



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

Superfund Records Center
SITE: Union Chemical
BREAK: b.4
OTHER: 571858

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

APPENDIX D-2
POST-TEST SOIL CHEMICAL DATA



CASE NARRATIVE

FOR

Balsam Environmental Consultants

March 18, 1992

Enseco - RMAL Project Number 020949

Introduction

Twenty soil samples (includes QC) and two aqueous samples were received at Enseco ERCO Laboratory on February 15, 1992. The samples were shipped to Enseco-Rocky Mountain Analytical Laboratory and received on February 18, 1992. The samples were logged in under RMAL project number 020949. A cross reference associating the RMAL sample numbers to the actual field samples numbers is included. The samples were analyzed for target compound list (TCL) Volatile compounds in accordance with SOW 3/90, Document Number OLM01.1.1.

Internal Quality Control Processes, Corrective Actions, and Resolution

All quality control and/or analytical problems encountered in processing the samples and corrective actions taken have been summarized below as per SOW 3/90, Document Number OLM01.1.1.

VOA

Samples 020949-0005, -0006, -0007, -0009, -0010, -0011, -0017, -0018, -0018MS, and -0018SD were analyzed and reported as medium level.

Samples 020949-0002, -0003, -0007, -0008, -0010, -0011, -0014, -0017, -0018, -0018MS, and -0018SD were analyzed at dilutions due to target and/or non-target compounds present in excess of calibration range. Because of the dilution required, surrogate compounds were not recoverable for samples -0007 and -0017.

Sample 020949-0001 was analyzed at the holding time limit. Samples 020949-0002, -0004 through -0006, -0009, -0017, -0018, -0018MS, and -0018SD were reanalyzed outside of holding time. Reanalysis of samples -0005, -0006, -0017, -0018, -0018MS, and -0018SD were due to laboratory error, in that the original analysis was performed without a blank. Both sets of raw data are submitted.

Case Narrative - RMAL #020948
March 17, 1992
Page Two

The original analysis of samples 020949-0002 and -0004 showed tetrachloroethene outside of linear range. The samples were reanalyzed to improve the quality of the data. Tetrachloroethene was not detected in the reanalysis of sample -0004. The sample matrix appears to be inhomogeneous. Both sets of data for samples -0002 and -0004 have been submitted.

Reported by: Susan Davis
Susan Davis
Program Administrator

Date: 3/19/92

SAMPLE DESCRIPTION INFORMATION
for
Balsam Environmental Consultants

Lab ID	Client ID	Matrix	Sampled Date	Sampled Time	Received Date
020949-0001-SA	UCC-SB-C-22	SOIL	13 FEB 92	09:45	15 FEB 92
020949-0002-SA	UCC-SB-C-23X	SOIL	13 FEB 92	11:15	15 FEB 92
020949-0003-SA	UCC-SB-C-24	SOIL	13 FEB 92	10:45	15 FEB 92
020949-0004-SA	UCC-SB-C-25	SOIL	13 FEB 92	09:20	15 FEB 92
020949-0005-SA	UCC-SB-C-26	SOIL	13 FEB 92	13:05	15 FEB 92
020949-0006-SA	UCC-SB-C-27	SOIL	13 FEB 92	13:30	15 FEB 92
020949-0007-SA	UCC-SB-C-28	SOIL	13 FEB 92	15:00	15 FEB 92
020949-0008-SA	UCC-SB-C-29	SOIL	13 FEB 92	14:20	15 FEB 92
020949-0009-SA	UCC-SB-C-30	SOIL	13 FEB 92	08:50	15 FEB 92
020949-0010-SA	UCC-SB-C-31	SOIL	13 FEB 92	09:00	15 FEB 92
020949-0011-SA	UCC-SB-C-32	SOIL	13 FEB 92	11:30	15 FEB 92
020949-0012-SA	UCC-SB-A-14	SOIL	13 FEB 92	16:15	15 FEB 92
020949-0013-SA	UCC-SB-A-15	SOIL	13 FEB 92	16:00	15 FEB 92
020949-0014-SA	UCC-SB-A-16	SOIL	14 FEB 92	09:30	15 FEB 92
020949-0015-SA	UCC-SB-A-17	SOIL	14 FEB 92	08:35	15 FEB 92
020949-0016-SA	UCC-SB-A-18	SOIL	14 FEB 92	08:15	15 FEB 92
020949-0017-SA	UCC-SB-A-19	SOIL	14 FEB 92	09:15	15 FEB 92
020949-0018-SA	Matrix Spike 2/13	SOIL	13 FEB 92		15 FEB 92
020949-0018-MS	Matrix Spike 2/13	SOIL	13 FEB 92		15 FEB 92
020949-0018-SD	Matrix Spike 2/13	SOIL	13 FEB 92		15 FEB 92
020949-0019-SA	UCC-2/13-QA1	AQUEOUS	13 FEB 92		15 FEB 92
020949-0020-TB	Trip Blank	AQUEOUS	13 FEB 92		15 FEB 92

TABLE OF CONTENTS
FOR
BALSAM ENVIRONMENTAL CONSULTANTS
RMAL PROJECT NO: 020949

VOLATILES

QC Summary.....	001
Sample Data	036
Standards Data.....	682
Raw QC Data.....	982

SEMIVOLATILES

QC Summary.....	N/A
Sample Data.....	N/A
Standards Data.....	N/A
Raw QC Data.....	N/A

PESTICIDE/PCB

QC Summary.....	N/A
Sample Data.....	N/A
Standards Data.....	N/A
Raw QC Data.....	N/A

CHAIN-OF-CUSTODY RECORD



PROJECT NUMBER HS7-T6		PROJECT NAME _____				SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>				SEND REPORT TO: JOHN O'DONNELL										
PROJECT ADDRESS _____				ANALYTICAL LABORATORY ENSECO ERCS				METHOD _____												
SAMPLE NUMBER	SAMPLING LOCATION	DATE	TIME	NATURE	COMPOSITE	PRESERVATIVE	FILTERED (Y/N)	CONTAINER TYPE	NUMBER OF CONTAINERS	ANALYSIS							COMMENTS			
										PC	PN	TEMPERATURE	RE METALS	PP METALS	OTHER	TOC				
UCC-5B-C-22		2/13/92	9:45	S.L.	X	ICE	N		1	X										
UCC-5B-C-23			2:20						1	X										X
UCC-5B-C-23x			11:15						1	X										X
UCC-5B-C-24			10:15						1	X										X
UCC-5B-C-25			9:20						1	X										X
UCC-5B-C-26			1:05						1	X										X
UCC-5B-C-27			1:30						1	X										X
UCC-5B-C-28			3:05						1	X										X
UCC-5B-C-29			2:20						1	X										X
UCC-5B-C-30			8:50						1	X										X
UCC-5B-C-31			7:00						1	X										X
UCC-5B-C-32			11:30						1	X										X
UCC-2/13-QA1									2	X										
UCC-2/13-QA2									2	X										
Matrix Spike-2/13																				

RELINQUISHED BY: <i>[Signature]</i>	DATE: 2/14/92	TIME: 4:30	RECEIVED BY: <i>[Signature]</i>	DATE: 02/15/92	TIME: 11:50
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED FOR LABORATORY BY:	DATE:	TIME:
METHOD OF SHIPMENT: Did not receive voc for this sample			AIRBILL (OR SHIPPING INVOICE) NUMBER: 2/15/92 mef		

MAR 17 '92 18:17 FROM ENSECO-ERCO PA DEPT TO ENSECO-RMA PAGE.002

CHAIN-OF-CUSTODY RECORD



PROJECT NUMBER 6437-T6		PROJECT NAME		SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>					SEND REPORT TO: John O'Donnell							
PROJECT ADDRESS				ANALYTICAL LABORATORY ENSECO					METHOD RUP							
SAMPLE NUMBER	SAMPLING LOCATION	DATE	TIME	INDEX	GROSS COMPOSITE	PRESERVATIVE	FILTERED (Y/N)	CONTAINER TYPE	NUMBER OF CONTAINERS	ANALYSES					COMMENTS	
										VOC	MAY	PENTACHLOROPOLYBIPHENYL	POLYCYCLIC AROMATIC HYDROCARBONS	OTHER		
UCC-SB-A-14		2/19/92	4:15	5		ICS	N	WGL	4	X					X	M.T. Buttl
UCC-SB-A-15		2/19/92	4:00							X					X	M.T. Buttl
UCC-SB-A-16		2/19/92	9:30							X					X	M.T. Buttl
UCC-SB-A-17		"	8:35							X					X	M.T. Buttl
UCC-SB-A-18		"	8:15							X					X	M.T. Buttl
UCC-SB-A-19		"	9:15							X					X	M.T. Buttl

MAR 17 '92 18:17 FROM ENSECO-ERCO PA DEPT TO ENSECO-RMA PAGE.003

Enseco

A Corning Company

Qualifier Codes and their Usage

U = Indicates compound was analyzed for but not detected. The sample quantitation limit is corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL (contract required quantitation limit) is multiplied by two to account for the fact that only half of the extract is recovered.

J = Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

B = This flag is used when the analyte is found in the associated blank as well as in the sample. B codes do not necessarily invalidate the data but are dependent upon the judgement of the reviewer in applying the validation guidelines. This flag is used for a TIC as well as for a positively identified target compound list (TCL) compound.

E = This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.

D = This flag identifies all compounds identified during a re-analysis of a diluted sample.

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

Additional Qualifiers for TIC data only:

I = Isomer The unknown may be this specific isomer or an isomer with the same molecular formula.

C = Class The unknown compound contains ions characteristic of a particular class of compounds.

000001



VOLATILES DATA
QC SUMMARY

Balsam Environmental Consultants
RMA # 20949

2A
 WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

000002

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	20949-19	99	95	104	0	0
02	20949-20	98	94	109	0	0
03	VBLK01	96	94	104	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 { 88-110 }
 SMC2 (BFB) = Bromofluorobenzene { 86-115 }
 SMC3 (DCE) = 1,2-Dichloroethane-d4 { 76-114 }

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

000003

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	20949-01	98	91	95	0	0
02	20949-02	114	88	89	0	0
03	20949-02DL	105	96	106	0	0
04	20949-03	98	95	96	0	0
05	20949-04	107	91	94	0	0
06	20949-04RE	105	102	109	0	0
07	20949-08	99	94	96	0	0
08	20949-12	104	92	96	0	0
09	20949-13	106	90	95	0	0
10	20949-14	105	106	96	0	0
11	20949-15	103	89	96	0	0
12	20949-16	99	89	97	0	0
13	20949-13MS	110	91	94	0	0
14	20949-13MSD	115	84	92	0	0
15	VBLK01	99	92	94	0	0
16	VBLK02	98	97	91	0	0
17	VBLK03	101	95	96	0	0
18	VBLK04	103	101	106	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)
 SMC2 (BFB) = Bromofluorobenzene (59-113)
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring compound diluted out

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

000004

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Level: (low/med) MED

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	20949-05	99	90	91	0	0
02	20949-06	99	97	88	0	0
03	20949-07	0 D	0 D	0 D	0	0
04	20949-09	86	83	74	0	0
05	20949-10	104	86	97	0	0
06	20949-11	103	85	94	0	0
07	20949-17	0 D	0 D	0 D	0	0
08	20949-18	102	100	92	0	0
09	20949-18MS	91	97	85	0	0
10	20949-18MSD	99	99	87	0	0
11	VBLK01	107	91	103	0	0
12	VBLK02	94	91	81	0	0
13	VBLK03	105	108	104	0	0

QC LIMITS

SMC1 (TOL) = Toluene-J8 (84-138)
 SMC2 (BFB) = Bromofluorobenzene (59-113)
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

000005

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Matrix Spike - EPA Sample No.: 20949-13 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	54.90	0	54.40	99	59-172
Trichloroethene	54.90	0	46.26	84	62-137
Benzene	54.90	0	50.55	92	66-142
Toluene	54.90	0	50.77	92	59-139
Chlorobenzene	54.90	0	52.09	95	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	54.90	54.18	99	0	22 59-172
Trichloroethene	54.90	45.05	82	2	24 62-137
Benzene	54.90	51.32	93	1	21 66-142
Toluene	54.90	51.10	93	1	21 59-139
Chlorobenzene	54.90	50.22	91	4	21 60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

000006

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Matrix Spike - EPA Sample No.: 20949-18 Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	6790	0	3940	58 *	59-172
Trichloroethene	6790	0	6033	89	62-137
Benzene	6790	0	6698	99	66-142
Toluene	6790	562.5	6046	81	59-139
Chlorobenzene	6790	0	6712	99	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	6790	4538	67	14	22 59-172
Trichloroethene	6790	6427	95	7	24 62-137
Benzene	6790	7364	108	9	21 66-142
Toluene	6790	7052	96	17	21 59-139
Chlorobenzene	6790	7514	111	11	21 60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
 Spike Recovery: 1 out of 10 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO 000007

VBLK01

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: M3143

Lab Sample ID: BL022292L

Date Analyzed: 02/22/92

Time Analyzed: 0106

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) Y

Instrument ID: HPL

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-03	20949-03	M3147	0355
02	20949-04	20949-04	M3148	0435
03	20949-12	20949-12	M3150	0555
04	20949-14	20949-14	M3152	0718
05	20949-15	20949-15	M3153	0757
06	20949-16	20949-16	M3154	0835

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

000008

VBLK02

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: M3214

Lab Sample ID: BL022492L

Date Analyzed: 02/24/92

Time Analyzed: 1207

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) Y

Instrument ID: HPL

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-02	20949-02	M3222	1757
02	20949-13	20949-13	M3224	1910
03	20949-13MS	20949-13MS	M3225	1946
04	20949-13MSD	20949-13MSD	M3226	2022

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO 000009

VBLK01

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: I4068

Lab Sample ID: BL022592

Date Analyzed: 02/25/92

Time Analyzed: 1737

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: HPH

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-19	20949-19	I4074	2156
02	20949-20	20949-20	I4075	2232

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO. 000010

VBLK01

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: J0758

Lab Sample ID: BL022592J

Date Analyzed: 02/25/92

Time Analyzed: 1928

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: HPJ

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-07	20949-07	J0761	2114
02	20949-10	20949-10	J0763	2225
03	20949-11	20949-11	J0764	2300

COMMENTS:

000011

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK03

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: M3262

Lab Sample ID: BL022592L2

Date Analyzed: 02/25/92

Time Analyzed: 2139

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) Y

Instrument ID: HPL

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-01	20949-01	M3274	0000
02	20949-08	20949-08	M3264	2319

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO. 000012

VBLK02

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: J0789

Lab Sample ID: BL022792J

Date Analyzed: 02/27/92

Time Analyzed: 1216

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: HPJ

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-09	20949-09	J0793	1519
02	20949-18MS	20949-18MS	J0791	1407
03	20949-18MSD	20949-18MSD	J0792	1443

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO. 000013

VBLK03

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: D1758

Lab Sample ID: BL022792

Date Analyzed: 02/27/92

Time Analyzed: 1747

GC Column: CAP ID: .0.530(mm)

Heated Purge: (Y/N) N

Instrument ID: HPD

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-05	20949-05	D1764	2156
02	20949-06	20949-06	D1755	1550
03	20949-17	20949-17	D1765	2230
04	20949-18	20949-18	D1757	1704

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO. **000014**

VBLK04

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: D1886

Lab Sample ID: BL030592

Date Analyzed: 03/05/92

Time Analyzed: 2309

GC Column: CAP ID: 0.530(mm)

Heated Purge: (Y/N) Y

Instrument ID: HPD

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	20949-02DL	20949-02DL	D1889	0009
02	20949-04RE	20949-04RE	D1890	0047

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000015

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID: H9333 BFB Injection Date: 05/02/91
 Instrument ID: HPH BFB Injection Time: 0748
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.4
75	30.0 - 66.0% of mass 95	57.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	83.4
175	4.0 - 9.0% of mass 174	6.6 (7.9)1
176	93.0 - 101.0% of mass 174	82.6 (99.0)1
177	5.0 - 9.0% of mass 176	5.2 (6.3)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	I9334	05/02/91	0812
02	VSTD020	20 PPB HSL	I9335	05/02/91	0935
03	VSTD010	10 PPB HSL	I9336	05/02/91	1013
04	VSTD100	100 PPB HSL	I9337	05/02/91	1052
05	VSTD200	200 PPB HSL	I9344	05/02/91	1725

000016

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: I4065

BFB Injection Date: 02/25/92

Instrument ID: HPH

BFB Injection Time: 1527

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.9
75	30.0 - 66.0% of mass 95	59.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	75.4
175	4.0 - 9.0% of mass 174	5.4 (7.2)1
176	93.0 - 101.0% of mass 174	71.7 (95.1)1
177	5.0 - 9.0% of mass 176	4.8 (6.7)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	I4066	02/25/92	1607
02	VBLK01	BL022592	I4068	02/25/92	1737
03	20949-19	20949-19	I4074	02/25/92	2156
04	20949-20	20949-20	I4075	02/25/92	2232

000017

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: D1750

BFB Injection Date: 02/27/92

Instrument ID: HPD

BFB Injection Time: 1032

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.9
75	30.0 - 66.0% of mass 95	56.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	62.7
175	4.0 - 9.0% of mass 174	4.8 (7.7)1
176	93.0 - 101.0% of mass 174	62.5 (99.7)1
177	5.0 - 9.0% of mass 176	4.2 (6.7)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	D1751	02/27/92	1056
02	20949-06	20949-06	D1755	02/27/92	1550
03	20949-18	20949-18	D1757	02/27/92	1704
04	VBLK03	BL022792	D1758	02/27/92	1747
05	20949-05	20949-05	D1764	02/27/92	2156
06	20949-17	20949-17	D1765	02/27/92	2230

000018

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ENSECO Contract:
Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
Lab File ID: D6724 BFB Injection Date: 05/06/91
Instrument ID: HPD BFB Injection Time: 2039
GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.1
75	30.0 - 66.0% of mass 95	51.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 120.0% of mass 95	82.7
175	4.0 - 9.0% of mass 174	5.4 (6.5)1
176	93.0 - 101.0% of mass 174	78.6 (95.0)1
177	5.0 - 9.0% of mass 176	5.1 (6.5)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50_PPB_HSL	E6725	05/06/91	2110
02	VSTD020	20_PPB_HSL	E6727	05/06/91	2226
03	VSTD100	100_PPB_HSL	E6728	05/06/91	2304
04	VSTD200	200_PPB_HSL	E6730	05/07/91	0026
05	VSTD010	10_PPB_HSL	E6734	05/07/91	0427

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000019

Lab Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID: E0998 BFB Injection Date: 01/07/92
 Instrument ID: HPD BFB Injection Time: 0927
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.5
75	30.0 - 66.0% of mass 95	46.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 120.0% of mass 95	70.2
175	4.0 - 9.0% of mass 174	4.6 (6.6)1
176	93.0 - 101.0% of mass 174	68.9 (98.2)1
177	5.0 - 9.0% of mass 176	4.5 (6.5)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	E1000	01/07/92	1110
02	VSTD010	10 PPB HSL	E1002	01/07/92	1317
03	VSTD100	100 PPB HSL	E1003	01/07/92	1355
04	VSTD200	200 PPB HSL	E1008	01/07/92	1714
05	VSTD020	20 PPB HSL	E1009	01/07/92	1805

000020

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: D1884

BFB Injection Date: 03/05/92

Instrument ID: HPD

BFB Injection Time: 1857

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.9
75	30.0 - 66.0% of mass 95	49.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	71.7
175	4.0 - 9.0% of mass 174	4.6 (6.4)1
176	93.0 - 101.0% of mass 174	69.5 (96.9)1
177	5.0 - 9.0% of mass 176	4.4 (6.3)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	D1885	03/05/92	1920
02	VBLK04	BLD30592	D1886	03/05/92	2309
03	20949-02DL	20949-02DL	D1889	03/06/92	0009
04	20949-04RE	20949-04RE	D1890	03/06/92	0047

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID: M2263 BFB Injection Date: 01/07/92
 Instrument ID: HPL BFB Injection Time: 1459
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.4
75	30.0 - 66.0% of mass 95	49.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	84.3
175	4.0 - 9.0% of mass 174	7.0 (8.3)1
176	93.0 - 101.0% of mass 174	84.0 (99.7)1
177	5.0 - 9.0% of mass 176	5.8 (6.9)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50_PPB_HSL	M2264	01/07/92	1540
02	VSTD020	20_PPB_HSL	M2265	01/07/92	1703
03	VSTD010	10_PPB_HSL	M2266	01/07/92	1739
04	VSTD100	100_PPB_HSL	M2267	01/07/92	1814
05	VSTD200	200_PPB_HSL	M2269	01/07/92	1926

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000022

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: M3139

BFB Injection Date: 02/21/92

Instrument ID: HPL

BFB Injection Time: 2214

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.1
75	30.0 - 66.0% of mass 95	46.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	70.7
175	4.0 - 9.0% of mass 174	5.0 (7.1)1
176	93.0 - 101.0% of mass 174	70.9 (100.3)1
177	5.0 - 9.0% of mass 176	4.2 (5.9)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	M3140	02/21/92	2244
02	VBLK01	BL022292L	M3143	02/22/92	0106
03	20949-03	20949-03	M3147	02/22/92	0355
04	20949-04	20949-04	M3148	02/22/92	0435
05	20949-12	20949-12	M3150	02/22/92	0555
06	20949-14	20949-14	M3152	02/22/92	0718
07	20949-15	20949-15	M3153	02/22/92	0757
08	20949-16	20949-16	M3154	02/22/92	0835

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000023

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: M3212

BFB Injection Date: 02/24/92

Instrument ID: HPL

BFB Injection Time: 1029

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.8
75	30.0 - 66.0% of mass 95	51.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	74.0
175	4.0 - 9.0% of mass 174	5.9 (8.0)1
176	93.0 - 101.0% of mass 174	73.5 (99.3)1
177	5.0 - 9.0% of mass 176	5.4 (7.4)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	M3213	02/24/92	1105
02	VBLK02	BL022492L	M3214	02/24/92	1207
03	20949-02	20949-02	M3222	02/24/92	1757
04	20949-13	20949-13	M3224	02/24/92	1910
05	20949-13MS	20949-13MS	M3225	02/24/92	1946
06	20949-13MSD	20949-13MSD	M3226	02/24/92	2022

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000024

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: M3260

BFB Injection Date: 02/25/92

Instrument ID: HPL

BFB Injection Time: 2002

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.0
75	30.0 - 66.0% of mass 95	50.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	77.9
175	4.0 - 9.0% of mass 174	6.2 (7.9)1
176	93.0 - 101.0% of mass 174	73.4 (94.2)1
177	5.0 - 9.0% of mass 176	5.3 (7.2)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	M3261	02/25/92	2028
02	VBLK03	BL022592L2	M3262	02/25/92	2139
03	20949-08	20949-08	M3264	02/25/92	2319
04	20949-01	20949-01	M3274	02/26/92	0000

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000025

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: K0672

BFB Injection Date: 02/20/92

Instrument ID: HPJ

BFB Injection Time: 1113

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.9
75	30.0 - 66.0% of mass 95	50.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	92.8
175	4.0 - 9.0% of mass 174	6.5 (7.0)1
176	93.0 - 101.0% of mass 174	90.8 (97.8)1
177	5.0 - 9.0% of mass 176	6.2 (6.8)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	K0673	02/20/92	1130
02	VSTD100	100 PPB HSL	K0674	02/20/92	1332
03	VSTD200	200 PPB HSL	K0676	02/20/92	1513
04	VSTD010	10 PPB HSL	K0679	02/20/92	1820
05	VSTD020	20 PPB HSL	K0682	02/20/92	2008

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

000027

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Lab File ID: J0786

BFB Injection Date: 02/27/92

Instrument ID: HPJ

BFB Injection Time: 0935

GC Column: CAP

ID: 0.530(mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.1
75	30.0 - 66.0% of mass 95	48.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	100.5
175	4.0 - 9.0% of mass 174	7.3 (7.3)1
176	93.0 - 101.0% of mass 174	97.6 (97.1)1
177	5.0 - 9.0% of mass 176	6.8 (7.0)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	50 PPB HSL	J0787	02/27/92	1011
02	VBLK02	BL022792J	J0789	02/27/92	1216
03	20949-18MS	20949-18MS	J0791	02/27/92	1407
04	20949-18MSD	20949-18MSD	J0792	02/27/92	1443
05	20949-09	20949-09	J0793	02/27/92	1519

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): M3261 Date Analyzed: 02/25/92
 Instrument ID: HPL Time Analyzed: 2028
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) Y

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	36068	7.26	159164	9.24	122050	14.57
UPPER LIMIT	72136	7.76	318328	9.74	244100	15.07
LOWER LIMIT	18034	6.76	79582	8.74	61025	14.07
EPA SAMPLE NO.						
01 20949-01	34275	7.15	143725	9.17	108574	14.57
02 20949-08	30067	7.26	129080	9.24	100816	14.56
03 VBLK03	21837	7.28	92361	9.23	69032	14.58

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

000029

Lab Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): J0787 Date Analyzed: 02/27/92
 Instrument ID: HPJ Time Analyzed: 1011
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) N

		IS1(BCM)	RT #	IS2(DFB)	RT #	IS3(CBZ)	RT #
		AREA #		AREA #		AREA #	
-----		-----	-----	-----	-----	-----	-----
12 HOUR STD		33600	5.34	117000	7.18	107000	12.37
UPPER LIMIT		67200	5.84	234000	7.68	214000	12.87
LOWER LIMIT		16800	4.84	58500	6.68	53500	11.87
-----		-----	-----	-----	-----	-----	-----
EPA SAMPLE NO.							
-----		-----	-----	-----	-----	-----	-----
01	20949-09	44612	5.38	146862	7.20	132085	12.37
02	20949-18MS	47212	5.36	154331	7.20	130524	12.35
03	20949-18MSD	32659	5.36	111524	7.20	102451	12.37
04	VBLK02	43044	5.36	132859	7.20	129153	12.34

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

000030

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): D1751 Date Analyzed: 02/27/92
 Instrument ID: HPD Time Analyzed: 1056
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) N

	ISI(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	11967	9.08	51657	11.06	38761	16.35
UPPER LIMIT	23934	9.58	103314	11.56	77522	16.85
LOWER LIMIT	5984	8.58	25828	10.56	19380	15.85
EPA SAMPLE NO.						
01 20949-05	15910	9.13	63606	11.09	47732	16.38
02 20949-06	15562	9.15	61517	11.11	47122	16.39
03 20949-17	14247	9.11	58794	11.09	44142	16.40
04 20949-18	12060	9.13	48172	11.09	34822	16.39
05 VBLK03	11661	9.11	47035	11.07	33494	16.38

ISI (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): D1885 Date Analyzed: 03/05/92
 Instrument ID: HPD Time Analyzed: 1920
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) Y

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	21236	9.05	80835	11.01	59561	16.30
UPPER LIMIT	42472	9.55	161670	11.51	119122	16.80
LOWER LIMIT	10618	8.55	40416	10.51	29780	15.80
EPA SAMPLE NO.						
01 20949-02DL	22218	9.03	85477	11.01	56302	16.35
02 20949-04RE	23199	9.06	92134	11.01	62125	16.35
03 VBLK04	16940	9.04	63333	11.02	42931	16.38

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): I4066 Date Analyzed: 02/25/92
 Instrument ID: HPH Time Analyzed: 1607
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) N

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	43929	6.23	183607	8.11	133086	13.19
UPPER LIMIT	87858	6.73	367214	8.61	266172	13.69
LOWER LIMIT	21964	5.73	91804	7.61	66543	12.69
EPA SAMPLE NO.						
01 20949-19	51645	6.24	218936	8.10	160715	13.18
02 20949-20	47310	6.25	202826	8.10	150783	13.18
03 VBLK01	46113	6.23	195889	8.13	145694	13.18

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

8A.
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): J0751 Date Analyzed: 02/25/92
 Instrument ID: HPJ Time Analyzed: 1200
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) N

	ISI(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	107081	5.32	371277	7.18	309124	12.36
UPPER LIMIT	214162	5.82	742554	7.68	618248	12.86
LOWER LIMIT	53540	4.82	185638	6.68	154562	11.86
EPA SAMPLE NO.						
01 20949-07	74382	5.34	250198	7.20	214185	12.37
02 20949-10	75418	5.36	256901	7.20	227733	12.37
03 20949-11	77644	5.37	269144	7.21	234870	12.38
04 VBLK01	69658	5.37	237696	7.21	223234	12.36

ISI (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

000034

BA
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): M3140 Date Analyzed: 02/21/92
 Instrument ID: HPL Time Analyzed: 2244
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) Y

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	55628	7.31	255736	9.24	192703	14.57
UPPER LIMIT	111256	7.81	511472	9.74	385406	15.07
LOWER LIMIT	27814	6.81	127868	8.74	96352	14.07
EPA SAMPLE NO.						
01 20949-03	46644	7.22	207056	9.20	160093	14.55
02 20949-04	44429	7.24	183103	9.19	118212	14.54
03 20949-12	41847	7.25	186593	9.20	135459	14.52
04 20949-14	42418	7.24	182068	9.20	115959	14.53
05 20949-15	43790	7.22	187817	9.19	141118	14.52
06 20949-16	45953	7.26	206925	9.21	156620	14.54
07 VBLK01	49050	7.21	219538	9.19	166935	14.54

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

000035

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Lab File ID (Standard): M3213 Date Analyzed: 02/24/92
 Instrument ID: HPL Time Analyzed: 1105
 GC Column: CAP ID: 0.530(mm) Heated Purge: (Y/N) Y

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	37563	7.29	167527	9.24	133600	14.57
UPPER LIMIT	75126	7.79	335054	9.74	267200	15.07
LOWER LIMIT	18782	6.79	83764	8.74	66800	14.07
EPA SAMPLE NO.						
01 20949-02	36215	7.26	146973	9.21	98631	14.56
02 20949-13	26861	7.24	112370	9.22	81131	14.57
03 20949-13MS	31896	7.24	132510	9.22	94453	14.54
04 20949-13MSD	33181	7.26	138729	9.21	94907	14.56
05 VBLK02	36072	7.28	163210	9.23	127402	14.58

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 100% of internal standard area.
 AREA LOWER LIMIT = - 50% of internal standard area.
 RT UPPER LIMIT = +0.50 minutes of internal standard RT.
 RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

000036



VOLATILES DATA

SAMPLE DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000037

20949-01

Lab Name: ENSECO Contract: _____

Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 20949-01

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M3274

Level: (low/med) LOW Date Received: 02/15/92

% Moisture: not dec. 10 Date Analyzed: 02/26/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

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

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

CAS NO. COMPOUND 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	2	BJ
67-64-1	-----Acetone	11	U
75-15-0	-----Carbon Disulfide	11	U
75-35-4	-----1,1-Dichloroethene	11	U
75-34-3	-----1,1-Dichloroethane	11	U
540-59-0	-----1,2-Dichloroethene (total)	11	U
67-66-3	-----Chloroform	11	U
107-06-2	-----1,2-Dichloroethane	11	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	11	U
56-23-5	-----Carbon Tetrachloride	11	U
75-27-4	-----Bromodichloromethane	11	U
78-87-5	-----1,2-Dichloropropane	11	U
10061-01-5	-----cis-1,3-Dichloropropene	11	U
79-01-6	-----Trichloroethene	11	U
124-48-1	-----Dibromochloromethane	11	U
79-00-5	-----1,1,2-Trichloroethane	11	U
71-43-2	-----Benzene	11	U
10061-02-6	-----trans-1,3-Dichloropropene	11	U
75-25-2	-----Bromoform	11	U
108-10-1	-----4-Methyl-2-Pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	110	U
79-34-5	-----1,1,2,2-Tetrachloroethane	11	U
108-88-3	-----Toluene	11	U
108-90-7	-----Chlorobenzene	11	U
100-41-4	-----Ethylbenzene	11	U
100-42-5	-----Styrene	11	U
1330-20-7	-----Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO
000038

20949-01

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-01

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: M3274

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 10

Date Analyzed: 02/26/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

000039

WARRANT REPORT

Page 1

Operator ID: LUEY1
 Output File: MS274:1Q1
 Data File: MS274:1L3
 Name: 20949-01, KAS-5
 Misc: 56/5ML, ANALYST RB INST. L HEATED

Quant Rev: 2 Quant Time: 920226 00:28
 Injected At: 920226 00:00
 Dilution Factor: 1.000000
 Instrument ID: L

W/HT

ID File: IDEPAL:10
 Title: 10 FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Mod Time: 920225 20:28

Compound	R.T.	Q Ion	Area	Conc	Units	q
1) *C101 BROMOCHLOROMETHANE	7.15	128.0	54275	50.00	UG/L	95
2) C515 1,2-DICHLOROLITHANE-D4	8.21	69.0	63330	47.49	UG/L	84
4) C035 ACETONE	3.62	43.0	991	2.11	UG/L	100
10) C030 METHYLENE CHLORIDE	4.35	84.0	1506	1.64	UG/L	93
19) *C110 1,4-DIFLUOROBENZENE	9.17	114.0	143725	50.00	UG/L	100
31) *C120 CHLOROBENZENE-D5	14.57	117.0	108574	50.00	UG/L	82
32) C505 TOLUENE-D8	11.77	98.0	132053	48.85	UG/L	97
33) C510 BROMOFLUOROBENZENE	17.11	95.0	76728	45.27	UG/L	100
36) C220 TETRACHLOROETHENE	12.91	164.0	90365	97.57	UG/L	95

* Compound is ISID

000040

MS data file header from : >M3274:L3

Sample: 20949-01, RAS-S Operator: LUEYI RFA. GRP. 2/26/92 0:00
Misc : 5G/5ML, ANALYST RB INST. L HEATED
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
Method file: SAMML Tuning file: M18FBL No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

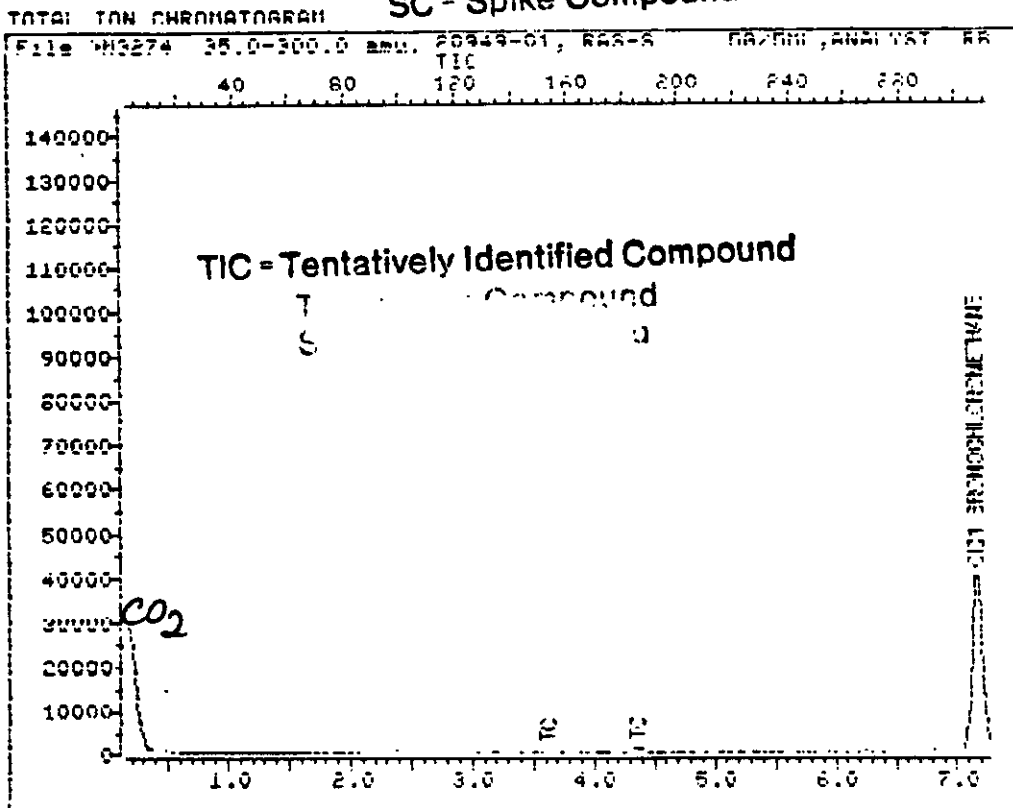
Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.2	0.0
Chromatographic rate, deg/min:	6.0	8.5	20.0	.5	0.0

CONCENTRATION DILUTION INFORMATION

Performance Check: >M3260 Injection Time: 2/25/92 20:02
Sample : >M3274 Injection time: 2/26/92 0:00
Elapsed Time: U Y U D 3:58
Sample: M3274 Calibration Stds.: M3261,
Invalid Response Factor for: C053 1,2-DICHLOROETHENE TOTAL
Invalid Response Factor for: C250 XYLENE TOTAL

TIC = Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

000041



Data File: >M3274::L3
Name: 20949-01, RAS-S
Misc: 56/5ML, ANALYST RB INST. L HEATED

Quant Output File: M3274::NT
Instrument ID: L

Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + IHP
Last Calibration: 911030 17:46

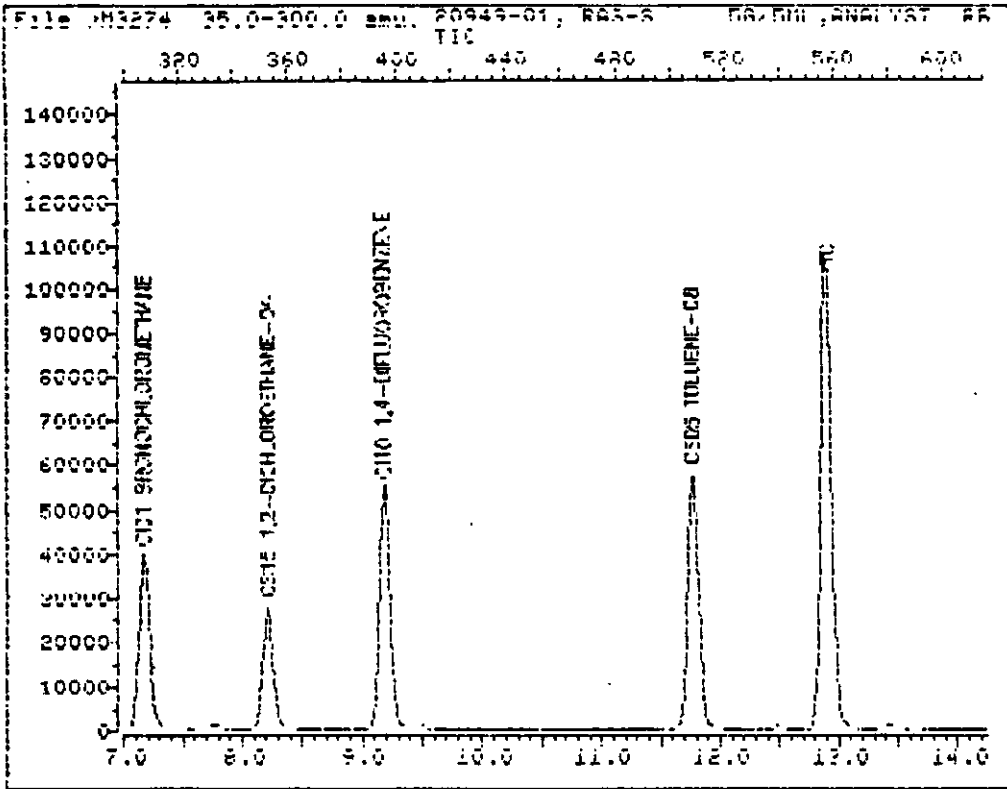
Last Qual Time: 920225 20:28

Operator ID: LUEYJ
Quant Time: 920226 00:28
Injected at: 920226 00:00

Page 1 of 4

000042

TOTAL ION CHROMATOGRAM



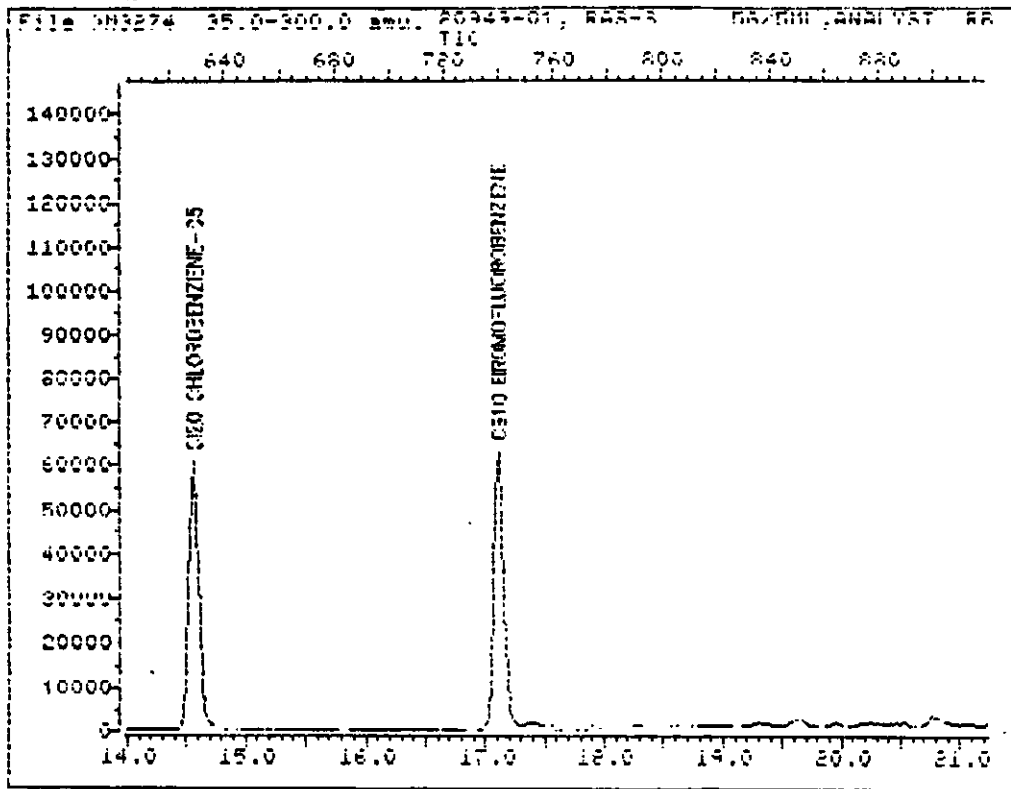
Data File: >M5274::L5 Quant Output File: ^M5274::Q1
Name: 20949-01, RAS-S Instrument ID: L
Misc: 5G/5ML, ANALYST RB INST. L HEATED

Id File: JDEPAL::ID
Title: ID FILE CLP INST. L + IHP
Last Calibration: 911030 17:46 Last Cal Time: 920225 20:28

Operator ID: LUEY1
Quant time : 920226 00:28
Injected at: 920226 00:00

000043

TOTAL ION CHROMATOGRAM



Data File: 013274::L5

Quant Output File: 013274::01

Name: 20949-01, NAS-S

Instrument ID: L

Misc: 56/5ML, ANALYST RB INST. L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THE

Last Calibration: 911030 17:46

Last Used Time: 920226 20:28

Operator ID: LUEY1

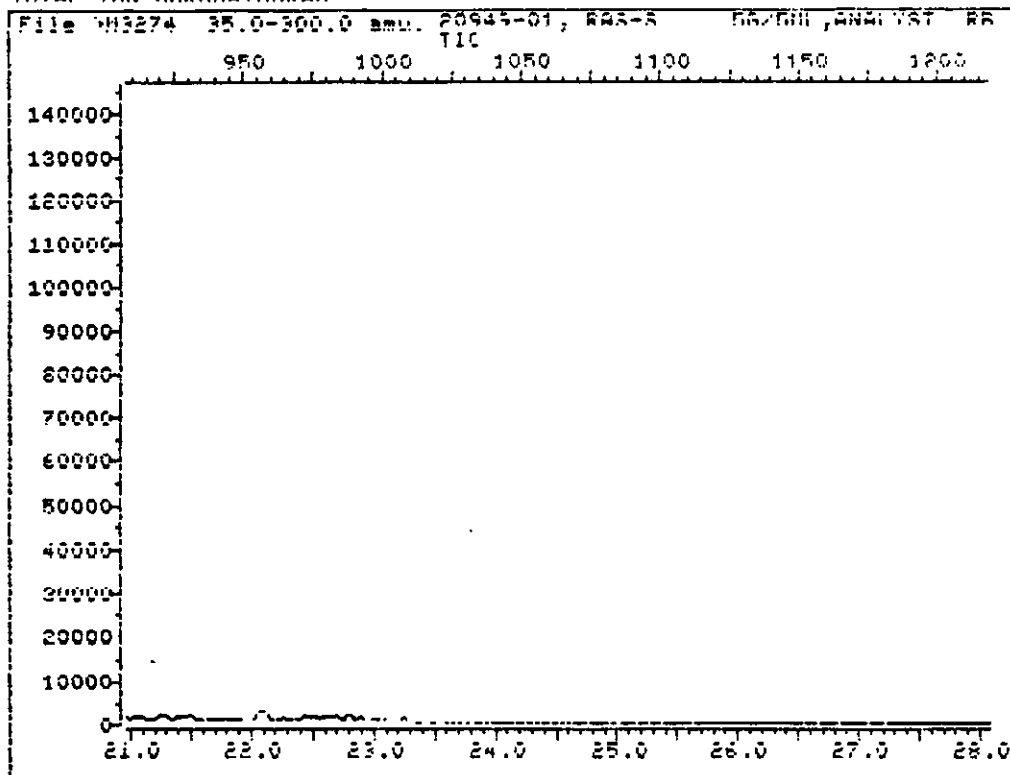
Quant time: 920226 00:28

Injected at: 920226 00:00

Page 3 of 4

000044

TOTAL ION CHROMATOGRAM

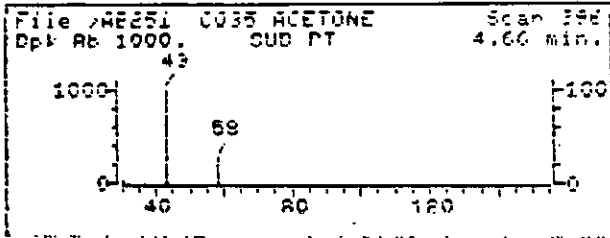


Data File: >M3274::L5 Quant Output File: >M3274::Q1
Name: 20945-01, RAS-S Instrument ID: L
Misc: 56/5ML, ANALYST RB INST. L HEATED

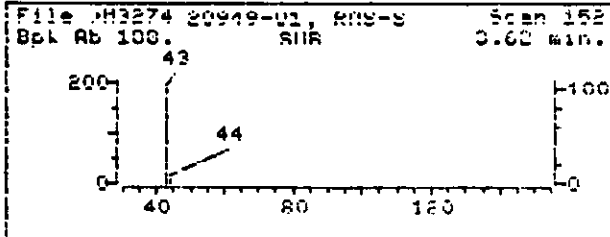
Id File: IDEPAL::ID
Title: ID FILE LLP INST. L + THE
Last Calibration: 911030 17:46 Last Cal Time: 920225 20:28

Operator ID: LUEY1
Quant time : 920226 00:28
Injected at: 920226 00:00

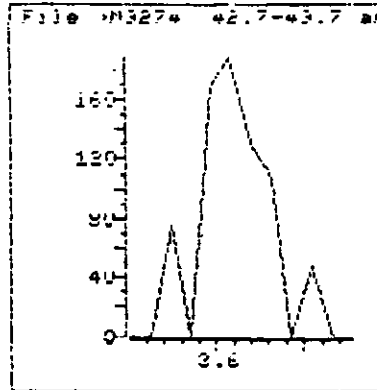
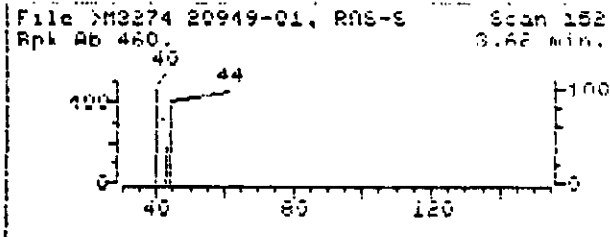
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

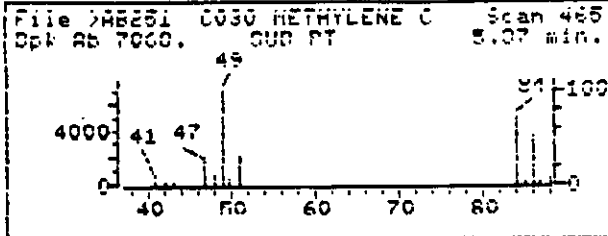


Data File: >M3274::L3
Name: 20949-01, RAS-S
Misc: 56/5ML, ANALYST RB INST. L HEATED
Quant Time: 920226 00:28
Injected at: 920226 00:00
Last Cal time: 920225 20:28

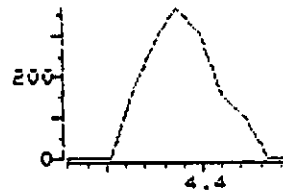
Quant Output File: >M3274::QT
Instrument ID: L
Quant ID File: 100PAL:10
Last Calibration: 921030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 152
Retention time: 3.62 min.
Quant Ion : 43.0
Area : 991
Concentration : 2.11 US/L
q-value : 100

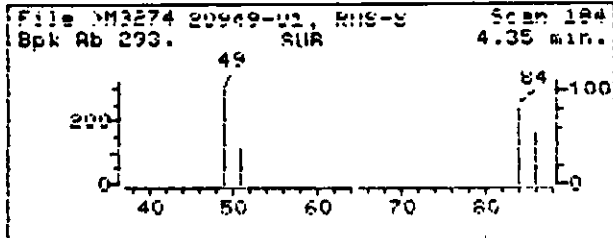
REFERENCE STANDARD SPECTRUM



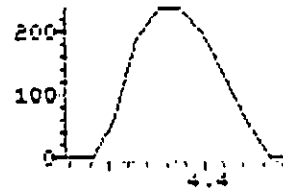
File >M3274 46.7-49.7 am



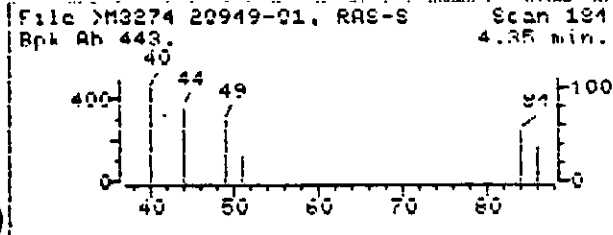
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



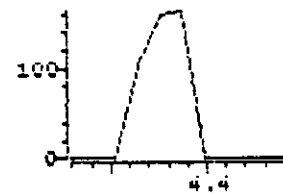
File >M3274 83.7-84.7 am



SAMPLE SPECTRUM (UNALTERED)



File >M3274 95.7-96.7 am

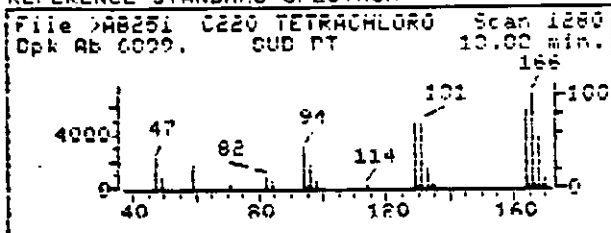


Data File: >M3274::L3
Name: 20949-01, RAS-S
Misc: 5G/5ML, ANALYST RB INST. L HEATED
Quant Time: 920226 00:28
Injected at: 920226 00:00
Last Wcal Time: 920225 20:28

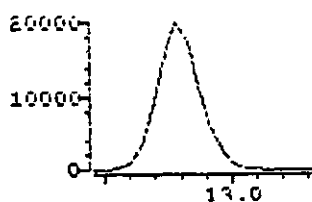
Quant Output File: >M3274::Q1
Instrument ID: 1
Quant ID File: 10LPA1::10
Last Calibration: 911030 17:46

Compound No : 10
Compound Name : 0030 METHYLENE CHLORIDE
Scan Number : 184
Retention Time: 4.35 min.
Quant Ion : 84.0
Area : 1506
Concentration : 1.64 UG/L
q-value : 93

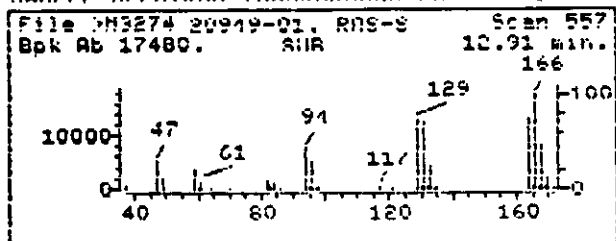
REFERENCE STANDARD SPECTRUM



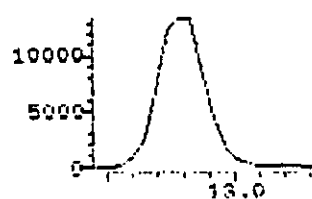
File >M3274 165.7-166.7



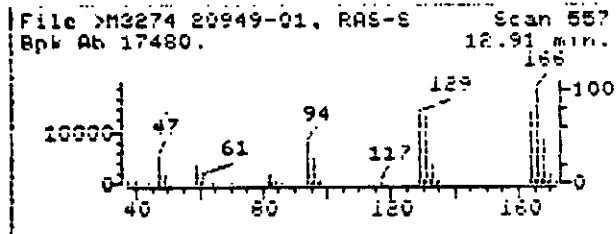
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



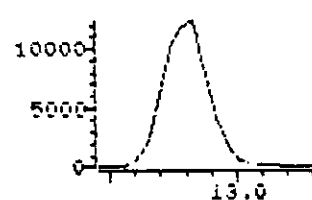
File >M3274 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >M3274 130.7-131.7



Data File: >M3274::L3
Name: 20949-01, RAS-S
Misc: 56/5ML, ANALYST RB INST. L HEATED
Quant time: 920226 00:28
Injected at: 920226 00:00
Last Qual time: 920226 20:28

Quant Output File: >M3274::Q1
Instrument ID: L
Quant ID File: IDLPAI::ID
Last Calibration: 911030 17:46

Compound No : 56
Compound Name : C220 TETRACHLOROETHYLENE
Scan Number : 557
Retention time: 12.91 min.
Quant Ion : 164.0
Area : 90365
Concentration : 97.59 UG/L
q-value : 95

000048

Diagnostic Quant Report

Data File: >M3274::L3 Injected at: 00:00 02/26/92
 Quant'd : 00:28 02/26/92
 ID File : IDEPAL::10 Calibrated : 17:46 10/30/91

Compound	- R.I. Info -			Ion	Area	RF	Conc.	
	Pred	Found	Dif					
1) *C101	BROMOCHLOROMETHANE	7.26	7.15	.11	128.0	34275	1.0000	50.00
2) C515	1,2-DICHLOROETHANE-D	8.15	8.21	.06	65.0	63330	1.9455	47.49
3) C010	CHLOROMETHANE	1.11	0.00	--	50.0	0	.7812	0.00
4) C020	VINYL CHLORIDE	1.29	0.00	--	62.0	0	.8950	0.00
5) C015	BROMOMETHANE	1.77	0.00	--	94.0	0	1.0941	0.00
6) C025	CHLOROETHANE	2.04	0.00	--	64.0	0	.6085	0.00
7) C045	1,1-DICHLOROETHENE	3.47	0.00	--	96.0	0	.9359	0.00
8) C040	CARBON DISULFIDE	3.53	0.00	--	76.0	0	1.5712	0.00
9) C035	ACETONE	3.94	3.62	.32	43.0	991	.6843	7.11
10) C030	METHYLENE CHLORIDE	4.53	4.35	.18	84.0	1506	1.3429	1.64
11) UNK	trans-1,2-DICHLORUE I	4.98	0.00	--	96.0	0	1.0972	0.00
12) C050	1,1-DICHLOROETHANE	5.75	0.00	--	63.0	0	2.1754	0.00
13) C011	cis-1,2-DICHLORU THE	6.79	0.00	--	96.0	0	1.1207	0.00
14) C053	1,2 DICHLORUE THENE I	0.00	0.00	--	96.0	0	1.1089	0.00
15) C110	2-BUTANONE	7.04	0.00	--	43.0	0	1.1012	0.00
16) C013	TETRAHYDROFURAN	7.29	0.00	--	42.0	0	.6386	0.00
17) C060	CHLOROFORM	7.47	0.00	--	83.0	0	2.5695	0.00
18) C065	1,2-DICHLORUE THANE	8.28	0.00	--	62.0	0	1.8775	0.00
19) *C110	1,4-DIFLUOROBENZENE	9.24	9.17	.06	114.0	143725	1.0000	50.00
20) C115	1,1,1-TRICHLORUE THAN	7.60	0.00	--	97.0	0	.5236	0.00
21) C120	CARBON TETRACHLORIDE	7.85	0.00	--	117.0	0	.4937	0.00
22) C165	BENZENE	8.21	0.00	--	78.0	0	.6751	0.00
23) C150	TRICHLORUE THENE	9.47	0.00	--	130.0	0	.3661	0.00
24) C140	1,2-DICHLOROPROPANE	9.81	0.00	--	63.0	0	.2732	0.00
25) C130	BROMODICHLOROMETHANE	10.47	0.00	--	83.0	0	.5078	0.00
26) C143	cis-1,3-DICHLOROPROP	11.32	0.00	--	75.0	0	.4373	0.00
27) C172	trans-1,3-DICHLOROPR	12.43	0.00	--	75.0	0	.3877	0.00
28) C160	1,1,2-TRICHLORUE THAN	12.73	0.00	--	97.0	0	.2968	0.00
29) C155	CHLORODIBROMOMETHANE	13.39	0.00	--	129.0	0	.5126	0.00
30) C180	BROMOFORM	16.22	0.00	--	173.0	0	.4280	0.00
31) *C120	CHLOROBENZENE-D5	14.57	14.57	.00	117.0	108574	1.0000	50.00
32) C505	TOLUENE-D8	11.79	11.77	.02	98.0	132053	1.2449	48.85
33) C510	BROMOFLUOROBENZENE	17.12	17.11	.00	95.0	76728	.7805	45.77
34) C230	TOLUENE	11.90	0.00	--	91.0	0	1.0930	0.00
35) C205	4-METHYL-2-PENTANONE	11.83	0.00	--	43.0	0	.6976	0.00
36) C220	TRICHLORUE THENE	12.91	12.91	.00	164.0	90365	.4264	97.59
37) C210	2-HEXANONE	13.49	0.00	--	43.0	0	.5688	0.00
38) C235	CHLOROBENZENE	14.61	0.00	--	112.0	0	.8190	0.00
39) C240	ETHYLBENZENE	14.96	0.00	--	106.0	0	.3974	0.00
40) UNK	m&p-XYLENES	15.23	0.00	--	106.0	0	.4983	0.00
41) C029	o-XYLENE	16.01	0.00	--	106.0	0	.4808	0.00
42) C250	XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.4896	0.00
43) C245	STYRENE	16.08	0.00	--	104.0	0	.8081	0.00
44) C225	1,1,2,2-TETRACHLORUE	17.67	0.00	--	83.0	0	.7660	0.00

* - Compound is an Internal Standard

0 - Compound Model'd

IC Internal Standard Report

Data File: >M3274

Maximum separation 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
306.	34275.	7.294 307. 234869.	93.951
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
394.	143725.	2.506 395. 346026.	96.067
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
629.	108574.	3.094 629. 345698.	102.903

Deleting peaks from INT file: UDIR68

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 7
 Number of peaks remaining: 7

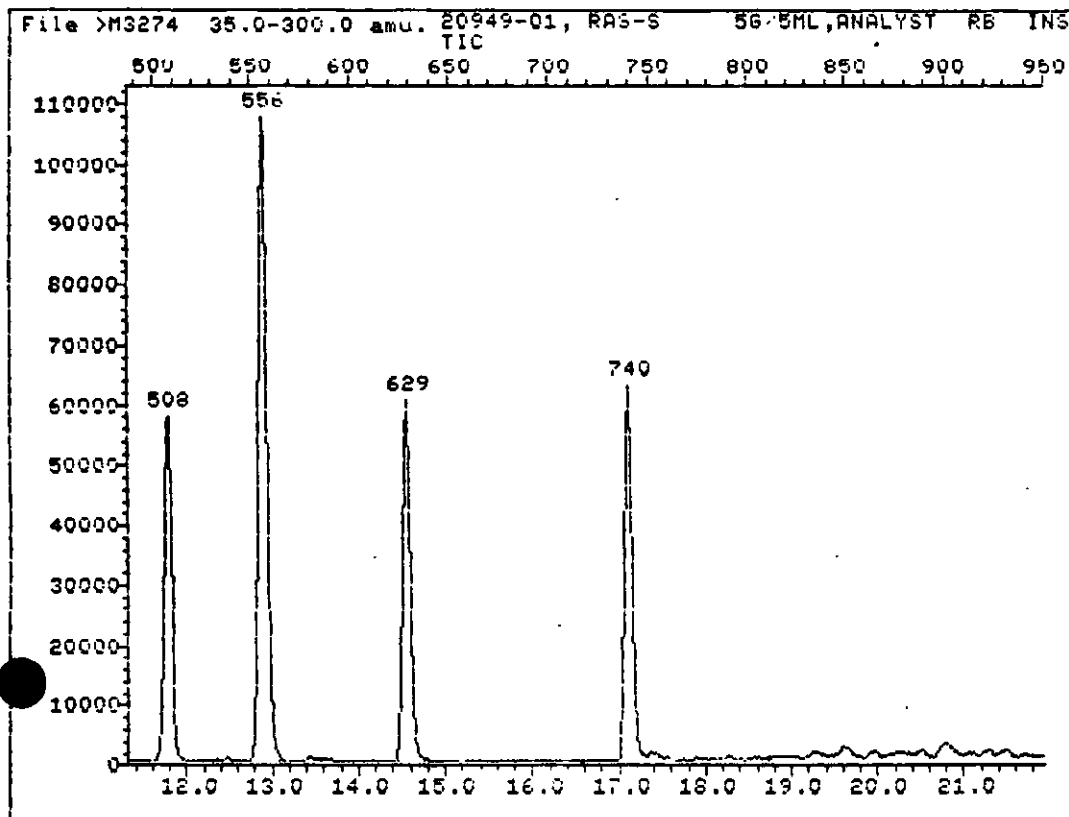
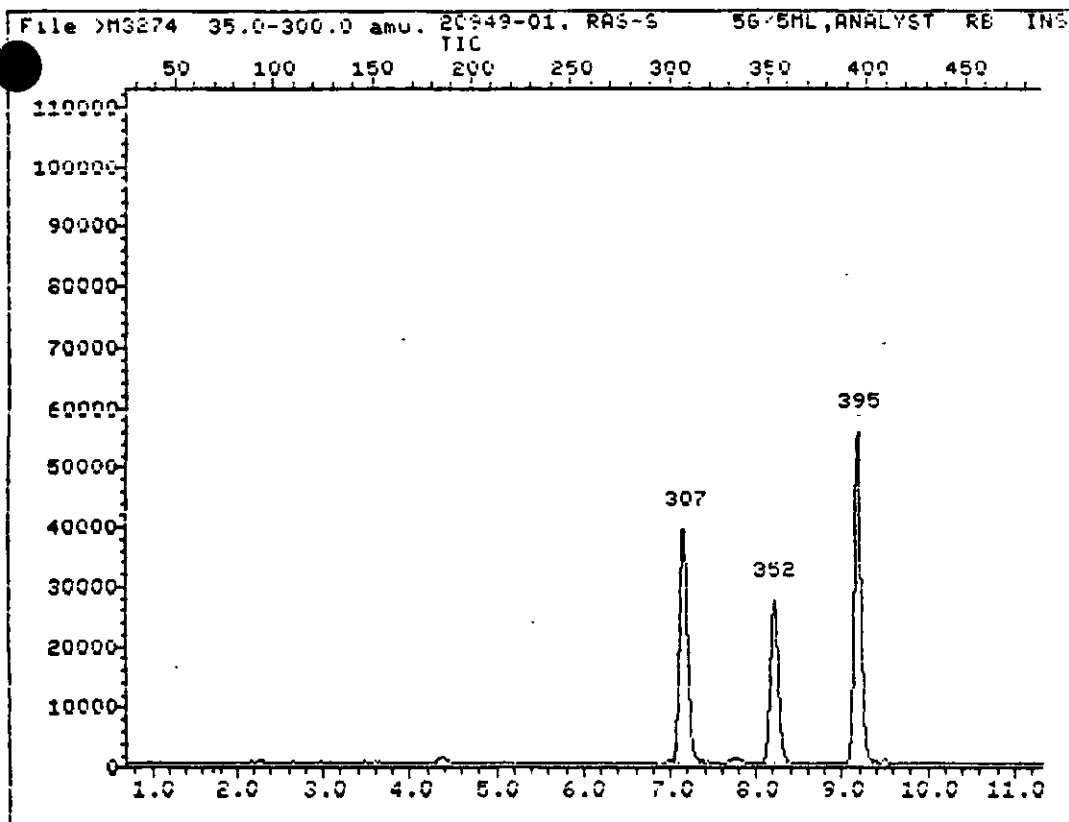
Deleting target compounds from INT file: UDIR68

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 7
 Number of peaks remaining: 0

Deleting all but largest peaks from INT file: UDIR68

Maximum number of peaks to keep: 15
 Number of peaks: 0
 Maximum number of peaks > number of peaks.

000050



000051

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20949-02

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-02

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: M3222

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 14

Date Analyzed: 02/24/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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	1	J
67-64-1	Acetone	4	J
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	260	E
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000052

20949-02

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-02

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: M3222

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 14

Date Analyzed: 02/24/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output file: >M3222:1WT
 Data File: >M3222:L3
 Name: 20949-02,U,CPA,
 Misc: CLP,,,02,L,S,

Quant Rev: 7 Quant Time: 920224 18:26
 Injected at: 920224 17:57
 Dilution Factor: 1.00000
 Instrument ID: L
 5G/5ML 8240-RAS-S SFB INSTR.L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *C101 BROMOCHLORIMETHANE	7.26	128.0	36215	50.00	UG/L	94
2) CS15 1,2-DICHLOROETHANE-D4	8.27	65.0	62538	44.49	UG/L	83
9) C035 ACETONE	3.89	43.0	1940	3.68	UG/L	100
10) C030 METHYLENE CHLORIDE	4.58	84.0	1414	1.18	UG/L	92
19) *C110 1,4-DIFLUOROBENZENE	9.21	114.0	146973	50.00	UG/L	100
20) C115 1,1,1-TRICHLOROETHANE	7.63	97.0	1206	.094	UG/L	95
23) C150 TRICHLOROETHENE	9.53	130.0	1662	1.28	UG/L	79
31) *C120 CHLOROBENZENE-D5	14.56	117.0	98631	50.00	UG/L	86
32) CS05 TOLUENE-D8	11.78	98.0	129489	56.85	UG/L	98
33) CS10 BROMOFLUOROBENZENE	17.11	95.0	66202	43.87	UG/L	100
34) C230 TOLUENE	11.90	91.0	3248	1.29	UG/L	99
6) C220 TETRACHLOROETHENE	12.91	164.0	211623	221.55	UG/L	95
39) C248 ETHYLBENZENE	15.23	106.0	625	.682	UG/L	66
40) C249 M-P-XYLENES	15.23	106.0	625	.552	UG/L	87
41) C229 O-XYLENE	16.01	106.0	571	.581	UG/L	88

* Compound is ISTD

000054

data file header from : >M3222::L3

Sample: 20949-02,U,EPA, Operator: LUEY1 REG. GRP. 2/24/92 17:57
 Misc : CLP,,,02,L,S, 5G/5ML 8240-RAS-S SFB INSTR.L
 Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
 Method file: SAMML Tuning file: M1BFBL No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

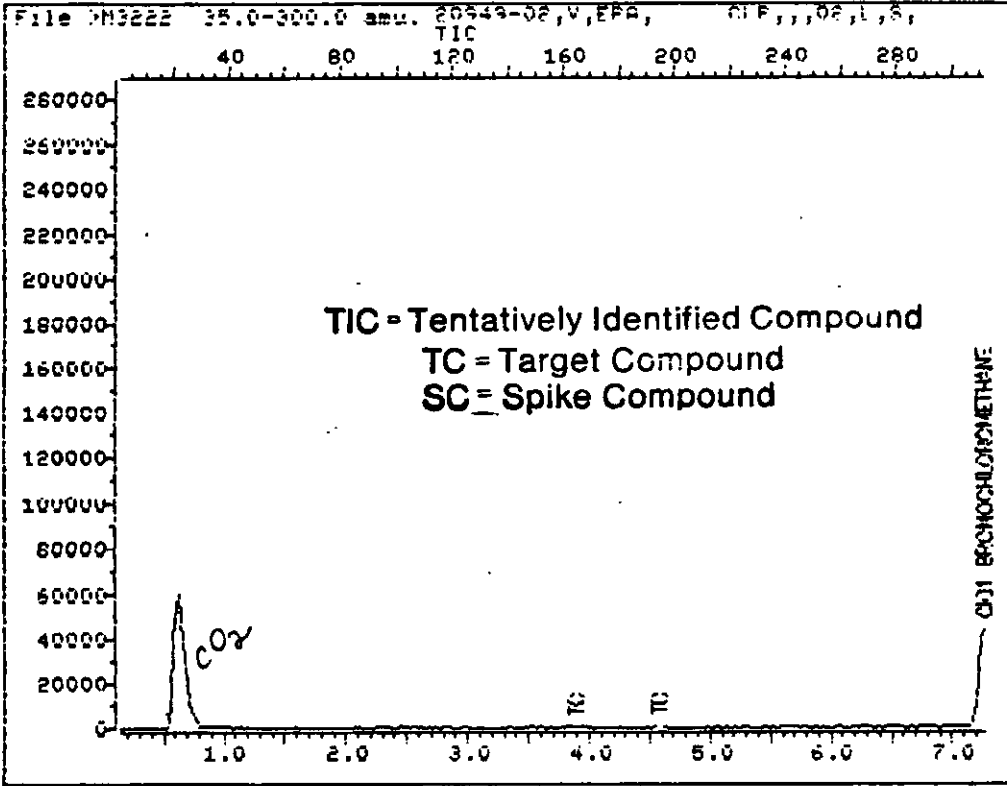
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	5G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	NA	%moisture for soil
int_ext_vol	NA	intermediate extract vol/M.L. ext vo
int_ext_vol_u	NA	intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
runfact	1.00	calcd runfactor
surfact	.0050	calcd surr vol

Performance Check: >M3212 Injection Time: 2/24/92 10:29
 Sample : >M3222 Injection Time: 2/24/92 17:57
 Elapsed Time: 0 Y 0 D 7:28 ✓
 Sample: ^M3222 Calibration Stds.: ^M3213,
 Invalid Response Factor for: 0053 1,2 DICHLORUETHENE TOTAL

000055

TOTAL ION CHROMATOGRAM



Data File: >M3222::L3
Name: 20549-02,U,EPA,
Misc: CLP,,,02,L,S,

Quant Output File: ^M3222::QT
Instrument ID: L
5G/5ML 8240-RAS-S SFB INSIR.L

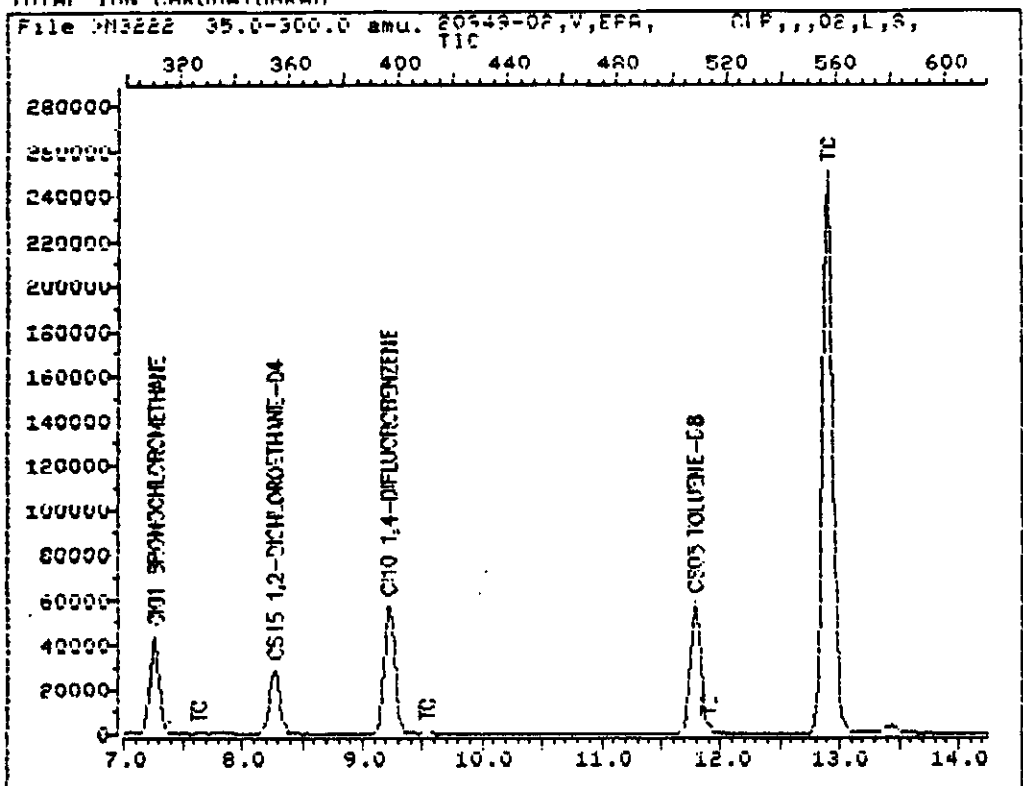
Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 12:46

Last Qual Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 18:26
Injected at: 920224 17:52

000056

TOTAL ION CHROMATOGRAM



Data File: >M3222::L3
Name: 20549-02,V,EPA,
Misc: CLP,,,02,L,S,

Quant Output File: M3222::QT
Instrument ID: L
5G/5ML 8240-RAS-S SP8 INSTR.L

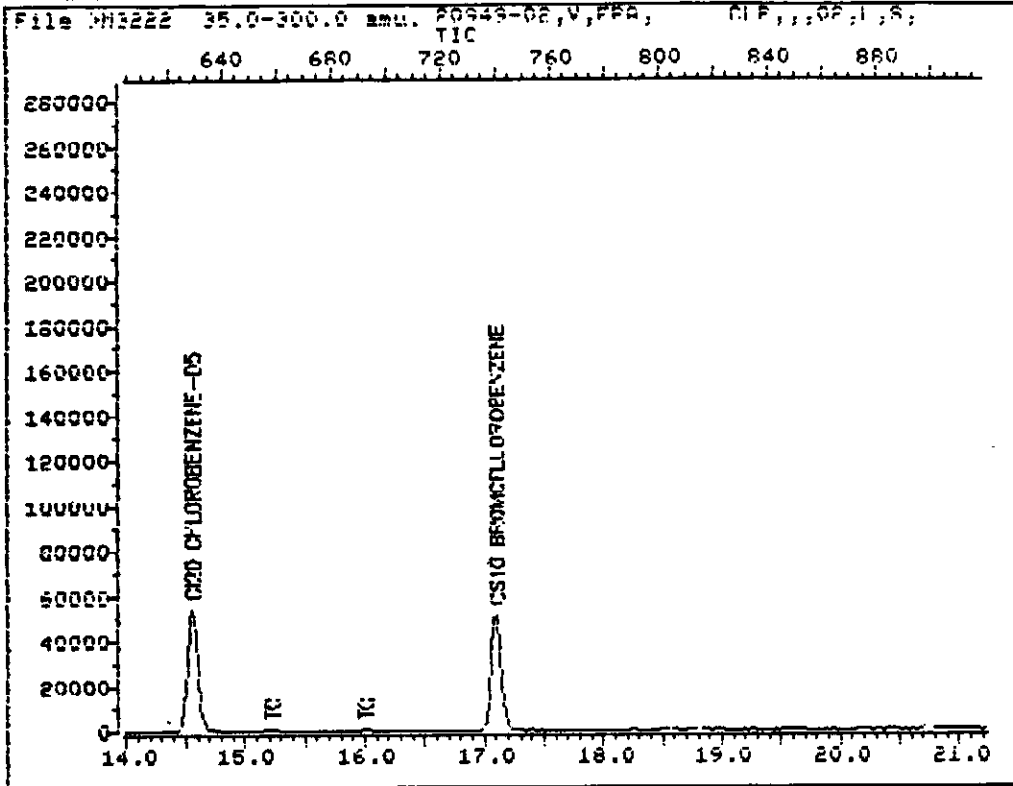
Id File: IDEPAI::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 18:26
Injected at: 920224 17:57

000057

TOTAL ION CHROMATOGRAM



Data File: >M3222::L3
Name: 20949-02,U,EPA,
Misc: CLP,,,02,L,S,

Quant Output File: ^M3222::Q1
Instrument ID: L
5G/5ML 8240-RAS-S SFB INSTR.L

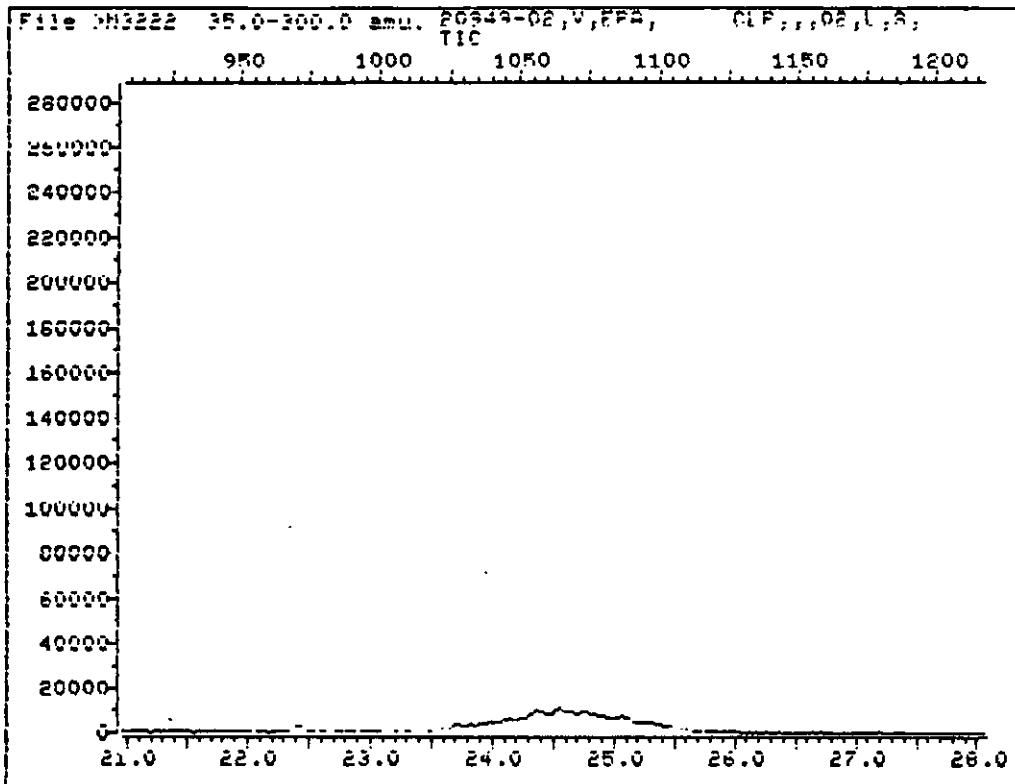
Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 18:26
Injected at: 920224 17:57

000058

TOTAL ION CHROMATOGRAM



Data File: >M3222::L3
Name: 20949-02,U,EPA,
Misc: CLP,,,02,L,S,

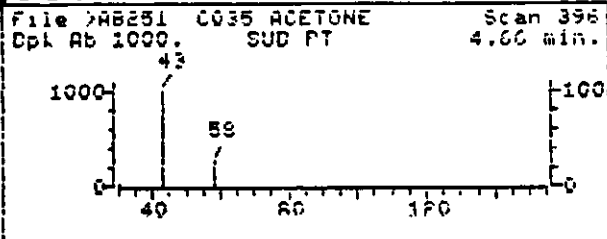
Quant Output File: M3222::Q1
Instrument ID: L
5G/5ML 8240-RAS-S SFB INSTR.L

Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46

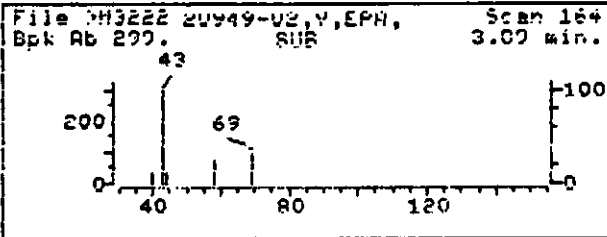
Last Qual Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 18:26
Injected at: 920224 17:57

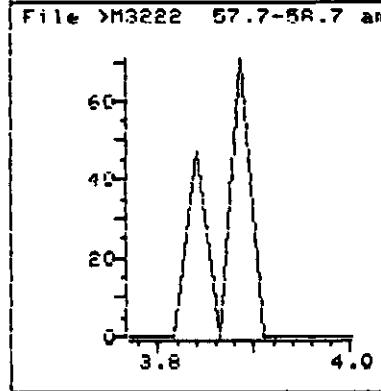
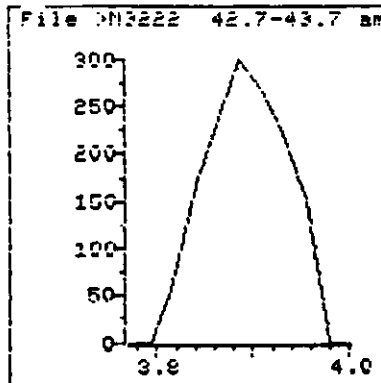
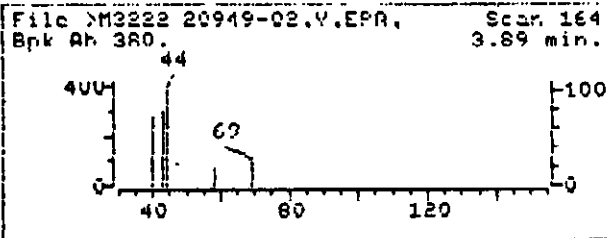
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3222::L3
Name: 20949-02.V,EPA,
Misc: CLP,,,02,L,S, 5G/5ML
Quant Time: 920224 18:26
Injected at: 920224 17:57
Last Qual Time: 920224.11:05

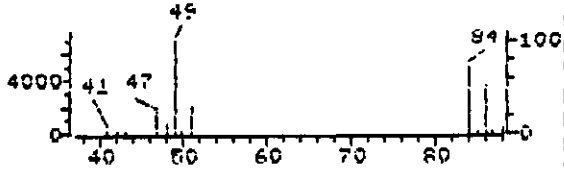
Quant Output File: >M3222::QT
Instrument ID: L
8240-RAS-S SFB INSTR.L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 164
Retention Time: 3.89 min.
Quant Ion : 43.0
Area : 19411
Concentration : 3.68 UG/L
q-value : 1111

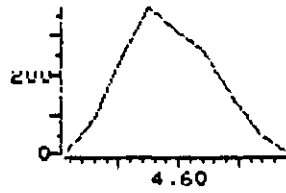
000060

REFERENCE STANDARD SPECTRUM

File >AB251 C030 METHYLENE C Scan 465
Dpk Ab 7000. SUD PT 5.07 min.

