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 3 OF 23

APPENDIX D

SOIL CHEMICAL DATA SUMMARY

APPENDIX D-1

PRE-TEST SOIL CHEMICAL DATA

Enseco
A CORNING Company

October 24, 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 09/30/91). This project was received at Enseco - Erco Laboratory on September 30, 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 010041 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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-D-02-004

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2871

Level: (low/med) MED Date Received: 08/30/90

% Moisture: not dec. 12 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	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	710	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-02-6	trans-1,3-Dichloropropene	710	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	810	
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	150	J
100-42-5	Styrene	710	U
1330-20-7	Xylene (total)	700	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-D-02-004

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2871

Level: (low/med) MED Date Received: 08/30/90

% Moisture: not dec. 12 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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-18-003

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2872

Level: (low/med) MED Date Received: 08/30/91

% Moisture: not dec. 12 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	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	3	BJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-02-6	trans-1,3-Dichloropropene	710	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	710	U
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	710	U
100-42-5	Styrene	710	U
1330-20-7	Xylene (total)	33	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-18-003

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2872

Level: (low/med) MED Date Received: 08/30/91

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

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	17.45	30	J
2.		UNKNOWN	20.58	43	J
3.		UNKNOWN	21.07	16	J
4.		UNKNOWN	21.24	14	J
5.		UNKNOWN ALKANE	21.48	24	J
6.	124-18-5	DECANE	21.80	130	J
7.		UNKNOWN ALKANE	22.78	51	J
8.		UNKNOWN ALKANE	23.59	37	J
9.		UNKNOWN	24.22	14	J
10.		C10H18 ISOMER	25.03	29	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

9-27-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10041-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2689

Level: (low/med) LOW Date Received: 08/30/91

% Moisture: not dec. _____ Date Analyzed: 10/02/91

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	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.

9-27-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10041-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2689

Level: (low/med) LOW Date Received: 08/30/91

% Moisture: not dec. _____ Date Analyzed: 10/02/91

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2688

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

% Moisture: not dec. _____ Date Analyzed: 10/01/91

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	1	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.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2688

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

% Moisture: not dec. _____ Date Analyzed: 10/01/91

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

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.: VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

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

Versar Laboratories INC.

ANALYSIS REPORT
General Inorganic Chemistry Section

DATE: 14-OCT-91 PAGE: 1
CODE / CONTROL #: ERCO / 5582
CLIENT / SITE: ENSECO-ERCO LAB / PO 10041
PROJECT / BATCH: 420.2.0 / 5

Lab#	Field #	TOC (mg/kg)		
63252	10041-01	6,460.		
63253	10041-02	605.		

C. Thompson
Laboratory Manager

000118

Versar Laboratories INC.

QUALITY ASSURANCE REPORT
General Inorganic Chemistry Section

DATE: 14-OCT-91
CONTROL #: 5582
CODE / BATCH: ERCO / 5
CLIENT / SITE: ENSECO-ERCO LAB / PO 10041
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	480000	102%	mg/kg

CONTINUING CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	CCV1	470500	469000	100%	mg/kg

Enseco
A Corning Company

DELIVERABLES INDEX

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analysis 09/30/91
Erco Project Number: 010041

Enseco
A Corning Company

DELIVERABLES INDEX (Cont.)

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analysis 09/30/91
Erco Project Number: 010041

NA=Not applicable

Enseco
A Corning Company

October 24, 1991

Case Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analysis 09/30/91
Erco Project No.: 010041

1. This case consists of the results for samples that were received at Enseco - Erco Laboratory on September 30, 1991. Please see the sample description information sheet for a list of samples.

2. Temperature of cooler was 11.0° C.
   Bottles were not broken in transit.
   Bottles were properly labeled.
   Samples agree with the chain-of-custody.
   Samples were preserved properly.
   Voa vials were preserved properly.

Versar Laboratories INC.

ANALYTICAL NARRATIVE
General Chemistry Section

DATE: 14-OCT-91
CODE/CONTROL: ERCO / 5582
CLIENT/SITE: ENSECO-ERCO LAB / PO 10041
PROJECT/BATCH: 420.2 / 5

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 1, 1991 and were analyzed October 8. 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
General Chemistry Section

M. Dillman for C. Thompson
Approved for Release
Chris Thompson, Section Chief

Enseco
A Corning Company

SAMPLE DESCRIPTION INFORMATION
for
Balsam Environmental Consultants, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
010041-0001-SA	UCC-SB-B-18-004	SOIL	26 SEP 91	16:15	30 SEP 91
010041-0002-SA	UCC-SB-D-01-003	SOIL	27 SEP 91	14:05	30 SEP 91
010041-0003-SA	UCC-SB-D-02-004	SOIL	27 SEP 91	14:05	30 SEP 91
010041-0004-SA	UCC-SB-B-18-003	SOIL	26 SEP 91	16:00	30 SEP 91
010041-0005-SA	UCC-9/27-QA1	AQUEOUS	24 SEP 91		30 SEP 91

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.

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.

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

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

CHAIN-OF-CUSTODY RECORD

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

PROJECT NUMBER: 6437 T6

PROJECT NAME:

SAMPLER(S) SIGNATURE(S): Debra Sulker

SEND REPORT TO: John 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-18-004		9/26	415	Soil	X		ice	no	8oml	1							X	
UCC-SB-D-01-003		9/27	205	↓	X		↓	↓	250ml	1							X	
UCC-SB-D-02-004		9/27	205	↓	X		↓	↓	40ml	3	X							
UCC-SB-B-18-003		9/26	400	↓	X		↓	↓	40ml	3	X							
UCC-9/27-9A1		9/24	—	water	X		ice	no	40ml	2	X							

Normal TAT
CLP per John O'Donnell 9/30/91 MMSE

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
Debra Sulker	9/28/91	12:00			
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY:	DATE:	TIME:
			James H. Brude III	9/30/91	09:00

METHOD OF SHIPMENT: Federal Express

AIRBILL (OR SHIPPING INVOICE) NUMBER: 3245364426

000008

JSTODY

A Corning Company

PAGE 1 OF 1

CSCar

EXPORT ID	ANALYTICAL REQUESTS: TOC-Soil	SAMPLE CONDITION UPON RECEIPT	COMMENTS
10041-01	L		UCC-SB-B-18-004
-02	L		UCC-SB-D-01-003

SEND RESULTS TO:

Enco Laboratory

ATTENTION: Mary Ford

600009

TEST PRICE	
SUBTOTAL	
DISCOUNT / SURCHARGE	
TOTAL	

WRITTEN RESULTS REQUIRED BY (DATE)

VERBAL/FAC RESULTS REQUIRED BY (DATE)

P.O. No. 10041

Q.C. ☐ STANDARD ENSECO ☒ CLP PROTOCOL ☐ PROJECT SPECIFIC

SAMPLE DISPOSAL ☐ ENSECO ☐ RETURN TO CLIENT ☐ PHONE

DETECTION LIMITS ☐ COMMON PRODUCTS ☒ OTHER* CLP

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 Mary B. Ford DATE / TIME 9/30/91 1200

RECEIVED Dann Murphy DATE / TIME 10-1-91 10[illegible]

ENS—1109

IMPORT COPY

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
010036	MK 9/28/91					UT 9/28/91			
010037	SA 9/30/91	SVK 10/01/91 1-9	KLK 10/1/91 1-9				00 9/30		
010038	SA 9/30/91	SVK 10/01/91 1-6	KLK 10-1-91 14				00 9/30		
010039	SHB 9/30/91							KC 9/30/91	
010040	SHB 9/30/91	TF					00 9/30		
[redacted]	SHB 9/30/91							P 10/1/91	M.B 10/1
010042									
010043									
010044									
010045									
010046									
010047									
010048									
010049									
010050	SHB 9/30				OM 10/1/91		OW 10-1-91		
010051									
010052									
010053									
010054	SHB 10/1						OW 10-1-91		
010055	ALF 10/1/91						00 10/1		
010056									
010057									

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

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.: 10041 SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	9-27-QA1	98	95	109	0	0
02	VBLK01	96	96	101	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.: 10041 SAS No.: _____ SDG No.: _____

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	SB-B-18-003	102	100	103	0	0
02	SB-D-02-004	109	111	109	0	0
03	VBLK02	101	101	106	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.: 10041 SAS No.: _____ SDG No.: _____

Lab File ID: F2688 Lab Sample ID: BLANK01

Date Analyzed: 10/01/91 Time Analyzed: 2337

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	9-27-QA1	10041-05	F2689	0009

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Lab File ID: F2870 Lab Sample ID: BLANK02

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-18-003	10041-04	F2872	1623
02	SB-D-02-004	10041-03	F2871	1551

COMMENTS:

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 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.: 10041 SAS No.: _____ SDG No.: _____

Lab File ID: F2680 BFB Injection Date: 10/01/91

Instrument ID: V6 BFB Injection Time: 1713

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	21.5
75	30.0 - 60.0% of mass 95	45.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	76.3
175	5.0 - 9.0% of mass 174	6.0 (7.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	74.2 (97.3)1
177	5.0 - 9.0% of mass 176	4.8 (6.5)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	F2682	10/01/91	1855
02	VBLK01	BLANK01	F2688	10/01/91	2337
03	9-27-QA1	10041-05	F2689	10/02/91	0009

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 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	VBLK02	BLANK02	F2870	10/10/91	1428
03	SB-D-02-004	10041-03	F2871	10/10/91	1551
04	SB-B-18-003	10041-04	F2872	10/10/91	1623

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2682 Date Analyzed: 10/01/91

Instrument ID: V6 Time Analyzed: 1855

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	76900	7.26	389000	9.15	294000	16.31
	UPPER LIMIT	153800		778000		588000	
	LOWER LIMIT	38450		194500		147000	
	EPA SAMPLE NO.						
01	9-27-QA1	72900	7.19	417000	9.08	318000	16.26
02	VBLK01	69900	7.22	405000	9.09	313000	16.28

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.: 10041 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-18-003	90100	7.30	508913	9.20	382751	16.40
02	SB-D-02-004	86100	7.36	472000	9.27	369000	9.27
03	VBLK02	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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-D-02-004

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2871

Level: (low/med) MED Date Received: 08/30/90

% Moisture: not dec. 12 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	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	710	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-02-6	trans-1,3-Dichloropropene	710	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	810	
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	150	J
100-42-5	Styrene	710	U
1330-20-7	Xylene (total)	700	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-D-02-004

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-03

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2871

Level: (low/med) MED Date Received: 08/30/90

% Moisture: not dec. 12 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

8240-S L-100791-V6A >F2870
NC R-101091-V6A meCl2

Reduced by : TRJ Date: 101091 Data File: >F2871
Reviewed by: MB Date: 101191 Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BAL. 10041-3 100ULX✓
Misc : V6, CH#01, 5UL MED IS, EXT=4.01/10ML 10/09, UCC-SB-D-02-004
Injected : 10/10/91 15:51 Units: UG/KG
Analyst: KERYLYNN✓ Run Factor: 125.000✓
ID File: MOBID6✓ Surrogate vol: .500
Quant list threshold: 1.00

Surrogate Spike Recoveries no unknowns

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	25.00	27.21	109	70 121
CS05 D8-Toluene	25.00	27.36	109 ✓	81 117
CS10 Bromofluorobenzene	25.00	27.74	111	74 121

Target Compounds: MOBID6

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: >F2871 Page: 2
Sample: BAL. 10041-3 100ULX.

Scan #	Concentration Quant list UG/L	Concentration Sample UG/KG		Compound
		BDL		C155 Dibromochloromethane
		BDL		C180 Bromoform
		BDL		C205 4-Methyl-2-pentanone
929	5.714	710		C230 Toluene
		BDL		C210 2-Hexanone
		BDL		C220 Tetrachloroethene
		BDL		C235 Chlorobenzene
1291	1.027	130	J	C240 Ethylbenzene
1319	3.357	~~420~~	NR	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)
	4.94	BDL		C250 Xylenes (total)
		617.5	J	

TRJ 101091 MB 10/11/91

Diagnostic Quant Report

Data File: >F2871::D6 Injected at: 15:51 10/10/91
Quant'd : 16:18 10/10/91
ID File : MOBID6::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.26	7.36	.09	128.0	86149	1.0000	50.00
2)	C010 Chloromethane	2.72	0.00	--	50.0	0	1.1732	0.00
3)	C020 Vinyl Chloride	2.87	0.00	--	62.0	0	1.0243	0.00
4)	C015 Bromomethane	3.26	0.00	--	94.0	0	.8064	0.00
5)	C025 Chloroethane	3.39	0.00	--	64.0	0	.4830	0.00
6)	C045 1,1-Dichloroethene	4.38	0.00	--	96.0	0	1.2352	0.00
7)	C035 Acetone	4.47	0.00	--	43.0	0	.2076	0.00
8)	C040 Carbon Disulfide	4.68	0.00	--	76.0	0	3.6934	0.00
9)	C030 Methylene Chloride	5.02	5.00	.02	84.0	1547	1.7398	.52
10)	CXXX Tert-butyl alcohol	5.18	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.41	0.00	--	96.0	0	1.6583	0.00
12)	C055 Cis-1,2-dichloroethe	6.95	0.00	--	96.0	0	1.7907	0.00
13)	CXXX Methyl tert-butyl et	5.43	0.00	--	73.0	0	3.1722	0.00
14)	C050 1,1-Dichloroethane	6.03	0.00	--	63.0	0	3.2420	0.00
15)	C060 Chloroform	7.50	0.00	--	83.0	0	3.6056	0.00
16)	C065 1,2-Dichloroethane	8.55	0.00	--	62.0	0	2.1656	0.00
17)	C110 2-Butanone	6.97	0.00	--	72.0	0	.1151	0.00
18)	CS15 D4-1,2-dichloroethan	8.41	8.40	.00	65.0	159238	1.6984	54.42
19)	*CI10 1,4-Difluorobenzene	9.15	9.27	.11	114.0	471552	1.0000	50.00
20)	C125 Vinyl Acetate	6.10	0.00	--	43.0	0	.6092	0.00
21)	C115 1,1,1-Trichloroethan	7.83	0.00	--	97.0	0	.5475	0.00
22)	C120 Carbon Tetrachloride	8.12	0.00	--	117.0	0	.4487	0.00
23)	C165 Benzene	8.51	0.00	--	78.0	0	.9682	0.00
24)	C150 Trichloroethene	9.81	0.00	--	130.0	0	.3931	0.00
25)	C140 1,2-Dichloropropane	10.28	0.00	--	63.0	0	.3949	0.00
26)	C130 Bromodichloromethane	10.92	0.00	--	83.0	0	.5930	0.00
27)	C175 2-Chloroethylvinylet	11.65	0.00	--	63.0	0	.1765	0.00
28)	C143 Cis-1,3-Dichloroprop	11.97	0.00	--	75.0	0	.5817	0.00
29)	C172 Trans-1,3-dichloropr	13.40	0.00	--	75.0	0	.4559	0.00
30)	C160 1,1,2-Trichloroethan	13.87	0.00	--	97.0	0	.3107	0.00
31)	C155 Dibromochloromethane	14.93	0.00	--	129.0	0	.4736	0.00
32)	C180 Bromoform	19.19	0.00	--	173.0	0	.2745	0.00
33)	*CI20 D5-Chlorobenzene	16.37	16.51	.13	117.0	369425	1.0000	50.00
34)	CS05 D8-Toluene	12.57	12.60	.02	98.0	515254	1.2743	54.72
35)	C205 4-Methyl-2-pentanone	12.33	0.00	--	43.0	0	.3539	0.00
36)	C230 Toluene	12.74	12.77	.03	92.0	35939	.8513	5.71
37)	C210 2-Hexanone	14.55	0.00	--	43.0	0	.2308	0.00
38)	C220 Tetrachloroethene	14.16	0.00	--	164.0	0	.4399	0.00
39)	C235 Chlorobenzene	16.58	0.00	--	112.0	0	1.0207	0.00
40)	C240 Ethylbenzene	16.97	16.98	.02	106.0	3895	.5133	1.03
40)D	C240 Ethylbenzene	16.97	17.31	.35	106.0	16522	.5133	4.36
41)D	CXXX Xylenes (p)	17.34	16.98	.36	106.0	3895	.6661	.79
41)	CXXX Xylenes (p)	17.34	17.31	-.03	106.0	16522	.6661	3.36
42)	CXXX Xylenes (o)	18.53	18.52	.01	106.0	3426	.6234	.74
43)	C245 Styrene	18.58	0.00	--	104.0	0	1.1017	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.78	0.00	--	83.0	0	.6460	0.00
45)	CS10 Bromofluorobenzene	20.20	20.17	.02	95.0	297390	.7254	55.49
46)	C335 Dichlorobenzene (m)	23.79	0.00	--	146.0	0	.8993	

49)D	C250	Xylenes (total)	18.53	18.76	1.22	106.0	2246	.6105	.90
49)D	C250	Xylenes (total)	18.53	17.31	1.22	106.0	16524	.6105	3.66
49)D	C250	Xylenes (total)	18.53	18.52	.01	106.0	3427	.6105	.76
49)	C250	Xylenes (total)	18.53	18.57	.04	106.0	1178	.6105	.26

* - Compound is an Internal Standard
D - Compound Qdel'ed

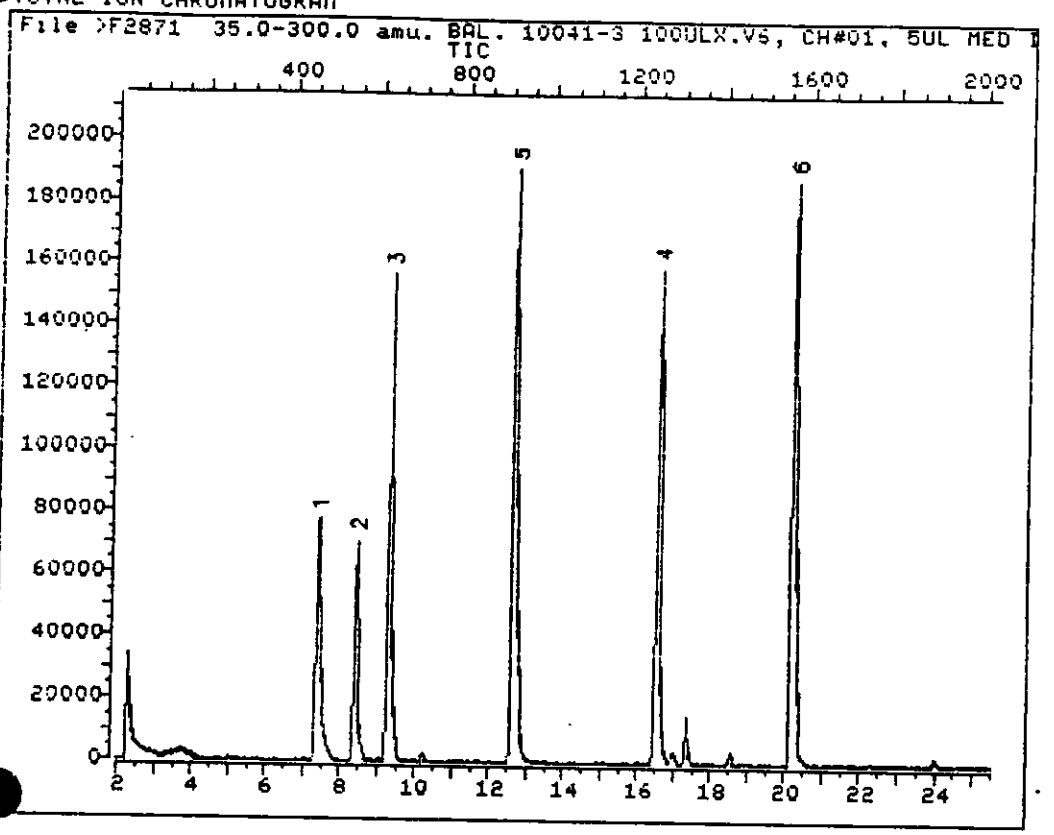
Internal Standard Comparison

Sample: >F2871 Date injected: 10/10/91 Standard: >F2866

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	86149	76639	112.4
CI10 1,4-Difluorobenzene	471552	407218	115.8
CI20 D5-Chlorobenzene	369425	313165	118.0

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

TOTAL ION CHROMATOGRAM



Data File: >F2871::D6 Quant Output File: ^F2871::D7
Name: BAL. 10041-3 100ULX. Instrument ID: V6
Misc: V6, CH#01, 5UL MED IS, EXT=4.01/10ML 10/09, UCC-SB-D-0

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 16:18
Injected at: 911010 15:51

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911010 16:18
Output File: ^F2871::D7 Injected at: 911010 15:51
Data File: >F2871::D6 Dilution Factor: 1.00000
Name: BAL. 10041-3 100ULX. Instrument ID: V6
Misc: V6, CH#01, 5UL MED IS, EXT=4.01/10ML 10/09, UCC-SB-D-0

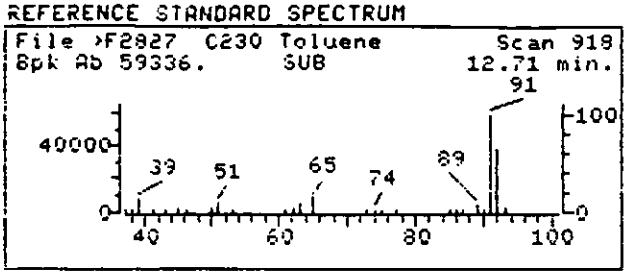
ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911010 11:03

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.36	128.0	86149	50.00	UG/L	70
9)	C030 Methylene Chloride	5.00	84.0	1547	.516	UG/L	73
18)	CS15 D4-1,2-dichloroethane	8.40	65.0	159238	54.42	UG/L	83
19)	*CI10 1,4-Difluorobenzene	9.27	114.0	471552	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.51	117.0	369425	50.00	UG/L	100
34)	CS05 D8-Toluene	12.60	98.0	515254	54.72	UG/L	97
36)	C230 Toluene	12.77	92.0	35939	5.71	UG/L	91
40)	C240 Ethylbenzene	16.98	106.0	3895	1.03	UG/L	94
41)	CXXX Xylenes (p)	17.31	106.0	16522	3.36	UG/L	99
[illegible])	CXXX Xylenes (o)	18.52	106.0	3426	.744	UG/L	80
[illegible])	CS10 Bromofluorobenzene	20.17	95.0	297390	55.49	UG/L	75
49)	C250 Xylenes (total)	17.31	106.0	22298M	4.94	UG/L	84

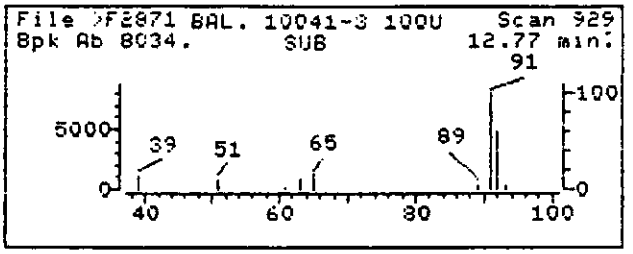
* Compound is ISTD

DBJ
101091

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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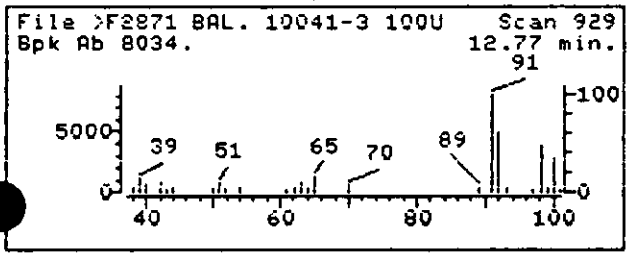
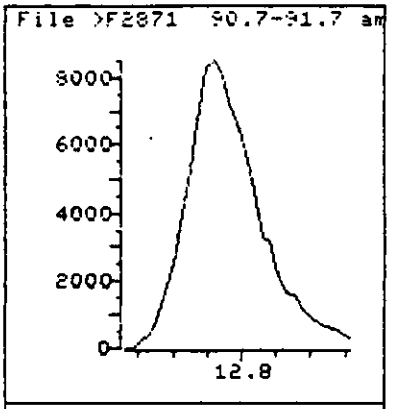
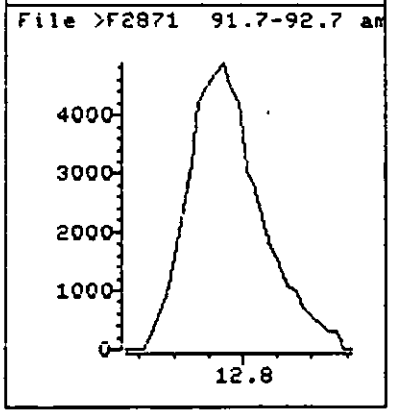




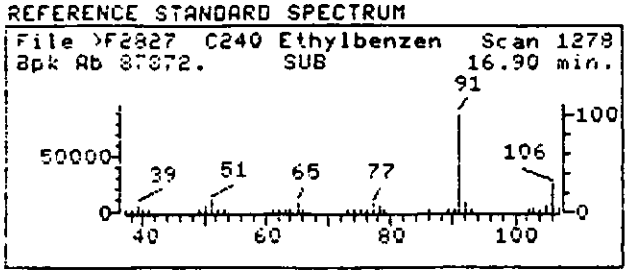


Data File: >F2871::D6 Quant Output File: ^F2871::D7
Name: BAL. 10041-3 100ULX. Instrument ID: V6
Misc: V6, CH#01, 5UL MED IS, EXT=4.01/10ML 10/09, UCC-SB-D-02-004
Quant Time: 911010 16:18 Quant ID File: MOBID6::MT
Injected at: 911010 15:51 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

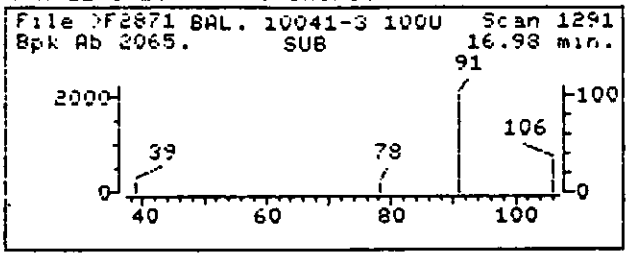
MB 10/11/91

Compound No : 36
Compound Name : C230 Toluene
Scan Number : 929
Retention Time: 12.77 min.
Quant Ion : 92.0
Area : 35939
Concentration : 5.71 UG/L
q-value : 91

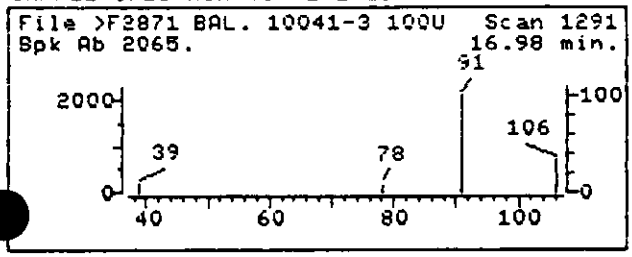
REFERENCE STANDARD SPECTRUM

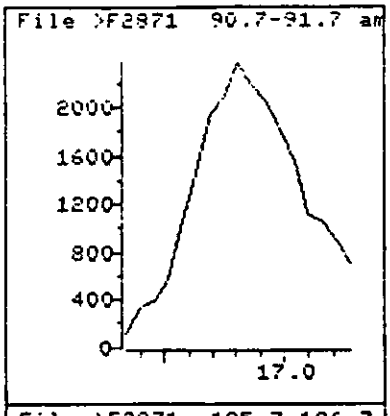


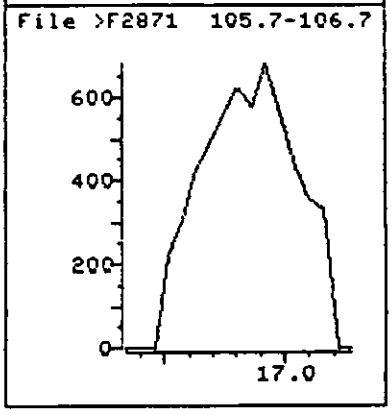
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



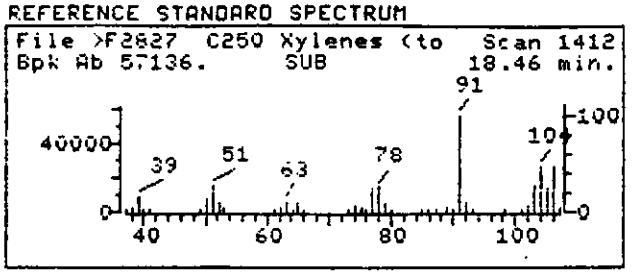




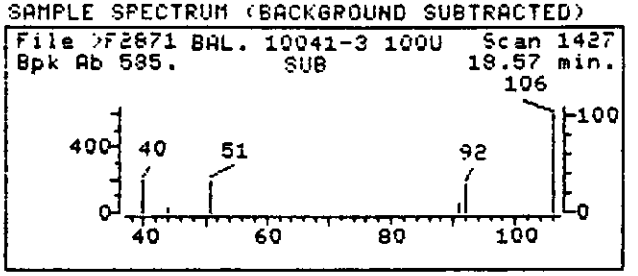
Data File: >F2871::D6 Quant Output File: ^F2871::D7
Name: BAL. 10041-3 100ULX. Instrument ID: V6
Misc: V6, CH#01, 5UL MED IS, EXT=4.01/10ML 10/09, UCC-SB-D-02-004
Quant Time: 911010 16:18 Quant ID File: MOBID6::MT
Injected at: 911010 15:51 Last Calibration: 910814 09:37 MB 10/11/91
Last Qcal Time: 911010 11:03

Compound No : 40
Compound Name : C240 Ethylbenzene
Scan Number : 1291
Retention Time: 16.98 min.
Quant Ion : 106.0
Area : 3895
Concentration : 1.03 UG/L ✓ checked
q-value : 94 MB 10/11/91

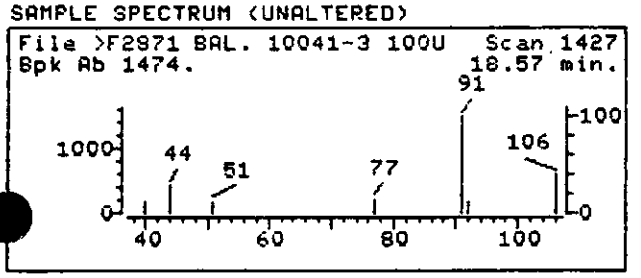
REFERENCE STANDARD SPECTRUM

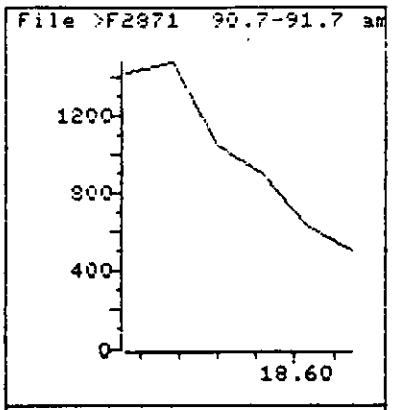


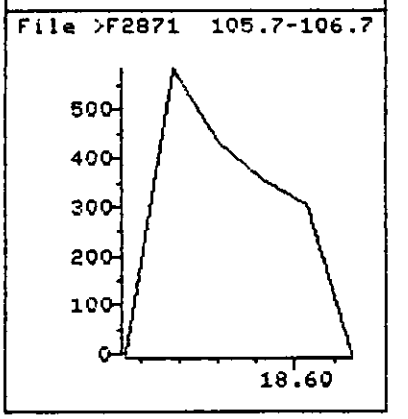
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2871::D6 Quant Output File: ^F2871::D7
Name: BAL. 10041-3 100ULX. Instrument ID: V6
Misc: V6, CH#01, 5UL MED IS, EXT=4.01/10ML 10/09, UCC-SB-D-02-004
Quant Time: 911010 16:18 Quant ID File: MOBID6::MT
Injected at: 911010 15:51 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

MB 10/11/91

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1427
Retention Time: 18.57 min.
Quant Ion : 106.0
Area : 1178
Concentration : .261 UG/L
q-value : 84

4.94 µG/L
DRJ 101091

Data Reduced by : TCJ Date: 101091 Data File: >F2871
Data Reviewed by : MB Date: 101191

Enseco TIC Report (page 1)

Sample: BAL. 10041-3 100ULX. Run Factor: 125.
Conditions: V6, CH#01, 5UL MED IS, EXT=4.0 Analyst: KERYLYNN

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

No Unk's

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-18-003

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2872

Level: (low/med) MED Date Received: 08/30/91

% Moisture: not dec. 12 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	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	3	BJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-02-6	trans-1,3-Dichloropropene	710	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	710	U
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	710	U
100-42-5	Styrene	710	U
1330-20-7	Xylene (total)	33	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-18-003

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10041-04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2872

Level: (low/med) MED Date Received: 08/30/91

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

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	17.45	30	J
2.		UNKNOWN	20.58	43	J
3.		UNKNOWN	21.07	16	J
4.		UNKNOWN	21.24	14	J
5.		UNKNOWN ALKANE	21.48	24	J
6.	124-18-5	DECANE	21.80	130	J
7.		UNKNOWN ALKANE	22.78	51	J
8.		UNKNOWN ALKANE	23.59	37	J
9.		UNKNOWN	24.22	14	J
10.		C10H18 ISOMER	25.03	29	J

* - Compound is an Internal Standard
D - Compound Qdel'ed

8240-> NC

>F2870 MeCl2

Produced by : DW Date: 101091
Reviewed by: MB Date: 101191

Data File: >F2872
Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BAL. 10041-4 100ULX. ✓
Misc : V6, CH#02, 5UL MED IS, EXT=3.95/10ML 10/10, UCC-SB-B-18-003
Injected : 10/10/91 16:23
Analyst: KERYLYNN
ID File: MOBID6 ✓
Quant list threshold: 1.00

Units: UG/KG
Run Factor: 127.000 ✓
Surrogate vol: .500

Surrogate Spike Recoveries

Unknowns present

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	25.00	25.72	103	70 121
CS05 D8-Toluene	25.00	25.51	102 ✓	81 117
CS10 Bromofluorobenzene	25.00	24.95	99.8	74 121

Target Compounds: MOBID6

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
256	2.242	280	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: >F2872 Page: 2
Sample: BAL. 10041-4 100ULX.

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
1305	1.209	~~150~~ 210	C240 Ethylbenzene
		BDL	CXXX Xylenes (p)
1408	26.948	3400	CXXX Xylenes (o)
		BDL	C245 Styrene
1594	4.467	~~570~~ 560	C225 1,1,2,2-Tetrachloroethane
		BDL	C335 Dichlorobenzene (m)
		BDL	C340 Dichlorobenzene (p)
		BDL	C350 Dichlorobenzene (o)
1408	~~27.416~~ 28.71	~~3900~~ 3646.17	C250 Xylenes (total)

MB 10/11/91 for RJ 101091

Diagnostic Quant Report

Data File: >F2872::D6 Injected at: 16:23 10/10/91
Quant'd : 16:51 10/10/91
ID File : MOBID6::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.26	7.30	.03	128.0	90134	1.0000	50.00
2)	C010 Chloromethane	2.70	0.00	--	50.0	0	1.1732	0.00
3)	C020 Vinyl Chloride	2.85	0.00	--	62.0	0	1.0243	0.00
4)	C015 Bromomethane	3.24	0.00	--	94.0	0	.8064	0.00
5)	C025 Chloroethane	3.36	0.00	--	64.0	0	.4830	0.00
6)	C045 1,1-Dichloroethene	4.35	0.00	--	96.0	0	1.2352	0.00
7)	C035 Acetone	4.43	0.00	--	43.0	0	.2076	0.00
8)	C040 Carbon Disulfide	4.64	4.62	.02	76.0	2135	3.6934	.32
9)	C030 Methylene Chloride	4.98	4.98	.00	84.0	7031	1.7398	2.24
10)	CXXX Tert-butyl alcohol	5.14	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.37	0.00	--	96.0	0	1.6583	0.00
12)	C055 Cis-1,2-dichloroethe	6.90	0.00	--	96.0	0	1.7907	0.00
13)	CXXX Methyl tert-butyl et	5.39	0.00	--	73.0	0	3.1722	0.00
14)	C050 1,1-Dichloroethane	5.99	0.00	--	63.0	0	3.2420	0.00
15)	C060 Chloroform	7.44	0.00	--	83.0	0	3.6056	0.00
16)	C065 1,2-Dichloroethane	8.48	0.00	--	62.0	0	2.1656	0.00
17)	C110 2-Butanone	6.91	0.00	--	72.0	0	.1151	0.00
18)	CS15 D4-1,2-dichloroethan	8.34	8.34	.01	65.0	157497	1.6984	51.44
19)	*CI10 1,4-Difluorobenzene	9.15	9.20	.05	114.0	508913	1.0000	50.00
20)	C125 Vinyl Acetate	6.06	0.00	--	43.0	0	.6092	0.00
21)	C115 1,1,1-Trichloroethan	7.77	0.00	--	97.0	0	.5475	0.00
22)	C120 Carbon Tetrachloride	8.06	0.00	--	117.0	0	.4487	0.00
23)	C165 Benzene	8.45	0.00	--	78.0	0	.9682	0.00
24)	C150 Trichloroethene	9.74	0.00	--	130.0	0	.3931	0.00
25)	C140 1,2-Dichloropropane	10.21	0.00	--	63.0	0	.3949	0.00
26)	C130 Bromodichloromethane	10.84	0.00	--	83.0	0	.5930	0.00
27)	C175 2-Chloroethylvinylet	11.56	0.00	--	63.0	0	.1765	0.00
28)	C143 Cis-1,3-Dichloroprop	11.88	0.00	--	75.0	0	.5817	0.00
29)	C172 Trans-1,3-dichloropr	13.30	0.00	--	75.0	0	.4559	0.00
30)	C160 1,1,2-Trichloroethan	13.77	0.00	--	97.0	0	.3107	0.00
31)	C155 Dibromochloromethane	14.82	0.00	--	129.0	0	.4736	0.00
32)	C180 Bromoform	19.05	0.00	--	173.0	0	.2745	0.00
33)	*CI20 D5-Chlorobenzene	16.37	16.40	.02	117.0	382751	1.0000	50.00
34)	CS05 D8-Toluene	12.49	12.51	.02	98.0	497714	1.2743	51.02
35)	C205 4-Methyl-2-pentanone	12.25	0.00	--	43.0	0	.3539	0.00
36)	C230 Toluene	12.65	0.00	--	92.0	0	.8513	0.00
37)	C210 2-Hexanone	14.45	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	16.85	17.20	.35	106.0	4752	.5133	1.21
41)	CXXX Xylenes (p)	17.23	17.20	.03	106.0	4752	.6661	.93
42)	CXXX Xylenes (o)	18.41	18.40	.00	106.0	128593	.6234	26.95
43)	C245 Styrene	18.45	18.41	.04	104.0	4968	1.1017	.59
44)	C225 1,1,2,2-Tetrachloroe	20.65	20.58	.07	83.0	21067	.6160	4.47
44)D	C225 1,1,2,2-Tetrachloroe	20.65	21.07	.42	83.0	2511	.6160	.53
45)	CS10 Bromofluorobenzene	20.06	20.06	.00	95.0	277131	.7254	49.91
46)	C335 Dichlorobenzene (m)	23.63	0.00	--	146.0	0	.8993	0.00
47)	C340 Dichlorobenzene (p)	23.95	0.00	--	146.0	0	.8234	0.00
48)	C350 Dichlorobenzene (o)	25.18	0.00	--	146.0	0	.8347	0.00
49)D	C250 Xylenes (total)	18.41	17.20	1.20	106.0	4487	.6105	.96

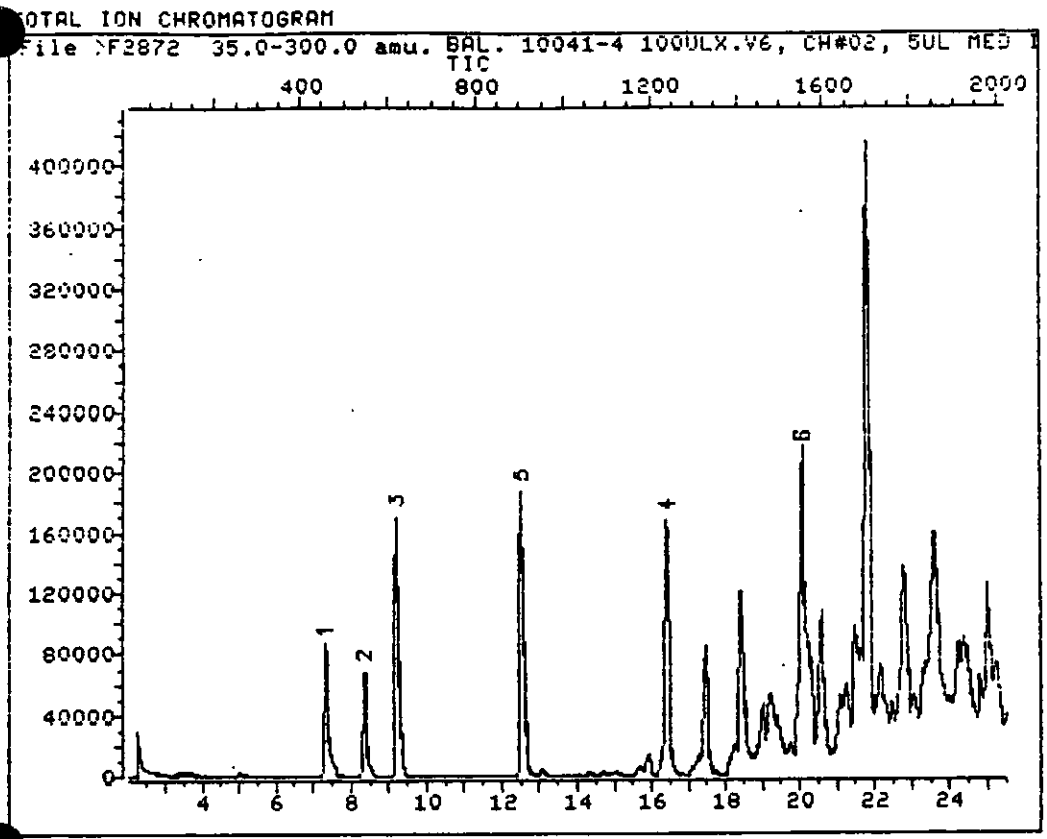
000039

Internal Standard Comparison

Sample: >F2872 Date injected: 10/10/91 Standard: >F2866

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	90134	76639	117.6
CI10 1,4-Difluorobenzene	508913	407218	125.0
CI20 D5-Chlorobenzene	382751	313165	122.2

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



Data File: >F2872::D6 Quant Output File: ^F2872::D7
Name: BAL. 10041-4 100ULX. Instrument ID: V6
Misc: V6, CH#02, 5UL MED IS, EXT=3.95/10ML 10/10, UCC-SB-B-1

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 16:51
Injected at: 911010 16:23

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911010 16:51
Output File: ^F2872::D7 Injected at: 911010 16:23
Data File: >F2872::D6 Dilution Factor: 1.00000
Name: BAL. 10041-4 100ULX. Instrument ID: V6
Misc: V6, CH#02, 5UL MED IS, EXT=3.95/10ML 10/10, UCC-SB-B-1

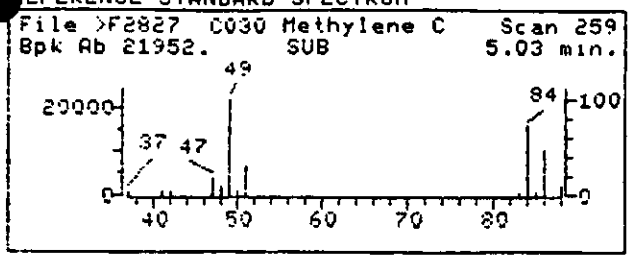
ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911010 11:03

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.30	128.0	90134	50.00	UG/L	69
8)	C040 Carbon Disulfide	4.62	76.0	2135	.321	UG/L	100
9)	C030 Methylene Chloride	4.98	84.0	7031	2.24	UG/L	82
18)	CS15 D4-1,2-dichloroethane	8.34	65.0	157497	51.44	UG/L	83
19)	*CI10 1,4-Difluorobenzene	9.20	114.0	508913	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.40	117.0	382751	50.00	UG/L	100
34)	CS05 D8-Toluene	12.51	98.0	497714	51.02	UG/L	96
40)	C240 Ethylbenzene	17.20	106.0	4752	1.21	UG/L	49
[illegible])	CXXX Xylenes (p)	17.20	106.0	4752	.932	UG/L	80
[illegible])	CXXX Xylenes (o)	18.40	106.0	128593	26.95	UG/L	98
43)	C245 Styrene	18.41	104.0	4968	.589	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane	20.58	83.0	21067	4.47	UG/L	56
45)	CS10 Bromofluorobenzene	20.06	95.0	277131	49.91	UG/L	68
49)	C250 Xylenes (total)	18.40	106.0	134190M	28.71	UG/L	93

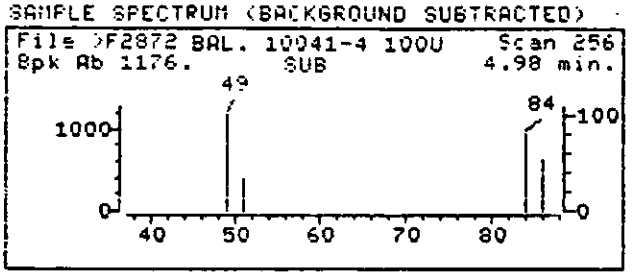
* Compound is ISTD

KL 101091

EFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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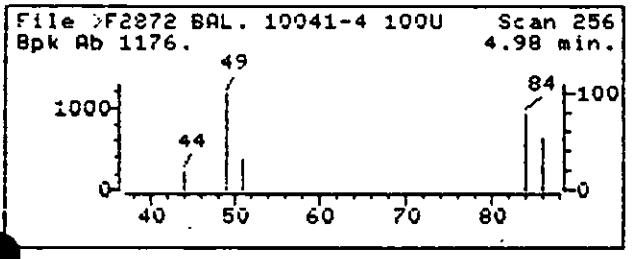
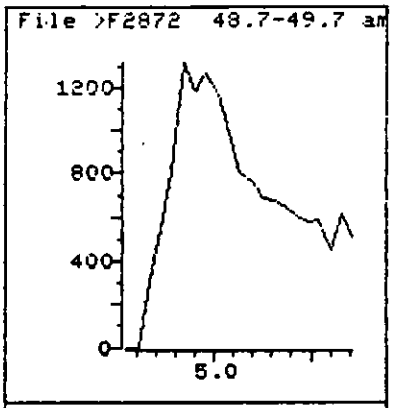
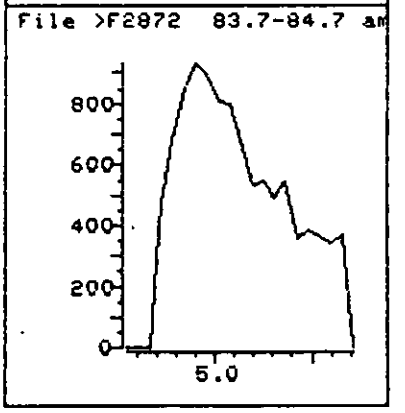


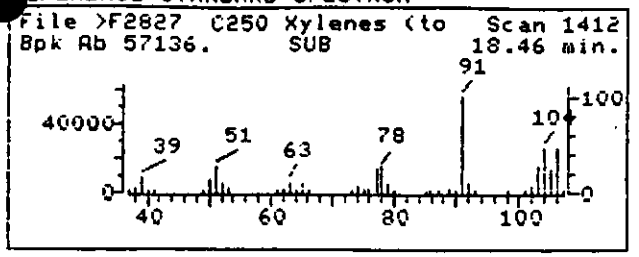




Data File: >F2872::D6 Quant Output File: ^F2872::D7
Name: BAL. 10041-4 100ULX. Instrument ID: V6
Misc: V6, CH#02, 5UL MED IS, EXT=3.95/10ML 10/10, UCC-SB-B-18-003
Quant Time: 911010 16:51 Quant ID File: MOBID6::MT
Injected at: 911010 16:23 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 256
Retention Time: 4.98 min.
Quant Ion : 84.0
Area : 7031
Concentration : 2.24 UG/L
q-value : 82

EFERENCE STANDARD SPECTRUM



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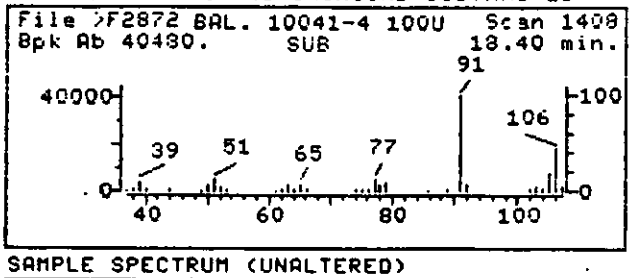
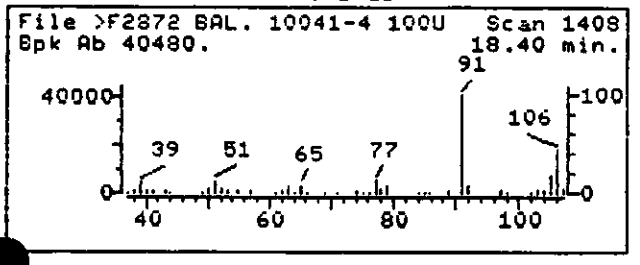
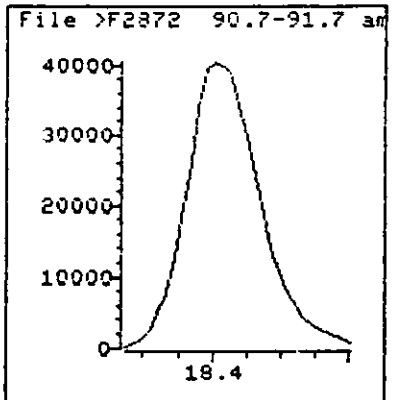
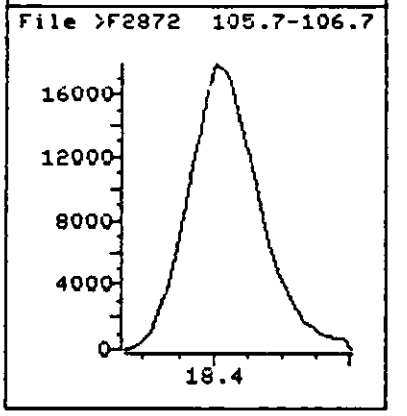


SAMPLE SPECTRUM (UNALTERED)







Data File: >F2872::D6 Quant Output File: ^F2872::D7
Name: BAL. 10041-4 100ULX. Instrument ID: V6
Misc: V6, CH#02, 5UL MED IS, EXT=3.95/10ML 10/10, UCC-SB-B-18-003
Quant Time: 911010 16:51 Quant ID File: MOBID6::MT MB 10/11/91
Injected at: 911010 16:23 Last Calibration: 910814 09:37
Last Qcal Time: 911010 11:03

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1408
Retention Time: 18.40 min.
Quant Ion : 106.0
Area : 128120
Concentration : 27.42 UG/L
q-value : 93

28.71 µg/L
DLV
10/09/91

Data Reduced by : DPJ Date: 101091
Data Reviewed by : MB Date: 101191

Data File: >F2872

Enseco TIC Report (page 1)

Sample: BAL. 10041-4 100ULX. Run Factor: 127.
Conditions: V6, CH#02, 5UL MED IS, EXT=3.9 Analyst: KERYLYNN

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	1326.			3400	111-84-2	Nonane Unk Alkane
2	1458.			1300.-	15869-94-0	Octane, 3,6-dimethyl- Unk Alkane
3	1477.			1500.-	1678-92-8	Cyclohexane, propyl- Unk Alkane
4	1594.			4900	15869-94-0	Octane, 3,6-dimethyl- Unk.
5	1636.			1800.	29053-04-1	Cyclopentane, 1-methyl-3-(2-methylpropyl)- Unknown Unk Alkane Unknown
6	1651.			1600	1119-14-8	1,4-Hexadiene, 2-methyl- C7H12 Isomer
7	1671.			2700	4291-79-6	Cyclohexane, 1-methyl-2-propyl- Unk Alkane
8	1682.			1500.-	16580-24-8	Cyclohexane, 1-methyl-3-(1-methylethyl)
9	1699.			15000	124-18-5	Decane Unk Alkane Unk Alkane
10	1727.			1400.-	29501-58-6	2-Pyrazoline, 1-butyl-5-methyl- Unk
11	1783.			5700	17302-28-2	Nonane, 2,6-dimethyl- Unknown alkane
12	1852.			4200	1678-98-4	Cyclohexane, (2-methylpropyl)- Unknown alka
13	1906.			1600	28372-88-4	Cyclopentanol, 2-chloro-, trans-
14	1928.			1400.-	17312-45-7	Decane, 3,4-dimethyl- Unknown NR
15	1974.			3200	91-17-8	Naphthalene, decahydro- $C_{10}H_{18}$ isomer

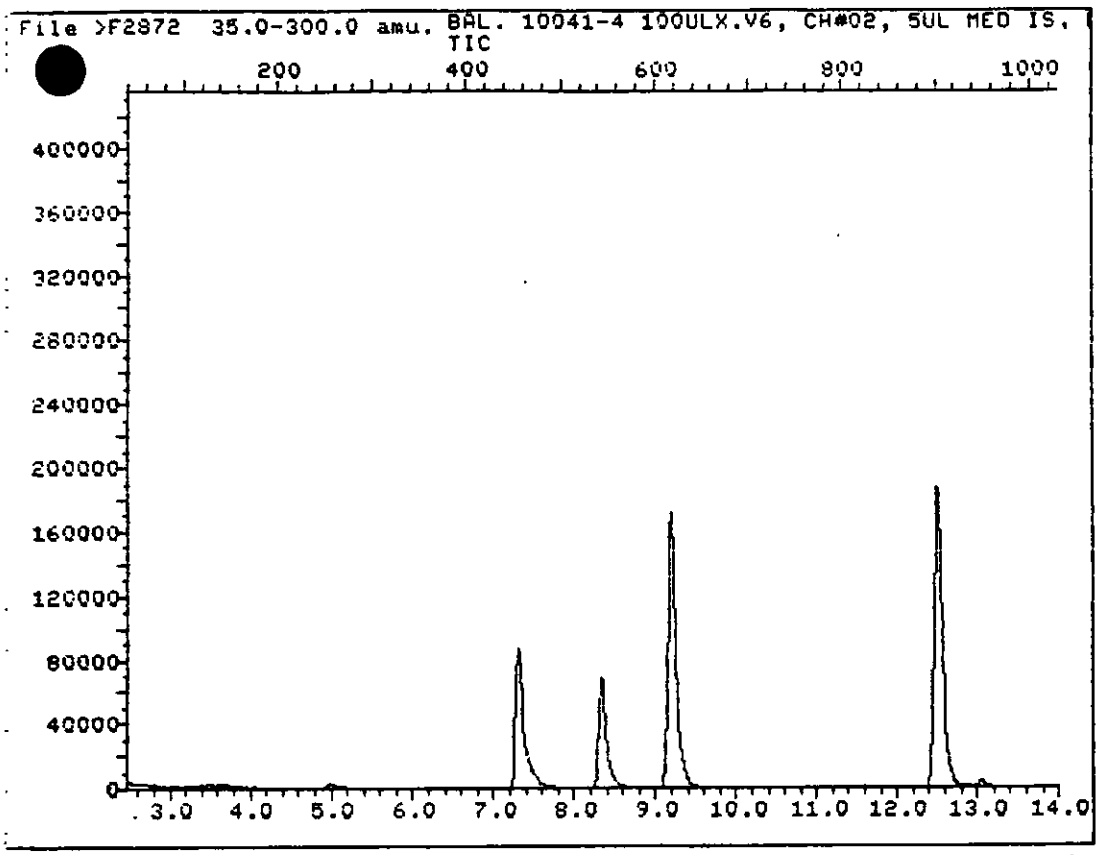
MB 10/11/91

Data File: >F2872

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	95	0	3	17.45	1.064	644698.	83638.	26.707
2	78	1	3	18.99	1.158	252505.	31967.	10.460
3	64	21	3	19.21	1.171	279155.	30331.	11.564
4	34	55	3	20.58	1.255	922262.	93970.	38.206
5	25	46	3	21.07	1.285	334365.	38317.	13.852
6	25	44	3	21.24	1.295	298327.	37746.	12.359
7	82	23	3	21.48	1.310	519898.	69653.	21.537
8	30	46	3	21.60	1.317	294581.	49232.	12.203
9	94	0	3	21.80	1.330	2839895.	377591.	117.646
10	20	53	3	22.13	1.349	264078.	31431.	10.940
11	88	3	3	22.78	1.389	1075925.	101228.	44.572
12	70	9	3	23.59	1.439	793141.	92060.	32.857
13	25	47	3	24.22	1.477	295107.	39385.	12.225
14	60	14	3	24.48	1.493	274977.	45367.	11.391
15	83	15	3	25.02	1.525	615451.	76438.	25.496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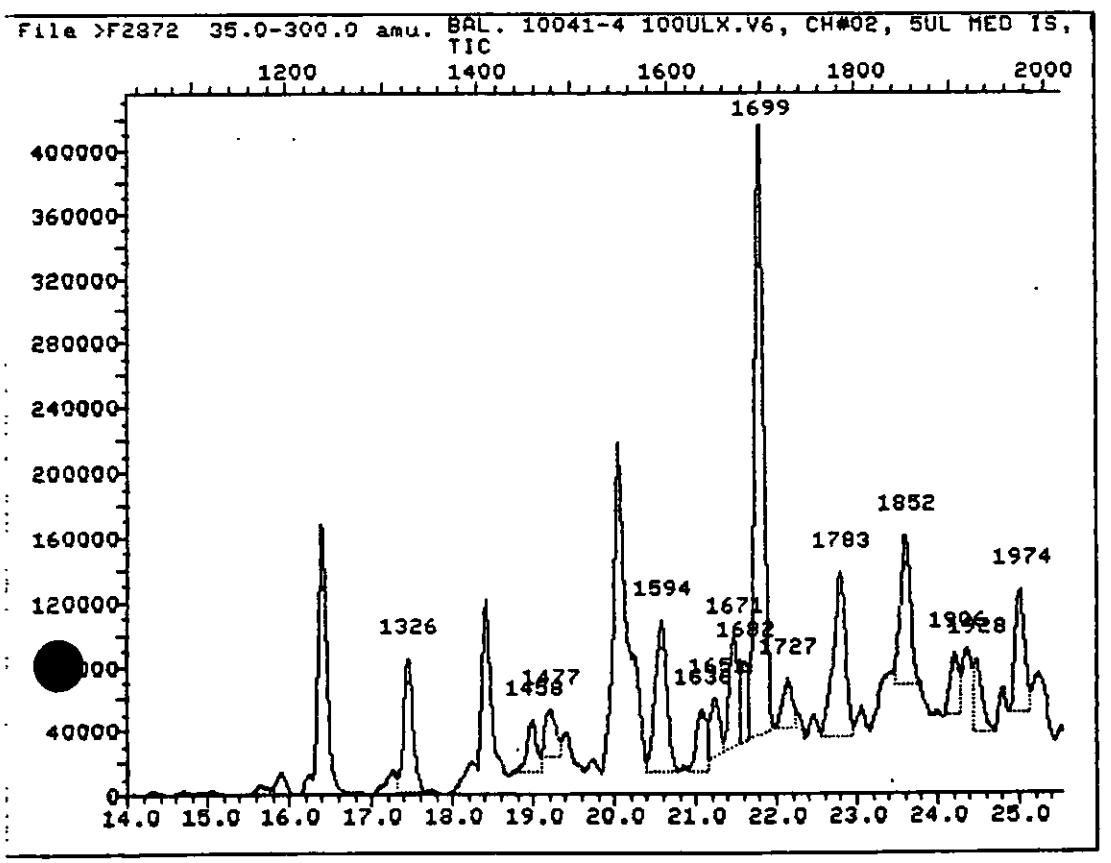
TIC
200
400
600
800
1000
400000
360000
320000
280000
240000
200000
160000
120000
80000
40000
0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0
14.0


File >F2872 35.0-300.0 amu. BAL. 10041-4 100ULX.V6, CH#02, 5UL MED IS,
TIC
1200
1400
1600
1800
2000
1699
400000
360000
320000
280000
240000
200000
160000
120000
40000
0
1852
1783
1974
1594
1326
1671
1682
1727
1638
1477
1458
14.0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0

TIC Internal Standard Report

Data File: >F2872

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	
455.	90134.	6.987	456.	623605.	99.019
2	CI10 1,4-Difluoroben	50.000	UG/L	Ok	
618.	508913.	2.300	618.	1159586.	99.078
3	CI20 D5-Chlorobenzen	50.000	UG/L	Ok	
1236.	382751.	3.615	1236.	1206962.	87.236

Deleting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 25
Number of peaks remaining: 25

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: 25
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

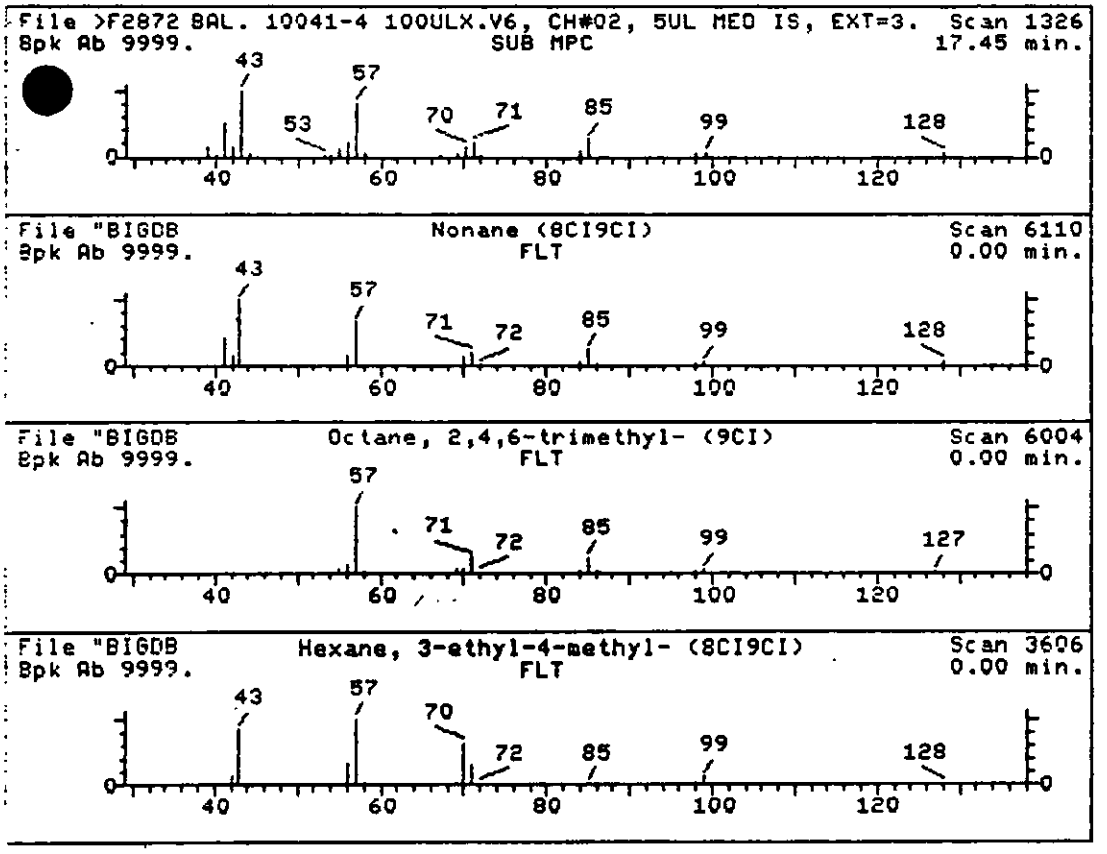
Unk alkane DLJ 101091

TIC NUMBER:1

1.	Nonane (8CI9CI)	128 C9H20
2.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
3.	Hexane, 3-ethyl-4-methyl- (8CI9CI)	128 C9H20
4.	Octane, 2,5,6-trimethyl- (9CI)	156 C11H24
5.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20
6.	Hexane, 2,3,4-trimethyl- (8CI9CI)	128 C9H20

Sample file: >F2872 Spectrum #: 1326
Search speed: 2 Tilting option: S No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	111842	6110	"BIGDB	83	13	1	0	98	0	72	93
2.	60	62016379	6004	"BIGDB	43	42	2	0	80	15	30	14
3.	53*	3074779	3606	"BIGDB	48	48	2	0	62	22	22	25
4.	42	62016142	6003	"BIGDB	41	46	2	0	71	25	17	13
5.	40*	2213232	5920	"BIGDB	54	38	1	0	77	49	12	41
6.	40*	921471	5917	"BIGDB	52	38	1	0	70	49	12	41



Unk's

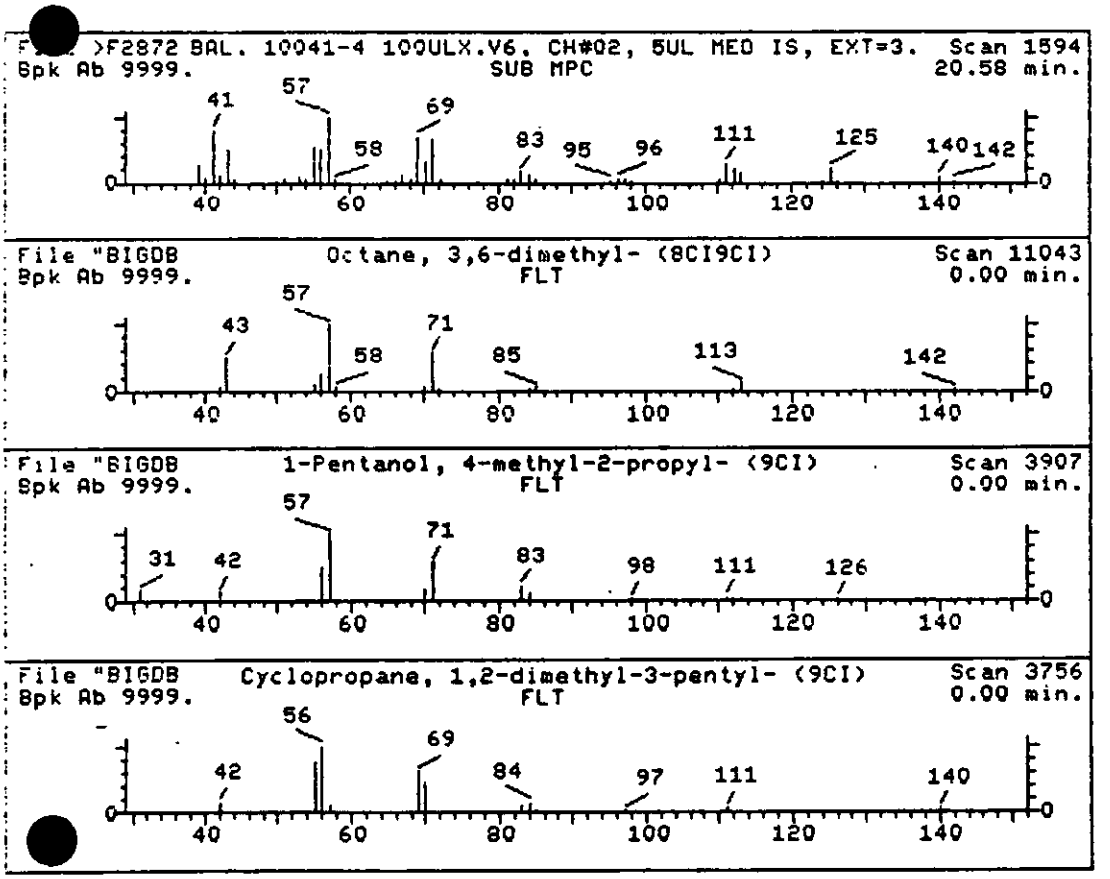
DRW 101091

NUMBER:4

1.	Octane, 3,6-dimethyl- (8CI9CI)	142 C10H22
2.	1-Pentanol, 4-methyl-2-propyl- (9CI)	144 C9H20O
3.	Cyclopropane, 1,2-dimethyl-3-pentyl- (9CI)	140 C10H20
4.	Decane, 2,6,7-trimethyl- (9CI)	184 C13H28
5.	1-Octanol, 3,7-dimethyl- (8CI9CI)	158 C10H22O
6.	1-Decene, 4-methyl- (8CI9CI)	154 C11H22

Sample file: >F2872 Spectrum #: 1594
Search speed: 2 Tilting option: S No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	34*	15869940	11043	"BIGDB	45	44	0	0	99	55	10	53
2.	27	54004410	3907	"BIGDB	50	48	1	0	89	44	8	15
3.	26*	62238055	3756	"BIGDB	48	53	0	0	51	58	7	57
4.	26	62108252	3963	"BIGDB	54	44	2	0	100	42	8	14
5.	25	106218	3699	"BIGDB	56	62	1	0	50	48	7	14
6.	25	13151296	10843	"BIGDB	37	50	1	0	46	48	7	14



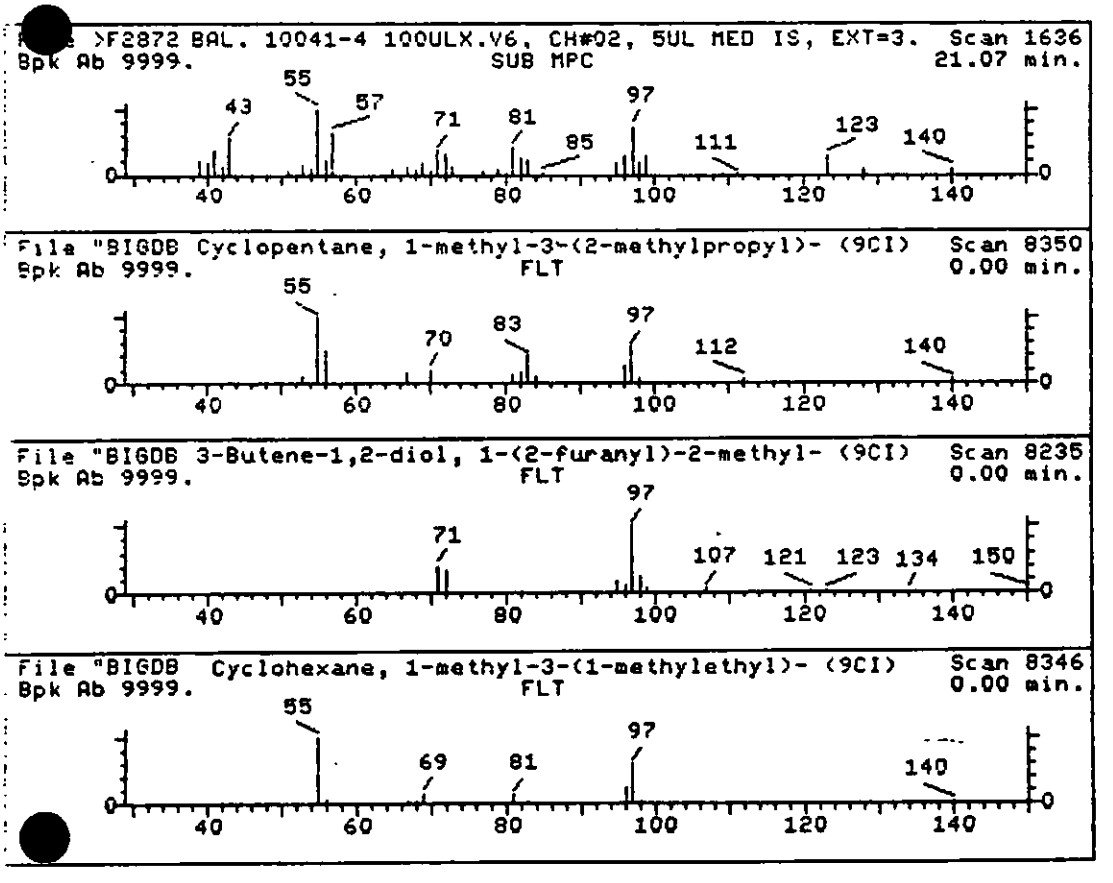
Unk Alkane RSI 101091

C NUMBER:5

1.	Cyclopentane, 1-methyl-3-(2-methylpropyl)- (9CI)	140	C10H20
2.	3-Butene-1,2-diol, 1-(2-furanyl)-2-methyl- (9CI)	168	C9H12O3
3.	Cyclohexane, 1-methyl-3-(1-methylethyl)- (9CI)	140	C10H20
4.	4H-1,2,4-Triazole, 4-ethyl- (9CI)	97	C4H7N3
5.	Cyclohexane, 1-methyl-3-propyl- (8CI9CI)	140	C10H20
6.	Cyclopentane, 2-isopropyl-1,3-dimethyl- (8CI)	140	C10H20

Sample file: >F2872 Spectrum #: 1636
Search speed: 2 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	29053041	8350	"BIGDB	30	82	3	0	100	46	7	13
2.	24	18927203	8235	"BIGDB	48	49	2	0	74	43	8	12
3.	24*	16580248	8346	"BIGDB	31	56	0	0	100	52	7	24
4.	20*	43183557	8226	"BIGDB	28	53	1	0	62	53	5	15
5.	20*	4291809	8342	"BIGDB	29	63	1	0	90	53	5	16
6.	20*	32281859	8299	"BIGDB	29	81	3	0	100	54	5	13



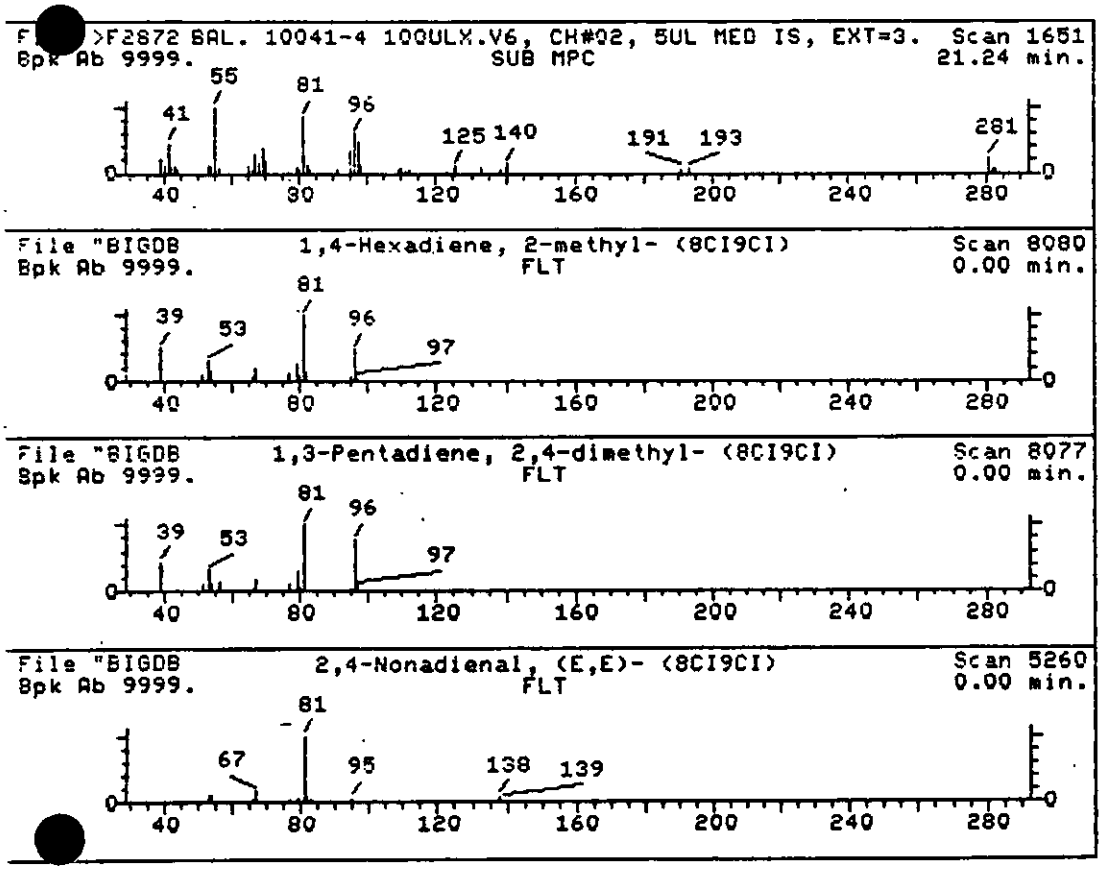
Unknown MB 10/11/91 C_7H_{12} Isomers DLW 10/CC1

NUMBER:6

1.	1,4-Hexadiene, 2-methyl- (8CI9CI)	96 C7H12
2.	1,3-Pentadiene, 2,4-dimethyl- (8CI9CI)	96 C7H12
3.	2,4-Nonadienal, (E,E)- (8CI9CI)	138 C9H14O
4.	Cyclopropane, trimethylmethylene- (9CI)	96 C7H12
5.	2,4-Hexadiene, 3-methyl- (8CI9CI)	96 C7H12
6.	2,4-Heptadiene, (E,E)- (9CI)	96 C7H12

Sample file: >F2872 Spectrum #: 1651
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.	25*	1119148	8080	"BIGDB	36	73	3	0	86	44	8	13
2.	25*	1000868	8077	"BIGDB	36	73	3	0	75	43	8	13
3.	24*	5910872	5260	"BIGDB	47	39	2	2	90	55	7	21
4.	20*	34462287	5210	"BIGDB	33	70	3	0	86	53	5	13
5.	20*	28823429	8062	"BIGDB	30	73	3	0	86	53	5	13
6.	20*	2384943	5204	"BIGDB	23	74	3	0	86	53	5	12



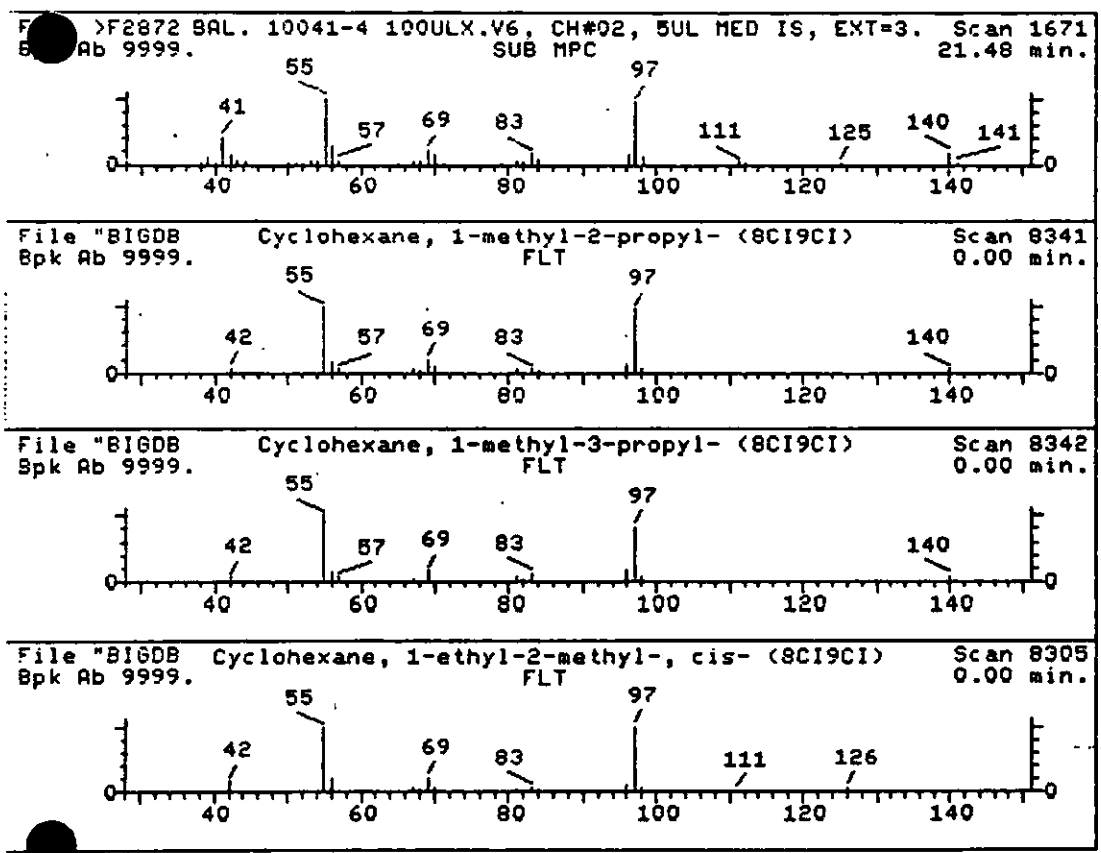
Unk Alkane
DL 101091

C NUMBER:7

1.	Cyclohexane, 1-methyl-2-propyl- (8CI9CI)	140	C10H20
2.	Cyclohexane, 1-methyl-3-propyl- (8CI9CI)	140	C10H20
3.	Cyclohexane, 1-ethyl-2-methyl-, cis- (8CI9CI)	126	C9H18
4.	Cyclohexane, 1-ethyl-2-methyl-, trans- (8CI9CI)	126	C9H18
5.	Cyclopentane, 1,2-dimethyl-3-(1-methylethyl)- (9CI)	140	C10H20
6.	Cyclohexane, 1,4-dimethyl-, cis- (8CI9CI)	112	C8H16

Sample file: >F2872 Spectrum #: 1671
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.	82*	4291796	8341	"BIGDB	66	23	0	0	99	23	41	78
2.	62*	4291809	8342	"BIGDB	57	35	2	0	100	29	25	43
3.	55	4923777	8305	"BIGDB	60	32	1	0	84	23	22	27
4.	53	4923788	8211	"BIGDB	60	28	0	0	95	32	20	37
5.	52*	489203	8206	"BIGDB	32	65	3	0	100	20	20	13
6.	45	624293	8259	"BIGDB	60	42	2	0	79	23	17	16



Unk Alkane

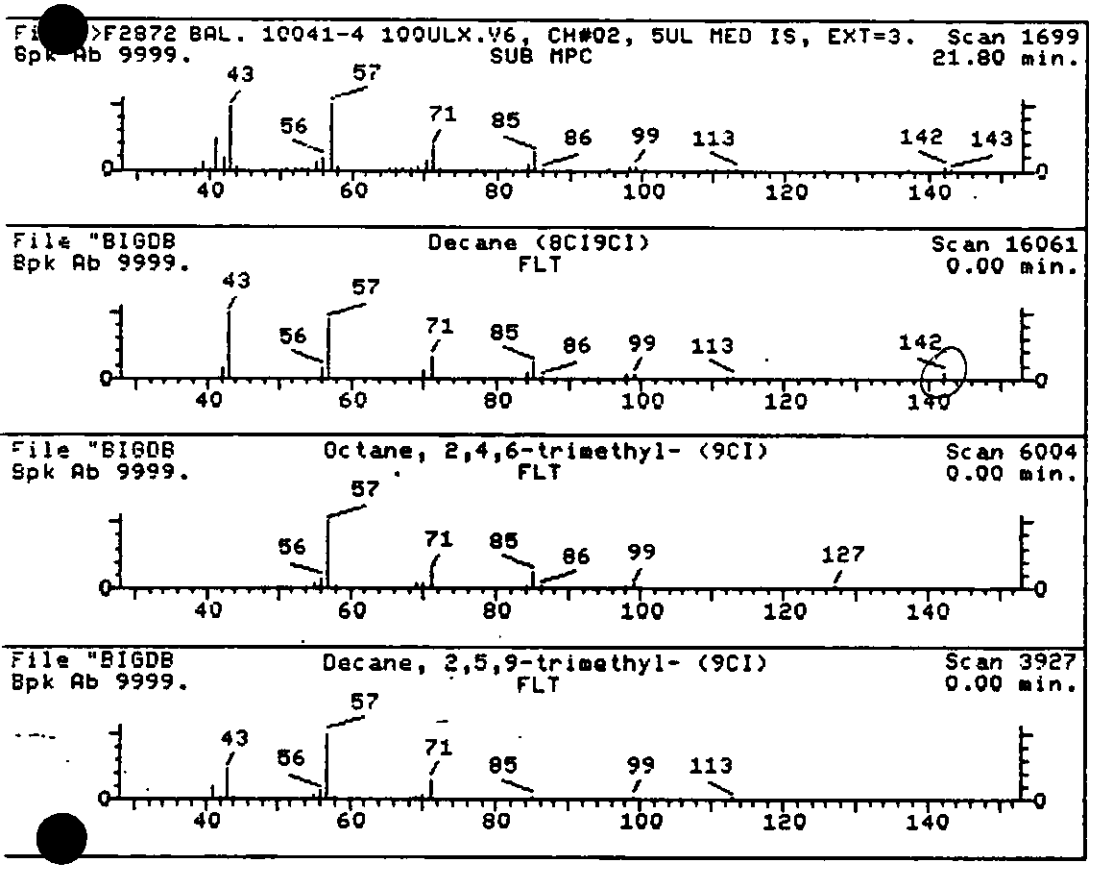
T NUMBER:9

1.	Decane (8CI9CI)	142 C10H22
2.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
3.	Decane, 2,5,9-trimethyl- (9CI)	184 C13H28
4.	Undecane, 4,6-dimethyl- (8CI)	184 C13H28
5.	Dodecane, 2-methyl- (8CI9CI)	184 C13H28
6.	Decane, 2,9-dimethyl- (8CI9CI)	170 C12H26

Decane
MB 10/11/91

Sample file: >F2872 Spectrum #: 1699
Search speed: 2 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	124185	16061	"BIGDB	91	9	1	1	88	0	72	92
2.	70	62016379	6004	"BIGDB	59	26	2	0	100	9	42	19
3.	63	62108229	3927	"BIGDB	58	33	0	0	94	19	30	35
4.	60	17312822	3957	"BIGDB	53	45	2	0	72	11	30	14
5.	60	1560970	6149	"BIGDB	53	48	2	0	85	12	30	12
6.	58	1002171	6094	"BIGDB	60	32	2	0	87	17	25	21



Unknown alkane

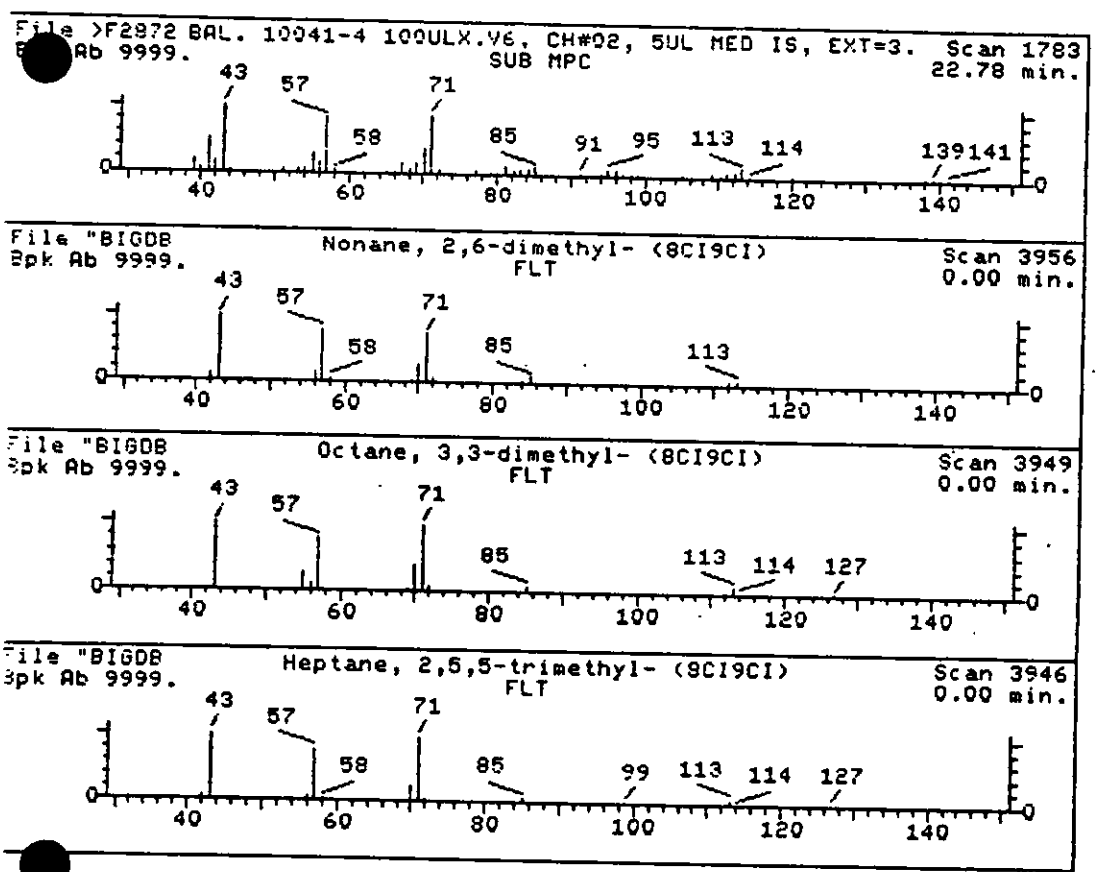
MB 10/11/91

TIC NUMBER:11

1. Nonane, 2,6-dimethyl- (8CI9CI)	156	C11H24
2. Octane, 3,3-dimethyl- (8CI9CI)	142	C10H22
3. Heptane, 2,5,5-trimethyl- (8CI9CI)	142	C10H22
4. Heptane, 3-ethyl-5-methyl- (9CI)	142	C10H22
5. Decane, 4-methyl- (8CI9CI)	156	C11H24
6. Octane, 2,3,6-trimethyl- (9CI)	156	C11H24

Sample file: >F2872 Spectrum #: 1783
Search speed: 2 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88	17302282	3956	"BIGDB	71	20	0	0	100	3	65	59
2.	86	4110445	3949	"BIGDB	62	36	0	0	83	5	60	39
3.	83	1189997	3946	"BIGDB	50	40	0	0	91	5	57	29
4.	79	52896909	3958	"BIGDB	59	35	0	0	81	10	48	36
5.	76	2847725	3947	"BIGDB	67	34	1	0	89	6	45	27
6.	76	62016335	3961	"BIGDB	49	43	0	0	81	6	45	28



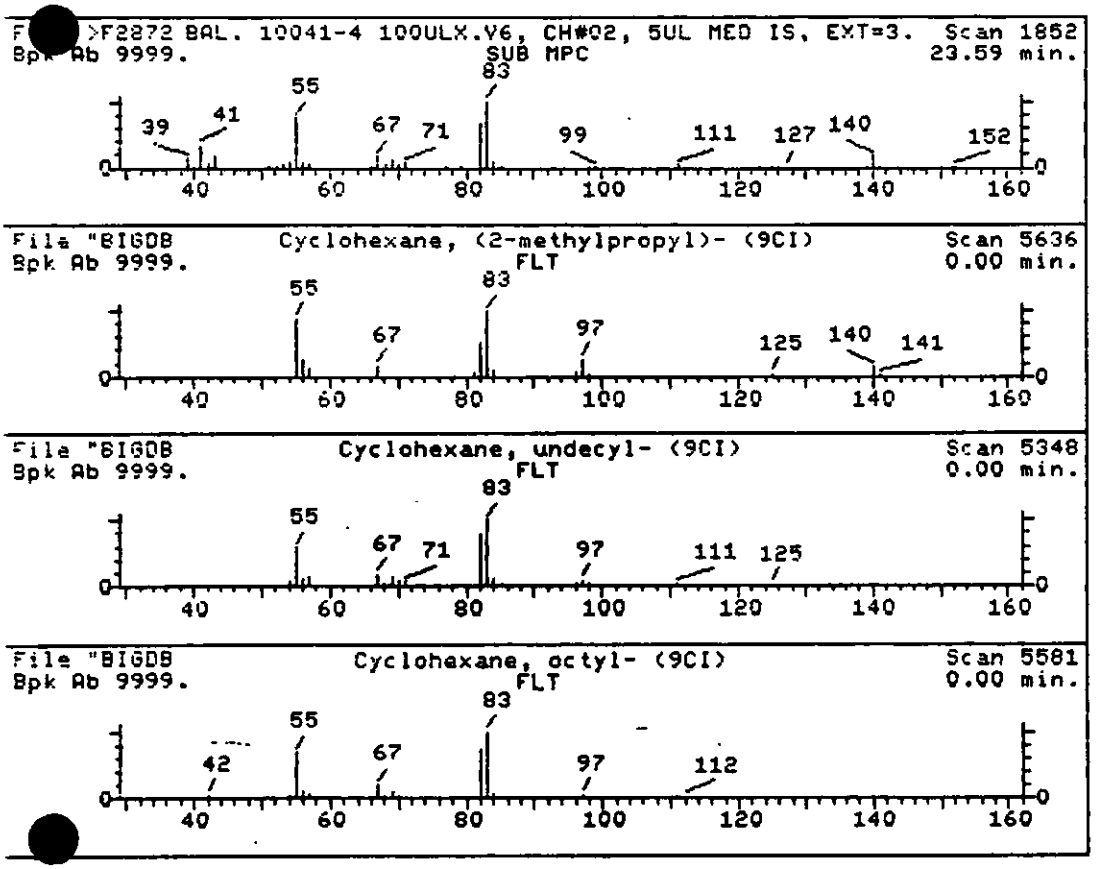
Unknown alkane

NUMBER: 12

1.	Cyclohexane, (2-methylpropyl)- (9CI) MB 10/11/91	140	C10H20
2.	Cyclohexane, undecyl- (9CI)	238	C17H34
3.	Cyclohexane, octyl- (9CI)	196	C14H28
4.	Cyclohexane, hexyl- (9CI)	168	C12H24
5.	Cyclohexane, propyl- (8CI9CI)	126	C9H18
6.	Cyclohexane, eicosyl- (9CI)	364	C26H52

Sample file: >F2872 Spectrum #: 1852
Search speed: 2 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70*	1678984	5636	"BIGDB	41	62	3	0	85	9	42	13
2.	70	54105667	5348	"BIGDB	74	42	2	0	80	10	42	18
3.	67	1795159	5581	"BIGDB	75	33	2	0	87	12	34	25
4.	67	4292755	5564	"BIGDB	67	28	2	0	70	13	34	23
5.	67	1678928	5625	"BIGDB	60	37	2	0	70	12	34	21
6.	60	4443554	5347	"BIGDB	61	69	2	0	69	13	30	12



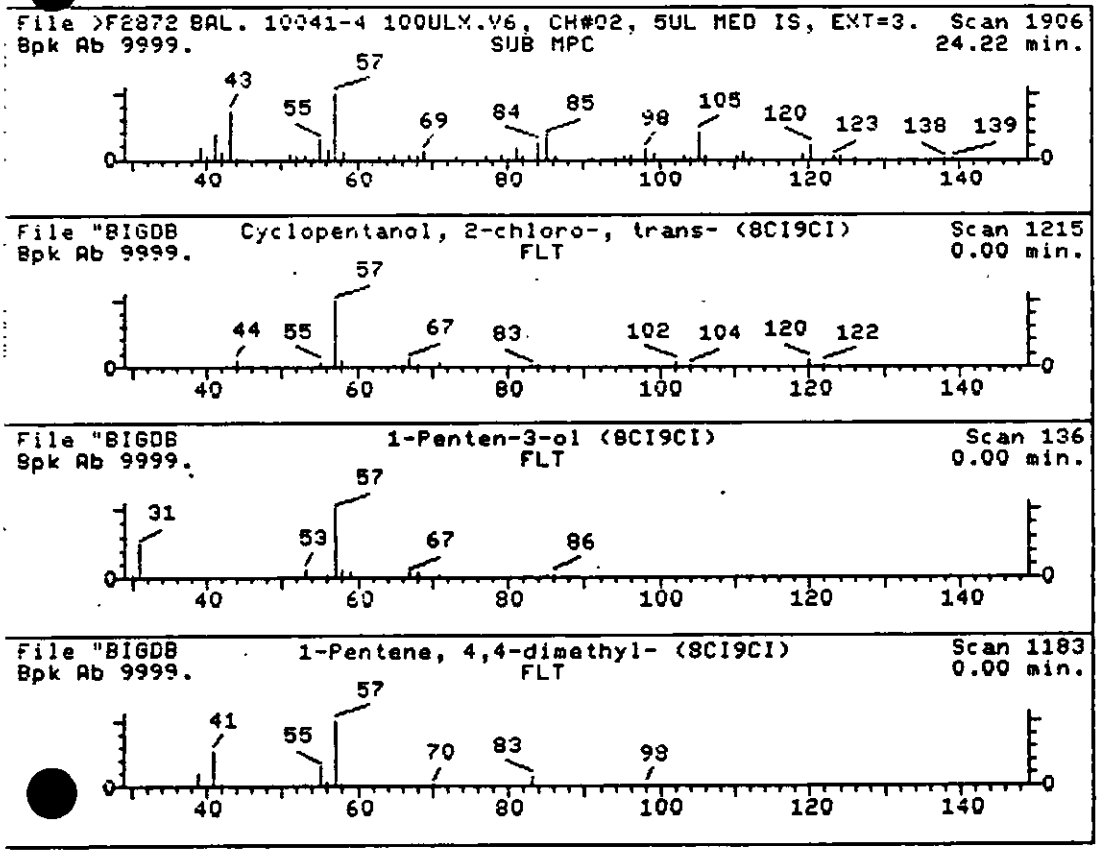
000056

NUMBER:13 Unknown MB 10/11/91

1.	Cyclopentanol, 2-chloro-, trans- (8CI9CI)	120	C5H9ClO
2.	1-Penten-3-ol (8CI9CI)	86	C5H10O
3.	1-Pentene, 4,4-dimethyl- (8CI9CI)	98	C7H14
4.	Propane, 1-(2,2-dichloro-1-methylcyclopropyl)-2,2-dimethyl- (8CI)	194	C9H16Cl2
5.	Pentane, 2,3,3,4-tetramethyl- (8CI9CI)	128	C9H20
6.	Pentane, 3-ethyl-2,4-dimethyl- (8CI9CI)	128	C9H20

Sample file: >F2872 Spectrum #: 1906
Search speed: 2 Tilting option: S No. of ion ranges searched: 65

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	20377804	1215	"BIGDB	22	56	2	0	85	47	7	13
2.	25*	616251	136	"BIGDB	23	74	2	0	97	47	7	13
3.	20*	762629	1183	"BIGDB	20	56	2	0	67	54	5	13
4.	15	24551846	1216	"BIGDB	39	39	2	0	100	56	3	13
5.	11	16747389	5967	"BIGDB	40	42	2	0	61	63	2	14
6.	11	1068877	5918	"BIGDB	35	48	2	0	74	63	2	12



$C_{10}H_{18}$ isomer

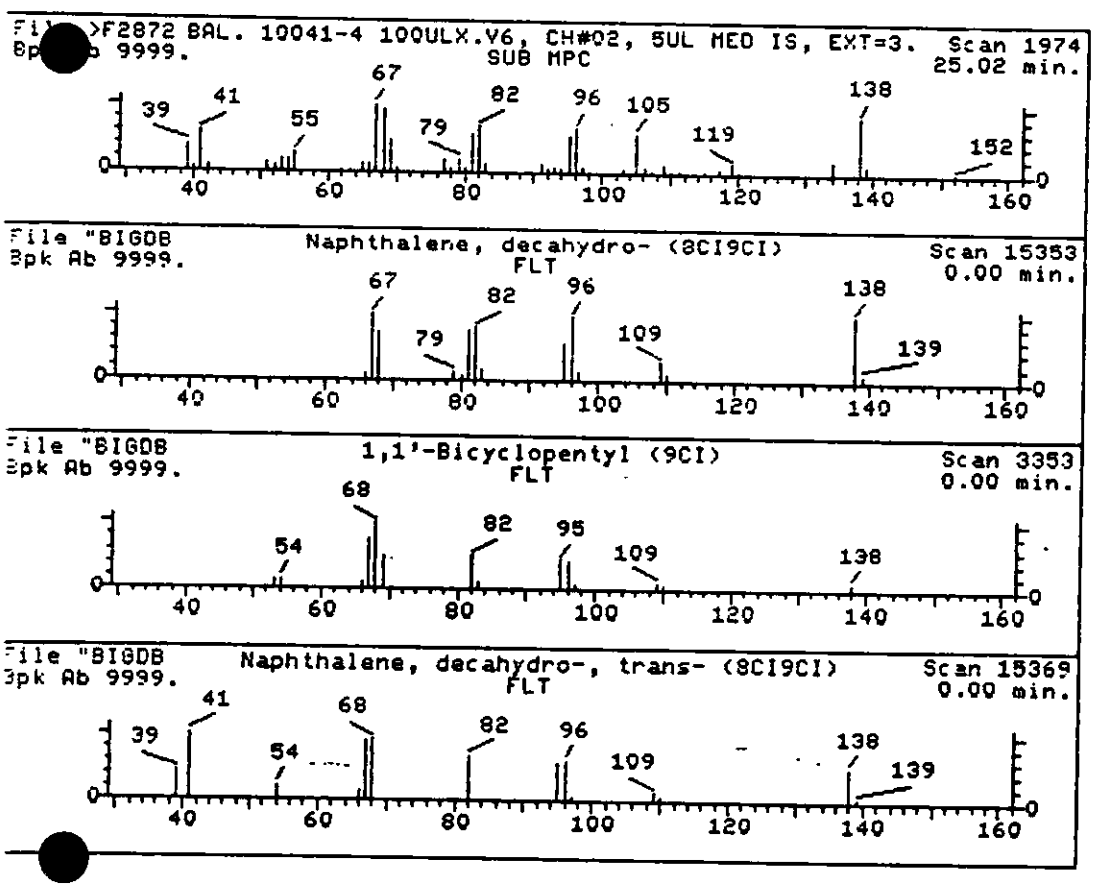
MB 10/11/91

TOP NUMBER: 15

1.	Naphthalene, decahydro- (8CI9CI)	138 C10H18
2.	1,1'-Bicyclopentyl (9CI)	138 C10H18
3.	Naphthalene, decahydro-, trans- (8CI9CI)	138 C10H18
4.	Spiro[4.5]decane (8CI9CI)	138 C10H18
5.	m-Menth-6-ene, (R)-(+)- (8CI)	138 C10H18
6.	Cyclohexene, 3-methyl-6-(1-methylethyl)-, trans- (9C	138 C10H18

Sample file: >F2872 Spectrum #: 1974
Search speed: 2 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	83*	91178	15353	"BIGDB	92	35	2	0	68	15	51	.71
2.	83*	1636391	3353	"BIGDB	86	32	1	0	92	25	47	83
3.	75*	493027	15369	"BIGDB	84	38	2	0	80	16	35	65
4.	47*	176636	15365	"BIGDB	69	55	2	0	65	42	16	49
5.	37*	13837702	5443	"BIGDB	50	58	3	0	277	30	14	14
6.	36*	1124261	15376	"BIGDB	34	69	3	0	351	27	14	13



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

9-27-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10041-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2689

Level: (low/med) LOW Date Received: 08/30/91

% Moisture: not dec. _____ Date Analyzed: 10/02/91

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	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.

9-27-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10041-05

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2689

Level: (low/med) LOW Date Received: 08/30/91

% Moisture: not dec. ____ Date Analyzed: 10/02/91

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

DELIVERABLES INDEX

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analysis 09/30/91
Erco Project Number: 010041

DELIVERABLES INDEX (Cont.)

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analysis 09/30/91
Erco Project Number: 010041

NA=Not applicable

D - Compound Qdel'ed

W/C

L-092691V6A
R-100191V6B

Produced by : [illegible] Date: 10/2/91 Data File: >F2689 F2688.
Reviewed by: MB Date: 10/11/91 Page: 1 MeCl2.

