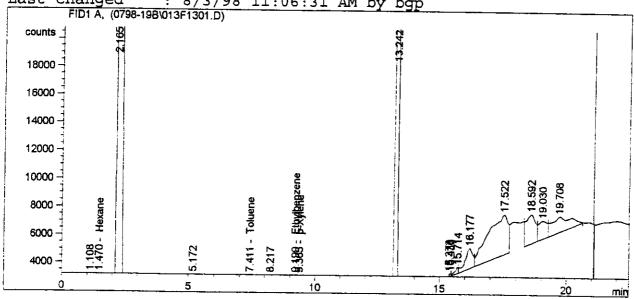
Injection Date : 7/31/98 10:32:24 PM Seq. Line : Sample Name : T-M18-R3 Aa+AbFH Vial : Acq. Operator : bgp Inj : 1

Inj Volume : 2 μ l 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



Sorted By :- Signal 8/3/98 11:04:16 AM -1 0000 Calib Data Modified Multiplier
Dilution Dilution

Signal 1 FID1 A

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.XvTene 9.474 10.097 Cumene	RetTime T [min]	counts*s	Amt/Area	[ug/kg]	Grp Name
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.	5.409	-		_	- 17、「「・・・」、「・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・
m Xyrene Cumene.	9-199-PV 9:365-VB	1979.22876	8.28951e-4	1.64068	- Ethylbenzene
	ការ៉ាកាស៊ី ទីកើត្តិកាស្ត្រ។				m Xylene Cumene

Results obtained with enhanced integrator! 2 Warnings or Errors

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

Teller 8/3/98 11:11:29 AM bgp

Seq. Line : Injection Date : 7/31/98 11:02:42 PM 13 Vial : : T-M18-R3 Aa+AbFH Sample Name Inj:

2 Acq. Operator : bgp Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

Last changed : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\013F1302.D) counts <u>_</u> 18000 16000 14000 12000 20.134 10000 410 - Toluene 8000 6000 8.218 5.174 4000 min 15 10

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

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

4.28963 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

294 Teller 8/3/98 11:11:40 AM bqp

: 7/31/98 11:33:00 PM Injection Date Seq. Line : Sample Name : T-M18-R3 AbBH Vial : 14 Acq. Operator : bgp Inj :

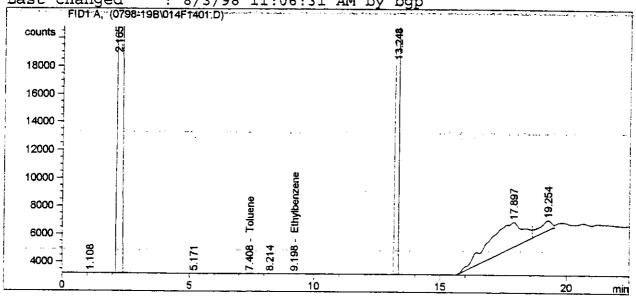
Inj Volume : 2 μ 1

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

: 8/3/98 11:06:31 AM by bgp



External Standard Report

was stgnal Calib Data Modified *** 8/3798 11-04-16 AM Multiplier 1.0000

Signal 1: FID1 A,

RetTime Type	Area	Amt/Area	Amount	TO Name
· Imint	Counteke		- lara Alcalisa	
			ranga kalanggan dan 19	
1.467		ng Mariantanan ang ang mga sa		Hexane
5.409				Benzene
7.408 BP		8.30843e-4	· · · · · · · · · · · · · · · · · · ·	
9.198 PV	1713.40027	8.28951e-4	1.42032	Ethylbenzene
9.338	-	-	_	p-Xylene
9.474 10.097	-	• •	-	m-Xylene
10.393	ing the State of Stat	e mae Traca est	en er e 🏯 geregen i skrive	Cumene
	The state of the second section of	er roman i Museum en en en en en	ري دين دري و مي روي _{در} ي و يوان مي اليون و در در ي و اليون و التي التي التي و التي و التي و التي و التي و التي	- o-Xylene

Totals -: 2.50521

Results obtained with enhanced integrator! 2 Warnings or Errors

ا در و میوز می از این از این به این بردن مهدور دو که این مهرفرهای بواهد به آی در که رست در آن اکتابا ایستان بر بهرمهمهای کهموستاری می است به ایستانیک که کاداکتهای کهورد زار در کردند را گفتان این که در کاداکت که در سهرمه Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

295

34

Teller 8/3/98 11:11:52 AM bgp

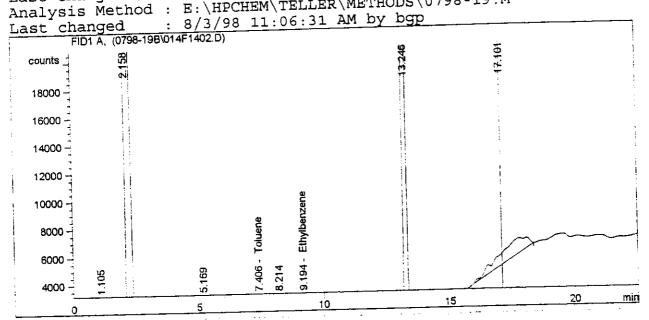
Seq. Line :

Injection Date : 8/1/98 12:03:13 AM 14 Vial : : T-M18-R3 AbBH Sample Name 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

Last changed : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

1.467	RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
	5.409 7.406 9.194 9.338 9.474	PV	1245.97449 1704.23376 - -	8.30843e-4 8.28951e-4 - -			Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene

2.44794 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

296 Teller 8/3/98 11:12:03 AM bgp

Injection Date : 8/1/98 12:33:31 AM Seq. Line : Sample Name : T-M18-R4 Aa+AbFH Vial : 15 Acq. Operator : bgp Inj : 1

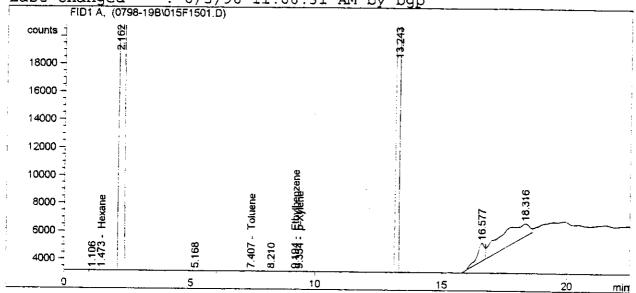
Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M : 7/31/98 6:22:19 PM by bgp Acq. Method

Last changed

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
1.473 5.409 7.407 9.194 9.354 9.474 10.097 10.393	PB PV	- 1227.05225 2357.92407	- 8.30843e-4 8.28951e-4	6.52496e-1 - 1.01949 1.95460 7.27343e-1	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 4.35393

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

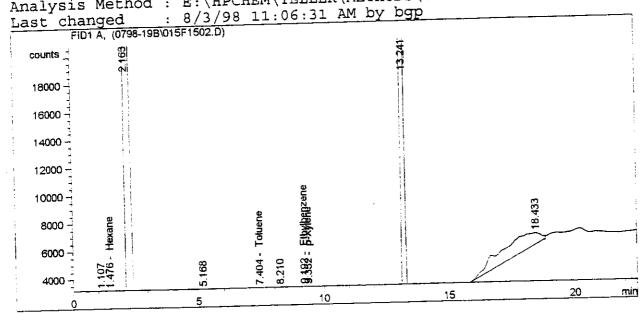
Warning : Calibrated compound(s) not found 297

Seq. Line : Injection Date : 8/1/98 1:03:42 AM 15 Vial : Sample Name : T-M18-R4 Aa+AbFH 2 Inj :

Acq. Operator : bgp Inj Volume : 2 μ l

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



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

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

4.40024 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Page 1 of 2

Injection Date : 8/1/98 1:34:00 AM Seg. Line : 16

Injection Date : 8/1/98 1:34:00 AM Seq. Line : 16
Sample Name : T-M18-R4 AbBH Vial : 16
Acq. Operator : bgp

cq. Operator : bgp = 1 Inj : 1 = 1 Inj Volume : 2 μ l

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

15

20

<u>min</u>

External Standard Report

Sorted By : Signal

99

<u>்</u> 5

Calib. Data Modified : 8/3/98 11:04:16 AM

Multiplier : 1.0000 Dilution : 1.0000

Signal 1: FID1 A,

8000

6000

4000

RetTime Ty [min]	pe Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
1.472 PB 5.409 7.402 PB 9.189 PV 9.349 VB 9.474 10.097 10.393	1324.84619 2264.42529	9.19566e-4 8.30843e-4 8.28951e-4 8.36380e-4	- 1.10074 1.87710	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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
Teller 8/3/98 11:12:37 AM bgp

Seq. Line :

Injection Date : 8/1/98 2:04:14 AM Vial : 16 AbBH Inj: 2
Inj Volume: 2 μl Sample Name : T-M18-R4 AbBH Acq. Operator : bgp

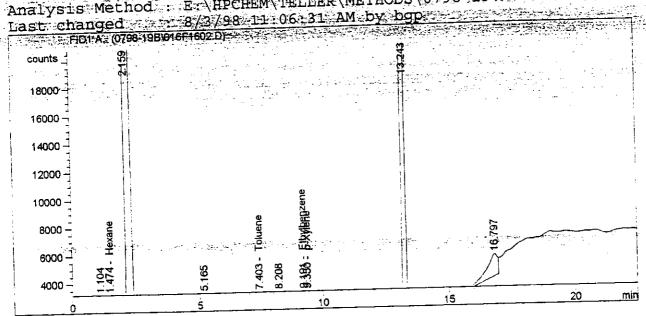
Sequence File :: HPCHEM\TELLER\SEQUENCE\0798-19A:S

Acq. Method :: E:\HPCHEM\TELLER\METHODS\0798-19A.M

Last changed : 7/31/98 6:22:19 PM by bgp

Analysis Method :: B-\HPCHEM\TELLER\METHODS\0798-19 M

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.474 5.409 7.403 9.191 9.350 9.474 10.097	PB PV	- 1341.05078	8.28951e-4	1.11420		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

4.40149 Totals:

Results obtained with enhanced integrator!

2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Teller 8/3/98 11:12:49 AM bgp

Page 1 of 2

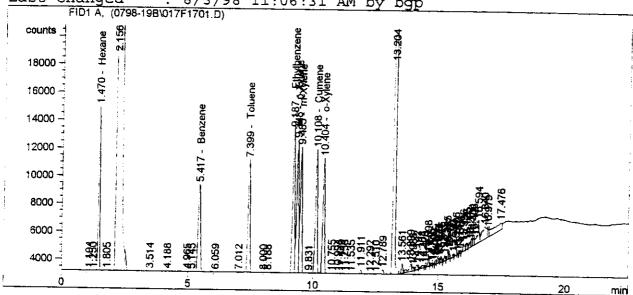
Injection Date : 8/1/98 2:34:28 AM Sample Name : T-M18-R1 Ba+BbFH Vial : 17 Acq. Operator : bgp Inj :

Inj Volume : 2 μ 1 Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S

: E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method Acq. Method : E:\HPCHEM\TELLER\METHODS\
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 5.417 7.399 9.187 9.348 9.485 10.108 10.404	VB VB BV VV	5.88468e4 5.56530e4 5.84696e4 6.78597e4 5.88443e4 5.72491e4 6.07160e4 5.10703e4	8.93746e-4 8.01450e-4 7.85572e-4 7.78158e-4 7.87241e-4 7.84612e-4 8.50922e-4 7.61006e-4	52.59406 44.60306 -45.93208 52.80560 46.32461 44.91835 51.66459 38.86480	· · · · · ·	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 377.70714

Results obtained with enhanced integrator! 1 Warnings or Errors :

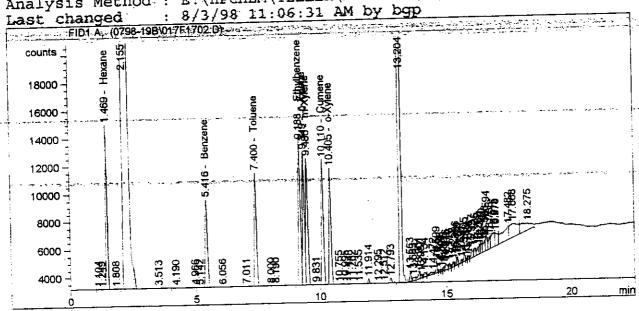
Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/1/98 3:04:35 AM Seq. Line : 17 Sample Name : T-M18-R1 Ba+BbFH Vial : 17 Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : E:\HPCHEM\TELLER\MBTHODD\\\ 7/31/98 6:22:19 PM by bgp : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



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 5.416 7.400 9.188 9.349 9.486 10.110	VB BV VV VP VV	5.87134e4 5.63163e4 5.87247e4 6.83843e4 5.92682e4 5.76456e4 6.26236e4 5.42974e4	8.93755e-4 8.01356e-4 7.85534e-4 7.78096e-4 7.87175e-4 7.84545e-4 8.50706e-4 7.60341e-4	52.47540 45.12944 46.13026 53.20955 46.65442 45.22555 53.27430 41.28451		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
m1-				383.38342		

Totals: 383.38342

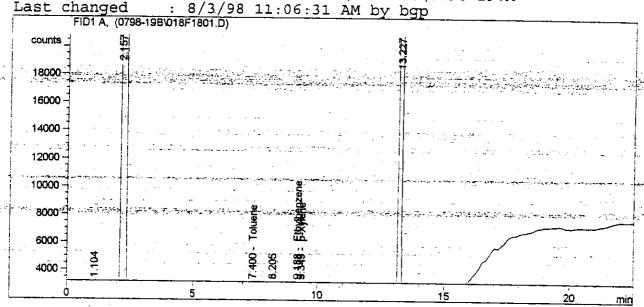
Results obtained with enhanced integrator!

1 Warnings or Errors :

: 8/1/98 3:34:40 AM Injection Date Seq. Line : Sample Name : T-M18-R1 BbBH Vial : Acq. Operator : bgp Inj : Inj Volume : 2

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



Sorted By Signal *

Calib. Data Modified : 8/3/98 11:04:16 AM

1.0000 Multiplier Dilution 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467 5.409 7.400 9.188 9.349	рp	2939.87476	- 8.30843e-4	1.03490 2.43701] , , ,	Hexane Benzene Toluene Ethylbenzene p-Xylene
9.474 10.097 10.393	wase co lor T			- - 	τ (m-Xylene Cumene 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 303

Teller- 8/3/98-11-13-30-AM-bgp

Page 1 of 2

min

Seq. Line: 18 Injection Date : 8/1/98 4:04:48 AM Vial : 18 Sample Name : T-M18-R1 BbBH 2 Inj :

Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File 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

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\018F1802.D) counts _ 18000 16000 14000 -12000 10000 400 - Toluene 8000 6000

External Standard Report

Signal Sorted By

5

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

4000

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u>	Name
1.467 5.409 7.400 9.186 9.346 9.474 10.097 10.393	PV	1220.44141 2931.23804 1124.07080	8.28951e-4	1.01400 2.42985 9.40150e-1 - -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

4.38400 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Teller 8/3/98 11:13:42 AM bgp

Injection Date : 8/2/98 10:24:30 AM

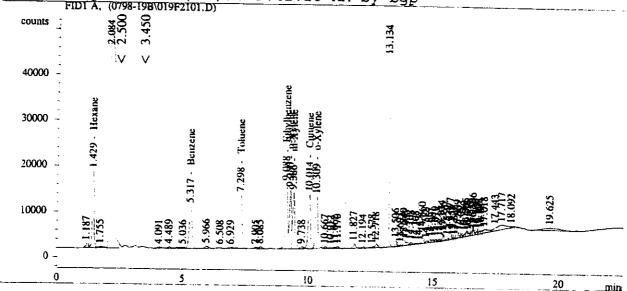
Seq. Line : Sample Name : T-M18-R2 Ba+BbFH Vial : Acq. Operator : bab Inj :

Inj Volume : 2 μ l 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 FIDI A, (0798-198/019F2101.D)



External Standard Report

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 5.317 7.298 9.088 9.250 9.386 10.014 10.309	VB VB BV VV VP VV	7.50164e4 7.26226e4 7.87055e4 8.88007e4 7.50438e4 7.33562e4 7.74209e4 6.99144e4	8.92873e-4 7.99597e-4 7.83355e-4 7.76250e-4 7.85246e-4 7.82473e-4 8.49391e-4 7.57989e-4	66.98010 58.06878 61.65435 68.93154 58.92786 57.39930 65.76061 52.99430		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 490.71684

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Teller 8/26/98 10:02:17 AM dmb

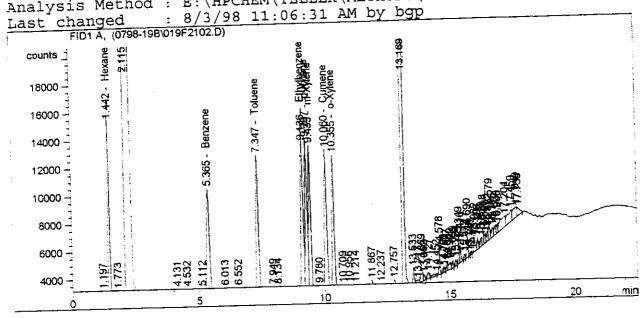
305

19

Seq. Line : Injection Date : 8/2/98 10:54:06 AM Vial : 1.9 Sample Name : T-M18-R2 Ba+BbFH Acq. Operator : bgp 2 Inj: Inj Volume : 2 μ 1

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



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp) Name
1.442 5.365 7.347 9.136 9.297 9.435 10.060 10.355	VB VB BV VV VP VP	6.70176e4 6.45477e4 7.28601e4 7.84683e4 6.63411e4 6.49026e4 6.69182e4 5.81525e4	8.93252e-4 8.00357e-4 7.83869e-4 7.77064e-4 7.86197e-4 7.83463e-4 8.50265e-4 7.59643e-4	59.86363 51.66123 57.11275 60.97490 52.15713 50.84880 56.89816 44.17512		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

433.69173 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

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

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,

1.458 PB	RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Gr	o Name
o kytene	5.409 7.377 9.167 9.328 9.474 10.097	BB BV	2765.96143 3718.42993 1331.17395	8.30843e-4 8.28951e-4 8.36380e-4	- 2.29808 3.08240		Benzene Toluene Ethylbenzene p-Xylene m-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

Teller 8/3/98 11:15:04 AM bgp

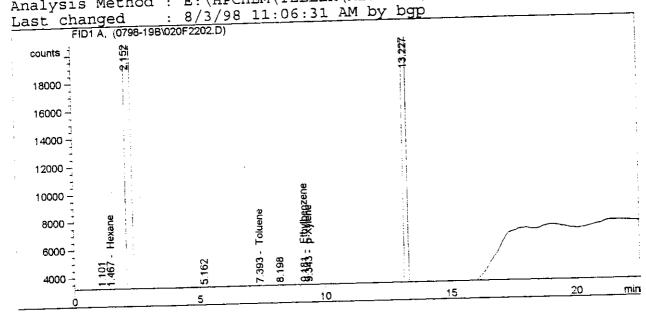
Seq. Line : Injection Date : 8/2/98 11:54:02 AM 20 Vial : : T-M18-R2 BbBH Sample Name 2 Inj: : pab Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 7/31/98 6:22:19 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467 5.409 7.393 9.181 9.343 9.474 10.097	BB PV	- 2676.80029 3594.99927	9.19566e-4 8.30843e-4 8.28951e-4 8.36380e-4	2.22400 2.98008		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

7.23403 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Teller 8/3/98 11:15:17 AM bgp

Page 1 of 2

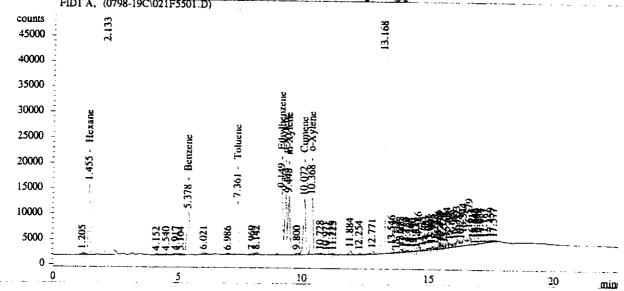
Injection Date : 8/6/98 12:31:42 PM Seq. Line : 55
Sample Name : T-M18-R3 Ba+BbFH Vial : 21
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

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 FIDI A. (0798-19C\021F5501.D)



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]	Grg	o Name
1.455 5.378 7.361 9.149 9.311 9.448 10.072 10.368	VB VB BV VV VP VP	6.09983e4 6.58453e4 7.08737e4 7.79383e4 6.95989e4 6.91366e4 7.06465e4 6.51023e4	8.47992e-4 7.56450e-4 7.43414e-4 7.37945e-4 7.44233e-4 7.41361e-4 8.06515e-4 7.16657e-4	51.72605 49.80868 52.68849 57.51419 51.79779 51.25520 56.97750 46.65597		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 418.42386

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

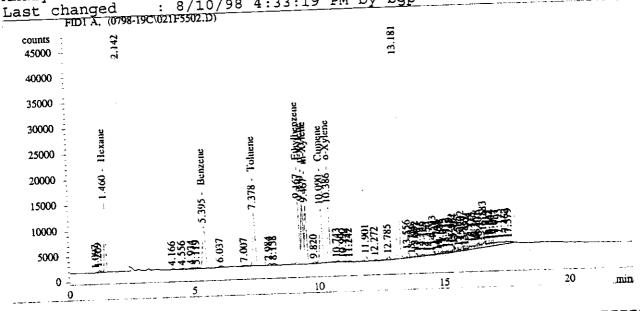
 \cup \cup

Injection Date : 8/6/98 1:01:37 PM Vial : Sample Name : T-M18-R3 Ba+BbFH 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

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

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

Signal I: Fibt	/				
RetTime Type [min]	Area counts*s	Amt/Area	Amount [ug/kg]	Grp -	Name
1.460 VP 5.395 VB 7.378 VB 9.167 BV 9.330 VV 9.467 VP 10.090 VP 10.386 VB	5.97375e4 6.43444e4 6.92771e4 7.61632e4 6.81792e4 6.74720e4 6.90756e4 6.36131e4	8.47735e-4 7.56251e-4 7.43247e-4 7.37815e-4 7.44095e-4 7.41196e-4 8.06360e-4 7.16492e-4	50.64158 48.66051 51.49000 56.19438 50.73180 50.00997 55.69978 45.57822		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
_			409.00625	; ;	

Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

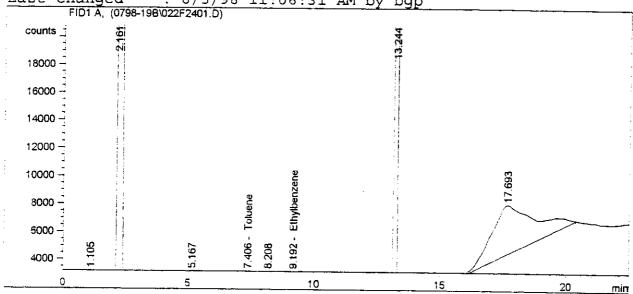
Injection Date : 8/2/98 1:24:11 PM Seq. Line : 24 Sample Name : T-M18-R3 BbBH Vial : 22 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Last changed : 5:\nrcnem\reliance\relambda\relam

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]	Gr	o Name
1.467 5.409 7.406 9.192 9.338 9.474 10.097 10.393			8.30843e-4 8.28951e-4 - -	1.12553 1.49287 - -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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 311

Teller 8/3/98 11:15:53 AM bgp

Seq. Line : Injection Date : 8/2/98 1:54:11 PM : T-M18-R3 BbBH Vial : 22 Sample Name 2 Inj : Acq. Operator : bgp

Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method Last changed : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\022F2402.D) 13,243 2.160 counts 📑 18000 -16000 14000 12000 9.193 - Ethylbenzene 10000 7,406 - Toluene 8000 6000 -8.207 4000 'n 20 min 15

10

External Standard Report

Signal Sorted By

5

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467 5.409 7.406 9.193 9.338 9.474 10.097 10.393	PV	1360.76868 1774.91150 - -	8.30843e-4 8.28951e-4 - -	1.13059 1.47131 - -	, ,	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

2,60190 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

312 Teller 8/3/98 11:16:04 AM bgp Page 1 of 2

Injection Date : 8/6/98 1:31:32 PM Seq. Line : 56
Sample Name : T-M18-R4 Ba+BbFH Vial : 23

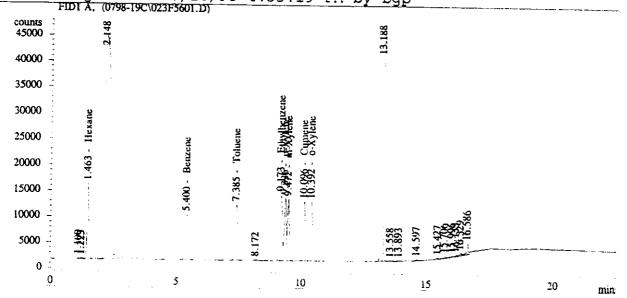
Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : E:\HPCHEM\TELLEK\METHODS 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 5.400 7.385 9.173 9.336 9.472 10.096 10.392	BB BV VV VP BV	6.31487e4 6.72259e4 7.15840e4 7.67611e4 7.02794e4 7.04534e4 6.98334e4 6.66174e4	8.48407e-4 7.56625e-4 7.43486e-4 7.37860e-4 7.44297e-4 7.41486e-4 8.06436e-4 7.16817e-4	53.57579 50.86477 53.22172 56.63891 52.30871 52.24024 56.31616 47.75247		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 422.91876

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

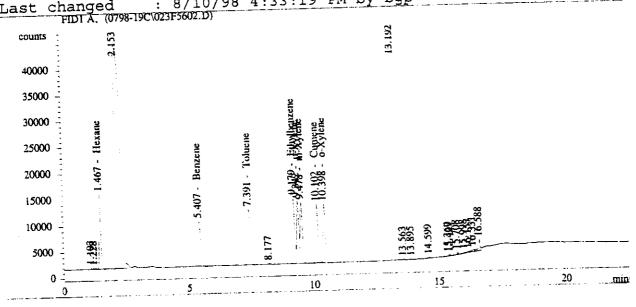
Seq. Line : Injection Date : 8/6/98 2:01:34 PM 23 Vial : Sample Name : T-M18-R4 Ba+BbFH 2 Inj: : bgp

Acq. Operator Inj Volume : 2 μ l

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

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

019110-		•			_	> 7
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.467 5.407 7.391 9.179 9.342 9.478 10.102	BB BV VV VB BV	6.26610e4 6.65805e4 7.06725e4 7.56775e4 6.93873e4 6.93255e4 6.87954e4 6.56323e4	8.48315e-4 7.56544e-4 7.43394e-4 7.37779e-4 7.44213e-4 7.41379e-4 8.06331e-4 7.16714e-4	51.39647 55.47188		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

417.44501 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/2/98 3:24:19 PM Seq. Line : 26 Sample Name : T-M18-R4 BbBH

Vial : 24 Acq. Operator : bgp Inj : 1

Inj Volume : 2 μ 1 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

: 8/3/98 11:06:31 AM by bgp FID1 A. (0798-198\024F2601.D) counts _ 9 ٥٧i 18000 16000 14000 12000 10000 9.391 : Etgylbegzene 403 - Toluene 8000 6000 8.207 4000 0 5 10 15 20 mini

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 5.409 7.403 9.191 9.351 9.474 10.097 10.393		2670.78638	8.30843e-4 8.28951e-4 8.36380e-4	1.06126 2.21395 9.40797e-1		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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 Teller 8/3/98 11:16:41 AM bgp

· U

Seq. Line : Injection Date : 8/2/98 3:54:19 PM Vial : 24 : T-M18-R4 BbBH Sample Name 2 Inj: : bgp

Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 7/31/98 6:22:19 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-198\024F2602.D) counts 📑 18000 16000 14000 12000 10000 407 - Toluene 8000 6000 8.207 4000 min 15 5

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

Teller 8/3/98 11:16:53 AM bgp

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u> 	Name
1.467 5.409 7.407 9.192 9.353 9.474 10.097	ΡV	1256.14758 2685.15796 1185.61462	8.28951e-4	1.04366 2.22586 9.91624e-1		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

4.26115 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

Page 1 of 2

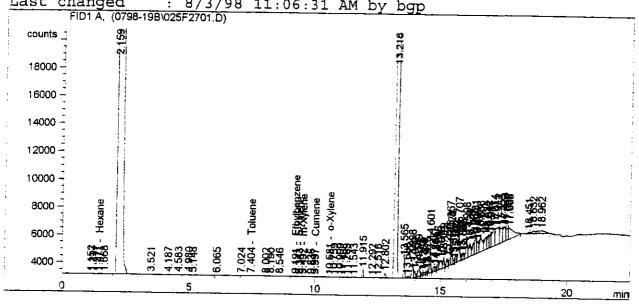
Injection Date : 8/2/98 4:24:22 PM Seq. Line : : T-M18-FB Aa+AbFH Sample Name Vial : 25 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr]	o Name
1.471 5.409 7.404 9.191 9.343 9.492 9.997 10.581	VB VV VV VP VV	2770.21680 5232.68848 9896.30664 2705.70215 1177.06531 7023.66455 4097.05811	8.30843e-4 8.25552e-4 8.36380e-4 8.35032e-4 8.93826e-4	2.54740 - 4.34754 8.16991 2.26299 9.82887e-1 6.27794 3.31943	- -	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Totals :				27 00011		

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 317

Teller 8/3/98 11:17:06 AM bgp

Seq. Line : Injection Date : 8/2/98 4:54:30 PM 25 Vial : : T-M18-FB Aa+AbFH Sample Name 2 Inj : : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

Last changed : 7/31/98 6:22:19 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\025F2702.D) counts 1 18000 16000 14000 12000 10000 8000 6000 4000 min 15 10 n

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u> 	Name
1.469 5.409 7.403 9.191 9.343 9.491 9.998 10.576	VV VP VB	2701.98755 1219.19104 7002.34375	-	3.36627 4.50569 8.26260 2.25989 1.01806 6.25888 3.41141	, ,	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

29.08280 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

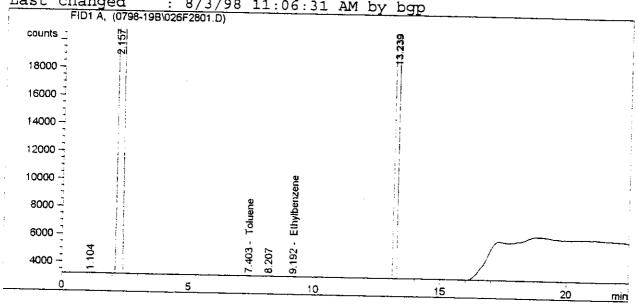
Injection Date : 8/2/98 5:24:36 PM Seq. Line : Sample Name : T-M18-FB AbBH Vial : 26 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

Acq. Method : E:\HPCHEM\TELLER\METHODS\
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 5.409 7.403 9.192 9.338 9.474 10.097 10.393	BB PV	1576.58813 1831.02161 - -		1.30990 1.51783 - -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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 319

Teller 8/3/98 11:17:32 AM bgp

Injection Date : 8/2/98 5:54:41 PM Seq. Line : 26 Vial : : T-M18-FB AbBH Sample Name Inj : 2 Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 7/31/98 6:22:19 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\026F2802.D) counts _ 18000 16000 -14000 -12000 9.190 - Ethylbenzene 10000 -404 - Toluene 8000 6000 4000 min 15

External Standard Report

Signal Sorted By

5

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

Ó

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.467 5.409 7.404 9.190 9.338 9.474 10.097	BV	1562.13708 1858.57507 -	- 8.30843e-4 8.28951e-4 - - -	- 1.29789 1.54067 - - -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

2.83856 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

59

Teller 8/3/98 11:17:43 AM bgp

Page 1 of 2

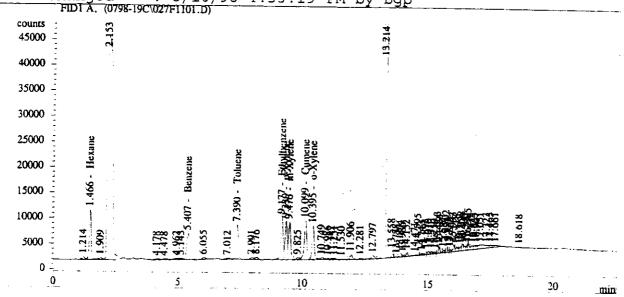
Injection Date : 8/5/98 12:10:10 AM Seg. Line : 11

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]	Gr:	o Name
1.466 5.407 7.390 9.177 9.339 9.476 10.099 10.395	VB BV VV VP VV	4.49669e4 4.01662e4 4.49701e4 5.32726e4 4.39774e4 4.33943e4 5.09340e4 4.09096e4	8.43649e-4 7.51006e-4 7.39248e-4 7.35371e-4 7.40377e-4 7.37399e-4 8.03869e-4 7.12489e-4	37.93631 30.16502 33.24408 39.17516 32.55988 31.99887 40.94422 29.14760		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 275.17115

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Seq. Line :

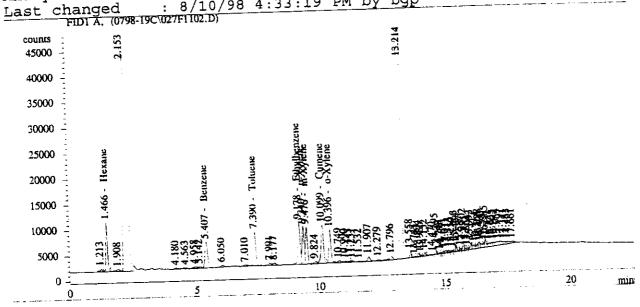
Injection Date : 8/5/98 12:40:04 AM 27 Vial : : T-M18-FB Ba+BbFH Sample Name 2 Inj: Acq. Operator : pab Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1,0000 Dilution

Signal 1: FID1 A,

Signar		,				
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.466 5.407 7.390 9.178 9.340 9.476 10.099 10.396	VB VB BV VV VP VV	4.47164e4 3.98394e4 4.44921e4 5.25585e4 4.33198e4 4.27056e4 4.99227e4 4.00927e4	8.43556e-4 7.50891e-4 7.39126e-4 7.35261e-4 7.40218e-4 7.37227e-4 8.03677e-4 7.12260e-4	37.72077 29.91506 32.88528 38.64420 32.06608 31.48376 40.12174 28.55646		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
m 1 -				271.39334		

Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

Injection Date : 8/2/98 7:24:59 PM Seq. Line: 30 Sample Name : T-M18-FB BbBH Acq. Operator : bgp Vial : 28 Inj: 1 Inj Volume : 2 μ 1

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\METHODŠ\0798-19.M

Last changed : 8/3/98 12:19:03 PM by bgp (modified after loading)

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External Standard Report

Sorted By

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]	Gr	Name
1.467 5.409 7.402 9.190 9.338 9.474 10.097 10.393		1089.38684 1195.99377 - - -	8.30843e-4 8.28951e-4	9.05110e-1 9.91420e-1 -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

Teller 8/3/98 12:19:04 PM bgp

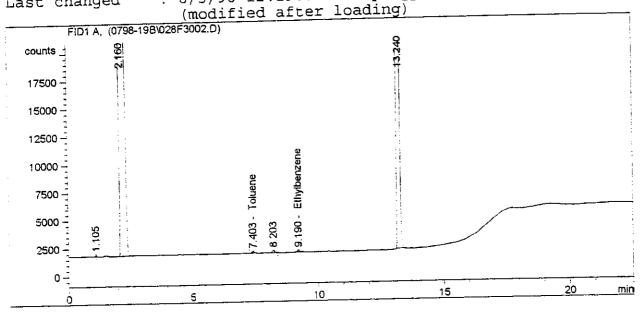
Seq. Line : Injection Date : 8/2/98 7:55:00 PM 28 Vial : : T-M18-FB BbBH Sample Name 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 7/31/98 6:22:19 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:19:34 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grr	Name
1.467 5.409 7.403 9.190 9.338 9.474 10.097 10.393		1089.69263 1190.57117 - -	- 8.30843e-4 8.28951e-4 - - -	- 9.05364e-1 9.86925e-1 - -	, 1	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1.89229 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning : Calibrated compound(s) not found

Warning: Calibration warnings (see calibration table listing)

Teller 8/3/98 12:19:35 PM bgp

Page 1 of 2

Calibration Table

Calib. Data Modified : 8/3/98 11:04:16 AM

Calculate : External Standard : Peak Area

Based on

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 Connected Linear Origin : Weight

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,

R -	RetTime [min] S	_	Lvl	Amount [ug/kg]	Area	Amt/Area	Ref Grp Name
	1.467	1	1	7.34000	8639.78955	8.49558e-4	
			2	16.28000		9.37270e-4	Hexane
			3	40.60000		9.34436e-4	
			4	80.70000		8.99683e-4	
			5	198.90000		8.89948e-4	
			6	388.00000	4.38292e5	8.85255e-4	
	5.409	1	1	7.85000		7.83699e-4	Benzene
			2	17.43000		8.45876e-4	Delizeite
			3		5.24541e4	8.27391e-4	
			4		1.07401e5	8.04462e-4	
			5	213.00000	2.68902e5	7.92111e-4	
		_	6		5.25387e5	7.91797e-4	
	7.390	1	1	7.77000	1.00433e4	7.73649e-4	Toluene'
			2		2.06467e4	8.34517e-4	10146116
			3			8.09277e-4	
			4		1.08566e5	7.87536e-4	
			5	210.60000	2.71226e5	7.76475e-4	
			6	411.00000		7.75321e-4	
	9.176	1	1			7.72470e-4	Ethylbenzene
325			2	17.13000		8.28948e-4	neny thenzene
260							

Method: E:\HPCHEM\TELLER\METHODS\0798-19.M of 8/3/98 12:59:48 PM

RetTime	L	vl	Amount	Area	Amt/Area	Ref Grp Name
[min] Si	.g		[ug/kg]	Ĩ		1 1 1
	· - ·	-			0.00000-4	
•		3	42.70000	5.31914e4	8.02/626-4	
		4	85.00000		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
J.414	~	2		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	
10 007	-	1	7 70000	9340.51563		Cumene
10.097	1	2	17 07000	1.88207e4	9.06980e-4	
		3	17.07000	4.82708e4		
			42.00000	9.91906e4	8.53912e-4	
		4	200 (0000	2.46706e5	8.45541e-4	
		5	407.00000	4 9435665	8.40291e-4	
	_	6	407.00000	1.01550e4		
10.393	1	1	7.67000	2.10958e4	8.06795e-4	
		2	17.02000	Z.1093064 E 4113064		
		3	42.40000	5.41139e4 1.11211e5	7.033330 1	
			84.40000	2.76692e5	7.505150 4	
		5	208.00000	5.43067e5	7.317376 4	
		6	406.00000	5.4306765	7.476066	
			_			
3 Warnin	gs.	or	Errors :			
		_		-1	dowa at 9 1	76 min signal 1
Warning	: (over	clapping pe	ak time win	dows at 3.1	.76 min, signal 1
Warning	: ()ver	Tapping pe	ak time win	down at 3.3	38 min, signal 1
Warning	: (Over	riapping pe	ak time win	uows at iv.	097 min, signal 1
						=======================================
3 2 2 2 2 2 2 2 2	===	====		Peak Sum	rahle	
				reak Sum		=======================================
=======	==:	====		:=======		

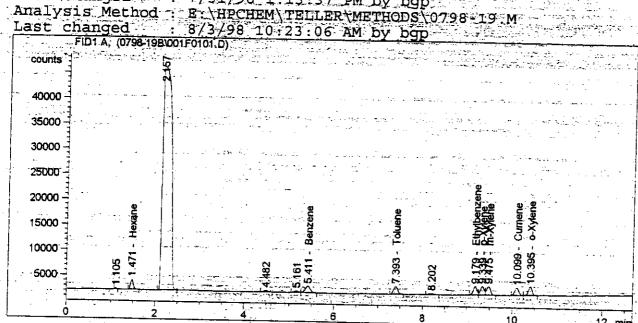
No Entries in table

Injection Date : 7/31/98 1:16:52 PM Seq. Line : Sample Name : gc-14 pg 53 #1 Vial: 1

Acq. Operator : pgp Inj : Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Last changed : 7731/98 1:13:37 PM 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,

				the state of the s	-		
RetTime [min]	Туре	Area Counts*s	Amt/Area	Amount [ug/kg]	Grp	Name	
1.471 5.411 7.393 9.179 9.339 9.475 10.099	VP BP BV VV VB BP	1.00033e4 9968.09863 9950.80371 9940.78320 9984.49902	8.27512e-4 8.25248e-4 8.32698e-4 8.30721e-4 8.90917e-4	7.91041 8.37917 8.24872 8.21188 8.27767 8.29433 8.14915 8.18685	E E m	Hexane Senzene Coluene Cthylbenzen D-Xylene Umene Umene	ie
M-4-1 -					٠,	•	

Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :...

Warning: Calibration warnings (see calibration table listing) 327

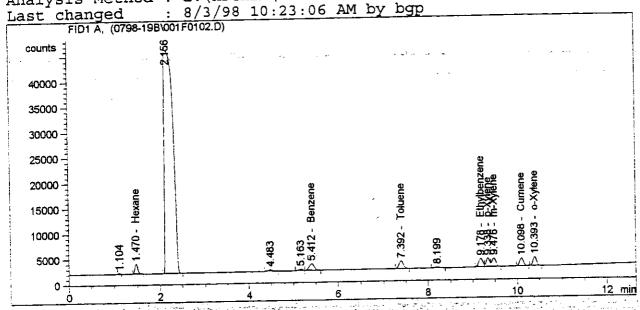
66 Page 1 of 2

Seq. Line : Injection Date : 7/31/98 1:34:08 PM Vial : Sample Name : gc-14 pg 53 #1 Acq. Operator : bgp Inj : Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 7/31/98 1:13:37 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



-----External Standard Report

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Signal Sorted By Calib. Data Modified 8/3/98 10:05:25 AM Multiplier 1.0000 1.0000 Dilution

RetTime Type [min]	Area Amt/Area	Amount Gr [ug/kg]	p Name:
5.412 VB 7.392 BP 9.178 BV 9.338 VV	8656.41406 9.17239e-4 1.00299e4 8.37520e-4 1.01185e4 8.26761e-4 1.00629e4 8.24633e-4 9997.56445 8.32388e-4 9987.87012 8.30702e-4 9534.10254 8.89005e-4 1.01538e4 8.06114e-4	8.32185 8.29695 8.47586	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

U.

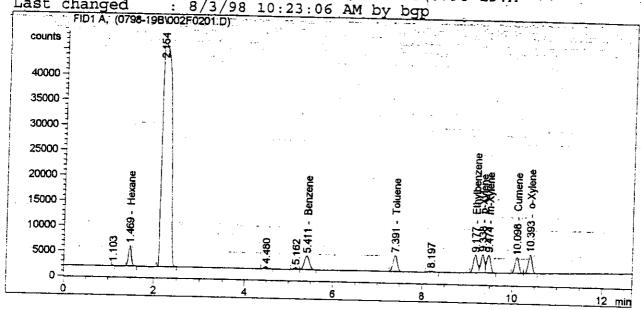
Injection Date : 7/31/98 1:51:15 PM Sample Name : gc-14 pg 53 #2 Vial:

Acq. Operator : bgp Inj : 1

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	Amt/Area	Amount [ug/kg]	Grp Name
1.469 5.411 7.391 9.177 9.338 9.474 10.098 10.393	VB BP BV VV VB BV	1.74008e4 2.06535e4 2.07118e4 2.07491e4 2.07433e4 2.06257e4 1.89469e4 2.12109e4	8.14888e-4 8.01285e-4 7.96530e-4 8.04213e-4 8.01907e-4	15.71980 16.83026 16.59603 16.52731 16.68206 16.53988 16.41868 16.47584	Toluene Ethylbenzene p-Xylene m-Xylene
Totale .					

Totals : 131.78985

Results obtained with enhanced integrator! 1 Warnings or Errors :

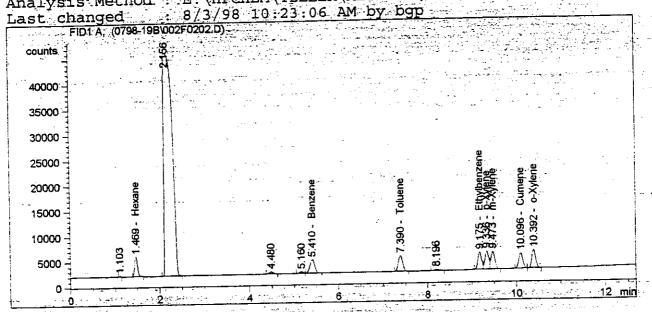
Teller 8/3/98-10:23:52 AM_bgp.

_____ Injection Date : 7/31/98 2:08:35 PM Seq. Line : : gc+14 pg-53 #2 Vial: Sample Name Inj : : bgp Acq. Operator Inj Volume : $2 \mu 1$

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

Last changed : 7/31/98 1:13:37 PM by bgp.

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



Signal Sorted By

: Signal 8/3/98 10:05:25 AM Calib. Data Modified

Multiplier : 1.0000-1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp -	Name
1.469 5.410 7.390 9.175 9.336 9.473 10.096 10.392	BP BV VB BV BV	1.73384e4 2.05582e4 2.05816e4 2.05803e4 2.05850e4 2.05406e4 1.86945e4 2.09807e4	9.03446e-4 8.14987e-4 8.01439e-4 7.96747e-4 8.04415e-4 8.02019e-4 8.66868e-4 7.77060e-4	15.66431 16.75467 16.49489 16.39734 16.55891 16.47392 16.20564 16.30329	I I I	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Motale				130.85297		

Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Injection Date : 7/31/98 2:25:44 PM Seq. Line : 3

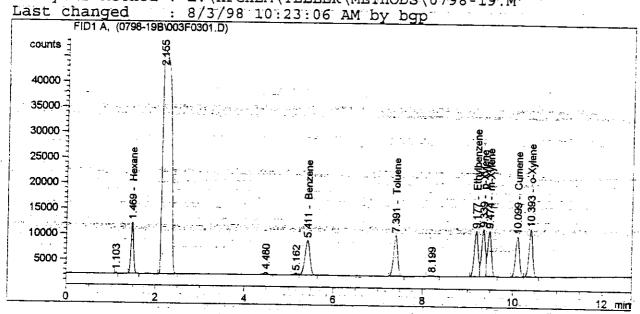
Sample Name : gc-14 pg 53 #3 Vial----Acq. Operator : bgp Inj : Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : E:\HPCHEM\TELLER\METHODS\(\)
Last changed : 7/31/98 1:13:37 PM by bgp

And the second s

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



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 5.411 7.391 9.177 9.339 9.474 10.099 10.393	VB BB BV VV VP BV	4.34487e4 5.24541e4 5.30103e4 5.31914e4 5.30487e4 5.27025e4 4.82708e4 5.41139e4	8.95182e-4 8.01933e-4 7.86459e-4 7.80390e-4 7.88250e-4 7.85452e-4 8.52751e-4 7.60376e-4	38.89447 42.06467 41.69041 41.50999 41.81562 41.39529 41.16300 41.14692	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 329.68038

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Seg. Line :

Injection Date : 7/31/98 2:42:56 PM Vial : 3 Sample Name : gc-14 pg 53 #3 Inj : Acq. Operator : bgp Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method Last changed : 7/31/98 1:13:37 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 10:23:06 AM by bgp Last changed___ FID1 A, (0798-19B\003F0302.D) 40000 35000 30000 25000 20000 15000 -5000

External Standard Report

Signal Sorted By ...

8/3/98 10:05:25 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area	Amt/Area	_Amount [ug/kg]	Grp Name
1.469 5.413 7.393 9.177 9.339 9.475 10.098 10.394	VP BB BV VV VP BV	5.32959e4 5.31714e4 5.29870e4	8.95184e-4 8.01930e-4 7.86423e-4 7.80369e-4 7.88227e-4 7.85396e-4 8.52728e-4 7.60337e-4		Toluene Ethylbenzene p-Xylene m-Xylene Cumene

Results obtained with enhanced integrator 1 Warnings or Errors :--

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\004F0401

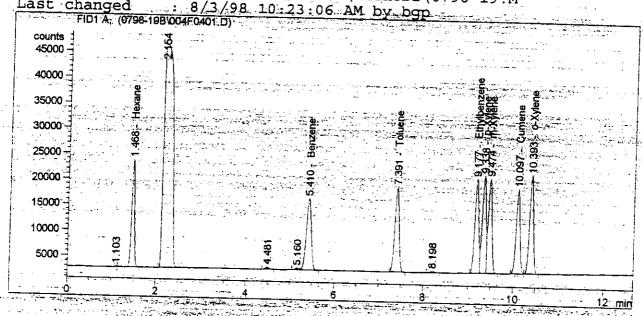
Injection Date : 7/31/98 3:00:17 PM Sample Name

gc-14 pg 53 #4 Acq. Operator : bgp

Inj Volume : 2 μ 1 Sequence File : E: HPCHEM\TELLER\SEQUENCE\0798-19A.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M : 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



Sorted By

Signal Calib: Data Modified

8/3/98 10:05:25 AM Multiplier Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
1.468 5.410 7.391 9.177 9.338 9.474 10.097 10.393	VP BB BV VV VB BV	8.99227e4 1.07524e5 1.08752e5 1.09267e5 1.09178e5 1.08643e5 9.94233e4 1.11486e5	8.92346e-4 7.97624e-4 7.81586e-4 7.75092e-4 7.82981e-4 7.80004e-4 8.48160e-4 7.54940e-4	80.24215 85.76399 84.99874 84.69234 85.48429 84.74167 84.32687 84.16556	Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene
Totals :		ر در این این این این این این این این این این		674 41561	n metalling fra fra singer i salah salah salah salah salah salah salah salah salah salah salah salah salah sal Senten menjada salah salah salah salah salah salah salah salah salah salah salah salah salah salah salah salah

674.41561

Results obtained with enhanced integrator! 1 Warnings or Errors :

Injection Date : 7/31/98 3:17:32 PM gc-14 pg 53 #4 Sample Name -- Inj-: 2 Acq. Operator : bgp Inj Volume : 2 μ l

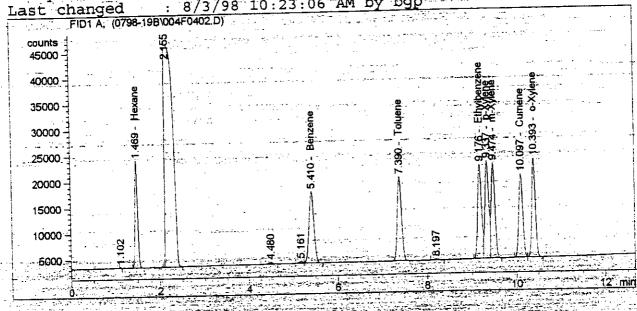
: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File

: E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : E:\HPCHEM\TELLER\METHODS\C 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



Sorted_By___ 8/3/98 10:05:25 AM Calib. Data Modified :---1:0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A, 17

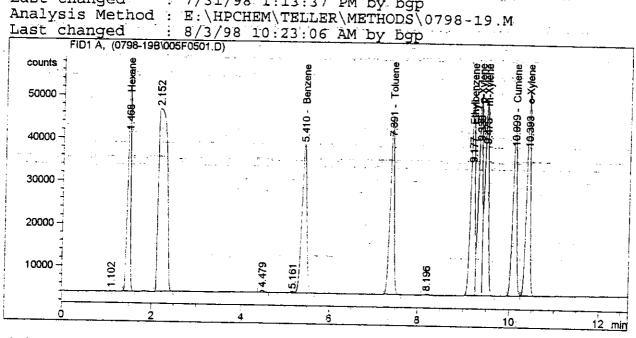
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
1.469 5.410 7.390 9.176 9.337 9.474 10.097	BV VV VP BV	8.94738e4 1.07278e5 1.08381e5 1.08761e5 1.08548e5 1.08237e5 9.89578e4 1.10935e5	8.92359e-4 7.97634e-4 7.81602e-4 7.75115e-4 7.83010e-4 7.80024e-4 8.48181e-4 -7.54965e-4	79.84274 85.56836 84.71110 84.30238 84.99421 84.42718 83.93411 83.75219	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene -Cumene o-Xylene
Totals	e Sylvania († 1902) 1900 - Parker State († 1902) 1900 - Parker State († 1902)			671:53228	

Results obtained with enhanced integrator! 1 Warnings or Errors : ---

Injection Date : 7/31/98 3:34:43 PM... Seq. Line : Sample Name : gc-14 pg 53 #5 Vial: 5 Acq. Operator Inj : 1
Inj Volume : 2 μ 1

Sequence File : E: HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : E:\HPCHEM\TELLER\METHODS\
Last changed : 7/31/98 1:13:37 PM by bgp



Sorted By Signal Calib. Data Modified - 8/3/98 10:05:25 AM 1:0000 Multiplier Dilution

RetTime Type	Area	Amt/Area	A # 25 / 1		A Property Commencer (Commencer Commencer Comm
[min]	counts*s		[ug/kg]	ip Name	
1.468 BB					
5,410 VP		8.90761e-4 7.95161e-4	199 11025	Hexane	
7.391 BB	The contract of the contract o	7:78810e-4	213:85088 211:28886	Benzene Toluene	
9.177 BV	2.71088e5	7.72092e-4	209.30524	Ethylben	zene
9.339 VV 9.475 VB		7.80008e-4		p-Xylene	meterina i mer petronistiki i i i Strenisti promonis Siring Maria
10.099 BV			209:33724 208:41059	m-Xylene	<u> </u>
10:393 VP	2.7643685	7.51880e-4	207.84678	- cumene - o-Xylene	
TALAN				A CONTRACTOR OF THE PARTY OF TH	

Results obtained with enhanced integral

335.

Injection Date : 7/31/98 3:52:06 PM Seq. Line : 5 Vial : : gc-14 pg 53 #5 Sample Name 2 Inj : : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M : 7/31/98 1:13:37 PM by bgp

Acq. Method

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 10:23:06 AM by bgp Last changed FID1 A, (0798-19B\005F0502.D) counts -50000 40000 30000 20000 8 10000 -12 min 8 10

External Standard Report

Signal Sorted By

8/3/98 10:05:25 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u> 	Name
1.468 5.410 7.390 9.176 9.338 9.475 10.098 10.394	VB BP BV VV VB BV	2.23464e5 2.68863e5 2.71154e5 2.71463e5 2.71011e5 2.69761e5 2.46940e5 2.76949e5	8.90761e-4 7.95162e-4 7.78811e-4 7.72089e-4 7.80007e-4 7.76939e-4 8.45572e-4 7.51876e-4			Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1671.62885 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

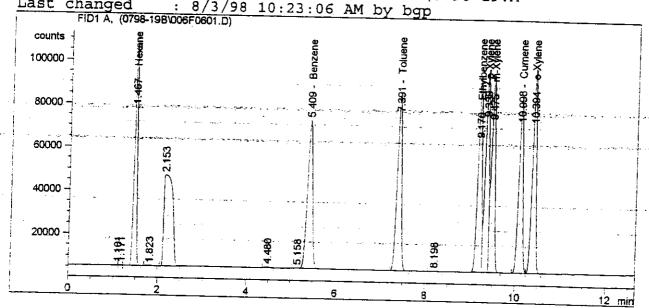
Injection Date : 7/31/98 4:09:19 PM Seq. Line : Sample Name : gc-14 pg 53 #6 Vial: 6 Acq. Operator : bgp Inj 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

Last changed : 7/31/98 1:13:37 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
1.467 5.409 7.391 9.176 9.339 9.475 10.098 10.394	BB BV VV VB BV	4.85568e5	8.90239e-4 7.94359e-4 7.77901e-4 7.71095e-4 7.79022e-4 7.75922e-4 8.44715e-4 7.50862e-4	389.85419 417.69611 413.21948 411.60028 414.59880 412.08225 410.16667 408.76811	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Totale .			the state of the s		The second of th

Totals : 3277.98588

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 76 337

Teller 8/3/98 10:25:24 AM bgp

Seq. Line : Injection Date : 7/31/98 4:26:32 PM Vial : Sample Name : gc-14 pg 53 #6 Acq. Operator : bgp 2 Inj:

Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M-

: 8/3/98 10:23:06 AM by bgp Last changed FID1 A, (0798-19B\006F0602.D) counts -100000 80000 60000 40000 20000 819 12 min

External Standard Report

Enterplane to the ex-

Sorted By

Signal 8/3/98 10:05:25 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.467 5.409 7.389 9.176 9.337 9.474 10.097	BP BV VV VB BV	4.38663e5 5.24947e5 5.29008e5 5.31411e5 5.29268e5 5.28669e5 4.83144e5 5.41735e5	8.90238e-4 7.94361e-4 7.77905e-4 7.71100e-4 7.79028e-4 7.75926e-4 8.44720e-4 7.50867e-4	390.51423 416.99741 411.51805 409.77137 412.31416 410.20822 408.12094 406.77122	िंद स्वकृष्टिकार - १८८१	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

3266.21560 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

Teller 8/3/98 10:25:36 AM bgp

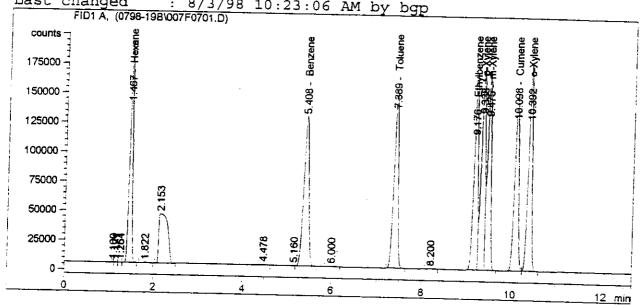
Page 1 of 2

Injection Date : 7/31/98 4:43:39 PM Seq. Line : Sample Name : gc-14 pg 53 #7 Vial : 7 Acq. Operator : bgp Inj : Ţ Inj Volume : 2 μ 1

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]	Gr	o Name
1.467 5.408 7.389 9.176 9.338 9.475 10.098 10.392	BB BV VV VB BV	8.12307e5 9.77077e5 9.86445e5 9.92289e5 9.91400e5 9.83926e5 9.03412e5 1.01189e6	8.89988e-4 7.93972e-4 7.77463e-4 7.70620e-4 7.78549e-4 7.75438e-4 8.44305e-4 7.50377e-4	722.94323 775.77160 766.92436 764.67767 771.85356 762.97398 762.75526 759.29978		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 6087.19944

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 339

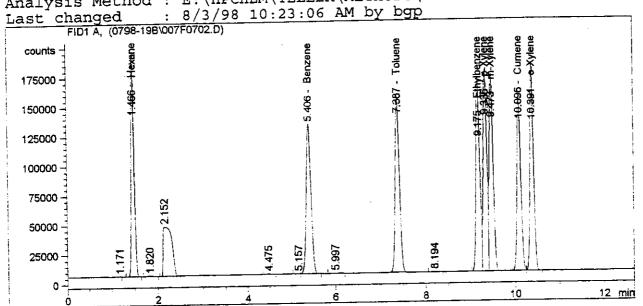
Seq. Line : 7 Injection Date : 7/31/98 5:01:16 PM : gc-14 pg 53 #7 7 Vial : Sample Name Inj : 2 : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S

: E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 7/31/98 1:13:37 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

Signal Sorted By

8/3/98 10:05:25 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grg	Name
1.466 5.406 7.387 9.175 9.336 9.473 10.096 10.391	VB BB BV VV VB BV	8.12124e5 9.77704e5 9.85694e5 9.89930e5 9.86868e5 9.82531e5 9.00901e5 1.00888e6	8.89988e-4 7.93972e-4 7.77463e-4 7.70621e-4 7.78551e-4 7.75439e-4 8.44306e-4 7.50379e-4	722.77997 776.26904 766.34121 762.86099 768.32757 761.89327 760.63672 757.04196		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

6076.15073 Totals:

Results obtained with enhanced integrator! 1 Warnings or Errors :

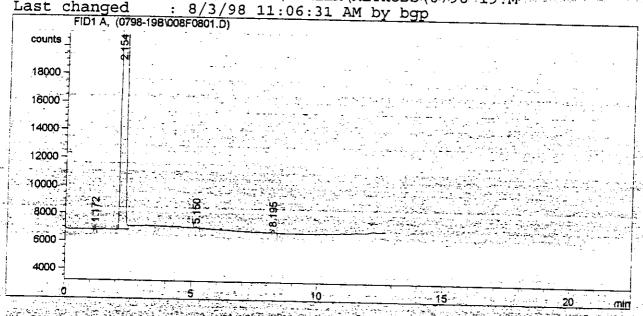
Warning: Calibration warnings (see calibration table listing)

Injection Date : 7/31/98 5:18:30 PM Sample Name : reagent blank Vial: Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ 1

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



Calib Data Modified 8/3/98 11:04:16 Multiplier - 1.0000 Dilution 1.0000

				and the second of the second s	100 mg 200 m 100 mg 200 mg
	ype Area.	Amt/Area	Amount G	rp Name	a state the said
[min]	counts*s		[ug/kq]	#BINGING	
			22		
1.467.		ranno de maria de la calega de l Calega de la calega			
5.409				Hexane	er en en en en en en en en en en en en en
7.390				Benzene	
9.176	and the second of the second o	ಕ್ ಕಟ್್ಡಿ ಈ ಭರ್ವ ಅವರ ಕಾರ್ಯಾಚರ್ಚರ್	The state of the property	Toluene	
9:338				Ethylbenzene	#+ .
		నా కాటు కాముంది. కాడుంది. కాలకు		p-Xylene	property of the second
9:474				m-Xylene	
10.097			A His organization of the second		ine in the second
10.393				Cumene?	* 5 ;
				O-Xylene	
Totals :	and the same of specific markets of				
	ార్ కొత్తుంది. ఈ కార్యమ్యాక్షుల్ 145, కార్ట్ కొండి 15 కి.మీ. శ్రీ ప్రమాత్రి కోండ్ గ్రామంలోని మహిరా కోరియి. ఈ సంగారం కంటే స్ట్		0.00000	and the second s	77 7 8 10.5

Results obtained with enhanced integrator! 2 Warnings or Errors :

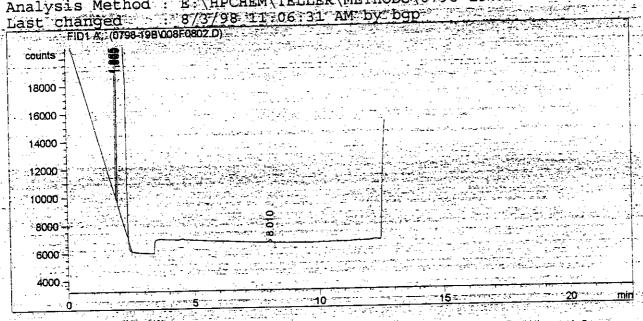
Warning: Calibration warnings (see calibration table listing) Warning: Calibrated compound(s) not found

Injection Date : 7/31/98 5:35:40 PM Seq. Line : Vial: Sample Name : reagent blank Inj : Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File 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



External Standard Report

Sorted By Signal

Calib Data Modified : 8/3/98 11:04:16 AM Multiplier : 1:0000: Dilution

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RetTime	Type Ar	11 中国政権では、1995年 - 11 日本 - 11		mount:::Gr g/kg]	Darame	受機を取ります。 And And Andrews (Andrews) Andrews (Andrews)
[min]	count	S*S		9/29		
1.467		TTTTTINITTT			-Hexane	
5.409					Benzene	
7.390			. The following the second control of the se		Toluene Ethylbenz	en e
9.176					p-Xylene	The second secon
9.338 9.474		The same of the sa	Taka Maria (1967) Pagada Araba (1967)		m-Xylene	ran in the state of the state o
10.097					Cumene	uit Af Tombel Carlos Ar
10:393					o-Xylene	
			والمستعدد المواجعة بالمارة	0.0000	ئىچىق دۇرىسىتىرى بىي. بورۇدى ياسىيىتىتى ئىچىق دۇرىسىتىرى بىي. بورۇدى ياسىيىتىت	اداد المحارجين الأراد المحارجين المحارجين الأراد

0.0000

Results obtained with enhanced integrator! 2 Warnings or Errors

Warning : Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

Teller 8/3/98 11:09:39 AM bgp

Page 1 of 2

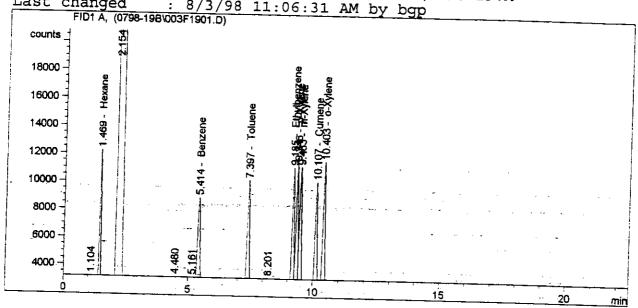
Injection Date : 8/1/98-4:34:57-AM Sample Name : gc-14 pg 53 #3 Seq. Line : 19 Acq. Operator : bgp

Inj : Inj Volume : 2 μl Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M : 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 FID1 A, (0798-198\003F1901.D) counts 1



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
9.346 9.483 10.107 10.403	BV VV VB BV	4.45540e4 5.36396e4 5.45539e4 5.48269e4 5.46690e4 5.46404e4 4.99349e4 5.59542e4	8.95046e-4 8.01748e-4 7.86190e-4 7.80082e-4 7.87946e-4 7.85077e-4 8.52454e-4 7.60029e-4	39.87785 43.00538 42.88974 42.76950 43.07628 42.89690 42.56717 42.52682	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
m = 1 - 3					•

Totals:

339.60964

Results obtained with enhanced integrator! 1 Warnings or Errors :

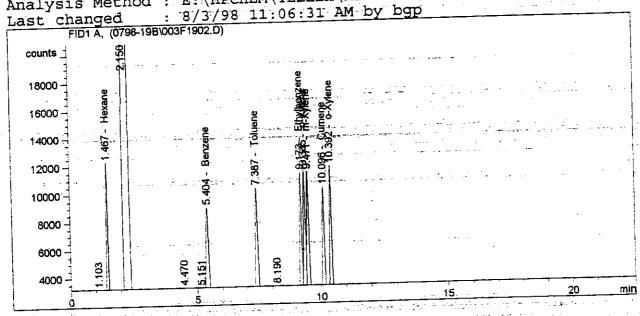
Warning: Calibration warnings (see calibration table listing) 343

Injection Date : 8/1/98.4:52:02 AM Vial : Sample Name : gc-14 pg 53 #3 Inj : Inj-Volume : 2-μl Acq. Operator : pab

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S E:\HPCHEM\TELLER\METHODS\0798-19B.M Sequence File

Acq. Method Last changed : 7/31/98 1:13:37 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

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

Signal 1: FID1 A,

ardinar -						
RetTime [min]	туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.467 5.404 7.387 9.173 9.335 9.471 10.096 10.392	VB BB BV VV VB BV	4.49065e4 5.41206e4 5.51148e4 5.54378e4 5.53478e4 5.51434e4 5.05195e4 5.66026e4	8.95004e-4 8.01674e-4 7.86096e-4 7.79971e-4 7.87824e-4 7.84984e-4 8.52354e-4 7.59912e-4	43.28669 43.06052	. Too s	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
				3 45 1 0 0 E 2		

343.10853 Totals :

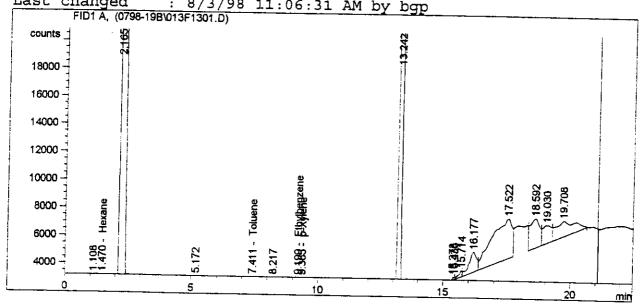
Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 344

Injection Date : 7/31/98 10:32:24 PM Seq. Line : Sample Name : T-M18-R3 Aa+AbFH Vial : 13 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ 1

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



Sorted By Signal. Calib. Data Modified: 8/3/98 17:04:16 AM Multiplier 1:0000 Dilution 1:0000 Signal 1:FID1 A.