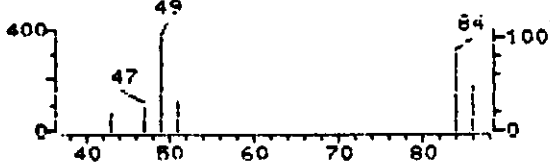


File >M3222 48.7-49.7 am

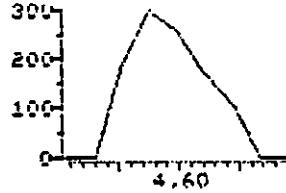


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3222 20949-02.V,EPA, Scan 194
Bpk Ab 367. SUB 4.50 min.

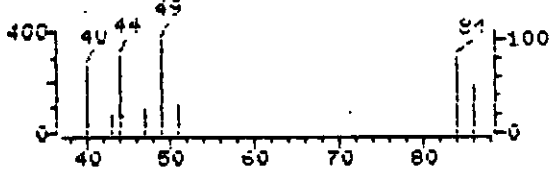


File >M3222 83.7-84.7 am

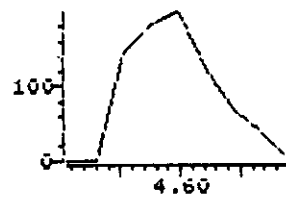


SAMPLE SPECTRUM (UNALTERED)

File >M3222 20949-02.V,EPA, Scan 194
Bpk Ab 367. 4.58 min.



File >M3222 85.7-86.7 am



Data File: >M3222::L3

Name: 20949-02,U,EPA,

Misc: CLP,,,U2,L,S,

Quant Time: 920224 18:26

Injected at: 920224 17:57

Last Qual Time: 920224 11:05

Quant Output File: ^M3222::WT

Instrument ID: L

5G/5ML 8240-RAS-S SFB INSTR.L

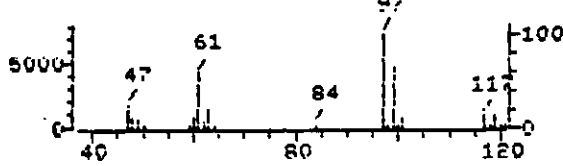
Quant ID File: IDEPAL::10

Last Calibration: 911030 17:46

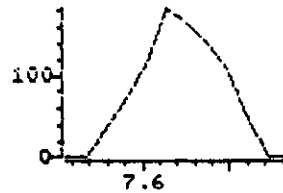
Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 194
Retention Time: 4.58 min.
Quant Ion : 84.U
Area : 1414
Concentration : 1.18 UG/L
q-value : 92

REFERENCE STANDARD SPECTRUM

File >R8251 C115 1,1,1-TRICH Scan 774
Cpk Ab 7354. SUB PT 9.58 min.

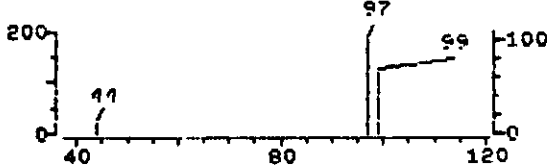


File >M3222 96.7-97.7 am

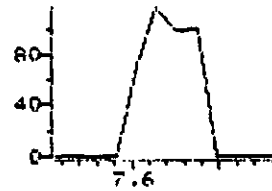


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3222 20949-U2,V,EPA, Scan 327
Bpk Ab 183. SUB 7.63 min.

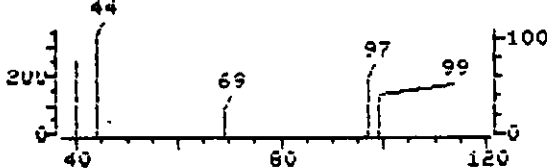


File >M3222 98.7-99.7 am

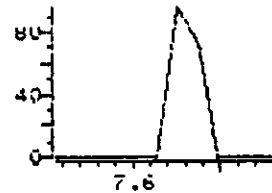


SAMPLE SPECTRUM (UNALTERED)

File >M3222 20949-U2,V,EPA, Scan 327
Bpk Ab 327. 7.63 min.



File >M3222 60.7-61.7 am



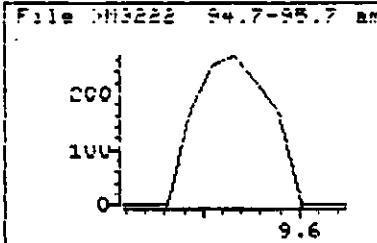
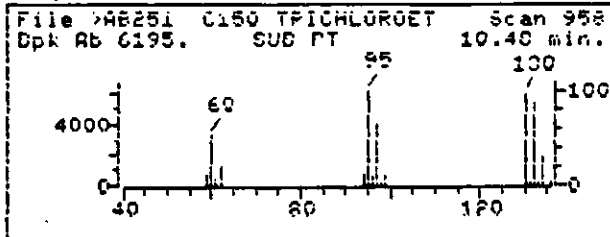
Data File: >M3222::L3
Name: 20949-U2,V,EPA,
Misc: CLP,,,U2,L,S, 5G/5ML
Quant Time: 920224 18:26
Injected at: 920224 17:57
Last Qual Time: 920224 11:05

Quant Output File: ^M3222::Q1
Instrument ID: L
8240-RAS-S SFB INSIR.L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

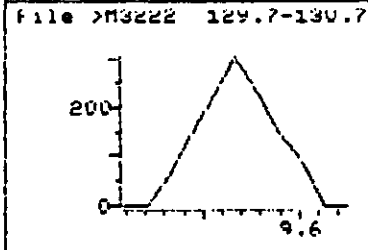
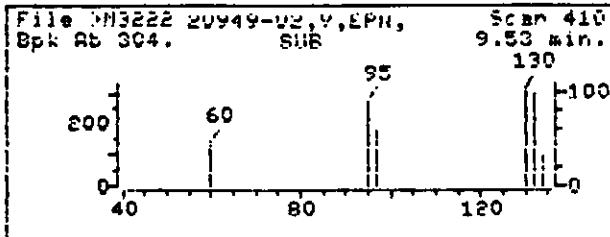
Compound No : 20
Compound Name : C115 1,1,1-TRICHLORIDEETHANE
Scan Number : 327
Retention Time: 7.63 min.
Quant Ion : 97.0
Area : 1206
Concentration : .694 UG/L
q-value : 95

BDL

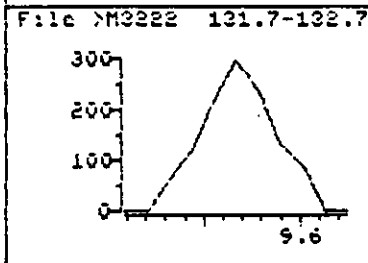
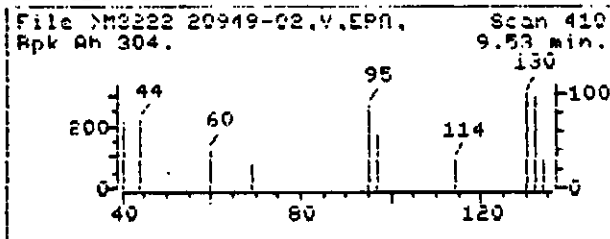
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



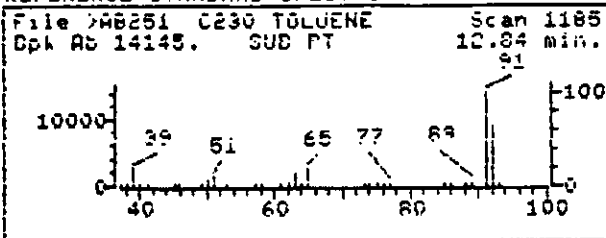
Data File: >M3222::L3
Name: 20949-02,U,EPA,
Misc: CLP,,,02,L,S, 5G/5ML
Quant Time: 920224 18:26
Injected at: 920224 17:57
Last Qual Time: 920224 11:05

Quant Output File: >M3222::QT
Instrument ID: L
8240-RAS-S SFB INSTR.L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

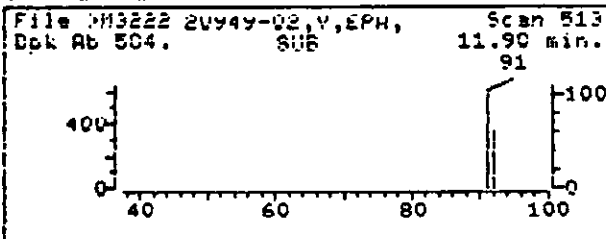
Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 410
Retention Time: 9.53 min.
Quant Ion : 130.0
Area : 1662
Concentration : 1.28 UG/L
q-value : 79

000063

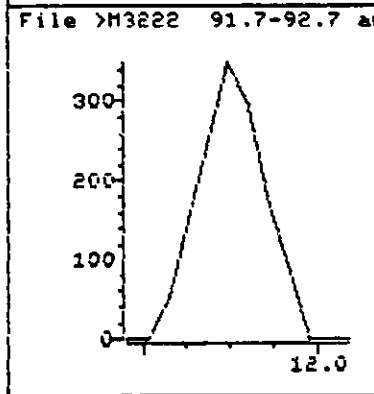
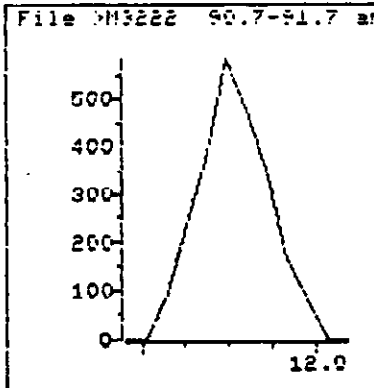
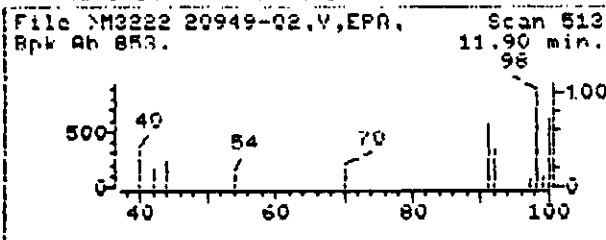
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



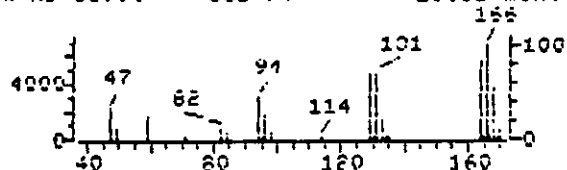
Data File: >M3222::L3
Name: 20949-02,V,EPA,
Misc: CLP,,,112,L,S, 5G/5ML
Quant Time: 920224 18:26
Injected at: 920224 17:57
Last Qual Time: 920224 11:05

Quant Output File: ^M3222::QT
Instrument ID: L
8240-RAS-S SFB INSIR.L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

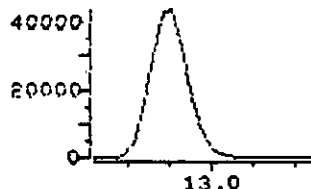
Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 513
Retention Time : 11.90 min.
Quant Ion : 91.0
Area : 3248
Concentration : 1.29 UG/L
q-value : 99

REFERENCE STANDARD SPECTRUM

File >A8251 C220 TETRACHLORO Scan 1280
Dpk Ab 6039. CUD PT 13.82 min.

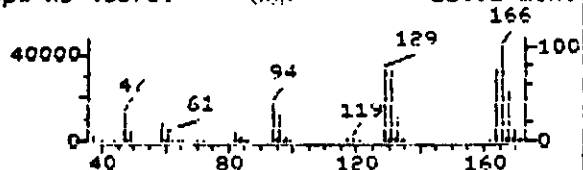


File >M3222 163.7-166.7

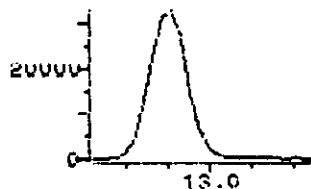


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3222 20949-U2,V,EPA, Scan 557
Dpk Ab 43376. SIA 12.91 min.

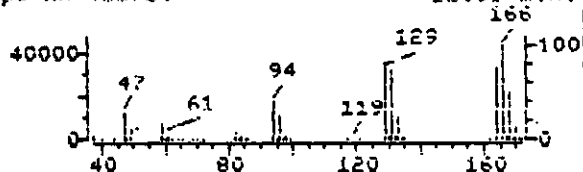


File >M3222 163.7-164.7

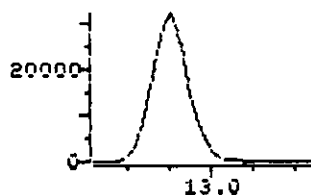


SAMPLE SPECTRUM (UNALTERED)

File >M3222 20949-02,V,EPA, Scan 557
Dpk Ab 43376. 12.91 min.



File >M3222 130.7-131.7



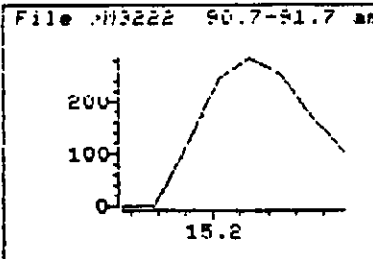
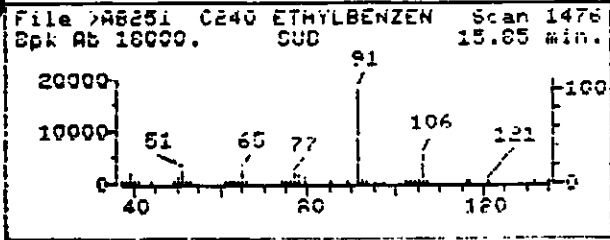
Data File: >M3222::L3
Name: 20949-U2,U,EPA,
Misc: CLP,,,02,L,S, 5G/5ML
Quant Time: 920224 18:26
Injected at: 920224 17:57
Last Qual Time: 920224 11:05

Quant Output File: >M3222::Q1
Instrument ID: L
8240-RAS-S SFB INSTR.L
Quant ID File: IUEPAL::ID
Last Calibration: 911030 17:46

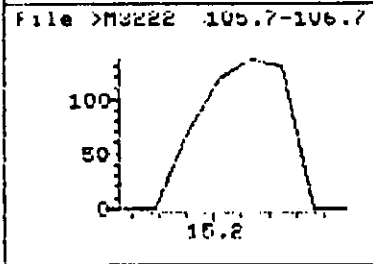
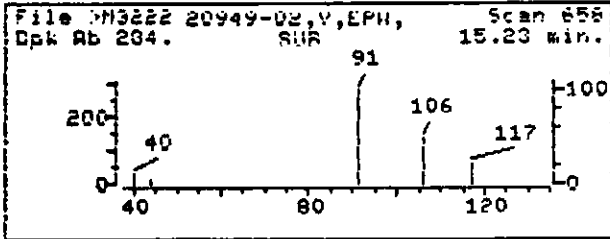
Compound No : 36
Compound Name : C220 TETRACHLORUETHENE
Scan Number : 557
Retention Time: 12.91 min.
Quant Ion : 164.0
Area : 211625
Concentration : 221.55 UG/L
q-value : 95

000065

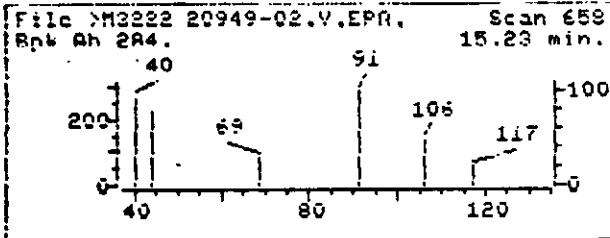
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



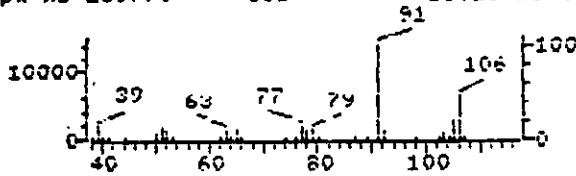
Date File: >M3222::L3
Name: 20949-02,U,EPA,
Misc: CLP,,,U2,L,S, 5G/5ML 8240-RAS-S SFB INSR.L
Quant Time: 920224 18:26
Injected at: 920224 17:57
Last Qual Time: 920224 11:05

Quant Output File: ^M3222::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

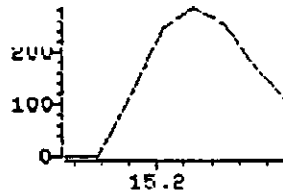
Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 658
Retention Time: 15.23 min.
Quant Ion : 106.0
Area : 625
Concentration : .682 UG/L
q-value : 66

REFERENCE STANDARD SPECTRUM

File >M3251 C250 M&P-XYLENES Scan 1503
 Ppk Ab 10977. CUD 10.10 min.

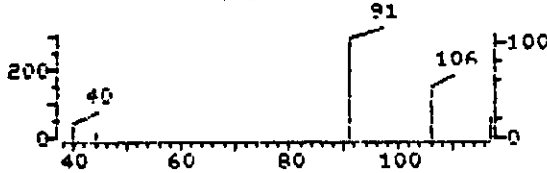


File >M3222 90.7-91.7 am

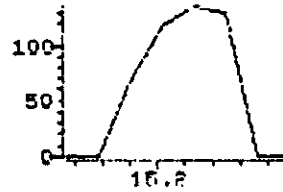


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3222 20949-02.V,EPA, Scan 658
 Ppk Ab 204. SIB 15.23 min.

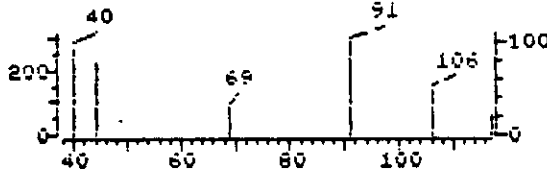


File >M3222 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)

File >M3222 20949-02.V,EPA, Scan 659
 Ppk Ab 264. 15.23 min.



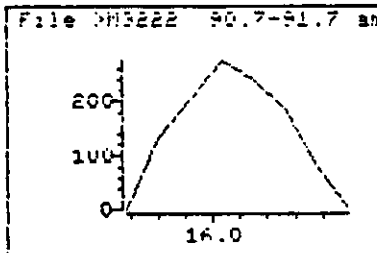
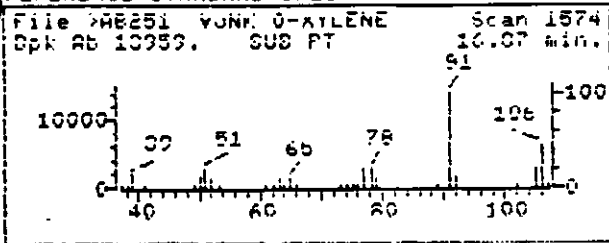
Data File: >M3222::L3
 Name: 20949-02.V,EPA,
 Misc: CLP,,02,L,S, 5G/5ML
 Quant Time: 920224 18:26
 Injected at: 920224 17:57
 Last Qual Time: 920224 11:05

Quant Output File: ^M3222::Q1
 Instrument ID: L
 8240-RAS-S SFB INSTR.L
 Quant ID File: IDEPAL::ID
 Last Calibration: 911030 17:46

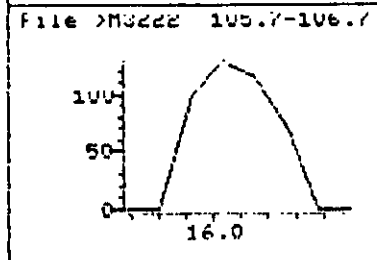
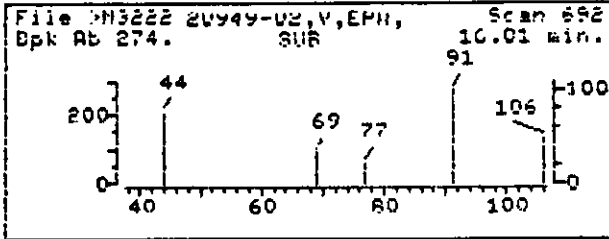
Compound No : 40
 Compound Name : UJNK M&P-XYLENES
 Scan Number : 658
 Retention Time: 15.23 min.
 Quant Ion : 106.0
 Area : 625
 Concentration : .552 UG/L
 q-value : 87

BDL

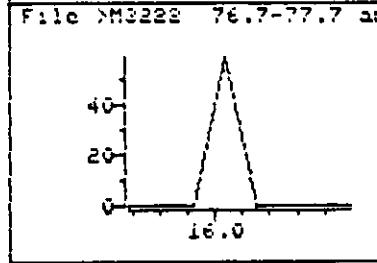
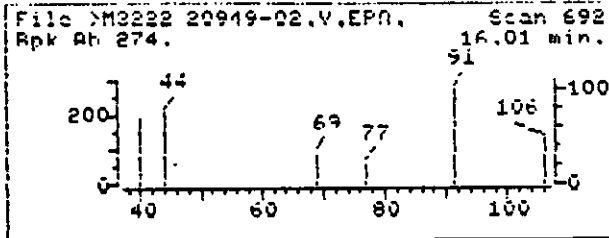
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNQATIFIED)



Data File: >M3222::L3
 Name: 20949-02,V,EPA,
 Misc: CLP,,,02,L,S, 5G/5ML
 Quant Time: 920224 18:26
 Injected at: 920224 17:57
 Last Qual Time: 920224 11:05

Quant Output File: ^M3222::Q1
 Instrument ID: L
 INSTR.L
 Quant ID File: IDEPAL::ID
 Last Calibration: 911030 17:46

Compound No : 41
 Compound Name : 0029 O-XYLENE
 Scan Number : 692
 Retention Time: 16.01 min.
 Quant Ion : 106.0
 Area : 571
 Concentration : .501 UG/L
 q-value : 88

BDL

000068

Diagnostic Quant Report

Data File: >M3222::L3 Injected at: 17:57 02/24/92

Quant'd : 18:26 02/24/92

ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -				Ion	Area	RF	Conc.
	Pred	Found	Dif					
1) *C101	BROMOCHLOROMETHANE	7.29	7.26	.02	128.0	36215	1.0000	50.00
2) CS15	1,2-DICHLORoETHANE-D	8.27	8.27	.00	65.0	62538	1.9409	44.49
3) C010	CHLORoMETHANE	1.15	0.00	--	50.0	0	.9219	0.00
4) C020	VINYL CHLORIDE	1.36	0.00	--	62.0	0	1.0481	0.00
5) C015	BROMoMETHANE	1.81	0.00	--	94.0	0	1.2863	0.00
6) C025	CHLORoETHANE	2.04	0.00	--	64.0	0	.7070	0.00
7) C045	1,1-DICHLORoETHENE	3.51	0.00	--	96.0	0	1.0416	0.00
8) C040	CARBON DISULFIDE	3.60	0.00	--	76.0	0	1.7723	0.00
9) C035	ACETONE	4.03	3.89	.15	43.0	1940	.7278	3.68
10) C030	METHYLENE CHLORIDE	4.61	4.58	.03	84.0	1414	1.6523	1.18
11) UNK	trans-1,2-DICHLORoET	5.06	0.00	--	96.0	0	1.3021	0.00
12) C050	1,1-DICHLORoETHANE	5.82	0.00	--	63.0	0	2.5245	0.00
13) V011	cis-1,2-DICHLORoETHE	6.89	0.00	--	96.0	0	1.3859	0.00
14) C053	1,2 DICHLORoETHENE T	0.00	0.00	--	96.0	0	1.3440	0.00
15) C110	2-BUTANONE	7.17	0.00	--	43.0	0	1.2485	0.00
16) V013	TETRAHYDRoFURAN	7.47	0.00	--	42.0	0	.8447	0.00
17) C060	CHLORoFORM	7.58	0.00	--	83.0	0	2.9977	0.00
18) C065	1,2-DICHLORoETHANE	8.41	0.00	--	62.0	0	2.1639	0.00
19) *C110	1,4-DIFLUORoBENZENE	9.24	9.21	.03	114.0	146973	1.0000	50.00
20) C115	1,1,1-TRICHLORoETHAN	7.63	7.63	.00	97.0	1206	.5915	.69
21) C120	CARBON TETRACHLORIDE	7.91	0.00	--	117.0	0	.5525	0.00
22) C165	BENZENE	8.27	0.00	--	78.0	0	.8484	0.00
23) C150	TRICHLORoETHENE	9.53	9.53	.00	130.0	1662	.4426	1.28
24) C140	1,2-DICHLORoPROPANE	9.88	0.00	--	63.0	0	.3401	0.00
25) C130	BROMODICHLORoMETHANE	10.54	0.00	--	83.0	0	.5965	0.00
26) C143	cis-1,3-DICHLORoPROP	11.37	0.00	--	75.0	0	.5336	0.00
27) C172	trans-1,3-DICHLORoPR	12.51	0.00	--	75.0	0	.4817	0.00
28) C160	1,1,2-TRICHLORoETHAN	12.79	0.00	--	97.0	0	.3574	0.00
29) C155	CHLORODIBROMoMETHANE	13.45	0.00	--	129.0	0	.6261	0.00
30) C180	BROMoFORM	16.29	0.00	--	173.0	0	.5647	0.00
31) *C120	CHLORoBENZENE-D5	14.57	14.56	.01	117.0	98631	1.0000	50.00
32) CS05	TOLUENE-D8	11.78	11.78	.00	98.0	129489	1.1547	56.85
33) CS10	BROMOFLUORoBENZENE	17.11	17.11	.00	95.0	66202	.7650	43.87
34) C230	TOLUENE	11.90	11.90	.00	91.0	3248	1.2730	1.29
35) C205	4-METHYL-2-PENTANONE	11.85	0.00	--	43.0	0	.8176	0.00
36) C220	TETRACHLORoETHENE	12.91	12.91	.00	164.0	211623	.4842	221.55
37) C210	2-HEXANONE	13.50	0.00	--	43.0	0	.6679	0.00
38) C235	CHLORoBENZENE	14.61	0.00	--	112.0	0	.9993	0.00
39) C240	ETHYL BENZENE	14.97	15.23	.25	106.0	625	.4643	.68
40) UNK	M&P-XYLENES	15.23	15.23	.00	106.0	625	.5735	.55
41) V029	O-XYLENE	16.01	16.01	.00	106.0	571	.5773	.50
42) C250	XYLENE (TOTAL)	0.00	0.00	0.00	106.0	1196	.5754	1.05
43) C245	STYRENE	16.08	0.00	--	104.0	0	.9250	0.00
44) C225	1,1,2,2-TETRACHLORoE	17.66	0.00	--	83.0	0	.9352	0.00

* - Compound is an Internal Standard

D - Compound Dried

TIC Internal Standard Report

Data File: >M3222

Maximum separation 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	C101 BROMOCHLORUMETH	50.000 UG/L	Ok
311.	36215.	7.294 311. 242969.	91.985
2	C110 1,4-DIFLUOROBEN	50.000 UG/L	Ok
396.	146973.	2.506 396. 347683.	94.594
3	C120 CHLOROENZENE-D	50.000 UG/L	Ok
629.	98631.	3.094 629. 315530.	103.592

Deleting peaks from INI file: UDIR87

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 7

Number of peaks remaining: 7

Deleting target compounds from INI file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 7

Number of peaks remaining: 0

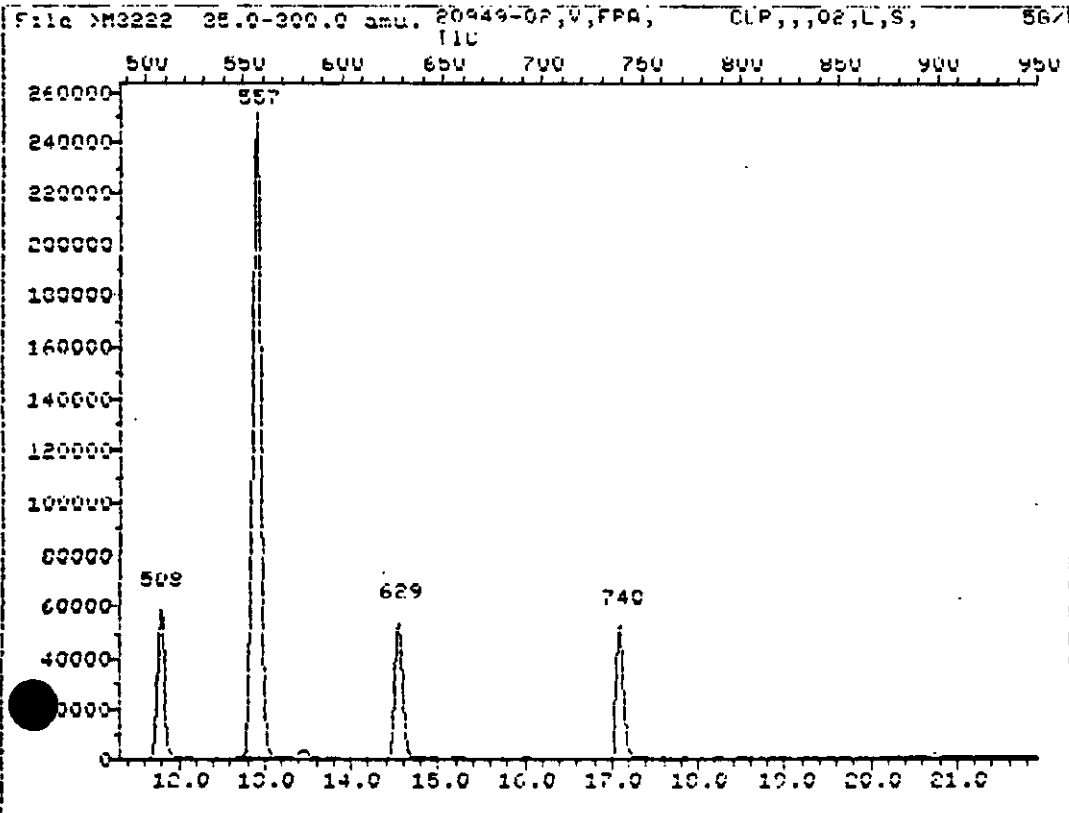
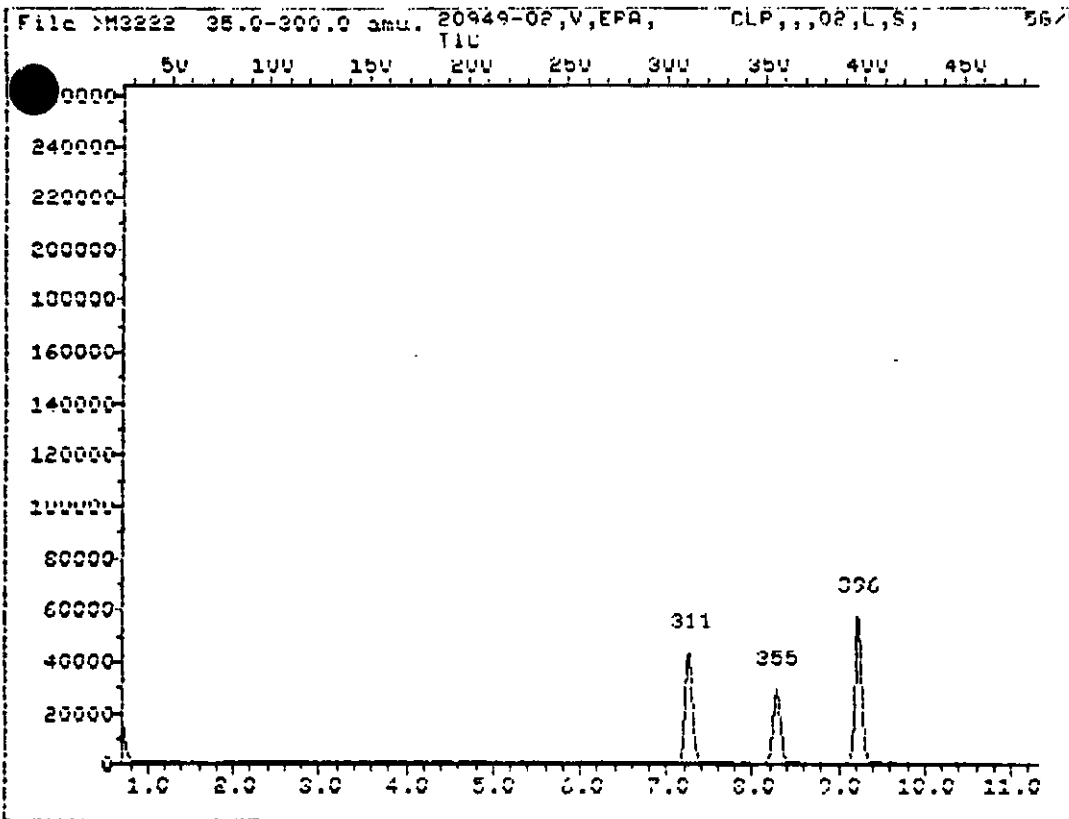
Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15

Number of peaks: 0

Maximum number of peaks > number of peaks.

000070



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000071

20949-02DL

Lab Name: ENSECO	Contract:
Lab Code: ENSECO	Case No.: 20949
	SAS No.:
	SDG No.:
Matrix: (soil/water) SOIL	Lab Sample ID: 20949-02DL
Sample wt/vol: 2.0 (g/mL) G	Lab File ID: D1889
Level: (low/med) LOW	Date Received: 02/15/92
% Moisture: not dec. 14	Date Analyzed: 03/06/92
GC Column: CAP	ID: 0.530 (mm)
	Dilution Factor: 1.0
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	29	U
74-83-9	Bromomethane	29	U
75-01-4	Vinyl Chloride	29	U
75-00-3	Chloroethane	29	U
75-09-2	Methylene Chloride	29	U
67-64-1	Acetone	29	U
75-15-0	Carbon Disulfide	29	U
75-35-4	1,1-Dichloroethene	29	U
75-34-3	1,1-Dichloroethane	29	U
540-59-0	1,2-Dichloroethene (total)	29	U
67-66-3	Chloroform	29	U
107-06-2	1,2-Dichloroethane	29	U
78-93-3	2-Butanone	29	U
71-55-6	1,1,1-Trichloroethane	29	U
56-23-5	Carbon Tetrachloride	29	U
75-27-4	Bromodichloromethane	29	U
78-87-5	1,2-Dichloropropane	29	U
10061-01-5	cis-1,3-Dichloropropene	29	U
79-01-6	Trichloroethene	29	U
124-48-1	Dibromochloromethane	29	U
79-00-5	1,1,2-Trichloroethane	29	U
71-43-2	Benzene	29	U
10061-02-6	trans-1,3-Dichloropropene	29	U
75-25-2	Bromoform	29	U
108-10-1	4-Methyl-2-Pentanone	29	U
591-78-6	2-Hexanone	29	U
127-18-4	Tetrachloroethene	120	D
79-34-5	1,1,2,2-Tetrachloroethane	29	U
108-88-3	Toluene	29	U
108-90-7	Chlorobenzene	29	U
100-41-4	Ethylbenzene	29	U
100-42-5	Styrene	29	U
1330-20-7	Xylene (total)	29	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-02DL	000072
------------	--------

Lab Name: ENSECO	Contract:	
Lab Code: ENSECO	Case No.: 20949	SAS No.:
Matrix: (soil/water) SOIL		SDG No.:
Sample wt/vol: 2.0 (g/mL) G		Lab Sample ID: 20949-02DL
Level: (low/med) LOW		Lab File ID: D1889
% Moisture: not dec. 14		Date Received: 02/15/92
GC Column: CAP	ID: 0.530 (mm)	Date Analyzed: 03/06/92
Soil Extract Volume: (uL)		Dilution Factor: 1.0
		Soil Aliquot Volume: (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	15.12	120	JN

QUANT REPORT

000073

Operator ID: DUEY1
 Output File: ^D1889::QT
 Data File: >D1889::D2
 Name: 20949-02 ✓ RAS-S
 Misc: 2G/5ML

Quant Rev: 7 Quant Time: 920306 00:38
 Injected at: 920306 00:09
 Dilution Factor: 1.00000
 Instrument ID: D
 ANALYST:DAB INST:D HEATED

ID File: IDEPAD::ID
 Title: ID FILE CLP INST. D + THF
 Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *CI01 BROMOCHLOROMETHANE	9.03	128.0	22218	50.00	UG/L	96
2) CS15 1,2-DICHLOROETHANE-D4	10.08	65.0	33931	52.76	UG/L	76
20) *CI10 1,4-DIFLUOROBENZENE	11.01	114.0	85477	50.00	UG/L	100
32) *CI20 CHLOROBENZENE-D5	16.35	117.0	56302	50.00	UG/L	79
33) CS05 TOLUENE-D8	13.61	98.0	69237	52.71	UG/L	96
34) CS10 BROMOFLUOROBENZENE	18.83	95.0	36742	48.02	UG/L	100
37) C220 TETRACHLOROETHENE	14.71	164.0	19619	42.51	UG/L	97

* Compound is ISTD

000074

MS data file header from : >D1889::D2

Sample: 20949-02^{DV} RAS-S Operator: DUEY1 REG. GRP. 3/06/92 0:09
 Misc : 2G/5ML ANALYST:DAB INST:D HEATED
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: 0
 Method file: SAMMD Tuning file: MTBFBD No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	2G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	NA	%moisture for soil
int_ext_vol	NA	intermediate extract vol/M.L. ext vo
int_ext_vol_u		intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
runfact	2.50	calcd runfactor
surfact	.0050	calcd surr vol

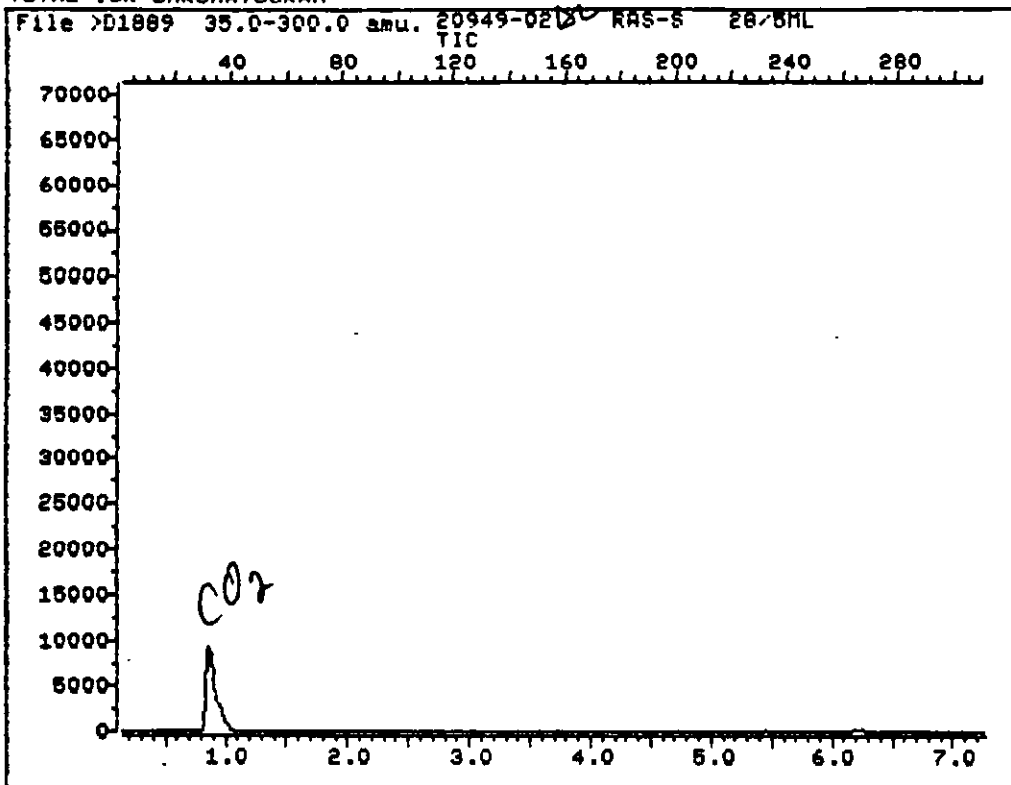
Performance Check: >D1884 Injection Time: 3/ 5/92 18:57
 Sample : >D1889 Injection Time: 3/ 6/92 0:09
 Elapsed Time: 0 Y 0 D 5:12
 Sample: ^D1889 Calibration Stds.: ^D1885,
 Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL

TIC = Tentatively Identified Compounds

TC = Target Compound

SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1889::D2
Name: 20949-02DV RAS-S
Misc: 2G/5ML

Quant Output File: ^D1889::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qual Time: 920305 19:20

Operator ID: DUEY1
Quant Time : 920306 00:38
Injected at: 920306 00:09

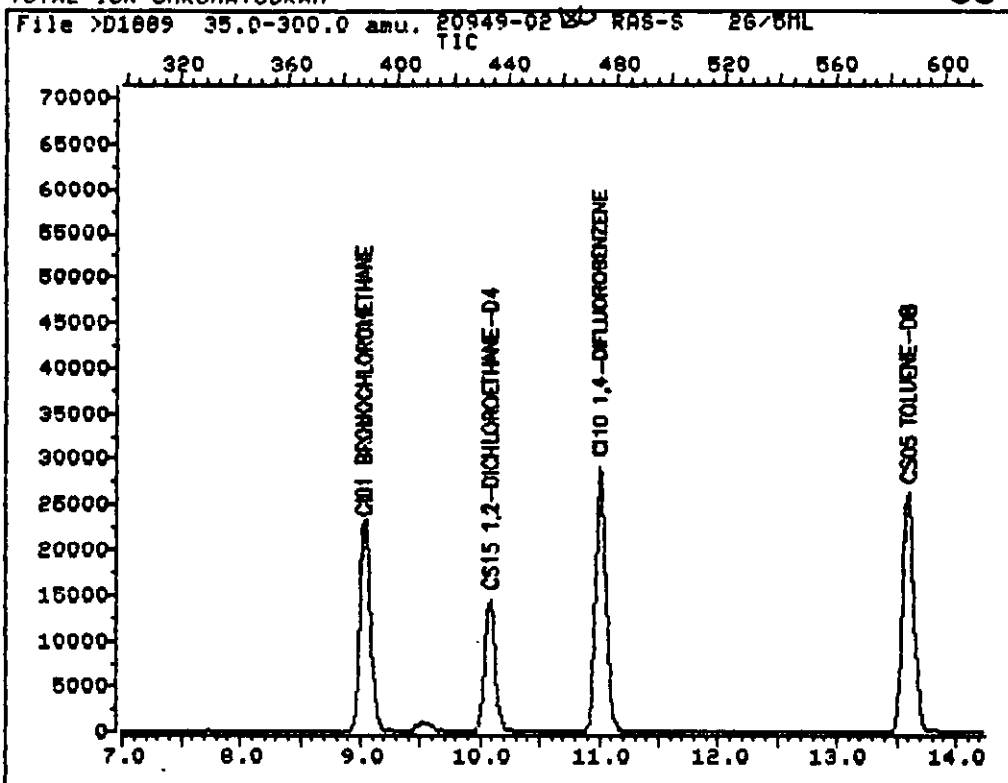
TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

000076

TOTAL ION CHROMATOGRAM



Data File: >D1889::D2
Name: 20949-02 RAS-S
Misc: 2G/5ML

Quant Output File: ^D1889::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

Operator ID: DUEY1
Quant Time : 920306 00:38
Injected at: 920306 00:09

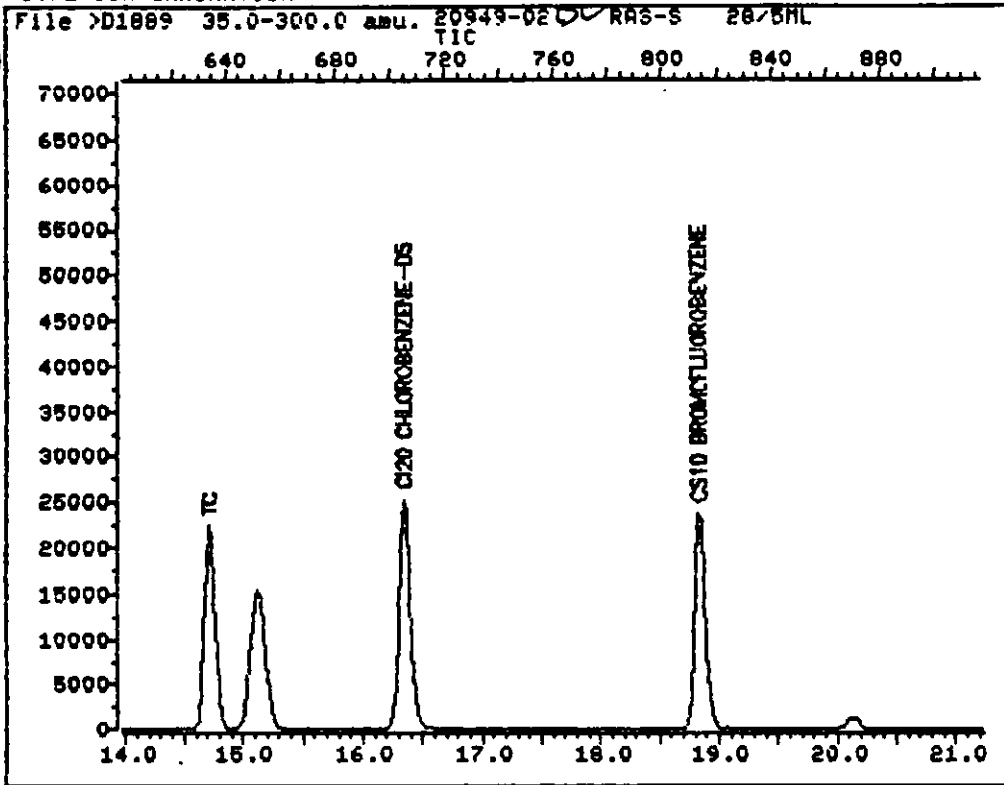
TC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

000077

TOTAL ION CHROMATOGRAM



Data File: >D1889::D2
Name: 20949-02 RAS-S
Misc: 2G/5ML

Quant Output File: ^D1889::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

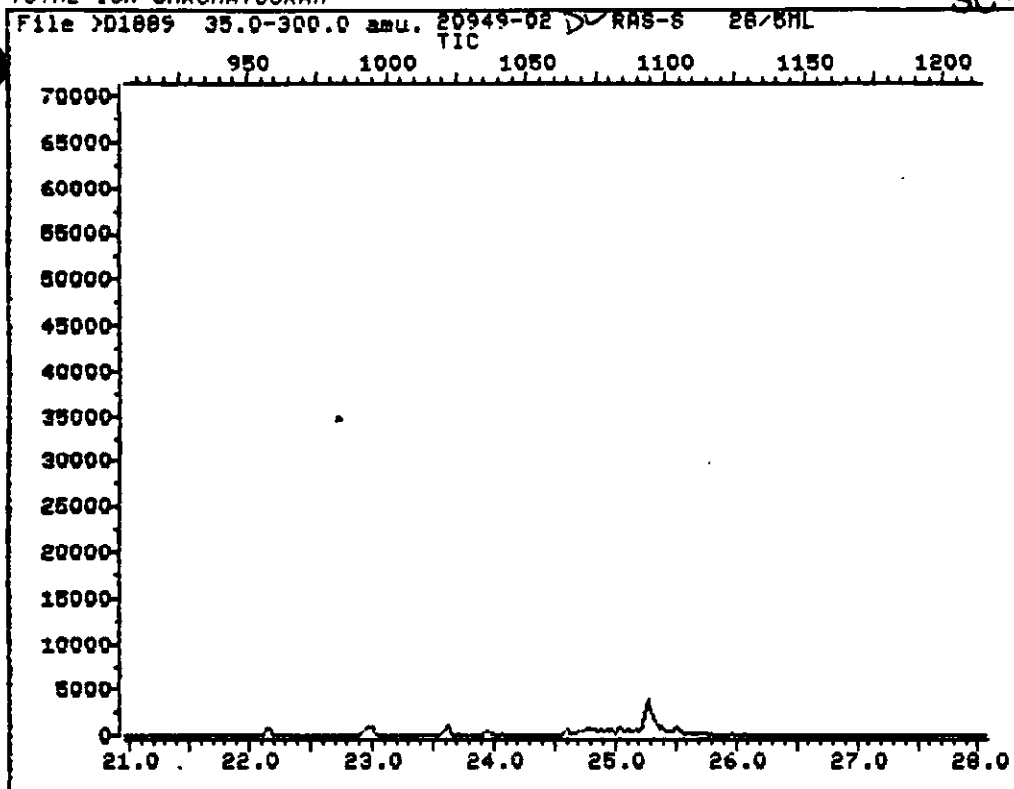
Operator ID: DUEY1
Quant Time : 920306 00:38
Injected at: 920306 00:09

TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1889::D2
Name: 20949-02 ✓ RAS-S
Misc: 2G/5ML

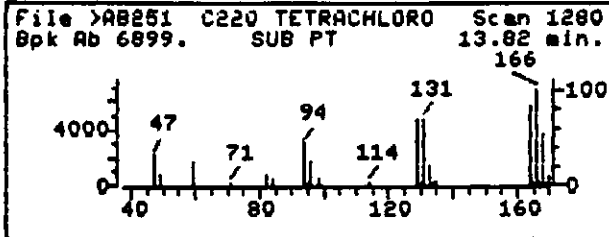
Quant Output File: ^D1889::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

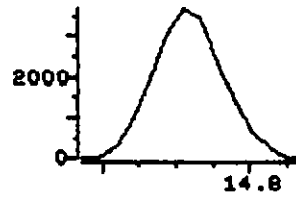
Last Qcal Time: 920305 19:20

Operator ID: DUEY1
Quant Time : 920306 00:38
Injected at: 920306 00:09

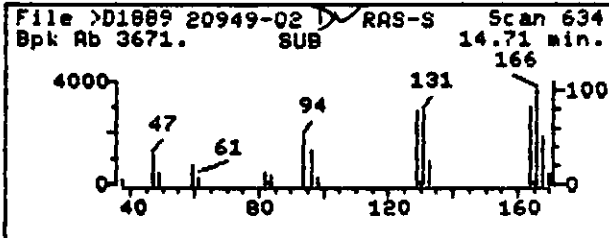
REFERENCE STANDARD SPECTRUM



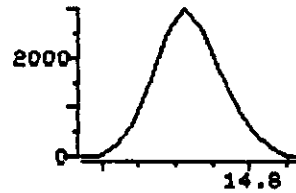
File >D1889 165.7-166.7



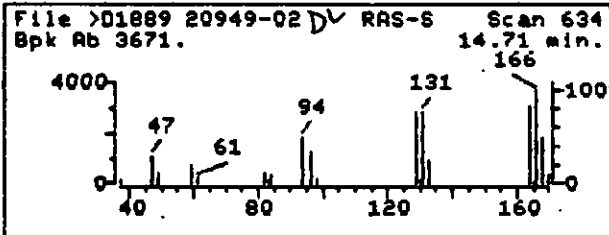
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



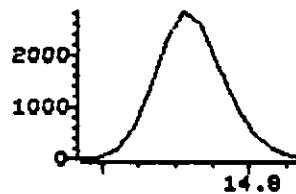
File >D1889 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >D1889 130.7-131.7



Data File: >D1889::D2
Name: 20949-02 RAS-S
Misc: 2G/5ML
Quant Time: 920306 00:38
Injected at: 920306 00:09
Last Qcal Time: 920305 19:20

Quant Output File: ^D1889::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 57
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 634
Retention Time : 14.71 min.
Quant Ion : 164.0
Area : 19619
Concentration : 42.51 UG/L
q-value : 97

000080

Diagnostic Quant Report

Data File: >D1889::D2 Injected at: 00:09 03/06/92
 Quant'd : 00:38 03/06/92
 ID File : IDEPAD::ID Calibrated : 14:39 01/08/92

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	9.05	9.03	.03	128.0	22218	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	10.06	10.08	.03	65.0	33931	1.4474	52.76
3) C010 CHLOROMETHANE	1.73	0.00	--	50.0	0	.4592	0.00
4) C020 VINYL CHLORIDE	2.03	0.00	--	62.0	0	.7201	0.00
5) C015 BROMOMETHANE	2.78	0.00	--	94.0	0	1.0817	0.00
6) C025 CHLOROETHANE	3.13	0.00	--	64.0	0	.5569	0.00
7) C045 1,1-DICHLOROETHENE	4.99	0.00	--	96.0	0	1.1222	0.00
8) V015 TRICHLORO-TRIFLUOROE	5.24	0.00	--	151.0	0	1.2659	0.00
9) C040 CARBON DISULFIDE	5.10	0.00	--	76.0	0	2.6222	0.00
10) C035 ACETONE	5.56	0.00	--	43.0	0	.5410	0.00
11) C030 METHYLENE CHLORIDE	6.20	0.00	--	84.0	0	1.6403	0.00
12) UJNK trans-1,2-DICHLOROCT	6.71	0.00	--	96.0	0	1.2714	0.00
13) C050 1,1-DICHLOROETHANE	7.53	0.00	--	63.0	0	2.0837	0.00
14) V011 cis-1,2-DICHLOROETHE	8.64	0.00	--	96.0	0	1.3868	0.00
15) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3291	0.00
16) C110 2-BUTANONE	8.89	0.00	--	43.0	0	.8041	0.00
17) V013 TETRAHYDROFURAN	9.19	0.00	--	42.0	0	.4658	0.00
18) C060 CHLOROFORM	9.32	0.00	--	83.0	0	2.6722	0.00
19) C065 1,2-DICHLOROETHANE	10.20	0.00	--	62.0	0	1.5403	0.00
20) *C110 1,4-DIFLUOROBENZENE	11.01	11.01	.00	114.0	85477	1.0000	50.00
21) C115 1,1,1-TRICHLOROETHAN	9.44	0.00	--	97.0	0	.5457	0.00
22) C120 CARBONTETRACHLORIDE	9.72	0.00	--	117.0	0	.4918	0.00
23) C165 BENZENE	10.09	0.00	--	78.0	0	.8419	0.00
24) C150 TRICHLOROETHENE	11.35	0.00	--	130.0	0	.4306	0.00
25) C140 1,2-DICHLOROPROPANE	11.70	0.00	--	63.0	0	.3075	0.00
26) C130 BROMODICHLOROMETHANE	12.34	0.00	--	83.0	0	.6052	0.00
27) C143 cis-1,3-DICHLOROPROP	13.15	0.00	--	75.0	0	.5121	0.00
28) C172 trans-1,3-DICHLOROPR	14.27	0.00	--	75.0	0	.4367	0.00
29) C160 1,1,2-TRICHLOROETHAN	14.55	0.00	--	97.0	0	.3238	0.00
30) C155 CHLORODIBROMOMETHANE	15.24	0.00	--	129.0	0	.5527	0.00
31) C180 BROMOFORM	18.03	0.00	--	173.0	0	.4178	0.00
32) *C120 CHLOROBENZENE-D5	16.30	16.35	.04	117.0	56302	1.0000	50.00
33) CS05 TOLUENE-D8	13.60	13.61	.01	98.0	69237	1.1664	52.71
34) CS10 BROMOFLUOROBENZENE	18.84	18.83	.01	95.0	36742	.6795	48.02
35) C230 TOLUENE	13.71	0.00	--	91.0	0	1.2290	0.00
36) C205 4-METHYL-2-PENTANONE	13.62	0.00	--	43.0	0	.5837	0.00
37) C220 TETRACHLOROETHENE	14.71	14.71	.01	164.0	19619	.4098	42.51
38) C210 2-HEXANONE	15.26	0.00	--	43.0	0	.3897	0.00
39) C235 CHLOROBENZENE	16.39	0.00	--	112.0	0	.9364	0.00
40) C240 ETHYLBENZENE	16.74	0.00	--	106.0	0	.4382	0.00
41) UJNK M&P-XYLENES	16.99	0.00	--	106.0	0	.6857	0.00
42) V029 O-XYLENE	17.78	0.00	--	106.0	0	.4046	0.00
43) C250 XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.5452	0.00
44) C245 STYRENE	17.82	0.00	--	104.0	0	.8919	0.00
45) C225 1,1,2,2-TETRACHLOROE	19.35	0.00	--	83.0	0	.9949	0.00

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

TIC Internal Standard Report

000081

Data File: >D1889

Maximum separation 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	Q scan	Q area	RQratio	Concentration RIC scan	Flag RIC area	% Est. RIC
1	CI01 BROMOCHLOROMETH	387.	22218.	7.294	50.000 UG/L 388.	Ok 145032.	89.498
2	CI10 1,4-DIFLUOROBEN	473.	85477.	2.506	50.000 UG/L 473.	Ok 185800.	86.735
3	CI20 CHLOROBENZENE-D	705.	56302.	3.094	50.000 UG/L 705.	Ok 166893.	95.802

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 10

Number of peaks remaining: 9

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 9

Number of peaks remaining: 2

23.1092

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15

Number of peaks: 2

Maximum number of peaks > number of peaks.

000082

Data Reduced by : CAW Date: 3/6/92
Data Reviewed by : A Date: 3-10-92

Data File: >D1889

Enseco TIC Report (page 1)

Sample: 20949-02 ^W RAS-S Run Factor: 2.91
Conditions: 2G/5ML ANALYST:D Analyst: DUEYI

#	Scan	Q	C	Concentration	CAS #	Compound
				In Sample (UG/KG)		
1	32			53	00-00-0	P31092
2	652.		2	120.	541-05-9	Cyclotrisiloxane, hexamethyl-

000083

Data File: >D1889

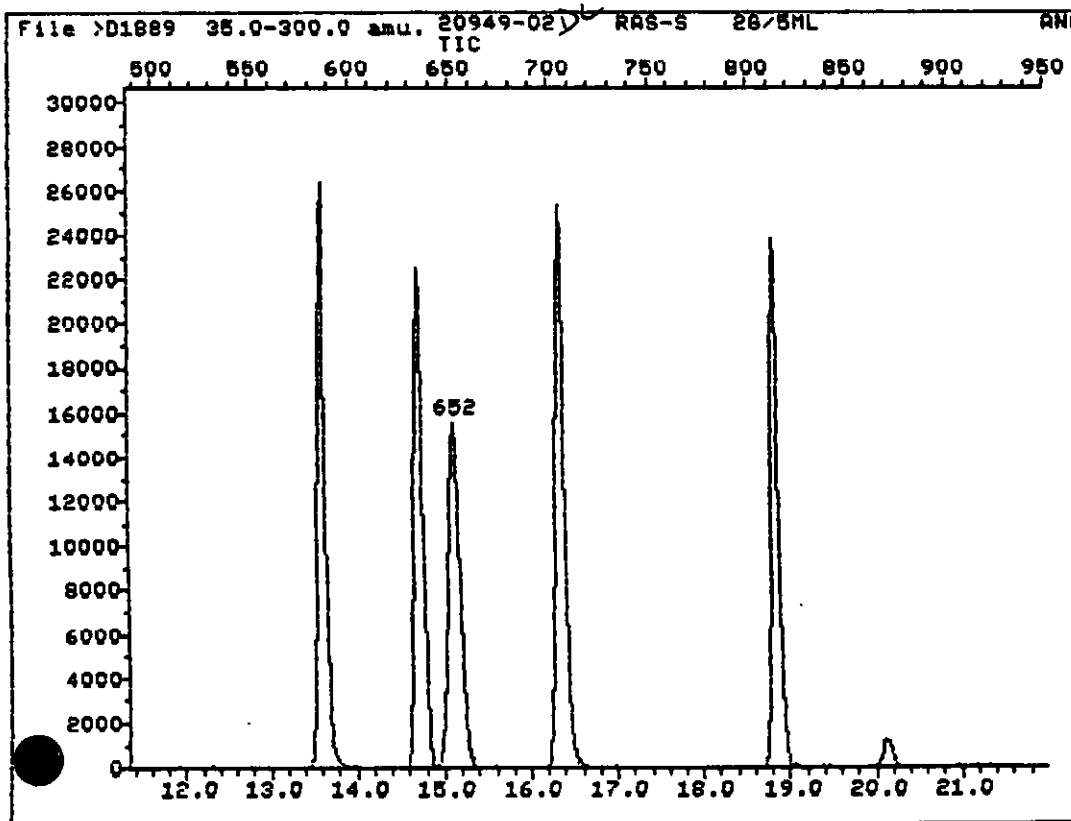
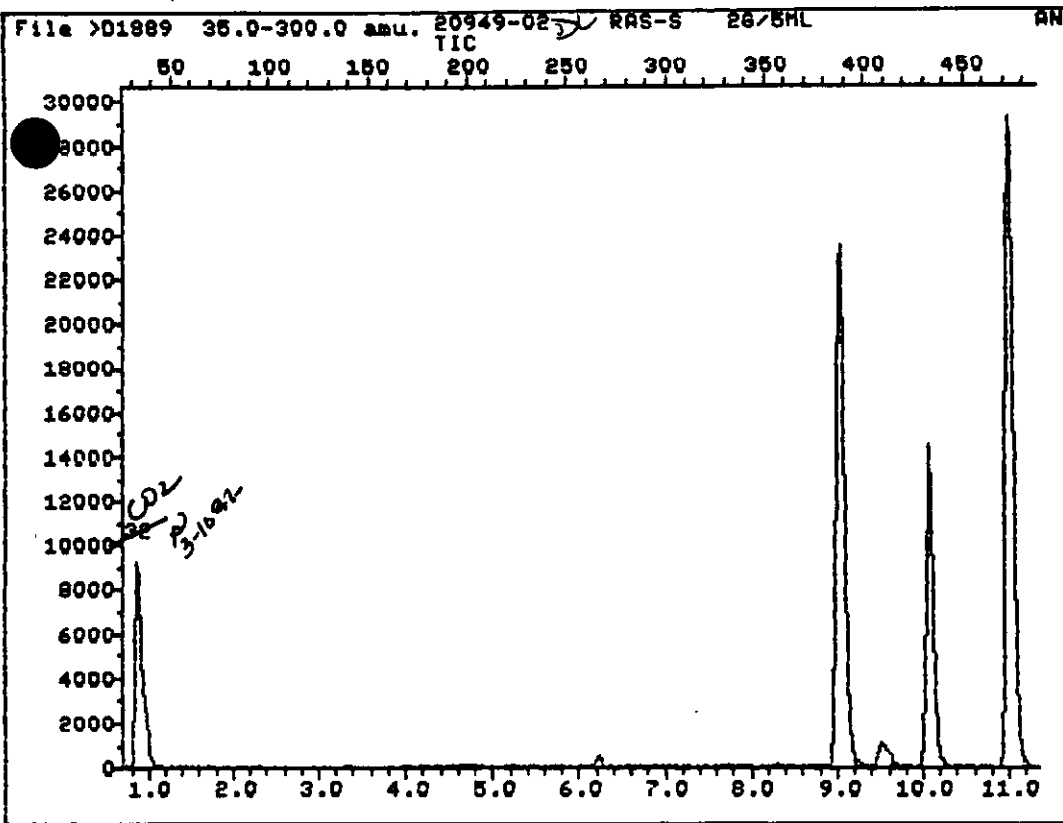
Enseco TIC Report (page 2)

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

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	0	0	1	.86	.895	52363.	9237.	18.852
2	67	12	3	15.13	.925	136639.	15525.	40.936

31092

000084



000085

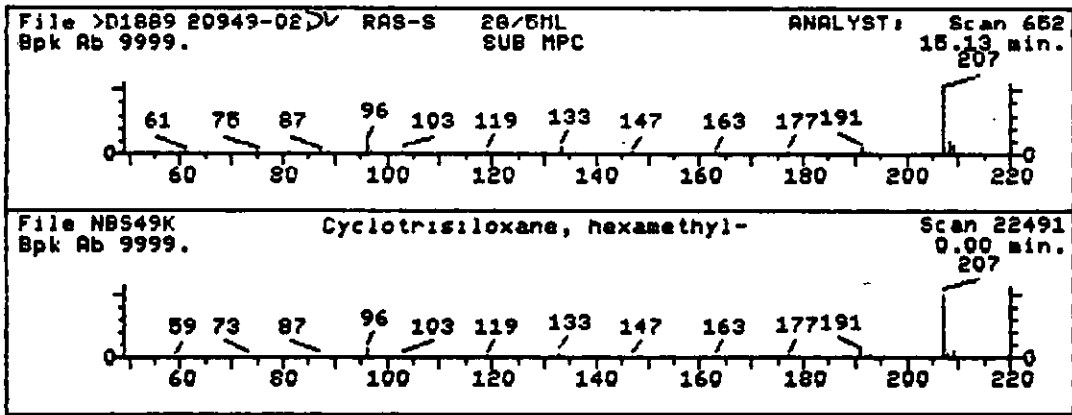
TIC NUMBER:2

1. Cyclotrisiloxane, hexamethyl-

222 C6H18O3Si3

Sample file: >D1889 Spectrum #: 652
Search speed: 2 Tilting option: S No. of ion ranges searched: 63

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	67	541059	28991	NBS49K	73	36	2	0	100	12	34	23



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000086

20949-03

Lab Name: ENSECO	Contract:		
Lab Code: ENSECO	Case No.: 20949	SAS No.:	SDG No.:
Matrix: (soil/water) SOIL		Lab Sample ID: 20949-03	
Sample wt/vol: 2.5 (g/mL) G		Lab File ID: M3147	
Level: (low/med) LOW		Date Received: 02/15/92	
% Moisture: not dec. 13		Date Analyzed: 02/22/92	
GC Column: CAP	ID: 0.530 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: (uL)		Soil Aliquot Volume: (uL)	

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

CAS NO.	COMPOUND	Q
74-87-3	Chloromethane	23 U
74-83-9	Bromomethane	23 U
75-01-4	Vinyl Chloride	23 U
75-00-3	Chloroethane	23 U
75-09-2	Methylene Chloride	3 J
67-64-1	Acetone	23 U
75-15-0	Carbon Disulfide	23 U
75-35-4	1,1-Dichloroethene	23 U
75-34-3	1,1-Dichloroethane	23 U
540-59-0	1,2-Dichloroethene (total)	23 U
67-66-3	Chloroform	23 U
107-06-2	1,2-Dichloroethane	23 U
78-93-3	2-Butanone	23 U
71-55-6	1,1,1-Trichloroethane	23 U
56-23-5	Carbon Tetrachloride	23 U
75-27-4	Bromodichloromethane	23 U
78-87-5	1,2-Dichloropropane	23 U
10061-01-5	cis-1,3-Dichloropropene	23 U
79-01-6	Trichloroethene	23 U
124-48-1	Dibromochloromethane	23 U
79-00-5	1,1,2-Trichloroethane	23 U
71-43-2	Benzene	23 U
10061-02-6	trans-1,3-Dichloropropene	23 U
75-25-2	Bromoform	23 U
108-10-1	4-Methyl-2-Pentanone	23 U
591-78-6	2-Hexanone	23 U
127-18-4	Tetrachloroethene	150 U
79-34-5	1,1,2,2-Tetrachloroethane	23 U
108-88-3	Toluene	23 U
108-90-7	Chlorobenzene	23 U
100-41-4	Ethylbenzene	23 U
100-42-5	Styrene	23 U
1330-20-7	Xylene (total)	23 U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 000087

20949-03

Lab Name: ENSECO Contract:
Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 20949-03
Sample wt/vol: 2.5 (g/mL) G Lab File ID: M3147
Level: (low/med) LOW Date Received: 02/15/92
% Moisture: not dec. 13 Date Analyzed: 02/22/92
GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

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

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

000088

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output File: ^M3147::QT
 Data File: >M3147::L2
 Name: 20949-03,RAS-S
 Misc: 2.5G/5ML ANALYST KB INST L HEATED

Quant Rev: 7 Quant Time: 920222 04:24
 Injected at: 920222 03:55
 Dilution Factor: 1.00000
 Instrument ID: L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

Compound	R.T.	Q	Ion	Area	Conc	Units	q
1) *C101 BROMOCHLOROMETHANE	7.22	128.0		46644	50.00	UG/L	98
2) CS15 1,2-DICHLOROETHANE-D4	8.25	65.0		69056	47.90	UG/L	75
4) C035 ACETONE <i>g/100</i>	3.89	43.0		3560	6.18	UG/L	100
10) C030 METHYLENE CHLORIDE	4.58	84.0		1908	1.25	UG/L	81
19) *C110 1,4-DIFLUOROBENZENE	9.19	114.0		207056	50.00	UG/L	100
23) C150 TRICHLOROETHENE <i>g/100</i>	9.52	130.0		1300	.752	UG/L	85
31) *C120 CHLOROBENZENE-D5	14.55	117.0		160093	50.00	UG/L	77
32) CS05 TOLUENE-D8	11.77	98.0		182359	49.18	UG/L	97
3) CS10 BROMOFLUOROBENZENE	17.07	95.0		110448	47.61	UG/L	100
4) C230 TOLUENE <i>g/100</i>	11.90	91.0		3127	.781	UG/L	95
36) C220 TETRACHLOROETHENE	12.87	164.0		90844	64.96	UG/L	97

* Compound is ISTD

000089

MS data file header from : >M3147::L2

Sample: 20949-03,RAS-S Operator: LUEY1 REG. GRP. 2/22/92 3:55
Misc : 2.5G/5ML ANALYST RB INST L HEATED
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
Method file: SAMML Tuning file: MTBFBL No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

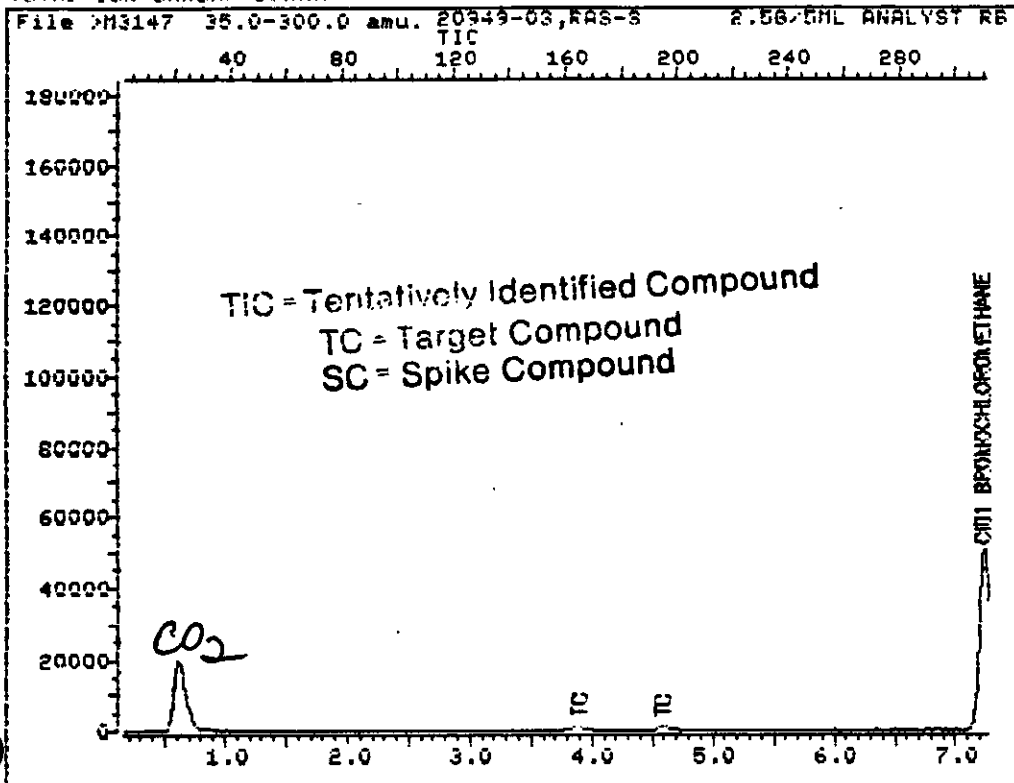
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	2G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	N/A	%moisture for soil
int_ext_vol	NA	intermediate extract vol/M.L. ext vo
int_ext_vol_u		intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
rfact	2.50	calcd runfactor
surfact	.0050	calcd surr vol

Performance Check: >M3139 Injection Time: 2/21/92 22:14
Sample : >M3147 Injection Time: 2/22/92 3:55
Elapsed Time: 0 Y 0 D 5:41
Sample: ^M3147 Calibration Stds.: ^M3140,
Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
Invalid Response Factor for: C250 XYLENE (TOTAL)

000090

TOTAL ION CHROMATOGRAM



Data File: >M3147::L2

Quant Output File: ^M3147::QT

Name: 20949-03,RAS-S

Instrument ID: L

Misc: 2.5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

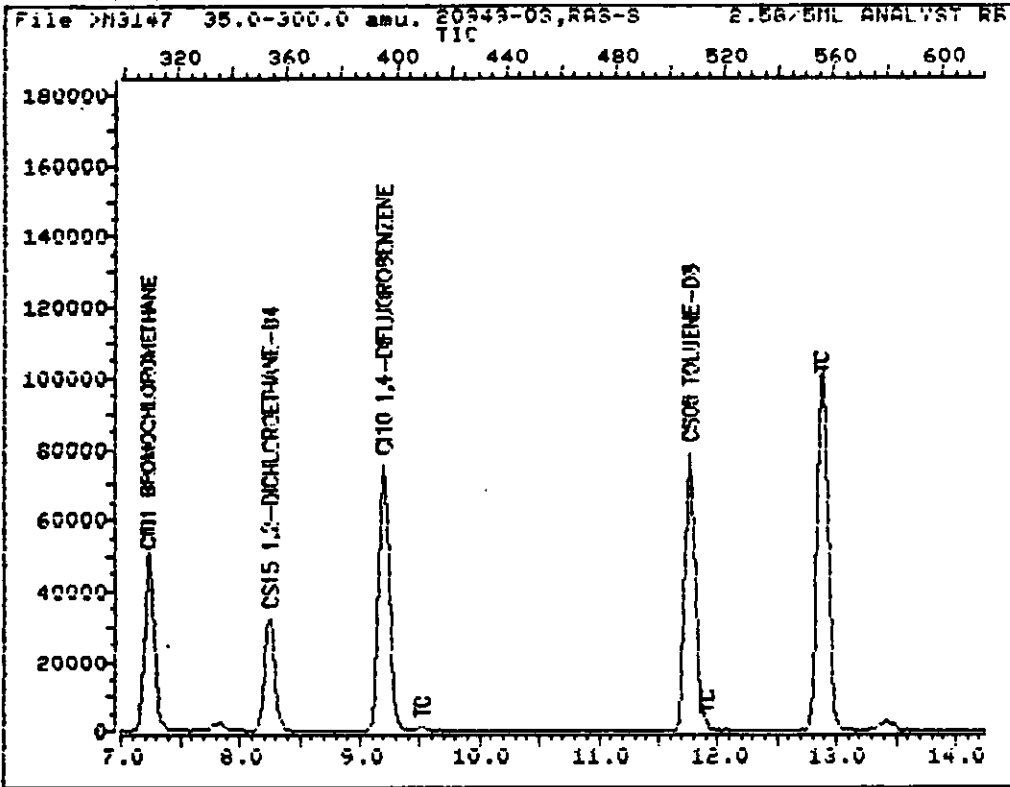
Operator ID: LUEY1

Quant Time : 920222 04:24

Injected at: 920222 03:55

000091

TOTAL ION CHROMATOGRAM



Data File: >M3147::L2

Quant Output File: ^M3147::QT

Name: 20949-03,RAS-S

Instrument ID: L

Misc: 2.5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

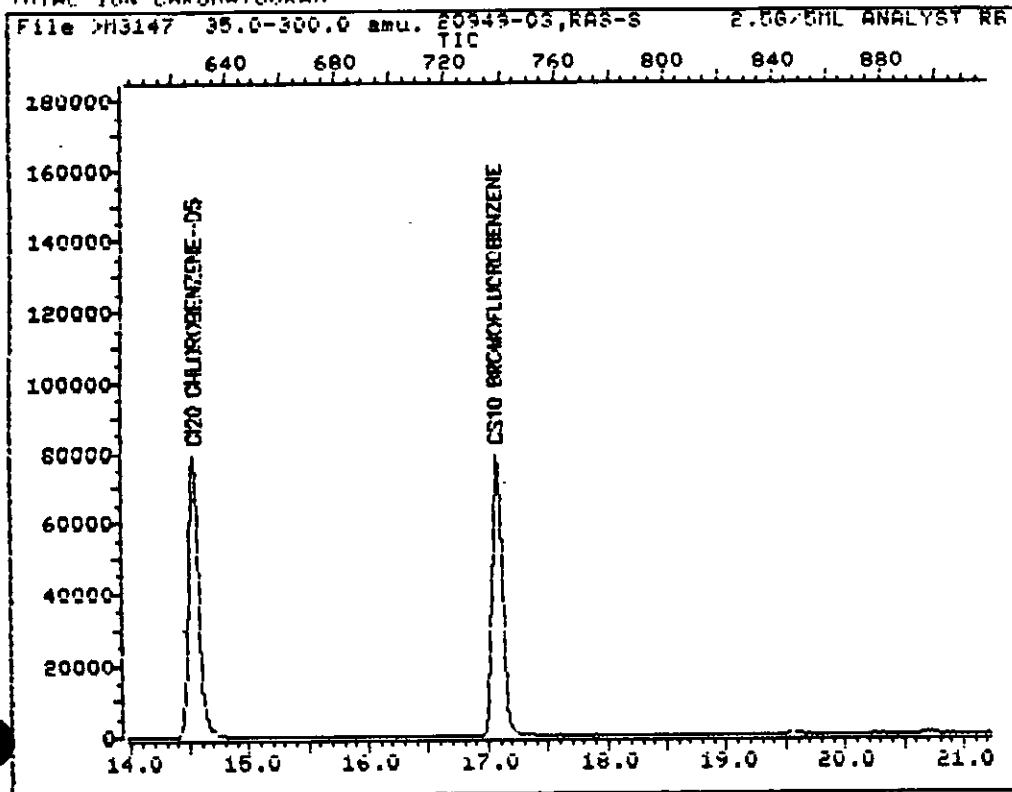
Quant Time : 920222 04:24

Injected at: 920222 03:55

Page 2 of 4

000092

TOTAL ION CHROMATOGRAM



Data File: >M3147::L2

Quant Output File: ^M3147::QT

Name: 20949-03,RAS-S

Instrument ID: L

Misc: 2.5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

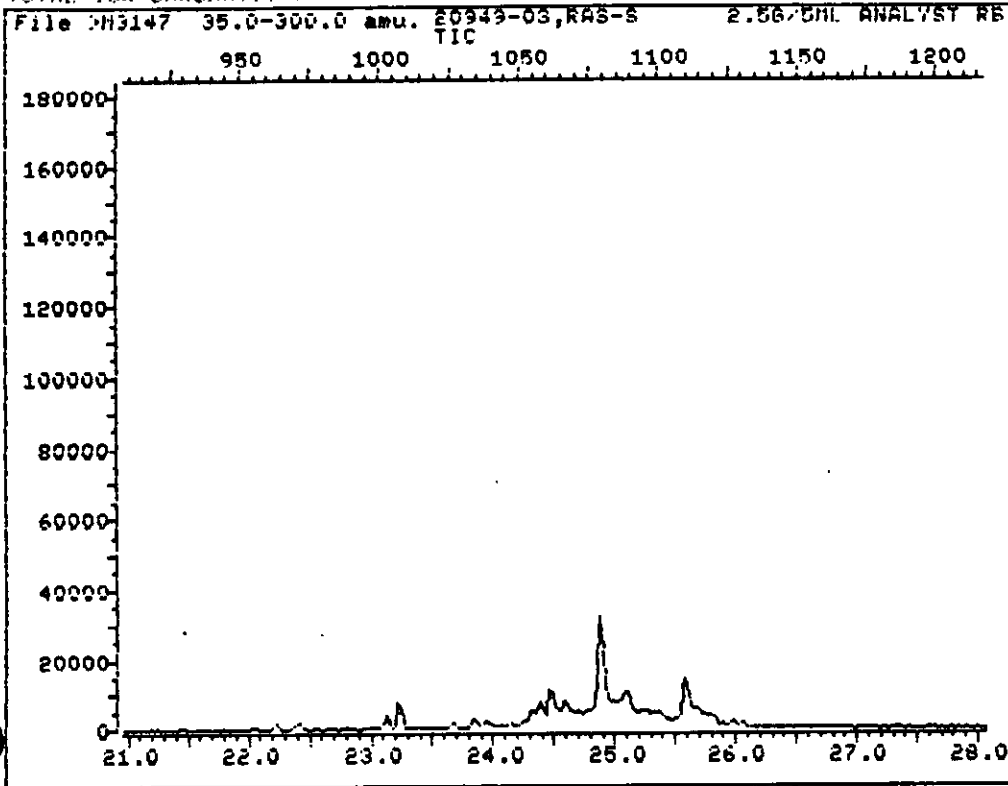
Operator ID: LUEY1

Quant Time : 920222 04:24

Injected at: 920222 03:55

000093

TOTAL ION CHROMATOGRAM



Data File: >M3147::L2

Quant Output File: ^M3147::QT

Name: 20949-03,RAS-S

Instrument ID: L

Misc: 2.5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

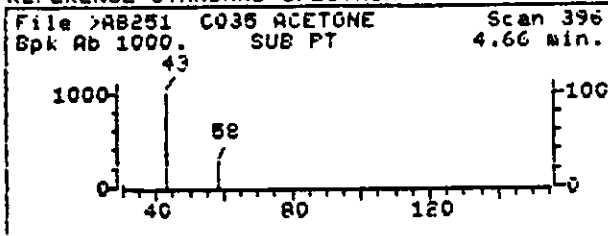
Operator ID: LUEY1

Quant Time : 920222 04:24

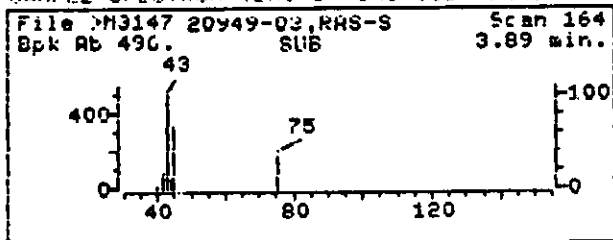
Injected at: 920222 03:55

Page 4 of 4

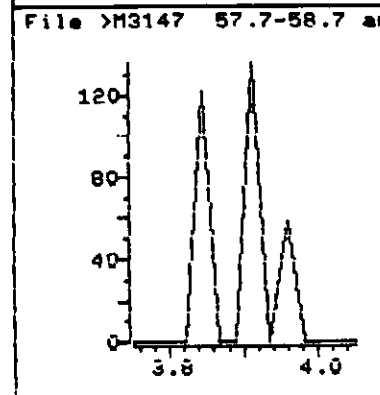
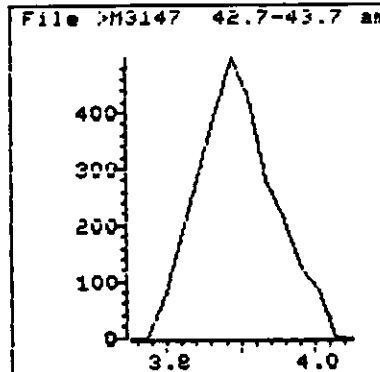
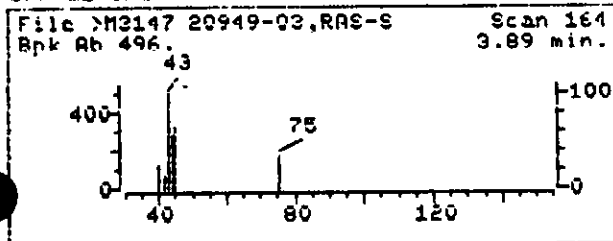
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

