VAPOR EXTRACTION TREATABILITY STUDY
UNION CHEMICAL COMPANY SITE
SOUTH HOPE, MAINE

Submitted to:

United States Environmental Protection Agency
Region I
John F. Kennedy Federal Building
Boston, Massachusetts 02203

Prepared on Behalf of:

Union Chemical Site Settling Defendants
c/o American Environmental Consultants
P.O. Box 310
Mont Vernon, New Hampshire 03057

Prepared By:

Balsam Environmental Consultants, Inc.
5 Industrial Way
Salem, New Hampshire 03057

April 3, 1992

Revision 0:

VOLUME 4 OF 23

Enseco
A CORNING Company

October 25, 1991

Mr. John O'Donnell
Balsam Environmental Consultants, Inc.
5 Industrial Way
Salem, NH 03079

Dear John:

Enclosed are the results of the analyses for UCC Soil Analysis October 1991 (UCC Soil Analyisis 10/07/91). This project was received at Enseco - Erco Laboratory on October 5, 1991, and was processed for a 21 day turnaround time and in accordance with CLP analyses and reporting protocols, where applicable. This letter authorizes the release of the analytical results and should be considered an integral part of this report.

Please refer to this project by the Enseco project number 010135 to expedite any further discussions. I will be happy to address any questions or concerns that you may have.

Sincerely,

Mary B. Ford

Mary Ford
Program Administrator

Encl.

Enseco Incorporated
205 Alewife Brook Parkway
Cambridge, MA 02138
617/661-3111 617/354-5258

Enseco
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5 Industrial Way
Salem, NH 03079

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Mary B. Ford

Mary Ford
Program Administrator

Encl.

Enseco Incorporated
205 Alewife Brook Parkway
Cambridge, MA 02138
617/661-3111 617/354-5258

SAMPLE DATA SUMMARY PACKAGE

Enseco
A Corning Company

April 1990

DELIVERABLES INDEX

Client: Ballard Environmental Consultants, Inc.
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 10135

DELIVERABLES INDEX (Cont.)

Client: Bolton Environmental Consultants
Project Name: UCC Bailey Area
Erco Project Number: 0135

Pages

III. SEMIVOLATILES DATA

A. QC Summary

1. Surrogate Percent Recovery Summary (Form II) — NA
2. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
3. Erco Method Blank Summary (Form IV)
4. GC/MS Tuning and Mass Calibration Summary (Form V)

B. Sample Data (Form I, Form I-TIC, and Raw Data)

C. Standards Data

1. Initial Calibration Data (Form VI)
2. Initial Calibration Standard Chromatograms
3. Continuing Calibration Data (Form VII)
4. Continuing Calibration Standard Chromatograms
5. Internal Standard Area Summary (Form VIII)

D. Raw QC Data

1. DFTPP Bar Graph and Mass Listing
2. Erco Blank Data
3. Matrix Spike/Matrix Spike Duplicate Data

IV. PESTICIDES/PCBs DATA

A. QC Summary

1. Surrogate Percent Recovery Summary (Form II) — NA
2. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
3. Erco Method Blank Summary (Form IV)

B. Sample Data (Form I and Raw Data)

DELIVERABLES INDEX (Cont.)

Client: Bobcat Environmental Consultants
Project Name: UCC Soil Analysis
Erco Project Number: 10135

Pages

IV. PESTICIDES/PCBs DATA (Cont.)

C. Standards Data

1. Pesticides Evaluation Standards Summary (Form VIII) — NA
2. Pesticides/PCBs Standards Summary (Form IX)
3. Pesticides/PCBs Identification (Form X)
4. Pesticides Standard Chromatograms

D. Raw QC Data

1. Erco Blank Data
2. Matrix Spike/Matrix Spike Duplicate Data

V. INORGANIC DATA

VI. METALS DATA (AQUEOUS)

VII. METALS DATA (SOLID)

VIII TOC

October 25, 1991

Case Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analyisis 10/07/91
Erco Project No.: 010135

1. This project consists of the results for samples received at Enseco - Erco Laboratory on October 5, 1991. Please see the sample description information sheet for a list of samples.

2. In the volatile fraction, 10135-04 (UCC-SB-B-17-4) was run outside of the holding time.

ANALYTICAL TEST REQUESTS
for
Balsam Environmental Consultants, Inc.

Lab ID: 010135	Group Code	Analysis Description	Custom Test?
0001 , 0004, 0006 , 0008	A	CLP GC/MS Organics (including TIDs)	
		VOLATILE ORGANICS	N
		Volatile Library search	N
		PERCENT WATER	N
0009	B	CLP GC/MS Organics (including TIDs)	
		VOLATILE ORGANICS	N
		VOLATILE ORGANICS	N
0002 - 0003, 0005 , 0007	C	Total Organic Carbon (TOC)	N
		PERCENT WATER	N

Enseco
A Corning Company

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 1 of 2)

ID	Manufacturer	Model	Data System
GC/MS #S-1	Finnigan	4530	INCOS
GC/MS #S-2	Finnigan	4615B	INCOS
GC/MS #S-3	Finnigan	4530	INCOS
GC/MS #V-5	Hewlett Packard	MSD	RTE-A
GC/MS #V-6	Hewlett Packard	MSD	RTE-A
GC/MS #S-6	Finnigan	Incos 50	Incos
GC/MS #V1*	Hewlett Packard	5996	RTE-6
GC/MS #V2*	Hewlett Packard	5996	RTE-6
GC/MS #V3*	Hewlett Packard	5996	RTE-6
GC/MS #V4*	Hewlett Packard	5985	RTE-6
GC/HECD #G2*	Hewlett Packard/OIC	5890/4420	HP-1000
GC/HECD/PID #G4*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/HECD/PID #G5*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/ECD #9-1	Hewlett Packard	5880	VG-3
GC/ECD #9-2	Hewlett Packard	5880	VG-4
GC/ECD #11-1	Hewlett Packard	5890	VG-1
GC/ECD #11-2	Hewlett Packard	5890	VG-2
GC/ECD #7-1	Hewlett Packard	5880	VG-11
GC/ECD #7-2	Hewlett Packard	5880	VG-12
GC/ECD #14-1	Hewlett Packard	5890 Series II	VG-15
GC/ECD #14-2	Hewlett Packard	5890 Series II	VG-16
GC/ECD #15-1	Hewlett Packard	5890 Series II	VG-13
GC/ECD #15-2	Hewlett Packard	5890 Series I	VG-14

*Purge-and-trap concentrators manufactured by Tekmar Company.

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 2 of 2)

ID	Manufacturer	Model	Data System
GC/ECD #12-1	Hewlett Packard	5890	VG-9
GC/FID #19	Hewlett Packard	5880	Beckman/HP-1000
GC/FID #28	Hewlett Packard	5890	Beckman/HP-1000
GC/PID #28	HNU Systems	P152	Beckman/HP-1000
GC/ECD #12-2	Hewlett Packard	5890	VG-10
IR1	Perkin-Elmer	FTIR 1600	Beckman/HP-1000
GC/FID #14	Hewlett Packard	5880	Beckman/HP-1000

*Purge-and-trap concentrators manufactured by Tekmar Company.

INSTRUMENT DETECTION LIMITS

Volatile Compounds

Hewlett-Packard 5996 GC/MS V1, V2, V3, V4, V5, S4, S5

CAS Number	Parameter	ng
74-87-3	Chloromethane	2 µ
74-83-9	Bromomethane	2 µ
75-01-4	Vinyl chloride	2 µ
75-00-3	Chloroethane	2 µ
75-09-2	Methylene chloride	2 µ
67-64-1	Acetone	2 µ
75-15-0	Carbon disulfide	1 µ
75-35-4	1,1-Dichloroethene	1 µ
75-34-3	1,1-Dichloroethane	1 µ
156-60-5	trans-1,2-Dichloroethene	1 µ
67-66-3	Chloroform	1 µ
107-06-2	1,2-Dichloroethane	1 µ
78-93-3	2-'Butanone	1 µ
71-55-6	1,1,1-Trichloroethane	1 µ
56-23-5	Carbon tetrachloride	1 µ
108-05-4	Vinyl acetate	2 µ
75-27-4	Bromodichloromethane	1 µ
79-34-5	1,1,2,2-Tetrachloroethane	1 µ
78-87-5	1,2-Dichloropropane	1 µ
10061-02-6	trans-1,3-Dichloropropene	1 µ
79-01-6	Trichloroethene	1 µ
124-48-1	Dibromochloromethane	1 µ
79-00-5	1,1,2-Trichloroethane	1 µ
71-43-2	Benzene	1 µ
10061-01-5	cis-1,3-Dichloropropene	1 µ
110-75-8	2-Chloroethylvinylether	2 µ
75-25-2	Bromoform	1 µ
591-78-6	2-Hexanone	2 µ
108-10-1	4-Methyl-2-pentanone	2 µ
127-18-4	Tetrachloroethene	1 µ
108-88-3	Toluene	1 µ
108-90-7	Chlorobenzene	1 µ
100-41-4	Ethylbenzene	1 µ
100-42-5	Styrene	1 µ
	Total xylenes	1 µ

KEY FOR SURROGATE AND INTERNAL STANDARDS

Acid/Base-Neutral Compounds

a - Fluorophenol	Surrogate standard
b - d_5-Phenol	Surrogate standard
c - d_4-2-Chlorophenol	Surrogate standard
d - d_4-Dichlorobenzene	Internal standard
e - d_4-1,2-Dichlorobenzene	Surrogate standard
f - d_5-Nitrobenzene	Surrogate standard
g - d_8-Naphthalene	Internal standard
h - Fluorobiphenyl	Surrogate standard
i - d_{10}-Acenaphthene	Internal standard
j - Tribromophenol	Surrogate standard
k - d_{10}-Phenanthrene	Internal standard
l - d_{14}-ortho-Terphenyl	Surrogate standard
m - d_{12}-Chrysene	Internal standard
n - d_{12}-Perylene	Internal standard

Volatile Compounds

1 - Bromochloromethane	Internal standard
2 - 1,2-Dichloroethane-d_4	Surrogate standard
3 - 1,4-Difluorobenzene	Internal standard
4 - Toluene-d_8	Surrogate standard
5 - Chlorobenzene-d_5	Internal standard
6 - Bromofluorobenzene	Surrogate standard

CHAIN-OF-CUSTODY RECORD

BALSAM
ENVIRONMENTAL CONSULTANTS, INC.
8 INDUSTRIAL WAY, SALEM, NH 03079

PROJECT NUMBER: 6437T6

PROJECT NAME: —

SAMPLER(S) SIGNATURE(S): [signature]

SEND REPORT TO: J. O'Donnell

PROJECT ADDRESS: —

ANALYTICAL LABORATORY: Enseco

METHOD: 8240

SAMPLE NUMBER	SAMPLING LOCATION	DATE	TIME	MATRIX	GRAB	COMPOSITE	PRESERVATIVE	FILTERED (Y/N)	CONTAINER TYPE	NUMBER OF CONTAINERS	ANALYSIS: VOC	ABN	PESTICIDES/PCBs	TCL METALS	PP METALS	CYANIDE	TOC	COMMENTS
UCC-SB-B-13-3		10/4/91	0900	Soil	X	X	ice	N	40ml VOA	3	X							
UCC-SB-B-13-3C		10/4	0900	Soil	X	X	ice	N	250ml	1						X		QA Astaco
UCC-SB-B-17-4		10/3	3:00PM	Soil	X		ice	N	250ml	1						X		after
UCC-SB-B-17-4		10/3	3:00PM	Soil	X		ice	N	40ml VOA	3	X							
UCC-SB-A-08-3		10/4	11:30	Soil	X		ice	N	250ml	1						X		Mary
UCC-SB-A-08-3		10/4	11:30	Soil	X		ice	N	40ml VOA	3	X							Ford
UCC-SB-B-12-3		10/4	10:30	Soil	X		ice	N	250ml	1						X		
UCC-SB-B-12-3		10/4	10:30	Soil	X		ice	N	40ml VOA	3	X							
UCC-	10/4-QA1	9/30	—	water	X		HCl/ice	N	40ml VOA	2	X							

RELINQUISHED BY: [signature]	DATE: 10/4/91	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY: [signature] DATE: 10/5/91 TIME: 1145
METHOD OF SHIPMENT: Fed Ex			AIRBILL (OR SHIPPING INVOICE) NUMBER: 3329067711

Enseco - Erco Laboratory

Internal Chain of Custody

Sample Control Tracking Log

Project Number	Project Acceptance Date	***Laboratory Acceptance Boxes***							
		Metals	Nonmetals	Chrom	Hydro	Semi GC/MS	VOA GC	VOA GC/MS	Data Central
010124									
010125									
010126	EH 10/4/91							P 10/5/91	M.B 10/7
010127									
010128	SHB 10/5/91	SRM 10/07/91 1-4					00 10/5		
010129	EH 10/4/91	SRM 10/07/91 1	KKR 10/7/91 ①			ST 10.7		P 10/5/91	SM-B 10/7
010130	SHB 10/7								
010131	SHB 10/7	MAC 10/7/91							
010132	EH 10/4	SRM 10/07/91 1-12							
010133	SHB 10/5					BG 10-7-91		100791 DRJ	
010134	EH 10/5							100791 DRJ	
010135	EH 10/5							100791 DRJ	TH 10/8
~~010136~~	EH 10/5					BG 10/7/91			
010137									
010138	SHB 10/7							100791 DRJ	
010139	SHB 10/7	SRM 10/07/91 1-3					00 10/7		
010140									
010141									
010142									
010143	C Kelly 10/7								
010144									
010145									

NOTE: Please sign name and date to confirm laboratory acceptance. Sample Control must highlight the Laboratory Acceptance Box to indicate which laboratories are affected.

Enseco-Erco Laboratory

205 Alewife Brook Parkway
Cambridge, Massachusetts 02138
617/661-3111 Fax: 617/354-5258

Attn: Larry Ballack

~~Enseco Client~~: Versar

Project UCC Soil Samples

Sampling Co. _____

Sampling Site _____

Team Leader _____

CHAIN OF CUSTODY

No. 10988

SAMPLE SAFE™ CONDITIONS

1. Packed by: _____ Seal # _____
2. Seal Intact Upon Receipt by Sampling Co.: Yes No
3. Condition of Contents: _____
4. Sealed for Shipping by: _____
5. Initial Contents Temp.: _____ °C Seal # _____
6. Sampling Status: Done Continuing Until _____
7. Seal Intact Upon Receipt by Laboratory: Yes No
8. Contents Temperature Upon Receipt by Lab: _____ °C
9. Condition of Contents: _____

Date of Collection	Time	Sample ID/Description	Sample Type	No. Containers	Analysis Parameters	~~Remarks~~ Erco Project #
10/4/91	09:00	UCC-SB-13-3C	Soil	1	TOC on Soils	10135-02
10/3/91	15:00	UCC-SB-17-4	↓	↓	↓	-03
10/4	11:30	UCC-SB-A-08-3				-05
10/4	10:30	UCC-SB-B-12-3	↓	↓	↓	-07
		Please provide Soil Jester project due 10/25/91				

CUSTODY TRANSFERS PRIOR TO SHIPPING

	Relinquished by: (signed)	Received by: (signed)	Date	Time
1	James M. Burdett III		10/7/91	15:50
2				
3	CO			

SHIPPING DETAILS

Delivered to Shipper by: _____

Method of Shipment: _____ Airbill # _____

Received for Lab: Lawrence Tillis Signed: _____ Date/Time 10/8/91 10:

Enseco Project No. _____

White and Pink Copies to Lab Yellow to Sampler

SS-001 (CM)

DATA REPORTING QUALIFIERS

The nine EPA-defined qualifers to be used are as follow:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

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

and df = dilution factor

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

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

For soil samples subjected to GPC cleanup procedures, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values in exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specific volume (see exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 µg/L, but a concentration of 3 µg/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the identification is based on a mass spectral library search. It is applied to all TIC results.

P - This flag is used for a pesticide/aroclor target analyte when the percent difference between the two GC columns is greater than 25% for detected concentrations (see form X). The lower of the two values is reported on form I and flagged with a P.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do NOT apply this flag. Instead, use a laboratory-defined flag.

DATA REPORTING QUALIFIERS (CONT.)

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale (except as noted in exhibit D), the sample or extract must be diluted and reanalyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

NOTE: For total xylenes where three isomers are quantified as two peaks, the calibration range of <u>each</u> peak should be considered separately (e.g., a diluted analysis is <u>not</u> required for total xylenes unless the concentrations of either peak separately exceed 200 µg/L).

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is reanalyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number of the Form I for the diluted sample, and <u>all</u> concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

The laboratory-defined data reporting qualifiers to be used are as follow:

X - Indicates that the database has been modified.

Z - Indicates coelution.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-13-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: B2989

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 15 Date Analyzed: 10/14/91

Column: (pack/cap) CAP Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	29000	U
74-83-9	Bromomethane	29000	U
75-01-4	Vinyl Chloride	29000	U
75-00-3	Chloroethane	29000	U
75-09-2	Methylene Chloride	30000	B
67-64-1	Acetone	29000	U
75-15-0	Carbon Disulfide	14000	U
75-35-4	1,1-Dichloroethene	14000	U
75-34-3	1,1-Dichloroethane	14000	U
540-59-0	1,2-Dichloroethene (total)	14000	U
67-66-3	Chloroform	14000	U
107-06-2	1,2-Dichloroethane	14000	U
78-93-3	2-Butanone	15000	BJ
71-55-6	1,1,1-Trichloroethane	7700	J
56-23-5	Carbon Tetrachloride	14000	U
108-05-4	Vinyl Acetate	29000	U
75-27-4	Bromodichloromethane	14000	U
78-87-5	1,2-Dichloropropane	14000	U
10061-01-5	cis-1,3-Dichloropropene	14000	U
79-01-6	Trichloroethene	3300	J
124-48-1	Dibromochloromethane	14000	U
79-00-5	1,1,2-Trichloroethane	14000	U
71-43-2	Benzene	14000	U
10061-02-6	trans-1,3-Dichloropropene	14000	U
110-75-8	2-Chloroethylvinylether	29000	U
75-25-2	Bromoform	14000	U
108-10-1	4-Methyl-2-Pentanone	29000	U
591-78-6	2-Hexanone	29000	U
127-18-4	Tetrachloroethene	14000	U
79-34-5	1,1,2,2-Tetrachloroethane	14000	U
108-88-3	Toluene	8800	BJ
108-90-7	Chlorobenzene	14000	U
100-41-4	Ethylbenzene	97000	
100-42-5	Styrene	14000	U
1330-20-7	Xylene (total)	570000	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-13-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: B2989

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 15 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 20

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	21.25	99000	JN
2.	Unknown	22.41	280000	JN
3.	C3-benzene isomer	23.04	24000	JN
4.	Unknown	23.50	35000	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-17-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: A3630

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 12 Date Analyzed: 10/19/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	690	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	690	U
75-35-4	1,1-Dichloroethene	690	U
75-34-3	1,1-Dichloroethane	690	U
540-59-0	1,2-Dichloroethene (total)	690	U
67-66-3	Chloroform	690	U
107-06-2	1,2-Dichloroethane	690	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	690	U
56-23-5	Carbon Tetrachloride	690	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	690	U
78-87-5	1,2-Dichloropropane	690	U
10061-01-5	cis-1,3-Dichloropropene	690	U
79-01-6	Trichloroethene	690	U
124-48-1	Dibromochloromethane	690	U
79-00-5	1,1,2-Trichloroethane	690	U
71-43-2	Benzene	690	U
10061-02-6	trans-1,3-Dichloropropene	690	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	690	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	690	U
79-34-5	1,1,2,2-Tetrachloroethane	690	U
108-88-3	Toluene	690	U
108-90-7	Chlorobenzene	690	U
100-41-4	Ethylbenzene	690	U
100-42-5	Styrene	690	U
1330-20-7	Xylene (total)	690	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-17-4

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: A3630

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 12 Date Analyzed: 10/19/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-18-5	Decane	20.18	3300	JN
2.		Unknown	21.17	1200	JN
3.	1120-21-4	Undecane	24.30	3000	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-A-08-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2803

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/08/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	3	BJ
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethylvinylether	12	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-A-08-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2803

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-12-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2880

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	160	BJ
67-64-1	Acetone	1500	U
75-15-0	Carbon Disulfide	730	U
75-35-4	1,1-Dichloroethene	730	U
75-34-3	1,1-Dichloroethane	730	U
540-59-0	1,2-Dichloroethene (total)	730	U
67-66-3	Chloroform	730	U
107-06-2	1,2-Dichloroethane	730	U
78-93-3	2-Butanone	1500	U
71-55-6	1,1,1-Trichloroethane	660	J
56-23-5	Carbon Tetrachloride	730	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	730	U
78-87-5	1,2-Dichloropropane	730	U
10061-01-5	cis-1,3-Dichloropropene	730	U
79-01-6	Trichloroethene	230	J
124-48-1	Dibromochloromethane	730	U
79-00-5	1,1,2-Trichloroethane	730	U
71-43-2	Benzene	730	U
10061-02-6	trans-1,3-Dichloropropene	730	U
110-75-8	2-Chloroethylvinylether	1500	U
75-25-2	Bromoform	730	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
108-88-3	Toluene	410	J
108-90-7	Chlorobenzene	730	U
100-41-4	Ethylbenzene	4700	
100-42-5	Styrene	730	U
1330-20-7	Xylene (total)	31000	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-12-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2880

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/10/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	20.93	7700	JN
2. 124-18-5	Decane	21.70	1700	JN
3.	Unknown	22.05	11000	JN
4.	C3-benzene isomer	22.79	1900	JN
5.	Unknown	23.16	1500	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-12-3RE

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08RE

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2919

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/12/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	730	U
67-64-1	Acetone	1500	U
75-15-0	Carbon Disulfide	730	U
75-35-4	1,1-Dichloroethene	730	U
75-34-3	1,1-Dichloroethane	730	U
540-59-0	1,2-Dichloroethene (total)	730	U
67-66-3	Chloroform	730	U
107-06-2	1,2-Dichloroethane	730	U
78-93-3	2-Butanone	1500	U
71-55-6	1,1,1-Trichloroethane	730	U
56-23-5	Carbon Tetrachloride	730	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	730	U
78-87-5	1,2-Dichloropropane	730	U
10061-01-5	cis-1,3-Dichloropropene	730	U
79-01-6	Trichloroethene	730	U
124-48-1	Dibromochloromethane	730	U
79-00-5	1,1,2-Trichloroethane	730	U
71-43-2	Benzene	730	U
10061-02-6	trans-1,3-Dichloropropene	730	U
110-75-8	2-Chloroethylvinylether	1500	U
75-25-2	Bromoform	730	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
108-88-3	Toluene	730	U
108-90-7	Chlorobenzene	730	U
100-41-4	Ethylbenzene	410	J
100-42-5	Styrene	730	U
1330-20-7	Xylene (total)	4900	

000099

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-12-3RE

Lab Name: ENSECO-ERCO Contract: .

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08RE

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2919

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/12/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	20.93	5200	JN
2. 124-18-5	Decane	21.68	1600	JN
3.	Unknown	22.05	8200	JN
4.	C9H12 isomer	22.69	1300	JN
5.	Unknown	23.13	1000	JN
6.	C4-benzene isomer	25.19	790	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-4-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10135-09

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2835

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. ____ Date Analyzed: 10/09/91

Column: (pack/cap) CAP Dilution Factor: 0.80

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 10-4-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10135-09

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2835

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. ____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 0.80

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B2981

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

% Moisture: not dec. 0 Date Analyzed: 10/14/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	J
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	610	J
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	360	J
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B2981

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

% Moisture: not dec. 0 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3627

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

% Moisture: not dec. 0 Date Analyzed: 10/19/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	U
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	530	J
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	130	J
108-88-3	Toluene	130	J
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3627

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

% Moisture: not dec. 0 Date Analyzed: 10/19/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2798

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

% Moisture: not dec. 0 Date Analyzed: 10/08/91

Column: (pack/cap) CAP Dilution Factor: 0.80

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	6	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2798

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

% Moisture: not dec. 0 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 0.80

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. ____ Date Analyzed: 10/09/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. ____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Enseco
A Corning Company

April 1990

DELIVERABLES INDEX

Client: Ballard Environmental Consultants, Inc.
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 10135

DELIVERABLES INDEX (Cont.)

Client: Bobar Environmental Consultants
Project Name: UCC Soil Analysis
Erco Project Number: 0135

DELIVERABLES INDEX (Cont.)

Client: Bolton Environmental Consultants
Project Name: UCC Soil Analysis
Erco Project Number: 0135

Pages

IV. PESTICIDES/PCBs DATA (Cont.)

C. Standards Data

1. Pesticides Evaluation Standards Summary (Form VIII) NA
2. Pesticides/PCBs Standards Summary (Form IX)
3. Pesticides/PCBs Identification (Form X)
4. Pesticides Standard Chromatograms

D. Raw QC Data

1. Erco Blank Data
2. Matrix Spike/Matrix Spike Duplicate Data

V. INORGANIC DATA

VI. METALS DATA (AQUEOUS)

VII. METALS DATA (SOLID)

VIII TOC

October 25, 1991

Case Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analyisis 10/07/91
Erco Project No.: 010135

1. This project consists of the results for samples received at Enseco - Erco Laboratory on October 5, 1991. Please see the sample description information sheet for a list of samples.

2. In the volatile fraction, 10135-04 (UCC-SB-B-17-4) was run outside of the holding time.

ANALYTICAL TEST REQUESTS
for
Balsam Environmental Consultants, Inc.

Lab ID: 010135	Group Code	Analysis Description	Custom Test?
0001 , 0004, 0006 , 0008	A	CLP GC/MS Organics (including TIDs)	
		VOLATILE ORGANICS	N
		Volatile Library search	N
		PERCENT WATER	N
0009	B	CLP GC/MS Organics (including TIDs)	
		VOLATILE ORGANICS	N
		VOLATILE ORGANICS	N
0002 - 0003, 0005 , 0007	C	Total Organic Carbon (TOC)	N
		PERCENT WATER	N

Enseco
A Corning Company

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 1 of 2)

ID	Manufacturer	Model	Data System
GC/MS #S-1	Finnigan	4530	INCOS
GC/MS #S-2	Finnigan	4615B	INCOS
GC/MS #S-3	Finnigan	4530	INCOS
GC/MS #V-5	Hewlett Packard	MSD	RTE-A
GC/MS #V-6	Hewlett Packard	MSD	RTE-A
GC/MS #S-6	Finnigan	Incos 50	Incos
GC/MS #V1*	Hewlett Packard	5996	RTE-6
GC/MS #V2*	Hewlett Packard	5996	RTE-6
GC/MS #V3*	Hewlett Packard	5996	RTE-6
GC/MS #V4*	Hewlett Packard	5985	RTE-6
GC/HECD #G2*	Hewlett Packard/OIC	5890/4420	HP-1000
GC/HECD/PID #G4*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/HECD/PID #G5*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/ECD #9-1	Hewlett Packard	5880	VG-3
GC/ECD #9-2	Hewlett Packard	5880	VG-4
GC/ECD #11-1	Hewlett Packard	5890	VG-1
GC/ECD #11-2	Hewlett Packard	5890	VG-2
GC/ECD #7-1	Hewlett Packard	5880	VG-11
GC/ECD #7-2	Hewlett Packard	5880	VG-12
GC/ECD #14-1	Hewlett Packard	5890 Series II	VG-15
GC/ECD #14-2	Hewlett Packard	5890 Series II	VG-16
GC/ECD #15-1	Hewlett Packard	5890 Series II	VG-13
GC/ECD #15-2	Hewlett Packard	5890 Series I	VG-14

*Purge-and-trap concentrators manufactured by Tekmar Company.

Enseco
A Corning Company

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 2 of 2)

ID	Manufacturer	Model	Data System
GC/ECD #12-1	Hewlett Packard	5890	VG-9
GC/FID #19	Hewlett Packard	5880	Beckman/HP-1000
GC/FID #28	Hewlett Packard	5890	Beckman/HP-1000
GC/PID #28	HNU Systems	P152	Beckman/HP-1000
GC/ECD #12-2	Hewlett Packard	5890	VG-10
IR1	Perkin-Elmer	FTIR 1600	Beckman/HP-1000
GC/FID #14	Hewlett Packard	5880	Beckman/HP-1000

*Purge-and-trap concentrators manufactured by Tekmar Company.

Enseco
A Corning Company

INSTRUMENT DETECTION LIMITS

Volatile Compounds

Hewlett-Packard 5996 GC/MS V1, V2, V3, V4, V5, S4, S5

CAS Number	Parameter	ng
74-87-3	Chloromethane	2 µ
74-83-9	Bromomethane	2 µ
75-01-4	Vinyl chloride	2 µ
75-00-3	Chloroethane	2 µ
75-09-2	Methylene chloride	2 µ
67-64-1	Acetone	2 µ
75-15-0	Carbon disulfide	1 µ
75-35-4	1,1-Dichloroethene	1 µ
75-34-3	1,1-Dichloroethane	1 µ
156-60-5	trans-1,2-Dichloroethene	1 µ
67-66-3	Chloroform	1 µ
107-06-2	1,2-Dichloroethane	1 µ
78-93-3	2-'Butanone	1 µ
71-55-6	1,1,1-Trichloroethane	1 µ
56-23-5	Carbon tetrachloride	1 µ
108-05-4	Vinyl acetate	2 µ
75-27-4	Bromodichloromethane	1 µ
79-34-5	1,1,2,2-Tetrachloroethane	1 µ
78-87-5	1,2-Dichloropropane	1 µ
10061-02-6	trans-1,3-Dichloropropene	1 µ
79-01-6	Trichloroethene	1 µ
124-48-1	Dibromochloromethane	1 µ
79-00-5	1,1,2-Trichloroethane	1 µ
71-43-2	Benzene	1 µ
10061-01-5	cis-1,3-Dichloropropene	1 µ
110-75-8	2-Chloroethylvinylether	2 µ
75-25-2	Bromoform	1 µ
591-78-6	2-Hexanone	2 µ
108-10-1	4-Methyl-2-pentanone	2 µ
127-18-4	Tetrachloroethene	1 µ
108-88-3	Toluene	1 µ
108-90-7	Chlorobenzene	1 µ
100-41-4	Ethylbenzene	1 µ
100-42-5	Styrene	1 µ
	Total xylenes	1 µ

KEY FOR SURROGATE AND INTERNAL STANDARDS

Acid/Base-Neutral Compounds

a - Fluorophenol	Surrogate standard
b - d_5-Phenol	Surrogate standard
c - d_4-2-Chlorophenol	Surrogate standard
d - d_4-Dichlorobenzene	Internal standard
e - d_4-1,2-Dichlorobenzene	Surrogate standard
f - d_5-Nitrobenzene	Surrogate standard
g - d_8-Naphthalene	Internal standard
h - Fluorobiphenyl	Surrogate standard
i - d_{10}-Acenaphthene	Internal standard
j - Tribromophenol	Surrogate standard
k - d_{10}-Phenanthrene	Internal standard
l - d_{14}-ortho-Terphenyl	Surrogate standard
m - d_{12}-Chrysene	Internal standard
n - d_{12}-Perylene	Internal standard

Volatile Compounds

1 - Bromochloromethane	Internal standard
2 - 1,2-Dichloroethane-d_4	Surrogate standard
3 - 1,4-Difluorobenzene	Internal standard
4 - Toluene-d_8	Surrogate standard
5 - Chlorobenzene-d_5	Internal standard
6 - Bromofluorobenzene	Surrogate standard

CHAIN-OF-CUSTODY RECORD

BALSAM
ENVIRONMENTAL CONSULTANTS, INC.
6 INDUSTRIAL WAY, SALEM, NH 03079

PROJECT NUMBER: 6437T6

PROJECT NAME: —

PROJECT ADDRESS: —

SAMPLER(S) SIGNATURE(S):

SEND REPORT TO: J. O'Donnell

ANALYTICAL LABORATORY: Enseco

SAMPLE NUMBER	SAMPLING LOCATION	DATE	TIME	MATRIX	GRAB	COMPOSITE	PRESERVATIVE	FILTERED (Y/N)	CONTAINER TYPE	NUMBER OF CONTAINERS	ANALYSIS: VOC	ABN	PESTICIDES/PCBs	TCL METALS	PP METALS	CYANIDE	TOC	COMMENTS
UCC-SB-B-13-3		10/4/91	0900	Soil	X	(X)	ice	N	40ml VOA	3	X							
UCC-SB-B-13-3C		10/4	0900	Soil	X	X	ice	N	250ml	1						X		C.P Astaco
UCC-SB-B-17-4		10/3	300PM	Soil	X		ice	N	250 ml	1						X		
UCC-SB-B-17-4		10/3	300PM	Soil	X		ice	N	40ml VOA	3	X							
UCC-SB-A-08-3		10/4	11:30	Soil	X		ice	N	250 ml	1						X		Mary Ford
UCC-SB-A-08-3		10/4	11:30	Soil	X		ice	N	40ml VOA	3	X							
UCC-SB-B-12-3		10/4	10:30	Soil	X		ice	N	250ml	1						X		
UCC-SB-B-12-3		10/4	10:30	Soil	X		ice	N	40ml VOA	3	X							
UCC-	10/4-QA1	9/30	—	water	X		HCl/ice	N	40ml VOA	2	X							

RELINQUISHED BY:	DATE: 10/4/91	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY: Eric Holley
METHOD OF SHIPMENT: Fed Ex			AIRBILL (OR SHIPPING INVOICE) NUMBER: 332906771 1

DATE: 10/5/91 TIME: 1145

Enseco - Erco Laboratory

Internal Chain of Custody

Sample Control Tracking Log

Project Number	Project Acceptance Date	***Laboratory Acceptance Boxes***							
		Metals	Nonmetals	Chrom	Hydro	Semi GC/MS	VOA GC	VOA GC/MS	Data Central
010124									
010125									
010126	EH 10/4/91							P 10/5/91	M.B 10/7
010127									
010128	SHB 10/5/91	SM 10/07/91 1-4					00 10/5		
010129	EH 10/4/91	SM 10/07/91 1	KAR 10/7/91 ①			ST 10.7		P 10/5/91	SM.B 10/7
010130	SHB 10/7								
010131	SHB 10/7	MAC 10/7/91							
010132	EH 10/4	SM 10/07/91 1-12							
010133	SHB 10/5					AS 10-7-91		100791 DRJ	
010134	EH 10/5							100791 DRJ	
010135	EH 10/5							100791 DRJ	TH 10/8
~~010136~~	EH 10/5					AS 10/7/91			
010137									
010138	SHB 10/7							100791 DRJ	
010139	SHB 10/7	SM 10/07/91 1-3					00 10/7		
010140									
010141									
010142									
010143	E Adly 10/7								
010144									
010145									

NOTE: Please sign name and date to confirm laboratory acceptance. Sample Control must highlight the Laboratory Acceptance Box to indicate which laboratories are affected.

Enseco Laboratory

205 Alewife Brook Parkway
Cambridge, Massachusetts 02138
617/661-3111 Fax: 617/354-5258

CHAIN OF CUSTODY

No. 10988

Attn: Larry Pollack

~~Enseco Client~~: Versar

Project: UCC Soil Samples

Sampling Co.:

Sampling Site:

Team Leader:

SAMPLE SAFE™ CONDITIONS

1. Packed by: _____ Seal # _____
2. Seal Intact Upon Receipt by Sampling Co.: Yes No
3. Condition of Contents: _____
4. Sealed for Shipping by: _____
5. Initial Contents Temp.: _____ °C Seal # _____
6. Sampling Status: Done Continuing Until _____
7. Seal Intact Upon Receipt by Laboratory: Yes No
8. Contents Temperature Upon Receipt by Lab: _____ °C
9. Condition of Contents: _____

Date of Collection	Time	Sample ID/Description	Sample Type	No. Containers	Analysis Parameters	~~Remarks~~ Enco Project #
10/4/91	09:00	UCC-SB-13-3C	Soil	1	TOC on soils	10135-02
10/3/91	15:00	UCC-SB-17-4	↓	↓	↓	-03
10/4	11:30	UCC-SB-A-08-3	↓	↓	↓	-05
10/4	10:30	UCC-SB-B-12-3	↓	↓	↓	-07
		Please provide Boring data project due 10/25/91				

CUSTODY TRANSFERS PRIOR TO SHIPPING

	Relinquished by: (signed)	Received by: (signed)	Date	Time
1	James M. Burdett		10/7/91	15:50
2				
3				

SHIPPING DETAILS

Delivered to Shipper by: _____

Method of Shipment: _____ Airbill # _____

Received for Lab: Laurence Lewis Signed: _____ Date/Time 10/7/91 16

Enseco Project No. _____

White and Pink Copies to Lab Yellow to Sampler

SS-001 (CM)

DATA REPORTING QUALIFIERS

The nine EPA-defined qualifers to be used are as follow:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

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

and df = dilution factor

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

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

For soil samples subjected to GPC cleanup procedures, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values in exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specific volume (see exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 µg/L, but a concentration of 3 µg/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the identification is based on a mass spectral library search. It is applied to all TIC results.

P - This flag is used for a pesticide/aroclor target analyte when the percent difference between the two GC columns is greater than 25% for detected concentrations (see form X). The lower of the two values is reported on form I and flagged with a P.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do NOT apply this flag. Instead, use a laboratory-defined flag.

DATA REPORTING QUALIFIERS (CONT.)

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale (except as noted in exhibit D), the sample or extract must be diluted and reanalyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

NOTE: For total xylenes where three isomers are quantified as two peaks, the calibration range of <u>each</u> peak should be considered separately (e.g., a diluted analysis is <u>not</u> required for total xylenes unless the concentrations of either peak separately exceed 200 µg/L).

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is reanalyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number of the Form I for the diluted sample, and <u>all</u> concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

The laboratory-defined data reporting qualifiers to be used are as follow:

X - Indicates that the database has been modified.

Z - Indicates coelution.

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	SB-B-12-3	128 *	136 *	129 *	0	3
02	SB-B-12-3RE	69 *	64 *	59 *	0	3
03	SB-B-13-3	90	103	80	0	0
04	SB-B-17-4	94	94	87	0	0
05	VBLK04	101	101	106	0	0
06	VBLK05	100	94	97	0	0
07	VBLK01	100	101	105	0	0
08	VBLK02	99	96	92	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	SB-A-08-3	99	95	102	0	0
02	VBLK03	104	105	100	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	10-4-QA1	95	104	104	0	0
02	VBLK06	97	99	102	0	0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: B2981 Lab Sample ID: BLANK01

Date Analyzed: 10/14/91 Time Analyzed: 1533

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: V2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-B-13-3	10135-01	B2989	2238

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: A3627 Lab Sample ID: BLANK02

Date Analyzed: 10/19/91 Time Analyzed: 1216

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: V1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-B-17-4	10135-04	A3630	1434

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2798 Lab Sample ID: BLANK03

Date Analyzed: 10/08/91 Time Analyzed: 1409

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

Instrument ID: V6

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-A-08-3	10135-06	F2803	1740

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2870 Lab Sample ID: BLANK04

Date Analyzed: 10/10/91 Time Analyzed: 1428

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: V6

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-B-12-3	10135-08	F2880	2043

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2910 Lab Sample ID: BLANK05

Date Analyzed: 10/11/91 Time Analyzed: 2250

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: V6

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-B-12-3RE	10135-08RE	F2919	0523

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2828 Lab Sample ID: BLANK06

Date Analyzed: 10/09/91 Time Analyzed: 1116

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

Instrument ID: V6

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	10-4-QA1	10135-09	F2835	1534

COMMENTS:

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: A2830 BFB Injection Date: 08/29/91

Instrument ID: V1 BFB Injection Time: 1010

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.1
75	30.0 - 60.0% of mass 95	51.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	93.0
175	5.0 - 9.0% of mass 174	6.9 (7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	88.9 (95.6)1
177	5.0 - 9.0% of mass 176	6.6 (7.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	A2831	08/29/91	1055
02	VSTD020	20PPBSTD	A2832	08/29/91	1139
03	VSTD100	100PPBSTD	A2834	08/29/91	1346
04	VSTD150	150PPBSTD	A2835	08/29/91	1422
05	VSTD200	200PPBSTD	A2836	08/29/91	1458

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: B2949 BFB Injection Date: 10/11/91

Instrument ID: V2 BFB Injection Time: 1641

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	46.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.5 (0.5)1
174	Greater than 50.0% of mass 95	97.1
175	5.0 - 9.0% of mass 174	6.8 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.5 (98.4)1
177	5.0 - 9.0% of mass 176	6.4 (6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	B2951	10/11/91	1745
02	VSTD020	20PPBSTD	B2952	10/11/91	1856
03	VSTD100	100PPBSTD	B2955	10/11/91	2116
04	VSTD150	150PPBSTD	B2956	10/11/91	2159
05	VSTD200	200PPBSTD	B2959	10/12/91	0025

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: B2977 BFB Injection Date: 10/14/91

Instrument ID: V2 BFB Injection Time: 1208

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 60.0% of mass 95	52.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	97.8
175	5.0 - 9.0% of mass 174	7.2 (7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	97.4 (99.6)1
177	5.0 - 9.0% of mass 176	7.2 (7.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	B2979	10/14/91	1334
02	VBLK01	BLANK01	B2981	10/14/91	1533
03	SB-B-13-3	10135-01	B2989	10/14/91	2238

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: A3625 BFB Injection Date: 10/19/91

Instrument ID: V1 BFB Injection Time: 1046

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.5
75	30.0 - 60.0% of mass 95	52.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	95.5
175	5.0 - 9.0% of mass 174	7.4 (7.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	96.0 (100.5)1
177	5.0 - 9.0% of mass 176	5.8 (6.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	A3626	10/19/91	1128
02	VBLK02	BLANK02	A3627	10/19/91	1216
03	SB-B-17-4	10135-04	A3630	10/19/91	1434

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2555 BFB Injection Date: 09/22/91

Instrument ID: V6 BFB Injection Time: 0915

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
75	30.0 - 60.0% of mass 95	54.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	69.7
175	5.0 - 9.0% of mass 174	4.5 (6.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	69.8 (100.1)1
177	5.0 - 9.0% of mass 176	4.9 (7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2557	09/22/91	1110
02	VSTD020	20PPBSTD	F2560	09/22/91	1322
03	VSTD100	100PPBSTD	F2561	09/22/91	1357
04	VSTD150	150PPBSTD	F2562	09/22/91	1435
05	VSTD200	200PPBSTD	F2563	09/22/91	1530

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2789 BFB Injection Date: 10/08/91

Instrument ID: V6 BFB Injection Time: 0734

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.6
75	30.0 - 60.0% of mass 95	44.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	78.1
175	5.0 - 9.0% of mass 174	6.1 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	74.4 (95.2)1
177	5.0 - 9.0% of mass 176	6.1 (8.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2790	10/08/91	0809
02	VSTD020	20PPBSTD	F2791	10/08/91	0902
03	VSTD100	100PPBSTD	F2793	10/08/91	1012
04	VSTD150	150PPBSTD	F2794	10/08/91	1057
05	VSTD200	200PPBSTD	F2795	10/08/91	1132
06	VBLK03	BLANK03	F2798	10/08/91	1409
07	SB-A-08-3	10135-06	F2803	10/08/91	1740

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2826 BFB Injection Date: 10/09/91

Instrument ID: V6 BFB Injection Time: 0921

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	51.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	4.4 (6.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	64.0 (96.2)1
177	5.0 - 9.0% of mass 176	4.5 (7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2827	10/09/91	1028
02	VBLK06	BLANK06	F2828	10/09/91	1116
03	10-4-QA1	10135-09	F2835	10/09/91	1534

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2865 BFB Injection Date: 10/10/91

Instrument ID: V6 BFB Injection Time: 1033

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.1
75	30.0 - 60.0% of mass 95	45.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	71.1
175	5.0 - 9.0% of mass 174	5.3 (7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	68.5 (96.3)1
177	5.0 - 9.0% of mass 176	4.4 (6.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2866	10/10/91	1103
02	VBLK04	BLANK04	F2870	10/10/91	1428
03	SB-B-12-3	10135-08	F2880	10/10/91	2043

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID: F2907 BFB Injection Date: 10/11/91

Instrument ID: V6 BFB Injection Time: 2053

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	48.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	80.1
175	5.0 - 9.0% of mass 174	6.2 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	79.1 (98.8)1
177	5.0 - 9.0% of mass 176	6.2 (7.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2909	10/11/91	2151
02	VBLK05	BLANK05	F2910	10/11/91	2250
03	SB-B-12-3RE	10135-08RE	F2919	10/12/91	0523

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-13-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: B2989

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 15 Date Analyzed: 10/14/91

Column: (pack/cap) CAP Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	29000	U
74-83-9	Bromomethane	29000	U
75-01-4	Vinyl Chloride	29000	U
75-00-3	Chloroethane	29000	U
75-09-2	Methylene Chloride	30000	B
67-64-1	Acetone	29000	U
75-15-0	Carbon Disulfide	14000	U
75-35-4	1,1-Dichloroethene	14000	U
75-34-3	1,1-Dichloroethane	14000	U
540-59-0	1,2-Dichloroethene (total)	14000	U
67-66-3	Chloroform	14000	U
107-06-2	1,2-Dichloroethane	14000	U
78-93-3	2-Butanone	15000	BJ
71-55-6	1,1,1-Trichloroethane	7700	J
56-23-5	Carbon Tetrachloride	14000	U
108-05-4	Vinyl Acetate	29000	U
75-27-4	Bromodichloromethane	14000	U
78-87-5	1,2-Dichloropropane	14000	U
10061-01-5	cis-1,3-Dichloropropene	14000	U
79-01-6	Trichloroethene	3300	J
124-48-1	Dibromochloromethane	14000	U
79-00-5	1,1,2-Trichloroethane	14000	U
71-43-2	Benzene	14000	U
10061-02-6	trans-1,3-Dichloropropene	14000	U
110-75-8	2-Chloroethylvinylether	29000	U
75-25-2	Bromoform	14000	U
108-10-1	4-Methyl-2-Pentanone	29000	U
591-78-6	2-Hexanone	29000	U
127-18-4	Tetrachloroethene	14000	U
79-34-5	1,1,2,2-Tetrachloroethane	14000	U
108-88-3	Toluene	8800	BJ
108-90-7	Chlorobenzene	14000	U
100-41-4	Ethylbenzene	97000	
100-42-5	Styrene	14000	U
1330-20-7	Xylene (total)	570000	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-13-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: B2989

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 15 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 20

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	21.25	99000	JN
2.		Unknown	22.41	280000	JN
3.		C3-benzene isomer	23.04	24000	JN
4.		Unknown	23.50	35000	JN

NC

R-IC14911.2A

7B2751

MeCl2
2-But
Toluene

JJ IC1591

Sample Data:
Misc : ... Soil is a VOA-SB-B-13-3 4.11g 10/1
Injected : 10 14 97 22:38 Units: UG/KG
Analyst: NORA Run Factor: 2450.00 ✓
ID File: #OAID2 Surrogate Vol: 2.000
Quant list threshold: 1.00

LF-486

Surrogate Spike Recoveries

	Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15	D4-1,2-Dichloroethane	25.00	19.86	79.4	70 121
CS05	D8-Toluene	25.00	22.50	90.0	81 117 ✓
CS10	Bromofluorobenzene (BFB)	25.00	25.79	103	74 121

Target Compounds: VOAID2

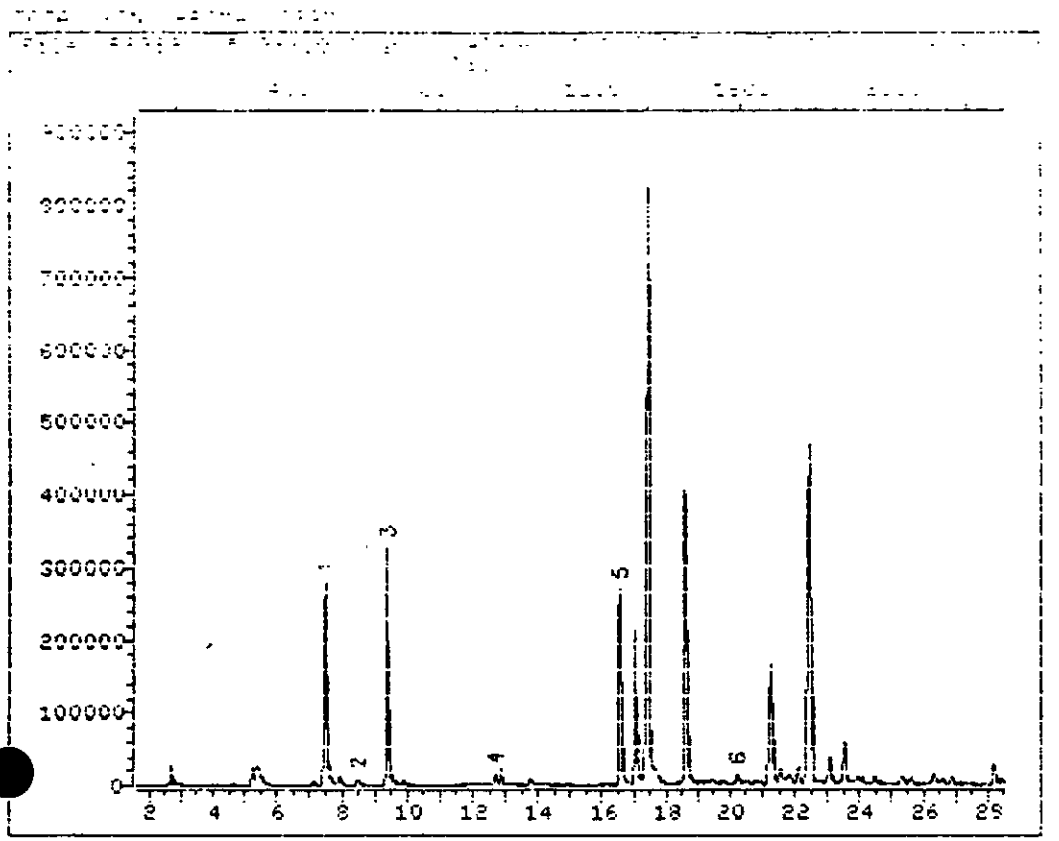
Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
		BDL	C045	1,1-Dichloroethene
262	~~1.025~~	SNG ~~2491~~	C035	Acetone
		BDL	C040	Carbon Disulfide
308	~~2.086~~ 10.44	~~5089~~ 25369 B	C030	Methylene Chloride
		BDL	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
471	5.198	12630 JB	C110	2-Butanone
		BDL	C125	Vinyl Acetate
541	2.686	6527 J	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
708	1.147	2787 J	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform

Scan #	Water Blk UG/L	Sample UG/KG		Compound
		BDL	C205	4-Methyl-2-Pentanone
85	3.082	7514 JB	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
1317	33.350	62500	C240	Ethylbenzene
1349	137.991	335300	CXXX	Xylene (p)
1451	58.487	142100	CXXX	Xylenes (o)
1451	~~1.650~~ SMJ	~~4496~~	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethan
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
1451	~~57.373~~ 198.58	~~130400~~ 482549	C250	Xylene (Total)

Compound			R.T. into Freq	Found	Diff	Ion	Area	RF	Conc.
1)	*C181	Bromochloromethane	7.47	7.47	.11	128.0	18711	1.0000	50.00
2)	C010	Chloromethane	5.10	0.00	--	50.0	0	.2417	0.00
3)	C020	Vinyl Chloride	5.24	0.00	--	62.0	0	.2662	0.00
4)	C015	Bromomethane	5.65	0.00	--	94.0	0	1.0170	0.00
5)	C025	Chloroethane	5.83	0.00	--	64.0	0	.2799	0.00
6)	C045	1,1-Dichloroethene	4.71	4.60	.11	96.0	1299	1.1416	.30
7)	C035	Acetone	4.69	4.67	.01	43.0	1645	.4244	1.05
8)	C040	Carbon Disulfide	4.94	4.88	.06	76.0	1187	4.8412	.06
9)	C050	Methylene Chloride	5.22	5.21	.01	84.0	20799	2.6370	2.09
10)	C053	Trans-1,2-Dichloroe	5.60	0.00	--	96.0	0	1.9760	0.00
11)	C055	cis-1,2-Dichloroeth	7.08	0.00	--	96.0	0	2.0042	0.00
12)	C060	1,1-Dichloroethane	6.19	0.00	--	63.0	0	3.6934	0.00
13)	C060	Chloroform	7.61	7.61	.00	83.0	6442	3.5395	.48
14)	C065	1,2-Dichloroethane	8.61	0.00	--	62.0	0	2.3048	0.00
15)	C110	2-Butanone	7.12	7.12	.00	43.0	21247	1.0812	5.20
16)	CS15	D4-1,2-Dichloroetha	8.47	8.48	.01	65.0	12408	1.6528	1.99
17)	*C118	1,4-Difluorobenzene	9.35	9.36	.02	114.0	783151	1.0000	50.00
18)	C125	Vinyl Acetate	6.30	0.00	--	43.0	0	.9271	0.00
19)	C115	1,1,1-Trichloroetha	7.95	7.93	.02	97.0	20154	.4790	2.69
20)	C120	Carbon Tetrachlorid	8.25	7.93	.31	117.0	2840	.4557	.40
21)	C165	Benzene	8.61	8.58	.03	78.0	4269	1.2479	.22
22)	C150	Trichloroethene	9.89	9.89	.00	130.0	7382	.4109	1.15
23)	C140	1,2-Dichloropropane	10.33	10.33	.00	63.0	529	.4179	.08
24)	C130	Bromodichloromethan	10.96	0.00	--	83.0	0	.5693	0.00
25)	C175	2-Chloroethylvinyle	11.69	0.00	--	63.0	0	.2011	0.00
26)	C143	Cis-1,3-Dichloropro	12.01	0.00	--	75.0	0	.5727	0.00
27)	C172	Trans-1,3-Dichlorop	13.41	0.00	--	75.0	0	.4328	0.00
28)	C160	1,1,2-Trichloroetha	13.86	0.00	--	97.0	0	.2958	0.00
29)	C155	Dibromochloromethan	14.89	0.00	--	129.0	0	.4224	0.00
30)	C180	Bromoform	19.10	0.00	--	173.0	0	.3017	0.00
31)	*C120	D5-Chlorobenzene	16.51	16.54	.04	117.0	531507	1.0000	50.00
32)	CS05	D8-Toluene	12.66	12.67	.01	98.0	31915	1.3341	2.25
33)	C205	4-Methyl-2-Pentanon	12.43	0.00	--	43.0	0	.5703	0.00
34)	C230	Toluene	12.83	12.85	.02	92.0	28520	.8678	3.09
35)	C210	2-Hexanone	14.63	0.00	--	43.0	0	.3123	0.00
36)	C220	Tetrachloroethene	14.25	14.26	.02	164.0	1764	.4102	.40
37)	C235	Chlorobenzene	16.63	0.00	--	112.0	0	1.0211	0.00
38)	C240	Ethylbenzene	17.04	17.02	.01	106.0	171740	.4759	33.95
38)D	C240	Ethylbenzene	17.04	17.40	.36	106.0	868741	.4759	171.73
39)D	CXXX	Xylene (p)	17.41	17.02	.39	106.0	171740	.5961	27.10
40)	CXXX	Xylene (p)	17.41	17.40	.01	106.0	874382	.5961	137.99
40)	CXXX	Xylenes (o)	18.60	18.59	.00	106.0	387686	.6235	58.50
41)	C245	Styrene	18.65	18.59	.06	104.0	19423	.9877	1.85
42)	C225	1,1,2,2-Tetrachloro	20.84	0.00	--	83.0	0	.8050	0.00
43)	CS10	Bromofluorobenzene	20.24	20.22	.02	95.0	16754	.6112	2.58
44)	C335	Dichlorobenzene (m	23.86	0.00	--	146.0	0	.9182	0.00
45)	C340	Dichlorobenzene (p	24.18	0.00	--	146.0	0	.9370	0.00
46)	C350	Dichlorobenzene (o	25.41	0.00	--	146.0	0	.9753	0.00

Internal Standard	Sample Area	Std Area	%
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: B2959::D6 Quant Output File: B2959::D

Name: balsam 10135-1 5ulx

Misc: v2 c12 5ul is/s ucc-sb-b-13-3 4.11g 10/12

Id File: VOA1D2::$$

Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO

Last Calibration: 911014 14:19

Operator ID: NORA

Quant Time: 911014 23:08

Injected at: 911014 22:38

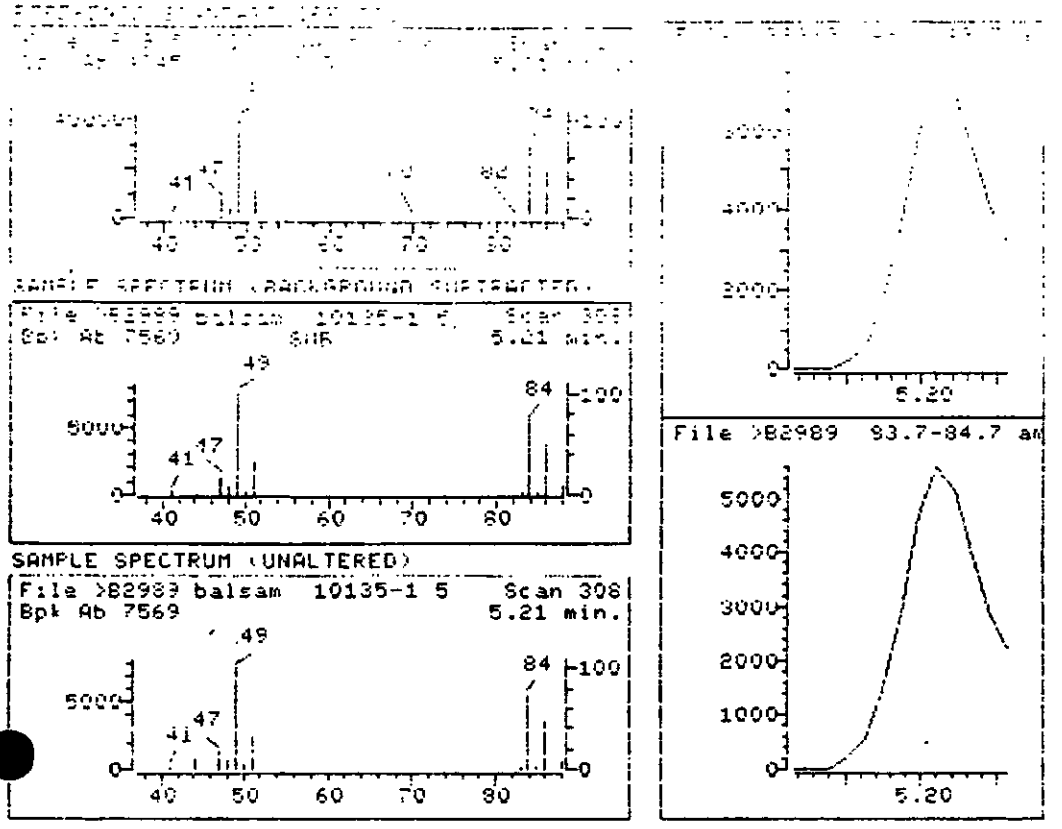
Name: baisam 10ug-1 soil
Misc: 02 010 soil .5:5 soc-sb-b-13-4 4.11g 10/12

LIMS ID: 90H102::31
Title: PBL VOLATILES:200mm/.5mm:Dec24:02:ERLO/ENSECO
Last Calibration: 01Jul14 14:19

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.47	128.0	189010	50.00	UG/L	81
6)	C045	1,1-Dichloroethene	4.60	96.0	1299	.30	UG/L	90
7)	C035	Acetone	4.67	43.0	1645	1.03	UG/L	100
8)	C040	Carbon Disulfide	4.88	76.0	1187	.06	UG/L	100
9)	C030	Methylene Chloride	5.21	84.0	20799	2.09	UG/L	88
13)	C060	Chloroform	7.61	83.0	6442	.48	UG/L	97
15)	C110	2-Butanone	7.12	43.0	21247	5.20	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.48	65.0	12408	1.99	UG/L	83
17)	*C110	1,4-Difluorobenzene	9.36	114.0	783151	50.00	UG/L	100
18)	C115	1,1,1-Trichloroethane	7.93	97.0	20154	2.69	UG/L	92
20)	C120	Carbon Tetrachloride	7.93	117.0	2840	.40	UG/L	95
21)	C165	Benzene	8.58	78.0	4269	.22	UG/L	100
22)	C190	Trichloroethene	9.89	130.0	7382	1.15	UG/L	96
29)	C140	1,2-Dichloropropane	10.53	63.0	529	.08	UG/L	100
31)	*C120	D5-Chlorobenzene	16.54	117.0	551507	50.00	UG/L	100
32)	CS05	D8-Toluene	12.67	98.0	31915	2.25	UG/L	99
34)	C250	Toluene	12.85	92.0	28520	3.09	UG/L	96
36)	C220	Tetrachloroethene	14.26	164.0	1764	.40	UG/L	90
38)	C240	Ethylbenzene	17.02	106.0	171740	33.95	UG/L	97
39)	CXXX	Xylene (p)	17.40	106.0	874382	137.99	UG/L	95
40)	CXXX	Xylenes (o)	18.59	106.0	387686	58.50	UG/L	95
41)	C245	Styrene	18.59	104.0	19423	1.85	UG/L	100
43)	CS10	Bromofluorobenzene (BFB)	20.22	95.0	16754	2.58	UG/L	75
47)	C250	Xylene (Total)	~~18.59~~ 17.40	106.0	~~387648~~ 1310618m	~~57.97~~ 198.58 ug/l	UG/L	96

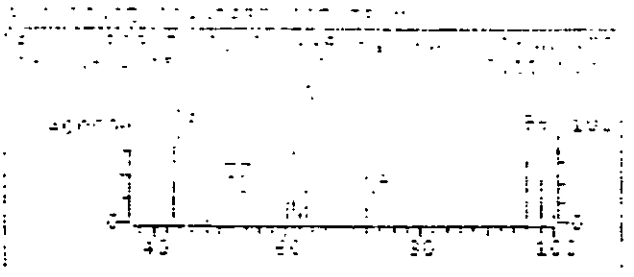
* Compound is ISTD

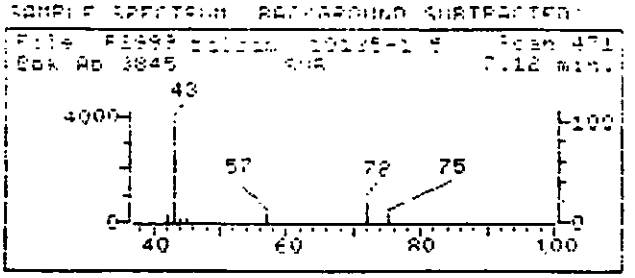
JJ 102591

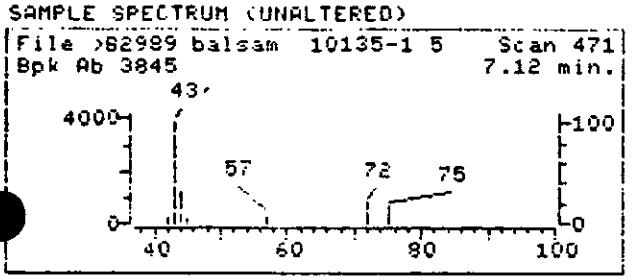


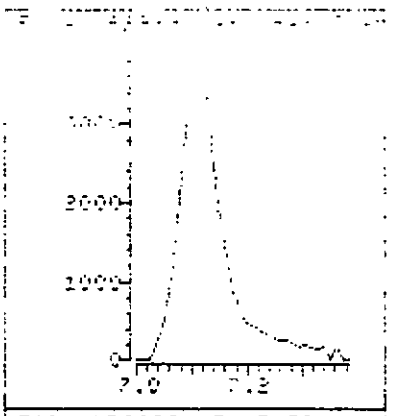
Data File: >B2989::D6 Quant Output File: >B2989::Q1
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul is/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOA1D2::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

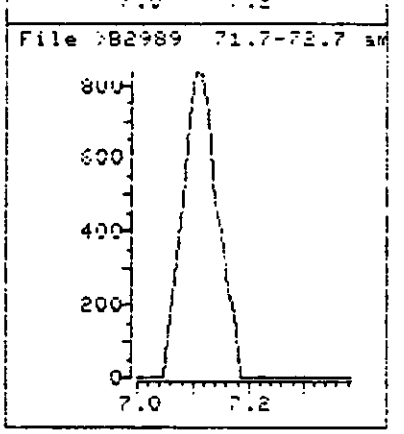
Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 308
Retention Time: 5.21 min.
Quant Ion: 84.0
Area: 20799
Concentration: 2.09 UG/L
q-value: 88





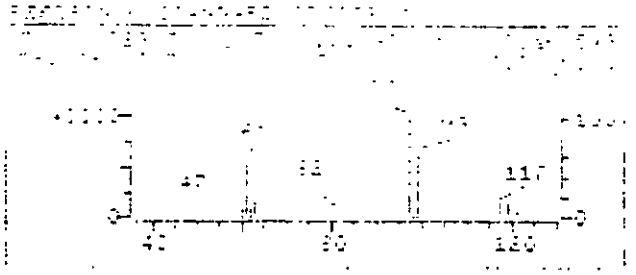


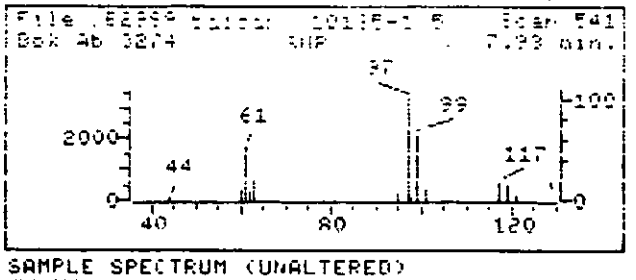




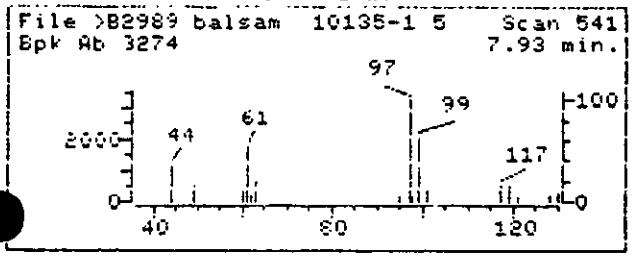
Data File: >B2989::D6 Quant Output File: ^B2969::QI
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul 1s/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOA102::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

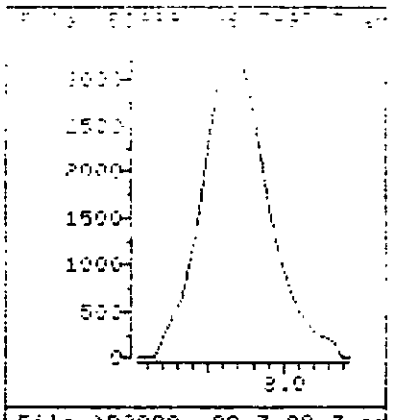
Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 471
Retention Time: 7.12 min.
Quant Ion: 43.0
Area: 21247
Concentration: 5.20 UG/L
q-value: 96

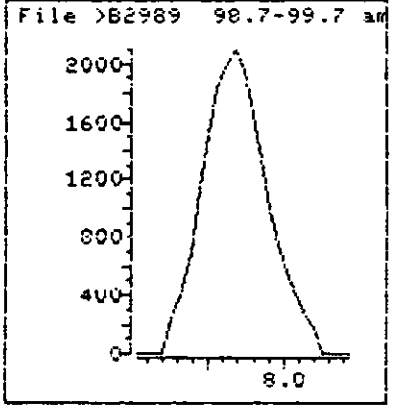




SAMPLE SPECTRUM (UNALTERED)

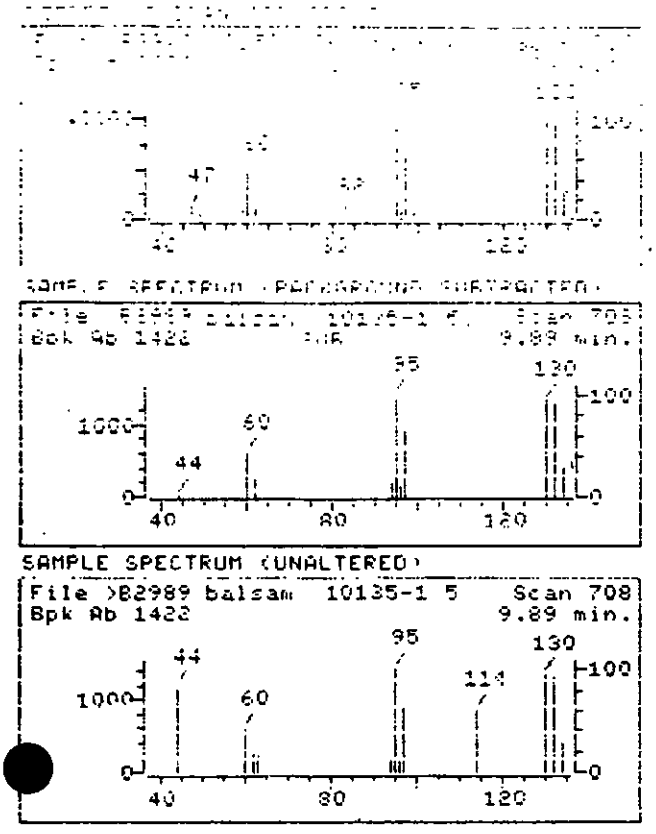


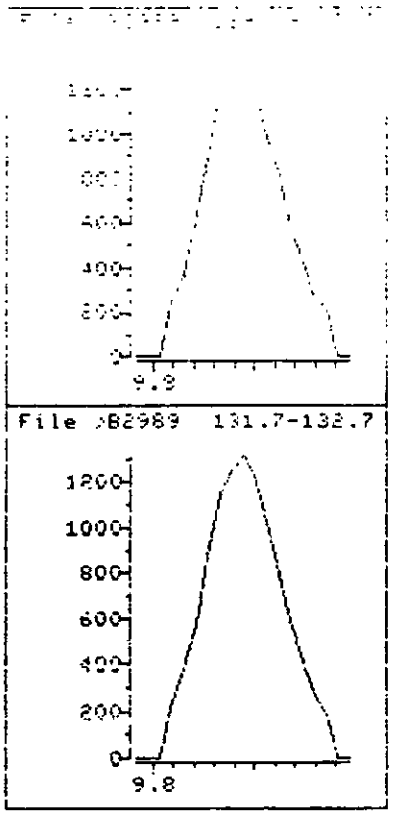




Data File: ^B2989::D6 Quant Output File: ^B2989::Q1
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul 1s/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOAID2::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

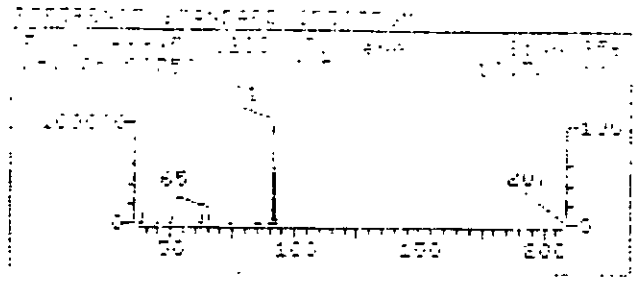
Compound No: 19
Compound Name: C115 1,1,1-Trichloroethane
Scan Number: 541
Retention Time: 7.93 min.
Quant Ion: 97.0
Area: 20154
Concentration: 2.69 UG/L
q-value: 92

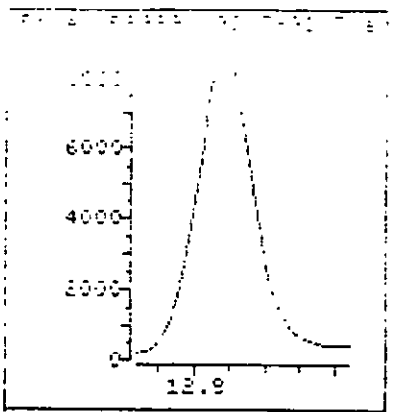


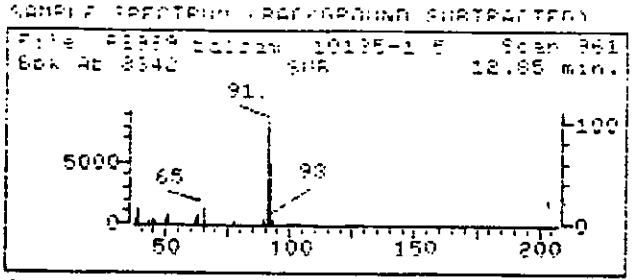


Data File: >B2989::D6 Quant Output File: >B2989::QT
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul is/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOAID2::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

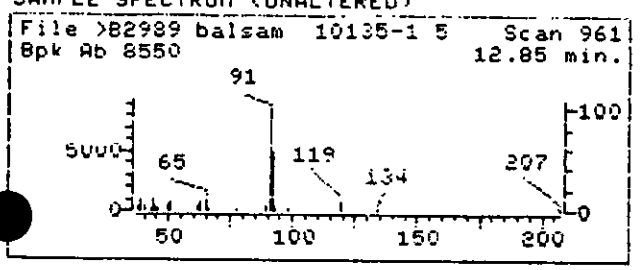
Compound No: 22
Compound Name: C150 Trichloroethene
Scan Number: 708
Retention Time: 9.89 min.
Quant Ion: 130.0
Area: 7382
Concentration: 1.15 UG/L
q-value: 98

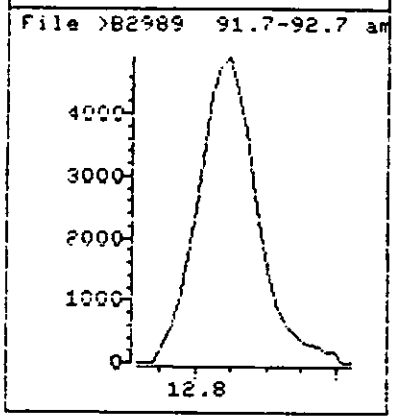






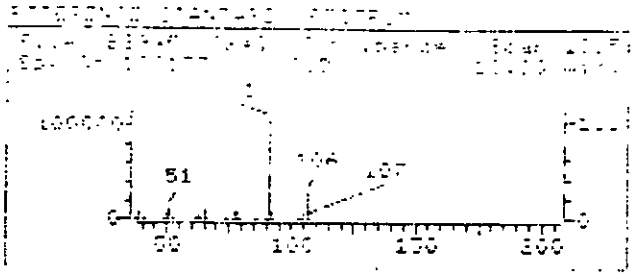
SAMPLE SPECTRUM (UNALTERED)

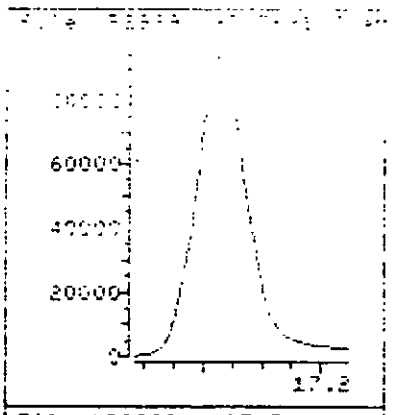




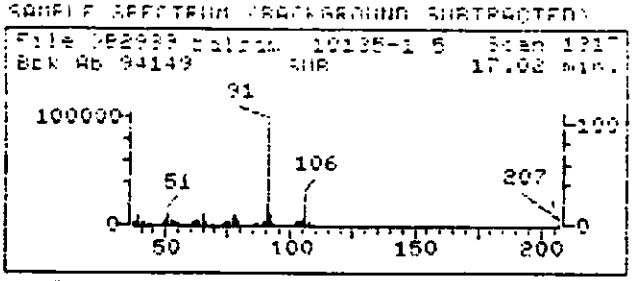
Data File: >B2989::D6 Quant Output File: ^B2989::QF
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul is/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOAID2::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

Compound No: 34
Compound Name: C23U Toluene
Scan Number: 961
Retention Time: 12.85 min.
Quant Ion: 92.0
Area: 28520
Concentration: 3.09 UG/L
q-value: 96

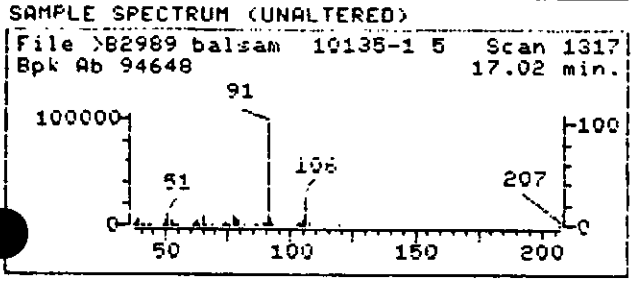


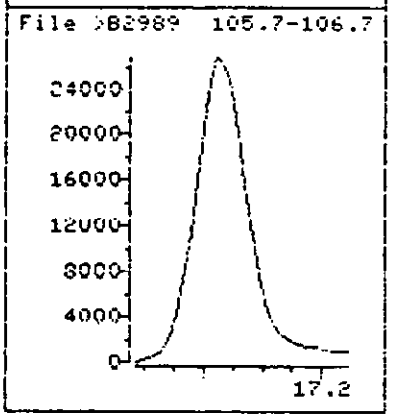


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



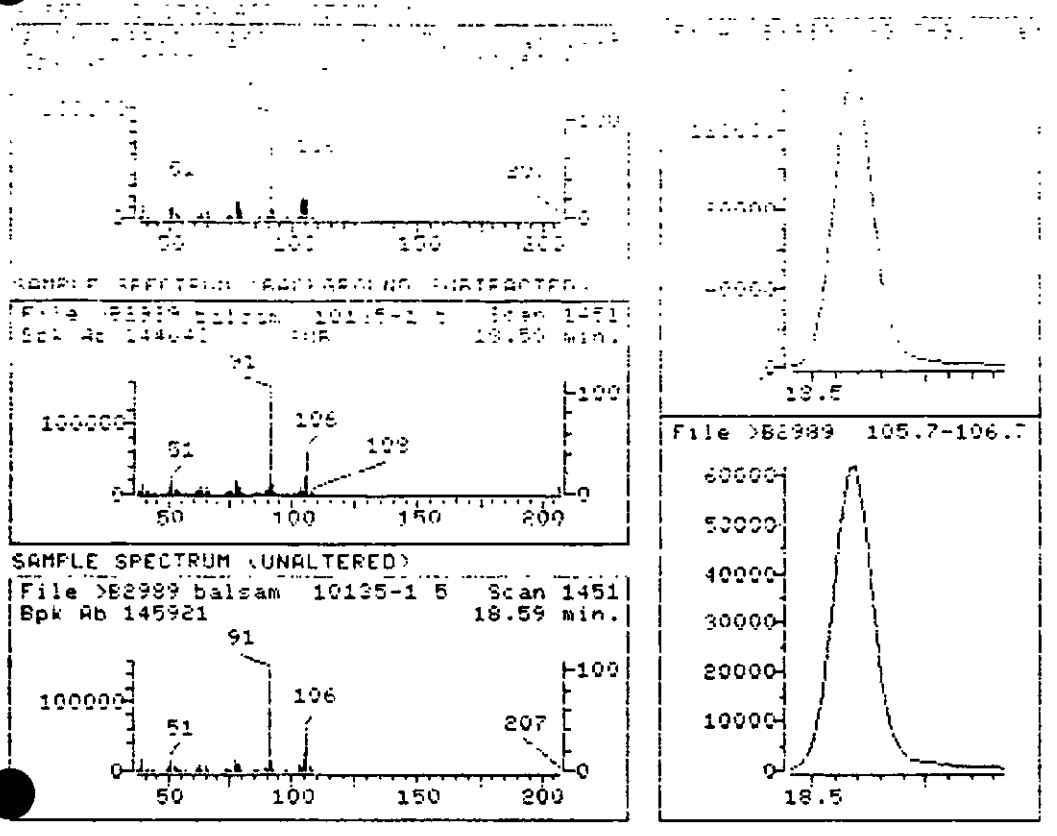
SAMPLE SPECTRUM (UNALTERED)





Data File: >B2989::D6 Quant Output File: ^B2989::WI
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul is/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOA1D2::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

Compound No: 38
Compound Name: C240 Ethylbenzene
Scan Number: 1317
Retention Time: 17.02 min.
Quant Ion: 106.0
Area: 171740
Concentration: 33.95 UG/L
q-value: 97



Data File: >B2989::06 Quant Output File: ^B2989::QI
Name: balsam 10135-1 5ulx
Misc: v2 c12 5ul is/s ucc-sb-b-13-3 4.11g 10/12
Quant Time: 911014 23:08 Quant ID File: VOAID2::$$
Injected at: 911014 22:38 Last Calibration: 911014 14:19

Compound No: 47
Compound Name: C250 Xylene (Total)
Scan Number: 1451
Retention Time: 18.59 min.
Quant Ion: 106.0
Area: 378648
Concentration: 57.37 UG/L
q-value: 96

17 Date: 161591

#	Scan	Concentration in Sample (ug/KG)	CAS #	Compound
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1873.	84000.	~~00-00-3~~	~~Methane, dichloro-~~ HSL Compound
[illegible]	[illegible]	[illegible]	~~105-56-7~~	~~2-Butanone~~ Unknown
[illegible]	[illegible]	230000.	~~615-24-7~~	~~2-Pentanone, 3,3,4-trimethyl-~~ Unknown
4	1821.	21000.	~~611-14-3~~	~~Benzene, 1-ethyl-2-methyl-~~ ✓ C3 benzene isomer
5	1870.	30000.	~~75-50-3~~	~~Methanamine, N,N-dimethyl-~~ Unknown

Date Filed: 03/03

3	88		3	21.45	1.000	1111312.	164340.	34.666
4	84		3	22.41	1.388	3136375.	484395.	86.666
5	85		3	23.84	1.388	774223.	25160.	3.441
6	86		3	23.50	.422	386681.	66216.	12.776

[illegible] Internal Standard Report

Data File: [illegible]

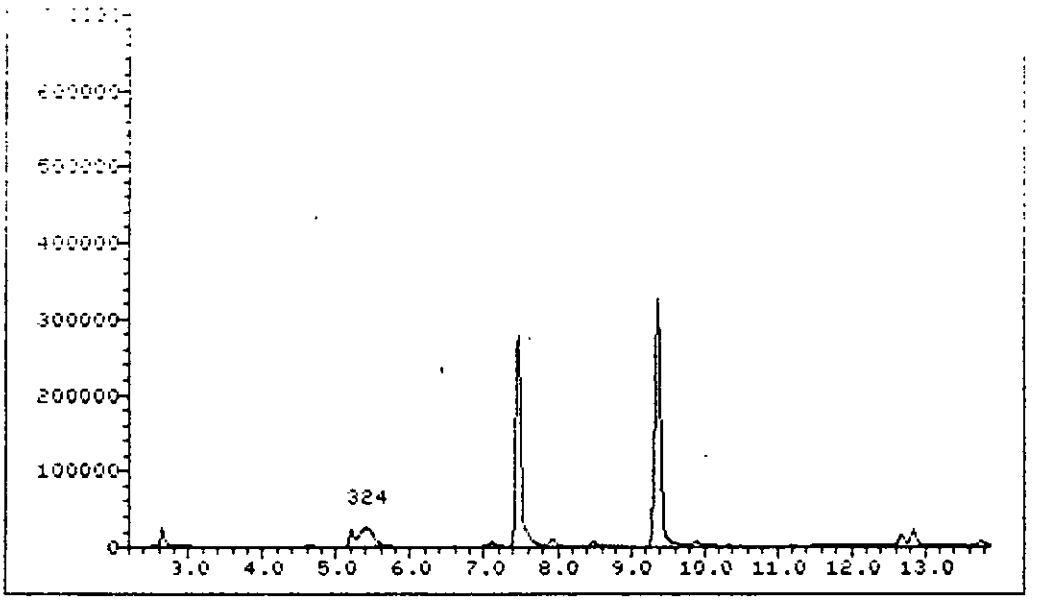
Minimum separation of RIC and next TIC peak: 5.
Minimum RIC peak area as % of est. RIC area: 50.
Maximum RIC peak area as % of est. RIC area: 200.

#	Name	Concentration		Flag		
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC	
1	CI01 Bromochloromet	50.000	UG/L	Ok		
501.	185010.	7.292	501.	1365695.	99.091	
2	CI10 1,4-Difluorobe	50.000	UG/L	Ok		
663.	783151.	2.409	663.	1767606.	93.679	
3	CI20 D5-Chlorobenze	50.000	UG/L	Ok		
1276.	531507.	3.457	1276.	1624324.	88.395	

Deleting peaks from INT file: VDIR72
  Minimum area: 10 % of area of closest Int. Std.
  Number of peaks: 11
  Number of peaks remaining: 11

Deleting target compounds from INT file: VDIR72
  Minimum seperation of TIC and target: 5.
  Maximum fraction of RIC peak from targets: 40. %
  Number of peaks: 11
  Number of peaks remaining: 5

Deleting all but largest peaks from INT file: VDIR72
  Maximum number of peaks to keep: 15
  Number of peaks: 5
Maximum number of peaks > number of peaks.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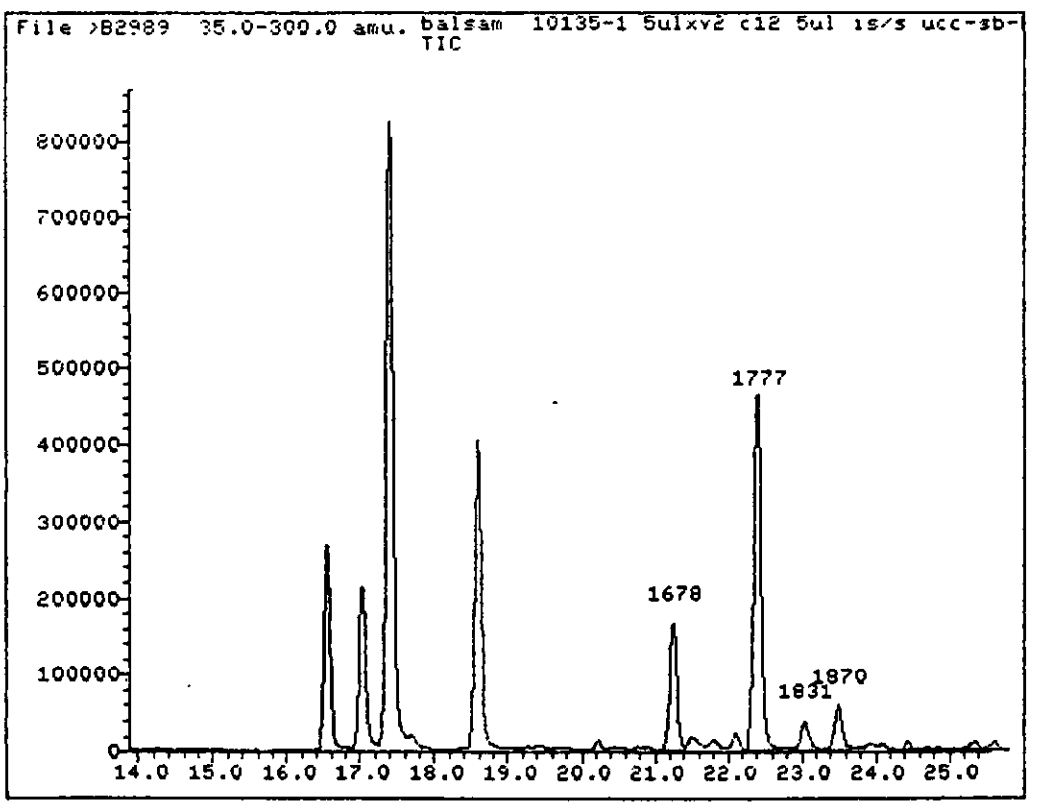
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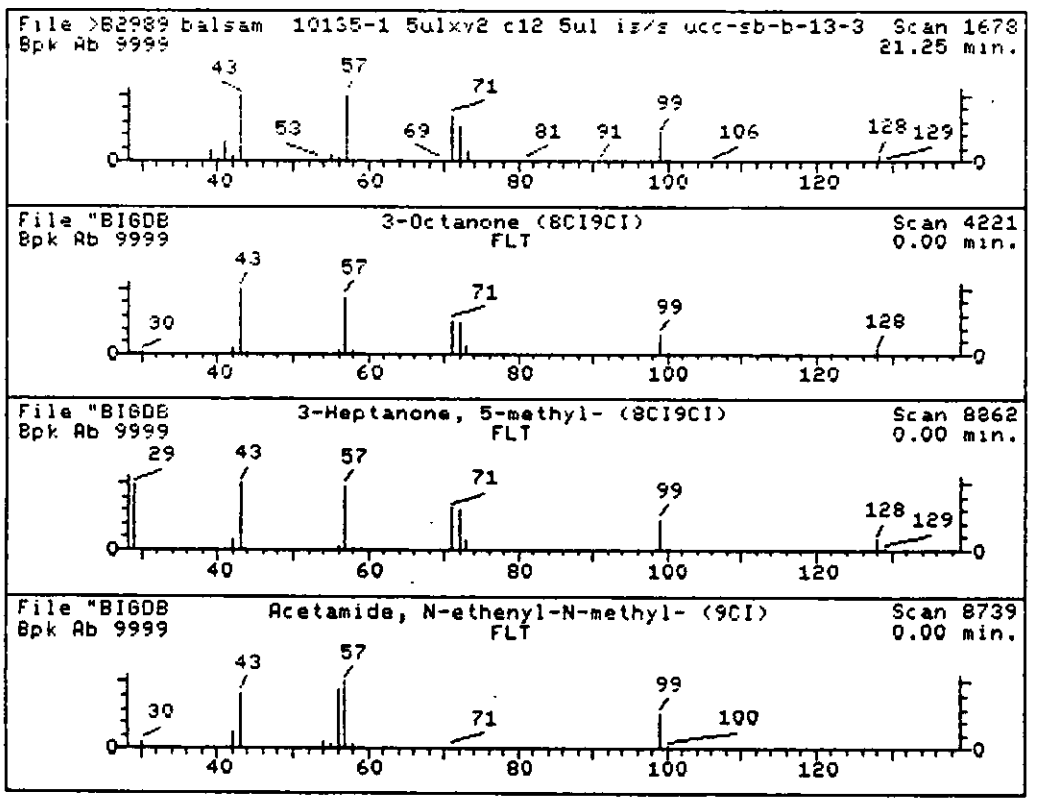
700000
600000
500000
400000
300000
200000
100000
0
1777
1678
1831
1870
14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0

Sample File: B2989 Spectrum #: 1678
Search speed: Tilting option: 3 No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	106683	4221	"BIGDB	80	19	1	0	97	0	66	77
2.	30*	541855	8862	"BIGDB	33	74	1	0	54	45	8	18
3.	30*	3195786	8739	"BIGDB	27	69	3	0	80	32	12	13
4.	25	56052858	8761	"BIGDB	39	41	2	0	81	45	8	13
5.	25*	5405798	3989	"BIGDB	25	60	3	0	100	42	8	13
6.	25*	6124910	4121	"BIGDB	27	71	3	0	179	45	8	13

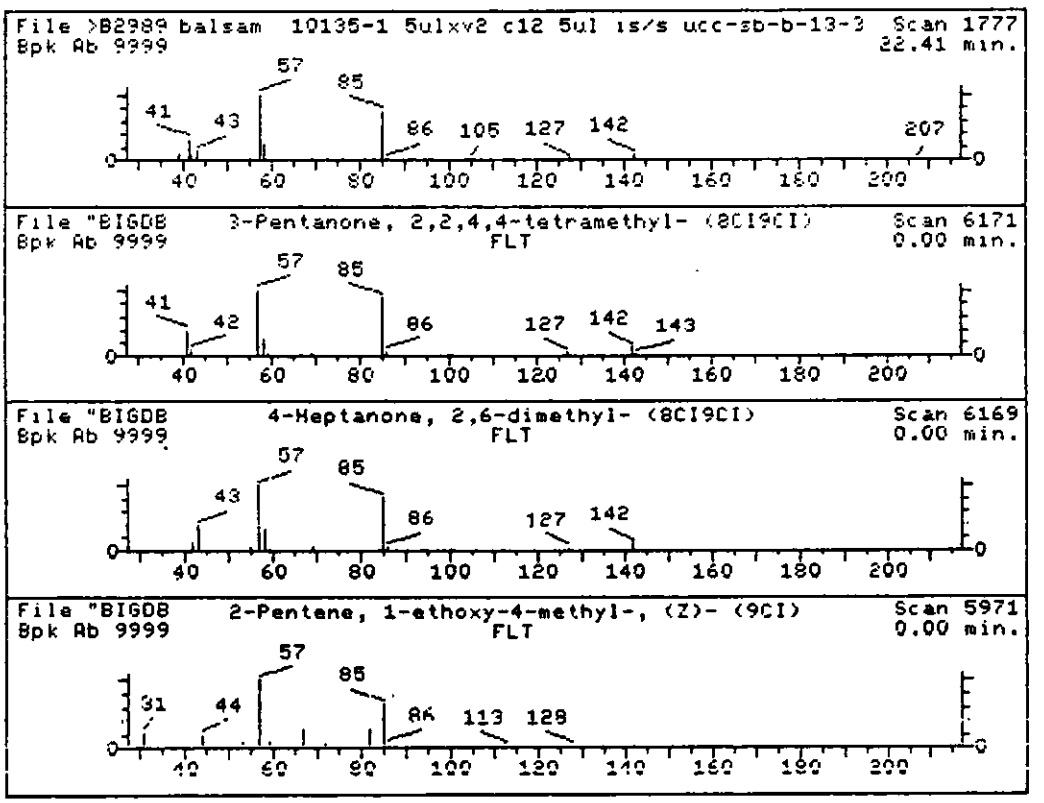


unknown
JG 101591

[illegible]

Sample file: B2989 Spectrum #: 1777
Search speed: [illegible] Tilting option: 3 No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	M	D-	#PLS	TILT	%	CON	C_I	P_I
1.	89*	815247	6171	"BIGDB	70	33	0	0	63	21	47	33
2.	83*	108838	6169	"BIGDB	48	51	2	0	74	3	57	22
3.	52*	51149758	5971	"BIGDB	25	80	3	0	100	19	20	13
4.	52*	4418615	,5	"BIGDB	21	104	2	0	100	19	20	13
5.	37	3494040	6173	"BIGDB	43	52	1	0	51	26	14	14
6.	26*	7492388	6174	"BIGDB	29	63	2	0	60	41	8	14

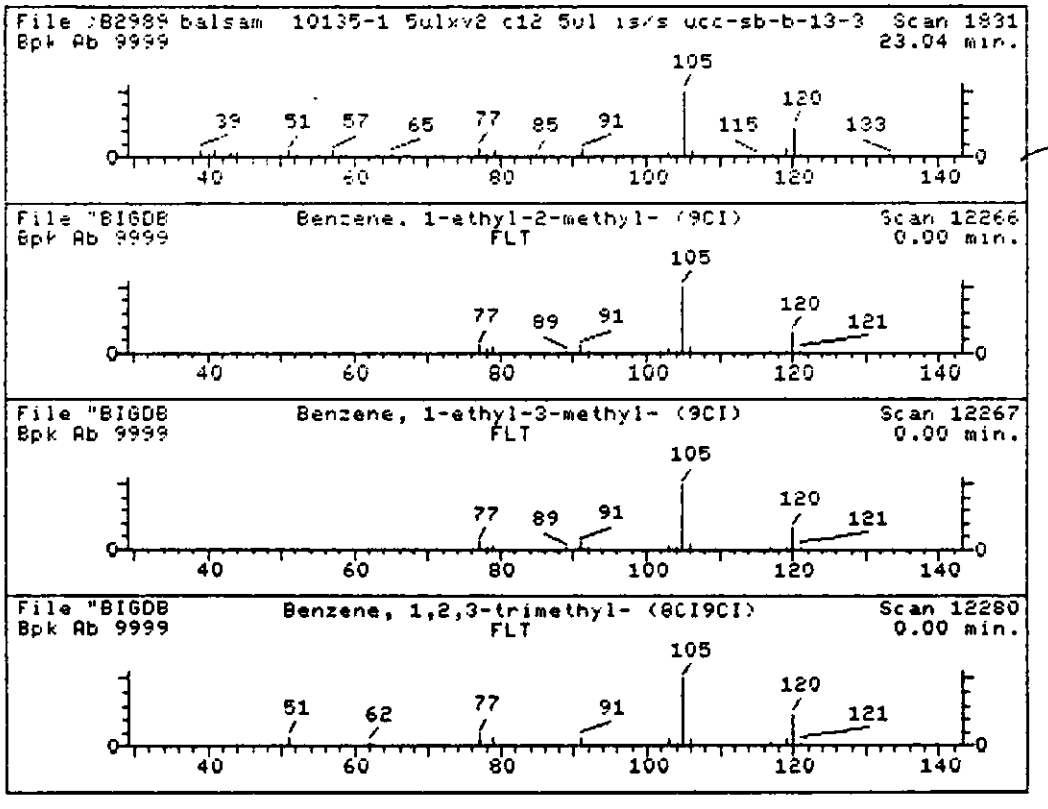


unknown
JG101591

TIC Match:

Sample file: d2989 Spectrum #: 1831
Search speed: 1 Tuning option: 5 No. of ion ranges searched: 40

	Prob.	CAS #	CBN #	FDOT	%	BP	#PLB	FLT	%	JCN	C_1	FL1
1.	94*	511143	12265	"BIGDB	75	10	1	0	100	10	68	93
2.	94*	620144	12267	"BIGDB	75	12	1	0	100	8	68	93
3.	93*	526738	12280	"BIGDB	94	16	1	0	68	5	68	93
4.	87*	108678	12275	"BIGDB	67	21	2	2	77	4	63	49
5.	87*	95636	12273	"BIGDB	65	30	2	0	75	5	63	49
6.	78*	3141024	12286	"BIGDB	40	64	3	0	72	5	55	13

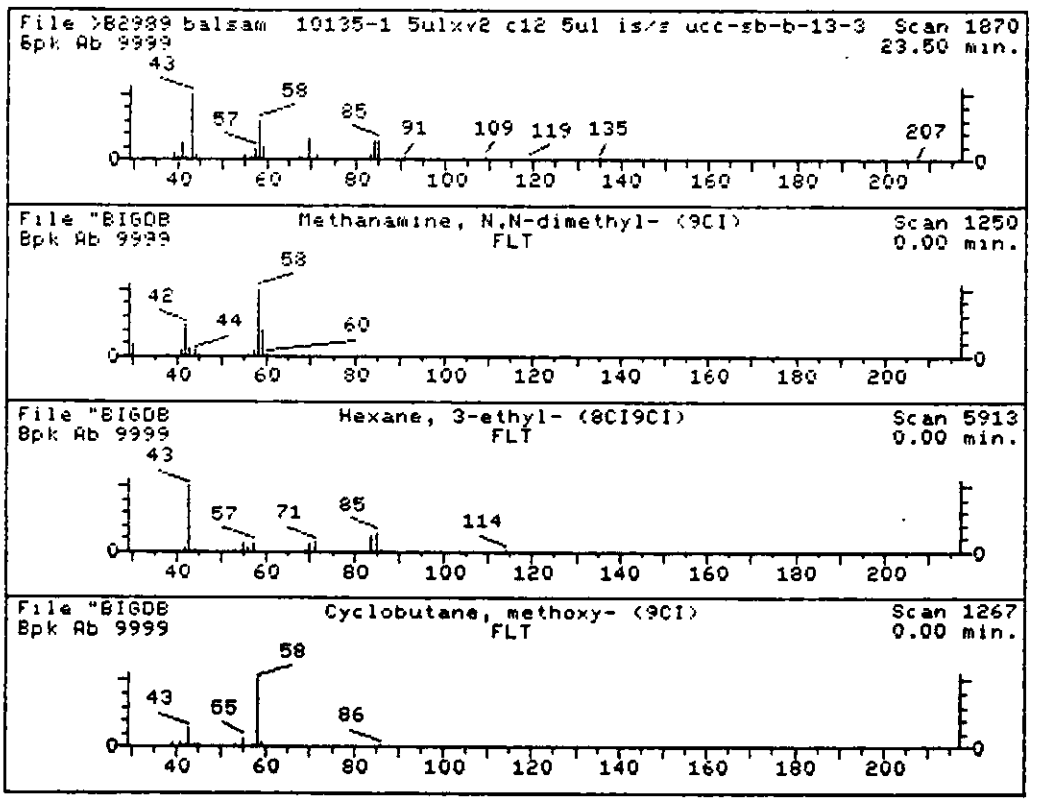


JG 101591

[illegible]

Sample file: d1818 Spectrum #: 1870
Search speed: 1 Tilting option: 5 No. of ion ranges searched: 43

	Prob.	Chi *	CON *	ROOT	#	DF	#FLG	TILT	%	CON	C_I	F_I
1.	15*	75503	1250	"BIGDB	22	45	2	0	49	48	7	13
2.	15	613996	5913	"BIGDB	43	47	2	0	100	56	3	12
3.	15*	18593334	1267	"BIGDB	26	44	1	0	56	58	3	14
4.	11	1068877	5918	"BIGDB	36	47	1	0	57	64	2	13



✓
unknown
JG 101591

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-17-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: A3630

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 12 Date Analyzed: 10/19/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	690	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	690	U
75-35-4	1,1-Dichloroethene	690	U
75-34-3	1,1-Dichloroethane	690	U
540-59-0	1,2-Dichloroethene (total)	690	U
67-66-3	Chloroform	690	U
107-06-2	1,2-Dichloroethane	690	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	690	U
56-23-5	Carbon Tetrachloride	690	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	690	U
78-87-5	1,2-Dichloropropane	690	U
10061-01-5	cis-1,3-Dichloropropene	690	U
79-01-6	Trichloroethene	690	U
124-48-1	Dibromochloromethane	690	U
79-00-5	1,1,2-Trichloroethane	690	U
71-43-2	Benzene	690	U
10061-02-6	trans-1,3-Dichloropropene	690	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	690	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	690	U
79-34-5	1,1,2,2-Tetrachloroethane	690	U
108-88-3	Toluene	690	U
108-90-7	Chlorobenzene	690	U
100-41-4	Ethylbenzene	690	U
100-42-5	Styrene	690	U
1330-20-7	Xylene (total)	690	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-B-17-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: A3630

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 12 Date Analyzed: 10/19/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-18-5	Decane	20.18	3300	JN
2.		Unknown	21.17	1200	JN
3.	1120-21-4	Undecane	24.30	3000	JN

Reduced by : _____ Date: _____ Data File: >A3630
Reviewed by: _____ Date: _____ Page: 1

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: BALSM 10135-4 100ulx
Misc : V1, CH1 5ul medis id# UCC-SB-B-17-4 4.09G/10ML 101291
Injected : 10/19/91 14:34 Units: UG/KG
Analyst: ALANA Run Factor: 122.000
ID File: VOAID1 Surrogate vol: .500
Quant list threshold: 1.00

LF= 2445

Surrogate Spike Recoveries

Compound		Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15	D4-1,2-Dichloroethane	25.00	21.63	86.5	70 121
CS05	D8-Toluene	25.00	23.61	94.4	81 117 ✓
CS10	Bromofluorobenzene (BFB)	25.00	23.58	94.3	74 121

Target Compounds: VOAID1

Scan #	Concentration Quant List UG/L	Sample UG/KG	Compound
	BDL	C010	Chloromethane
	BDL	C020	Vinyl Chloride
	BDL	C015	Bromomethane
	BDL	C025	Chloroethane
	BDL	C045	1,1-Dichloroethene
	BDL	C035	Acetone
	BDL	C040	Carbon Disulfide
	BDL	C030	Methylene Chloride
	BDL	C053	Trans-1,2-Dichloroethene
	BDL	C055	cis-1,2-Dichloroethene
	BDL	C050	1,1-Dichloroethane
	BDL	C060	Chloroform
	BDL	C065	1,2-Dichloroethane
	BDL	C110	2-Butanone
	BDL	C125	Vinyl Acetate
	BDL	C115	1,1,1-Trichloroethane
	BDL	C120	Carbon Tetrachloride
	BDL	C165	Benzene
	BDL	C150	Trichloroethene
	BDL	C140	1,2-Dichloropropane
	BDL	C130	Bromodichloromethane
	BDL	C175	2-Chloroethylvinylether
	BDL	C143	Cis-1,3-Dichloropropen
	BDL	C172	Trans-1,3-Dichloropropen
	BDL	C160	1,1,2-Trichloroethane
	BDL	C155	Dibromochloromethane
	BDL	C180	Bromoform

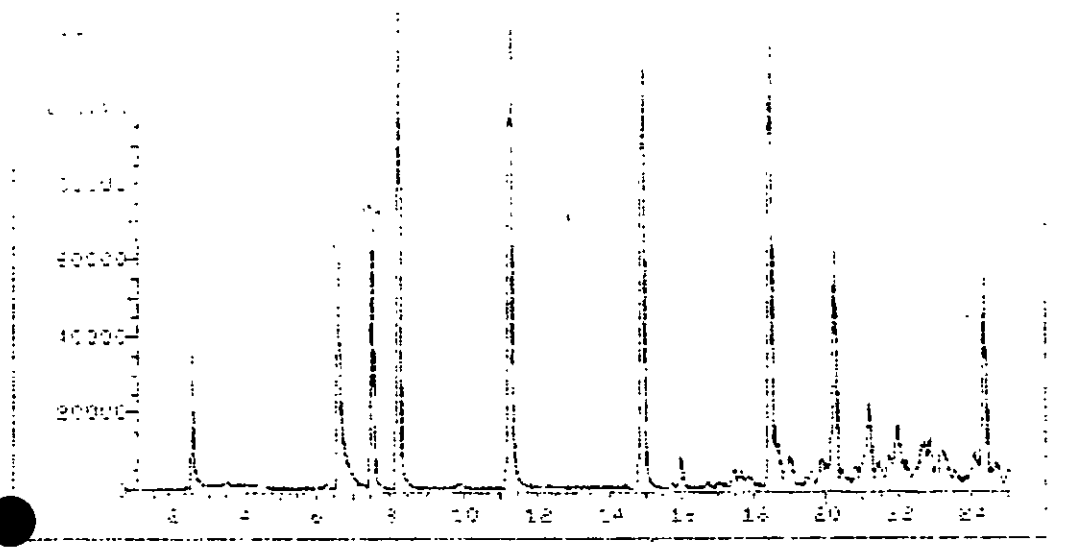
Data file: >A3630 Page: 2
Sample: BALSM 10135-4 100ulx

Scan #	Concentration Quant list UG/L	Sample UG/KG	Compound
	BDL	C205	4-Methyl-2-Pentanone
	BDL	C230	Toluene
	BDL	C210	2-Hexanone
	BDL	C220	Tetrachloroethene
	BDL	C235	Chlorobenzene
	BDL	C240	Ethylbenzene
	BDL	CXXX	Xylene (p)
	BDL	CXXX	Xylene (o)
	BDL	C245	Styrene
	BDL	C225	1,1,2,2-Tetrachloroethan
	BDL	C335	Dichlorobenzene (m)
	BDL	C340	Dichlorobenzene (p)
	BDL	C350	Dichlorobenzene (o)
	BDL	C250	Xylene (Total)

1)	C005	Dichlorodifluoromethane	4.37	0.00	--	85.0	0	.2116	0.00	
2)	C010	Chloromethane	4.82	0.00	--	50.0	0	.2019	0.00	
3)	C020	Vinyl Chloride	4.96	0.00	--	62.5	0	.2116	0.00	
4)	C030	Methylene Chloride	4.58	4.65	.11	84.0	5887	1.1805	.12	
5)	C050	Trans-1,2-Dichloroe	5.75	0.00	--	96.0	0	1.4226	0.00	
6)	C060	1,1-Dichloroethane	6.24	0.00	--	96.0	0	1.0881	0.00	
7)	C070	1,1-Dichloroethene	7.45	0.00	--	61.0	0	2.7-05	0.00	
8)	C080	Chloroform	8.79	0.00	--	83.0	0	1.1500	0.00	
9)	C090	1,2-Dichloroethane	9.06	0.00	--	62.0	0	1.1292	0.00	
10)	C100	2-Butanone	9.07	0.00	--	72.0	0	.8527	0.00	
11)	C110	1,1,1-Trichloroethane	9.41	9.48	.01	97.0	1256	1.0000	49.17	
12)	C120	Bromodichloromethane	9.72	9.78	.06	164.0	2564.43	1.1000	.1	
13)	C130	1,2-Dichloropropane	9.94	0.00	--	63.0	0	.2116	0.00	
14)	C140	Cis-1,3-Dichloropro	10.47	0.00	--	75.0	0	.1-05	0.00	
15)	C145	Trichloroethene	10.62	0.00	--	130.0	0	.2116	0.00	
16)	C150	Dibromochloromethane	10.93	0.00	--	129.0	0	.1693	0.00	
17)	C160	1,1,2-Trichloroetha	11.22	0.00	--	97.0	0	.1410	0.00	
18)	C170	Trans-1,3-Dichlorop	11.92	0.00	--	75.0	0	.1693	0.00	
19)	C180	Cis-1,3-Dichloropro	12.09	0.00	--	75.0	0	.1693	0.00	
20)	C190	2-Chloroethylvinyle	12.53	0.00	--	63.0	0	.1693	0.00	
21)	C200	Bromoform	13.28	0.00	--	173.0	0	.1693	0.00	
22)	C210	4-Methyl-2-Pentanon	13.05	0.00	--	43.0	0	.1693	0.00	
23)	C220	2-Hexanone	13.88	0.00	--	43.0	0	.1693	0.00	
24)	C230	Tetrachloroethene	13.69	0.00	--	164.0	0	.1693	0.00	
25)	C240	Toluene	14.38	14.37	.02	92.0	601	.1693	.12	
26)	C250	Chlorobenzene	14.99	0.00	--	112.0	0	.1693	0.00	
27)	C260	Ethylbenzene	15.32	15.68	.36	106.0	760	.1693	.14	
28)	C270	Xylene (p)	15.68	15.68	.01	106.0	760	.1693	.20	
29)	C280	Xylene (o)	16.79	0.00	--	106.0	0	.1693	0.00	
30)	C290	Styrene	16.86	0.00	--	104.0	0	.1693	0.00	
31)	C300	1,1,2,2-Tetrachloro	18.96	0.00	--	83.0	0	.1693	0.00	
32)	C310	Bromofluorobenzene	18.37	18.43	.06	95.0	170421	.1693	4.17	
33)	C320	Dichlorobenzene (m	21.82	0.00	--	146.0	0	.1693	0.00	
34)	C330	Dichlorobenzene (p	22.13	0.00	--	146.0	0	.1693	0.00	
35)	C340	Dichlorobenzene (o	23.32	0.00	--	146.0	0	.1693	0.00	
36)	C250	Xylene (total)	16.79	15.68	1.11	106.0	760	.1693	.22	

* - Compound is an internal Standard

000047



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Title: Hal VOLATILES:105mmx.5mm:U6624:01:EPLUSENDCU
Last Calibration: 111019 12:09

Operator ID: ALANA
Quant Time: 111019 15:00
Injected at: 111019 14:34

```
                                       [illegible]

     Compound                          R.T.  QIon   Response      Conc  Units        q
  ------------------------------------ ----- ----- --------- --------- -------- ---
  1) *[illegible] Bromochloromethane    5.70 128.0   [illegible]  [illegible] ug/L    -
  [illegible] Methylene Chloride        4.[illegible] 84.0   849      .12 ug/L     [illegible]
  [illegible] d4-1,2-dichloroethane     7.42  65.0   125[illegible]1   4[illegible].2[illegible] ug/L  9[illegible]
  [illegible] *[illegible] 1,4-difluorobenzene   8.22 114.0  298240   50.00 ug/L   100
  [illegible] *[illegible] d5-chlorobenzene     14.86 117.0  262678   50.00 ug/L   100
  [illegible] d8-toluene                11.12  98.0  279[illegible]   47.22 ug/L   9[illegible]
  24) [illegible] toluene               11.57  92.0   401      .13 ug/L     95
  [illegible] ethylbenzene              15.[illegible]8 106.0   [illegible]60      .04 ug/L     [illegible]
  [illegible] xylene (m,p)              15.68 106.0   [illegible]60      .[illegible] ug/L     [illegible]
  [illegible] bromofluorobenzene (bfb)  18.47  95.0  17[illegible]4[illegible]1   4[illegible].[illegible] ug/L   [illegible]
  [illegible] xylene (total)            15.68 106.0   [illegible]50      .[illegible] ug/L     [illegible]

  [illegible]
```

Data Reduced by : RL Date: 10/24/91 Data File: >A3630
Data Reviewed by : [illegible] Date: [illegible]

Enseco TIC Report (page 1)

Sample: BALSM 10135-4 100ulx Run Factor: ~~1.00~~ 122
Conditions: V1, CH1 5ul medis id# UCC-SB-B Analyst: ALANA

#	Scan	Q	C	Concentration In Sample (UG/L)	CAS #	Compound
1	97.			~~11.~~ 1342	~~00-00-0~~	solvent front
2	1334.			~~24.~~ 2930	124-18-5	Decane
3	1403.			~~8.9~~ 1086	~~10592-76-5~~	~~Ethenamine, N-pentylidene-~~ UNKNOWN
4	1622.			~~22.~~ 2684	~~1120-21-4~~	~~Undecane~~ * Nonane (C_9H_{20})

Data File: >A3630

Enseco TIC Report (page 2)

Concentration = Area(TIC) * Conc.(IS) / Area(IS)

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	0	0	1	2.51	.381	97751.	34088.	11.367
2	83	2	3	20.18	1.356	426402.	62049.	24.082
3	24	42	3	21.17	1.423	157497.	19856.	8.895
4	89	1	3	24.30	1.633	380857.	54328.	21.510

TIC Internal Standard Report

Data File: >A3630

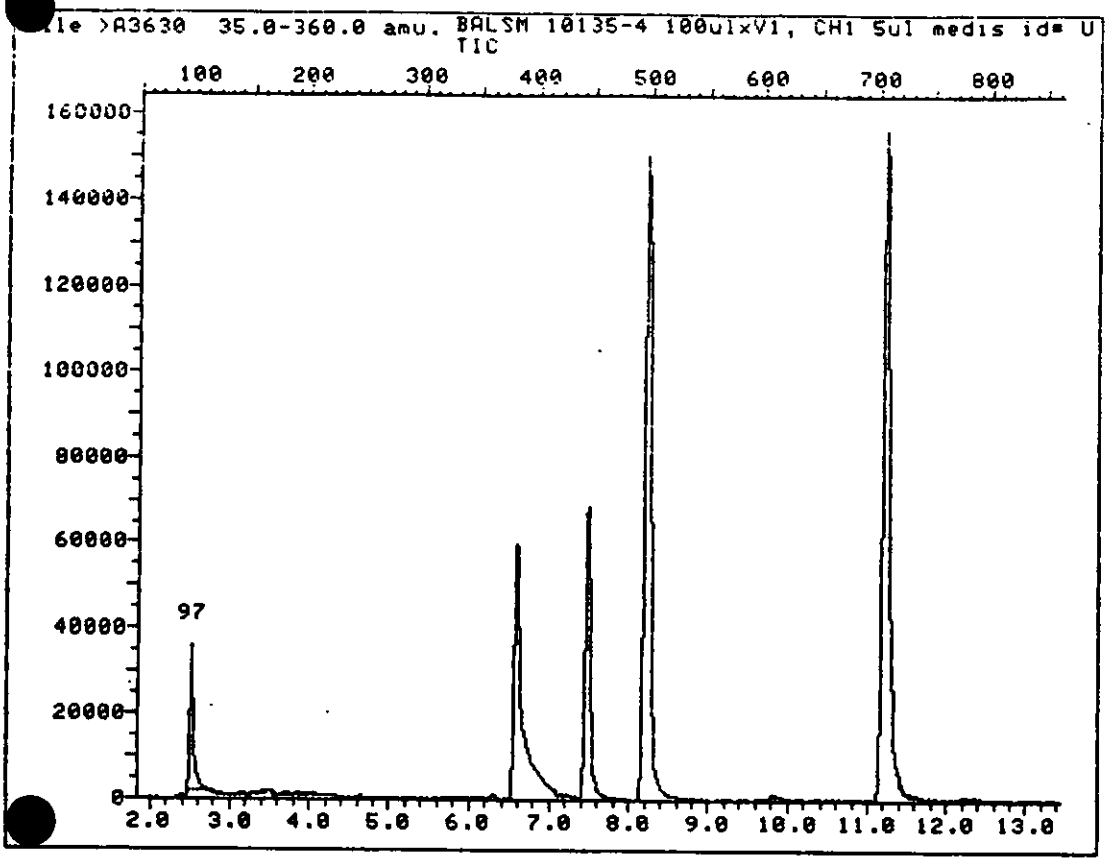
Maximum seperation of RIC and Quan ion peaks: 3.
Minimum RIC peak area as % of est. RIC area: 50.
Maximum RIC peak area as % of est. RIC area: 200.

#	Name		Concentration		Flag	
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC	
1	CI01	Bromochloromet	50.000	UG/L	Ok	
382.	77886.	6.293	382.	429986.	87.722	
2	CI10	1,4-Difluorobe	50.000	UG/L	Ok	
497.	368243.	2.237	497.	793099.	96.291	
3	CI20	D5-Chlorobenze	50.000	UG/L	Ok	
963.	303698.	3.528	963.	885320.	82.623	

Deleting peaks from INT file: VDIR73
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 15
Number of peaks remaining: 10

Deleting target compounds from INT file: VDIR73
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 10
Number of peaks remaining: 4

Deleting all but largest peaks from INT file: VDIR73
Maximum number of peaks to keep: 15
Number of peaks: 4
Maximum number of peaks > number of peaks.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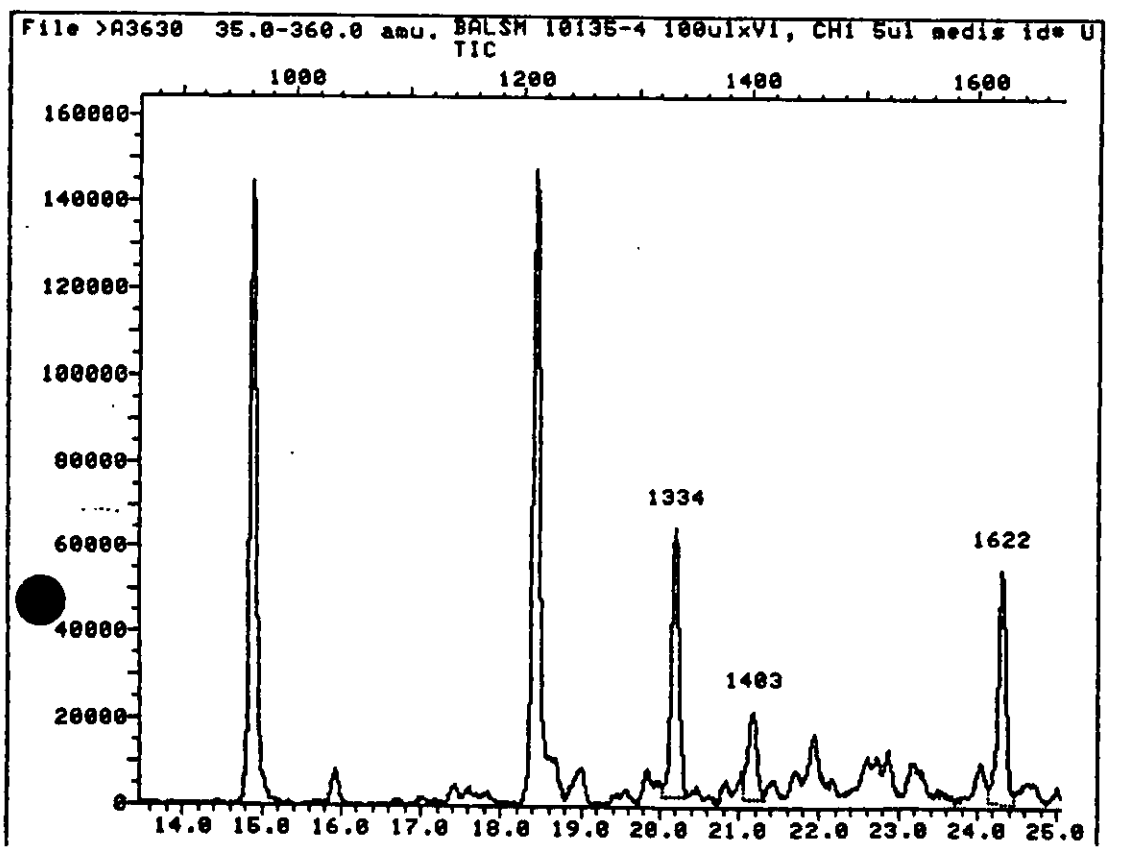
TIC
97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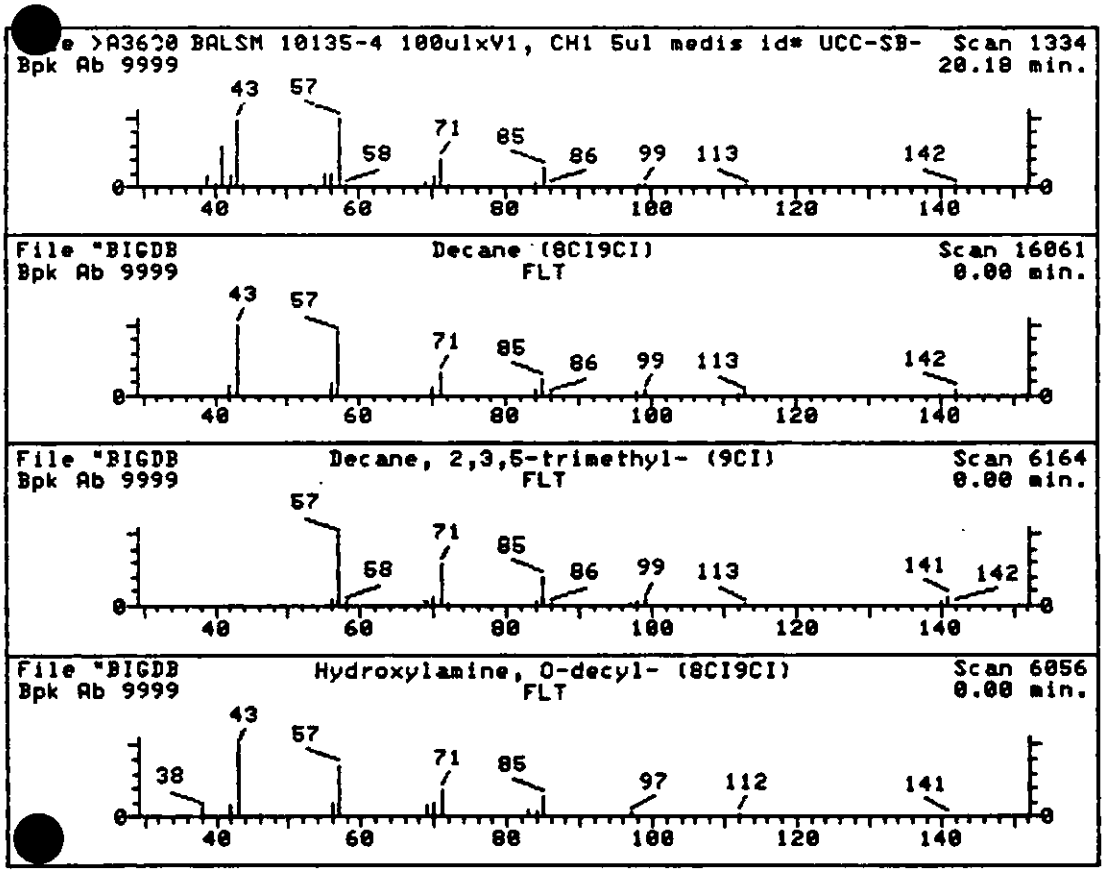
TIC
1334
1403
1622

TIC NUMBER:2

1.	Decane (8CI9CI)	142 C10H22
2.	Decane, 2,3,5-trimethyl- (9CI)	184 C13H28
3.	Hydroxylamine, O-decyl- (8CI9CI)	173 C10H23NO
4.	Undecane, 3-methyl- (8CI9CI)	170 C12H26
5.	Nonane (8CI9CI)	128 C9H20
6.	Decane, 2,9-dimethyl- (8CI9CI)	170 C12H26

Sample file: >A3630 Spectrum #: 1334
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #.	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83	124185	16061	"BIGDB	67	33	2	0	96	2	57	23
2.	70	62238113	6164	"BIGDB	68	35	3	0	69	9	42	15
3.	70	29812791	6056	"BIGDB	57	48	2	0	95	9	42	12
4.	70	1002433	6148	"BIGDB	47	41	2	0	72	7	42	16
5.	67	111842	6110	"BIGDB	62	34	2	0	103	14	34	22
6.	67	1002171	6094	"BIGDB	60	32	2	0	86	12	34	21

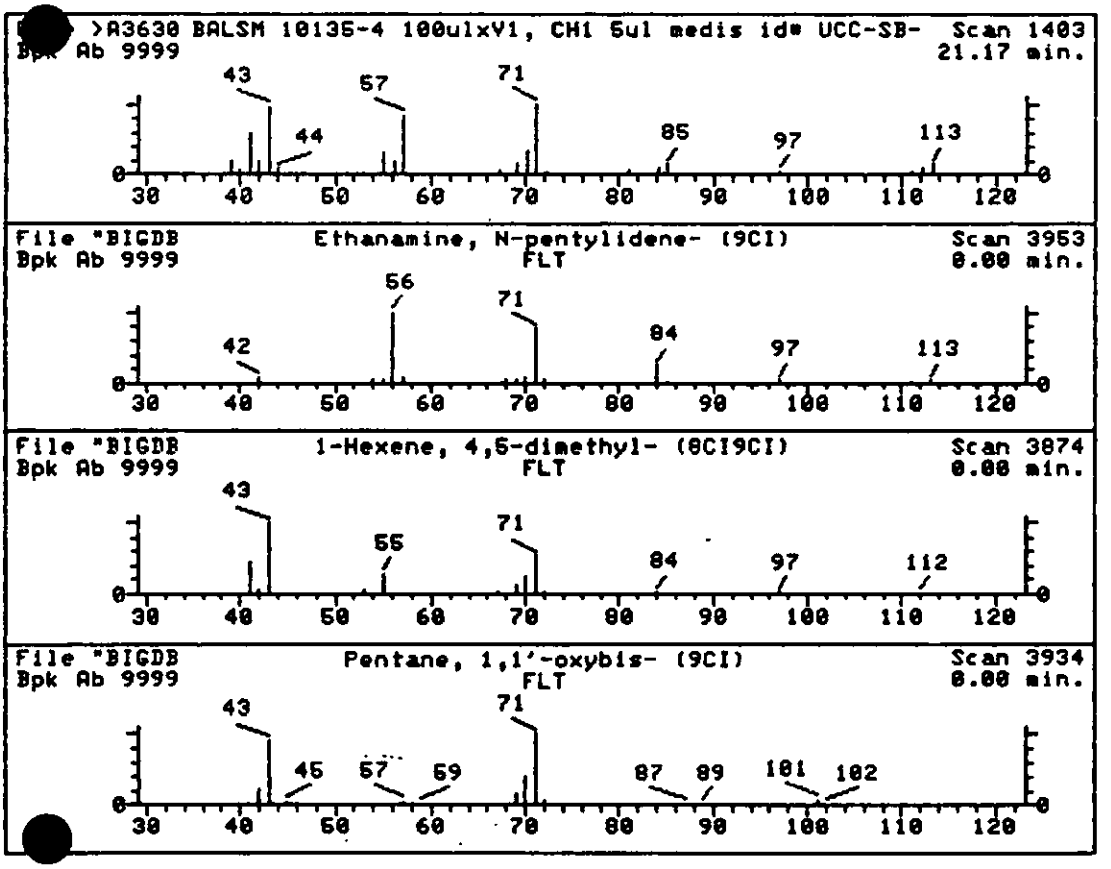


TIC NUMBER:3

1.	Ethanamine, N-pentylidene- (9CI)	113	C7H15N
2.	1-Hexene, 4,5-dimethyl- (8CI9CI)	112	C8H16
3.	Pentane, 1,1'-oxybis- (9CI)	158	C10H22O
4.	Azetidine, 1-methyl- (8CI9CI)	71	C4H9N
5.	Cyanic acid, ethyl ester (8CI9CI)	71	C3H5NO
6.	1-Pentene, 2,4,4-trimethyl- (8CI9CI)	112	C8H16

Sample file: >A3630 Spectrum #: 1403
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	24*	10599765	3953	"BIGDB	24	66	3	0	129	42	8	12
2.	20*	16106595	3874	"BIGDB	42	45	3	0	130	51	5	17
3.	20	693652	3934	"BIGDB	44	48	2	0	81	54	5	12
4.	20*	4923799	3888	"BIGDB	24	77	3	0	181	53	5	12
5.	15*	627485	3867	"BIGDB	24	50	1	0	219	59	3	14
6.	15*	107391	10757	"BIGDB	28	57	2	0	67	57	3	14

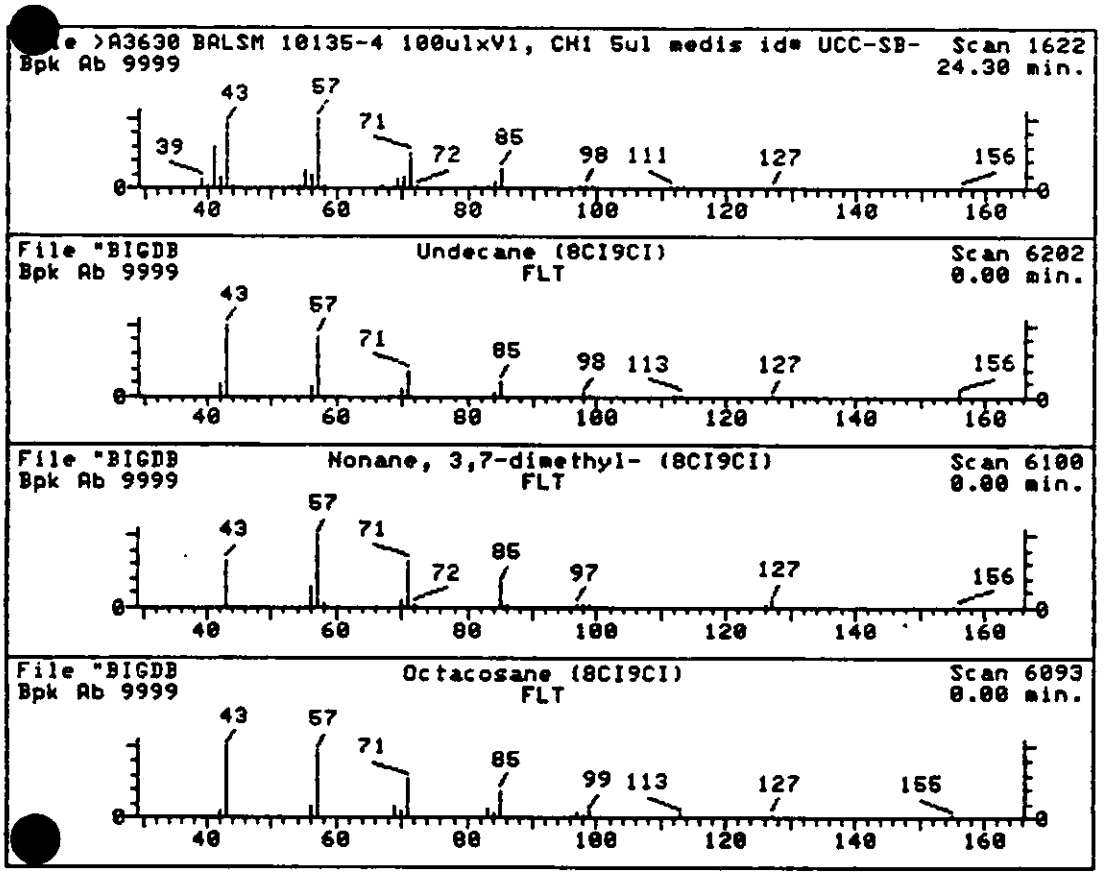


TIC NUMBER:4

1.	Undecane (8CI9CI)	156	C11H24
2.	Nonane, 3,7-dimethyl- (8CI9CI)	156	C11H24
3.	Octacosane (8CI9CI)	394	C28H58
4.	Nonacosane (8CI9CI)	408	C29H60
5.	Undecane, 4,6-dimethyl- (8CI)	184	C13H28
6.	Undecane, 2-methyl- (8CI9CI)	170	C12H26

Sample file: >A3630 Spectrum #: 1622
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #,	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	1120214	6202	"BIGDB	75	22	1	0	99	1	66	73
2.	71*	17302328	6100	"BIGDB	51	35	2	0	74	11	38	33
3.	70	630024	6093	"BIGDB	61	76	2	0	76	8	42	12
4.	70	630035	8905	"BIGDB	61	84	2	0	76	8	42	12
5.	60	17312822	3957	"BIGDB	54	44	2	2	100	14	30	12
6.	52	7045718	6095	"BIGDB	53	41	2	0	90	17	20	17



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-A-08-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2803

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/08/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	3	BJ
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethylvinylether	12	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-A-08-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2803

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* = Compound in or Internal Standard
I = Compound Identified

Run Factor: .999
Surrogate Vol: .010

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2548	102	70 121
CS05 D8-Toluene	.2500	.2480	99.2	84 117
CS10 Bromofluorobenzene	.2500	.2367	94.7	59 121

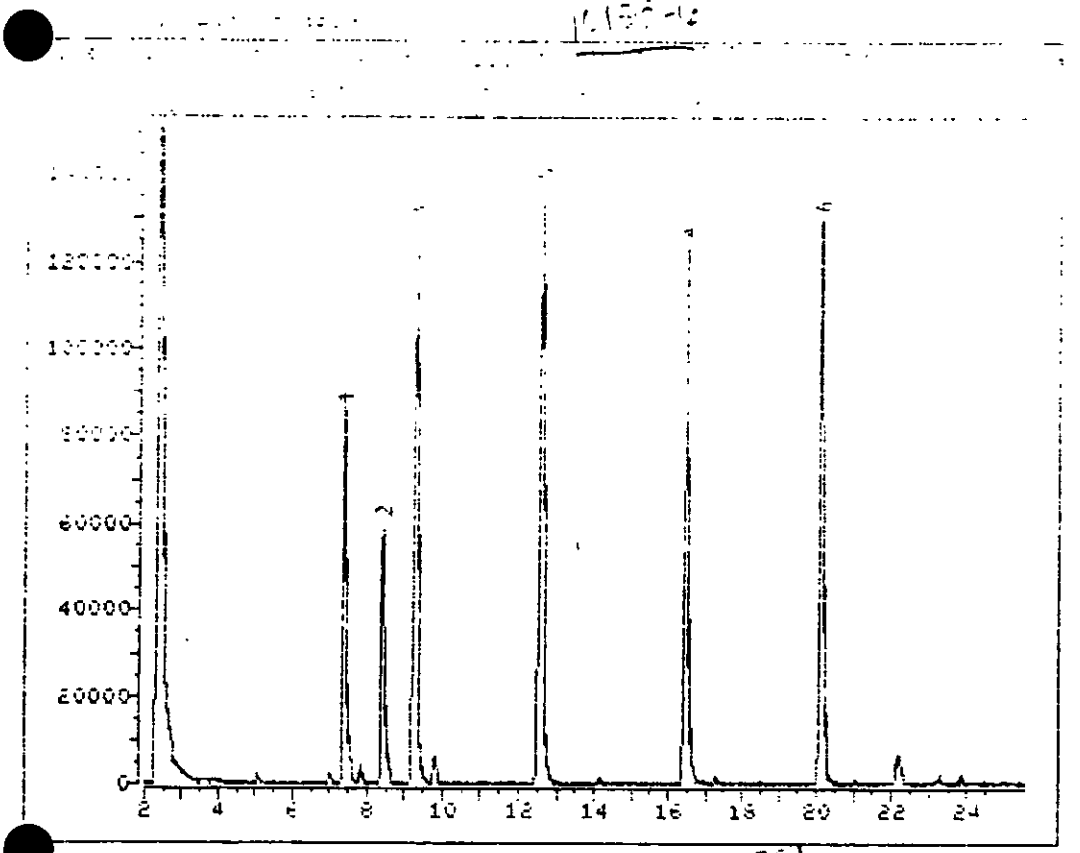
Target Compounds: HAMID6

Scan #	Concentration Quent List UG/L	Sample UG/KG		Compound
		BDL		C012 Dichlorodifluoromethane
		BDL		C010 Chloromethane
		BDL		C020 Vinyl Chloride
		BDL		C015 Bromomethane
		BDL		C025 Chloroethane
		BDL		C028 Trichlorofluoromethane
		BDL		C045 1,1-Dichloroethene
		BDL		C038 1,1,2-Trichloro-1,2,2-tri
		BDL		C035 Acetone
		BDL		C040 Carbon Disulfide
262	1.709		1.7	J C030 Methylene Chloride
		BDL		C053 Trans-1,2-dichloroethene
		BDL		C055 Cis-1,2-dichloroethene
		BDL		C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
429	2.808		2.8	J,B C110 2-Butanone
		BDL		C125 Vinyl Acetate
500	2.779		2.8	J C115 1,1,1-Trichloroethane
		BDL		C120 Carbon Tetrachloride
		BDL		C165 Benzene
9	2.841		2.8	J C150 Trichloroethene
		BDL		C140 1,2-Dichloropropane
		BDL		C130 Bromodichloromethane
		BDL		C175 2-Chloroethylvinylether
		BDL		C143 Cis-1,3-Dichloropropene
		BDL		C172 Trans-1,3-dichloropropene

Item #	[illegible]	[illegible]	Compound
	BDL	C169	1,1,2-Trichloroethane
	BDL	C [illegible]95	Dibromochloromethane
	BDL	C180	Bromoform
	BDL	C205	4-Methyl-2-pentanone
	BDL	C210	Toluene
	BDL	C219	2-Hexanone
	BDL	C220	Tetrachloroethene
	BDL	C239	Chlorobenzene
	BDL	C240	Ethylbenzene
	BDL	CXXX	Xylenes (p)
	BDL	CXXX	Xylenes (o)
	BDL	C245	Styrene
	BDL	C225	1,1,2,2-Tetrachloroethane
	BDL	C339	Dichlorobenzene (m)
	BDL	C340	Dichlorobenzene (p)
	BDL	C350	Dichlorobenzene (o)
	BDL	C250	Xylenes (total)

Compound			Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101	Bromochloromethane	7.33	7.33	.16	128.0	[illegible]	1.[illegible]	[illegible]
2)	C110	Dichlorodifluorometh	2.48	0.00	--	85.0	0	1.[illegible] ✓	[illegible]
3)	C010	Chloromethane	2.71	0.00	--	50.0	0	1.[illegible]	[illegible]
4)	C020	Vinyl Chloride	2.88	0.00	--	62.0	0	1.[illegible]	[illegible]
5)	C015	Bromomethane	3.27	0.00	--	94.0	0	1.1029	0.00
6)	C025	Chloroethane	3.39	0.00	--	64.0	0	.6017	0.00
7)	C028	Trichlorofluorometha	3.70	0.00	--	101.0	0	1.9343	0.00
8)	C045	1,1-Dichloroethene	4.35	0.00	--	96.0	0	1.0123	0.00
9)	C038	1,1,2-Trichloro-1,2,	4.35	0.00	--	101.0	0	2.3058	0.00
10)	C035	Acetone	4.46	0.00	--	43.0	0	.4339	0.00
11)	C040	Carbon Disulfide	4.66	0.00	--	76.0	0	2.9923	0.00
12)	C030	Methylene Chloride	5.02	5.04	.02	84.0	3731	1.4571	1.71
13)	C053	Trans-1,2-dichloroet	5.38	0.00	--	96.0	0	1.4870	0.00
14)	C059	Cis-1,2-dichloroethe	6.92	0.00	--	96.0	0	1.7015	0.00
15)	C050	1,1-Dichloroethane	6.01	0.00	--	63.0	0	2.8582	0.00
16)	C060	Chloroform	7.48	0.00	--	83.0	0	3.1850	0.00
17)	C065	1,2-Dichloroethane	8.52	0.00	--	62.0	0	2.1457	0.00
18)	C110	2-Butanone	6.98	6.98	.01	72.0	1726	.3151	2.81
19)	CS15	D4-1,2-dichloroethan	8.38	8.38	.01	65.0	131022	1.7156	50.00
20)	*C110	1,4-Difluorobenzene	9.12	9.23	.11	114.0	376794	1.0000	50.00
21)	C125	Vinyl Acetate	6.07	0.00	--	43.0	0	.9307	0.00
22)	C115	1,1,1-Trichloroethan	7.79	7.81	.02	97.0	11160	.5330	2.78
23)	C120	Carbon Tetrachloride	8.08	0.00	--	117.0	0	.4382	0.00
24)	C165	Benzene	8.47	0.00	--	78.0	0	.9528	0.00
25)	C150	Trichloroethene	9.76	9.78	.02	130.0	8275	.3865	2.84
26)	C140	1,2-Dichloropropane	10.24	0.00	--	63.0	0	.4025	0.00
27)	C130	Bromodichloromethane	10.86	0.00	--	83.0	0	.6435	0.00
28)	C175	2-Chloroethylvinylet	11.60	0.00	--	63.0	0	.2689	0.00
29)	C143	Cis-1,3-Dichloroprop	11.92	0.00	--	75.0	0	.5928	0.00
30)	C172	Trans-1,3-dichloropr	13.35	0.00	--	75.0	0	.5159	0.00
31)	C160	1,1,2-Trichloroethan	13.81	0.00	--	97.0	0	.3815	0.00
32)	C155	Dibromochloromethane	14.86	0.00	--	129.0	0	.5619	0.00
33)	C180	Bromoform	19.11	0.00	--	173.0	0	.4211	0.00
34)	*C120	D5-Chlorobenzene	16.30	16.44	.14	117.0	295765	1.0000	50.00
35)	CS05	D8-Toluene	12.53	12.55	.02	98.0	368147	1.2547	49.60
35)D	CS05	D8-Toluene	12.53	12.88	.35	98.0	1339	1.2547	.18
36)	C205	4-Methyl-2-pentanone	12.30	0.00	--	43.0	0	.9161	0.00
37)	C230	Toluene	12.70	0.00	--	92.0	0	.8255	0.00
38)	C210	2-Hexanone	14.54	0.00	--	43.0	0	.6983	0.00
39)	C220	Tetrachloroethene	14.12	0.00	--	164.0	0	.4264	0.00
40)	C235	Chlorobenzene	16.52	0.00	--	112.0	0	1.0439	0.00
41)	C240	Ethylbenzene	16.91	17.25	.33	106.0	1898	.4965	.65
42)	CXXX	Xylenes (p)	17.29	17.25	.04	106.0	1898	.6578	.49
43)	CXXX	Xylenes (o)	18.48	0.00	--	106.0	0	.6174	0.00
44)	C245	Styrene	18.54	0.00	--	104.0	0	1.0869	0.00
45)	C225	1,1,2,2-Tetrachloroe	20.74	0.00	--	83.0	0	1.0059	0.00
46)	CS10	Bromofluorobenzene	20.12	20.06	.06	95.0	211562	.7553	67.35
47)	C335	Dichlorobenzene (m)	23.73	0.00	--	146.0	0	.9[illegible]	[illegible]
48)	C340	Dichlorobenzene (p)	24.06	0.00	--	146.0	0	.9610	0.00

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



Data File: >F2803::06 Quant Output File: ^F2803::07
Name: BALSAM ~~H912a-5~~ 5.01G 10135-6 Instrument ID: V6
Misc: V6, CH#13, 5UL IS/S, UCC-SB-A-08-3

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911008 08:09

Operator ID: KERYLYNN
Quant Time : 911008 18:07
Injected at: 911008 17:40

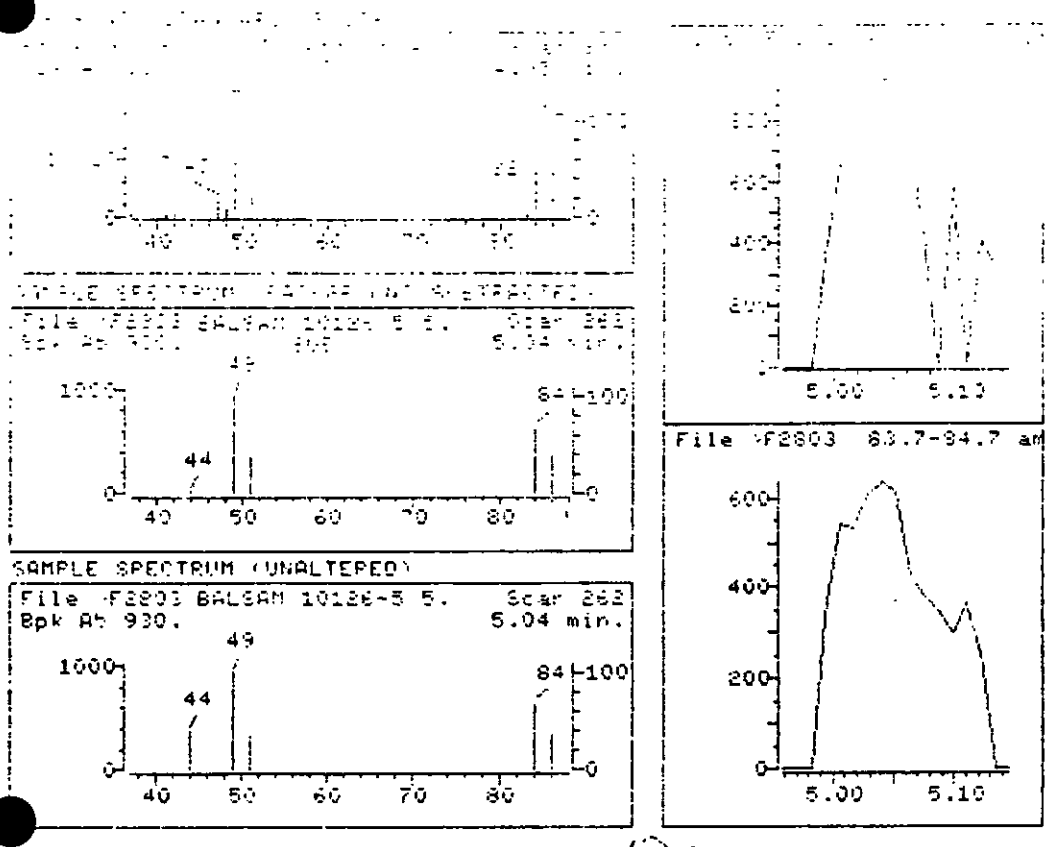
Disc: No. CH#17, Vol 15-E, UCC-SB-A-08-3 100391

Data File: H4[illegible]:MT

Last Calibration: 910408 11:20 Last Ocal Time: 911008 08:0[illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.33	128.0	74931	50.00	UG/L	84
12)	C030 Methylene Chloride	5.04	84.0	3731	1.71	UG/L	95
18)	C110 2-Butanone	6.98	72.0	1326	2.81	UG/L	92
19)	CS15 D4-1,2-dichloroethane	8.38	65.0	131022	50.96	UG/L	87
20)	*C119 1,4-Difluorobenzene	9.23	114.0	376794	50.00	UG/L	100
22)	C115 1,1,1-Trichloroethane	7.81	97.0	11160	2.78	UG/L	82
25)	C150 Trichloroethene	9.78	130.0	8275	2.84	UG/L	89
34)	*C120 D5-Chlorobenzene	16.44	117.0	295765	50.00	UG/L	100
35)	CS09 D8-Toluene	12.55	98.0	368147	49.60	UG/L	94
37)	C240 Ethylbenzene	17.25	106.0	1898	.646	UG/L	83
38)	CXXX Xylenes (p)	17.25	106.0	1898	.438	UG/L	91
46)	CS10 Bromofluorobenzene	20.06	95.0	211562	47.35	UG/L	70

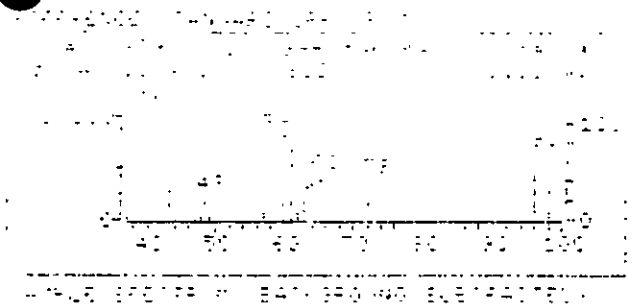
* Compound is ISTD

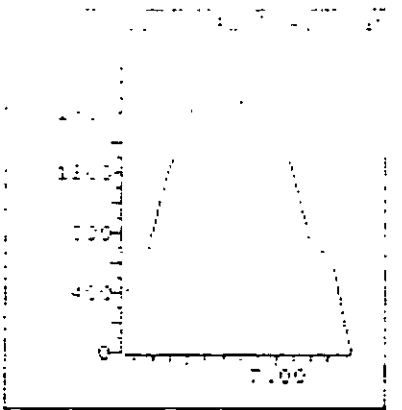


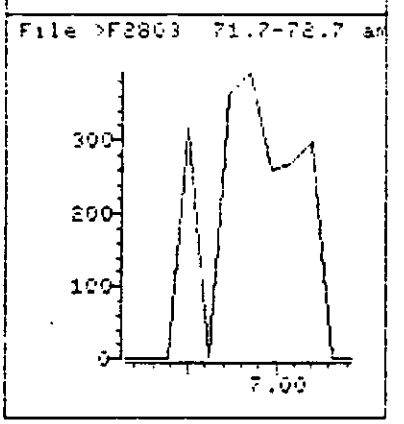
(3) RC 10/30/91

Data File: >F2803::D6 10135-6 Quant Output File: >F2803::D7
Name: BALSAM1 ~~10126-5~~ 5.016 Instrument ID: V6
Misc: V6, CH#13, 5UL IS/S, UCC-SB-A-08-3
Quant Time: 911008 18:07 Quant ID File: HAMID6::MT
Injected at: 911008 17:40 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

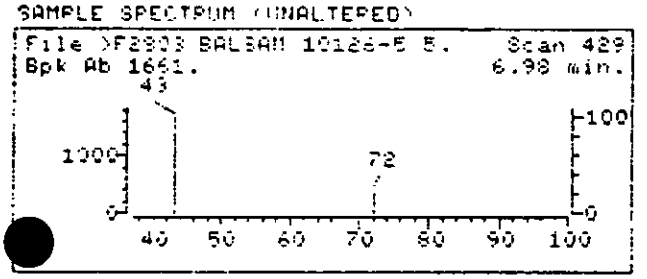
Compound No : 12
Compound Name : C030 Methylene Chloride
Scan Number : 262
Retention Time: 5.04 min.
Quant Ion : 84.0
Area : 3731
Concentration : 1.71 UG/L
q-value : 95 ✓







SAMPLE SPECTRUM (UNALTERED)

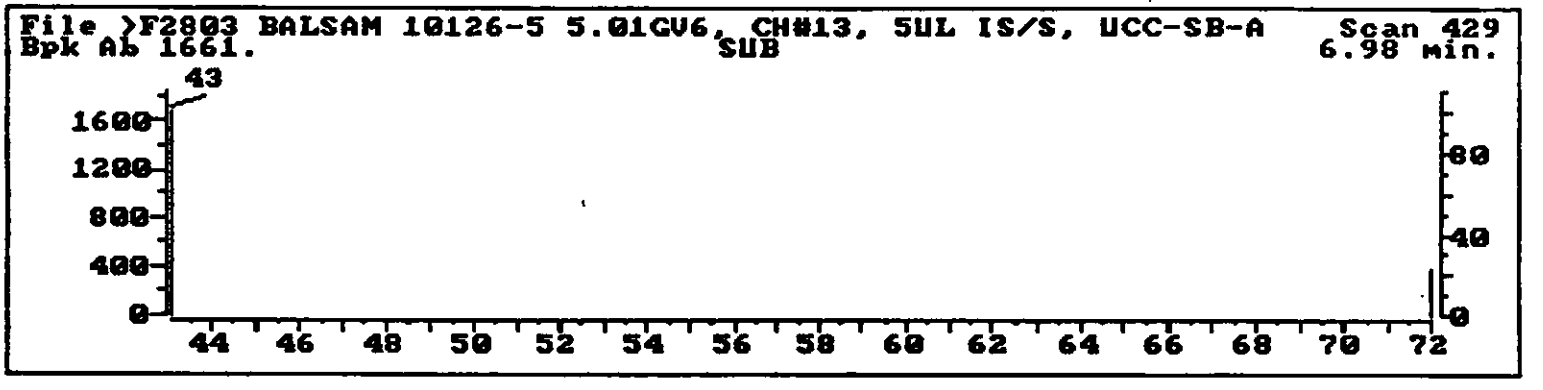


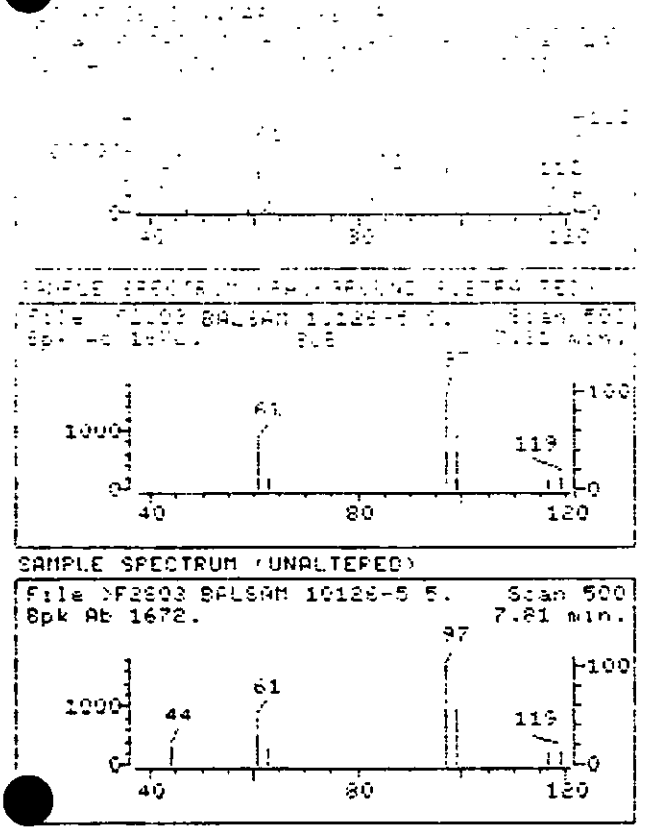
(3) DL 100851

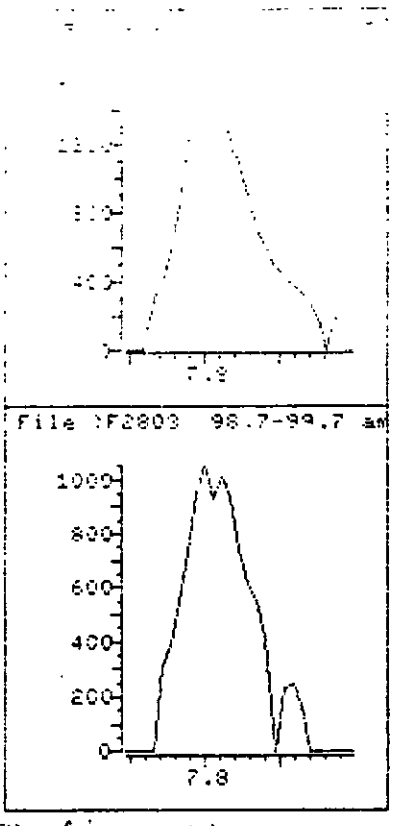
Data File: >F2803::D6 10135-6 Quant Output File: ^F2803::D7
Name: BALSAM ~~10126-5~~ 5.01G Instrument ID: V6
Misc: V6, CH#13, 50UL IS/S, UCC-SB-A-08-3
Quant Time: 911008 18:07 Quant ID File: HAMID6::MT
Injected at: 911008 17:40 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 18
Compound Name : C110 2-Butanone
Scan Number : 429
Retention Time: 6.98 min.
Quant Ion : 72.0
Area : 1326
Concentration : 2.81 UG/L ✓
q-value : 92

Background subtracted



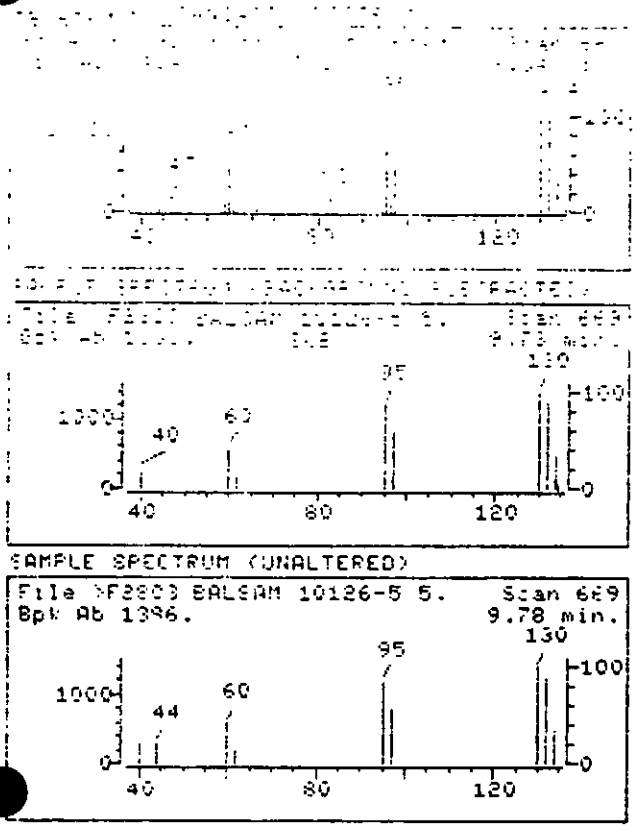


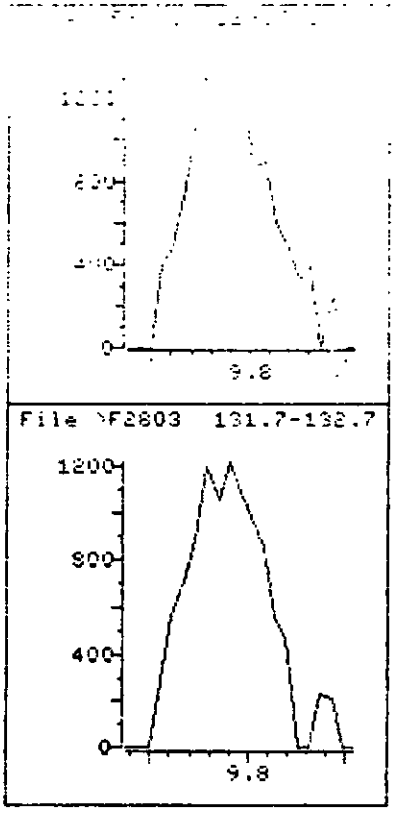


(3) RV 000851

Data File: >F2803::06 ~~10126-5~~ 10135-6 Quant Output File: ^F2803::07
Name: BALSAM ~~10126-5~~ 5.01G Instrument ID: V6
Misc: V6, CH#13, 5UL IS/S, UCC-SB-A-08-3
Quant Time: 911008 18:07 Quant ID File: HAMID6::MT
Injected at: 911008 17:40 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09 .