RetTime	Time	7	The state of the s			
[min]	L _	counts*s	Amt/Area	Amount [ug/kg]	Grp Name	
1.470 5.409	BB	738:32959	9:19566e-4	6.78943e-1	Hexane	
7.411 9.199		1517.63257	8-30843e-4	1.26092	Benzene Toluene	.
9.365		1979 22876 1656 76697	8,2895Te-4 8,36380e-4	1,64068 5,49306e-1	Ethylber p∈Xylene	izene
10-097					m-Xylene Cumene	
FU:053					o-XyTene	

Results obtained with enhanced integrator! 2 Warnings or Errors

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

Seq. Line : Injection Date : 7/31/98 11:02:42 PM Vial : 13 Sample Name : T-M18-R3 Aa+AbFH 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ 1

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 FID1 A, (0798-19B\013F1302.D) counts _ 18000 16000 14000 12000 20.134 10000 -410 - Toluene 8000 6000 8.218 4000 20 min 5 10

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.476 5.409 7.410 9.199 9.362 9.474 10.097	BP BV	- 1592.62354	9.19566e-4 8.30843e-4 8.28951e-4 8.36380e-4	1.32322 1.69061		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

4.28963 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Page 1 of 2

Injection Date : 8/1/98 5:09:05 AM Seq. Line : Sample Name : gc-14 pg 53 #4 Vial : 4 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

Last changed : n:\nrcnem\reliance\nob\ : 7/31/98 1:13:37 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\004F2001.D) counts 📑 Benzene 18000 16000 14000 12000 10000 8000 6000 -184 4000 0 5 10 15 20 min

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 5.398 7.380 9.168 9.329 9.466 10.089 10.385	BP BV VV VB BV	9.41514e4 1.12904e5 1.15428e5 1.16960e5 1.16531e5 1.16662e5 1.06802e5 1.19525e5	8.92227e-4 7.97429e-4 7.81318e-4 7.74761e-4 7.82666e-4 7.79652e-4 8.47861e-4 7.54595e-4	84.00436 90.03271 90.18625 90.61615 91.20521 90.95574 90.55294 90.19261		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene

Totals : 717.74597

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 345

Injection Date : 8/1/98 5:26:07 AM 4 Vial : Sample Name : gc-14 pg 53 #4 2 Inj: : bgp Acq. Operator Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 11:06:31 AM by bgp Last changed FID1 A, (0798-19B\004F2002.D) counts 📑 18000 16000 14000 12000 10000 8000 6000 4000 min 15

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

ardinar -		,				
RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.460 5.393 7.375 9.162 9.325 9.461 10.085 10.380	VB BB BV VV VB BV	9.45197e4 1.13242e5 1.15861e5 1.17556e5 1.17438e5 1.17081e5 1.07353e5 1.20128e5	8.92217e-4 7.97417e-4 7.81302e-4 7.74738e-4 7.82630e-4 7.79634e-4 8.47840e-4 7.54571e-4			Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
				721 08560		

721.08560 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/3/98 8:46:21 PM Seq. Line :

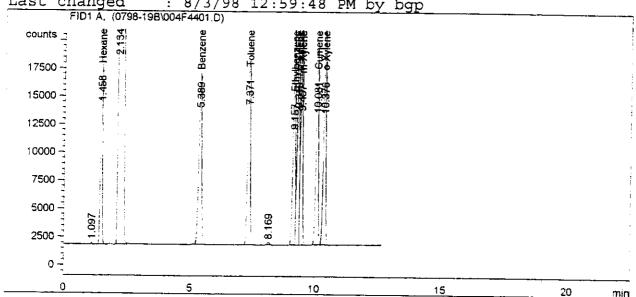
Sample Name : gc-14 pg 53 #4 Vial: 4 Acq. Operator : bgp Inj : 1

Inj Volume : 2 μ 1 Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

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 5.389 7.371 9.157 9.319 9.457 10.081 10.376	BP BB BV VV VP BV	9.77024e4 1.17667e5 1.18726e5 1.18916e5 1.18456e5 1.18531e5 1.08061e5 1.21298e5	8.92135e-4 7.97271e-4 7.81197e-4 7.74684e-4 7.82591e-4 7.79576e-4 8.47814e-4 7.54525e-4	87.16372 93.81246 92.74812 92.12230 92.70269 92.40364 91.61544 91.52250		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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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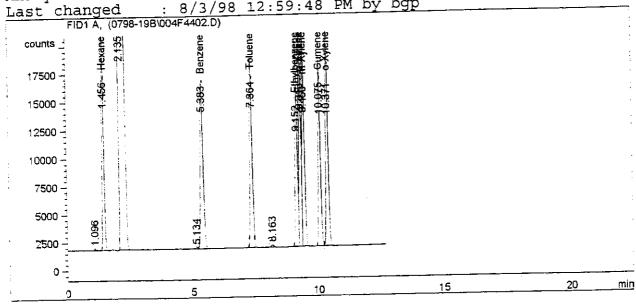
Seq. Line : Injection Date : 8/3/98 9:03:48 PM : gc-14 pg 53 #4 4 Vial : Sample Name 2 Inj : : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456 5.383 7.364 9.152 9.313 9.450 10.075 10.371	VB BB BV VV VB BV	9.52124e4 1.13881e5 1.13914e5 1.13832e5 1.13460e5 1.13273e5 1.03323e5 1.15914e5	8.92198e-4 7.97395e-4 7.81376e-4 7.74890e-4 7.82793e-4 7.79795e-4 8.47997e-4 7.54744e-4	88.32969	'	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

705.22117 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

348

Page 1 of 2

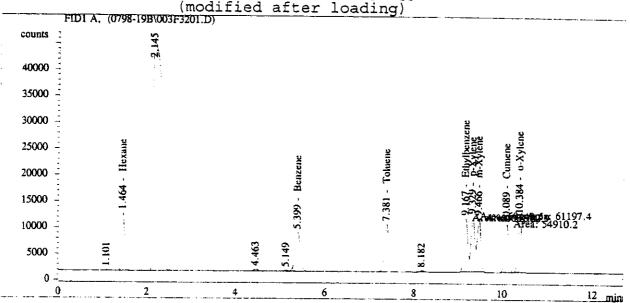
Injection Date : 8/2/98 8:59:11 PM Seq. Line : 32 Sample Name : gc-14 pg 53 #3 Vial : 3 Acq. Operator : bgp Inj : 1 Inj Volume : 2 µ1

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



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.464 5.399 7.381 9.167 9.329 9.466 10.089 10.384	VB BB MF MF FM MM	4.74541e4 5.72762e4 5.96777e4 6.00312e4 6.04495e4 5.89629e4 5.49102e4 6.11974e4	8.94719e-4 8.01225e-4 7.85397e-4 7.79214e-4 7.86995e-4 7.84329e-4 8.51672e-4 7.59154e-4	42.45803 45.89113 46.87069 46.77711 47.57348 46.24630 46.76548 46.45823]	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 369.04045

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

349

Teller 8/11/98 9:27:46 AM bgp

Seq. Line : Injection Date : 8/2/98 9:16:07 PM Sample Name : gc-14 pg 53 #3 Acq. Operator : bgp 3 Vial : 2 Inj : Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\METHODS\0798-19B.M Acg. Method

: 7/31/98 1:13:37 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/11/98 9:29:17 AM by bgp Last changed

(modified after loading) FID1 A, (0798-19B\003F3202.D) counts 40000 35000 -30000 25000 20000 5.395 -15000 10000 5000

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.464 5.395 7.376 9.163 9.324 9.460 10.085 10.381	VB BB MF MF FM MM	4.80388e4 5.77994e4 5.98757e4 6.04979e4 6.02223e4 5.92578e4 5.44072e4 6.05400e4	8.94657e-4 8.01155e-4 7.85369e-4 7.79143e-4 7.87029e-4 7.84282e-4 8.51745e-4 7.59255e-4	42.97826 46.30627 47.02449 47.13648 47.39669 46.47485 46.34106 45.96532	E T E N	Hexane Benzene Foluene Ethylbenzene p-Xylene m-Xylene Cumene p-Xylene

369.62342 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Calibration Table

Calib. Data Modified : 8/10/98 4:32:29 PM

Calculate : External Standard : Peak Area

Based on

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

Linear Connected Linear Curve Type Origin Weight

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] S		vl '	Amount [ug/kg]	Area	Amt/Area	Ref Grp Name
1.463	1	1 2 3	7.34000 16.28000 40.60000	1.93840e4	7.58794e-4 8.39868e-4 8.51612e-4	
		4 5 6	198.90000	9.41487e4 2.32427e5 4.52658e5	8.57155e-4 8.55754e-4 8.57159e-4	
5.391	1	1 2 3 4		1.12912e4 2.29720e4 5.71282e4 1.13452e5	6.95232e-4 7.58751e-4 7.59695e-4 7.61554e-4	Benzene
7.373	1	5 6 1 2	213.00000 416.00000 7.77000	2.80086e5	7.60481e-4 7.64066e-4 6.86000e-4 7.47272e-4	Toluene
0.161	-	3 4 5 6	85.50000 210.60000 411.00000	5.47336e5	7.46971e-4 7.46155e-4 7.44692e-4 7.50909e-4	
9.161 351	1	1 2		1.12851e4 2.30363e4	6.84973e-4 7.43609e-4	Ethylbenzene 90

Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M of 8/10/98 4:33:19 PM

RetTime [min] Sig		- /1 1	Area		Ref Grp Name
	- 3	42 70000	5.74747e4	1.429368-4	
	4	85.00000	1.14978e5	7.39275e-4	
	5 6	209.30000 409.00000	2.84062e5 5.49455e5	7.44375e-4	
9.323	1 1	7 79000	1.13100e4	6.88773e-4	p-Xylene
	2 3	43.00000	5.72964e4	7.50185e-4 7.50484e-4	
	4	85.70000	1.14837e5	7.46277e-4	
	5 6	412.00000	2.83267e5 5.48456e5	7.51200e-4	
9.460	1 1	7.74000	1.12483e4 2.29714e4	6.88105e-4 7.46582e-4	m-Xylene
	2 3	42.80000	5.73538e4	7.46246e-4	
	4 5	85.10000	1.14503e5 2.82924e5	7.43214e-4 7.40834e-4	
	6	409.00000	5.45918e5	7.49197e-4	Cumone
10.084	1 1 2	7.70000	1.03730e4 2.10490e4	7.42314e-4 8.10963e-4	Cumene
	3	42.60000	5.23159e4	8.14285e-4	
	4 5	84.70000 208.60000	1.04737e5 2.58683e5	8.06393e-4	
	6	407.00000	5.00240e5	8.13610e-4 6.64528e-4	
10.379	1 1 2	17.02000	5.00240e5 1.15420e4 2.35537e4	7.22604e-4	-
	3 4	42.40000	5.86601e4 1.17426e5	7.22808e-4 7.18752e-4	
		208.00000	2.89885e5	7.17527e-4	
	6	406.00000	5.60476e5	7.24384e-4	
3 Warning	s or	Errors :			
Warning :	Ove	rlapping pe	ak time wir	dows at 9.1	61 min, signal 1
	^·	winen ne	וואז מחד שבי	inows at 5.5	23 min, signal 1 084 min, signal 1
			Peak Sum	n Table	
=======================================	:====	_=========	:=========	:=========	=======================================

No Entries in table

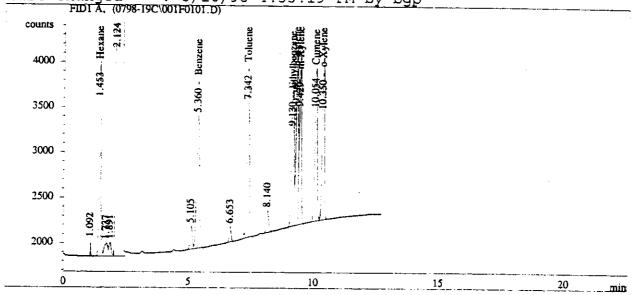
Injection Date : 8/4/98 5:10:41 PM Seq. Line : 1 Sample Name : gc-14 pg 53 #1 Vial : 1 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

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 5.360 7.342 9.130 9.292 9.429 10.054 10.350	VB BB BV VV VP BV	9766.34668 1.13277e4 1.13748e4 1.13538e4 1.13914e4 1.13131e4 1.04436e4 1.16209e4	7.84089e-4 7.15467e-4 7.05586e-4 7.05348e-4 7.10416e-4 7.07220e-4 7.67100e-4 6.84220e-4	7.65769 8.10456 8.02590 8.00841 8.09261 8.00083 8.01131 7.95124		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 63.85254

Results obtained with enhanced integrator!

1 Warnings or Errors:

Warning: Calibration warnings (see calibration table listing)

92

Seq. Line : Injection Date : 8/4/98 5:27:43 PM

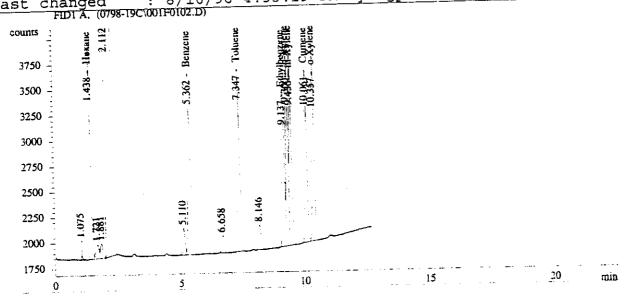
Vial: Sample Name : gc-14 pg 53 #1 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method Last changed : E:\nrcnem\\text{TELDDA\\mathbb{MEIRODS}}
: 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

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

J-						
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u> !	Name
1.438 5.362 7.347 9.137 9.300 9.436 10.061 10.357	BP BV VB BV	9580.13281 1.12548e4 1.12783e4 1.12164e4 1.12286e4 1.11835e4 1.03023e4 1.14632e4	7.82610e-4 7.15146e-4 7.05200e-4 7.04880e-4 7.09830e-4 7.06747e-4 7.66465e-4 6.83677e-4	7.49751 8.04879 7.95345 7.90621 7.97038 7.90391 7.89635 7.83710		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
				62 01277		

63.01371 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/4/98 5:44:45 PM Seq. Line : 2
Sample Name : gc-14 pg 53 #2 Vial : 2
Acq. Operator : bgp Inj : 1

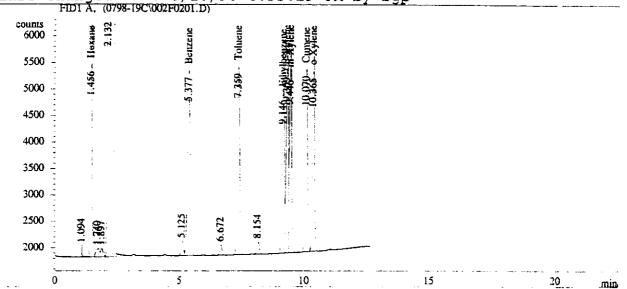
Inj Volume : 2 μ l

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]	Grg	o Name
1.456 5.377 7.359 9.146 9.309 9.446 10.070 10.365	VB BP BV VV VB BV	1.94564e4 2.30514e4 2.31373e4 2.31203e4 2.30779e4 2.30659e4 2.11355e4 2.36299e4	8.21982e-4 7.40642e-4 7.28494e-4 7.24766e-4 7.30892e-4 7.28020e-4 7.90498e-4 7.04287e-4	15.99285 17.07283 16.85538 16.75680 16.86745 16.79241 16.70755 16.64220	1 1	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 133.68747

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

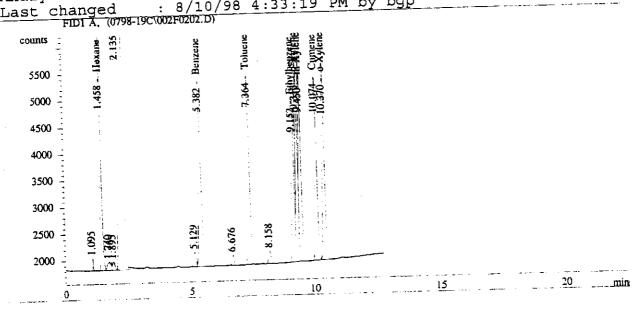
Seq. Line : Injection Date : 8/4/98 6:01:48 PM 2 Vial : Sample Name : gc-14 pg 53 #2 Acq. Operator : bgp Inj : Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

Signar	.: PIDI	11,				
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.458 5.382 7.364 9.152 9.313 9.450 10.074 10.370	VB BP BV VV VB BV	1.93115e4 2.28925e4 2.29771e4 2.29523e4 2.29641e4 2.28769e4 2.09626e4 2.34776e4	8.21696e-4 7.40473e-4 7.28339e-4 7.24629e-4 7.30793e-4 7.27854e-4 7.90309e-4 7.04161e-4	15.86821 16.95128 16.73513 16.63192 16.78200 16.65101 16.56693 16.53198		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
				120 71046		

132.71846 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

356 Teller 8/10/98 4:36:11 PM bgp

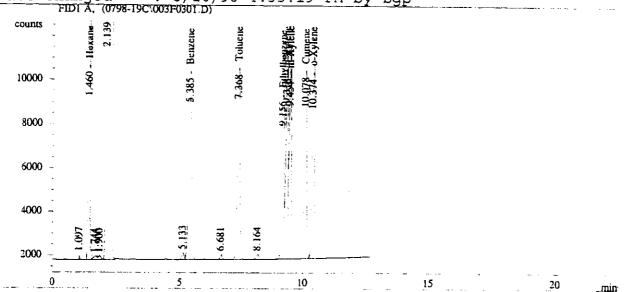
Injection Date : 8/4/98 6:19:01 PM Seq. Line : 3 Sample Name : gc-14 pg 53 #3 Vial : 3 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

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

ast 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]	Туре 	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.460 5.385 7.368 9.156 9.318 9.454 10.078 10.374	VB BP BV VV VB BV	4.77891e4 5.71940e4 5.74193e4 5.74099e4 5.72619e4 5.73043e4 5.22604e4 5.86130e4	8.44625e-4 7.55162e-4 7.41720e-4 7.35957e-4 7.42807e-4 7.39982e-4 8.04110e-4 7.15876e-4	40.36387 43.19074 42.58905 42.25125 42.53457 42.40416 42.02307 41.95963		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 337.31634

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

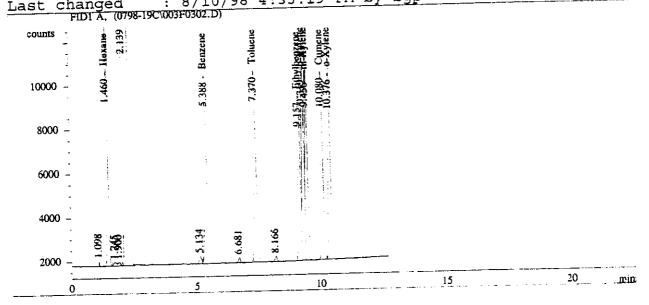
Seq. Line : Injection Date : 8/4/98 6:36:09 PM 3 Vial: : qc-14 pg 53 #3 Sample Name 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460 5.388 7.370 9.157 9.319 9.456 10.080	VB BB BV VV VB BV	4.75595e4 5.70623e4 5.74446e4 5.75394e4 5.73308e4 5.74032e4 5.23713e4 5.87073e4	8.44550e-4 7.55139e-4 7.41724e-4 7.35974e-4 7.42817e-4 7.39996e-4 8.04129e-4 7.15889e-4	40.16637 43.09000 42.60799 42.34755 42.58630 42.47814 42.11333 42.02791	, ,	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

337.41758 Totals :

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

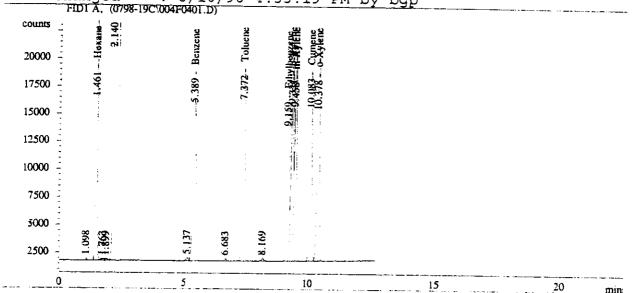
Injection Date : 8/4/98 6:53:16 PM Seq. Line : 4
Sample Name : gc-14 pg 53 #4 Vial : 4
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.461 5.389 7.372 9.159 9.321 9.458 10.083 10.378	VB BB BV VV VB BV	9.40295e4 1.13221e5 1.14201e5 1.14469e5 1.14312e5 1.14059e5 1.04220e5 1.16834e5	8.52271e-4 7.60013e-4 7.46158e-4 7.39719e-4 7.46822e-4 7.43992e-4 8.08718e-4 7.19777e-4	80.13861 86.04933 85.21218 84.67486 85.37055 84.85930 84.28492 84.09424		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 674.68398

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

359

98
Page 1 of 2

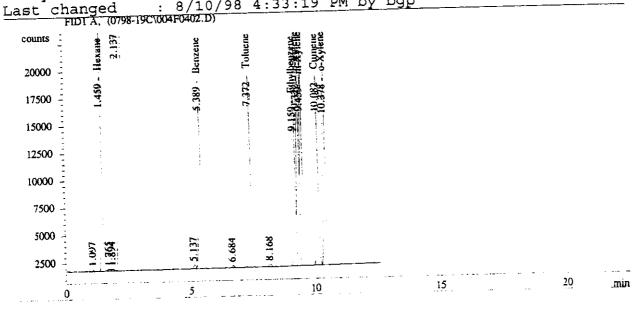
Seq. Line : Injection Date : 8/4/98 7:10:28 PM Vial : Sample Name : gc-14 pg 53 #4 Acq. Operator : bgp 2 Inj: Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 : Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.459 5.389 7.372 9.159 9.322 9.459 10.082 10.378	VB BP BV VV VB BV	9.42678e4 1.13684e5 1.14974e5 1.15486e5 1.15362e5 1.14946e5 1.05253e5 1.18018e5	8.52291e-4 7.60033e-4 7.46188e-4 7.39752e-4 7.46858e-4 7.44023e-4 8.08763e-4 7.19817e-4	85.52248 85.12493		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

679.72735 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

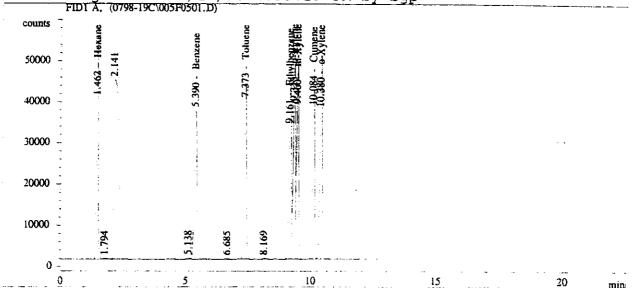
Injection Date : 8/4/98 7:27:34 PM Seq. Line : 5
Sample Name : gc-14 pg 53 #5 Vial : 5
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

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 5.390 7.373 9.161 9.323 9.460 10.084 10.380	VB BB BV VV VB BV	2.32817e5 2.80396e5 2.82960e5 2.84084e5 2.83107e5 2.82990e5 2.58695e5 2.89900e5	8.56982e-4 7.62966e-4 7.48835e-4 7.41978e-4 7.49224e-4 7.46409e-4 8.11486e-4 7.22122e-4	199.51974 213.93234 211.89053 210.78420 212.11038 211.22596 209.92757 209.34334		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 1678.73407

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

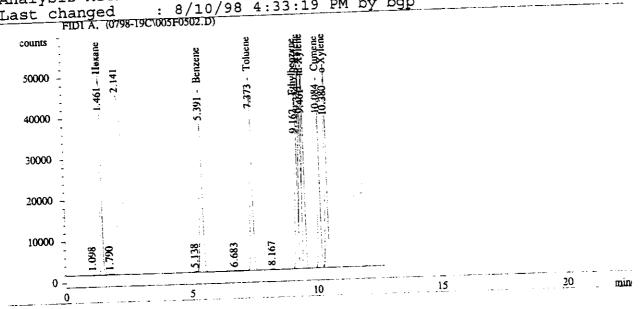
Seq. Line :

Injection Date : 8/4/98 7:44:40 PM Vial : Sample Name : gc-14 pg 53 #5 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M : 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

Signal

Sorted By 8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

Signal I	: PIDI	F-1				
RetTime [min]	туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.461 5.391 7.373 9.162 9.324 9.461 10.084 10.380	VB BB BV VV VB BV	2.32037e5 2.79776e5 2.82642e5 2.84041e5 2.83427e5 2.82859e5 2.58670e5 2.89869e5	8.56971e-4 7.62961e-4 7.48833e-4 7.41978e-4 7.49226e-4 7.46408e-4 8.11485e-4 7.22122e-4	198.84866 213.45857 211.65183 210.75197 212.35101 211.12820 209.90705 209.32068		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
		•		1677 41797		

1677.41797 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

362

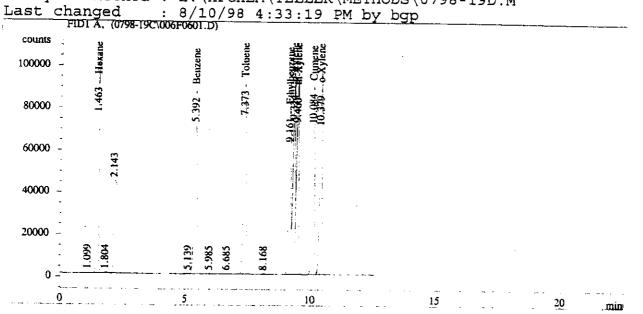
Injection Date : 8/4/98 8:01:47 PM Seq. Line : Sample Name : gc-14 pg 53 #6 Vial : 6 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

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

: 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]	Gr	Name
1.463 5.392 7.373 9.161 9.324 9.460 10.084 10.379	VB BB BV VV VB BV	4.51702e5 5.43694e5 5.46499e5 5.48540e5 5.47295e5 5.45232e5 4.99417e5 5.59526e5	8.58528e-4 7.63934e-4 7.49708e-4 7.42713e-4 7.50009e-4 7.47194e-4 8.12386e-4 7.22885e-4	387.79894 415.34663 409.71448 407.40779 410.47635 407.39376 405.71883 404.47246		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 3248.32924

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 343

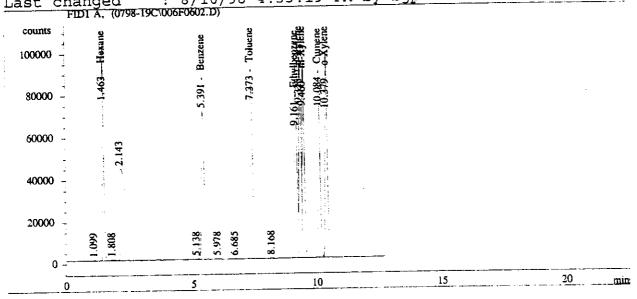
Seq. Line : Injection Date : 8/4/98 8:18:58 PM Vial: 6 : gc-14 pg 53 #6 Sample Name 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M Aca. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	name
1.463 5.391 7.373 9.161 9.323 9.460 10.084 10.379	VB BB BV VV VB BV	4.53614e5 5.45217e5 5.48174e5 5.50369e5 5.49617e5 5.46603e5 5.01063e5 5.61426e5	8.58535e-4 7.63937e-4 7.49711e-4 7.42716e-4 7.50013e-4 7.47196e-4 8.12389e-4 7.22887e-4	389.44396 416.51158 410.97214 408.76803 412.21955 408.41984 407.05816 405.84804		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

3259.24130 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

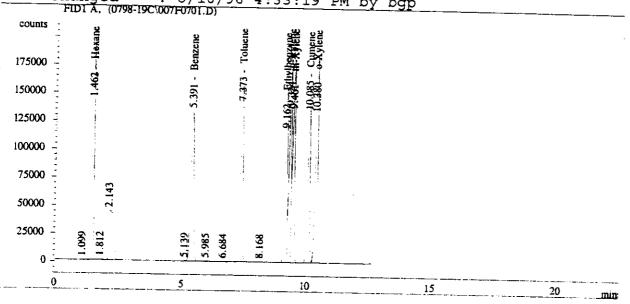
Injection Date : 8/4/98 8:36:06 PM Seq. Line : 7
Sample Name : gc-14 pg 53 #7 Vial : 7
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grg	o Name
1.462 5.391 7.373 9.162 9.324 9.461 10.085 10.380	VB BB BV VV VB	8.58600e5 1.03106e6 1.03703e6 1.04202e6 1.03930e6 1.03504e6 9.48559e5 1.06259e6	8.59308e-4 7.64422e-4 7.50152e-4 7.43087e-4 7.50408e-4 7.47595e-4 8.12844e-4 7.23273e-4	737.80146 788.16460 777.93240 774.31072 779.89849 773.78753 771.02980 768.54032		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 6171.46531

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

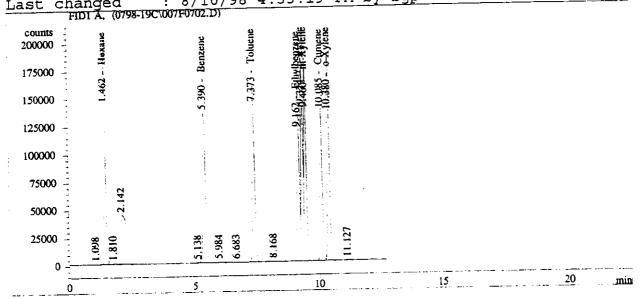
Injection Date : 8/4/98 8:53:17 PM Seq. Line : 7 Vial : : gc-14 pg 53 #7 Sample Name 2 Inj: Acq. Operator : pab Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.462 5.390 7.373 9.162 9.324 9.460 10.085 10.380	VB BV VV VB BV	8.67357e5 1.04386e6 1.05233e6 1.05790e6 1.05523e6 1.05110e6 9.63790e5 1.07980e6	8.59317e-4 7.64428e-4 7.50159e-4 7.43094e-4 7.50414e-4 7.47601e-4 8.12852e-4 7.23280e-4	785.80522 783.41833		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

6260.90659 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 366

Injection Date : 8/4/98 9:10:18 PM Seq. Line : Sample Name : reagent blank Vial: 8 Acq. Operator : bgp Inj : Inj Volume : 2 μ l 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 bop

<u> Lasc</u>	FIDI A.	(0798-19C\008F0801.D))	FM by bgb		
counts	<u>:</u>	139		=		
45000	-	7		13.221		
40000	= = = = = = = = = = = = = = = = = = = =					
35000				• •		
30000	<u>:</u>					
25000						
20000	-					
15000	1				<u>∞</u> •••	
10000	7			200	17.7	
5000	1.097		8.168	13.72		
. 0	-					
	0		10	15	20	min

External Standard Report

Sorted By

Signal 8/10/98 4:32:29 PM 1.0000 Calib. Data Modified :

Multiplier : Dilution 1.0000

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	name
1.463		-	-	-	1 1	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

Teller 8/10/98 4:38:19 PM bqp

Seq. Line :

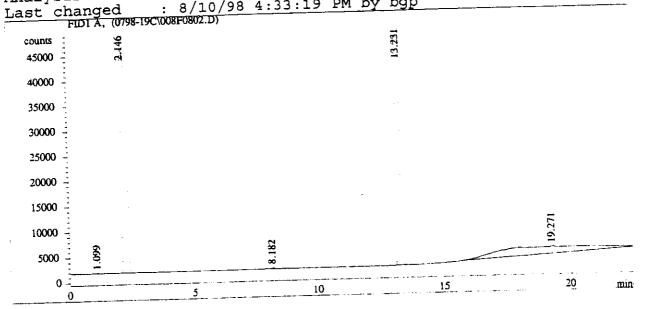
Injection Date : 8/4/98 9:40:22 PM 8 Vial : : reagent blank Sample Name 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 8/3/98 3:07:34 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 : Multiplier 1.0000 Dilution

Signal 1: FID1 A,

0-5					
RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
				_	Hexane
1.463		-	-	_	Benzene
5.391		-	-	•••	Toluene
7.373		_	_	-	Ethylbenzene
9.161		-	_	_	p-Xylene
9.323		-	_	_	m-Xylene
9.460		-	-	-	Cumene
10.084		-	_	_	o-Xylene
10.379					

0.00000 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

348 Teller 8/10/98 4:38:37 PM bgp Page 1 of 2

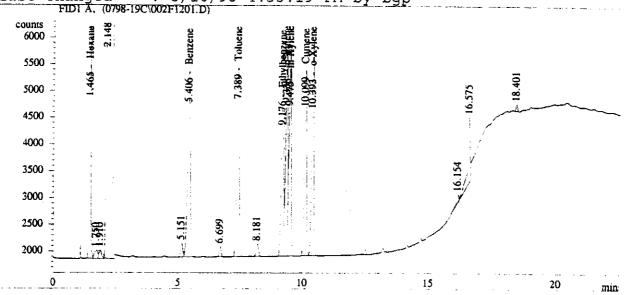
Injection Date : 8/5/98 1:10:00 AM Seq. Line : 12
Sample Name : gc-14 pg 53 #2 Vial : 2
Acq. Operator : bgp Inj : 1

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]	Туре !	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465 5.406 7.389 9.176 9.338 9.475 10.099 10.393	VP BV VV VB BV	1.92377e4 2.27607e4 2.29237e4 2.30050e4 2.29969e4 2.29607e4 2.10420e4 2.35487e4	8.21548e-4 7.40331e-4 7.28287e-4 7.24672e-4 7.30822e-4 7.27928e-4 7.90396e-4 7.04220e-4	15.80466 16.85048 16.69503 16.67105 16.80664 16.71375 16.63152 16.58347		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 132.75661

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 369

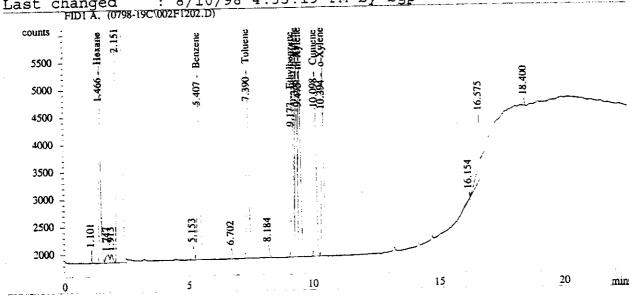
Seq. Line : : 8/5/98 1:40:02 AM Injection Date 2 Vial : qc-14 pg 53 #2 Sample Name 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.466 5.407 7.390 9.177 9.338 9.475 10.098 10.394	BB BV VV VB BV	1.87378e4 2.21512e4 2.23187e4 2.24116e4 2.23561e4 2.23166e4 2.04392e4 2.28810e4	8.20518e-4 7.39653e-4 7.27681e-4 7.24174e-4 7.30248e-4 7.27347e-4 7.89719e-4 7.03651e-4	15.37473 16.38417 16.24088 16.22990 16.32547 16.23189 16.14127 16.10023		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