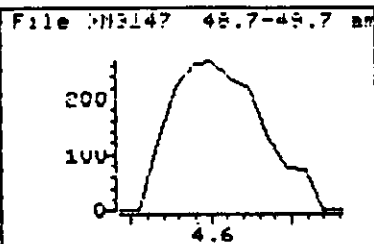
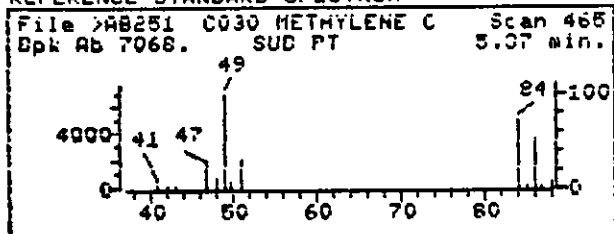


Data File: >M3147::L2
Name: 20949-03,RAS-S
Misc: 2.5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 04:24
Injected at: 920222 03:55
Last Qcal Time: 920221 22:44

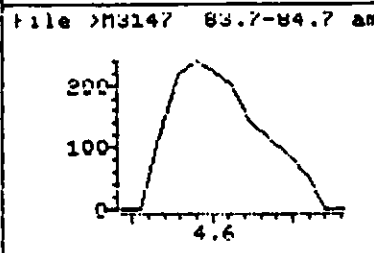
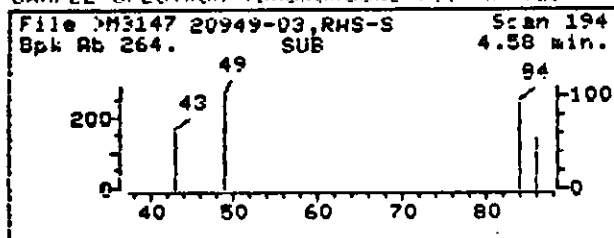
Quant Output File: ^M3147::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 164
Retention Time: 3.89 min.
Quant Ion : 43.0
Area : 3560
Concentration : 6.18 UG/L
q-value : 100

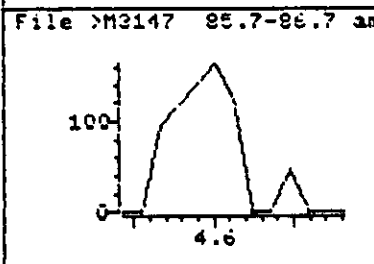
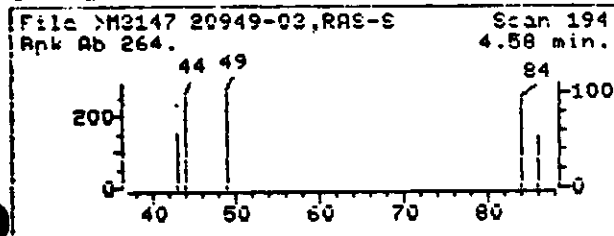
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



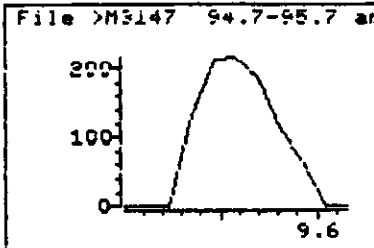
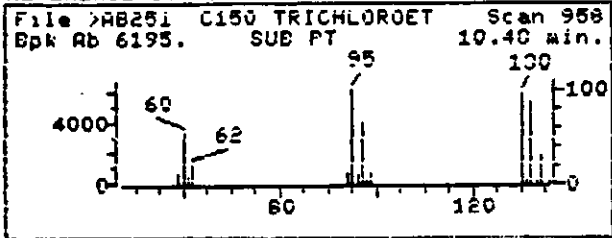
Data File: >M3147::L2
Name: 20949-03,RAS-S
Misc: 2.5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 04:24
Injected at: 920222 03:55
Last Qual Time: 920221 22:44

Quant Output File: ^M3147::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

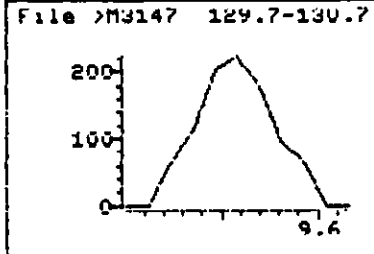
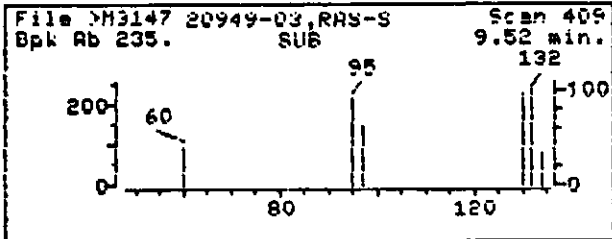
Compound No : 10
Compound Name : 0030 METHYLENE CHLORIDE
Scan Number : 194
Retention Time : 4.58 min.
Quant Ion : 84.0
Area : 1908
Concentration : 1.25 UG/L
q-value : 81

000096

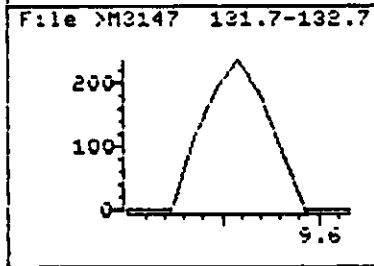
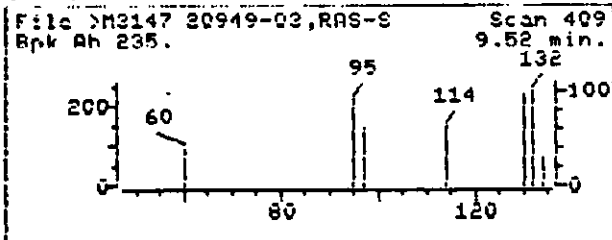
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



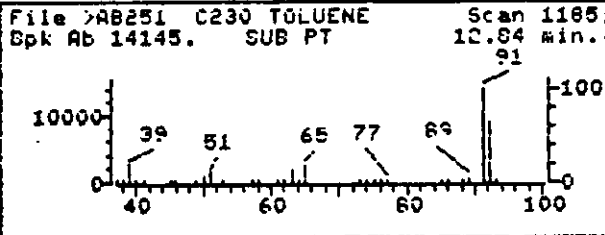
Data File: >M3147::L2
Name: 20949-03,RAS-S
Misc: 2.5G/5ML ANALYST RB INST L HEATED
Quant time: 920222 04:24
Injected at: 920222 03:55
Last Qcal Time: 920221 22:44

Quant Output File: ^M3147::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

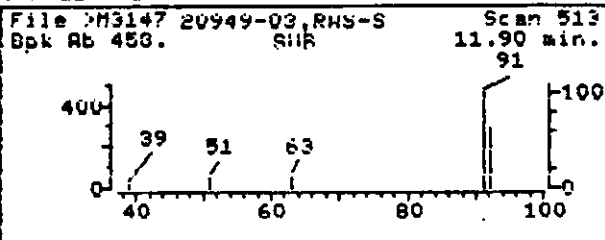
Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 409
Retention Time: 9.52 min.
Quant Ion : 130.0
Area : 1300
Concentration : .752 UG/L
q-value : 85

BAL

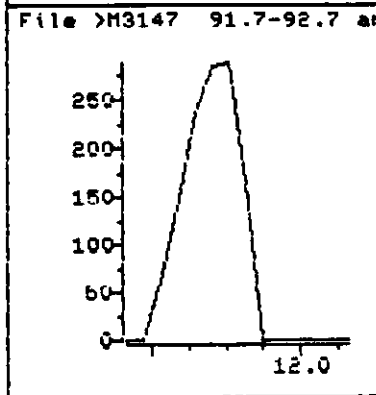
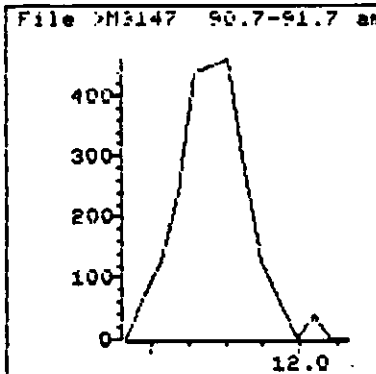
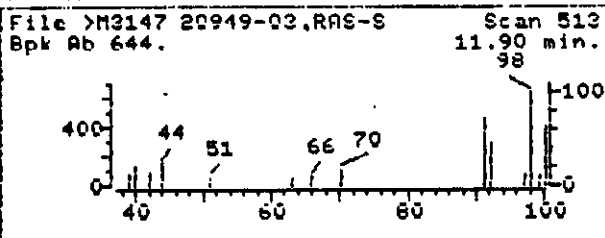
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



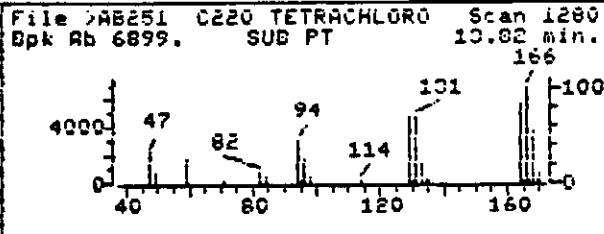
Data File: >M3147::L2
Name: 20949-03,RAS-S
Misc: 2.5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 04:24
Injected at: 920222 03:55
Last Qcal Time: 920221 22:44

Quant Output File: ^M3147::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

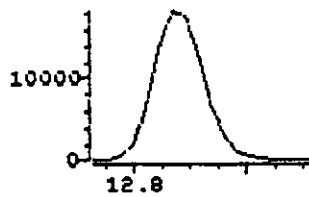
Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 513
Retention Time: 11.90 min.
Quant Ion : 91.0
Area : 3127
Concentration : .781 UG/L
q-value : 95

BAL

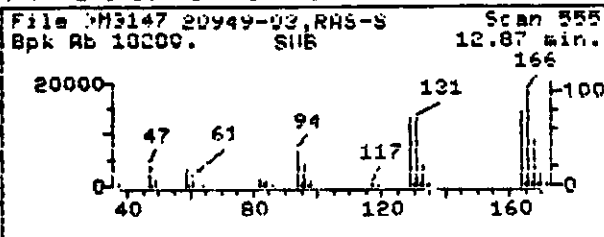
REFERENCE STANDARD SPECTRUM



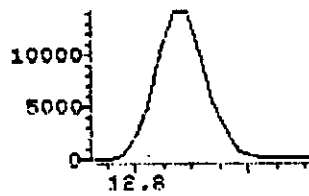
File >M3147 163.7-166.7



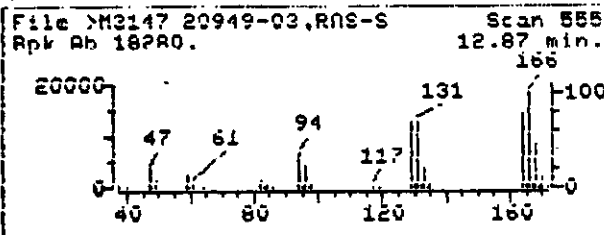
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



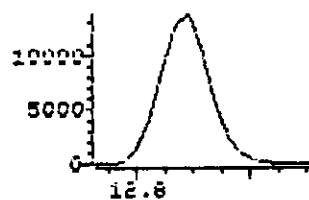
File >M3147 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >M3147 130.7-131.7



Data File: >M3147::L2

Name: 20949-03,RAS-S

Misc: 2.5G/5ML ANALYST KB INST L HEATED

Quant Time: 920222 04:24

Injected at: 920222 03:55

Last Qual Time: 920221 22:44

Quant Output File: ^M3147::QT

Instrument ID: L

Quant ID File: IDEPAL::ID

Last Calibration: 911030 17:46

Compound No : 36
 Compound Name : C220 TETRACHLOROETHENE
 Scan Number : 555
 Retention Time: 12.87 min.
 Quant Ion : 164.0
 Area : 90844
 Concentration : 64.96 UG/L
 q-value : 97

000099

Diagnostic Quant Report

Date File: >M3147::L2 Injected at: 03:55 U2/22/92
 Quant'd : 04:24 U2/22/92
 ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -			Ion	Area	RF	Conc.
	Pred	Found	Dif				
1) *C101 BROMOCHLOROMETHANE	7.31	7.22	.09	128.0	46644	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	8.22	8.25	.03	65.0	69056	1.5454	47.90
3) C010 CHLOROMETHANE	1.12	0.00	--	50.0	0	.6752	0.00
4) C020 VINYL CHLORIDE	1.32	0.00	--	62.0	0	.8468	0.00
5) C015 BROMOMETHANE	1.78	0.00	--	94.0	0	1.1498	0.00
6) C025 CHLOROETHANE	2.05	0.00	--	64.0	0	.6141	0.00
7) C045 1,1-DICHLOROETHENE	3.48	0.00	--	96.0	0	1.0677	0.00
8) C040 CARBON DISULFIDE	3.57	0.00	--	76.0	0	1.7671	0.00
9) C035 ACETONE	4.00	3.89	.11	43.0	3560	.6178	6.18
10) C030 METHYLENE CHLORIDE	4.57	4.58	.01	84.0	1908	1.6412	1.25
11) UJNK trans-1,2-DICHLORUET	5.02	0.00	--	96.0	0	1.2769	0.00
12) C050 1,1-DICHLOROETHANE	5.79	0.00	--	63.0	0	2.3261	0.00
13) U011 cis-1,2-DICHLOROETHE	6.83	0.00	--	96.0	0	1.3491	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3130	0.00
15) C110 2-BUTANONE	7.13	0.00	--	43.0	0	1.2932	0.00
16) U013 TETRAHYDROFURAN	7.38	0.00	--	42.0	0	.7593	0.00
17) C060 CHLOROFORM	7.54	0.00	--	83.0	0	2.6596	0.00
18) C065 1,2-DICHLOROETHANE	8.33	0.00	--	62.0	0	1.7595	0.00
19) *C110 1,4-DIFLUORUBENZENE	9.24	9.19	.05	114.0	207056	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	7.64	0.00	--	97.0	0	.5005	0.00
21) C120 CARBONTETRACHLORIDE	7.89	0.00	--	117.0	0	.4865	0.00
22) C165 BENZENE	8.26	0.00	--	78.0	0	.7901	0.00
23) C150 TRICHLOROETHENE	9.52	9.52	.00	130.0	1300	.4176	.75
24) C140 1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.3057	0.00
25) C130 BROMODICHLOROMETHANE	10.52	0.00	--	83.0	0	.4976	0.00
26) C143 cis-1,3-DICHLOROPROP	11.34	0.00	--	75.0	0	.4843	0.00
27) C172 trans-1,3-DICHLORUPR	12.49	0.00	--	75.0	0	.4312	0.00
28) C160 1,1,2-TRICHLOROETHAN	12.76	0.00	--	97.0	0	.3304	0.00
29) C155 CHLORODIBROMOMETHANE	13.45	0.00	--	129.0	0	.5172	0.00
30) C180 BROMOFORM	16.26	0.00	--	173.0	0	.4372	0.00
31) *C120 CHLOROBENZENE-D5	14.57	14.55	.03	117.0	160093	1.0000	50.00
32) CS05 TOLUENE-D8	11.79	11.77	.03	98.0	182359	1.1581	49.18
33) CS10 BROMOFLUORUBENZENE	17.10	17.07	.03	95.0	110448	.7245	47.61
34) C230 TOLUENE	11.91	11.90	.01	91.0	3127	1.2499	.78
35) C205 4-METHYL-2-PENTANONE	11.84	0.00	--	43.0	0	.7503	0.00
36) C220 TETRACHLOROETHENE	12.89	12.87	.02	164.0	90844	.4367	64.96
37) C210 2-HEXANONE	13.49	0.00	--	43.0	0	.6263	0.00
38) C235 CHLOROBENZENE	14.61	0.00	--	112.0	0	.9753	0.00
39) C240 ETHYLBENZENE	14.96	0.00	--	106.0	0	.4618	0.00
40) UJNK M&P-XYLENES	15.21	0.00	--	106.0	0	.5985	0.00
41) U029 O-XYLENE	15.99	0.00	--	106.0	0	.5731	0.00
42) C250 XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.5858	0.00
43) C245 STYRENE	16.06	0.00	--	104.0	0	.9212	0.00
44) C225 1,1,2,2-TETRACHLORNE	17.65	0.00	--	83.0	0	.8826	0.00

* - Compound is an Internal Standard
 D - Compound Deleted

TIC Internal Standard Report

Data File: >M3147

Maximum separation 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	Q scan	Q area	Concentration	Flag	% Est. RIC
			RQratio	RIC scan	RIC area	
1	CI01 BROMOCHLOROMETH	309.	46644.	50.000 UG/L	Ok	86.123
2	CI10 1,4-DIFLUOROBEN	395.	207056.	50.000 UG/L	Ok	89.960
3	CI20 CHLOROBENZENE-D	628.	160093.	50.000 UG/L	Ok	96.597

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 7
 Number of peaks remaining: 7

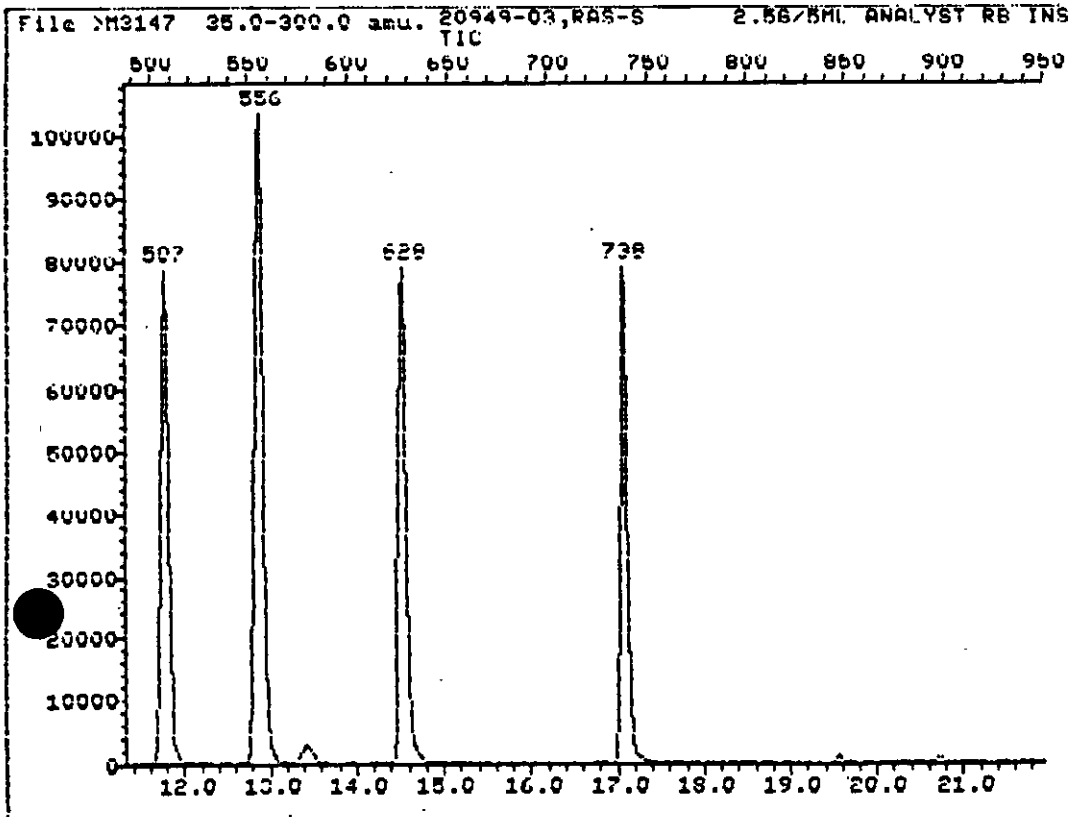
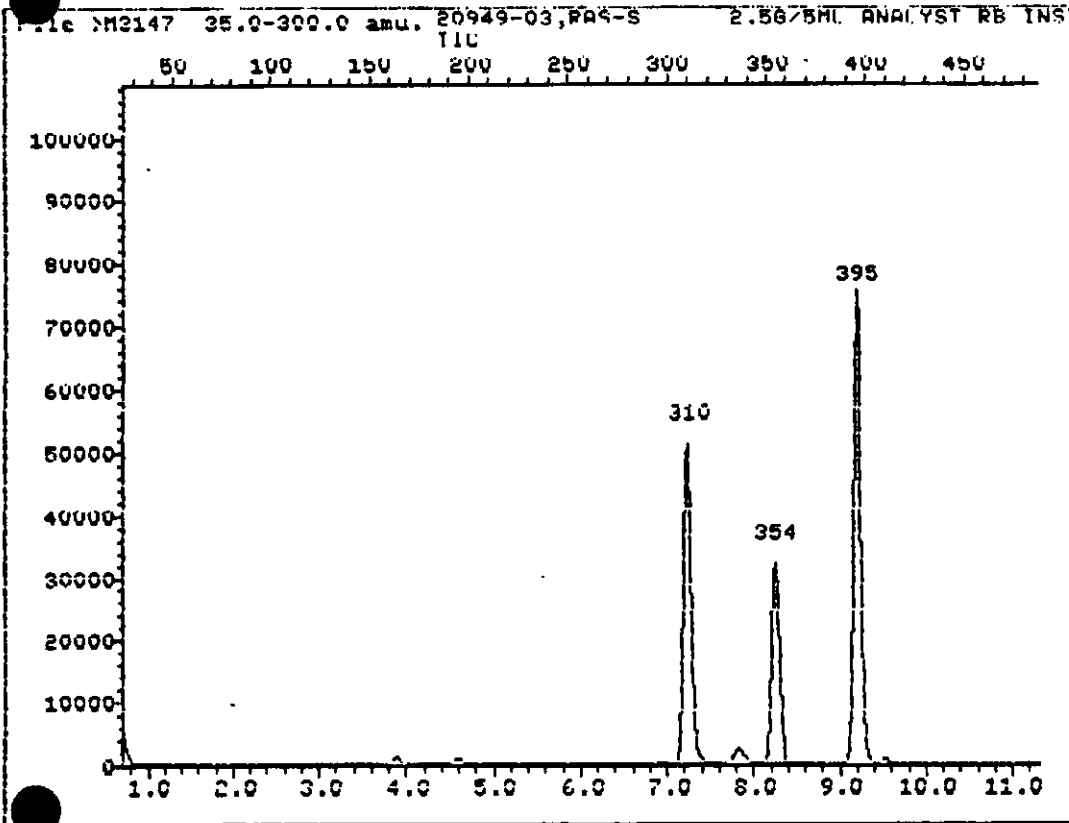
Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 7
 Number of peaks remaining: 0

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15
 Number of peaks: 0
 Maximum number of peaks > number of peaks.

000101



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE 000102

20949-04

Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-04

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: M3148

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 9

Date Analyzed: 02/22/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

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	2	J
67-64-1	Acetone	8	J
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	5	J
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	2	J
71-55-6	1,1,1-Trichloroethane	4	J
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	250	E
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	3	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. **000103**

20949-04

Lab Name: **ENSECO** Contract: _____

Lab Code: **ENSECO** Case No.: **20949** SAS No.: _____ SDG No.: _____

Matrix: (soil/water) **SOIL** Lab Sample ID: **20949-04**

Sample wt/vol: **5.0 (g/mL) G** Lab File ID: **M3148**

Level: (low/med) **LOW** Date Received: **02/15/92**

% Moisture: not dec. **9** Date Analyzed: **02/22/92**

GC Column: **CAP** ID: **0.530 (mm)** Dilution Factor: **1.0**

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

Number TICs found: **4** CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2207-03-6	Cyclohexane, 1,3-dimethyl-,	12.30	17	JN
2.	Unknown	12.47	29	JN
3. 541-05-9	Cyclotrisiloxane, hexamethyl	13.40	19	JN
4. 3073-66-3	Cyclohexane, 1,1,3-trimethyl	13.62	22	JN

000104

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output File: ^M3148::Q1
 Data File: >M3148::L2
 Name: 20949-04,RAS-S
 Misc: 5G/5ML ANALYST RB INST L HEATED

Quant Rev: 7 Quant Time: 920222 05:04
 Injected at: 920222 04:35
 Dilution Factor: 1.00000
 Instrument ID: L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

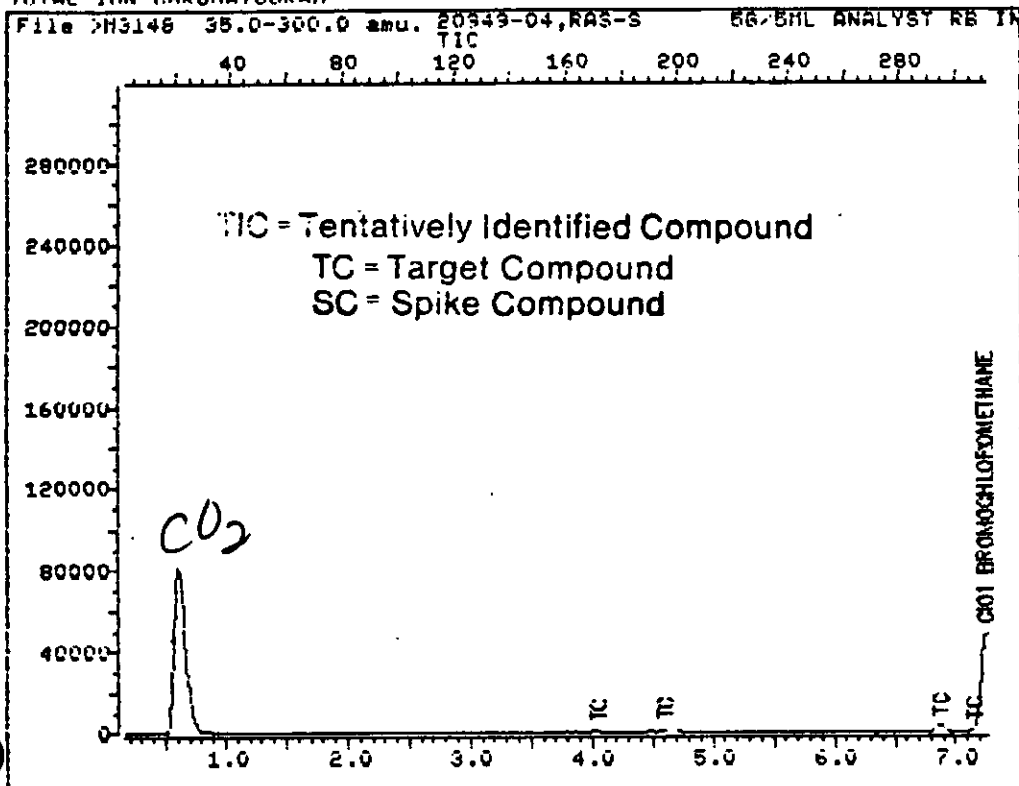
Last Qcal Time: 920221 22:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	7.24	128.0	44429	50.00	UG/L	92
2)	CS15 1,2-DICHLOROETHANE-D4	8.27	65.0	64644	47.08	UG/L	81
9)	CD35 ACETONE	4.05	43.0	3844	7.00	UG/L	100
10)	CD30 METHYLENE CHLORIDE	4.60	84.0	3149	2.16	UG/L	82
13)	V011 cis-1,2-DICHLOROETHENE	6.87	96.0	4899	4.09	UG/L	76
15)	C110 2-BUTANONE	7.15	43.0	2591	2.25	UG/L	78
19)	*C110 1,4-DIFLUOROBENZENE	9.19	114.0	183103	50.00	UG/L	100
20)	C115 1,1,1-TRICHLOROETHANE	7.63	97.0	5841	3.19	UG/L	89
21)	C120 CARBONTETRACHLORIDE	7.61	117.0	738	7.414	UG/L	78
23)	C150 TRICHLOROETHENE	9.51	130.0	14802	9.68	UG/L	88
31)	*C120 CHLOROBENZENE-D5	14.54	117.0	118212	50.00	UG/L	83
32)	CS05 TOLUENE-D8	11.76	98.0	146483	53.50	UG/L	97
33)	CS10 BROMOFLUOROBENZENE	17.09	95.0	77520	45.26	UG/L	100
34)	C230 TOLUENE	11.88	91.0	3156	1.07	UG/L	90
36)	C220 TETRACHLOROETHENE	12.89	164.0	239349	231.80	UG/L	95
39)	C240 ETHYLBENZENE	15.21	106.0	1649	1.51	UG/L	74
40)	UJNK M&P-XYLENES	15.21	106.0	1649	1.17	UG/L	93
41)	U029 O-XYLENE	15.99	106.0	1621	1.20	UG/L	83
44)	C225 1,1,2,2-TETRACHLOROETHANE	17.89	83.0	2109	1.01	UG/L	59

* Compound is ISTD

000105

TOTAL ION CHROMATOGRAM



Data File: >M3148::L2

Quant Output File: ^M3148::QT

Name: 20949-04,RAS-S

Instrument ID: L

Misc: 56/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

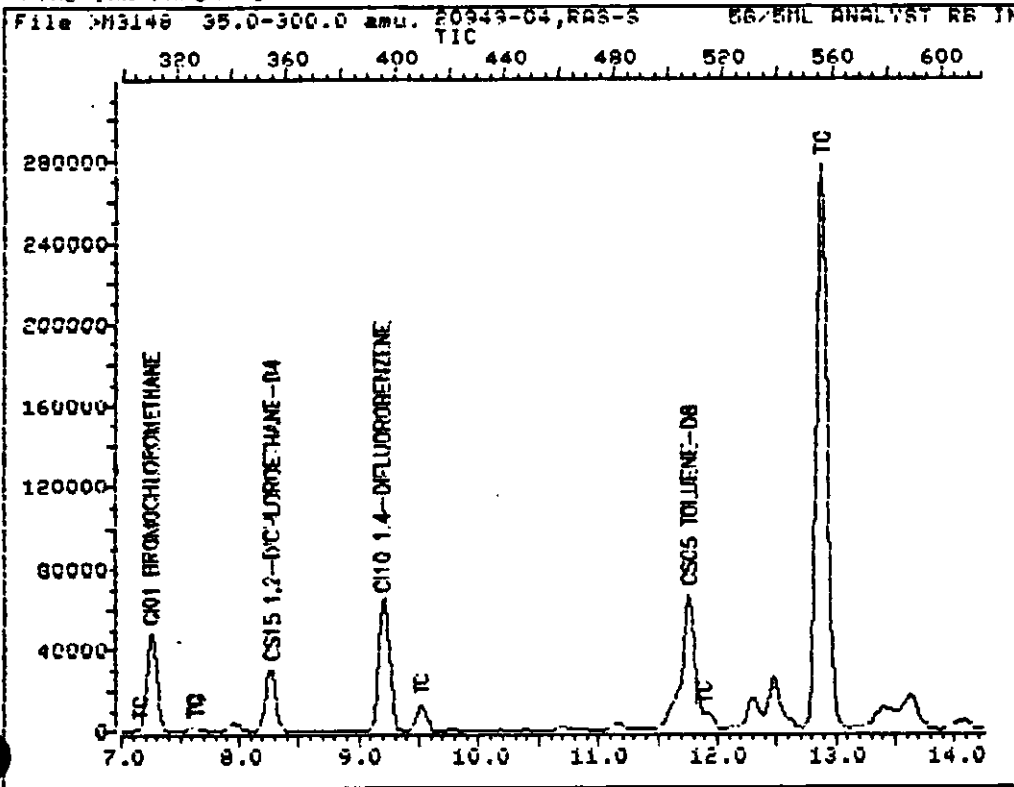
Quant Time : 920222 05:04

Injected at: 920222 04:35

Page 1 of 4

000106

TOTAL ION CHROMATOGRAM



Data File: >M3148::L2

Quant Output File: ^M3148::QT

Name: 20949-04, RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

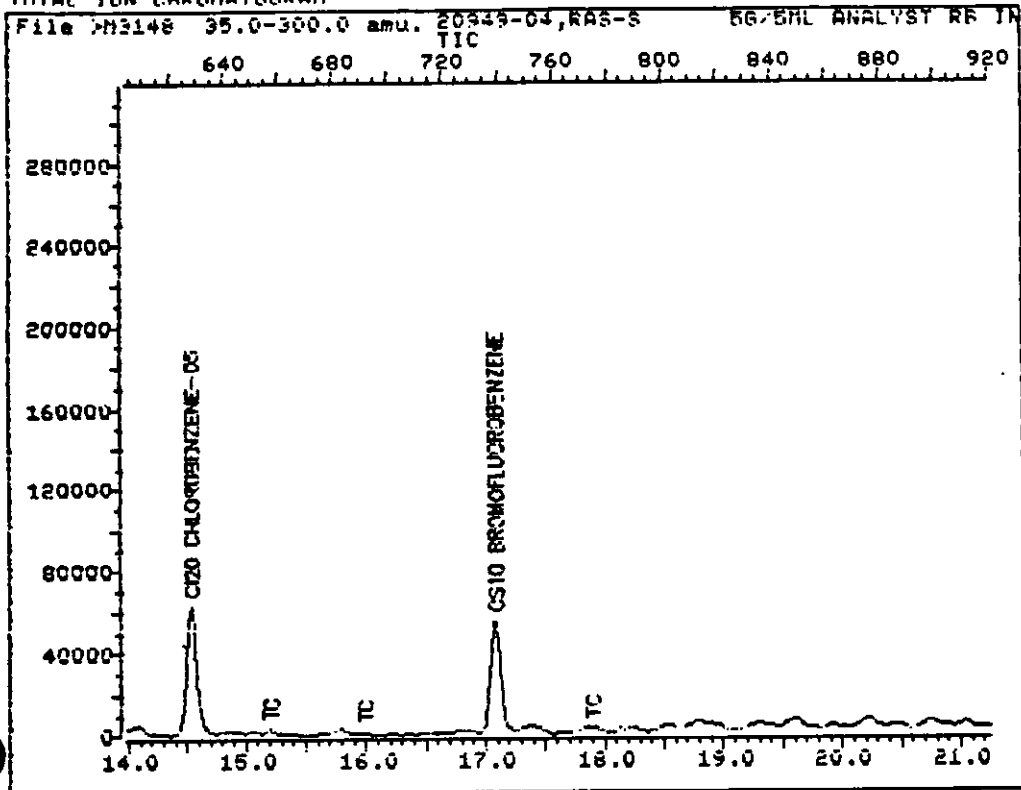
Quant Time : 920222 05:04

Injected at: 920222 04:35

Page 2 of 4

000107

TOTAL ION CHROMATOGRAM



Date File: >M3148::L2

Quant Output File: ^M3148::QT

Name: 20949-04,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

Operator ID: LUEY1

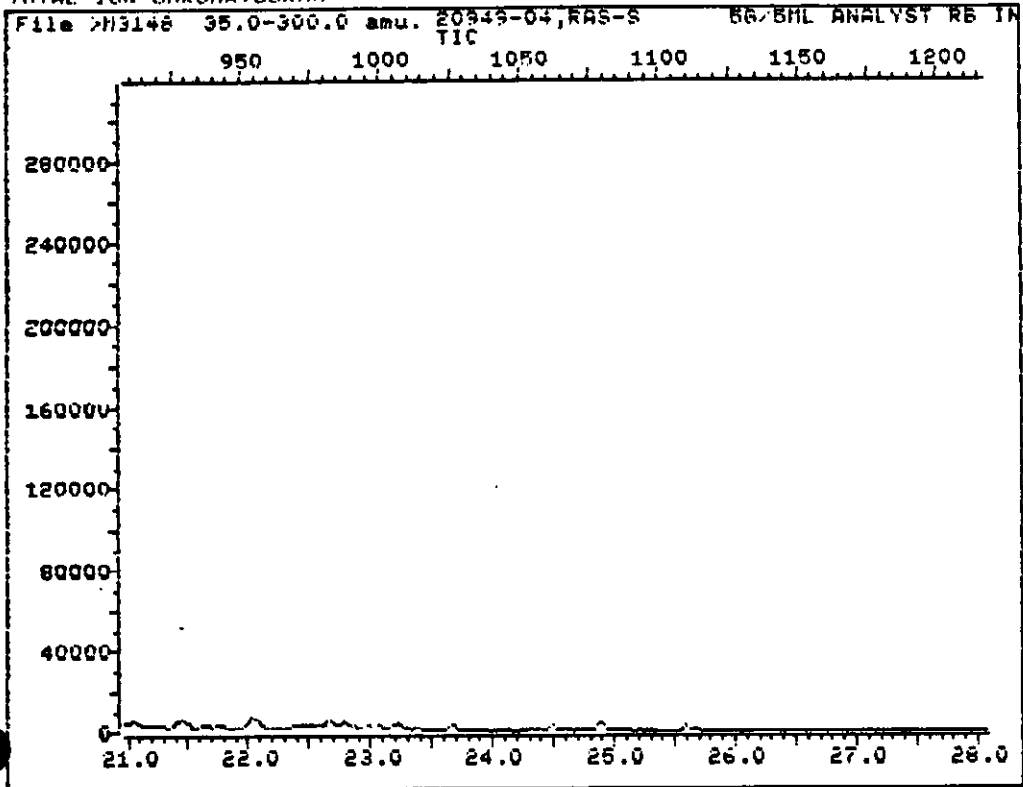
Quant Time : 920222 05:04

Injected at: 920222 04:35

Page 3 of 4

000108

TOTAL ION CHROMATOGRAM

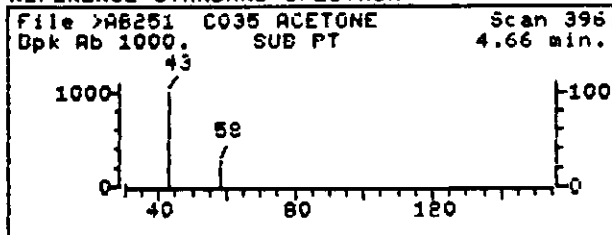


Data File: >M3148::L2 Quant Output File: ^M3148::QT
Name: 20949-04,RAS-S Instrument ID: L
Misc: 5G/5ML ANALYST RB INST L HEATED

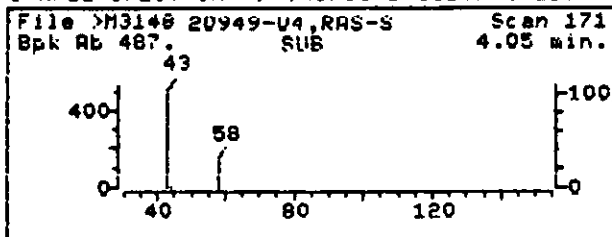
Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46 Last Qcal Time: 920221 22:44

Operator ID: LUEY1
Quant Time : 920222 05:04
Injected at: 920222 04:35

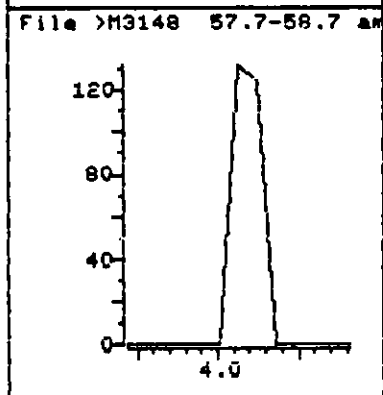
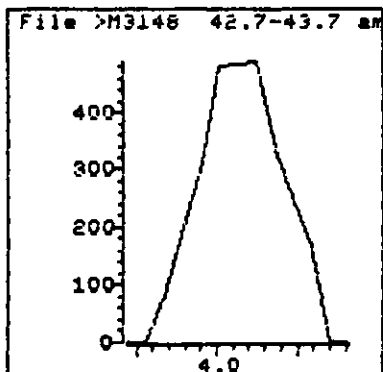
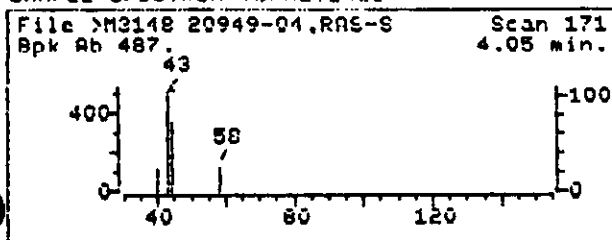
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

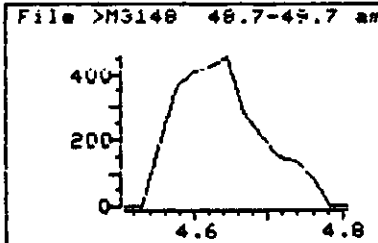
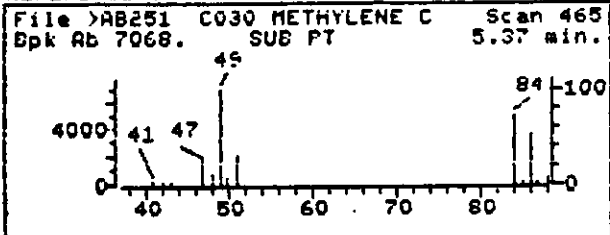


Data File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qcal Time: 920221 22:44

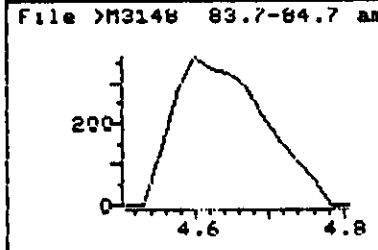
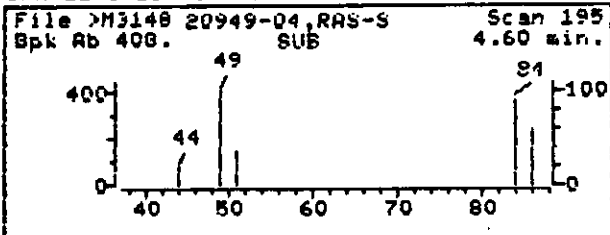
Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No: 9
Compound Name: C035 ACETONE
Scan Number: 171
Retention Time: 4.05 min.
Quant Ion: 43.0
Area: 3844
Concentration: 7.00 UG/L
q-value: 100

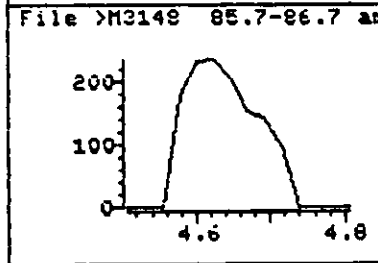
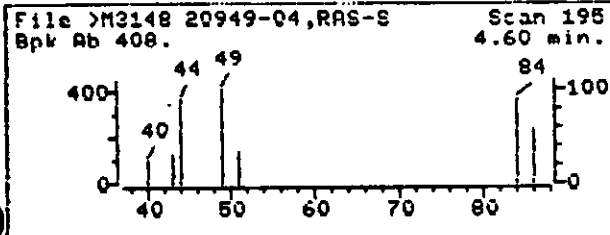
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

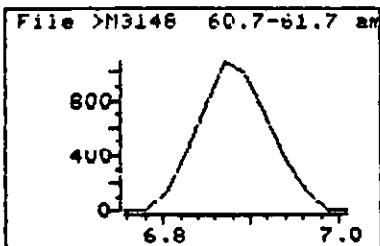
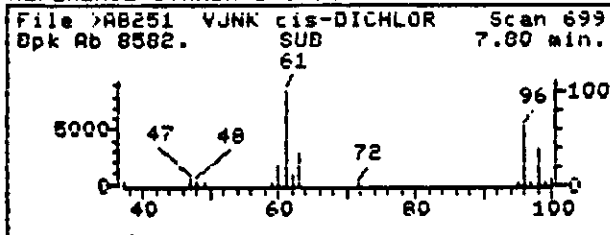


Data File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qcal Time: 920221 22:44

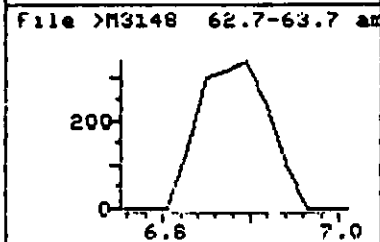
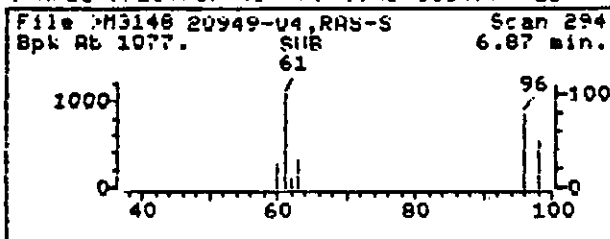
Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 195
Retention Time : 4.60 min
Quant Ion : 84.0
Area : 3149
Concentration : 2.16 UG/L
q-value : 82

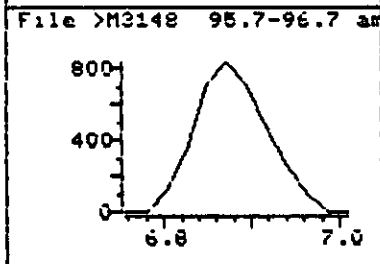
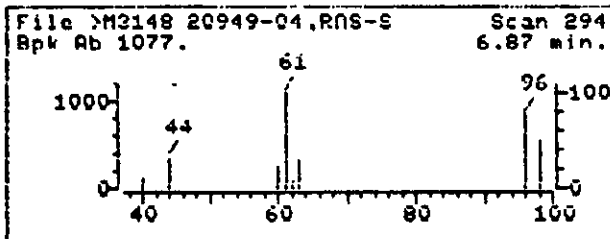
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3148::L2

Quant Output File: ^M3148::QT

Name: 20949-04,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Quant Time: 920222 05:04

Quant ID File: IDEPAL::ID

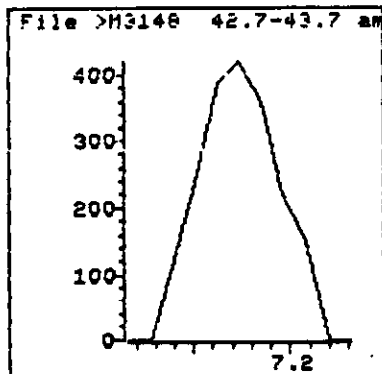
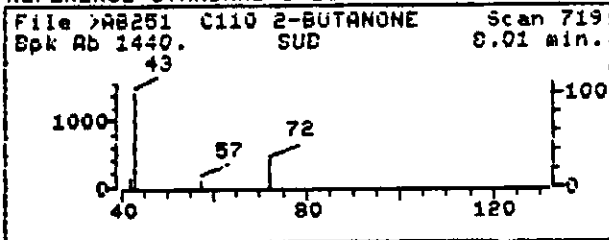
Injected at: 920222 04:35

Last Calibration: 911030 17:46

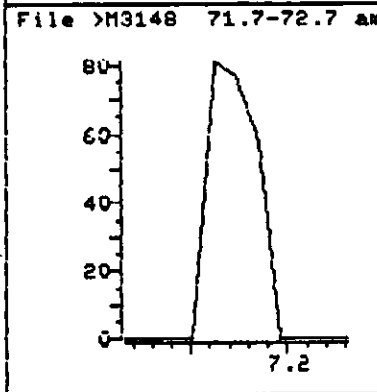
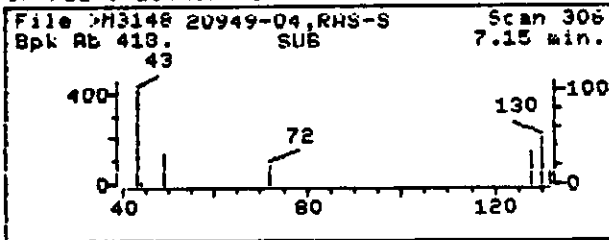
Last Qcal Time: 920221 22:44

Compound No : 13
 Compound Name : U011 cis-1,2-DICHLOROETHENE
 Scan Number : 294
 Retention Time : 6.87 min.
 Quant Ion : 96.0
 Area : 4899
 Concentration : 4.09 UG/L
 q-value : 76

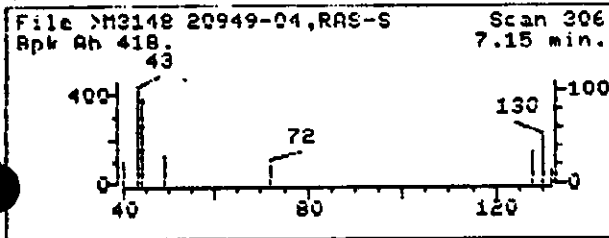
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

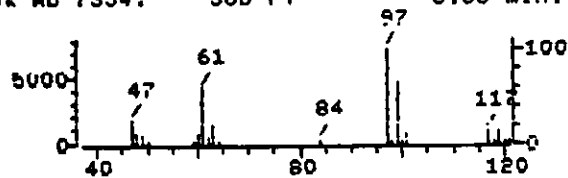


Data File: >M3148::L2 Quant Output File: ^M3148::QT
Name: 20949-04,RAS-S Instrument ID: L
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04 Quant ID File: IDEPAL::ID
Injected at: 920222 04:35 Last Calibration: 911030 17:46
Last Qcal Time: 920221 22:44

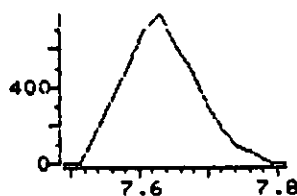
Compound No : 15
Compound Name : C110 2-BUTANONE
Scan Number : 306
Retention Time: 7.15 min.
Quant Ion : 43.0
Area : 2591
Concentration : 2.25 UG/L
q-value : 78

REFERENCE STANDARD SPECTRUM

File >AB251 C115 1,1,1-TRICH Scan 774
Bpk Ab 7354. SUB PT 8.58 min.

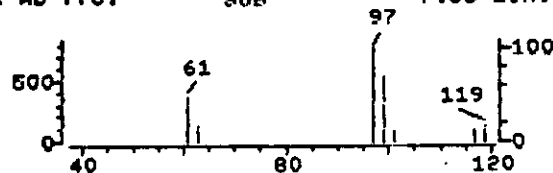


File >M3148 96.7-97.7 am

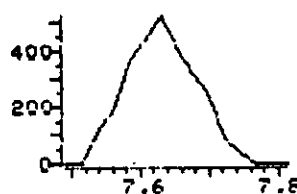


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3148 20949-04,RHS-S Scan 327
Bpk Ab 776. SUB 7.63 min.

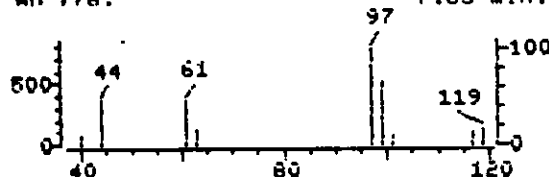


File >M3148 98.7-99.7 am

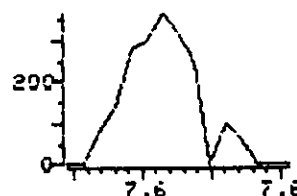


SAMPLE SPECTRUM (UNALTERED)

File >M3148 20949-04,RAS-S Scan 327
Bpk Ab 776. 7.63 min.



File >M3148 60.7-61.7 am



Data File: >M3148::L2

Name: 20949-04,RAS-S

Misc: 5G/5ML ANALYST RB INST L HEATED

Quant Time: 920222 05:04

Injected at: 920222 04:35

Last Qcal Time: 920221 22:44

Quant Output File: ^M3148::QT

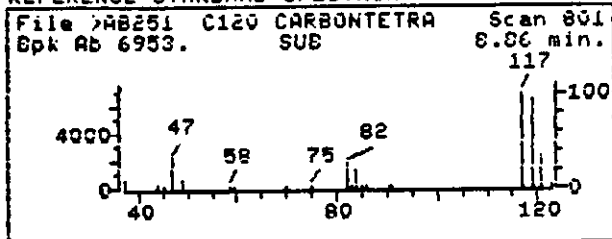
Instrument ID: L

Quant ID File: IDEPAL::ID

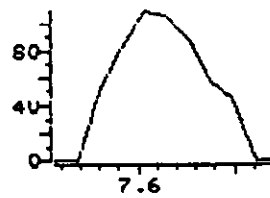
Last Calibration: 911030 17:46

Compound No : 20
Compound Name : C115 1,1,1-TRICHLORoETHANE
Scan Number : 327
Retention Time : 7.63 min.
Quant Ion : 97.0
Area : 5841
Concentration : 3.19 UG/L
q-value : 89

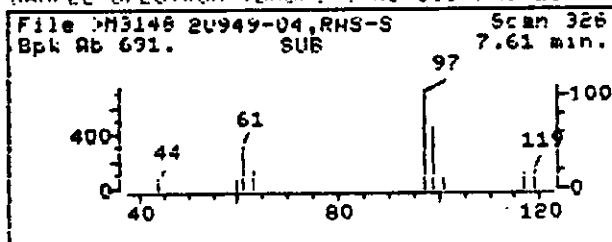
REFERENCE STANDARD SPECTRUM



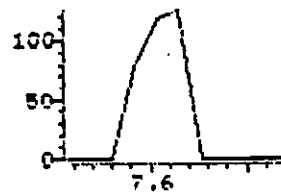
File >M3148 116.7-117.7



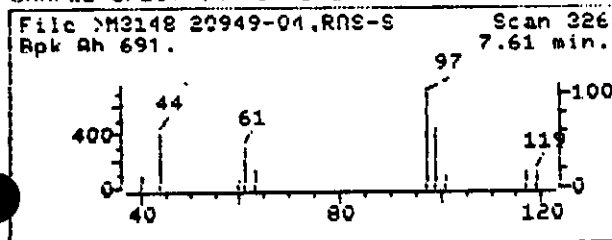
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >M3148 118.7-119.7



SAMPLE SPECTRUM (UNALTERED)



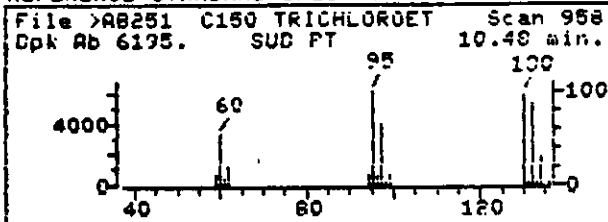
Data File: >M3148::L2
Name: 20949-04,RMS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qcal Time: 920221 22:44

Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

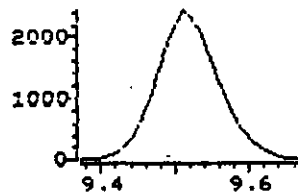
Compound No : 21
Compound Name : C120 CARBONTETRACHLORIDE
Scan Number : 326
Retention Time: 7.61 min.
Quant Ion : 117.0
Area : 738
Concentration : .414 UG/L
q-value : 78

BOL

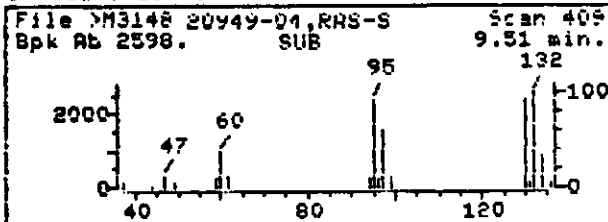
REFERENCE STANDARD SPECTRUM



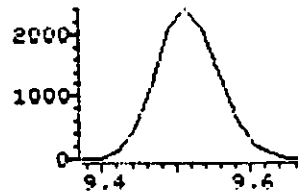
File >M3148 94.7-95.7 am



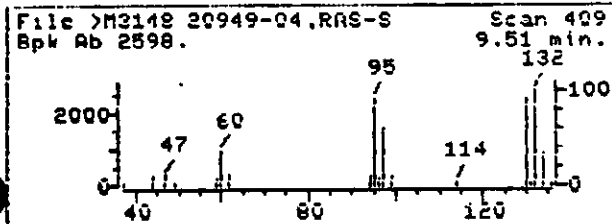
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



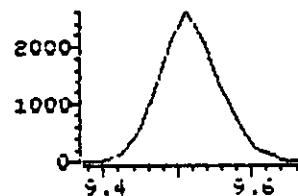
File >M3148 129.7-130.7



SAMPLE SPECTRUM (UNALTERED)



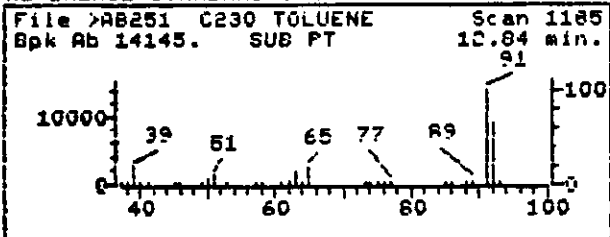
File >M3148 131.7-132.7



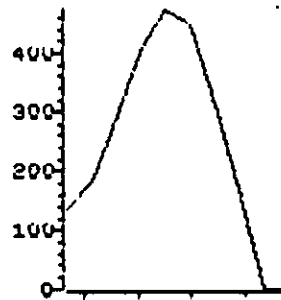
Data File: >M3148::L2 Quant Output File: ^M3148::QT
Name: 20949-04,RAS-S Instrument ID: L
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04 Quant ID File: IDEPAL::ID
Injected at: 920222 04:35 Last Calibration: 911030 17:46
Last Qual Time: 920221 22:44

Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 409
Retention Time: 9.51 min.
Quant Ion : 130.0
Area : 14802
Concentration : 9.68 UG/L
q-value : 88

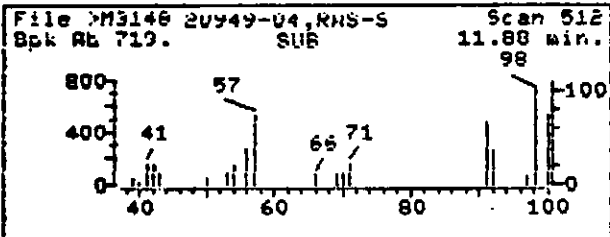
REFERENCE STANDARD SPECTRUM



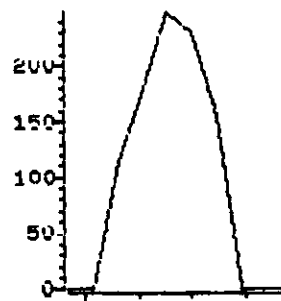
File >M3148 90.7-91.7 am



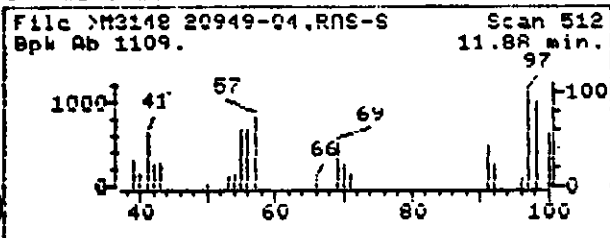
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >M3148 91.7-92.7 am



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST KB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qcal Time: 920221 22:44

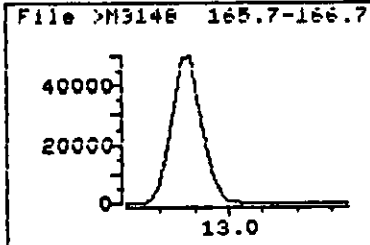
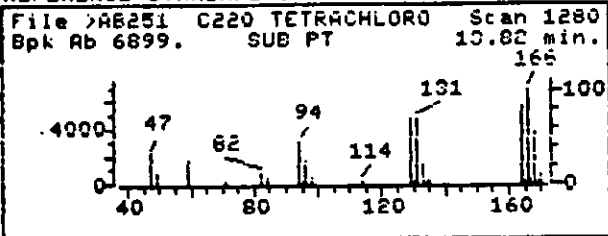
Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 512
Retention Time: 11.88 min.
Quant Ion : 91.0
Area : 3156
Concentration : 1.07 UG/L
q-value : 90

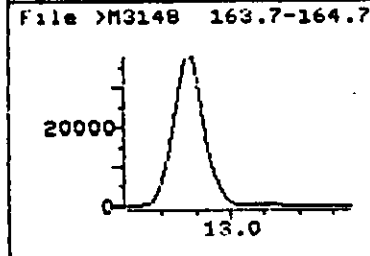
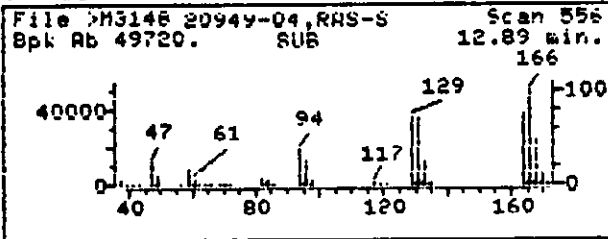
OK AD
100-31092

000117

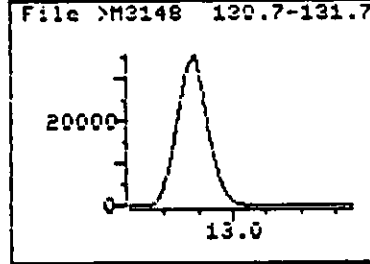
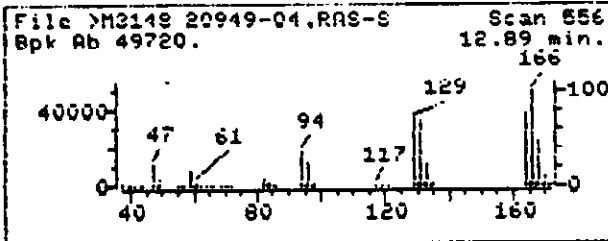
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



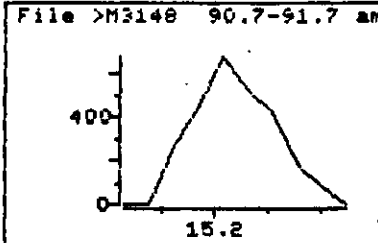
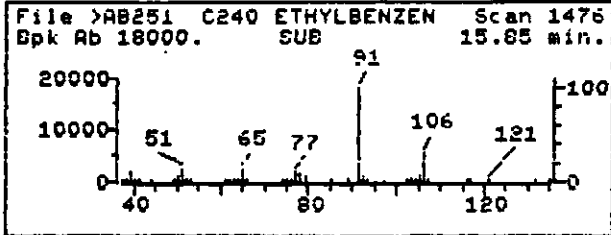
SAMPLE SPECTRUM (UNALTERED)



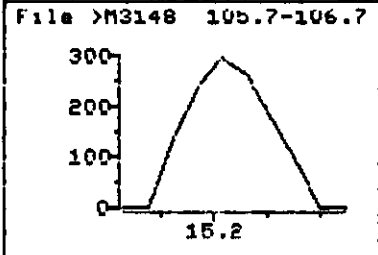
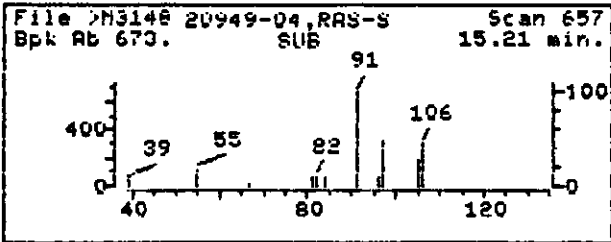
Data File: >M3148::L2 Quant Output File: ^M3148::QT
Name: 20949-04,RAS-S Instrument ID: L
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04 Quant ID File: IDEPAL::ID
Injected at: 920222 04:35 Last Calibration: 911030 17:46
Last Qcal Time: 920221 22:44

Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 556
Retention Time: 12.89 min.
Quant Ion : 164.0
Area : 239349
Concentration : 231.80 UG/L
q-value : 95

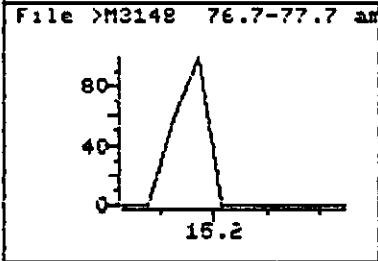
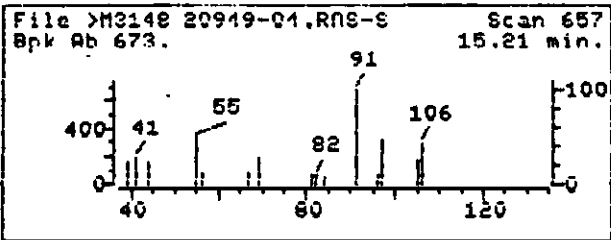
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



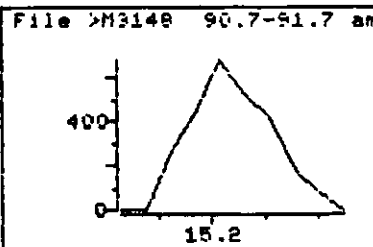
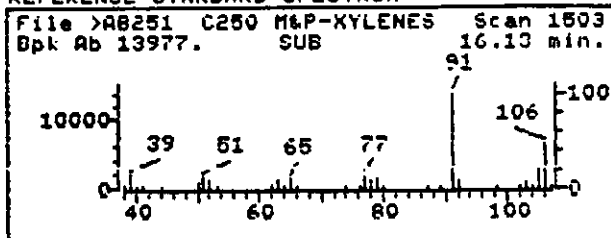
Data File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qcal Time: 920221 22:44

Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

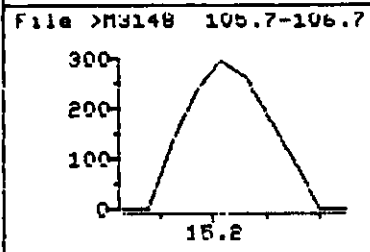
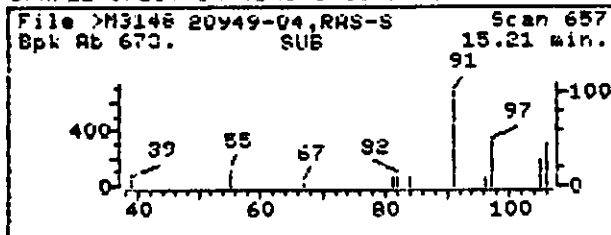
Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 657
Retention Time: 15.21 min.
Quant Ion : 106.0
Area : 1649
Concentration : 1.51 UG/L
q-value : 74

NO

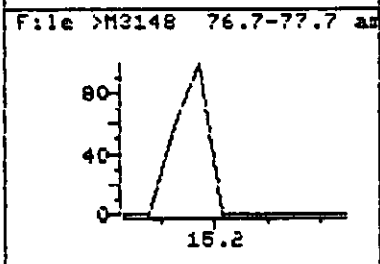
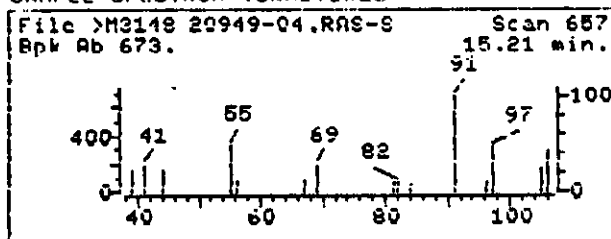
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



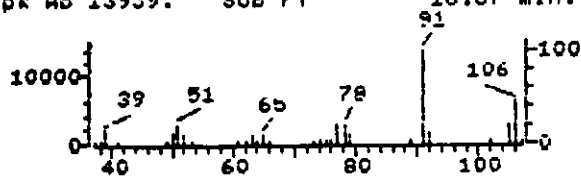
Data File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qual Time: 920221 22:44

Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

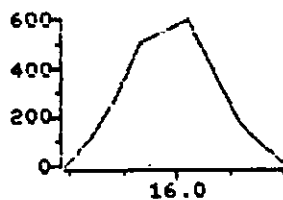
Compound No : 40
Compound Name : UJNK M&P-XYLENES
Scan Number : 657
Retention Time : 15.21 min.
Quant Ion : 106.0
Area : 1649
Concentration : 1.17 UG/L
q-value : 93

REFERENCE STANDARD SPECTRUM

File >AB251 VJNK O-XYLENE Scan 1574
Bpk Ab 13959. SUB PT 10.87 min.

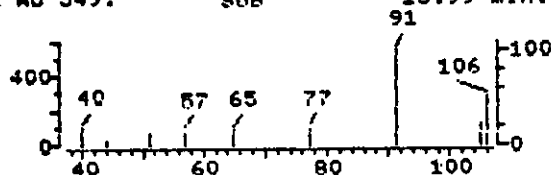


File >M3148 90.7-91.7 min

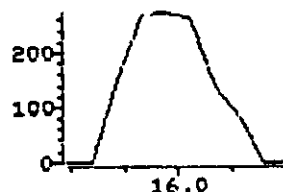


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3148 20949-04,RAS-S Scan 691
Bpk Ab 540. SUB 15.99 min.

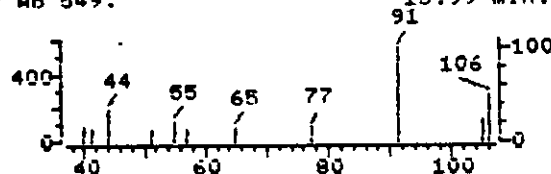


File >M3148 105.7-106.7 min

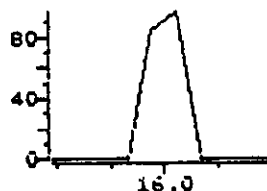


SAMPLE SPECTRUM (UNALTERED)

File >M3148 20949-04,RAS-S Scan 691
Bpk Ab 549. SUB 15.99 min.



File >M3148 76.7-77.7 min



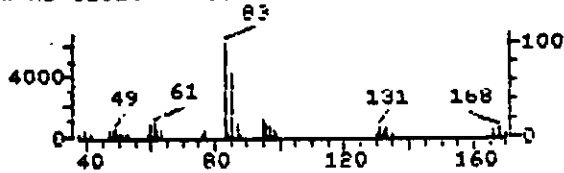
Data File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qcal Time: 920221 22:44

Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

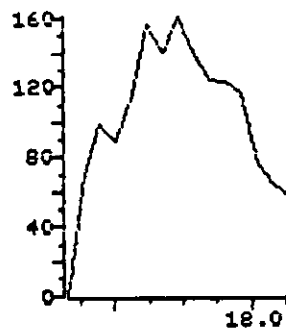
Compound No : 41
Compound Name : O029 O-XYLENE
Scan Number : 691
Retention Time: 15.99 min.
Quant Ion : 106.0
Area : 1621
Concentration : 1.20 UG/L
q-value : 83

REFERENCE STANDARD SPECTRUM

File >AB251 C225 1,1,2,2-TET Scan 1731
Bpk Ab 6251. SUB PT 18.50 min.

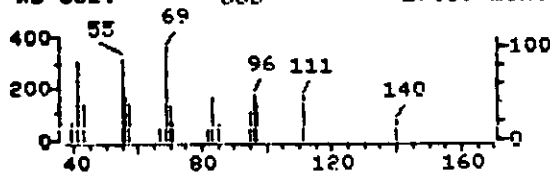


File >M3148 82.7-83.7 min

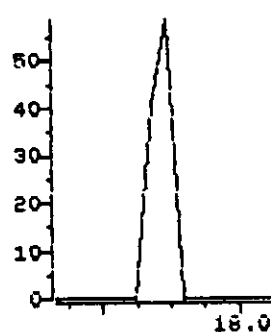


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >M3148 20949-04,RAS-S Scan 774
Bpk Ab 362. SUB 17.89 min.



File >M3148 84.7-85.7 min



SAMPLE SPECTRUM (UNALTERED)

File >M3148 20949-04,RAS-S Scan 774
Bpk Ab 432. SUB 17.89 min.



Date File: >M3148::L2
Name: 20949-04,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 05:04
Injected at: 920222 04:35
Last Qual Time: 920221 22:44

Quant Output File: ^M3148::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 44
Compound Name : C225 1,1,2,2-TETRACHLOROETHANE
Scan Number : 774
Retention Time: 17.89 min.
Quant Ion : 83.0
Area : 2109
Concentration : 1.01 UG/L
q-value : 59

No

000122

Diagnostic Quant Report

Data File: >M3148::L2 Injected at: 04:35 02/22/92

Quant'd : 05:04 02/22/92

ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

		- R.T. Info -						
Compound		Pred	Found	Dif	Ion	Area	KF	Conc.
1)	*C101 BROMOCHLOROMETHANE	7.31	7.24	.07	128.0	44429	1.0000	50.00
2)	CS15 1,2-DICHLOROETHANE-D	8.24	8.27	.03	65.0	64644	1.5454	47.08
3)	C010 CHLOROMETHANE	1.12	0.00	--	50.0	0	.6752	0.00
4)	C020 VINYL CHLORIDE	1.33	0.00	--	62.0	0	.8468	0.00
5)	C015 BROMOMETHANE	1.78	0.00	--	94.0	0	1.1498	0.00
6)	C025 CHLOROETHANE	2.05	0.00	--	64.0	0	.6141	0.00
7)	C045 1,1-DICHLOROETHENE	3.49	0.00	--	96.0	0	1.0677	0.00
8)	C040 CARBON DISULFIDE	3.58	0.00	--	76.0	0	1.7671	0.00
9)	C035 ACETONE	4.01	4.05	.04	43.0	3844	.6178	7.00
9)D	C035 ACETONE	4.01	4.49	.48	43.0	432	.6178	.79
10)	C030 METHYLENE CHLORIDE	4.58	4.60	.02	84.0	3149	1.6412	2.16
11)	UJNK trans-1,2-DICHLOROET	5.03	0.00	--	96.0	0	1.2769	0.00
12)	C050 1,1-DICHLOROETHANE	5.81	0.00	--	63.0	0	2.3261	0.00
13)	U011 cis-1,2-DICHLOROETHE	6.85	6.87	.02	96.0	4899	1.3491	4.09
14)	C053 1,2 DICHLOROETHENE T	0.00	0.00	0.00	96.0	4899	1.3130	4.20
15)	C110 2-BUTANONE	7.15	7.15	.00	43.0	2591	1.2932	2.25
16)	U013 TETRAHYDROFURAN	7.40	0.00	--	42.0	0	.7593	0.00
17)	C060 CHLOROFORM	7.56	0.00	--	83.0	0	2.6596	0.00
18)	C065 1,2-DICHLOROETHANE	8.35	0.00	--	62.0	0	1.7595	0.00
19)	*C110 1,4-DIFLUOROBENZENE	9.24	9.19	.05	114.0	183103	1.0000	50.00
20)	C115 1,1,1-TRICHLOROETHAN	7.64	7.63	.01	97.0	5841	.5005	3.19
21)	C120 CARBONTETRACHLORIDE	7.89	7.61	.28	117.0	738	.4865	.41
22)	C165 BENZENE	8.25	0.00	--	78.0	0	.7901	0.00
23)	C150 TRICHLOROETHENE	9.51	9.51	.00	130.0	14802	.4176	9.68
24)	C140 1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.3057	0.00
25)	C130 BROMODICHLOROMETHANE	10.52	0.00	--	83.0	0	.4976	0.00
26)	C143 cis-1,3-DICHLOROPROP	11.34	0.00	--	75.0	0	.4843	0.00
27)	C172 trans-1,3-DICHLOROPR	12.48	0.00	--	75.0	0	.4312	0.00
28)	C160 1,1,2-TRICHLOROETHAN	12.76	0.00	--	97.0	0	.3304	0.00
29)	C155 CHLORODIBROMOMETHANE	13.44	0.00	--	129.0	0	.5172	0.00
30)	C180 BROMOFORM	16.26	0.00	--	173.0	0	.4372	0.00
31)	*C120 CHLOROBENZENE-05	14.57	14.54	.03	117.0	118212	1.0000	50.00
32)	CS05 TOLUENE-D8	11.79	11.76	.03	98.0	146483	1.1581	53.50
33)D	CS10 BROMOFLUOROBENZENE	17.09	16.84	.25	95.0	1598	.7245	.93
33)	CS10 BROMOFLUOROBENZENE	17.09	17.09	.00	95.0	77520	.7245	45.26
34)	C230 TOLUENE	11.90	11.88	.03	91.0	3156	1.2499	1.07
35)	C205 4-METHYL-2-PENTANONE	11.84	0.00	--	43.0	0	.7503	0.00
36)	C220 TETRACHLOROETHENE	12.89	12.89	.00	164.0	239349	.4367	231.80
37)	C210 2-HEXANONE	13.49	0.00	--	43.0	0	.6263	0.00
38)	C235 CHLOROBENZENE	14.61	0.00	--	112.0	0	.9753	0.00
39)	C240 ETHYLBENZENE	14.96	15.21	.25	106.0	1649	.4618	1.51
40)	UJNK M&P-XYLENES	15.21	15.21	.00	106.0	1649	.5985	1.17
41)	U029 O-XYLENE	15.99	15.99	.00	106.0	1621	.5731	1.20
42)	C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	3270	.5858	2.36
43)	C245 STYRENE	16.06	0.00	--	104.0	0	.9212	0.00
44)	C225 1,1,2,2-TETRACHLOROE	17.64	17.89	.25	83.0	2109	.8826	1.01

* - Compound is an Internal Standard

TIC Internal Standard Report

Data File: >M3148

Maximum separation of RIC and Quant 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	RURatio RIC scan RIC area	% Est. RIC
1	C101 BROMOCHLOROMETH	50.000 UG/L	Ok
310.	44429.	7.294 311. 281675.	86.923
2	C110 1,4-DIFLUOROBEN	50.000 UG/L	Ok
395.	183103.	2.506 396. 406483.	88.582
3	C120 CHLOROBENZENE-D	50.000 UG/L	Ok
628.	118212.	3.094 628. 361107.	98.726

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 11
 Number of peaks remaining: 11

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 11
 Number of peaks remaining: 4

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15
 Number of peaks: 4
 Maximum number of peaks > number of peaks.

000124

TICE: _D

Data Reduced by : SFB Date: 3/5/92
 Data Reviewed by : A Date: 3.10.92

Data File: >M3148

Enseco TIC Report (page 1)

Sample: 20949-04,RAS-S Run Factor: 1.10
 Conditions: 5G/5ML ANALYST RB INST L HEATE Analyst: LUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	531.		2	17.	2207-03-6	Cyclohexane, 1,3-dimethyl-, trans-
2	538.			29.	00-00-0	Unknown
3	579.		2	19.	541-05-9	Cyclotrisiloxane, hexamethyl-
4	588.		2	22.	3073-66-3	Cyclohexane, 1,1,3-trimethyl-

Hit return for more ...