Compound No : 22
Compound Name : C115 1,1,1-Trichloroethane
Scan Number : 500
Retention Time: 7.81 min.
Quant Ion : 97.0
Area : 11160
Concentration : 2.78 UG/L
q-value : 82 ✓





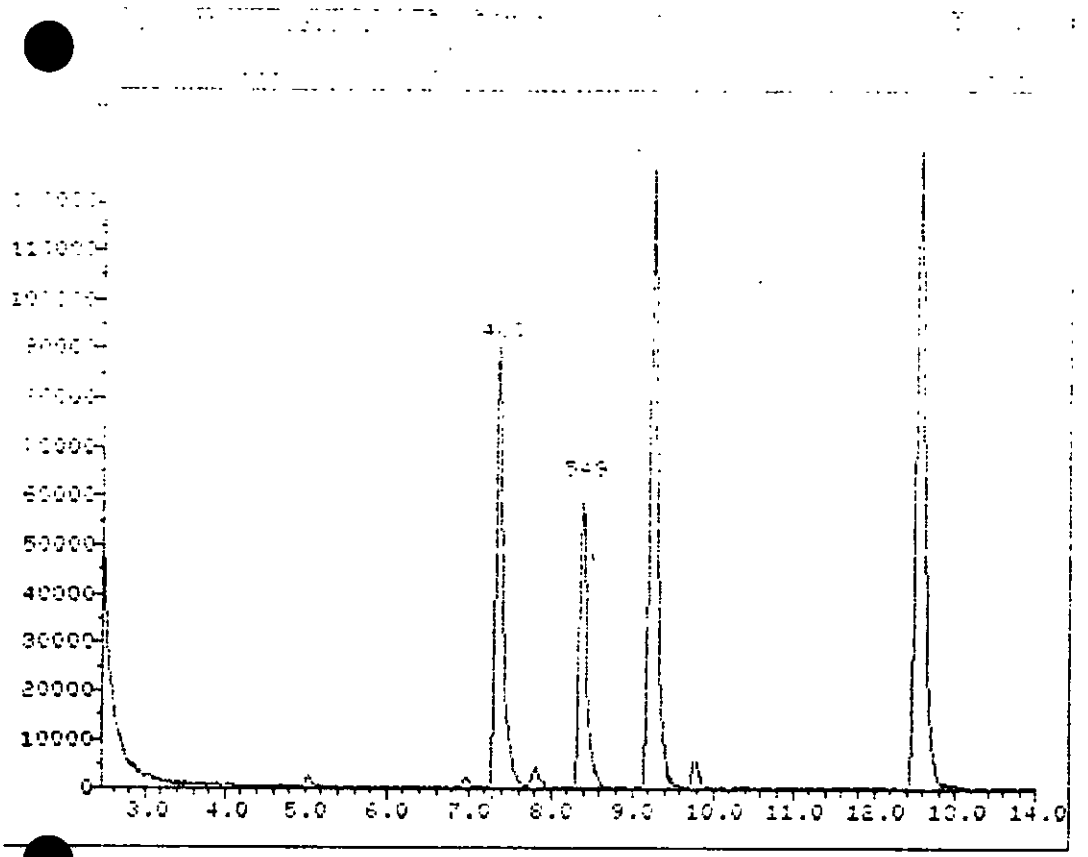
Data File: >F2803::D6 10135-6 NV 100891 Quant Output File: ^F2803::D7
Name: BALSAM ~~10126-5~~ 5.01G Instrument ID: V6
Misc: V6, CH#13, 5UL IS/S, UCC-SB-A-08-3
Quant Time: 911008 18:07 Quant ID File: HAMID6::MT
Injected at: 911008 17:40 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 25
Compound Name : C150 Trichloroethene
Scan Number : 669
Retention Time: 9.78 min.
Quant Ion : 130.0
Area : 8275
Concentration : 2.84 UG/L
q-value : 89

Concentration
In Sample

Scan O C UG/KG CAS # Compound

NO Unk's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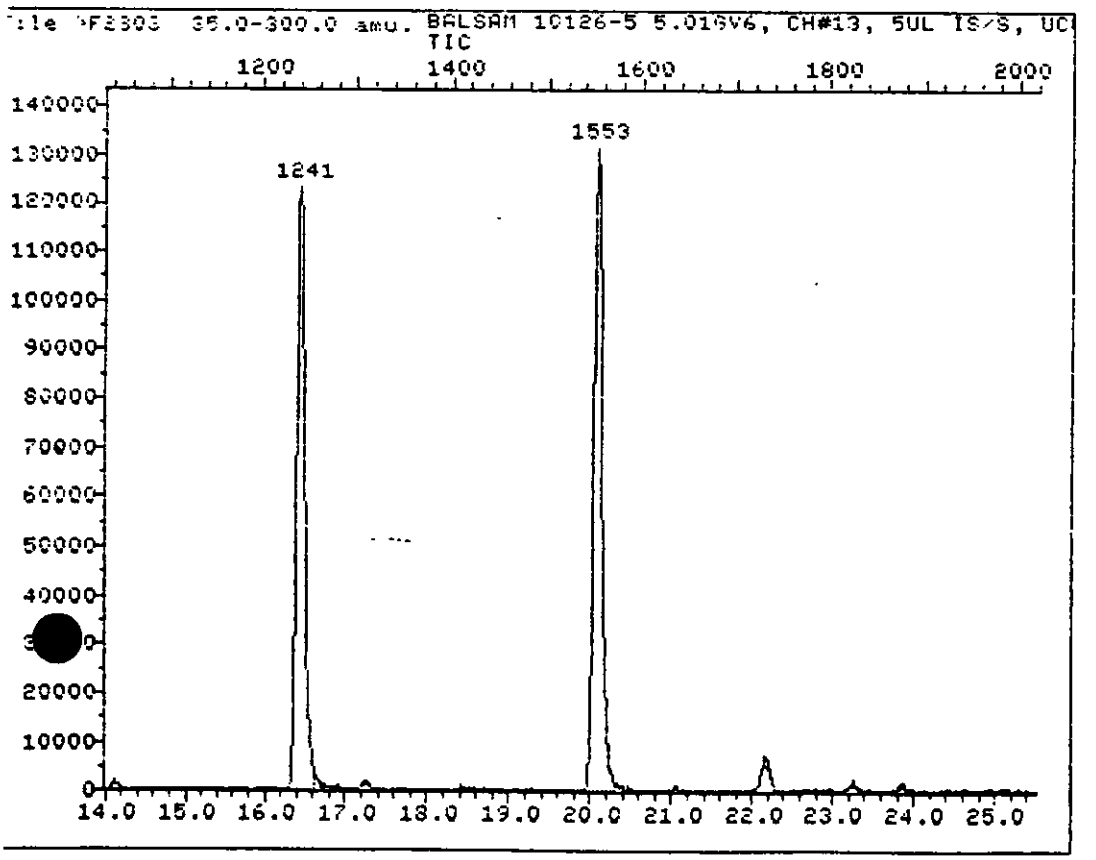
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1553
140000
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0

# Name			Concentration			
Time	Area	Ajusted RIC area	R.C area	% Diff.	RT	
Cl Pentachloroethane		50.000	UG/L	C		
466.	4471.	2.196	466.	5e1[illegible].	105.03[illegible]	
2 C[illegible]9 1,4-Difluorobenzen		50.000	UG/L	OK		
622.	376794.	2.346	622.	845098.	93.631	
3 C120 D5-Chlorobenzen		50.000	UG/L	OK		
1241.	295765.	3.904	1241.	869445.	83.902	

Deleting peaks from INT file: VOIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 6
Number of peaks remaining: 6

Deleting target compounds from INT file: VOIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 6
Number of peaks remaining: 0

Deleting all but largest peaks from INT file: VOIR87
Maximum number of peaks to keep: 15
Number of peaks: 0
Minimum number of peaks > number of peaks.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-12-3

Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10135 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2880

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	160	BJ
67-64-1	Acetone	1500	U
75-15-0	Carbon Disulfide	730	U
75-35-4	1,1-Dichloroethene	730	U
75-34-3	1,1-Dichloroethane	730	U
540-59-0	1,2-Dichloroethene (total)	730	U
67-66-3	Chloroform	730	U
107-06-2	1,2-Dichloroethane	730	U
78-93-3	2-Butanone	1500	U
71-55-6	1,1,1-Trichloroethane	660	J
56-23-5	Carbon Tetrachloride	730	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	730	U
78-87-5	1,2-Dichloropropane	730	U
10061-01-5	cis-1,3-Dichloropropene	730	U
79-01-6	Trichloroethene	230	J
124-48-1	Dibromochloromethane	730	U
79-00-5	1,1,2-Trichloroethane	730	U
71-43-2	Benzene	730	U
10061-02-6	trans-1,3-Dichloropropene	730	U
110-75-8	2-Chloroethylvinylether	1500	U
75-25-2	Bromoform	730	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
108-88-3	Toluene	410	J
108-90-7	Chlorobenzene	730	U
100-41-4	Ethylbenzene	4700	
100-42-5	Styrene	730	U
1330-20-7	Xylene (total)	31000	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-12-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2880

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/10/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 5

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	20.93	7700	JN
2. 124-18-5	Decane	21.70	1700	JN
3.	Unknown	22.05	11000	JN
4.	C3-benzene isomer	22.79	1900	JN
5.	Unknown	23.16	1500	JN

RR
ICL 1X

[illegible]

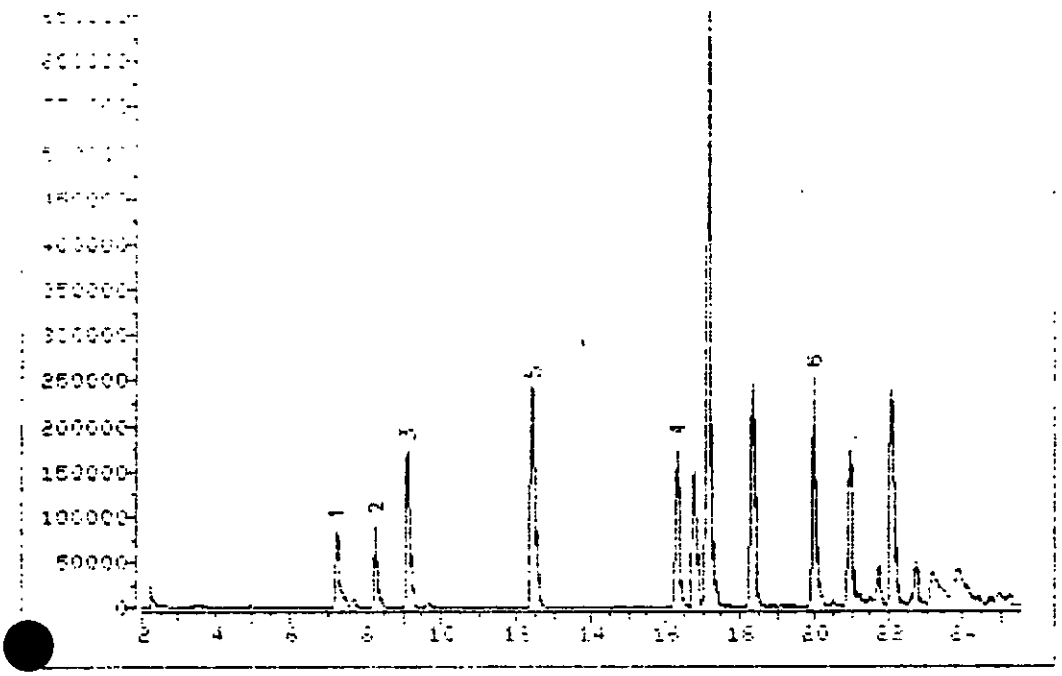
Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
S10 D4-1,2-dichloroethene	25.00	32.37	129*	70 121
S05 D8-Toluene	25.00	31.92	128*	81 117
S10 Bromofluorobenzene	25.00	33.90	136*	74 121

Target Compounds: MOBIOs

Scan #	Concentration Quant List UG/L	Sample UG/G	Compound
	BDL		C010 Chloromethane
	BDL		C020 Vinyl Chloride
	BDL		C015 Bromomethane
	BDL		C025 Chloroethane
	BDL		C045 1,1-Dichloroethene
	BDL		C035 Acetone
	BDL		C040 Carbon Disulfide
252	1.108	140 J	C030 Methylene Chloride
	BDL		CXXX Tert-butyl alcohol
	BDL		C053 Trans-1,2-dichloroethene
	BDL		C055 Cis-1,2-dichloroethene
	BDL		CXXX Methyl tert-butyl ether
	BDL		C050 1,1-Dichloroethane
	BDL		C060 Chloroform
	BDL		C065 1,2-Dichloroethane
	BDL		C110 2-Butanone
	BDL		C125 Vinyl Acetate
491	4.556	560 J	C115 1,1,1-Trichloroethane
	----	BDL	C120 Carbon Tetrachloride
	BDL		C165 Benzene
458	1.557	190 J	C150 Trichloroethene
	BDL		C140 1,2-Dichloropropane
	BDL		C130 Bromodichloromethane
	BDL		C175 2-Chloroethylvinylether
	BDL		C143 Cis-1,3-Dichloropropene
	BDL		C172 Trans-1,3-dichloropropene
	BDL		C160 1,1,2-Trichloroethane

				[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]
				[illegible]
1269	30.048			C240 Ethylbenzene
[illegible]	140.231			[illegible] Xylenes (p)
1403	53.887			C465 Xylenes (o)
1492	1.377			C245 Styrene
		BDL		C229 1,1,2,2-Tetrachloroethane
		BDL		C335 Dichlorobenzene (m)
		BDL		C340 Dichlorobenzene (p)
		BDL		C350 Dichlorobenzene (o)
1403	~~55.217~~ 215.00		~~800~~ 2644	C290 Xylenes (total)



Data File: \F2890::06 Quant Output File: \F2890::07
Name: BALS. 10135-8 100ULX Instrument ID: V6
Misc: V6, CH#10, 5UL MED IS, EXT=4.07G/10ML 10/08, UCC-SB-B

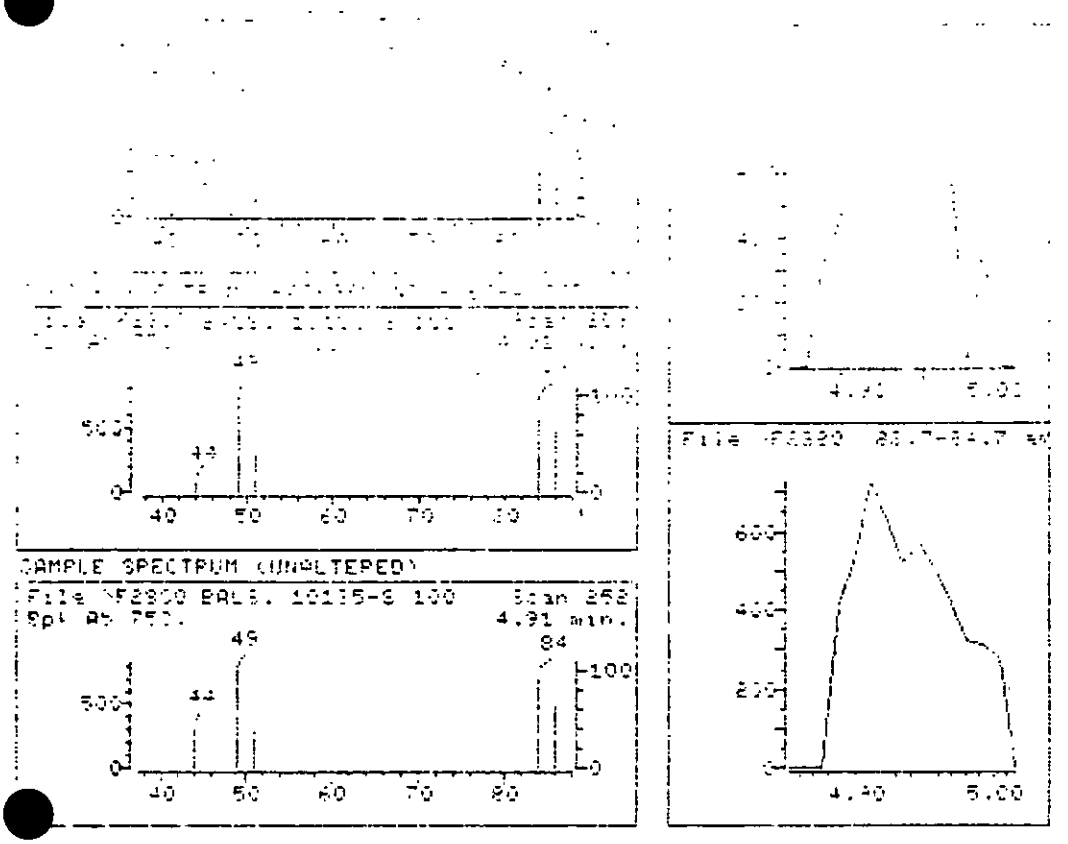
Id File: MOBIO6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Ocal Time: 911010 11:03

Operator ID: KERYLYNN
Quant Time : 911010 21:10
Injected at: 911010 20:43

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.23	128.0	94921	50.00	UG/L	72
9)	C030 Methylene Chloride	4.91	84.0	3659	1.11	UG/L	99
18)	C515 D4-1,2-dichloroethane	8.27	65.0	208750	64.74	UG/L	81
19)	*C110 1,4-Difluorobenzene	9.12	114.0	515951	50.00	UG/L	100
21)	C115 1,1,1-Trichloroethane	7.70	97.0	25778	4.56	UG/L	96
24)	C150 Trichloroethene	9.64	130.0	6718	1.56	UG/L	97
33)	*C120 DF-Chlorobenzene	16.30	117.0	410511	50.00	UG/L	100
34)	C505 D8-Toluene	12.43	98.0	667944	67.84	UG/L	95
36)	C220 Toluene	12.58	92.0	19836	2.84	UG/L	96
40)	C240 Ethylbenzene	16.76	106.0	137944	32.65	UG/L	91
41)	C260 Xylenes (p)	17.17	106.0	766878	140.23	UG/L	76
42)	C265 Xylenes (o)	18.32	106.0	275795	93.84	UG/L	94
43)	C245 Styrene	18.31	104.0	12457	1.38	UG/L	100
45)	C510 Bromofluorobenzene	19.95	95.0	403782	67.79	UG/L	74
49)	C250 Xylenes (total)	18.32	106.0	~~276754~~	~~19.22~~	UG/L	88

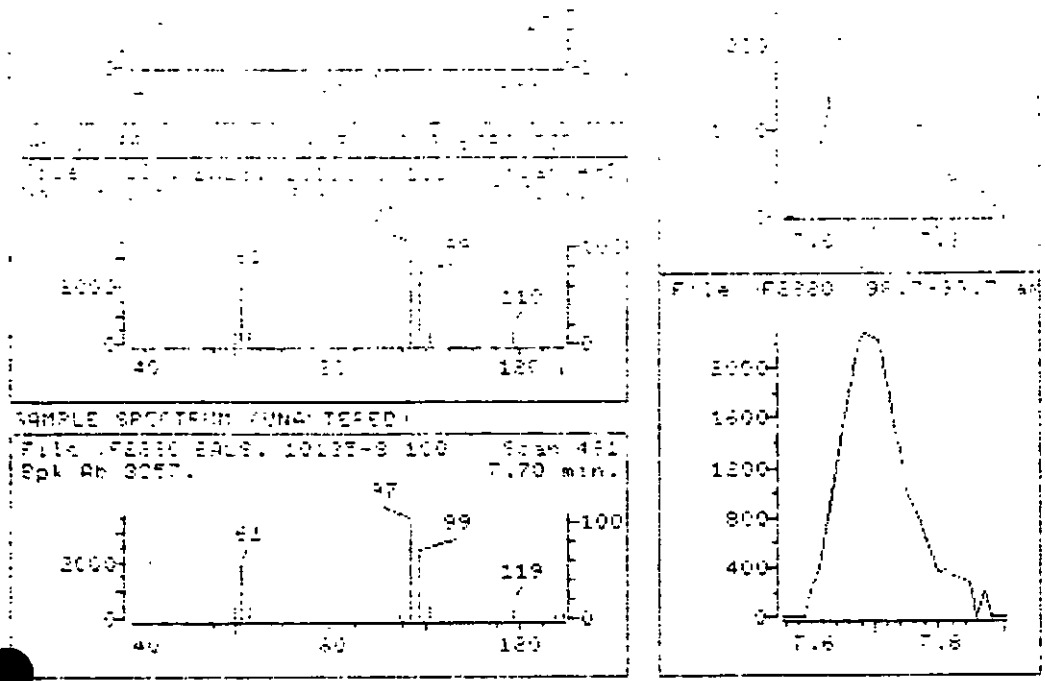
* Compound is ISTD

1077635M 215.00 ug/L
DN
101091



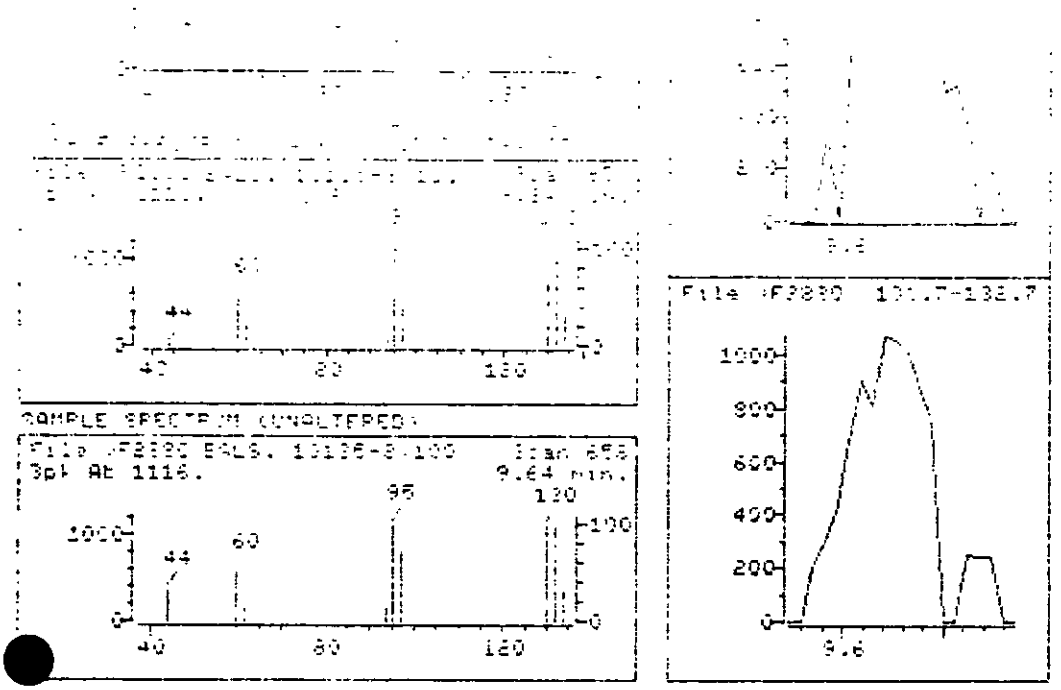
Data File: >F0280::0e Quant Output File: >F28s0::07
Name: BALS. 10135-8 100ULX Instrument ID: >6
Misc: V6, CH#10, 5UL MED IS, EXT=4.07G/10ML 10/08, UCC-S8-B
Quant Time: 911010 21:10 Quant ID File: M0BID6::MT
Injected at: 911010 20:43 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No: 9
Compound Name : C030 Methylene Chloride
Scan Number : 252
Retention Time: 4.91 min.
Quant Ion : 84.0
Area : 3659
Concentration : 1.11 UG/L
q-value : 59



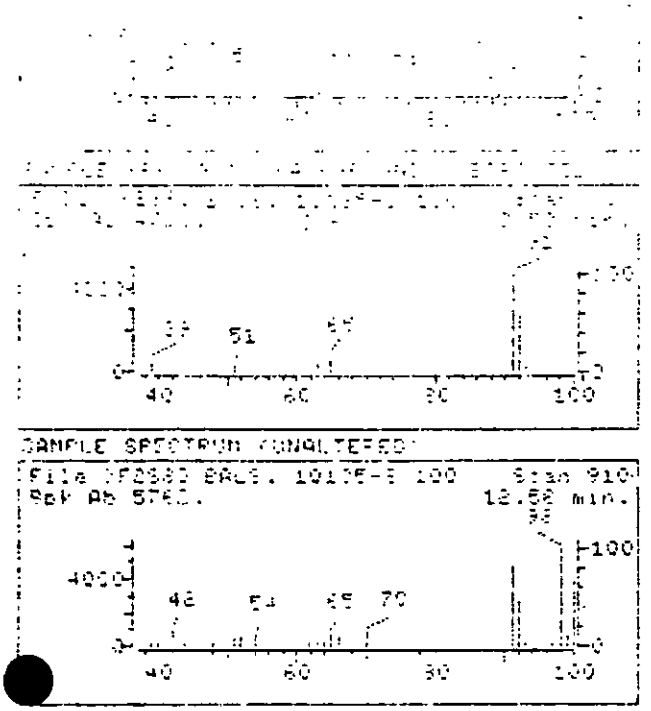
Data File: F2880::64 Quant Output File: F2880::67
Name: BHLS. 10135-8 100ULX Instrument ID: Vo
Misc: 04, CH#10, 50UL MED IS, EXT=4.07G/10ML 10/02. UCC-SB-B
Quant Time: 911010 21:10 Quant ID File: MUBI06::MT
Injected at: 911010 20:47 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No : 21
Compound Name : C119 1,1,1-Trichloroethane
Scan Number : 491
Retention Time: 7.70 min.
Quant Ion : 97.0
Area : 25738
Concentration : 4.56 UG/L
q-value : 96



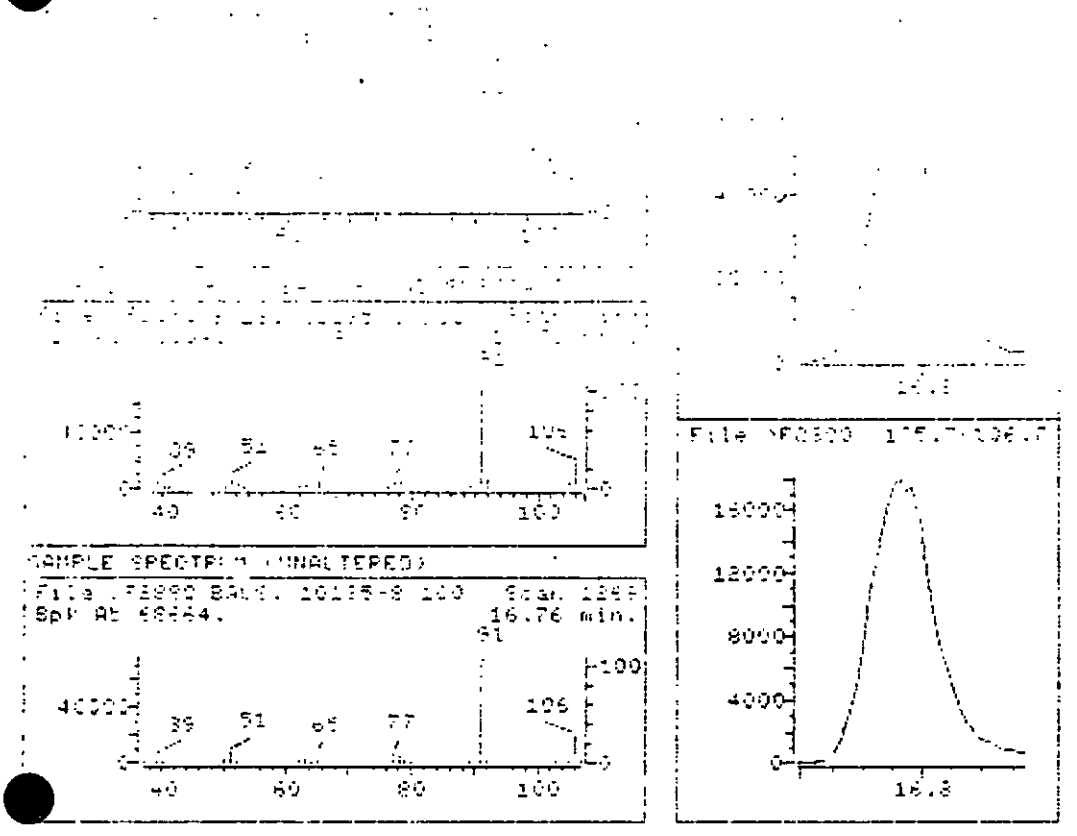
Data File: :F2880::06 Quant Output File: :F2880::07
Name: SALS. 10135-8 100ULX Instrument ID: V6
Misc: V6, CH#10, 50L MEO IS, EXT=4.07G/10ML 10/08, UCC-SB-8
Quant Time: 911010 21:10 Quant ID File: MOBID6::MT
Injected at: 911010 20:43 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No : 24
Compound Name : C150 Trichloroethene
Scan Number : 658
Retention Time: 9.64 min.
Quant Ion : 130.0
Area : 6318
Concentration : 1.56 UG/L
q-value : 97



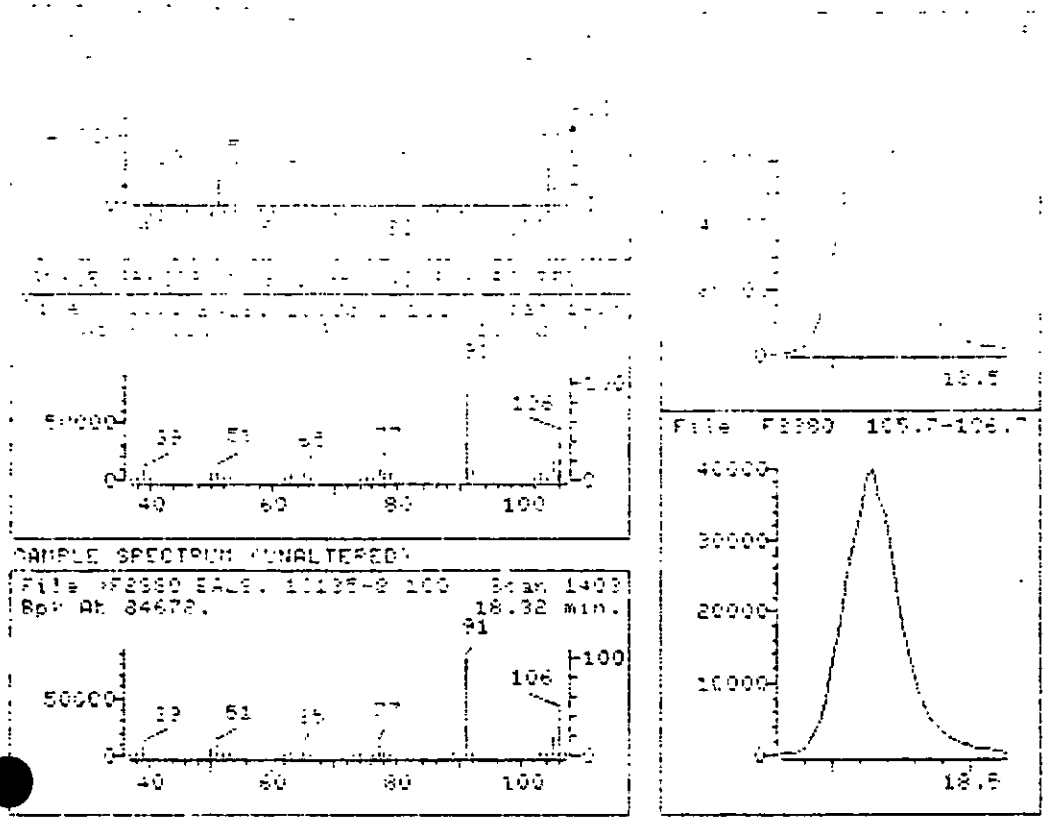
Data File: >F2880::Cn Quant Output File: >F2869::07
Name: BHLS. 10175-8 100ULX Instrument ID: V6
Misc: V6, CH#10, 5UL MED IS, EXT=4.07G/10ML 10/09, UCC-SB-B
Quant Time: 911010 21:10 Quant ID File: MOBID6::MT
Injected at: 911010 20:43 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No : 36
Compound Name : C230 Toluene
Scan Number : 910
Retention Time: 12.58 min.
Quant Ion : 92.0
Area : 19836
Concentration : 2.84 UG/L
q-value : 96



Data File: >F[illegible]:[illegible] Quant Output File: [illegible]
Name: BRLS. 10139-8 100ULX Instrument ID: U6
Misc: U6, CH#10, 5UL MED IS, EXT=4.07G/10ML 10/08, UCC-SB-B
Quant Time: 911010 21:10 Quant ID File: MOBID6::QT
Injected at: 911010 20:43 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No : 40
Compound Name : C240 Ethylbenzene
Scan Number : 1269
Retention Time: 16.76 min.
Quant Ion : 106.0
Area : 137599
Concentration : 32.65 UG/L
q-value : 93



Data File: ^F2880::06 Quant Output File: ^F2880::C^
Name: SALS. 10135-8 100ULX Instrument ID: Vo
Misc: V6, CH#10, SUL MED IS, EXT=4.07G/10ML 10/09, UCC-SB-8
Quant Time: 911010 21:10 Quant ID File: MDBIO6::MT
Injected at: 911010 20:43 Last Calibration: 910814 09:37
Last Ocal Time: 911010 11:03

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1403
Retention Time: 18.32 min.
Quant Ion : 106.0
Area : 276754
Concentration : 55.22 UG/L
q-value : 88

#	Time	Area	Lib #	Compound
1	1-07.	-990.	~~108-67-8 Benzene, 1,3,5-trimethyl-~~	Unknown
2	1493.	1500.	124-18-5 Decane✓	
3	1727.	9000.	~~815-24-7 Pentadecane, 2,6,10,14-tetramethyl-~~	Unknown
4	1778.	1600.	~~108-67-8 Benzene, 1,3,5-trimethyl-~~	C3-benzene isomer
5	1918.	1300.	~~765-43-5 Ethanone, 1-cyclopropyl-~~	Unknown

1	40	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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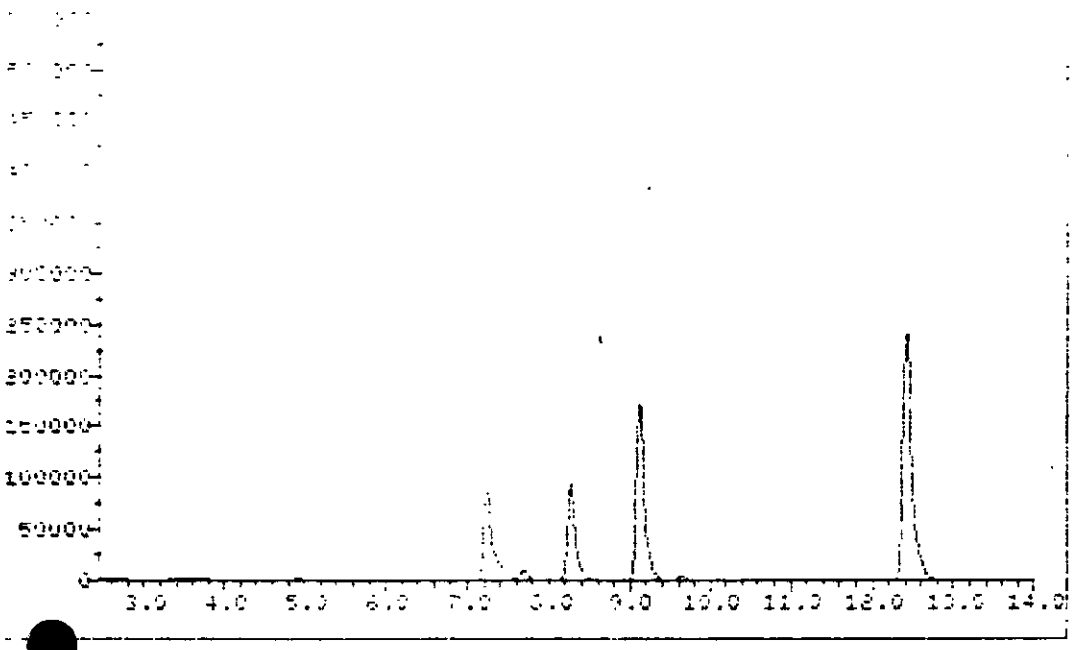
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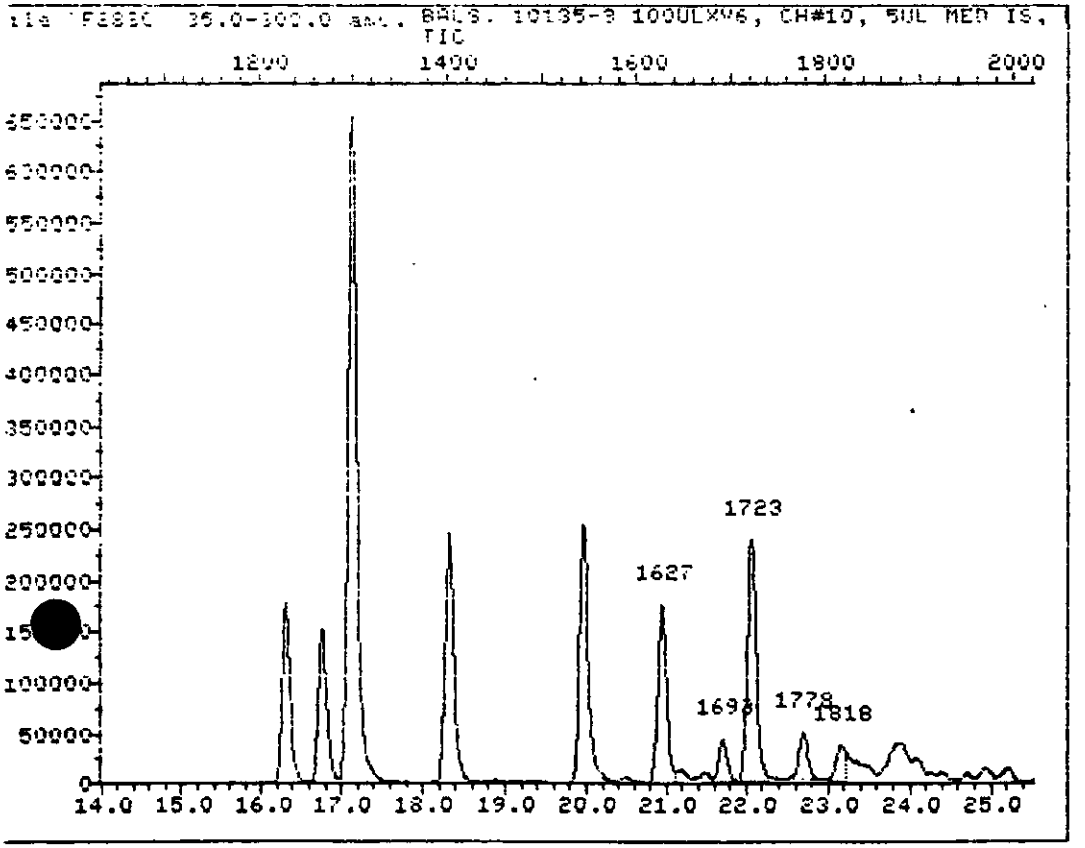
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25.0

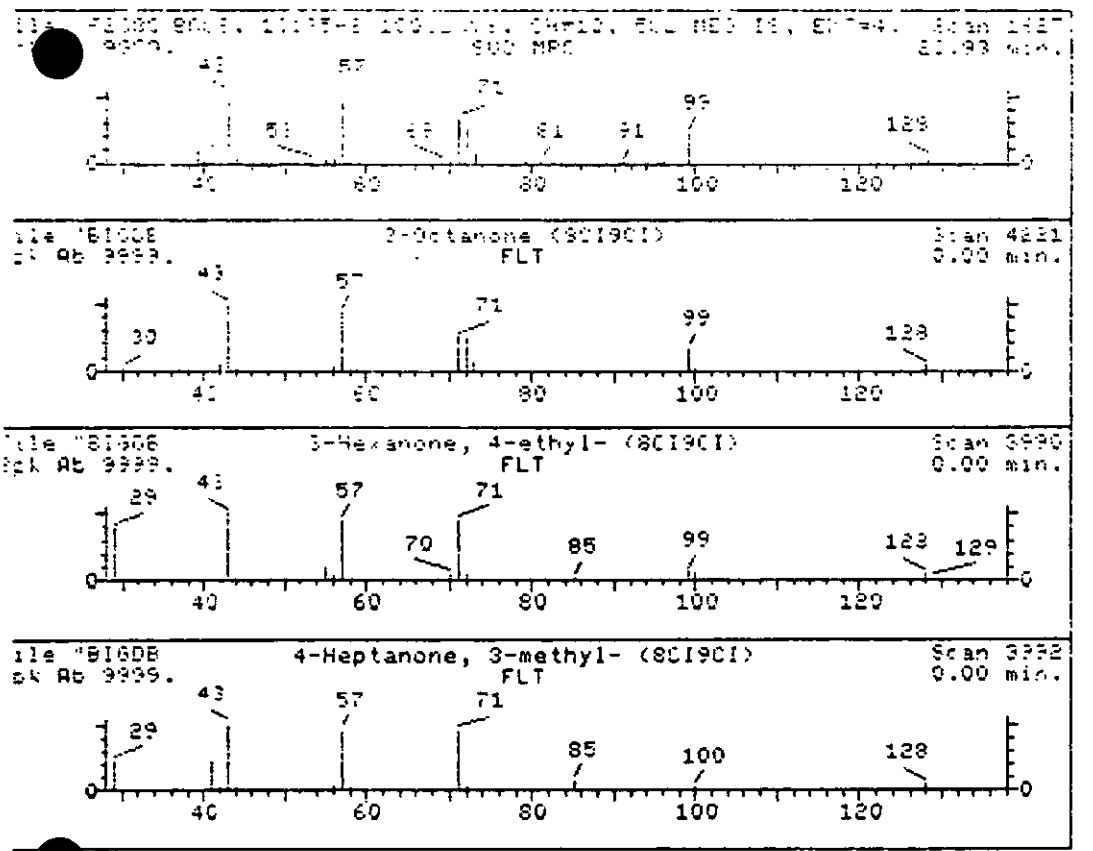
[illegible]

[illegible]

[illegible]

#	Name	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	Name	RT	Area	Height	Type	Width	Area%	Sym	Num	Corr	Corr Area	Purity	Purity New
1.	[illegible]	[illegible]	10e6e3	4071	"BIGDB	91	.8	1	0	100	0	66	77
2.	[illegible]	[illegible]	e17"129	7340	"BIGDB	39	60	3	0	"3	26	17	17
3.	40*	1572e1e5	3992	"BIGDB	49	47	3	0	7-	29	14	17
4.	31*	4418"5	9862	"BIGDB	44	63	2	0	60	33	12	14
5.	30*	3195"8e	8779	"BIGDB	32	64	3	0	84	32	12	17
6.	24*	5405799	3489	"BIGDB	34	71	3	0	97	42	8	14



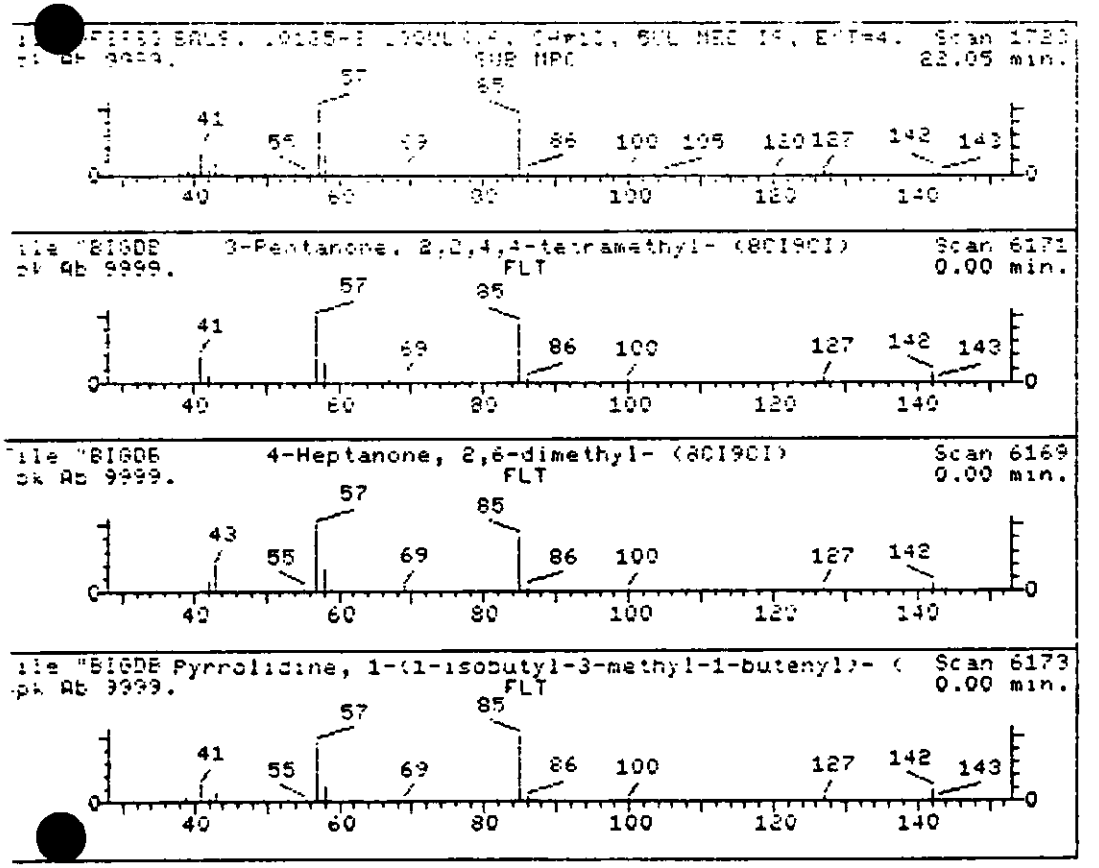
Unknown
#

[illegible]

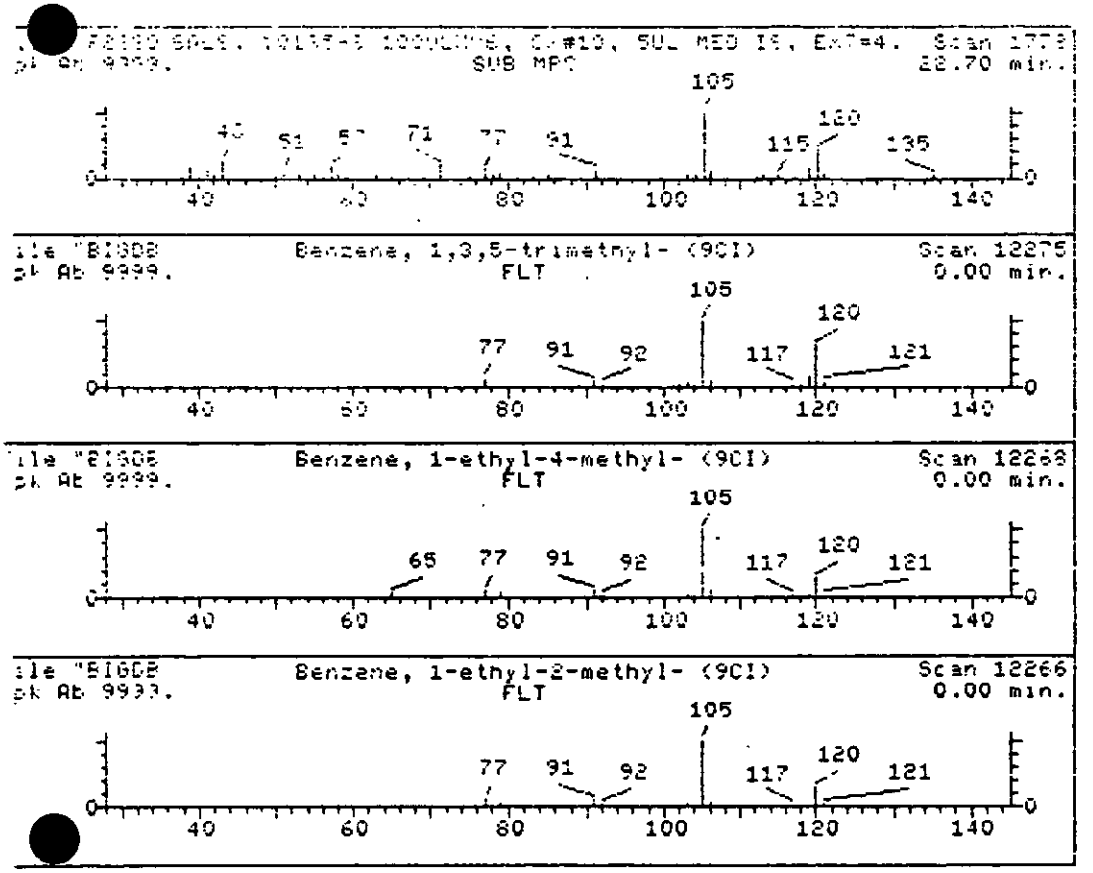
[illegible]

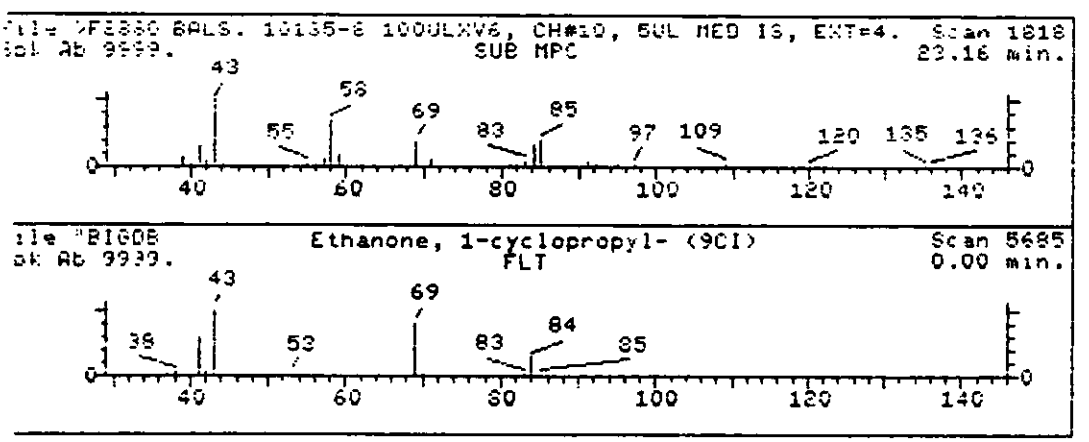
[illegible]

	Prob.	CAS #	C N #	HUBT	K	LR	#FLG	TILT	%	C_N	C_I	F_I
1.	96*	815247	6171	"BIGDB	79	14	0	0	69	2	72	55
2.	83*	108939	6149	"BIGDB	49	90	2	0	81	3	57	29
3.	79	3494040	6173	"BIGDB	82	13	1	4	70	7	48	36
4.	52*	4418615	5	"BIGDB	21	104	2	0	100	19	20	13
5.	28*	7492328	6174	"BIGDB	34	58	2	0	66	41	8	16
6.	26*	67660409	17499	"BIGDB	27	73	2	0	65	45	8	14



	Prob.	CAS #	CIN #	SOCT	K	DK	#FLG	TILT	%	JON	C_1	P_IV
1.	71*	108678	12275	"BIGDB	60	28	2	1	71	19	38	39
2.	68*	622969	12269	"BIGDB	65	20	2	0	100	24	30	55
3.	68*	611143	12266	"BIGDB	65	20	2	0	100	24	30	55
4.	68*	620144	12267	"BIGDB	65	22	2	0	100	23	30	55
5.	66*	95636	12273	"BIGDB	65	30	2	0	76	20	31	49
6.	66*	526738	12280	"BIGDB	66	34	2	0	78	20	31	48




File :FE880 BALS. 10135-8 100ULXV6, CH#10, 50L MED IS, EXT=4. Scan 1818
Sol Ab 9999. SUB MPC 23.16 min.
43
56
69
55
83
85
97
109
120
135
136
40
60
80
100
120
140
File :BIGDB Ethanone, 1-cyclopropyl- (9CI) Scan 5685
Bk Ab 9999. FLT 0.00 min.
43
69
38
53
83
84
85
40
60
80
100
120
140

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-12-3RE

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08RE

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2919

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/12/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	730	U
67-64-1	Acetone	1500	U
75-15-0	Carbon Disulfide	730	U
75-35-4	1,1-Dichloroethene	730	U
75-34-3	1,1-Dichloroethane	730	U
540-59-0	1,2-Dichloroethene (total)	730	U
67-66-3	Chloroform	730	U
107-06-2	1,2-Dichloroethane	730	U
78-93-3	2-Butanone	1500	U
71-55-6	1,1,1-Trichloroethane	730	U
56-23-5	Carbon Tetrachloride	730	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	730	U
78-87-5	1,2-Dichloropropane	730	U
10061-01-5	cis-1,3-Dichloropropene	730	U
79-01-6	Trichloroethene	730	U
124-48-1	Dibromochloromethane	730	U
79-00-5	1,1,2-Trichloroethane	730	U
71-43-2	Benzene	730	U
10061-02-6	trans-1,3-Dichloropropene	730	U
110-75-8	2-Chloroethylvinylether	1500	U
75-25-2	Bromoform	730	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
108-88-3	Toluene	730	U
108-90-7	Chlorobenzene	730	U
100-41-4	Ethylbenzene	410	J
100-42-5	Styrene	730	U
1330-20-7	Xylene (total)	4900	U

000099

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: SB-B-12-3RE

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08RE

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2919

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/12/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	20.93	5200	JN
2.	124-18-5	Decane	21.68	1600	JN
3.		Unknown	22.05	8200	JN
4.		C9H12 isomer	22.69	1300	JN
5.		Unknown	23.13	1000	JN
6.		C4-benzene isomer	25.19	790	JN

R-10/19/91-VOA

F2910

NC

10/12/91

Analyst: PERKINS

Dilution Factor: 1.00

Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QL limits
BS19 D4-1,2-dichloroethene	25.00	14.81	59.2*	70 121
BS05 D8-Toluene	25.00	17.37	69.5*	81 117
BS10 Bromofluorobenzene	25.00	16.11	64.4*	74 121

ok confirmation

Target Compounds: MOBID6

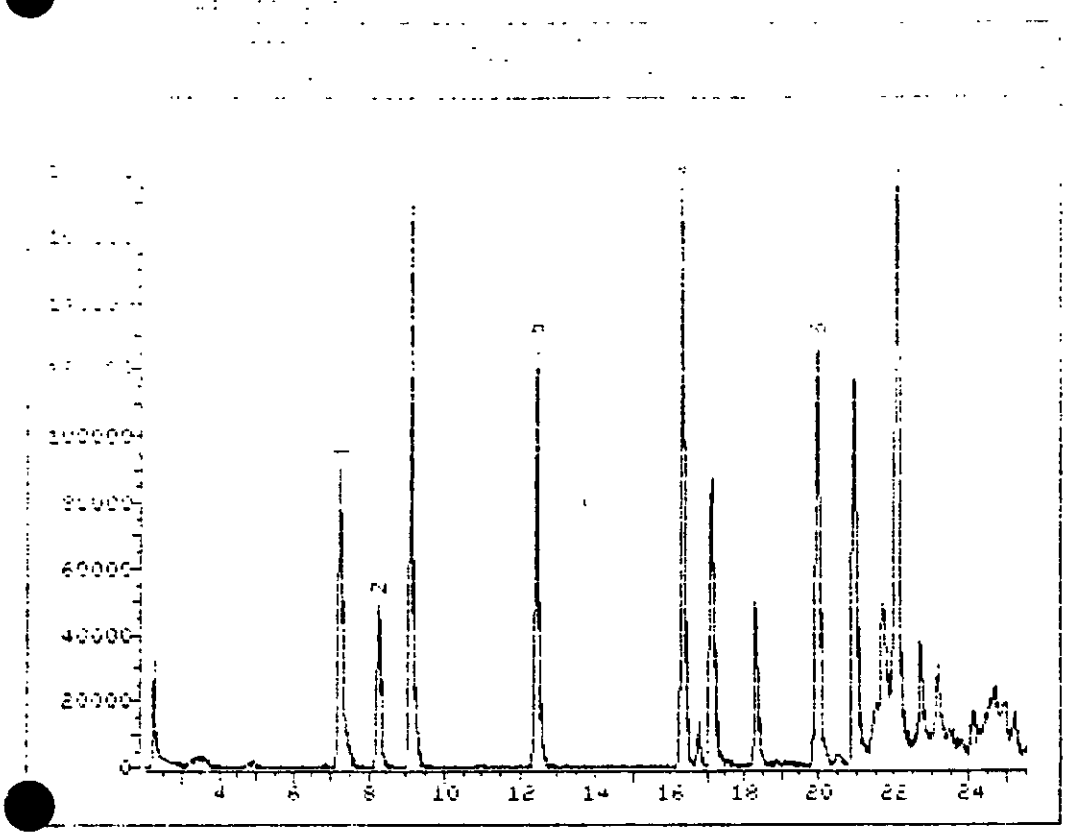
Gran #	Concentration Quant List UG/L	Sample UG/KG	Compound
	BDL		C010 Chloromethane
	BDL		C020 Vinyl Chloride
	BDL		C015 Bromomethane
	BDL		C025 Chloroethane
	BDL		C045 1,1-Dichloroethene
	BDL		C035 Acetone
	BDL		C040 Carbon Disulfide
	BDL		C030 Methylene Chloride
	BDL		CXXX Tert-butyl alcohol
	BDL		C053 Trans-1,2-dichloroethene
	BDL		C055 Cis-1,2-dichloroethene
	BDL		CXXX Methyl tert-butyl ether
	BDL		C050 1,1-Dichloroethane
	BDL		C060 Chloroform
	BDL		C065 1,2-Dichloroethane
	BDL		C110 2-Butanone
	BDL		C125 Vinyl Acetate
	BDL		C115 1,1,1-Trichloroethane
	BDL		C120 Carbon Tetrachloride
	BDL		C165 Benzene
	BDL		C150 Trichloroethene
	BDL		C140 1,2-Dichloropropane
	BDL		C130 Bromodichloromethane
	BDL		C175 2-Chloroethylvinylether
	BDL		C143 Cis-1,3-Dichloropropene
	BDL		C172 Trans-1,3-dichloropropene
	BDL		C160 1,1,2-Trichloroethane

Scan #	RT	UG/L	UG/G	Compound
		BDL		C195 Dibromochloromethane
		BDL		C200 Bromoform
		BDL		C205 4-Methyl-2-pentanone
		BDL		C230 Toluene
		BDL		C210 2-Hexanone
		BDL		C220 Tetrachloroethene
		BDL		C235 Chlorobenzene
1266	2.916		340 J	C240 Ethylbenzene
1297	19.459		2400	CXXX Xylenes (p)
1400	11.191		1400	CXXX Xylenes (o)
		BDL		C245 Styrene
		BDL		C225 1,1,2,2-Tetrachloroethane
		BDL		C335 Dichlorobenzene (m)
		BDL		C340 Dichlorobenzene (p)
		BDL		C350 Dichlorobenzene (o)
1297	33.476		4190	C250 Xylenes (total)

Compound		Pred	Found	Dif	Ion	[illegible]	[illegible]	[illegible]
1)	*CI01 Bromochloromethane	7.26	7.22	.04	128.0	[illegible]	[illegible]	[illegible]
2)	[illegible]	2.68	0.00	--	61.0	[illegible]	[illegible]	[illegible]
3)	C020 Vinyl chloride	2.81	0.00	--	62.0	0	[illegible]	[illegible]
4)	C015 Bromomethane	3.21	0.00	--	94.0	0	[illegible]	[illegible]
5)	C025 Chloroethane	3.73	0.00	--	64.0	0	.6744	0.00
6)	C045 1,1-Dichloroethene	4.30	0.00	--	96.0	0	1.4917	0.00
7)	C035 Acetone	4.37	0.00	--	43.0	0	.2700	0.00
8)	C040 Carbon Disulfide	4.59	0.00	--	76.0	0	4.2959	0.00
9)	C030 Methylene Chloride	4.94	4.89	.05	84.0	1836	1.9495	.49
10)	CXXX Tert-butyl alcohol	5.09	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.31	0.00	--	96.0	0	1.8870	0.00
12)	C055 Cis-1,2-dichloroethe	6.81	0.00	--	96.0	0	2.1051	0.00
13)	CXXX Methyl tert-butyl et	5.30	0.00	--	73.0	0	3.2861	0.00
14)	C050 1,1-Dichloroethane	5.91	0.00	--	63.0	0	3.5292	0.00
15)	C060 Chloroform	7.35	0.00	--	83.0	0	4.0280	0.00
16)	C065 1,2-Dichloroethane	8.39	0.00	--	62.0	0	2.4804	0.00
[illegible]	C110 2-Butanone	6.83	0.00	--	72.0	0	.1404	0.00
[illegible]	CS15 D4-1,2-dichloroethan	8.24	8.23	.01	65.0	109621	1.9353	29.61
19)	*CI10 1,4-Difluorobenzene	9.15	9.10	.06	114.0	926760	1.0000	50.00
20)	C125 Vinyl Acetate	5.99	0.00	--	47.0	0	.4676	0.00
21)	C115 1,1,1-Trichloroethan	7.67	0.00	--	97.0	0	.5747	0.00
22)	C120 Carbon Tetrachloride	7.97	0.00	--	117.0	0	.4641	0.00
23)	C165 Benzene	8.34	0.00	--	78.0	0	1.0150	0.00
24)	C150 Trichloroethene	9.62	0.00	--	130.0	0	.4334	0.00
25)	C140 1,2-Dichloropropane	10.09	0.00	--	63.0	0	.4174	0.00
26)	C130 Bromodichloromethane	10.69	0.00	--	83.0	0	.6012	0.00
27)	C175 2-Chloroethylvinylet	11.42	0.00	--	63.0	0	.1957	0.00
28)	C143 Cis-1,3-Dichloroprop	11.73	0.00	--	75.0	0	.6106	0.00
29)	C172 Trans-1,3-dichloropr	13.15	0.00	--	75.0	0	.4875	0.00
30)	C160 1,1,2-Trichloroethan	13.59	0.00	--	97.0	0	.3429	0.00
31)	C155 Dibromochloromethane	14.63	0.00	--	129.0	0	.5106	0.00
32)	C180 Bromoform	18.80	0.00	--	173.0	0	.3125	0.00
33)	*CI20 D5-Chlorobenzene	16.34	16.29	.05	117.0	411730	1.0000	50.00
34)	CS05 D8-Toluene	12.41	12.40	.01	98.0	343186	1.1997	34.74
35)	C205 4-Methyl-2-pentanone	12.18	0.00	--	43.0	0	.3569	0.00
36)	C230 Toluene	12.58	0.00	--	92.0	0	.8509	0.00
37)	C210 2-Hexanone	14.38	0.00	--	43.0	0	.2562	0.00
38)	C220 Tetrachloroethene	13.99	0.00	--	164.0	0	.4391	0.00
39)	C235 Chlorobenzene	16.38	0.00	--	112.0	0	1.0247	0.00
40)	C240 Ethylbenzene	16.74	16.74	.00	106.0	11670	.5033	2.82
40)D	C240 Ethylbenzene	16.74	17.10	.36	106.0	102722	.5033	24.79
[illegible]	CXXX Xylenes (p)	17.13	16.74	.38	106.0	11670	.6411	2.21
[illegible]	CXXX Xylenes (p)	17.13	17.10	.02	106.0	102722	.6411	19.46
42)	CXXX Xylenes (o)	18.29	18.30	.02	106.0	55098	.5984	11.19
43)	C245 Styrene	18.36	18.32	.04	104.0	1370	1.0632	.16
44)	C225 1,1,2,2-Tetrachloroe	20.52	0.00	--	83.0	0	.5937	0.00
45)	CS10 Bromofluorobenzene	19.92	19.95	.02	95.0	203855	.7690	32.19
46)	C335 Dichlorobenzene (m)	23.49	0.00	--	146.0	0	.9066	0.00
47)	C340 Dichlorobenzene (p)	23.80	0.00	--	146.0	0	.8310	0.00

[illegible] Bromochloromethane	99635	[illegible]	[illegible]
[illegible] 1,2-Dichloropropane	[illegible]	[illegible]	[illegible]
[illegible] Di-Chlorobenzene	411730	[illegible]	[illegible]

* - [illegible]
+ Area outside limits



Data File: ^F2919::D5 9c1d12/91 Quant Output File: ^F2919::D7
Name: BALS 10135-18 ~~Blank~~ 10 ml x Instrument ID: 2V6
Misc: V6, CH05, 5UL MEDIS, 4.07G 101191, UCC-SB-B-1-3 RE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911011 21:51

Operator ID: KERYLYNN
Quant Time : 911012 05:51
Injected at: 911012 05:23

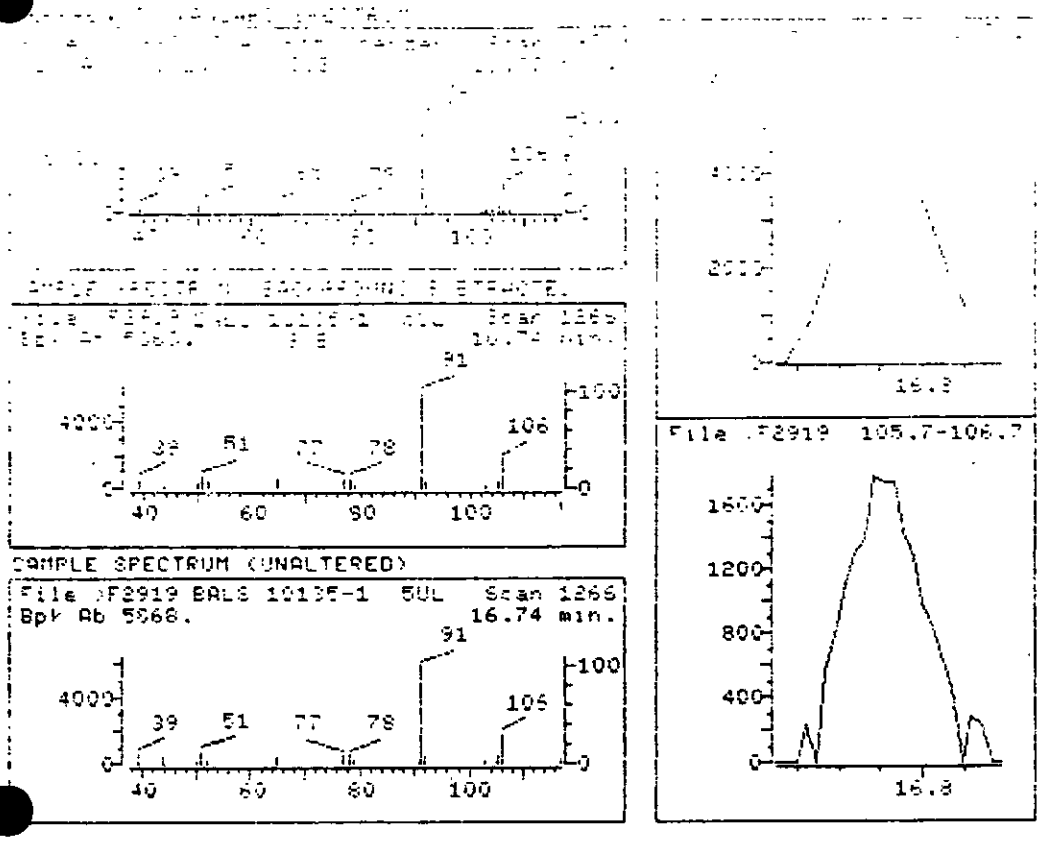
Data File: F101191S
Name: Purge [illegible]
Misc: V6, CH09, Pur, HEL15, 4.0ml 101191, UCC-SB-B-1[illegible]-3

Data File: M[illegible]
Title: HSL VOLATILES: [illegible] 25mm: 08e24 V6 SPCC EVS-CC
Last Calibration: Cryvia (R:37 Last Mass Time: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.22	128.0	95635	50.00	UG/L	69
9)	C030 Methylene Chloride	4.89	84.0	1936	.492	UG/L	74
18)	CS15 D4-1,2-dichloroethane	8.23	65.0	109621	29.61	UG/L	83
19)	*CI10 1,4-Difluorobenzene	9.10	114.0	526760	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.29	117.0	411730	50.00	UG/L	100
34)	CS05 D8-Toluene	12.40	98.0	343186	34.74	UG/L	96
40)	C240 Ethylbenzene	16.74	106.0	11670	2.82	UG/L	99
[illegible]	CXXX Xylenes (p)	17.10	106.0	102722	19.46	UG/L	94
[illegible]	CXXX Xylenes (o)	18.30	106.0	55098	11.18	UG/L	92
43)	C245 Styrene	18.32	104.0	1370	.156	UG/L	[illegible]
45)	CS10 Bromofluorobenzene	19.95	95.0	203855	32.19	UG/L	71
49)	C250 Xylenes (total)	18.30	106.0	~~52216~~ 158053m	~~11.63~~ 33.48	UG/L	99

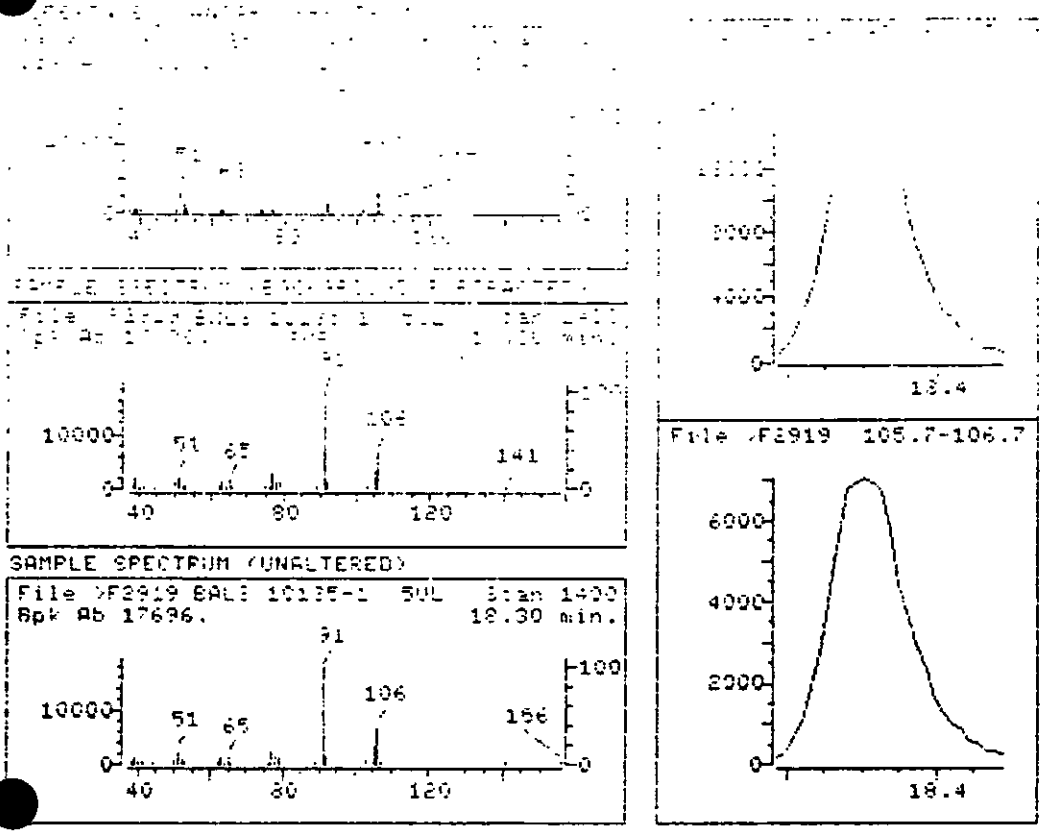
* Compound is ISTD

JZ 10/12/91



Data File: >F2919::06 JR 10/12/91 Quant Output File: ^F2919::07
Name: BALS 10135-~~1~~ ~~5ULX100~~ Instrument ID: 2 06
Misc: V6, CH05, 5UL MEDIS, 4.07G 101191, UCC-SB-B-1~~3~~-3 RC
Quant Time: 911012 05:51 Quant ID File: MOBI06::MT
Injected at: 911012 05:23 Last Calibration: 910814 09:37
Last Qcal Time: 911011 21:51

Compound No : 40
Compound Name : C240 Ethylbenzene
Scan Number : 1266
Retention Time: 16.74 min.
Quant Ion : 106.0
Area : 11670
Concentration : 2.82 UG/L
q-value : 99



Data File: >F2919::06 10/12/9·
Name: BALS 10135-~~18~~ ~~5UL~~ 100 5L ×
Misc: U6, CH05, 5UL MEDIS, 4.07G 101191, UCC-SB-B-17-3 10-30-91
Quant Time: 911012 05:51
Injected at: 911012 05:23
Last Qcal Time: 911011 21:51

Quant Output File: ^F2919::07
Instrument ID: ZU6
Quant ID File: MOBID6::MT
Last Calibration: 910814 09:37

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1400
Retention Time: 18.30 min.
Quant Ion : 106.0
Area : 52216
Concentration : 11.06 UG/L
q-value : 99

JE 10/12/91

[illegible] : JE Date: 10/12/91

[illegible] : R Date: 10-24-91

Sample: BALS 10135 S 5ml/10ml ✓ Run factor: (122)

Partitions: U6; CH2Cl2, FOL Mod(), 4.0"G 1:1 Analyst: ASPALLIN

#	Scan	Q	C	Concentration In Sample (UG/KG)		CAS #	Compound
1	1625.			~~10000~~.	4355	~~541-05-9~~	~~Cyclopentasiloxane, decamethyl~~ unknown ~~Siloxane~~
2	1690.			~~27000~~.	2167	~~124-18-5~~	~~Decane~~ ~~unknown alkane~~
*	1721.			~~100000~~.	2257	~~815-24-7~~	~~3-Pentanone, 2,2,4,4-tetramethyl-~~ unknown ✓
4	1776.			~~22000~~.	351.9	~~526-73-8~~	~~Benzene, 1,2,3-trimethyl-~~ C_9H_{12} Isomer
5	1814.			~~10000~~.	288.44	~~6137-06-0~~	~~2-Heptanone, 4-methyl-~~ unknown
6	1990.			13000.	667.8	~~1758-88-9~~	~~Benzene, 2-ethyl-1,4-dimethyl-~~ ~~$C_{10}H_{14}$ Isomer~~ C_4-benzene isomer

JE
10/12/91

		Int.					Conc. as analyzed
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	27	0	3	20.93	1.365	487489.	11542.	14.249
	26	10	3	21.49	1.37	[illegible]	7.082.	[illegible]
3	24	0	3	22.36	1.743	140177.	17868.	46.427
4	25	20	3	22.69	1.393	218471.	24529.	8.798
5	28	40	3	23.13	1.420	179454.	21977.	7.216
6	21	10	3	26.18	1.546	136136.	12496.	5.474

[illegible]

[illegible]

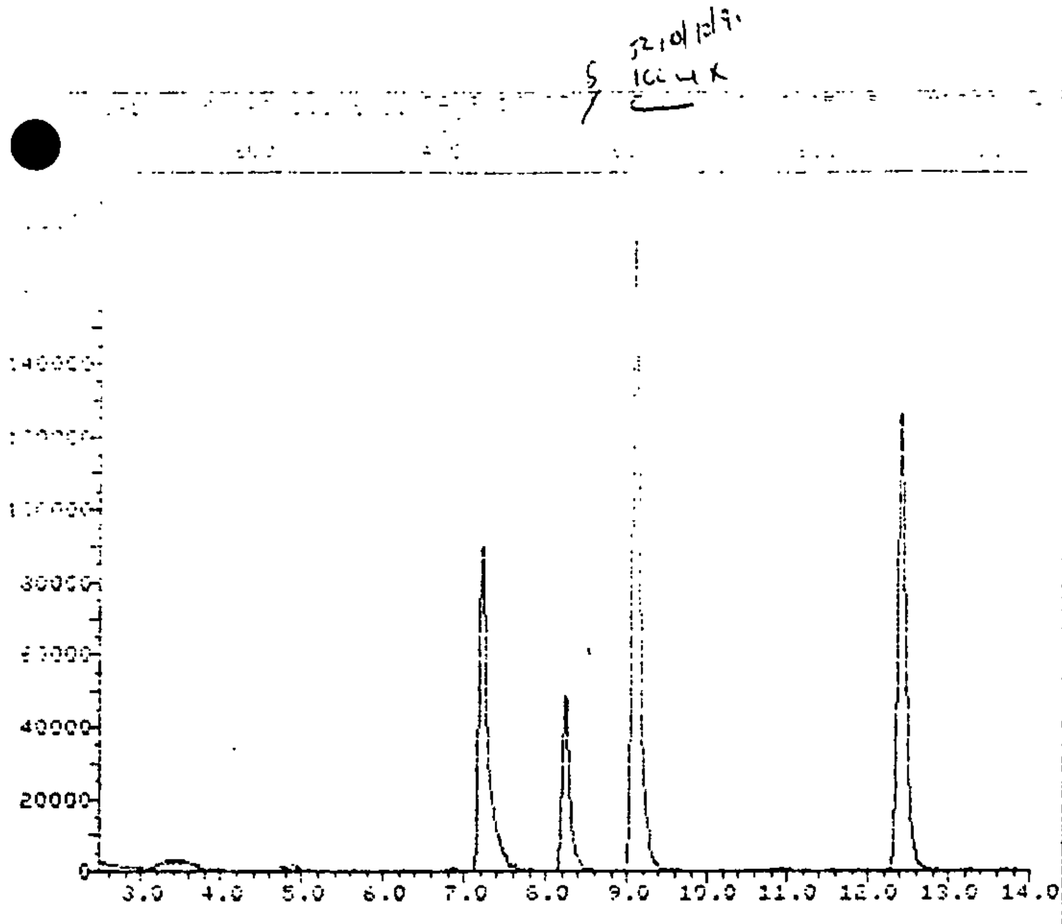
[illegible]
[illegible]

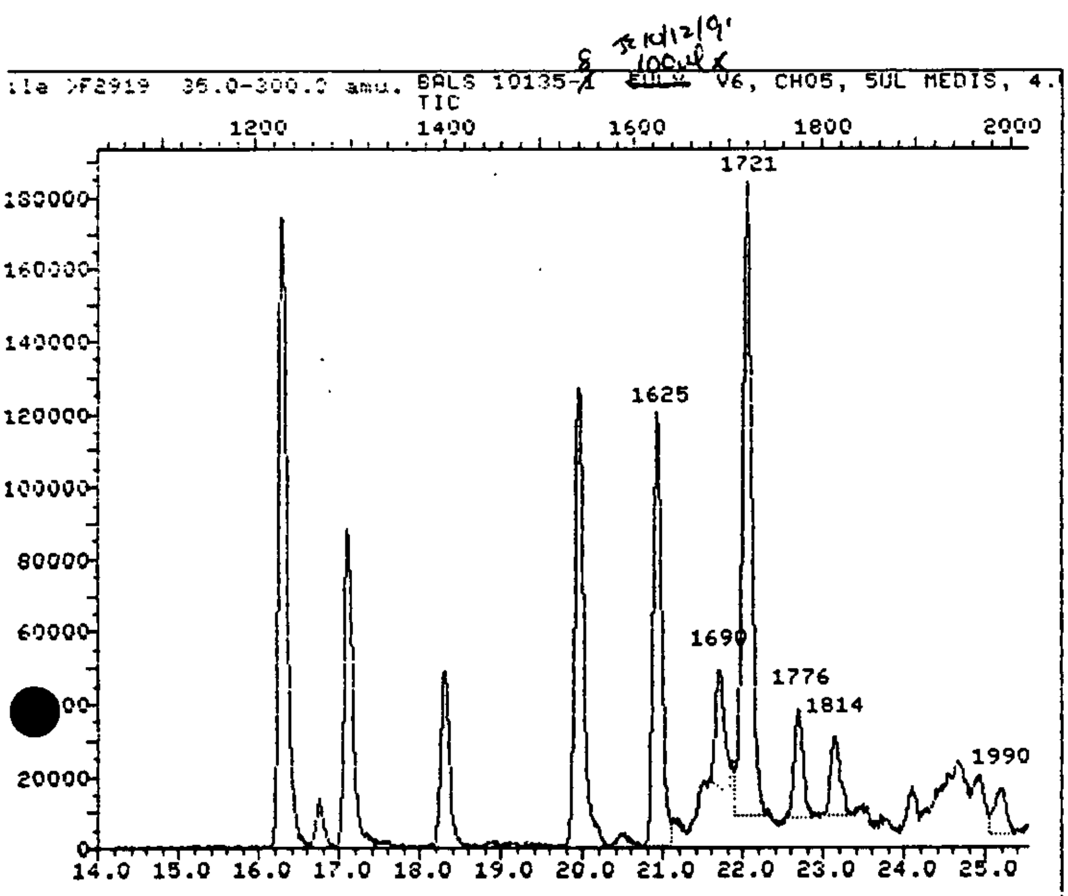
#	Name	Concentration		Flag	
		Ratio	RIC area	RIC area	% Est. Rfl
1	C[8] Bromochloromeths	50.000	UG/L	Ok	
	448.	95636.	6.987	448.	682409.	112.124
2	C[10] 1,4-Difluorobenzen	50.000	UG/L	Ok	
	609.	526760.	2.300	609.	1212562.	100.994
3	C[20] 05-Chlorobenzen	50.000	UG/L	Ok	
	1227.	411730.	3.615	1227.	1243365.	83.542

eting peaks from INT file: VOIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 15
Number of peaks remaining: 14

eleting target compounds from INT file: VOIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 14
Number of peaks remaining: 6

eleting all but largest peaks from INT file: VOIR87
Maximum number of peaks to keep: 15
Number of peaks: 6
eximum number of peaks > number of peaks.


140000
120000
100000
80000
60000
40000
20000
0
3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0


ile >F2919 35.0-300.0 amu. BALS 10135-1 EULX V6, CH05, SUL MEDIS, 4.
TIC
1200 1400 1600 1800 2000
1721
1625
1690
1776
1814
1990
180000
160000
140000
120000
100000
80000
60000
20000
0
14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0

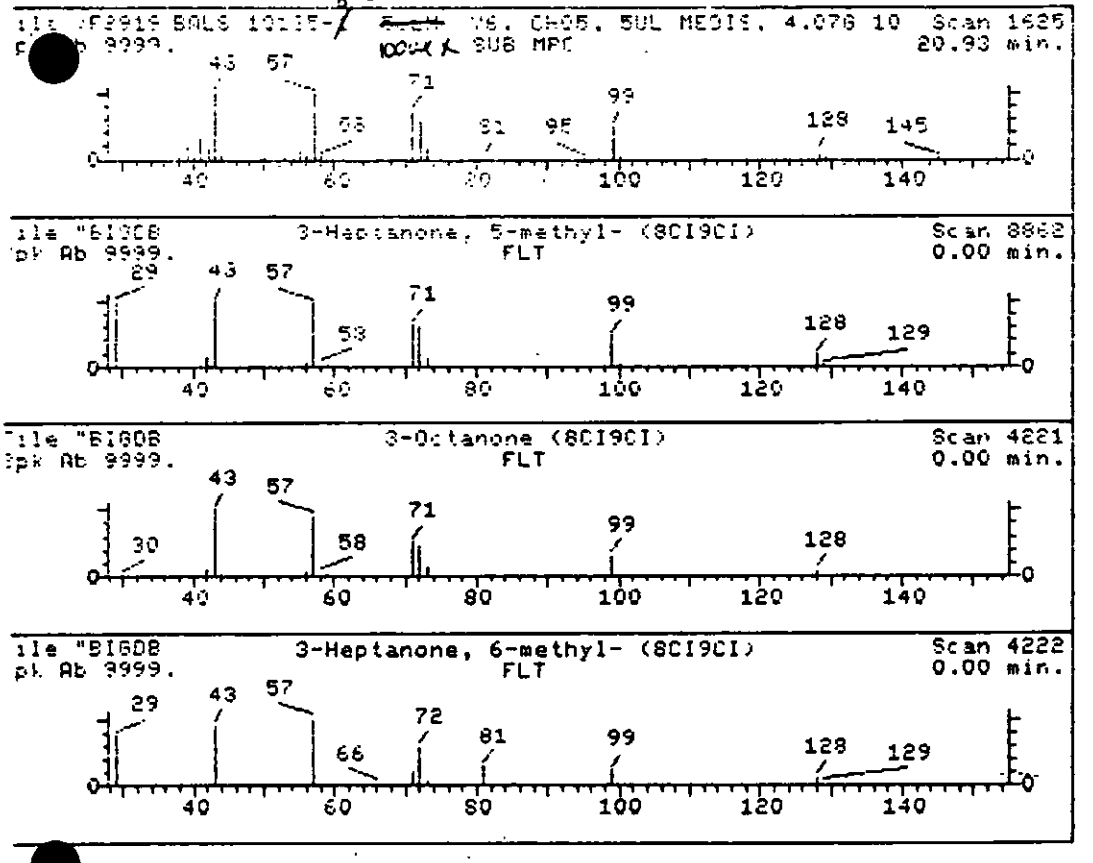
[illegible]

Sample file: [illegible] Spectrum #: [illegible]

Search speed: 2 Tuning option: 5 No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	M_I
1.	87*	541855	3862	"BIGDB	62	45	2	0	71	9	53	40
2.	86*	106687	4221	"BIGDB	72	27	1	0	100	7	69	71
3.	60*	624420	4222	"BIGDB	41	62	3	0	98	14	30	13
4.	42*	6137128	3990	"BIGDB	44	55	3	0	78	25	17	13
5.	30*	3195786	8739	"BIGDB	32	64	3	0	89	32	12	13
6.	25*	5405798	3989	"BIGDB	25	60	3	0	98	42	8	13

JE 10/12/91



unknown
Ketone

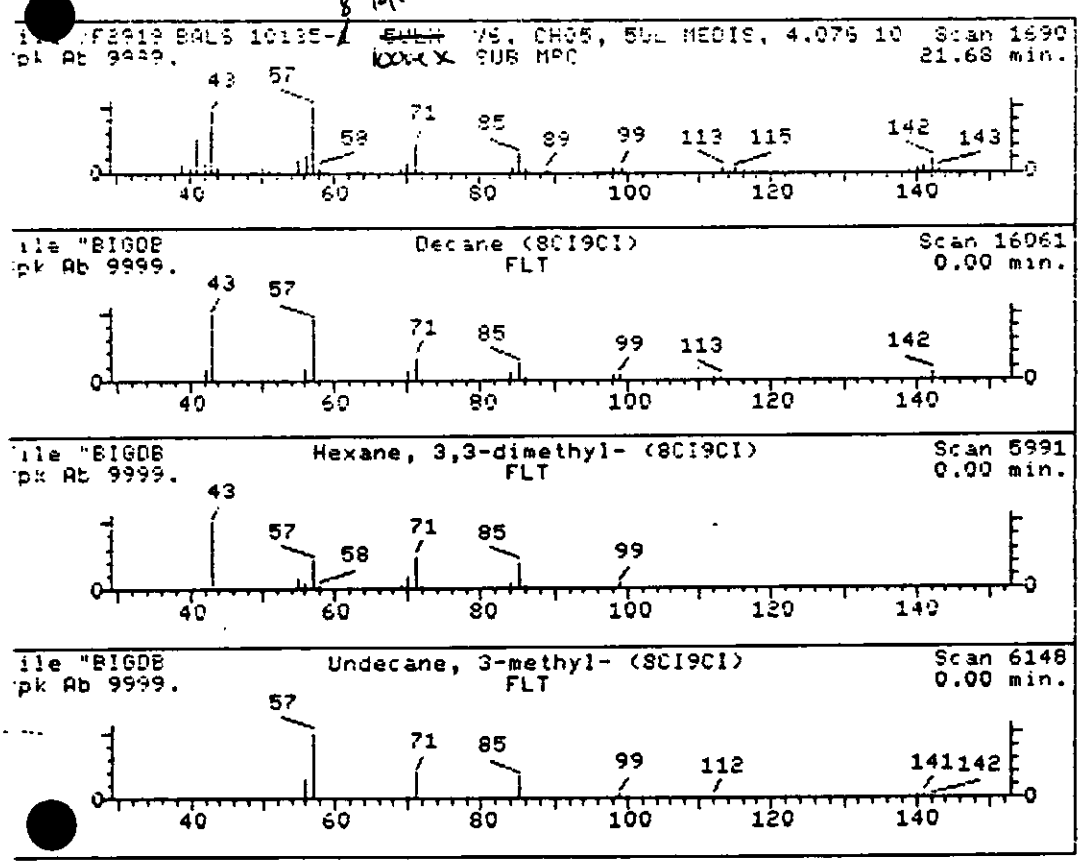
JE 10/12/91

5. Hexane, 3,3-dimethyl- (8CI,9CI)
6. Decane, 2,3,6-trimethyl- (9CI)

Sample file: "F2919 Spectrum #: 16090
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 1

	Prob.	CAS #	CON #	POOT	K	OK	#FLG	TILT	%	CON	C_I	P_I
1.	75*	124185	16061	"BIGDB	67	33	1	0	92	17	35	66
2.	53	563166	5991	"BIGDB	55	35	0	0	74	28	24	33
3.	48	1002433	6148	"BIGDB	54	34	2	0	81	21	17	19
4.	43	17312559	11149	"BIGDB	48	44	2	0	72	23	17	14
5.	39	62238124	6165	"BIGDB	65	43	1	1	61	30	14	16
6.	36	62238113	6164	"BIGDB	65	38	1	1	73	32	12	19

§ 10/12/91 SZ



unknown ~~alkane~~

JZ 10/12/91

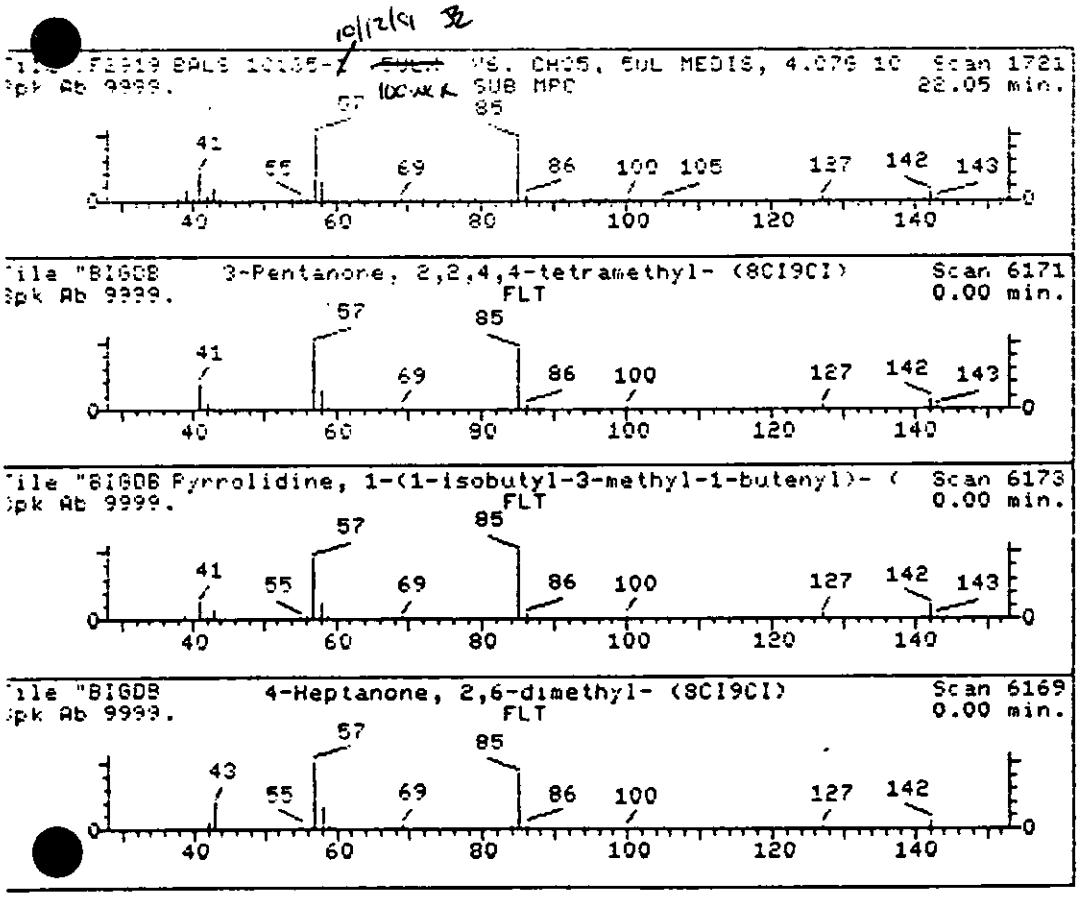
[illegible]

4. [illegible]
5. [illegible]
6. [illegible]

Sample file: [illegible] Spectrum #: [illegible]
Search speed: 2 Tuning option: 5 No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_IV
1.	95*	815247	6171	"BIGDB	79	14	0	0	78	2	72	95
2.	88	3494940	6173	"BIGDB	90	5	1	3	84	2	69	50
3.	86*	108838	6169	"BIGDB	55	44	2	0	79	3	60	32
4.	52*	4418615	5	"BIGDB	21	104	2	0	100	19	20	13
5.	50*	7492388	6174	"BIGDB	42	50	2	0	69	21	22	22
6.	29*	288164	5907	"BIGDB	21	34	2	0	69	50	7	13

10/12/91 JZ



JZ 10/12/91

[illegible]

6. Benzene, (1-methylethyl)- (9CI)

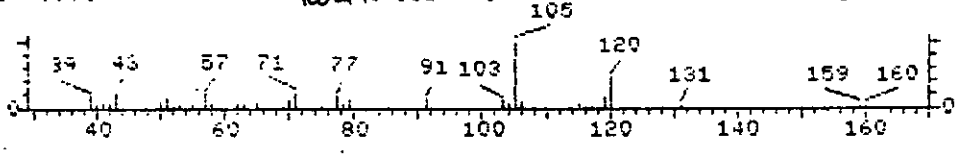
[illegible]

Search speed: 2 Tilting option: 3 No. of ion ranges searched: 45

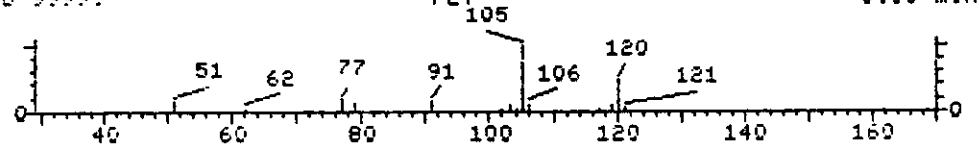
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	M_I
1.	75*	526738	12280	"BIGDB	80	20	2	0	85	20	35	65
2.	64*	95636	12273	"BIGDB	65	30	2	0	77	22	28	49
3.	63*	108678	12275	"BIGDB	57	31	2	3	86	16	30	35
4.	59*	620144	12267	"BIGDB	53	34	2	0	100	25	27	36
5.	42*	3141024	12286	"BIGDB	44	60	3	0	77	22	17	13
6.	41*	98828	12259	"BIGDB	48	39	2	0	100	37	14	28

JR 10/12/91

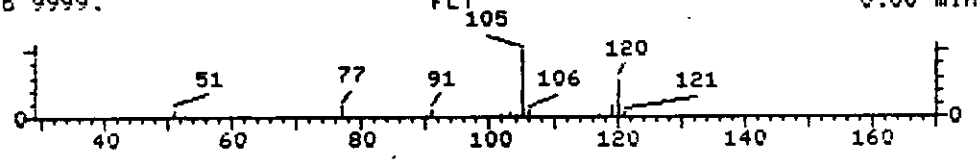
[illegible] BALS 1013E-1 ~~5 ul~~ 100uL SUB MPC V6, DH05, SUL MEDIA, 4.07G 10 Scan 1776
pk Ab 9999. 22.69 min.



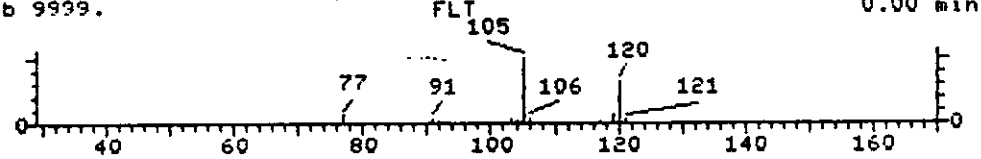
ile "BIGDB Benzene, 1,2,3-trimethyl- (8CI9CI) Scan 12280
pk Ab 9999. FLT 0.00 min.



ile "BIGDB Benzene, 1,2,4-trimethyl- (8CI9CI) Scan 12273
pk Ab 9999. FLT 0.00 min.



ile "BIGDB Benzene, 1,3,5-trimethyl- (9CI) Scan 12275
pk Ab 9999. FLT 0.00 min.



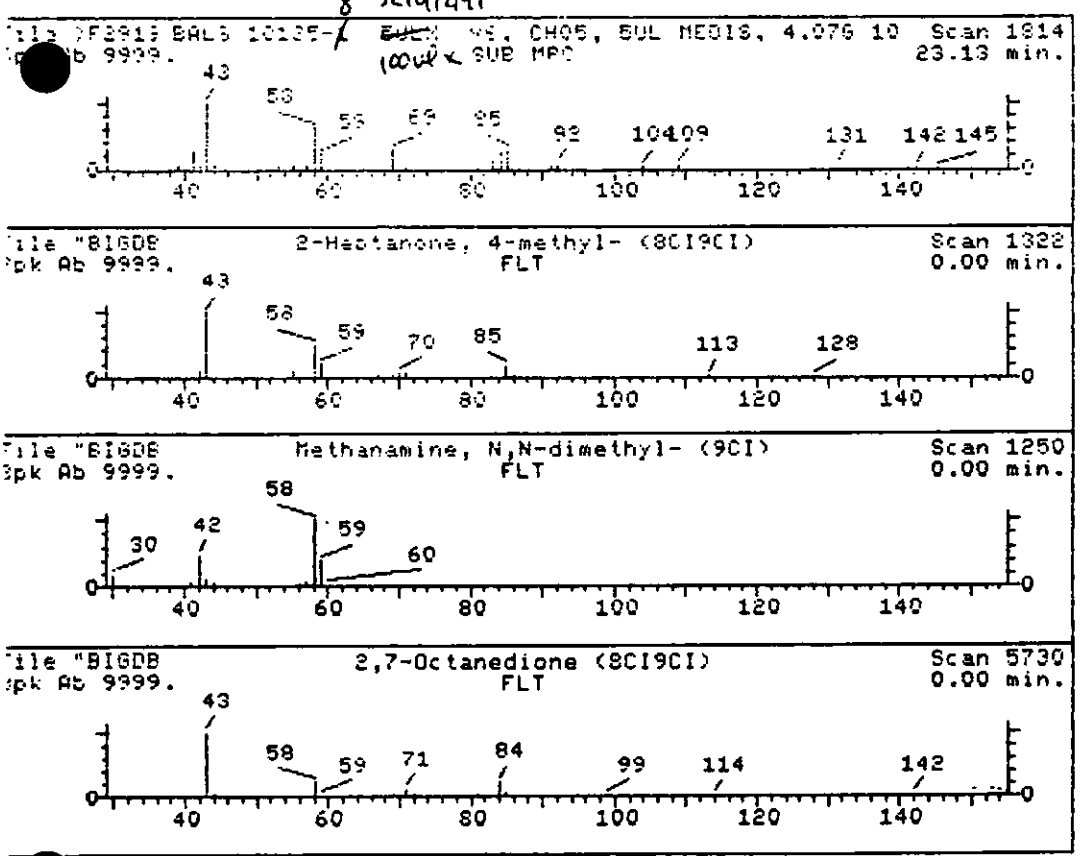
C_9H_{12} Isome

JR 10/12/91

Sample File: [illegible] Spectrum #: 18.4
Search speed: 2 Fitting option: 3 No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	28*	6137060	1322	"BIGDB	27	60	2	0	100	40	10	14
2.	20*	75503	1250	"BIGDB	26	56	2	0	60	51	5	14
3.	15*	1626091	5730	"BIGDB	23	61	2	0	100	59	3	13
4.	11*	3074713	5924	"BIGDB	29	62	2	0	94	65	2	14
5.	11*	15869928	5929	"BIGDB	27	61	3	0	100	63	2	13

§ 10/12/91



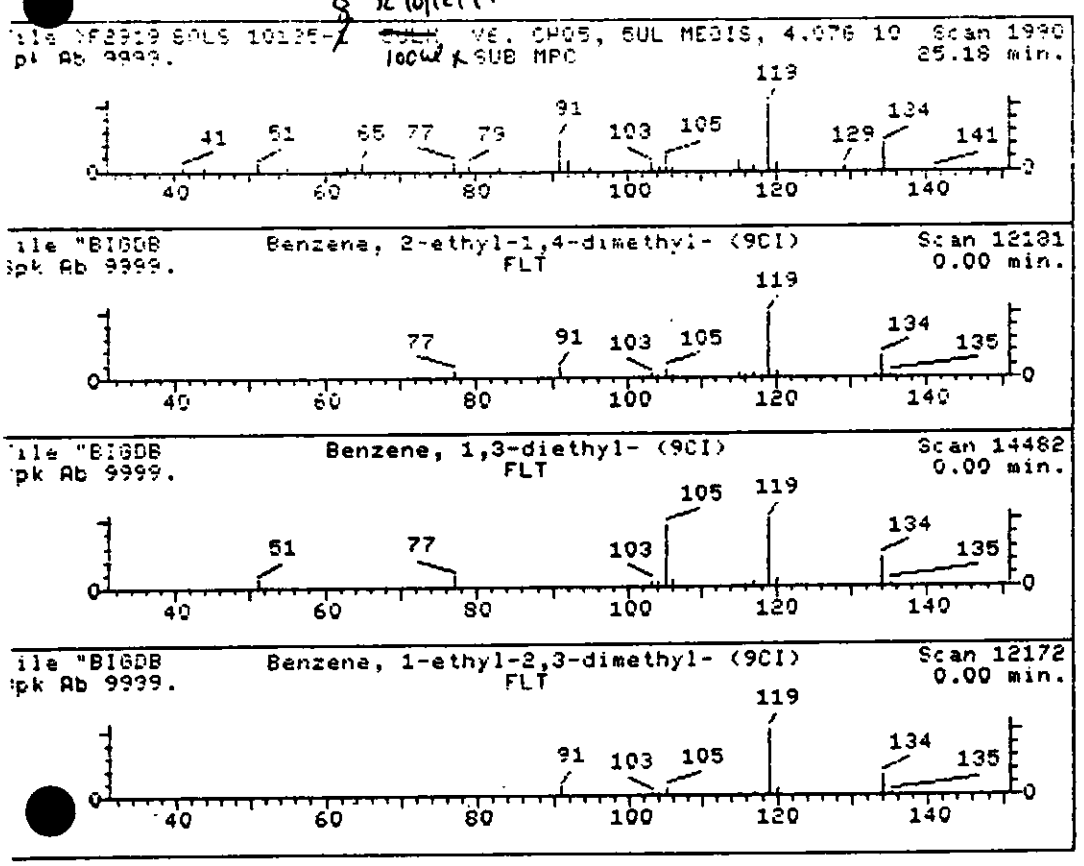
unknown
SR
10/12/91

a. [illegible]
b. [illegible]
c. [illegible]
d. Benzene, 1-ethyl-2,3-dimethyl- (9CI)
e. Benzene, 1-ethyl-2,4-dimethyl- (9CI)
f. Benzene, 1-methyl-4-(1-methylethyl)- (9CI)

Sample file: [illegible] Spectrum #: [illegible]
Search speed: 2 Tilting option: B No. of ion ranges searched: [illegible]

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	P_IV
1.	81*	1758889	12181	"BIGDB	61	33	2	2	97	10	53	40
2.	60*	141935	14482	"BIGDB	57	49	3	-1	87	12	30	13
3.	52*	933982	12172	"BIGDB	36	55	2	0	100	19	20	18
4.	52*	934805	12173	"BIGDB	36	57	2	0	100	17	20	17
5.	52*	934747	12180	"BIGDB	37	58	2	0	100	19	20	16
6.	50*	99876	12178	"BIGDB	49	56	2	0	71	25	22	22

JR 10/12/91



C4-benzene

JR 10-21-91

~~$C_{10}H_{14}$ Isomer~~

JR 10/12/91

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-4-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10135-09

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2835

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column: (pack/cap) CAP Dilution Factor: 0.80

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

10-4-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10135-09

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2835

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 0.80

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

D - Compound Dtel eq

L 100991 VOA

R 100991 VOA

MeCl2

Target Compound Data Summary Sheet

Sample: BRLSM1 [illegible]
Misc : Ma CH#15 FULIS ID# WEC-10-4-CH1
Injected : 10/06/91 15:34
Analyst: LIE
Data File: M0B1D6
Quant list threshold: 1.00

Units: UG/L
Run Factor: 1.000
Surrogate ml: .005

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QL limits
CS15 D4-1,2-dichloroethane	.2500	.2603	104	76 114
CS05 D8-Toluene	.2500	.2369	94.8	88 110
CS10 Bromofluorobenzene	.2500	.2591	104	86 115

Target Compounds: M0B1D6

NO UNKNOWNS

100991

Scan #	Concentration Quant List UG/L	Sample UG/L		Compound
		BDL		C010 Chloromethane
		BDL		C020 Vinyl Chloride
		BDL		C015 Bromomethane
		BDL		C025 Chloroethane
		BDL		C045 1,1-Dichloroethene
		BDL		C035 Acetone
		BDL		C040 Carbon Disulfide
257	3.133	3.1	JB	C030 Methylene Chloride
		BDL		CXXX Tert-butyl alcohol
		BDL		C053 Trans-1,2-dichloroethene
		BDL		C055 Cis-1,2-dichloroethene
		BDL		CXXX Methyl tert-butyl ether
		BDL		C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
		BDL		C110 2-Butanone
		BDL		C125 Vinyl Acetate
		BDL		C115 1,1,1-Trichloroethane
		BDL		C120 Carbon Tetrachloride
		BDL		C165 Benzene
		BDL		C150 Trichloroethene
		BDL		C140 1,2-Dichloropropane
		BDL		C130 Bromodichloromethane
		BDL		C175 2-Chloroethylvinylether
		BDL		C143 Cis-1,3-Dichloropropene
		BDL		C172 Trans-1,3-dichloropropene
		BDL		C160 1,1,2-Trichloroethane

Scan #	Concentration Quant List: UG/L	Sample UG/L	Compound
		BDL	C155 Dibromochloromethane
		BDL	C180 Bromoform
		BDL	C205 4-Methyl-2-pentanone
		BDL	C230 Toluene
		BDL	C210 2-Hexanone
		BDL	C220 Tetrachloroethene
		BDL	C235 Chlorobenzene
		BDL	C240 Ethylbenzene
		BDL	CXXX Xylenes (p)
		BDL	CXXX Xylenes (o)
		BDL	C245 Styrene
		BDL	C225 1,1,2,2-Tetrachloroethane
		BDL	C335 Dichlorobenzene (m)
		BDL	C340 Dichlorobenzene (p)
		BDL	C350 Dichlorobenzene (o)
		BDL	C250 Xylenes (total)

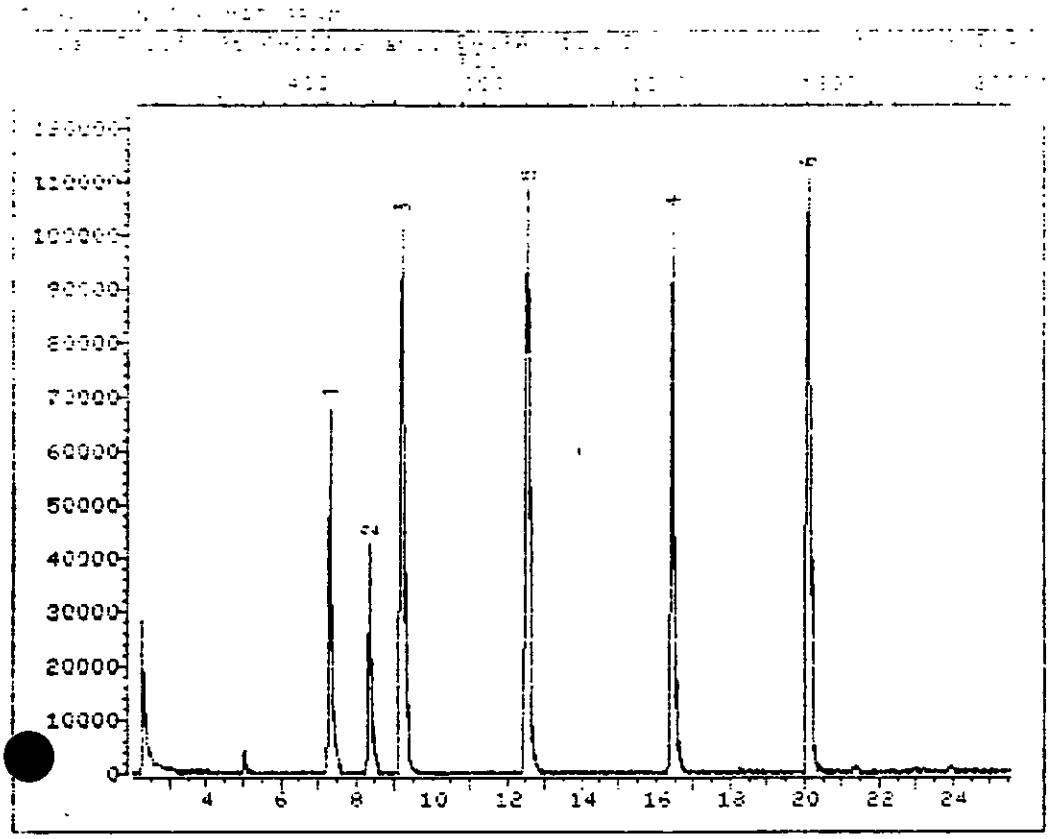
[illegible]

[illegible] File : [illegible] Calibrated : [illegible]

	Compound	- R.T. Into - Prec	Found	Dir	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.77	7.80	.03	128.0	57218	1.0000	50.00
2)	C010 Chloromethane	2.70	0.00	--	50.0	0	1.3234	0.00
3)	C020 Vinyl Chloride	2.86	0.00	--	62.0	0	1.3500	0.00
4)	C015 Bromomethane	3.27	0.00	--	94.0	0	1.2156	0.00
5)	C025 Chloroethane	3.39	0.00	--	64.0	0	.5022	0.00
6)	C045 1,1-Dichloroethene	4.32	0.00	--	96.0	0	1.5071	0.00
7)	C035 Acetone	4.43	0.00	--	43.0	0	.1843	0.00
8)	C040 Carbon Disulfide	4.67	0.00	--	76.0	0	4.4340	0.00
9)	C030 Methylene Chloride	5.01	5.00	.01	84.0	6455	1.7999	3.13
10)	CXXX Tert-butyl alcohol	5.15	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.39	0.00	--	96.0	0	1.8441	0.00
12)	C055 Cis-1,2-dichloroethe	6.91	0.00	--	96.0	0	1.9832	0.00
13)	CXXX Methyl tert-butyl et	5.39	0.00	--	73.0	0	3.1722	0.00
14)	C050 1,1-Dichloroethane	6.01	0.00	--	63.0	0	3.5329	0.00
15)	C060 Chloroform	7.46	0.00	--	83.0	0	3.7902	0.00
16)	C065 1,2-Dichloroethane	8.48	0.00	--	62.0	0	2.1737	0.00
17)	C110 2-Butanone	6.93	0.00	--	72.0	0	.1091	0.00
18)	CS15 D4-1,2-dichloroethan	8.34	8.33	.01	65.0	93600	1.5708	52.09
19)	*CI10 1,4-Difluorobenzene	9.23	9.19	.04	114.0	296011	1.0000	50.00
20)	C125 Vinyl Acetate	6.07	0.00	--	43.0	0	.6048	0.00
21)	C115 1,1,1-Trichloroethan	7.76	0.00	--	97.0	0	.5974	0.00
22)	C120 Carbon Tetrachloride	8.07	0.00	--	117.0	0	.4898	0.00
23)	C165 Benzene	8.45	0.00	--	78.0	0	.9908	0.00
24)	C150 Trichloroethene	9.71	0.00	--	130.0	0	.4258	0.00
25)	C140 1,2-Dichloropropane	10.19	0.00	--	63.0	0	.4057	0.00
26)	C130 Bromodichloromethane	10.82	0.00	--	83.0	0	.6001	0.00
27)	C175 2-Chloroethylvinylet	11.53	0.00	--	63.0	0	.1776	0.00
28)	C143 Cis-1,3-Dichloroprop	11.86	0.00	--	75.0	0	.5829	0.00
29)	C172 Trans-1,3-dichloropr	13.25	0.00	--	75.0	0	.4482	0.00
30)	C160 1,1,2-Trichloroethan	13.73	0.00	--	97.0	0	.2952	0.00
31)	C155 Dibromochloromethane	14.76	0.00	--	129.0	0	.4676	0.00
32)	C180 Bromoform	18.92	0.00	--	173.0	0	.2627	0.00
33)	*CI20 D5-Chlorobenzene	16.44	16.42	.02	117.0	238246	1.0000	50.00
34)	CS05 D8-Toluene	12.53	12.52	.01	98.0	293076	1.2981	47.38
35)	C205 4-Methyl-2-pentanone	12.29	0.00	--	43.0	0	.3240	0.00
36)	C230 Toluene	12.69	0.00	--	92.0	0	.9048	0.00
37)	C210 2-Hexanone	14.49	0.00	--	43.0	0	.2131	0.00
38)	C220 Tetrachloroethene	14.11	0.00	--	164.0	0	.4676	0.00
39)	C235 Chlorobenzene	16.49	0.00	--	112.0	0	1.0869	0.00
40)	C240 Ethylbenzene	16.87	0.00	--	106.0	0	.5461	0.00
41)	CXXX Xylenes (p)	17.24	0.00	--	106.0	0	.6696	0.00
42)	CXXX Xylenes (o)	18.43	0.00	--	106.0	0	.6363	0.00
43)	C245 Styrene	18.48	0.00	--	104.0	0	1.1149	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.64	0.00	--	83.0	0	.5730	0.00
45)	CS10 Bromofluorobenzene	20.06	20.09	.03	95.0	176177	.7136	51.81
46)	C335 Dichlorobenzene (m)	23.61	0.00	--	146.0	0	.9078	0.00
47)	C340 Dichlorobenzene (p)	23.92	0.00	--	146.0	0	.8481	0.00
48)	C350 Dichlorobenzene (o)	25.16	0.00	--	146.0	0	.8417	0.00

Internal Standard	Sample Area	Std Area	%
101 Bromochloromethane	57238	75510	75.8
110 1,4-Difluorobenzene	296011	409263	72.3
120 Chlorobenzene	238246	308421	77.2

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >F2835::D6 Quant Output File: ^F2835::D7
Name: BALSAM 10135-9 5ML Instrument ID: V6
Misc: V6 CH#15 5ULIS ID# UCC-10/4-QA1

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

Operator ID: LIZ
Quant Time : 911009 16:01
Injected at: 911009 15:34

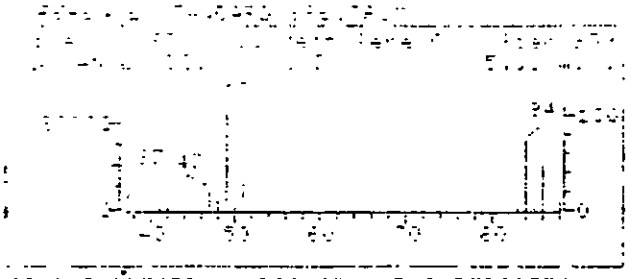
[illegible]

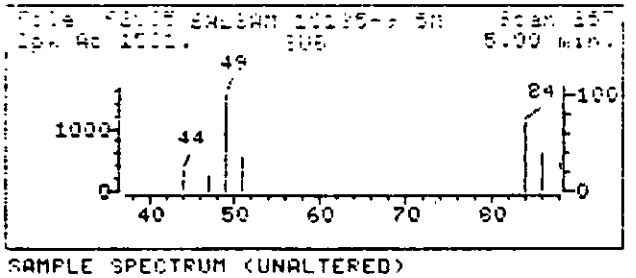
Data File: [illegible] Dilution Factor: 1.00000
Name: [illegible] Instrument ID: V6
Misc: V6 CH#15 [illegible]

ICAL File: [illegible]
Title: [illegible]
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:25

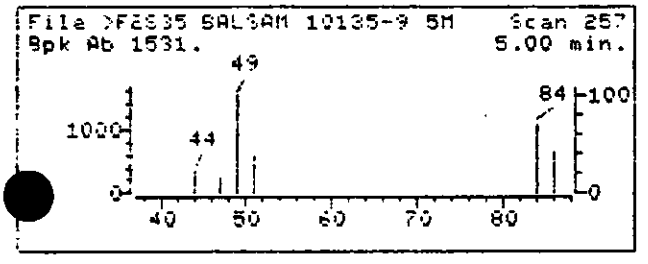
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.30	128.0	57238	50.00	UG/L	67
9)	CS30 Methylene Chloride	5.00	84.0	6455	3.13	UG/L	93
18)	CS15 D4-1,2-dichloroethane	8.33	65.0	93600	52.05	UG/L	86
19)	*CI10 1,4-Difluorobenzene	9.19	114.0	296011	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.42	117.0	238246	50.00	UG/L	100
34)	CS05 D8-Toluene	12.52	98.0	293076	47.38	UG/L	94
[illegible]	CS10 Bromofluorobenzene	20.09	95.0	176177	51.81	UG/L	67

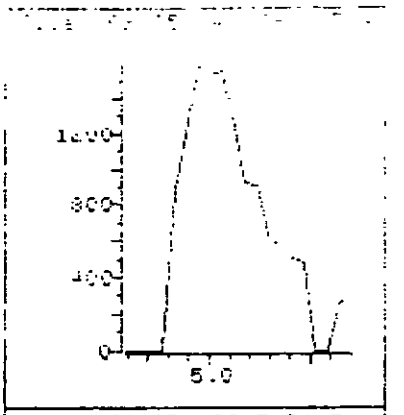
* Compound is ISTD

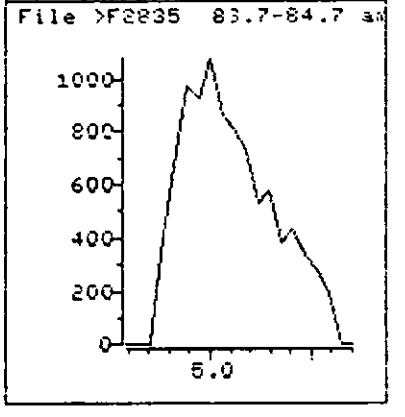




SAMPLE SPECTRUM (UNALTERED)







Data File: >F2835::D6 Quant Output File: ^F2835::D7
Name: BALSAM 10135-9 5ML Instrument ID: V6
Misc: V6 CH#15 5ULIS ID# UCC-10/4-QA1
Quant Time: 911009 16:01 Quant ID File: MOBID6::MT
Injected at: 911009 15:34 Last Calibration: 910814 09:37
Last Qcal Time: 911009 10:28

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 257
Retention Time: 5.00 min.
Quant Ion : 84.0
Area : 6455
Concentration : 3.13 UG/L
q-value : 93

Sample: BHLSM1 10.7[illegible] 5ML Run Date: [illegible]
Conditions: V6 Cmsb [illegible] [illegible] UFC-10 [illegible] Analyst: L'Z

# Scan	Q	C	Concentration in Sample (UG/L)	CAS #	Compound

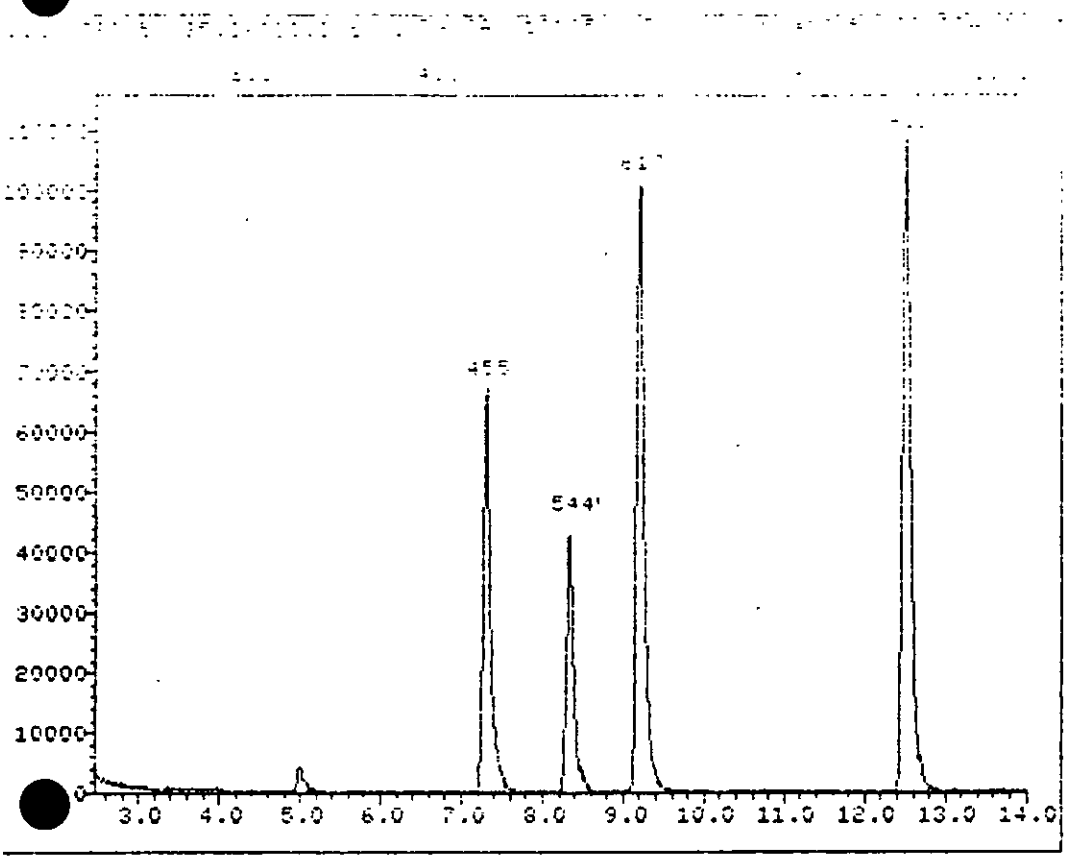
NO UNKNOWNS

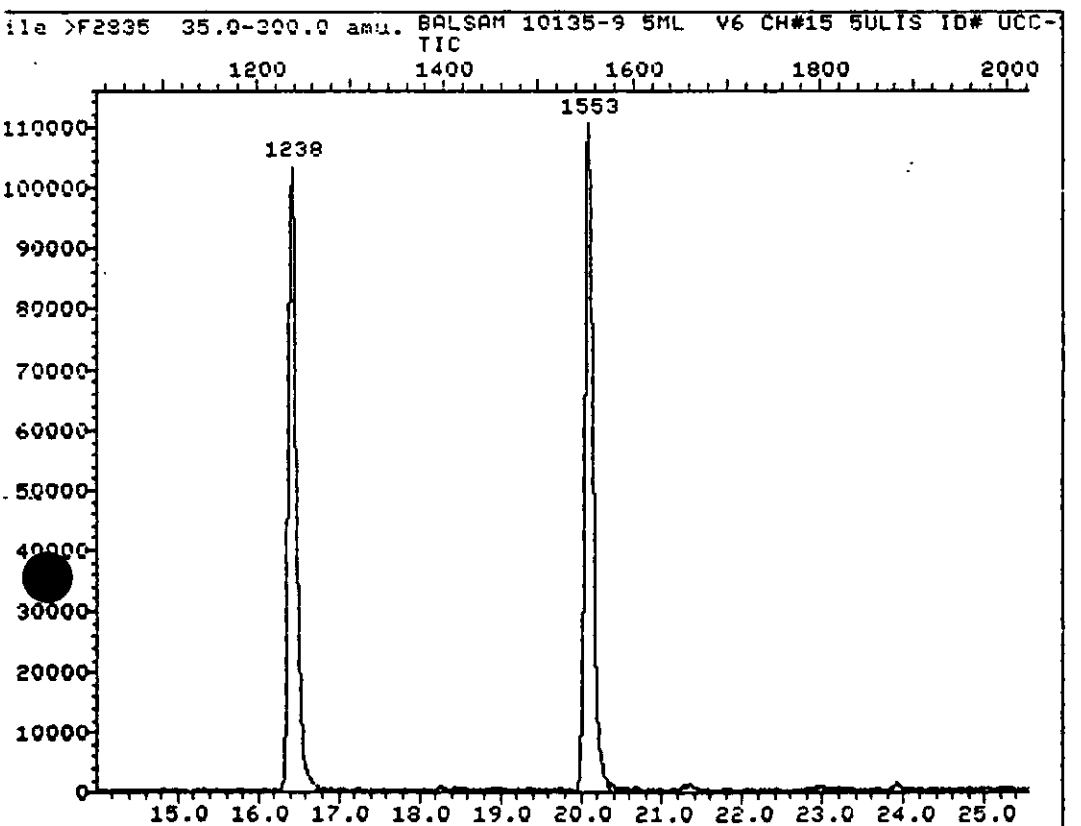
[illegible]

[illegible]

[illegible]

#	Prct.	Cert.	Std.	RT	PRT	Area	Height	Conc. As Analyzed (UG/L)


455
544
617
3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0


File >F2835 35.0-300.0 amu. BALSAM 10135-9 5ML V6 CH#15 5ULIS ID# UCC-
TIC
1200 1400 1600 1800 2000
1238
1553
15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0

imum separation of RIC and Quan ion peaks: 3.
imum RIC peak area as % of est. RIC area: 50.
imum RIC peak area as % of est. RIC area: 200.

#	Name	Concentration		Flag	
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC
1	CI01 Bromochlorometh	50.000	UG/L	Ok	
455.	57239.	6.987	455.	406290.	101.590
2	CI10 1,4-Difluoroben	50.000	UG/L	Ok	
617.	296011.	2.300	617.	667273.	98.020
3	CI20 D5-Chlorobenzen	50.000	UG/L	Ok	
1238.	238246.	3.615	1238.	736642.	85.536

leting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 6
Number of peaks remaining: 6

leting target compounds from INT file: VDIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 6
Number of peaks remaining: 0

leting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 0
ximum number of peaks > number of peaks.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V1 Calibration Date(s): 08/29/91 08/29/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = A2832 RRF50 = A2831
RRF100= A2834 RRF150= A2835 RRF200= A2836

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	1.002	0.999	0.848	0.994	0.899	0.948	7.5#
Bromomethane	1.031	0.786	0.935	0.853	0.643	0.850	17.3
Vinyl Chloride *	1.190	1.226	1.083	1.288	1.140	1.185	6.6*
Chloroethane	0.796	0.752	0.685	0.814	0.622	0.734	10.9
Methylene Chloride	1.713	1.622	1.422	1.782	1.622	1.632	8.3
Acetone	0.431	0.413	0.346	0.400	0.379	0.394	8.3
Carbon Disulfide	4.325	4.091	3.995	4.979	4.670	4.412	9.3
1,1-Dichloroethene *	1.233	1.125	1.172	1.346	1.182	1.212	7.0*
1,1-Dichloroethane #	3.159	2.934	2.895	3.221	2.988	3.039	4.7#
1,2-Dichloroethene (total)	1.606	1.535	1.470	1.678	1.452	1.548	6.1
Chloroform *	3.629	3.420	3.614	3.962	3.568	3.639	5.5*
1,2-Dichloroethane	2.616	2.446	2.430	2.719	2.452	2.533	5.1
2-Butanone	0.201	0.192	0.168	0.180	0.170	0.182	7.8
1,1,1-Trichloroethane	0.623	0.563	0.548	0.631	0.600	0.593	6.1
Carbon Tetrachloride	0.581	0.522	0.523	0.577	0.556	0.552	5.1
Vinyl Acetate	0.580	0.594	0.540	0.535	0.532	0.556	5.2
Bromodichloromethane	0.627	0.593	0.575	0.640	0.607	0.608	4.3
1,2-Dichloropropane *	0.446	0.429	0.387	0.426	0.399	0.417	5.7*
cis-1,3-Dichloropropene	0.680	0.640	0.594	0.665	0.639	0.644	5.1
Trichloroethene	0.520	0.466	0.419	0.464	0.425	0.459	8.8
Dibromochloromethane	0.609	0.590	0.570	0.617	0.581	0.593	3.3
1,1,2-Trichloroethane	0.399	0.374	0.342	0.364	0.348	0.365	6.2
Benzene	1.248	1.129	0.994	1.085	1.066	1.104	8.5
trans-1,3-Dichloropropene	0.593	0.575	0.554	0.608	0.587	0.583	3.5
2-Chloroethylvinylether	0.269	0.246	0.238	0.253	0.248	0.251	4.6
Bromoform #	0.517	0.499	0.487	0.520	0.489	0.502	3.1#
4-Methyl-2-Pentanone	0.494	0.487	0.440	0.485	0.469	0.475	4.5
2-Hexanone	0.353	0.342	0.312	0.338	0.334	0.336	4.5
Tetrachloroethene	0.574	0.512	0.469	0.516	0.471	0.508	8.4
1,1,2,2-Tetrachloroethane #	0.718	0.690	0.654	0.705	0.673	0.688	3.7#
Toluene *	0.934	0.871	0.790	0.897	0.857	0.870	6.1*
Chlorobenzene #	1.252	1.149	1.055	1.187	1.128	1.154	6.3#
Ethylbenzene *	0.612	0.561	0.515	0.577	0.537	0.560	6.6*
Styrene	1.211	1.124	1.010	1.143	1.101	1.118	6.5
Xylene (total)	0.692	0.648	0.582	0.634	0.605	0.632	6.7
Toluene-d8	1.474	1.244	1.242	1.225	1.264	1.290	8.1
Bromofluorobenzene	0.680	0.578	0.593	0.563	0.568	0.596	8.1
1,2-Dichloroethane-d4	2.066	1.610	1.852	1.857	1.841	1.845	8.8

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V2 Calibration Date(s): 10/11/91 10/12/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = B2952 RRF50 = B2951
RRF100= B2955 RRF150= B2956 RRF200= B2959

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	0.692	0.412	0.469	0.436	0.267	0.455	33.7#
Bromomethane	1.038	0.868	0.614	0.544	0.398	0.692	37.2
Vinyl Chloride *	1.105	0.855	0.886	0.798	0.589	0.847	21.9*
Chloroethane	0.733	0.632	0.492	0.438	0.362	0.531	28.2
Methylene Chloride	2.143	2.182	1.952	1.908	0.389	1.715	43.8
Acetone	0.462	0.678	0.306	0.319	0.256	0.404	42.4
Carbon Disulfide	5.167	4.992	4.472	3.962	3.067	4.332	19.6
1,1-Dichloroethene *	1.210	1.123	0.924	0.835	0.582	0.935	26.5*
1,1-Dichloroethane #	3.537	3.638	3.285	3.068	3.042	3.314	8.1#
1,2-Dichloroethene (total)	1.912	1.889	1.785	1.637	1.627	1.770	7.6
Chloroform *	3.441	3.547	3.212	3.004	3.098	3.260	7.0*
1,2-Dichloroethane	2.140	2.347	2.168	2.078	2.109	2.168	4.9
2-Butanone	1.010	1.136	0.915	0.937	1.080	1.016	9.2
1,1,1-Trichloroethane	0.536	0.451	0.445	0.448	0.384	0.453	12.0
Carbon Tetrachloride	0.490	0.417	0.425	0.425	0.375	0.426	9.7
Vinyl Acetate	0.777	0.979	0.921	0.949	0.732	0.872	12.6
Bromodichloromethane	0.623	0.588	0.582	0.583	0.554	0.586	4.2
1,2-Dichloropropane *	0.460	0.426	0.438	0.450	0.429	0.441	3.2*
cis-1,3-Dichloropropene	0.592	0.618	0.638	0.623	0.594	0.613	3.2
Trichloroethene	0.482	0.417	0.417	0.417	0.385	0.424	8.4
Dibromochloromethane	0.433	0.455	0.448	0.453	0.443	0.446	2.0
1,1,2-Trichloroethane	0.324	0.329	0.320	0.324	0.332	0.326	1.4
Benzene	1.449	1.269	1.143	1.108	0.876	1.169	18.1
trans-1,3-Dichloropropene	0.435	0.478	0.486	0.464	0.495	0.472	5.0
2-Chloroethylvinylether	0.190	0.211	0.237	0.230	0.294	0.232	16.8
Bromoform #	0.301	0.322	0.305	0.320	0.326	0.315	3.5#
4-Methyl-2-Pentanone	0.599	0.573	0.566	0.599	0.619	0.591	3.6
2-Hexanone	0.350	0.318	0.312	0.299	0.331	0.322	6.0
Tetrachloroethene	0.455	0.402	0.420	0.422	0.413	0.422	4.7
1,1,2,2-Tetrachloroethane #	0.928	0.855	0.794	0.844	0.783	0.841	6.9#
Toluene *	0.973	0.879	0.917	0.907	0.921	0.919	3.7*
Chlorobenzene #	1.170	1.042	1.048	1.045	0.983	1.058	6.5#
Ethylbenzene *	0.559	0.483	0.484	0.484	0.463	0.495	7.5*
Styrene	1.180	0.982	0.995	0.947	0.843	0.989	12.4
Xylene (total)	0.757	0.595	0.585	0.590	0.518	0.609	14.5
Toluene-d8	1.489	1.320	1.245	1.221	1.154	1.286	10.0
Bromofluorobenzene	0.672	0.611	0.584	0.564	0.552	0.597	8.0
1,2-Dichloroethane-d4	1.569	1.598	1.502	1.456	1.441	1.513	4.5

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration Date(s): 09/22/91 09/22/91

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

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = F2560 RRF50 = F2557
RRF100= F2561 RRF150= F2562 RRF200= F2563

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane	#	1.360	1.302	1.234	1.144	1.188	1.246	7.0	#
Bromomethane		1.323	1.100	1.017	0.926	0.910	1.055	15.9	
Vinyl Chloride	*	1.398	1.319	1.273	1.125	1.174	1.258	8.7	*
Chloroethane		0.837	0.723	0.655	0.548	0.493	0.651	21.1	
Methylene Chloride		1.893	1.654	1.705	1.638	1.630	1.704	6.4	
Acetone		0.273	0.190	0.201	0.194	0.198	0.211	16.5	
Carbon Disulfide		4.539	4.000	4.256	3.923	4.063	4.156	5.9	
1,1-Dichloroethene	*	1.595	1.424	1.405	1.228	1.282	1.387	10.3	*
1,1-Dichloroethane	#	3.661	3.124	3.257	3.095	3.113	3.250	7.3	#
1,2-Dichloroethene (total)		1.930	1.710	1.750	1.626	1.621	1.727	7.3	
Chloroform	*	4.209	3.700	3.841	3.747	3.790	3.857	5.3	*
1,2-Dichloroethane		2.410	2.081	2.239	2.089	2.036	2.171	7.1	
2-Butanone		0.105	0.113	0.120	0.109	0.107	0.111	5.3	
1,1,1-Trichloroethane		0.606	0.559	0.557	0.539	0.538	0.560	4.9	
Carbon Tetrachloride		0.513	0.482	0.477	0.456	0.468	0.479	4.5	
Vinyl Acetate		0.537	0.604	0.532	0.531	0.487	0.538	7.8	
Bromodichloromethane		0.644	0.581	0.613	0.634	0.638	0.622	4.1	
1,2-Dichloropropane	*	0.421	0.404	0.401	0.405	0.403	0.407	2.0	*
cis-1,3-Dichloropropene		0.604	0.569	0.592	0.615	0.634	0.603	4.0	
Trichloroethene		0.453	0.398	0.411	0.406	0.406	0.415	5.3	
Dibromochloromethane		0.480	0.472	0.505	0.522	0.525	0.501	4.8	
1,1,2-Trichloroethane		0.326	0.305	0.306	0.324	0.317	0.316	3.1	
Benzene		1.112	0.969	0.969	0.994	0.960	1.001	6.3	
trans-1,3-Dichloropropene		0.484	0.447	0.464	0.457	0.495	0.469	4.2	
2-Chloroethylvinylether		0.193	0.186	0.186	0.194	0.190	0.190	2.0	
Bromoform	#	0.264	0.283	0.301	0.330	0.333	0.302	9.9	#
4-Methyl-2-Pentanone		0.361	0.319	0.312	0.354	0.313	0.332	7.2	
2-Hexanone		0.241	0.243	0.215	0.256	0.225	0.236	6.8	
Tetrachloroethene		0.466	0.437	0.407	0.433	0.407	0.430	5.7	
1,1,2,2-Tetrachloroethane	#	0.608	0.606	0.555	0.632	0.581	0.596	4.9	#
Toluene	*	0.907	0.852	0.778	0.860	0.796	0.839	6.2	*
Chlorobenzene	#	1.105	1.056	0.981	1.093	1.048	1.057	4.6	#
Ethylbenzene	*	0.554	0.527	0.467	0.515	0.483	0.509	6.8	*
Styrene		1.157	1.119	1.029	1.122	1.064	1.098	4.6	
Xylene (total)		0.644	0.619	0.558	0.600	0.582	0.601	5.5	
Toluene-d8		1.318	1.254	1.152	1.246	1.261	1.246	4.8	
Bromofluorobenzene		0.767	0.737	0.743	0.722	0.740	0.742	2.2	
1,2-Dichloroethane-d4		1.915	1.724	1.746	1.683	1.729	1.759	5.1	

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

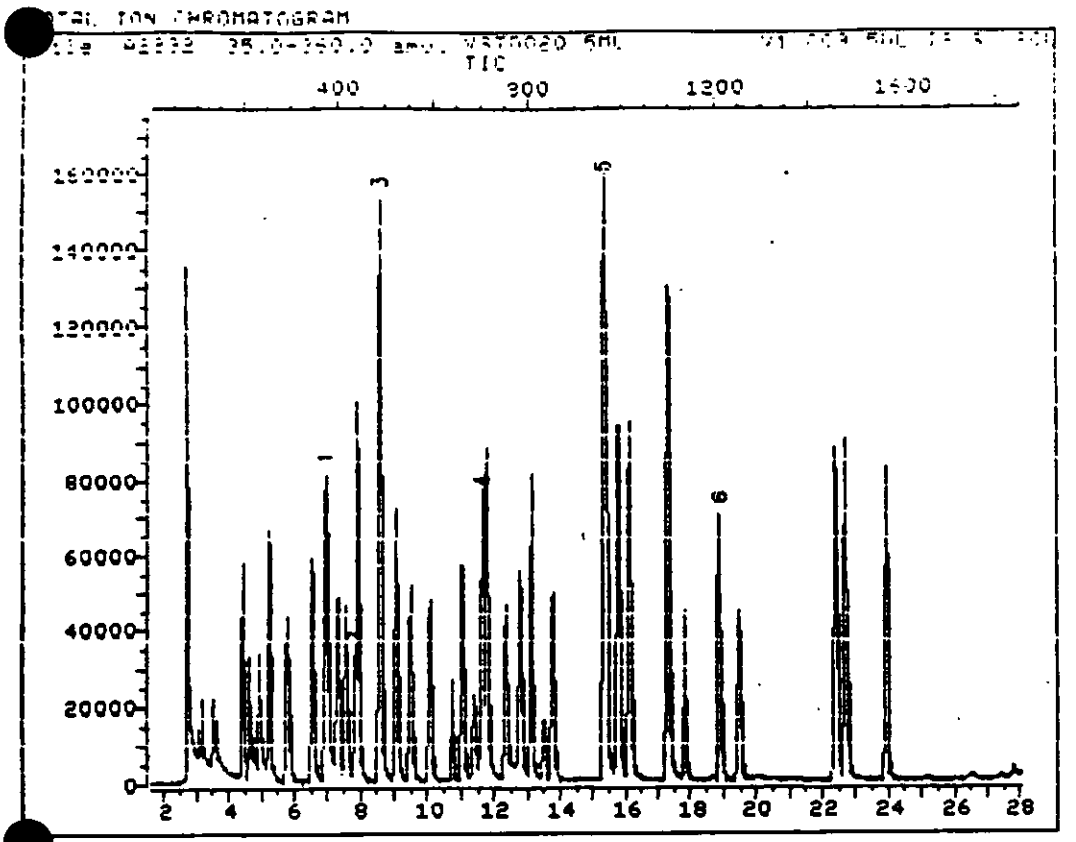
Instrument ID: V6 Calibration Date(s): 10/08/91 10/08/91

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

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = F2791 RRF50 = F2790
RRF100= F2793 RRF150= F2794 RRF200= F2795

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane	#	1.187	1.104	1.101	1.094	0.995	1.096	6.2	#
Bromomethane		1.370	1.103	1.284	1.257	1.110	1.225	9.5	
Vinyl Chloride	*	1.162	1.090	1.180	1.152	1.109	1.139	3.3	*
Chloroethane		0.736	0.602	0.718	0.708	0.556	0.664	12.0	
Methylene Chloride		1.812	1.458	1.407	1.525	1.438	1.528	10.8	
Acetone		0.427	0.434	0.368	0.337	0.309	0.375	14.6	
Carbon Disulfide		3.800	2.994	2.658	2.765	2.888	3.021	15.0	
1,1-Dichloroethene	*	1.293	1.013	0.937	0.874	0.829	0.989	18.5	*
1,1-Dichloroethane	#	3.559	2.860	2.953	3.068	2.949	3.078	9.1	#
1,2-Dichloroethene (total)		1.844	1.488	1.472	1.592	1.507	1.581	9.8	
Chloroform	*	4.006	3.186	3.604	3.591	3.457	3.569	8.3	*
1,2-Dichloroethane		2.610	2.147	2.290	2.232	2.051	2.266	9.4	
2-Butanone		0.379	0.315	0.369	0.335	0.293	0.338	10.7	
1,1,1-Trichloroethane		0.660	0.533	0.557	0.574	0.549	0.575	8.7	
Carbon Tetrachloride		0.544	0.438	0.467	0.480	0.484	0.483	8.0	
Vinyl Acetate		1.062	0.931	0.953	1.015	0.919	0.976	6.2	
Bromodichloromethane		0.724	0.643	0.677	0.698	0.664	0.681	4.6	
1,2-Dichloropropane	*	0.482	0.402	0.414	0.428	0.398	0.425	8.0	*
cis-1,3-Dichloropropene		0.695	0.593	0.643	0.662	0.636	0.646	5.8	
Trichloroethene		0.472	0.386	0.416	0.430	0.413	0.423	7.4	
Dibromochloromethane		0.636	0.562	0.617	0.659	0.631	0.621	5.8	
1,1,2-Trichloroethane		0.454	0.381	0.400	0.408	0.392	0.407	6.9	
Benzene		1.158	0.953	0.982	1.024	0.940	1.011	8.7	
trans-1,3-Dichloropropene		0.621	0.515	0.551	0.531	0.554	0.554	7.3	
2-Chloroethylvinylether		0.274	0.269	0.285	0.334	0.265	0.285	9.9	
Bromoform	#	0.460	0.421	0.479	0.519	0.493	0.474	7.8	#
4-Methyl-2-Pentanone		0.966	0.917	0.974	0.935	0.811	0.921	7.1	
2-Hexanone		0.725	0.699	0.788	0.755	0.655	0.724	7.1	
Tetrachloroethene		0.496	0.427	0.428	0.436	0.415	0.440	7.3	
1,1,2,2-Tetrachloroethane	#	1.140	1.007	1.107	1.122	1.018	1.079	5.7	#
Toluene	*	0.971	0.826	0.823	0.857	0.788	0.853	8.2	*
Chlorobenzene	#	1.219	1.045	1.064	1.106	1.024	1.092	7.1	#
Ethylbenzene	*	0.628	0.497	0.513	0.524	0.488	0.530	10.7	*
Styrene		1.307	1.088	1.107	1.178	1.068	1.150	8.5	
Xylene (total)		0.728	0.622	0.613	0.636	0.582	0.636	8.6	
Toluene-d8		1.314	1.256	1.191	1.215	1.223	1.240	3.8	
Bromofluorobenzene		0.778	0.756	0.756	0.741	0.766	0.759	1.8	
1,2-Dichloroethane-d4		1.969	1.716	1.839	1.751	1.792	1.813	5.4	



Data File: >A2832::D7 Quant Output File: ^A2832::QT
Name: VSTD020 5ML
Misc: V1 C09 5UL IS/S 20UL/200ML VOA A,B,HSL

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

Operator ID: DUDE
Quant Time: 910829 12:08
Injected at: 910829 11:39

QUANT REPORT

Operator ID: DUDE Quant Rev: 6 Quant Time: 910829 12:08
Output File: ^A2832::QT Injected at: 910829 11:39
Data File: >A2832::D7 Dilution Factor: 1.00000
Name: VSTD020 5ML
Misc: V1 C09 5UL IS/S 20UL/200ML VOA A,B,HSL

ID File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

		Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	6.91	373	76378	50.00	UG/L	45
2)	C010	Chloromethane	3.06	104	30618	20.06	UG/L	92
3)	C020	Vinyl Chloride	3.16	111	36350	19.40	UG/L	87
4)	C015	Bromomethane	3.51	135	31506	26.24	UG/L	95
5)	C025	Chloroethane	3.61	142	24324	21.15	UG/L	94
6)	C045	1,1-Dichloroethene	4.39	197	37681	21.91	UG/L	92
7)	C035	Acetone	4.46	202	13162	20.83	UG/L	100
8)	C040	Carbon Disulfide	4.65	215	132185	21.14	UG/L	100
9)	C030	Methylene Chloride	4.92	234	52338	21.11	UG/L	81
10)	C053	Trans-1,2-Dichloroethene	5.24	256	49093	20.92	UG/L	97
11)	C055	cis-1,2-Dichloroethene	6.55	348	57119	21.49	UG/L	92
12)	C050	1,1-Dichloroethane	5.76	293	96538	21.53	UG/L	83
13)	C060	Chloroform	7.01	380	110912	21.22	UG/L	97
14)	C065	1,2-Dichloroethane	7.94	445	79948	21.39	UG/L	100
15)	C110	2-Butanone	6.58	350	6155	21.03	UG/L	89
16)	CS15	D4-1,2-Dichloroethane	7.81	436	63126	25.66	UG/L	91
17)	*CI10	1,4-Difluorobenzene	8.57	489	355098	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.82	297	82300	19.52	UG/L	99
19)	C115	1,1,1-Trichloroethane	7.31	401	88472	22.17	UG/L	92
20)	C120	Carbon Tetrachloride	7.57	419	82519	22.30	UG/L	96
21)	C165	Benzene	7.91	443	177190	22.13	UG/L	100
22)	C150	Trichloroethene	9.05	523	73846	22.33	UG/L	99
23)	C140	1,2-Dichloropropane	9.48	553	63285M	20.91	UG/L	100
24)	C130	Bromodichloromethane	10.05	593	89017	21.16	UG/L	78
25)	C175	2-Chloroethylvinylether	10.72	640	38260	21.87	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	11.01	660	101468M	20.64	UG/L	94
27)	C172	Trans-1,3-Dichloropropen	12.34	753	75764	18.56	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.77	783	56660	21.34	UG/L	76
29)	C155	Dibromochloromethane	13.77	853	86483	20.65	UG/L	95
30)	C180	Bromoform	17.81	1136	73447	20.76	UG/L	93
31)	*CI20	D5-Chlorobenzene	15.31	961	302592	50.00	UG/L	100
32)	CS05	D8-Toluene	11.61	702	178616	23.72	UG/L	85
33)	C205	4-Methyl-2-Pentanone	11.41	688	59842	20.30	UG/L	88
34)	C230	Toluene	11.78	714	113164	21.47	UG/L	96
35)	C210	2-Hexanone	13.48	833	42726	20.64	UG/L	94
36)	C220	Tetrachloroethene	13.10	806	69536	22.43	UG/L	95
37)	C235	Chlorobenzene	15.40	967	151689	21.83	UG/L	69
38)	C240	Ethylbenzene	15.75	992	74144	21.86	UG/L	99
39)	CXXX	Xylene (p)	16.11	1017	92569	21.82	UG/L	98
40)	CXXX	Xylene (o)	17.27	1098	86277	21.84	UG/L	95
41)	C245	Styrene	17.33	1102	146825	21.59	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.47	1252	87071	20.86	UG/L	94

9/30/91

9/30/91

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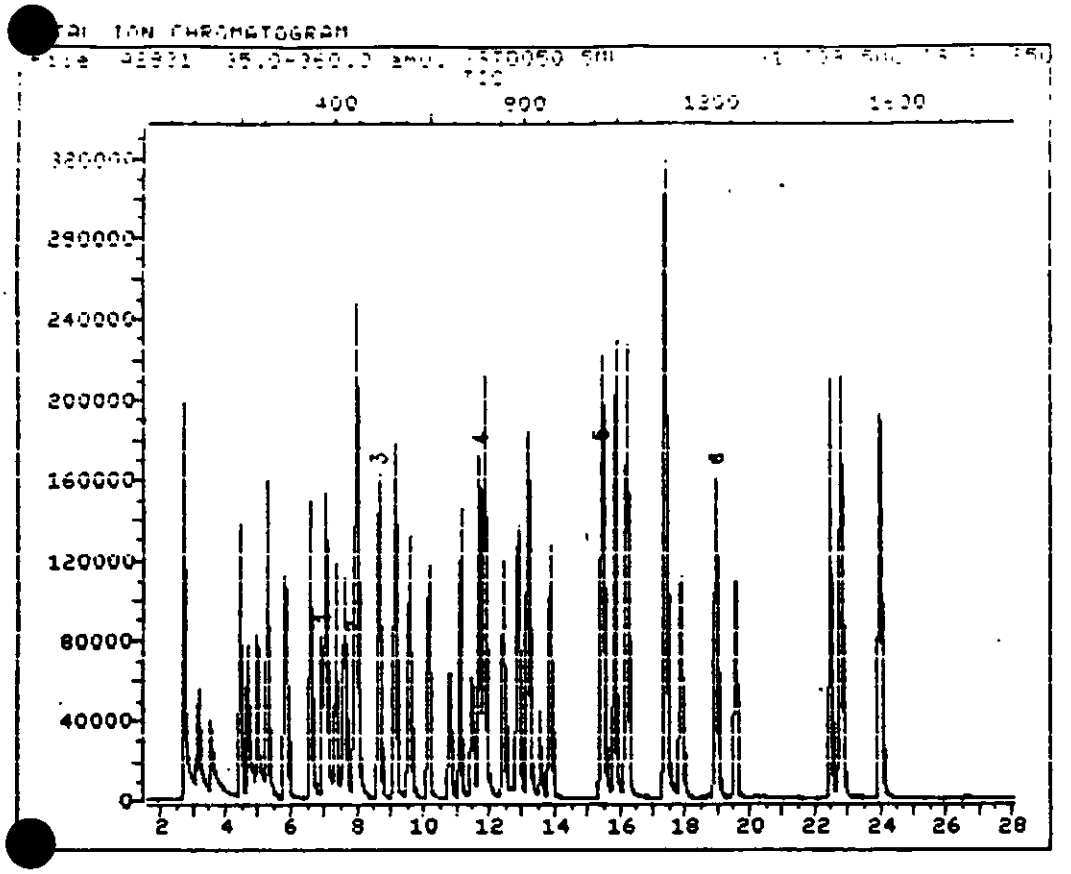
		Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	22.39	1456	139648	22.50	UG/L	100
45)	C340	Dichlorobenzene (p)	22.70	1478	141730	22.78	UG/L	100
46)	C350	Dichlorobenzene (o)	23.91	1563	131522	22.40	UG/L	100
47)	C250	Xylene (Total)	17.27	1098	83830	21.37	UG/L	97

* Compound is ISTD



Data File: >A2831::D7 Quant Output File: ^A2831::QT
Name: VSTD050 5ML
Misc: V1 C09 5UL IS/S 25UL/100ML VOA A,B,HSL

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910828 22:18

Operator ID: MANAGER
Quant Time: 910829 11:24
Injected at: 910829 10:55

QUANT REPORT

Operator ID: MANAGER Quant Rev: 6 Quant Time: 910829 11:24
Output File: ^A2831::QT Injected at: 910829 10:55
Data File: >A2831::07 Dilution Factor: 1.00000
Name: VSTD050 5ML
Misc: V1 C09 5UL IS/S 25UL/100ML VOA A,B,HSL

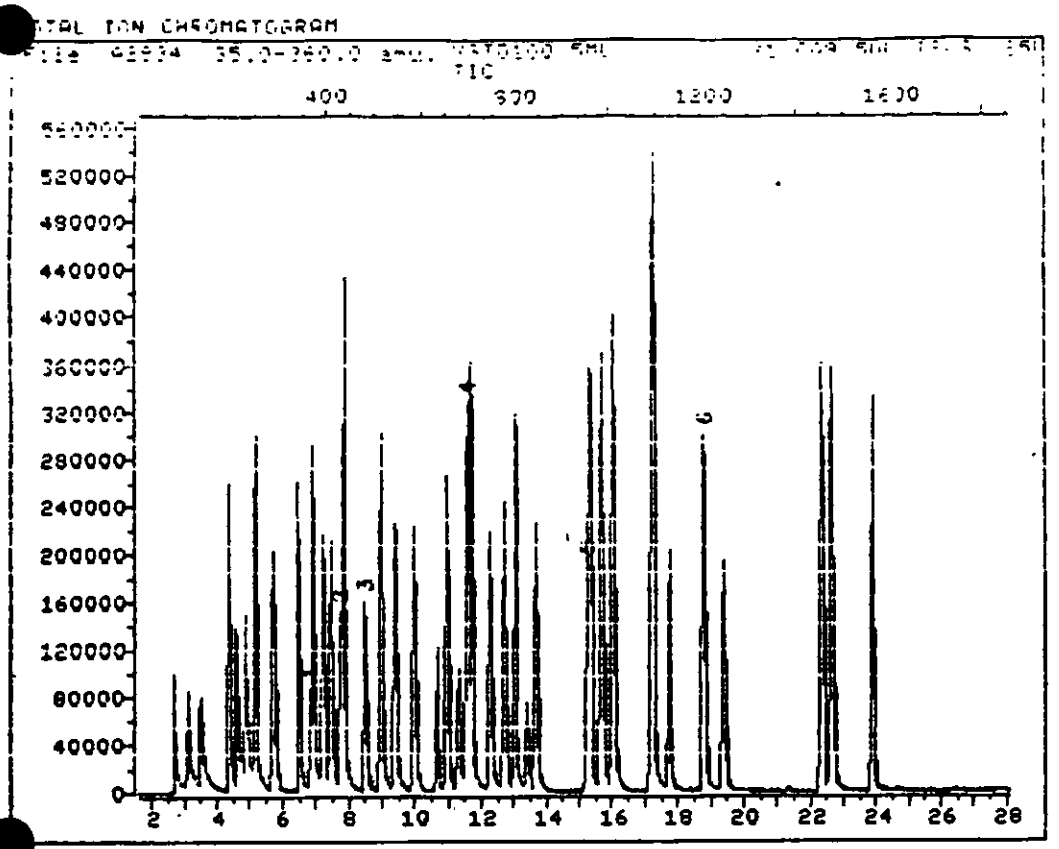
ID File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910828 22:18

		Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	6.95	376	83353	50.00	UG/L	37
2)	C010	Chloromethane	3.08	105	83292	49.99	UG/L	95
3)	C020	Vinyl Chloride	3.19	113	102260	50.71	UG/L	86
4)	C015	Bromomethane	3.52	136	65512	48.25	UG/L	92
5)	C025	Chloroethane	3.62	143	62745	49.23	UG/L	95
6)	C045	1,1-Dichloroethene	4.42	199	93837	48.58	UG/L	91
7)	C035	Acetone	4.49	204	34481	51.69	UG/L	100
8)	C040	Carbon Disulfide	4.68	217	341204	49.86	UG/L	100
9)	C030	Methylene Chloride	4.95	236	135256	51.55	UG/L	73
10)	C053	Trans-1,2-Dichloroethene	5.28	259	128028	51.84	UG/L	97
11)	C055	cis-1,2-Dichloroethene	6.59	351	145036	51.38	UG/L	94
12)	C050	1,1-Dichloroethane	5.81	296	244708	51.35	UG/L	86
13)	C060	Chloroform	7.06	384	285216	51.51	UG/L	94
14)	C065	1,2-Dichloroethane	7.99	449	203980	51.13	UG/L	100
15)	C110	2-Butanone	6.62	353	15974	51.85	UG/L	87
16)	CS15	D4-1,2-Dichloroethane	7.86	440	134247	43.22	UG/L	89
17)	*CI10	1,4-Difluorobenzene	8.62	493	384471	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.85	299	228225	181.27	UG/L	98
19)	C115	1,1,1-Trichloroethane	7.35	404	216065	53.29	UG/L	93
20)	C120	Carbon Tetrachloride	7.62	423	200331	52.20	UG/L	99
21)	C165	Benzene	7.96	447	433445	52.96	UG/L	100
22)	C150	Trichloroethene	9.11	527	178997	47.58	UG/L	98
23)	C140	1,2-Dichloropropane	9.55	558	165073M	48.61	UG/L	100
24)	C130	Bromodichloromethane	10.11	597	227752	52.59	UG/L	78
25)	C175	2-Chloroethylvinylether	10.78	644	94707	50.86	UG/L	93
26)	C143	Cis-1,3-Dichloropropen	11.10	666	260994M	54.50	UG/L	99
27)	C172	Trans-1,3-Dichloropropen	12.41	758	203304	50.37	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.85	789	143742	53.22	UG/L	66
29)	C155	Dibromochloromethane	13.84	858	226739	53.82	UG/L	92
30)	C180	Bromoform	17.89	1141	191550	53.26	UG/L	99
31)	*CI20	D5-Chlorobenzene	15.38	966	321107	50.00	UG/L	100
32)	CS05	D8-Toluene	11.70	708	399484	50.84	UG/L	87
33)	C205	4-Methyl-2-Pentanone	11.47	692	156434	57.82	UG/L	86
34)	C230	Toluene	11.85	719	279684	55.50	UG/L	98
35)	C210	2-Hexanone	13.55	838	109823	58.24	UG/L	98
36)	C220	Tetrachloroethene	13.17	811	164482	53.64	UG/L	93
37)	C235	Chlorobenzene	15.47	972	368690	53.64	UG/L	70
38)	C240	Ethylbenzene	15.83	997	179953	54.39	UG/L	99
39)	CXXX	Xylene (p)	16.18	1022	225092	56.22	UG/L	98
40)	CXXX	Xylene (o)	17.34	1103	209599	54.08	UG/L	95
41)	C245	Styrene	17.40	1107	360858	54.26	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.54	1257	221509	66.69	UG/L	94

00141

		Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	22.46	1461	329306	53.35	UG/L	100
45)	C340	Dichlorobenzene (p)	22.77	1483	330127	53.70	UG/L	100
46)	C350	Dichlorobenzene (o)	23.99	1568	311538	53.35	UG/L	100
47)	C250	Xylene (Total)	17.34	1103	208136	54.12	UG/L	97

* Compound is ISTD



Data File: >A2834::D7 Quant Output File: ^A2834::QT
Name: VSTD100 5ML
Misc: V1 C09 5UL IS/S 25UL/50 ML VOA A,B,HSL

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

Operator ID: MANAGER
Quant Time: 910829 14:15
Injected at: 910829 13:46

QUANT REPORT

Operator ID: MANAGER Quant Rev: 6 Quant Time: 910829 14:15
Output File: ^A2834::QT Injected at: 910829 13:46
Data File: >A2834::D7 Dilution Factor: 1.00000
Name: VSTD100 5ML
Misc: V1 C09 5UL IS/S 25UL/50 ML VOA A,B,HSL

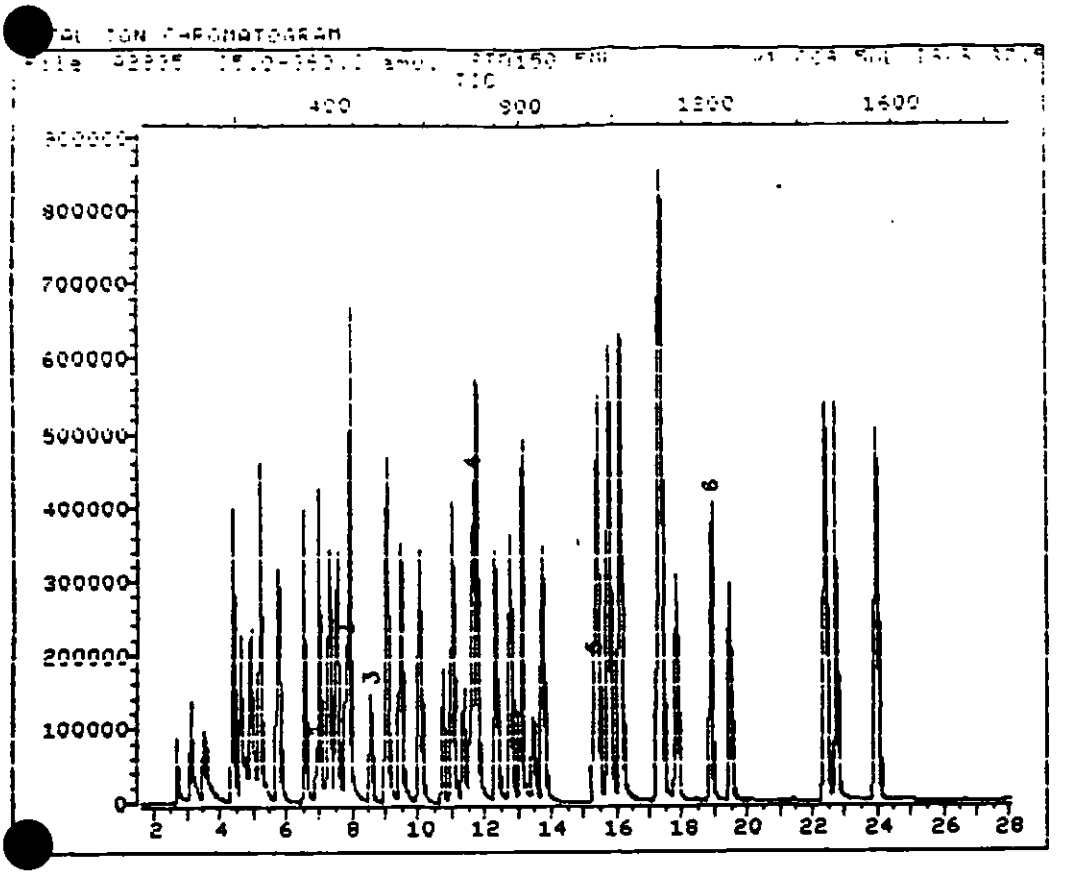
ID File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

		Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	6.84	368	78217	50.00	UG/L	43
2)	C010	Chloromethane	3.03	102	132706	84.89	UG/L	94
3)	C020	Vinyl Chloride	3.15	110	169354	88.24	UG/L	86
4)	C015	Bromomethane	3.48	133	146296	118.99	UG/L	95
5)	C025	Chloroethane	3.58	140	107146	90.99	UG/L	97
6)	C045	1,1-Dichloroethene	4.35	194	183360	104.12	UG/L	93
7)	C035	Acetone	4.42	199	54155	83.69	UG/L	100
8)	C040	Carbon Disulfide	4.61	212	624836	97.58	UG/L	100
9)	C030	Methylene Chloride	4.88	231	222401	87.61	UG/L	86
10)	C053	Trans-1,2-Dichloroethene	5.19	253	229867	95.67	UG/L	96
11)	C055	cis-1,2-Dichloroethene	6.48	343	258500	94.97	UG/L	91
12)	C050	1,1-Dichloroethane	5.71	289	452739	98.58	UG/L	85
13)	C060	Chloroform	6.95	376	565254	105.60	UG/L	99
14)	C065	1,2-Dichloroethane	7.87	440	380051	99.28	UG/L	100
15)	C110	2-Butanone	6.51	345	26214	87.44	UG/L	87
16)	CS15	D4-1,2-Dichloroethane	7.74	431	289645	114.96	UG/L	89
17)	*CI10	1,4-Difluorobenzene	8.50	484	371650	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.76	293	402069	91.12	UG/L	96
19)	C115	1,1,1-Trichloroethane	7.24	396	407881	97.64	UG/L	92
20)	C120	Carbon Tetrachloride	7.49	414	389003	100.44	UG/L	99
21)	C165	Benzene	7.84	438	739897	88.30	UG/L	100
22)	C150	Trichloroethene	8.98	518	311468	90.01	UG/L	98
23)	C140	1,2-Dichloropropane	9.41	548	287461M	91.00	UG/L	100
24)	C130	Bromodichloromethane	9.97	587	427505	97.09	UG/L	79
25)	C175	2-Chloroethylvinylether	10.64	634	176951	96.64	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	10.94	655	468359M	96.91	UG/L	96
27)	C172	Trans-1,3-Dichloropropen	12.26	747	378677	88.64	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.70	778	254565	91.60	UG/L	67
29)	C155	Dibromochloromethane	13.67	846	424192	96.77	UG/L	94
30)	C180	Bromoform	17.72	1129	362042	97.76	UG/L	99
31)	*CI20	D5-Chlorobenzene	15.23	955	307292	50.00	UG/L	100
32)	CS05	D8-Toluene	11.54	697	762859	99.77	UG/L	85
33)	C205	4-Methyl-2-Pentanone	11.33	682	270273	90.27	UG/L	87
34)	C230	Toluene	11.70	708	485339	90.67	UG/L	98
35)	C210	2-Hexanone	13.39	826	191286	91.00	UG/L	96
36)	C220	Tetrachloroethene	13.02	800	288181	91.54	UG/L	84
37)	C235	Chlorobenzene	15.32	961	648020	91.83	UG/L	72
38)	C240	Ethylbenzene	15.67	986	316408	91.87	UG/L	90
39)	CXXX	Xylene (p)	16.03	1011	367159	85.22	UG/L	96
40)	CXXX	Xylene (o)	17.18	1091	359584	89.64	UG/L	95
41)	C245	Styrene	17.25	1096	620036	89.77	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.39	1246	401319	94.66	UG/L	92

000144

	Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C335 Dichlorobenzene (m)	22.32	1451	570768	90.56	UG/L	100
45)	C340 Dichlorobenzene (p)	22.64	1473	567049	89.74	UG/L	100
46)	C350 Dichlorobenzene (o)	23.87	1559	534670	89.67	UG/L	100
47)	C250 Xylene (Total)	17.18	1091	357382	89.71	UG/L	96

* Compound is ISTD



Data File: >A2835::D7 Quant Output File: ^A2835::QT
Name: VSTD150 5ML
Misc: V1 C09 5UL IS/S 37.5 /50 ML VOA A,B,HSL

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

Operator ID: MANAGER
Quant Time: 910829 14:51
Injected at: 910829 14:22

QUANT REPORT

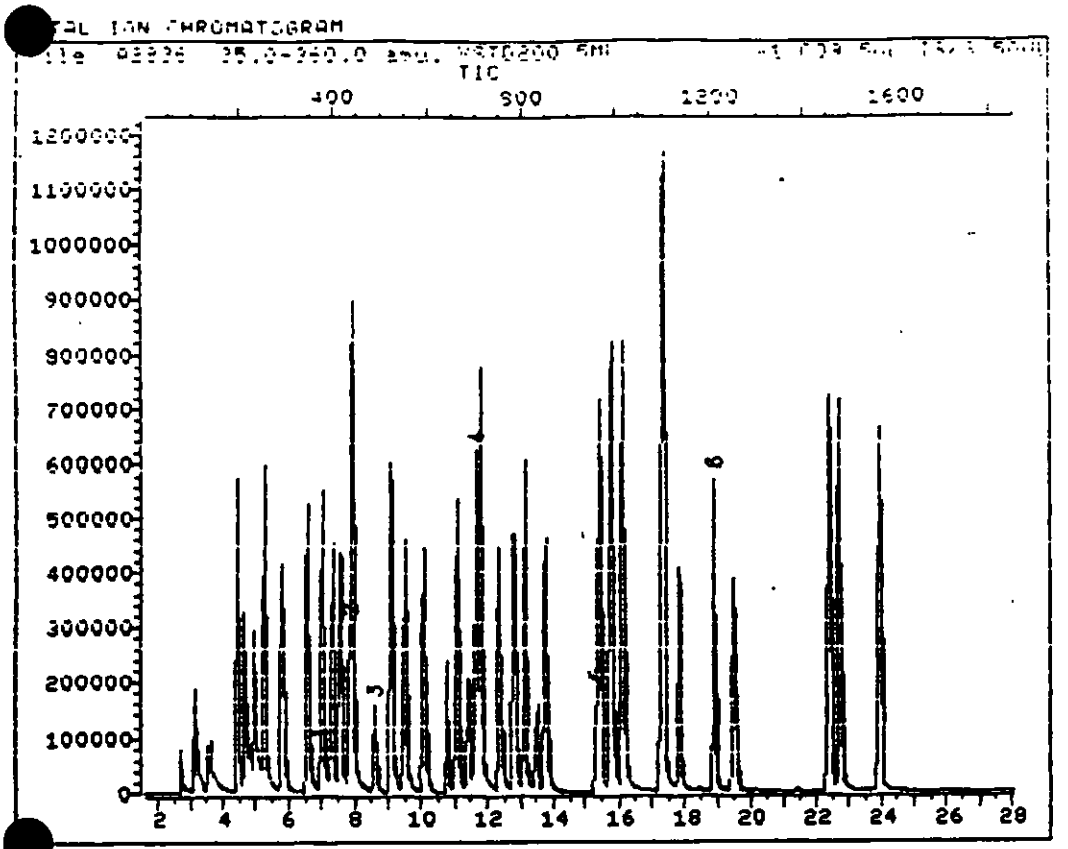
Operator ID: MANAGER Quant Rev: 6 Quant Time: 910829 14:51
Output File: ^A2835::QT Injected at: 910829 14:22
Data File: >A2835::07 Dilution Factor: 1.00000
Name: VSTD150 5ML
Misc: V1 C09 5UL IS/S 37.5 /50 ML VOA A,B,HSL