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BALS 10041-5 5ML Id # UCC-9/27-QA1
Misc : V6 C6 5UL IS/S
Injected : 10/02/91 00:09 Units: UG/L
Analyst: KERYLYNN Run Factor: 1.000
ID File: MOBID6 Surrogate vol: .005
Quant list threshold: 1.00

Surrogate Spike Recoveries no unknowns

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2716	109	76 114
CS05 D8-Toluene	.2500	.2458	98.3	88 110
CS10 Bromofluorobenzene	.2500	.2377	95.1	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
251	2.508	(2.5) 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: >F2689 Page: 2
Sample: BALS 10041-5 5ML VCC-9/27-QA1

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: >F2689::D5 Injected at: 00:09 10/02/91
Quant'd : 00:36 10/02/91
ID File : MOBID6::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.26	7.19	.07	128.0	72943	1.0000	50.00
2)	C010 Chloromethane	2.67	0.00	--	50.0	0	1.1322	0.00
3)	C020 Vinyl Chloride	2.81	0.00	--	62.0	0	1.2055	0.00
4)	C015 Bromomethane	3.21	0.00	--	94.0	0	1.1318	0.00
5)	C025 Chloroethane	3.33	0.00	--	64.0	0	.5994	0.00
6)	C045 1,1-Dichloroethene	4.28	0.00	--	96.0	0	1.4660	0.00
7)	C035 Acetone	4.35	0.00	--	43.0	0	.2433	0.00
8)	C040 Carbon Disulfide	4.60	4.56	.04	76.0	1905	4.4588	.29
9)	C030 Methylene Chloride	4.92	4.91	.01	84.0	5813	1.5886	2.51
10)	CXXX Tert-butyl alcohol	5.07	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.30	0.00	--	96.0	0	1.7403	0.00
12)	C055 Cis-1,2-dichloroethe	6.80	0.00	--	96.0	0	1.9068	0.00
13)	CXXX Methyl tert-butyl et	5.29	0.00	--	73.0	0	2.9749	0.00
14)	C050 1,1-Dichloroethane	5.90	0.00	--	63.0	0	3.3410	0.00
15)	C060 Chloroform	7.33	7.34	.01	83.0	3170	3.8827	.56
16)	C065 1,2-Dichloroethane	8.35	0.00	--	62.0	0	2.1923	0.00
17)	C110 2-Butanone	6.81	0.00	--	72.0	0	.1173	0.00
18)	CS15 D4-1,2-dichloroethan	8.21	8.23	.02	65.0	130166	1.6427	54.32
19)	*CI10 1,4-Difluorobenzene	9.15	9.08	.07	114.0	417406	1.0000	50.00
20)	C125 Vinyl Acetate	5.98	0.00	--	43.0	0	.6324	0.00
21)	C115 1,1,1-Trichloroethan	7.66	0.00	--	97.0	0	.6048	0.00
22)	C120 Carbon Tetrachloride	7.96	0.00	--	117.0	0	.5142	0.00
23)	C165 Benzene	8.33	0.00	--	78.0	0	1.0481	0.00
24)	C150 Trichloroethene	9.60	0.00	--	130.0	0	.4502	0.00
25)	C140 1,2-Dichloropropane	10.07	0.00	--	63.0	0	.4286	0.00
26)	C130 Bromodichloromethane	10.67	0.00	--	83.0	0	.6628	0.00
27)	C175 2-Chloroethylvinylet	11.39	0.00	--	63.0	0	.1966	0.00
28)	C143 Cis-1,3-Dichloroprop	11.72	0.00	--	75.0	0	.6373	0.00
29)	C172 Trans-1,3-dichloropr	13.10	0.00	--	75.0	0	.4952	0.00
30)	C160 1,1,2-Trichloroethan	13.56	0.00	--	97.0	0	.3279	0.00
31)	C155 Dibromochloromethane	14.60	0.00	--	129.0	0	.5190	0.00
32)	C180 Bromoform	18.75	0.00	--	173.0	0	.3145	0.00
33)	*CI20 D5-Chlorobenzene	16.31	16.26	.05	117.0	318270	1.0000	50.00
34)	CS05 D8-Toluene	12.40	12.38	.02	98.0	405950	1.2973	49.16
35)	C205 4-Methyl-2-pentanone	12.17	0.00	--	43.0	0	.3755	0.00
36)	C230 Toluene	12.57	0.00	--	92.0	0	.9417	0.00
37)	C210 2-Hexanone	14.36	0.00	--	43.0	0	.2450	0.00
38)	C220 Tetrachloroethene	13.97	0.00	--	164.0	0	.4947	0.00
39)	C235 Chlorobenzene	16.35	0.00	--	112.0	0	1.1580	0.00
40)	C240 Ethylbenzene	16.71	0.00	--	106.0	0	.5752	0.00
41)	CXXX Xylenes (p)	17.09	0.00	--	106.0	0	.7213	0.00
42)	CXXX Xylenes (o)	18.28	0.00	--	106.0	0	.7062	0.00
43)	C245 Styrene	18.34	0.00	--	104.0	0	1.2348	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.50	0.00	--	83.0	0	.6717	0.00
45)	CS10 Bromofluorobenzene	19.92	19.91	.01	95.0	226460	.7483	47.54
46)	C335 Dichlorobenzene (m)	23.46	0.00	--	146.0	0	.9928	0.00
47)	C340 Dichlorobenzene (p)	23.77	0.00	--	146.0	0	.9070	0.00
48)	C350 Dichlorobenzene (o)	24.99	0.00	--	146.0	0	.9067	0.00
(?)	[illegible]	[illegible]	0.00	--	106.0	0	.6202	0.00

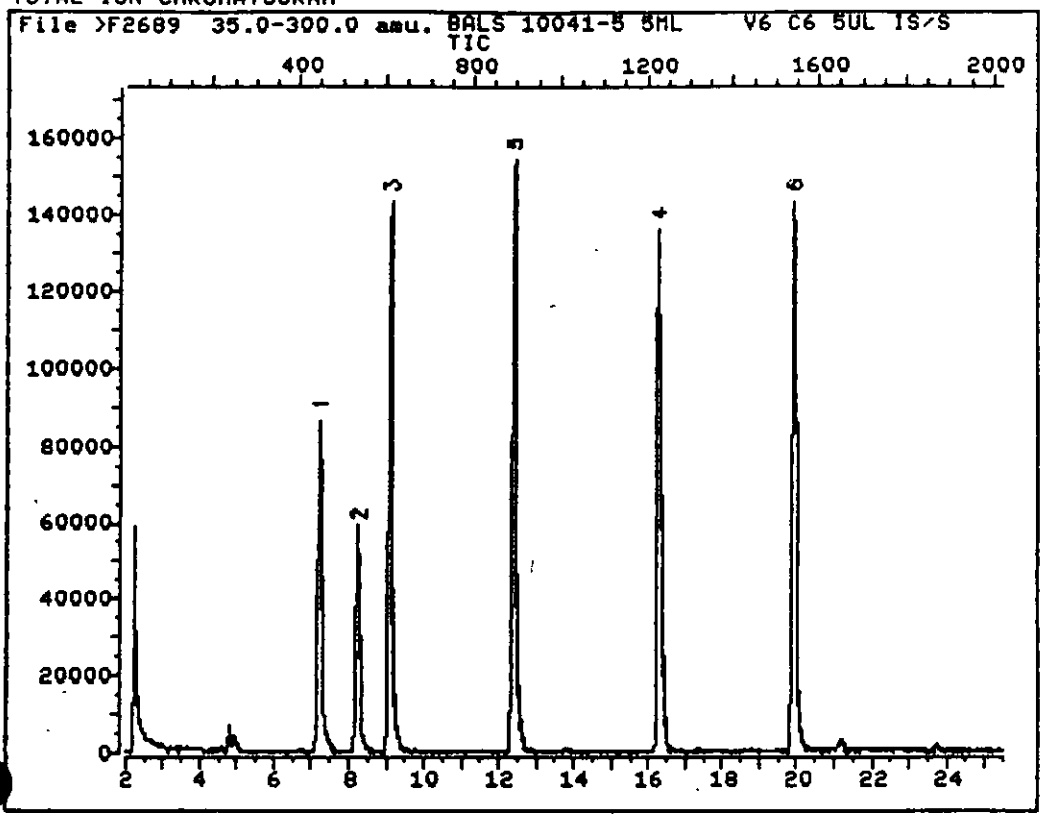
Internal Standard Comparison

Sample: >F2689 Date injected: 10/02/91 Standard: >F2682

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	72943	76899	94.9
CI10 1,4-Difluorobenzene	417406	388768	107.4
CI20 D5-Chlorobenzene	318270	293543	108.4

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

TOTAL ION CHROMATOGRAM



Data File: >F2689::D5 Quant Output File: ^F2689::D7
Name: BALS 10041-5 5ML Instrument ID: V6
Misc: V6 C6 5UL IS/S Id# VCC-9/27-QA1

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911001 18:55

Operator ID: KERYLYNN
Quant Time : 911002 00:36
Injected at: 911002 00:09

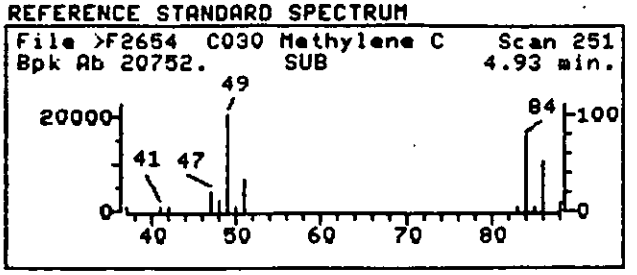
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911002 00:36
Output File: ^F2689::D7 Injected at: 911002 00:09
Data File: >F2689::D5 Dilution Factor: 1.00000
Name: BALS 10041-5 5ML Instrument ID: V6
Misc: V6 C6 5UL IS/S VCC-9/27-QA1

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911001 18:55

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	72943	50.00	UG/L	66
8)	C040 Carbon Disulfide	4.56	76.0	1905	.293	UG/L	100
9)	C030 Methylene Chloride	4.91	84.0	5813	2.51	UG/L	79
15)	C060 Chloroform	7.34	83.0	3170	.560	UG/L	79
18)	CS15 D4-1,2-dichloroethane	8.23	65.0	130166	54.32	UG/L	90
19)	*CI10 1,4-Difluorobenzene	9.08	114.0	417406	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.26	117.0	318270	50.00	UG/L	100
34)	CS05 D8-Toluene	12.38	98.0	405950	49.16	UG/L	96
)	CS10 Bromofluorobenzene	19.91	95.0	226460	47.54	UG/L	74

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



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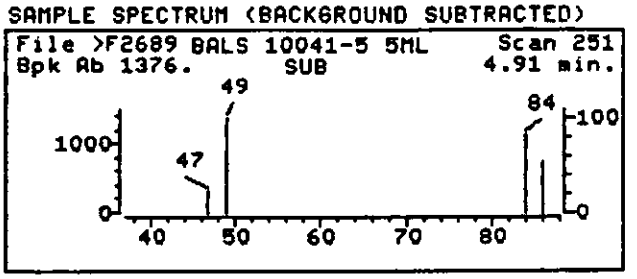
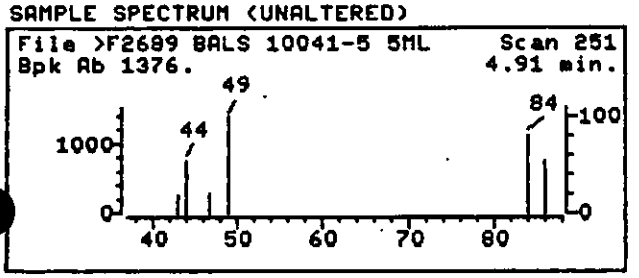
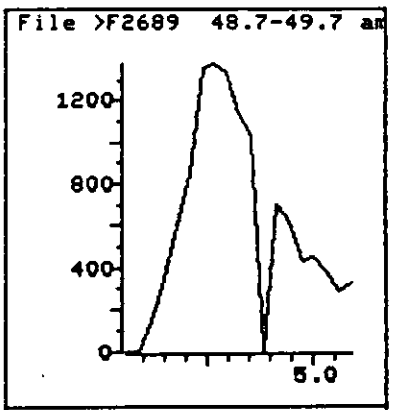
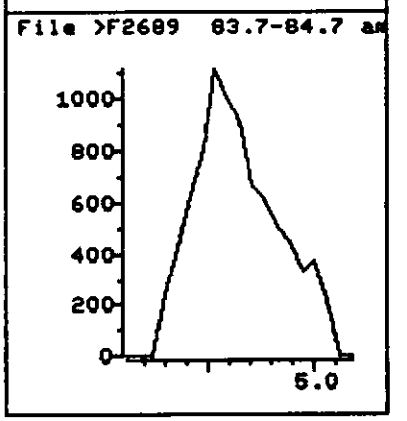


SAMPLE SPECTRUM (UNALTERED)







Data File: >F2689::D5 Quant Output File: ^F2689::D7
Name: BALS 10041-5 5ML Instrument ID: V6
Misc: V6 C6 5UL IS/S VCC-9/27-QA1
Quant Time: 911002 00:36 Quant ID File: MOBID6::MT
Injected at: 911002 00:09 Last Calibration: 910814 09:37
Last Qcal Time: 911001 18:55

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 251
Retention Time: 4.91 min.
Quant Ion : 84.0
Area : 5813
Concentration : 2.51 UG/L
q-value : 79

Data Reduced by : [illegible] Date: 10/2/91 Data File: >F2689
Data Reviewed by : MB Date: 10/11/91

Enseco TIC Report (page 1)

Sample: BALS 10041-5 5ML Run Factor: 1.00
Conditions: V6 C6 5UL IS/S OCC-9/27-QA1 Analyst: KERYLYNN

# 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.: 10041 SAS No.: _____ SDG No.: _____

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

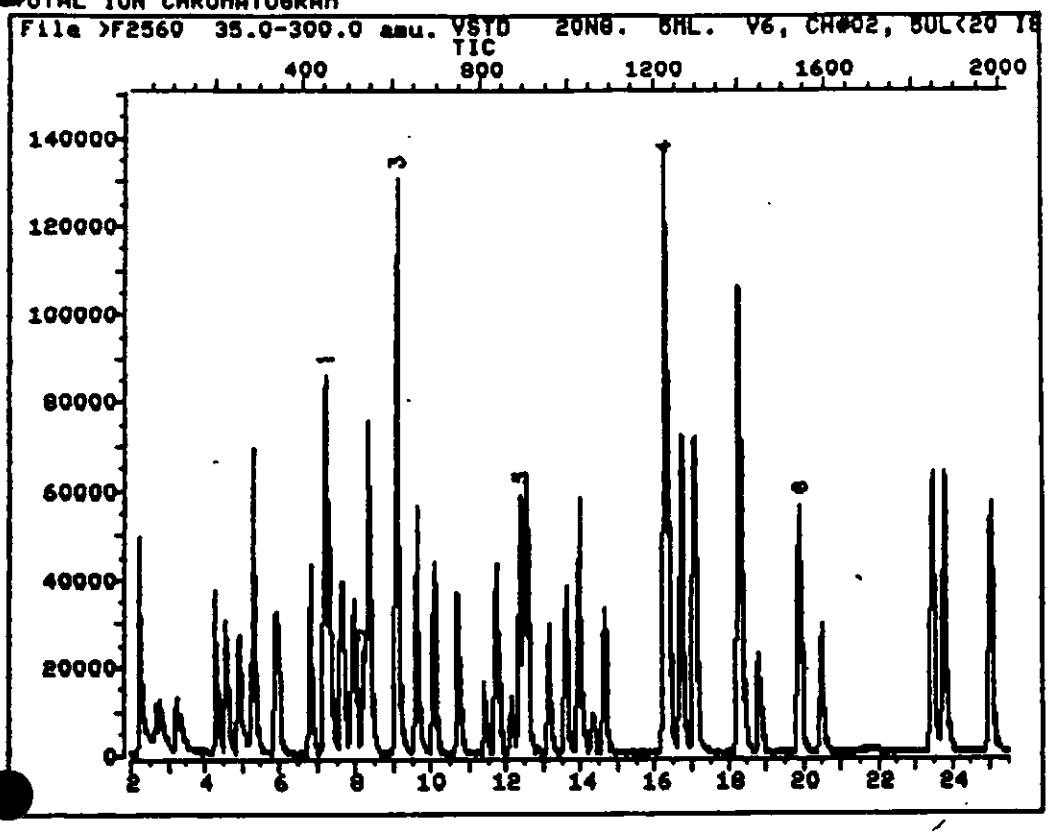
Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

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

TOTAL ION CHROMATOGRAM



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

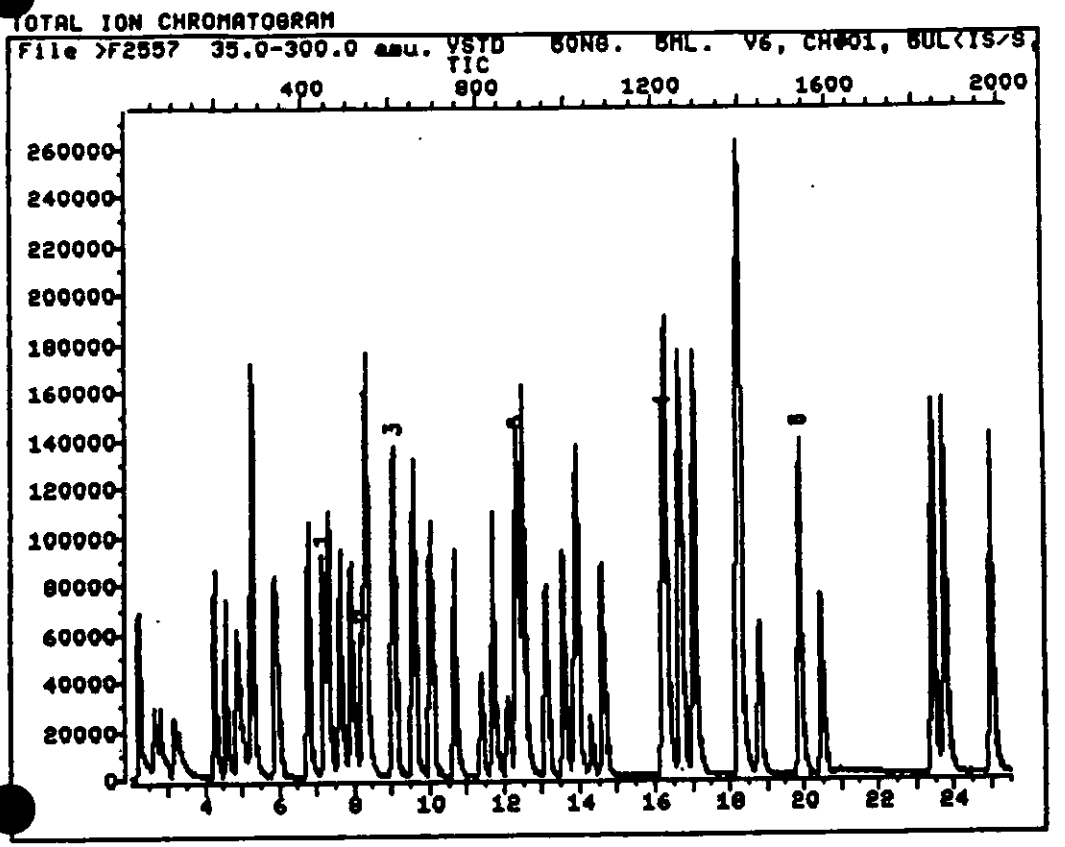
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	66164	50.00	UG/L	64
2)	C010 Chloromethane	2.65	50.0	36001	20.90	UG/L	99
3)	C020 Vinyl Chloride	2.79	62.0	37017	21.21	UG/L	87
4)	C015 Bromomethane	3.19	94.0	35029	24.07	UG/L	92
5)	C025 Chloroethane	3.32	64.0	22151M	23.15	UG/L	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	100
41)	CXXX Xylenes (p)	17.08	106.0	85811	21.55	UG/L	95

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-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

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

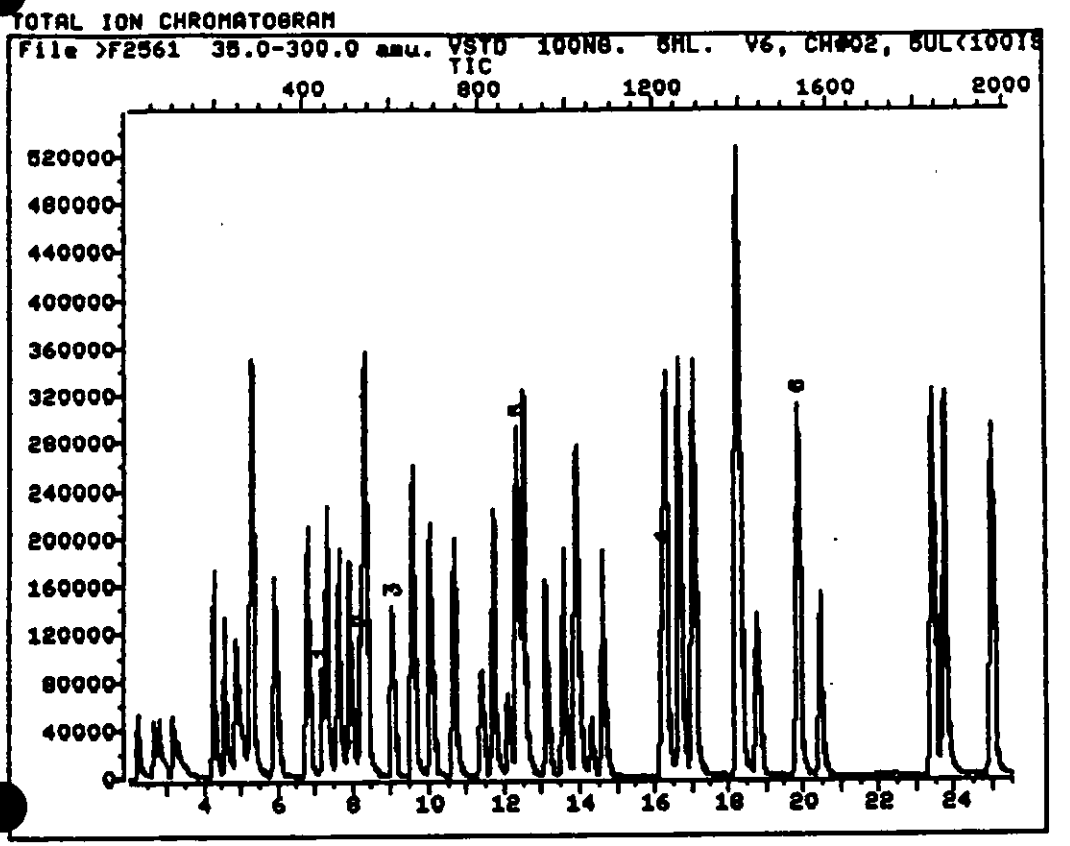
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.17	128.0	72616	50.00	UG/L	70
2)	C010 Chloromethane	2.65	50.0	94512	74.65	UG/L	99
3)	C020 Vinyl Chloride	2.78	62.0	95768	61.62	UG/L	93
4)	C015 Bromomethane	3.16	94.0	79846	49.64	UG/L	94
5)	C025 Chloroethane	3.29	64.0	52513M	50.84	UG/L	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
42)	CXXX Xylenes (o)	18.25	106.0	186544	47.97	UG/L	

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-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-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

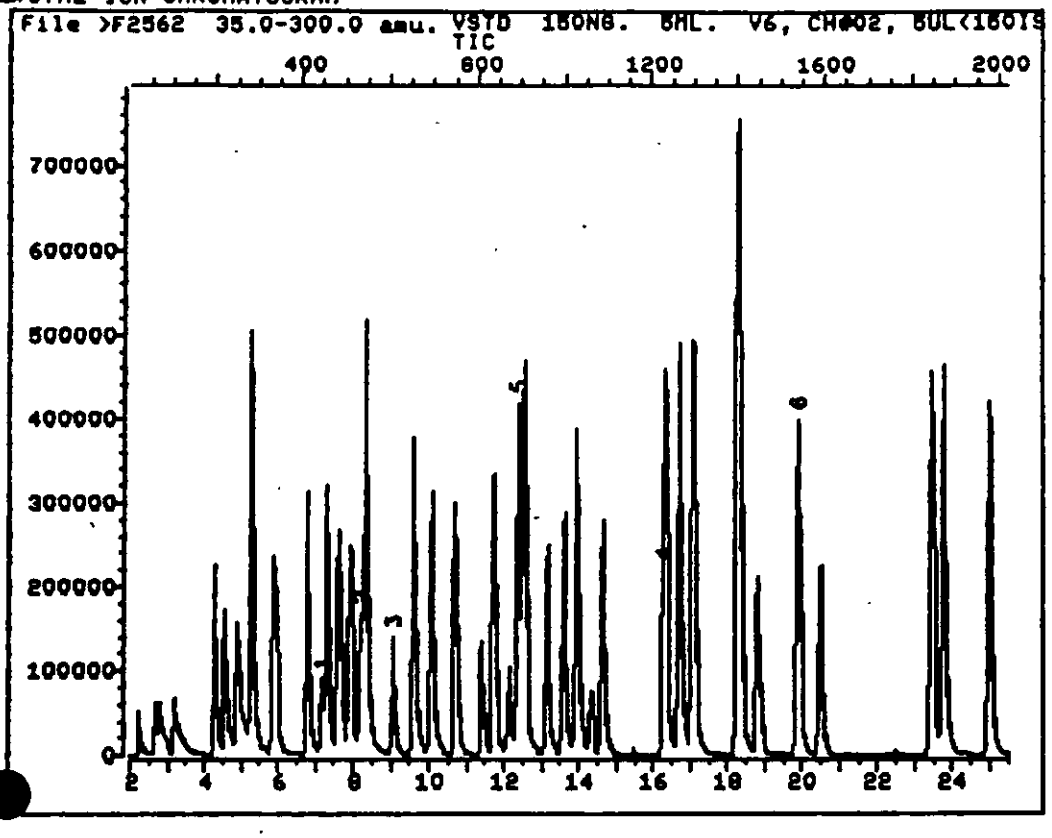
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 14:24
Output File: ^F2561::D7 Injected at: 910922 13:57
Data File: >F2561::D4 Dilution Factor: 1.00000
Name: VSTD 100NG. 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL(100IS/S), STD=25UL/ 50ML HSL,A,B+ MTBE

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

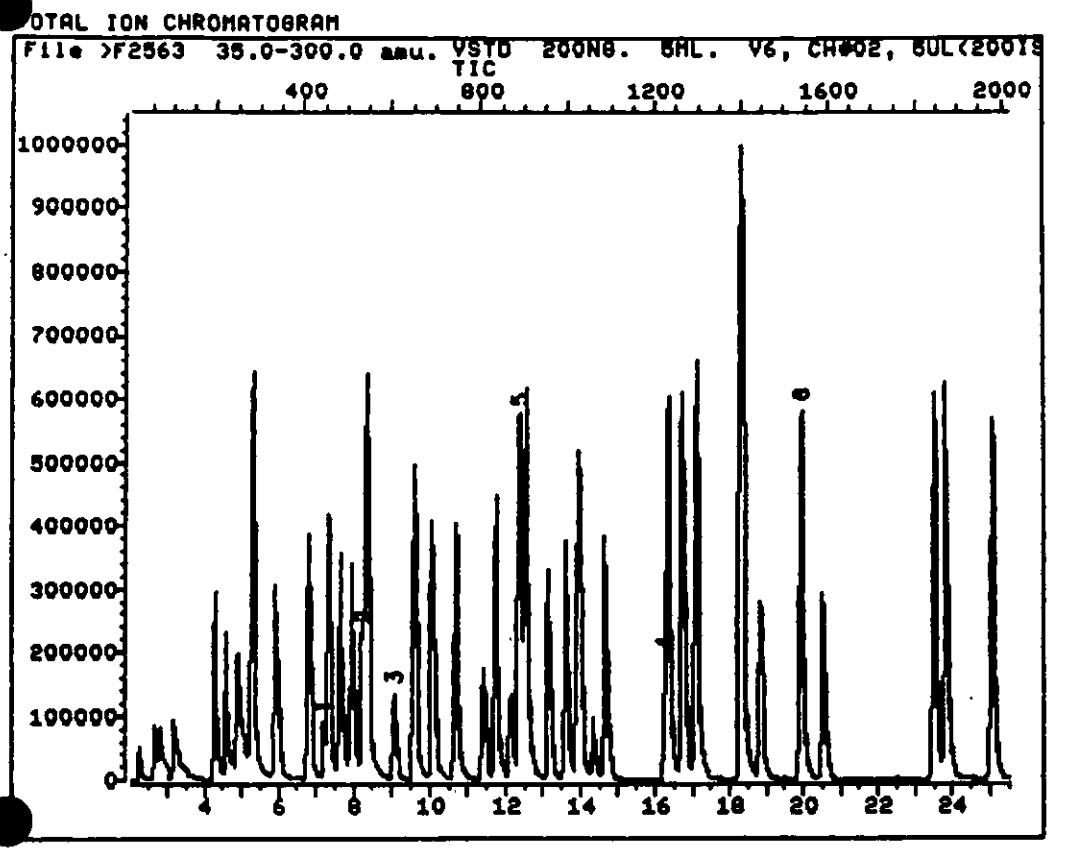
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	71409	50.00	UG/L	65
2)	C010 Chloromethane	2.65	50.0	245105	131.86	UG/L	98
3)	C020 Vinyl Chloride	2.78	62.0	240961	127.93	UG/L	85
4)	C015 Bromomethane	3.15	94.0	198283M	126.26	UG/L	91
5)	C025 Chloroethane	3.28	64.0	117468M	113.74	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	85
41)	CXXX Xylenes (p)	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-Tetrachloroethene	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

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	198.58	UG/L	70
40)	C240 Ethylbenzene	16.72	106.0	601155	183.32	UG/L	92
41)	CXXX Xylenes (o)	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.: 10041 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/01/91 Time: 1855

Lab File ID: F2682 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	1.132	9.1	#
	Bromomethane	1.055	1.132	-7.3	
	Vinyl Chloride	1.258	1.206	4.1	*
	Chloroethane	0.651	0.599	8.0	
	Methylene Chloride	1.704	1.589	6.7	
	Acetone	0.211	0.243	-15.2	
	Carbon Disulfide	4.156	4.459	-7.3	
	1,1-Dichloroethene	1.387	1.466	-5.7	*
	1,1-Dichloroethane	3.250	3.341	-2.8	#
	1,2-Dichloroethene (total)	1.727	1.740	-0.8	
	Chloroform	3.857	3.883	-0.7	*
	1,2-Dichloroethane	2.171	2.192	-1.0	
	2-Butanone	0.111	0.117	-5.4	
	1,1,1-Trichloroethane	0.560	0.604	-7.9	
	Carbon Tetrachloride	0.479	0.514	-7.3	
	Vinyl Acetate	0.538	0.632	-17.5	
	Bromodichloromethane	0.622	0.662	-6.4	
	1,2-Dichloropropane	0.407	0.428	-5.2	*
	cis-1,3-Dichloropropene	0.603	0.637	-5.6	
	Trichloroethene	0.415	0.450	-8.4	
	Dibromochloromethane	0.501	0.519	-3.6	
	1,1,2-Trichloroethane	0.316	0.328	-3.8	
	Benzene	1.001	1.048	-4.7	
	trans-1,3-Dichloropropene	0.470	0.495	-5.3	
	2-Chloroethylvinylether	0.190	0.197	-3.7	
	Bromoform	0.302	0.314	-4.0	#
	4-Methyl-2-Pentanone	0.332	0.375	-13.0	
	2-Hexanone	0.236	0.245	-3.8	
	Tetrachloroethene	0.430	0.494	-14.9	
	1,1,2,2-Tetrachloroethane	0.596	0.671	-12.6	#
	Toluene	0.839	0.940	-12.0	*
	Chlorobenzene	1.057	1.156	-9.4	#
	Ethylbenzene	0.509	0.574	-12.8	*
	Styrene	1.098	1.233	-12.3	
	Xylene (total)	0.601	0.669	-11.3	
	Toluene-d8	1.246	1.295	-3.9	
	Bromofluorobenzene	0.742	0.747	-0.7	
	1,2-Dichloroethane-d4	1.759	1.643	6.6	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/10/91 Time: 1103

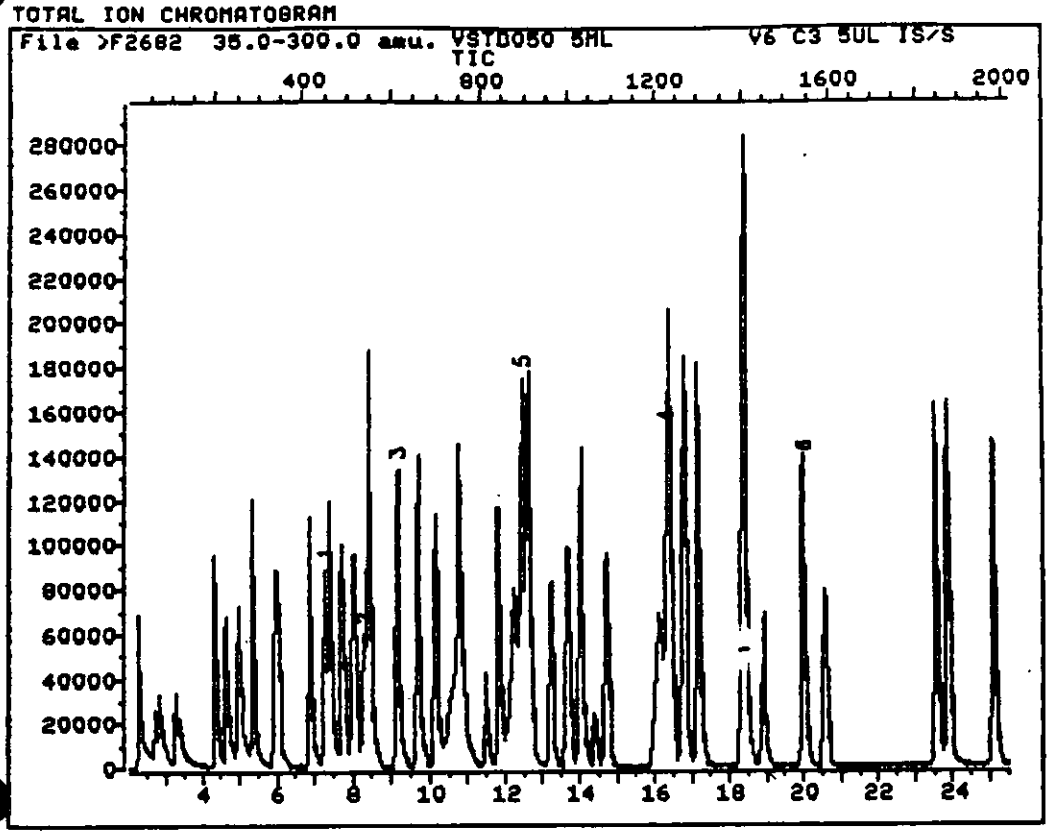
Lab File ID: F2866 Init. Calib. Date(s): 09/22/91 09/22/91

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	

TOTAL ION CHROMATOGRAM



Data File: >F2682::D5 Quant Output File: ^F2682::D7
Name: VSTD050 5ML Instrument ID: V6
Misc: V6 C3 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: 910928 10:25

Operator ID: KERYLYNN
Quant Time : 911001 19:22
Injected at: 911001 18:55

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911001 19:22
Output File: ^F2682::D7 Injected at: 911001 18:55
Data File: >F2682::D5 Dilution Factor: 1.00000
Name: VSTD050 5ML Instrument ID: V6
Misc: V6 C3 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: 910928 10:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.26	128.0	76899	50.00	UG/L	66
2)	C010 Chloromethane	2.70	50.0	87062	45.44	UG/L	99
3)	C020 Vinyl Chloride	2.84	62.0	92702	52.26	UG/L	84
4)	C015 Bromomethane	3.24	94.0	87037	54.88	UG/L	97
5)	C025 Chloroethane	3.36	64.0	46093	42.45	UG/L	87
6)	C045 1,1-Dichloroethene	4.33	96.0	112736	55.31	UG/L	88
7)	C035 Acetone	4.40	43.0	18713	40.40	UG/L	29
8)	C040 Carbon Disulfide	4.64	76.0	342875	53.66	UG/L	100
9)	C030 Methylene Chloride	4.97	84.0	122160	46.32	UG/L	89
11)	C053 Trans-1,2-dichloroethene	5.35	96.0	133825	50.66	UG/L	97
12)	C055 Cis-1,2-dichloroethene	6.87	96.0	146634	48.85	UG/L	93
14)	C050 1,1-Dichloroethane	5.96	63.0	256919	50.34	UG/L	100
15)	C060 Chloroform	7.40	83.0	298573	50.43	UG/L	98
16)	C065 1,2-Dichloroethane	8.43	62.0	168586	50.28	UG/L	100
17)	C110 2-Butanone	6.88	72.0	9019	50.47	UG/L	90
18)	CS15 D4-1,2-dichloroethane	8.29	65.0	126322	47.99	UG/L	89
19)	*CI10 1,4-Difluorobenzene	9.15	114.0	388768	50.00	UG/L	100
20)	C125 Vinyl Acetate	6.03	43.0	245866	51.69	UG/L	97
21)	C115 1,1,1-Trichloroethane	7.72	97.0	235114	52.16	UG/L	94
22)	C120 Carbon Tetrachloride	8.02	117.0	199910	50.80	UG/L	96
23)	C165 Benzene	8.39	78.0	407470	50.30	UG/L	100
24)	C150 Trichloroethene	9.68	130.0	175040	50.36	UG/L	91
25)	C140 1,2-Dichloropropane	10.15	63.0	166616	51.88	UG/L	100
26)	C130 Bromodichloromethane	10.76	83.0	257675	53.94	UG/L	79
27)	C175 2-Chloroethylvinylether	11.48	63.0	76449	47.03	UG/L	96
28)	C143 Cis-1,3-Dichloropropene	11.81	75.0	262647	57.22	UG/L	96
29)	C172 Trans-1,3-dichloropropene	13.21	75.0	177114	49.05	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.66	97.0	127495	53.99	UG/L	81
31)	C155 Dibromochloromethane	14.71	129.0	201780	54.36	UG/L	94
32)	C180 Bromoform	18.90	173.0	122268	56.70	UG/L	96
33)	*CI20 D5-Chlorobenzene	16.31	117.0	293543	50.00	UG/L	100
34)	CS05 D8-Toluene	12.44	98.0	380808	51.91	UG/L	87
35)	C205 4-Methyl-2-pentanone	12.21	43.0	110233	51.94	UG/L	90
36)	C230 Toluene	12.60	92.0	276443	52.28	UG/L	90
37)	C210 2-Hexanone	14.40	43.0	71911	51.35	UG/L	97
38)	C220 Tetrachloroethene	14.01	164.0	145225	53.60	UG/L	87
39)	C235 Chlorobenzene	16.40	112.0	339937	52.18	UG/L	66
40)	C240 Ethylbenzene	16.76	106.0	168858	53.38	UG/L	97
41)	CXXX Xylenes (p)	17.14	106.0	211737	53.87	UG/L	91
42)	CXXX Xylenes (o)	18.34	106.0	207308	56.14	UG/L	96
43)	C245 Styrene	18.40	104.0	362475	55.40	UG/L	100
44)	C225 1,1,2,2-Tetrachloroethane	20.56	83.0	197164	56.66	UG/L	94

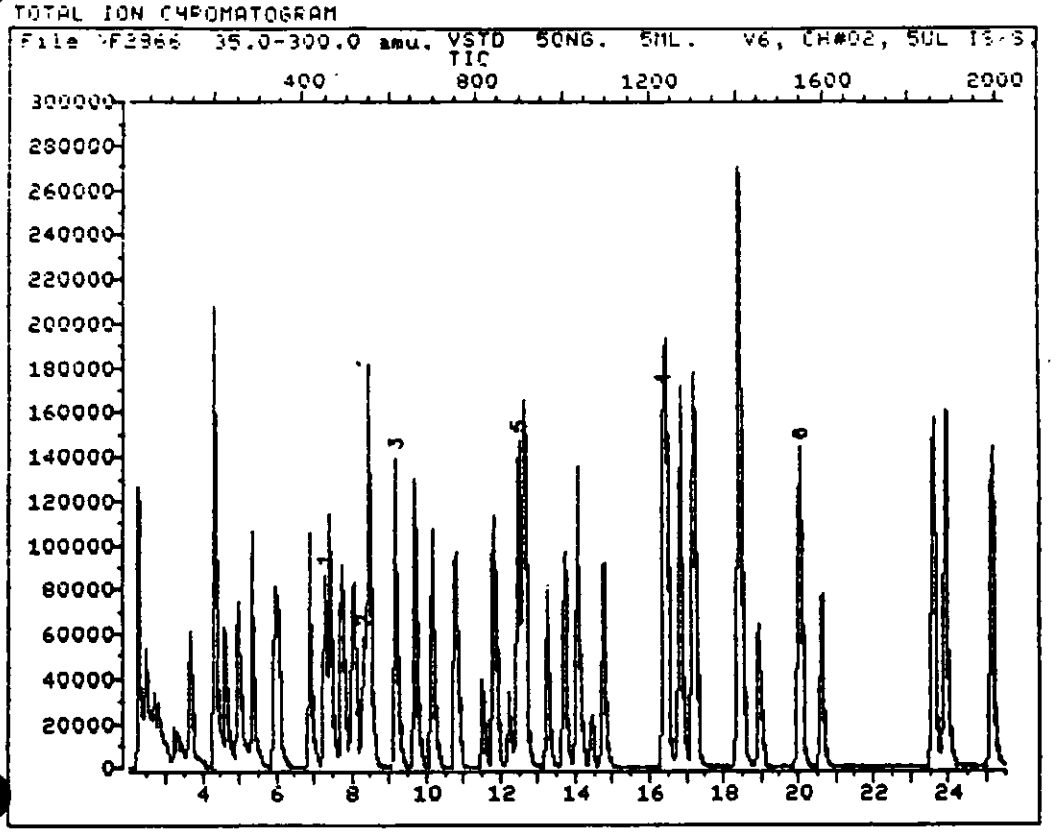
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911001 19:22
Output File: ^F2682::D7 Injected at: 911001 18:55
Data File: >F2682::D5 Dilution Factor: 1.00000
Name: VSTD050 5ML Instrument ID: V6
Misc: V6 C3 5UL IS/S

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 910928 10:25

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	C335 Dichlorobenzene (m)	23.53	146.0	291429	49.97	UG/L	100
47)	C340 Dichlorobenzene (p)	23.85	146.0	266249	49.98	UG/L	100
48)	C350 Dichlorobenzene (o)	25.07	146.0	266146	50.60	UG/L	100
49)	C250 Xylenes (total)	18.34	106.0	196724	53.48	UG/L	95

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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 11:07

Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911010 11:31
Output File: ^F2866::07 Injected at: 911010 11:03
Data File: >F2866::06 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

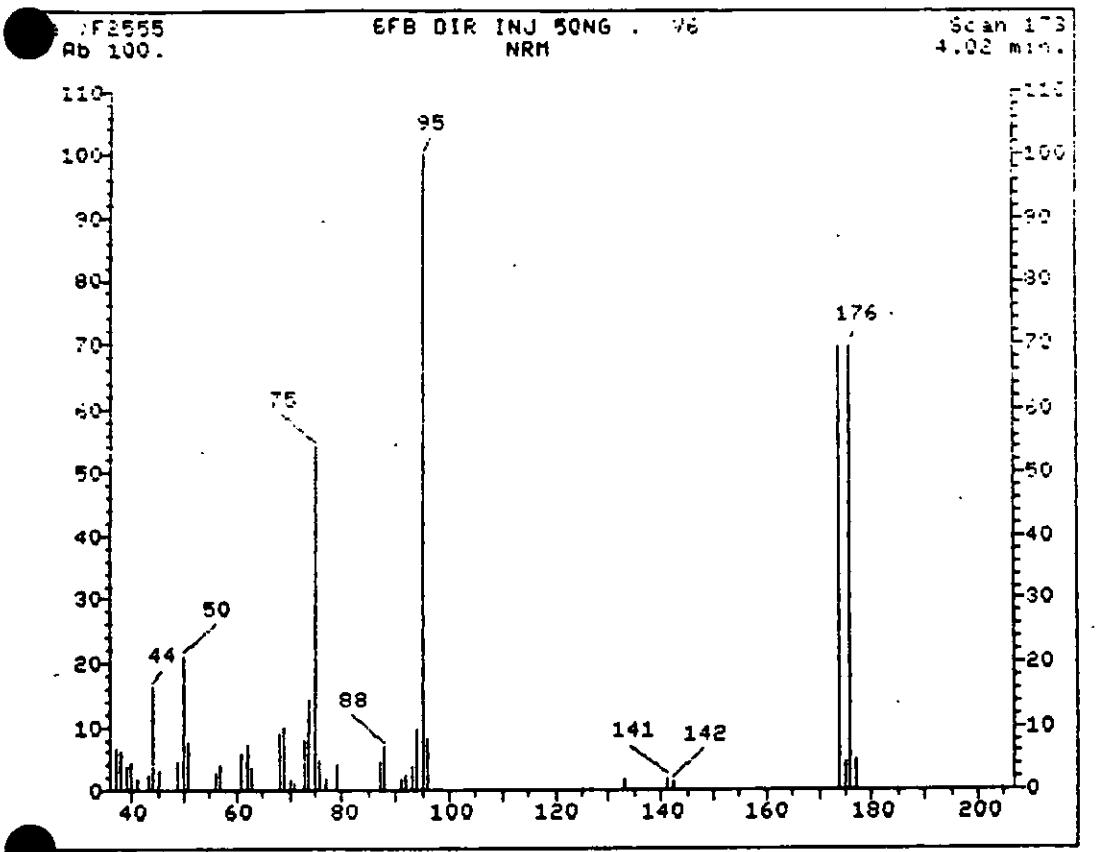
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.26	128.0	76639	50.00	UG/L	70
2)	C010 Chloromethane	2.68	50.0	89916M	44.08	UG/L	96
3)	C020 Vinyl Chloride	2.84	62.0	78498M	39.32	UG/L	85
4)	C015 Bromomethane	3.22	94.0	61802M	29.31	UG/L	94
5)	C025 Chloroethane	3.35	64.0	37015M	26.70	UG/L	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	195220	45.66	UG/L	100

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: 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



TON V0A
old SOW

1S 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				

ENSECO-ERCO LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

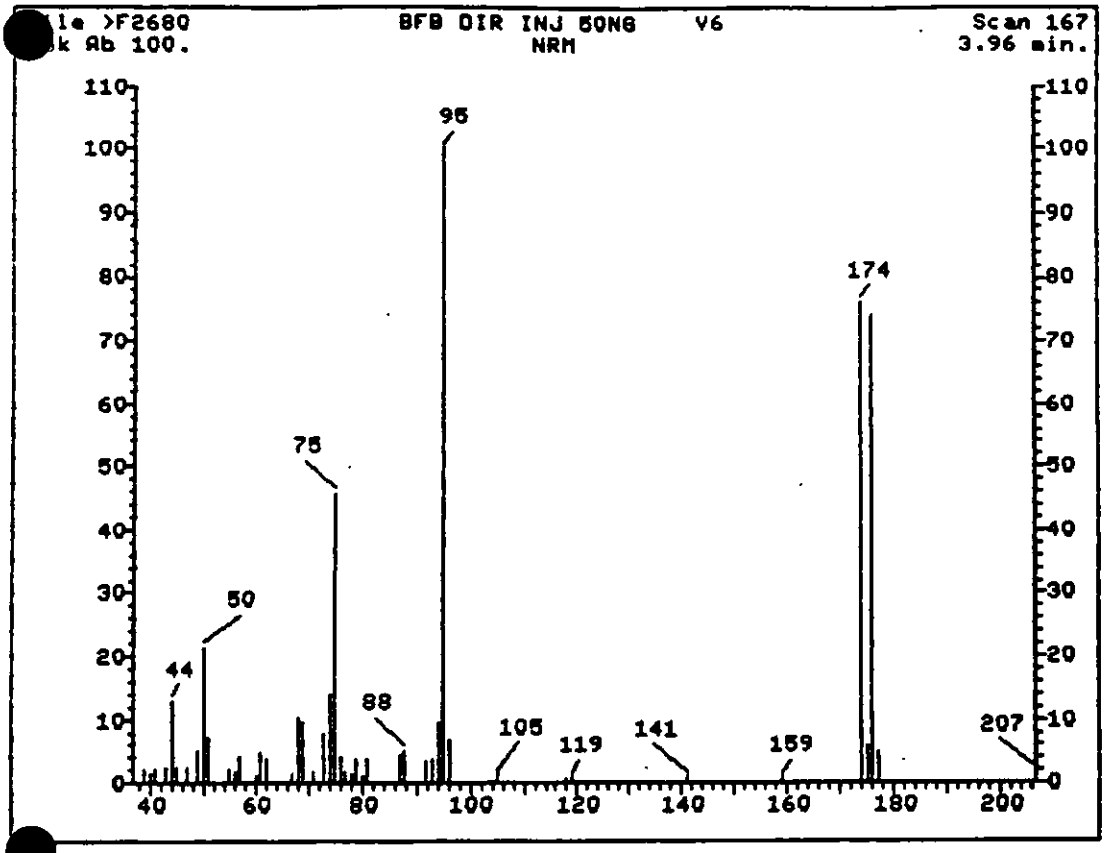
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.54	21.54	Ok
75	30-60% of mass 95	45.84	45.84	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.93	6.93	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	76.26	76.26	Ok
175	5-9% of mass 174	5.93	7.78	Ok
176	95-101% of mass 174	74.23	97.34	Ok
177	5-9% of mass 176	4.83	6.51	Ok

Injection Date: 10/01/91
Injection Time: 17:13
Data File: >F2680
Scan: 167
Name: BFB DIR INJ 50NG
Misc: V6

>F2680 BFB DIR INJ 50NG V6
167 NRM

File: >F2680 Scan #: 167 Retn. time: 3.96

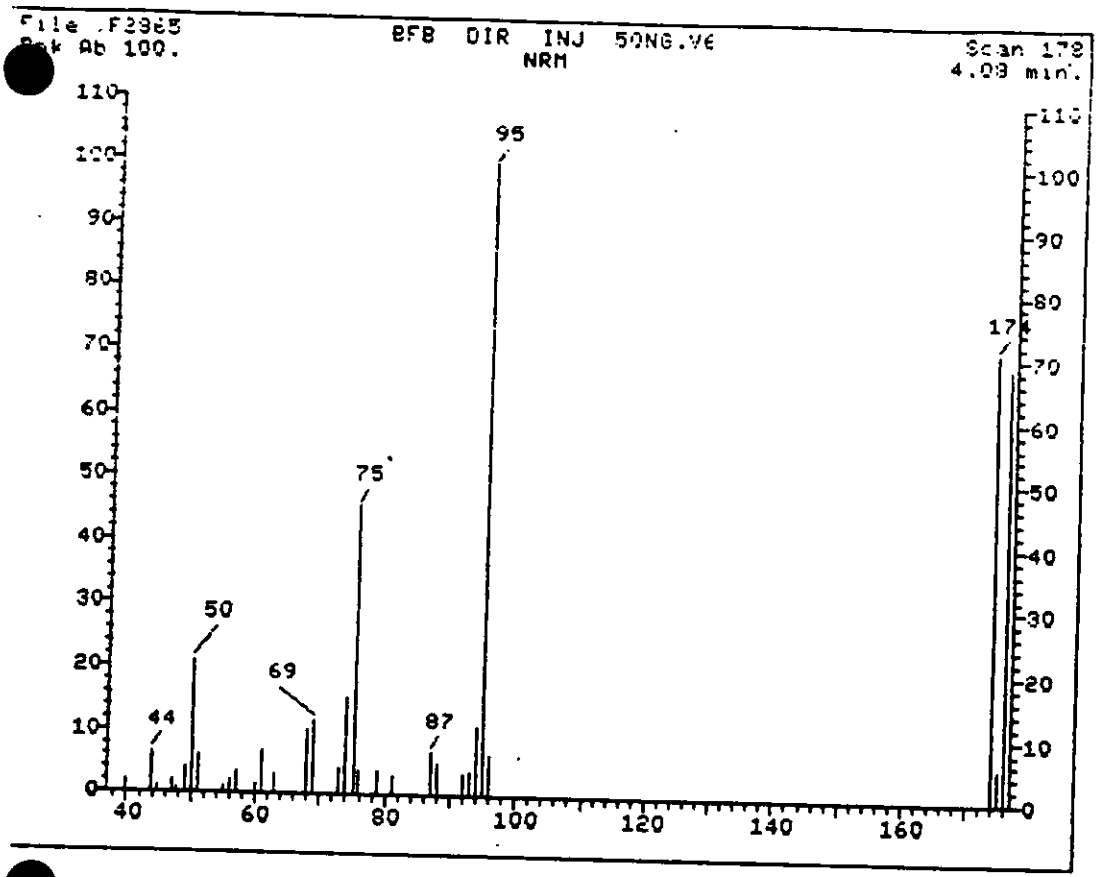
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.95	5.542	51.05	7.245	71.05	1.690	80.95	3.786	117.95	.747
38.95	2.018	54.95	2.044	72.95	8.005	86.95	4.428	118.95	.969
39.95	1.507	55.95	1.834	73.95	14.018	87.95	5.214	140.85	1.048
41.05	2.240	57.05	4.232	75.05	45.840	91.95	3.354	159.15	1.035
42.95	2.620	59.95	1.127	76.05	4.022	93.05	3.681	173.95	76.261
43.95	12.983	60.95	4.743	76.95	1.638	94.05	9.511	174.95	5.935
45.05	2.332	62.05	3.970	77.95	1.572	95.05	100.000	175.95	74.230
47.05	2.542	66.95	1.507	78.95	3.642	96.05	6.930	176.95	4.834
49.05	5.109	67.95	10.297	79.95	1.087	104.95	1.310	206.90	1.769
50.05	21.538	69.05	9.407						



MS data file header from : >F2680::D6

Sample: BFB DIR INJ 50NG Operator: KERYLYNN SUPER GRP. 10/01/91 17:13
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



S 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	4.242	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		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2688

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

% Moisture: not dec. _____ Date Analyzed: 10/01/91

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	1	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.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2688

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

% Moisture: not dec. ____ Date Analyzed: 10/01/91

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

N/C 624-A L-092691 V6A R-100191 V6B

Reduced by : P Date: 10/2/91 Data File: >F2688
Reviewed by: MB Date: 10/11/91 Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

$MeCl_2$

Sample: VBLK01 5ML
Misc : V6 C5 5UL IS/S
Injected : 10/01/91 23:37
Analyst: KERYLYNN
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	.2520	101	76 114
CS05 D8-Toluene	.2500	.2395	95.8	88 110
CS10 Bromofluorobenzene	.2500	.2404	96.2	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
254	1.231	1.2	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
		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-Trichloroethene

Data file: >F2688 Page: 2
Sample: VBLK 5ML

Scan #	Concentration Quant list UG/L	Concentration 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: >F2688::D5 Injected at: 23:37 10/01/91
Quant'd : 00:04 10/02/91
ID File : MOBID6::MT Calibrated : 09:37 08/14/91

	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.26	7.22	.04	128.0	69862	1.0000	50.00
2)	C010 Chloromethane	2.68	0.00	--	50.0	0	1.1322	0.00
3)	C020 Vinyl Chloride	2.82	0.00	--	62.0	0	1.2055	0.00
4)	C015 Bromomethane	3.22	0.00	--	94.0	0	1.1318	0.00
5)	C025 Chloroethane	3.34	0.00	--	64.0	0	.5994	0.00
6)	C045 1,1-Dichloroethene	4.30	0.00	--	96.0	0	1.4660	0.00
7)	C035 Acetone	4.37	0.00	--	43.0	0	.2433	0.00
8)	C040 Carbon Disulfide	4.61	0.00	--	76.0	0	4.4588	0.00
9)	C030 Methylene Chloride	4.94	4.93	.01	84.0	2732	1.5886	1.23
10)	CXXX Tert-butyl alcohol	5.09	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.32	0.00	--	96.0	0	1.7403	0.00
12)	C055 Cis-1,2-dichloroethe	6.83	0.00	--	96.0	0	1.9068	0.00
13)	CXXX Methyl tert-butyl et	5.31	0.00	--	73.0	0	2.9749	0.00
14)	C050 1,1-Dichloroethane	5.92	0.00	--	63.0	0	3.3410	0.00
15)	C060 Chloroform	7.36	0.00	--	83.0	0	3.8827	0.00
16)	C065 1,2-Dichloroethane	8.38	0.00	--	62.0	0	2.1923	0.00
17)	C110 2-Butanone	6.84	0.00	--	72.0	0	.1173	0.00
18)	CS15 D4-1,2-dichloroethan	8.24	8.23	.01	65.0	115692	1.6427	50.41
19)	*CI10 1,4-Difluorobenzene	9.15	9.09	.06	114.0	405137	1.0000	50.00
20)	C125 Vinyl Acetate	5.99	0.00	--	43.0	0	.6324	0.00
21)	C115 1,1,1-Trichloroethan	7.67	0.00	--	97.0	0	.6048	0.00
22)	C120 Carbon Tetrachloride	7.97	0.00	--	117.0	0	.5142	0.00
23)	C165 Benzene	8.34	0.00	--	78.0	0	1.0481	0.00
24)	C150 Trichloroethene	9.62	0.00	--	130.0	0	.4502	0.00
25)	C140 1,2-Dichloropropane	10.09	0.00	--	63.0	0	.4286	0.00
26)	C130 Bromodichloromethane	10.69	0.00	--	83.0	0	.6628	0.00
27)	C175 2-Chloroethylvinylet	11.41	0.00	--	63.0	0	.1966	0.00
28)	C143 Cis-1,3-Dichloroprop	11.74	0.00	--	75.0	0	.6373	0.00
29)	C172 Trans-1,3-dichloropr	13.13	0.00	--	75.0	0	.4952	0.00
30)	C160 1,1,2-Trichloroethan	13.58	0.00	--	97.0	0	.3279	0.00
31)	C155 Dibromochloromethane	14.62	0.00	--	129.0	0	.5190	0.00
32)	C180 Bromoform	18.78	0.00	--	173.0	0	.3145	0.00
33)	*CI20 D5-Chlorobenzene	16.31	16.28	.03	117.0	312583	1.0000	50.00
34)	CS05 D8-Toluene	12.41	12.40	.01	98.0	388428	1.2973	47.89
34)D	CS05 D8-Toluene	12.41	12.85	.44	98.0	1513	1.2973	.19
35)	C205 4-Methyl-2-pentanone	12.18	0.00	--	43.0	0	.3755	0.00
36)	C230 Toluene	12.58	0.00	--	92.0	0	.9417	0.00
37)	C210 2-Hexanone	14.37	0.00	--	43.0	0	.2450	0.00
38)	C220 Tetrachloroethene	13.99	0.00	--	164.0	0	.4947	0.00
39)	C235 Chlorobenzene	16.37	0.00	--	112.0	0	1.1580	0.00
40)	C240 Ethylbenzene	16.73	0.00	--	106.0	0	.5752	0.00
41)	CXXX Xylenes (p)	17.10	0.00	--	106.0	0	.7213	0.00
42)	CXXX Xylenes (o)	18.30	0.00	--	106.0	0	.7062	0.00
43)	C245 Styrene	18.36	0.00	--	104.0	0	1.2348	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.52	0.00	--	83.0	0	.6717	0.00
45)	CS10 Bromofluorobenzene	19.94	19.92	.02	95.0	224896	.2483	48.07
46)	C335 Dichlorobenzene (m)	23.48	0.00	--	146.0	0	.9928	0.00
47)	C340 Dichlorobenzene (p)	23.80	0.00	--	146.0	0	.9070	0.00
48)	C350 Dichlorobenzene (o)	25.02	0.00	--	146.0	0	.9067	0.00
49)	C250 Xylenes (total)							

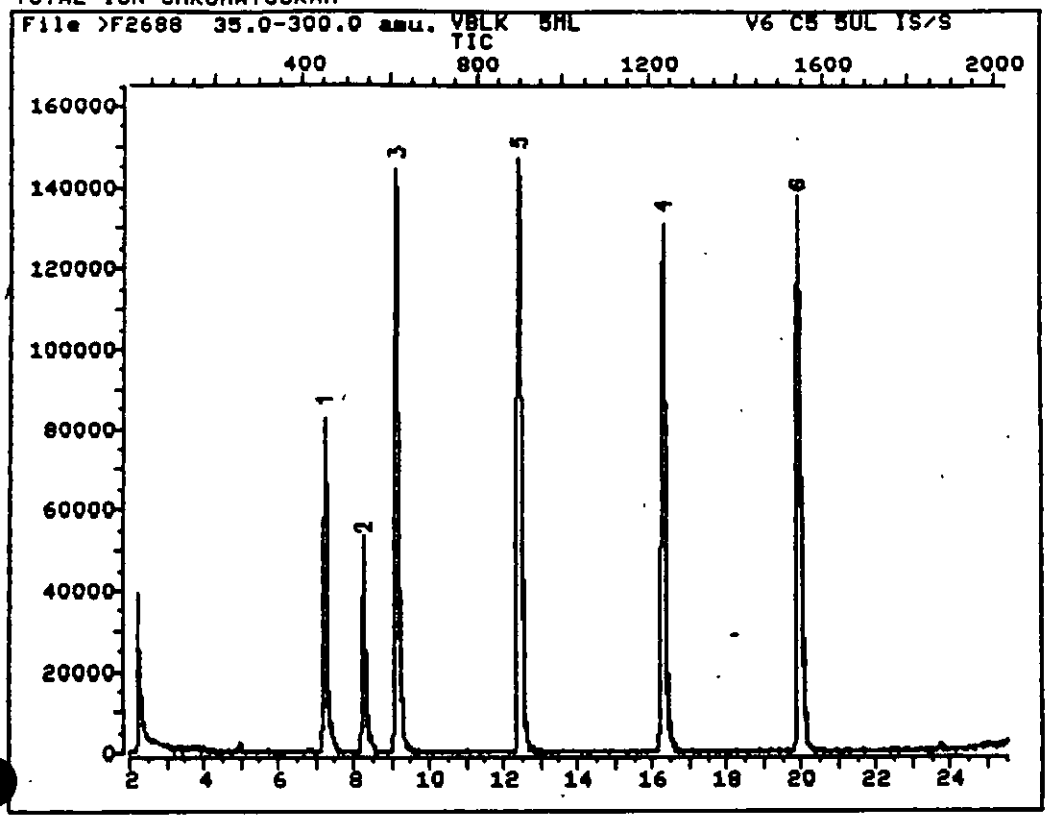
Internal Standard Comparison

Sample: >F2688 Date injected: 10/01/91 Standard: >F2682

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	69862	76899	90.8
CI10 1,4-Difluorobenzene	405137	388768	104.2
CI20 D5-Chlorobenzene	312583	293543	106.5

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

TOTAL ION CHROMATOGRAM



Data File: >F2688::D5 Quant Output File: ^F2688::D7
Name: VBLK01 5ML Instrument ID: V6
Misc: V6 C5 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: 911001 18:55

Operator ID: KERYLYNN
Quant Time : 911002 00:04
Injected at: 911001 23:37

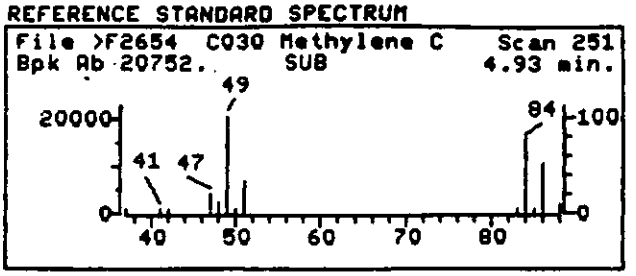
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911002 00:04
Output File: ^F2688::D7 Injected at: 911001 23:37
Data File: >F2688::D5 Dilution Factor: 1.00000
Name: VBLK01 5ML Instrument ID: V6
Misc: V6 C5 5UL IS/S

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911001 18:55

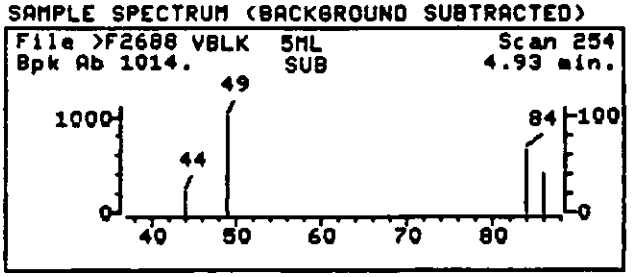
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.22	128.0	69862	50.00	UG/L	68
9)	C030 Methylene Chloride	4.93	84.0	2732	1.23	UG/L	98
18)	CS15 D4-1,2-dichloroethane	8.23	65.0	115692	50.41	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.09	114.0	405137	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.28	117.0	312583	50.00	UG/L	100
34)	CS05 D8-Toluene	12.40	98.0	388428	47.89	UG/L	94
45)	CS10 Bromofluorobenzene	19.92	95.0	224896	48.07	UG/L	70

* Compound is ISTD

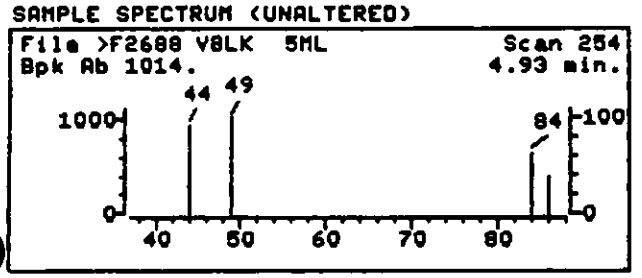
REFERENCE STANDARD SPECTRUM

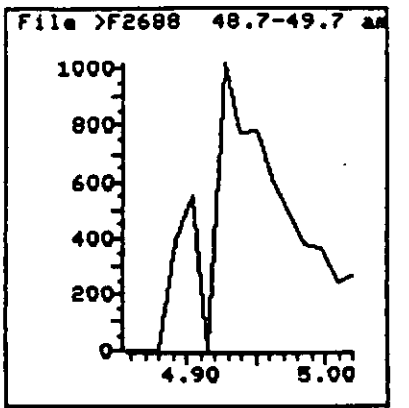


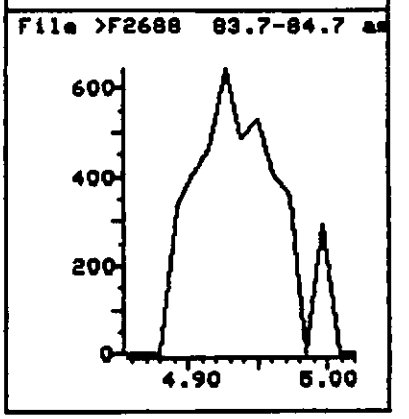
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2688::D5
Name: VBLK01 5ML
Misc: V6 C5 5UL IS/S
Quant Time: 911002 00:04
Injected at: 911001 23:37
Last Qcal Time: 911001 18:55

Quant Output File: ^F2688::D7
Instrument ID: V6

Quant ID File: MOBID6::MT
Last Calibration: 910814 09:37

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 254
Retention Time: 4.93 min.
Quant Ion : 84.0
Area : 2732
Concentration : 1.23 UG/L
q-value : 98

Data Reduced by : P Date: 10/2/91 Data File: >F2688
Data Reviewed by : PW Date: 10/8/91

Enseco TIC Report (page 1)

Sample: VBLK01 5ML Run Factor: 1.00
Conditions: V6 C5 5UL IS/S Analyst: KERYLYNN

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

no unk

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

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.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10041 SAS No.: _____ SDG No.: _____

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

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-10071-06A

NC

R-10109I-06A 8240-

Produced by : SZ Date: 10/10/91 Data File: >F28/U >F2870
Reviewed by: MB Date: 10/11/91 Page: 1 mecl2

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: VBLK.02 MeOH 1000UL.
Misc : V6, LH#02, 50UL IS/S
Injected : 10/10/91 14:28 Units: UG/KG
Analyst: KERYLYNN Run Factor: 125.000
ID File: MUBIU6 Surrogate Vol: .005
Quant list threshold: 1.00

no unknowns

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: MUBIU6

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
252	1.161	150 J	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-Trichloroethene

Data File: >F28/U Page: 2
Sample: VBLK. MeOH 100UL.

Scan #	Concentration Quant list ug/L	Sample ug/kg	Compound
	BDL	C155	Dibromochloromethane
	BDL	C18U	Bromoform
	BDL	C205	4-Methyl-2-pentanone
	BDL	C25U	Toluene
	BDL	C21U	2-Hexanone
	BDL	C22U	Tetrachloroethene
	BDL	C235	Chlorobenzene
	BDL	C24U	Ethylbenzene
	BDL	CXXX	Xylenes (p)
	BDL	CXXX	Xylenes (o)
	BDL	C245	Styrene
	BDL	C225	1,1,2,2-Tetrachloroethane
	BDL	C335	Dichlorobenzene (m)
	BDL	C34U	Dichlorobenzene (p)
	BDL	C35U	Dichlorobenzene (o)
	BDL	C25U	Xylenes (total)

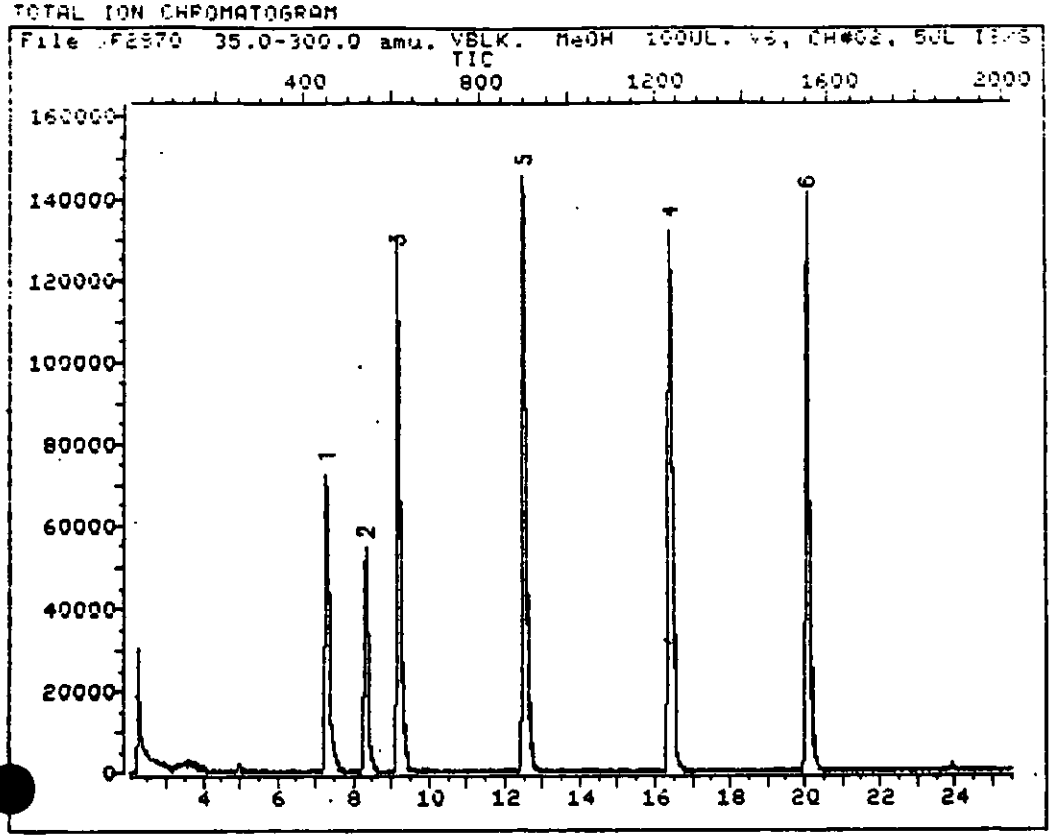
Internal Standard Comparison

Sample: >F2870 Date injected: 10/10/91 Standard: >F2866

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	69679	76639	90.9
CI10 1,4-Difluorobenzene	393780	407218	96.7
CI20 D5-Chlorobenzene	307497	313165	98.2

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

TOTAL ION CHROMATOGRAM



Data File: >F2870::D6 Quant Output File: ^F2870::D7
Name: VBLK02 MeOH 100UL. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

Id File: M0BID6::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**

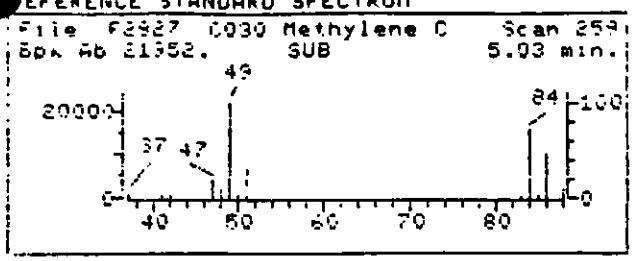
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911010 14:56
Output File: ^F2870::D7 Injected at: 911010 14:28
Data File: >F2870::D6 Dilution Factor: 1.00000
Name: VBLK. MeOH 100UL. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

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

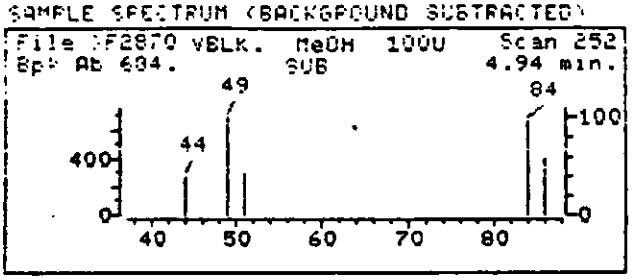
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.27	128.0	69679	50.00	UG/L	70
9)	C030 Methylene Chloride	4.94	84.0	2816	1.16	UG/L	61
18)	CS15 D4-1,2-dichloroethane	8.31	65.0	125843	53.17	UG/L	94
19)	*CI10 1,4-Difluorobenzene	9.16	114.0	393780	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	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

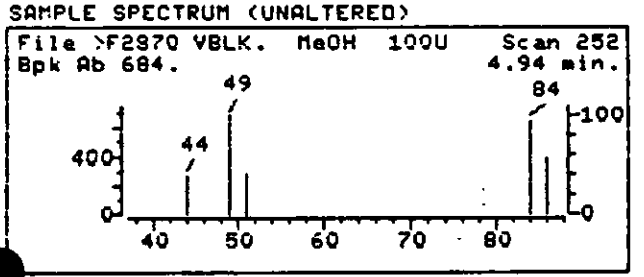
EFERENCE STANDARD SPECTRUM

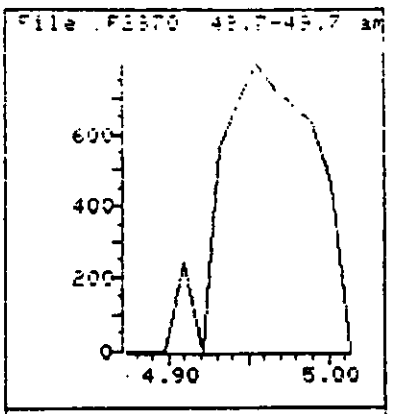


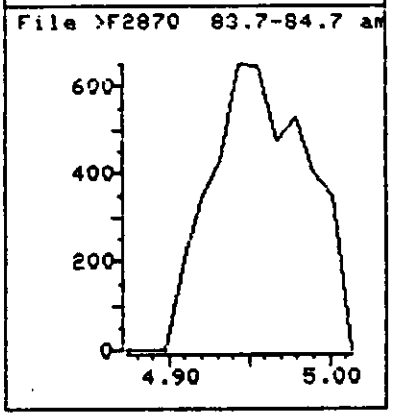
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2870::D6
Name: VBLK02 MeOH 100UL.
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: 10/9/91 Data File: >F28/U
Data Reviewed by : MB Date: 10/11/91

Enseco HC Report (page 1)

Sample: VBLKD2 MeOH 1000UL. Run Factor: 125.
Conditions: V6, CH#02, 50UL 15/5 Analyst: KERYLYNN

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

No Units

Versar Laboratories INC.

ANALYSIS REPORT
General Inorganic Chemistry Section

DATE: 14-OCT-91 PAGE: 1
CODE / CONTROL #: ERCO / 5582
CLIENT / SITE: ENSECO-ERCO LAB / PO 10041
PROJECT / BATCH: 420.2.0 / 5

Lab#	Field #	TOC (mg/kg)		
63252	10041-01	6,460.		
63253	10041-02	605.		

C. Thompson
Laboratory Manager

000118

Versar Laboratories INC.

QUALITY ASSURANCE REPORT
General Inorganic Chemistry Section

DATE: 14-OCT-91
CONTROL #: 5582
CODE / BATCH: ERCO / 5
CLIENT / SITE: ENSECO-ERCO LAB / PO 10041
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	480000	102%	mg/kg

CONTINUING CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	CCV1	470500	469000	100%	mg/kg

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 10/04/91). This project was received at Enseco - Erco Laboratory on October 4, 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 010126 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

DELIVERABLES INDEX

Client: Bafoan Environmental Consultants
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 0126

DELIVERABLES INDEX (Cont.)

Client: Ballard Environmental Consultants
Project Name: YPC Soil Analysis October 1991
Erco Project Number: 10126

	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: Baker Environmental Consultants
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 10126

NA = Not Applicable

October 25, 1991

Project Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analyisis 10/04/91
Erco Project No.: 010126

1. This project consists of the results for samples received at Enseco - Erco Laboratory on October 4, 1991. Please see the sample description information sheet for a list of samples.

2. In the volatile fraction please note that additional dilution of sample 01 (client id:UCC-SB-B-11-2) was analyzed one day outside holding time.Original sample was analyzed within holding time. Please note that above sample has very difficult matrix and was analyzed several times to meet CLP requirements.

SAMPLE DESCRIPTION INFORMATION
for
Balsam Environmental Consultants, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
010126-0001-SA	UCC-SB-B-11-2	SOIL	01 OCT 91	15:00	04 OCT 91
010126-0002-SA	UCC-SB-B-11-2C	SOIL	01 OCT 91	15:00	04 OCT 91
010126-0003-SA	UCC-SB-A-09-4	SOIL	01 OCT 91	16:15	04 OCT 91
010126-0004-SA	UCC-SB-A-09-4C	SOIL	01 OCT 91	16:15	04 OCT 91
010126-0005-SA	UCC-SB-B-16-3	SOIL	02 OCT 91	16:00	04 OCT 91
010126-0006-SA	UCC-SB-B-16-3	SOIL	02 OCT 91	16:00	04 OCT 91
010126-0007-SA	UCC-PC-1	AQUEOUS	02 OCT 91	17:40	04 OCT 91
010126-0008-SA	UCC-SB-C-18-2	SOIL	03 OCT 91	09:00	04 OCT 91
010126-0009-SA	UCC-SB-C-18-2	SOIL	03 OCT 91	09:00	04 OCT 91
010126-0010-SA	UCC-10/3-QA1	AQUEOUS	24 SEP 91		04 OCT 91
010126-0011-SA	UCC-SB-B-14-3C	SOIL	03 OCT 91	12:00	04 OCT 91
010126-0012-SA	UCC-SB-B-14-3	SOIL	03 OCT 91	12:00	04 OCT 91

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.
6 INDUSTRIAL WAY, SALEM, NH 03079

PROJECT NUMBER: 6437 T6

PROJECT NAME:

SAMPLER(S) SIGNATURE(S): Robert Sulker, Willie M. Barker

SEND REPORT TO: J.M. O'Donnell

PROJECT ADDRESS:

ANALYTICAL LABORATORY: Enseco

METHOD: 8240 / 8270

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-11-2		10/1/91	1500	Soil	X		ice	n	40ml VOA	3	X							
UCC-SB-B-11-2C		10/1/91	1500	soil		X	"	"	250ml	1							X	CLP reporting
UCC-SB-A-09-4		10/1/91	4:15PM	soil	X		"	"	40ml VOA	3	X							Attn:
UCC-SB-A-09-4C		10/1/91	4:15PM	Soil		X	"	"	850ml	1							X	Mary Ford
UCC-SB-B-16-3		10/2/91	1400	soil	X		"	"	40ml VOA	3	X							
UCC-SB-B-16-3		10/2/91	1400	soil	X		"	"	250ml	1							X	
UCC-RC-1	(Rinse blank)	10/2/91	5:40PM	WATER	X		"	"	40ml VOA	3	X							
UCC-SB-C-18-2		10/3/91	0900	soil	X		"	"	40ml VOA	3	X							
UCC-SB-C-18-2		10/3/91	0900	soil	X		"	"	250ml	1							X	
UCC-9 (DUP)	10/3-9A1	9/24/90	—	water	X		"	"	40ml VOA	2	X							
UCC-SB-B-14-3C		10/3	1200	S	X		"	"	250ml	1							X	
UCC-SB-B-14-3		10/3	1200	S	X		"	"	40ml VOA	3	X							

RELINQUISHED BY: Robert Sulker	DATE: 10/3/91	TIME: 12:30AM	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY: Eric Folly

DATE: 10/4/91 TIME: 930

METHOD OF SHIPMENT: Fed Ex

AIRBILL (OR SHIPPING INVOICE) NUMBER: 3329067710

FORM/ADM/ENSECO

INTERLABORATORY CHAIN OF CUSTODY

ENSECO A Company

PAGE 1 OF 1

SHIP TO: Ventura

ATTENTION: Larry Pollock

SEND RESULTS TO: Enseco Frco

ATTENTION: MARY B. FORD

EXPORT ID	ANALYTICAL REQUESTS: TOC	SAMPLE CONDITION UPON RECEIPT	COMMENTS
UCC-SB-B-11-2C	↓		10126-02
UCC-SB-A-09-4C			-04
UCC-SB-B-16-3			-06
UCC-SB-C-18-2			-09
UCC-SB-B-14-3C			-11

TEST PRICE	
SUBTOTAL	
DISCOUNT / SURCHARGE	
TOTAL	

WRITTEN RESULTS REQUIRED BY (DATE): 10/24 | VERBAL/FAC RESULTS REQUIRED BY (DATE): | P.O. No. 10126

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: Mary B. Ford — DATE / TIME: 10/4/91

RECEIVED: [signature] — DATE / TIME: 10-7-91 10^oc

ENS—1109

IMPORT COPY

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	SHB 10/07/91 1-4					00 10/5		
010129	EH 10/4/91	SHB 10/07/91 1				ST 10.7		P 10/5/91	M.B 10/7
010130	SHB 10/7								
010131									
010132	EH 10/4								
010133	SHB 10/5								
010134									
010135									
010136									
010137									
010138									
010139									
010140									
010141									
010142									
010143									
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.

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-11-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01

Sample wt/vol: 3.1 (g/mL) G Lab File ID: B2984

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/14/91

Column: (pack/cap) CAP Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11000	U
74-83-9	Bromomethane	11000	U
75-01-4	Vinyl Chloride	11000	U
75-00-3	Chloroethane	11000	U
75-09-2	Methylene Chloride	12000	B
67-64-1	Acetone	2100	J
75-15-0	Carbon Disulfide	5300	U
75-35-4	1,1-Dichloroethene	4100	J
75-34-3	1,1-Dichloroethane	5300	U
540-59-0	1,2-Dichloroethene (total)	5300	U
67-66-3	Chloroform	5300	U
107-06-2	1,2-Dichloroethane	5300	U
78-93-3	2-Butanone	6200	BJ
71-55-6	1,1,1-Trichloroethane	54000	
56-23-5	Carbon Tetrachloride	5300	U
108-05-4	Vinyl Acetate	11000	U
75-27-4	Bromodichloromethane	5300	U
78-87-5	1,2-Dichloropropane	5300	U
10061-01-5	cis-1,3-Dichloropropene	5300	U
79-01-6	Trichloroethene	23000	
124-48-1	Dibromochloromethane	5300	U
79-00-5	1,1,2-Trichloroethane	5300	U
71-43-2	Benzene	5300	U
10061-02-6	trans-1,3-Dichloropropene	5300	U
110-75-8	2-Chloroethylvinylether	11000	U
75-25-2	Bromoform	5300	U
108-10-1	4-Methyl-2-Pentanone	11000	U
591-78-6	2-Hexanone	11000	U
127-18-4	Tetrachloroethene	3000	J
79-34-5	1,1,2,2-Tetrachloroethane	5300	U
108-88-3	Toluene	22000	B
108-90-7	Chlorobenzene	5300	U
100-41-4	Ethylbenzene	370000	E
100-42-5	Styrene	5300	U
1330-20-7	Xylene (total)	1100000	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-11-2

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01

Sample wt/vol: 3.1 (g/mL) G Lab File ID: B2984

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 5.0

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C8H16O ISOMER	21.24	190000	J
2.		METHYLETHYLBENZENE ISOMER	21.50	53000	J
3.		UNKNOWN ALKANE	22.10	80000	J
4.		C9H18O ISOMER	22.40	330000	J
5.		C3-BENZENE ISOMER	23.03	140000	J
6.		UNKNOWN	23.47	56000	J
7.		C3-BENZENE ISOMER	24.41	49000	J
8.		C4-BENZENE ISOMER	25.31	63000	J
9.		C4-BENZENE ISOMER	25.58	78000	J
10.		UNKNOWN ALKANE	26.28	49000	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-11-2DL

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01DL

Sample wt/vol: 1.0 (g/mL) G Lab File ID: A3520

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/15/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130000	U
74-83-9	Bromomethane	130000	U
75-01-4	Vinyl Chloride	130000	U
75-00-3	Chloroethane	130000	U
75-09-2	Methylene Chloride	46000	BDJ
67-64-1	Acetone	130000	U
75-15-0	Carbon Disulfide	64000	U
75-35-4	1,1-Dichloroethene	64000	U
75-34-3	1,1-Dichloroethane	64000	U
540-59-0	1,2-Dichloroethene (total)	64000	U
67-66-3	Chloroform	64000	U
107-06-2	1,2-Dichloroethane	64000	U
78-93-3	2-Butanone	130000	U
71-55-6	1,1,1-Trichloroethane	150000	D
56-23-5	Carbon Tetrachloride	64000	U
108-05-4	Vinyl Acetate	130000	U
75-27-4	Bromodichloromethane	64000	U
78-87-5	1,2-Dichloropropane	64000	U
10061-01-5	cis-1,3-Dichloropropene	64000	U
79-01-6	Trichloroethene	33000	DJ
124-48-1	Dibromochloromethane	64000	U
79-00-5	1,1,2-Trichloroethane	64000	U
71-43-2	Benzene	64000	U
10061-02-6	trans-1,3-Dichloropropene	64000	U
110-75-8	2-Chloroethylvinylether	130000	U
75-25-2	Bromoform	64000	U
108-10-1	4-Methyl-2-Pentanone	130000	U
591-78-6	2-Hexanone	130000	U
127-18-4	Tetrachloroethene	64000	U
79-34-5	1,1,2,2-Tetrachloroethane	64000	U
108-88-3	Toluene	20000	DJ
108-90-7	Chlorobenzene	64000	U
100-41-4	Ethylbenzene	370000	D
100-42-5	Styrene	64000	U
1330-20-7	Xylene (total)	2000000	D

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-11-2DL

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01DL

Sample wt/vol: 1.0 (g/mL) G Lab File ID: A3520

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/15/91

Column (pack/cap) CAP Dilution Factor: 20

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.60	220000	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-A-09-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2804

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. 17 Date Analyzed: 10/08/91

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	7	
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	5	BJ
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	2	J
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	6	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	17	
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	4	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	4	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-A-09-4

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2804

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. 17 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C6H14 ISOMER	5.85	36	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-16-3

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2802

Level: (low/med) LOW Date Received: 10/04/91

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

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	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	32	
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	63	
540-59-0	1,2-Dichloroethene (total)	30	
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	6	BJ
71-55-6	1,1,1-Trichloroethane	20	
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	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	11	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	21	
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	83	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-16-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2802

Level: (low/med) LOW Date Received: 10/04/91

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

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.		C8H160 ISOMER	21.19	18	J
2.		UNKNOWN	21.96	5.8	J
3.		UNKNOWN	22.33	85	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PC-1

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10126 SAS No.: SDG No.:

Matrix: (soil/water) WATER Lab Sample ID: 10126-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2753

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. Date Analyzed: 10/06/91

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	U
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)	3	J
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	2	J
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	2	J
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	10	
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.

PC-1

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2753

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. _____ Date Analyzed: 10/06/91

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-C-18-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2896

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 10 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	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	140	J
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	680	U
75-35-4	1,1-Dichloroethene	680	U
75-34-3	1,1-Dichloroethane	680	U
540-59-0	1,2-Dichloroethene (total)	190	J
67-66-3	Chloroform	680	U
107-06-2	1,2-Dichloroethane	680	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	680	U
56-23-5	Carbon Tetrachloride	680	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	680	U
78-87-5	1,2-Dichloropropane	680	U
10061-01-5	cis-1,3-Dichloropropene	680	U
79-01-6	Trichloroethene	680	U
124-48-1	Dibromochloromethane	680	U
79-00-5	1,1,2-Trichloroethane	680	U
71-43-2	Benzene	680	U
10061-02-6	trans-1,3-Dichloropropene	680	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	680	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U
108-88-3	Toluene	330	J
108-90-7	Chlorobenzene	680	U
100-41-4	Ethylbenzene	900	
100-42-5	Styrene	680	U
1330-20-7	Xylene (total)	6000	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-C-18-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2896

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 10 Date Analyzed: 10/11/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C8H18 ISOMER	11.49	2200	J
2.		C8H18 ISOMER	11.84	1500	J
3.		OCTANE	12.95	2800	J
4.		C8H16 ISOMER	14.77	750	J
5.		C10H22 ISOMER	21.71	1400	J
6.		UNKNOWN	22.07	1300	J
7.		ETHYLMETHYLBENZENE ISOMER	22.73	1300	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-3-QA1

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2735

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. ____ Date Analyzed: 10/05/91

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	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.

10-3-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2735

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. ____ Date Analyzed: 10/05/91

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-14-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-12

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2894

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 15 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	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	200	J
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	720	U
75-35-4	1,1-Dichloroethene	720	U
75-34-3	1,1-Dichloroethane	720	U
540-59-0	1,2-Dichloroethene (total)	720	U
67-66-3	Chloroform	720	U
107-06-2	1,2-Dichloroethane	720	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	720	U
56-23-5	Carbon Tetrachloride	720	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	720	U
78-87-5	1,2-Dichloropropane	720	U
10061-01-5	cis-1,3-Dichloropropene	720	U
79-01-6	Trichloroethene	720	U
124-48-1	Dibromochloromethane	720	U
79-00-5	1,1,2-Trichloroethane	720	U
71-43-2	Benzene	720	U
10061-02-6	trans-1,3-Dichloropropene	720	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	720	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	720	U
79-34-5	1,1,2,2-Tetrachloroethane	720	U
108-88-3	Toluene	720	U
108-90-7	Chlorobenzene	720	U
100-41-4	Ethylbenzene	720	U
100-42-5	Styrene	720	U
1330-20-7	Xylene (total)	340	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-14-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-12

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2894

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 15 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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2752

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

% Moisture: not dec. ____ Date Analyzed: 10/06/91

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	U
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	4	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.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2752

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

% Moisture: not dec. _____ Date Analyzed: 10/06/91

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10126 SAS No.: SDG No.:

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

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3515

Level: (low/med) MED Date Received:

% Moisture: not dec. 0 Date Analyzed: 10/15/91

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	520	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	640	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	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.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3515

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

% Moisture: not dec. 0 Date Analyzed: 10/15/91

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.: 10126 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.: 10126 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

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2886

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.

VBLK04

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2886

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK05

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK05

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.

VBLK05

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK05

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: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C8H16O ISOMER	21.24	23000	J
2.		METHYLETHYLBENZENE ISOMER	21.50	6300	J
3.		UNKNOWN ALKANE	22.10	9500	J
4.		C9H18O ISOMER	22.40	39000	J
5.		C3-BENZENE ISOMER	23.03	16000	J
6.		UNKNOWN	23.47	6600	J
7.		C3-BENZENE ISOMER	24.41	5800	J
8.		C4-BENZENE ISOMER	25.31	7500	J
9.		C4-BENZENE ISOMER	25.58	9300	J
10.		UNKNOWN ALKANE	26.28	5800	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK06

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2732

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

% Moisture: not dec. _____ Date Analyzed: 10/05/91

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	U
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

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2732

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

% Moisture: not dec. _____ Date Analyzed: 10/05/91

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: Bafour Environmental Consultants
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 0126

DELIVERABLES INDEX (Cont.)

Client: Balboa Environmental Consultants
Project Name: YCC Soil Analysis October 1991
Erco Project Number: 10126

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: Bafford Environmental Consultants
Project Name: UCC Soil Analysis October 1991
Erco Project Number: 10126

NA = Not Applicable

October 25, 1991

Project Narrative

Client: Balsam Environmental Consultants, Inc.
Project Name: UCC Soil Analyisis 10/04/91
Erco Project No.: 010126

1. This project consists of the results for samples received at Enseco - Erco Laboratory on October 4, 1991. Please see the sample description information sheet for a list of samples.

2. In the volatile fraction please note that additional dilution of sample 01 (client id:UCC-SB-B-11-2) was analyzed one day outside holding time.Original sample was analyzed within holding time. Please note that above sample has very difficult matrix and was analyzed several times to meet CLP requirements.

SAMPLE DESCRIPTION INFORMATION
for
Balsam Environmental Consultants, Inc.

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
010126-0001-SA	UCC-SB-B-11-2	SOIL	01 OCT 91	15:00	04 OCT 91
010126-0002-SA	UCC-SB-B-11-2C	SOIL	01 OCT 91	15:00	04 OCT 91
010126-0003-SA	UCC-SB-A-09-4	SOIL	01 OCT 91	16:15	04 OCT 91
010126-0004-SA	UCC-SB-A-09-4C	SOIL	01 OCT 91	16:15	04 OCT 91
010126-0005-SA	UCC-SB-B-16-3	SOIL	02 OCT 91	16:00	04 OCT 91
010126-0006-SA	UCC-SB-B-16-3	SOIL	02 OCT 91	16:00	04 OCT 91
010126-0007-SA	UCC-PC-1	AQUEOUS	02 OCT 91	17:40	04 OCT 91
010126-0008-SA	UCC-SB-C-18-2	SOIL	03 OCT 91	09:00	04 OCT 91
010126-0009-SA	UCC-SB-C-18-2	SOIL	03 OCT 91	09:00	04 OCT 91
010126-0010-SA	UCC-10/3-QA1	AQUEOUS	24 SEP 91		04 OCT 91
010126-0011-SA	UCC-SB-B-14-3C	SOIL	03 OCT 91	12:00	04 OCT 91
010126-0012-SA	UCC-SB-B-14-3	SOIL	03 OCT 91	12:00	04 OCT 91

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: 6437 T6

PROJECT NAME:

SAMPLER(S) SIGNATURE(S):

SEND REPORT TO: J.M. O'Donnell

PROJECT ADDRESS:

ANALYTICAL LABORATORY: Enseco

METHOD: BNO

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-11-2		10/1/91	1500	Soil	X		ice	n	40ml VOA	3	X							
UCC-SB-B-11-2C		10/1/91	1500	soil		X	"	"	250ml	1						X		CLP reporting
UCC-SB-A-09-4		10/1/91	4:15PM	soil	X		"	"	40ml VOA	3	X							After
UCC-SB-A-09-4C		10/1/91	4:15PM	Soil		X	"	"	850ml	1						X		Mary Ford
UCC-SB-B-16-3		10/2/91	1400	soil	X		"	"	40ml VOA	3	X							
UCC-SB-B-16-3		10/2/91	1400	soil	X		"	"	250ml	1						X		
UCC-PC-1	(pipe chase)	10/2/91	5:45PM	WATER	X		"	"	40ml VOA	3	X							
UCC-SB-C-18-2		10/3/91	0900	soil	X		"	"	40ml VOA	3	X							
UCC-SB-C-18-2		10/3/91	0900	Soil	X		"	"	250 ml	1						X		
UCC-9 (DUP)	10/3-9A1	9/24/90	—	water	X		"	"	40ml VOA	2	X							
UCC-SB-B-14-3C		10/3	1200	S	X		"	"	250ml	1						X		
UCC-SB-B-14-3		10/3	1200	S	X		"	"	40ml VOA	3	X							

RELINQUISHED BY: Robert Sulger	DATE: 10/3/91	TIME: 12:30AM	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY: Eric Holley

DATE: 10/4/91 TIME: 930

METHOD OF SHIPMENT: Fed Ex

AIRBILL (OR SHIPPING INVOICE) NUMBER: 3329067 70

INTERLABORATORY CHAIN OF CUSTODY

ENSECO
A Core Company

PAGE 1 OF 1

SHIP TO: Versar

ATTENTION: Larry Pollack

ANALYTICAL REQUESTS: TOC

SEND RESULTS TO: Enseco Frco

ATTENTION: MARY B. FORD

EXPORT ID	SAMPLE CONDITION UPON RECEIPT	COMMENTS
UCC-SB-B-11-2C		10126-02
UCC-SB-A-09-4C		-04
UCC-SB-B-16-3		-06
UCC-SB-C-18-2		-09
UCC-SB-B-14-3C		-11

TEST PRICE
SUBTOTAL
DISCOUNT / SURCHARGE
TOTAL

WRITTEN RESULTS REQUIRED BY (DATE) 10/24 | VERBAL/FAC RESULTS REQUIRED BY (DATE) | PO No 10126

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: Mary B. Ford — DATE / TIME: 10/4/91

RECEIVED: — DATE / TIME: 10-7-91 10 CX

ENS—1109

IMPORT COPY

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	SHB 10/07/91 1-4					00 10/5		
010129	EH 10/4/91	SHB 10/07/91 1				ST 10.7		P 10/5/91	SM.B 10/7
010130	SHB 10/7								
010131									
010132	EH 10/4								
010133	SHB 10/5								
010134									
010135									
010136									
010137									
010138									
010139									
010140									
010141									
010142									
010143									
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.