129.02855 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

370

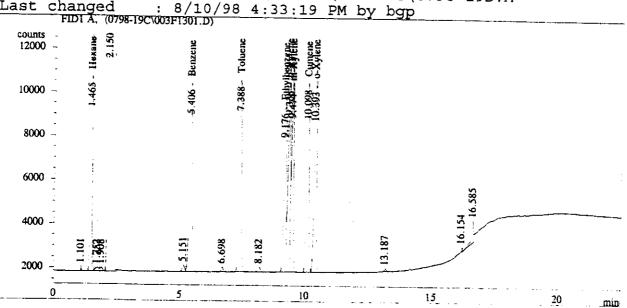
Injection Date : 8/5/98 2:09:53 AM Seq. Line : 13 Sample Name : gc-14 pg 53 #3 Vial : 3 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

Last changed : 8/3/98 3:07:34 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

Last changed



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 5.406 7.388 9.176 9.338 9.474 10.098 10.393	VB BB BV VV VB BV	4.73164e4 5.66121e4 5.73015e4 5.76857e4 5.75846e4 5.74559e4 5.25911e4 5.88886e4	8.44469e-4 7.55061e-4 7.41701e-4 7.35993e-4 7.42852e-4 7.40003e-4 8.04168e-4 7.15913e-4	39.95728 42.74560 42.50061 42.45628 42.77683 42.51755 42.29204 42.15913	; ; 1	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene

Totals : 337.40531

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 371

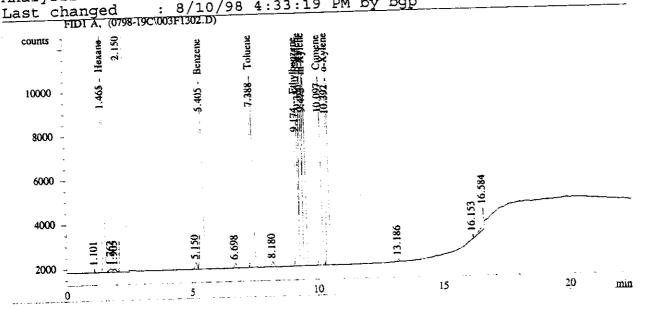
Seq. Line : Injection Date : 8/5/98 2:39:49 AM Vial : : gc-14 pg 53 #3 Sample Name 2 Inj : : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 8/3/98 3:07:34 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

019.141		•				
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.465 5.405 7.388 9.174 9.336 9.473 10.097	VB BB BV VV VB BV	4.69837e4 5.61973e4 5.68241e4 5.71784e4 5.70622e4 5.69874e4 5.21201e4 5.83977e4	8.44358e-4 7.54988e-4 7.41626e-4 7.35927e-4 7.42779e-4 7.39937e-4 8.04085e-4 7.15847e-4	39.67107 42.42826 42.14223 42.07912 42.38461 42.16712 41.90899 41.80383		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
				334.58522		

334.58522 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 372

Injection Date : 8/5/98 3:36:53 PM Seq. Line : 26
Sample Name : gc-14 pg 53 #1 Vial : 1
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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr	o Name
1.465 5.388 7.371 9.158 9.321 9.457 10.081	VB BB BV VV VB BB	9892.75000 1.17021e4 1.17243e4 1.18427e4 1.17606e4 1.17522e4 1.08340e4 1.20247e4	7.85061e-4 7.17051e-4 7.06929e-4 7.06923e-4 7.11686e-4 7.08745e-4 7.68766e-4 6.85546e-4	7.76642 8.39096 8.28823 8.37186 8.36987 8.32933 8.32882 8.24348		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 66.08898

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 373

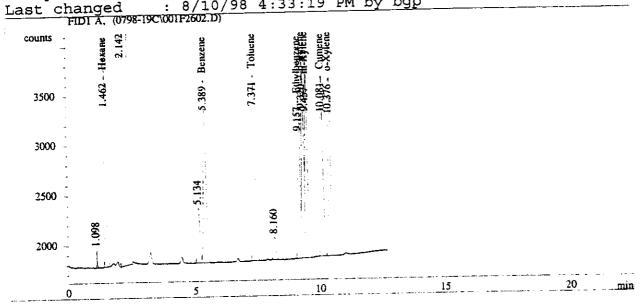
Seq. Line : 26 Injection Date : 8/5/98 3:53:57 PM 1 Vial : : gc-14 pg 53 #1 Sample Name 2 Inj: : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area	Amt/Area	Amount [ug/kg]	Grp 	Name
1.462 E 5.389 V 7.371 E 9.157 E 9.320 V 9.457 V 10.081 E	/B 3B 3V /V /B 3V	_,	7.86648e-4 7.18029e-4 7.07901e-4 7.07541e-4 7.12506e-4 7.09610e-4 7.69809e-4 6.86495e-4	7.94999 8.57749 8.48834 8.52309 8.55882 8.52717 8.53981 8.46530	'	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

67.63002 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 374

: 8/5/98 4:10:57 PM Injection Date Seq. Line : Sample Name : gc-14 pg 53 #2 Vial: 2 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ 1 Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M : 8/3/98 3:08:36 PM by bgp Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M : 8/10/98 4:33:19 PM by bgp Last changed

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 5.387 7.369 9.156 9.319 9.455 10.079 10.375	VB BB BV VV VB BV	1.96048e4 2.34057e4 2.35130e4 2.35986e4 2.36144e4 2.35333e4 2.15492e4 2.41302e4	8.22271e-4 7.41010e-4 7.28848e-4 7.25146e-4 7.31345e-4 7.28417e-4 7.90937e-4 7.04689e-4	16.12050 17.34382 17.13742 17.11246 17.27028 17.14207 17.04408 17.00432		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 136.17496

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

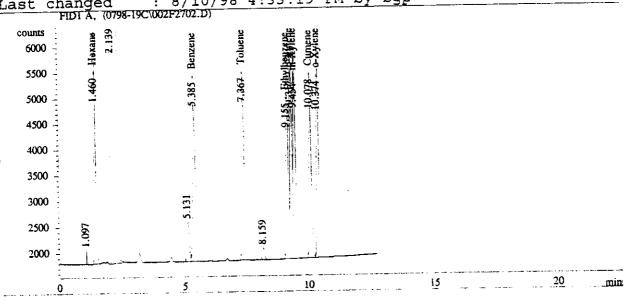
Seq. Line : 27 Injection Date : 8/5/98 4:27:55 PM Acq. Operator : bqp 4:27:55 Vial : Inj : 2 Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460 5.385 7.367 9.155 9.317 9.454 10.078 10.374	VB BB BV VV VB BV	1.96589e4 2.35329e4 2.37342e4 2.38620e4 2.38921e4 2.38308e4 2.18431e4 2.44331e4	8.22376e-4 7.41139e-4 7.29051e-4 7.25348e-4 7.31572e-4 7.28662e-4 7.91238e-4 7.04925e-4	16.16696 17.44118 17.30346 17.30825 17.47876 17.36458 17.28313 17.22352	l f	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

137.56984 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

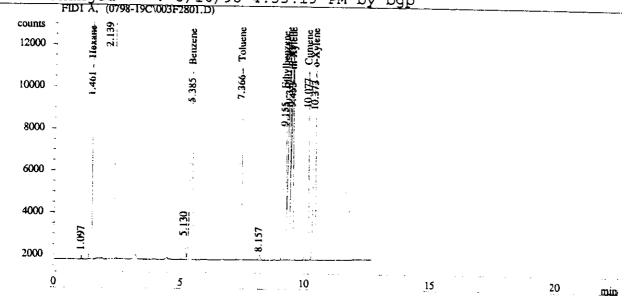
Injection Date : 8/5/98 4:45:27 PM Seq. Line : 28
Sample Name : gc-14 pg 53 #3 Vial : 3
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.461 5.385 7.366 9.155 9.317 9.453 10.077 10.373	VP BB BV VV VB BV	4.94909e4 5.94979e4 5.99434e4 6.01167e4 6.00323e4 5.99071e4 5.47831e4 6.13553e4	8.45159e-4 7.55542e-4 7.42095e-4 7.36297e-4 7.43178e-4 7.40332e-4 8.04535e-4 7.16226e-4	41.82766 44.95313 44.48376 44.26373 44.61470 44.35114 44.07496 43.94430		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 352.51337

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

377

116 Page 1 of 2

Injection Date : 8/5/98 5:02:54 PM Seq. Line : 28

Sample Name : gc-14 pg 53 #3 Vial : 3

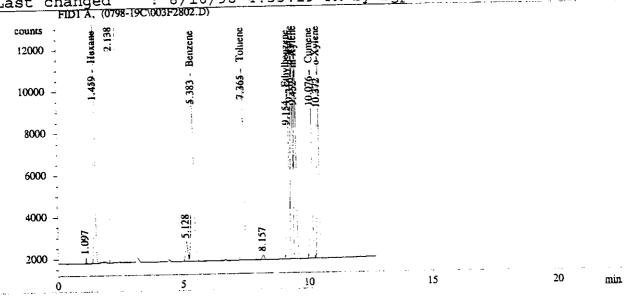
Acq. Operator : bgp Inj Volume : 2 µl

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459 5.383 7.365 9.154 9.316 9.452 10.076 10.372	VB BB BV VV VB BV	4.93526e4 5.94520e4 6.00325e4 6.02789e4 6.02093e4 6.00765e4 5.50062e4 6.16074e4	8.45117e-4 7.55534e-4 7.42108e-4 7.36316e-4 7.43201e-4 7.40354e-4 8.04571e-4 7.16257e-4	41.70870 44.91803 44.55063 44.38435 44.74761 44.47789 44.25640 44.12672		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 353.17033

Results obtained with enhanced integrator!

1 Warnings or Errors:

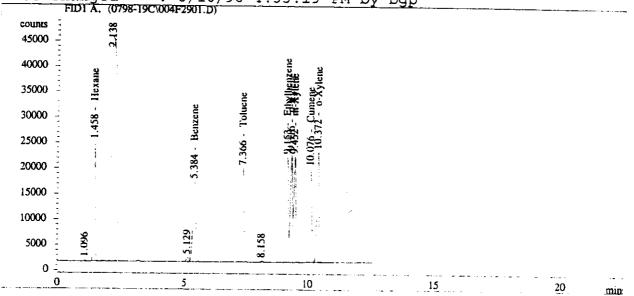
Injection Date : 8/5/98 5:19:54 PM Seq. Line : 29
Sample Name : gc-14 pg 53 #4 Vial : 4
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

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]	Gr	Name
1.458 5.384 7.366 9.153 9.316 9.452 10.076 10.372	VB BB BV VV VB BV	1.00341e5 1.20798e5 1.22055e5 1.22763e5 1.22584e5 1.22184e5 1.11941e5 1.25361e5	8.52768e-4 7.60324e-4 7.46447e-4 7.39974e-4 7.47093e-4 7.44261e-4 8.09038e-4 7.20045e-4	85.56799 91.84564 91.10732 90.84131 91.58164 90.93695 90.56470 90.26525		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 722.71081

Results obtained with enhanced integrator!
1 Warnings or Errors :

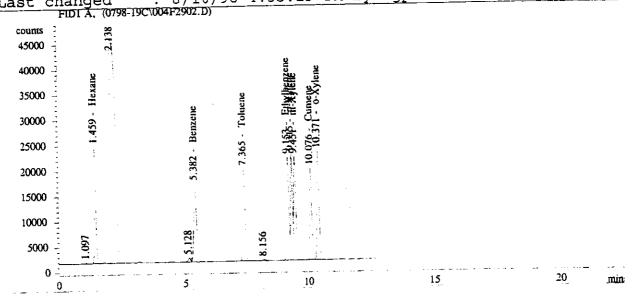
29 Seq. Line : Injection Date : 8/5/98 5:37:21 PM 4 Vial: : gc-14 pg 53 #4 Sample Name Inj: : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459 5.382 7.365 9.153 9.315 9.451 10.076 10.371	VB BB BV VV VB BV	1.00275e5 1.20464e5 1.21396e5 1.21982e5 1.21783e5 1.21523e5 1.11223e5 1.24561e5	8.52763e-4 7.60311e-4 7.46424e-4 7.39952e-4 7.47069e-4 7.44241e-4 8.09010e-4 7.20021e-4	85.51103 91.58992 90.61259 90.26043 90.98017 90.44265 89.98031 89.68640	!!!	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

719.06352 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Injection Date : 8/5/98 5:54:26 PM Seq. Line : Sample Name : gc-14 pg 53 #5 Vial : 5 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method Last changed : E:\nrcnbm\\Ibbba\\mathred{method}
: 8/3/98 3:08:36 PM by bgp Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M Last changed : 8/10, FIDI A. (0798-19C\005F3001.D) : 8/10/98 4:33:19 PM by bgp

Sound - 10000

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 5.382 7.364 9.152 9.315 9.452 10.075 10.371	VB BB BV VV VB BV	2.40122e5 2.89426e5 2.92052e5 2.93213e5 2.92461e5 2.92304e5 2.67238e5 2.99443e5	8.57079e-4 7.63028e-4 7.48891e-4 7.42026e-4 7.49276e-4 7.46461e-4 8.11545e-4 7.22172e-4	205.80309 220.84041 218.71496 217.57124 219.13377 218.19350 216.87590 216.24938		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 1733.38226

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

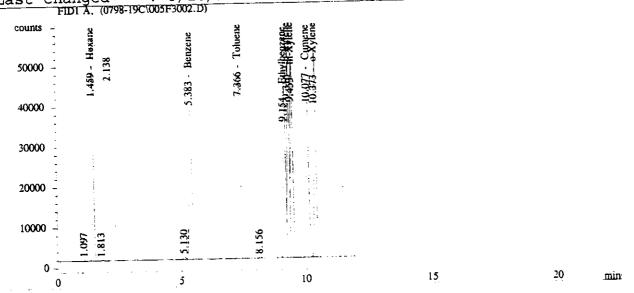
Seq. Line : 30 Injection Date : 8/5/98 6:11:30 PM 5 Vial : : gc-14 pg 53 #5 Sample Name 2 Inj: : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459 5.383 7.366 9.154 9.316 9.453 10.077 10.373	VB BB BV VV VB BV	2.40923e5 2.90051e5 2.92662e5 2.94040e5 2.93792e5 2.92696e5 2.68347e5 3.00419e5	8.57089e-4 7.63032e-4 7.48895e-4 7.42030e-4 7.49283e-4 7.46463e-4 8.11553e-4 7.22177e-4	206.49285 221.31830 219.17269 218.18651 220.13320 218.48663 217.77803 216.95601		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1738.52424 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

```
: 8/5/98 6:28:36 PM
Injection Date
                                                       Seq. Line :
Sample Name
                  : gc-14 pg 53 #6
                                                            Vial:
                                                                      6
Acq. Operator
                  : bgp
                                                             Inj :
                                                                      1
                                                     Inj Volume : 2 \mul
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
       FID1 A, (0798-19C\006F3101.D)
  counts
 100000
  80000
  60000
 40000
 20000
    0 -
                                                               20
```

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459 5.384 7.366 9.155 9.317 9.453 10.078 10.373	VB BB BV VV VB BV	4.78606e5 5.76680e5 5.82751e5 5.86478e5 5.85912e5 5.83143e5 5.35052e5 5.98997e5	8.58621e-4 7.63993e-4 7.49767e-4 7.42764e-4 7.50065e-4 7.47249e-4 8.12450e-4 7.22939e-4	410.94134 440.57945 436.92713 435.61528 439.47168 435.75264 434.70288 433.03813		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 3467.02853

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 383

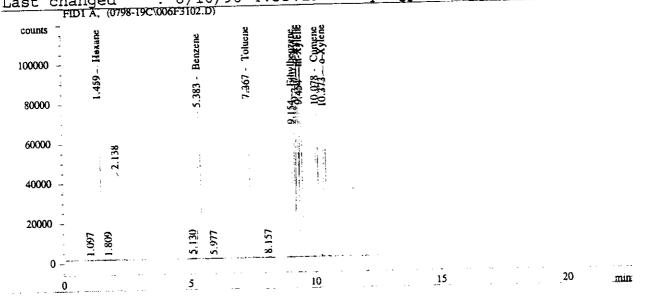
Seq. Line : Injection Date : 8/5/98 6:45:39 PM 31 6 Sample Name : gc-14 pg 53 #6 Acq. Operator : bgp Vial : 2 Inj:Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method Last changed : 8/3/98 3:08:36 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459 5.383 7.367 9.154 9.317 9.454 10.078	BB BV VV VB BV	4.80723e5 5.77425e5 5.80793e5 5.83186e5 5.81349e5 5.79740e5 5.30790e5 5.94669e5	8.58628e-4 7.63995e-4 7.49764e-4 7.42760e-4 7.50059e-4 7.47244e-4 8.12443e-4 7.22933e-4	412.76189 441.14983 435.45779 433.16706 436.04611 433.20733 431.23688 429.90611		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

3452.93302 Totals :

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 Seq. Line : Sample Name : gc-14 pg 53 #7 Vial: 7 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File 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 hanged : 8/10/98 4:33:19 PM by bgp FIDI A, (0798-19C\007F3201.D) Last changed counts 2.150 a But 1997 His 200000 175000 150000 125000 100000 75000 50000 25000 0

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]	Gr	o Name
1.460 5.383 7.366 9.156 9.318 9.455 10.079 10.374	BB BV VV VB BV	9.15150e5 1.10075e6 1.11061e6 1.11818e6 1.11521e6 1.11194e6 1.02031e6 1.14142e6	8.59361e-4 7.64456e-4 7.50185e-4 7.43116e-4 7.50438e-4 7.47625e-4 8.12879e-4 7.23303e-4	786.44437 841.47744 833.16451 830.93727 836.89699 831.31312 829.38751 825.59503		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 6615.21624

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

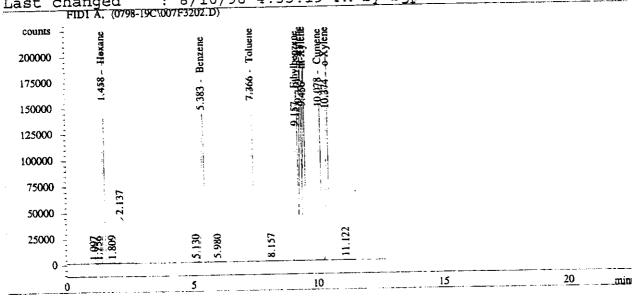
32 Injection Date : 8/5/98 7:20:16 PM Seq. Line : 7 Vial : : gc-14 pg 53 #7 Sample Name 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

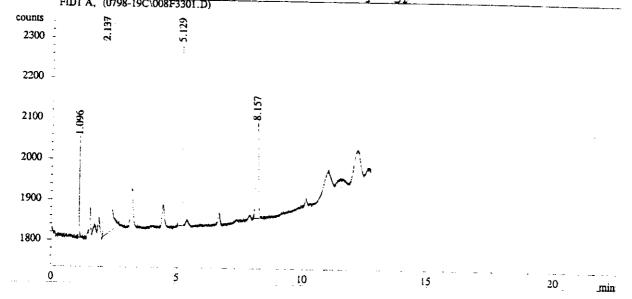
Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u> 	Name
1.458 5.383 7.366 9.157 9.319 9.456 10.078	BB BV VB BV	9.16961e5 1.10659e6 1.12023e6 1.13027e6 1.12876e6 1.12249e6 1.03201e6 1.15395e6	8.59363e-4 7.64459e-4 7.50188e-4 7.43120e-4 7.50443e-4 7.47629e-4 8.12885e-4 7.23307e-4	788.00214 845.94169 840.38516 839.92771 847.06971 839.20411 838.90201 834.65808	1 1	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

6674.09060 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Injection Date : 8/5/98 7:37:22 PM Seq. Line : Sample Name : reagent blank Vial : 8 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l 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 hanged : 8/10/98 4:33:19 PM by bgp counts 2300



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.463		_				TT
5.391		-	_	-		Hexane Benzene
7.373		-	-	-		Toluene
9.161		-	~	-		Ethylbenzene
9.323			-	-		p-Xylene
9.460 10.084		-	-	-		m-Xylene
10.004		-		-		Cumene
10.375		-	~	-		o-Xylene

Totals : 0.00000

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing).

Teller 8/10/98 4:49:08 PM bgp

Warning: Calibrated compound(s) not found

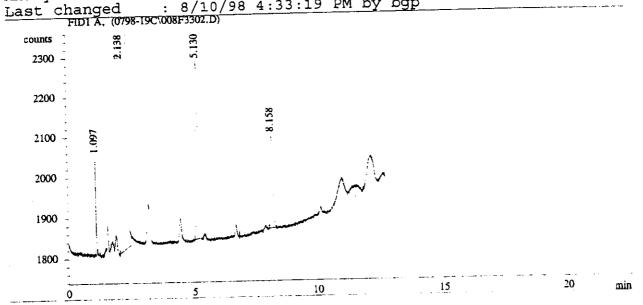
Seq. Line : Injection Date : 8/5/98 7:54:51 PM 8 Vial : : reagent blank: bgp Sample Name 2 Inj: Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
			-	<u>-</u>	Hexane
1.463 5.391		_	-	-	Benzene
7.373		-		-	Toluene
9.161		-	-	-	Ethylbenzene
9.323		-	-	-	p-Xylene m-Xylene
9.460		-	-	-	Cumene
10.084		-	-	-	o-Xylene
10.379			-		- 4

0.00000 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

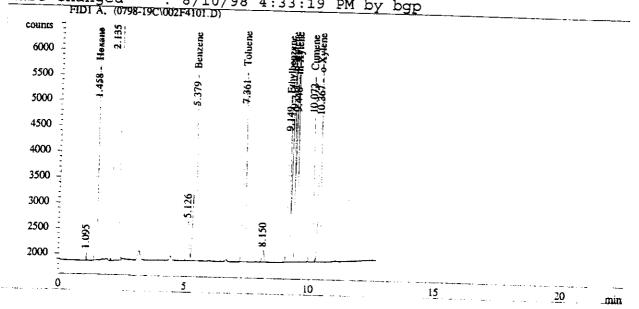
Injection Date : 8/6/98 2:46:09 AM Seq. Line : Sample Name : gc-14 pg 53 #2 41 Vial: Acq. Operator 2 : bgp Inj : 1

Inj Volume : 2 μ l 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

: 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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.458 5.379 7.361 9.149 9.311 9.448 10.072 10.367	VP BB BV VV VB BV	2.40242e4 2.20226e4	8.22651e-4 7.41263e-4 7.29217e-4 7.25528e-4 7.31753e-4 7.28818e-4 7.91418e-4 7.05071e-4	16.29107 17.53549 17.44174 17.48546 17.64856 17.50927 17.42909 17.36227		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Total -						_

Totals : 138.70295

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing) 100

389

Teller 8/10/98 4:52:42 PM bgp

Seq. Line : 41 Injection Date : 8/6/98 3:02:56 AM

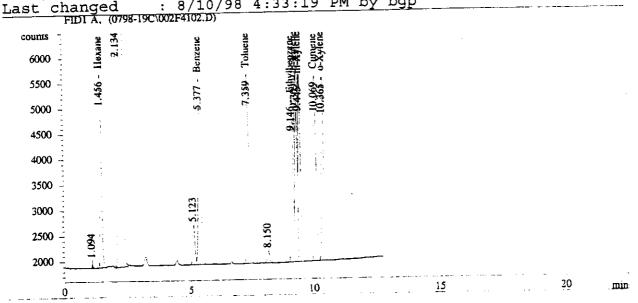
Vial: 2 : gc-14 pg 53 #2 Sample Name 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456 5.377 7.359 9.146 9.309 9.445 10.069 10.365	VP BB BV VV VB BV	2.00435e4 2.39464e4 2.41049e4 2.42570e4 2.42205e4 2.42138e4 2.21757e4 2.47956e4	8.23101e-4 7.41551e-4 7.29383e-4 7.25644e-4 7.31834e-4 7.28969e-4 7.91570e-4 7.05200e-4	16.49779 17.75746 17.58170 17.60196 17.72541 17.65107 17.55365 17.48588		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

139.85492 Totals:

Results obtained with enhanced integrator! 1 Warnings or Errors :

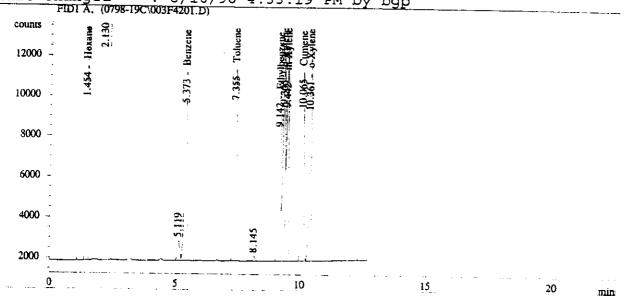
Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/6/98 3:20:15 AM Seq. Line : Sample Name : gc-14 pg 53 #3 Vial : 3 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Acq. Method : E:\HPCHEM\TELLER\METHODS Last changed : 8/3/98 3:08:36 PM by bgp Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



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]	Gr	o Name
1.454 5.373 7.355 9.142 9.305 9.442 10.065 10.361	VB BB BV VV VB BV	5.07974e4 6.11546e4 6.20564e4 6.25570e4 6.24251e4 6.23966e4 5.70634e4 6.39282e4	8.45545e-4 7.55797e-4 7.42387e-4 7.36578e-4 7.43472e-4 7.40640e-4 8.04888e-4 7.16527e-4	42.95150 46.22047 46.06985 46.07809 46.41135 46.21342 45.92965 45.80631		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 365.68064

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 391

1-0

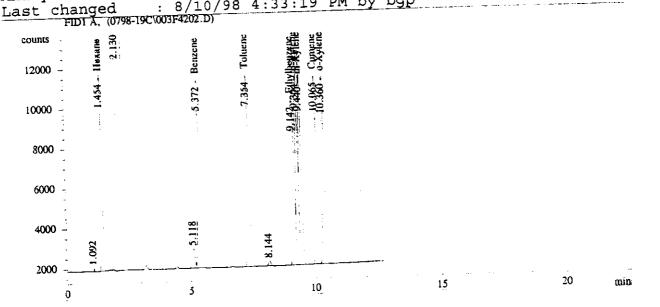
Seq. Line : Injection Date : 8/6/98 3:37:03 AM 3 Vial : Sample Name : gc-14 pg 53 #3 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method Last changed : 8/3/98 3:08:36 PM by bgp

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.454 5.372 7.354 9.142 9.304 9.440 10.065	VB BB BV VV VB BV	5.09829e4 6.14342e4 6.24129e4 6.29460e4 6.29851e4 6.27251e4 5.75052e4 6.43890e4	8.45599e-4 7.55839e-4 7.42434e-4 7.36621e-4 7.43538e-4 7.40678e-4 8.04953e-4 7.16579e-4	46.36732 46.83184 46.45915 46.28893		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

367.96986 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

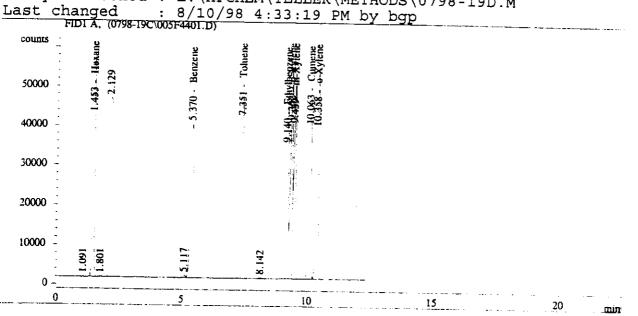
Injection Date : 8/6/98 4:27:29 AM Seq. Line : Sample Name : gc-14 pg 53 #5 Vial : 5 Acq. Operator : bgp Inj : 1

Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

Last changed : 8/3/98 3:08:36 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr) Name
1.453 5.370 7.351 9.140 9.302 9.439 10.063 10.358	VB BB BV VV VB BV	2.50274e5 3.00913e5 3.04919e5 3.07313e5 3.06895e5 3.05877e5 2.80247e5 3.14063e5	8.57204e-4 7.63102e-4 7.48965e-4 7.42093e-4 7.49350e-4 7.46531e-4 8.11629e-4 7.22244e-4	214.53571 229.62719 228.37346 228.05477 229.97146 228.34691 227.45668 226.82992		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 1813.19610

Results obtained with enhanced integrator! 1 Warnings or Errors :

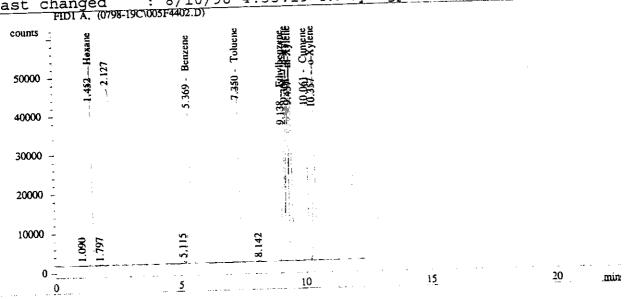
Seq. Line : Injection Date : 8/6/98 4:44:17 AM

5 Vial : Sample Name : gc-14 pg 53 #5 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ l

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

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.452 5.369 7.350 9.138 9.301 9.437 10.061 10.357	BB BV VV VB BV	2.50300e5 3.01311e5 3.05927e5 3.08694e5 3.08005e5 3.07228e5 2.81479e5 3.15449e5	8.57205e-4 7.63105e-4 7.48971e-4 7.42100e-4 7.49355e-4 7.46538e-4 8.11637e-4 7.22250e-4	214.55852 229.93167 229.13046 229.08185 230.80493 229.35758 228.45903 227.83289		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1819.15693 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/6/98 11:23:44 AM Seq. Line : Sample Name : gc-14 pg 53 #3 Vial : 3 Acq. Operator : bgp Inj : Inj Volume : 2 μ 1 Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method Acq. Method : E:\HPCHEM\TELLEK\METHODS Last changed : 8/3/98 3:08:36 PM by bgp Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M Last changed : 8/10, FID1 A, (0798-19C\003F5301.D) : 8/10/98 4:33:19 PM by bgp counts 5.381 · Benzene 12000 10000 8000 6000 4000 153 2000 min

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]	Grr	Name
1.462 5.381 7.364 9.153 9.315 9.452 10.075 10.371	VB BB BV VV VB BV	4.99256e4 6.01662e4 6.15714e4 6.23263e4 6.23330e4 6.21256e4 5.69599e4 6.37333e4	8.45290e-4 7.55646e-4 7.42322e-4 7.36552e-4 7.43461e-4 7.40607e-4 8.04872e-4 7.16505e-4	42.20164 45.46440 45.70580 45.90661 46.34222 46.01065 45.84548 45.66527		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 363.14206

Results obtained with enhanced integrator!