ID File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

		Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*C101	Bromochloromethane	6.88	371	72149	50.00	UG/L	36
2)	C010	Chloromethane	3.05	103	215004	149.11	UG/L	99
3)	C020	Vinyl Chloride	3.16	111	278563	157.35	UG/L	89
4)	C015	Bromomethane	3.48	133	184548	162.72	UG/L	95
5)	C025	Chloroethane	3.58	140	176076	162.10	UG/L	96
6)	C045	1,1-Dichloroethene	4.36	195	291214	179.27	UG/L	90
7)	C035	Acetone	4.45	201	86625	145.12	UG/L	100
8)	C040	Carbon Disulfide	4.64	214	1076973	182.33	UG/L	100
9)	C030	Methylene Chloride	4.91	233	385440	164.61	UG/L	75
10)	C053	Trans-1,2-Dichloroethene	5.22	255	362995	163.78	UG/L	91
11)	C055	cis-1,2-Dichloroethene	6.52	346	411168	163.76	UG/L	97
12)	C050	1,1-Dichloroethane	5.74	291	696625	164.44	UG/L	85
13)	C060	Chloroform	7.00	379	856893	173.55	UG/L	96
14)	C065	1,2-Dichloroethane	7.93	444	588119	166.55	UG/L	100
15)	C110	2-Butanone	6.55	348	38874	140.57	UG/L	90
16)	CS15	D4-1,2-Dichloroethane	7.80	435	401621	172.81	UG/L	93
17)	*C110	1,4-Difluorobenzene	8.54	487	348543	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.79	295	559593	135.23	UG/L	99
19)	C115	1,1,1-Trichloroethane	7.28	399	660237	168.54	UG/L	92
20)	C120	Carbon Tetrachloride	7.54	417	603144	166.05	UG/L	98
21)	C165	Benzene	7.90	442	1134088	144.31	UG/L	100
22)	C150	Trichloroethene	9.03	521	485727	149.47	UG/L	92
23)	C140	1,2-Dichloropropane	9.47	552	445895M	156.67	UG/L	100
24)	C130	Bromodichloromethane	10.03	591	669130	162.04	UG/L	79
25)	C175	2-Chloroethylvinylether	10.70	638	264241	153.88	UG/L	97
26)	C143	Cis-1,3-Dichloropropen	11.01	660	736657M	170.84	UG/L	98
27)	C172	Trans-1,3-Dichloropropen	12.33	752	584426	145.86	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.76	782	381195	146.27	UG/L	70
29)	C155	Dibromochloromethane	13.75	851	645295	156.97	UG/L	86
30)	C180	Bromoform	17.81	1135	544102	156.67	UG/L	98
31)	*C120	D5-Chlorobenzene	15.31	960	283609	50.00	UG/L	100
32)	CS05	D8-Toluene	11.60	701	1043402	147.86	UG/L	84
33)	C205	4-Methyl-2-Pentanone	11.39	686	413232	149.54	UG/L	89
34)	C230	Toluene	11.76	712	764090	154.66	UG/L	96
35)	C210	2-Hexanone	13.46	831	287719	148.31	UG/L	95
36)	C220	Tetrachloroethene	13.09	805	439742	151.35	UG/L	98
37)	C235	Chlorobenzene	15.39	966	1011649	155.33	UG/L	72
38)	C240	Ethylbenzene	15.75	991	491687	154.68	UG/L	93
39)	CXXX	Xylene (p)	16.12	1017	592967	149.13	UG/L	96
40)	CXXX	Xylene (o)	17.27	1097	544414	147.04	UG/L	90
41)	C245	Styrene	17.32	1101	973525	152.73	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.46	1250	600989	153.59	UG/L	92

	Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C335 Dichlorobenzene (m)	22.40	1456	858350	147.56	UG/L	100
45)	C340 Dichlorobenzene (p)	22.71	1478	834408	143.09	UG/L	100
46)	C350 Dichlorobenzene (o)	23.94	1564	798290	145.06	UG/L	100
47)	C250 Xylene (Total)	17.27	1097	540381	146.98	UG/L	97

* Compound is ISTD



Data File: >A2836::D7 Quant Output File: ^A2836::QT
Name: VSTD200 5ML
Misc: V1 C09 5UL IS/S 50UL /50 ML VOA A,B,HSL

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

Operator ID: MANAGER
Quant Time: 910829 15:27
Injected at: 910829 14:58

QUANT REPORT

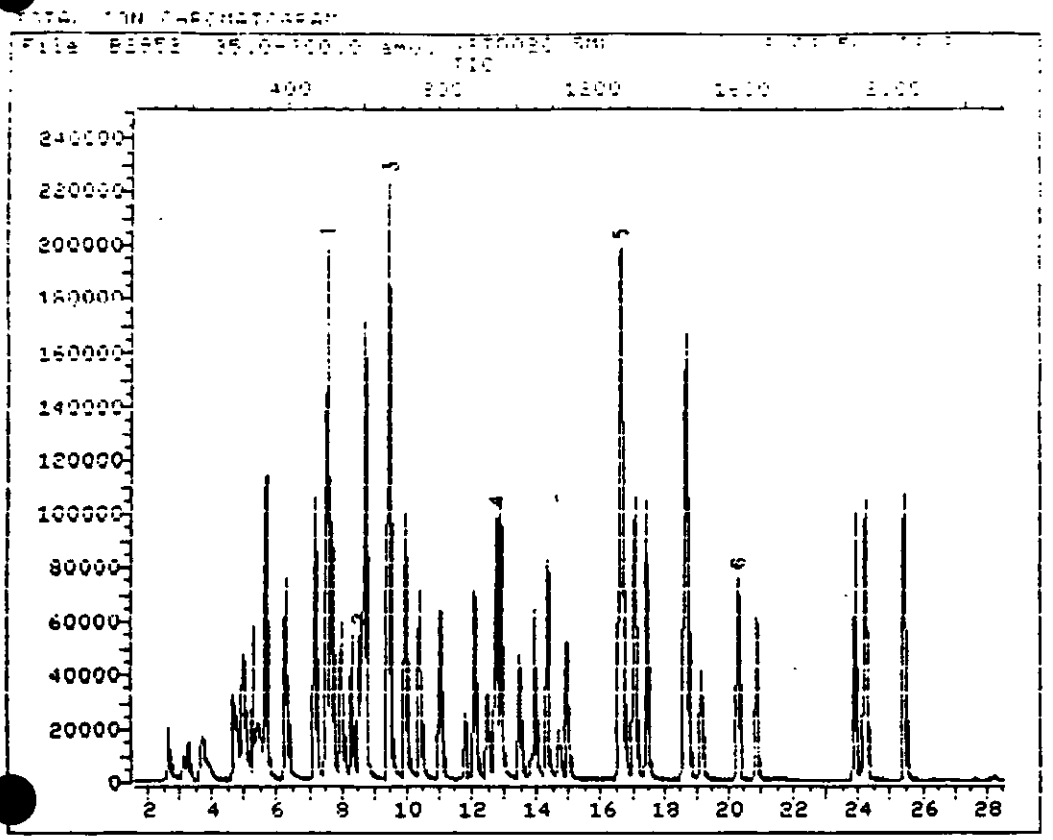
Operator ID: MANAGER Quant Rev: 6 Quant Time: 910829 15:27
Output File: ^A2836::QT Injected at: 910829 14:58
Data File: >A2836::07 Dilution Factor: 1.00000
Name: VSTD200 5ML
Misc: V1 C09 5UL IS/S 50UL /50 ML VOA A,B,HSL

ID File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910829 11:45

		Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	6.92	374	79470	50.00	UG/L	39
2)	C010	Chloromethane	3.06	104	285890	180.00	UG/L	96
3)	C020	Vinyl Chloride	3.18	112	362563	185.94	UG/L	88
4)	C015	Bromomethane	3.51	135	204541	163.74	UG/L	94
5)	C025	Chloroethane	3.61	142	197818	165.34	UG/L	95
6)	C045	1,1-Dichloroethene	4.41	198	375789	210.02	UG/L	85
7)	C035	Acetone	4.48	203	120419	183.15	UG/L	100
8)	C040	Carbon Disulfide	4.66	216	1485222	228.28	UG/L	100
9)	C030	Methylene Chloride	4.94	235	515623	199.92	UG/L	62
10)	C053	Trans-1,2-Dichloroethene	5.25	257	461586	189.08	UG/L	94
11)	C055	cis-1,2-Dichloroethene	6.57	349	542697	196.23	UG/L	97
12)	C050	1,1-Dichloroethane	5.78	294	950357	203.67	UG/L	82
13)	C060	Chloroform	7.04	382	1134736	208.65	UG/L	97
14)	C065	1,2-Dichloroethane	7.95	446	779850	200.50	UG/L	100
15)	C110	2-Butanone	6.59	351	54174	177.85	UG/L	86
16)	CS15	D4-1,2-Dichloroethane	7.84	438	585540	228.74	UG/L	92
17)	*CI10	1,4-Difluorobenzene	8.60	491	360656	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.84	298	767677	179.29	UG/L	95
19)	C115	1,1,1-Trichloroethane	7.32	402	866744	213.82	UG/L	91
20)	C120	Carbon Tetrachloride	7.58	420	802601	213.55	UG/L	98
21)	C165	Benzene	7.93	444	1539289	189.29	UG/L	100
22)	C150	Trichloroethene	9.07	524	613113	182.57	UG/L	97
23)	C140	1,2-Dichloropropane	9.51	555	576032M	190.19	UG/L	100
24)	C130	Bromodichloromethane	10.07	594	876560	205.14	UG/L	80
25)	C175	2-Chloroethylvinylether	10.74	641	357440	201.17	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	11.04	662	977817M	201.74	UG/L	98
27)	C172	Trans-1,3-Dichloropropen	12.36	754	779468	188.01	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.79	784	503160	186.58	UG/L	67
29)	C155	Dibromochloromethane	13.78	853	838386	197.09	UG/L	99
30)	C180	Bromoform	17.83	1136	706098	196.48	UG/L	99
31)	*CI20	D5-Chlorobenzene	15.32	961	293563	50.00	UG/L	100
32)	CS05	D8-Toluene	11.63	703	1486353	203.49	UG/L	85
33)	C205	4-Methyl-2-Pentanone	11.42	688	552084	193.02	UG/L	88
34)	C230	Toluene	11.79	714	1007286	196.97	UG/L	94
35)	C210	2-Hexanone	13.49	833	392938	195.68	UG/L	96
36)	C220	Tetrachloroethene	13.12	807	553819	184.15	UG/L	93
37)	C235	Chlorobenzene	15.41	967	1326960	196.84	UG/L	72
38)	C240	Ethylbenzene	15.77	992	631312	191.87	UG/L	95
39)	CXXX	Xylene (p)	16.14	1018	775127	188.34	UG/L	92
40)	CXXX	Xylene (o)	17.30	1099	719879	187.84	UG/L	89
41)	C245	Styrene	17.35	1103	1295035	196.27	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.47	1251	791768	195.49	UG/L	93

		Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	22.40	1456	1092409	181.43	UG/L	100
45)	C340	Dichlorobenzene (p)	22.72	1478	1096034	181.58	UG/L	100
46)	C350	Dichlorobenzene (o)	23.93	1563	1021783	179.38	UG/L	100
47)	C250	Xylene (Total)	17.30	1099	711553	186.97	UG/L	97

* Compound is ISTD



Data File: >B2952::D6 Quant Output File: ^B2952::Q1
Name: VSTD020 5ML
Misc: V2 C3 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 910829 00:11

Operator ID: NORA
Quant Time: 911011 19:25
Injected at: 911011 18:56

Quant Report

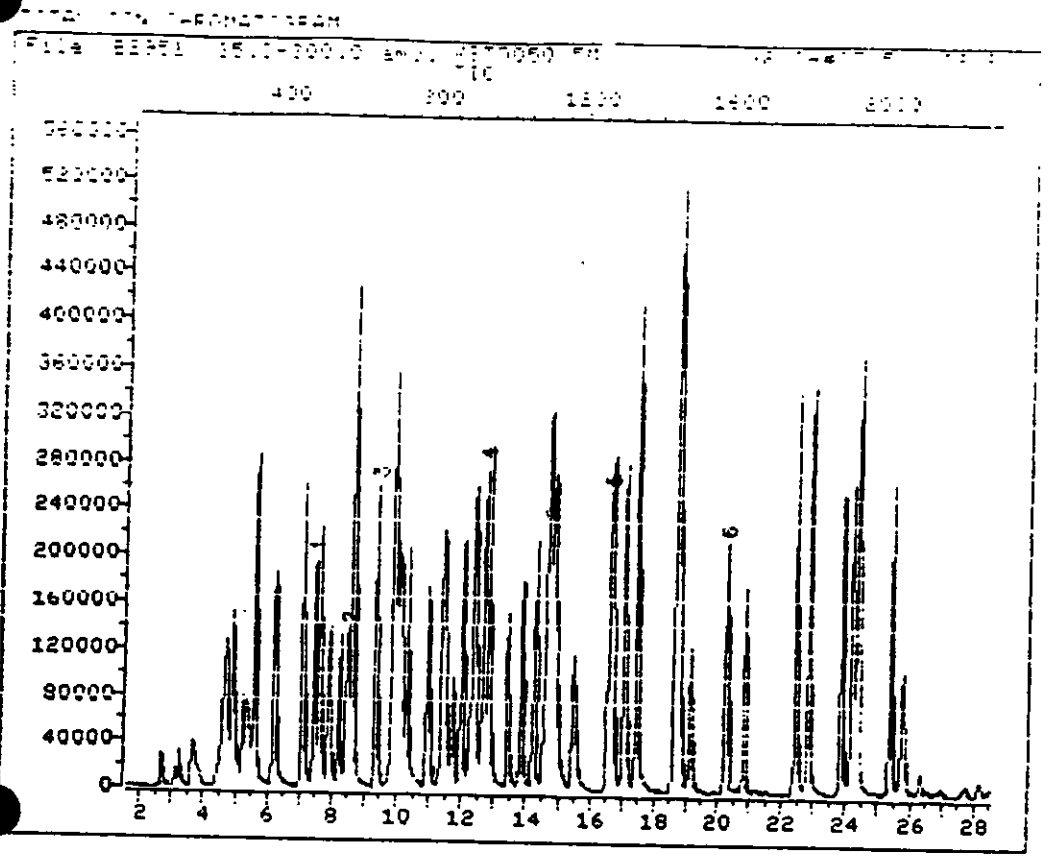
Operator id: [illegible] Quant Period: 6 Quant Time: [illegible]
Output File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: [illegible]
Name: 9510020 5ML
Misc: 02 03 50UL 15/5

ID File: V0401::$$
Title: HSL VOLATILES:105mmx.53mm:U8624:02:ERCO/ENGELO
Last Calibration: 910829 00:11

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.53	128.0	136078	50.00	UG/L	82
2)	C010	Chloromethane	3.12	50.0	37658	18.12	UG/L	97
3)	C020	Vinyl Chloride	3.26	62.0	60131	23.80	UG/L	87
4)	C015	Bromomethane	3.69	94.0	56473	26.60	UG/L	89
5)	C025	Chloroethane	3.88	64.0	39899	22.99	UG/L	96
6)	C045	1,1-Dichloroethene	4.64	96.0	29701	8.45	UG/L	98
7)	C035	Acetone	4.71	43.0	23320	9.35	UG/L	100
8)	C040	Carbon Disulfide	4.99	76.0	281098	19.64	UG/L	100
9)	C030	Methylene Chloride	5.26	84.0	53069	8.02	UG/L	87
10)	C053	Trans-1,2-Dichloroethene	5.63	96.0	103983	20.00	UG/L	99
11)	C055	cis-1,2-Dichloroethene	7.14	96.0	109314	21.70	UG/L	92
12)	C050	1,1-Dichloroethane	6.24	63.0	192411	18.54	UG/L	89
13)	C060	Chloroform	7.68	83.0	187169	19.54	UG/L	96
14)	C065	1,2-Dichloroethane	8.69	62.0	116405	16.97	UG/L	100
15)	C110	2-Butanone	7.17	43.0	54919	60.48	UG/L	95
16)	CS15	D4-1,2-Dichloroethane	8.55	65.0	85367	16.96	UG/L	84
17)	*C110	1,4-Difluorobenzene	9.43	114.0	524984	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.34	43.0	163205	18.02	UG/L	97
19)	C115	1,1,1-Trichloroethane	8.00	97.0	112633	17.84	UG/L	91
20)	C120	Carbon Tetrachloride	8.30	117.0	102908	17.87	UG/L	97
21)	C165	Benzene	8.67	78.0	304334	21.19	UG/L	100
22)	C150	Trichloroethene	9.95	130.0	101134	23.98	UG/L	99
23)	C140	1,2-Dichloropropane	10.40	63.0	96702	18.69	UG/L	100
24)	C130	Bromodichloromethane	11.02	83.0	130804	19.77	UG/L	79
25)	C175	2-Chloroethylvinylether	11.77	63.0	39915	13.39	UG/L	99
26)	C143	Cis-1,3-Dichloropropen	12.07	75.0	130504	19.86	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	13.47	75.0	82221	15.64	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.92	97.0	68000	19.79	UG/L	67
29)	C155	Dibromochloromethane	14.94	129.0	90927	20.09	UG/L	95
30)	C180	Bromoform	19.13	173.0	63130	18.52	UG/L	97
31)	*C120	D5-Chlorobenzene	16.57	117.0	367336	50.00	UG/L	100
32)	CS05	D8-Toluene	12.71	98.0	218568	20.74	UG/L	94
33)	C205	4-Methyl-2-Pentanone	12.49	43.0	87905	9.16	UG/L	86
34)	C230	Toluene	12.88	92.0	142783	20.28	UG/L	96
35)	C210	2-Hexanone	14.68	43.0	51387	9.01	UG/L	97
36)	C220	Tetrachloroethene	14.29	164.0	66762	23.11	UG/L	91
37)	C235	Chlorobenzene	16.65	112.0	171726	22.89	UG/L	75
38)	C240	Ethylbenzene	17.06	106.0	82047	21.89	UG/L	97
39)	CXXX	Xylene (p)	17.43	106.0	100626	22.22	UG/L	99
40)	CXXX	Xylenes (o)	18.61	106.0	112144	24.48	UG/L	97
41)	C245	Styrene	18.67	104.0	173224	23.65	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.84	83.0	136168	18.32	UG/L	94
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	98625	21.91	UG/L	79

	Compound		R.T.	J ion	Area	conc		I
[illegible]	[illegible]	Dichlorobenzene	(m)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene	(p)	24.10	146.0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene	(o)	25.41	146.0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Xylene (Total)		18.61	106.0	[illegible]	[illegible]	[illegible]

* Compound is ISTD



Data File: >B2951::D6 Quant Output File: ^B2951::QT
Name: VSTD050 5ML
Misc: V2 CH#U7 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 910829 00:11

Operator ID: NORA
Quant Time: 911011 18:21
Injected at: 911011 17:45

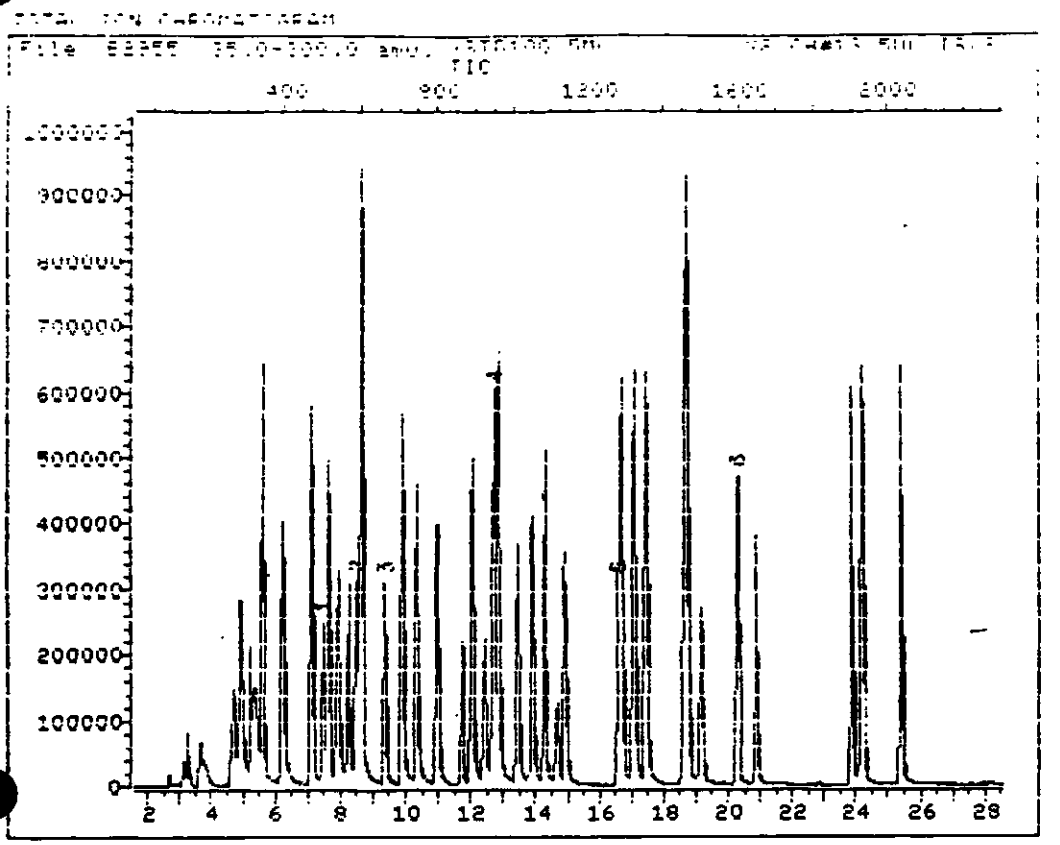
Operator ID: [illegible] Quant Method: 6 Quant Time: [illegible]
Output File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.0000
Name: VS:0050 5ML
Misc: 02 CH#07 90UL IS 5

ID File: 00H102::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:02:ERCO/ENSELO
Last Calibration: 910829 00:11

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.44	128.0	132167	50.00	UG/L	81
2)	C010	Chloromethane	3.08	50.0	54447	26.98	UG/L	98
3)	C020	Vinyl Chloride	3.21	62.0	112846	45.99	UG/L	88
4)	C015	Bromomethane	3.62	94.0	114612	55.58	UG/L	93
5)	C025	Chloroethane	3.82	64.0	83450	49.50	UG/L	97
6)	C045	1,1-Dichloroethene	4.68	96.0	148196	43.39	UG/L	98
7)	C035	Acetone	4.65	43.0	184082	75.96	UG/L	100
8)	C040	Carbon Disulfide	4.90	76.0	658896	47.39	UG/L	100
9)	C030	Methylene Chloride	5.18	84.0	69839	10.86	UG/L	84
10)	C053	Trans-1,2-Dichloroethene	5.57	96.0	249393	49.38	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.05	96.0	274344	56.08	UG/L	94
12)	C050	1,1-Dichloroethane	6.15	63.0	480279	47.64	UG/L	85
13)	C060	Chloroform	7.58	83.0	468229	50.34	UG/L	96
14)	C065	1,2-Dichloroethane	8.60	62.0	309849	46.51	UG/L	100
15)	C110	2-Butanone	7.08	43.0	149911	169.99	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.46	65.0	210883	43.15	UG/L	81
17)	*C110	1,4-Difluorobenzene	9.34	114.0	607975	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.25	43.0	595453	56.72	UG/L	98
19)	C115	1,1,1-Trichloroethane	7.91	97.0	274393	37.51	UG/L	91
20)	C120	Carbon Tetrachloride	8.21	117.0	253246	37.95	UG/L	97
21)	C165	Benzene	8.58	78.0	771706	46.37	UG/L	100
22)	C150	Trichloroethene	9.86	130.0	253256	51.81	UG/L	99
23)	C140	1,2-Dichloropropane	10.31	63.0	259303	43.25	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	357676	46.65	UG/L	78
25)	C175	2-Chloroethylvinylether	11.69	63.0	128078	37.07	UG/L	93
26)	C143	Cis-1,3-Dichloropropen	12.01	75.0	397955	52.26	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	13.43	75.0	267830	43.95	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.87	97.0	199810	50.16	UG/L	72
29)	C155	Dibromochloromethane	14.91	129.0	276425	52.70	UG/L	99
30)	C180	Bromoform	19.12	173.0	195648	49.51	UG/L	97
31)	*C120	D5-Chlorobenzene	16.57	117.0	454894	50.00	UG/L	100
32)	CS05	D8-Toluene	12.65	98.0	600575	46.02	UG/L	95
33)	C205	4-Methyl-2-Pentanone	12.43	43.0	260803	21.94	UG/L	84
34)	C230	Toluene	12.83	92.0	399745	45.84	UG/L	96
35)	C210	2-Hexanone	14.64	43.0	144652	20.49	UG/L	99
36)	C220	Tetrachloroethene	14.25	164.0	183139	51.18	UG/L	89
37)	C235	Chlorobenzene	16.65	112.0	474314	51.06	UG/L	74
38)	C240	Ethylbenzene	17.05	106.0	219923	47.37	UG/L	97
39)	CXXX	Xylene (p)	17.43	106.0	257928	45.99	UG/L	98
40)	CXXX	Xylenes (o)	18.60	106.0	276800	48.79	UG/L	93
41)	C245	Styrene	18.66	104.0	446756	49.25	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.83	83.0	388993	42.26	UG/L	93

	Compound							
44)	C525	Dichlorobenzene (m)	27.51	140.0	2460 *	47.10	UG/L	1.1
45)	C540	Dichlorobenzene (p)	24.15	140.0	2460 *	48.16	UG/L	1.1
46)	C550	Dichlorobenzene (o)	25.38	140.0	4082**	51.47	UG/L	1.0
47)	C250	Xylene (total)	18.60	100.0	2702**	47.39	UG/L	43

* Compound is 1510



Data File: >B2955::D6 Quant Output File: ^B2955::QT
Name: VSTD100 5ML
Misc: V2 CH#13 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

Operator ID: NORA
Quant Time: 911011 21:47
Injected at: 911011 21:16

Operator ID: [illegible]
Output File: "B2955::U1
Data File: "B2955::D5
Name: 05!0100 5ML
Misc: 02 CH#13 5UL 15/5

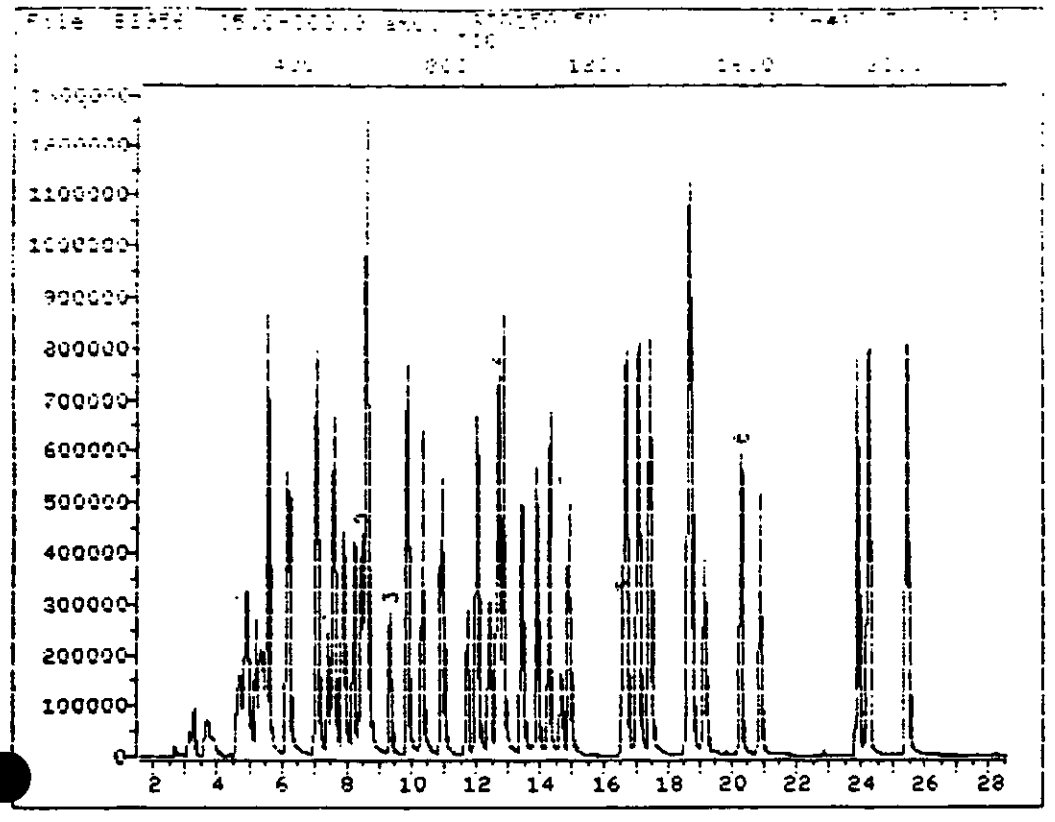
Quant Rev: 5 Quant Time: [illegible]
Injected at: 911011 21:1[illegible]
Dilution Factor: 1.00000

ID File: U0H102::$$
Title: HSL VOLATILES:105mmx.53mm:UB624:02:ERCO/ENGELU
Last Calibration: 911011 20:54

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.45	128.0	162023	50.00	UG/L	80
2)	C010	Chloromethane	3.08	50.0	152111	113.95	UG/L	99
3)	C020	Vinyl Chloride	3.21	62.0	287133	103.78	UG/L	87
4)	C015	Bromomethane	3.63	94.0	198927	70.79	UG/L	92
5)	C025	Chloroethane	3.81	64.0	159399	77.91	UG/L	94
6)	C045	1,1-Dichloroethene	4.60	96.0	75232	20.71	UG/L	94
7)	C035	Acetone	4.66	43.0	99259	28.17	UG/L	100
8)	C040	Carbon Disulfide	4.92	76.0	1449057	89.70	UG/L	100
9)	C030	Methylene Chloride	5.20	84.0	190922	111.50	UG/L	88
10)	C053	Trans-1,2-Dichloroethene	5.57	96.0	578426	94.60	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.06	96.0	631526	93.89	UG/L	89
12)	C050	1,1-Dichloroethane	6.17	63.0	1064475	90.40	UG/L	90
13)	C060	Chloroform	7.60	83.0	1040575	90.64	UG/L	88
14)	C065	1,2-Dichloroethane	8.61	62.0	702437	92.46	UG/L	100
15)	C110	2-Butanone	7.10	43.0	296318	80.62	UG/L	99
16)	CS15	D4-1,2-Dichloroethane	8.47	65.0	486551	94.10	UG/L	82
17)	*C110	1,4-Difluorobenzene	9.35	114.0	720617	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.25	43.0	1327889	94.07	UG/L	99
19)	C115	1,1,1-Trichloroethane	7.92	97.0	640995	98.54	UG/L	92
20)	C120	Carbon Tetrachloride	8.22	117.0	612243	101.98	UG/L	98
21)	C165	Benzene	8.58	78.0	1648423	90.11	UG/L	100
22)	C150	Trichloroethene	9.87	130.0	601110	100.13	UG/L	99
23)	C140	1,2-Dichloropropane	10.32	63.0	631434	102.72	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	839058	98.96	UG/L	82
25)	C175	2-Chloroethylvinylether	11.70	63.0	341631	112.52	UG/L	97
26)	C143	Cis-1,3-Dichloropropen	12.02	75.0	974344	109.48	UG/L	94
27)	C172	Trans-1,3-Dichloropropen	13.42	75.0	644635	93.41	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.88	97.0	460975	97.32	UG/L	72
29)	C155	Dibromochloromethane	14.91	129.0	646440	98.65	UG/L	97
30)	C180	Bromoform	19.12	173.0	440022	94.87	UG/L	97
31)	*C120	D5-Chlorobenzene	16.56	117.0	536074	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	1334719	94.29	UG/L	87
33)	C205	4-Methyl-2-Pentanone	12.42	43.0	606224	98.62	UG/L	85
34)	C230	Toluene	12.84	92.0	982597	104.29	UG/L	85
35)	C210	2-Hexanone	14.64	43.0	334809	98.20	UG/L	98
36)	C220	Tetrachloroethene	14.25	164.0	450223	104.30	UG/L	88
37)	C235	Chlorobenzene	16.64	112.0	1123494	100.50	UG/L	78
38)	C240	Ethylbenzene	17.05	106.0	518655	100.06	UG/L	97
39)	CXXX	Xylene (p)	17.43	106.0	642240	105.65	UG/L	95
40)	CXXX	Xylenes (o)	18.61	106.0	631530	96.80	UG/L	99
41)	C245	Styrene	18.67	104.0	1066755	101.31	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.84	83.0	851411	92.87	UG/L	94
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	626247	95.52	UG/L	81

	Compound		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene	m	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene	p	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C250	Dichlorobenzene	o	25.36	146.0	1015395	105.44	106
[illegible]	C250	Xylene (total)		18.61	106.0	627068	98.25	98

* Compound is ISTD



Data File: >B2956::D6 Quant Output File: ^B2956::QT
Name: VSTD150 5ML
Misc: V2 CH#13 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

Operator ID: NORA
Quant Time: 911011 22:30
Injected at: 911011 21:59

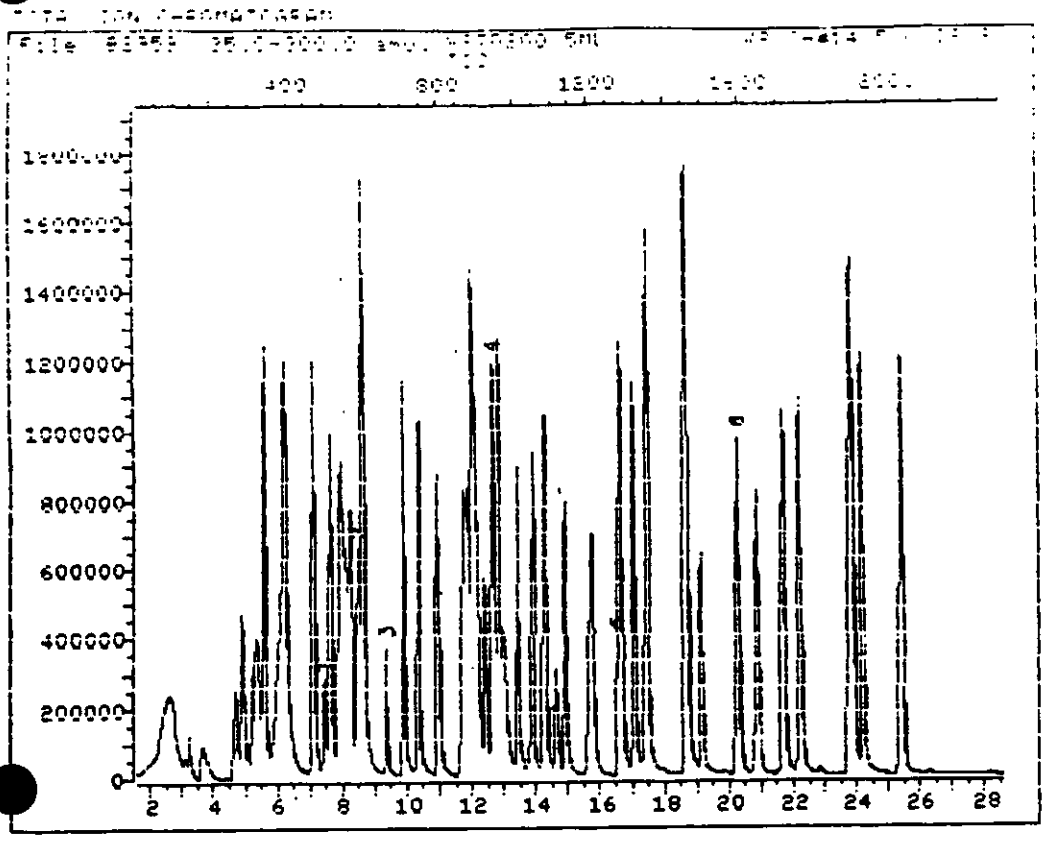
Operator id: MGM Client ref: c Acquired time:
Output File: B:\rb1:01 Injected at:
Data File: B:\rb1:06 Dilution Factor: 1.0000
Name: 05\0150 50%
Misc: V2 CH#13 5%L 15.0

ID File: UUAID2::$$
Title: HSL VL TILES:105mmx.53mm:UB624:V2:ERCO/ENGELU
Last Calibration: 911011 20:54

		Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*C101	Bromochloromethane	7.42	128.0	158267	50.00	UG/L	79
2)	C010	Chloromethane	3.10	50.0	206729	158.54	UG/L	97
3)	C020	Vinyl Chloride	3.24	62.0	378399	140.01	UG/L	88
4)	C015	Bromomethane	3.65	94.0	257677	93.87	UG/L	94
5)	C025	Chloroethane	3.85	64.0	207639	103.89	UG/L	97
6)	C045	1,1-Dichloroethene	4.58	96.0	61506	17.33	UG/L	91
7)	C035	Acetone	4.63	43.0	151366	43.97	UG/L	100
8)	C040	Carbon Disulfide	4.91	76.0	1878198	119.02	UG/L	100
9)	C030	Methylene Chloride	5.17	84.0	235766	140.96	UG/L	88
10)	C053	Trans-1,2-Dichloroethene	5.55	96.0	776099	129.94	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.03	96.0	870635	132.51	UG/L	94
12)	C050	1,1-Dichloroethane	6.14	63.0	1454347	126.44	UG/L	92
13)	C060	Chloroform	7.57	83.0	1424017	126.99	UG/L	94
14)	C065	1,2-Dichloroethane	8.59	62.0	984918	132.72	UG/L	100
15)	C110	2-Butanone	7.07	43.0	444066	125.68	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.44	65.0	690070	136.63	UG/L	88
17)	*C110	1,4-Difluorobenzene	9.32	114.0	659180	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.23	43.0	1876894	145.56	UG/L	96
19)	C115	1,1,1-Trichloroethane	7.89	97.0	885103	148.76	UG/L	92
20)	C120	Carbon Tetrachloride	8.19	117.0	839939	152.95	UG/L	98
21)	C165	Benzene	8.56	78.0	2190746	130.92	UG/L	100
22)	C150	Trichloroethene	9.85	130.0	825140	150.25	UG/L	98
23)	C140	1,2-Dichloropropane	10.30	63.0	890473	158.37	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	1151988	148.53	UG/L	76
25)	C175	2-Chloroethylvinylether	11.67	63.0	453930	163.44	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	11.99	75.0	1305254	160.33	UG/L	90
27)	C172	Trans-1,3-Dichloropropen	13.41	75.0	904824	143.33	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.86	97.0	640702	147.87	UG/L	71
29)	C155	Dibromochloromethane	14.91	129.0	896083	149.49	UG/L	93
30)	C180	Bromoform	19.14	173.0	632185	149.01	UG/L	96
31)	*C120	D5-Chlorobenzene	16.56	117.0	471247	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	1725492	138.67	UG/L	97
33)	C205	4-Methyl-2-Pentanone	12.41	43.0	846074	156.58	UG/L	85
34)	C230	Toluene	12.82	92.0	1281353	154.71	UG/L	94
35)	C210	2-Hexanone	14.64	43.0	422289	140.90	UG/L	99
36)	C220	Tetrachloroethene	14.24	164.0	595969	157.06	UG/L	88
37)	C235	Chlorobenzene	16.64	112.0	1476219	150.22	UG/L	82
38)	C240	Ethylbenzene	17.05	106.0	683199	149.94	UG/L	96
39)	CXXX	Xylene (p)	17.43	106.0	854518	159.90	UG/L	95
40)	CXXX	Xylenes (o)	18.61	106.0	833983	145.42	UG/L	99
41)	C245	Styrene	18.68	104.0	1338406	144.59	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.86	83.0	1192768	147.99	UG/L	98
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	796464	138.19	UG/L	82

	Compound								
[illegible]	[illegible]	Dichlorobenzene	(m)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene	(p)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene	(o)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Xylene (total)		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is ISTD



Data File: >B2959::D6 Quant Output File: ^B2959::QT
Name: VSTD200 5ML
Misc: V2 CH#14 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

Operator ID: NORA
Quant Time: 911012 00:54
Injected at: 911012 00:25

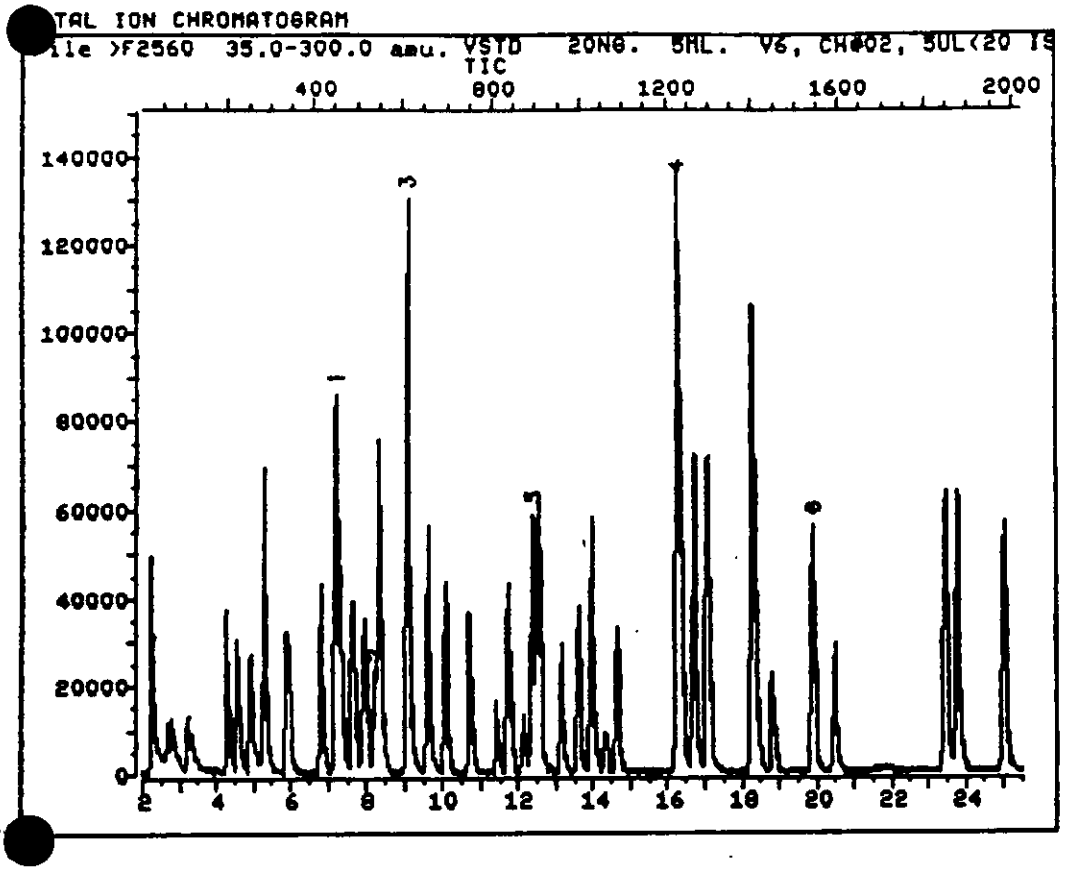
Operator ID: NBFH Quant Ver: 8 Quant Time:
Output File: B2459::01 Injected at:
Data File: B2459::06 Dilution Factor: 1.00000
Name: VSTD200 5ML
Misc: 02 LH#14 50UL 15/5

ID File: VOA1102::$$
Title: HSL VOLATILES:105mmx.5mm:DB624:02:EPA8/ENSECD
Last Calibration: 911011 20:54

		Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*C101	Bromochloromethane	7.44	128.0	179140	50.00	UG/L	82
2)	C010	Chloromethane	3.06	50.0	191336	129.64	UG/L	95
3)	C020	Vinyl Chloride	3.21	62.0	421456	137.77	UG/L	87
4)	C015	Bromomethane	3.61	94.0	284717	91.64	UG/L	92
5)	C025	Chloroethane	3.81	64.0	259177	114.57	UG/L	97
6)	C045	1,1-Dichloroethene	4.69	96.0	416520	103.68	UG/L	88
7)	C035	Acetone	4.66	43.0	183334	47.05	UG/L	100
8)	C040	Carbon Disulfide	4.90	76.0	2196104	122.95	UG/L	100
9)	C030	Methylene Chloride	5.20	84.0	278786	147.26	UG/L	89
10)	C053	Trans-1,2-Dichloroethene	5.57	96.0	1165173	172.35	UG/L	98
11)	C055	cis-1,2-Dichloroethene	7.06	96.0	1346925	181.11	UG/L	96
12)	C050	1,1-Dichloroethane	6.17	63.0	2178040	167.29	UG/L	92
13)	C060	Chloroform	7.60	83.0	2218189	174.76	UG/L	86
14)	C065	1,2-Dichloroethane	8.61	62.0	1510287	179.81	UG/L	100
15)	C110	2-Butanone	7.10	43.0	773030	190.22	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.46	65.0	1031606	180.46	UG/L	78
17)	*C110	1,4-Difluorobenzene	9.34	114.0	842659	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.26	43.0	2468971	149.58	UG/L	85
19)	C115	1,1,1-Trichloroethane	7.92	97.0	1293781	170.10	UG/L	99
20)	C120	Carbon Tetrachloride	8.21	117.0	1263219	179.95	UG/L	98
21)	C165	Benzene	8.59	78.0	2954016	138.09	UG/L	100
22)	C150	Trichloroethene	9.86	130.0	1298161	184.92	UG/L	99
23)	C140	1,2-Dichloropropane	10.32	63.0	1446581	201.25	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	1868945	188.50	UG/L	74
25)	C175	2-Chloroethylvinylether	11.69	63.0	989824	278.80	UG/L	88
26)	C143	Cis-1,3-Dichloropropen	12.00	75.0	2121970	203.90	UG/L	72
27)	C172	Trans-1,3-Dichloropropen	13.42	75.0	1934413	190.14	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.87	97.0	1117874	201.83	UG/L	70
29)	C155	Dibromochloromethane	14.91	129.0	1492493	194.78	UG/L	98
30)	C180	Bromoform	19.12	173.0	1097615	202.39	UG/L	92
31)	*C120	D5-Chlorobenzene	16.55	117.0	603214	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	2782230	174.68	UG/L	89
33)	C205	4-Methyl-2-Pentanone	12.42	43.0	1492776	215.82	UG/L	79
34)	C230	Toluene	12.82	92.0	2222251	209.61	UG/L	63
35)	C210	2-Hexanone	14.64	43.0	798038	208.02	UG/L	99
36)	C220	Tetrachloroethene	14.24	164.0	995502	204.96	UG/L	74
37)	C235	Chlorobenzene	16.65	112.0	2370742	188.46	UG/L	79
38)	C240	Ethylbenzene	17.05	106.0	1117386	191.58	UG/L	76
39)	CXXX	Xylene (p)	17.44	106.0	1250824	182.85	UG/L	94
40)	CXXX	Xylenes (o)	18.61	106.0	1260494	171.71	UG/L	94
41)	C245	Styrene	18.68	104.0	2032593	171.55	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.85	83.0	1888659	183.07	UG/L	96
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	1330538	180.35	UG/L	86

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
44	C135	Dichlorobenzene (m)	37.31	146.0	541-73-1	180.2	ug/L	1	
45	C540	Dichlorobenzene (p)	34.1	146.0	106-46-7	141.45	ug/L	1.0	
46	C150	Dichlorobenzene (o)	29.39	146.0	95-50-1	183.06	ug/L	100	
47	C250	Xylene (total)	18.61	106.0	1330-20-7	174.14	ug/L	50	

* Compound is ISTD



Data File: >F2560::D4 Quant Output File: ^F2560::D7
Name: VSTD 20NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(20 IS/S), STD=20UL/200ML HSL,A,B+ MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 13:49
Injected at: 910922 13:22

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 13:49
Output File: ^F2560::D7 Injected at: 910922 13:22
Data File: >F2560::D4 Dilution Factor: 1.00000
Name: VSTD 20NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(20 IS/S), STD=20UL/200ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

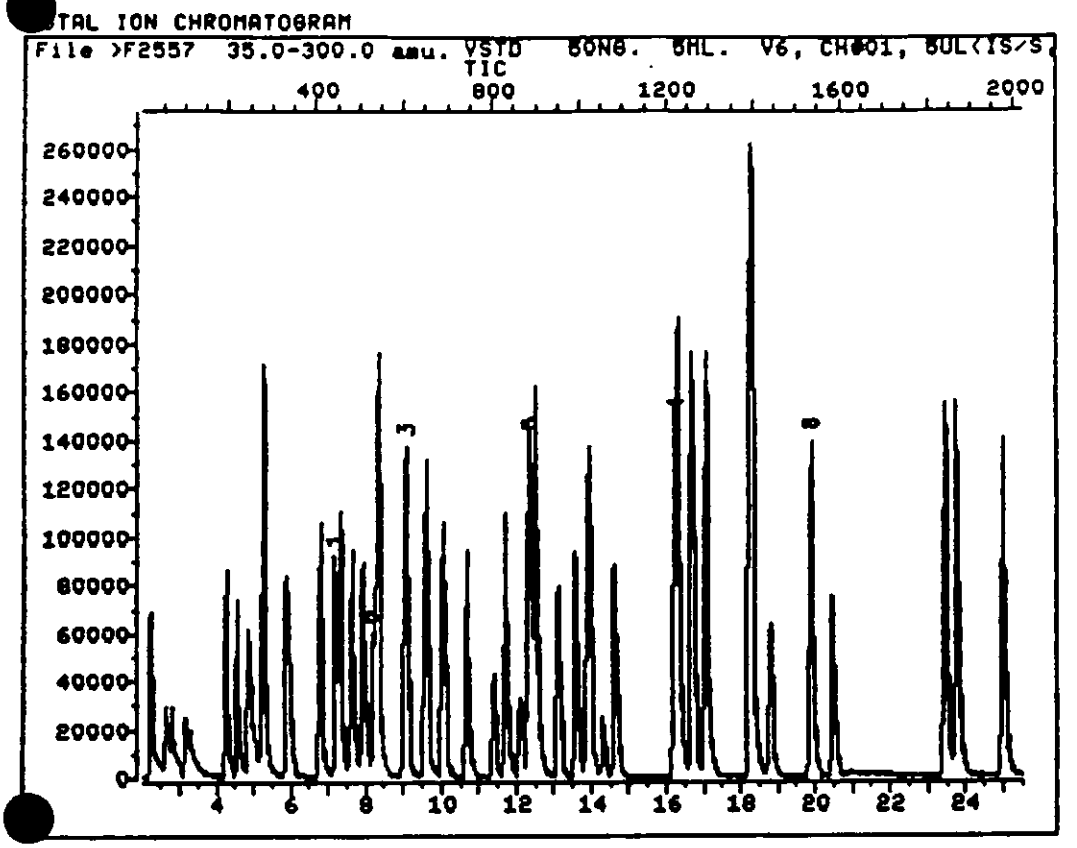
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	66164	50.00	UG/L	64
2)	C010 Chloromethane	2.65	50.0	36001	20.90	UG/L	99
3)	C020 Vinyl Chloride	2.79	62.0	37017	21.21	UG/L	87
4)	C015 Bromomethane	3.19	94.0	35029	24.07	UG/L	92
5)	C025 Chloroethane	3.32	64.0	22151M	23.15	UG/L	96
6)	C045 1,1-Dichloroethene	4.29	96.0	42246	22.43	UG/L	91
7)	C035 Acetone	4.36	43.0	7226	28.69	UG/L	30
8)	C040 Carbon Disulfide	4.57	76.0	120197	22.71	UG/L	100
9)	C030 Methylene Chloride	4.92	84.0	50135	22.91	UG/L	91
10)	CXXX Tert-butyl alcohol	5.07	59.0	1147M	12.07	UG/L	
11)	C053 Trans-1,2-dichloroethene	5.29	96.0	51105	22.59	UG/L	95
12)	C055 Cis-1,2-dichloroethene	6.80	96.0	55446	22.80	UG/L	95
13)	CXXX Methyl tert-butyl ether	5.28	73.0	76693	20.61	UG/L	90
14)	C050 1,1-Dichloroethane	5.88	63.0	96940	23.46	UG/L	100
15)	C060 Chloroform	7.33	83.0	111460	22.77	UG/L	94
16)	C065 1,2-Dichloroethane	8.37	62.0	63812	23.18	UG/L	100
17)	C110 2-Butanone	6.83	72.0	2791	18.63	UG/L	90
18)	CS15 D4-1,2-dichloroethane	8.21	65.0	50708	22.23	UG/L	87
19)	*CI10 1,4-Difluorobenzene	9.08	114.0	362515	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.96	43.0	78027	17.83	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.67	97.0	88029	21.72	UG/L	97
22)	C120 Carbon Tetrachloride	7.96	117.0	74521	21.31	UG/L	98
23)	C165 Benzene	8.32	78.0	161518	22.98	UG/L	100
24)	C150 Trichloroethene	9.59	130.0	65720	22.79	UG/L	95
25)	C140 1,2-Dichloropropane	10.08	63.0	61152	20.89	UG/L	100
26)	C130 Bromodichloromethane	10.70	83.0	93377	22.16	UG/L	91
27)	C175 2-Chloroethylvinylether	11.41	63.0	28001	20.80	UG/L	96
28)	C143 Cis-1,3-Dichloropropene	11.73	75.0	91930	22.30	UG/L	94
29)	C172 Trans-1,3-dichloropropene	13.13	75.0	63203	19.51	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.60	97.0	47273	21.36	UG/L	75
31)	C155 Dibromochloromethane	14.64	129.0	69711	20.36	UG/L	98
32)	C180 Bromoform	18.81	173.0	38349	18.68	UG/L	99
33)	*CI20 D5-Chlorobenzene	16.24	117.0	292082	50.00	UG/L	100
34)	CS05 D8-Toluene	12.36	98.0	153965	21.03	UG/L	93
35)	C205 4-Methyl-2-pentanone	12.14	43.0	42184	22.67	UG/L	90
36)	C230 Toluene	12.53	92.0	105957	21.29	UG/L	80
37)	C210 2-Hexanone	14.33	43.0	28149	19.84	UG/L	97
38)	C220 Tetrachloroethene	13.94	164.0	54447	21.32	UG/L	96
39)	C235 Chlorobenzene	16.32	112.0	129024	20.92	UG/L	75
40)	C240 Ethylbenzene	16.70	106.0	64766	21.04	UG/L	94
41)	CXXX Xylenes (p)	17.08	106.0	85811	21.55	UG/L	95
42)	CXXX Xylenes (o)	18.26	106.0	77264	21.35	UG/L	99

)perator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 13:49
)utput File: ^F2560::D7 Injected at: 910922 13:22
)ata File: >F2560::D4 Dilution Factor: 1.00000
lame: VSTD 20NG. 5ML. Instrument ID: V6
lisc: V6, CH#02, 5UL(20 IS/S), STD=20UL/200ML HSL,A,B+ MTBE

:D File: MOBID6::MT
'itle: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
.ast Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.48	83.0	71037	20.06	UG/L	90
45)	CS10 Bromofluorobenzene	19.90	95.0	89608	20.84	UG/L	72
46)	C335 Dichlorobenzene (m)	23.46	146.0	112165	20.58	UG/L	100
47)	C340 Dichlorobenzene (p)	23.78	146.0	104930	21.20	UG/L	100
48)	C350 Dichlorobenzene (o)	25.01	146.0	106197	21.34	UG/L	100
49)	C250 Xylenes (total)	18.26	106.0	75196	20.79	UG/L	91

* Compound is ISTD



Data File: >F2557::D4 Quant Output File: ^F2557::D7
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL(IS/S, MTBE, TBA), STD=25UL/100ML HSL,A

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910918 21:59

Operator ID: KERYLYNN
Quant Time : 910922 11:37
Injected at: 910922 11:10

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 11:37
Output File: ^F2557::D7 Injected at: 910922 11:10
Data File: >F2557::D4 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL(IS/S, MTBE, TBA), STD=25UL/100ML HSL,A

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910918 21:59

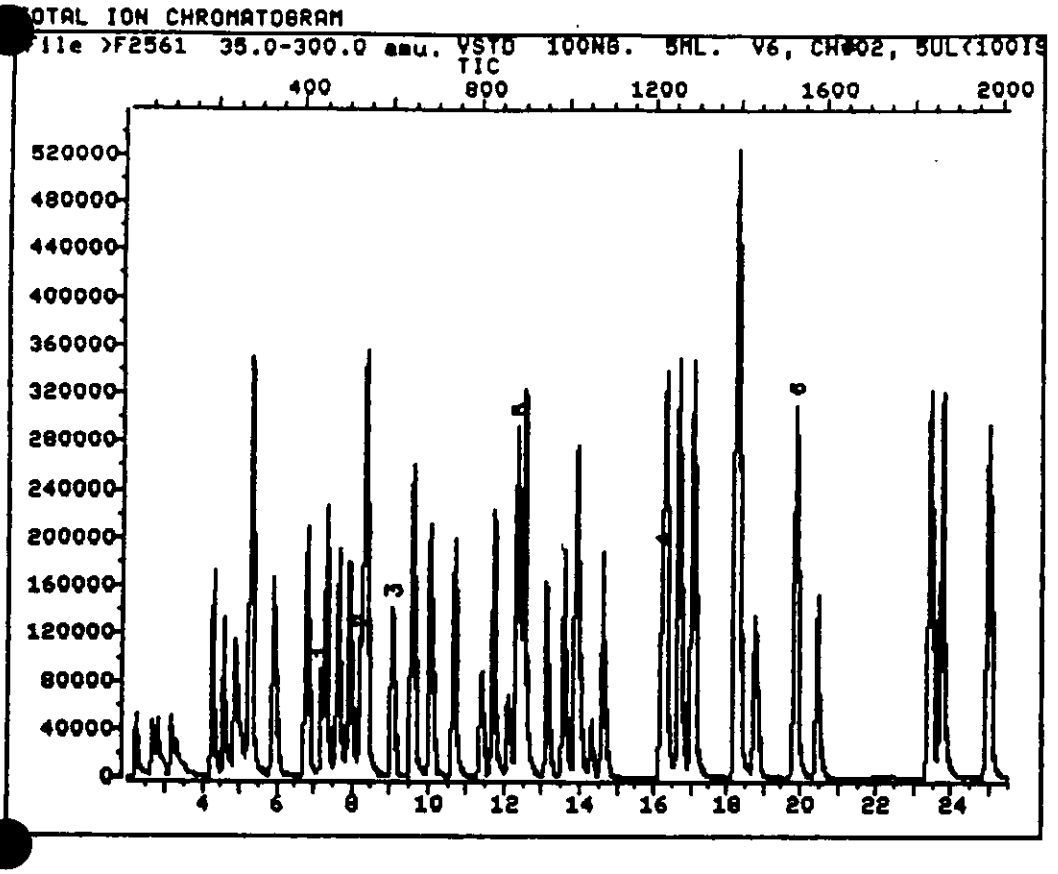
		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.17	128.0	72616	50.00	UG/L	70
2)	C010	Chloromethane	2.65	50.0	94512	74.65	UG/L	99
3)	C020	Vinyl Chloride	2.78	62.0	95768	61.62	UG/L	93
4)	C015	Bromomethane	3.16	94.0	79846	49.64	UG/L	94
5)	C025	Chloroethane	3.29	64.0	52513M	50.84	UG/L	98
6)	C045	1,1-Dichloroethene	4.27	96.0	103350	50.18	UG/L	84
7)	C035	Acetone	4.34	43.0	13823	48.47	UG/L	23
8)	C040	Carbon Disulfide	4.56	76.0	290422	49.86	UG/L	100
9)	C030	Methylene Chloride	4.90	84.0	120111	49.96	UG/L	91
10)	CXXX	Tert-butyl alcohol	5.06	59.0	5214M	51.56	UG/L	
11)	C053	Trans-1,2-dichloroethene	5.27	96.0	124123	49.89	UG/L	99
12)	C055	Cis-1,2-dichloroethene	6.79	96.0	133461	52.07	UG/L	97
13)	CXXX	Methyl tert-butyl ether	5.27	73.0	204169	47.71	UG/L	87
14)	C050	1,1-Dichloroethane	5.88	63.0	226786	49.15	UG/L	100
15)	C060	Chloroform	7.31	83.0	268649	49.77	UG/L	98
16)	C065	1,2-Dichloroethane	8.34	62.0	151088	49.69	UG/L	100
17)	C110	2-Butanone	6.81	72.0	8219	49.63	UG/L	91
18)	CS15	D4-1,2-dichloroethane	8.21	65.0	125151	55.05	UG/L	87
19)	*C110	1,4-Difluorobenzene	9.06	114.0	389063	50.00	UG/L	100
20)	C125	Vinyl Acetate	5.95	43.0	234819	166.62	UG/L	99
21)	C115	1,1,1-Trichloroethane	7.64	97.0	217439	49.11	UG/L	91
22)	C120	Carbon Tetrachloride	7.93	117.0	187662	45.28	UG/L	96
23)	C165	Benzene	8.31	78.0	377123	47.20	UG/L	100
24)	C150	Trichloroethene	9.58	130.0	154733	45.96	UG/L	99
25)	C140	1,2-Dichloropropane	10.05	63.0	157115	47.90	UG/L	100
26)	C130	Bromodichloromethane	10.66	83.0	226079	48.59	UG/L	74
27)	C175	2-Chloroethylvinylether	11.39	63.0	72247	51.23	UG/L	98
28)	C143	Cis-1,3-Dichloropropene	11.72	75.0	234502	51.26	UG/L	93
29)	C172	Trans-1,3-dichloropropene	13.12	75.0	159892	48.88	UG/L	100
30)	C160	1,1,2-Trichloroethane	13.57	97.0	118735	50.42	UG/L	72
31)	C155	Dibromochloromethane	14.62	129.0	183774	50.15	UG/L	96
32)	C180	Bromoform	18.81	173.0	110158	51.82	UG/L	97
33)	*C120	D5-Chlorobenzene	16.23	117.0	301138	50.00	UG/L	100
34)	CS05	D8-Toluene	12.34	98.0	377478	50.56	UG/L	95
35)	C205	4-Methyl-2-pentanone	12.11	43.0	95924	41.87	UG/L	82
36)	C230	Toluene	12.52	92.0	256595	48.56	UG/L	91
37)	C210	2-Hexanone	14.31	43.0	73156	51.18	UG/L	97
38)	C220	Tetrachloroethene	13.92	164.0	131665	47.47	UG/L	93
39)	C235	Chlorobenzene	16.31	112.0	317994	47.91	UG/L	75
40)	C240	Ethylbenzene	16.68	106.0	158712	49.37	UG/L	96
41)	CXXX	Xylenes (p)	17.07	106.0	205258M	55.82	UG/L	97
42)	CXXX	Xylenes (o)	18.25	106.0	186544	47.97	UG/L	96
43)	C245	Styrene	18.30	104.0	334783	50.44	UG/L	100

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 11:37
Output File: ^F2557::D7 Injected at: 910922 11:10
Data File: >F2557::D4 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL(IS/S, MTBE, TBA), STD=25UL/100ML HSL,A

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910918 21:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethene	20.48	83.0	182548	53.82	UG/L	96
45)	CS10 Bromofluorobenzene	19.88	95.0	221701	53.12	UG/L	76
46)	C335 Dichlorobenzene (m)	23.44	146.0	280976	60.57	UG/L	100
47)	C340 Dichlorobenzene (p)	23.77	146.0	255152	59.38	UG/L	100
48)	C350 Dichlorobenzene (o)	25.00	146.0	256534	56.04	UG/L	100
49)	C250 Xylenes (total)	18.25	106.0	186423	50.92	UG/L	94

* Compound is ISTD



Data File: >F2561::D4 Quant Output File: ^F2561::D7
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 14:24
Injected at: 910922 13:57

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 14:24
Output File: ^F2561::D7 Injected at: 910922 13:57
Data File: >F2561::D4 Dilution Factor: 1.00000
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

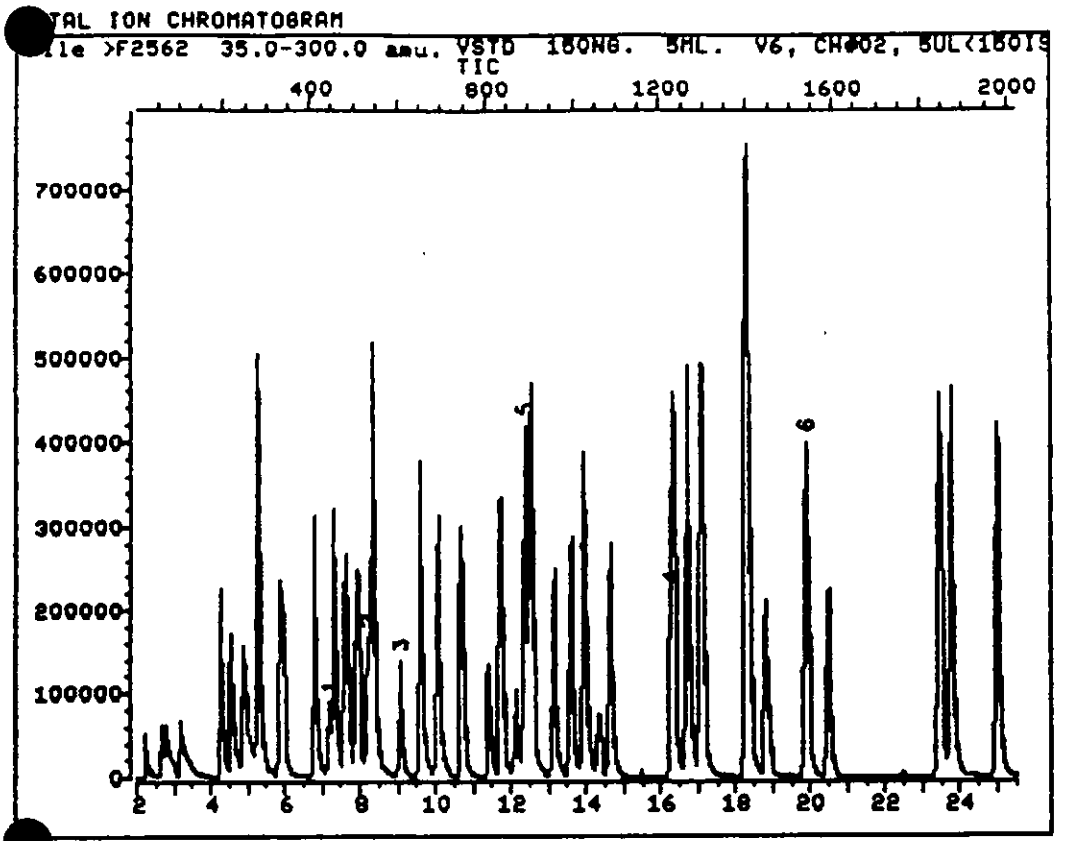
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.17	128.0	70645	50.00	UG/L	71
2)	C010 Chloromethane	2.66	50.0	174253	94.76	UG/L	97
3)	C020 Vinyl Chloride	2.80	62.0	179744	96.46	UG/L	87
4)	C015 Bromomethane	3.18	94.0	143619	92.44	UG/L	97
5)	C025 Chloroethane	3.29	64.0	92542M	90.57	UG/L	97
6)	C045 1,1-Dichloroethene	4.27	96.0	198396	98.66	UG/L	97
7)	C035 Acetone	4.35	43.0	28415	105.65	UG/L	19
8)	C040 Carbon Disulfide	4.56	76.0	600925	106.34	UG/L	100
9)	C030 Methylene Chloride	4.90	84.0	240774	103.03	UG/L	89
10)	CXXX Tert-butyl alcohol	5.10	59.0	11539	113.74	UG/L	54
11)	C053 Trans-1,2-dichloroethene	5.27	96.0	247144	102.33	UG/L	91
12)	C055 Cis-1,2-dichloroethene	6.79	96.0	272101	104.78	UG/L	88
13)	CXXX Methyl tert-butyl ether	5.28	73.0	448446	112.89	UG/L	88
14)	C050 1,1-Dichloroethane	5.88	63.0	459872	104.22	UG/L	100
15)	C060 Chloroform	7.31	83.0	542393	103.76	UG/L	99
16)	C065 1,2-Dichloroethane	8.35	62.0	316160	107.55	UG/L	100
17)	C110 2-Butanone	6.80	72.0	16990	106.24	UG/L	90
18)	CS15 D4-1,2-dichloroethane	8.20	65.0	246549	101.25	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.05	114.0	394127	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.95	43.0	419012	88.07	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.63	97.0	438774	99.60	UG/L	91
22)	C120 Carbon Tetrachloride	7.93	117.0	375523	98.77	UG/L	94
23)	C165 Benzene	8.30	78.0	763423	99.92	UG/L	100
24)	C150 Trichloroethene	9.59	130.0	323845	103.30	UG/L	88
25)	C140 1,2-Dichloropropane	10.05	63.0	316223	99.34	UG/L	100
26)	C130 Bromodichloromethane	10.66	83.0	483261	105.51	UG/L	82
27)	C175 2-Chloroethylvinylether	11.39	63.0	146485	100.08	UG/L	97
28)	C143 Cis-1,3-Dichloropropene	11.70	75.0	494607	110.35	UG/L	97
29)	C172 Trans-1,3-dichloropropene	13.11	75.0	336392	95.53	UG/L	100
30)	C160 1,1,2-Trichloroethene	13.57	97.0	240907	100.14	UG/L	79
31)	C155 Dibromochloromethane	14.60	129.0	397912	106.87	UG/L	94
32)	C180 Bromoform	18.77	173.0	237517	106.42	UG/L	94
33)	*CI20 D5-Chlorobenzene	16.22	117.0	333225	50.00	UG/L	100
34)	CS05 D8-Toluene	12.35	98.0	767265	91.84	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.10	43.0	207706	97.84	UG/L	86
36)	C230 Toluene	12.50	92.0	518033	91.22	UG/L	89
37)	C210 2-Hexanone	14.31	43.0	143237	88.47	UG/L	98
38)	C220 Tetrachloroethene	13.90	164.0	270796	92.93	UG/L	93
39)	C235 Chlorobenzene	16.30	112.0	653477	92.86	UG/L	100
40)	C240 Ethylbenzene	16.67	106.0	311198	88.60	UG/L	97
41)	CXXX Xylenes (p)	17.04	106.0	397865M	87.59	UG/L	99
42)	CXXX Xylenes (o)	18.24	106.0	382684	92.70	UG/L	98

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 14:24
Output File: ^F2561::D7 Injected at: 910922 13:57
Data File: >F2561::D4 Dilution Factor: 1.00000
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.45	83.0	369800	91.54	UG/L	95
45)	CS10 Bromofluorobenzene	19.86	95.0	494842	100.85	UG/L	67
46)	C335 Dichlorobenzene (m)	23.42	146.0	572130	92.01	UG/L	100
47)	C340 Dichlorobenzene (p)	23.76	146.0	526188	93.18	UG/L	100
48)	C350 Dichlorobenzene (o)	24.97	146.0	526619	92.76	UG/L	100
49)	C250 Xylenes (total)	18.24	106.0	371954	90.15	UG/L	93

* Compound is ISTD



Data File: >F2562::D4 Quant Output File: ^F2562::D7
Name: VSTD 150NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(150IS/S), STD=37.5UL/50ML HSL,A,B+ MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 15:02
Injected at: 910922 14:35

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:02
Output File: ^F2562::D7 Injected at: 910922 14:35
Data File: >F2562::D4 Dilution Factor: 1.00000
Name: VSTD 150NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(150IS/S), STD=37.5UL/50ML HSL,A,B+ MTBE

ID File: M08ID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

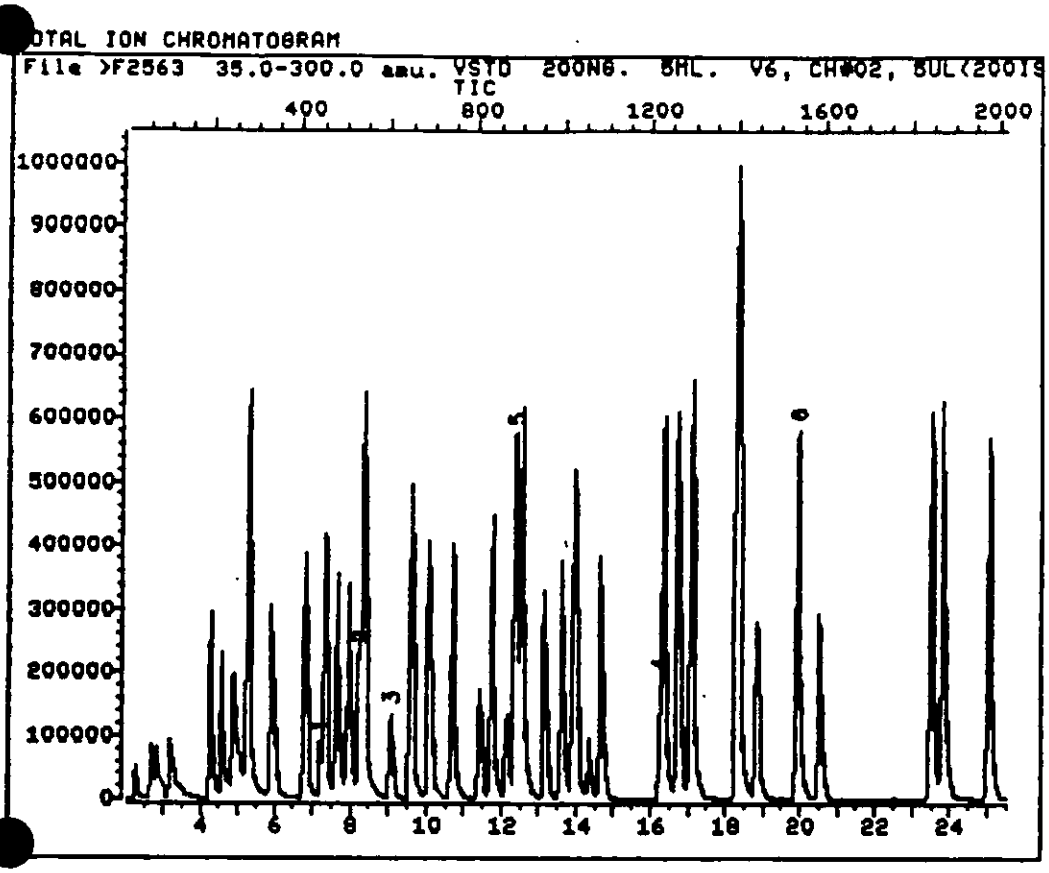
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	71409	50.00	UG/L	65
2)	C010 Chloromethane	2.65	50.0	245105	131.86	UG/L	98
3)	C020 Vinyl Chloride	2.78	62.0	240961	127.93	UG/L	85
4)	C015 Bromomethane	3.15	94.0	198283M	126.26	UG/L	91
5)	C025 Chloroethane	3.28	64.0	117468M	113.74	UG/L	94
6)	C045 1,1-Dichloroethene	4.26	96.0	263121	129.45	UG/L	89
7)	C035 Acetone	4.34	43.0	41564	152.88	UG/L	14
8)	C040 Carbon Disulfide	4.55	76.0	840310	147.12	UG/L	100
9)	C030 Methylene Chloride	4.89	84.0	350805	148.50	UG/L	92
10)	CXXX Tert-butyl alcohol	5.10	59.0	17361M	169.30	UG/L	89
11)	C053 Trans-1,2-dichloroethene	5.26	96.0	348218	142.64	UG/L	99
12)	C055 Cis-1,2-dichloroethene	6.78	96.0	394246	150.20	UG/L	99
13)	CXXX Methyl tert-butyl ether	5.29	73.0	680426	169.45	UG/L	88
14)	C050 1,1-Dichloroethane	5.87	63.0	663016	148.65	UG/L	100
15)	C060 Chloroform	7.32	83.0	802553	151.89	UG/L	97
16)	C065 1,2-Dichloroethane	8.34	62.0	447415	150.57	UG/L	100
17)	C110 2-Butanone	6.83	72.0	23274	143.98	UG/L	96
18)	CS15 D4-1,2-dichloroethane	8.20	65.0	360514	146.47	UG/L	90
19)	*CI10 1,4-Difluorobenzene	9.05	114.0	377988	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.95	43.0	602069	131.95	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.64	97.0	611378	144.71	UG/L	96
22)	C120 Carbon Tetrachloride	7.93	117.0	516812	141.73	UG/L	99
23)	C165 Benzene	8.31	78.0	1126805	153.77	UG/L	100
24)	C150 Trichloroethene	9.58	130.0	459944	152.98	UG/L	99
25)	C140 1,2-Dichloropropane	10.04	63.0	459419	150.49	UG/L	100
26)	C130 Bromodichloromethane	10.67	83.0	719287	163.74	UG/L	79
27)	C175 2-Chloroethylvinylether	11.40	63.0	220430	157.02	UG/L	99
28)	C143 Cis-1,3-Dichloropropene	11.72	75.0	739104	171.94	UG/L	98
29)	C172 Trans-1,3-dichloropropene	13.12	75.0	511852	151.57	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.59	97.0	367882	159.46	UG/L	78
31)	C155 Dibromochloromethane	14.64	129.0	591556	165.66	UG/L	98
32)	C180 Bromoform	18.81	173.0	374345	174.89	UG/L	94
33)	*CI20 D5-Chlorobenzene	16.26	117.0	289223	50.00	UG/L	100
34)	CS05 D8-Toluene	12.37	98.0	1080178	148.97	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.12	43.0	307252	166.75	UG/L	89
36)	C230 Toluene	12.52	92.0	745978	151.35	UG/L	90
37)	C210 2-Hexanone	14.33	43.0	221742	157.80	UG/L	96
38)	C220 Tetrachloroethene	13.94	164.0	375691	148.55	UG/L	92
39)	C235 Chlorobenzene	16.33	112.0	947878	155.18	UG/L	69
40)	C240 Ethylbenzene	16.70	106.0	446295	146.39	UG/L	95
41)	CXXX Xylenes (p)	17.09	106.0	530855	134.64	UG/L	95

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:02
Output File: ^F2562::D7 Injected at: 910922 14:35
Data File: >F2562::D4 Dilution Factor: 1.00000
Name: VSTD 150NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(150IS/S), STD=37.5UL/50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.48	83.0	548216	156.34	UG/L	84
45)	CS10 Bromofluorobenzene	19.90	95.0	626399	147.09	UG/L	71
46)	C335 Dichlorobenzene (m)	23.45	146.0	809504	149.99	UG/L	100
47)	C340 Dichlorobenzene (p)	23.77	146.0	752370	153.51	UG/L	100
48)	C350 Dichlorobenzene (o)	24.99	146.0	746636	151.52	UG/L	100
49)	C250 Xylenes (total)	18.26	106.0	520527	145.36	UG/L	95

* Compound is ISTD



Data File: >F2563::D4 Quant Output File: ^F2563::D7
Name: VSTD 200NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 15:57
Injected at: 910922 15:30

QUANT REPORT Page 1

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:57
Output File: ^F2563::D7 Injected at: 910922 15:30
Data File: >F2563::D4 Dilution Factor: 1.00000
Name: VSTD 200NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

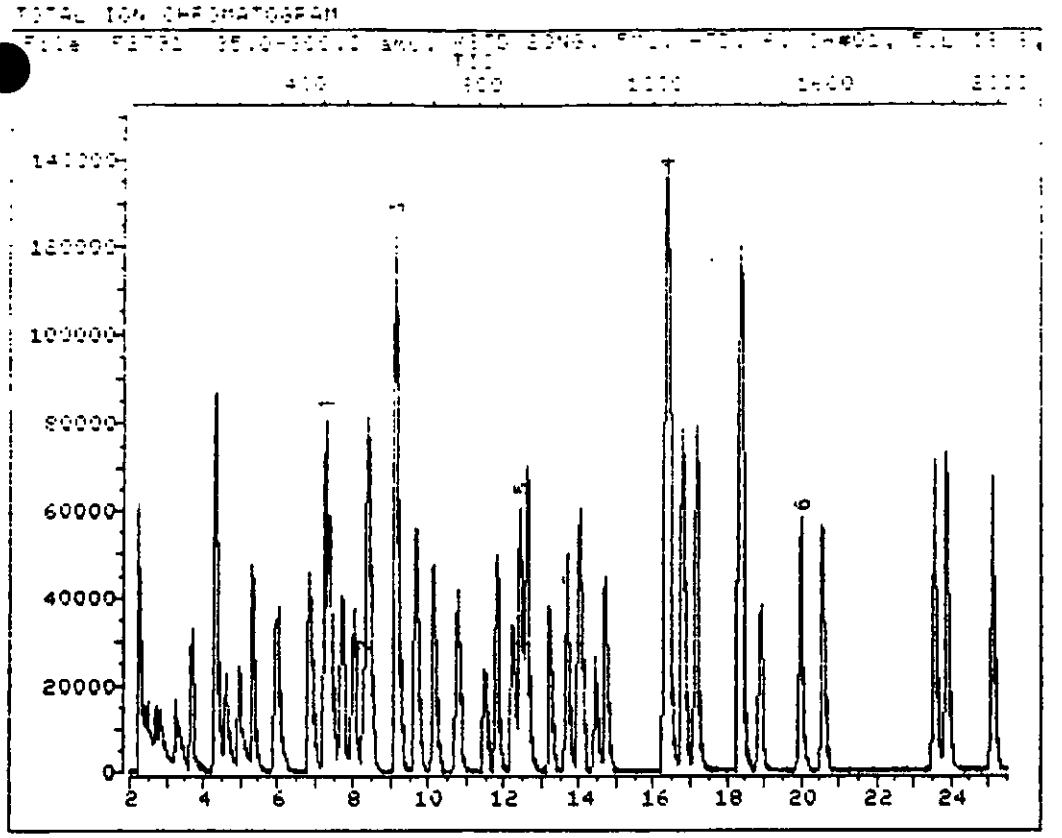
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	69596	50.00	UG/L	72
2)	C010 Chloromethane	2.66	50.0	330885	182.65	UG/L	98
3)	C020 Vinyl Chloride	2.80	62.0	326977	178.12	UG/L	88
4)	C015 Bromomethane	3.18	94.0	253347	165.53	UG/L	96
5)	C025 Chloroethane	3.29	64.0	137303M	136.41	UG/L	93
6)	C045 1,1-Dichloroethene	4.26	96.0	357003	180.21	UG/L	89
7)	C035 Acetone	4.36	43.0	54993	207.55	UG/L	25
8)	C040 Carbon Disulfide	4.56	76.0	1131014	203.17	UG/L	100
[illegible]	C030 Methylene Chloride	4.90	84.0	453720	197.07	UG/L	78
[illegible]	CXXX Tert-butyl alcohol	5.13	59.0	12869	128.76	UG/L	70
11)	C053 Trans-1,2-dichloroethene	5.27	96.0	451171	189.63	UG/L	91
12)	C055 Cis-1,2-dichloroethene	6.79	96.0	531114	207.61	UG/L	94
13)	CXXX Methyl tert-butyl ether	5.31	73.0	880513	224.99	UG/L	87
14)	C050 1,1-Dichloroethane	5.89	63.0	866766	199.39	UG/L	100
15)	C060 Chloroform	7.33	83.0	1055076	204.89	UG/L	96
16)	C065 1,2-Dichloroethane	8.37	62.0	566691	195.67	UG/L	100
17)	C110 2-Butanone	6.83	72.0	29892	189.74	UG/L	89
18)	CS15 D4-1,2-dichloroethane	8.23	65.0	481320	200.64	UG/L	92
19)	*CI10 1,4-Difluorobenzene	9.07	114.0	375720	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.96	43.0	732065	161.41	UG/L	99
21)	C115 1,1,1-Trichloroethane	7.65	97.0	809612	192.78	UG/L	97
22)	C120 Carbon Tetrachloride	7.95	117.0	703159	194.00	UG/L	99
23)	C165 Benzene	8.32	78.0	1443731	198.21	UG/L	100
24)	C150 Trichloroethene	9.62	130.0	611194	204.51	UG/L	91
25)	C140 1,2-Dichloropropane	10.07	63.0	605483	199.53	UG/L	100
26)	C130 Bromodichloromethane	10.69	83.0	960226	219.91	UG/L	79
27)	C175 2-Chloroethylvinylether	11.41	63.0	285259	204.43	UG/L	96
28)	C143 Cis-1,3-Dichloropropene	11.74	75.0	1010029	236.38	UG/L	95
29)	C172 Trans-1,3-dichloropropene	13.14	75.0	684649	203.96	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.61	97.0	476300	207.70	UG/L	80
31)	C155 Dibromochloromethane	14.64	129.0	789823	222.52	UG/L	95
32)	C180 Bromoform	18.85	173.0	500712	235.34	UG/L	98
33)	*CI20 D5-Chlorobenzene	16.26	117.0	311099	50.00	UG/L	100
[illegible]	CS05 D8-Toluene	12.37	98.0	1568348	201.09	UG/L	96
[illegible]	C205 4-Methyl-2-pentanone	12.16	43.0	389618	196.58	UG/L	86
36)	C230 Toluene	12.54	92.0	990574	186.84	UG/L	89
37)	C210 2-Hexanone	14.35	43.0	280453	185.54	UG/L	96
38)	C220 Tetrachloroethene	13.94	164.0	506318	186.12	UG/L	93
39)	C235 Chlorobenzene	16.34	112.0	1304165	198.50	UG/L	70
40)	C240 Ethylbenzene	16.72	106.0	601155	183.32	UG/L	92
41)	CXXX Xylenes (p)	17.10	106.0	761941M	179.66	UG/L	99
42)	CXXX Xylenes (o)	18.29	106.0	732520	190.05	UG/L	99

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:57
Output File: ^F2563::D7 Injected at: 910922 15:30
Data File: >F2563::D4 Dilution Factor: 1.00000
Name: VSTD 200NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.53	83.0	722312	191.51	UG/L	96
45)	CS10 Bromofluorobenzene	19.94	95.0	921157	201.10	UG/L	72
46)	C335 Dichlorobenzene (m)	23.50	146.0	1109250	191.07	UG/L	100
47)	C340 Dichlorobenzene (p)	23.83	146.0	1018106	193.12	UG/L	100
48)	C350 Dichlorobenzene (o)	25.05	146.0	1029257	194.19	UG/L	100
49)	C250 Xylenes (total)	18.29	106.0	723402	187.81	UG/L	92

* Compound is ISTD



Data File: >F2791::D6 Quant Output File: ^F2791::D7
Name: USTD 20NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=20UL/200ML HSL,A,B,FREONS, 40

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

Operator ID: LIZ
Quant Time : 911008 09:30
Injected at: 911008 09:02

Operator ID: LIZ Quant Method : T Last Time: Fri 8 :
Purge File: F2791::07 Injected at: Fri 18 0:01
Data File: F2791::06 Dilution Factor: 1.00000
Name: STD 20NS, 5ML, HTO. Instrument ID: Vo
Misc: V6, CH#01, 5UL IS/S, STD=20UL/200ML HSL,A,B,FREQNS, 40

ID File: H4MID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, Vo HTO ERCO-ENSECO
Last Calibration: 910408 11:20 Last Ocal Time: 911004 12:08

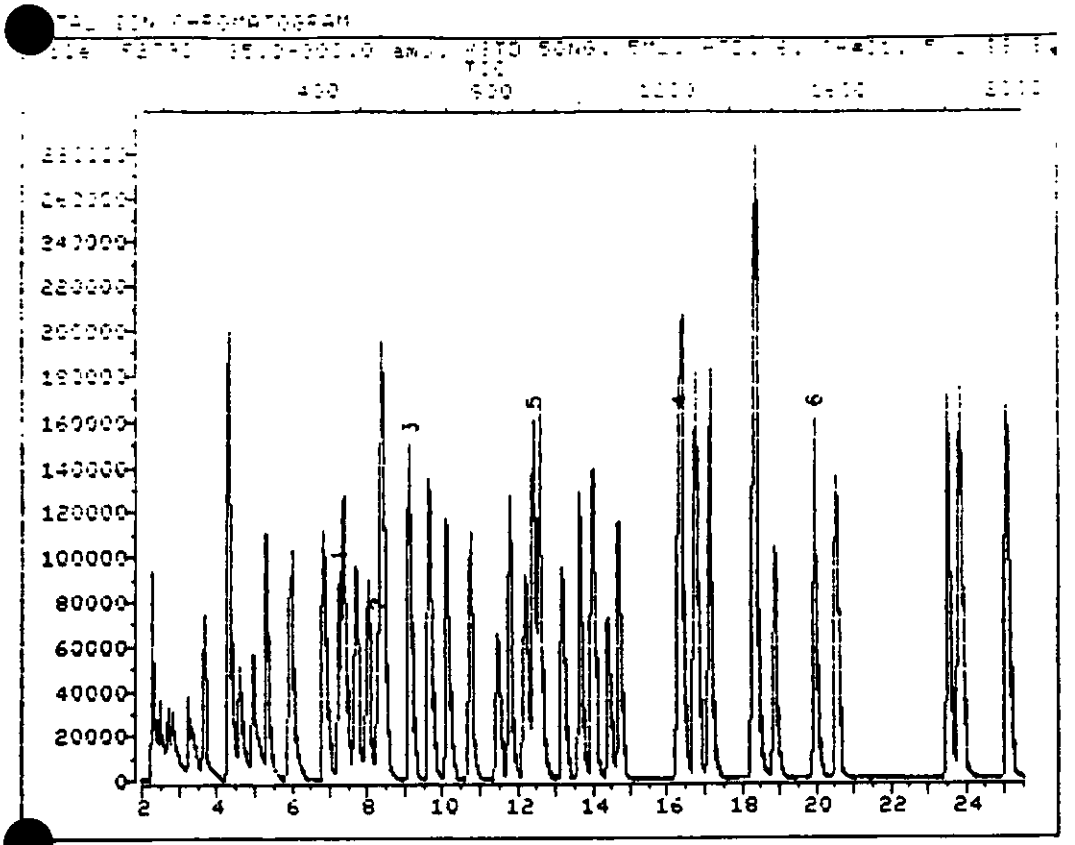
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.24	128.0	77345	50.00	UG/L	84
2)	C012 Dichlorodifluoromethane	2.44	85.0	39080	13.69	UG/L	80
3)	C010 Chloromethane	2.68	50.0	36711	21.66	UG/L	98
4)	C020 Vinyl Chloride	2.82	62.0	35933	20.21	UG/L	89
5)	C015 Bromomethane	3.22	94.0	42372	29.60	UG/L	94
6)	C025 Chloroethane	3.35	64.0	22768M	24.90	UG/L	89
7)	C028 Trichlorofluoromethane	3.67	101.0	82484	20.84	UG/L	97
8)	C045 1,1-Dichloroethene	4.30	96.0	39977	18.85	UG/L	81
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.30	101.0	91614	41.02	UG/L	94
10)	C035 Acetone	4.42	43.0	13188	12.61	UG/L	15
11)	C040 Carbon Disulfide	4.60	76.0	117479	19.08	UG/L	100
12)	C030 Methylene Chloride	4.95	84.0	56037	21.90	UG/L	90
13)	C053 Trans-1,2-dichloroethene	5.32	96.0	57018	21.07	UG/L	96
14)	C055 Cis-1,2-dichloroethene	6.85	96.0	61355	20.50	UG/L	97
15)	C050 1,1-Dichloroethane	5.93	63.0	110057	21.17	UG/L	100
16)	C060 Chloroform	7.38	83.0	123866	21.16	UG/L	90
17)	C065 1,2-Dichloroethane	8.41	62.0	80689	21.41	UG/L	100
18)	C110 2-Butanone	6.89	72.0	11706	26.32	UG/L	90
19)	CS15 D4-1,2-dichloroethane	8.27	65.0	60876	21.36	UG/L	88
20)	*CI10 1,4-Difluorobenzene	9.12	114.0	382718	50.00	UG/L	100
21)	C125 Vinyl Acetate	6.02	43.0	162692	26.67	UG/L	98
22)	C115 1,1,1-Trichloroethane	7.69	97.0	101073	21.05	UG/L	90
23)	C120 Carbon Tetrachloride	8.00	117.0	83339	20.84	UG/L	94
24)	C165 Benzene	8.37	78.0	177399	20.30	UG/L	100
25)	C150 Trichloroethene	9.66	130.0	72243	19.46	UG/L	99
26)	C140 1,2-Dichloropropane	10.12	63.0	73888	20.52	UG/L	100
27)	C130 Bromodichloromethane	10.74	83.0	110918	20.02	UG/L	84
28)	C175 2-Chloroethylvinylether	11.48	63.0	41966	17.67	UG/L	97
29)	C143 Cis-1,3-Dichloropropene	11.79	75.0	111863	21.08	UG/L	95
30)	C172 Trans-1,3-dichloropropene	13.20	75.0	85660	18.88	UG/L	100
31)	C160 1,1,2-Trichloroethane	13.66	97.0	69521	21.64	UG/L	80
32)	C155 Dibromochloromethane	14.70	129.0	97461	20.31	UG/L	95
33)	C180 Bromoform	18.88	173.0	70427	21.60	UG/L	97
34)	*CI20 D5-Chlorobenzene	16.32	117.0	304631	50.00	UG/L	100
35)	CS05 D8-Toluene	12.43	98.0	160365	20.84	UG/L	95
36)	C205 4-Methyl-2-pentanone	12.22	43.0	117912	23.85	UG/L	84
37)	C230 Toluene	12.59	92.0	118402	20.33	UG/L	90
38)	C210 2-Hexanone	14.43	43.0	88416	21.98	UG/L	99
39)	C220 Tetrachloroethene	14.00	164.0	60480	19.63	UG/L	85
40)	C235 Chlorobenzene	16.39	112.0	148734	20.53	UG/L	71
41)	C240 Ethylbenzene	16.79	106.0	76620	21.57	UG/L	99
42)	CXXX Xylenes (p)	17.15	106.0	94026M	21.06	UG/L	97

Operator ID: LIC Client Pct: 7 Client Time:
Output File: F2791::07 Injected at:
Data File: F2791::06 Dilution Factor: 1.0000
Name: STD 20NG, 5ML, HTD. Instrument ID:
Misc: Uc, CH#01, 5UL IS'S, STD=20UL/200ML HSL,A,B,FREONS, 40

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C245 Styrene	18.39	104.0	159465	20.53	UG/L	100
45)	C225 1,1,2,2-Tetrachloroethane	20.56	83.0	139141	22.25	UG/L	94
46)	CS10 Bromofluorobenzene	19.99	95.0	94859	20.81	UG/L	69
47)	C335 Dichlorobenzene (m)	23.53	146.0	133901	20.79	UG/L	100
48)	C340 Dichlorobenzene (p)	23.87	146.0	134437M	22.58	UG/L	100
49)	C350 Dichlorobenzene (o)	25.09	146.0	125774	20.15	UG/L	100
50)	C250 Xylenes (total)	18.35	106.0	88864	21.09	UG/L	91

* Compound is ISTD



Data File: >F2790::D6 Quant Output File: ^F2790::D7
Name: VSTD 50NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B,FREONS, 50

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

Operator ID: KERYLYNN
Quant Time : 911008 08:36
Injected at: 911008 08:09

Operator ID: KEPLINN Sample #: 7 Sample Time: 11:53 8:5
Output File: >F2790::07 Injected at: 11:57 11:
Data File: >F2790::06 Dilution Factor: 1.0000
Name: VSTD 50NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B,FPEO:S, 50

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

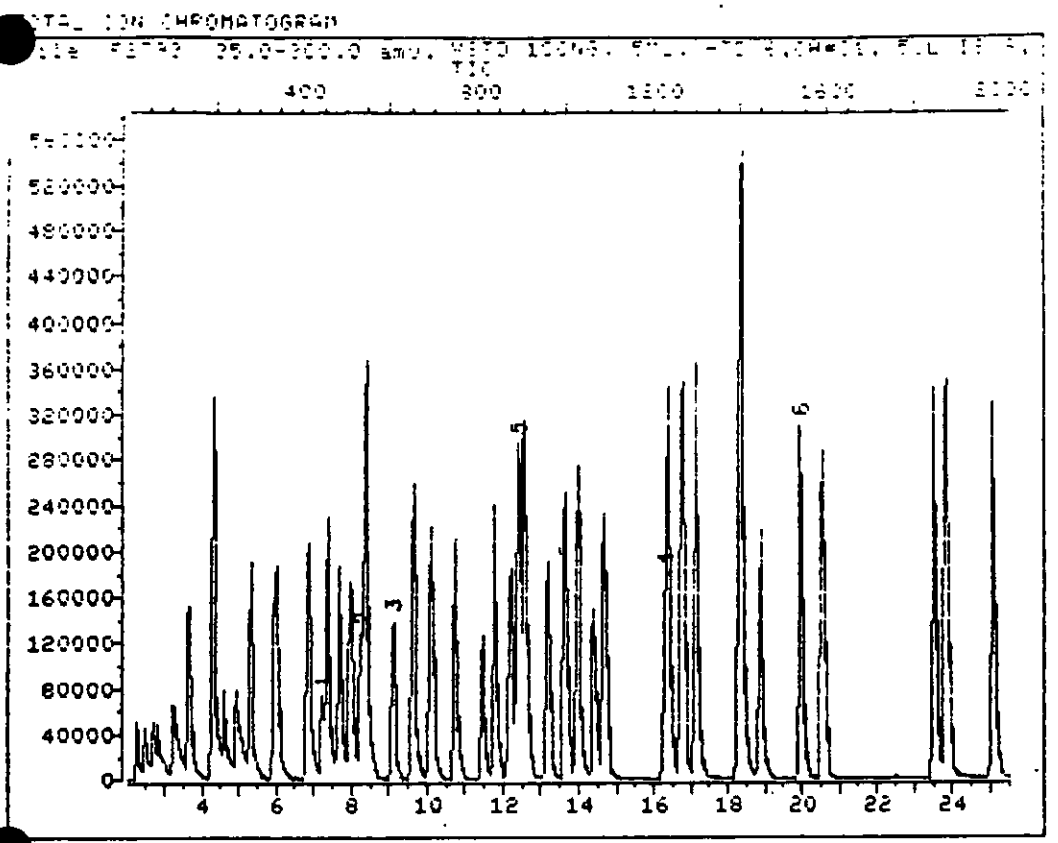
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.23	128.0	91542	50.00	UG/L	86
2)	C012 Dichlorodifluoromethane	2.44	85.0	98474	29.15	UG/L	84
3)	C010 Chloromethane	2.67	50.0	101050	50.38	UG/L	93
4)	C020 Vinyl Chloride	2.81	62.0	99740	47.40	UG/L	86
5)	C015 Bromomethane	3.22	94.0	100961	59.60	UG/L	95
6)	C025 Chloroethane	3.34	64.0	55083M	50.90	UG/L	99
7)	C028 Trichlorofluoromethane	3.65	101.0	177069	37.81	UG/L	88
8)	C045 1,1-Dichloroethene	4.29	96.0	92671	36.92	UG/L	89
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.29	101.0	211081	79.85	UG/L	89
10)	C035 Acetone	4.40	43.0	39722M	32.08	UG/L	11
11)	C040 Carbon Disulfide	4.60	76.0	273920	37.58	UG/L	100
12)	C030 Methylene Chloride	4.95	84.0	133387	44.05	UG/L	86
13)	C053 Trans-1,2-dichloroethene	5.31	96.0	136119	42.50	UG/L	96
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	155755	43.97	UG/L	83
15)	C050 1,1-Dichloroethane	5.92	63.0	261647	42.53	UG/L	100
16)	C060 Chloroform	7.37	83.0	291562	42.08	UG/L	99
17)	C065 1,2-Dichloroethane	8.40	62.0	196420	44.04	UG/L	100
18)	C110 2-Butanone	6.88	72.0	28847	54.81	UG/L	99
19)	CS15 D4-1,2-dichloroethane	8.26	65.0	157053	46.56	UG/L	88
20)	*CI10 1,4-Difluorobenzene	9.12	114.0	441917	50.00	UG/L	100
21)	C125 Vinyl Acetate	5.99	43.0	411297	58.38	UG/L	99
22)	C115 1,1,1-Trichloroethane	7.70	97.0	235534	42.49	UG/L	87
23)	C120 Carbon Tetrachloride	7.98	117.0	193666	41.94	UG/L	92
24)	C165 Benzene	8.36	78.0	421065	41.73	UG/L	100
25)	C150 Trichloroethene	9.64	130.0	170815	39.85	UG/L	98
26)	C140 1,2-Dichloropropane	10.11	63.0	177881	42.79	UG/L	100
27)	C130 Bromodichloromethane	10.73	83.0	284395	44.45	UG/L	79
28)	C175 2-Chloroethylvinylether	11.46	63.0	118827	43.34	UG/L	99
29)	C143 Cis-1,3-Dichloropropene	11.78	75.0	277685	45.31	UG/L	96
30)	C172 Trans-1,3-dichloropropene	13.19	75.0	209583	40.00	UG/L	100
31)	C160 1,1,2-Trichloroethane	13.64	97.0	168612	45.45	UG/L	72
32)	C155 Dibromochloromethane	14.68	129.0	248306	44.82	UG/L	91
33)	C180 Bromoform	18.87	173.0	186111	49.43	UG/L	99
34)	*CI20 D5-Chlorobenzene	16.30	117.0	336266	50.00	UG/L	100
35)	CS05 D8-Toluene	12.42	98.0	421899	49.67	UG/L	95
36)	C205 4-Methyl-2-pentanone	12.20	43.0	308065	56.46	UG/L	87
37)	C230 Toluene	12.59	92.0	277600	43.18	UG/L	90
38)	C210 2-Hexanone	14.41	43.0	234827	52.88	UG/L	99
39)	C220 Tetrachloroethene	13.99	164.0	143392	42.16	UG/L	88
40)	C235 Chlorobenzene	16.38	112.0	351030	43.90	UG/L	74
41)	C240 Ethylbenzene	16.76	106.0	166957	42.59	UG/L	97
42)	CXXX Xylenes (p)	17.14	106.0	221199	44.88	UG/L	94

Operator ID: [illegible] Quant Rev: 7 Quant Time: 911012 09:3[illegible]
Data File: FI790::07 Injected at: 911008 18:1[illegible]
Std File: FI790::06 Dilution Factor: 1.00000
Name: STD 50UG, 5ML, HTD. Instrument ID: V6
Misc: V6, CH#01, 50L IS/S, STD=25UL/100ML HSL,A,B,FREONS, 50

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C245 Styrene	18.37	104.0	365473	42.62	UG/L	100
45)	C225 1,1,2,2-Tetrachloroethane	20.55	83.0	338248	49.00	UG/L	93
46)	CS10 Bromofluorobenzene	19.95	95.0	253995	50.47	UG/L	72
47)	C335 Dichlorobenzene (m)	23.52	146.0	308235	43.36	UG/L	100
48)	C340 Dichlorobenzene (p)	23.85	146.0	323136M	49.16	UG/L	100
49)	C350 Dichlorobenzene (o)	25.07	146.0	298021M	43.26	UG/L	100
50)	C250 Xylenes (total)	18.31	106.0	208945M	44.93	UG/L	96

* Compound is ISTD



Data File: >F2793::D6 Quant Output File: ^F2793::D7
Name: VSTD 100NG. 5ML. HTD Instrument ID: V6
Misc: V6,CH#01, 5UL IS/S, STD=25UL/50ML HSL,A,B,CL3F,CL2F,50

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

Operator ID: KERYLYNN
Quant Time : 911008 10:39
Injected at: 911008 10:12

Operator ID: HERLIHAN Count Per: 7 Quant Time: 9.10.8 10:39
Input File: FI793::07 Injected at: 911004 1:1_
Data File: HF2793::06 Dilution Factor: 1.00000
Name: HSTD 100NG, 5ML, HTD Instrument ID: H6
Misc: H6,CH#01, 5UL IS/S, STD=25UL/50ML HSL,H,B,CL3F,CL2F,50

ID File: H4MI06::MT
Title: HSL VOLATILES: 75m * .53mm: 502.2, V6 HTD ERCO-ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

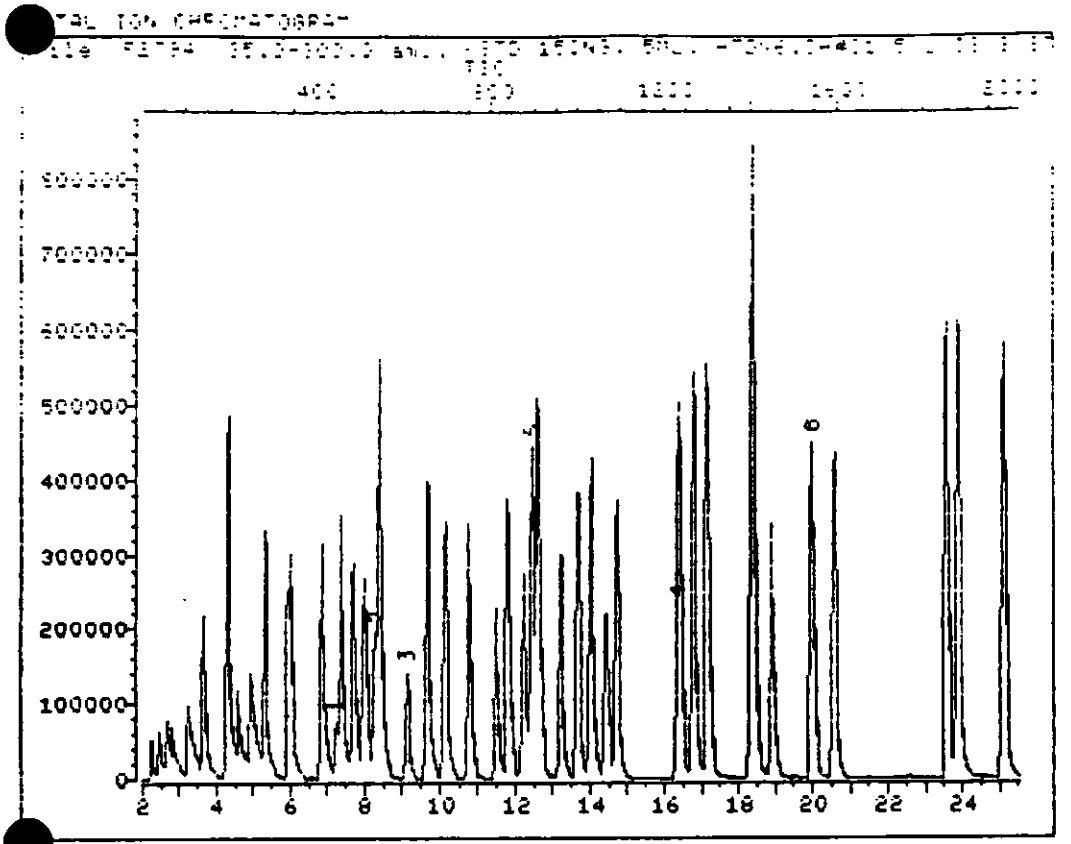
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	79858	50.00	UG/L	89
2)	C012 Dichlorodifluoromethane	2.45	85.0	181340M	61.54	UG/L	83
3)	C010 Chloromethane	2.67	50.0	175957	100.56	UG/L	99
4)	C020 Vinyl Chloride	2.81	62.0	188558	102.72	UG/L	86
5)	C015 Bromomethane	3.22	94.0	205152	138.83	UG/L	98
6)	C025 Chloroethane	3.33	64.0	114816M	121.62	UG/L	98
7)	C028 Trichlorofluoromethane	3.65	101.0	388286	95.03	UG/L	93
8)	C045 1,1-Dichloroethene	4.28	96.0	149758	68.40	UG/L	89
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.28	101.0	350897M	152.16	UG/L	81
10)	C035 Acetone	4.42	43.0	58817M	54.45	UG/L	76
11)	C040 Carbon Disulfide	4.58	76.0	424771	66.81	UG/L	100
12)	C030 Methylene Chloride	4.92	84.0	224803M	85.10	UG/L	76
13)	C053 Trans-1,2-dichloroethene	5.29	96.0	235168	84.16	UG/L	96
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	290493	94.02	UG/L	89
15)	C050 1,1-Dichloroethane	5.91	63.0	471927	87.92	UG/L	100
16)	C060 Chloroform	7.34	83.0	575916	95.28	UG/L	98
17)	C065 1,2-Dichloroethane	8.38	62.0	365922	94.04	UG/L	100
18)	C110 2-Butanone	6.89	72.0	58996	128.49	UG/L	93
19)	CS15 D4-1,2-dichloroethane	8.25	65.0	293909	99.87	UG/L	90
20)	*CI10 1,4-Difluorobenzene	9.10	114.0	405833	50.00	UG/L	100
21)	C125 Vinyl Acetate	5.98	43.0	773943	119.63	UG/L	97
22)	C115 1,1,1-Trichloroethane	7.67	97.0	451926	88.78	UG/L	87
23)	C120 Carbon Tetrachloride	7.96	117.0	379093	89.39	UG/L	97
24)	C165 Benzene	8.35	78.0	797747	86.10	UG/L	100
25)	C150 Trichloroethene	9.63	130.0	337724	85.79	UG/L	95
26)	C140 1,2-Dichloropropane	10.09	63.0	335941	88.00	UG/L	100
27)	C130 Bromodichloromethane	10.71	83.0	549525	93.54	UG/L	89
28)	C175 2-Chloroethylvinylether	11.45	63.0	231209	91.82	UG/L	93
29)	C143 Cis-1,3-Dichloropropene	11.75	75.0	553144	98.29	UG/L	98
30)	C172 Trans-1,3-dichloropropene	13.16	75.0	411749	85.56	UG/L	100
31)	C160 1,1,2-Trichloroethane	13.63	97.0	324975	95.39	UG/L	69
32)	C155 Dibromochloromethane	14.68	129.0	501210	98.52	UG/L	97
33)	C180 Bromoform	18.86	173.0	389321	112.60	UG/L	96
34)	*CI20 D5-Chlorobenzene	16.29	117.0	324057	50.00	UG/L	100
35)	CS05 D8-Toluene	12.40	98.0	771866	94.30	UG/L	93
36)	C205 4-Methyl-2-pentanone	12.18	43.0	631008	120.00	UG/L	90
37)	C230 Toluene	12.56	92.0	533492	86.11	UG/L	89
38)	C210 2-Hexanone	14.39	43.0	510464	119.28	UG/L	99
39)	C220 Tetrachloroethene	13.97	164.0	277511	84.67	UG/L	81
40)	C235 Chlorobenzene	16.37	112.0	689817	89.52	UG/L	72
41)	C240 Ethylbenzene	16.75	106.0	332203	87.93	UG/L	99
42)	CXXX Xylenes (p)	17.13	106.0	424778M	89.42	UG/L	96

Operator ID: HSL/LMN Quant Run: 7 Quant Time: 911108 10:34
Input File: F2793::07 Injected at: 911008 10:11
Data File: F2793::06 Dilution Factor: 1.0000
Name: VSTD 100NG, 5ML, HTD Instrument ID: Vo
Misc: Vo,CH#01, FUL IS S, STD=25UL/5ML HSL,A,B,CL3F,CL2F,50

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C245 Styrene	18.36	104.0	717603	86.83	UG/L	100
45)	C225 1,1,2,2-Tetrachloroethane	20.54	83.0	717391	107.83	UG/L	90
46)	CS10 Bromofluorobenzene	19.95	95.0	489943	101.02	UG/L	73
47)	C335 Dichlorobenzene (m)	23.51	146.0	609123	88.91	UG/L	100
48)	C340 Dichlorobenzene (p)	23.84	146.0	622509M	98.27	UG/L	100
49)	C350 Dichlorobenzene (o)	25.05	146.0	593203	89.35	UG/L	100
50)	C250 Xylenes (total)	18.32	106.0	397501M	88.70	UG/L	97

* Compound is ISTD



Data File: >F2794::D6 Quant Output File: ^F2794::D7
Name: VSTD 150NG. 5ML. HTD Instrument ID: V6
Misc: V6,CH#01 5UL IS/S STD=37.5UL/50ML HSL,A,B,CL3F,CL2F,50

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

Operator ID: LIZ
Quant Time : 911008 11:24
Injected at: 911008 10:57

Operator ID: LIC Quant Pe : 7 Quant Time: 9.10.5 11:1-
Output File: \F2794::D7 Injected at: 911109 1:47
Data File: \F2794::Db Dilution Factor: 1.00000
Name: HSTD 150NG. 5ML. HTD Instrument ID: U6
Misc: Ub,CH#01 5UL IS/S STD=37.5UL/50ML HSL,A,B,CL3F,CL2F,50

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, U6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

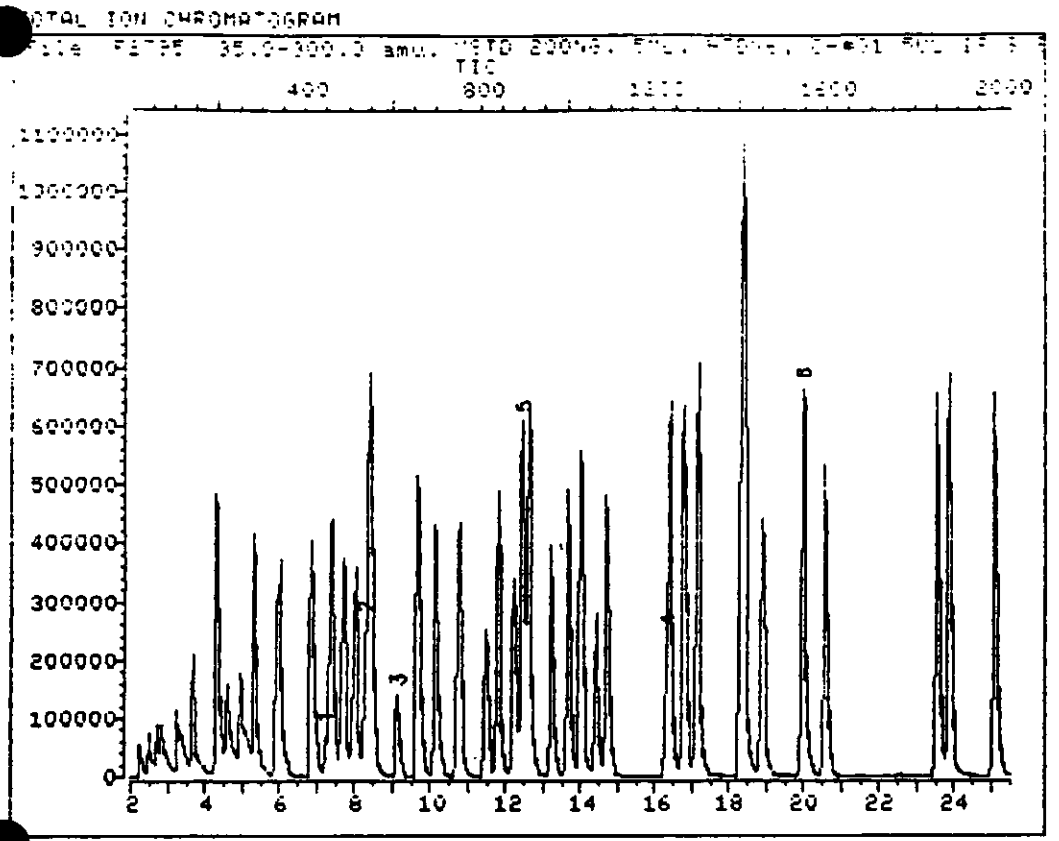
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.23	128.0	82954	50.00	UG/L	88
2)	C012 Dichlorodifluoromethane	2.45	85.0	268633	87.76	UG/L	83
3)	C010 Chloromethane	2.67	50.0	272402	149.86	UG/L	96
4)	C020 Vinyl Chloride	2.82	62.0	286918	150.47	UG/L	84
5)	C015 Bromomethane	3.23	94.0	313079	203.95	UG/L	89
6)	C025 Chloroethane	3.36	64.0	176341M	179.82	UG/L	86
7)	C028 Trichlorofluoromethane	3.66	101.0	540171	127.28	UG/L	99
8)	C045 1,1-Dichloroethene	4.29	96.0	217625	95.69	UG/L	82
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.30	101.0	522714M	218.20	UG/L	90
10)	C035 Acetone	4.43	43.0	84002	74.86	UG/L	22
11)	C040 Carbon Disulfide	4.58	76.0	688446	104.24	UG/L	100
12)	C030 Methylene Chloride	4.93	84.0	379746	138.38	UG/L	86
13)	C053 Trans-1,2-dichloroethene	5.31	96.0	396362	136.56	UG/L	98
14)	C055 Cis-1,2-dichloroethene	6.83	96.0	451993	140.82	UG/L	84
15)	C050 1,1-Dichloroethane	5.92	63.0	763987	137.03	UG/L	100
16)	C060 Chloroform	7.37	83.0	894116	142.41	UG/L	97
17)	C065 1,2-Dichloroethane	8.41	62.0	555755	137.50	UG/L	100
18)	C110 2-Butanone	6.89	72.0	83423	174.92	UG/L	93
19)	CS15 D4-1,2-dichloroethane	8.27	65.0	435952	142.61	UG/L	91
20)	*CI10 1,4-Difluorobenzene	9.12	114.0	403490	50.00	UG/L	100
21)	C125 Vinyl Acetate	6.01	43.0	1226982	190.75	UG/L	99
22)	C115 1,1,1-Trichloroethane	7.70	97.0	693910	137.10	UG/L	97
23)	C120 Carbon Tetrachloride	7.99	117.0	580382	137.64	UG/L	94
24)	C165 Benzene	8.36	78.0	1238067	134.40	UG/L	100
25)	C150 Trichloroethene	9.65	130.0	520168	132.90	UG/L	92
26)	C140 1,2-Dichloropropane	10.13	63.0	517172	136.26	UG/L	100
27)	C130 Bromodichloromethane	10.76	83.0	844399	144.56	UG/L	72
28)	C175 2-Chloroethylvinylether	11.47	63.0	404024	161.39	UG/L	98
29)	C143 Cis-1,3-Dichloropropene	11.79	75.0	847942	151.54	UG/L	98
30)	C172 Trans-1,3-dichloropropene	13.21	75.0	633150	132.33	UG/L	100
31)	C160 1,1,2-Trichloroethane	13.66	97.0	493343	145.65	UG/L	71
32)	C155 Dibromochloromethane	14.70	129.0	796760	157.52	UG/L	96
33)	C180 Bromoform	18.90	173.0	626975	182.39	UG/L	96
34)	*CI20 D5-Chlorobenzene	16.33	117.0	319865	50.00	UG/L	100
35)	CS05 D8-Toluene	12.43	98.0	1166598	144.39	UG/L	92
36)	C205 4-Methyl-2-pentanone	12.21	43.0	897582	172.93	UG/L	85
37)	C230 Toluene	12.59	92.0	822420	134.48	UG/L	97
38)	C210 2-Hexanone	14.42	43.0	725053	171.64	UG/L	97
39)	C220 Tetrachloroethene	14.01	164.0	418686	129.42	UG/L	96
40)	C235 Chlorobenzene	16.40	112.0	1061419	139.56	UG/L	75
41)	C240 Ethylbenzene	16.77	106.0	503394	134.99	UG/L	98
42)	CXYY Xylenes (p)	17.16	106.0	636078M	135.66	UG/L	93

Operator ID: LIZ Quant Pe.: 7 Quant Time: 911008 11:24
Output File: >F2794::D7 Injected at: 911008 10:57
Data File: >F2794::D6 Dilution Factor: 1.00000
Name: VSTD 150NG. 5ML. HTD Instrument ID: V6
Misc: V6,CH#01 5UL IS/S STD=37.5UL/50ML HSL,A,B,CL3F,CL2F,50

ID File: HAM1D6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C245 Styrene	18.41	104.0	1130574	138.60	UG/L	100
45)	C225 1,1,2,2-Tetrachloroethane	20.56	83.0	1077249	164.04	UG/L	91
46)	CS10 Bromofluorobenzene	19.98	95.0	711489	148.62	UG/L	69
47)	C335 Dichlorobenzene (m)	23.56	146.0	1086310	160.65	UG/L	100
48)	C340 Dichlorobenzene (p)	23.87	146.0	1120197M	179.15	UG/L	100
49)	C350 Dichlorobenzene (o)	25.10	146.0	1050752	160.35	UG/L	100
50)	C250 Xylenes (total)	18.35	106.0	610490M	138.01	UG/L	98

* Compound is ISTD



Data File: >F2795::D6 Quant Output File: ^F2795::D7
Name: VSTD 200NG. 5ML. HTD Instrument ID: V6
Misc: V6, CH#01 5UL IS/S STD=50UL/50ML HSL,A,B,CL3F,CL2F,100

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

Operator ID: KERYLYNN
Quant Time : 911008 11:59
Injected at: 911008 11:32

Operator ID: KER/LYNN Quant Rev: 7 Quant Time: 9.1123 11:59
Output File: >F2796::OP Injected at: 9.1004 11:31
Data File: >F2796::D6 Dilution Factor: 1.00000
Name: USTD 200NG. 5ML. HTD Instrument ID: V6
Misc: V6, CH#01 50UL IS/S STD=50UL/50ML HSL,A,B,CL3F,CL2F,100

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.23	128.0	83588	50.00	UG/L	87
2)	C012 Dichlorodifluoromethane	2.45	85.0	334776	108.54	UG/L	84
3)	C010 Chloromethane	2.68	50.0	332629	181.61	UG/L	99
4)	C020 Vinyl Chloride	2.81	62.0	370753	192.97	UG/L	89
5)	C015 Bromomethane	3.23	94.0	371286	240.04	UG/L	91
6)	C025 Chloroethane	3.35	64.0	186048M	188.28	UG/L	93
7)	C028 Trichlorofluoromethane	3.65	101.0	586346	137.11	UG/L	93
8)	C045 1,1-Dichloroethene	4.29	96.0	277331	121.02	UG/L	81
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.28	101.0	504977M	209.20	UG/L	87
10)	C035 Acetone	4.40	43.0	103359M	91.41	UG/L	18
11)	C040 Carbon Disulfide	4.58	76.0	965656	145.10	UG/L	100
12)	C030 Methylene Chloride	4.92	84.0	480826	173.89	UG/L	81
13)	C053 Trans-1,2-dichloroethene	5.30	96.0	504018	172.33	UG/L	98
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	578756	178.95	UG/L	85
15)	C050 1,1-Dichloroethane	5.91	63.0	986212	175.54	UG/L	100
16)	C060 Chloroform	7.37	83.0	1156092	182.74	UG/L	97
17)	C065 1,2-Dichloroethane	8.41	62.0	685805	168.39	UG/L	100
18)	C110 2-Butanone	6.88	72.0	97995	203.91	UG/L	92
19)	CS15 D4-1,2-dichloroethane	8.26	65.0	599075	194.48	UG/L	90
20)	*CI10 1,4-Difluorobenzene	9.12	114.0	411133	50.00	UG/L	100
21)	C125 Vinyl Acetate	6.01	43.0	1511390	230.60	UG/L	97
22)	C115 1,1,1-Trichloroethane	7.69	97.0	902935	175.09	UG/L	88
23)	C120 Carbon Tetrachloride	7.99	117.0	795997	185.27	UG/L	96
24)	C165 Benzene	8.36	78.0	1545062	164.61	UG/L	100
25)	C150 Trichloroethene	9.65	130.0	678289	170.08	UG/L	92
26)	C140 1,2-Dichloropropane	10.13	63.0	653483	168.97	UG/L	100
27)	C130 Bromodichloromethane	10.73	83.0	1091898	183.46	UG/L	75
28)	C175 2-Chloroethylvinylether	11.46	63.0	436418	171.09	UG/L	95
29)	C143 Cis-1,3-Dichloropropene	11.77	75.0	1108220	194.38	UG/L	99
30)	C172 Trans-1,3-dichloropropene	13.18	75.0	837597	171.81	UG/L	100
31)	C160 1,1,2-Trichloroethane	13.65	97.0	644039	186.60	UG/L	75
32)	C155 Dibromochloromethane	14.69	129.0	1036765	201.16	UG/L	94
33)	C180 Bromoform	18.89	173.0	809934	231.23	UG/L	99
34)	*CI20 D5-Chlorobenzene	16.31	117.0	334300	50.00	UG/L	100
35)	CS05 D8-Toluene	12.42	98.0	1633769	193.48	UG/L	92
36)	C205 4-Methyl-2-pentanone	12.20	43.0	1084015	199.83	UG/L	85
37)	C230 Toluene	12.58	92.0	1052882	164.73	UG/L	92
38)	C210 2-Hexanone	14.40	43.0	875629	198.34	UG/L	99
39)	C220 Tetrachloroethene	13.99	164.0	554589	164.03	UG/L	90
40)	C235 Chlorobenzene	16.39	112.0	1368352	172.14	UG/L	75
41)	C240 Ethylbenzene	16.75	106.0	652235	167.39	UG/L	91
42)	CXXX Xylenes (p)	17.14	106.0	826336M	168.63	UG/L	94

000196

Operator ID: KERILYNN Quant Rev: 7 Quant Time: 911004 12:5-
Output File: DF2795::D7 Injected at: 911004 11:32
Data File: >F2795::D6 Dilution Factor: 1.00000
Name: USTD 200NG. 5ML. HTD Instrument ID: V6
Misc: V6, CH#01 50UL IS/S STD=50UL/50ML HSL,A,B,CL3F,CL2F,100

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C245 Styrene	18.39	104.0	1427223	167.41	UG/L	100
45)	C225 1,1,2,2-Tetrachloroethane	20.55	83.0	1359653	198.11	UG/L	86
46)	CS10 Bromofluorobenzene	19.96	95.0	1023256	204.52	UG/L	72
47)	C335 Dichlorobenzene (m)	23.53	146.0	1213628	171.73	UG/L	100
48)	C340 Dichlorobenzene (p)	23.85	146.0	1237767M	189.41	UG/L	100
49)	C350 Dichlorobenzene (o)	25.08	146.0	1161517	169.60	UG/L	100
50)	C250 Xylenes (total)	18.33	106.0	777990M	168.28	UG/L	92

Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V1 Calibration date: 10/19/91 Time: 1128

Lab File ID: A3626 Init. Calib. Date(s): 08/29/91 08/29/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.948	0.900	5.1	#
Bromomethane		0.850	0.726	14.6	
Vinyl Chloride	*	1.185	1.128	4.8	*
Chloroethane		0.734	0.666	9.3	
Methylene Chloride		1.632	1.182	27.6	
Acetone		0.394	0.263	33.2	
Carbon Disulfide		4.412	2.909	34.1	
1,1-Dichloroethene	*	1.212	0.922	23.9	*
1,1-Dichloroethane	#	3.039	2.592	14.7	#
1,2-Dichloroethene (total)		1.548	1.422	8.1	
Chloroform	*	3.639	3.154	13.3	*
1,2-Dichloroethane		2.533	2.128	16.0	
2-Butanone		0.182	0.153	15.9	
1,1,1-Trichloroethane		0.593	0.481	18.9	
Carbon Tetrachloride		0.552	0.466	15.6	
Vinyl Acetate		0.556	0.350	37.0	
Bromodichloromethane		0.608	0.506	16.8	
1,2-Dichloropropane	*	0.417	0.340	18.5	*
cis-1,3-Dichloropropene		0.644	0.530	17.7	
Trichloroethene		0.459	0.405	11.8	
Dibromochloromethane		0.593	0.496	16.4	
1,1,2-Trichloroethane		0.365	0.294	19.4	
Benzene		1.104	0.942	14.7	
trans-1,3-Dichloropropene		0.583	0.453	22.3	
2-Chloroethylvinylether		0.251	0.181	27.9	
Bromoform	#	0.502	0.415	17.3	#
4-Methyl-2-Pentanone		0.475	0.334	29.7	
2-Hexanone		0.336	0.232	31.0	
Tetrachloroethene		0.508	0.502	1.2	
1,1,2,2-Tetrachloroethane	#	0.688	0.581	15.6	#
Toluene	*	0.870	0.778	10.6	*
Chlorobenzene	#	1.154	1.019	11.7	#
Ethylbenzene	*	0.560	0.523	6.6	*
Styrene		1.118	0.996	10.9	
Xylene (total)		0.632	0.571	9.7	
Toluene-d8		1.290	1.322	-2.5	
Bromofluorobenzene		0.596	0.595	0.2	
1,2-Dichloroethane-d4		1.845	1.864	-1.0	

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V2 Calibration date: 10/14/91 Time: 1334

Lab File ID: B2979 Init. Calib. Date(s): 10/11/91 10/12/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.455	0.340	25.3	#
Bromomethane		0.692	1.017	-47.0	
Vinyl Chloride	*	0.847	0.753	11.1	*
Chloroethane		0.531	0.727	-36.9	
Methylene Chloride		1.715	2.637	-53.8	
Acetone		0.404	0.423	-4.7	
Carbon Disulfide		4.332	4.840	-11.7	
1,1-Dichloroethene	*	0.935	1.142	-22.1	*
1,1-Dichloroethane	#	3.314	3.693	-11.4	#
1,2-Dichloroethene (total)		1.770	1.967	-11.1	
Chloroform	*	3.260	3.539	-8.6	*
1,2-Dichloroethane		2.168	2.305	-6.3	
2-Butanone		1.016	1.081	-6.4	
1,1,1-Trichloroethane		0.453	0.479	-5.7	
Carbon Tetrachloride		0.426	0.456	-7.0	
Vinyl Acetate		0.872	0.927	-6.3	
Bromodichloromethane		0.586	0.569	2.9	
1,2-Dichloropropane	*	0.441	0.418	5.2	*
cis-1,3-Dichloropropene		0.613	0.578	5.7	
Trichloroethene		0.424	0.411	3.1	
Dibromochloromethane		0.446	0.422	5.4	
1,1,2-Trichloroethane		0.326	0.296	9.2	
Benzene		1.169	1.248	-6.8	
trans-1,3-Dichloropropene		0.472	0.433	8.3	
2-Chloroethylvinylether		0.232	0.201	13.4	
Bromoform	#	0.315	0.302	4.1	#
4-Methyl-2-Pentanone		0.591	0.570	3.6	
2-Hexanone		0.322	0.312	3.1	
Tetrachloroethene		0.422	0.410	2.8	
1,1,2,2-Tetrachloroethane	#	0.841	0.804	4.4	#
Toluene	*	0.919	0.867	5.7	*
Chlorobenzene	#	1.058	1.020	3.6	#
Ethylbenzene	*	0.495	0.475	4.0	*
Styrene		0.989	0.986	0.3	
Xylene (total)		0.609	0.620	-1.8	
Toluene-d8		1.286	1.332	-3.6	
Bromofluorobenzene		0.597	0.610	-2.2	
1,2-Dichloroethane-d4		1.513	1.646	-8.8	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/08/91 Time: 0809

Lab File ID: F2790 Init. Calib. Date(s): 10/08/91 10/08/91

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

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	1.096	1.104	-0.7	#
Bromomethane		1.225	1.103	10.0	
Vinyl Chloride	*	1.139	1.090	4.3	*
Chloroethane		0.664	0.602	9.3	
Methylene Chloride		1.528	1.458	4.6	
Acetone		0.375	0.434	-15.7	
Carbon Disulfide		3.021	2.994	0.9	
1,1-Dichloroethene	*	0.989	1.013	-2.4	*
1,1-Dichloroethane	#	3.078	2.860	7.1	#
1,2-Dichloroethene (total)		1.581	1.488	5.9	
Chloroform	*	3.569	3.186	10.7	*
1,2-Dichloroethane		2.266	2.147	5.3	
2-Butanone		0.338	0.315	6.8	
1,1,1-Trichloroethane		0.575	0.533	7.3	
Carbon Tetrachloride		0.483	0.438	9.3	
Vinyl Acetate		0.976	0.931	4.6	
Bromodichloromethane		0.681	0.643	5.6	
1,2-Dichloropropane	*	0.425	0.402	5.4	*
cis-1,3-Dichloropropene		0.646	0.593	8.2	
Trichloroethene		0.423	0.386	8.7	
Dibromochloromethane		0.621	0.562	9.5	
1,1,2-Trichloroethane		0.407	0.381	6.4	
Benzene		1.011	0.953	5.7	
trans-1,3-Dichloropropene		0.554	0.515	7.0	
2-Chloroethylvinylether		0.285	0.269	5.6	
Bromoform	#	0.474	0.421	11.2	#
4-Methyl-2-Pentanone		0.921	0.917	0.4	
2-Hexanone		0.724	0.699	3.5	
Tetrachloroethene		0.440	0.427	3.0	
1,1,2,2-Tetrachloroethane	#	1.079	1.007	6.7	#
Toluene	*	0.853	0.826	3.2	*
Chlorobenzene	#	1.092	1.045	4.3	#
Ethylbenzene	*	0.530	0.497	6.2	*
Styrene		1.150	1.088	5.4	
Xylene (total)		0.636	0.622	2.2	
Toluene-d8		1.240	1.256	-1.3	
Bromofluorobenzene		0.759	0.756	0.4	
1,2-Dichloroethane-d4		1.813	1.716	5.4	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/09/91 Time: 1028

Lab File ID: F2827 Init. Calib. Date(s): 09/22/91 09/22/91

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

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

	COMPOUND	$\overline{RRF}$	RRF50	%D	
	Chloromethane	1.246	1.324	-6.3	#
	Bromomethane	1.055	1.216	-15.3	
*	Vinyl Chloride	1.258	1.350	-7.3	*
	Chloroethane	0.651	0.502	22.9	
	Methylene Chloride	1.704	1.800	-5.6	
	Acetone	0.211	0.184	12.8	
	Carbon Disulfide	4.156	4.435	-6.7	
*	1,1-Dichloroethene	1.387	1.507	-8.7	*
#	1,1-Dichloroethane	3.250	3.533	-8.7	#
	1,2-Dichloroethene (total)	1.727	1.844	-6.8	
*	Chloroform	3.857	3.791	1.7	*
	1,2-Dichloroethane	2.171	2.174	-0.1	
	2-Butanone	0.111	0.109	1.8	
	1,1,1-Trichloroethane	0.560	0.598	-6.8	
	Carbon Tetrachloride	0.479	0.490	-2.3	
	Vinyl Acetate	0.538	0.605	-12.4	
	Bromodichloromethane	0.622	0.601	3.4	
*	1,2-Dichloropropane	0.407	0.406	0.2	*
	cis-1,3-Dichloropropene	0.603	0.583	3.3	
	Trichloroethene	0.415	0.426	-2.7	
	Dibromochloromethane	0.501	0.468	6.6	
	1,1,2-Trichloroethane	0.316	0.295	6.6	
	Benzene	1.001	0.991	1.0	
	trans-1,3-Dichloropropene	0.470	0.448	4.7	
	2-Chloroethylvinylether	0.190	0.178	6.3	
#	Bromoform	0.302	0.263	12.9	#
	4-Methyl-2-Pentanone	0.332	0.324	2.4	
	2-Hexanone	0.236	0.213	9.7	
	Tetrachloroethene	0.430	0.468	-8.8	
#	1,1,2,2-Tetrachloroethane	0.596	0.574	3.7	#
*	Toluene	0.839	0.906	-8.0	*
#	Chlorobenzene	1.057	1.088	-2.9	#
*	Ethylbenzene	0.509	0.547	-7.5	*
	Styrene	1.098	1.116	-1.6	
	Xylene (total)	0.601	0.637	-6.0	
	Toluene-d8	1.246	1.300	-4.3	
	Bromofluorobenzene	0.742	0.715	3.6	
	1,2-Dichloroethane-d4	1.759	1.571	10.7	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/10/91 Time: 1103

Lab File ID: F2866 Init. Calib. Date(s): 09/22/91 09/22/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	1.246	1.174	5.8	#
Bromomethane		1.055	0.807	23.5	
Vinyl Chloride	*	1.258	1.025	18.5	*
Chloroethane		0.651	0.483	25.8	
Methylene Chloride		1.704	1.741	-2.2	
Acetone		0.211	0.208	1.4	
Carbon Disulfide		4.156	3.695	11.1	
1,1-Dichloroethene	*	1.387	1.236	10.9	*
1,1-Dichloroethane	#	3.250	3.244	0.2	#
1,2-Dichloroethene (total)		1.727	1.659	3.9	
Chloroform	*	3.857	3.608	6.5	*
1,2-Dichloroethane		2.171	2.167	0.2	
2-Butanone		0.111	0.115	-3.6	
1,1,1-Trichloroethane		0.560	0.548	2.1	
Carbon Tetrachloride		0.479	0.449	6.3	
Vinyl Acetate		0.538	0.610	-13.4	
Bromodichloromethane		0.622	0.593	4.7	
1,2-Dichloropropane	*	0.407	0.395	2.9	*
cis-1,3-Dichloropropene		0.603	0.582	3.5	
Trichloroethene		0.415	0.393	5.3	
Dibromochloromethane		0.501	0.474	5.4	
1,1,2-Trichloroethane		0.316	0.311	1.6	
Benzene		1.001	0.969	3.2	
trans-1,3-Dichloropropene		0.470	0.456	3.0	
2-Chloroethylvinylether		0.190	0.177	6.8	
Bromoform	#	0.302	0.275	8.9	#
4-Methyl-2-Pentanone		0.332	0.354	-6.6	
2-Hexanone		0.236	0.231	2.1	
Tetrachloroethene		0.430	0.440	-2.3	
1,1,2,2-Tetrachloroethane	#	0.596	0.616	-3.4	#
Toluene	*	0.839	0.852	-1.5	*
Chlorobenzene	#	1.057	1.021	3.4	#
Ethylbenzene	*	0.509	0.514	-1.0	*
Styrene		1.098	1.102	-0.4	
Xylene (total)		0.601	0.611	-1.7	
Toluene-d8		1.246	1.275	-2.3	
Bromofluorobenzene		0.742	0.726	2.2	
1,2-Dichloroethane-d4		1.759	1.699	3.4	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

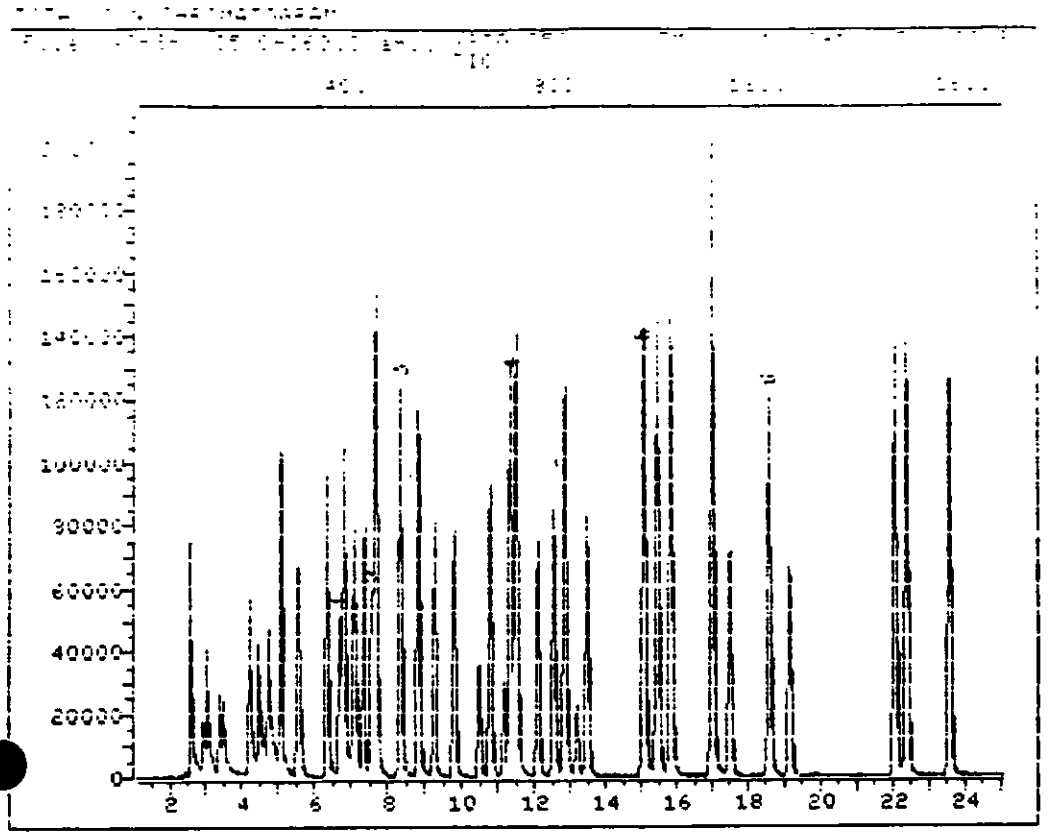
Instrument ID: V6 Calibration date: 10/11/91 Time: 2151

Lab File ID: F2909 Init. Calib. Date(s): 09/22/91 09/22/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

	COMPOUND		$\overline{RRF}$	RRF50	%D	
	Chloromethane	#	1.246	1.269	-1.8	#
	Bromomethane		1.055	1.197	-13.5	
	Vinyl Chloride	*	1.258	1.378	-9.5	*
	Chloroethane		0.651	0.680	-4.5	
	Methylene Chloride		1.704	1.951	-14.5	
	Acetone		0.211	0.270	-28.0	
	Carbon Disulfide		4.156	4.299	-3.4	
	1,1-Dichloroethene	*	1.387	1.499	-8.1	*
	1,1-Dichloroethane	#	3.250	3.531	-8.6	#
	1,2-Dichloroethene (total)		1.727	1.888	-9.3	
	Chloroform	*	3.857	4.030	-4.5	*
	1,2-Dichloroethane		2.171	2.482	-14.3	
	2-Butanone		0.111	0.140	-26.1	
	1,1,1-Trichloroethane		0.560	0.575	-2.7	
	Carbon Tetrachloride		0.479	0.464	3.1	
	Vinyl Acetate		0.538	0.468	13.0	
	Bromodichloromethane		0.622	0.601	3.4	
	1,2-Dichloropropane	*	0.407	0.417	-2.5	*
	cis-1,3-Dichloropropene		0.603	0.611	-1.3	
	Trichloroethene		0.415	0.433	-4.3	
	Dibromochloromethane		0.501	0.511	-2.0	
	1,1,2-Trichloroethane		0.316	0.343	-8.5	
	Benzene		1.001	1.015	-1.4	
	trans-1,3-Dichloropropene		0.470	0.487	-3.6	
	2-Chloroethylvinylether		0.190	0.196	-3.2	
	Bromoform	#	0.302	0.312	-3.3	#
	4-Methyl-2-Pentanone		0.332	0.357	-7.5	
	2-Hexanone		0.236	0.257	-8.9	
	Tetrachloroethene		0.430	0.440	-2.3	
	1,1,2,2-Tetrachloroethane	#	0.596	0.594	0.3	#
	Toluene	*	0.839	0.852	-1.5	*
	Chlorobenzene	#	1.057	1.026	2.9	#
	Ethylbenzene	*	0.509	0.504	1.0	*
	Styrene		1.098	1.064	3.1	
	Xylene (total)		0.601	0.574	4.5	
	Toluene-d8		1.246	1.201	3.6	
	Bromofluorobenzene		0.742	0.770	-3.8	
	1,2-Dichloroethane-d4		1.759	1.936	-10.1	



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Misc: V1, CH1 , 5UL IS/S

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Last Calibration: 911018 21:10

Operator ID: ALANA
Quant Time: 911019 11:54
Injected at: 911019 11:28

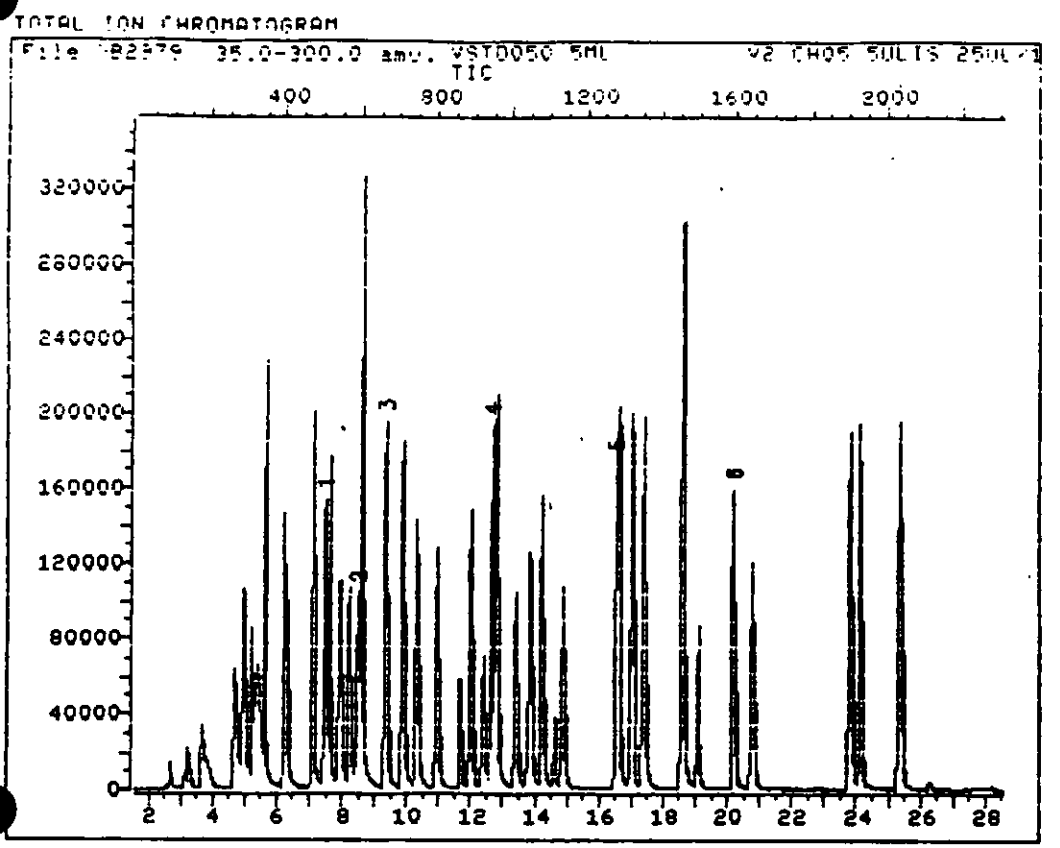
Data File: MU-1U::::
Title: mtL "ULA" lab:lu5mm,.25mm:Serial: VIcPLUS/ENGELL
Last Calibration: Fri Uls 21:10

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	6.66	128.0	59152	50.00	UG/L	92
2)	C010	Chloromethane	2.92	50.0	53265	55.05	UG/L	86
3)	C020	Vinyl Chloride	3.02	62.0	66797	54.06	UG/L	89
4)	C015	Bromomethane	3.33	94.0	42966	34.56	UG/L	92
5)	C025	Chloroethane	3.43	64.0	39421	48.58	UG/L	97
6)	C045	1,1-Dichloroethene	4.20	96.0	54587	45.22	UG/L	90
7)	C035	Acetone	4.28	43.0	15559	51.34	UG/L	100
8)	C040	Carbon Disulfide	4.45	76.0	172226	41.51	UG/L	100
9)	C050	Methylene Chloride	4.72	84.0	70004	48.44	UG/L	98
10)	C055	Trans-1,2-Dichloroethene	5.02	96.0	84152	48.18	UG/L	98
11)	C065	cis-1,2-Dichloroethene	6.32	96.0	99855	50.09	UG/L	85
12)	C060	1,1-Dichloroethane	5.55	63.0	153470	48.30	UG/L	88
13)	C060	Chloroform	6.78	83.0	186686	48.98	UG/L	95
14)	C065	1,2-Dichloroethane	7.69	62.0	125948	47.23	UG/L	100
15)	C110	2-Butanone	6.35	72.0	9030	60.58	UG/L	80
16)	CS15	D4-1,2-Dichloroethane	7.56	65.0	110331	50.34	UG/L	93
17)	*C110	1,4-Difluorobenzene	8.32	114.0	298536	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.61	43.0	104579	59.69	UG/L	99
19)	C115	1,1,1-Trichloroethane	7.06	97.0	143922	43.41	UG/L	94
20)	C120	Carbon Tetrachloride	7.32	117.0	139470	42.55	UG/L	99
21)	C165	Benzene	7.65	78.0	281725	47.77	UG/L	100
22)	C150	Trichloroethene	8.79	130.0	121132	46.12	UG/L	94
23)	C140	1,2-Dichloropropane	9.22	63.0	101611	48.66	UG/L	100
24)	C130	Bromodichloromethane	9.78	83.0	151155	47.69	UG/L	81
25)	C175	2-Chloroethylvinylether	10.45	63.0	54261	50.89	UG/L	94
26)	C143	Cis-1,3-Dichloropropen	10.75	75.0	167908	51.57	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	12.07	75.0	124685	44.36	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.50	97.0	87896	47.51	UG/L	69
29)	C155	Dibromochloromethane	13.48	129.0	148274	46.38	UG/L	93
30)	C180	Bromoform	17.48	173.0	124194	47.17	UG/L	99
31)	*C120	D5-Chlorobenzene	15.03	117.0	232914	50.00	UG/L	100
32)	CS05	D8-Toluene	11.34	98.0	307993	50.68	UG/L	73
33)	C205	4-Methyl-2-Pentanone	11.14	43.0	77772	51.63	UG/L	80
34)	C230	Toluene	11.50	92.0	181381	47.96	UG/L	96
35)	C210	2-Hexanone	13.21	43.0	53984	51.31	UG/L	97
36)	C220	Tetrachloroethene	12.81	164.0	116891	46.37	UG/L	88
37)	C235	Chlorobenzene	15.10	112.0	237439	47.29	UG/L	68
38)	C240	Ethylbenzene	15.47	106.0	121868	49.80	UG/L	99
39)	CXXX	Xylene (p)	15.83	106.0	148460	49.14	UG/L	99
40)	CXXX	Xylene (o)	16.96	106.0	134730	49.27	UG/L	95
41)	C245	Styrene	17.03	104.0	232082	48.04	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.14	83.0	135341	53.18	UG/L	94
43)	CS10	Bromofluorobenzene (BFB)	18.54	95.0	139550	51.10	UG/L	100

000205

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1,3-Dichlorobenzene	(m)	[illegible]	146.	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1,4-Dichlorobenzene	(p)	22.14	146.)	[illegible]	46.61	UG/L	[illegible]
[illegible]	[illegible]	1,2-Dichlorobenzene	(o)	23.54	146.0	[illegible]	47.46	UG/L	[illegible]
[illegible]	[illegible]	Xylene (total)		16.76	106.0	[illegible]	46.36	UG/L	[illegible]

* Compound is [illegible]



Data File: >B2979::D6 Quant Output File: ^B2979::QT
Name: VSTD050 5ML
Misc: V2 CH05 5ULIS 25UL/100ML A+B+HSL

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911012 13:56

Operator ID: NORA
Quant Time: 911014 14:03
Injected at: 911014 13:34

QUANT REPORT

Operator ID: NORM Quant Rev: 6 Quant Time: 911014 14:55
Output File: >B2979::Q1 Injected at: 911014 13:54
Data File: >B2979::D6 Dilution Factor: 1.00000
Name: VSTD050 5ML
Misc: V2 CH05 50LIS 25UL/100ML A+B+HSL

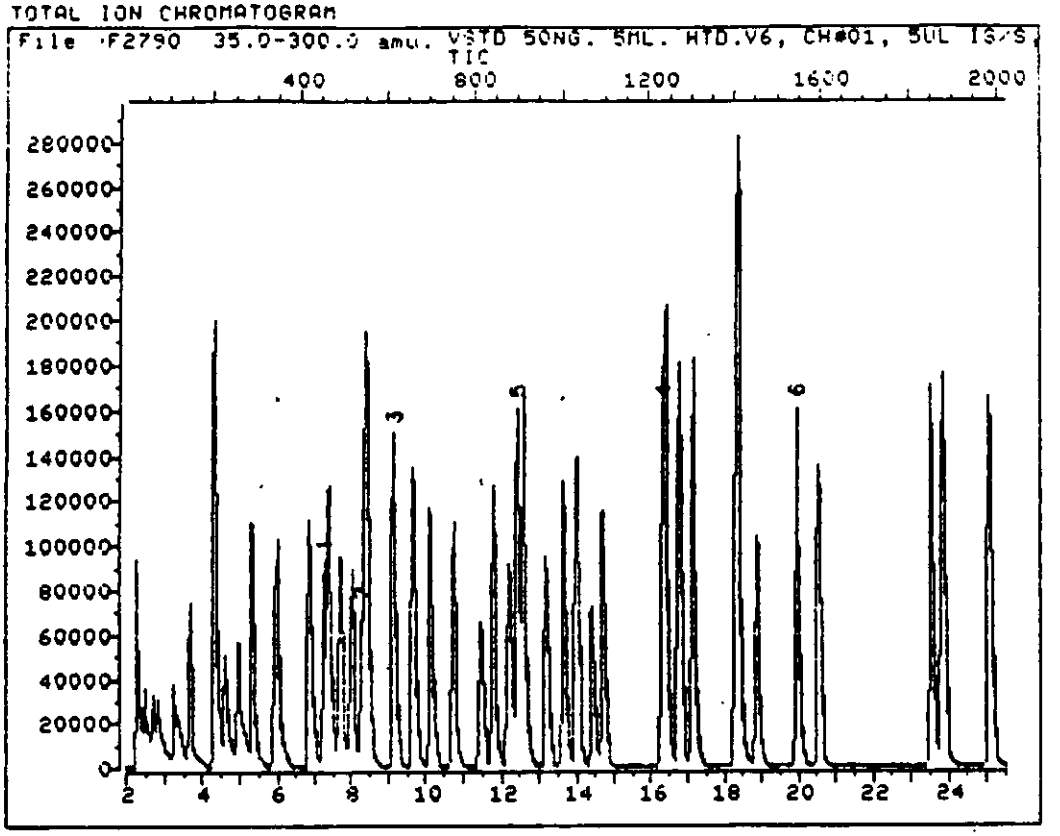
ID File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911012 13:56

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane'	7.47	128.0	100554	50.00	UG/L	80
2)	C010	Chloromethane	3.10	50.0	34365	59.11	UG/L	99
3)	C020	Vinyl Chloride	3.24	62.0	76036	51.87	UG/L	87
4)	C015	Bromomethane	3.65	94.0	102259	60.16	UG/L	93
5)	C025	Chloroethane	3.84	64.0	73394	55.06	UG/L	93
6)	C045	1,1-Dichloroethene	4.71	96.0	114792M	60.23	UG/L	97
7)	C035	Acetone	4.69	43.0	42677	67.81	UG/L	100
8)	C040	Carbon Disulfide	4.95	76.0	486804	52	UG/L	100
9)	C030	Methylene Chloride	5.23	84.0	265165M	57.90	UG/L	89
10)	C053	Trans-1,2-Dichloroethene	5.60	96.0	198693	48.94	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.09	96.0	201534	46.24	UG/L	96
12)	C050	1,1-Dichloroethane	6.20	63.0	371383	49.08	UG/L	86
13)	C060	Chloroform	7.61	83.0	355906	48.62	UG/L	94
14)	C065	1,2-Dichloroethane	8.62	62.0	231752	50.38	UG/L	100
15)	C110	2-Butanone	7.12	43.0	108724	52.12	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.48	65.0	166194	54.19	UG/L	85
17)	*C110	1,4-Difluorobenzene	9.35	114.0	448145	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.29	43.0	415491	47.96	UG/L	96
19)	C115	1,1,1-Trichloroethane	7.94	97.0	214651	50.36	UG/L	93
20)	C120	Carbon Tetrachloride	8.23	117.0	204201	50.26	UG/L	99
21)	C165	Benzene	8.60	78.0	559043	46.18	UG/L	100
22)	C150	Trichloroethene	9.87	130.0	184139	45.20	UG/L	98
23)	C140	1,2-Dichloropropane	10.32	63.0	187301	45.71	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	255107	47.98	UG/L	80
25)	C175	2-Chloroethylvinylether	11.67	63.0	90114	50.76	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	11.99	75.0	274429	48.95	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	13.38	75.0	178445	44.40	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.84	97.0	132574	47.61	UG/L	71
29)	C155	Dibromochloromethane	14.87	129.0	189282	49.32	UG/L	98
30)	C180	Bromoform	19.07	173.0	135195	50.88	UG/L	97
31)	*C120	D5-Chlorobenzene	16.51	117.0	321576	50.00	UG/L	100
32)	CS05	D8-Toluene	12.63	98.0	429007	49.46	UG/L	93
33)	C205	4-Methyl-2-Pentanone	12.40	43.0	183383	50.75	UG/L	85
34)	C230	Toluene	12.80	92.0	279061	45.26	UG/L	97
35)	C210	2-Hexanone	14.60	43.0	100429	56.28	UG/L	99
36)	C220	Tetrachloroethene	14.21	164.0	131923	46.57	UG/L	89
37)	C235	Chlorobenzene	16.59	112.0	328361	46.03	UG/L	74
38)	C240	Ethylbenzene	17.00	106.0	153031	46.44	UG/L	96
39)	CXXX	Xylene (p)	17.37	106.0	191688	47.55	UG/L	98
40)	CXXX	Xylenes (o)	18.55	106.0	200489	45.11	UG/L	93
41)	C245	Styrene	18.61	104.0	317627	45.91	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.79	83.0	258865	45.04	UG/L	93

		Compound	R.T.	Q ion	Area	Conc	Units	C
44)	C395	Dichlorobenzene (m)	23.81	146.0	295269	46.41	UG/L	100
45)	C340	Dichlorobenzene (p)	24.12	146.0	301527	46.48	UG/L	100
46)	C390	Dichlorobenzene (o)	25.36	146.0	313621	46.92	UG/L	100
47)	C250	Xylene (Total)	18.55	106.0	199653	45.58	UG/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F2790::D6 Quant Output File: ^F2790::D7
Name: VSTD 50NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B,FREONS, 50

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

Operator ID: KERYLYNN
Quant Time : 911008 08:36
Injected at: 911008 08:09

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911008 08:3c
Output File: ^F2790::D7 Injected at: 911008 08:09
Data File: >F2790::D6 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B,FREONS, 50

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.23	128.0	91542	50.00	UG/L	86
2)	C012 Dichlorodifluoromethane	2.44	85.0	98474	29.15	UG/L	84
3)	C010 Chloromethane	2.67	50.0	101050	50.38	UG/L	93
4)	C020 Vinyl Chloride	2.81	62.0	99740	47.40	UG/L	86
5)	C015 Bromomethane	3.22	94.0	100961	59.60	UG/L	95
6)	C025 Chloroethane	3.34	64.0	55083M	50.90	UG/L	99
7)	C028 Trichlorofluoromethane	3.65	101.0	177069	37.81	UG/L	88
8)	C045 1,1-Dichloroethene	4.29	96.0	92671	36.92	UG/L	89
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.29	101.0	211081	79.85	UG/L	89
10)	C035 Acetone	4.40	43.0	39722M	32.08	UG/L	11
11)	C040 Carbon Disulfide	4.60	76.0	273920	37.58	UG/L	100
12)	C030 Methylene Chloride	4.95	84.0	133387	44.05	UG/L	86
13)	C053 Trans-1,2-dichloroethene	5.31	96.0	136119	42.50	UG/L	96
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	155755	43.97	UG/L	83
15)	C050 1,1-Dichloroethane	5.92	63.0	261647	42.53	UG/L	100
16)	C060 Chloroform	7.37	83.0	291562	42.08	UG/L	99
17)	C065 1,2-Dichloroethane	8.40	62.0	196420	44.04	UG/L	100
18)	C110 2-Butanone	6.88	72.0	28847	54.81	UG/L	99
19)	CS15 D4-1,2-dichloroethane	8.26	65.0	157053	46.56	UG/L	88
20)	*CI10 1,4-Difluorobenzene	9.12	114.0	441917	50.00	UG/L	100
21)	C125 Vinyl Acetate	5.99	43.0	411297	58.38	UG/L	99
22)	C115 1,1,1-Trichloroethane	7.70	97.0	235534	42.49	UG/L	87
23)	C120 Carbon Tetrachloride	7.98	117.0	193666	41.94	UG/L	92
24)	C165 Benzene	8.36	78.0	421065	41.73	UG/L	100
25)	C150 Trichloroethene	9.64	130.0	170815	39.85	UG/L	98
26)	C140 1,2-Dichloropropane	10.11	63.0	177881	42.79	UG/L	100
27)	C130 Bromodichloromethane	10.73	83.0	284395	44.45	UG/L	79
28)	C175 2-Chloroethylvinylether	11.46	63.0	118827	43.34	UG/L	99
29)	C143 Cis-1,3-Dichloropropene	11.78	75.0	277685	45.31	UG/L	96
30)	C172 Trans-1,3-dichloropropene	13.19	75.0	209583	40.00	UG/L	100
31)	C160 1,1,2-Trichloroethane	13.64	97.0	168612	45.45	UG/L	72
32)	C155 Dibromochloromethane	14.68	129.0	248306	44.82	UG/L	91
33)	C180 Bromoform	18.87	173.0	186111	49.43	UG/L	99
34)	*CI20 D5-Chlorobenzene	16.30	117.0	336266	50.00	UG/L	100
35)	CS05 D8-Toluene	12.42	98.0	421899	49.67	UG/L	95
36)	C205 4-Methyl-2-pentanone	12.20	43.0	308065	56.46	UG/L	87
37)	C230 Toluene	12.59	92.0	277600	43.18	UG/L	90
38)	C210 2-Hexanone	14.41	43.0	234827	52.88	UG/L	99
39)	C220 Tetrachloroethene	13.99	164.0	143392	42.16	UG/L	88
40)	C235 Chlorobenzene	14.38	112.0	351030	43.90	UG/L	74

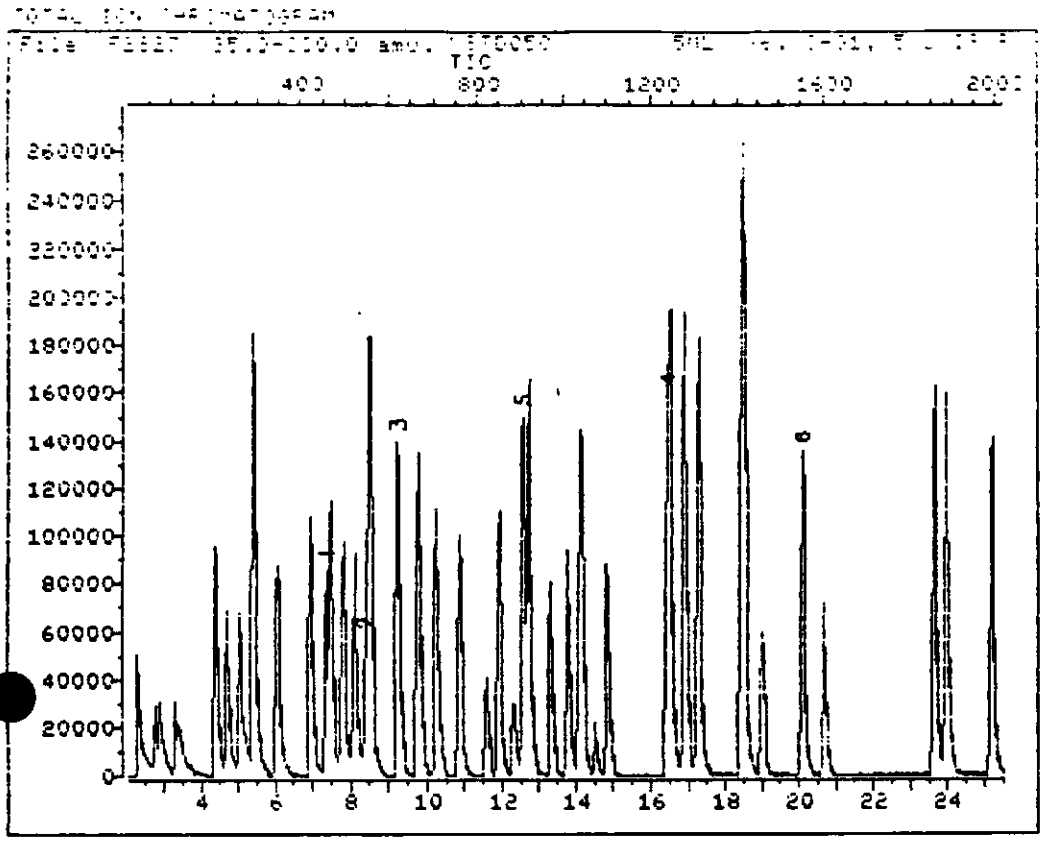
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911008 08:3
Output File: ^F2790::D7 Injected at: 911008 08:09
Data File: >F2790::D6 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B,FREONS, 50

ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911004 12:08

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C245 Styrene	18.37	104.0	365473	42.62	UG/L	100
45)	C225 1,1,2,2-Tetrachloroethane	20.55	83.0	338248	49.00	UG/L	93
46)	CS10 Bromofluorobenzene	19.95	95.0	253995	50.47	UG/L	72
47)	C335 Dichlorobenzene (m)	23.52	146.0	308235	43.36	UG/L	100
48)	C340 Dichlorobenzene (p)	23.85	146.0	323136M	49.16	UG/L	100
49)	C350 Dichlorobenzene (o)	25.07	146.0	298021M	43.26	UG/L	100
50)	C250 Xylenes (total)	18.31	106.0	208945M	44.93	UG/L	96

* Compound is ISTD

RPJ 10/08/91



Data File: >F2827::D6 Quant Output File: ^F2827::D7
Name: VSTD050 5ML Instrument ID: V6
Misc: V6, CH01, 5UL IS/S 25UL/100ML + 5UL MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911008 21:54

Operator ID: KERYLYNN
Quant Time : 911009 10:55
Injected at: 911009 10:28

Operator ID: KSPYLYNN Quant Rev: 7 Quant Time: 9.1009 10:4?
Output File: ^F2807::07 Injected at: 911009 10:28
Data File: ^F2807::06 Dilution Factor: 1.00000
Name: VSTD050 FML Instrument ID: V6
Misc: V6, CH01, 5UL IS S 25UL/10ML + 5UL MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911008 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.33	128.0	75510	50.00	UG/L	71
2)	C010 Chloromethane	2.73	50.0	99943	55.93	UG/L	99
3)	C020 Vinyl Chloride	2.87	62.0	101935	54.40	UG/L	84
4)	C015 Bromomethane	3.28	94.0	91789	49.82	UG/L	91
5)	C025 Chloroethane	3.41	64.0	37922	32.66	UG/L	96
6)	C045 1,1-Dichloroethene	4.38	96.0	113802	51.88	UG/L	94
7)	C035 Acetone	4.44	43.0	13920	50.31	UG/L	23
8)	C040 Carbon Disulfide	4.69	76.0	334810	54.70	UG/L	100
9)	C030 Methylene Chloride	5.03	84.0	135911	51.97	UG/L	91
11)	C053 Trans-1,2-dichloroethene	5.41	96.0	139247	50.56	UG/L	96
12)	C055 Cis-1,2-dichloroethene	6.94	96.0	149748	52.11	UG/L	81
13)	CXXX Methyl tert-butyl ether	5.41	73.0	239531	48.92	UG/L	89
14)	C050 1,1-Dichloroethane	6.03	63.0	266766	52.38	UG/L	100
15)	C060 Chloroform	7.48	83.0	286198	49.43	UG/L	95
16)	C065 1,2-Dichloroethane	8.51	62.0	164138	51.59	UG/L	100
17)	C110 2-Butanone	6.96	72.0	8235	47.57	UG/L	96
18)	CS15 D4-1,2-dichloroethane	8.37	65.0	118610	45.49	UG/L	82
19)	*C110 1,4-Difluorobenzene	9.23	114.0	407259	50.00	UG/L	100
20)	C125 Vinyl Acetate	6.10	43.0	246295	49.72	UG/L	99
21)	C115 1,1,1-Trichloroethane	7.80	97.0	243305	53.92	UG/L	91
22)	C120 Carbon Tetrachloride	8.10	117.0	199472	52.04	UG/L	98
23)	C165 Benzene	8.49	78.0	403493	49.15	UG/L	100
24)	C150 Trichloroethene	9.76	130.0	173394	51.61	UG/L	95
25)	C140 1,2-Dichloropropane	10.24	63.0	165220	51.94	UG/L	100
26)	C130 Bromodichloromethane	10.86	83.0	244413	51.31	UG/L	77
27)	C175 2-Chloroethylvinylether	11.59	63.0	72344	57.93	UG/L	97
28)	C143 Cis-1,3-Dichloropropene	11.91	75.0	251615	52.67	UG/L	98
29)	C172 Trans-1,3-dichloropropene	13.31	75.0	167932	46.75	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.79	97.0	120208	50.77	UG/L	72
31)	C155 Dibromochloromethane	14.83	129.0	190425	50.97	UG/L	91
32)	C180 Bromoform	19.01	173.0	106999	50.52	UG/L	93
33)	*C120 D5-Chlorobenzene	16.44	117.0	308421	50.00	UG/L	100
34)	CS05 D8-Toluene	12.55	98.0	400363	50.48	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.31	43.0	99930	50.16	UG/L	86
36)	C230 Toluene	12.71	92.0	279066	50.87	UG/L	87
37)	C210 2-Hexanone	14.51	43.0	65728	51.20	UG/L	96
38)	C220 Tetrachloroethene	14.13	164.0	144216	50.19	UG/L	82
39)	C235 Chlorobenzene	16.51	112.0	335211	50.22	UG/L	75

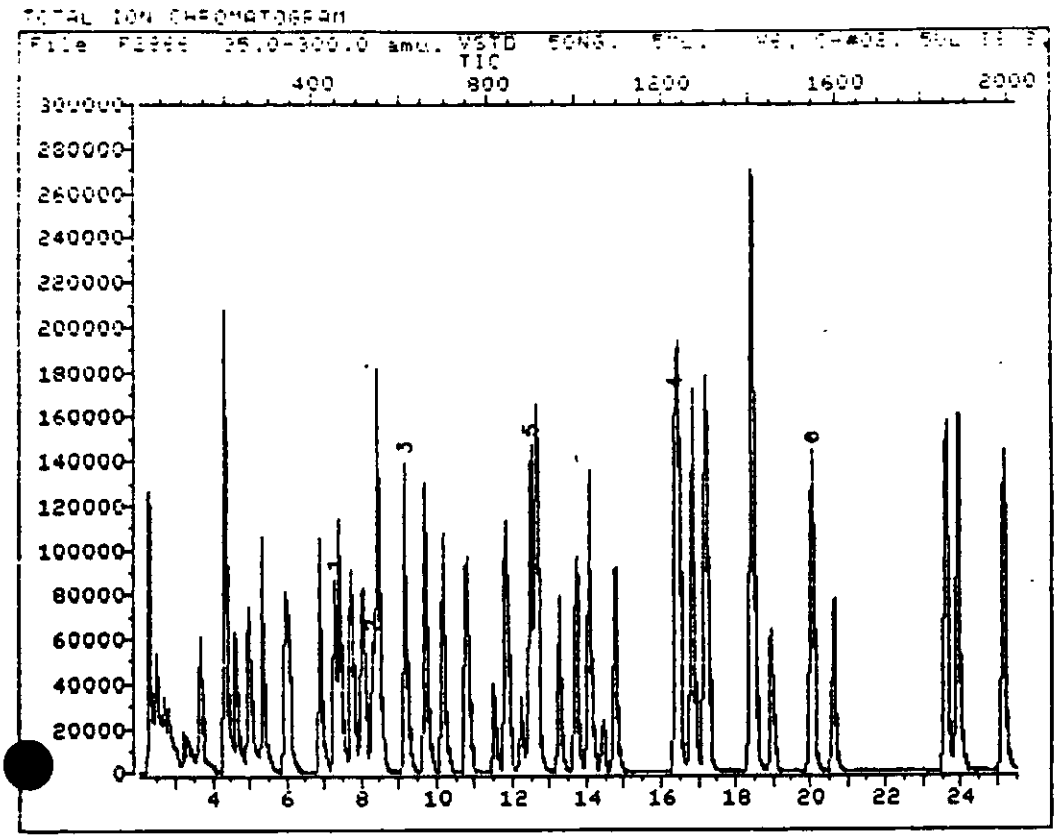
QUANT REPORT

Operator ID: KEPYLINN Quant Rev: 7 Quant Time: 911009 10:55
Output File: >F2327::07 Injected at: 911009 10:28
Data File: >F2327::06 Dilution Factor: 1.00000
Name: VSTD050 5ML Instrument ID: V6
Misc: V6, CH01, 5UL IS S 25UL/100ML + 5UL MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911008 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	CS10 Bromofluorobenzene	20.09	95.0	220101	49.28	UG/L	68
46)	C335 Dichlorobenzene (m)	23.64	146.0	289245	49.44	UG/L	100
47)	C340 Dichlorobenzene (p)	23.96	146.0	261567	48.31	UG/L	100
48)	C350 Dichlorobenzene (o)	25.19	146.0	259603	48.89	UG/L	100
	C250 Xylenes (total)	18.46	106.0	196274	50.19	UG/L	92

* Compound is ISTD



Data File: >F2866::D6 Quant Output File: ^F2866::D7
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S, STD=25UL/100ML HSL,A,B,CL3F,CL2F2

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 21:13

Operator ID: KERYLYNN
Quant Time : 911010 11:31
Injected at: 911010 11:03

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911010 11:31
Output File: ^F2866::D7 Injected at: 911010 11:03
Data File: >F2866::D6 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S, STD=25UL/100ML HSL,A,B,CL3F,CL2F2

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 21:13

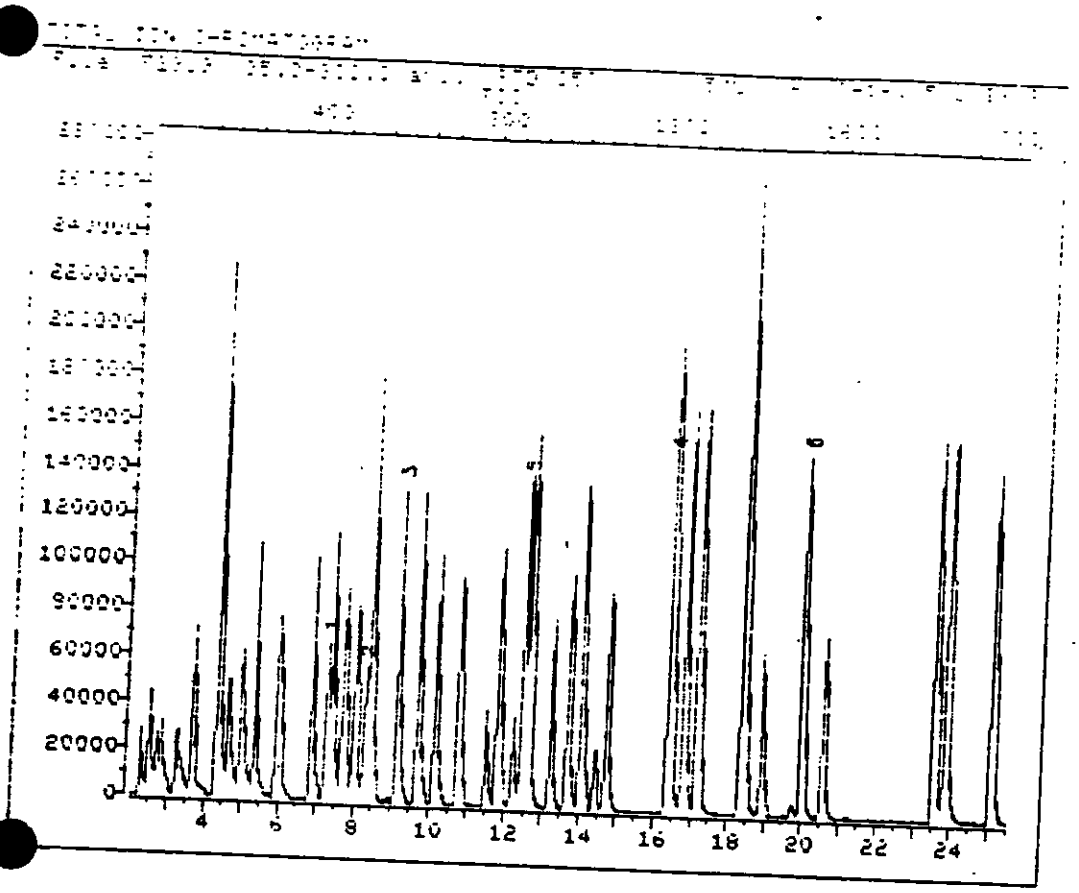
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.26	128.0	76639	50.00	UG/L	70
2)	C010 Chloromethane	2.68	50.0	89916M	44.08	UG/L	96
3)	C020 Vinyl Chloride	2.84	62.0	78498M	39.32	UG/L	85
4)	C015 Bromomethane	3.22	94.0	61802M	29.31	UG/L	94
5)	C025 Chloroethane	3.35	64.0	37015M	26.70	UG/L	95
6)	C045 1,1-Dichloroethene	4.33	96.0	94661	39.16	UG/L	89
7)	C035 Acetone	4.41	43.0	15907	53.83	UG/L	17
8)	C040 Carbon Disulfide	4.62	76.0	283058	34.27	UG/L	100
9)	C030 Methylene Chloride	4.96	84.0	133335	42.98	UG/L	86
11)	C053 Trans-1,2-dichloroethene	5.34	96.0	127087	40.81	UG/L	98
12)	C055 Cis-1,2-dichloroethene	6.87	96.0	137234	41.67	UG/L	94
14)	C050 1,1-Dichloroethane	5.96	63.0	248461	43.56	UG/L	100
15)	C060 Chloroform	7.40	83.0	276333	43.85	UG/L	98
16)	C065 1,2-Dichloroethane	8.44	62.0	165973	46.37	UG/L	100
17)	C110 2-Butanone	6.88	72.0	8823	50.57	UG/L	92
18)	CS15 D4-1,2-dichloroethane	8.30	65.0	130166	49.95	UG/L	85
19)	*CI10 1,4-Difluorobenzene	9.15	114.0	407218	50.00	UG/L	100
20)	C125 Vinyl Acetate	6.03	43.0	248085	50.50	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.73	97.0	222940	44.69	UG/L	88
22)	C120 Carbon Tetrachloride	8.02	117.0	182726	44.15	UG/L	97
23)	C165 Benzene	8.41	78.0	394283	45.88	UG/L	100
24)	C150 Trichloroethene	9.69	130.0	160083	43.74	UG/L	97
25)	C140 1,2-Dichloropropane	10.15	63.0	160817	45.16	UG/L	100
26)	C130 Bromodichloromethane	10.78	83.0	241474	46.22	UG/L	80
27)	C175 2-Chloroethylvinylether	11.51	63.0	71859	64.58	UG/L	91
28)	C143 Cis-1,3-Dichloropropene	11.82	75.0	251092	50.23	UG/L	99
29)	C172 Trans-1,3-dichloropropene	13.23	75.0	170794	45.56	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.70	97.0	126529M	51.54	UG/L	98
31)	C155 Dibromochloromethane	14.75	129.0	192847	49.10	UG/L	97
32)	C180 Bromoform	18.95	173.0	111775	49.94	UG/L	96
33)	*CI20 D5-Chlorobenzene	16.37	117.0	313165	50.00	UG/L	100
34)	CS05 D8-Toluene	12.47	98.0	399081	51.01	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.23	43.0	110816	59.92	UG/L	86
36)	C230 Toluene	12.64	92.0	266605	44.54	UG/L	96
37)	C210 2-Hexanone	14.43	43.0	72269	55.09	UG/L	96
38)	C220 Tetrachloroethene	14.05	164.0	137754	46.76	UG/L	87
39)	C235 Chlorobenzene	16.45	112.0	319645	43.84	UG/L	74
40)	C240 Ethylbenzene	16.83	106.0	160760	43.80	UG/L	99
41)	CXXX Xylenes (p)	17.20	106.0	208594	46.61	UG/L	94
42)	CXXX Xylenes (o)	18.38	106.0	125080	45.66	UG/L	100

Operator ID: KERYLYNN Quant Rev: Quant Time: 911010 11:31
Output File: >F2866::D7 Injected at: 911010 11:03
Data File: >F2866::D6 Dilution Factor: 1.00000
Name: USTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S, STD=25UL/100ML HSL,A,B,CL3F,CL2F2

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 21:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	C335 Dichlorobenzene (m)	23.60	146.0	281632	54.28	UG/L	100
47)	C340 Dichlorobenzene (p)	23.91	146.0	257875	52.74	UG/L	100
48)	C350 Dichlorobenzene (o)	25.15	146.0	261411	52.89	UG/L	100
49)	C250 Xylenes (total)	18.38	106.0	191180	46.25	UG/L	92

* Compound is ISTD



Data File: >F2909::D6
Name: VSTD 050 5ML
Misc: V6, CH16, 5UL IS/S

Quant Output File: ^F2909::D7
Instrument ID: V6

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37

Last Qcal Time: 911010 22:48

Operator ID: KERYLYNN
Quant Time : 911011 22:25
Injected at: 911011 21:51

Operator ID: EPCON
Data File: B9909:07
Meth File: B9909:06
Name: METD 624 5ML
Misc: 06, CH16, FUL 15/5

Last Cal : [illegible]
Last Time: [illegible]
Injected at: 9110.1 21:5
Dilution Factor: 1.00.00
Instrument ID: 06

Page [illegible]

Q File: M09106::07
Title: HSL VOLATILES: 75m x .53mm: 05o24 06 EPCON:ENSECO
Last Calibration: 910914 09:37
Last Qcal Time: 9:10:0 22:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.26	128.0	66141	50.00	UG/L	71
2)	C010 Chloromethane	2.70	50.0	83907	48.94	UG/L	98
3)	C020 Vinyl Chloride	2.82	62.0	91095	50.08	UG/L	87
4)	C015 Bromomethane	3.23	94.0	79136	52.33	UG/L	93
5)	C025 Chloroethane	3.35	64.0	44933	46.19	UG/L	93
6)	C045 1,1-Dichloroethene	4.33	96.0	99061	47.65	UG/L	88
7)	C035 Acetone	4.40	43.0	17859	61.32	UG/L	18
8)	C040 Carbon Disulfide	4.62	76.0	284136	49.96	UG/L	100
9)	C030 Methylene Chloride	4.97	84.0	128942	50.02	UG/L	84
10)	C053 Trans-1,2-dichloroethene	5.34	96.0	124809	49.45	UG/L	99
12)	C055 Cis-1,2-dichloroethene	6.86	96.0	139231	51.56	UG/L	95
14)	C050 1,1-Dichloroethane	5.95	63.0	233427	49.09	UG/L	100
15)	C060 Chloroform	7.39	83.0	266419	50.07	UG/L	98
16)	C065 1,2-Dichloroethane	8.44	62.0	164058	54.00	UG/L	100
17)	C110 2-Butanone	6.87	72.0	9283	56.48	UG/L	90
18)	CS15 D4-1,2-dichloroethane	8.29	65.0	128000	52.33	UG/L	85
19)	*CI10 1,4-Difluorobenzene	9.15	114.0	387963	50.00	UG/L	100
20)	C125 Vinyl Acetate	6.03	43.0	181424	46.85	UG/L	99
21)	C115 1,1,1-Trichloroethane	7.72	97.0	222968	51.56	UG/L	92
22)	C120 Carbon Tetrachloride	8.02	117.0	180035	52.25	UG/L	96
23)	C165 Benzene	8.39	78.0	393799	51.44	UG/L	100
24)	C150 Trichloroethene	9.68	130.0	168125	51.18	UG/L	94
25)	C140 1,2-Dichloropropane	10.15	63.0	161938	52.69	UG/L	100
26)	C130 Bromodichloromethane	10.76	83.0	233228	53.48	UG/L	84
27)	C175 2-Chloroethylvinylether	11.49	63.0	75943	61.10	UG/L	97
28)	C143 Cis-1,3-Dichloropropene	11.81	75.0	251105	59.29	UG/L	94
29)	C172 Trans-1,3-dichloropropene	13.23	75.0	173993	52.79	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.67	97.0	133027	57.61	UG/L	84
31)	C155 Dibromochloromethane	14.72	129.0	198097	57.84	UG/L	98
32)	C180 Bromoform	18.92	173.0	121226	61.67	UG/L	95
33)	*CI20 D5-Chlorobenzene	16.34	117.0	316340	50.00	UG/L	100
34)	CS05 D8-Toluene	12.45	98.0	379527	49.13	UG/L	98
35)	C205 4-Methyl-2-pentanone	12.22	43.0	112909	57.75	UG/L	91
36)	C230 Toluene	12.62	92.0	269175	53.35	UG/L	90
37)	C210 2-Hexanone	14.43	43.0	81057	61.24	UG/L	97
38)	C220 Tetrachloroethene	14.03	164.0	138910	53.81	UG/L	87
39)	C235 Chlorobenzene	16.44	112.0	324142	52.20	UG/L	72
40)	C240 Ethylbenzene	16.80	106.0	159209	50.23	UG/L	99
41)	CXXX Xylenes (p)	17.18	106.0	202793	51.42	UG/L	86
42)	CXXX Xylenes (o)	18.35	106.0	189305	50.91	UG/L	100
43)	C245 Styrene	18.42	104.0	336332	51.86	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane						

000220

[illegible] REPORT [illegible]

[illegible]: [illegible] Client Req.: - Last Time: [illegible]
[illegible]: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: [illegible]
Name: [illegible] Instrument ID: [illegible]
Misc: [illegible]

Q File: MOBIDx::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 EPCO ENSECO
Last Calibration: 910914 09:37 Last Opt Time: 910103 22:[illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	C335 Dichlorobenzene (m)	23.56	146.0	286766	55.72	UG/L	100
47)	C340 Dichlorobenzene (p)	23.88	146.0	262878	56.01	UG/L	100
48)	C350 Dichlorobenzene (o)	25.10	146.0	270378	54.50	UG/L	100
49)	C250 Xylenes (total)	18.35	106.0	181374	50.10	UG/L	93

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2790 Date Analyzed: 10/08/91

Instrument ID: V6 Time Analyzed: 0809

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

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	91500	7.23	442000	9.12	336000	16.30
	UPPER LIMIT	183000		884000		672000	
	LOWER LIMIT	45750		221000		168000	
	EPA SAMPLE NO.						
01	SB-A-08-3	74900	7.33	377000	9.23	296000	16.44
02	VBLK03	84200	7.26	417000	9.14	314000	16.34

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2827 Date Analyzed: 10/09/91

Instrument ID: V6 Time Analyzed: 1028

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

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	75500	7.33	407000	9.23	308000	16.44
	UPPER LIMIT	151000		814000		616000	
	LOWER LIMIT	37750		203500		154000	
	EPA SAMPLE NO.						
01	10-4-QA1	57200	7.30	296000	9.19	238000	16.42
02	VBLK06	75100	7.29	403000	9.19	323000	16.44

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2866 Date Analyzed: 10/10/91

Instrument ID: V6 Time Analyzed: 1103

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	76600	7.26	407000	9.15	313000	16.38
	UPPER LIMIT	153200		814000		626000	
	LOWER LIMIT	38300		203500		156500	
	EPA SAMPLE NO.						
01	SB-B-12-3	94900	7.23	516000	9.12	411000	16.30
02	VBLK04	69700	7.27	393780	9.16	307000	0.27

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2909 Date Analyzed: 10/11/91

Instrument ID: V6 Time Analyzed: 2151

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA	#	RT	IS2(DFB) AREA	#	RT	IS3(CBZ) AREA	#	RT
	12 HOUR STD	66100		7.26	388000		9.15	316000		16.34
	UPPER LIMIT	132200			776000			632000		
	LOWER LIMIT	33050			194000			158000		
	EPA SAMPLE NO.									
01	SB-B-12-3RE	95600		7.22	527000		9.10	412000		16.29
02	VBLK05	65200		7.28	402000		9.17	328000		16.40

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): B2979 Date Analyzed: 10/14/91

Instrument ID: V2 Time Analyzed: 1334

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	101000	7.47	448000	9.35	322000	16.51
	UPPER LIMIT	202000		896000		644000	
	LOWER LIMIT	50500		224000		161000	
	EPA SAMPLE NO.						
01	SB-B-13-3	189000	7.47	783000	9.36	532000	16.54
02	VBLK01	110000	7.48	477000	9.37	330000	16.56

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): A3626 Date Analyzed: 10/19/91

Instrument ID: V1 Time Analyzed: 1128

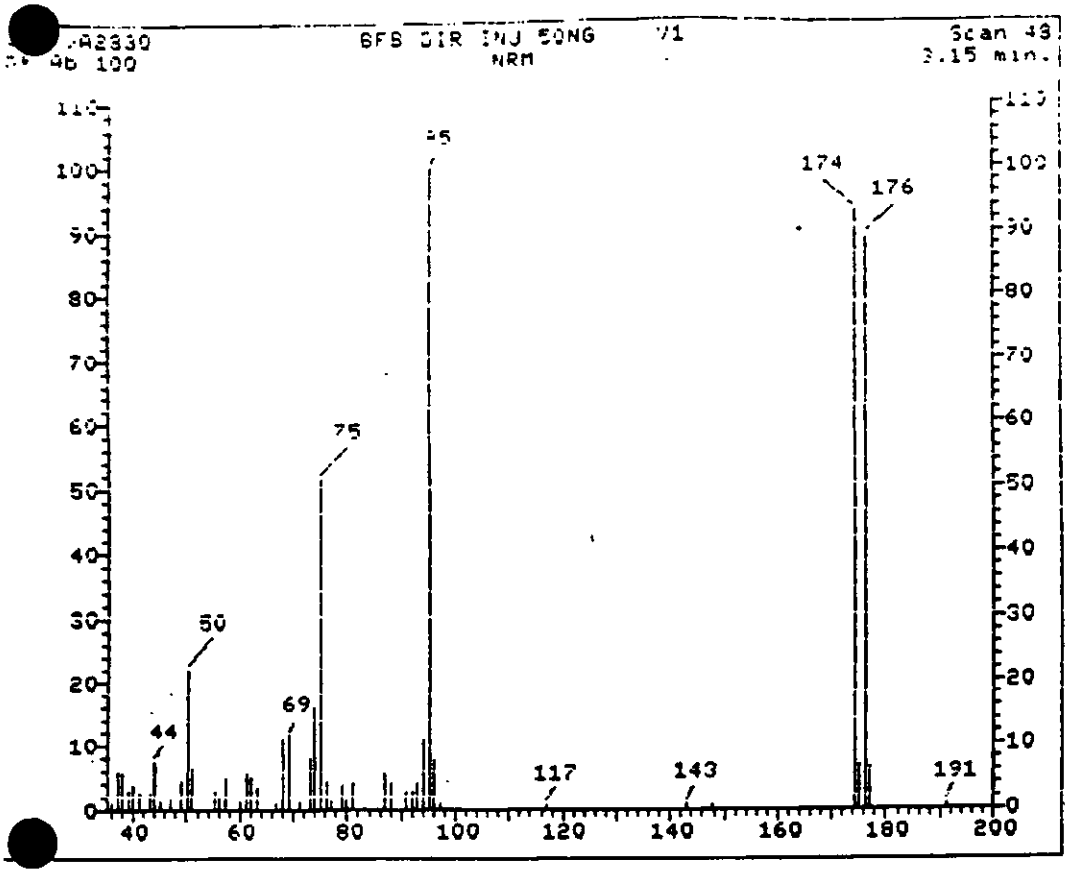
Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	59200	6.66	299000	8.32	233000	15.03
	UPPER LIMIT	118400		598000		466000	
	LOWER LIMIT	29600		149500		116500	
	EPA SAMPLE NO.						
01	SB-B-17-4	77900	6.58	368000	8.22	304000	14.88
02	VBLK02	59200	6.56	287000	8.20	232000	14.85

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk



TUNE DA

MS data file header from : >A2830

Sample: BFB DIR INJ 50NG Operator: MANAGER MS 8/29/91 10:10
Misc : V1
Sys. #: 1 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB1 Tuning file: MT7401 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	0.0	0.0	0.0	0.0

ENSECO-ERLO Laboratory

50 NG PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

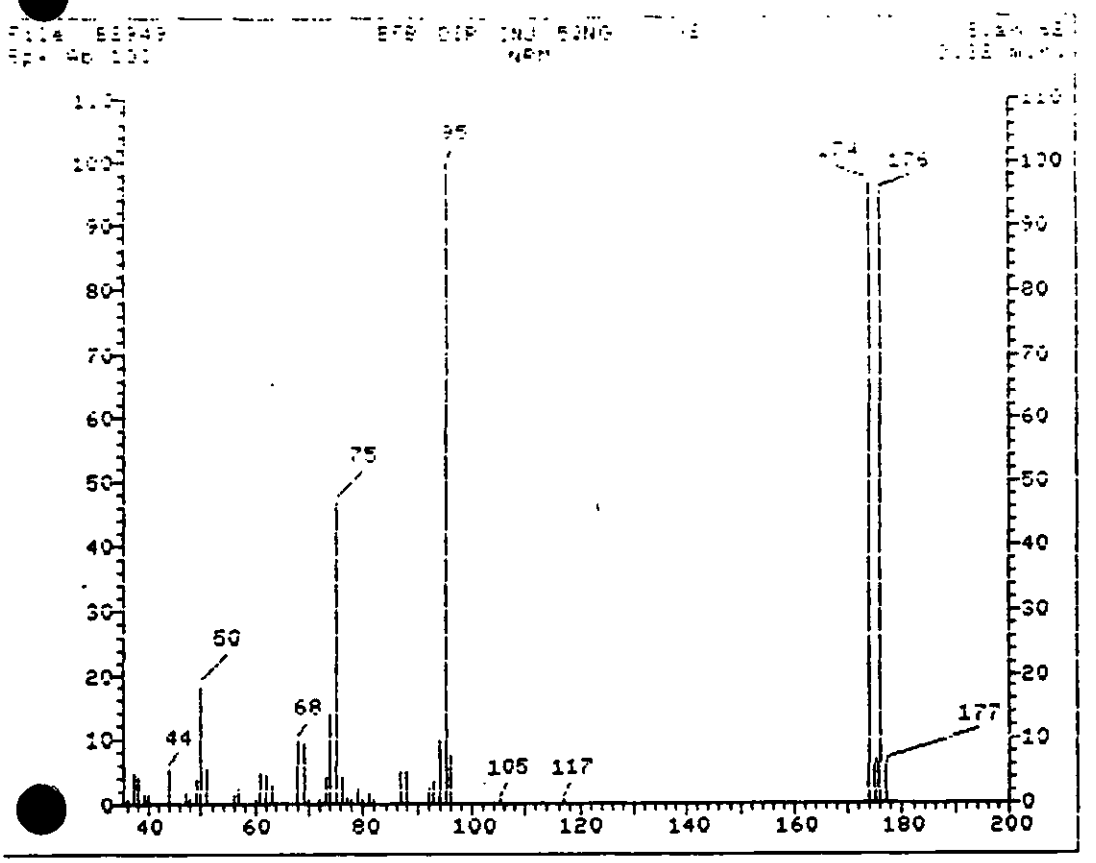
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.13	22.13	Ok
75	30-60% of mass 95	51.54	51.54	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.79	7.79	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	92.95	92.95	Ok
175	5-9% of mass 174	6.86	7.38	Ok
176	95-101% of mass 174	88.81	95.55	Ok
177	5-9% of mass 176	6.54	7.36	Ok

Injection Date: 08/29/91
Injection Time: 10:10
Data File: >A2830
Scan: 48
Name:BFB DIR INJ 50NG
Misc:V1

A2830 BFB DIR INJ 50NG V1
48 NRM

ile: >A2830 Scan #: 48 Retn. time: 3.15

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	.896	50.05	22.133	68.10	11.189	81.10	4.222	117.00	.756
37.10	6.211	51.15	6.362	69.10	11.759	87.10	5.792	143.05	.965
38.10	5.676	55.15	2.815	71.10	1.338	88.10	3.920	147.95	.791
38.95	2.722	56.05	2.187	73.10	8.200	91.05	2.815	174.10	92.952
40.05	3.873	57.15	5.199	74.10	16.155	92.05	2.640	175.00	6.862
40.95	2.233	60.05	1.233	75.10	51.535	93.05	4.164	176.10	88.811
43.05	2.245	61.15	5.629	76.10	4.257	94.05	11.258	177.10	6.536
44.05	7.525	62.05	5.071	77.10	1.338	95.15	100.000	191.15	.721
44.95	1.489	63.15	3.361	79.00	3.733	96.15	7.793	207.15	3.222
.05	1.628	66.90	1.023	80.00	1.338	97.15	1.163	281.20	1.500
.05	4.420								



MS data file header from : >B2949

Sample: BFB DIR INJ 50NG Operator: NORA MS 10/11/91 16:41
Misc : V2
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB2 Tuning file: MT7402 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	5.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	0.0	0.0

ENSECO-CAL Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB

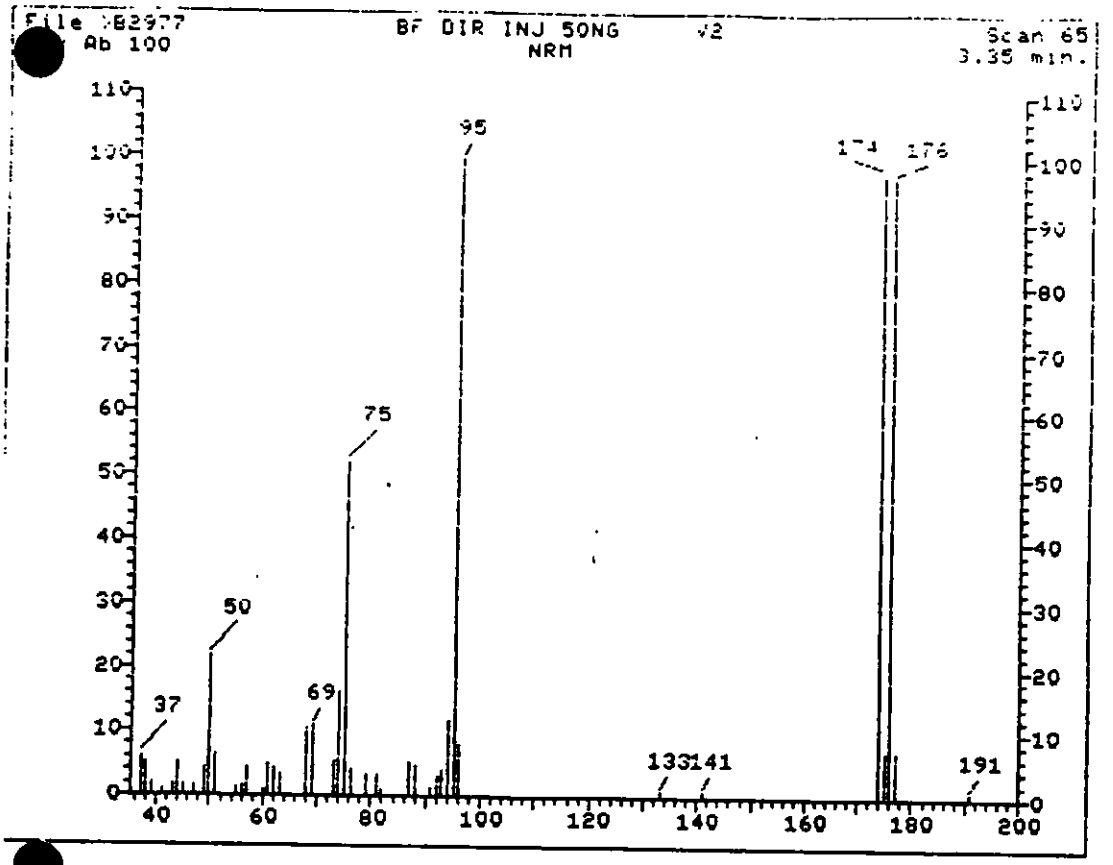
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	18.29	18.29	Ok
75	30-60% of mass 95	46.81	46.81	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.49	7.49	Ok
173	Less than 2% of mass 174	.48	.50	Ok
174	Greater than 50% of mass 95	97.06	97.06	Ok
175	5-9% of mass 174	6.82	7.03	Ok
176	95-101% of mass 174	95.47	98.37	Ok
177	5-9% of mass 176	6.41	6.71	Ok

Injection Date: 10/11/91
Injection Time: 16:41
Data File: >B2949
Scan: 62
Name:BFB DIR INJ 50NG
Misc:V2

>B2949 BFB DIR INJ 50NG V2
62 NRM

File: >B2949 Scan #: 62 Retn. time: 3.32

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	.863	51.10	5.403	72.00	.585	81.00	2.495	104.00	.437
37.05	4.880	56.00	1.245	73.00	3.992	82.00	.554	105.10	.579
38.05	4.159	57.10	2.255	74.00	14.029	86.95	5.101	116.95	.579
39.05	1.472	59.95	.739	75.10	46.812	87.95	4.935	173.00	.481
40.05	1.429	61.05	4.756	76.10	4.005	92.05	2.434	174.00	97.055
44.05	5.539	62.05	4.276	77.10	.900	93.05	3.419	175.00	6.820
47.00	1.756	63.05	2.618	78.00	.598	94.05	10.006	176.00	95.472
48.00	.642	68.05	9.975	79.00	2.545	95.05	100.000	177.00	6.407
49.00	3.881	69.05	9.291	80.00	.696	96.10	7.455	207.20	2.199
50.00	18.286	70.05	.702						



MS data file header from : >B2977

Sample: BF DIR INJ 50NG Operator: NORA MS 10/14/91 12:08
Misc : V2
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB2 Tuning file: MT7402 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	5.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	0.0	0.0

ENSECO-ERCO Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.81	21.81	Ok
75	30-60% of mass 95	52.12	52.12	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.20	8.20	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	97.76	97.76	Ok
175	5-9% of mass 174	7.23	7.39	Ok
176	95-101% of mass 174	97.34	99.57	Ok
177	5-9% of mass 176	7.19	7.39	Ok

Injection Date: 10/14/91
Injection Time: 12:08
Data File: >B2977
Scan: 65
Name:BF DIR INJ 50NG
Misc:V2

>B2977 BF DIR INJ 50NG V2
65 NRM

File: >B2977 Scan #: 65 Retn. time: 3.35

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	6.124	51.00	6.264	69.05	11.063	88.05	4.648	174.00	97.757
38.05	5.195	55.00	1.313	73.00	5.334	91.05	1.464	175.00	7.228
39.05	2.162	56.10	1.883	74.00	16.049	92.05	3.010	176.00	97.339
41.05	1.023	57.10	4.311	75.00	52.121	93.05	3.974	177.00	7.193
43.05	1.569	60.05	.895	76.10	4.009	94.05	11.807	191.05	.918
44.05	5.067	61.05	4.985	79.00	3.231	95.15	100.000	207.10	7.298
45.00	1.836	62.05	4.335	81.00	3.475	96.10	8.205	208.20	1.569
47.00	1.662	63.05	3.417	82.00	.930	133.10	.930	209.10	1.081
49.00	4.253	68.05	10.308	87.05	5.253	141.05	.906	281.10	.872
50.00	21.813								

5A

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

Lab Name: ENSECO-ERCO LABORATORY Contract: _____

Lab Code: ENSECO Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: >B2922 BFB Injection Date: 10/14/91

Instrument ID: __ BFB Injection Time: 12:08

Matrix: (soil/water) _____ Level: (low/med) _____ Column: (pack/cap) _____

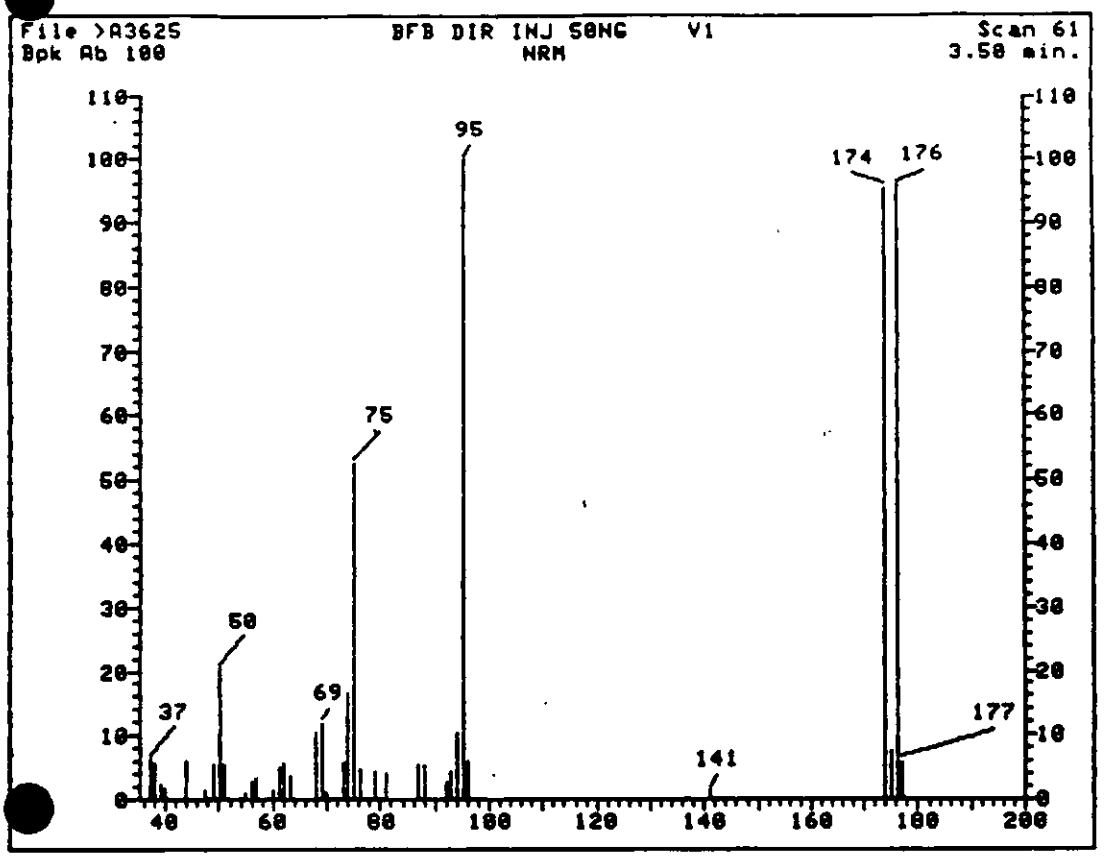
m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	21.8
75	30.0 - 60.0% OF MASS 95	52.1
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	97.8
175	5.0 - 9.0% of mass 174	7.2(7.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	97.3(99.6)1
177	5.0 - 9.0% of mass 176	7.2(7.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	_BFB_50ng_____	_____	_____	_____
02	_VSTD050____	_50ppb_STD____	_____	_____	_____
03	_VBLK_____	_Proc_Blank___	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

000234



MS data file header from : >A3625

Sample: BFB DIR INJ 50NG Operator: ALANA MS 10/19/91 10:46
Misc : V1
Sys. #: 1 MS model: 9ó SW/HW rev.: IA ALS # : 0
Method file: BFB1 Tuning file: MT7401 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	0.0	0.0	0.0	0.0

ENSECO-ERCO Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

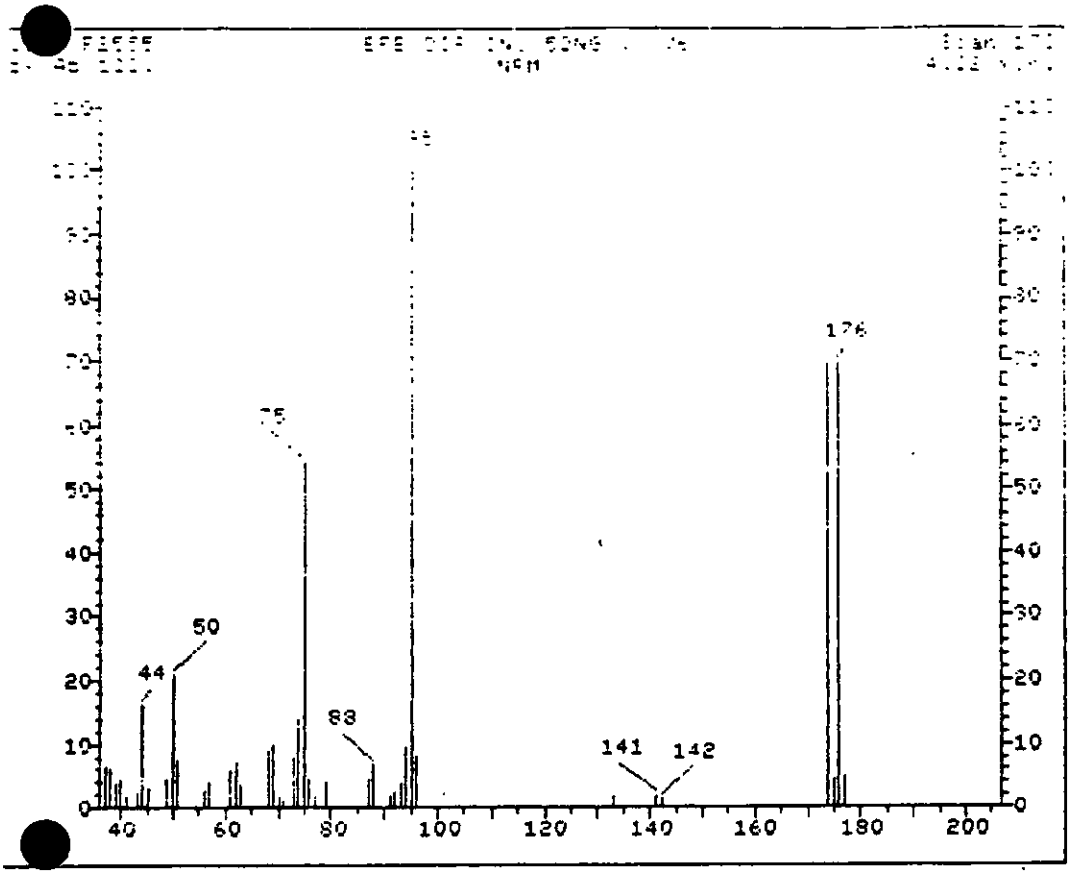
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.51	20.51	Ok
75	30-60% of mass 95	52.54	52.54	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.10	6.10	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	95.50	95.50	Ok
175	5-9% of mass 174	7.33	7.68	Ok
176	95-101% of mass 174	95.97	100.48	Ok
177	5-9% of mass 176	5.79	6.03	Ok

Injection Date: 10/19/91
Injection Time: 10:46
Data File: >A3625
Scan: 61
Name:BFB DIR INJ 50NG
Misc:V1

>A3625 BFB DIR INJ 50NG V1
61 NRM

File: >A3625 Scan #: 61 Retn. time: 3.50

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	6.270	51.15	5.248	68.10	10.515	81.00	4.090	96.05	6.097
38.10	5.595	54.95	1.080	69.10	11.789	87.10	5.402	140.95	1.273
39.05	2.392	56.05	2.566	70.00	.965	88.10	5.248	174.00	95.505
39.95	1.872	57.05	3.473	73.10	5.615	92.05	2.624	175.10	7.332
43.95	6.174	60.05	1.254	74.10	16.380	93.05	4.245	176.10	95.968
47.35	1.466	61.15	5.171	75.10	52.537	94.05	10.573	177.00	5.788
49.05	5.518	62.15	5.827	76.10	4.708	95.15	100.000	207.05	2.064
50.05	20.509	63.05	3.820	79.00	4.360				



TCN UOA
cid SOW

MS data file header from : >F2555::D4

Sample: BFB DIR INJ 50NG . Operator: KERYLYNN SUPER GRP. 9/22/91 9:15
Misc : U6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: U6
Method file: BF86 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

[illegible]

[illegible]

Bromofluorobenzene (BFB

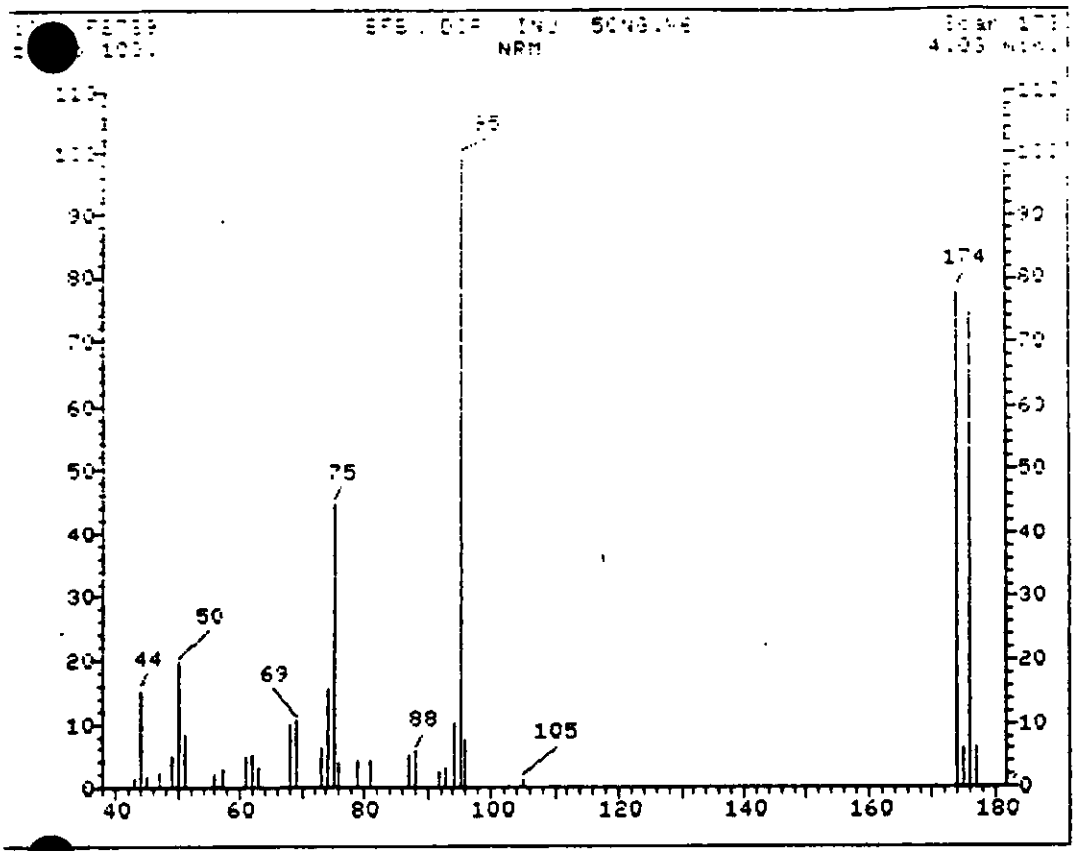
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.98	20.98	Ok
75	30-60% of mass 95	54.14	54.14	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.18	8.18	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	69.66	69.66	Ok
175	5-9% of mass 174	4.52	6.49	Ok
176	95-101% of mass 174	69.74	100.12	Ok
177	5-9% of mass 176	4.88	7.00	Ok

Injection Date: 09/22/91
Injection Time: 09:15
Data File: >F2555
Scan: 173
Name: BFB DIR INJ 50NG .
Misc: V6

F2555 BFB DIR INJ 50NG . V6
173 NRM

File: >F2555 Scan #: 173 Retn. time: 4.02

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	2.000	48.95	4.589	69.05	10.015	86.95	4.442	132.95	1.705
37.05	6.655	50.05	20.980	70.05	1.836	87.95	6.819	141.05	1.869
38.05	6.032	50.95	7.392	71.05	1.065	90.95	1.885	142.15	1.426
38.95	3.819	56.05	2.950	72.95	7.753	91.95	2.344	173.95	69.661
39.95	4.557	56.95	4.294	73.95	14.162	93.05	3.868	174.95	4.524
40.95	1.836	60.95	5.983	75.05	54.139	94.05	9.523	175.95	69.743
42.95	2.426	61.95	7.114	75.95	4.983	95.05	100.000	176.95	4.884
43.95	16.260	62.95	3.557	77.05	1.688	95.95	8.179	207.00	3.524
44.95	3.180	68.05	8.900	78.95	4.278				



TUNDOA
old SOW

MS data file header from : >F2789::D6

Sample: BFB DIR INJ 50NG. Operator: LIZ SUPER GRP. 10/08/91 7:34
Misc : V6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BFB6 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

[illegible]

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

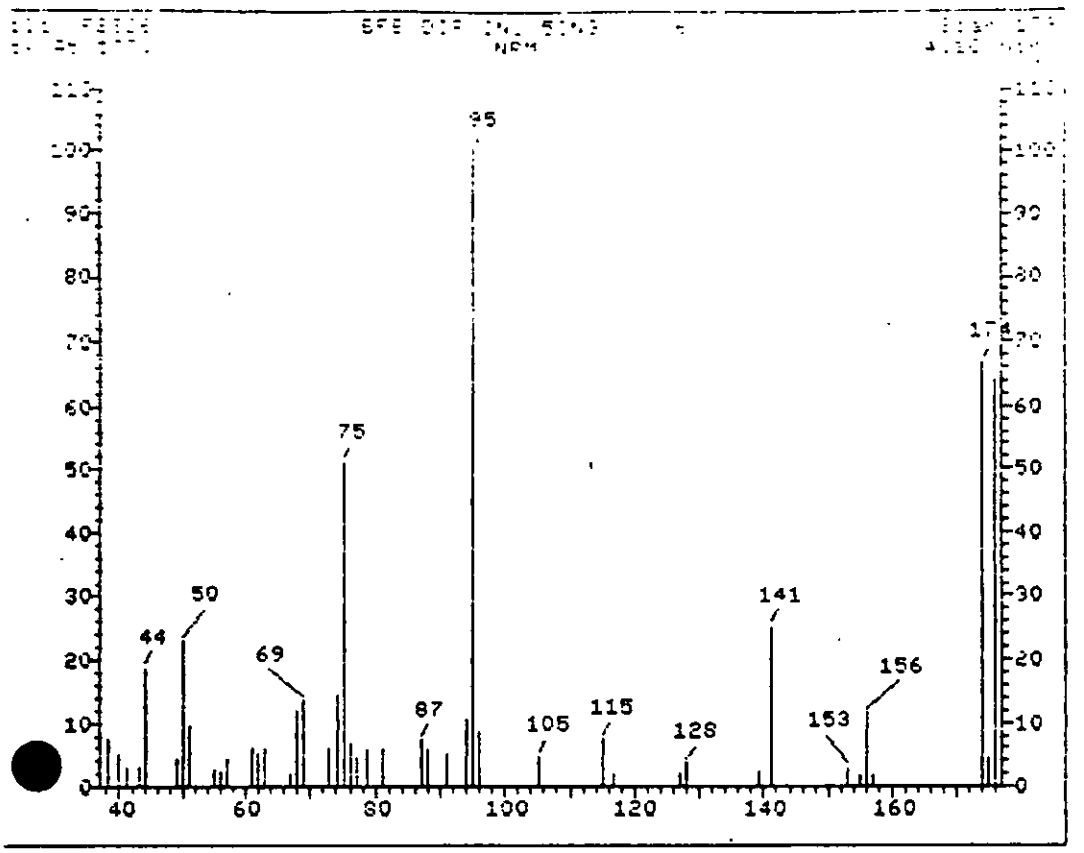
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	19.57	19.57	Ok
75	30-60% of mass 95	44.84	44.84	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.49	7.49	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	78.09	78.09	Ok
175	5-9% of mass 174	6.07	7.77	Ok
176	95-101% of mass 174	74.34	95.19	Ok
177	5-9% of mass 176	6.09	8.20	Ok

Injection Date: 10/08/91
Injection Time: 07:34
Data File: >F2789
Scan: 173
Name: BFB DIR INJ 50NG.
Misc: V6

>F2789 BFB DIR INJ 50NG.V6
173 NRM

File: >F2789 Scan #: 173 Retn. time: 4.03

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.95	5.504	50.95	8.337	69.05	10.461	86.95	5.130	104.95	1.189
43.05	1.576	55.85	2.044	73.05	6.293	88.05	5.691	173.95	78.090
43.95	15.431	57.05	2.953	74.05	15.792	91.95	2.445	174.95	6.065
44.95	1.670	61.05	4.823	75.05	44.836	92.95	3.206	175.95	74.335
46.95	2.298	61.95	5.037	75.95	3.874	94.05	10.180	176.95	6.092
49.05	4.836	63.05	2.979	78.95	4.235	95.05	100.000	181.85	1.283
49.95	19.572	67.95	9.980	80.85	4.289	96.05	7.495		



MS data file header from : >F2826::D6

Sample: BF8 DIR INJ 50NG Operator: LIZ SUPER GRP. 10/09/91 9:21
Misc : V6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BF86 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

ENSECO-EPCO LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

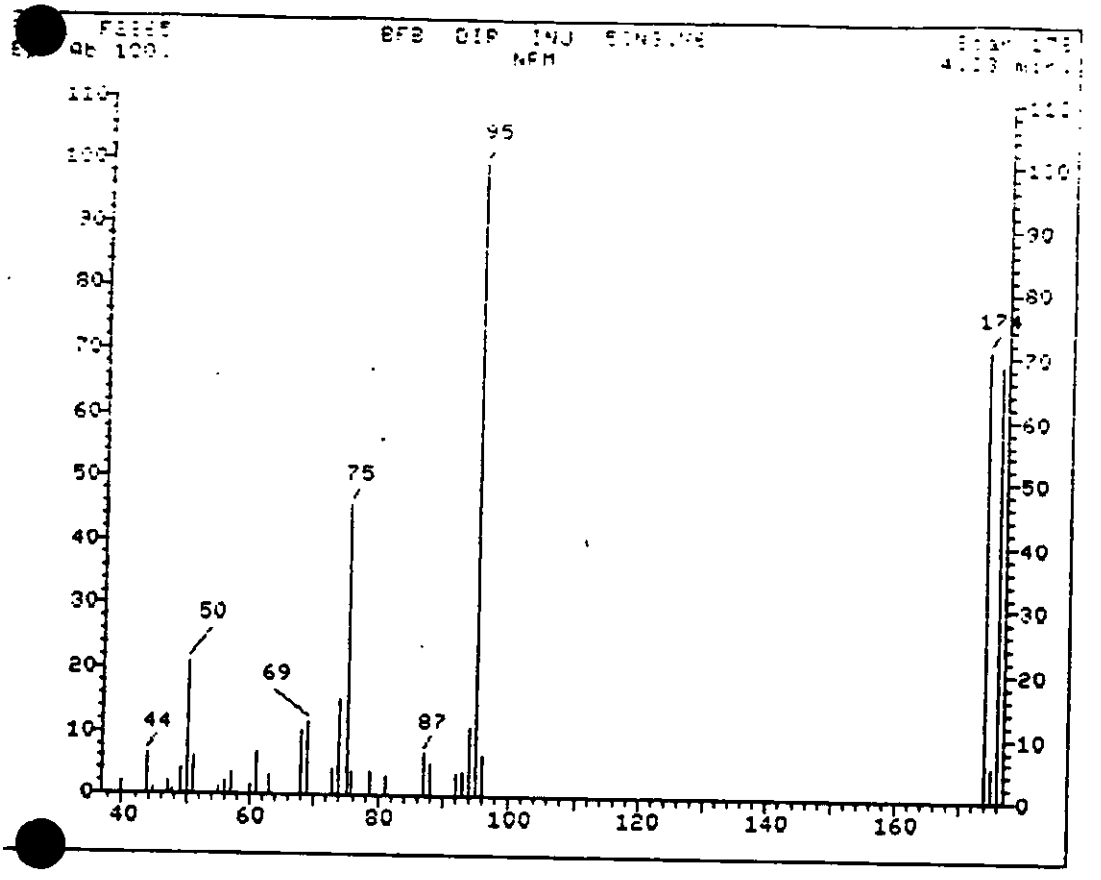
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.90	22.90	Ok
75	30-60% of mass 95	51.14	51.14	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.42	8.42	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	66.51	66.51	Ok
175	5-9% of mass 174	4.36	6.56	Ok
176	95-101% of mass 174	64.00	96.23	Ok
177	5-9% of mass 176	4.46	6.97	Ok

Injection Date: 10/09/91
Injection Time: 09:21
Data File: >F2826
Scan: 179
Name: BFB DIR INJ 50NG
Misc: V6

>F2826 BFB DIR INJ 50NG V6
179 NRM

File: >F2826 Scan #: 179 Retn. time: 4.10

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.95	9.432	56.05	2.333	74.05	14.528	94.05	10.421	141.05	25.152
38.05	7.632	57.05	4.462	75.05	51.141	95.05	100.000	153.05	2.916
39.95	5.147	61.05	6.034	76.05	6.871	96.05	8.418	155.05	1.876
41.05	3.017	62.05	5.046	77.05	4.767	105.05	4.691	156.15	11.511
43.05	2.992	62.95	6.085	78.95	5.730	115.05	7.404	157.15	1.927
47.05	18.712	67.05	2.206	80.95	6.034	116.85	2.028	173.95	66.506
48.95	4.513	68.05	11.993	86.95	7.353	127.05	2.155	174.95	4.361
50.05	22.896	69.05	13.590	87.95	5.705	128.05	3.753	175.95	63.996
51.05	9.559	72.95	6.034	91.05	5.071	139.15	2.333	176.95	4.462
54.95	2.713								



IS data file header from : >F2865::D6

Sample: BFB DIR INJ 50NG. Operator: KERYLYNN SUPER GRP. 10/10/91 10:33
Misc : V6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BFB6 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

ENSECO-EPCO LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

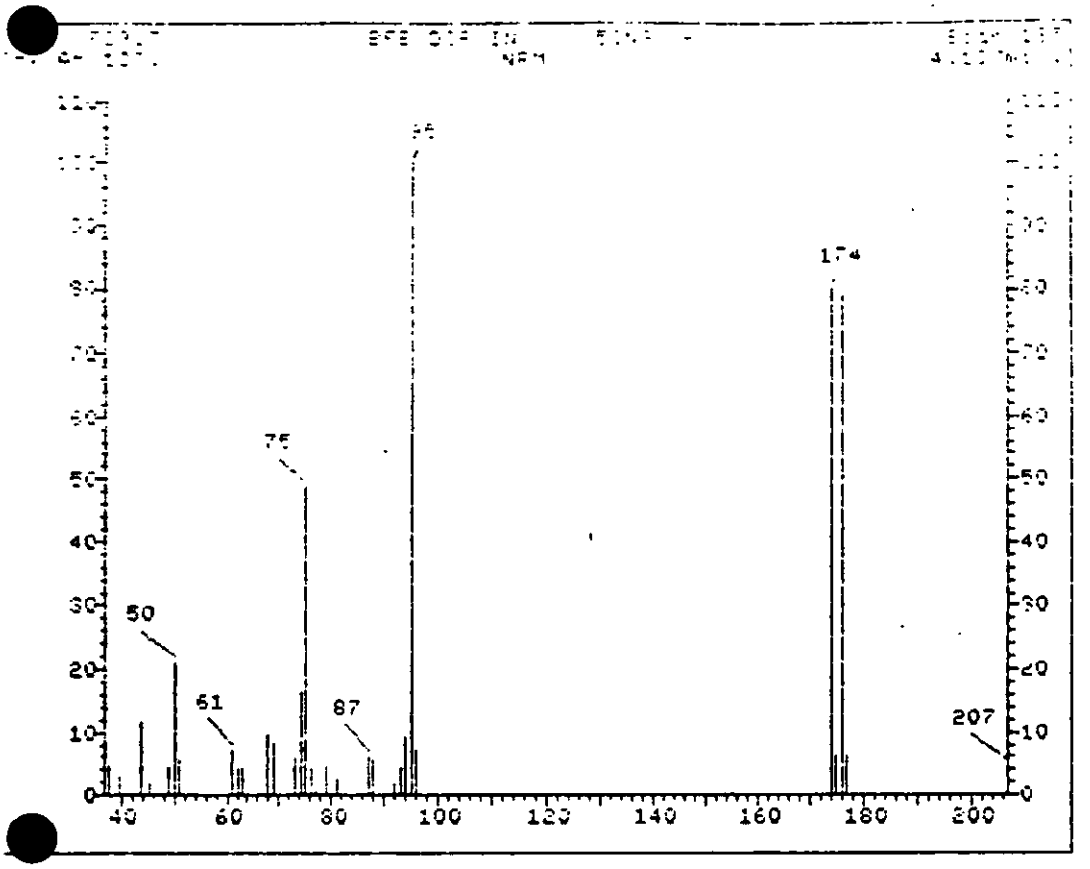
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.12	21.12	Ok
75	30-60% of mass 95	45.65	45.65	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.54	6.54	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	71.14	71.14	Ok
175	5-9% of mass 174	5.35	7.52	Ok
176	95-101% of mass 174	68.53	96.33	Ok
177	5-9% of mass 176	4.40	6.43	Ok

Injection Date: 10/10/91
Injection Time: 10:33
Data File: >F2865
Scan: 178
Name: BFB DIR INJ 50NG.
Misc: V6

>F2865 BFB DIR INJ 50NG.V6
178 NRM

File: >F2865 Scan #: 178 Retn. time: 4.08

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.95	5.249	50.05	21.123	62.95	3.241	78.95	3.686	95.05	100.000
39.95	2.271	50.95	6.242	67.95	10.350	80.95	2.978	95.95	6.539
43.95	6.585	55.05	1.016	69.05	11.731	86.95	6.950	173.95	71.140
44.95	1.107	56.05	2.043	72.95	4.268	87.95	5.169	174.95	5.352
47.05	2.157	57.05	3.446	73.95	15.394	91.95	3.366	175.95	68.527
47.75	.719	59.95	1.335	75.05	45.646	93.05	3.869	176.95	4.405
48.95	4.291	61.05	6.915	75.95	3.948	94.05	10.830		



MS data file header from : >F2907::D6

Sample: BFB DIR INJ 50NG Operator: KERYLYNN SUPER GRP. 10/11/91 20:53
Misc : V6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BFB6 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

ENSECO-SAIC Laboratories

BFB Performance Evaluation

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.18	21.18	Ok
75	30-60% of mass 95	48.74	48.74	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.16	7.16	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	80.14	80.14	Ok
175	5-9% of mass 174	6.28	7.84	Ok
176	95-101% of mass 174	79.13	98.75	Ok
177	5-9% of mass 176	6.26	7.91	Ok

Injection Date: 10/11/91
Injection Time: 20:53
Data File: >F2907
Scan: 185
Name: BFB DIR INJ 50NG
Misc: V6

F2907 BFB DIR INJ 50NG V6
185 NRM

ile: >F2907 Scan #: 185 Retn. time: 4.10

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	5.602	51.05	5.356	74.05	16.294	86.95	6.197	95.95	7.162
37.95	5.110	60.95	7.223	75.05	48.738	87.95	5.500	173.95	80.135
39.95	3.222	62.05	4.145	76.05	4.022	92.05	2.134	174.95	6.279
43.95	11.738	63.05	4.002	77.05	1.457	93.05	4.351	175.95	79.130
45.25	2.093	67.95	9.522	78.95	4.597	94.05	9.378	176.95	6.259
49.05	4.515	68.95	8.208	80.95	2.524	95.05	100.000	207.00	4.638
50.05	21.178	73.05	6.033						

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B2981

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

% Moisture: not dec. 0 Date Analyzed: 10/14/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	J
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	610	J
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	360	J
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B2981

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

% Moisture: not dec. 0 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Produced by : _____ Date: ~~101391~~ 101491
Reviewed by: _____ Date: _____

Data File: >B2981
Page: 1

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: MEOH VBLK01 100UL/5ML-01
Misc : V2 CH05 5ULIS
Injected : 10/14/91 15:33
Analyst: ALANA
ID File: VOAID2
Quent list threshold: 1.00

Units: UG/KG
Run Factor: 125.000
Surrogate vol: .500

Surrogate Spike Recoveries

Compound		Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15	D4-1,2-Dichloroethane	25.00	26.25	105	70 121
CS05	D8-Toluene	25.00	25.06	100	81 117
CS10	Bromofluorobenzene (BFB)	25.00	25.36	101	74 121

Target Compounds: VOAID2

Scan #	Concentration Quent List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
		BDL	C045	1,1-Dichloroethene
265	~~2.399~~ SNG	~~294.4~~	C035	Acetone
301	~~1.123~~	~~140.4~~	C035	Acetone
		BDL	C040	Carbon Disulfide
327	4.993	624.1 J	C030	Methylene Chloride
		BDL	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
473	4.872	609.8 J	C110	2-Butanone
		BDL	C125	Vinyl Acetate
		BDL	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
		BDL	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C179	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane

000249

Data file: >B2981₀₁ Page: 2
Sample: MEOH VBLK 100UL/5ML

Scan #	Concentration Quant list UG/L	Sample UG/KG		Compound
		BDL	C180	Bromoform
		BDL	C205	4-Methyl-2-Pentanone
961	2.901	362.6	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
		BDL	C240	Ethylbenzene
		BDL	CXXX	Xylene (p)
		BDL	CXXX	Xylenes (o)
		BDL	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethan
		BDL	C335	Dichlorobenzene (m)
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
		BDL	C250	Xylene (Total)

Diagnostic Quant Report

Data File: >B2981::D6 Injected at: 15:33 10/14/91
Quant'd : 16:03 10/14/91
ID File : VOAID2::$$ Calibrated : 14:19 10/14/91

Compound			- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01	Bromochloromethane	7.47	7.48	.01	128.0	109638	1.0000	50.00
2)	C010	Chloromethane	3.10	0.00	--	50.0	0	.3418	0.00
3)	C020	Vinyl Chloride	3.24	0.00	--	62.0	0	.7562	0.00
4)	C015	Bromomethane	3.65	0.00	--	94.0	0	1.0170	0.00
5)	C025	Chloroethane	3.84	0.00	--	64.0	0	.7299	0.00
6)D	C045	1,1-Dichloroethene	4.72	4.62	.10	96.0	1554	1.1416	.62
7)D	C035	Acetone	4.70	4.69	.01	43.0	2192	.4244	2.36
7)D	C035	Acetone	4.70	5.11	.41	43.0	1045	.4244	1.12
8)D	C040	Carbon Disulfide	4.95	4.96	.00	76.0	2033	4.8412	.19
9)	C030	Methylene Chloride	5.23	5.41	.18	84.0	28869	2.6370	4.99
10)	C053	Trans-1,2-Dichloroe	5.61	0.00	--	96.0	0	1.9760	0.00
11)	C055	cis-1,2-Dichloroeth	7.10	0.00	--	96.0	0	2.0042	0.00
12)	C050	1,1-Dichloroethane	6.21	0.00	--	63.0	0	3.6934	0.00
13)D	C060	Chloroform	7.62	7.61	.01	83.0	1684	3.5395	.22
14)D	C065	1,2-Dichloroethane	8.63	8.62	.01	62.0	550	2.3048	.11
15)	C110	2-Butanone	7.13	7.12	.01	43.0	11550	1.0812	4.87
16)	CS15	D4-1,2-Dichloroetha	8.49	8.50	.01	65.0	190264	1.6528	52.50
17)	*CI10	1,4-Difluorobenzene	9.35	9.37	.02	114.0	477278	1.0000	50.00
18)	C125	Vinyl Acetate	6.31	0.00	--	43.0	0	.9271	0.00
19)D	C115	1,1,1-Trichloroetha	7.96	7.94	.02	97.0	2816	.4790	.62
20)	C120	Carbon Tetrachlorid	8.25	0.00	--	117.0	0	.4557	0.00
21)D	C165	Benzene	8.62	8.61	.01	78.0	3900	1.2475	.33
22)D	C150	Trichloroethene	9.89	9.88	.01	130.0	759	.4109	.19
23)	C140	1,2-Dichloropropane	10.34	0.00	--	63.0	0	.4179	0.00
24)	C130	Bromodichloromethan	10.96	0.00	--	83.0	0	.5693	0.00
25)	C175	2-Chloroethylvinyle	11.70	0.00	--	63.0	0	.2011	0.00
26)	C143	Cis-1,3-Dichloropro	12.02	0.00	--	75.0	0	.5777	0.00
27)	C172	Trans-1,3-Dichlorop	13.41	0.00	--	75.0	0	.4328	0.00
28)	C160	1,1,2-Trichloroetha	13.87	0.00	--	97.0	0	.2958	0.00
29)	C155	Dibromochloromethan	14.90	0.00	--	129.0	0	.4224	0.00
30)	C180	Bromoform	19.11	0.00	--	173.0	0	.3017	0.00
31)	*CI20	D5-Chlorobenzene	16.51	16.56	.05	117.0	329712	1.0000	50.00
32)	CS05	D8-Toluene	12.67	12.66	.01	98.0	440987	1.3341	50.13
33)	C205	4-Methyl-2-Pentanon	12.44	0.00	--	43.0	0	.5703	0.00
34)	C230	Toluene	12.84	12.83	.01	92.0	16599	.8678	2.90
35)	C210	2-Hexanone	14.65	0.00	--	43.0	0	.3123	0.00
36)	C220	Tetrachloroethene	14.26	0.00	--	164.0	0	.4102	0.00
37)	C235	Chlorobenzene	16.64	0.00	--	112.0	0	1.0211	0.00
38)	C240	Ethylbenzene	17.05	0.00	--	106.0	0	.4759	0.00
39)	CXXX	Xylene (p)	17.43	0.00	--	106.0	0	.5961	0.00
40)D	CXXX	Xylenes (o)	18.61	18.60	.01	106.0	687	.6235	.17
41)D	C245	Styrene	18.67	18.67	.00	104.0	1055	.9877	.16
42)	C225	1,1,2,2-Tetrachloro	20.85	0.00	--	83.0	0	.8050	0.00
43)	CS10	Bromofluorobenzene	20.25	20.24	.02	95.0	204401	.6112	50.72
44)D	C335	Dichlorobenzene (m	23.88	23.85	.03	146.0	916	.9182	.15
44)D	C335	Dichlorobenzene (m	23.88	24.16	.28	146.0	1070	.9182	.18
45)D	C340	Dichlorobenzene (p	24.20	23.85	.34	146.0	916	.9577	.15
45)D	C340	Dichlorobenzene (p	24.20	24.16	.04	146.0	1070	.9577	.17
46)D	C350	Dichlorobenzene (o	25.43	25.40	.04	146.0	1108	.9253	.17

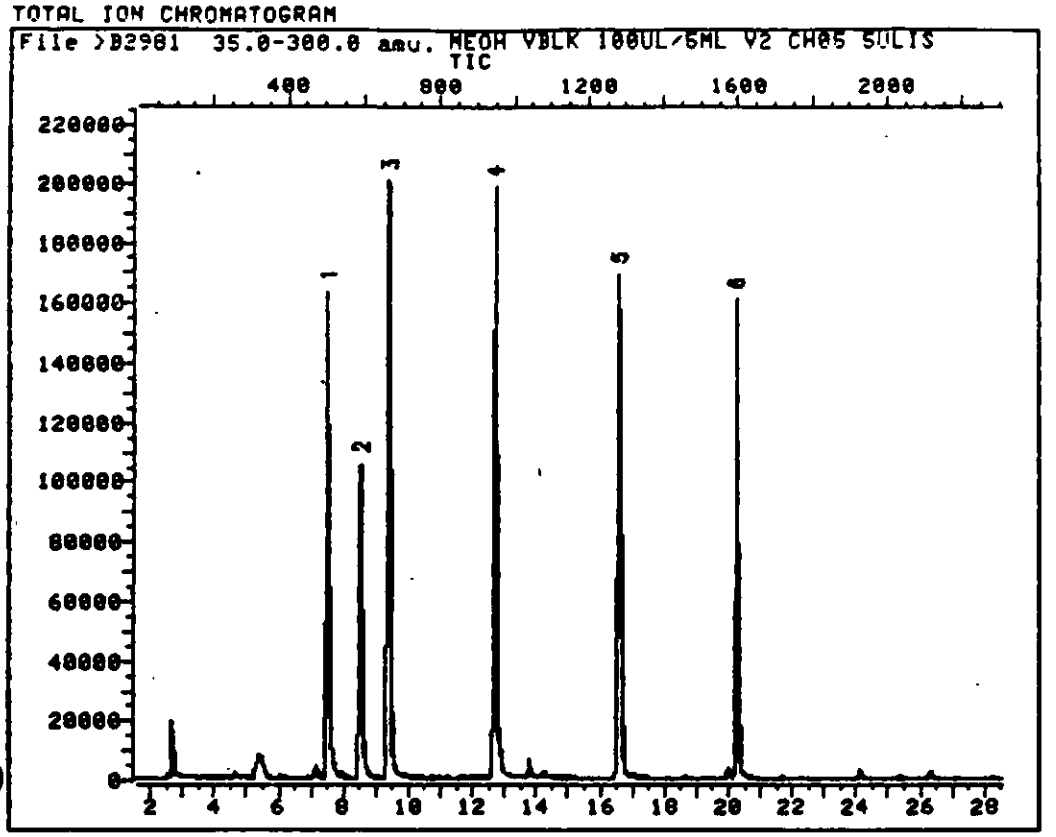
Internal Standard Comparison

Sample: >82981 Date injected: 10/14/91 Standard: >82979

	Internal Standard	Sample Area	Std Area	%
CI01	Bromochloromethane	109638	100554	109.0
CI10	1,4-Difluorobenzene	477278	448145	106.5
CI20	D5-Chlorobenzene	329712	321576	102.5

% = (Sample Area/Std Area)*100
* Area outside limits

TOTAL ION CHROMATOGRAM



Data File: >B2981::D6 Quant Output File: ^B2981::QT
Name: MEOH VBLK 100UL/5ML -01
Misc: V2 CH05 5ULIS

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911014 14:19

Operator ID: ALANA
Quant Time: 911014 16:03
Injected at: 911014 15:33

QUANT REPORT

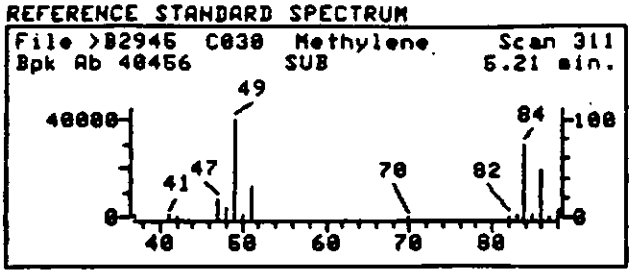
Operator ID: ALANA Quant Rev: 6 Quant Time: 911014 16:03
Output File: ^B2981::QT Injected at: 911014 15:33
Data File: >B2981::D6 Dilution Factor: 1.00000
Name: MEOH VBLK 100UL/5ML -01
Misc: V2 CH05 5ULIS

ID File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911014 14:19

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.48	128.0	109638	50.00	UG/L	81
9)	C030	Methylene Chloride	5.41	84.0	28869M	4.99	UG/L	81
15)	C110	2-Butanone	7.12	43.0	11550	4.87	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.50	65.0	190264	52.50	UG/L	85
17)	*CI10	1,4-Difluorobenzene	9.37	114.0	477278	50.00	UG/L	100
31)	*CI20	D5-Chlorobenzene	16.56	117.0	329712	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	440987	50.13	UG/L	89
34)	C230	Toluene	12.83	92.0	16599	2.90	UG/L	96
43)	CS10	Bromofluorobenzene (BFB)	20.24	95.0	204401	50.72	UG/L	86

● Compound is ISTD

REFERENCE STANDARD SPECTRUM



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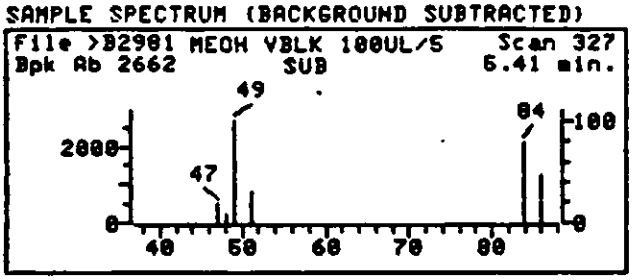

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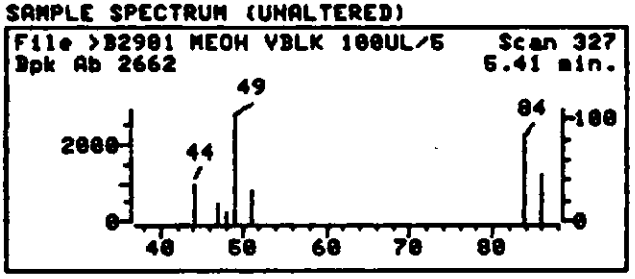
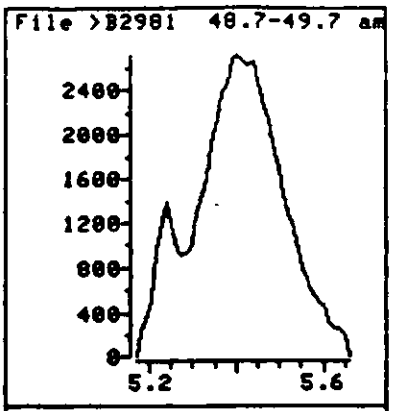
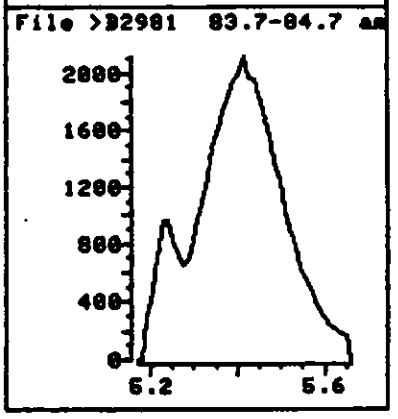


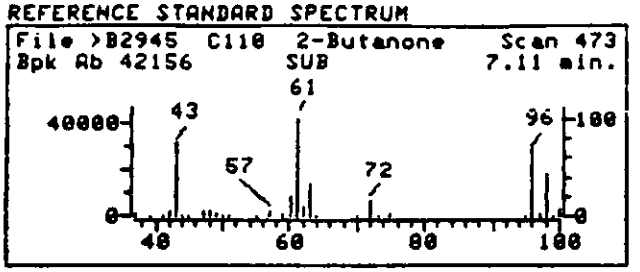




Data File: >B2981::D6 Quant Output File: ^B2981::QT
Name: MEOH VBLK 100UL/5ML
Misc: V2 CH05 5ULIS
Quant Time: 911014 16:03 Quant ID File: VOAID2::$$
Injected at: 911014 15:33 Last Calibration: 911014 14:19

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 327
Retention Time: 5.41 min.
Quant Ion: 84.0
Area: [illegible]
Concentration: 4.99 UG/L
q-value: [illegible]

REFERENCE STANDARD SPECTRUM



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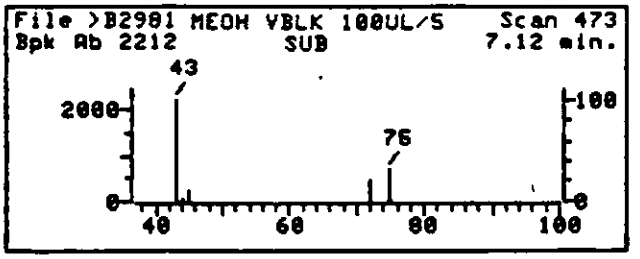

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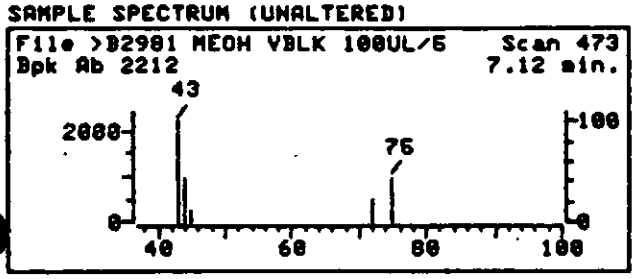
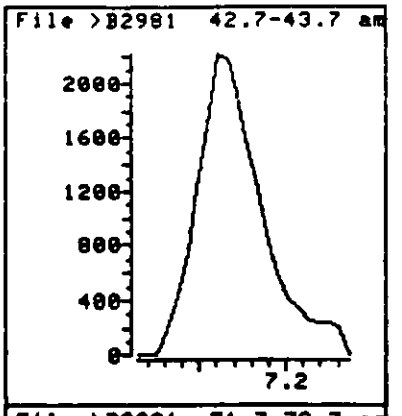
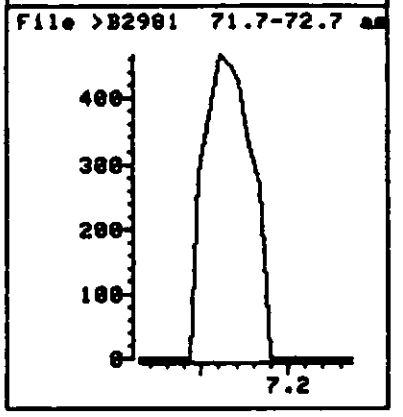


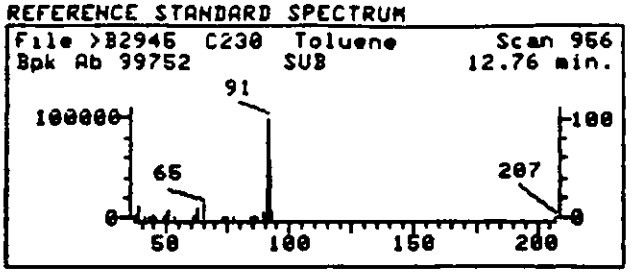




Data File: >B2981::D6 Quant Output File: ^B2981::QT
Name: MEOH VBLK 100UL/5ML —01
Misc: V2 CH05 5ULIS
Quant Time: 911014 16:03 Quant ID File: VOAID2::$$
Injected at: 911014 15:33 Last Calibration: 911014 14:19

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 473
Retention Time: 7.12 min.
Quant Ion: 43.0
Area: 11558
Concentration: 4.87 UG/L
q-value: 97

REFERENCE STANDARD SPECTRUM



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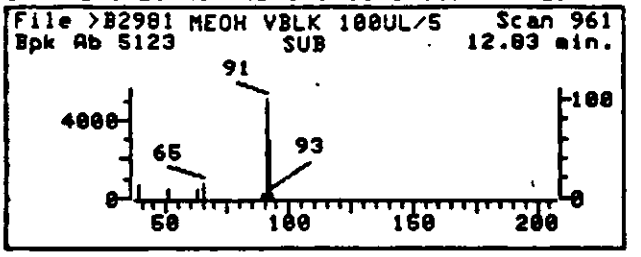

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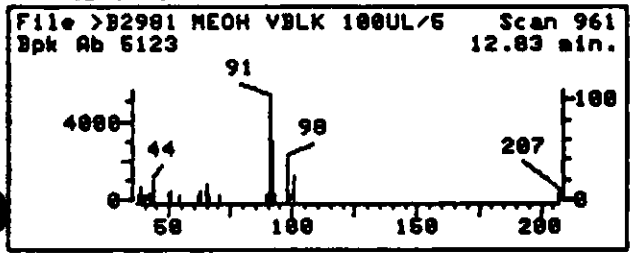
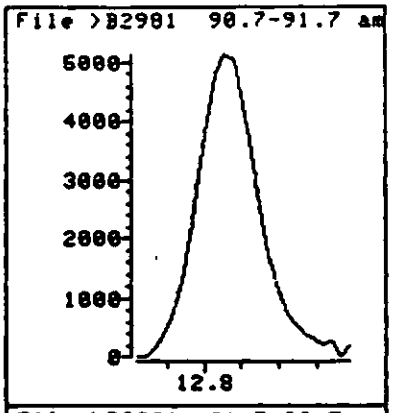
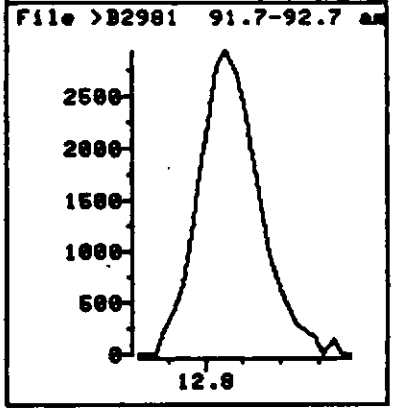






Data File: >B2981::D6
Name: MEOH VBLK 100UL/5ML -01
Misc: V2 CH05 5ULIS
Quant Time: 911014 16:03
Injected at: 911014 15:33

Quant Output File: ^B2981::QT

Quant ID File: VOAID2::$$
Last Calibration: 911014 14:19

Compound No: 34
Compound Name: C230 Toluene
Scan Number: 961
Retention Time: 12.83 min.
Quant Ion: 92.0
Area: 16599
Concentration: 2.90 UG/L
q-value: 96

NO WKS

Data Reduced by : [signature] Date: 101491 Data File: >B2981
Data Reviewed by : [signature] Date: 10/16/91

Enseco TIC Report (page 1)

Sample: MEOH VBLK 100UL/5ML 01 Run Factor: 125.
Conditions: V2 CH05 5ULIS Analyst: ALANA

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3627

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

% Moisture: not dec. 0 Date Analyzed: 10/19/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	U
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	530	J
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	130	J
108-88-3	Toluene	130	J
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3627

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

% Moisture: not dec. 0 Date Analyzed: 10/19/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* = Compound is an Internal Standard
J = Compound detected

8240-S L-CT-2-91-CIF
R-10-991-VIA
PAGE=

Toluene
1,1,2-Tetrachloroethane
(M)-Dichlorobenzene

Analyzed By: KK Date: 10/20/91
Reviewed By: _____ Date: _____

Target Compound List Volatiles

Matrix: SOIL Dilution - .02 mL
File: [illegible] Lab Sample ID: [illegible]
Injected: [illegible] Units: ug/kg
Analyst: ALPHA Run Factor: 1.0000
GC File: [illegible] Surrogate Vol: .02
Quant List Threshold: 1.0

Surrogate Spike Recoveries

Compound		Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
CS15	D4-1,2-Dichloroethane	25.00	23.12	92.5	70 121
CS16	D8-Toluene	25.00	24.71	98.8	81 117
CS10	Bromofluorobenzene (BFB)	25.00	24.01	96.0	74 121

Target Compounds: VOA101

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
		BDL	C045	1,1-Dichloroethene
		BDL	C035	Acetone
		BDL	C040	Carbon Disulfide
		BDL	C030	Methylene Chloride
		BDL	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
364	4.228	528.5	C110	2-Butanone
		BDL	C125	Vinyl Acetate
		BDL	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
		BDL	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform

Item #	Conc.	Qual	Compound
		BDL	4-Methyl-2-pentanone
[illegible]	1.001	[illegible]	Toluene
		BDL	2-Hexanone
		BDL	Tetrachloroethene
		BDL	Chlorobenzene
		BDL	Ethylbenzene
		BDL	Xylene (p)
		BDL	Xylene (o)
		BDL	Styrene
1256	1.010		1,1,2,2-Tetrachloroethan
1458	1.033		1,3-Dichlorobenzene (m)
		BDL	1,4-Dichlorobenzene (p)
		BDL	1,2-Dichlorobenzene (o)
		BDL	Xylene (Total)

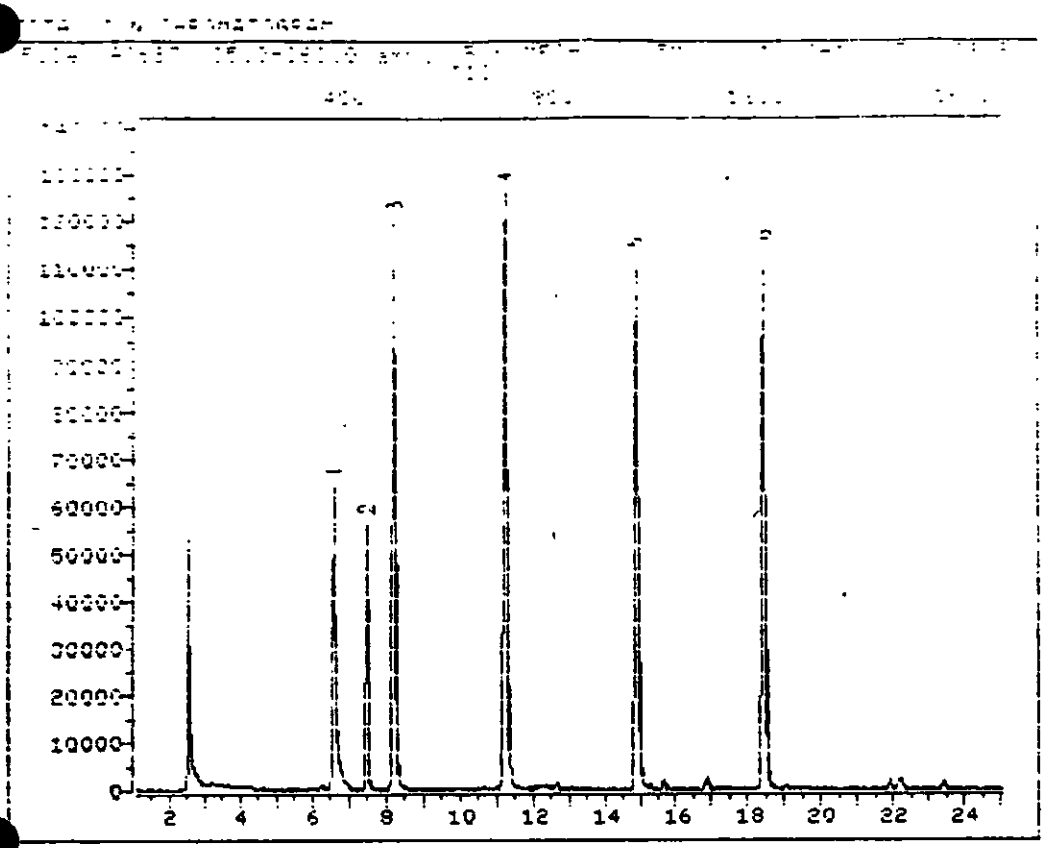
[illegible]

			Rtnd	Found	Diff	Ion	Area	RF	Conc.
1	*C005	Bromochloromethane	6.70	6.70	.00	128.0	99140	1.0000	50.00
2	C010	Chloromethane	2.80	0.00	--	50.0	0	.7917	0.00
3	C020	Vinyl Chloride	2.97	0.00	--	62.0	0	1.1272	0.00
4	C015	Bromomethane	3.28	0.00	--	94.0	0	.7564	0.00
5	C025	Chloroethane	3.38	0.00	--	64.0	0	.6664	0.00
6	C045	1,1-Dichloroethene	4.14	0.00	--	96.0	0	.4228	0.00
7	C035	Acetone	4.21	0.00	--	43.0	0	.2630	0.00
8	C040	Carbon Disulfide	4.38	0.00	--	76.0	0	2.9116	0.00
9	C050	Methylene Chloride	4.65	4.66	.01	84.0	806	1.1835	.58
10	C053	Trans-1,2-Dichloroe	4.94	0.00	--	96.0	0	1.4226	0.00
11	C055	cis-1,2-Dichloroeth	6.22	0.00	--	96.0	0	1.6881	0.00
12	C060	1,1-Dichloroethane	5.46	0.00	--	63.0	0	2.5945	0.00
13	C060	Chloroform	6.67	0.00	--	83.0	0	3.1560	0.00
14	C065	1,2-Dichloroethane	7.57	0.00	--	62.0	0	2.1292	0.00
15	C110	2-Butanone	6.25	6.26	.01	72.0	764	.1527	4.23
16	CS15	D4-1,2-Dichloroetha	7.45	7.45	.00	65.0	102090	1.8652	46.24
17	*C110	1,4-Difluorobenzene	8.32	8.20	.12	114.0	287157	1.0000	50.00
18	C125	Vinyl Acetate	5.53	0.00	--	43.0	0	.3503	0.00
19	C115	1,1,1-Trichloroetha	6.96	0.00	--	97.0	0	.4821	0.00
20	C120	Carbon Tetrachlorid	7.22	0.00	--	117.0	0	.4672	0.00
21	C165	Benzene	7.54	7.55	.00	78.0	781	.9452	.14
22	C150	Trichloroethene	8.67	0.00	--	130.0	0	.4058	0.00
23	C140	1,2-Dichloropropane	9.09	0.00	--	63.0	0	.3404	0.00
24	C130	Bromodichloromethan	9.64	0.00	--	83.0	0	.5063	0.00
25	C175	2-Chloroethylvinyle	10.30	0.00	--	63.0	0	.1818	0.00
26	C143	Cis-1,3-Dichloropro	10.60	0.00	--	75.0	0	.5306	0.00
27	C172	Trans-1,3-Dichlorop	11.90	0.00	--	75.0	0	.4540	0.00
28	C160	1,1,2-Trichloroetha	12.32	0.00	--	97.0	0	.2944	0.00
29	C195	Dibromochloromethan	13.29	0.00	--	129.0	0	.4967	0.00
30	C180	Bromoform	17.24	0.00	--	173.0	0	.4160	0.00
31	*C120	D5-Chlorobenzene	15.03	14.85	.18	117.0	232406	1.0000	50.00
32	CS05	D8-Toluene	11.21	11.19	.01	98.0	303785	1.3223	49.42
33	C205	4-Methyl-2-Pentanon	11.01	0.00	--	43.0	0	.3339	0.00
34	C230	Toluene	11.36	11.33	.03	92.0	3695	.7787	1.02
35	C210	2-Hexanone	13.06	0.00	--	43.0	0	.2318	0.00
36	C220	Tetrachloroethene	12.66	12.65	.01	164.0	1675	.5019	.72
37	C235	Chlorobenzene	14.92	14.94	.02	112.0	3572	1.0194	.75
38	C240	Ethylbenzene	15.29	15.29	.00	106.0	622	.5232	.26
38	D C240	Ethylbenzene	15.29	15.67	.38	106.0	2294	.5232	.94
39	D CXXX	Xylene (p)	15.64	15.29	.35	106.0	622	.6374	.21
40	CXXX	Xylene (p)	15.64	15.67	.02	106.0	2294	.6374	.77
40	CXXX	Xylene (o)	16.76	16.81	.05	106.0	1816	.5785	.68
41	C245	Styrene	16.83	16.87	.04	104.0	3551	.9964	.77
42	C225	1,1,2,2-Tetrachloro	18.92	19.01	.09	83.0	2889	.5811	1.07
43	CS10	Bromofluorobenzene	18.33	18.41	.08	95.0	132777	.5949	48.02
44	C335	Dichlorobenzene (m	21.77	21.90	.12	146.0	4504	.9383	1.03
45	D C340	Dichlorobenzene (p	22.08	21.90	.19	146.0	4504	.9456	1.02
45	C340	Dichlorobenzene (p	22.08	22.21	.13	146.0	4276	.9	.97
46	C350	Dichlorobenzene (o	23.22	23.43	.16	146.0	4182	.9052	.99

000263

Internal Standard	Sample Area	Std Area	%
Li-1 Bromochloromethane	[illegible]	[illegible]	100.1
Li-2 1,4-Difluorobenzene	[illegible]	[illegible]	98.2
Li-3 Chlorobenzene-d5	[illegible]	[illegible]	99.3

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >A3627::D1 Quant Output File: ^A3627::Q1
Name: VBLK MEOH .02 5ML
Misc: V1, CH1 , 5UL IS/S 100UL MEOH LOT #AY323

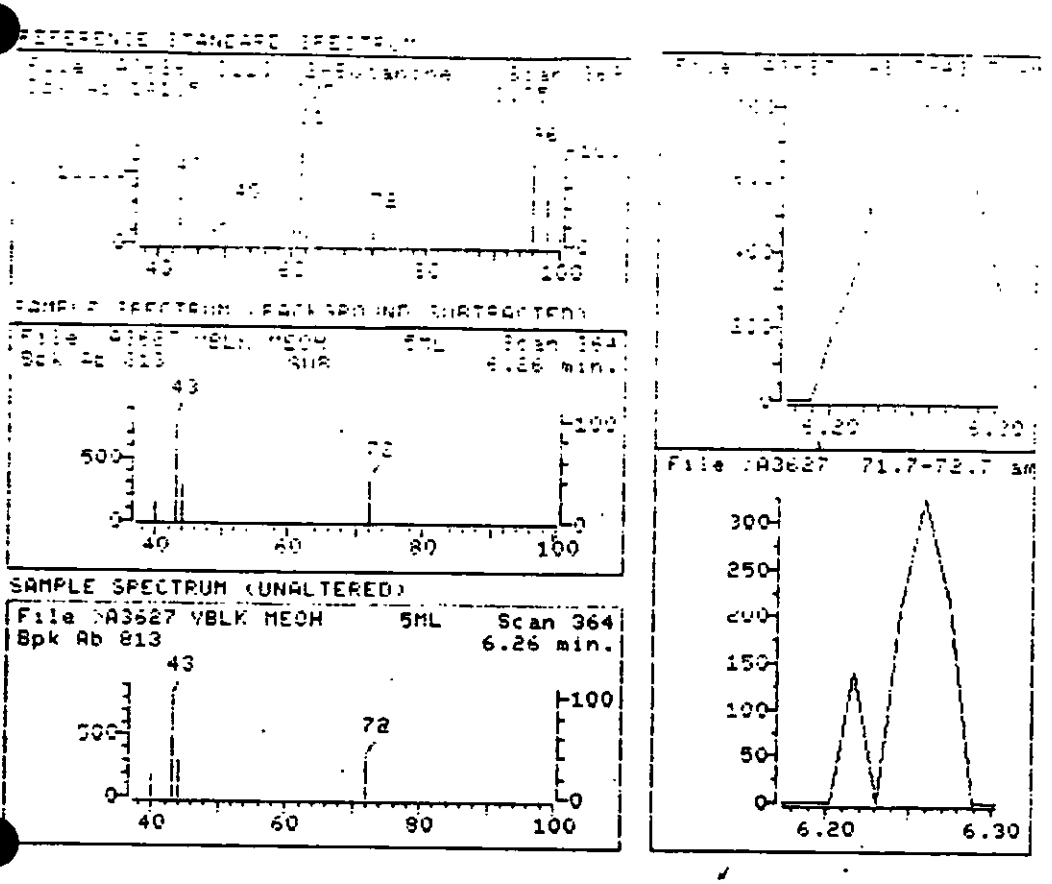
Id File: VOA1D1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 911019 12:09

Operator ID: ALANA
Quant Time: 911019 12:50
Injected at: 911019 12:16

Data File: [illegible]
Title: [illegible]
Last Calibration: [illegible]

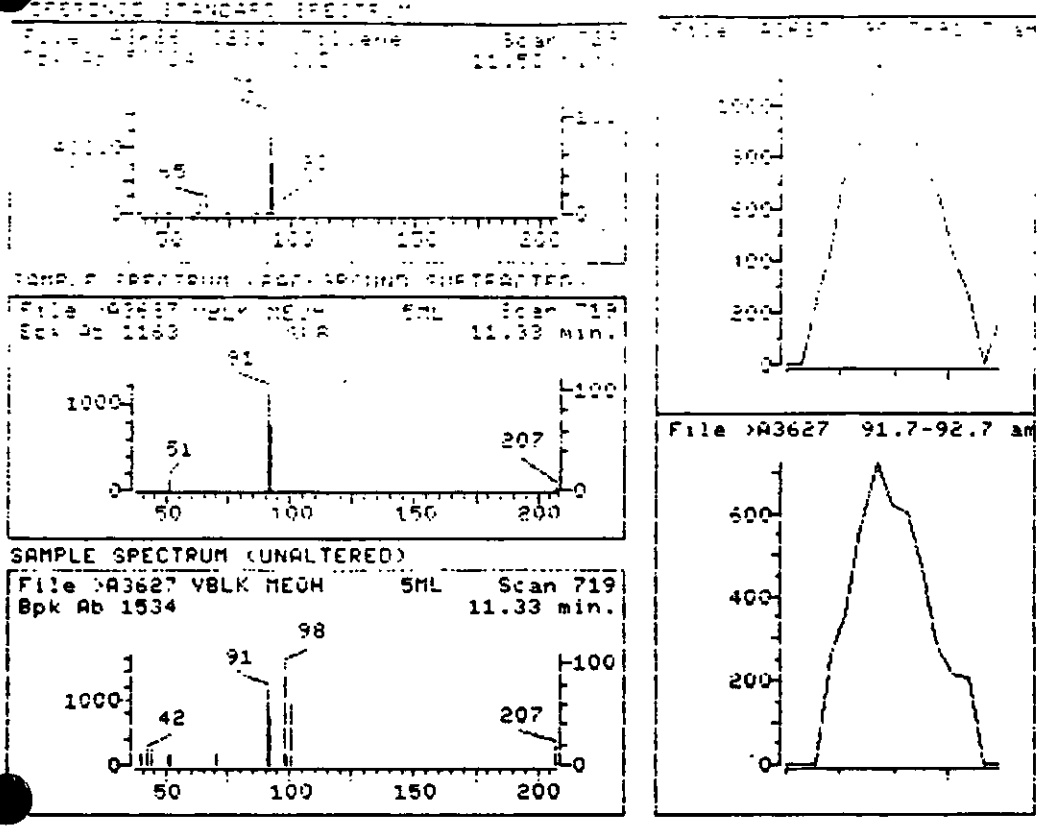
		Compound	R.T.	Q Ion	Area	Conc	Units	%
1)	*C101	Bromochloromethane	6.56	128.0	59190	50.00	UG/L	92
9)	C050	Methylene Chloride	4.66	84.0	806	.98	UG/L	91
15)	C110	2-Butanone	6.26	72.0	764	4.23	UG/L	96
16)	C515	D4-1,2-Dichloroethane	7.45	65.0	102090	46.24	UG/L	88
17)	*C110	1,4-Difluorobenzene	8.20	114.0	287157	50.00	UG/L	100
21)	C165	Benzene	7.55	78.0	781	.14	UG/L	100
31)	*C120	D5-Chlorobenzene	14.85	117.0	232406	50.00	UG/L	100
32)	C505	D8-Toluene	11.19	98.0	303785	49.42	UG/L	87
34)	C230	Toluene	11.33	92.0	3695	1.02	UG/L	89
36)	C220	Tetrachloroethene	12.65	164.0	1675	.72	UG/L	83
37)	C235	Chlorobenzene	14.94	112.0	3572	.95	UG/L	87
38)	C240	Ethylbenzene	15.29	106.0	622	.26	UG/L	90
[illegible]	CXXX	Xylene (p)	15.67	106.0	2294	.77	UG/L	84
40)	CXXX	Xylene (o)	16.81	106.0	1816	.68	UG/L	90
41)	C245	Styrene	16.87	104.0	3551	.77	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.01	83.0	2889	1.07	UG/L	94
43)	C510	Bromofluorobenzene (BFB)	18.41	95.0	132777	48.02	UG/L	89
44)	C335	Dichlorobenzene (m)	21.90	146.0	4504	1.03	UG/L	100
45)	C340	Dichlorobenzene (p)	22.21	146.0	4276	.97	UG/L	100
46)	C350	Dichlorobenzene (o)	23.43	146.0	4182	.99	UG/L	100
47)	C250	Xylene (Total)	16.81	106.0	1562	.59	UG/L	82

* Compound is ISTD



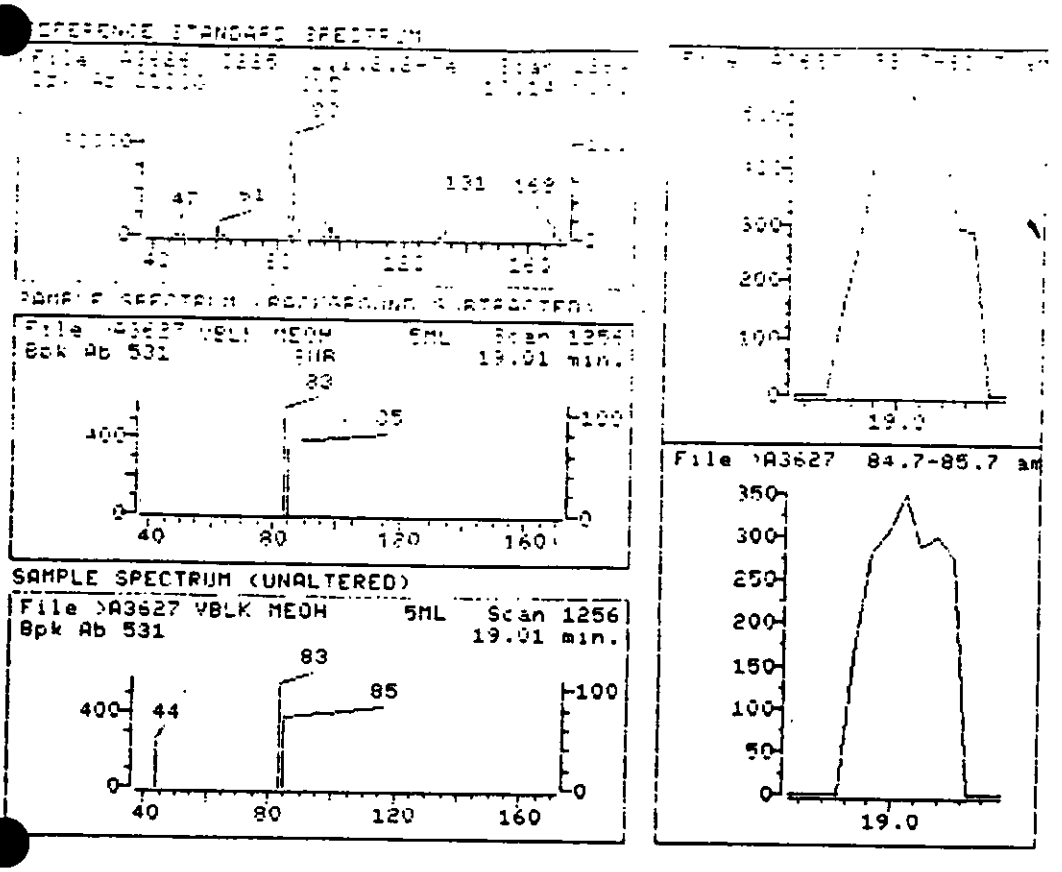
Data File: :A3627::D1 Quant Output File: :A3627::Q1
Name: VBLK MEOH 5ML
Misc: V1, CH1 , 5UL IS/S 100UL MEOH LOT #HY323
Quant Time: 911019 12:50 Quant ID File: VQA1D1::$$
Injected at: 911019 12:16 Last Calibration: 911019 12:09

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 364
Retention Time: 6.26 min.
Quant Ion: 72.0
Area: 764
Concentration: 4.23 UG/L
q-value: 56



Data File: >A3627::01 Quant Output File: ^A3627::QT
Name: VBLK MEOH 02 5ML
Misc: V1, CH1 , 5UL IS/S 100UL MEOH LOT #AY323
Quant Time: 911019 12:50 Quant ID File: VOAID1::$$
Injected at: 911019 12:16 Last Calibration: 911019 12:09

Compound No: 34
Compound Name: C230 Toluene
Scan Number: 719
Retention Time: 11.33.min.
Quant Ion: 92.0
Area: 3695
Concentration: 1.02 UG/L
q-value: 89



Data File: >A3627::D1 Quant Output File: ^A3627::QT
Name: VBLK MEOH 10^ 5ML
Misc: V1, CH1 , 5UL IS/S 100UL MEOH LOT #AY323
Quant Time: 911019 12:50 Quant ID File: VOAID1::$$
Injected at: 911019 12:16 Last Calibration: 911019 12:09

Compound No: 42
Compound Name: C225 1,1,2,2-Tetrachloroethan
Scan Number: 1256
Retention Time: 19.01 min.
Quant Ion: 83.0
Area: 2889
Concentration: 1.07 UG/L
q-value: 94

Data Reduced by : ____ Date: ____ Data File: -[illegible]
Data Reviewed by : KK Date: 10/21/91

Ensecs TIC Report page 1

Sample: VBLK MEOH -02 5ML Run Factor: 125.
Conditions: V1, CH1 , 5UL IS/S 100UL MEOH Analyst: ALANA

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	103.			2700.	00-00-0	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2798

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

% Moisture: not dec. 0 Date Analyzed: 10/08/91

Column: (pack/cap) CAP Dilution Factor: 0.80

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	6	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2798

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

% Moisture: not dec. 0 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 0.80

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

NC R-10089-V6A 8240-> >F2798 CS_2 2-But

Reduced by : JZ Date: 10/8/91 Data File: >F2798
Reviewed by: NC Date: 10/14/91 Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: VBLK,C3 5ML MID.
Misc : V6, LH#02, 5UL IS/S
Injected : 10/08/91 14:09 Units: UG/KG
Analyst: KERYLYNN Run Factor: 1.000
ID File: HAMID6 Surrogate vol: .005
Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2497	99.9	70 121
CS05 D8-Toluene	.2500	.2608	104	84 117
CS10 Bromofluorobenzene	.2500	.2650	105	59 121

Target Compounds: HAMID6

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL		C012 Dichlorodifluoromethane
		BDL		C010 Chloromethane
		BDL		C020 Vinyl Chloride
		BDL		C015 Bromomethane
		BDL		C025 Chloroethane
		BDL		C028 Trichlorofluoromethane
		BDL		C045 1,1-Dichloroethene
		BDL		C038 1,1,2-Trichloro-1,2,2-tri
		BDL		C035 Acetone
225	4.883		4.9	C040 Carbon Disulfide
		BDL		C050 Methylene Chloride
		BDL		C053 Trans-1,2-dichloroethene
		BDL		C055 Cis-1,2-dichloroethene
		BDL		C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
422	5.638		5.6	C110 2-Butanone
		BDL		C125 Vinyl Acetate
		BDL		C115 1,1,1-Trichloroethane
		BDL		C120 Carbon Tetrachloride
		BDL		C165 Benzene
		BDL		C150 Trichloroethene
		BDL		C140 1,2-Dichloropropane
		BDL		C130 Bromodichloromethane
		BDL		C175 2-Chloroethylvinylether
		BDL		C143 Cis-1,3-Dichloropropene
		BDL		C172 Trans-1,3-dichloropropene

Data file: >F2/YB Page: 2
Sample: VBLK 03 5ML HID.

Scan #	Concentration Quant list UG/L	Sample UG/KG	Compound
		BDL	C160 1,1,2-Trichloroethane
		BDL	C195 Dibromochloromethane
		BDL	C180 Bromoform
		BDL	C205 4-Methyl-2-pentanone
		BDL	C230 Toluene
		BDL	C210 2-Hexanone
		BDL	C220 Tetrachloroethene
		BDL	C235 Chlorobenzene
		BDL	C240 Ethylbenzene
		BDL	CXXX Xylenes (p)
		BDL	CXXX Xylenes (o)
		BDL	C245 Styrene
		BDL	C225 1,1,2,2-Tetrachloroethane
		BDL	C335 Dichlorobenzene (m)
		BDL	C340 Dichlorobenzene (p)
		BDL	C350 Dichlorobenzene (o)
		BDL	C250 Xylenes (total)

Diagnostic Quant Report

Data File: :F2798::D6 Injected at: 14:09 10/08/91
Quant'd : 14:37 10/08/91
ID File : HAM!D6::MT Calibrated : 11:20 04/08/91

Compound		- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *C101	Bromochloromethane	7.23	7.26	.03	128.0	84171	1.0000	50.00
2) C012	Dichlorodifluorometh	2.45	0.00	--	85.0	0	1.0757	0.00
3) C010	Chloromethane	2.69	0.00	--	50.0	0	1.1039	0.00
4) C020	Vinyl Chloride	2.83	0.00	--	62.0	0	1.0896	0.00
5) C015	Bromomethane	3.24	0.00	--	94.0	0	1.1029	0.00
6) C025	Chloroethane	3.35	0.00	--	64.0	0	.6017	0.00
7) C028	Trichlorofluorometha	3.67	0.00	--	101.0	0	1.9343	0.00
8) C045	1,1-Dichloroethene	4.31	0.00	--	96.0	0	1.0123	0.00
9) C038	1,1,2-Trichloro-1,2,	4.31	0.00	--	101.0	0	2.3058	0.00
10) C035	Acetone	4.42	0.00	--	43.0	0	.4339	0.00
11) C040	Carbon Disulfide	4.62	4.63	.02	76.0	24599	2.9923	4.88
11)D C040	Carbon Disulfide	4.62	4.87	.25	76.0	1320	2.9923	.26
12) C030	Methylene Chloride	4.97	0.00	--	84.0	0	1.4571	0.00
13) C053	Trans-1,2-dichloroet	5.33	0.00	--	96.0	0	1.4870	0.00
14) C055	Cis-1,2-dichloroethe	6.85	0.00	--	96.0	0	1.7015	0.00
15) C050	1,1-Dichloroethane	5.95	0.00	--	63.0	0	2.8582	0.00
16) C060	Chloroform	7.41	0.00	--	83.0	0	3.1850	0.00
17) C065	1,2-Dichloroethane	8.44	0.00	--	62.0	0	2.1457	0.00
18) C110	2-Butanone	6.91	6.93	.01	72.0	2991	.3151	5.64
19) CS15	D4-1,2-dichloroethan	8.30	8.29	.01	65.0	144254	1.7156	49.95
20) *C110	1,4-Difluorobenzene	9.12	9.14	.02	114.0	416706	1.0000	50.00
21) C125	Vinyl Acetate	6.01	0.00	--	43.0	0	.9307	0.00
22) C115	1,1,1-Trichloroethan	7.71	0.00	--	97.0	0	.5330	0.00
23) C120	Carbon Tetrachloride	8.00	0.00	--	117.0	0	.4382	0.00
24) C165	Benzene	8.38	0.00	--	78.0	0	.9528	0.00
25) C150	Trichloroethene	9.67	0.00	--	130.0	0	.3865	0.00
26) C140	1,2-Dichloropropane	10.13	0.00	--	63.0	0	.4025	0.00
27) C130	Bromodichloromethane	10.75	0.00	--	83.0	0	.6435	0.00
28) C175	2-Chloroethylvinylet	11.49	0.00	--	63.0	0	.2689	0.00
29) C143	Cis-1,3-Dichloroprop	11.80	0.00	--	75.0	0	.5928	0.00
30) C172	Trans-1,3-dichloropr	13.22	0.00	--	75.0	0	.5155	0.00
31) C160	1,1,2-Trichloroethan	13.67	0.00	--	97.0	0	.3815	0.00
32) C155	Dibromochloromethane	14.71	0.00	--	129.0	0	.5619	0.00
33) C180	Bromoform	18.92	0.00	--	173.0	0	.4211	0.00
34) *C120	D5-Chlorobenzene	16.30	16.34	.04	117.0	313814	1.0000	50.00
35) CS05	D8-Toluene	12.45	12.46	.01	98.0	410688	1.2547	52.15
35)D CS05	D8-Toluene	12.45	12.82	.37	98.0	2270	1.2547	.29
36) C205	4-Methyl-2-pentanone	12.23	0.00	--	43.0	0	.9161	0.00
37) C230	Toluene	12.62	0.00	--	92.0	0	.8255	0.00
38) C210	2-Hexanone	14.45	0.00	--	43.0	0	.6983	0.00
39) C220	Tetrachloroethene	14.03	0.00	--	164.0	0	.4264	0.00
40) C235	Chlorobenzene	16.42	0.00	--	112.0	0	1.0439	0.00
41) C240	Ethylbenzene	16.81	0.00	--	106.0	0	.4965	0.00
42) CXXX	Xylenes (p)	17.18	0.00	--	106.0	0	.6578	0.00
43) CXXX	Xylenes (o)	18.36	0.00	--	106.0	0	.6174	0.00
44) C245	Styrene	18.42	0.00	--	104.0	0	1.0869	0.00
45) C225	1,1,2,2-Tetrachloroe	20.60	0.00	--	83.0	0	1.0059	0.00
46) CS10	Bromofluorobenzene	20.00	19.98	.01	95.0	249376	.7	.60
47) C335	Dichlorobenzene (m)	23.58	23.56	.02	146.0	1464	.9166	.25
47)D C335	Dichlorobenzene (m)	23.58	23.88	.30	146.0	2263	.9166	.39

[illegible]	C350 Dichlorobenzene	D	25.13	0.00	--	146.0	[illegible]	[illegible]
50)	C250 Xylenes (total)		18.36	0.00	--	106.0	0.0214	0.00

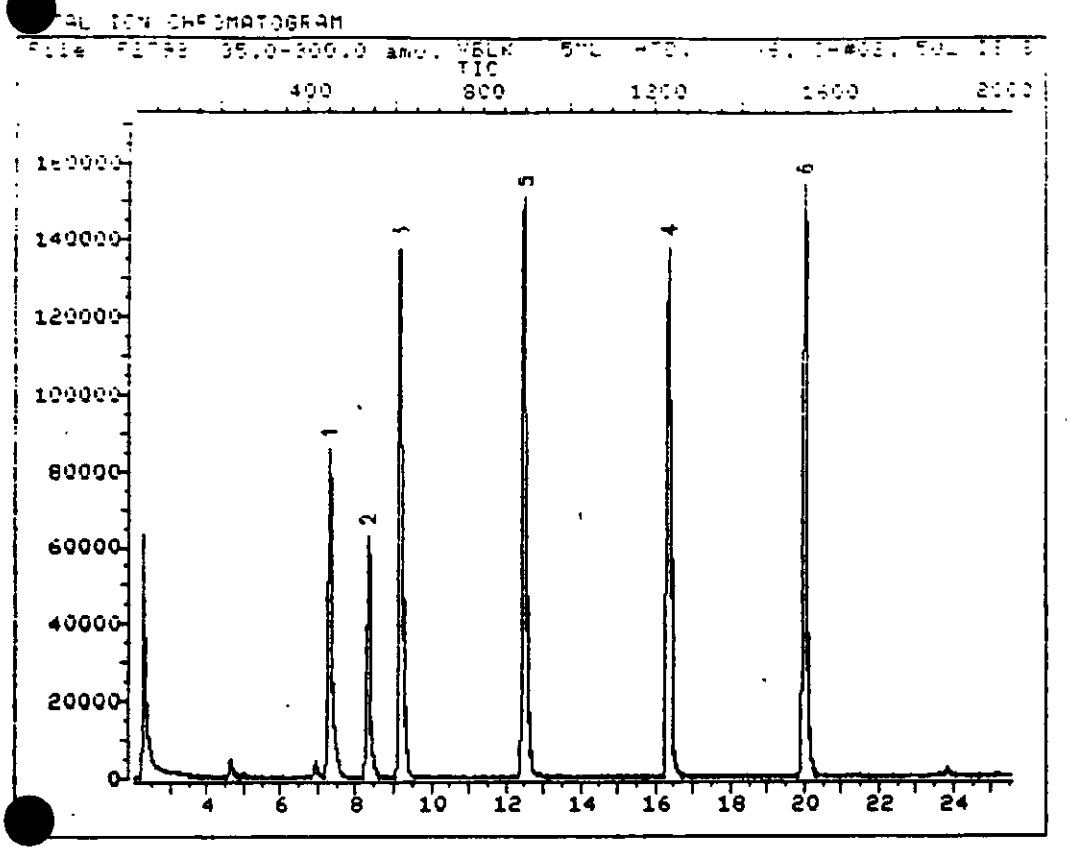
* - Compound is an Internal Standard
D - Compound Qdel'ed

Internal Standard Comparison

Sample: [illegible]F2798 Date injected: 10/08/91 Standard: [illegible]F2790 ✓

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	84171	91542	91.9
CI10 1,4-Difluorobenzene	416706	441917	94.3
CI20 D5-Chlorobenzene	313814	336266	93.3

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >F2798::D6 Quant Output File: ^F2798::D7
Name: VBLK 03 5ML HTD. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

Id File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911008 08:09

Operator ID: KERYLYNN
Quant Time : 911008 14:37
Injected at: 911008 14:09

QUANT REPORT Page 1

Operator ID: KERYL^NN Quant Rev: 7 Quant Time: 9110 8 14:37
Output File: ^F2799::07 Injected at: 911038 14:0?
Data File: ^F2798::06 Dilution Factor: 1.00000
Name: VBLK,c3 5ML HTD. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

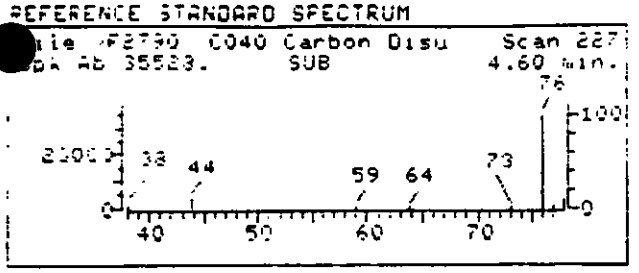
ID File: HAMID6::MT
Title: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
Last Calibration: 910408 11:20 Last Qcal Time: 911008 08:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.26	128.0	84171	50.00	UG/L	88
11)	C040 Carbon Disulfide	4.63	76.0	24599	4.88	UG/L	100
18)	C110 2-Butanone	6.93	72.0	2991	5.64	UG/L	97
19)	CS15 D4-1,2-dichloroethane	8.29	65.0	144254	49.95	UG/L	85
20)	*CI10 1,4-Difluorobenzene	9.14	114.0	416706	50.00	UG/L	100
34)	*CI20 D5-Chlorobenzene	16.34	117.0	313814	50.00	UG/L	100
35)	CS05 D8-Toluene	12.46	98.0	410688	52.15	UG/L	92
46)	CS10 Bromofluorobenzene	19.98	95.0	249376	52.60	UG/L	74
47)	C335 Dichlorobenzene (m)	23.56	146.0	1464	.254	UG/L	100
)	C340 Dichlorobenzene (p)	23.88	146.0	2263	.375	UG/L	100

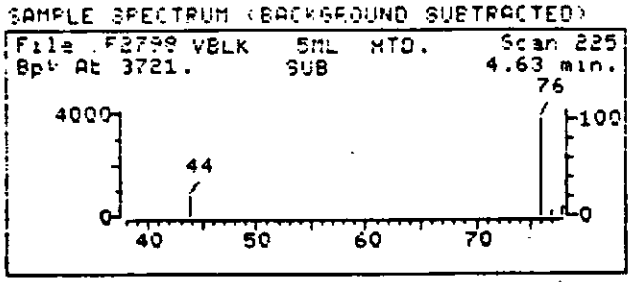
* Compound is ISTD

000279

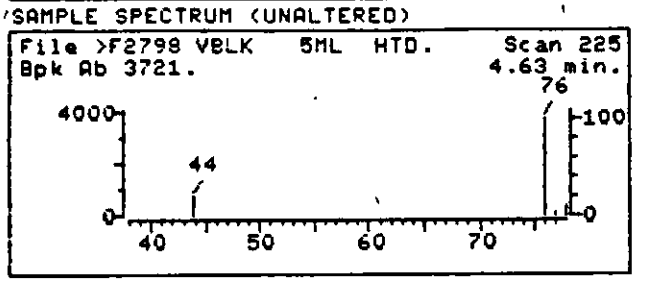
REFERENCE STANDARD SPECTRUM

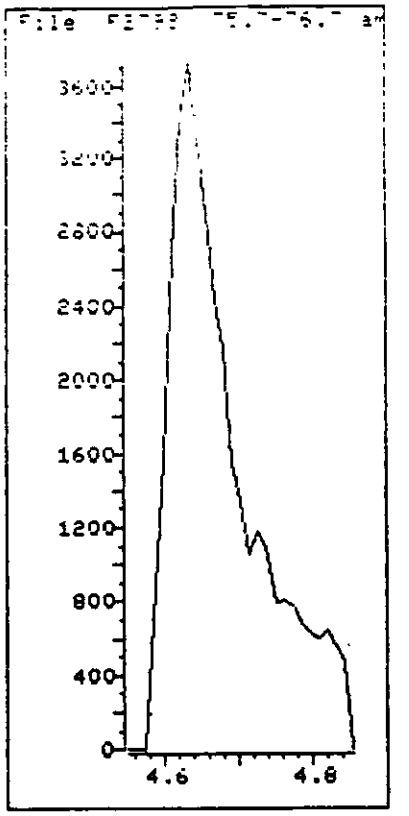


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



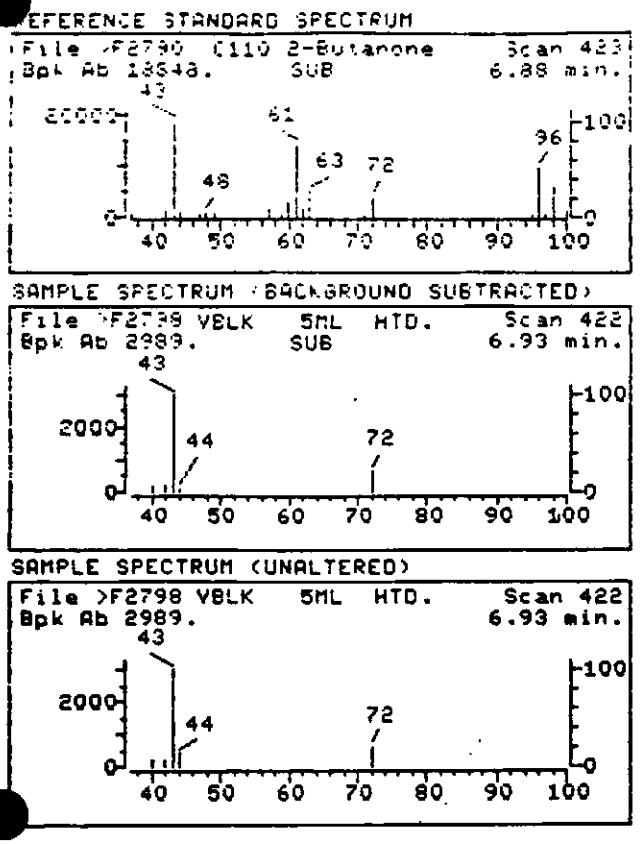


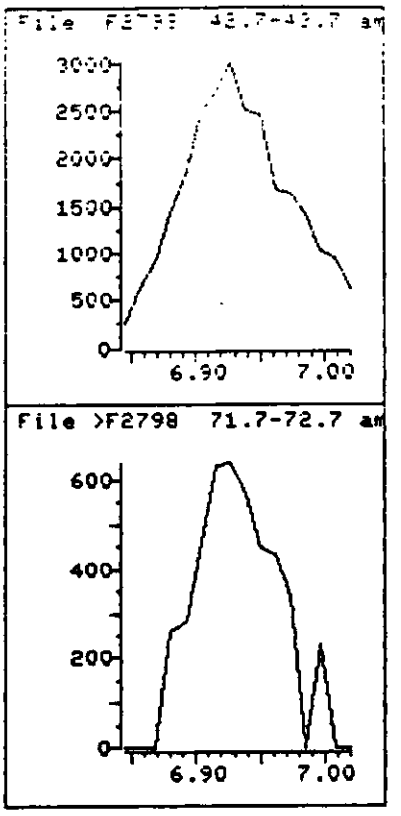
Data File: >F2798::D6
Name: VBLK 0.5ML HTD.
Misc: V6, CH#02, 5UL IS/S
Quant Time: 911008 14:37
Injected at: 911008 14:09
Last Qcal Time: 911008 08:09

Quant Output File: ^F2798::D7
Instrument ID: V6

Quant ID File: HAMID6::MT
Last Calibration: 910408 11:20

Compound No : 11
Compound Name : C040 Carbon Disulfide
Scan Number : 225
Retention Time: 4.63 min.
Quant Ion : 76.0
Area : 24599
Concentration : 4.88 UG/L
q-value : 100





Data File: >F2798::D6
Name: VBLK 5ML HTD.
Misc: V6, CH#02, 5UL IS/S
Quant Time: 911008 14:37
Injected at: 911008 14:09
Last Qcal Time: 911008 08:09

Quant Output File: ^F2798::D7
Instrument ID: V6

Quant ID File: HAMID6::MT
Last Calibration: 910408 11:20

Compound No : 18
Compound Name : C110 2-Butanone
Scan Number : 422
Retention Time: 6.93 min.
Quant Ion : 72.0
Area : 2991
Concentration : 5.64 UG/L
q-value : 97

Data Reduced by : JE Date: 10/8/91 Data File: F[illegible]

Data Reviewed by : [illegible] Date: 10/14/91

Enseco TIC Report (page 1)

Sample: [illegible]SL ✓ 5ML HTD. Run Factor: 1.00

Conditions: V6, CH#02, 5UL IS/S Analyst: KEPPLINN

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

No Unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK04

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2870

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

% Moisture: not dec. 0 Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	140	J
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	1200	U
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	620	U
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK04

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2870

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

% Moisture: not dec. 0 Date Analyzed: 10/10/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

L-10C771-06A

NC

R-101091-06A

8240-

Produced by : JS Date: 10/10/91 Data File: >F2870

Reviewed by: _____ Date: _____ Page: 1

>F2870

MeCl2

Enseco Mass Spectrometry

Target Compound Data Summary Sheet

Sample: 06LK, 5ml MeOH 1000UL.

Misc : 06, CH#02, 50UL 15/5

Injected : 10/10/91 14:28 Units: UG/KG

Analyst: KERYLYNN Run Factor: 125.000

ID File: MUB1D6 Surrogate vol: .005

Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2658	106	70 121
CS05 D8-Toluene	.2500	.2519	101	84 117
CS10 Bromofluorobenzene	.2500	.2532	101	59 121

Target Compounds: MUB1D6

Scan #	Concentration Quant List UG/L	Sample UG/KG	Compound
		BDL	C010 Chloromethane
		BDL	C020 Vinyl Chloride
		BDL	C015 Bromomethane
		BDL	C025 Chloroethane
		BDL	C045 1,1-Dichloroethene
		BDL	C035 Acetone
		BDL	C040 Carbon Disulfide
292	1.161	150J BDL	C050 Methylene Chloride
		BDL	CXXX Tert-butyl alcohol
		BDL	C053 Trans-1,2-dichloroethene
		BDL	C055 Cis-1,2-dichloroethene
		BDL	CXXX Methyl tert-butyl ether
		BDL	C050 1,1-Dichloroethane
		BDL	C060 Chloroform
		BDL	C065 1,2-Dichloroethane
		BDL	C110 2-Butanone
		BDL	C125 Vinyl Acetate
		BDL	C115 1,1,1-Trichloroethane
		BDL	C120 Carbon Tetrachloride
		BDL	C165 Benzene
		BDL	C150 Trichloroethene
		BDL	C140 1,2-Dichloropropane
		BDL	C130 Bromodichloromethane
		BDL	C175 2-Chloroethylvinylether
		BDL	C143 Cis-1,3-Dichloropropene
		BDL	C172 Trans-1,3-dichloropropene
		BDL	C160 1,1,2-Trichloroethane

Data file: >F28/0 _04 Page: 2
Sample: VBLK. MeOH 1000UL.

Scan #	Concentration Quant list UG/L	Sample UG/KG	Compound
	BDL		C155 Dibromochloromethane
	BDL		C180 Bromoform
	BDL		C205 4-Methyl-2-pentanone
	BDL		C230 Toluene
	BDL		C210 2-Hexanone
	BDL		C220 Tetrachloroethene
	BDL		C235 Chlorobenzene
	BDL		C240 Ethylbenzene
	BDL		CXXX Xylenes (p)
	BDL		CXXX Xylenes (o)
	BDL		C245 Styrene
	BDL		C225 1,1,2,2-Tetrachloroethane
	BDL		C335 Dichlorobenzene (m)
	BDL		C340 Dichlorobenzene (p)
	BDL		C350 Dichlorobenzene (o)
	BDL		C250 Xylenes (total)

Diagnostic Quant Report

Data File: F2870::D6 Injected at: 14:28 10/10/91
Quant'd : 14:50 10/10/91
ID File : M081D6::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.26	7.27	.01	128.0	69679	1.0000	50.00
2)	C010 Chloromethane	2.69	0.00	--	50.0	0	1.1732	0.00
3)	C020 Vinyl Chloride	2.84	0.00	--	62.0	0	1.0243	0.00
4)	C015 Bromomethane	3.23	0.00	--	94.0	0	.8064	0.00
5)	C025 Chloroethane	3.35	0.00	--	64.0	0	.4830	0.00
6)	C045 1,1-Dichloroethene	4.33	0.00	--	96.0	0	1.2352	0.00
7)	C035 Acetone	4.42	0.00	--	43.0	0	.2076	0.00
8)	C040 Carbon Disulfide	4.63	0.00	--	76.0	0	3.6934	0.00
9)	C030 Methylene Chloride	4.96	4.94	.02	84.0	2816	1.7398	1.16
10)	CXXX Tert-butyl alcohol	5.12	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.35	0.00	--	96.0	0	1.6583	0.00
12)	C055 Cis-1,2-dichloroethe	6.88	0.00	--	96.0	0	1.7907	0.00
13)	CXXX Methyl tert-butyl et	5.37	0.00	--	73.0	0	3.1722	0.00
14)	C050 1,1-Dichloroethane	5.97	0.00	--	63.0	0	3.2420	0.00
15)	C060 Chloroform	7.41	0.00	--	83.0	0	3.6056	0.00
16)	C065 1,2-Dichloroethane	8.45	0.00	--	62.0	0	2.1656	0.00
17)	C110 2-Butanone	6.89	0.00	--	72.0	0	.1151	0.00
18)	CS15 D4-1,2-dichloroethan	8.31	8.31	.00	65.0	125843	1.6984	53.17
19)	*CI10 1,4-Difluorobenzene	9.15	9.16	.01	114.0	393780	1.0000	50.00
20)	C125 Vinyl Acetate	6.04	0.00	--	43.0	0	.6092	0.00
21)	C115 1,1,1-Trichloroethan	7.74	0.00	--	97.0	0	.5475	0.00
22)	C120 Carbon Tetrachloride	8.03	0.00	--	117.0	0	.4487	0.00
23)	C165 Benzene	8.42	0.00	--	78.0	0	.9682	0.00
24)	C150 Trichloroethene	9.70	0.00	--	130.0	0	.3931	0.00
25)	C140 1,2-Dichloropropane	10.17	0.00	--	63.0	0	.3949	0.00
26)	C130 Bromodichloromethane	10.80	0.00	--	83.0	0	.5930	0.00
27)	C175 2-Chloroethylvinylet	11.52	0.00	--	63.0	0	.1765	0.00
28)	C143 Cis-1,3-Dichloroprop	11.83	0.00	--	75.0	0	.5817	0.00
29)	C172 Trans-1,3-dichloropr	13.24	0.00	--	75.0	0	.4559	0.00
30)	C160 1,1,2-Trichloroethan	13.71	0.00	--	97.0	0	.3107	0.00
31)	C155 Dibromochloromethane	14.76	0.00	--	129.0	0	.4736	0.00
32)	C180 Bromoform	18.97	0.00	--	173.0	0	.2745	0.00
33)	*CI20 D5-Chlorobenzene	16.37	16.40	.03	117.0	307497	1.0000	50.00
34)	CS05 D8-Toluene	12.49	12.49	.00	98.0	394776	1.2743	50.37
35)	C205 4-Methyl-2-pentanone	12.25	0.00	--	43.0	0	.3539	0.00
36)	C230 Toluene	12.66	0.00	--	92.0	0	.8513	0.00
37)	C210 2-Hexanone	14.46	0.00	--	43.0	0	.2308	0.00
38)	C220 Tetrachloroethene	14.07	0.00	--	164.0	0	.4399	0.00
39)	C235 Chlorobenzene	16.47	0.00	--	112.0	0	1.0207	0.00
40)	C240 Ethylbenzene	16.86	0.00	--	106.0	0	.5133	0.00
41)	CXXX Xylenes (p)	17.23	0.00	--	106.0	0	.6661	0.00
42)	CXXX Xylenes (o)	18.41	0.00	--	106.0	0	.6234	0.00
43)	C245 Styrene	18.46	0.00	--	104.0	0	1.1017	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.65	0.00	--	83.0	0	.6160	0.00
45)	CS10 Bromofluorobenzene	20.07	20.07	.00	95.0	225893	.7254	50.64
46)	C335 Dichlorobenzene (m)	23.64	0.00	--	146.0	0	.8[illegible]	0.00
47)	C340 Dichlorobenzene (p)	23.95	0.00	--	146.0	0	.8234	0.00
48)	C350 Dichlorobenzene (o)	25.19	0.00	--	146.0	0	.8347	0.00

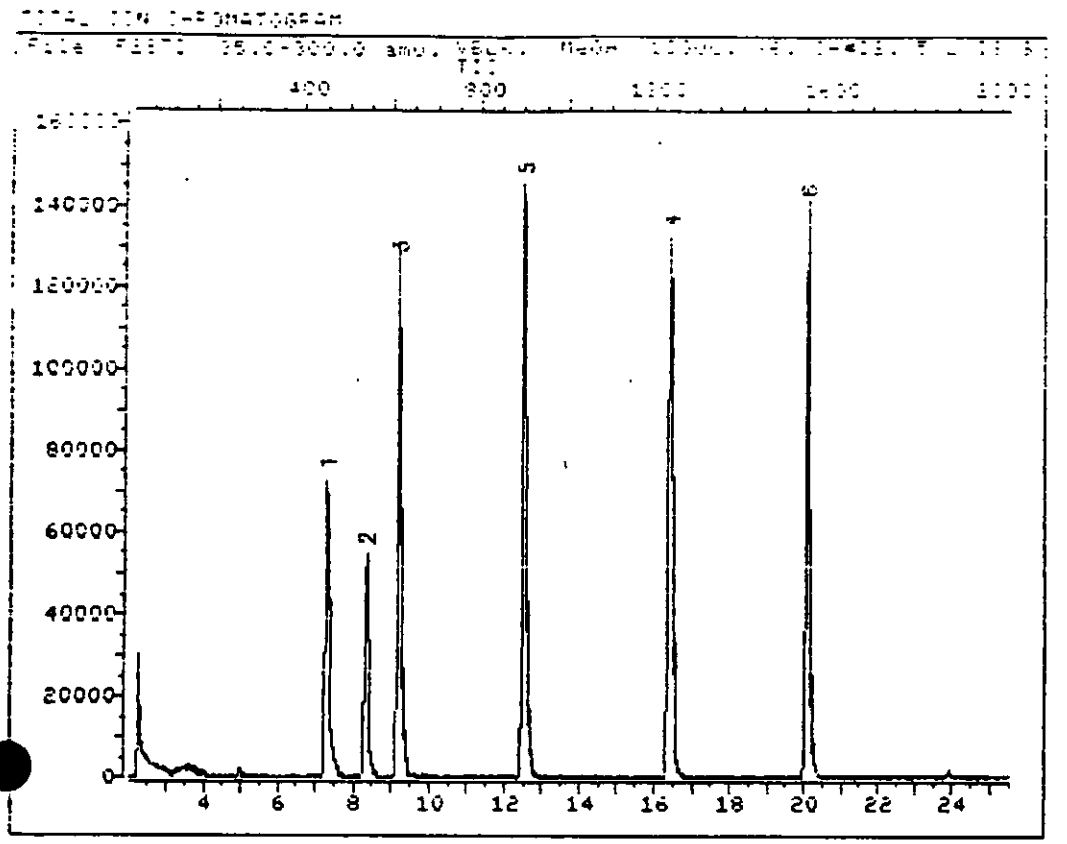
000287

Internal Standard Comparison

Sample: F1370 Date injected: 10-10-91 Standard: F1366

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	69679	76639	90.9
CI10 1,4-Difluorobenzene	393790	407218	96.7
CI20 D5-Chlorobenzene	307497	313165	98.2

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >F2870::D6 Quant Output File: ^F2870::D7
Name: VBLK05 MeOH 100UL. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911010 11:03

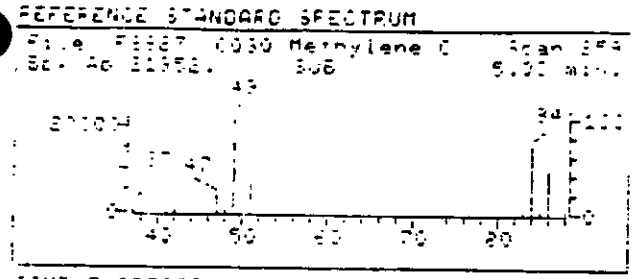
Operator ID: KERYLYNN
Quant Time : 911010 14:56
Injected at: 911010 14:28

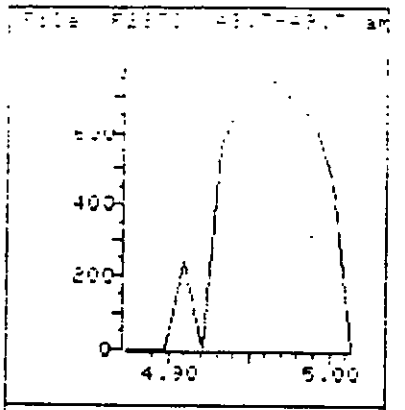
Operator ID: KERYLYNN Quant File : 7 Quant Time: 911010 14:56
Output File: >F2870::D7 Injected at: 911010 14:29
Data File: >F2870::D6 Dilution Factor: 1.00000
Name: UBLK, MeOH 100uL. -cy Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

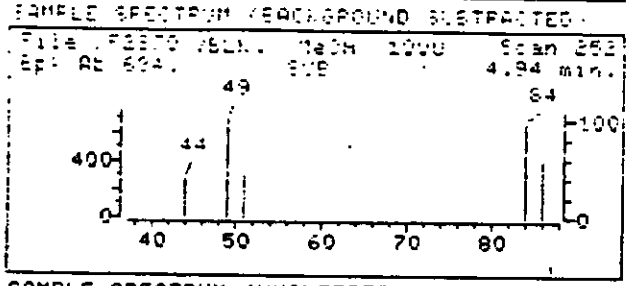
ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911010 11:03

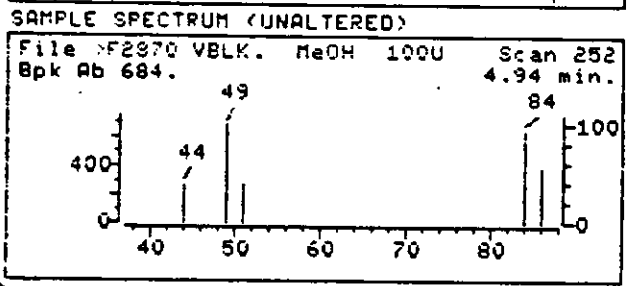
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.27	128.0	69679	50.00	UG/L	70
9)	C030 Methylene Chloride	4.94	84.0	2816	1.16	UG/L	61
18)	CS15 D4-1,2-dichloroethane	8.31	65.0	125843	53.17	UG/L	94
19)	*CI10 1,4-Difluorobenzene	9.16	114.0	393780	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.40	117.0	307497	50.00	UG/L	100
34)	CS05 D8-Toluene	12.49	98.0	394776	50.37	UG/L	99
45)	CS10 Bromofluorobenzene	20.07	95.0	225893	50.64	UG/L	72

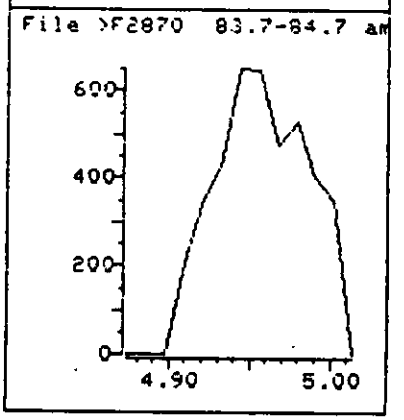
* Compound is ISTD











Data File: >F2870::D6
Name: VBLK. MeOH 100UL 01
Misc: V6, CH#02, 5UL IS/S
Quant Time: 911010 14:56
Injected at: 911010 14:28
Last Qcal Time: 911010 11:03

Quant Output File: ^F2870::D7
Instrument ID: V6

Quant ID File: MOBID6::MT
Last Calibration: 910814 09:37

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 252
Retention Time: 4.94 min.
Quant Ion : 84.0
Area : 2816
Concentration : 1.16 UG/L
q-value : 61

Data Reduced by : DV Date: 10/05/91 Data File: >F28/U
Data Reviewed by : _____ Date: _____

Enseco TIC Report (page 1)

Sample: UBLK. MeUH 1000UL. -04 Run Factor: 125.
Conditions: V6, LH#02, 50UL 15/5 Analyst: KERYLYNN

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

No Unks

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK05

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK05

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2910

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

% Moisture: not dec. 0 Date Analyzed: 10/11/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	U
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	1200	U
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	620	U
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK05

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK05

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2910

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

% Moisture: not dec. 0 Date Analyzed: 10/11/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

[illegible] Internal Standard
C - Compound Deleted

L-100791-V6A
R-101191-V6B >F2910
Clean

Reduced by : DPV Date: 10/29/91
Reviewed by: [illegible] Date: 10/29/91

Data File: [illegible]
Page:

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: MECH BNL
Misc : 4- C1
Injected : 10-11-91 22:50
Analyst: KERYLYNN
ID File: M0BID6
Quant list threshold: 1.00

Units: UG/KG
Run Factor: 125.000
Surrogate Vol: .500

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	25.00	24.36	97.4	70 121
CS05 D8-Toluene	25.00	25.01	100	81 117
CS10 Bromofluorobenzene	25.00	23.47	93.9	74 121

Target Compounds: M0BID6

Concentration Quant List UG/L	Sample UG/KG	Compound
BDL		C010 Chloromethane
BDL		C020 Vinyl Chloride
BDL		C015 Bromomethane
BDL		C025 Chloroethane
BDL		C045 1,1-Dichloroethene
BDL		C035 Acetone
BDL		C040 Carbon Disulfide
BDL		C030 Methylene Chloride
BDL		CXXX Tert-butyl alcohol
BDL		C053 Trans-1,2-dichloroethene
BDL		C055 Cis-1,2-dichloroethene
BDL		CXXX Methyl tert-butyl ether
BDL		C050 1,1-Dichloroethane
BDL		C060 Chloroform
BDL		C065 1,2-Dichloroethane
BDL		C110 2-Butanone
BDL		C125 Vinyl Acetate
BDL		C115 1,1,1-Trichloroethane
BDL		C120 Carbon Tetrachloride
BDL		C165 Benzene
BDL		C150 Trichloroethene
BDL		C140 1,2-Dichloropropane
BDL		C130 Bromodichloromethane
BDL		C175 2-Chloroethylvinylether
BDL		C143 Cis-1,3-Dichloropropene
BDL		C172 Trans-1,3-dichloropropene
BDL		C160 1,1,2-Trichloroethane

No Add'l Compds.

Data File: .F2910 Page: 1
Sample: MEOH 5ML

Scan #	Concentration Quant list UG/L	Sample UG/KG	Compound
		BDL	C155 Dibromochloromethane
		BDL	C180 Bromoform
882	1.712	~~210~~ SNG	C205 4-Methyl-2-pentanone
		BDL	C230 Toluene
		BDL	C210 2-Hexanone
		BDL	C220 Tetrachloroethene
		BDL	C235 Chlorobenzene
		BDL	C240 Ethylbenzene
		BDL	CXXX Xylenes (p)
		BDL	CXXX Xylenes (o)
		BDL	C245 Styrene
		BDL	C225 1,1,2,2-Tetrachloroethane
		BDL	C335 Dichlorobenzene (m)
1882	1.007	~~130~~ NR	C340 Dichlorobenzene (p)
1988	1.254	~~160~~ NR	C350 Dichlorobenzene (o)
		BDL	C250 Xylenes (total)

RU 10/9/91

Diagnostic Quant Report

Data File: :FID10::D6 Injected at: 22:50 10 11 91
Quant'd : 02:17 10 12 91
ID File : :DB:D6::MT Calibrated : 09:37 08 14 91

Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *CI01 Bromochloromethane	7.26	7.28	.01	128.0	58228	1.0000	50.00
2) C010 Chloromethane	2.70	0.00	--	50.0	0	1.2680	0.00
3) C020 Vinyl Chloride	2.83	0.00	--	62.0	0	1.3273	0.00
4) C015 Bromomethane	3.24	0.00	--	94.0	0	1.1965	0.00
5) C025 Chloroethane	3.35	0.00	--	64.0	0	.5794	0.00
6) C045 1,1-Dichloroethene	4.34	0.00	--	96.0	0	1.4977	0.00
7) C035 Acetone	4.41	0.00	--	43.0	0	.2700	0.00
8) C040 Carbon Disulfide	4.63	0.00	--	76.0	0	4.2959	0.00
9) C030 Methylene Chloride	4.98	4.97	.01	84.0	1594	1.9495	.63
10) CXXX Tert-butyl alcohol	5.13	0.00	--	59.0	0	.0770	0.00
11) C053 Trans-1,2-dichloroet	5.35	0.00	--	96.0	0	1.8870	0.00
12) C055 Cis-1,2-dichloroethe	6.87	0.00	--	96.0	0	2.1051	0.00
13) CXXX Methyl tert-butyl et	5.35	0.00	--	73.0	0	3.2861	0.00
14) C050 1,1-Dichloroethane	5.96	0.00	--	63.0	0	3.5292	0.00
15) C060 Chloroform	7.41	0.00	--	83.0	0	4.0280	0.00
16) C065 1,2-Dichloroethane	8.46	0.00	--	62.0	0	2.4804	0.00
17) C110 2-Butanone	6.88	0.00	--	72.0	0	.1404	0.00
18) CS15 D4-1,2-dichloroethan	8.30	8.31	.01	65.0	123026	1.9353	48.73
19) *CI10 1,4-Difluorobenzene	9.15	9.17	.02	114.0	402183	1.0000	50.00
20) C125 Vinyl Acetate	6.04	0.00	--	43.0	0	.4676	0.00
21) C115 1,1,1-Trichloroethan	7.74	0.00	--	97.0	0	.5747	0.00
22) C120 Carbon Tetrachloride	8.04	0.00	--	117.0	0	.4641	0.00
23) C165 Benzene	8.42	0.00	--	78.0	0	1.0150	0.00
24) C150 Trichloroethene	9.70	0.00	--	130.0	0	.4334	0.00
25) C140 1,2-Dichloropropane	10.18	0.00	--	63.0	0	.4174	0.00
26) C130 Bromodichloromethane	10.79	0.00	--	83.0	0	.6012	0.00
27) C175 2-Chloroethylvinylet	11.52	0.00	--	63.0	0	.1957	0.00
28) C143 Cis-1,3-Dichloroprop	11.84	0.00	--	75.0	0	.6106	0.00
29) C172 Trans-1,3-dichloropr	13.26	0.00	--	75.0	0	.4875	0.00
30) C160 1,1,2-Trichloroethan	13.71	0.00	--	97.0	0	.3429	0.00
31) C155 Dibromochloromethane	14.76	0.00	--	129.0	0	.5106	0.00
32) C180 Bromoform	18.96	0.00	--	173.0	0	.3125	0.00
33) *CI20 D5-Chlorobenzene	16.34	16.40	.06	117.0	327566	1.0000	50.00
34) CS05 D8-Toluene	12.50	12.50	.01	98.0	393208	1.1997	50.03
34)D CS05 D8-Toluene	12.50	12.90	.40	98.0	1916	1.1997	.24
35) C205 4-Methyl-2-pentanone	12.26	12.28	.02	43.0	4004	.3569	1.71
36) C230 Toluene	12.67	12.67	.00	92.0	1537	.8509	.28
37) C210 2-Hexanone	14.48	14.52	.03	43.0	1587	.2562	.95
38) C220 Tetrachloroethene	14.09	0.00	--	164.0	0	.4391	0.00
39) C235 Chlorobenzene	16.50	0.00	--	112.0	0	1.0247	0.00
40) C240 Ethylbenzene	16.86	0.00	--	106.0	0	.5033	0.00
41) CXXX Xylenes (p)	17.25	0.00	--	106.0	0	.6411	0.00
42) CXXX Xylenes (o)	18.41	18.44	.03	106.0	1063	.5984	.27
43) C245 Styrene	18.48	18.46	.02	104.0	1056	1.0632	.15
44) C225 1,1,2,2-Tetrachloroe	20.66	0.00	--	83.0	0	.5937	0.00
45) CS10 Bromofluorobenzene	20.06	20.07	.01	95.0	236446	.7690	46.94
46) C335 Dichlorobenzene (m)	23.65	23.62	.03	146.0	5037	.9065	[illegible]
46)D C335 Dichlorobenzene (m)	23.65	23.92	.27	146.0	5480	.9065	[illegible]
47)D C340 Dichlorobenzene (p)	23.97	23.62	.35	146.0	5037	.8310	.93
47) C340 Dichlorobenzene (p)	23.97	23.92	.05	146.0	5480	.8310	1.01
48) C350 Dichlorobenzene (o)	[illegible]						

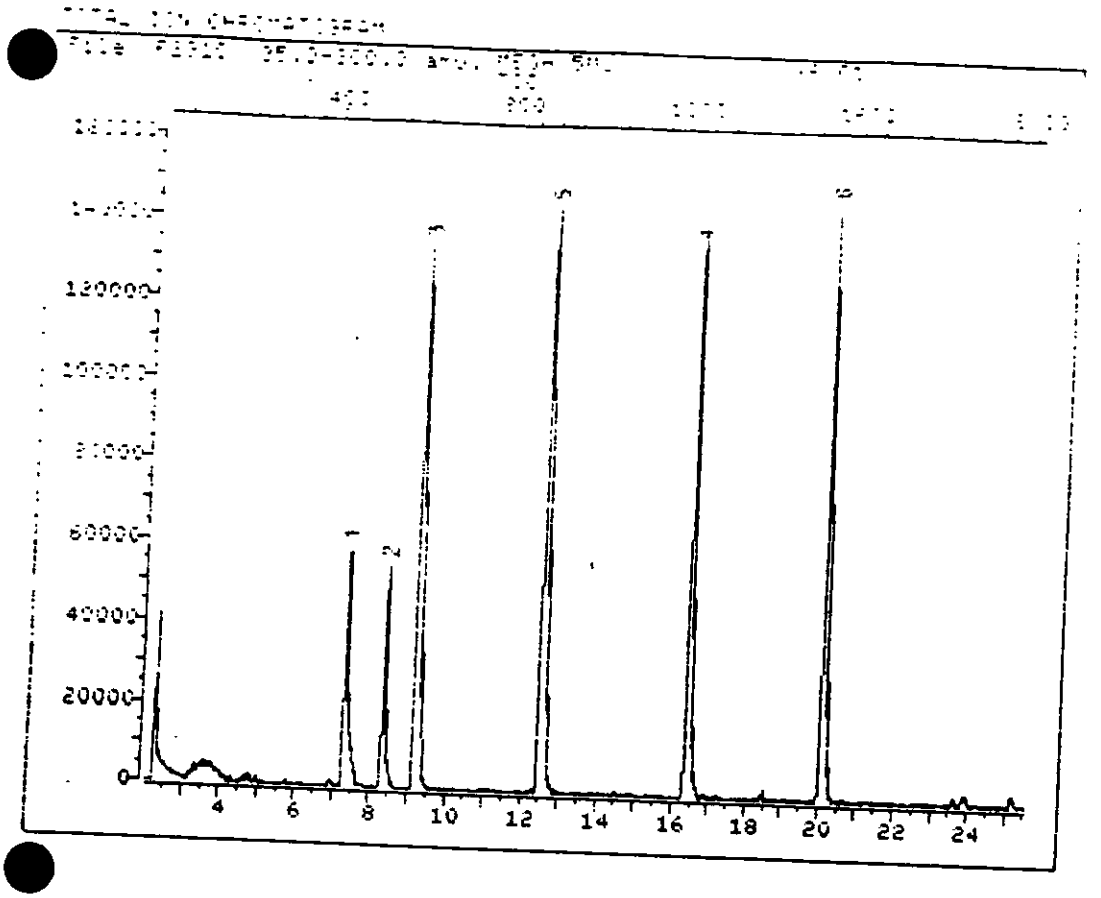
000297

Internal Standard Comparison

Sample: [illegible]2910 Date injected: 10/11 01 Standard: [illegible]2909

Internal Standard	Sample Area	Std Area	%
C101 Bromochloromethane	65228	66141	98.6
C110 1,4-Difluorobenzene	402183	387963	103.7
C120 05-Chlorobenzene	327566	316340	103.5

% = (Sample Area/Std Area)*100
* Area outside limits



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Name: MEOH 5ML
Misc: V6 C1

Quant Output File: ^F2910::D7
Instrument ID: V6

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37

Last Qcal Time: 911011 21:51

Operator ID: KERYLYNN
Quant Time : 911012 02:17
Injected at: 911011 22:50

Operator ID: KERYLANN
Output File: >FE910::07
Data File: >FE910::D6
Name: MEOH 5ML
Misc: V6 C1

Quant Rej: "

Dilution Factor: 1.00000
Instrument ID: V6

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 EPCO/ENSECO
Last Calibration: 910814 09:37

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.28	128.0	65228	50.00	UG/L	72
9)	C030 Methylene Chloride	4.97	84.0	1594	.627	UG/L	81
18)	CS15 D4-1,2-dichloroethane	8.31	65.0	123026	48.73	UG/L	87
19)	*CI10 1,4-Difluorobenzene	9.17	114.0	402183	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.40	117.0	327566	50.00	UG/L	100
34)	CS05 D8-Toluene	12.50	98.0	393208	50.03	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.28	43.0	4004	1.71	UG/L	70
36)	C230 Toluene	12.67	92.0	1537	.276	UG/L	49
[illegible]	C210 2-Hexanone	14.52	43.0	1587	.945	UG/L	93
42)	CXXX Xylenes (o)	18.44	106.0	1063	.271	UG/L	98
43)	C245 Styrene	18.46	104.0	1056	.152	UG/L	100
45)	CS10 Bromofluorobenzene	20.07	95.0	236446	46.94	UG/L	75
46)	C335 Dichlorobenzene (m)	23.62	146.0	5037	.848	UG/L	100
47)	C340 Dichlorobenzene (p)	23.92	146.0	5480	1.01	UG/L	100
48)	C350 Dichlorobenzene (o)	25.16	146.0	7023	1.25	UG/L	100
49)	C250 Xylenes (total)	18.44	106.0	1063	.283	UG/L	22

* Compound is ISTD

Data Reduced by : DFV Date: 10/19/91 Data File: F[illegible]

Data Reviewed by : W Date: 10/19/91

Speedo TIC Report Page #

Sample: MW14 FNL Dil Factor: 1.5.