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.: 10126 SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	10-3-QA1	97	101	93	0	0
02	PC-1	99	96	91	0	0
03	VBLK06	100	102	98	0	0
04	VBLK01	101	96	88	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.: 10126 SAS No.: _____ SDG No.: _____

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	SB-A-09-4	102	94	100	0	0
02	SB-B-16-3	99	99	96	0	0
03	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

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	SB-B-11-2	95	102	84	0	0
02	SB-B-11-2DL	0 D	0 D	0 D	0	0
03	SB-B-14-3	85	81	76	0	0
04	SB-C-18-2	86	83	74	0	0
05	VBLK04	98	100	100	0	0
06	VBLK05	100	101	105	0	0
07	VBLK02	97	95	91	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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: F2752 Lab Sample ID: BLANK01

Date Analyzed: 10/06/91 Time Analyzed: 1118

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	PC-1	10126-07	F2753	1225

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: A3515 Lab Sample ID: BLANK02

Date Analyzed: 10/15/91 Time Analyzed: 1303

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-11-2DL	10126-01DL	A3520	1559

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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-09-4	10126-03	F2804	1852
02	SB-B-16-3	10126-05	F2802	1708

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: F2886 Lab Sample ID: BLANK04

Date Analyzed: 10/11/91 Time Analyzed: 0039

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-14-3	10126-12	F2894	0456
02	SB-C-18-2	10126-08	F2896	0602

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: B2981 Lab Sample ID: BLANK05

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-11-2	10126-01	B2984	1750

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: F2732 Lab Sample ID: BLANK06

Date Analyzed: 10/05/91 Time Analyzed: 1526

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	10-3-QA1	10126-10	F2735	1646

COMMENTS:

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Instrument ID: V1 BFB Injection Time: 1010

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	22.1
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.: 10126 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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: F2728 BFB Injection Date: 10/05/91

Instrument ID: V6 BFB Injection Time: 1246

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	19.4
75	30.0 - 60.0% of mass 95	48.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	80.5
175	5.0 - 9.0% of mass 174	6.1 (7.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.2 (99.6)1
177	5.0 - 9.0% of mass 176	5.0 (6.2)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	F2729	10/05/91	1323
02	VBLK06	BLANK06	F2732	10/05/91	1526
03	10-3-QA1	10126-10	F2735	10/05/91	1646

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: F2750 BFB Injection Date: 10/06/91

Instrument ID: V6 BFB Injection Time: 1005

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	20.4
75	30.0 - 60.0% of mass 95	50.0
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	75.4
175	5.0 - 9.0% of mass 174	5.5 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	74.7 (99.1)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)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	F2751	10/06/91	1030
02	VBLK01	BLANK01	F2752	10/06/91	1118
03	PC-1	10126-07	F2753	10/06/91	1225

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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-B-16-3	10126-05	F2802	10/08/91	1708
08	SB-A-09-4	10126-03	F2804	10/08/91	1852

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: F2882 BFB Injection Date: 10/10/91

Instrument ID: V6 BFB Injection Time: 2154

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	19.6
75	30.0 - 60.0% of mass 95	51.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	72.7
175	5.0 - 9.0% of mass 174	4.4 (6.1)1
176	Greater than 95.0%, but less than 101.0% of mass 174	69.8 (96.0)1
177	5.0 - 9.0% of mass 176	5.0 (7.2)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	F2884	10/10/91	2248
02	VBLK04	BLANK04	F2886	10/11/91	0039
03	SB-B-14-3	10126-12	F2894	10/11/91	0456
04	SB-C-18-2	10126-08	F2896	10/11/91	0602

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID: A3512 BFB Injection Date: 10/15/91

Instrument ID: V1 BFB Injection Time: 1006

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	20.8
75	30.0 - 60.0% of mass 95	48.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	87.1
175	5.0 - 9.0% of mass 174	6.0 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	84.7 (97.2)1
177	5.0 - 9.0% of mass 176	5.4 (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	A3513	10/15/91	1041
02	VBLK02	BLANK02	A3515	10/15/91	1303
03	SB-B-11-2DL	10126-01DL	A3520	10/15/91	1559

5A

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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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	VBLK05	BLANK05	B2981	10/14/91	1533
03	SB-B-11-2	10126-01	B2984	10/14/91	1750

000018

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-11-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01

Sample wt/vol: 3.1 (g/mL) G Lab File ID: B2984

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/14/91

Column: (pack/cap) CAP Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11000	U
74-83-9	Bromomethane	11000	U
75-01-4	Vinyl Chloride	11000	U
75-00-3	Chloroethane	11000	U
75-09-2	Methylene Chloride	12000	B
67-64-1	Acetone	2100	J
75-15-0	Carbon Disulfide	5300	U
75-35-4	1,1-Dichloroethene	4100	J
75-34-3	1,1-Dichloroethane	5300	U
540-59-0	1,2-Dichloroethene (total)	5300	U
67-66-3	Chloroform	5300	U
107-06-2	1,2-Dichloroethane	5300	U
78-93-3	2-Butanone	6200	BJ
71-55-6	1,1,1-Trichloroethane	54000	
56-23-5	Carbon Tetrachloride	5300	U
108-05-4	Vinyl Acetate	11000	U
75-27-4	Bromodichloromethane	5300	U
78-87-5	1,2-Dichloropropane	5300	U
10061-01-5	cis-1,3-Dichloropropene	5300	U
79-01-6	Trichloroethene	23000	
124-48-1	Dibromochloromethane	5300	U
79-00-5	1,1,2-Trichloroethane	5300	U
71-43-2	Benzene	5300	U
10061-02-6	trans-1,3-Dichloropropene	5300	U
110-75-8	2-Chloroethylvinylether	11000	U
75-25-2	Bromoform	5300	U
108-10-1	4-Methyl-2-Pentanone	11000	U
591-78-6	2-Hexanone	11000	U
127-18-4	Tetrachloroethene	3000	J
79-34-5	1,1,2,2-Tetrachloroethane	5300	U
108-88-3	Toluene	22000	B
108-90-7	Chlorobenzene	5300	U
100-41-4	Ethylbenzene	370000	E
100-42-5	Styrene	5300	U
1330-20-7	Xylene (total)	1100000	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SB-B-11-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01

Sample wt/vol: 3.1 (g/mL) G Lab File ID: B2984

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/14/91

Column (pack/cap) CAP Dilution Factor: 5.0

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C8H16O ISOMER	21.24	190000	J
2.		METHYLETHYLBENZENE ISOMER	21.50	53000	J
3.		UNKNOWN ALKANE	22.10	80000	J
4.		C9H18O ISOMER	22.40	330000	J
5.		C3-BENZENE ISOMER	23.03	140000	J
6.		UNKNOWN	23.47	56000	J
7.		C3-BENZENE ISOMER	24.41	49000	J
8.		C4-BENZENE ISOMER	25.31	63000	J
9.		C4-BENZENE ISOMER	25.58	78000	J
10.		UNKNOWN ALKANE	26.28	49000	J

NC
RR
5ulx

R-IC1491V2A
7B0951
MeCl2
2-But
Toluene

Lab File ID: VUA102

Surrogate Spike Recoveries

Compound		Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
CS15	D4-1,2-Dichloroethane	25.00	20.93	83.7	70 121
CS05	D8-Toluene	25.00	23.72	94.9	81 117
CS10	Bromofluorobenzene (BFB)	25.00	25.48	102	74 121

Target Compounds: VUA102

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL	C010	Chloromethane
		BDL	C020	Vinyl Chloride
		BDL	C015	Bromomethane
	3.92	BDL (3183) J	C025	Chloroethane
261	~~5.317~~	~~2693~~	C045	1,1-Dichloroethene
263	1.975	(1604) J	C035	Acetone
		BDL	C040	Carbon Disulfide
308	~~1.913~~	~~1555~~	C030	Methylene Chloride
	10.95	BDL (8891) JB	C053	Trans-1,2-Dichloroethene
		BDL	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
472	5.857	(4756) JB	C110	2-Butanone
		BDL	C125	Vinyl Acetate
542	51.293	(41650)	C115	1,1,1-Trichloroethane
542	7.925	(6435) JM	C120	Carbon Tetrachloride
		BDL	C165	Benzene
710	21.885	(17770)	C150	Trichloroethene
		BDL	C140	1,2-Dichloropropane
		BDL	C130	Bromodichloromethane
		BDL	C175	2-Chloroethylvinylether
		BDL RLM	C143	Cis-1,3-Dichloropropen
		BDL	C172	Trans-1,3-Dichloropropen
1019	1.769	~~1436~~ J	C160	1,1,2-Trichloroethane
		BDL	C155	Dibromochloromethane
		BDL	C180	Bromoform

10/22/91 or 11/23/91

1429	~~1.110~~	5U J	~~5.55~~	C245	4-Methyl-2-Pentanone
1430	20.519	Imm6U J	B	C250	Toluene
		BDL		C215	2-Hexanone
1431	2.555	2.55 J		C230	Tetrachloroethene
		BDL		C225	Chlorobenzene
1434	999.288	2889UU	E	C240	Ethylbenzene
1433	275.342	223600		CXXX	Xylene (p)
1438	407.747	321100		CXXX	Xylenes (o)
1438	~~13.950~~	5U J ~~11050~~		C245	Styrene
		BDL		C225	1,1,2,2-Tetrachloroethan
		BDL		C335	Dichlorobenzene (m)
		BDL		C340	Dichlorobenzene (p)
		BDL		C350	Dichlorobenzene (o)
1438	~~990.000~~	~~3220000~~		C250	Xylene (Total)

1013.62 (823059) E

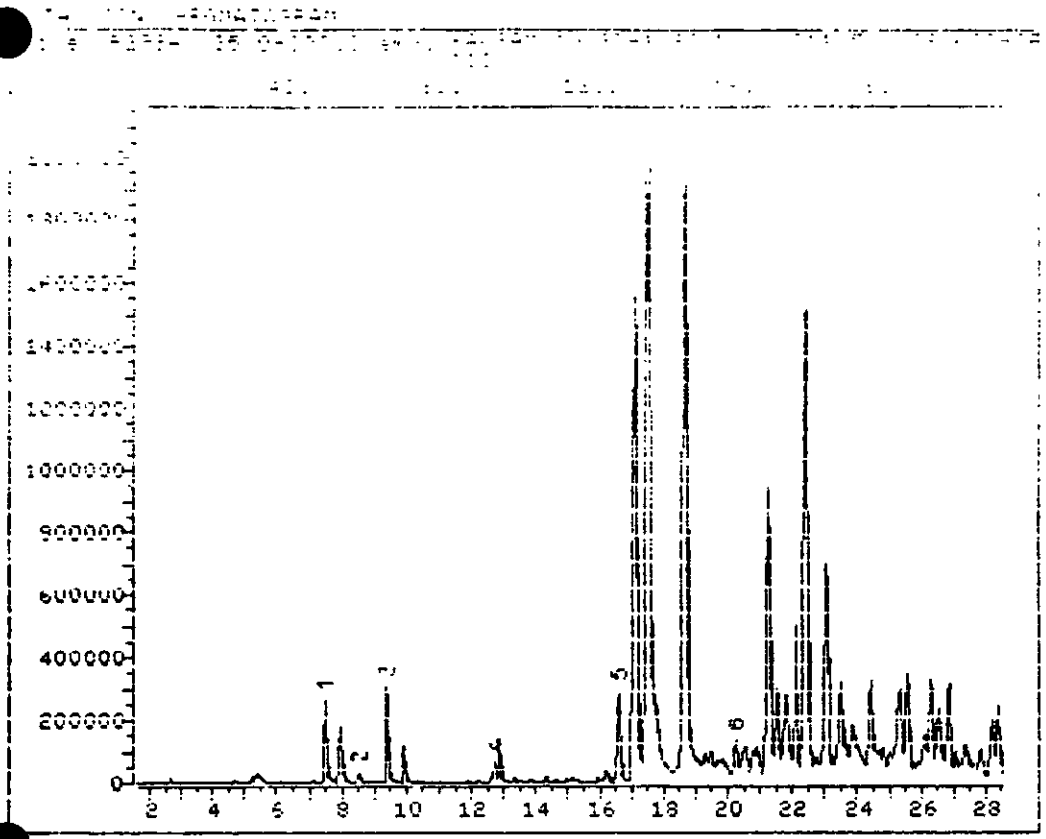
JG 101591

Compound			Prod Found	Conc	Dev	RT	Area	RF	Amt
1)	*C161	Bromochloromethane	7.14	7.14	.00	128.0	1[illegible]25	1.0000	50.00
2)	C010	Chloromethane	3.19	0.00	--	50.0	0	.2413	0.00
3)	C020	Vinyl Chloride	3.34	0.00	--	62.0	0	.2762	0.00
4)	C015	Bromomethane	3.65	0.00	--	94.0	0	1.0115	0.00
5)	C025	Chloroethane	3.85	0.00	--	64.0	0	.2249	0.00
6)	C045	1,1-Dichloroethene	4.71	4.65	.06	96.0	12428	1.1416	3.52
7)	C035	Acetone	4.69	4.67	.01	43.0	2973	.4244	1.98
7)D	C035	Acetone	4.69	5.09	.41	43.0	1248	.4244	.83
8)	C040	Carbon Disulfide	4.94	0.00	--	76.0	0	4.8412	0.00
9)	C030	Methylene Chloride	5.22	5.20	.02	84.0	17891	2.6370	1.91
10)	C053	Trans-1,2-Dichloroe	5.60	5.54	.06	96.0	518	1.9760	.07
11)	C055	cis-1,2-Dichloroeth	7.08	7.07	.01	96.0	2512	2.0042	.35
12)	C050	1,1-Dichloroethane	6.19	6.17	.02	63.0	5994	3.6934	.30
13)	C060	Chloroform	7.61	7.61	.00	83.0	7198	3.5395	.57
14)	C065	1,2-Dichloroethane	8.62	8.62	.00	62.0	870	2.3048	.11
15)	C110	2-Butanone	7.12	7.12	.00	43.0	22458	1.0812	5.86
16)	CS15	D4-1,2-Dichloroetha	8.47	8.49	.01	65.0	49083	1.6528	8.37
17)	*C110	1,4-Difluorobenzene	9.39	9.38	.03	114.0	732440	1.0000	50.00
18)	C125	Vinyl Acetate	6.31	0.00	--	43.0	0	.9271	0.00
19)	C115	1,1,1-Trichloroetha	7.97	7.94	.03	97.0	559896	.4790	51.29
20)	C120	Carbon Tetrachlorid	8.26	7.94	.32	117.0	52900	.4557	2.73
21)	C165	Benzene	8.62	8.59	.03	78.0	2949	1.2475	.16
22)	C150	Trichloroethene	9.90	9.90	.00	130.0	131725	.4109	21.88
23)	C140	1,2-Dichloropropane	10.35	10.35	.00	63.0	911	.4179	.15
24)	C130	Bromodichloromethan	10.97	0.00	--	83.0	0	.5693	0.00
25)	C175	2-Chloroethylvinyle	11.71	0.00	--	63.0	0	.2011	0.00
26)	C143	Cis-1,3-Dichloropro	12.03	0.00	--	75.0	0	.5727	0.00
27)	C172	Trans-1,3-Dichlorop	13.43	0.00	--	75.0	0	.4328	0.00
28)	C160	1,1,2-Trichloroetha	13.88	13.52	.37	97.0	7666	.2958	1.27
29)	C155	Dibromochloromethan	14.92	0.00	--	129.0	0	.4224	0.00
30)	C180	Bromoform	19.13	0.00	--	173.0	0	.3017	0.00
31)	*C120	D5-Chlorobenzene	16.51	16.58	.08	117.0	542068	1.0000	50.00
32)	CS05	D8-Toluene	12.69	12.70	.01	98.0	137251	1.3341	9.47
33)	C205	4-Methyl-2-Pentanon	12.46	12.45	.01	43.0	7228	.5703	1.17
33)D	C205	4-Methyl-2-Pentanon	12.46	12.72	.26	43.0	660	.5703	.11
34)	C230	Toluene	12.86	12.86	.00	92.0	193002	.8678	20.51
35)	C210	2-Hexanone	14.67	0.00	--	43.0	0	.3123	0.00
36)	C220	Tetrachloroethene	14.28	14.29	.01	164.0	12758	.4102	2.87
37)	C235	Chlorobenzene	16.66	0.00	--	112.0	0	1.0211	0.00
38)	C240	Ethylbenzene	17.08	17.09	.01	106.0	1833084	.4759	355.31
38)D	C240	Ethylbenzene	17.08	17.43	.35	106.0	1779377	.4759	344.90
39)D	CXXX	Xylene (p)	17.45	17.09	.37	106.0	1833084	.5961	283.65
39)	CXXX	Xylene (p)	17.45	17.43	.03	106.0	1779377	.5961	275.34
40)	CXXX	Xylenes (o)	18.64	18.66	.02	106.0	2756351	.6235	407.80
41)	C245	Styrene	18.70	18.66	.04	104.0	145419	.9877	13.58
42)	C225	1,1,2,2-Tetrachloro	20.88	0.00	--	83.0	0	.8050	0.00
43)	CS10	Bromofluorobenzene	20.29	20.24	.04	95.0	67530	.6112	10.19
44)	C335	Dichlorobenzene (m	23.92	23.82	.10	146.0	764	.9182	.08
44)D	C335	Dichlorobenzene (m	23.92	24.12	.21	146.0	886	.9182	.09
45)D	C340	Dichlorobenzene (p	24.23	23.82	.42	146.0	764	.9377	.08

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1101	Bromochloromethane	74839	100 ug/L	0.5 J
1110	1,4-Difluorobenzene	540736	100 ug/L	100.4
1120	Chlorobenzene-d5	3114855	100 ug/L	100.3

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



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Name: BALSAM 10125-1 200LX
Misc: 02 D11 50L 15 DCC-SB-B-11-2 3.086/10ML 101291

Id File: VOA1D2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911014 14:19

Operator ID: ALANA
Quant Time: 911014 18:19
Injected at: 911014 17:50

LT 10/23/91

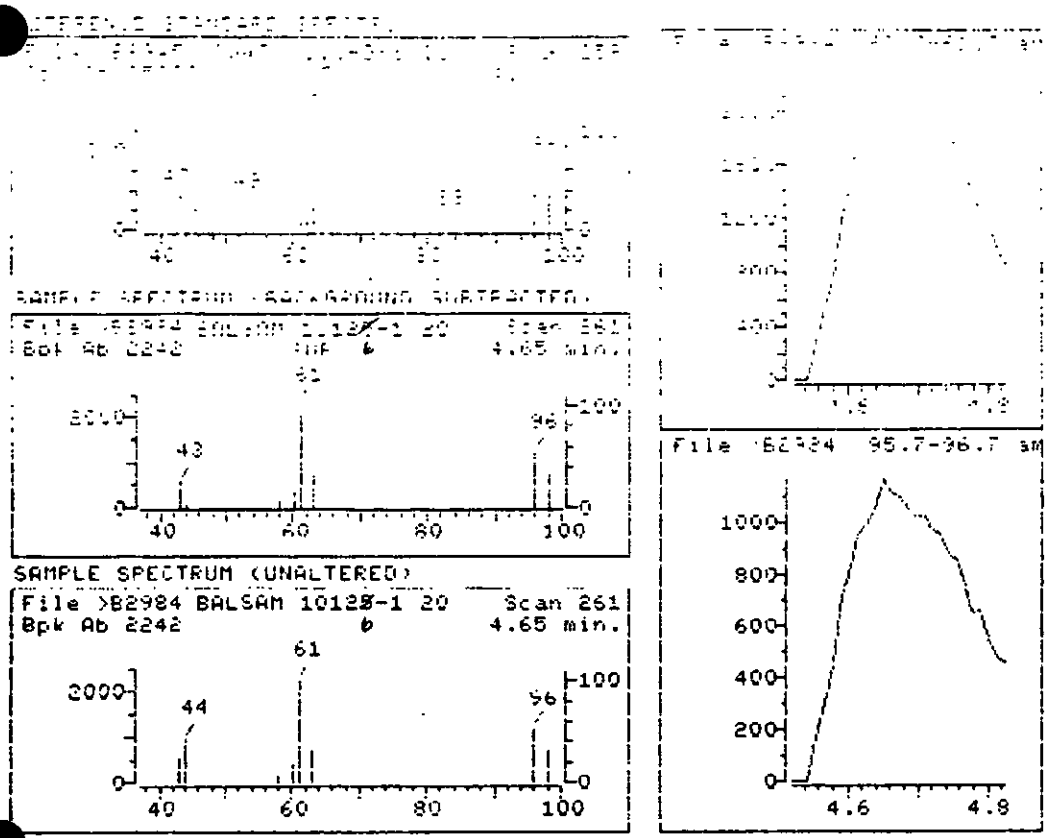
Data File: [illegible]
Title: MSL [illegible]
Last Calibration: [illegible]

		Compound	R...	I...	Area	Conc	Units	Q
1)	*C101	Bromochloromethane	7.47	128.0	147525	50.00	UG/L	99
6)	C045	1,1-Dichloroethene	4.65	96.0	13428	3.32	UG/L	94
7)	C035	Acetone	4.67	43.0	2973	1.98	UG/L	100
9)	C050	Methylene Chloride	5.20	84.0	17891	1.91	UG/L	85
10)	C053	Trans-1,2-Dichloroethene	5.54	96.0	518	.07	UG/L	96
11)	C055	cis-1,2-Dichloroethene	7.07	96.0	2512	.39	UG/L	99
12)	C050	1,1-Dichloroethane	6.17	63.0	3994	.30	UG/L	90
13)	C060	Chloroform	7.61	83.0	7198	.57	UG/L	99
14)	C065	1,2-Dichloroethane	8.62	62.0	870	.11	UG/L	100
15)	C110	2-Butanone	7.12	43.0	22458	5.86	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.49	65.0	49083	8.37	UG/L	83
17)	*C110	1,4-Difluorobenzene	9.38	114.0	732440	50.00	UG/L	100
[illegible]	C115	1,1,1-Trichloroethane	7.94	97.0	559646	51.29	UG/L	92
[illegible]	C120	Carbon Tetrachloride	7.94	117.0	92900	7.93	UG/L	99
21)	C165	Benzene	8.59	78.0	2949	.16	UG/L	100
22)	C150	Trichloroethene	9.90	130.0	151729	21.88	UG/L	99
23)	C140	1,2-Dichloropropane	10.35	63.0	911	.15	UG/L	100
28)	C160	1,1,2-Trichloroethane	13.52	97.0	7666	1.22	UG/L	45
31)	*C120	D5-Chlorobenzene	16.58	117.0	542068	50.00	UG/L	100
32)	CS05	D8-Toluene	12.20	98.0	137291	9.49	UG/L	95
33)	C205	4-Methyl-2-Pentanone	12.45	43.0	7228	1.17	UG/L	96
34)	C230	Toluene	12.86	92.0	193002	20.51	UG/L	97
36)	C220	Tetrachloroethene	14.29	164.0	12758	2.87	UG/L	92
38)	C240	Ethylbenzene	17.09	106.0	1833084	355.31	UG/L	43
39)	CXXX	Xylene (p)	17.43	106.0	1279377	275.34	UG/L	51
40)	CXXX	Xylenes (o)	18.66	106.0	2756351	407.80	UG/L	49
41)	C245	Styrene	18.66	104.0	145419	13.58	UG/L	100
43)	CS10	Bromofluorobenzene (BFB)	20.24	95.0	67530	10.19	UG/L	81
44)	C335	Dichlorobenzene (m)	23.82	146.0	764	.08	UG/L	100
45)	C340	Dichlorobenzene (p)	24.12	146.0	886	.09	UG/L	100
46)	C350	Dichlorobenzene (o)	25.37	146.0	515	.05	UG/L	100
47)	C250	Xylene (Total)	~~18.66~~ 17.54	106.0	~~2604357~~ 682590m	~~398.81~~ 1013.62 ug/l	UG/L	38

* Compound is ISTD

1,1-Dichloroethene Rt. 4.65 area 15888m 3.92 ug/l

$MeCl_2$ Rt. 5.20 area: 102413m 10.95 ug/l JG 101591



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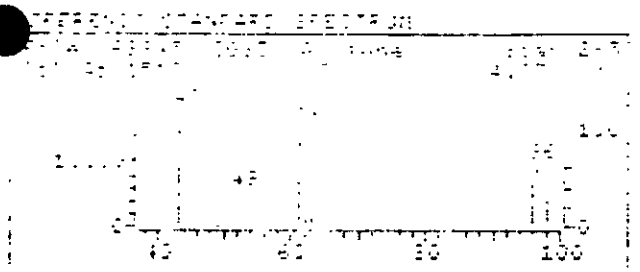
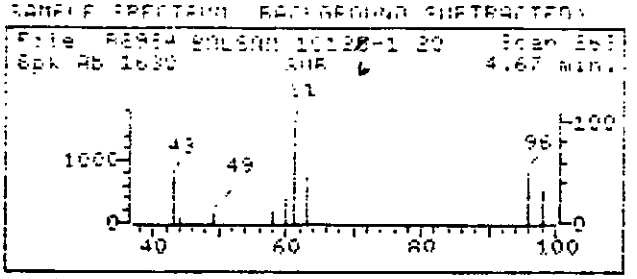
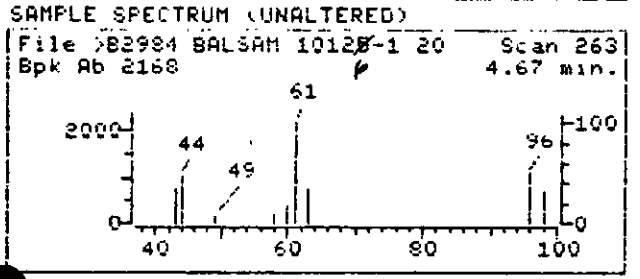
Misc: V2 C11 5UL IS UCC-SB-B-11-2 5.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VOA1U2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

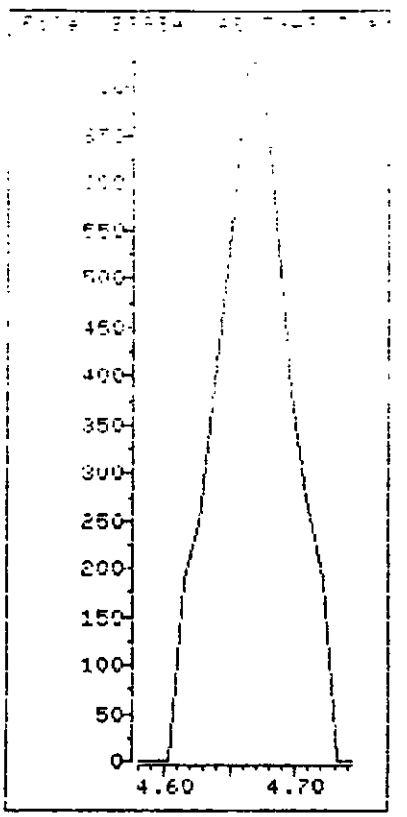
Compound No: 6
Compound Name: C045 1,1-Dichloroethene
Scan Number: 261
Retention Time: 4.65 min.
Quant Ion: 96.0
Area: 13428
Concentration: 3.32 UG/L
q-value: 94

VT 10/23/91





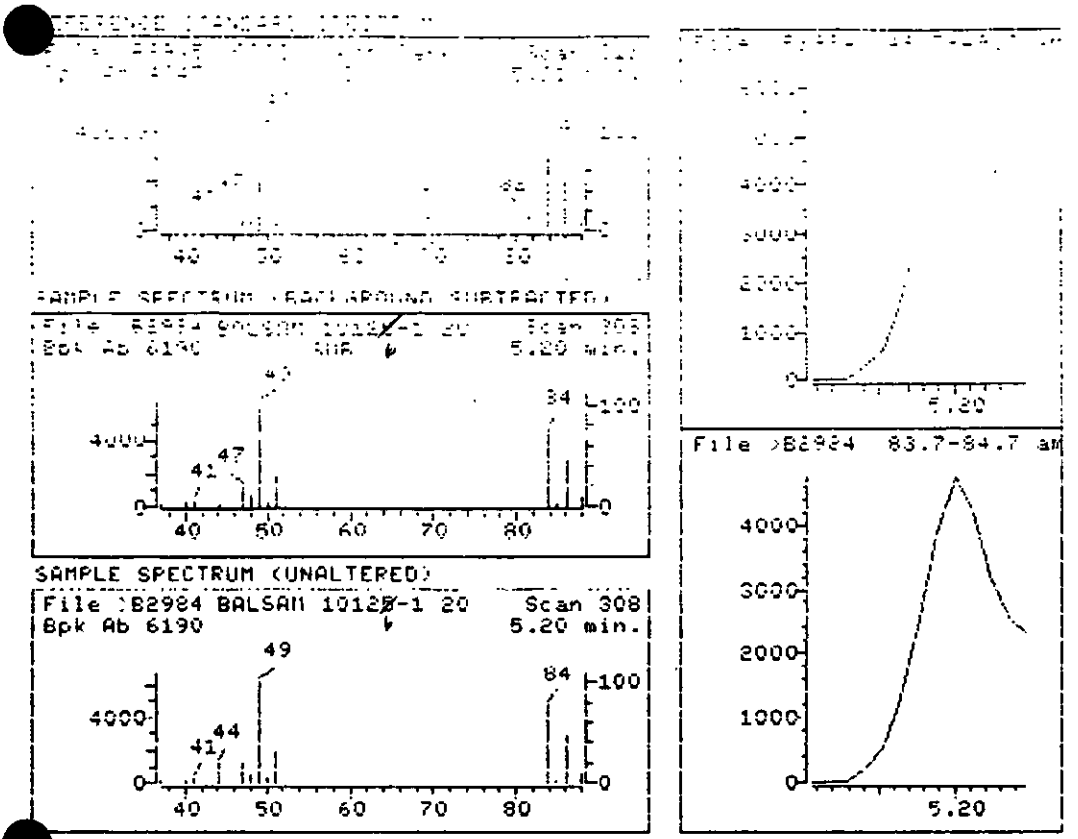




Data File: B2984::D6 Quant Output File: ^B2984::Q1
Name: BALSAM 10128-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-B-11-2 3.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VUA1D2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

Compound No: 7
Compound Name: C035 Acetone
Scan Number: 263
Retention Time: 4.67 min.
Quant Ion: 43.0
Area: 2973
Concentration: 1.98 UG/L
q-value: 100

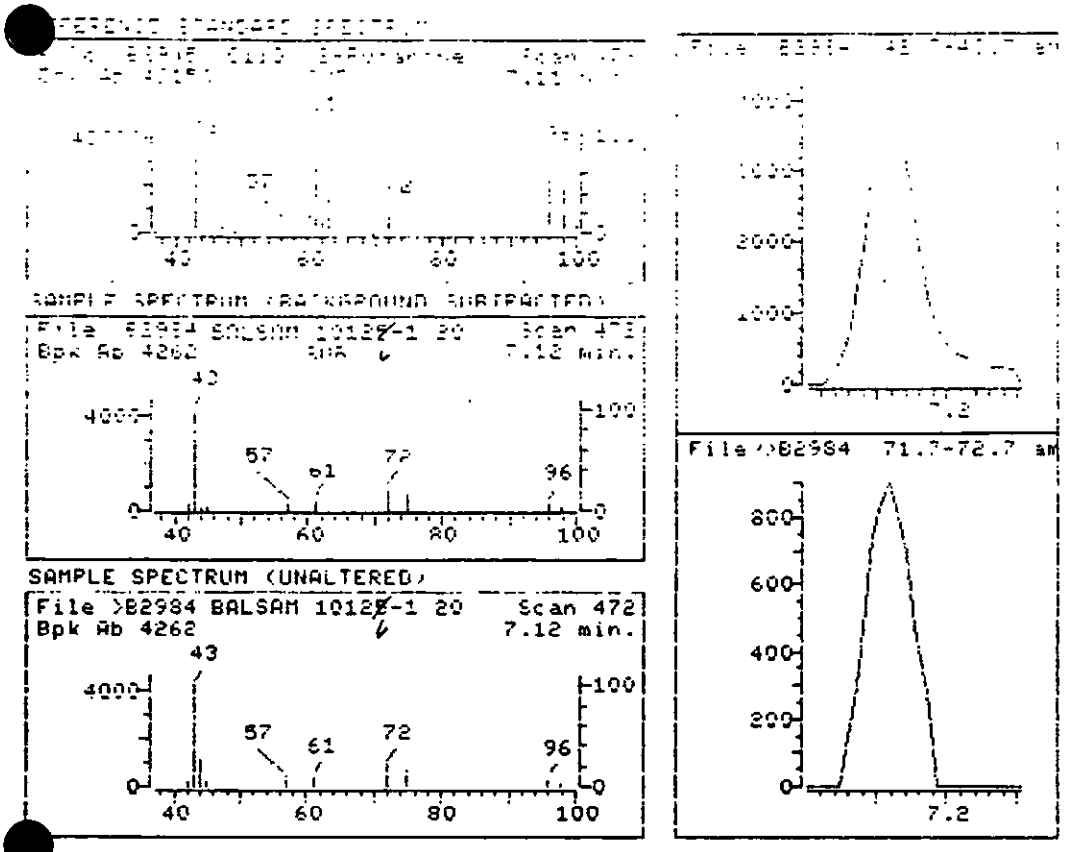
10/23/91



Data File: >B2984::D6 Quant Output File: ^B2984::Q1
Name: BALSAM 10128-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-B-11-2 3.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VUA1D2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 308
Retention Time: 5.20 min.
Quant Ion: 84.0
Area: 17891
Concentration: 1.91 UG/L
q-value: 85

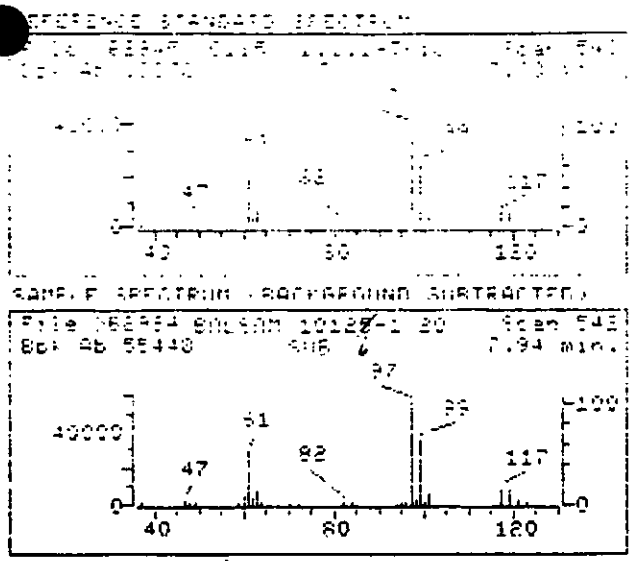
VI 10/23/91

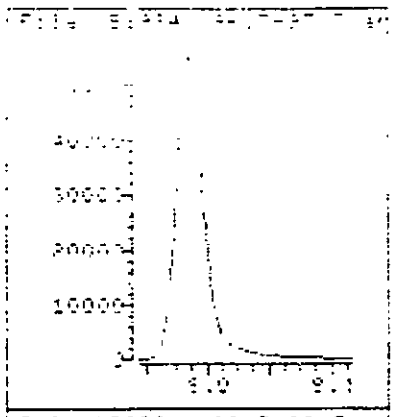


Data File: >B2984::D6 Quant Output File: ^B2984::01
Name: BALSAM 10128-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-8-11-2 3.086/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VOAID2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

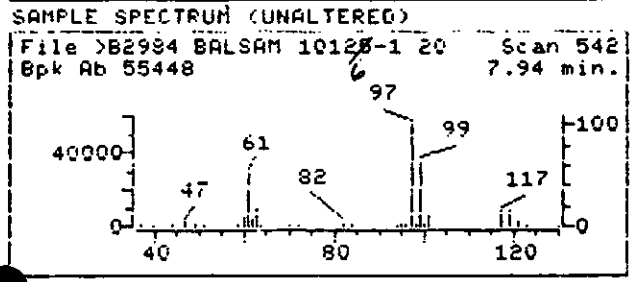
Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 472
Retention Time: 7.12 min.
Quant Ion: 43.0
Area: 22458
Concentration: 5.86 UG/L
q-value: 97

a 10/29/91





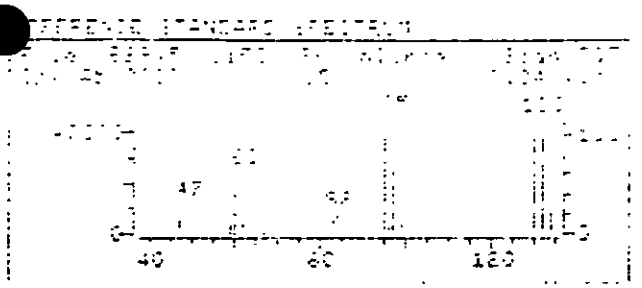
SAMPLE SPECTRUM (UNALTERED)

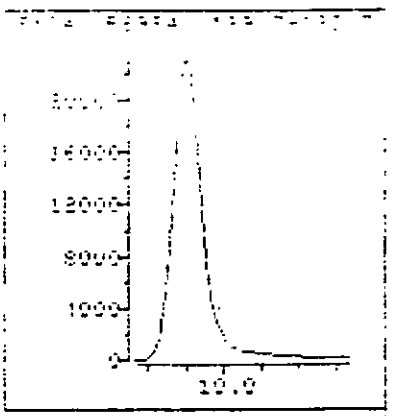


Data File: >B2984::D6 Quant Output File: >B2984::D1
Name: BALSAM 10128-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-B-11-2 3.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VOA1D2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

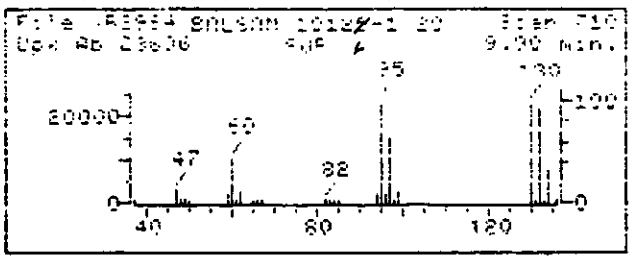
Compound No: 19
Compound Name: C115 1,1,1-Trichloroethane
Scan Number: 542
Retention Time: 7.94 min.
Quant Ion: 97.0
Area: 359896
Concentration: 51.29 UG/L
q-value: 92

G 10/23/91

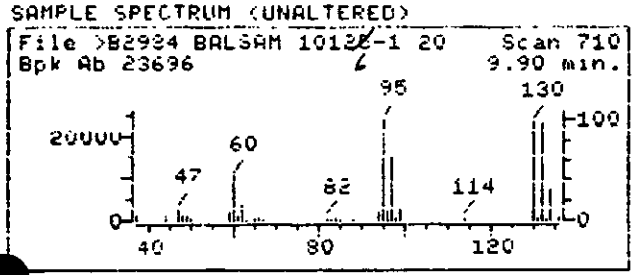


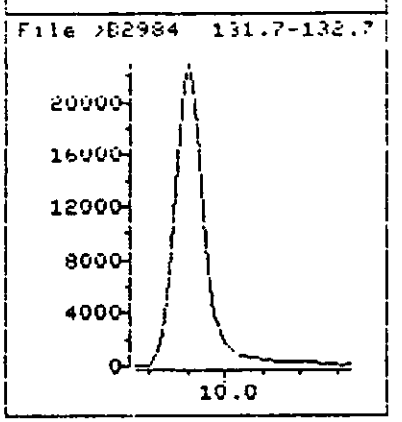


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

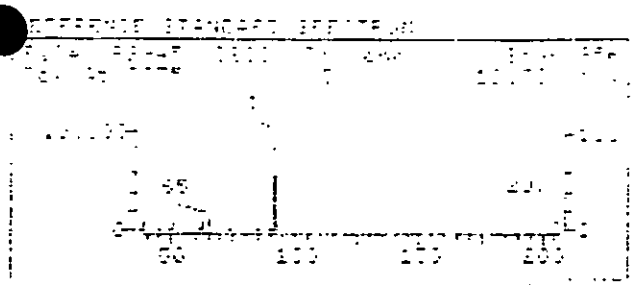


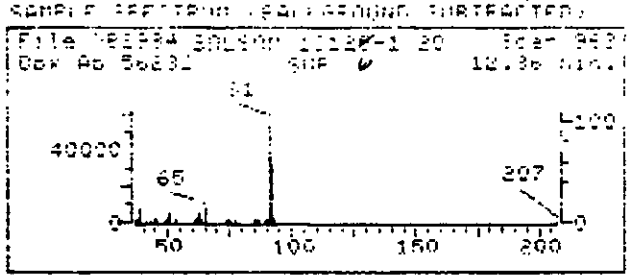


Data File: >B2984::D6 Quant Output File: >B2984::Q!
Name: BALSAM 1012%-1 20ULX
Misc: V2 C11 5UL TS UCL-SB-B-11-2 3.08G/1UML 101291
Quant Time: 911014 18:19 Quant ID File: VUAID2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

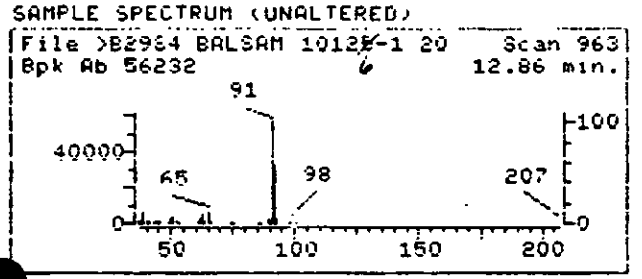
Compound No: 22
Compound Name: C150 Trichloroethene
Scan Number: 710
Retention Time: 9.90 min.
Quant Ion: 130.0
Area: 131725
Concentration: 21.88 UG/L
q-value: 99

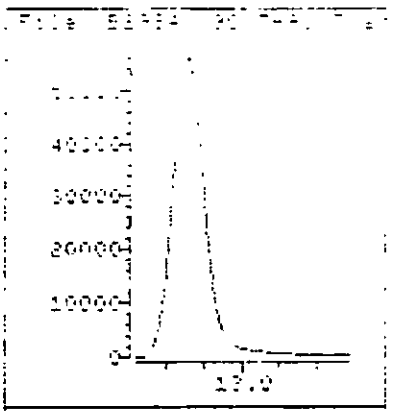
LT 10/23/91

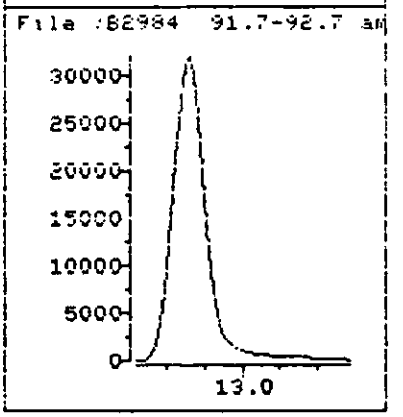




SAMPLE SPECTRUM (UNALTERED)

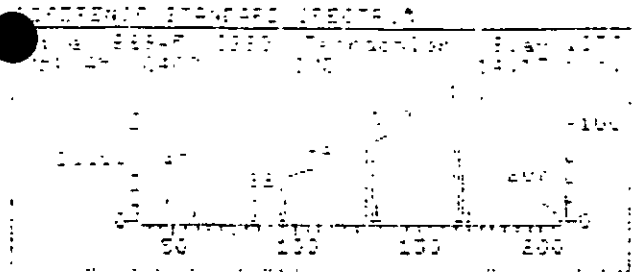


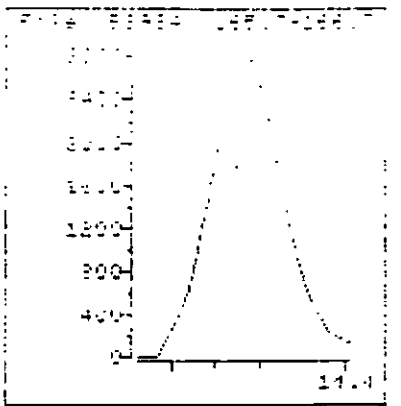


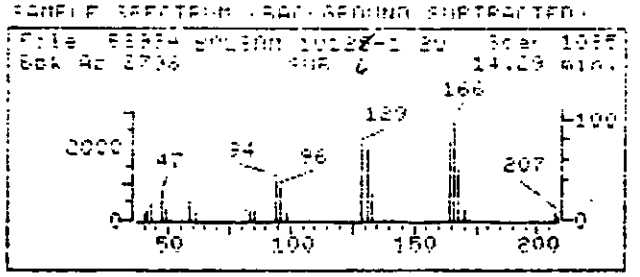


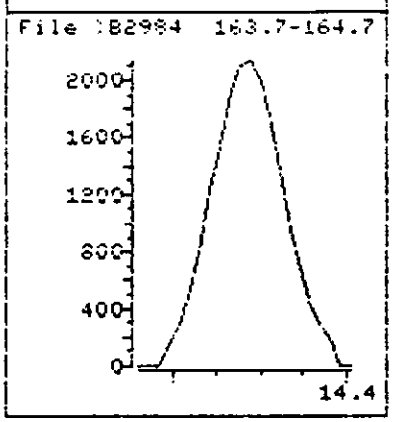
Data File: >B2984::D6 Quant Output File: >B2984::Q1
Name: BALSAM 1012 1 20ULX
Misc: V2 C11 50L IS UCC-SB-B-11-2 3.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VOAID2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

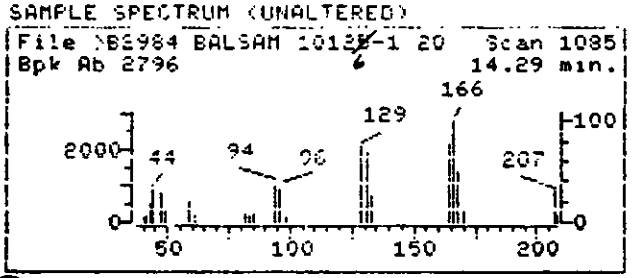
Compound No: 34
Compound Name: C230 Toluene
Scan Number: 963
Retention Time: 12.86 min.
Quant Ion: 92.0
Area: 193002
Concentration: 20.51 UG/L
q-value: 97







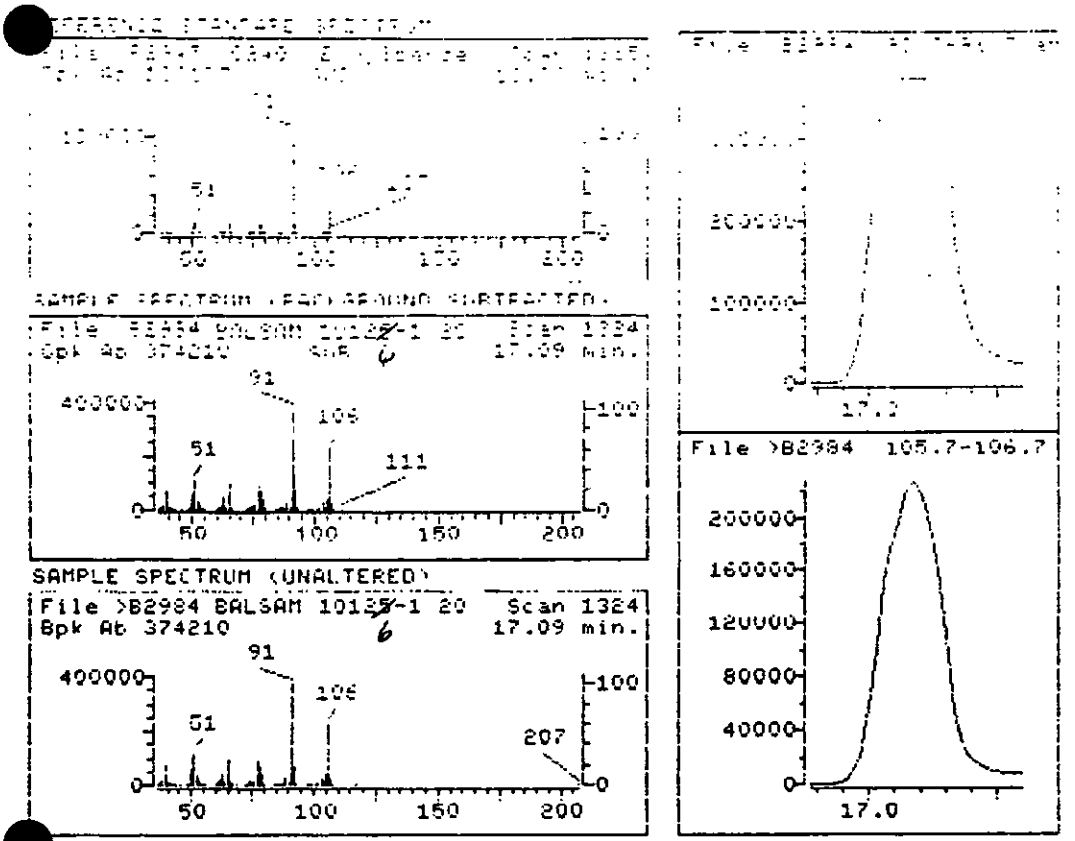




Data File: :B2984::D6 Quant Output File: :B2984::QI
Name: BALSAM 1012[illegible]-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-B-11-2 3.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VUA1D2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

Compound No: 36
Compound Name: C220 Tetrachloroethene
Scan Number: 1085
Retention Time: 14.29 min.
Quant Ion: 164.0
Area: 12758
Concentration: 2.87 UG/L
q-value: 92

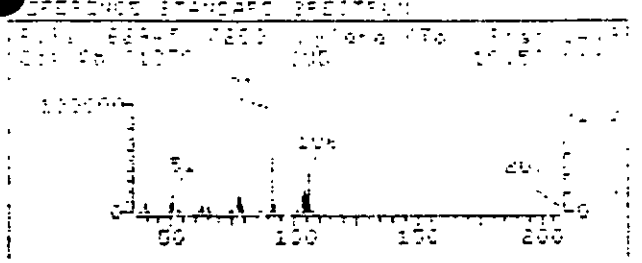
LT 10/23/91



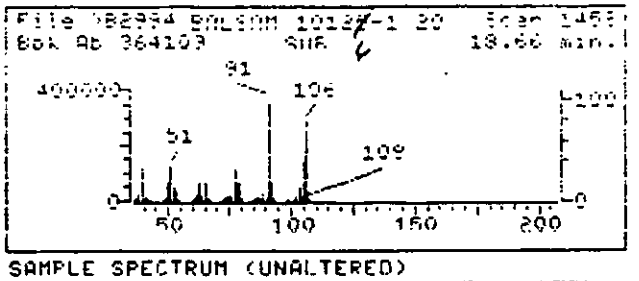
Data File: >B2984::D6 Quant Output File: ^B2984::W1
Name: BALSAM 1012B-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-B-11-2 3.08G/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VOAID2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

Compound No: 38
Compound Name: C240 Ethylbenzene
Scan Number: 1324
Retention Time: 17.09 min.
Quant Ion: 106.0
Area: 1833084
Concentration: 355.31 UG/L
q-value: 43

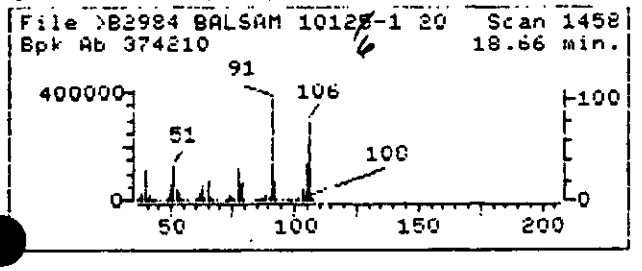
LT 10/23/91

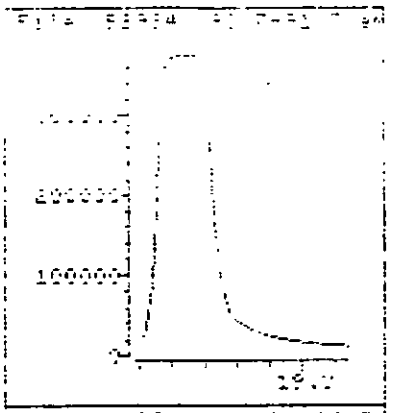


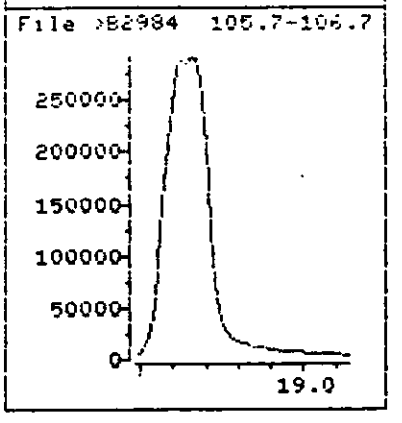
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >B2984::D6 Quant Output File: ^B2984::D1
Name: BALSAM 1012-1 20ULX
Misc: V2 C11 5UL IS UCC-SB-B-11-2 3.086/10ML 101291
Quant Time: 911014 18:19 Quant ID File: VOAID2::$$
Injected at: 911014 17:50 Last Calibration: 911014 14:19

Compound No: 47
Compound Name: C250 Xylene (Total)
Scan Number: 1458
Retention Time: 18.66 min.
Quant Ion: 106.0
Area: 2684357
Concentration: 398 81 UG/L
q-value: 38

4 10/23/91

1013.62 MB 10/22/91

Data Reduced by : JJ Date: 10/15/91 Data File: >B2984
Data Reviewed by : MBV Date: 10/22/91

Enseco TIC Report (page 1)

Sample: BALSAM 10126-1 20ULX v1 10/23/91 Run Factor: 812.
Conditions: V2 C11 5UL IS UCC-SB-B-11-2 3. Analyst: ALANA

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
~~1~~	~~1354.~~			~~300000.~~	~~108-38-3~~	~~Benzene, 1,3-dimethyl-~~ TCL (Xylenes) C_8H_{10} isomer
2	1678.			150000.	~~106-68-3~~	~~3 Octanone~~ ✓ $C_8H_{16}O$ isomer
3	1700.			41000.	~~611-14-3~~	Benzene, ~~1~~-ethyl-~~2~~-methyl- ✓ isomer
4	1726.			37000.	622-96-8	Benzene, 1-ethyl-4-methyl- ✓
5	1751.			62000.	~~124-18-5~~	~~Decane~~ ✓ Unknown alkane
6	1776.			250000.	~~815-24-7~~	~~3-Pentanone, 2,2,4,4-tetramethyl-~~ ✓ $C_9H_{18}O$ isomer
7	1830.			110000.	~~108-67-8~~	~~Benzene, 1,3,5-trimethyl-~~ C_9H_{12} isomer ✓
8	1867.			43000.	~~591-78-6~~	~~2 Hexanone~~ unknown → C_3 Benzene isomer
9	1947.			38000.	~~611-14-3~~	~~Benzene, 1-ethyl 2-methyl-~~ C_9H_{12} isomer
10	2021.			49000.	~~1074-43-7~~	~~Benzene, 1-methyl-3-propyl-~~ ✓ C_4 Benzene isomer
~~11~~	2044.			60000.	~~535-77-3~~	~~Benzene, 1-methyl-3-(1-methylethyl)-~~ ✓
~~12~~	2104.			38000.	~~1120-21-4~~	~~Undecane~~ ✓ unknown alkane C_4-Benzene isomer ✓
13	2151.			35000.	535-77-3	Benzene, 1-methyl-3-(1-methylethyl)- ✓
14	2268.			37000.	488-23-3	Benzene, 1,2,3,4-tetramethyl- ✓
15	2283.			28000.	488-23-3	Benzene, 1,2,3,4-tetramethyl- ✓

C3-Benzene isomer

Data File: >B2984

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	75	17	3	17.44	1.052	13827902.	1923711.	369.706
2	86	6	3	21.24	1.281	6757301.	921832.	180.665
3	97	8	3	21.50	1.297	1887416.	241594.	50.462
4	92	29	3	21.81	1.315	1701918.	219035.	45.503
5	94	0	3	22.10	1.333	2844674.	448711.	76.056
6	95	2	3	22.40	1.351	11593650.	1487456.	309.970
7	88	4	3	23.03	1.389	4931164.	642534.	131.841
8	15	57	3	23.47	1.415	1982900.	264381.	53.015
9	89	8	3	24.41	1.472	1743491.	269070.	46.614
10	97	5	3	25.30	1.525	2236062.	235199.	59.784
11	94	7	3	25.57	1.542	2780914.	308485.	74.351
12	95	4	3	26.27	1.584	1731864.	273782.	46.304
13	96	3	3	26.82	1.618	1601480.	264859.	42.818
14	95	6	3	28.20	1.701	1708656.	181614.	45.683
15	96	1	3	28.38	1.711	1275248.	215033.	34.095

Internal Standard Report

Data File: >B2984

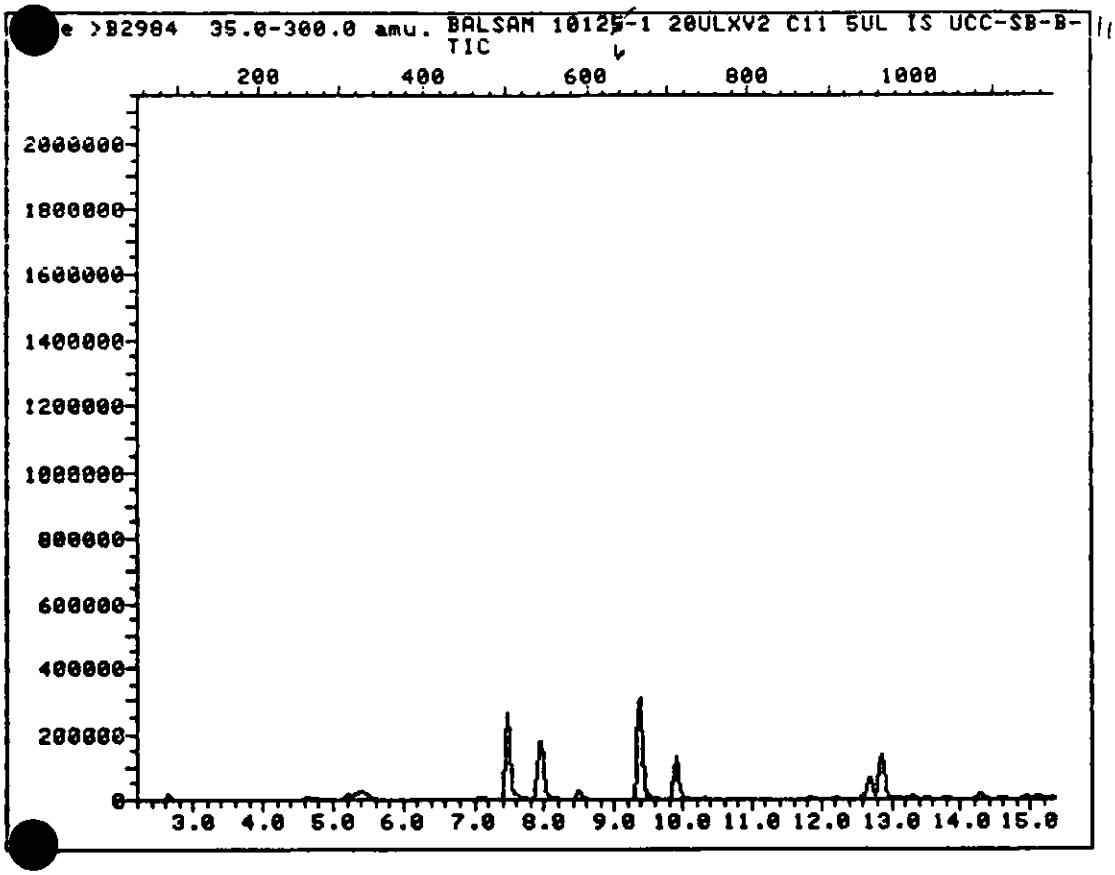
Maximum seperation of RIC and Quan ion peaks: 3.
Minimum RIC peak area as % of est. RIC area: 50.
Maximum RIC peak area as % of est. RIC area: 200.

#	Name		Concentration		Flag	
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC	
1	CI01	Bromochloromet	50.000	UG/L	Ok	
502.	177325.	7.292	502.	1280181.	99.007	
2	CI10	1,4-Difluorobe	50.000	UG/L	Ok	
665.	732440.	2.409	665.	1670209.	94.645	
3	CI20	D5-Chlorobenze	50.000	UG/L	Ok	
1281.	542068.	3.457	1281.	1870122.	99.789	

Deleting peaks from INT file: VDIR73
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 23
Number of peaks remaining: 23

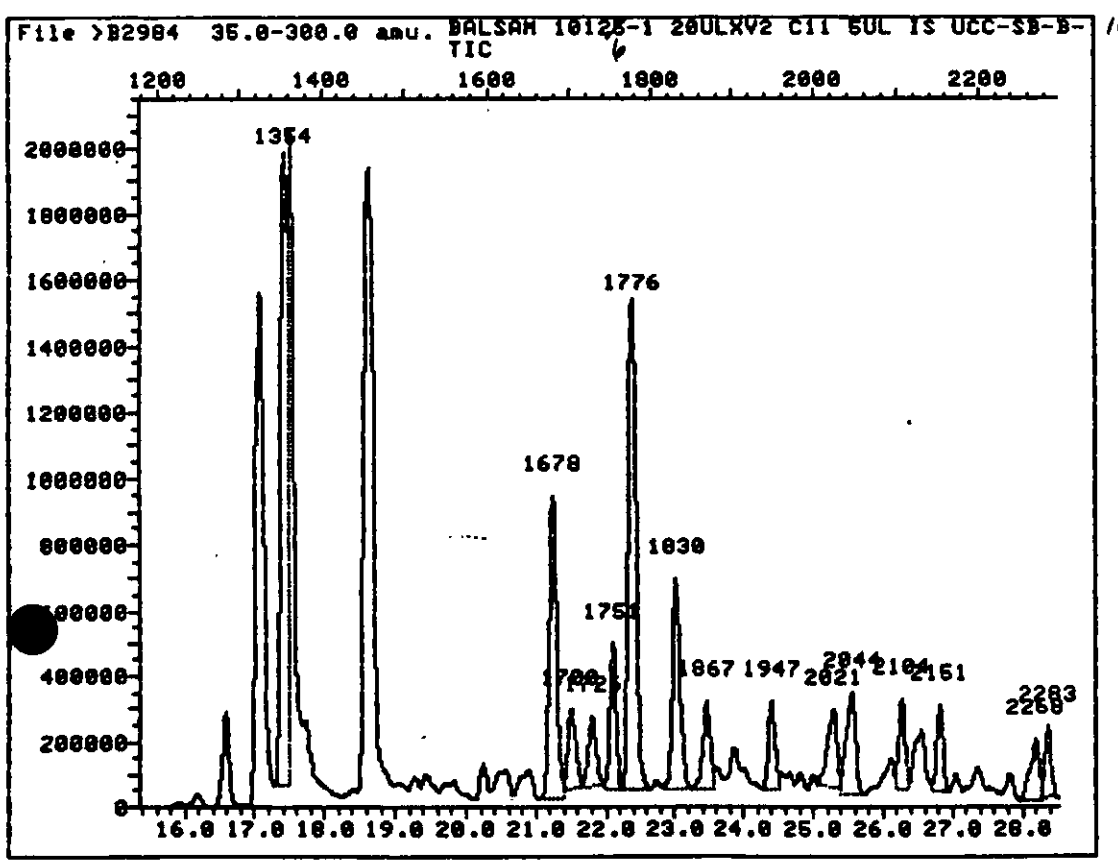
Deleting target compounds from INT file: VDIR73
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 23
Number of peaks remaining: 16

Deleting all but largest peaks from INT file: VDIR73
Maximum number of peaks to keep: 15
Number of peaks: 16
Number of peaks remaining: 15



11-2

10/23/91



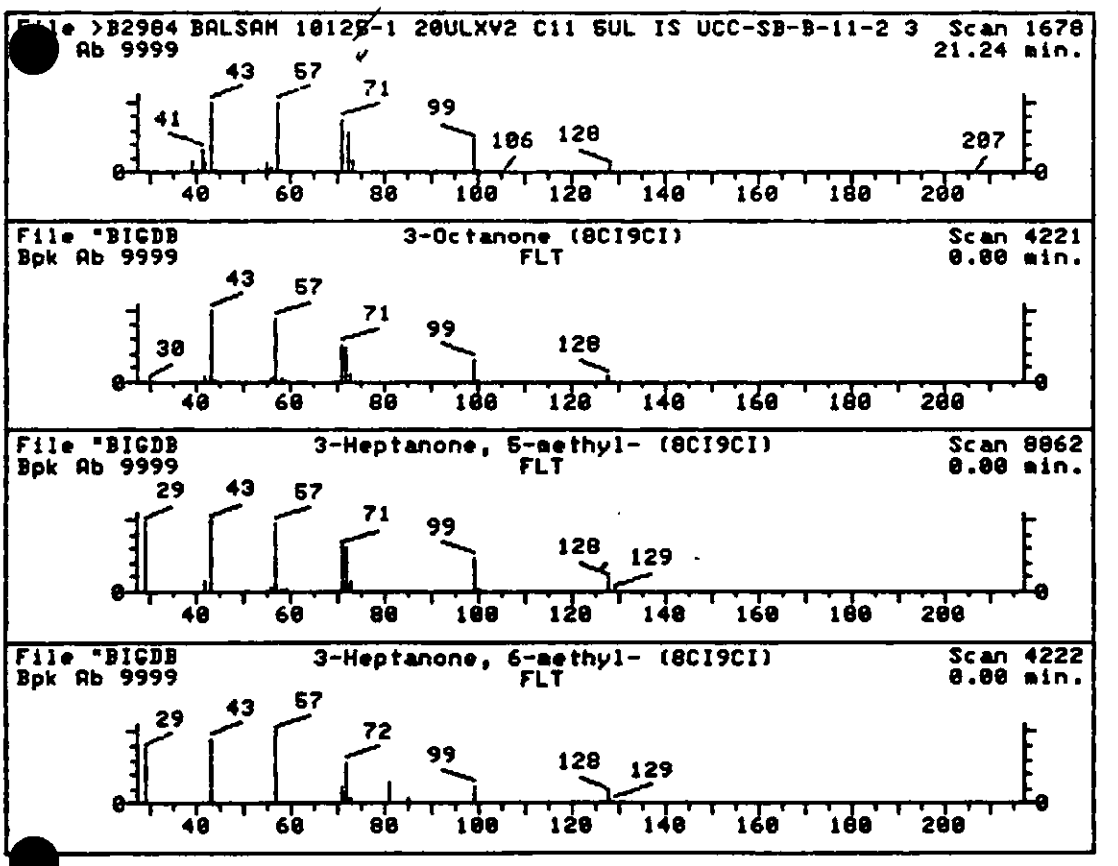
11-2

C NUMBER:2

1.	3-Octanone (8CI9CI)	128 C8H16O
2.	3-Heptanone, 5-methyl- (8CI9CI)	128 C8H16O
3.	3-Heptanone, 6-methyl- (8CI9CI)	128 C8H16O
4.	Hexane, 2,4,4-trimethyl- (8CI9CI)	128 C9H20
5.	4-Heptanone, 3-methyl- (8CI9CI)	128 C8H16O
6.	2-Pentene, 5-(pentyloxy)-, (E)- (9CI)	156 C10H20O

Sample file: >B2984 Spectrum #: 1678
Search speed: 1 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	86*	106683	4221	"BIGDB	72	27	1	0	99	6	59	71
2.	83	541855	8862	"BIGDB	71	36	2	0	81	3	57	23
3.	39*	624420	4222	"BIGDB	30	73	1	0	88	26	14	16
4.	37	16747301	3925	"BIGDB	41	47	1	0	89	26	14	14
5.	36*	15726155	3992	"BIGDB	47	49	2	0	68	37	14	23
6.	27	56052858	8761	"BIGDB	39	41	2	0	88	40	10	13



✓ JG 101591

$C_8H_{16}O$ isomer

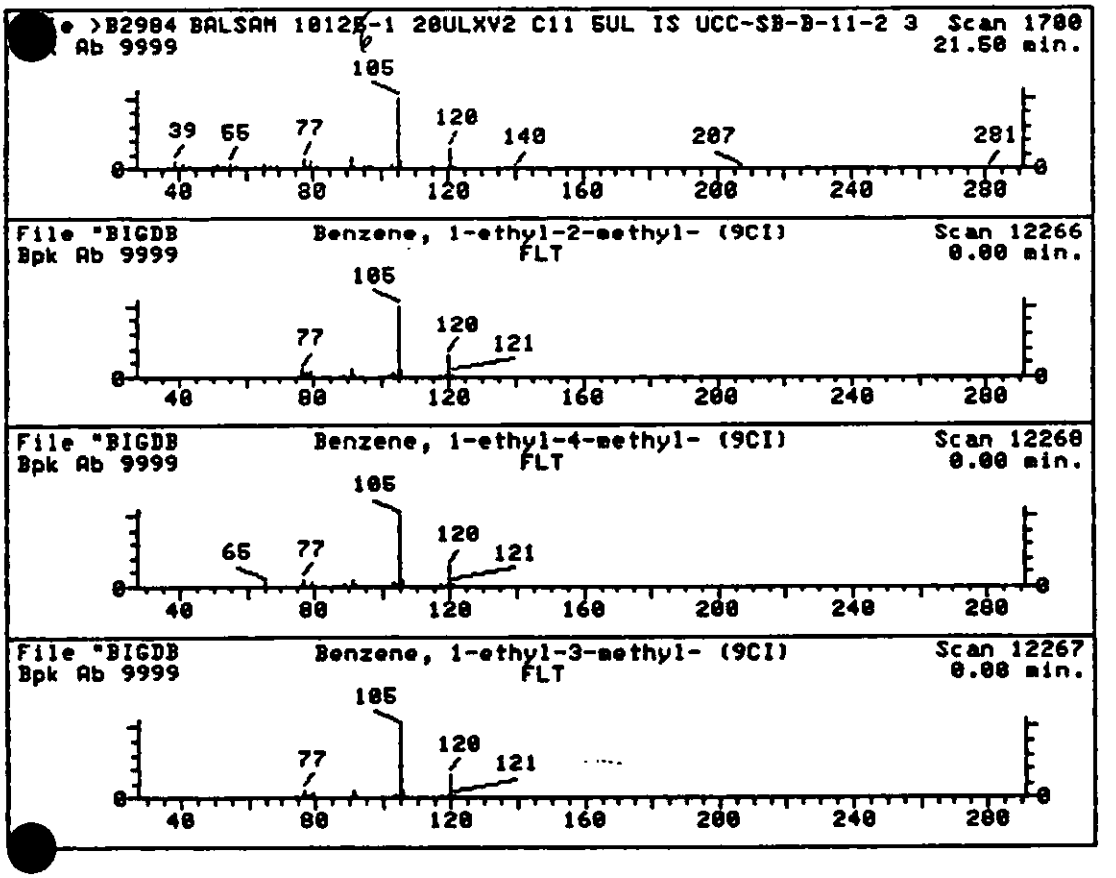
MB 10/22/91

TIC NUMBER:3

1.	Benzene, ~~1~~-ethyl-~~2~~-methyl- (9CI) isomer	120	C9H12
2.	Benzene, 1-ethyl-4-methyl- (9CI) MB 10/22/91	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B2984 Spectrum #: 1700
Search speed: 1 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	611143	12266	"BIGDB	78	7	0	0	93	8	68	97
2.	95*	622968	12268	"BIGDB	78	7	1	0	89	8	68	95
3.	93*	620144	12267	"BIGDB	74	13	0	1	69	10	68	92
4.	83*	98828	12259	"BIGDB	69	18	1	0	82	13	51	77
5.	48*	526738	12280	"BIGDB	67	33	2	-1	59	37	17	37
6.	41	5814857	9857	"BIGDB	51	48	2	0	100	24	17	12



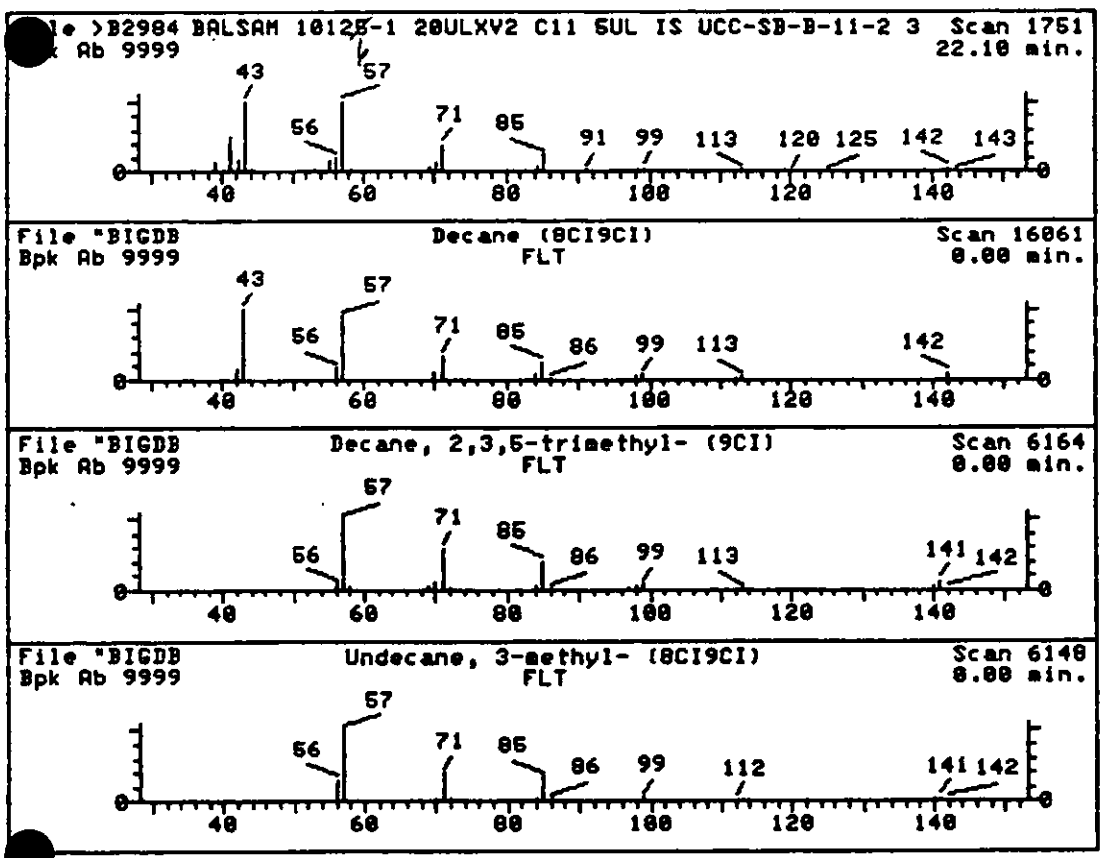
✓ JG 101591

MIC NUMBER:5

1.	Decane (8CI9CI)	142 C10H22
2.	Decane, 2,3,5-trimethyl- (9CI)	184 C13H28
3.	Undecane, 3-methyl- (8CI9CI)	170 C12H26
4.	Octane, 3,5-dimethyl- (8CI9CI)	142 C10H22
5.	Octane, 2,7-dimethyl- (8CI9CI)	142 C10H22
6.	Decane, 6-ethyl-2-methyl- (9CI)	184 C13H28

Sample file: >B2984 Spectrum #: 1751
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*	124185	16061	"BIGDB	91	9	1	2	89	0	72	92
2.	70	62238113	6164	"BIGDB	62	41	2	1	68	10	42	14
3.	70	1002433	6148	"BIGDB	47	41	2	0	69	7	42	16
4.	63*	15869939	3611	"BIGDB	49	44	2	0	100	19	30	30
5.	60*	1072168	8726	"BIGDB	38	57	3	0	99	11	30	13
6.	60	62108218	6163	"BIGDB	61	38	2	1	94	13	30	14



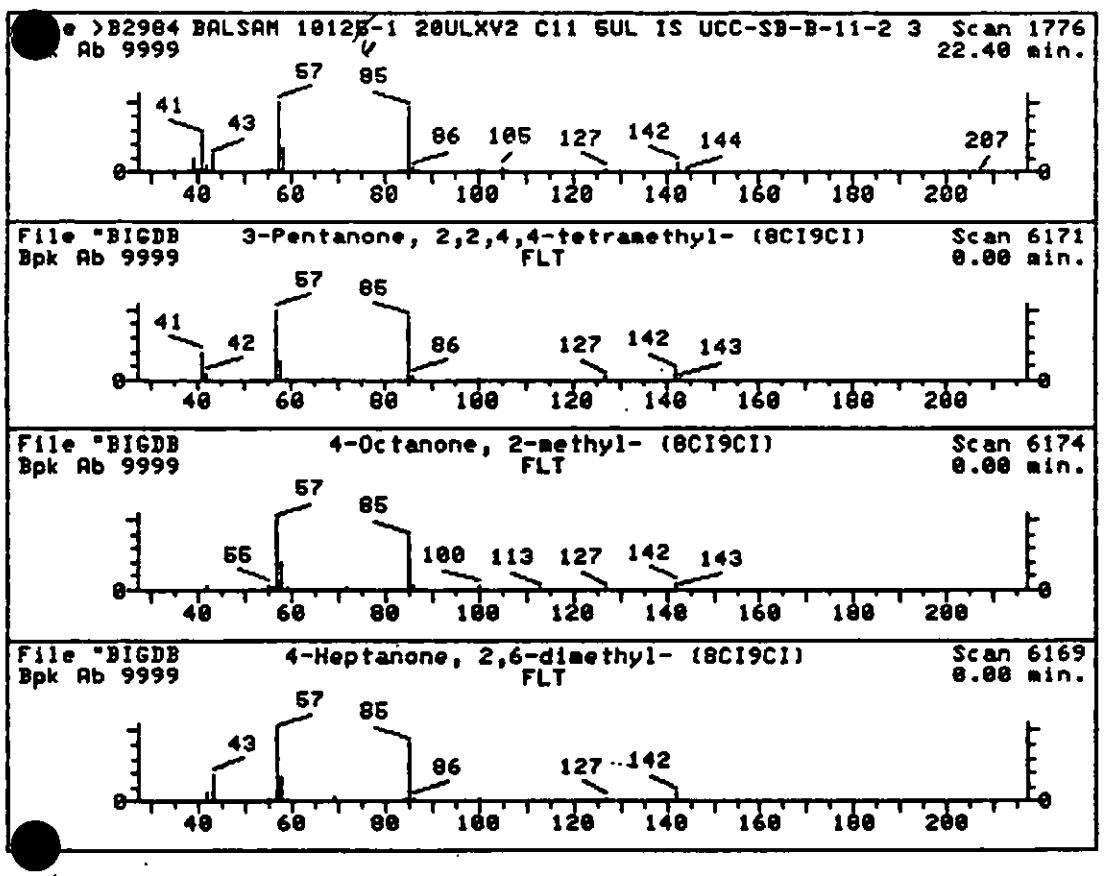
unknown alkane
MB 4/4/91
✓ Dg 101591

TIC NUMBER:6

1.	3-Pentanone, 2,2,4,4-tetramethyl- (8CI9CI)	142	C9H18O
2.	4-Octanone, 2-methyl- (8CI9CI)	142	C9H18O
3.	4-Heptanone, 2,6-dimethyl- (8CI9CI)	142	C9H18O
4.	Pyrrolidine, 1-(1-isobutyl-3-methyl-1-butenyl)- (8CI	195	C13H25N
5.	Butanoic acid, 3-methyl-, 2-propenyl ester (9CI)	142	C8H14O2
6.	1H-Tetrazol-5-amine (9CI)	85	CH3N5

Sample file: >B2984 Spectrum #: 1776
Search speed: 1 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	95*	815247	6171	"BIGDB	80	13	0	0	100	2	72	95
2.	87*	7492388	6174	"BIGDB	58	34	2	0	88	3	63	44
3.	78*	108838	6169	"BIGDB	54	45	3	0	100	3	55	19
4.	76	3494040	6173	"BIGDB	69	26	1	3	89	7	45	27
5.	60*	2835394	6014	"BIGDB	28	67	3	0	100	14	30	13
6.	52*	4418615	5	"BIGDB	21	104	2	0	100	19	20	13



$C_9H_{18}O$ isomer

MB 10/2/96

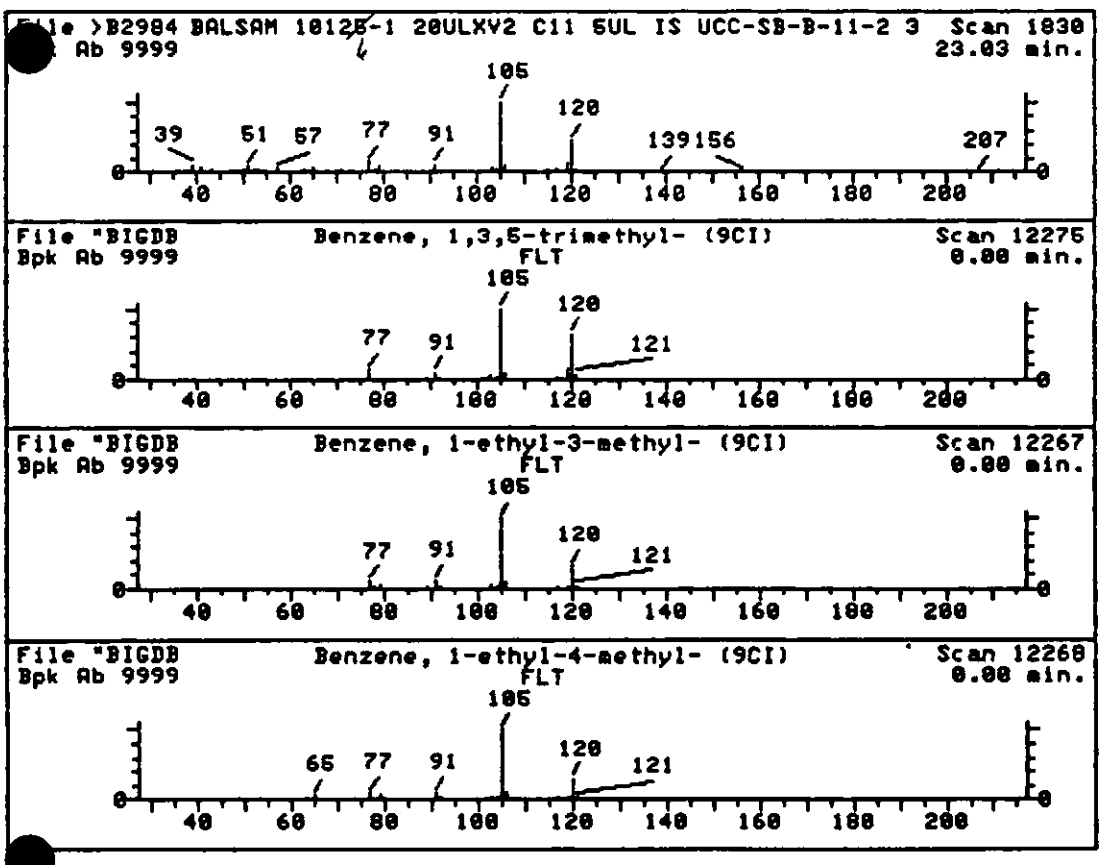
✓ JG 101591

IC NUMBER:7

1.	Benzene, 1,3,5-trimethyl- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
5.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
6.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)- (9CI)	120	C9H12

Sample file: >B2984 Spectrum #: 1830
Search speed: 1 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88*	108678	12275	"BIGDB	65	23	2	0	73	4	65	55
2.	84*	620144	12267	"BIGDB	70	17	2	0	100	7	55	61
3.	75*	622968	12268	"BIGDB	59	26	1	0	100	20	35	61
4.	75*	611143	12266	"BIGDB	59	26	1	0	93	20	35	61
5.	73*	98828	12259	"BIGDB	63	24	0	-2	100	23	32	63
6.	70*	3141024	12286	"BIGDB	40	64	3	0	76	10	42	13



C_3-Benzene isomer MB 10/22/91

C_9H_{12} isomer

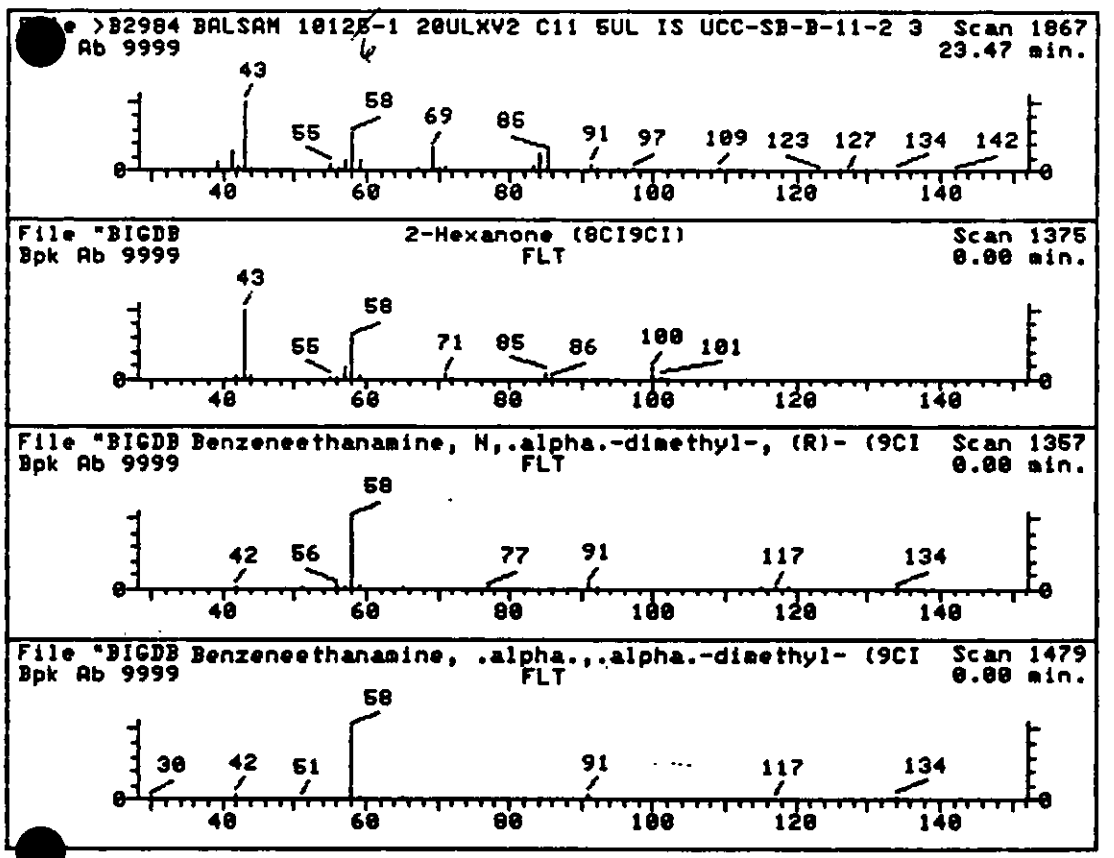
JG 101591

IC NUMBER:8

1.	2-Hexanone (8CI9CI)	100	C6H12O
2.	Benzeneethanamine, N,.alpha.-dimethyl-, (R)- (9CI)	149	C10H15N
3.	Benzeneethanamine, .alpha.,.alpha.-dimethyl- (9CI)	149	C10H15N
4.	Methanamine, N,N-dimethyl- (9CI)	59	C3H9N
5.	2-Hexanone, 4-hydroxy-3-propyl- (9CI)	158	C9H18O2
6.	Undecanal, 2-methyl- (8CI9CI)	184	C12H24O

Sample file: >B2984 Spectrum #: 1867
Search speed: 1 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15	591786	1375	"BIGDB	40	43	2	0	92	57	3	14
2.	15	33817093	1357	"BIGDB	34	39	1	0	55	57	3	12
3.	15	122098	1479	"BIGDB	25	33	0	0	47	57	3	12
4.	15*	75503	1250	"BIGDB	29	38	1	0	45	57	3	16
5.	15	62338174	1380	"BIGDB	34	53	1	0	83	59	3	12
6.	15	110418	1452	"BIGDB	34	56	1	0	55	57	3	12



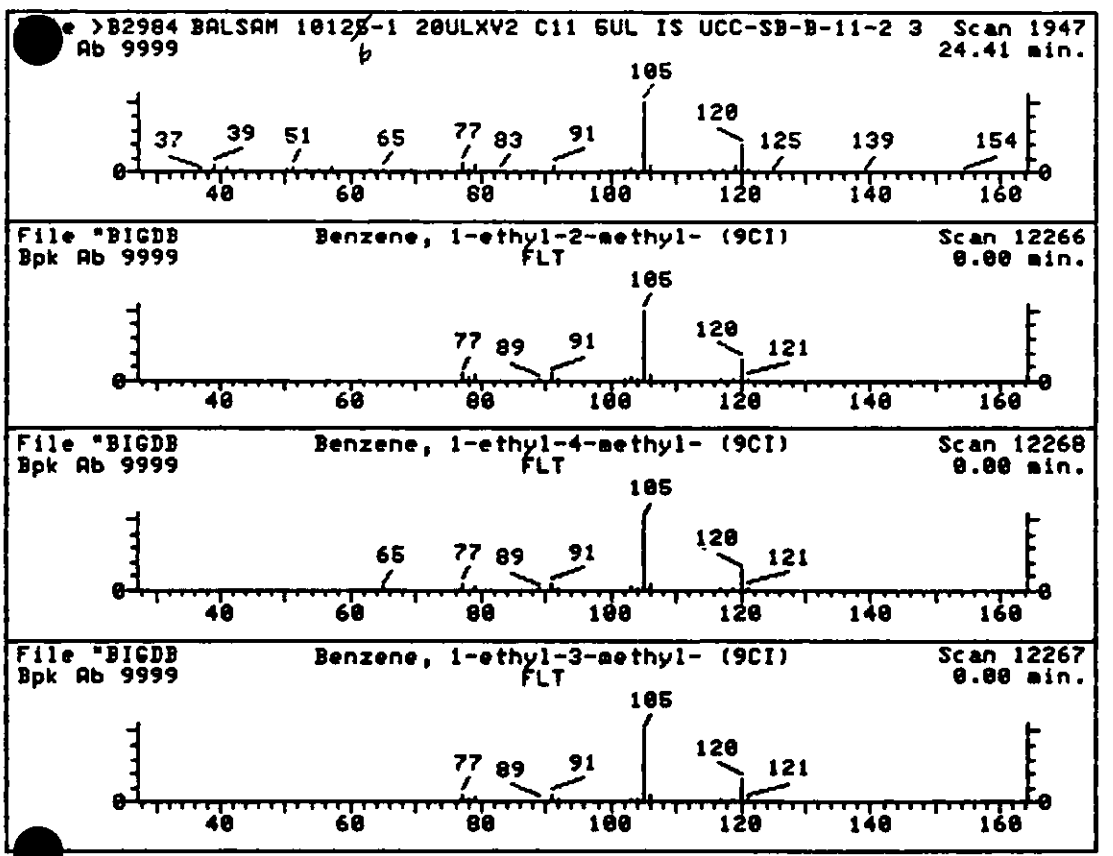
unknown
JG 101591

IC NUMBER:9

1.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120	C9H12

Sample file: >B2984 Spectrum #: 1947
Search speed: 1 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	611143	12266	"BIGDB	68	17	1	0	88	8	62	80
2.	86*	622968	12268	"BIGDB	67	18	1	0	94	8	59	77
3.	86*	620144	12267	"BIGDB	68	19	1	0	88	8	59	76
4.	84*	98828	12259	"BIGDB	62	25	0	-2	91	8	55	61
5.	74*	526738	12280	"BIGDB	74	26	1	0	56	27	37	72
6.	73*	95636	12273	"BIGDB	72	23	1	0	54	27	37	71



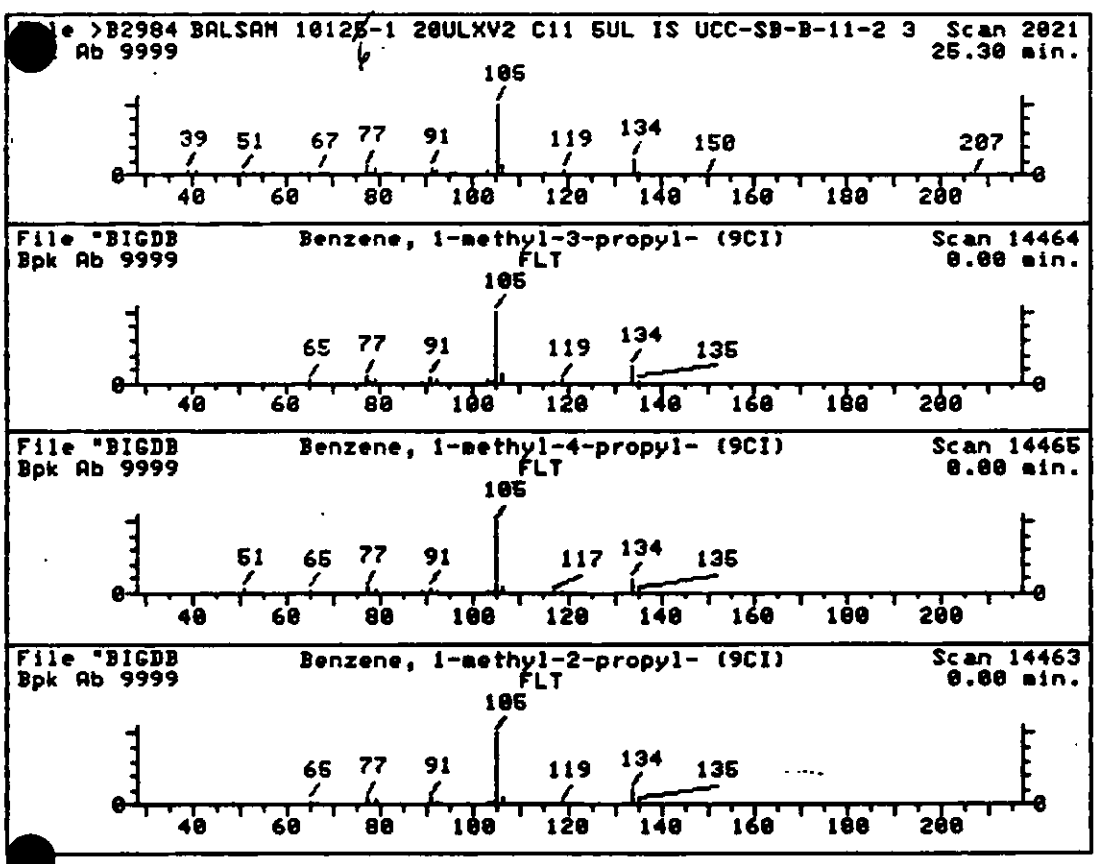
C_3 Benzene isomer
HB 10/23/91
~~C_9H_{12}~~ isomer
JG 101591

IC NUMBER:10

1.	Benzene, 1-methyl-3-propyl- (9CI)	134	C10H14
2.	Benzene, 1-methyl-4-propyl- (9CI)	134	C10H14
3.	Benzene, 1-methyl-2-propyl- (9CI)	134	C10H14
4.	Benzene, (1-methylpropyl)- (9CI)	134	C10H14
5.	Benzene, (1-methyl-3-butenyl)- (9CI)	146	C11H14
6.	Benzene, (1,2,2-trimethyl-3-butenyl)- (9CI)	174	C13H18

Sample file: >B2984 Spectrum #: 2021
Search speed: 1 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	1074437	14464	"BIGDB	87	0	0	0	97	5	72	97
2.	95*	1074551	14465	"BIGDB	67	16	0	0	92	8	68	94
3.	89*	1074175	14463	"BIGDB	68	17	1	0	90	8	62	80
4.	79*	135988	14459	"BIGDB	55	31	0	0	74	15	43	66
5.	38	10340495	9870	"BIGDB	45	35	2	0	74	29	14	15
6.	38	61142174	9915	"BIGDB	45	41	2	0	100	28	14	15



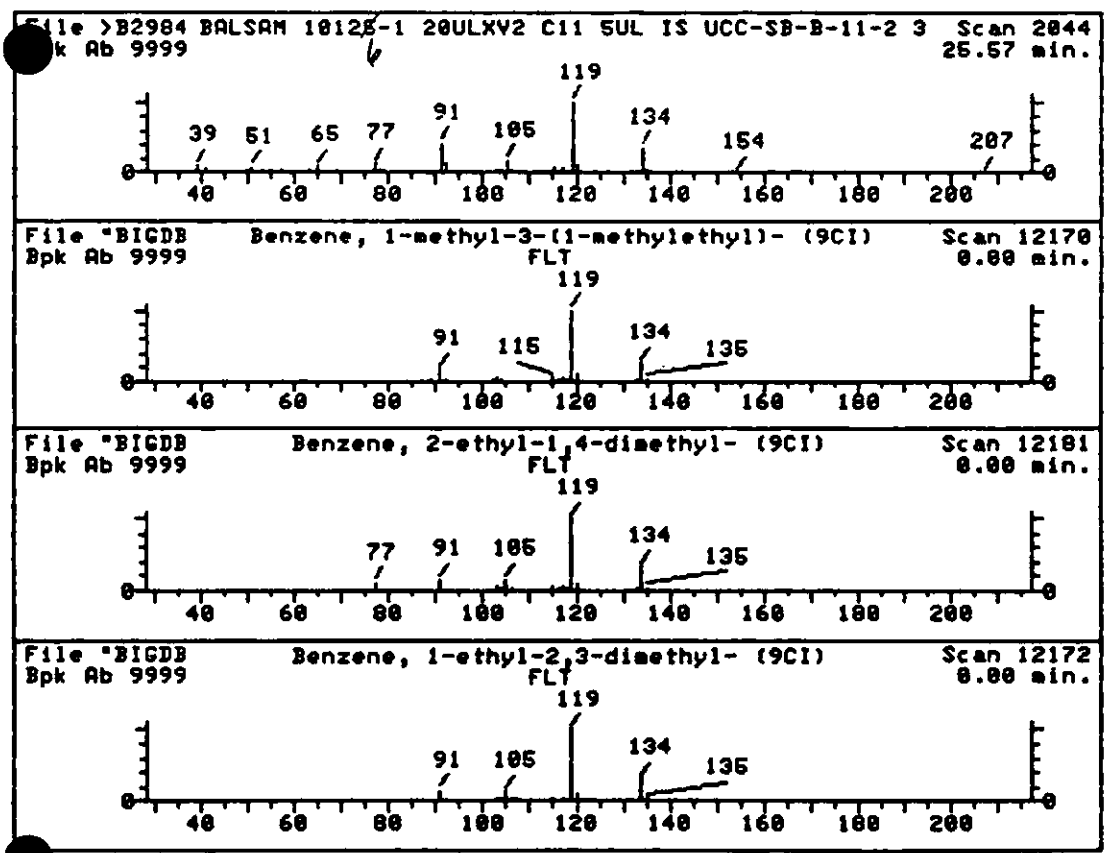
C4 Benzene isomer
HB 10/21/9
✓
JG 101591

IC NUMBER:11

1.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14
2.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134 C10H14
3.	Benzene, 1-ethyl-2,3-dimethyl- (9CI)	134 C10H14
4.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134 C10H14
5.	Benzene, 1-ethyl-2,4-dimethyl- (9CI)	134 C10H14
6.	Benzene, 1,2,3,4-tetramethyl- (8CI9CI)	134 C10H14

Sample file: >B2984 Spectrum #: 2044
Search speed: 1 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	535773	12170	"BIGDB	72	17	0	0	98	7	68	93
2.	93*	1758889	12181	"BIGDB	73	21	0	0	76	8	68	92
3.	86*	933982	12172	"BIGDB	79	12	1	2	100	8	59	78
4.	84*	2870044	12174	"BIGDB	67	22	1	0	100	8	55	69
5.	84*	874419	12171	"BIGDB	66	22	1	0	98	8	55	69
6.	84*	488233	14484	"BIGDB	68	26	1	0	69	7	55	66



C4-Benzene trouver
MB 10/22/98

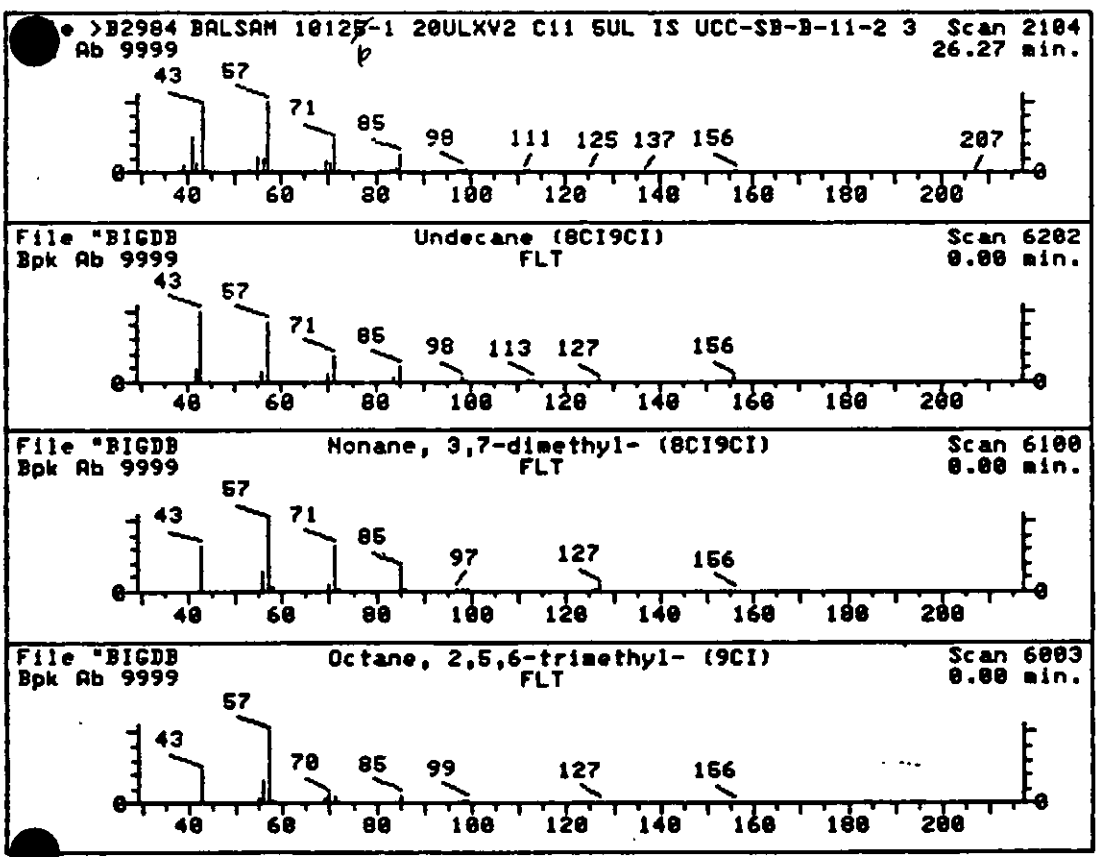
JG 101591

TIC NUMBER:12

1.	Undecane (8CI9CI)	156 C11H24
2.	Nonane, 3,7-dimethyl- (8CI9CI)	156 C11H24
3.	Octane, 2,5,6-trimethyl- (9CI)	156 C11H24
4.	Decane, 6-ethyl-2-methyl- (9CI)	184 C13H28
5.	Nonane, 2,5-dimethyl- (8CI9CI)	156 C11H24
6.	Isooctane, (ethenyloxy)- (9CI)	156 C10H20O

Sample file: >B2984 Spectrum #: 2104
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.	95*	1120214	6202	"BIGDB	82	15	0	0	91	4	72	95
2.	81*	17302328	6100	"BIGDB	56	30	1	2	71	9	53	46
3.	65*	62016142	6003	"BIGDB	45	42	0	0	67	32	24	53
4.	60	62108218	6163	"BIGDB	57	42	1	0	85	13	30	19
5.	59*	17302271	8752	"BIGDB	55	40	2	0	90	22	27	35
6.	58*	37769623	3941	"BIGDB	49	54	2	0	86	16	25	22



Unknown alkane
MB 10/21/91

✓ JG 101591

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-11-2DL

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10126 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01DL

Sample wt/vol: 1.0 (g/mL) G Lab File ID: A3520

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/15/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130000	U
74-83-9	Bromomethane	130000	U
75-01-4	Vinyl Chloride	130000	U
75-00-3	Chloroethane	130000	U
75-09-2	Methylene Chloride	46000	BDJ
67-64-1	Acetone	130000	U
75-15-0	Carbon Disulfide	64000	U
75-35-4	1,1-Dichloroethene	64000	U
75-34-3	1,1-Dichloroethane	64000	U
540-59-0	1,2-Dichloroethene (total)	64000	U
67-66-3	Chloroform	64000	U
107-06-2	1,2-Dichloroethane	64000	U
78-93-3	2-Butanone	130000	U
71-55-6	1,1,1-Trichloroethane	150000	D
56-23-5	Carbon Tetrachloride	64000	U
108-05-4	Vinyl Acetate	130000	U
75-27-4	Bromodichloromethane	64000	U
78-87-5	1,2-Dichloropropane	64000	U
10061-01-5	cis-1,3-Dichloropropene	64000	U
79-01-6	Trichloroethene	33000	DJ
124-48-1	Dibromochloromethane	64000	U
79-00-5	1,1,2-Trichloroethane	64000	U
71-43-2	Benzene	64000	U
10061-02-6	trans-1,3-Dichloropropene	64000	U
110-75-8	2-Chloroethylvinylether	130000	U
75-25-2	Bromoform	64000	U
108-10-1	4-Methyl-2-Pentanone	130000	U
591-78-6	2-Hexanone	130000	U
127-18-4	Tetrachloroethene	64000	U
79-34-5	1,1,2,2-Tetrachloroethane	64000	U
108-88-3	Toluene	20000	DJ
108-90-7	Chlorobenzene	64000	U
100-41-4	Ethylbenzene	370000	D
100-42-5	Styrene	64000	U
1330-20-7	Xylene (total)	2000000	D

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-11-2DL

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-01DL

Sample wt/vol: 1.0 (g/mL) G Lab File ID: A3520

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 23 Date Analyzed: 10/15/91

Column (pack/cap) CAP Dilution Factor: 20

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.60	220000	J

L-07211-C4
R-101591-V1A >A3515
MeCl2
2 BW

Reduced by : TSV Date: 101591 Data File: >A3520
Reviewed by: AC Date: 10-16-91 Page: 1

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: BALSM 10126-1 5ULX ✓ DL
Misc : V1 CH16 5ULIS ID# UCC-SB-B-11-2 DL 1.01G/10ML (101591)
Injected : 10/15/91 15:59 Units: UG/KG
Analyst: ALANA Run Factor: 9900.00 ✓
ID File: VOAID1 ✓ Surrogate vol: 10.000
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	16.30	DL	65.2*H	70 121
CS05	D8-Toluene	25.00	23.20	↓	92.8	81 117
CS10	Bromofluorobenzene (BFB)	25.00	23.28	↓	93.1 ✓	74 121

DCJ 101591

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
254	3.591	35550 J,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
		BDL	C110	2-Butanone
		BDL	C125	Vinyl Acetate
416	11.897	117800	C115	1,1,1-Trichloroethane
416	1.895	~~18760~~ R DH	C120	Carbon Tetrachloride
		BDL	C165	Benzene
536	2.573	25470 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

Data file: >A3520 PaS
ge: 2
Sample: BALSM 10126-1 5ULX

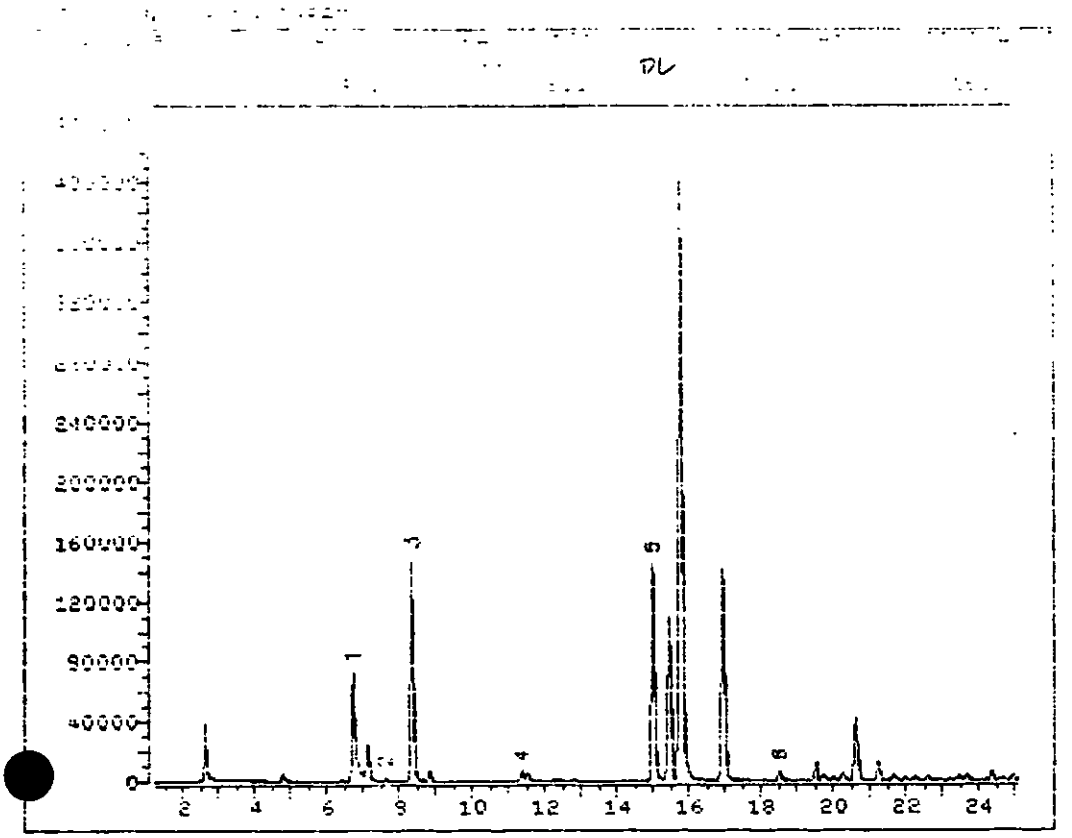
Scan #	Concentration Quant list UG/L	Sample UG/KG		Compound
		BDL	C205	4-Methyl-2-Pentanone
724	1.579	15630 J	C230	Toluene
		BDL	C210	2-Hexanone
		BDL	C220	Tetrachloroethene
		BDL	C235	Chlorobenzene
999	29.072	287800	C240	Ethylbenzene
1024	106.781	~~1052000~~	CXXX	Xylene (p)
1104	39.185	~~387900~~ NR	CXXX	Xylene (o)
1104	1.229	~~12170~~ SNG	C245	Styrene
		BDL	C225	1,1,2,2-Tetrachloroethan
		BDL	C335	Dichlorobenzene (m)
		BDL	C340	Dichlorobenzene (p)
		BDL	C350	Dichlorobenzene (o)
1104	~~39.352~~	~~389600~~	C250	Xylene (Total)
	155.32	1537668		101591

Segment			Found	Found	Diff	RT	Area	Ratio	Conc
1)	*C111	Bromochloromethane	6.71	6.71	.01	128.0	7[illegible]	[illegible]	[illegible]
2)	C010	Chloromethane	2.98	0.00	--	50.0	0	[illegible]	0.00
3)	C020	Vinyl Chloride	3.06	0.00	--	62.0	0	1.[illegible]	0.00
4)	C030	Bromomethane	3.32	0.00	--	94.0	0	.9380	0.00
5)	C035	Chloroethane	3.42	0.00	--	64.0	0	.8765	0.00
6)	C040	1,1-Dichloroethene	4.24	0.00	--	96.0	0	1.0752	0.00
7)	C050	Acetone	4.33	0.00	--	43.0	0	.4096	0.00
8)	C060	Carbon Disulfide	4.49	0.00	--	76.0	0	4.0946	0.00
9)	C070	Methylene Chloride	4.76	4.77	.01	84.0	9290	1.8473	3.59
10)	C095	Trans-1,2-Dichloroe	5.07	0.00	--	96.0	0	1.7306	0.00
11)	C099	cis-1,2-Dichloroeth	6.36	0.00	--	96.0	0	2.0357	0.00
12)	C090	1,1-Dichloroethane	5.59	0.00	--	63.0	0	3.2472	0.00
13)	C080	Chloroform	6.82	0.00	--	83.0	0	3.7480	0.00
14)	C095	1,2-Dichloroethane	7.72	0.00	--	62.0	0	2.5302	0.00
15)	C110	2-Butanone	6.39	0.00	--	72.0	0	.2174	0.00
16)	C515	D4-1,2-Dichloroetha	7.60	7.60	.00	65.0	4302	1.8859	1.[illegible]
17)	*C110	1,4-Difluorobenzene	8.35	8.35	.02	114.0	355698	1.0000	50.00
18)	C125	Vinyl Acetate	5.63	0.00	--	43.0	0	.6597	0.00
19)	C115	1,1,1-Trichloroetha	7.07	7.09	.01	97.0	45599	.5388	11.[illegible]
20)	C120	Carbon Tetrachlorid	7.35	7.09	.26	117.0	6889	.5110	1.90
21)	C165	Benzene.	7.67	7.67	.00	78.0	1681	1.0939	.22
22)	C150	Trichloroethene	8.80	8.80	.00	130.0	8264	.4515	2.57
23)	C140	1,2-Dichloropropane	9.23	0.00	--	63.0	0	.4033	0.00
24)	C130	Bromodichloromethan	9.79	0.00	--	83.0	0	.5724	0.00
25)	C175	2-Chloroethylvinyle	10.46	0.00	--	63.0	0	.2325	0.00
26)	C143	Cis-1,3-Dichloropro	10.79	0.00	--	75.0	0	.6111	0.00
27)	C172	Trans-1,3-Dichlorop	12.05	0.00	--	75.0	0	.5393	0.00
28)	C160	1,1,2-Trichloroetha	12.50	0.00	--	97.0	0	.3539	0.00
29)	C155	Dibromochloromethan	13.45	0.00	--	129.0	0	.5629	0.00
30)	C180	Bromoform	17.49	0.00	--	173.0	0	.4748	0.00
31)	*C120	D5-Chlorobenzene	15.03	14.97	.06	117.0	293859	1.0000	50.00
32)	CS05	D8-Toluene	11.33	11.32	.01	98.0	17658	1.2949	2.32
33)	C205	4-Methyl-2-Pentanon	11.11	0.00	--	43.0	0	.4262	0.00
34)	C230	Toluene	11.47	11.49	.02	92.0	7707	.8303	1.58
35)	C210	2-Hexanone	13.18	0.00	--	43.0	0	.3083	0.00
36)	C220	Tetrachloroethene	12.78	12.77	.01	164.0	1838	.5137	.61
37)	C235	Chlorobenzene	15.06	0.00	--	112.0	0	1.1099	0.00
38)	C240	Ethylbenzene	15.41	15.42	.00	106.0	93428	.5468	29.07
38)D	C240	Ethylbenzene	15.41	15.77	.36	106.0	413659	.5468	128.72
39)D	CXXX	Xylene (p)	15.78	15.42	.37	106.0	93428	.6591	24.12
39)	CXXX	Xylene (p)	15.78	15.77	.01	106.0	413659	.6591	106.78
40)	CXXX	Xylene (o)	16.91	16.92	.01	106.0	143493	.6231	39.19
41)	C245	Styrene	16.98	16.92	.07	104.0	7892	1.0930	1.23
42)	C225	1,1,2,2-Tetrachloro	19.13	0.00	--	83.0	0	.6769	0.00
43)	CS10	Bromofluorobenzene	18.52	18.50	.02	95.0	8535	.6238	2.33
44)	C335	Dichlorobenzene (m	22.04	21.99	.05	146.0	1125	1.0034	.19
45)D	C340	Dichlorobenzene (p	22.35	21.99	.36	146.0	1125	1.0105	.19
45)	C340	Dichlorobenzene (p	22.35	22.30	.05	146.0	1649	1.0105	.28

000056

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

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



Data File: >A3520::D1 Quant Output File: ^A3520::Q1
Name: SALSM 101126-10 5ULX DL
Misc: V1 CH16 5ULIS ID# UCC-SB-B-11-2 1.01G/10ML (101591)

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 911015 11:54

Operator ID: ALANA
Quant Time: 911015 16:26
Injected at: 911015 15:59

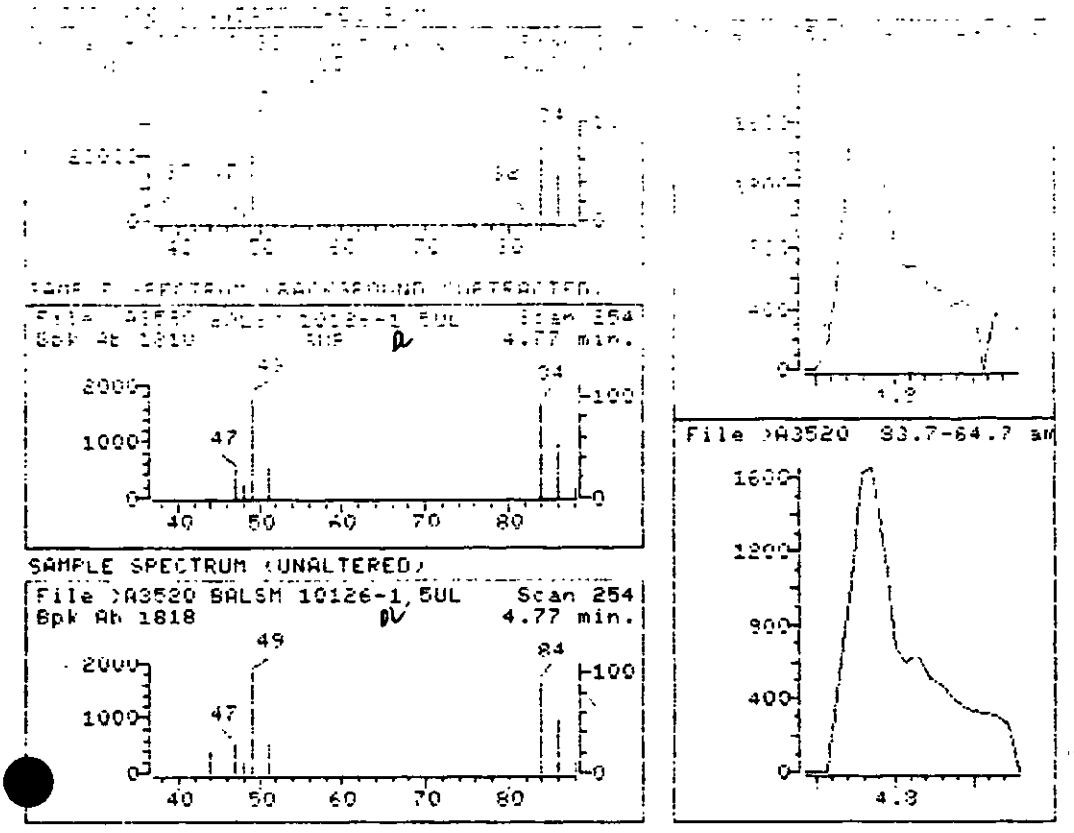
[illegible]