1 Warnings or Errors:

Warning: Calibration warnings (see calibration table listing)

Seq. Line : Injection Date : 8/6/98 11:40:59 AM 3 Vial : Sample Name : gc-14 pg 53 #3 2 Inj :

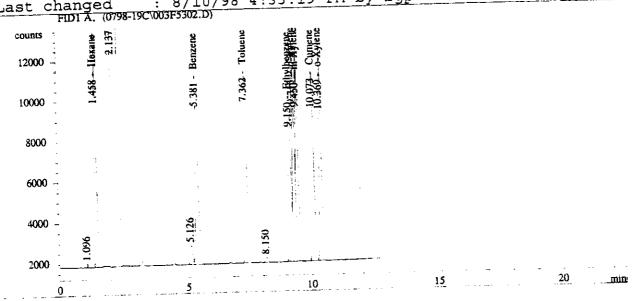
: bgp Acq. Operator Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method Last changed : 8/3/98 3:08:36 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.458 5.381 7.362 9.150 9.313 9.450 10.073 10.369	VP BB BV VV VB BV	5.04413e4 6.07557e4 6.19534e4 6.25815e4 6.25698e4 6.23963e4 5.71435e4 6.39645e4	8.45442e-4 7.55737e-4 7.42373e-4 7.36581e-4 7.43489e-4 7.40640e-4 8.04899e-4 7.16531e-4	45.99478		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

365,20993 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 396

Page 1 of 2

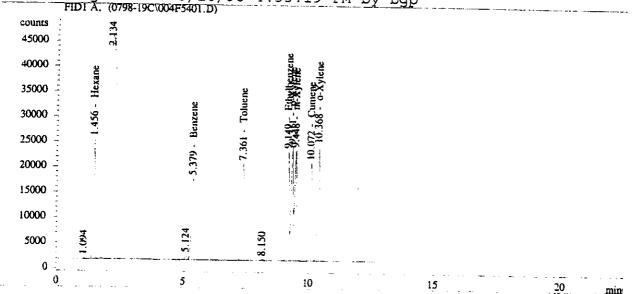
Injection Date : 8/6/98 11:57:57 AM Seq. Line : 54
Sample Name : gc-14 pg 53 #4 Vial : 4
Acq. Operator : bgp Inj : 1

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]	Gr _I	o Name
1.456 5.379 7.361 9.149 9.311 9.448 10.072 10.368	VB BB BV VV VB BV	1.03187e5 1.24076e5 1.27499e5 1.29652e5 1.29775e5 1.29420e5 1.18734e5 1.32749e5	8.52972e-4 7.60447e-4 7.46626e-4 7.40162e-4 7.47302e-4 7.44472e-4 8.09284e-4 7.20248e-4	88.01538 94.35345 95.19395 95.96347 96.98086 96.34962 96.08996 95.61250		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 758.55918

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 397

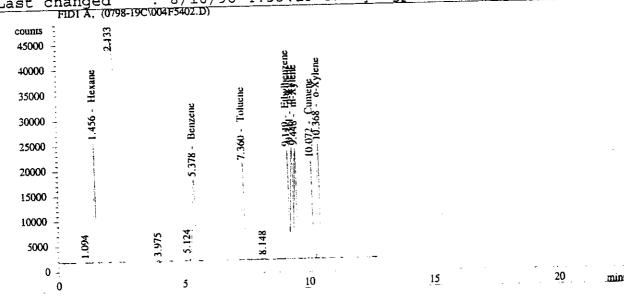
Seq. Line : 54 Injection Date : 8/6/98 12:14:49 PM : gc-14 pg 53 #4 : ban 4 Vial : Sample Name 2 Inj: : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>p</u>	Name
1.456 5.378 7.360 9.149 9.311 9.448 10.072	VB BB BV VV VB BV	1.03395e5 1.24627e5 1.28481e5 1.30819e5 1.30931e5 1.30497e5 1.19883e5 1.33989e5	8.52987e-4 7.60467e-4 7.46657e-4 7.40192e-4 7.47333e-4 7.44502e-4 8.09323e-4 7.20280e-4	88.19448 94.77463 95.93112 96.83092 97.84923 97.15542 97.02372 96.50965		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

764.26917 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

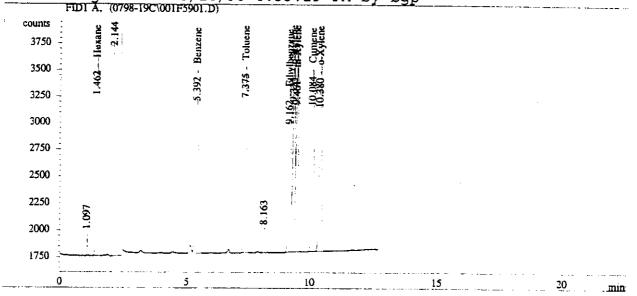
Injection Date : 8/6/98 5:00:57 PM Seq. Line :

Sample Name : gc-14 pg 53 #1 Vial : Acq. Operator : bgp Inj :

Inj Volume : 2 μ 1 Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Acq. Method : E:\HPCHEM\TELLER\METHODS Last changed : 8/3/98 3:08:36 PM by bgp : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp) Name
1.462 5.392 7.375 9.162 9.325 9.461 10.084 10.380	VP BB BV VV VB BB	9538.49316 1.11561e4 1.11073e4 1.12084e4 1.12313e4 1.11514e4 1.03224e4 1.14369e4	7.82272e-4 7.14706e-4 7.04501e-4 7.04853e-4 7.09840e-4 7.06628e-4 7.66556e-4 6.83585e-4	7.46169 7.97335 7.82513 7.90025 7.97241 7.87989 7.91267 7.81809		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 62.74348

Results obtained with enhanced integrator! 1 Warnings or Errors :

0/30/00 4 EO EE DM hom

Warning: Calibration warnings (see calibration table listing)

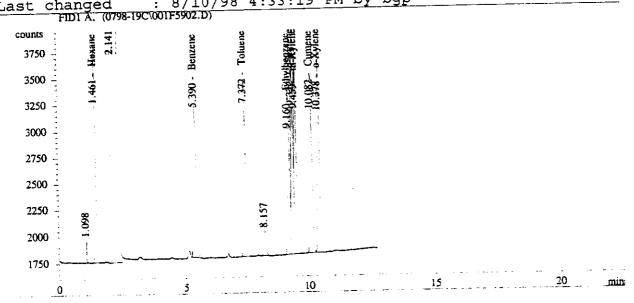
Seq. Line: 59 Injection Date : 8/6/98 5:17:59 PM

Vial : Sample Name : gc-14 pg 53 #1 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ l

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

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

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	RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
	5.390 7.372 9.160 9.322 9.459 10.082	BB BV VV VB BV	1.10191e4 1.11801e4 1.12359e4 1.12540e4 1.12027e4 1.03427e4	7.14081e-4 7.04801e-4 7.04947e-4 7.09922e-4 7.06818e-4 7.66648e-4	7.86851 7.87977 7.92068 7.98944 7.91828 7.92919		Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene

62.84663 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

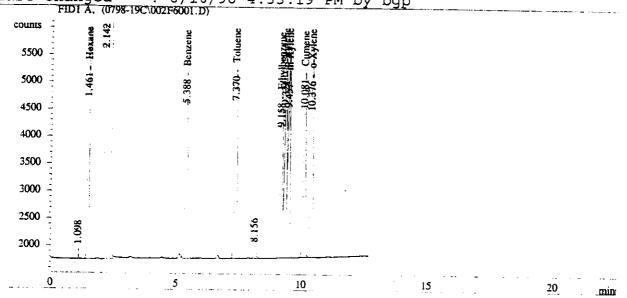
Injection Date : 8/6/98 5:34:58 PM Seq. Line : Sample Name : gc-14 pg 53 #2 Vial : 2 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M Last changed : E:\hPChEM\IEDDEK\mEInODS

E:\hPChEM\IEDDEK\mEInODS

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 5.388 7.370 9.158 9.321 9.457 10.081 10.376	VP BB BV VV VB BV	1.88349e4 2.23942e4 2.25022e4 2.26119e4 2.25918e4 2.25585e4 2.06700e4 2.31152e4	8.20722e-4 7.39928e-4 7.27868e-4 7.24345e-4 7.30463e-4 7.27569e-4 7.89983e-4 7.03854e-4	15.45822 16.57008 16.37863 16.37883 16.50250 16.41285 16.32896 16.26972		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 130.29980

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 401

Seq. Line :

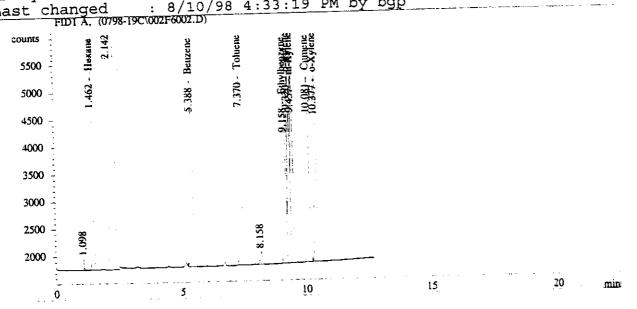
Injection Date : 8/6/98 5:52:03 PM 2 Vial: : gc-14 pg 53 #2 Sample Name 2 Inj: : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 : Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462 5.388 7.370 9.158 9.320 9.457 10.081 10.377	VB BB BV VV VB BV	1.88527e4 2.24067e4 2.25652e4 2.26749e4 2.27059e4 2.26387e4 2.07404e4 2.31923e4	8.20759e-4 7.39942e-4 7.27932e-4 7.24398e-4 7.30565e-4 7.27642e-4 7.90062e-4 7.03920e-4	15.47350 16.57969 16.42589 16.42564 16.58811 16.47285 16.38620 16.32554		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
				120 67741		

130.67741 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

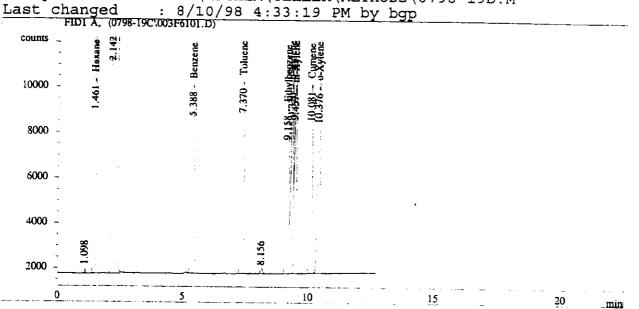
: 8/6/98 6:09:05 PM Injection Date Seq. Line : Sample Name : gc-14 pg 53 #3 Vial: 3 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

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

: 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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.461 5.388 7.370 9.158 9.320 9.457 10.081 10.376	BP BB BV VV VB BV	4.57835e4 5.48417e4 5.55141e4 5.58189e4 5.57529e4 5.56544e4 5.09452e4 5.70346e4	8.43943e-4 7.54742e-4 7.41413e-4 7.35742e-4 7.42589e-4 7.39743e-4 8.03871e-4 7.15660e-4	38.63867 41.39128 41.15891 41.06835 41.40151 41.16995 40.95336 40.81739		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 326.59941

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 403

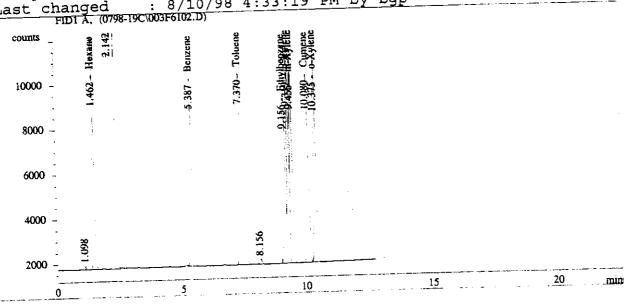
Seq. Line : Injection Date : 8/6/98 6:26:06 PM Vial : 3 Sample Name : gc-14 pg 53 #3 2 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By :

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

519	• •	•				
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.462 5.387 7.370 9.156 9.319 9.455 10.080	BB BV VV VB BV	4.59909e4 5.51822e4 5.59330e4 5.62218e4 5.62132e4 5.60984e4 5.13419e4 5.74893e4	8.44017e-4 7.54805e-4 7.41482e-4 7.35798e-4 7.42657e-4 7.39809e-4 8.03944e-4 7.15723e-4	38.81705 41.65178 41.47331 41.36789 41.74716 41.50206 41.27603 41.14646		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
_				328.98172		

328.98172 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/6/98 6:43:12 PM Seq. Line : Sample Name : gc-14 pg 53 #4 Vial: 4 Acq. Operator : bgp Inj : Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method Last changed : 8/3/98 3:08:36 PM by bgp Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M : 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 5.388 7.370 9.158 9.321 9.457 10.082 10.377	BB BB BV VV VB BV	9.66502e4 1.15994e5 1.17522e5 1.18329e5 1.18088e5 1.17925e5 1.08058e5 1.20951e5	8.52485e-4 7.60132e-4 7.46285e-4 7.39842e-4 7.46950e-4 7.44125e-4 8.08883e-4 7.19911e-4	82.39284 88.17057 87.70514 87.54510 88.20591 87.75083 87.40653 87.07407	B T E p m C	dexane denzene doluene dthylbenzene denzene denzene denzene denzene denzene dumene dumene denzene

Totals: 696.25100

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing),

Seq. Line : 62 Injection Date : 8/6/98 7:00:18 PM 4 Vial : : gc-14 pg 53 #4

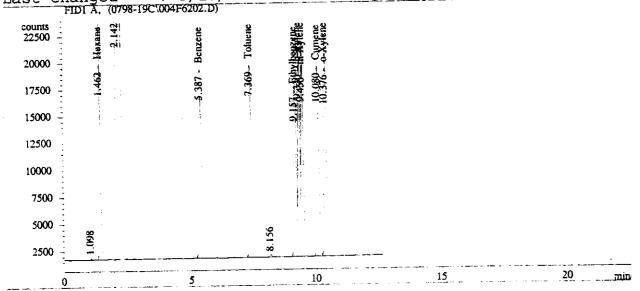
Sample Name 2 Inj : : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.462 5.387 7.369 9.157 9.320 9.456 10.080 10.376	BB BB BV VV VB BV	9.66746e4 1.15979e5 1.17484e5 1.18250e5 1.17995e5 1.17879e5 1.07944e5 1.20804e5	8.52487e-4 7.60131e-4 7.46283e-4 7.39840e-4 7.46947e-4 7.44123e-4 8.08878e-4 7.19906e-4	82.41385 88.15916 87.67633 87.48569 88.13641 87.71669 87.31387 86.96794	. 1	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

695.86994 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Page 1 of 2

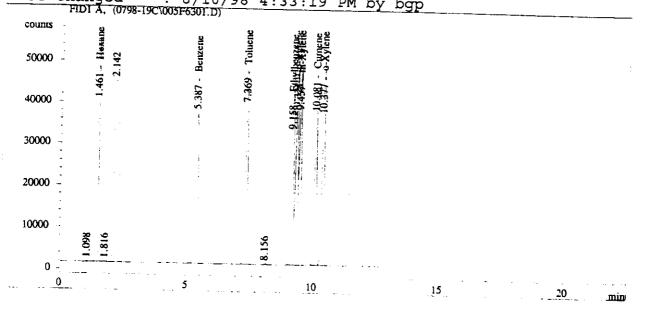
Injection Date : 8/6/98 7:17:15 PM Seq. Line : Sample Name : gc-14 pg 53 #5 Vial: 5 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

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 hanged : 8/10/98 4:33:19 PM by bgp FIDI A, (0798-19C1005F6301.D)



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]	Туре 	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461 5.387 7.369 9.158 9.321 9.457 10.081 10.377	BB BB BV VV VB BV	2.81554e5	8.56971e-4 7.62955e-4 7.48824e-4 7.41971e-4 7.49218e-4 7.46401e-4 8.11479e-4 7.22115e-4	198.86109 212.77005 210.68045 209.82278 211.29742 210.15185 209.22810 208.47462		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 1671.28635

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

407

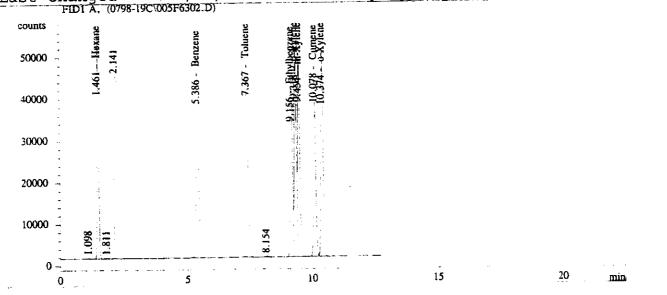
Seq. Line : 63 Injection Date : 8/6/98 7:34:14 PM 5 Vial: : gc-14 pg 53 #5 Sample Name Inj : 2 : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

: 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461 5.386 7.367 9.156 9.318 9.454 10.078	BB BB BV VV VB BV	2.32557e5 2.79938e5 2.82953e5 2.84730e5 2.84202e5 2.83418e5 2.60010e5 2.90922e5	8.56978e-4 7.62963e-4 7.48835e-4 7.41982e-4 7.49230e-4 7.46411e-4 8.11495e-4 7.22128e-4	199.29587 213.58252 211.88528 211.26462 212.93271 211.54612 210.99654 210.08270		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1681.58635 Totals :

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 147 408

Page 1 of 2

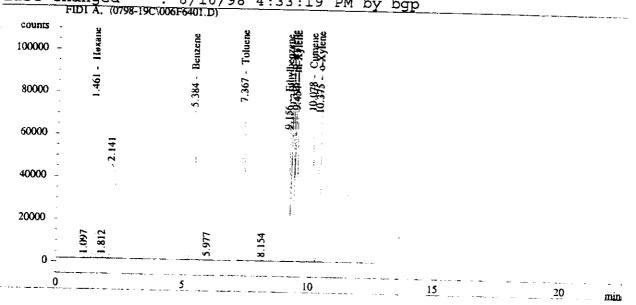
Injection Date : 8/6/98 7:51:15 PM Seq. Line : Sample Name : gc-14 pg 53 #6 Vial : 6 Acq. Operator : bgp Inj : 1 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19B.M Acq. Method

Last changed : 8/3/98 3:08:36 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

Last changed hanged : 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	o Name
1.461 5.384 7.367 9.156 9.318 9.454 10.078 10.375	BB BB BV VV VB BV		8.58524e-4 7.63932e-4 7.49713e-4 7.42721e-4 7.50019e-4 7.47203e-4 8.12399e-4 7.22895e-4	386.82304 414.57311 411.91120 411.54739 415.35604 411.97205 411.37610 409.46851		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 3273.02743

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 409

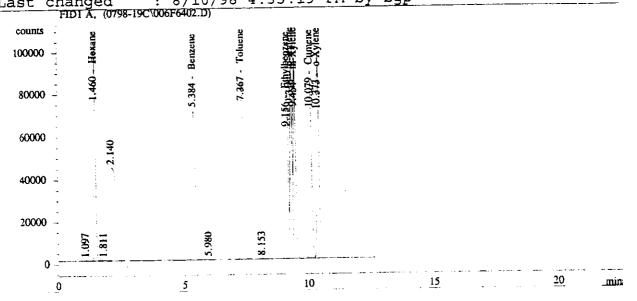
Seq. Line : 64 Injection Date : 8/6/98 8:08:15 PM 6 Vial : : gc-14 pg 53 #6 Sample Name 2 Inj : Acq. Operator : bgp Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19B.M

Acq. Method : 8/3/98 3:08:36 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 : Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460 5.384 7.367 9.156 9.318 9.454 10.079 10.373	BB BV VV VB BV	4.53507e5 5.45976e5 5.51595e5 5.55808e5 5.55121e5 5.53005e5 5.07604e5 5.67888e5	8.58535e-4 7.63939e-4 7.49717e-4 7.42724e-4 7.50021e-4 7.47206e-4 8.12401e-4 7.22897e-4	389.35120 417.09219 413.53996 412.81144 416.35219 413.20832 412.37820 410.52417	·	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

3285.25766 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

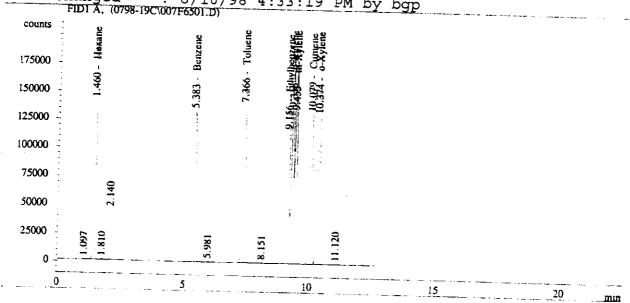
Injection Date : 8/6/98 8:25:11 PM Seq. Line : Sample Name : gc-14 pg 53 #7 Vial : Acq. Operator : bgp Inj : Inj Volume : 2 μ l

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	o Name
1.460 5.383 7.366 9.156 9.318 9.455 10.079 10.374	BB BB BV VV VB BV	8.51358e5 1.02519e6 1.03916e6 1.05050e6 1.05071e6 1.04290e6 9.61165e5 1.07375e6	8.59301e-4 7.64419e-4 7.50153e-4 7.43091e-4 7.50413e-4 7.47598e-4 8.12850e-4 7.23277e-4	731.57272 783.67731 779.53165 780.61967 788.46711 779.66834 781.28303 776.62184		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 6201,44168

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

 μ Inj Volume : 2 μ l Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S

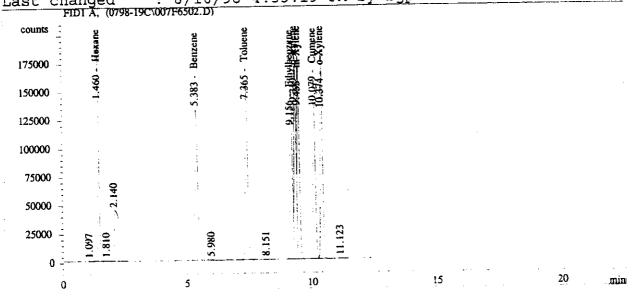
Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.5

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,

1.460 VB 8.50354e5 8.59300e-4 730.70922 Hexane	etTime [min]	Type Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
5.383 BB	7.365 9.156 9.319 9.455 10.079	B 1.02494e B 1.03935e V 1.05134e V 1.04964e B 1.04662e V 9.62492e	7.64419e-4 7.50153e-4 7.43091e-4 7.50412e-4 7.47600e-4 8.12851e-4	783.48636 779.67291 781.23920 787.66473 782.44937 782.36291	Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene

Totals: 6205.15160

Results obtained with enhanced integrator!

1 Warnings or Errors:

Warning: Calibration warnings (see calibration table listing)

Silo GC/MS Results

Client ID: PES Sample ID: S-M18-1

Enthalpy Project ID: 0798-19 Volume of Sample (mL) = 5

	Ret		Total	Catch		
Peak#	Time	Tentative Identification	Area	(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
	16.155	Methyloctane	1,047,621	270	2216-33-3	128.2
14	17.274	Trimethylbenzene	823,130	212	526-73-8	120.1
15 46	17.582	Decane	1,465,245	378	124-18-5	142.2
16	17.582	Trimethylbenzene	1,636,194	422	95-36-3	120.1
17	18.187	Dimethylnonane	1,656,031	427	17302-28-2	156.2
18	18.928	Ethylmethylcyclopropane	1,203,166	310	53778-43-1	84.1
19	19.148	Methylmethylenecyclohexane	991,440	255	2808-75-5	110.1
20	19.140	Dipropylcyclopropene	813,093	210	10306-92-0	124.1
21		Tetradecane	1.723,934	444	629-59-4	198.2
22	19.953 20.496	Decahydromethylnaphthalene	960,004	247	2958-76-1	152.2
23	20.888	Octadecyne	1,217,570	314	35365-59-4	250.3
24	20.000	Methylundecane	1,908,125	492	7045-71-8	170.2
25		Dimethylundecane	2,086,560	538	17301-23-4	184.2
26	22.457	Trimethyldecane	955,196	246	62108-25-2	184.2
27	23.664	Tridecane	1,526,276	393	629-50-5	184.2
28	24.126		1,241,035	320	3891-98-3	212.2
29	25.650	Trimethyldodecane	11			
		Internal Standard		ug/ml		
	15.176	4-Bromofluorobenzene	970,108	50		

970,108 15.176 4-Bromofluorobenzene

Reviewed by:



Client ID: PES Sample ID : S-M18-2

Enthalpy Project ID: 0798-19

Volume of Sample (mL) = 5

	Ret		Total	0-4-1-		
Peak#	Time	Tentative Identification	Area	Catch	0.0	
1	10.474	N,N-Dimethyl formamide ⋆	21,749,581	(ug) 8,622	CAS	MW
2	11.512	Trimethylheptane	702,688	279	68-12-2	73.0
3	13.786	2-Heptyn-1-ol	513,034	203	14720-74-2	142.2
4	15.940	2,4-Dimethylheptane	726,063	203 288	1002-36-4	112.0
5	16.159	3-Ethyl-2-methylheptane	483,694	192	2213-23-2	128.2
6	16.652	Tetramethylcyclohexane	814,772	323	14676-29-0	142.2
7	17.578	2-methylnonane	953,947	323 378	6783-92-2	140.2
8	17.989	Trimethylbenzene	821,522	376 326	871-83-0	142.2
9	18.181	2-Heptenal	1,103,064	437	95-36-3	120.1
10	18.353	1-methyl-4-(1-methylethylidene)-Cyclohexane	472,118	437 187	57266-86-1	112.0
11	18.483	5-Methyl-3-undecene	1,063,219		1124-27-2	138.1
12	18.936	5-Methyl-1-decene	460,895	421	NA Table To Table To	112.1
13	19.156	Cyclodecene	668,305	183	54244-79-0	154.2
14	19.348	Methylbicyclohexane-3-one	759,510	265	3618-12-0	138.1
15	19.718	Dimethylnonadiene	983,674	301	1125-12-8	152.1
16	19.952	Dimethyloctane		390	20054-25-5	152.2
17	20.350	Tetradecyloxirane	1,146,137 552,319	454	1072-16-8	142.2
18	20.494	Decahydro-2-methylnaphthalene	1,133,399	219	7320-37-8	240.2
19	20.886	Decahydro-2-methylnaphthalene		449	2958-76-1	152.2
20	21.367	Bromotridecane	878,578	348	2958-76-1	152.2
21	21.752	Undecyne	725,002	287	765-09-3	262.1
22	22.117	Dodecane	566,797	225	2294-72-6	152.2
23	22.949	Trimethylcyclohexane	1,046,226	415	112-40-3	170.2
24	23.666	Dimethylundecane	2,076,158	823	1678-97-3	126.1
25	24.045	Dimethylcyclooctane	1,264,257	501	17301-23-4	184.2
26	24.128	Tridecane	466,498	185	13151-98-9	140.2
27	24.535	Cetylpyridinium chloride	2,080,059	825	629-50-5	184.2
28	25.652	Tetramethylheptadecane	866,092	343	6004-24-6	357.0
29	26.005	Tetracecane	1,007,238	399	18344-37-1	296.3
	20.000	remacecarie	3,558,428	1,411	629-59-4	198.2
		Internal Standard		ug/ml		
	15.19	4-Bromofluorobenzene	630,620	50		

	Internal Standard		ug/ml
15.19	4-Bromofluorobenzene	630,620	50

Client ID: PES Sample ID: S-M18-3 Enthalpy Project ID: 0798-19

Volume of Sample (mL) = 5

	Ret		Total	Catch		
Peak#	Time	Tentative Identification	Area	(ug)	CAS	<u>MW</u>
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 <i>-</i> 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
	24,126	Tridecane	1,284,708	520	629-50 - 5	184.2
23	24.120	Tetradecene	571,984	231	1120-36-1	196.2
24	25.654	Trimethyldodecane	634,272	257	3891-98-3	212.2
25	26.005	Tetradecane	1,629,986	659	629-59-4	198.2
- 26	27.224	Tetramethylheptadecane	953,903	386	18344-37-1	296.3
27	27.224	Pentadecane	5,126,790	2,074	629-62-9	212.2
28		Hexadecane	1,699,568	687	544-76 - 3	226.3
29	30.164	HEXAUCUATIO	.,,			
		Internal Standard		ug/ml_		
	15.185	4-Bromofluorobenzene	618,049	50		



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
7	10.188	N,N-Dimethyl formamide ⊀	100	0.0324	68-12-2	73.0
2	10,457	N,N-Dimethyl formamide ⊀		0.0324	68-12-2	73.0
_		Internal Standard		ug/ml		
	15.186	4-Bromofluorobenzene	772,573	50		

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Silo GC/MS Data

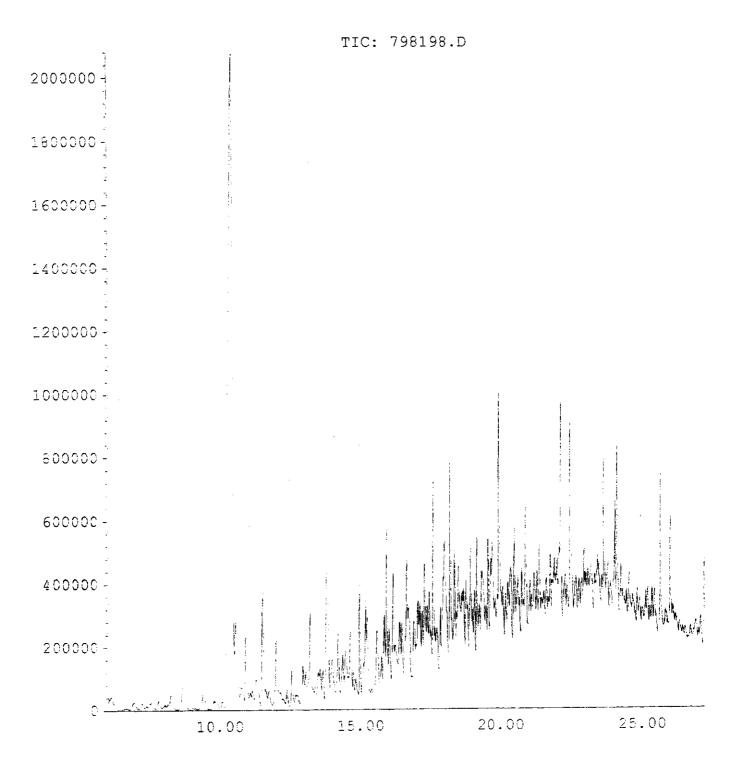
File : D:\HPCHEM\1\DATA\079819\798198.D

Operator : TAB

Acquired: 27 Aug 98 9:44 am using AcqMethod 079819

Instrument: 5970 Sample Name: S-M18-1

Misc Info : Vial Number: 5



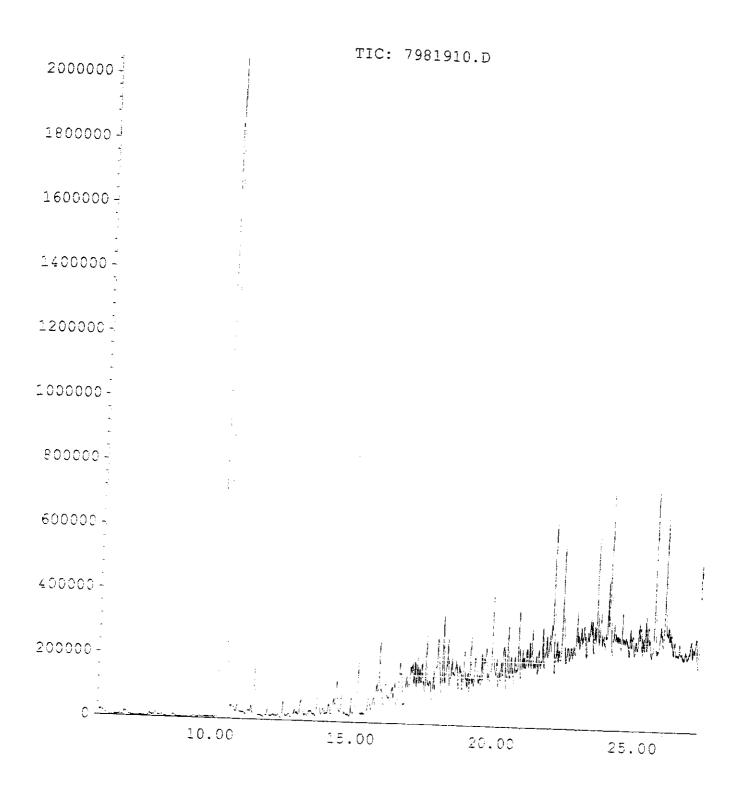
File : D:\HPCHEM\1\DATA\079819\7981910.D

Operator : TAB

: 27 Aug 98 12:10 pm using AcqMethod 079819 Acquired

Instrument : 597Õ Sample Name: S-M18-2

Misc Info Vial Number: 6



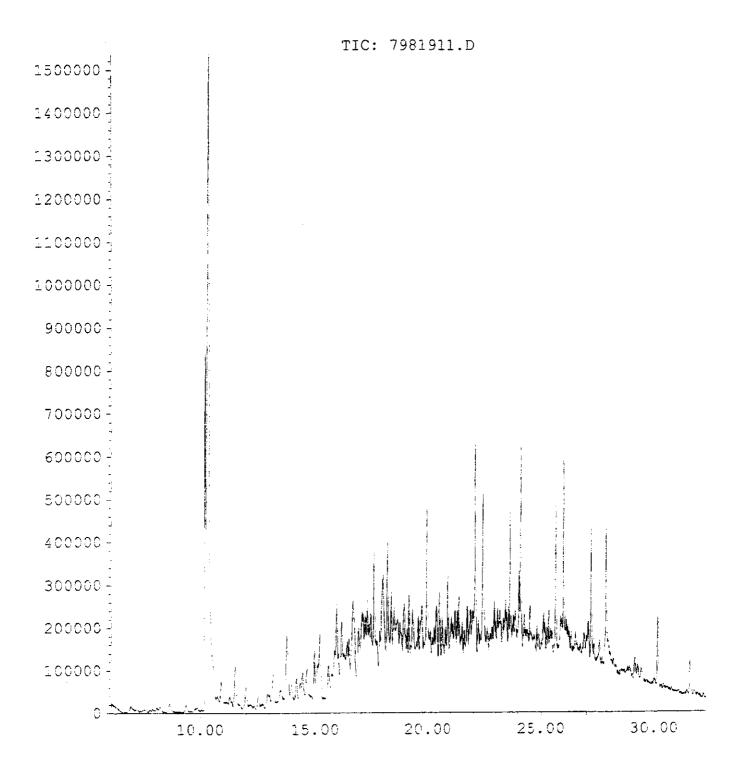
File : D:\HPCHEM\1\DATA\079819\7981911.D

Operator : TAB

Acquired : 27 Aug 98 12:46 pm using AcqMethod 079819

Instrument : 5970
Sample Name: S-M18-3

Misc Info :
Vial Number: 7



: 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 TIC: 7981912.D 2000000 -1800000 1600000-1400000 -1200000-1000000 -800000 -600000 -400000 -200000

15.00

20.00

25.00

10.00

File

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

isc Info : Vial Number: 5

Search Libraries: C:\DATABASE\NBS75K.L C:\DATABASE\EXTRA.L Minimum Quality: 10 Minimum Quality: 10

C:\DATABASE\T014TAR.L

Unknown Spectrum: Apex

Integration Params: current RTEINT parameters

Pk#	RT	Area	library/ID	Ref#	CAS# Q	ual
1	10.44	38.47	C:\DATABASE\NBS75K.L Formamide, N,N-dimethyl- Formamide, N,N-dimethyl- 2-Butanamine, (.+/)-	62526	000068-12-2 000068-12-2 033966-50-6	86
2	10.55	2.00	C:\DATABASE\NBS75K.L Pyrrolidine Hydroxylamine, O-pentyl- Pyrrolidine	1838	000123-75-1 005963-74-6 000123-75-1	43
ભ	10.91	1.45	C:\DATABASÉ\NBS75K.L 1-Pentanol, 2,2,4-trimethyl- Heptane, 1,1'-oxybis- Heptane, 2-methyl-	26421	000123-44-4 000629-64-1 000592-27-8	56
4	11.52	2.70	C:\DATABASE\NBS75K.L Hexane, 2,2,5-trimethyl- Hexane, 2,2,5,5-tetramethyl- Heptane, 2,2-dimethyl-	66226	003522-94-9 001071-81-4 001071-26-7	72
5	13.20	1.55	C:\DATABASE\NBS75K.l Cyclohexane, 1,1,3-trimethyl- Cyclohexane, 1,1,3-trimethyl- Cyclohexane, 1,1,3-trimethyl-	64942	003073-66-3 003073-66-3 003073-66-3	72
6	13.77	4.20	C:\DATABASE\NBS75K.L Hexane, 3-ethyl- Hexane, 2,3,5-trimethyl- Heptane, 2,3-dimethyl-	5161	000619-99-8 001069-53-0 003074-71-3	38
7	14.19	1.34	C:\DATABASE\NBS75K.L 1-Hexanol, 2-ethyl- 1-Hexanol, 2-ethyl- Ether, heptyl hexyl	65291	000104-76-7 000104-76-7 007289-40-9	74