Conditions: He CI Analyst: KERYLANN

# Scan	Q	Concentration In Sample C (UG/KG)	CAS #	Compound

NO UNKS

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. ____ Date Analyzed: 10/09/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* - Compound is an Internal Standard
C - Compound Spiked

624-A

NC

L- 100691V6A
R- 100991V6A

7F2828

meCl2

Reduced by : JD Date: 100991
Reviewed : ND Date: 101491

Data File: F1B1B
Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: VBLK —cc 5ML
Test : 624, CH02, 5UL IS/S
Injected : 10/09/91 11:16
Analyst: KERRLYNN
ID File: MOBID6
Quant list threshold: 1.00

Units: UG/L
Run Factor: 1.000
Surrogate vol: .005

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2540	102	76 114
CS05 D8-Toluene	.2500	.2425	97.0	88 110
CS10 Bromofluorobenzene	.2500	.2474	99.0	86 115

Target Compounds: MOBID6

Scan #	Concentration Quant List UG/L	Sample UG/L		Compound
		BDL		C010 Chloromethane
		BDL		C020 Vinyl Chloride
		BDL		C015 Bromomethane
		BDL		C025 Chloroethane
		BDL		C045 1,1-Dichloroethene
		BDL		C035 Acetone
		BDL		C040 Carbon Disulfide
256	3.449		3.4	C030 Methylene Chloride
		BDL		CXXX Tert-butyl alcohol
		BDL		C053 Trans-1,2-dichloroethene
		BDL		C055 Cis-1,2-dichloroethene
		BDL		CXXX Methyl tert-butyl ether
		BDL		C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
		BDL		C110 2-Butanone
		BDL		C125 Vinyl Acetate
		BDL		C115 1,1,1-Trichloroethane
		BDL		C120 Carbon Tetrachloride
		BDL		C165 Benzene
		BDL		C150 Trichloroethene
		BDL		C140 1,2-Dichloropropane
		BDL		C130 Bromodichloromethane
		BDL		C175 2-Chloroethylvinylether
		BDL		C143 Cis-1,3-Dichloropropene
		BDL		C172 Trans-1,3-dichloropropene
		BDL		C160 1,1,2-Trichloroethane

000304

Data File: F2819 Page: 1
Sample: VBLK —CC 5ML

Scan #	Concentration Quant list UG/L	Sample UG/L		Compound
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform
982	~~2~~	5ng	~~2~~	C205 4-Methyl-2-pentanone
		BDL	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
		BDL	C240	Ethylbenzene
		BDL	CXXX	Xylenes (p)
		BDL	CXXX	Xylenes (o)
		BDL	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethane
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
		BDL	C250	Xylenes (total)

Diagnostic Quant Report

Data File: F2828::Co Injected at: 11:40 10 [illegible] 91
Report : 11:47 10 [illegible] 91
QC File : MOBICo::MT Calibrated : [illegible]

Compound	- P.T. Into - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *CI01 Bromochloromethane	7.33	7.29	.04	128.0	75116	1.0000	50.00
2) C010 Chloromethane	2.72	0.00	--	50.0	0	1.3276	0.00
3) C020 Vinyl Chloride	2.86	0.00	--	62.0	0	1.3500	0.00
4) C015 Bromomethane	3.26	0.00	--	94.0	0	1.2156	0.00
5) C025 Chloroethane	3.39	0.00	--	64.0	0	.5022	0.00
6) C045 1,1-Dichloroethene	4.36	0.00	--	96.0	0	1.5071	0.00
7) C035 Acetone	4.42	0.00	--	43.0	0	.1843	0.00
8) C040 Carbon Disulfide	4.66	0.00	--	76.0	0	4.4340	0.00
9) C030 Methylene Chloride	5.00	4.99	.01	84.0	9327	1.7999	3.45
10) CXXX Tert-butyl alcohol	5.14	0.00	--	59.0	0	.0770	0.00
11) C053 Trans-1,2-dichloroet	5.38	0.00	--	96.0	0	1.8441	0.00
12) C055 Cis-1,2-dichloroethe	6.90	0.00	--	96.0	0	1.9832	0.00
13) CXXX Methyl tert-butyl et	5.38	0.00	--	73.0	0	3.1722	0.00
14) C050 1,1-Dichloroethane	6.00	0.00	--	63.0	0	3.5329	0.00
15) C060 Chloroform	7.44	0.00	--	83.0	0	3.7902	0.00
[illegible] C065 1,2-Dichloroethane	8.46	0.00	--	62.0	0	2.1737	0.00
[illegible] C110 2-Butanone	6.92	0.00	--	72.0	0	.1091	0.00
18) CS15 D4-1,2-dichloroethan	8.32	8.34	.02	65.0	119894	1.5708	50.81
19) *CI10 1,4-Difluorobenzene	9.23	9.19	.04	114.0	403435	1.0000	50.00
20) C125 Vinyl Acetate	6.07	0.00	--	43.0	0	.6048	0.00
21) C115 1,1,1-Trichloroethan	7.76	0.00	--	97.0	0	.5974	0.00
22) C120 Carbon Tetrachloride	8.06	0.00	--	117.0	0	.4898	0.00
23) C165 Benzene	8.45	8.43	.01	78.0	1105	.9908	.14
24) C150 Trichloroethene	9.71	0.00	--	130.0	0	.4258	0.00
25) C140 1,2-Dichloropropane	10.19	0.00	--	63.0	0	.4057	0.00
26) C130 Bromodichloromethane	10.81	0.00	--	83.0	0	.6001	0.00
27) C175 2-Chloroethylvinylet	11.53	0.00	--	63.0	0	.1776	0.00
28) C143 Cis-1,3-Dichloroprop	11.86	0.00	--	75.0	0	.5829	0.00
29) C172 Trans-1,3-dichloropr	13.25	0.00	--	75.0	0	.4482	0.00
30) C160 1,1,2-Trichloroethan	13.73	0.00	--	97.0	0	.2952	0.00
31) C155 Dibromochloromethane	14.76	0.00	--	129.0	0	.4676	0.00
32) C180 Bromoform	18.92	0.00	--	173.0	0	.2627	0.00
33) *CI20 D5-Chlorobenzene	16.44	16.44	.00	117.0	322976	1.0000	50.00
34) CS05 D8-Toluene	12.55	12.52	.03	98.0	406752	1.2981	48.51
34)D CS05 D8-Toluene	12.55	12.87	.32	98.0	1520	1.2981	.18
35) C205 4-Methyl-2-pentanone	12.31	12.27	.03	43.0	5738	.3240	2.74
36) C230 Toluene	12.70	12.71	.00	92.0	2358	.9048	.40
37) C210 2-Hexanone	14.51	0.00	--	43.0	0	.2131	0.00
38) C220 Tetrachloroethene	14.12	0.00	--	164.0	0	.4676	0.00
39) C235 Chlorobenzene	16.51	16.52	.01	112.0	3421	1.0869	.49
[illegible] C240 Ethylbenzene	16.90	17.26	.36	106.0	1951	.5461	.55
[illegible] CXXX Xylenes (p)	17.26	17.26	.00	106.0	1951	.6696	.45
42) CXXX Xylenes (o)	18.46	0.00	--	106.0	0	.6363	0.00
43) C245 Styrene	18.50	18.51	.01	104.0	3990	1.1149	.55
44) C225 1,1,2,2-Tetrachloroe	20.67	20.68	.01	83.0	2048	.5730	.55
45) CS10 Bromofluorobenzene	20.09	20.11	.02	95.0	228063	.7136	49.47
46) C335 Dichlorobenzene (m)	23.64	23.70	.06	146.0	3302	.9378	.55
46)D C335 Dichlorobenzene (m)	23.64	24.00	.36	146.0	3681	.9378	.61
47)D C340 Dichlorobenzene (p)	23.86	23.70	.16	146.0	3302	.8481	.60

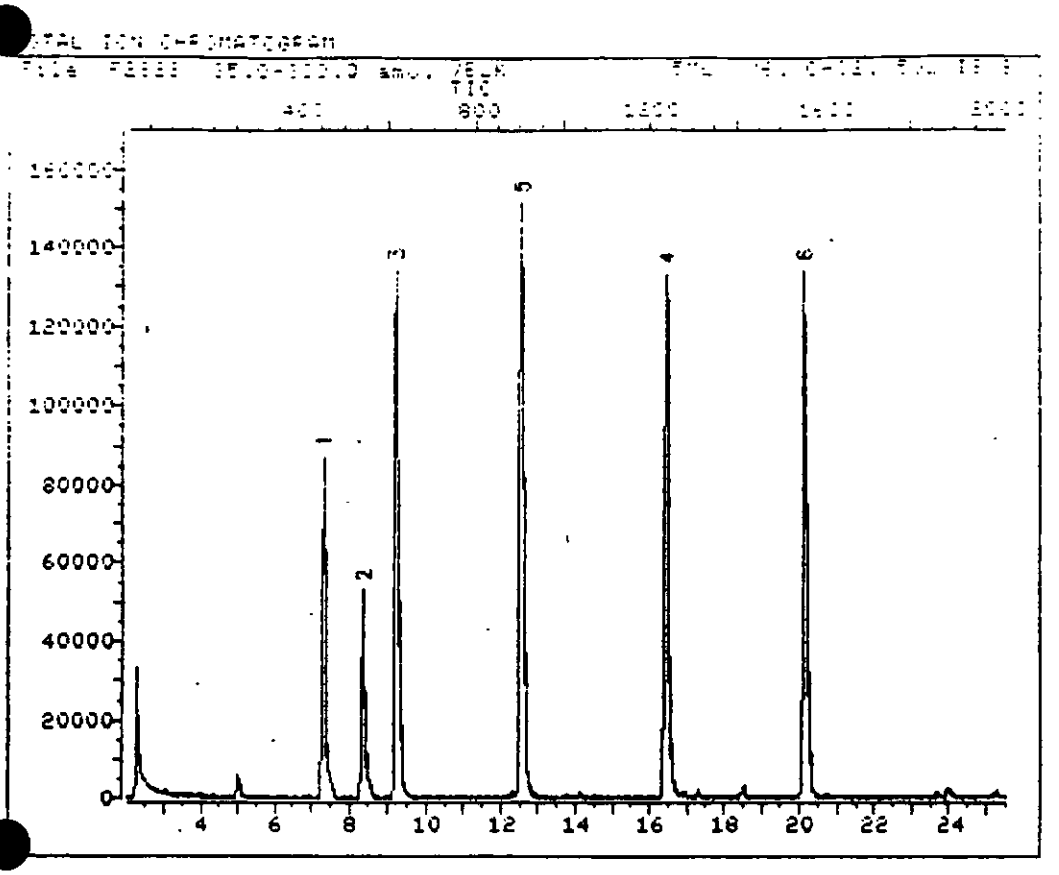
000306

Internal Standard Comparison

Sample: F2928 Date injected: 10-09-91 Standard: F2817 ✓

Internal Standard	Sample Area	Std Area	%
IS01 Bromochloromethane	75116	75510	99.5
IS10 1,4-Difluorobenzene	403435	407259	99.1
IS20 D5-Chlorobenzene	322976	308421	104.7

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >F2828::D6 Quant Output File: ^F2828::D7
Name: VBLK -06 5ML Instrument ID: V6
Misc: V6, CH02, 5UL IS/S

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

Operator ID: KERYLYNN
Quant Time : 911009 11:43
Injected at: 911009 11:16

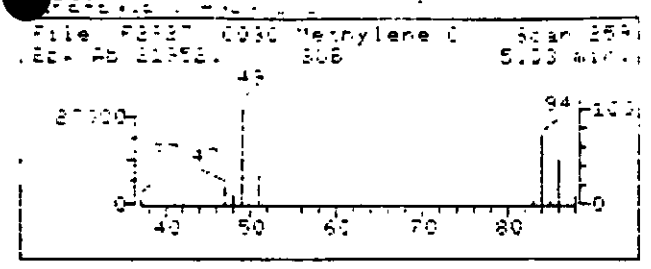
Operator ID: PEPYL'NN
Input File: 'F0928::07
Data File: 'F0928::06
Name: 'BLK —CL 5ML
Misc: '6, CH02, 5UL IS S

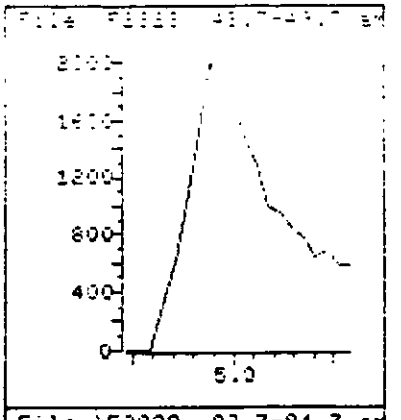
Quant Ref: 7 Quant Time: 9111 9 11:47
Injected at: 911109 11:14
Dilution Factor: 1.00000
Instrument ID: 'b

'D File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 '6 ERCO'ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:25

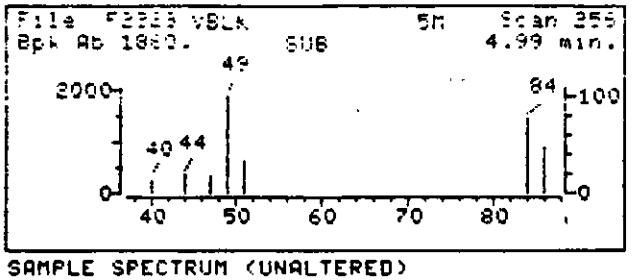
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.29	128.0	75116	50.00	UG/L	68
9)	C030 Methylene Chloride	4.99	84.0	9327	3.45	UG/L	85
18)	CS15 D4-1,2-dichloroethane	8.34	65.0	119894	50.81	UG/L	89
19)	*CI10 1,4-Difluorobenzene	9.19	114.0	403435	50.00	UG/L	100
23)	C165 Benzene	8.43	78.0	1105	.138	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.44	117.0	322976	50.00	UG/L	100
34)	CS05 D8-Toluene	12.52	98.0	406752	48.51	UG/L	93
35)	C205 4-Methyl-2-pentanone	12.27	43.0	5738	2.74	UG/L	95
36)	C230 Toluene	12.71	92.0	2358	.403	UG/L	75
[illegible])	C235 Chlorobenzene	16.52	112.0	3421	.487	UG/L	85
[illegible])	C240 Ethylbenzene	17.26	106.0	1951	.553	UG/L	78
41)	CXXX Xylenes (p)	17.26	106.0	1951	.451	UG/L	94
43)	C245 Styrene	18.51	104.0	3990	.554	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane	20.68	83.0	2048	.553	UG/L	87
45)	CS10 Bromofluorobenzene	20.11	95.0	228063	49.47	UG/L	66
46)	C335 Dichlorobenzene (m)	23.70	146.0	3302	.545	UG/L	100
47)	C340 Dichlorobenzene (p)	24.00	146.0	3681	.672	UG/L	100
48)	C350 Dichlorobenzene (o)	25.26	146.0	3675	.676	UG/L	100
49)	C250 Xylenes (total)	17.26	106.0	1646	.400	UG/L	60

* Compound is ISTD

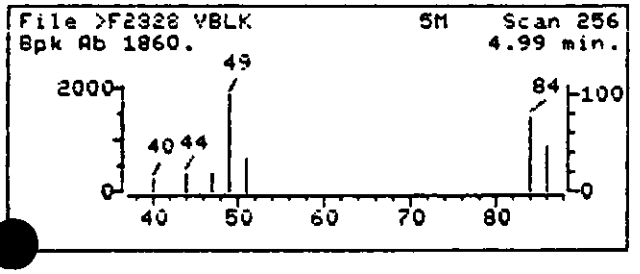


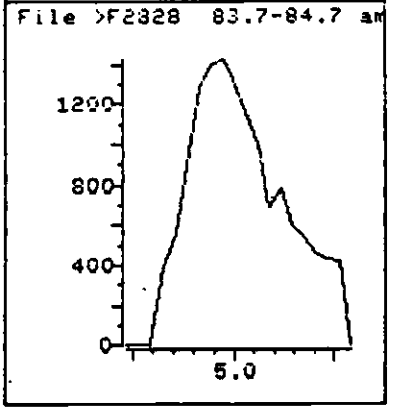


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)





Data File: >F2828::D6 Quant Output File: ^F2828::D7
Name: VBLK 5ML Instrument ID: V6
Misc: V6, CH02, 5UL IS/S
Quant Time: 911009 11:43 Quant ID File: MOBID6::MT
Injected at: 911009 11:16 Last Calibration: 910814 09:37
Last Qcal Time: 911009 10:28

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 256
Retention Time: 4.99 min.
Quant Ion : 84.0
Area : 9327
Concentration : 3.45 UG/L
q-value : 85

Data Reduced by : _____ Date: 100991 Data File: F2328
Data Reviewed by : _____ Date: 10199

Enseco TIC Report Page 1

Sample: MBLK -02 5ML Run Factor: 1.00
Conditions: V6, CH02, 5UL IS/S Analyst: KERYLYNN

# Scan	D	C	Concentration In Sample (UG/L)	CAS #	Compound

no unknowns

Versar Laboratories

ANALYTICAL DATA PACKAGE
General Chemistry Section

CLIENT: ENSECO-ERCO LAB
SITE: PROJ# 10135
CODE-BATCH: ERCO - 7
CONTROL #: 5618
DATE: 22-OCT-91
ANALYSIS: TOC

Versar Laboratories

ANALYTICAL NARRATIVE
General Chemistry Section

DATE: 22-OCT-91
CODE/CONTROL: ERCO / 5618
CLIENT/SITE: ENSECO-ERCO LAB / PROJ# 10135
PROJECT/BATCH: 420.2 / 7

This task consisted of four soil samples which were analyzed for total organic carbon (TOC) using a Perkin-Elmer Elemental Analyzer, model #2400. Prior to analysis, air-dried sample aliquots were acidified and heated to remove inorganic carbon. Sample results have been reported on an oven-dried basis.

Samples were received October 8, 1991 and were analyzed October 21. No analytical or quality assurance problems were encountered. Check standard recoveries were within acceptable limits, and blank results were below method detection limits. Duplicate and spike analyses were not required.

Release of this data has been authorized by laboratory management.

Sincerely,

Melanie J. Dillman

Melanie J. Dillman
General Chemistry Section

C. Thompson

Approved for Release
Chris Thompson, Section Chief

Versar Laboratories

ANALYSIS REPORT
General Inorganic Chemistry Section

DATE: 22-OCT-91 PAGE: 1
CODE / CONTROL #: ERCO / 5618
CLIENT / SITE: ENSECO-ERCO LAB / PROJ# 10135
PROJECT / BATCH: 420.2.0 / 7

Lab#	Field #	TOC (mg/kg)		
63653	UCC-SB-13-3C	5,500.		
63654	UCC-SB-17-4	861.		
63655	UCC-SB-A-08-3	10,400.		
63656	UCC-SB-B-12-3	7,460.		

C. Thompson
Laboratory Manager

Versar Laboratories

QUALITY ASSURANCE REPORT
General Inorganic Chemistry Section

DATE: 22-OCT-91
CONTROL #: 5618
CODE / BATCH: ERCO / 7
CLIENT / SITE: ENSECO-ERCO LAB / PROJ# 10135
JOB NUMBER: 420.2.0

TOC

BLANK ANALYSIS / METHOD DETECTION LIMIT

QC Name	QC Type	Result	Units
CALIBRATION BLANK	CB1	<100	mg/kg
DETECTION LIMIT	MDL1	100	mg/kg
REAGENT BLANK	RB1	<100	mg/kg

INITIAL CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	ICV1	470500	460000	98%	mg/kg

CONTINUING CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	CCV1	470500	466000	99%	mg/kg

2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-13-3

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10135 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10135-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: B2989

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 15 Date Analyzed: 10/14/91

Column: (pack/cap) CAP Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	29000	U
74-83-9	Bromomethane	29000	U
75-01-4	Vinyl Chloride	29000	U
75-00-3	Chloroethane	29000	U
75-09-2	Methylene Chloride	30000	B
67-64-1	Acetone	29000	U
75-15-0	Carbon Disulfide	14000	U
75-35-4	1,1-Dichloroethene	14000	U
75-34-3	1,1-Dichloroethane	14000	U
540-59-0	1,2-Dichloroethene (total)	14000	U
67-66-3	Chloroform	14000	U
107-06-2	1,2-Dichloroethane	14000	U
78-93-3	2-Butanone	15000	BJ
71-55-6	1,1,1-Trichloroethane	7700	J
56-23-5	Carbon Tetrachloride	14000	U
108-05-4	Vinyl Acetate	29000	U
75-27-4	Bromodichloromethane	14000	U
78-87-5	1,2-Dichloropropane	14000	U
10061-01-5	cis-1,3-Dichloropropene	14000	U
79-01-6	Trichloroethene	3300	J
124-48-1	Dibromochloromethane	14000	U
79-00-5	1,1,2-Trichloroethane	14000	U
71-43-2	Benzene	14000	U
10061-02-6	trans-1,3-Dichloropropene	14000	U
110-75-8	2-Chloroethylvinylether	29000	U
75-25-2	Bromoform	14000	U
108-10-1	4-Methyl-2-Pentanone	29000	U
591-78-6	2-Hexanone	29000	U
127-18-4	Tetrachloroethene	14000	U
79-34-5	1,1,2,2-Tetrachloroethane	14000	U
108-88-3	Toluene	8800	BJ
108-90-7	Chlorobenzene	14000	U
100-41-4	Ethylbenzene	97000	
100-42-5	Styrene	14000	U
1330-20-7	Xylene (total)	570000	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-13-3

Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10135 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10135-01

Sample wt/vol: 4.1 (g/mL) G Lab File ID: B2989

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 15 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 20

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	21.25	99000	JN
2.	Unknown	22.41	280000	JN
3.	C3-benzene isomer	23.04	24000	JN
4.	Unknown	23.50	35000	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-17-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: A3630

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 12 Date Analyzed: 10/19/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	690	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	690	U
75-35-4	1,1-Dichloroethene	690	U
75-34-3	1,1-Dichloroethane	690	U
540-59-0	1,2-Dichloroethene (total)	690	U
67-66-3	Chloroform	690	U
107-06-2	1,2-Dichloroethane	690	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	690	U
56-23-5	Carbon Tetrachloride	690	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	690	U
78-87-5	1,2-Dichloropropane	690	U
10061-01-5	cis-1,3-Dichloropropene	690	U
79-01-6	Trichloroethene	690	U
124-48-1	Dibromochloromethane	690	U
79-00-5	1,1,2-Trichloroethane	690	U
71-43-2	Benzene	690	U
10061-02-6	trans-1,3-Dichloropropene	690	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	690	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	690	U
79-34-5	1,1,2,2-Tetrachloroethane	690	U
108-88-3	Toluene	690	U
108-90-7	Chlorobenzene	690	U
100-41-4	Ethylbenzene	690	U
100-42-5	Styrene	690	U
1330-20-7	Xylene (total)	690	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: SB-B-17-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-04

Sample wt/vol: 4.1 (g/mL) G Lab File ID: A3630

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 12 Date Analyzed: 10/19/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	124-18-5	Decane	20.18	3300	JN
2.		Unknown	21.17	1200	JN
3.	1120-21-4	Undecane	24.30	3000	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-A-08-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2803

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/08/91

Column: (pack/cap) CAP Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	3	BJ
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	3	J
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethylvinylether	12	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-A-08-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-06

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2803

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-12-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2880

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	160	BJ
67-64-1	Acetone	1500	U
75-15-0	Carbon Disulfide	730	U
75-35-4	1,1-Dichloroethene	730	U
75-34-3	1,1-Dichloroethane	730	U
540-59-0	1,2-Dichloroethene (total)	730	U
67-66-3	Chloroform	730	U
107-06-2	1,2-Dichloroethane	730	U
78-93-3	2-Butanone	1500	U
71-55-6	1,1,1-Trichloroethane	660	J
56-23-5	Carbon Tetrachloride	730	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	730	U
78-87-5	1,2-Dichloropropane	730	U
10061-01-5	cis-1,3-Dichloropropene	730	U
79-01-6	Trichloroethene	230	J
124-48-1	Dibromochloromethane	730	U
79-00-5	1,1,2-Trichloroethane	730	U
71-43-2	Benzene	730	U
10061-02-6	trans-1,3-Dichloropropene	730	U
110-75-8	2-Chloroethylvinylether	1500	U
75-25-2	Bromoform	730	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
108-88-3	Toluene	410	J
108-90-7	Chlorobenzene	730	U
100-41-4	Ethylbenzene	4700	
100-42-5	Styrene	730	U
1330-20-7	Xylene (total)	31000	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-12-3

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10135 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2880

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/10/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 5

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	20.93	7700	JN
2.	124-18-5	Decane	21.70	1700	JN
3.		Unknown	22.05	11000	JN
4.		C3-benzene isomer	22.79	1900	JN
5.		Unknown	23.16	1500	JN

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-12-3RE

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08RE

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2919

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/12/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1500	U
74-83-9	Bromomethane	1500	U
75-01-4	Vinyl Chloride	1500	U
75-00-3	Chloroethane	1500	U
75-09-2	Methylene Chloride	730	U
67-64-1	Acetone	1500	U
75-15-0	Carbon Disulfide	730	U
75-35-4	1,1-Dichloroethene	730	U
75-34-3	1,1-Dichloroethane	730	U
540-59-0	1,2-Dichloroethene (total)	730	U
67-66-3	Chloroform	730	U
107-06-2	1,2-Dichloroethane	730	U
78-93-3	2-Butanone	1500	U
71-55-6	1,1,1-Trichloroethane	730	U
56-23-5	Carbon Tetrachloride	730	U
108-05-4	Vinyl Acetate	1500	U
75-27-4	Bromodichloromethane	730	U
78-87-5	1,2-Dichloropropane	730	U
10061-01-5	cis-1,3-Dichloropropene	730	U
79-01-6	Trichloroethene	730	U
124-48-1	Dibromochloromethane	730	U
79-00-5	1,1,2-Trichloroethane	730	U
71-43-2	Benzene	730	U
10061-02-6	trans-1,3-Dichloropropene	730	U
110-75-8	2-Chloroethylvinylether	1500	U
75-25-2	Bromoform	730	U
108-10-1	4-Methyl-2-Pentanone	1500	U
591-78-6	2-Hexanone	1500	U
127-18-4	Tetrachloroethene	730	U
79-34-5	1,1,2,2-Tetrachloroethane	730	U
108-88-3	Toluene	730	U
108-90-7	Chlorobenzene	730	U
100-41-4	Ethylbenzene	410	J
100-42-5	Styrene	730	U
1330-20-7	Xylene (total)	4900	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-12-3RE

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10135-08RE

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2919

Level: (low/med) MED Date Received: 10/05/91

% Moisture: not dec. 16 Date Analyzed: 10/12/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	20.93	5200	JN
2.	124-18-5	Decane	21.68	1600	JN
3.		Unknown	22.05	8200	JN
4.		C9H12 isomer	22.69	1300	JN
5.		Unknown	23.13	1000	JN
6.		C4-benzene isomer	25.19	790	JN

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-4-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10135-09

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2835

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. ____ Date Analyzed: 10/09/91

Column: (pack/cap) CAP Dilution Factor: 0.80

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

10-4-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10135-09

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2835

Level: (low/med) LOW Date Received: 10/05/91

% Moisture: not dec. ____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 0.80

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10135 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B2981

Level: (low/med) MED Date Received:

% Moisture: not dec. 0 Date Analyzed: 10/14/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	J
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	610	J
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	360	J
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B2981

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

% Moisture: not dec. 0 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3627

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

% Moisture: not dec. 0 Date Analyzed: 10/19/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	U
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	530	J
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	130	J
108-88-3	Toluene	130	J
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3627

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

% Moisture: not dec. 0 Date Analyzed: 10/19/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2798

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

% Moisture: not dec. 0 Date Analyzed: 10/08/91

Column: (pack/cap) CAP Dilution Factor: 0.80

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	6	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2798

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

% Moisture: not dec. 0 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 0.80

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. _____ Date Analyzed: 10/09/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10135 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK06

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

Enseco
A CORNING Company

October 25, 1991

Mr. John O'Donnell
Balsam Environmental Consultants, Inc.
5 Industrial Way
Salem, NH 03079

Dear John:

Enclosed are the results of the analyses for UCC Soil Analysis October 1991 (UCC Soil Analyisis 10/08/91). This project was received at Enseco - Erco Laboratory on October 8, 1991, and was processed for a 21 day turnaround time and in accordance with CLP analyses and reporting protocols, where applicable. This letter authorizes the release of the analytical results and should be considered an integral part of this report.

Please refer to this project by the Enseco project number 010147 to expedite any further discussions. I will be happy to address any questions or concerns that you may have.

Sincerely,

Mary B. Ford

Mary Ford
Program Administrator

Encl.

Enseco Incorporated
205 Alewife Brook Parkway
Cambridge, MA 02138
617/661-3111 617/354-5258

SAMPLE DATA SUMMARY PACKAGE

Enseco
A Company

April 1990

DELIVERABLES INDEX

Client: Bechtel Environmental Consultants Inc.
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 1014F

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	A. QC Summary	
	1. Surrogate Percent Recovery Summary (Form II)	1
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	4. GC/MS Tuning and Mass Calibration Summary (Form V)	8
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DELIVERABLES INDEX (Cont.)

Client: Balcom Environmental Consultants
Project Name: UCC Gulf Terminals October 1991
Erco Project Number: 1047

Pages

III. SEMIVOLATILES DATA

A. QC Summary

1. Surrogate Percent Recovery Summary (Form II)
2. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
3. Erco Method Blank Summary (Form IV)
4. GC/MS Tuning and Mass Calibration Summary (Form V)

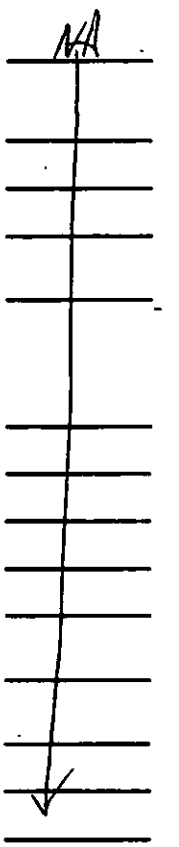
B. Sample Data (Form I, Form I-TIC, and Raw Data)

C. Standards Data

1. Initial Calibration Data (Form VI)
2. Initial Calibration Standard Chromatograms
3. Continuing Calibration Data (Form VII)
4. Continuing Calibration Standard Chromatograms
5. Internal Standard Area Summary (Form VIII)

D. Raw QC Data

1. DFTPP Bar Graph and Mass Listing
2. Erco Blank Data
3. Matrix Spike/Matrix Spike Duplicate Data

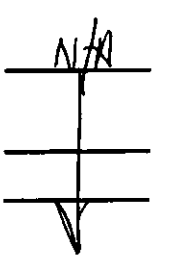


IV. PESTICIDES/PCBs DATA

A. QC Summary

1. Surrogate Percent Recovery Summary (Form II)
2. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
3. Erco Method Blank Summary (Form IV)

B. Sample Data (Form I and Raw Data)



DELIVERABLES INDEX (Cont.)

Client: Ballard Environmental Consultants Inc.
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 1047

Pages

IV. PESTICIDES/PCBs DATA (Cont.)

C. Standards Data

1. Pesticides Evaluation Standards Summary (Form VIII) NA
2. Pesticides/PCBs Standards Summary (Form IX)
3. Pesticides/PCBs Identification (Form X)
4. Pesticides Standard Chromatograms

D. Raw QC Data

1. Erco Blank Data
2. Matrix Spike/Matrix Spike Duplicate Data

V. INORGANIC DATA

VI. METALS DATA (AQUEOUS)

VII. METALS DATA (SOLID)

VIII. TOC 1-3

October 25, 1991

Case Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analyisis 10/08/91
Erco Project No.: 010147

1. This project consists of the results for samples received at Enseco - Erco Laboratory on October 8, 1991. Please see the sample description information sheet for a list of samples.

2. Temperature of cooler was upon receipt was 6.0c.
   Bottles were not broken in transit.
   Bottles were properly labeled.
   Samples agree with chain-of-custody.
   Samples were properly preserved.
   VOA vials were properly preserved.
   VOA vials did not contain headspace.

SAMPLE DESCRIPTION INFORMATION
for
Balsam Environmental Consultants, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
010147-0001-SA	UCC-SB-A-12-4	SOIL	07 OCT 91	11:10	08 OCT 91
010147-0002-SA	UCC-10/7-QA3	AQUEOUS	07 OCT 91	11:30	08 OCT 91
010147-0003-SA	UCC-10/7-QA2	SOIL	07 OCT 91	11:15	08 OCT 91
010147-0004-SA	UCC-SB-B-19-4	SOIL	07 OCT 91	11:15	08 OCT 91
010147-0005-SA	UCC-SB-B-19-4	SOIL	07 OCT 91	11:15	08 OCT 91
010147-0006-SA	UCC-SB-A-12-4C	SOIL	07 OCT 91	11:10	08 OCT 91
010147-0007-SA	UCC-10/7-QA1	AQUEOUS	07 OCT 91		08 OCT 91

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 1 of 2)

ID	Manufacturer	Model	Data System
GC/MS #S-1	Finnigan	4530	INCOS
GC/MS #S-2	Finnigan	4615B	INCOS
GC/MS #S-3	Finnigan	4530	INCOS
GC/MS #V-5	Hewlett Packard	MSD	RTE-A
GC/MS #V-6	Hewlett Packard	MSD	RTE-A
GC/MS #S-6	Finnigan	Incos 50	Incos
GC/MS #V1*	Hewlett Packard	5996	RTE-6
GC/MS #V2*	Hewlett Packard	5996	RTE-6
GC/MS #V3*	Hewlett Packard	5996	RTE-6
GC/MS #V4*	Hewlett Packard	5985	RTE-6
GC/HECD #G2*	Hewlett Packard/OIC	5890/4420	HP-1000
GC/HECD/PID #G4*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/HECD/PID #G5*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/ECD #9-1	Hewlett Packard	5880	VG-3
GC/ECD #9-2	Hewlett Packard	5880	VG-4
GC/ECD #11-1	Hewlett Packard	5890	VG-1
GC/ECD #11-2	Hewlett Packard	5890	VG-2
GC/ECD #7-1	Hewlett Packard	5880	VG-11
GC/ECD #7-2	Hewlett Packard	5880	VG-12
GC/ECD #14-1	Hewlett Packard	5890 Series II	VG-15
GC/ECD #14-2	Hewlett Packard	5890 Series II	VG-16
GC/ECD #15-1	Hewlett Packard	5890 Series II	VG-13
GC/ECD #15-2	Hewlett Packard	5890 Series I	VG-14

*Purge-and-trap concentrators manufactured by Tekmar Company.

Sample Analysis Instrumentation Key for Organics (Page 2 of 2)

ID	Manufacturer	Model	Data System
GC/ECD #12-1	Hewlett Packard	5890	VG-9
GC/FID #19	Hewlett Packard	5880	Beckman/HP-1000
GC/FID #28	Hewlett Packard	5890	Beckman/HP-1000
GC/PID #28	HNU Systems	P152	Beckman/HP-1000
GC/ECD #12-2	Hewlett Packard	5890	VG-10
IR1	Perkin-Elmer	FTIR 1600	Beckman/HP-1000
GC/FID #14	Hewlett Packard	5880	Beckman/HP-1000

*Purge-and-trap concentrators manufactured by Tekmar Company.

INSTRUMENT DETECTION LIMITS

Volatile Compounds

Hewlett-Packard 5996 GC/MS V1, V2, V3, V4, V5, S4, S5

CAS Number	Parameter	ng
74-87-3	Chloromethane	2 µ
74-83-9	Bromomethane	2 µ
75-01-4	Vinyl chloride	2 µ
75-00-3	Chloroethane	2 µ
75-09-2	Methylene chloride	2 µ
67-64-1	Acetone	2 µ
75-15-0	Carbon disulfide	1 µ
75-35-4	1,1-Dichloroethene	1 µ
75-34-3	1,1-Dichloroethane	1 µ
156-60-5	trans-1,2-Dichloroethene	1 µ
67-66-3	Chloroform	1 µ
107-06-2	1,2-Dichloroethane	1 µ
78-93-3	2-'Butanone	1 µ
71-55-6	1,1,1-Trichloroethane	1 µ
56-23-5	Carbon tetrachloride	1 µ
108-05-4	Vinyl acetate	2 µ
75-27-4	Bromodichloromethane	1 µ
79-34-5	1,1,2,2-Tetrachloroethane	1 µ
78-87-5	1,2-Dichloropropane	1 µ
10061-02-6	trans-1,3-Dichloropropene	1 µ
79-01-6	Trichloroethene	1 µ
124-48-1	Dibromochloromethane	1 µ
79-00-5	1,1,2-Trichloroethane	1 µ
71-43-2	Benzene	1 µ
10061-01-5	cis-1,3-Dichloropropene	1 µ
110-75-8	2-Chloroethylvinylether	2 µ
75-25-2	Bromoform	1 µ
591-78-6	2-Hexanone	2 µ
108-10-1	4-Methyl-2-pentanone	2 µ
127-18-4	Tetrachloroethene	1 µ
108-88-3	Toluene	1 µ
108-90-7	Chlorobenzene	1 µ
100-41-4	Ethylbenzene	1 µ
100-42-5	Styrene	1 µ
	Total xylenes	1 µ

KEY FOR SURROGATE AND INTERNAL STANDARDS

Acid/Base-Neutral Compounds

a - Fluorophenol	Surrogate standard
b - d_5-Phenol	Surrogate standard
c - d_4-2-Chlorophenol	Surrogate standard
d - d_4-Dichlorobenzene	Internal standard
e - d_4-1,2-Dichlorobenzene	Surrogate standard
f - d_5-Nitrobenzene	Surrogate standard
g - d_8-Naphthalene	Internal standard
h - Fluorobiphenyl	Surrogate standard
i - d_{10}-Acenaphthene	Internal standard
j - Tribromophenol	Surrogate standard
k - d_{10}-Phenanthrene	Internal standard
l - d_{14}-ortho-Terphenyl	Surrogate standard
m - d_{12}-Chrysene	Internal standard
n - d_{12}-Perylene	Internal standard

Volatile Compounds

1 - Bromochloromethane	Internal standard
2 - 1,2-Dichloroethane-d_4	Surrogate standard
3 - 1,4-Difluorobenzene	Internal standard
4 - Toluene-d_8	Surrogate standard
5 - Chlorobenzene-d_5	Internal standard
6 - Bromofluorobenzene	Surrogate standard

CHAIN-OF-CUSTODY RECORD

BALSAM
ENVIRONMENTAL CONSULTANTS, INC.
8 INDUSTRIAL WAY, SALEM, NH 03079

PROJECT NUMBER	PROJECT NAME	SAMPLER(S) SIGNATURE(S)	SEND REPORT TO:
6437 T6	—		T. C. Dorrill

PROJECT ADDRESS:

ANALYTICAL LABORATORY: Enseco

SAMPLE NUMBER	SAMPLING LOCATION	DATE	TIME	MATRIX	GRAB	COMPOSITE	PRESERVATIVE	FILTERED (Y/N)	CONTAINER TYPE	NUMBER OF CONTAINERS	METHOD / ANALYSIS: VOC	ABN	PESTICIDES/PCBs	TCL METALS	PP METALS	CYANIDE	T.C.	COMMENTS
UCC-SB-A-12-4		10/7/91	1110	S	X		ICE	N	4oz wide vial	3	X							(illegible)
UCC-10/7-QA3		10/7	1130	W	X		ICE/HCl	N	40ml VOA	2	X							
UCC-10/7-QA2		10/7	1115	S	X		ICE	N	4oz wide VOA	3	X							(illegible)
UCC-SB-B-19-4 (0.5)		10/7	1115	S	X		ICE	N	4oz wide VOA	3	X							(illegible)
UCC-SB-B-19A-4		10/7	1115	S	X		ICE	N	950 ml	1						X		
UCC-SB-A-12-4C		10/7	1110	S	X		ICE	N	950 ml	1						X		
UCC-10/7-QA1		10/7	—	W	X		ICE/HCl	N	40ml VOA	2	X							

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
(signature)	10/7/91	12:00			
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY: Eric Hall	DATE: 10/8/91	TIME: 9:15

METHOD OF SHIPMENT: FedEx

AIRBILL (OR SHIPPING INVOICE) NUMBER: 3329067727

Enseco -- Erco Laboratory

Internal Chain of Custody

Sample Control Tracking Log

Project Number	Project Acceptance Date	***Laboratory Acceptance Boxes***							
		Metals	Nonmetals	Chrom	Hydro	Semi GC/MS	VOA GC	VOA GC/MS	Data Central
010146	EH 10/9/91							P 10/14/91	
010147	EH 10/9/91							P 10/14/91	TH 10/9
010148	EH 10/11 AM						DO 10/11		
010149	TH 10/9/91			AM 10/15/91					
010150									
010151	SHB 10/8/91				ST 10-8	ST 10-8			
010152									
010153	EH 10/9	SVH 10/11/91 1-56							
010154	SHB 10/4						DJ 10/11		
010155									
010156									
010157	SHB 10/8				SDL 10-7-91	SDL 10-8-91			
010158	EH 10/9				DV 9OCT91	~~SHB~~ 10/9/91	CDW 10-9-91		
010159									
010160	MK 10/9/91						CDW 10-9-91		
010161	TH 10/9/91					AM 10/10/91	DO 10/9	P 10/12/91	
010162	TH 10/9/91							10/9/91 TRJ	
010163	EH 10/9/91							10/9/91 TRJ	TH 10/10
010164									
010165									
010166									
010167									

NOTE: Please sign name and date to confirm laboratory acceptance. Sample Control must highlight the Laboratory Acceptance Box to indicate which laboratories are affected.

INTERLABORATORY CHAIN OF CUSTODY

ENSECO
A Comi[illegible]ompany

PA[illegible] OF 1

SHIP TO: VERSAR

ATTENTION: CARRY POLLACK

EXPORT ID

ANALYTICAL REQUESTS						
TOC						
✓						
✓						

SAMPLE CONDITION UPON RECEIPT

SEND RESULTS TO: ENSECO - ERCO

ATTENTION: MARY FORD

COMMENTS

EXPORT ID	COMMENTS
UCC-SB-B-19-4	10147-05
UCC-SB-A-12-4C	10147-06

TEST PRICE	
SUBTOTAL	
DISCOUNT / SURCHARGE	
TOTAL	

WRITTEN RESULTS REQUIRED BY (DATE): 10/28

VERBAL/FAC RESULTS REQUIRED BY (DATE): 10/25

PO No. 10147

Q.C. ☐ STANDARD ENSECO ☒ CLP PROTOCOL ☐ PROJECT SPECIFIC _____

SAMPLE DISPOSAL ☐ ENSECO ☐ RETURN TO CLIENT ☐ PHONE _____

DETECTION LIMITS ☒ COMMON PRODUCTS ☐ OTHER*

HOLDING TIMES ☐ ENSECO ☐ EPA-CLP ☐ TIER ☐ OTHER*

RAW DATA COPIES NEEDED ☒ YES ☐ NO

CUSTODY SEALS INTACT ☐ YES ☐ NO ☐ WET WEIGHT ☐ DRY WEIGHT

*SPECIAL INSTRUCTIONS

RELINQUISHED DATE / TIME

RECEIVED DATE / TIME 10-9-91 11[illegible] AM

ENS—1109

IMPORT COPY

DATA REPORTING QUALIFIERS

The nine EPA-defined qualifers to be used are as follow:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

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

and df = dilution factor

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

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

For soil samples subjected to GPC cleanup procedures, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values in exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specific volume (see exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 µg/L, but a concentration of 3 µg/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the identification is based on a mass spectral library search. It is applied to all TIC results.

P - This flag is used for a pesticide/aroclor target analyte when the percent difference between the two GC columns is greater than 25% for detected concentrations (see form X). The lower of the two values is reported on form I and flagged with a P.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do NOT apply this flag. Instead, use a laboratory-defined flag.

DATA REPORTING QUALIFIERS (CONT.)

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale (except as noted in exhibit D), the sample or extract must be diluted and reanalyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

NOTE: For total xylenes where three isomers are quantified as two peaks, the calibration range of <u>each</u> peak should be considered separately (e.g., a diluted analysis is <u>not</u> required for total xylenes unless the concentrations of either peak separately exceed 200 µg/L).

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is reanalyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number of the Form I for the diluted sample, and <u>all</u> concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

The laboratory-defined data reporting qualifiers to be used are as follow:

X - Indicates that the database has been modified.

Z - Indicates coelution.

DELIVERABLES INDEX

Client: Bolland Environmental Consultants Inc.
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 1014F

DELIVERABLES INDEX (Cont.)

Client: Balcam Environmental Consultants
Project Name: UIC Self Analysis October 1991
Erco Project Number: 1047

Pages

III. SEMIVOLATILES DATA

A. QC Summary

1. Surrogate Percent Recovery Summary (Form II) NA
2. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
3. Erco Method Blank Summary (Form IV)
4. GC/MS Tuning and Mass Calibration Summary (Form V)

B. Sample Data (Form I, Form I-TIC, and Raw Data)

C. Standards Data

1. Initial Calibration Data (Form VI)
2. Initial Calibration Standard Chromatograms
3. Continuing Calibration Data (Form VII)
4. Continuing Calibration Standard Chromatograms
5. Internal Standard Area Summary (Form VIII)

D. Raw QC Data

1. DFTPP Bar Graph and Mass Listing
2. Erco Blank Data
3. Matrix Spike/Matrix Spike Duplicate Data

IV. PESTICIDES/PCBs DATA

A. QC Summary

1. Surrogate Percent Recovery Summary (Form II) N/A
2. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
3. Erco Method Blank Summary (Form IV)

B. Sample Data (Form I and Raw Data)

DELIVERABLES INDEX (Cont.)

Client: Ballard Environmental Consultants, Inc.
Project Name: UPC Soil Analysis October 1991
Erco Project Number: 1047

October 25, 1991

Case Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analyisis 10/08/91
Erco Project No.: 010147

1. This project consists of the results for samples received at Enseco - Erco Laboratory on October 8, 1991. Please see the sample description information sheet for a list of samples.

2. Temperature of cooler was upon receipt was 6.0c.
   Bottles were not broken in transit.
   Bottles were properly labeled.
   Samples agree with chain-of-custody.
   Samples were properly preserved.
   VOA vials were properly preserved.
   VOA vials did not contain headspace.

SAMPLE DESCRIPTION INFORMATION
for
Balsam Environmental Consultants, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
010147-0001-SA	UCC-SB-A-12-4	SOIL	07 OCT 91	11:10	08 OCT 91
010147-0002-SA	UCC-10/7-QA3	AQUEOUS	07 OCT 91	11:30	08 OCT 91
010147-0003-SA	UCC-10/7-QA2	SOIL	07 OCT 91	11:15	08 OCT 91
010147-0004-SA	UCC-SB-B-19-4	SOIL	07 OCT 91	11:15	08 OCT 91
010147-0005-SA	UCC-SB-B-19-4	SOIL	07 OCT 91	11:15	08 OCT 91
010147-0006-SA	UCC-SB-A-12-4C	SOIL	07 OCT 91	11:10	08 OCT 91
010147-0007-SA	UCC-10/7-QA1	AQUEOUS	07 OCT 91		08 OCT 91

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 1 of 2)

ID	Manufacturer	Model	Data System
GC/MS #S-1	Finnigan	4530	INCOS
GC/MS #S-2	Finnigan	4615B	INCOS
GC/MS #S-3	Finnigan	4530	INCOS
GC/MS #V-5	Hewlett Packard	MSD	RTE-A
GC/MS #V-6	Hewlett Packard	MSD	RTE-A
GC/MS #S-6	Finnigan	Incos 50	Incos
GC/MS #V1*	Hewlett Packard	5996	RTE-6
GC/MS #V2*	Hewlett Packard	5996	RTE-6
GC/MS #V3*	Hewlett Packard	5996	RTE-6
GC/MS #V4*	Hewlett Packard	5985	RTE-6
GC/HECD #G2*	Hewlett Packard/OIC	5890/4420	HP-1000
GC/HECD/PID #G4*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/HECD/PID #G5*	Hewlett Packard/OIC/HNU	5890/4420/PI-52-02	Beckman CALS/ HP-1000
GC/ECD #9-1	Hewlett Packard	5880	VG-3
GC/ECD #9-2	Hewlett Packard	5880	VG-4
GC/ECD #11-1	Hewlett Packard	5890	VG-1
GC/ECD #11-2	Hewlett Packard	5890	VG-2
GC/ECD #7-1	Hewlett Packard	5880	VG-11
GC/ECD #7-2	Hewlett Packard	5880	VG-12
GC/ECD #14-1	Hewlett Packard	5890 Series II	VG-15
GC/ECD #14-2	Hewlett Packard	5890 Series II	VG-16
GC/ECD #15-1	Hewlett Packard	5890 Series II	VG-13
GC/ECD #15-2	Hewlett Packard	5890 Series I	VG-14

*Purge-and-trap concentrators manufactured by Tekmar Company.

Enseco - Erco Laboratory

Sample Analysis Instrumentation Key for Organics (Page 2 of 2)

ID	Manufacturer	Model	Data System
GC/ECD #12-1	Hewlett Packard	5890	VG-9
GC/FID #19	Hewlett Packard	5880	Beckman/HP-1000
GC/FID #28	Hewlett Packard	5890	Beckman/HP-1000
GC/PID #28	HNU Systems	P152	Beckman/HP-1000
GC/ECD #12-2	Hewlett Packard	5890	VG-10
IR1	Perkin-Elmer	FTIR 1600	Beckman/HP-1000
GC/FID #14	Hewlett Packard	5880	Beckman/HP-1000

*Purge-and-trap concentrators manufactured by Tekmar Company.

INSTRUMENT DETECTION LIMITS

Volatile Compounds

Hewlett-Packard 5996 GC/MS V1, V2, V3, V4, V5, S4, S5

CAS Number	Parameter	ng
74-87-3	Chloromethane	2 µ
74-83-9	Bromomethane	2 µ
75-01-4	Vinyl chloride	2 µ
75-00-3	Chloroethane	2 µ
75-09-2	Methylene chloride	2 µ
67-64-1	Acetone	2 µ
75-15-0	Carbon disulfide	1 µ
75-35-4	1,1-Dichloroethene	1 µ
75-34-3	1,1-Dichloroethane	1 µ
156-60-5	trans-1,2-Dichloroethene	1 µ
67-66-3	Chloroform	1 µ
107-06-2	1,2-Dichloroethane	1 µ
78-93-3	2-'Butanone	1 µ
71-55-6	1,1,1-Trichloroethane	1 µ
56-23-5	Carbon tetrachloride	1 µ
108-05-4	Vinyl acetate	2 µ
75-27-4	Bromodichloromethane	1 µ
79-34-5	1,1,2,2-Tetrachloroethane	1 µ
78-87-5	1,2-Dichloropropane	1 µ
10061-02-6	trans-1,3-Dichloropropene	1 µ
79-01-6	Trichloroethene	1 µ
124-48-1	Dibromochloromethane	1 µ
79-00-5	1,1,2-Trichloroethane	1 µ
71-43-2	Benzene	1 µ
10061-01-5	cis-1,3-Dichloropropene	1 µ
110-75-8	2-Chloroethylvinylether	2 µ
75-25-2	Bromoform	1 µ
591-78-6	2-Hexanone	2 µ
108-10-1	4-Methyl-2-pentanone	2 µ
127-18-4	Tetrachloroethene	1 µ
108-88-3	Toluene	1 µ
108-90-7	Chlorobenzene	1 µ
100-41-4	Ethylbenzene	1 µ
100-42-5	Styrene	1 µ
	Total xylenes	1 µ

KEY FOR SURROGATE AND INTERNAL STANDARDS

Acid/Base-Neutral Compounds

a - Fluorophenol	Surrogate standard
b - d_5-Phenol	Surrogate standard
c - d_4-2-Chlorophenol	Surrogate standard
d - d_4-Dichlorobenzene	Internal standard
e - d_4-1,2-Dichlorobenzene	Surrogate standard
f - d_5-Nitrobenzene	Surrogate standard
g - d_8-Naphthalene	Internal standard
h - Fluorobiphenyl	Surrogate standard
i - d_{10}-Acenaphthene	Internal standard
j - Tribromophenol	Surrogate standard
k - d_{10}-Phenanthrene	Internal standard
l - d_{14}-ortho-Terphenyl	Surrogate standard
m - d_{12}-Chrysene	Internal standard
n - d_{12}-Perylene	Internal standard

Volatile Compounds

1 - Bromochloromethane	Internal standard
2 - 1,2-Dichloroethane-d_4	Surrogate standard
3 - 1,4-Difluorobenzene	Internal standard
4 - Toluene-d_8	Surrogate standard
5 - Chlorobenzene-d_5	Internal standard
6 - Bromofluorobenzene	Surrogate standard

CHAIN-OF-CUSTODY RECORD

BALSAM
ENVIRONMENTAL CONSULTANTS, INC.
8 INDUSTRIAL WAY, SALEM, NH 03079

PROJECT NUMBER: 6437 T6

PROJECT NAME:

SAMPLER(S) SIGNATURE(S):

SEND REPORT TO: T. C. Dunn II

PROJECT ADDRESS:

ANALYTICAL LABORATORY: Enseco

METHOD / ANALYSIS

SAMPLE NUMBER	SAMPLING LOCATION	DATE	TIME	MATRIX	GRAB	COMPOSITE	PRESERVATIVE	FILTERED (Y/N)	CONTAINER TYPE	NUMBER OF CONTAINERS	VOC	ABN	PESTICIDES/PCBs	TCL METALS	PP METALS	CYANIDE	T.C.			COMMENTS
UCC-SB-A-12-4		10/7/91	1110	S	X		ICE	N	4oz wide vial	3	X										CLP Lab
UCC-10/7-QA3		10/7	1130	W	X		ICE/HCl	N	40ml VOA	2	X										
UCC-10/7-QA2		10/7	1115	S	X		ICE	N	40ml VOA	3	X										Citric
UCC-SB-B-19-4 (DUP)		10/7	1115	S	X		ICE	N	40ml VOA	3	X										Illeg.
UCC-SB-B-19A-4		10/7	1115	S	X		ICE	N	8oz wide	1						X					
UCC-SB-A-12-4C		10/7	1110	S	X		ICE	N	8oz wide	1						X					
UCC-10/7-QA1		10/7	—	W	X		ICE/HCl	N	40ml VOA	2	X										

RELINQUISHED BY:	DATE: 10/7/91	TIME: 12:00	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY: Eric Hadley

DATE: 10/8/91 TIME: 910

METHOD OF SHIPMENT: Fed Ex

AIRBILL (OR SHIPPING INVOICE) NUMBER: 3329067722

Enseco -- Erco Laboratory

Internal Chain of Custody

Sample Control Tracking Log

Project Number	Project Acceptance Date	***Laboratory Acceptance Boxes***							
		Metals	Nonmetals	Chrom	Hydro	Semi GC/MS	VOA GC	VOA GC/MS	Data Central
010146	EH 10/8/91							PD 10/14/91	
010147	EH 10/8/91							PD 10/14/91	TH 10/9
010148	EH 10/11/91						DO 10/11		
010149	TH 10/9/91			AH 10/15/91					
010150									
010151	SHB 10/8/91				ST 10-8	ST 10-8			
010152									
010153	EH 10/8	SRH 10/11/91 1-56							
010154	SHB 10/4						DJ 10/11		
010155									
010156									
010157	SHB 10/8				JDL 10-8-91	JDL 10-8-91			
010158	EH 10/8				DV 9OCT91	~~SHB~~ 10/9/91	CDW 10-9-91		
010159									
010160	MK 10/9/91						CDW 10-9-91		
010161	TH 10/9/91					AH 10/10/91	DO 10/9	PD 10/12/91	
010162	TH 10/9/91							10/9/91 RJ	
010163	SHA 10/9/91							10/9/91 RJ	TH 10/10
010164									
010165									
010166									
010167									

NOTE: Please sign name and date to confirm laboratory acceptance. Sample Control must highlight the Laboratory Acceptance Box to indicate which laboratories are affected.

INTERLABORATORY CHAIN OF CUSTODY

ENSECO
A Com[illegible] Company

1 OF 1

SHIP TO: VERSAR

ATTENTION: CARRY POLLACK

EXPORT ID	ANALYTICAL REQUESTS	SAMPLE CONDITION UPON RECEIPT	COMMENTS
	TOC		
UCC-SB-B-19-4	✓		10147-05
UCC-SB-A-12-4C	✓		10147-06

SEND RESULTS TO: ENSECO - ERCO

ATTENTION: MARY FORD

TEST PRICE

SUBTOTAL

DISCOUNT / SURCHARGE

TOTAL

WRITTEN RESULTS REQUIRED BY (DATE) 10/28 | VERBAL/FAC RESULTS REQUIRED BY (DATE) 10/25 | PO NO. 10147

Q.C. ☐ STANDARD ENSECO ☒ CLP PROTOCOL ☐ PROJECT SPECIFIC

SAMPLE DISPOSAL ☐ ENSECO ☐ RETURN TO CLIENT ☐ PHONE

DETECTION LIMITS ☒ COMMON PRODUCTS ☐ OTHER*

HOLDING TIMES ☐ ENSECO ☐ EPA-CLP ☐ [illegible]ER ☐ OTHER*

RAW DATA COPIES NEEDED ☒ YES ☐ NO

CUSTODY SEALS INTACT ☐ YES ☐ NO | ☐ WET WEIGHT ☐ DRY WEIGHT

*SPECIAL INSTRUCTIONS

RELINQUISHED — DATE / TIME

RECEIVED — DATE / TIME 10-9-91 11[illegible] AM

6

ENS—1109

IMPORT COPY

DATA REPORTING QUALIFIERS

The nine EPA-defined qualifers to be used are as follow:

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

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

and df = dilution factor

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

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

For soil samples subjected to GPC cleanup procedures, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values in exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specific volume (see exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 µg/L, but a concentration of 3 µg/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds where the identification is based on a mass spectral library search. It is applied to all TIC results.

P - This flag is used for a pesticide/aroclor target analyte when the percent difference between the two GC columns is greater than 25% for detected concentrations (see form X). The lower of the two values is reported on form I and flagged with a P.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do NOT apply this flag. Instead, use a laboratory-defined flag.

DATA REPORTING QUALIFIERS (CONT.)

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale (except as noted in exhibit D), the sample or extract must be diluted and reanalyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

NOTE: For total xylenes where three isomers are quantified as two peaks, the calibration range of <u>each</u> peak should be considered separately (e.g., a diluted analysis is <u>not</u> required for total xylenes unless the concentrations of either peak separately exceed 200 µg/L).

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is reanalyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number of the Form I for the diluted sample, and <u>all</u> concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

The laboratory-defined data reporting qualifiers to be used are as follow:

X - Indicates that the database has been modified.

Z - Indicates coelution.

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	10-7-QA1	98	99	108	0	0
02	10-7-QA3	92	109	108	0	0
03	VBLK02	97	99	102	0	0

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	SB-A-12-4	98	107	103	0	0
02	VBLK01	98	104	110	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	10-7-QA2	100	90	74	0	0
02	10-7-QA2DL	0 D	0 D	0 D	0	0
03	SB-B-19-4	98	78	77	0	0
04	VBLK03	104	103	103	0	0
05	VBLK04	96	104	103	0	0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: F2828 Lab Sample ID: BLANK02

Date Analyzed: 10/09/91 Time Analyzed: 1116

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

Instrument ID: V6

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	10-7-QA1	10147-07	F2837	1637
02	10-7-QA3	10147-02	F2836	1605

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: B2933 Lab Sample ID: BLANK01

Date Analyzed: 10/10/91 Time Analyzed: 1132

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

Instrument ID: V2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	SB-A-12-4	10147-01	B2934	1225

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: F2934 Lab Sample ID: BLANK03

Date Analyzed: 10/12/91 Time Analyzed: 1636

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: V6

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	10-7-QA2	10147-03	F2941	2023
02	SB-B-19-4	10147-04	F2942	2055

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: B3023 Lab Sample ID: BLANK04

Date Analyzed: 10/16/91 Time Analyzed: 1124

Matrix: (soil/water) SOIL Level:(low/med) MED

Instrument ID: V2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	10-7-QA2DL	10147-03DL	B3028	1602

COMMENTS:

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: B2910 BFB Injection Date: 10/09/91

Instrument ID: V2 BFB Injection Time: 0935

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.4
75	30.0 - 60.0% of mass 95	45.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.6 (0.6)1
174	Greater than 50.0% of mass 95	98.2
175	5.0 - 9.0% of mass 174	6.9 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.0 (96.7)1
177	5.0 - 9.0% of mass 176	6.6 (6.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD100	100PPBSTD	B2915	10/09/91	1358
02	VSTD200	200PPBSTD	B2916	10/09/91	1440
03	VSTD150	150PPBSTD	B2919	10/09/91	1639
04	VSTD050	50PPBSTD	B2922	10/09/91	1841
05	VSTD020	20PPBSTD	B2923	10/09/91	1955

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: B2929 BFB Injection Date: 10/10/91

Instrument ID: V2 BFB Injection Time: 0831

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.4
75	30.0 - 60.0% of mass 95	44.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.4 (0.4)1
174	Greater than 50.0% of mass 95	95.1
175	5.0 - 9.0% of mass 174	6.8 (7.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	94.4 (99.3)1
177	5.0 - 9.0% of mass 176	6.4 (6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	B2930	10/10/91	0933
02	VBLK01	BLANK01	B2933	10/10/91	1132
03	SB-A-12-4	10147-01	B2934	10/10/91	1225

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: B2949 BFB Injection Date: 10/11/91

Instrument ID: V2 BFB Injection Time: 1641

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	46.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.5 (0.5)1
174	Greater than 50.0% of mass 95	97.1
175	5.0 - 9.0% of mass 174	6.8 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.5 (98.4)1
177	5.0 - 9.0% of mass 176	6.4 (6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	B2951	10/11/91	1745
02	VSTD020	20PPBSTD	B2952	10/11/91	1856
03	VSTD100	100PPBSTD	B2955	10/11/91	2116
04	VSTD150	150PPBSTD	B2956	10/11/91	2159
05	VSTD200	200PPBSTD	B2959	10/12/91	0025

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: B3020 BFB Injection Date: 10/16/91

Instrument ID: V2 BFB Injection Time: 0915

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.4
75	30.0 - 60.0% of mass 95	44.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	97.3
175	5.0 - 9.0% of mass 174	6.9 (7.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	94.9 (97.5)1
177	5.0 - 9.0% of mass 176	7.1 (7.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	B3022	10/16/91	1021
02	VBLK04	BLANK04	B3023	10/16/91	1124
03	10-7-QA2DL	10147-03DL	B3028	10/16/91	1602

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: F2555 BFB Injection Date: 09/22/91

Instrument ID: V6 BFB Injection Time: 0915

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
75	30.0 - 60.0% of mass 95	54.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	69.7
175	5.0 - 9.0% of mass 174	4.5 (6.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	69.8 (100.1)1
177	5.0 - 9.0% of mass 176	4.9 (7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2557	09/22/91	1110
02	VSTD020	20PPBSTD	F2560	09/22/91	1322
03	VSTD100	100PPBSTD	F2561	09/22/91	1357
04	VSTD150	150PPBSTD	F2562	09/22/91	1435
05	VSTD200	200PPBSTD	F2563	09/22/91	1530

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: F2826 BFB Injection Date: 10/09/91

Instrument ID: V6 BFB Injection Time: 0921

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	51.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	4.4 (6.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	64.0 (96.2)1
177	5.0 - 9.0% of mass 176	4.5 (7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2827	10/09/91	1028
02	VBLK02	BLANK02	F2828	10/09/91	1116
03	10-7-QA3	10147-02	F2836	10/09/91	1605
04	10-7-QA1	10147-07	F2837	10/09/91	1637

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID: F2928 BFB Injection Date: 10/12/91

Instrument ID: V6 BFB Injection Time: 1148

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.6
75	30.0 - 60.0% of mass 95	52.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	74.5
175	5.0 - 9.0% of mass 174	5.8 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.0 (98.0)1
177	5.0 - 9.0% of mass 176	4.9 (6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50PPBSTD	F2930	10/12/91	1259
02	VBLK03	BLANK03	F2934	10/12/91	1636
03	10-7-QA2	10147-03	F2941	10/12/91	2023
04	SB-B-19-4	10147-04	F2942	10/12/91	2055

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-A-12-4

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10147 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10147-01

Sample wt/vol: 5.1 (g/mL) G Lab File ID: B2934

Level: (low/med) LOW Date Received: 10/08/91

% Moisture: not dec. 17 Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	9	B
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	3	BJ
71-55-6	1,1,1-Trichloroethane	2	J
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	trans-1,3-Dichloropropene	6	U
110-75-8	2-Chloroethylvinylether	12	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-A-12-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-01

Sample wt/vol: 5.1 (g/mL) G Lab File ID: B2934

Level: (low/med) LOW Date Received: 10/08/91

% Moisture: not dec. 17 Date Analyzed: 10/10/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* - Compound is an Internal Standard
D - Compound diel'ed

NC

L-100791 V2A
R-101091 V2A
→ B2933
$meCl_2$
2-But

Reduced by : [illegible] Date: 101091
Reviewed by: [illegible] Date: 101691

Data File: >B2934
Page: 1

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: BALSAM 10147-1 5.08G
Misc : V2 CH# 10 SULIS ID# UCC-SB-A-12-4
Injected : 10/10/91 12:25
Analyst: NORA
ID File: VOHID2
Quant list threshold: 1.00

Units: UG/KG
Run Factor: .984 ✓
Surrogate vol: .005

Surrogate Spike Recoveries

	Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15	D4-1,2-Dichloroethane	.2500	.2567	103	70 121
CS05	D8-Toluene	.2500	.2441	97.6	81 117
CS10	Bromofluorobenzene (BFB)	.2500	.2684	107	74 121

Target Compounds: VOHID2

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
		BDL	C045	1,1-Dichloroethene
263	~~2.168~~ SNG	~~2.133~~	C035	Acetone
		BDL	C040	Carbon Disulfide
310	~~5.808~~ 5	~~5.715~~	C030	Methylene Chloride
	7.23	BDL (7.114) B	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
473	2.654	(2.612) JB	C110	2-Butanone
		BDL	C125	Vinyl Acetate
544	1.385	(1.363) J	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
710	1.199	(1.180) J	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane

Data file: >B2934 Page: 2
Sample: BALSAM 10147-1 5.08G

Scan #	Concentration Quant list UG/L	Sample UG/KG	Compound
	BDL	C205	4-Methyl-2-Pentanone
	BDL	C230	Toluene
	BDL	C210	2-Hexanone
	BDL	C220	Tetrachloroethene
	BDL	C235	Chlorobenzene
	BDL	C240	Ethylbenzene
	BDL	CXXX	Xylene (p)
	BDL	CXXX	Xylenes (o)
	BDL	C245	Styrene
	BDL	C225	1,1,2,2-Tetrachloroethan
	BDL	C335	Dichlorobenzene (m)
	BDL	C340	Dichlorobenzene (p)
	BDL	C350	Dichlorobenzene (o)
	BDL	C250	Xylene (Total)

Diagnostic Quant Report

Data File: >B2934::D6 Injected at: 12:25 10/10/91
Quant'd : 12:54 10/10/91
ID File : VOHID2::$$ Calibrated : 11:39 10/10/91

	Compound		- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01	Bromochloromethane	7.50	7.49	.01	128.0	127200	1.0000	50.00
2)	C010	Chloromethane	3.12	0.00	--	50.0	0	.7606	0.00
3)	C020	Vinyl Chloride	3.25	0.00	--	62.0	0	.9823	0.00
4)	C015	Bromomethane	3.68	0.00	--	94.0	0	.5698	0.00
5)	C025	Chloroethane	3.87	0.00	--	64.0	0	.4451	0.00
6)	C045	1,1-Dichloroethene	4.62	4.62	.00	96.0	1402	.8127	.68
7)	C035	Acetone	4.69	4.69	.00	43.0	2131	.3863	2.17
7)D	C035	Acetone	4.69	5.11	.42	43.0	1095	.3863	1.11
8)	C040	Carbon Disulfide	4.97	4.90	.07	76.0	6046	3.9680	.60
9)	C030	Methylene Chloride	5.23	5.24	.01	84.0	12688	.8587	5.81
10)	C053	Trans-1,2-Dichloroe	5.61	5.59	.02	96.0	511	1.6910	.12
11)	C055	cis-1,2-Dichloroeth	7.11	7.07	.04	96.0	1162	1.8277	.25
12)	C050	1,1-Dichloroethane	6.21	0.00	--	63.0	0	3.1862	0.00
13)	C060	Chloroform	7.65	7.62	.02	83.0	2105	3.1033	.27
14)	C065	1,2-Dichloroethane	8.65	8.64	.01	62.0	760	1.9704	.15
15)	C110	2-Butanone	7.14	7.14	.00	72.0	1796	.2660	2.65
16)	CS15	D4-1,2-Dichloroetha	8.51	8.52	.01	65.0	184331	1.4113	51.34
17)	*CI10	1,4-Difluorobenzene	9.40	9.39	.01	114.0	431522	1.0000	50.00
18)	C125	Vinyl Acetate	6.30	0.00	--	43.0	0	.9517	0.00
19)	C115	1,1,1-Trichloroetha	7.96	7.97	.01	97.0	5419	.4534	1.38
20)	C120	Carbon Tetrachlorid	8.27	0.00	--	117.0	0	.4089	0.00
21)	C165	Benzene	8.64	8.62	.02	78.0	3521	1.2956	.31
22)	C150	Trichloroethene	9.92	9.92	.00	130.0	4323	.4179	1.20
23)	C140	1,2-Dichloropropane	10.36	0.00	--	63.0	0	.4373	0.00
24)	C130	Bromodichloromethan	10.98	0.00	--	83.0	0	.5779	0.00
25)	C175	2-Chloroethylvinyle	11.73	0.00	--	63.0	0	.2103	0.00
26)	C143	Cis-1,3-Dichloropro	12.03	0.00	--	75.0	0	.6202	0.00
27)	C172	Trans-1,3-Dichlorop	13.42	0.00	--	75.0	0	.4589	0.00
28)	C160	1,1,2-Trichloroetha	13.88	0.00	--	97.0	0	.3349	0.00
29)	C155	Dibromochloromethan	14.90	0.00	--	129.0	0	.4462	0.00
30)	C180	Bromoform	19.10	0.00	--	173.0	0	.3428	0.00
31)	*CI20	D5-Chlorobenzene	16.55	16.58	.03	117.0	292147	1.0000	50.00
32)	CS05	D8-Toluene	12.71	12.70	.01	98.0	406872	1.4264	48.82
33)	C205	4-Methyl-2-Pentanon	12.49	0.00	--	43.0	0	.8523	0.00
34)	C230	Toluene	12.88	12.86	.01	92.0	2368	.9534	.43
35)	C210	2-Hexanone	14.67	0.00	--	43.0	0	.4437	0.00
36)	C220	Tetrachloroethene	14.29	14.29	.01	164.0	1715	.4268	.69
37)	C235	Chlorobenzene	16.66	16.66	.00	112.0	1392	1.1171	.21
38)	C240	Ethylbenzene	17.06	17.43	.37	106.0	1342	.5167	.44
39)	CXXX	Xylene (p)	17.45	17.43	.01	106.0	1342	.6402	.36
40)	CXXX	Xylenes (o)	18.63	0.00	--	106.0	0	.7147	0.00
41)	C245	Styrene	18.68	18.70	.02	104.0	940	1.1194	.14
42)	C225	1,1,2,2-Tetrachloro	20.86	0.00	--	83.0	0	1.2096	0.00
43)	CS10	Bromofluorobenzene	20.27	20.26	.01	95.0	194063	.6187	53.68
44)	C335	Dichlorobenzene (m	23.87	0.00	--	146.0	0	.9644	0.00
45)	C340	Dichlorobenzene (p	24.20	0.00	--	146.0	0	.9886	0.00

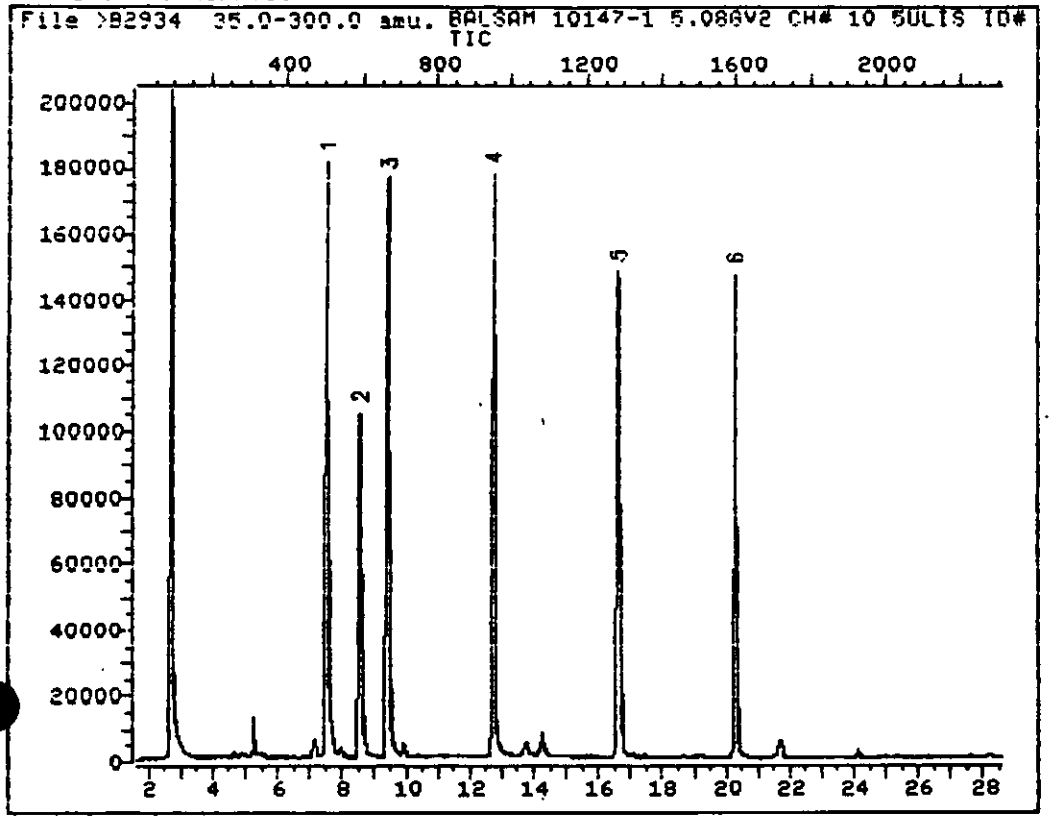
Internal Standard Comparison

Sample: >82934 Date injected: 10/10/91 Standard: >82930 ✓

	Internal Standard	Sample Area	Std Area	%
CI01	Bromochloromethane	127200	167202	76.1
CI10	1,4-Difluorobenzene	431522	667525	64.6
CI20	D5-Chlorobenzene	292147	454669	64.3

% = (Sample Area/Std Area)*100
* Area outside limits

TOTAL ION CHROMATOGRAM



Data File: >B2934::D6 Quant Output File: ^B2934::QT
Name: BALSAM 10147-1 5.08G
Misc: V2 CH# 10 5ULIS ID# UCC-SB-A-12-4

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911010 11:39

Operator ID: NORA
Quant Time: 911010 12:54
Injected at: 911010 12:25

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911010 12:54
Output File: ^B2934::QT Injected at: 911010 12:25
Data File: >B2934::D6 Dilution Factor: 1.00000
Name: BALSAM 10147-1 5.08G
Misc: V2 CH# 10 SULIS ID# UCC-SB-A-12-4

ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911010 11:39

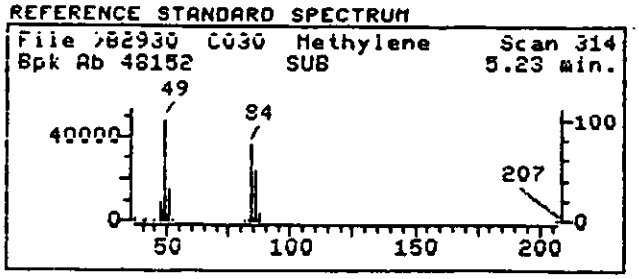
		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.49	128.0	127200	50.00	UG/L	96
6)	C045	1,1-Dichloroethene	4.62	96.0	1402	.68	UG/L	93
7)	C035	Acetone	4.69	43.0	2131	2.17	UG/L	100
8)	C040	Carbon Disulfide	4.90	76.0	6046	.60	UG/L	100
9)	C030	Methylene Chloride	5.24	84.0	12688	5.81	UG/L	85
10)	C053	Trans-1,2-Dichloroethene	5.59	96.0	511	.12	UG/L	99
11)	C055	cis-1,2-Dichloroethene	7.07	96.0	1162	.25	UG/L	97
13)	C060	Chloroform	7.62	83.0	2105	.27	UG/L	92
14)	C065	1,2-Dichloroethane	8.64	62.0	760	.15	UG/L	100
15)	C110	2-Butanone	7.14	72.0	1796	2.65	UG/L	94
16)	CS15	D4-1,2-Dichloroethane	8.52	65.0	184331	51.34	UG/L	80
17)	*CI10	1,4-Difluorobenzene	9.39	114.0	431522	50.00	UG/L	100
19)	C115	1,1,1-Trichloroethane	7.97	97.0	5419	1.38	UG/L	95
21)	C165	Benzene	8.62	78.0	3521	.31	UG/L	100
22)	C150	Trichloroethene	9.92	130.0	4323	1.20	UG/L	97
31)	*CI20	D5-Chlorobenzene	16.58	117.0	292147	50.00	UG/L	100
32)	CS05	D8-Toluene	12.70	98.0	406872	48.82	UG/L	93
34)	C230	Toluene	12.86	92.0	2368	.43	UG/L	95
36)	C220	Tetrachloroethene	14.29	164.0	1715	.69	UG/L	77
37)	C235	Chlorobenzene	16.66	112.0	1392	.21	UG/L	88
38)	C240	Ethylbenzene	17.43	106.0	1342	.44	UG/L	70
39)	CXXX	Xylene (p)	17.43	106.0	1342	.36	UG/L	98
41)	C245	Styrene	18.70	104.0	940	.14	UG/L	100
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	194063	53.68	UG/L	79
47)	C250	Xylene (Total)	17.42	106.0	1342	.32	UG/L	85

* Compound is ISTD

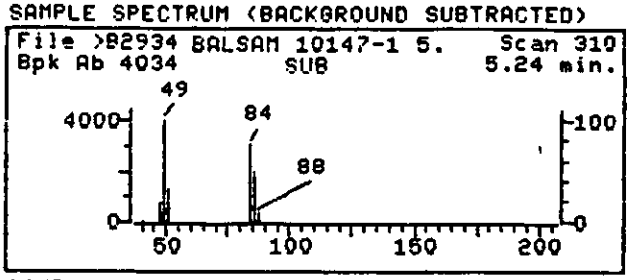
$MeCl_2$ $\bar{R}t.$ 5.24 area: 15785m 7.23 ug/l

JJ 101091

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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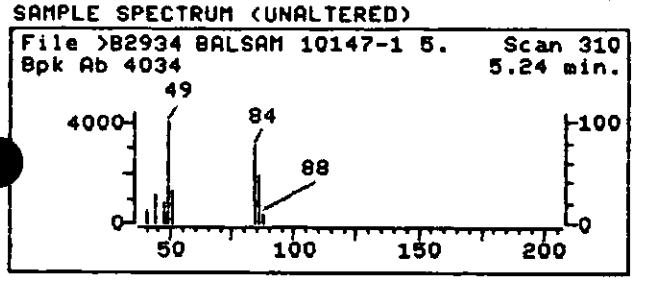
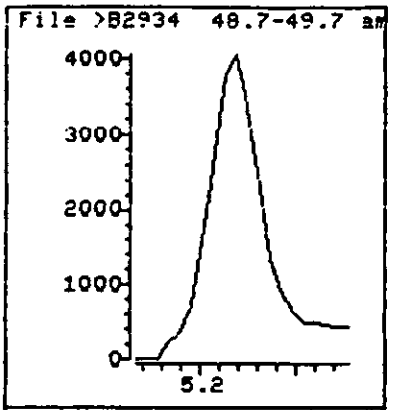
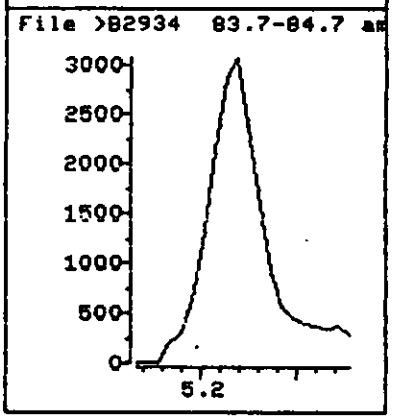


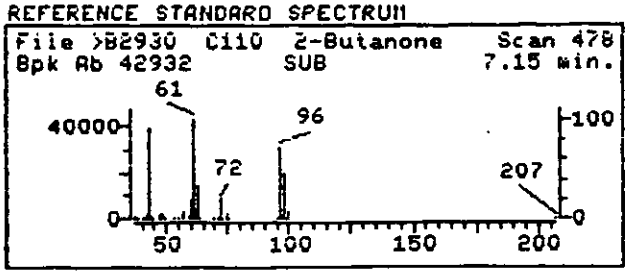




Data File: >B2934::D6 Quant Output File: ^B2934::QT
Name: BALSAM 10147-1 5.08G
Misc: V2 CH# 10 5ULIS ID# UCC-SB-A-12-4
Quant Time: 911010 12:54 Quant ID File: VOHID2::$$
Injected at: 911010 12:25 Last Calibration: 911010 11:39

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 310
Retention Time: 5.24 min.
Quant Ion: 84.0
Area: 12688
Concentration: 5.81 UG/L
q-value: 85

REFERENCE STANDARD SPECTRUM



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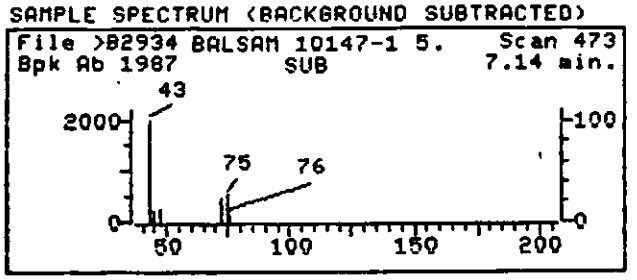

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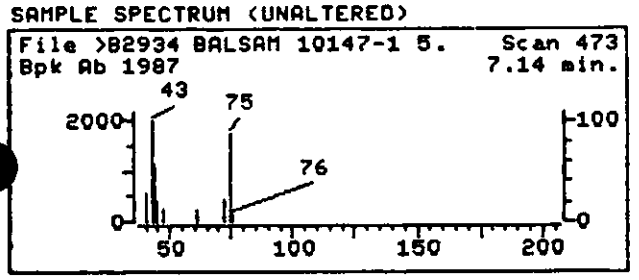
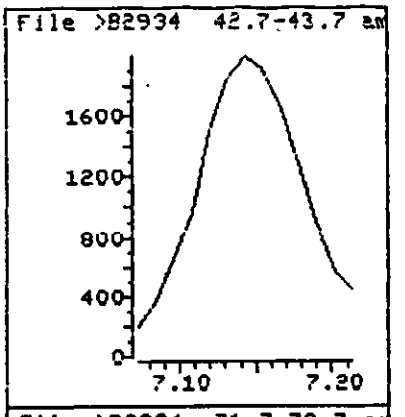
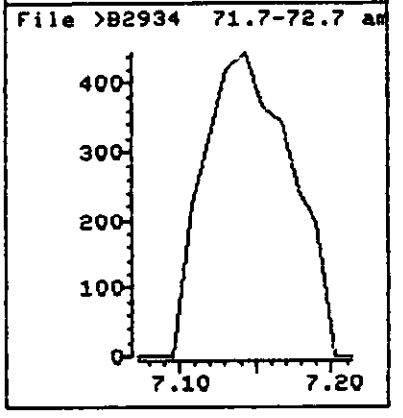


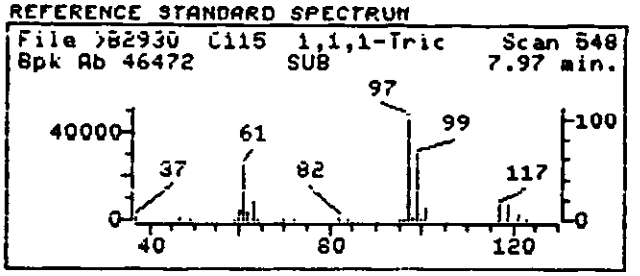




Data File: >B2934::D6 Quant Output File: ^B2934::QT
Name: BALSAM 10147-1 5.08G
Misc: V2 CH# 10 5ULIS ID# UCC-SB-A-12-4
Quant Time: 911010 12:54 Quant ID File: VOHID2::$$
Injected at: 911010 12:25 Last Calibration: 911010 11:39

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 473
Retention Time: 7.14 min.
Quant Ion: 72.0
Area: 1796
Concentration: 2.65 UG/L
q-value: 94

REFERENCE STANDARD SPECTRUM



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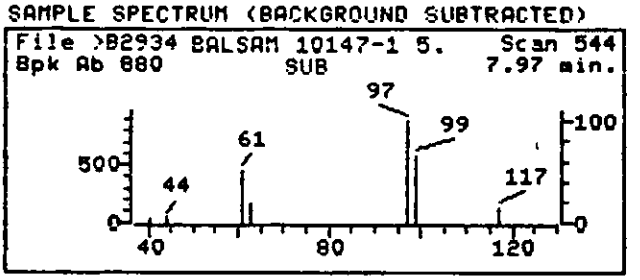

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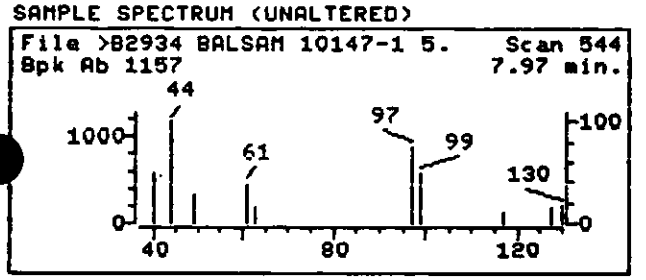
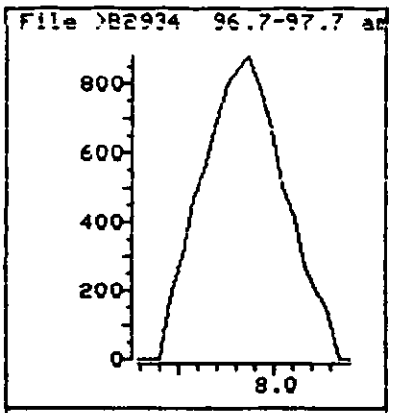
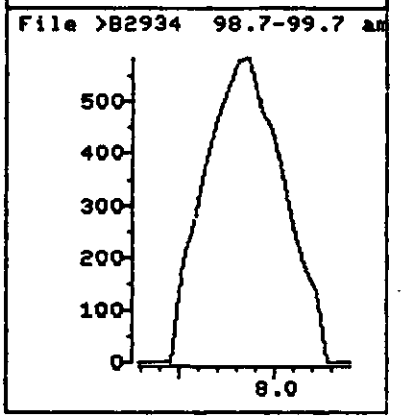


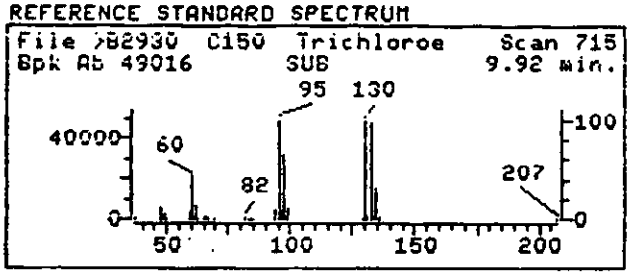




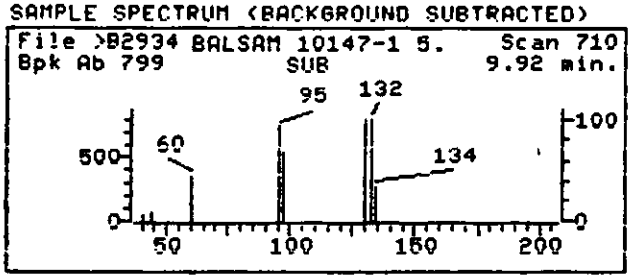
Data File: >B2934::D6 Quant Output File: ^B2934::QT
Name: BALSAM 10147-1 5.08G
Misc: V2 CH# 10 5ULIS ID# UCC-SB-A-12-4
Quant Time: 911010 12:54 Quant ID File: VOHID2::$$
Injected at: 911010 12:25 Last Calibration: 911010 11:39

Compound No: 19
Compound Name: C115 1,1,1-Trichloroethane
Scan Number: 544
Retention Time: 7.97 min.
Quant Ion: 97.0
Area: 5419
Concentration: 1.38 UG/L
q-value: 95

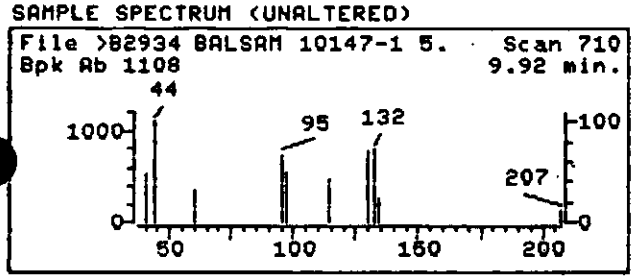
REFERENCE STANDARD SPECTRUM

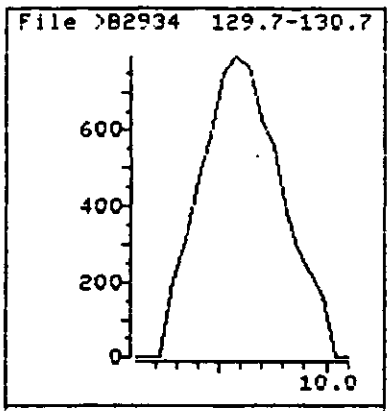


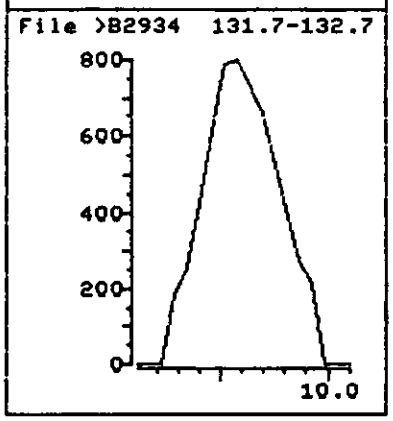
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B2934::D6 Quant Output File: ^B2934::QT
Name: BALSAM 10147-1 5.08G
Misc: V2 CH# 10 5ULIS ID# UCC-SB-A-12-4
Quant Time: 911010 12:54 Quant ID File: VOHID2::$$
Injected at: 911010 12:25 Last Calibration: 911010 11:39

Compound No: 22
Compound Name: C150 Trichloroethene
Scan Number: 710
Retention Time: 9.92 min.
Quant Ion: 130.0
Area: 4323
Concentration: 1.20 UG/L
q-value: 97

Data Reduced by : JJ Date: 101091 Data File: >B2934
Data Reviewed by : [illegible] Date: 10/6/91

Enseco TIC Report (page 1)

Sample: BALSAM 10147-1 5.08G Run Factor: .984
Conditions: V2 CH# 10 5ULIS ID# UCC-SB-A-1 Analyst: NORA

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	~~88.~~			~~87.~~	~~00-00-0~~	solvent front

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-7-QA3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10147-02

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2836

Level: (low/med) LOW Date Received: 10/08/91

% Moisture: not dec. _____ Date Analyzed: 10/09/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

10-7-QA3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10147-02

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2836

Level: (low/med) LOW Date Received: 10/08/91

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRICHLOROBENZENE ISOMER	20.74	37	J

* - Compound is an Internal Standard
D - Compound Qdel'ed

L - 100691 V6A

N/C

R 100991 V6A

Reduced by : Date: 100991
Reviewed by: Date: 10/6/91

Data File: >F2836
Page: 1

MeCl2

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BALSAM 10147-2 5ML
Misc : V6 CH#1 SULIS ID# UCC-10/7-DA/3
Injected : 10/09/91 16:05
Analyst: LIZ
ID File: MOBID6
Quant list threshold: 1.00

10-21-91

Units: UG/L
Pun Factor: 1.000
Surrogate vol: .005

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2701	108	76 114
CS05 D8-Toluene	.2500	.2306	92.2	88 110
CS10 Bromofluorobenzene	.2500	.2725	109	86 115

Target Compounds: MOBID6

Scan #	Concentration Quant List UG/L	Sample UG/L	Compound
		BDL	C010 Chloromethane
		BDL	C020 Vinyl Chloride
		BDL	C015 Bromomethane
		BDL	C025 Chloroethane
		BDL	C045 1,1-Dichloroethene
		BDL	C035 Acetone
		BDL	C040 Carbon Disulfide
263	4.101	4.1 B	C030 Methylene Chloride
		BDL	CXXX Tert-butyl alcohol
		BDL	C053 Trans-1,2-dichloroethene
		BDL	C055 Cis-1,2-dichloroethene
		BDL	CXXX Methyl tert-butyl ether
		BDL	C050 1,1-Dichloroethane
		BDL	C060 Chloroform
		BDL	C065 1,2-Dichloroethane
		BDL	C110 2-Butanone
		BDL	C125 Vinyl Acetate
		BDL	C115 1,1,1-Trichloroethane
		BDL	C120 Carbon Tetrachloride
		BDL	C165 Benzene
		BDL	C150 Trichloroethene
		BDL	C140 1,2-Dichloropropane
		BDL	C130 Bromodichloromethane
		BDL	C175 2-Chloroethylvinylether
		BDL	C143 Cis-1,3-Dichloropropene
		BDL	C172 Trans-1,3-dichloropropene
		BDL	C160 1,1,2-Trichloroethane

Data file: >F2836 Page: 2
Sample: BALSAM 10147-2 5ML

Scan #	Concentration Quant list UG/L	Sample UG/L	Compound
		BDL	C155 Dibromochloromethane
		BDL	C180 Bromoform
		BDL	C205 4-Methyl-2-pentanone
		BDL	C230 Toluene
		BDL	C210 2-Hexanone
		BDL	C220 Tetrachloroethene
		BDL	C235 Chlorobenzene
		BDL	C240 Ethylbenzene
		BDL	CXXX Xylenes (p)
		BDL	CXXX Xylenes (o)
		BDL	C245 Styrene
		BDL	C225 1,1,2,2-Tetrachloroethane
		BDL	C335 Dichlorobenzene (m)
		BDL	C340 Dichlorobenzene (p)
		BDL	C350 Dichlorobenzene (o)
		BDL	C250 Xylenes (total)

Diagnostic Quant Report

Data File: >F2936::D6 Injected at: 16:05 10/09/91
Quant'd : 16:33 10/09/91
ID File : MOBID6::MT Calibrated : 09:37 08/14/91

Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *CI01 Bromochloromethane	7.33	7.34	.01	128.0	51326	1.0000	50.00
2) C010 Chloromethane	2.73	0.00	--	50.0	0	1.3236	0.00
3) C020 Vinyl Chloride	2.87	0.00	--	62.0	0	1.3500	0.00
4) C015 Bromomethane	3.28	0.00	--	94.0	0	1.2156	0.00
5) C025 Chloroethane	3.41	0.00	--	64.0	0	.5022	0.00
6) C045 1,1-Dichloroethene	4.39	0.00	--	96.0	0	1.5071	0.00
7) C035 Acetone	4.45	0.00	--	43.0	0	.1843	0.00
8) C040 Carbon Disulfide	4.69	0.00	--	76.0	0	4.4340	0.00
9) C030 Methylene Chloride	5.03	5.03	.00	84.0	7577	1.7999	4.10
10) CXXX Tert-butyl alcohol	5.17	0.00	--	59.0	0	.0770	0.00
11) C053 Trans-1,2-dichloroet	5.42	0.00	--	96.0	0	1.8441	0.00
12) C055 Cis-1,2-dichloroethe	6.94	0.00	--	96.0	0	1.9832	0.00
13) CXXX Methyl tert-butyl et	5.42	0.00	--	73.0	0	3.1722	0.00
14) C050 1,1-Dichloroethane	6.03	0.00	--	63.0	0	3.5329	0.00
15) C060 Chloroform	7.49	0.00	--	83.0	0	3.7902	0.00
16) C065 1,2-Dichloroethane	8.52	0.00	--	62.0	0	2.1737	0.00
17) C110 2-Butanone	6.97	0.00	--	72.0	0	.1091	0.00
18) CS15 D4-1,2-dichloroethan	8.38	8.38	.00	65.0	87090	1.5708	54.01
19) *CI10 1,4-Difluorobenzene	9.23	9.24	.00	114.0	251677	1.0000	50.00
20) C125 Vinyl Acetate	6.10	0.00	--	43.0	0	.6048	0.00
21) C115 1,1,1-Trichloroethan	7.80	0.00	--	97.0	0	.5974	0.00
22) C120 Carbon Tetrachloride	8.11	0.00	--	117.0	0	.4898	0.00
23) C165 Benzene	8.49	0.00	--	78.0	0	.9908	0.00
24) C150 Trichloroethene	9.76	0.00	--	130.0	0	.4258	0.00
25) C140 1,2-Dichloropropane	10.24	0.00	--	63.0	0	.4057	0.00
26) C130 Bromodichloromethane	10.87	0.00	--	83.0	0	.6001	0.00
27) C175 2-Chloroethylvinylet	11.59	0.00	--	63.0	0	.1776	0.00
28) C143 Cis-1,3-Dichloroprop	11.92	0.00	--	75.0	0	.5829	0.00
29) C172 Trans-1,3-dichloropr	13.32	0.00	--	75.0	0	.4482	0.00
30) C160 1,1,2-Trichloroethan	13.80	0.00	--	97.0	0	.2952	0.00
31) C155 Dibromochloromethane	14.83	0.00	--	129.0	0	.4676	0.00
32) C180 Bromoform	19.02	0.00	--	173.0	0	.2627	0.00
33) *CI20 D5-Chlorobenzene	16.44	16.46	.01	117.0	209565	1.0000	50.00
34) CS05 D8-Toluene	12.56	12.57	.00	98.0	250951	1.2981	46.12
35) C205 4-Methyl-2-pentanone	12.32	0.00	--	43.0	0	.3240	0.00
36) C230 Toluene	12.72	0.00	--	92.0	0	.9048	0.00
37) C210 2-Hexanone	14.52	0.00	--	43.0	0	.2131	0.00
38) C220 Tetrachloroethene	14.14	0.00	--	164.0	0	.4676	0.00
39) C235 Chlorobenzene	16.53	0.00	--	112.0	0	1.0869	0.00
40) C240 Ethylbenzene	16.91	17.31	.39	106.0	1261	.5461	.55
41) CXXX Xylenes (p)	17.28	17.31	.03	106.0	1261	.6696	.45
42) CXXX Xylenes (o)	18.48	0.00	--	106.0	0	.6363	0.00
43) C245 Styrene	18.52	0.00	--	104.0	0	1.1149	0.00
44) C225 1,1,2,2-Tetrachloroe	20.69	0.00	--	83.0	0	.5730	0.00
45) CS10 Bromofluorobenzene	20.11	20.14	.03	95.0	162992	.7136	54.49
46) C335 Dichlorobenzene (m)	23.66	0.00	--	146.0	0	.9378	0.00
47) C340 Dichlorobenzene (p)	23.98	0.00	--	146.0	0	.8480	0.00
48) C350 Dichlorobenzene (o)	25.21	0.00	--	146.0	0	.8417	0.00

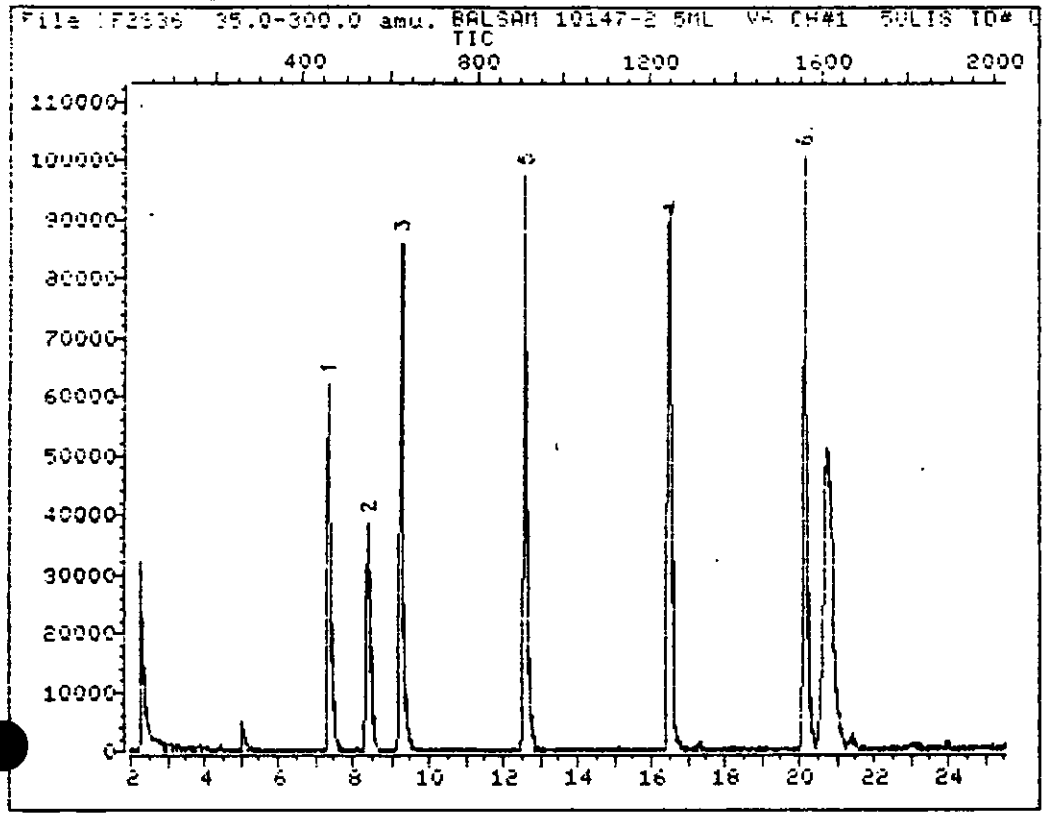
Internal Standard Comparison

Sample: >F2836 Date injected: 10/09/91 Standard: >F2827

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	51326	75510	68.0
CI10 1,4-Difluorobenzene	251677	407259	61.8
CI20 D5-Chlorobenzene	209565	308421	67.9

% = (Sample Area/Std Area)*100
* Area outside limits

TOTAL ION CHROMATOGRAM



Data File: >F2836::D6 Quant Output File: ^F2836::D7
Name: BALSAM 10147-2 5ML Instrument ID: V6
Misc: V6 CH#1 5ULIS ID# UCC-10/7-QA1/3

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

Operator ID: LIZ
Quant Time : 911009 16:33
Injected at: 911009 16:05

QUANT REPORT

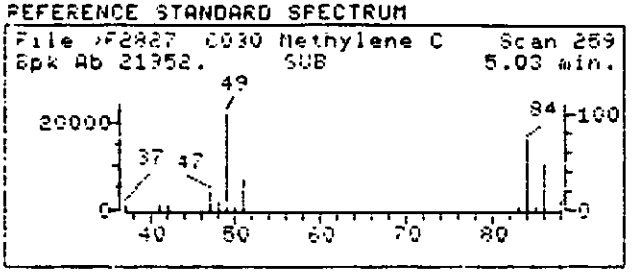
Operator ID: LIZ Quant Rev: 7 Quant Time: 911009 16:33
Output File: ^F2836::D7 Injected at: 911009 16:09
Data File: >F2836::D6 Dilution Factor: 1.00000
Name: BALSAM 10147-2 5ML Instrument ID: V6
Misc: V6 CH#1 5ULIS ID# UCC-10/7-0A/3

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

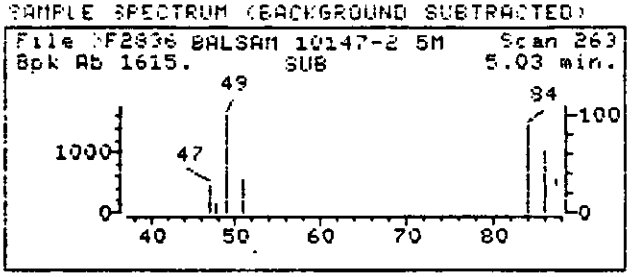
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.34	128.0	51326	50.00	UG/L	69
9)	C030 Methylene Chloride	5.03	84.0	7577	4.10	UG/L	70
18)	CS15 D4-1,2-dichloroethane	8.38	65.0	87090	54.01	UG/L	75
19)	*CI10 1,4-Difluorobenzene	9.24	114.0	251677	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.46	117.0	209565	50.00	UG/L	100
34)	CS05 D8-Toluene	12.57	98.0	250951	46.12	UG/L	98
40)	C240 Ethylbenzene	17.31	106.0	1261	.551	UG/L	48
[illegible])	CXXX Xylenes (p)	17.31	106.0	1261	.449	UG/L	80
[illegible])	CS10 Bromofluorobenzene	20.14	95.0	162992	54.49	UG/L	72

* Compound is ISTD

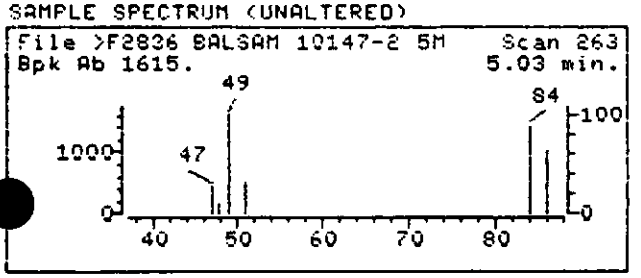
REFERENCE STANDARD SPECTRUM

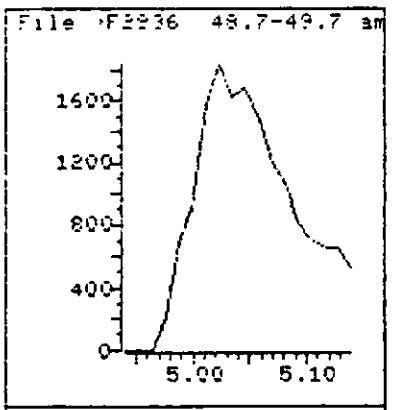


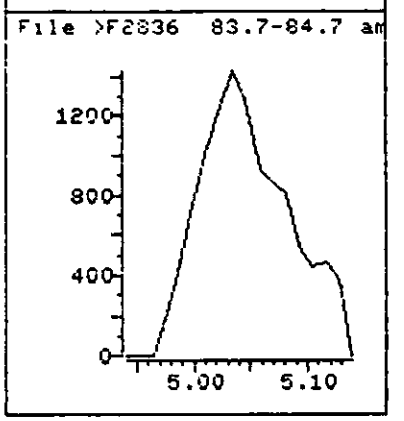
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2836::D6 Quant Output File: ^F2836::D7
Name: BALSAM 10147-2 5ML Instrument ID: V6
Misc: V6 CH#1 5ULIS ID# UCC-1017-QAX3 µ 1021-91
Quant Time: 911009 16:33 Quant ID File: MOBID6::MT
Injected at: 911009 16:05 Last Calibration: 910814 09:37
Last Qcal Time: 911009 10:28

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 263
Retention Time: 5.03 min.
Quant Ion : 84.0
Area : 7577
Concentration : 4.10 UG/L
q-value : 70

Data Peduced by : LIZ Date: 10/29/91 Data File: >F2836
Data Peviewed by : RR Date: 10-29-91

Enseco TIC Report (page 1)

Sample: BALSAM 10147-2 5ML Run Factor: 1.00
Conditions: V6 CH#1 5ULIS ID# UCC-107-QA3 Analyst: LIZ

#	Scan	Q	C	Concentration In Sample (UG/L)	CAS #	Compound
1	1612.			37.	108-70-3	Benzene, ~~1,3,5-~~ trichloro- ISOMER

Data File: >F2836

Enseco TIC Report (page 2)

Concentration = Area(TIC) * Conc.(IS) / Area(IS)

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	96	15	3	20.74	1.259	498950.	50925.	37.323

TIC Internal Standard Report

Data File: >F2836

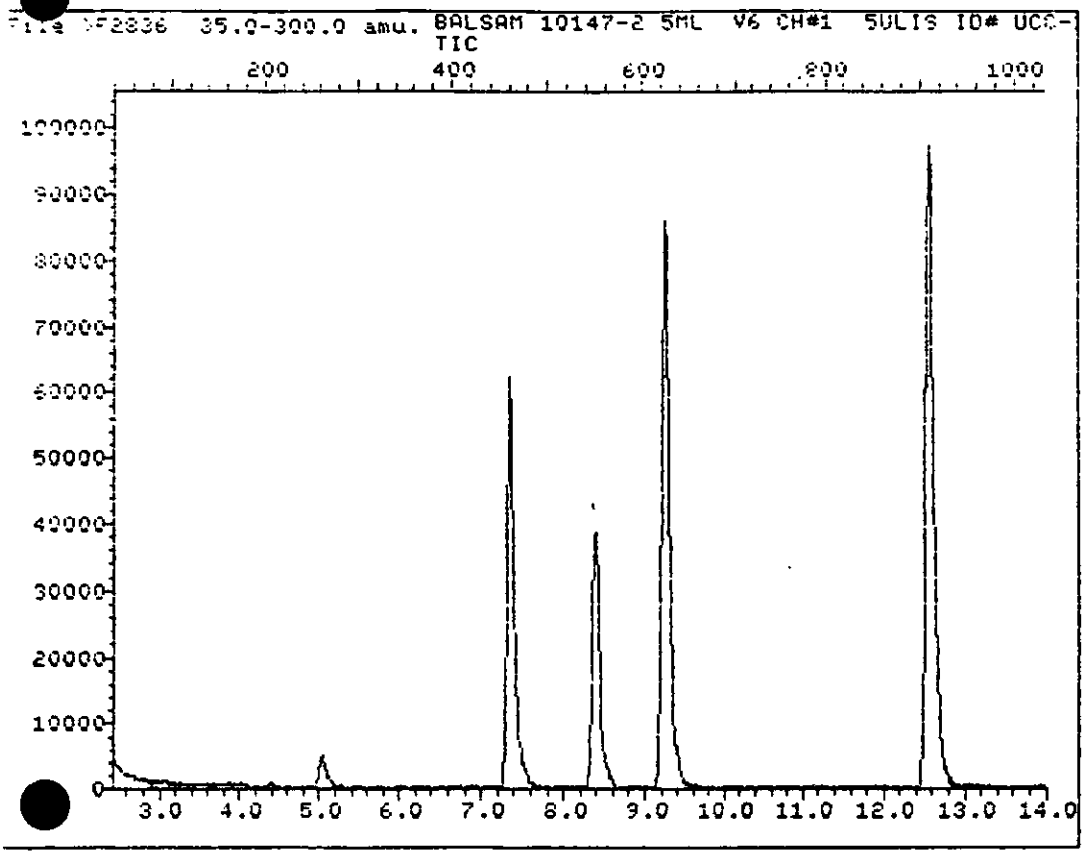
Maximum seperation of RIC and Quan ion peaks: 3.
Minimum RIC peak area as % of est. RIC area: 50.
Maximum RIC peak area as % of est. RIC area: 200.

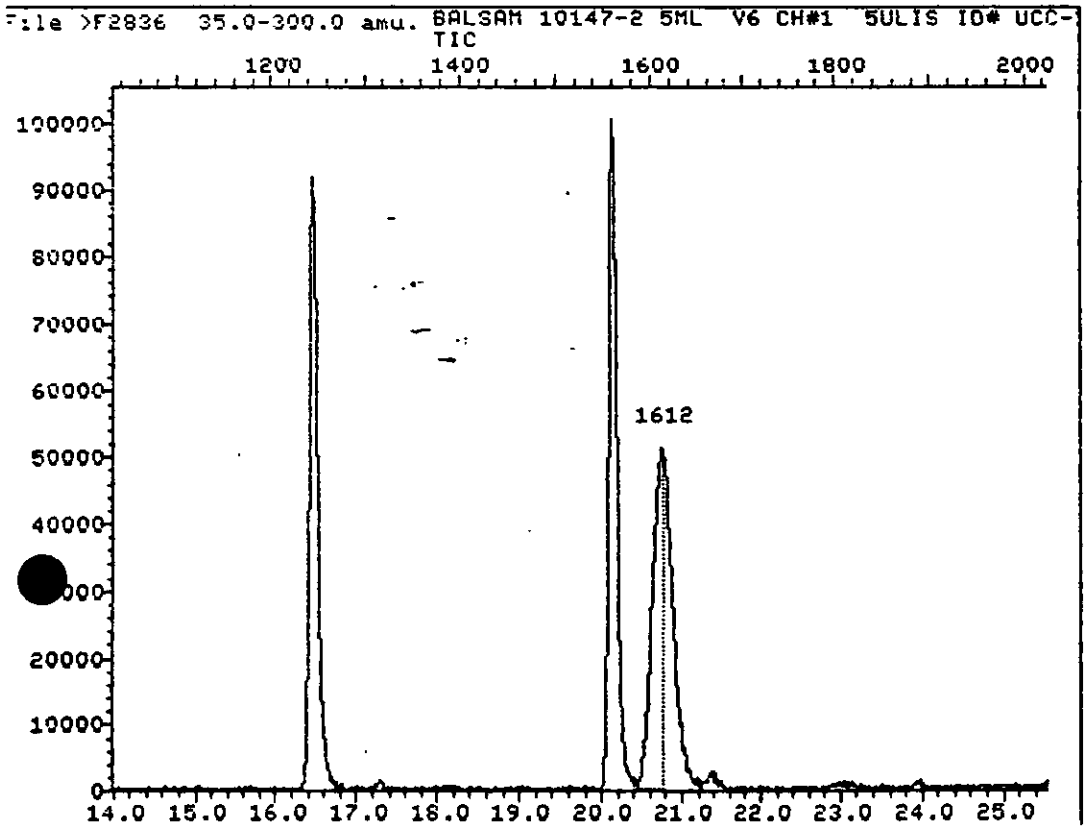
#	Name		Concentration		Flag	
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC	
1	CI01 Bromochlorometh	50.000	UG/L	Ok		
461.	51326.	6.987	461.	354569.	98.870	
2	CI10 1,4-Difluoroben	50.000	UG/L	Ok		
624.	251677.	2.300	624.	560713.	96.876	
3	CI20 D5-Chlorobenzen	50.000	UG/L	Ok		
1244.	209565.	3.615	1245.	655030.	86.469	

Deleting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 7
Number of peaks remaining: 7

Deleting target compounds from INT file: VDIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 7
Number of peaks remaining: 1

Deleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 1
Maximum number of peaks > number of peaks.


File >F2836 35.0-300.0 amu. BALSAM 10147-2 5ML V6 CH#1 5ULIS ID# UCC-
TIC
200
400
600
800
1000
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0

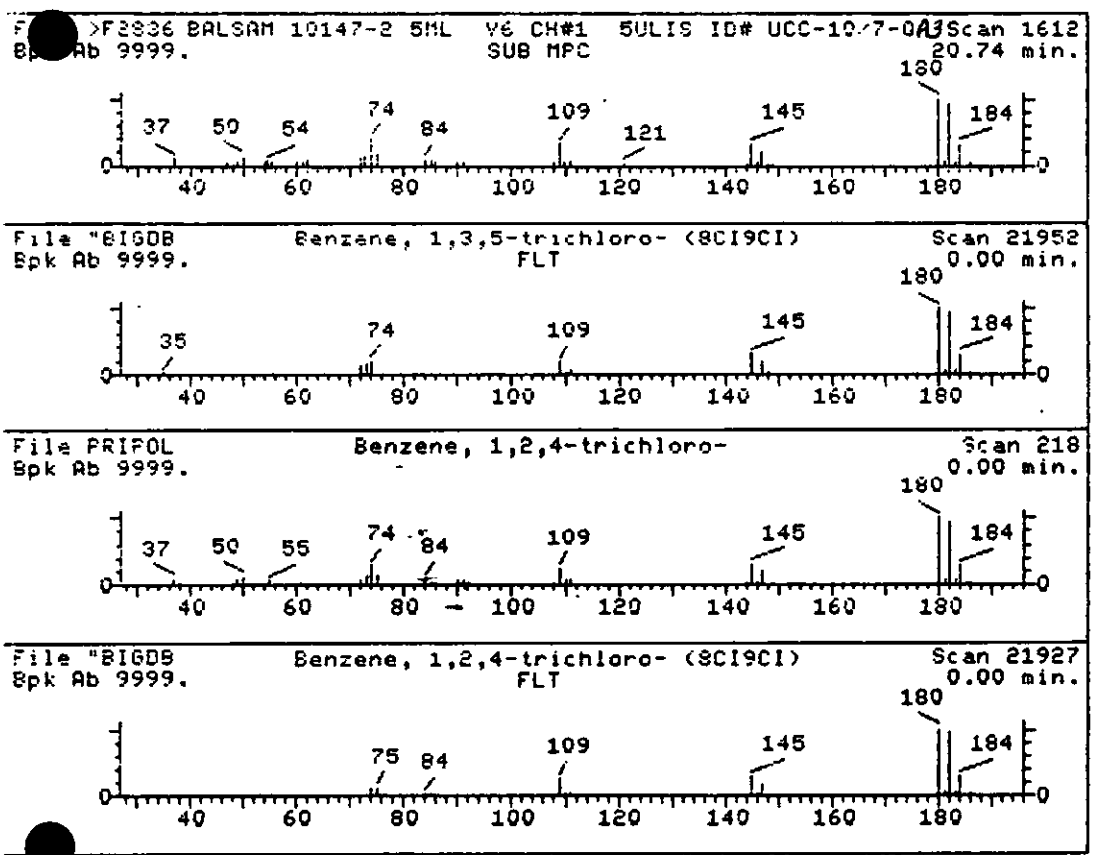

File >F2836 35.0-300.0 amu. BALSAM 10147-2 5ML V6 CH#1 5ULIS ID# UCC-
TIC
1200
1400
1600
1800
2000
100000
90000
80000
70000
60000
50000
40000
20000
10000
0
1612
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0

NUMBER: 1

1.	Benzene, ~~1,3,5-~~trichloro- (8CI9CI) isomer	180	C6H3Cl3
2.	Benzene, 1,2,4-trichloro-	180	C6H3Cl3
3.	Benzene, 1,2,4-trichloro- (8CI9CI)	180	C6H3Cl3
4.	Benzene, 1,2,4-trichloro-	180	C6H3Cl3
5.	Benzene, 1,2,3-trichloro- (8CI9CI)	180	C6H3Cl3
6.	Benzene, 1,2,4-trichloro-	180	C6H3Cl3

Sample file: >F2836 Spectrum #: 1612
Search speed: 2 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	108703	21952	"BIGDB	98	23	0	0	80	15	64	97
2.	95*	218	320	PRIPOL	87	34	0	0	73	10	68	95
3.	94*	120821	21927	"BIGDB	82	35	0	0	75	18	60	94
4.	94*	217	319	PRIPOL	82	35	0	0	75	18	60	94
5.	83*	87616	21925	"BIGDB	76	38	1	0	93	15	51	74
6.	79*	216	318	PRIPOL	68	47	1	0	95	15	43	66



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-7-QA2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2941

Level: (low/med) MED Date Received: 10/08/91

% Moisture: not dec. 10 Date Analyzed: 10/12/91

Column: (pack/cap) CAP Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14000	U
74-83-9	Bromomethane	14000	U
75-01-4	Vinyl Chloride	14000	U
75-00-3	Chloroethane	14000	U
75-09-2	Methylene Chloride	6800	U
67-64-1	Acetone	14000	U
75-15-0	Carbon Disulfide	6800	U
75-35-4	1,1-Dichloroethene	6800	U
75-34-3	1,1-Dichloroethane	6800	U
540-59-0	1,2-Dichloroethene (total)	6800	U
67-66-3	Chloroform	6800	U
107-06-2	1,2-Dichloroethane	6800	U
78-93-3	2-Butanone	14000	U
71-55-6	1,1,1-Trichloroethane	19000	
56-23-5	Carbon Tetrachloride	6800	U
108-05-4	Vinyl Acetate	14000	U
75-27-4	Bromodichloromethane	6800	U
78-87-5	1,2-Dichloropropane	6800	U
10061-01-5	cis-1,3-Dichloropropene	6800	U
79-01-6	Trichloroethene	8800	
124-48-1	Dibromochloromethane	6800	U
79-00-5	1,1,2-Trichloroethane	6800	U
71-43-2	Benzene	6800	U
10061-02-6	trans-1,3-Dichloropropene	6800	U
110-75-8	2-Chloroethylvinylether	14000	U
75-25-2	Bromoform	6800	U
108-10-1	4-Methyl-2-Pentanone	14000	U
591-78-6	2-Hexanone	14000	U
127-18-4	Tetrachloroethene	6800	U
79-34-5	1,1,2,2-Tetrachloroethane	6800	U
108-88-3	Toluene	7100	
108-90-7	Chlorobenzene	6800	U
100-41-4	Ethylbenzene	100000	
100-42-5	Styrene	6800	U
1330-20-7	Xylene (total)	510000	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

10-7-QA2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2941

Level: (low/med) MED Date Received: 10/08/91

% Moisture: not dec. 10 Date Analyzed: 10/12/91

Column (pack/cap) CAP Dilution Factor: 10.0

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C9H20 ISOMER	17.47	56000	J
2.		SUBSTITUTED CYCLOHEXANE	19.22	36000	J
3.		UNKNOWN HYDROCARBON	20.60	59000	J
4.		TRIMETHYLBENZENE ISOMER	21.61	34000	J
5.		C10H22 ISOMER	21.83	150000	J
6.		UNKNOWN	22.19	55000	J
7.		TRIMETHYLBENZENE ISOMER	22.82	120000	J
8.		METHYLETHYLBENZENE ISOMER	24.24	39000	J
9.		METHYLPROPYLBENZENE ISOMER	25.10	75000	J
10.		C4-BENZENE ISOMER	25.34	77000	J

N/C CIP ~~L=10/11/91~~ ~~R01291WA~~ ③~ 10/5

Reduced by : ✓ Date: 10/5/91 Data File: >F2941 F2934
Reviewed by: RD Date: 10-22-91 Page: 1 CLEAN

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BALSM 1014/-3 100LX
Misc : V6 CH09 50LI5 ID# UCL-107/-WA2 4.08G/10ML 100991
Injected : 10/12/91 20:23 Units: UG/KG
Analyst: KERYLYNN Run Factor: 1230.00 ✓
ID File: MUB1D6 Surrogate vol: 5.000
Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	25.00	18.56	74.2	70 121
CS05 D8-Toluene	25.00	25.06	100	81 117
CS10 Bromofluorobenzene	25.00	22.54	90.2	74 121

Target Compounds: MUB1D6

Scan #	Concentration Quant List UG/L	Sample UG/KG	Compound
		BDL	C010 Chloromethane
		BDL	C020 Vinyl Chloride
		BDL	C015 Bromomethane
		BDL	C025 Chloroethane
		BDL	C045 1,1-Dichloroethene
		BDL	C035 Acetone
		BDL	C040 Carbon Disulfide
		BDL	C050 Methylene Chloride
		BDL	CXXX Tert-butyl alcohol
		BDL	C055 Trans-1,2-dichloroethene
		BDL	C055 Cis-1,2-dichloroethene
		BDL	CXXX Methyl tert-butyl ether
		BDL	C050 1,1-Dichloroethane
		BDL	C060 Chloroform
		BDL	C065 1,2-Dichloroethane
		BDL	C110 2-Butanone
		BDL	C125 Vinyl Acetate
494	14.157	12000	C115 1,1,1-Trichloroethane
494	~~2.257 SNG~~	~~2000~~ J	C120 Carbon Tetrachloride
		BDL	C165 Benzene
662	6.448	7900	C150 Trichloroethene
		BDL	C140 1,2-Dichloropropane
		BDL	C130 Bromodichloromethane
		BDL	C175 2-Chloroethylvinylether
		BDL	C145 Cis-1,3-Dichloropropene
		BDL	C172 Trans-1,3-dichloropropene
969	~~1.365 SNG~~	~~1400~~ J	C160 1,1,2-Trichloroethane

③~10/5/91

Data File: VF2941 Page: 2
Sample: BALSM 10147-3 10ULX

Scan #	Concentration Quant List (UG/L)	Sample (UG/KG)		Compound
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform
		BDL	C205	4-Methyl-2-pentanone
915	5.220	6400	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
1275	74.643	92000	C240	Ethylbenzene
1275	60.924	~~75000~~	CXXX	Xylenes (p)
1409	71.832	~~88000~~	CXXX	Xylenes (o)
1409	~~2.137~~	~~2600~~ 260	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethane
		BDL	C355	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
1306	375.503	460000	C250	Xylenes (total)

000045

Diagnostic Quant Report

Data File: >F1941::06 Injected at: 08:23 10/12/91
Start : 20:59 10/12/91
CO File : M08!06::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Into - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101 Bromochloromethane	7.74	7.80	.07	128.0	96759	1.0000	50.00
2)	C019 Chloromethane	2.71	0.00	--	50.0	0	1.3182	0.00
3)	C020 Vinyl Chloride	2.85	0.00	--	62.0	0	1.5229	0.00
4)	C015 Bromomethane	3.25	0.00	--	94.0	0	1.2706	0.00
5)	C025 Chloroethane	3.36	0.00	--	64.0	0	.8066	0.00
6)	C045 1,1-Dichloroethene	4.35	0.00	--	96.0	0	1.5349	0.00
7)	C035 Acetone	4.41	0.00	--	43.0	0	.5024	0.00
8)	C040 Carbon Disulfide	4.64	0.00	--	76.0	0	4.2106	0.00
9)	C030 Methylene Chloride	4.99	0.00	--	84.0	0	1.7841	0.00
10)	CXXX Tert-butyl alcohol	5.14	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.36	0.00	--	96.0	0	1.8974	0.00
12)	C055 Cis-1,2-dichloroethe	6.90	0.00	--	96.0	0	2.0428	0.00
13)	CXXX Methyl tert-butyl et	5.36	0.00	--	73.0	0	3.2861	0.00
14)	C050 1,1-Dichloroethane	5.98	0.00	--	63.0	0	3.5014	0.00
15)	C060 Chloroform	7.44	0.00	--	83.0	0	3.9818	0.00
16)	C065 1,2-Dichloroethane	8.48	0.00	--	62.0	0	2.3840	0.00
17)	C110 2-Butanone	6.92	0.00	--	72.0	0	.1733	0.00
18)	CS15 D4-1,2-dichloroethan	8.35	8.33	.02	65.0	13472	1.8749	3.71
19)	*C110 1,4-Difluorobenzene	9.11	9.20	.09	114.0	522175	1.0000	50.00
20)	C125 Vinyl Acetate	6.05	0.00	--	43.0	0	.4441	0.00
21)	C115 1,1,1-Trichloroethan	7.78	7.77	.01	97.0	83513	.5648	14.16
22)	C120 Carbon Tetrachloride	8.08	7.77	.31	117.0	11120	.4717	2.26
23)	C165 Benzene	8.45	0.00	--	78.0	0	1.0551	0.00
24)	C150 Trichloroethene	9.74	9.72	.02	130.0	28333	.4207	6.49
25)	C140 1,2-Dichloropropane	10.22	0.00	--	63.0	0	.4143	0.00
26)	C130 Bromodichloromethane	10.85	0.00	--	83.0	0	.6104	0.00
27)	C175 2-Chloroethylvinylet	11.58	0.00	--	63.0	0	.2031	0.00
28)	C143 Cis-1,3-Dichloroprop	11.91	0.00	--	75.0	0	.5792	0.00
29)	C172 Trans-1,3-dichloropr	13.33	0.00	--	75.0	0	.4136	0.00
30)	C160 1,1,2-Trichloroethan	13.80	13.30	.50	97.0	4783	.3355	1.37
31)	C155 Dibromochloromethane	14.85	0.00	--	129.0	0	.4975	0.00
32)	C180 Bromoform	19.08	0.00	--	173.0	0	.3012	0.00
33)	*C120 D5-Chlorobenzene	16.32	16.40	.08	117.0	408818	1.0000	50.00
34)	CS05 D8-Toluene	12.49	12.52	.03	98.0	48403	1.1812	5.01
35)	C205 4-Methyl-2-pentanone	12.26	0.00	--	43.0	0	.3987	0.00
36)	C230 Toluene	12.66	12.67	.01	92.0	37046	.8679	5.22
37)	C210 2-Hexanone	14.47	0.00	--	43.0	0	.2733	0.00
38)	C220 Tetrachloroethene	14.07	14.07	.00	164.0	1996	.4248	.57
39)	C235 Chlorobenzene	16.47	0.00	--	112.0	0	1.0055	0.00
40)	C240 Ethylbenzene	16.87	16.87	.00	106.0	308420	.5060	74.54
40)D	C240 Ethylbenzene	16.87	17.23	.36	106.0	1428529	.5060	345.27
41)	CXXX Xylenes (p)	17.25	16.87	.38	106.0	308420	.6191	60.92
41)D	CXXX Xylenes (p)	17.25	17.23	.01	106.0	1428529	.6191	282.19
42)	CXXX Xylenes (o)	18.43	18.44	.01	106.0	354138	.6030	71.83
43)	C245 Styrene	18.49	18.43	.06	104.0	18263	1.0452	2.14
44)D	C225 1,1,2,2-Tetrachloroe	20.67	20.58	.09	83.0	23962	.6267	4.73
44)	C225 1,1,2,2-Tetrachloroe	20.67	20.92	.25	83.0	1638	.6267	.32
44)D	C225 1,1,2,2-Tetrachloroe	20.67	21.14	.47	83.0	5697	.6267	1.11
45)	CS10 Bromofluorobenzene	20.08	20.06	.02	95.0	21227	.7490	3.47

000046

[illegible]	C350	Dichlorobenzene (o	25.2[illegible]	0.0[illegible]	--	146.0	0	.[illegible]50	0.00
49)D	C250	Xylenes (total)	18.43	16.87	1.56	196.0	[illegible]08[illegible]6	.[illegible]992	[illegible]3.6[illegible]
49)D	C250	Xylenes (total)	18.4[illegible]	17.2[illegible]	1.19	196.0	141[illegible]6	.[illegible]927	[illegible]32.4[illegible]
49)	C250	Xylenes (total)	18.43	17.23	1.19	196.0	1[illegible]19[illegible]6	.6927	[illegible]75.90
49)D	C250	Xylenes (total)	18.4[illegible]	21.3[illegible]	2.8[illegible]	196.0	14959	.6927	3.0[illegible]

* - Compound is an Internal Standard
D - Compound Odel'ed

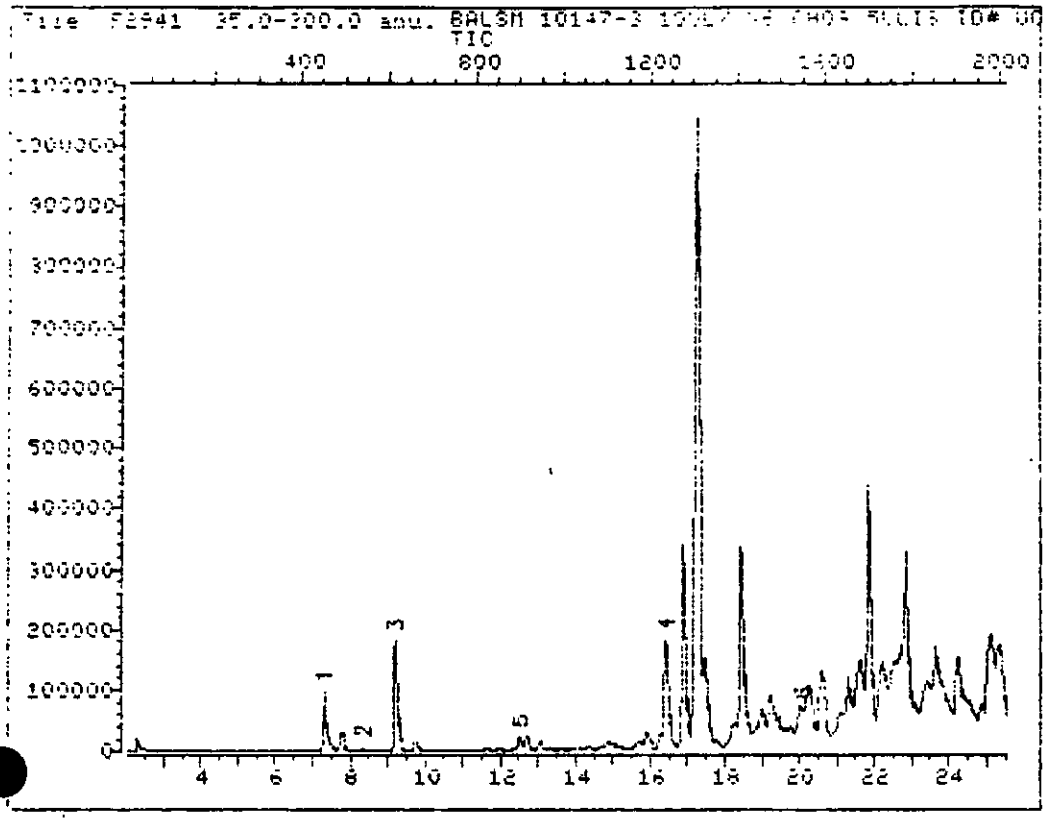
Internal Standard Comparison

Sample: [illegible]41 Date injected: 10/12/91 Standard: [illegible]F2-30

Internal Standard	Sample Area	Std Area	%
[illegible]91 Bromochloromethane	96769	67959	142.2
[illegible]93 1,4-Difluorobenzene	522179	380644	137.2
[illegible]99 Chlorobenzene	408818	315108	130.6

% = (Sample Area/Std Area)*100
* Area outside limits

TOTAL ION CHROMATOGRAM



Data File: >F2941::D6 Quant Output File: ^F2941::D7
Name: BALSM 10147-3 10ULX Instrument ID: V6
Misc: V6 CH09 5ULIS ID# UCC-10/7-QA2 4.08G/10ML 100991

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911012 12:59

Operator ID: KERYLYNN
Quant Time : 911012 20:50
Injected at: 911012 20:23

Operator ID: ERYLYNN Quant Rev: 7 Quant Time: 911012 10:10
Output File: MS941::07 Injected at: 911012 2:23
Data File: MS941::D6 Dilution Factor: 1.00000
Name: BXLFM 10:47-3 10ULY Instrument ID: V6
Misc: V6 E+09 PULIS 10# UCC-10/7-OA2 4.98G/10ML 101991

LIB File: M:SIOA::MT
Title: HSL VOLATILES: 75m x .53mm: DMA24 V6 5°CO/ENSECO
Last Calibration: 910814 09:37 Last Ocal Time: 911012 12:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.30	128.0	96769	50.00	UG/L	72
18)	CS15 D4-1,2-dichloroethane	8.33	65.0	13472	3.71	UG/L	88
19)	*C110 1,4-Difluorobenzene	9.20	114.0	522175	50.00	UG/L	100
21)	C115 1,1,1-Trichloroethane	7.77	97.0	93513	14.16	UG/L	89
22)	C120 Carbon Tetrachloride	7.77	117.0	11120	2.26	UG/L	98
24)	C150 Trichloroethene	9.72	130.0	28333	6.45	UG/L	95
30)	C160 1,1,2-Trichloroethane	13.30	97.0	4783	1.57	UG/L	69
33)	*C120 D5-Chlorobenzene	16.40	117.0	408818M	50.00	UG/L	100
34)	CS05 D8-Toluene	12.52	98.0	48403	5.01	UG/L	99
36)	C230 Toluene	12.67	92.0	37046	5.22	UG/L	95
38)	C220 Tetrachloroethene	14.07	164.0	1996	.575	UG/L	70
40)	C240 Ethylbenzene	16.87	106.0	308420	74.54	UG/L	97
41)	CXXX Xylenes (p)	16.87	106.0	308420	60.92	UG/L	95
42)	CXXX Xylenes (o)	18.44	106.0	~~354130~~	~~71.85~~	UG/L	97
43)	C245 Styrene	18.43	104.0	18263	2.14	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane	20.92	83.0	1638	.320	UG/L	61
45)	CS10 Bromofluorobenzene	20.06	95.0	21227	3.47	UG/L	84
49)	C250 Xylenes (total)	17.23	106.0	1819756M	375.50	UG/L	94

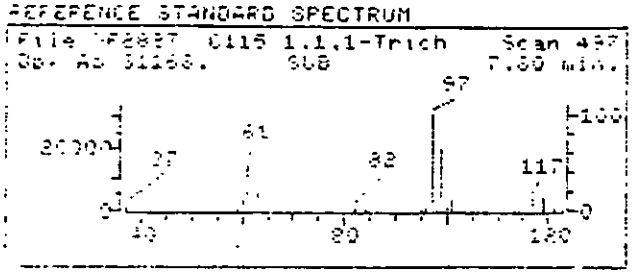
285 36

* Compound is ISTD

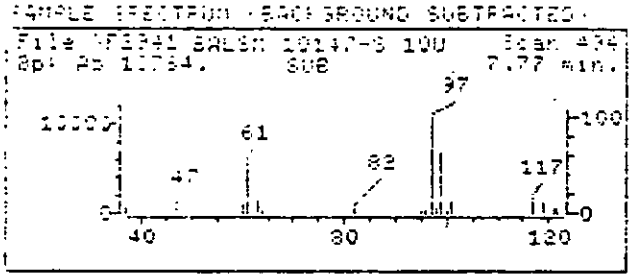
101991

000050

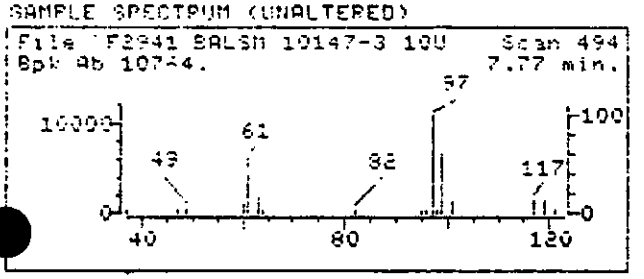
REFERENCE STANDARD SPECTRUM

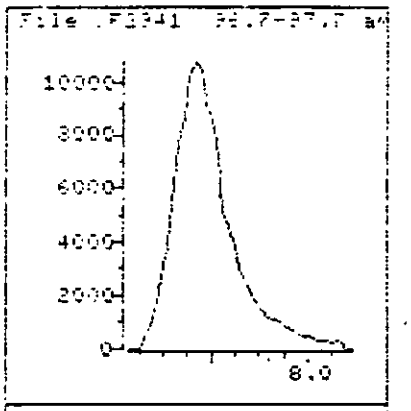


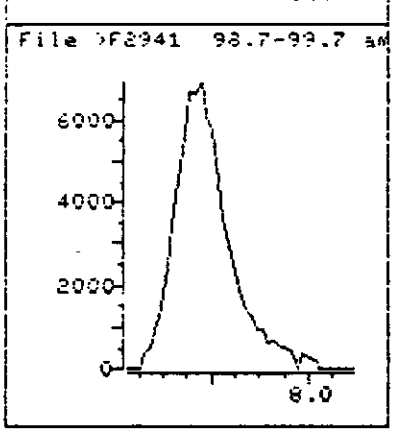
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



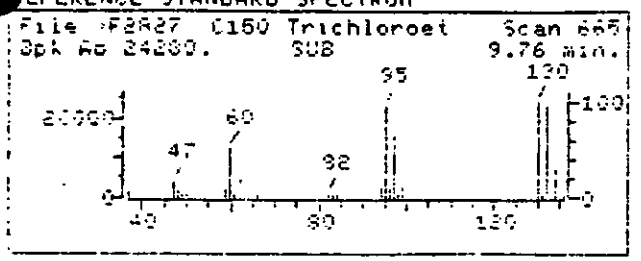




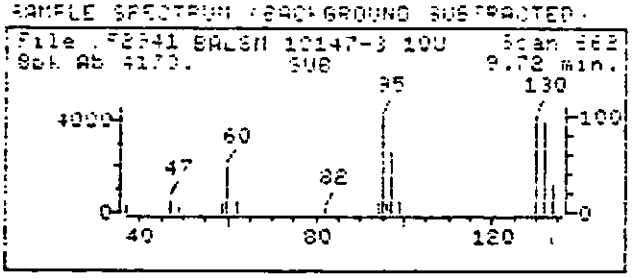
Data File: >F2941::D6 Quant Output File: ^F2941::D7
Name: BALSM 10147-3 10ULX Instrument ID: V6
Misc: V6 CH09 5ULIS ID# UCC-10/7-QA2 4.08G/10ML 100991
Quant Time: 911012 20:50 Quant ID File: MOBID6::MT
Injected at: 911012 20:23 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 21
Compound Name : C115 1,1,1-Trichloroethane
Scan Number : 494
Retention Time: 7.77 min.
Quant Ion : 97.0
Area : 83513
Concentration : 14.16 UG/L
q-value : 89

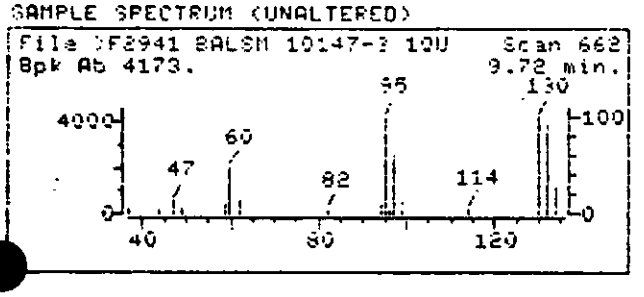
EFERENCE STANDARD SPECTRUM

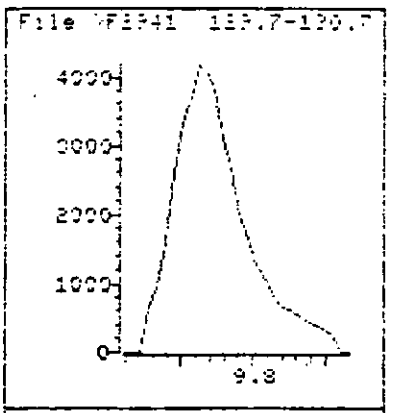


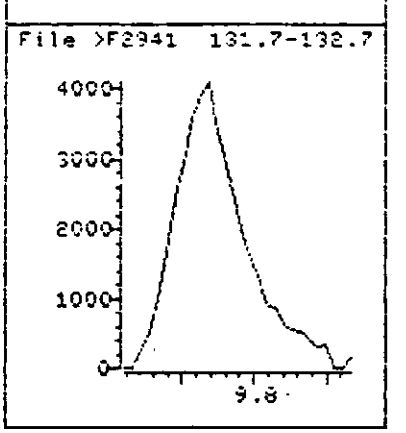
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

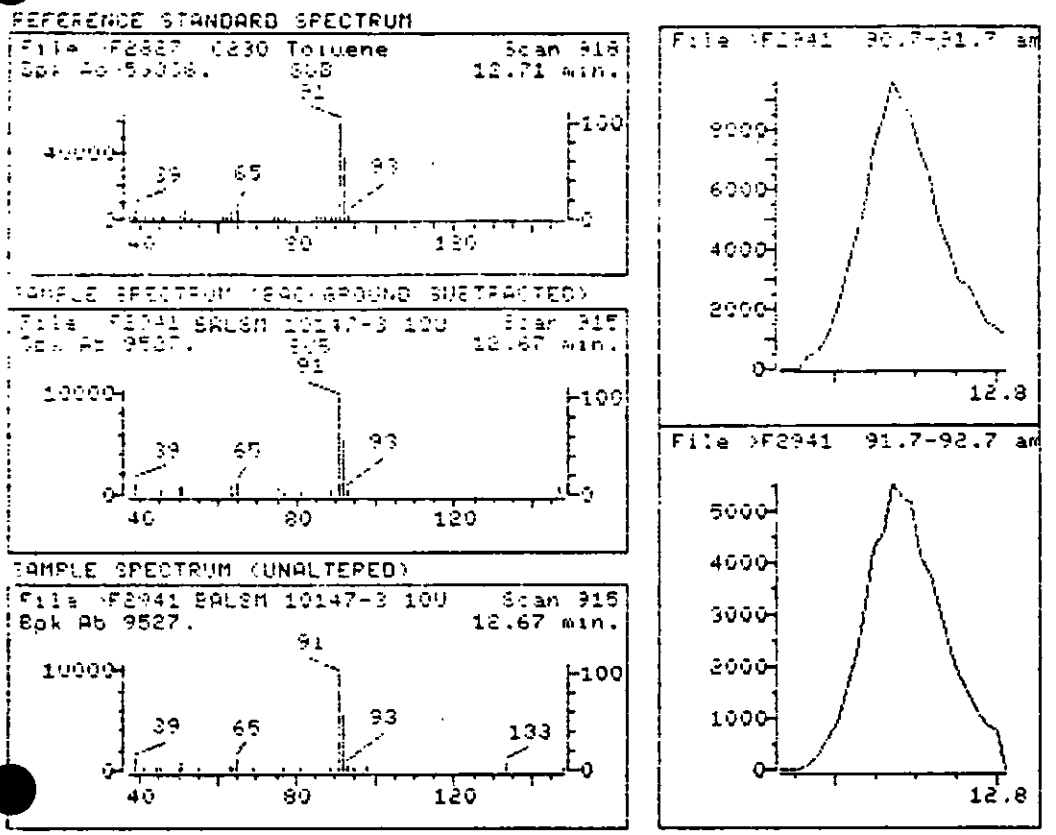






Data File: >F2941::D6 Quant Output File: ^F2941::D7
Name: BALSM 10147-3 10ULX Instrument ID: V6
Misc: V6 CH09 5ULIS ID# UCC-10/7-QA2 4.08G/10ML 100991
Quant Time: 911012 20:50 Quant ID File: MOBID6::MT
Injected at: 911012 20:23 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

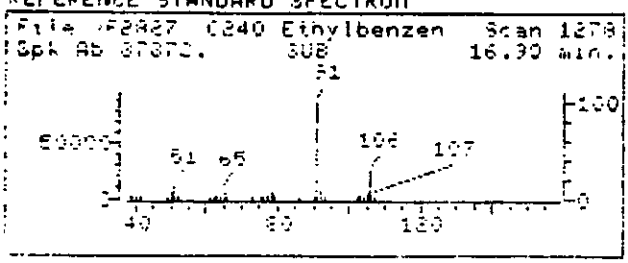
Compound No : 24
Compound Name : C150 Trichloroethene
Scan Number : 662
Retention Time: 9.72 min.
Quant Ion : 130.0
Area : 28333
Concentration : 6.45 UG/L
q-value : 95



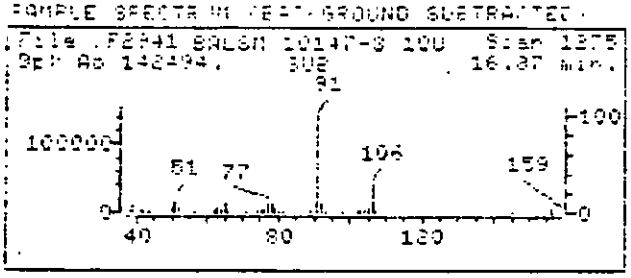
Data File: >F2941::D6 Quant Output File: ^F2941::D7
Name: BALSM 10147-3 10ULX Instrument ID: V6
Misc: V6 CH09 5ULIS ID# UCC-10/7-QA2 4.08G/10ML 100991
Quant Time: 911012 20:50 Quant ID File: MOBID6::MT
Injected at: 911012 20:23 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 36
Compound Name : C230 Toluene
Scan Number : 915
Retention Time: 12.67 min.
Quant Ion : 92.0
Area : 37046
Concentration : 5.16 UG/L
q-value : 95

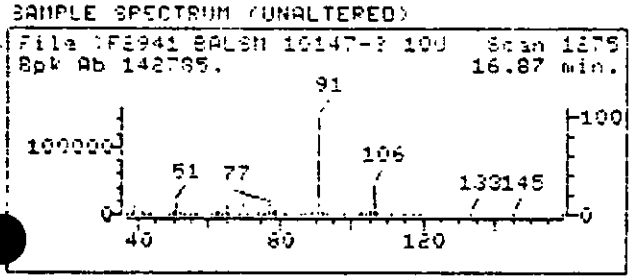
REFERENCE STANDARD SPECTRUM

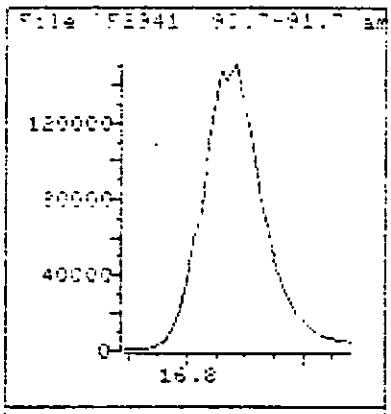


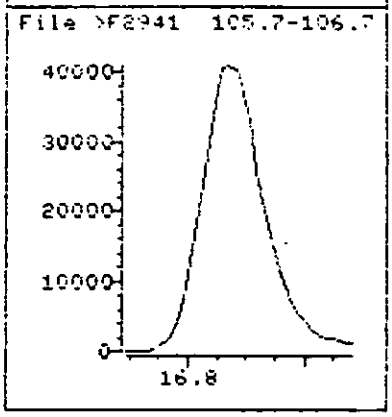
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



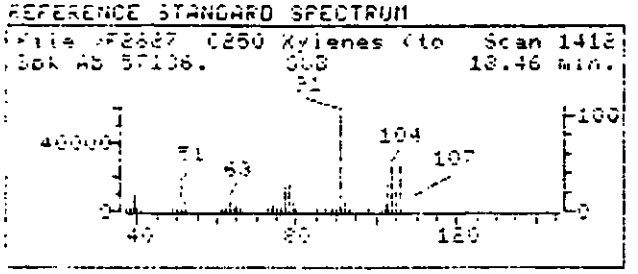




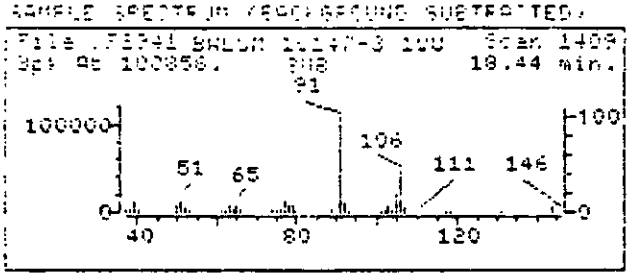
Data File: >F2941::D6 Quant Output File: ^F2941::D7
Name: BALSM 10147-3 10ULX Instrument ID: V6
Misc: V6 CH09 5ULIS ID# UCC-10/7-QA2 4.08G/10ML 100991
Quant Time: 911012 20:50 Quant ID File: MOBID6::MT
Injected at: 911012 20:23 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 40
Compound Name : C240 Ethylbenzene
Scan Number : 1275
Retention Time: 16.87 min.
Quant Ion : 106.0
Area : 308420
Concentration : 73.66 UG/L
q-value : 97

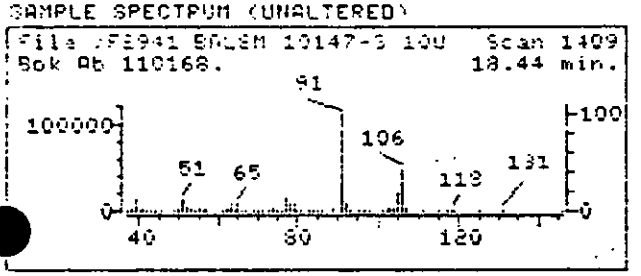
REFERENCE STANDARD SPECTRUM

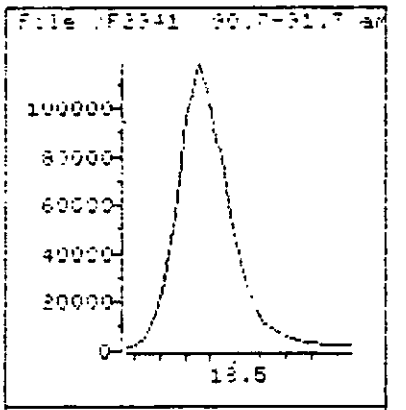


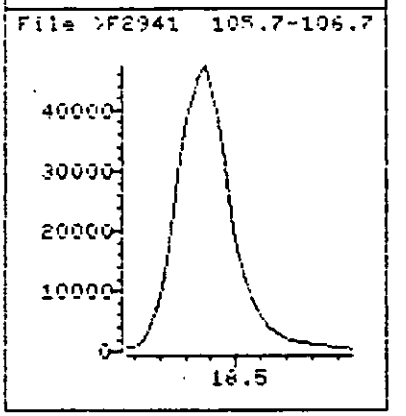
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2941::D6 Quant Output File: ^F2941::D7
Name: BALSM 10147-3 10ULX Instrument ID: V6
Misc: V6 CH09 50LIS ID# UCC-10/7-QA2 4.08G/10ML 100991
Quant Time: 911012 20:50 Quant ID File: MOBID6::MT
Injected at: 911012 20:23 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1409
Retention Time: 18.44 min.
Quant Ion : 106.0
Area : 350233
Concentration : 71.41 UG/L
q-value : 94

③ 101491

Data Reduced by : _____ Date: 10/15/91 101491

Data Reviewed by : _____ Date: 10-22-91

Data File: NF294L

Enseco TIC Report (page 1)

Sample: BHLSM 10147-3 100LX Run Factor: 1250.

Conditions: 16 CH19 SULIS ID# UCC-1047-0A2 Analyst: MERYLANN

#	Scan	O	C	Concentration In Sample (UG/KG)	CAS #	Compound
①	1326.			50000.	111-84-2	~~Nonane~~ C9H20 ISOMER
②	1458.			~~26000.~~	15869-94-0	Octane, 3,6-dimethyl- UNK ~~OCTANE~~ OCTANE ③ 101591
③	1476.			32000.	1678-92-8	~~Cyclohexane, propyl~~ ~~C9H18 ISOMER~~ substituted cyclohexane
④	1494.			53000.	53966-53-3	~~3-Nonene, 2-methyl~~ unknown hydrocarbon
⑤	~~1463~~			~~2000.~~	611-14-3	Benzene, 1-ethyl-2-methyl- C9H12 ISOMER
⑥	1680.			30000.	95-63-6	Benzene, ~~1,2,~~4-trimethyl- ~~ISOMER~~ ~~C9H12 ISOMER~~
⑦	1699.			140000.	124-18-5	~~Decane UNK ALKANE~~ C10H22 isomer
⑧	1730.			50000.	2972-05-6	Cyclobutanone, oxime unknown
⑨	1784.			110000.	95-63-6	Benzene, ~~1,2,4-~~trimethyl- ~~C9H12 ISOMER~~
⑩	~~1854.~~			~~22000.~~	1678-93-9	Cyclohexane, butyl- UNK
⑪	1905.			35000.	622-96-8	Benzene, ~~1~~-ethyl-~~4~~-methyl- ~~C9H12~~ ISOMER
⑫	1977.			68000.	1074-43-7	Benzene, ~~1~~-methyl-~~4~~-propyl- ~~C10H14~~ ISOMER
⑬	1998.			69000.	1758-88-9	~~Benzene, 2-ethyl-1,4-dimethyl~~ ~~C10H14~~ ISOMER C4-benzene isomer

Data File: >F2941

Enseco TIC Report (page 2)

Concentration = Area(TIC) * Conc.(IS) / Area(IS)

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	96	0	3	17.47	1.065	1033764.	137236.	41.032
2	86	2	3	19.01	1.159	523743.	46020.	20.788
3	75	19	3	19.22	1.172	664804.	64699.	26.387
4	96	44	3	20.60	1.256	1086957.	110336.	43.143
5	95	17	3	21.29	1.298	588183.	74710.	23.346
6	91	27	3	21.61	1.317	618148.	85462.	24.535
7	94	0	3	21.83	1.331	2845272.	386974.	112.934
8	36	26	3	22.19	1.353	1022526.	96845.	40.586
9	83	46	3	22.82	1.391	2196302.	257971.	87.175
10	79	10	3	23.64	1.441	454148.	66442.	18.026
11	96	13	3	24.24	1.478	726762.	93706.	28.847
12	76	39	3	25.09	1.529	1385483.	132330.	54.992
13	91	31	3	25.33	1.544	1415522.	117053.	56.185

IC Internal Standard Report

ata File: >F2941

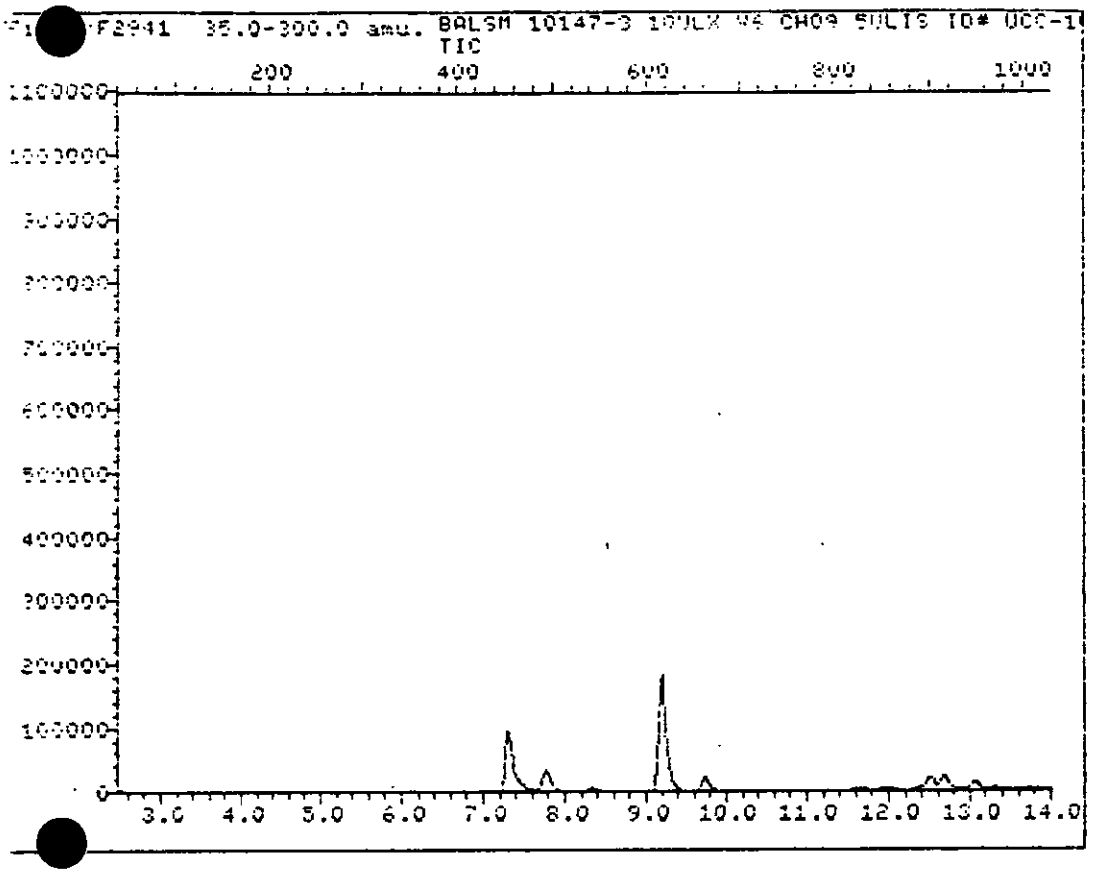
ximum seperation of PIC and Quan ion peaks: 7.
inimum PIC peak area as % of est. PIC area: 50.
aximum PIC peak area as % of est. PIC area: 200.

#	Name		Concentration		Flag	
Q scan	Q area	PQratio	PIC scan	PIC area	% Est. PIC	
1	C101 Bromochlorometh	50.000	UG/L	Ok		
454.	96769.	6.987	454.	e87344.	101.657	
2	C110 1,4-Difluoroben	50.000	UG/L	Ok		
617.	522175.	2.300	617.	1196495.	99.635	
3	C120 D5-Chlorobenzen	50.000	UG/L	Ok		
1235.	413740.	3.615	1235.	1259704.	84.229	

eleting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 19
Number of peaks remaining: 19

eleting target compounds from INT file: VDIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of PIC peak from targets: 40. %
Number of peaks: 19
Number of peaks remaining: 13

eleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 13
aximum number of peaks > number of peaks.