[illegible]

	Compound		R.T.	Q ion	Area	Conc	Units	Q
1)	*C101	bromochloromethane	6.70	128.0	70028	50.00	UG/L	92
9)	C050	Methylene Chloride	4.77	84.0	9290	3.99	UG/L	84
16)	CS15	D4-1,2-Dichloroethane	7.60	65.0	4302	1.63	UG/L	90
17)	*C110	1,4-Difluorobenzene	8.33	114.0	355698	50.00	UG/L	100
19)	C115	1,1,1-Trichloroethane	7.09	97.0	45599	11.90	UG/L	95
20)	C120	Carbon Tetrachloride	7.09	117.0	6889	1.90	UG/L	90
21)	C165	Benzene	7.67	78.0	1681	.22	UG/L	100
22)	C150	Trichloroethene	8.80	130.0	8264	2.57	UG/L	94
31)	*C120	D5-Chlorobenzene	14.97	117.0	293859	50.00	UG/L	100
32)	CS05	D8-Toluene	11.32	98.0	17658	2.32	UG/L	89
34)	C230	Toluene	11.49	92.0	7707	1.58	UG/L	49
36)	C220	Tetrachloroethene	12.77	164.0	1838	.61	UG/L	86
38)	C240	Ethylbenzene	13.42	106.0	93428	24.07	UG/L	98
39)	CXXX	Xylene (p)	13.77	106.0	413659	106.78	UG/L	99
40)	CXXX	Xylene (o)	16.92	106.0	143493	37.19	UG/L	94
41)	C245	Styrene	16.92	104.0	7892	1.23	UG/L	100
43)	CS10	Bromofluorobenzene (BFB)	16.50	95.0	8535	2.33	UG/L	86
44)	C335	Dichlorobenzene (m)	21.99	146.0	1125	.19	UG/L	100
45)	C340	Dichlorobenzene (p)	22.30	146.0	1649	.28	UG/L	100
46)	C350	Dichlorobenzene (o)	23.53	146.0	760	.13	UG/L	100
47)	C250	Xylene (Total)	15.77	106.0	563955M	155.32	UG/L	97

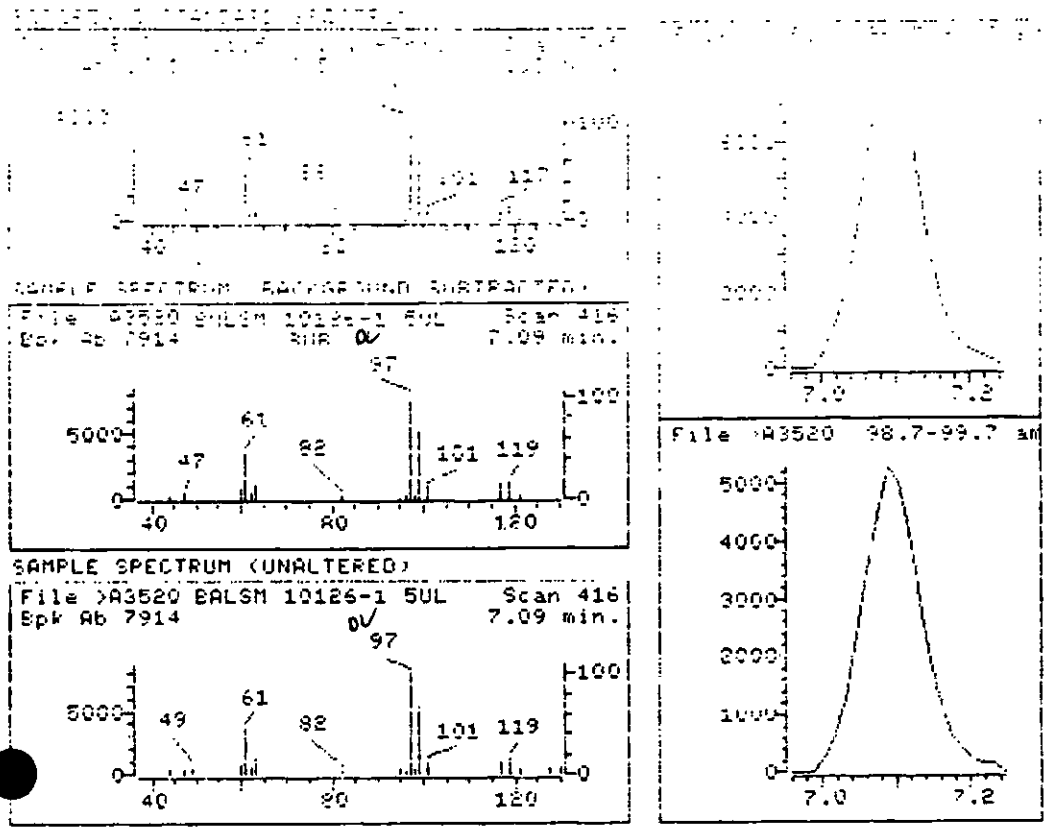
* Compound is IS10

RV
101591



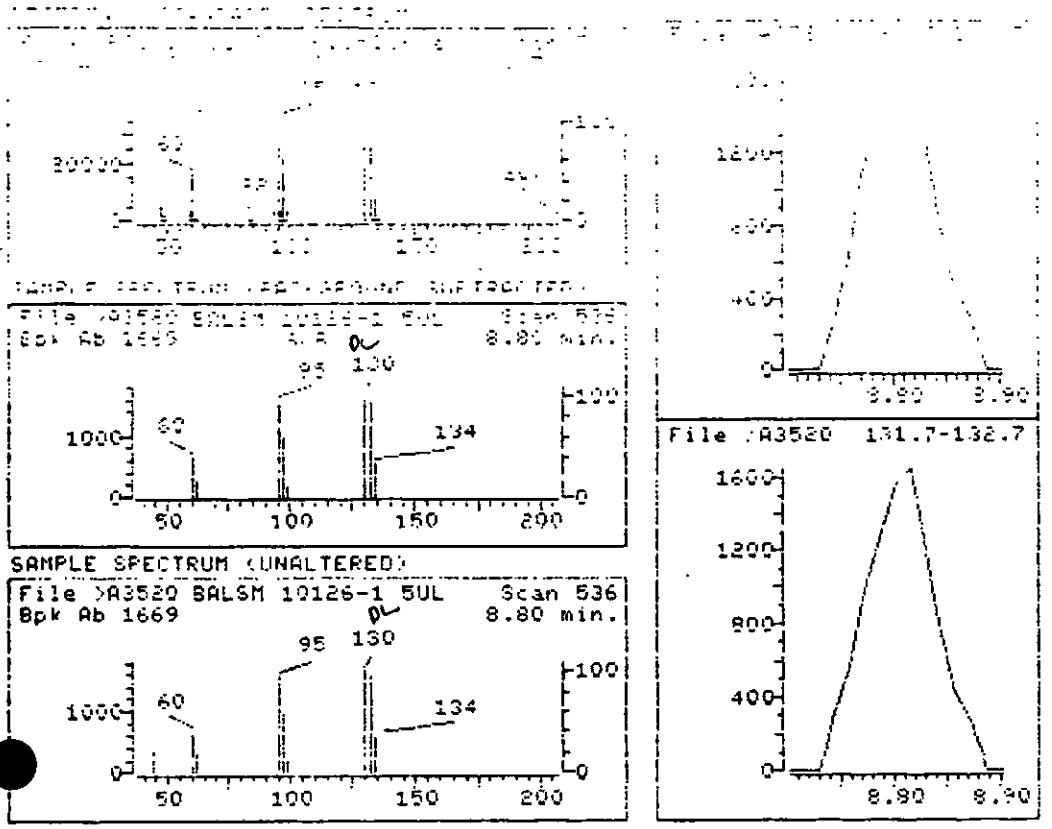
Data File: >A3520::D1 Quant Output File: >A3520::D1
Name: BALSM 10126-1,5ULX
Misc: V1 CH16 5ULIS ID# UCC-SB-B-11-2 1.01G/10ML (101591)
Quant Time: 911015 16:26 Quant ID File: VOAID1::$$
Injected at: 911015 15:59 Last Calibration: 911015 11:54

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 254
Retention Time: 4.77 min.
Quant Ion: 84.0
Area: 9290
Concentration: 3.59 UG/L
q-value: 67



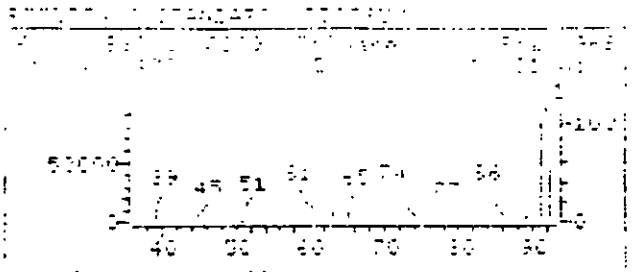
Data File: >A3520::01 Quant Output File: ^A3520::01
Name: BALSM 10126-1 5ULX
Misc: V1 CH16 5ULIS ID# UCC-SB-8-11-2 1.01G/1UML (101591)
Quant Time: 911015 16:26 Quant ID File: VUAID1::$$
Injected at: 911015 15:59 Last Calibration: 911015 11:54

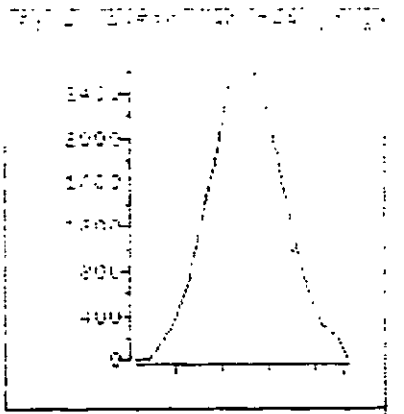
Compound No: 19
Compound Name: C115 1,1,1-Trichloroethane
Scan Number: 416
Retention Time: 7.09 min.
Quant Ion: 97.0
Area: 45599
Concentration: 11.90 UG/L
q-value: 95



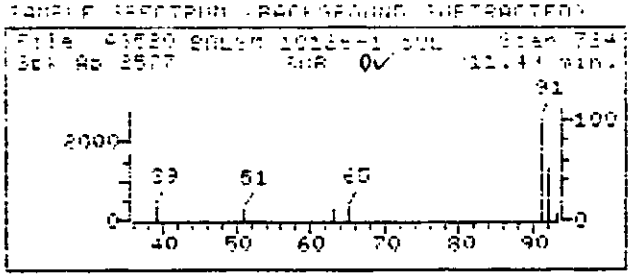
Data File: >A3520::D1 Quant Output File: >A3520::Q1
Name: BALSM 10126-1 5ULX
Misc: V1 CH16 5ULIS ID# UCC-SB-B-11-2 1.01G/10ML (101591)
Quant Time: 911015 16:26 Quant ID File: VUAID1::$$
Injected at: 911015 15:59 Last Calibration: 911015 11:54

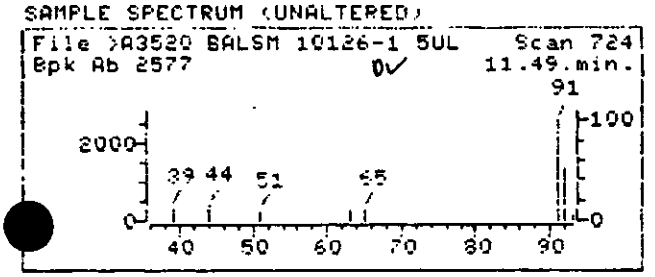
Compound No: 22
Compound Name: C150 Trichloroethene
Scan Number: 536
Retention Time: 8.80 min.
Quant Ion: 130.0
Area: 8264
Concentration: 2.57 UG/L
q-value: 94

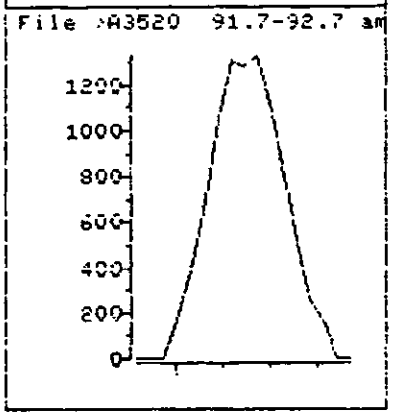




SAMPLE SPECTRUM (UNALTERED)

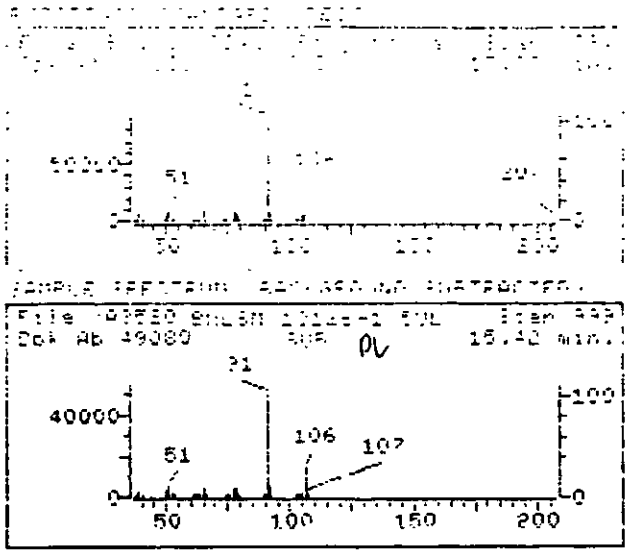


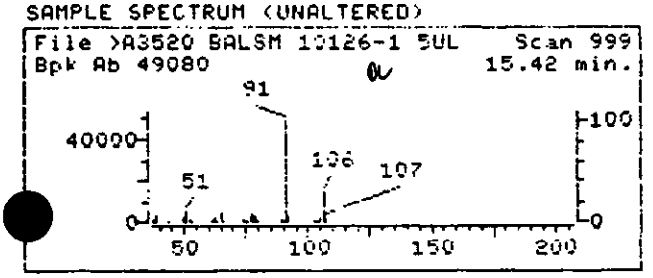


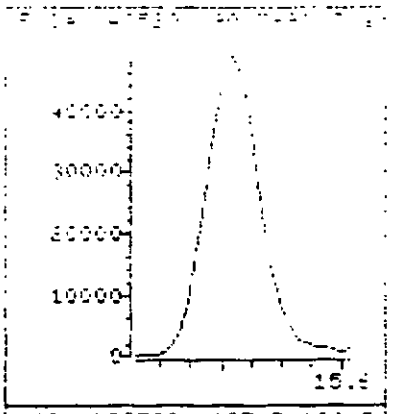


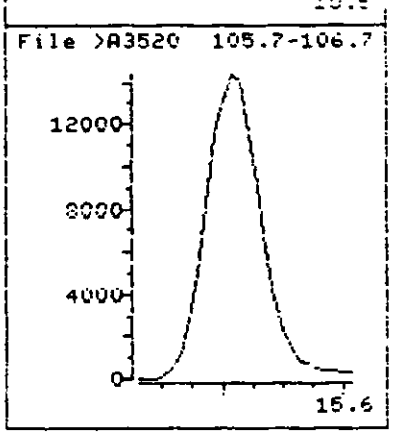
Data File: >A3520::D1 Quant Output File: >A3520::UT
Name: BALSM 10126-10 5ULX
Misc: V1 CH16 5ULIS ID# UCC-SB-B-11-2 1.01G/10ML (101591)
Quant Time: 911015 16:26 Quant ID File: VUAID1::$$
Injected at: 911015 15:59 Last Calibration: 911015 11:54

Compound No: 34
Compound Name: C230 Toluene
Scan Number: 724
Retention Time: 11.49 min.
Quant Ion: 92.0
Area: 7707
Concentration: 1.58 UG/L
q-value: 95



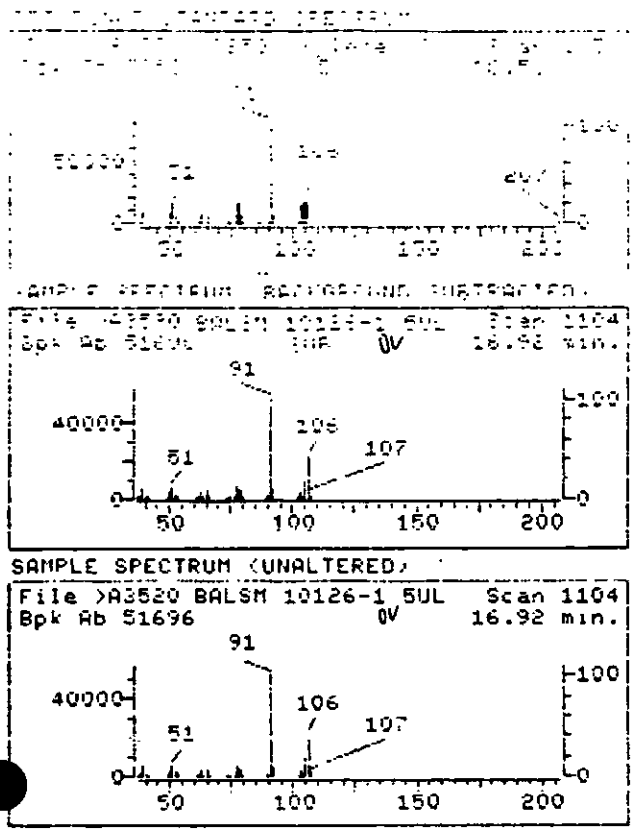


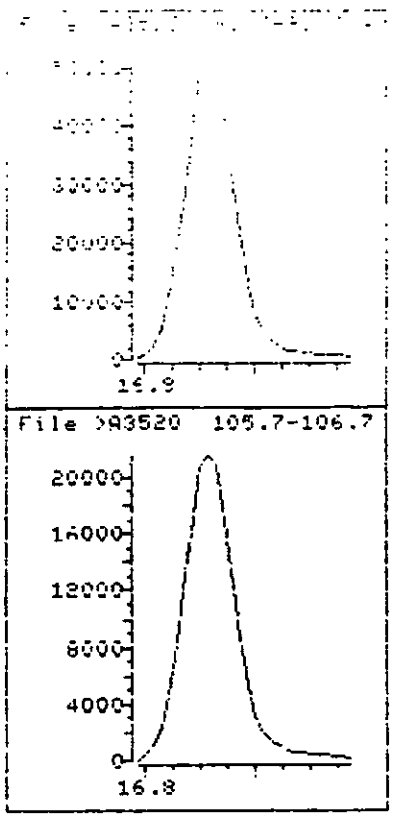




Data File: >A3520::D1 Quant Output File: ^A3520::U1
Name: BALSM 10126-1 5ULX
Misc: V1 CH16 5ULIS ID# UCC-SB-B-11-2 1.01G/10ML (101591)
Quant Time: 911015 16:26 Quant ID File: VOAI01::$$
Injected at: 911015 15:59 Last Calibration: 911015 11:54

Compound No: 38
Compound Name: C240 Ethylbenzene
Scan Number: 999
Retention Time: 15.42 min.
Quant Ion: 106.0
Area: 93428
Concentration: 29.07 UG/L
q-value: 98





Data File: >A3520::D1 Quant Output File: >A3520::Q1
Name: BALSM 10126-1 5ULX
Misc: V1 CH16 5ULIS ID# UCC-SB-B-11-2 1.01G/10ML (101591)
Quant Time: 911015 16:26 Quant ID File: VOAID1::$$
Injected at: 911015 15:59 Last Calibration: 911015 11:54

Compound No: 47
Compound Name: C250 Xylene (Total)
Scan Number: 1104
Retention Time: 16.92 min.
Quant Ion: 106.0
Area: 142885
Concentration: ~~39.55~~ UG/L
155.32 µg/L
q-value: 97

RW
101591

[illegible] BV [illegible] 11501 [illegible]

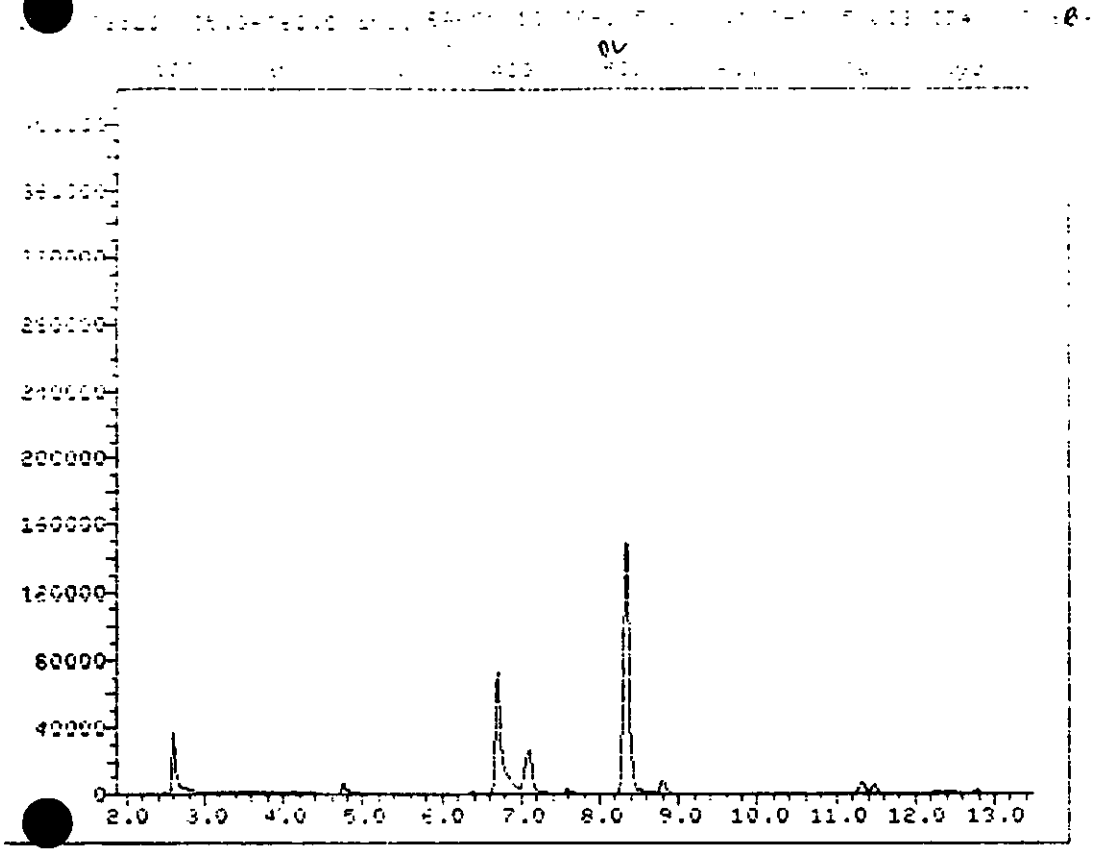
[illegible] [illegible] [illegible] [illegible]

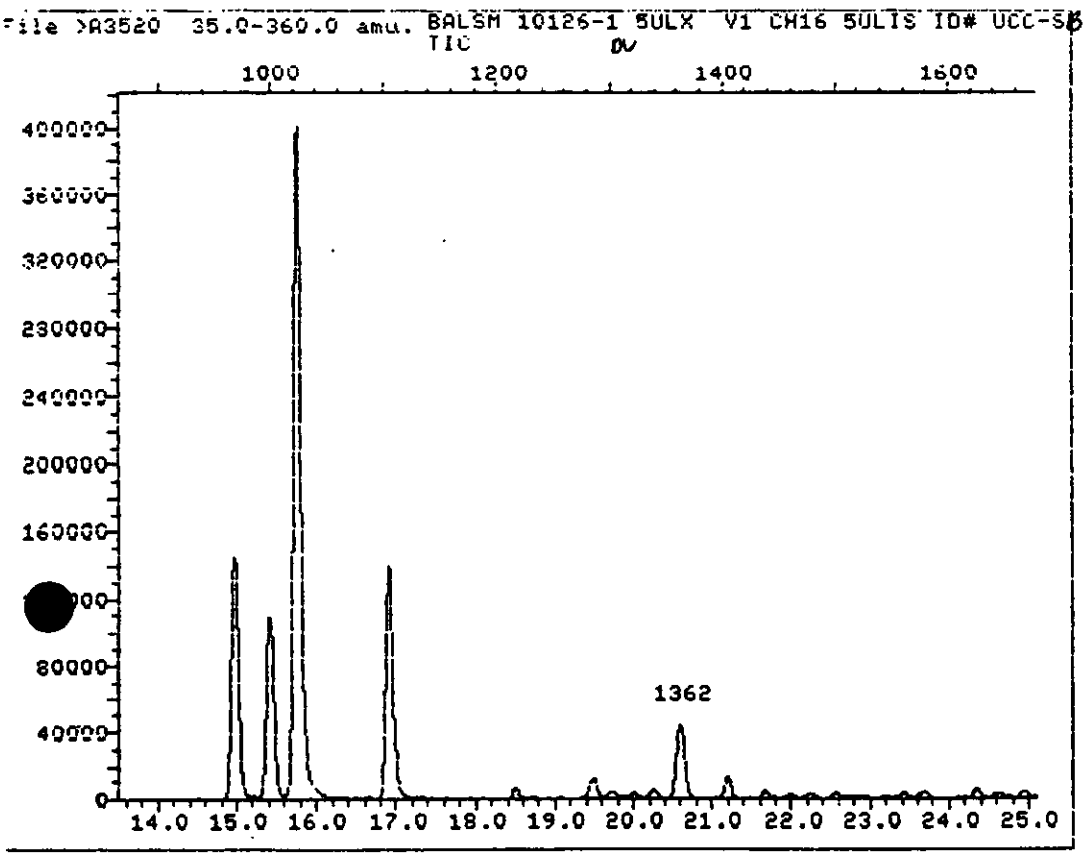
[illegible]

Sample: SHLSH 1911-1 OK [illegible] Run Factor: [illegible].
Conditions: VA CHIA BULLS ID# 001-SE-B-11-2 DL Analyst: ALHHP

# Scan	Q	L	Concentration in Sample (ug/kg)	Lab #	Compound
1	1362.		170000.	~~81-24-7~~	~~5-Pentanone, 2,2,4,4-tetramethyl-~~ Unknown

# Prob.	Cont.	Int. End.	Pi	Phi	Area	Height	Conc. As Analyzed (ug/L)
	dd	%	%	rad.nU	1.3 e	dProb.	dUnit.	Unit2


DV
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0
13.0


File >A3520 35.0-360.0 amu. BALSM 10126-1 SULX V1 CH16 SULIS ID# UCC-S
TIC
DV
1000
1200
1400
1600
1362
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]

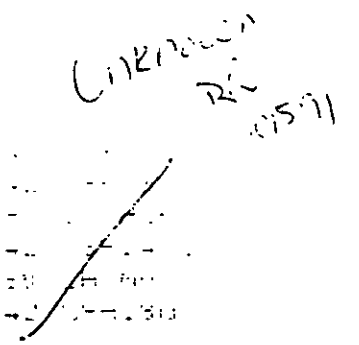
[illegible] peaks: [illegible]
[illegible] peak area as % of est. ISTD area: [illegible]
[illegible] peak area as % of est. ISTD area: [illegible]

#	Name	Concentration		FLAG
	ID area	ID area	Purge	ISTD area	ISTD area	% est. ISTD
1	C10I Bromochloromet	50.000	UG/L		Ok	
	389.	20026.	2.281	389.	429830.	84.30%
2	C11U 1,4-Difluorobe	50.000	UG/L		Ok	
	503.	356698.	2.413	503.	778681.	90.736
3	C12U 05-Chlorobenze	50.000	UG/L		Ok	
	968.	293859.	3.463	968.	853490.	83.859

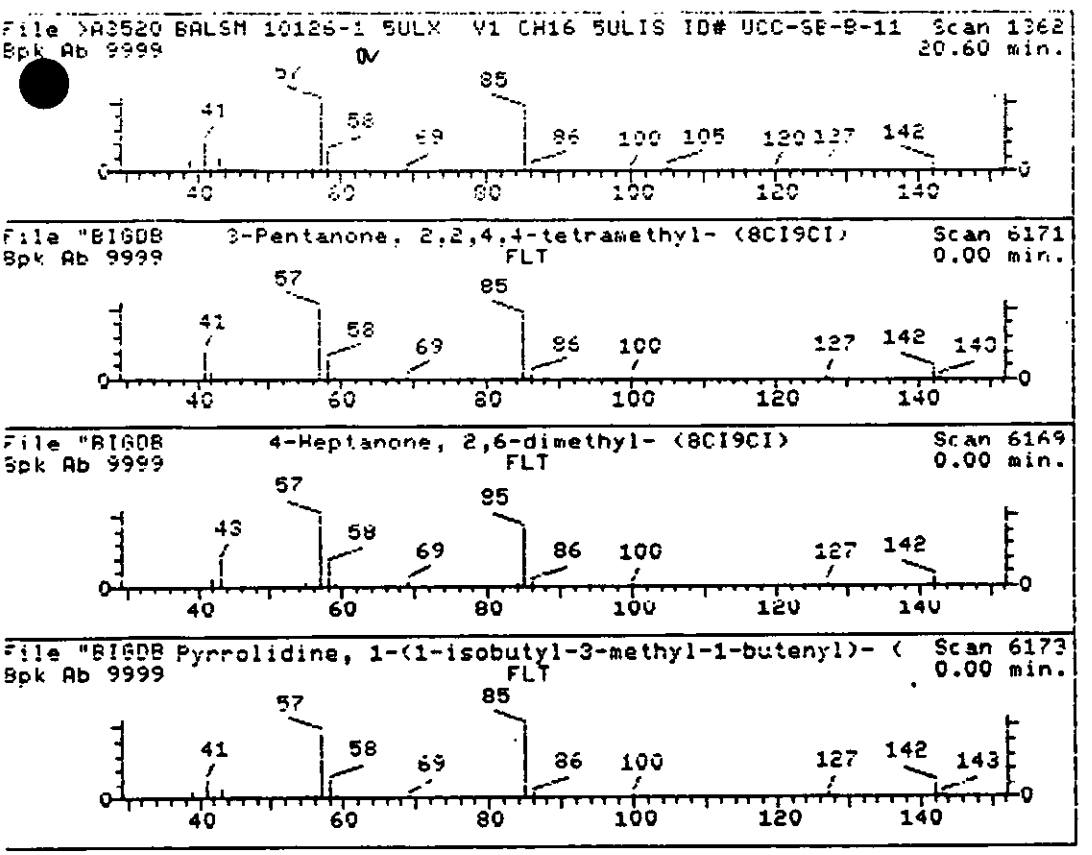
eleting peaks from INT file: VDIR88
 Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 8
 Number of peaks remaining: 8

eleting target compounds from INT file: VDIR88
 Minimum seperation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 8
 Number of peaks remaining: 1

eleting all but largest peaks from INT file: VDIR88
 Maximum number of peaks to keep: 15
 Number of peaks: 1
aximum number of peaks > number of peaks.



	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	FILT	%	CUN	C_I	P_IO
1.	88*	815247	6171	"BIGDB	70	23	2	0	86	5	65	59



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-A-09-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2804

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. 17 Date Analyzed: 10/08/91

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	7	
67-64-1	Acetone	12	U
75-15-0	Carbon Disulfide	5	BJ
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	2	J
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	6	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	17	
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	4	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	4	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-A-09-4

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-03

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2804

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. 17 Date Analyzed: 10/08/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C6H14 ISOMER	5.85	36	J

8240-SL L-090291-CW
R-100891-V6A
NC
7F2798
CS_2
2 Bnt.

Analyzed By: DCV Date: 100891
AC Time: 10:16:51

Sample: a-LSM1 10.2g-3 4.9mG ✓
File : V6:CH14.B\ Is S. I# 1-Sp-A-V8-4 ✓
Injected : 10/08/91 18:52 Units: UG/G
Analyst: LIC Dil Factor: 1.0134 ✓
ID File: HAMID6 ✓ Surrogate Vol: .045
Quant list threshold: 1.0

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured		QC limits
CS15 D4-1,2-dichloroethane	.2500	.2494	99.8		70 121
CS05 D8-Toluene	.2500	.2560	102	✓	84 117
CS10 Bromofluorobenzene	.2500	.2355	94.2		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
234	3.953	4.0	J,B	C040 Carbon Disulfide ✓
264	5.586	5.6		C030 Methylene Chloride ✓
		BDL		C053 Trans-1,2-dichloroethene
427	1.410	1.4	J	C055 Cis-1,2-dichloroethene ✓
		BDL		C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
429	2.640	2.7	J,B	C110 2-Butanone ✓
331	8.649	~~8.7~~	~~J~~	C125 Vinyl Acetate
503	4.684	4.7	J	C115 1,1,1-Trichloroethane ✓
		BDL		C120 Carbon Tetrachloride
		BDL		C165 Benzene
774	13.578	14		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

Client Lot #	Client Lot	Sample Result		Compound
		BDL		C150 1,1,2-Trichloroethane
		BDL		C155 Dibromochloromethane
		BDL		C160 Bromoform
		BDL		C205 4-Methyl-2-pentanone
992	1.165		1.2 J	C270 Toluene ✓
		BDL		C210 2-Hexanone
992	3.644		3.7 J	C220 Tetrachloroethene ✓
		BDL		C235 Chlorobenzene
		BDL		C240 Ethylbenzene
1323	2.466		~~2.5~~ NR	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)
	3.29	BDL	3.32	C350 Dichlorobenzene (o)
1323	~~2.611~~		~~2.6~~	C250 Xylenes (total) ✓

DLU
100891

Data File: [illegible] Injected at: [illegible]

Data : [illegible]

File : [illegible] Calibrated : [illegible]

Compound		Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101 Bromochloromethane	7.23	7.40	.17	128.0	[illegible]	1.0000	[illegible]
2)	C012 Dichlorodifluorometh	2.60	0.00	--	85.0	0	1.0787	0.00
3)	C010 Chloromethane	2.73	0.00	--	50.0	0	1.2019	0.00
4)	C020 Vinyl Chloride	2.86	0.00	--	62.0	0	1.0596	0.00
5)	C015 Bromomethane	3.29	0.00	--	94.0	0	1.1029	0.00
6)	C025 Chloroethane	3.41	0.00	--	64.0	0	.6017	0.00
7)	C028 Trichlorofluorometha	3.74	0.00	--	101.0	0	1.9343	0.00
8)	C045 1,1-Dichloroethene	4.39	0.00	--	96.0	0	1.0123	0.00
9)	C038 1,1,2-Trichloro-1,2,	4.39	4.40	.01	101.0	1088	2.3058	.30
10)	C035 Acetone	4.50	0.00	--	43.0	0	.4339	0.00
11)	C040 Carbon Disulfide	4.70	4.73	.03	76.0	18896	2.9923	3.95
12)	C030 Methylene Chloride	5.06	5.08	.02	84.0	13003	1.4571	5.59
13)	C053 Trans-1,2-dichloroet	5.43	0.00	--	96.0	0	1.4870	0.00
14)	C055 Cis-1,2-dichloroethe	6.98	6.98	.00	96.0	3832	1.7015	1.41
15)	C050 1,1-Dichloroethane	6.06	0.00	--	63.0	0	2.8582	0.00
16)	C060 Chloroform	7.54	0.00	--	83.0	0	3.1850	0.00
17)	C065 1,2-Dichloroethane	8.59	0.00	--	62.0	0	2.1457	0.00
18)	C110 2-Butanone	7.04	7.00	.04	72.0	1329	.3151	2.64
19)	CS15 D4-1,2-dichloroethan	8.45	8.44	.00	65.0	136695	1.7156	49.97
20)	*C119 1,4-Difluorobenzene	9.12	9.31	.19	114.0	384349	1.0000	50.00
21)	C125 Vinyl Acetate	6.12	5.86	.26	43.0	61878	.9307	8.69
22)	C115 1,1,1-Trichloroethan	7.85	7.86	.01	97.0	19192	.5330	4.68
23)	C120 Carbon Tetrachloride	8.14	0.00	--	117.0	0	.4382	0.00
24)	C165 Benzene	8.53	0.00	--	78.0	0	.9528	0.00
25)	C150 Trichloroethene	9.84	9.85	.01	130.0	40345	.3865	13.58
26)	C140 1,2-Dichloropropane	10.32	0.00	--	63.0	0	.4025	0.00
27)	C130 Bromodichloromethane	10.95	0.00	--	83.0	0	.6435	0.00
28)	C175 2-Chloroethylvinylet	11.70	0.00	--	63.0	0	.2689	0.00
29)	C143 Cis-1,3-Dichloroprop	12.02	0.00	--	75.0	0	.5928	0.00
30)	C172 Trans-1,3-dichloropr	13.46	0.00	--	75.0	0	.5155	0.00
31)	C160 1,1,2-Trichloroethan	13.92	0.00	--	97.0	0	.3815	0.00
32)	C155 Dibromochloromethane	14.98	0.00	--	129.0	0	.5619	0.00
33)	C180 Bromoform	19.26	0.00	--	173.0	0	.4211	0.00
34)	*C120 D5-Chlorobenzene	16.30	16.57	.27	117.0	287475	1.0000	50.00
35)	CS05 D8-Toluene	12.62	12.65	.02	98.0	369405	1.2547	51.21
35)D	CS05 D8-Toluene	12.62	13.12	.50	98.0	1094	1.2547	.15
36)	C205 4-Methyl-2-pentanone	12.40	0.00	--	43.0	0	.9161	0.00
37)	C230 Toluene	12.80	12.82	.02	92.0	5528	.8255	1.16
38)	C210 2-Hexanone	14.65	0.00	--	43.0	0	.6983	0.00
39)	C220 Tetrachloroethene	14.22	14.25	.03	164.0	8934	.4264	3.64
40)	C235 Chlorobenzene	16.65	0.00	--	112.0	0	1.0439	0.00
41)	C240 Ethylbenzene	17.04	17.01	.03	106.0	1024	.4965	.36
41)D	C240 Ethylbenzene	17.04	17.41	.36	106.0	9328	.4965	3.27
42)D	CXXX Xylenes (p)	17.42	17.01	.41	106.0	1024	.6578	.27
42)	CXXX Xylenes (p)	17.42	17.41	.02	106.0	9328	.6578	2.47
43)	CXXX Xylenes (o)	18.62	18.61	.01	106.0	1742	.6174	.49
44)	C245 Styrene	18.68	0.00	--	104.0	0	1.0869	0.00
45)	C225 1,1,2,2-Tetrachloroe	20.90	0.00	--	83.0	0	1.0[illegible]	0.00
46)	CS10 Bromofluorobenzene	20.28	20.26	.02	95.0	204532	.7553	47.10
47)	C335 Dichlorobenzene (m)	23.91	0.00	--	146.0	0	.9166	0.00

000076

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C2F3 [illegible]	[illegible]	18.6	17.41	1.21	[illegible]	9729	[illegible]

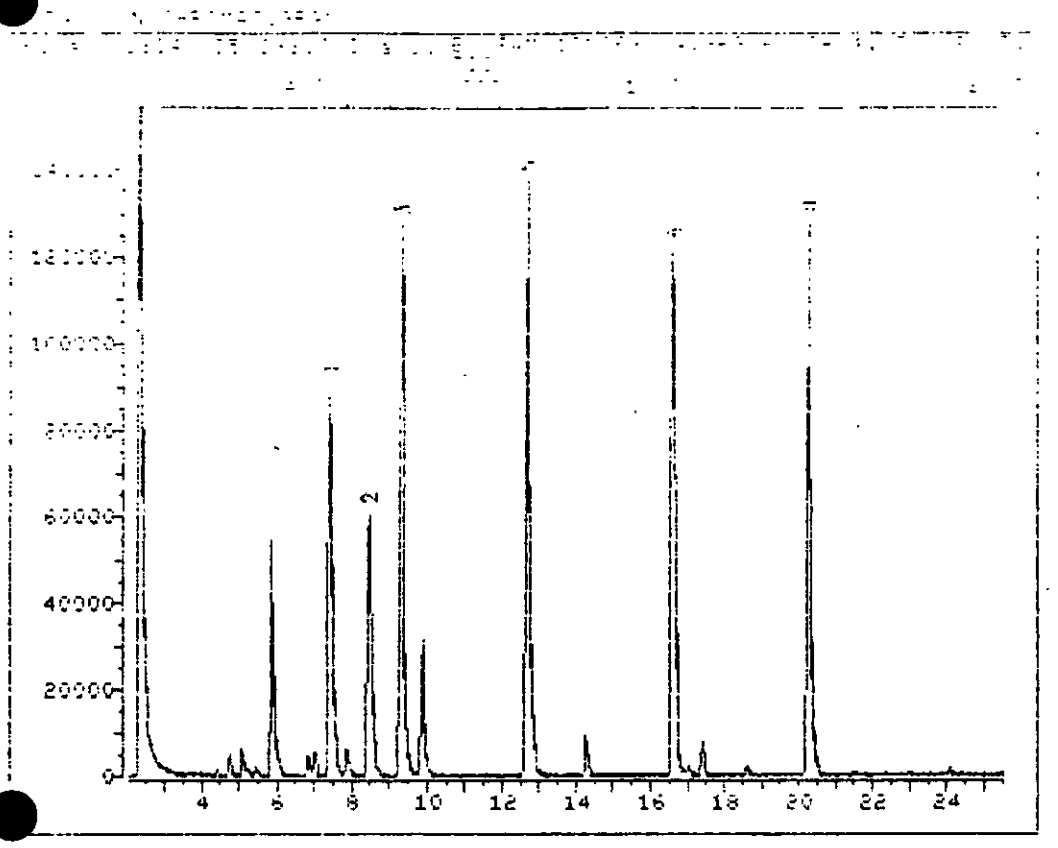
* - Compound is an [illegible] Standard
[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	%
[101] Bromochloromethane	99893	91742	91.8
[110] 1,4-Difluorobenzene	784764	441917	56.3
[120] Chlorobenzene	837875	776266	92.6

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



Data File: >F2804::D6 Quant Output File: ^F2804::D7
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-S8-A-09-4

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

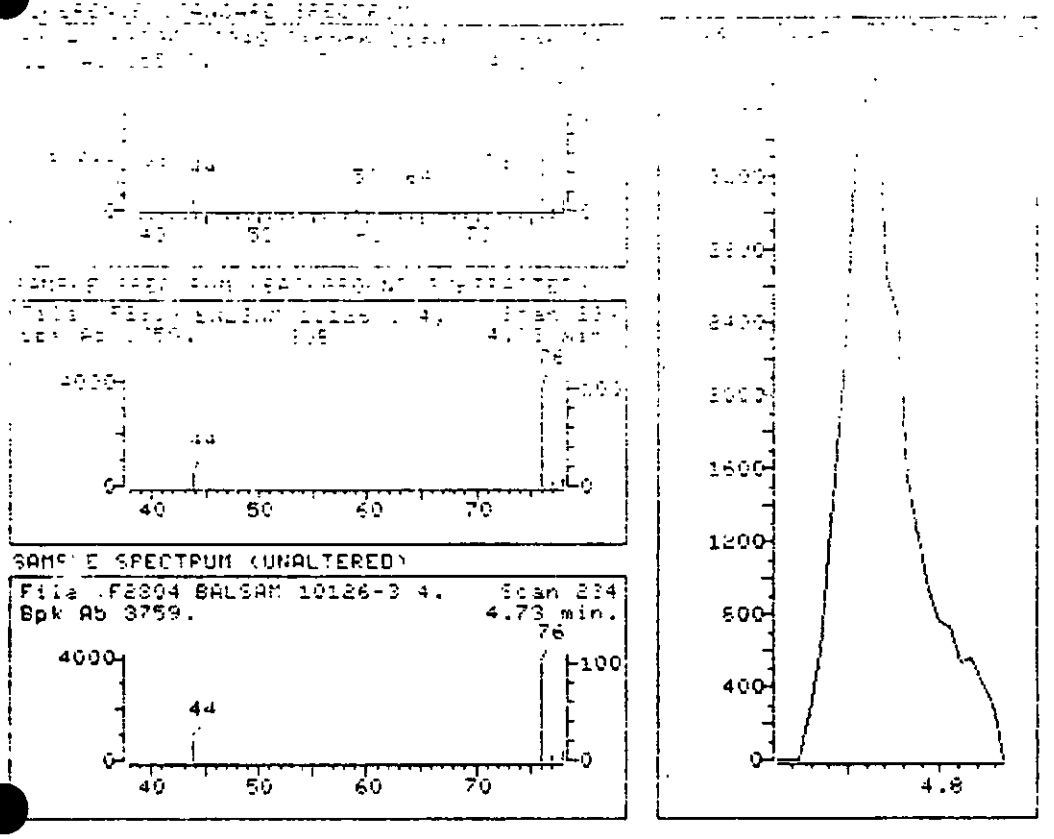
Operator ID: LIZ
Quant Time : 911008 19:19
Injected at: 911008 18:52

Data File: H4NI0[illegible]::MI
Title: HSL VOLA[illegible]: [illegible]m . .[illegible]mm: [illegible], US HTO EPOI ENBE U
Last Calibration: 910408 11:20 Last Cal Time: 9[illegible] 8:[illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.40	128.0	79883	50.00	UG/L	89
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.40	101.0	1088	.295	UG/L	98
11)	C040 Carbon Disulfide	4.73	76.0	18896	3.95	UG/L	100
12)	C030 Methylene Chloride	5.08	84.0	13003	5.59	UG/L	69
14)	C055 Cis-1,2-dichloroethene	6.98	96.0	3832	1.41	UG/L	93
18)	C110 2-Butanone	7.00	72.0	1329	2.64	UG/L	85
19)	CS15 D4-1,2-dichloroethane	8.44	65.0	136695	49.87	UG/L	89
20)	*CI10 1,4-Difluorobenzene	9.31	114.0	384349	50.00	UG/L	100
21)	C125 Vinyl Acetate	5.86	43.0	61878	8.65	UG/L	44
23)	C115 1,1,1-Trichloroethane	7.86	97.0	19192	4.68	UG/L	89
25)	C150 Trichloroethene	9.85	130.0	40345	13.58	UG/L	99
34)	*CI20 D5-Chlorobenzene	16.57	117.0	287475	50.00	UG/L	100
35)	CS05 D8-Toluene	12.65	98.0	369405	51.21	UG/L	99
37)	C230 Toluene	12.82	92.0	5528	1.16	UG/L	97
39)	C220 Tetrachloroethene	14.25	164.0	8934	3.64	UG/L	81
41)	C240 Ethylbenzene	17.01	106.0	1024	.359	UG/L	97
42)	CXXX Xylenes (p)	17.41	106.0	9328	2.47	UG/L	98
43)	CXXX Xylenes (o)	18.61	106.0	1742	.491	UG/L	91
46)	CS10 Bromofluorobenzene	20.26	95.0	204532	47.10	UG/L	71
50)	C250 Xylenes (total)	17.41	106.0	~~9329~~ 11756M	~~2.61~~ 3.29	UG/L	93

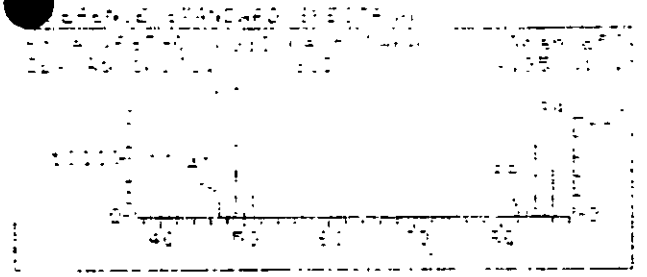
DRU 100891

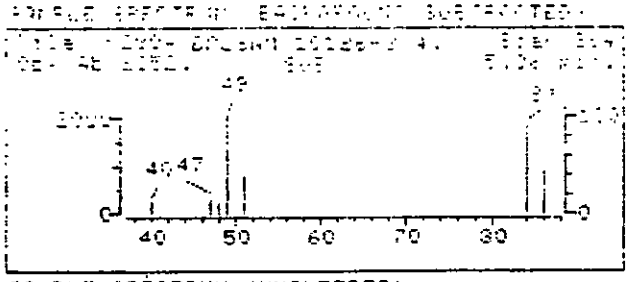
* Compound is ISTD



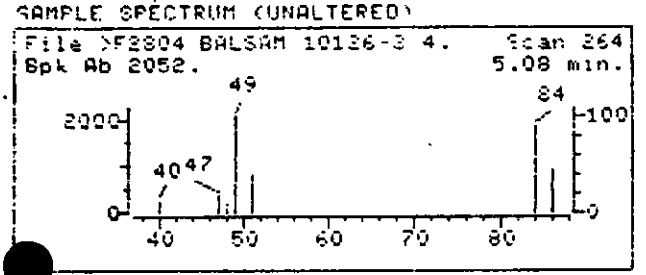
Data File: >F2804::D6 Quant Output File: ^F2804::D7
Name: BALSAM 10126-3 4.96S Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-S8-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

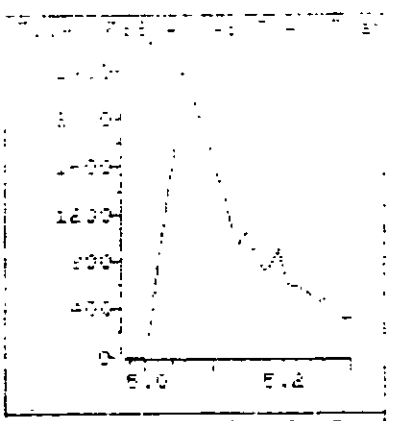
Compound No : 11
Compound Name : C040 Carbon Disulfide
Scan Number : 234
Retention Time: 4.73 min.
Quant Ion : 76.0
Area : 18896
Concentration : 3.95 UG/L ✓
q-value : 100

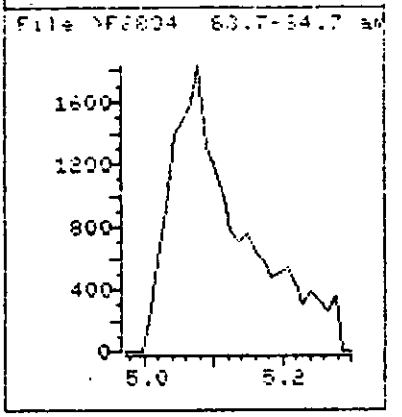




SAMPLE SPECTRUM (UNALTERED)

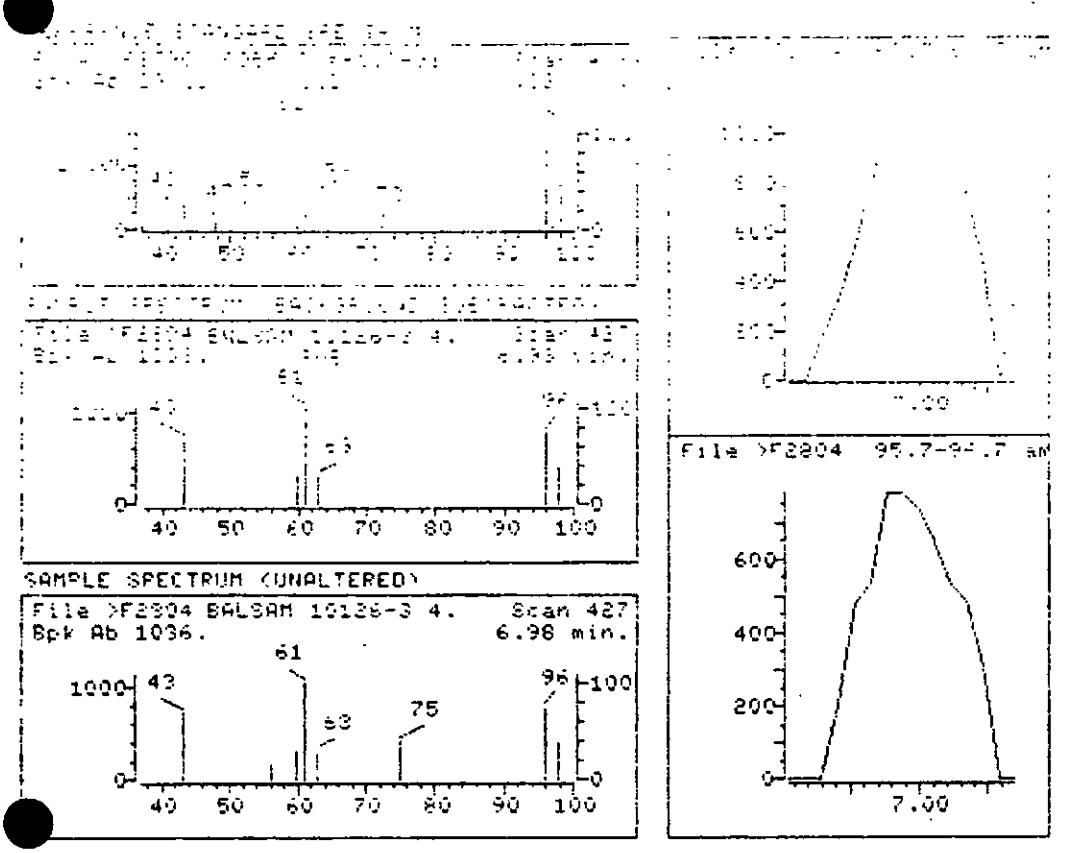






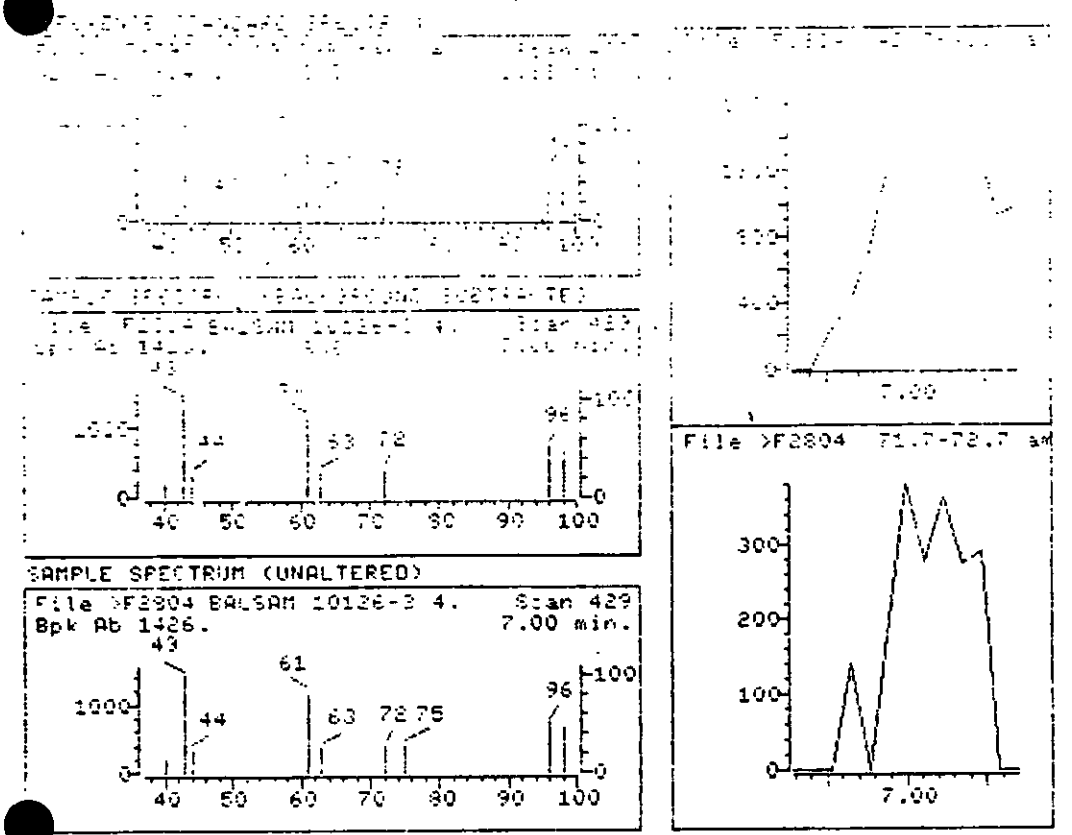
Data File: >F2804::D6 Quant Output File: >F2804::D7
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 12
Compound Name : C030 Methylene Chloride
Scan Number : 264
Retention Time: 5.08 min.
Quant Ion : 84.0
Area : 13003
Concentration : 5.59 UG/L
q-value : 69



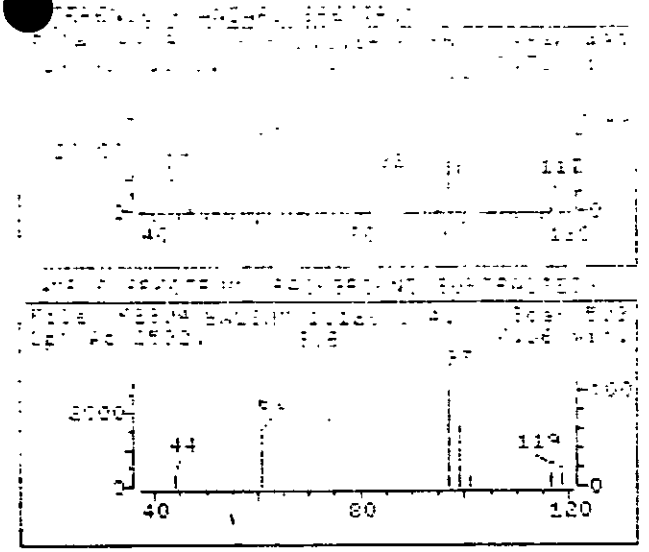
Data File: >F2804::D6 Quant Output File: ^F2804::D?
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

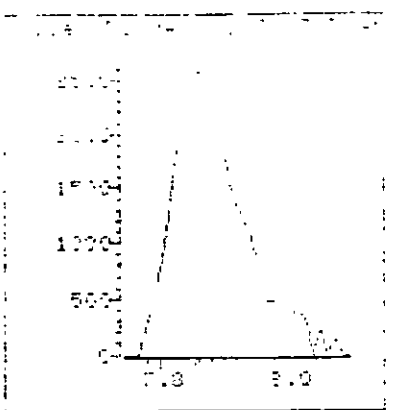
Compound No : 14
Compound Name : C055 Cis-1,2-dichloroethene
Scan Number : 427
Retention Time: 6.98 min.
Quant Ion : 96.0
Area : 3832
Concentration : 1.41 UG/L
q-value : 93

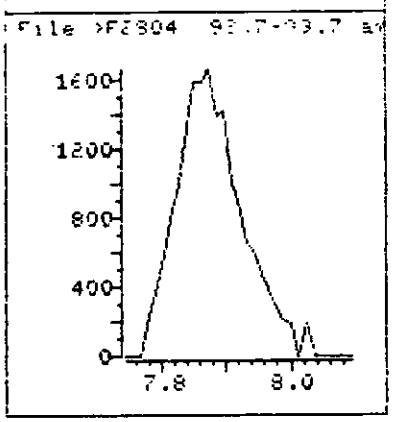


Data File: >F2804::D6 Quant Output File: >F2804::D7
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

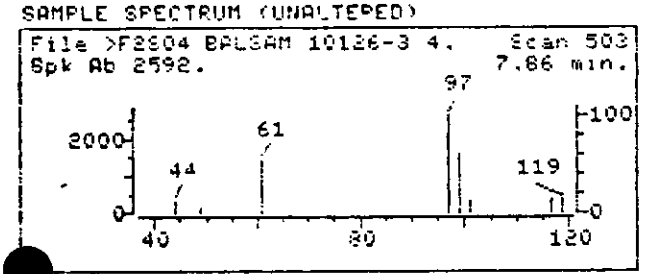
Compound No : 18
Compound Name : C110 2-Butanone
Scan Number : 429
Retention Time: 7.00 min.
Quant Ion : 72.0
Area : 1329
Concentration : 2.64 UG/L
q-value : 85





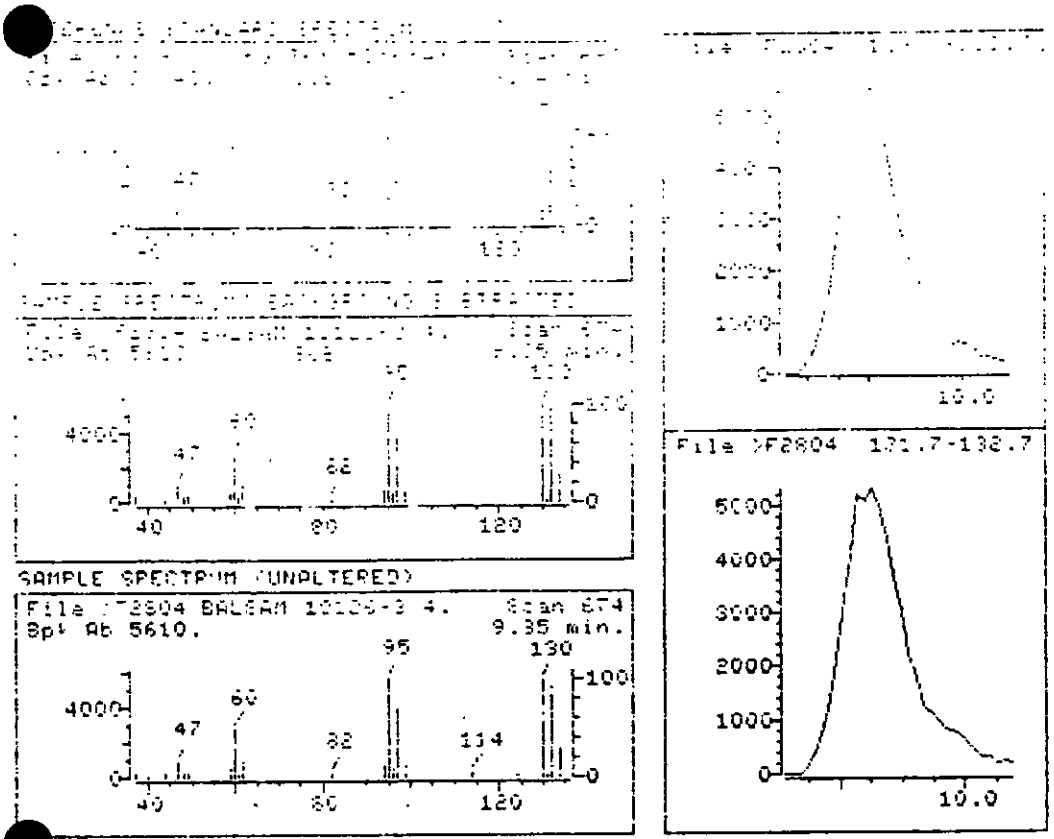


SAMPLE SPECTRUM (UNALTERED)



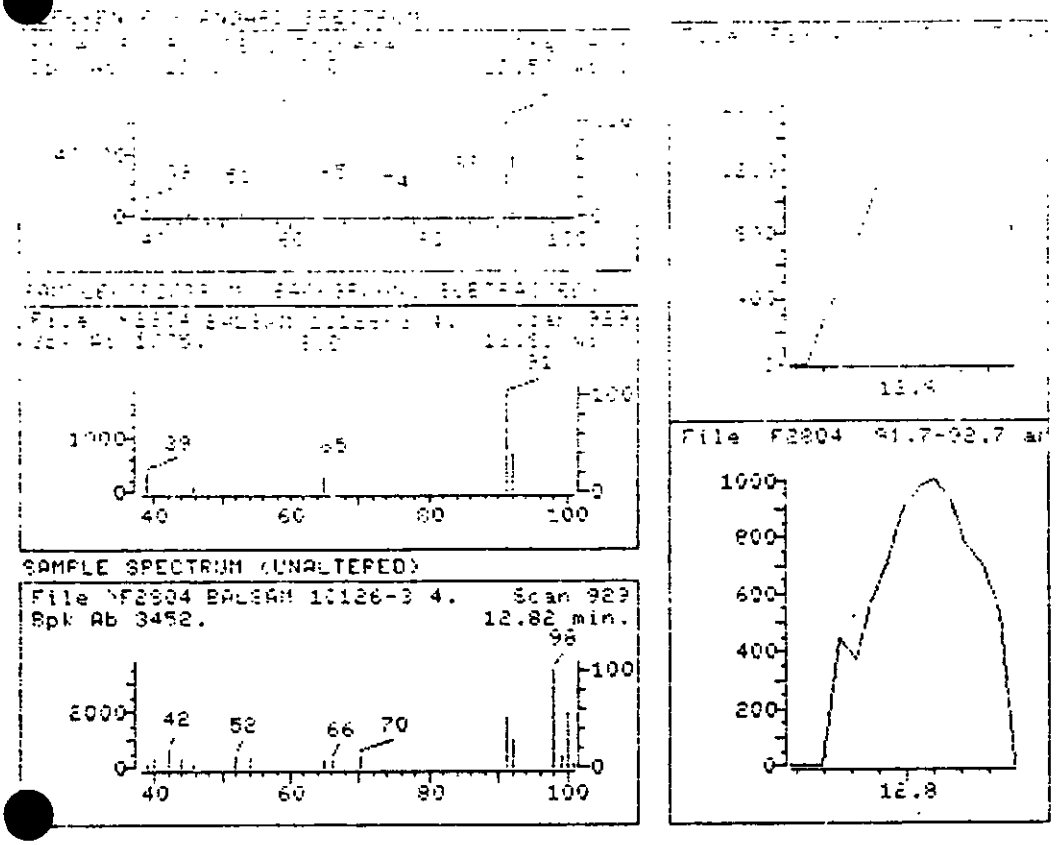
Data File: F2804::D6 Quant Output File: ^F2804::D7
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 22
Compound Name : C115 1,1,1-Trichloroethane
Scan Number : 503
Retention Time: 7.86 min.
Quant Ion : 97.0
Area : 19192
Concentration : 4.68 UG/L
q-value : 89



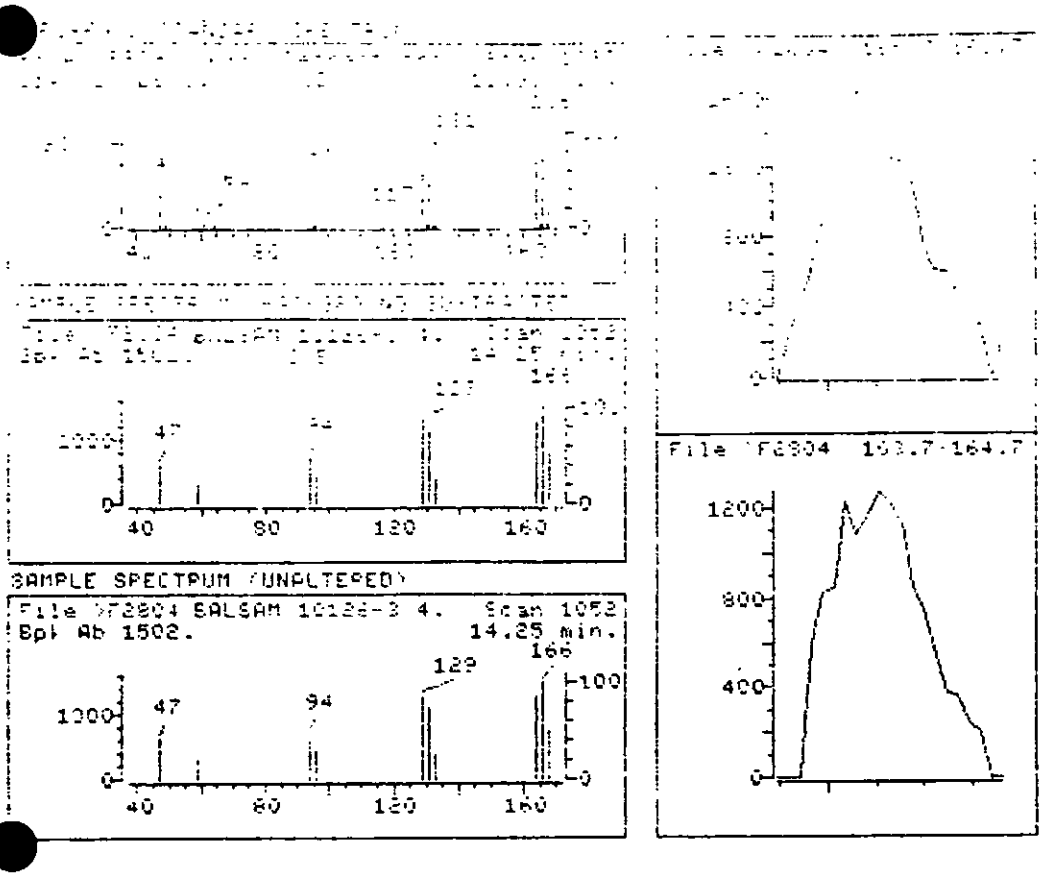
Data File: >F2804::D6
Quant Output File: ^F2804::D7
Name: BALSAM 10126-3 4.96G
Instrument ID: V6
Misc: V6, CH1A, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19
Quant ID File: HAMID6::MT
Injected at: 911008 18:52
Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 25
Compound Name : C150 Trichloroethene
Scan Number : 674
Retention Time: 9.85 min.
Quant Ion : 130.0
Area : 40345
Concentration : 13.58 UG/L
q-value : 95



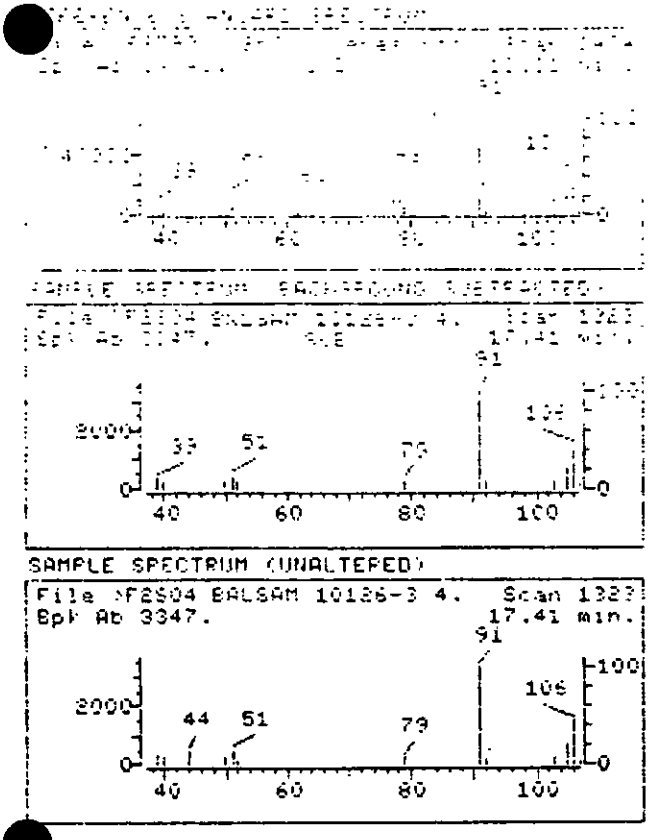
Data File: >F2804::D6 Quant Output File: ^F2804::D7
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

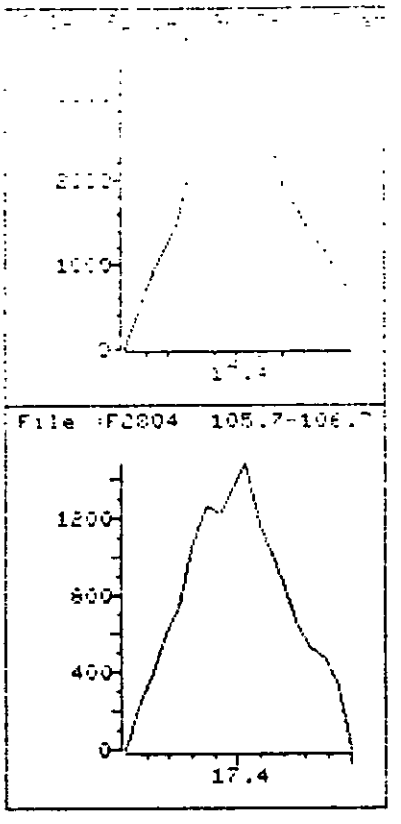
Compound No : 37
Compound Name : C230 Toluene
Scan Number : 929
Retention Time: 12.82 min.
Quant Ion : 92.0
Area : 5528
Concentration : 1.16 UG/L
q-value : 97



Data File: ^F2804::Da Quant Output File: ^F2804::D7
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 39
Compound Name : C220 Tetrachloroethene
Scan Number : 1052
Retention Time: 14.25 min.
Quant Ion : 164.0
Area : 8934
Concentration : 3.64 UG/L
q-value : 81





Data File: >F2804::06 Quant Output File: ^F2804::07
Name: BALSAM 10126-3 4.96G Instrument ID: V6
Misc: V6, CH14, 5UL IS/S, ID# UCC-SB-A-09-4
Quant Time: 911008 19:19 Quant ID File: HAMID6::MT
Injected at: 911008 18:52 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 50
Compound Name : C250 Xylenes (total)
Scan Number : 1323
Retention Time: 17.41 min.
Quant Ion : 106.0
Area : 9329
Concentration : ~~2.61~~ UG/L 3.29 µg/L
q-value : 93

TLV
100591

DRU [illegible] 100891

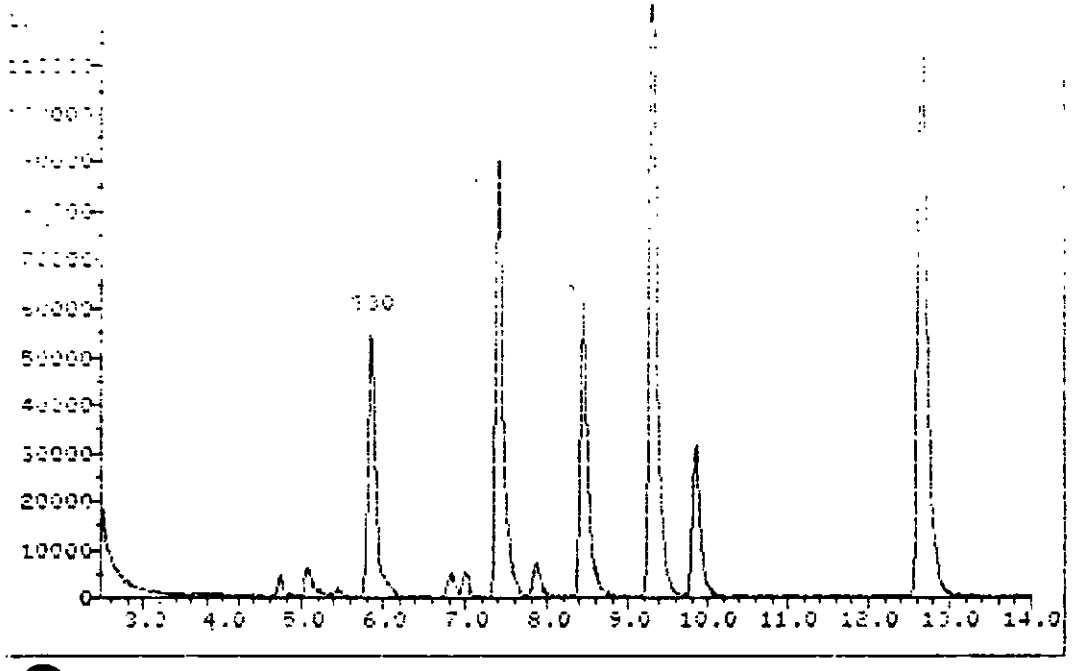
[illegible] : RK Date: 10-16-91

[illegible]

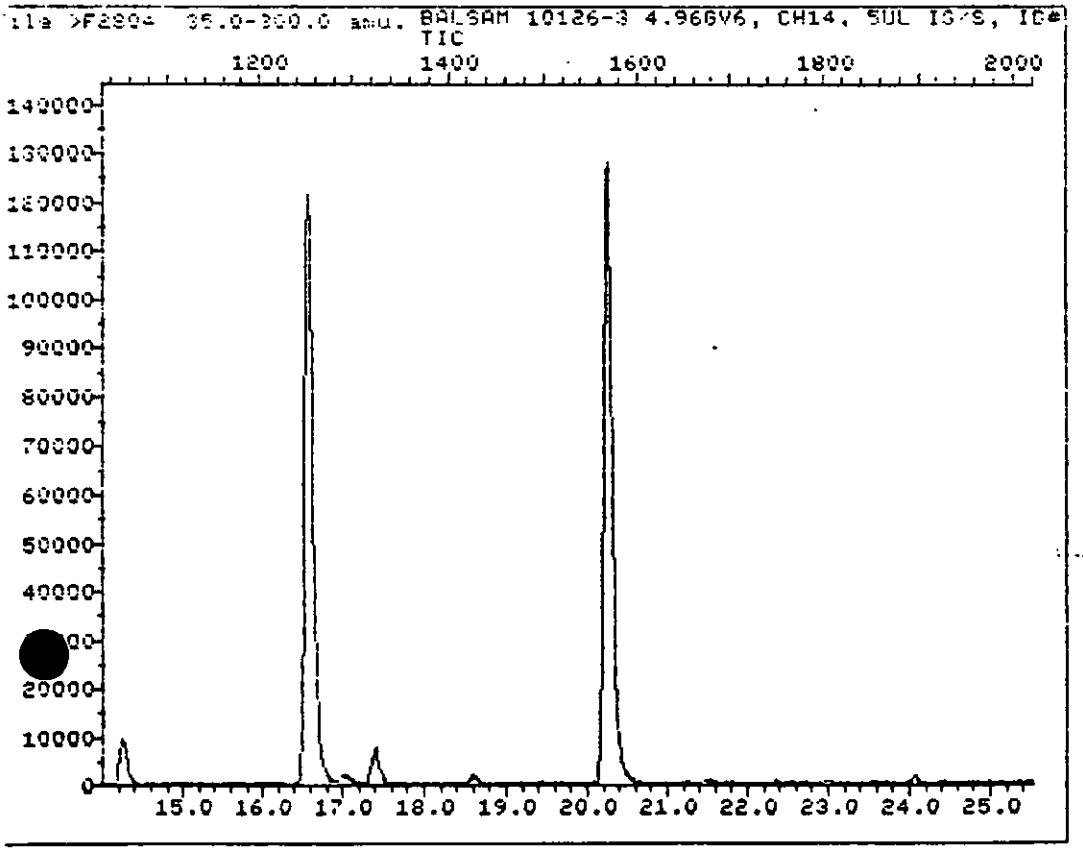
Sample: [illegible] Run Factor: 1.11

[illegible] Analyst: LIC

# Scan	Concentration In Sample (ug/kg)	CAS #	Compound
[illegible]	[illegible]		~~[illegible] Hexane (OUT)~~ Unk. C_6H_{14} Isome


130
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

UCC-SB-A-09-4


TIC
1200
1400
1600
1800
2000
140000
130000
120000
110000
100000
90000
80000
70000
60000
50000
40000
20000
10000
0
15.0
16.0
17.0
18.0
19.0
20.0
21.0
22.0
23.0
24.0
25.0

[illegible]

[illegible]

[illegible]

#	Name		Concentration			Flag
	Time	Q Area	Ratio	RIC Area	RIC Area	% Rec.
1	C[1] Bromochloromethane		50.000	UG/L		OK
	463.	73997.	7.119	463.	699779.	105.479
2	C[1] 1,4-Difluorobenzene		50.000	UG/L		OK
	627.	384349.	2.395	627.	868971.	94.384
3	C[2] D5-Chlorobenzene		50.000	UG/L		OK
	1251.	287475.	3.704	1251.	878420.	87.213

eleting peaks from INT file: VDIR87
inimum area: 10 % of area of closest Int. Std.
Number of peaks: 9
Number of peaks remaining: 8

eleting target compounds from INT file: VDIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 8
Number of peaks remaining: 1

eleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 1
aximum number of peaks > number of peaks.

fp 10-16-91

C_6H_{14} isomers

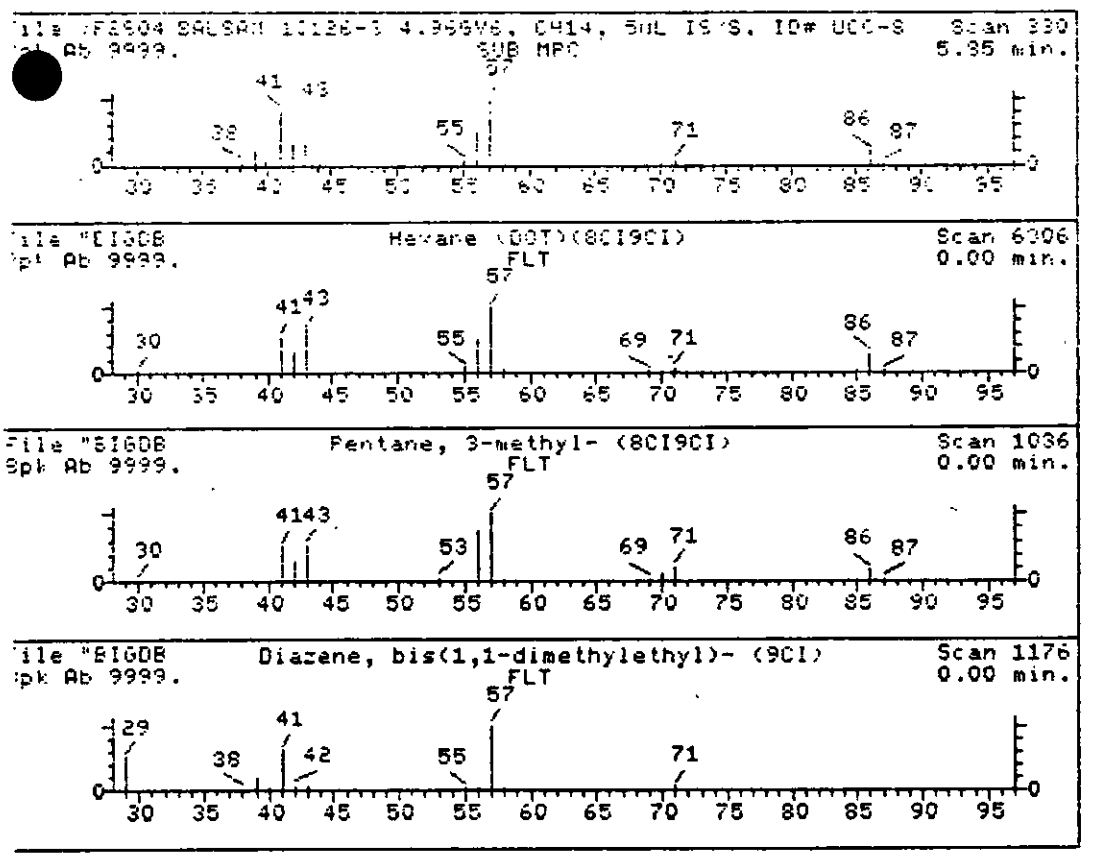
Unk 5

[redacted]

[redacted]

Search speed: 2 Tuning option: 3 No. of ion ranges searched: --

	Prob.	CAS #	Cmpd #	Pdbt	r	Sc	#Flg	Tilt	%	C Mw	C_I	P_I
1.	51*	110543	6306	"BIGDB	44	45	2	0	69	23	22	27
2.	36*	96140	1036	"BIGDB	32	61	3	0	100	30	14	19
3.	31	927833	1176	"BIGDB	37	34	1	0	100	39	12	14
4.	20*	624839	948	"BIGDB	26	38	2	0	100	53	5	14
5.	20*	115117	940	"BIGDB	21	52	2	0	56	53	5	13
6.	19*	96220	6300	"BIGDB	27	55	0	0	100	58	3	19



UCC-SB-A-09-4

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-16-3

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10126 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10126-05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2802

Level: (low/med) LOW Date Received: 10/04/91

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

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	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	32	
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	63	
540-59-0	1,2-Dichloroethene (total)	30	
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	6	BJ
71-55-6	1,1,1-Trichloroethane	20	
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	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	11	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	J
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	21	
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	83	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-16-3

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10126 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10126-05

Sample wt/vol: 5.0 (g/mL) G Lab File ID: F2802

Level: (low/med) LOW Date Received: 10/04/91

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

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.	C8H160 ISOMER	21.19	18	J
2.	UNKNOWN	21.96	5.8	J
3.	UNKNOWN	22.33	85	J

R-130891 VGA

Reviewed By: _____ Date: 10/10/91

Data File: _____

Area: _____ Unit: 10-16-91

Gcms: _____

Gcms Mass Spectrometry

Target Compound List Volatiles

Sample: BHLSHN 1012e-5 5.0UG

Misc : Fe, CH#10, Pkl 18 5: LLC-54-W-1-3

Injected : 10/08/91 17:08 Units: UG/G

Analyst: MSPULVAN Dilution Factor: .2500

ID File: mHMID6 Surrogate Vol: .005

Client list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2404	96.2	70 121
CS05 D8-Toluene	.2500	.2480	99.2	84 117
CS10 Bromofluorobenzene	.2500	.2478	99.1	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
216	28.383		28	C035 Acetone
		BDL		C040 Carbon Disulfide
267	3.100		3.1 J	C030 Methylene Chloride
		BDL		C053 Trans-1,2-dichloroethene
432	26.747		26	C055 Cis-1,2-dichloroethene
352	56.132		56	C050 1,1-Dichloroethane
		BDL		C060 Chloroform
		BDL		C065 1,2-Dichloroethane
434	5.523		5.5 J,B	C110 2-Butanone
		BDL		C125 Vinyl Acetate
506	17.480		17	C115 1,1,1-Trichloroethane
505	2.710		2.7 RDM	C120 Carbon Tetrachloride
		BDL		C165 Benzene
477	1.103		1.1 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

Scan #	Conc.	Lab Qual	Data Qual	Compound
		BDL		C160 1,1,2-Trichloroethane
		BDL		C155 Dibromochloromethane
		BDL		C153 Bromoform
		BDL		C205 4-Methyl-2-pentanone
[illegible]	1.6[illegible]		(1.1) J	C179 Toluene
		BDL		C210 2-Hexanone
1[illegible]2	4.27[illegible]		(4.2) J	C220 Tetrachloroethene
		BDL		C235 Chlorobenzene
12[illegible]2	18.713		(1[illegible])	C240 Ethylbenzene
1322	49.622		~~49~~ MC	CXXX Xylenes (p)
1425	22.329		~~22~~ MC	CXXX Xylenes (o)
		BDL		C245 Styrene
		BDL		C225 1,1,2,2-Tetrachloroethane
		BDL		C335 Dichlorobenzene (m)
		BDL		C340 Dichlorobenzene (p)
	74.29	BDL	(23.55)	C350 Dichlorobenzene (o)
1425	22.190		~~22~~ →	C250 Xylenes (total)

RU 100891

Data File : FL80[1]C5 Injection Date : [illegible]

ID File : MA[illegible] Calibrated : 11:20 [illegible]

Compound	RT Pred	RT Found	RT Dif	Ion	Area	RF	Conc.
1) *C101 Bromochloromethane	7.23	7.41	.18	128.0	94[illegible]	[illegible]	[illegible]
2) C012 Dichlorodifluorometh	2.50	0.00	--	85.0	0	[illegible]	.00
3) C010 Chloromethane	2.74	0.00	--	50.0	0	1.107[illegible]	0.00
4) C020 Vinyl Chloride	2.88	0.00	--	62.0	0	1.[illegible]	0.
5) C015 Bromomethane	3.30	0.00	--	94.0	0	1.10[illegible]	0.00
6) C025 Chloroethane	3.42	0.00	--	64.0	0	.6017	0.00
7) C028 Trichlorofluorometha	3.74	0.00	--	101.0	0	1.9343	0.00
8) C045 1,1-Dichloroethene	4.40	0.00	--	96.0	0	1.0123	0.00
9) C038 1,1,2-Trichloro-1.2,	4.40	0.00	--	101.0	0	2.3058	0.00
10) C035 Acetone	4.51	4.48	.02	43.0	20721	.4339	29.39
11) C040 Carbon Disulfide	4.71	4.73	.02	76.0	1687	2.9923	.34
12) C030 Methylene Chloride	5.07	5.08	.01	84.0	7999	1.4571	3.10
13) C053 Trans-1,2-dichloroet	5.44	0.00	--	96.0	0	1.4870	0.00
14) C055 Cis-1,2-dichloroethe	6.99	7.00	.01	96.0	76565	1.7015	26.75
15) C050 1,1-Dichloroethane	6.07	6.07	.00	63.0	269924	2.8582	56.13
16) C060 Chloroform	7.55	0.00	--	83.0	0	3.1850	0.00
17) C065 1,2-Dichloroethane	8.60	0.00	--	62.0	0	2.1457	0.00
18) C110 2-Butanone	7.05	7.02	.03	72.0	2928	.3151	9.52
19) CS15 D4-1,2-dichloroethan	8.46	8.43	.03	65.0	138759	1.7150	48.07
20) *C110 1,4-Difluorobenzene	9.12	9.31	.19	114.0	400004	1.0000	50.00
21) C125 Vinyl Acetate	6.12	0.00	--	43.0	0	.9307	0.00
22) C115 1,1,1-Trichloroethan	7.85	7.86	.01	97.0	74535	.5330	17.49
23) C120 Carbon Tetrachloride	8.14	7.85	.29	117.0	9500	.4382	2.71
24) C165 Benzene	8.53	0.00	--	78.0	0	.9528	0.00
25) C150 Trichloroethene	9.84	9.85	.01	130.0	3411	.3865	1.10
26) C140 1,2-Dichloropropane	10.32	0.00	--	63.0	0	.4025	0.00
27) C130 Bromodichloromethane	10.95	0.00	--	83.0	0	.6435	0.00
28) C175 2-Chloroethylvinylet	11.70	0.00	--	63.0	0	.2689	0.00
29) C143 Cis-1,3-Dichloroprop	12.02	0.00	--	75.0	0	.5928	0.00
30) C172 Trans-1,3-dichloropr	13.46	0.00	--	75.0	0	.5155	0.00
31) C160 1,1,2-Trichloroethan	13.92	0.00	--	97.0	0	.3815	0.00
32) C155 Dibromochloromethane	14.98	0.00	--	129.0	0	.5619	0.00
33) C180 Bromoform	19.26	0.00	--	173.0	0	.4211	0.00
34) *C120 D5-Chlorobenzene	16.30	16.54	.24	117.0	316820	1.0000	50.00
35) CS05 D8-Toluene	12.60	12.64	.04	98.0	394306	1.2547	49.60
36) C205 4-Methyl-2-pentanone	12.38	0.00	--	43.0	0	.9161	0.00
37) C230 Toluene	12.78	12.80	.02	92.0	8877	.8255	1.70
38) C210 2-Hexanone	14.62	0.00	--	43.0	0	.6983	0.00
39) C220 Tetrachloroethene	14.20	14.22	.02	164.0	11563	.4264	4.28
40) C235 Chlorobenzene	16.62	0.00	--	112.0	0	1.0439	0.00
41) C240 Ethylbenzene	17.01	17.02	.00	106.0	58872	.4965	18.71
41)D C240 Ethylbenzene	17.01	17.37	.35	106.0	206832	.4965	65.74
42)D CXXX Xylenes (p)	17.39	17.02	.37	106.0	58872	.6578	14.12
42) CXXX Xylenes (p)	17.39	17.37	.02	106.0	206832	.6578	49.62
43) CXXX Xylenes (o)	18.59	18.57	.02	106.0	87357	.6174	22.33
44) C245 Styrene	18.64	18.57	.08	104.0	4694	1.0869	.68
45) C225 1,1,2,2-Tetrachloroe	20.86	0.00	--	83.0	0	1.0059	0.00
46) CS10 Bromofluorobenzene	20.24	20.22	.02	95.0	237233	.7553	50.00
47) C335 Dichlorobenzene (m)	23.87	0.00	--	146.0	0	.9166	0.00

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

* - Compound is an internal Standard

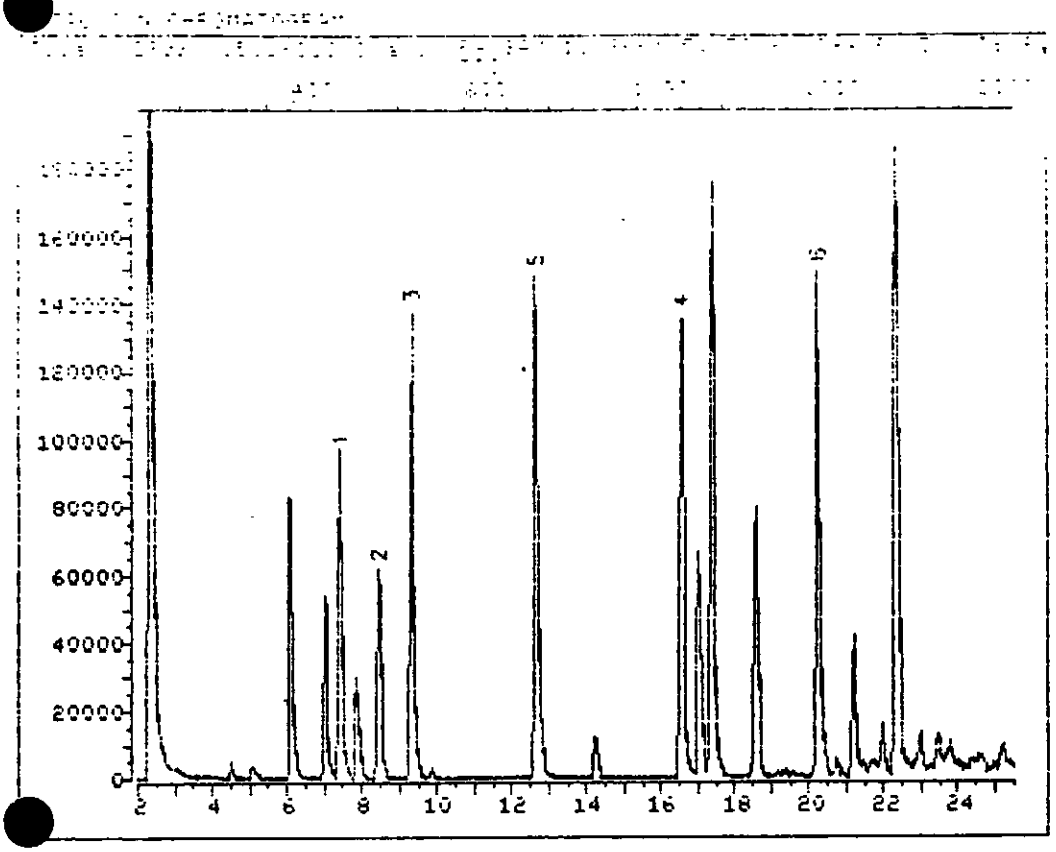
[illegible]

Internal Standard Summary

Sample: [illegible] Date Injected: 10/3/91 Standard: [illegible]

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	84121	91942	91.9
CI10 1,4-Difluorobenzene	400004	441917	90.5
CI20 D5-Chlorobenzene	316820	336266	94.2

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



Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3

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 17:35
Injected at: 911008 17:08

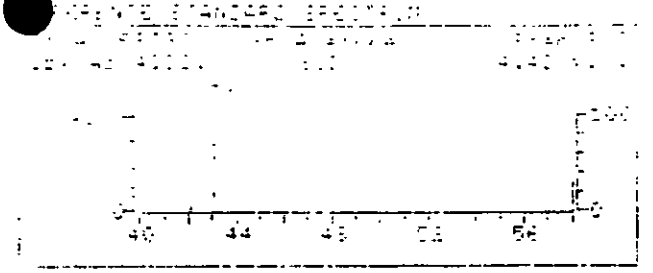
Misc: No. CH#12, 5uL IS'S, UCC-SB-B-1e-3

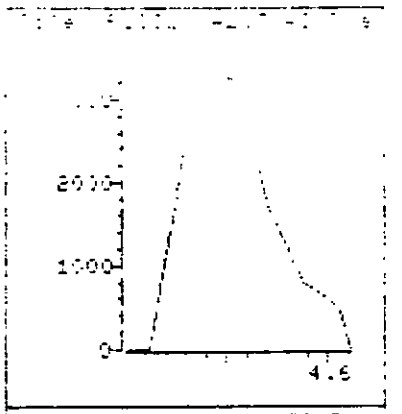
ID File: HAMI0=::MT
Title: PSL VOLATILES: 75m x .53mm; 5um 2.2, 1.5 FID ERCO ENSECO
Last Calibration: 910408 11:20 Last Ocal Time: 911008 08:09

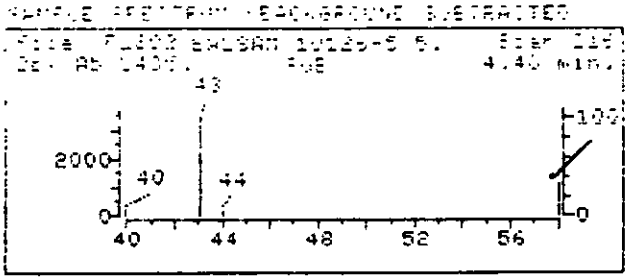
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.41	128.0	84121	50.00	UG/L	80
10)	C035 Acetone	4.48	43.0	20721	28.38	UG/L	12
11)	C040 Carbon Disulfide	4.73	76.0	1687	.335	UG/L	100
12)	C030 Methylene Chloride	5.08	84.0	7599	3.10	UG/L	99
14)	C055 Cis-1,2-dichloroethene	7.00	96.0	76565	26.75	UG/L	89
15)	C050 1,1-Dichloroethane	6.07	63.0	269924	56.13	UG/L	100
18)	C110 2-Butanone	7.02	72.0	2928	5.52	UG/L	87
19)	CS15 D4-1,2-dichloroethane	8.43	65.0	138759	48.07	UG/L	89
20)	*C110 1,4-Difluorobenzene	9.31	114.0	400004	50.00	UG/L	100
2[illegible])	C115 1,1,1-Trichloroethane	7.86	97.0	74535	17.48	UG/L	88
2[illegible])	C120 Carbon Tetrachloride	7.85	117.0	9500	2.71	UG/L	99
25)	C150 Trichloroethene	9.85	130.0	3411	1.10	UG/L	95
34)	*C120 D5-Chlorobenzene	16.54	117.0	316820	50.00	UG/L	100
35)	CS05 D8-Toluene	12.64	98.0	394306	49.60	UG/L	95
37)	C230 Toluene	12.80	92.0	8877	1.70	UG/L	88
39)	C220 Tetrachloroethene	14.22	164.0	11563	4.28	UG/L	95
41)	C240 Ethylbenzene	17.02	106.0	58872	18.71	UG/L	98
42)	CXXX Xylenes (p)	17.37	106.0	206832	49.62	UG/L	95
43)	CXXX Xylenes (o)	18.57	106.0	87357	22.33	UG/L	95
44)	C245 Styrene	18.57	104.0	4694	.682	UG/L	100
46)	CS10 Bromofluorobenzene	20.22	95.0	237233	49.57	UG/L	73
50)	C250 Xylenes (total)	18.57	106.0	~~87368~~ 292479 M	~~22.19~~ 74.29	UG/L ug/L	97

* Compound is ISTD

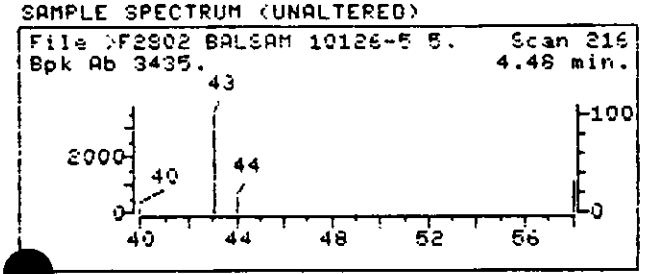
HR100891

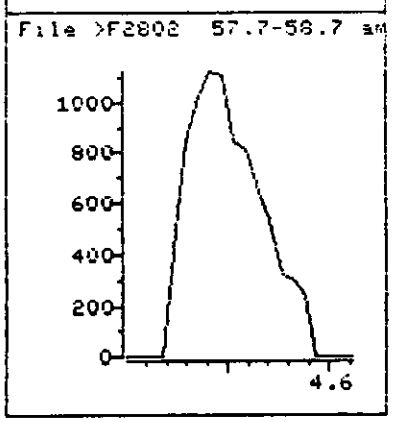






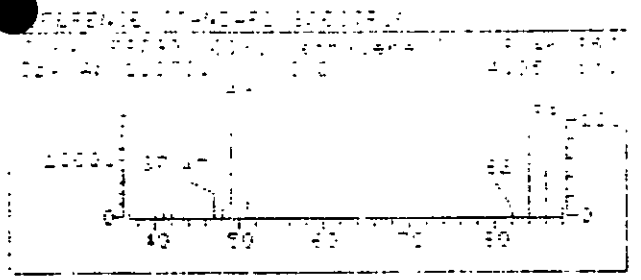
SAMPLE SPECTRUM (UNALTERED)

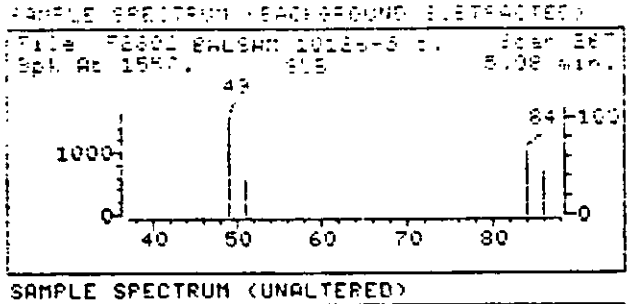




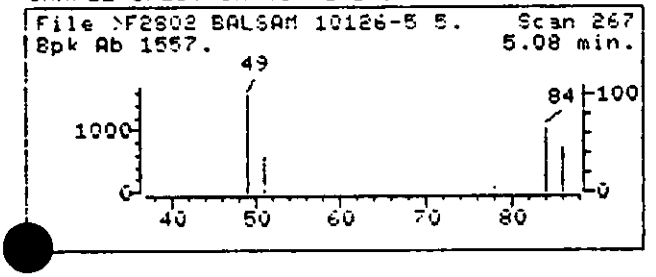
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

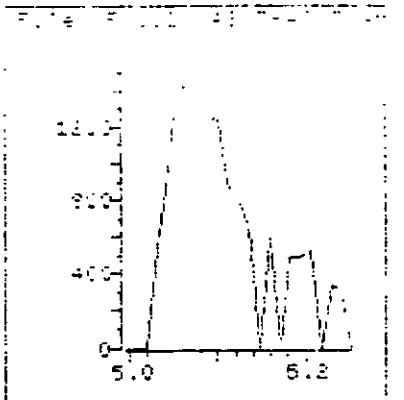
Compound No : 10
Compound Name : C035 Acetone
Scan Number : 216
Retention Time: 4.48 min.
Quant Ion : 43.0
Area : 20721
Concentration : 28.38 UG/L
q-value : 12

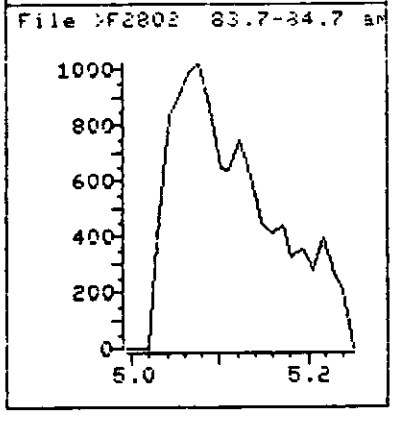




SAMPLE SPECTRUM (UNALTERED)

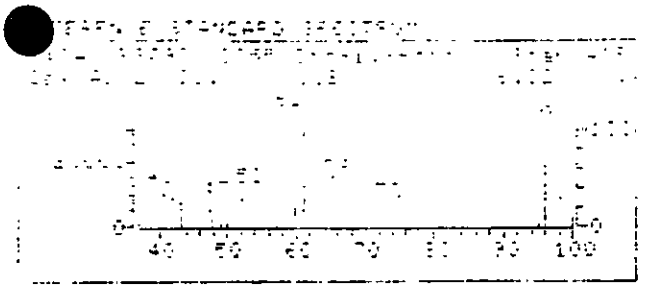


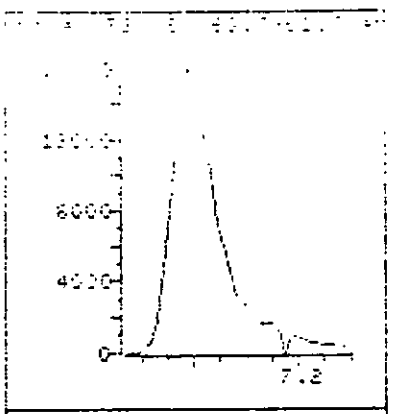


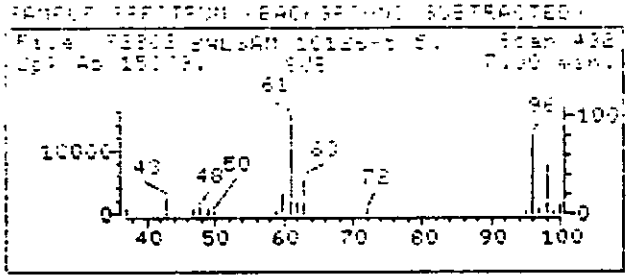


Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

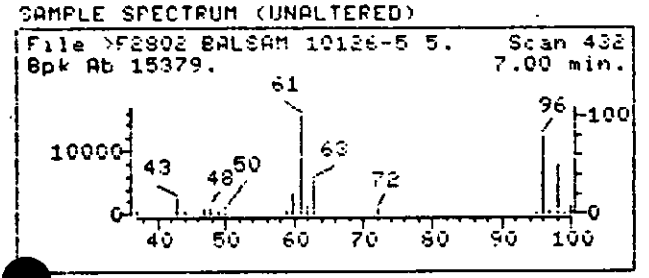
Compound No : 12
Compound Name : C030 Methylene Chloride
Scan Number : 267
Retention Time: 5.08 min.
Quant Ion : 84.0
Area : 7599
Concentration : 3.10 UG/L
q-value : 99