	RT	Area%	Library/ID	Ref#	CAS#	•
8	14.64	1.32 C:\T	DATABASE\NBS75K.L		CA5#	Qual
		6-0) Yahi Quol o I O I O I			
		3-7	Oxabicyclo[3.1.0]hexane	575	00000=	_
		J-N	Jonene, (E)~ Centenal	4664	000285-67	7-6 64
		4-1	entenal	571	020063-92	2-7 59
9	14.96	1 61 0.15	ATABASE\NBS75K.L	3/1 (002100-17	-6 53
		# • O I C : \ []	ATABASE\NBS75K.L			
		Non		65344	\ .	
		Non		65144 (000111-84	-2 91
		Non	ane	65145 (00111-84	-2 83
1.0	15 10	1 70 0 1-	_	65143 ()	00111-84	-2 78
	10.15	7.70 C: \DZ	ATABASE\NBS75K.L			
		Benz	zene. 1-hromo-2-fi	1.600-		
		D#112	zene, 1-bromo-3-fluoro	16035 0	01072-85-	-1 97
		Benz	ene, 1-bromo-3-fluoro-	±6634 O	01073-nk-	- Q D D -
44 .				68407 0	01073-06-	-9 91
ŦŢ -	15.5/	1.41 C:\DA	TABASE\NBS75K.L			
		1,3-	Pentadiene 2-mothus			
		1,3-	Pentadiene, 2-methyl-, (E)-	482 0(1118-58-	7 49
		Bicv	clo[4.1.0] heptane	4/5 0(0926-54-	5 47
				63134 00	0286-08-	8 13
±2 _	5.93	2.09 C:\DA	TABASE\NBS75K.l			C 43
		Octai	ne, 2,6-dimethyl-			
		Octai	ne, 2,6-dimethyl-	66227 00	2051-30-1	1 50
		Oxira	ane, pentyl-	66228 ეე	2051-30-3	. 23
				3071 00	5063-65 - (4 0 3
13 1	6.16	1.84 C:\DAT	TABASE\NBS75K.L		0000 00-(7 53
		Undec	cane, 5,6-dimethyl-			
		Octan	e, 3-methyl-	19004 01	761501 7	
		Decan	e, ormetnyl-	5150 001	2216-33 - 3	50
			e, 2,5,6-trimethy1-	19019 062	2100-33 - 3	50
14 17	7.27 1	.44 0.102	ABASE\NBS75K.l		-100-23-0	4 /
		Barzo:	ADASE (NES /SK.]			
		2 7 7	ne, 1,2,3-trimethyl-	3773 000	526-73-8	
		-/4/4°	-Trimethylbenzene	3771 000	1095-36-3	89
		5-11761	ne, 1,2,3-trimethyl-	64576 000	506 70 C	5 7
15 17	.58 2	57 C. \ \\ \	ABASE\NBS75K.L	01070 000	J26-73-8	64
	-	Decane	JEASE/NBS/5K.L			
				6620E 000	300 50 -	
		Volane Monane	2,7-dimethyl-	8074 000	144-15-5	64
		Nonane	2, 2-methy1-	8076 001	0/2-16-6	53
16 17.	92 -	77 C. S.	BASE\NBS75K.l	8093 0008	2/1-83-0	52
		O NALA	BASE NBS75K.I			
		o-Octy	ne, 6-methyl-	(262.060)		
		Charou	eptene, 1,2-dimethyl-	4262 0621	.08-34-3	43
		- /-Few.	tatriacontene	4250 0200	153-89-8	38
17 17	ପ୍ରହ ଓ			58705 0069	//1-40-0	35
<u> </u>	JU Z.	o/ U:\DATA	BASE\NBS75K.l			
		4,4,4-0	Frimethylbergone			
			Rane. 1-mathwrly /1	3771 0000	95-36-3 4	1 9
		o-Methy	/1-5-hexen-3-yn-2-ol	1092 0011	24-27-5 2	<u> </u>
			2 2 - 0 -	2307 0 6 80.	17-33-4 4	3

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Pk#	RT	Area	Library/ID	Ref#	CAS# Qu	nal
18	18.19	2.90	C:\DATABASE\NBS75K.L Nonane, 2,6-dimethyl- Decane, 4-methyl- Nonane, 4-methyl-5-propyl-	67324	017302-28-2 002847-72-5 062185-55-1	47
19	18.35	1.40	C:\DATABASE\NBS75K.L Naphthalene, decahydro-2-methyl- Cyclohexene, 3-methyl-6-(1-methyle 3,5-Dimethylcyclohexene	7099	002958-76-1 005256-65-5 000000-00-0	53
20	18.93	2.11	C:\DATABASE\NBS75K.L Cyclopropane, 1-ethyl-1-methyl- 5-Undecene, (E)- 1-Decene, 5-methyl-	67184	053778-43-1 000764-97-6 054244-79-0	64
21	19.15	2.74	C:\DATABASE\NBS75K.L 1-Methyl-2-methylenecyclohexane Cycloheptene, methyl- cis-7-Dodecen-1-ol	63885	002808-75-5 055308-20-8 020056-92-2	60
22	19.56	1.43	<pre>C:\DATABASE\NBS75K.L 1,2-Dipropylcyclopropene 1,4-Hexadiene, 2,3-dimethyl- (E)-1-Phenyl-1-butene</pre>	2380	010306-92-0 018669-52-8 001005-64-7	38
23	19.95	3.02	C:\DATABASE\NBS75K.L Tetradecane Nonadecane Pentadecane	37469	000629-59-4 000629-92-5 000629-62-9	64
24	20.50	1.68	C:\DATABASE\NBS75K.L Naphthalene, decahydro-2-methyl- Cyclohexanone, 2-methyl-5-(1-methy Cyclohexanone, 2-methyl-5-(1-methy	10308	002958-76-1 007764-50-3 005948-04-9	93
25	20.89	2.14	C:\DATABASE\NBS75K.L 9-Octadecyne Cyclohexanone, 2-methyl-5-(1-methyl-Dodecyne	10308	035365-59-4 007764-50-3 000765-03-7	60
26	22.12	3.35	C:\DATABASE\NBS75K.L Undecane, 2-methyl- Decane Decane, 2-methyl-	66204	007045-71-8 000124-18-5 006975-98-0	59
27	22.46	3.66	C:\DATABASE\NBS75K.L Undecane, 2,6-dimethyl- Heptane, 3-ethyl-2-methyl- 3-Undecene, 6-methyl-, (E)-	8080	017301-23-4 014676-29-0 074630-52-7	43

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Pk:		Area%	Library/ID	Ref#	CAS# Qual
		Octane,	2,6,7-trimethyl- 3-methyl- 2,3,7-trimethyl-	00201	7 062108-25-2 64 2 005911-04-6 64 3 062016-34-6 53
29	24.13	2.68 C:\DATAB Trideca Dodecan Trideca:	ne e	69019 68254	000629-50-5 91 000112-40-3 73
30	25.65	200609116	ASE\NBS75K.L 2,6,10-trimethyl- 2,6,11-trimethyl- 2,6,11-trimethyl-	70269 25998	000629-50-5 64 003891-98-3 72 031295-56-4 64 031295-56-4 59

S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
reak#	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
3 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
	15.176	rVV	0.082	970108	15.121	15.204
10	15.567	rVB	0.144	803175	15.512	15.656
1 C	15.929	rVV	0.096	1189071	15.882	15.977
12	16.155	rBV	0.096	1047621	16.100	16.196
13	17.274	rBV	0.096	823130	17.225	17.322
14	17.582	rBV	0.082	1465245	17.534	17.617
15	17.939	rVV	0.076	838366	17.878	17.953
16	17.981	rVB	0.165	1636194	17.960	18.125
17	18.187	rBV	0.096	1656031	18.132	18.228
18	16.352	rBV	0.096	796987	18,297	18.393
19	18.926	rBV	0.117	1203166	18.853	18.970
20	10.920	rBV	0.082	991440	19.107	19.189
21	19.561	rVB	0.096	813093	19.513	19.609
22	19.361	rBV	0.117	1723934	19.904	20.021
23	20.496	rBV	0.089	960004	20.454	20.544
24	20.490	rVB	0.110	1217570	20.840	20.950
25 15	22.120	rVB	0.096	1908125	22.086	22.182
·	22.120	rVB	0.158	2086560	22.409	22.568
. , ,	23.664	rBV	0.097	955196	23.622	23.719
28		rVB	0.057	1526276	24.084	24.202
29	24.126	rVB	0.124	1241035	25.609	25.733
30	25.650	± V D	U • # = **	1211000		

Ion 91.00 (90.70 to 91.70): 798198.D S-M18-1

Peak# Ret Time 10.566 2	Type rBV rBV rBB rBB rBV rVB rBV rVB rVB rVB	Width 0.062 0.075 0.199 0.151 0.123 0.103 0.107 0.096 0.158 0.069 0.103 0.069 0.110 0.090 0.083 0.090 0.055 0.090	Area 22889 28121 196585 67268 37806 16236 22235 12888 48615 10755 20233 12811 18169 12377 18842 15055 15057 15493 17903	Start Time 10.511 13.492 13.731 14.416 16.128 16.327 17.205 17.603 18.709 19.320 19.519 20.221 20.317 20.606 20.716 20.846 20.963 21.053 21.789	End Time 10.573 13.567 13.930 14.567 16.251 16.430 17.322 17.699 18.867 19.389 19.623 20.289 20.427 20.716 20.805 20.929 21.053 21.108
20 22.072	rVB	0.036	14088	21.789 22.044	21.879 22.120

TIC: 798198.D

110.		S-M18-1		Total		
Peak#	Ret Time	Type	Width	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 = Ethyl benzan 2 = map - Xylen 3 = On Xylene 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

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

Ion 106.00 (105.70 to 106.70): 798198.D S-M18-1

Peak# 1 2 3 4 5	Ret Time 13.834 14.498 17.267 17.988 20.998	Type rBB rBB rBB rBB	Width 0.171 0.117 0.089 0.089 0.090	Area 74588 25640 16737 13222 15042	Start Time 13.745 14.430 17.212 17.932 20.963	End Time 13.916 14.546 17.301 18.022 21.053
6	23.098	rBB	0.090	11748	23.043	21.05 <i>3</i> 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

Information from Data File:

: D:\HPCHEM\1\DATA\079819\7981910.D File

Operator : TAB
Acquired : 27 Aug 98 12:10 pm using AcqMethod 079819

Sample Name: S-M18-2

lisc Info : Vial Number: 6

Search Libraries: C:\DATABASE\NBS75K.L

Minimum Quality: Minimum Quality:

C:\DATABASE\EXTRA.L

C:\DATABASE\TO14TAR.L

Unknown Spectrum: Apex

Integration Params: current RTEINT parameters

Fk#	RT	Areas	Library/ID C:\DATABASE\NBS75K.L	Ref#	CAS#	Qual
			Formamide, N,N-dimethyl- Formamide, N,N-dimethyl- Formamide, N,N-dimethyl-	62526	000068-12- 000068-12- 000068-12-	2 86
2	11.51	1.40	C:\DATABASE\NBS75K.L Heptane, 2,2,4-trimethyl- Decane, 2,2,6-trimethyl- Hexane, 2,2,5-trimethyl-	18995	014720-74-2 062237-97-2 003522-94-9	2 59
3	13.79	1.02	C:\DATABASE\NBS75K.I 2-Heptyn-1-ol Furan, 2,3-dihydro- 1-Heptene, 4-methyl-	62438	001002-36-4 001191-99-7 013151-05-8	38
<u>L</u>	15.19	1.25	C:\DATABASE\NBS75K.L Benzene, 1-bromo-2-fluoro- Benzene, 1-bromo-3-fluoro- p-Bromofluorobenzene	16034	001072-85-1 001073-06-9 000460-00-4	96
Ē	15.94	1.44	C:\DATABASE\NBS75K.l Heptane, 2,4-dimethyl- Heptane, 2,4-dimethyl- Heptane, 2,4-dimethyl-	5145	002213-23-2 002213-23-2 002213-23-2	43
6	16.16		C:\DATABASE\NBS75K.L Heptane, 3-ethyl-2-methyl- (Z)-3-Heptene Cyclohexane, methyl-	1368	014676-29-0 007642-10-6 000108-87-2	27
~	16.65		C:\DATABASE\NBS75K.1 Cyclohexane, 1,1,2,3-tetramethyl- Cyclohexane, 1,2,3-trimethyl-, (1. Cyclohexane, 1,2,3-trimethyl-, (1.	4680	006783-92-2 001678-81-5 001839-88-9	60

Pk#	RT	Area%	Library/ID	Ref#	CAS# Q	ıal
8	17.58	1.90	C:\DATABASE\NBS75K.L Nonane, 2-methyl- Hydroxylamine, 0-decyl- Decane	15973	000871-83-0 029812-79-1 000124-18-5	53
9	17.99	1.63	C:\DATABASE\NBS75K.L 1,2,4-Trimethylbenzene Benzene, 1,2,3-trimethyl- Benzene, 1-ethyl-2-methyl-	64576	000095-36-3 000526-73-8 000611-14-3	47
10	18.18	2.19	C:\DATABASE\NBS75K.L 2-Heptenal, (Z)- 2-Heptenal, (E)- Silane, trichloroeicosyl-	2632	057266-86-1 018829-55-5 018733-57-8	45
111	18.35	0.94	C:\DATABASE\NBS75K.L Cyclohexane, 1-methyl-4-(1-methyle 5-Bromo-1-hexene Bicyclo[4.1.0]heptane, 3,7,7-trime	12784	004558-27-4	43
12	18.48	2.11	C:\DATABASE\NBS75K.L 3-Undecene, 5-methyl- 3-Heptene, 3-methyl- 5-Methyl-3-heptene	64039	000000-00-0 007300-03-0 000000-00-0	46
13	18.94	0.92	<pre>C:\DATABASE\NBS75K.L 1-Decene, 5-methyl- 6-Octenal, 3,7-dimethyl- 3-Undecene, (E)-</pre>	67174	054244-79-0 000106-23-0 001002-68-2	70
14	19.16	1.33	C:\DATABASE\NBS75K.L Cyclodecene 1-Methyl-2-methylenecyclohexane cis-7-Dodecen-1-ol	2368	003618-12-0 002808-75-5 020056-92-2	60
15	19.35	1.51	C:\DATABASE\NBS75K.L Bicyclo[3.1.0]hexan-3-one, 4-methy Bicyclo[4.1.0]heptane, 3-methyl- Cyclodecene, 3-bromo-	2354	001125-12-8 041977-47-3 056325-56-5	49
16	19.72	1.96	C:\DATABASE\NBS75K.L 1,8-Nonadiene, 2,8-dimethyl- trans-1,3-Diethylcyclopentane Cyclopentane, 1,2-dimethyl-3-\1-me	4618	020054-25-5 000000-00-0 000489-20-3	47
27	19.95	2.28	C:\DATABASE\NBS75K.L Octane, 2,7-dimethyl- Undecane Heptane, 2,6-dimethyl-	67317	001072-16-8 001120-21-4 001072-05-5	5 3

Pk	-	Area	Didiy/ID	Ref#	CAS#	Qual
1			O C:\DATABASE\NBS75K.L Oxirane, tetradecyl- Silane, trichloroeicosyl- 1-Tetracosanol	54853	5 007320-37- 3 018733-57- 5 000506-51-	-8 27
19	€ 20.49	2.25	C:\DATABASE\NBS75K.L Naphthalene, decahydro-2-methyl- 7-Hexadecyne Bicyclo[4.1.0]heptan-3-one, 4,7,7-	28265	002958-76- 074685-28- 004176-04-	-2 83
20	20.89	1.75	C:\DATABASE\NBS75K.L Naphthalene, decahydro-2-methyl- Naphthalene, decahydro-2-methyl- Cyclohexanone, 2-methyl-5-(1-methy	67009 67008	.002958-76- 002958-76- 007764-50-	·1 83 ·1 81
21	21.37	1.44	<pre>C:\DATABASE\NBS75K.L Tridecane, 1-bromo- Hexadecane, 1-bromo- Oxirane, [(tetradecyloxy)methyl]-</pre>	71786 72867	000765-09- 000112-82- 038954-75-	3 49 3 41
22	21.75	1.13	<pre>C:\DATABASE\NBS75K.I 5-Undecyne trans,cis-1,8-Dimethylspiro[4.5]de 3-Octyne, 5-methyl-</pre>	6701 <u>1</u> 14144	000004 =0	6 55 0 53
23	22.12	2.08	C:\DATABASE\NBS75K.L Dodecane Dodecane Dodecane	68249	000112-40-3 000112-40-3 000112-40-3	3 70
24	22.95		C:\DATABASE\NBS75K.L Cyclohexane, 1,2,3-trimethyl- Cyclotridecane Cyclopentane, 1-pentyl-2-propyl-	18483	001678-97-3 000295-02-3 062199-51-3	
25	23.67	:	C:\DATABASE\NBS75K.L Undecane, 2,6-dimethyl- Octane, 2,3,7-trimethyl- Nonane, 4-methyl-5-propyl-	11603	017301-23-4 062016-34-6 062185-55-1	7.2
26	24.05	(C:\DATABASE\NBS75K.L Cyclooctane, 1,4-dimethyl-, trans- Cyclohexane, 1,2,3-trimethyl-, (1. 6-Tridecene, 7-methyl-	4622 (013151-98-9 001839-88-9 024949-42-6	45
27	24.13		D:\DATABASE\NBS75K.L Pridecane Pridecane Pridecane	18989 0	000629-50-5 000629-50-5 00629-50-5	70

Pk#	RT	Area%	Library/ID	Ref#	CAS# Qu	al
28	24.53	1.72	C:\DATABASE\NBS75K.L Cetylpyridinium Chloride 1-Dotriacontanol Silane, trichloroeicosyl-	57795	006004-24-6 006624-79-9 018733-57-8	30
29	25.65	2.00	C:\DATABASE\NBS75K.L Heptadecane, 2,6,10,14-tetramethyl 1-Iodo-2-methylundecane Dodecane, 2,6,11-trimethyl-	41997	018344-37-1 073105-67-6 031295-56-4	72
30	26.00	7.08	C:\DATABASE\NBS75K.L Tetradecane Tetradecane Hydroxylamine, O-decyl-	69658	000629-59-4 000629-59-4 029812-79-1	70

S-M18-2

Peak#	Ret Time	Туре	Width	Area	Ot t m:	
1	10.474	rBV	0.636	21749581	Start Time	End Time
2	11.512	rVB	0.225	702688	10.221	10.857
3	13.786	rBV	0.219		11.451	11.676
4	15.194	rVB	0.164	513034	13.704	13.922
5	15.940	rVB	0.104	630620	15.153	15.317
6	16.159	rBV	0.336	726063	15.892	16.104
7	16.652	rBV		483694	16.111	16.447
8	17.578	rVB	0.288	814772	16.556	16.844
9	17.989		0.261	953947	17.537	17.797
10	18.181	rVB	0.165	821522	17.962	18.126
11	18.353	rBV	0.192	1103064	18.126	18.318
12		rVV	0.089	472118	18.318	18.408
13	18.483	rVV	0.309	1063219	18.408	18.716
	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	$\mathtt{r}\mathtt{B}\mathtt{V}$	0.275	1133399	20.453	20.728
20	20.886	rBV	0.413	878578	20.845	21.257
21	21.367	rVЗ	0.234	725002	21.340	21.237
22	21.752	rVV	0.303	566797	21.724	22.027
23	22.117	rVЗ	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	24.017
_7	24.128	rVV	0.421	2080059	24.080	
28	24.535	rVB	0.290	866092	24.507	24.500
29	25.652	rBV	0.359	1007238	25.611	24.797
30	26.005	rVB	1.208	3558428	25.970	25.970
				400 0 22 0	20.570	27.178

S-M18-3

- 1	Ret Time	Type	Width	Area	Start Time	End Time
Peak#	10.201	rBV	0.075	2565563	10.160	10.236
1	10.359	rVV	0.602	11277526	10.236	10.837
2	10.559	rBV	0.273	503869	11.425	11.698
3	13.775	rBV	0.219	903615	13.686	13.905
4		rBV	0.274	1074316	14.890	15.164
5	14.952	rVB	0.274	618049	15.164	15.438
6	15.185	rVB	0.192	711888	15.896	16.088
7	15.938	rBV	0.364	1203289	16.088	16.452
8	16.157	rVB	0.267	915416	16.575	16.843
9	16.651	rBV	0.158	531066	16.843	17.001
10	16.884	rVB	0.130	1218396	17.529	17.797
11	17.577	rBV	0.200	1876924	17.797	18.125
12	17.989		0.329	1124655	18.125	18.290
13	18.180	χVV	0.103	2427532	18.290	18.867
14	18.352	rVV rVV	0.377	807099	18.867	19.107
15	18.928	rVV	0.171	516327	19.107	19.278
16	19.148	rv3	0.330	792549	19.278	19.608
17	19.306	rev	0.330	818242	19.608	19.896
18	19.711	ZVV.	0.412	1530864	19.910	20.322
19	19.944		0.392	998790	20.851	21.243
20	20.885	rVE	0.392	519648	22.405	22.914
21	22.453	EVI EVI	0.482	1392597	23.066	23.547
22	23.437	rVV	0.392	850090	23.616	24.009
23	23.658	rVB	0.124	1284708	24.084	24.208
24	24.126	 	0.124	571984	24.208	24.491
25	24.270	rBV	0.234	634272	25.606	25.840
9 ر	25.654		0.324	1629986	25.964	26.288
47	26.005	rVB	0.653	953903	27.169	27.823
28	27.224	rVB	2.239	5126790	27.864	30.103
29	27.905	77E	2.239 1.384	1699568	30.103	31.486
30	30.164	zvv	2.304	±099900	22.200	

Information from Data File:

: D:\HPCHEM\1\DATA\079819\7981911.D File

Operator : TAB

Acquired : 27 Aug 98 12:46 pm using AcqMethod 079819

Sample Name: S-M18-3

isc Info : Vial Number: 7

Search Libraries: C:\DATABASE\NBS75K.L

Minimum Quality: C:\DATABASE\EXTRA.L Minimum Quality: 5

C:\DATABASE\TO14TAR.L

Unknown Spectrum: Apex

Integration Params: current RTEINT parameters

± 11 €	egratio.	li Pd[d	ms: current RTEINT parameters			
	Pk# RT Area%			Ref#	CAS# (Qual
1	10.20	5.45	C:\DATABASE\NBS75K.L Formamide, N,N-dimethyl- Formamide, N,N-dimethyl- 2-Butanamine, (.+/)-	62525	000068-12-2 000068-12-2 033966-50-6	2 90
2	10.36	23.95	<pre>C:\DATABASE\NBS75K.L Formamide, N,N-dimethyl- Formamide, N,N-dimethyl- 2-Butanamine, (.+/)-</pre>	62525	000068-12-2 000068-12-2 033966-50-6	86
3	11.51	1.07	C:\DATABASE\NBS75K.L Hexane, 2,2,3-trimethyl- Pentane, 3-ethyl-2,2-dimethyl- Pentane, 3-ethyl-2,2-dimethyl-	65109	016747-25-4 016747-32-3 016747-32-3	59
	13.77 mop-Y-de		C:\DATABASE\NBS75K.L Cyclopropane, 1,1-dimethyl-2-(1-me 7-Oxabicyclo[4.1.0]heptane, 3-oxir Hydroxylamine, 0-decyl-	7391	074779-84-3 000106-87-6 029812-79-1	10
5	14.95	2.28	C:\DATABASE\NBS75K.L Nonane Nonane Nonane	65145	000111-84-2 000111-84-2 000111-84-2	7.8
6	15.18		C:\DATABASE\NBS75K.L Benzene, 1-bromo-2-fluoro- Benzene, 1-bromo-3-fluoro- p-Bromofluorobenzene	16034	001072-85-1 001073-06-9 000460-00-4	96
?	15.94 methyl		C:\DATABASE\NBS75K.L Oxirane, (3-methylbutyl)- 1-Undecene, 6-methyl- 1-Pensancl, 2-methyl-	14702	053229-41-7 074630-40-3 000105-30-6	38

7981911.0

Fri Aug 28 15:32:16 1998

Page 1

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
8	16.16, 0: max	A	C:\DATABASE\NBS75K.L Oxirane, [(dodecyloxy)methyl]- 3-Undecene, 6-methyl-, (E)- Heptane, 3-ethyl-2-methyl-	14747	002461-18 074630-52 014676-29	2-7 43
9	16.65	1.94	C:\DATABASE\NBS75K.L 2-Octene, 2,6-dimethyl- Cyclopentane, ethyl- cis-3-Decene	1350	004057-42 001640-8 019398-8	9-7 49
10	16.88	1.13	<pre>C:\DATABASE\NBS75K.L 2-Hexenal, 2-ethyl- 2-Heptenal, (Z)- 2-Heptenal, (E)-</pre>	2610	000645-6 057266-8 018829-5	6-1 30
11	17.58	2.59	C:\DATABASE\NBS75K.L Octane, 2,7-dimethyl- Decane Nonane, 2-methyl-	66204	001072-1 000124-1 000871-8	8-5 53
12	17.99	3.99	C:\DATABASE\NBS75K.1 4-Pyridinol, acetate (ester) Benzene, 1-etnyl-2-methyl- Benzene, 1,2,3-trimethyl-	64559	014210-2 000611-1 000526-7	4-3 35
13	18.18	2.39	C:\DATABASE\NBS75K.L Octane, 1,1'-oxybis- Nonane, 2,6-dimethyl- Nonane, 3-methyl-	11598	000629-8 017302-2 005911-0	8-2 43
14	18.35	5.16	C:\DATABASE\NBS75K.L 7-Hexadecyne 3-Hexadecyne Spiropentane, butyl-	28271	074685-2 061886-6 006191-9	52-2 53
15	18.93	3 1.71	C:\DATABASE\NBS75K.L Cyclopropane, 1,2-dimethyl-1-penty 5-Undecene, (E)- 6-Octenal, 3,7-dimethyl-	67164	062238-0 000764-9 000106-2	97-6-72
16	19,15	5 1.10	C:\DATABASE\NBS75K.l cis-7-Dodecen-1-cl 2-Decen-1-cl, (Z)- 1,10-Undecadiene	11570	9 020056-9 9 004194-1 9 013688-0	71 - 2 38
27	19.33	1.68	8 C:\DATABASE\NBS75K.L 6-Oxabicyclo[3.1.0]hexane 4-Pentenal 2,7-Octadiene, 4-methyl-	571	000285-0 002100-1 000000-0	17-6 25

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
18	19.71	1.74	C:\DATABASE\NBS75K.L 3-Octyne, 6-methyl- Diphosphoric acid, diisooctyl este 4-Undecene, (E)-	54052	062108-34- 072101-07- 000693-62-	-6 35
19	19.94	3.25	C:\DATABASE\NBS75K.L Decane .Tetradecane Decane	69661	000124-18- 000629-59- 000124-18-	4 64
20	20.89	2.12	C:\DATABASE\NBS75K.L Naphthalene, decahydro-2-methyl- 7-Hexadecyne 3-Cyclohexene-1-carboxaldehyde, 1,	28265	002958-76- 074685-28- 040702-26-	2 46
21	22.45	1.10	C:\DATABASE\NBS75K.1 Undecane, 2,6-dimethyl- Undecane, 3,6-dimethyl- Eicosane	19000	017301-23- 017301-28- 000112-95-	9 50
22	23.44	2.96	C:\DATABASE\NBS75K.L 2-Hexyl-1-decanol Ethanone, 1-(2,2-dimethylcyclopent 1-Octadecanol	7482	000000-00- 003664-75- 000112-92-	3 38
23	23.66	1,81	C:\DATABASE\NBS75K.L Heptadecane, 2,6-dimethyl- Nonane, 3-methyl- Octane, 2,3,7-trimethyl-	8075	054105-67-6 005911-04-6 062016-34-6	6 64
24	24.13	2.73	C:\DATABASE\NBS75K.L Tridecane Tridecane Pentacosane	18989	000629-50-5 000629-50-5 000629-99-2	5 87
25	24.27		C:\DATABASE\NBS75K.l 1-Tetradecene 3-Tetradecene, (Z)- 3-Tetradecene, (E)-	21966	001120-36-1 041446-67-7 041446-68-8	45
26	25.63		0:\DATABASE\NBS75K.l Heptadecane, 2,6,10,14-tetramethyl Dodecane, 2,6,10-trimethyl- Dodecane, 2,6,10-trimethyl-	25995	018344-37-1 003891-98-3 003891-98-3	72
27	26.01	• •		67320	000629-59-4 006975-98-0 000629-59-4	63

Pk#	RT	Area%	Library/ID	Ref#	CAS# Qu	ıal
28	27.22	2.03	C:\DATABASE\NBS75K.L Heptadecane, 2,6,10,14-tetramethyl Tetradecane Dodecane	69661	018344-37-1 000629-59-4 000112-40-3	80
29	27.91	10.89	C:\DATABASE\NBS75K.L Pentadecane 10-Methylnonadecane Tridecane, 4,8-dimethyl-	39858	000629-62-9 000000-00-0 055030-62-1	86
30	30.16	3.61	C:\DATABASE\NBS75K.L Hexadecane Triacontane Eicosane	70787 55461 72323	000638-68-6	86

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

isc 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

			1		
	RT 10.19		Eibrary/ID C:\DATABASE\NBS75K.L	Ref#	CAS# Qual
			Formamide, N,N-dimethyl- Formamide, N,N-dimethyl- 2-Butanamine, (.+/)-	62525	000068-12-2 90 000068-12-2 90 033966-50-6 86
			C:\DATABASE\NBS75K.L Formamide, N,N-dimethyl- Formamide, N,N-dimethyl- 2-Butanamine, (.+/)-	62526 62525	000068-12-2 86 000068-12-2 86 033966-50-6 86
			C:\DATABASE\NBS75K.L 2-Hydroxypyridine 1,2,4,5-Benzenetetracarboxylic ant 2-Hydroxypyridine	63081 27070	000142-08-5 12 000089-32-7 12 000142-08-5 10
4 /	15.19	5.71	C:\DATABASE\NBS75K.L Benzene, 1-bromo-2-fluoro- Benzene, 1-bromo-3-fluoro- Benzene, 1-bromo-3-fluoro-	16035 16034	001072-85-1 96 001073-06-9 96 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

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 On A Barcode Mismatch

(X) Full Method (X) Inject Anyway () Reprocessing Only () 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	б	798199	079819	S-M18-2
5)	Sample	7	7981910	079819	S-M18-3
6)	Sample	5	7981911	079819	S-M ₄ 8-4
7)	Blank	2	79 8 1912	079819	blank & is

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

Gr aral Information

Inlet

Inlet : GC
Tune File : ATUNE.U Acquisition Mode : Scan

"S Information

'olvent Delay : 6.00 min

IM Absolute : True esulting Voltage : 1600.0

Scan Parameters

ow Mass : 35 igh Mass : 350 nreshold : 500

ampling # : 2 A/D Samples 4

hthoa: 079819.M Thu Aug 27 14:32:27 1998

```
[Real Time Plot Parameters]
  Time Window : 10 min
  Iconize Real Time Display : False
  Plot 1 type : Total ion
  Scale minimum : 1
    le maximum : 1500000
  Prot 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
[C on Program]
Initial Temp. : 40 C
Initial Time : 5.00 min
Level Rate (C/min) Final Temp. (C) Final Time (min)
                       210
  2
             0.00
Next Run Time : 27.25 min
Injector Information
_____
injection Source : Manual
Purge Information;
urge A/E Init. Value
                         On Time
                                     Off Time
   \mathcal{L}_{\mathbf{i}}
           Cii
                         0.00
   3
              Off
                           0.50
                                     0.00
```

etnoq: 079819.M

Thu Aug 27 14:32:27 1998

Page: 2

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

Dutput Destination

Screen: No Printer: Yes File: No

Benerate Report During Run Method: No

u itative Report Settings

Page: 3**189** ethod: 079819.M Thu Aug 27 14:32:27 1998

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

lethod: 079819.M

Thu Aug 27 14:32:27 1998

Page: 190

Silo GC/FID Data

Company:	PES	Client #:	D012 004
Analyst:	BGP		R012.001
•		Enthalpy #:	0798-19
Parameters:	Organics	PO #:	104080300
# Samples:	- 11		104980229
	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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R012.001	61-86-16	104980229	86/11/60
Clear	Euthalpy #:	PO	Report Date:
PES	BGP	Hexane	
Company	A maly pt:	Parameters	/ Samples:
DON	E GG	:	(mdd

	Total Catch Weight	169	2,528	2,371
	Catch Weight (ug)	< 10.0 691 < 5.00 691	2,262 265 265 2,528	298 < 5.00 2,371 - 7.35
	Mution			
	Volume (mL)	5 5	\$ 5	2 S S S
	Curve	0798-19D. 0798-19.M 0798-19.M	0798-19D. 0798-19 M.	0798-19D 0798-19D 0798-19D
0798-19 0798-19 104980229 09/17/98	Average Conc.	000 > 100	53.9	59.5 < 1.00 < 1.47 < 1.00
Cleat Cleat	% Difference of Mean	0.00	0.08	0.18 0.41 0.00 0.93
	Concentration	1.001.312.00	53.9 53.0 < 1.00	293 293 293 203 2 1 48 2 1 00
PES BGP Hexane	Conce Inj. // 1	1 001 45< 1 00	53.2	29.8 59.8 < 1.00 < 1.00 < 1.00
Company: Analysi: Parameters: # Samples:	Percent Difference	NA 1 19 NA	0.00	00 00 V 00 00 V 00 00 V 00 00 V 00 00 V 00 00
undd	ime (min.) Inj. # 2	NA 1 444 NA	1.447	NA 1 445 NA 1 460 NA 1 465 NA 1 465
1.00 5.00 34 - 388 ppm)	Retention Tyme (min.)	NA NA NA	1.447	1.465 1.460 1.465 NA
MDL; 1.00 LOQ: 5.00 Curve range (7.34 - 388 ppm)	146 D.	0475401 D 0475402 D 029F3301 D 029F3301 D 030F3402 D	032F3601.D 049F3602.D 031F1501.D 031F1502.D 032F3601.D 032F3602.D	051F3801 D 051F3802 D 033F1802 D 033F1801 D 033F1802 D 033F1802 D 035F1701 D 035F1701 D 035F1701 D 036F4001 D 036F4002 D
		VOA	VOA P	VOA FH HH HH BH
2	Sample	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M18-3A S-M18-3A S-M18-3A S-M18-EB S-M18-EB