F2941 35.0-300.0 amu. BALSM 10147-3 10ULX V6 CH09 5ULIS ID# UCC-1
TIC
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400
600
800
1000
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900000
800000
700000
600000
500000
400000
300000
200000
100000
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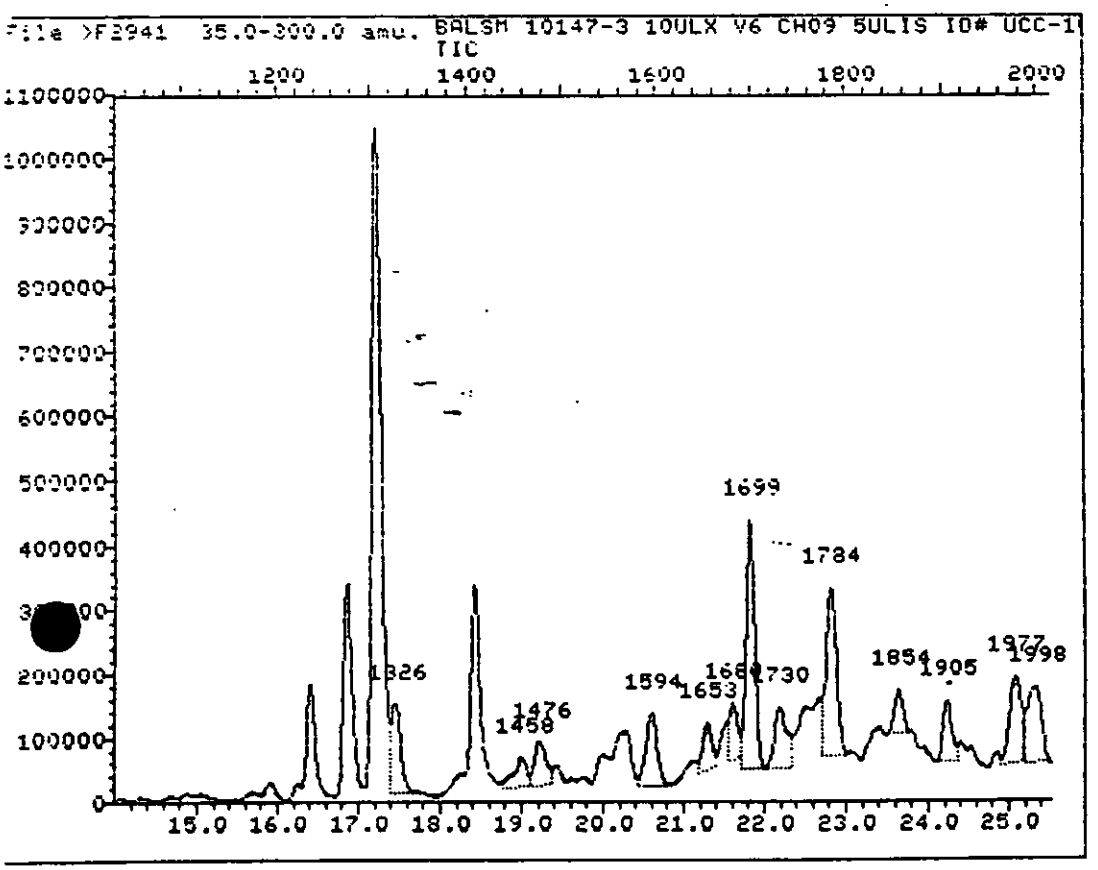
14.0


File >F2941 35.0-300.0 amu. BALSM 10147-3 10ULX V6 CH09 5ULIS ID# UCC-1
TIC
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1400
1600
1800
2000
1100000
1000000
900000
800000
700000
600000
500000
400000
200000
100000
0
1699
1784
1326
1594
1653
1730
1854
1905
1977
1998
1476
1458
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0

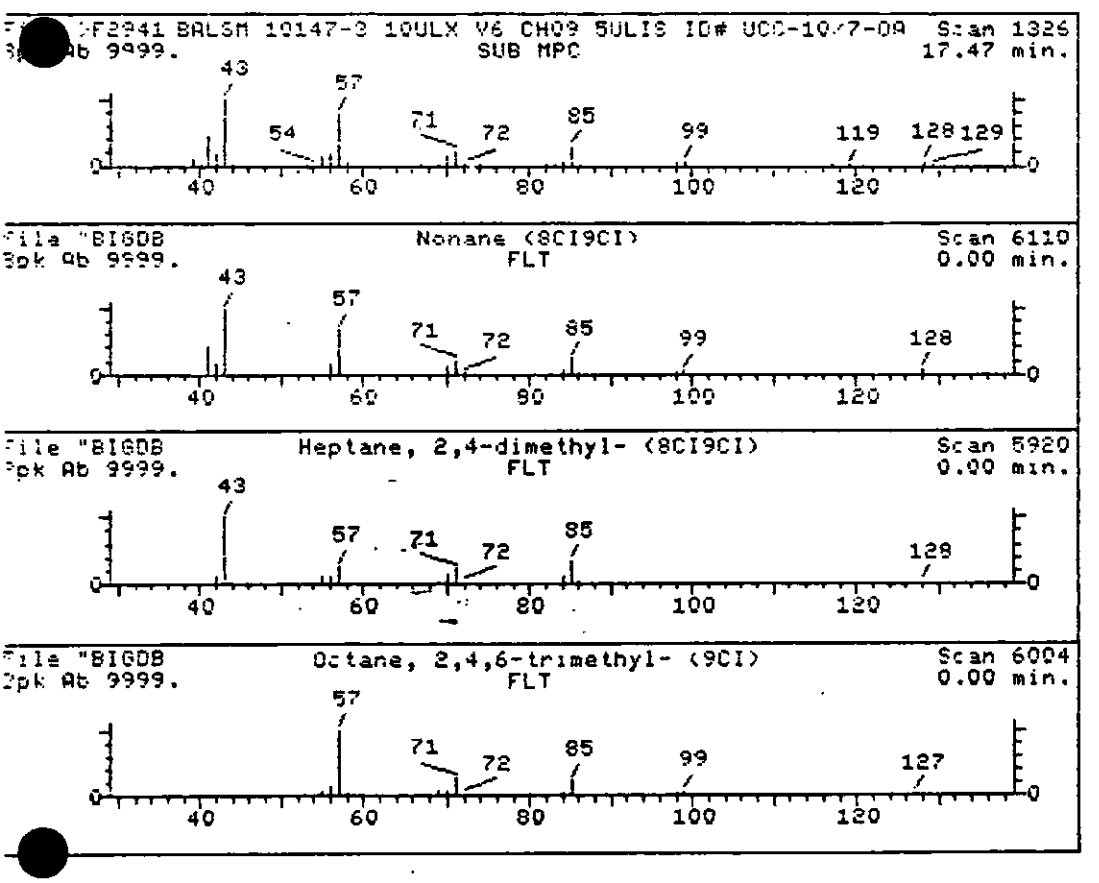
C9H20 Isomer

TIC NUMBER: 1

1.	Nonane (8CI9CI)	128 C9H20
2.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20
3.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
4.	Heptane, 3,5-dimethyl- (8CI9CI)	128 C9H20
5.	Heptane, 2,5-dimethyl- (8CI9CI)	128 C9H20
6.	3-Hexanone, 2,4-dimethyl- (8CI9CI)	128 C8H16O

Sample file: F2941 Spectrum #: 1326
Search speed: 2 Tilting option: S No. of ion ranges searched: 1

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	F_IV
1.	96*	111842	6110	"BIGDB	88	8	0	0	89	0	72	96
2.	63*	2213232	5920	"BIGDB	60	32	0	0	79	46	20	73
3.	60	62016379	6004	"BIGDB	39	46	2	0	77	12	30	13
4.	57*	926829	8724	"BIGDB	37	45	0	0	55	33	22	42
5.	52*	2216300	8730	"BIGDB	35	51	0	0	52	33	20	36
6.	52*	18641708	6120	"BIGDB	29	56	1	0	75	19	20	16



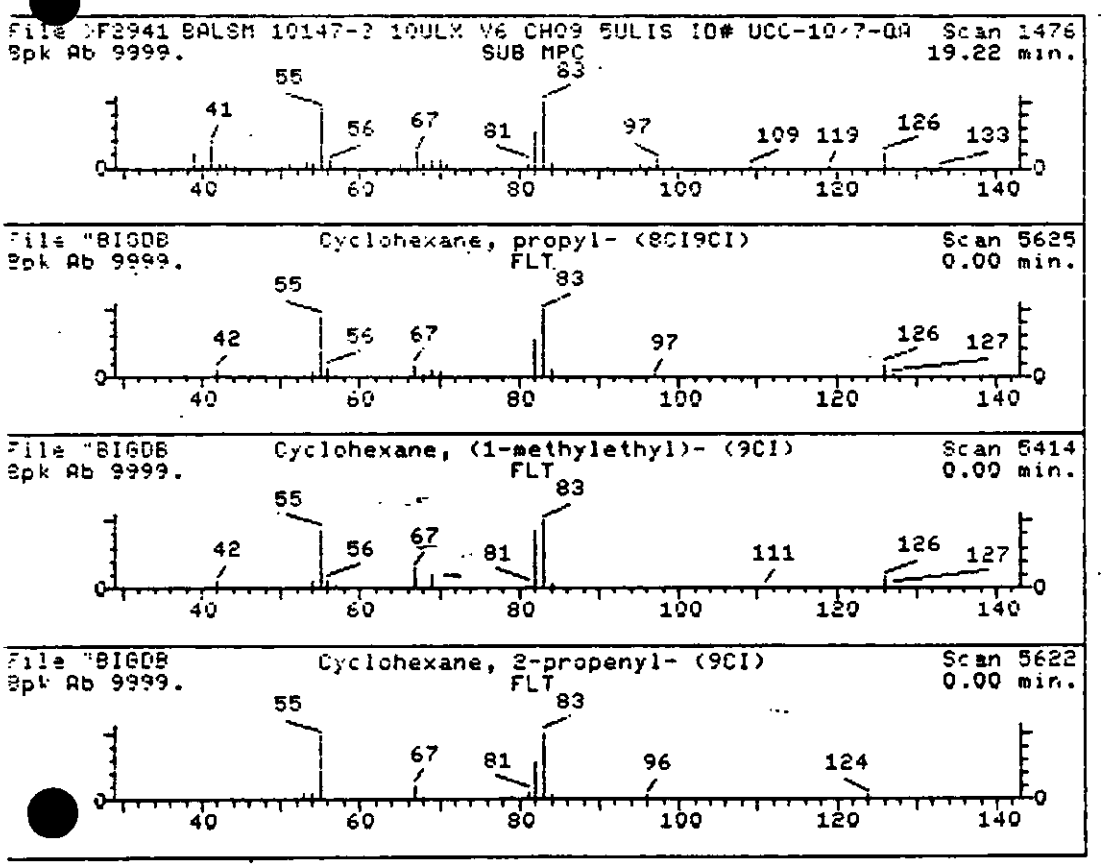
C_9H_{18} substituted cyclohexane ISOMER

TIC NUMBER:3

1.	Cyclohexane, propyl- (8CI9CI)	126	C_9H_{18}
2.	Cyclohexane, (1-methylethyl)- (9CI)	126	C_9H_{18}
3.	Cyclohexane, 2-propenyl- (9CI)	124	C_9H_{16}
4.	2-Hexene, 4,4,5-trimethyl- (9CI)	126	C_9H_{18}
5.	Cyclohexane, octyl- (9CI)	196	$C_{14}H_{28}$
6.	Cyclopentane, 1-ethyl-1-methyl- (8CI9CI)	112	C_8H_{16}

Sample file: >F2941 Spectrum #: 1476
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	75*	1678928	5625	"BIGDB	54	43	0	0	74	19	35	66
2.	45*	696297	5414	"BIGDB	51	52	1	0	63	39	17	34
3.	43	2114423	5622	"BIGDB	54	45	2	0	93	23	17	14
4.	40*	55702619	5569	"BIGDB	38	45	0	0	100	47	12	44
5.	31	1795159	5581	"BIGDB	72	36	3	0	100	35	12	14
6.	29	16747505	5582	"BIGDB	60	44	2	0	78	38	10	14



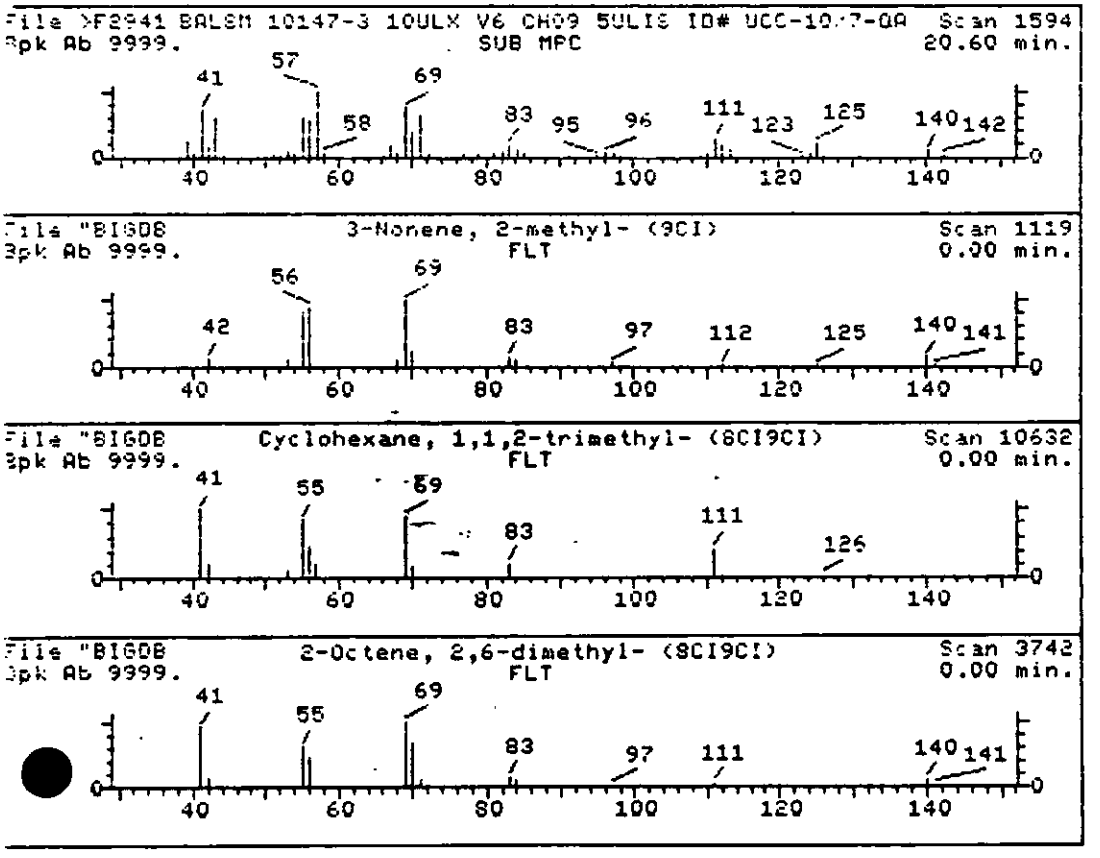
unknown hydrocarbon

TIC NUMBER:4

1.	3-Nonene, 2-methyl- (9CI)	140 C10H20
2.	Cyclohexane, 1,1,2-trimethyl- (8CI9CI)	126 C9H18
3.	2-Octene, 2,6-dimethyl- (8CI9CI)	140 C10H20
4.	Cyclopentane, 1,1,3,4-tetramethyl-, cis- (9CI)	126 C9H18
5.	2-Octene, 2,6-dimethyl- (8CI9CI)	140 C10H20
6.	1-Octene, 3,7-dimethyl- (8CI9CI)	140 C10H20

Sample file: >F2941 Spectrum #: 1594
Search speed: 2 Tilting option: S No. of ion ranges searched: 50

	Prob.	CAS #	CON #	, PDOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	55*	53966533	1119	"BIGDB	63	43	1	0	63	44	18	60
2.	47*	7094260	10632	"BIGDB	59	49	0	0	64	52	16	72
3.	42*	4057425	3742	"BIGDB	49	55	1	0	60	40	14	29
4.	41*	53907601	10646	"BIGDB	52	56	1	0	54	41	14	35
5.	40*	6874288	3743	"BIGDB	52	56	2	0	65	39	14	27
6.	38*	4984014	3660	"BIGDB	50	43	0	0	49	55	11	60

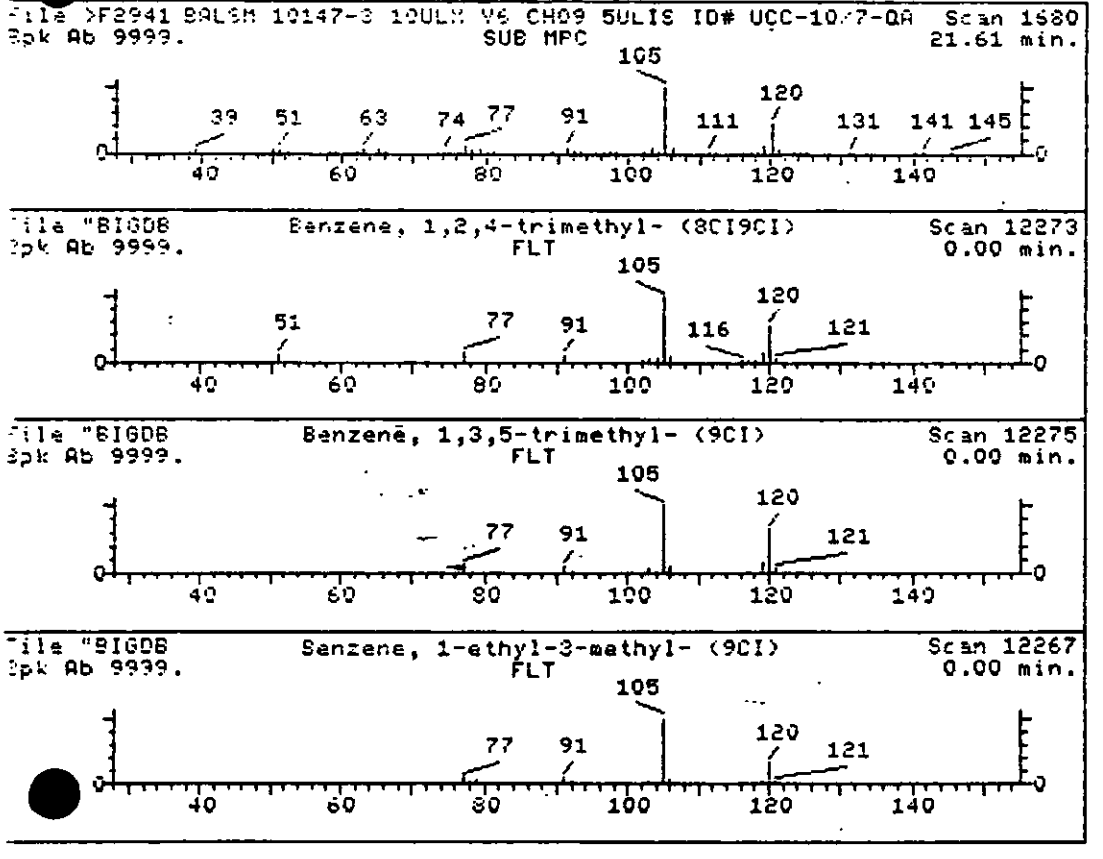


TIC NUMBER:6

1.	Benzene, ~~1,2,4~~-trimethyl- (8CI9CI) isomer	120 C9H12
2.	Benzene, 1,3,5-trimethyl- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
5.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
6.	Benzene, (1-methylethyl)- (9CI)	120 C9H12

Sample file: >F2941 Spectrum #: 1680
Search speed: 2 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	95636	12273	"BIGDB	77	18	0	0	53	27	57	93
2.	89*	108678	12275	"BIGDB	72	16	2	1	70	3	65	56
3.	84*	620144	12267	"BIGDB	68	19	2	0	100	8	55	60
4.	83*	622968	12268	"BIGDB	64	21	0	0	83	22	47	83
5.	73*	611143	12266	"BIGDB	64	21	0	-2	70	22	32	65
6.	59*	98828	12259	"BIGDB	49	38	2	0	87	22	27	30



UNK
ALKANE

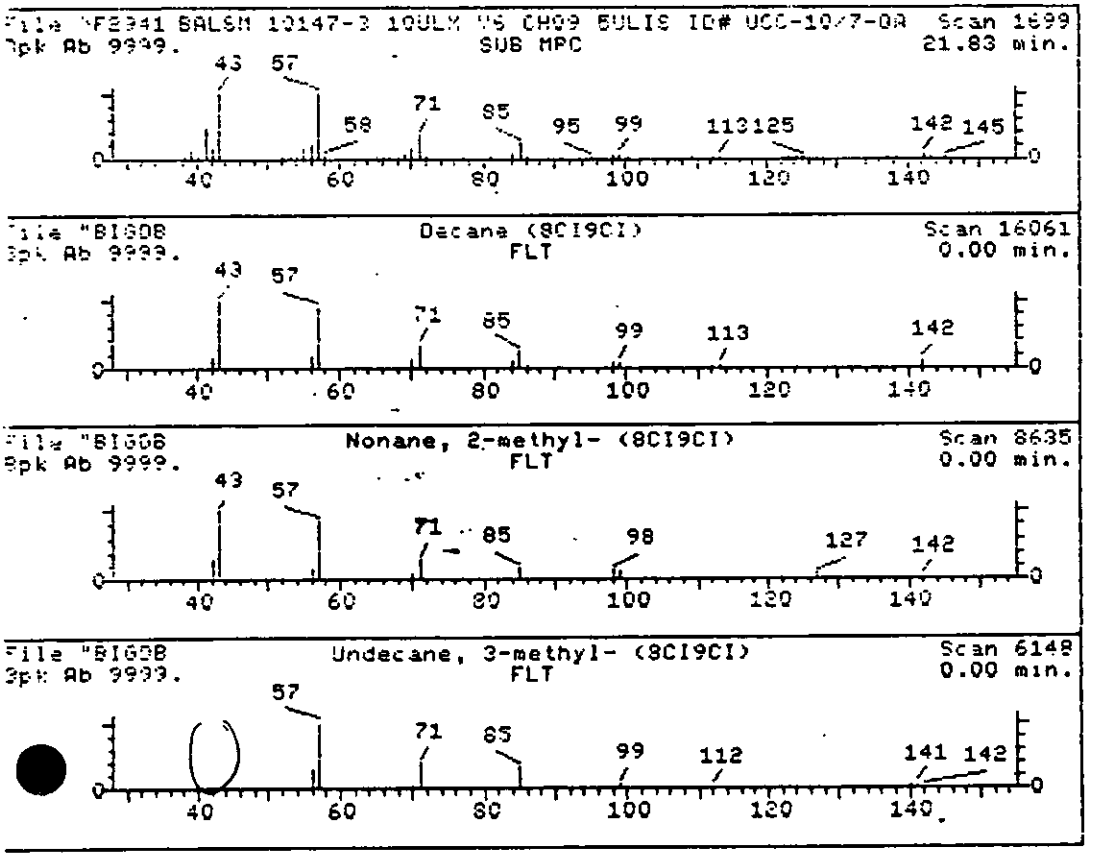
TIC NUMBER:2

1. Decane (8CI9CI)
2. Nonane, 2-methyl- (8CI9CI)
3. Undecane, 3-methyl- (8CI9CI)
4. Octane, 2,4,6-trimethyl- (9CI)
5. Decane, 2,5,9-trimethyl- (9CI)
6. Octane, 2,7-dimethyl- (8CI9CI)

142 C10H22 isomer
142 C10H22 RI 10-22-91
170 C12H26
156 C11H24
184 C13H28
142 C10H22

Sample file: >F2941 Spectrum #: 1699
Search speed: 2 Tilting option: S No. of ion ranges searched: 93

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	124185	16061	"BIGDB	91	9	1	2	90	0	72	92
2.	70*	871830	8635	"BIGDB	42	54	3	0	99	10	42	13
3.	70	1002433	6148	"BIGDB	47	41	2	0	68	8	42	16
4.	67	62016379	6004	"BIGDB	62	23	2	0	100	11	34	22
5.	66	62108229	3927	"BIGDB	63	28	0	0	100	17	31	40
6.	60*	1072168	8726	"BIGDB	38	57	3	0	99	13	30	13



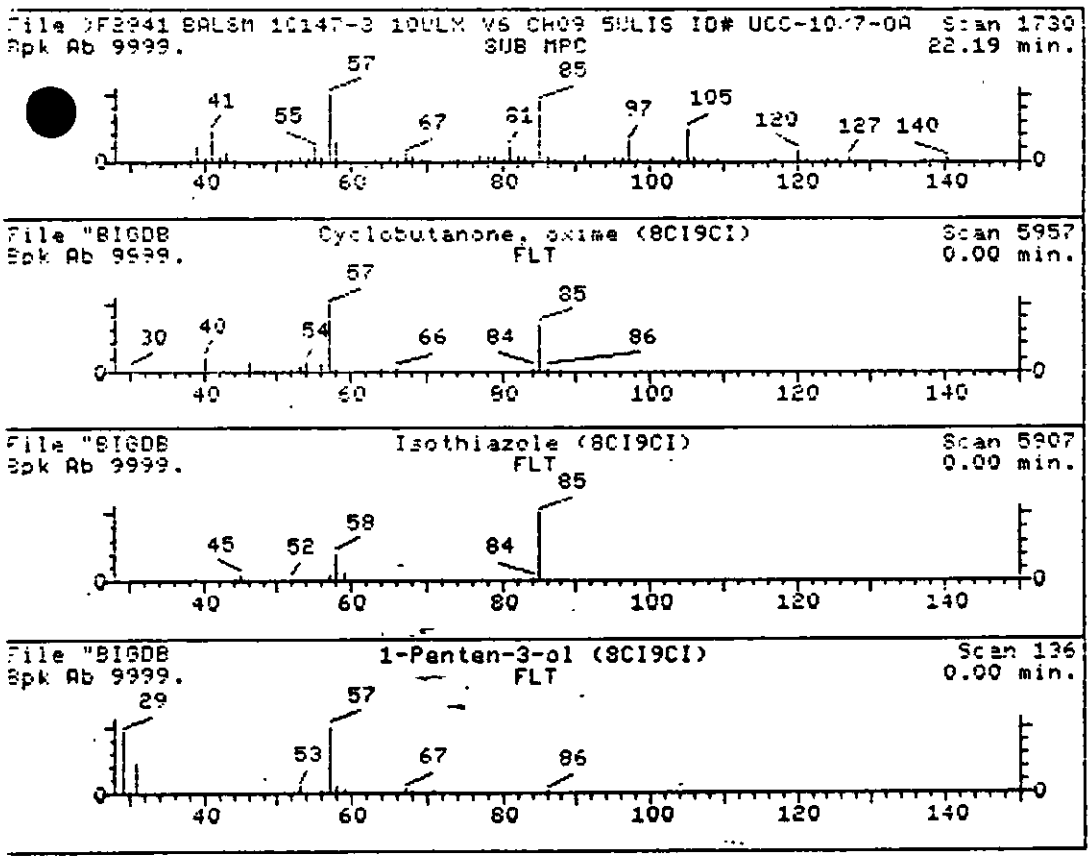
UNK

TIC NUMBER:8

1.	Cyclobutanone, oxime (8CI9CI)	89 C4H7NO
2.	Isothiazole (8CI9CI)	85 C3H3NS
3.	1-Penten-3-ol (8CI9CI)	86 C5H10O
4.	2-Pyrrolidinone (8CI9CI)	85 C4H7NO

Sample file: >F2941 Spectrum #: 1730
Search speed: 2 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	36*	2972056	5957	"BIGDB	21	75	2	0	100	26	14	13
2.	20*	288164	5907	"BIGDB	26	29	2	0	67	54	5	14
3.	15*	616251	136	"BIGDB	26	71	2	0	100	57	3	14
4.	15*	616455	5953	"BIGDB	23	68	2	0	88	60	3	13



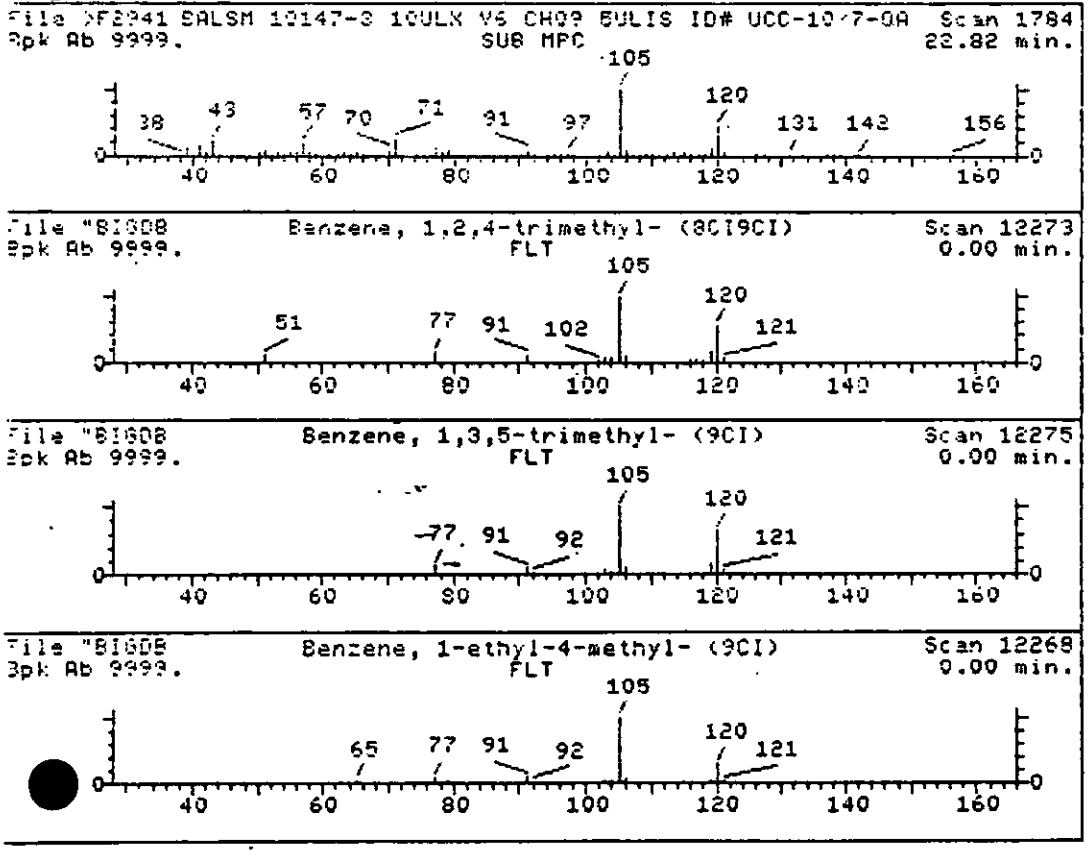
C9H12 ISOMER

TIC number:9

1.	Benzene, ~~1,2,~~4-trimethyl- (8CI,9CI) isomer	120 C9H12
2.	Benzene, 1,3,5-trimethyl- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
4.	Benzene, 1,2,3-trimethyl- (8CI,9CI)	120 C9H12
5.	Benzene, (1-methylethyl)- (9CI)	120 C9H12
6.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)- (9CI)	120 C9H12

Sample file: >F2941 Spectrum #: 1784
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	P_IV
1.	83*	95636	12273	"BIGDB	78	17	0	0	63	46	40	93
2.	76*	108678	12275	"BIGDB	78	10	2	0	69	23	41	72
3.	68*	622968	12268	"BIGDB	64	21	1	0	84	39	28	72
4.	62*	526738	12280	"BIGDB	74	26	1	0	63	46	20	72
5.	57*	98828	12259	"BIGDB	56	31	0	0	72	46	14	67
6.	30*	3141024	12286	"BIGDB	53	51	2	0	56	46	10	28



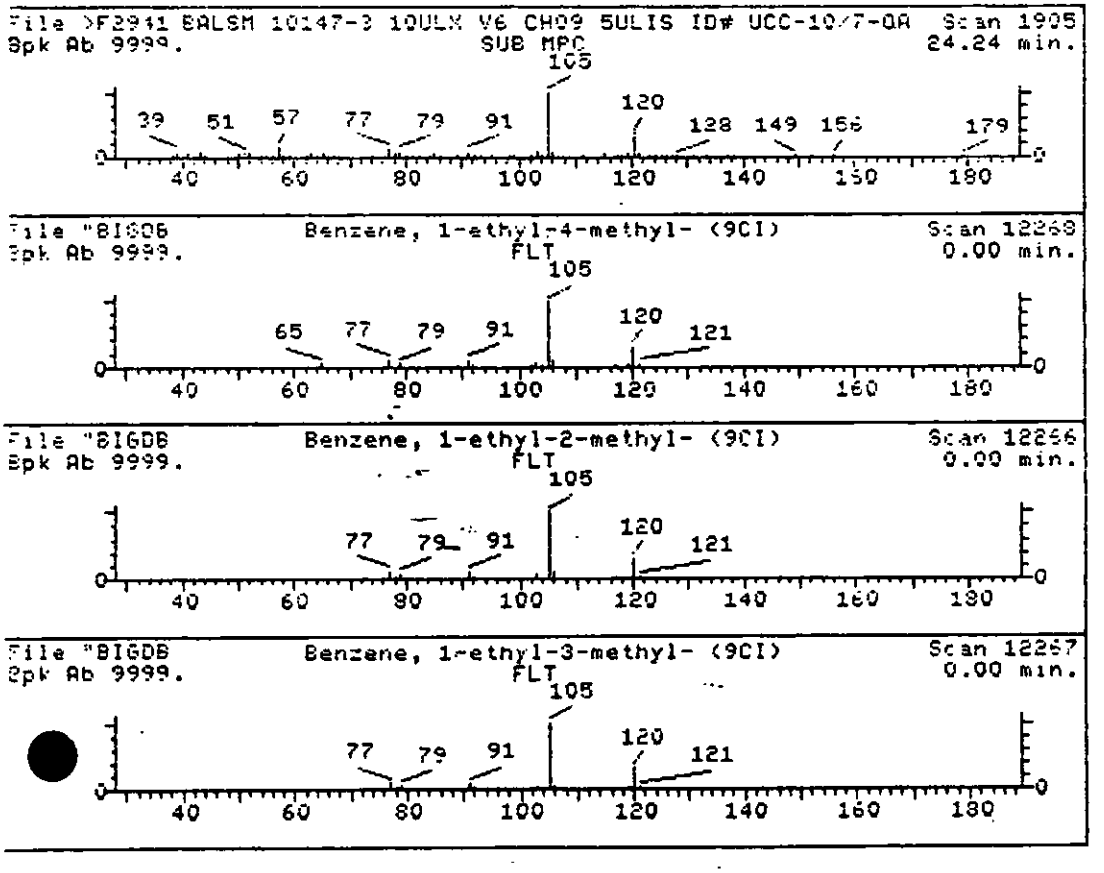
C9H12 ISOMER

TIC NUMBER: 11

1.	Benzene, 1-ethyl-4-methyl- (9CI) isomer	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, 1,2,3-trimethyl- (8CI,9CI)	120	C9H12
5.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
6.	Benzene, 1,3,5-trimethyl- (9CI)	120	C9H12

Sample File: >F2941 Spectrum #: 1905
Search speed: 2 Tilting option: S No. of ion ranges searched: 61

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	622968	12268	"BIGDB	78	7	0	0	90	13	64	97
2.	94*	611143	12266	"BIGDB	69	16	0	0	79	13	64	94
3.	92*	620144	12267	"BIGDB	73	14	1	0	82	13	64	92
4.	79*	526738	12280	"BIGDB	69	31	0	0	51	41	33	86
5.	79*	99828	12259	"BIGDB	60	27	1	0	84	13	43	60
6.	50*	108678	12275	"BIGDB	57	31	1	0	51	41	17	53



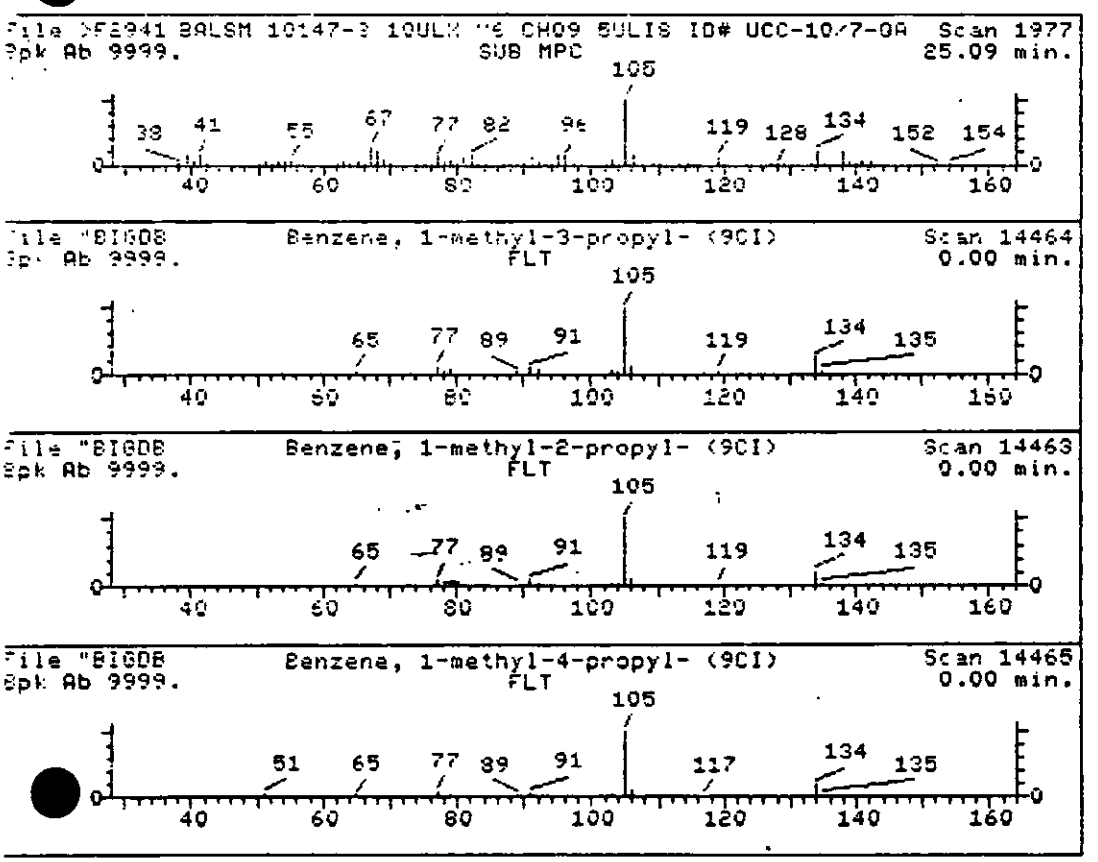
C10H14 ISOMER

FILE NUMBER: 12

1.	Benzene, γ-methyl-β-propyl- (9CI) (Isomer)	134 C10H14
2.	Benzene, 1-methyl-2-propyl- (9CI)	134 C10H14
3.	Benzene, 1-methyl-4-propyl- (9CI)	134 C10H14
4.	Benzene, (1-methylpropyl)- (9CI)	134 C10H14
5.	Benzene, (1,2,2-trimethyl-3-butenyl)- (9CI)	174 C13H18
6.	2,4-Heptadien-6-ynal, (E,E)- (8CI,9CI)	106 C7H6O

Sample file: >F2941 Spectrum #: 1977
Search speed: 2 Tilting option: S No. of ion ranges searched: 49

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	76*	1074437	14464	"BIGDB	70	17	1	0	92	39	37	80
2.	69*	1074175	14463	"BIGDB	65	20	1	0	100	40	28	73
3.	68*	1074551	14465	"BIGDB	62	21	1	0	89	40	28	72
4.	53*	135988	14459	"BIGDB	58	28	2	0	80	40	19	44
5.	20	61142174	9915	"BIGDB	37	49	2	0	100	52	5	12
6.	20*	7200046	9911	"BIGDB	29	59	2	0	69	52	5	14



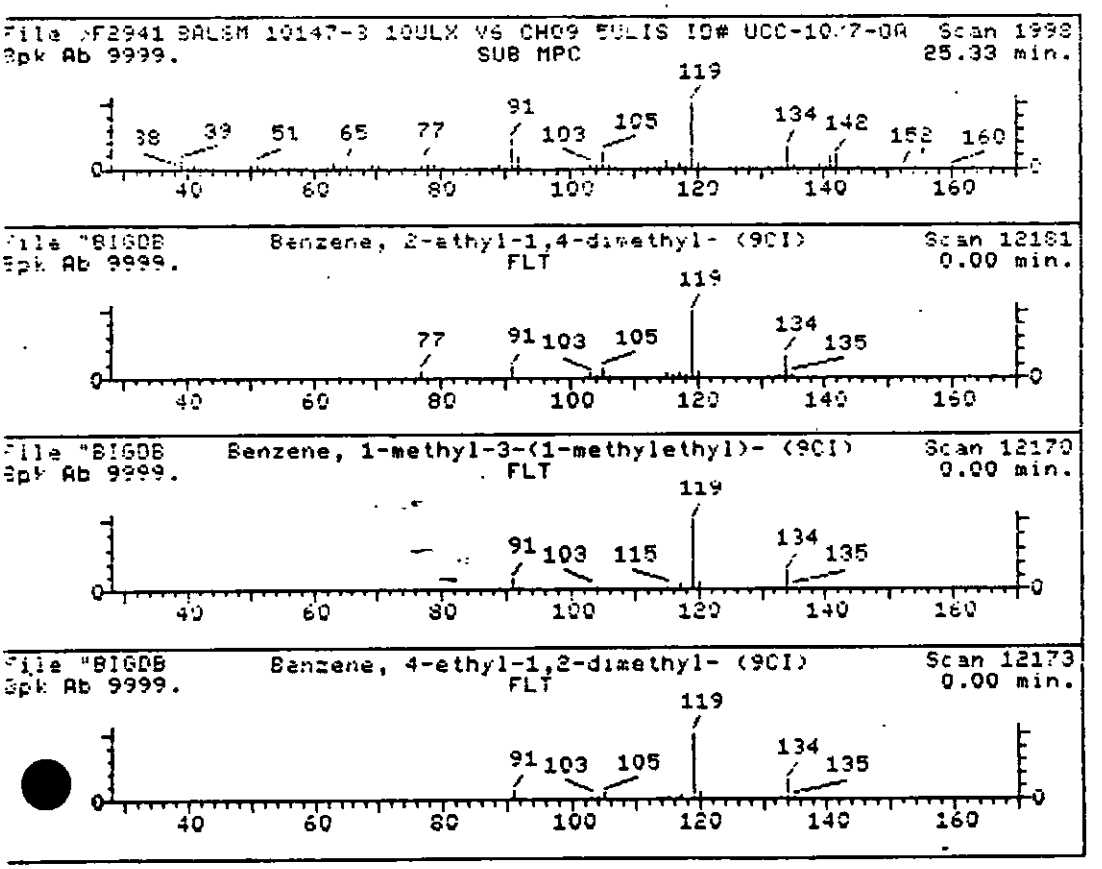
C4 Benzene
~~C10H14~~
ISOMER
10-22-91

FIC NUMBER:13

1.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134 C10H14
2.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14
3.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134 C10H14
4.	Benzene, 1-ethyl-2,3-dimethyl- (9CI)	134 C10H14
5.	Benzene, 1-methyl-2-(1-methylethyl)- (9CI)	134 C10H14
6.	Benzene, methyl(1-methylethyl)- (9CI)	134 C10H14

Sample file: >F2941 Spectrum #: 1998
Search speed: 2 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	1758889	12181	"BIGDB	79	15	0	0	91	31	50	95
2.	78*	535773	12170	"BIGDB	67	22	0	0	97	35	40	80
3.	77*	934805	12173	"BIGDB	66	27	0	0	88	34	32	78
4.	75*	933982	12172	"BIGDB	72	19	1	0	100	31	32	76
5.	70*	527844	12169	"BIGDB	72	20	1	0	98	32	32	73
6.	63*	25155151	12177	"BIGDB	61	29	2	0	99	35	22	48



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-7-QA2DL

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-03DL

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B3028

Level: (low/med) MED Date Received: 10/08/91

% Moisture: not dec. 10 Date Analyzed: 10/16/91

Column: (pack/cap) CAP Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	140000	U
74-83-9	Bromomethane	140000	U
75-01-4	Vinyl Chloride	140000	U
75-00-3	Chloroethane	140000	U
75-09-2	Methylene Chloride	68000	U
67-64-1	Acetone	140000	U
75-15-0	Carbon Disulfide	68000	U
75-35-4	1,1-Dichloroethene	68000	U
75-34-3	1,1-Dichloroethane	68000	U
540-59-0	1,2-Dichloroethene (total)	68000	U
67-66-3	Chloroform	68000	U
107-06-2	1,2-Dichloroethane	68000	U
78-93-3	2-Butanone	56000	BDJ
71-55-6	1,1,1-Trichloroethane	36000	BDJ
56-23-5	Carbon Tetrachloride	68000	U
108-05-4	Vinyl Acetate	140000	U
75-27-4	Bromodichloromethane	68000	U
78-87-5	1,2-Dichloropropane	68000	U
10061-01-5	cis-1,3-Dichloropropene	68000	U
79-01-6	Trichloroethene	68000	U
124-48-1	Dibromochloromethane	68000	U
79-00-5	1,1,2-Trichloroethane	68000	U
71-43-2	Benzene	68000	U
10061-02-6	trans-1,3-Dichloropropene	68000	U
110-75-8	2-Chloroethylvinylether	140000	U
75-25-2	Bromoform	68000	U
108-10-1	4-Methyl-2-Pentanone	140000	U
591-78-6	2-Hexanone	140000	U
127-18-4	Tetrachloroethene	68000	U
79-34-5	1,1,2,2-Tetrachloroethane	68000	U
108-88-3	Toluene	68000	U
108-90-7	Chlorobenzene	68000	U
100-41-4	Ethylbenzene	110000	D
100-42-5	Styrene	68000	U
1330-20-7	Xylene (total)	520000	D

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

10-7-QA2DL

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-03DL

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B3028

Level: (low/med) MED Date Received: 10/08/91

% Moisture: not dec. 10 Date Analyzed: 10/16/91

Column (pack/cap) CAP Dilution Factor: 100

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	17.70	73000	J
2.		UNKNOWN ALKANE	20.48	69000	J
3.		UNKNOWN ALKANE	22.12	390000	J
4.		UNKNOWN ALKANE	23.09	260000	J
5.		SUBSTITUTED CYCLOHEXANE	23.89	100000	J
6.		UNKNOWN	25.30	90000	J
7.		C4-BENZENE ISOMER	25.60	78000	J
8.		UNKNOWN ALKANE	26.33	320000	J

>B 3023

1,1 Cl_2 Ethen
1,1 Cl_2 Ethan
2 But
1,1,1 Cl_3 Ethan

Reduced by : DJV Date: 101691 Data File: >B3023
Reviewed by: [illegible] Date: 10/29/91 Page: 1

Ensaco GC/MS
Target Compound Data Summary Sheet

Sample: SAL 10147-3 1000UL01L ✓
Misc : V2 CH#16 DIL=1000UL/10ML 4.086/10ML 10/9 DCL-10/7-UA2 DL
Injected : 10/16/91 16:02 Units: UG/KG
Analyst: NURA Run Factor: 12500.0 ✓
ID File: VOAID2 ✓ Surrogate vol: 50.000
Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound		Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS19	D4-1,2-Dichloroethane	25.00	56.87	227*	70 121
CS09	D8-Toluene	25.00	61.93	248*	81 117
CS10	Bromofluorobenzene (BFB)	25.00	54.72	219*	74 121

DL ↓ H

Target Compounds: VOAID2

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
		BDL	C045	1,1-Dichloroethene
		BDL	C035	Acetone
		BDL	C040	Carbon Disulfide
		BDL	C030	Methylene Chloride
		BDL	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
474	4.061	49950 JB	C110	2-Butanone
		BDL	C125	Vinyl Acetate
539	2.627	32310 JB	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
		BDL	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform

Data File: B83028 Page: 2
Sample: BAL 10147-5 1000UL0IL

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C205	4-Methyl-2-Pentanone
		BDL	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
1313	8.206	100960	C240	Ethylbenzene
1344	32.360	~~398060~~ NR	CXXX	Xylene (p)
1447	8.188	~~100700~~	CXXX	Xylenes (o)
		BDL	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethan
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
1447	~~48.196~~ 39.87	~~592800~~ 465801	C250	Xylene (Total)

BJ 101691

Diagnostic Quant Report

Data File: >B5028::DB Injected At: 16:02 10/16/91
Quant'd : 16:31 10/16/91
ID File : DUAIU2::$$ Calibrated : 11:13 10/16/91

	Compound		- R.T. Into - Fred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101	Bromochloromethane	7.50	7.51	.02	128.0	215433	1.0000	50.00
2)	C010	Chloromethane	3.20	0.00	--	50.0	0	.5920	0.00
3)	C020	Vinyl Chloride	3.33	0.00	--	62.0	0	.8211	0.00
4)	C015	Bromomethane	3.75	0.00	--	94.0	0	.6222	0.00
5)	C025	Chloroethane	3.94	0.00	--	64.0	0	.5546	0.00
6)	C045	1,1-Dichloroethene	4.79	0.00	--	96.0	0	1.1322	0.00
7)	C035	Acetone	4.73	5.19	.45	43.0	593	.3999	.54
8)	C040	Carbon Disulfide	5.01	0.00	--	76.0	0	4.7412	0.00
9)	C030	Methylene Chloride	5.27	5.25	.03	84.0	1549	.7264	.49
9)D	C030	Methylene Chloride	5.27	5.43	.16	84.0	4180	.7264	1.34
10)	C050	Trans-1,2-Dichloroe	5.65	0.00	--	96.0	0	1.9143	0.00
11)	C055	cis-1,2-Dichloroeth	7.13	0.00	--	96.0	0	1.9601	0.00
12)	C050	1,1-Dichloroethane	6.23	6.20	.03	63.0	11965	3.8038	.73
13)	C060	Chloroform	7.65	7.68	.02	83.0	6200	3.4381	.42
14)	C065	1,2-Dichloroethane	8.66	0.00	--	62.0	0	2.1786	0.00
15)	C110	2-Butanone	7.16	7.21	.05	43.0	15479	.8847	4.06
16)	CS15	D4-1,2-Dichloroetha	8.52	8.52	.00	65.0	7294	1.4884	1.14
17)	*C110	1,4-Difluorobenzene	9.37	9.40	.03	114.0	872599	1.0000	50.00
18)	C125	Vinyl Acetate	6.33	6.03	.30	43.0	8110	1.0500	.44
19)	C115	1,1,1-Trichloroetha	7.99	7.97	.02	97.0	27603	.6021	2.63
20)	C120	Carbon Tetrachlorid	8.29	7.97	.32	117.0	3672	.5024	.42
21)	C165	Benzene	8.65	8.63	.02	78.0	1953	1.4215	.08
22)	C150	Trichloroethene	9.93	9.90	.03	130.0	6535	.4607	.81
23)	C140	1,2-Dichloropropane	10.37	0.00	--	63.0	0	.4667	0.00
24)	C130	Bromodichloromethan	10.99	0.00	--	83.0	0	.6293	0.00
25)	C175	2-Chloroethylvinyle	11.75	0.00	--	63.0	0	.1968	0.00
26)	C143	Cis-1,3-Dichloropro	12.05	0.00	--	75.0	0	.6096	0.00
27)	C172	Trans-1,3-Dichlorop	13.45	0.00	--	75.0	0	.4477	0.00
28)	C160	1,1,2-Trichloroetha	13.91	0.00	--	97.0	0	.3175	0.00
29)	C155	Dibromochloromethan	14.94	0.00	--	129.0	0	.4505	0.00
30)	C180	Bromoform	19.17	0.00	--	173.0	0	.3234	0.00
31)	*C120	D5-Chlorobenzene	16.54	16.54	.00	117.0	577754	1.0000	50.00
32)	CS05	D8-Toluene	12.66	12.66	.00	98.0	20032	1.3998	1.24
33)	C205	4-Methyl-2-Pentanon	12.42	0.00	--	43.0	0	.6298	0.00
34)	C230	Toluene	12.82	12.82	.00	92.0	7468	.9983	.65
35)	C210	2-Hexanone	14.63	0.00	--	43.0	0	.3350	0.00
36)	C220	Tetrachloroethene	14.24	14.23	.01	164.0	1781	.4801	.32
37)	C235	Chlorobenzene	16.63	0.00	--	112.0	0	1.1890	0.00
38)	C240	Ethylbenzene	17.02	17.02	.00	106.0	53062	.5596	8.21
38)D	C240	Ethylbenzene	17.02	17.39	.36	106.0	255429	.5596	39.50
38)D	CXXX	Xylene (p)	17.41	17.02	.39	106.0	53062	.6831	6.72
39)	CXXX	Xylene (p)	17.41	17.39	.02	106.0	255429	.6831	32.36
40)	CXXX	Xylenes (o)	18.59	18.59	.00	106.0	71643	.7572	8.19
41)	C245	Styrene	18.65	18.61	.05	104.0	3863	1.1752	.28
42)	C225	1,1,2,2-Tetrachloro	20.83	0.00	--	83.0	0	.9905	0.00
43)	CS10	Bromofluorobenzene	20.23	20.24	.01	95.0	7819	.618	.09
44)	C335	Dichlorobenzene (m	23.86	0.00	--	146.0	0	1.1423	0.00
							0	1.1531	0.00

47)D	C250	Xylene (Total)	18.59	17.59	1.21	106.0	251080	.7533	28.84
47)	C250	Xylene (Total)	18.59	18.59	.00	106.0	71342	.7533	8.20
47)D	C250	Xylene (Total)	18.59	21.51	2.92	106.0	3614	.7533	.42
47)D	C250	Xylene (Total)	18.59	21.83	3.23	106.0	2924	.7533	.34

* - Compound is an Internal Standard
D - Compound Odel'ed

Error opening Sample output file: -6

 Done . . .
:
WAITING FOR INPUT
:ISCMP.^B3028,^B3022
FMGR 067
:ISCMP,^B3028,^B3022

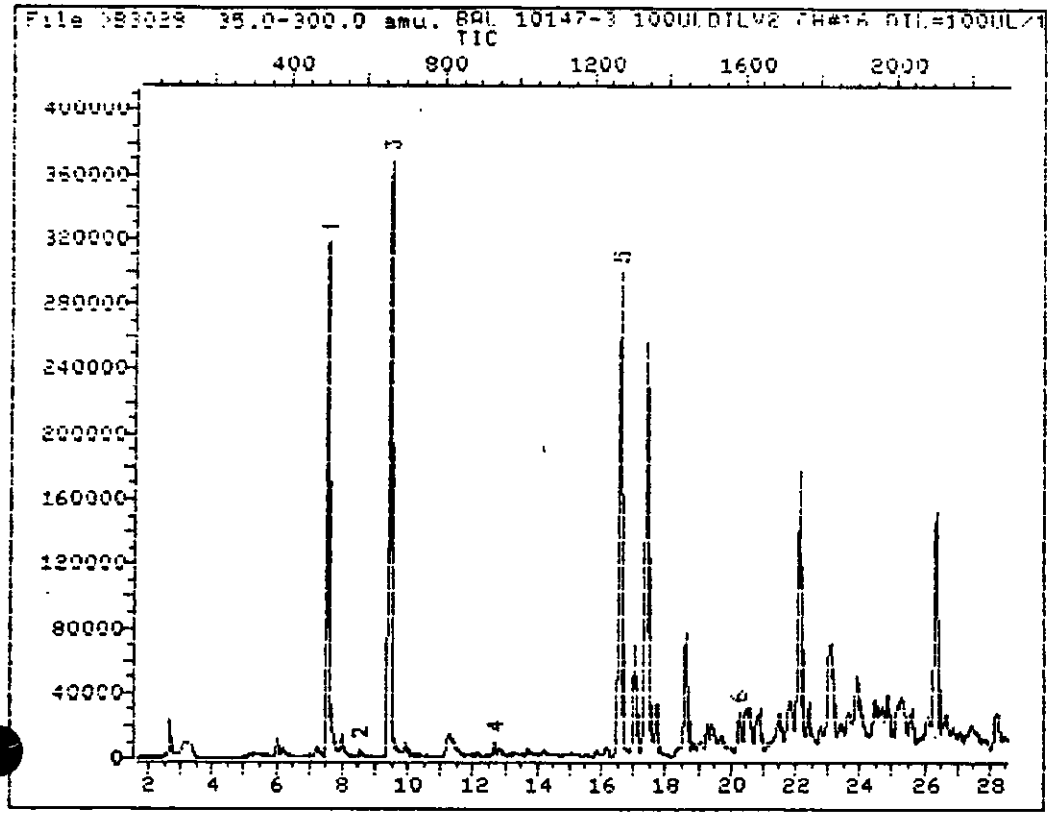
Internal Standard Comparison

Sample: >B3028 Date injected: 10/16/91 Standard: >B3022

Internal Standard		Sample Area	Std Area	%
CI01	Bromochloromethane	215433	121162	177.8
CI10	1,4-Difluorobenzene	872599	462273	188.8
CI20	D5-Chlorobenzene	577754	311269	185.6

 % = (Sample Area/Std Area)*100
 * Area outside limits

TOTAL ION CHROMATOGRAM



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Name: BAL 10147-3 100ULDIL
Misc: V2 CH#16 DIL=100UL/10ML 4.08G/10ML 10/9 UCC-10/7-QA2 DL
MB 10/23/91

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911016 11:13

Operator ID: NURA
Quant Time: 911016 16:31
Injected at: 911016 16:02

QUANT REPORT

Operator ID: NURA Quant Rev: 6 Quant Time: 911016 16:31
Output File: ^B3028::DT Injected at: 911016 16:02
Data File: >B3028::DD Dilution Factor: 1.00000
Name: BAL 10147-3 100ULDIL
Misc: V2 CH#16 DIL=100UL/10ML 4.08G/10ML 10/9 UCC-10/7-QA2 DL

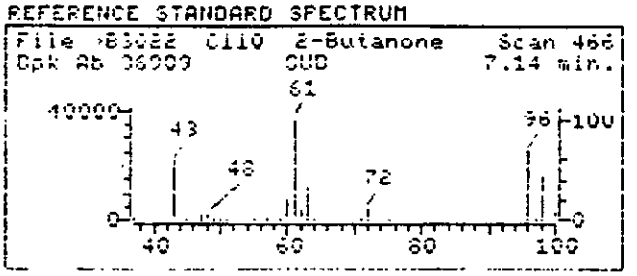
ID File: VOA1D2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911016 11:13

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.51	128.0	215433	50.00	UG/L	76
7)	C035	Acetone	5.19	43.0	593	.54	UG/L	100
9)	C030	Methylene Chloride	5.25	84.0	1549	.49	UG/L	86
12)	C050	1,1-Dichloroethane	6.20	63.0	11965	.73	UG/L	84
13)	C060	Chloroform	7.68	83.0	6200	.42	UG/L	95
15)	C110	2-Butanone	7.21	43.0	15479	4.06	UG/L	98
16)	CS15	D4-1,2-Dichloroethane	8.52	65.0	7294	1.14	UG/L	83
17)	*C110	1,4-Difluorobenzene	9.40	114.0	872599	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.03	43.0	8110	.44	UG/L	66
[illegible]	C115	1,1,1-Trichloroethane	7.97	97.0	27603	2.63	UG/L	95
20)	C120	Carbon Tetrachloride	7.97	117.0	3672	.42	UG/L	94
21)	C169	Benzene	8.63	78.0	1953	.08	UG/L	100
22)	C150	Trichloroethene	9.90	130.0	6535	.81	UG/L	89
31)	*C120	D5-Chlorobenzene	16.54	117.0	577754	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	20032	1.24	UG/L	89
34)	C230	Toluene	12.82	92.0	7468	.65	UG/L	99
36)	C220	Tetrachloroethene	14.23	164.0	1781	.32	UG/L	73
38)	C240	Ethylbenzene	17.02	106.0	53062	8.21	UG/L	97
39)	CXXX	Xylene (p)	17.39	106.0	255429	32.36	UG/L	98
40)	CXXX	Xylenes (o)	18.59	106.0	71643	8.19	UG/L	96
41)	C245	Styrene	18.61	104.0	3863	.28	UG/L	100
43)	CS10	Bromofluorobenzene (BFB)	20.24	95.0	7819	1.09	UG/L	70
47)	C250	Xylene (Total)	18.59	106.0	~~71342~~ 329662M	~~8.28~~ 37.87	UG/L	95

* Compound is ISTD

TEJ 101691

REFERENCE STANDARD SPECTRUM



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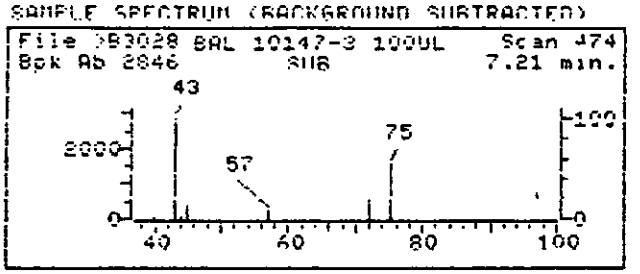

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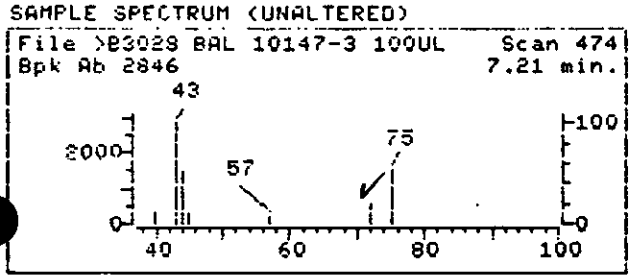
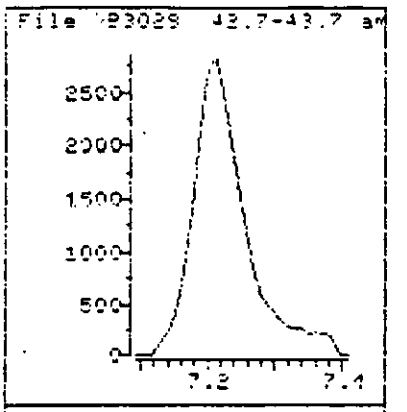
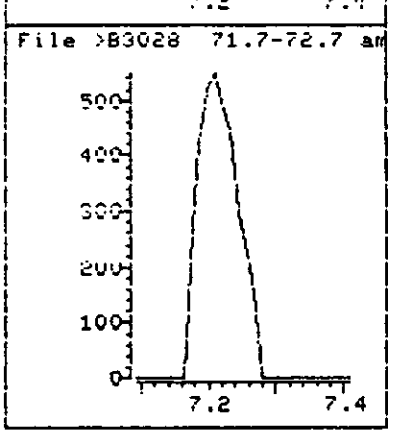


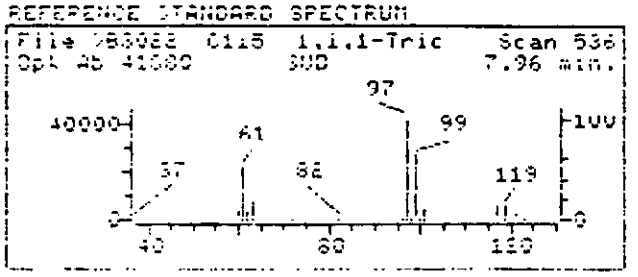




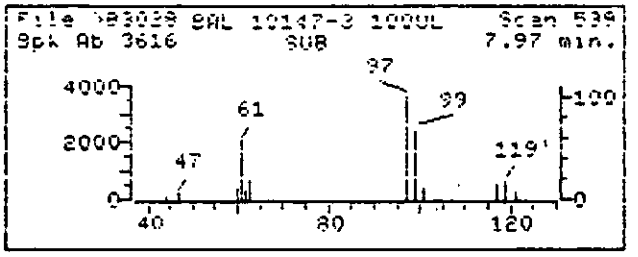
Data File: >B3028::D0 Quant Output File: ^B3028::Q1
Name: BAL 10147-3 100ULDIL
Misc: V2 CH#16 DIL=100UL/10ML 4.08G/10ML 10/9 UCC-10/7-QA2DL MB 10/23/91
Quant Time: 911016 16:31 Quant ID File: VOA1D2::$$
Injected at: 911016 16:02 Last Calibration: 911016 11:13

Compound No: 19
Compound Name: C110 2-Butanone
Scan Number: 474
Retention Time: 7.21 min.
Quant Ion: 43.0
Area: 15479
Concentration: 4.06 UG/L
q-value: 98

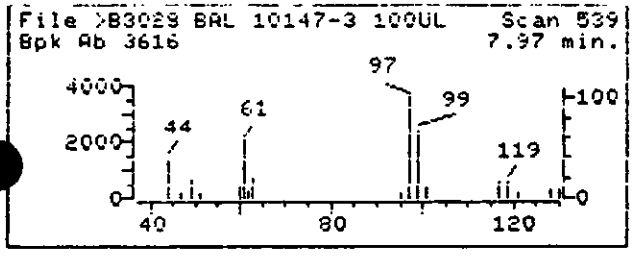
REFERENCE STANDARD SPECTRUM

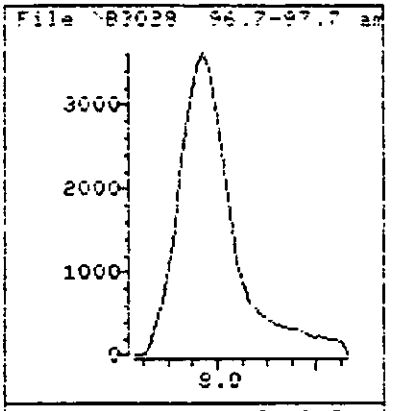


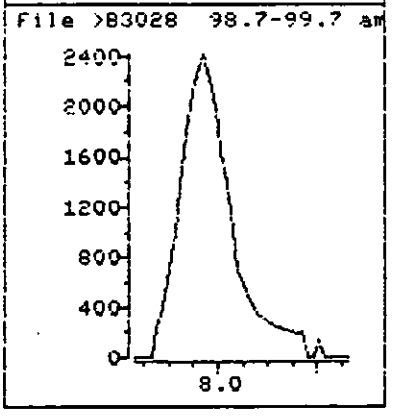
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



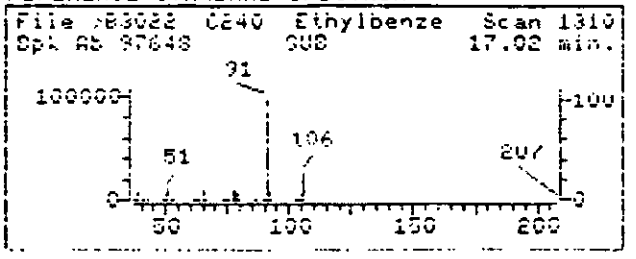




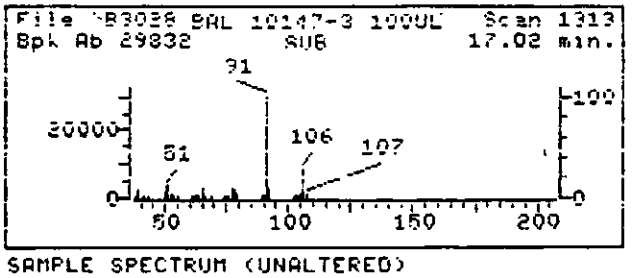
Data File: >B3028::D0 Quant Output File: ^B3028::QT
Name: BAL 10147-3 100ULD1L
Misc: V2 CH#16 DIL=100UL/10ML 4.08G/10ML 10/9 UCC-10/7-QA2 DL MB 10/23/91
Quant Time: 911016 16:31 Quant ID File: VOAID2::$$
Injected at: 911016 16:02 Last Calibration: 911016 11:13

Compound No: 19
Compound Name: C115 1,1,1-Trichloroethane
Scan Number: 539
Retention Time: 7.97 min.
Quant Ion: 97.0
Area: 27603
Concentration: 2.63 UG/L
q-value: 95

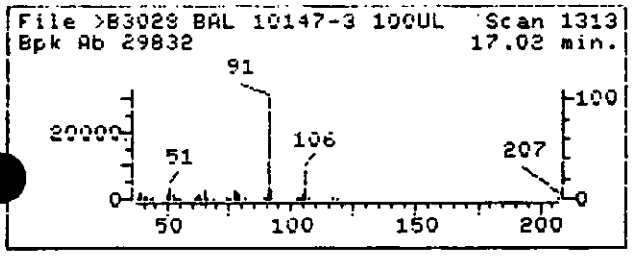
REFERENCE STANDARD SPECTRUM

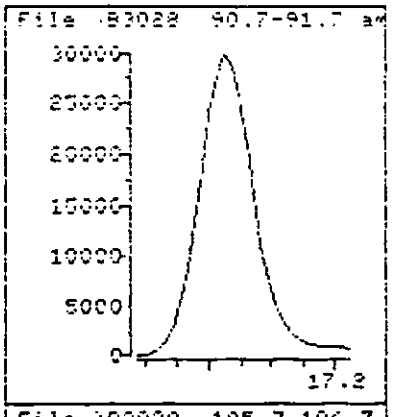


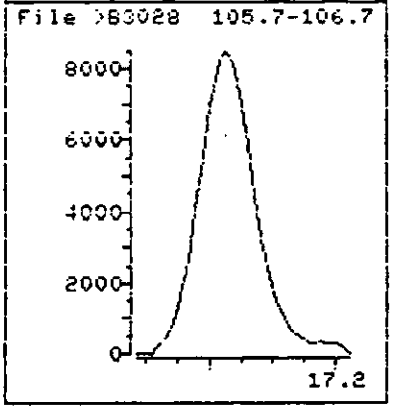
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



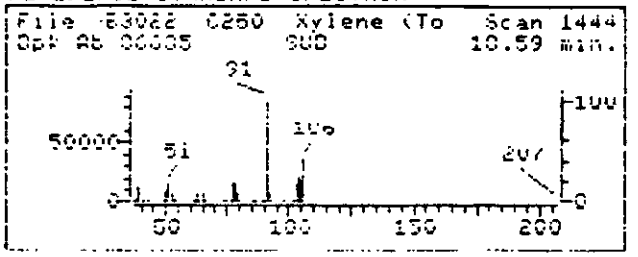




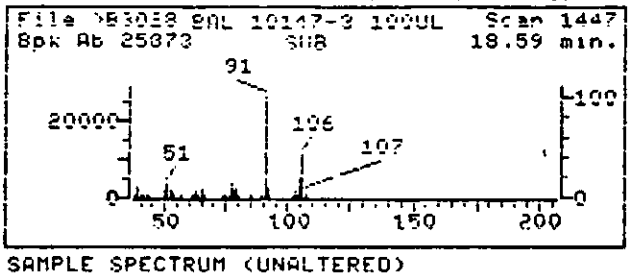
Data File: >B3028::D0 Quant Output File: ^B3028::QT
Name: BAL 10147-3 100ULDIL
Misc: V2 CH#16 DIL=100UL/10ML 4.08G/10ML 10/9 UCC-10/7-QA2 DL MB 10/23/91
Quant Time: 911016 16:31 Quant ID File: V0AID2::$$
Injected at: 911016 16:02 Last Calibration: 911016 11:13

Compound No: 38
Compound Name: C240 Ethylbenzene
Scan Number: 1313
Retention Time: 17.02 min.
Quant Ion: 106.0
Area: 53062
Concentration: 8.21 UG/L ✓
q-value: 97

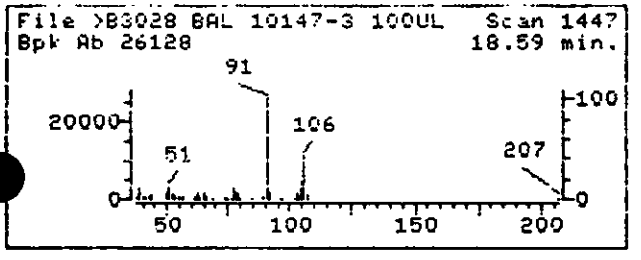
REFERENCE STANDARD SPECTRUM

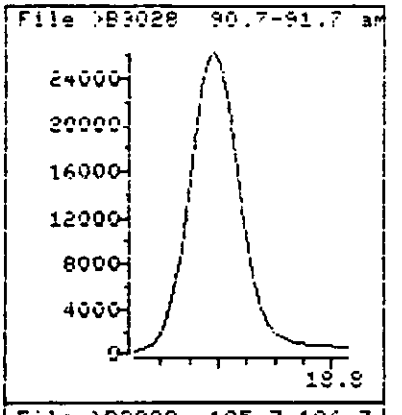


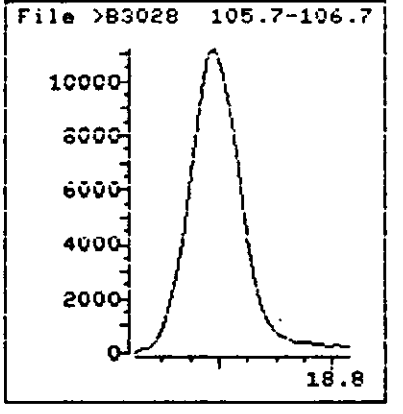
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B3028::D0 Quant Output File: ^B3028::QT
Name: BAL 10147-3 100ULDIL
Misc: V2 CH#16 DIL=100UL/10ML 4.08G/10ML 10/9 UCC-10/7-QA2 DL MB 10/23/91
Quant Time: 911016 16:31 Quant ID File: VOA1D2::$$
Injected at: 911016 16:02 Last Calibration: 911016 11:13

Compound No: 47
Compound Name: C250 Xylene (Total)
Scan Number: 1447
Retention Time: 18.59 min.
Quant Ion: 106.0
Area: 71342
Concentration: 8.20 UG/L
q-value: 95

37.87 UG/L
DL 101691

Data Reduced by : DRJ Date: 101691 Data File: >B3028
Data Reviewed by : ll Date: 10-22-91

Enseco TIC Report (page 1)

Sample: BAL 10147-3 100ULDIL Run Factor: 12300.
Conditions: V2 CH#16 DIL=100UL/10ML 4.08G/ Analyst: NORA

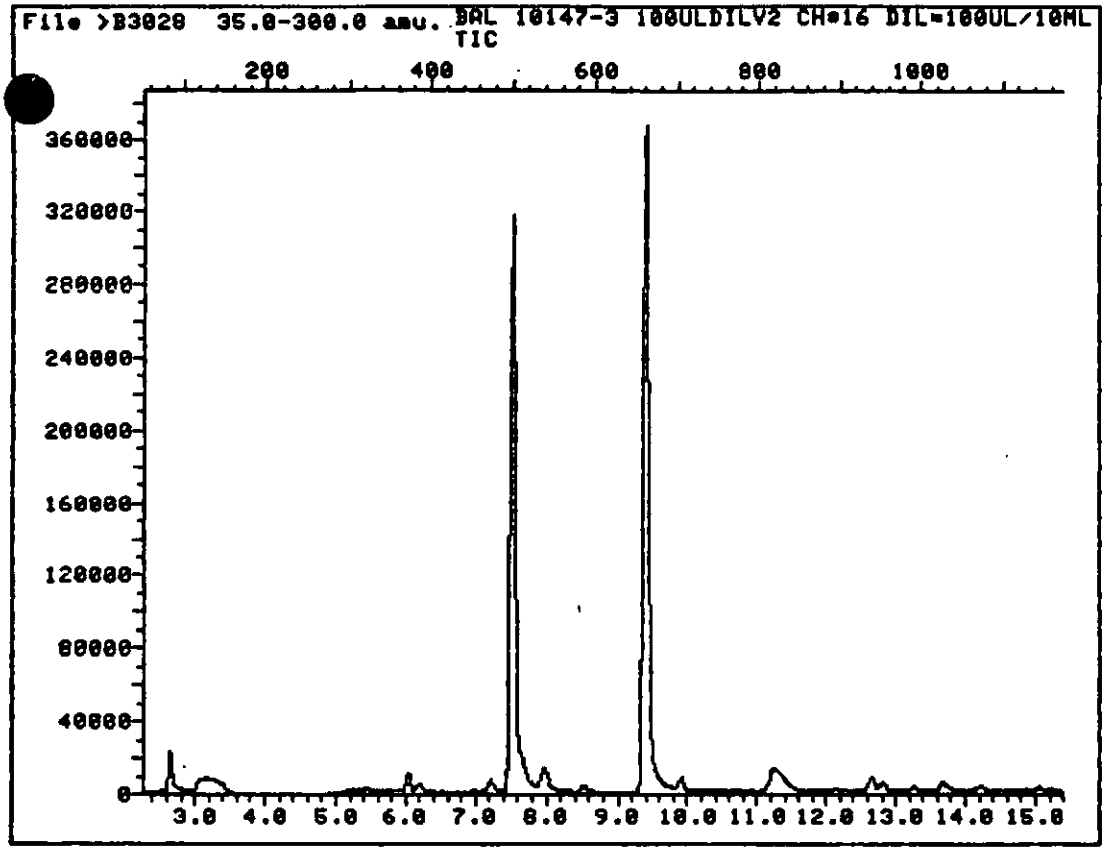
#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	1371.			66000.	~~111-84-2~~	~~Nonane~~ Unknown alkane
2	1608.			62000.	~~15869-89-3~~	~~Octane, 2,5-dimethyl-~~ Unk alkane
3	1748.			350000.	~~1120-21-4~~	~~Undecane~~ Unk alkane
4	1831.			240000.	~~17302-28-2~~	~~Nonane, 2,6-dimethyl-~~ Unk alkane cyclohexane substituted ~~Unk alkane~~
5	1899.			94000.	~~1678-98-4~~	~~Cyclohexane, (2-methylpropyl)~~ ~~Unk alkane~~ unknown C11H22 isom
6	2018.			81000.	~~493-02-7~~	~~Naphthalene, decahydro-, trans-~~ ~~C11H22 isom~~
7	2044.			69000.	~~934-74-7~~	~~Benzene, 1-ethyl-3,5-dimethyl-~~ ~~C11H16 isom~~ C4-Benzene isomer
8	2106.			290000.	~~1120-21-4~~	~~Undecane~~ Unk alkane

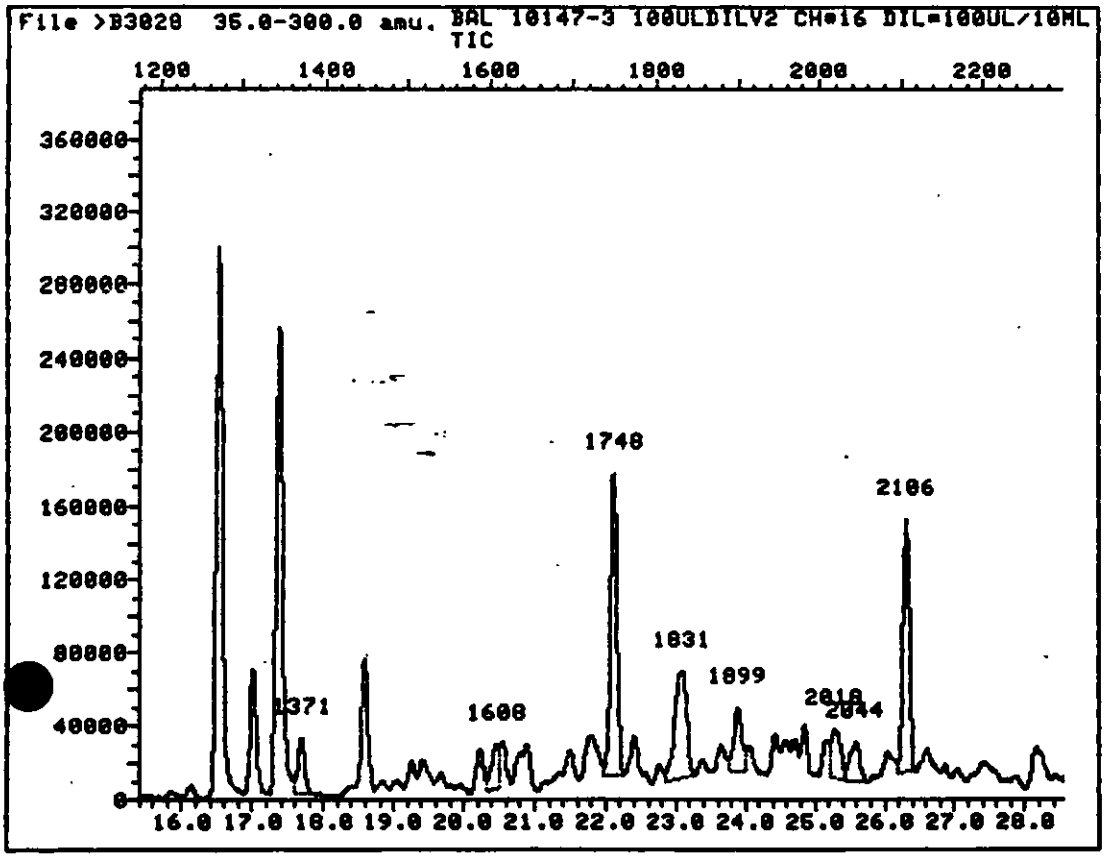
Data File: >B3028

Enseco TIC Report (page 2)

Concentration = Area(TIC) * Conc.(IS) / Area(IS)

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	63	19	3	17.70	1.070	195583.	29996.	5.361
2	78	5	3	20.48	1.238	185042.	25109.	5.072
3	83	5	3	22.12	1.337	1030882.	163824.	28.255
4	86	9	3	23.09	1.396	700242.	59852.	19.193
5	47	29	3	23.89	1.444	279127.	34800.	7.651
6	92	25	3	25.29	1.528	241444.	26433.	6.618
7	76	23	3	25.59	1.547	204683.	20668.	5.610
8	94	14	3	26.32	1,591	865100.	138585.	23.711


File >B3028 35.0-300.0 amu. BAL 10147-3 100ULDILV2 CH=16 DIL=100UL/10ML
TIC
200
400
600
800
1000
360000
320000
280000
240000
200000
160000
120000
80000
40000
0
3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0


File >B3028 35.0-300.0 amu. BAL 10147-3 100ULDILV2 CH=16 DIL=100UL/10ML
TIC
1200
1400
1600
1800
2000
2200
360000
320000
280000
240000
200000
160000
120000
80000
40000
0
1748
2106
1831
1899
1608
16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0

TIC Internal Standard Report

Data File: >B3028

Maximum seperation of RIC and Quan ion peaks: 3.
Minimum RIC peak area as % of est. RIC area: 50.
Maximum RIC peak area as % of est. RIC area: 200.

#	Name	Concentration		Flag	
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC
1 CI01	Bromochloromet	50.000	UG/L	Ok	
500.	215433.	7.280	501.	1580174.	100.756
2 CI10	1,4-Difluorobe	50.000	UG/L	Ok	
661.	872599.	2.404	661.	2015378.	96.073
3 CI20	D5-Chlorobenze	50.000	UG/L	Ok	
1272.	577754.	3.474	1272.	1824227.	90.897

Deleting peaks from INT file: VDIR73
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 31
Number of peaks remaining: 14

Deleting target compounds from INT file: VDIR73
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 14
Number of peaks remaining: 8

Deleting all but largest peaks from INT file: VDIR73
Maximum number of peaks to keep: 15
Number of peaks: 8
Maximum number of peaks > number of peaks.

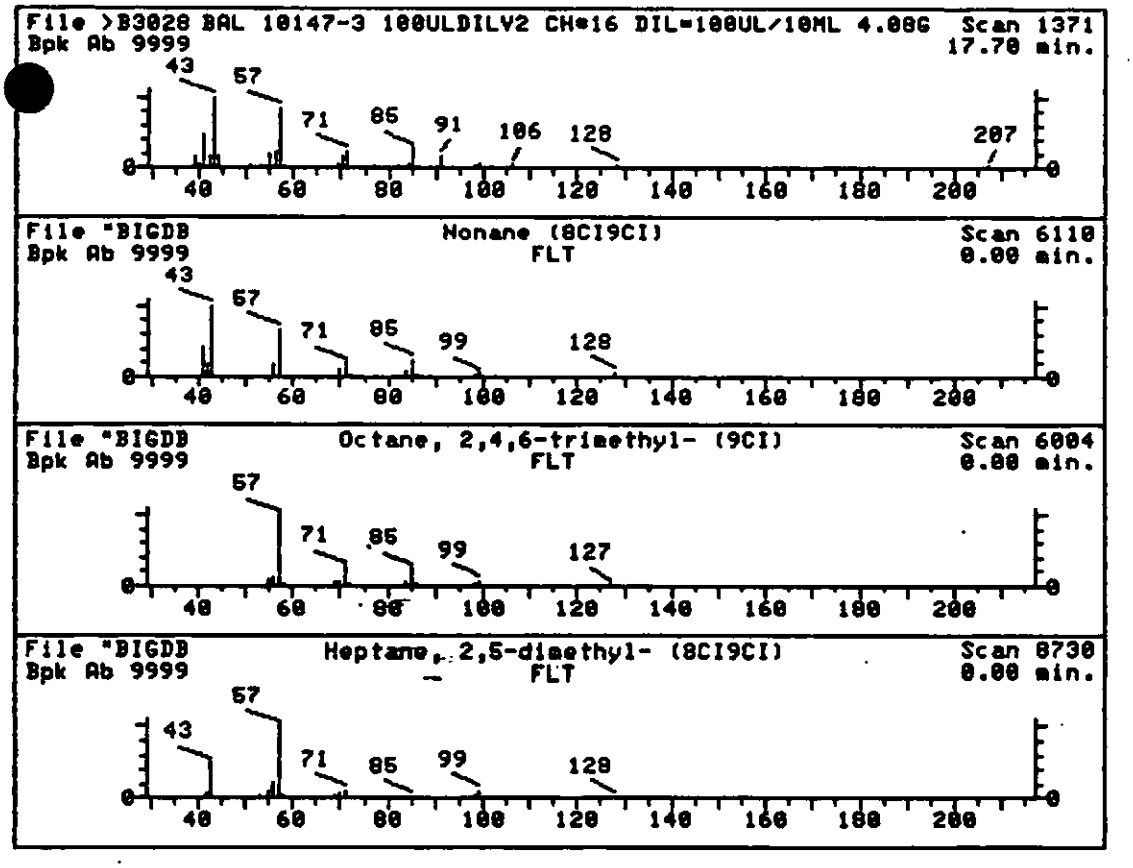
Unk alkane
TJ
101691

TIC NUMBER:1

1.	Nonane (8CI9CI)	128 C9H20
2.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
3.	Heptane, 2,5-dimethyl- (8CI9CI)	128 C9H20
4.	Hexane, 3-ethyl-4-methyl- (8CI9CI)	128 C9H20
5.	Octane, 3,5-dimethyl- (8CI9CI)	142 C10H22
6.	Octane, 3-methyl- (8CI9CI)	128 C9H20

Sample file: >B3028 Spectrum #: 1371
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	63*	111842	6110	"BIGDB	71	25	3	1	100	19	30	38
2.	43	62016379	6004	"BIGDB	43	42	2	0	85	22	17	14
3.	41*	2216300	8730	"BIGDB	31	55	0	0	64	33	16	24
4.	36*	3074779	3606	"BIGDB	29	67	3	0	85	27	14	13
5.	35	15869939	3611	"BIGDB	44	49	2	0	61	27	14	12
6.	31*	2216333	8731	"BIGDB	25	59	1	0	75	33	12	14



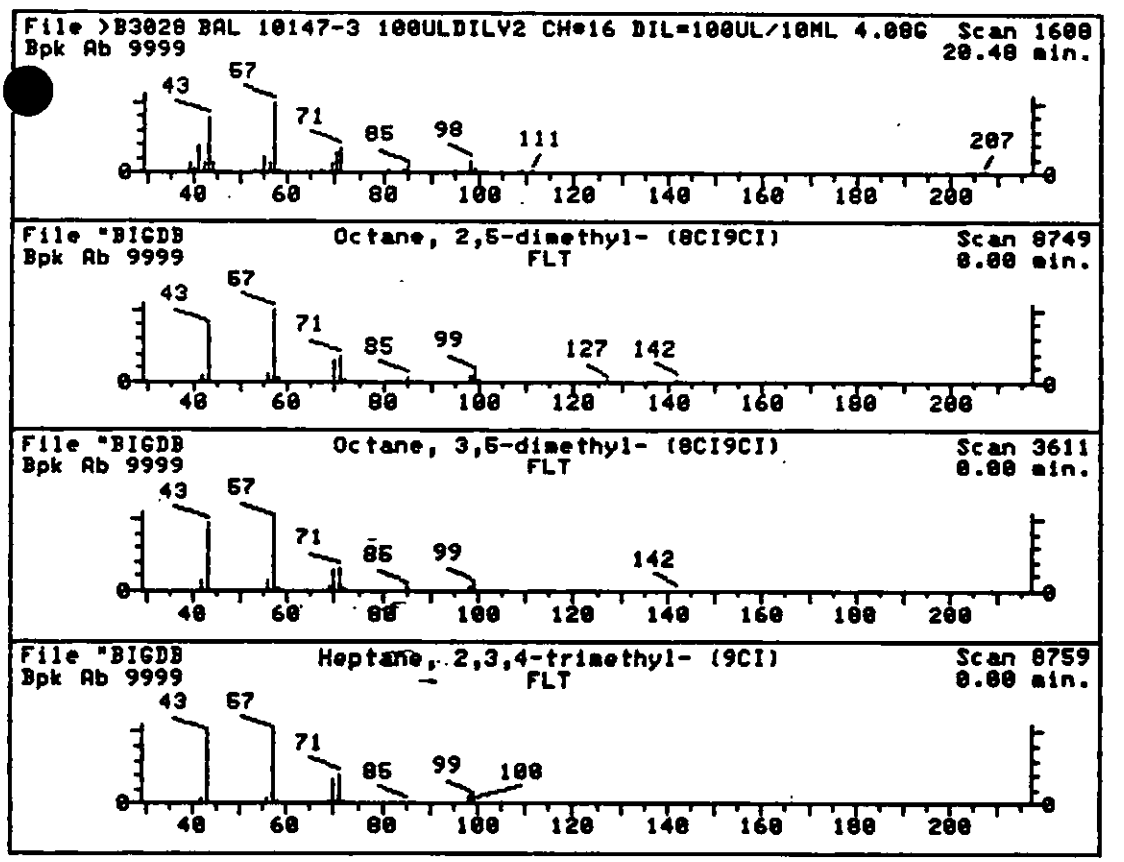
Unknown alkane
DJ
10/16/91

TIC NUMBER:2

1.	Octane, 2,5-dimethyl- (8CI9CI)	142 C10H22
2.	Octane, 3,5-dimethyl- (8CI9CI)	142 C10H22
3.	Heptane, 2,3,4-trimethyl- (9CI)	142 C10H22
4.	Hexane, 4-ethyl-2-methyl- (8CI9CI)	128 C9H20
5.	Heptane, 3-ethyl- (8CI9CI)	128 C9H20
6.	Methanamine, N-pentylidene- (9CI)	99 C6H13N

Sample file: >B3028 Spectrum #: 1608
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	78	15869893	8749	"BIGDB	57	35	2	0	99	5	55	19
2.	70	15869939	3611	"BIGDB	59	34	2	0	82	8	42	19
3.	52	52896954	8759	"BIGDB	41	49	2	0	80	16	20	12
4.	52	3074757	8735	"BIGDB	40	49	2	0	100	17	20	12
5.	52	15869804	8564	"BIGDB	35	53	1	0	80	20	20	13
6.	37*	10599754	3487	"BIGDB	33	42	3	0	126	26	14	14



Unk alkane

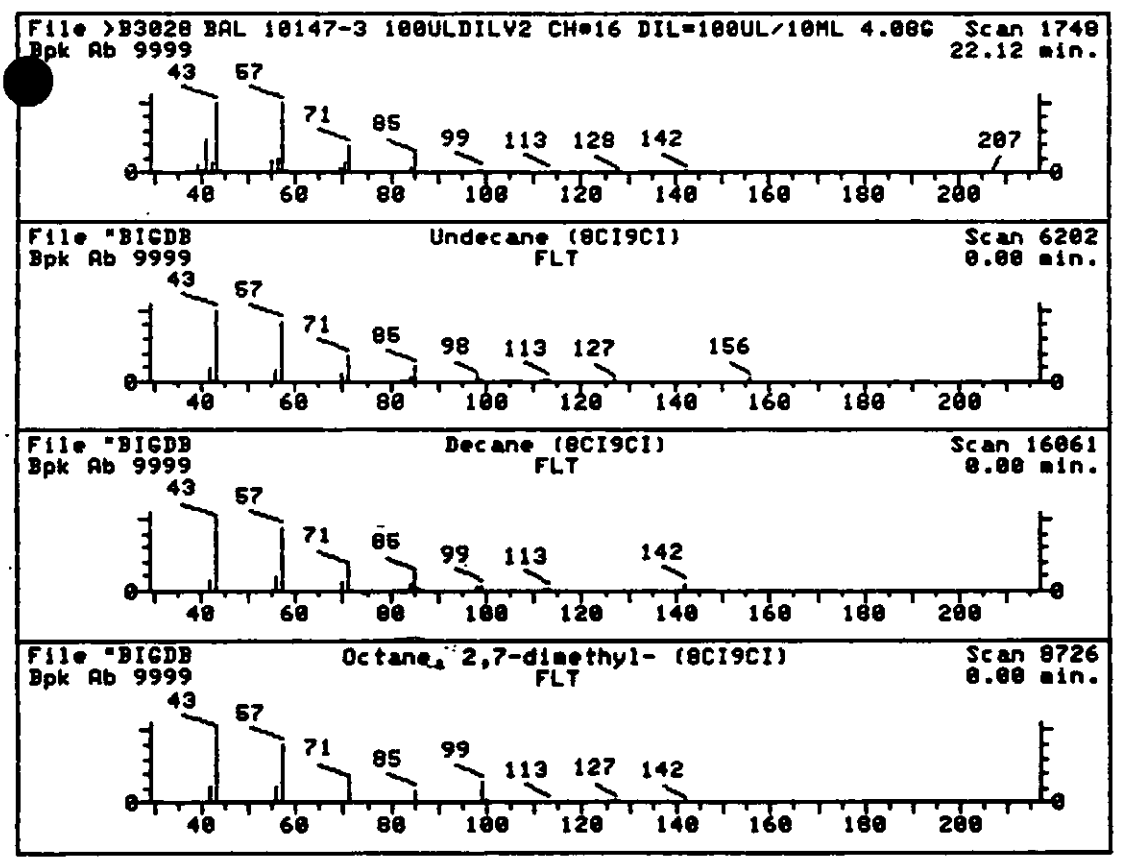
DL 101691

TIC NUMBER:3

1.	Undecane (8CI9CI)	156 C11H24
2.	Decane (8CI9CI)	142 C10H22
3.	Octane, 2,7-dimethyl- (8CI9CI)	142 C10H22
4.	Undecane, 3-methyl- (8CI9CI)	170 C12H26
5.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
6.	Decane, 2,3,5-trimethyl- (9CI)	184 C13H28

Sample file: >B3028 Spectrum #: 1748
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83	1120214	6202	"BIGDB	70	27	2	0	90	5	57	25
2.	76	124185	16061	"BIGDB	72	28	2	0	100	6	45	26
3.	70*	1072168	8726	"BIGDB	38	57	3	0	100	9	42	13
4.	70	1002433	6148	"BIGDB	47	41	2	0	71	9	42	16
5.	60	62016379	6004	"BIGDB	58	27	2	0	99	12	30	19
6.	60	62238113	6164	"BIGDB	63	40	2	1	67	12	30	14



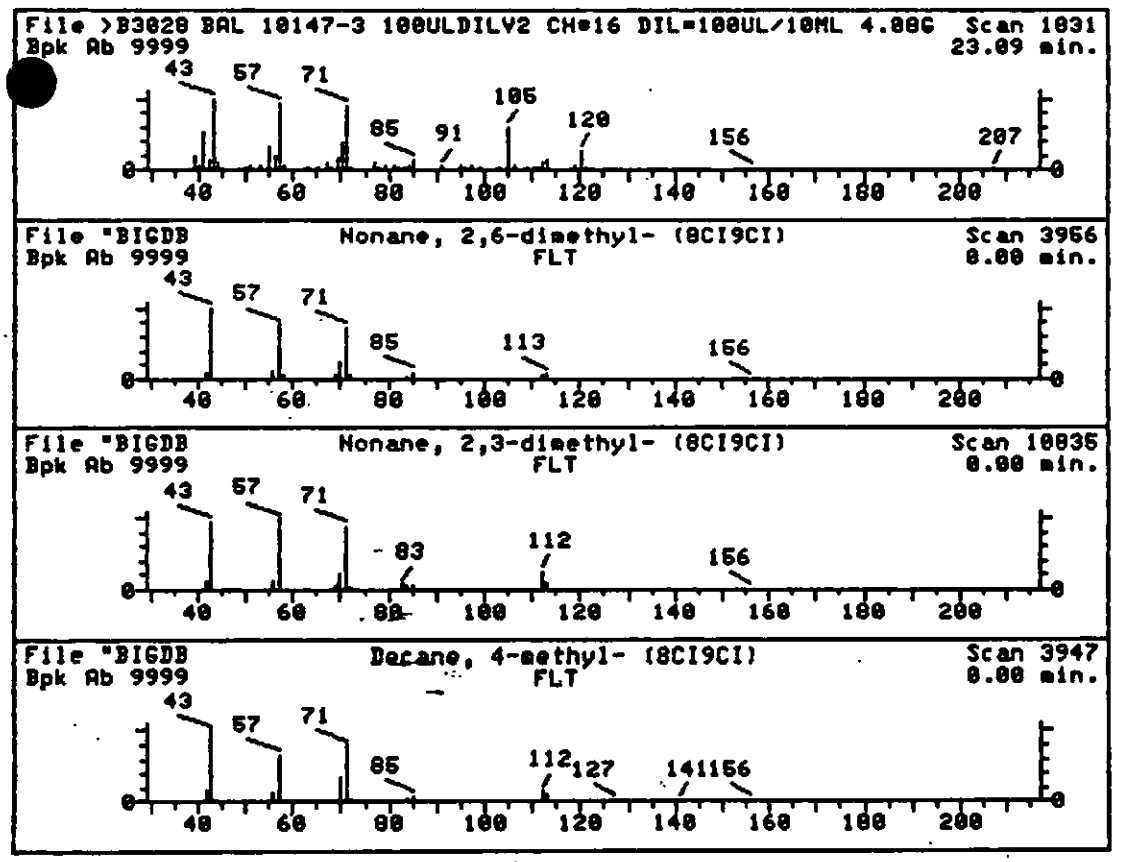
Unk alkane DLV 101691

TIC NUMBER:4

1.	Nonane, 2,6-dimethyl- (8CI9CI)	156 C11H24
2.	Nonane, 2,3-dimethyl- (8CI9CI)	156 C11H24
3.	Decane, 4-methyl- (8CI9CI)	156 C11H24
4.	Heptane, 2,5,5-trimethyl- (8CI9CI)	142 C10H22
5.	Octane, 2,3,6-trimethyl- (9CI)	156 C11H24
6.	Octane, 2,3,7-trimethyl- (9CI)	156 C11H24

Sample file: >B3028 Spectrum #: 1831
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	86*	17302282	3956	"BIGDB	71	20	1	0	119	9	59	73
2.	67*	2884062	10835	"BIGDB	49	52	2	0	93	15	34	22
3.	67*	2847725	3947	"BIGDB	60	41	1	0	80	30	27	56
4.	67	1189997	3946	"BIGDB	49	41	0	0	90	15	34	28
5.	67	62016335	3961	"BIGDB	50	42	0	0	93	12	34	29
6.	63	62016346	3962	"BIGDB	58	35	0	0	93	16	30	35



substituted cyclohexane
~~unk alkane~~

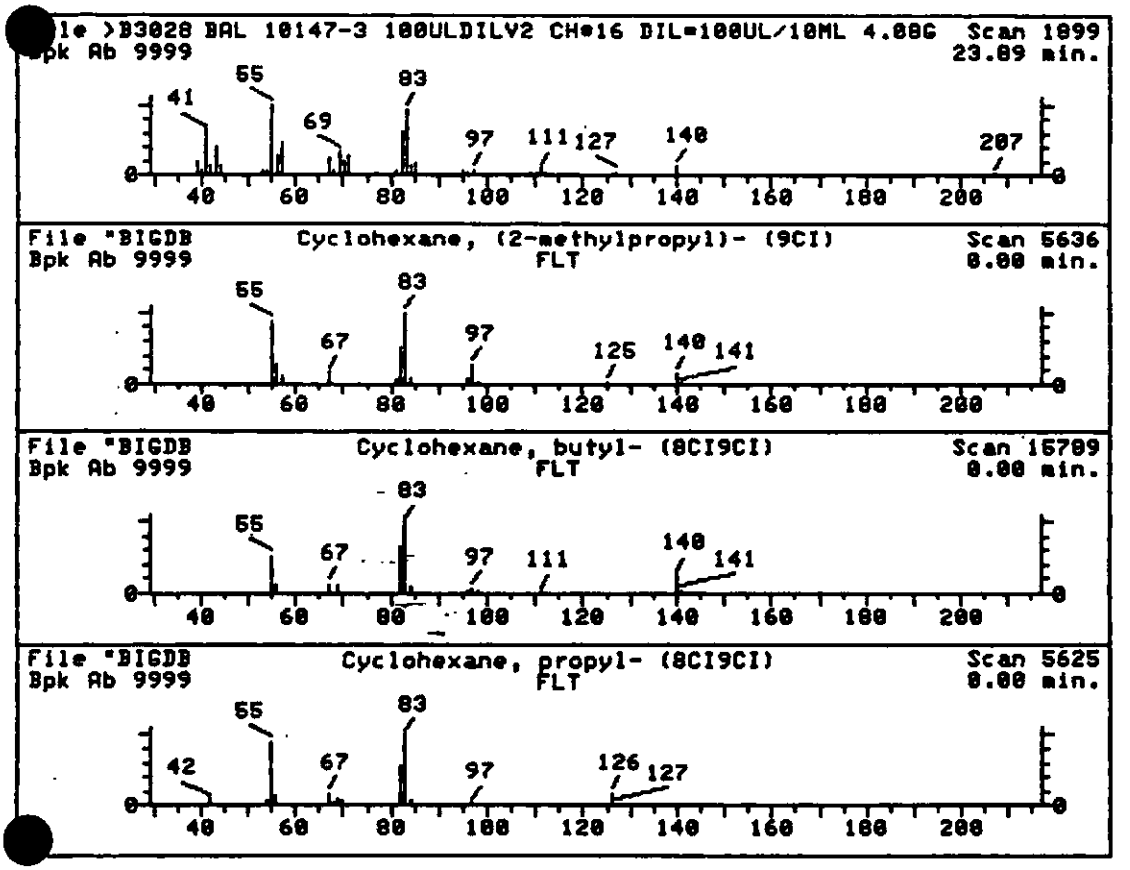
DRJ 101691

IC NUMBER:5

1.	Cyclohexane, (2-methylpropyl)- (9CI)	140	C10H20
2.	Cyclohexane, butyl- (8CI9CI)	140	C10H20
3.	Cyclohexane, propyl- (8CI9CI)	126	C9H18
4.	Cyclopentane, 1-ethyl-1-methyl- (8CI9CI)	112	C8H16
5.	2-Butenoic acid, 2-methyl-, 2-propenyl ester, (E)- (9CI)	140	C8H12O2
6.	Cyclohexane, (1-methylpropyl)- (9CI)	140	C10H20

Sample file: >B3028 Spectrum #: 1899
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	47*	1678984	5636	"BIGDB	51	52	2	0	94	29	19	25
2.	40*	1678939	15789	"BIGDB	51	47	2	4	100	35	16	23
3.	35	1678928	5625	"BIGDB	41	56	1	0	94	30	14	12
4.	29*	16747505	5582	"BIGDB	32	72	1	0	76	43	8	17
5.	25*	7493712	5638	"BIGDB	27	67	3	0	94	45	8	13
6.	24*	7058017	5637	"BIGDB	41	60	1	0	76	53	7	21



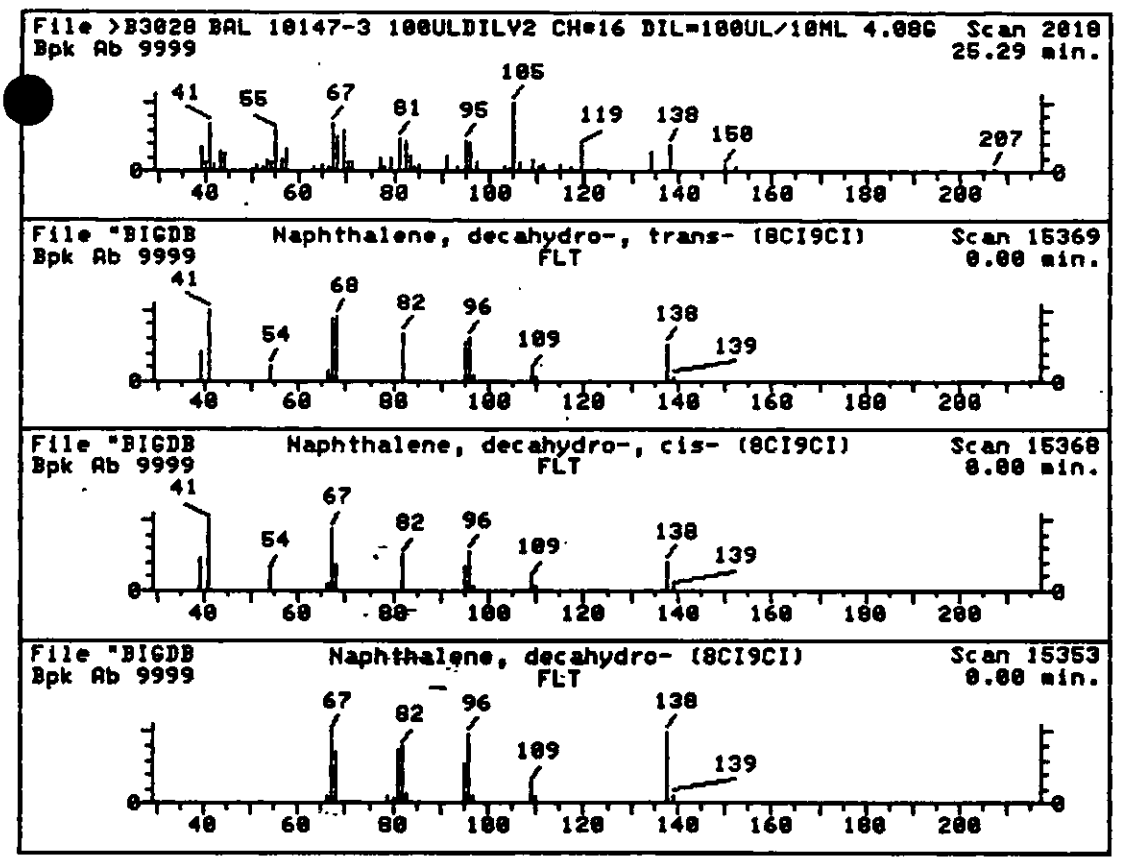
unknown as ~~$C_{10}H_{18}$~~ Isomer

TIC NUMBER:6

1.	Naphthalene, decahydro-, trans- (8CI9CI)	138	C10H18
2.	Naphthalene, decahydro-, cis- (8CI9CI)	138	C10H18
3.	Naphthalene, decahydro- (8CI9CI)	138	C10H18
4.	Bicyclo[2.2.1]heptane, 2-methyl-, exo- (9CI)	110	C8H14
5.	1,1'-Bicyclopentyl (9CI)	138	C10H18
6.	Spiro[4.5]decane (8CI9CI)	138	C10H18

Sample file: >B3028 Spectrum #: 2018
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	92*	493027	15369	"BIGDB	75	47	0	0	54	25	53	93
2.	69*	493016	15368	"BIGDB	66	52	1	0	69	32	26	66
3.	62*	91178	15353	"BIGDB	71	41	2	2	40	30	25	44
4.	48*	872786	3291	"BIGDB	75	38	1	0	54	51	16	73
5.	47*	1636391	3353	"BIGDB	57	61	1	0	69	44	16	46
6.	41*	176636	15365	"BIGDB	61	63	2	0	56	42	14	38



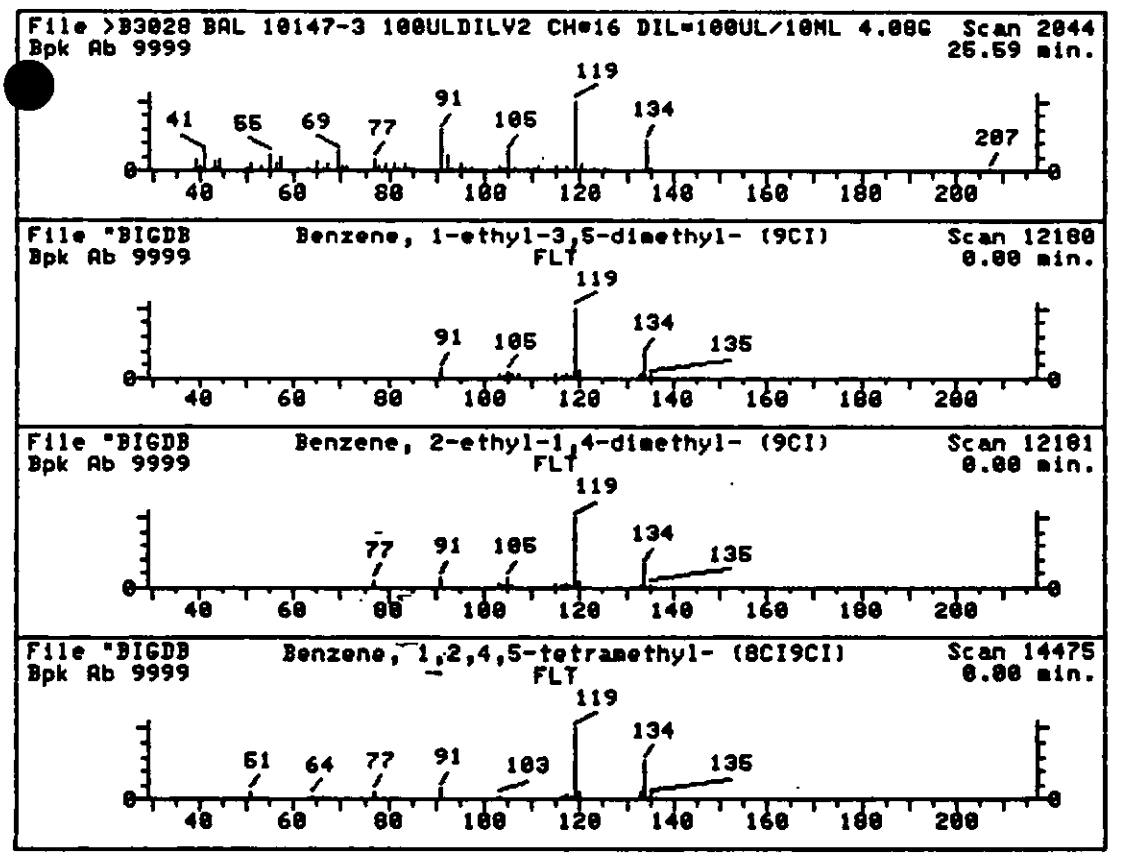
C4-benzene
~~C10H14~~
Isomer

TIC NUMBER:7

1.	Benzene, 1-ethyl-3,5-dimethyl- (9CI)	134 C10H14
2.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134 C10H14
3.	Benzene, 1,2,4,5-tetramethyl- (8CI9CI)	134 C10H14
4.	Benzene, 1-ethyl-2,3-dimethyl- (9CI)	134 C10H14
5.	Benzene, 1,2,3,4-tetramethyl- (8CI9CI)	134 C10H14
6.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134 C10H14

Sample file: >B3028 Spectrum #: 2044
Search speed: 1 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	76*	934747	12180	"BIGDB	59	36	0	0	100	23	41	72
2.	75*	1758889	12181	"BIGDB	58	36	0	0	98	23	41	71
3.	75*	95932	14475	"BIGDB	61	41	0	0	79	28	37	73
4.	73*	933982	12172	"BIGDB	57	34	0	0	100	23	32	69
5.	73*	488233	14484	"BIGDB	53	41	0	0	85	25	32	65
6.	73*	934805	12173	"BIGDB	52	41	0	0	100	23	32	63



000093

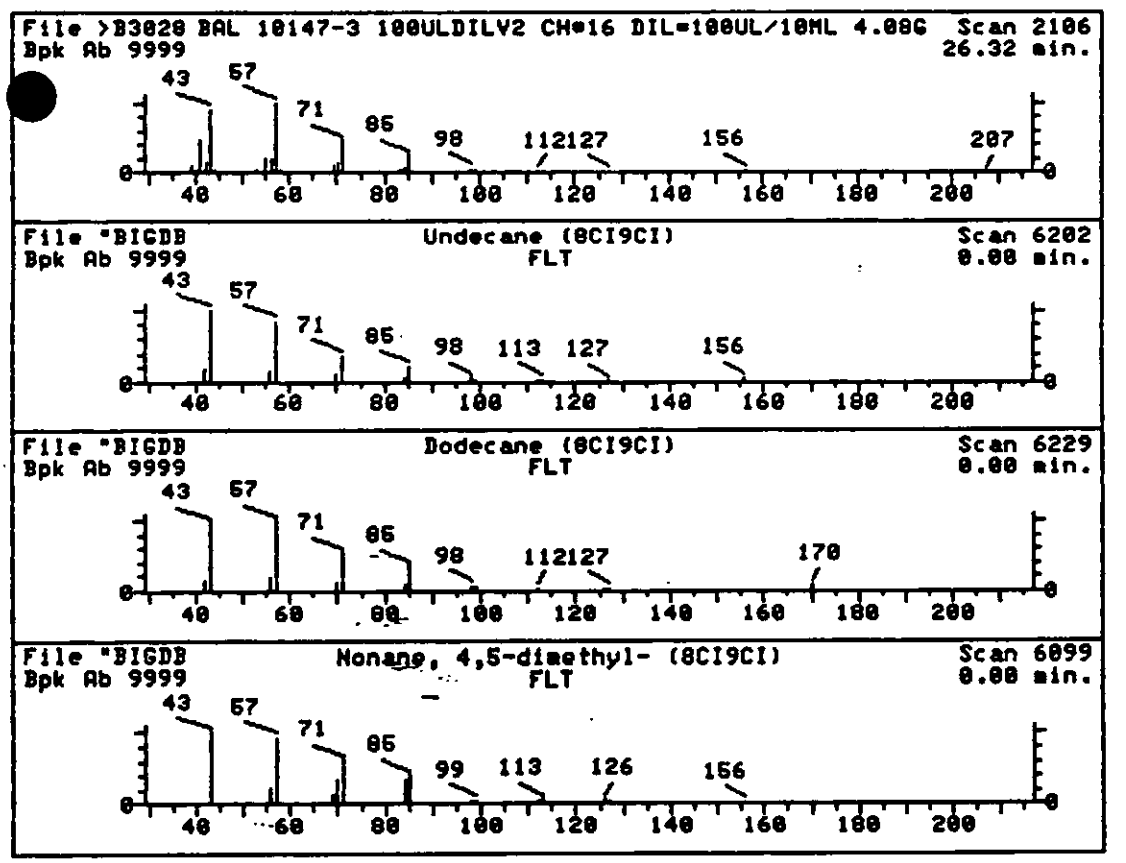
Unk alkane #3
101691

TIC NUMBER:8

1. Undecane (8CI9CI)	156	C11H24
2. Dodecane (8CI9CI)	170	C12H26
3. Nonane, 4,5-dimethyl- (8CI9CI)	156	C11H24
4. Decane, 6-ethyl-2-methyl- (9CI)	184	C13H28
5. Tetradecane, 1-iodo- (8CI9CI)	324	C14H29I
6. Undecane, 4,6-dimethyl- (8CI)	184	C13H28

Sample file: >B3028 Spectrum #: 2106
Search speed: 1 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%. CON	C_I	R_IV
1.	94*	1120214	6202	"BIGDB	80	17	0	0	85	14	64	94
2.	83	112403	6229	"BIGDB	80	21	2	1	73	4	57	23
3.	70*	17302237	6099	"BIGDB	48	57	3	0	77	8	42	13
4.	70	62108218	6163	"BIGDB	57	42	1	0	92	8	42	19
5.	70	19218941	6199	"BIGDB	68	60	2	0	71	10	42	15
6.	67	17312822	3957	"BIGDB	59	39	1	0	70	13	34	21



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-19-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2942

Level: (low/med) MED Date Received: 10/08/91

% Moisture: not dec. 8 Date Analyzed: 10/12/91

Column: (pack/cap) CAP Dilution Factor: 10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14000	U
74-83-9	Bromomethane	14000	U
75-01-4	Vinyl Chloride	14000	U
75-00-3	Chloroethane	14000	U
75-09-2	Methylene Chloride	6800	U
67-64-1	Acetone	14000	U
75-15-0	Carbon Disulfide	6800	U
75-35-4	1,1-Dichloroethene	6800	U
75-34-3	1,1-Dichloroethane	6800	U
540-59-0	1,2-Dichloroethene (total)	6800	U
67-66-3	Chloroform	6800	U
107-06-2	1,2-Dichloroethane	6800	U
78-93-3	2-Butanone	14000	U
71-55-6	1,1,1-Trichloroethane	20000	
56-23-5	Carbon Tetrachloride	6800	U
108-05-4	Vinyl Acetate	14000	U
75-27-4	Bromodichloromethane	6800	U
78-87-5	1,2-Dichloropropane	6800	U
10061-01-5	cis-1,3-Dichloropropene	6800	U
79-01-6	Trichloroethene	6900	
124-48-1	Dibromochloromethane	6800	U
79-00-5	1,1,2-Trichloroethane	6800	U
71-43-2	Benzene	6800	U
10061-02-6	trans-1,3-Dichloropropene	6800	U
110-75-8	2-Chloroethylvinylether	14000	U
75-25-2	Bromoform	6800	U
108-10-1	4-Methyl-2-Pentanone	14000	U
591-78-6	2-Hexanone	14000	U
127-18-4	Tetrachloroethene	6800	U
79-34-5	1,1,2,2-Tetrachloroethane	6800	U
108-88-3	Toluene	5000	J
108-90-7	Chlorobenzene	6800	U
100-41-4	Ethylbenzene	63000	
100-42-5	Styrene	6800	U
1330-20-7	Xylene (total)	310000	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-19-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10147-04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2942

Level: (low/med) MED Date Received: 10/08/91

% Moisture: not dec. 8 Date Analyzed: 10/12/91

Column (pack/cap) CAP Dilution Factor: 10

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C9H20 ISOMER	17.50	40000	J
2.		C10H22 ISOMER	20.26	30000	J
3.		UNKNOWN ALKANE	20.64	42000	J
4.		C3-BENZENE ISOMER	21.63	29000	J
5.		UNKNOWN ALKANE	21.86	150000	J
6.		C9H18O ISOMER AND C3-BENZENE	22.21	31000	J
7.		C3-BENZENE ISOMER	22.84	89000	J
8.		METHYLETHYLBENZENE ISOMER	24.24	35000	J
9.		METHYLPROPYLBENZENE ISOMER	25.08	41000	J
10.		ETHYLDIMETHYLBENZENE ISOMER	25.37	30000	J

CLP

N/C

1F2934

CLEAN

Reviewed by : N Date: 101591 Data File: 1F2942
Validated by: [illegible] Date: 10/69 Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BH SM 00147-4 100LX
Test : VH CH10 SOLIS ID# U8C-SB-B-19-4 4.0IG/10ML 100991
Injected : 10/12/91 20:55 Units: UG/KG
Analyst: ESPYLYNN Run Factor: 1L50.00
ID File: M08106 Surrogate vol: 5.000
Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	25.00	19.30	77.2	70 121
CS05 D8-Toluene	25.00	24.62	98.5	81 117
CS10 Bromofluorobenzene	25.00	19.59	78.4	74 121

Target Compounds: M08106

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL		C010 Chloromethane
		BDL		C020 Vinyl Chloride
		BDL		C015 Bromomethane
		BDL		C025 Chloroethane
		BDL		C045 1,1-Dichloroethene
		BDL		C035 Acetone
		BDL		C040 Carbon Disulfide
		BDL		C030 Methylene Chloride
		BDL		CXXX Tert-butyl alcohol
		BDL		C053 Trans-1,2-dichloroethene
		BDL		C055 Cis-1,2-dichloroethene
		BDL		CXXX Methyl tert-butyl ether
		BDL		C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
		BDL		C110 2-Butanone
		BDL		C125 Vinyl Acetate
501	14.803	19000		C115 1,1,1-Trichloroethane
502	2.283	SNC ~~2900~~		C120 Carbon Tetrachloride
		BDL		C165 Benzene
470	5.088	6400	J	C150 Trichloroethene
		BDL		C140 1,2-Dichloropropane
		BDL		C130 Bromodichloromethane
		BDL		C175 2-Chloroethylvinylether
		BDL		C143 Cis-1,3-Dichloropropene
		BDL		C172 Trans-1,3-dichloropropene
		BDL		C160 1,1,2-Trichloroethane

000097

Data file: >F2942 Page: 2
Sample: 94LSM 10147-4 10ULX

Scan #	Concentration Quant list ug/L	Sample ug/kg		Compound
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform
		BDL	C205	4-Methyl-2-pentanone
922	3.665	4600	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
1282	46.490	58000	C240	Ethylbenzene
1313	169.446	N.R ~~210000~~	CXXX	Xylenes (p)
1415	40.193	N.R ~~50000~~	CXXX	Xylenes (o)
1414	1.215	~~SNC 1500~~	C245	Styrene
1598	3.950	SNC ~~4900~~	C225	1,1,2,2-Tetrachloroethane
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
1415	~~40.223~~ 228	~~51000~~ 285000	C250	Xylenes (total)

N

101591

Diagnostic Quant Report

Data File: BF0942::06 Injected at: 20:55 10/12/91
Acquired : 01:22 10/12/91
RD File : MUB106::RT Calibrated : 09:37 08/14/91

	Compound	- R.T. Into - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.24	7.34	.11	128.0	102639	1.0000	50.00
2)	C010 Chloromethane	2.72	0.00	--	50.0	0	1.3182	0.00
3)	C020 Vinyl Chloride	2.86	0.00	--	62.0	0	1.3229	0.00
4)	C015 Bromomethane	3.27	0.00	--	94.0	0	1.2706	0.00
5)	C025 Chloroethane	3.38	0.00	--	64.0	0	.8066	0.00
6)	C045 1,1-Dichloroethene	4.38	0.00	--	96.0	0	1.5349	0.00
7)	C035 Acetone	4.44	0.00	--	43.0	0	.3024	0.00
8)	C040 Carbon Disulfide	4.67	0.00	--	76.0	0	4.2106	0.00
9)	C050 Methylene Chloride	5.01	0.00	--	84.0	0	1.7841	0.00
10)	CXXX Tert-butyl alcohol	5.17	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.39	0.00	--	96.0	0	1.8974	0.00
12)	C055 Cis-1,2-dichloroethe	6.94	0.00	--	96.0	0	2.0428	0.00
13)	CXXX Methyl tert-butyl et	5.40	0.00	--	73.0	0	3.2861	0.00
14)	C050 1,1-Dichloroethane	6.02	0.00	--	63.0	0	3.5014	0.00
15)	C060 Chloroform	7.49	0.00	--	83.0	0	3.4818	0.00
16)	C065 1,2-Dichloroethane	8.53	0.00	--	62.0	0	2.3840	0.00
17)	C110 2-Butanone	6.97	0.00	--	72.0	0	.1733	0.00
18)	CS15 D4-1,2-dichloroethan	8.40	8.38	.02	65.0	14856	1.8749	3.86
19)	*CI10 1,4-Difluorobenzene	9.11	9.26	.14	114.0	551453	1.0000	50.00
20)	C125 Vinyl Acetate	6.08	0.00	--	43.0	0	.4441	0.00
21)	C115 1,1,1-Trichloroethan	7.82	7.81	.01	97.0	92216	.5648	14.80
22)	C120 Carbon Tetrachloride	8.13	7.82	.31	117.0	11875	.4717	2.28
23)	C165 Benzene	8.50	0.00	--	78.0	0	1.0551	0.00
24)	C150 Trichloroethene	9.80	9.78	.02	130.0	23609	.4207	5.09
25)	C140 1,2-Dichloropropane	10.29	0.00	--	63.0	0	.4143	0.00
26)	C130 Bromodichloromethane	10.91	0.00	--	83.0	0	.6104	0.00
27)	C175 2-Chloroethylvinylet	11.65	0.00	--	63.0	0	.2031	0.00
28)	C143 Cis-1,3-Dichloroprop	11.98	0.00	--	75.0	0	.5792	0.00
29)	C172 Trans-1,3-dichloropr	13.41	0.00	--	75.0	0	.4136	0.00
30)	C160 1,1,2-Trichloroethan	13.88	0.00	--	97.0	0	.3355	0.00
31)	C155 Dibromochloromethane	14.94	0.00	--	129.0	0	.4975	0.00
32)	C180 Bromoform	19.20	0.00	--	173.0	0	.3012	0.00
33)	*CI20 D5-Chlorobenzene	16.32	16.46	.14	117.0	417497	1.0000	50.00
34)	CS05 D8-Toluene	12.54	12.56	.03	98.0	48563	1.1812	4.92
35)	C205 4-Methyl-2-pentanone	12.30	0.00	--	43.0	0	.3987	0.00
36)	C230 Toluene	12.70	12.72	.02	92.0	26562	.8679	3.67
37)	C210 2-Hexanone	14.52	0.00	--	43.0	0	.2733	0.00
38)	C220 Tetrachloroethene	14.12	0.00	--	164.0	0	.4248	0.00
39)	C235 Chlorobenzene	16.53	0.00	--	112.0	0	1.0055	0.00
40)	C240 Ethylbenzene	16.93	16.91	.02	106.0	196435	.5060	46.49
40)D	C240 Ethylbenzene	16.93	17.28	.35	106.0	876007	.5060	207.32
41)D	CXXX Xylenes (p)	17.31	16.91	.39	106.0	196435	.6191	38.00
41)	CXXX Xylenes (p)	17.31	17.28	.03	106.0	876007	.6191	169.45
42)	CXXX Xylenes (o)	18.49	18.47	.02	106.0	202360	.6030	40.19
43)	C245 Styrene	18.55	18.46	.09	104.0	10600	1.0452	1.21
44)	C225 1,1,2,2-Tetrachloroe	20.74	20.61	.13	83.0	20670	.6267	3.96
44)D	C225 1,1,2,2-Tetrachloroe	20.74	21.13	.40	83.0	2636	.6267	0.50
45)	CS10 Bromofluorobenzene	20.15	20.10	.05	95.0	24499	.7490	3.92
46)	C335 Dichlorobenzene (m)	23.74	0.00	--	146.0	0	.8780	0.00

000099

[illegible]	C250	Xylenes (total)	19.49	16.91	1.58	106.0	[illegible]	.9907	39.70
[illegible]	C250	Xylenes (total)	18.49	17.28	1.21	106.0	869707	.9907	176.43
[illegible]	C250	Xylenes (total)	18.49	18.47	.02	106.0	2023e0	.9907	40.84

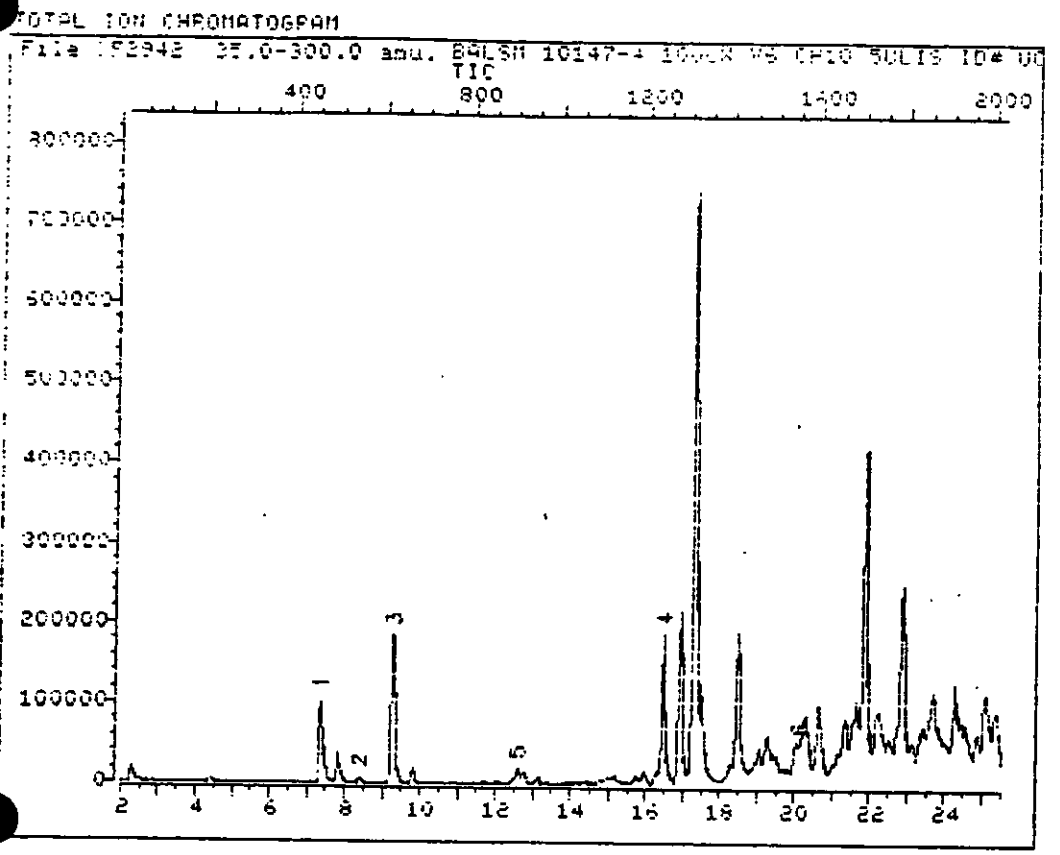
* - Compound is an Internal Standard
C - Compound Qdel'ed

Internal Standard Comparison

Sample: 2F2942 Date injected: 10/12/91 Standard: 2F2930

Internal Standard	Sample Area	Std Area	%
(101 Bromochloromethane	102639	67559	151.9
(110 1,4-Difluorobenzene	551493	380644	144.9
(120 Chlorobenzene	417497	313108	133.3

% = (Sample Area/Std Area)*100
* Area outside limits



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Misc: V6 CH10 5ULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911012 12:59

Operator ID: KERYLYNN
Quant Time : 911012 21:22
Injected at: 911012 20:55

QUANT REPORT Page 1

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911012 21:22
Output File: >F2942::D7 Injected at: 911012 20:59
Data File: >F2942::D6 Dilution Factor: 1.00000
Name: 24LSM 10147-4 100LX Instrument ID: V6
Misc: V6 CH10 PULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991

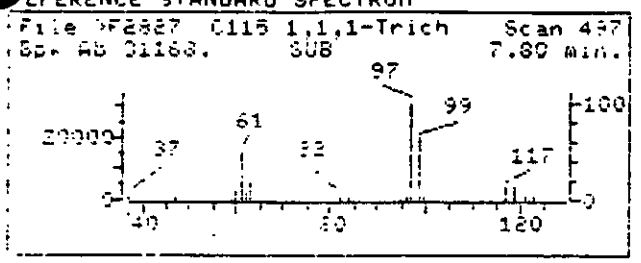
ID File: MOBI06::NT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 EPCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911012 12:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.34	128.0	102639	50.00	UG/L	72
18)	CS19 D4-1,2-dichloroethane	8.38	65.0	14856	3.86	UG/L	83
19)	*CI10 1,4-Difluorobenzene	9.26	114.0	551453	50.00	UG/L	100
21)	C115 1,1,1-Trichloroethane	7.81	97.0	92216	14.80	UG/L	89
22)	C120 Carbon Tetrachloride	7.82	117.0	11875	2.28	UG/L	99
24)	C150 Trichloroethene	9.78	130.0	23609	5.09	UG/L	97
33)	*CI20 D5-Chlorobenzene	16.46	117.0	417497	50.00	UG/L	100
34)	CS05 D8-Toluene	12.56	98.0	48563	4.92	UG/L	92
36)	C230 Toluene	12.72	92.0	26562	3.67	UG/L	95
[illegible]	C240 Ethylbenzene	16.91	106.0	196435	46.49	UG/L	99
[illegible]	CXXX Xylenes (p)	17.28	106.0	876007	169.45	UG/L	94
42)	CXXX Xylenes (o)	18.47	106.0	202360	40.19	UG/L	99
43)	C245 Styrene	18.46	104.0	10600	1.21	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane	20.61	83.0	20670	3.95	UG/L	56
45)	CS10 Bromofluorobenzene	20.10	95.0	24499	3.92	UG/L	84
49)	C250 Xylenes (total)	18.47	106.0	202360	40.89	UG/L	92

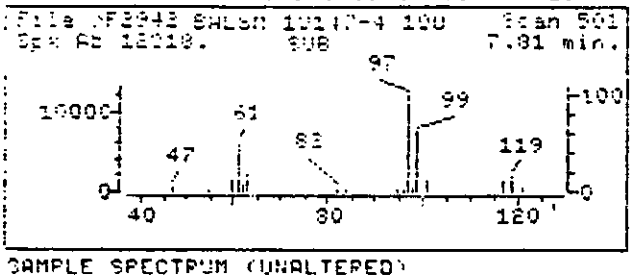
* Compound is ISTD

000103

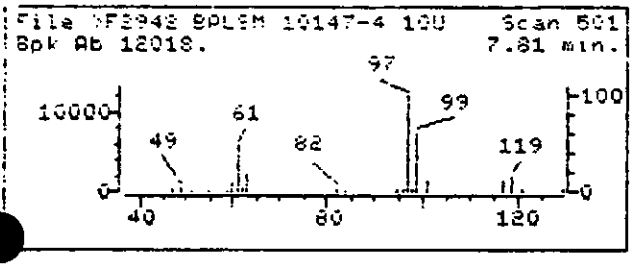
EFERENCE STANDARD SPECTRUM

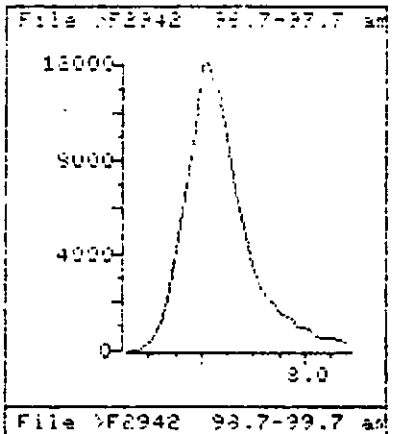


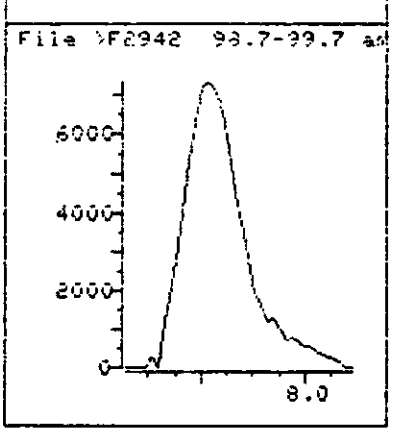
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2942::D6 Quant Output File: ^F2942::D7
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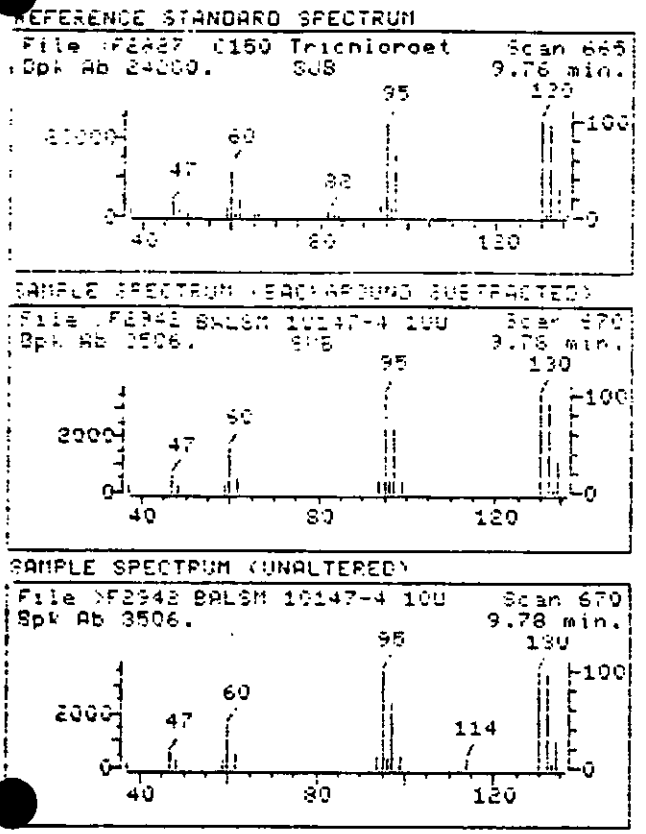
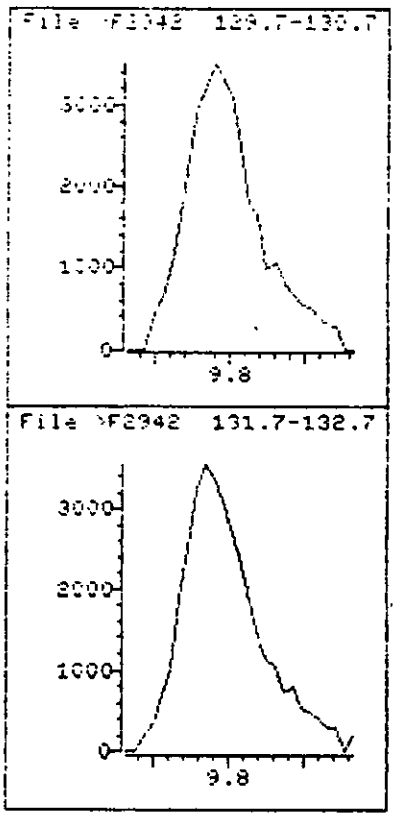
Misc: V6 CH10 5ULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991
Quant Time: 911012 21:22 Quant ID File: MOBID6::MT
Injected at: 911012 20:55 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

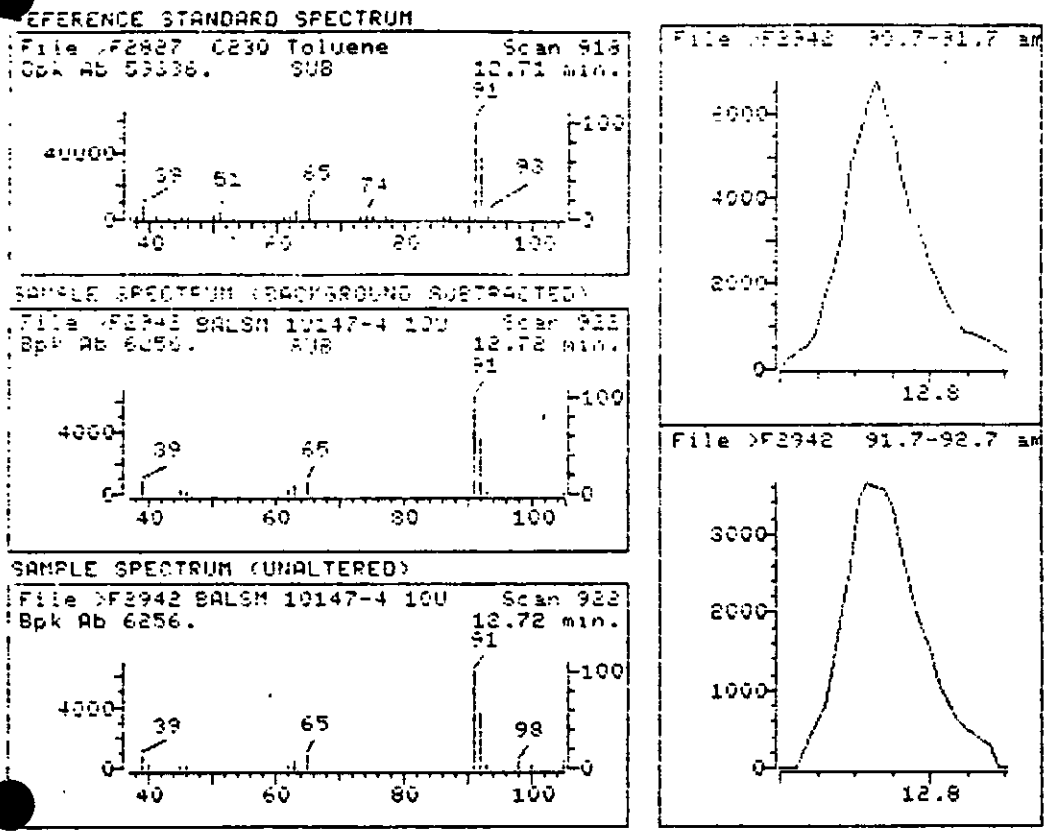
Compound No : 21
Compound Name : C115 1,1,1-Trichloroethane
Scan Number : 501
Retention Time: 7.81 min.
Quant Ion : 97.0
Area : 92216
Concentration : 14.80 UG/L
q-value : .89





Data File: >F2942::D6 Quant Output File: ^F2942::D7
Name: BALSM 10147-4 10ULX Instrument ID: V6
Misc: V6 CH10 5ULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991
Quant Time: 911012 21:22 Quant ID File: MOBID6::MT
Injected at: 911012 20:55 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

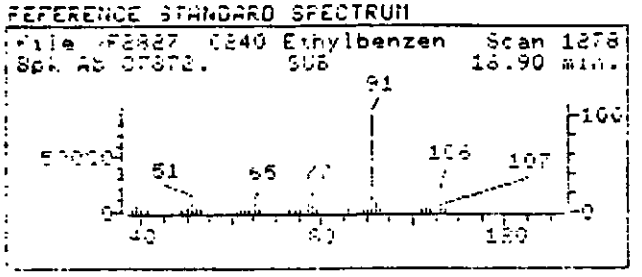
Compound No : 24
Compound Name : C150 Trichloroethene
Scan Number : 670
Retention Time: 9.78 min.
Quant Ion : 130.0
Area : 23609
Concentration : 5.09 UG/L
q-value : 97



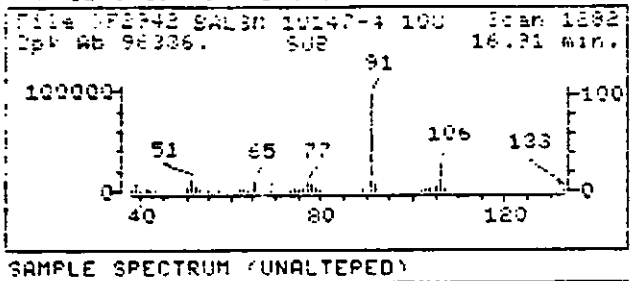
Data File: >F2942::D6 Quant Output File: ^F2942::D7
Name: BALSM 10147-4 10ULX Instrument ID: V6
Misc: V6 CH10 5ULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991
Quant Time: 911012 21:22 Quant ID File: MOBID6::MT
Injected at: 911012 20:55 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 36
Compound Name : C230 Toluene
Scan Number : 922
Retention Time: 12.72 min.
Quant Ion : 92.0
Area : 26562
Concentration : 3.67 UG/L
q-value : 95

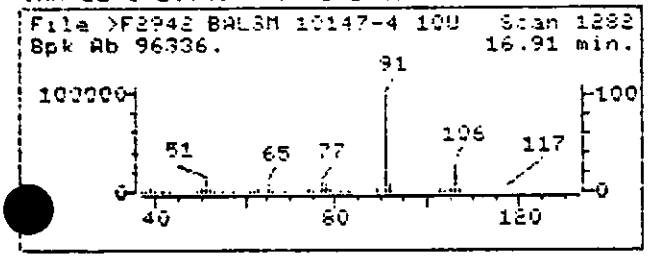
REFERENCE STANDARD SPECTRUM

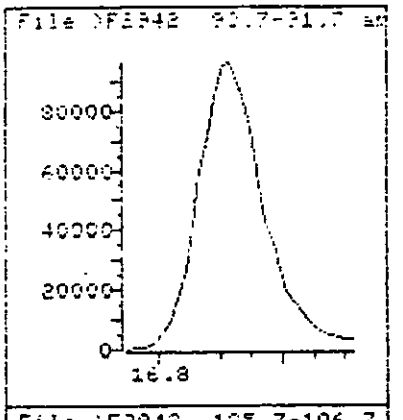


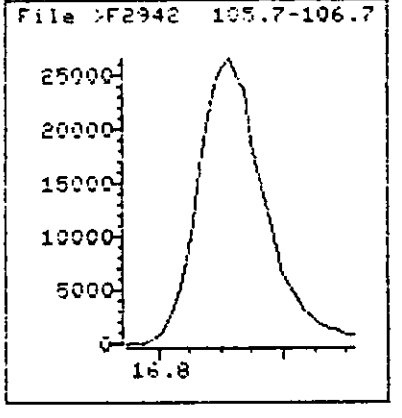
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

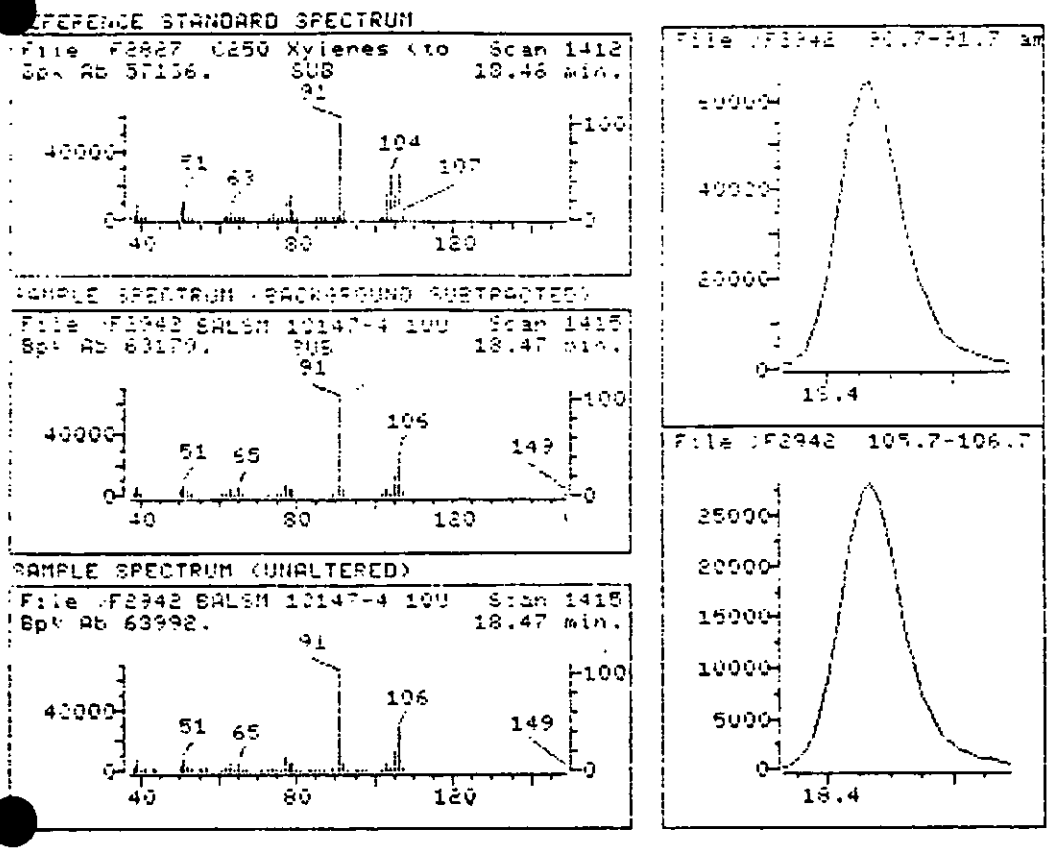






Data File: >F2942::D6 Quant Output File: ^F2942::D?
Name: BALSM 10147-4 10ULX Instrument ID: V6
Misc: V6 CH10 5ULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991
Quant Time: 911012 21:22 Quant ID File: MOBID6::MT
Injected at: 911012 20:55 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 40
Compound Name : C240 Ethylbenzene
Scan Number : 1282
Retention Time: 16.91 min.
Quant Ion : 106.0
Area : 196435
Concentration : 46.49 UG/L
q-value : 95



Data File: >F2942::D6 Quant Output File: ^F2942::D7
Name: BALSM 10147-4 10ULX Instrument ID: V6
Misc: V6 CH10 5ULIS ID# UCC-SB-B-19-4 4.01G/10ML 100991
Quant Time: 911012 21:22 Quant ID File: MOBID6::MT
Injected at: 911012 20:55 Last Calibration: 910814 09:37
Last Qcal Time: 911012 12:59

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1415
Retention Time: 18.47 min.
Quant Ion :- 106.0
Area : 202360
Concentration : 40.89 UG/L
q-value : 92

Data Reduced by : N Date: 101491
Data Reviewed by : [illegible] Date: 10/69/

Data File: \F2942

Enseco TIC Report (page 1)

Sample: PALSM 10147-4 10ULX
Conditions: U6 C-10 PULIS ID# ULC-SB-B-19-

Run Factor: 12.0.
Analyst: KERYLYNN

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	1332.			37000.	~~111-84-2~~	~~Nonane~~ C9H20 ISOMER
2	1493			~~19000~~.	~~1678-92-8~~	~~Cyclohexane, propyl-~~ C9H18 ISOMER
3	1568.			27000.	~~17301-94-9~~	~~Nonane, 4-methyl-~~ C10H22 ISOMER
4	~~1572.~~			~~20000.~~	~~17312-81-1~~	~~Undecane, 3,6-dimethyl-~~ UNK ALKANE
5	1601.			39000.	~~1566-94-8~~	~~Octane, 3,6-dimethyl-~~ UNK. ALKANE
6	~~1660.~~			~~21000.~~	~~611-14-3~~	~~Benzene, 1-ethyl 2 methyl-~~ C9H12 ISOMER
7	1686.			27000.	611-14-3	Benzene, 1-ethyl-2-methyl- ~~C9H12 ISOMER~~ C3-benzene isomer
8	1705.			140000.	~~124-18-5~~	~~Decane~~ UNK ALKANE
9	1735.			29000.	~~815-24-7~~	~~3-Pentanone, 2,2,4,4-tetramethyl-~~ ~~UNK. ALKANE~~
10	1789.			82000.	~~620-14-4~~	~~Benzene, 1-ethyl-3-methyl-~~ ~~C9H12 ISOMER~~ C3-benzene isomer
11	~~1838.~~			~~21000.~~	135-98-8	Benzene, (1-methylpropyl)- C10H14 ISOMER
12	~~1858.~~			~~24000.~~	~~1678-93-9~~	~~Cyclohexane, butyl-~~ C10H20 ISOMER
13	1909.			32000.	~~622-96-8~~	~~Benzene, 1-ethyl 4-methyl-~~ ~~C9H12~~ ISOMER
14	1980.			38000.	~~1074-43-7~~	~~Benzene, 1-methyl-2-propyl-~~ ~~C10H14~~ ISOMER
15	2004.			28000.	~~1758-88-9~~	~~Benzene, 1-ethyl 3,4-dimethyl-~~ ~~C10H14~~ ISOMER

#9 $C_9H_{18}O$ isomer and C_3-benzene isomer

File: >F2942

Enseco TIC Report (page 2)

Concentration = Area(TIC) * Conc.(IS) / Area(IS)

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	46	1	3	17.50	1.063	772916.	99815.	29.312
2	79	19	3	19.26	1.179	404075.	42213.	15.323
3	78	4	3	20.26	1.231	579686.	70777.	21.984
4	78	5	3	20.30	1.233	431297.	74677.	16.356
5	67	28	3	20.64	1.254	818643.	85805.	31.046
6	93	13	3	21.37	1.296	433773.	57637.	16.450
7	87	14	3	21.63	1.314	569034.	72220.	21.580
8	94	1	3	21.86	1.328	2909691.	386683.	110.343
9	49	46	3	22.21	1.349	603374.	53081.	22.882
10	90	35	3	22.84	1.388	1720010.	207148.	65.229
11	69	35	3	23.41	1.422	452637.	38979.	17.166
12	76	7	3	23.65	1.437	419087.	52058.	15.893
13	96	14	3	24.24	1.473	671601.	81454.	25.470
14	69	54	3	25.07	1.523	801206.	80987.	30.385
15	95	16	3	25.36	1.540	587102.	59316.	22.265

Internal Standard Report

Data File: F2942

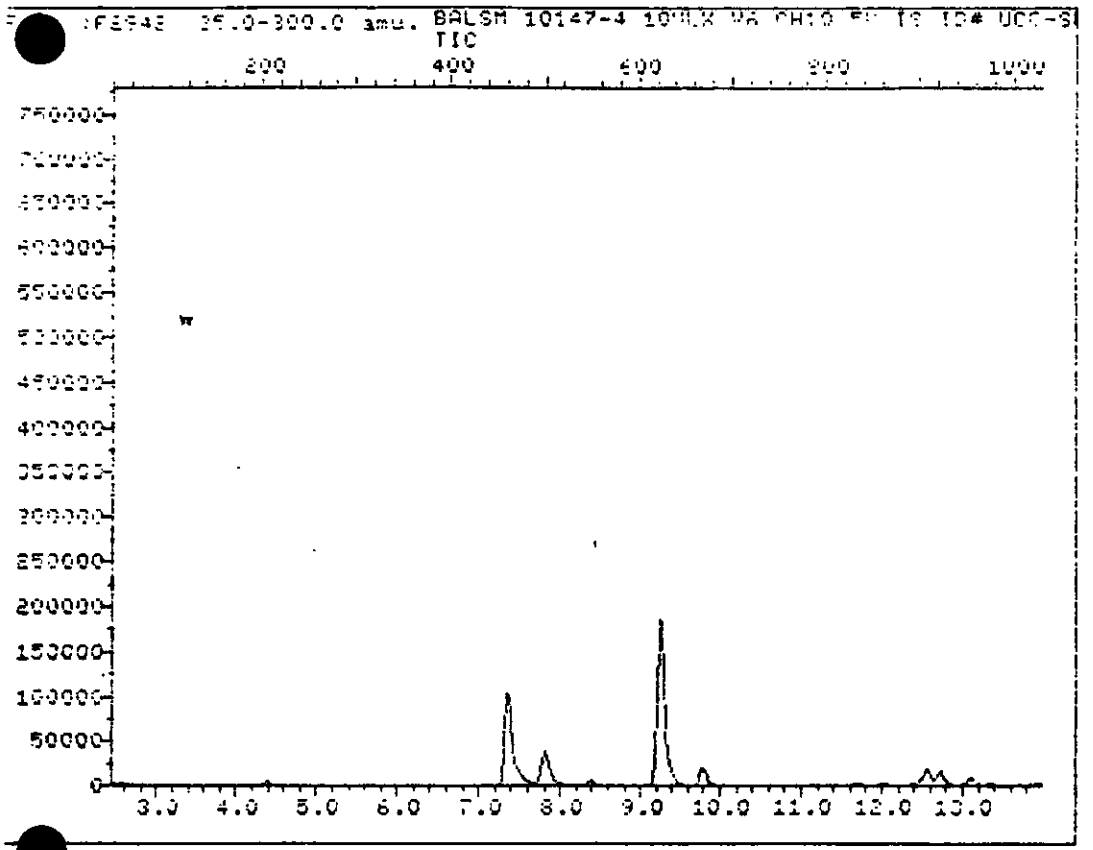
Maximum seperation of RIC and Quan ion peaks: 5.
Minimum PIC peak area as % of est. RIC area: 50.
Maximum PIC peak area as % of est. RIC area: 200.