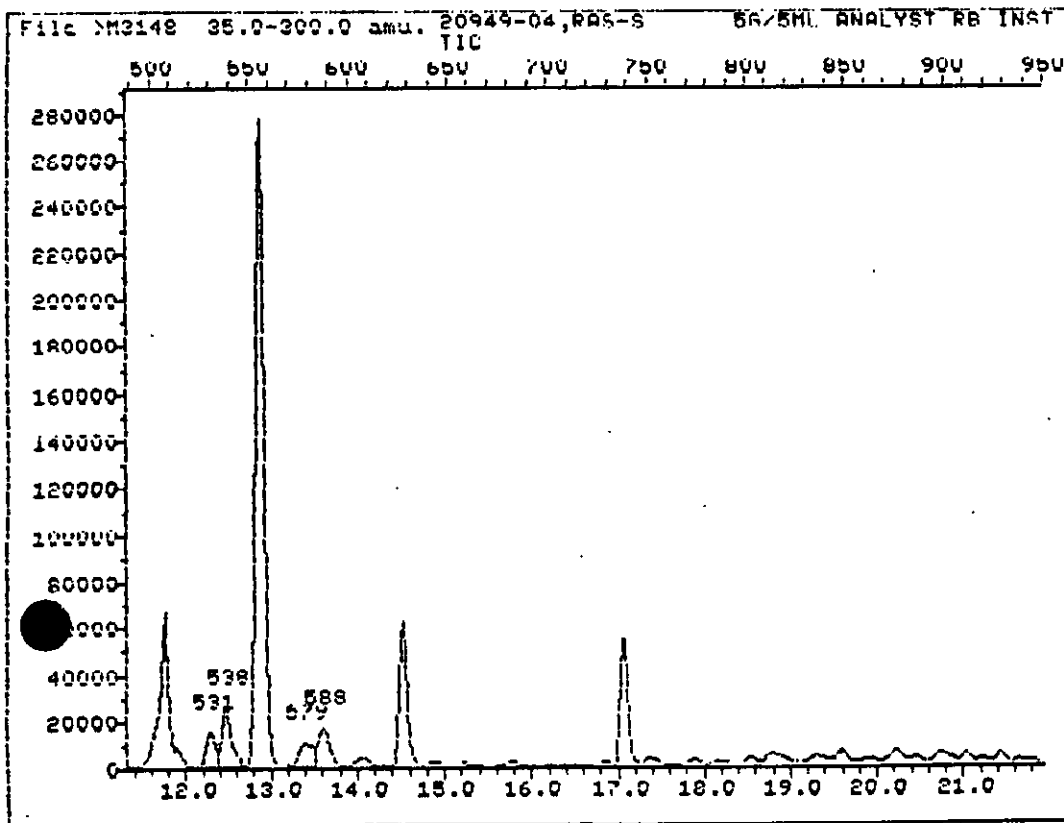
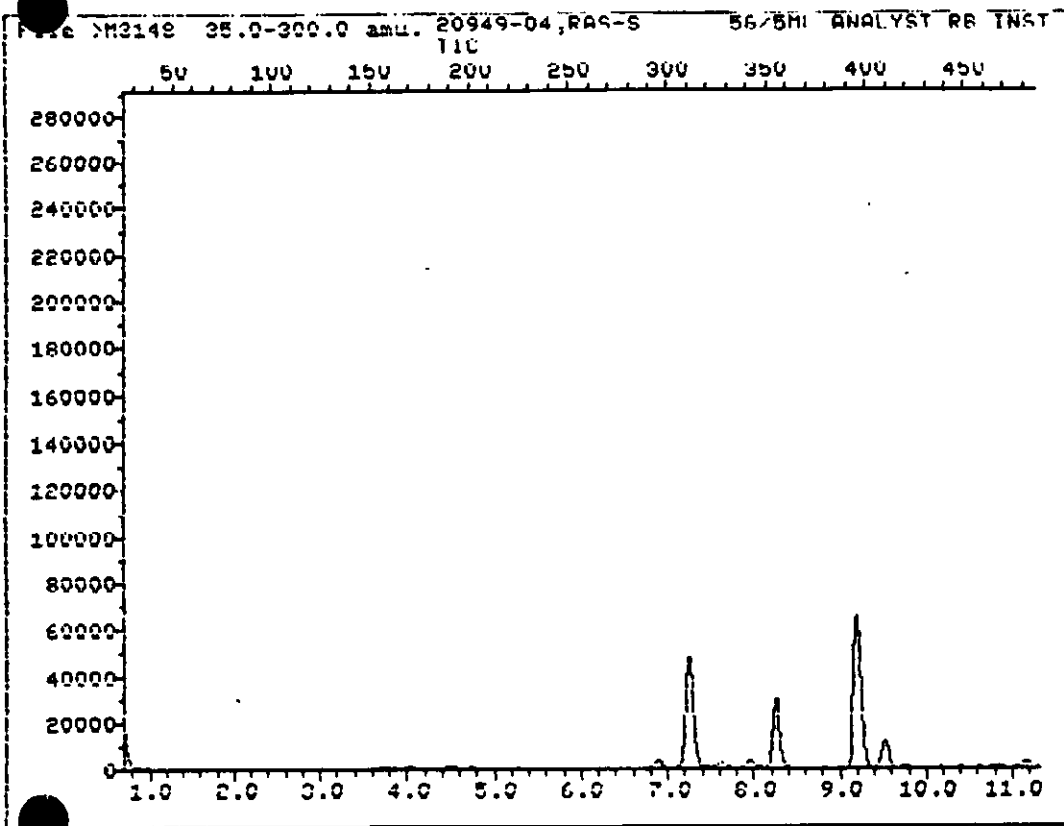
Data File: >M3148

Enseco TIC Report (page 2)

$$\text{Concentration} = \text{Area(TIC)} * \text{Conc. (IS)} / \text{Area (IS)}$$

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	58	20	3	12.31	.847	113137.	14303.	15.665
2			3	12.47	.858	188144.	25583.	26.051
3	36	26	3	13.42	.923	126237.	10284.	17.479
4	70	6	3	13.62	.937	143241.	16835.	19.834

000125



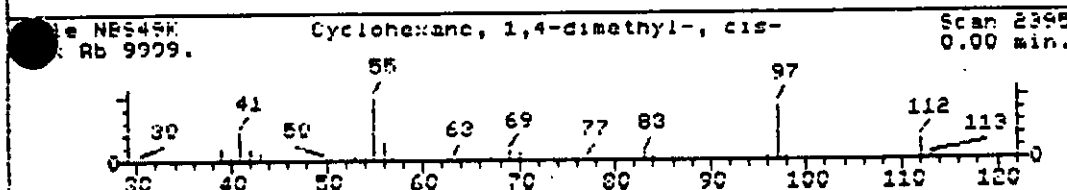
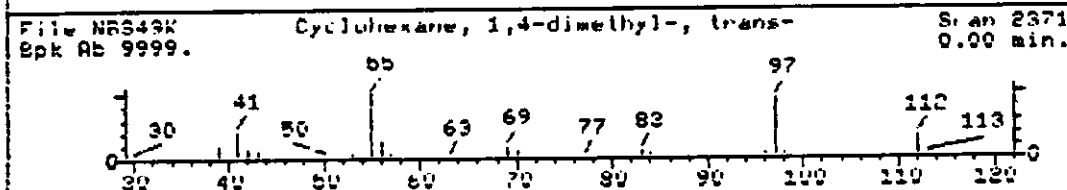
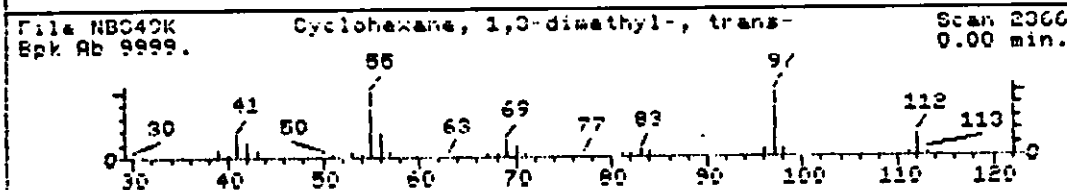
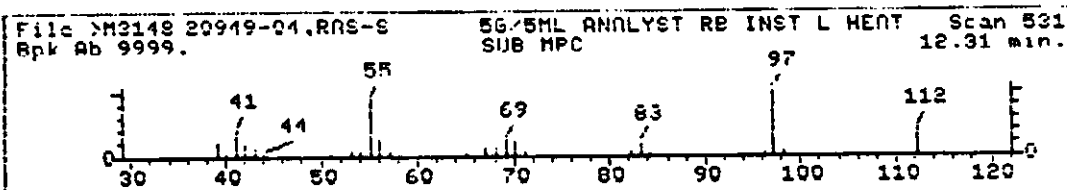
000126

TIC NUMBER: 1

- | | |
|--|-------------|
| 1. Cyclohexane, 1,3-dimethyl-, trans- | 112 C8H16 |
| 2. Cyclohexane, 1,4-dimethyl-, trans- | 112 C8H16 |
| 3. Cyclohexane, 1,4-dimethyl-, cis- | 112 C8H16 |
| 4. 1H-Pyrazole, 4,5-dihydro-3,4,5-trimethyl- | 112 C6H12N2 |
| 5. Acetaldehyde, 2-butenylhydrazone | 112 C6H12N2 |
| 6. Cyclohexane, 1,3-dimethyl-, cis- | 112 C8H16 |

Sample file: >M3148 Spectrum #: 531
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	ILT	%	CUN	C_I	R_IV	
1.	58*	2207036	9103	NBS49K	58	41	2	-1	78	20	25	27
2.	58*	2207047	9106	NBS49K	52	50	2	0	88	18	25	27
3.	52*	624293	9112	NBS49K	51	51	2	-1	100	17	20	15
4.	46*	22591953	9088	NBS49K	50	47	3	0	100	21	17	17
5.	42*	75268074	12008	NBS49K	26	44	3	0	100	24	17	13
6.	38*	638040	9110	NBS49K	42	52	2	0	91	34	16	21



2

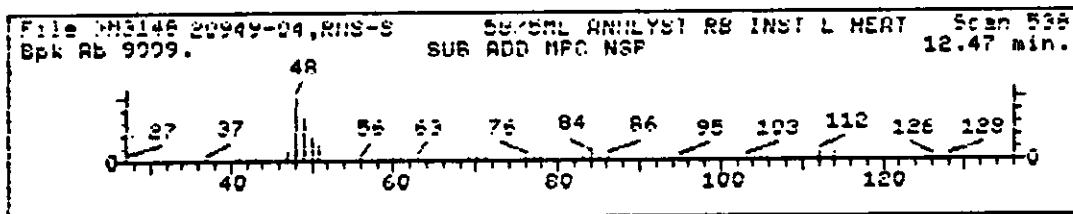
000127

TIC: NUMBER:2

Sample file: >M3148 Spectrum #: 538

No data base entries were retrieved.

unknown



000128

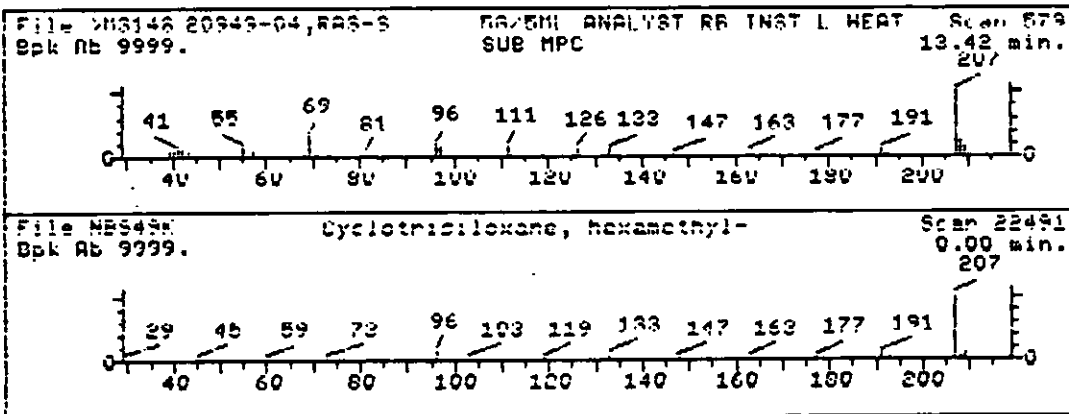
TIC NUMBER:3

1. Cyclotrisiloxane, hexamethyl-

222 L6H18U3S13

Sample file: >M3148 Spectrum #: 579
Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROUT	K	UK	#FLG	TILT	%	CON	C_I	R_IV	
1.	36	541059	28991	NBS49K	63	46	2	U	100	26	14	13



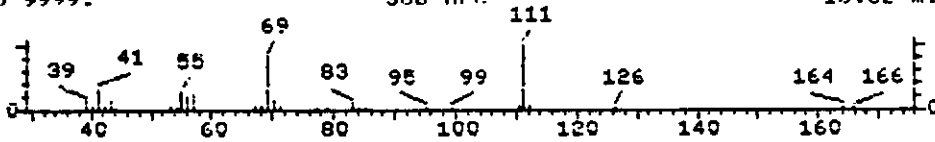
TIC NUMBER: 4

1. Cyclohexane, 1,1,3-trimethyl-	126 C9H18
2. 1-Hexene, 3,3,5-trimethyl-	126 C9H18
3. 2(1H)-Pyrimidinone, 4-amino-	111 C4H5N3O
4. 1-Pentene, 3,3-dimethyl-	98 C7H14
5. Silane, trichloro(2-methyl-2-butenyl)-	202 C5H9Cl3Si
6. 1-Pentyn-3-ol, 3,4-dimethyl-	112 C7H12O

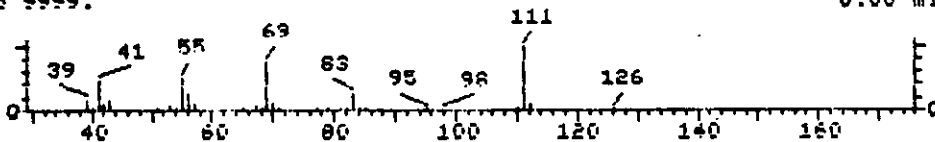
Sample file: >M3148 Spectrum #: 588
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CON #	RUOT	K	OK	#PLG	TILT	%	CUN	C_I	R_IV	
1.	70*	3073663	11838	NBS49K	45	53	3	0	100	6	42	14
2.	25*	13427435	3954	NBS49K	28	65	3	0	82	47	7	13
3.	25*	71307	11806	NBS49K	21	65	2	0	97	42	8	13
4.	20	3404737	3741	NBS49K	41	42	2	0	55	51	5	14
5.	15	18163570	3782	NBS49K	36	47	2	0	62	60	3	12
6.	15*	1482151	3745	NBS49K	23	57	3	0	82	56	3	12

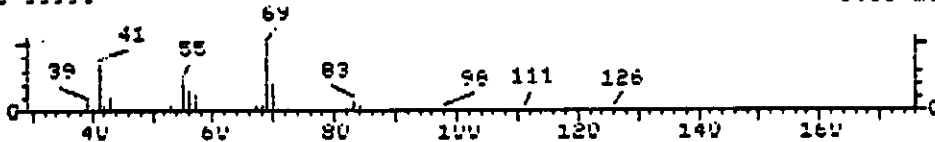
File >M3148 20949-04.RAS-S 50.5ML ANALYST RE INST L HEAT Scan 599
 Bpk Ab 9999. SUB MPC 13.62 min.



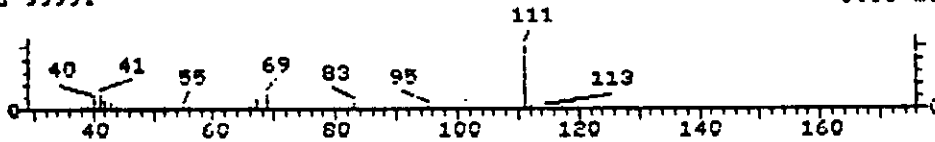
File NBS49K Cyclohexane, 1,1,3-trimethyl- Scan 4037
 Bpk Ab 9999. 0.00 min.



File NBS49K 1-Hexene, 3,3,5-trimethyl- Scan 4062
 Bpk Ab 9999. 0.00 min.



File NBS49K 2(1H)-Pyrimidinone, 4-amino- Scan 2142
 Bpk Ab 9999. 0.00 min.



2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000130

20949-04RE

Lab Name: ENSECO Contract: _____

Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 20949-04RE

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D1890

Level: (low/med) LOW Date Received: 02/15/92

% Moisture: not dec. 9 Date Analyzed: 03/06/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

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

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

CAS NO. COMPOUND 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	11	U
67-64-1	-----Acetone	11	U
75-15-0	-----Carbon Disulfide	11	U
75-35-4	-----1,1-Dichloroethene	11	U
75-34-3	-----1,1-Dichloroethane	11	U
540-59-0	-----1,2-Dichloroethene (total)	11	U
67-66-3	-----Chloroform	11	U
107-06-2	-----1,2-Dichloroethane	11	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	11	U
56-23-5	-----Carbon Tetrachloride	11	U
75-27-4	-----Bromodichloromethane	11	U
78-87-5	-----1,2-Dichloropropane	11	U
10061-01-5	-----cis-1,3-Dichloropropene	11	U
79-01-6	-----Trichloroethene	11	U
124-48-1	-----Dibromochloromethane	11	U
79-00-5	-----1,1,2-Trichloroethane	11	U
71-43-2	-----Benzene	11	U
10061-02-6	-----trans-1,3-Dichloropropene	11	U
75-25-2	-----Bromoform	11	U
108-10-1	-----4-Methyl-2-Pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	11	U
79-34-5	-----1,1,2,2-Tetrachloroethane	11	U
108-88-3	-----Toluene	11	U
108-90-7	-----Chlorobenzene	11	U
100-41-4	-----Ethylbenzene	11	U
100-42-5	-----Styrene	11	U
1330-20-7	-----Xylene (total)	11	U

000131

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-04RE

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-04RE

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: D1890

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 9

Date Analyzed: 03/06/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	15.10	45	JN

QUANT REPORT

000132 Page 1

Operator ID: DUEY1
 Output File: ^D1890::QT
 Data File: >D1890::D2
 Name: 20949-04 ~~PC~~ RAS-5
 Misc: 5G/5ML RE

Quant Rev: 7 Quant Time: 920306 01:16
 Injected at: 920306 00:47
 Dilution Factor: 1.00000
 Instrument ID: D

ANALYST:DAB INST:D HEATED

ID File: IDEPAD::ID
 Title: ID FILE CLP INST. D + THF
 Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *CI01 BROMOCHLOROMETHANE	9.06	128.0	23199	50.00	UG/L	96
2) CS15 1,2-DICHLOROETHANE-D4	10.09	65.0	36678	54.62	UG/L	81
20) *CI10 1,4-DIFLUOROBENZENE	11.01	114.0	92134	50.00	UG/L	100
32) *CI20 CHLOROBENZENE-D5	16.35	117.0	62125	50.00	UG/L	80
33) CS05 TOLUENE-D8	13.59	98.0	75905	52.37	UG/L	97
34) CS10 BROMOFLUOROBENZENE	18.84	95.0	42949	50.87	UG/L	100

* Compound is ISTD

000133

MS data file header from : >D1890::D2

Sample: 20949-047 ^{DOCK 3-11-92} RAS-S Operator: DUEY1 REG. GRP. 3/06/92 0:47
 Misc : 5G/5ML RE ANALYST:DAB INST:D HEATED
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: D
 Method file: SAMMD Tuning file: MTBFBD No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	5G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	NA	%moisture for soil
int_ext_vol	NA	intermediate extract vol/M.L. ext vo
int_ext_vol_u		intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
runfact	1.00	calcd runfactor
surfact	.0050	calcd surr vol

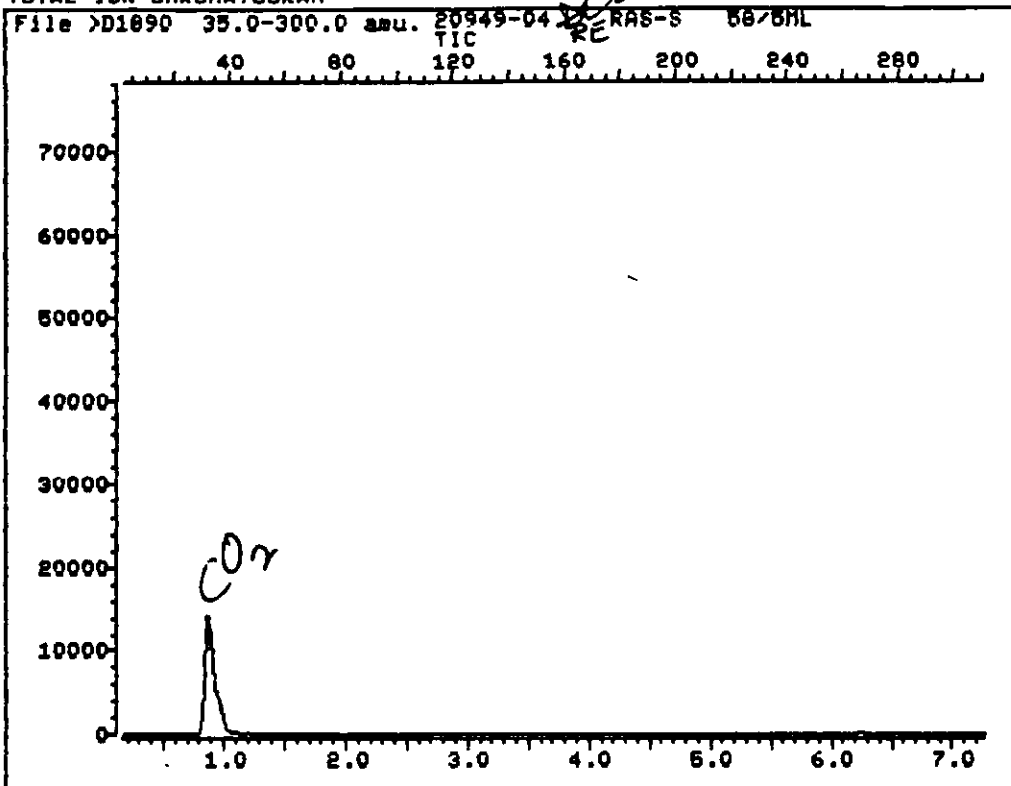
Performance Check: >D1884 Injection Time: 3/ 5/92 18:57
 Sample : >D1890 Injection Time: 3/ 6/92 0:47
 Elapsed Time: 0 Y 0 D 5:50
 Sample: ^D1890 Calibration Stds.: ^D1885,
 Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL

TIC = Tentatively Identified Compound

TC = Target Compound ⁰⁰⁰¹⁸⁴

SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1890::D2
Name: 20949-04 ^{RE} RAS-S
Misc: 5G/5ML

Quant Output File: ^D1890::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

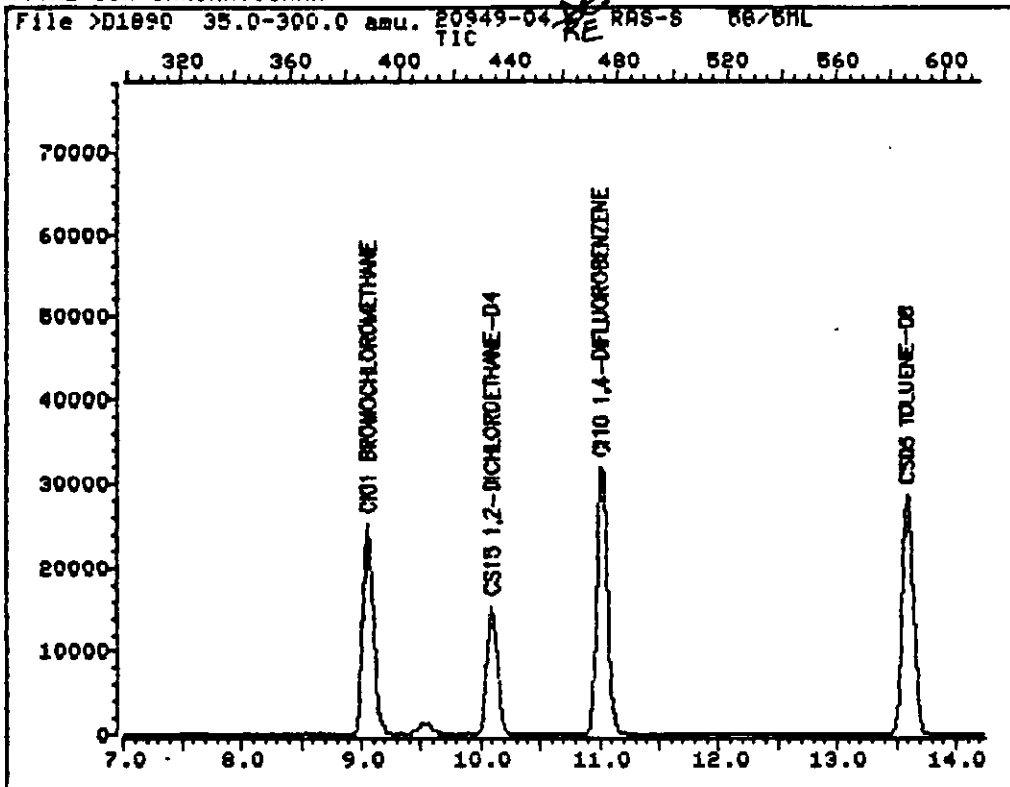
Operator ID: DUEY1
Quant Time : 920306 01:16
Injected at: 920306 00:47

TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

TOTAL ION CHROMATOGRAM



000135

Data File: >D1890::D2
Name: 20949-04 ~~RE~~ *11.11.92* RAS-5
Misc: 5G/5ML *RE*

Quant Output File: ^D1890::QT
Instrument ID: .D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

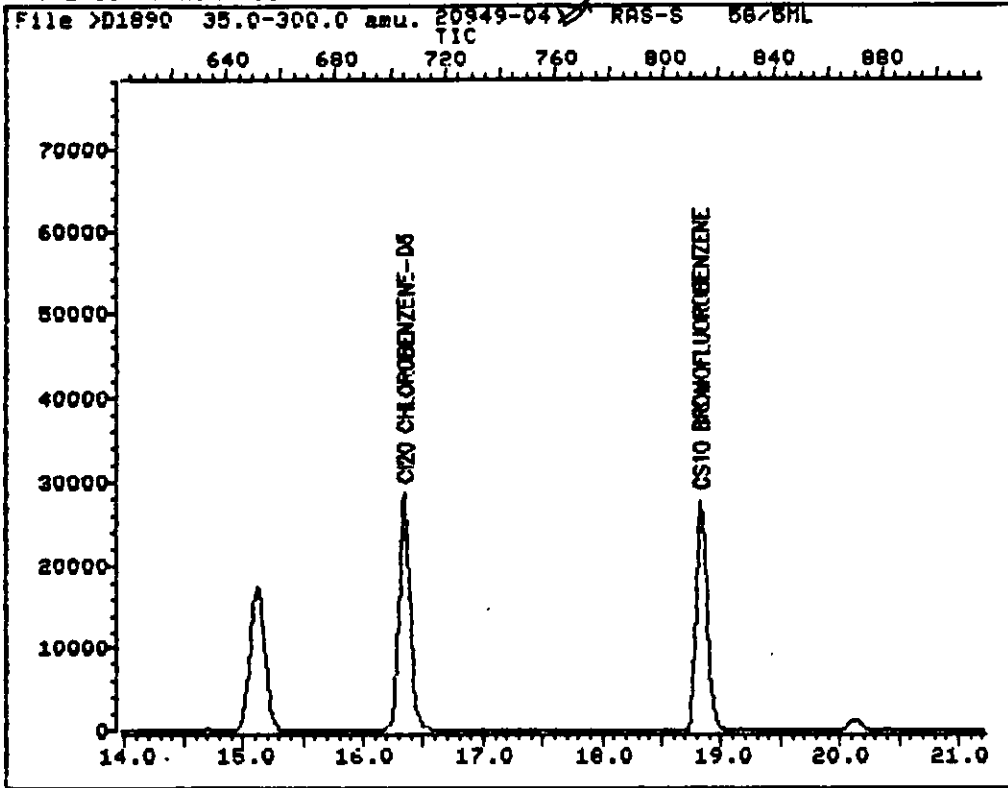
Last Qcal Time: 920305 19:20

Operator ID: DUEY1
Quant Time : 920306 01:16
Injected at: 920306 00:47

TC = Target Compound
SC = Spike Compound

000136

TOTAL ION CHROMATOGRAM



Data File: >D1890::D2
Name: 20949-04 RAS-S
Misc: 5G/5ML RE

Quant Output File: ^D1890::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

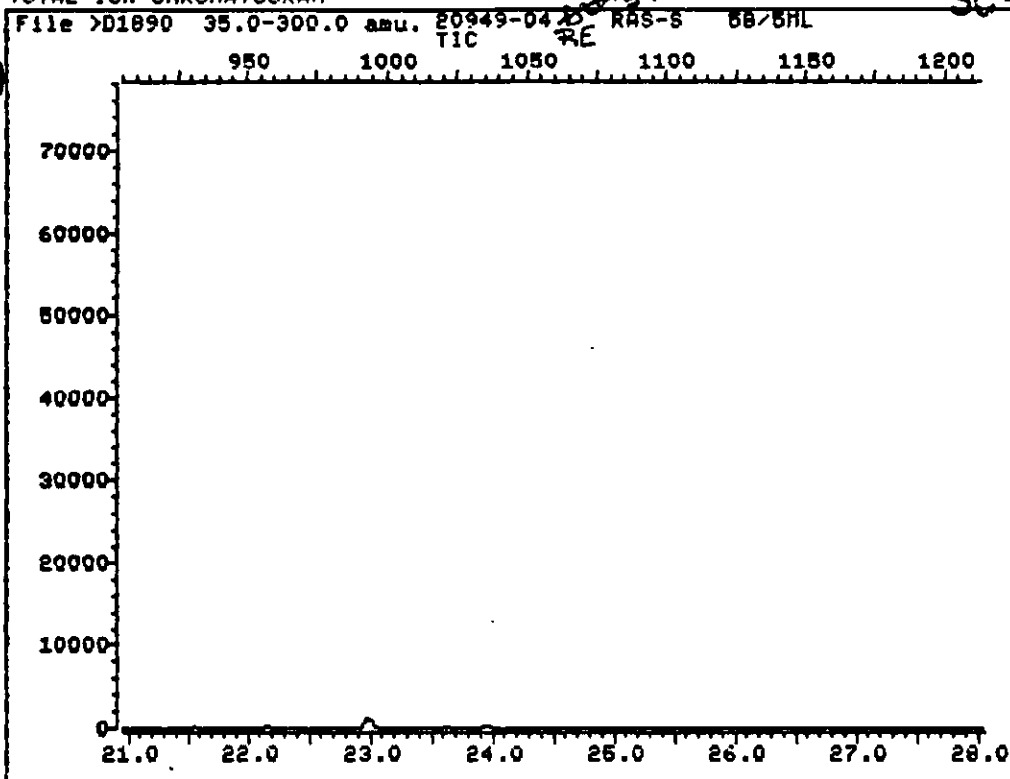
Operator ID: DUEY1
Quant Time : 920306 01:16
Injected at: 920306 00:47

TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound 000137

TOTAL ION CHROMATOGRAM



Data File: >D1890::D2
Name: 20949-04 ^{RE} RAS-S
Misc: 5G/5ML

Quant Output File: ^D1890::QT
Instrument ID: D
ANALYST:DAB INST:D HEATED

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920305 19:20

Operator ID: DUEY1
Quant Time : 920306 01:16
Injected at: 920306 00:47

000138

Diagnostic Quant Report

Data File: >D1890::D2 Injected at: 00:47 03/06/92
 Quant'd : 01:16 03/06/92
 ID File : IDEPAD::ID Calibrated : 14:39 01/08/92

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	9.05	9.06	.00	126.0	23199	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	10.09	10.09	.00	65.0	36678	1.4474	54.62
3) C010 CHLOROMETHANE	1.73	0.00	--	50.0	0	.4592	0.00
4) C020 VINYL CHLORIDE	2.03	0.00	--	62.0	0	.7201	0.00
5) C015 BROMOMETHANE	2.79	0.00	--	94.0	0	1.0817	0.00
6) C025 CHLOROETHANE	3.14	0.00	--	64.0	0	.5569	0.00
7) C045 1,1-DICHLOROETHENE	5.00	0.00	--	96.0	0	1.1222	0.00
8) U015 TRICHLORO-TRIFLUOROE	5.26	0.00	--	151.0	0	1.2659	0.00
9) C040 CARBON DISULFIDE	5.12	0.00	--	76.0	0	2.6222	0.00
10) C035 ACETONE	5.58	0.00	--	43.0	0	.5410	0.00
11) C030 METHYLENE CHLORIDE	6.22	0.00	--	84.0	0	1.6403	0.00
12) UJNK trans-1,2-DICHLOROET	6.73	0.00	--	96.0	0	1.2714	0.00
13) C050 1,1-DICHLOROETHANE	7.56	0.00	--	63.0	0	2.0837	0.00
14) U011 cis-1,2-DICHLOROETHE	8.66	0.00	--	96.0	0	1.3868	0.00
15) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3291	0.00
16) C110 2-BUTANONE	8.92	0.00	--	43.0	0	.8041	0.00
17) U013 TETRAHYDROFURAN	9.22	0.00	--	42.0	0	.4658	0.00
18) C060 CHLOROFORM	9.36	0.00	--	83.0	0	2.6722	0.00
19) C065 1,2-DICHLOROETHANE	10.23	0.00	--	62.0	0	1.5403	0.00
20) *C110 1,4-DIFLUOROBENZENE	11.01	11.01	.00	114.0	92134	1.0000	50.00
21) C115 1,1,1-TRICHLOROETHAN	9.45	0.00	--	97.0	0	.5457	0.00
22) C120 CARBONTETRACHLORIDE	9.72	0.00	--	117.0	0	.4918	0.00
23) C165 BENZENE	10.09	0.00	--	78.0	0	.8419	0.00
24) C150 TRICHLOROETHENE	11.36	0.00	--	130.0	0	.4306	0.00
25) C140 1,2-DICHLOROPROPANE	11.70	0.00	--	63.0	0	.3075	0.00
26) C130 BROMODICHLOROMETHANE	12.35	0.00	--	83.0	0	.6052	0.00
27) C143 cis-1,3-DICHLOROPROP	13.15	0.00	--	75.0	0	.5121	0.00
28) C172 trans-1,3-DICHLOROPR	14.28	0.00	--	75.0	0	.4367	0.00
29) C160 1,1,2-TRICHLOROETHAN	14.56	0.00	--	97.0	0	.3238	0.00
30) C155 CHLORODIBROMOMETHANE	15.25	0.00	--	129.0	0	.5527	0.00
31) C180 BROMOFORM	18.04	0.00	--	173.0	0	.4178	0.00
32) *C120 CHLOROBENZENE-D5	16.30	16.35	.05	117.0	62125	1.0000	50.00
33) CS05 TOLUENE-D8	13.60	13.59	.01	98.0	75905	1.1664	52.37
34) CS10 BROMOFLUOROBENZENE	18.85	18.84	.01	95.0	42949	.6795	50.87
35) C230 TOLUENE	13.72	0.00	--	91.0	0	1.2290	0.00
36) C205 4-METHYL-2-PENTANONE	13.63	0.00	--	43.0	0	.5837	0.00
37) C220 TETRACHLOROETHENE	14.71	0.00	--	164.0	0	.4098	0.00
38) C210 2-HEXANONE	15.27	0.00	--	43.0	0	.3897	0.00
39) C235 CHLOROBENZENE	16.40	0.00	--	112.0	0	.9364	0.00
40) C240 ETHYLBENZENE	16.75	0.00	--	106.0	0	.4382	0.00
41) UJNK M&P-XYLENES	17.00	0.00	--	106.0	0	.6857	0.00
42) U029 O-XYLENE	17.78	0.00	--	106.0	0	.4046	0.00
43) C250 XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.5452	0.00
44) C245 STYRENE	17.83	0.00	--	104.0	0	.8919	0.00
45) C225 1,1,2,2-TETRACHLOROE	19.36	0.00	--	83.0	0	.9949	0.00

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

000139

TIC Internal Standard Report

Data File: >D1890

Maximum separation 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
388.	23199.	7.294 388.	152178. 89.936
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
473.	92134.	2.506 473.	204245. 88.457
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
705.	62125.	3.094 705.	189550. 98.609

Deleting peaks from INT file: UDIR71

Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 10
Number of peaks remaining: 8

Deleting target compounds from INT file: UDIR71

Minimum separation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 8
Number of peaks remaining: ~~2~~ 1

03-10-92

Deleting all but largest peaks from INT file: UDIR71

Maximum number of peaks to keep: 15
Number of peaks: 2
Maximum number of peaks > number of peaks.

000140

Data Reduced by : CAW Date: 3/6/92
Data Reviewed by : N Date: 3/10/92

Data File: >D1890

PE
8/11/92
Enseco TIC Report (page 1)

Sample: 20949-04 RAS-S Run Factor: 1.10
Conditions: 5G/5ML ANALYST:D Analyst: DUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	33.			30.	00-00-0	CO2 @ 31092
2	651.	2		45.	541-05-9	Cyclotrisiloxane, hexamethyl-

000141

Data File: >D1890

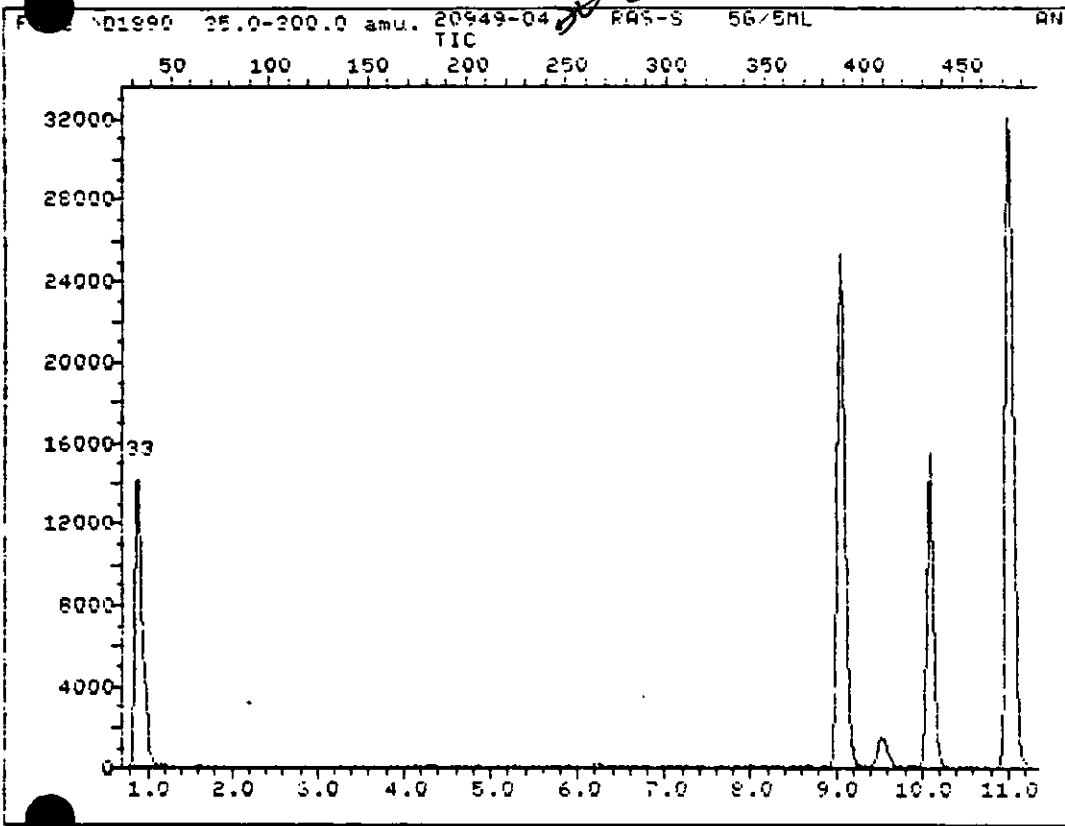
Enseco TIC Report (page 2)

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

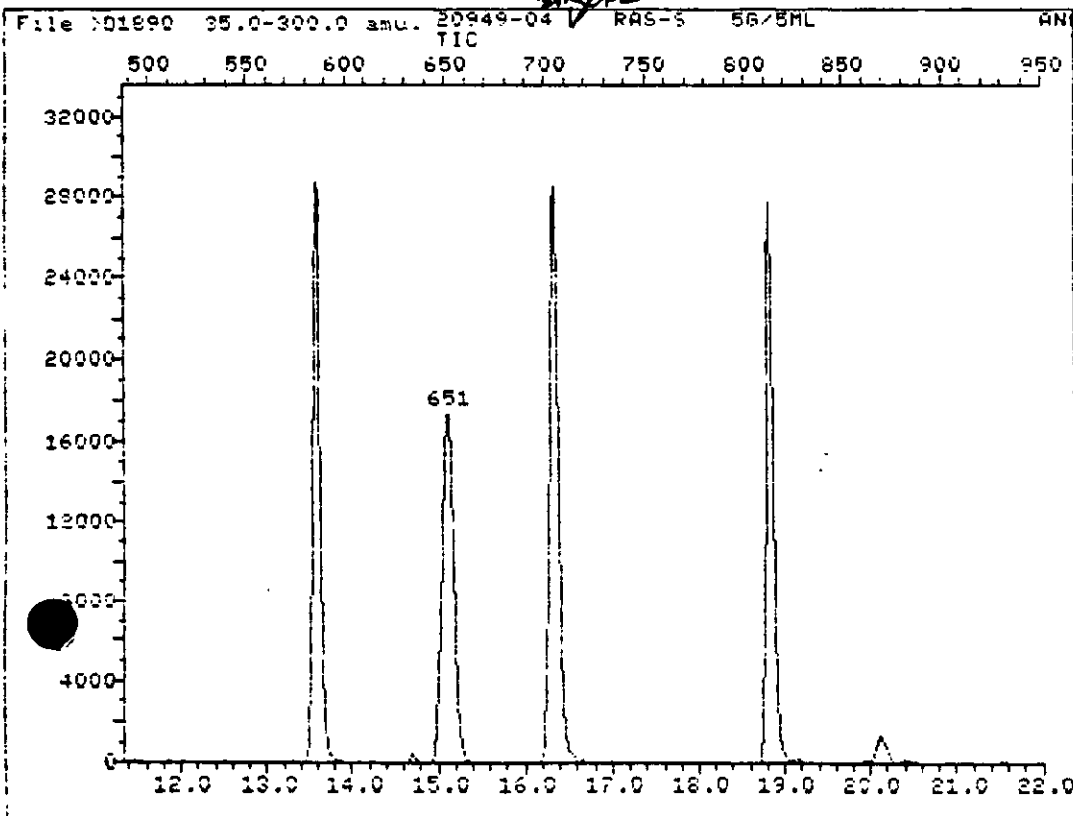
#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	0	0	1	.89	.098	82259	14092	27.027 * 3.1092
2	60	12	3	15.11	.924	154306.	17311.	40.703

000142

RE K3 11-72



5/3/72



TIC NUMBER:2

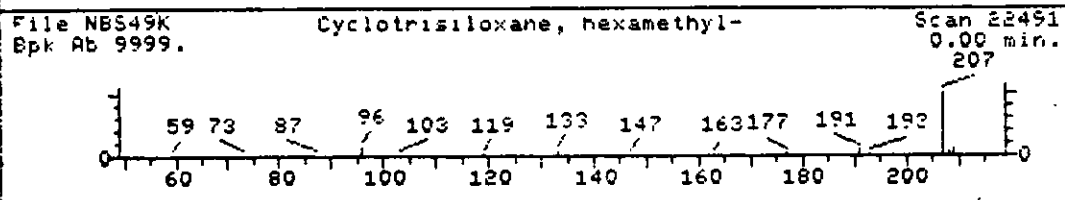
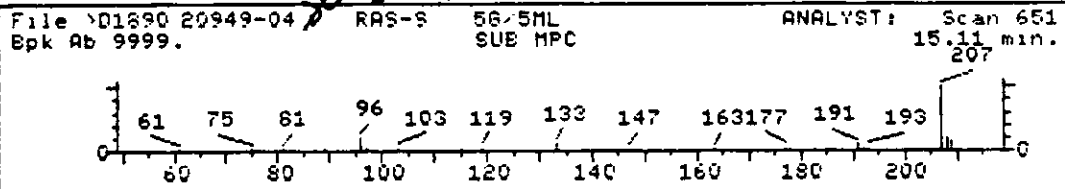
1. Cyclotrisiloxane, hexamethyl-

222 C6H18O3Si3

Sample file: >D1890 Spectrum #: 651
Search speed: 2 Tilting option: S No. of ion ranges searched: 63

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	60	541059	28991	NBS49K	61	48	2	0	100	12	30	12

RE, 11.92



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20949-05

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-05

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: D1764

Level: (low/med) MED

Date Received: 02/15/92

% Moisture: not dec. 17

Date Analyzed: 02/27/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	-----Chloromethane	1500	U
74-83-9	-----Bromomethane	1500	U
75-01-4	-----Vinyl Chloride	1500	U
75-00-3	-----Chloroethane	1500	U
75-09-2	-----Methylene Chloride	1500	U
67-64-1	-----Acetone	1500	U
75-15-0	-----Carbon Disulfide	1500	U
75-35-4	-----1,1-Dichloroethene	1500	U
75-34-3	-----1,1-Dichloroethane	1500	U
540-59-0	-----1,2-Dichloroethene (total)	1500	U
67-66-3	-----Chloroform	1500	U
107-06-2	-----1,2-Dichloroethane	1500	U
78-93-3	-----2-Butanone	1500	U
71-55-6	-----1,1,1-Trichloroethane	1500	U
56-23-5	-----Carbon Tetrachloride	1500	U
75-27-4	-----Bromodichloromethane	1500	U
78-87-5	-----1,2-Dichloropropane	1500	U
10061-01-5	-----cis-1,3-Dichloropropene	1500	U
79-01-6	-----Trichloroethene	1500	U
124-48-1	-----Dibromochloromethane	1500	U
79-00-5	-----1,1,2-Trichloroethane	1500	U
71-43-2	-----Benzene	1500	U
10061-02-6	-----trans-1,3-Dichloropropene	1500	U
75-25-2	-----Bromoform	1500	U
108-10-1	-----4-Methyl-2-Pentanone	1500	U
591-78-6	-----2-Hexanone	1500	U
127-18-4	-----Tetrachloroethene	1500	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1500	U
108-88-3	-----Toluene	1500	U
108-90-7	-----Chlorobenzene	1500	U
100-41-4	-----Ethylbenzene	250	J
100-42-5	-----Styrene	1500	U
1330-20-7	-----Xylene (total)	2400	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. **000145**

20949-05

Lab Name: ENSECO Contract: _____
Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 20949-05
Sample wt/vol: 4.0 (g/mL) G Lab File ID: D1764
Level: (low/med) MED Date Received: 02/15/92
% Moisture: not dec. 17 Date Analyzed: 02/27/92
GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0
Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

Number TICs found: 6 CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 592-27-8	Heptane, 2-methyl-	13.15	3900	JN
2. 765-43-5	Ethanone, 1-cyclopropyl-	13.44	2300	JN
3. 2213-23-2	Heptane, 2,4-dimethyl-	14.29	7300	JN
4. 75-83-2	Butane, 2,2-dimethyl-	15.22	1300	JN
5. 285-76-7	1-Azabicyclo[3.1.0]hexane	15.37	3600	JN
6. 624-83-9	Methane, isocyanato-	20.25	750	JN

000146

QUANT REPORT

Page 1

Operator ID: DUEY1
 Output File: ^D1764::QT
 Data File: >D1764::D2
 Name: 20949-05,U,EPA,
 Misc: CLP,20949,,05,M,S,

Quant Rev: 7 Quant Time: 920227 22:25
 Injected at: 920227 21:56
 Dilution Factor: 1.00000
 Instrument ID: D
 100UL/5ML/100%/4G/10ML

ID File: IDEPAD::ID
 Title: ID FILE CLP INST. D + THF
 Last Calibration: 920108 14:39

Last Qual Time: 920227 10:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 BROMOCHLOROMETHANE	9.13	128.0	15910	50.00	UG/L	95
2)	CS15 1,2-DICHLOROETHANE-D4	10.17	65.0	25154	45.54	UG/L	77
10)	C035 ACETONE	5.68	43.0	429	6.24	UG/L	100
20)	*CI10 1,4-DIFLUOROBENZENE	11.09	114.0	63606	50.00	UG/L	100
32)	*CI20 CHLOROBENZENE-D5	16.38	117.0	47732	50.00	UG/L	85
33)	CS05 TOLUENE-D8	13.64	98.0	59030	49.44	UG/L	94
34)	CS10 BROMOFLUOROBENZENE	18.87	95.0	29165	44.96	UG/L	100
35)	C230 TOLUENE	13.78	91.0	856	.770	UG/L	97
40)	C240 ETHYLBENZENE	16.78	106.0	665	1.63	UG/L	96
41)	UJNK M&P-XYLENES	17.03	106.0	6404	12.61	UG/L	87
42)	U029 O-XYLENE	17.79	106.0	1589	3.27	UG/L	89

* Compound is ISTD

data file header from : >D1764::D2

Sample: 20949-05,U,EPA, Operator: DUEY1 REG. GRP. 2/27/92 21:56
Misc : CLP,20949,,05,M,S, 100UL/5ML/100%/4G/10ML
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: 0
Method file: SAMMD Tuning file: MTBFBD No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

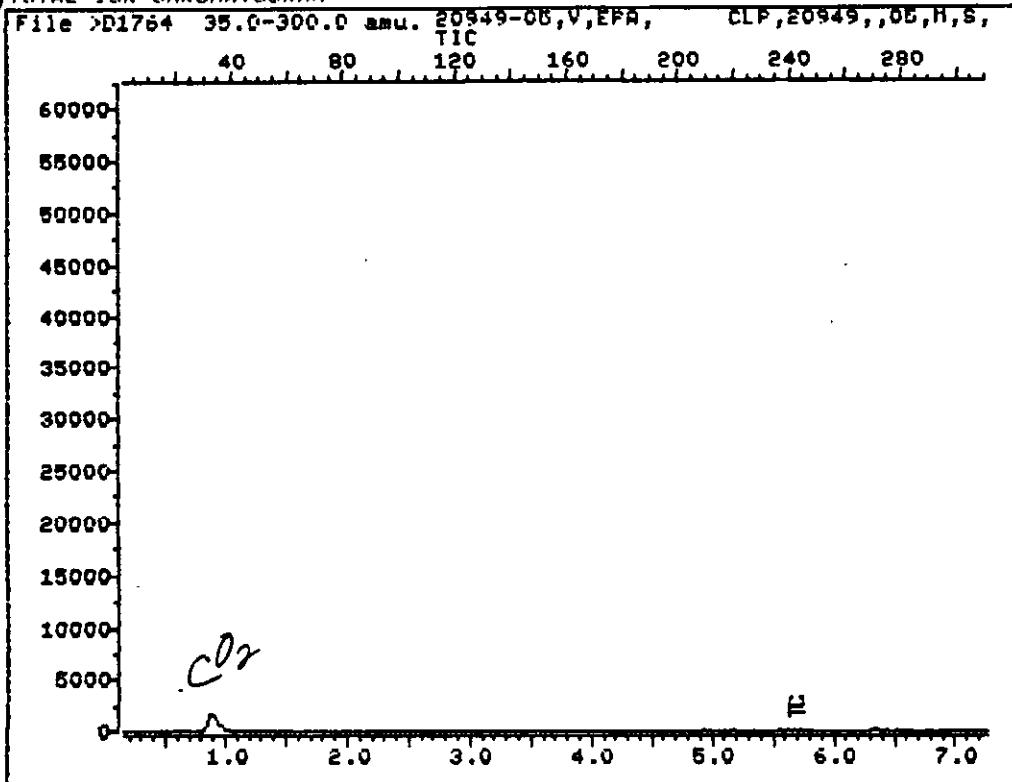
CONCENTRATION DILUTION INFORMATION

Performance Check: >D1750 Injection Time: 2/27/92 10:32
Sample : >D1764 Injection Time: 2/27/92 21:56
Elapsed Time: 0 Y 0 D 11:24
Sample: ^D1764 Calibration Stds.: ^D1751,

TIC - Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

000148

TOTAL ION CHROMATOGRAM



Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,

Quant Output File: ^D1764::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 22:25
Injected at: 920227 21:56

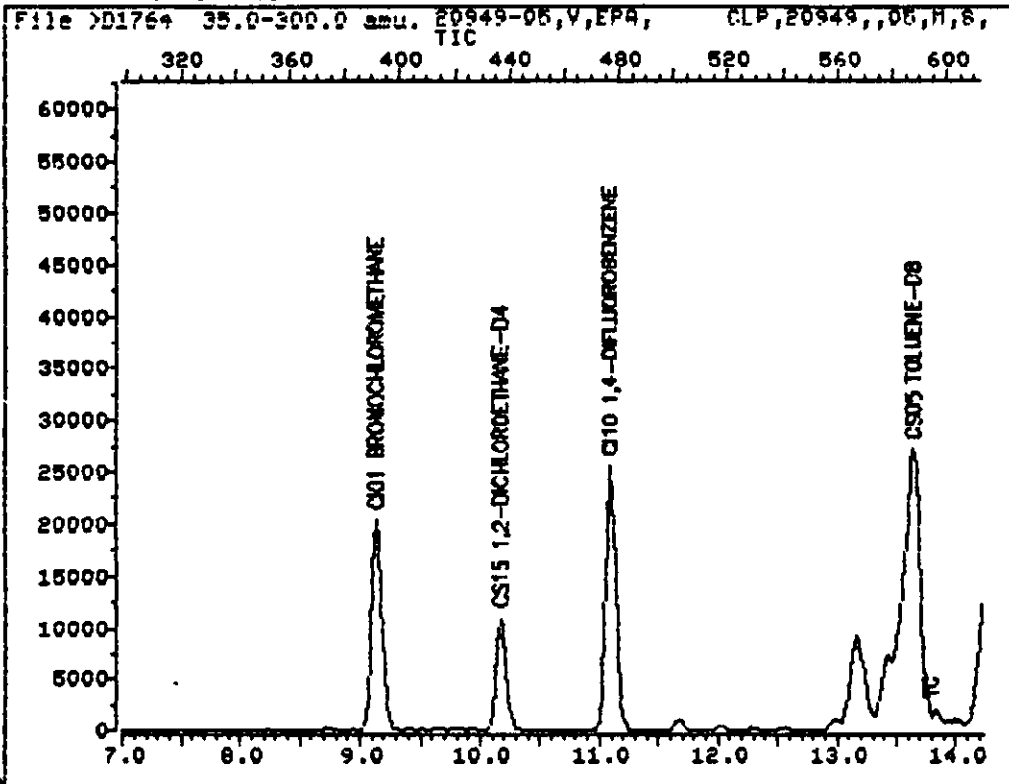
000149

TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,

Quant Output File: ^D1764::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML

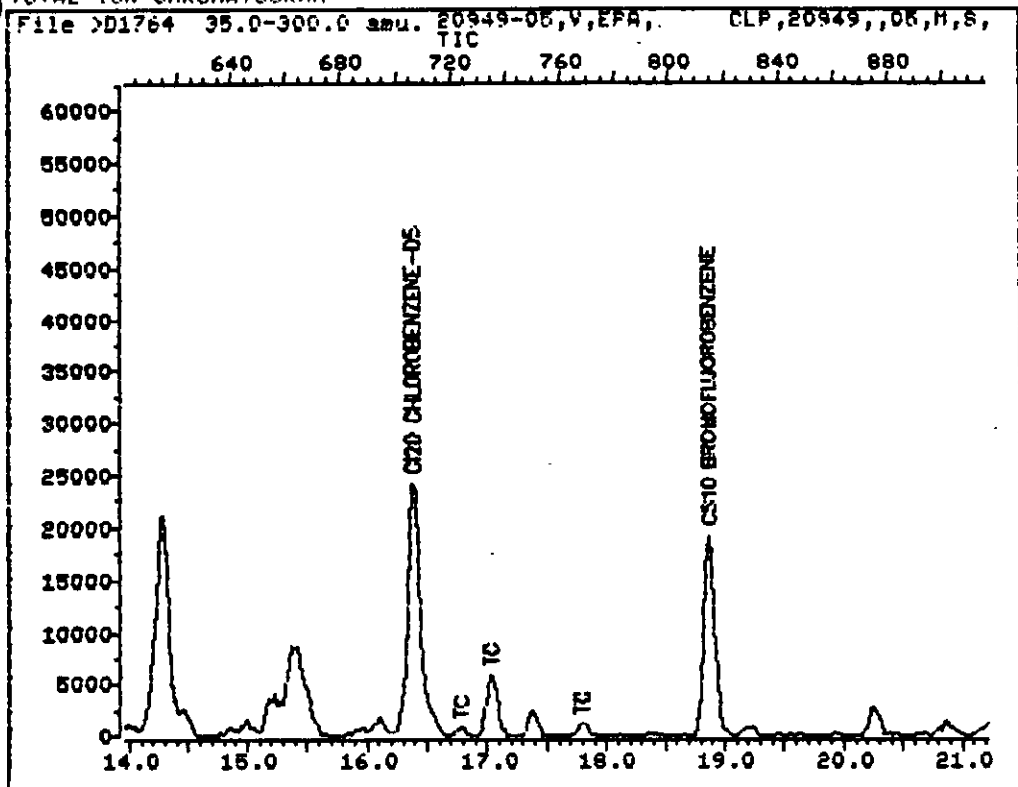
Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 22:25
Injected at: 920227 21:56

TIC = Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,

Quant Output File: ^D1764::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qual Time: 920227 10:56

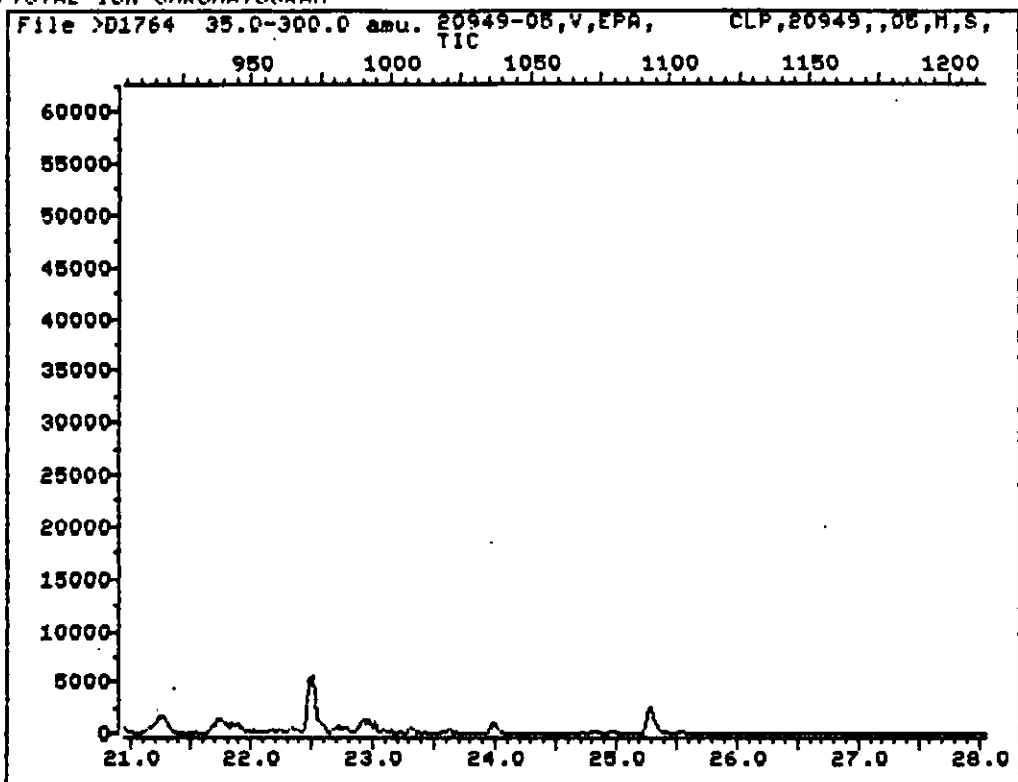
Operator ID: DUEY1
Quant Time : 920227 22:25
Injected at: 920227 21:56

TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

TOTAL ION CHROMATOGRAM



000151

Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,

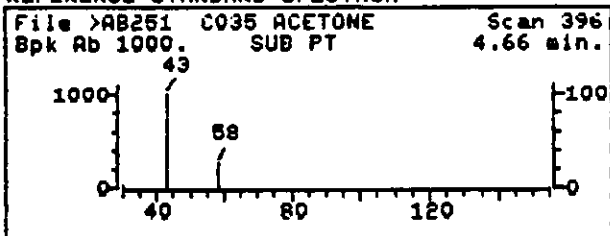
Quant Output File: ^D1764::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

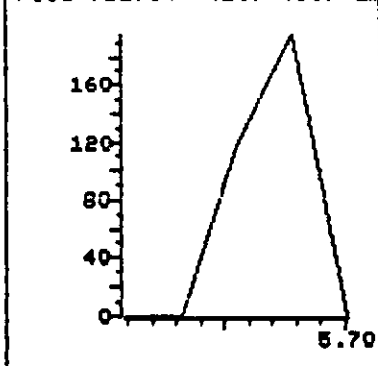
Last Qcal Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 22:25
Injected at: 920227 21:56

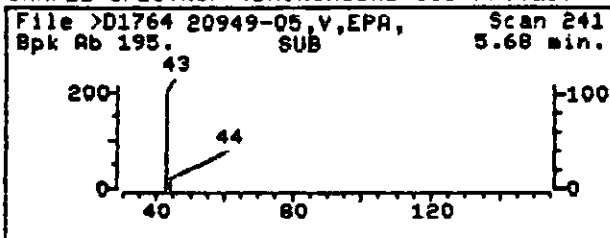
REFERENCE STANDARD SPECTRUM



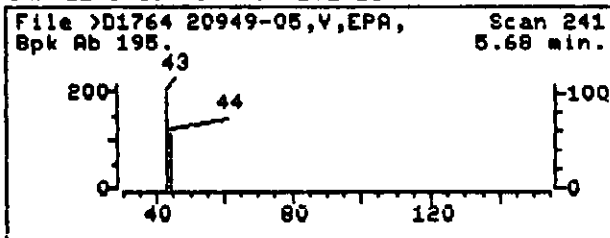
File >D1764 42.7-43.7 min



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



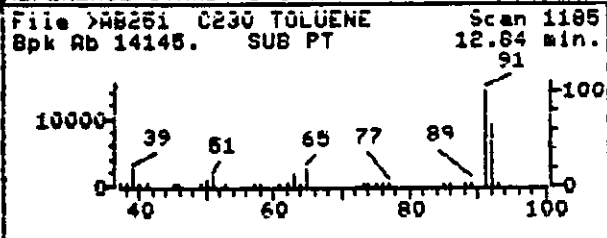
Data File: >D1764::D2
Name: 20949-05,V,EPA,
Misc: CLP,20949,,05,M,S,
Quant Time: 920227 22:25
Injected at: 920227 21:56
Last Qcal Time: 920227 10:56

Quant Output File: ^D1764::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

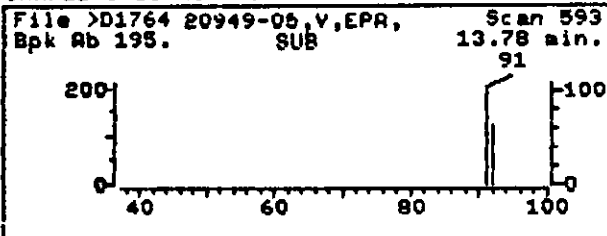
Compound No : 10
Compound Name : C035 ACETONE
Scan Number : 241
Retention Time: 5.68 min.
Quant Ion : 43.0
Area : 429
Concentration : 6.24 UG/L
q-value : 100

NO

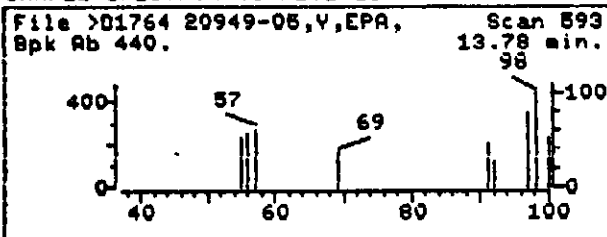
REFERENCE STANDARD SPECTRUM



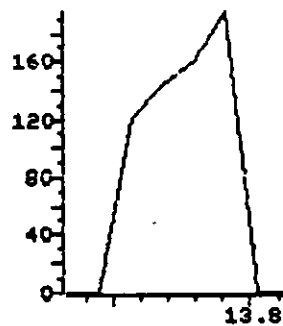
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



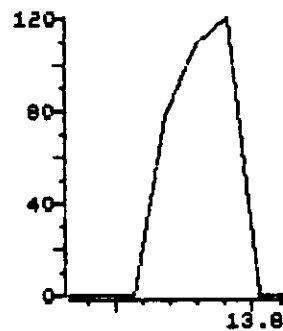
SAMPLE SPECTRUM (UNALTERED)



File >D1764 90.7-91.7 am



File >D1764 91.7-92.7 am



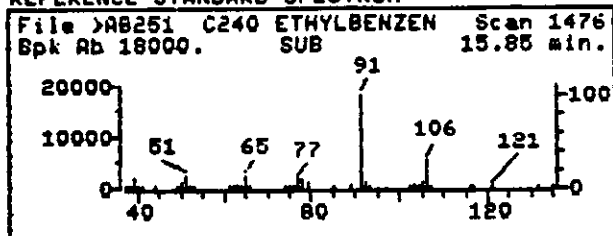
Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,
Quant Time: 920227 22:25
Injected at: 920227 21:56
Last Qcal Time: 920227 10:56

Quant Output File: ^D1764::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

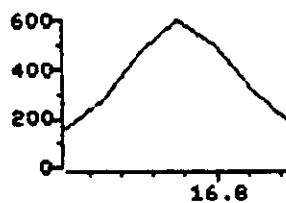
Compound No : 35
Compound Name : C230 TOLUENE
Scan Number : 593
Retention Time: 13.78 min.
Quant Ion : 91.0
Area : 856
Concentration : .770 UG/L
q-value : 97

BDL

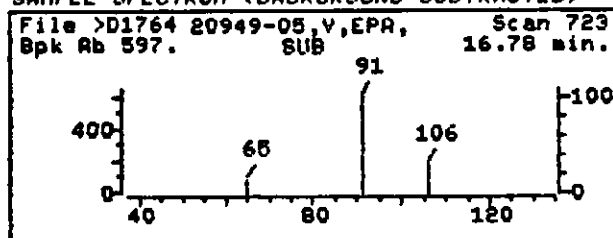
REFERENCE STANDARD SPECTRUM



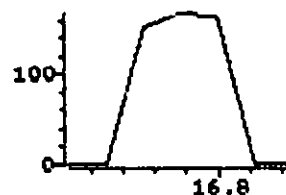
File >D1764 90.7-91.7 am



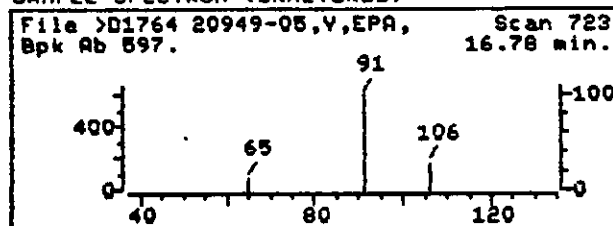
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



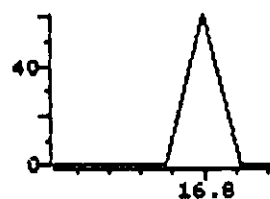
File >D1764 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)



File >D1764 76.7-77.7 am

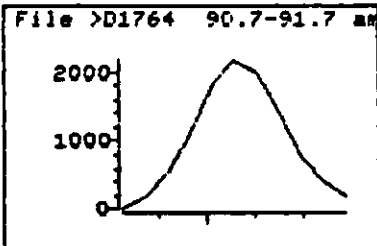
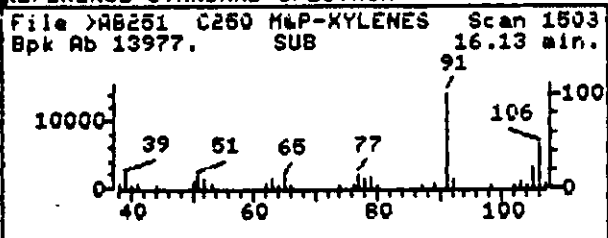


Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,
Quant Time: 920227 22:25
Injected at: 920227 21:56
Last Qcal Time: 920227 18:56

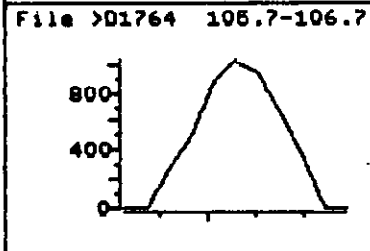
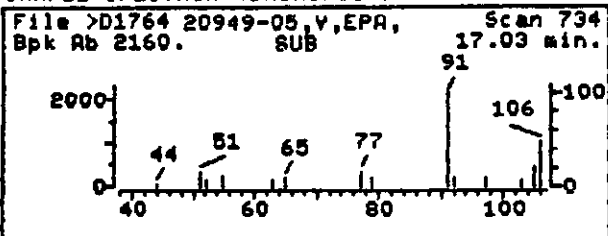
Quant Output File: ^D1764::QT
Instrument ID: 0
100UL/5ML/100%/4G/10ML
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 40
Compound Name : C240 ETHYLBENZENE
Scan Number : 723
Retention Time: 16.78 min.
Quant Ion : 106.0
Area : 665
Concentration : 1.63 UG/L
q-value : 96

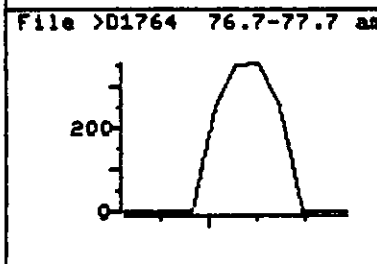
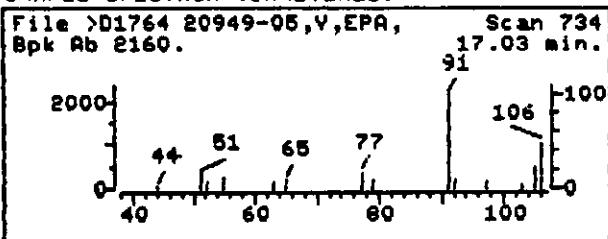
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

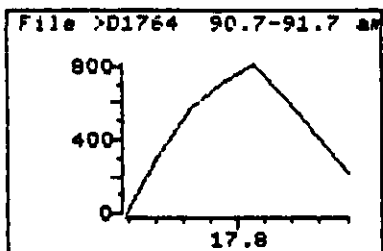
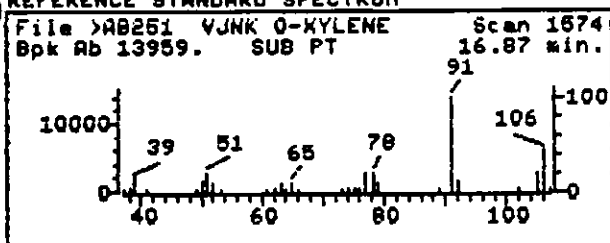


Data File: >D1764::D2
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S,
Quant Time: 920227 22:25
Injected at: 920227 21:56
Last Qcal Time: 920227 10:56

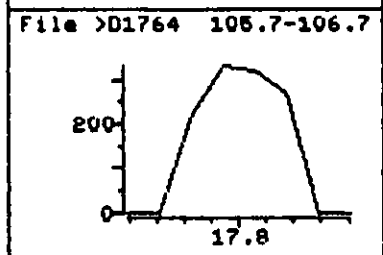
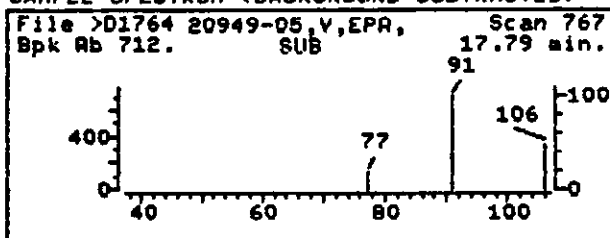
Quant Output File: ^D1764::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 41
Compound Name : UJNK M&P-XYLENES
Scan Number : 734
Retention Time: 17.03 min.
Quant Ion : 106.0
Area : 6404
Concentration : 12.61 UG/L
q-value : 87

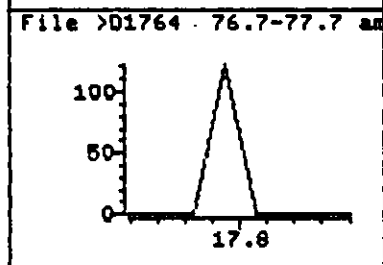
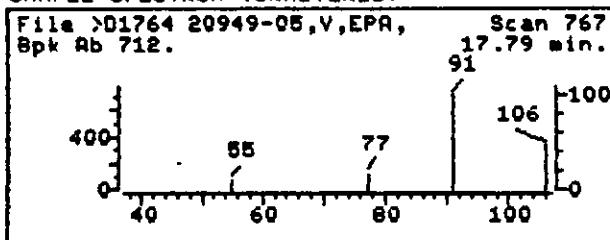
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D1764::D2
Name: 20949-05,V,EPA,
Misc: CLP,20949,,05,M,S, 100UL/5ML/100%/4G/10ML
Quant Time: 920227 22:25
Injected at: 920227 21:56
Last Qcal Time: 920227 10:56

Quant Output File: ^D1764::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 42
Compound Name : U029 O-XYLENE
Scan Number : 767
Retention Time: 17.79 min.
Quant Ion : 106.0
Area : 1589
Concentration : 3.27 UG/L
q-value : 89

Diagnostic Quant Report

Date File: >D1764::D2 Injected at: 21:56 02/27/92
 Quant'd : 22:25 02/27/92
 ID File : IDEPAD::ID Calibrated : 14:39 01/08/92

Compound	- R.T. Info -			Ion	Area	RF	Conc.
	Pred	Found	Dif				
1) *C101 BROMOCHLOROMETHANE	9.08	9.13	.06	128.0	15910	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	10.17	10.17	.01	65.0	25154	1.7357	45.54
3) C010 CHLOROMETHANE	1.74	0.00	--	50.0	0	1.0291	0.00
4) C020 VINYL CHLORIDE	2.04	0.00	--	62.0	0	1.2378	0.00
5) C015 BROMOMETHANE	2.81	0.00	--	94.0	0	1.3246	0.00
6) C025 CHLOROETHANE	3.18	0.00	--	64.0	0	.8416	0.00
7) C045 1,1-DICHLOROETHENE	5.08	0.00	--	96.0	0	1.3207	0.00
8) U015 TRICHLORO-TRIFLUOROE	5.33	0.00	--	151.0	0	1.1911	0.00
9) C040 CARBON DISULFIDE	5.19	0.00	--	76.0	0	2.3987	0.00
10) C035 ACETONE	5.56	5.68	.11	43.0	429	.2160	6.24
11) C030 METHYLENE CHLORIDE	6.28	0.00	--	84.0	0	1.7748	0.00
12) UJNK trans-1,2-DICHLOROET	6.82	0.00	--	96.0	0	1.3047	0.00
13) C050 1,1-DICHLOROETHANE	7.63	0.00	--	63.0	0	2.7955	0.00
14) U011 cis-1,2-DICHLOROETHE	8.74	0.00	--	96.0	0	1.4126	0.00
15) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3587	0.00
16) C110 2-BUTANONE	8.95	0.00	--	43.0	0	.4131	0.00
17) U013 TETRAHYDROFURAN	9.27	0.00	--	42.0	0	.1945	0.00
18) C060 CHLOROFORM	9.43	0.00	--	83.0	0	3.0091	0.00
19) C065 1,2-DICHLOROETHANE	10.31	0.00	--	62.0	0	1.8182	0.00
20) *C110 1,4-DIFLUOROBENZENE	11.06	11.09	.03	114.0	63606	1.0000	50.00
21) C115 1,1,1-TRICHLOROETHAN	9.52	0.00	--	97.0	0	.5218	0.00
22) C120 CARBONTETRACHLORIDE	9.80	0.00	--	117.0	0	.4951	0.00
23) C165 BENZENE	10.17	0.00	--	78.0	0	.8941	0.00
24) C150 TRICHLOROETHENE	11.41	0.00	--	130.0	0	.3791	0.00
25) C140 1,2-DICHLOROPROPANE	11.78	0.00	--	63.0	0	.3892	0.00
26) C130 BROMODICHLOROMETHANE	12.41	0.00	--	83.0	0	.6236	0.00
27) C143 cis-1,3-DICHLOROPROP	13.24	0.00	--	75.0	0	.5411	0.00
28) C172 trans-1,3-DICHLOROPR	14.37	0.00	--	75.0	0	.4289	0.00
29) C160 1,1,2-TRICHLOROETHAN	14.65	0.00	--	97.0	0	.3033	0.00
30) C155 CHLORODIBROMOMETHANE	15.32	0.00	--	129.0	0	.4809	0.00
31) C180 BROMOFORM	18.11	0.00	--	173.0	0	.2986	0.00
32) *C120 CHLOROBENZENE-D5	16.35	16.38	.03	117.0	47732	1.0000	50.00
33) CS05 TOLUENE-D8	13.66	13.64	.02	98.0	59030	1.2507	49.44
34) CS10 BROMOFLUOROBENZENE	18.85	18.87	.02	95.0	29165	.6795	44.96
35) C230 TOLUENE	13.78	13.78	.01	91.0	856	1.1651	.77
36) C205 4-METHYL-2-PENTANONE	13.66	0.00	--	43.0	0	.3933	0.00
37) C220 TETRACHLOROETHENE	14.75	0.00	--	164.0	0	.3423	0.00
38) C210 2-HEXANONE	15.28	0.00	--	43.0	0	.2348	0.00
39) C235 CHLOROBENZENE	16.43	0.00	--	112.0	0	.8381	0.00
40) C240 ETHYLBENZENE	16.75	16.78	.02	106.0	665	.4270	1.63
40)D C240 ETHYLBENZENE	16.75	17.03	.28	106.0	6404	.4270	15.71
41)D UJNK M&P-XYLENES	17.01	16.78	.23	106.0	665	.5320	1.31
41) UJNK M&P-XYLENES	17.01	17.03	.02	106.0	6404	.5320	12.61
42) U029 O-XYLENE	17.79	17.79	.00	106.0	1589	.5086	3.27
43) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	7993	.5203	16.09
44) C245 STYRENE	17.84	0.00	--	104.0	0	.8082	0.00
45) C225 1,1,2,2-TETRACHLOROE	19.36	0.00	--	83.0	0	.7925	0.00

* - Compound is an Internal Standard

000158

D - Compound Qdel'ed

TIC Internal Standard Report

Data File: >D1764

Maximum separation 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
391.	15910.	7.294 391. 124011.	106.867
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
476.	63606.	2.506 476. 153077.	96.031
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
706.	47732.	3.094 706. 186505.	126.281

Deleting peaks from INT file: UDIR71

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 15
 Number of peaks remaining: 13

Deleting target compounds from INT file: UDIR71

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 13
 Number of peaks remaining: 6

Deleting all but largest peaks from INT file: UDIR71

Maximum number of peaks to keep: 15
 Number of peaks: 6
 Maximum number of peaks > number of peaks.

000160

Data Reduced by : CAW Date: 3/1/92
Date Reviewed by : Date:

Data File: >D1764

Enseco TIC Report (page 1)

Sample: 20949-05,U,EPA, Run Factor: 151.
Conditions: CLP,20949,,05,M,S, 100UL/5M Analyst: DUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	566.	2		3900.	592-27-8	Heptane, 2-methyl-
2	578.	1		2300.	765-43-5	Ethanone, 1-cyclopropyl-
3	615.	2		7300.	2213-23-2	Heptane, 2,4-dimethyl-
4	656.	1		1300.	75-83-2	Butane, 2,2-dimethyl-
5	662.	1		3600.	285-76-7	1-Azabicyclo[3.1.0]hexane
6	874.	1		760.	624-83-9	Methane, isocyanato-

000161

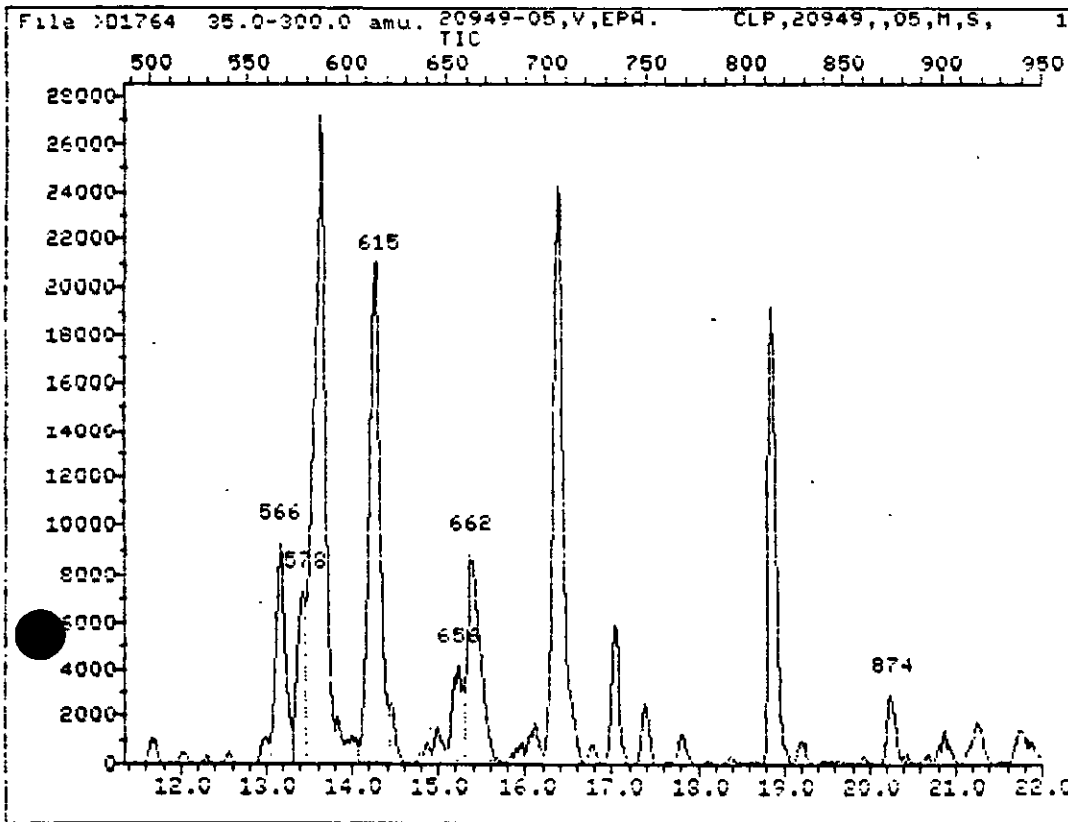
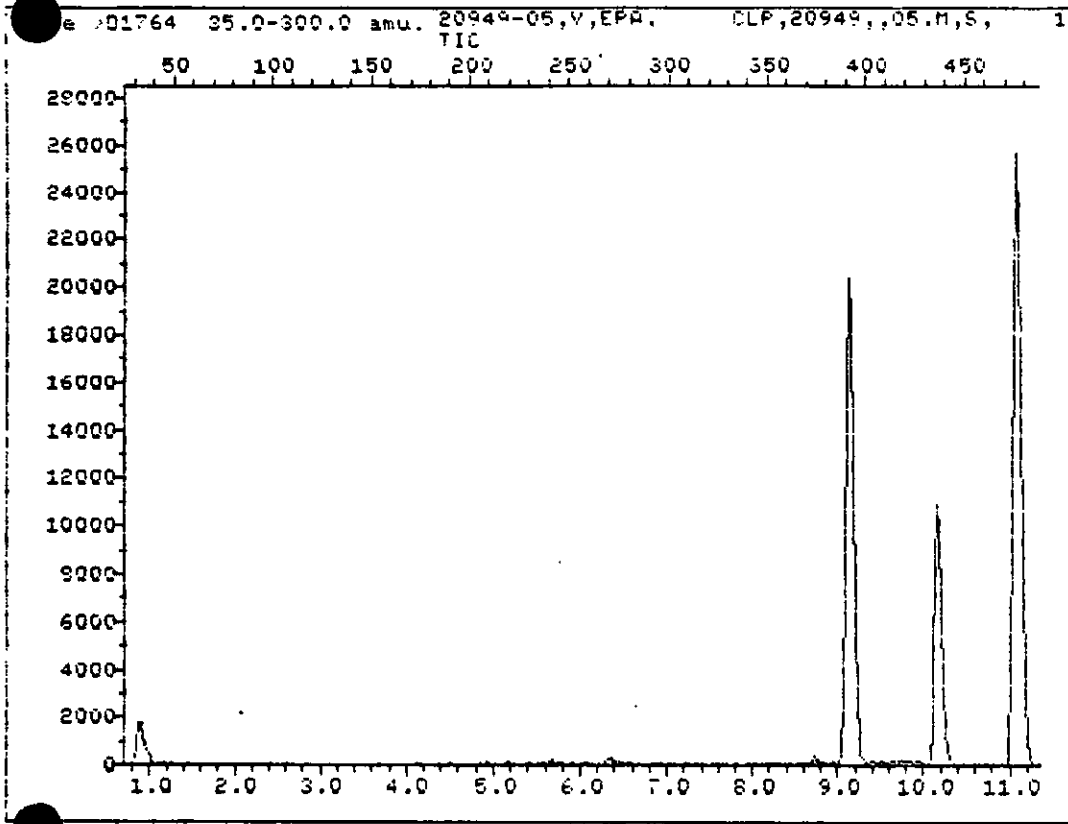
Data File: >D1764

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	60	11	2	13.16	1.187	78786.	9233.	25.734
2	15	58	2	13.44	1.212	45831.	7291.	14.970
3	70	8	3	14.29	.872	179744.	21024.	48.187
4	43	25	3	15.23	.930	32916.	3923.	8.824
5	25	45	3	15.37	.938	89239.	8576.	23.924
6	31	35	3	20.25	1.236	18704.	2886.	5.014

000162



TIC NUMBER:1

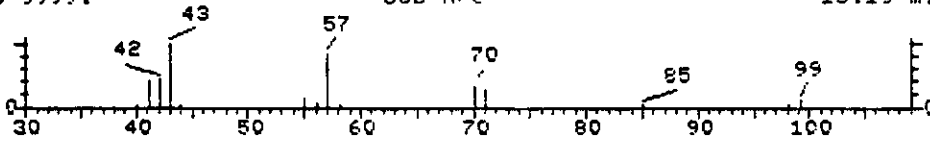
1. Heptane, 2-methyl-
2. Propane, 2-methyl-
3. Pyrrolidine

114 C8H18
58 C4H10
71 C4H9N

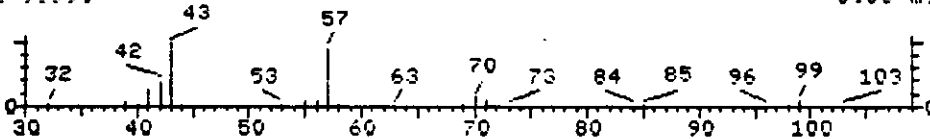
Sample file: >D1764 Spectrum #: 566
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60	592278	9677	NBS49K	48	43	2	0	91	11	30	15
2.	25*	75285	248	NBS49K	27	42	0	0	94	50	7	19
3.	25*	123751	3822	NBS49K	20	68	2	0	88	47	7	13

File >D1764 20949-05.V.EPA. CLP,20949..05.M,S. 100UL/5 Scan 566
Bpk Ab 9999. SUB MPC 13.15 min.

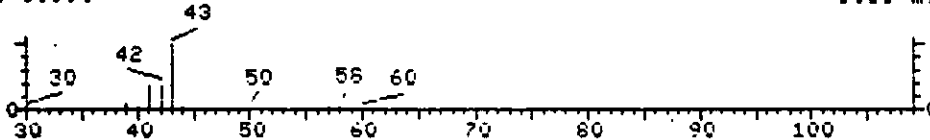


File NBS49K Heptane, 2-methyl- Scan 2720
Bpk Ab 9999. 0.00 min.

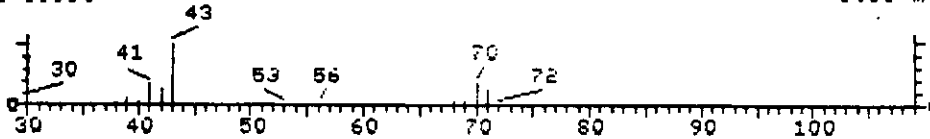


2

File NBS49K Propane, 2-methyl- Scan 97
Bpk Ab 9999. 0.00 min.



File NBS49K Pyrrolidine Scan 236
Bpk Ab 9999. 0.00 min.