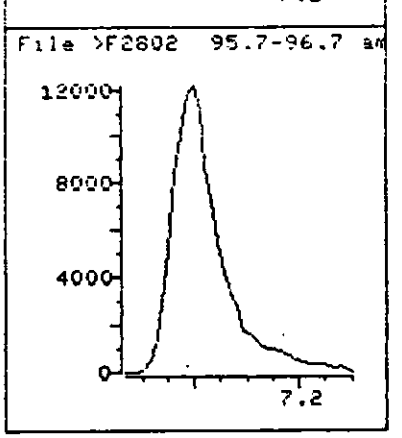






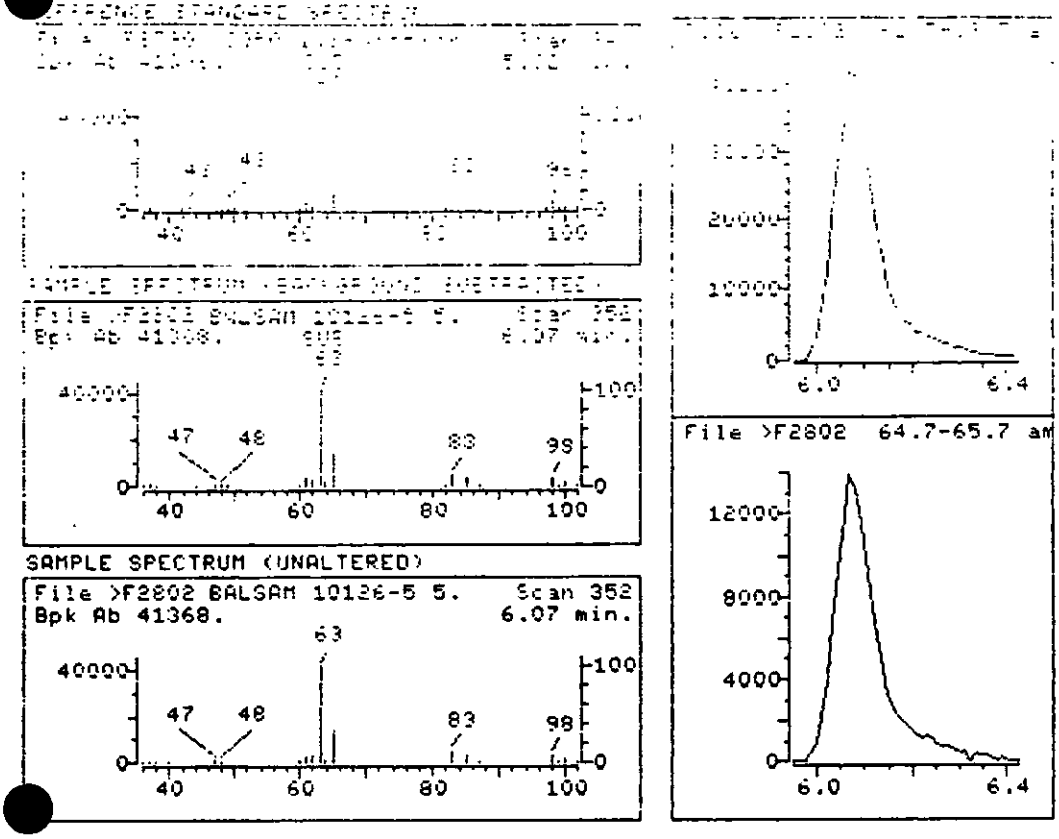
SAMPLE SPECTRUM (UNALTERED)





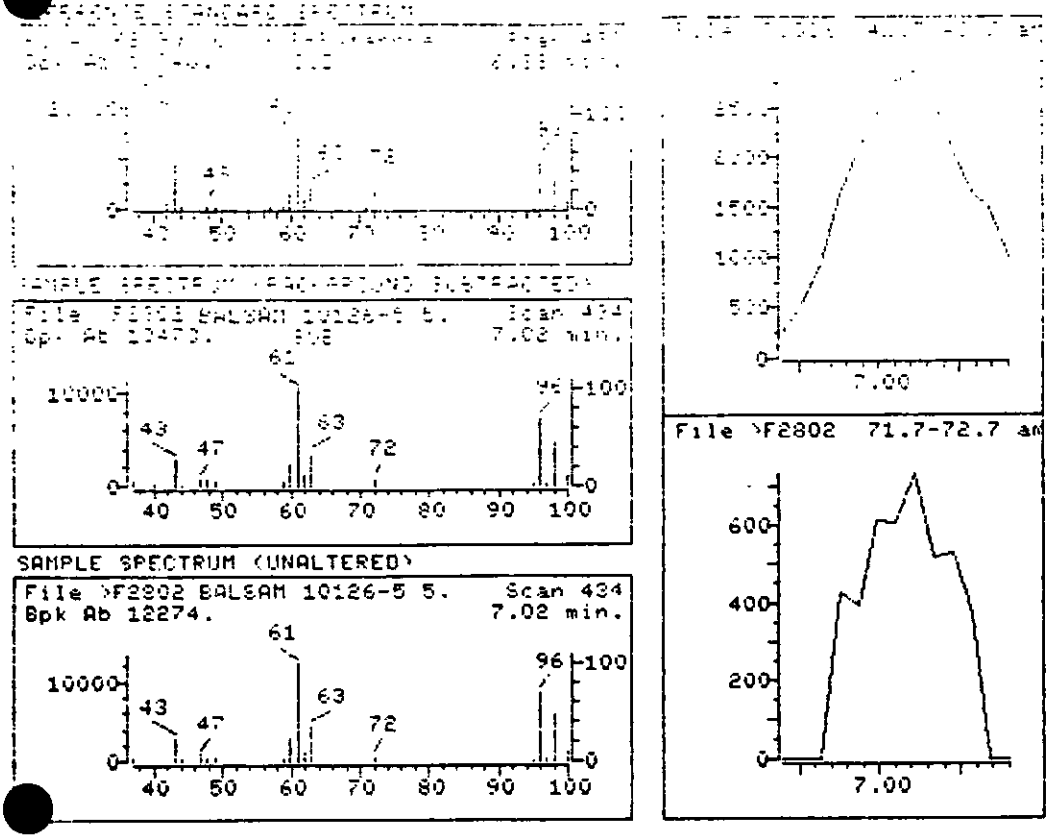
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-8-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 14
Compound Name : C055 Cis-1,2-dichloroethene
Scan Number : 432
Retention Time: 7.00 min.
Quant Ion : 96.0
Area : 76565
Concentration : 26.75 UG/L
q-value : 89



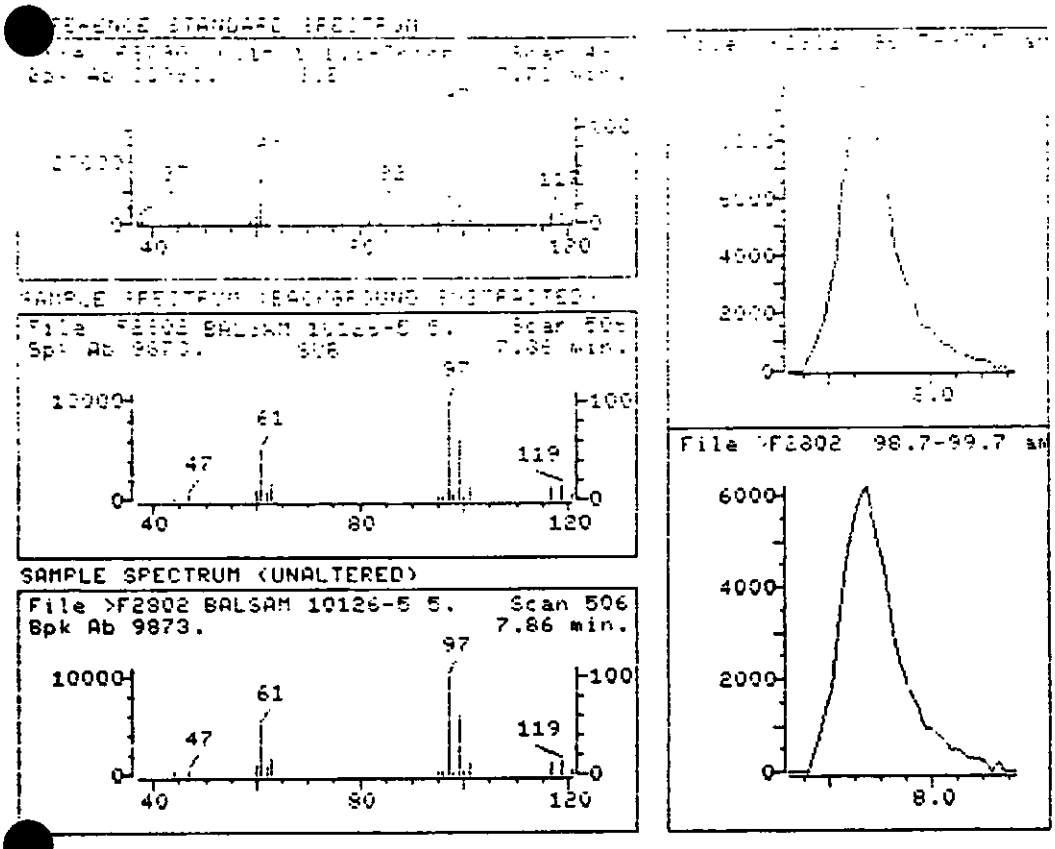
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 15
Compound Name : C050 1,1-Dichloroethane
Scan Number : 352
Retention Time: 6.07 min.
Quant Ion : 63.0
Area : 269924
Concentration : 56.13 UG/L
q-value : 100



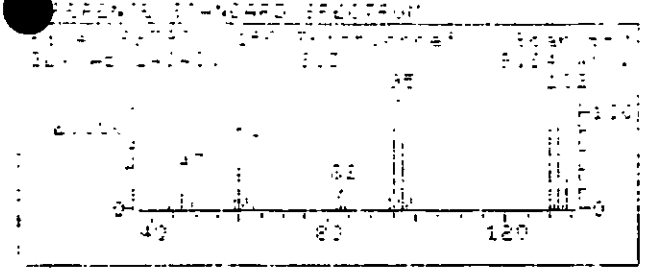
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

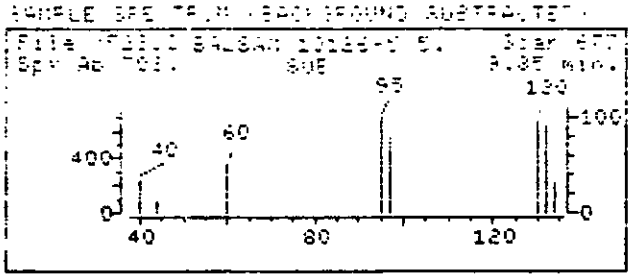
Compound No : 18
*Compound Name : C110 2-Butanone
Scan Number : 434
Retention Time: 7.02 min.
Quant Ion : 72.0
Area : 2928
Concentration : 5.52 UG/L ✓
q-value : 87

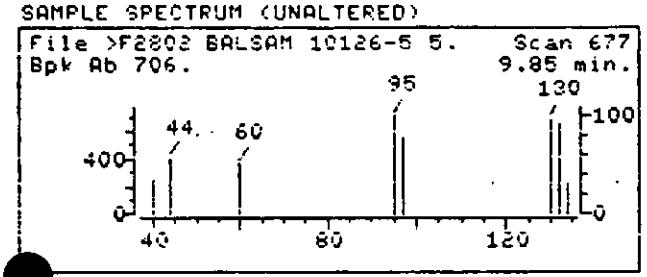


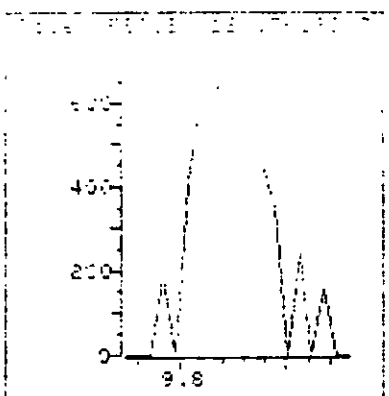
Data File: >F2802::D6 Quant Output File: >F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-S8-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

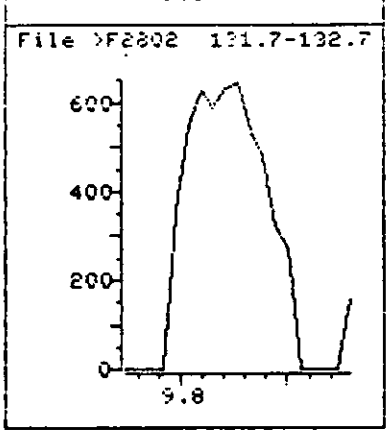
Compound No : 22
Compound Name : C115 1,1,1-Trichloroethane
Scan Number : 506
Retention Time: 7.86 min.
Quant Ion : 97.0
Area : 74535
Concentration : 17.48 UG/L ✓
q-value : 88





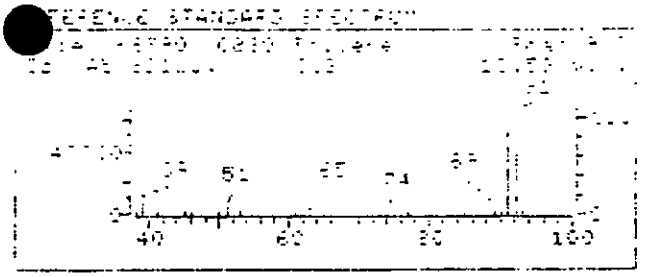


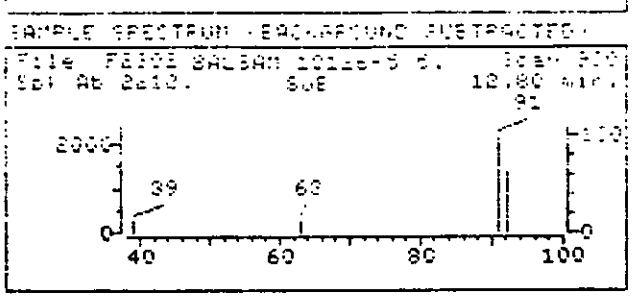


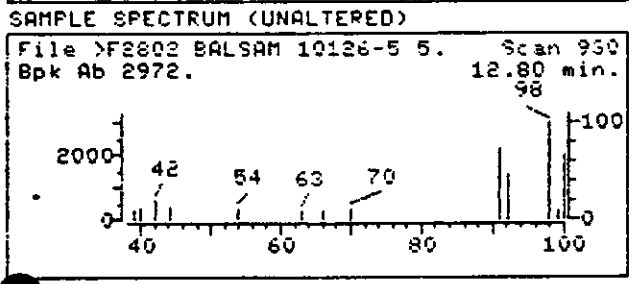


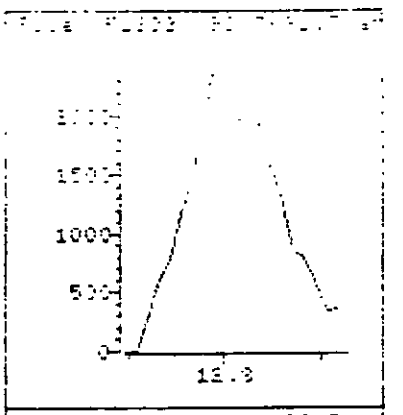
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

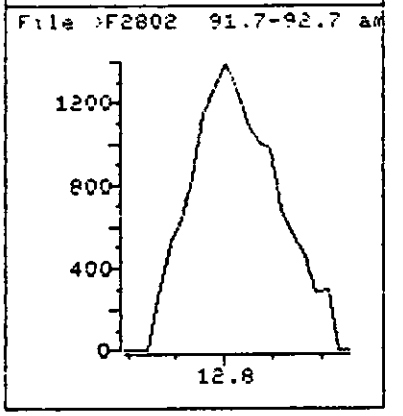
Compound No : 25
Compound Name : C150 Trichloroethene
Scan Number : 677
Retention Time: 9.85 min.
Quant Ion : 130.0
Area : 3411
Concentration : 1.10 UG/L
q-value : 95





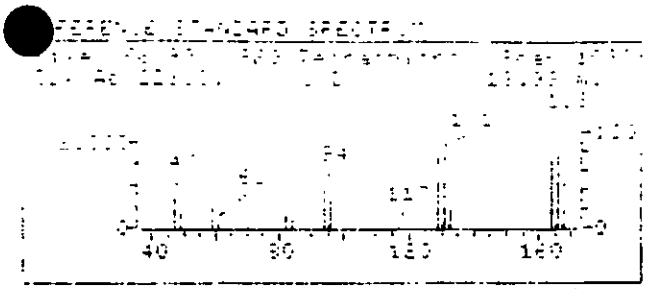


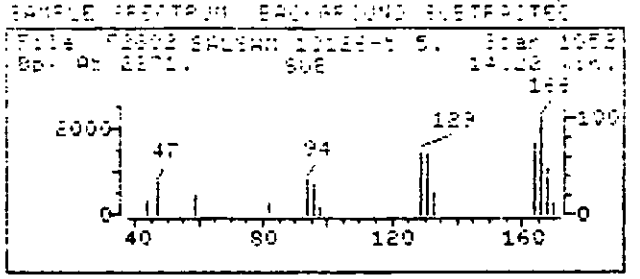


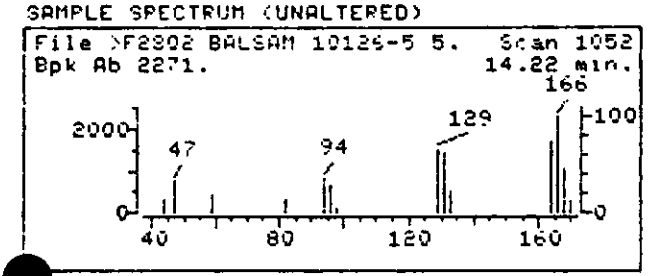


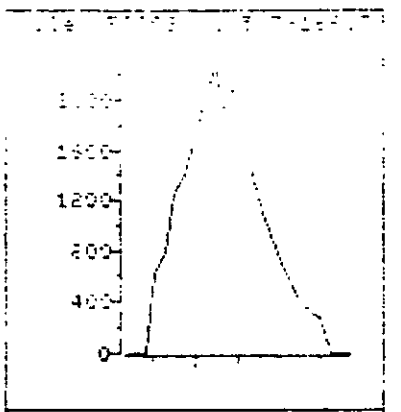
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

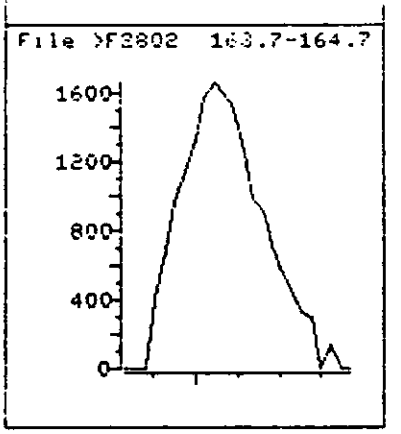
Compound No : 37
Compound Name : C230 Toluene
Scan Number : 930
Retention Time: 12.80 min.
Quant Ion : 92.0
Area : 8877
Concentration : 1.70 UG/L
q-value : 88





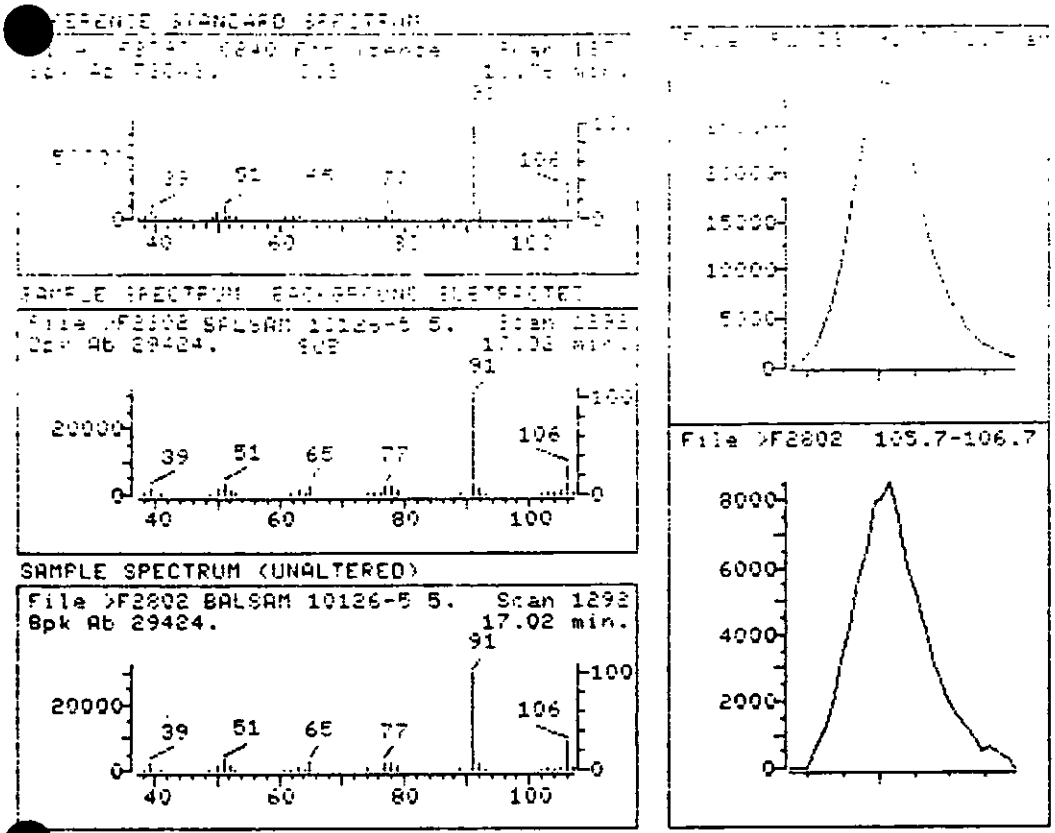






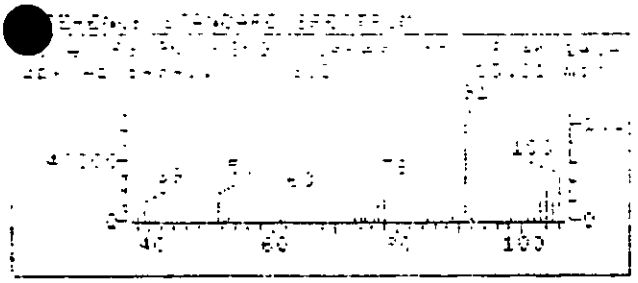
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

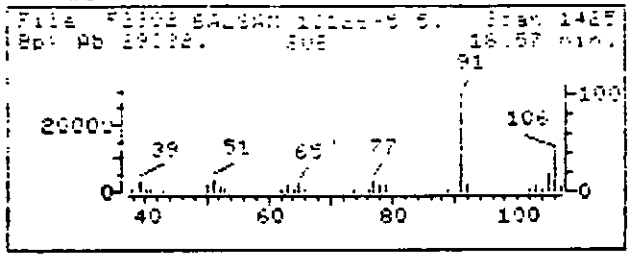
Compound No : 39
Compound Name : C220 Tetrachloroethene
Scan Number : 1052
Retention Time: 14.22 min.
Quant Ion : 164.0
Area : 11563
Concentration : 4.28 UG/L ✓
q-value : 95

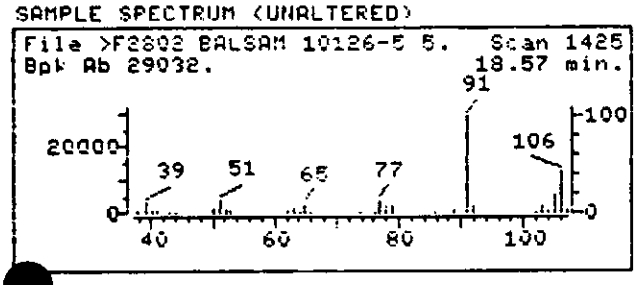


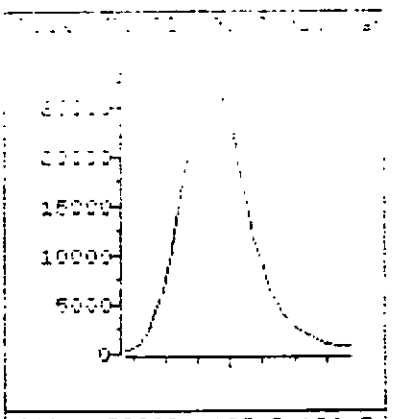
Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

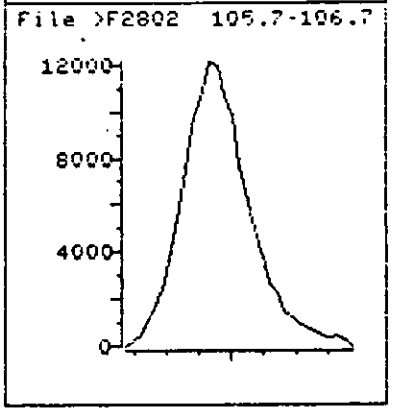
Compound No : 41
Compound Name : C240 Ethylbenzene
Scan Number : 1292
Retention Time: 17.02 min.
Quant Ion : 106.0
Area : 58872
Concentration : 18.71 UG/L
q-value : 98











Data File: >F2802::D6 Quant Output File: ^F2802::D7
Name: BALSAM 10126-5 5.05G Instrument ID: V6
Misc: V6, CH#12, 5UL IS/S, UCC-SB-B-16-3
Quant Time: 911008 17:35 Quant ID File: HAMID6::MT
Injected at: 911008 17:08 Last Calibration: 910408 11:20
Last Qcal Time: 911008 08:09

Compound No : 50
Compound Name : C250 Xylenes (total)
Scan Number : 1425
Retention Time: 18.57 min.
Quant Ion : 106.0
Area : 87368
Concentration : 22 ~~19~~ UG/L 74.29 µG/L
q-value : 97

RU 100891

Data Reviewed By: DLV Date: 100891

Data Reviewed By: [illegible] Date: 10-10-91

Library Search Report

Sample: BHLSHM 1012e-5 5.0GG Run Factor: .990
Conditions: U6, CH#2, 30L 15/S, ULC-SB-B- Analyst: KERYLYNN

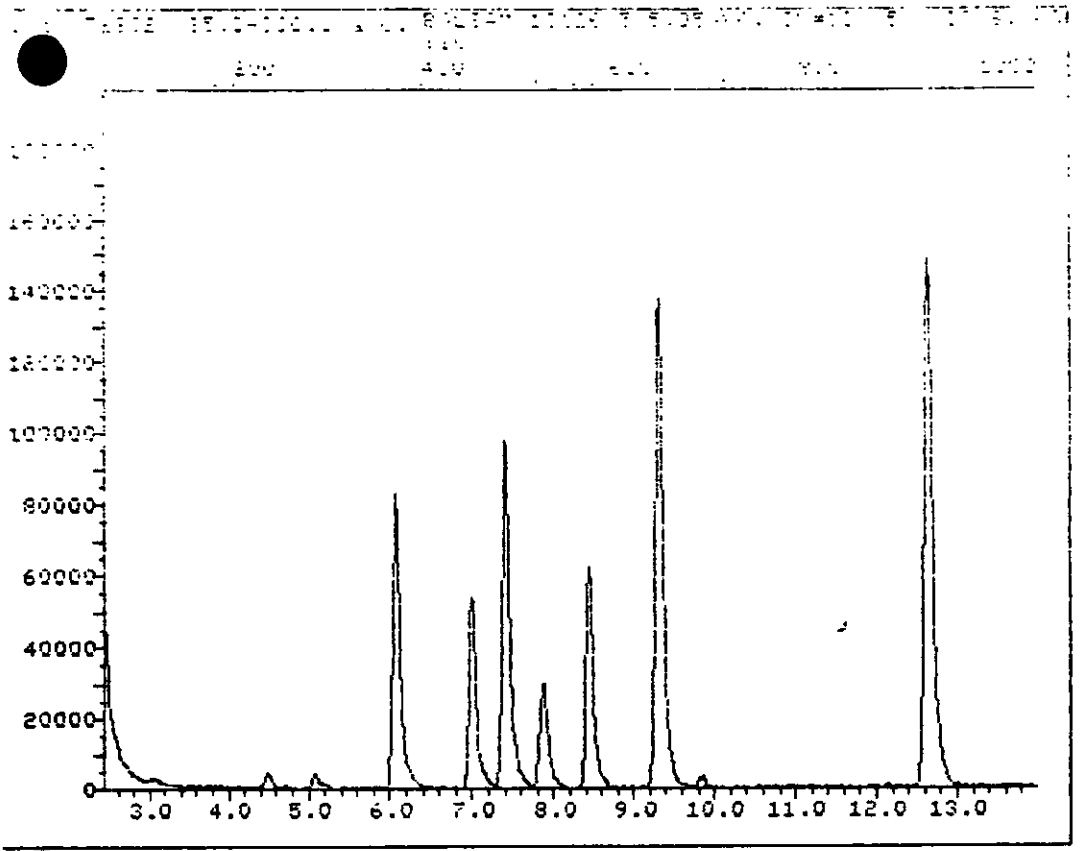
#	Scan	O	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	1650.			16.	~~541-85-5~~	~~3-Heptanone, 5-methyl-~~ C8H16O Isomers
2	1716.			5.1	~~34375-89-8~~	~~Pyrrolidine, 3-methyl-~~ Unkn's
3	1748.			75.	~~815-24-7~~	~~3-Pentanone, 2,2,4,4-tetramethyl-~~ unknown

~~C9H18O Isomer~~

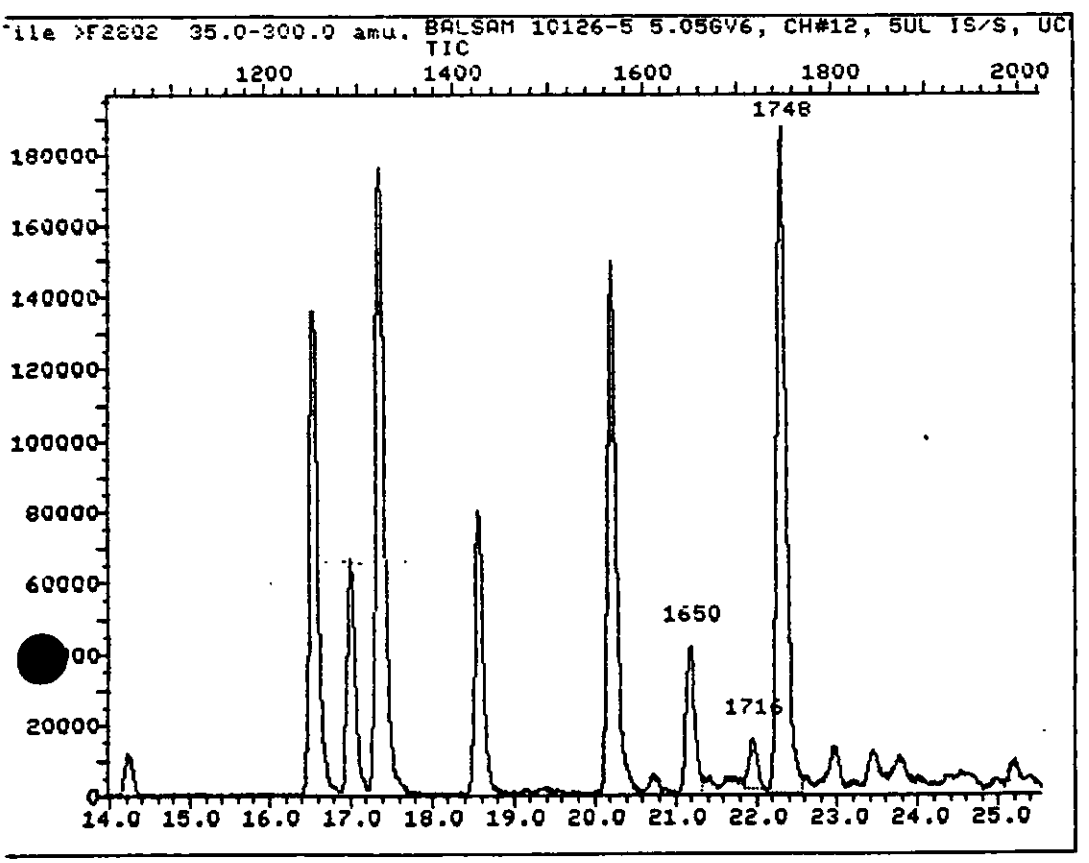
File: F0102

Concentration = Area * (Conc.(STD) / Area(STD)

#	Prob.	Cert.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	88	2	3	21.19	1.281	315346.	41537.	16.209
2	1[illegible]	40	3	21.[illegible]	1.309	100071.	14298.	5.144
3	89	3	3	22.33	1.350	1469976.	186679.	75.556


160000
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

UCC-SB-B-163


File >F2802 35.0-300.0 amu. BALSAM 10126-5 5.056V6, CH#12, 5UL IS/S, UC
TIC
1200
1400
1600
1800
2000
1748
180000
160000
140000
120000
100000
80000
60000
1650
20000
1716
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] Internal Standards

Int. File: [illegible]

[illegible] separation of TIC and target:
inimum RIC peak area as % of est. RIC area:
aximum RIC peak area as % of est. RIC area:

#	Name	Concentration		Flag	
RT	scan	O area	RRratio	RIC scan	RIC area	% Est. RIC
1	CI01 Bromochlorometh	50.000	UG/L	Ok	
	467.	84121.	7.135	466.	611868.	1[illegible]942
2	CI10 1,4-Difluoroben	50.000	UG/L	Ok	
	630.	400004.	2.395	630.	921127.	96.133
3	CI20 D5-Chlorobenzen	50.000	UG/L	Ok	
	1251.	316820.	3.504	1251.	972777.	87.636

eleting peaks from INT file: VDIR87
imum area: 10 % of area of closest Int. Std.
Number of peaks: 16
Number of peaks remaining: 15

eleting target compounds from INT file: VDIR87
Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 15
Number of peaks remaining: 3

eleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 3
aximum number of peaks > number of peaks.

C8H16O

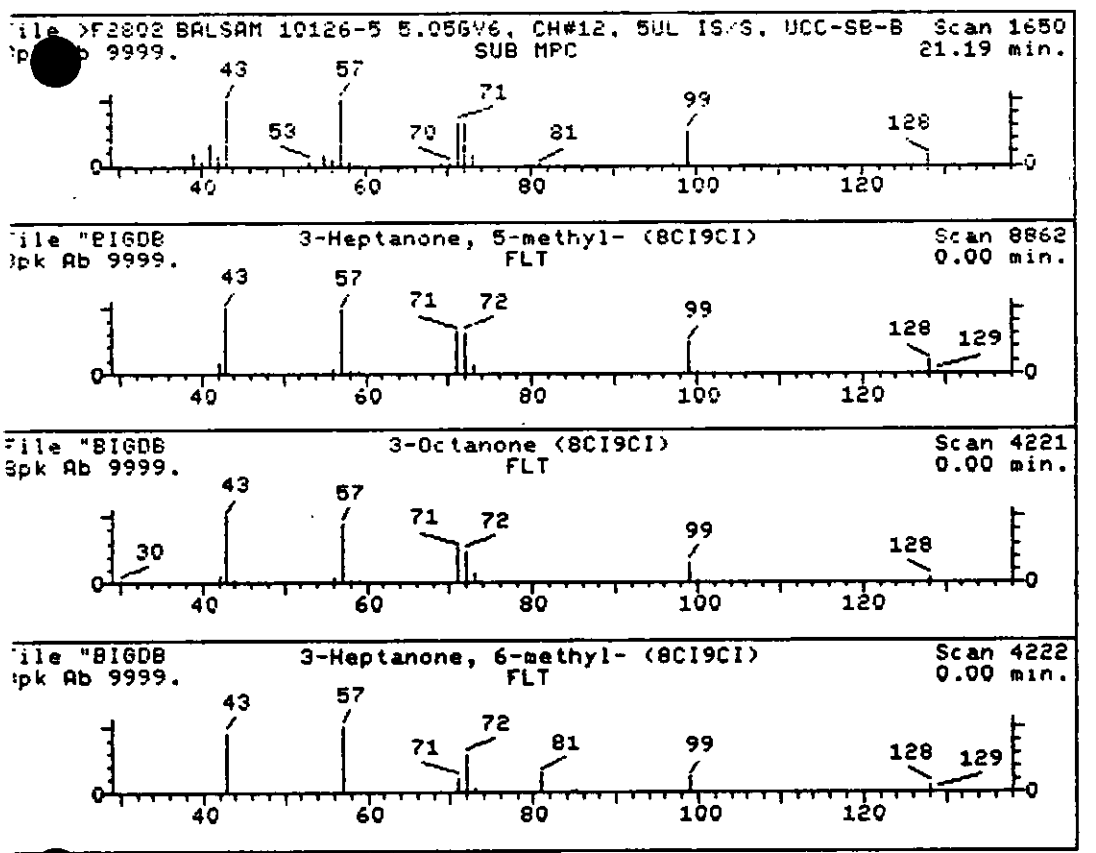
3 Somers

DJ 10-8-91

UCC-SB-B-16-3

Sample file: >F2802 Spectrum #: 1650
Search speed: 2 Tilting option: 5 No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	A_IU
1.	88*	541855	8862	"BIGDB	74	33	2	0	77	2	65	56
2.	79*	106683	4221	"BIGDB	55	44	2	0	99	8	48	32
3.	52*	624420	4222	"BIGDB	36	67	3	0	100	16	20	13
4.	25*	5405798	3989	"BIGDB	30	55	3	0	100	43	8	13
5.	25*	15726155	3992	"BIGDB	31	65	3	0	72	42	8	13
6.	25*	6137128	3990	"BIGDB	26	73	3	0	71	41	8	13

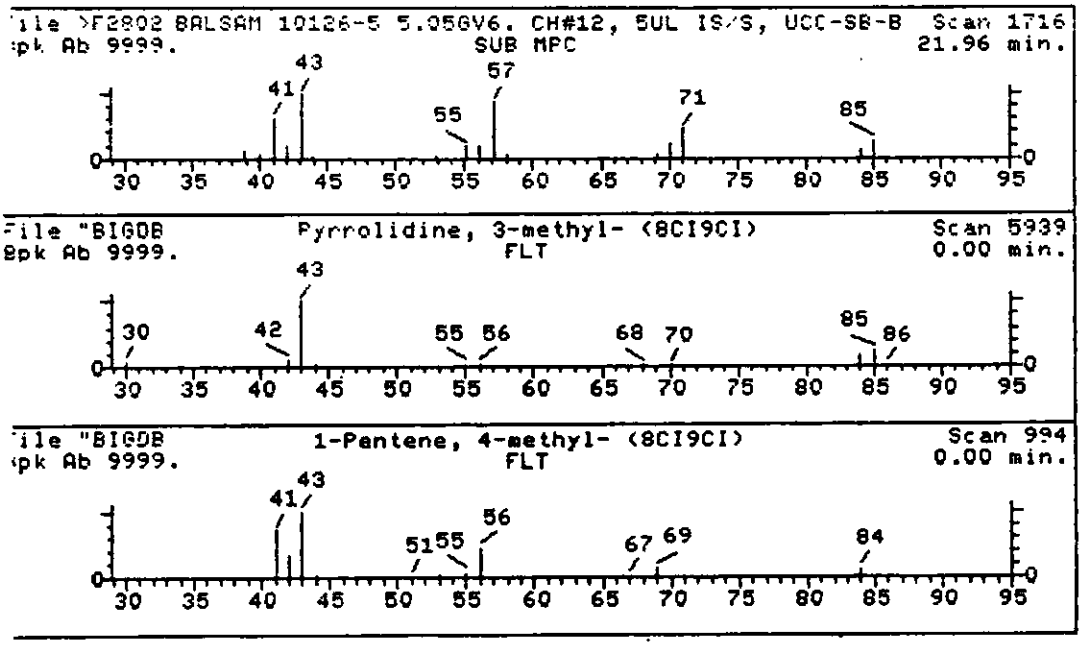


Unknown

Sample file: >F2802 Spectrum #: 1716
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	FOOT	F	DK	#FLG	TILT	%	CON	C_I	F_I
1.	15*	34375898	5939	"BIGDB	26	54	2	0	80	60	3	14
2.	11*	691372	994	"BIGDB	27	58	3	0	85	62	2	13

UCC-SB-B-163



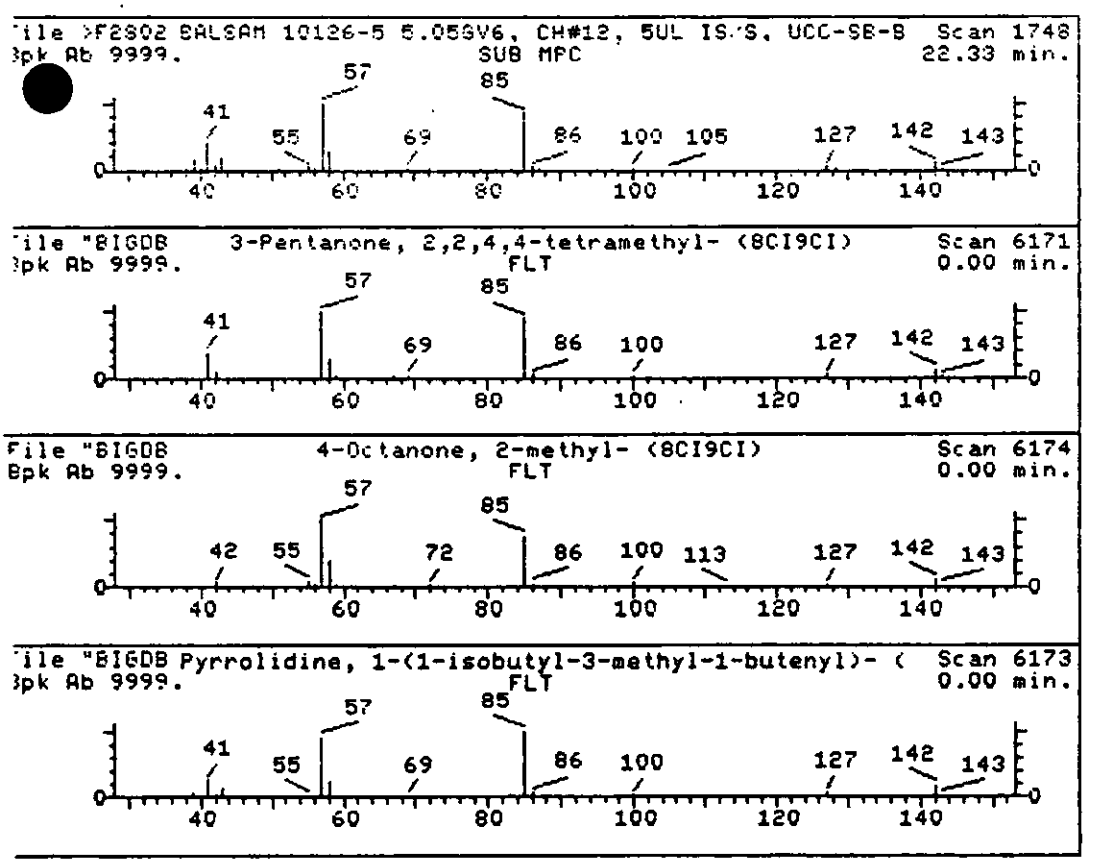
Unknown
~~C9H18O~~
IS only
DL (1008)

1. [illegible]
2. 4-Octanone, 2-methyl- (8CI9CI)
3. [illegible]
4. 4-Heptanone, 2,6-dimethyl- (8CI9CI)
5. 2-Propen-1-ol (9CI)

Sample file: >F2802 Spectrum #: 1748
Search speed: 2 Tilting option: 8 No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	815247	6171	"BIGDB	74	19	1	0	76	3	66	76
2.	47*	7492388	6174	"BIGDB	37	55	2	0	68	22	17	18
3.	35	3494040	6173	"BIGDB	39	56	1	0	58	26	14	12
4.	25*	108838	6169	"BIGDB	27	57	2	0	47	46	7	14
5.	20*	107186	1235	"BIGDB	22	62	2	0	100	52	5	13

UCC-SB-B-163



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PC-1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2753

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. ____ Date Analyzed: 10/06/91

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	U
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)	3	J
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	2	J
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	2	J
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	10	
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.

PC-1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-07

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2753

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. _____ Date Analyzed: 10/06/91

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

NC

R-100691V6A

72752

2-But

~~4-methyl~~

~~2-pentanone~~

Processed by : JJ Date: 100791 Data File: [illegible]

Reviewed by: [illegible] Date: [illegible] Page: 1

Stratco Mass Spectrometry

Target Compound Data Summary Sheet

Sample: BALSAM 10134-7 5ML.
Misc : V6, CH#01, 5UL IS/S, UCC-PC-1 ✓
Injected : 10/06/91 12:25
Analyst: KERYLYNN
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	.2277	91.1	76 114
CS05 D8-Toluene	.2500	.2481	99.2 ✓	88 110
CS10 Bromofluorobenzene	.2500	.2411	96.4	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
		BDL		C030 Methylene Chloride
		BDL		CXXX Tert-butyl alcohol
		BDL		C053 Trans-1,2-dichloroethene
412	2.667	2.7	J	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
486	1.661	1.7	J	C115 1,1,1-Trichloroethane —
		BDL		C120 Carbon Tetrachloride
		BDL		C165 Benzene
654	1.773	1.8	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
		BDL		C160 1,1,2-Trichloroethane

Data File: F2753 Page: 2
Sample: B4L1A" 10:2e-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
1027	9.747	9.7	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: F2753::D6 Injected at: 12:29 10/3e 91
Sample : 1:39 10/3e/91
ID File : M0BI06::MT Calibrated : 09:37 08/14/91

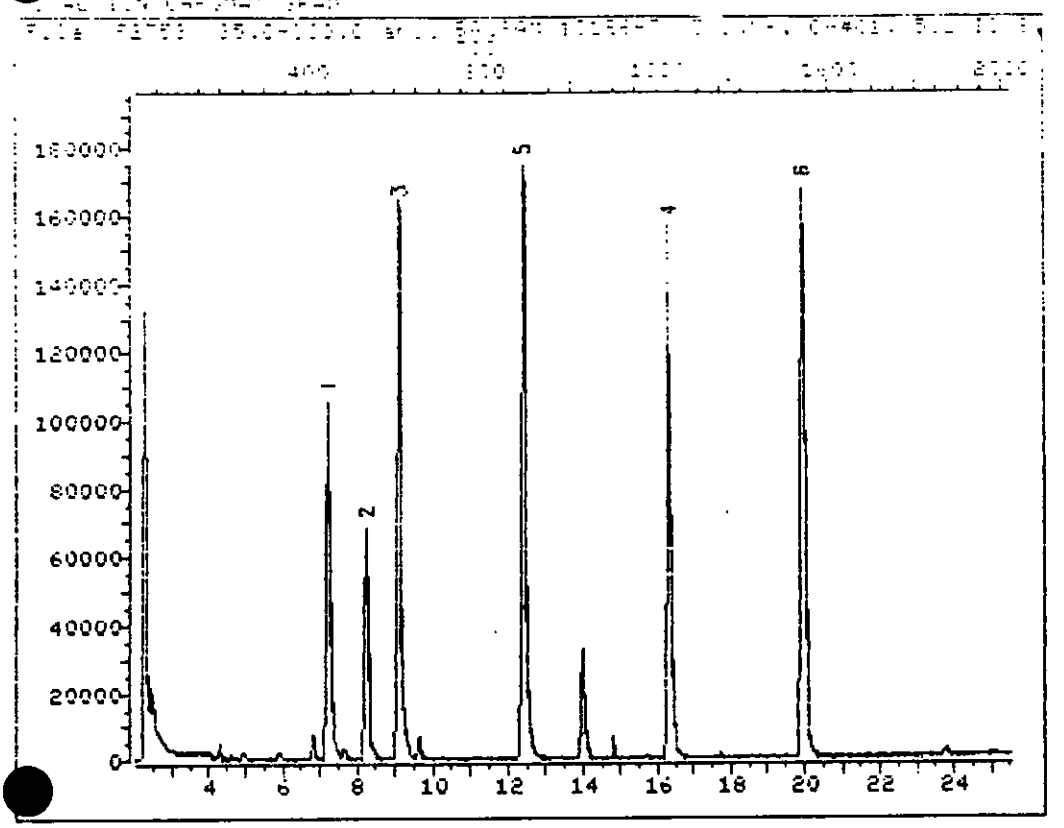
Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1) *CI01 Bromochloromethane	7.20	7.20	.00	128.0	93385	1.0000	50.00
2) C010 Chloromethane	2.66	0.00	--	50.0	0	1.1144	0.00
3) C020 Vinyl Chloride	2.80	0.00	--	62.0	0	1.1573	0.00
4) C015 Bromomethane	3.18	0.00	--	94.0	0	1.1009	0.00
5) C025 Chloroethane	3.32	0.00	--	64.0	0	.7412	0.00
6) C045 1,1-Dichloroethene	4.29	0.00	--	96.0	0	1.4064	0.00
7) C035 Acetone	4.35	0.00	--	43.0	0	.1922	0.00
8) C040 Carbon Disulfide	4.58	4.58	.00	76.0	3418	4.2140	.43
9) C030 Methylene Chloride	4.91	4.91	.00	84.0	2739	1.7274	.85
10) CXXX Tert-butyl alcohol	5.07	0.00	--	59.0	0	.0770	0.00
11) C053 Trans-1,2-dichloroet	5.29	0.00	--	96.0	0	1.7216	0.00
12) C055 Cis-1,2-dichloroethe	6.81	6.81	.00	96.0	9546	1.9165	2.67
13) CXXX Methyl tert-butyl et	5.29	0.00	--	73.0	0	2.9749	0.00
14) C050 1,1-Dichloroethane	5.89	5.90	.01	63.0	5881	3.2916	.96
15) C060 Chloroform	7.34	0.00	--	83.0	0	3.6900	0.00
16) C065 1,2-Dichloroethane	8.37	0.00	--	62.0	0	2.0979	0.00
17) C110 2-Butanone	6.81	0.00	--	72.0	0	.1333	0.00
18) CS15 D4-1,2-dichloroethan	8.23	8.24	.01	65.0	149451	1.7574	45.53
19) *CI10 1,4-Difluorobenzene	9.08	9.10	.03	114.0	499977	1.0000	50.00
20) C125 Vinyl Acetate	5.98	0.00	--	43.0	0	.5819	0.00
21) C115 1,1,1-Trichloroethan	7.68	7.67	.01	97.0	9202	.5540	1.66
22) C120 Carbon Tetrachloride	7.98	0.00	--	117.0	0	.4824	0.00
23) C165 Benzene	8.35	0.00	--	78.0	0	1.0182	0.00
24) C150 Trichloroethene	9.63	9.63	.00	130.0	7193	.4056	1.77
25) C140 1,2-Dichloropropane	10.10	0.00	--	63.0	0	.3950	0.00
26) C130 Bromodichloromethane	10.73	0.00	--	83.0	0	.6175	0.00
27) C175 2-Chloroethylvinylet	11.45	0.00	--	63.0	0	.2138	0.00
28) C143 Cis-1,3-Dichloroprop	11.77	0.00	--	75.0	0	.6058	0.00
29) C172 Trans-1,3-dichloropr	13.18	0.00	--	75.0	0	.4753	0.00
30) C160 1,1,2-Trichloroethan	13.65	0.00	--	97.0	0	.3200	0.00
31) C155 Dibromochloromethane	14.69	0.00	--	129.0	0	.5130	0.00
32) C180 Bromoform	18.89	0.00	--	173.0	0	.3269	0.00
33) *CI20 D5-Chlorobenzene	16.26	16.30	.05	117.0	380054	1.0000	50.00
34) CS05 D8-Toluene	12.42	12.39	.03	98.0	477999	1.2671	49.63
35) C205 4-Methyl-2-pentanone	12.16	0.00	--	43.0	0	.3665	0.00
36) C230 Toluene	12.56	0.00	--	92.0	0	.8674	0.00
37) C210 2-Hexanone	14.37	0.00	--	43.0	0	.2493	0.00
38) C220 Tetrachloroethene	13.98	13.97	.01	164.0	34564	.4665	9.75
39) C235 Chlorobenzene	16.38	0.00	--	112.0	0	1.0936	0.00
40) C240 Ethylbenzene	16.77	0.00	--	106.0	0	.5476	0.00
41) CXXX Xylenes (p)	17.13	0.00	--	106.0	0	.6560	0.00
42) CXXX Xylenes (o)	18.33	0.00	--	106.0	0	.6457	0.00
43) C245 Styrene	18.38	0.00	--	104.0	0	1.1380	0.00
44) C225 1,1,2,2-Tetrachloroe	20.56	0.00	--	83.0	0	.6669	0.00
45) CS10 Bromofluorobenzene	19.96	19.95	.01	95.0	272514	.7436	48.21
46) C335 Dichlorobenzene (m)	23.57	0.00	--	146.0	0	1.0945	0.00
47) C340 Dichlorobenzene (p)	23.86	0.00	--	146.0	0	.9985	0.00
48) C350 Dichlorobenzene (o)	25.11	25.07	.04	146.0	1528	1.0	.20
49) C250 Xylenes (total)	18.33	0.00	--	106.0	0	.6457	0.00

Internal Standard Comparison

Sample: 2F2793 Date injected: 10 Oct 91 Standard: F2 91 ✓

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	93385	87593	106.6
CI10 1,4-Difluorobenzene	499977	477342	104.7
CI20 D5-Chlorobenzene	380054	362068	105.0

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



Data File: >F2753::D6 Quant Output File: ^F2753::D7
Name: BALSAM 10126-7 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, UCC-PC-1

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911006 10:30

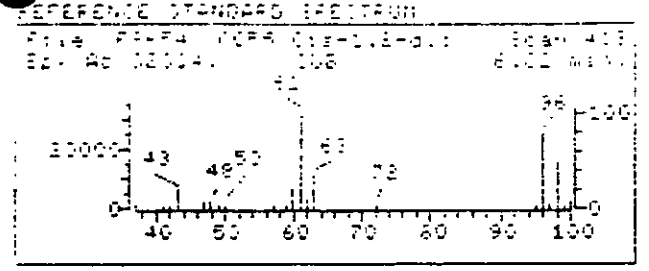
Operator ID: KERYLYNN
Quant Time : 911006 13:39
Injected at: 911006 12:25

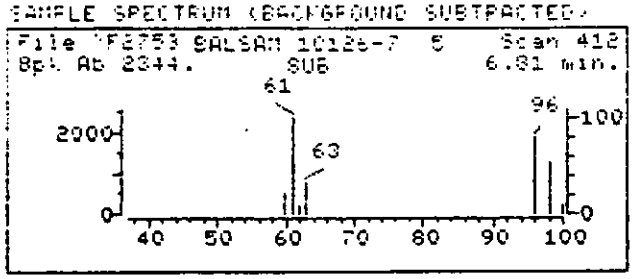
Operator ID: [illegible] Quant Rev: [illegible] Quant Time: [illegible]
Output File: [illegible] Injected at: [illegible]
Data File: F2753::D6 Dilution Factor: 1.00000
Name: BALSAM 10126-7 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, UCC-PC-1

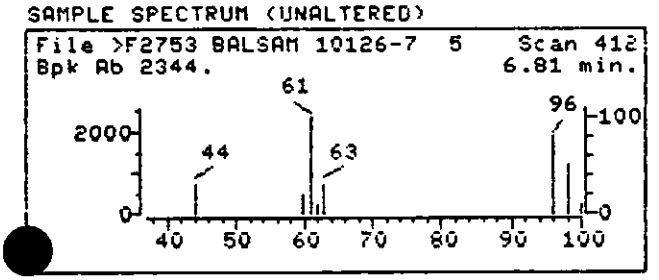
ID File: M0B1D6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911006 10:30

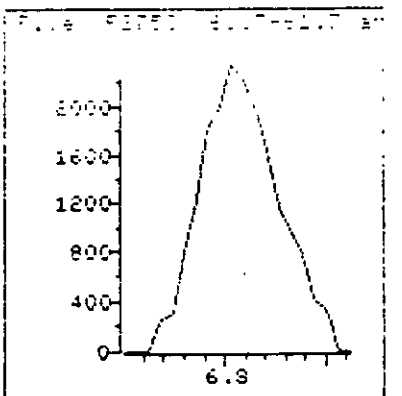
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	93385	50.00	UG/L	71
8)	C040 Carbon Disulfide	4.58	76.0	3418	.434	UG/L	100
9)	C030 Methylene Chloride	4.91	84.0	2739	.849	UG/L	83
12)	C055 Cis-1,2-dichloroethene	6.81	96.0	9546	2.67	UG/L	87
14)	C050 1,1-Dichloroethane	5.90	63.0	5881	.957	UG/L	100
18)	CS15 D4-1,2-dichloroethane	8.24	65.0	149451	45.53	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.10	114.0	499977	50.00	UG/L	100
[illegible])	C115 1,1,1-Trichloroethane	7.67	97.0	9202	1.66	UG/L	85
[illegible])	C150 Trichloroethene	9.63	130.0	7193	1.77	UG/L	90
33)	*CI20 D5-Chlorobenzene	16.30	117.0	380054	50.00	UG/L	100
34)	CS05 D8-Toluene	12.39	98.0	477999	49.63	UG/L	93
38)	C220 Tetrachloroethene	13.97	164.0	34564	9.75	UG/L	89
45)	CS10 Bromofluorobenzene	19.95	95.0	272514	48.21	UG/L	80
48)	C350 Dichlorobenzene (o)	25.07	146.0	1528	.200	UG/L	100

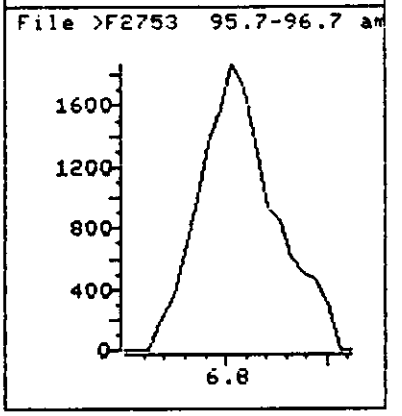
* Compound is ISTD





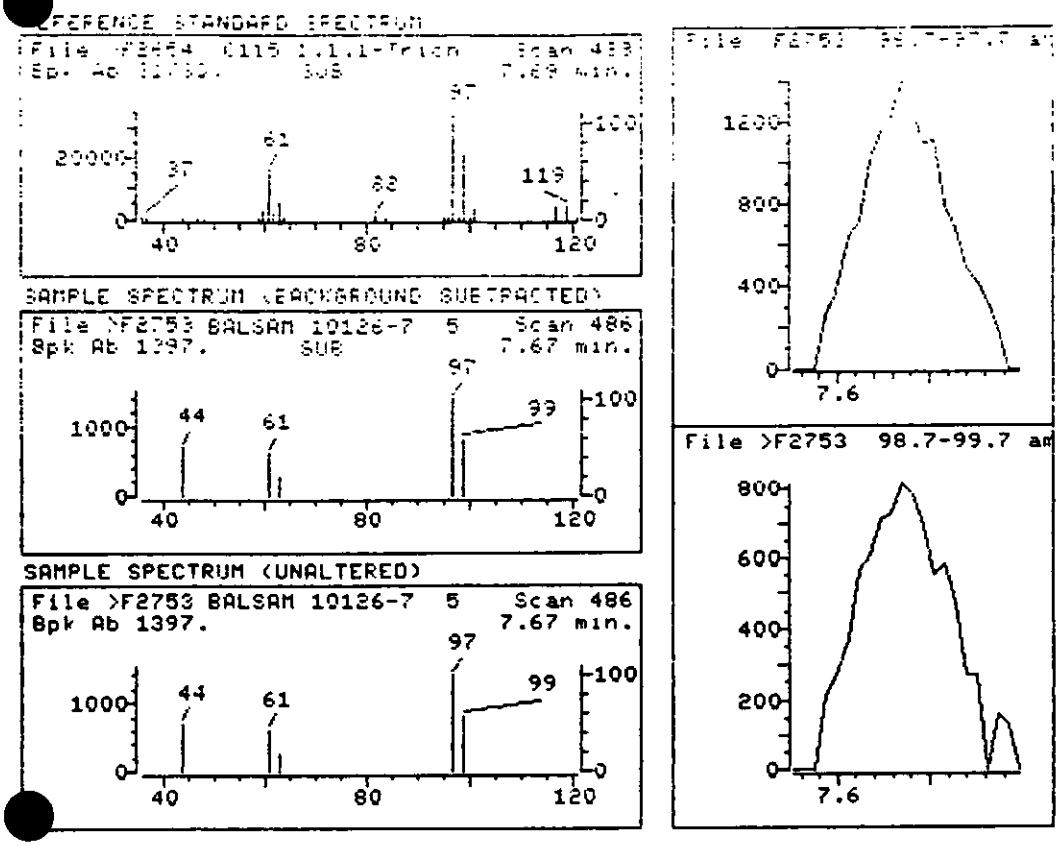






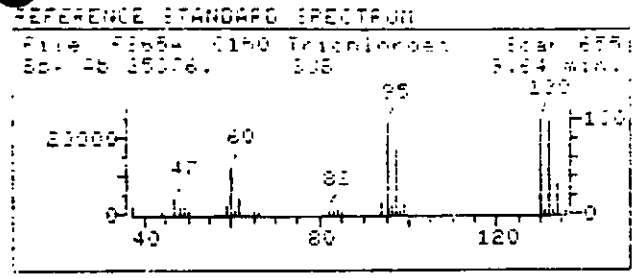
Data File: >F2753::D6 Quant Output File: ^F2753::D7
Name: BALSAM 10126-7 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, UCC-PC-1
Quant Time: 911006 13:39 Quant ID File: MOBID6::MT
Injected at: 911006 12:25 Last Calibration: 910814 09:37
Last Qcal Time: 911006 10:30

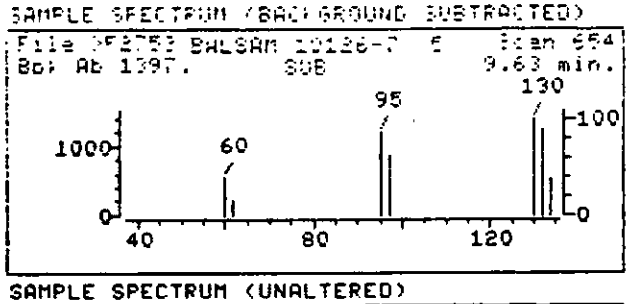
Compound No : 12
Compound Name : C055 Cis-1,2-dichloroethene
Scan Number : 412
Retention Time: 6.81 min.
Quant Ion : 96.0
Area : 9546
Concentration : 2.67 UG/L
q-value : 87

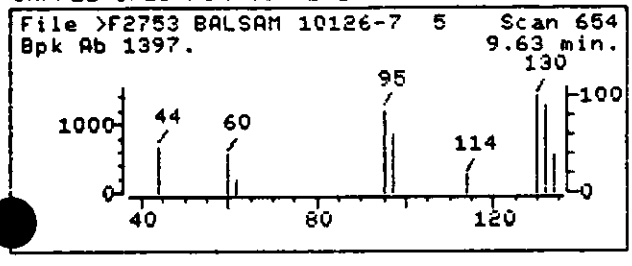


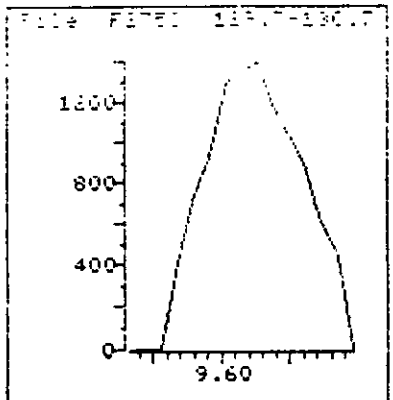
Data File: >F2753::D6 Quant Output File: ^F2753::D7
Name: BALSAM 10126-7 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, UCC-PC-1
Quant Time: 911006 13:39 Quant ID File: MOBID6::MT
Injected at: 911006 12:25 Last Calibration: 910814 09:37
Last Qcal Time: 911006 10:30

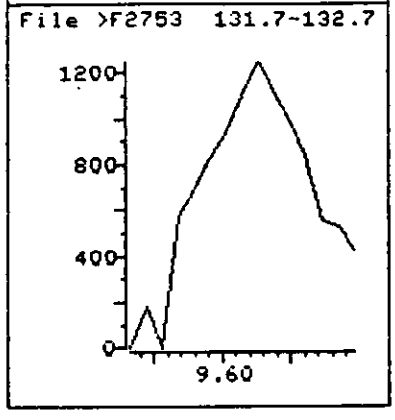
Compound No : 21
Compound Name : C115 1,1,1-Trichloroethane
Scan Number : 486
Retention Time: 7.67 min.
Quant Ion : 97.0
Area : 9202
Concentration : 1.66 UG/L
q-value : 85







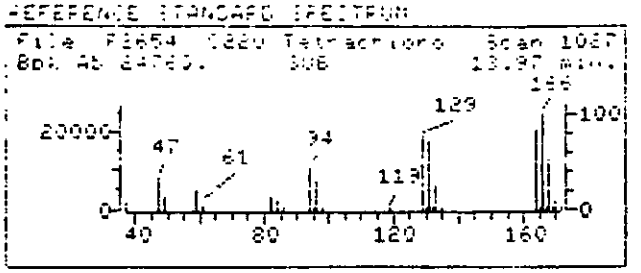




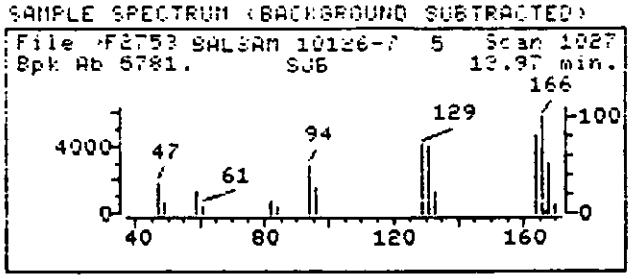
Data File: >F2753::D6 Quant Output File: ^F2753::D7
Name: BALSAM 10126-7 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, UCC-PC-1
Quant Time: 911006 13:39 Quant ID File: MOBID6::MT
Injected at: 911006 12:25 Last Calibration: 910814 09:37
Last Qcal Time: 911006 10:30

Compound No : 24
Compound Name : C150 Trichloroethene
Scan Number : 654
Retention Time: 9.63 min.
Quant Ion : 130.0
Area : 7193
Concentration : 1.77 UG/L
q-value : 90

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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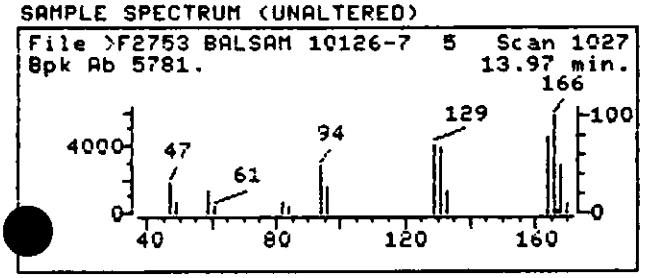
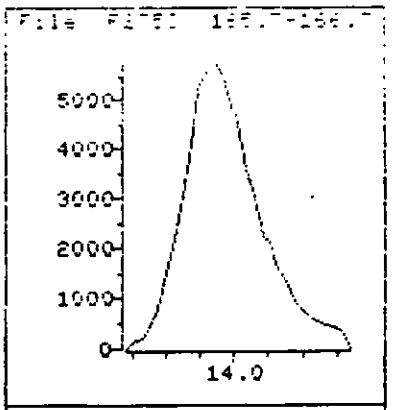
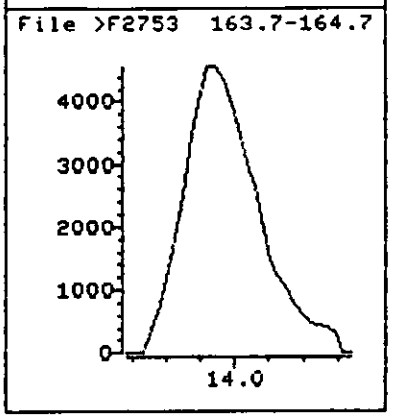






Data File: >F2753::D6 Quant Output File: ^F2753::D7
Name: BALSAM 10126-7 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, UCC-PC-1
Quant Time: 911006 13:39 Quant ID File: MOBID6::MT
Injected at: 911006 12:25 Last Calibration: 910814 09:37
Last Qcal Time: 911006 10:30

Compound No : 38
Compound Name : C220 Tetrachloroethene
Scan Number : 1027
Retention Time: 13.97 min.
Quant Ion : 164.0
Area : 34564
Concentration : 9.75 UG/L
q-value : 89

Data Reduced by : KJ Date: 100791 Data File: >F2/53
Data Reviewed by : ___ Date: ___

Enseco LIL Report (page 1)

Sample: BALSAM 10126-/ 5ML. Run Factor: 1.00
Conditions: V6, LH#01, 50L 15/5, ULC-PL-1 Analyst: KERYLYNN

# Scan	W	L	Concentration In Sample (UG/L)	LAS #	Compound

no unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-C-18-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2896

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 10 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	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	140	J
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	680	U
75-35-4	1,1-Dichloroethene	680	U
75-34-3	1,1-Dichloroethane	680	U
540-59-0	1,2-Dichloroethene (total)	190	J
67-66-3	Chloroform	680	U
107-06-2	1,2-Dichloroethane	680	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	680	U
56-23-5	Carbon Tetrachloride	680	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	680	U
78-87-5	1,2-Dichloropropane	680	U
10061-01-5	cis-1,3-Dichloropropene	680	U
79-01-6	Trichloroethene	680	U
124-48-1	Dibromochloromethane	680	U
79-00-5	1,1,2-Trichloroethane	680	U
71-43-2	Benzene	680	U
10061-02-6	trans-1,3-Dichloropropene	680	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	680	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	680	U
79-34-5	1,1,2,2-Tetrachloroethane	680	U
108-88-3	Toluene	330	J
108-90-7	Chlorobenzene	680	U
100-41-4	Ethylbenzene	900	
100-42-5	Styrene	680	U
1330-20-7	Xylene (total)	6000	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-C-18-2

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-08

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2896

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 10 Date Analyzed: 10/11/91

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 7

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C8H18 ISOMER	11.49	2200	J
2.		C8H18 ISOMER	11.84	1500	J
3.		OCTANE	12.95	2800	J
4.		C8H16 ISOMER	14.77	750	J
5.		C10H22 ISOMER	21.71	1400	J
6.		UNKNOWN	22.07	1300	J
7.		ETHYLMETHYLBENZENE ISOMER	22.73	1300	J

NC

R-101091V6B
7F2556

Reduced by: [illegible] Date: 101191 Data File: 7F2556
Reviewed by: [illegible] Date: 10-16-91 Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: RMLS 101126-8 100ULX
Misc : V6 C01 50L 15/5 4.08G/10ML 100891 ULL-SB-L-0-18-2
Injected : 10/11/91 06:02 Units: UG/KG
Analyst: KERYLYNN Run Factor: 125.000
ID File: MUB1U6 Surrogate vol: .500
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	18.54	74.2	70 121
CS05 D8-Toluene	25.00	21.55	86.2	81 117
CS10 Bromofluorobenzene	25.00	20.78	83.1	74 121

Target Compounds: MUB1U6

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL		C01U Chloromethane
		BDL		C02U Vinyl Chloride
		BDL		C03 Bromomethane
		BDL		C02S Chloroethane
		BDL		C04S 1,1-Dichloroethene
		BDL		C03S Acetone
		BDL		C04U Carbon Disulfide
249	1.009	12U	J	C05U Methylene Chloride
		BDL		CXXX Tert-butyl alcohol
		BDL		C05S Trans-1,2-dichloroethene
414	1.401	1/U	J	C05S Cis-1,2-dichloroethene
		BDL		CXXX Methyl tert-butyl ether
		BDL		C05U 1,1-Dichloroethane
		BDL		C06D Chloroform
		BDL		C06S 1,2-Dichloroethane
		BDL		C11U 2-Butanone
		BDL		C12S Vinyl Acetate
		BDL		C11S 1,1,1-Trichloroethane
		BDL		C12D Carbon Tetrachloride
		BDL		C16S Benzene
		BDL		C15U Trichloroethene
		BDL		C14U 1,2-Dichloropropane
		BDL		C13U Bromodichloromethane
		BDL		C17S 2-Chloroethylvinylether
		BDL		C14S Cis-1,3-Dichloropropene
		BDL	RT off	C17Z Trans-1,3-dichloropropene
960	11.841	~~13UU~~	J	C16U 1,1,2-Trichloroethane

000136

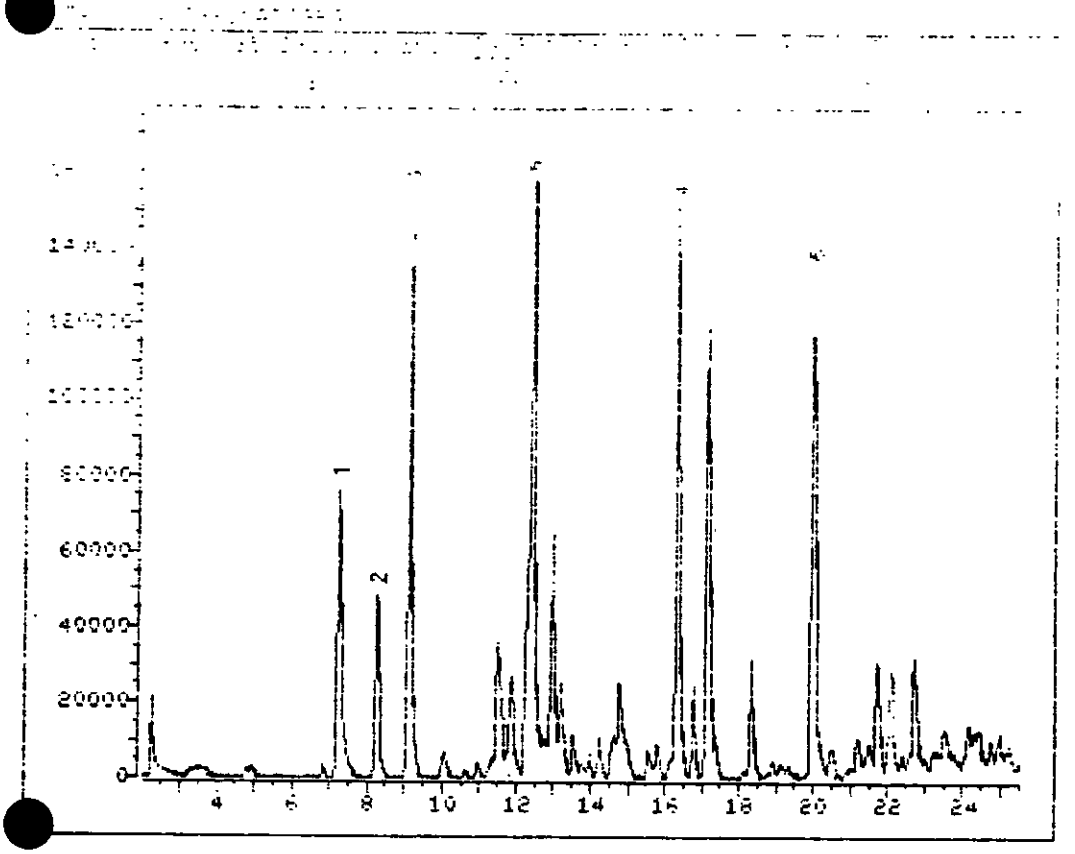
Scan #	Concentration Quant List UG/L	Sample UG/KG	Compound
		BDL	C155 Dibromochloromethane
		BDL	C180 Bromoform
		BDL	C205 4-Methyl-2-pentanone
907	2.415	500 J	C230 Toluene
		BDL	C210 2-Hexanone
		BDL	C220 Tetrachloroethene
		BDL	C235 Chlorobenzene
1266	6.620	810	C240 Ethylbenzene
1297	31.648	5900	CXXX Xylenes (p)
1401	9.134	1100	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)
1401	~~9.520~~ 43.99	~~1100~~ 5411	C250 Xylenes (total)

pl 10-16-91

		Prod	Found	Dif		Area	RF	
1)	*C191 Bromochloromethane	7.99	7.92	.07	128.0	[illegible]	[illegible]	[illegible]
2)	[illegible] Chloromethane	[illegible]	[illegible]	--	[illegible]	0	[illegible]	[illegible]
3)	C020 Vinyl Chloride	3.91	0.00	--	62.0	0	[illegible]	[illegible]
4)	C045 Bromomethane	3.14	0.00	--	94.0	0	[illegible]	[illegible]
5)	C046 Chloroethane	3.32	0.00	--	64.0	0	[illegible]	[illegible]
6)	C045 1,1-Dichloroethene	4.29	0.00	--	96.0	0	.7884	[illegible]
7)	C035 Acetone	4.36	0.00	--	43.0	0	1.5214	0.00
8)	C040 Carbon Disulfide	4.59	0.00	--	76.0	0	.2202	0.00
9)	C030 Methylene Chloride	4.93	4.90	.03	84.0	3212	4.2994	0.00
10)	CXXX Tert-butyl alcohol	5.09	0.00	--	59.0	0	1.9489	1.01
11)	C053 Trans-1,2-dichloroet	5.30	0.00	--	96.0	0	.0770	0.00
12)	C055 Cis-1,2-dichloroethe	6.82	6.82	.01	96.0	4672	1.9080	0.00
13)	CXXX Methyl tert-butyl et	5.30	0.00	--	73.0	0	2.0414	1.40
14)	C050 1,1-Dichloroethane	5.92	0.00	--	63.0	0	3.2861	0.00
15)	C060 Chloroform	7.36	0.00	--	83.0	0	3.5944	0.00
16)	C065 1,2-Dichloroethane	8.39	0.00	--	62.0	0	4.0227	0.00
17)	C110 2-Butanone	6.83	0.00	--	72.0	0	2.2965	0.00
18)	CS15 D4-1,2-dichloroethan	8.24	8.24	.01	65.0	0	.1243	0.00
19)	*C110 1,4-Difluorobenzene	9.18	9.09	.08	114.0	111998	1.8492	32.98
20)	C125 Vinyl Acetate	5.98	0.00	--	43.0	441858	1.0000	#0.00
21)	C115 1,1,1-Trichloroethan	7.69	0.00	--	97.0	0	.4990	0.00
22)	C120 Carbon Tetrachloride	7.97	0.00	--	117.0	0	.9573	0.00
23)	C165 Benzene	8.36	0.00	--	78.0	0	.4441	0.00
24)	C150 Trichloroethene	9.61	0.00	--	130.0	0	.9866	0.00
25)	C140 1,2-Dichloropropane	10.10	0.00	--	63.0	0	.4234	0.00
26)	C130 Bromodichloromethane	10.71	0.00	--	83.0	0	.3961	0.00
27)	C175 2-Chloroethylvinylet	11.43	0.00	--	63.0	0	.5620	0.00
28)	C143 Cis-1,3-Dichloroprop	11.74	0.00	--	75.0	0	.1602	0.00
29)	C172 Trans-1,3-dichloropr	13.15	0.00	--	75.0	0	.5458	0.00
30)	C160 1,1,2-Trichloroethan	13.60	13.18	.41	97.0	0	.4248	0.00
31)	C155 Dibromochloromethane	14.65	0.00	--	129.0	31141	.2976	11.84
32)	C180 Bromoform	18.82	0.00	--	173.0	0	.4414	0.00
33)	*C120 D5-Chlorobenzene	16.40	16.29	.11	117.0	0	.2534	0.00
34)	CS09 D8-Toluene	12.42	12.40	.01	98.0	348220	1.0000	50.00
35)	C205 4-Methyl-2-pentanone	12.19	0.00	--	43.0	366479	1.2209	43.10
36)	C230 Toluene	12.58	12.57	.01	92.0	0	.3090	0.00
37)	C210 2-Hexanone	14.37	0.00	--	43.0	13412	.7974	2.41
38)	C220 Tetrachloroethene	13.99	0.00	--	164.0	0	.2092	0.00
39)	C235 Chlorobenzene	16.38	0.00	--	112.0	0	.4080	0.00
40)	C240 Ethylbenzene	16.75	16.75	.00	106.0	0	.9815	0.00
40)D	C240 Ethylbenzene	16.75	17.11	.36	106.0	23098	.5010	6.62
40)D	CXXX Xylenes (p)	17.12	16.75	.37	106.0	137381	.5010	39.38
41)	CXXX Xylenes (p)	17.12	17.11	.01	106.0	23098	.6233	5.32
41)D	CXXX Xylenes (o)	18.31	18.32	.01	106.0	137381	.6233	31.65
42)	C245 Styrene	18.35	18.33	.02	104.0	37382	.5877	9.13
43)	C225 1,1,2,2-Tetrachloroe	20.53	0.00	--	83.0	1441	1.0250	.20
44)	CS10 Bromofluorobenzene	19.95	19.96	.01	95.0	0	.5339	0.00
45)	C335 Dichlorobenzene (m)	23.50	0.00	--	146.0	213248	.7366	41.57
46)	C340 Dichlorobenzene (p)	23.82	0.00	--	146.0	0	.8135	0.00
47)	C350 Dichlorobenzene (o)	25.04	0.00	--	146.0	0	.7410	0.00
47)D	C250 Xylenes (total)	[illegible]	[illegible]	[illegible]	[illegible]	0	.7841	0.00

[illegible] Bromochloromethane	[illegible]	[illegible]	[illegible]
[illegible] 1,4-Dichlorobenzene	[illegible]	[illegible]	[illegible]
0100 95-Chlorobenzene	348200	[illegible]	[illegible]

% = (Sample Area / Area [illegible])
* Area outside limits



Data File: >F2896::D6 Quant Output File: ^F2896::D7
Name: BALS 10126-8 100ULX Instrument ID: V6
Misc: V6 C01 5UL IS/S 4.08G/10ML 100891 UCC-SB-V-6-18-2

Id File: MOBID6::MT LT 10/23/91
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 06:29
Injected at: 911011 06:02

[illegible]

Name: [illegible] 1.0ML 100-91 [illegible]

Qt File: [illegible] LT 10/23/91

Title: [illegible] VOLATILES: [illegible]

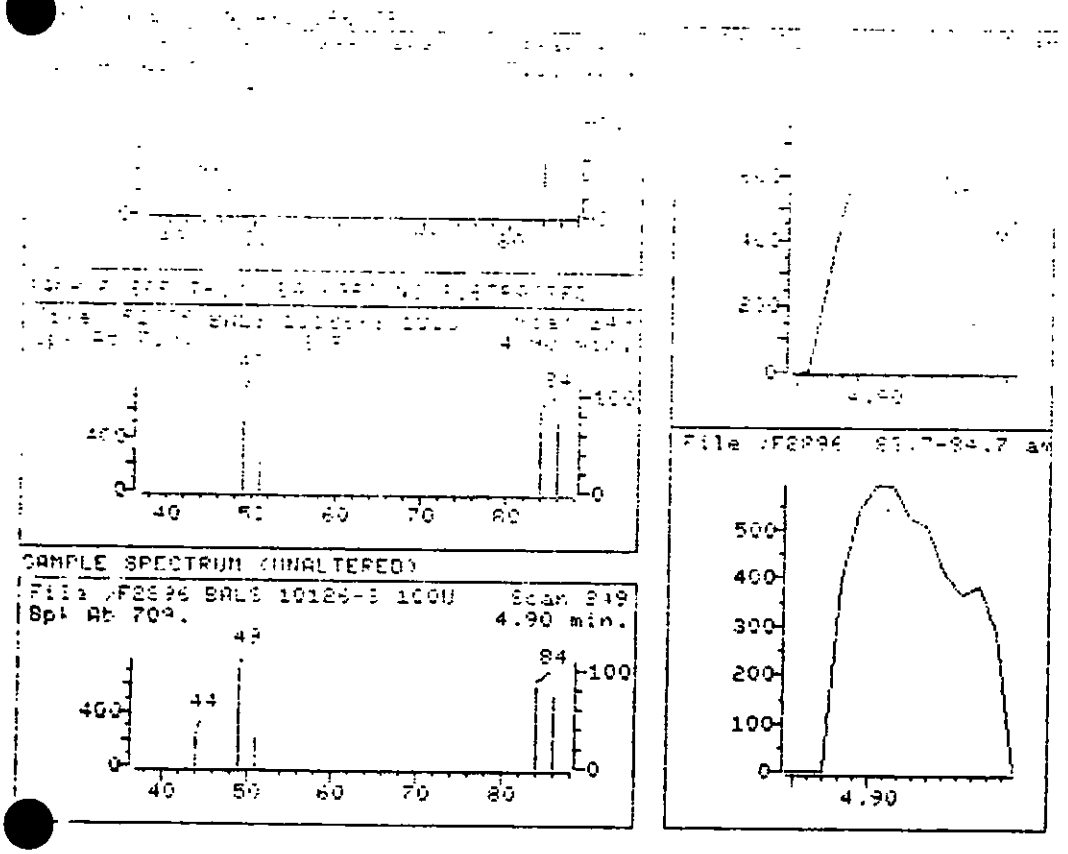
Last Calibration: [illegible] Last Qcal Time: [illegible]

	Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.22	128.0	81661	50.00	UG/L	68
9)	C030 Methylene Chloride	4.90	84.0	3212	1.01	UG/L	76
12)	C055 Cis-1,2-dichloroethene	6.82	96.0	4672	1.40	UG/L	99
18)	CS15 D4-1,2-dichloroethane	8.24	65.0	111998	37.08	UG/L	91
19)	*CI10 1,4-Difluorobenzene	9.09	114.0	441858	50.00	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.18	97.0	31141	11.84	UG/L	42
33)	*CI20 D5-Chlorobenzene	16.29	117.0	348220	50.00	UG/L	100
34)	CS05 D8-Toluene	12.40	98.0	366479	43.10	UG/L	98
36)	C230 Toluene	12.57	92.0	13412	2.41	UG/L	96
[illegible]	C240 Ethylbenzene	16.75	106.0	23098	6.62	UG/L	[illegible]
41)	CXXX Xylenes (p)	17.11	106.0	137381	31.65	UG/L	97
42)	CXXX Xylenes (o)	18.32	106.0	37382	9.13	UG/L	[illegible]
43)	C245 Styrene	18.33	104.0	1441	.202	UG/L	100
45)	CS10 Bromofluorobenzene	19.96	95.0	213248	41.57	UG/L	75
49)	C250 Xylenes (total)	18.32	106.0	~~37141~~ 175315A	~~9.32~~ 43.91	~~UG~~/L	90

* Compound is ISTD

RL 10-16-91

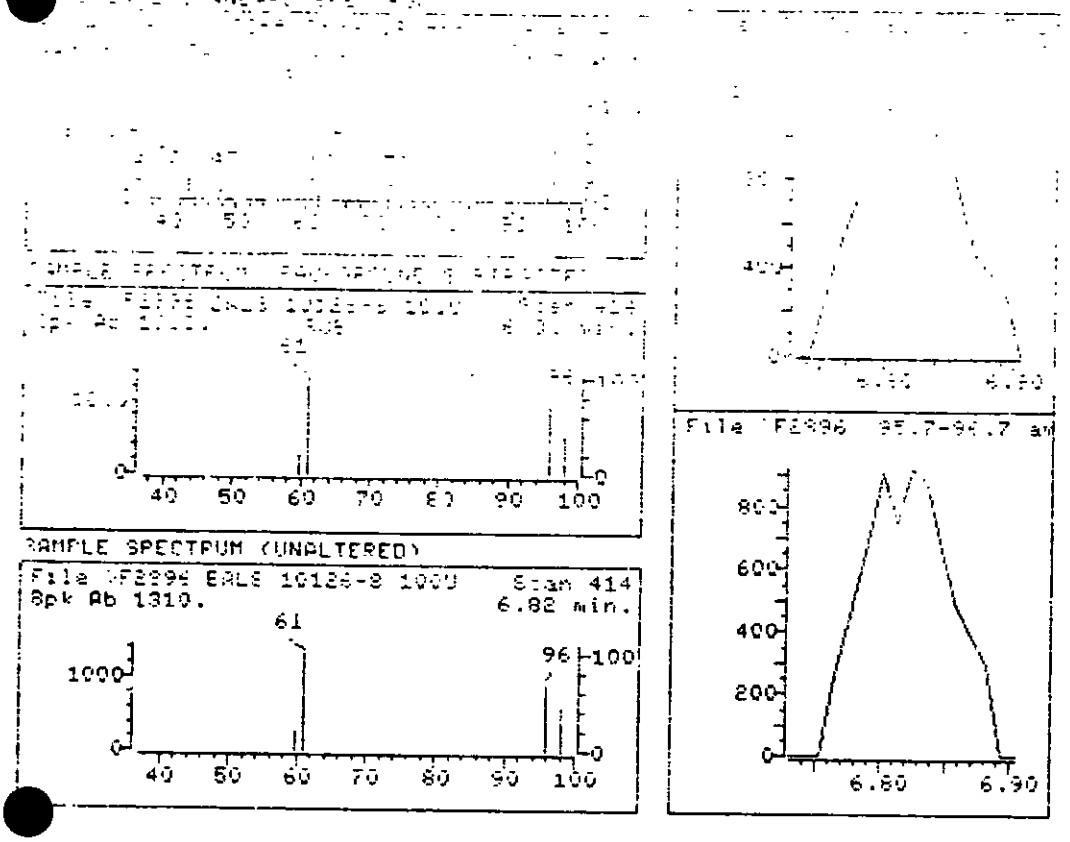
000142



Data File: >F2896::D6 Quant Output File: ^F2896::D7
Name: BALS 10126-8 100ULX Instrument ID: U6
Misc: U6 C01 5UL IS/S 4.08G/10ML 100891 UCC-SB-Z-6-18-2
Quant Time: 911011 06:29 Quant ID File: MOBID6::MT
Injected at: 911011 06:02 Last Calibration: 910814 09:37
Last Qcal Time: 911010 22:48

K 10/23/91

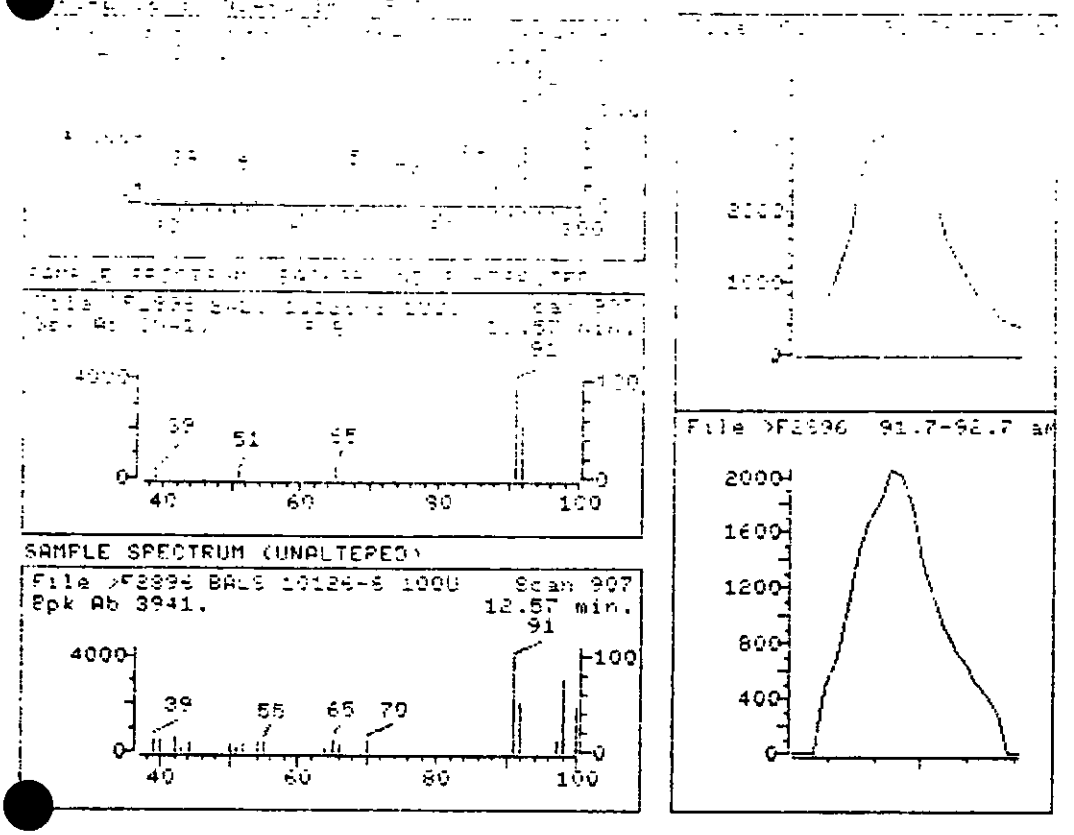
Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 249
Retention Time: 4.90 min.
Quant Ion : 84.0
Area : 3212
Concentration : 1.01 UG/L
q-value : 76



Data File: >F2896::D6 Quant Output File: ^F2896::D7
Name: BALS 10126-8 100ULX Instrument ID: V6
Misc: V6 C01 5UL IS/S 4.08G/10ML 100891 UCC-SB-Ø-6-18-2
Quant Time: 911011 06:29 Quant ID File: MOBID6::MT
Injected at: 911011 06:02 Last Calibration: 910814 09:37
Last Qcal Time: 911010 22:48

IS 10/23/91

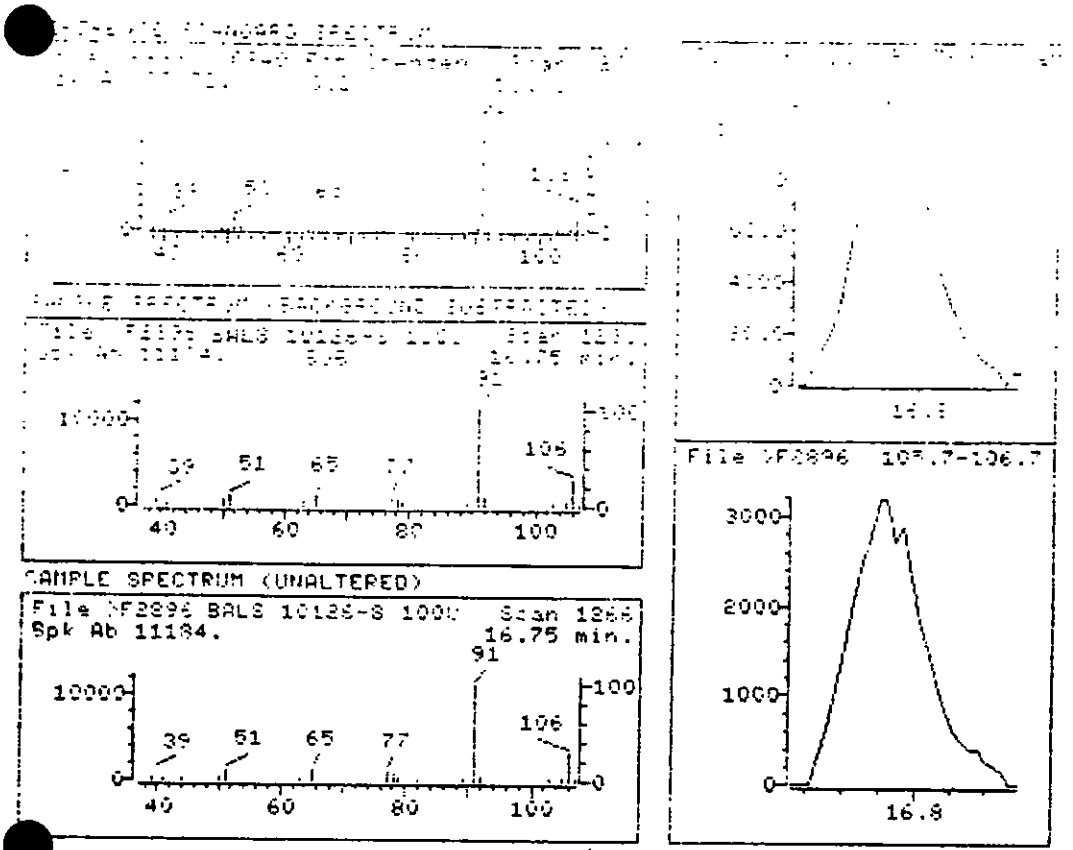
Compound No : 12
Compound Name : C055 Cis-1,2-dichloroethene
Scan Number : 414
Retention Time: 6.82 min.
Quant Ion : 96.0
Area : 4672
Concentration : 1.40 UG/L
q-value : 99



Data File: >F2896::06 Quant Output File: ^F2896::D7
Name: BALS 10126-8 100ULX Instrument ID: V6
Misc: V6 C01 5UL IS/S 4.08G/10ML 100891 UCC-SB-Ø-6-18-2
Quant Time: 911011 06:29 Quant ID File: MOBID6::MT
Injected at: 911011 06:02 Last Calibration: 910814 09:37
Last Qcal Time: 911010 22:48

W 10/23/91

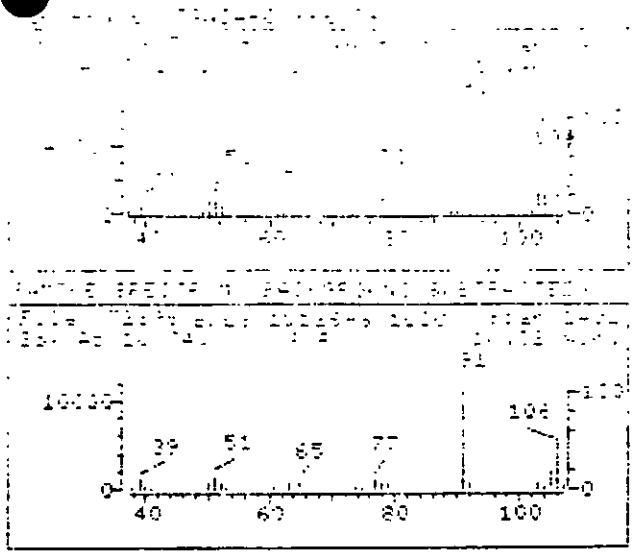
Compound No : 36
Compound Name : C230 Toluene
Scan Number : 907
Retention Time: 12.57 min.
Quant Ion : 92.0
Area : 13412
Concentration : 2.41 UG/L
q-value : 96

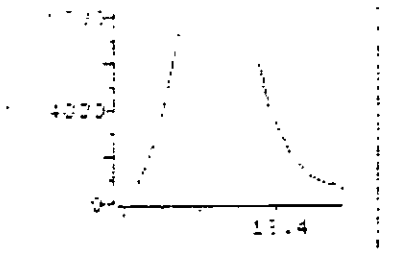


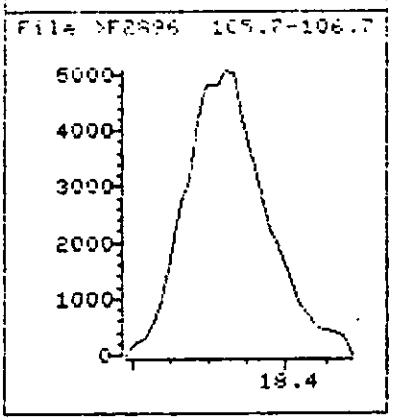
Data File: >F2896::06 Quant Output File: ^F2896::07
Name: BALS 10126-8 100ULX Instrument ID: V6
Misc: V6 C01 5UL IS/S 4.08G/10ML 100891 UCC-SB-Ø-6-18-2
Quant Time: 911011 06:29 Quant ID File: MOBID6::MT
Injected at: 911011 06:02 Last Calibration: 910814 09:37
Last Ocal Time: 911010 22:48

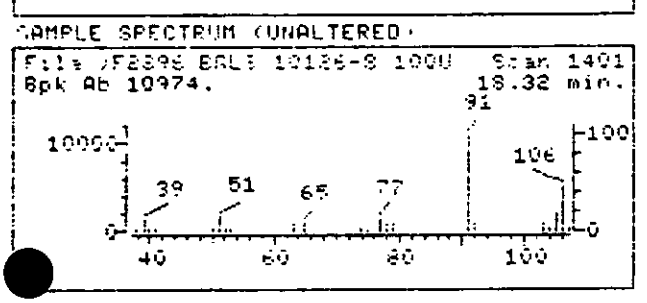
VF 10/23/91

Compound No : 40
Compound Name : C240 Ethylbenzene
Scan Number : 1266
Retention Time: 16.75 min.
Quant Ion : 106.0
Area : 23098
Concentration : 6.62 UG/L
q-value : 97









Data File: >F2896::D6 Quant Output File: ^F2896::D?
Name: BALS 10126-8 100ULX Instrument ID: U6
Misc: U6 C01 5UL IS/S 4.08G/10ML 100891 UCC-SB-~~X~~-6-18-2
Quant Time: 911011 06:29 Quant ID File: MOBID6::MT
Injected at: 911011 06:02 Last Calibration: 910814 09:37
Last Qcal Time: 911010 22:48

10/23/91

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1401
Retention Time: 18.32 min.
Quant Ion : 106.0
Area : 37141
Concentration : 9 ~~.32~~ UG/L
q-value : 90

43.99

10-16-91

JJ 101191

AC 10-16-91

133 AC 10-16-91

Sample: B-LE 101Oe-3 1000L

Concentration: [illegible] UG/L In Sample: 4.0Gm [illegible] Analyst: REP 10/15

UCC-SB-18-2.

# Scan	U	C	Concentration In Sample UG/L	CAS #	Compound
1 819.			~~15.~~ 1968	~~592-27-8~~	~~Heptane, 2-methyl-~~ C_8H_{18} isomer ✓
2 845.			~~11.~~ 4353	~~589-81-1~~	~~Heptane, 3-methyl~~ ~~Unknown~~ C_8H_{18} isomer
3 940.			~~20.~~ 2460	111-65-9	Octane (OCT) ✓
4 1096.			~~5.4~~ 664.2	~~2678-91-7~~	~~Cyclohexene, ethyl-~~ ~~Unknown alkane~~ C_8H_{16} isomer
5 1692.			~~9.9~~ 1218	~~111-84-2~~	~~Nonane~~ ~~Unknown alkane~~ $C_{10}H_{22}$ isomer
6 1723.			~~9.9~~ 1218	~~815-24-7~~	~~3-Pentanone, 2,2,4,4-tetramethyl-~~ Unknown
7 1779.			~~9.6~~ 1181	~~611-14-3~~	~~Benzene, 1-ethyl-2-methyl-~~ ethylmethylbenzene isomer C_9H_{12} isomer

AC 10-16-91

#	Area	Cent.	Int. Sec.	PI	PmT	Mass	Height	Mz Analyzed (Da)
1	89	1	2	11.49	1.2e4	3733e4.	74810.	15.427
2	91	6	2	1.18-	1.702	09020-.	24?10.	13.6??
3	95	0	3	12.??	.795	4?137?.	?e846.	20.??
4	?1	11	3	1?.?.	.??-	1?1?9?.	1e?e?.	9.?10
5	70	8	3	21.71	1.333	203379.	27?95.	9.?46
6	81	?	3	22.07	1.396	201716.	26851.	9.869
7	56	33	3	22.73	1.395	197233.	26563.	9.646

[illegible]

[illegible]

[illegible]

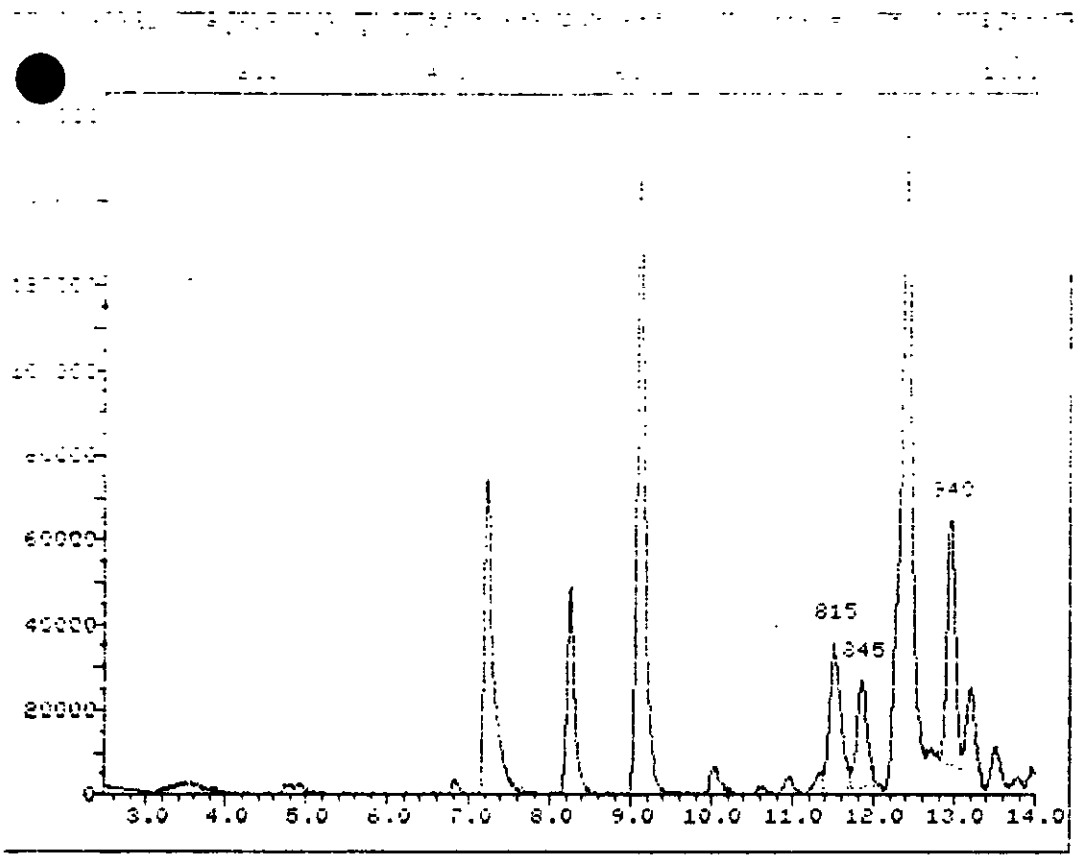
[illegible]

#	Name		Concentration		Flag	
	Q ions	% area	RRatio	RIC scan	RIC area	% Est. RIC
1	C[0] Bromochloromeeth		50.000	UG/L	OK	
	448.	91661.	6.997	448.	570064.	94.911
2	C[10] 1,4-Difluorobenz		50.000	UG/L	OK	
	609.	441858.	2.300	609.	1014653.	99.851
3	C[20] D5-Chlorobenzen		50.000	UG/L	OK	
	1227.	348220.	3.615	1227.	1022369.	81.221

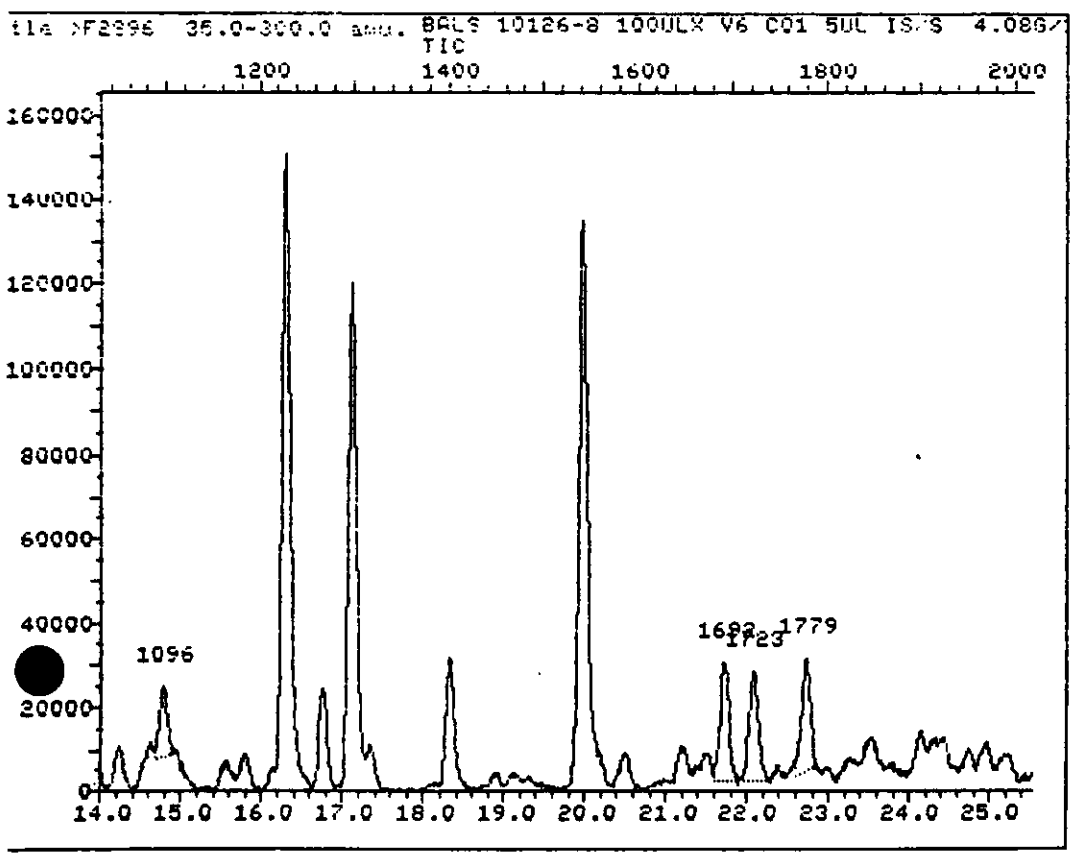
[illegible]eting peaks from INT file: VDIR87
[illegible]imum area: 10 % of area of closest Int. Std.
Number of peaks: 18
Number of peaks remaining: 17

[illegible]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: 17
Number of peaks remaining: 7

eleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 7
[illegible]ximum number of peaks > number of peaks.