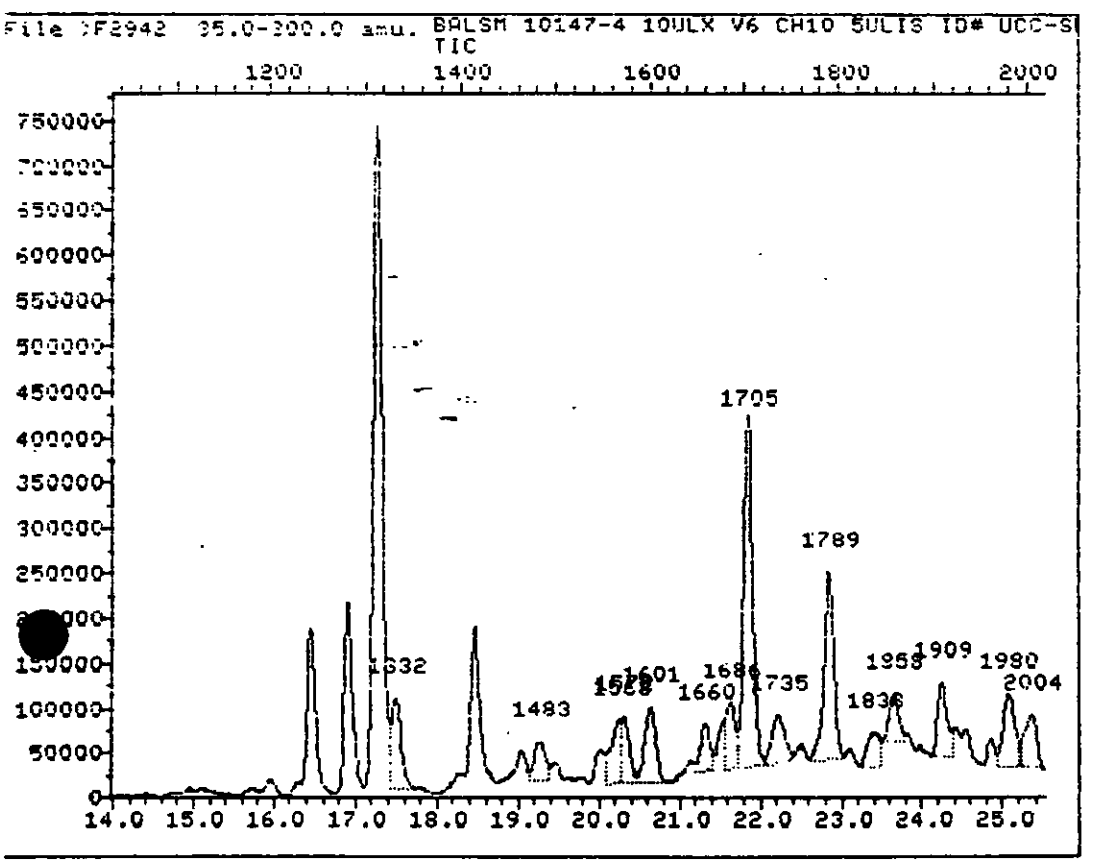
#	Name	Concentration		Flag		
	Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC
1	C191 Bromochlorometh	50.000	UG/L		Ok	
	461.	102639.	6.987	461.	747325.	104.207
2	C110 1,4-Difluoroben	50.000	UG/L		Ok	
	625.	551453.	2.300	624.	1267302.	99.928
3	C120 D5-Chlorobenzen	50.000	UG/L		Ok	
	1243.	417497.	3.615	1243.	1318431.	87.362

Deleting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 24
Number of peaks remaining: 24

Deleting target compounds from INT file: VDIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 24
Number of peaks remaining: 18

Deleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 18
Number of peaks remaining: 15


TIC
200
400
600
800
1000
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0


File :F2942 35.0-300.0 amu. BALSM 10147-4 10ULX V6 CH10 5ULIS ID# UCC-S
TIC
1200
1400
1600
1800
2000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
150000
100000
50000
0
1705
1789
1909
1980
2004
1958
1836
1735
1660
1601
1483
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0

C9H20 ISOMER

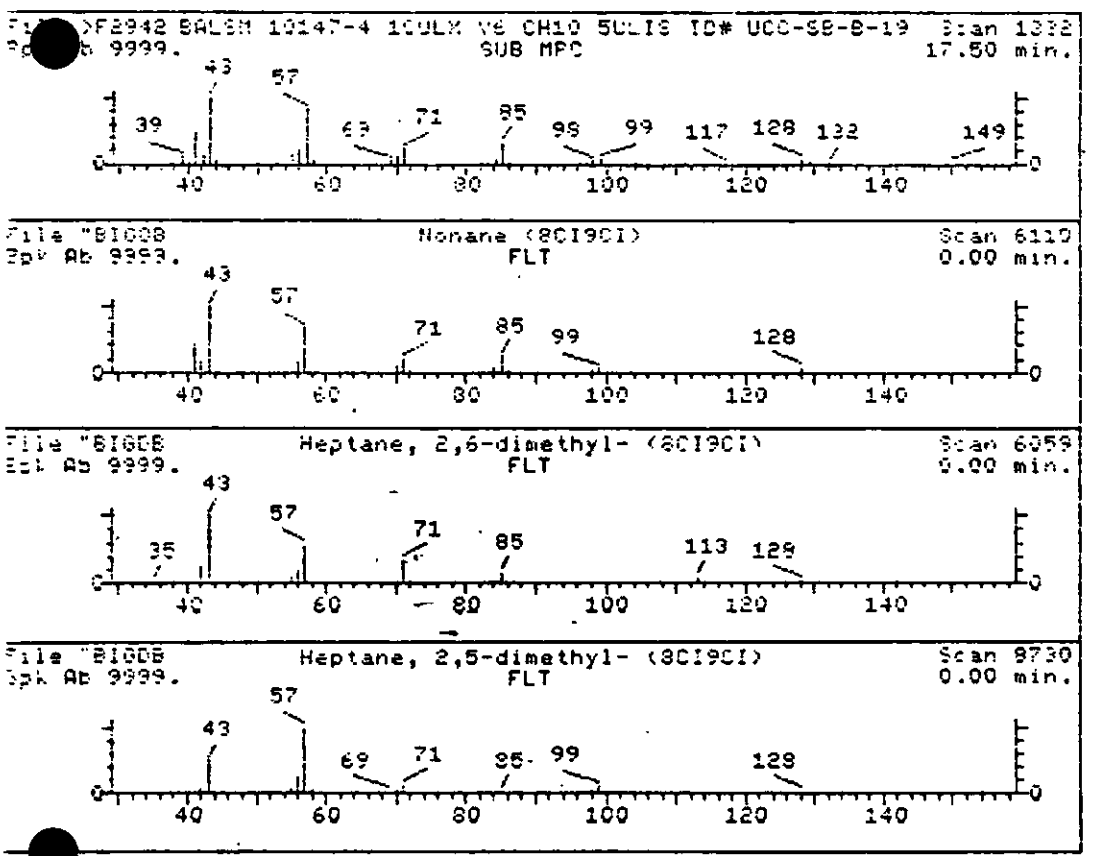
TAG NUMBER: 1

1.	Nonane (8CI9CI)	128 C9H20
2.	Heptane, 2,6-dimethyl- (8CI9CI)	128 C9H20
3.	Heptane, 2,5-dimethyl- (8CI9CI)	128 C9H20
4.	Hexane, 3-ethyl-4-methyl- (8CI9CI)	128 C9H20
5.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20
6.	Octane, 3-methyl- (8CI9CI)	128 C9H20

1/9 10/691

Sample file: >F2942 Spectrum #: 1392
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 51

	Prob.	CAS #	CON #	ROOT	K	OK	#PKS	TILT	%	CON	C_I	R_IX
1.	95*	111842	6110	"BIGDB	33	13	1	0	91	1	72	93
2.	52*	1072055	6059	"BIGDB	23	69	3	0	100	20	20	12
3.	46*	2216300	8730	"BIGDB	31	55	0	0	67	27	19	24
4.	42*	3074779	3606	"BIGDB	29	67	3	0	82	21	17	13
5.	40*	2213032	5920	"BIGDB	56	36	1	0	92	49	12	44
6.	39*	2216333	8731	"BIGDB	29	55	1	0	78	28	14	16



TIC NUMBER:3

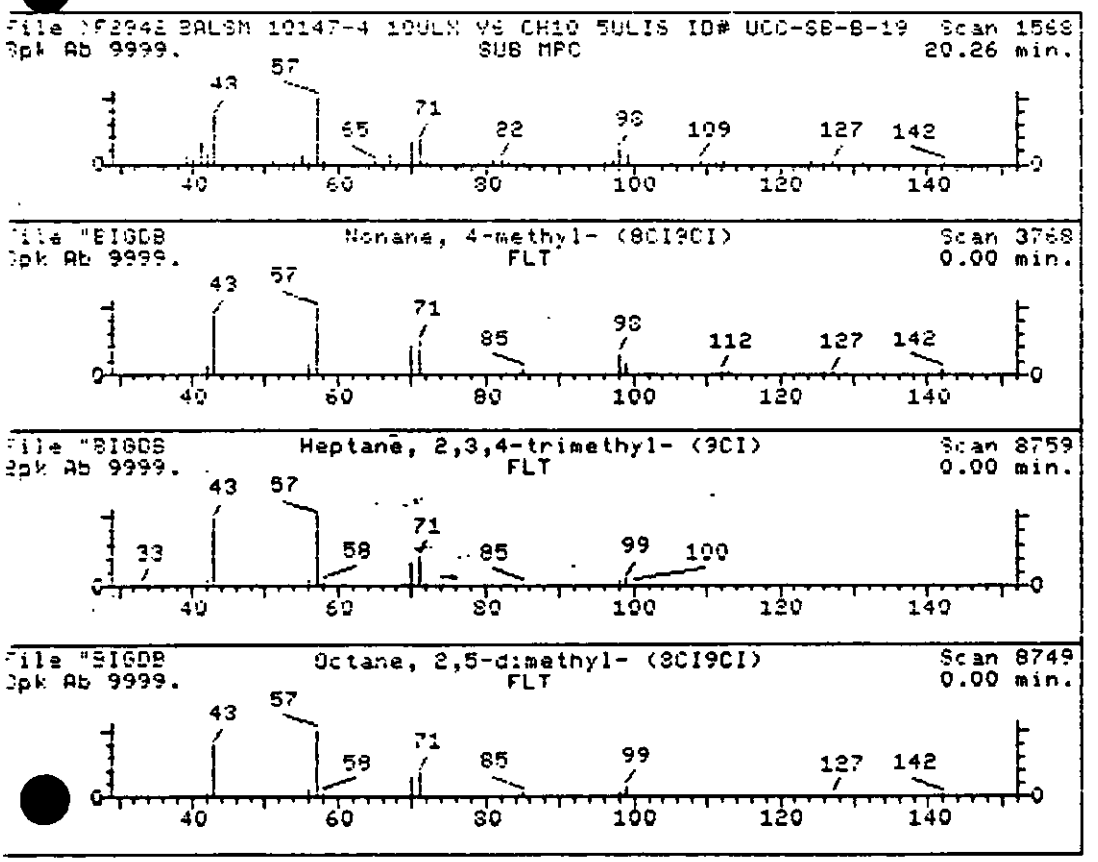
1. Nonane, 4-methyl- (8CI9CI)	142	C10H22
2. Heptane, 2,3,4-trimethyl- (9CI)	142	C10H22
3. Octane, 2,5-dimethyl- (8CI9CI)	142	C10H22
4. Octane, 3,5-dimethyl- (8CI9CI)	142	C10H22
5. Octane, 2,3-dimethyl- (8CI9CI)	142	C10H22
6. Heptane, 4-(1-methylethyl)- (9CI)	142	C10H22

Isomers

(8/01/91

Sample file: >F294C Spectrum #: 1568
Search speed: 2 Tilting option: S No. of ion ranges searched: 5*

	Prob.	CAS #	CON #	ROOT	M	OK	#PLG	TILT	%	CON	C_I	P_I*
1.	78	17301949	3768	"BIGDB	58	42	2	0	73	4	55	16
2.	52	52896954	8759	"BIGDB	51	39	2	0	74	20	20	17
3.	52*	15869893	8749	"BIGDB	51	41	3	1	88	19	20	16
4.	43*	15869939	3611	"BIGDB	24	69	2	0	75	22	17	14
5.	42*	7146603	8559	"BIGDB	40	50	2	0	78	27	14	19
6.	39*	52896874	8582	"BIGDB	73	50	2	0	92	30	14	16



unk
Alkane

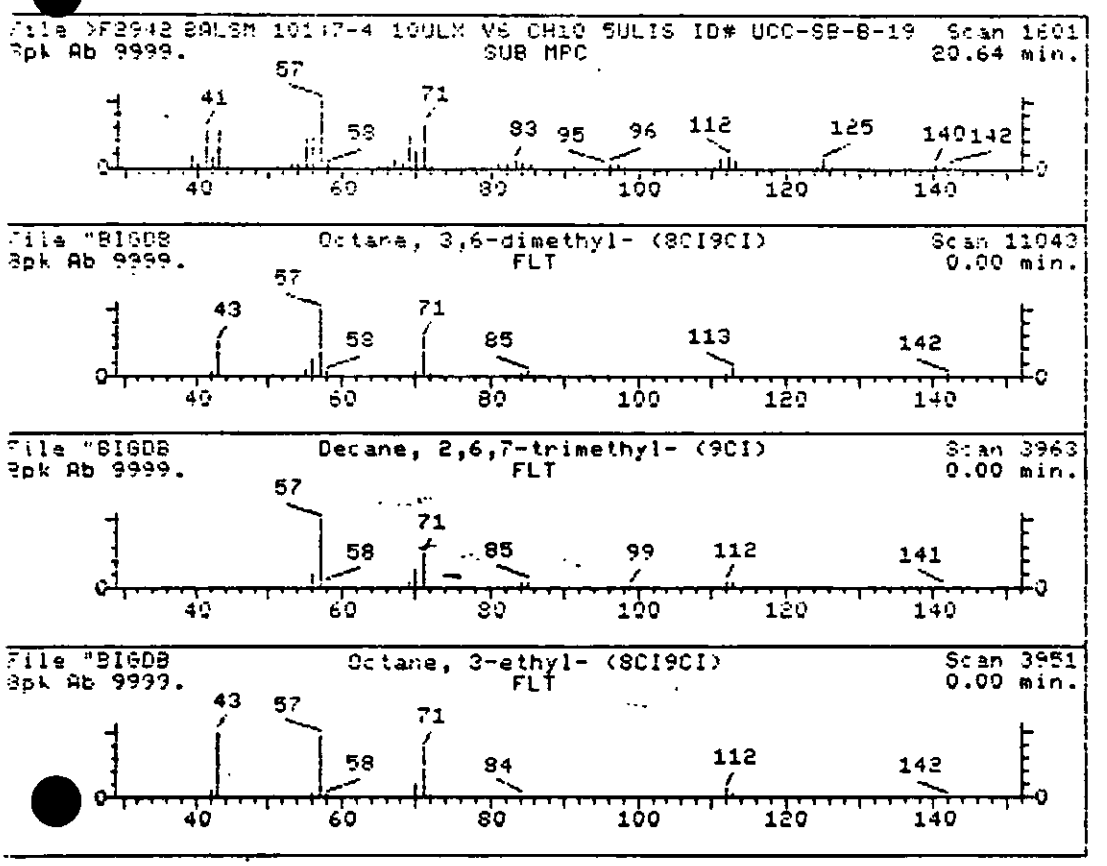
TIC NUMBER:5

1.	Octane, 3,6-dimethyl- (8CI9CI)	142 C10H22
2.	Decane, 2,6,7-trimethyl- (9CI)	184 C13H28
3.	Octane, 3-ethyl- (8CI9CI)	142 C10H22
4.	Heptane, 3-ethyl-5-methyl- (9CI)	142 C10H22
5.	1-Decene, 3,4-dimethyl- (9CI)	168 C12H24
6.	Nonane, 2,3-dimethyl- (8CI9CI)	156 C11H24

Q1C1691

Sample file: >F2942 Spectrum #: 1601
Search speed: 2 Tilting option: S No. of ion ranges searched: 64

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	#_I
1.	67*	19869940	11043	"BIGDB	45	44	0	0	99	28	27	53
2.	52	62109252	3963	"BIGDB	49	49	2	0	93	20	20	12
3.	48*	5881174	3951	"BIGDB	46	47	2	0	87	26	19	26
4.	46*	52896909	3958	"BIGDB	46	48	1	0	82	32	16	29
5.	44	50871039	10926	"BIGDB	55	47	1	0	70	23	17	15
6.	40	2884062	10835	"BIGDB	60	41	2	0	72	30	14	17



~~C_7H_{12} ISOMER~~

C_3-benzene isomer

M 10-22-91

MPC NUMBER:7

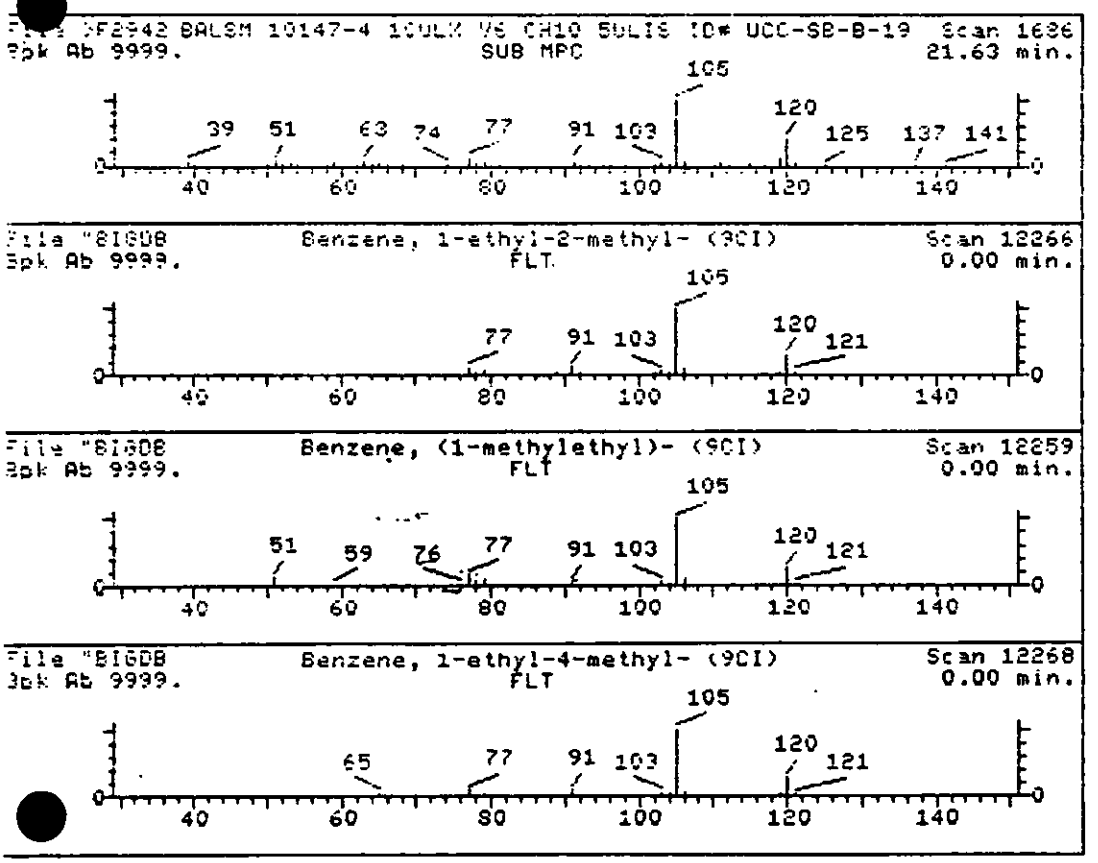
1.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C_9H_{12}
2.	Benzene, (1-methylethyl)- (9CI)	120 C_9H_{12}
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C_9H_{12}
4.	Benzene, 1,2,3-trimethyl- (8CI,9CI)	120 C_9H_{12}
5.	Benzene, 1,2,4-trimethyl- (8CI,9CI)	120 C_9H_{12}
6.	Benzene, 1,3,5-trimethyl- (9CI)	120 C_9H_{12}

no other

(101691

Sample File: >F2942 Spectrum #: 1686
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IO
1.	87*	611143	12266	"BIGDB	68	17	1	0	100	14	55	80
2.	83*	98828	12259	"BIGDB	77	10	0	-4	100	15	51	73
3.	82*	622968	12268	"BIGDB	64	21	0	0	90	26	43	83
4.	82*	526738	12280	"BIGDB	70	30	0	0	52	45	33	89
5.	81*	95636	12273	"BIGDB	68	27	0	0	63	34	40	83
6.	76*	108678	12275	"BIGDB	64	24	0	0	64	34	32	77



Unk.
Alkane

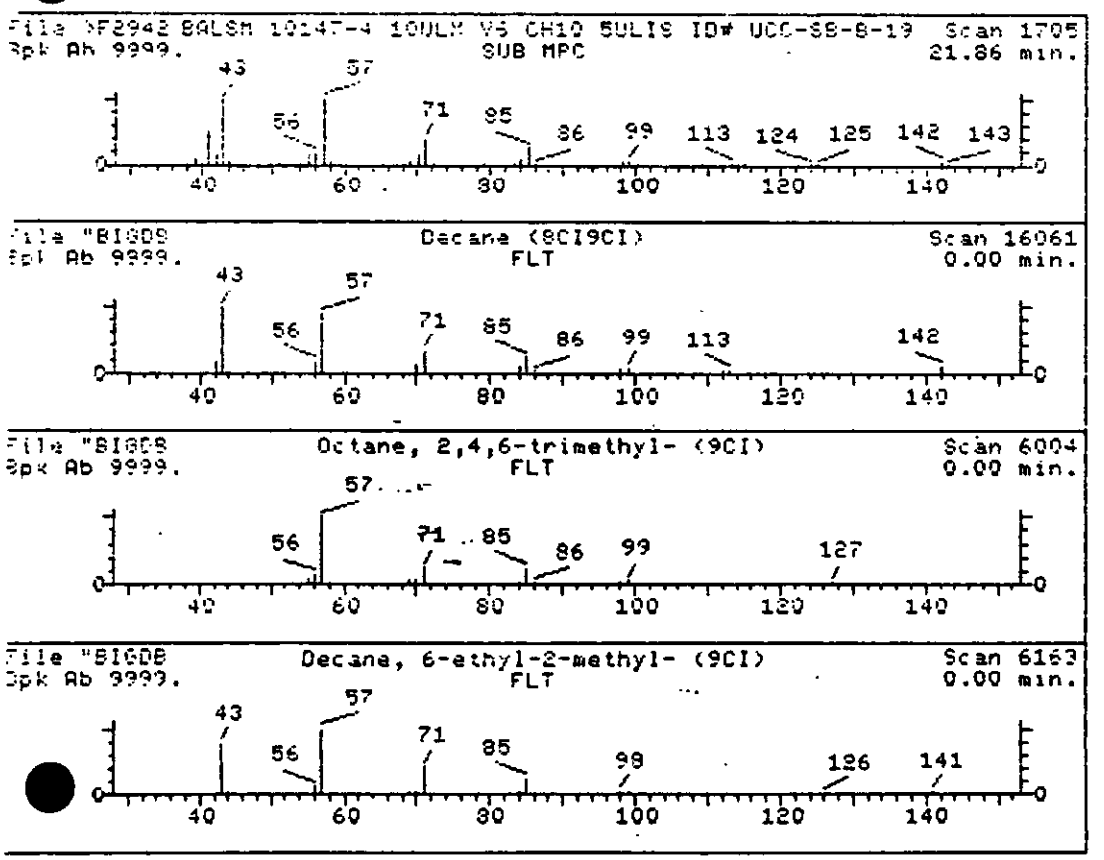
TIC NUMBER:8

1.	Decane (9CI9CI)	142 C10H22
2.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
3.	Decane, 6-ethyl-2-methyl- (9CI)	184 C13H28
4.	Octane, 2,5,9-trimethyl- (9CI)	184 C13H28
5.	Nonane, 2-methyl- (8CI9CI)	142 C10H22
6.	Nonane, 4-methyl- (8CI9CI)	142 C10H22

9101691

Sample file: >F2942 Spectrum #: 1709
Search speed: 2 Tilting option: S No. of ion ranges searched: 53

	Prob.	CAS #	CON #	ROOT	K	UK	#FLG	TILT	%	CON	C_I	P_I
1.	94*	124185	16061	"BIGDB	91	9	1	1	86	1	72	92
2.	70	62016779	6004	"BIGDB	59	26	2	0	100	19	42	19
3.	70	62108218	6163	"BIGDB	62	47	2	0	89	10	42	13
4.	63	62108229	3927	"BIGDB	55	36	0	0	100	17	30	33
5.	60*	871830	8635	"BIGDB	42	54	3	0	98	11	30	13
6.	60*	17301949	3768	"BIGDB	38	62	3	0	77	15	30	13



~~UNK ALKANE~~

$C_9H_{18}O$ isomer and C_3 benzene isomer
NL 10-22-91

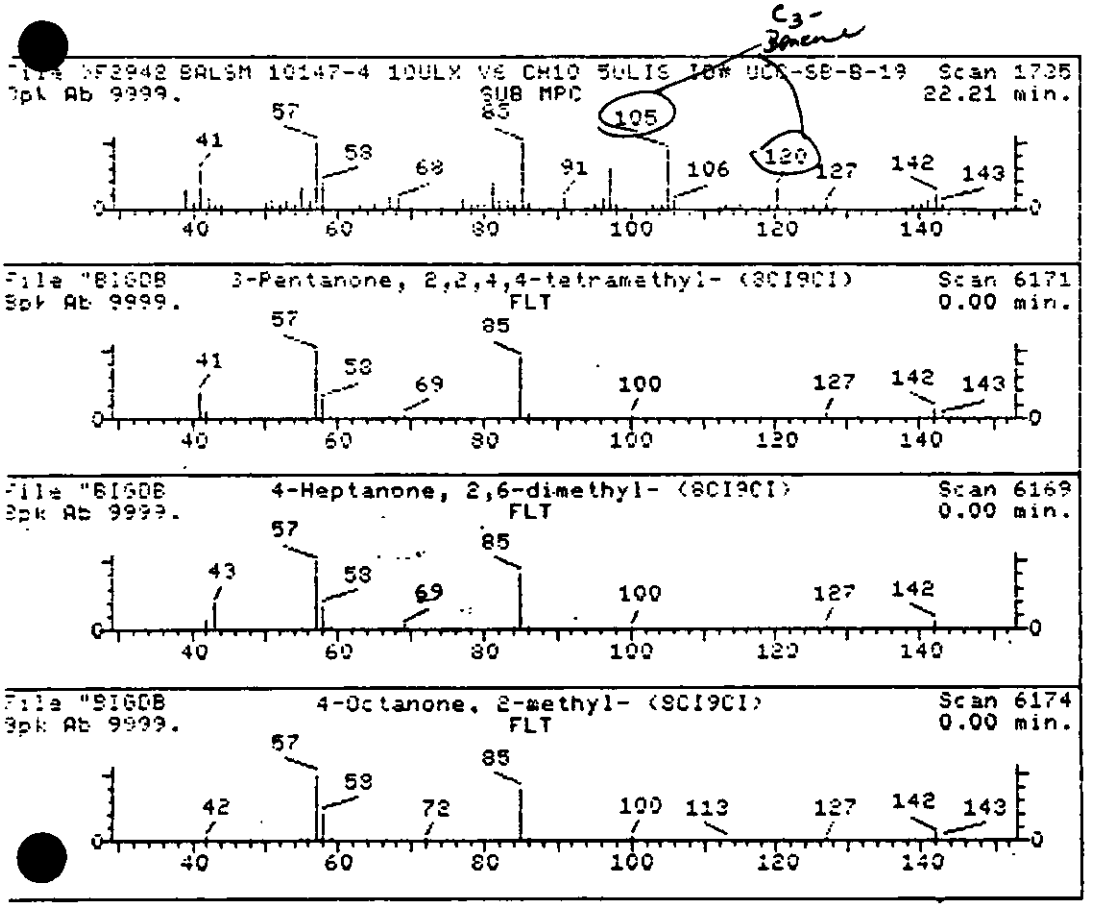
HITS TO: NUMBER:9

1.	3-Pentanone, 2,2,4,4-tetramethyl- (8CI9CI)	142	$C_9H_{18}O$
2.	4-Heptanone, 2,6-dimethyl- (8CI9CI)	142	$C_9H_{18}O$
3.	4-Octanone, 2-methyl- (8CI9CI)	142	$C_9H_{18}O$
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C_9H_{12}
5.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C_9H_{12}
6.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C_9H_{12}

JA 10/16/91

Sample File: >F2942 Spectrum #: 1735
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	49*	815247	6171	"BIGDB	49	44	0	0	100	46	13	59
2.	30*	108838	6169	"BIGDB	49	50	1	0	100	47	10	29
3.	30*	7492?98	6174	"BIGDB	31	61	0	0	94	46	10	24
4.	30*	622968	12269	"BIGDB	52	33	2	1	96	47	10	28
5.	30*	620144	12267	"BIGDB	52	35	2	1	96	47	10	28
6.	30*	611143	12266	"BIGDB	51	34	2	1	96	47	10	27



~~C_9H_{12} ISOMER~~ C_3-benzene isomer

RR 10-28-91

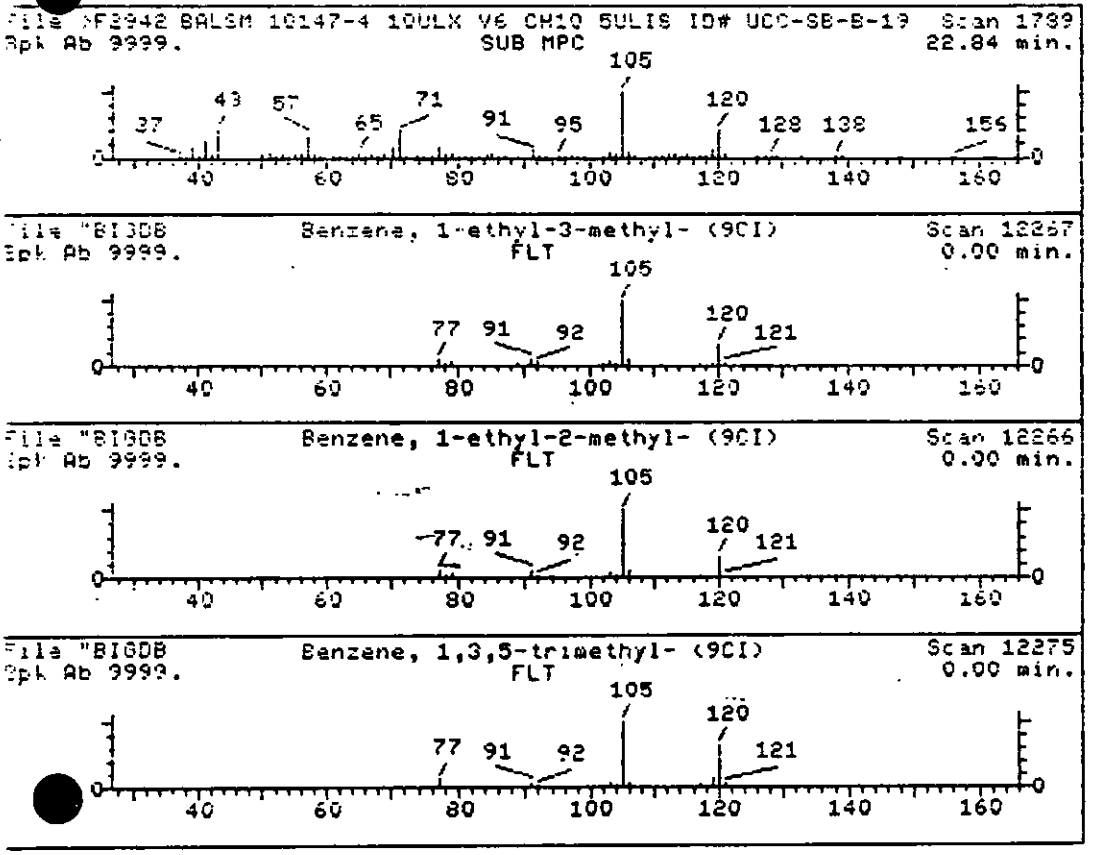
FILE NUMBER: 10

1.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C_9H_{12}
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C_9H_{12}
3.	Benzene, 1,3,5-trimethyl- (9CI)	120	C_9H_{12}
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C_9H_{12}
5.	Benzene, 1,2,4-trimethyl- (8CI,9CI)	120	C_9H_{12}
6.	Benzene, (1-methylethyl)- (9CI)	120	C_9H_{12}

JG11691

Sample File: >F2942 Spectrum #: 1789
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	90*	620144	12267	"BIGDB	75	12	1	0	98	35	50	93
2.	88*	611143	12266	"BIGDB	75	10	1	0	97	36	47	93
3.	73*	108678	12275	"BIGDB	78	10	2	4	74	22	32	61
4.	73*	622968	12268	"BIGDB	64	21	0	0	75	46	30	83
5.	64*	95636	12273	"BIGDB	71	24	0	0	61	52	25	89
6.	45*	98828	12259	"BIGDB	56	31	0	0	71	52	11	67



~~C9H12~~

~~ISOMER~~

NUMBER: 13

1.	Benzene, 1-ethyl-4-methyl- (9CI) (isomer)	120 C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
4.	Benzene, (1-methylethyl)- (9CI)	120 C9H12
5.	Benzene, 1,3,5-trimethyl- (9CI)	120 C9H12
6.	Benzene, 1,2,4-trimethyl- (8CI,9CI)	120 C9H12

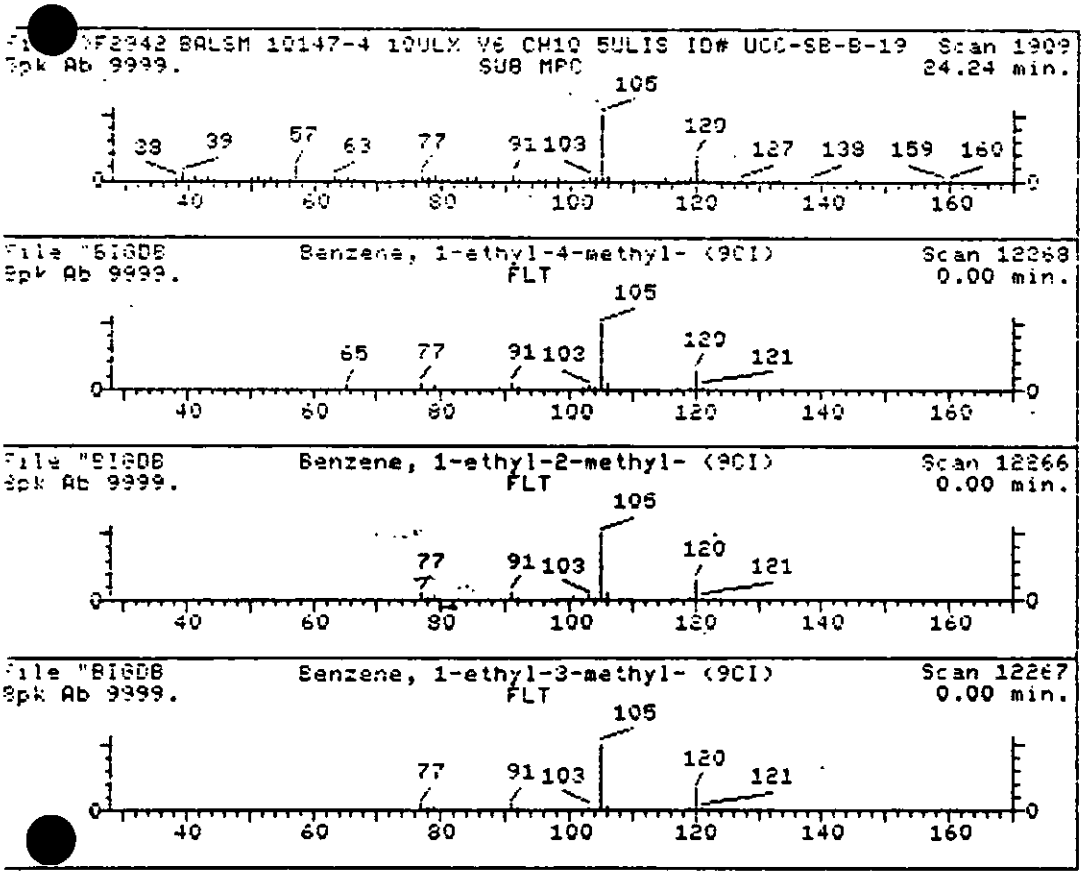
R 10-22-91

~~9101691~~

Sample file: >F2942 Spectrum #: 1909

Search speed: 2 Tilting option: S No. of ion ranges searched: 62

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_I
1.	96*	622968	12268	"BIGDB	79	6	0	0	96	14	64	97
2.	93*	611143	12266	"BIGDB	75	10	1	0	87	14	64	93
3.	93*	620144	12267	"BIGDB	75	12	1	0	87	14	64	93
4.	79*	98828	12259	"BIGDB	77	10	1	-3	100	12	43	61
5.	72*	108678	12275	"BIGDB	68	20	1	0	58	35	32	73
6.	70*	95636	12273	"BIGDB	72	23	1	0	56	35	32	71



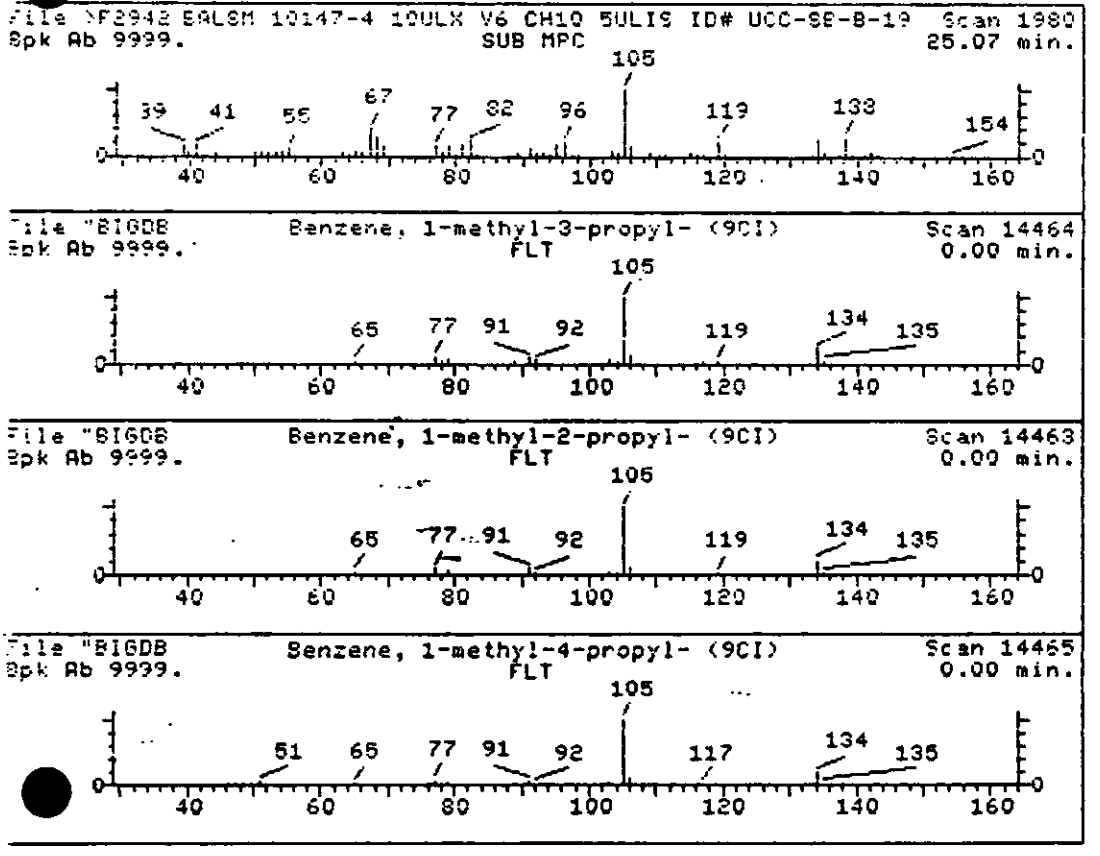
C10H14 ISOMER

PID NUMBER:14

1. Benzene, 1-methyl-3-propyl- (9CI) isomer — 134 C10H14
2. Benzene, 1-methyl-2-propyl- (9CI) — 134 C10H14
3. Benzene, 1-methyl-4-propyl- (9CI) — 134 C10H14
4. Benzene, (1-methylpropyl)- (9CI) — 134 C10H14
5. Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI) — 196 C15H16
6. Benzene, (1-methyl-3-butenyl)- (9CI) — 146 C11H14

Sample file: >F2942 Spectrum #: 1980
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

	Prob.	CAS #	CON #	POOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	59*	1074437	14464	"BIGDB	81	6	0	3	98	54	35	94
2.	59*	1074175	14463	"BIGDB	67	18	1	2	100	48	14	69
3.	57*	1074551	14465	"BIGDB	56	27	0	1	97	48	14	67
4.	47*	135988	14459	"BIGDB	57	29	0	0	93	55	11	69
5.	11	5814857	9857	"BIGDB	57	42	2	0	100	64	2	16
6.	11	10340495	9870	"BIGDB	46	34	2	0	100	64	2	15



C10H14
ISOMER

10-22-91

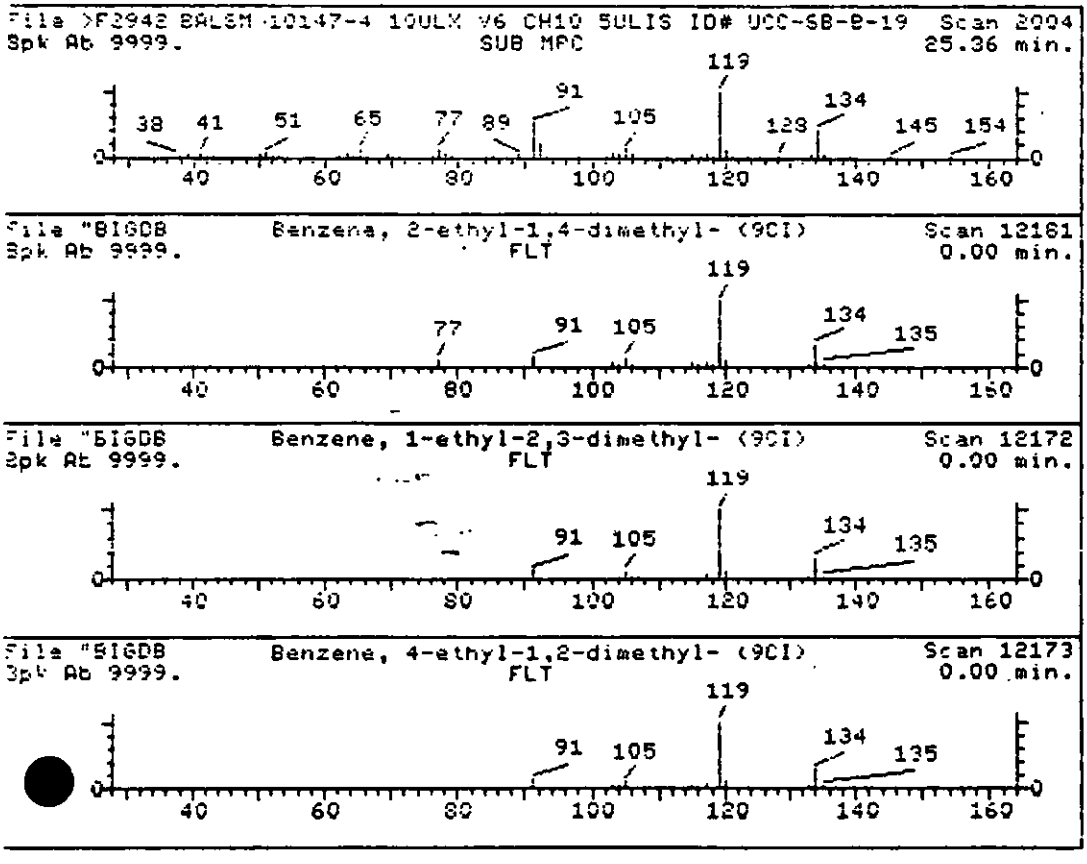
TIC NUMBER: 19

1.	Benzene, 2-ethyl-1,4-dimethyl- (9CI) (Some	134 C10H14
2.	Benzene, 1-ethyl-2,3-dimethyl- (9CI)	134 C10H14
3.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134 C10H14
4.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14
5.	Benzene, 1-ethyl-3,5-dimethyl- (9CI)	134 C10H14
6.	Ethanone, 1-(methylphenyl)- (9CI)	134 C9H10O

✓ 10/16/91

Sample file: >F2942 Spectrum #: 2004
Search speed: 2 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CUN #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	1758889	12181	"BIGDB	86	8	0	0	92	16	60	96
2.	93*	933982	12172	"BIGDB	79	12	1	0	100	16	60	93
3.	86*	934805	12173	"BIGDB	72	21	0	0	100	16	50	89
4.	71*	535773	12170	"BIGDB	53	36	0	0	100	26	29	65
5.	70*	934747	12180	"BIGDB	70	25	2	0	100	16	32	55
6.	70*	26444199	12182	"BIGDB	65	27	1	-2	93	16	32	52



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-7-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10147-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2837

Level: (low/med) LOW Date Received: 10/08/91

% Moisture: not dec. ____ Date Analyzed: 10/09/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	B
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: 10-7-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10147-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2837

Level: (low/med) LOW Date Received: 10/08/91

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* - Compound is an Internal Standard
D - Compound Qdel'ed

L 100691 V6A

N/C

R 100991 V6A

Peduced by : Date: 100991
Re'iewed by: Date: 10/6/91

Data File: >F2837
Page: 1

Mech2

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BALSAM 10147-7 5ML
Misc : V6 CH#2 5ULIS ID# UCC-10/7-QA1
Injected : 10/09/91 16:37
Analyst: LIZ
ID File: MOBID6
Quant list threshold: 1.00

Units: UG/L
Run Factor: 1.000
Surrogate vol: .005

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2707	108	76 114
CS05 D8-Toluene	.2500	.2453	98.1	88 110
CS10 Bromofluorobenzene	.2500	.2486	99.4	86 115

Target Compounds: MOBID6

Scan #	Concentration Quant List UG/L	Sample UG/L	Compound
		BDL	C010 Chloromethane
		BDL	C020 Vinyl Chloride
		BDL	C015 Bromomethane
		BDL	C025 Chloroethane
		BDL	C045 1,1-Dichloroethene
		BDL	C035 Acetone
		BDL	C040 Carbon Disulfide
263	4.706	4.7 JB	C030 Methylene Chloride
		BDL	CXXX Tert-butyl alcohol
		BDL	C053 Trans-1,2-dichloroethene
		BDL	C055 Cis-1,2-dichloroethene
		BDL	CXXX Methyl tert-butyl ether
		BDL	C050 1,1-Dichloroethane
		BDL	C060 Chloroform
		BDL	C065 1,2-Dichloroethane
		BDL	C110 2-Butanone
		BDL	C125 Vinyl Acetate
		BDL	C115 1,1,1-Trichloroethane
		BDL	C120 Carbon Tetrachloride
		BDL	C165 Benzene
		BDL	C150 Trichloroethene
		BDL	C140 1,2-Dichloropropane
		BDL	C130 Bromodichloromethane
		BDL	C175 2-Chloroethylvinylether
		BDL	C143 Cis-1,3-Dichloropropene
		BDL	C172 Trans-1,3-dichloropropene
		BDL	C160 1,1,2-Trichloroethane

Data File: >F2837 Page: 2
Sample: BALSAM 10147-7 5ML

Scan #	Concentration Quant list UG/L	Sample UG/L	Compound
		BDL	C155 Dibromochloromethane
		BDL	C180 Bromoform
		BDL	C205 4-Methyl-2-pentanone
		BDL	C230 Toluene
		BDL	C210 2-Hexanone
		BDL	C220 Tetrachloroethene
		BDL	C235 Chlorobenzene
		BDL	C240 Ethylbenzene
		BDL	CXXX Xylenes (p)
		BDL	CXXX Xylenes (o)
		BDL	C245 Styrene
		BDL	C225 1,1,2,2-Tetrachloroethane
		BDL	C335 Dichlorobenzene (m)
		BDL	C340 Dichlorobenzene (p)
		BDL	C350 Dichlorobenzene (o)
		BDL	C250 Xylenes (total)

Diagnostic Quant Report

Data File: >F2837::D6 Injected at: 16:37 10/09/91
Quant'd : 17:05 10/09/91
ID File : MOBID6::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.33	7.37	.04	128.0	67067	1.0000	50.00
2)	C010 Chloromethane	2.74	0.00	--	50.0	0	1.3236	0.00
3)	C020 Vinyl Chloride	2.89	0.00	--	62.0	0	1.3500	0.00
4)	C015 Bromomethane	3.29	0.00	--	94.0	0	1.2156	0.00
5)	C025 Chloroethane	3.42	0.00	--	64.0	0	.5022	0.00
6)	C045 1,1-Dichloroethene	4.41	0.00	--	96.0	0	1.5071	0.00
7)	C035 Acetone	4.47	0.00	--	43.0	0	.1843	0.00
8)	C040 Carbon Disulfide	4.71	4.70	.01	76.0	3094	4.4340	.52
9)	C030 Methylene Chloride	5.05	5.03	.02	84.0	11361	1.7999	4.71
10)	CXXX Tert-butyl alcohol	5.19	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.44	0.00	--	96.0	0	1.8441	0.00
12)	C055 Cis-1,2-dichloroethe	6.97	0.00	--	96.0	0	1.9832	0.00
13)	CXXX Methyl tert-butyl et	5.44	0.00	--	73.0	0	3.1722	0.00
14)	C050 1,1-Dichloroethane	6.06	0.00	--	63.0	0	3.5329	0.00
15)	C060 Chloroform	7.52	7.49	.04	83.0	2796	3.7902	.55
16)	C065 1,2-Dichloroethane	8.55	0.00	--	62.0	0	2.1737	0.00
17)	C110 2-Butanone	6.99	0.00	--	72.0	0	.1091	0.00
18)	CS15 D4-1,2-dichloroethan	8.41	8.38	.03	65.0	114067	1.5708	54.14
19)	*CI10 1,4-Difluorobenzene	9.23	9.26	.02	114.0	363370	1.0000	50.00
20)	C125 Vinyl Acetate	6.11	0.00	--	43.0	0	.6048	0.00
21)	C115 1,1,1-Trichloroethan	7.82	0.00	--	97.0	0	.5974	0.00
22)	C120 Carbon Tetrachloride	8.12	0.00	--	117.0	0	.4898	0.00
23)	C165 Benzene	8.51	0.00	--	78.0	0	.9908	0.00
24)	C150 Trichloroethene	9.78	0.00	--	130.0	0	.4258	0.00
25)	C140 1,2-Dichloropropane	10.26	0.00	--	63.0	0	.4057	0.00
26)	C130 Bromodichloromethane	10.89	0.00	--	83.0	0	.6001	0.00
27)	C175 2-Chloroethylvinylet	11.62	0.00	--	63.0	0	.1776	0.00
28)	C143 Cis-1,3-Dichloroprop	11.94	0.00	--	75.0	0	.5829	0.00
29)	C172 Trans-1,3-dichloropr	13.35	0.00	--	75.0	0	.4482	0.00
30)	C160 1,1,2-Trichloroethan	13.82	0.00	--	97.0	0	.2952	0.00
31)	C155 Dibromochloromethane	14.86	0.00	--	129.0	0	.4676	0.00
32)	C180 Bromoform	19.06	0.00	--	173.0	0	.2627	0.00
33)	*CI20 D5-Chlorobenzene	16.44	16.47	.03	117.0	283117	1.0000	50.00
34)	CS05 D8-Toluene	12.58	12.59	.01	98.0	360677	1.2981	49.07
35)	C205 4-Methyl-2-pentanone	12.33	0.00	--	43.0	0	.3240	0.00
36)	C230 Toluene	12.73	0.00	--	92.0	0	.9048	0.00
37)	C210 2-Hexanone	14.54	0.00	--	43.0	0	.2131	0.00
38)	C220 Tetrachloroethene	14.15	0.00	--	164.0	0	.4676	0.00
39)	C235 Chlorobenzene	16.54	0.00	--	112.0	0	1.0869	0.00
40)	C240 Ethylbenzene	16.93	0.00	--	106.0	0	.5461	0.00
41)	CXXX Xylenes (p)	17.29	0.00	--	106.0	0	.6696	0.00
42)	CXXX Xylenes (o)	18.49	0.00	--	106.0	0	.6363	0.00
43)	C245 Styrene	18.54	0.00	--	104.0	0	1.1149	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.71	0.00	--	83.0	0	.5730	0.00
45)	CS10 Bromofluorobenzene	20.13	20.12	.01	95.0	200889	.7136	48.71
46)	C335 Dichlorobenzene (m)	23.69	0.00	--	146.0	0	.9300	0.00
47)	C340 Dichlorobenzene (p)	24.00	0.00	--	146.0	0	.8481	0.00
48)	C350 Dichlorobenzene (o)	25.26	0.00	--	146.0	0	.8417	0.00

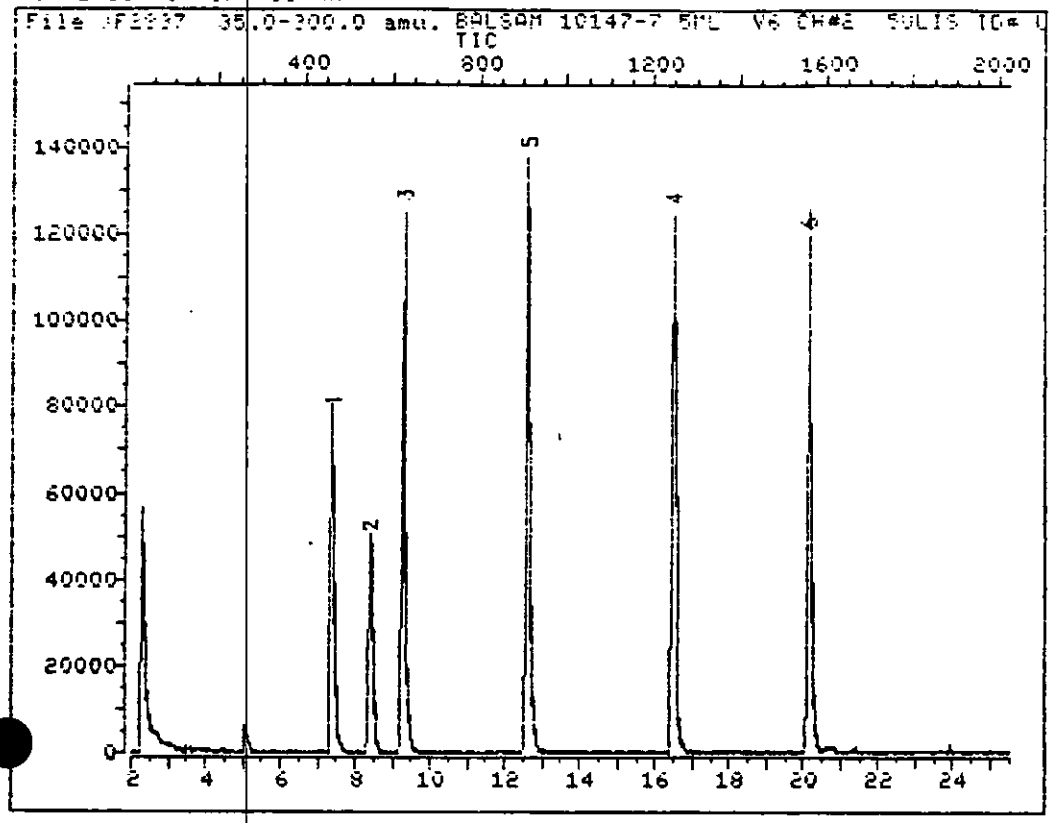
Internal Standard Comparison

Sample: >F2837 Date injected: 10/09/91 Standard: >F2827

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	67067	75510	88.8
CI10 1,4-Difluorobenzene	363370	407259	89.2
CI20 D5-Chlorobenzene	283117	308421	91.8

% = (Sample Area/Std Area)*100
* Area outside limits

TOTAL ION CHROMATOGRAM



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Name: BALSAM 10147-7 5ML Instrument ID: V6
Misc: V6 CH#2 5ULIS ID# UCC-1077-QA1

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

Operator ID: LIZ
Quant Time : 911009 17:05
Injected at: 911009 16:37

QUANT REPORT Page 1

Operator ID: LIZ Quant Rev: 7 Quant Time: 911009 17:05
Output File: ^F2837::D7 Injected at: 911009 16:37
Data File: >F2837::D6 Dilution Factor: 1.00000
Name: BALSAM 10147-7 5ML Instrument ID: V6
Misc: V6 CH#2 SULIS ID# UCC-1077-0A1

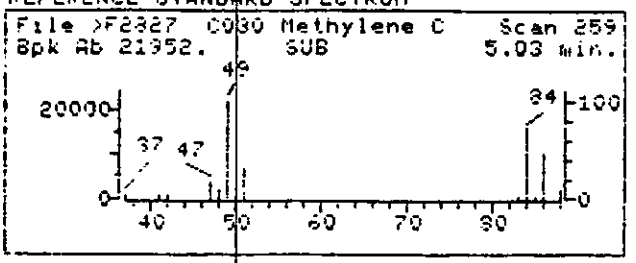
ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.37	128.0	67067	50.00	UG/L	62
8)	C040 Carbon Disulfide	4.70	76.0	3094	.520	UG/L	100
9)	C030 Methylene Chloride	5.03	84.0	11361	4.71	UG/L	68
15)	C060 Chloroform	7.49	83.0	2796	.550	UG/L	97
18)	CS15 D4-1,2-dichloroethane	8.38	65.0	114067	54.14	UG/L	86
19)	*CI10 1,4-Difluorobenzene	9.26	114.0	363370	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.47	117.0	283117	50.00	UG/L	100
34)	CS05 D8-Toluene	12.59	98.0	360677	49.07	UG/L	96
36)	CS10 Bromofluorobenzene	20.12	95.0	200889	49.71	UG/L	67

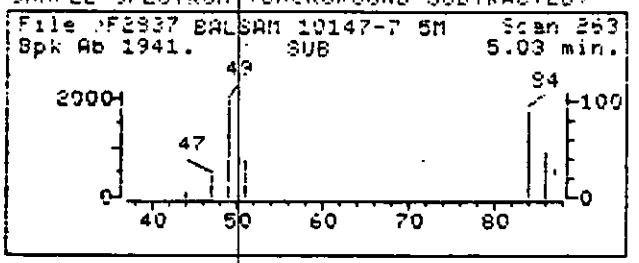
* Compound is ISTD

000130

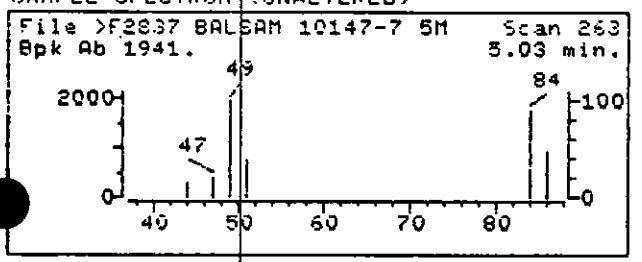
REFERENCE STANDARD SPECTRUM

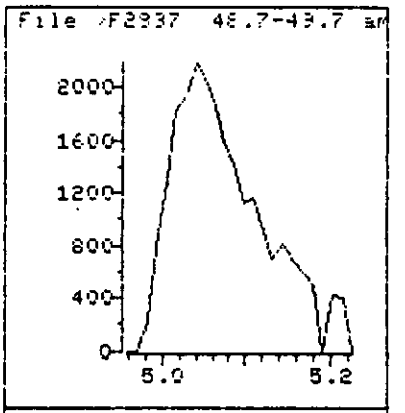


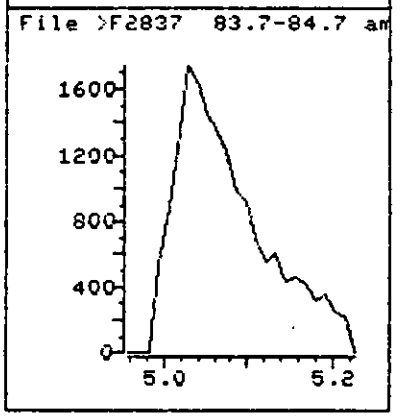
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2837::D6 Quant Output File: ^F2837::D7
Name: BALSAM 10147-7 5ML Instrument ID: V6
Misc: V6 CH#2 5ULIS ID# UCC-10/7-QA1
Quant Time: 911009 17:05 Quant ID File: MOBID6::MT
Injected at: 911009 16:37 Last Calibration: 910814 09:37
Last Qcal Time: 911009 10:28

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 263
Retention Time : 5.03 min.
Quant Ion : 84.0
Area : 11361
Concentration : 4.71 UG/L
q-value : 68

ta Reduced by : Date: 10/29/91
ta Reviewed by : Date: 10/29/91

Data File: >F2837

Enseco TIC Report (page 1)

Sample: BALSAM 10147-7 5ML
Conditions: V6 CH#2 5ULIS ID# UCC-1047-QA

Run Factor: 1.00
Analyst: LIZ

# Scan	Q	C	Concentration In Sample (UG/L)	CAS #	Compound

NO UNKNOWNS

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Instrument ID: V2 Calibration Date(s): 10/09/91 10/09/91

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

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = B2923 RRF50 = B2922
RRF100= B2915 RRF150= B2919 RRF200= B2916

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	1.195	0.998	0.669	0.992	1.028	0.976	19.6#
Bromomethane	0.896	0.709	0.624	0.566	0.382	0.635	29.7
Vinyl Chloride *	1.300	1.104	0.785	1.163	1.217	1.114	17.7*
Chloroethane	0.677	0.546	0.467	0.477	0.351	0.504	23.7
Methylene Chloride	2.347	1.991	1.498	1.488	2.876	2.040	28.9
Acetone	0.574	0.480	0.332	0.435	0.541	0.472	20.2
Carbon Disulfide	5.214	4.844	3.501	4.542	5.006	4.621	14.6
1,1-Dichloroethene *	1.192	0.986	0.790	0.947	1.036	0.990	14.7*
1,1-Dichloroethane #	3.745	3.324	2.462	3.492	4.093	3.423	17.8#
1,2-Dichloroethene (total)	2.059	1.797	1.316	1.855	2.348	1.875	20.2
Chloroform *	3.592	3.223	2.398	3.361	4.107	3.336	18.7*
1,2-Dichloroethane	2.204	2.008	1.579	2.241	2.920	2.190	22.2
2-Butanone	0.323	0.221	0.160	0.238	0.376	0.264	32.4
1,1,1-Trichloroethane	0.624	0.547	0.367	0.566	0.671	0.555	20.9
Carbon Tetrachloride	0.534	0.480	0.326	0.518	0.623	0.496	21.9
Vinyl Acetate	0.805	0.799	0.717	1.030	1.093	0.889	18.3
Bromodichloromethane	0.652	0.609	0.435	0.652	0.799	0.629	20.7
1,2-Dichloropropane *	0.510	0.460	0.313	0.501	0.598	0.476	21.9*
cis-1,3-Dichloropropene	0.648	0.617	0.448	0.686	0.839	0.648	21.7
Trichloroethene	0.527	0.462	0.302	0.481	0.539	0.462	20.6
Dibromochloromethane	0.479	0.461	0.330	0.523	0.647	0.488	23.4
1,1,2-Trichloroethane	0.365	0.330	0.229	0.365	0.469	0.352	24.4
Benzene	1.582	1.366	0.893	1.210	1.218	1.254	20.1
trans-1,3-Dichloropropene	0.440	0.421	0.319	0.499	0.674	0.471	27.8
2-Chloroethylvinylether	0.263	0.232	0.167	0.272	0.435	0.274	36.2
Bromoform #	0.369	0.341	0.249	0.386	0.520	0.373	26.2#
4-Methyl-2-Pentanone	0.884	0.707	0.446	0.776	1.061	0.775	29.3
2-Hexanone	0.493	0.370	0.244	0.386	0.637	0.426	34.6
Tetrachloroethene	0.466	0.444	0.287	0.490	0.596	0.457	24.4
1,1,2,2-Tetrachloroethane #	1.123	0.983	0.603	0.958	1.153	0.964	22.7#
Toluene *	1.019	0.958	0.620	0.988	1.180	0.953	21.5*
Chlorobenzene #	1.239	1.135	0.738	1.134	1.342	1.118	20.5#
Ethylbenzene *	0.618	0.542	0.345	0.552	0.667	0.545	22.5*
Styrene	1.316	1.135	0.720	1.045	1.185	1.080	20.7
Xylene (total)	0.819	0.716	0.433	0.669	0.714	0.670	21.4
Toluene-d8	1.492	1.394	1.256	1.236	1.215	1.319	9.1
Bromofluorobenzene	0.730	0.635	0.582	0.567	0.590	0.621	10.6
1,2-Dichloroethane-d4	1.535	1.418	1.701	1.426	1.502	1.516	7.6

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Instrument ID: V2 Calibration Date(s): 10/11/91 10/12/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = B2952 RRF50 = B2951
RRF100= B2955 RRF150= B2956 RRF200= B2959

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane	#	0.692	0.412	0.469	0.436	0.267	0.455	33.7#
Bromomethane		1.038	0.868	0.614	0.544	0.398	0.692	37.2
Vinyl Chloride	*	1.105	0.855	0.886	0.798	0.589	0.847	21.9*
Chloroethane		0.733	0.632	0.492	0.438	0.362	0.531	28.2
Methylene Chloride		2.143	2.182	1.952	1.908	0.389	1.715	43.8
Acetone		0.462	0.678	0.306	0.319	0.256	0.404	42.4
Carbon Disulfide		5.167	4.992	4.472	3.962	3.067	4.332	19.6
1,1-Dichloroethene	*	1.210	1.123	0.924	0.835	0.582	0.935	26.5*
1,1-Dichloroethane	#	3.537	3.638	3.285	3.068	3.042	3.314	8.1#
1,2-Dichloroethene (total)		1.912	1.889	1.785	1.637	1.627	1.770	7.6
Chloroform	*	3.441	3.547	3.212	3.004	3.098	3.260	7.0*
1,2-Dichloroethane		2.140	2.347	2.168	2.078	2.109	2.168	4.9
2-Butanone		1.010	1.136	0.915	0.937	1.080	1.016	9.2
1,1,1-Trichloroethane		0.536	0.451	0.445	0.448	0.384	0.453	12.0
Carbon Tetrachloride		0.490	0.417	0.425	0.425	0.375	0.426	9.7
Vinyl Acetate		0.777	0.979	0.921	0.949	0.732	0.872	12.6
Bromodichloromethane		0.623	0.588	0.582	0.583	0.554	0.586	4.2
1,2-Dichloropropane	*	0.460	0.426	0.438	0.450	0.429	0.441	3.2*
cis-1,3-Dichloropropene		0.592	0.618	0.638	0.623	0.594	0.613	3.2
Trichloroethene		0.482	0.417	0.417	0.417	0.385	0.424	8.4
Dibromochloromethane		0.433	0.455	0.448	0.453	0.443	0.446	2.0
1,1,2-Trichloroethane		0.324	0.329	0.320	0.324	0.332	0.326	1.4
Benzene		1.449	1.269	1.143	1.108	0.876	1.169	18.1
trans-1,3-Dichloropropene		0.435	0.478	0.486	0.464	0.495	0.472	5.0
2-Chloroethylvinylether		0.190	0.211	0.237	0.230	0.294	0.232	16.8
Bromoform	#	0.301	0.322	0.305	0.320	0.326	0.315	3.5#
4-Methyl-2-Pentanone		0.599	0.573	0.566	0.599	0.619	0.591	3.6
2-Hexanone		0.350	0.318	0.312	0.299	0.331	0.322	6.0
Tetrachloroethene		0.455	0.402	0.420	0.422	0.413	0.422	4.7
1,1,2,2-Tetrachloroethane	#	0.928	0.855	0.794	0.844	0.783	0.841	6.9#
Toluene	*	0.973	0.879	0.917	0.907	0.921	0.919	3.7*
Chlorobenzene	#	1.170	1.042	1.048	1.045	0.983	1.058	6.5#
Ethylbenzene	*	0.559	0.483	0.484	0.484	0.463	0.495	7.5*
Styrene		1.180	0.982	0.995	0.947	0.843	0.989	12.4
Xylene (total)		0.757	0.595	0.585	0.590	0.518	0.609	14.5
Toluene-d8		1.489	1.320	1.245	1.221	1.154	1.286	10.0
Bromofluorobenzene		0.672	0.611	0.584	0.564	0.552	0.597	8.0
1,2-Dichloroethane-d4		1.569	1.598	1.502	1.456	1.441	1.513	4.5

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

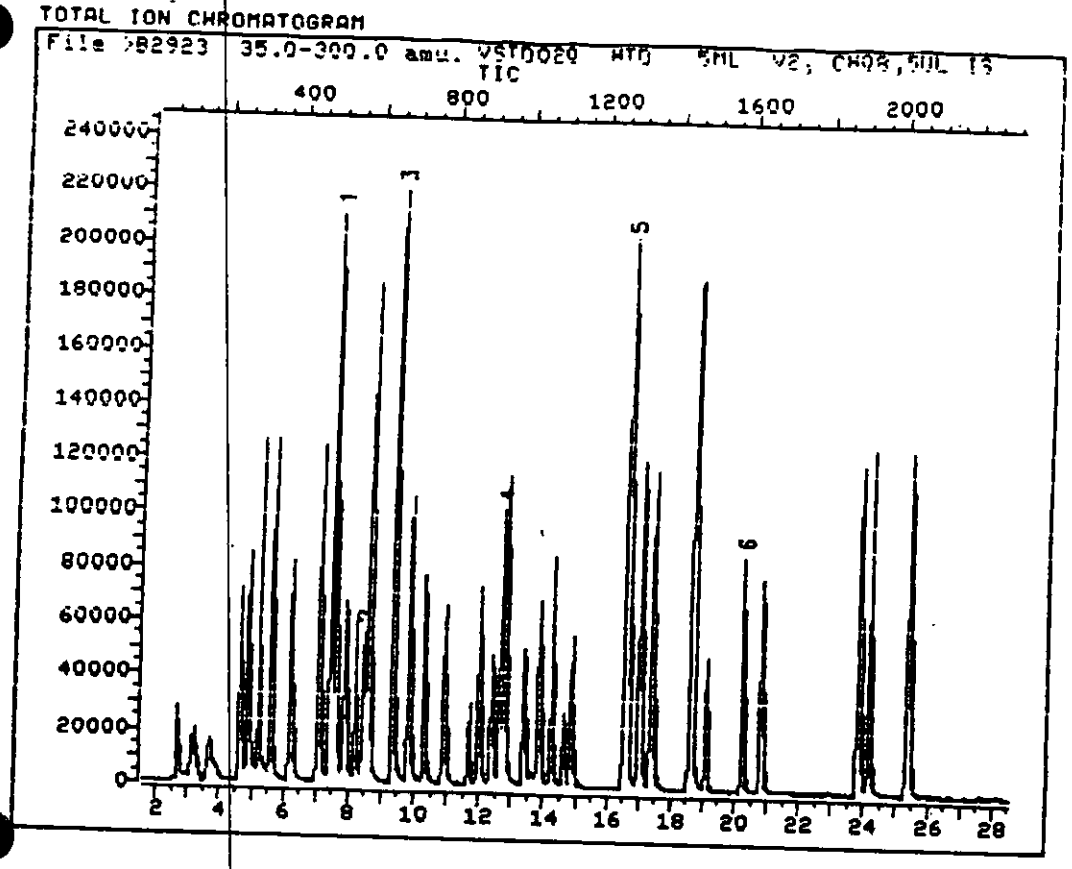
Instrument ID: V6 Calibration Date(s): 09/22/91 09/22/91

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

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = F2560 RRF50 = F2557
RRF100= F2561 RRF150= F2562 RRF200= F2563

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane	#	1.360	1.302	1.234	1.144	1.188	1.246	7.0	#
Bromomethane		1.323	1.100	1.017	0.926	0.910	1.055	15.9	
Vinyl Chloride	*	1.398	1.319	1.273	1.125	1.174	1.258	8.7	*
Chloroethane		0.837	0.723	0.655	0.548	0.493	0.651	21.1	
Methylene Chloride		1.893	1.654	1.705	1.638	1.630	1.704	6.4	
Acetone		0.273	0.190	0.201	0.194	0.198	0.211	16.5	
Carbon Disulfide		4.539	4.000	4.256	3.923	4.063	4.156	5.9	
1,1-Dichloroethene	*	1.595	1.424	1.405	1.228	1.282	1.387	10.3	*
1,1-Dichloroethane	#	3.661	3.124	3.257	3.095	3.113	3.250	7.3	#
1,2-Dichloroethene (total)		1.930	1.710	1.750	1.626	1.621	1.727	7.3	
Chloroform	*	4.209	3.700	3.841	3.747	3.790	3.857	5.3	*
1,2-Dichloroethane		2.410	2.081	2.239	2.089	2.036	2.171	7.1	
2-Butanone		0.105	0.113	0.120	0.109	0.107	0.111	5.3	
1,1,1-Trichloroethane		0.606	0.559	0.557	0.539	0.538	0.560	4.9	
Carbon Tetrachloride		0.513	0.482	0.477	0.456	0.468	0.479	4.5	
Vinyl Acetate		0.537	0.604	0.532	0.531	0.487	0.538	7.8	
Bromodichloromethane		0.644	0.581	0.613	0.634	0.638	0.622	4.1	
1,2-Dichloropropane	*	0.421	0.404	0.401	0.405	0.403	0.407	2.0	*
cis-1,3-Dichloropropene		0.604	0.569	0.592	0.615	0.634	0.603	4.0	
Trichloroethene		0.453	0.398	0.411	0.406	0.406	0.415	5.3	
Dibromochloromethane		0.480	0.472	0.505	0.522	0.525	0.501	4.8	
1,1,2-Trichloroethane		0.326	0.305	0.306	0.324	0.317	0.316	3.1	
Benzene		1.112	0.969	0.969	0.994	0.960	1.001	6.3	
trans-1,3-Dichloropropene		0.484	0.447	0.464	0.457	0.495	0.469	4.2	
2-Chloroethylvinylether		0.193	0.186	0.186	0.194	0.190	0.190	2.0	
Bromoform	#	0.264	0.283	0.301	0.330	0.333	0.302	9.9	#
4-Methyl-2-Pentanone		0.361	0.319	0.312	0.354	0.313	0.332	7.2	
2-Hexanone		0.241	0.243	0.215	0.256	0.225	0.236	6.8	
Tetrachloroethene		0.466	0.437	0.407	0.433	0.407	0.430	5.7	
1,1,2,2-Tetrachloroethane	#	0.608	0.606	0.555	0.632	0.581	0.596	4.9	#
Toluene	*	0.907	0.852	0.778	0.860	0.796	0.839	6.2	*
Chlorobenzene	#	1.105	1.056	0.981	1.093	1.048	1.057	4.6	#
Ethylbenzene	*	0.554	0.527	0.467	0.515	0.483	0.509	6.8	*
Styrene		1.157	1.119	1.029	1.122	1.064	1.098	4.6	
Xylene (total)		0.644	0.619	0.558	0.600	0.582	0.601	5.5	
Toluene-d8		1.318	1.254	1.152	1.246	1.261	1.246	4.8	
Bromofluorobenzene		0.767	0.737	0.743	0.722	0.740	0.742	2.2	
1,2-Dichloroethane-d4		1.915	1.724	1.746	1.683	1.729	1.759	5.1	



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Name: VSTD020 HTD 5ML
Misc: V2, CH08,5UL IS

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

Operator ID: NORA
Quant Time: 911009 20:24
Injected at: 911009 19:55

QUANT REPORT

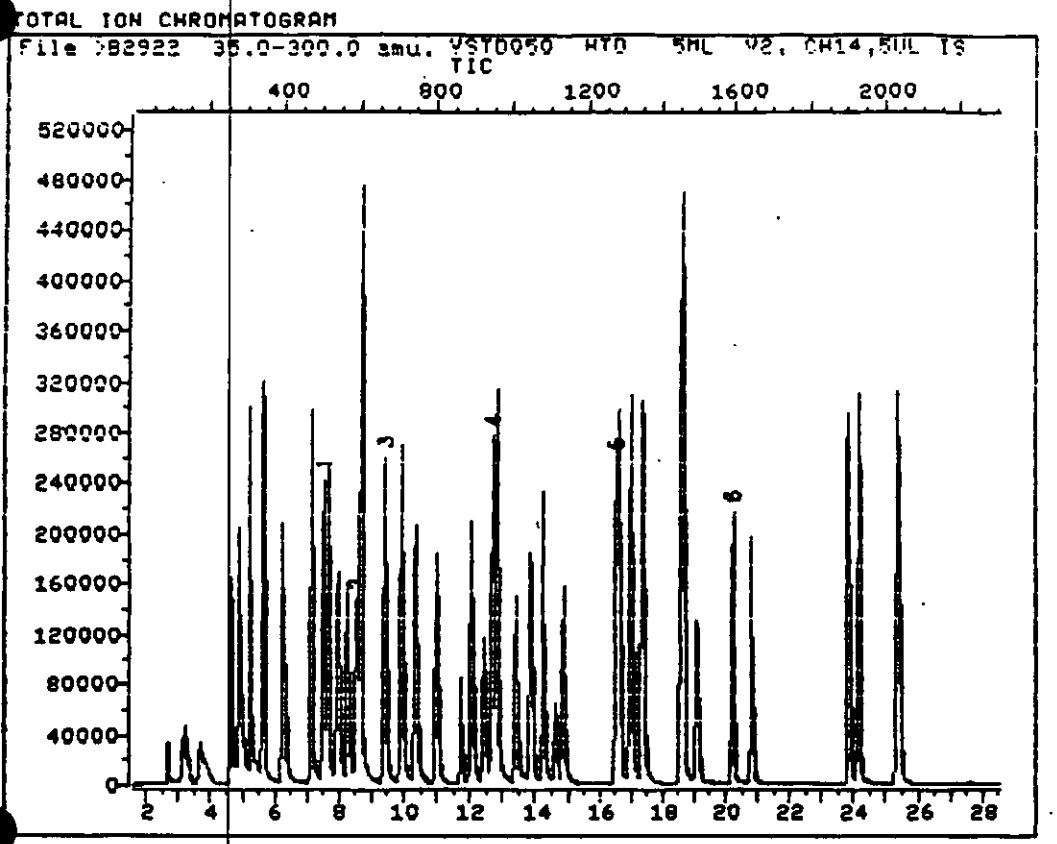
Operator ID: NORA Quant Rev: 6 Quant Time: 911009 20:24
Output File: B2923::QT Injected at: 911009 19:55
Data File: B2923::D6 Dilution Factor: 1.00000
Name: VSTD020 HTD 5ML
Misc: V2, CH08,5UL IS

ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.42	128.0	139895	50.00	UG/L	97
2)	C010	Chloromethane	3.11	50.0	66915	33.61	UG/L	98
3)	C020	Vinyl Chloride	3.24	62.0	72778	23.98	UG/L	86
4)	C015	Bromomethane	3.67	94.0	50198	17.52	UG/L	94
5)	C025	Chloroethane	3.86	64.0	37903	17.88	UG/L	99
6)	C045	1,1-Dichloroethene	4.59	96.0	66749	17.09	UG/L	97
7)	C035	Acetone	4.66	43.0	32125	17.25	UG/L	100
8)	C040	Carbon Disulfide	4.86	76.0	292012	17.80	UG/L	100
9)	C030	Methylene Chloride	5.19	84.0	131427	57.16	UG/L	86
10)	C053	Trans-1,2-Dichloroethene	5.56	96.0	115301	22.38	UG/L	99
11)	C055	cis-1,2-Dichloroethene	7.04	96.0	119923	23.08	UG/L	94
12)	C050	1,1-Dichloroethane	6.15	63.0	209722	20.44	UG/L	87
13)	C060	Chloroform	7.56	83.0	201133	20.83	UG/L	95
14)	C065	1,2-Dichloroethane	8.57	62.0	123453	17.82	UG/L	100
15)	C110	2-Butanone	7.07	72.0	18103	21.66	UG/L	94
16)	CS15	D4-1,2-Dichloroethane	8.43	65.0	85955	17.31	UG/L	79
17)	*C110	1,4-Difluorobenzene	9.31	114.0	522134	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.24	43.0	168128	13.62	UG/L	97
19)	C115	1,1,1-Trichloroethane	7.88	97.0	130318	23.43	UG/L	91
20)	C120	Carbon Tetrachloride	8.18	117.0	111592	21.35	UG/L	97
21)	C165	Benzene	8.56	78.0	330403	24.21	UG/L	100
22)	C150	Trichloroethene	9.83	130.0	110106	24.89	UG/L	96
23)	C140	1,2-Dichloropropane	10.28	63.0	106517	22.27	UG/L	100
24)	C130	Bromodichloromethane	10.91	83.0	136053	20.50	UG/L	78
25)	C175	2-Chloroethylvinylether	11.66	63.0	49451	18.62	UG/L	95
26)	C143	Cis-1,3-Dichloropropen	11.96	75.0	142135	20.96	UG/L	96
27)	C172	Trans-1,3-Dichloropropen	13.39	75.0	91874	16.74	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.85	97.0	76129	21.26	UG/L	70
29)	C155	Dibromochloromethane	14.88	129.0	100003	19.29	UG/L	98
30)	C180	Bromoform	19.10	173.0	77054	19.16	UG/L	97
31)	*C120	D5-Chlorobenzene	16.52	117.0	385064	50.00	UG/L	100
32)	CS05	D8-Toluene	12.63	98.0	229762	21.63	UG/L	93
33)	C205	4-Methyl-2-Pentanone	12.38	43.0	136059	21.09	UG/L	87
34)	C230	Toluene	12.79	92.0	156981	22.47	UG/L	96
35)	C210	2-Hexanone	14.61	43.0	75989	20.39	UG/L	98
36)	C220	Tetrachloroethene	14.21	164.0	71804	21.10	UG/L	89
37)	C235	Chlorobenzene	16.61	112.0	190854	22.26	UG/L	75
38)	C240	Ethylbenzene	17.02	106.0	95100	24.30	UG/L	98
39)	CXXX	Xylene (p)	17.39	106.0	118316	24.40	UG/L	99
40)	CXXX	Xylenes (o)	18.57	106.0	126086	24.68	UG/L	98
41)	C245	Styrene	18.63	104.0	202710	24.38	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.80	83.0	172968	21.48	UG/L	98

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.82	146.0	189955	22.63	UG/L	100
45)	C340	Dichlorobenzene (p)	24.14	146.0	194818	22.98	UG/L	100
46)	C350	Dichlorobenzene (o)	25.36	146.0	196129	22.52	UG/L	100
47)	C250	Xylene (Total)	18.57	106.0	126101	24.98	UG/L	93

* Compound is ISTD



Data File: >B2922::D6 Quant Output File: ^B2922::QT
Name: VSTD050 HTD 5ML
Misc: V2, CH14,5UL IS

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

Operator ID: NORA
Quant Time: 911009 19:10
Injected at: 911009 18:41

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911009 19:10
Output File: B2922::QT Injected at: 911009 18:41
Data File: B2922::D6 Dilution Factor: 1.00000
Name: VSTD050 HTD 5ML
Misc: V2, CH14,5UL IS

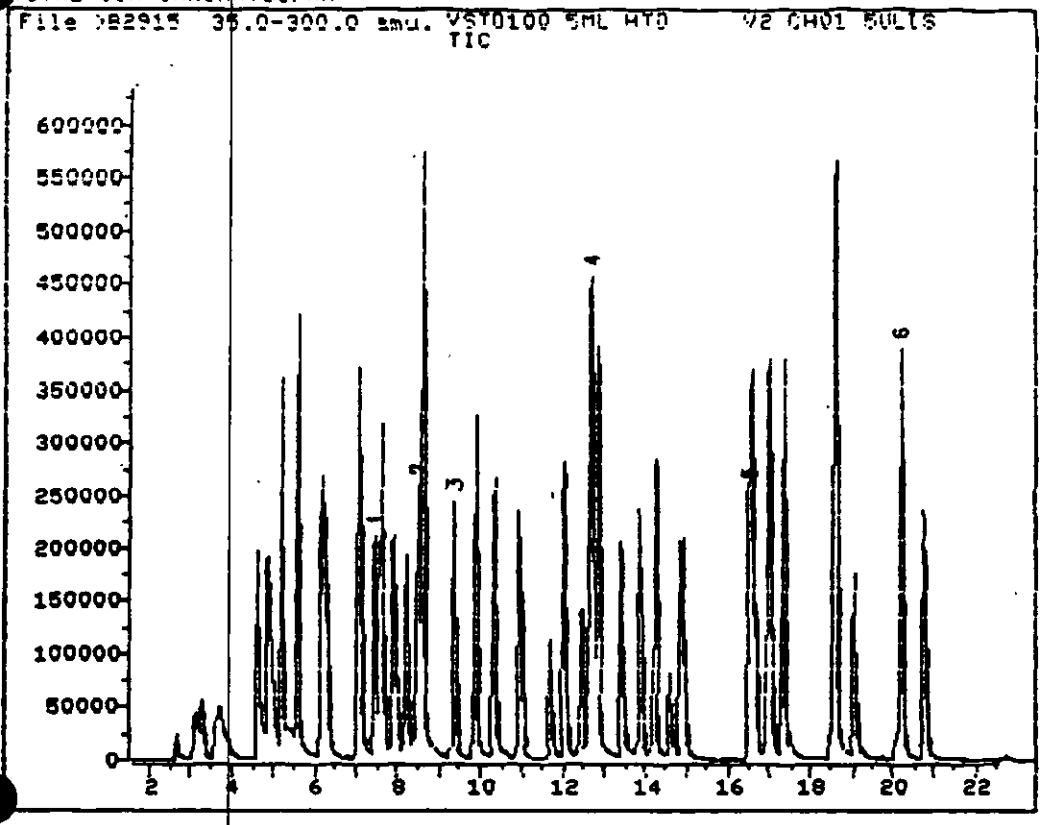
ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.49	128.0	161511	50.00	UG/L	98
2)	C010	Chloromethane	3.12	50.0	161665	70.34	UG/L	99
3)	C020	Vinyl Chloride	3.25	62.0	178809	51.03	UG/L	88
4)	C015	Bromomethane	3.68	94.0	114889	34.74	UG/L	97
5)	C025	Chloroethane	3.87	64.0	88426	36.14	UG/L	99
6)	C045	1,1-Dichloroethene	4.61	96.0	159699	35.41	UG/L	95
7)	C035	Acetone	4.68	43.0	77700	36.14	UG/L	100
8)	C040	Carbon Disulfide	4.90	76.0	784801	41.44	UG/L	100
9)	C030	Methylene Chloride	5.22	84.0	322593	121.53	UG/L	85
10)	C053	Trans-1,2-Dichloroethene	5.61	96.0	291096	48.95	UG/L	96
11)	C055	cis-1,2-Dichloroethene	7.11	96.0	303477	50.59	UG/L	96
12)	C050	1,1-Dichloroethane	6.21	63.0	538419	45.45	UG/L	85
13)	C060	Chloroform	7.64	83.0	522136	46.83	UG/L	95
14)	C065	1,2-Dichloroethane	8.65	62.0	325212	40.67	UG/L	100
15)	C110	2-Butanone	7.14	72.0	35770	37.07	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.51	65.0	229730	40.08	UG/L	82
17)	*CI10	1,4-Difluorobenzene	9.39	114.0	615593	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.30	43.0	492245	33.83	UG/L	96
19)	C115	1,1,1-Trichloroethane	7.96	97.0	336711	51.35	UG/L	92
20)	C120	Carbon Tetrachloride	8.27	117.0	295654	47.98	UG/L	99
21)	C165	Benzene	8.64	78.0	841466	52.31	UG/L	100
22)	C150	Trichloroethene	9.92	130.0	284322	54.53	UG/L	99
23)	C140	1,2-Dichloropropane	10.36	63.0	283272	50.23	UG/L	100
24)	C130	Bromodichloromethane	10.98	83.0	375391	47.98	UG/L	80
25)	C175	2-Chloroethylvinylether	11.72	63.0	131483	41.99	UG/L	95
26)	C143	Cis-1,3-Dichloropropen	12.03	75.0	402725	50.37	UG/L	97
27)	C172	Trans-1,3-Dichloropropen	13.42	75.0	259324	40.07	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.86	97.0	203268	48.16	UG/L	70
29)	C155	Dibromochloromethane	14.88	129.0	284128	46.49	UG/L	97
30)	C180	Bromoform	19.07	173.0	209791	44.25	UG/L	97
31)	*CI20	D5-Chlorobenzene	16.51	117.0	445857	50.00	UG/L	100
32)	CS05	D8-Toluene	12.67	98.0	621806	50.55	UG/L	94
33)	C205	4-Methyl-2-Pentanone	12.43	43.0	315454	42.23	UG/L	85
34)	C230	Toluene	12.83	92.0	427230	52.82	UG/L	97
35)	C210	2-Hexanone	14.61	43.0	164917	38.23	UG/L	99
36)	C220	Tetrachloroethene	14.22	164.0	197832	50.21	UG/L	89
37)	C235	Chlorobenzene	16.59	112.0	506342	51.01	UG/L	74
38)	C240	Ethylbenzene	17.00	106.0	241881	53.37	UG/L	97
39)	CXXX	Xylene (p)	17.38	106.0	295470	52.62	UG/L	98
40)	CXXX	Xylenes (o)	18.55	106.0	321873	54.41	UG/L	94
41)	C245	Styrene	18.61	104.0	506248	52.59	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.79	83.0	438269	47.01	UG/L	93
43)	CS10	Bromofluorobenzene (BFB)	20.20	95.0	283338	50.76	UG/L	82

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.81	146.0	468904	48.25	UG/L	100
45)	C340	Dichlorobenzene (p)	24.14	146.0	471641	46.06	UG/L	100
46)	C350	Dichlorobenzene (o)	25.37	146.0	493070	48.89	UG/L	100
47)	C250	Xylene (Total)	18.55	106.0	319337	54.63	UG/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2915::D6 Quant Output File: ^B2915::QT
Name: VSTD100 5ML HTD
Misc: V2 CH01 5ULIS

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

Operator ID: NORA
Quant Time: 911009 14:28
Injected at: 911009 13:58

QUANT REPORT

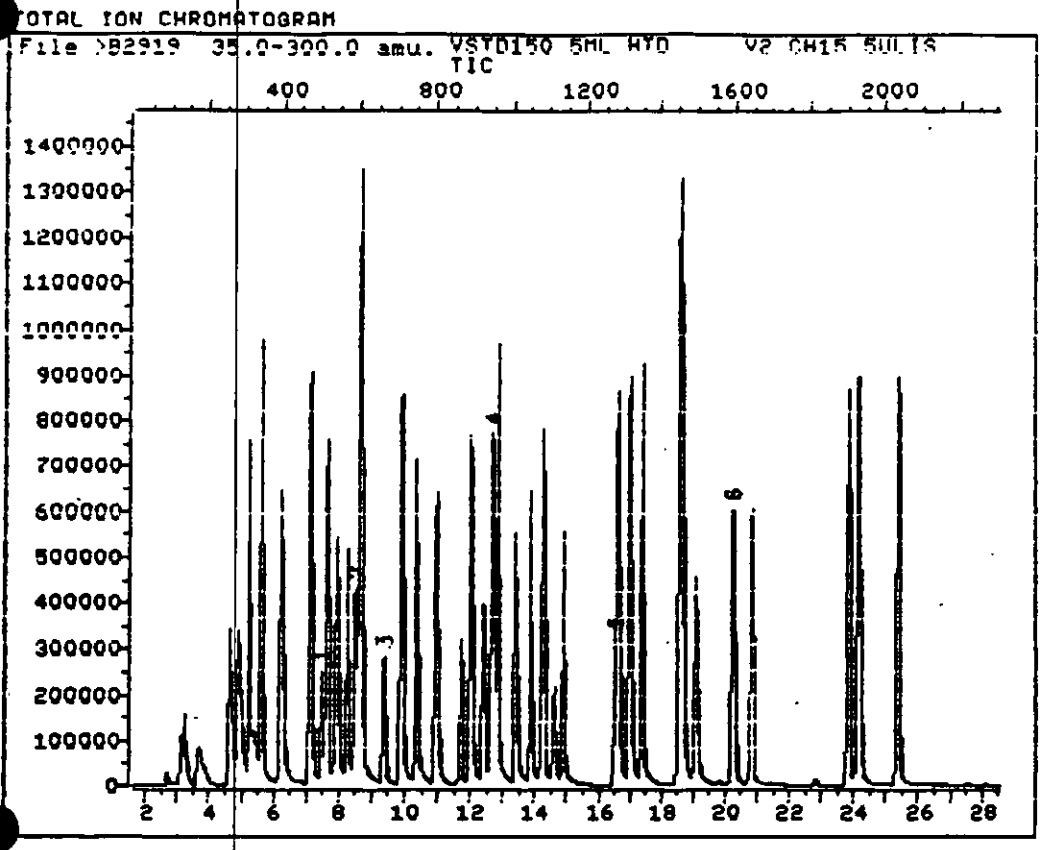
Operator ID: NORA Quant Rev: 6 Quant Time: 911009 14:28
Output File: ^B2915::QT Injected at: 911009 13:58
Data File: >B2915::D6 Dilution Factor: 1.00000
Name: VSTD100 5ML HTD
Misc: V2 CH01 5ULIS

ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.44	128.0	140402	50.00	UG/L	95
2)	C010	Chloromethane	3.12	50.0	187418	93.80	UG/L	98
3)	C020	Vinyl Chloride	3.25	62.0	219915	72.20	UG/L	87
4)	C015	Bromomethane	3.67	94.0	174604	60.73	UG/L	93
5)	C025	Chloroethane	3.87	64.0	130865	61.52	UG/L	96
6)	C045	1,1-Dichloroethene	4.58	96.0	221305M	56.44	UG/L	96
7)	C035	Acetone	4.65	43.0	92840	49.67	UG/L	100
8)	C040	Carbon Disulfide	4.86	76.0	980244M	59.54	UG/L	100
9)	C030	Methylene Chloride	5.19	84.0	419368M	181.74	UG/L	88
10)	C053	Trans-1,2-Dichloroethene	5.56	96.0	368500	71.28	UG/L	95
11)	C055	cis-1,2-Dichloroethene	7.05	96.0	384384	73.71	UG/L	95
12)	C050	1,1-Dichloroethane	6.15	63.0	689471	66.94	UG/L	85
13)	C060	Chloroform	7.59	83.0	671444	69.28	UG/L	95
14)	C065	1,2-Dichloroethane	8.60	62.0	442151	63.61	UG/L	100
15)	C110	2-Butanone	7.07	72.0	44704	53.29	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.46	65.0	476281	95.59	UG/L	85
17)	*CI10	1,4-Difluorobenzene	9.33	114.0	562984	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.24	43.0	807825	60.71	UG/L	99
19)	C115	1,1,1-Trichloroethane	7.91	97.0	413117	68.89	UG/L	93
20)	C120	Carbon Tetrachloride	8.21	117.0	367026	65.13	UG/L	99
21)	C165	Benzene	8.57	78.0	1005546	68.34	UG/L	100
22)	C150	Trichloroethene	9.86	130.0	340068	71.31	UG/L	98
23)	C140	1,2-Dichloropropane	10.31	63.0	352245	68.29	UG/L	100
24)	C130	Bromodichloromethane	10.93	83.0	490080	68.49	UG/L	79
25)	C175	2-Chloroethylvinylether	11.69	63.0	173294	60.52	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	11.99	75.0	535141	73.19	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	13.40	75.0	359528	60.75	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.84	97.0	257625	66.74	UG/L	66
29)	C155	Dibromochloromethane	14.87	129.0	371207	66.42	UG/L	97
30)	C180	Bromoform	19.04	173.0	280270	64.65	UG/L	96
31)	*CI20	D5-Chlorobenzene	16.50	117.0	426184	50.00	UG/L	100
32)	CS05	D8-Toluene	12.65	98.0	1070227	91.03	UG/L	99
33)	C205	4-Methyl-2-Pentanone	12.41	43.0	380303	53.26	UG/L	85
34)	C230	Toluene	12.81	92.0	528494	68.36	UG/L	95
35)	C210	2-Hexanone	14.60	43.0	207792	50.39	UG/L	99
36)	C220	Tetrachloroethene	14.22	164.0	244581	64.94	UG/L	89
37)	C235	Chlorobenzene	16.58	112.0	628542	66.25	UG/L	74
38)	C240	Ethylbenzene	16.98	106.0	294293	67.93	UG/L	98
39)	CXXX	Xylene (p)	17.35	106.0	358032	66.70	UG/L	97
40)	CXXX	Xylenes (o)	18.52	106.0	377767	66.81	UG/L	94
41)	C245	Styrene	18.58	104.0	613692	66.70	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.76	83.0	513764	57.66	UG/L	97
43)	CS10	Bromofluorobenzene (BFB)	20.16	95.0	495901	92.94	UG/L	87

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.80	146.0	540502	58.18	UG/L	100
45)	C340	Dichlorobenzene (p)	24.11	146.0	549665	58.59	UG/L	100
46)	C350	Dichlorobenzene (o)	25.35	146.0	556363	57.71	UG/L	100
47)	C250	Xylene (Total)	18.52	106.0	368913	66.03	UG/L	97

* Compound is ISTD



Data File: >B2919::D6 Quant Output File: ^B2919::QT
Name: VSTD150 5ML HTD
Misc: V2 CH15 5ULIS

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

Operator ID: NORA
Quant Time: 911009 17:08
Injected at: 911009 16:39

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911009 17:08
Output File: ^B2919::QT Injected at: 911009 16:39
Data File: >B2919::D6 Dilution Factor: 1.00000
Name: VSTD150 5ML HTD
Misc: V2 CH15 50LIS

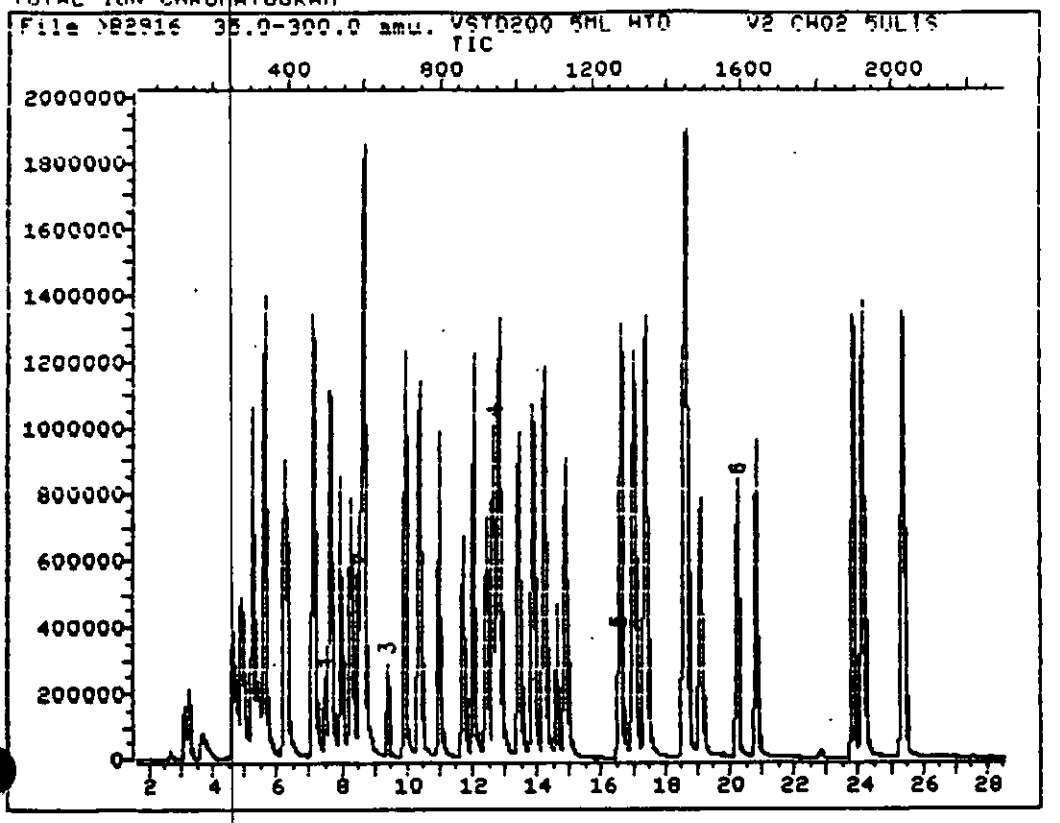
ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.46	128.0	162876	50.00	UG/L	97
2)	C010	Chloromethane	3.11	50.0	485197	209.34	UG/L	98
3)	C020	Vinyl Chloride	3.24	62.0	568824	160.98	UG/L	87
4)	C015	Bromomethane	3.66	94.0	276744	82.98	UG/L	93
5)	C025	Chloroethane	3.82	64.0	233260	94.53	UG/L	96
6)	C045	1,1-Dichloroethene	4.59	96.0	462849M	101.76	UG/L	91
7)	C035	Acetone	4.66	43.0	212545	98.02	UG/L	100
8)	C040	Carbon Disulfide	4.88	76.0	2220787M	116.28	UG/L	100
9)	C030	Methylene Chloride	5.20	84.0	727455	271.76	UG/L	86
10)	C053	Trans-1,2-Dichloroethene	5.58	96.0	907083	151.24	UG/L	99
11)	C055	cis-1,2-Dichloroethene	7.08	96.0	989257	163.52	UG/L	96
12)	C050	1,1-Dichloroethane	6.18	63.0	1707360	142.90	UG/L	92
13)	C060	Chloroform	7.62	83.0	1643313	146.17	UG/L	92
14)	C065	1,2-Dichloroethane	8.64	62.0	1095795	135.89	UG/L	100
15)	C110	2-Butanone	7.11	72.0	116136	119.34	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.49	65.0	697063	120.60	UG/L	85
17)	*CI10	1,4-Difluorobenzene	9.36	114.0	655605	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.27	43.0	2027357	130.84	UG/L	94
19)	C115	1,1,1-Trichloroethane	7.94	97.0	1112964	159.37	UG/L	98
20)	C120	Carbon Tetrachloride	8.25	117.0	1019362	155.33	UG/L	98
21)	C165	Benzene	8.61	78.0	2380951	138.97	UG/L	100
22)	C150	Trichloroethene	9.90	130.0	945724	170.30	UG/L	95
23)	C140	1,2-Dichloropropane	10.35	63.0	986759	164.28	UG/L	100
24)	C130	Bromodichloromethane	10.96	83.0	1282244	153.89	UG/L	59
25)	C175	2-Chloroethylvinylether	11.69	63.0	493278	147.92	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	12.00	75.0	1430451	167.99	UG/L	91
27)	C172	Trans-1,3-Dichloropropen	13.38	75.0	982821	142.61	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.84	97.0	718231	159.77	UG/L	72
29)	C155	Dibromochloromethane	14.87	129.0	1028766	158.06	UG/L	97
30)	C180	Bromoform	19.08	173.0	759471	150.43	UG/L	97
31)	*CI20	D5-Chlorobenzene	16.51	117.0	471789	50.00	UG/L	100
32)	CS05	D8-Toluene	12.64	98.0	1749876	134.45	UG/L	95
33)	C205	4-Methyl-2-Pentanone	12.41	43.0	1098856	139.00	UG/L	80
34)	C230	Toluene	12.81	92.0	1398981	163.46	UG/L	92
35)	C210	2-Hexanone	14.60	43.0	546793	119.78	UG/L	99
36)	C220	Tetrachloroethene	14.22	164.0	693371	166.31	UG/L	90
37)	C235	Chlorobenzene	16.59	112.0	1606173	152.93	UG/L	77
38)	C240	Ethylbenzene	16.99	106.0	781476	162.95	UG/L	93
39)	CXXX	Xylene (p)	17.39	106.0	980289	164.97	UG/L	90
40)	CXXX	Xylenes (o)	18.56	106.0	949082	151.63	UG/L	91
41)	C245	Styrene	18.62	104.0	1479718	145.27	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.80	83.0	1356192	137.49	UG/L	89
43)	CS10	Bromofluorobenzene (BFB)	20.21	95.0	802341	135.84	UG/L	98

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.81	146.0	1382367	134.43	UG/L	100
45)	C340	Dichlorobenzene (p)	24.13	146.0	1422165	136.95	UG/L	100
46)	C350	Dichlorobenzene (o)	25.36	146.0	1452759	136.13	UG/L	100
47)	C250	Xylene (Total)	18.56	106.0	947816	153.24	UG/L	83

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2916::D6 Quant Output File: ^B2916::QT
Name: VSTD200 5ML HTD
Misc: V2 CH02 5ULIS

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

Operator ID: NORA
Quant Time: 911009 15:10
Injected at: 911009 14:40

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911009 15:10
Output File: >B2916::QT Injected at: 911009 14:40
Data File: >B2916::D6 Dilution Factor: 1.00000
Name: VSTD200 5ML HTD
Misc: V2 CH02 5ULIS

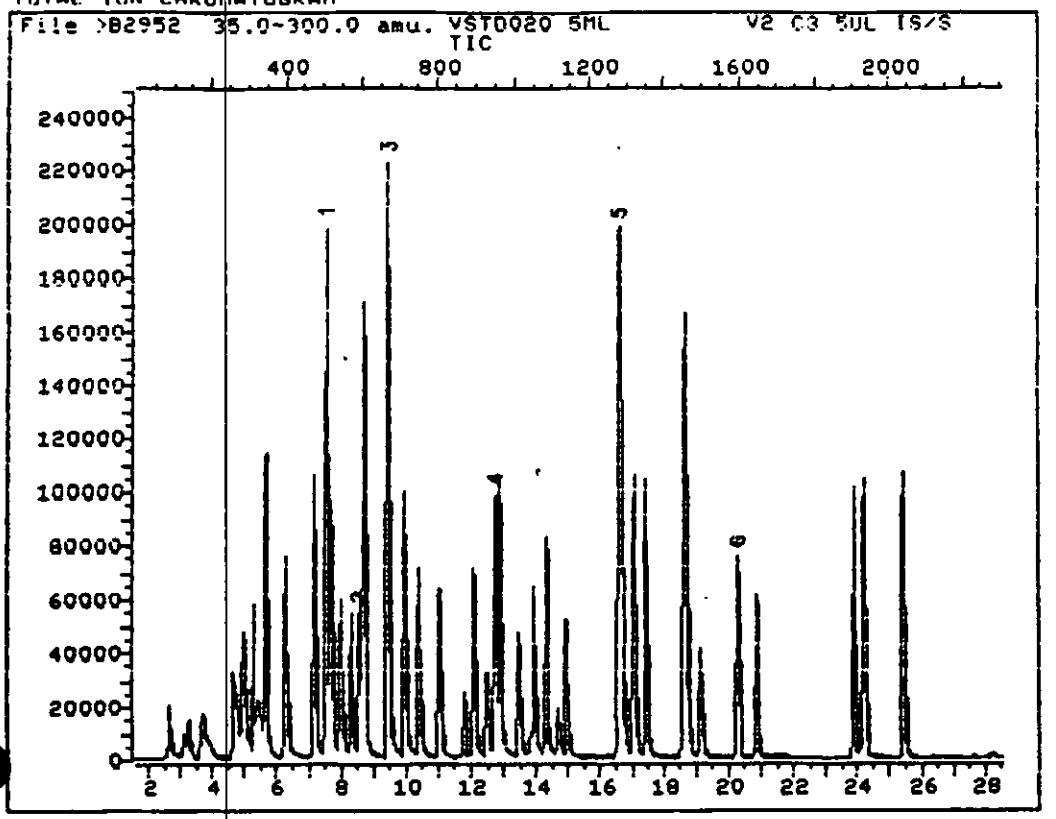
ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.49	128.0	150259	50.00	UG/L	96
2)	C010	Chloromethane	3.10	50.0	616764	288.44	UG/L	98
3)	C020	Vinyl Chloride	3.24	62.0	730147	223.98	UG/L	87
4)	C015	Bromomethane	3.66	94.0	229084	74.46	UG/L	94
5)	C025	Chloroethane	3.86	64.0	210773	92.58	UG/L	99
6)	C045	1,1-Dichloroethene	4.60	96.0	621542M	148.12	UG/L	88
7)	C035	Acetone	4.70	43.0	324829	162.38	UG/L	100
8)	C040	Carbon Disulfide	4.93	76.0	3003597	170.48	UG/L	100
9)	C030	Methylene Chloride	5.23	84.0	1725847M	698.87	UG/L	86
10)	C053	Trans-1,2-Dichloroethene	5.60	96.0	1408612	254.59	UG/L	87
11)	C055	cis-1,2-Dichloroethene	7.10	96.0	1492342	267.39	UG/L	93
12)	C050	1,1-Dichloroethane	6.20	63.0	2456052	222.83	UG/L	92
13)	C060	Chloroform	7.64	83.0	2463970	237.56	UG/L	75
14)	C065	1,2-Dichloroethane	8.66	62.0	1752079	235.52	UG/L	100
15)	C110	2-Butanone	7.15	72.0	225430	251.10	UG/L	94
16)	CS15	D4-1,2-Dichloroethane	8.52	65.0	901013	168.97	UG/L	81
17)	*CI10	1,4-Difluorobenzene	9.39	114.0	642810	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.30	43.0	2810834	185.01	UG/L	70
19)	C115	1,1,1-Trichloroethane	7.96	97.0	1726629	252.17	UG/L	94
20)	C120	Carbon Tetrachloride	8.26	117.0	1602683	249.07	UG/L	99
21)	C165	Benzene	8.63	78.0	3132896	186.49	UG/L	100
22)	C150	Trichloroethene	9.90	130.0	1386619	254.66	UG/L	99
23)	C140	1,2-Dichloropropane	10.36	63.0	1538035	261.16	UG/L	100
24)	C130	Bromodichloromethane	10.97	83.0	2054235	251.44	UG/L	75
25)	C175	2-Chloroethylvinylether	11.71	63.0	1030209	315.08	UG/L	93
26)	C143	Cis-1,3-Dichloropropen	12.01	75.0	2287629	274.01	UG/L	85
27)	C172	Trans-1,3-Dichloropropen	13.41	75.0	1733394	256.52	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.86	97.0	1206426	273.71	UG/L	71
29)	C155	Dibromochloromethane	14.88	129.0	1663970	260.74	UG/L	97
30)	C180	Bromoform	19.09	173.0	1336314	269.96	UG/L	90
31)	*CI20	D5-Chlorobenzene	16.52	117.0	468088	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	2274032	176.10	UG/L	96
33)	C205	4-Methyl-2-Pentanone	12.42	43.0	1986293	253.25	UG/L	79
34)	C230	Toluene	12.82	92.0	2209844	260.25	UG/L	55
35)	C210	2-Hexanone	14.61	43.0	1192395	263.26	UG/L	95
36)	C220	Tetrachloroethene	14.22	164.0	1116072	269.82	UG/L	80
37)	C235	Chlorobenzene	16.60	112.0	2511621	241.03	UG/L	80
38)	C240	Ethylbenzene	17.01	106.0	1248322	262.35	UG/L	69
39)	CXXX	Xylene (p)	17.39	106.0	1520942	257.98	UG/L	81
40)	CXXX	Xylenes (o)	18.57	106.0	1341587	216.03	UG/L	93
41)	C245	Styrene	18.64	104.0	2217977	219.48	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.81	83.0	2158694	220.57	UG/L	96
43)	CS10	Bromofluorobenzene (BFB)	20.22	95.0	1104050	188.40	UG/L	86

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.82	146.0	2161494	211.85	UG/L	100
45)	C340	Dichlorobenzene (p)	24.14	146.0	2244862	217.88	UG/L	100
46)	C350	Dichlorobenzene (o)	25.35	146.0	2226534	210.29	UG/L	100
47)	C250	Xylene (Total)	18.57	106.0	1336792	217.83	UG/L	84

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2952::D6 Quant Output File: ^B2952::QT
Name: VSTD020 5ML
Misc: V2 C3 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 910829 00:11

Operator ID: NORA
Quant Time: 911011 19:25
Injected at: 911011 18:56

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911011 19:25
Output File: ^B2952::QT Injected at: 911011 18:56
Data File: >B2952::D6 Dilution Factor: 1.00000
Name: VSTD020 5ML
Misc: V2 C3 5UL IS/S

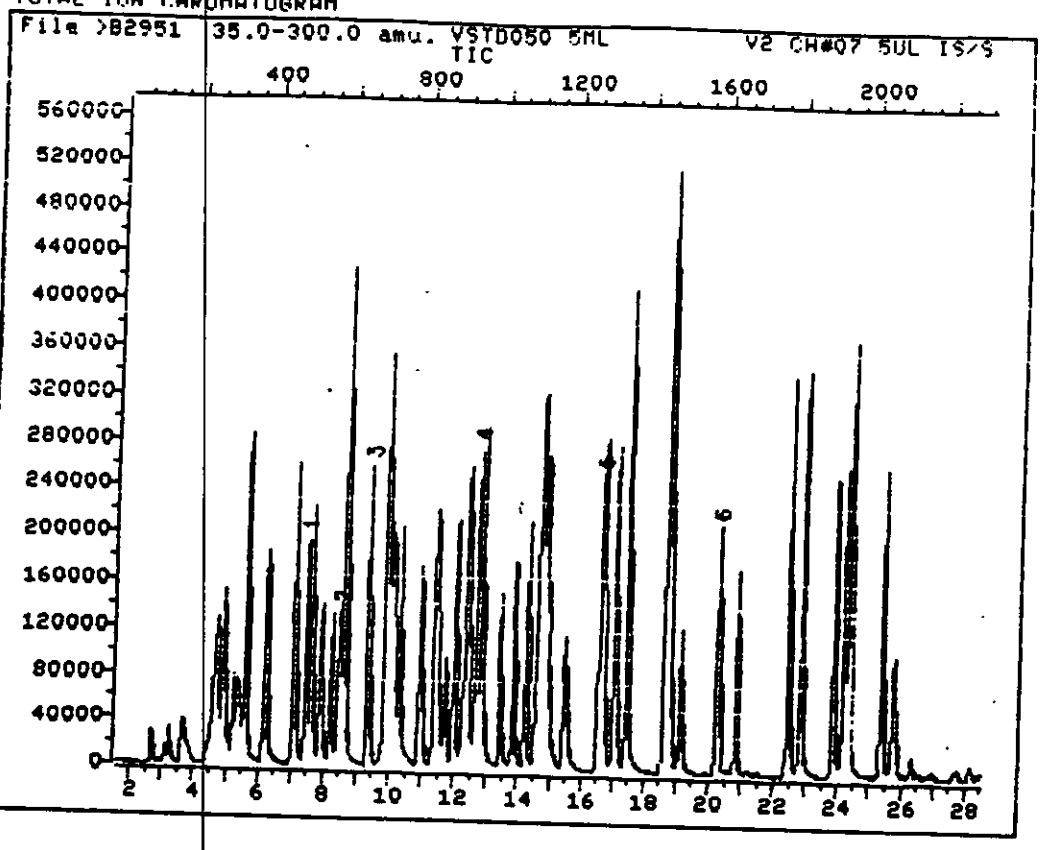
ID File: VOA$D2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 910829 00:11

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.53	128.0	136078	50.00	UG/L	82
2)	C010	Chloromethane	3.12	50.0	37658	18.12	UG/L	97
3)	C020	Vinyl Chloride	3.26	62.0	60131	23.80	UG/L	87
4)	C015	Bromomethane	3.69	94.0	56473	26.60	UG/L	89
5)	C025	Chloroethane	3.88	64.0	39899	22.99	UG/L	96
6)	C045	1,1-Dichloroethene	4.64	96.0	29701	8.45	UG/L	98
7)	C035	Acetone	4.71	43.0	23320	9.35	UG/L	100
8)	C040	Carbon Disulfide	4.99	76.0	281098	19.64	UG/L	100
9)	C030	Methylene Chloride	5.26	84.0	53069	8.02	UG/L	87
10)	C053	Trans-1,2-Dichloroethene	5.63	96.0	103983	20.00	UG/L	99
11)	C055	cis-1,2-Dichloroethene	7.14	96.0	109314	21.70	UG/L	92
12)	C050	1,1-Dichloroethane	6.24	63.0	192411	18.54	UG/L	85
13)	C060	Chloroform	7.68	83.0	187169	19.54	UG/L	96
14)	C065	1,2-Dichloroethane	8.69	62.0	116405	16.97	UG/L	100
15)	C110	2-Butanone	7.17	43.0	54919	60.48	UG/L	95
16)	CS15	D4-1,2-Dichloroethane	8.55	65.0	85367	16.96	UG/L	84
17)	*CI10	1,4-Difluorobenzene	9.43	114.0	524584	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.34	43.0	163205	18.02	UG/L	97
19)	C115	1,1,1-Trichloroethane	8.00	97.0	112633	17.84	UG/L	91
20)	C120	Carbon Tetrachloride	8.30	117.0	102908	17.87	UG/L	97
21)	C165	Benzene	8.67	78.0	304334	21.19	UG/L	100
22)	C150	Trichloroethene	9.95	130.0	101134	23.98	UG/L	99
23)	C140	1,2-Dichloropropane	10.40	63.0	96702	18.69	UG/L	100
24)	C130	Bromodichloromethane	11.02	83.0	130804	19.77	UG/L	79
25)	C175	2-Chloroethylvinylether	11.77	63.0	39915	13.39	UG/L	99
26)	C143	Cis-1,3-Dichloropropen	12.07	75.0	130504	19.86	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	13.47	75.0	82221	15.64	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.92	97.0	68000	19.79	UG/L	67
29)	C155	Dibromochloromethane	14.94	129.0	90927	20.09	UG/L	95
30)	C180	Bromoform	19.13	173.0	63130	18.52	UG/L	97
31)	*CI20	D5-Chlorobenzene	16.57	117.0	367336	50.00	UG/L	100
32)	CS05	D8-Toluene	12.71	98.0	218568	20.74	UG/L	94
33)	C205	4-Methyl-2-Pentanone	12.49	43.0	87905	9.16	UG/L	86
34)	C230	Toluene	12.88	92.0	142783	20.28	UG/L	96
35)	C210	2-Hexanone	14.68	43.0	51387	9.01	UG/L	97
36)	C220	Tetrachloroethene	14.29	164.0	66762	23.11	UG/L	91
37)	C235	Chlorobenzene	16.65	112.0	171726	22.89	UG/L	75
38)	C240	Ethylbenzene	17.06	106.0	82047	21.89	UG/L	97
39)	CXXX	Xylene (p)	17.43	106.0	100626	22.22	UG/L	99
40)	CXXX	Xylenes (o)	18.61	106.0	112144	24.48	UG/L	97
41)	C245	Styrene	18.67	104.0	173224	23.65	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.84	83.0	136168	18.32	UG/L	94
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	98625	21.91	UG/L	79

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.87	146.0	158105	24.65	UG/L	100
45)	C340	Dichlorobenzene (p)	24.18	146.0	159799	24.39	UG/L	100
46)	C350	Dichlorobenzene (o)	25.41	146.0	169391	26.44	UG/L	100
47)	C250	Xylene (Total)	18.61	106.0	111069	24.28	UG/L	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2951::D6
Name: VSTD050 5ML
Misc: V2 CH#07 5UL IS/S

Quant Output File: ^B2951::QT

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 910829 00:11

Operator ID: NORA
Quant Time: 911011 18:21
Injected at: 911011 17:45

QUANT REPORT

Operator ID: NORA
Output File: ^B2951::QT
Data File: >B2951::D6
Name: VSTD050 5ML
Misc: V2 CH#07 5UL IS/S

Quant Rev: 6 Quant Time: 911011 18:21
Injected at: 911011 17:45
Dilution Factor: 1.00000

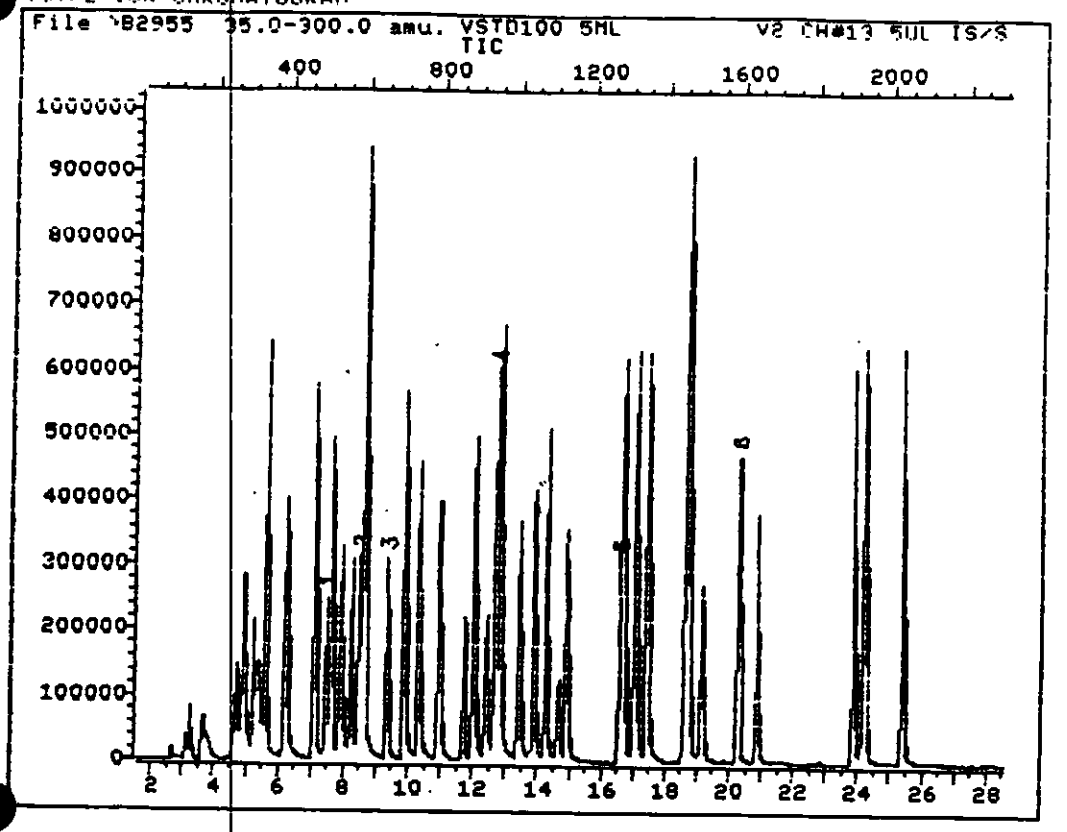
ID File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 910829 00:11

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.44	128.0	132167	50.00	UG/L	81
2)	C010	Chloromethane	3.08	50.0	54447	26.98	UG/L	98
3)	C020	Vinyl Chloride	3.21	62.0	112846	45.99	UG/L	88
4)	C015	Bromomethane	3.62	94.0	114612	55.58	UG/L	93
5)	C025	Chloroethane	3.82	64.0	83450	49.50	UG/L	97
6)	C045	1,1-Dichloroethene	4.68	96.0	148196	43.39	UG/L	98
7)	C035	Acetone	4.65	43.0	184082	75.96	UG/L	100
8)	C040	Carbon Disulfide	4.90	76.0	658896	47.39	UG/L	100
9)	C030	Methylene Chloride	5.18	84.0	69839	10.86	UG/L	84
10)	C053	Trans-1,2-Dichloroethene	5.57	96.0	249393	49.38	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.05	96.0	274344	56.08	UG/L	94
12)	C050	1,1-Dichloroethane	6.15	63.0	480279	47.64	UG/L	85
13)	C060	Chloroform	7.58	83.0	468229	50.34	UG/L	96
14)	C065	1,2-Dichloroethane	8.60	62.0	309849	46.51	UG/L	100
15)	C110	2-Butanone	7.08	43.0	149911	169.99	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.46	65.0	210883	43.15	UG/L	81
17)	*CI10	1,4-Difluorobenzene	9.34	114.0	607975	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.25	43.0	595453	56.72	UG/L	98
19)	C115	1,1,1-Trichloroethane	7.91	97.0	274393	37.51	UG/L	91
20)	C120	Carbon Tetrachloride	8.21	117.0	253246	37.95	UG/L	97
21)	C165	Benzene	8.58	78.0	771706	46.37	UG/L	100
22)	C150	Trichloroethene	9.86	130.0	253256	51.81	UG/L	99
23)	C140	1,2-Dichloropropane	10.31	63.0	259303	43.25	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	357676	46.65	UG/L	78
25)	C175	2-Chloroethylvinylether	11.69	63.0	128078	37.07	UG/L	93
26)	C143	Cis-1,3-Dichloropropen	12.01	75.0	397955	52.26	UG/L	95
27)	C172	Trans-1,3-Dichloropropen	13.43	75.0	267830	43.95	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.87	97.0	199810	50.16	UG/L	72
29)	C155	Dibromochloromethane	14.91	129.0	276425	52.70	UG/L	99
30)	C180	Bromoform	19.12	173.0	195648	49.51	UG/L	97
31)	*CI20	D5-Chlorobenzene	16.57	117.0	454894	50.00	UG/L	100
32)	CS05	D8-Toluene	12.65	98.0	600575	46.02	UG/L	95
33)	C205	4-Methyl-2-Pentanone	12.43	43.0	260803	21.94	UG/L	84
34)	C230	Toluene	12.83	92.0	399745	45.84	UG/L	96
35)	C210	2-Hexanone	14.64	43.0	144652	20.49	UG/L	99
36)	C220	Tetrachloroethene	14.25	164.0	183139	51.18	UG/L	89
37)	C235	Chlorobenzene	16.65	112.0	474314	51.06	UG/L	74
38)	C240	Ethylbenzene	17.05	106.0	219923	47.37	UG/L	97
39)	CXXX	Xylene (p)	17.43	106.0	257928	45.99	UG/L	98
40)	CXXX	Xylenes (o)	18.60	106.0	276800	48.79	UG/L	93
41)	C245	Styrene	18.66	104.0	446756	49.25	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.83	83.0	388993	42.26	UG/L	93

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.82	146.0	396477	49.93	UG/L	100
45)	C340	Dichlorobenzene (p)	24.15	146.0	390757	48.16	UG/L	100
46)	C350	Dichlorobenzene (o)	25.38	146.0	408398	51.47	UG/L	100
47)	C250	Xylene (Total)	18.60	106.0	270797	47.79	UG/L	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2955::D6 Quant Output File: ^B2955::QT
Name: VSTD100 5ML
Misc: V2 CH#13 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

Operator ID: NORA
Quant Time: 911011 21:47
Injected at: 911011 21:16

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911011 21:47
Output File: ^B2955::QT Injected at: 911011 21:16
Data File: >B2955::D6 Dilution Factor: 1.00000
Name: VSTD100 5ML
Misc: V2 CH#13 5UL IS/S

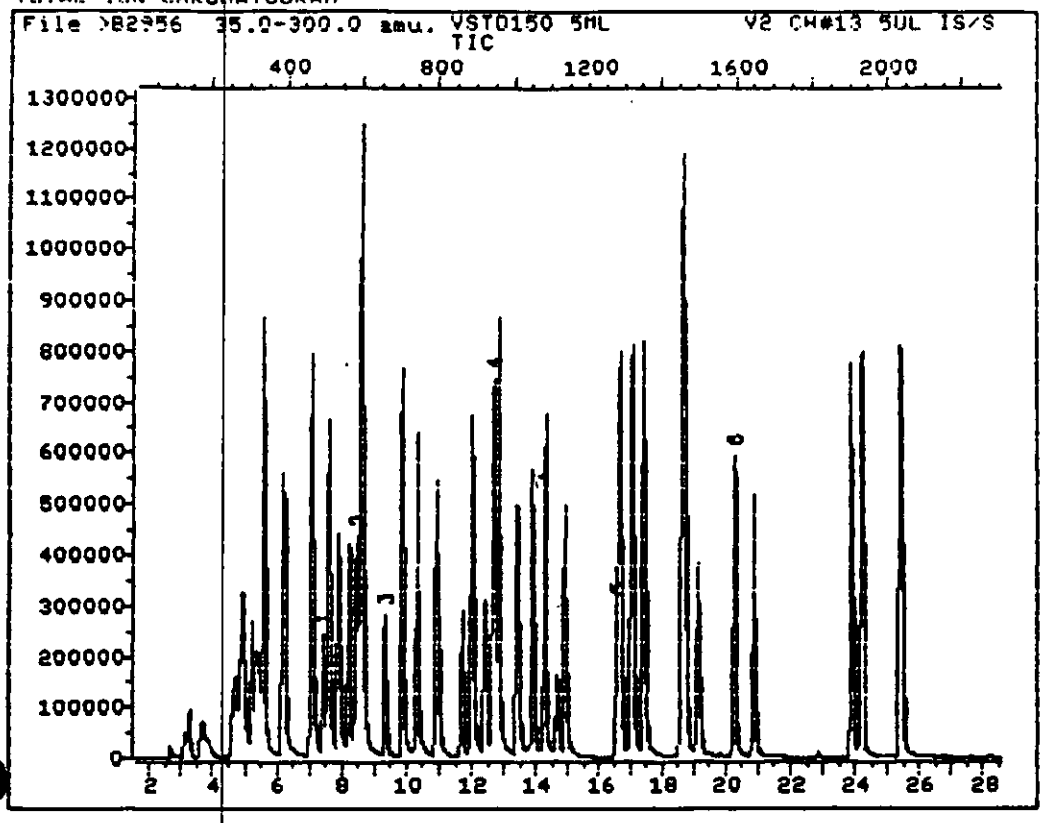
ID File: VOA$D2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.45	128.0	162023	50.00	UG/L	80
2)	C010	Chloromethane	3.08	50.0	152111	113.95	UG/L	99
3)	C020	Vinyl Chloride	3.21	62.0	287133	103.78	UG/L	87
4)	C015	Bromomethane	3.63	94.0	198927	70.79	UG/L	92
5)	C025	Chloroethane	3.81	64.0	159399	77.91	UG/L	94
6)	C045	1,1-Dichloroethene	4.60	96.0	75232	20.71	UG/L	94
7)	C035	Acetone	4.66	43.0	99259	28.17	UG/L	100
8)	C040	Carbon Disulfide	4.92	76.0	1449057	89.70	UG/L	100
9)	C030	Methylene Chloride	5.20	84.0	190922	111.50	UG/L	88
10)	C053	Trans-1,2-Dichloroethene	5.57	96.0	578426	94.60	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.06	96.0	631526	93.89	UG/L	89
12)	C050	1,1-Dichloroethane	6.17	63.0	1064475	90.40	UG/L	90
13)	C060	Chloroform	7.60	83.0	1040575	90.64	UG/L	88
14)	C065	1,2-Dichloroethane	8.61	62.0	702437	92.46	UG/L	100
15)	C110	2-Butanone	7.10	43.0	296318	80.62	UG/L	95
16)	CS15	D4-1,2-Dichloroethane	8.47	65.0	486551	94.10	UG/L	82
17)	*CI10	1,4-Difluorobenzene	9.35	114.0	720617	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.25	43.0	1327889	94.07	UG/L	99
19)	C115	1,1,1-Trichloroethane	7.92	97.0	640995	98.54	UG/L	92
20)	C120	Carbon Tetrachloride	8.22	117.0	612243	101.98	UG/L	98
21)	C165	Benzene	8.58	78.0	1648423	90.11	UG/L	100
22)	C150	Trichloroethene	9.87	130.0	601110	100.13	UG/L	99
23)	C140	1,2-Dichloropropane	10.32	63.0	631434	102.72	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	839058	98.96	UG/L	82
25)	C175	2-Chloroethylvinylether	11.70	63.0	341631	112.52	UG/L	97
26)	C143	Cis-1,3-Dichloropropen	12.02	75.0	974344	109.48	UG/L	94
27)	C172	Trans-1,3-Dichloropropen	13.42	75.0	644635	93.41	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.88	97.0	460975	97.32	UG/L	72
29)	C155	Dibromochloromethane	14.91	129.0	646440	98.65	UG/L	97
30)	C180	Bromoform	19.12	173.0	440022	94.87	UG/L	97
31)	*CI20	D5-Chlorobenzene	16.56	117.0	536074	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	1334719	94.29	UG/L	87
33)	C205	4-Methyl-2-Pentanone	12.42	43.0	606224	98.62	UG/L	85
34)	C230	Toluene	12.84	92.0	982597	104.29	UG/L	85
35)	C210	2-Hexanone	14.64	43.0	334809	98.20	UG/L	98
36)	C220	Tetrachloroethene	14.25	164.0	450223	104.30	UG/L	88
37)	C235	Chlorobenzene	16.64	112.0	1123494	100.50	UG/L	78
38)	C240	Ethylbenzene	17.05	106.0	518655	100.06	UG/L	97
39)	CXXX	Xylene (p)	17.43	106.0	642240	105.65	UG/L	95
40)	CXXX	Xylenes (o)	18.61	106.0	631530	96.80	UG/L	99
41)	C245	Styrene	18.67	104.0	1066755	101.31	UG/L	80
42)	C225	1,1,2,2-Tetrachloroethan	20.84	83.0	851411	92.87	UG/L	94
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	626247	95.52	UG/L	81

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335 Dichlorobenzene (m)	23.85	146.0	979014	104.77	UG/L	100
45)	C340 Dichlorobenzene (p)	24.17	146.0	1023402	111.12	UG/L	100
46)	C350 Dichlorobenzene (o)	25.36	146.0	1015395	105.49	UG/L	100
47)	C250 Xylene (Total)	18.61	106.0	627068	98.25	UG/L	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2956::D6 Quant Output File: ^B2956::QT
Name: VSTD150 5ML
Misc: V2 CH#13 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

Operator ID: NORA
Quant Time: 911011 22:30
Injected at: 911011 21:59

QUANT REPORT

Operator ID: NORA
Output File: ^82956::QT
Data File: >82956::D6
Name: VSTD150 5ML
Misc: V2 CH#13 5UL IS/S

Quant Rev: 6 Quant Time: 911011 22:30
Injected at: 911011 21:59
Dilution Factor: 1.00000

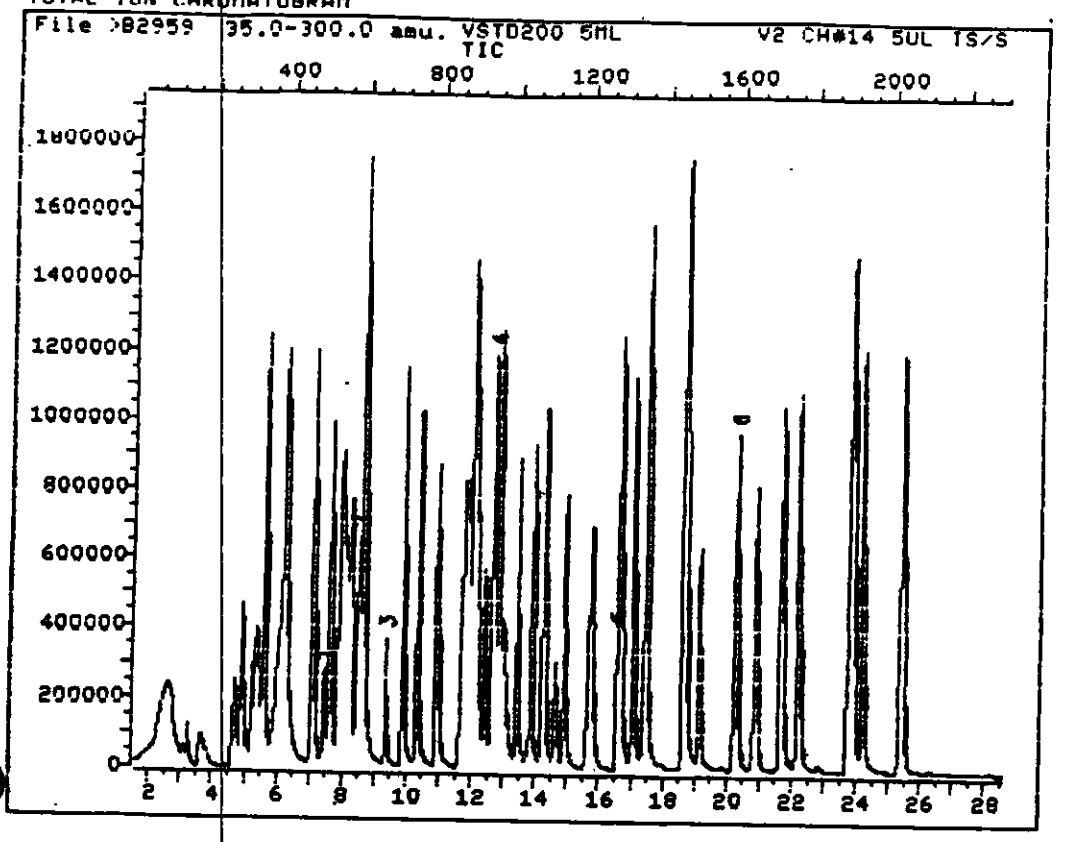
ID File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.42	128.0	158267	50.00	UG/L	79
2)	C010	Chloromethane	3.10	50.0	206729	158.54	UG/L	97
3)	C020	Vinyl Chloride	3.24	62.0	378399	140.01	UG/L	88
4)	C015	Bromomethane	3.65	94.0	257677	93.87	UG/L	94
5)	C025	Chloroethane	3.85	64.0	207639	103.89	UG/L	97
6)	C045	1,1-Dichloroethene	4.58	96.0	61506	17.33	UG/L	91
7)	C035	Acetone	4.63	43.0	151366	43.97	UG/L	100
8)	C040	Carbon Disulfide	4.91	76.0	1878198	119.02	UG/L	100
9)	C030	Methylene Chloride	5.17	84.0	235766	140.96	UG/L	88
10)	C053	Trans-1,2-Dichloroethene	5.55	96.0	776099	129.94	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.03	96.0	870635	132.51	UG/L	94
12)	C050	1,1-Dichloroethane	6.14	63.0	1454347	126.44	UG/L	92
13)	C060	Chloroform	7.57	83.0	1424017	126.99	UG/L	94
14)	C065	1,2-Dichloroethane	8.59	62.0	984918	132.72	UG/L	100
15)	C110	2-Butanone	7.07	43.0	444066	123.68	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.44	65.0	690070	136.63	UG/L	88
17)	*CI10	1,4-Difluorobenzene	9.32	114.0	659180	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.23	43.0	1876894	145.36	UG/L	96
19)	C115	1,1,1-Trichloroethane	7.89	97.0	885103	148.76	UG/L	92
20)	C120	Carbon Tetrachloride	8.19	117.0	839939	152.95	UG/L	98
21)	C165	Benzene	8.56	78.0	2190746	130.92	UG/L	100
22)	C150	Trichloroethene	9.85	130.0	825140	150.25	UG/L	98
23)	C140	1,2-Dichloropropane	10.30	63.0	890473	158.37	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	1151988	148.53	UG/L	76
25)	C175	2-Chloroethylvinylether	11.67	63.0	453930	163.44	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	11.99	75.0	1305254	160.33	UG/L	90
27)	C172	Trans-1,3-Dichloropropen	13.41	75.0	904824	143.33	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.86	97.0	640702	147.87	UG/L	71
29)	C155	Dibromochloromethane	14.91	129.0	896083	149.49	UG/L	93
30)	C180	Bromoform	19.14	173.0	632185	149.01	UG/L	96
31)	*CI20	D5-Chlorobenzene	16.56	117.0	471247	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	1725492	138.67	UG/L	97
33)	C205	4-Methyl-2-Pentanone	12.41	43.0	846074	156.58	UG/L	85
34)	C230	Toluene	12.82	92.0	1281353	154.71	UG/L	94
35)	C210	2-Hexanone	14.64	43.0	422289	140.90	UG/L	99
36)	C220	Tetrachloroethene	14.24	164.0	595969	157.06	UG/L	88
37)	C235	Chlorobenzene	16.64	112.0	1476219	150.22	UG/L	82
38)	C240	Ethylbenzene	17.05	106.0	683199	149.94	UG/L	96
39)	CXXX	Xylene (p)	17.43	106.0	854518	159.90	UG/L	95
40)	CXXX	Xylenes (o)	18.61	106.0	833983	145.42	UG/L	99
41)	C245	Styrene	18.68	104.0	1338406	144.59	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.86	83.0	1192768	147.99	UG/L	98
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	796464	138.19	UG/L	82

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.86	146.0	1231056	149.86	UG/L	100
45)	C340	Dichlorobenzene (p)	24.18	146.0	1264477	156.18	UG/L	100
46)	C350	Dichlorobenzene (o)	25.41	146.0	1299268	153.55	UG/L	100
47)	C250	Xylene (Total)	18.61	106.0	833941	148.64	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2959::D6 Quant Output File: ^B2959::QT
Name: VSTD200 5ML
Misc: V2 CH#14 5UL IS/S

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

Operator ID: NORA
Quant Time: 911012 00:54
Injected at: 911012 00:25

QUANT REPORT

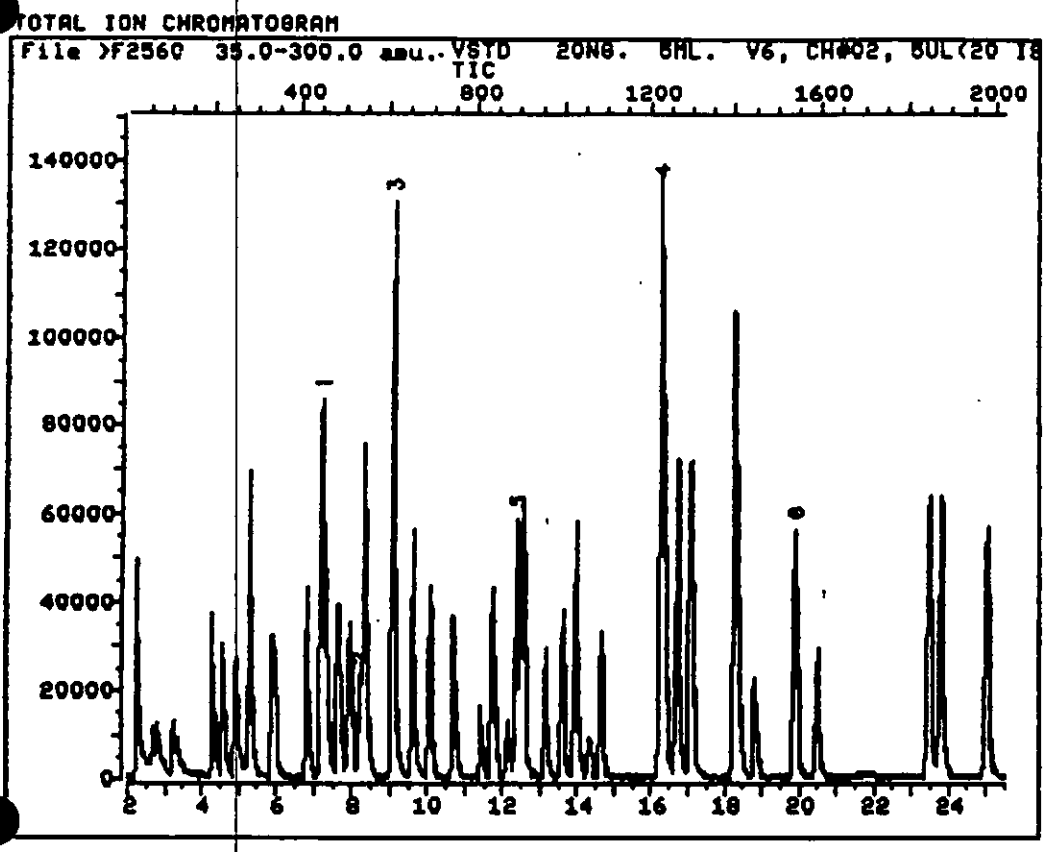
Operator ID: NORA Quant Rev: 6 Quant Time: 911012 00:54
Output File: ^B2959::QT Injected at: 911012 00:25
Data File: >B2959::D6 Dilution Factor: 1.00000
Name: VSTD200 5ML
Misc: V2 CH#14 5UL IS/S

ID File: VOA1D2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911011 20:54

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.44	128.0	179140	50.00	UG/L	82
2)	C010	Chloromethane	3.06	50.0	191336	129.64	UG/L	95
3)	C020	Vinyl Chloride	3.21	62.0	421456	137.77	UG/L	87
4)	C015	Bromomethane	3.61	94.0	284717	91.64	UG/L	92
5)	C025	Chloroethane	3.81	64.0	259177	114.57	UG/L	97
6)	C045	1,1-Dichloroethene	4.69	96.0	416520	103.68	UG/L	88
7)	C035	Acetone	4.66	43.0	183334	47.05	UG/L	100
8)	C040	Carbon Disulfide	4.90	76.0	2196104	122.95	UG/L	100
9)	C030	Methylene Chloride	5.20	84.0	278786	147.26	UG/L	89
10)	C053	Trans-1,2-Dichloroethene	5.57	96.0	1165173	172.35	UG/L	98
11)	C055	cis-1,2-Dichloroethene	7.06	96.0	1346925	181.11	UG/L	96
12)	C050	1,1-Dichloroethane	6.17	63.0	2178040	167.29	UG/L	92
13)	C060	Chloroform	7.60	83.0	2218189	174.76	UG/L	86
14)	C065	1,2-Dichloroethane	8.61	62.0	1510287	179.81	UG/L	100
15)	C110	2-Butanone	7.10	43.0	773030	190.22	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.46	65.0	1031606	180.46	UG/L	78
17)	*CI10	1,4-Difluorobenzene	9.34	114.0	842659	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.26	43.0	2468971	149.58	UG/L	85
19)	C115	1,1,1-Trichloroethane	7.92	97.0	1293781	170.10	UG/L	99
20)	C120	Carbon Tetrachloride	8.21	117.0	1263219	179.95	UG/L	98
21)	C165	Benzene	8.59	78.0	2954016	138.09	UG/L	100
22)	C150	Trichloroethene	9.86	130.0	1298161	184.92	UG/L	99
23)	C140	1,2-Dichloropropane	10.32	63.0	1446581	201.25	UG/L	100
24)	C130	Bromodichloromethane	10.94	83.0	1868945	188.50	UG/L	74
25)	C175	2-Chloroethylvinylether	11.69	63.0	989824	278.80	UG/L	88
26)	C143	Cis-1,3-Dichloropropen	12.00	75.0	2121970	203.90	UG/L	72
27)	C172	Trans-1,3-Dichloropropen	13.42	75.0	1534413	190.14	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.87	97.0	1117874	201.83	UG/L	70
29)	C155	Dibromochloromethane	14.91	129.0	1492493	194.78	UG/L	98
30)	C180	Bromoform	19.12	173.0	1097615	202.39	UG/L	92
31)	*CI20	D5-Chlorobenzene	16.55	117.0	603214	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	98.0	2782230	174.68	UG/L	89
33)	C205	4-Methyl-2-Pentanone	12.42	43.0	1492776	215.82	UG/L	79
34)	C230	Toluene	12.82	92.0	2222251	209.61	UG/L	63
35)	C210	2-Hexanone	14.64	43.0	798038	208.02	UG/L	99
36)	C220	Tetrachloroethene	14.24	164.0	995502	204.96	UG/L	74
37)	C235	Chlorobenzene	16.65	112.0	2370742	188.46	UG/L	79
38)	C240	Ethylbenzene	17.05	106.0	1117386	191.58	UG/L	76
39)	CXXX	Xylene (p)	17.44	106.0	1250824	182.85	UG/L	94
40)	CXXX	Xylenes (o)	18.61	106.0	1260494	171.71	UG/L	94
41)	C245	Styrene	18.68	104.0	2032593	171.55	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.85	83.0	1888659	183.07	UG/L	98

		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.81	146.0	3477500	330.72	UG/L	10
45)	C340	Dichlorobenzene (p)	24.17	146.0	1989250	191.95	UG/L	10
46)	C350	Dichlorobenzene (o)	25.39	146.0	1982800	183.06	UG/L	10
47)	C250	Xylene (Total)	18.61	106.0	1250622	174.14	UG/L	86

* Compound is ISTD



Data File: >F2560::D4 Quant Output File: ^F2560::D7
Name: VSTD 20NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(20 IS/S), STD=20UL/200ML HSL,A,B+ MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 13:49
Injected at: 910922 13:22

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 13:49
Output File: ^F2560::D7 Injected at: 910922 13:22
Data File: >F2560::D4 Dilution Factor: 1.00000
Name: VSTD 20NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(20 IS/S), STD=20UL/200ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	66164	50.00	UG/L	64
2)	C010 Chloromethane	2.65	50.0	36001	20.90	UG/L	99
3)	C020 Vinyl Chloride	2.79	62.0	37017	21.21	UG/L	87
4)	C015 Bromomethane	3.19	94.0	35029	24.07	UG/L	92
5)	C025 Chloroethane	3.32	64.0	22151M	23.15	UG/L	96
6)	C045 1,1-Dichloroethene	4.29	96.0	42246	22.43	UG/L	91
7)	C035 Acetone	4.36	43.0	7226	28.69	UG/L	30
8)	C040 Carbon Disulfide	4.57	76.0	120197	22.71	UG/L	100
9)	C030 Methylene Chloride	4.92	84.0	50135	22.91	UG/L	91
10)	CXXX Tert-butyl alcohol	5.07	59.0	1147M	12.07	UG/L	
11)	C053 Trans-1,2-dichloroethene	5.29	96.0	51105	22.59	UG/L	95
12)	C055 Cis-1,2-dichloroethene	6.80	96.0	55446	22.80	UG/L	95
13)	CXXX Methyl tert-butyl ether	5.28	73.0	76693	20.61	UG/L	90
14)	C050 1,1-Dichloroethane	5.88	63.0	96940	23.46	UG/L	100
15)	C060 Chloroform	7.33	83.0	111460	22.77	UG/L	94
16)	C065 1,2-Dichloroethane	8.37	62.0	63812	23.18	UG/L	100
17)	C110 2-Butanone	6.83	72.0	2791	18.63	UG/L	90
18)	CS15 D4-1,2-dichloroethane	8.21	65.0	50708	22.23	UG/L	87
19)	*CI10 1,4-Difluorobenzene	9.08	114.0	362515	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.96	43.0	78027	17.83	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.67	97.0	88029	21.72	UG/L	97
22)	C120 Carbon Tetrachloride	7.96	117.0	74521	21.31	UG/L	98
23)	C165 Benzene	8.32	78.0	161518	22.98	UG/L	100
24)	C150 Trichloroethene	9.59	130.0	65720	22.79	UG/L	95
25)	C140 1,2-Dichloropropane	10.08	63.0	61152	20.89	UG/L	100
26)	C130 Bromodichloromethane	10.70	83.0	93377	22.16	UG/L	91
27)	C175 2-Chloroethylvinylether	11.41	63.0	28001	20.80	UG/L	96
28)	C143 Cis-1,3-Dichloropropene	11.73	75.0	91930	22.30	UG/L	94
29)	C172 Trans-1,3-dichloropropene	13.13	75.0	63203	19.51	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.60	97.0	47273	21.36	UG/L	75
31)	C155 Dibromochloromethane	14.64	129.0	69711	20.36	UG/L	98
32)	C180 Bromoform	18.81	173.0	38349	18.68	UG/L	99
33)	*CI20 D5-Chlorobenzene	16.24	117.0	292082	50.00	UG/L	100
34)	CS05 D8-Toluene	12.36	98.0	153965	21.03	UG/L	93
35)	C205 4-Methyl-2-pentanone	12.14	43.0	42184	22.67	UG/L	90
36)	C230 Toluene	12.53	92.0	105957	21.29	UG/L	80
37)	C210 2-Hexanone	14.33	43.0	28149	19.84	UG/L	97
38)	C220 Tetrachloroethene	13.94	164.0	54447	21.32	UG/L	96
39)	C235 Chlorobenzene	16.32	112.0	129024	20.92	UG/L	75
40)	C240 Ethylbenzene	16.70	106.0	64766	21.04	UG/L	94
41)	CXXX Xylenes (p)	17.08	106.0	85811	21.55	UG/L	95
42)	CXXX Xylenes (o)	19.26	106.0	77264	21.35	UG/L	98

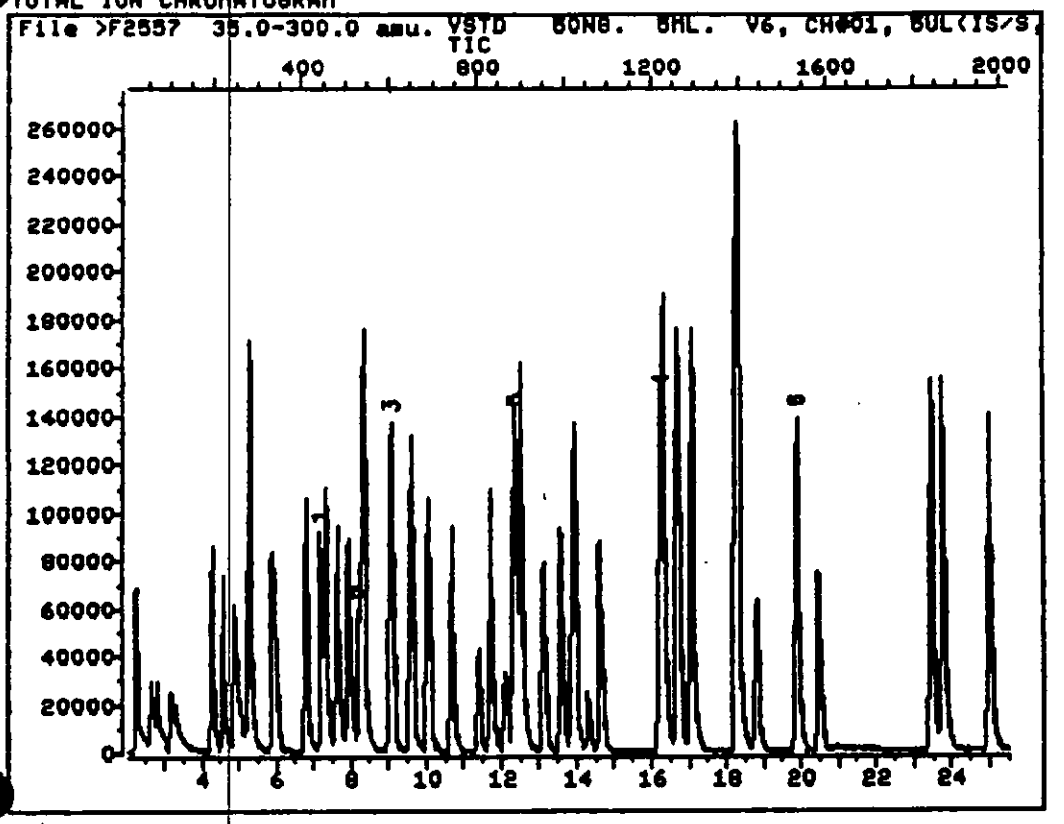
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 13:49
Output File: ^F2560::D7 Injected at: 910922 13:22
Data File: >F2560::D4 Dilution Factor: 1.00000
Name: VSTD 20NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(20 IS/S), STD=20UL/200ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethene	20.48	83.0	71037	20.06	UG/L	90
45)	CS10 Bromofluorobenzene	19.90	95.0	89608	20.84	UG/L	72
46)	C335 Dichlorobenzene (m)	23.46	146.0	112165	20.58	UG/L	100
47)	C340 Dichlorobenzene (p)	23.78	146.0	104930	21.20	UG/L	100
48)	C350 Dichlorobenzene (o)	25.01	146.0	106197	21.34	UG/L	100
49)	C250 Xylenes (total)	18.26	106.0	75196	20.79	UG/L	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F2557::D4 Quant Output File: ^F2557::D7
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL(IS/S, MTBE, TBA), STD=25UL/100ML HSL,A

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910918 21:59

Operator ID: KERYLYNN
Quant Time : 910922 11:37
Injected at: 910922 11:10

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 11:37
Output File: ^F2557::D7 Injected at: 910922 11:10
Data File: >F2557::D4 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL(IS/S, MTBE, TBA), STD=25UL/100ML HSL,A

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910918 21:59

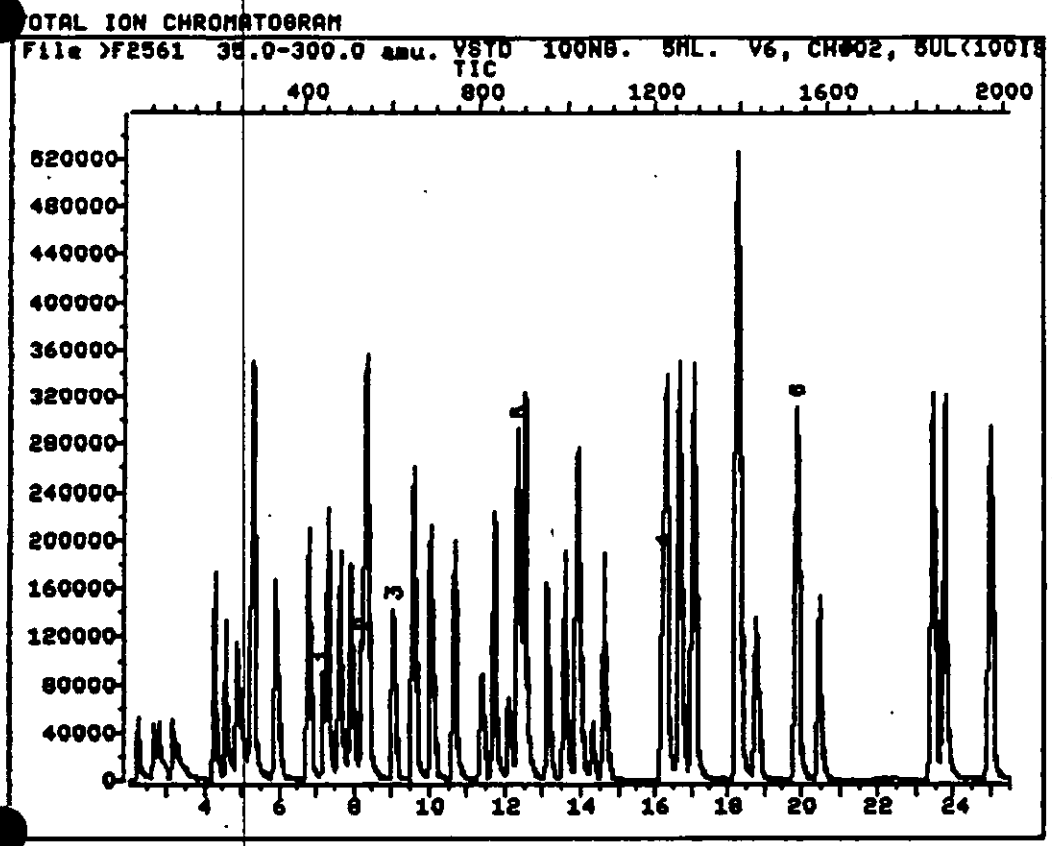
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.17	128.0	72616	50.00	UG/L	70
2)	C010 Chloromethane	2.65	50.0	94512	74.65	UG/L	99
3)	C020 Vinyl Chloride	2.78	62.0	95768	61.62	UG/L	93
4)	C015 Bromomethane	3.16	94.0	79846	49.64	UG/L	94
5)	C025 Chloroethane	3.29	64.0	52513M	50.84	UG/L	98
6)	C045 1,1-Dichloroethene	4.27	96.0	103350	50.18	UG/L	84
7)	C035 Acetone	4.34	43.0	13823	48.47	UG/L	23
8)	C040 Carbon Disulfide	4.56	76.0	290422	49.86	UG/L	100
9)	C030 Methylene Chloride	4.90	84.0	120111	49.96	UG/L	91
10)	CXXX Tert-butyl alcohol	5.06	59.0	5214M	51.56	UG/L	
11)	C053 Trans-1,2-dichloroethene	5.27	96.0	124123	49.89	UG/L	99
12)	C055 Cis-1,2-dichloroethene	6.79	96.0	133461	52.07	UG/L	97
13)	CXXX Methyl tert-butyl ether	5.27	73.0	204169	47.71	UG/L	87
14)	C050 1,1-Dichloroethane	5.88	63.0	226786	49.15	UG/L	100
15)	C060 Chloroform	7.31	83.0	268649	49.77	UG/L	98
16)	C065 1,2-Dichloroethane	8.34	62.0	151088	49.69	UG/L	100
17)	C110 2-Butanone	6.81	72.0	8219	49.63	UG/L	91
18)	CS15 D4-1,2-dichloroethane	8.21	65.0	125151	55.05	UG/L	87
19)	*CI10 1,4-Difluorobenzene	9.06	114.0	389063	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.95	43.0	234819	166.62	UG/L	99
21)	C115 1,1,1-Trichloroethane	7.64	97.0	217439	49.11	UG/L	91
22)	C120 Carbon Tetrachloride	7.93	117.0	187662	45.28	UG/L	96
23)	C165 Benzene	8.31	78.0	377123	47.20	UG/L	100
24)	C150 Trichloroethene	9.58	130.0	154733	45.96	UG/L	99
25)	C140 1,2-Dichloropropane	10.05	63.0	157115	47.90	UG/L	100
26)	C130 Bromodichloromethane	10.66	83.0	226079	48.59	UG/L	74
27)	C175 2-Chloroethylvinylether	11.39	63.0	72247	51.23	UG/L	98
28)	C143 Cis-1,3-Dichloropropene	11.72	75.0	234502	51.26	UG/L	93
29)	C172 Trans-1,3-dichloropropene	13.12	75.0	159892	48.88	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.57	97.0	118735	50.42	UG/L	72
31)	C155 Dibromochloromethane	14.62	129.0	183774	50.15	UG/L	96
32)	C180 Bromoform	18.81	173.0	110158	51.82	UG/L	97
33)	*CI20 D5-Chlorobenzene	16.23	117.0	301138	50.00	UG/L	100
34)	CS05 D8-Toluene	12.34	98.0	377478	50.56	UG/L	95
35)	C205 4-Methyl-2-pentanone	12.11	43.0	95924	41.87	UG/L	82
36)	C230 Toluene	12.52	92.0	256595	48.56	UG/L	91
37)	C210 2-Hexanone	14.31	43.0	73156	51.18	UG/L	97
38)	C220 Tetrachloroethene	13.92	164.0	131665	47.47	UG/L	93
39)	C235 Chlorobenzene	16.31	112.0	317994	47.91	UG/L	75
40)	C240 Ethylbenzene	16.68	106.0	158712	49.37	UG/L	96
41)	CXXX Xylenes (p)	17.07	106.0	205258M	55.82	UG/L	97

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 11:37
Output File: ^F2557::D7 Injected at: 910922 11:10
Data File: >F2557::D4 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL(IS/S, MTBE, TBA), STD=25UL/100ML HSL,A

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910918 21:59

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.48	83.0	182548	53.82	UG/L	96
45)	CS10 Bromofluorobenzene	19.88	95.0	221701	53.12	UG/L	76
46)	C335 Dichlorobenzene (m)	23.44	146.0	280976	60.57	UG/L	100
47)	C340 Dichlorobenzene (p)	23.77	146.0	255152	59.38	UG/L	100
48)	C350 Dichlorobenzene (o)	25.00	146.0	256534	56.04	UG/L	100
49)	C250 Xylenes (total)	18.25	106.0	186423	50.92	UG/L	94

* Compound is ISTD



Data File: >F2561::D4 Quant Output File: ^F2561::D7
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 14:24
Injected at: 910922 13:57

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 14:24
Output File: ^F2561::D7 Injected at: 910922 13:57
Data File: >F2561::D4 Dilution Factor: 1.00000
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.17	128.0	70645	50.00	UG/L	71
2)	C010 Chloromethane	2.66	50.0	174253	94.76	UG/L	97
3)	C020 Vinyl Chloride	2.80	62.0	179744	96.46	UG/L	87
4)	C015 Bromomethane	3.18	94.0	143619	92.44	UG/L	97
5)	C025 Chloroethane	3.29	64.0	92542M	90.57	UG/L	97
6)	C045 1,1-Dichloroethene	4.27	96.0	198396	98.66	UG/L	97
7)	C035 Acetone	4.35	43.0	28415	105.65	UG/L	19
8)	C040 Carbon Disulfide	4.56	76.0	600925	106.34	UG/L	100
9)	C030 Methylene Chloride	4.90	84.0	240774	103.03	UG/L	89
10)	CXXX Tert-butyl alcohol	5.10	59.0	11539	113.74	UG/L	54
11)	C053 Trans-1,2-dichloroethene	5.27	96.0	247144	102.33	UG/L	91
12)	C055 Cis-1,2-dichloroethene	6.79	96.0	272101	104.78	UG/L	88
13)	CXXX Methyl tert-butyl ether	5.28	73.0	448446	112.89	UG/L	88
14)	C050 1,1-Dichloroethane	5.88	63.0	459872	104.22	UG/L	100
15)	C060 Chloroform	7.31	83.0	542393	103.76	UG/L	99
16)	C065 1,2-Dichloroethane	8.35	62.0	316160	107.55	UG/L	100
17)	C110 2-Butanone	6.80	72.0	16990	106.24	UG/L	90
18)	CS15 D4-1,2-dichloroethane	8.20	65.0	246549	101.25	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.05	114.0	394127	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.95	43.0	419012	88.07	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.63	97.0	438774	99.60	UG/L	91
22)	C120 Carbon Tetrachloride	7.93	117.0	375523	98.77	UG/L	94
23)	C165 Benzene	8.30	78.0	763423	99.92	UG/L	100
24)	C150 Trichloroethene	9.59	130.0	323845	103.30	UG/L	88
25)	C140 1,2-Dichloropropene	10.05	63.0	316223	99.34	UG/L	100
26)	C130 Bromodichloromethane	10.66	83.0	483261	105.51	UG/L	82
27)	C175 2-Chloroethylvinylether	11.39	63.0	146485	100.08	UG/L	97
28)	C143 Cis-1,3-Dichloropropene	11.70	75.0	494607	110.35	UG/L	97
29)	C172 Trans-1,3-dichloropropene	13.11	75.0	336392	95.53	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.57	97.0	240907	100.14	UG/L	79
31)	C155 Dibromochloromethane	14.60	129.0	397912	106.87	UG/L	94
32)	C180 Bromoform	18.77	173.0	237517	106.42	UG/L	94
33)	*CI20 D5-Chlorobenzene	16.22	117.0	333225	50.00	UG/L	100
34)	CS05 D8-Toluene	12.35	98.0	767265	91.84	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.10	43.0	207706	97.84	UG/L	86
36)	C230 Toluene	12.50	92.0	518033	91.22	UG/L	89
37)	C210 2-Hexanone	14.31	43.0	143237	88.47	UG/L	98
38)	C220 Tetrachloroethene	13.90	164.0	270796	92.93	UG/L	93
39)	C235 Chlorobenzene	16.30	112.0	653477	92.86	UG/L	70
40)	C240 Ethylbenzene	16.67	106.0	311198	88.60	UG/L	97
41)	CXXX Xylenes (p)	17.04	106.0	397865M	87.59	UG/L	99

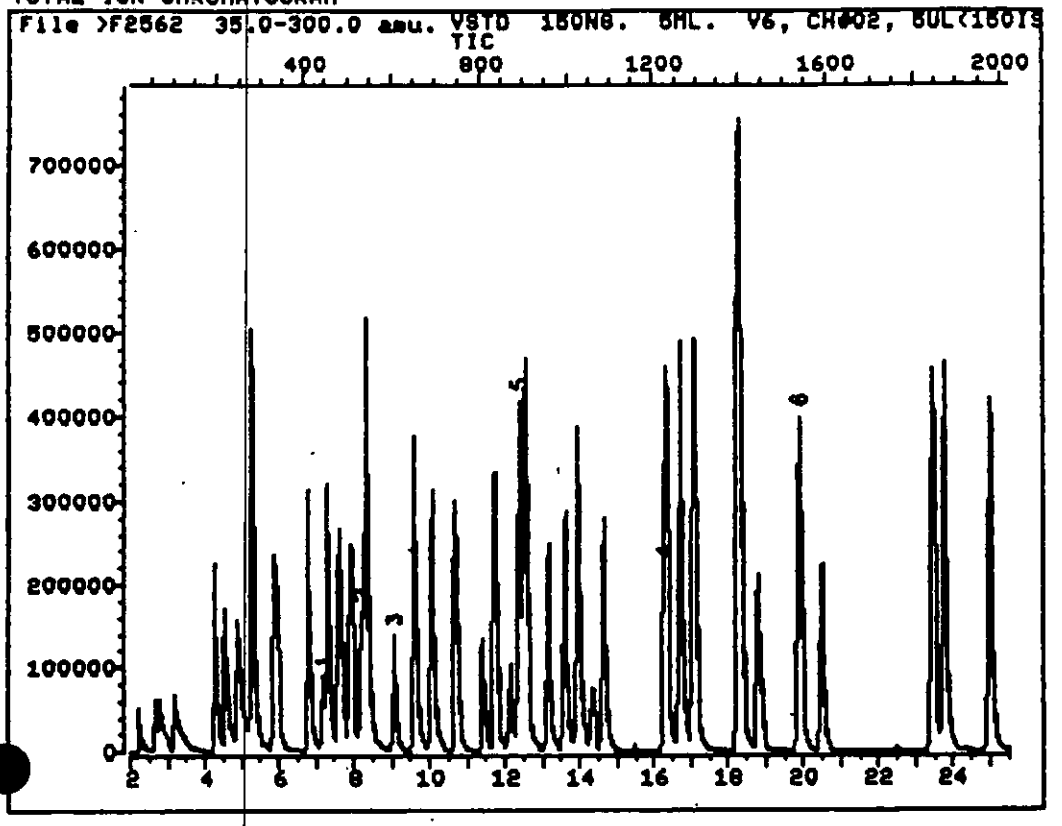
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 14:24
Output File: ^F2561::D7 Injected at: 910922 13:57
Data File: >F2561::D4 Dilution Factor: 1.00000
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.45	83.0	369800	91.54	UG/L	95
45)	CS10 Bromofluorobenzene	19.86	95.0	494842	100.85	UG/L	67
46)	C335 Dichlorobenzene (m)	23.42	146.0	572130	92.01	UG/L	100
47)	C340 Dichlorobenzene (p)	23.76	146.0	526188	93.18	UG/L	100
48)	C350 Dichlorobenzene (o)	24.97	146.0	526619	92.76	UG/L	100
49)	C250 Xylenes (total)	18.24	106.0	371954	90.15	UG/L	93

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F2562::D4 Quant Output File: ^F2562::D7
Name: VSTD 150NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(150IS/S), STD=37.5UL/50ML HSL,A,B+ MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 15:02
Injected at: 910922 14:35

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:02
Output File: ^F2562::D7 Injected at: 910922 14:35
Data File: >F2562::D4 Dilution Factor: 1.00000
Name: VSTD 150NG. 5ML. Instrument ID: V6
Misc: V6, CH$02, 5UL(150IS/S), STD=37.5UL/50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	71409	50.00	UG/L	65
2)	C010 Chloromethane	2.65	50.0	245105	131.86	UG/L	98
3)	C020 Vinyl Chloride	2.78	62.0	240961	127.93	UG/L	85
4)	C015 Bromomethane	3.15	94.0	198283M	126.26	UG/L	91
5)	C025 Chloroethane	3.28	64.0	117468M	113.74	UG/L	94
6)	C045 1,1-Dichloroethene	4.26	96.0	263121	129.45	UG/L	89
7)	C035 Acetone	4.34	43.0	41564	152.88	UG/L	14
8)	C040 Carbon Disulfide	4.55	76.0	840310	147.12	UG/L	100
9)	C030 Methylene Chloride	4.89	84.0	350805	148.50	UG/L	92
10)	CXXX Tert-butyl alcohol	5.10	59.0	17361M	169.30	UG/L	89
11)	C053 Trans-1,2-dichloroethene	5.26	96.0	348218	142.64	UG/L	99
12)	C055 Cis-1,2-dichloroethene	6.78	96.0	394246	150.20	UG/L	99
13)	CXXX Methyl tert-butyl ether	5.29	73.0	680426	169.45	UG/L	88
14)	C050 1,1-Dichloroethane	5.87	63.0	663016	148.65	UG/L	100
15)	C060 Chloroform	7.32	83.0	802593	151.89	UG/L	97
16)	C065 1,2-Dichloroethane	8.34	62.0	447415	150.57	UG/L	100
17)	C110 2-Butanone	6.83	72.0	23274	143.98	UG/L	96
18)	CS15 D4-1,2-dichloroethane	8.20	65.0	360514	146.47	UG/L	90
19)	*CI10 1,4-Difluorobenzene	9.05	114.0	377988	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.95	43.0	602069	131.95	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.64	97.0	611378	144.71	UG/L	96
22)	C120 Carbon Tetrachloride	7.93	117.0	516812	141.73	UG/L	99
23)	C165 Benzene	8.31	78.0	1126805	153.77	UG/L	100
24)	C150 Trichloroethene	9.58	130.0	459944	152.98	UG/L	99
25)	C140 1,2-Dichloropropane	10.04	63.0	459419	150.49	UG/L	100
26)	C130 Bromodichloromethane	10.67	83.0	719287	163.74	UG/L	79
27)	C175 2-Chloroethylvinylether	11.40	63.0	220430	157.02	UG/L	99
28)	C143 Cis-1,3-Dichloropropene	11.72	75.0	739104	171.94	UG/L	98
29)	C172 Trans-1,3-dichloropropene	13.12	75.0	511852	151.57	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.59	97.0	367082	159.46	UG/L	78
31)	C155 Dibromochloromethane	14.64	129.0	591556	165.66	UG/L	98
32)	C180 Bromoform	18.81	173.0	374345	174.89	UG/L	94
33)	*CI20 D5-Chlorobenzene	16.26	117.0	289223	50.00	UG/L	100
34)	CS05 D8-Toluene	12.37	98.0	1080178	148.97	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.12	43.0	307252	166.75	UG/L	89
36)	C230 Toluene	12.52	92.0	745978	151.35	UG/L	90
37)	C210 2-Hexanone	14.33	43.0	221742	157.80	UG/L	96
38)	C220 Tetrachloroethene	13.94	164.0	375691	148.55	UG/L	92
39)	C235 Chlorobenzene	16.33	112.0	947878	155.18	UG/L	69
40)	C240 Ethylbenzene	16.70	106.0	446295	146.39	UG/L	99
41)	CXXX Xylenes (o)	17.09	106.0	530855	134.64	UG/L	99

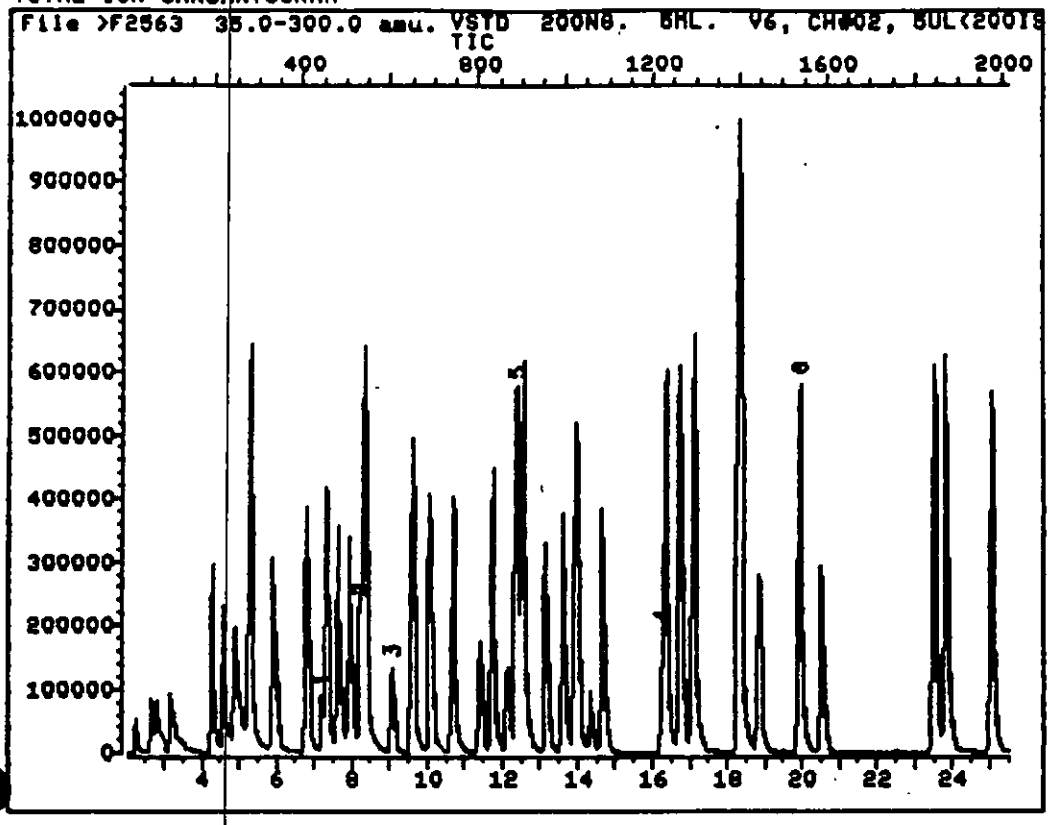
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:02
Output File: ^F2562::D7 Injected at: 910922 14:35
Data File: >F2562::D4 Dilution Factor: 1.00000
Name: VSTD 150NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(150IS/S), STD=37.5UL/50ML HSL,A,B+ MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.48	83.0	548216	156.34	UG/L	84
45)	CS10 Bromofluorobenzene	19.90	95.0	626399	147.09	UG/L	71
46)	C335 Dichlorobenzene (m)	23.45	146.0	809504	149.99	UG/L	100
47)	C340 Dichlorobenzene (p)	23.77	146.0	752370	153.51	UG/L	100
48)	C350 Dichlorobenzene (o)	24.99	146.0	746636	151.52	UG/L	100
49)	C250 Xylenes (total)	18.26	106.0	520527	145.36	UG/L	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F2563::D4 Quant Output File: ^F2563::D7
Name: VSTD 200NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

Operator ID: KERYLYNN
Quant Time : 910922 15:57
Injected at: 910922 15:30

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:57
Output File: ^F2563::D7 Injected at: 910922 15:30
Data File: >F2563::D4 Dilution Factor: 1.00000
Name: VSTD 200NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	69596	50.00	UG/L	72
2)	C010 Chloromethane	2.66	50.0	330885	182.65	UG/L	98
3)	C020 Vinyl Chloride	2.80	62.0	326977	178.12	UG/L	88
4)	C015 Bromomethane	3.18	94.0	253347	165.53	UG/L	96
5)	C025 Chloroethane	3.29	64.0	137303M	136.41	UG/L	93
6)	C045 1,1-Dichloroethene	4.26	96.0	357003	180.21	UG/L	89
7)	C035 Acetone	4.36	43.0	54993	207.55	UG/L	25
8)	C040 Carbon Disulfide	4.56	76.0	1131014	203.17	UG/L	100
9)	C030 Methylene Chloride	4.90	84.0	453720	197.07	UG/L	78
10)	CXXX Tert-butyl alcohol	5.13	59.0	12869	128.76	UG/L	70
11)	C053 Trans-1,2-dichloroethene	5.27	96.0	451171	189.63	UG/L	91
12)	C055 Cis-1,2-dichloroethene	6.79	96.0	531114	207.61	UG/L	94
13)	CXXX Methyl tert-butyl ether	5.31	73.0	880513	224.99	UG/L	87
14)	C050 1,1-Dichloroethane	5.89	63.0	866766	199.39	UG/L	100
15)	C060 Chloroform	7.33	83.0	1055076	204.89	UG/L	96
16)	C065 1,2-Dichloroethane	8.37	62.0	566691	195.67	UG/L	100
17)	C110 2-Butanone	6.83	72.0	29892	189.74	UG/L	89
18)	CS15 D4-1,2-dichloroethane	8.23	65.0	481320	200.64	UG/L	92
19)	*CI10 1,4-Difluorobenzene	9.07	114.0	375720	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.96	43.0	732065	161.41	UG/L	99
21)	C115 1,1,1-Trichloroethane	7.65	97.0	809612	192.78	UG/L	97
22)	C120 Carbon Tetrachloride	7.95	117.0	703159	194.00	UG/L	99
23)	C165 Benzene	8.32	78.0	1443731	198.21	UG/L	100
24)	C150 Trichloroethene	9.62	130.0	611194	204.51	UG/L	91
25)	C140 1,2-Dichloropropane	10.07	63.0	605483	199.53	UG/L	100
26)	C130 Bromodichloromethane	10.69	83.0	960226	219.91	UG/L	79
27)	C175 2-Chloroethylvinylether	11.41	63.0	285259	204.43	UG/L	96
28)	C143 Cis-1,3-Dichloropropene	11.74	75.0	1010029	236.38	UG/L	95
29)	C172 Trans-1,3-dichloropropene	13.14	75.0	684649	203.96	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.61	97.0	476300	207.70	UG/L	80
31)	C155 Dibromochloromethane	14.64	129.0	789823	222.52	UG/L	95
32)	C180 Bromoform	18.85	173.0	500712	235.34	UG/L	98
33)	*CI20 D5-Chlorobenzene	16.26	117.0	311099	50.00	UG/L	100
34)	CS05 D8-Toluene	12.37	98.0	1568348	201.09	UG/L	96
35)	C205 4-Methyl-2-pentanone	12.16	43.0	389618	196.58	UG/L	86
36)	C230 Toluene	12.54	92.0	990574	186.84	UG/L	89
37)	C210 2-Hexanone	14.35	43.0	280453	185.54	UG/L	96
38)	C220 Tetrachloroethene	13.94	164.0	506318	186.12	UG/L	93
39)	C235 Chlorobenzene	16.34	112.0	1304165	198.50	UG/L	70
40)	C240 Ethylbenzene	16.72	106.0	601155	183.32	UG/L	92
41)	CYXX Xylenes (p)	17.10	106.0	761941M	179.66	UG/L	99