000164

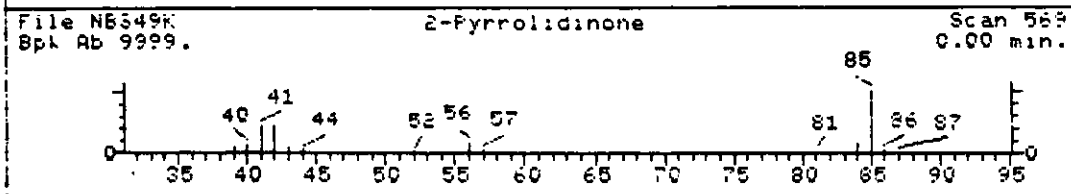
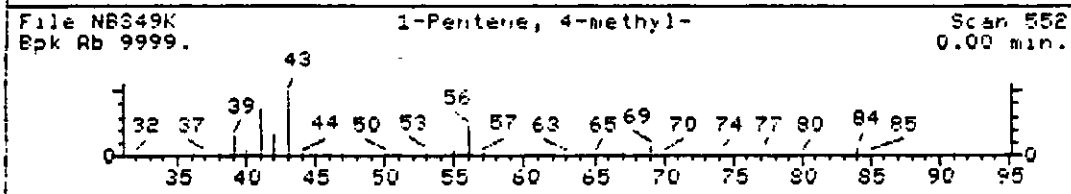
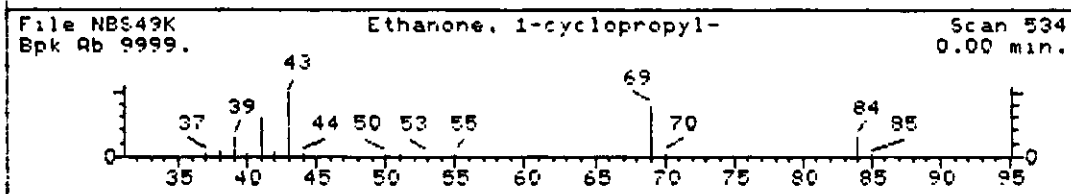
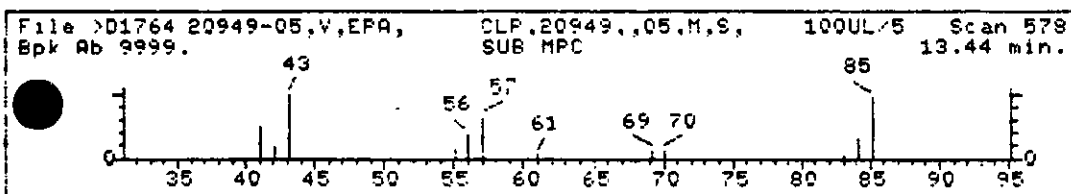
TIC NUMBER:2

1. Ethanone, 1-cyclopropyl-
2. 1-Pentene, 4-methyl-
3. 2-Pyrrolidinone

84 C5H8O
84 C6H12
85 C4H7NO

Sample file: >D1764 Spectrum #: 578
Search speed: 2 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	15*	765435	6286	NBS49K	24	56	3	0	86	58	3	12
2.	15*	691372	1017	NBS49K	26	59	3	0	70	58	3	13
3.	15*	616455	6510	NBS49K	23	68	3	0	94	60	3	12



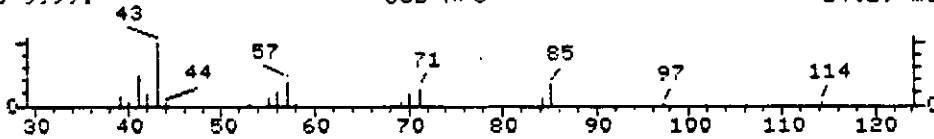
TIC NUMBER:3

- | | |
|-----------------------------|-----------|
| 1. Heptane, 2,4-dimethyl- | 128 C9H20 |
| 2. Octane | 114 C8H18 |
| 3. Hexane, 2,3,4-trimethyl- | 128 C9H20 |
| 4. Heptane, 3-methyl- | 114 C8H18 |
| 5. Hexane, 3-ethyl- | 114 C8H18 |
| 6. Hexane, 2,4-dimethyl- | 114 C8H18 |

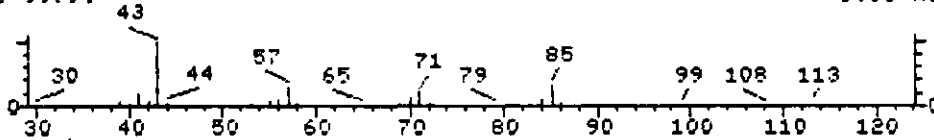
Sample file: >D1764 Spectrum #: 615
 Search speed: 2 Tilting option: S No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70	2213232	NBS49K	49	38	2	0	100	8	42	17
2.	59*	111659	NBS49K	66	23	2	0	126	39	21	56
3.	52	921471	NBS49K	51	39	2	0	78	20	20	17
4.	34*	589811	NBS49K	31	44	1	0	46	33	12	17
5.	34*	619998	NBS49K	34	56	2	0	99	34	12	17
6.	31*	589435	NBS49K	29	69	2	0	52	32	12	14

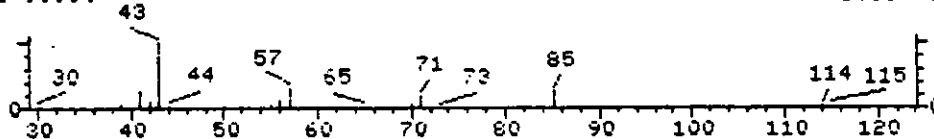
File >D1764 20949-05,V,EPA, CLP,20949.,05.M.S, 100UL'S Scan 615
 Bpk Ab 9999. SUB MPC 14.29 min.



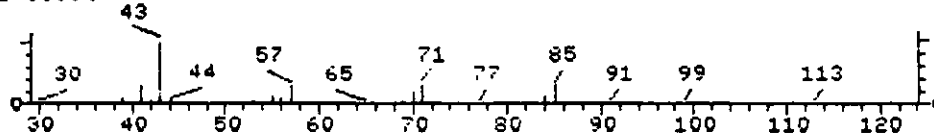
File NBS49K Heptane, 2,4-dimethyl- Scan 4444
 Bpk Ab 9999. 0.00 min.



File NBS49K Octane Scan 2712
 Bpk Ab 9999. 0.00 min.



File NBS49K Hexane, 2,3,4-trimethyl- Scan 4446
 Bpk Ab 9999. 0.00 min.



2

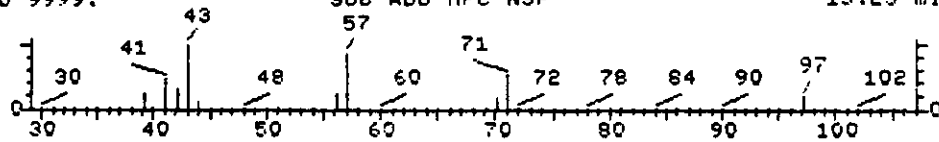
TIC NUMBER:4

1. Butane, 2,2-dimethyl-	86 C6H14
2. Cyclopentanol, 3-methyl-	100 C6H12O
3. Propanoyl chloride, 2,2-dimethyl-	120 C5H9ClO
4. Azetidine, 2-methyl-	71 C4H9N
5. Borinic acid, diethyl-, methyl ester	100 C5H13BO

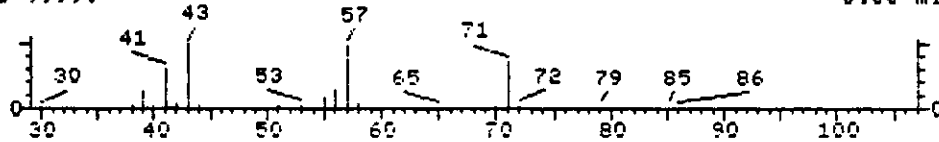
Sample file: >D1764 Spectrum #: 656
 Search speed: 2 Tilting option: S No. of ion ranges searched: 38

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	43	75832	4259	NBS49K	41	51	1	0	71	25	17	14
2.	36*	18729481	4268	NBS49K	27	70	3	0	70	27	14	13
3.	20	3282302	1251	NBS49K	34	49	1	0	67	54	5	12
4.	11*	19812498	4253	NBS49K	24	38	1	0	52	64	2	14
5.	11*	7397468	4267	NBS49K	30	59	1	0	52	63	2	16

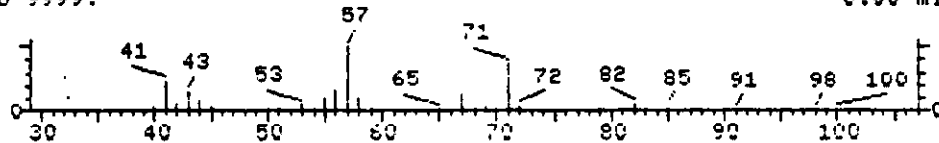
>D1764 20949-05,V.EPA, CLP,20949,,05,M,S, 100UL/5 Scan 656
 Bpk Ab 9999. SUB ADD MPC NSP 15.23 min.



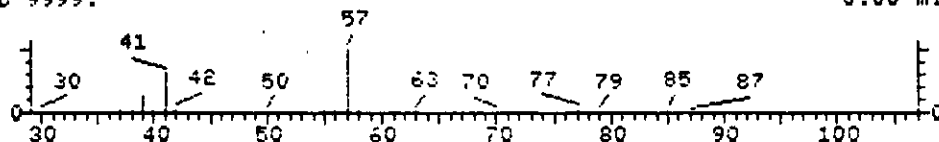
File NBS49K Butane, 2,2-dimethyl- Scan 677
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclopentanol, 3-methyl- Scan 1350
 Bpk Ab 9999. 0.00 min.



File NBS49K Propanoyl chloride, 2,2-dimethyl- Scan 3248
 Bpk Ab 9999. 0.00 min.



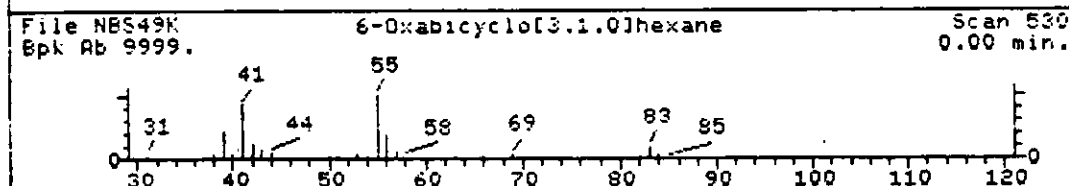
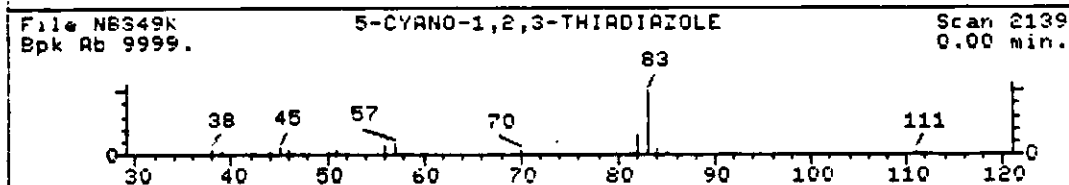
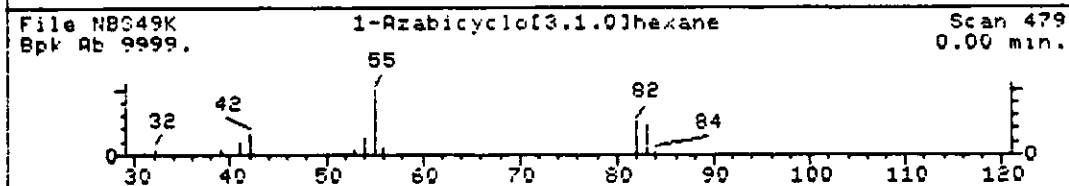
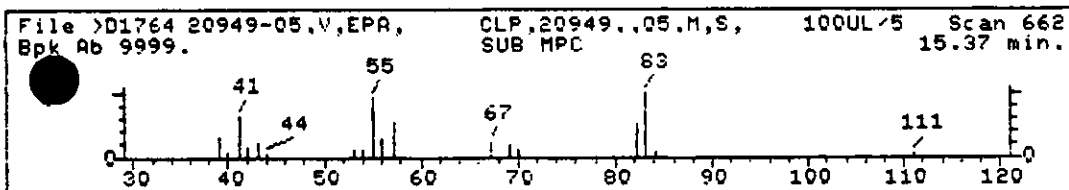
TIC NUMBER:5

1. 1-Azabicyclo[3.1.0]hexane
2. 5-CYANO-1,2,3-THIADIAZOLE
3. 6-Oxabicyclo[3.1.0]hexane
4. 1H-1,2,4-Triazole, 3-methyl-

83 C5H9N
 111 C3HN3S
 84 C5H8O
 83 C3H5N3

Sample file: >D1764 Spectrum #: 662
 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*	285767	5859	NBS49K	20	59	2	0	93	45	8 13
2.	15*	57352020	6152	NBS49K	24	63	2	0	100	56	3 14
3.	13*	285676	57	NBS49K	54	51	2	0	65	61	3 31
4.	11*	7170016	6131	NBS49K	21	34	2	0	82	63	2 13



000168

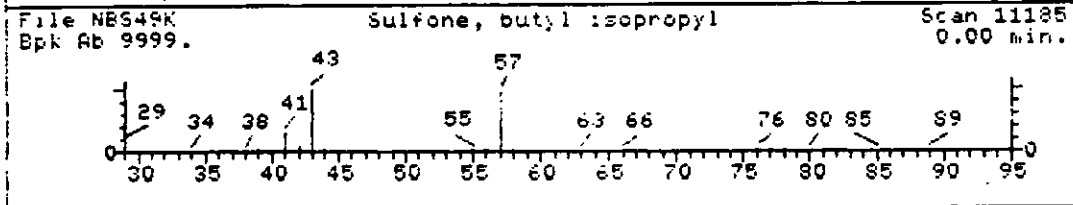
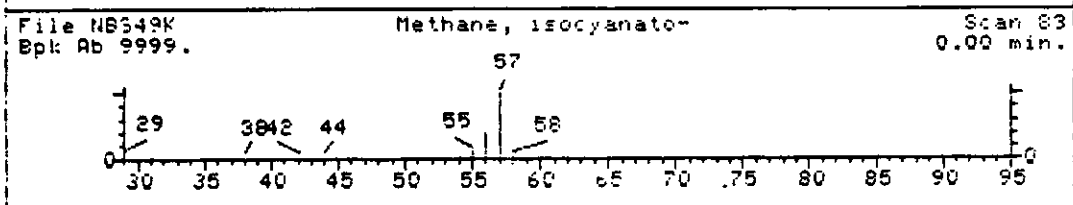
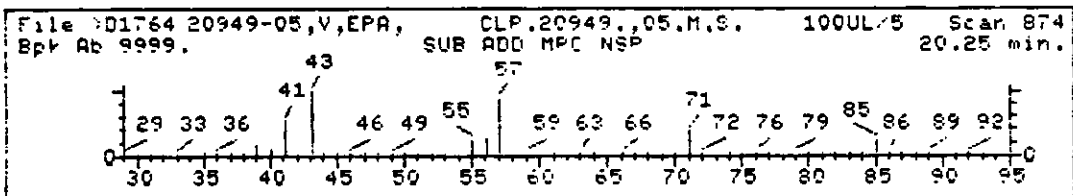
TIC NUMBER:6

1. Methane, isocyanato-
2. Sulfone, butyl isopropyl

57 C2H3NO
164 C7H16O2S

Sample file: >D1764 Spectrum #: 874
Search speed: 2 Tilting option: S No. of ion ranges searched: 37

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	31*	624839	1000	NBS49K	26	38	1	0	61	35	12	14
2.	25	31124400	1279	NBS49K	35	52	1	0	95	45	8	13



000169
DRAFT

QUANT REPORT

Operator ID: HUEY1 Quant Rev: 7 Quant Time: 920225 23:57
Output File: ^I4082::QT Injected at: 920225 23:29
Data File: >I4082::H3 Dilution Factor: 1.00000
Name: 20949-05,U,EPA, Instrument ID: H
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML

ID File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57

Last Qcal Time: 920225 16:07

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	6.28	128.0	54281	50.00	UG/L	97
2)	CS15 1,2-DICHLOROETHANE-D4	7.22	65.0	102394	45.94	UG/L	84
7)	C045 1,1-DICHLOROETHENE	2.82	96.0	1183	1.01	UG/L	93
9)	C035 ACETONE	3.26	43.0	582	.879	UG/L	100
10)	C030 METHYLENE CHLORIDE	3.81	84.0	1378	.785	UG/L	67
13)	U011 cis-1,2-DICHLOROETHENE	5.91	96.0	3339	2.02	UG/L	78
15)	C110 2-BUTANONE	6.25	43.0	5166	7.94	UG/L	77
19)	*C110 1,4-DIFLUOROBENZENE	8.13	114.0	225144	50.00	UG/L	100
20)	C115 1,1,1-TRICHLOROETHANE	6.60	97.0	1960	.583	UG/L	98
22)	C165 BENZENE	7.19	78.0	5112	1.52	UG/L	100
23)	C150 TRICHLOROETHENE	8.38	130.0	3234	1.68	UG/L	95
31)	*C120 CHLOROBENZENE-D5	13.19	117.0	161302	50.00	UG/L	86
32)	CS05 TOLUENE-D8	10.54	98.0	180749	47.09	UG/L	99
33)	CS10 BROMOFLUOROBENZENE	15.66	95.0	124727	45.45	UG/L	100
34)	C230 TOLUENE	10.65	91.0	9910	2.62	UG/L	97
38)	C235 CHLOROBENZENE	13.24	112.0	4729	1.61	UG/L	89
39)	C240 ETHYLBENZENE	13.60	106.0	4208	3.04	UG/L	98
40)	UJNK M&P-XYLENES	13.86	106.0	27102	15.27	UG/L	92
41)	U029 O-XYLENE	14.61	106.0	9305	5.58	UG/L	95

* Compound is ISTD

DRAFT

MS data file header from : >I4082::H3

Sample: 20949-05,U,EPA, Operator: HUEY1 PEG. GRP. 2/25/92 23:29
Misc : CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: H
Method file: SAMMH Tuning file: MTBFBH No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

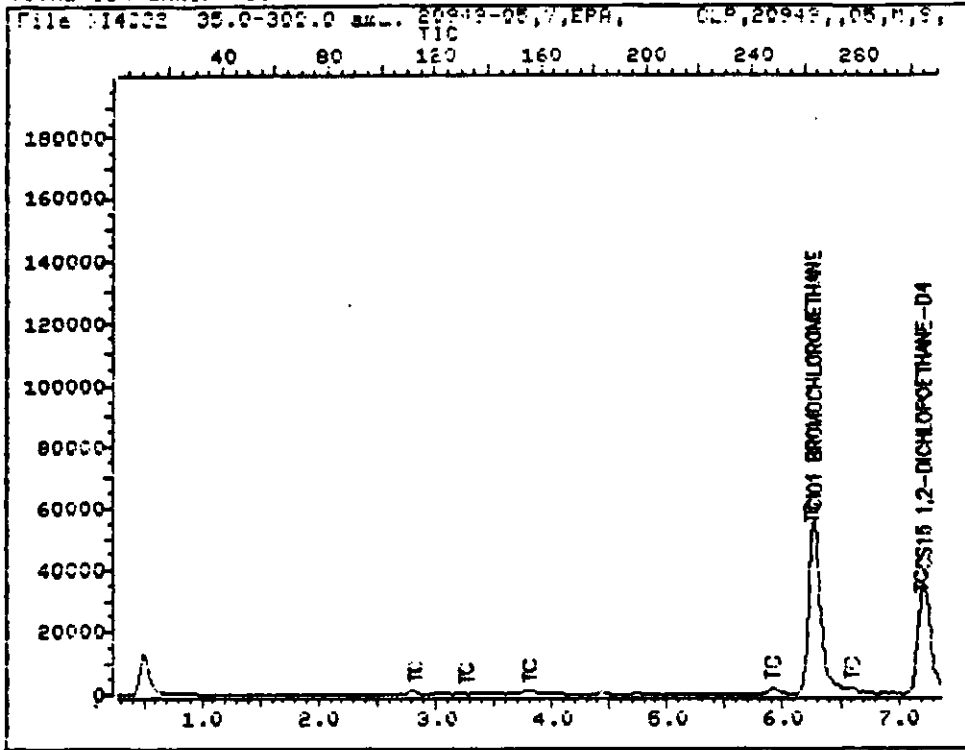
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Idesired reporting units
samp_amt	4G	Iamt of sample taken
ext_vol	5ML	Ifinal extract volume
q_units	UG/L	Ical units from quant
ext_dil	100	I dilution factor
%moist	N/A	I%moisture for soil
int_ext_vol	10ML	Iintermediate extr ct vol/M.L. ext vo
int_ext_vol_u	.1ML	Iintermediate extract vol/M.L. vol US
spiked	S	ISurrogate added at S(tart)/E(nd)
matrix	S	I sample matrix W(ater)/S(oil)
runfact	125	I calcd runfactor
surfact	.500	I calcd surr vol

Performance Check: >I4065 Injection Time: 2/25/92 15:27
Sample : >I4082 Injection Time: 2/25/92 23:29
Elapsed Time: 0 Y 0 D 8:02
Sample: ^I4082 Calibration Stds.: ^I4066,
Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
Invalid Response Factor for: C250 XYLENE (TOTAL)

DRAFT

TOTAL ION CHROMATOGRAM



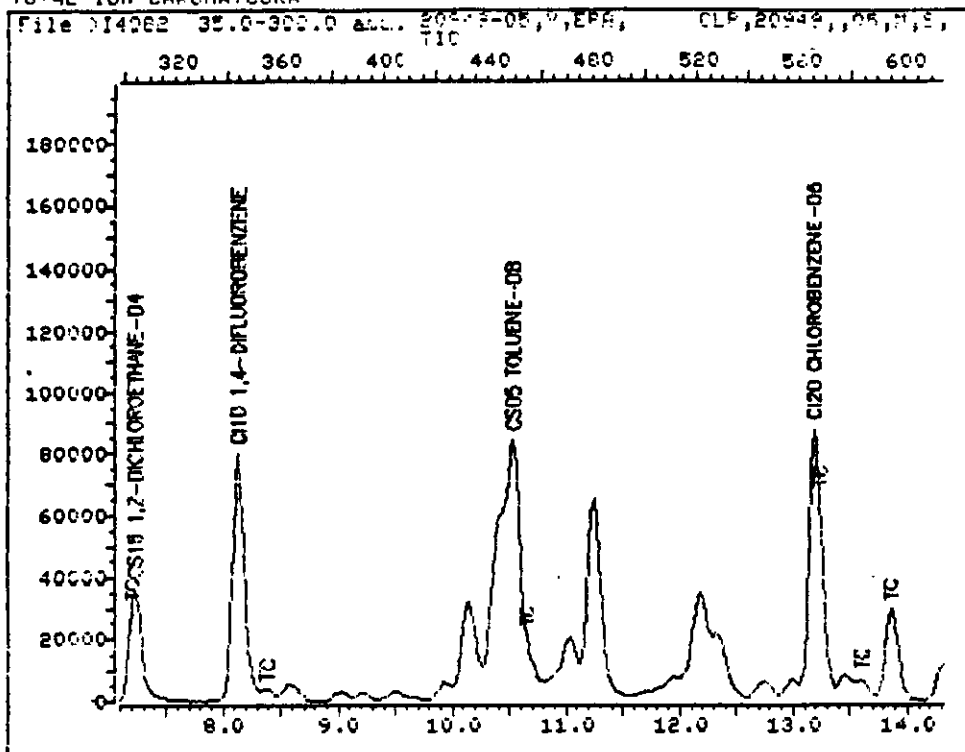
Data File: >14082::H3 Quant Output File: ^14082::QT
Name: 20949-05,U,EPA, Instrument ID: H
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57 Last Cal Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920225 23:57
Injected at: 920225 23:29

DRAFT

TOTAL ION CHROMATOGRAM



Data File: >14082::H3

Quant Output File: ^14082::QT

Name: 20949-05, U, EPA,

Instrument ID: H

Misc: CLP, 20949, 05, M, S, 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID

Title: ID FILE CLP INST. H + THF

Last Calibration: 910722 16:57

Last Qual Time: 920225 16:07

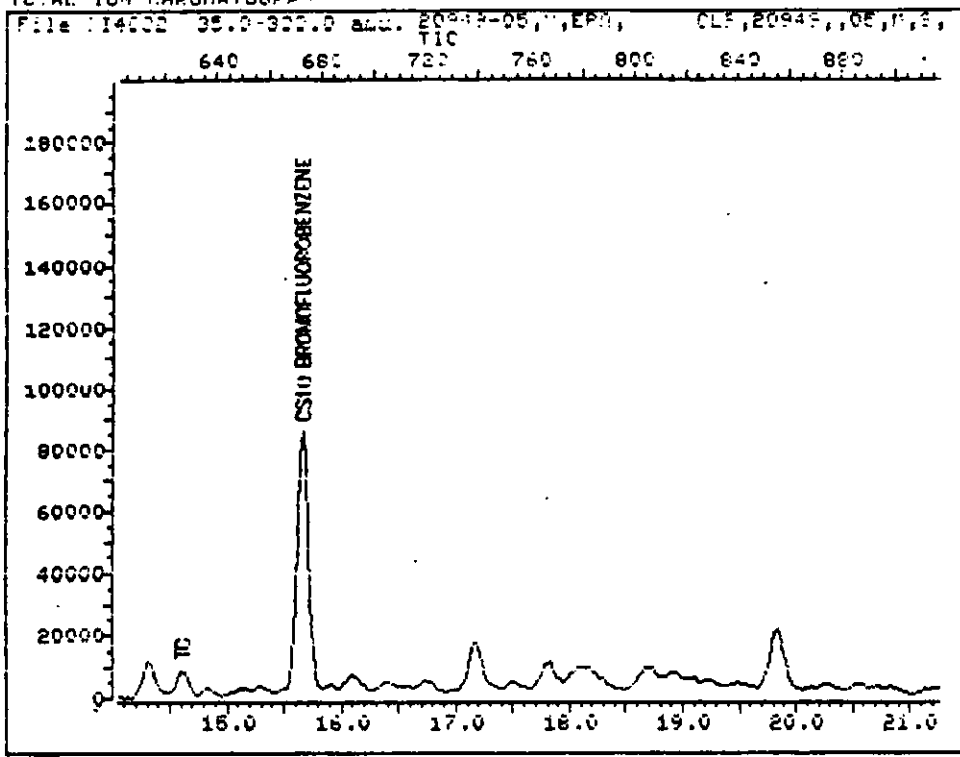
Operator ID: HUEY1

Quant Time : 920225 23:57

Injected at: 920225 23:29

000173
DRAFT

TOTAL ION CHROMATOGRAM



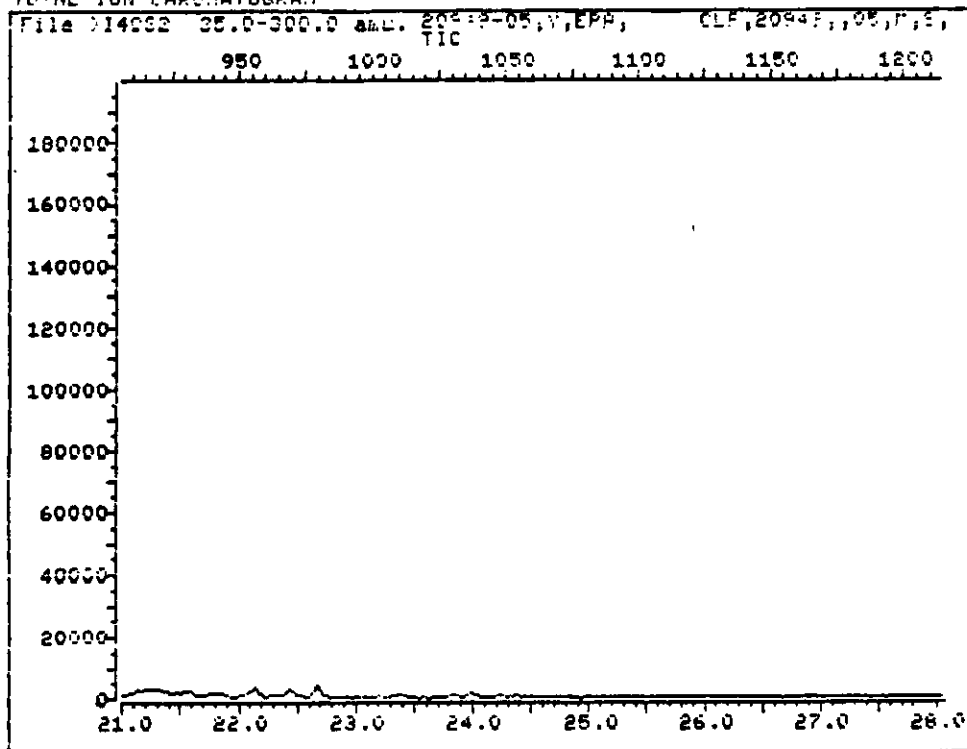
Data File: >I4082::H3 Quant Output File: ^I4082::QT
Name: 20949-05,U,EPA, Instrument ID: H
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57 Last Qcal Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920225 23:57
Injected at: 920225 23:29

000171
DRAFT

TOTAL ION CHROMATOGRAM



Data File: >I4082::H3

Quant Output File: ^I4082::QT

Name: 20949-05,U,EPA,

Instrument ID: H

Misc: CLP,20949,,05,M,S. 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID

Title: ID FILE CLP INST. H + THF

Last Calibration: 910722 16:57

Last Qcal Time: 920225 16:07

Operator ID: HUEY1

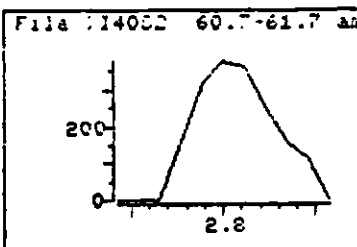
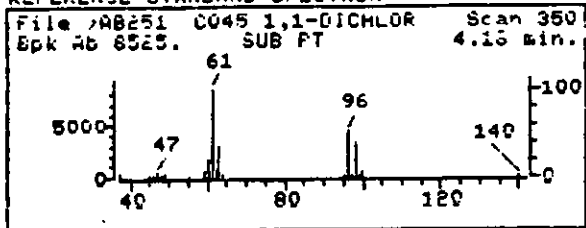
Quant Time : 920225 23:57

Injected at: 920225 23:29

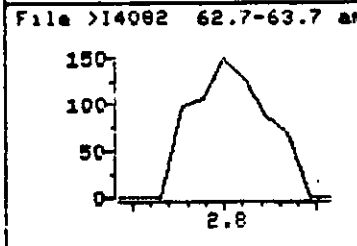
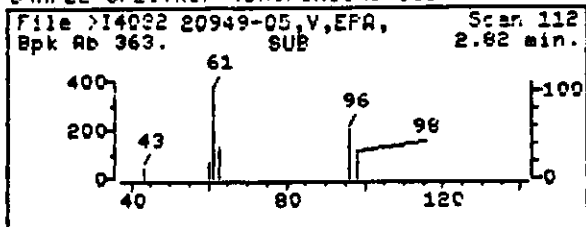
000175

LEA T

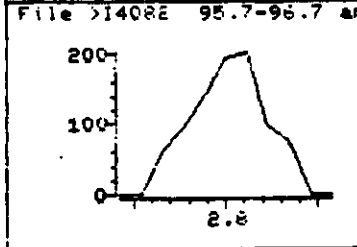
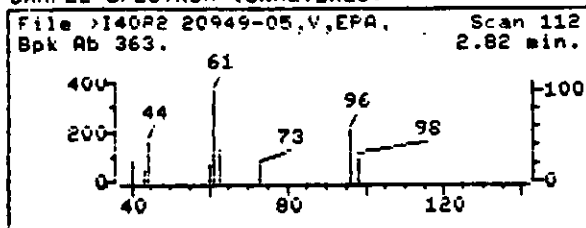
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



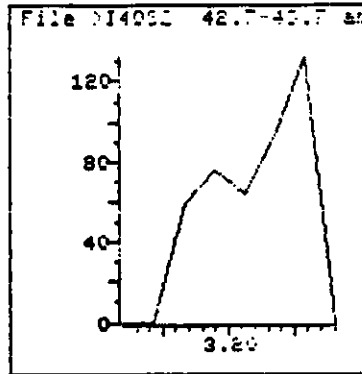
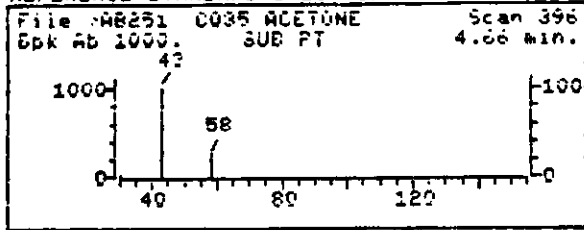
Data File: >I4082::H3
 Name: 20949-05,V,EPA,
 Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
 Quant Time: 920225 23:57
 Injected at: 920225 23:29
 Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
 Instrument ID: H
 Quant ID File: IDEPAH::ID
 Last Calibration: 910722 16:57

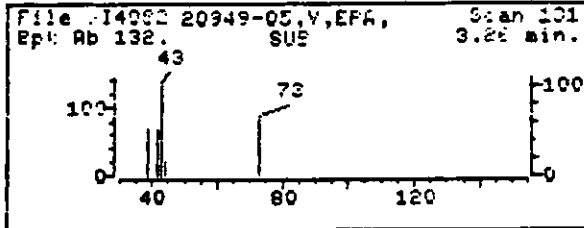
Compound No : 7
 Compound Name : C045 1,1-DICHLOROETHENE
 Scan Number : 112
 Retention Time: 2.82 min.
 Quant Ion : 96.0
 Area : 1183
 Concentration : 1.01 UG/L
 q-value : 93

000176
DRAFT

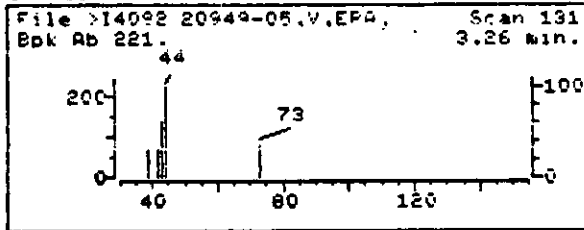
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



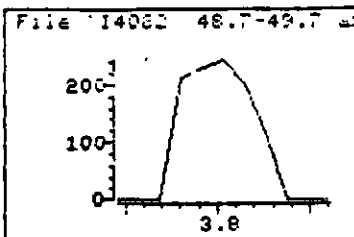
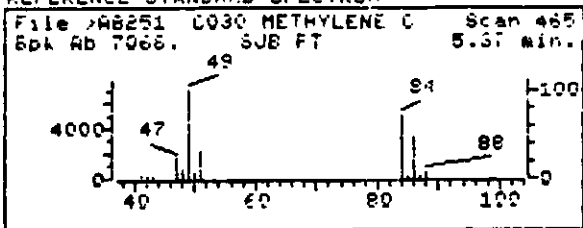
Data File: >I4082::H3
Name: 20949-05.V,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/1UML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

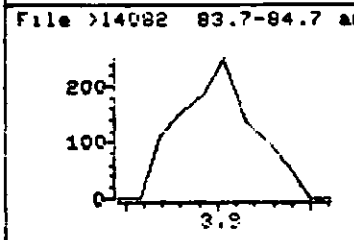
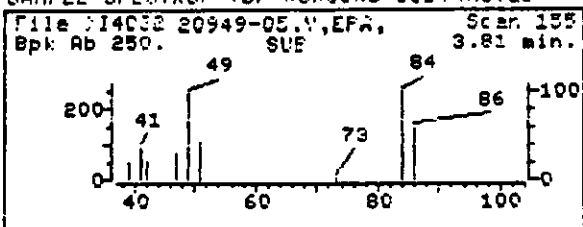
Compound No : 9
Compound Name : 0035 ACETONE
Scan Number : 131
Retention Time: 3.26 min.
Quant Ion : 43.0
Area : 582
Concentration : .879 UG/L
q-value : 100

000177
DRAFT

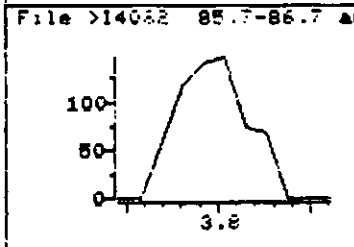
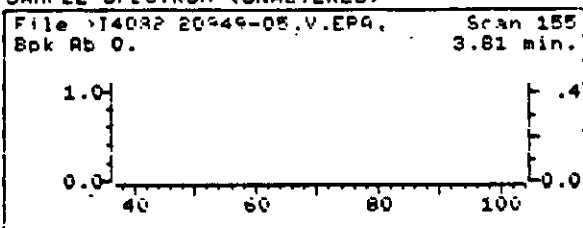
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



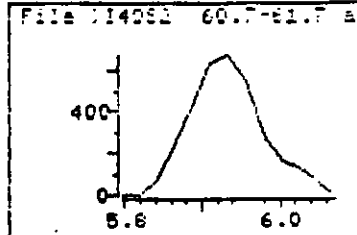
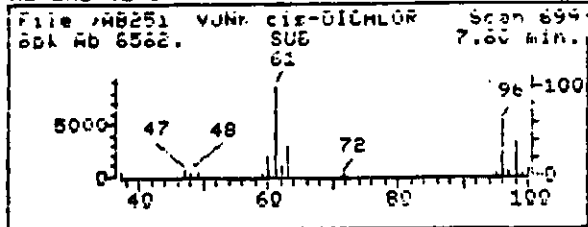
Data File: >I4082::H3
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcsl Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

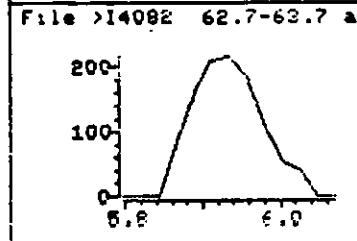
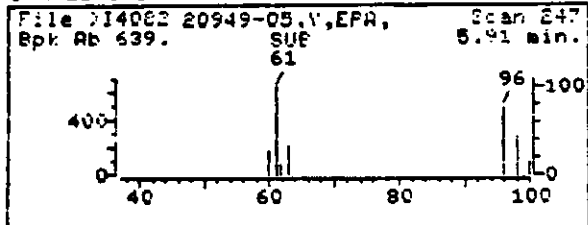
Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 155
Retention Time: 3.81 min.
Quant Ion : 84.0
Area : 1378
Concentration : .785 UG/L
q-value : 67

000178
DRAFT

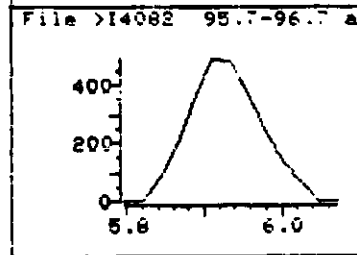
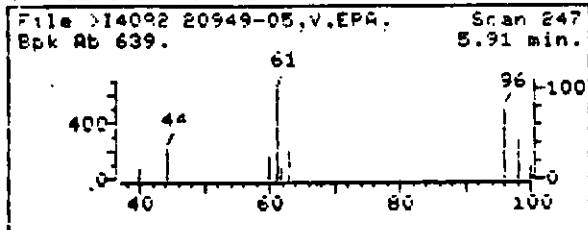
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



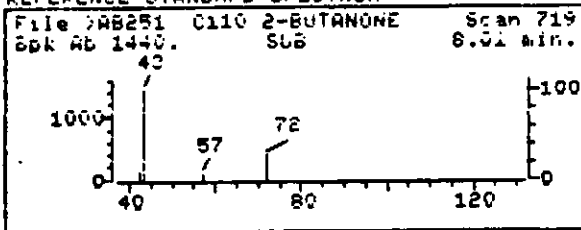
Data File: >I4082::H3
Name: 20949-05.V,EPA,
Misc: CLP,20949,,05,M.S. 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

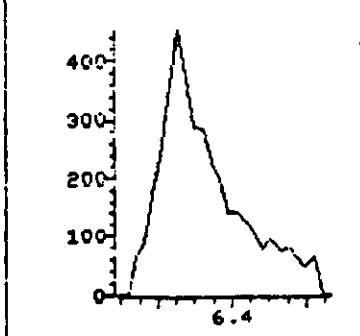
Compound No : 13
Compound Name : U011 cis-1,2-DICHLOROETHENE
Scan Number : 247
Retention Time: 5.91 min.
Quant Ion : 96.0
Area : 3339
Concentration : 2.02 UG/L
q-value : 78

DRAFT 800179

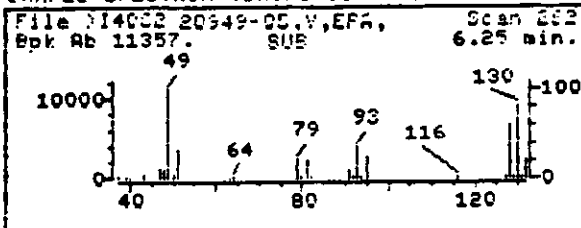
REFERENCE STANDARD SPECTRUM



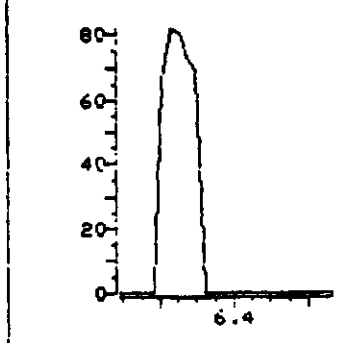
File >I4002 42.7-43.7 min



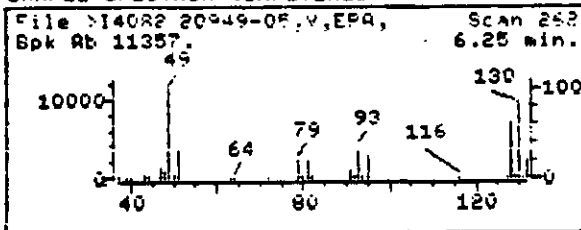
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >I4082 71.7-72.7 min



SAMPLE SPECTRUM (UNALTERED)



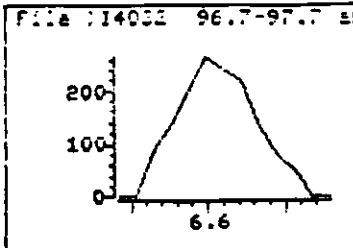
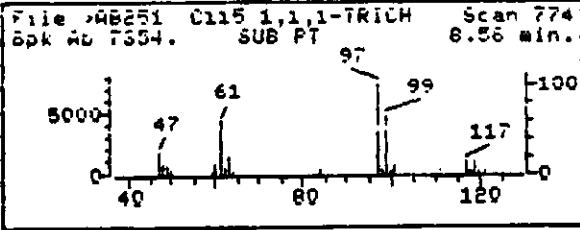
Data File: >I4082::H3
Name: 20949-05.V,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qual Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

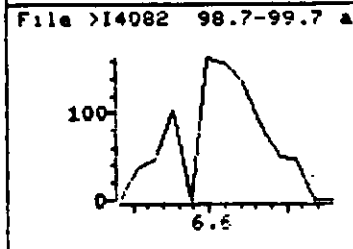
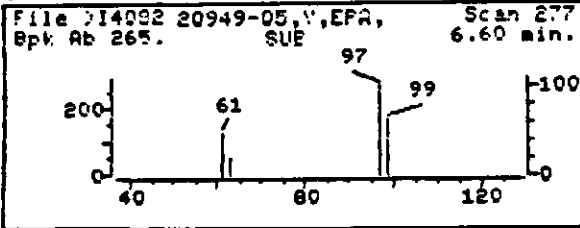
Compound No : 15
Compound Name : C110 2-BUTANONE
Scan Number : 262
Retention Time: 6.25 min.
Quant Ion : 43.0
Area : 5166
Concentration : 7.94 UG/L
q-value : 77

000180
DRAFT

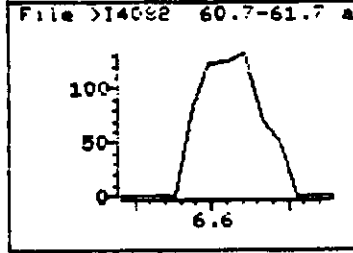
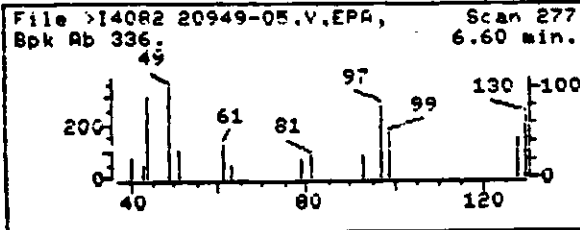
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



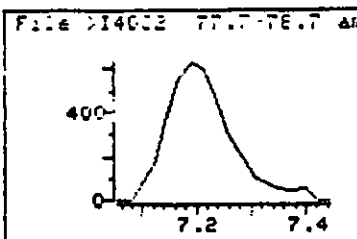
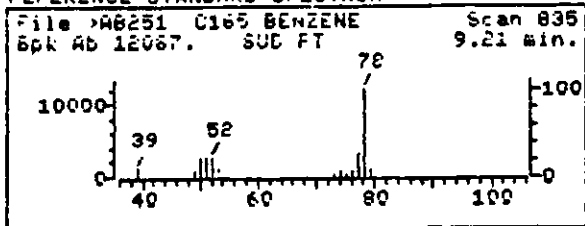
Data File: >I4082::H3
Name: 20949-05.V,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

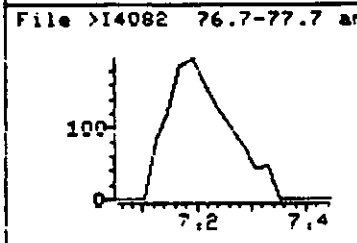
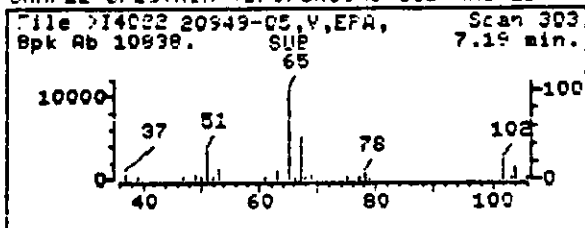
Compound No : 20
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 277
Retention Time: 6.60 min.
Quant Ion : 97.0
Area : 1960
Concentration : .583 UG/L
q-value : 98

000181
DRAFT

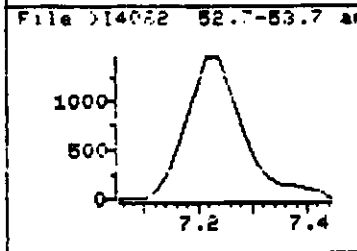
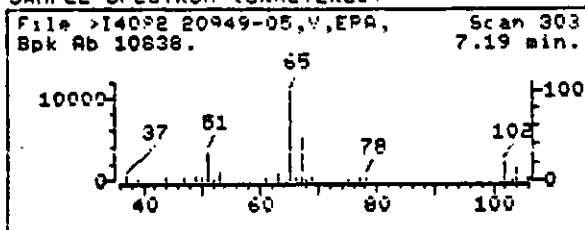
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



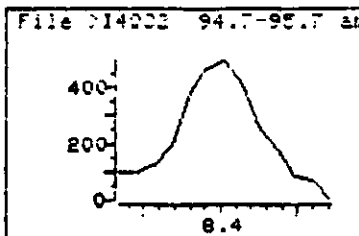
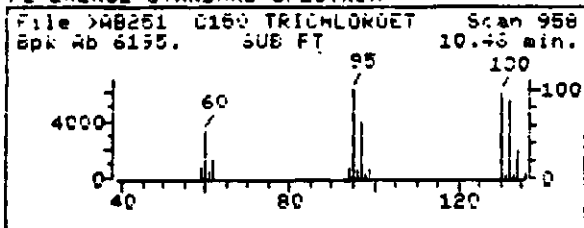
Data File: >I4082::H3
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M.S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

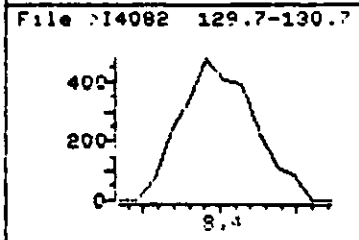
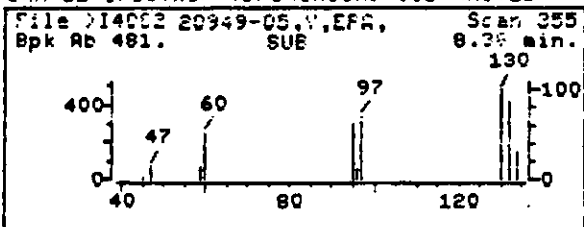
Compound No : 22
Compound Name : C165 BENZENE
Scan Number : 303
Retention Time: 7.19 min.
Quant Ion : 78.0
Area : 5112
Concentration : 1.52 UG/L
q-value : 100

000182
EPA

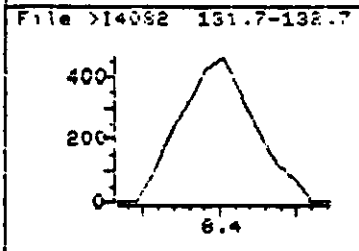
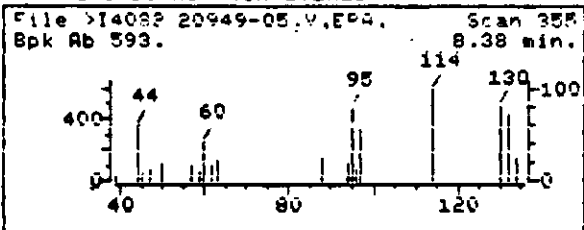
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



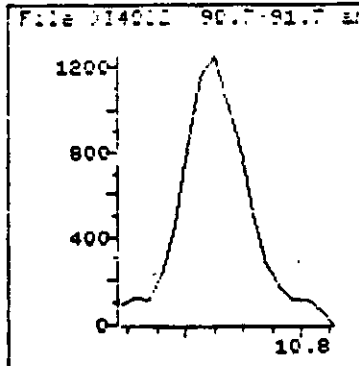
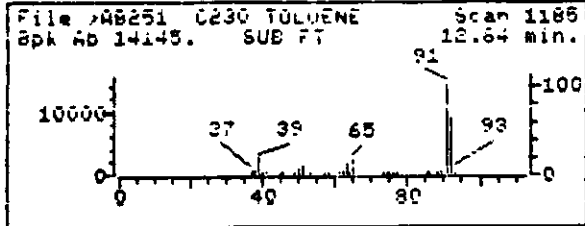
Data File: >I4082::H3
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qual Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

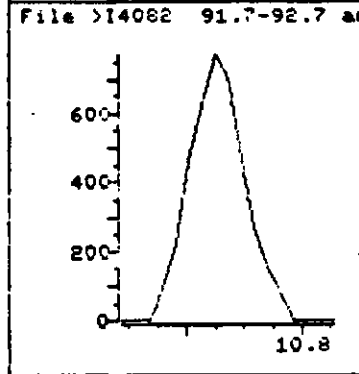
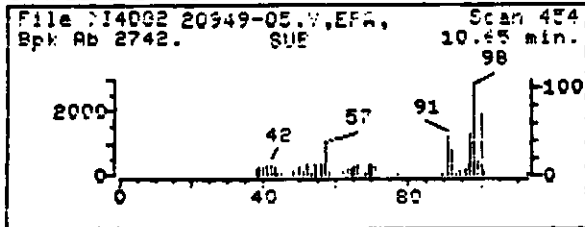
Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 355
Retention Time: 8.38 min.
Quant Ion : 130.0
Area : 3234
Concentration : 1.68 UG/L
q-value : 95

000183

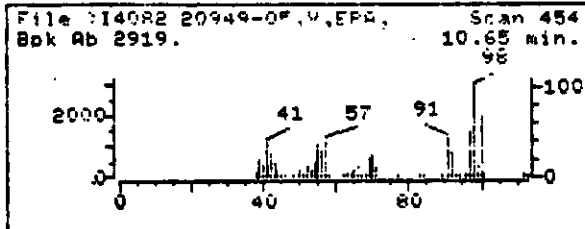
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



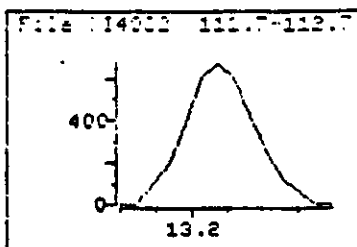
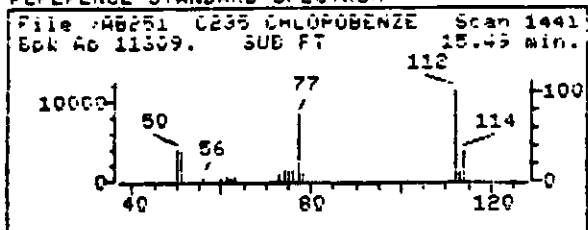
Data File: >I4082::H3
 Name: 20949-05,U,EPA,
 Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
 Quant Time: 920225 23:57
 Injected at: 920225 23:29
 Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
 Instrument ID: H
 Quant ID File: IDEPAH::ID
 Last Calibration: 910722 16:57

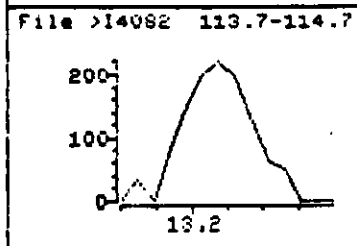
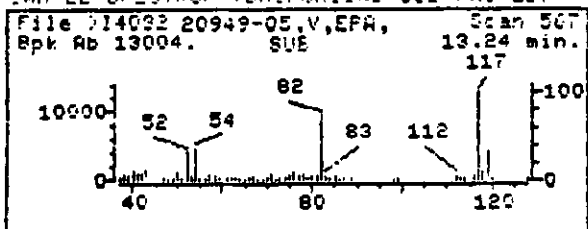
Compound No : 34
 Compound Name : C230 TOLUENE
 Scan Number : 454
 Retention Time: 10.65 min.
 Quant Ion : 91.0
 Area : 9010
 Concentration : 2.62 UG/L
 a-value : 97

000184

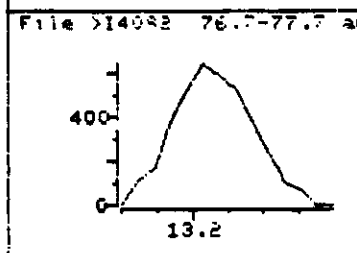
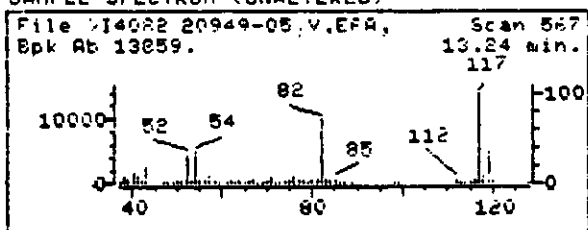
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



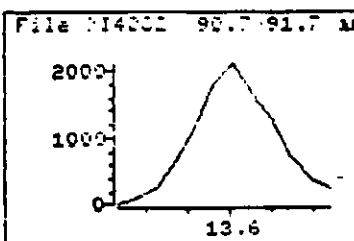
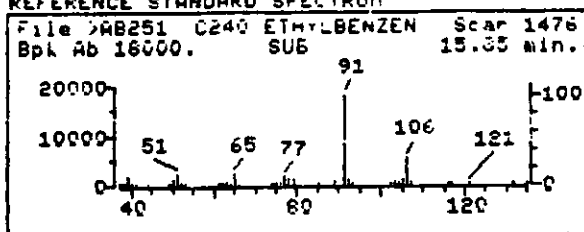
Data File: >I4082::H3
Name: 20949-05,U,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

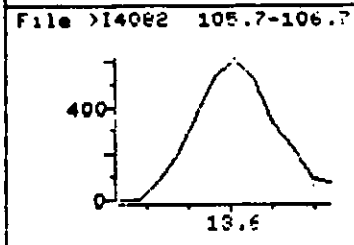
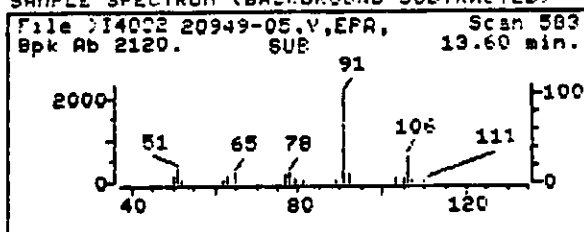
Compound No : 38
Compound Name : C235 CHLOROBENZENE
Scan Number : 567
Retention Time: 13.24 min.
Quant Ion : 112.0
Area : 4729
Concentration : 1.61 UG/L
q-value : 89

000185
DRAFT

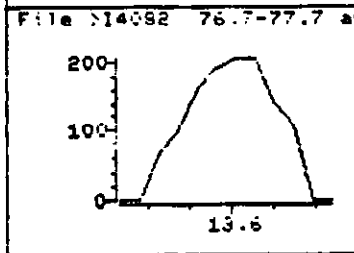
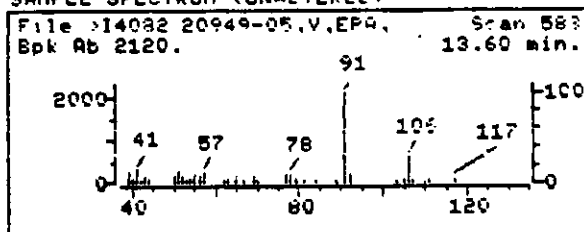
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I4082::H3
Name: 20949-05.V,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qual Time: 920225 16:07

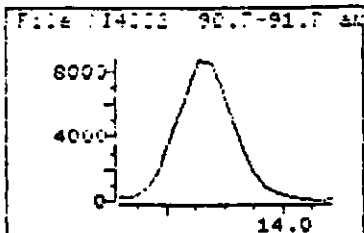
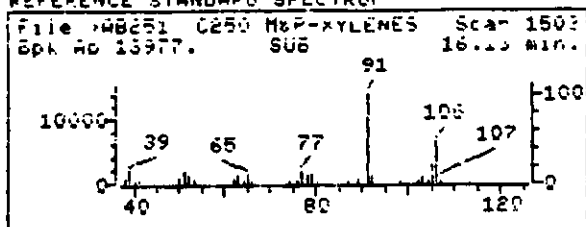
Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 583
Retention Time: 13.60 min.
Quant Ion : 106.0
Area : 4208
Concentration : 3.04 UG/L
q-value : 98

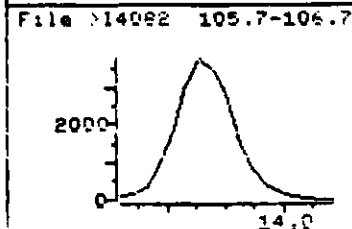
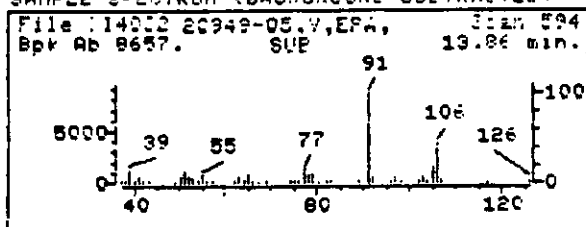
000186

DRAFT

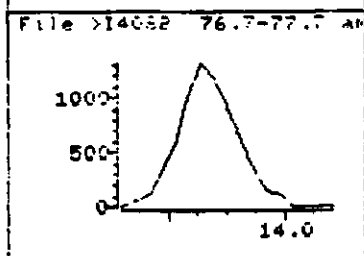
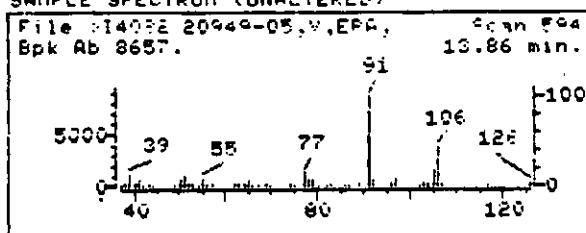
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I4082::H3
Name: 20949-05.V,EPA,
Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920225 23:57
Injected at: 920225 23:29
Last Qcal Time: 920225 16:07

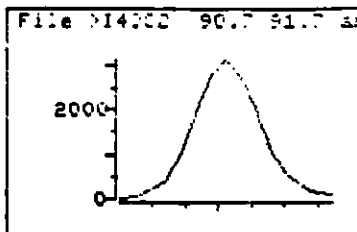
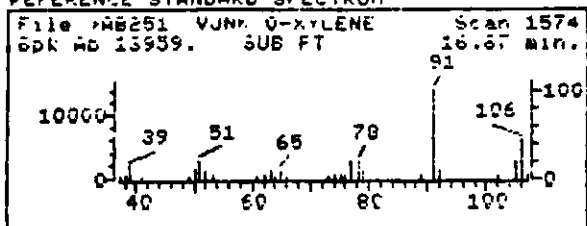
Quant Output File: ^I4082::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 40
Compound Name : UNKN M&P-XYLENES
Scan Number : 594
Retention Time: 13.86 min.
Quant Ion : 106.0
Area : 27102
Concentration : 15.27 UG/L
q-value : 92

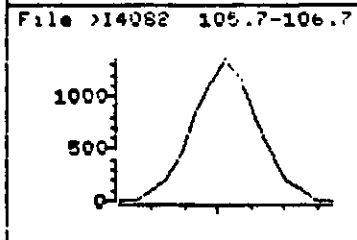
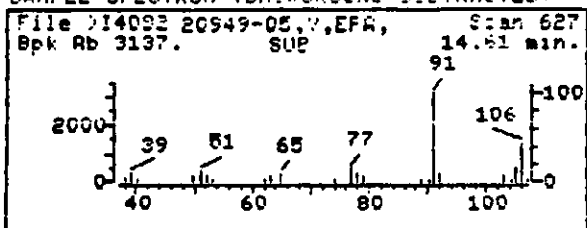
000187

6637

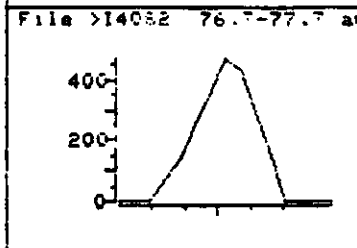
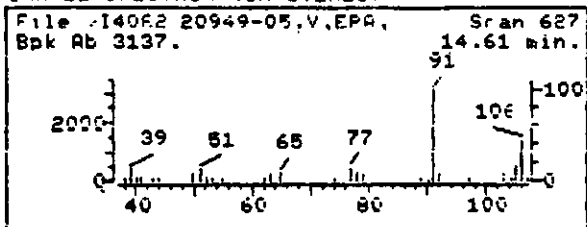
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I4082::H3
 Name: 20949-05,U,EPA,
 Misc: CLP,20949,,05,M,S, 100uL/5ML/100%/4G/10ML
 Quant Time: 920225 23:57
 Injected at: 920225 23:29
 Last Qcal Time: 920225 16:07

Quant Output File: ^I4082::QT
 Instrument ID: H
 Quant ID File: IDEPAH::ID
 Last Calibration: 910722 16:57

Compound No : 41
 Compound Name : U029 0-XYLENE
 Scan Number : 627
 Retention Time: 14.61 min.
 Quant Ion : 106.0
 Area : 9305
 Concentration : 5.58 UG/L
 q-value : 95

000188

DRAFT

Diagnostic Quant Report

Data File: >14082::H3 Injected at: 23:29 02/25/92
 Quant'd : 23:57 02/25/92
 ID File : IDEPAH::ID Calibrated : 16:57 07/22/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	6.23	6.28	.05	128.0	54281	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	7.25	7.22	.03	65.0	102394	2.0529	45.94
3) C010 CHLOROMETHANE	.83	0.00	--	50.0	0	.6955	0.00
4) C020 VINYL CHLORIDE	.97	0.00	--	62.0	0	.7947	0.00
5) C015 BROMOMETHANE	1.39	0.00	--	94.0	0	.9780	0.00
6) C025 CHLOROETHANE	1.62	0.00	--	64.0	0	.6445	0.00
7) C045 1,1-DICHLOROETHENE	2.82	2.82	.01	96.0	1183	1.0839	1.01
8) C040 CARBON DISULFIDE	2.89	0.00	--	76.0	0	1.7506	0.00
9) C035 ACETONE	3.28	3.26	.02	43.0	582	.6096	.88
9)D C035 ACETONE	3.28	3.30	.02	43.0	735	.6096	1.11
9)D C035 ACETONE	3.28	3.72	.44	43.0	827	.6096	1.25
10) C030 METHYLENE CHLORIDE	3.81	3.81	.00	84.0	1379	1.6176	.78
11) VJNK trans-1,2-DICHLOROET	4.23	0.00	--	96.0	0	1.4324	0.00
12) C050 1,1-DICHLOROETHANE	4.94	0.00	--	63.0	0	2.7081	0.00
13) V011 cis-1,2-DICHLOROETHE	5.93	5.91	.02	96.0	3339	1.5215	2.02
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	0.00	96.0	3339	1.4770	2.08
15) C110 2-BUTANONE	6.19	6.25	.07	43.0	5166	.5995	7.94
16) U013 TETRAHYDROFURAN	6.42	0.00	--	42.0	0	.2064	0.00
17) C060 CHLOROFORM	6.60	0.00	--	83.0	0	3.2173	0.00
18) C065 1,2-DICHLOROETHANE	7.36	0.00	--	62.0	0	2.1836	0.00
19) *C110 1,4-DIFLUOROBENZENE	8.11	8.13	.02	114.0	225144	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	6.62	6.60	.02	97.0	1960	.7461	.58
21) C120 CARBONTETRACHLORIDE	6.85	0.00	--	117.0	0	.7771	0.00
22) C165 BENZENE	7.21	7.19	.02	78.0	5112	.7461	1.52
23) C150 TRICHLOROETHENE	8.41	8.38	.02	130.0	3234	.4263	1.68
24) C140 1,2-DICHLOROPROPANE	8.73	0.00	--	63.0	0	.3252	0.00
25) C130 BROMODICHLOROMETHANE	9.39	0.00	--	83.0	0	.6946	0.00
26) C143 cis-1,3-DICHLOROPROP	10.20	0.00	--	75.0	0	.5216	0.00
27) C172 trans-1,3-DICHLOROPR	11.30	0.00	--	75.0	0	.5036	0.00
28) C160 1,1,2-TRICHLOROETHAN	11.58	0.00	--	97.0	0	.2683	0.00
29) C155 CHLORODIBROMOMETHANE	12.20	0.00	--	129.0	0	.5313	0.00
30) C180 BROMOFORM	14.93	0.00	--	173.0	0	.3981	0.00
31) *C120 CHLOROBENZENE-D5	13.19	13.19	.00	117.0	161302	1.0000	50.00
32)D CS05 TOLUENE-D8	10.54	10.15	.39	98.0	3034	1.1898	.79
32) CS05 TOLUENE-D8	10.54	10.54	.00	98.0	180749	1.1898	47.09
33) CS10 BROMOFLUOROBENZENE	15.64	15.66	.02	95.0	124727	.8506	45.45
34) C230 TOLUENE	10.65	10.65	.00	91.0	9910	1.1729	2.62
35) C205 4-METHYL-2-PENTANONE	10.63	0.00	--	43.0	0	.3454	0.00
36) C220 TETRACHLOROETHENE	11.59	0.00	--	164.0	0	.4456	0.00
37) C210 2-HEXANONE	12.23	0.00	--	43.0	0	.3389	0.00
38) C235 CHLOROBENZENE	13.24	13.24	.00	112.0	4729	.9102	1.61
39) C240 ETHYLBENZENE	13.58	13.60	.02	106.0	4208	.4285	3.04
39)D C240 ETHYLBENZENE	13.58	13.86	.28	106.0	27102	.4285	19.60
40)D VJNK M&P-XYLENES	13.86	13.60	.25	106.0	4208	.5500	2.37
40) VJNK M&P-XYLENES	13.86	13.86	.00	106.0	27102	.5500	15.27
41) U029 O-XYLENE	14.59	14.61	.02	106.0	9305	.5173	5.58
42) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	36407	.5337	21.15
43) C245 STYRENE	14.68	0.00	--	104.0	0	.8556	0.00
44) C225 1,1,2,2-TETRACHLOROE	16.26	0.00	--	83.0	0	.6045	0.00

DRAFT
000189

TIC Internal Standard Report

Data File: >I4082

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	Q area	Concentration	Flag	
Q scan	Q area	RIC ratio	RIC scan	RIC area	% Est. RIC
1	CI01	BROMOCHLOROMETH	50.000 UG/L	OK	
263.	54281.	7.294	263.	416426.	105.182
2	CI10	1,4-DIFLUOROBEN	50.000 UG/L	OK	
344.	225144.	2.506	344.	581309.	103.026
3	CI20	CHLOROBENZENE-D	50.000 UG/L	OK	
565.	161302.	3.094	565.	656819.	131.603

Deleting peaks from INT file: UDIR87

Minimum area: 0 % of area of closest Int. Std.
Number of peaks: 18
Number of peaks remaining: 18

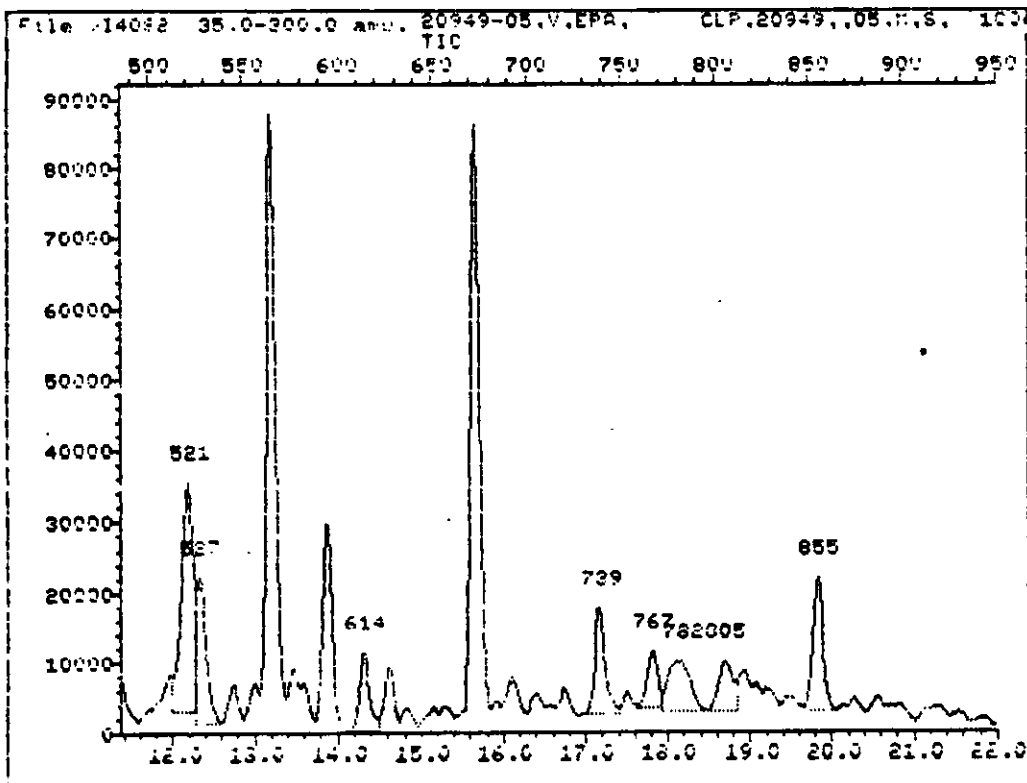
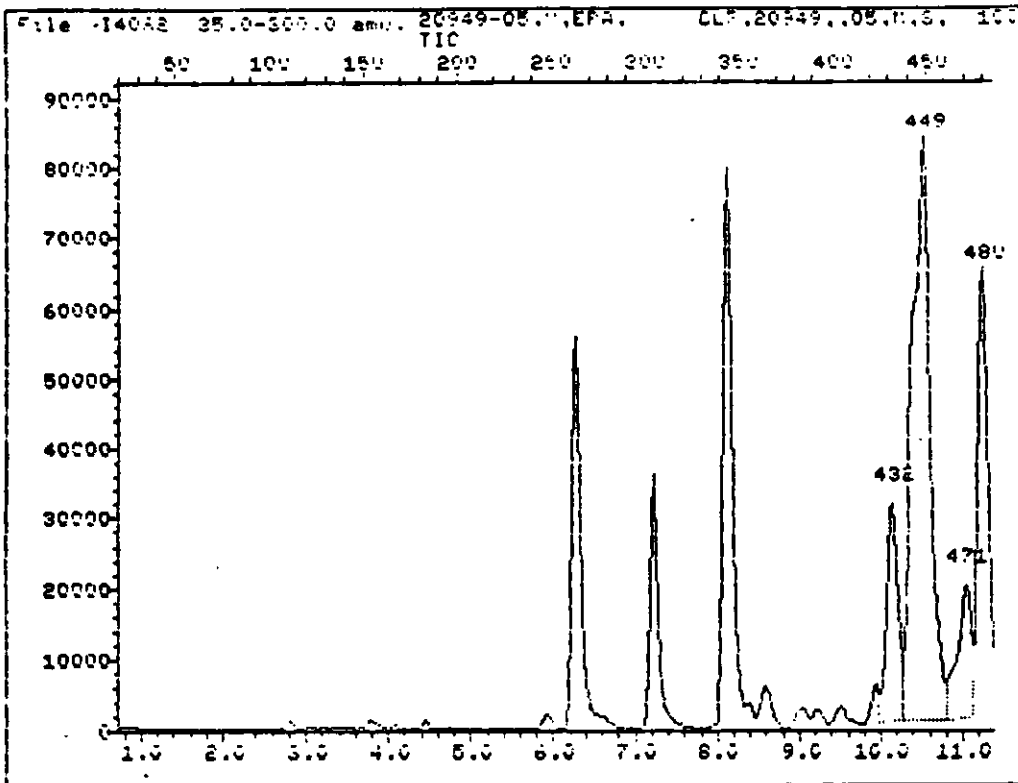
Deleting target compounds from INT file: UDIR87

Minimum seperation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 18
Number of peaks remaining: 12

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 50
Number of peaks: 12
Maximum number of peaks > number of peaks.