815
845
940
3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0

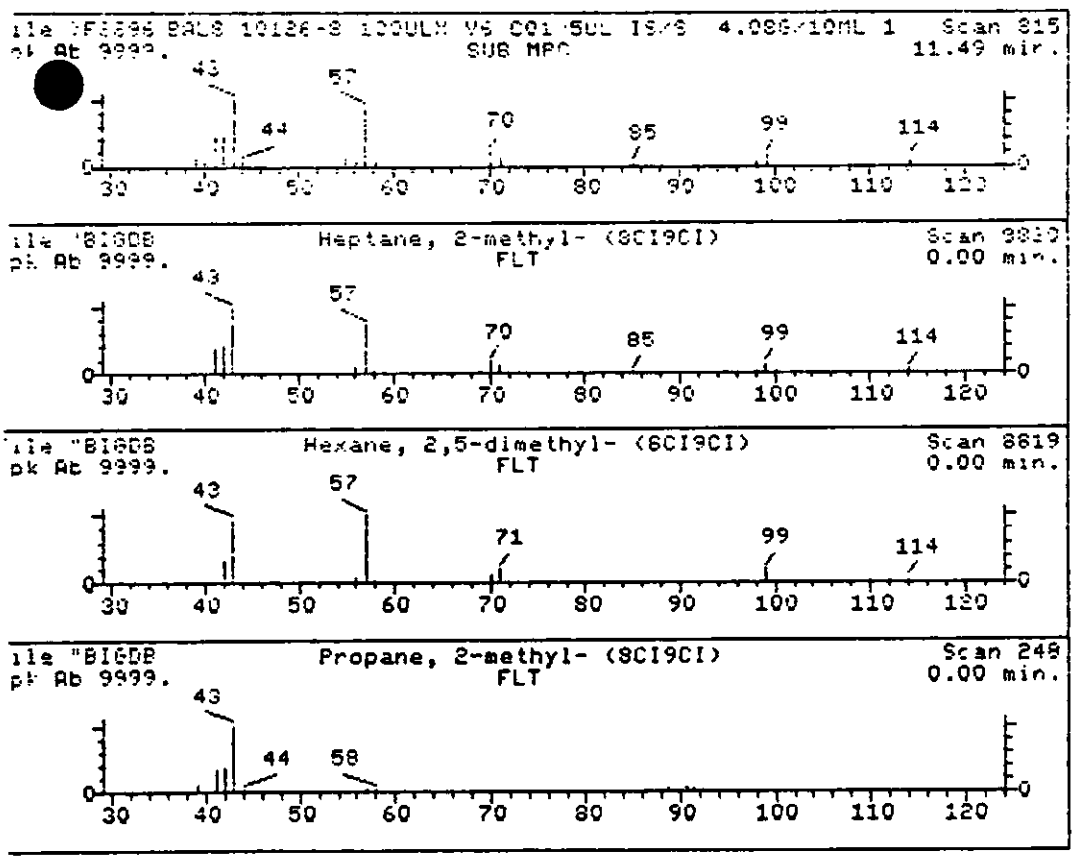
VCC - SB - C - 18-2.


TIC
1200 1400 1600 1800 2000
1096
1683
1723
1779
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 Name: [illegible] Spectrum #: 815
Search speed: 2 Tuning option: 8 No. of ion ranges searched: 48

	Prob.	CAS #	CON #	FORT	M	DF	#PUB	TILT	%	CON	C_I	P_IN
1.	89*	592278	8820	"BIGDB	71	22	2	0	100	1	66	50
2.	52*	592132	8819	"BIGDB	38	52	2	0	79	17	20	19
3.	25*	75285	248	"BIGDB	27	42	0	0	100	49	7	19
4.	24	6898711	3662	"BIGDB	37	48	2	0	70	42	8	12
5.	15*	7493595	3873	"BIGDB	20	51	2	0	100	59	3	13
6.	11*	762629	1183	"BIGDB	26	50	3	0	82	64	2	13

UCC-SB-C-18-2



✓ JD 101191

C_8H_{18} isomer

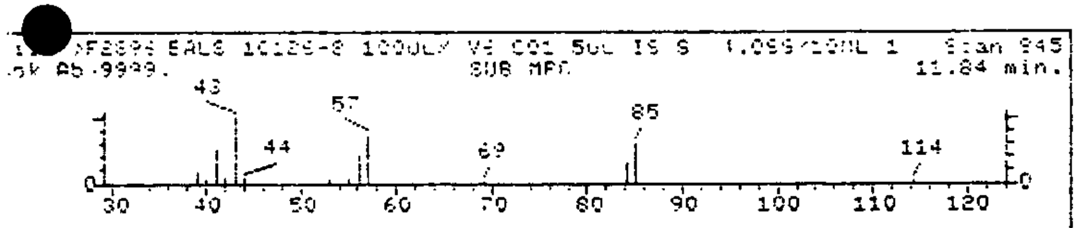
RL

Ethanone, 1-cyclopropyl- (9CI) 84 C_5H_8O

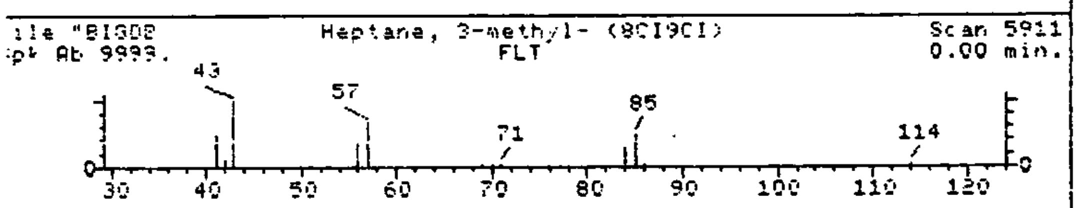
Search speed: 2 Tilting option: 5 No. of ion ranges searched: [illegible]

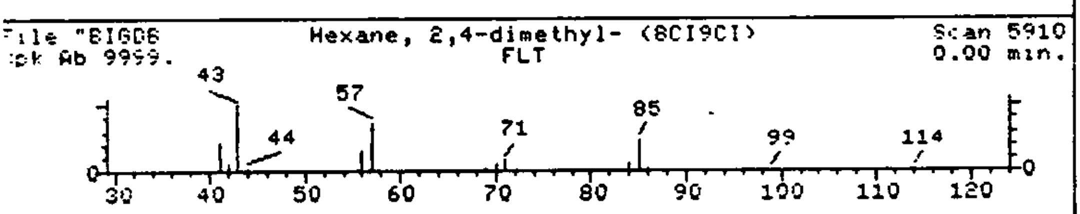
	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IN
1.	87*	589811	5911	"BIGDB	55	36	2	0	100	5	63	41
2.	70*	589435	5910	"BIGDB	35	63	3	0	100	7	42	13
3.	24*	619998	5913	"BIGDB	22	68	3	0	100	45	8	12
4.	20*	691372	994	"BIGDB	29	56	3	0	67	53	5	13
5.	20*	34375898	5939	"BIGDB	20	60	2	0	94	55	5	13
6.	15*	765435	5685	"BIGDB	24	56	3	0	83	60	3	12

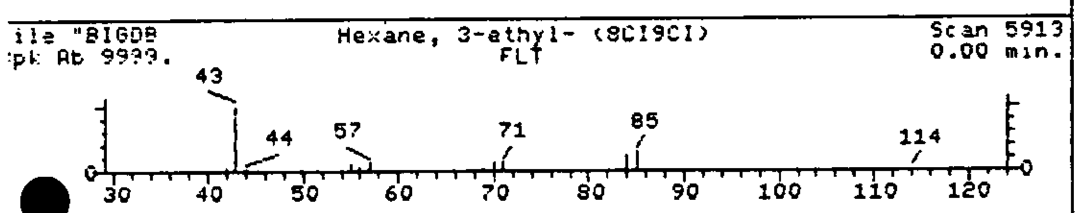
UCC-SB-C-18-2



✓ C_8H_{18} isomer
~~Unknown~~
JG 101191
RJ 10-16-91







c. Ethanone, 1-(3-ethylphenyl)- (9CI)

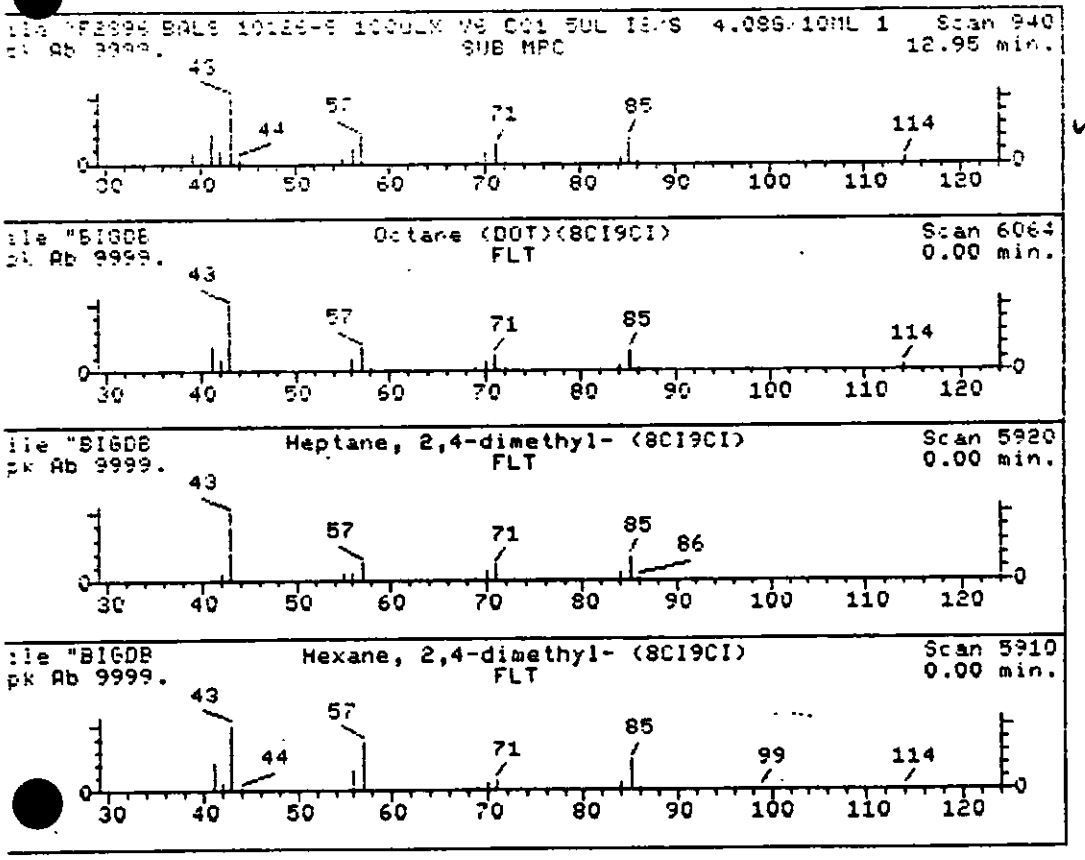
114 C10H12O

Spectrum #: 940

Search speed: 2 Tuning option: S No. of ion ranges searched: 2

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	95*	111659	6064	"BIGDB	81	12	1	0	91	0	72	93
2.	60	2213332	5920	"BIGDB	49	43	1	0	92	15	30	18
3.	49*	589435	5910	"BIGDB	46	52	2	0	66	24	22	21
4.	44	591764	6010	"BIGDB	45	41	2	0	99	23	17	15
5.	40*	619998	5913	"BIGDB	34	56	2	0	100	28	14	17
6.	32*	17257817	5933	"BIGDB	36	38	2	0	96	37	10	18

UCC-SB-C-18-2



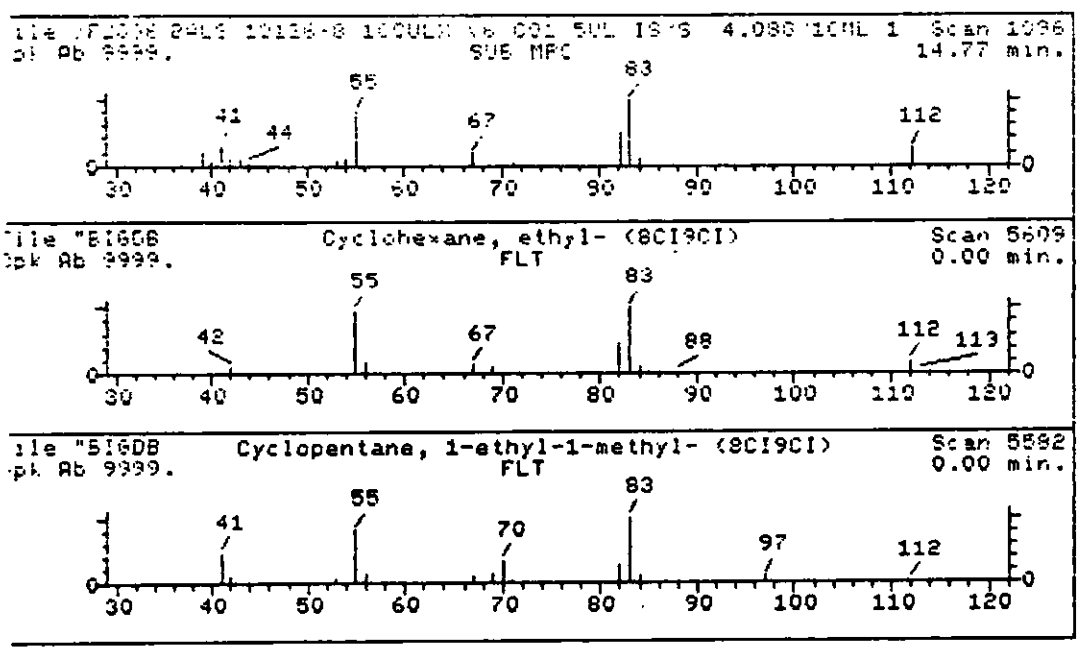
JG 101191

Search speed: 2 Tuning option: 8 No. of ion ranges searched: 7

	Comp.	Lab #	Inj #	Name	R	Q	#-Lib	TIC T	%	Conc	C_I	I_I
1.	80*	1678917	5509	"BIGDB	37	82	3	0	84	11	77	17
2.	82*	1678906	5582	"BIGDB	27	77	3	0	98	19	20	13

UCC - SB - C - 18 - 2

C_8H_{16} isomer AL 10-16-91



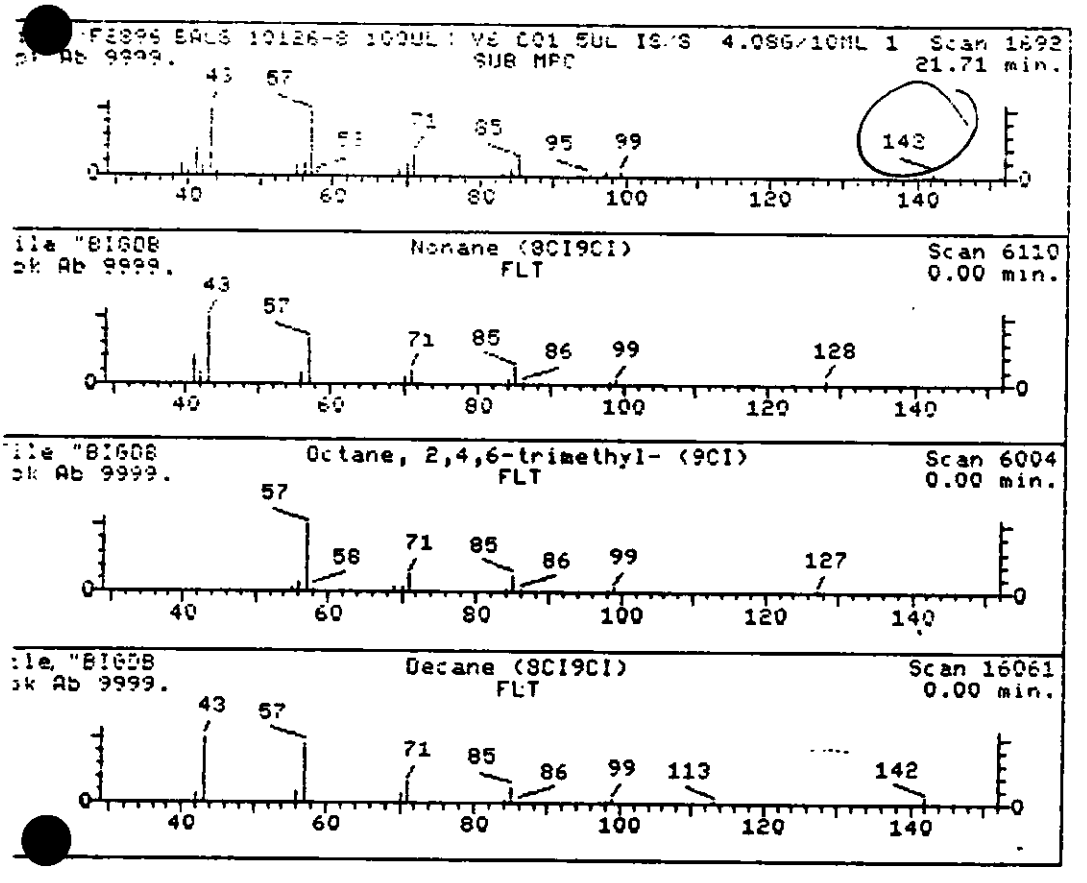
unknown alkane JG 101191

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. Decane, 2,4-dimethyl- (9CI9CI)

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

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70	111842	6110	"BIGDB	52	44	2	0	97	8	42	14
2.	70	62016379	6004	"BIGDB	43	42	2	0	94	8	42	14
3.	67*	124185	16061	"BIGDB	63	37	3	1	100	11	34	26
4.	52*	1072168	8726	"BIGDB	28	67	3	0	100	17	20	13
5.	52*	17301949	3768	"BIGDB	25	75	3	0	94	20	20	13
6.	52	1002171	6094	"BIGDB	50	42	2	0	80	20	20	16

UCC - SB - C - 18-2



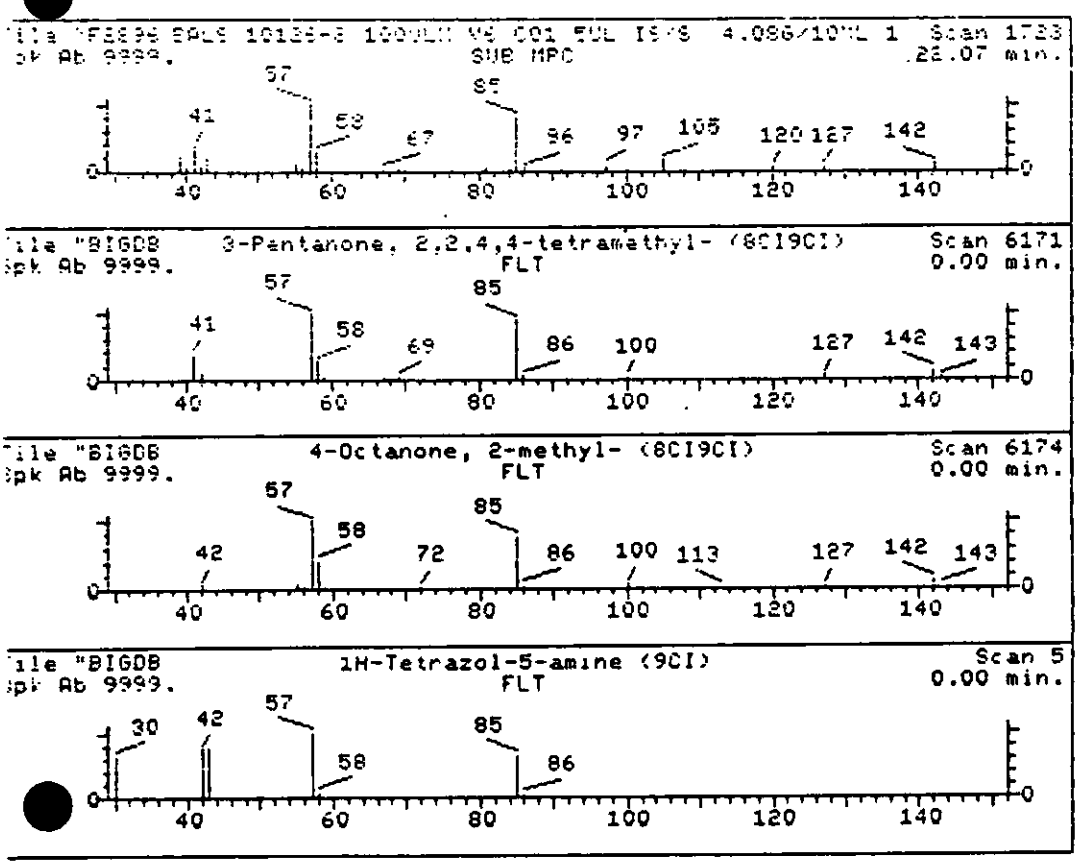
$C_{10}H_{22}$ "Isomer" R 10-16-91
unknown
alkane
JG 10/09/91

6. 2-Pyrrolidinone (8CI9CI)

Search file: [illegible] Spectrum #: [illegible]
Search speed: 2 Tilting option: S No. of ion ranges searched: 3

	Prob.	CAS #	CON #	ROOT	K	DK	#-LG	TILT	%	CON	C_I	P_IV
1.	81*	815247	6171	"BIGDB	61	32	2	0	83	7	53	46
2.	76*	7492389	6174	"BIGDB	48	44	2	0	72	9	45	28
3.	42*	4418615	5	"BIGDB	21	104	2	0	100	22	17	13
4.	25*	108838	6169	"BIGDB	28	71	2	0	96	50	7	14
5.	20*	3002231	6172	"BIGDB	26	69	3	0	80	51	5	13
6.	19*	616495	5953	"BIGDB	25	66	2	0	80	59	3	14

UCC - SB-C-18-2



Unknown
JB 10119 (

[illegible] / [illegible] / [illegible] - Benz

A 10/16/91

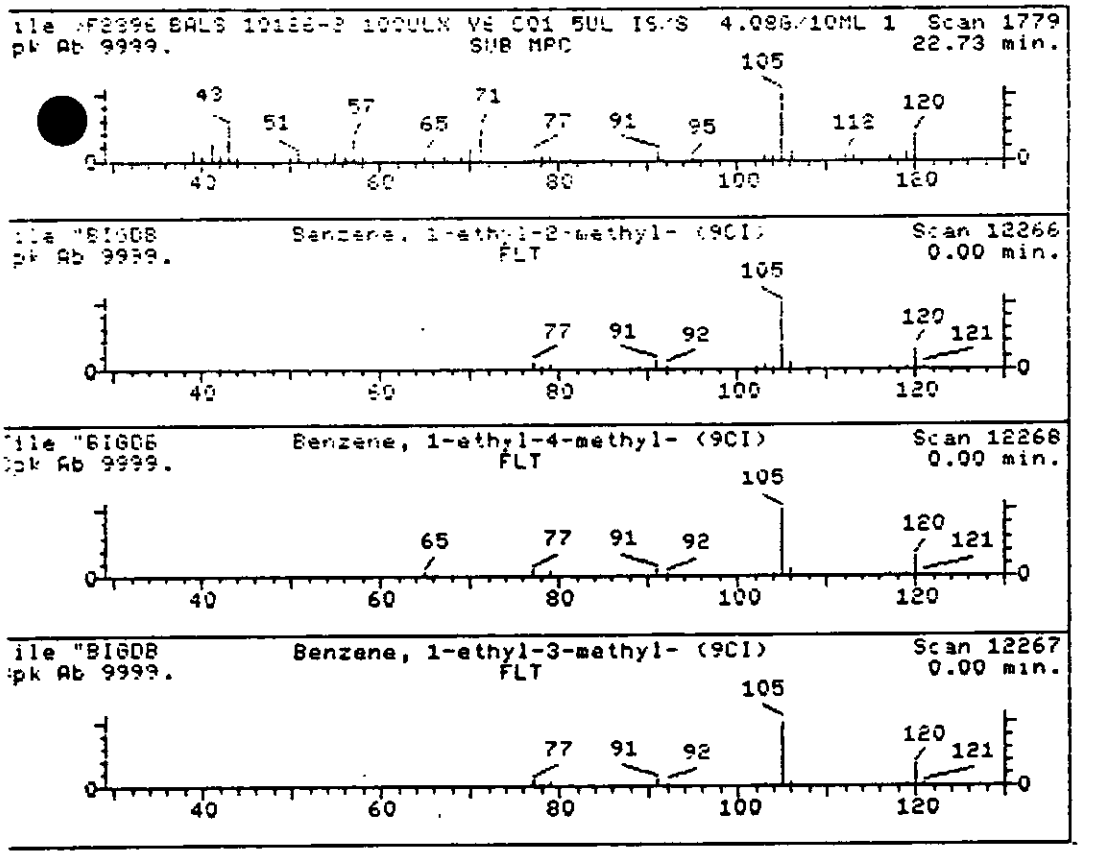
[illegible]. Benzene, 1-methyl-ethyl- [illegible]

Sample File: [illegible] Spectrum #: [illegible]

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

	Prob.	CAS #	CON #	POOL	K	DK	#FLG	TILT	%	[illegible]	[illegible]	[illegible]
1.	56*	611143	12266	"BIGDB	55	30	2	0	100	33	22	41
2.	56*	622968	12269	"BIGDB	55	30	2	0	100	33	22	41
3.	56*	620144	12267	"BIGDB	55	32	2	0	100	32	22	41
4.	18*	98828	12259	"BIGDB	57	30	2	-2	100	59	4	26

UCC - SB-18-2



Cq Hazlemer

JG 101191

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

10-3-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2735

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. _____ Date Analyzed: 10/05/91

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	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.

10-3-QA1

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: 10126-10

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2735

Level: (low/med) LOW Date Received: 10/04/91

% Moisture: not dec. ____ Date Analyzed: 10/05/91

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 Odel'ed

P-100591-V6A

NC

624-A

>F2732

Clear

Reduced by : JR Date: 10/6/91 Data File: F2738
Reviewed by: _____ Date: _____ Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BALSAM 10126-10 5ML.
Misc : V6, CH#02, 5UL IS/S, UCC-1073-0A1
Injected : 10/05/91 16:46 Units: UG/L
Analyst: KERYLYNN Run Factor: 1.000
ID File: MOBID6 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	.2327	93.1	76 114
CS05 D8-Toluene	.2500	.2416	96.6	88 110
CS10 Bromofluorobenzene	.2500	.2527	101	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
248	3.724	(3.7) 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
		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: `F2778 Page: 2
Sample: B4LSAM 1012e-10 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: F2735::Da Injected at: 16:46 10/05/91
Quant'd : 17:14 10/05/91
ID File : MOBIO6::MT Calibrated : 09:37 08/14/91

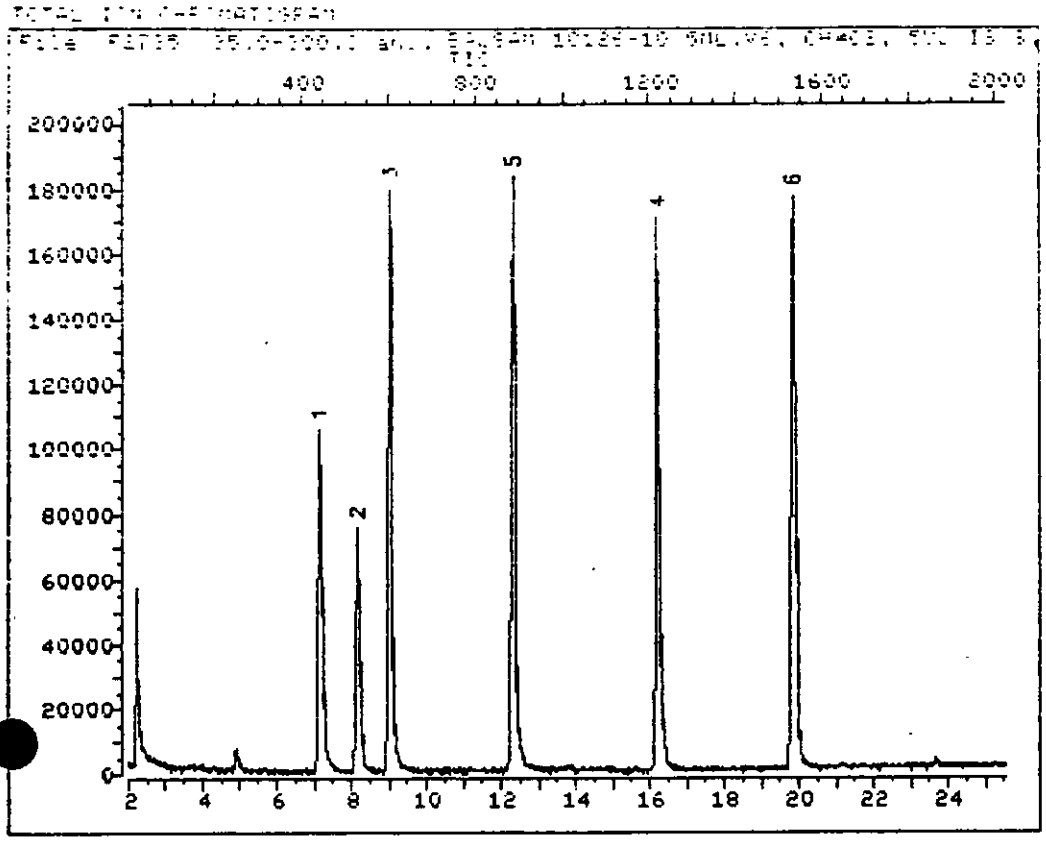
	Compound	- R.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.13	7.14	.01	128.0	94471	1.0000	50.00
2)	C010 Chloromethane	2.62	0.00	--	50.0	0	1.2796	0.00
3)	C020 Vinyl Chloride	2.76	0.00	--	62.0	0	1.2103	0.00
4)	C015 Bromomethane	3.15	0.00	--	94.0	0	1.0877	0.00
5)	C025 Chloroethane	3.28	0.00	--	64.0	0	.7092	0.00
6)	C045 1,1-Dichloroethene	4.23	0.00	--	96.0	0	1.3313	0.00
7)	C035 Acetone	4.30	0.00	--	43.0	0	.2589	0.00
8)	C040 Carbon Disulfide	4.53	0.00	--	76.0	0	3.9189	0.00
9)	C030 Methylene Chloride	4.86	4.87	.00	84.0	11642	1.6545	3.72
10)	CXXX Tert-butyl alcohol	5.03	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.24	0.00	--	96.0	0	1.6464	0.00
12)	C055 Cis-1,2-dichloroethe	6.73	0.00	--	96.0	0	1.8854	0.00
13)	CXXX Methyl tert-butyl et	5.25	0.00	--	73.0	0	2.9749	0.00
14)	C050 1,1-Dichloroethane	5.84	0.00	--	63.0	0	3.1591	0.00
15)	C060 Chloroform	7.27	7.28	.01	83.0	3821	3.7242	.54
16)	C065 1,2-Dichloroethane	8.29	0.00	--	62.0	0	2.1732	0.00
17)	C110 2-Butanone	6.76	0.00	--	72.0	0	.1512	0.00
18)	CS15 D4-1,2-dichloroethan	8.15	8.16	.01	65.0	151603	1.7243	46.53
19)	*CI10 1,4-Difluorobenzene	9.00	9.01	.02	114.0	516954	1.0000	50.00
20)	C125 Vinyl Acetate	5.92	0.00	--	43.0	0	.6181	0.00
21)	C115 1,1,1-Trichloroethan	7.60	0.00	--	97.0	0	.5735	0.00
22)	C120 Carbon Tetrachloride	7.90	0.00	--	117.0	0	.4757	0.00
23)	C165 Benzene	8.28	0.00	--	78.0	0	1.0014	0.00
24)	C150 Trichloroethene	9.54	0.00	--	130.0	0	.4246	0.00
25)	C140 1,2-Dichloropropane	10.02	0.00	--	63.0	0	.4199	0.00
26)	C130 Bromodichloromethane	10.64	0.00	--	83.0	0	.6324	0.00
27)	C175 2-Chloroethylvinylet	11.37	0.00	--	63.0	0	.2024	0.00
28)	C143 Cis-1,3-Dichloroprop	11.68	0.00	--	75.0	0	.6252	0.00
29)	C172 Trans-1,3-dichloropr	13.09	0.00	--	75.0	0	.4986	0.00
30)	C160 1,1,2-Trichloroethan	13.56	0.00	--	97.0	0	.3453	0.00
31)	C155 Dibromochloromethane	14.59	0.00	--	129.0	0	.5216	0.00
32)	C180 Bromoform	18.79	0.00	--	173.0	0	.3118	0.00
33)	*CI20 D5-Chlorobenzene	16.18	16.18	.00	117.0	401206	1.0000	50.00
34)	CS05 D8-Toluene	12.30	12.31	.01	98.0	491967	1.2690	48.31
35)	C205 4-Methyl-2-pentanone	12.06	0.00	--	43.0	0	.4176	0.00
36)	C230 Toluene	12.47	12.46	.01	92.0	1330	.9244	.18
37)	C210 2-Hexanone	14.27	0.00	--	43.0	0	.3022	0.00
38)	C220 Tetrachloroethene	13.87	0.00	--	164.0	0	.4776	0.00
39)	C235 Chlorobenzene	16.27	0.00	--	112.0	0	1.1252	0.00
40)	C240 Ethylbenzene	16.65	0.00	--	106.0	0	.5495	0.00
41)	CXXX Xylenes (p)	17.02	0.00	--	106.0	0	.6626	0.00
42)	CXXX Xylenes (o)	18.21	0.00	--	106.0	0	.6522	0.00
43)	C245 Styrene	18.26	0.00	--	104.0	0	1.1452	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.44	0.00	--	83.0	0	.7090	0.00
45)	CS10 Bromofluorobenzene	19.84	19.84	.00	95.0	289799	.7147	50.53
46)	C335 Dichlorobenzene (m)	23.41	0.00	--	146.0	0	.8843	0.00
47)	C340 Dichlorobenzene (p)	23.72	0.00	--	146.0	0	.8083	0.00
48)	C350 Dichlorobenzene (o)	24.95	0.00	--	146.0	0	.8123	0.00

Internal Standard Comparison

Sample: F2735 Date injected: 10/05/91 Standard: F2729 ✓

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	94471	82626	114.3
CI10 1,4-Difluorobenzene	516954	439106	117.7
CI20 D5-Chlorobenzene	401206	330996	121.2

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



Data File: >F2735::D6 Quant Output File: ^F2735::D7
Name: BALSAM 10126-10 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S, UCC-10/3-QA1

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911005 13:23

Operator ID: KERYLYNN
Quant Time : 911005 17:14
Injected at: 911005 16:46

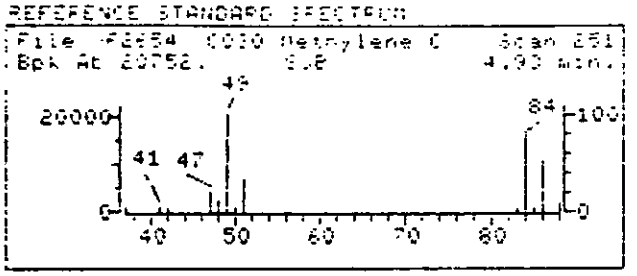
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911005 17:14
Output File: ^F2735::D7 Injected at: 911005 16:46
Data File: >F2735::D6 Dilution Factor: 1.00000
Name: BALSAM 10126-10 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S, UCC-10/3-QA1

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911005 13:23

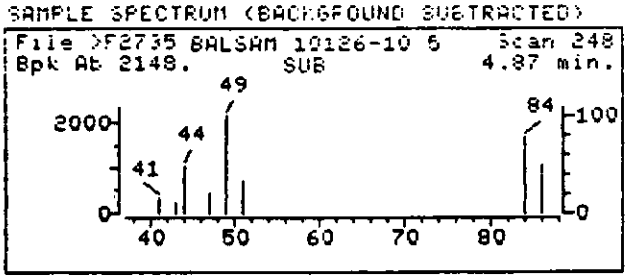
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.14	128.0	94471	50.00	UG/L	77
9)	C030 Methylene Chloride	4.87	84.0	11642	3.72	UG/L	84
15)	C060 Chloroform	7.28	83.0	3821	.543	UG/L	99
18)	CS15 D4-1,2-dichloroethane	8.16	65.0	151603	46.53	UG/L	91
19)	*CI10 1,4-Difluorobenzene	9.01	114.0	516954	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.18	117.0	401206	50.00	UG/L	100
[illegible]	CS05 D8-Toluene	12.31	98.0	491967	48.31	UG/L	95
36)	C230 Toluene	12.46	92.0	1330	.179	UG/L	79
45)	CS10 Bromofluorobenzene	19.84	95.0	289799	50.53	UG/L	74

* Compound is ISTD

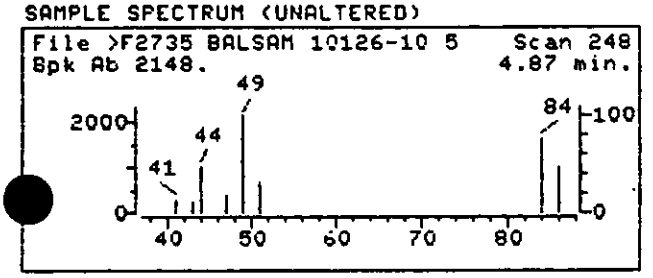
REFERENCE STANDARD SPECTRUM

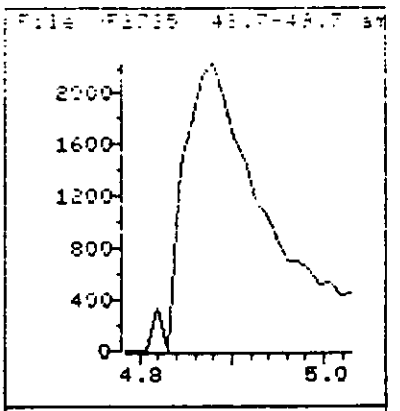


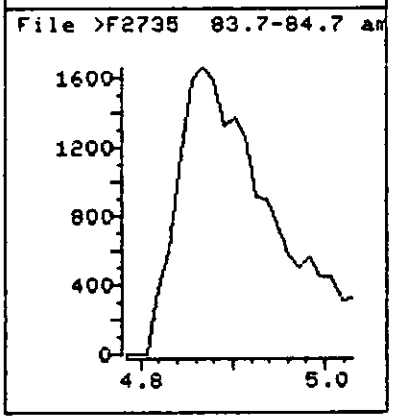
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)







Data File: >F2735::D6 Quant Output File: ^F2735::D7
Name: BALSAM 10126-10 5ML. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S, UCC-10/3-QA1
Quant Time: 911005 17:14 Quant ID File: MOBID6::MT
Injected at: 911005 16:46 Last Calibration: 910814 09:37
Last Qcal Time: 911005 13:23

Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 248
Retention Time: 4.87 min.
Quant Ion : 84.0
Area : 11642
Concentration : 3.72 UG/L
q-value : 84

IC Internal Standard Report

ata File: F2735

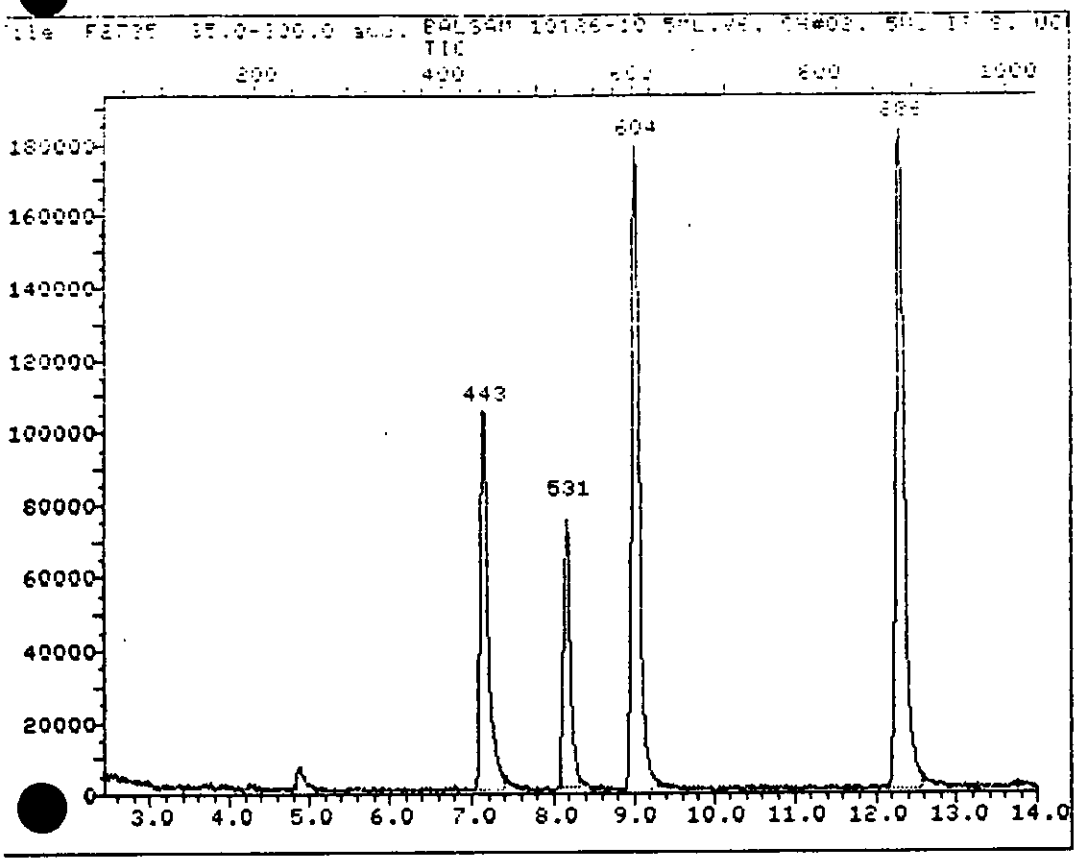
aximum seperation of PIC and Quan ion peaks: 3.
inimum RIC peak area as % of est. RIC area: 50.
aximum RIC peak area as % of est. RIC area: 200.

#	Name	Concentration		Flag	
1	CI01 Bromochlorometh	50.000	UG/L	Ok	
	443. 94471.	7.150	443.	680505.	100.750
2	CI10 1,4-Difluoroben	50.000	UG/L	Ok	
	604. 516954.	2.360	604.	1149020.	94.189
3	CI20 D5-Chlorobenzen	50.000	UG/L	Ok	
	1219. 401206.	3.818	1219.	1225309.	79.991

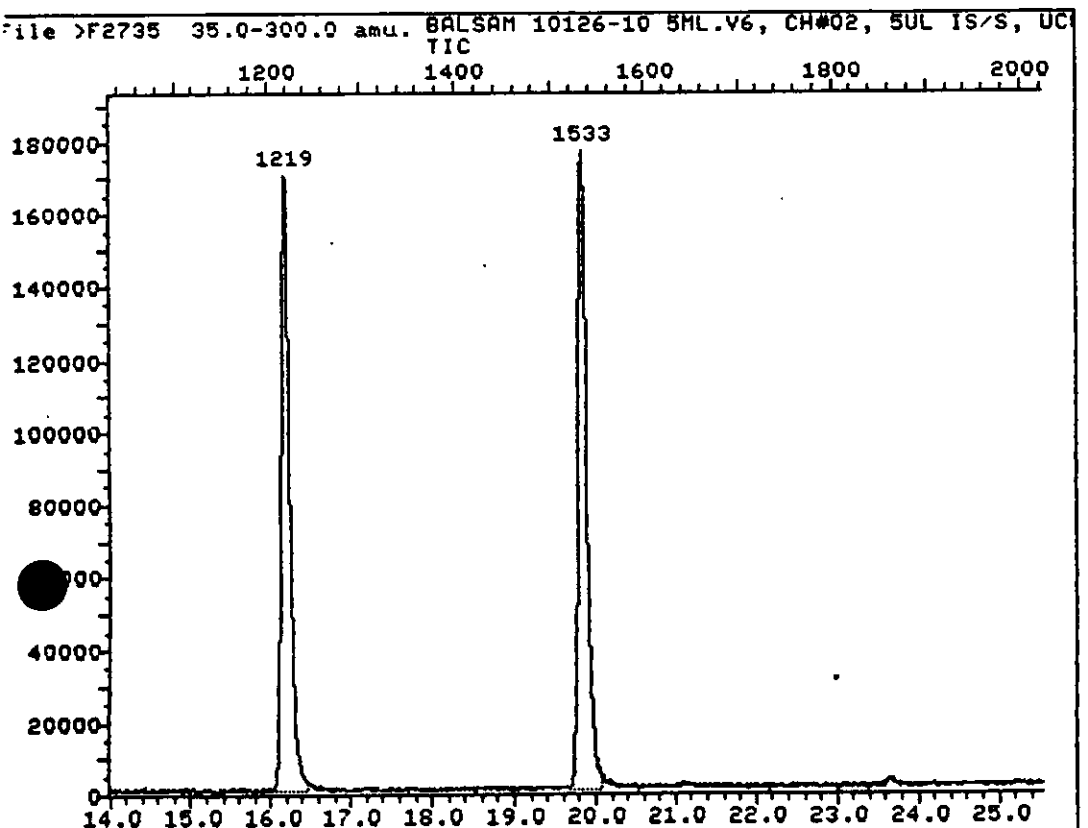
eleting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 6
Number of peaks remaining: 6

eleting 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

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


TIC
443
531
604
384
3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0

UCC - 10/3 - QA1


File >F2735 35.0-300.0 amu. BALSAM 10126-10 5ML.V6, CH#02, 5UL IS/S, UC
TIC
1219
1533
14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 23.0 24.0 25.0

Data Reduced by : JE Date: 10/6/91 Data File: F2??F
Data Reviewed by : _____ Date: _____

Ensecо TIC Report (page 1)

Sample: BALSAM 10126-10 5ML. Run Factor: 1.00
Conditions: V6, CH#02, 5UL IS/S, UCC-10/3- Analyst: KERYLYNN

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

UCC-10/3-QA1

No Unknowns

Data File: F273F

Exxon TIC Report (page 2)

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

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SB-B-14-3

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 10126-12

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2894

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 15 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	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	200	J
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	720	U
75-35-4	1,1-Dichloroethene	720	U
75-34-3	1,1-Dichloroethane	720	U
540-59-0	1,2-Dichloroethene (total)	720	U
67-66-3	Chloroform	720	U
107-06-2	1,2-Dichloroethane	720	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	720	U
56-23-5	Carbon Tetrachloride	720	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	720	U
78-87-5	1,2-Dichloropropane	720	U
10061-01-5	cis-1,3-Dichloropropene	720	U
79-01-6	Trichloroethene	720	U
124-48-1	Dibromochloromethane	720	U
79-00-5	1,1,2-Trichloroethane	720	U
71-43-2	Benzene	720	U
10061-02-6	trans-1,3-Dichloropropene	720	U
110-75-8	2-Chloroethylvinylether	1400	U
75-25-2	Bromoform	720	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	720	U
79-34-5	1,1,2,2-Tetrachloroethane	720	U
108-88-3	Toluene	720	U
108-90-7	Chlorobenzene	720	U
100-41-4	Ethylbenzene	720	U
100-42-5	Styrene	720	U
1330-20-7	Xylene (total)	340	J

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-B-14-3

Lab Name: ENSECO-ERCO Contract:

Lab Code: EERCO Case No.: 10126 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 10126-12

Sample wt/vol: 4.1 (g/mL) G Lab File ID: F2894

Level: (low/med) MED Date Received: 10/04/91

% Moisture: not dec. 15 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

NC

L- 100+11V6M
R- 101091V6B
7F2856
clean

Reviewed by: RJ Date: 10/16/91 Page: 1

Enseco Mass Spectrometry
Target Compound Data Summary Sheet

Sample: BBLS 10126-12 100ULX
Misc : V6 L15 50UL 15/5 4.066/10ML 100891 GCC-SB-B-14-3
Injected : 10/11/91 04:56 Units: UG/KG
Analyst: KERYLYNN Run Factor: 123.000
ID File: MUB1U6 Surrogate vol: .5UU
Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	WC limits
C515 D4-1,2-dichloroethane	25.00	18.97	75.9	70 121
C505 D8-toluene	25.00	21.25	85.0	81 117
C510 Bromofluorobenzene	25.00	20.33	81.3	74 121

Target Compounds: MUB1U6

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	(3)	C055 Acetone
		BDL		C040 Carbon Disulfide
262	1.369	170	BRC	C030 Methylene Chloride
		BDL	J	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

JG 101191

Sample: BALS 10126-12 1000LX

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
1515	2.231	270 BRL	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)
1515	2.356	290 J BRL	C250 Xylenes (total)

Compound		Pred	Found	Dif	Ion	Area	Rf	Conc.
1)	*CI01 Bromochloromethane	7.29	7.33	.04	128.0	8515	1.0000	50.00
2)	C210 Chloromethane	2.71	0.00	--	50.0	0	1.0746	0.00
3)	C020 Vinyl Chloride	2.85	0.00	--	62.0	0	1.2700	0.00
4)	C010 Bromomethane	3.04	0.00	--	94.0	0	1.1471	0.00
5)	C025 Chloroethane	3.37	0.00	--	64.0	0	.7354	0.00
6)	C040 1,1-Dichloroethene	4.35	0.00	--	96.0	0	1.5714	0.00
7)	C035 Acetone	4.42	0.00	--	43.0	0	.2202	0.00
8)	C040 Carbon Disulfide	4.66	0.00	--	76.0	0	4.2994	0.00
9)	C030 Methylene Chloride	5.01	5.01	.00	84.0	4543	1.9489	1.37
10)	CXXX Tert-butyl alcohol	5.16	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.38	0.00	--	96.0	0	1.9080	0.00
12)	C055 Cis-1,2-dichloroethe	6.92	0.00	--	96.0	0	2.0414	0.00
13)	CXXX Methyl tert-butyl et	5.38	0.00	--	73.0	0	3.2861	0.00
14)	C050 1,1-Dichloroethane	6.01	0.00	--	63.0	0	3.5944	0.00
15)	C060 Chloroform	7.47	0.00	--	83.0	0	4.0227	0.00
16)	C065 1,2-Dichloroethane	8.50	0.00	--	62.0	0	2.2965	0.00
17)	C110 2-Butanone	6.93	0.00	--	72.0	0	.1243	0.00
18)	CS15 D4-1,2-dichloroethan	8.36	8.36	.00	65.0	119462	1.8492	37.93
19)	*CI10 1,4-Difluorobenzene	9.18	9.23	.05	114.0	472226	1.0000	50.00
20)	C125 Vinyl Acetate	6.06	0.00	--	43.0	0	.4990	0.00
21)	C115 1,1,1-Trichloroethan	7.80	0.00	--	97.0	0	.5573	0.00
22)	C120 Carbon Tetrachloride	8.09	0.00	--	117.0	0	.4441	0.00
23)	C165 Benzene	8.48	0.00	--	78.0	0	.9866	0.00
24)	C150 Trichloroethene	9.75	0.00	--	130.0	0	.4234	0.00
25)	C140 1,2-Dichloropropane	10.25	0.00	--	63.0	0	.3961	0.00
26)	C130 Bromodichloromethane	10.87	0.00	--	83.0	0	.5620	0.00
27)	C175 2-Chloroethylvinylet	11.59	0.00	--	63.0	0	.1602	0.00
28)	C143 Cis-1,3-Dichloroprop	11.91	0.00	--	75.0	0	.5458	0.00
29)	C172 Trans-1,3-dichloropr	13.34	0.00	--	75.0	0	.4248	0.00
30)	C160 1,1,2-Trichloroethan	13.79	0.00	--	97.0	0	.2976	0.00
31)	C155 Dibromochloromethane	14.86	0.00	--	129.0	0	.4414	0.00
32)	C180 Bromoform	19.09	0.00	--	173.0	0	.2534	0.00
33)	*CI20 D5-Chlorobenzene	16.40	16.43	.03	117.0	368044	1.0000	50.00
34)	CS05 D8-Toluene	12.52	12.54	.02	98.0	381915	1.2209	42.50
35)	C205 4-Methyl-2-pentanone	12.29	0.00	--	43.0	0	.3090	0.00
36)	C230 Toluene	12.69	0.00	--	92.0	0	.7974	0.00
37)	C210 2-Hexanone	14.49	0.00	--	43.0	0	.2092	0.00
38)	C220 Tetrachloroethene	14.11	0.00	--	164.0	0	.4080	0.00
39)	C235 Chlorobenzene	16.51	0.00	--	112.0	0	.9815	0.00
40)	C240 Ethylbenzene	16.89	16.87	.01	106.0	1030	.5010	.28
40)D	C240 Ethylbenzene	16.89	17.25	.36	106.0	10234	.5010	2.78
41)D	CXXX Xylenes (p)	17.26	16.87	.39	106.0	1030	.6233	.22
41)	CXXX Xylenes (p)	17.26	17.25	.01	106.0	10234	.6233	2.23
42)	CXXX Xylenes (o)	18.46	18.44	.02	106.0	2542	.5877	.59
43)	C245 Styrene	18.51	0.00	--	104.0	0	1.0250	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.70	0.00	--	83.0	0	.5339	0.00
45)	CS10 Bromofluorobenzene	20.12	20.07	.05	95.0	220477	.7366	40.66
46)	C335 Dichlorobenzene (m)	23.70	0.00	--	146.0	0	.8135	0.00
47)	C340 Dichlorobenzene (p)	24.02	0.00	--	146.0	0	.7418	0.00
48)	C350 Dichlorobenzene (o)	25.25	0.00	--	146.0	0	.7841	0.00

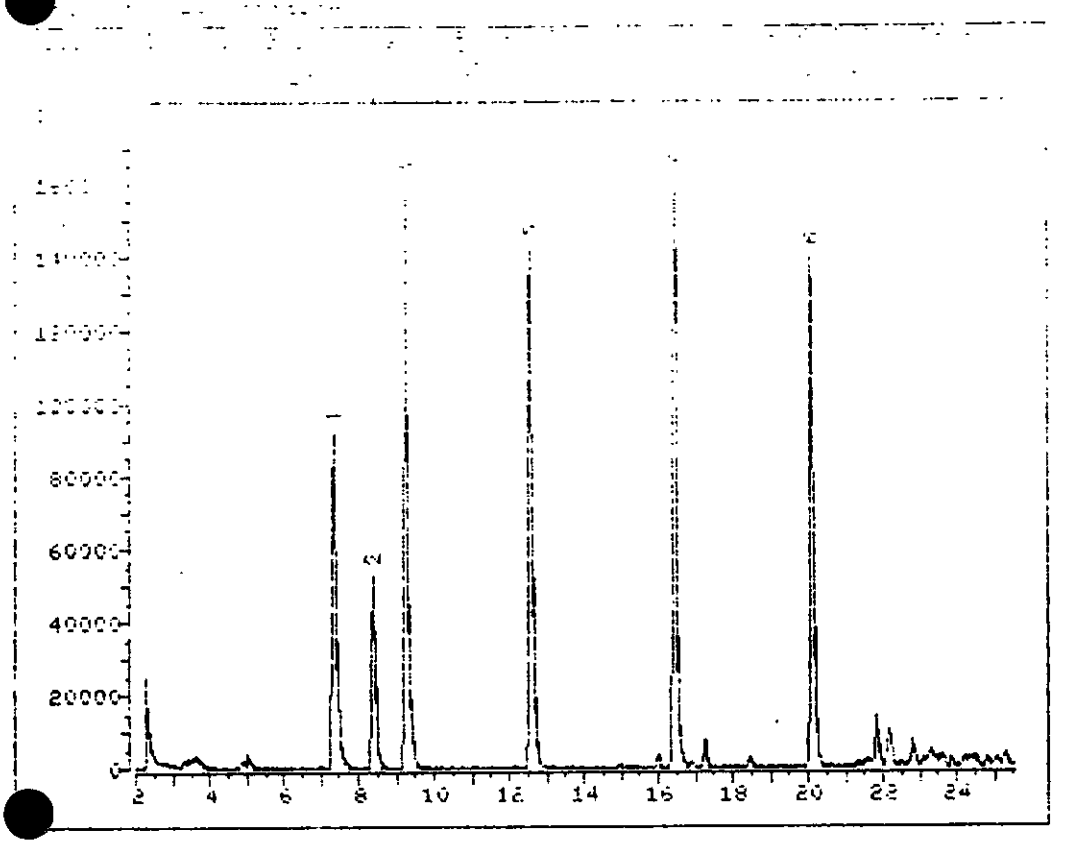
[illegible]

[illegible]

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

[illegible]

[illegible]



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Name: BALS 10126-12 100ULX Instrument ID: V6
Misc: V6 CIF 5UL IS/S 4.06G/10ML 100891 UCC-SB-B-14-3

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

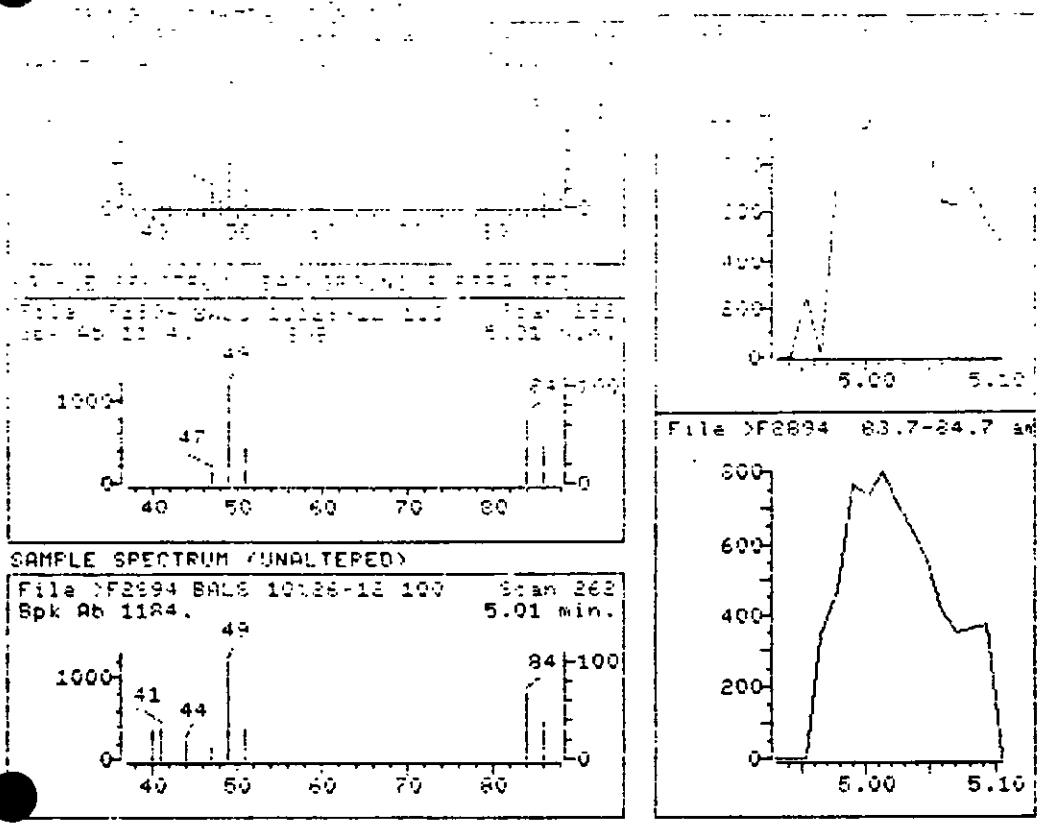
Operator ID: KERYLYNN
Quant Time : 911011 05:24
Injected at: 911011 04:56

[illegible]

File: [illegible]
Title: [illegible] VOLATILES: [illegible]
[illegible] Calibration: [illegible]   Last Qval Time: [illegible]

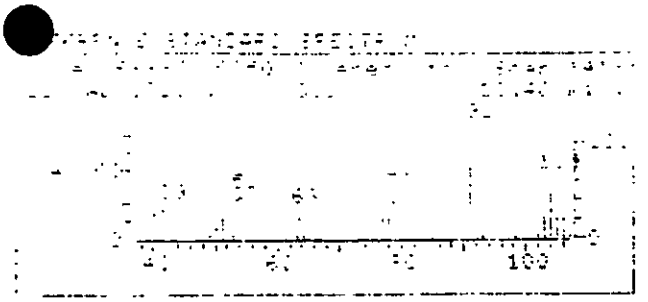
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.33	128.0	85150	50.00	UG/L	72
[illegible]	C030 Methylene Chloride	5.01	84.0	4543	1.37	UG/L	96
18)	CS15 D4-1,2-dichloroethane	8.36	65.0	119462	37.93	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.23	114.0	472226	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.43	117.0	368044	50.00	UG/L	100
34)	CS05 D8-Toluene	12.54	98.0	381915	42.50	UG/L	91
40)	C240 Ethylbenzene	16.87	106.0	1030	.279	UG/L	98
41)	CXXX Xylenes (p)	17.25	106.0	10234	2.23	UG/L	98
42)	CXXX Xylenes (o)	18.44	106.0	2542	.588	UG/L	97
[illegible]	CS10 Bromofluorobenzene	20.07	95.0	220477	40.66	UG/L	71
[illegible]	C250 Xylenes (total)	17.25	106.0	9922	2.36	UG/L	84

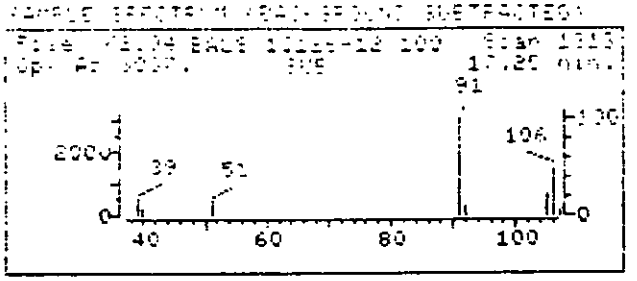
* Compound is ISTD

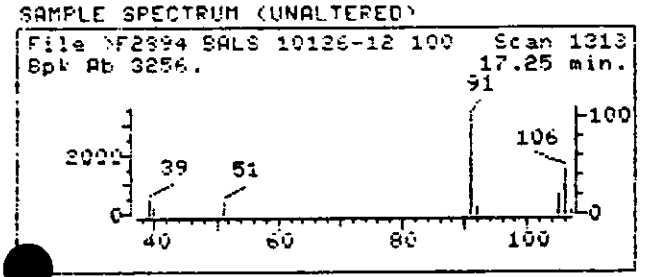


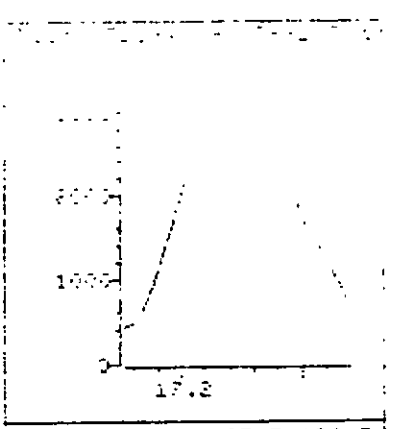
Data File: >F2894::D6 Quant Output File: ^F2894::D7
Name: BALS 10126-12 100ULX Instrument ID: V6
Misc: V6 C15 5UL IS/S 4.06G/10ML 100891 UCC-SB-B-14-3
Quant Time: 911011 05:24 Quant ID File: MOBID6::MT
Injected at: 911011 04:56 Last Calibration: 910814 09:37
Last Qcal Time: 911010 22:48

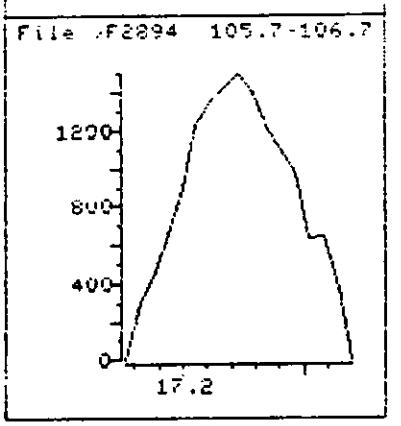
Compound No : 9
Compound Name : C030 Methylene Chloride
Scan Number : 262
Retention Time: 5.01 min.
Quant Ion : 84.0
Area : 4543
Concentration : 1.37 UG/L
q-value : 96











Data File: >F2894::06 Quant Output File: ^F2894::07
Name: BALS 10126-12 100ULX Instrument ID: V6
Misc: V6 C15 50UL IS/S 4.06G/10ML 100891 UCC-SB-B-14-3
Quant Time: 911011 05:24 Quant ID File: MOBID6::MT
Injected at: 911011 04:56 Last Calibration: 910814 09:37
Last Qcal Time: 911010 22:48

Compound No : 49
Compound Name : C250 Xylenes (total)
Scan Number : 1313
Retention Time: 17.25 min.
Quant Ion : 106.0
Area : 9922
Concentration : 2.36 UG/L
q-value : 84

Data Reduced by : JJ Date: 10/19/91 Data File: >F2894
Data Reviewed by : [illegible] Date: 10-16-91

Enseco TIL Report (page 1)

Sample: MALS 101X6-12 1000ULX Run Factor: 1.0
Conditions: V6 L15 5UL 15/5 4.0G5/10ML 10 Analyst: KERYLYNN

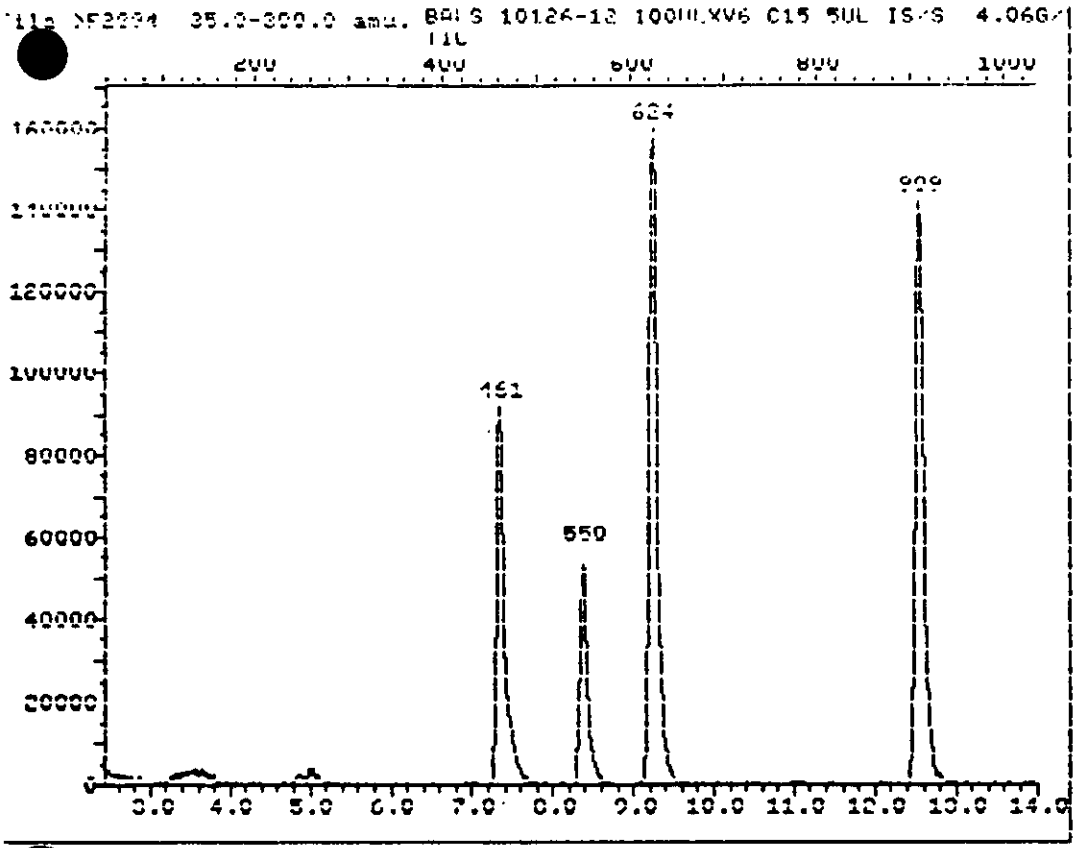
# Scan	Q	Concentration In Sample C (UG/KG)	CAS #	Compound

NO unknowns

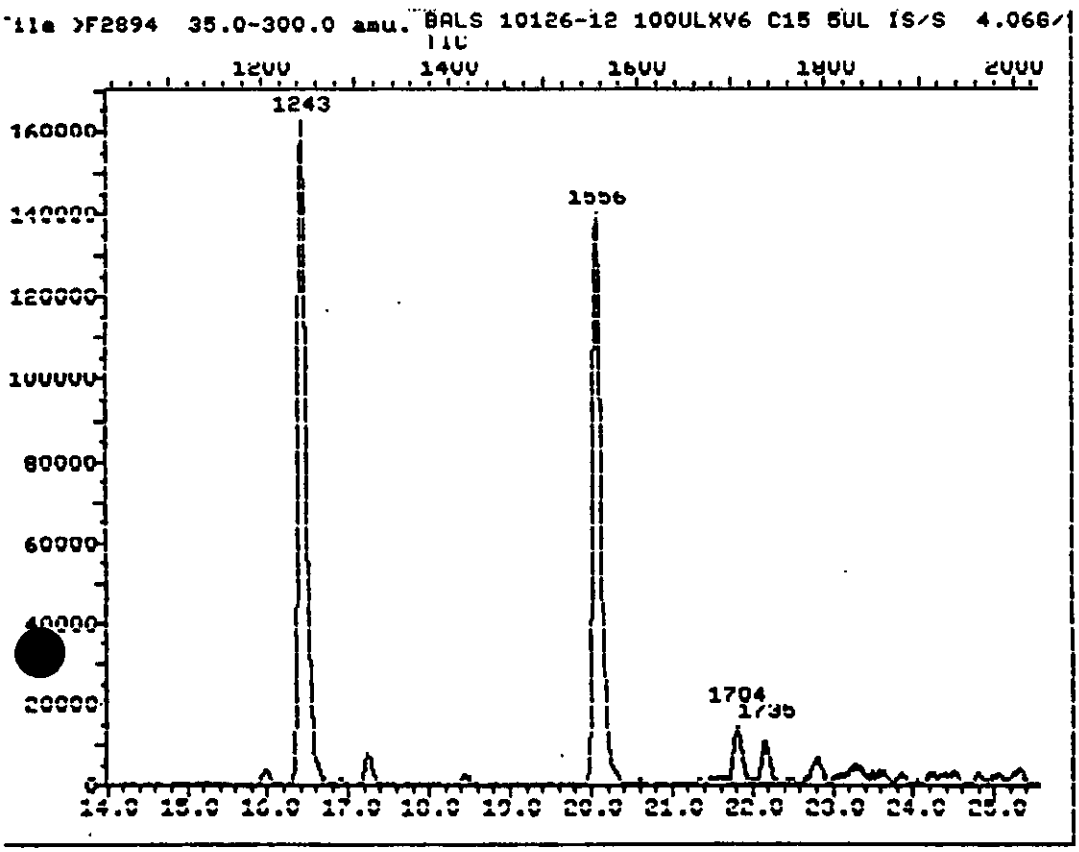
UCC-SB-B-14-3

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

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)



UCC-SB-B-14-3



Internal Standard Report

ata File: >F2894

aximum seperation of RIC and Quan Ion peaks: 5.
inimum RIC peak area as % of est. RIC area: 50.
aximum RIC peak area as % of est. RIC area: 200.

#	Name	Concentration		Flag	
Q scan	Q area	RQratio	RIC scan	RIC area	% Est. RIC
1	C101 Bromochlorometh	50.000	UG/L	Uk	
461.	R5150.	6.987	461.	629592.	105.822
2	C110 1,4-Difluoroben	50.000	UG/L	Uk	
624.	472226.	2.500	624.	1096639.	100.979
3	C120 D5-Chlorobenzen	50.000	UG/L	Uk	
1243.	568044.	5.615	1243.	1151410.	85.043

eleting peaks from INI file: VD1R/5
 imum area: 10 % of area of closest Int. Std.
 Number of peaks: 8
 Number of peaks remaining: 6

eleting target compounds from INI file: VD1R/5
 Minimum seperation of RIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 6
 Number of peaks remaining: 0

eleting all but largest peaks from INI file: VD1R/5
 Maximum number of peaks to keep: 15
 Number of peaks: 0
aximum number of peaks > number of peaks.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

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 = 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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

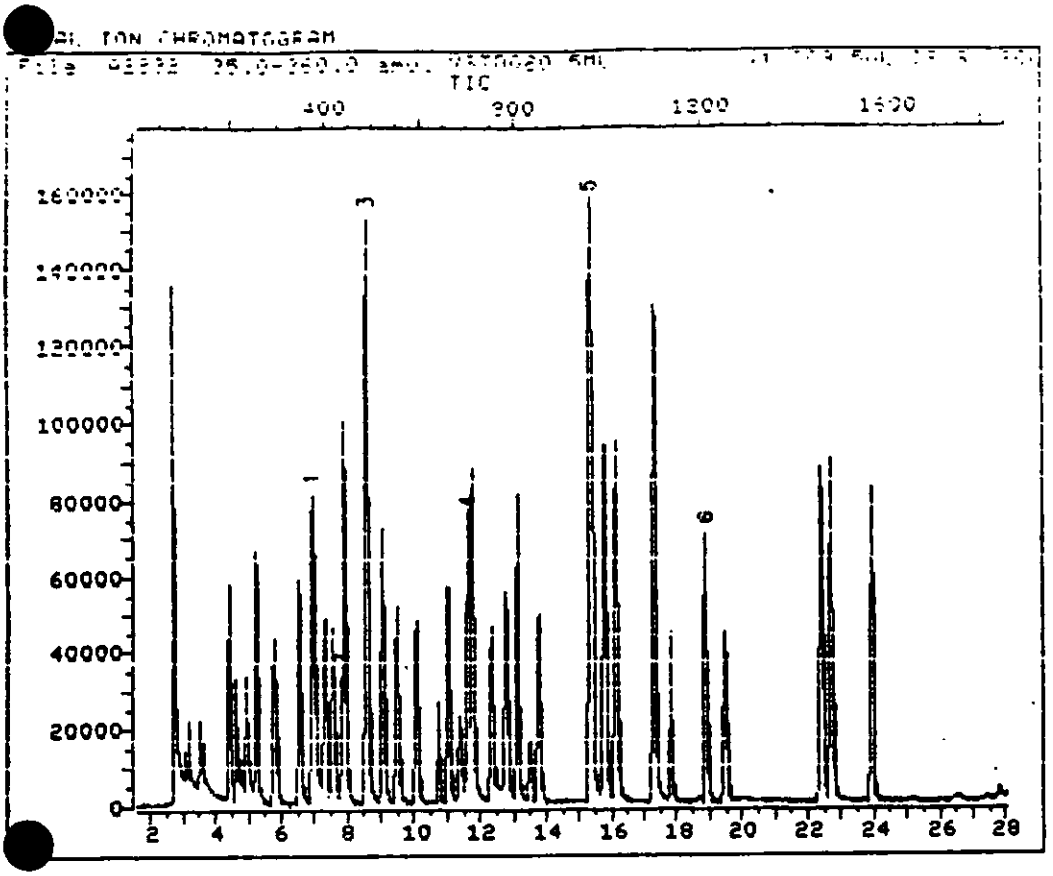
Instrument ID: V2 Calibration Date(s): 10/11/91 10/12/91

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 = 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		0.690	0.711	0.734	0.669	0.684	0.698	3.6
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		0.392	0.441	0.447	0.458	0.455	0.439	6.1
2-Chloroethylvinylether		0.181	0.199	0.224	0.217	0.277	0.220	16.4
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



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	98
42)	C225	1,1,2,2-Tetrachloroethan	19.47	1252	87071	20.86	UG/L	94

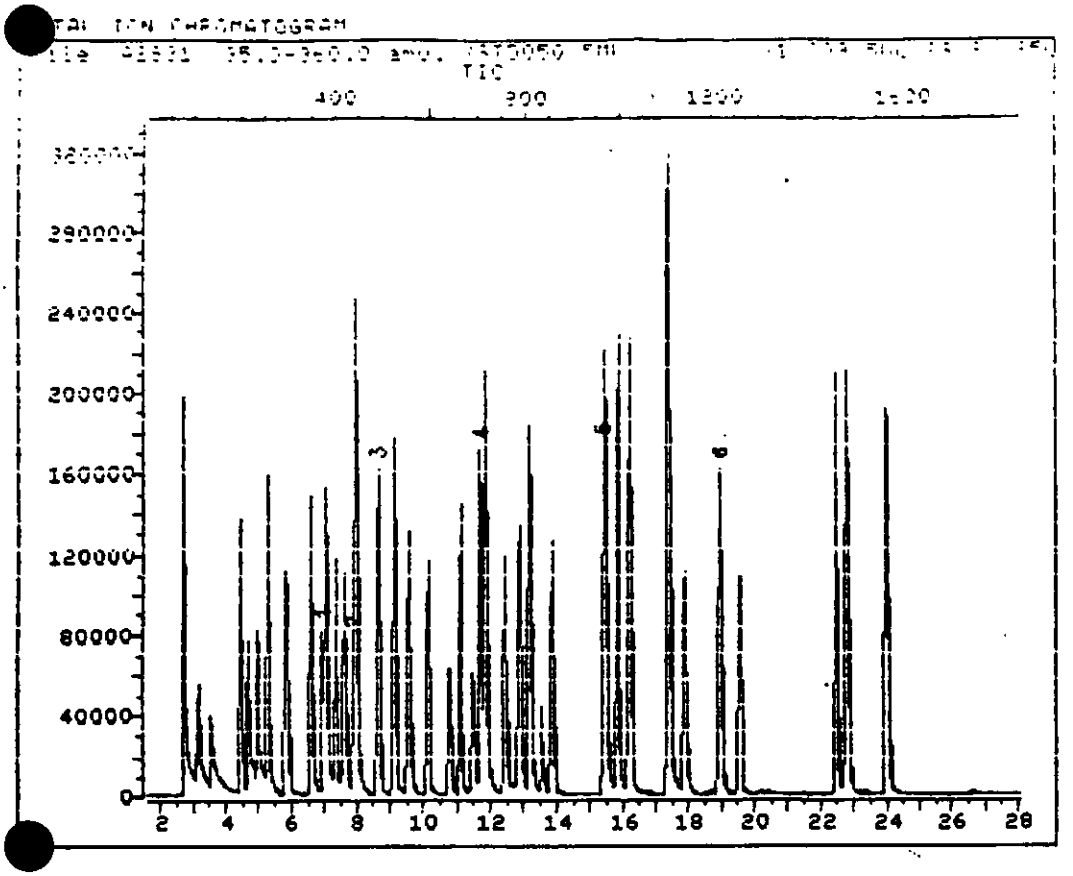
JJ 09/09/91

JJ 09/09/91

000191

		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::D7 Dilution Factor: 1.00000
Name: VSTD050 5ML
Misc: V1 C09 5UL IS/S 25UL/100ML VOA A,B,HSL

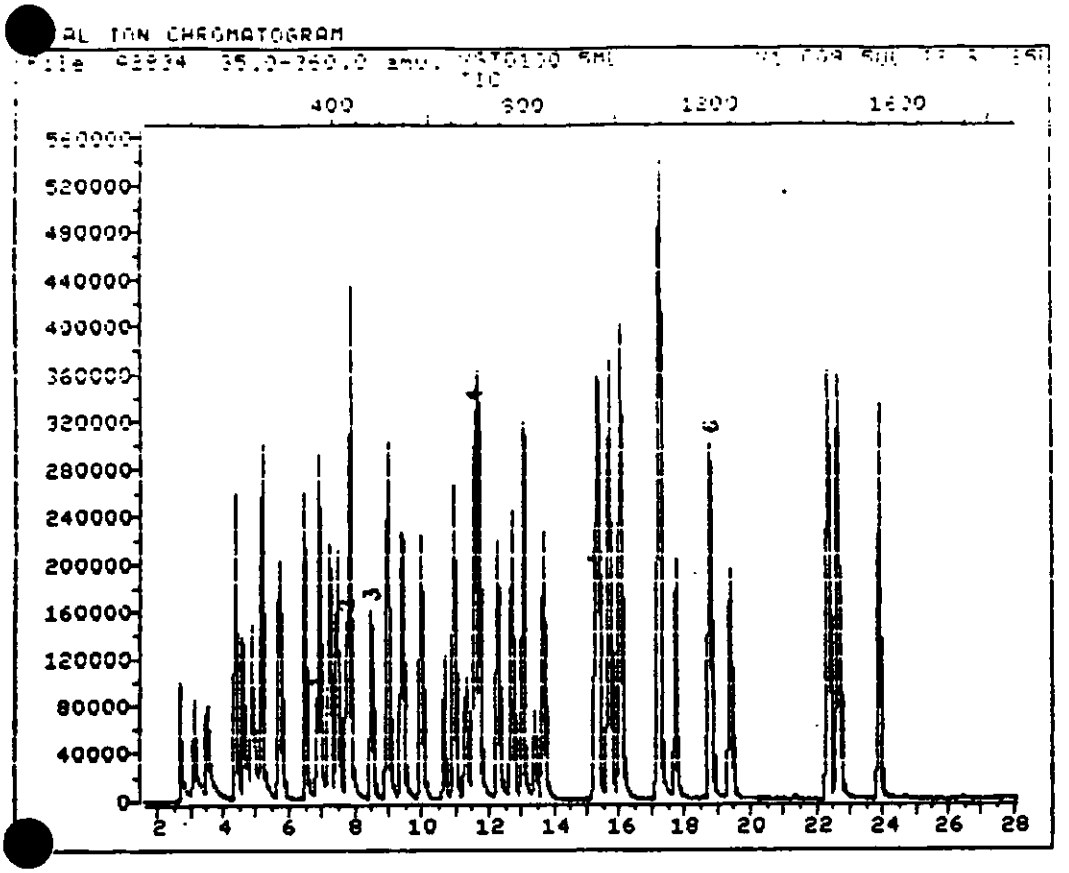
ID File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 910828 22:18

		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	47.59	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	100
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

000193

		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

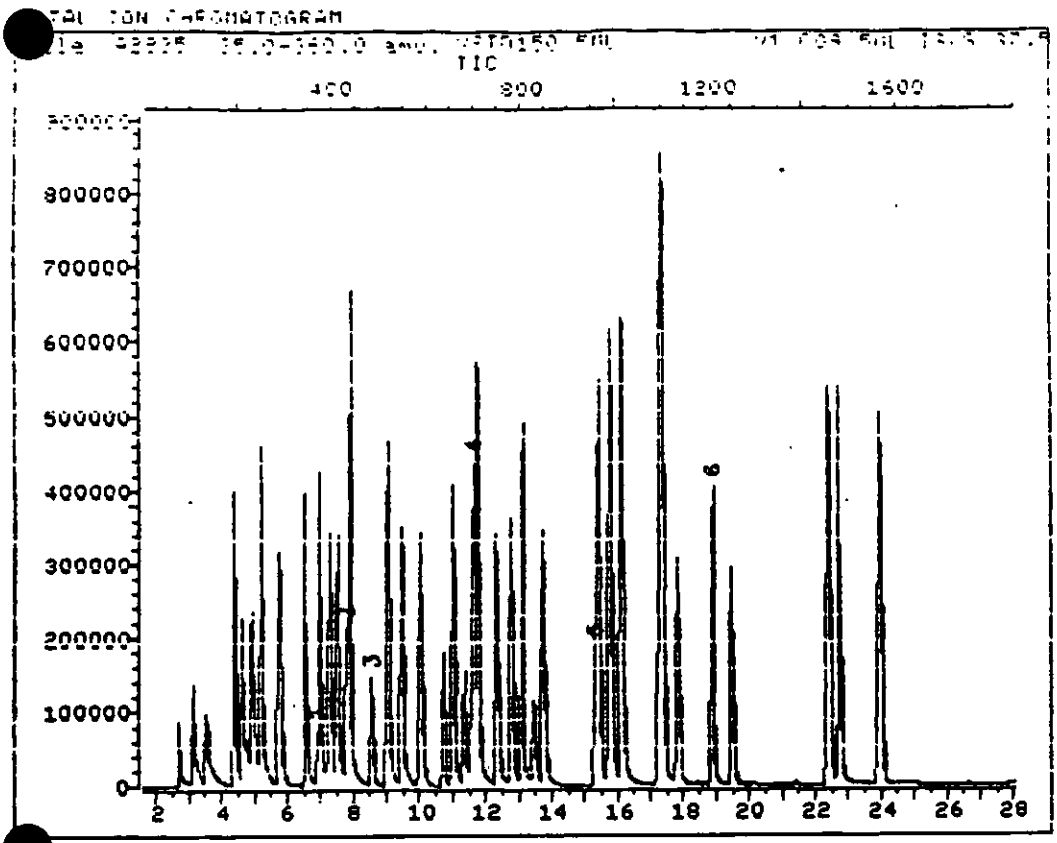
Operator ID: MANAGER Quant Rev: 6 Quant Time: 910829 14:15
Output File: ^A2834::QT Injected at: 910829 13:46
Data File: >A2834::D7 Dilution Factor: 1.00000
Name: VSTD100 5ML
Misc: V1 C09 5UL IS/S 25UL/50 ML VOA A,B,HSL

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	94.01	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	70
42)	C225	1,1,2,2-Tetrachloroethan	19.39	1246	401319	94.66	UG/L	92
43)	CS10	Bromofluorobenzene (BFB)	18.29	1204	363882	102.43	UG/L	99

		Compound	R.T.	Scan#	Area	Conc	Units	q
44)	C339	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

perator ID: MANAGER
lutput File: ^A2835::QT
ata File: >A2835::D7
lame: VSTD150 5ML
lisc: V1 C09 5UL IS/S 37.5 /50 ML VOA A,B,HSL

Quant Rev: 6 Quant Time: 910829 14:51
Injected at: 910829 14:22
Dilution Factor: 1.00000

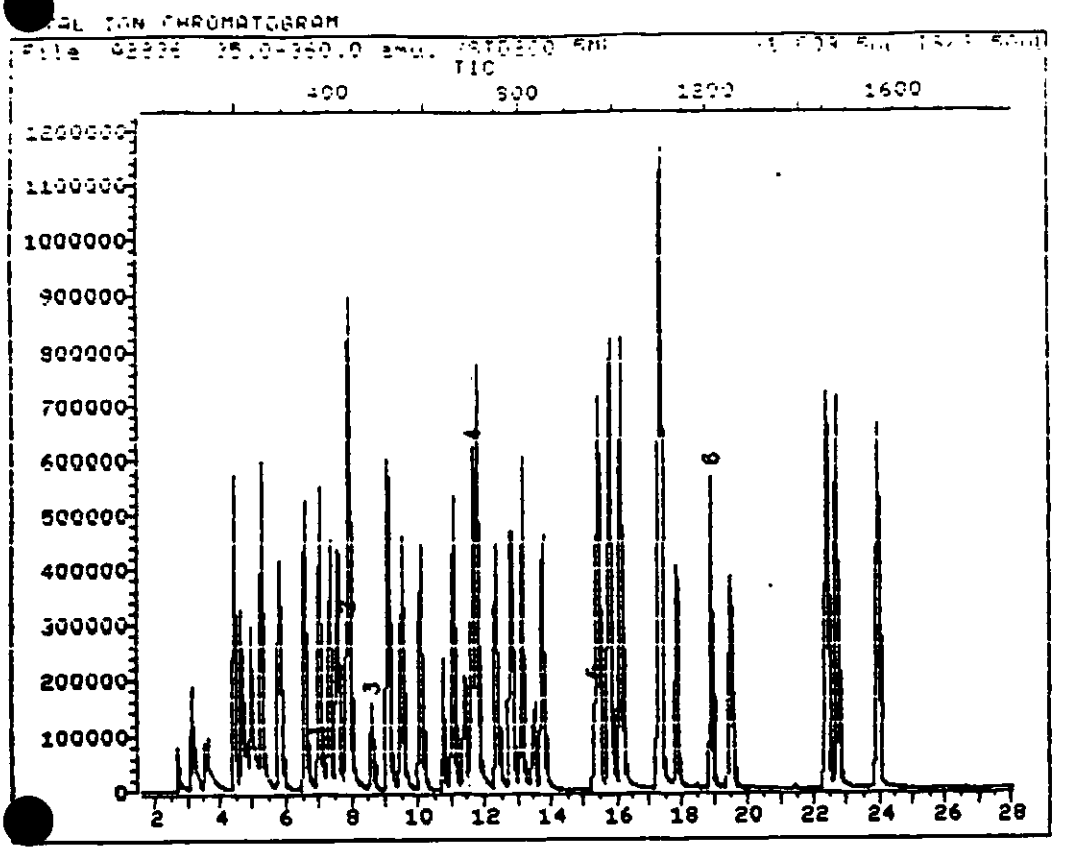
D File: VOAID1::$$
itle: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
ast Calibration: 910829 11:45

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*CI01 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)	*CI10 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	149.49	UG/L	92
23)	C140 1,2-Dichloropropene	9.47	552	445895M	[illegible]	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	[illegible]	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)	*CI20 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	00
		19.46	1250	600989	153.59	UG/L	92

000200

		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

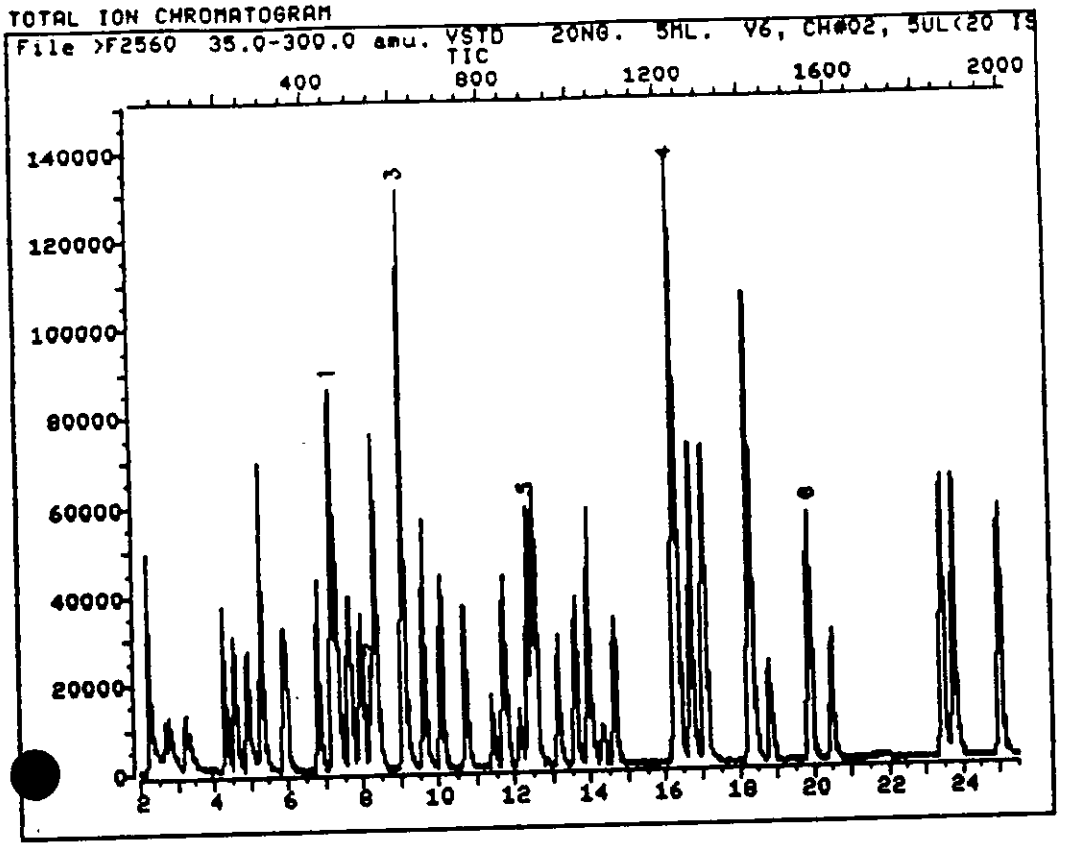
Operator ID: MANAGER Quant Rev: 6 Quant Time: 910829 15:27
Output File: ^A2836::QT Injected at: 910829 14:58
Data File: >A2836::07 Dilution Factor: 1.00000
Name: VSTD200 5ML
Misc: V1 C09 5UL IS/S 50UL /50 ML VOA A,B,HSL

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	204.19	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: >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

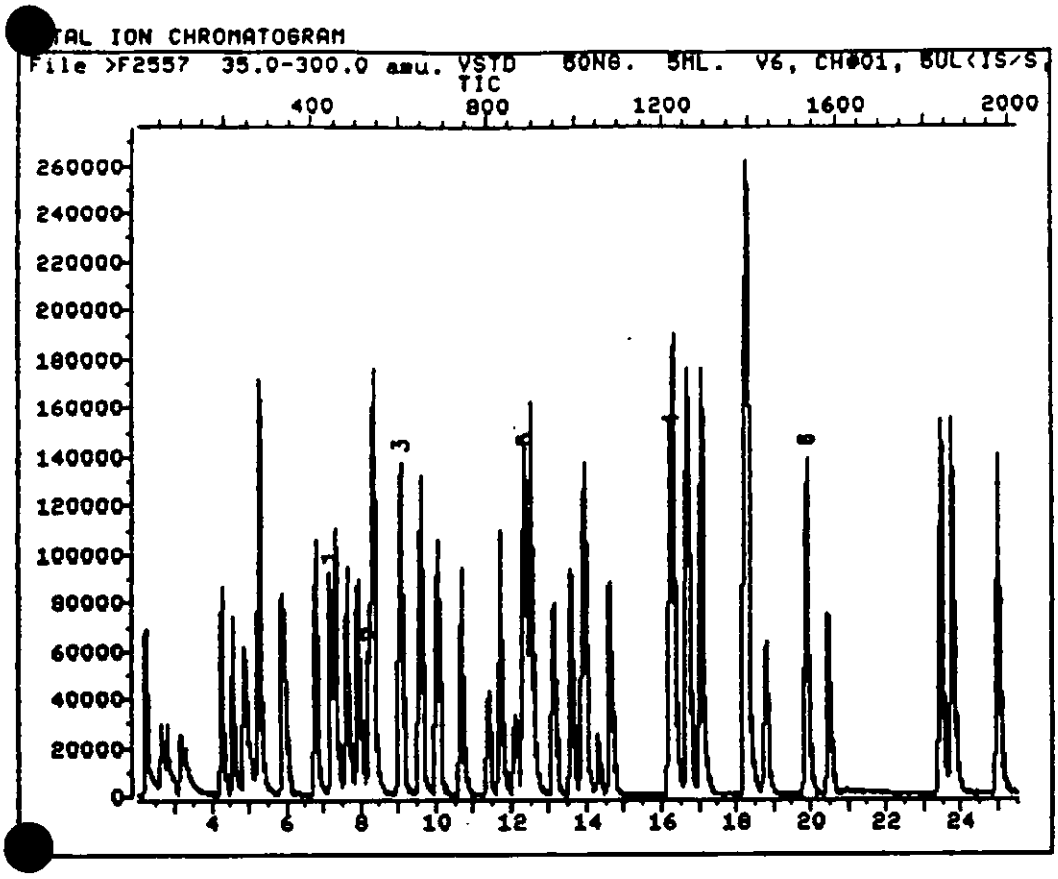
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	66164	50.00	UG/L	64
2)	C010 Chloromethane	2.65	50.0	36001	20.90	UG/L	99
3)	C020 Vinyl Chloride	2.79	62.0	37017	21.21	UG/L	87
4)	C015 Bromomethane	3.19	94.0	35029	24.07	UG/L	92
5)	C025 Chloroethane	3.32	64.0	22151M	23.15	UG/L	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

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-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

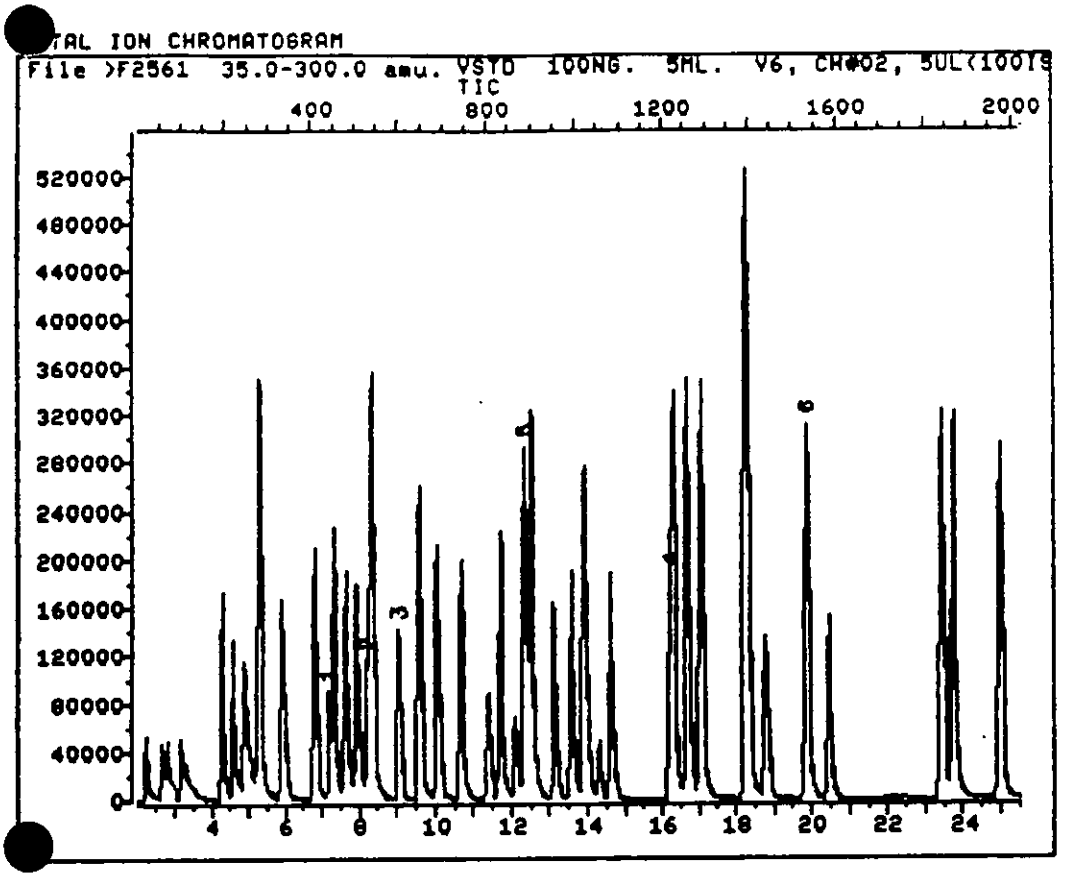
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.17	128.0	72616	50.00	UG/L	70
2)	C010 Chloromethane	2.65	50.0	94512	74.65	UG/L	99
3)	C020 Vinyl Chloride	2.78	62.0	95768	61.62	UG/L	93
4)	C015 Bromomethane	3.16	94.0	79846	49.64	UG/L	94
5)	C025 Chloroethane	3.29	64.0	52513M	50.84	UG/L	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
42)	CXXX Xylenes (o)	18.25	106.0	186544	47.97	UG/L	96

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: M08ID6::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

.D 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-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
42)	CXXX Xylenes (o)	18.24	106.0	392684	92.20	UG/L	98

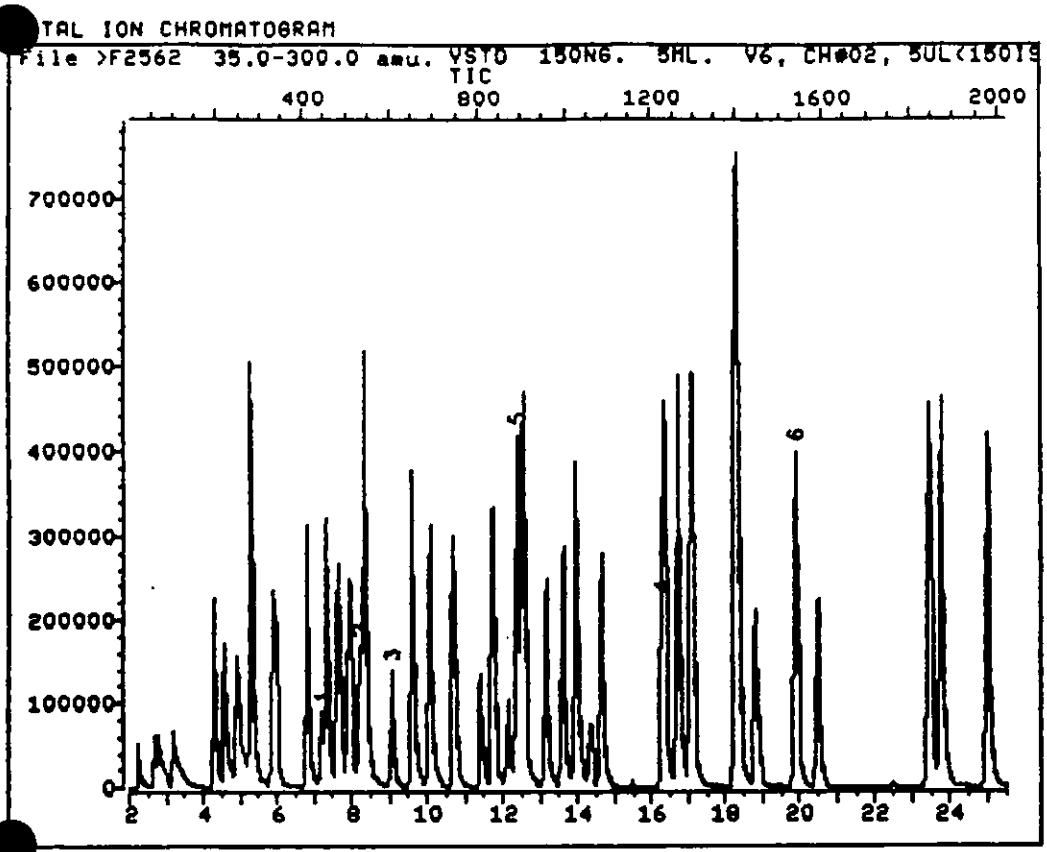
000212

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

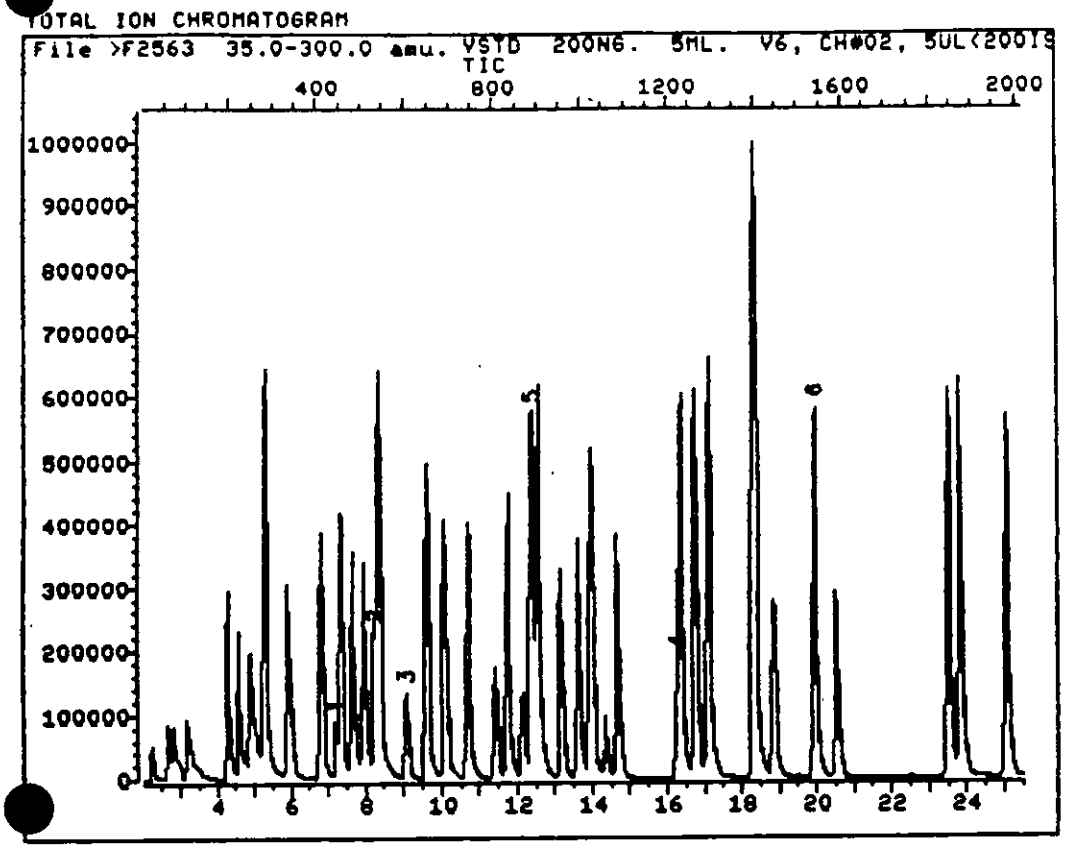
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	71409	50.00	UG/L	65
2)	C010 Chloromethane	2.65	50.0	245105	131.86	UG/L	98
3)	C020 Vinyl Chloride	2.78	62.0	240961	127.93	UG/L	85
4)	C015 Bromomethane	3.15	94.0	198283M	126.26	UG/L	91
5)	C025 Chloroethane	3.28	64.0	117468M	113.74	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	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