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	Tota Catch W		08	28	38
	Catch Weight (ng)	< 10.0 801 < 5.00	801 < 42.0 283 < 5.00	283 < 42.0 394 < 5.00	394
	Difution Ratio				
	Volume (mL)	5 5	5 5	42 5	~
	Curve	0798-19D. 0798-19 M 0798-19 M	0798 19D. 0798-19D. 0798-19 M.	0798-19D. 0798-19D. 0798-19 M	0798 19D
8012.001 0798-19 104980229 09/17/98	Average Conc.	00 00	00 V	> 1.00 78.8 1.00	901 >
Chest f. Esthelpy f. PO f. Report Date:	% Difference of Mean	0.00	0.00	0.00	00 0
PES BGP Benzeic 11	Concentration Inj. f i Inj. f 2	1.00 < 1.00 169 < 1.51 1.00 < 1.00	1.00 < 1.00 56.5 56.7 1.00 < 1.00	1.00 < 1.00 77.6 80.1 1.00 < 1.00	99 >
Company: P Andyst: B Farmseckii: B		00.1 > 169	> 1.00 56.5 < 1.00	> 1.00 7.7.5 0.1.00	00 1
Come Parent Set	Percent Difference	NA 1 27	AN CO	0.00 AN	Y Z
undd undd	Ime (inin.) Inj. // 2	5.507 NA	NA 5.436 NA	NA S.415 NA	Y X
1.00 5.00 85 - 416 ppm	Retention Time (min.)	NA 5 438 NA	NA S 442 NA	5.412 NA	X X
MD1.: 1.00 LOQ: 5.00 Curve range (7.85 - 416 ppm)	ation Inj. / 1 Lig. / 2	VOA 0475301 D 0475302 D FH 0285301 D 0285302 D BH 03053401 D 03053402 D	VOA 046F3601 D 046F3602 D FH 031F1501 D 031F1502 D BH 032F3601 D 032F5602 D	VOA 651F3801 D 051F3802 D FH 033F1601 D 033F1602 D BH 034F3801 D 034F3802 D	FII 035F1701.D 035F1702.D BII 036F4001.D 036F4002.D
	Gentification	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M18-3A S-M18-3A S-M18-3A	S-M18-FB S-M18-FB

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	Total Catch Weight	1,092	126	944	- 20.6
	Cosch Weight	- 24.0 1,068 < 5.00 1,092	< 42.0 915 - 5.88 921	< 42.0 937 - 6.25 944	. 15.1 5.45 - 20.6
	Dilution				
	Volume (mL)	10 5 5	42 5 5	\$ \$	20
	Curve	0798-19D. 0798-19-M 0798-19-M	0798-19D. 0798-19D. 0798-19 M	0798-19D. 0798-19D. 0798-19 M	0798-19D.
R012 001 0798-19 10+980229 09/17/98	Average Conc.	- 2.40 214 < 1.00	183	< 1.00 - 1.25	- 3.02
Chest #1 Enthalpy f. Po.f.: Report Date:	% Difference of Mean	2.67	0.00	0.00	0.42
	Concentration Inj. # 1 Inj. # 2	203	< 1.00 185 - 1.15	< 1.00 1.25	3 03
PES BGP Tolucia	Conc Inj. # 1	224 < 1.00	< 1.00182- 1.21	00100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100100<li< td=""><td>108</td></li<>	108
Company: Analyst: Parameters: # Samples:	Percent Difference	0.14 0.81 NA	0.05 0.03	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	100
undd	Time (min.) Inf. #2	7.27! 7.362 NA	NA 7 363 7 391	7.427	7,387
1.00 5.00 77 - 411 ppm	Retention Time (min.)	7.261 7.303 NA	NA 7.367 7.393	7.424 7.382 7.386	7.393
MDL: 1.00 1.00	Lab ID Inj. #2	047F3401 D 047F3402 D 059F3301 D 029F3302 D 030F3401 D 030F3402 D	048F3601.D 048F3602.D 031F1501.D 031F1502.D 032F3601.D 032F3602.D	031F3001.D 051F3802.D 033F1601.D 033F1602.D 034F3801.D 034F3802.D	035F1701.D 035F1702.D 036F4002.D
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VOA FII 02	VOA FH BIT	VOA BII	E 18
155	Sample	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M16-3A S-M18-3A S-M18-3A	S-M18-FB S-M18-FB

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T A
Ш

	Total	and Badd Transport	809	1,635	955
	Plindon Catch Weight Ratio (ur)	1 798	809 1 < 42.0 1 626	1,635	955
	Volume (mL)	5 5	2 2 2	42 5 5	2 2
998	College	0798-19D. 0798-19.M	0798-19D. 0798-19D. 0798-19.M	0798-19D. 0798-19D. 0798-19 M	M 61-8670
Hear F. R012 001 elpy f. 0796 19 PO f. 104980229 L Date: 09/17/98	Average Conc.	80 - 00 160 - 00	< 1.00 325 - 1.66	- 2.57 168 - 1.55	- 4.73
Chest // Enthelpy // PO // Report Date:	% Difference of Mean	0.90	0.00	0.36 > 5 % 2.97	0.04
20137	Concentration 11 Inj. 12	001 > 100	< 1.00 333 1.67	. 2.58 . 52 . 1.59	- 473
r PES t BGP s Ethylbenzene	- T	- 1.07	318	- 2 56 284 - 1 50	1.54
Company: Amilyn: Parameters: I Samples:	Percent Difference	98 0 VX	0 00 0 00 0 01	0.03 1.47 0.04	100
ppm ppm	Refeution Time (min.)	8.991 9.157 NA	9 053 9 083 9 180	9.178	9 175
1.00 5.00 7.73 - 409 pp	Refeution Inj. / 1	8.981 9.236 NA	9 057 9 179	9.076	9 176
MDL: 1.00 LOQ: 5.00 Curve range (7.73 - 409 ppm)	Lu. / 1 Jul. / 2	047F3401.D 047F3402.D 020F3401.D 020F3402.D	049F3801D 049F3802 D 031F1501D 031F1502 D 032F3801D 032F3802 D	051F3801 D 051F3802 D 033F1801 D 033F1802 D 034F3801 D 034F3802 D	035F1701 D 035F1702 D 036F4001 D 038F4002 D
	ilon.	VOA FII BIH	VOA FII BII	VOA FIL BH	定蓋
56	Sentification	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M18-3A S-M18-3A S-M18-3A	S-M18-FB

Cler 7, R012 001	Englantpy #: 0798-19	FO (104980229	Report Date: 09/17/98
PES	BCF.	p-Xykne	1

	Total Catch Weight	196	111	654	1 86
	Catch Weight C	< 10.0 967 < 5.00 967	< 42.0 77.1 < 5.00 77.1	- 76.1 578 < 5.00 654	- 7.66 < 5.00 - 7.66
	Volume Dilution (mL) Ratio	1 000	422	42 5 1 5	5 1 5
6	Cal.	0798-19D 0798-19 M 0798-19 M	0798-19D. 0798-19D. 0798-19 M	0798-19D 0798-19D 0798-19-M	0798-191). 0798-19 M
6 8012 001 6 0798-19 104980229 16 0917798	Ayerage Conc.	V V V V V V V V V V	>	181 - 16	- 1.53
Chest () Refusty 7 () Report Date:	% Difference of Mean	0000	2.01	0.85	0 33
	Concentration	> 1.90 173 173	1.001.511.00	- 1.83 115 < 1.00	> 1.53
PES BGP P-Xyene	Concer Inj. / I	1.002141.00	< 1.00 157 < 1.00	. 1.80 1.16 1.00	22 00
Company: Auslyd: Parameters: # Samples:	Percent Difference	NA 1 05 NA	0.03 0.03	0 00 VV	0.00
uudd	ime (min.) Inj. # 2	9.294 NA	9.319 9.340	9 284 9 324 NA	9.337
MDL: 1.00 1.00	Retention Time (min.)	9 393 AA	9.322 9.341	9 284 9 321 NA	9 338
MDL: 1.0Q: Curve range (7	in Ke in 12	047F3401.D 047F3402.D 029F3301.D 029F3302.D 030F3401.D 030F3402.D	046F3801.D 046F3602.D 031F1501.D 031F1502.D 032F3801.D 032F3602.D	051F3801.D 051F3802.D 033F1801.D 033F1602.D 034F3801.D 034F3802.D	035F1701 D 035F1702 D
	Sample dentification	VOA FII BII	VOA FIE BIE	VOA FII BIH	FIL
457	Sample	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M18-3A S-M18-3A S-W18-3A	S-M18-FB S-M18-FB

9013 001	0798-19	104980229	09/11/60
	1	2	Report Date:
y: PES	Mt. BGP	m. Xylene	
Congress	1		de la

R012 001 9796-19 104960229 9917798	Average Cel. Volume Dijection E. Catop Weight Total Conc. Curve (ml.) Ratio Cury	146 0798-19D 10 1 14.6	< 1.00	< 1.00	< 1.00
Company PES Canal Per Cana	Percent Concentration Epiferome Difference Inj. / 1 Inj. / 2 of Mean	0.07 - 1.47 - 1.44 1.02 >3 % 412 192 > 5 % NA < 1.00 < 1.00 0.00	NA < 1.00 < 1.00 0.00 0.00 0.00 0.00 0.00	NA < 1.00 < 1.00 0.00 0.00 97.33 1.00 1.54 NA < 1.00 < 1.00 0.00	0001
MDE: 1.00 ppm 1.0Q: 5.00 ppm Curve fange (7.74 - 409 ppm)	Toentification [15] [15] [15] [15] [15] [15] [15] [15]	S-M18-1A VOA 047F3401 D 047F3402 D 9.538 9.545 S-M18-1A FII 020F3301 D 020F3302 D 9.743 9.449 S-M18-1A BII 030F3401 D 030F3402 D NA NA	S-M18-2A VOA QUETSEOTD DOGF3602 D NA NA S-M18-2A FII Q31F1501 D Q31F1502 D 9.480 9.479 S-M18-2A BII Q32F3901 D Q32F3902 D NA NA NA	S-M18-3A VOA 05/F3801 D 06/F3802 D NA NA S-M18-3A FH 038/F3801 D 038/F3802 D 9.475 S-M18-3A BH 034/F3801 D 034/F3802 D NA NA	S-M18-FB FII 035F1701 D 035F1702 D 9 474 9 475 S-M18-FB BII 036F4001 D 036F4002 D NA NA

Page. 1

unpany: PES	Amalyst: BGP	PO P	demples: 11 Report Date:
Count	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Parson	S

	Catch Weight	615	1 198	1,180	88
	Caich Weight (ug)	< 10.0 615 < 5.00 615	< 42.0 1,198 < 5.00 1,198	224 956 < 5.00 1,180	
	Dilution Ratio				
	Volume (mL)	5 5	42 5	42 5 5	2 2
	Cal.	0798-191). 0798-19.M 0798-19.M	0798-19D. 0798-19D. 0798-19.M	0798 19D 0798 19D 0798 19 M	0798-19D 0798-19 M
0798-19 104980229 104980229 09/17/98	Ayerage Conc.	1.001.001.00	240 1.00 1.00	5.33	00.1 > 0.00
Chest fr Employer f PO f Report Date:	% Difference of Mean	0 00 0 00 0 00 0 0 0 0 0 0 0 0 0 0 0 0 0	00.0	0.38	00.0
	Concentration	1.001.001.00	 1.00 2.39 1.00 	5.35 190 < 1.00	8 8
PES BGP Cutterne	Conce	1.001.291.00	1.002401.00	5.32 192 < 1.00	8 8
Company: Amilye: Parameters: I Samples:	Percent Difference	0.53 NA	NA 0.03 NA	0 0 0 V	0.01 NA
uudd	inte (min.) Inj. #2	NA 10 223 NA	9.991 AN	9 993 9 990 NA	10 10I NA
MDL: 1.00 f LOQ: 5.00 l Curve range (7.70 - 407 ppm)	Retention Time (win.	NA 10.169 NA	406 6 A X	9 994 9 988 NA	10 102 NA
MDL: LCQ: Curve range (020F3301.D 047F3402.D 020F3302.D 030F3401.D 030F3402.D	048-3801 D 048F3602 D 031F1501 D 03F1502 D 032F3601 D 032F3602 D	051F3801.D 051F3802.D 033F1801.D 033F1802.D 034F3801.D 034F3802.D	035F1701 D 035F1702 D
		VOA FEI BIII	VOA FII 00	VOA FII	FII
159	Femilia	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M18-3A S-M18-3A S-M18-3A	S-M18-FB S-M18-FB

Page 1

ENTHALPY analytical, inc.

	Total Catch Weight		754	349	340
	Catch Weight (ug)	738 738 < 5.00	254 < 42.0 349 < 5.00	349 42.0 340 5.00	340
	Volume Dilution (mL) Ratio	100	42	42	- 1 - 2
01 99 88	Cal. Curve	0798-19D. 0798-19 M 0798-19 M	0798-19D. 0798-19D. 0798-19.M.	0798-19D. 0798-19D. 0798-19-M.	0798-19D. 0798-19 M
Chain ft R012 001 Bath 197 ft 0798 19 R0 ft 104980229 Report Date: 09/17/98	% Difference Average of Mean Conc.	2.80 - 1.52 > 5 % 148 0.00 < 1.00	9.00 < 1.00 2.00 69.8 0.00 < 1.00	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 < 1.00
	centration Inj. // 2	1.48	71.2	9 89	00.1 >
Continuity PES Amalysis BCP Amalysis BCP Samples II	Percent Con Difference Inj. / 1	0.08 - 1.56 0.54 1.55 NA < 1.00	NA	NA < 1.00 0.00 67.5 NA < 1.00	00 V
udd		10 664 10 364 0 364 NA	NA NA NA NA NA NA NA NA NA NA NA NA NA N	10.389 NA NA	VV VV
1.00 5.00 (7.67 - 406 ppm)	Retention Time (min.)	10.656 10.308 NA	NA 10.386 NA	NA 10.389 NA	Ϋ́ V
MDL: LOQ: Cuive tange	10 (17 14 10) (17 14 14 14 14 14 14 14 14 14 14 14 14 14	0475401.D 04753402.D 029F3301.D 029F3302.D 030F3401.D 030F3402.D	049F3601 D 049F3602 D 031F1501 D 031F1502 D 037F3601 D 032F3602 D	051F3001 D 051F3802 D 033F1801 D 033F1802 D 034F3001 D 034F3802 D	035F1701 D 035F1702 D 036F4001 D 036F4002 D
	imple	VOA HIE	VOA FE	VOA FH BH	F11 B11
460	S	S-M18-1A S-M18-1A S-M18-1A	S-M18-2A S-M18-2A S-M18-2A	S-M18-3A S-M18-3A S-M18-3A	S-M18-FB

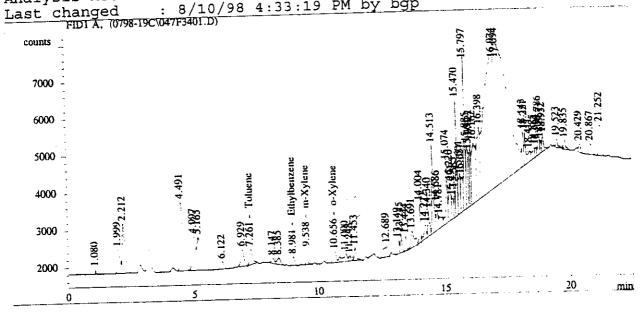
Seq. Line : Injection Date : 8/5/98 8:12:24 PM Vial : 47 : S-M18-R1 A VOA Sample Name Inj : : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : E:\HPCHEM\TELLER\METHODS Last changed : 8/3/98 3:07:34 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

0191141 -	.,	•				
RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.463 5.391 7.261 8.981 9.323 9.538 10.084 10.656	PP PB	2083.59888	7.04194e-4 7.04047e-4 7.05922e-4 6.82854e-4	- 2.46236 1.07296 - 1.47086 - 1.56214		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Totals	:			6.56832		

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

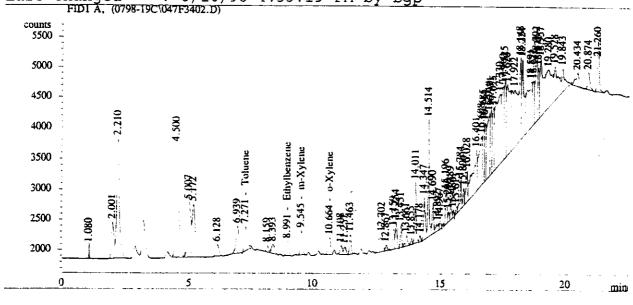
Warning: Calibrated compound(s) not found

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 : 8/10/984:33:19 PM by bqp



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr	o Name
1.463 5.391 7.271 8.991 9.323 9.545 10.084 10.664	PP PB	3314.64355 1551.56201 - 2041.66711 - 2163.11621	7.04047e-4 - 7.05922e-4	2.33415 1.09237 - 1.44126 - 1.47709		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Totals :	1			6.34487		

Results obtained with enhanced integrator!

2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

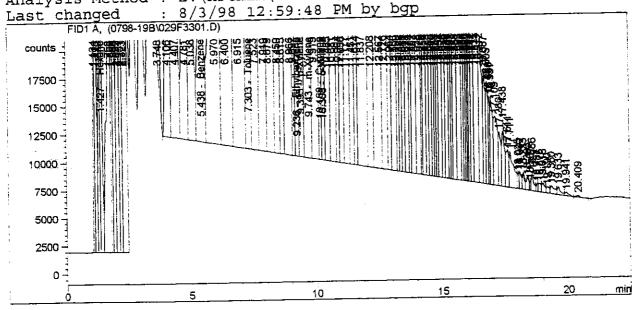
202

Seq. Line : 33 Injection Date : 8/3/98 10:13:14 AM Vial : 29 Sample Name : S-M18-R1 Aa+AbFH Inj: 1Acq. Operator : bgp Inj Volume : 2 μ l

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



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>p</u> 	Name
1.427 5.438 7.303 9.236 9.393 9.743 10.169 10.308	VV VV VV VV	1.63214e5 2.12879e5 2.88281e5 2.44732e5 2.73796e5 5.31077e5 1.52252e5 2.06328e5	8.91155e-4 7.95593e-4 7.78700e-4 7.72310e-4 7.79986e-4 7.75922e-4 8.46657e-4 7.52583e-4	145.44933 169.36479 224.48417 189.00882 213.55716 412.07445 128.90518 155.27882	'	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1638.12271 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

Injection Date : 8/3/98 10:43:09 AM Seq. Line : Sample Name : S-M18-R1 Aa+AbFH Vial : 29 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ 1

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 FID1 A, (0798-19B\029F3302.D) counts 📑 17500 -15000 -12500 10000 7500 -5000 2500 0 5 10 15

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	o Name
1.444 5.507 7.362 9.157 9.294 9.449 10.223 10.364	VV VV VV VV VV	1.47009e5 1.89691e5 2.60230e5 1.68426e5 2.21887e5 2.46637e5 1.38139e5 1.86071e5	8.91316e-4 7.95847e-4 7.78889e-4 7.73327e-4 7.80451e-4 7.77133e-4 8.46946e-4 7.52884e-4	131.03177 150.96457 202.69023 130.24839 173.17158 191.66947 116.99614 140.08986		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 1236.86202

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

204

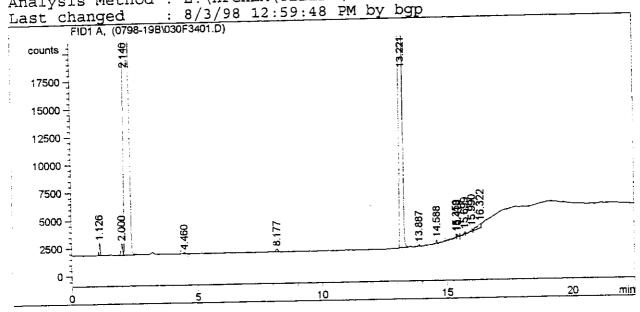
min

Seq. Line : Injection Date : 8/3/98 11:12:49 AM 30 Vial : : S-M18-R1 AbFH Sample Name 1 Inj: : bgp Acq. Operator Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 7/31/98 6:22:19 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
					,	Hexane
1.467		-	-	_		
5.409		<u>-</u>	-	-	_	
		_	-	-		
			_	_	I	Ethylbenzene
		-		_		
9.338			_	_		
9.474		-	-	-		=
		_	-	-		
			_	_	(o-Xylene
10.393		-				-
5.409 7.390 9.176 9.338 9.474 10.097 10.393		- - - - -	-	- - - - -	I I r	Benzene Foluene Ethylbenzene p-Xylene n-Xylene Cumene p-Xylene

0.00000 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

205 Warning: Calibrated compound(s) not found

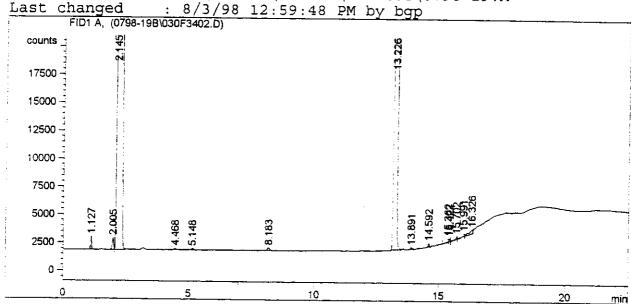
465 Teller 8/4/98 7:56:35 AM bgp

Injection Date : 8/3/98 11:42:35 AM Seq. Line : 34
Sample Name : S-M18-R1 AbFH Vial : 30
Acq. Operator : bgp Inj : 2
Inj Volume : 2 µ1

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



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]	Grg) Name
1.467		_			- -	
		_	-			Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		~	_	-		Ethylbenzene
9.338		-	_			
9.474			·-	-		p-Xylene
		-	-	-		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

Seq. Line : 36 Injection Date : 8/5/98 10:12:14 PM 49 Vial :

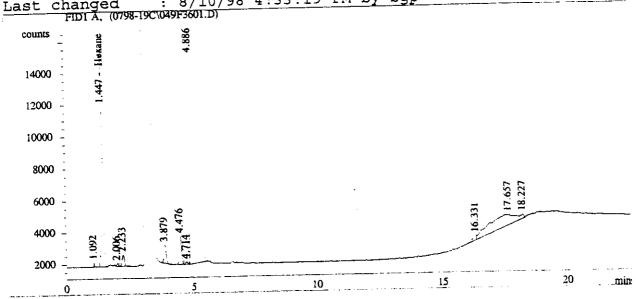
: S-M18-R2 A VOA Sample Name Inj : 1 Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.447 5.391 7.373 9.161 9.323 9.460 10.084 10.379		6.34282e4 - - - - - -	8.48458e-4 - - - - - -	53.81621	, 3	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

53.81621 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 207

Warning: Calibrated compound(s) not found

Teller 8/10/98 4:50:33 PM bap

Injection Date : 8/5/98 10:42:10 PM Seq. Line : Sample Name : S-M18-R2 A VOA Vial : 49 Acq. Operator : bqp Inj : 2 Inj Volume : 2 μ l : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File 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 : 8/10/98 4:33:19 PM by bgp Last changed FIDY A, (0798-19C\049F3602.D) counts 14000 12000 10000 8000 6000 4000 2000 min

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 5.391 7.373 9.161 9.323 9.460 10.084 10.379	BP	6.35279e4 - - - - - - -	8.48477e-4 - - - - -	53.90196	Be To Et p- m- Cu	exane enzene oluene chylbenzene -Xylene cmene -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

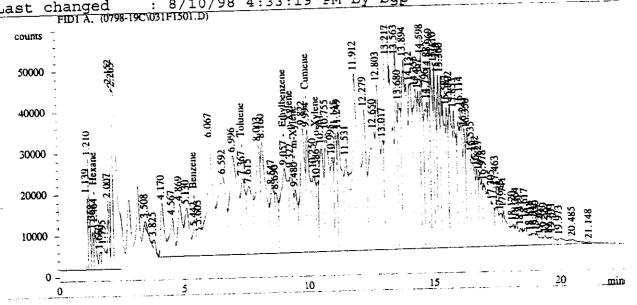
408
Taller 8/10/98 4.50.46 PM hap

Seq. Line : Injection Date : 8/5/98 4:09:11 AM Vial : 31 Sample Name : S-M18-R2 Aa+AbFH Inj: 1Acq. Operator : bgp Inj Volume : 2 μ l

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

Signal Sorted By

Signal 8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.464 5.442 7.367 9.057 9.322 9.480 9.994	VV VV VV VV VV	6.27407e4 7.45377e4 2.42525e5 4.28229e5 2.10223e5 1.39680e5 2.95555e5 9.52145e4	8.48330e-4 7.57443e-4 7.48533e-4 7.42491e-4 7.48660e-4 7.44735e-4 8.11718e-4 7.18886e-4	104.02433		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1178.94302 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

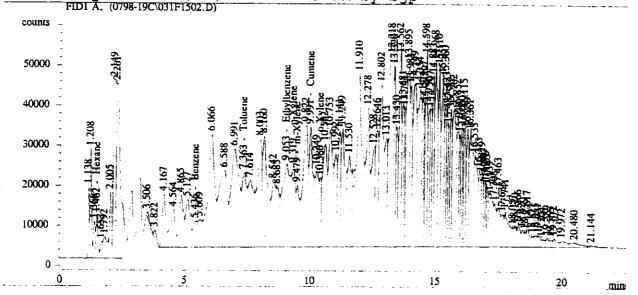
Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/5/98 4:39:04 AM Seq. Line : : S-M18-R2 Aa+AbFH Sample Name Vial : 31 Acq. Operator : bgp Inj : Inj Volume : 2 μ 1

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

: 8/10/98 4:33:19 PM by bgp Last changed



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]	Grg	Name
1.462 5.436 7.363 9.053 9.319 9.479 9.991 10.380	VV VV VV VV VV	6.24492e4 7.48563e4 2.46545e5 4.47935e5 2.01966e5 1.42681e5 2.95025e5 9.90839e4	8.48275e-4 7.57475e-4 7.48567e-4 7.42536e-4 7.48570e-4 7.44804e-4 8.11715e-4 7.19074e-4	52.97408 56.70179 184.55565 332.60783 151.18565 106.26962 239.47638 71.24863		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 1195.01963

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Seq. Line : 36 Injection Date : 8/3/98 1:12:14 PM Vial : 32 : S-M18-R2 AbBH Sample Name Inj: 1

: bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 8/3/98 1:05:33 PM by bgp Last changed (modified after loading)

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp Last changed FID1 A. (0798-19B\032F3601.D) counts _ 17500 15000 12500 10000 393 - Toluene 7500 5000 2500 0 15 20 min 10 5

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr <u>r</u> 	Name
1.465 5.409 7.393 9.179 9.341 9.474 10.097	BP BV VB	- 1450.75732 1994.65137	9.19566e-4 8.30843e-4 8.28951e-4 8.36380e-4	1.20535 1.65347		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

4.30882 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Page 1 of 2

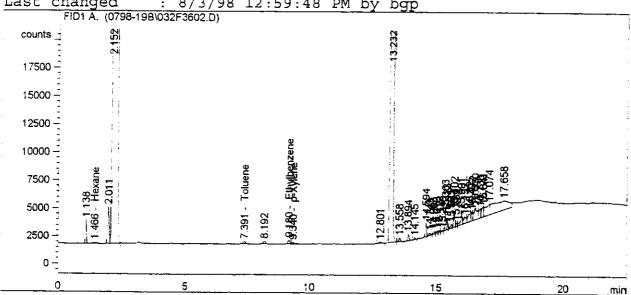
Injection Date : 8/3/98 1:42:06 PM Seq. Line : Sample Name : S-M18-R2 AbBH Vial : 32 Acq. Operator apd: Inj : 2 Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

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 Type Area Amt/Area Amount Grp Name [min] counts*s [ug/kg]	
1.466 BB 729.49854 9.19566e-4 6.70822e-1 Hexane 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) 472

212

Teller 8/4/98 7:58:27 AM bgp

Seq. Line :

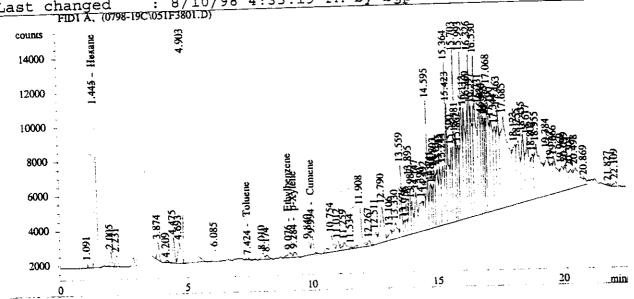
Injection Date : 8/6/98 12:12:00 AM 51 Vial : : S-M18-R3 A VOA Sample Name Inj : 1 Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method Last changed : 8/3/98 3:07:34 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1,0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.445 5.391 7.424 9.076 9.284 9.460 9.994 10.379	PB VV VP	717.28729 3637.93311 2533.23242	8.47395e-4 7.04194e-4 7.04047e-4 7.08933e-4 - 7.65340e-4	2.56128 1.79589		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

59.46000 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found 473 Teller 8/10/98 4:51:25 PM bap

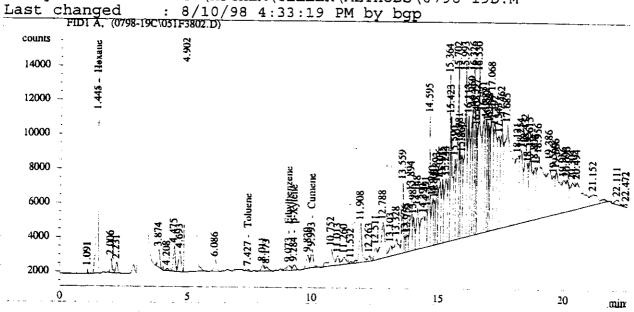
Injection Date : 8/6/98 12:41:52 AM Seq. Line : Sample Name : S-M18-R3 A VOA Vial : 51 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 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	o Name
1.445 5.391 7.427 9.073 9.284 9.460 9.993 10.379	PP VV VB	5.83576e4 803.78278 3664.12817 2576.88647 6984.73779	7.08933e-4	49.45461 - 5.66019e-1 2.57972 1.82684 - 5.34570		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 59.77289

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

474 Teller 8/10/98 4:51:38 PM bqp

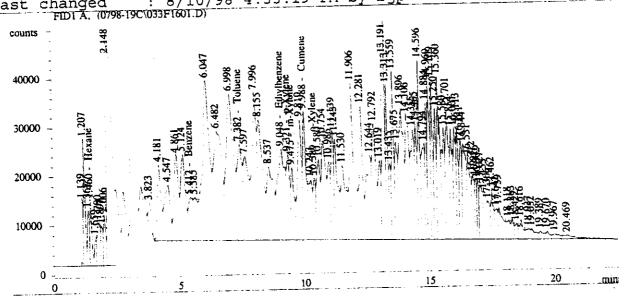
Warning: Calibrated compound(s) not found

Seq. Line : Injection Date : 8/5/98 5:08:49 AM Vial : 33 Sample Name : S-M18-R3 Aa+AbFH Acq. Operator : bgp Inj: 1 Inj Volume : 2 μ l

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

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460 5.412 7.382 9.048 9.321 9.475 9.988 10.389	VV VV VV VV VV	7.03650e4 1.02148e5 2.50915e5 3.82630e5 1.55327e5 1.30735e5 2.36540e5 9.38973e4	8.49613e-4 7.59476e-4 7.48603e-4 7.42371e-4 7.47886e-4 7.44508e-4 8.11311e-4 7.18818e-4	59.78302 77.57935 187.83555 284.05329 116.16679 97.33338 191.90747 67.49510		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1082.15396 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

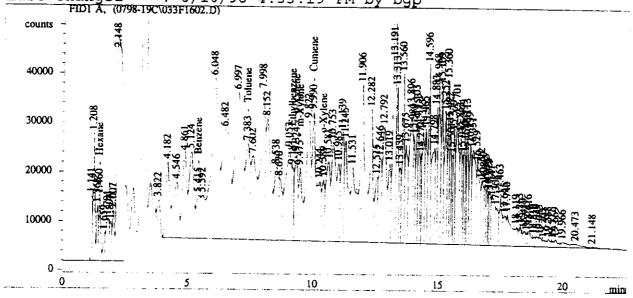
475

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : E:\HPCHEM\TELLER\METHODS 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	o Name
1.460 5.415 7.383 9.181 9.324 9.475 9.990 10.389	VV VV VV VV VV	6.97956e4 1.05456e5 2.49889e5 7.03364e4 1.53911e5 1.34798e5 2.34743e5 9.54592e4	8.49527e-4 7.59649e-4 7.48595e-4 7.37344e-4 7.47858e-4 7.44615e-4 8.11295e-4 7.18898e-4	59.29322 80.10916 187.06587 51.86212 115.10395 100.37223 190.44548 68.62545		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 852.87748

Results obtained with enhanced integrator!