DRAFT
000190

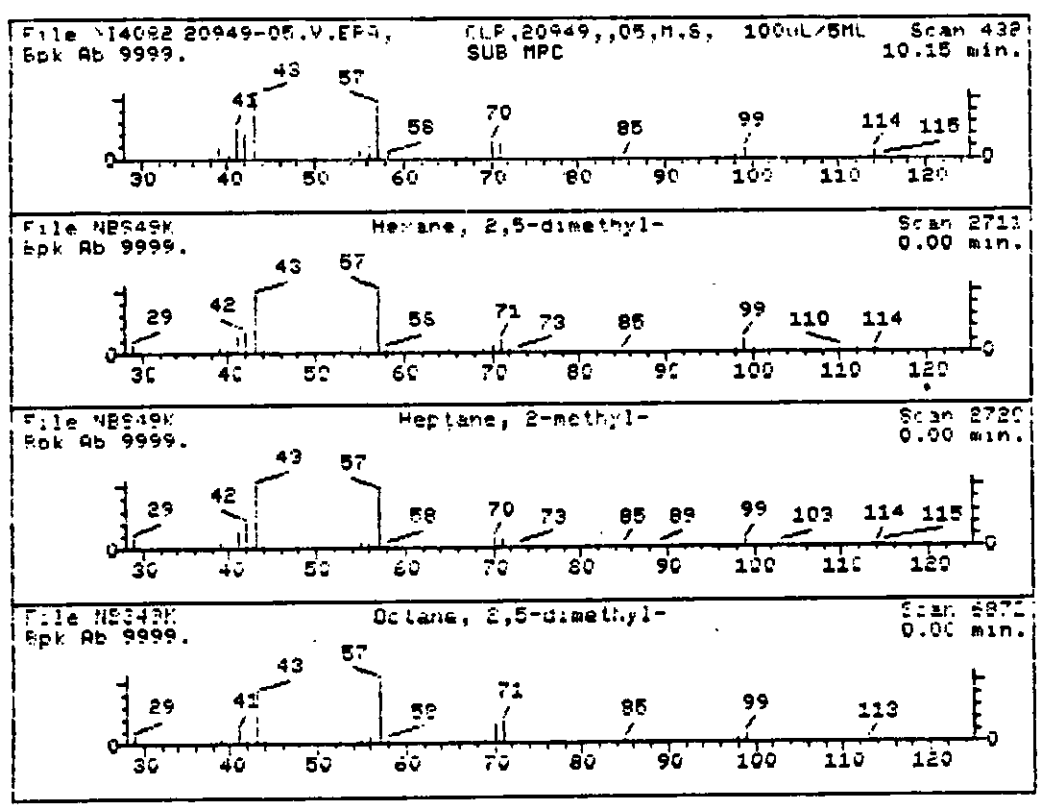


TIC NUMBER:1

- | | |
|-------------------------------|-------------|
| 1. Hexane, 2,5-dimethyl- | 114 C8H18 |
| 2. Heptane, 2-methyl- | 114 C8H18 |
| 3. Octane, 2,5-dimethyl- | 142 C10H22 |
| 4. Heptane, 2,3,4-trimethyl- | 142 C10H22 |
| 5. Heptane, 3-bromo- | 178 C7H15Br |
| 6. 2-Pentene, 5-butoxy-, (E)- | 142 C9H18O |

Sample file: >I4082 Spectrum #: 432
 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.	74*	592132	9676	NBS49K	56	34	2	0	84	12	39	42
2.	48*	592278	9677	NBS49K	36	55	1	0	69	25	17	19
3.	41	15869893	9754	NBS49K	43	49	2	0	67	23	17	12
4.	32	52896954	9753	NBS49K	47	43	2	0	82	33	12	15
5.	26	1974056	9843	NBS49K	41	46	1	0	73	44	8	14
6.	25	54004238	9745	NBS49K	36	40	2	0	66	50	7	12



000192 FT

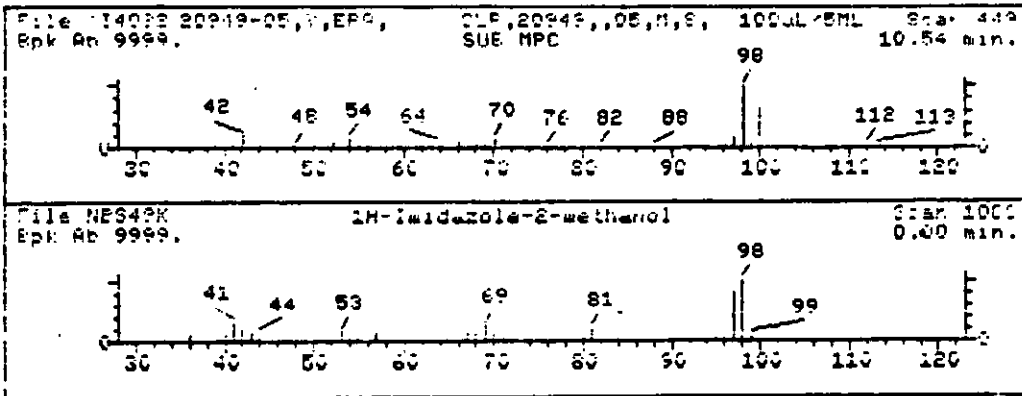
TIC NUMBER:2

1. 1H-Imidazole-2-methanol

98 C4H6N2O

Sample file: >I4082 Spectrum #: 449
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.	26*	3724263	9396	NBS49K	22	85	3	0	100	37	10	12



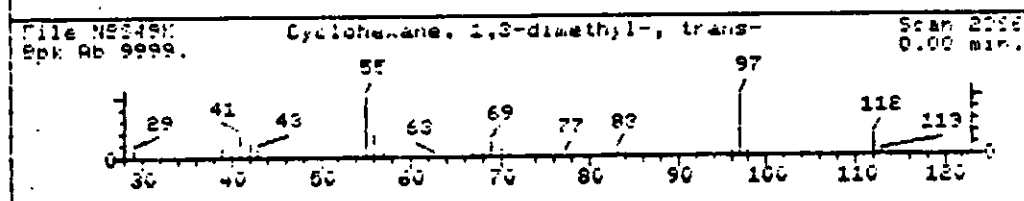
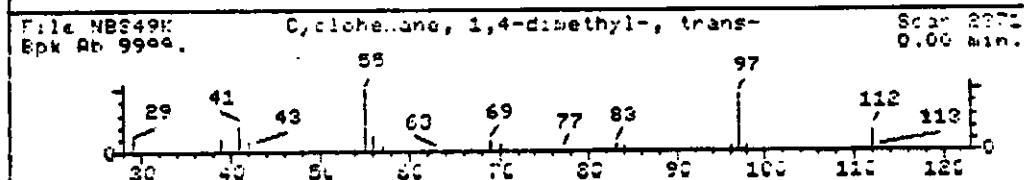
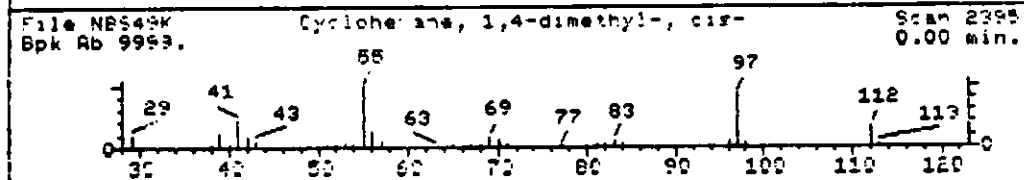
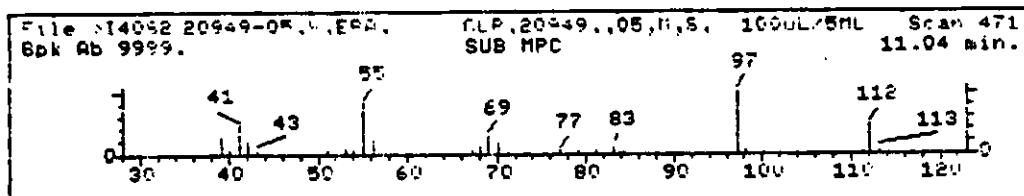
000193

TIC NUMBER:3

- | | |
|---|-----------|
| 1. Cyclohexane, 1,4-dimethyl-, cis- | 112 C8H16 |
| 2. Cyclohexane, 1,4-dimethyl-, trans- | 112 C8H16 |
| 3. Cyclohexane, 1,3-dimethyl-, trans- | 112 C8H16 |
| 4. Cyclohexane, 1-ethyl-2-methyl-, cis- | 126 C9H18 |
| 5. Cyclohexane, 1,3-dimethyl-, cis- | 112 C8H16 |
| 6. Cyclohexane, 1,2-dimethyl-, trans- | 112 C8H16 |

Sample file: >I4062 Spectrum #: 471
 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.	76*	624293	9112	NBS49K	56	46	2	-1	95	9	45 21
2.	67*	2207047	9106	NBS49K	53	49	2	0	82	13	34 22
3.	60*	2207036	9103	NBS49K	61	38	3	-2	92	12	30 19
4.	60	4923777	9132	NBS49K	57	35	2	1	73	13	30 13
5.	52*	638040	9110	NBS49K	40	54	2	0	85	19	20 19
6.	43*	6876239	9108	NBS49K	41	66	2	0	58	24	17 14



DRAFT

000191

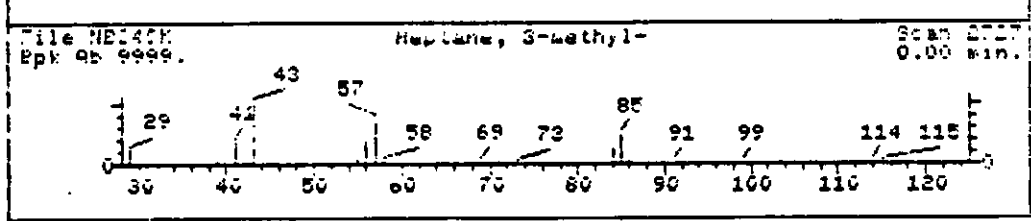
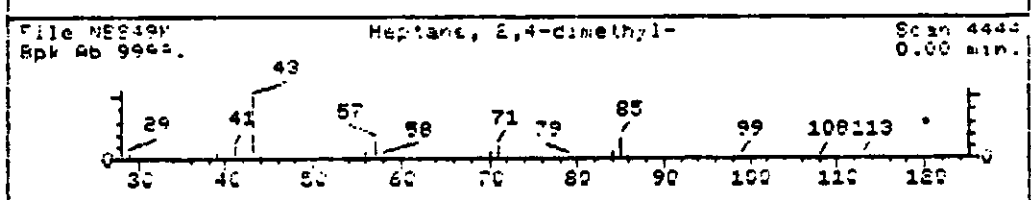
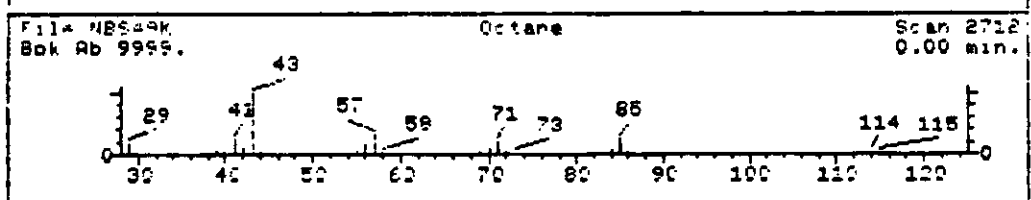
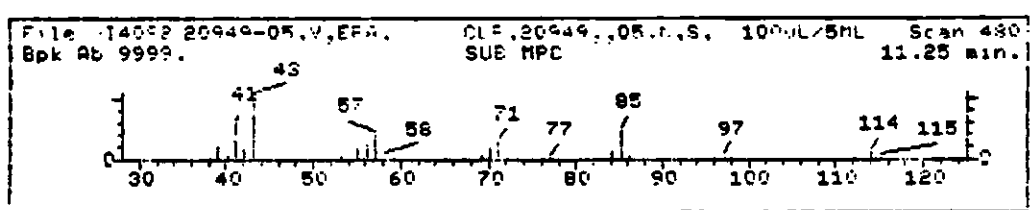
TIC NUMBER: 4

- 1. Octane
- 2. Heptane, 2,4-dimethyl-
- 3. Heptane, 3-methyl-
- 4. Hexane, 2,4-dimethyl-
- 5. Hexane, 3-ethyl-
- 6. Hexane, 2,3,4-trimethyl-

- 114 C8H18
- 128 C9H20
- 114 C8H18
- 114 C8H18
- 114 C8H18
- 128 C9H20

Sample file: >I4082 Spectrum #: 480
 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.	81*	2712	6558	NBS49K	56	33	2	0	131	6	53 42
2.	60	4444	6602	NBS49K	49	38	2	0	100	14	30 17
3.	37*	2727	6564	NBS49K	31	59	0	0	51	37	14 24
4.	33*	2717	6561	NBS49K	45	53	2	0	87	39	10 19
5.	25*	2722	6562	NBS49K	36	54	2	0	127	48	7 18
6.	25	4446	6604	NBS49K	34	56	1	0	65	50	7 12



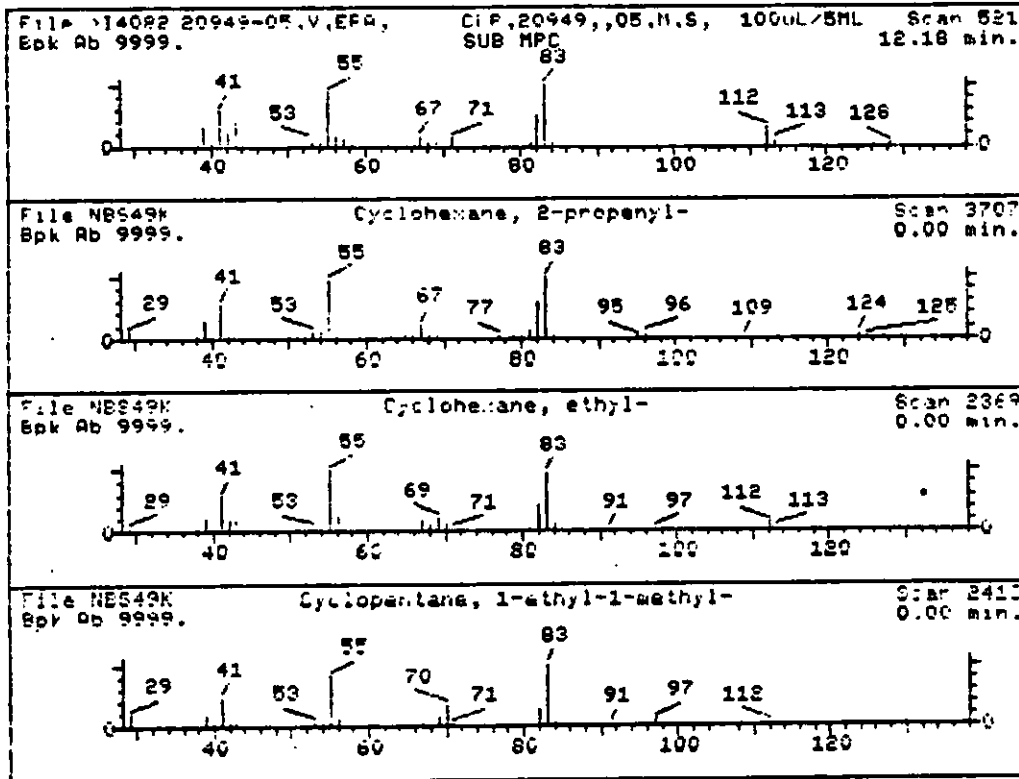
DRAFT
000195

TIC NUMBER:5

- | | |
|--|-------------|
| 1. Cyclohexane, 2-propenyl- | 124 C9H16 |
| 2. Cyclohexane, ethyl- | 112 C8H16 |
| 3. Cyclopentane, 1-ethyl-1-methyl- | 112 C8H16 |
| 4. Cyclopentane, 1-ethyl-3-methyl- | 112 C8H16 |
| 5. Cyclopentane, 1-ethyl-3-methyl-, cis- | 112 C8H16 |
| 6. Cyclohexanecarboxylic acid, ethenyl ester | 154 C9H14O2 |

Sample file: >I4082 Spectrum #: 521
 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.	48	3707	6175	NBS49K	60	39	2	0	75	25	17	19
2.	37*	2369	6163	NBS49K	41	64	2	0	77	29	14	14
3.	31*	2413	6168	NBS49K	33	71	2	0	100	34	12	14
4.	30*	2388	6165	NBS49K	27	80	3	0	89	34	12	13
5.	30*	2393	6167	NBS49K	27	81	3	0	89	33	12	13
6.	29	9059	6200	NBS49K	51	33	2	0	100	44	8	17



DRAFT
000196

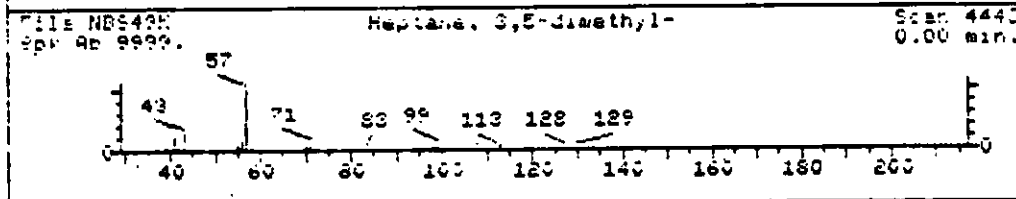
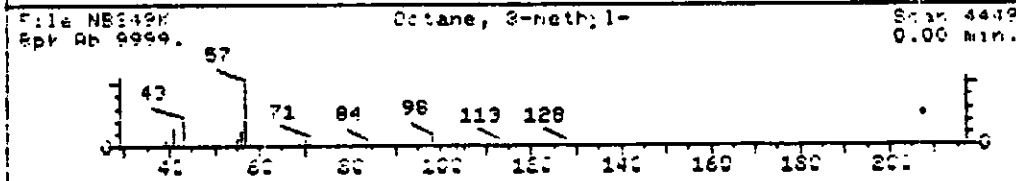
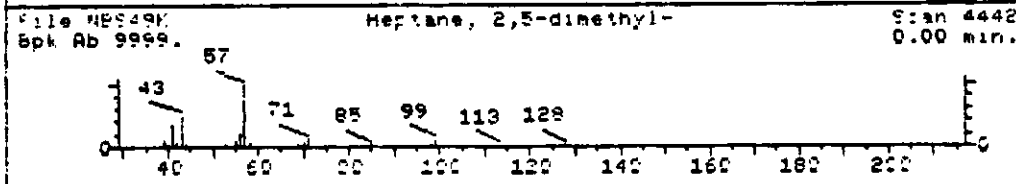
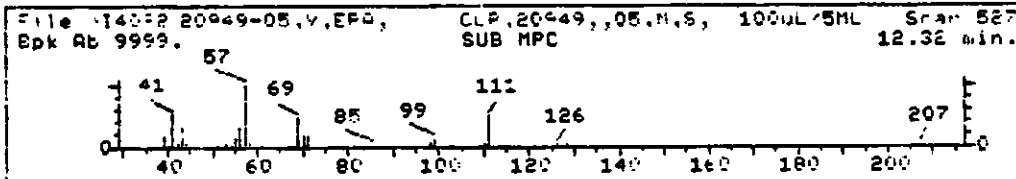
TIC NUMBER:6

1. Heptane, 2,5-dimethyl-
2. Octane, 3-methyl-
3. Heptane, 3,5-dimethyl-
4. Heptane, 2,3,5-trimethyl-
5. Heptane, 2-bromo-
6. 1-Pentene, 4,4-dimethyl-

128 C9H20
128 C9H20
128 C9H20
142 C10H22
178 C7H15Br
98 C7H14

Sample file: >I4082 Spectrum #: 527
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.	44*	2216300	9707	NBS49K	34	52	0	0	72	38	17	33
2.	38*	2216333	9708	NBS49K	41	43	2	0	100	33	16	21
3.	33*	4443	1262	NBS49K	28	49	0	0	100	38	10	19
4.	28	6855	1274	NBS49K	39	37	1	0	94	40	10	14
5.	26	14108	1290	NBS49K	37	47	2	0	74	40	10	12
6.	25*	1189	1237	NBS49K	33	43	2	0	89	49	7	16



DRAFT
000197

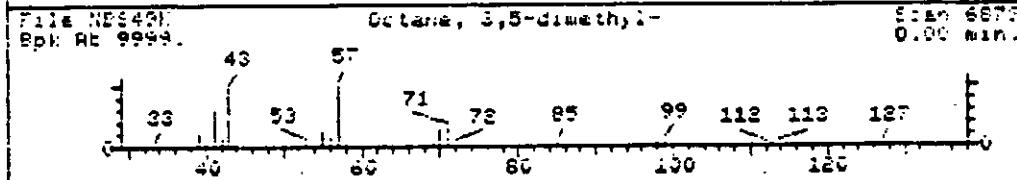
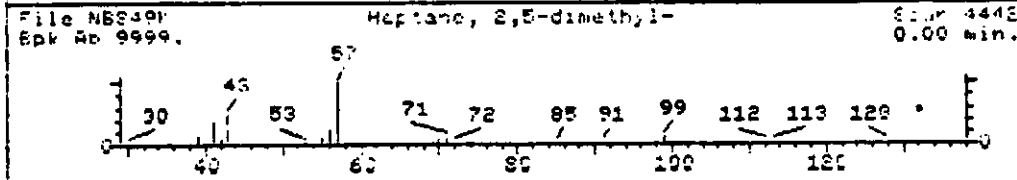
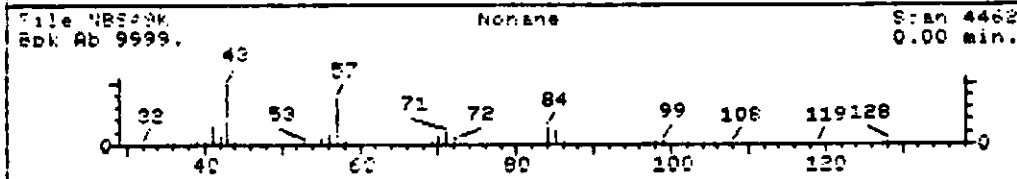
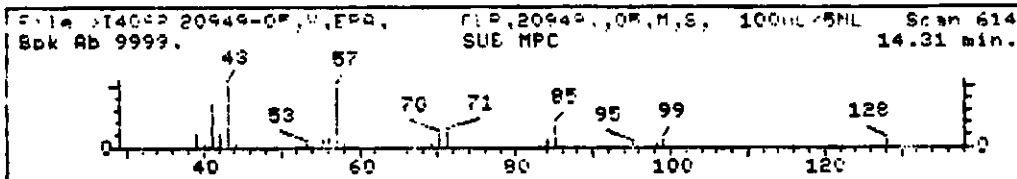
TIC NUMBER: 7

1. Nonane
2. Heptane, 2,5-dimethyl-
3. Octane, 3,5-dimethyl-
4. Octane, 2,4,6-trimethyl-
5. Hexane, 4-ethyl-2-methyl-
6. Hexane, 3-ethyl-4-methyl-

- 128 C9H20
- 128 C9H20
- 142 C10H22
- 156 C11H24
- 128 C9H20
- 128 C9H20

Sample file: >I4082 Spectrum #: 614
 Search speed: 2 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	88*	4462	6612	NBS49K	70	26	2	0	130	5	65	54
2.	57*	2216300	9707	NBS49K	37	49	0	0	92	31	22	42
3.	44	6879	4028	NBS49K	50	43	2	0	80	24	17	15
4.	42	9747	6682	NBS49K	39	46	2	0	94	21	17	13
5.	36*	3074757	9710	NBS49K	28	61	0	0	71	35	12	19
6.	36*	4461	3967	NBS49K	30	66	3	0	97	29	14	13



DRAFT
000198

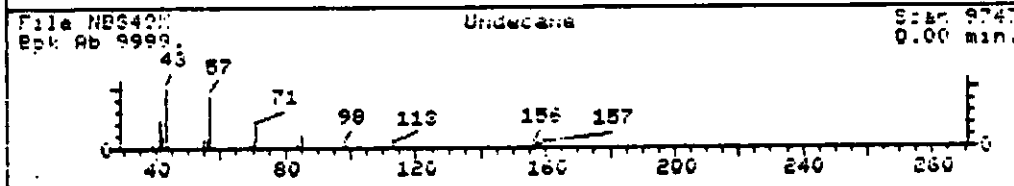
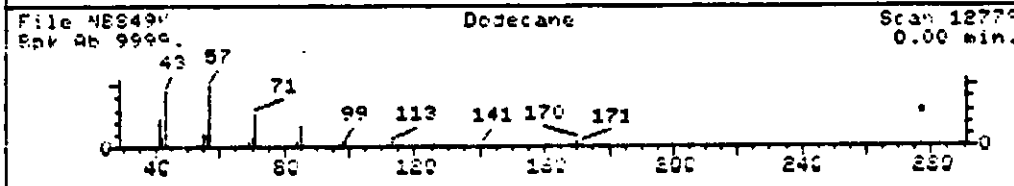
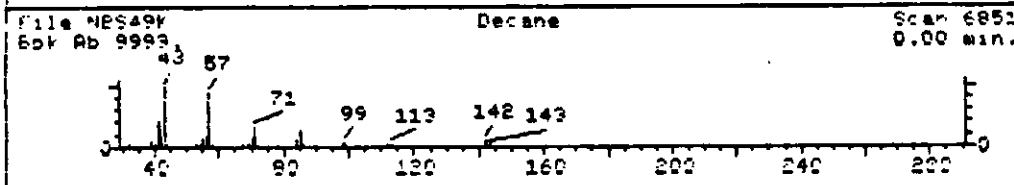
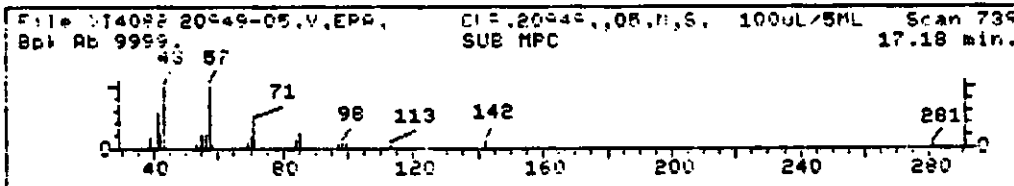
TIC NUMBER:8

1. Decane
2. Dodecane
3. Undecane
4. Undecane, 3-methyl-
5. Octane, 3,5-dimethyl-
6. Octane, 4-ethyl-

- 142 C10H22
- 170 C12H26
- 156 C11H24
- 170 C12H26
- 142 C10H22
- 142 C10H22

Sample file: >I4082 Spectrum #: 739
 Search speed: 2 Tilting option: S No. of ion ranges searched: 55

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	96*	124185	18079	NBS49K	91	9	0	0	98	1	72	96
2.	70	12779	6735	NBS49K	61	38	2	1	86	6	42	14
3.	70	9747	6685	NBS49K	59	38	2	0	98	7	42	19
4.	60	12793	6742	NBS49K	42	46	2	0	74	13	30	13
5.	59*	6879	4028	NBS49K	50	43	2	0	100	24	27	31
6.	52*	15969860	12088	NBS49K	43	50	2	0	100	18	25	23



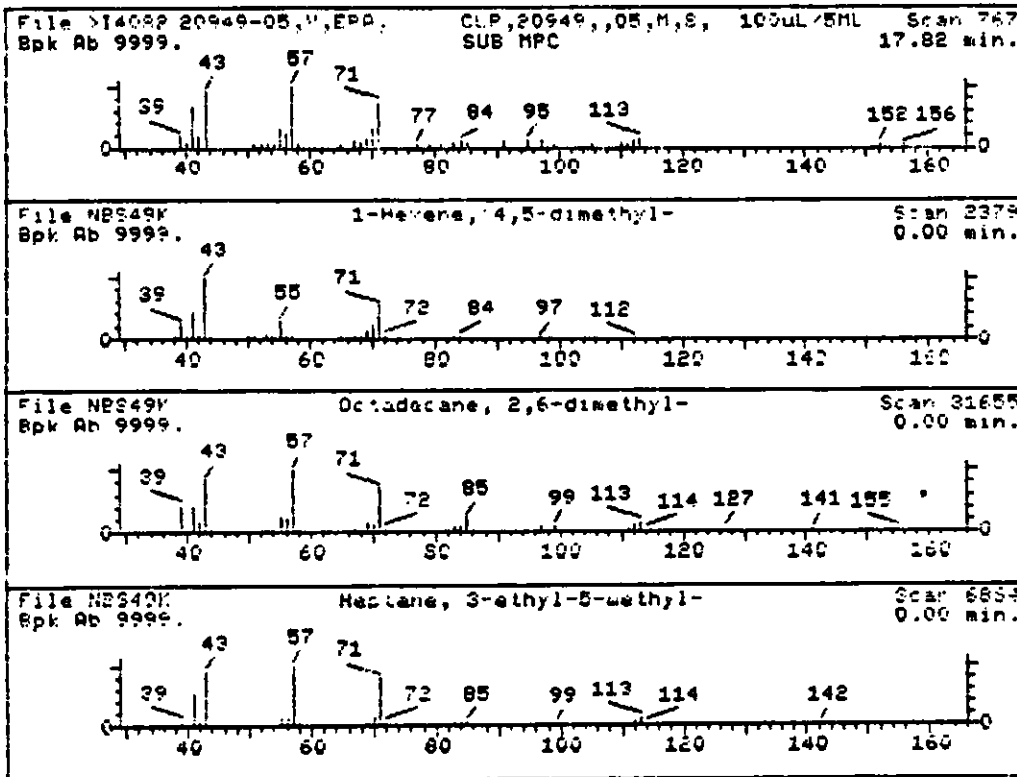
TIC NUMBER:9

1. 1-Hexene, 4,5-dimethyl-
2. Octadecane, 2,6-dimethyl-
3. Heptane, 3-ethyl-5-methyl-
4. Octane, 2,3,7-trimethyl-
5. Decane, 4-methyl-
6. Propanal, 2-propenylhydrazone

- 112 C8H16
- 282 C20H42
- 142 C10H22
- 156 C11H24
- 156 C11H24
- 112 C6H12N2

Sample file: >I4082 Spectrum #: 767
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	61*	2379	4288	NBS49K	39	48	0	0	91	31	22	46
2.	60	75163972	12512	NBS49K	70	71	3	0	100	12	30	12
3.	47	6864	4335	NBS49K	59	35	1	0	94	26	19	25
4.	46	9740	4360	NBS49K	57	36	1	0	97	26	19	24
5.	44*	9751	4361	NBS49K	42	59	2	0	70	21	17	15
6.	44*	2278	4287	NBS49K	40	59	1	0	64	29	19	22



DRAFT

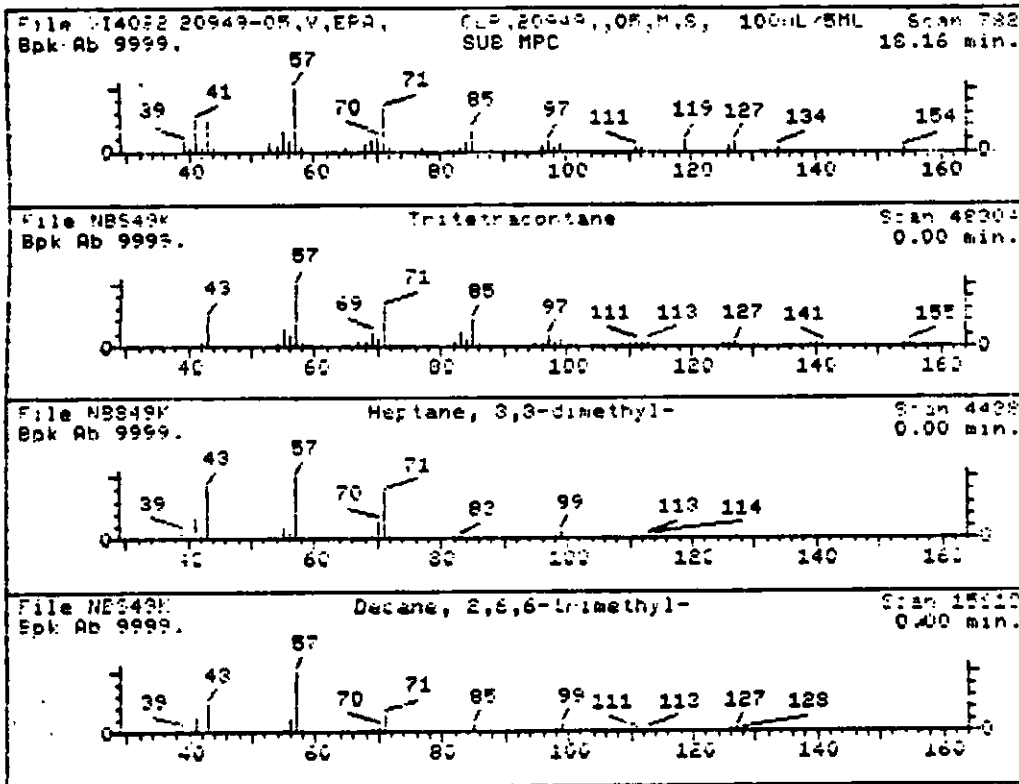
TIC NUMBER:10

1. Tritetracontane
2. Heptane, 3,3-dimethyl-
3. Decane, 2,6,6-trimethyl-
4. Methylamine, N-(1-methylhexylidene)-

604 C43H88
128 C44H20
184 C13H28
127 C8H17N

Sample file: >I4082 Spectrum #: 782
Search speed: 2 Tilting option: S No. of ion ranges searched: 62

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42	48304	6919	NBS49K	76	98	2	0	84	30	14	19
2.	25	4438	4314	NBS49K	42	49	2	0	82	46	7	12
3.	15	62108241	9855	NBS49K	43	56	1	0	86	59	3	12
4.	15*	4177	4301	NBS49K	27	61	2	0	66	57	3	14



DRAFT

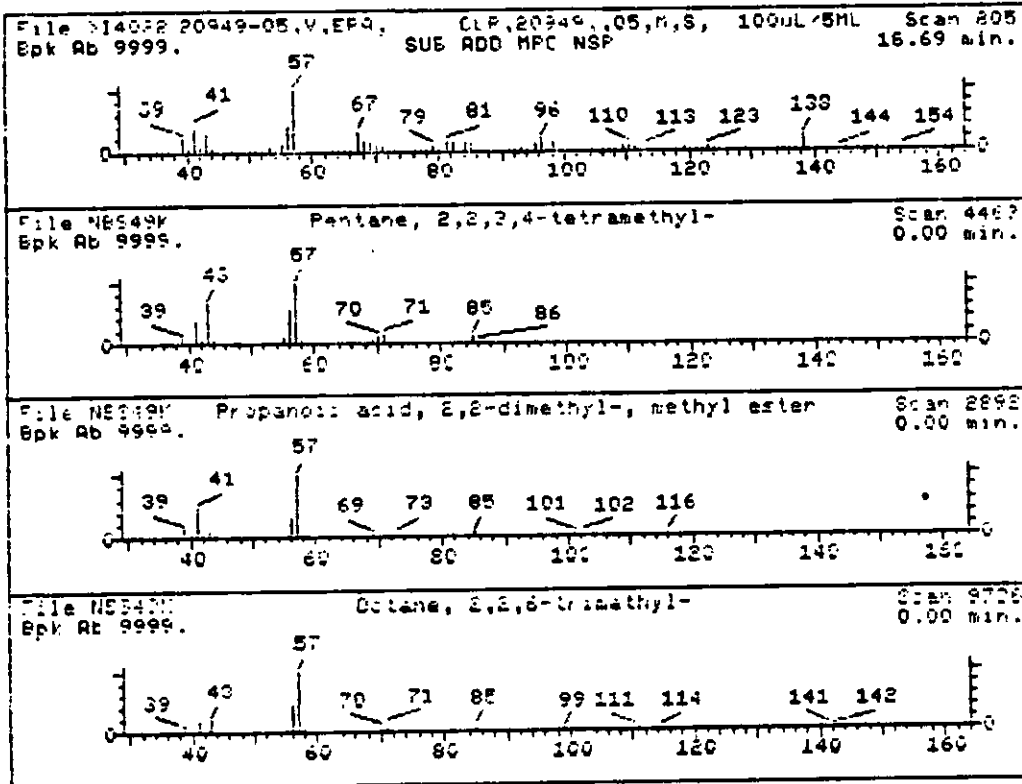
TIC NUMBER: 11

1. Pentane, 2,2,3,4-tetramethyl-
2. Propanoic acid, 2,2-dimethyl-, methyl ester
3. Octane, 2,2,6-trimethyl-
4. Nonane, 2,5-dimethyl-
5. Heptane, 2,2-dimethyl-
6. Hexane, 2,2-dimethyl-

128 C9H20
116 C6H12O2
156 C11H24
156 C11H24
128 C9H20
114 C8H18

Sample file: >I4082 Spectrum #: 805
Search speed: 2 Tilting option: S No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	15	4463	1124	NBS49K	38	45	2	0	77	60	3	13
2.	15	2842	1252	NBS49K	36	51	1	0	99	60	3	13
3.	15	9736	1179	NBS49K	42	35	1	0	98	56	3	15
4.	13*	17302271	9794	NBS49K	40	40	0	-1	32	62	3	32
5.	11	4453	1123	NBS49K	34	45	1	0	91	64	2	12
6.	11	2719	1250	NBS49K	38	34	1	0	129	64	2	14



DRAFT

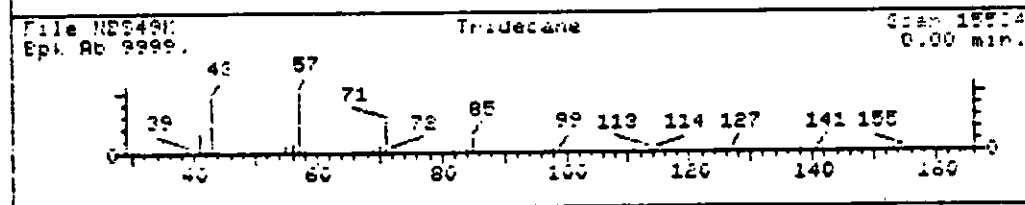
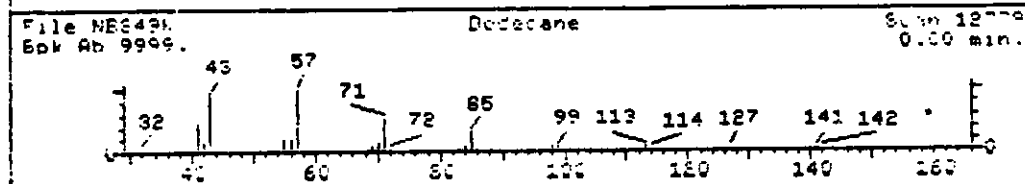
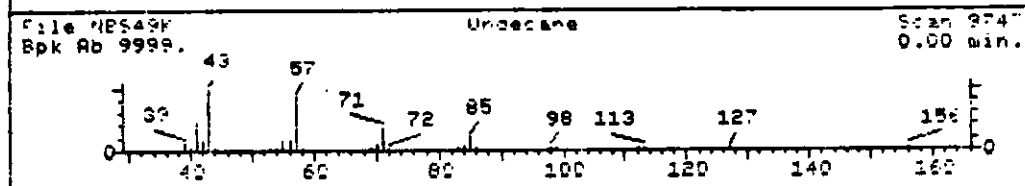
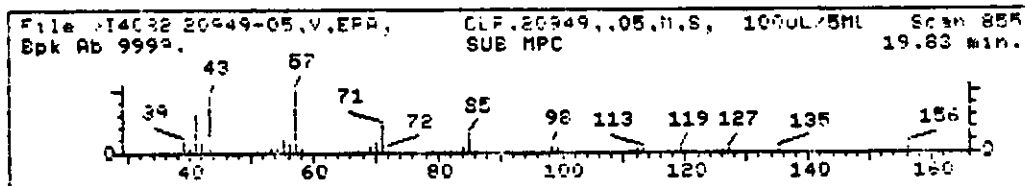
TIC NUMBER: 12

1. Undecane
2. Dodecane
3. Tridecane
4. Nonane, 4,5-dimethyl-
5. Tetradecane
6. Pentadecane

- 156 C11H24
- 170 C12H26
- 184 C13H28
- 156 C11H24
- 198 C14H30
- 212 C15H32

Sample file: >I4082 Spectrum #: 855
 Search speed: 2 Tilting option: S No. of ion ranges searched: 57

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	93*	9747	6685	NBS49K	89	8	1	-2	98	1	68	83
2.	86	12779	6735	NBS49K	81	18	2	0	81	4	60	30
3.	83	15584	6764	NBS49K	71	35	2	0	85	5	57	23
4.	79*	9748	6686	NBS49K	63	42	3	0	71	9	48	31
5.	78	18383	6807	NBS49K	68	40	2	0	81	2	55	17
6.	78	21020	6822	NBS49K	73	47	2	0	67	4	55	18



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000203

20949-06

Lab Name: ENSECO	Contract:
Lab Code: ENSECO	Case No.: 20949
Matrix: (soil/water) SOIL	SAS No.:
Sample wt/vol: 4.0 (g/mL) G	SDG No.:
Level: (low/med) MED	Lab Sample ID: 20949-06
% Moisture: not dec. 8	Lab File ID: D1755
GC Column: CAP	ID: 0.530 (mm)
Soil Extract Volume: 10000 (uL)	Date Received: 02/15/92
	Date Analyzed: 02/27/92
	Dilution Factor: 1.0
	Soil Aliquot Volume: 100 (uL)

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	1400	U
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	1400	U
75-35-4	1,1-Dichloroethene	1400	U
75-34-3	1,1-Dichloroethane	1400	U
540-59-0	1,2-Dichloroethene (total)	1400	U
67-66-3	Chloroform	1400	U
107-06-2	1,2-Dichloroethane	1400	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	1400	U
56-23-5	Carbon Tetrachloride	1400	U
75-27-4	Bromodichloromethane	1400	U
78-87-5	1,2-Dichloropropane	1400	U
10061-01-5	cis-1,3-Dichloropropene	1400	U
79-01-6	Trichloroethene	1400	U
124-48-1	Dibromochloromethane	1400	U
79-00-5	1,1,2-Trichloroethane	1400	U
71-43-2	Benzene	1400	U
10061-02-6	trans-1,3-Dichloropropene	1400	U
75-25-2	Bromoform	1400	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	1400	U
127-18-4	Tetrachloroethene	1400	U
79-34-5	1,1,2,2-Tetrachloroethane	1400	U
108-88-3	Toluene	290	J
108-90-7	Chlorobenzene	1400	U
100-41-4	Ethylbenzene	1200	J
100-42-5	Styrene	1400	U
1330-20-7	Xylene (total)	9300	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000204
EPA SAMPLE NO.

20949-06

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-06

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: D1755

Level: (low/med) MED

Date Received: 02/15/92

% Moisture: not dec. 8

Date Analyzed: 02/27/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

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

Number TICs found: 15

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 592-27-8	Heptane, 2-methyl-	13.15	8500	JN
2. 589-81-1	Heptane, 3-methyl-	13.40	4700	JN
3. 2213-23-2	Heptane, 2,4-dimethyl-	14.29	15000	JN
4. 5405-79-8	3-Hexanone, 2,2-dimethyl-	15.20	2200	JN
5. 1678-91-7	Cyclohexane, ethyl-	15.39	6600	JN
6. 111-84-2	Nonane	17.37	3500	JN
7. 1186-53-4	Pentane, 2,2,3,4-tetramethyl	18.37	2200	JN
8. 629-64-1	Heptane, 1,1'-oxybis-	19.19	5600	JN
9. 29053-04-1	Cyclopentane, 1-methyl-3-(2-	19.94	1700	JN
10. 1120-21-4	Undecane	20.25	13000	JN
11. 526-73-8	Benzene, 1,2,3-trimethyl-	20.67	3500	JN
12. 13475-78-0	Heptane, 5-ethyl-2-methyl-	20.85	2400	JN
13. 3788-32-7	Cyclopentane, (2-methylpropy	21.24	6300	JN
14. 15869-94-0	Octane, 3,6-dimethyl-	21.72	2100	JN
15. 493-02-7	Naphthalene, decahydro-, tra	21.84	1800	JN

000205

QUANT REPORT

Page 1

Operator ID: DUEY1 Quant Rev: 7 Quant Time: 920227 16:20
 Output File: ^D1755::QT Injected at: 920227 15:50
 Date File: >D1755::D2 Dilution Factor: 1.00000
 Name: 20949-06,U,EPA, Instrument ID: 0
 Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D

ID File: IDEPAD::ID
 Title: ID FILE CLP INST. D + THF
 Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *CI01 BROMOCHLOROMETHANE	9.15	128.0	15562	50.00	UG/L	94
2) CS15 1,2-DICHLOROETHANE-D4	10.19	65.0	23732	43.93	UG/L	77
20) *CI10 1,4-DIFLUOROBENZENE	11.11	114.0	61517	50.00	UG/L	100
32) *CI20 CHLOROBENZENE-D5	16.39	117.0	47122	50.00	UG/L	81
33) CS05 TOLUENE-D8	13.64	98.0	58181	49.36	UG/L	95
34) CS10 BROMOFLUOROBENZENE	18.85	95.0	30985	48.38	UG/L	100
35) C230 TOLUENE	13.76	91.0	2308	2.10	UG/L	97
40) C240 ETHYLBENZENE	16.78	106.0	3661	9.10	UG/L	97
41) UJNK M&P-XYLENES	17.03	106.0	27193	54.24	UG/L	89
42) U029 O-XYLENE	17.79	106.0	6515	13.59	UG/L	99

* Compound is ISTD

000206

MS data file header from : >D1755::D2

Sample: 20949-06,U,EPA, Operator: DUEY1 REG. GRP. 2/27/92 15:50
Misc : CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: 0
Method file: SAMMD Tuning file: MTBFBD No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

CONCENTRATION DILUTION INFORMATION

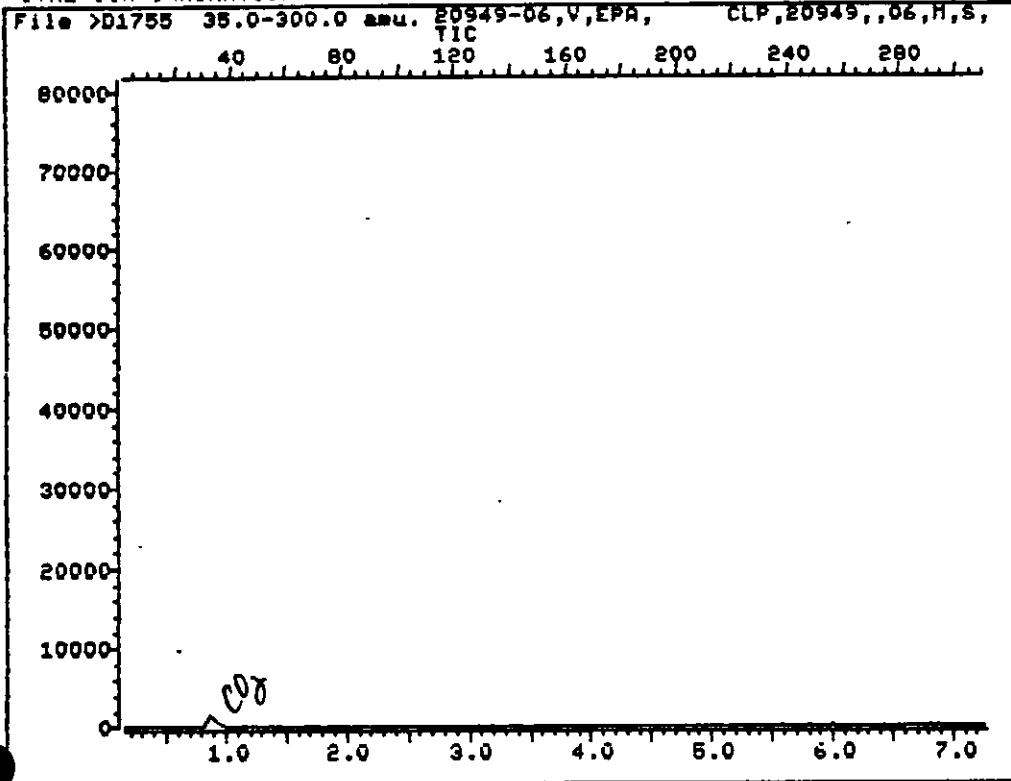
rep_units	UG/KG	Idesired reporting units
samp_amt	4G	Iamt of sample taken
ext_vol	5ML	Ifinal extract volume
q_units	UG/L	Ical units from quant
ext_dil	100	I dilution factor
%moist	N/A	I%moisture for soil
int_ext_vol	10	Iintermediate extr ct vol/M.L. ext vo
int_ext_vol_u	.100	Iintermediate extract vol/M.L. vol US
spiked	S	ISurrogate added at S(tart)/E(nd)
matrix	S	I sample matrix W(ater)/S(oil)
runfact	125	I calcd runfactor
surfact	.500	I calcd surr vol

Performance Check: >D1750 Injection Time: 2/27/92 10:32
Sample : >D1755 Injection Time: 2/27/92 15:50
Elapsed Time: 0 Y 0 D 5:18
Sample: ^D1755 Calibration Stds.: ^D1751,

000207

TIC = Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1755::D2
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D

Quant Output File: ^D1755::QT
Instrument ID: D

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

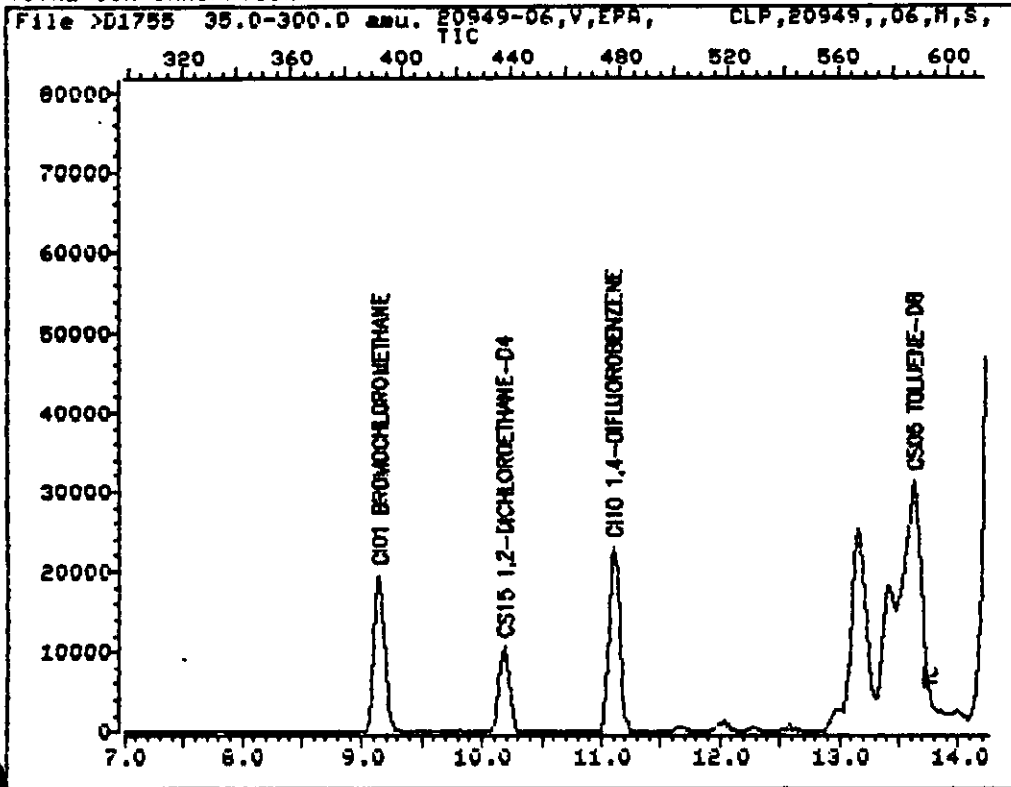
Last Qual Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 16:20
Injected at: 920227 15:50

000208

TIC = Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1755::D2

Name: 20949-06,V,EPA,

Misc: CLP,20949,,06,M,S,

Quant Output File: ^D1755::QT

Instrument ID: D

100UL/5ML/100%/4G/10ML CAW D

Id File: IDEPAD::ID

Title: ID FILE CLP INST. D + THF

Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1

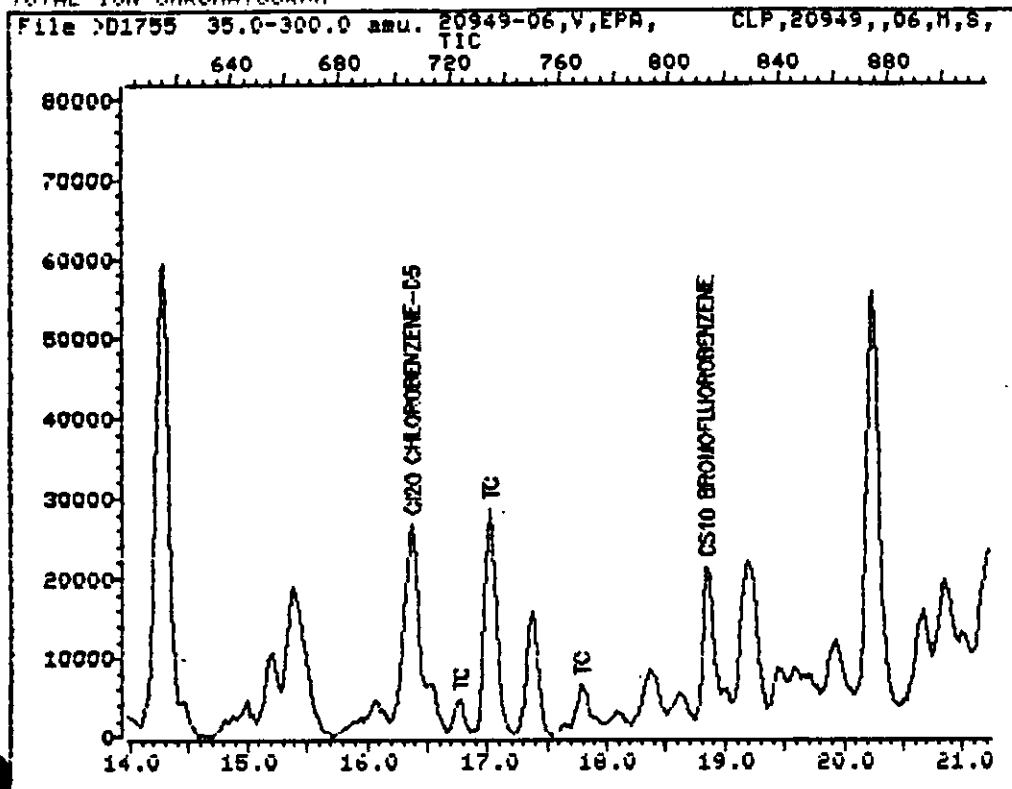
Quant Time : 920227 16:20

Injected at: 920227 15:50

000209

10 = Tentatively Identified Peaks of
Total Ion Chromatogram
30 = 100% Chlorobenzene

TOTAL ION CHROMATOGRAM



Date File: >D1755::D2

Quant Output File: ^D1755::QT

Name: 20949-06,U,EPA,

Instrument ID: D

Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D

Id File: IDEPAD::ID

Title: ID FILE CLP INST. D + THF

Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1

Quant Time : 920227 16:20

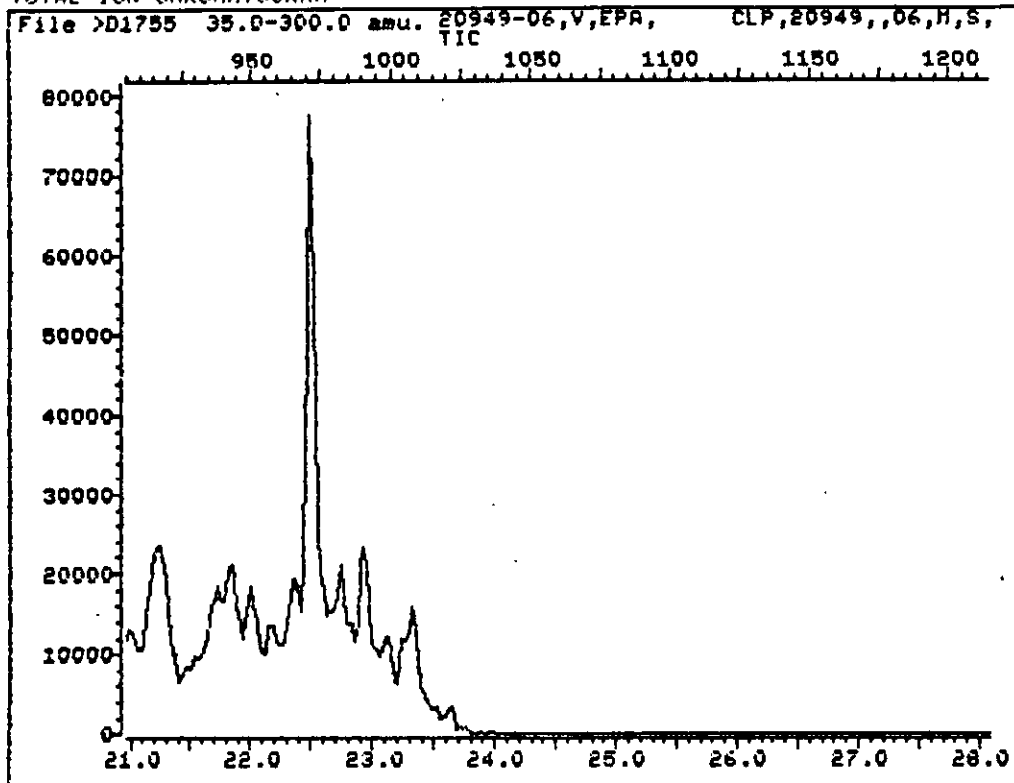
Injected at: 920227 15:50

Page 3 of 4

000210

TIC - Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1755::D2

Quant Output File: ^D1755::QT

Name: 20949-06,U,EPA,

Instrument ID: D

Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D

Id File: IDEPAD::ID

Title: ID FILE CLP INST. D + THF

Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1

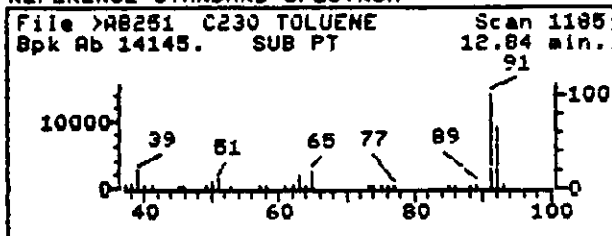
Quant Time : 920227 16:20

Injected at: 920227 15:50

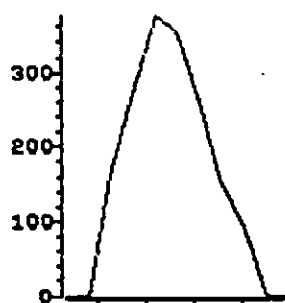
Page 4 of 4

000211

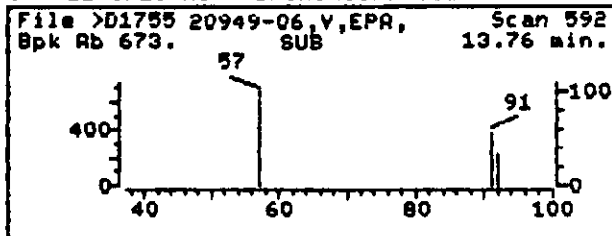
REFERENCE STANDARD SPECTRUM



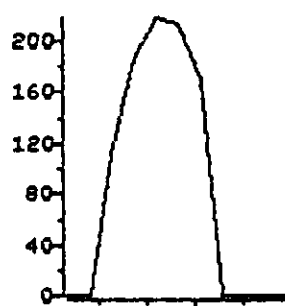
File >D1755 90.7-91.7 min



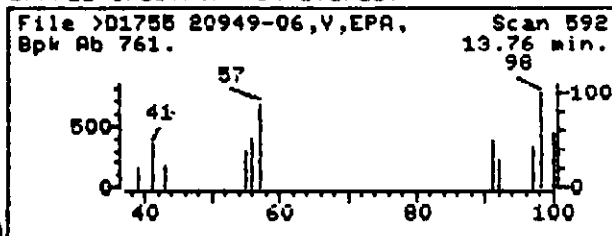
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >D1755 91.7-92.7 min



SAMPLE SPECTRUM (UNALTERED)

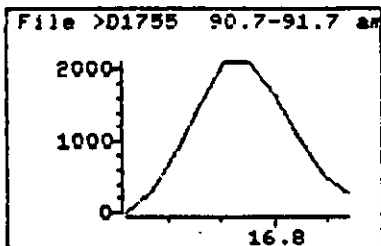
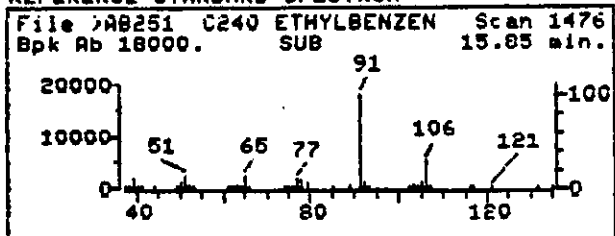


Data File: >D1755::D2
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D
Quant Time: 920227 16:20
Injected at: 920227 15:50
Last Qcal Time: 920227 10:56

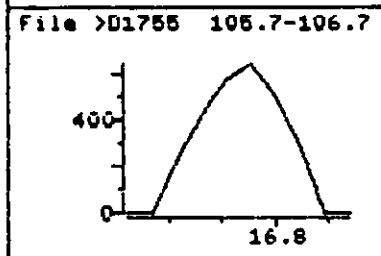
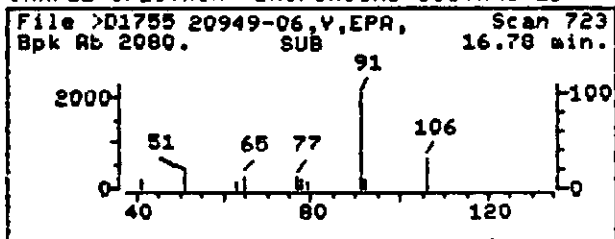
Quant Output File: ^D1755::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 35
Compound Name : C230 TOLUENE
Scan Number : 592
Retention Time : 13.76 min.
Quant Ion : 91.0
Area : 2308
Concentration : 2.10 UG/L
q-value : 97

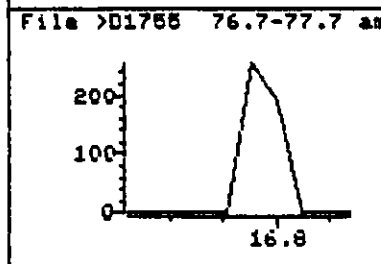
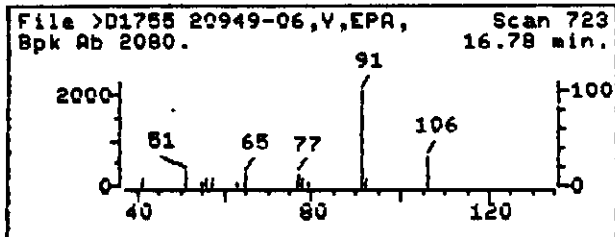
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D1755::D2
Name: 20949-06,V,EPA,
Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D
Quant Time: 920227 16:20
Injected at: 920227 15:50
Last Qcal Time: 920227 10:56

Quant Output File: ^D1755::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

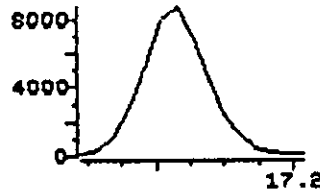
Compound No : 40
Compound Name : C240 ETHYLBENZENE
Scan Number : 723
Retention Time: 16.78 min.
Quant Ion : 106.0
Area : 3661
Concentration : 9.10 UG/L
q-value : 97

REFERENCE STANDARD SPECTRUM

File >AB251 C250 M&P-XYLENES Scan 1503
Bpk Ab 13977. SUB 16.13 min.

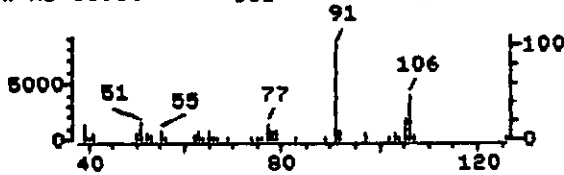


File >D1755 90.7-91.7 am

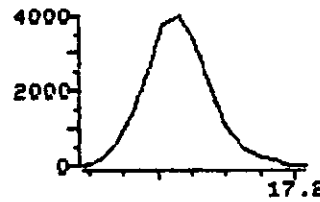


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >D1755 20949-06,U,EPA, Scan 734
Bpk Ab 8393. SUB 17.03 min.

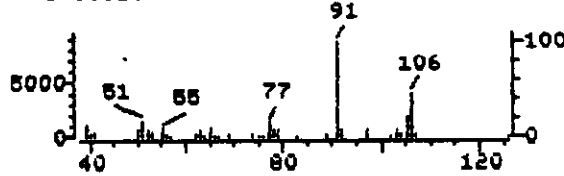


File >D1755 105.7-106.7

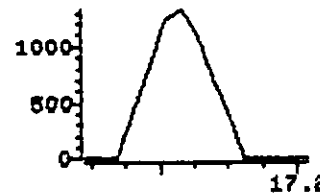


SAMPLE SPECTRUM (UNALTERED)

File >D1755 20949-06,U,EPA, Scan 734
Bpk Ab 8652. SUB 17.03 min.



File >D1755 76.7-77.7 am

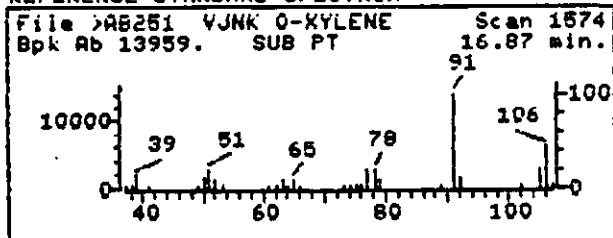


Data File: >D1755::D2
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D
Quant Time: 920227 16:20
Injected at: 920227 15:50
Last Qcal Time: 920227 10:56

Quant Output File: ^D1755::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 41
Compound Name : UJNK M&P-XYLENES
Scan Number : 734
Retention Time: 17.03 min.
Quant Ion : 106.0
Area : 27193
Concentration : 54.24 UG/L
q-value : 89

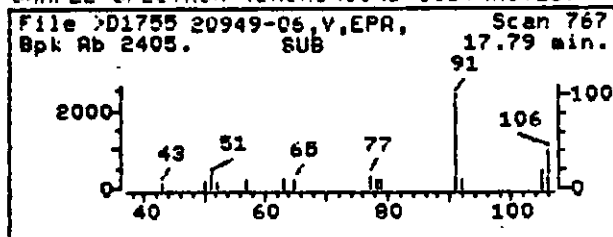
REFERENCE STANDARD SPECTRUM



File >D1755 90.7-91.7 am



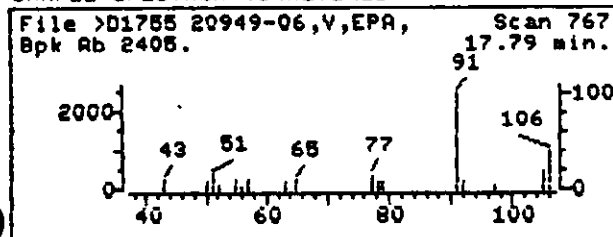
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



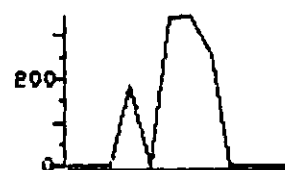
File >D1755 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)



File >D1755 76.7-77.7 am



Data File: >D1755::D2
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100UL/5ML/100%/4G/10ML CAW D
Quant Time: 920227 16:20
Injected at: 920227 15:50
Last Qcal Time: 920227 10:56

Quant Output File: ^D1755::QT
Instrument ID: D
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 42
Compound Name : U029 O-XYLENE
Scan Number : 767
Retention Time: 17.79 min.
Quant Ion : 106.0
Area : 6515
Concentration : 13.59 UG/L
q-value : 99

000215

Diagnostic Quant Report

Date File: >D1755::D2 Injected at: 15:50 02/27/92
 Quant'd : 16:20 02/27/92
 ID File : IDEPAD::ID Calibrated : 14:39 01/08/92

Compound	- R.T. Info -			Ion	Area	RF	Conc.
	Pred	Found	Dif				
1) *C101 BROMOCHLOROMETHANE	9.08	9.15	.08	128.0	15562	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	10.20	10.19	.01	65.0	23732	1.7357	43.93
3) C010 CHLOROMETHANE	1.75	0.00	--	50.0	0	1.0291	0.00
4) C020 VINYL CHLORIDE	2.05	0.00	--	62.0	0	1.2378	0.00
5) C015 BROMOMETHANE	2.82	0.00	--	94.0	0	1.3246	0.00
6) C025 CHLOROETHANE	3.19	0.00	--	64.0	0	.8416	0.00
7) C045 1,1-DICHLOROETHENE	5.09	0.00	--	96.0	0	1.3207	0.00
8) U015 TRICHLORO-TRIFLUOROE	5.35	0.00	--	151.0	0	1.1911	0.00
9) C040 CARBON DISULFIDE	5.21	0.00	--	76.0	0	2.3987	0.00
10) C035 ACETONE	5.58	0.00	--	43.0	0	.2160	0.00
11) C030 METHYLENE CHLORIDE	6.30	0.00	--	84.0	0	1.7748	0.00
12) UJNK trans-1,2-DICHLOROET	6.83	0.00	--	96.0	0	1.3047	0.00
13) C050 1,1-DICHLOROETHANE	7.64	0.00	--	63.0	0	2.7955	0.00
14) U011 cis-1,2-DICHLOROETHE	8.76	0.00	--	96.0	0	1.4126	0.00
15) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3587	0.00
16) C110 2-BUTANONE	8.97	0.00	--	43.0	0	.4131	0.00
17) U013 TETRAHYDROFURAN	9.29	0.00	--	42.0	0	.1945	0.00
18) C060 CHLOROFORM	9.46	0.00	--	83.0	0	3.0091	0.00
19) C065 1,2-DICHLOROETHANE	10.34	0.00	--	62.0	0	1.8182	0.00
20) *C110 1,4-DIFLUOROBENZENE	11.06	11.11	.05	114.0	61517	1.0000	50.00
21) C115 1,1,1-TRICHLOROETHAN	9.54	0.00	--	97.0	0	.5218	0.00
22) C120 CARBONTETRACHLORIDE	9.82	0.00	--	117.0	0	.4951	0.00
23) C165 BENZENE	10.19	0.00	--	78.0	0	.8941	0.00
24) C150 TRICHLOROETHENE	11.43	0.00	--	130.0	0	.3791	0.00
25) C140 1,2-DICHLOROPROPANE	11.80	0.00	--	63.0	0	.3892	0.00
26) C130 BROMODICHLOROMETHANE	12.43	0.00	--	83.0	0	.6236	0.00
27) C143 cis-1,3-DICHLOROPROP	13.26	0.00	--	75.0	0	.5411	0.00
28) C172 trans-1,3-DICHLOROPR	14.40	0.00	--	75.0	0	.4289	0.00
29) C160 1,1,2-TRICHLOROETHAN	14.67	0.00	--	97.0	0	.3033	0.00
30) C155 CHLORODIBROMOMETHANE	15.35	0.00	--	129.0	0	.4809	0.00
31) C180 BROMOFORM	18.15	0.00	--	173.0	0	.2986	0.00
32) *C120 CHLOROBENZENE-D5	16.35	16.39	.03	117.0	47122	1.0000	50.00
33) CS05 TOLUENE-D8	13.66	13.64	.02	98.0	58181	1.2507	49.36
34) CS10 BROMOFLUOROBENZENE	18.85	18.85	.00	95.0	30985	.6795	48.38
35) C230 TOLUENE	13.78	13.76	.02	91.0	2308	1.1651	2.10
36) C205 4-METHYL-2-PENTANONE	13.66	0.00	--	43.0	0	.3933	0.00
37) C220 TETRACHLOROETHENE	14.75	0.00	--	164.0	0	.3423	0.00
38) C210 2-HEXANONE	15.28	0.00	--	43.0	0	.2348	0.00
39) C235 CHLOROBENZENE	16.43	0.00	--	112.0	0	.8381	0.00
40) C240 ETHYLBENZENE	16.75	16.78	.02	106.0	3661	.4270	9.10
40) D C240 ETHYLBENZENE	16.75	17.03	.28	106.0	27193	.4270	67.58
41) D UJNK M&P-XYLENES	17.01	16.78	.23	106.0	3661	.5320	7.30
41) UJNK M&P-XYLENES	17.01	17.03	.02	106.0	27193	.5320	54.24
42) U029 O-XYLENE	17.79	17.79	.00	106.0	6515	.5086	13.59
43) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	33708	.5203	68.74
44) C245 STYRENE	17.84	0.00	--	104.0	0	.8082	0.00
45) C225 1,1,2,2-TETRACHLOROE	19.36	0.00	--	83.0	0	.7925	0.00

* - Compound is an Internal Standard

Internal Standard Report

Data File: >D1755

Maximum separation 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
392.	15562.	7.294 392. 118742.	104.614
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
477.	61517.	2.506 477. 144215.	93.544
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
706.	47122.	3.094 706. 201579.	138.255

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 26
 Number of peaks remaining: 26

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 26
 Number of peaks remaining: 18

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15
 Number of peaks: 18
 Number of peaks remaining: 15

000217

Data Reduced by : DAB Date: 3/4/92
 Data Reviewed by : AJ Date: 3/10/92

Data File: 001755

Enseco TIC Report (page 1)

Sample: 20949-06,U,EPA, Run Factor: 136.
 Conditions: CLP,20949,,06,M.S, 100UL/5ML/ Analyst: DUEY1

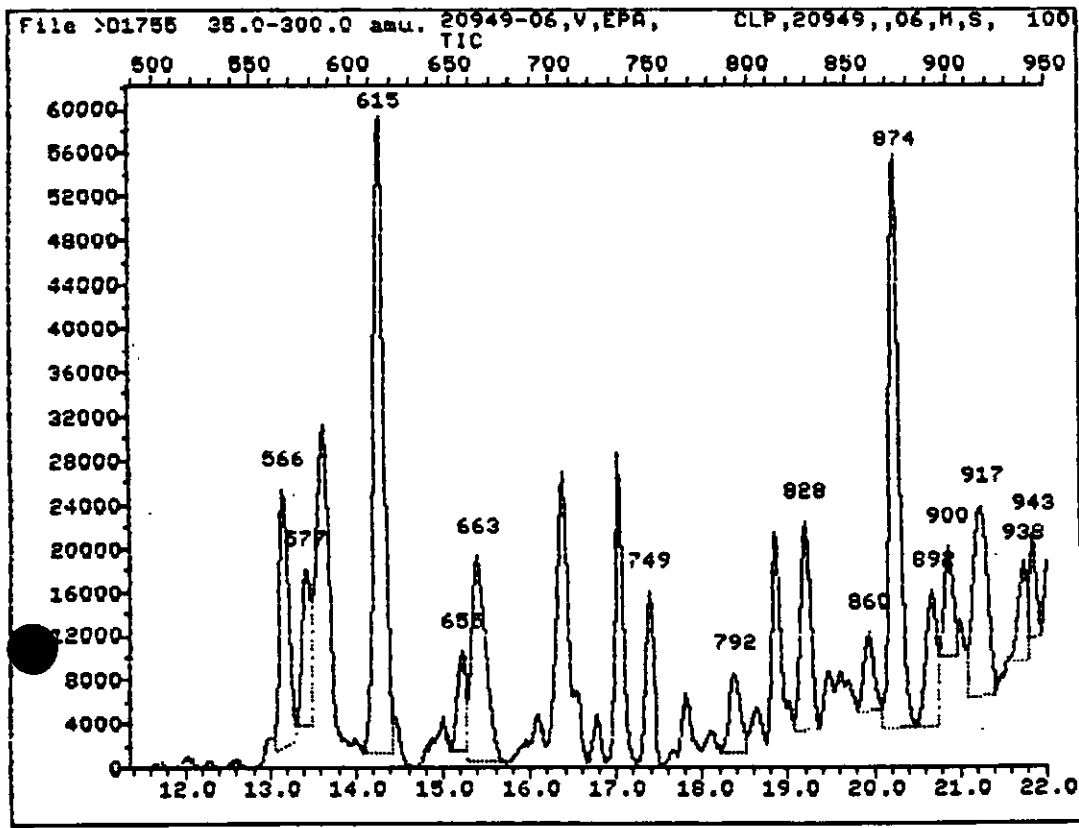
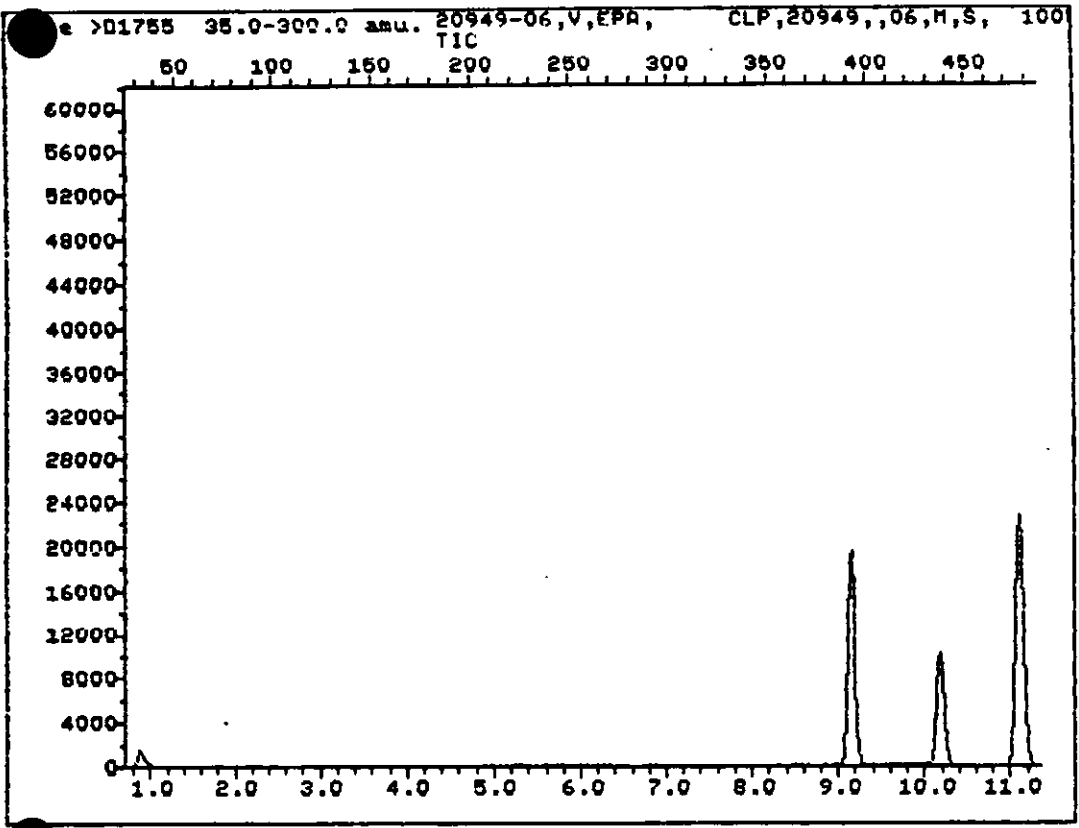
#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	566.	2		8500.	592-27-8	Heptane, 2-methyl-
2	577.	2		4700.	589-81-1	Heptane, 3-methyl-
3	615.	2		15000.	2213-23-2	Heptane, 2,4-dimethyl-
4	655.	1		2200.	5405-79-8	3-Hexanone, 2,2-dimethyl-
5	663.	1		6700.	1678-91-7	Cyclohexane, ethyl-
6	749.	2		3500.	111-84-2	Nonane
7	792.	1		2200.	1186-53-4	Pentane, 2,2,3,4-tetramethyl-
8	828.	1		5600.	629-64-1	Heptane, 1,1'-oxybis-
9	860.	1		1700.	29053-04-1	Cyclopentane, 1-methyl-3-(2-methylpropyl)-
10	874.	2		13000.	1120-21-4	Undecene
11	892.	2		3500.	526-73-8	Benzene, 1,2,3-trimethyl-
12	900.	2		2300.	13475-78-0	Heptane, 5-ethyl-2-methyl-
13	917.	1		6300.	3788-32-7	Cyclopentane, (2-methylpropyl)-
14	938.	1		2100.	15869-94-0	Octane, 3,6-dimethyl-
15	943.	1		1700.	493-02-7	Naphthalene, decahydro-, trans-

Data File: >D1755

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	79	10	2	13.16	1.184	179869.	23007.	62.361
2	70	9	2	13.41	1.207	99267.	14109.	34.416
3	76	10	3	14.29	.872	452559.	58000.	112.254
4	32	35	3	15.21	.928	64105.	8925.	15.901
5	25	43	3	15.39	.940	197237.	18462.	48.923
6	88	4	3	17.38	1.060	103946.	15744.	25.783
7	25	50	3	18.37	1.121	65133.	7113.	16.156
8	41	25	3	19.20	1.172	167167.	18764.	41.464
9	30	32	3	19.93	1.217	51704.	6901.	12.825
10	83	5	3	20.26	1.236	392241.	52072.	97.292
11	79	9	3	20.67	1.262	104630.	12392.	25.953
12	52	16	3	20.86	1.273	69554.	9801.	17.252
13	31	57	3	21.25	1.297	188205.	16992.	46.683
14	36	26	3	21.73	1.326	63185.	8903.	15.673
15	31	32	3	21.85	1.333	51838.	9170.	12.858



TIC NUMBER:1

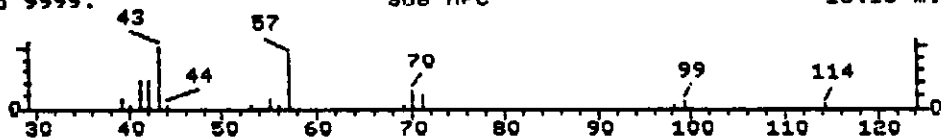
1. Heptane, 2-methyl-
2. Hexane, 2,5-dimethyl-
3. Butane, 1-(ethenyloxy)-3-methyl-
4. Pyrrolidine

114 C8H18
 114 C8H18
 114 C7H14O
 71 C4H9N

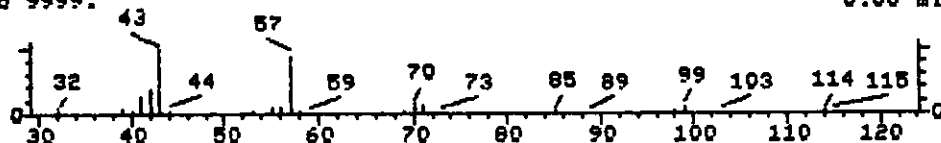
Sample file: >D1755 Spectrum #: 566
 Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	79*	592278	9677	NBS49K	48	43	1	0	86	10	48	35
2.	52*	592132	9676	NBS49K	25	65	3	0	88	20	20	13
3.	25*	39782382	3913	NBS49K	35	45	3	0	100	48	7	14
4.	25*	123751	3822	NBS49K	20	68	2	0	73	47	7	13

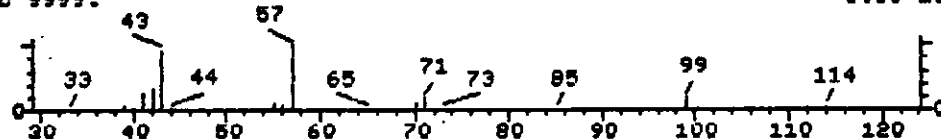
File >D1755 20949-06,V,EPA, CLP,20949.,06,M,S, 100UL/BML Scan 566
 Bpk Ab 9999. SUB MPC 13.16 min.



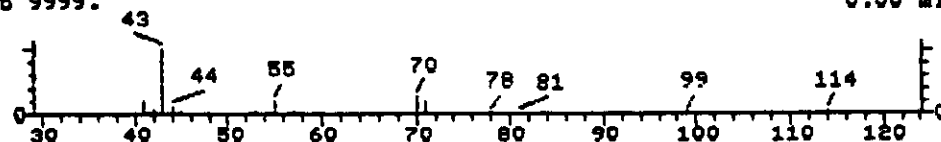
File NBS49K Heptane, 2-methyl- Scan 2720
 Bpk Ab 9999. 0.00 min.



File NBS49K Hexane, 2,5-dimethyl- Scan 2711
 Bpk Ab 9999. 0.00 min.



File NBS49K Butane, 1-(ethenyloxy)-3-methyl- Scan 2703
 Bpk Ab 9999. 0.00 min.



2

000221

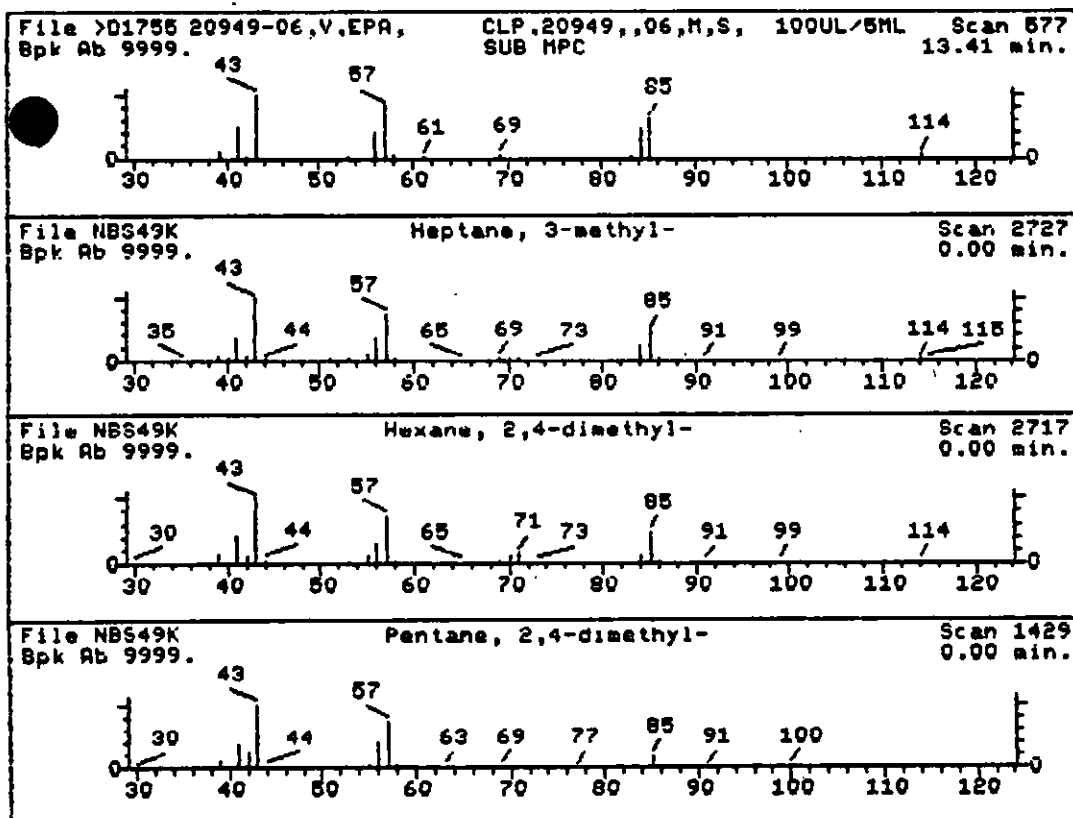
TIC NUMBER:2

- 1. Heptane, 3-methyl-
- 2. Hexane, 2,4-dimethyl-
- 3. Pentane, 2,4-dimethyl-
- 4. 1-Pentene, 4-methyl-

114 C8H18
 114 C8H18
 100 C7H16
 84 C6H12

Sample file: >D1755 Spectrum #: 577
 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*	589811	6561	NBS49K	39	51	2	0	100	9	42	19
2.	60*	589435	6558	NBS49K	40	58	3	0	100	14	30	13
3.	35	108087	1063	NBS49K	35	49	2	0	100	27	14	12
4.	20*	691372	1017	NBS49K	24	61	3	0	69	55	5	12



2

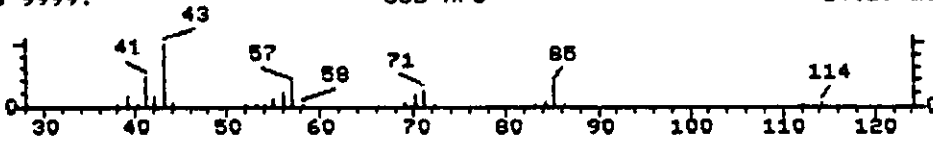
TIC NUMBER:3

- | | |
|-----------------------------|-----------|
| 1. Heptane, 2,4-dimethyl- | 128 C9H20 |
| 2. Octane | 114 C8H18 |
| 3. Hexane, 2,4-dimethyl- | 114 C8H18 |
| 4. Hexane, 2,3,4-trimethyl- | 128 C9H20 |
| 5. Hexane, 3-ethyl- | 114 C8H18 |
| 6. Hexane, 2-methyl- | 100 C7H16 |

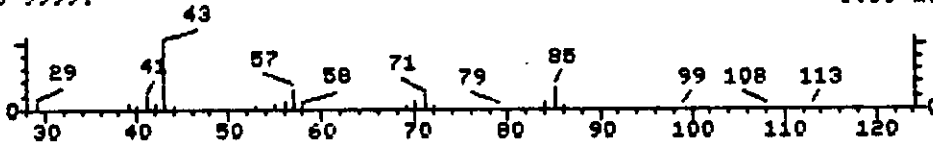
Sample file: >D1755 Spectrum #: 615
 Search speed: 2 Tilting option: S No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	76	2213232	NBS49K	59	28	1	0	97	10	45	26
2.	67*	111659	NBS49K	71	18	1	0	121	49	20	77
3.	67*	589435	NBS49K	50	48	2	0	70	13	34	25
4.	60	921471	NBS49K	52	38	1	0	71	13	30	19
5.	53*	619998	NBS49K	43	47	1	0	100	24	22	25
6.	52	591764	NBS49K	46	41	2	0	100	20	20	15

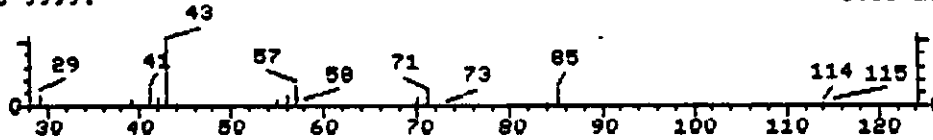
File >D1755 20949-06,V,EPA, CLP,20949,,06,H,S, 100UL/5ML Scan 615
 Bpk Ab 9999. SUB MPC 14.29 min.



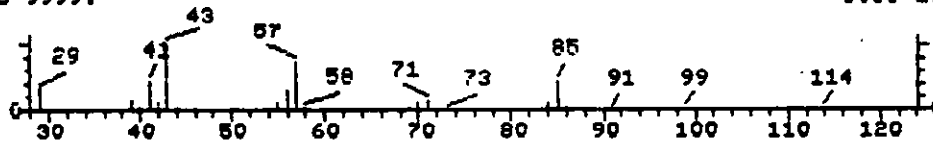
File NBS49K Heptane, 2,4-dimethyl- Scan 4444
 Bpk Ab 9999. 0.00 min.



File NBS49K Octane Scan 2712
 Bpk Ab 9999. 0.00 min.



File NBS49K Hexane, 2,4-dimethyl- Scan 2717
 Bpk Ab 9999. 0.00 min.