)perator ID: KERYLYNN Quant Rev: 7 Quant Time: 910922 15:02
)utput File: ^F2562::D7 Injected at: 910922 14:35
)ata File: >F2562::D4 Dilution Factor: 1.00000
lame: VSTD 150NG. 5ML. Instrument ID: V6
lisc: V6, CH#02, 5UL(150IS/S), STD=37.5UL/50ML 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	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

perator ID: KERYLYNN
utput File: ^F2563::D7
ata File: >F2563::D4
ame: VSTD 200NG. 5ML.
isc: V6, CH$02, 5UL(200IS/S), STD=50UL/50ML HSL,A,B+ MTBE,

Quant Rev: 7 Quant Time: 910922 15:57
Injected at: 910922 15:30
Dilution Factor: 1.00000
Instrument ID: V6

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

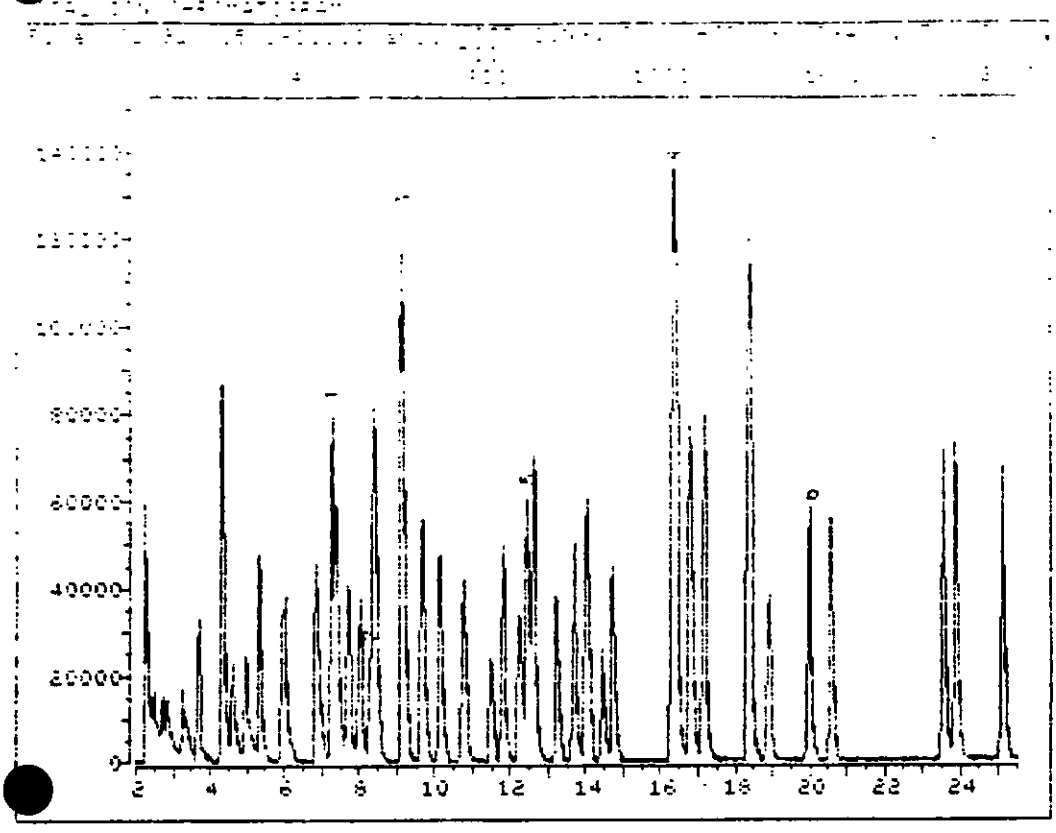
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.19	128.0	69596	50.00	UG/L	72
2)	C010 Chloromethane	2.66	50.0	330885	182.65	UG/L	98
3)	C020 Vinyl Chloride	2.80	62.0	326977	178.12	UG/L	88
4)	C015 Bromomethane	3.18	94.0	253347	165.53	UG/L	96
5)	C025 Chloroethane	3.29	64.0	137303M	136.41	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)	CXXX 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



Data File: >F2791::06 Quant Output File: >F2791::07
Name: USTD 20NG. 5ML. HTD. Instrument ID: U6
Misc: U6, 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, U6 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

Data File: H:\10\::\T
Title: HSL VOL-TILES: 25m . .5/mm: 5%C.C, 1% HTD EPOI EN5E10
Last Calibration: 91040B 11:20 Last Goal Time: 911014 12:13

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*C101 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	95
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	61395	20.50	UG/L	97
15)	C050 1,1-Dichloroethane	5.93	63.0	110057	21.17	UG/L	109
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)	*C110 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)	*C120 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	97
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

[illegible]

[illegible]

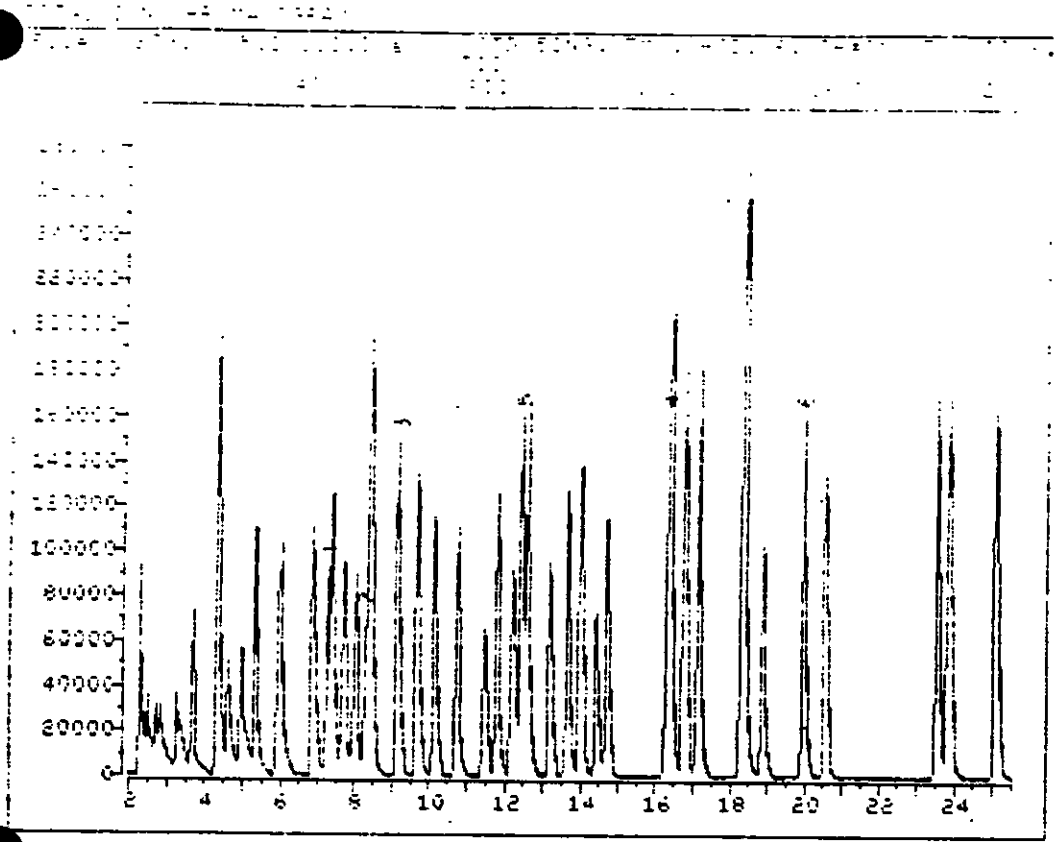
ID File: [illegible]

[illegible]

Last Calibration: 910[illegible] 11:20 Last Qcal Time: [illegible]

	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)	C910 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.[illegible]5	UG/L	100
50)	C250 Xylenes (total)	18.35	106.0	88364	21.09	UG/L	91

* Compound is ISTD



Data File: >F2790::06 Quant Output File: >F2790::07
Name: USTD 50:0. 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

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[redacted]

[redacted]

[redacted]

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*CI01 Bromochloromethane	7.23	128.0	91542	50.00	UG/L	[illegible]
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	96
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)	C039 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	94
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	155755	43.97	UG/L	93
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

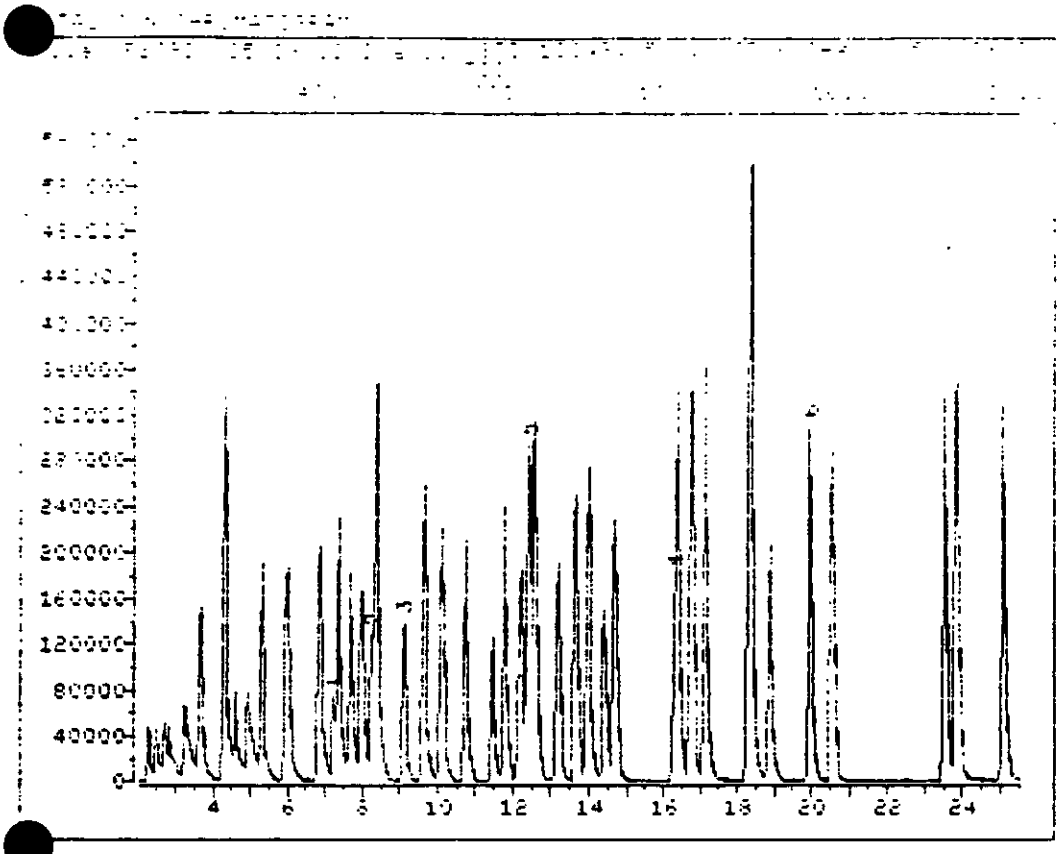
[illegible]

[illegible]

ID File: [illegible]
[illegible]
Last Calibration: [illegible] Last Cal Time: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	[illegible]
[illegible]	C249 Styrene	18.37	104.0	369473	42.62	UG/L	[illegible]
45)	C225 1,1,2,2-Tetrachloroethane	20.55	83.0	338248	49.00	UG/L	97
46)	CS10 Bromofluorobenzene	19.95	95.0	253995	50.47	UG/L	92
47)	C335 Dichlorobenzene (m)	23.52	146.0	308239	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)	C260 Xylenes (total)	18.31	106.0	208945M	44.93	UG/L	9[illegible]

* Compound is ISTD



Data File: >F2793::06 Quant Output File: ^F2793::07
Name: VSTD 100NG. 5ML. HTD Instrument ID: V6
Misc: V6,CH#01, 50UL 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

Last Calibration: 910408 11:20 Last Ocal Time: 911.04 ..: 3

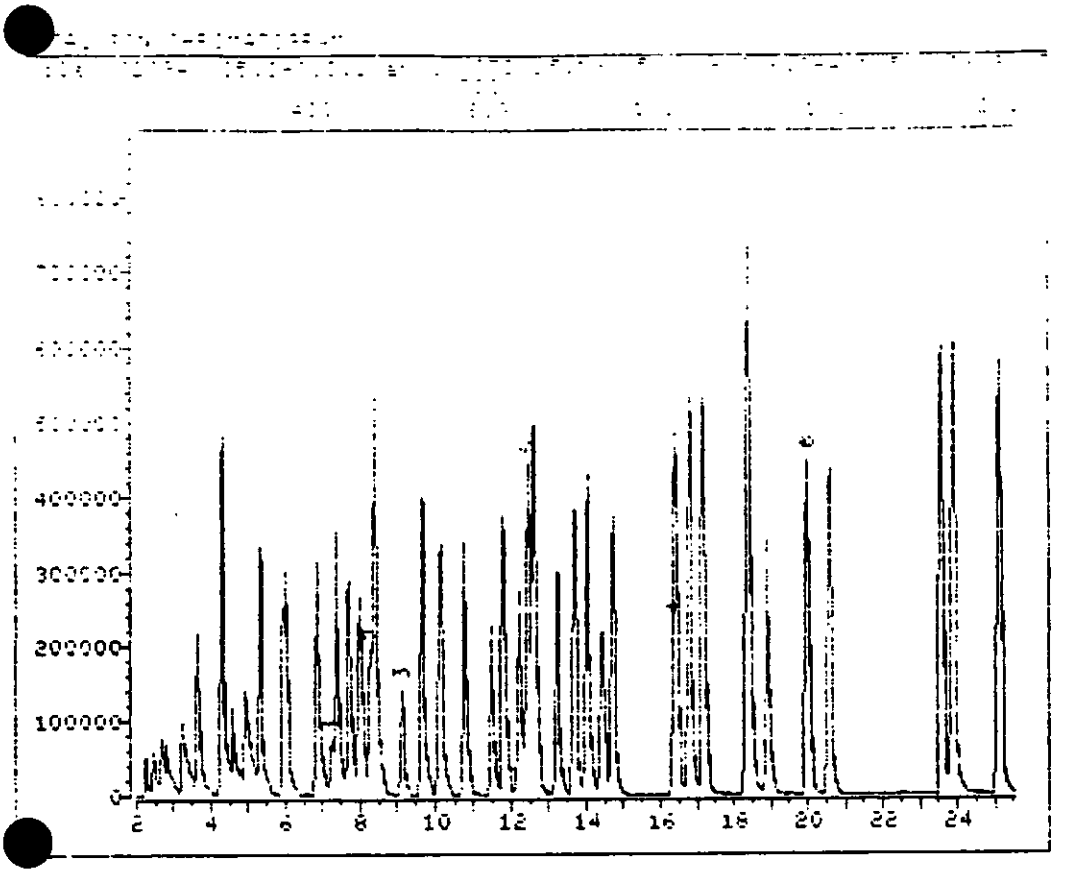
	Compound	P.T.	Q ion	Area	Conc	Units	%
1)	*C101 Bromochloromethane	7.20	128.0	79858	50.00	UG/L	89
2)	C012 Dichlorodifluoromethane	2.45	85.0	181340M	61.54	UG/L	83
3)	C010 Chloromethane	2.67	50.0	175957	100.56	UG/L	99
4)	C020 Vinyl Chloride	2.81	62.0	188558	102.72	UG/L	86
5)	C015 Bromomethane	3.22	94.0	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	99
9)	C038 1,1,2-Trichloro-1,2,2-tri	4.28	101.0	350997M	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)	C050 Methylene Chloride	4.92	84.0	224803M	99.10	UG/L	76
13)	C057 Trans-1,2-dichloroethene	5.29	96.0	235168	84.16	UG/L	95
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	290493	94.02	UG/L	89
15)	C059 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	99
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

[illegible]

ID File: [illegible]
Title: [illegible]
Last Calibration: [illegible]10-08 11:20 Last Qcal Time: [illegible]

	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::06 Quant Output File: ^F2794::07
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 12:09

Operator ID: LIZ
Quant Time : 911008 11:24
Injected at: 911008 10:57

Last Calibration: 910-05 11:20 Last Qcal Time: [illegible]

Title: [illegible] Data File: [illegible] Quant Method: [illegible] Misc: [illegible]

		Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.23	128.0	82954	50.00	UG/L	99
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
[illegible]	C035	Acetone	4.43	43.0	84002	74.86	UG/L	[illegible]
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	[illegible]
13)	C053	Trans-1,2-dichloroethene	5.31	96.0	396362	136.56	UG/L	[illegible]
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
[illegible]	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)	CXXX	Xylenes (p)	17.16	106.0	636078M	135.66	UG/L	93

[illegible]

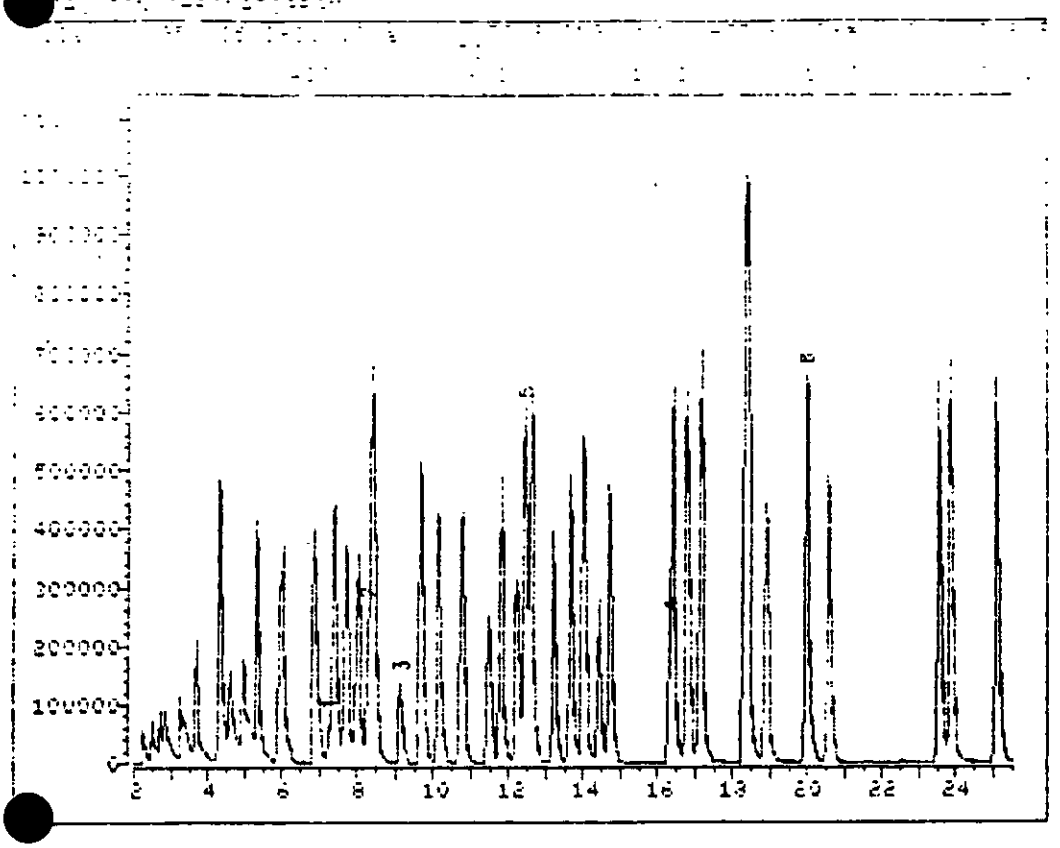
[illegible]

Name: STD 1PING. PML. HTD
Misc: Fe,IH=01 Pul 10 5 Sl:=37.5L-5ML HeL,=.E.CL2F,CL2F.5

ID File: HHM:D6::MT
Title: HEL VOLATILES: [illegible] .5/mm: 502.2, ve HID EH00 EN=500
Last Calibration: 910403 11:20 Last Ocal Time: 911.04 12: 8

	Compound	P.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)	C910 Bromofluorobenzene	19.98	95.0	711489	148.62	UG/L	69
47)	C335 Dichlorobenzene (m)	23.96	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::06 Quant Output File: ^F2795::07
Name: VSTD 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

Operator ID: VERYLYNN
Quant Time : 911008 11:59
Injected at: 911008 11:32

Last Calibration: 910408 11:20 Last Qcal Time: 911.04 12:4

	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)	C029 Trichlorofluoromethane	3.65	101.0	98e346	137.11	UG/L	97
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	969656	145.10	UG/L	1..
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	9?
14)	C055 Cis-1,2-dichloroethene	6.82	96.0	578756	178.95	UG/L	88
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	9?
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	9?
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	94
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	167.35	UG/L	94
42)	CXXX Xylenes (p)	17.14	106.0	826336M	168.63	UG/L	94

[illegible]

[illegible]
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Name: [illegible]
[illegible]

IQ File: [illegible]
Title: [illegible]
Last Calibration: [illegible] 11:[illegible] Last Qcal Time: [illegible]

	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.: 10126 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/08/91 Time: 0809

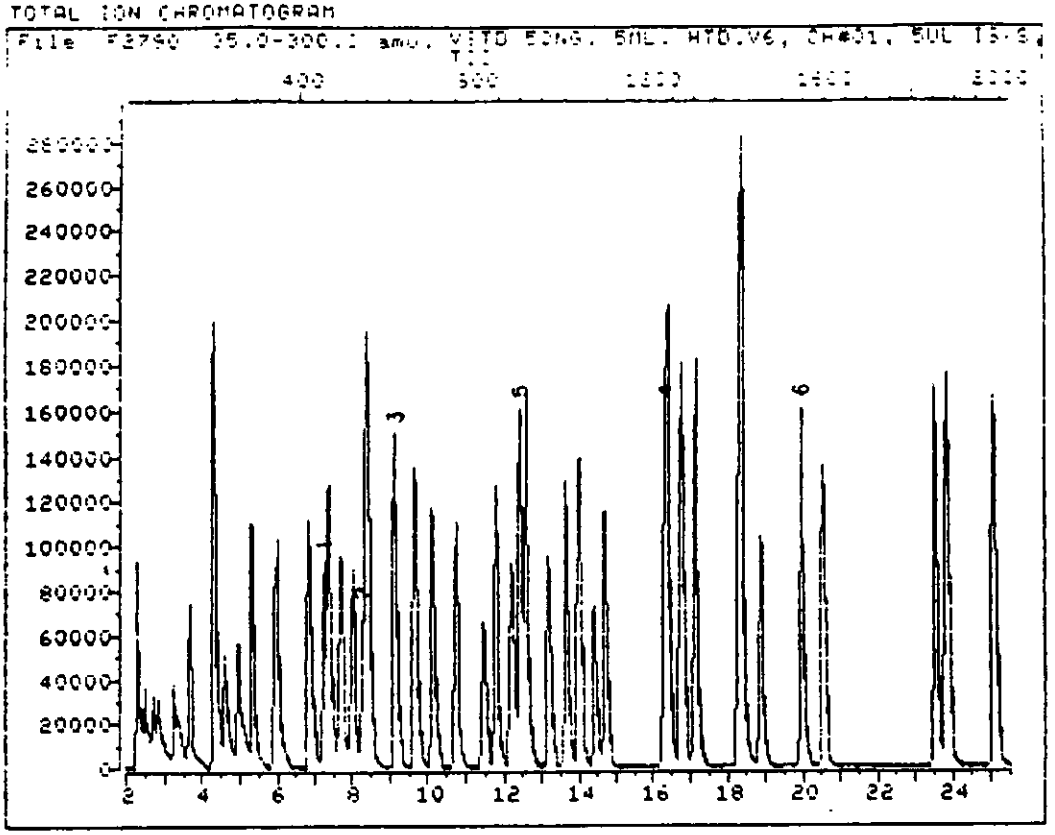
Lab File ID: F2790 Init. Calib. Date(s): 10/08/91 10/08/91

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	

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

QUANT REPORT Page 1

perator ID: KERYLYNN Quant Rev: 7 Quant Time: 911008 13:?:
:ata File: >F2790::D7 Injected at: 911008 :3:0-
:ata File: >F2790::D6 Dilution Factor: 1.0000
ame: VSTD 50NG. 5ML. HTD. Instrument ID: V6
lisc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B,FREONS, 50

D File: HAMID6::MT
itle: HSL VOLATILES: 75m x .53mm: 502.2, V6 HTD ERCO/ENSECO
est Calibration: 910408 11:20 Last Qcal Time: 911004 13:08

	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	8c
13)	C053 Trans-1,2-dichloroethene	5.31	96.0	136119	42.50	UG/L	9c
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	96
41)	C240 Ethylbenzene	16.76	106.0	166957	42.59	UG/L	97

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QUANT REPORT Page 1

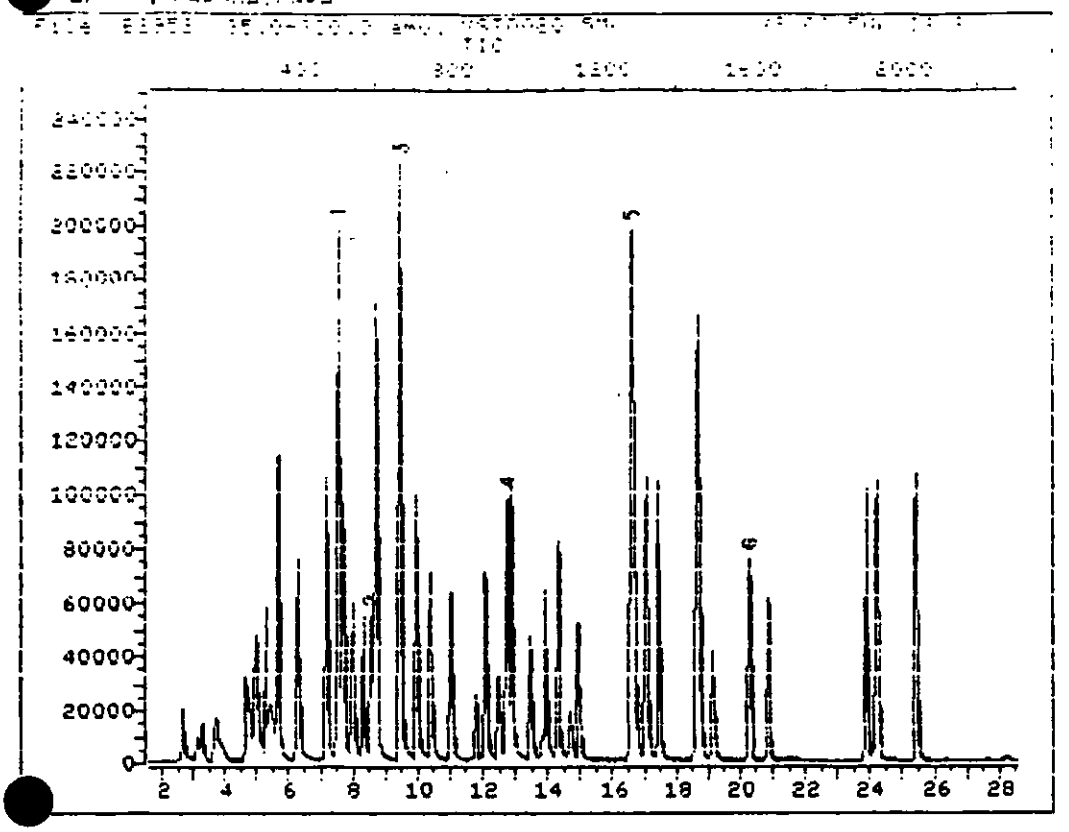
Operator ID: KERYLYNN Quant Rev: 7 Quant Time: 911009 09:5?
Output File: ^F2790::D7 Injected at: 911008 08:0?
Data File: >F2790::D6 Dilution Factor: 1.00000
Name: VSTD 50NG. 5ML. HTD. Instrument ID: V6
Misc: V6, CH#01, 5UL IS-S, STD=25UL 100ML HSL,A,B,FREONS, 50

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

RJ 10/08/91



Data File: >B2952::D6 Quant Output File: ^B2952::Q1
Name: VSTD02U 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

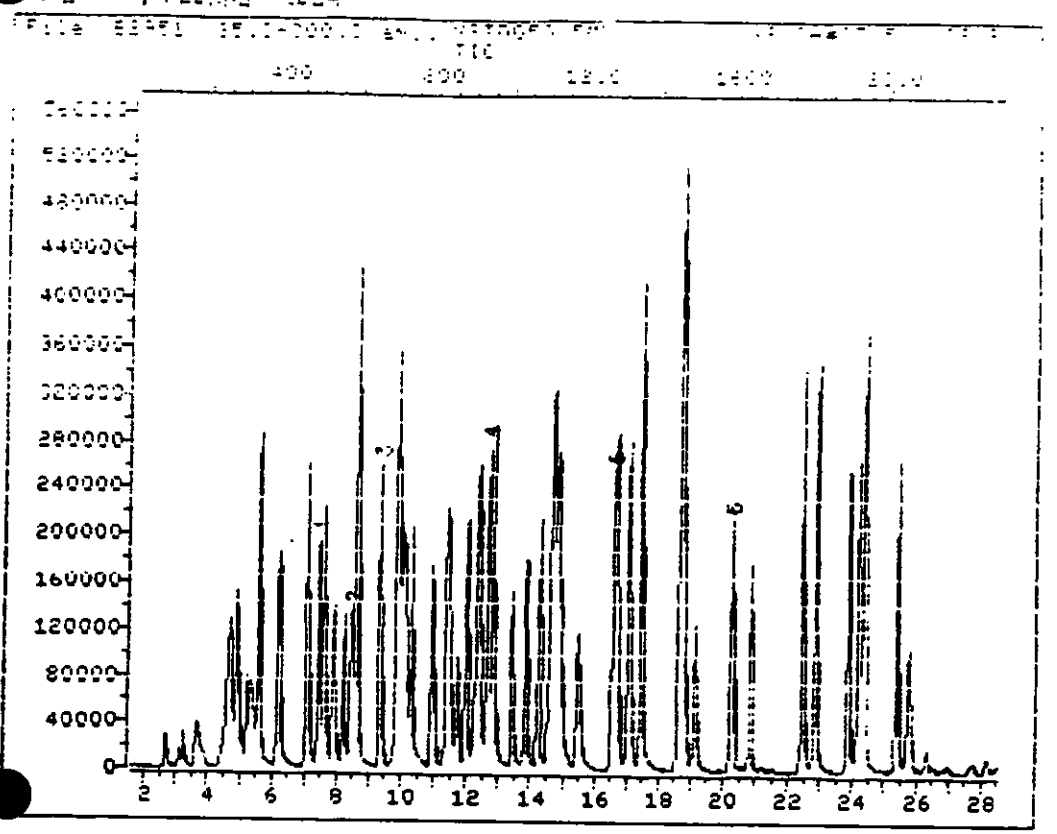
Operator ID: [illegible] Quant Type: [illegible] Quant Time: [illegible]
Output File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.00000
Name: VSLD020 SRL
Misc: 02 03 90L [illegible]

ID File: VOH1D2::$$
Title: HSL VOLH FILES:105mmx.5mm:DB624:02:ERLO/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	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)	*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	98
43)	CS10	Bromofluorobenzene (BFB)	20.26	95.0	98625	21.91	UG/L	99

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Dichlorobenzene (m)	[illegible]	146.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1540	Dichlorobenzene (p)	24.18	146.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1550	Dichlorobenzene (o)	29.41	146.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1250	Xylene (total)	18.61	106.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is ISTD



Data File: >B2951::D6 Quant Output File: ^B2951::QT
Name: VSTD050 5ML
Misc: V2 CH#07 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: 0 Quant File: [illegible]
Input File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.000000
Name: VSTD050 5ML
Misc: 02 LH#07 50UL 15 5

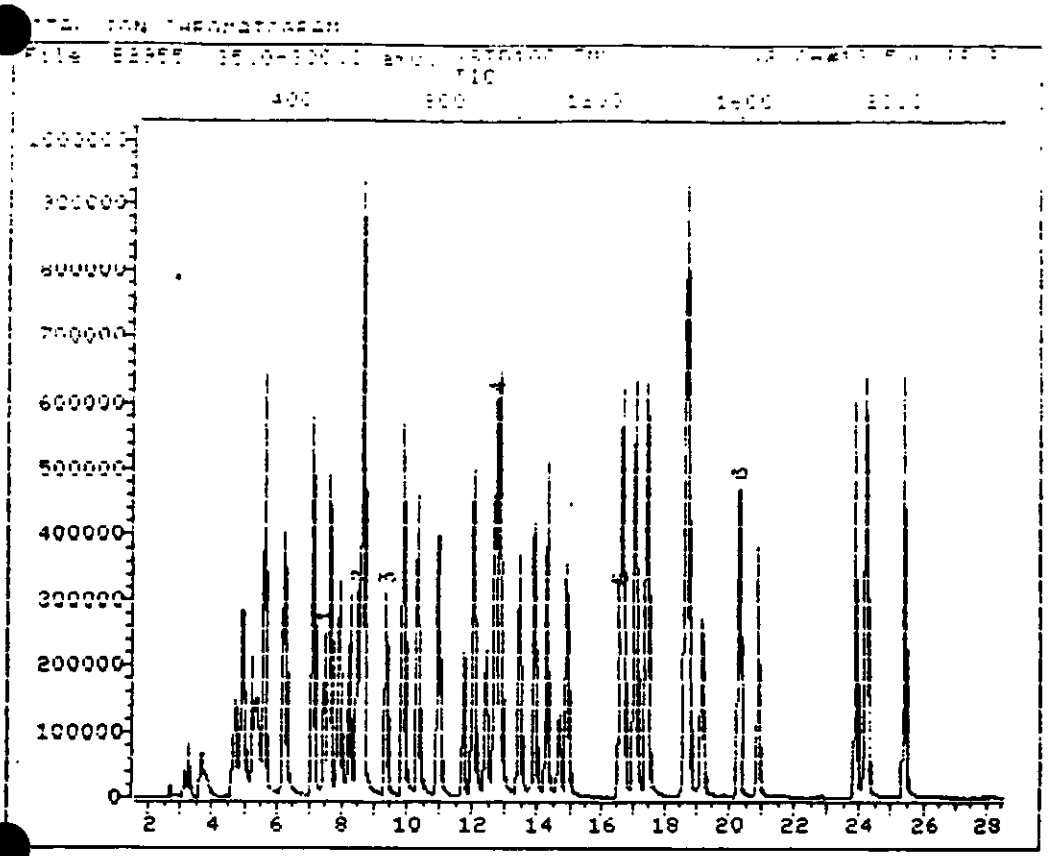
ID File: VOH102::11
Title: HSL 50ULHTLL5:105mmx.53mm:DB624:02:ERCO/ENSELO
Last Calibration: 910829 00:11

		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	89
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	98
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

000243

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1,3-Dichlorobenzene (m)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1340	1,4-Dichlorobenzene (p)	24.1	148.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1350	1,2-Dichlorobenzene (o)	25.0	148.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C250	Xylene (total)	18.0	106.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is [illegible]



Data File: >B2955::06 Quant Output File: ^B2955::01
Name: VSTD100 5ML
Misc: V2 CH#13 50UL 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

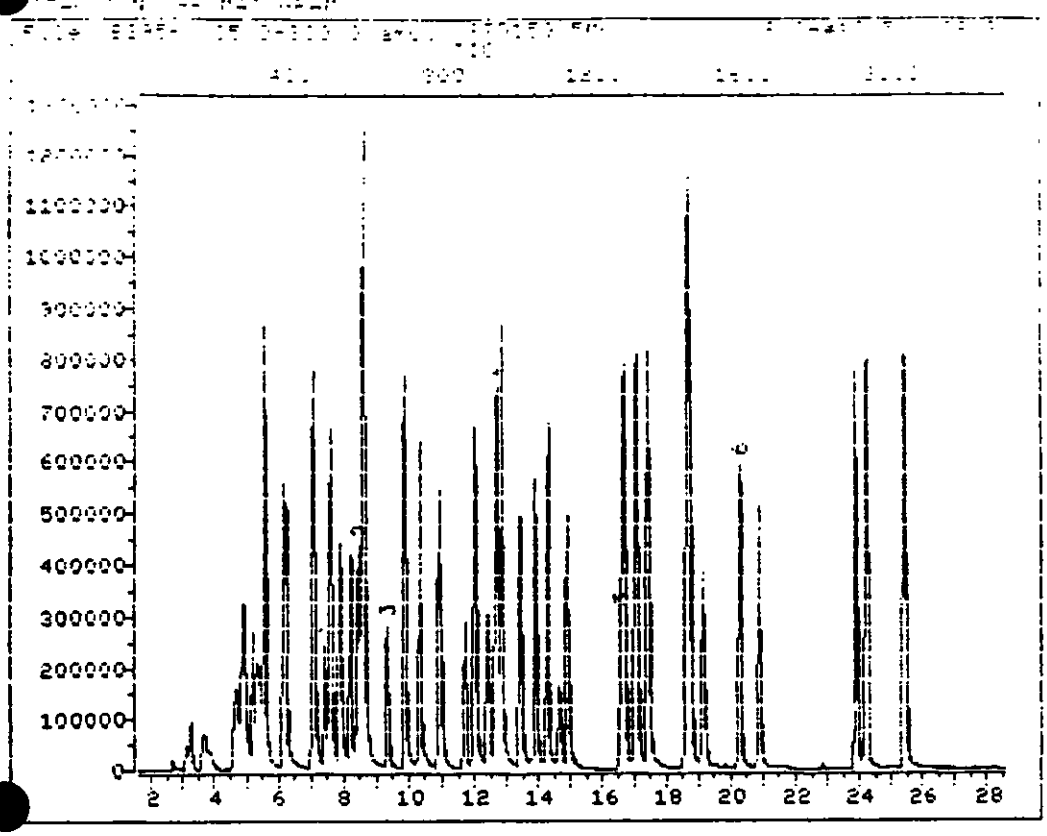
Operator: CL: ALEX Quant Method: 3 Quant Time: 911011 21:54
Output File: DB2456::D1 Injected at: 911011 21:54
Data File: DB2456::D6 Dilution Factor: 1.00000
Name: 05ID100 5ML
Misc: 02 LH#13 50UL 1575

IL File: DUAID2::$1
Title: HSL DULATILES:105mmx.25mm:DB624:02:ERLD/ENSELD
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	95
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

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C1540	Dichlorobenzene	p	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C1550	Dichlorobenzene	o	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C2500	Xylene (total)		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is 1510



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

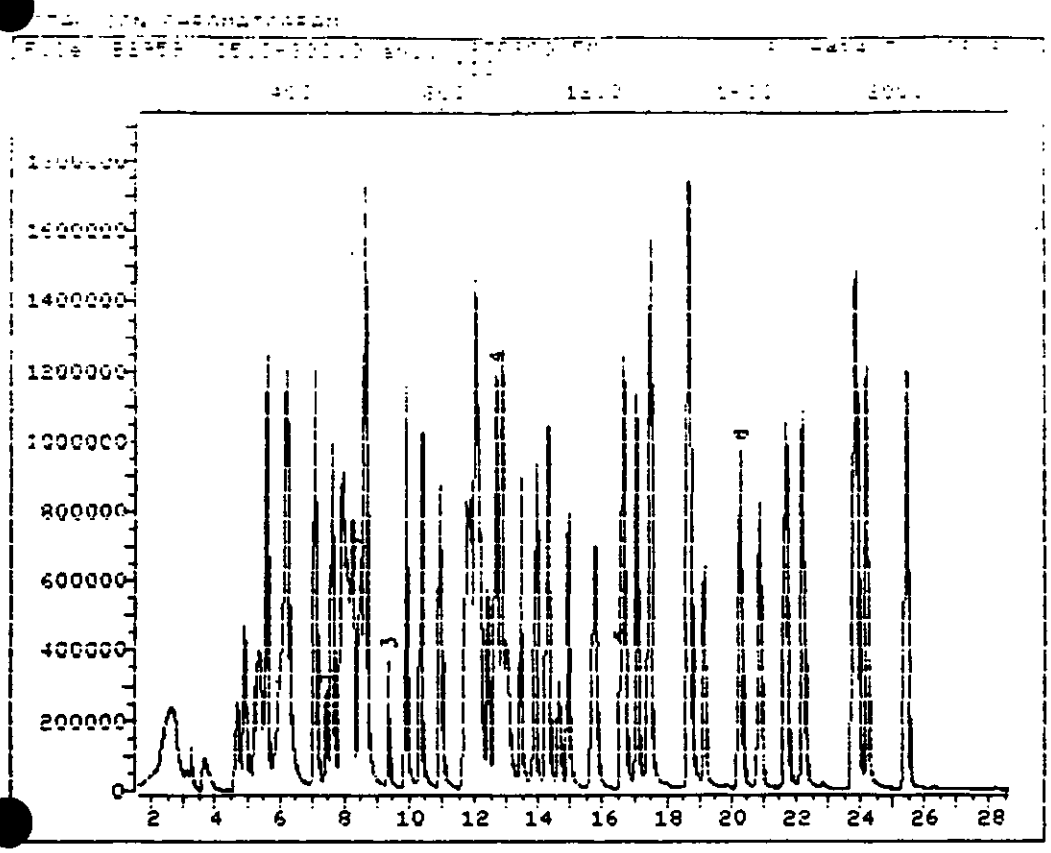
Operator ID: [illegible] Count Per: 0 Quant Time: [illegible]
Output File: C:\...\...01 Injected at: [illegible]
Data File: B:\...\... Dilution Factor: 1.00000
Name: V8010150 5ML
Misc: V2 CH#13 50L 15 5

ID File: V8A102::$1
Title: HSL VOLATILES:10.5mm*.53mm:DB624:V2:ERCO/ENSELU
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)	C055	Trans-1,2-Dichloroethene	5.55	96.0	776099	129.94	UG/L	97
11)	C054	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

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1,3-Dichlorobenzene (m)	25.00	1.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1,4-Dichlorobenzene (p)	24.11	1.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1,2-Dichlorobenzene (o)	25.41	1.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	Xylene (total)	18.01	100.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is [illegible]



Data File: >B2959::Do 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: [illegible] Quant Method: [illegible] Quant Type: [illegible]
Data file: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.0000
Name: VSTD200 5ML
Misc: 02 LH#14 HGL [illegible]

ID File: VOAIDX:[illegible]$
Title: HSL VOLAFILES:105mm<.53mm:LB024:[illegible]:EPCO/ENSECO
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	1169173	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	6.50	83.0	2218189	174.76	UG/L	86
14)	C065 1,2-Dichloroethane	8.01	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	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)	*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	1330638	180.35	UG/L	86

		Compound							
[illegible]	[illegible]	Dichlorobenzene (m)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C7401	Dichlorobenzene (p)	[illegible]	146.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C750	Dichlorobenzene (o)	29.77	146.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C750	Xylene (total)	18.61	106.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Compound is 1510

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/05/91 Time: 1323

Lab File ID: F2729 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	1.280	-2.7	#
Bromomethane		1.055	1.088	-3.1	
Vinyl Chloride	*	1.258	1.211	3.7	*
Chloroethane		0.651	0.709	-8.9	
Methylene Chloride		1.704	1.655	2.9	
Acetone		0.211	0.259	-22.8	
Carbon Disulfide		4.156	3.920	5.7	
1,1-Dichloroethene	*	1.387	1.332	4.0	*
1,1-Dichloroethane	#	3.250	3.160	2.8	#
1,2-Dichloroethene (total)		1.727	1.647	4.6	
Chloroform	*	3.857	3.725	3.4	*
1,2-Dichloroethane		2.171	2.174	-0.1	
2-Butanone		0.111	0.151	-36.0	
1,1,1-Trichloroethane		0.560	0.574	-2.5	
Carbon Tetrachloride		0.479	0.476	0.6	
Vinyl Acetate		0.538	0.618	-14.9	
Bromodichloromethane		0.622	0.633	-1.8	
1,2-Dichloropropane	*	0.407	0.420	-3.2	*
cis-1,3-Dichloropropene		0.603	0.625	-3.6	
Trichloroethene		0.415	0.425	-2.4	
Dibromochloromethane		0.501	0.522	-4.2	
1,1,2-Trichloroethane		0.316	0.345	-9.2	
Benzene		1.001	1.002	-0.1	
trans-1,3-Dichloropropene		0.470	0.499	-6.2	
2-Chloroethylvinylether		0.190	0.202	-6.3	
Bromoform	#	0.302	0.312	-3.3	#
4-Methyl-2-Pentanone		0.332	0.418	-25.9	
2-Hexanone		0.236	0.302	-28.0	
Tetrachloroethene		0.430	0.478	-11.2	
1,1,2,2-Tetrachloroethane	#	0.596	0.709	-19.0	#
Toluene	*	0.839	0.924	-10.1	*
Chlorobenzene	#	1.057	1.125	-6.4	#
Ethylbenzene	*	0.509	0.549	-7.9	*
Styrene		1.098	1.145	-4.3	
Xylene (total)		0.601	0.635	-5.7	
Toluene-d8		1.246	1.270	-1.9	
Bromofluorobenzene		0.742	0.715	3.6	
1,2-Dichloroethane-d4		1.759	1.725	1.9	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/06/91 Time: 1030

Lab File ID: F2751 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	1.114	10.6	#
Bromomethane		1.055	1.101	-4.4	
Vinyl Chloride	*	1.258	1.157	8.0	*
Chloroethane		0.651	0.741	-13.8	
Methylene Chloride		1.704	1.727	-1.4	
Acetone		0.211	0.192	9.0	
Carbon Disulfide		4.156	4.214	-1.4	
1,1-Dichloroethene	*	1.387	1.406	-1.4	*
1,1-Dichloroethane	#	3.250	3.291	-1.3	#
1,2-Dichloroethene (total)		1.727	1.722	0.3	
Chloroform	*	3.857	3.690	4.3	*
1,2-Dichloroethane		2.171	2.098	3.4	
2-Butanone		0.111	0.133	-19.8	
1,1,1-Trichloroethane		0.560	0.554	1.1	
Carbon Tetrachloride		0.479	0.483	-0.8	
Vinyl Acetate		0.538	0.582	-8.2	
Bromodichloromethane		0.622	0.618	0.6	
1,2-Dichloropropane	*	0.407	0.395	2.9	*
cis-1,3-Dichloropropene		0.603	0.606	-0.5	
Trichloroethene		0.415	0.406	2.2	
Dibromochloromethane		0.501	0.513	-2.4	
1,1,2-Trichloroethane		0.316	0.320	-1.3	
Benzene		1.001	1.019	-1.8	
trans-1,3-Dichloropropene		0.470	0.476	-1.3	
2-Chloroethylvinylether		0.190	0.214	-12.6	
Bromoform	#	0.302	0.327	-8.3	#
4-Methyl-2-Pentanone		0.332	0.367	-10.5	
2-Hexanone		0.236	0.249	-5.5	
Tetrachloroethene		0.430	0.467	-8.6	
1,1,2,2-Tetrachloroethane	#	0.596	0.667	-11.9	#
Toluene	*	0.839	0.868	-3.5	*
Chlorobenzene	#	1.057	1.094	-3.5	#
Ethylbenzene	*	0.509	0.548	-7.7	*
Styrene		1.098	1.138	-3.6	
Xylene (total)		0.601	0.646	-7.5	
Toluene-d8		1.246	1.267	-1.7	
Bromofluorobenzene		0.742	0.744	-0.3	
1,2-Dichloroethane-d4		1.759	1.757	0.1	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Instrument ID: V6 Calibration date: 10/10/91 Time: 2248

Lab File ID: F2884 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	1.296	-4.0	#
Bromomethane		1.055	1.143	-8.3	
Vinyl Chloride	*	1.258	1.375	-9.3	*
Chloroethane		0.651	0.735	-12.9	
Methylene Chloride		1.704	1.948	-14.3	
Acetone		0.211	0.220	-4.3	
Carbon Disulfide		4.156	4.298	-3.4	
1,1-Dichloroethene	*	1.387	1.571	-13.3	*
1,1-Dichloroethane	#	3.250	3.593	-10.6	#
1,2-Dichloroethene (total)		1.727	1.907	-10.4	
Chloroform	*	3.857	4.022	-4.3	*
1,2-Dichloroethane		2.171	2.296	-5.8	
2-Butanone		0.111	0.124	-11.7	
1,1,1-Trichloroethane		0.560	0.557	0.5	
Carbon Tetrachloride		0.479	0.444	7.3	
Vinyl Acetate		0.538	0.499	7.2	
Bromodichloromethane		0.622	0.562	9.6	
1,2-Dichloropropane	*	0.407	0.396	2.7	*
cis-1,3-Dichloropropene		0.603	0.546	9.5	
Trichloroethene		0.415	0.423	-1.9	
Dibromochloromethane		0.501	0.441	12.0	
1,1,2-Trichloroethane		0.316	0.298	5.7	
Benzene		1.001	0.987	1.4	
trans-1,3-Dichloropropene		0.470	0.425	9.6	
2-Chloroethylvinylether		0.190	0.160	15.8	
Bromoform	#	0.302	0.253	16.2	#
4-Methyl-2-Pentanone		0.332	0.309	6.9	
2-Hexanone		0.236	0.209	11.4	
Tetrachloroethene		0.430	0.409	4.9	
1,1,2,2-Tetrachloroethane	#	0.596	0.535	10.2	#
Toluene	*	0.839	0.798	4.9	*
Chlorobenzene	#	1.057	0.983	7.0	#
Ethylbenzene	*	0.509	0.502	1.4	*
Styrene		1.098	1.026	6.6	
Xylene (total)		0.601	0.573	4.7	
Toluene-d8		1.246	1.222	1.9	
Bromofluorobenzene		0.742	0.738	0.5	
1,2-Dichloroethane-d4		1.759	1.849	-5.1	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Instrument ID: V1 Calibration date: 10/15/91 Time: 1041

Lab File ID: A3513 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	1.324	-39.7	#
	Bromomethane		0.850	0.538	36.7	
	Vinyl Chloride	*	1.185	1.337	-12.8	*
	Chloroethane		0.734	0.697	5.0	
	Methylene Chloride		1.632	1.848	-13.2	
	Acetone		0.394	0.410	-4.1	
	Carbon Disulfide		4.412	4.097	7.1	
	1,1-Dichloroethene	*	1.212	1.076	11.2	*
	1,1-Dichloroethane	#	3.039	3.249	-6.9	#
	1,2-Dichloroethene (total)		1.548	1.732	-11.9	
	Chloroform	*	3.639	3.750	-3.0	*
	1,2-Dichloroethane		2.533	2.532	0.0	
	2-Butanone		0.182	0.218	-19.8	
	1,1,1-Trichloroethane		0.593	0.539	9.1	
	Carbon Tetrachloride		0.552	0.511	7.4	
	Vinyl Acetate		0.556	0.640	-15.1	
	Bromodichloromethane		0.608	0.572	5.9	
	1,2-Dichloropropane	*	0.417	0.403	3.4	*
	cis-1,3-Dichloropropene		0.644	0.611	5.1	
	Trichloroethene		0.459	0.451	1.7	
	Dibromochloromethane		0.593	0.568	4.2	
	1,1,2-Trichloroethane		0.365	0.354	3.0	
	Benzene		1.104	1.094	0.9	
	trans-1,3-Dichloropropene		0.583	0.539	7.5	
	2-Chloroethylvinylether		0.251	0.232	7.6	
	Bromoform	#	0.502	0.475	5.4	#
	4-Methyl-2-Pentanone		0.475	0.426	10.3	
	2-Hexanone		0.336	0.308	8.3	
	Tetrachloroethene		0.508	0.514	-1.2	
	1,1,2,2-Tetrachloroethane	#	0.688	0.677	1.6	#
	Toluene	*	0.870	0.830	4.6	*
	Chlorobenzene	#	1.154	1.110	3.8	#
	Ethylbenzene	*	0.560	0.547	2.3	*
	Styrene		1.118	1.093	2.2	
	Xylene (total)		0.632	0.618	2.2	
	Toluene-d8		1.290	1.295	-0.4	
	Bromofluorobenzene		0.596	0.624	-4.7	
	1,2-Dichloroethane-d4		1.845	1.886	-2.2	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

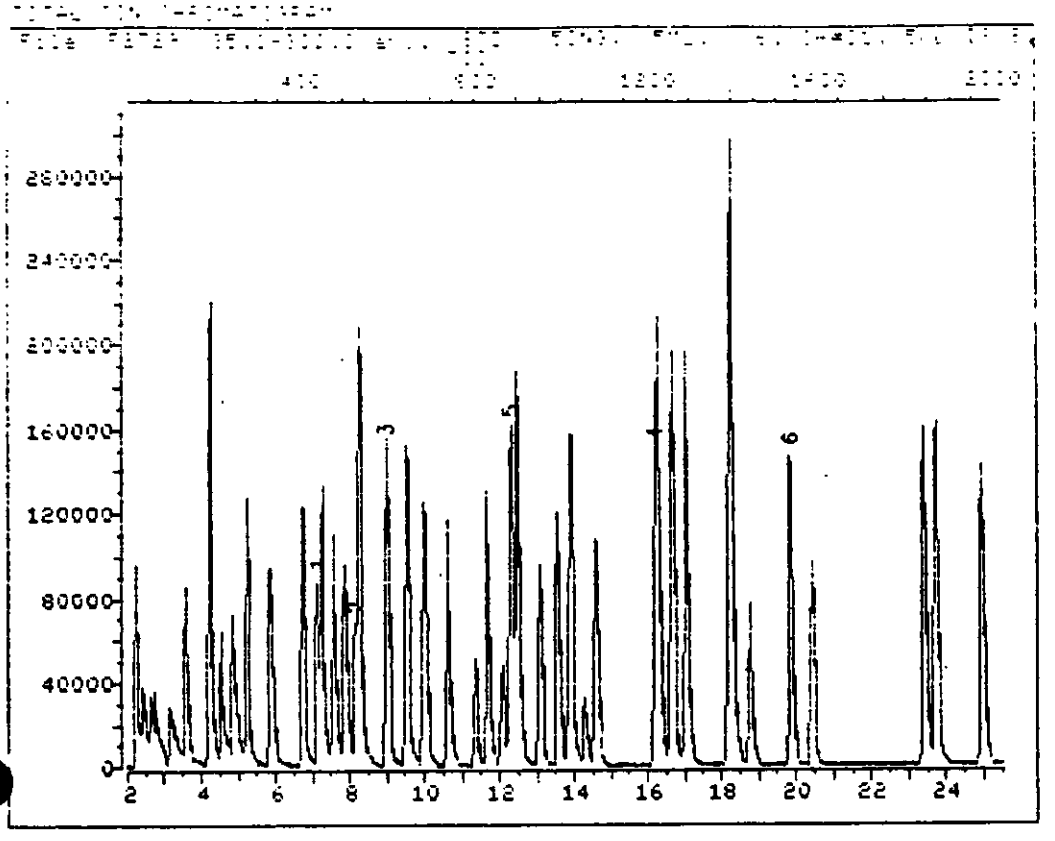
Instrument ID: V2 Calibration date: 10/14/91 Time: 1334

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	1.012	-46.2	
Vinyl Chloride	*	0.847	0.753	11.1	*
Chloroethane		0.531	0.727	-36.9	
Methylene Chloride		1.715	2.625	-53.1	
Acetone		0.404	0.423	-4.7	
Carbon Disulfide		4.332	4.820	-11.3	
1,1-Dichloroethene	*	0.935	1.137	-21.6	*
1,1-Dichloroethane	#	3.314	3.677	-11.0	#
1,2-Dichloroethene (total)		1.770	1.967	-11.1	
Chloroform	*	3.260	3.524	-8.1	*
1,2-Dichloroethane		2.168	2.295	-5.9	
2-Butanone		1.016	1.076	-5.9	
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		0.698	0.578	17.2	
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		0.439	0.433	1.4	
2-Chloroethylvinylether		0.220	0.201	8.6	
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	



Data File: >F2729::D6 Quant Output File: ^F2729::D7
Name: USTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B + FREONS

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911003 13:19

Operator ID: KERYLYNN
Quant Time : 911005 13:50
Injected at: 911005 13:23

QUANT REPORT Page

Operator ID: EFKLINN Quant Pe : 7 Quant Time: 911003 13:50
Output File: F2709::07 Injected at: 9:10CF 17:27
Data File: >F2709::06 Dilution Factor: 1.00000
Name: USTD 50NG, 5ML. Instrument ID: U6
Misc: U6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B + EPEONS

IO File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 U6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911003 17:15

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.13	128.0	82626	50.00	UG/L	76
2)	C010 Chloromethane	2.62	50.0	109730	57.75	UG/L	99
3)	C020 Vinyl Chloride	2.76	62.0	100005	52.67	UG/L	90
4)	C015 Bromomethane	3.14	94.0	89874	48.62	UG/L	88
5)	C025 Chloroethane	3.27	64.0	58602M	49.43	UG/L	99
6)	C045 1,1-Dichloroethene	4.23	96.0	109999 JE 10/5/91	51.53	UG/L	92
7)	C035 Acetone	4.30	43.0	213961	78.66	UG/L	22
8)	C040 Carbon Disulfide	4.52	76.0	323800	52.01	UG/L	100
9)	C030 Methylene Chloride	4.86	84.0	136704	47.45	UG/L	98
11)	C053 Trans-1,2-dichloroethene	5.23	96.0	136036	49.76	UG/L	99
12)	C055 Cis-1,2-dichloroethene	6.72	96.0	155784	51.50	UG/L	94
14)	C050 1,1-Dichloroethane	5.84	63.0	261025	51.61	UG/L	100
15)	C060 Chloroform	7.26	83.0	307718	54.14	UG/L	96
16)	C065 1,2-Dichloroethane	8.29	62.0	179563	54.92	UG/L	100
17)	C110 2-Butanone	6.76	72.0	12491	75.18	UG/L	91
18)	CS15 D4-1,2-dichloroethane	8.14	65.0	142470	50.97	UG/L	83
19)	*CI10 1,4-Difluorobenzene	9.00	114.0	439106	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.91	43.0	271403	67.11	UG/L	98
21)	C115 1,1,1-Trichloroethane	7.59	97.0	251828	54.67	UG/L	97
22)	C120 Carbon Tetrachloride	7.89	117.0	208877	54.60	UG/L	91
23)	C165 Benzene	8.26	78.0	439733	53.85	UG/L	100
24)	C150 Trichloroethene	9.52	130.0	186447	52.36	UG/L	99
25)	C140 1,2-Dichloropropane	10.00	63.0	184360	56.28	UG/L	100
26)	C130 Bromodichloromethane	10.62	83.0	277697	56.42	UG/L	71
27)	C175 2-Chloroethylvinylether	11.35	63.0	88894	60.94	UG/L	94
28)	C143 Cis-1,3-Dichloropropene	11.65	75.0	290990	60.15	UG/L	99
29)	C172 Trans-1,3-dichloropropene	13.07	75.0	201429	53.87	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.53	97.0	151604	60.09	UG/L	73
31)	C155 Dibromochloromethane	14.56	129.0	229031	58.31	UG/L	92
32)	C180 Bromoform	18.75	173.0	136920	58.33	UG/L	94
33)	*CI20 D5-Chlorobenzene	16.18	117.0	330996	50.00	UG/L	100
34)	CS05 D8-Toluene	12.29	98.0	420037	49.54	UG/L	95
35)	C205 4-Methyl-2-pentanone	12.06	43.0	138218	71.35	UG/L	79
36)	C230 Toluene	12.47	92.0	305960	55.17	UG/L	93
37)	C210 2-Hexanone	14.27	43.0	100025	74.29	UG/L	98
38)	C220 Tetrachloroethene	13.87	164.0	158098	55.49	UG/L	86
39)	C235 Chlorobenzene	16.27	112.0	372423	56.33	UG/L	74
40)	C240 Ethylbenzene	16.64	106.0	181878	54.08	UG/L	99
41)	CXXX Xylenes (p)	17.02	106.0	219323	54.43	UG/L	97
42)	CXXX Xylenes (o)	18.21	106.0	215881	54.50	UG/L	93
43)	C245 Styrene	18.25	104.0	379064	55.45	UG/L	100

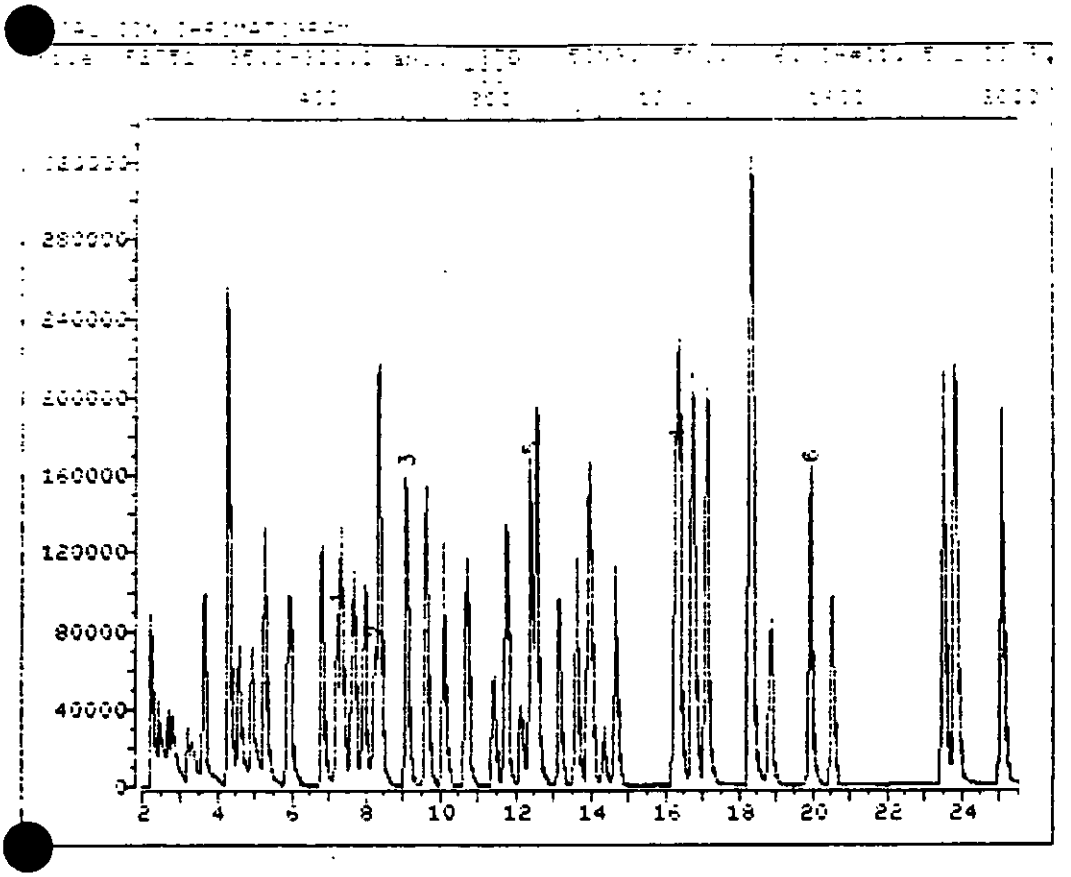
000260

Operator ID: [illegible] Quant Pe.: [illegible] Quant Time: [illegible]
Output File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.00000
Name: USTD 50NG. 5ML. Instrument ID: U6
Misc: U6, CH#01, 50L IS/S, STD=25UL/100ML HSL,A.B + FREONS

ID File: MOB:D6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 U6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Ocal Time: 911003 13:19

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	C335 Dichlorobenzene (m)	23.40	146.0	292695	51.74	UG/L	100
47)	C340 Dichlorobenzene (p)	23.72	146.0	267546	52.22	UG/L	100
48)	C350 Dichlorobenzene (o)	24.94	146.0	268856	51.71	UG/L	100
49)	C250 Xylenes (total)	18.21	106.0	210274	53.08	UG/L	84

* Compound is ISTD



Data File: >F2751::D6 Quant Output File: ^F2751::D7
Name: VSTD 50NG. 5ML. Instrument ID: V6
Misc: V6, CH#01, 5UL IS/S, STD=25UL/100ML HSL,A,B

Id File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911005 13:23

Operator ID: KERYLYNN
Quant Time : 911006 10:57
Injected at: 911006 10:30

Operator ID: [illegible] Client Rev: [illegible] Client Time: [illegible]
Acqu File: [illegible] Injected at: [illegible]
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Name: [illegible] Instrument ID: [illegible]
Misc: [illegible]

ID File: [illegible]
Title: [illegible]
Last Calibration: [illegible] Last Cal Time: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.20	128.0	87593	50.00	UG/L	71
2)	C010 Chloromethane	2.66	50.0	97614	43.54	UG/L	97
3)	C020 Vinyl Chloride	2.80	62.0	101375	47.81	UG/L	92
4)	C015 Bromomethane	3.18	94.0	96429	[illegible]	UG/L	97
5)	C025 Chloroethane	3.32	64.0	64923M	32.25	UG/L	98
6)	C045 1,1-Dichloroethene	4.29	96.0	123188	52.82	UG/L	89
7)	C035 Acetone	4.34	43.0	16836	37.11	UG/L	24
8)	C040 Carbon Disulfide	4.58	76.0	369118	53.77	UG/L	100
9)	C030 Methylene Chloride	4.90	84.0	151307	52.20	UG/L	97
11)	C053 Trans-1,2-dichloroethene	5.29	96.0	150804	52.28	UG/L	98
12)	C055 Cis-1,2-dichloroethene	6.80	96.0	167875	50.83	UG/L	90
14)	C050 1,1-Dichloroethane	5.88	63.0	288323	52.10	UG/L	100
15)	C060 Chloroform	7.34	83.0	323216	49.54	UG/L	97
16)	C065 1,2-Dichloroethane	8.37	62.0	183762	48.27	UG/L	100
17)	C110 2-Butanone	6.80	72.0	11676	44.09	UG/L	87
18)	CS15 D4-1,2-dichloroethane	8.23	65.0	153933	50.96	UG/L	82
19)	*C110 1,4-Difluorobenzene	9.08	114.0	477342	50.00	UG/L	100
20)	C125 Vinyl Acetate	5.96	43.0	277784	47.08	UG/L	97
21)	C115 1,1,1-Trichloroethane	7.65	97.0	264471	48.30	UG/L	96
22)	C120 Carbon Tetrachloride	7.96	117.0	230283	50.71	UG/L	99
23)	C165 Benzene	8.33	78.0	486009	50.84	UG/L	100
24)	C150 Trichloroethene	9.60	130.0	193621	47.76	UG/L	98
25)	C140 1,2-Dichloropropane	10.07	63.0	188550	47.04	UG/L	100
26)	C130 Bromodichloromethane	10.70	83.0	294764	48.82	UG/L	83
27)	C175 2-Chloroethylvinylether	11.42	63.0	102063	52.81	UG/L	95
28)	C143 Cis-1,3-Dichloropropene	11.73	75.0	306538	51.36	UG/L	98
29)	C172 Trans-1,3-dichloropropene	13.14	75.0	208731	43.85	UG/L	100
30)	C160 1,1,2-Trichloroethane	13.61	97.0	152751	46.34	UG/L	76
31)	C155 Dibromochloromethane	14.65	129.0	244876	49.18	UG/L	95
32)	C180 Bromoform	18.83	173.0	156055	52.42	UG/L	92
33)	*C120 D5-Chlorobenzene	16.26	117.0	362068	50.00	UG/L	100
34)	CS05 D8-Toluene	12.39	98.0	458791	49.93	UG/L	92
35)	C205 4-Methyl-2-pentanone	12.13	43.0	132688	43.88	UG/L	88
36)	C230 Toluene	12.53	92.0	314065	46.92	UG/L	97
37)	C210 2-Hexanone	14.33	43.0	90248	41.24	UG/L	93
38)	C220 Tetrachloroethene	13.94	164.0	168911	48.84	UG/L	89
39)	C235 Chlorobenzene	16.34	112.0	395947	48.60	UG/L	71
40)	C240 Ethylbenzene	16.72	106.0	198256	49.83	UG/L	95
41)	CXXX Xylenes (p)	17.08	106.0	237504	49.50	UG/L	99
42)	CXXX Xylenes (o)	18.27	106.0	233773	49.50	UG/L	97
43)	C245 Styrene	18.33	104.0	412050	49.69	UG/L	100

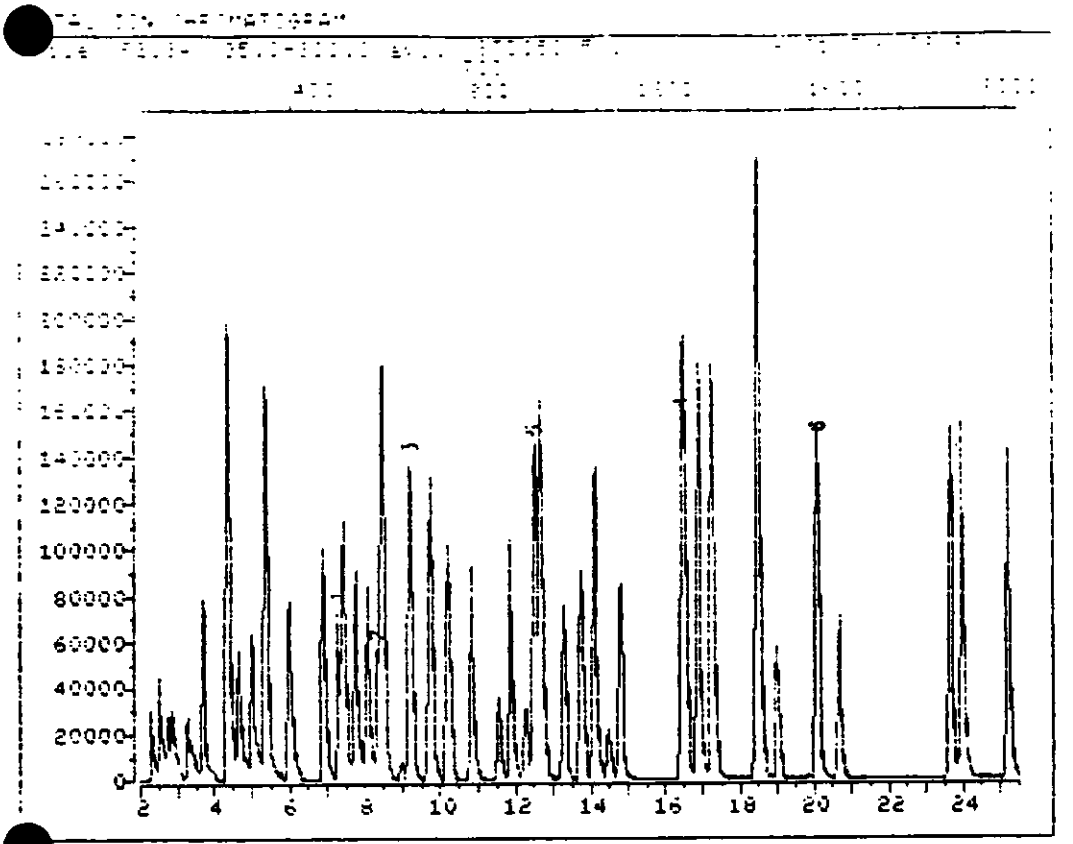
000263

Operator ID: REP_MW Client Reference: Client Time: 9/10/91 11:17
Purge File: MP1PF1::07 Injected at: 9/10/91 11:17
Data File: MP1F1::06 Dilution Factor: 1.00
Name: STD 50NG, 5ML. Instrument ID: MS
Misc: MS, CH#01, FUL IE'S, STD=25UL/100ML HSL,H.B

ID File: MSPID1::07
Title: HSL VOLATILES: 75m x .53mm: DB624 MS EPCO/ENSECO
Last Calibration: 910814 09:37 Last Ocal Time: 9/10/91 13:17

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	C335 Dichlorobenzene (m)	23.90	146.0	396296	61.89	UG/L	100
47)	C340 Dichlorobenzene (p)	23.80	146.0	361513	61.76	UG/L	100
48)	C350 Dichlorobenzene (o)	25.04	146.0	364732	62.01	UG/L	100
49)	C250 Xylenes (total)	18.27	106.0	233797	50.82	UG/L	94

* Compound is ISTD



Data File: >F2884::D6 Quant Output File: ^F2884::D7
Name: VSTD050 5ML Instrument ID: V6
Misc: V6 C1 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 23:15
Injected at: 911010 22:48

Data File: [illegible]
Title: HSL [illegible]
Last Calibration: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.29	128.0	67879	50.00	UG/L	67
2)	C010 Chloromethane	2.70	50.0	87980	55.24	UG/L	98
3)	C020 Vinyl Chloride	2.84	62.0	93332	67.12	UG/L	84
4)	C015 Bromomethane	3.22	94.0	77594	70.88	UG/L	93
5)	C025 Chloroethane	3.35	64.0	49917M	7/10/91	UG/L	89
6)	C045 1,1-Dichloroethene	4.33	96.0	106667	63.61	UG/L	95
7)	C035 Acetone	4.40	43.0	14946	53.04	UG/L	29
8)	C040 Carbon Disulfide	4.63	76.0	291841	58.20	UG/L	100
9)	C030 Methylene Chloride	4.98	84.0	132288	56.01	UG/L	92
10)	C053 Trans-1,2-dichloroethene	5.36	96.0	129511	57.53	UG/L	99
11)	C055 Cis-1,2-dichloroethene	6.88	96.0	138570	57.00	UG/L	96
12)	CXXX Methyl tert-butyl ether	5.36	73.0	223056	51.80	UG/L	86
13)	C050 1,1-Dichloroethane	5.97	63.0	243981	55.43	UG/L	100
14)	C060 Chloroform	7.43	83.0	273060	55.78	UG/L	97
15)	C065 1,2-Dichloroethane	8.46	62.0	155885	53.02	UG/L	100
16)	C110 2-Butanone	6.89	72.0	8434	53.96	UG/L	91
17)	CS15 D4-1,2-dichloroethane	8.32	65.0	125523	54.44	UG/L	85
18)	*C110 1,4-Difluorobenzene	9.18	114.0	403984	50.00	UG/L	100
19)	C125 Vinyl Acetate	6.03	43.0	201606	40.96	UG/L	98
20)	C115 1,1,1-Trichloroethane	7.76	97.0	225130	50.90	UG/L	89
21)	C120 Carbon Tetrachloride	8.05	117.0	179406	49.48	UG/L	97
22)	C165 Benzene	8.43	78.0	398572	50.95	UG/L	100
23)	C150 Trichloroethene	9.70	130.0	171038	53.85	UG/L	88
24)	C140 1,2-Dichloropropane	10.19	63.0	160017	50.15	UG/L	100
25)	C130 Bromodichloromethane	10.81	83.0	227057	47.39	UG/L	77
26)	C175 2-Chloroethylvinylether	11.53	63.0	64712	45.39	UG/L	99
27)	C143 Cis-1,3-Dichloropropene	11.85	75.0	233726	49.73	UG/L	97
28)	C172 Trans-1,3-dichloropropene	13.27	75.0	157885	42.86	UG/L	100
29)	C160 1,1,2-Trichloroethane	13.72	97.0	120228	47.89	UG/L	76
30)	C155 Dibromochloromethane	14.78	129.0	178323	46.60	UG/L	92
31)	C180 Bromoform	18.99	173.0	102353	46.15	UG/L	98
32)	*C120 D5-Chlorobenzene	16.40	117.0	330421	50.00	UG/L	100
33)	CS05 D8-Toluene	12.50	98.0	403422	47.90	UG/L	98
34)	C205 4-Methyl-2-pentanone	12.27	43.0	102103	43.66	UG/L	83
35)	C230 Toluene	12.66	92.0	263494	46.84	UG/L	94
36)	C210 2-Hexanone	14.47	43.0	69124	45.33	UG/L	98
37)	C220 Tetrachloroethene	14.08	164.0	134827	46.38	UG/L	86
38)	C235 Chlorobenzene	16.48	112.0	324313	48.08	UG/L	74
39)	C240 Ethylbenzene	16.86	106.0	165528	48.79	UG/L	97
40)	CXXX Xylenes (p)	17.23	106.0	205953	46.79	UG/L	97
41)	CXXX Xylenes (o)	18.43	106.0	194179	47.14	UG/L	100
42)	C245 Styrene	18.48	104.0	338692	46.52	UG/L	100

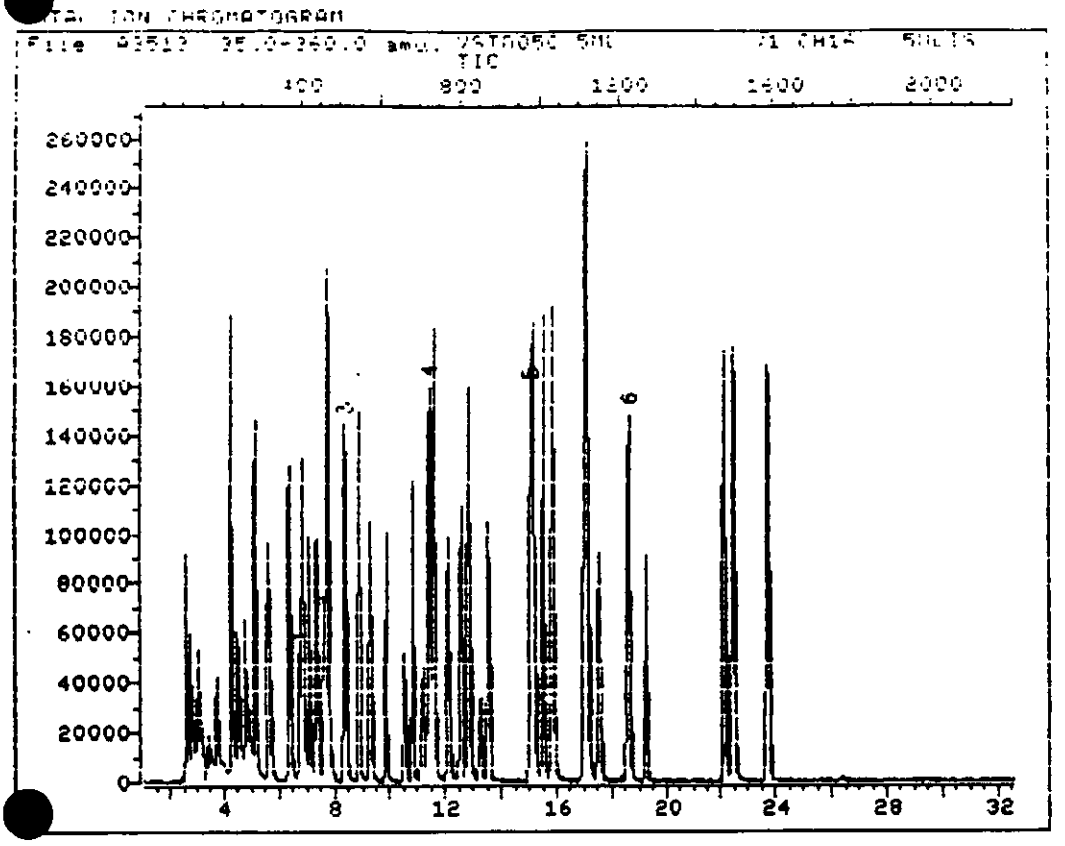
000266

Operator ID: REF Lims Client no : Acquired Time:
Data File: F1894::CT Injected at:
Sts File: F1894::DB Dilution Factor:
Name: Method #1 Instrument ID:
Misc: Wb 01 5UL IS 5

CO File: MOPIDr::MT
Title: HSL VOL-TILES: 75m x .53mm: DB624 W6 EPCO-ENSECO
Last Calibration: 910914 09:37 Last Acal Time: 911010 11:0

	Compound	R.T.	Q ion	Area	Conc	Units	q
45)	C510 Bromofluorobenzene	20.08	95.0	243392	50.77	UG/L	96
46)	C335 Dichlorobenzene (m)	23.66	146.0	268793	45.23	UG/L	100
47)	C340 Dichlorobenzene (p)	23.97	146.0	245101	45.04	UG/L	100
48)	C350 Dichlorobenzene (o)	25.21	146.0	259079	46.97	UG/L	100
49)	C250 Xylenes (total)	18.43	106.0	189066	46.86	UG/L	93

* Compound is ISTD



Data File: >A3513::D1 Quant Output File: ^A3513::QT
Name: VSTD050 5ML
Misc: V1 CH16 5ULIS

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 911009 08:24

Operator ID: ALANA
Quant Time: 911015 11:15
Injected at: 911015 10:41

Operator ID: HLHUH Quant Ref: 5 Quant Time: 911015 11:17
Output File: HA5513::QT Injected at: 911015 10:41
Data File: HA5513::D1 Dilution Factor: 1.00000
Name: VSTD050 5ML
Misc: V1 CH16 50UL15

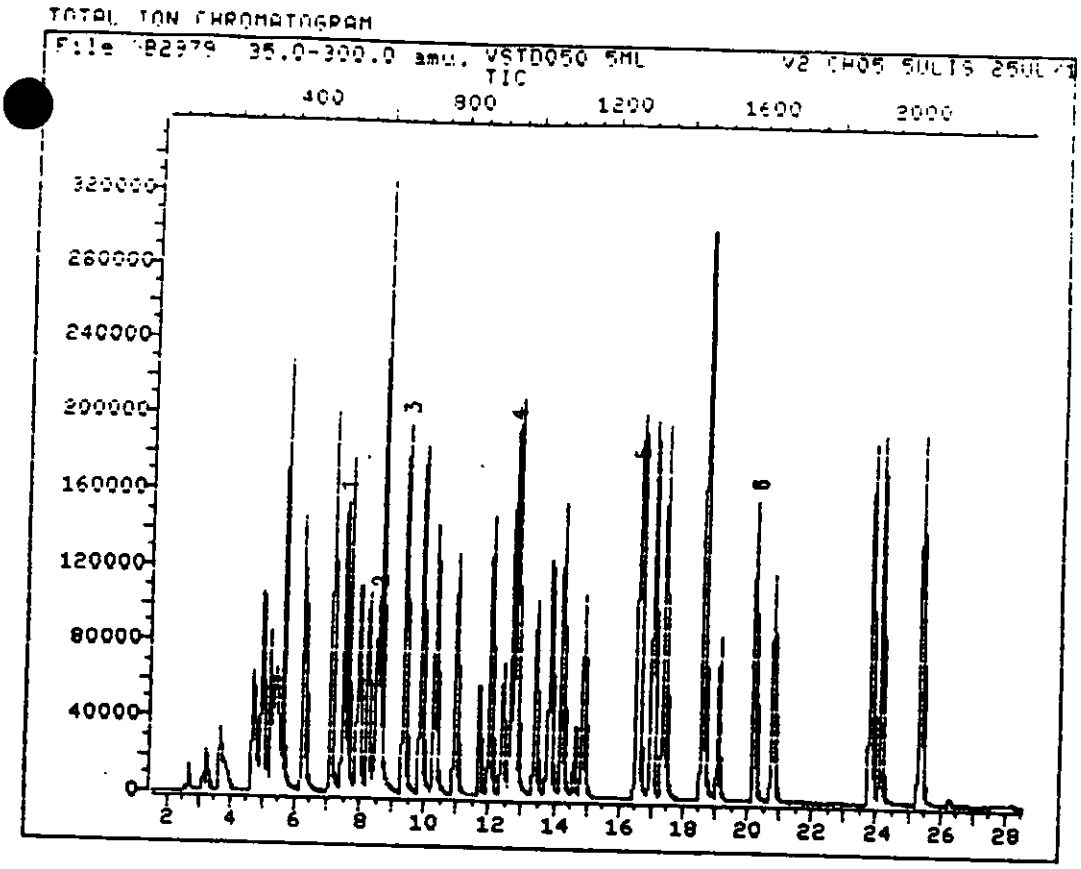
ID File: VOA1U1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERLO/ENSELO
Last Calibration: 911009 08:24

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	6.71	128.0	63438	50.00	UG/L	39
2)	C010	Chloromethane	2.96	50.0	83966	76.49	UG/L	97
3)	C020	Vinyl Chloride	3.06	62.0	84787	56.74	UG/L	85
4)	C015	Bromomethane	3.38	94.0	34132M	26.35	UG/L	91
5)	C025	Chloroethane	3.48	64.0	44175M	42.29	UG/L	97
6)	C045	1,1-Dichloroethene	4.25	96.0	68210	45.43	UG/L	88
7)	C035	Acetone	4.33	43.0	25982	53.96	UG/L	100
8)	C040	Carbon Disulfide	4.49	76.0	259765	46.97	UG/L	100
9)	C030	Methylene Chloride	4.76	84.0	117187	53.02	UG/L	77
10)	C053	Trans-1,2-Dichloroethene	5.08	96.0	109784	49.86	UG/L	99
11)	C055	cis-1,2-Dichloroethene	6.36	96.0	129013	54.24	UG/L	88
12)	C050	1,1-Dichloroethane	5.59	63.0	205994	52.45	UG/L	87
13)	C060	Chloroform	6.82	83.0	237768	51.61	UG/L	94
14)	C065	1,2-Dichloroethane	7.72	62.0	160542	49.03	UG/L	100
15)	C110	2-Butanone	6.39	72.0	13794	57.38	UG/L	86
16)	CS15	D4-1,2-Dichloroethane	7.61	65.0	119581	48.74	UG/L	88
17)	*C110	1,4-Difluorobenzene	8.35	114.0	339941	50.00	UG/L	100
18)	C125	Vinyl Acetate	5.65	43.0	217529	164.12	UG/L	98
19)	C115	1,1,1-Trichloroethane	7.09	97.0	183145	44.40	UG/L	92
20)	C120	Carbon Tetrachloride	7.36	117.0	173698	42.83	UG/L	95
21)	C165	Benzene	7.69	78.0	371878	47.94	UG/L	100
22)	C150	Trichloroethene	8.82	130.0	153485	46.40	UG/L	85
23)	C140	1,2-Dichloropropane	9.25	63.0	137107	48.13	UG/L	100
24)	C130	Bromodichloromethane	9.81	83.0	194599	47.41	UG/L	80
25)	C175	2-Chloroethylvinylether	10.48	63.0	79023	50.13	UG/L	96
26)	C143	Cis-1,3-Dichloropropen	10.78	75.0	220218	50.68	UG/L	96
27)	C172	Trans-1,3-Dichloropropen	12.08	75.0	168657	43.58	UG/L	100
28)	C160	1,1,2-Trichloroethane	12.53	97.0	120295	48.40	UG/L	70
29)	C155	Dibromochloromethane	13.48	129.0	193046	47.69	UG/L	93
30)	C180	Bromoform	17.53	173.0	161410	46.28	UG/L	99
31)	*C120	D5-Chlorobenzene	15.03	117.0	284949	50.00	UG/L	100
32)	CS05	D8-Toluene	11.37	98.0	368979	49.38	UG/L	86
33)	C205	4-Methyl-2-Pentanone	11.15	43.0	121447	45.89	UG/L	84
34)	C230	Toluene	11.51	92.0	236592	45.43	UG/L	99
35)	C210	2-Hexanone	13.23	43.0	87864	47.84	UG/L	98
36)	C220	Tetrachloroethene	12.83	164.0	146371	44.84	UG/L	90
37)	C235	Chlorobenzene	15.11	112.0	316254	45.58	UG/L	69
38)	C240	Ethylbenzene	15.47	106.0	155814	44.91	UG/L	99
39)	CXXX	Xylene (p)	15.84	106.0	187822	46.71	UG/L	99
40)	CXXX	Xylene (o)	16.97	106.0	177545	45.85	UG/L	99
41)	C245	Styrene	17.05	104.0	311457	47.12	UG/L	100
42)	C225	1,1,2,2-Tetrachloroethan	19.20	83.0	192884	50.13	UG/L	94
43)	CS10	Bromofluorobenzene (BFB)	18.59	95.0	177754	51.19	UG/L	92

000269

		Compound	[illegible]	[illegible]	Area	Conc	[illegible]	[illegible]
44)	C335	Dichlorobenzene (m)	22.12	146.0	269952	47.21	UG/L	1..
45)	C340	Dichlorobenzene (p)	22.43	146.0	284936	50.22	UG/L	100
46)	C350	Dichlorobenzene (o)	23.65	146.0	279502	48.83	UG/L	1..
47)	C250	Xylene (Total)	16.97	106.0	176043	45.46	UG/L	92

* Compound is ISTD



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: NORA Quant Rev: 6 Quant Time: 911014 14:53
Output File: >B2979::QT Injected at: 911014 13:54
Data File: >B2979::D6 Dilution Factor: 1.00000
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

		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01	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	48.16	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	61.72	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)	*CI10	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)	*CI20	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
43)	CS10	Bromofluorobenzene (BFB)	20.19	95.0	196538	48.12	UG/L	96

000272

		Compound	R.T.	Q ion	Area	Conc	Units	Q
44)	C350	Dichlorobenzene (m)	23.81	146.0	295267	46.41	UG/L	100
45)	C340	Dichlorobenzene (p)	24.12	146.0	301527	46.48	UG/L	100
46)	C350	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

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): A3513 Date Analyzed: 10/15/91

Instrument ID: V1 Time Analyzed: 1041

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	63400	6.71	340000	8.35	285000	15.03
	UPPER LIMIT	126800		680000		570000	
	LOWER LIMIT	31700		170000		142500	
	EPA SAMPLE NO.						
01	SB-B-11-2DL	70000	6.70	356000	8.33	294000	14.97
02	VBLK02	67100	6.60	359000	8.25	312000	14.95

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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): B2979 Date Analyzed: 10/14/91

Instrument ID: V2 Time Analyzed: 1334

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	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-11-2	177000	7.47	732000	9.38	542000	16.58
02	VBLK05	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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2751 Date Analyzed: 10/06/91

Instrument ID: V6 Time Analyzed: 1030

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	87600	7.20	477000	9.08	362000	16.26
	UPPER LIMIT	175200		954000		724000	
	LOWER LIMIT	43800		238500		181000	
	EPA SAMPLE NO.						
01	PC-1	93400	7.20	500000	9.10	380000	7.20
02	VBLK01	95500	7.20	486000	9.08	382000	16.27

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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2729 Date Analyzed: 10/05/91

Instrument ID: V6 Time Analyzed: 1323

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	82600	7.13	439000	9.00	331000	16.18
	UPPER LIMIT	165200		878000		662000	
	LOWER LIMIT	41300		219500		165500	
	EPA SAMPLE NO.						
01	10-3-QA1	94500	7.14	517000	9.01	401000	16.18
02	VBLK06	75700	7.17	420000	9.03	331000	16.20

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.: 10126 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-09-4	79900	7.40	384000	9.31	287000	16.57
02	SB-B-16-3	84100	7.41	400000	9.31	317000	16.54
03	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.: 10126 SAS No.: _____ SDG No.: _____

Lab File ID (Standard): F2884 Date Analyzed: 10/10/91

Instrument ID: V6 Time Analyzed: 2248

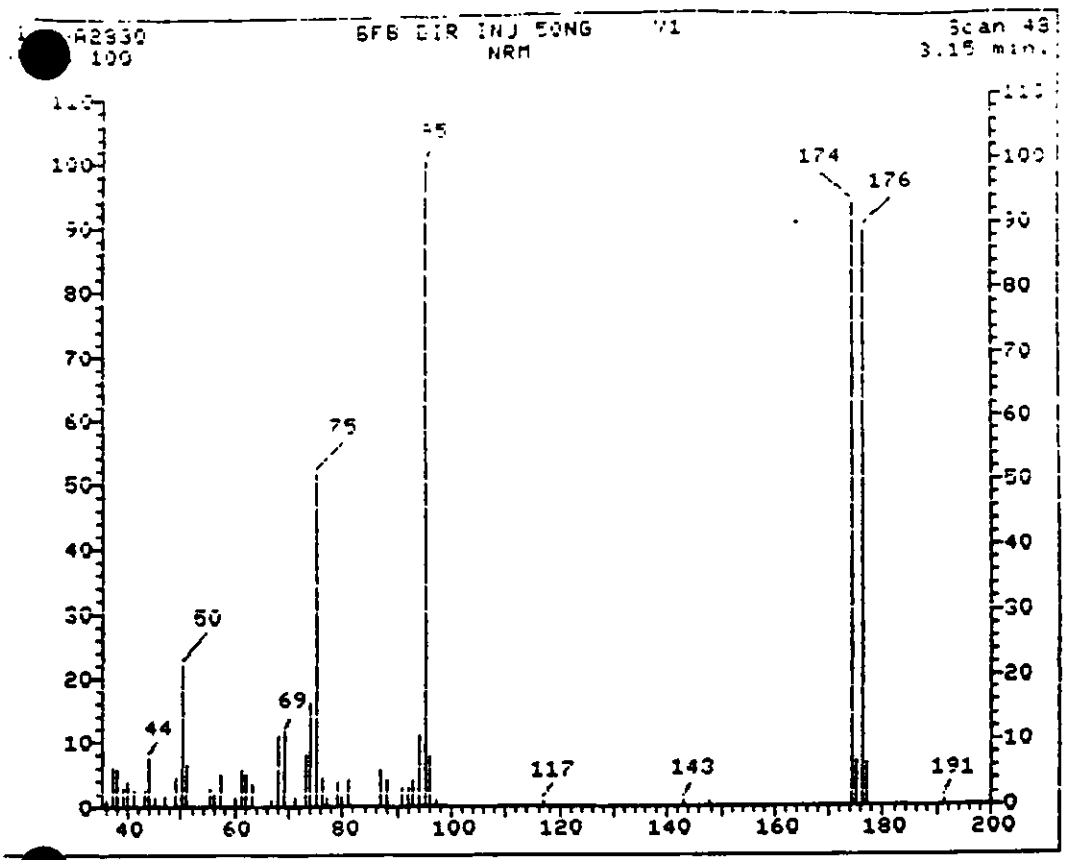
Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	67900	7.29	404000	9.18	330000	16.40
	UPPER LIMIT	135800		808000		660000	
	LOWER LIMIT	33950		202000		165000	
	EPA SAMPLE NO.						
01	SB-B-14-3	85200	7.33	472000	9.23	368000	16.43
02	SB-C-18-2	81700	7.22	442000	9.09	348000	16.29
03	VBLK04	61100	7.21	377000	9.09	319000	16.29

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



TUNDA

MS data file header from : >A2830

Sample: BFB DIR INJ 50NG Operator: MANAGER MS 8/29/91 10:10
Disc : 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-CRLO Laboratory

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

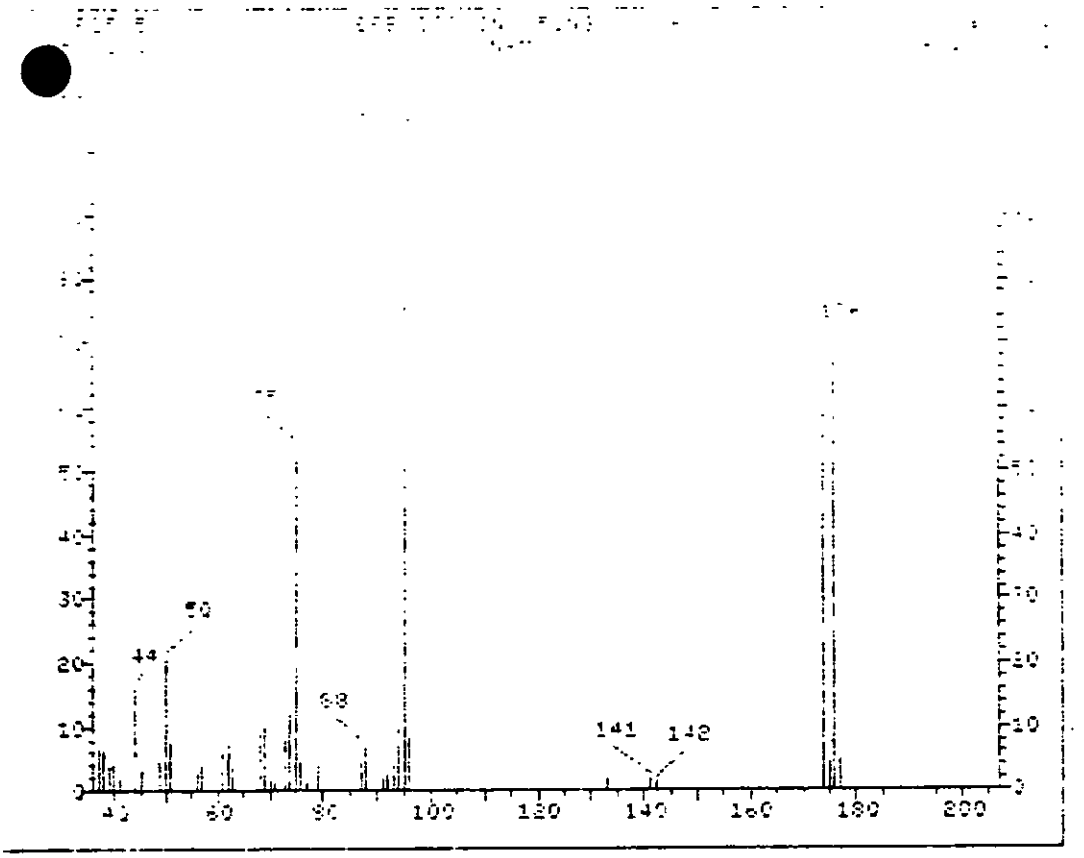
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.13	22.13	Ok
75	30-60% of mass 95	51.54	51.54	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.79	7.79	Ok
173	Less than 2% of mass 174	0.00	0.00	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
47.05	1.628	66.90	1.023	80.00	1.338	97.15	1.163	281.20	1.500
49.05	4.420								



TCA 60A
std 5.00

E data file header from : >F2555::D4

Sample: BFB DIR INJ 50NG . Operator: KERYLYNN SUPER GRP. 4/22/91 9:15
Misc : Vo
Ves. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: Vo
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

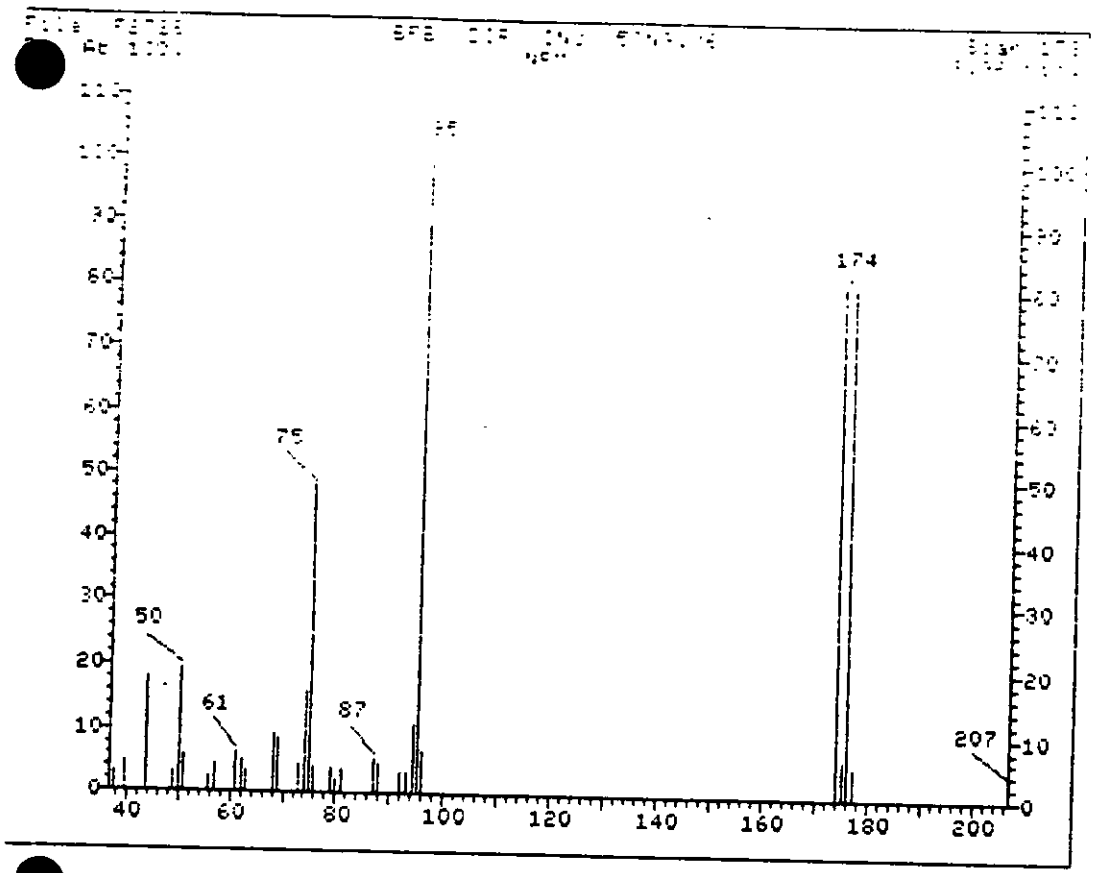
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Abundance Interpolated Peak	Status
95	95-105% of mass 95	20.91	21.98	OK
96	5-9% of mass 95	5.14	5.14	OK
95	Base peak, 100% relative abundance	100.00	100.00	OK
96	5-9% of mass 95	6.18	6.18	OK
173	Less than 2% of mass 174	0.00	0.00	OK
174	Greater than 50% of mass 95	69.06	69.00	OK
175	5-9% of mass 174	4.52	6.49	OK
176	95-101% of mass 174	69.74	100.13	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 DIF INJ 50NG .
Misc: V6

F2555 BFB DIF 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	0.032	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				



IS data file header from : >F2728::D6

Sample: BFB DIR INJ 50NG. Operator: LIZ SUPER GRP. 10/05/91 12:46
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)

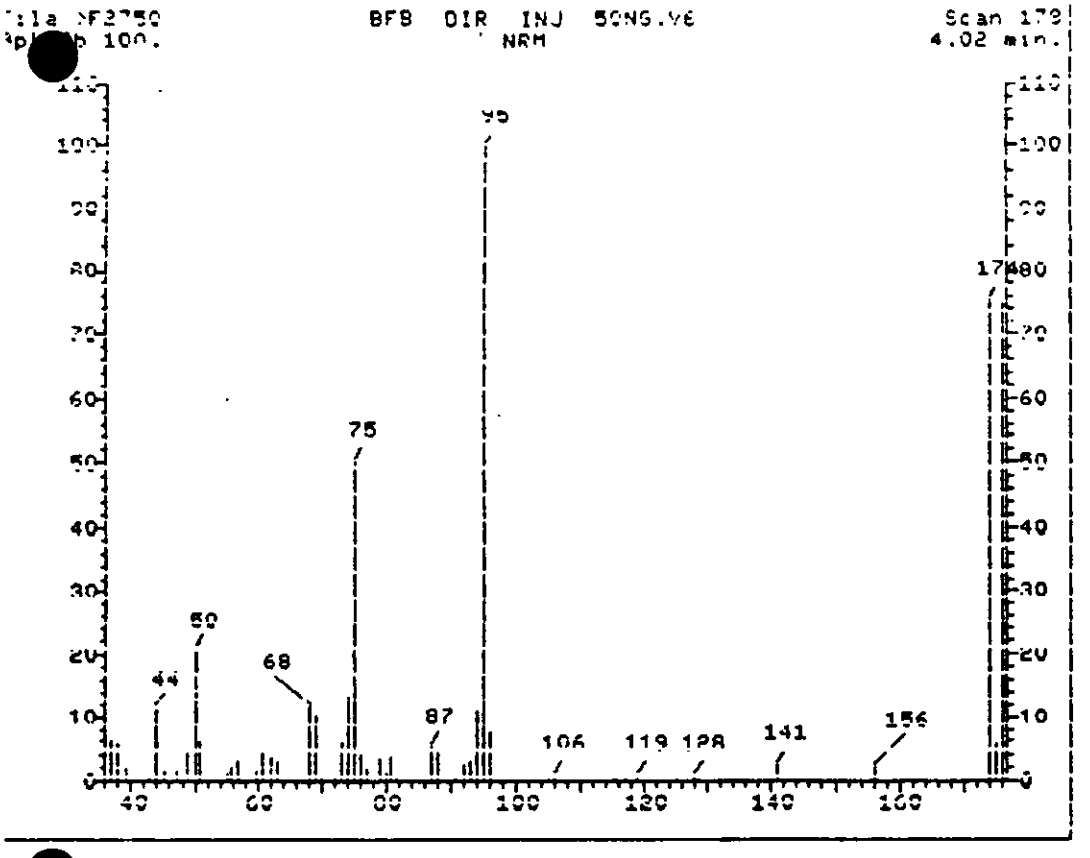
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	19.39	19.39	Ok
75	30-60% of mass 95	48.33	48.33	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.82	6.82	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	80.47	80.47	Ok
175	5-9% of mass 174	6.14	7.63	Ok
176	95-101% of mass 174	80.12	99.57	Ok
177	5-9% of mass 176	5.00	6.24	Ok

Injection Date: 10/05/91
Injection Time: 12:46
Data File: >F2728
Scan: 173
Name: BFB DIR INJ 50NG.
Misc: V6

>F2728 BFB DIR INJ 50NG.V6
173 NRM

File: >F2728 Scan #: 173 Retn. time: 3.96

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	5.560	55.95	2.460	72.95	4.611	86.95	5.560	95.95	6.819
37.95	3.158	57.05	4.320	74.05	15.866	87.95	4.785	173.95	80.473
39.85	4.959	60.95	6.490	75.05	48.334	91.95	3.623	174.95	6.141
43.95	18.074	62.05	5.056	75.95	4.281	92.95	3.603	175.95	80.124
49.05	3.100	62.95	3.468	78.85	3.991	94.05	11.042	176.95	4.998
50.05	19.392	68.05	9.299	79.95	1.976	95.05	100.000	206.90	3.351
50.95	5.812	68.95	8.853	80.95	3.758				