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:57
Output File: ^F2563::D7 Injected at: 910922 15:30
Data File: >F2563::D4 Dilution Factor: 1.00000
Name: VSTD 200NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910922 11:10

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C225 1,1,2,2-Tetrachloroethane	20.53	83.0	722312	191.51	UG/L	96
45)	CS10 Bromofluorobenzene	19.94	95.0	921157	201.10	UG/L	72
46)	C335 Dichlorobenzene (m)	23.50	146.0	1109250	191.07	UG/L	100
47)	C340 Dichlorobenzene (p)	23.83	146.0	1018106	193.12	UG/L	100
48)	C350 Dichlorobenzene (o)	25.05	146.0	1029257	194.19	UG/L	100
49)	C250 Xylenes (total)	18.29	106.0	723402	187.81	UG/L	92

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/09/91 Time: 1028

Lab File ID: F2827 Init. Calib. Date(s): 09/22/91 09/22/91

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

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	1.246	1.324	-6.3	#
Bromomethane		1.055	1.216	-15.3	
Vinyl Chloride	*	1.258	1.350	-7.3	*
Chloroethane		0.651	0.502	22.9	
Methylene Chloride		1.704	1.800	-5.6	
Acetone		0.211	0.184	12.8	
Carbon Disulfide		4.156	4.435	-6.7	
1,1-Dichloroethene	*	1.387	1.507	-8.7	*
1,1-Dichloroethane	#	3.250	3.533	-8.7	#
1,2-Dichloroethene (total)		1.727	1.844	-6.8	
Chloroform	*	3.857	3.791	1.7	*
1,2-Dichloroethane		2.171	2.174	-0.1	
2-Butanone		0.111	0.109	1.8	
1,1,1-Trichloroethane		0.560	0.598	-6.8	
Carbon Tetrachloride		0.479	0.490	-2.3	
Vinyl Acetate		0.538	0.605	-12.4	
Bromodichloromethane		0.622	0.601	3.4	
1,2-Dichloropropane	*	0.407	0.406	0.2	*
cis-1,3-Dichloropropene		0.603	0.583	3.3	
Trichloroethene		0.415	0.426	-2.7	
Dibromochloromethane		0.501	0.468	6.6	
1,1,2-Trichloroethane		0.316	0.295	6.6	
Benzene		1.001	0.991	1.0	
trans-1,3-Dichloropropene		0.470	0.448	4.7	
2-Chloroethylvinylether		0.190	0.178	6.3	
Bromoform	#	0.302	0.263	12.9	#
4-Methyl-2-Pentanone		0.332	0.324	2.4	
2-Hexanone		0.236	0.213	9.7	
Tetrachloroethene		0.430	0.468	-8.8	
1,1,2,2-Tetrachloroethane	#	0.596	0.574	3.7	#
Toluene	*	0.839	0.906	-8.0	*
Chlorobenzene	#	1.057	1.088	-2.9	#
Ethylbenzene	*	0.509	0.547	-7.5	*
Styrene		1.098	1.116	-1.6	
Xylene (total)		0.601	0.637	-6.0	
Toluene-d8		1.246	1.300	-4.3	
Bromofluorobenzene		0.742	0.715	3.6	
1,2-Dichloroethane-d4		1.759	1.571	10.7	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Instrument ID: V2 Calibration date: 10/10/91 Time: 0933

Lab File ID: B2930 Init. Calib. Date(s): 10/09/91 10/09/91

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

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.976	0.762	21.9	#
Bromomethane		0.635	0.571	10.1	
Vinyl Chloride	*	1.114	0.983	11.8	*
Chloroethane		0.504	0.446	11.5	
Methylene Chloride		2.040	0.860	57.8	
Acetone		0.472	0.387	18.0	
Carbon Disulfide		4.621	3.973	14.0	
1,1-Dichloroethene	*	0.990	0.814	17.8	*
1,1-Dichloroethane	#	3.423	3.190	6.8	#
1,2-Dichloroethene (total)		1.875	1.693	9.7	
Chloroform	*	3.336	3.107	6.9	*
1,2-Dichloroethane		2.190	1.973	9.9	
2-Butanone		0.264	0.266	-0.8	
1,1,1-Trichloroethane		0.555	0.453	18.4	
Carbon Tetrachloride		0.496	0.409	17.5	
Vinyl Acetate		0.889	0.951	-7.0	
Bromodichloromethane		0.629	0.578	8.1	
1,2-Dichloropropane	*	0.476	0.437	8.2	*
cis-1,3-Dichloropropene		0.648	0.620	4.3	
Trichloroethene		0.462	0.418	9.5	
Dibromochloromethane		0.488	0.446	8.6	
1,1,2-Trichloroethane		0.352	0.335	4.8	
Benzene		1.254	1.295	-3.3	
trans-1,3-Dichloropropene		0.471	0.459	2.5	
2-Chloroethylvinylether		0.274	0.210	23.4	
Bromoform	#	0.373	0.343	8.0	#
4-Methyl-2-Pentanone		0.775	0.852	-9.9	
2-Hexanone		0.426	0.443	-4.0	
Tetrachloroethene		0.457	0.426	6.8	
1,1,2,2-Tetrachloroethane	#	0.964	1.209	-25.4	#
Toluene	*	0.953	0.953	0.0	*
Chlorobenzene	#	1.118	1.116	0.2	#
Ethylbenzene	*	0.545	0.516	5.3	*
Styrene		1.080	1.119	-3.6	
Xylene (total)		0.670	0.707	-5.5	
Toluene-d8		1.319	1.425	-8.0	
Bromofluorobenzene		0.621	0.618	0.5	
1,2-Dichloroethane-d4		1.516	1.413	6.8	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/12/91 Time: 1259

Lab File ID: F2930 Init. Calib. Date(s): 09/22/91 09/22/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	1.246	1.317	-5.7	#
Bromomethane		1.055	1.270	-20.4	
Vinyl Chloride	*	1.258	1.322	-5.1	*
Chloroethane		0.651	0.806	-23.8	
Methylene Chloride		1.704	1.783	-4.6	
Acetone		0.211	0.302	-43.1	
Carbon Disulfide		4.156	4.208	-1.3	
1,1-Dichloroethene	*	1.387	1.534	-10.6	*
1,1-Dichloroethane	#	3.250	3.499	-7.7	#
1,2-Dichloroethene (total)		1.727	1.896	-9.8	
Chloroform	*	3.857	3.979	-3.2	*
1,2-Dichloroethane		2.171	2.383	-9.8	
2-Butanone		0.111	0.173	-55.9	
1,1,1-Trichloroethane		0.560	0.564	-0.7	
Carbon Tetrachloride		0.479	0.471	1.7	
Vinyl Acetate		0.538	0.444	17.5	
Bromodichloromethane		0.622	0.610	1.9	
1,2-Dichloropropane	*	0.407	0.414	-1.7	*
cis-1,3-Dichloropropene		0.603	0.579	4.0	
Trichloroethene		0.415	0.420	-1.2	
Dibromochloromethane		0.501	0.497	0.8	
1,1,2-Trichloroethane		0.316	0.335	-6.0	
Benzene		1.001	1.054	-5.3	
trans-1,3-Dichloropropene		0.470	0.413	12.1	
2-Chloroethylvinylether		0.190	0.203	-6.8	
Bromoform	#	0.302	0.301	0.3	#
4-Methyl-2-Pentanone		0.332	0.399	-20.2	
2-Hexanone		0.236	0.273	-15.7	
Tetrachloroethene		0.430	0.425	1.2	
1,1,2,2-Tetrachloroethane	#	0.596	0.627	-5.2	#
Toluene	*	0.839	0.868	-3.5	*
Chlorobenzene	#	1.057	1.006	4.8	#
Ethylbenzene	*	0.509	0.506	0.6	*
Styrene		1.098	1.046	4.7	
Xylene (total)		0.601	0.593	1.3	
Toluene-d8		1.246	1.182	5.1	
Bromofluorobenzene		0.742	0.749	-0.9	
1,2-Dichloroethane-d4		1.759	1.874	-6.5	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

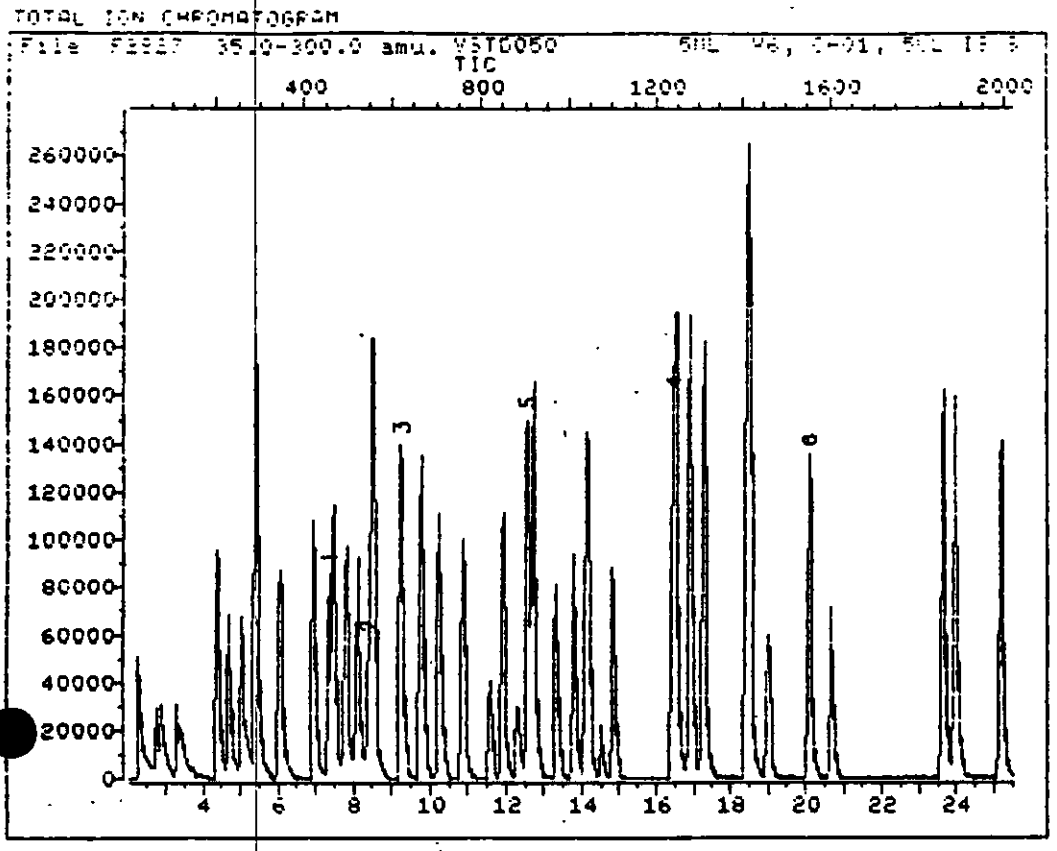
Instrument ID: V2 Calibration date: 10/16/91 Time: 1021

Lab File ID: B3022 Init. Calib. Date(s): 10/11/91 10/12/91

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.455	0.392	13.8	#
Bromomethane		0.692	0.679	1.9	
Vinyl Chloride	*	0.847	0.822	3.0	*
Chloroethane		0.531	0.535	-0.8	
Methylene Chloride		1.715	0.727	57.6	
Acetone		0.404	0.400	1.0	
Carbon Disulfide		4.332	4.748	-9.6	
1,1-Dichloroethene	*	0.935	1.139	-21.8	*
1,1-Dichloroethane	#	3.314	3.809	-14.9	#
1,2-Dichloroethene (total)		1.770	1.917	-8.3	
Chloroform	*	3.260	3.443	-5.6	*
1,2-Dichloroethane		2.168	2.182	-0.6	
2-Butanone		1.016	0.886	12.8	
1,1,1-Trichloroethane		0.453	0.602	-32.9	
Carbon Tetrachloride		0.426	0.503	-18.1	
Vinyl Acetate		0.872	1.051	-20.5	
Bromodichloromethane		0.586	0.630	-7.5	
1,2-Dichloropropane	*	0.441	0.467	-5.9	*
cis-1,3-Dichloropropene		0.698	0.610	12.6	
Trichloroethene		0.424	0.461	-8.7	
Dibromochloromethane		0.446	0.451	-1.1	
1,1,2-Trichloroethane		0.326	0.318	2.5	
Benzene		1.169	1.422	-21.6	
trans-1,3-Dichloropropene		0.439	0.448	-2.0	
2-Chloroethylvinylether		0.220	0.197	10.4	
Bromoform	#	0.315	0.324	-2.9	#
4-Methyl-2-Pentanone		0.591	0.630	-6.6	
2-Hexanone		0.322	0.335	-4.0	
Tetrachloroethene		0.422	0.481	-14.0	
1,1,2,2-Tetrachloroethane	#	0.841	0.991	-17.8	#
Toluene	*	0.919	0.999	-8.7	*
Chlorobenzene	#	1.058	1.190	-12.5	#
Ethylbenzene	*	0.495	0.560	-13.1	*
Styrene		0.989	1.176	-18.9	
Xylene (total)		0.609	0.754	-23.8	
Toluene-d8		1.286	1.401	-8.9	
Bromofluorobenzene		0.597	0.619	-3.7	
1,2-Dichloroethane-d4		1.513	1.490	1.5	



Data File: >F2827::D6 Quant Output File: ^F2827::D7
Name: VSTD050 5ML Instrument ID: V6
Misc: V6, CH01, 5UL IS/S 25UL/100ML + 5UL MTBE

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911008 21:54

Operator ID: KERYLYNN
Quant Time : **911009 10:55**
Injected at: **911009 10:28**

QUANT REPORT Page 1

perator ID: KEPYLYNN Quant Rev: 7 Quant Time: 911009 10:55
utput File: ^F2827::D7 Injected at: 911009 10:28
ata File: >F2827::D6 Dilution Factor: 1.00000
ame: VSTD050 5ML Instrument ID: V6
isc: V6, CH01, 5UL IS/S 25UL/100ML + 5UL MTBE

D File: MOBID6::MT
itle: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
ast Calibration: 910814 09:37 Last Qcal Time: 911008 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.33	128.0	75510	50.00	UG/L	71
2)	C010 Chloromethane	2.73	50.0	99943	55.93	UG/L	99
3)	C020 Vinyl Chloride	2.87	62.0	101935	54.40	UG/L	84
4)	C015 Bromomethane	3.28	94.0	91789	49.82	UG/L	91
5)	C025 Chloroethane	3.41	64.0	37922	32.66	UG/L	96
6)	C045 1,1-Dichloroethene	4.38	96.0	113802	51.88	UG/L	94
7)	C035 Acetone	4.44	43.0	13920	50.31	UG/L	23
8)	C040 Carbon Disulfide	4.69	76.0	334810	54.70	UG/L	100
9)	C030 Methylene Chloride	5.03	84.0	135911	51.97	UG/L	91
11)	C053 Trans-1,2-dichloroethene	5.41	96.0	139247	50.56	UG/L	96
12)	C055 Cis-1,2-dichloroethene	6.94	96.0	149748	52.11	UG/L	81
13)	CXXX Methyl tert-butyl ether	5.41	73.0	239531	48.92	UG/L	89
14)	C050 1,1-Dichloroethane	6.03	63.0	266766	52.38	UG/L	100
15)	C060 Chloroform	7.48	83.0	286198	49.43	UG/L	95
16)	C065 1,2-Dichloroethane	8.51	62.0	164138	51.59	UG/L	100
17)	C110 2-Butanone	6.96	72.0	8235	47.57	UG/L	96
18)	CS15 D4-1,2-dichloroethane	8.37	65.0	118610	45.49	UG/L	82
19)	*CI10 1,4-Difluorobenzene	9.23	114.0	407259	50.00	UG/L	100
20)	C125 Vinyl Acetate	6.10	43.0	246295	49.72	UG/L	99
21)	C115 1,1,1-Trichloroethane	7.80	97.0	243305	53.92	UG/L	91
22)	C120 Carbon Tetrachloride	8.10	117.0	199472	52.04	UG/L	98
23)	C165 Benzene	8.49	78.0	403493	49.15	UG/L	100
24)	C150 Trichloroethene	9.76	130.0	173394	51.61	UG/L	95
25)	C140 1,2-Dichloropropane	10.24	63.0	165220	51.94	UG/L	100
26)	C130 Bromodichloromethane	10.86	83.0	244413	51.31	UG/L	77
27)	C175 2-Chloroethylvinylether	11.59	63.0	72344	57.93	UG/L	97
28)	C143 Cis-1,3-Dichloropropene	11.91	75.0	251615	52.67	UG/L	98
29)	C172 Trans-1,3-dichloropropene	13.31	75.0	167932	46.75	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.79	97.0	120208	50.77	UG/L	72
31)	C155 Dibromochloromethane	14.83	129.0	190425	50.97	UG/L	91
32)	C180 Bromoform	19.01	173.0	106999	50.52	UG/L	93
33)	*CI20 D5-Chlorobenzene	16.44	117.0	308421	50.00	UG/L	100
34)	CS05 D8-Toluene	12.55	98.0	400363	50.48	UG/L	94
35)	C205 4-Methyl-2-pentanone	12.31	43.0	99930	50.16	UG/L	86
36)	C230 Toluene	12.71	92.0	279066	50.87	UG/L	87
37)	C210 2-Hexanone	14.51	43.0	65728	51.20	UG/L	96
38)	C220 Tetrachloroethene	14.13	164.0	144216	50.19	UG/L	82
39)	C235 Chlorobenzene	16.51	112.0	335211	50.22	UG/L	95
40)	C240 Ethylbenzene	16.90	106.0	168417	50.87	UG/L	95
41)	CXXX Xylenes (p)	17.26	106.0	206509	49.01	UG/L	97

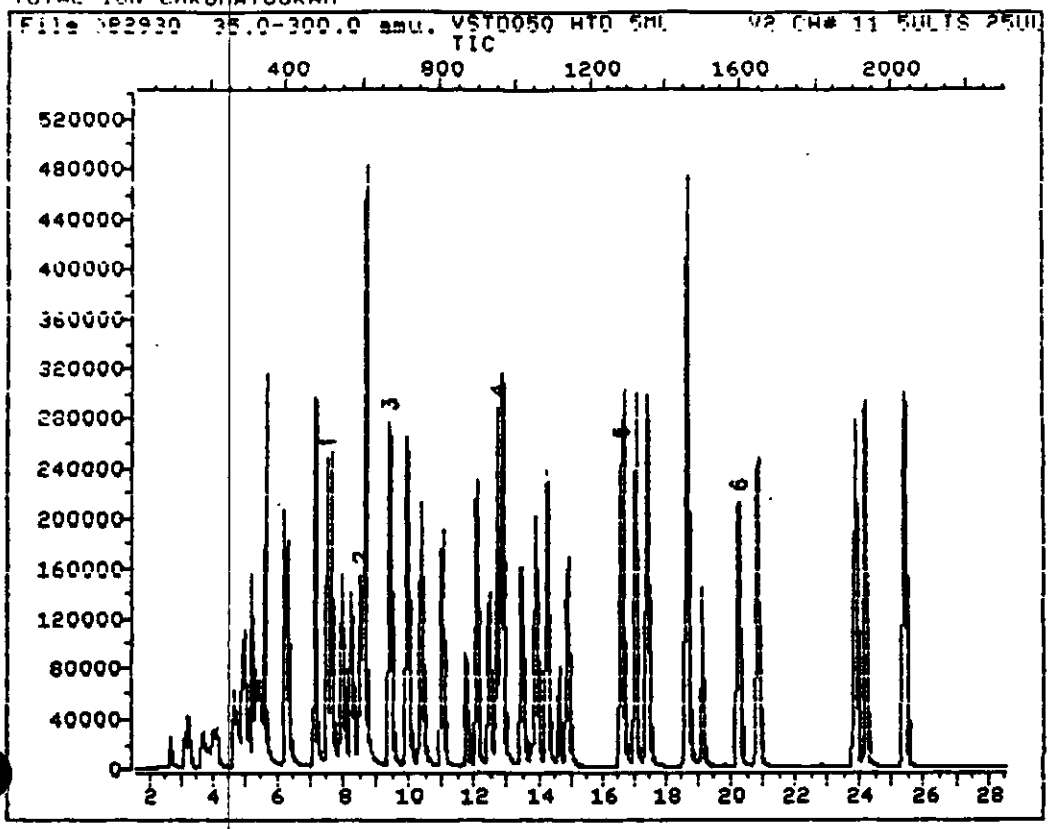
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911009 10:55
Output File: ^F2827::D7 Injected at: 911009 10:28
Data File: >F2827::D6 Dilution Factor: 1.00000
Name: VSTD050 5ML Instrument ID: V6
Misc: V6, CH01, 5UL IS/S 25UL/100ML + 5UL MTBE

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911008 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	CS10 Bromofluorobenzene	20.09	95.0	220101	49.28	UG/L	68
46)	C335 Dichlorobenzene (m)	23.64	146.0	289245	49.44	UG/L	100
47)	C340 Dichlorobenzene (p)	23.96	146.0	261567	48.31	UG/L	100
48)	C350 Dichlorobenzene (o)	25.19	146.0	259603	48.89	UG/L	100
49)	C250 Xylenes (total)	18.46	106.0	196274	50.19	UG/L	92

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >B2930::D6 Quant Output File: ^B2930::QT
Name: VSTD050 HTD 5ML
Misc: V2 CH# 11 5ULIS 25UL/100ML

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

Operator ID: NORA
Quant Time: 911010 10:02
Injected at: 911010 09:33

QUANT REPORT

Operator ID: NORA Quant Rev: 6 Quant Time: 911010 10:02
Output File: ↑B2930::QT Injected at: 911010 09:33
Data File: ↑B2930::D6 Dilution Factor: 1.00000
Name: VSTD050 HTD 5ML
Misc: V2 CH# 11 5ULIS 25UL/100ML

ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911009 11:41

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.50	128.0	167202	50.00	UG/L	96
2)	C010	Chloromethane	3.12	50.0	127176	53.45	UG/L	98
3)	C020	Vinyl Chloride	3.25	62.0	164238	45.28	UG/L	88
4)	C015	Bromomethane	3.69	94.0	95277	27.83	UG/L	96
5)	C025	Chloroethane	3.87	64.0	74416	29.38	UG/L	96
6)	C045	1,1-Dichloroethene	4.62	96.0	135878M	29.10	UG/L	94
7)	C035	Acetone	4.69	43.0	64596	29.02	UG/L	100
8)	C040	Carbon Disulfide	4.97	76.0	663454	33.84	UG/L	100
9)	C030	Methylene Chloride	5.23	84.0	143576	52.25	UG/L	85
10)	C053	Trans-1,2-Dichloroethene	5.62	96.0	282738	45.92	UG/L	98
11)	C055	cis-1,2-Dichloroethene	7.11	96.0	305587	49.20	UG/L	94
12)	C050	1,1-Dichloroethane	6.21	63.0	532736	43.44	UG/L	84
13)	C060	Chloroform	7.65	83.0	518879	44.96	UG/L	96
14)	C065	1,2-Dichloroethane	8.66	62.0	329462	39.80	UG/L	100
15)	C110	2-Butanone	7.15	72.0	44471	44.52	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.52	65.0	235968	39.77	UG/L	82
17)	*CI10	1,4-Difluorobenzene	9.40	114.0	667525	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.31	43.0	635276	40.27	UG/L	97
19)	C115	1,1,1-Trichloroethane	7.97	97.0	302668	42.57	UG/L	93
20)	C120	Carbon Tetrachloride	8.27	117.0	272955	40.85	UG/L	98
21)	C165	Benzene	8.65	78.0	864872	49.58	UG/L	100
22)	C150	Trichloroethene	9.92	130.0	278961	49.34	UG/L	98
23)	C140	1,2-Dichloropropane	10.37	63.0	291907	47.73	UG/L	100
24)	C130	Bromodichloromethane	10.99	83.0	385783	45.47	UG/L	78
25)	C175	2-Chloroethylvinylether	11.74	63.0	140350	41.34	UG/L	95
26)	C143	Cis-1,3-Dichloropropen	12.04	75.0	438806	50.61	UG/L	96
27)	C172	Trans-1,3-Dichloropropen	13.44	75.0	281801	40.16	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.89	97.0	223525	48.83	UG/L	72
29)	C155	Dibromochloromethane	14.91	129.0	297875	44.95	UG/L	96
30)	C180	Bromoform	19.11	173.0	228817	44.51	UG/L	98
31)	*CI20	D5-Chlorobenzene	16.55	117.0	454669	50.00	UG/L	100
32)	CS05	D8-Toluene	12.69	98.0	648523	51.70	UG/L	94
33)	C205	4-Methyl-2-Pentanone	12.46	43.0	387534	50.87	UG/L	86
34)	C230	Toluene	12.85	92.0	433460	52.55	UG/L	97
35)	C210	2-Hexanone	14.64	43.0	201753	45.86	UG/L	99
36)	C220	Tetrachloroethene	14.27	164.0	194042	48.30	UG/L	90
37)	C235	Chlorobenzene	16.63	112.0	507899	50.18	UG/L	74
38)	C240	Ethylbenzene	17.03	106.0	234948	50.83	UG/L	97
39)	CXXX	Xylene (p)	17.41	106.0	291091	50.83	UG/L	99
40)	CXXX	Xylenes (o)	18.60	106.0	324939	53.87	UG/L	96
41)	C245	Styrene	18.64	104.0	508945	51.85	UG/L	100

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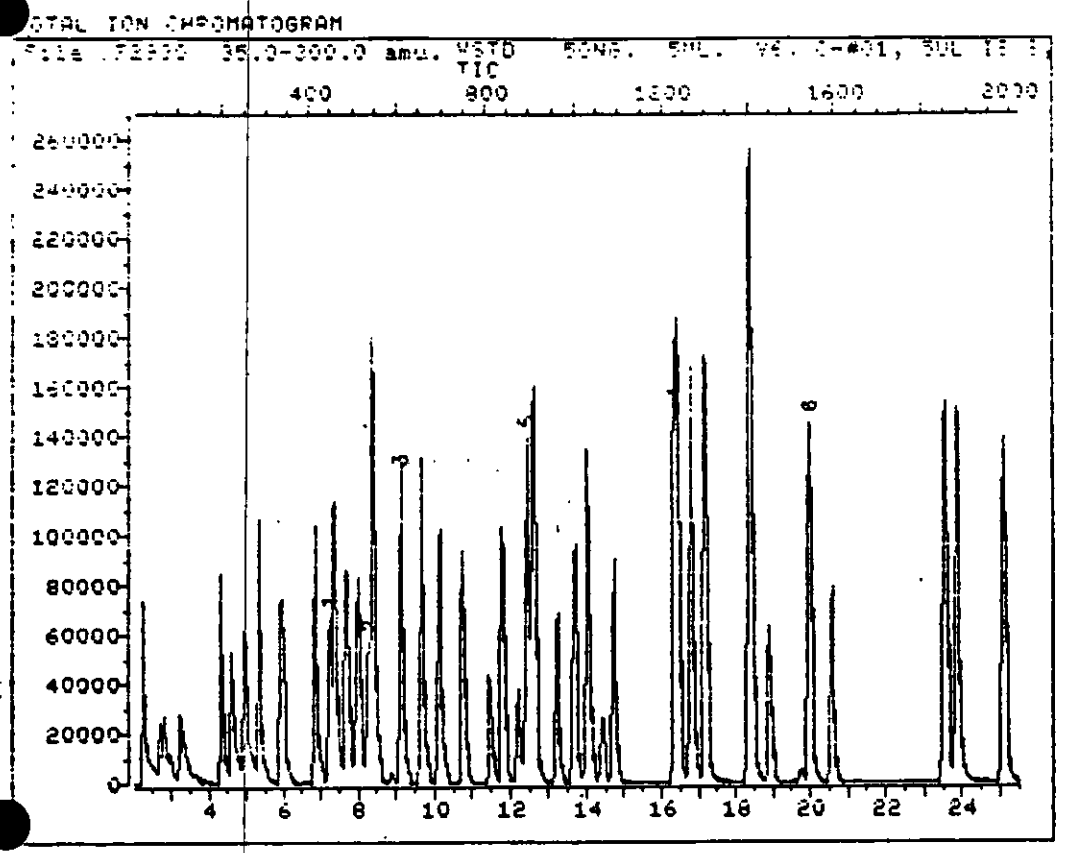
		Compound	R.T.	Q ion	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.82	146.0	438465	44.24	UG/L	100
45)	C340	Dichlorobenzene (p)	24.15	146.0	449432	44.91	UG/L	100
46)	C350	Dichlorobenzene (o)	25.37	146.0	465961	45.31	UG/L	100
47)	C250	Xylene (Total)	18.60	106.0	321573	53.95	UG/L	97

* Compound is ISTD



Data File: >F2930::D6 Quant Output File: ^F2930::D7
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HLS,A,B

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911011 21:51

Operator ID: KERYLYNN
Quant Time : 911012 13:37
Injected at: 911012 12:59

QUANT REPORT Page 1

Operator ID: KERYL/NN Quant Rev: 7 Quant Time: 911012 13:47
Data File: :F2930::07 Injected at: 911012 12:59
Meth File: :F2930::D6 Dilution Factor: 1.00000
Name: 8270 8MNS. 5ML. Instrument ID: MS
Misc: MS, CH#01, 5UL IS'S, STD=05UL/100ML HLS,A,B

ID File: MOBIO::MT
Title: PSL VOLATILES: 75m x .53mm: DB624 V6 EPCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911011 21:51

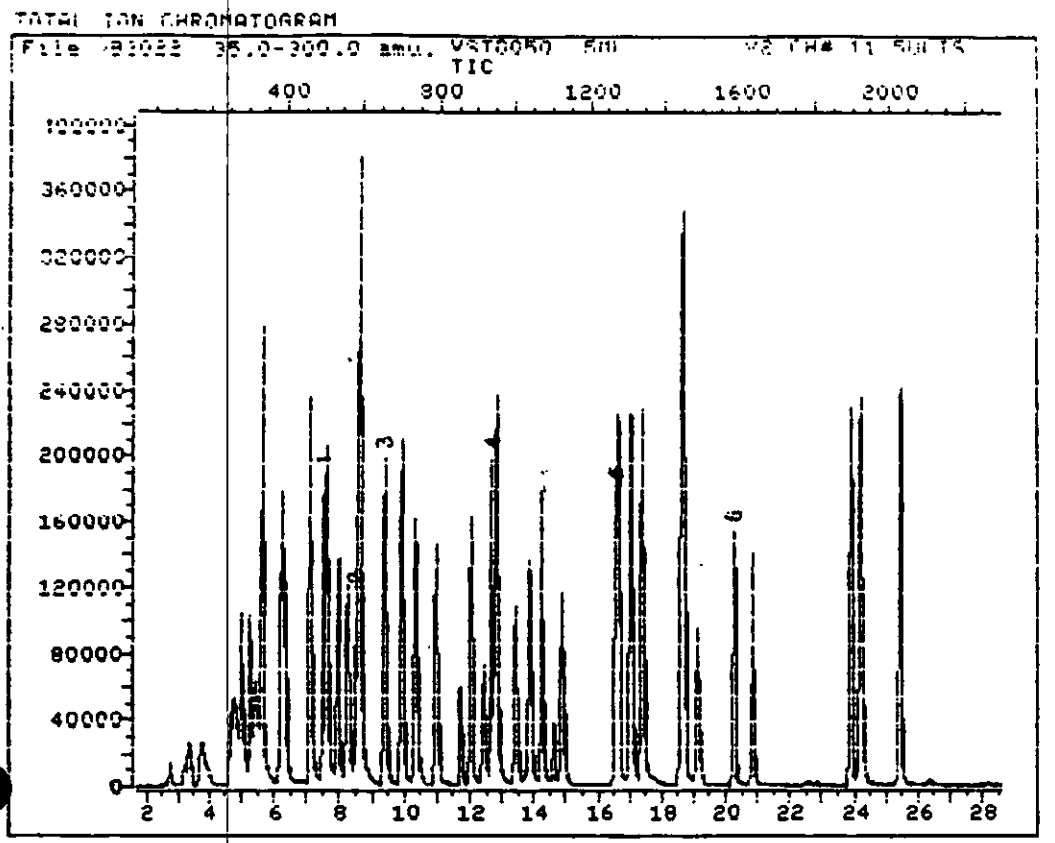
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.24	128.0	67559	50.00	UG/L	71
2)	C010 Chloromethane	2.68	50.0	89055	51.99	UG/L	98
3)	C020 Vinyl Chloride	2.82	62.0	89375	48.03	UG/L	88
4)	C015 Bromomethane	3.22	94.0	85842	53.10	UG/L	99
5)	C025 Chloroethane	3.33	64.0	54494M	59.37	UG/L	97
6)	C045 1,1-Dichloroethene	4.31	96.0	103699	51.24	UG/L	91
7)	C035 Acetone	4.37	43.0	20430	56.90	UG/L	8
8)	C040 Carbon Disulfide	4.60	76.0	284467	49.01	UG/L	100
9)	C030 Methylene Chloride	4.94	84.0	120534	45.76	UG/L	83
10)	C053 Trans-1,2-dichloroethene	5.31	96.0	128186	50.28	UG/L	94
12)	C055 Cis-1,2-dichloroethene	6.84	96.0	138011	48.52	UG/L	88
14)	C050 1,1-Dichloroethane	5.93	63.0	236548	49.61	UG/L	100
15)	C060 Chloroform	7.38	83.0	269006	49.43	UG/L	96
16)	C065 1,2-Dichloroethane	8.40	62.0	161064	48.06	UG/L	100
17)	C110 2-Butanone	6.86	72.0	11707	61.73	UG/L	88
18)	CS15 D4-1,2-dichloroethane	8.27	65.0	126664	48.44	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.11	114.0	380644	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.99	43.0	169032	47.48	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.70	97.0	215005	49.14	UG/L	89
22)	C120 Carbon Tetrachloride	8.00	117.0	179548	50.82	UG/L	98
23)	C165 Benzene	8.37	78.0	401611	51.97	UG/L	100
24)	C150 Trichloroethene	9.65	130.0	160145	48.54	UG/L	96
25)	C140 1,2-Dichloropropane	10.13	63.0	157704	49.63	UG/L	100
26)	C130 Bromodichloromethane	10.74	83.0	232336	50.77	UG/L	82
27)	C175 2-Chloroethylvinylether	11.47	63.0	77311	51.88	UG/L	93
28)	C143 Cis-1,3-Dichloropropene	11.79	75.0	233677	50.27	UG/L	94
29)	C172 Trans-1,3-dichloropropene	13.20	75.0	144849	39.03	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.67	97.0	127709	48.92	UG/L	72
31)	C155 Dibromochloromethane	14.71	129.0	189355	48.71	UG/L	95
32)	C180 Bromoform	18.90	173.0	114635	48.19	UG/L	98
33)	*CI20 D5-Chlorobenzene	16.32	117.0	313108	50.00	UG/L	100
34)	CS05 D8-Toluene	12.43	98.0	369829	49.23	UG/L	98
35)	C205 4-Methyl-2-pentanone	12.20	43.0	124844	55.86	UG/L	83
36)	C230 Toluene	12.60	92.0	271750	51.00	UG/L	88
37)	C210 2-Hexanone	14.40	43.0	85588	53.34	UG/L	97
38)	C220 Tetrachloroethene	14.01	164.0	133015	48.37	UG/L	88
39)	C235 Chlorobenzene	16.39	112.0	314824	49.06	UG/L	71
40)	C240 Ethylbenzene	16.79	106.0	158441	50.27	UG/L	97
41)	CXXX Xylenes (p)	17.16	106.0	193859	48.29	UG/L	96
42)	CXXX Xylenes (o)	18.34	106.0	188794	50.38	UG/L	99
43)	C245 Styrene	18.40	104.0	327247	49.15	UG/L	100

erator ID: PEPYLYNN Quant Pe : 7 Quant Time: 9110.2 13:57
tput File: ^F2930::D7 Injected at: 9110.2 12:59
ata File: ^F2930::D6 Dilution Factor: 1.00000
ame: USTD 50NG. 5ML. Instrument ID: 06
esc: 06, CH#01, FUL IONS, STD=25UL/10UML HLS.A.B

Q File: M0B106::MT
itle: HSL VOLATILES: 75m x .53mm: 08624 06 EPCO/ENSECO
ast Calibration: 910814 09:37 Last Qcal Time: 911011 21:51

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	C335 Dichlorobenzene (m)	23.54	146.0	274922	48.43	UG/L	100
47)	C340 Dichlorobenzene (p)	23.86	146.0	249590	47.96	UG/L	100
48)	C350 Dichlorobenzene (o)	25.09	146.0	258625	48.32	UG/L	100
49)	C250 Xylenes (total)	18.34	106.0	185581	51.69	UG/L	91

* Compound is ISTD



Data File: >B3022::D0 Quant Output File: ^B3022::QT
Name: VSTD050 5ML
Misc: V2 CH# 11 5ULIS

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911015 23:03

Operator ID: NORA
Quant Time: **911016 10:51**
Injected at: **911016 10:21**

QUANT REPORT

Operator ID: NOPA Quant Rev: 6 Quant Time: 911016 10:51
Output File: B3022::07 Injected at: 911016 10:21
Data File: B3022::30 Dilution Factor: 1.00000
Name: VSTD050 5ML
Misc: V2 LH# 11 50UL IS

ID File: VOA102::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911015 23:03

		Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.50	496	121162	50.00	UG/L	77
2)	C010	Chloromethane	3.19	128	47493	46.02	UG/L	98
3)	C020	Vinyl Chloride	3.32	139	99484	44.47	UG/L	87
4)	C015	Bromomethane	3.74	175	82110	30.89	UG/L	90
5)	C025	Chloroethane	3.93	191	64773	33.46	UG/L	99
6)	C045	1,1-Dichloroethene	4.78	264	137840	46.62	UG/L	97
7)	C035	Acetone	4.72	259	48448	40.37	UG/L	100
8)	C040	Carbon Disulfide	5.00	283	574452	40.04	UG/L	100
9)	C030	Methylene Chloride	5.26	305	88015	41.68	UG/L	90
10)	C053	Trans-1,2-Dichloroethene	5.63	337	231944	44.04	UG/L	93
11)	C055	cis-1,2-Dichloroethene	7.11	463	237492	44.15	UG/L	96
12)	C050	1,1-Dichloroethane	6.22	387	460875	45.87	UG/L	86
13)	C060	Chloroform	7.64	508	416570	43.12	UG/L	96
14)	C065	1,2-Dichloroethane	8.64	594	263958	41.24	UG/L	100
15)	C110	2-Butanone	7.14	466	107191	42.05	UG/L	98
16)	CS15	D4-1,2-Dichloroethane	8.50	582	180341	44.42	UG/L	82
17)	*C110	1,4-Difluorobenzene	9.37	656	462273	50.00	UG/L	100
18)	C125	Vinyl Acetate	6.31	395	485368	45.48	UG/L	96
19)	C115	1,1,1-Trichloroethane	7.96	536	278339	53.12	UG/L	92
20)	C120	Carbon Tetrachloride	8.27	562	232235	46.68	UG/L	99
21)	C165	Benzene	8.62	592	657129	50.32	UG/L	100
22)	C150	Trichloroethene	9.90	701	212950	48.87	UG/L	98
23)	C140	1,2-Dichloropropane	10.34	739	215729	49.75	UG/L	100
24)	C130	Bromodichloromethane	10.96	792	290913	48.02	UG/L	79
25)	C175	2-Chloroethylvinylether	11.71	856	90986	33.20	UG/L	95
26)	C143	Cis-1,3-Dichloropropen	12.01	882	298713	49.64	UG/L	96
27)	C172	Trans-1,3-Dichloropropen	13.41	1001	190397	41.70	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.86	1040	146783	48.29	UG/L	70
29)	C155	Dibromochloromethane	14.89	1128	208253	46.92	UG/L	97
30)	C180	Bromoform	19.11	1488	149485	45.89	UG/L	98
31)	*C120	D5-Chlorobenzene	16.54	1269	311269	50.00	UG/L	100
32)	CS05	D8-Toluene	12.66	937	435702	53.05	UG/L	93
33)	C205	4-Methyl-2-Pentanone	12.42	917	196027	51.85	UG/L	86
34)	C230	Toluene	12.82	951	310738	51.57	UG/L	98
35)	C210	2-Hexanone	14.63	1105	104265	54.72	UG/L	99
36)	C220	Tetrachloroethene	14.24	1072	149450	51.27	UG/L	90
37)	C235	Chlorobenzene	16.63	1276	370097	51.46	UG/L	73
38)	C240	Ethylbenzene	17.02	1310	174180	52.60	UG/L	97
39)	CXXX	Xylene (p)	17.41	1343	212630	51.13	UG/L	99
40)	CXXX	Xylenes (o)	18.59	1444	235701	53.76	UG/L	95
41)	C245	Styrene	18.65	1449	365816	52.60	UG/L	100

DJ 10/28/91

000195

		Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C335	Dichlorobenzene (m)	23.86	1894	355553	35.92	UG/L	100
45)	C340	Dichlorobenzene (p)	24.17	1921	358936	35.96	UG/L	100
46)	C350	Dichlorobenzene (o)	25.40	2026	343842	34.95	UG/L	100
47)	C250	Xylene (Total)	18.59	1444	234488	53.98	UG/L	96

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): B2930 Date Analyzed: 10/10/91

Instrument ID: V2 Time Analyzed: 0933

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	167000	7.50	668000	9.40	455000	16.55
	UPPER LIMIT	334000		1336000		910000	
	LOWER LIMIT	83500		334000		227500	
	EPA SAMPLE NO.						
01	SB-A-12-4	127000	7.49	432000	9.39	292000	16.58
02	VBLK01	154000	7.50	618000	9.36	432000	16.52

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): B3022 Date Analyzed: 10/16/91

Instrument ID: V2 Time Analyzed: 1021

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	121000	7.50	462000	9.37	311000	16.54
	UPPER LIMIT	242000		924000		622000	
	LOWER LIMIT	60500		231000		155500	
	EPA SAMPLE NO.						
01	10-7-QA2DL	215000	7.51	873000	9.40	578000	16.54
02	VBLK04	135000	7.53	489000	9.41	347000	16.59

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2827 Date Analyzed: 10/09/91

Instrument ID: V6 Time Analyzed: 1028

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

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	75500	7.33	407000	9.23	308000	16.44
	UPPER LIMIT	151000		814000		616000	
	LOWER LIMIT	37750		203500		154000	
	EPA SAMPLE NO.						
01	10-7-QA1	67100	7.37	363000	9.26	283000	16.47
02	10-7-QA3	51300	7.34	252000	9.24	210000	16.46
03	VBLK02	75100	7.29	403000	9.19	323000	16.44

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2930 Date Analyzed: 10/12/91

Instrument ID: V6 Time Analyzed: 1259

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	67600	7.24	381000	9.11	313000	16.32
	UPPER LIMIT	135200		762000		626000	
	LOWER LIMIT	33800		190500		156500	
	EPA SAMPLE NO.						
01	10-7-QA2	96800	7.30	522000	9.20	409000	16.40
02	SB-B-19-4	103000	7.34	551000	9.26	417000	16.46
03	VBLK03	60400	7.21	380000	9.09	303000	16.30

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

ENSECO-FRL Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

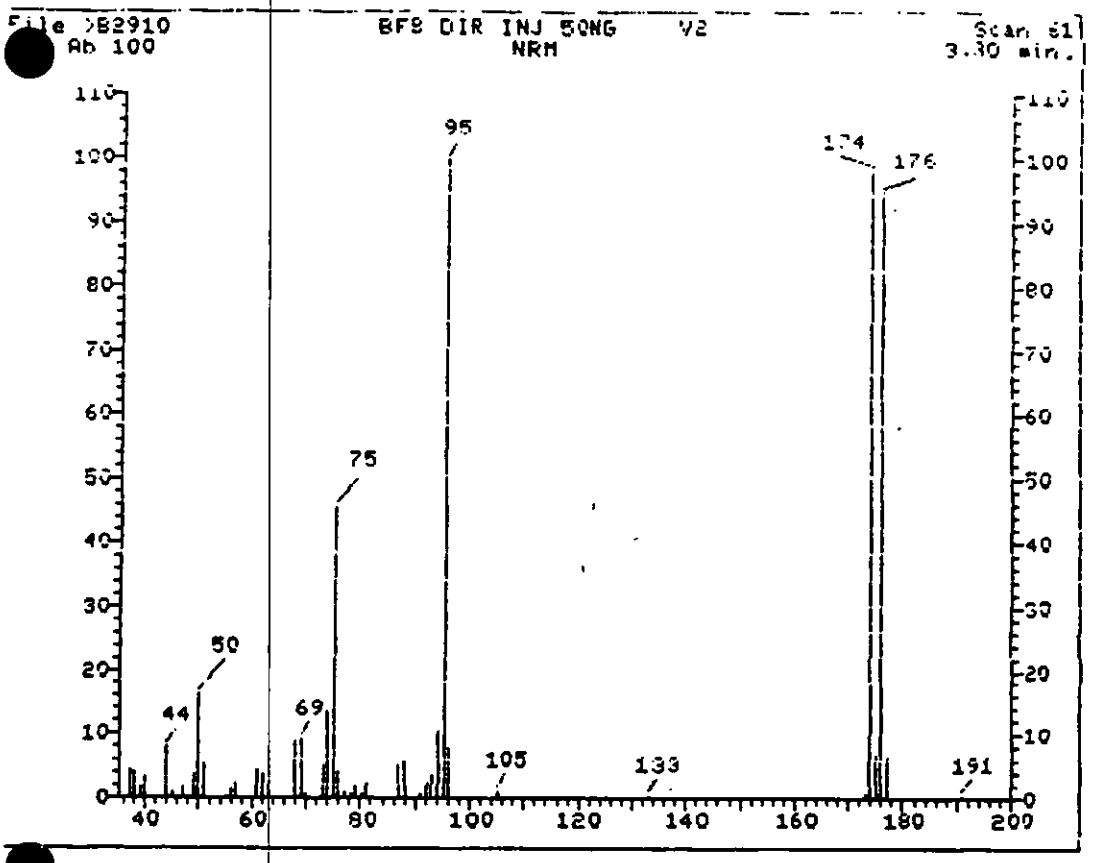
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	16.38	16.38	Ok
75	30-60% of mass 95	45.58	45.58	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.29	7.29	Ok
173	Less than 2% of mass 174	.56	.57	Ok
174	Greater than 50% of mass 95	98.21	98.21	Ok
175	5-9% of mass 174	6.86	6.98	Ok
176	95-101% of mass 174	94.98	96.71	Ok
177	5-9% of mass 176	6.56	6.91	Ok

Injection Date: 10/09/91
Injection Time: 09:35
Data File: >B2910
Scan: 61
Name:BFB DIR INJ 50NG
Misc:V2

>B2910 BFB DIR INJ 50NG V2
61 NRM

File: >B2910 Scan #: 61 Retn. time: 3.30

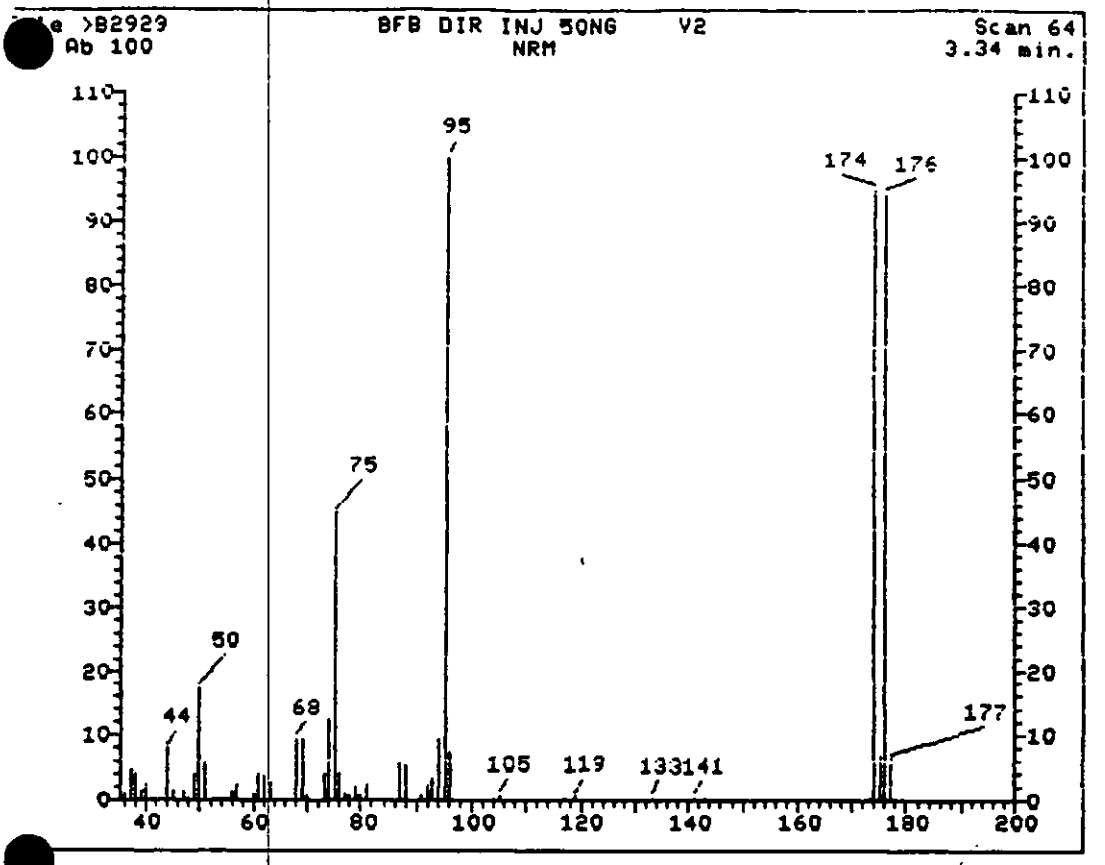
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	4.360	56.10	1.413	74.10	13.494	88.05	5.637	173.00	.559
38.05	4.000	57.10	2.300	75.00	45.584	91.05	.695	174.00	98.211
39.05	1.868	61.05	4.336	76.00	3.992	92.05	2.355	175.00	6.859
39.95	3.449	62.05	3.889	77.00	.982	93.05	3.713	176.00	94.978
44.05	8.017	63.05	2.340	78.10	.679	94.05	10.332	177.00	6.563
45.00	1.142	68.05	8.919	79.00	2.108	95.05	100.000	191.05	.511
47.00	1.637	69.05	9.118	80.10	.711	96.00	7.793	207.10	4.216
49.00	3.641	70.05	.767	81.00	2.276	105.10	1.102	208.10	.934
50.00	16.377	73.10	4.982	87.05	5.158	133.10	.487	209.00	.575
51.10	5.334								



MS data file header from : >B2910

Sample: BFB DIR INJ 50NG Operator: NORA MS 10/09/91 9:35
Misc : V2
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB2 Tuning file: MT7402 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	9.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	0.0	0.0



MS data file header from : >B2929

Sample: BFB DIR INJ 50NG Operator: NORA MS 10/10/91 8:31
Misc : V2
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB2 Tuning file: MT7402 No. of extra records: 2
Source temp.: 220. Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	5.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	0.0	0.0

ENSECO-ERCO Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	17.39	17.39	Ok
75	30-60% of mass 95	44.92	44.92	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.46	7.46	Ok
173	Less than 2% of mass 174	.36	.38	Ok
174	Greater than 50% of mass 95	95.08	95.08	Ok
175	5-9% of mass 174	6.73	7.08	Ok
176	95-101% of mass 174	94.43	99.31	Ok
177	5-9% of mass 176	6.37	6.75	Ok

Injection Date: 10/10/91
Injection Time: 08:31
Data File: >B2929
Scan: 64
Name:BFB DIR INJ 50NG
Misc:V2

>B2929 BFB DIR INJ 50NG V2
64 NRM

File: >B2929 Scan #: 64 Retn. time: 3.34

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	.904	51.10	5.767	74.00	12.488	91.05	.593	133.00	.403
37.05	4.784	56.10	1.216	75.00	44.923	92.05	2.474	140.95	.501
38.05	4.057	57.10	2.517	76.00	4.038	93.05	3.403	142.95	.477
39.05	1.491	60.05	.904	77.00	.935	94.05	9.470	173.00	.360
39.95	2.401	61.05	4.118	77.90	.648	95.05	100.000	174.00	95.082
44.05	8.003	62.05	3.873	79.00	2.175	96.10	7.460	175.00	6.733
45.00	1.265	63.05	2.658	80.00	.605	104.00	.409	176.00	94.428
47.00	1.424	68.05	9.476	81.00	2.377	105.10	.739	177.00	6.372
48.00	.538	69.05	9.415	86.95	5.670	116.95	.464	207.10	3.586
49.00	3.965	70.05	.745	87.95	5.260	118.95	.617	208.20	.703
0.00	17.394	73.00	4.099						

5A

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

ab Name: ENSECO-ERCO LABORATORY Contract: _____

ab Code: ENSECO Case No.: _____ SAS No.: _____ SDG No.: _____

ab File ID: >B2929 BFB Injection Date: 10/10/91

nstrument ID: __ BFB Injection Time: 8:31

atrix: (soil/water) _____ Level: (low/med) _____ Column: (pack/cap) _____

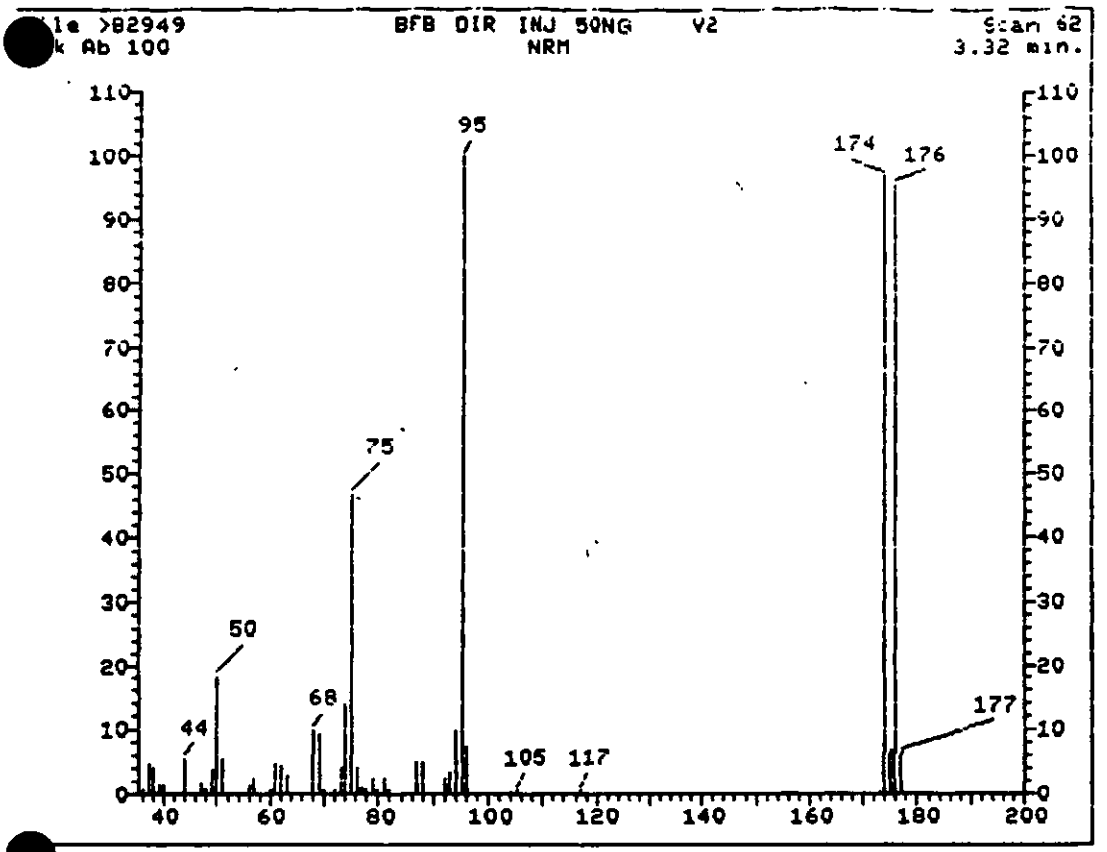
m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	17.4
75	30.0 - 60.0% OF MASS 95	44.9
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	.4(.4)1
174	Greater than 50.0% of mass 95	95.1
175	5.0 - 9.0% of mass 174	6.7(7.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	94.4(99.3)1
177	5.0 - 9.0% of mass 176	6.4(6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	_BFB_50ng_____	_____	_____	_____
02	_VSTD050_____	_50ppb_STD_____	_____	_____	_____
03	_VBLK_____	_Proc_Blank___	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

000205



MS data file header from : >B2949

Sample: BFB DIR INJ 50NG Operator: NORA MS 10/11/91 16:41
Misc : V2
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB2 Tuning file: MT7402 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	5.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	0.0	0.0

ENSECO-ERCO Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	18.29	18.29	Ok
75	30-60% of mass 95	46.81	46.81	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.45	7.45	Ok
173	Less than 2% of mass 174	.48	.50	Ok
174	Greater than 50% of mass 95	97.06	97.06	Ok
175	5-9% of mass 174	6.82	7.03	Ok
176	95-101% of mass 174	95.47	98.37	Ok
177	5-9% of mass 176	6.41	6.71	Ok

Injection Date: 10/11/91
Injection Time: 16:41
Data File: >B2949
Scan: 62
Name:BFB DIR INJ 50NG
Misc:V2

>B2949 BFB DIR INJ 50NG V2
62 NRM

File: >B2949 Scan #: 62 Retn. time: 3.32

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	.863	51.10	5.403	72.00	.585	81.00	2.495	104.00	.437
37.05	4.880	56.00	1.245	73.00	3.992	82.00	.554	105.10	.579
38.05	4.159	57.10	2.255	74.00	14.029	86.95	5.101	116.95	.579
39.05	1.472	59.95	.739	75.10	46.812	87.95	4.935	173.00	.481
40.05	1.429	61.05	4.756	76.10	4.005	92.05	2.434	174.00	97.055
44.05	5.539	62.05	4.276	77.10	.900	93.05	3.419	175.00	6.820
47.00	1.756	63.05	2.618	78.00	.598	94.05	10.006	176.00	95.472
48.00	.647	68.05	9.975	79.00	2.545	95.05	100.000	177.00	6.407
49.00	3.881	69.05	9.291	80.00	.696	96.10	7.455	207.20	2.199
50.00	18.286	70.05	.702						

000207

5A

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

Lab Name: ENSECO-ERCO LABORATORY Contract: _____

Lab Code: ENSECO Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: >82949 BFB Injection Date: 10/11/91

Instrument ID: __ BFB Injection Time: 16:41

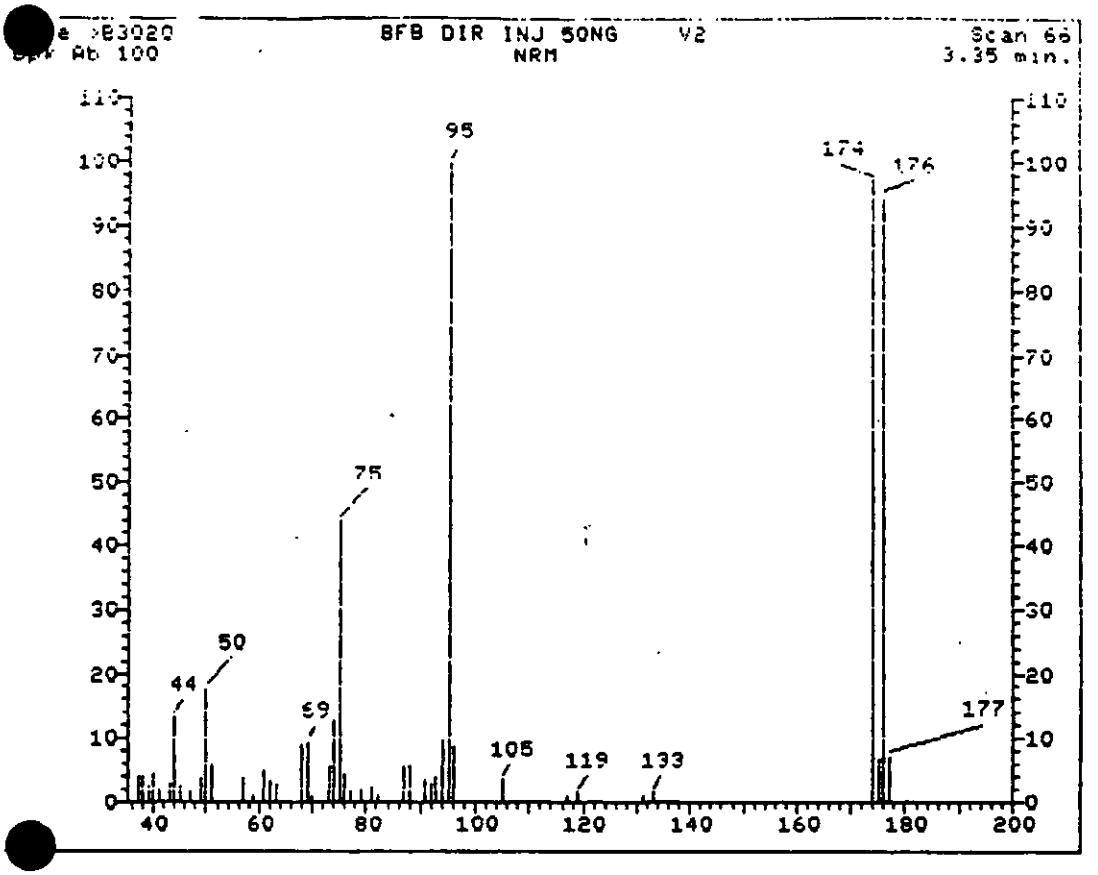
Matrix: (soil/water) _____ Level: (low/med) _____ Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	18.3
75	30.0 - 60.0% OF MASS 95	46.8
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	.5(.5)1
174	Greater than 50.0% of mass 95	97.1
175	5.0 - 9.0% of mass 174	6.8(7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	95.5(98.4)1
177	5.0 - 9.0% of mass 176	6.4(6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	_BFB_50ng_____	_____	_____	_____
02	_VSTD050_____	_50ppb_STD____	_____	_____	_____
03	_VBLK_____	_Proc_Blank___	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____



MS data file header from : >B3020

Sample: BFB DIR INJ 50NG Operator: NORA MS 10/16/91 9:15
Misc : V2
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: BFB2 Tuning file: MT7402 No. of extra records: 2
Source temp.: 220 Analyzer temp.: 220 Transfer line temp. : 220

Chromatographic temperatures :	160.	160.	0.	0.	0.
Chromatographic times, min. :	1.0	5.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	8.0	0.0	0.0	0.0	0.0

ENSECO-ERCO Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	17.38	17.38	Ok
75	30-60% of mass 95	43.99	43.99	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.72	8.72	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	97.26	97.26	Ok
175	5-9% of mass 174	6.88	7.07	Ok
176	95-101% of mass 174	94.84	97.51	Ok
177	5-9% of mass 176	7.12	7.51	Ok

Injection Date: 10/16/91
Injection Time: 09:15
Data File: >B3020
Scan: 66
Name:BFB DIR INJ 50NG
Misc:V2

>B3020 BFB DIR INJ 50NG V2
66 NRM

File: >B3020 Scan #: 66 Retn. time: 3.35

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	4.199	50.00	17.378	73.00	5.646	91.05	3.320	131.10	1.007
38.05	4.071	51.10	6.058	74.10	12.895	92.05	2.866	133.10	1.561
39.05	2.468	57.10	3.688	75.10	43.992	93.05	4.057	174.00	97.262
39.95	4.256	59.05	1.092	76.00	4.256	94.05	9.803	175.00	6.880
41.05	2.100	61.05	5.008	77.00	1.702	95.15	100.000	176.00	94.836
43.05	2.851	62.05	3.532	79.00	2.171	96.10	8.725	177.00	7.122
44.05	13.406	63.05	2.781	81.00	2.341	105.10	3.561	207.10	8.597
45.00	2.270	68.05	9.150	82.10	1.007	117.05	1.121	208.20	1.773
47.00	1.603	69.05	9.335	86.95	5.703	119.05	1.561	209.10	1.064
49.00	3.674	70.05	.965	87.95	5.958				

5A

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

Lab Name: ENSECO-ERCO LABORATORY Contract: _____

Lab Code: ENSECO Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: >B3020 BFB Injection Date: 10/16/91

Instrument ID: __ BFB Injection Time: 9:15

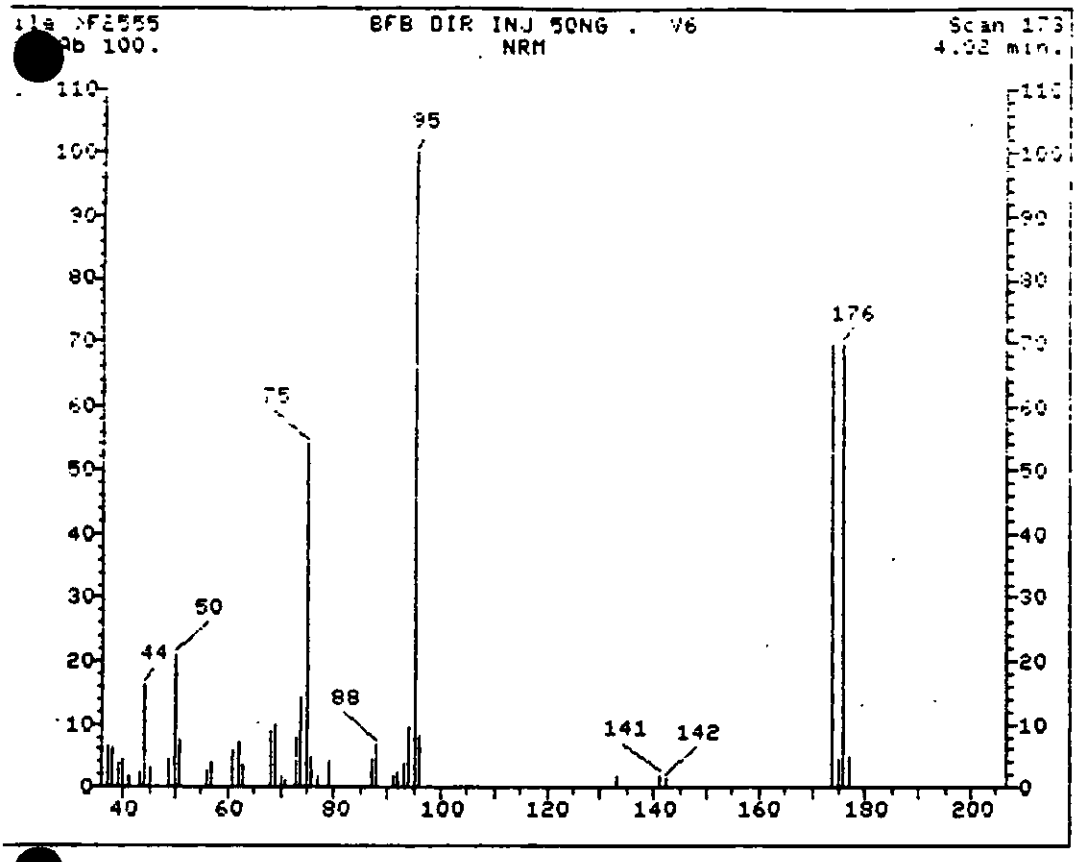
Matrix: (soil/water) _____ Level: (low/med) _____ Column: (pack/cap) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	17.4
75	30.0 - 60.0% OF MASS 95	44.0
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.7
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	97.3
175	5.0 - 9.0% of mass 174	6.9(7.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	94.8(97.5)1
177	5.0 - 9.0% of mass 176	7.1(7.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	_BFB_50ng_____	_____	_____	_____
02	_VSTD050_____	_50ppb_STD_____	_____	_____	_____
03	_VBLK_____	_Proc_Blank____	_____	_____	_____
04	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____



TON V0A
old SOW

IS data file header from : >F2555::D4

Sample: BFB DIR INJ 50NG . Operator: KERYLYNN SUPER GRP. 9/22/91 9:15
Misc : V6
Sys. #: 2 . MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BFB6 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

ENSECO-EPCO LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.98	20.98	Ok
75	30-60% of mass 95	54.14	54.14	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.18	8.18	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	69.66	69.66	Ok
175	5-9% of mass 174	4.52	6.49	Ok
176	95-101% of mass 174	69.74	100.12	Ok
177	5-9% of mass 176	4.88	7.00	Ok

Injection Date: 09/22/91
Injection Time: 09:15
Data File: >F2555
Scan: 173
Name: BFB DIR INJ 50NG .
Misc: V6

>F2555 BFB DIR INJ 50NG . V6
173 NRM

File: >F2555 Scan #: 173 Retn. time: 4.02

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	2.000	48.95	4.589	69.05	10.015	86.95	4.442	132.95	1.705
37.05	6.655	50.05	20.980	70.05	1.836	87.95	6.819	141.05	1.869
38.05	6.032	50.95	7.392	71.05	1.065	90.95	1.885	142.15	1.426
38.95	3.819	56.05	2.950	72.95	7.753	91.95	2.344	173.95	69.661
39.95	4.557	56.95	4.294	73.95	14.162	93.05	3.868	174.95	4.524
40.95	1.836	60.95	5.983	75.05	54.139	94.05	9.523	175.95	69.743
42.95	2.426	61.95	7.114	75.95	4.983	95.05	100.000	176.95	4.884
43.95	16.260	62.95	3.557	77.05	1.688	95.95	8.179	207.00	3.524
44.95	3.180	68.05	8.900	78.95	4.278				

000213

5A

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

Lab Name: ENSEID-EPCO LABORATORY Contract: _____

Lab Code: EPCO Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: F2555 BFB Injection Date: 9/22 91

Instrument ID: Vo BFB Injection Time: 9:15

Matrix: (soil-water) _____ Level: (low/med) ____ Column: (pack cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	21.0
75	30.0 - 60.0% OF MASS 95	54.1
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	69.7
175	5.0 - 9.0% of mass 174	4.5(6.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	69.7(100.1)1
177	5.0 - 9.0% of mass 176	4.9(7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01					
02					
03					
04					
05					
06					
07					
08					
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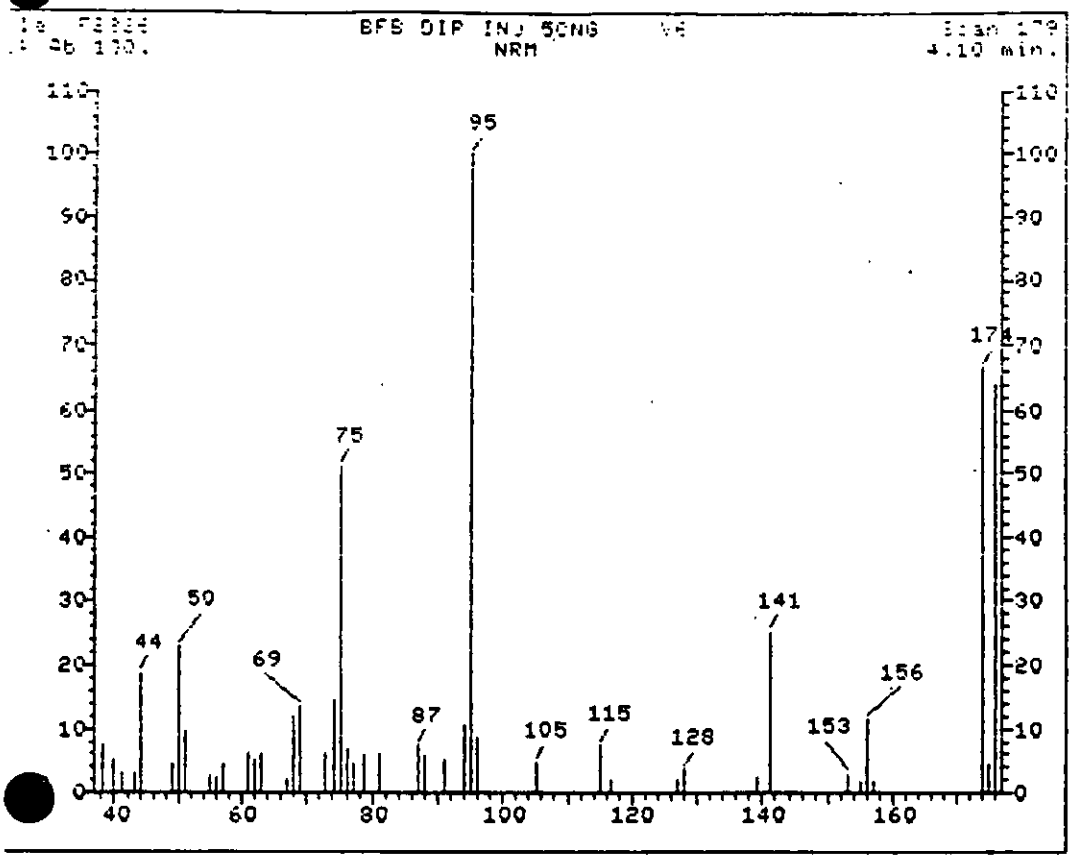
21					
22					



MS data file header from : >F2826::D6

Sample: BFB DIP INJ 50NG Operator: LIZ SUPER GRP. 10/09/91 9:21
Misc : V6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BFB6 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

ENSECO-EPCO LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.90	22.90	Ok
75	30-60% of mass 95	51.14	51.14	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.42	8.42	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	66.51	66.51	Ok
175	5-9% of mass 174	4.36	6.56	Ok
176	95-101% of mass 174	64.00	96.23	Ok
177	5-9% of mass 176	4.46	6.97	Ok

Injection Date: 10/09/91
Injection Time: 09:21
Data File: >F2826
Scan: 179
Name: BFB DIR INJ 50NG
Misc: V6

>F2826 BFB DIR INJ 50NG V6
179 NRM

File: >F2826 Scan #: 179 Retn. time: 4.10

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.95	9.432	56.05	2.333	74.05	14.528	94.05	10.421	141.05	25.152
38.05	7.632	57.05	4.462	75.05	51.141	95.05	100.000	153.05	2.916
39.95	5.147	61.05	6.034	76.05	6.871	96.05	8.418	155.05	1.876
41.05	3.017	62.05	5.046	77.05	4.767	105.05	4.691	156.15	11.511
43.05	2.992	62.95	6.085	78.95	5.730	115.05	7.404	157.15	1.927
44.05	18.712	67.05	2.206	80.95	6.034	116.85	2.028	173.95	66.506
[illegible].95	4.513	68.05	11.993	86.95	7.353	127.05	2.155	174.95	4.361
[illegible].05	22.896	69.05	13.590	87.95	5.705	128.05	3.753	175.95	63.996
51.05	9.559	72.95	6.034	91.05	5.071	139.15	2.333	176.95	4.462
54.95	2.713								

5A

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

b Name: ENSECO-ERCO LABORATORY Contract: _____

b Code: ERCO Case No.: _____ SAS No.: _____ SDG No.: _____

b File ID: >F2826 BFB Injection Date: 10/09/91

strument ID: V6 BFB Injection Time: 9:21

trix: (soil/water) _____ Level: (low/med) ____ Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	22.9
75	30.0 - 60.0% OF MASS 95	51.1
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.4
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	66.5
175	5.0 - 9.0% of mass 174	4.4(6.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	64.0(96.2)1
177	5.0 - 9.0% of mass 176	4.5(7.0)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
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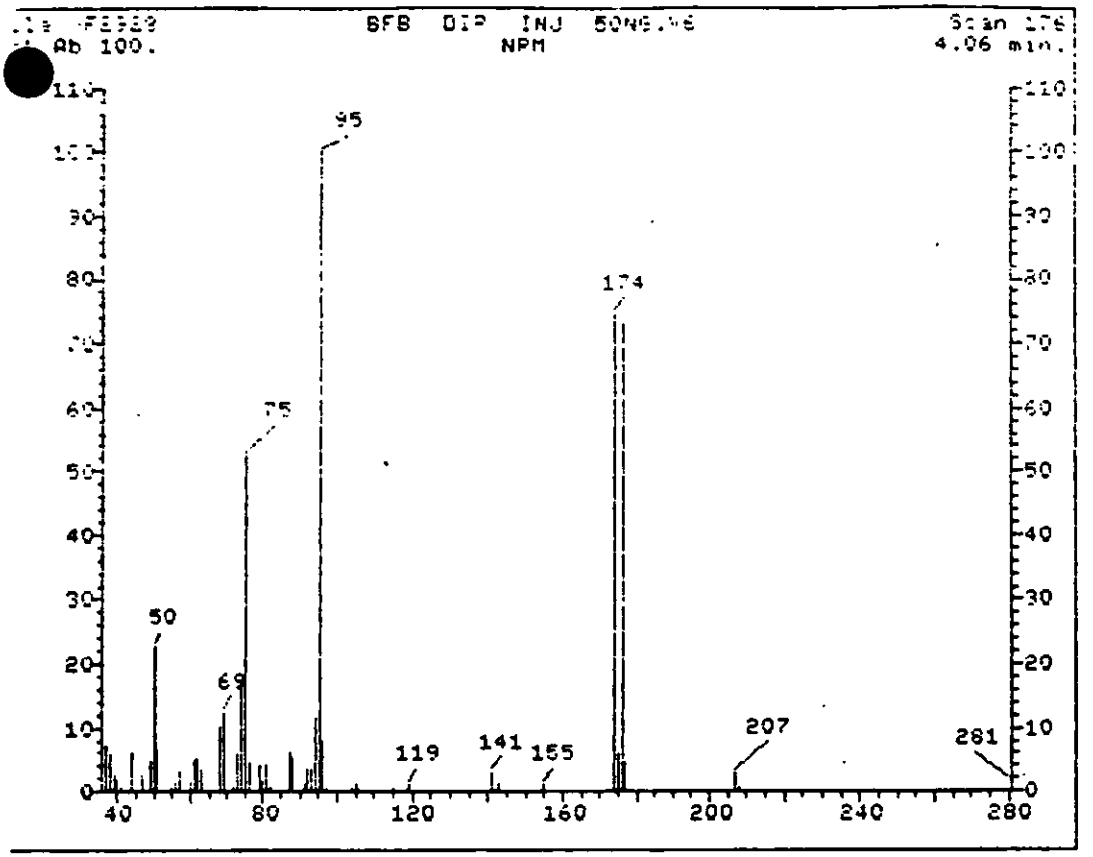
16					
17					
18					
19					
20					
21					



TUNV06
old SOW

IS data file header from : >F2928::D6

Sample: BFB DIR INJ 50NG. Operator: KERYLYNN SUPER GRP. 10/12/91 11:48
Misc : V6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: V6
Method file: BFB6 Tuning file: MT7406 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	150.	150.	0.	0.	0.
Chromatographic times, min. :	1.0	6.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	1.0	0.0	0.0	0.0	0.0

ENSECO-ERCO LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.56	22.56	Ok
75	30-60% of mass 95	52.40	52.40	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.76	7.76	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	74.47	74.47	Ok
175	5-9% of mass 174	5.80	7.78	Ok
176	95-101% of mass 174	72.97	97.98	Ok
177	5-9% of mass 176	4.86	6.66	Ok

Injection Date: 10/12/91
Injection Time: 11:48
Data File: >F2928
Scan: 176
Name: BFB DIR INJ 50NG.
Misc: V6

F2928 BFB DIR INJ 50NG.V6
176 NRM

File: >F2928 Scan #: 176 Retn. time: 4.06

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
45.95	1.438	55.05	1.146	73.95	17.034	92.95	3.376	141.05	2.857
47.05	7.043	55.95	1.547	75.05	52.402	94.05	11.601	142.95	1.010
48.05	5.687	57.05	3.221	76.05	4.540	95.05	100.000	155.05	1.101
49.05	2.484	59.95	1.510	78.95	4.095	96.05	7.762	173.95	74.468
49.85	1.820	61.05	4.704	79.95	1.447	96.95	.965	174.95	5.796
50.95	.710	61.95	5.068	80.85	4.076	103.95	.874	175.95	72.966
53.95	6.051	63.05	3.339	81.95	.819	105.05	1.265	176.95	4.859
67.05	2.557	68.05	10.182	86.95	6.297	105.75	.564	207.00	2.748
69.05	4.768	69.05	12.402	87.95	5.114	114.95	.746	207.90	.810
70.05	22.557	71.85	.728	91.05	1.146	118.95	.965	281.00	.983
71.05	6.470	72.95	5.896	91.95	3.439				

5A

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

b Name: ENFECO-EPCO LABORATORY Contract: _____

b Code: EPCO Case No.: _____ SAS No.: _____ SDG No.: _____

b File ID: F2909 BFB Injection Date: 10/12/91

strument ID: 06 BFB Injection Time: 11:48

trix: (soil/water) _____ Level: (low/med) _____ Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% OF MASS 95	22.6
75	30.0 - 60.0% OF MASS 95	52.4
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	74.5
175	5.0 - 9.0% of mass 174	5.8(7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	73.0(98.0)1
177	5.0 - 9.0% of mass 176	4.9(6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01					
02					
03					
04					
05					
06					
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21					
22					

000220

FORM II VOA 1/87 Rev.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B2933

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

% Moisture: not dec. 0 Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B2933

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

% Moisture: not dec. 0 Date Analyzed: 10/10/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

NC 8240-SL R- 101091 V2A

7B2933

$meCl_2$

2-But

Reduced by : [illegible] Date: 101091

Reviewed by: [illegible] Date: 101491

Data File: >B2933

Page: 1

Enseco GC/MS

Target Compound Data Summary Sheet

Sample: VBLK01 5ML

Misc : V2, CH3 ,5UL IS

Injected : 10/10/91 11:32

Analyst: NORA

ID File: VOHID2

Quant list threshold: 1.00

Units: UG/KG

Run Factor: 1.000

Surrogate vol: .005

Surrogate Spike Recoveries

	Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15	D4-1,2-Dichloroethane	.2500	.2748	110	70 121
CS05	D8-Toluene	.2500	.2441	97.6	81 117
CS10	Bromofluorobenzene (BFB)	.2500	.2610	104	74 121

Target Compounds: VOHID2

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
		BDL	C045	1,1-Dichloroethene
265	~~1.667~~	5hg ~~1.667~~	C035	Acetone
		BDL	C040	Carbon Disulfide
311	2.140	2.140	C030	Methylene Chloride
		BDL	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
473	3.010	3.010	C110	2-Butanone
		BDL	C125	Vinyl Acetate
		BDL	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
		BDL	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform

000223

Data File: >B2933
Sample: VBLK 5ML

Scan #	Concentration Quant list UG/L	Sample UG/KG	Compound
	BDL	C205	4-Methyl-2-Pentanone
	BDL	C230	Toluene
	BDL	C210	2-Hexanone
	BDL	C220	Tetrachloroethene
	BDL	C235	Chlorobenzene
	BDL	C240	Ethylbenzene
	BDL	CXXX	Xylene (p)
	BDL	CXXX	Xylenes (o)
	BDL	C245	Styrene
	BDL	C225	1,1,2,2-Tetrachloroethan
	BDL	C335	Dichlorobenzene (m)
	BDL	C340	Dichlorobenzene (p)
	BDL	C350	Dichlorobenzene (o)
		C250	Xylene (Total)

Diagnostic Quant Report

Data File: >B2933::D6 Injected at: 11:32 10/10/91
Quant'd : 12:02 10/10/91
ID File : VOHID2::$$ Calibrated : 11:39 10/10/91

Compound			- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01	Bromochloromethane	7.50	7.50	.00	128.0	154004	1.0000	50.00
2)	C010	Chloromethane	3.12	0.00	--	50.0	0	.7606	0.00
3)	C020	Vinyl Chloride	3.25	0.00	--	62.0	0	.9823	0.00
4)	C015	Bromomethane	3.68	0.00	--	94.0	0	.5698	0.00
5)	C025	Chloroethane	3.87	0.00	--	64.0	0	.4451	0.00
6)	C045	1,1-Dichloroethene	4.62	4.64	.03	96.0	1338	.8127	.53
7)	C035	Acetone	4.69	4.71	.02	43.0	1984	.3863	1.67
7)D	C035	Acetone	4.69	5.14	.45	43.0	1272	.3863	1.07
8)	C040	Carbon Disulfide	4.97	4.91	.06	76.0	2035	3.9680	.17
9)	C030	Methylene Chloride	5.23	5.25	.02	84.0	5661	.8587	2.14
10)	C053	Trans-1,2-Dichloroe	5.61	5.59	.02	96.0	1096	1.6910	.21
11)	C055	cis-1,2-Dichloroeth	7.11	7.08	.03	96.0	1027	1.8277	.18
12)	C050	1,1-Dichloroethane	6.21	0.00	--	63.0	0	3.1862	0.00
13)	C060	Chloroform	7.65	7.61	.04	83.0	2354	3.1033	.25
[illegible]	C065	1,2-Dichloroethane	8.66	8.61	.05	62.0	958	1.9704	.16
15)	C110	2-Butanone	7.15	7.15	.00	72.0	2466	.2660	3.01
16)	CS15	D4-1,2-Dichloroetha	8.52	8.49	.02	65.0	238859	1.4113	54.95
17)	*CI10	1,4-Difluorobenzene	9.40	9.36	.04	114.0	617610	1.0000	50.00
18)	C125	Vinyl Acetate	6.28	0.00	--	43.0	0	.9517	0.00
19)	C115	1,1,1-Trichloroetha	7.93	7.94	.01	97.0	1029	.4534	.18
20)	C120	Carbon Tetrachlorid	8.24	0.00	--	117.0	0	.4089	0.00
21)	C165	Benzene	8.61	8.58	.03	78.0	5003	1.2956	.31
22)	C150	Trichloroethene	9.88	9.85	.03	130.0	1502	.4179	.29
23)	C140	1,2-Dichloropropane	10.32	10.28	.04	63.0	651	.4373	.12
24)	C130	Bromodichloromethan	10.94	0.00	--	83.0	0	.5779	0.00
25)	C175	2-Chloroethylvinyle	11.69	0.00	--	63.0	0	.2103	0.00
26)	C143	Cis-1,3-Dichloropro	11.99	0.00	--	75.0	0	.6202	0.00
27)	C172	Trans-1,3-Dichlorop	13.38	13.39	.01	75.0	889	.4589	.16
28)	C160	1,1,2-Trichloroetha	13.83	13.82	.01	97.0	709	.3349	.17
29)	C155	Dibromochloromethan	14.85	0.00	--	129.0	0	.4462	0.00
30)	C180	Bromoform	19.03	0.00	--	173.0	0	.3428	0.00
31)	*CI20	D5-Chlorobenzene	16.55	16.52	.03	117.0	432331	1.0000	50.00
32)	CS05	D8-Toluene -	12.67	12.63	.04	98.0	602186	1.4264	48.83
33)	C205	4-Methyl-2-Pentanon	12.44	0.00	--	43.0	0	.8523	0.00
34)	C230	Toluene	12.83	12.79	.04	92.0	2628	.9534	.32
35)	C210	2-Hexanone	14.62	0.00	--	43.0	0	.4437	0.00
36)	C220	Tetrachloroethene	14.24	14.21	.04	164.0	713	.4268	.19
37)	C235	Chlorobenzene	16.60	0.00	--	112.0	0	1.1171	0.00
[illegible]	C240	Ethylbenzene	17.00	17.01	.01	106.0	768	.5167	.17
[illegible]D	C240	Ethylbenzene	17.00	17.40	.40	106.0	980	.5167	.22
39)D	CXXX	Xylene (p)	17.39	17.01	.37	106.0	768	.6402	.14
39)	CXXX	Xylene (p)	17.39	17.40	.01	106.0	980	.6402	.18
40)	CXXX	Xylenes (o)	18.57	18.59	.02	106.0	514	.7147	.08
41)	C245	Styrene	18.61	18.64	.02	104.0	1934	1.1194	.20
42)	C225	1,1,2,2-Tetrachloro	20.79	0.00	--	83.0	0	1.2096	0.00
43)	CS10	Bromofluorobenzene	20.20	20.21	.01	95.0	279234	.6187	[illegible]
43)D	CS10	Bromofluorobenzene	20.20	20.68	.48	95.0	889	.6187	.17

000225

46)	C350	Dichlorobenzene (o	25.33	25.34	.02	146.0	1705	1.0248		.19
47)D	C250	Xylene (Total)	18.57	17.01	1.55	106.0	545	.7073		.09
47)	C250	Xylene (Total)	18.57	17.40	1.17	106.0	980	.7073		.16

* - Compound is an Internal Standard
D - Compound Qdel'ed

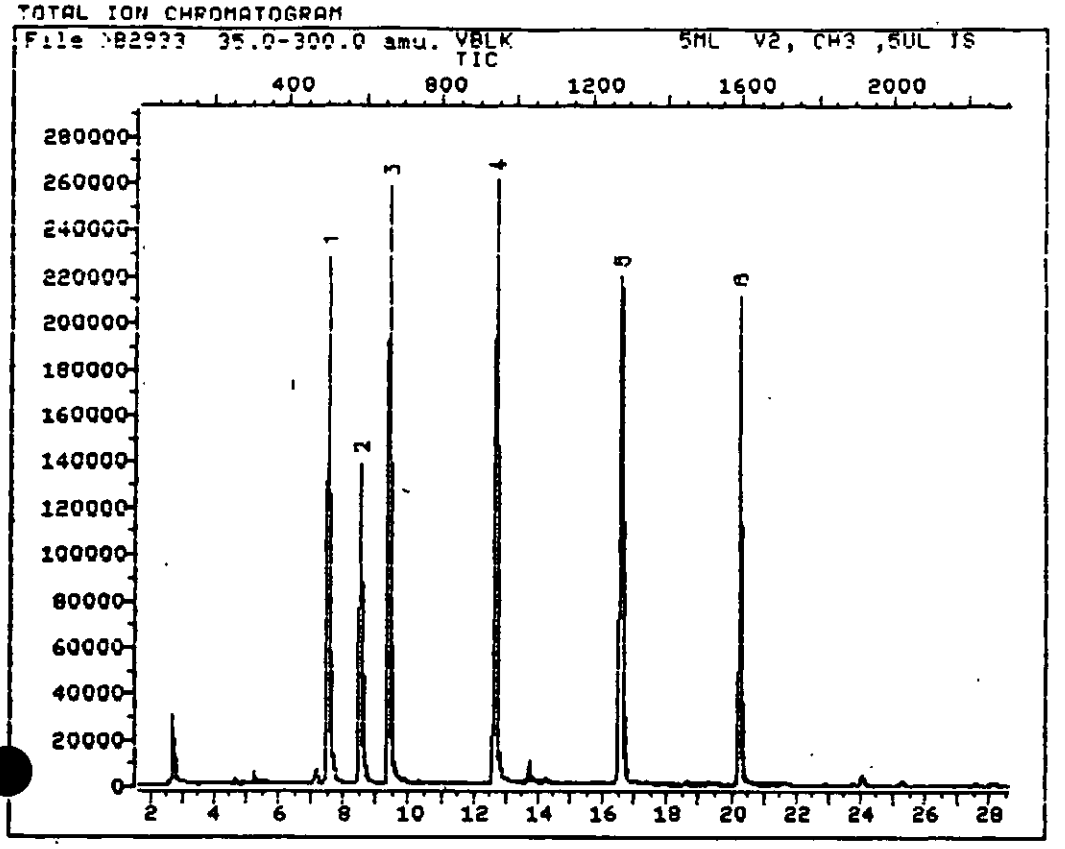
Internal Standard Comparison

Sample: >82933 Date injected: 10/10/91 Standard: >82930 ✓

	Internal Standard	Sample Area	Std Area	%
CI01	Bromochloromethane	154004	167202	92.1
CI10	1,4-Difluorobenzene	617610	667525	92.5
CI20	D5-Chlorobenzene	432331	454669	95.1

% = (Sample Area/Std Area)*100
* Area outside limits

TOTAL ION CHROMATOGRAM



Data File: >B2933::D6 Quant Output File: ^B2933::QT
Name: VBLK01 5ML
Misc: V2, CH3 ,5UL IS

Id File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911010 11:39

Operator ID: NORA
Quant Time: 911010 12:02
Injected at: 911010 11:32

QUANT REPORT

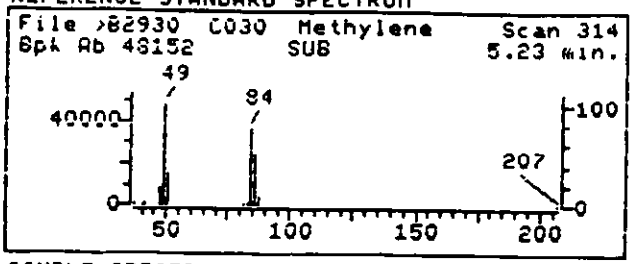
Operator ID: NORA Quant Rev: 6 Quant Time: 911010 12:02
Output File: ^B2933::QT Injected at: 911010 11:32
Data File: >B2933::D6 Dilution Factor: 1.00000
Name: VBLK 01 5ML
Misc: V2, CH3 ,5UL IS

ID File: VOHID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO HEATED
Last Calibration: 911010 11:39

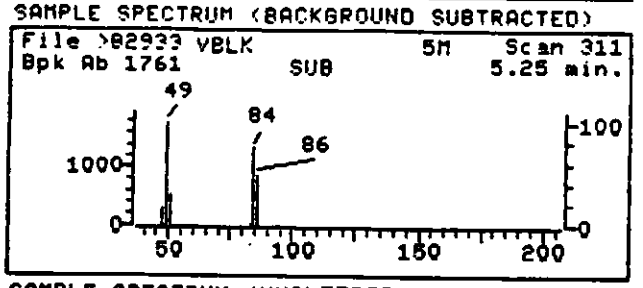
		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.50	128.0	154004	50.00	UG/L	94
6)	C045	1,1-Dichloroethene	4.64	96.0	1338	.53	UG/L	99
7)	C035	Acetone	4.71	43.0	1984	1.67	UG/L	100
8)	C040	Carbon Disulfide	4.91	76.0	2035	.17	UG/L	100
9)	C030	Methylene Chloride	5.25	84.0	5661	2.14	UG/L	86
10)	C053	Trans-1,2-Dichloroethene	5.59	96.0	1096	.21	UG/L	97
11)	C055	cis-1,2-Dichloroethene	7.08	96.0	1027	.18	UG/L	88
13)	C060	Chloroform	7.61	83.0	2354	.25	UG/L	92
14)	C065	1,2-Dichloroethane	8.61	62.0	958	.16	UG/L	100
[illegible]	C110	2-Butanone	7.15	72.0	2466	3.01	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.49	65.0	238859	54.95	UG/L	81
17)	*CI10	1,4-Difluorobenzene	9.36	114.0	617610	50.00	UG/L	100
19)	C115	1,1,1-Trichloroethane	7.94	97.0	1029	.18	UG/L	92
21)	C165	Benzene	8.58	78.0	5003	.31	UG/L	100
22)	C150	Trichloroethene	9.85	130.0	1502	.29	UG/L	81
23)	C140	1,2-Dichloropropane	10.28	63.0	651	.12	UG/L	100
27)	C172	Trans-1,3-Dichloropropen	13.39	75.0	889	.16	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.82	97.0	709	.17	UG/L	91
31)	*CI20	D5-Chlorobenzene	16.52	117.0	432331	50.00	UG/L	100
32)	CS05	D8-Toluene	12.63	98.0	602186	48.83	UG/L	93
34)	C230	Toluene	12.79	92.0	2628	.32	UG/L	96
36)	C220	Tetrachloroethene	14.21	164.0	713	.19	UG/L	90
38)	C240	Ethylbenzene	17.01	106.0	768	.17	UG/L	91
39)	CXXX	Xylene (-p)	17.40	106.0	980	.18	UG/L	98
40)	CXXX	Xylenes (o)	18.59	106.0	514	.08	UG/L	95
41)	C245	Styrene	18.64	104.0	1934	.20	UG/L	100
43)	CS10	Bromofluorobenzene (BFB)	20.21	95.0	279234	52.20	UG/L	79
44)	C335	Dichlorobenzene (m)	23.79	146.0	1994	.24	UG/L	100
45)	C340	Dichlorobenzene (p)	24.11	146.0	2322	.27	UG/L	100
46)	C350	Dichlorobenzene (o)	25.34	146.0	1705	.19	UG/L	100
47)	C250	Xylene (Total)	17.40	106.0	980	.16	UG/L	93

* Compound is ISTD

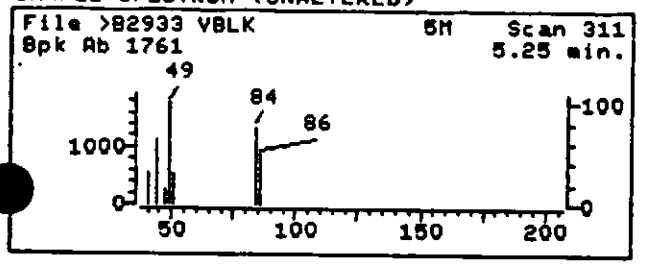
REFERENCE STANDARD SPECTRUM

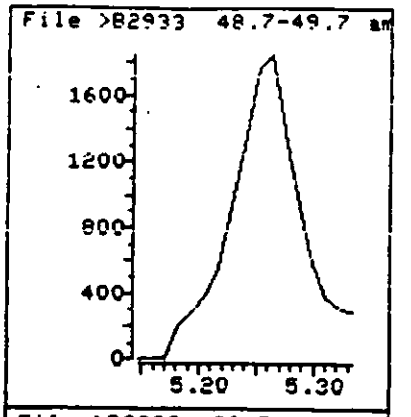


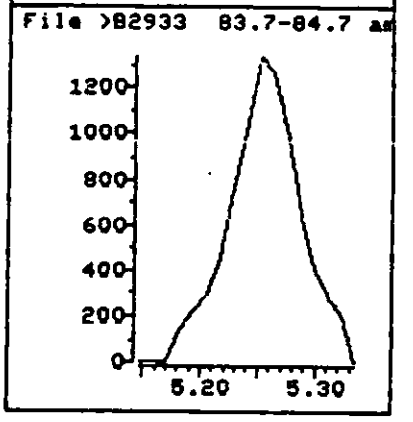
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



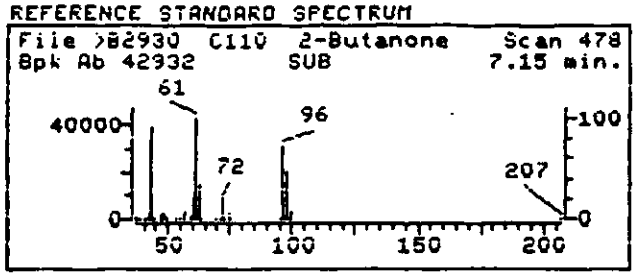




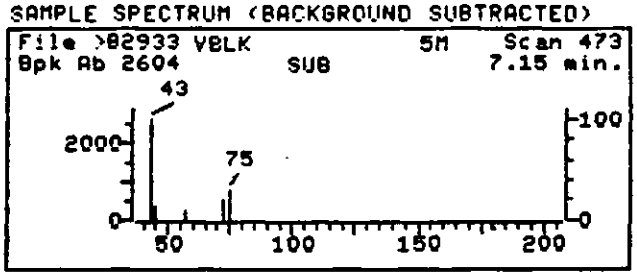
Data File: >B2933::D6 Quant Output File: ^B2933::QT
Name: VBLK 01 5ML
Misc: V2, CH3 ,5UL IS
Quant Time: 911010 12:02 Quant ID File: VOHID2::$$
Injected at: 911010 11:32 Last Calibration: 911010 11:39

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 311
Retention Time: 5.25 min.
Quant Ion: 84.0
Area: 5661
Concentration: 2.14 UG/L
q-value: 86

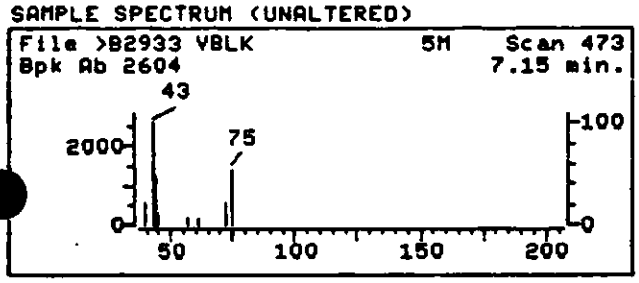
REFERENCE STANDARD SPECTRUM

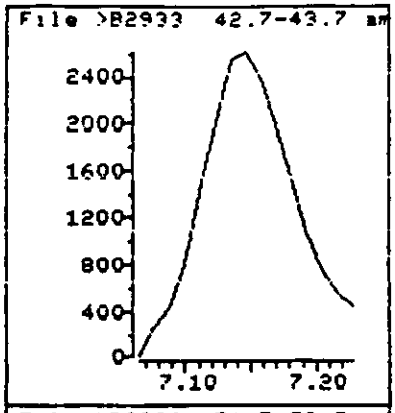


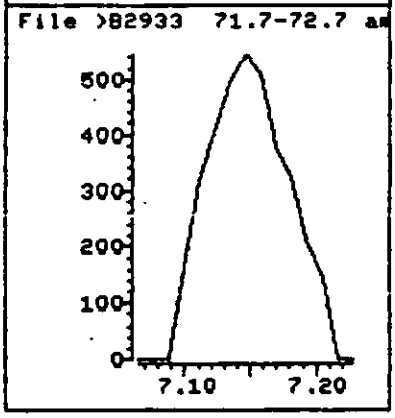
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B2933::D6
Name: VBLK 01 5ML
Misc: V2, CH3 ,5UL IS
Quant Time: 911010 12:02
Injected at: 911010 11:32

Quant Output File: ^B2933::QT

Quant ID File: VOHID2::$$
Last Calibration: 911010 11:39

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 473
Retention Time: 7.15 min.
Quant Ion: 72.0
Area: 2466
Concentration: 3.01 UG/L
q-value: 97

Data Reduced by : JJ Date: 101091 Data File: >B2933
Data Reviewed by : NR Date: ~~10109~~ 101491 1349

Enseco TIC Report (page 1)

Sample: VBLK01 5ML Run Factor: 1.00
Conditions: V2, CH3 ,5UL IS Analyst: NORA

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	~~89.~~			~~5.3~~	~~00-00-0~~	solvent front

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK02

Sample wt/vol: 5.0 (g/mL) G Lab File ID: B2933

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

% Moisture: not dec. _____ Date Analyzed: 10/10/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	2	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	10	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK02

Sample wt/vol: 4.0 (g/mL) ML Lab File ID: F2828

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

% Moisture: not dec. _____ Date Analyzed: 10/09/91

Column (pack/cap) CAP Dilution Factor: 0.80

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* - Compound is an Internal Standard
D - Compound Qdel'ed

624-A
NC

L- 100691V6A
R- 100991V6A

7F2828
$MeCl_2$

Produced by: JD Date: 100991
Reviewed by: ND Date: 101491

Data File: F2828
Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: VBLK02 5ML
Misc : V6, CH02, 5UL IS/S
Injected : 10/09/91 11:16
Analyst: KERYLYNN
D File: MOBID6
Quant list threshold: 1.00

Units: UG/L
Run Factor: 1.000
Surrogate vol: .005

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
S15 D4-1,2-dichloroethane	.2500	.2540	102	76 114
S05 D8-Toluene	.2500	.2425	97.0	88 110
S10 Bromofluorobenzene	.2500	.2474	99.0	86 115

Target Compounds: MOBID6

Scan #	Concentration Quant List UG/L	Sample UG/L	Compound
		BDL	C010 Chloromethane
		BDL	C020 Vinyl Chloride
		BDL	C015 Bromomethane
		BDL	C025 Chloroethane
		BDL	C045 1,1-Dichloroethene
		BDL	C035 Acetone
		BDL	C040 Carbon Disulfide
256	3.449	3.4	C030 Methylene Chloride
		BDL	CXXX Tert-butyl alcohol
		BDL	C053 Trans-1,2-dichloroethene
		BDL	C055 Cis-1,2-dichloroethene
		BDL	CXXX Methyl tert-butyl ether
		BDL	C050 1,1-Dichloroethane
		BDL	C060 Chloroform
		BDL	C065 1,2-Dichloroethane
		BDL	C110 2-Butanone
		BDL	C125 Vinyl Acetate
		BDL	C115 1,1,1-Trichloroethane
		BDL	C120 Carbon Tetrachloride
		BDL	C165 Benzene
		BDL	C150 Trichloroethene
		BDL	C140 1,2-Dichloropropane
		BDL	C130 Bromodichloromethane
		BDL	C175 2-Chloroethylvinylether
		BDL	C143 Cis-1,3-Dichloropropene
		BDL	C172 Trans-1,3-dichloropropene
		BDL	C160 1,1,2-Trichloroethane

Scan #	Concentration Quant list UG/L	Concentration Sample UG/L		Compound
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform
882	~~2.742~~	snq ~~2.7~~	C205	4-Methyl-2-pentanone
		BDL	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
		BDL	C240	Ethylbenzene
		BDL	CXXX	Xylenes (p)
		BDL	CXXX	Xylenes (o)
		BDL	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethane
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
		BDL	C250	Xylenes (total)

Diagnostic Quant Report

Data File: >F2828::D6 Injected at: 11:16 10/09/91
Quant'd : 11:43 10/09/91
DB File : MOBIL06::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	PF	Conc.
1)	*CI01 Bromochloromethane	7.33	7.29	.04	128.0	75116	1.0000	50.00
2)	C010 Chloromethane	2.72	0.00	--	50.0	0	1.3236	0.00
3)	C020 Vinyl Chloride	2.86	0.00	--	62.0	0	1.3500	0.00
4)	C015 Bromomethane	3.26	0.00	--	94.0	0	1.2156	0.00
5)	C025 Chloroethane	3.39	0.00	--	64.0	0	.5022	0.00
6)	C045 1,1-Dichloroethene	4.36	0.00	--	96.0	0	1.5071	0.00
7)	C035 Acetone	4.42	0.00	--	43.0	0	.1843	0.00
8)	C040 Carbon Disulfide	4.66	0.00	--	76.0	0	4.4340	0.00
9)	C030 Methylene Chloride	5.00	4.99	.01	84.0	9327	1.7999	3.45
0)	CXXX Tert-butyl alcohol	5.14	0.00	--	59.0	0	.0770	0.00
1)	C053 Trans-1,2-dichloroet	5.38	0.00	--	96.0	0	1.8441	0.00
2)	C055 Cis-1,2-dichloroethe	6.90	0.00	--	96.0	0	1.9832	0.00
3)	CXXX Methyl tert-butyl et	5.38	0.00	--	73.0	0	3.1722	0.00
4)	C050 1,1-Dichloroethane	6.00	0.00	--	63.0	0	3.5329	0.00
5)	C060 Chloroform	7.44	0.00	--	83.0	0	3.7902	0.00
6)	C065 1,2-Dichloroethane	8.46	0.00	--	62.0	0	2.1737	0.00
7)	C110 2-Butanone	6.92	0.00	--	72.0	0	.1091	0.00
	CS15 D4-1,2-dichloroethan	8.32	8.34	.02	65.0	119894	1.5708	50.81
9)	*CI10 1,4-Difluorobenzene	9.23	9.19	.04	114.0	403435	1.0000	50.00
0)	C125 Vinyl Acetate	6.07	0.00	--	43.0	0	.6048	0.00
1)	C115 1,1,1-Trichloroethan	7.76	0.00	--	97.0	0	.5974	0.00
2)	C120 Carbon Tetrachloride	8.06	0.00	--	117.0	0	.4898	0.00
3)	C165 Benzene	8.45	8.43	.01	78.0	1105	.9908	.14
4)	C150 Trichloroethene	9.71	0.00	--	130.0	0	.4258	0.00
5)	C140 1,2-Dichloropropane	10.19	0.00	--	63.0	0	.4057	0.00
6)	C130 Bromodichloromethane	10.81	0.00	--	83.0	0	.6001	0.00
27)	C175 2-Chloroethylvinylet	11.53	0.00	--	63.0	0	.1776	0.00
28)	C143 Cis-1,3-Dichloroprop	11.86	0.00	--	75.0	0	.5829	0.00
29)	C172 Trans-1,3-dichloropr	13.25	0.00	--	75.0	0	.4482	0.00
30)	C160 1,1,2-Trichloroethan	13.73	0.00	--	97.0	0	.2952	0.00
31)	C155 Dibromochloromethane	14.76	0.00	--	129.0	0	.4676	0.00
2)	C180 Bromoform	18.92	0.00	--	173.0	0	.2627	0.00
3)	*CI20 D5-Chlorobenzene	16.44	16.44	.00	117.0	322976	1.0000	50.00
4)	CS05 D8-Toluene	12.55	12.52	.03	98.0	406752	1.2981	48.51
4)D	CS05 D8-Toluene	12.55	12.87	.32	98.0	1520	1.2981	.18
5)	C205 4-Methyl-2-pentanone	12.31	12.27	.03	43.0	5738	.3240	2.74
6)	C230 Toluene	12.70	12.71	.00	92.0	2358	.9048	.40
7)	C210 2-Hexanone	14.51	0.00	--	43.0	0	.2131	0.00
8)	C220 Tetrachloroethene	14.12	0.00	--	164.0	0	.4676	0.00
9)	C235 Chlorobenzene	16.51	16.52	.01	112.0	3421	1.0869	.49
0)	C240 Ethylbenzene	16.90	17.26	.36	106.0	1951	.5461	.55
1)	CXXX Xylenes (p)	17.26	17.26	.00	106.0	1951	.6696	.45
	CXXX Xylenes (o)	18.46	0.00	--	106.0	0	.6363	0.00
3)	C245 Styrene	18.50	18.51	.01	104.0	3990	1.1149	.55
4)	C225 1,1,2,2-Tetrachloroe	20.67	20.68	.01	83.0	2048	.5730	.55
5)	CS10 Bromofluorobenzene	20.09	20.11	.02	95.0	228063	.7136	49.47
6)	C335 Dichlorobenzene (m)	23.64	23.70	.06	146.0	3302	.9378	.55
6)D	C335 Dichlorobenzene (m)	23.64	24.00	.36	146.0	3681	.9378	.61
7)D	C340 Dichlorobenzene (p)	23.95	23.70	.26	146.0	3302	.8481	.60
7)	C340 Dichlorobenzene (p)	23.95	24.00	.04	146.0	3681	.8481	.67

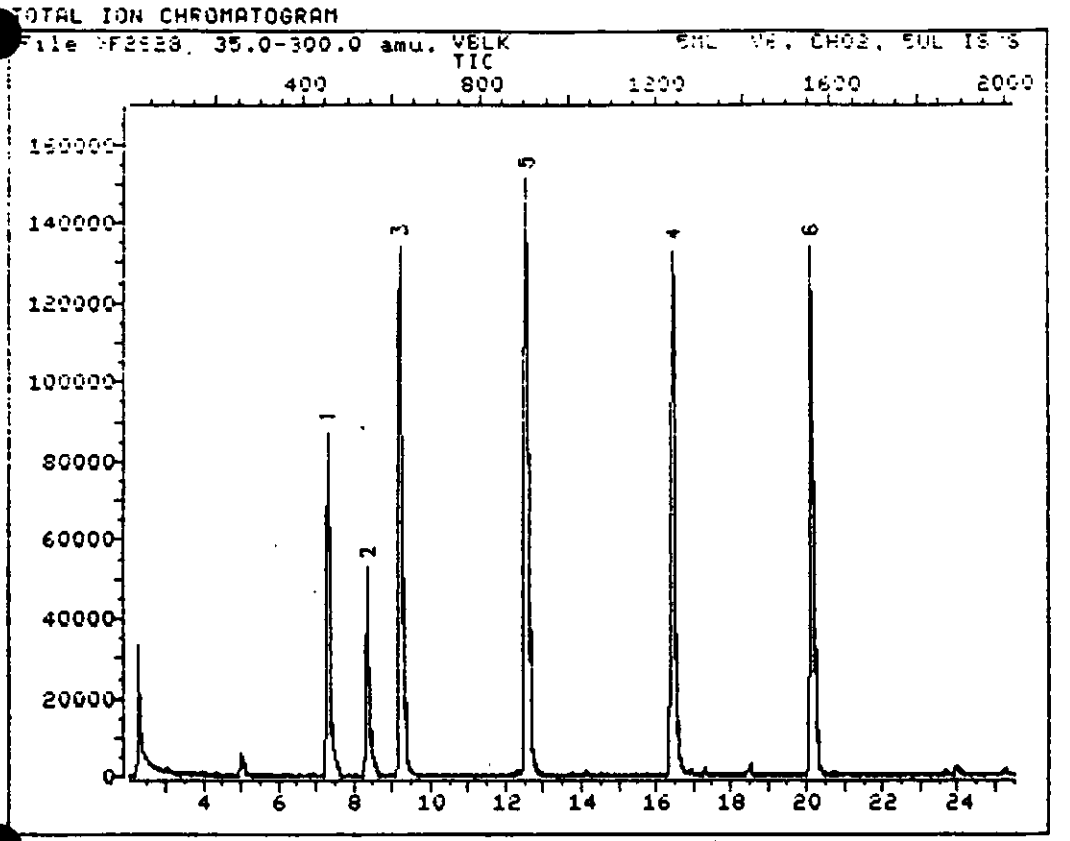
000237

Internal Standard Comparison

ample: F2828 Date injected: 10/09/91 Standard: F2827 ✓

Internal Standard	Sample Area	Std Area	%
101 Bromochloromethane	75116	75510	99.5
110 1,4-Difluorobenzene	403435	407259	99.1
120 D5-Chlorobenzene	322976	308421	104.7

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >F2828::D6 Quant Output File: ^F2828::D7
Name: VBLK *oz* 5ML Instrument ID: V6
Misc: V6, CH02, 5UL IS/S

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

Operator ID: KERYLYNN
Quant Time : 911009 11:43
Injected at: 911009 11:16

QUANT REPORT Page 1

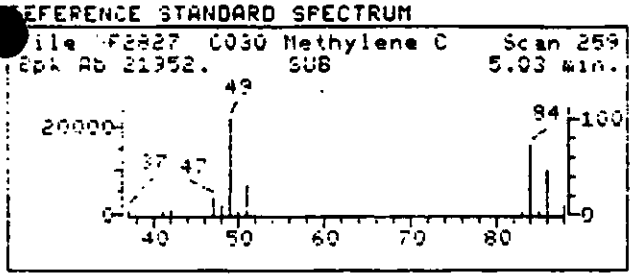
erator ID: KERYLYNN Quant Rev: 7 Quant Time: 911009 11:43
utput File: ^F2828::D7 Injected at: 911009 11:16
ata File: ^F2828::D6 Dilution Factor: 1.00000
ame: VBLK 5ML Instrument ID: Vo
isc: V6, CH02, 5UL IS/S

D File: MOBID6::MT
itle: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
ast Calibration: 910814 09:37 Last Qcal Time: 911009 10:28

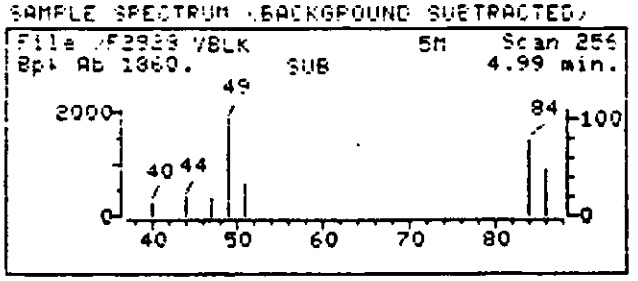
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.29	128.0	75116	50.00	UG/L	68
9)	C030 Methylene Chloride	4.99	84.0	9327	3.45	UG/L	85
18)	CS15 D4-1,2-dichloroethane	8.34	65.0	119894	50.81	UG/L	89
19)	*CI10 1,4-Difluorobenzene	9.19	114.0	403435	50.00	UG/L	100
23)	C165 Benzene	8.43	78.0	1105	.138	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.44	117.0	322976	50.00	UG/L	100
34)	CS05 D8-Toluene	12.52	98.0	406752	48.51	UG/L	93
35)	C205 4-Methyl-2-pentanone	12.27	43.0	5738	2.74	UG/L	95
36)	C230 Toluene	12.71	92.0	2358	.403	UG/L	75
38)	C235 Chlorobenzene	16.52	112.0	3421	.487	UG/L	85
)	C240 Ethylbenzene	17.26	106.0	1951	.553	UG/L	78
41)	CXXX Xylenes (p)	17.26	106.0	1951	.451	UG/L	94
43)	C245 Styrene	18.51	104.0	3990	.554	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane	20.68	83.0	2048	.553	UG/L	87
45)	CS10 Bromofluorobenzene	20.11	95.0	228063	49.47	UG/L	66
46)	C335 Dichlorobenzene (m)	23.70	146.0	3302	.545	UG/L	100
47)	C340 Dichlorobenzene (p)	24.00	146.0	3681	.672	UG/L	100
48)	C350 Dichlorobenzene (o)	25.26	146.0	3675	.676	UG/L	100
49)	C250 Xylenes (total)	17.26	106.0	1646	.400	UG/L	60

* Compound is ISTD

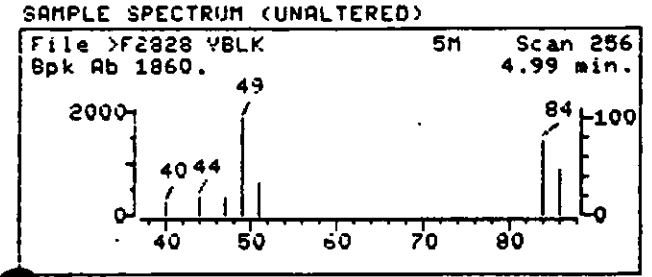
EFERENCE STANDARD SPECTRUM

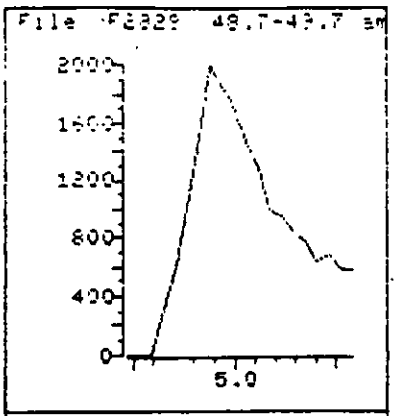


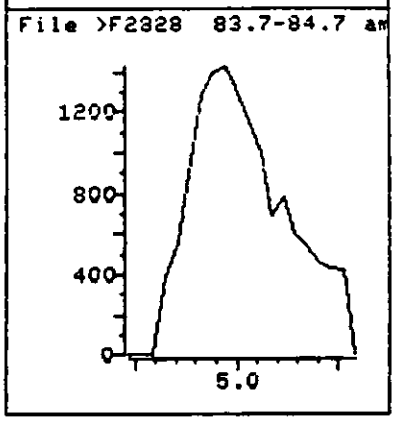
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2828::D6 Quant Output File: ^F2828::D7
Name: VBLK02 5ML Instrument ID: V6
Misc: V6, CH02, 5UL IS/S
Quant Time: 911009 11:43 Quant ID File: MOBID6::MT
Injected at: 911009 11:16 Last Calibration: 910814 09:37
Last Qcal Time: 911009 10:28

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 256
Retention Time: 4.99 min.
Quant Ion : 84.0
Area : 9327
Concentration : 3.45 UG/L
q-value : 85

Data Reduced by : JJ Date: 100991 Data File: >F2828
Data Reviewed by : [illegible] Date: 0149

Enseco TIC Report (page 1)

Sample: UBLK 02 5ML Run Factor: 1.00
Conditions: V6, CH02, 5UL IS/S Analyst: KERYLYNN

# Scan	Q	C	Concentration In Sample (UG/L)	CAS #	Compound

no unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2934

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

% Moisture: not dec. 0 Date Analyzed: 10/12/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	U
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	620	U
75-34-3	1,1-Dichloroethane	620	U
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	1200	U
71-55-6	1,1,1-Trichloroethane	620	U
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	620	U
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2934

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

% Moisture: not dec. 0 Date Analyzed: 10/12/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

N/C

8240-5 CLIENT-VOA
R-101291-VGA
>F2934
clean

Reviewed by: M Date: 101591
Entered by: VL Date: 10/4/91 Data File: F0[illegible] Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

VBLK 03 MB10/23/91

Sample: METHOD BLK SOIL
Misc : 05 CH01 PULIS 100UL MEOH LOT# HX323
Injected : 10-12-91 10:36 Units: UG/KG
Analyst: KERYLYNN Run Factor: 125.000
Data File: M0BI06 Surrogate vol: .500
Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
S15 D4-1,2-dichloroethane	25.00	25.64	103	70 121
S05 D8-Toluene	25.00	25.99	104	81 117
S10 Bromofluorobenzene	25.00	25.81	103	74 121

Target Compounds: M0BI06

Scan #	Concentration Quant List UG/L	Sample UG/KG	Compound
		BDL	C010 Chloromethane
		BDL	C020 Vinyl Chloride
		BDL	C015 Bromomethane
		BDL	C025 Chloroethane
		BDL	C045 1,1-Dichloroethene
		BDL	C035 Acetone
		BDL	C040 Carbon Disulfide
		BDL	C030 Methylene Chloride
		BDL	CXXX Tert-butyl alcohol
		BDL	C053 Trans-1,2-dichloroethene
		BDL	C055 Cis-1,2-dichloroethene
		BDL	CXXX Methyl tert-butyl ether
		BDL	C050 1,1-Dichloroethane
		BDL	C060 Chloroform
		BDL	C065 1,2-Dichloroethane
		BDL	C110 2-Butanone
		BDL	C125 Vinyl Acetate
		BDL	C115 1,1,1-Trichloroethane
		BDL	C120 Carbon Tetrachloride
		BDL	C165 Benzene
		BDL	C150 Trichloroethene
		BDL	C140 1,2-Dichloropropane
		BDL	C130 Bromodichloromethane
		BDL	C175 2-Chloroethylvinylether
		BDL	C143 Cis-1,3-Dichloropropene
		BDL	C172 Trans-1,3-dichloropropene
		BDL	C160 1,1,2-Trichloroethane

Data File: F2934 Page: 2
Sample: MPGH BLK 5ML

Scan #	Concentration Want list UG/L	Sample UG/KG	Compound
	BDL		C155 Dibromochloromethane
	BDL		C180 Bromoform
	BDL		C205 4-Methyl-2-pentanone
	BDL		C230 Toluene
	BDL		C210 2-Hexanone
	BDL		C220 Tetrachloroethene
	BDL		C235 Chlorobenzene
	BDL		C240 Ethylbenzene
	BDL		CXXX Xylenes (p)
	BDL		CXXX Xylenes (o)
	BDL		C245 Styrene
	BDL		C225 1,1,2,2-Tetrachloroethane
	BDL		C335 Dichlorobenzene (m)
	BDL		C340 Dichlorobenzene (p)
	BDL		C350 Dichlorobenzene (o)
	BDL		C250 Xylenes (total)

Diagnostic Quant Report

Data File: F2934::D6 Injected at: 15:56 10 12 91
Printed : 17:03 10/12/91
Cal File : F0910D6::MT Calibrated : 09:37 08-14-91

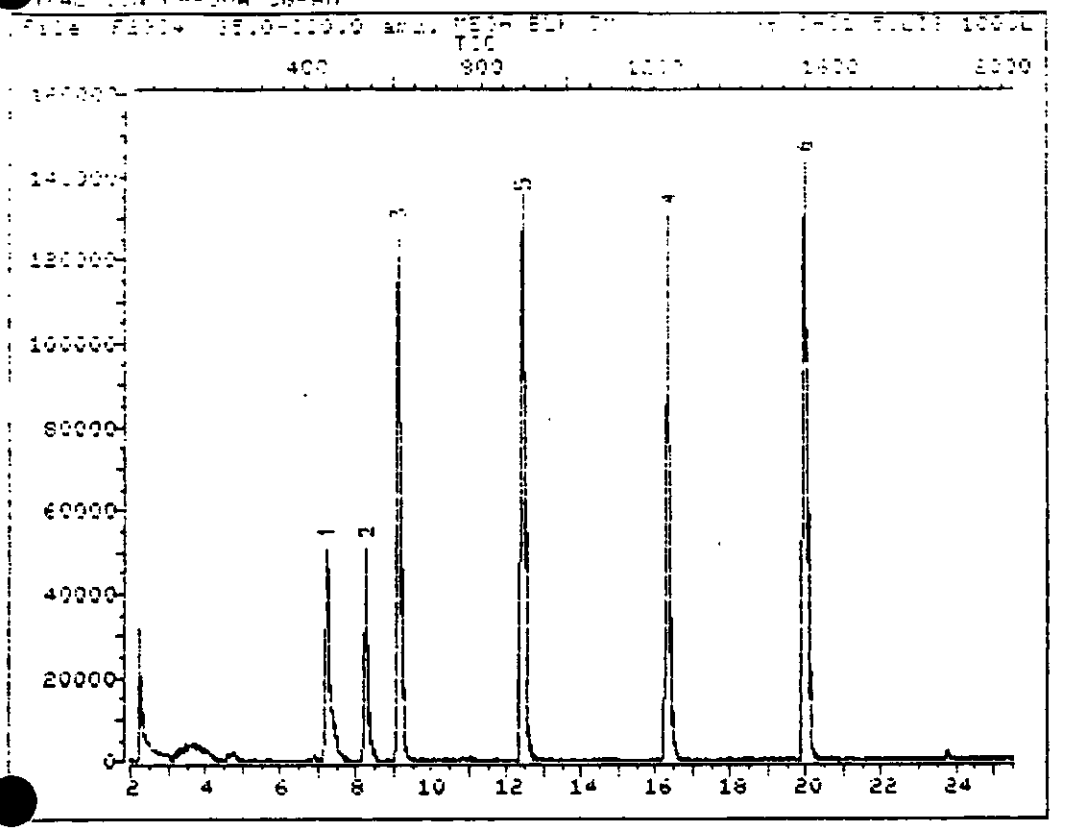
Compound		- P.T. Into - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *CI01	Bromochloromethane	7.24	7.21	.03	128.0	60375	1.0000	50.00
2) C010	Chloromethane	2.67	0.00	--	50.0	0	1.3122	0.00
3) C020	Vinyl Chloride	2.81	0.00	--	62.0	0	1.3229	0.00
4) C015	Bromomethane	3.20	0.00	--	94.0	0	1.2706	0.00
5) C025	Chloroethane	3.32	0.00	--	64.0	0	.8056	0.00
6) C045	1,1-Dichloroethene	4.30	0.00	--	96.0	0	1.5349	0.00
7) C035	Acetone	4.35	0.00	--	43.0	0	.3024	0.00
8) C040	Carbon Disulfide	4.59	0.00	--	76.0	0	4.2106	0.00
9) C030	Methylene Chloride	4.92	0.00	--	84.0	0	1.7841	0.00
0) CXXX	Tert-butyl alcohol	5.08	0.00	--	59.0	0	.0770	0.00
1) C053	Trans-1,2-dichloroet	5.29	0.00	--	96.0	0	1.8974	0.00
2) C055	Cis-1,2-dichloroethe	6.81	0.00	--	96.0	0	2.0428	0.00
3) CXXX	Methyl tert-butyl et	5.30	0.00	--	73.0	0	3.2861	0.00
4) C050	1,1-Dichloroethane	5.91	0.00	--	63.0	0	3.5014	0.00
5) C060	Chloroform	7.35	0.00	--	83.0	0	3.9818	0.00
6) C065	1,2-Dichloroethane	8.37	0.00	--	62.0	0	2.3840	0.00
7) C110	2-Butanone	6.84	0.00	--	72.0	0	.1733	0.00
8) CS15	D4-1,2-dichloroethan	8.24	8.24	.00	65.0	116107	1.8749	51.29
9) *CI10	1,4-Difluorobenzene	9.11	9.09	.02	114.0	380452	1.0000	50.00
0) C125	Vinyl Acetate	5.98	0.00	--	43.0	0	.4441	0.00
1) C115	1,1,1-Trichloroethan	7.69	0.00	--	97.0	0	.5648	0.00
2) C120	Carbon Tetrachloride	7.99	0.00	--	117.0	0	.4717	0.00
3) C165	Benzene	8.35	0.00	--	78.0	0	1.0551	0.00
4) C150	Trichloroethene	9.63	0.00	--	130.0	0	.4207	0.00
5) C140	1,2-Dichloropropane	10.11	0.00	--	63.0	0	.4143	0.00
6) C130	Bromodichloromethane	10.72	0.00	--	83.0	0	.6104	0.00
7) C175	2-Chloroethylvinylet	11.44	0.00	--	63.0	0	.2031	0.00
8) C143	Cis-1,3-Dichloroprop	11.77	0.00	--	75.0	0	.5792	0.00
9) C172	Trans-1,3-dichloropr	13.18	0.00	--	75.0	0	.4136	0.00
0) C160	1,1,2-Trichloroethan	13.64	0.00	--	97.0	0	.3355	0.00
1) C155	Dibromochloromethane	14.68	0.00	--	129.0	0	.4975	0.00
2) C180	Bromoform	18.86	0.00	--	173.0	0	.3012	0.00
3) *CI20	D5-Chlorobenzene	16.32	16.30	.02	117.0	302614	1.0000	50.00
4) CS05	D8-Toluene	12.41	12.40	.01	98.0	371562	1.1812	51.98
5) C205	4-Methyl-2-pentanone	12.18	0.00	--	43.0	0	.3987	0.00
6) C230	Toluene	12.58	0.00	--	92.0	0	.8679	0.00
7) C210	2-Hexanone	14.38	0.00	--	43.0	0	.2733	0.00
8) C220	Tetrachloroethene	13.99	0.00	--	164.0	0	.4248	0.00
9) C235	Chlorobenzene	16.37	0.00	--	112.0	0	1.0055	0.00
0) C240	Ethylbenzene	16.77	0.00	--	106.0	0	.5060	0.00
1) CXXX	Xylenes (p)	17.14	0.00	--	106.0	0	.6191	0.00
2) CXXX	Xylenes (o)	18.31	0.00	--	106.0	0	.6030	0.00
3) C245	Styrene	18.37	0.00	--	104.0	0	1.0452	0.00
4) C225	1,1,2,2-Tetrachloroe	20.53	0.00	--	83.0	0	.6267	0.00
5) CS10	Bromofluorobenzene	19.95	19.94	.01	95.0	234051	.7490	51.63
6) C335	Dichlorobenzene (m)	23.51	0.00	--	146.0	0	.8780	0.00
7) C340	Dichlorobenzene (p)	23.82	0.00	--	146.0	0	.7971	0.00
8) C350	Dichlorobenzene (o)	25.06	0.00	--	146.0	0	.8260	0.00
9) C260	Xylenes (total)	18.31	0.00	--	106.0	0	.5927	0.00

Internal Standard Comparison

Sample: F2414 Date injected: 10/12/91 Standard: F2430

Internal Standard	Sample Area	Std Area	%
101 Bromochloromethane	60375	67659	89.4
110 1,4-Difluorobenzene	330492	390644	84.9
120 D5-Chlorobenzene	302614	313198	96.6

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >F2934::D6 Quant Output File: ^F2934::D7
Name: MEOH BLK 5ML Instrument ID: V6
Misc: V6 CH01 5ULIS 100UL MEOH LOT# AY323

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: 08624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911012 12:59

Operator ID: KERYLYNN
Quant Time : 911012 17:03
Injected at: 911012 16:36

Operator ID: *SPYLYNN Quant Rev: 7 Quant Time: 91.012 17:03
Data File: F2974::D7 Injected at: 911012 16:56
Sple File: >F2974::D6 Dilution Factor: 1.00000
Name: MEOH BLK 5ML Instrument ID: V6
Misc: V6 CH01 5ULIS 100UL MEOH LOT# AY323

ID File: M0810D6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 EPCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911012 12:59

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*CI01 Bromochloromethane	7.21	128.0	60375	50.00	UG/L	68
18)	CS15 D4-1,2-dichloroethane	8.24	65.0	116107	51.29	UG/L	83
19)	*CI10 1,4-Difluorobenzene	9.09	114.0	380452	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.30	117.0	302614	50.00	UG/L	100
34)	CS05 D8-Toluene	12.40	98.0	371562	51.98	UG/L	91
45)	CS10 Bromofluorobenzene	19.94	95.0	234051	51.63	UG/L	73

* Compound is ISTD

Data Reduced by : KK Date: 10/14/91 Data File: >F2934
Data Reviewed by : _____ Date: _____

Enseco HLC Report (page 1)

Sample: MEOH BLK 5ML 03 Run Factor: 125.
Conditions: V6 CH01 5UL15 100UL MEOH LOI# Analyst: KERYLYNN

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

no emissions

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK04

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B3023

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

% Moisture: not dec. 0 Date Analyzed: 10/16/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1200	U
74-83-9	Bromomethane	1200	U
75-01-4	Vinyl Chloride	1200	U
75-00-3	Chloroethane	1200	U
75-09-2	Methylene Chloride	620	U
67-64-1	Acetone	1200	U
75-15-0	Carbon Disulfide	620	U
75-35-4	1,1-Dichloroethene	130	J
75-34-3	1,1-Dichloroethane	130	J
540-59-0	1,2-Dichloroethene (total)	620	U
67-66-3	Chloroform	620	U
107-06-2	1,2-Dichloroethane	620	U
78-93-3	2-Butanone	500	J
71-55-6	1,1,1-Trichloroethane	280	J
56-23-5	Carbon Tetrachloride	620	U
108-05-4	Vinyl Acetate	1200	U
75-27-4	Bromodichloromethane	620	U
78-87-5	1,2-Dichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U
79-01-6	Trichloroethene	620	U
124-48-1	Dibromochloromethane	620	U
79-00-5	1,1,2-Trichloroethane	620	U
71-43-2	Benzene	620	U
10061-02-6	trans-1,3-Dichloropropene	620	U
110-75-8	2-Chloroethylvinylether	1200	U
75-25-2	Bromoform	620	U
108-10-1	4-Methyl-2-Pentanone	1200	U
591-78-6	2-Hexanone	1200	U
127-18-4	Tetrachloroethene	620	U
79-34-5	1,1,2,2-Tetrachloroethane	620	U
108-88-3	Toluene	620	U
108-90-7	Chlorobenzene	620	U
100-41-4	Ethylbenzene	620	U
100-42-5	Styrene	620	U
1330-20-7	Xylene (total)	620	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK04

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10147 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: B3023

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

% Moisture: not dec. 0 Date Analyzed: 10/16/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

* - Compound is an Internal Standard
D - Compound Qdel'ed

NC

624 - L-101491V2A
R-101691V2A

8240-S L-10159N
R-10169N2

Reduced by : [illegible] Date: 101691
Reviewed by: [illegible] Date: 10/17/91

Data file: b[illegible]3023 Page: 1

Ensecb GC/Ms
Target Compound Data summary Sheet

7B3023
1,1-Dichloroethen
1,1-Dichloroethane
2-But.
1,1,1-Trichlor

Sample: UBLK 04 MEOH 5ML
Misc : V2 LH# 16 5UL15
Injected : 10/16/91 11:24
Analyst: NORA
ID File: VOAID2
Quant list threshold: 1.00

Units: UG/L
Run Factor: 1.000
Surrogate vol: .005

Surrogate Spike Recoveries

Compound		Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15	D4-1,2-Dichloroethane	.2500	.2586	103	76 114
CS05	D8-Toluene	.2500	.2404	96.2	88 110
CS10	Bromofluorobenzene (BFB)	.2500	.2601	104	86 115

Target Compounds: VOAID2

Scan #	Concentration Quant List UG/L	Sample UG/L		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
		BDL	C025	Chloroethane
256	1.058	1.058	C045	1,1-Dichloroethene
263	~~1.786~~ 5mg	~~1.786~~	C035	Acetone
		BDL	C040	Carbon Disulfide
		BDL	C030	Methylene Chloride
		BDL	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
389	1.065	1.065	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
472	3.965	3.965	C110	2-Butanone
		BDL	C125	Vinyl Acetate
539	2.274	2.274	C115	1,1,1-Trichloroethane
		BDL	C120	Carbon Tetrachloride
		BDL	C165	Benzene
		BDL	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
		BDL	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform

Data File: -B3023 Page: 2
Sample: VBLK 5ML

Scan #	Concentration Quant list UG/L	Concentration Sample UG/L		Compound
		BDL	C205	4-Methyl-2-Pentanone
		BDL	C230	Toluene
1115	~~2.056~~ SNQ	~~2.056~~	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
		BDL	C240	Ethylbenzene
		BDL	CXXX	Xylene (p)
		BDL	CXXX	Xylenes (o)
		BDL	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethan
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
		BDL	C250	Xylene (Total)

Diagnostic Quant Report

Data File: B5023::DU Injected at: 11:24 10/16/91
Quant'd : 11:54 10/16/91
ID File : U0M102::$$ Calibrated : 11:13 10/16/91

	Compound		- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101	Bromochloromethane	7.50	7.53	.04	128.0	134731	1.0000	50.00
2)	C010	Chloromethane	3.20	0.00	--	50.0	0	.3920	0.00
3)	C020	Vinyl Chloride	3.33	0.00	--	62.0	0	.8211	0.00
4)	C015	Bromomethane	3.76	0.00	--	94.0	0	.6777	0.00
5)	C025	Chloroethane	3.94	0.00	--	64.0	0	.5346	0.00
6)	C045	1,1-Dichloroethene	4.80	4.66	.15	96.0	3243	1.1377	1.06
7)	C035	Acetone	4.74	4.74	.01	43.0	1924	.3999	1.79
7)D	C035	Acetone	4.74	5.17	.43	43.0	1284	.3999	1.19
8)	C040	Carbon Disulfide	5.03	4.96	.07	76.0	1181	4.7412	.09
9)	C030	Methylene Chloride	5.28	5.28	.01	84.0	1690	.7264	.86
10)	C053	Trans-1,2-Dichloroe	5.66	0.00	--	96.0	0	1.9143	0.00
11)	C055	cis-1,2-Dichloroeth	7.14	0.00	--	96.0	0	1.9601	0.00
12)	C050	1,1-Dichloroethane	6.25	6.21	.04	63.0	10918	3.8038	1.07
13)	C060	Chloroform	7.67	7.65	.02	83.0	822	3.4381	.09
14)	C065	1,2-Dichloroethane	8.68	0.00	--	62.0	0	2.1786	0.00
15)	C110	2-Butanone	7.18	7.18	.00	43.0	9452	.8847	3.96
16)	CS15	D4-1,2-Dichloroetha	8.54	8.55	.01	65.0	207423	1.4884	51.72
17)	*C110	1,4-Difluorobenzene	9.37	9.41	.05	114.0	489033	1.0000	50.00
18)	C125	Vinyl Acetate	6.34	0.00	--	43.0	0	1.0500	0.00
19)	C115	1,1,1-Trichloroetha	8.00	7.96	.04	97.0	13392	.6021	2.27
20)	C120	Carbon Tetrachlorid	8.31	7.98	.33	117.0	1214	.5024	.25
21)	C165	Benzene	8.66	8.65	.01	78.0	5154	1.4215	.37
22)	C150	Trichloroethene	9.94	9.93	.01	130.0	1272	.4607	.28
23)	C140	1,2-Dichloropropane	10.39	0.00	--	63.0	0	.4667	0.00
24)	C130	Bromodichloromethan	11.01	0.00	--	83.0	0	.6293	0.00
25)	C175	2-Chloroethylvinyle	11.77	0.00	--	63.0	0	.1968	0.00
26)	C143	Cis-1,3-Dichloropro	12.07	0.00	--	75.0	0	.6096	0.00
27)	C172	Trans-1,3-Dichlorop	13.47	0.00	--	75.0	0	.4477	0.00
28)	C160	1,1,2-Trichloroetha	13.93	0.00	--	97.0	0	.3175	0.00
29)	C155	Dibromochloromethan	14.97	0.00	--	129.0	0	.4505	0.00
30)	C180	Bromoform	19.20	0.00	--	173.0	0	.3234	0.00
31)	*C120	D5-Chlorobenzene	16.54	16.59	.05	117.0	346793	1.0000	50.00
32)	CS05	D8-Toluene	12.70	12.72	.03	98.0	466756	1.3998	48.08
33)	C205	4-Methyl-2-Pentanon	12.46	12.51	.05	43.0	3400	.6298	.78
34)	C230	Toluene	12.86	12.90	.04	92.0	2663	.9983	.58
35)	C210	2-Hexanone	14.67	14.70	.03	43.0	4730	.3350	2.04
36)	C220	Tetrachloroethene	14.28	14.30	.02	164.0	801	.4801	.24
37)	C235	Chlorobenzene	16.68	0.00	--	112.0	0	1.1890	0.00
38)	C240	Ethylbenzene	17.08	17.46	.38	106.0	2356	.5596	.61
39)	CXXX	Xylene (p)	17.46	17.46	.00	106.0	2356	.6831	.50
40)	CXXX	Xylenes (o)	18.65	18.64	.01	106.0	1187	.7572	.23
41)	C245	Styrene	18.71	18.71	.00	104.0	3647	1.1752	.45
42)	C225	1,1,2,2-Tetrachloro	20.89	20.86	.03	83.0	3883	.9905	.57
43)	CS10	Bromofluorobenzene	20.29	20.26	.03	95.0	223109	.6183	52.03
44)	C335	Dichlorobenzene (m	23.93	23.84	.09	146.0	4227	1.1423	.53
44)D	C335	Dichlorobenzene (m	23.93	24.16	.23	146.0	4926	1.1423	.62
45)D	C340	Dichlorobenzene (p	24.25	23.84	.41	146.0	4227	1.153	.53
45)	C340	Dichlorobenzene (p	24.25	24.16	.09	146.0	4926	1.1531	.62

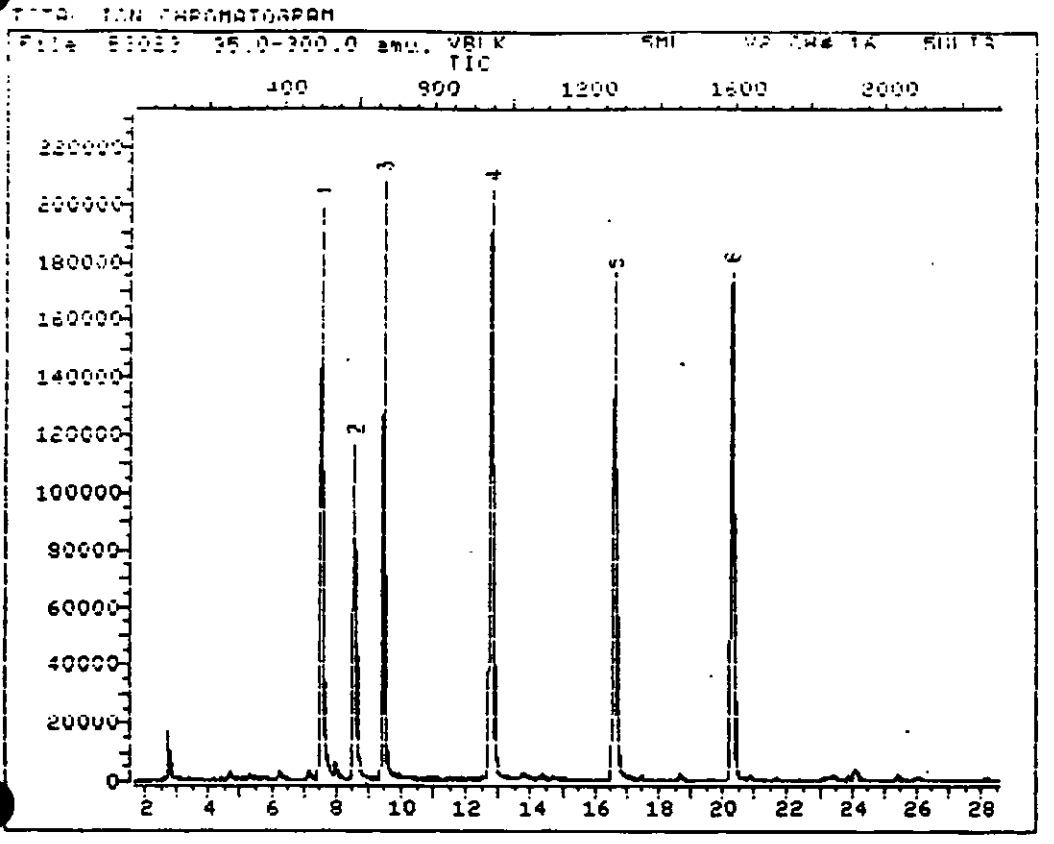
000258

Internal Standard Comparison

Sample: B3023 Date Injected: 10/16/91 Standard: B3022 ✓

Internal Standard		Sample Area	Std Area	%
CI01	Bromochloromethane	134731	121162	111.2
CI10	1,4-Difluorobenzene	489033	462273	105.8
CI20	D5-Chlorobenzene	346793	311269	111.4

% = (Sample Area/Std Area)*100
* Area outside limits



Data File: >B3023::DU Quant Output File: ^B3023::QT
Name: VBLK09 5ML
Misc: V2 CH# 16 5ULIS

Id File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911016 11:13

Operator ID: NORA
Quant Time: 911016 11:54
Injected at: 911016 11:24

QUANT REPORT

Operator ID: NORA
Output File: "B3023::QT
Data File: "B3023::DU
Name: VBLK 04 5ML
Misc: V2 LH# 16 5ULIS

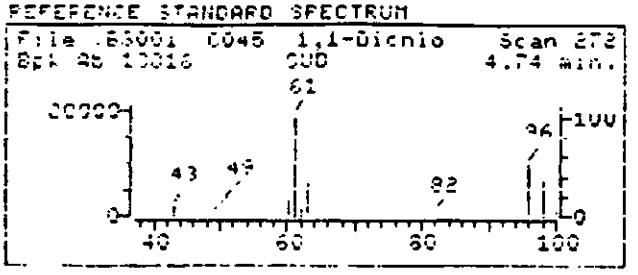
Quant Rev: c Quant Time: 911016 11:54
Injected at: 911016 11:24
Dilution Factor: 1.00000

ID File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911016 11:13

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	7.53	128.0	134731	50.00	UG/L	80
6)	C045	1,1-Dichloroethene	4.66	96.0	3243	1.06	UG/L	87
7)	C035	Acetone	4.74	43.0	1924	1.79	UG/L	100
8)	C040	Carbon Disulfide	4.96	76.0	1181	.09	UG/L	100
9)	C030	Methylene Chloride	5.28	84.0	1690	.86	UG/L	84
12)	C050	1,1-Dichloroethane	6.21	63.0	10918	1.07	UG/L	89
13)	C060	Chloroform	7.65	83.0	822	.09	UG/L	86
15)	C110	2-Butanone	7.18	43.0	9452	3.96	UG/L	96
16)	CS15	D4-1,2-Dichloroethane	8.55	65.0	207423	51.72	UG/L	82
17)	*C110	1,4-Difluorobenzene	9.41	114.0	489033	50.00	UG/L	100
19)	C115	1,1,1-Trichloroethane	7.96	97.0	13392	2.27	UG/L	90
20)	C120	Carbon Tetrachloride	7.98	117.0	1214	.25	UG/L	98
21)	C165	Benzene	8.65	78.0	5154	.37	UG/L	100
22)	C150	Trichloroethene	9.93	130.0	1272	.28	UG/L	85
31)	*C120	D5-Chlorobenzene	16.59	117.0	346793	50.00	UG/L	100
32)	CS05	D8-Toluene	12.72	98.0	466756	48.08	UG/L	92
33)	C205	4-Methyl-2-Pentanone	12.51	43.0	3400	.78	UG/L	97
34)	C230	Toluene	12.90	92.0	2663	.38	UG/L	94
35)	C210	2-Hexanone	14.70	43.0	4730	2.04	UG/L	94
36)	C220	Tetrachloroethene	14.30	164.0	801	.24	UG/L	87
38)	C240	Ethylbenzene	17.46	106.0	2356	.61	UG/L	76
39)	CXXX	Xylene (p)	17.46	106.0	2356	.50	UG/L	96
40)	CXXX	Xylenes (o)	18.64	106.0	1187	.23	UG/L	99
41)	C245	Styrene	18.71	104.0	3647	.45	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	20.86	83.0	3883	.57	UG/L	98
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	223109	52.03	UG/L	84
44)	C335	Dichlorobenzene (m)	23.84	146.0	4227	.53	UG/L	100
45)	C340	Dichlorobenzene (p)	24.16	146.0	4926	.62	UG/L	100
46)	C350	Dichlorobenzene (o)	25.38	146.0	4494	.54	UG/L	100
47)	C250	Xylene (Total)	18.63	106.0	1067	.20	UG/L	98

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



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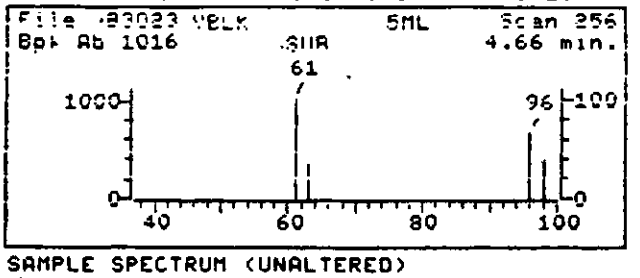

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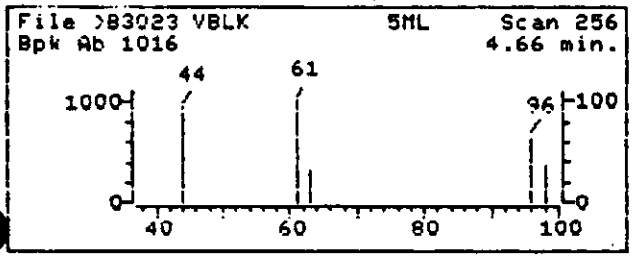
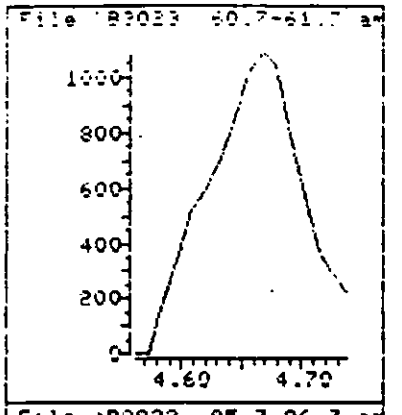
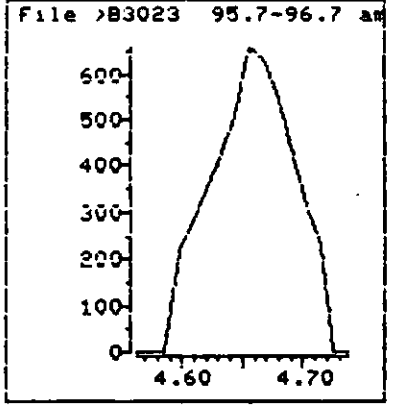


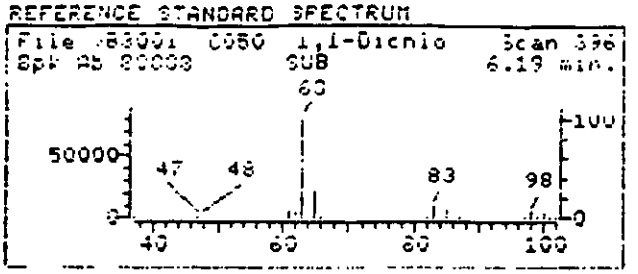




Data File: >B3023::D0 Quant Output File: ^B3023::QT
Name: VBLK04 5ML
Misc: V2 CH# 16 5ULIS
Quant Time: 911016 11:54 Quant ID File: VOAID2::$$
Injected at: 911016 11:24 Last Calibration: 911016 11:13

Compound No: 6
Compound Name: C045 1,1-Dichloroethene
Scan Number: 256
Retention Time: 4.66 min.
Quant Ion: 96.0
Area: 3243
Concentration: 1.06 UG/L
q-value: 87

REFERENCE STANDARD SPECTRUM



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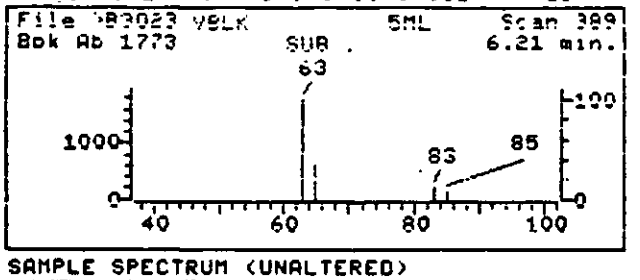

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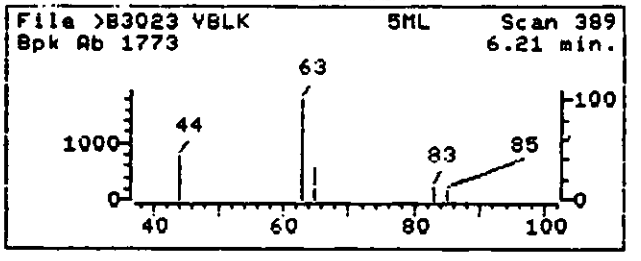
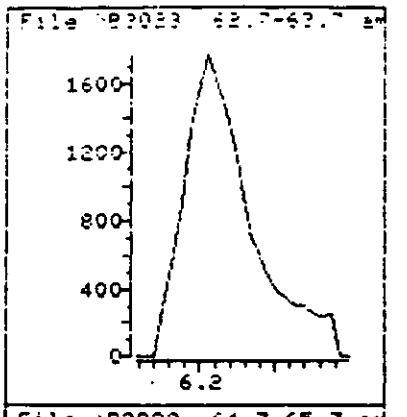
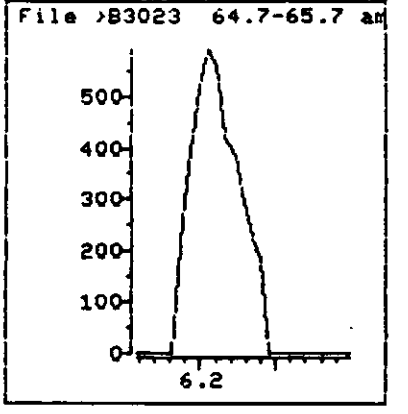


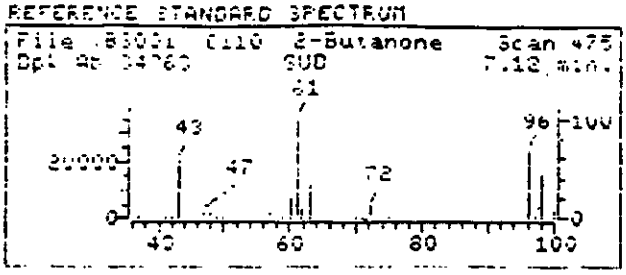




Data File: >B3023::D0 Quant Output File: ^B3023::QT
Name: VBLK04 5ML
Misc: V2 CH# 16 5ULIS
Quant Time: 911016 11:54 Quant ID File: VOAID2::$$
Injected at: 911016 11:24 Last Calibration: 911016 11:13

Compound No: 12
Compound Name: C050 1,1-Dichloroethane
Scan Number: 389
Retention Time: 6.21 min.
Quant Ion: 63.0
Area: 10918
Concentration: 1.07 UG/L
q-value: 89

REFERENCE STANDARD SPECTRUM



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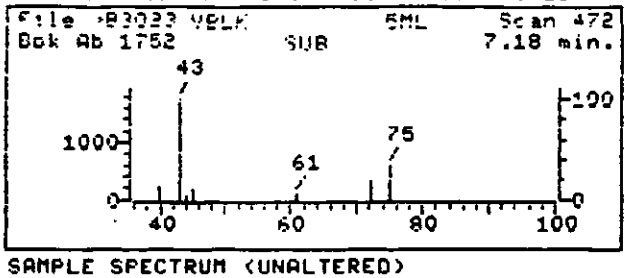
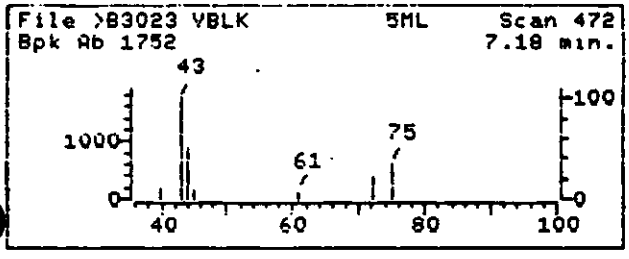
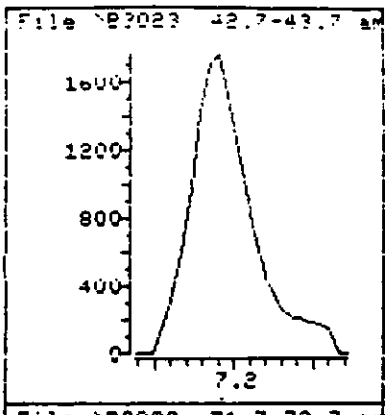
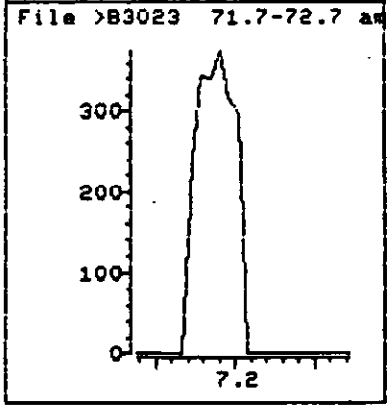


SAMPLE SPECTRUM (UNALTERED)



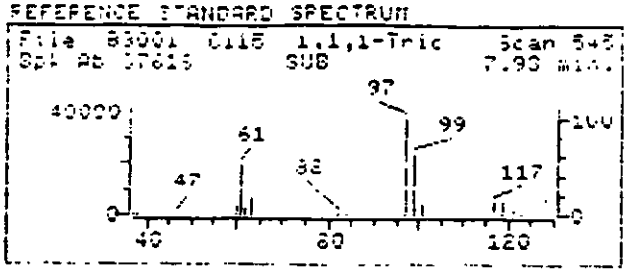




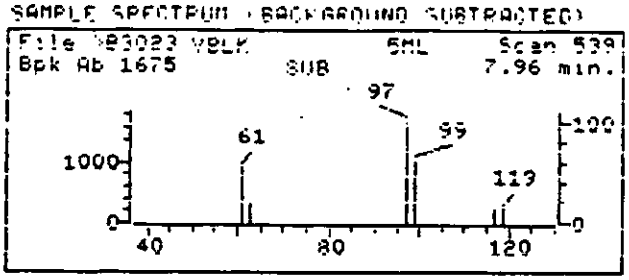
Data File: >B3023::D0 Quant Output File: ^B3023::QT
Name: VBLK04 5ML
Misc: V2 CH# 16 5ULIS
Quant Time: 911016 11:54 Quant ID File: VOAID2::$$
Injected at: 911016 11:24 Last Calibration: 911016 11:13

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 472
Retention Time: 7.18 min.
Quant Ion: 43.0
Area: 9452
Concentration: 3.96 UG/L
q-value: 96

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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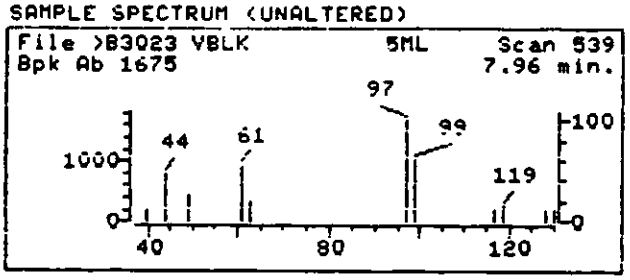

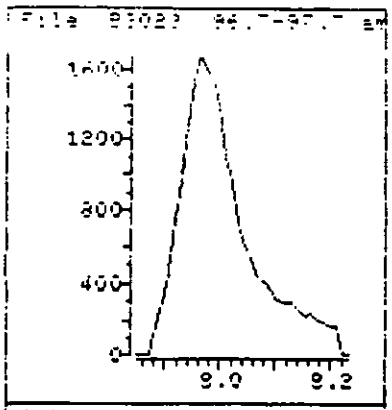

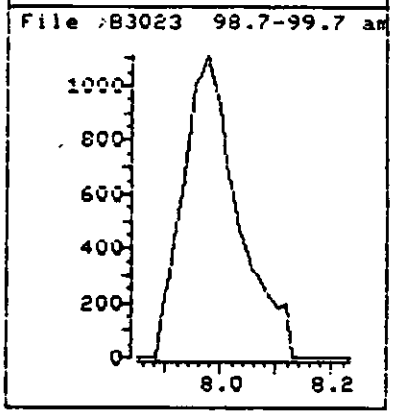

Data File: >B3023::DU
Name: VBLK 04 5ML
Misc: V2 CH# 16 5ULIS
Quant Time: 911016 11:54
Injected at: 911016 11:24

Quant Output File: ^B3023::QT
Quant ID File: VOA102::$$
Last Calibration: 911016 11:13

Compound No: 19
Compound Name: C115 1,1,1-Trichloroethane
Scan Number: 539
Retention Time: 7.96 min.
Quant Ion: 97.0
Area: 13392
Concentration: 2.27 UG/L
q-value: 90

Data Reduced by : JP Date: 10/16/91
Data Reviewed by : [illegible] Date: 10/17/91 Data File: b/ULS

Enseco TIC Report (page 1)

Sample: UBLK04 5ML
Conditions: V2 CH# 16 5ULIS

Run Factor: 1.00
Analyst: NURA

# Scan	U	D	Concentration In Sample (UG/L)	CAS #	Compound

no unknowns

Versar Laboratories

ANALYTICAL DATA PACKAGE
General Chemistry Section

CLIENT: ENSECO-ERCO LAB
SITE: PROJ# 10147
CODE-BATCH: ERCO - 8
CONTROL #: 5620
DATE: 22-OCT-91
ANALYSIS: TOC

Versar Laboratories

ANALYTICAL NARRATIVE
General Chemistry Section

DATE: 22-OCT-91
CODE/CONTROL: ERCO / 5620
CLIENT/SITE: ENSECO-ERCO LAB / PROJ# 10147
PROJECT/BATCH: 420.2 / 8

This task consisted of two soil samples which were analyzed for total organic carbon (TOC) using a Perkin-Elmer Elemental Analyzer, model #2400. Prior to analysis, air-dried sample aliquots were acidified and heated to remove inorganic carbon. Sample results have been reported on an oven-dried basis.

Samples were received October 9, 1991 and were analyzed October 21. No analytical or quality assurance problems were encountered. Check standard recoveries were within acceptable limits, and blank results were below method detection limits. Duplicate and spike analyses were not required.

Release of this data has been authorized by laboratory management.

Sincerely,

Melanie J Dillman

Melanie J. Dillman
General Chemistry Section

C. Thompson

Approved for Release
Chris Thompson, Section Chief

Versar Laboratories

ANALYSIS REPORT
General Inorganic Chemistry Section

DATE: 22-OCT-91 PAGE: 1
CODE / CONTROL #: ERCO / 5620
CLIENT / SITE: ENSECO-ERCO LAB / PROJ# 10147
PROJECT / BATCH: 420.2.0 / 8

Lab#	Field #	TOC (mg/kg)		
63659	UCC-SB-B-19-4	1,100.		
63660	UCC-SB-A-12-4C	3,450.		

C. Thompson
Laboratory Manager

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Versar Laboratories

QUALITY ASSURANCE REPORT
General Inorganic Chemistry Section

DATE: 22-OCT-91
CONTROL #: 5620
CODE / BATCH: ERCO / 8
CLIENT / SITE: ENSECO-ERCO LAB / PROJ# 10147
JOB NUMBER: 420.2.0

TOC

BLANK ANALYSIS / METHOD DETECTION LIMIT

QC Name	QC Type	Result	Units
CALIBRATION BLANK	CB1	<100	mg/kg
DETECTION LIMIT	MDL1	100	mg/kg
REAGENT BLANK	RB1	<100	mg/kg

INITIAL CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	ICV1	470500	460000	98%	mg/kg

CONTINUING CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	CCV1	470500	466000	99%	mg/kg

4