2

000223

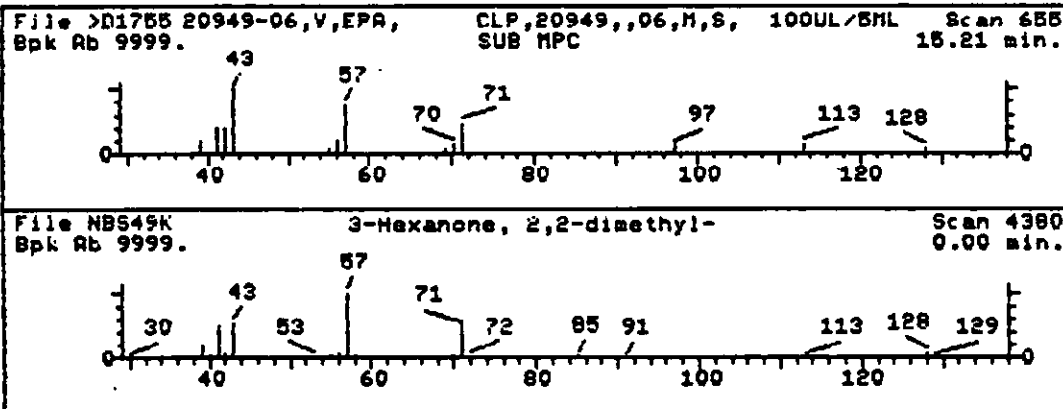
TIC NUMBER:4

1. 3-Hexanone, 2,2-dimethyl-

128 C8H16O

Sample file: >D1755 Spectrum #: 655
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	32*	5405798	4306	NBS49K	31	54	2	0	75	35	12 15



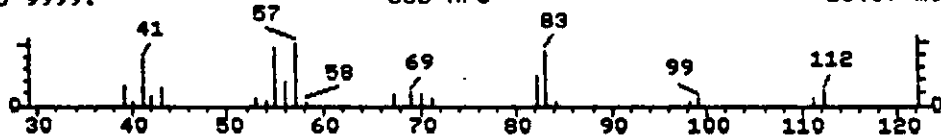
TIC NUMBER:5

1. Cyclohexane, ethyl-	112 CBH16
2. Cyclopentane, 1-ethyl-3-methyl-, trans-	112 CBH16
3. Cyclopentane, 1-ethyl-2-methyl-, cis-	112 CBH16
4. Cyclopentane, 1-ethyl-3-methyl-, cis-	112 CBH16
5. Cyclopentane, 1-ethyl-3-methyl-	112 CBH16
6. 2-Hexene, 2,3-dimethyl-	112 CBH16

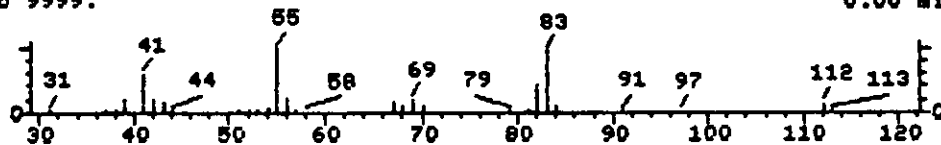
Sample file: >D1755 Spectrum #: 663
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	25*	1678917	6160	NBS49K	43	62	3	0	91	43	8	13
2.	25*	2613652	6163	NBS49K	37	71	3	0	91	43	8	13
3.	25*	930892	6161	NBS49K	35	80	3	0	88	48	7	13
4.	25*	2613663	6164	NBS49K	29	79	3	0	91	50	7	13
5.	25*	3726474	6162	NBS49K	22	85	3	0	91	50	7	12
6.	18*	7145202	12046	NBS49K	42	52	2	0	75	56	4	21

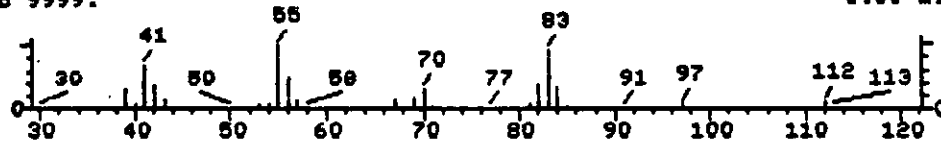
File >D1755 20949-06,V,EPA, CLP,20949.,06,H,S, 100UL/6NL Scan 663
 Bpk Ab 9999. SUB MPC 15.39 min.



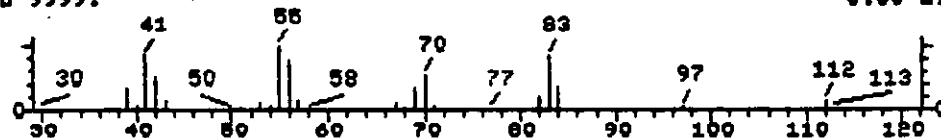
File NBS49K Cyclohexane, ethyl- Scan 2369
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclopentane, 1-ethyl-3-methyl-, trans- Scan 2390
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclopentane, 1-ethyl-2-methyl-, cis- Scan 2373
 Bpk Ab 9999. 0.00 min.



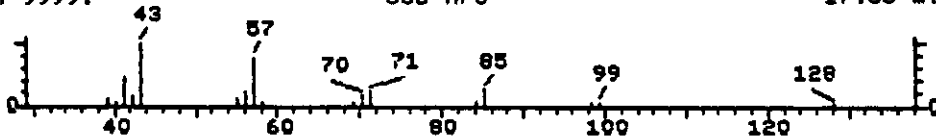
TIC NUMBER:6

1. Nonane	128 C9H20
2. Heptane, 3,4-dimethyl-	128 C9H20
3. Octane, 4-methyl-	128 C9H20
4. Hexane, 2,3,4-trimethyl-	128 C9H20
5. Hexane, 3-ethyl-4-methyl-	128 C9H20
6. Heptane, 2,4-dimethyl-	128 C9H20

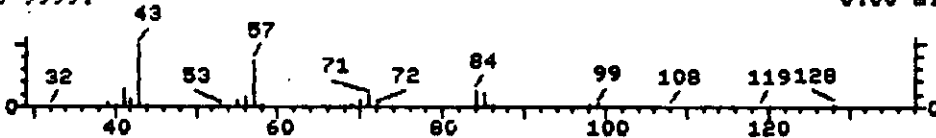
Sample file: >D1755 Spectrum #: 749
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	88*	111842	NBS49K	71	25	2	0	100	4	65	55
2.	52*	922281	NBS49K	28	69	3	0	100	20	20	13
3.	36*	2216344	NBS49K	40	51	2	0	81	34	12	19
4.	36*	921471	NBS49K	39	51	2	0	75	34	12	19
5.	36*	3074779	NBS49K	30	66	3	0	77	30	14	13
6.	33*	2213232	NBS49K	32	55	2	0	78	34	12	16

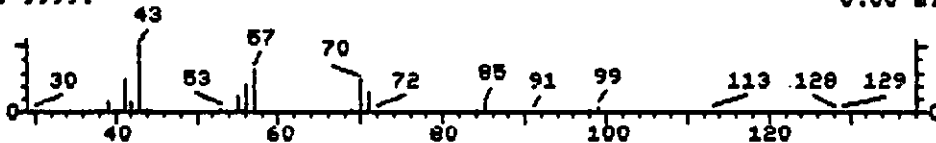
File >D1755 20949-06,V,EPA, CLP,20949,,06,H,S, 100UL/EML Scan 749
 Bpk Ab 9999. SUB MPC 17.38 min.



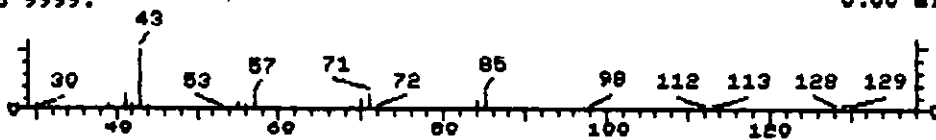
File NBS49K Nonane Scan 4462
 Bpk Ab 9999. 0.00 min.



File NBS49K Heptane, 3,4-dimethyl- Scan 4464
 Bpk Ab 9999. 0.00 min.



File NBS49K Octane, 4-methyl- Scan 4450
 Bpk Ab 9999. 0.00 min.



2

000226

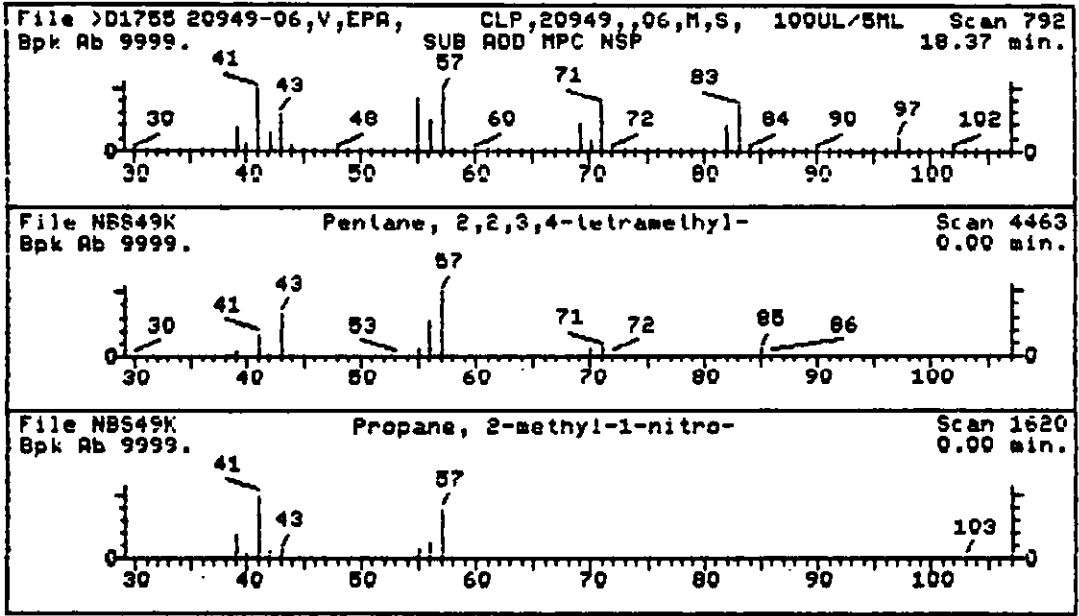
TIC NUMBER:7

- 1. Pentane, 2,2,3,4-tetramethyl-
- 2. Propane, 2-methyl-1-nitro-

128 C9H20
103 C4H9NO2

Sample file: >D1755 Spectrum #: 792
Search speed: 2 Tilting option: S No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25	1186534	1121	NBS49K	34	49	1	0	87	50	7	12
2.	11*	625741	1240	NBS49K	25	24	0	0	98	61	2	18



000227

TIC NUMBER:8

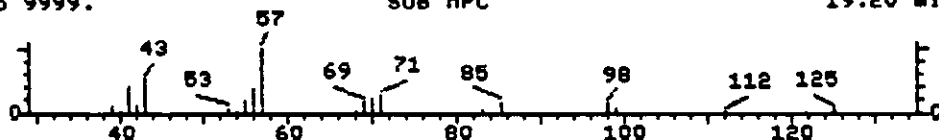
1. Heptane, 1,1'-oxybis-
2. Butane, 2-azido-2,3,3-trimethyl-
3. Nonane, 4-methyl-
4. Heptane, 2-bromo-

214 C14H30O
 141 C7H15N3
 142 C10H22
 178 C7H15Br

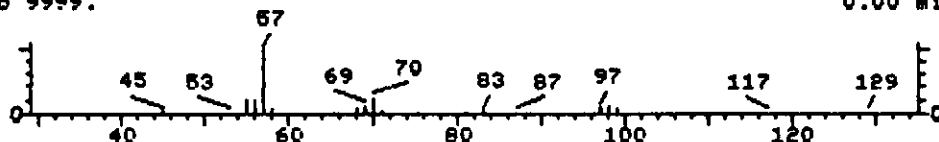
Sample file: >D1755 Spectrum #: 828
 Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	41	629641	4214	NBS49K	41	49	2	0	91	25	17	12
2.	28	51677419	9734	NBS49K	43	22	2	0	84	36	10	14
3.	26	17301949	4024	NBS49K	37	48	2	0	44	40	10	12
4.	25	1974045	1287	NBS49K	39	45	2	0	67	42	8	13

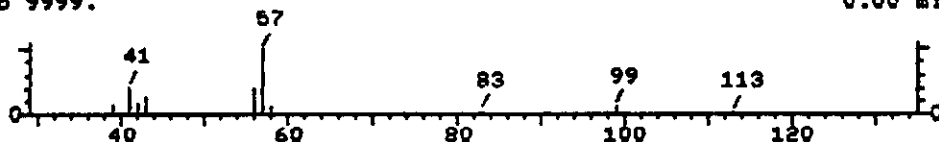
File >D1755 20949-06,V,EPR, CLP,20949,,06,M,S, 100UL/5ML Scan 828
 Bpk Ab 9999. SUB MPC 19.20 min.



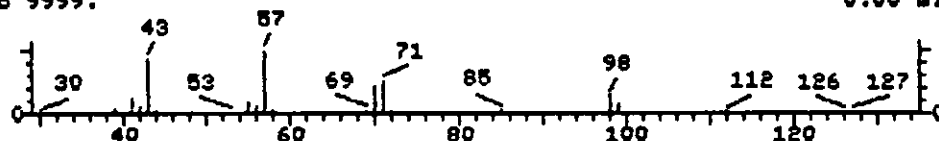
File NBS49K Heptane, 1,1'-oxybis- Scan 21341
 Bpk Ab 9999. 0.00 min.



File NBS49K Butane, 2-azido-2,3,3-trimethyl- Scan 6533
 Bpk Ab 9999. 0.00 min.



File NBS49K Nonane, 4-methyl- Scan 6870
 Bpk Ab 9999. 0.00 min.



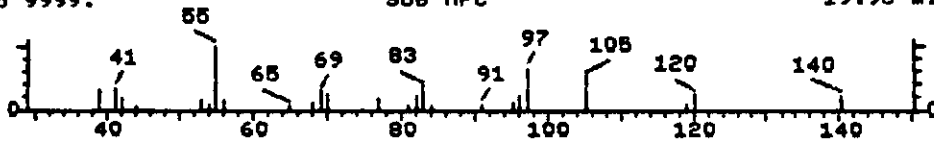
TIC NUMBER:9

1. Cyclopentane, 1-methyl-3-(2-methylpropyl)-	140 C10H20
2. Cyclopentane, 1,2-dimethyl-3-(1-methylethyl)-	140 C10H20
3. Cyclopentane, 2-isopropyl-1,3-dimethyl-	140 C10H20
4. Cyclopentane, (1-methylbutyl)-	140 C10H20
5. Cyclohexane, 1-methyl-3-(1-methylethyl)-	140 C10H20
6. m-Menthane, (1S,3S)-(+)-	140 C10H20

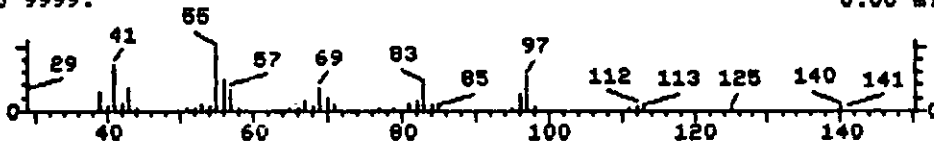
Sample file: >D1755 Spectrum #: 860
 Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	30*	29053041	9171	NBS49K	30	82	3	0	100	32	12	13
2.	25*	489203	9178	NBS49K	29	68	3	0	100	50	7	13
3.	25*	32281859	9166	NBS49K	29	81	3	0	98	44	8	13
4.	15*	4737433	9173	NBS49K	43	65	3	0	87	58	3	13
5.	15*	16580248	9172	NBS49K	24	63	2	0	84	60	3	14
6.	15*	13837677	9170	NBS49K	25	70	3	0	67	60	3	13

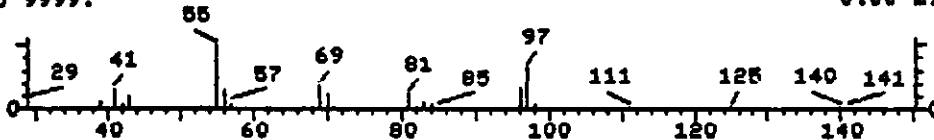
File >D1755 20949-06,V,EPR, CLP,20949,,06,M,S, 100UL/5ML Scan 860
 Bpk Ab 9999. SUB MPC 19.93 min.



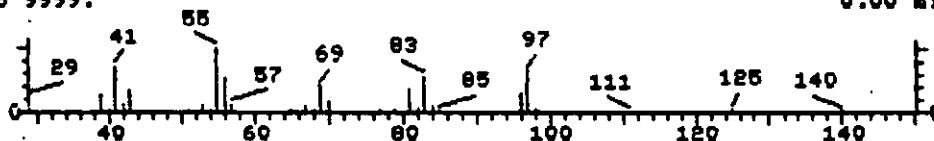
File NBS49K Cyclopentane, 1-methyl-3-(2-methylpropyl)- Scan 6413
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclopentane, 1,2-dimethyl-3-(1-methylethyl)- Scan 6460
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclopentane, 2-isopropyl-1,3-dimethyl- Scan 6388
 Bpk Ab 9999. 0.00 min.



TIC NUMBER:10

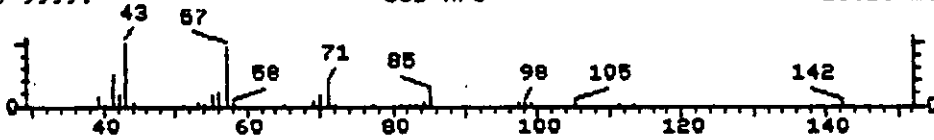
1. Undecane
2. Decane
3. Undecane, 3-methyl-
4. Nonane, 2-methyl-
5. Decane, 2,9-dimethyl-
6. Nonane

156 C11H24
 142 C10H22
 170 C12H26
 142 C10H22
 170 C12H26
 128 C9H20

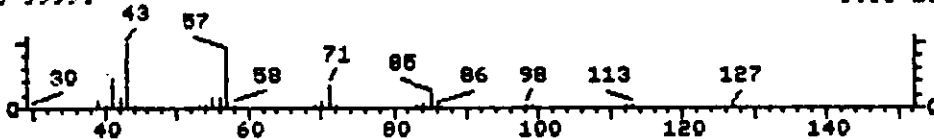
Sample file: >D1755 Spectrum #: 874
 Search speed: 2 Tilting option: S No. of ion ranges searched: 52

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	83	1120214	6682	NBS49K	65	32	2	0	100	5	57	23
2.	78	124185	18079	NBS49K	62	38	2	0	97	2	55	19
3.	70	1002433	6739	NBS49K	42	46	2	0	69	10	42	13
4.	70*	871830	9512	NBS49K	40	56	3	0	100	8	42	13
5.	67	1002171	6738	NBS49K	60	32	2	0	86	14	34	21
6.	60	111842	6609	NBS49K	47	49	2	0	100	13	30	12

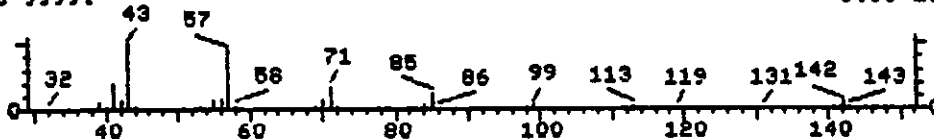
File >D1755 20949-06,Y,EPR, CLP,20949,,06,M,8, 100UL/BML Scan 874
 Bpk Ab 9999. SUB MPC 20.26 min.



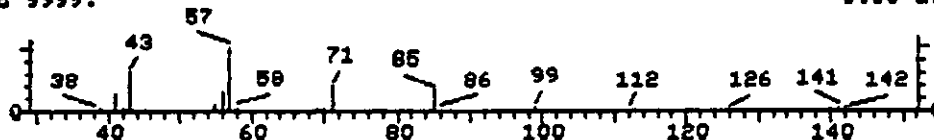
File NBS49K Undecane Scan 9747
 Bpk Ab 9999. 0.00 min.



File NBS49K Decane Scan 6851
 Bpk Ab 9999. 0.00 min.



File NBS49K Undecane, 3-methyl- Scan 12793
 Bpk Ab 9999. 0.00 min.



2

000230

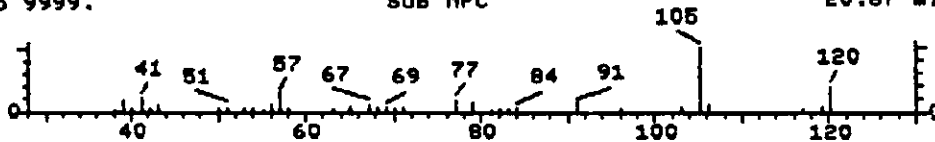
TIC NUMBER:11

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

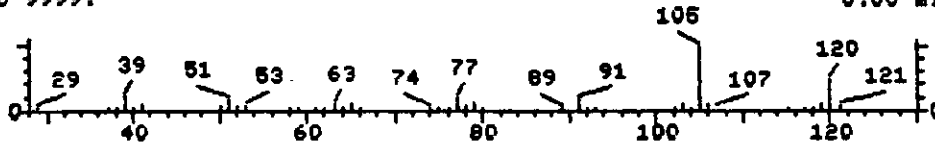
Sample file: >D1755 Spectrum #: 892
 Search speed: 2 Tilting option: S No. of ion ranges searched: 59

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	79*	526738	13674	NBS49K	60	40	2	0	67	9	48	37
2.	67*	611143	13669	NBS49K	43	42	2	0	100	14	34	23
3.	60*	620144	13671	NBS49K	38	49	2	0	100	12	30	19
4.	60*	622968	13672	NBS49K	36	49	2	0	100	14	30	18
5.	45*	98828	13667	NBS49K	40	47	3	0	100	22	17	16
6.	27*	108678	13673	NBS49K	20	68	2	0	59	40	10	13

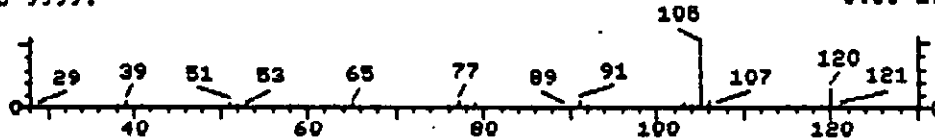
File >D1755 20949-06,V,EPA, CLP,20949,,06,H,S, 100UL/5ML Scan 892
 Bpk Ab 9999. SUB MPC 20.67 min.



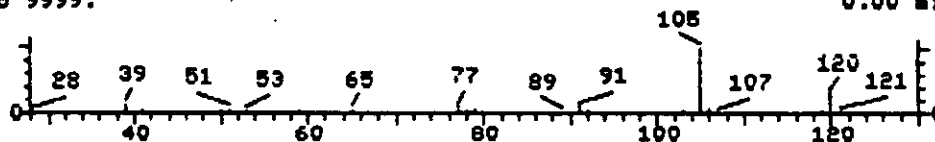
File NBS49K Benzene, 1,2,3-trimethyl- Scan 3300
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-2-methyl- Scan 3293
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-3-methyl- Scan 3297
 Bpk Ab 9999. 0.00 min.



2

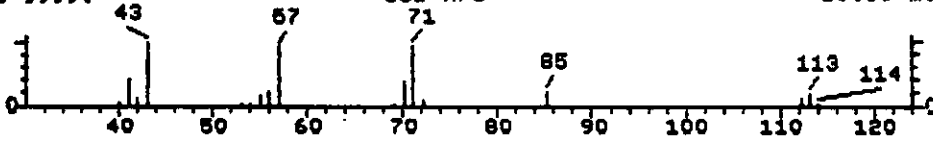
TIC NUMBER:12

1. Heptane, 5-ethyl-2-methyl-	142 C10H22
2. Hexane, 2,4-dimethyl-	114 C8H18
3. Heptane, 3-methyl-	114 C8H18
4. Pentane, 2,3,4-trimethyl-	114 C8H18
5. Pentane, 3-ethyl-2-methyl-	114 C8H18
6. Hexane, 2,3-dimethyl-	114 C8H18

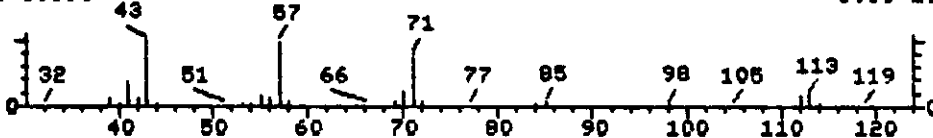
Sample file: >D1755 Spectrum #: 900
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	52	13475780	4333	NBS49K	56	45	2	0	81	16	20	14
2.	30*	589435	6558	NBS49K	30	68	3	0	94	35	12	13
3.	27*	589811	6561	NBS49K	28	62	3	0	100	40	10	13
4.	25*	565753	3918	NBS49K	23	57	1	0	90	48	7	14
5.	20*	609267	3917	NBS49K	31	60	2	0	77	51	5	15
6.	20*	584941	3916	NBS49K	25	62	2	0	66	53	5	14

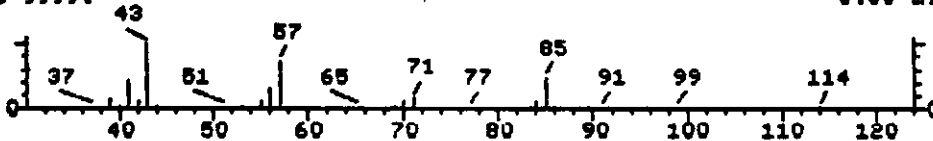
File >D1755 20949-06,V,EPA, CLP,20949,,06,M,S, 100UL/5ML Scan 900
 Bpk Ab 9999. SUB MPC 20.86 min.



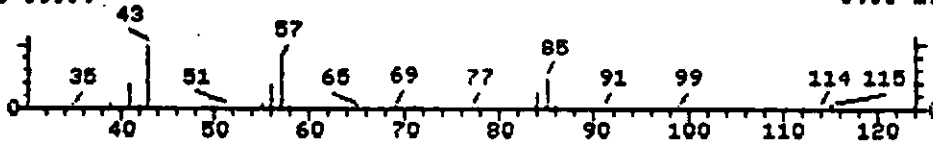
File NBS49K Heptane, 5-ethyl-2-methyl- Scan 6871
 Bpk Ab 9999. 0.00 min.



File NBS49K Hexane, 2,4-dimethyl- Scan 2717
 Bpk Ab 9999. 0.00 min.



File NBS49K Heptane, 3-methyl- Scan 2727
 Bpk Ab 9999. 0.00 min.



2

TIC NUMBER:13

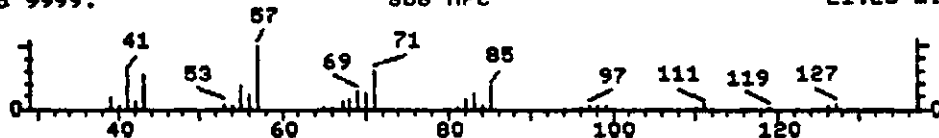
1. Cyclopentane, (2-methylpropyl)-
2. Nonane, 3,7-dimethyl-
3. 3-Hexadecene, (Z)-
4. 7-Tetradecene

126 C9H18
156 C11H24
224 C16H32
196 C14H28

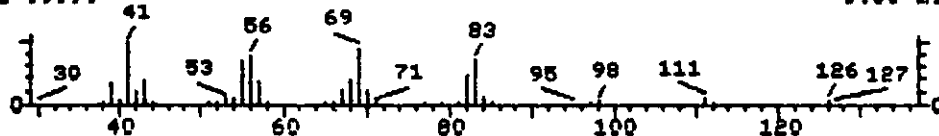
Sample file: >D1755 Spectrum #: 917
Search speed: 2 Tilting option: S No. of ion ranges searched: 57

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_1	R_IU
1.	31*	3788327	5910	NBS49K	51	52	0	0	28	57	8	61
2.	28	17302328	6677	NBS49K	43	44	2	0	78	37	10	14
3.	20	34303816	9294	NBS49K	62	68	2	0	30	51	5	13
4.	15	10374740	9272	NBS49K	61	64	2	0	31	56	3	12

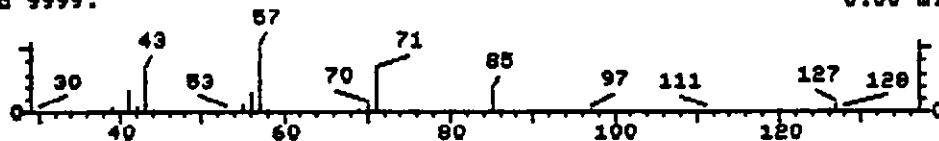
File >D1755 20949-06,V,EPA, CLP,20949,,06,M,S, 100UL/5ML Scan 917
Bpk Ab 9999. SUB MPC 21.25 min.



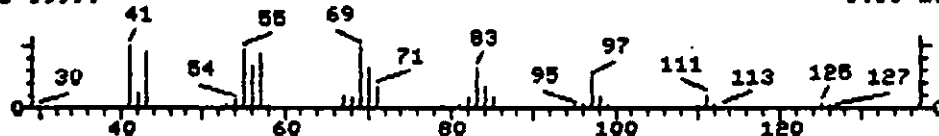
File NBS49K Cyclopentane, (2-methylpropyl)- Scan 4025
Bpk Ab 9999. 0.00 min.



File NBS49K Nonane, 3,7-dimethyl- Scan 9738
Bpk Ab 9999. 0.00 min.



File NBS49K 3-Hexadecene, (Z)- Scan 23150
Bpk Ab 9999. 0.00 min.



000233

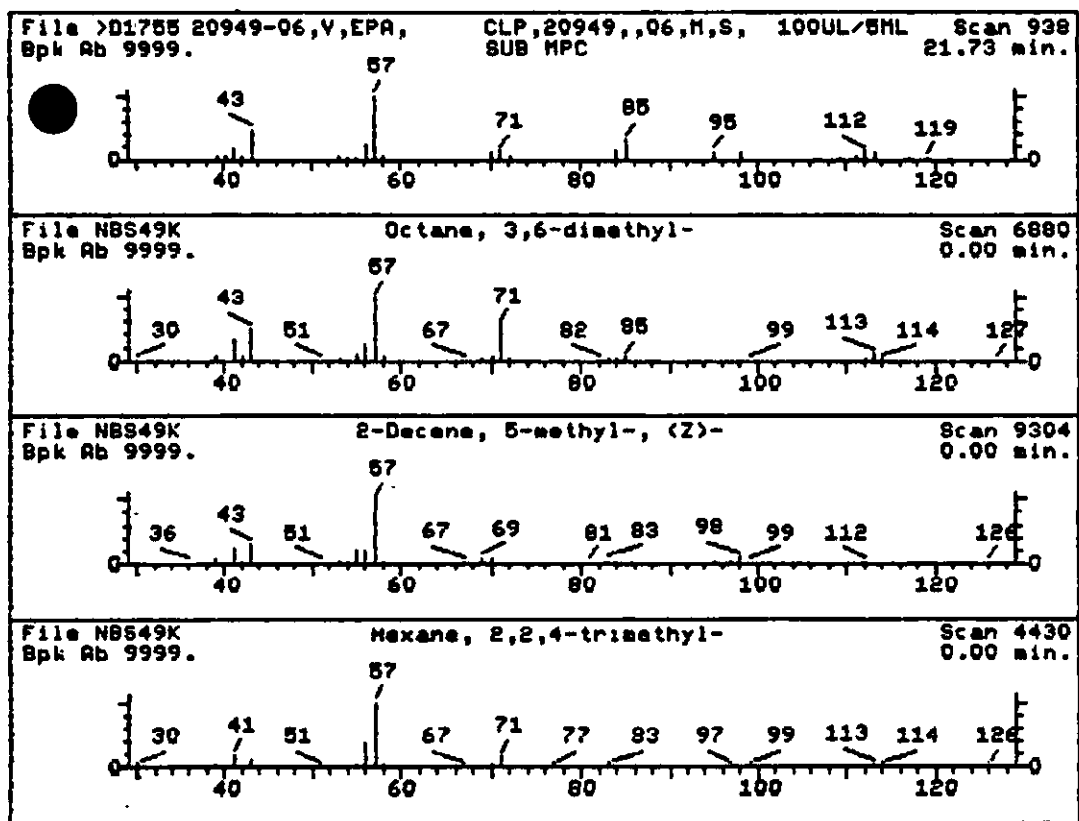
TIC NUMBER:14

- 1. Octane, 3,6-dimethyl-
- 2. 2-Decene, 5-methyl-, (Z)-
- 3. Hexane, 2,2,4-trimethyl-
- 4. Heptane, 2,3,6-trimethyl-

142 C10H22
154 C11H22
128 C9H20
142 C10H22

Sample file: >D1755 Spectrum #: 938
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.	36	15869940	12333	NBS49K	43	46	2	0	96	26	14	13
2.	35	74645866	9525	NBS49K	35	46	2	0	100	30	14	12
3.	28	16747265	1257	NBS49K	37	34	1	0	67	40	10	14
4.	26	4032933	4023	NBS49K	35	47	2	0	88	40	10	12



TIC NUMBER:15

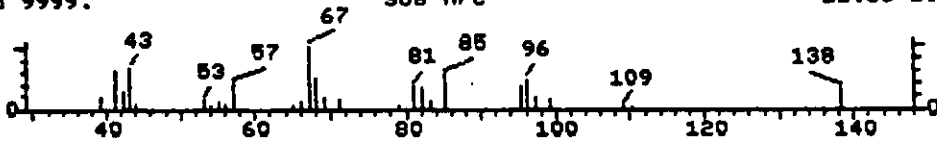
1. Naphthalene, decahydro-, trans-
2. Naphthalene, decahydro-, cis-
3. Cyclohexane, butylidene-
4. Acetonitrile, 2,2'-iminobis-
5. Cyclopropane, methylmethylene-
6. Cyclopentene, 1-pentyl-

- 138 C10H18
- 138 C10H18
- 138 C10H18
- 95 C4H5N3
- 68 C5H8
- 138 C10H18

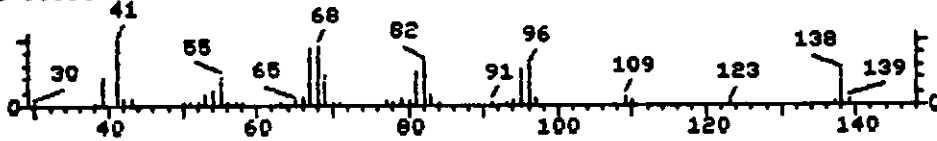
Sample file: >D1755 Spectrum #: 943
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	31*	493027	17244	NBS49K	51	71	3	0	53	32	12	14
2.	27*	493016	17243	NBS49K	40	78	3	0	62	39	10	13
3.	27*	2272039	17231	NBS49K	34	74	3	0	100	37	10	13
4.	20*	628875	3461	NBS49K	40	59	3	0	118	53	5	13
5.	20*	18631840	3536	NBS49K	22	75	3	0	100	55	5	12
6.	20*	4291989	3207	NBS49K	22	76	3	0	100	53	5	12

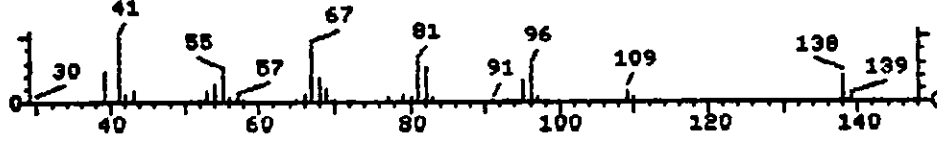
File >D1755 20949-06,V,EPA, CLP,20949,,06,M,S, 100UL/6ML Scan 943
 Bpk Ab 9999. SUB MPC 21.85 min.



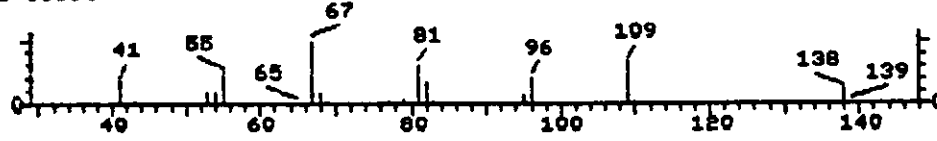
File NBS49K Naphthalene, decahydro-, trans- Scan 6054
 Bpk Ab 9999. 0.00 min.



File NBS49K Naphthalene, decahydro-, cis- Scan 6049
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclohexane, butylidene- Scan 5990
 Bpk Ab 9999. 0.00 min.



000235

DRAFT

QUANT REPORT

Page 1

Operator ID: HUEY1 Quant Rev: 7 Quant Time: 920226 00:33
 Output File: ^I4083::QT Injected at: 920226 00:04
 Data File: >I4083::H3 Dilution Factor: 1.00000
 Name: 20449-06.V,EPA, Instrument ID: H
 Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML

ID File: IDEPAH::ID
 Title: ID FILE CLP INST. H + THF
 Last Calibration: 910722 16:57

Last Cal Time: 920225 16:07

	Compound	R.T.	Q	ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	6.27	128.0		53050	50.00	UG/L	97
2)	CS15 1,2-DICHLOROETHANE-D4	7.24	65.0		100898	46.32	UG/L	88
9)	C035 ACETONE	3.30	43.0		1896	2.93	UG/L	100
10)	C030 METHYLENE CHLORIDE	3.80	84.0		1391	.810	UG/L	88
19)	*C110 1,4-DIFLUOROBENZENE	8.15	114.0		210254	50.00	UG/L	100
28)	C160 1,1,2-TRICHLOROETHANE	12.02	97.0		7334^	6.50	UG/L	56
31)	*C120 CHLOROENZENE-D5	13.19	117.0		156481	50.00	UG/L	84
32)	CS05 TOLUENE-D8	10.56	98.0		177357	47.63	UG/L	99
33)	CS10 BROMOFLUOROBENZENE	15.64	95.0		118373	44.47	UG/L	100
34)	C230 TOLUENE	10.67	91.0		8969	2.44	UG/L	91
37)	C210 2-HEXANONE	12.34	43.0		26779	25.25	UG/L	46
38)	C235 CHLOROENZENE	12.76	112.0		1053	.370	UG/L	54
39)	C240 ETHYLBENZENE	13.60	106.0		14586	10.88	UG/L	94
40)	VJNK M2P-XYLENES	13.86	106.0		87504	50.83	UG/L	98
41)	V029 O-XYLENE	14.59	106.0		24511	15.14	UG/L	96

* Compound is ISTD

000236

DRAFT

MS data file header from : >I4083::H3

Sample: 20949-06.U,EPA. Operator: HUEY1 REG. GPP. 2/26/92 0:04
 Misc : CLP,20949,,06.M.S. 100uL/5ML/100%/4G/10ML
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: H
 Method file: SAMMH Tuning file: MTBFBH No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

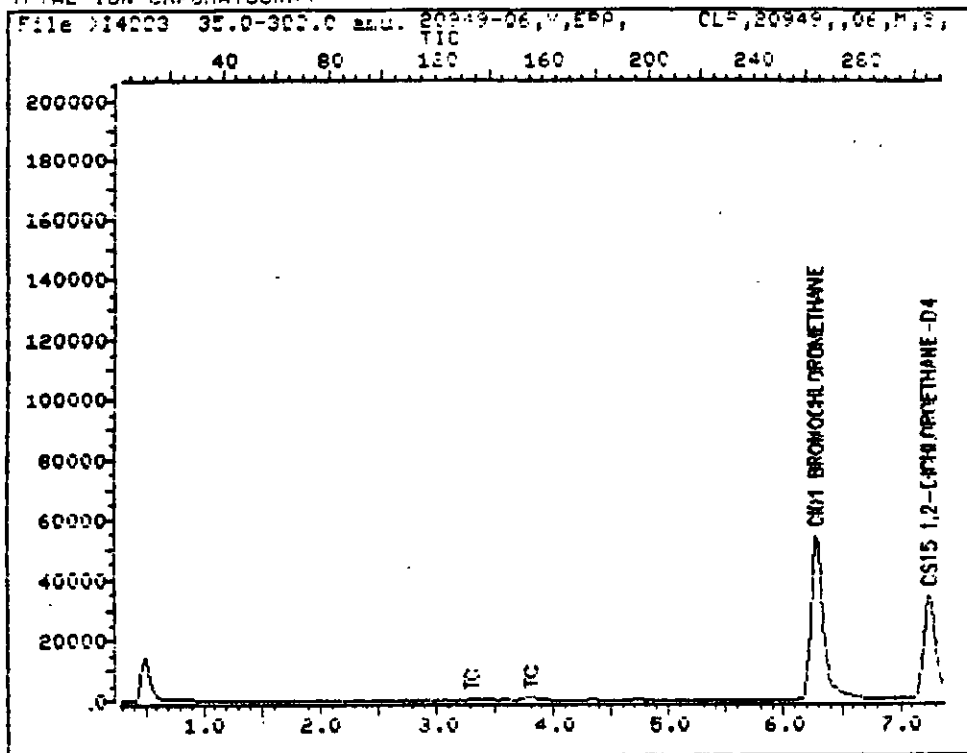
Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/mini :	6.0	8.3	70.0	.5	0.0

CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	4G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	N/A	%moisture for soil
int_ext_vol	10ML	intermediate extract vol/M.L. ext vo
int_ext_vol!_u	.1ML	intermediate extract vol/M.L. vol US
spiked	S	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
runfact	125	calcd runfactor
surfact	.500	calcd surr vol

Performance Check: >I4065 Injection Time: 2/25/92 15:27
 Sample : >I4083 Injection Time: 2/26/92 0:04
 Elapsed Time: 0 Y 0 D 8:37
 Sample: ^I4083 Calibration Stds.: ^I4066,
 Invalid Response Factor for: C053 1,2-DICHLOROETHENE TOTAL
 Invalid Response Factor for: C250 XYLENE (TOTAL)

TOTAL ION CHROMATOGRAM

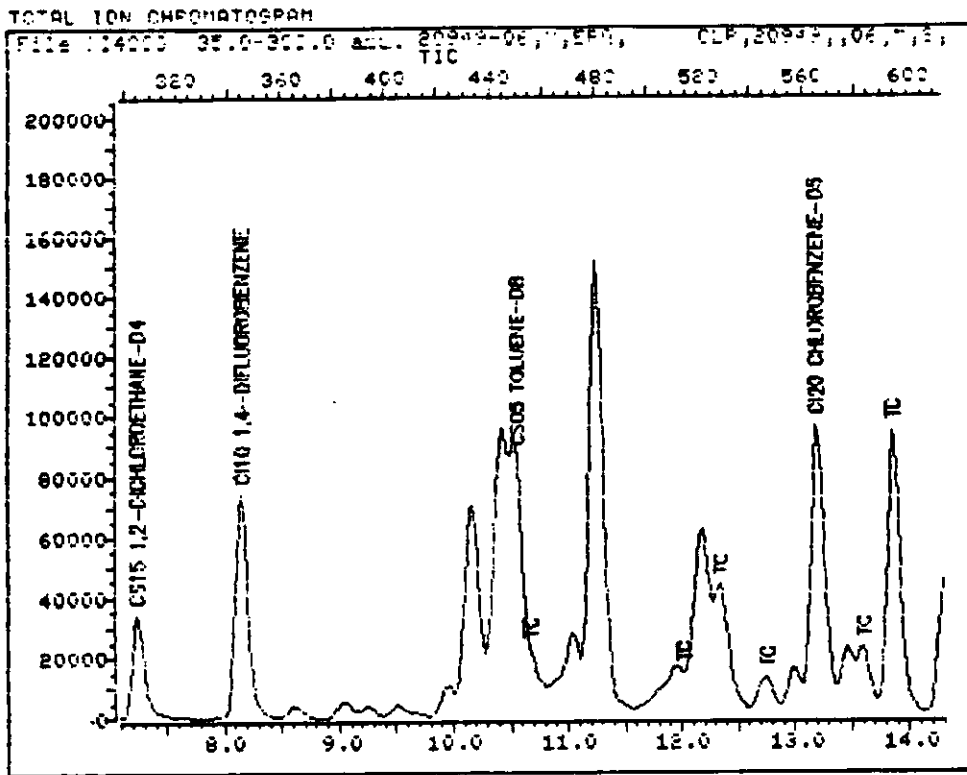


Date File: >I4083::H3 Quant Output File: ^I4083::QT
Name: 20949-06,U,EPA, Instrument ID: H
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57 Last Qual Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920226 00:33
Injected at: 920226 00:04

000238 DRAFT



Data File: ^14083::H3 Quant Output File: ^14083::QT
Name: 20949-06,U,EPA, Instrument ID: H
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML

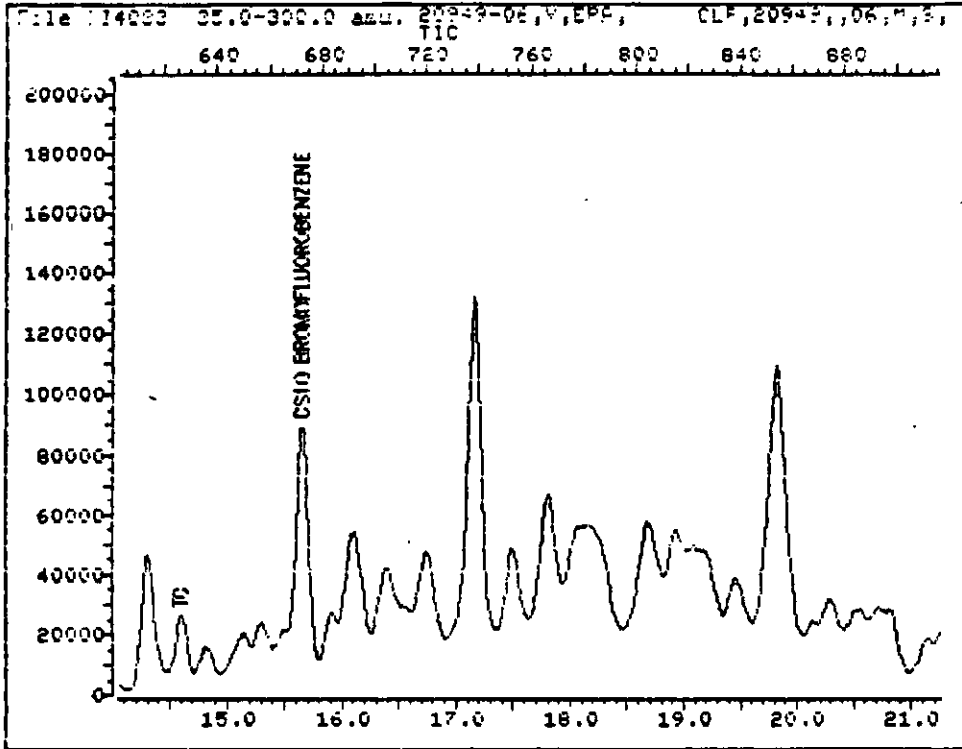
Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57

Last Qual Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920226 00:33
Injected at: 920226 00:04

000239 DRAFT

TOTAL ION CHROMATOGRAM



Data File: >14083::H3

Quant Output File: ^14083::QT

Name: 20949-06,U,EPA,

Instrument ID: H

Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID

Title: ID FILE CLP INST. H + THF

Last Calibration: 910722 16:57

Last Qcal Time: 920225 16:07

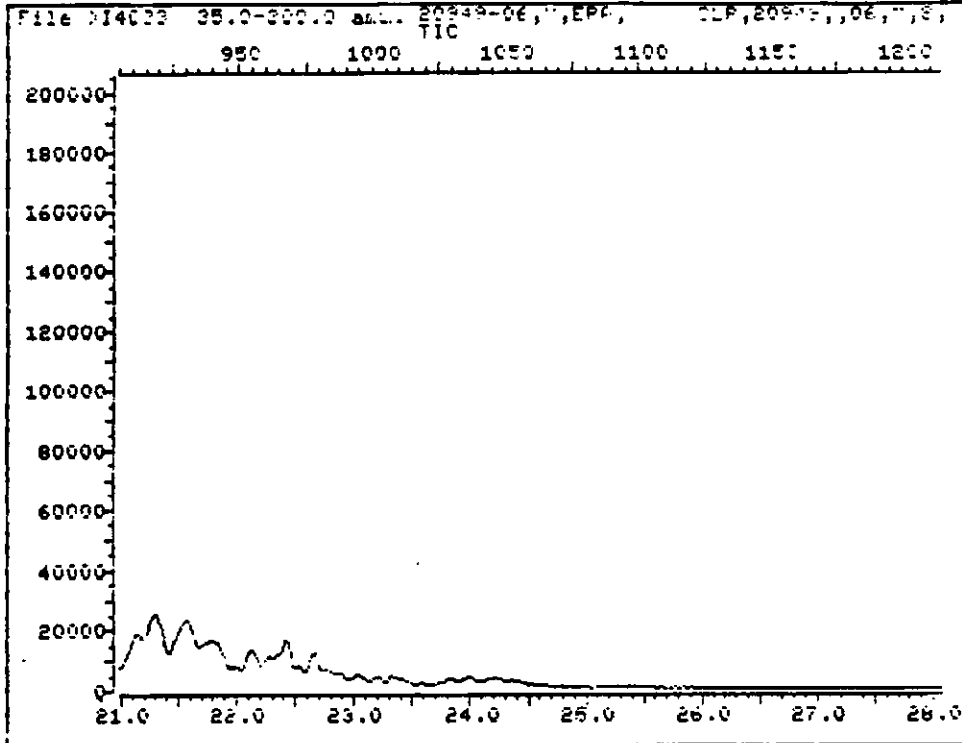
Operator ID: HUEY1

Quant Time : 920226 00:33

Injected at: 920226 00:04

000240 DRAFT

TOTAL ION CHROMATOGRAM



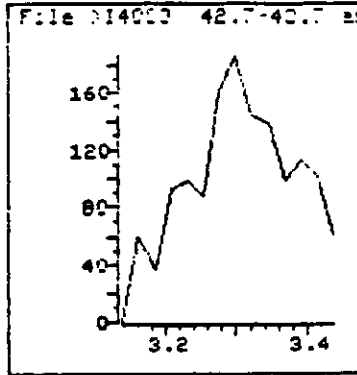
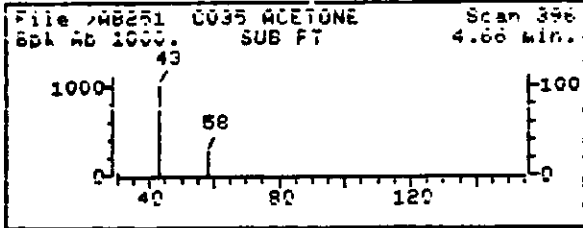
Data File: >I4083::H3 Quant Output File: ^I4083::QT
Name: 20949-06.U,EPA, Instrument ID: H
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57 Last Qcal Time: 920225 16:07

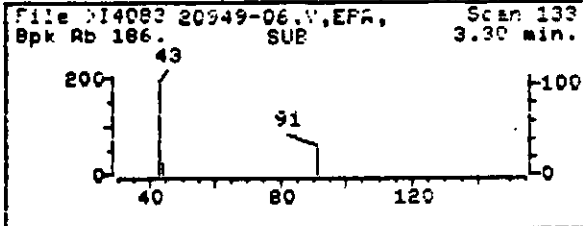
Operator ID: HUEY1
Quant Time : 920226 00:33
Injected at: 920226 00:04

000241
DATA

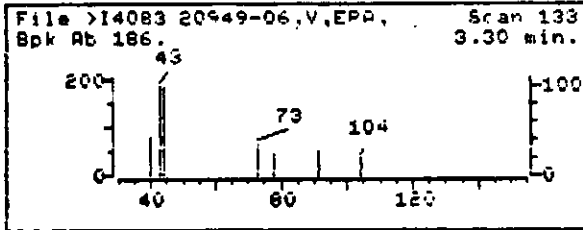
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >I4083::H3
Name: 20949-06.V,EPA,
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qual Time: 920225 16:07

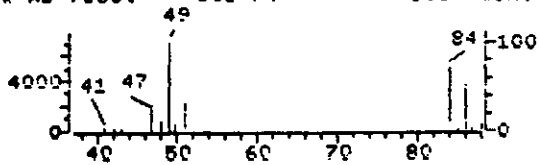
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 133
Retention Time: 3.30 min.
Quant Ion : 43.0
Area : 1896
Concentration : 2.93 UG/L
q-value : 100

000242 AFT

REFERENCE STANDARD SPECTRUM

File >H8251 C030 METHYLENE C Scan 465
Bpk No 7966. SUE FT 5.37 min.

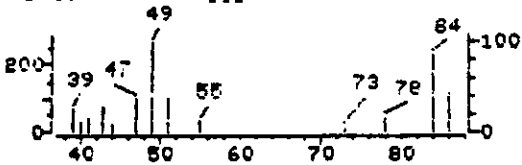


File >I4083 46.7-49.7 min

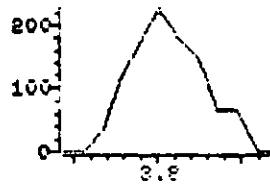


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >I4083 20949-06,U,EPA, Scan 155
Bpk Ab 267. SUE 3.80 min.

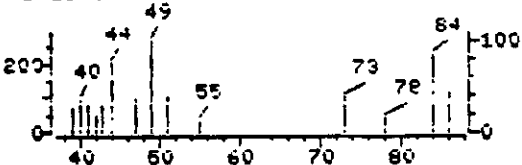


File >I4083 83.7-84.7 min

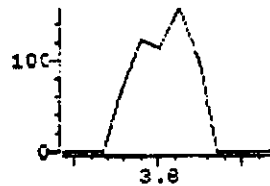


SAMPLE SPECTRUM (UNALTEPED)

File >I4083 20949-06,U,EPA, Scan 155
Bpk Ab 267. 3.80 min.



File >I4083 85.7-86.7 min

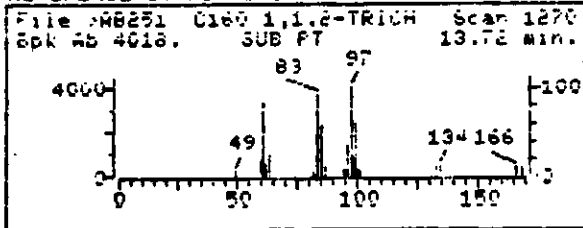


Data File: >I4083::H3
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qual Time: 920225 16:07

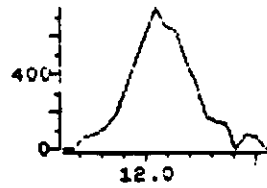
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 155
Retention Time: 3.80 min.
Quant Ion : 84.0
Area : 1391
Concentration : .810 UG/L
q-value : 88

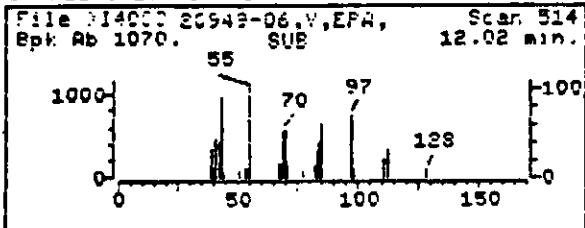
REFERENCE STANDARD SPECTRUM



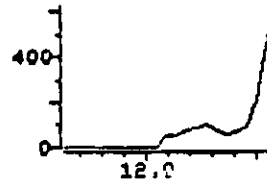
File >I4083 96.7-97.7 am



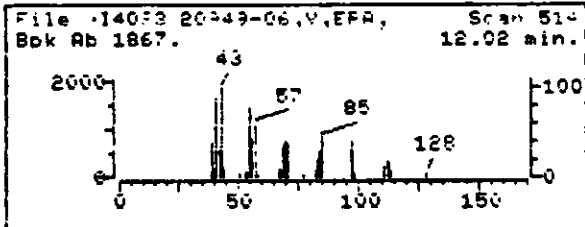
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



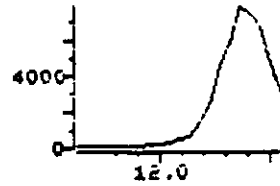
File >I4083 98.7-99.7 am



SAMPLE SPECTRUM (UNALTERED)



File >I4083 82.7-83.7 am

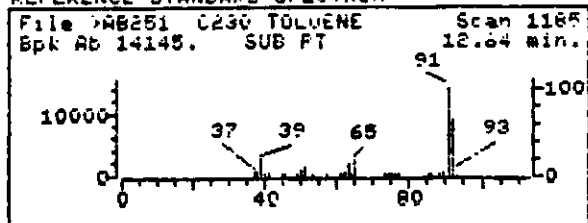


Data File: >I4083::H3
Name: 20949-06.V,EPA,
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qcal Time: 920225 16:07

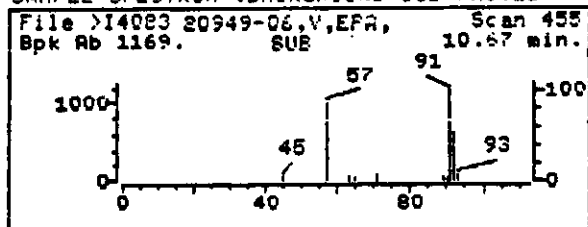
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 28
Compound Name : C160 1,1,2-TRICHLOROETHANE
Scan Number : 514
Retention Time: 12.02 min.
Quant Ion : 97.0
Area : 7334^
Concentration : 6.50 UG/L
q-value : 56

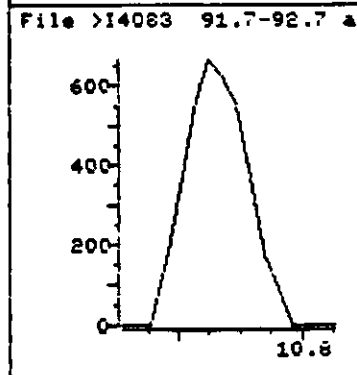
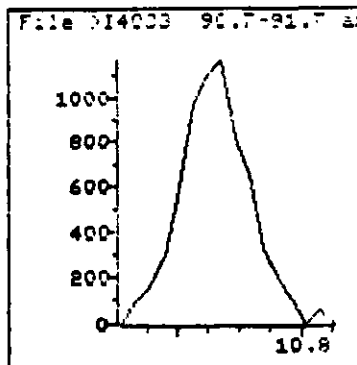
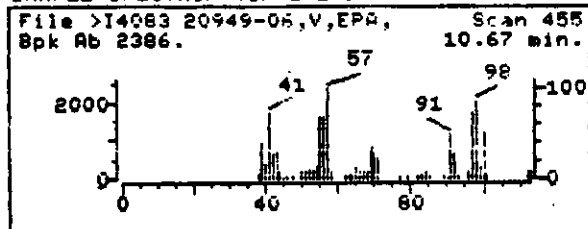
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

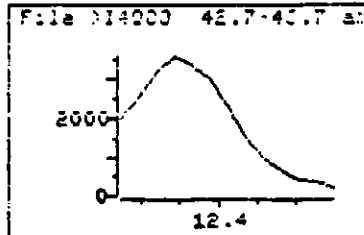
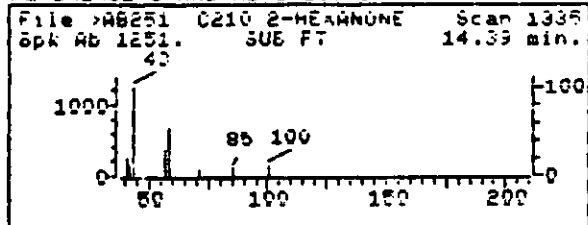


Data File: >I4083::H3
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qual Time: 920225 16:07

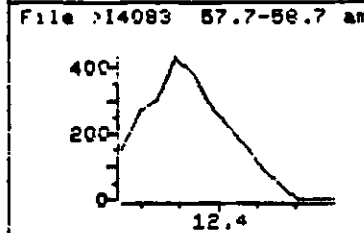
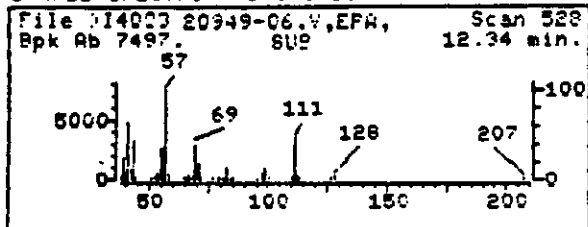
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 455
Retention Time: 10.67 min.
Quant Ion : 91.0
Area : 8969
Concentration : 2.44 UG/L
q-value : 91

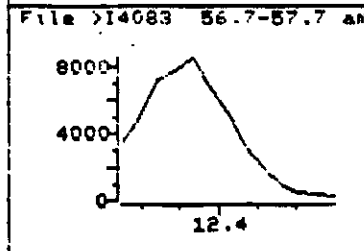
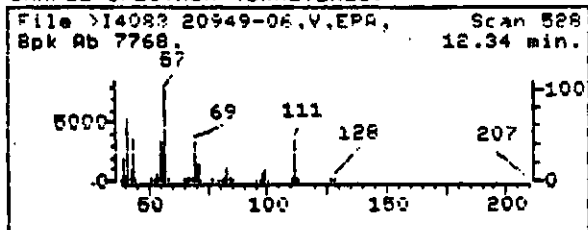
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

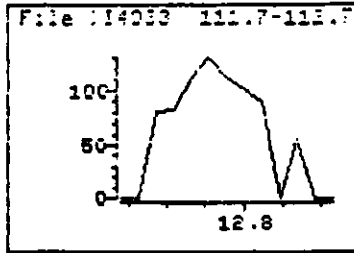
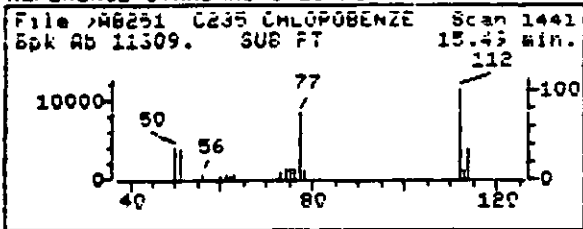


Data File: >I4083::H3
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qcal Time: 920225 16:07

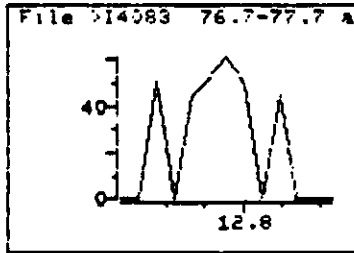
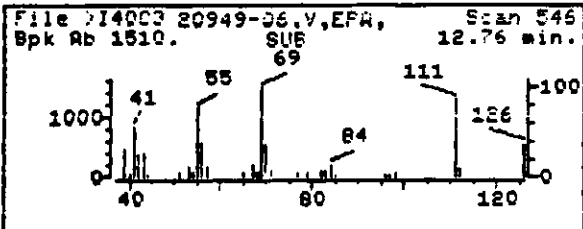
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 37
Compound Name : C210 2-HEXANONE
Scan Number : 528
Retention Time: 12.34 min.
Quant Ion : 43.0
Area : 26.779
Concentration : 25.25 UG/L
alpha-value : 46

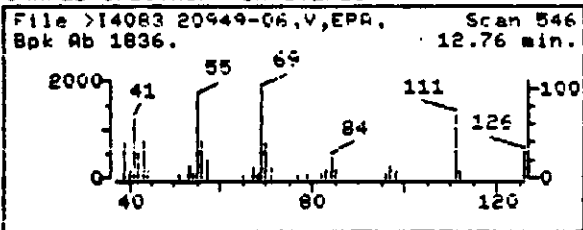
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

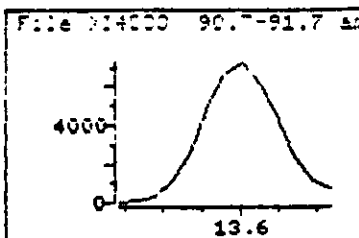
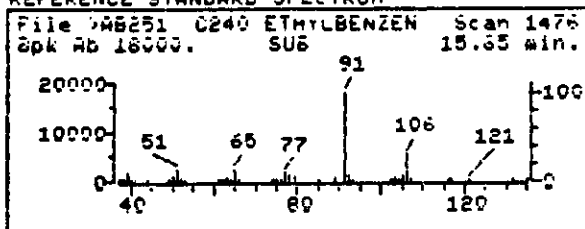


Data File: >I4083::H3
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qcal Time: 920225 16:07

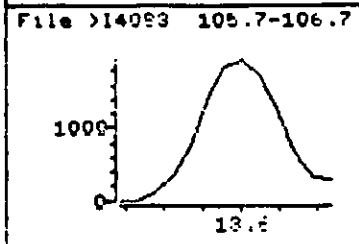
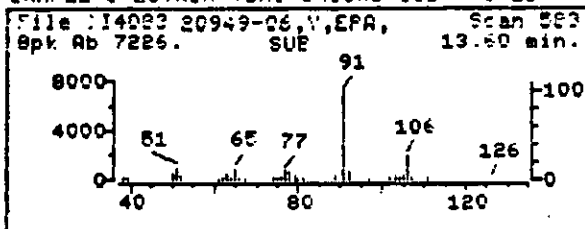
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 38
Compound Name : C235 CHLOROBEZENE
Scan Number : 546
Retention Time: 12.76 min.
Quant Ion : 112.0
Area : 1053
Concentration : .370 UG/L
q-value : 54

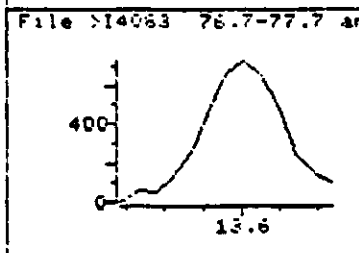
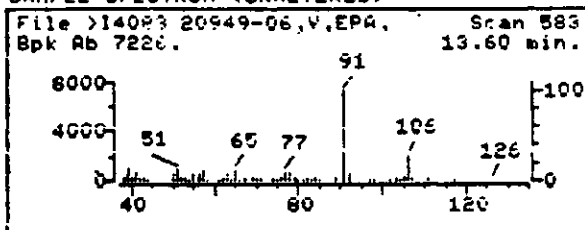
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I4083::H3
Name: 20949-06,U,EPA,
Misc: CLP,20949,,06,M.S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qcal Time: 920225 16:07

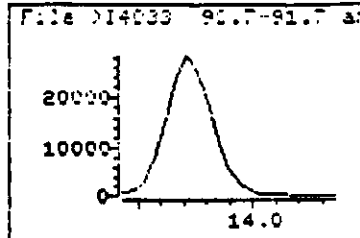
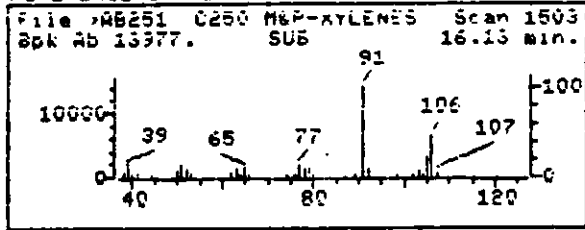
Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 583
Retention Time: 13.60 min.
Quant Ion : 106.0
Area : 14586
Concentration : 10.88 UG/L
q-value : 94

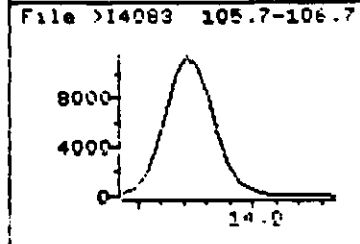
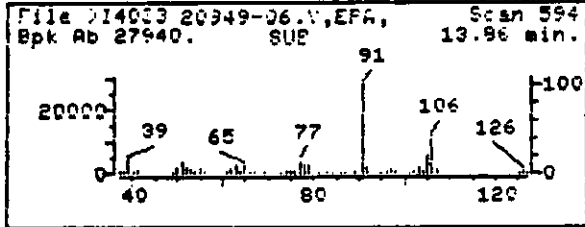
000248

DRAFT

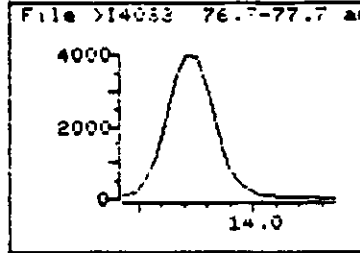
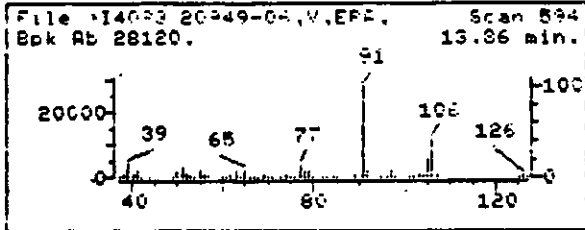
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



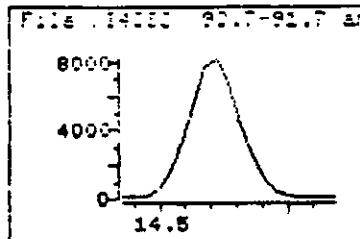
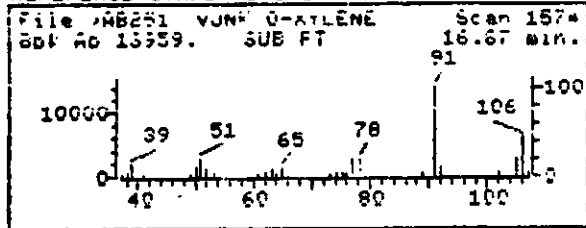
Data File: >I4083::H3
 Name: 20949-06,U,EPA,
 Misc: CLP,20949,,06,M,S, 100uL/5ML/100%/4G/10ML
 Quant Time: 920226 00:33
 Injected at: 920226 00:04
 Last Qcal Time: 920225 16:07

Quant Output File: ^I4083::QT
 Instrument ID: H
 Quant ID File: IDEPAH::ID
 Last Calibration: 910722 16:57

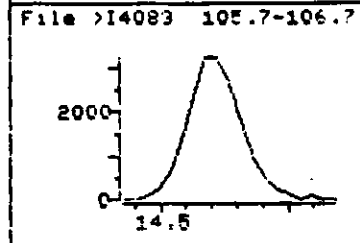
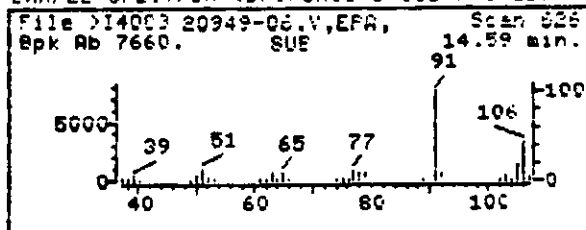
Compound No : 40
 Compound Name : UJNK M&P-XYLENES
 Scan Number : 594
 Retention Time: 13.86 min.
 Quant Ion : 106.0
 Area : 87504
 Concentration : 50.83 UG/L
 q-value : 98

DRAFT

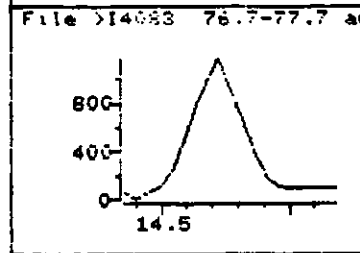
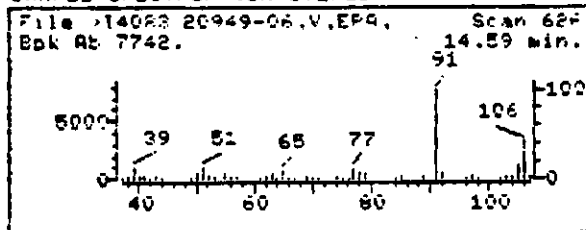
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I4083::H3
Name: 20949-06.U,EPA,
Misc: CLP,20949,,06.M,S, 100uL/5ML/100%/4G/10ML
Quant Time: 920226 00:33
Injected at: 920226 00:04
Last Qcal Time: 920225 16:07

Quant Output File: ^I4083::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 41
Compound Name : U029 0-XYLENE
Scan Number : 626
Retention Time: 14.59 min.
Quant Ion : 106.0
Area : 24511
Concentration : 15.14 UG/L
q-value : 96

000250

DRAFT

Diagnostic Quant Report

Data File: >14083:H3 Injected at: 00:04 02/26/92

Quant'd : 00:33 02/26/92

ID File : IDEPAH:ID Calibrated : 16:57 07/22/91

Compound	- R.T. Info -			Ion	Area	RF	Conc.
	Pred	Found	Dif				
1) *C101 BROMOCHLOROMETHANE	6.23	6.27	.04	128.0	53050	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	7.24	7.24	.01	65.0	100898	2.0529	46.32
3) C010 CHLOROMETHANE	.83	0.00	--	50.0	0	.6955	0.00
4) C020 VINYL CHLORIDE	.97	0.00	--	62.0	0	.7947	0.00
5) C015 BROMOMETHANE	1.39	0.00	--	94.0	0	.9780	0.00
6) C025 CHLOROETHANE	1.62	0.00	--	64.0	0	.6445	0.00
7) C045 1,1-DICHLOROETHENE	2.82	0.00	--	96.0	0	1.0839	0.00
8) C040 CARBON DISULFIDE	2.89	0.00	--	76.0	0	1.7506	0.00
9)D C035 ACETONE	3.28	2.91	.37	43.0	525	.6096	.81
9) C035 ACETONE	3.28	3.30	.02	43.0	1896	.6096	2.93
9)D C035 ACETONE	3.28	3.71	.43	43.0	327	.6096	.51
10) C030 METHYLENE CHLORIDE	3.81	3.80	.00	84.0	1391	1.6176	.81
11) UJNK trans-1,2-DICHLOROET	4.22	0.00	--	96.0	0	1.4324	0.00
12) C050 1,1-DICHLOROETHANE	4.94	0.00	--	63.0	0	2.7081	0.00
13) V011 cis-1,2-DICHLOROETHE	5.93	0.00	--	96.0	0	1.5215	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.4770	0.00
15) C110 2-BUTANONE	6.18	0.00	--	43.0	0	.5995	0.00
16) V013 TETRAHYDROFURAN	6.41	0.00	--	42.0	0	.2064	0.00
17) C060 CHLOROFORM	6.60	0.00	--	83.0	0	3.2173	0.00
18) C065 1,2-DICHLOROETHANE	7.36	0.00	--	62.0	0	2.1836	0.00
19) *C110 1,4-DIFLUOROBENZENE	8.11	8.15	.04	114.0	210254	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	6.63	0.00	--	97.0	0	.7461	0.00
21) C120 CARBONTETRACHLORIDE	6.86	0.00	--	117.0	0	.7771	0.00
22) C165 BENZENE	7.23	0.00	--	78.0	0	.7461	0.00
23) C150 TRICHLOROETHENE	8.43	0.00	--	130.0	0	.4263	0.00
24) C140 1,2-DICHLOROPROPANE	8.75	0.00	--	63.0	0	.3252	0.00
25) C130 BROMODICHLOROMETHANE	9.42	0.00	--	83.0	0	.6946	0.00
26) C143 cis-1,3-DICHLOROPROP	10.22	0.00	--	75.0	0	.5216	0.00
27) C172 trans-1,3-DICHLOROPR	11.33	0.00	--	75.0	0	.5036	0.00
28) C160 1,1,2-TRICHLOROETHAN	11.60	12.02	.42	97.0	7334	.2683	6.50
29) C155 CHLORODIBROMOMETHANE	12.23	0.00	--	129.0	0	.5313	0.00
30) C180 BROMOFORM	14.96	0.00	--	173.0	0	.3981	0.00
31) *C120 CHLOROBENZENE-D5	13.19	13.19	.00	117.0	156481	1.0000	50.00
32) CS05 TOLUENE-D8	10.53	10.56	.02	98.0	177357	1.1898	47.63
33)D CS10 BROMOFLUOROBENZENE	15.64	15.39	.25	95.0	3612	.8506	1.36
33) CS10 BROMOFLUOROBENZENE	15.64	15.64	.00	95.0	118373	.8506	44.47
34) C230 TOLUENE	10.65	10.67	.02	91.0	8969	1.1729	2.44
35) C205 4-METHYL-2-PENTANONE	10.63	0.00	--	43.0	0	.3454	0.00
36) C220 TETRACHLOROETHENE	11.59	0.00	--	164.0	0	.4456	0.00
37)D C210 2-HEXANONE	12.23	11.77	.46	43.0	6422	.3389	6.05
37) C210 2-HEXANONE	12.23	12.34	.11	43.0	26779	.3389	25.25
38) C235 CHLOROBENZENE	13.24	12.76	.48	112.0	1053	.9102	.37
39) C240 ETHYLBENZENE	13.58	13.60	.02	106.0	14586	.4285	10.88
39)D C240 ETHYLBENZENE	13.58	13.86	.28	106.0	87504	.4285	65.25
40)D UJNK M&P-XYLENES	13.85	13.60	.25	106.0	14586	.5500	8.47
40) UJNK M&P-XYLENES	13.85	13.86	.00	106.0	87504	.5500	50.83
41) V029 O-XYLENE	14.59	14.59	.00	106.0	24511	.5173	15.14
42) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	112815	.5337	67.07
43) C245 STYRENE	14.68	0.00	--	104.0	0	.8556	0.00

44) C225 1,1,2,2-TETRACHLOROE 16.26 0.00 -- 000251 0 .6045 0.00

* - Compound is an Internal Standard
C - Compound Deleted

DRAFT

DRAFT

TIC Internal Standard Report

Data File: >I4083

Maximum separation 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
263.	53050.	7.294 263.	402550. 104.037
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
345.	210254.	2.506 345.	560666. 106.404
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
565.	156481.	3.094 565.	662228. 136.774

Deleting peaks from INT file: UDIR87

Minimum area: 0 % of area of closest Int. Std.

Number of peaks: 43

Number of peaks remaining: 43

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 43

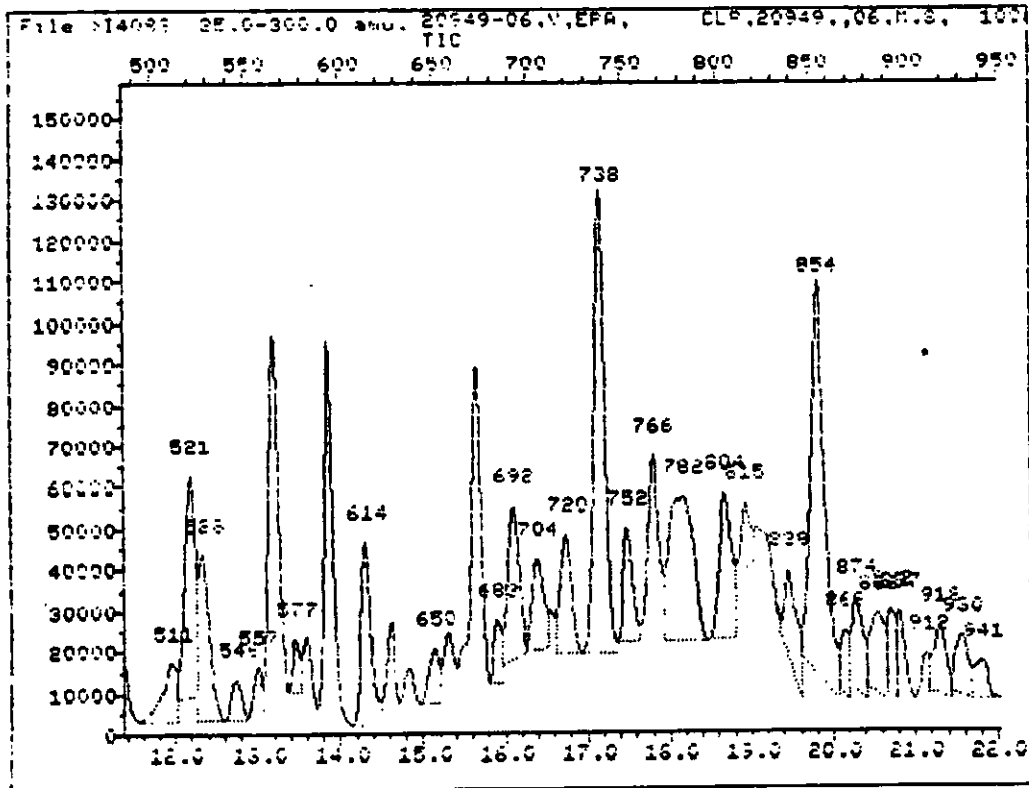
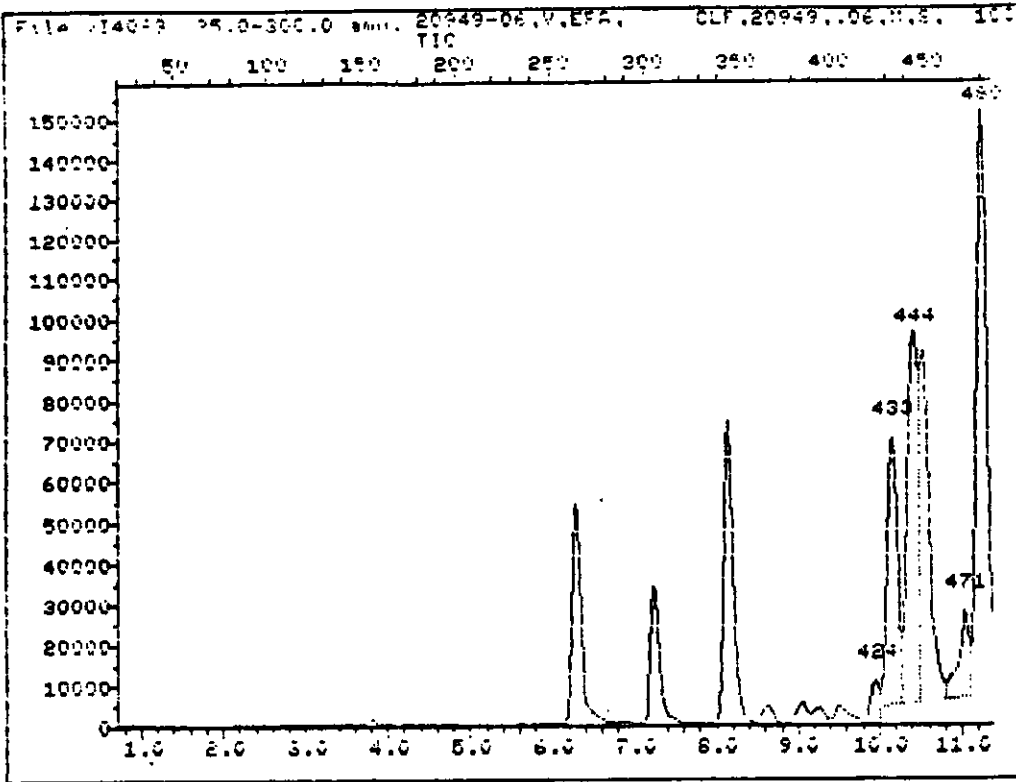
Number of peaks remaining: 34

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 50

Number of peaks: 34

Maximum number of peaks > number of peaks.