MS data file header from : >F2/5U::U6

Sample: BFB DIR INJ 5UNG. Operator: KERYLYNN SUPER GRP. 1U/U6/91 1U:U5
Misc : U6
Sys. #: 2 MS model: /U SW/HW rev.: LF ALS # : U Equip ID: U6
Method file: BFB6 Tuning file: M1/4U6 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : U

Chromatographic temperatures :	15U.	15U.	U.	U.	U.
Chromatographic times, min. :	1.U	6.U	U.U	U.U	U.U
Chromatographic rate, deg/min:	1.U	U.U	U.U	U.U	U.U

ENERGY-ENGINEERING LABORATORY

GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

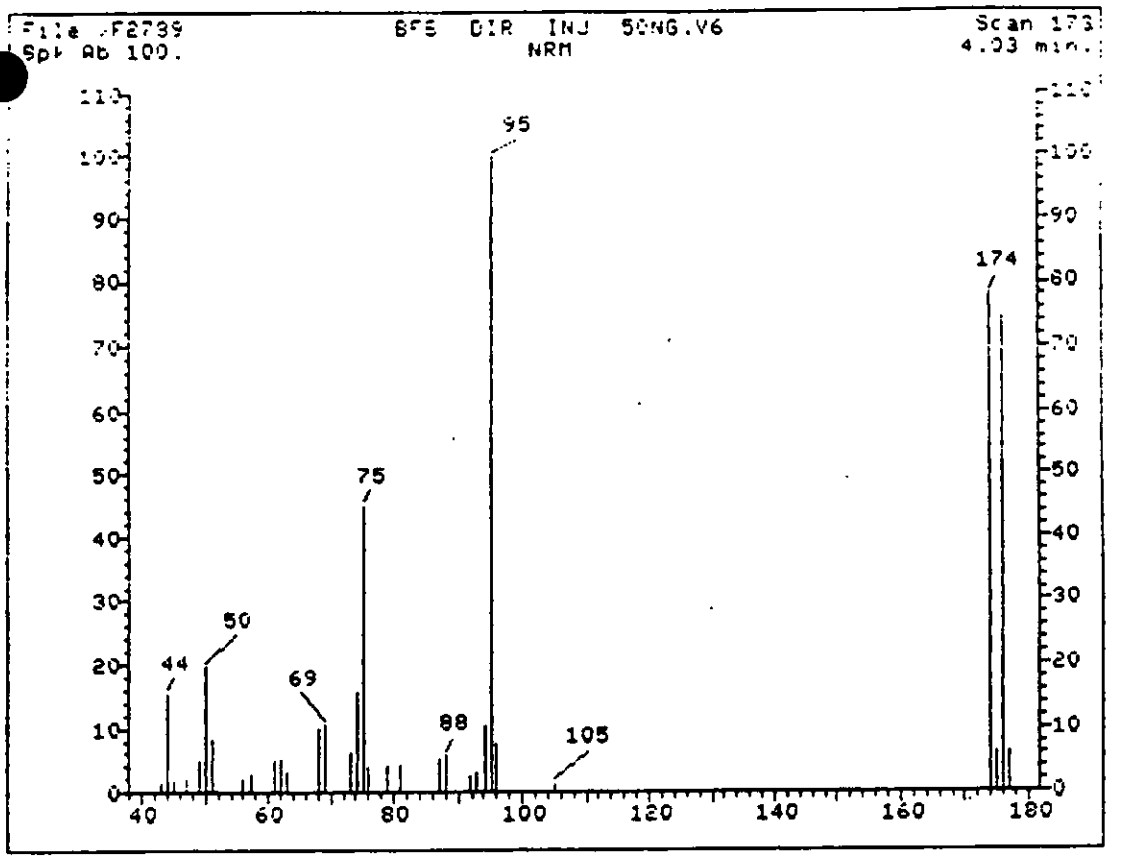
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.40	20.40	Ok
75	30-60% of mass 95	50.01	50.01	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.52	7.52	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	75.39	75.39	Ok
175	5-9% of mass 174	5.48	7.27	Ok
176	95-101% of mass 174	74.70	99.08	Ok
177	5-9% of mass 176	4.94	6.62	Ok

Injection Date: 10/06/91
Injection Time: 10:05
Data File: >F270
Scan: 178
Name: BFB DIR INJ 50NG.
Misc: 06

>F270 BFB DIR INJ 50NG.06
178 NRM

File: >F270 Scan #: 178 Retn. time: 4.02

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	1.275	55.05	1.150	71.95	.682	86.95	5.004	115.15	.558
36.95	6.231	55.95	1.985	73.05	5.680	87.95	4.784	116.95	.558
37.95	5.542	56.95	3.274	74.05	13.331	90.85	.620	118.95	.620
39.05	2.213	59.95	1.385	75.05	50.014	91.95	2.585	127.95	.682
42.95	.841	60.95	4.680	75.95	4.294	92.95	3.136	140.95	2.337
43.95	11.339	62.05	3.825	77.05	1.744	94.05	11.008	176.15	1.999
45.05	1.454	62.95	3.226	78.95	3.626	95.05	100.000	173.95	75.393
47.05	1.558	67.95	11.455	79.95	1.027	96.05	7.520	174.95	5.480
48.95	4.329	68.95	10.153	80.85	3.956	105.05	.558	175.95	74.697
50.05	20.396	70.05	.813	81.85	.620	105.95	.689	176.85	4.942
50.95	6.155								



TUNOCA
old SOW

MS data file header from : >F2789::D6

Sample: BFB DIR INJ 50NG. Operator: LIZ SUPER GRP. 10/08/91 7:34
Misc : U6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: U6
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)

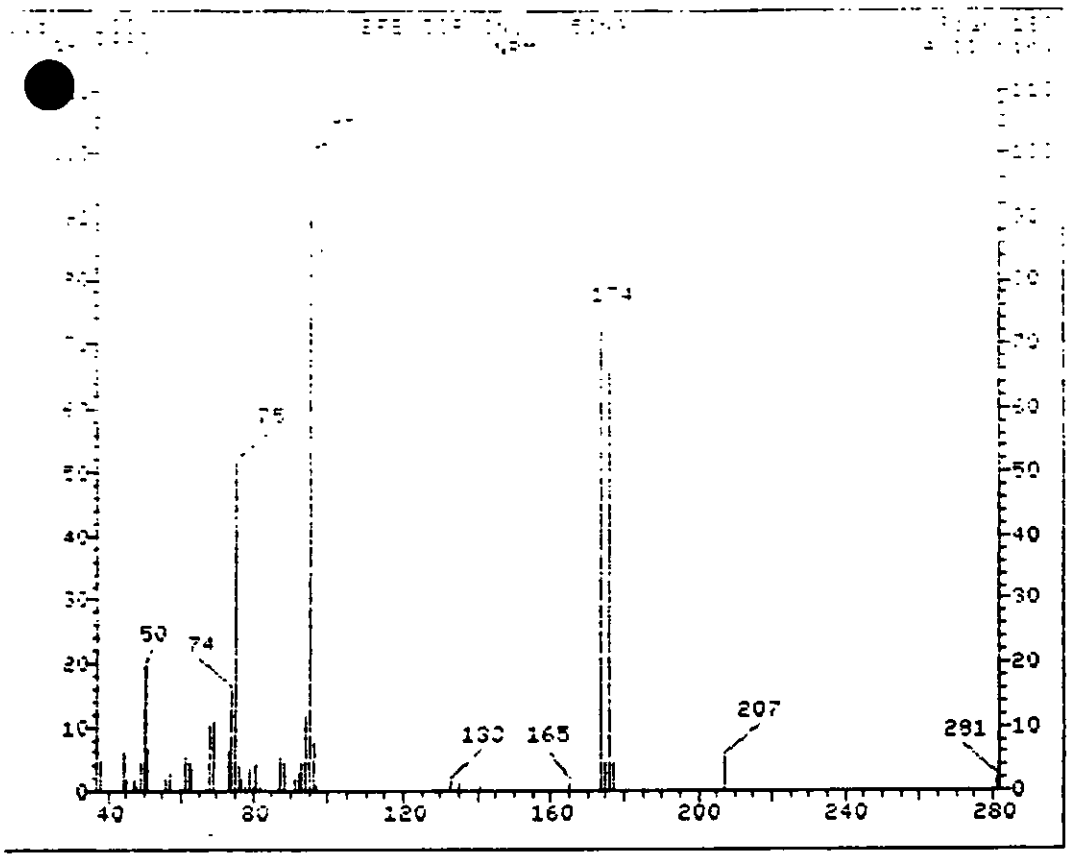
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	19.57	19.57	Ok
75	30-60% of mass 95	44.84	44.84	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.49	7.49	Ok
173	Less than 2% of mass 174	0.00	0.00	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	1.139
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		



IS data file header from : >F2882::D6

Sample: BFB DIR INJ 50NG Operator: KERYLYNN SUPER GRP. 10/10/91 21:54
Misc : U6
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip.ID: U6
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]

[illegible]

[illegible]

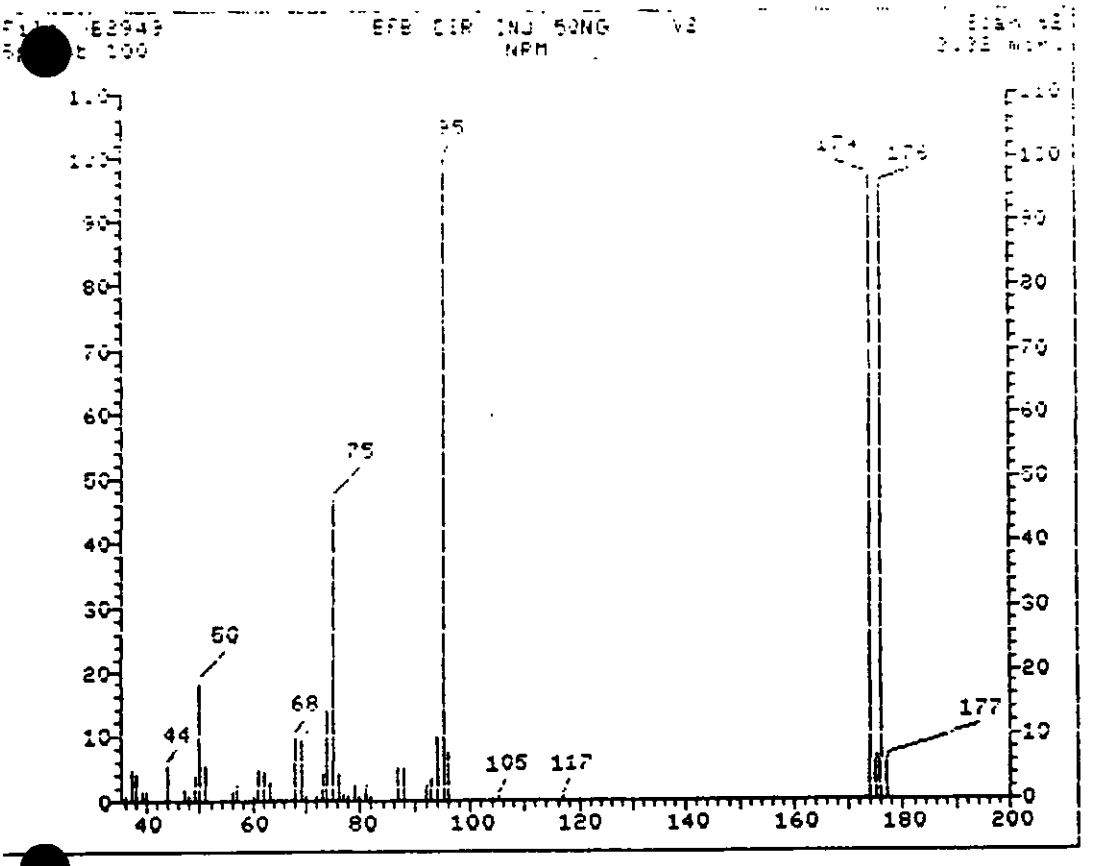
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	19.58	19.58	Ok
75	30-60% of mass 95	51.37	51.37	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.64	7.64	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	72.67	72.67	Ok
175	5-9% of mass 174	4.40	6.06	Ok
176	95-101% of mass 174	69.76	95.99	Ok
177	5-9% of mass 176	4.99	7.15	Ok

Injection Date: 10/10/91
Injection Time: 21:54
Data File: >F2882
Scan: 180
Name: BFB DIR INJ 50NG
Misc: V6

>F2882 BFB DIR INJ 50NG V6
180 NRM

File: >F2882 Scan #: 180 Retn. time: 4.11

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.95	6.794	57.05	2.818	75.05	51.366	90.95	2.070	140.85	.740
38.05	4.873	59.95	1.094	76.05	3.637	92.05	2.787	165.05	1.236
44.05	6.006	61.05	5.290	76.95	1.630	93.05	4.519	173.95	72.668
44.95	1.685	62.05	4.582	77.95	.771	93.95	11.470	175.05	4.401
46.95	1.818	63.05	3.322	78.85	3.629	95.05	100.000	175.95	69.755
47.85	.708	67.05	.504	79.95	.803	96.05	7.644	177.05	4.991
49.05	4.755	67.95	10.352	80.95	4.204	96.95	.646	207.00	5.046
50.05	19.578	69.05	10.761	81.85	.921	132.95	1.401	281.10	1.968
50.95	6.534	73.05	6.211	86.95	5.259	134.95	1.071	281.90	.401
56.05	2.078	74.05	15.540	87.95	4.645				



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-ERLO 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

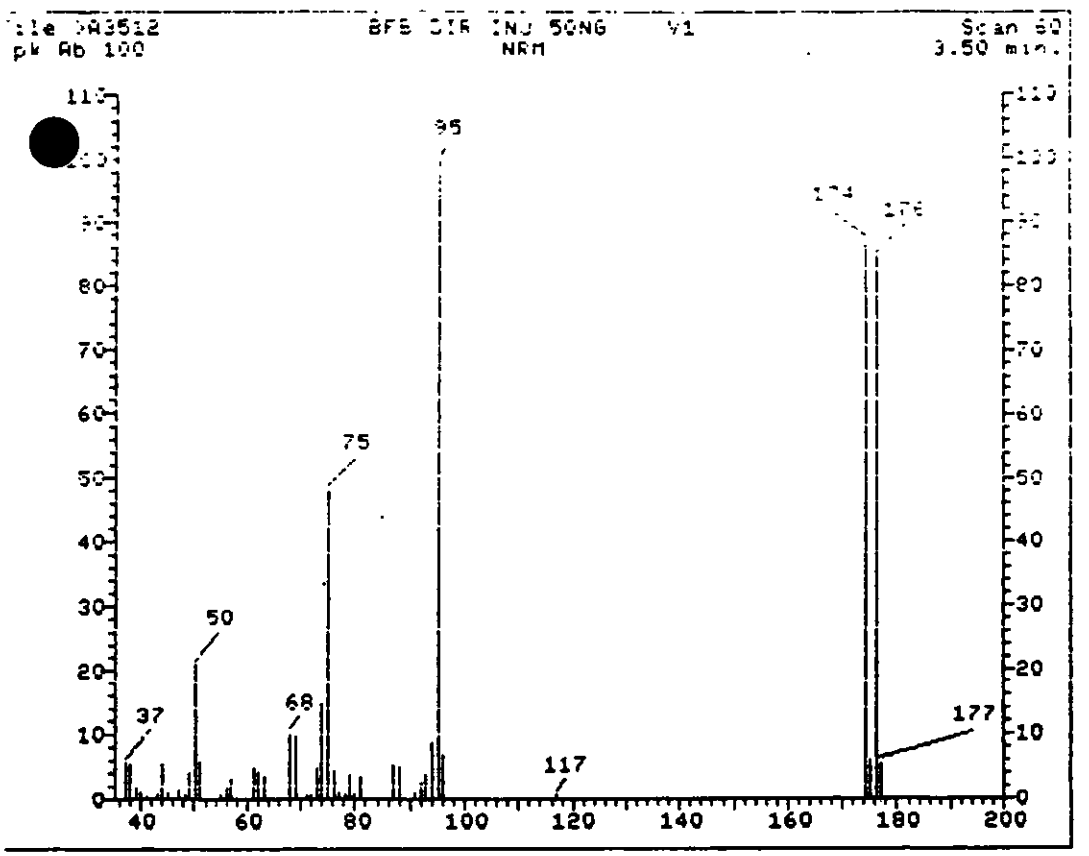
Injection Date: 10/11/91
Injection Time: 16:41
Data File: >B2949
Scan: 62
Name:BFB DIR INJ 50NG
Misc:V2

>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	.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						

000293



tunvoA

MS data file header from : >A3512

Sample: BFB DIR INJ 50NG Operator: ALANA MS 10/15/91 10:06
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 :	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)

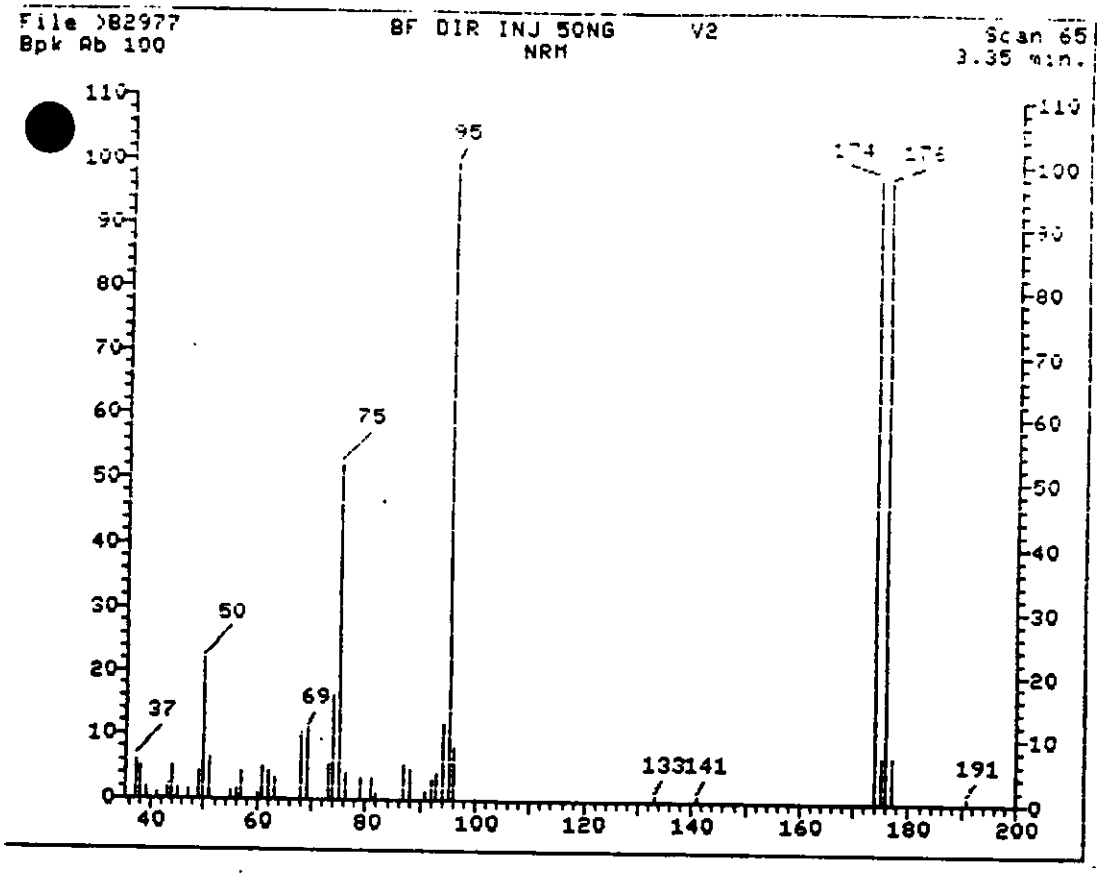
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.76	20.76	Ok
75	30-60% of mass 95	48.11	48.11	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.89	6.89	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	87.09	87.09	Ok
175	5-9% of mass 174	5.99	6.88	Ok
176	95-101% of mass 174	84.62	97.17	Ok
177	5-9% of mass 176	5.45	6.44	Ok

Injection Date: 10/15/91
Injection Time: 10:06
Data File: >A3512
Scan: 60
Name:BFB DIR INJ 50NG
Misc:V1

>A3512 BFB DIR INJ 50NG V1
60 NRM

File: >A3512 Scan #: 60 Retn. time: 3.50

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	5.661	48.05	.741	63.15	3.232	77.10	.938	93.05	3.692
38.10	5.304	49.05	3.974	68.10	10.260	78.20	.616	94.15	8.795
39.05	1.813	50.05	20.761	69.10	9.965	79.00	3.688	95.15	100.000
40.05	1.098	51.05	5.608	71.10	.705	80.00	.822	96.15	6.849
41.05	.509	55.05	.607	72.00	.768	81.00	3.340	117.00	.545
43.05	.580	56.05	1.839	73.10	4.759	87.10	5.411	174.10	87.088
44.05	5.465	57.05	2.965	74.10	14.716	88.10	5.099	175.10	5.992
44.95	1.063	61.15	4.759	75.10	48.111	91.05	.955	176.10	84.624
47.05	1.357	62.15	4.054	76.10	4.518	92.15	2.465	177.00	5.447



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-EPLU 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								

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2752

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

% Moisture: not dec. _____ Date Analyzed: 10/06/91

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	U
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	4	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.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2752

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

% Moisture: not dec. _____ Date Analyzed: 10/06/91

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

NC R-100691-V6A 624 T.

>F2752

2-But

4-Methe-2-pent

Reduced by: JZ Date: 10/6/91 Data File: F2752

Reviewed by: [illegible] Date: [illegible] Page: 1

Erseco Mass Spectrometry

Target Compound Data Summary Sheet

Sample: VBLK01 5ML.

Misc : V6, CH#16, 5UL IS S

Injected : 10/05/91 11:18 Units: UG/L

Analyst: KERYLYNN Run Factor: 1.000

ID File: MOBID6 Surrogate vol: .005

Quant list threshold: 1.00

20 milliliters

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2206	88.2	76 114
CS05 D8-Toluene	.2500	.2533	101	88 110
CS10 Bromofluorobenzene	.2500	.2406	96.2	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
		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
417	4.352	4.4	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		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
878	2.993		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)

3.0

Diagnostic Quant Report

Data File: F2TF2::Db Injected at: 11:19 10 Oct 91
Last : 1F::: 11 Oct 9.
ID File : MOBIDc::1T Calibrated : 09:37 08-14-91

	Compound	- P.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*CI01 Bromochloromethane	7.20	7.20	.00	128.0	95509	1.0000	50.00
2)	C010 Chloromethane	2.64	0.00	--	50.0	0	1.1144	0.00
3)	C020 Vinyl Chloride	2.80	0.00	--	62.0	0	1.1573	0.00
4)	C015 Bromomethane	3.19	0.00	--	94.0	0	1.1009	0.00
5)	C025 Chloroethane	3.32	0.00	--	64.0	0	.7412	0.00
6)	C045 1,1-Dichloroethene	4.29	0.00	--	96.0	0	1.4064	0.00
7)	C035 Acetone	4.35	0.00	--	43.0	0	.1922	0.00
8)	C040 Carbon Disulfide	4.58	0.00	--	76.0	0	4.2140	0.00
9)	C030 Methylene Chloride	4.91	4.91	.00	84.0	2490	1.7274	.75
10)	CXXX Tert-butyl alcohol	5.07	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.29	0.00	--	96.0	0	1.7216	0.00
12)	C055 Cis-1,2-dichloroethe	6.80	0.00	--	96.0	0	1.9165	0.00
13)	CXXX Methyl tert-butyl et	5.29	0.00	--	73.0	0	2.9749	0.00
14)	C050 1,1-Dichloroethane	5.88	0.00	--	63.0	0	3.2916	0.00
15)	C060 Chloroform	7.34	0.00	--	83.0	0	3.6900	0.00
16)	C065 1,2-Dichloroethane	8.37	0.00	--	62.0	0	2.0979	0.00
17)	C110 2-Butanone	6.80	6.80	.00	72.0	1108	.1333	4.35
18)	CS15 D4-1,2-dichloroethan	8.23	8.21	.01	65.0	148091	1.7574	44.12
19)	*CI10 1,4-Difluorobenzene	9.08	9.08	.00	114.0	485806	1.0000	50.00
20)	C125 Vinyl Acetate	5.96	0.00	--	43.0	0	.5819	0.00
21)	C115 1,1,1-Trichloroethan	7.65	0.00	--	97.0	0	.5540	0.00
22)	C120 Carbon Tetrachloride	7.96	0.00	--	117.0	0	.4824	0.00
23)	C165 Benzene	8.33	0.00	--	78.0	0	1.0182	0.00
24)	C150 Trichloroethene	9.60	0.00	--	130.0	0	.4056	0.00
25)	C140 1,2-Dichloropropane	10.07	0.00	--	63.0	0	.3950	0.00
26)	C130 Bromodichloromethane	10.70	0.00	--	83.0	0	.6175	0.00
27)	C175 2-Chloroethylvinylet	11.42	0.00	--	63.0	0	.2138	0.00
28)	C143 Cis-1,3-Dichloroprop	11.73	0.00	--	75.0	0	.6058	0.00
29)	C172 Trans-1,3-dichloropr	13.14	0.00	--	75.0	0	.4753	0.00
30)	C160 1,1,2-Trichloroethan	13.61	0.00	--	97.0	0	.3200	0.00
31)	C155 Dibromochloromethane	14.65	0.00	--	129.0	0	.5130	0.00
32)	C180 Bromoform	18.83	0.00	--	173.0	0	.3269	0.00
33)	*CI20 D5-Chlorobenzene	16.26	16.27	.01	117.0	382381	1.0000	50.00
34)	CS05 D8-Toluene	12.40	12.40	.00	98.0	490844	1.2671	50.65
34)D	CS05 D8-Toluene	12.40	12.76	.36	98.0	2682	1.2671	.28
34)D	CS05 D8-Toluene	12.40	12.85	.46	98.0	1432	1.2671	.15
35)	C205 4-Methyl-2-pentanone	12.14	12.18	.04	43.0	8275	.3665	2.95
36)	C230 Toluene	12.54	12.55	.01	92.0	1706	.8674	.26
37)	C210 2-Hexanone	14.35	0.00	--	43.0	0	.2493	0.00
38)	C220 Tetrachloroethene	13.95	0.00	--	164.0	0	.4665	0.00
39)	C235 Chlorobenzene	16.35	16.35	.00	112.0	2617	1.0936	.31
40)	C240 Ethylbenzene	16.74	0.00	--	106.0	0	.5476	0.00
41)	CXXX Xylenes (p)	17.10	0.00	--	106.0	0	.6560	0.00
42)	CXXX Xylenes (o)	18.29	18.27	.01	106.0	1225	.6457	.25
43)	C245 Styrene	18.35	18.33	.01	104.0	2926	1.1380	.34
44)	C225 1,1,2,2-Tetrachloroe	20.52	0.00	--	83.0	0	.6669	0.00
45)	CS10 Bromofluorobenzene	19.92	19.93	.01	95.0	273644	.7436	48.12
46)	C335 Dichlorobenzene (m)	23.52	23.50	.03	146.0	3554	1.0000	.42
46)D	C335 Dichlorobenzene (m)	23.52	23.80	.28	146.0	3456	1.0945	.41

49	C259 Xylenes (total)	18.29	0.00	--	100.0		J	.545	0.10

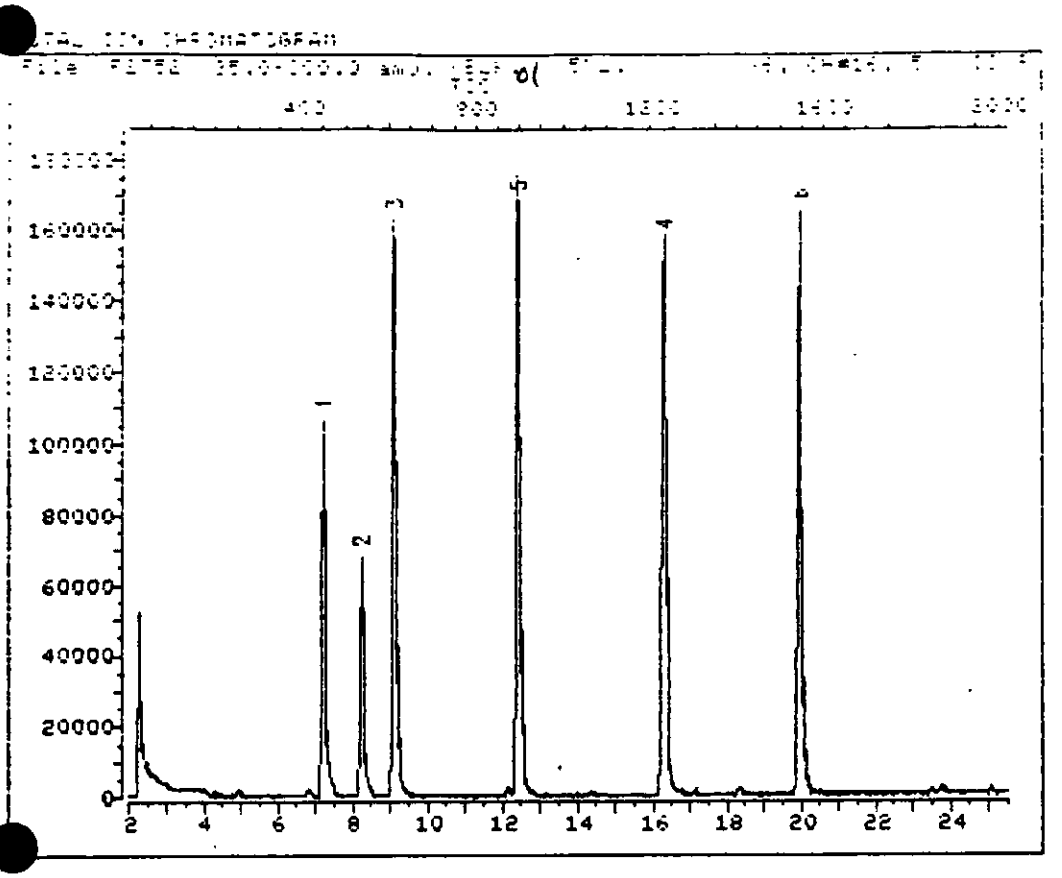
* - Compound is an Internal Standard
D - Compound Qdel'ed

Internal Standard Comparison

Sample: F2750 Date injected: 10/06/91 Standard: F2791

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	95509	87593	109.0
CI10 1,4-Difluorobenzene	485806	477342	101.8
CI20 DS-Chlorobenzene	382381	362068	105.6

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



Data File: >F2752::D6 Quant Output File: ^F2752::D7
Name: VBLK01 5ML. Instrument ID: V6
Misc: V6, CH#16, 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: 911006 10:30

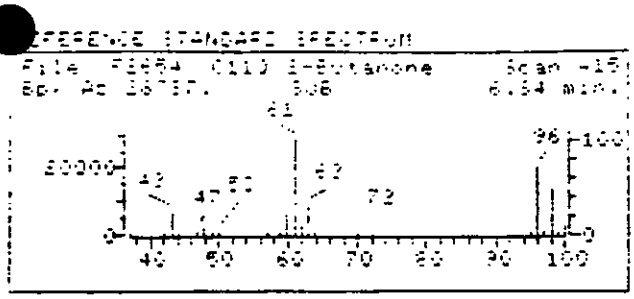
Operator ID: KERYLYNN
Quant Time : 911006 13:44
Injected at: 911006 11:18

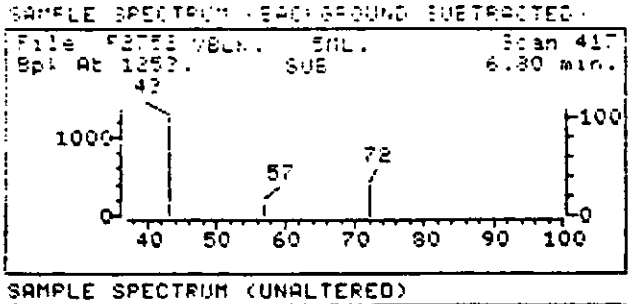
Operator ID: EPYLYNN Quant Pe : 7 Quant Time: 9110 9 .7:--
Target File: F2752::D7 Injected at: 9110[illegible] 1.:1[illegible]
Data File: F2752::D6 Dilution Factor: 1.00000
Name: VELP 01 FNL. Instrument ID: V6
Misc: V6, CH#1o, 5UL IS/S

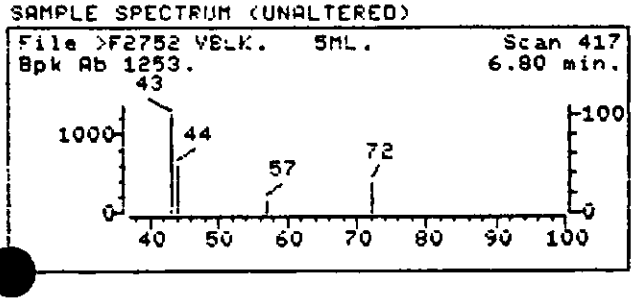
ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37 Last Qcal Time: 911006 1[illegible]:30

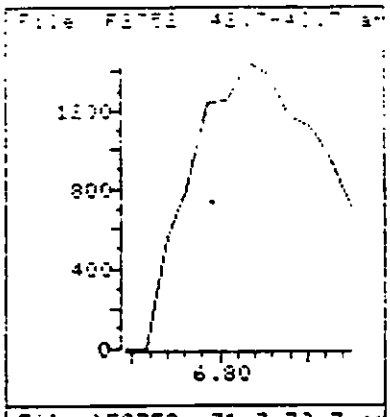
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.20	128.0	95509	50.00	UG/L	72
9)	C030 Methylene Chloride	4.91	84.0	2490	.755	UG/L	83
17)	C110 2-Butanone	6.80	72.0	1108	4.35	UG/L	78
18)	CS15 D4-1,2-dichloroethane	8.21	65.0	148091	44.12	UG/L	89
19)	*CI10 1,4-Difluorobenzene	9.08	114.0	485806	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.27	117.0	382381	50.00	UG/L	100
34)	CS05 D8-Toluene	12.40	98.0	490844	50.65	UG/L	88
35)	C205 4-Methyl-2-pentanone	12.18	43.0	8275	2.95	UG/L	88
36)	C230 Toluene	12.55	92.0	1706	.257	UG/L	79
[illegible]	C235 Chlorobenzene	16.35	112.0	2617	.313	UG/L	70
[illegible]	CXXX Xylenes (o)	18.27	106.0	1225	.248	UG/L	77
43)	C245 Styrene	18.33	104.0	2926	.336	UG/L	100
45)	CS10 Bromofluorobenzene	19.93	95.0	273644	48.12	UG/L	73
46)	C335 Dichlorobenzene (m)	23.50	146.0	3554	.425	UG/L	100
47)	C340 Dichlorobenzene (p)	23.80	146.0	3456	.453	UG/L	100
48)	C350 Dichlorobenzene (o)	25.01	146.0	4125	.535	UG/L	100

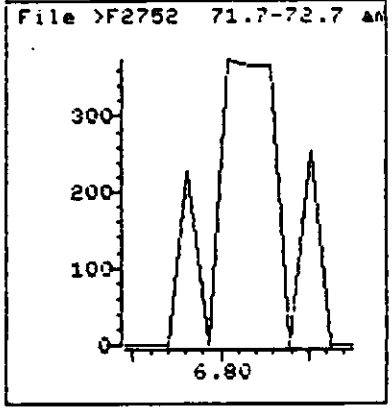
* Compound is ISTD











Data File: >F2752::D6
Name: VBLK01 5ML.
Misc: V6, CH#16, 5UL IS/S
Quant Time: 911006 13:44
Injected at: 911006 11:18
Last Qcal Time: 911006 10:30

Quant Output File: ^F2752::D7
Instrument ID: V6

Quant ID File: MOBID6::MT
Last Calibration: 910814 09:37

Compound No : 17
Compound Name : C110 2-Butanone
Scan Number : 417
Retention Time: 6.80 min.
Quant Ion : 72.0
Area : 1108
Concentration : 4.35 UG/L
q-value : 78

Data Reduced by : JE Date: 10/6/91 Data File: F1791

Data Reviewed by : _____ Date: _____

Erasco TIC Report (page 1)

Sample: VBLK07 5ML. Run Factor: 1.00
Conditions: Va, CHalo, FUL IS/S Analyst: KER_LINN

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

No Unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3515

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

% Moisture: not dec. 0 Date Analyzed: 10/15/91

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	520	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	640	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	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.

VBLK02

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 4.0 (g/mL) G Lab File ID: A3515

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

% Moisture: not dec. 0 Date Analyzed: 10/15/91

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

MC
8240-S

Reviewed by: Date: 101591
Released by: Date: 10/17/91

Data File: H0315
Page: 1

Entered by Ms

MeCl2
2-Butt

Target Compound Data Summary Sheet

Sample: VBLK0MEOH 5ML
Misc : V1 LHV1 SOLIS 1000UL/5ML MEOH LOT # AY323
Injected : 10/15/91 13:03
Analyst: ALANA
ID File: V0AID1
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	22.66	90.6	70 121
CS05	D8-Toluene	25.00	24.33	97.3	81 117
CS10	Bromofluorobenzene (BFB)	25.00	23.73	94.9	74 121

Target Compounds: V0AID1

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
221	2.378	SNR ~~297.5~~	C035	Acetone
		BDL	C040	Carbon Disulfide
247	4.18 ~~2.285~~	~~285.6~~	C030	Methylene Chloride DJ 101591
		BDL	C053	Trans-1,2-Dichloroethene
		BDL 522.5	C055	cis-1,2-Dichloroethene
		BDL	C050	1,1-Dichloroethane
		BDL	C060	Chloroform
		BDL	C065	1,2-Dichloroethane
363	5.144	643.0	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

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)

Diagnostic Quant Report

Data File: [illegible] Injected : [illegible]
Quant d : 15:29 10/15/91
ID File : QUAID1::$$ Calibrated : 11:24 10 [illegible]

	Compound		- R.T. Info - Fred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101	Bromochloromethane	6.71	6.60	.10	128.0	67146	1.0000	50.00
2)	C010	Chloromethane	2.91	0.00	--	50.0	0	1.3236	0.00
3)	C020	Vinyl Chloride	3.01	0.00	--	62.0	0	1.3365	0.00
4)	C015	Bromomethane	3.32	0.00	--	94.0	0	.5380	0.00
5)	C025	Chloroethane	3.42	0.00	--	64.0	0	.6963	0.00
6)	C045	1,1-Dichloroethene	4.18	0.00	--	96.0	0	1.0752	0.00
7)	C035	Acetone	4.27	4.29	.02	43.0	1308	.4096	2.38
8)	C040	Carbon Disulfide	4.42	0.00	--	76.0	0	4.0948	0.00
9)	C030	Methylene Chloride	4.69	4.66	.03	84.0	5669	1.8473	2.29
10)	C053	Trans-1,2-Dichloroe	5.00	0.00	--	96.0	0	1.7306	0.00
11)	C055	cis-1,2-Dichloroeth	6.26	0.00	--	96.0	0	2.0337	0.00
12)	C050	1,1-Dichloroethane	5.50	0.00	--	63.0	0	3.2472	0.00
13)	C060	Chloroform	6.71	0.00	--	83.0	0	3.7480	0.00
14)	C065	1,2-Dichloroethane	7.60	0.00	--	62.0	0	2.5307	0.00
15)	C110	2-Butanone	6.29	6.32	.02	72.0	1502	.2174	5.14
16)	CS15	D4-1,2-Dichloroetha	7.49	7.50	.01	65.0	114743	1.8850	45.33
17)	*C110	1,4-Difluorobenzene	8.35	8.25	.10	114.0	358658	1.0000	50.00
18)	C125	Vinyl Acetate	5.58	0.00	--	43.0	0	.6399	0.00
19)	C115	1,1,1-Trichloroetha	7.00	6.99	.02	97.0	1967	.5388	.51
20)	C120	Carbon Tetrachlorid	7.27	0.00	--	117.0	0	.5110	0.00
21)	C165	Benzene	7.60	0.00	--	78.0	0	1.0939	0.00
22)	C150	Trichloroethene	8.71	0.00	--	130.0	0	.4515	0.00
23)	C140	1,2-Dichloropropane	9.14	0.00	--	63.0	0	.4033	0.00
24)	C130	Bromodichloromethan	9.69	0.00	--	83.0	0	.5724	0.00
25)	C175	2-Chloroethylvinyle	10.35	0.00	--	63.0	0	.2325	0.00
26)	C143	Cis-1,3-Dichloropro	10.65	0.00	--	75.0	0	.6111	0.00
27)	C172	Trans-1,3-Dichlorop	11.93	0.00	--	75.0	0	.5393	0.00
28)	C160	1,1,2-Trichloroetha	12.37	0.00	--	97.0	0	.3539	0.00
29)	C155	Dibromochloromethan	13.32	0.00	--	129.0	0	.5679	0.00
30)	C180	Bromoform	17.31	0.00	--	173.0	0	.4748	0.00
31)	*C120	D5-Chlorobenzene	15.03	14.95	.08	117.0	311674	1.0000	50.00
32)	CS05	D8-Toluene	11.31	11.26	.04	98.0	392777	1.2949	48.66
33)	C205	4-Methyl-2-Pentanon	11.09	0.00	--	43.0	0	.4262	0.00
34)	C230	Toluene	11.45	11.42	.03	92.0	589	.8303	.11
35)	C210	2-Hexanone	13.16	0.00	--	43.0	0	.3083	0.00
36)	C220	Tetrachloroethene	12.76	0.00	--	164.0	0	.5137	0.00
37)	C235	Chlorobenzene	15.03	15.04	.00	112.0	616	1.1099	.09
38)	C240	Ethylbenzene	15.39	0.00	--	106.0	0	.5468	0.00
39)	CXXX	Xylene (p)	15.76	0.00	--	106.0	0	.6591	0.00
40)	CXXX	Xylene (o)	16.88	0.00	--	106.0	0	.6231	0.00
41)	C245	Styrene	16.96	0.00	--	104.0	0	1.0930	0.00
42)	C225	1,1,2,2-Tetrachloro	19.10	0.00	--	83.0	0	.6769	0.00
43)	CS10	Bromofluorobenzene	18.49	18.51	.01	95.0	184540	.6238	47.46
44)	C335	Dichlorobenzene (m	22.00	0.00	--	146.0	0	1.0034	0.00
45)	C340	Dichlorobenzene (p	22.32	0.00	--	146.0	0	1.0105	0.00
46)	C350	Dichlorobenzene (o	23.52	0.00	--	146.0	0	.9809	0.00
47)	C250	Xylene (Total)	16.88	0.00	--	106.0	0	.617[illegible]	[illegible]

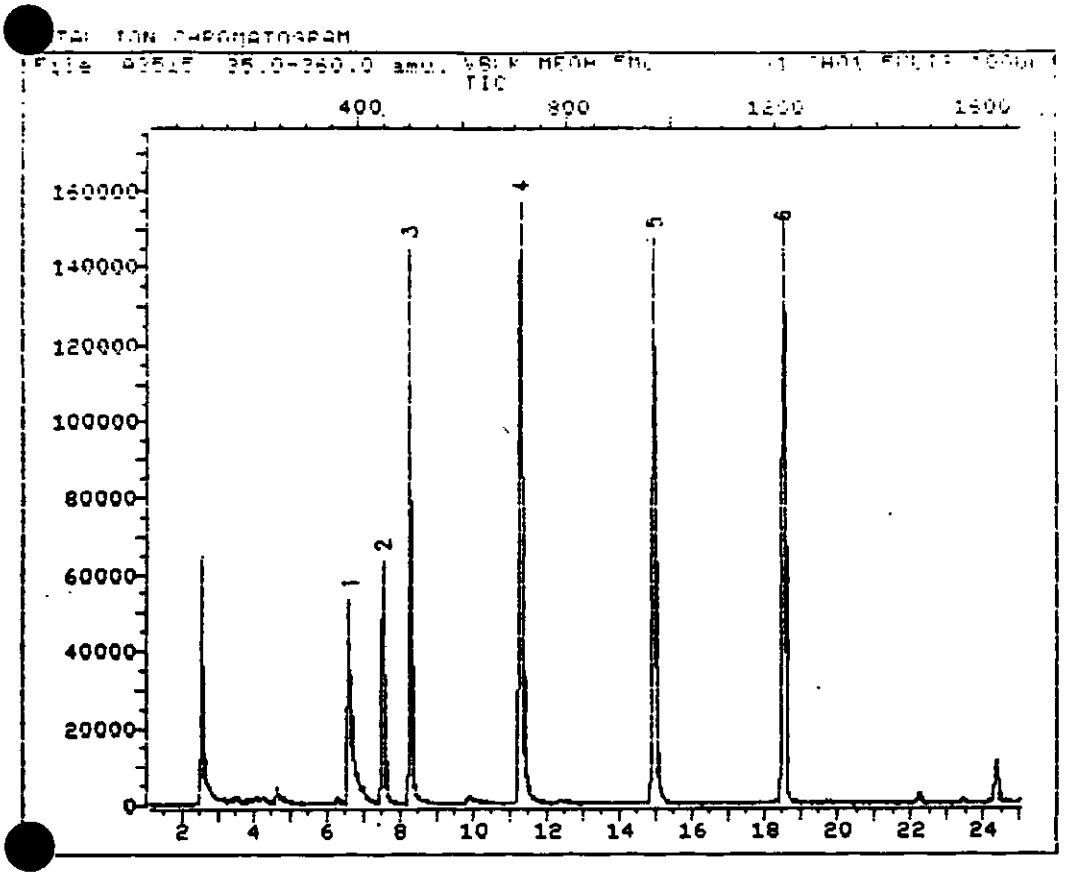
S

Internal Standard Comparison

Sample: >A3515 Date injected: 10/15/91 Standard: >A3513

Internal Standard		Sample Area	Std Area	%
CI01	Bromochloromethane	67146	63438	105.8
CI10	1,4-Difluorobenzene	358658	339941	105.5
CI20	D5-Chlorobenzene	311674	284949	109.4

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



Data File: >A3515::D1 Quant Output File: ^A3515::QT
Name: VBLK02MEOH 5ML
Misc: V1 CH01 5ULIS 100UL/5ML MEOH LOT # AY323

Id File: VOAID1::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V1:ERCO/ENSECO
Last Calibration: 911015 11:54

Operator ID: ALANA
Quant Time: 911015 13:29
Injected at: 911015 13:03

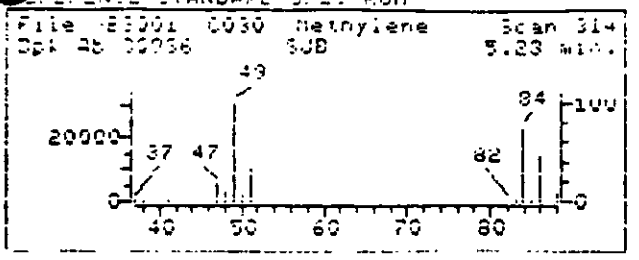
Operator ID: ALMH Quant Rev: 0 Quant Time: Failed Initial
Output File: A3515::U1 Injected at: 911015 12:12
Data File: VA3515::U1 Dilution Factor: 1.0000
Name: UBLK01MEOH 5ML
Misc: U1 CH01 50UL IS 100UL 5ML MEOH LOT # AY323

ID File: UOA101::$$
Title: HSL VOLATILES:105mmx.53mm:UB624:U1:ERLD/ENSECO
Last Calibration: 911015 11:54

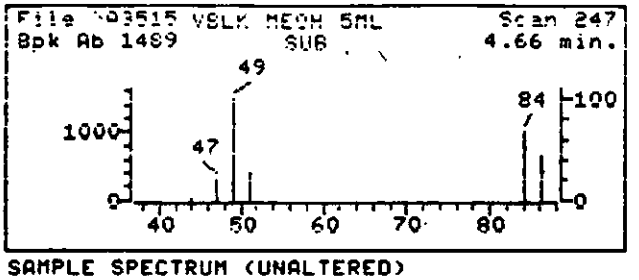
		Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101	Bromochloromethane	6.60	128.0	67146	50.00	UG/L	37
7)	C035	Acetone	4.29	43.0	1308	2.38	UG/L	100
9)	C030	Methylene Chloride	4.66	84.0	10368M	4.18	UG/L	96
15)	C110	2-Butanone	6.32	72.0	1502	5.14	UG/L	81
16)	CS15	D4-1,2-Dichloroethane	7.50	65.0	114743	45.33	UG/L	86
17)	*C110	1,4-Difluorobenzene	8.25	114.0	358658	50.00	UG/L	100
19)	C115	1,1,1-Trichloroethane	6.99	97.0	1967	.51	UG/L	88
31)	*C120	D5-Chlorobenzene	14.95	117.0	311674	50.00	UG/L	100
32)	CS05	D8-Toluene	11.26	98.0	392777	48.66	UG/L	86
34)	C230	Toluene	11.42	92.0	589	.11	UG/L	93
37)	C235	Chlorobenzene	15.04	112.0	616	.09	UG/L	88
4[illegible]	CS10	Bromofluorobenzene (BFB)	18.51	95.0	184540	47.46	UG/L	96

* Compound is ISTD

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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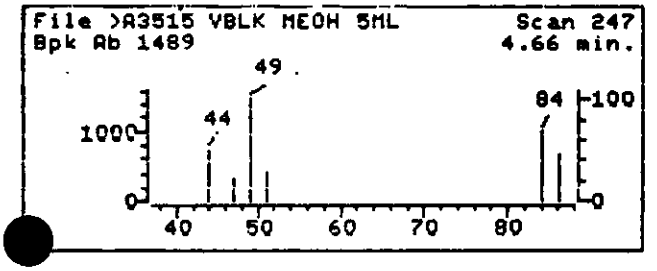
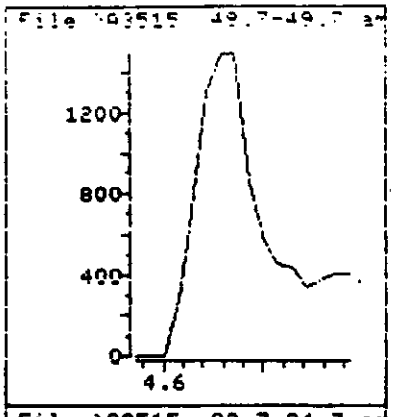
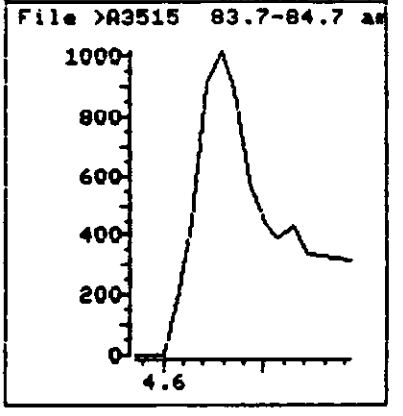


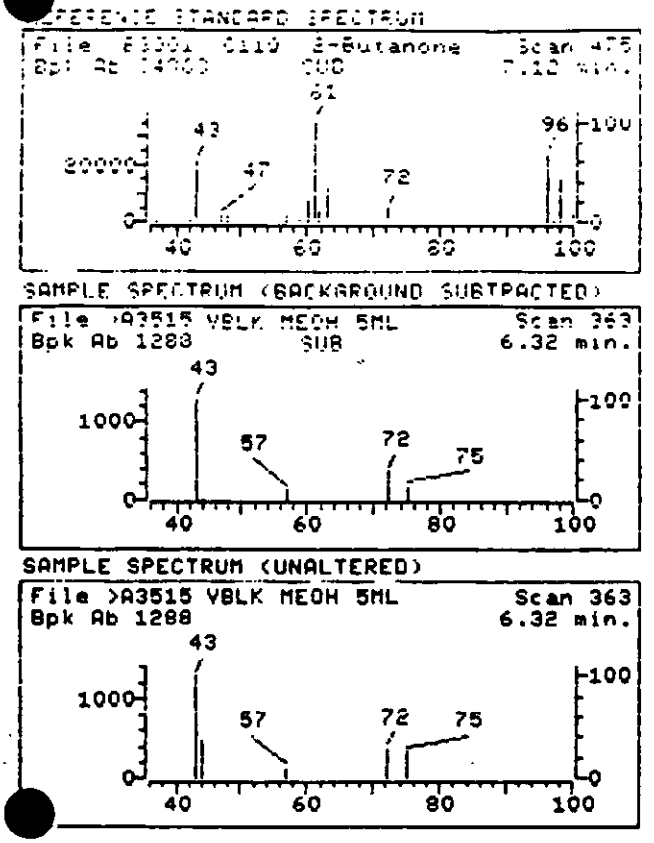


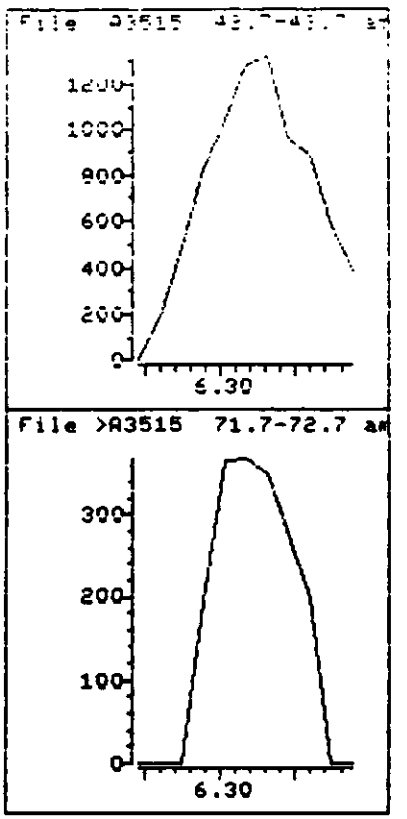


Data File: >A3515::D1 Quant Output File: ^A3515::QT
Name: VBLK@MEOH 5ML
Misc: V1 CH01 5ULIS 100UL/5ML MEOH LOT # AY323
Quant Time: 911015 13:29 Quant ID File: VOAID1::$$
Injected at: 911015 13:03 Last Calibration: 911015 11:54

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 247
Retention Time: 4.66 min.
Quant Ion: 84.0
Area: * 5669
Concentration: ~~2.29~~ UG/L 4.18 µg/L
q-value: 96

DRV 101591





Data File: >A3515::D1 Quant Output File: ^A3515::QT
Name: VBLK@MEOH 5ML
Misc: V1 CH01 5ULIS 100UL/5ML MEOH LOT # AY323
Quant Time: 911015 13:29 Quant ID File: VOAID1::$$
Injected at: 911015 13:03 Last Calibration: 911015 11:54

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 363
Retention Time: 6.32 min.
Quant Ion: 72.0
Area: 1502
Concentration: 5.14 UG/L
q-value: 81

Data Reduced by : [signature] Date: 10/5/91
Data Reviewed by : [signature] Date: 10/17/91 Data File: VA5515

Enseco TIC Report (page 1)

Sample: VBLK01MEUH 5ML Run Factor: 125.
Conditions: VI CH01 5UL15 1000UL/5ML MEUH L Analyst: ALANA

#	Scan	Q	Concentration In Sample C (UG/KG)	CAS #	Compound
1	98.		3100.	~~00-00-0~~	Solvent front

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK03

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 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 C-10091-VCA

Reduced by: JZ Date: 10/8/91 Data File: >F279S

Reviewed by: NC Date: 10/9/91 Page: 1

Enseco Mass Spectrometry

Target Compound Data Summary Sheet

Sample: VBLK03 5ML MID.

Misc : U6, LH#02, 50UL IS/S

Injected : 10/08/91 14:09 Units: UG/KG

Analyst: KERYLYNN Run Factor: 1.000

ICU File: HAM1U6 Surrogate Vol: .005

Quant list threshold: 1.00

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
S1S D4-1,2-dichloroethane	.2500	.2497	99.9	70 121
S2S D8-Toluene	.2500	.2608	104	84 117
S1U Bromofluorobenzene	.2500	.2650	105	59 121

Target Compounds: HAM1U6

Scan #	Concentration Quant List UG/L	Sample UG/KG		Compound
		BDL		C012 Dichlorodifluoromethane
		BDL		C01U Chloromethane
		BDL		C02U Vinyl Chloride
		BDL		C01S Bromomethane
		BDL		C02S Chloroethane
		BDL		C02B Trichlorofluoromethane
		BDL		C04S 1,1-Dichloroethene
		BDL		C03B 1,1,2-Trichloro-1,2,2-tri
		BDL		C03S Acetone
225	4.885	4.9	J	C04U Carbon Disulfide
		BDL		C05U Methylene Chloride
		BDL		C05S Trans-1,2-dichloroethene
		BDL		C05S Cis-1,2-dichloroethene
		BDL		C05U 1,1-Dichloroethane
		BDL		C06U Chloroform
		BDL		C06S 1,2-Dichloroethane
422	5.638	5.6	J	C11U 2-Butanone
		BDL		C12S Vinyl Acetate
		BDL		C11S 1,1,1-Trichloroethane
		BDL		C12U Carbon Tetrachloride
		BDL		C16S Benzene
		BDL		C15U Trichloroethene
		BDL		C14U 1,2-Dichloropropane
		BDL		C13U Bromodichloromethane
		BDL		C17S 2-Chloroethylvinylether
		BDL		C14S Cis-1,3-Dichloropropene
		BDL		C17Z Trans-1,3-dichloropropene

000322

Data file: [illegible] Page: 2
Sample: UBLK 5ML HIU.

Scan #	Concentration Quant list Units	Sample Units	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)

[redacted]

1)	*C101	Bromochloromethane	7.27	7.26	.03	128.0	[illegible]	1.0000	[illegible]
2)	C011	Dichlorodifluorometh	1.45	0.00	--	85.0	0	1.[illegible]	
3)	C010	Chloromethane	2.69	0.00	--	50.0	0	1.1[illegible]	[illegible]
4)	C01[illegible]	Vinyl Chloride	2.87	0.00	--	62.0	0	1.0[illegible]	
5)	C01[illegible]	Bromomethane	3.24	0.00	--	94.0	0	1.1[illegible]	[illegible]
6)	C02[illegible]	Chloroethane	3.39	0.00	--	64.0	0	.6913	[illegible]
7)	C009	Trichlorofluorometha	3.67	0.00	--	101.0	0	1.9743	[illegible]
8)	C04[illegible]	1,1-Dichloroethere	4.31	0.00	--	96.0	0	1.0123	[illegible]
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	0.0
18)	C110	2-Butanone	6.91	6.93	.01	72.0	2991	.3151	5.[illegible]
19)	C515	D4-1,2-dichloroethan	8.30	8.29	.01	65.0	144254	1.7156	49.[illegible]
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	.7553	[illegible]
47)	C335	Dichlorobenzene (m)	23.58	23.56	.02	146.0	1464	.9166	[illegible]
47)D	C335	Dichlorobenzene (m)	23.58	23.88	.30	146.0	2263	.9166	.39
48)D	C340	Dichlorobenzene (p)	23.81	23.56	.25	146.0	1464	.9610	.24

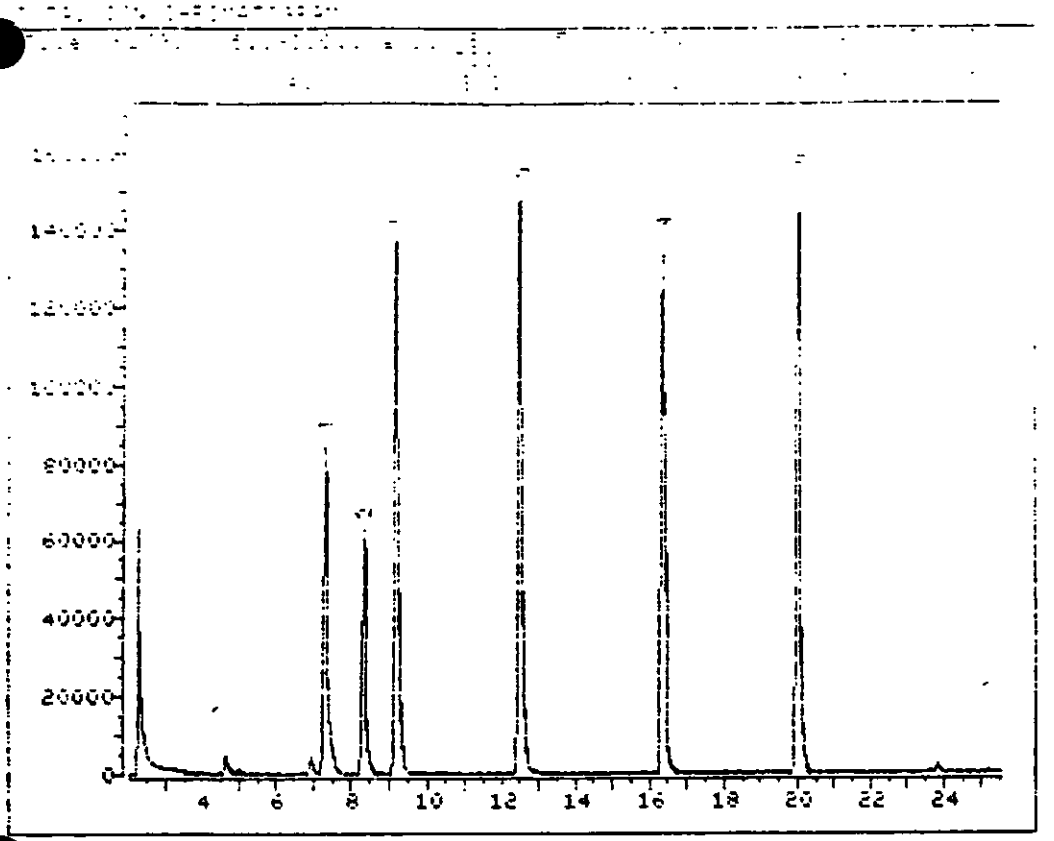
000325

[illegible]

[illegible]

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

[illegible]
[illegible]



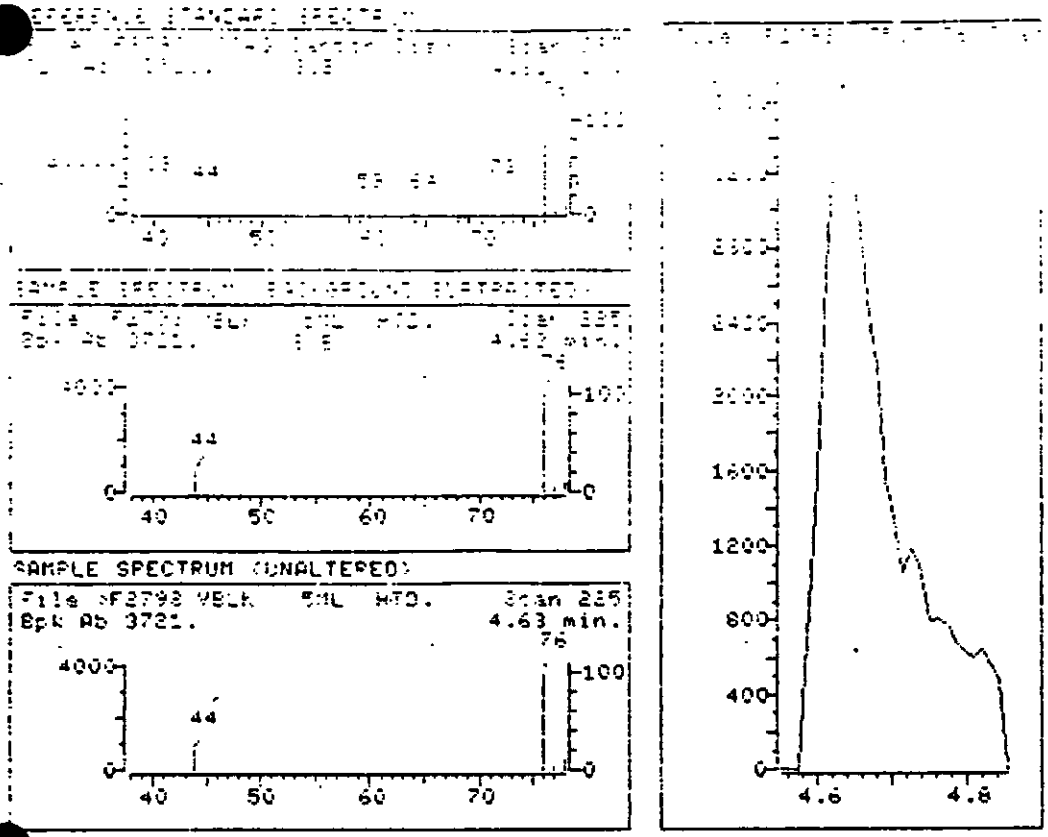
Data File: ^F2798::D6 Quant Output File: ^F2798::D7
Name: BLK03 5ML HTD. Instrument ID: V6
Misc: V6, CH#02, 5UL IS/S

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

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*C101 Bromochloromethane	7.26	128.0	84171	50.00	UG/L	83
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)	*C110 1,4-Difluorobenzene	9.14	114.0	416706	50.00	UG/L	100
34)	*C120 D5-Chlorobenzene	16.34	117.0	313814	50.00	UG/L	100
45)	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
48)	C340 Dichlorobenzene (p)	23.88	146.0	2263	.375	UG/L	100

Compound is ISTD

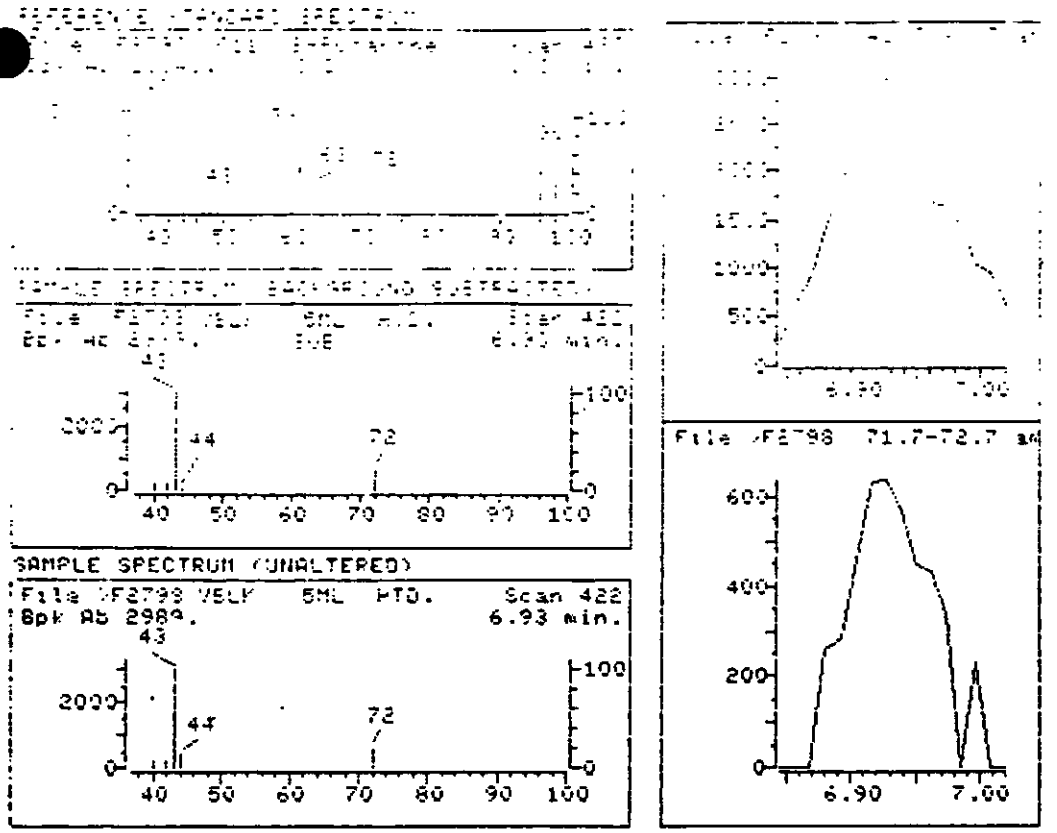


Data File: ^F2798::D6
Name: VBLK03 5ML HTD.
Misc: V6, CH#02, 5UL IS/S
Quant Time: 911008 14:37
Injected at: 911008 14:09
Last Qcal Time: 911008 08:09

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: VBLK03 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

Concentration
In Sample
Plan ID LMS-G1 LMS # Compound

No Unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK04

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2886

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.

VBLK04

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK04

Sample wt/vol: 4.0 (g/mL) G Lab File ID: F2886

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

624-A → L-100991V6A
R-101091V6B

Date: 101191
Date: 10/14/91
7F7886
clean

Page: 1

VBLK04

Dilution Factor: 1.0 ✓

Surrogate Spike Recoveries:

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
S15 D4-1,2-dichloroethane	25.00	24.95	99.8	70 121
S05 D8-Toluene	25.00	24.42	97.7	81 117
S10 Bromofluorobenzene	25.00	25.05	100.	74 121

Target Compounds: M0B1D6

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

Lab #	Concentration Detection Limit UG/L	Sample Results UG/L	Compound
	BDL	C155	Dibromochloromethane
	BDL	C160	Bromoform
	BDL	C195	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]

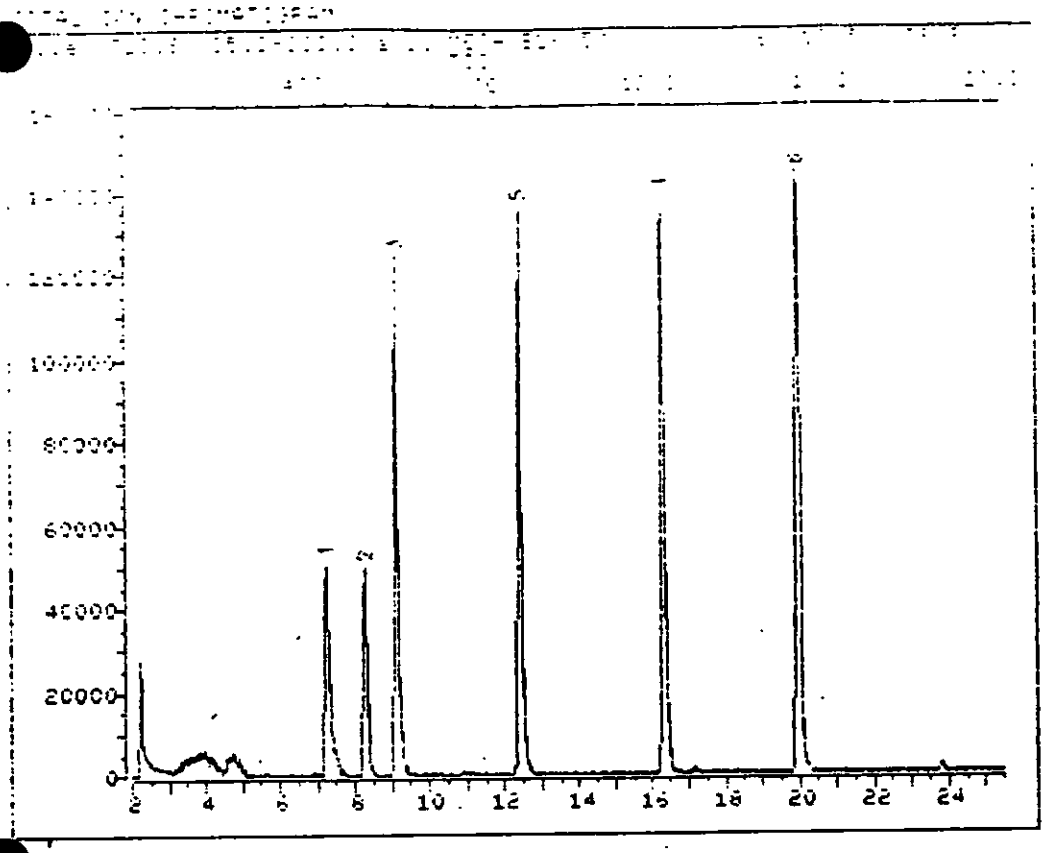
Compound		Prog	Found	Dif	Ion	Area	RF	Conc.
1)	*C101 Bromochloromethane	7.29	7.21	.08	128.0	61147	1.0000	[illegible]
[illegible]	C[illegible] Chloromethane	2.67	0.00	--	50.0	0	1.[illegible]	[illegible]
[illegible]	C020 Vinyl Chloride	2.91	0.00	--	62.0	0	1.[illegible]	[illegible]
[illegible]	C[illegible] Bromomethane	3.19	0.00	--	94.0	0	1.14[illegible]	[illegible]
[illegible]	C025 Chloroethane	3.31	0.00	--	64.0	0	.[illegible]	[illegible]
[illegible]	C045 1,1-Dichloroethene	4.23	0.00	--	96.0	0	1.[illegible]	[illegible]
7)	C035 Acetone	4.35	0.00	--	43.0	0	.2282	0.00
8)	C040 Carbon Disulfide	4.58	0.00	--	76.0	0	4.2994	0.00
9)	C030 Methylene Chloride	4.93	4.88	.05	84.0	1682	1.9489	.71
0)	CXXX Tert-butyl alcohol	5.08	0.00	--	59.0	0	.0770	0.00
1)	C053 Trans-1,2-dichloroet	5.30	0.00	--	96.0	0	1.9080	0.00
2)	C055 Cis-1,2-dichloroethe	6.81	0.00	--	96.0	0	2.0414	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	3.5944	0.00
5)	C060 Chloroform	7.35	0.00	--	83.0	0	4.0227	0.00
6)	C065 1,2-Dichloroethane	8.37	0.00	--	62.0	0	2.2965	0.00
7)	C110 2-Butanone	6.82	0.00	--	72.0	0	.1243	0.00
[illegible]	CS15 D4-1,2-dichloroethan	8.23	8.25	.02	65.0	112777	1.8492	49.8[illegible]
[illegible]	*C110 1,4-Difluorobenzene	9.18	9.09	.09	114.0	376794	1.0000	50.00
0)	C125 Vinyl Acetate	5.97	0.00	--	43.0	0	.4990	0.00
1)	C115 1,1,1-Trichloroethan	7.68	0.00	--	97.0	0	.5573	0.00
2)	C120 Carbon Tetrachloride	7.92	0.00	--	117.0	0	.4441	0.00
3)	C165 Benzene	8.35	0.00	--	78.0	0	.9866	0.00
4)	C150 Trichloroethene	9.61	0.00	--	130.0	0	.4234	0.00
25)	C140 1,2-Dichloropropane	10.09	0.00	--	63.0	0	.3961	0.00
26)	C130 Bromodichloromethane	10.70	0.00	--	83.0	0	.5620	0.00
27)	C175 2-Chloroethylvinylet	11.42	0.00	--	63.0	0	.1602	0.00
28)	C143 Cis-1,3-Dichloroprop	11.73	0.00	--	75.0	0	.5458	0.00
29)	C172 Trans-1,3-dichloropr	13.14	0.00	--	75.0	0	.4248	0.00
30)	C160 1,1,2-Trichloroethan	13.59	0.00	--	97.0	0	.2976	0.00
31)	C155 Dibromochloromethane	14.64	0.00	--	129.0	0	.4414	0.00
32)	C180 Bromoform	18.80	0.00	--	173.0	0	.2534	0.00
33)	*C120 D5-Chlorobenzene	16.40	16.29	.11	117.0	318652	1.0000	50.00
34)	CS05 D8-Toluene	12.42	12.41	.01	98.0	379985	1.2209	48.8[illegible]
35)	C205 4-Methyl-2-pentanone	12.18	0.00	--	43.0	0	.3090	0.00
36)	C230 Toluene	12.58	0.00	--	92.0	0	.7974	0.00
37)	C210 2-Hexanone	14.37	0.00	--	43.0	0	.2092	0.00
38)	C220 Tetrachloroethene	13.99	0.00	--	164.0	0	.4080	0.00
39)	C235 Chlorobenzene	16.37	0.00	--	112.0	0	.9815	0.00
40)	C240 Ethylbenzene	16.74	0.00	--	106.0	0	.5010	0.00
41)	CXXX Xylenes (p)	17.12	17.11	.01	106.0	1131	.6233	.28
42)	CXXX Xylenes (o)	18.31	0.00	--	106.0	0	.5877	0.00
[illegible]	C245 Styrene	18.35	0.00	--	104.0	0	1.0250	0.00
[illegible]	C225 1,1,2,2-Tetrachloroe	20.53	0.00	--	83.0	0	.5339	0.00
45)	CS10 Bromofluorobenzene	19.95	19.96	.01	95.0	235149	.7366	50.09
46)	C335 Dichlorobenzene (m)	23.50	0.00	--	146.0	0	.8135	0.00
47)	C340 Dichlorobenzene (p)	23.81	0.00	--	146.0	0	.7418	0.00
48)	C350 Dichlorobenzene (o)	25.04	0.00	--	146.0	0	.7841	0.00
49)	C250 Xylenes (total)	18.31	0.00	--	106.0	0	.5[illegible]	0.00

[illegible]

[illegible]

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

[illegible]
[illegible]



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Name: MEOH BLK 5ML VELLOY Instrument ID: V6
Misc: V6 C12 5UL IS/S

Id File: M08ID6::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 01:06
Injected at: 911011 00:39

Data File: [illegible]

Title: HSL VOLATILES: 75m x .25mm: DB-624 He HP5890-Enabled

Last Cal Time: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 Bromochloromethane	7.21	128.0	61117	50.00	UG/L	70
9)	C030 Methylene Chloride	4.88	84.0	1682	.706	UG/L	64
18)	CS15 D4-1,2-dichloroethane	8.25	65.0	112777	49.89	UG/L	90
19)	*C110 1,4-Difluorobenzene	9.09	114.0	376794	50.00	UG/L	100
33)	*C120 D5-Chlorobenzene	16.29	117.0	318652	50.00	UG/L	100
34)	CS05 D8-Toluene	12.41	98.0	379985	48.83	UG/L	89
41)	CXXX Xylenes (p)	17.11	106.0	1131	.285	UG/L	12
45)	CS10 Bromofluorobenzene	19.96	95.0	235149	50.09	UG/L	73

* Compound is ISTD

Data Reduced By : JC Date: 10/19/91 Data File: [illegible]

Data Reviewed by : [illegible] Date: 10/24/91

Search Hit Report - Page 1

Sample: MEOH BLK PML Run Factor: 1.0

Instrument: HP 5970 MSD ID # VBLK04 Analyst: [illegible]

# Scan	ID	C	Concentration In Sample (UG/KG)	CAS #	Compound

no unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK05

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK05

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.

VBLK05

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: BLANK05

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: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		C8H16O ISOMER	21.24	23000	J
2.		METHYLETHYLBENZENE ISOMER	21.50	6300	J
3.		UNKNOWN ALKANE	22.10	9500	J
4.		C9H18O ISOMER	22.40	39000	J
5.		C3-BENZENE ISOMER	23.03	16000	J
6.		UNKNOWN	23.47	6600	J
7.		C3-BENZENE ISOMER	24.41	5800	J
8.		C4-BENZENE ISOMER	25.31	7500	J
9.		C4-BENZENE ISOMER	25.58	9300	J
10.		UNKNOWN ALKANE	26.28	5800	J

Reduced by : [illegible] Date: ~~10/13/91~~ 10/14/91
Reviewed by: ____ Date: ____

Data File: >82981
Page: 1

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: MEOH VBLK05 100UL/5ML
Misc : V2 CH05 5ULIS
Injected : 10/14/91 15:33
Analyst: ALANA
ID File: VOAID2
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	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 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	~~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	609.0 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	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: >B2981 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 J	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)

HB 10/21/91

Diagnostic Quant Report

Data File: >82981::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	.9	.15
45)D	C340	Dichlorobenzene (p	24.20	24.16	.04	146.0	1070	.9	.17
46)D	C350	Dichlorobenzene (o	25.43	25.40	.04	146.0	1108	.9753	.17

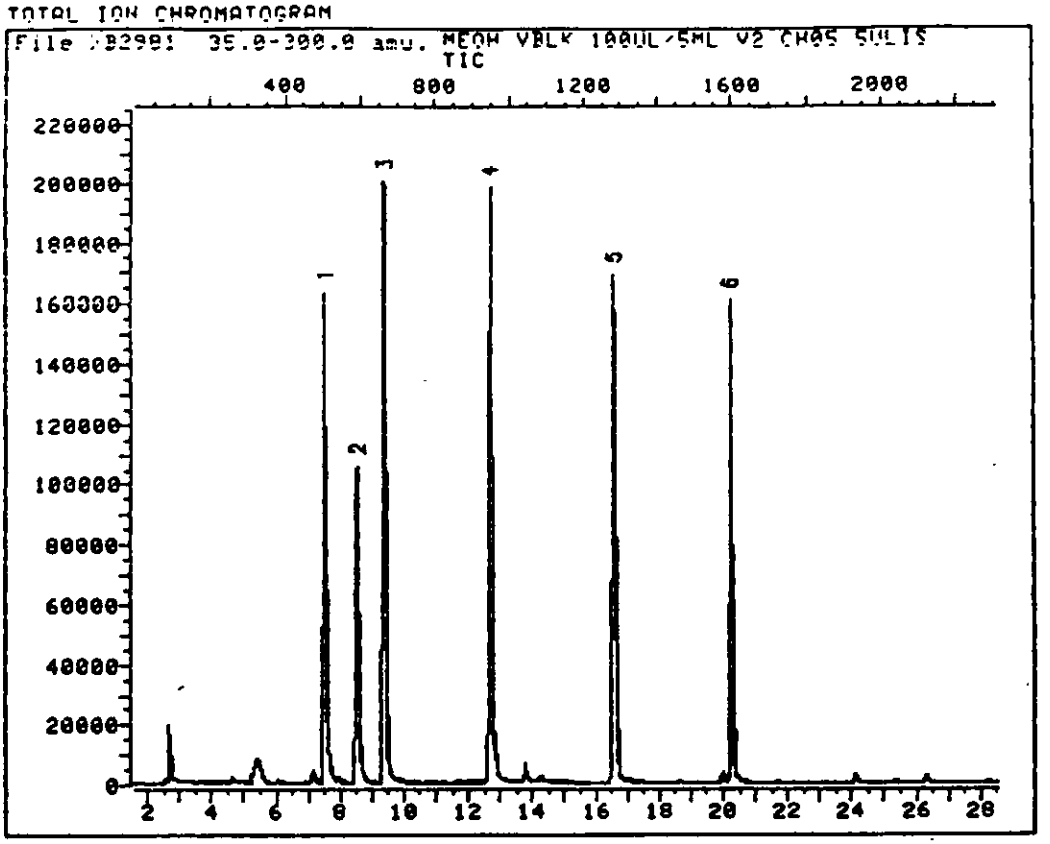
Internal Standard Comparison

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



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Name: MEOH VBLK 100UL/5ML
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

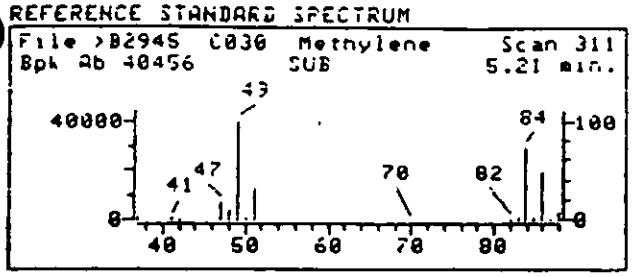
Operator ID: ALANA Quant Rev: 6 Quant Time: 911014 16:03
Output File: ^B2981::QT Injected at: 911014 15:33
Data File: >B2981::D6 Dilution Factor: 1.00000
Name: MEOH VBLK 100UL/5ML
Misc: V2 CH05 5ULIS

ID File: VOAID2::$$
Title: HSL VOLATILES:105mmx.53mm:DB624:V2:ERCO/ENSECO
Last Calibration: 911014 14:19

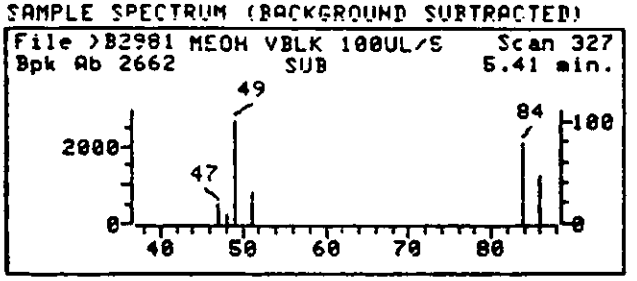
		Compound	R.T.	Q-ion	Area	Conc	Units	q
1)	*CI01	Bromochloromethane	7.48	128.0	109638	50.00	UG/L	81
9)	C030	Methylene Chloride	5.41	84.0	28869M	4.99	UG/L	81
15)	C110	2-Butanone	7.12	43.0	11550	4.87	UG/L	97
16)	CS15	D4-1,2-Dichloroethane	8.50	65.0	190264	52.50	UG/L	85
17)	*CI10	1,4-Difluorobenzene	9.37	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



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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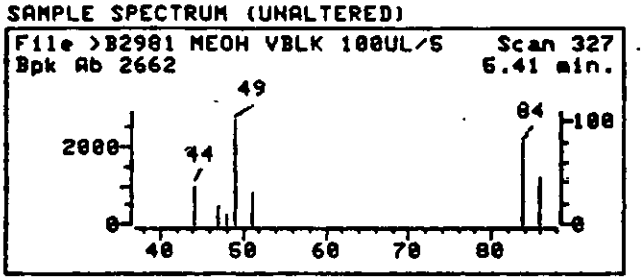
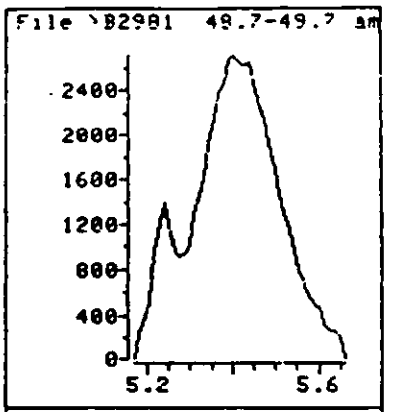
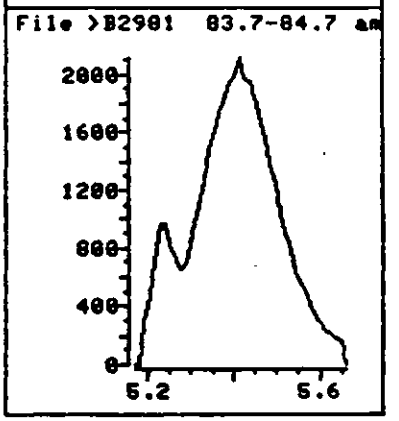


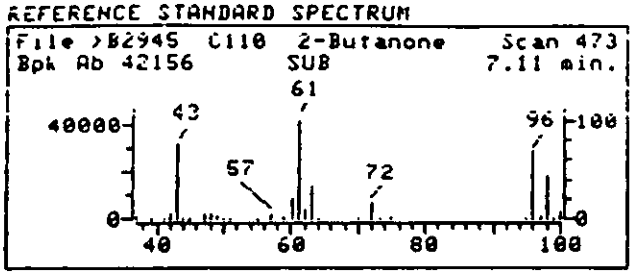




Data File: >B2981::D6 Quant Output File: ^B2981::QT
Name: MEOH VBLK 100UL/5ML
Misc: V2 CH05 5ULIS
Quant Time: 911014 16:03 Quant ID File: VOAID2::$$
Injected at: 911014 15:33 Last Calibration: 911014 14:19

Compound No: 9
Compound Name: C030 Methylene Chloride
Scan Number: 327
Retention Time: 5.41 min.
Quant Ion: 84.0
Area: 28869M
Concentration: 4.99 UG/L
q-value: 81

REFERENCE STANDARD SPECTRUM



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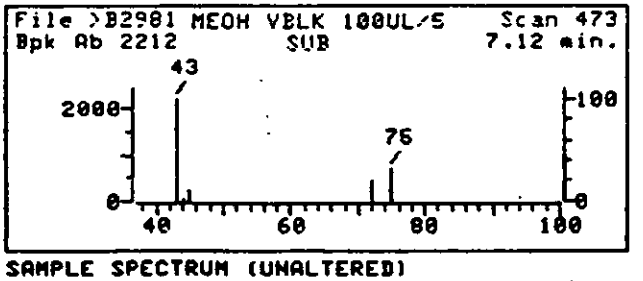

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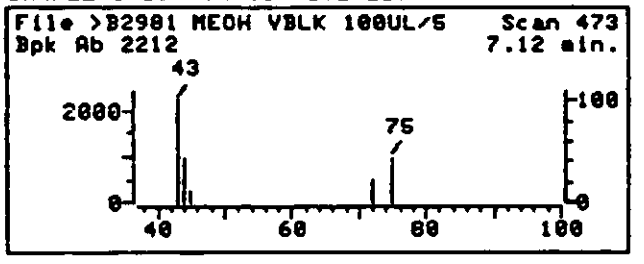
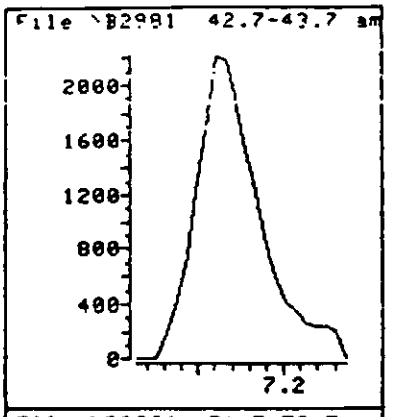
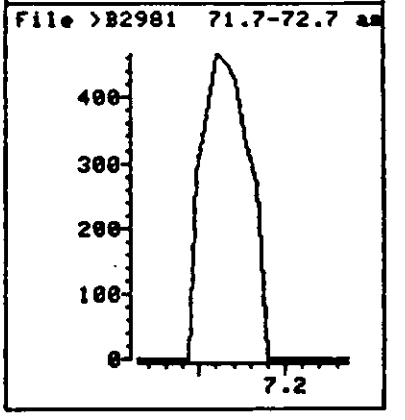






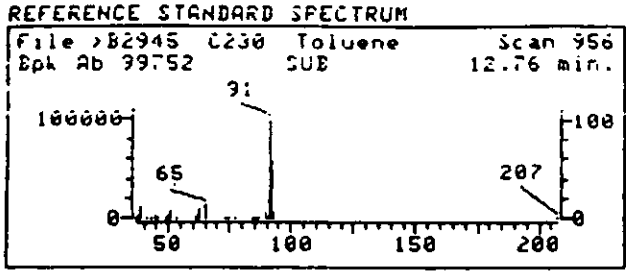
Data File: >B2981::D6
Name: MEOH VBLK 100UL/5ML
Misc: V2 CH05 5ULIS
Quant Time: 911014 16:03
Injected at: 911014 15:33

Quant Output File: ^B2981::QT

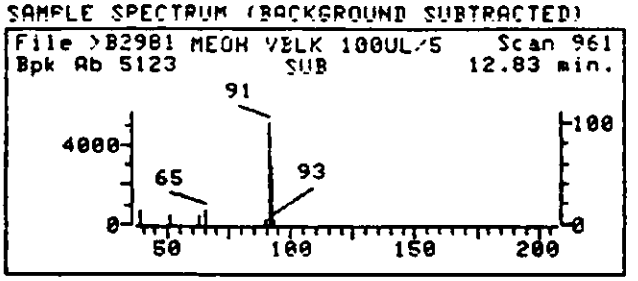
Quant ID File: VOAID2::$$
Last Calibration: 911014_14:19

Compound No: 15
Compound Name: C110 2-Butanone
Scan Number: 473
Retention Time: 7.12 min.
Quant Ion: 43.0
Area: 11550
Concentration: 4.87 UG/L
q-value: 97

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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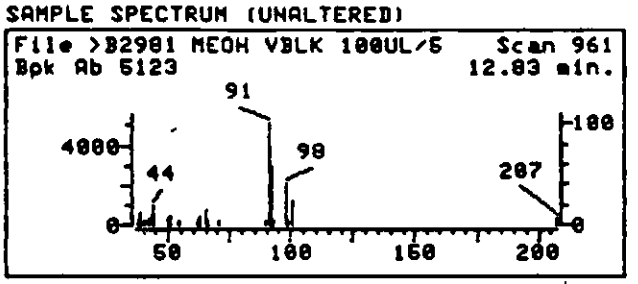
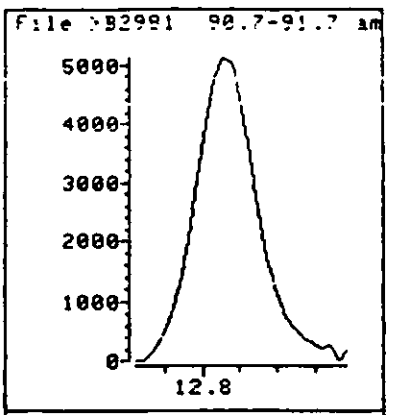
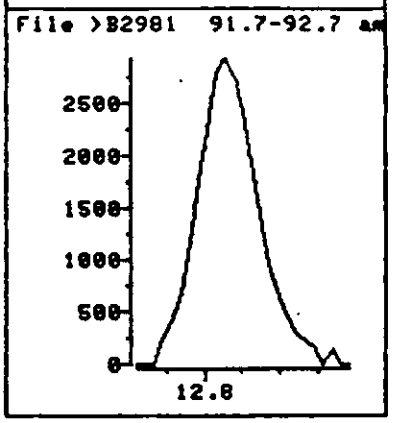






Data File: >B2981::D6
Name: MEOH VBLK 100UL/5ML
Misc: V2 CH05 5ULIS
Quant Time: 911014 16:03
Injected at: 911014 15:33

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 UNKS

Data Reduced by : _____ Date: 12/19/91 Data File: >82981
Data Reviewed by : _____ Date: 12/26/91

Enseco TIC Report (page 1)

Sample: MEOH VBLK05 100UL/5ML Run Factor: 125.
Conditions: V2 CH05 5ULIS Analyst: ALANA

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound

NO unknowns

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK06

Lab Name: ENSECO-ERCO Contract: _____

Lab Code: EERCO Case No.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2732

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

% Moisture: not dec. _____ Date Analyzed: 10/05/91

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	U
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.: 10126 SAS No.: _____ SDG No.: _____

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: F2732

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

% Moisture: not dec. ____ Date Analyzed: 10/05/91

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

* - [illegible]
D - Compound Deleted

L-100571-06A

R-100591-06A

624-A1

NC

7F2732

Clean

Reviewed By: JR Date: 10/5/91
Technical Review: VK Date: 10/6/91
Enseco Data Processing
Target Compound Data Summary Sheet

Data File: [illegible]
Page: -

Sample: MBLK06 SOIL
Misc : 06, CH#03, SOIL IS/S
Injected : 10/05/91 15:26
Analyst: KER/LMN
ID File: MOBID6
Quant list threshold: 1.00

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

Surrogate Spike Recoveries no outliers

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS15 D4-1,2-dichloroethane	.2500	.2441	97.6	76 114
CS05 D8-Toluene	.2500	.2495	99.8	88 110
CS10 Bromofluorobenzene	.2500	.2558	102	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
		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: F1732 Page: 2
Sample: MW-06 PVL

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: F1732::D6 Injected at: 19:2[illegible] 10 0[illegible] 91
Quantit : 1[illegible] 10 06 91
ID File : MCE:D6::MT Calibrated : 09:37 08 14 91

Compound		- P.T. Info - Pred	Found	Dif	Ion	Area	RF	Conc.
1)	*C101 Bromochloromethane	7.13	7.17	.04	128.0	75698	1.0000	50.00
2)	C010 Chloromethane	2.63	0.00	--	50.0	0	1.2[illegible]	0.00
3)	C020 Vinyl Chloride	2.77	0.00	--	62.0	0	1.21[illegible]	0.00
4)	C015 Bromomethane	3.16	0.00	--	94.0	0	1.0877	0.00
5)	C025 Chloroethane	3.29	0.00	--	64.0	0	.7092	0.00
6)	C045 1,1-Dichloroethene	4.25	0.00	--	96.0	0	1.3313	0.00
7)	C035 Acetone	4.32	0.00	--	43.0	0	.2589	0.00
8)	C040 Carbon Disulfide	4.54	0.00	--	76.0	0	3.9189	0.00
9)	C030 Methylene Chloride	4.88	4.88	.00	84.0	1621	1.6545	.65
10)	CXXX Tert-butyl alcohol	5.05	0.00	--	59.0	0	.0770	0.00
11)	C053 Trans-1,2-dichloroet	5.26	0.00	--	96.0	0	1.6464	0.00
12)	C055 Cis-1,2-dichloroethe	6.76	0.00	--	96.0	0	1.8854	0.00
13)	CXXX Methyl tert-butyl et	5.27	0.00	--	73.0	0	2.9749	0.00
14)	C050 1,1-Dichloroethane	5.87	0.00	--	63.0	0	3.1591	0.00
15)	C060 Chloroform	7.29	0.00	--	83.0	0	3.7242	0.00
[illegible]	C065 1,2-Dichloroethane	8.33	0.00	--	62.0	0	2.1732	0.00
[illegible]	C110 2-Butanone	6.79	0.00	--	72.0	0	.1512	0.00
18)	CS15 D4-1,2-dichloroethan	8.19	8.19	.00	65.0	127452	1.7243	48.82
19)	*C110 1,4-Difluorobenzene	9.00	9.03	.03	114.0	420345	1.0000	50.00
20)	C125 Vinyl Acetate	5.93	0.00	--	43.0	0	.6181	0.00
21)	C115 1,1,1-Trichloroethan	7.61	0.00	--	97.0	0	.5735	0.00
22)	C120 Carbon Tetrachloride	7.92	0.00	--	117.0	0	.4757	0.00
23)	C165 Benzene	8.29	0.00	--	78.0	0	1.0014	0.00
24)	C150 Trichloroethene	9.55	0.00	--	130.0	0	.4246	0.00
25)	C140 1,2-Dichloropropane	10.03	0.00	--	63.0	0	.4199	0.00
26)	C130 Bromodichloromethane	10.65	0.00	--	83.0	0	.6324	0.00
27)	C175 2-Chloroethylvinylet	11.39	0.00	--	63.0	0	.2024	0.00
28)	C143 Cis-1,3-Dichloroprop	11.69	0.00	--	75.0	0	.6252	0.00
29)	C172 Trans-1,3-dichloropr	13.11	0.00	--	75.0	0	.4986	0.00
30)	C160 1,1,2-Trichloroethan	13.58	0.00	--	97.0	0	.3453	0.00
31)	C155 Dibromochloromethane	14.61	0.00	--	129.0	0	.5216	0.00
32)	C180 Bromoform	18.82	0.00	--	173.0	0	.3118	0.00
33)	*C120 D5-Chlorobenzene	16.18	16.20	.02	117.0	331282	1.0000	50.00
34)	CS05 D8-Toluene	12.31	12.33	.02	98.0	419575	1.2690	49.90
35)	C205 4-Methyl-2-pentanone	12.08	0.00	--	43.0	0	.4176	0.00
36)	C230 Toluene	12.49	0.00	--	92.0	0	.9244	0.00
37)	C210 2-Hexanone	14.29	0.00	--	43.0	0	.3022	0.00
38)	C220 Tetrachloroethene	13.89	0.00	--	164.0	0	.4776	0.00
39)	C235 Chlorobenzene	16.29	0.00	--	112.0	0	1.1252	0.00
40)	C240 Ethylbenzene	16.67	0.00	--	106.0	0	.5495	0.00
[illegible]	CXXX Xylenes (p)	17.04	0.00	--	106.0	0	.6626	0.00
[illegible]	CXXX Xylenes (o)	18.23	0.00	--	106.0	0	.6522	0.00
43)	C245 Styrene	18.28	0.00	--	104.0	0	1.1452	0.00
44)	C225 1,1,2,2-Tetrachloroe	20.46	0.00	--	83.0	0	.7090	0.00
45)	CS10 Bromofluorobenzene	19.86	19.87	.00	95.0	242232	.7147	51.15
46)	C335 Dichlorobenzene (m)	23.43	0.00	--	146.0	0	.88[illegible]	0.00
47)	C340 Dichlorobenzene (p)	23.75	0.00	--	146.0	0	.8085	0.00
48)	C350 Dichlorobenzene (o)	24.98	0.00	--	146.0	0	.8123	0.00

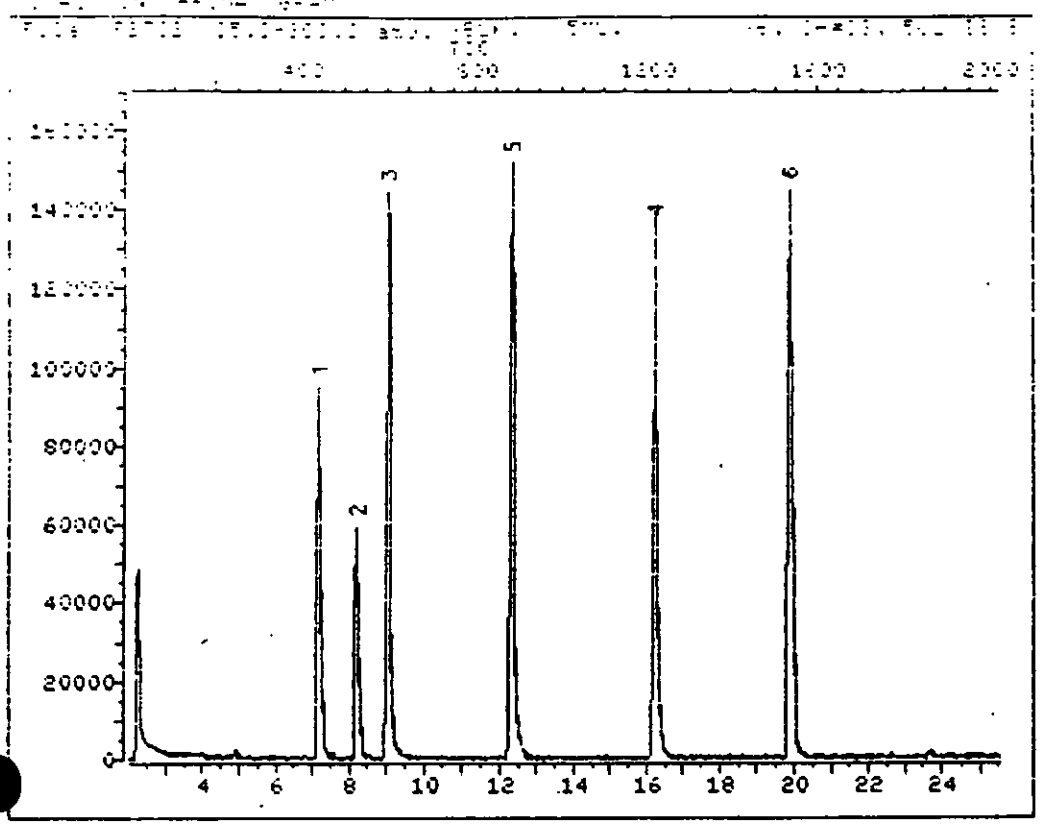
000357

Internal Standard Summary

Sample: F2732 Date injected: 10 09 91 Standard: FI 29

Internal Standard	Sample Area	Std Area	%
CI01 Bromochloromethane	79698	88026	91.0
CI10 1,4-Difluorobenzene	420345	439106	95.7
CI20 D5-Chlorobenzene	331282	330996	100.1

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



Data File: >F2732::D6 Quant Output File: ^F2732::D7
Name: VBLK06 5ML. Instrument ID: V6
Misc: V6, CH#03, 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: 911005 13:23

Operator ID: KERYLYNN
Quant Time : 911005 15:53
Injected at: 911005 15:26

Operator ID: [illegible]
Output File: [illegible]
Data File: [illegible]
Name: VBLK06 5ML.
Misc: V6, CH#03, 5UL IS/S

Client Po : [illegible]
Client Time: [illegible]
Injected at: [illegible]
Dilution Factor: 1.00000
Instrument ID: V6

ID File: MOBID6::MT
Title: HSL VOLATILES: 75m x .53mm: DB624 V6 ERCO/ENSECO
Last Calibration: 910814 09:37
Last Cal Time: 911005 17:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 Bromochloromethane	7.17	128.0	75698	50.00	UG/L	72
9)	C030 Methylene Chloride	4.88	84.0	1621	.647	UG/L	91
18)	CS15 D4-1,2-dichloroethane	8.19	65.0	127452	48.82	UG/L	88
19)	*CI10 1,4-Difluorobenzene	9.03	114.0	420345	50.00	UG/L	100
33)	*CI20 D5-Chlorobenzene	16.20	117.0	331282	50.00	UG/L	100
34)	CS05 D8-Toluene	12.33	98.0	419575	49.90	UG/L	94
45)	CS10 Bromofluorobenzene	19.87	95.0	242232	51.15	UG/L	73

Compound is ISTD

Data Reduced by : VV Date: 1/5/94 Data File: F0??I
Data Reviewed by : _____ Date: _____

Environmental Testing Report page 1

Sample: VBLK04 FIL. Run Factor: 1.00
Conditions: Vb, CH#03, FUL IS/S Analyst: KERYLYNN

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

No unknowns.

Versar Laboratories

ANALYTICAL DATA PACKAGE
General Chemistry Section

CLIENT: ENSECO-ERCO LAB
SITE: PROJ# 10126
CODE-BATCH: ERCO - 6
CONTROL #: 5607
DATE: 22-OCT-91
ANALYSIS: TOC

Versar Laboratories

ANALYTICAL NARRATIVE
General Chemistry Section

DATE: 22-OCT-91
CODE/CONTROL: ERCO / 5607
CLIENT/SITE: ENSECO-ERCO LAB / PROJ# 10126
PROJECT/BATCH: 420.2 / 6

This task consisted of five 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 7, 1991 and were analyzed October 15. 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 / 5607
CLIENT / SITE: ENSECO-ERCO LAB / PROJ# 10126
PROJECT / BATCH: 420.2.0 / 6

Lab#	Field #	TOC (mg/kg)		
63537	UCC-SB-B-11-2C	1,210.		
63538	UCC-SB-A-09-4C	3,130.		
63539	UCC-SB-B-16-3	7,310.		
63540	UCC-SB-C-18-2	8,200.		
63541	UCC-SB-B-14-3C	2,320.		

C. Thompson
Laboratory Manager

Versar Laboratories

QUALITY ASSURANCE REPORT
General Inorganic Chemistry Section

DATE: 22-OCT-91
CONTROL #: 5607
CODE / BATCH: ERCO / 6
CLIENT / SITE: ENSECO-ERCO LAB / PROJ# 10126
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	471000	100%	mg/kg

CONTINUING CALIBRATION VERIFICATION

Source	QC Type	True	Found	Recovery	Units
KHP	CCV1	470500	469000	100%	mg/kg