1 Warnings or Errors:

Warning: Calibration warnings (see calibration table listing)

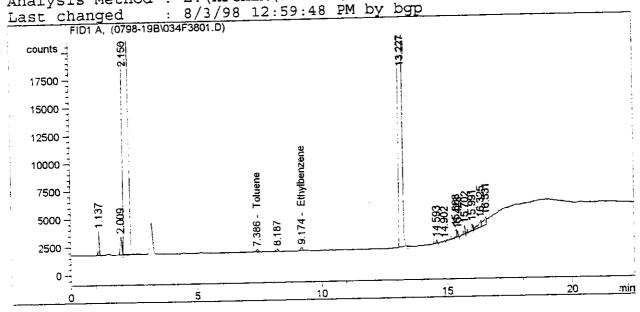
Seq. Line : Injection Date : 8/3/98 3:13:40 PM Vial : 34 : S-M18-R3 AbBH Sample Name 1 Inj : : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467 5.409 7.386 9.174 9.338 9.474 10.097		1504.16638 1809.70996 - -	8.30843e-4 8.28951e-4	1.24973 1.50016 - -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

2.74989 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

477

Injection Date : 8/3/98 3:43:29 PM

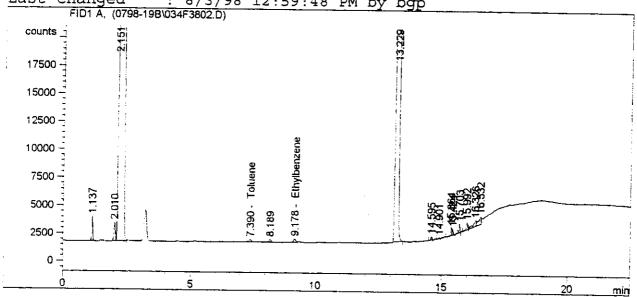
Seq. Line : Sample Name : S-M18-R3 AbBH Vial : 34 Acq. Operator : bgp Inj : 2

Inj Volume : 2 μ 1 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

: 8/3/98 12:59:48 PM by bgp Last changed



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]	Grţ	o Name
1.467 5.409 7.390 9.178 9.338 9.474 10.097 10.393		1504.11279 1920.49646 - -		1.24968 1.59200 -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

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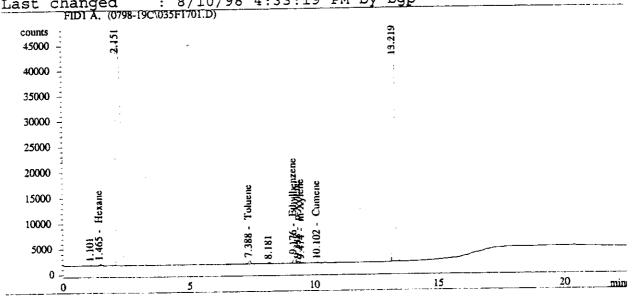
Seq. Line : 17 Injection Date : 8/5/98 6:08:57 AM Vial : 35 : S-M18-FB Aa+AbFH Sample Name 1 Inj: : bgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified :

1.0000 Multiplier : 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Gr	o Name
1.465 5.391 7.388 9.176 9.338 9.474 10.102 10.379	BP VV VP	1864.04346 4273.76465 6714.62695 2168.54346 770.28723 598.98212	- 7.04194e-4 7.04047e-4	1.45600 - 3.00956 4.72741 1.53735 5.43763e-1 4.58425e-1	l	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

11.73251 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

Page 1 of 2

Teller 8/10/98 4:42:21 PM bqp

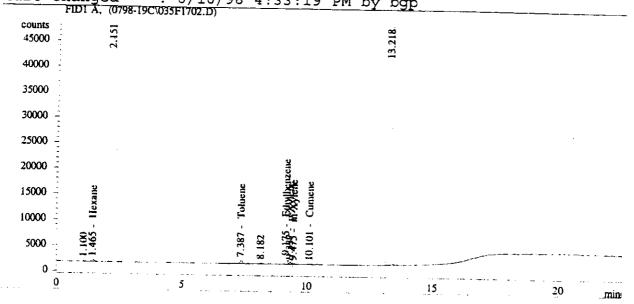
Injection Date : 8/5/98 6:38:46 AM Seq. Line : 17
Sample Name : S-M18-FB Aa+AbFH Vial : 35
Acq. Operator : bgp Inj : 2
Inj Volume : 2 µl

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	o Name
1.465 5.391 7.387 9.175 9.337 9.475 10.101 10.379	BP BV VV VP	4309.81299 6719.50342 2154.44360 725.68115	7.04047e-4			Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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 Teller 8/10/98 4:42:34 PM bgp

Injection Date : 8/3/98 5:13:02 PM Seq. Line : 40 Vial : 36 Sample Name : S-M18-FB AbBH Inj : 1 Acq. Operator : bgp Inj Volume : 2 μ l

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

: 8/3/98 12:59:48 PM by bgp Last changed FID1 A, (0798-19B\036F4001.D) counts 📑 17500 15000 12500 10000 7500 5000 -2500 0 15 5 10 0

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]	Gr <u>r</u>	Name
1.467 5.409 7.393 9.179 9.342 9.474 10.097 10.393	PV	1299.58960 1854.63794 632.35193	8.28951e-4	- 1.07976 1.53740 5.28886e-1 - -	,	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

Injection Date : 8/3/98 5:42:58 PM Seq. Line : Sample Name : S-M18-FB AbBH Vial : 36 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ 1

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 FID1 A, (0798-19B\036F4002.D) counts -17500 15000 12500 9339 - EXMPrezene 10000 7.392 - Toluene 7500 5000 2500 0 -0 5

External Standard Report

15

20

min

10

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 5.409 7.392 9.178 9.337 9.474 10.097 10.393	ΡV	1324.87170 1875.25574 658.98865		1.10076 1.55449 5.51165e-1		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 3.20642

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

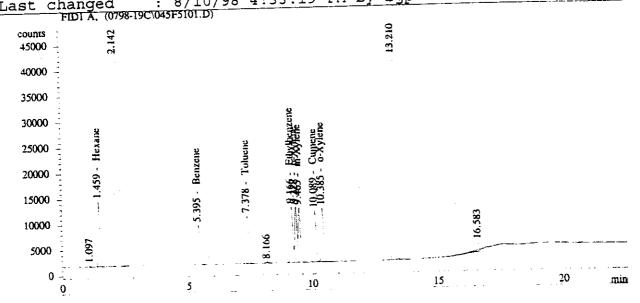
Warning: Calibrated compound(s) not found

Seq. Line : 51 Injection Date : 8/6/98 10:07:31 AM Vial : 45 Sample Name : LCS #1 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M : 8/3/98 3:07:34 PM by bgp Sequence File

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

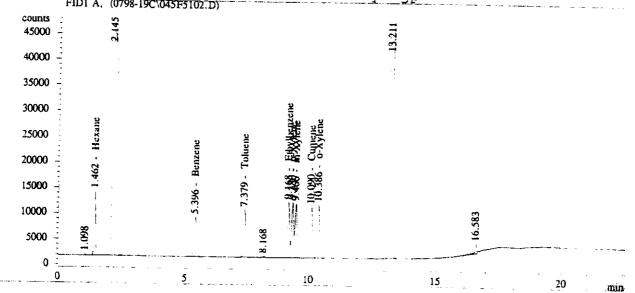
RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grg 	Name
1.459 5.395 7.378 9.166 9.328 9.465 10.089 10.385	BB BB BV VV VB BV	5.44922e4 5.99673e4 6.22264e4 6.55951e4 6.29597e4 6.34409e4 6.15578e4 6.12353e4	8.46537e-4 7.55615e-4 7.42409e-4 7.36899e-4 7.43535e-4 7.40761e-4 8.05506e-4 7.16212e-4	46.12968 45.31221 46.19746 48.33695 46.81276 46.99461 49.58516 43.85743		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
mla				373.22626		

Totals : Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/6/98 10:37:15 AM Line : Sample Name : LCS #1 Vial: 45 Acq. Operator : bqp Inj : 2 Inj Volume : 2 μ 1 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, FIDI A. (0798-19C\045F5102.D) : 8/10/98 4:33:19 PM by bgp counts



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462 5.396 7.379 9.168 9.330 9.466 10.090 10.386	BP BB BV VV VB BV	5.45174e4 5.96934e4 6.16479e4 6.48683e4 6.23519e4 6.26660e4 6.09151e4 6.05934e4	8.46544e-4 7.55573e-4 7.42332e-4 7.36825e-4 7.43464e-4 7.40671e-4 8.05423e-4 7.16132e-4	46.15134 45.10269 45.76324 47.79659 46.35637 46.41492 49.06245 43.39288	Be: To: Et: p-: m-: Cur	xane nzene luene hylbenzene Xylene Mene Mene Xylene
Totals :				370 04048		

370.04048

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 464

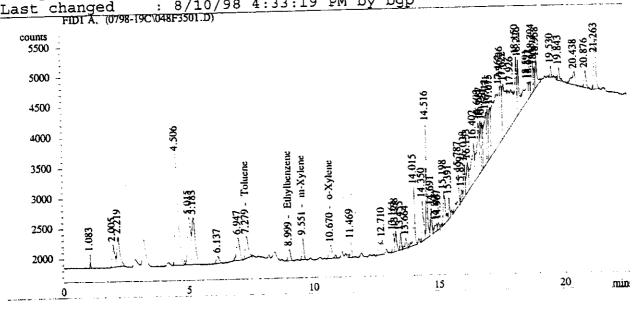
Seq. Line : 35 : 8/5/98 9:12:21 PM Injection Date 48 Vial : : S-M18-R1 B VOA Sample Name 1 Inj: Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463 5.391 7.279 8.999 9.323 9.551 10.084 10.670	PP PB	- 1782.05444 -	7.04047e-4 -	2.08424 8.65708e-1 - 1.25799 - 1.26182		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

Teller 8/10/98 4:50:07 PM bgp

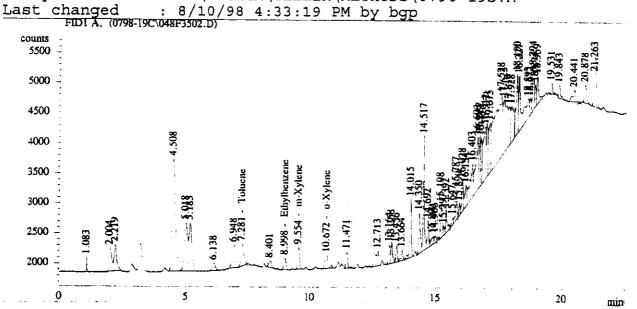
Injection Date : 8/5/98 9:42:17 PM Line : Sample Name : S-M18-R1 B VOA Vial: 48 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

Last changed : 8/3/98 3:07:34 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
1.463 5.391 7.281 8.998 9.323 9.554 10.084 10.672	PP BB	2952.48633 1248.16382 1796.79407 	7.04047e-4 - 7.05922e-4	2.07912 8.78766e-1 - 1.26840	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

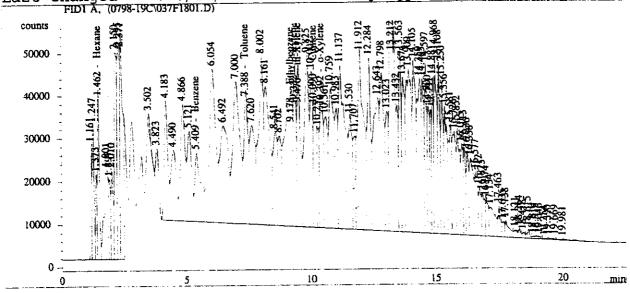
Injection Date : 8/5/98 7:08:33 AM Seq. Line : 18 Sample Name : S-M18-R1 Ba+BbFH Vial : 37 Acq. Operator : bgp Inj Volume : 2 μ l

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462 5.409 7.388 9.178 9.332 9.476 10.090 10.392	VV VV VV VV VV	2.04053e5 2.60243e5 3.50435e5 7.01543e5 2.91187e5 3.30641e5 2.73010e5 3.17976e5	8.56532e-4 7.62811e-4 7.49183e-4 7.42886e-4 7.49269e-4 7.46644e-4 8.11583e-4 7.22262e-4	174.77828 198.51585 262.54019 521.16618 218.17726 246.87097 221.57052 229.66208		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 2073.28132

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date: 8/5/98 7:38:26 AM Seg Line: 18

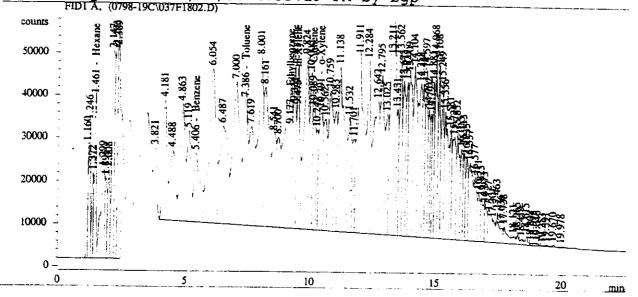
Injection Date : 8/5/98 7:38:26 AM Seq. Line : 18
Sample Name : S-M18-R1 Ba+BbFH Vial : 37
Acq. Operator : bgp Inj : 2
Inj Volume : 2 µ1

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 FIDI A. (0798-19C\037F1802.D)



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 5.406 7.386 9.177 9.331 9.475 10.089 10.391	VV VV VV VV VV	2.04814e5 2.62453e5 3.53094e5 7.04914e5 2.92837e5 3.34004e5 2.72573e5 3.20068e5	8.56545e-4 7.62829e-4 7.49194e-4 7.42889e-4 7.49278e-4 7.46658e-4 8.11581e-4 7.22271e-4	175.43229 200.20657 264.53637 523.67263 219.41663 249.38698 221.21463 231.17595		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 2085.04205

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/3/98 7:12:39 PM Seq. Line : 42 Vial : 38 Sample Name : S-M18-R1 BbBH Inj : 1 Acq. Operator : bgp Inj Volume : 2 μ l

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

: 8/3/98 12:59:48 PM by bgp Last changed FID1 A, (0798-19B\038F4201.D) counts _ ςŅ 17500 15000 12500 10000 7500 5000 2500 0 min 15 10 5 0

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name
			_	_	Hexane
1.467		-	_	_	Benzene
5.409		-	-	_	Toluene
7.390		-	-	-	
9.176		-	-	-	Ethylbenzene
9.338			-	-	p-Xylene
9.474			-	-	m-Xylene
			_	_	Cumene
10.097		-	_		o-Xylene
10.393		-	•	-	O' My ICIIC

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

Page 1 of 2

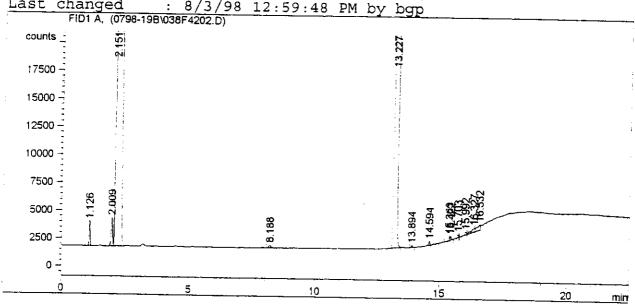
Injection Date : 8/3/98 7:42:33 PM Seq. Line : 42 Sample Name : S-M18-R1 BbBH Vial : 38 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ 1

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

: 8/3/98 12:59:48 PM by bgp Last changed



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	o Name
1.467						
5.409		~	-	-		Hexane
		-	-	-		Benzene
7.390		-	~	-		Toluene
9.176		_	_	_		
9.338				_		Ethylbenzene
9.474			-	_		p-Xylene
			-	-		m-Xylene
10.097		-	-	-		Cumene
10.393			-	_		o-Xylene
						O WATERIE

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

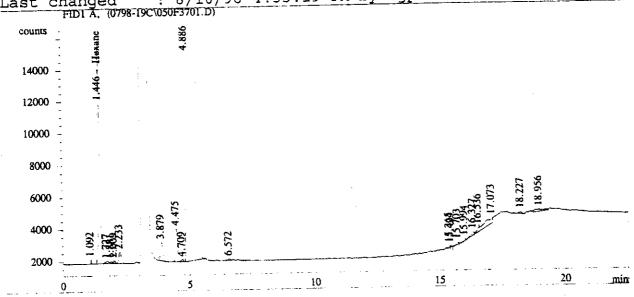
Page 1 of 2

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp Name	Name
1.446 B 5.391 7.373 9.161 9.323 9.460 10.084 10.379	B	6.33843e4 - - - - - -	8.48450e-4 - - - - - -	53.77840 - - - - - - -	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene	Benzene Toluene Ethylber p-Xylene m-Xylene Cumene

Totals : 53.77840

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 231

Warning : Calibrated compound(s) not found

Teller 8/10/98 4:50:59 PM bqp

Page 1 of 2

Injection Date : 8/5/98 11:42:02 PM Seq. Line : 37 Sample Name : S-M18-R2 B VOA Vial : 50 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ 1 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/ FIDI A. (0798-19C\050F3702.D) : 8/10/98 4:33:19 PM by bgp counts 16000 14000 12000 10000 8000 6000 4000 2000

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]	Grī	o Name
1.446 5.391 7.373 9.161 9.323 9.460 10.084 10.379	BV	6.41331e4 - - - - - - - -	8.48587e-4 - - - - - -	54.42251	-	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

Seq. Line : Injection Date : 8/6/98 7:09:13 AM 48 Vial : 39 Sample Name : S-M18-R2 Ba+BbFH Inj: 1

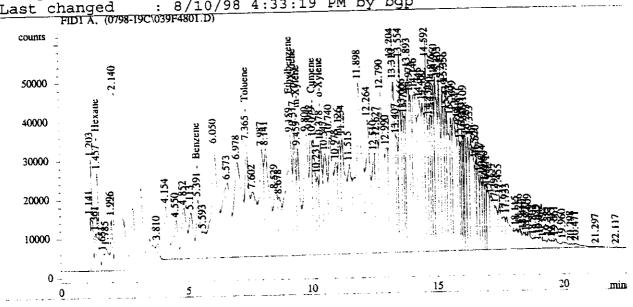
Acq. Operator : bgp Inj Volume : 2 μ l

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

: 8/10/98 4:33:19 PM by bgp



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grg	Name
1.457 5.391 7.365 9.159 9.317 9.459 10.079	VV VV VV VV VV	1.33993e5 1.64116e5 3.36246e5 5.50828e5 2.43226e5 2.27467e5 2.25841e5 2.31108e5	8.54628e-4 7.61549e-4 7.49122e-4 7.42717e-4 7.48957e-4 7.46011e-4 8.11214e-4 7.21719e-4	114.51425 124.98208 251.88944 409.10888 182.16593 169.69302 183.20543 166.79535		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1602.35437 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

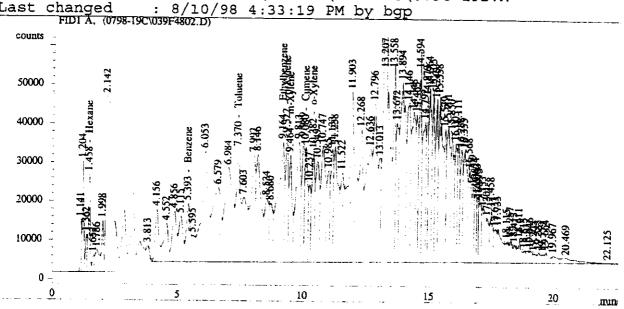
Injection Date : 8/6/98 7:39:04 AM Line : Sample Name : S-M18-R2 Ba+BbFH Vial : 39 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ l

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



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]	Grţ	Name
1.458 5.393 7.370 9.164 9.322 9.464 10.080 10.382	VV VV VV VV VV	1.31846e5 1.63240e5 3.35324e5 5.53192e5 2.44607e5 2.28730e5 2.25219e5 2.333362e5	8.54538e-4 7.61531e-4 7.49118e-4 7.42720e-4 7.48968e-4 7.46022e-4 8.11208e-4 7.21739e-4	112.66767 124.31253 251.19720 410.86671 183.20304 170.63781 182.69960 168.42663		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 1604.01120

Results obtained with enhanced integrator! 1 Warnings or Errors :

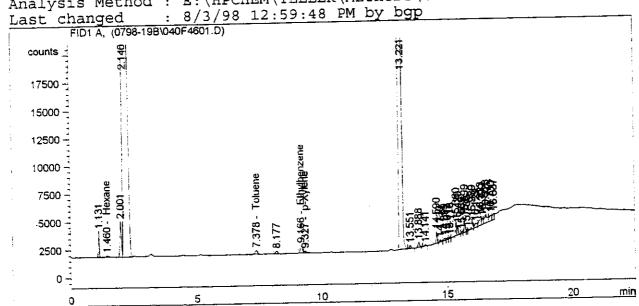
Warning: Calibration warnings (see calibration table listing) 494

Seq. Line : Injection Date : 8/3/98 10:20:01 PM Vial : 40 : S-M18-R2 BbBH Sample Name Inj : 1 : pgp Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 : Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460 5.409 7.378 9.166 9.327 9.474 10.097 10.393	BB BV	- 2242.50830 3906.80664	8.30843e-4 8.28951e-4	8.87090e-1 1.86317 3.23855 9.63511e-1	, ,	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

6.95233 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

235 495 Page 1 of 2

Teller 8/4/98 8:05:24 AM bgp

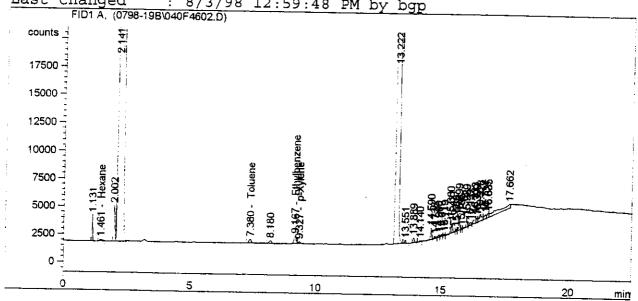
Injection Date : 8/3/98 10:49:45 PM Seq. Line : Sample Name : S-M18-R2 BbBH Vial : 40 Acq. Operator : bgp Inj : 2

Inj Volume : 2 μ 1 Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S

: E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method Last changed : 8/3/98 3:07:34 PM by bgp

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp Last changed



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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grg	o Name
1.461 5.409 7.380 9.167 9.327 9.474 10.097 10.393	BB BV	961.89789 - 2234.69775 3934.68726 1196.38647 - -	8.28951e-4	8.84528e-1 - 1.85668 3.26166 1.00063		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

236

Teller 8/4/98 8:05:45 AM bgp

Page 1 of 2

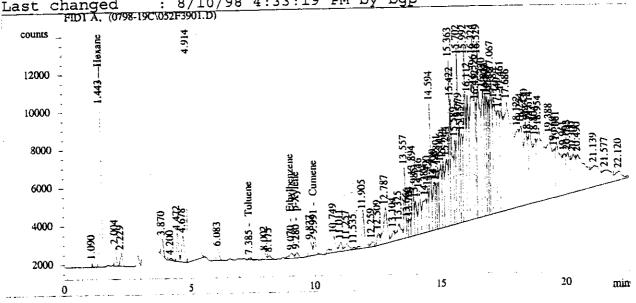
Seq. Line : Injection Date : 8/6/98 1:11:44 AM 39 : S-M18-R3 B VOA r : ban 52 Vial : Sample Name Inj: Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M

: 8/10/98 4:33:19 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/10/98 4:32:29 PM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.443 5.391 7.385 9.070 9.280 9.460 9.991 10.379	PB VV VP	3223.32056 2390.66724 -	8.45734e-4 7.04194e-4 7.04047e-4 7.08933e-4 7.65340e-4	43.52177 3.93989e-1 2.26937 1.69482 4.83464		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

52.71458 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Page 1 of 2

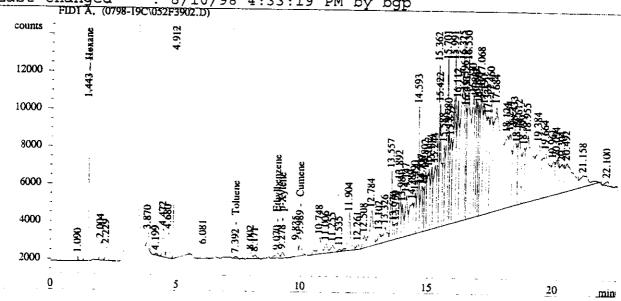
Injection Date : 8/6/98 1:41:30 AM Seq. Line : Sample Name : S-M18-R3 B VOA Vial : 52 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ 1

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 5.391 7.392 9.070 9.278 9.460 9.989 10.379	PB VV VB	5.23668e4 - 762.66333 3324.22925 2424.00928 - 6414.71875	_	44.30143 5.37063e-1 2.34041 1.71846 - 4.90944		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 53.80680

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 238 Warning : Calibrated compound(s) not found

Teller 8/10/98 4:52:06 PM bgp

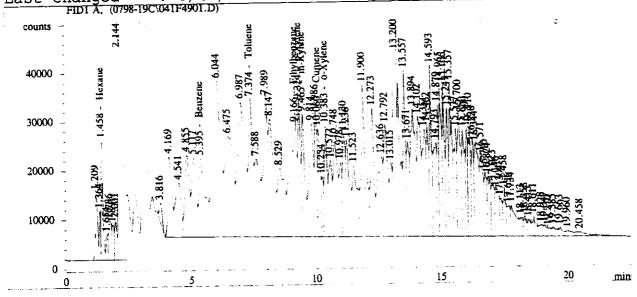
Injection Date : 8/6/98 8:08:45 AM Seq. Line : 49
Sample Name : S-M18-R3 Ba+BbFH Vial : 41
Acq. Operator : bgp Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M

Acq. Method : E:\nFcn...\
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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grţ 	Name
1.458 5.395 7.374 9.166 9.324 9.465 10.080 10.383	VV VV VV VV VV	1.23852e5 2.52715e5 3.24464e5 4.43642e5 1.99624e5 1.93010e5 1.57841e5 1.79133e5	8.54174e-4 7.62747e-4 7.49066e-4 7.42527e-4 7.48544e-4 7.45648e-4 8.10292e-4 7.21143e-4	105.79078 192.75763 243.04486 329.41613 149.42733 143.91771 127.89743 129.18056	. '	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals : 1421.43242

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Injection Date : 8/6/98 8:38:24 AM

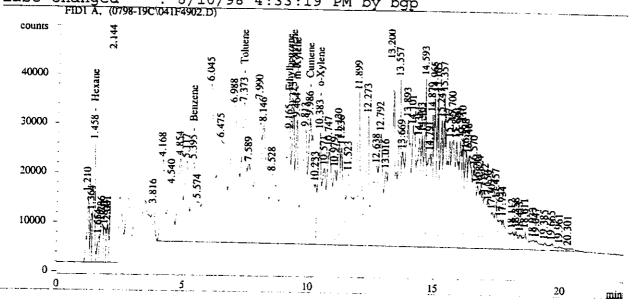
Seq. Line : Sample Name : S-M18-R3 Ba+BbFH Vial: Acq. Operator : bgp Inj : 2

Inj Volume : 2 μ 1 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]	Grg	o Name
1.458 5.395 7.373 9.165 9.323 9.464 9.986 10.383	VV VV VV VV VV	1.22404e5 1.85078e5 3.23061e5 4.41326e5 2.00091e5 1.91902e5 3.41276e5 1.78194e5	8.54103e-4 7.61936e-4 7.49059e-4 7.42521e-4 7.48549e-4 7.45634e-4 8.11937e-4 7.21130e-4	104.54529 141.01749 241.99175 327.69432 149.77806 143.08881 277.09443 128.50119		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 1513.71134

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing) 500

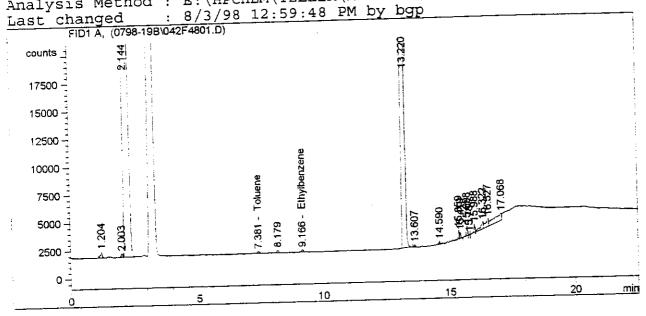
Seq. Line : Injection Date : 8/4/98 12:18:48 AM Vial : 42 : S-M18-R3 BbBH Sample Name Inj : 1 : bgp Acq. Operator Inj Volume : 2 μ l

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp

Last changed Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp 	Name
1.467 5.409 7.381 9.166 9.338 9.474 10.097		1162.16675 1205.91162 - -	8.30843e-4 8.28951e-4	- 9.65579e-1 9.99642e-1 - - -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

1.96522 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

Warning: Calibrated compound(s) not found

Page 1 of 2

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 FID1 A, (0798-198\042F4802.D) counts 🗄 17500 15000 12500 -Ethylbenzene 10000 7500 5000 2500 0 5 10 15 20 min

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]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp) Name
1.467 5.409 7.378 9.165 9.338 9.474 10.097 10.393	BB PB	1155.89404 1195.68872 - - -	8.30843e-4 8.28951e-4 -	9.60367e-1 9.91167e-1 -		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

Totals: 1.95153

Results obtained with enhanced integrator! 2 Warnings or Errors :

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

242

Teller 8/4/98 8:07:09 AM bgp

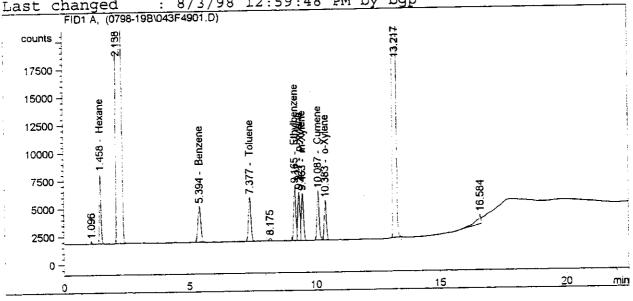
Seq. Line : Injection Date : 8/4/98 1:18:08 AM Vial : 43 : S-M18-FB Ba+BbFH Sample Name 1 Inj : Acq. Operator : bgp Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp Last changed



External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified :

1.0000 Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Туре	Area counts*s	Amt/Area	Amount [ug/kg]	Grp) Name
1.458 5.394 7.377 9.165 9.327 9.463 10.087 10.383	BP BB BV VV VB BV	2.74713e4 2.50121e4 2.64406e4 2.93148e4 2.49899e4 2.49547e4 2.72814e4 2.09601e4	8.98374e-4 8.11164e-4 7.96013e-4 7.88798e-4 7.99759e-4 7.97217e-4 8.59616e-4 7.77087e-4	24.67946 20.28893 21.04710 23.12342 19.98587 19.89431 23.45154 16.28778		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

168.75840 Totals :

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

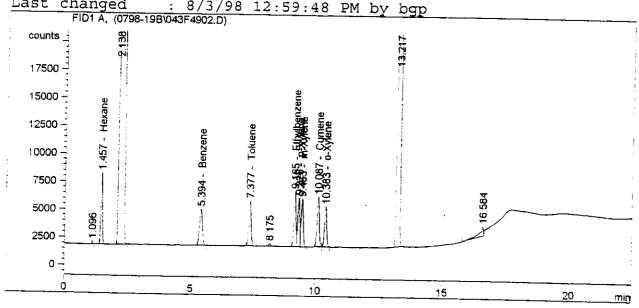
Injection Date : 8/4/98 1:47:47 AM Seq. Line : Sample Name : S-M18-FB Ba+BbFH Vial : 43 Acq. Operator : bgp Inj : 2 Inj Volume : 2 μ 1

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Aca. Method

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 5.394 7.377 9.165 9.326 9.463 10.087 10.383	BB BP BV VV VB		8.98380e-4 8.11039e-4 7.95784e-4 7.88582e-4 7.99516e-4 7.96928e-4 8.59437e-4 7.76761e-4	24.66226 20.43087 21.29739 23.38699 20.20509 20.14783 23.71534 16.47778		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene
Totale						

Totals : 170.32356

Results obtained with enhanced integrator! 1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing) 504

Seq. Line : Injection Date : 8/4/98 2:17:22 AM Vial : : S-M18-FB BbBH Sample Name Inj : 1 gpd : Acq. Operator Inj Volume : 2 μ l

: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S Sequence File : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

: 8/3/98 3:07:34 PM by bgp Last changed

Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M

: 8/3/98 12:59:48 PM by bgp Last changed FID1 A. (0798-19B\044F5001.D) 13:220 counts _ ovi 17500 15000 12500 -9355- EtyWherzene 10000 7.376 - Toluene 7500 5000 2500 0 20 min 10 5

External Standard Report

Signal Sorted By

8/3/98 11:04:16 AM Calib. Data Modified

1.0000 : Multiplier 1.0000 Dilution

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grg) Name
1.458 5.409 7.376 9.165 9.325 9.474 10.097	BP PV	- 1931.41174 2568.42358	9.19566e-4 8.30843e-4 8.28951e-4 8.36380e-4	- 1.60470 2.12910	i I	Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene o-Xylene

5.28977 Totals :

Results obtained with enhanced integrator! 2 Warnings or Errors :

Warning: Calibration warnings (see calibration table listing)

Warning : Calibrated compound(s) not found

505 Teller 8/4/98 8:08:10 AM bgp Page 1 of 2

Injection Date : 8/4/98 2:47:05 AM Seq. Line : 50 Sample Name : S-M18-FB BbBH Vial : 44 Acq. Operator : pgp Inj : 2 Inj Volume : 2 μ 1

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S : E:\HPCHEM\TELLER\METHODS\0798-19A.M Acq. Method

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 FID1 A, (0798-19B\044F5002.D) counts -17500 15000 12500 10000 7.375 - Toluene 7500 5000 2500 0 0 10 15 20 min

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]	Gr	o Name
1.459 5.409 7.375 9.163 9.325 9.474 10.097 10.393	BB PV	- 1924.91589 2517.97632	- 8.30843e-4 8.28951e-4	7.48307e-1 - 1.59930 2.08728 7.60866e-1		Hexane Benzene Toluene Ethylbenzene p-Xylene m-Xylene Cumene 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

Teller 8/4/98 8:08:30 AM bgp

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Page 1 of 2

Sensidyne Flow Cell Calibration Certificate





SENSIDYNE, INC.

CALIBRATION CERTIFICATE

CELL S/N: 16299-S

DATE: 05 - 18 - 1998

This is to certify that the above referenced Gilibrator Ficw 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 8361604.
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	O	0.0
2013	2016	3	0.15
2009	2009	0	0.0
2016	2017	1	0.05
2019	2021	2	0.1

MAX MEAN 2012.7

2014

3

CALIBRATED BY Rapal Jones (205)

DATE: 05 - 18 - 1998

0.15

CODE 300

	•	

EPORT DATA reverse before completing
3. RECIPIENT'S ACCESSION NO.
5. REPORT DATE May 2000
6. PERFORMING ORGANIZATION CODE
8. PERFORMING ORGANIZATION REPORT NO.
10. PROGRAM ELEMENT NO.
11. CONTRACT/GRANT NO. 68-D-98004
13. TYPE OF REPORT AND PERIOD COVERED Final
14. SPONSORING AGENCY CODE EPA/200/04

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.	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	19. SECURITY CLASS (This Report) Unclassified	21. NO. OF PAGES Vol. 8 - 531					
Unlimited	20. SECURITY CLASS (This page) Unclassified	22. PRICE					