DRAFT

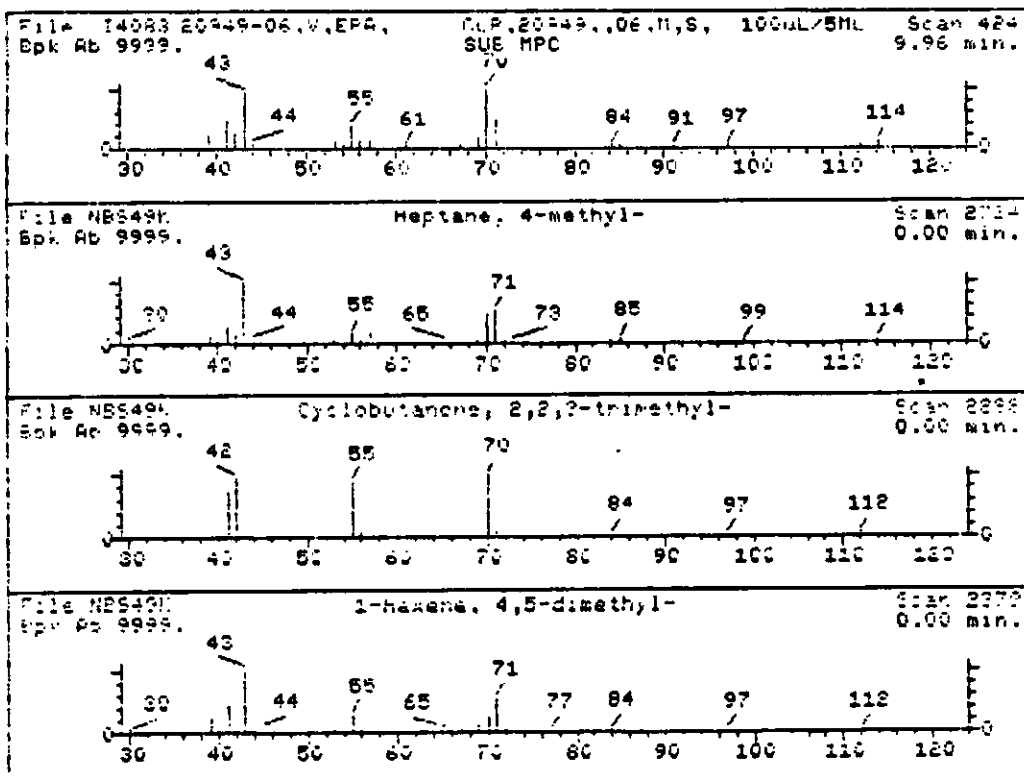
TIC NUMBER:1

1. Heptane, 4-methyl-
2. Cyclobutanone, 2,2,3-trimethyl-
3. 1-Hexene, 4,5-dimethyl-
4. Butane, 1-(ethenyloxy)-3-methyl-
5. N,N'-DIETHYLIDENE-1,1-DIAMINOETHANE
6. Hexane, 2,3-dimethyl-

114 C8H18
 112 C7H12O
 112 C8H16
 114 C7H14O
 112 C6H12N2
 114 C8H18

Sample file: >I4083 Spectrum #: 424
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLS	TILT	%	CON	C_I	R_IV
1.	50*	2724	3918	NBS49K	36	51	0	0	85	40	17	39
2.	28*	2298	3894	NBS49K	24	36	2	0	69	40	10	14
3.	28*	2379	4288	NBS49K	34	53	0	0	89	53	8	33
4.	26*	2703	3916	NBS49K	32	48	3	0	177	44	8	14
5.	25*	2268	3883	NBS49K	20	50	2	0	100	44	8	13
6.	25*	2725	3919	NBS49K	20	67	0	0	73	46	7	15



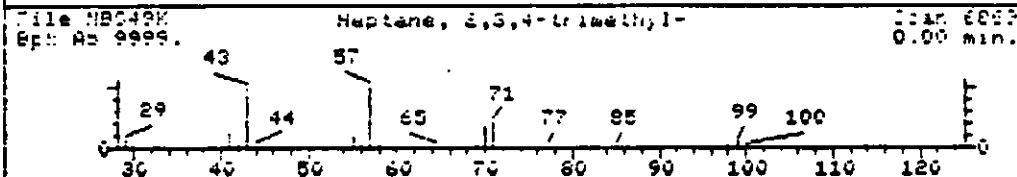
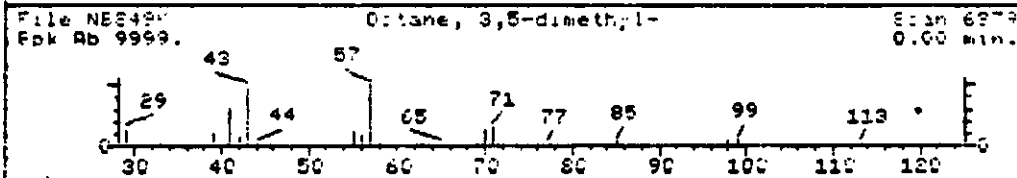
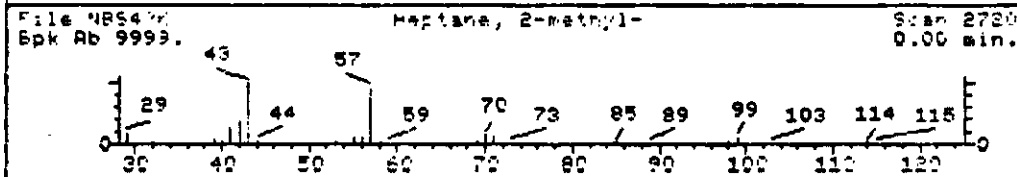
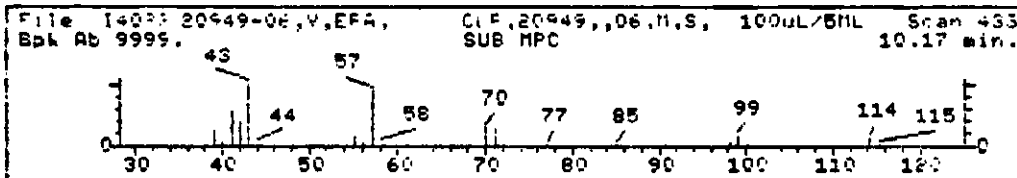
TIC NUMBER:2

1. Heptane, 2-methyl-
2. Octane, 3,5-dimethyl-
3. Heptane, 2,3,4-trimethyl-
4. Octane, 2,5-dimethyl-
5. Hexane, 2,5-dimethyl-
6. Heptane, 3-bromo-

- 114 C8H18
- 142 C10H22
- 142 C10H22
- 142 C10H22
- 114 C8H18
- 178 C7H15Br

Sample file: >I4083 Spectrum #: 433
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	58*	592278	9677	NBS49K	43	48	1	0	82	20	25
2.	44	6879	4028	NBS49K	50	43	2	0	88	21	17
3.	43	52896954	9753	NBS49K	38	52	1	0	64	25	17
4.	42	15869893	9754	NBS49K	45	47	2	0	75	23	17
5.	40*	592132	9676	NBS49K	35	55	2	0	82	28	14
6.	26	1974056	9843	NBS49K	41	46	1	0	70	44	8



DRAFT

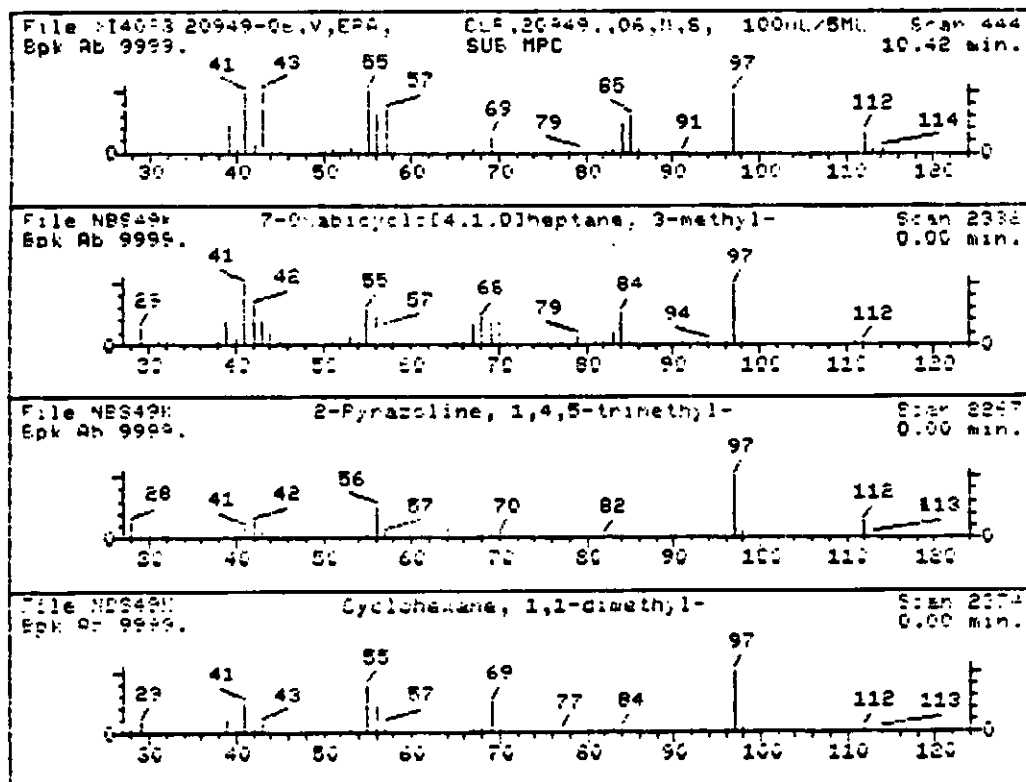
TIC NUMBER:3

1. 7-Oxabicyclo[4.1.0]heptane, 3-methyl-
2. 2-Pyrazoline, 1,4,5-trimethyl-
3. Cyclohexane, 1,1-dimethyl-
4. Cyclohexane, 1,4-dimethyl-
5. 2-Pentene, 3,4,4-trimethyl-
6. 2-Pentene, 2,3,4-trimethyl-

112 C7H12O
 112 C6H12N2
 112 C8H16
 112 C9H16
 112 C8H16
 112 C8H16

Sample file: >I4083 Spectrum #: 444
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DV	#FLG	TILT	%	CON	C_I	R_IV	
1.	42*	36099511	9099	NBS49K	33	83	3	0	88	24	17	13
2.	25*	7423112	9086	NBS49K	35	59	3	0	97	49	7	13
3.	25*	590669	9107	NBS49K	31	67	3	0	97	50	7	13
4.	25*	589902	12036	NBS49K	30	66	3	0	100	50	7	13
5.	21*	598969	9113	NBS49K	53	42	2	0	90	57	5	32
6.	21*	565775	9102	NBS49K	49	39	2	0	100	57	5	30

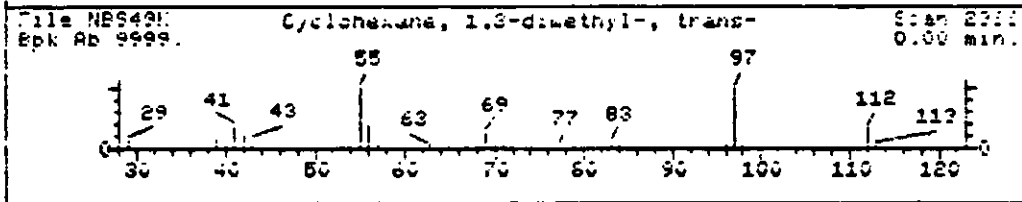
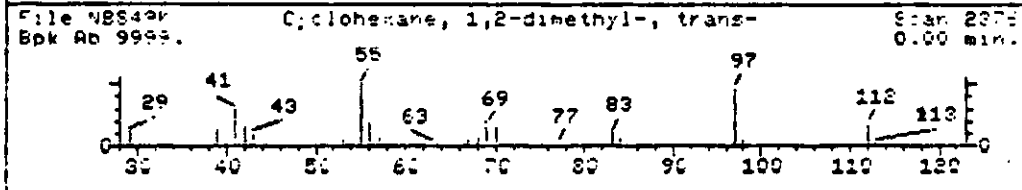
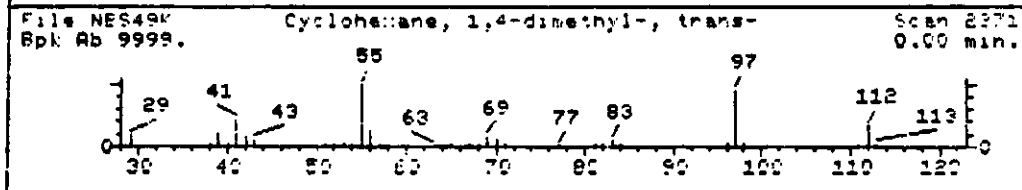
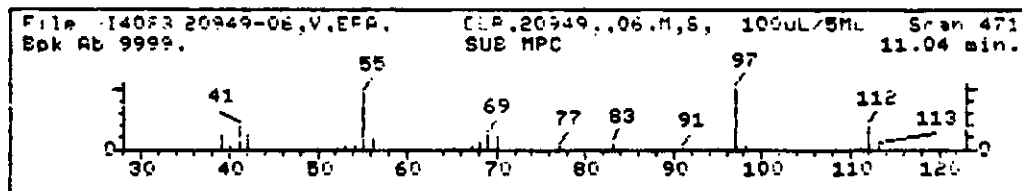


TIC NUMBER: 4

- | | |
|---------------------------------------|-----------|
| 1. Cyclohexane, 1,4-dimethyl-, trans- | 112 C8H16 |
| 2. Cyclohexane, 1,2-dimethyl-, trans- | 112 C8H16 |
| 3. Cyclohexane, 1,3-dimethyl-, trans- | 112 C8H16 |
| 4. Cyclohexane, 1,3-dimethyl-, cis- | 112 C8H16 |
| 5. Cyclohexane, 1,2-dimethyl-, cis- | 112 C8H16 |
| 6. 2-Pentene, 2,3,4-trimethyl- | 112 C8H16 |

Sample file: >I4083 Spectrum #: 471
 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.	79*	2207047	9106	NBS49K	60	42	2	0	77	10	48	37
2.	78*	6876239	9108	NBS49K	42	65	3	0	92	1	55	13
3.	78*	2207036	9103	NBS49K	61	38	3	-1	96	5	55	19
4.	58*	638040	9110	NBS49K	46	48	2	0	95	18	25	25
5.	52*	2207014	12031	NBS49K	25	84	3	0	92	20	20	13
6.	49*	565775	9102	NBS49K	47	41	2	0	92	29	19	27



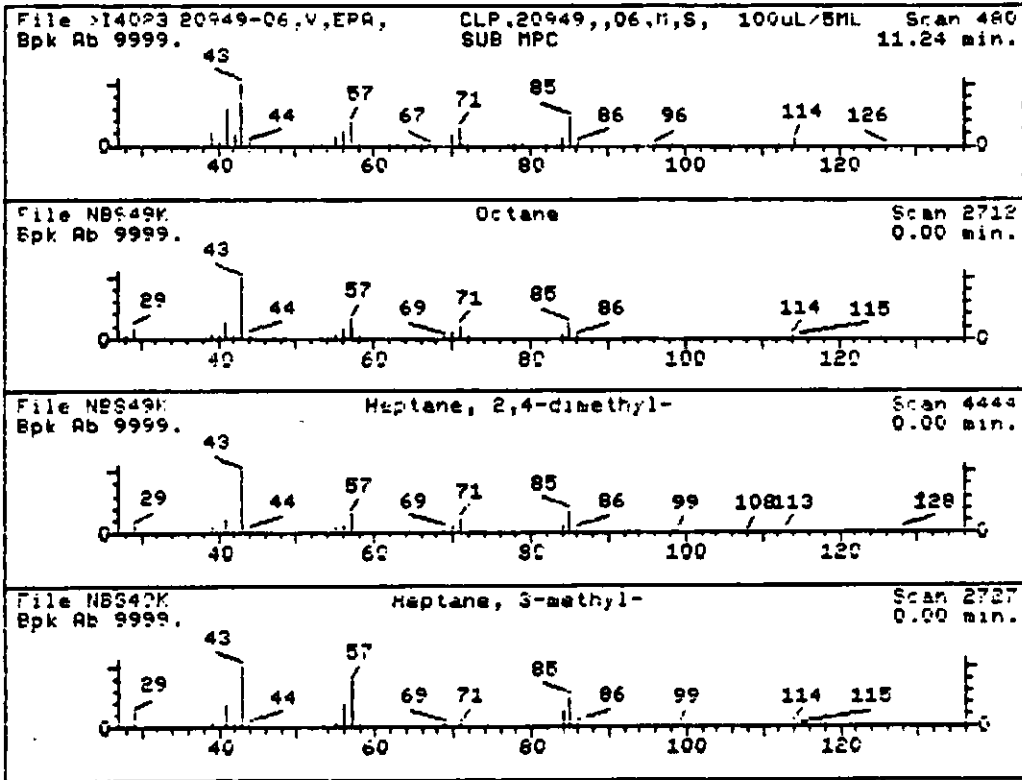
000258 **DRAFT**

TIC NUMBER:5

- | | |
|-----------------------------|-----------|
| 1. Octane | 114 C8H18 |
| 2. Heptane, 2,4-dimethyl- | 128 C9H20 |
| 3. Heptane, 3-methyl- | 114 C8H18 |
| 4. Hexane, 2,3,4-trimethyl- | 128 C9H20 |
| 5. Hexane, 2,4-dimethyl- | 114 C8H18 |
| 6. Hexane, 3,3-dimethyl- | 114 C8H18 |

Sample file: >I4083 Spectrum #: 480
 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.	79*	2712	6558	NBS49K	50	39	2	0	126	10	48	31
2.	52	4444	6602	NBS49K	49	38	2	0	100	20	20	17
3.	41*	2727	6564	NBS49K	36	54	0	0	51	41	14	39
4.	35	4446	6604	NBS49K	53	37	2	0	90	31	12	18
5.	33*	2717	6561	NBS49K	45	53	2	0	82	40	10	19
6.	32	2723	6563	NBS49K	47	43	2	0	94	34	12	15



000259
DRAFT

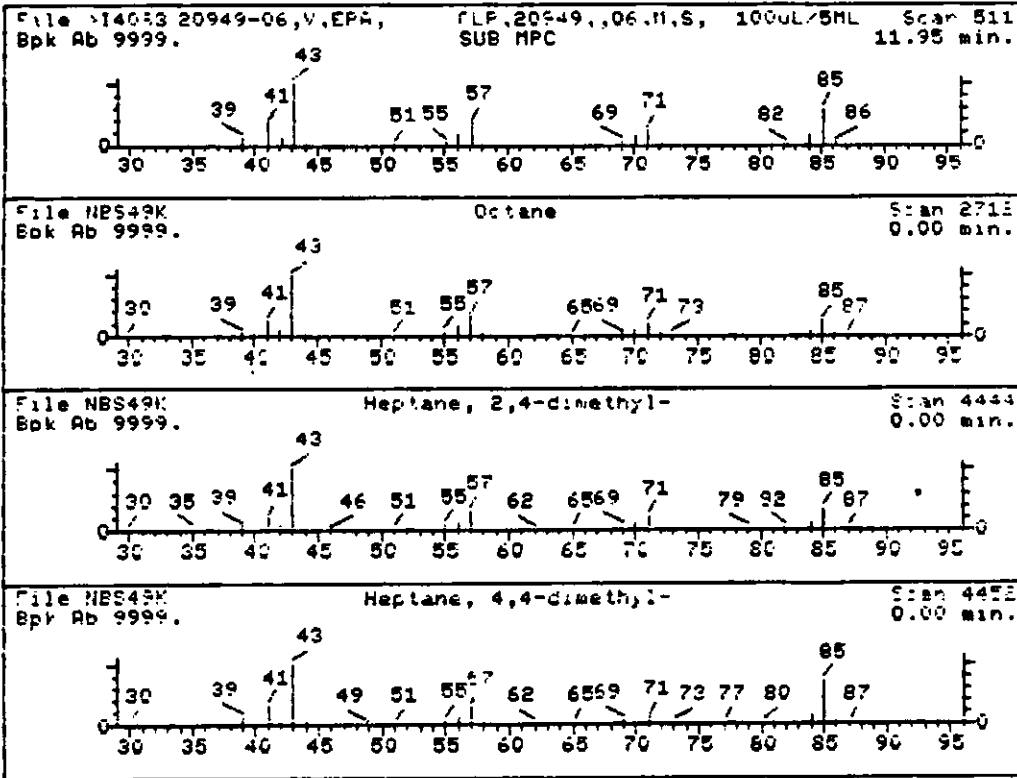
TIC NUMBER:6

1. Octane
2. Heptane, 2,4-dimethyl-
3. Heptane, 4,4-dimethyl-
4. Pentane, 3-ethyl-3-methyl-
5. Pyrrolidine, 3-methyl-
6. Hexane, 2,3,3-trimethyl-

- 114 C8H18
- 128 C9H20
- 128 C9H20
- 114 C8H18
- 85 C5H11N
- 128 C9H20

Sample file: >I4083 Spectrum #: 511
 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.	60	2712	6558	NBS49K	43	46	2	0	98	15	30	13
2.	60	4444	6602	NBS49K	39	48	2	0	100	11	30	12
3.	60	4452	6608	NBS49K	47	41	2	0	82	13	30	16
4.	52	2715	6559	NBS49K	41	41	2	0	89	20	20	14
5.	28*	588	6519	NBS49K	24	56	2	0	96	40	10	14
6.	28	4431	6599	NBS49K	45	44	2	0	60	37	10	14

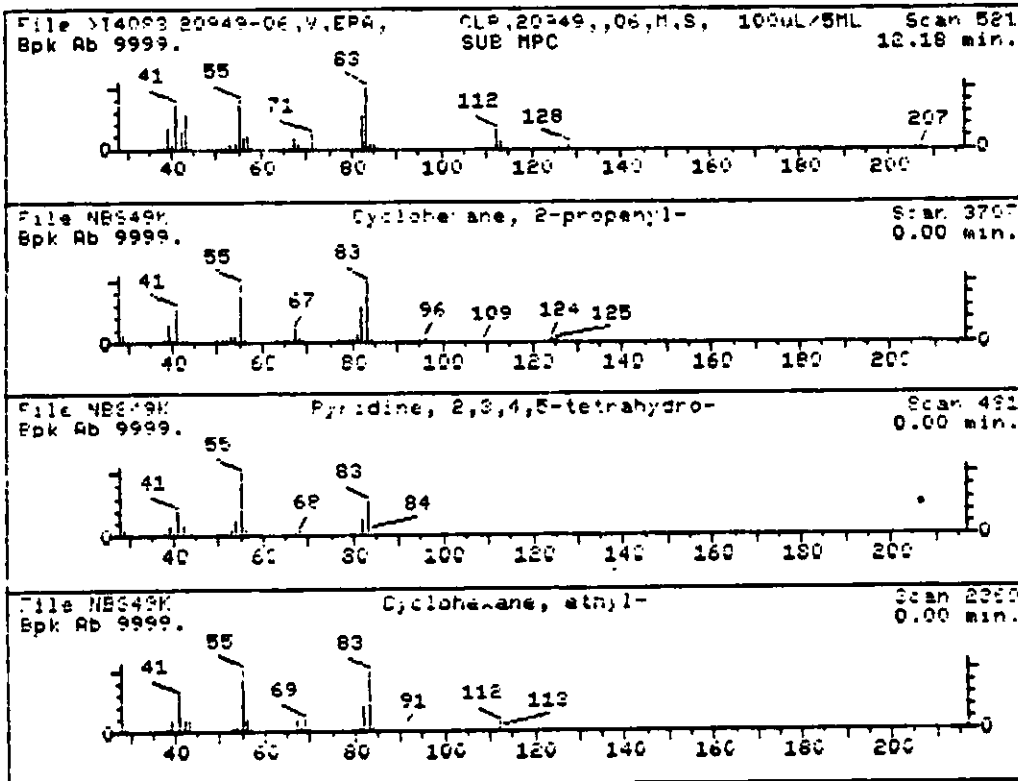


TIC NUMBER:7

- | | |
|------------------------------------|------------|
| 1. Cyclohexane, 2-propenyl- | 124 C9H16 |
| 2. Pyridine, 2,3,4,5-tetrahydro- | 83 C5H9N |
| 3. Cyclohexane, ethyl- | 112 C8H16 |
| 4. Cyclopentane, 1-ethyl-1-methyl- | 112 C8H16 |
| 5. 2-ETHYLBUTENOLIDE | 112 C6H8O2 |
| 6. 2-Hexene, 2,3-dimethyl- | 112 C8H16 |

Sample file: >I4083 Spectrum #: 521
 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.	37	3707	NBS49K	55	44	2	0	82	30	14	14
2.	30*	481	NBS49K	38	55	3	0	183	35	12	13
3.	28*	2369	NBS49K	36	69	2	0	78	38	10	14
4.	26*	2413	NBS49K	34	70	2	0	96	42	8	14
5.	25*	2313011	NBS49K	21	34	2	0	100	50	7	13
6.	25*	7145202	NBS49K	35	59	3	0	86	43	8	13



000261

[] [] [] [] [] []

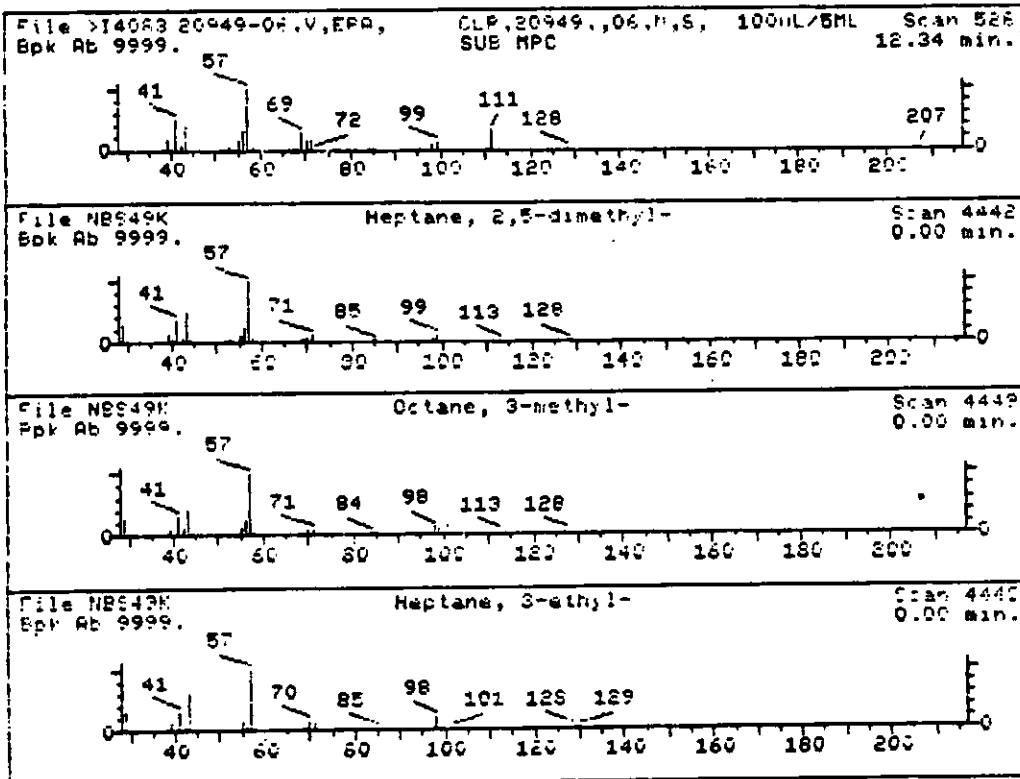
TIC NUMBER:8

1. Heptane, 2,5-dimethyl-
2. Octane, 3-methyl-
3. Heptane, 3-ethyl-
4. Heptane, 3,5-dimethyl-
5. 1-Hexene, 3,5,5-trimethyl-
6. Heptane, 4-(1-methylethyl)-

128 C9H20
 128 C9H20
 128 C9H20
 128 C9H20
 126 C9H18
 142 C10H22

Sample file: >I4083 Spectrum #: 528
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	49*	2216300	9707	NBS49K	41	45	2	0	100	22	22	21
2.	44*	2216333	9708	NBS49K	31	53	2	0	100	22	17	15
3.	42*	15869804	9483	NBS49K	38	50	2	0	67	29	14	19
4.	41*	4443	1262	NBS49K	26	51	0	0	100	26	14	18
5.	37*	4063	3958	NBS49K	45	45	2	0	80	37	14	24
6.	35	52896874	9510	NBS49K	37	46	2	0	98	27	14	12



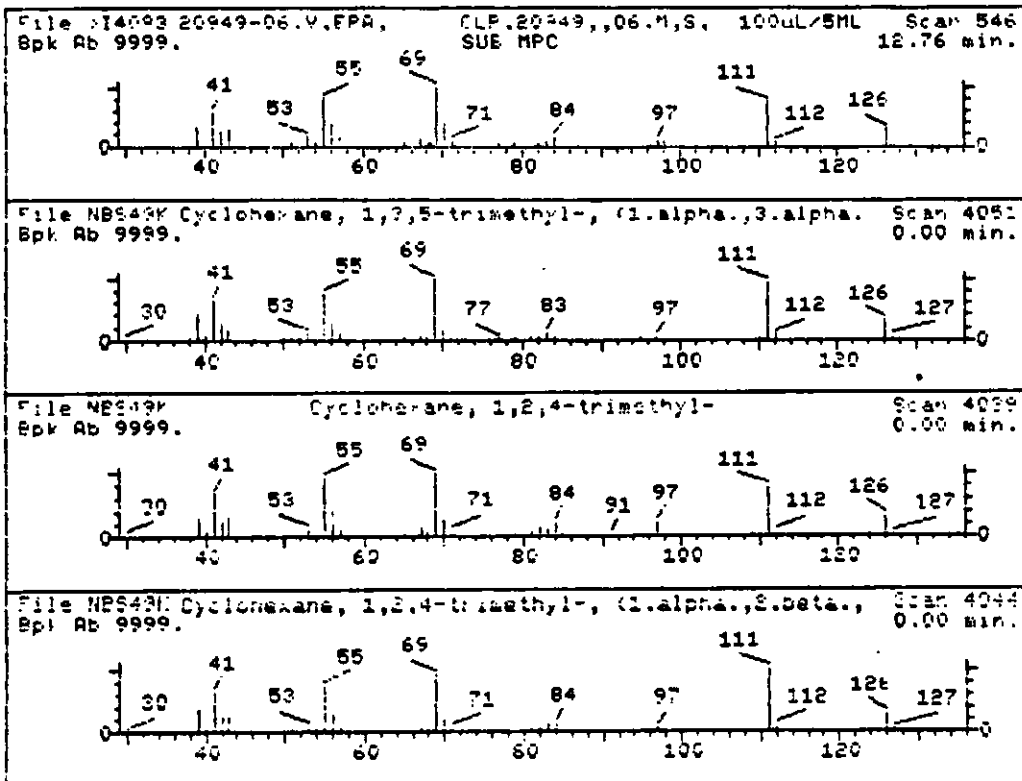
000262

TIC NUMBER:9

1. Cyclohexane, 1,3,5-trimethyl-, (1.alpha.,3.alpha.,5.beta.)- 126 C9H18
2. Cyclohexane, 1,2,4-trimethyl- 126 C9H18
3. Cyclohexane, 1,2,4-trimethyl-, (1.alpha.,2.beta.,4.beta.)- 126 C9H18
4. Cyclohexane, 1,2,3-trimethyl-, (1.alpha.,2.beta.,3.alpha.)- 126 C9H18
5. Cyclohexane, 1,2,3-trimethyl-, (1.alpha.,2.alpha.,3.beta.)- 126 C9H18
6. Cyclohexane, 1,3,5-trimethyl- 126 C9H18

Sample file: >I4083 Spectrum #: 546
 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.	86*	1795262	11842	NBS49K	69	44	0	0	79	19	50	86
2.	84*	2234755	11839	NBS49K	79	38	2	0	75	6	55	60
3.	79*	7667609	11841	NBS49K	68	43	1	0	75	13	43	66
4.	63*	1678815	14779	NBS49K	78	41	2	-1	66	17	30	39
5.	63*	7667552	14774	NBS49K	70	48	3	0	83	18	30	36
6.	43*	1839630	11836	NBS49K	30	68	2	0	100	21	17	14



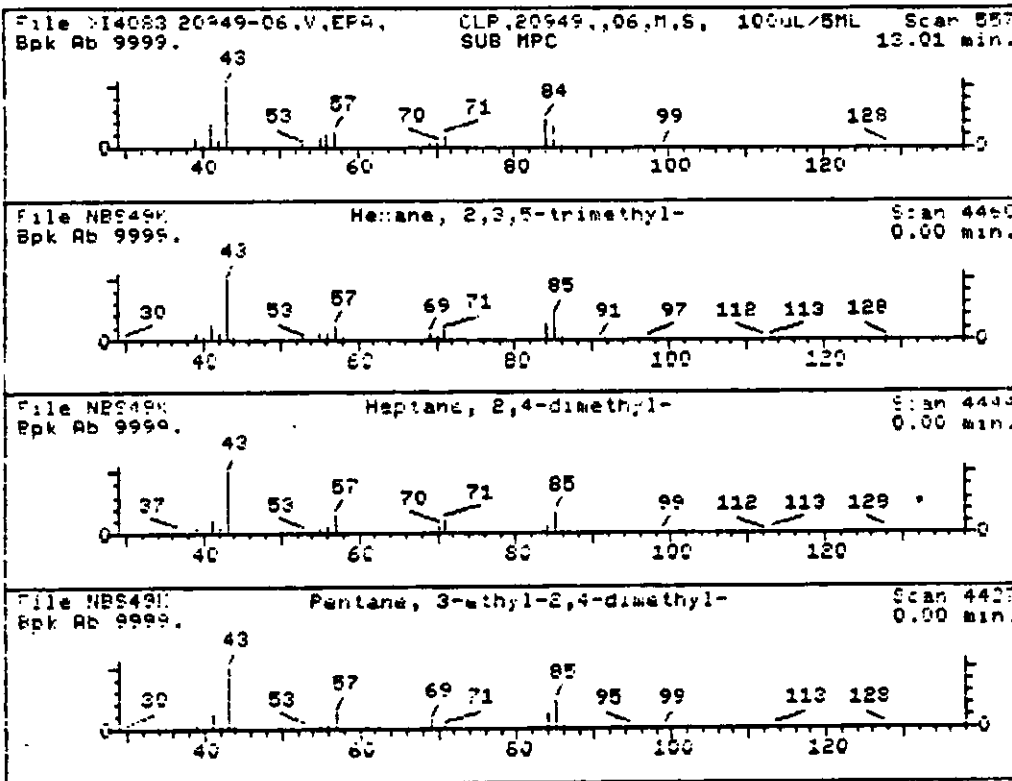
TIC NUMBER:10

1. Hexane, 2,3,5-trimethyl-
2. Heptane, 2,4-dimethyl-
3. Pentane, 3-ethyl-2,4-dimethyl-
4. Hexane, 3-ethyl-
5. Hexane, 2,3,4-trimethyl-
6. Tetrahydrofuran, 2,2-dimethyl-

128 C9H20
 128 C9H20
 128 C9H20
 114 C8H18
 128 C9H20
 100 C6H12O

Sample file: >I4083 Spectrum #: 557
 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.	58*	4460	6611	NBS49K	47	44	2	0	85	18	25	27
2.	50*	4444	6602	NBS49K	42	45	2	0	84	25	22	22
3.	43*	4437	6600	NBS49K	25	58	2	0	80	23	17	14
4.	42	2722	6562	NBS49K	43	47	2	0	100	24	17	13
5.	42*	4446	6604	NBS49K	28	62	3	0	100	25	17	13
6.	25	1392	6535	NBS49K	38	41	2	0	70	45	8	13

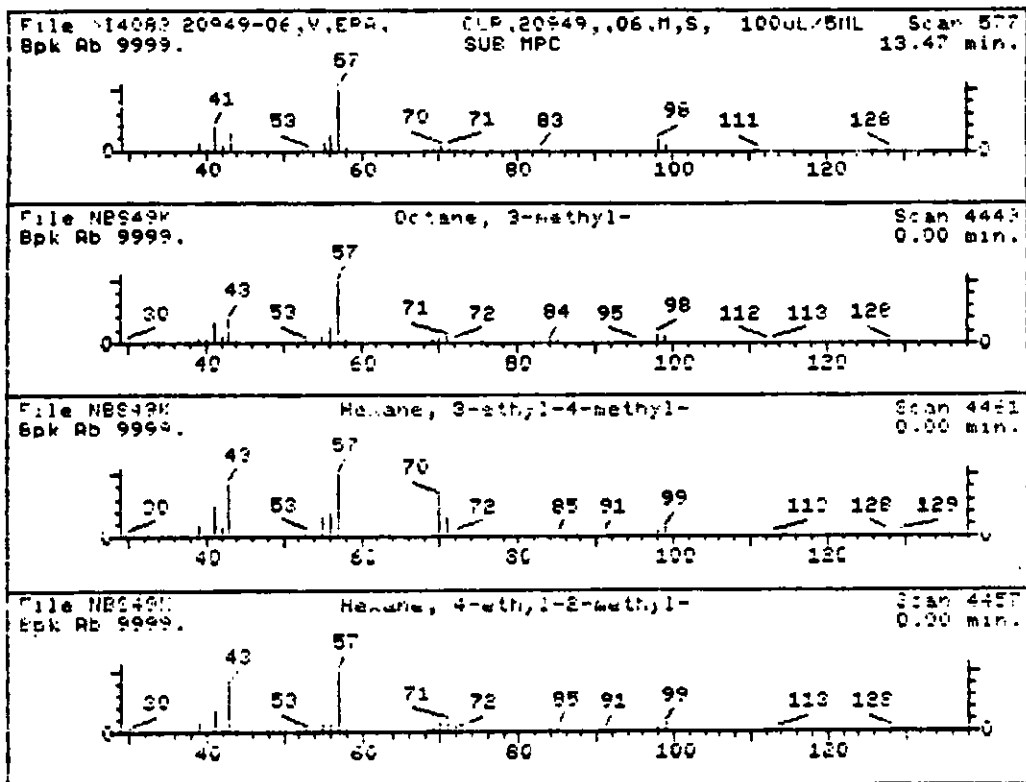


TIC NUMBER:11

- | | |
|------------------------------|------------|
| 1. Octane, 3-methyl- | 128 C9H20 |
| 2. Hexane, 3-ethyl-4-methyl- | 128 C9H20 |
| 3. Hexane, 4-ethyl-2-methyl- | 128 C9H20 |
| 4. Undecane, 6-methyl- | 170 C12H26 |
| 5. Heptane, 2,3,5-trimethyl- | 142 C10H22 |
| 6. Heptane, 3,5-dimethyl- | 128 C9H20 |

Sample file: >I4083 Spectrum #: 577
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	86*	2216333	9708	NBS49K	53	31	2	0	97	5	60	36
2.	70*	4461	3967	NBS49K	25	71	3	0	100	10	42	13
3.	60*	3074757	9710	NBS49K	30	59	3	0	100	12	30	13
4.	60	17302339	9556	NBS49K	43	35	2	0	100	12	30	14
5.	52	6855	1274	NBS49K	35	41	2	0	75	19	20	12
6.	52*	4443	1262	NBS49K	35	42	1	0	97	17	20	19



DRAFT

000265

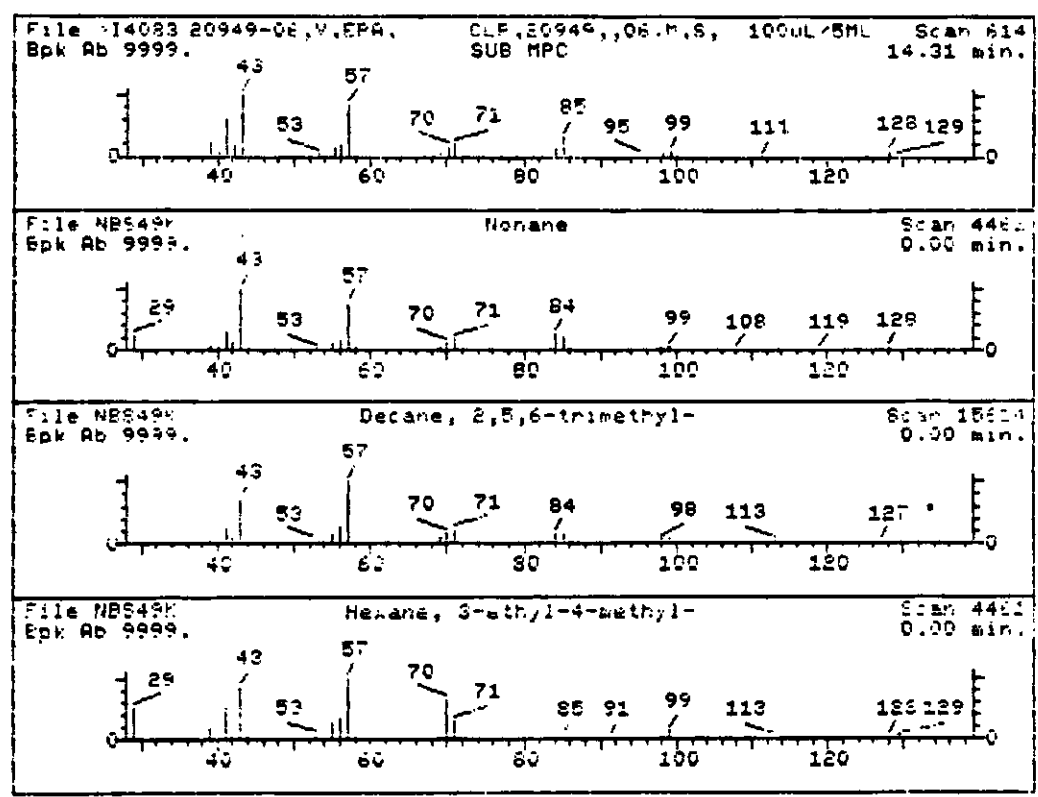
TIC NUMBER: 12

- 1. Nonane
- 2. Decane, 2,5,6-trimethyl-
- 3. Hexane, 3-ethyl-4-methyl-
- 4. Heptane, 2,5-dimethyl-
- 5. Octane, 2,4,6-trimethyl-
- 6. 3-Hexanone, 2,5-dimethyl-

- 128 C9H20
- 184 C12H28
- 128 C9H20
- 128 C9H20
- 156 C11H24
- 128 C8H16O

Sample file: >14083 Spectrum #: 614
 Search speed: 2 Tilting option: S No. of ion ranges searched: 50

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	4462	6612	NBS49K	63	33	1	0	100	5	66 60
2.	70	15614	6773	NBS49K	56	45	2	0	83	8	42 14
3.	68*	4461	3967	NBS49K	60	36	1	0	62	23	30 56
4.	59*	2216300	9707	NBS49K	36	50	0	0	74	29	24 39
5.	52	9743	6682	NBS49K	49	36	1	0	78	19	20 18
6.	49*	4372	6590	NBS49K	45	48	1	0	63	26	19 27



000266

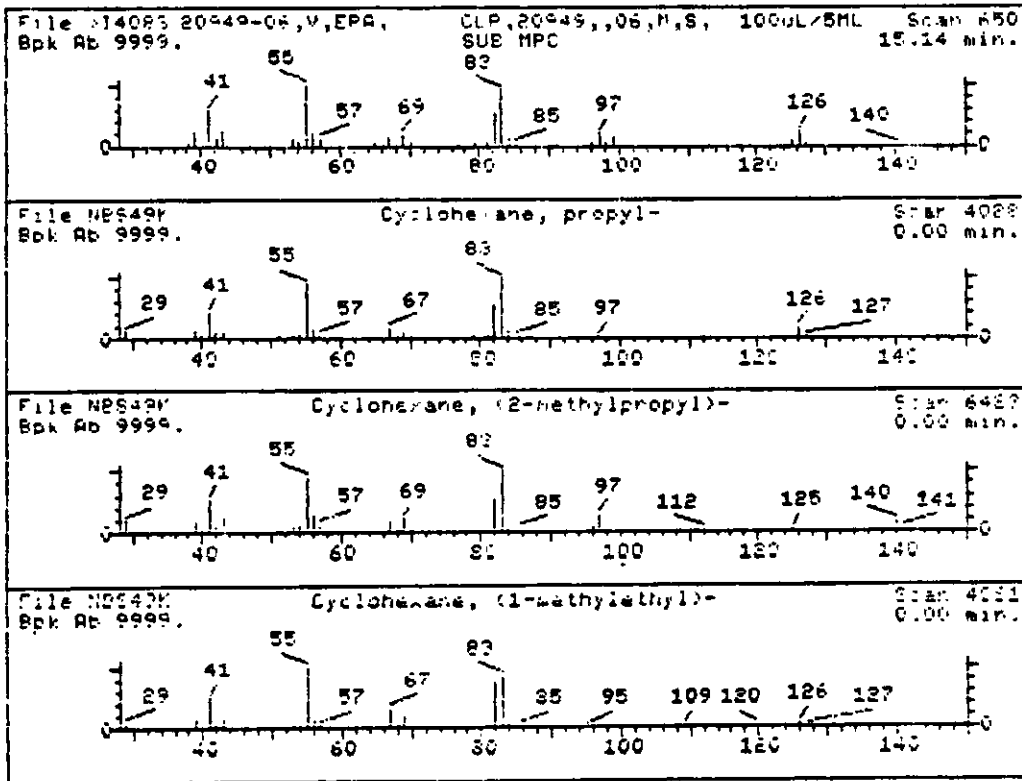
DRAFT

TIC NUMBER:13

- | | |
|--|-------------|
| 1. Cyclohexane, propyl- | 126 C9H18 |
| 2. Cyclohexane, (2-methylpropyl)- | 140 C10H20 |
| 3. Cyclohexane, (1-methylethyl)- | 126 C9H18 |
| 4. Cyclohexane, (4-methylpentyl)- | 168 C12H24 |
| 5. 2-Pyrazoline, 1-methyl-4-propyl- | 126 C7H14N2 |
| 6. Cyclopentane, 1-methyl-3-(1-methylethyl)- | 126 C9H18 |

Sample file: >14083 Spectrum #: 650
 Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV	
1.	75*	4028	6182	NBS49K	67	30	1	0	91	20	35	66
2.	49	6423	6191	NBS49K	66	37	2	0	76	21	22	21
3.	40*	4061	6184	NBS49K	51	43	2	2	80	40	14	27
4.	36	12337	6218	NBS49K	51	46	2	0	77	28	14	13
5.	31*	33063773	14750	NBS49K	34	52	2	0	91	37	10	17
6.	30*	4034	5914	NBS49K	35	67	3	0	100	32	12	13



DRAFT

000267

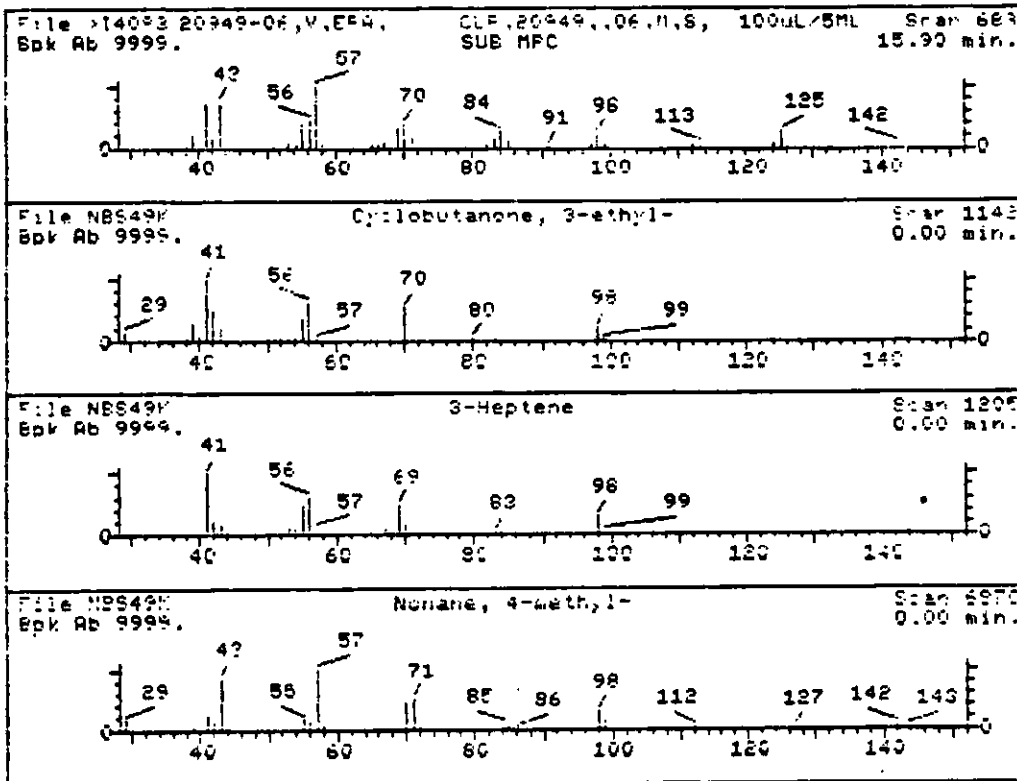
TIC NUMBER:14

- 1. Cyclobutanone, 3-ethyl-
- 2. 3-Heptene
- 3. Nonane, 4-methyl-
- 4. 1-Octene
- 5. Cyclobutanone, 2-ethyl-
- 6. Piperidine, 1-(1-propenyl)-

- 98 C6H10O
- 98 C7H14
- 142 C10H22
- 112 C8H16
- 98 C6H10O
- 125 C8H15N

Sample file: >14083 Spectrum #: 683
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLS	TILT	%	CON	C_I	R_IV	
1.	28*	1142	3845	NBS49K	37	53	3	0	70	37	10	14
2.	26*	592789	9449	NBS49K	59	32	1	0	65	59	7	53
3.	25*	6870	4027	NBS49K	47	53	2	0	74	50	7	19
4.	25*	2362	3891	NBS49K	42	61	3	0	67	45	8	13
5.	25*	1116	3843	NBS49K	22	77	3	0	53	50	7	12
6.	24*	7182094	14445	NBS49K	22	104	3	0	73	45	8	12



000268

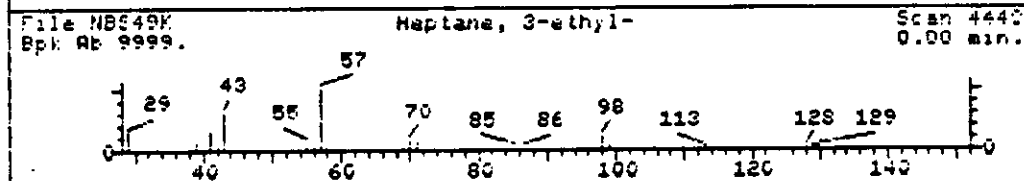
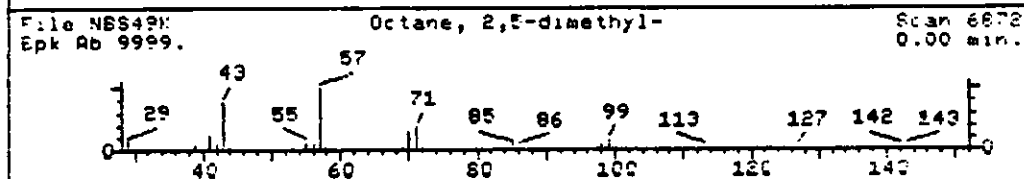
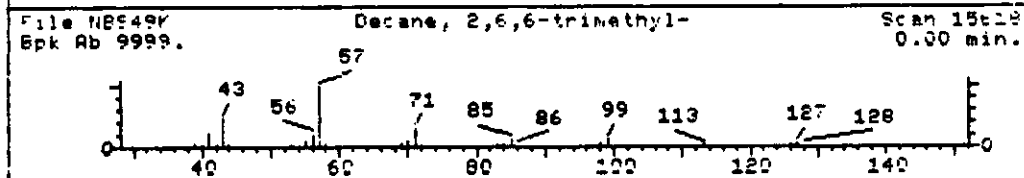
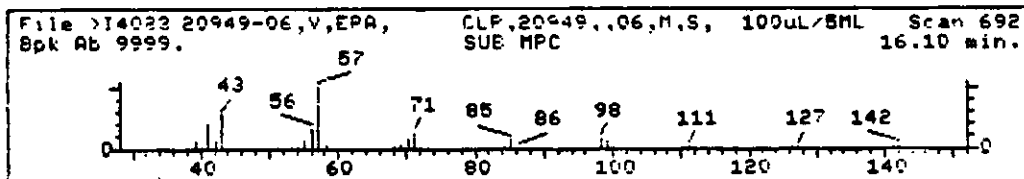
DRAFT

TIC NUMBER:15

1. Decane, 2,6,6-trimethyl-	184	C13H28
2. Octane, 2,5-dimethyl-	142	C10H22
3. Heptane, 3-ethyl-	128	C9H20
4. Octane, 2,5,6-trimethyl-	156	C11H24
5. Heptane, 2,5-dimethyl-	128	C9H20
6. Octane, 3-methyl-	128	C9H20

Sample file: >I4083 Spectrum #: 692
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	67	62108241	9855	NBS49K	65	34	2	0	84	13	34	23
2.	64*	15869893	9754	NBS49K	58	34	1	0	70	22	28	49
3.	53	15869804	9483	NBS49K	58	30	1	0	71	23	22	25
4.	52	9744	6693	NBS49K	40	47	1	0	79	20	20	14
5.	52	2216300	9707	NBS49K	50	36	1	0	94	20	20	19
6.	52	2216333	9708	NBS49K	47	37	2	0	100	20	20	16

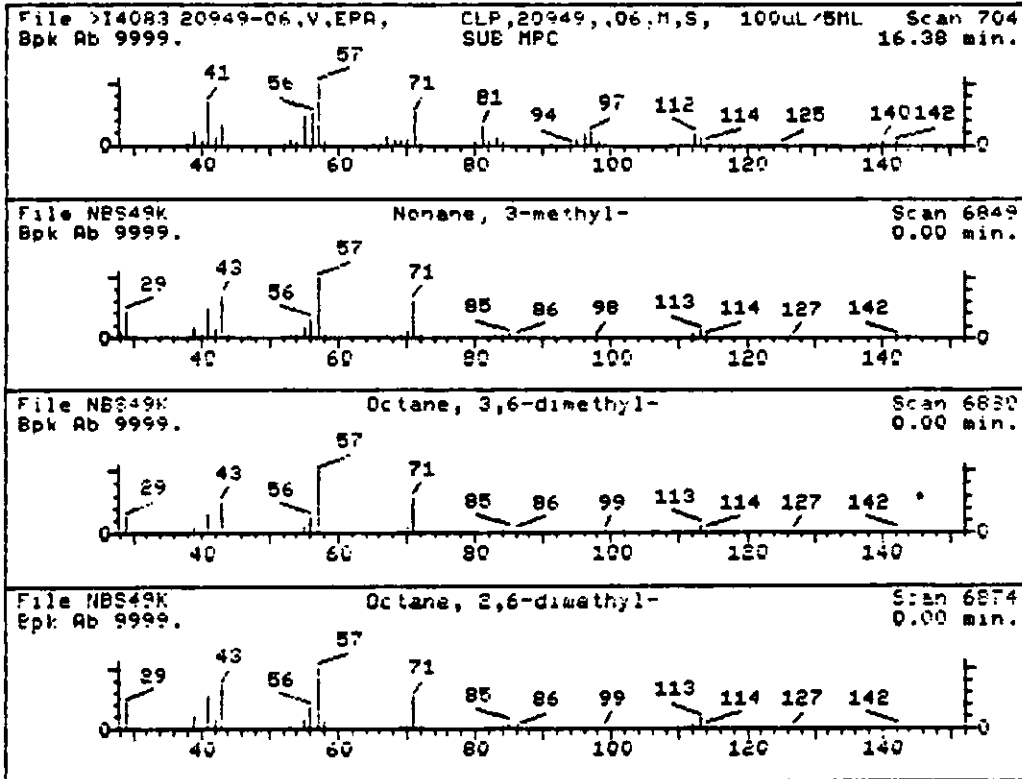


TIC NUMBER:16

- | | |
|--------------------------------|------------|
| 1. Nonane, 3-methyl- | 142 C10H22 |
| 2. Octane, 3,6-dimethyl- | 142 C10H22 |
| 3. Octane, 2,6-dimethyl- | 142 C10H22 |
| 4. 1-Pentene, 2,4,4-trimethyl- | 112 C8H16 |
| 5. 1-Hexene, 5,5-dimethyl- | 112 C8H16 |
| 6. Heptane, 3-ethyl-5-methyl- | 142 C10H22 |

Sample file: >I4083 Spectrum #: 704
 Search speed: 2 Tilting option: S No. of ion ranges searched: 60

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	49*	5911046	12331	NBS49K	45	52	1	0	73	28	19	27
2.	42*	15869940	12333	NBS49K	43	46	1	0	70	34	16	25
3.	42*	2051301	12332	NBS49K	50	45	2	1	74	35	16	25
4.	36*	107391	12039	NBS49K	41	47	1	0	79	40	14	23
5.	35*	7116861	9104	NBS49K	33	50	0	0	82	46	11	30
6.	31*	6864	4335	NBS49K	32	62	2	0	67	35	12	14

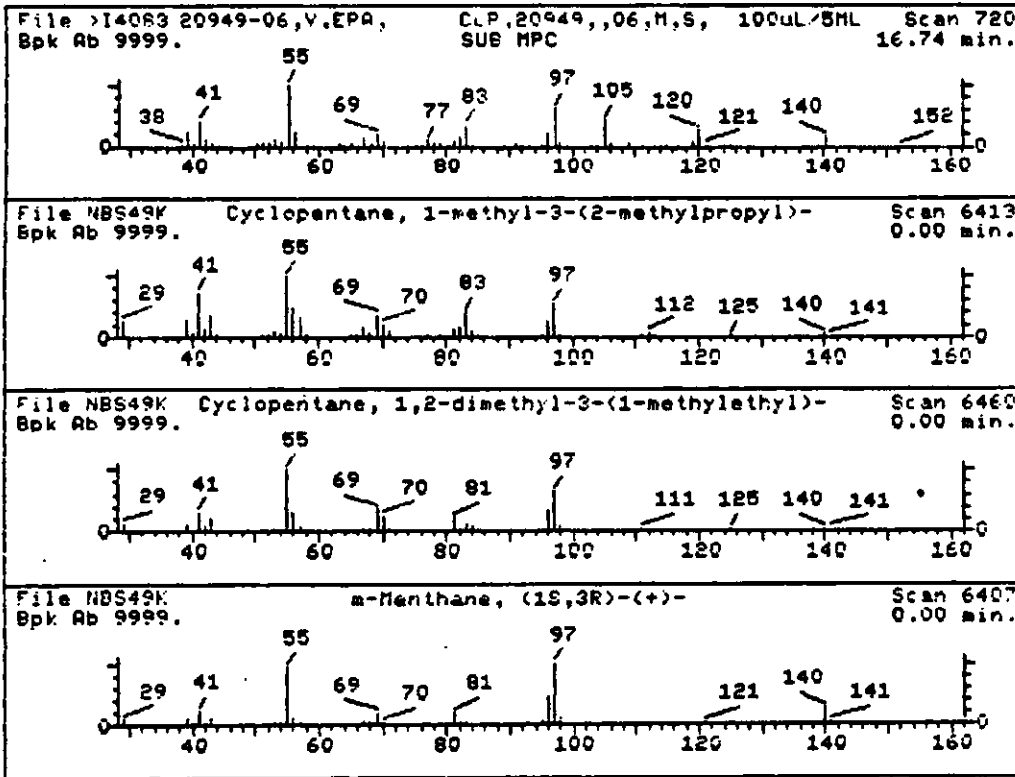


TIC NUMBER:17

- | | |
|--|------------|
| 1. Cyclopentane, 1-methyl-3-(2-methylpropyl)- | 140 C10H20 |
| 2. Cyclopentane, 1,2-dimethyl-3-(1-methylethyl)- | 140 C10H20 |
| 3. m-Menthane, (1S,3R)-(+)- | 140 C10H20 |
| 4. 3-Heptene, 4-propyl- | 140 C10H20 |
| 5. 3-Hexene, 3-ethyl-2,5-dimethyl- | 140 C10H20 |
| 6. Cyclopentane, 2-isopropyl-1,3-dimethyl- | 140 C10H20 |

Sample file: >I4083 Spectrum #: 720
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	42*	29053041	9171	NBS49K	35	77	3	0	100	25	17	13
2.	26*	489203	9178	NBS49K	35	62	2	0	64	43	8	14
3.	25*	13837666	9169	NBS49K	39	43	2	0	44	50	7	19
4.	25*	4485136	9167	NBS49K	37	58	2	0	100	48	7	16
5.	25*	62338083	9168	NBS49K	37	62	2	0	81	50	7	14
6.	25*	32281859	9166	NBS49K	29	66	2	0	47	46	7	14



000271 DRAFT

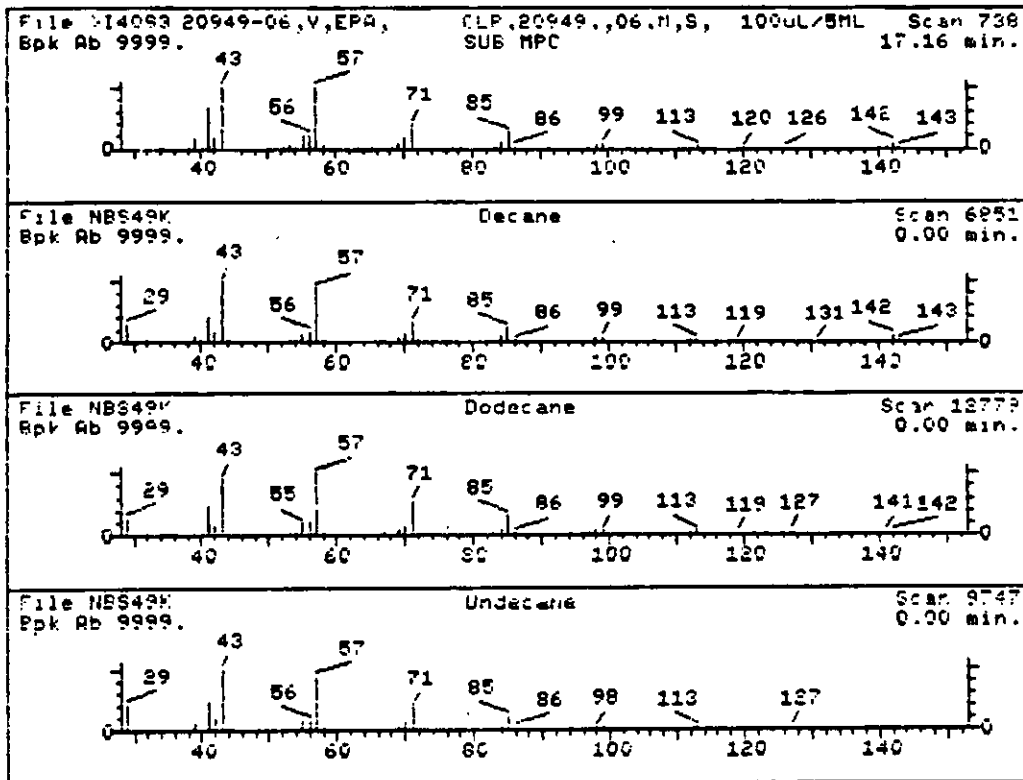
TIC NUMBER:18

1. Decane
2. Dodecane
3. Undecane
4. Undecane, 2,9-dimethyl-
5. Undecane, 3-methyl-
6. Decane, 2,3,5-trimethyl-

- 142 C10H22
- 170 C12H26
- 152 C11H24
- 184 C13H28
- 170 C12H26
- 184 C13H28

Sample file: >I4083 Spectrum #: 738
 Search speed: 2 Tilting option: S No. of ion ranges searched: 55

Prob.	CAS #	COI. #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	124185	18079	NBS49K	92	8	0	100	1	72	96
2.	76	12779	6735	NBS49K	79	20	2	88	8	45	23
3.	76	9747	6685	NBS49K	65	32	2	100	7	45	23
4.	60	17301267	9852	NBS49K	58	43	2	73	12	30	15
5.	60	12793	6742	NBS49K	47	41	1	78	13	30	17
6.	58	15638	6782	NBS49K	67	36	1	68	16	25	24



000272

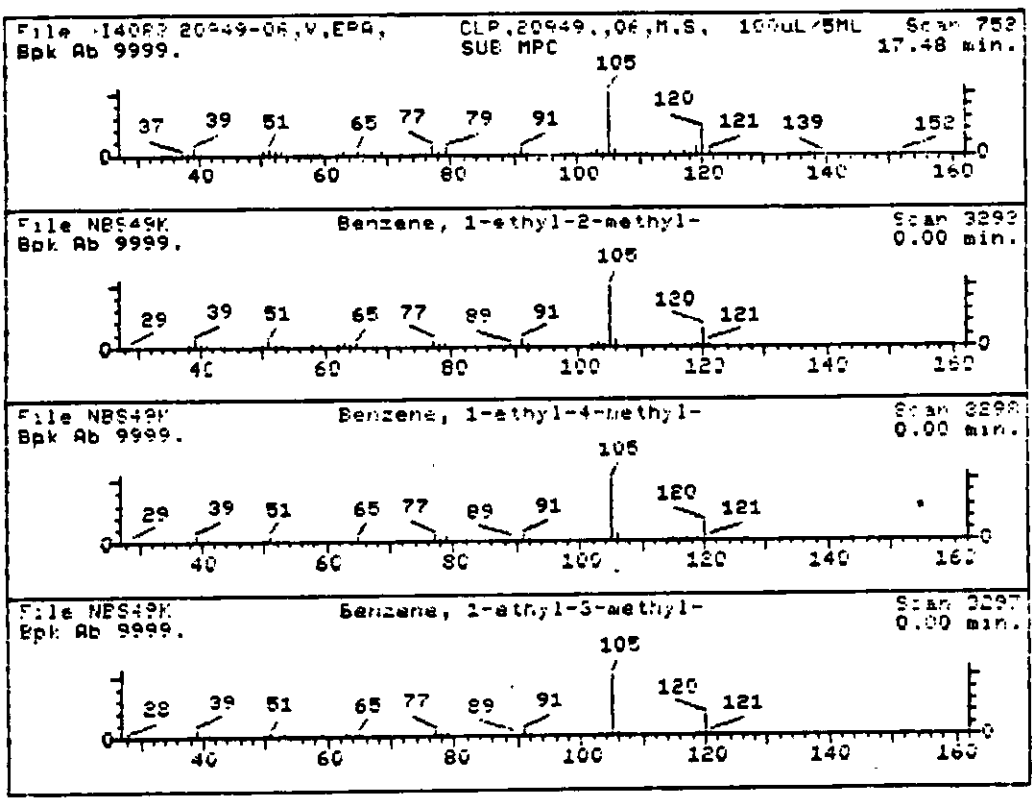
DRAFT

TIC NUMBER:19

- | | |
|-------------------------------|-----------|
| 1. Benzene, 1-ethyl-2-methyl- | 120 C9H12 |
| 2. Benzene, 1-ethyl-4-methyl- | 120 C9H12 |
| 3. Benzene, 1-ethyl-3-methyl- | 120 C9H12 |
| 4. Benzene, 1,2,3-trimethyl- | 120 C9H12 |
| 5. Benzene, (1-methylethyl)- | 120 C9H12 |
| 6. Benzene, 1,2,4-trimethyl- | 120 C9H12 |

Sample file: >I4083 Spectrum #: 752
 Search speed: 2 Tilting option: S No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	93*	611143	13669	NBS49K	75	10	1	0	100	12	64	93
2.	93*	622968	13672	NBS49K	75	10	1	0	100	12	64	93
3.	93*	620144	13671	NBS49K	75	12	1	0	100	11	64	93
4.	91*	526738	13674	NBS49K	80	20	0	0	56	31	50	94
5.	83*	98828	13667	NBS49K	71	16	1	0	100	25	47	83
6.	69*	95636	13676	NBS49K	66	29	1	0	58	31	26	66



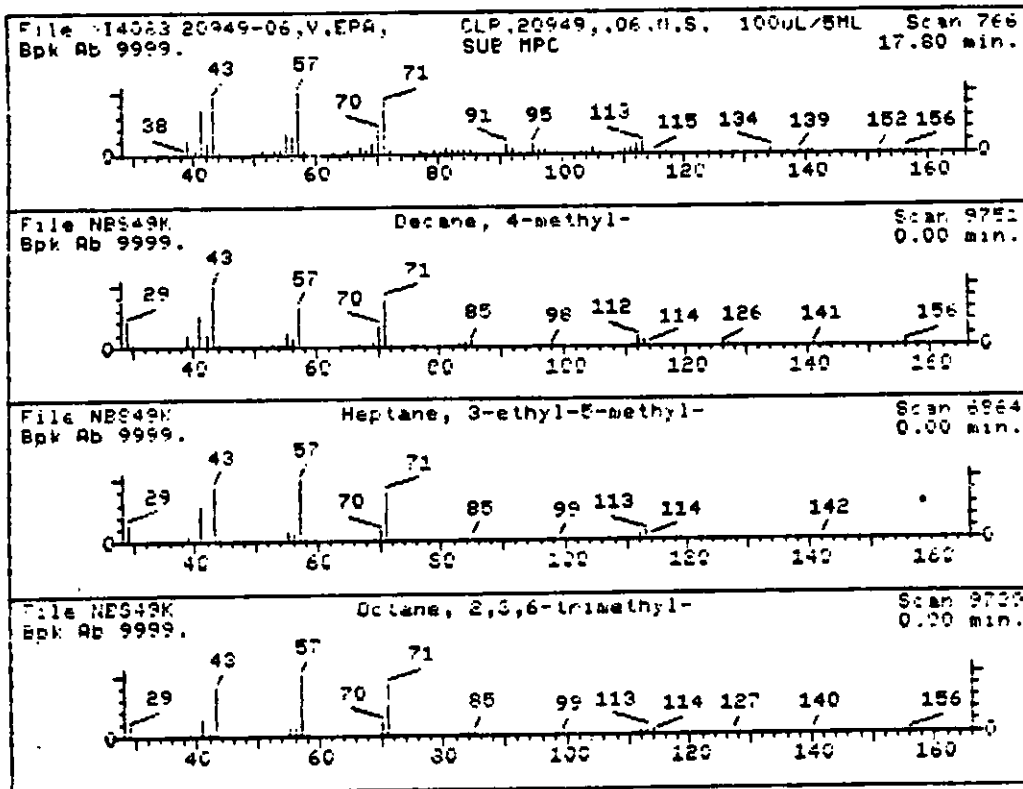
000273

TIC NUMBER:20

- | | |
|-------------------------------|------------|
| 1. Decane, 4-methyl- | 156 C11H24 |
| 2. Heptane, 3-ethyl-5-methyl- | 142 C10H22 |
| 3. Octane, 2,3,6-trimethyl- | 156 C11H24 |
| 4. Butane, 2,2-dimethyl- | 86 C6H14 |
| 5. Octane, 3-ethyl- | 142 C10H22 |
| 6. Octane, 2,3,7-trimethyl- | 156 C11H24 |

Sample file: >I4083 Spectrum #: 766
 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.	83*	9751	NBS49K	68	33	0	0	82	22	47	83
2.	59	6864	NBS49K	58	36	0	0	93	21	27	35
3.	57	9739	NBS49K	50	42	0	0	87	23	22	29
4.	55	677	NBS49K	57	35	0	0	91	26	24	35
5.	55	6856	NBS49K	47	46	0	0	91	23	22	27
6.	54	9740	NBS49K	45	48	0	0	96	23	22	26



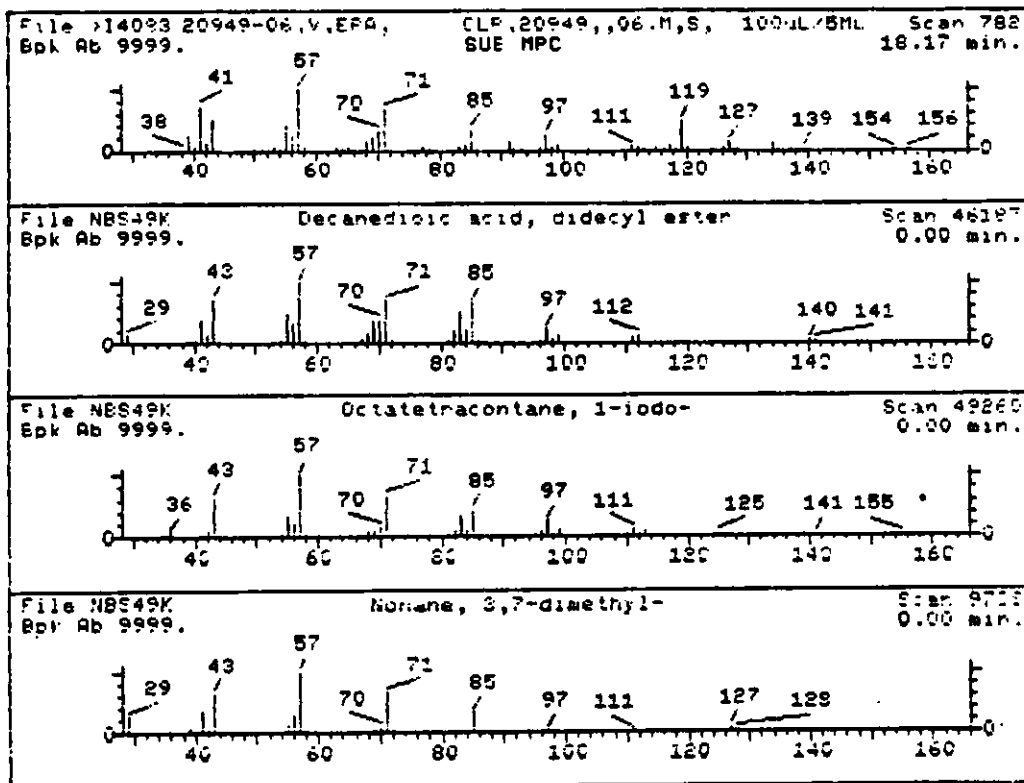
TIC NUMBER:21

1. Decanedioic acid, didecyl ester
2. Octatetracontane, 1-iodo-
3. Nonane, 3,7-dimethyl-
4. Nonane, 4,5-dimethyl-
5. Dodecane, 2,6,10-trimethyl-
6. Octane, 5-ethyl-2-methyl-

482 C30H58O4
 800 C48H97I
 156 C11H24
 156 C11H24
 212 C15H32
 156 C11H24

Sample file: >I4083 Spectrum #: 782
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	32	46187	6917	NBS49K	89	81	3	0	71	39	10	18
2.	28	49260	6922	NBS49K	70	118	2	0	80	43	8	16
3.	28	9738	6680	NBS49K	58	29	0	0	79	53	8	35
4.	25*	9748	6636	NBS49K	46	50	3	0	106	43	8	13
5.	24	21014	4423	NBS49K	71	53	3	0	91	42	8	12
6.	20*	62016186	15041	NBS49K	41	57	2	0	107	52	5	17

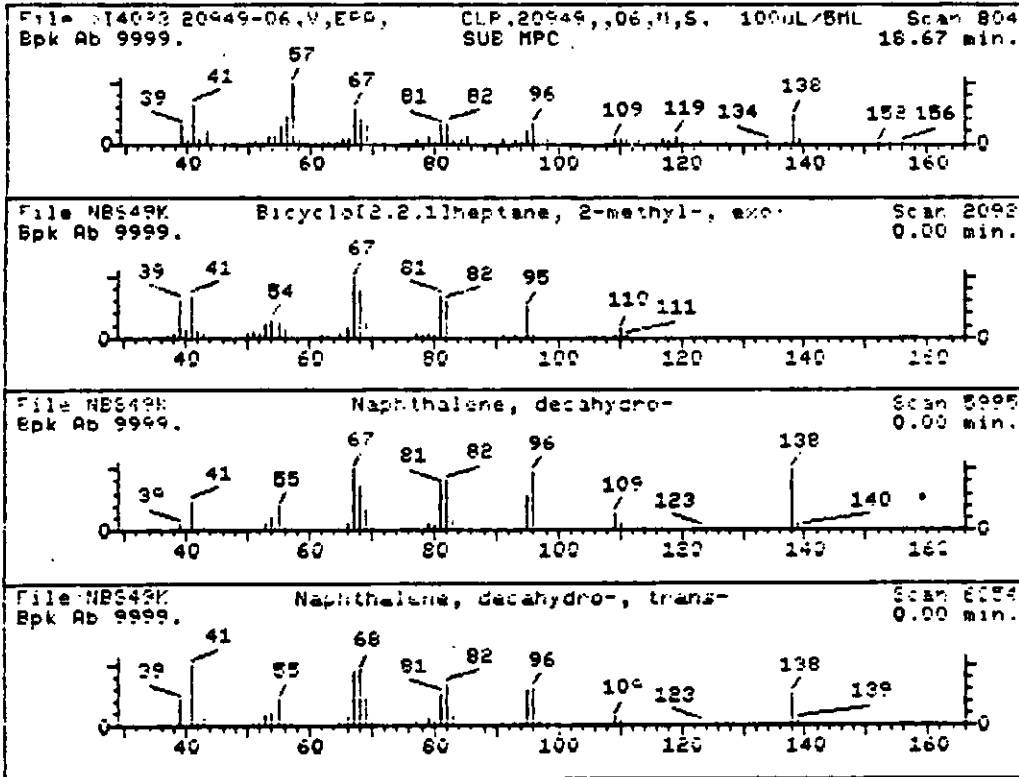


TIC NUMBER: 22

- | | |
|---|------------|
| 1. Bicyclo[2.2.1]heptane, 2-methyl-, exo- | 118 C8H14 |
| 2. Naphthalene, decahydro- | 138 C10H18 |
| 3. Naphthalene, decahydro-, trans- | 138 C10H18 |
| 4. Cyclohexanone, 2-(1-methylethylidene)- | 138 C9H14O |
| 5. Spiro[4.4]nonan-2-one | 138 C9H14O |
| 6. Naphthalene, decahydro-, cis- | 138 C10H18 |

Sample file: >I4083 Spectrum #: 804
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	84*	2092	NBS49K	80	18	0	0	40	47	40	94
2.	69*	91178	NBS49K	75	37	0	4	34	42	24	76
3.	51*	493027	NBS49K	46	61	0	0	36	44	17	54
4.	40*	13747734	NBS49K	64	51	2	0	52	46	12	43
5.	37*	34177189	NBS49K	57	74	3	1	59	30	14	14
6.	32*	493016	NBS49K	56	47	1	0	45	51	9	44



000276
DRAFT

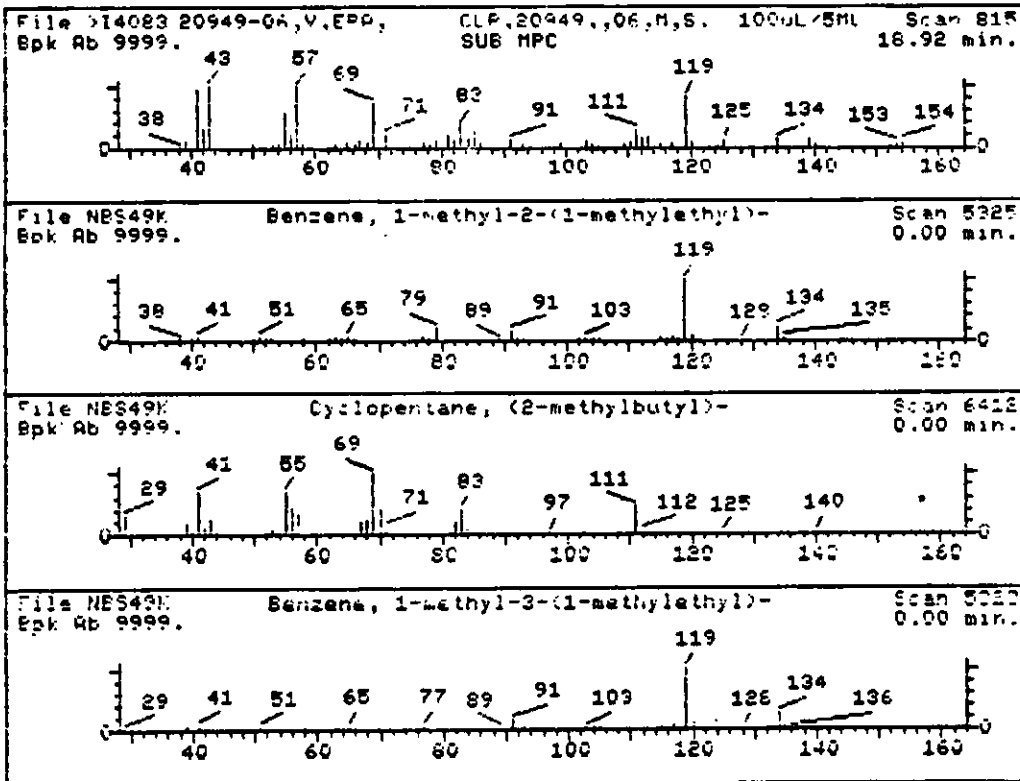
TIC NUMBER:23

1. Benzene, 1-methyl-2-(1-methylethyl)-
2. Cyclopentane, (2-methylbutyl)-
3. Benzene, 1-methyl-3-(1-methylethyl)-
4. Benzene, 2-ethyl-1,3-dimethyl-
5. Pyridine, 5-ethenyl-2-methyl-
6. 1-Chloromethyl-3,5-dimethylbenzene

134 C10H14
140 C10H20
134 C10H14
134 C10H14
119 C8H9N
154 C9H11Cl

Sample file: >I4083 Spectrum #: 815
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.	28*	527844	13539	NBS49K	54	38	2	0	54	52	8 38
2.	20*	53366384	11862	NBS49K	42	70	2	1	51	52	5 12
3.	18*	535773	13538	NBS49K	52	37	2	2	73	57	4 28
4.	15*	2870044	13529	NBS49K	40	49	2	2	71	60	3 13
5.	15*	140761	13518	NBS49K	27	78	3	0	82	57	3 13
6.	15	2745542	13559	NBS49K	49	43	2	0	82	57	3 15



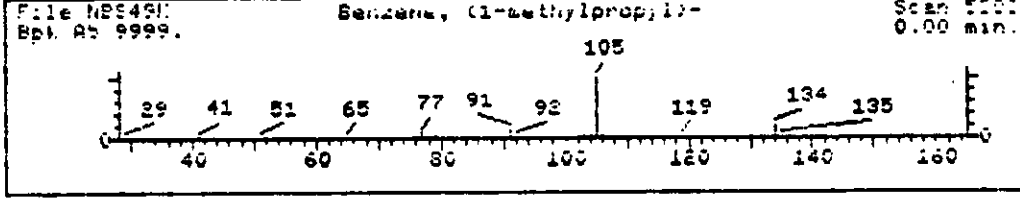
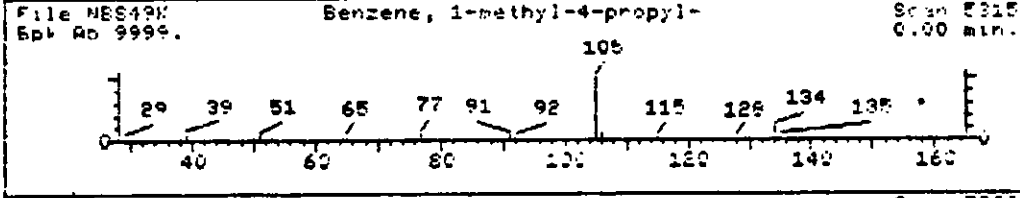
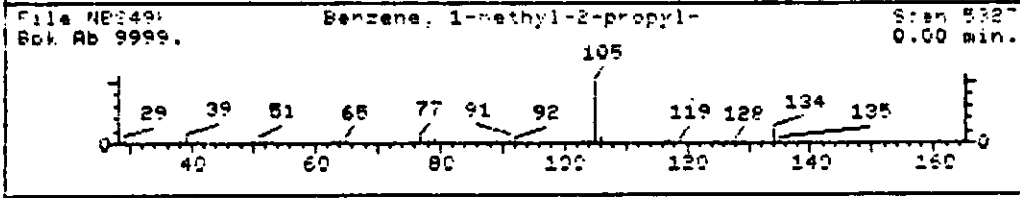
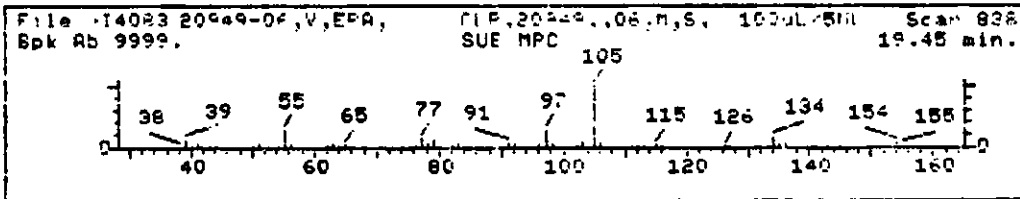
0027-AFT

TIC NUMBER:24

- | | |
|---------------------------------------|-------------|
| 1. Benzene, 1-methyl-2-propyl- | 134 C10H14 |
| 2. Benzene, 1-methyl-4-propyl- | 134 C10H14 |
| 3. Benzene, (1-methylpropyl)- | 134 C10H14 |
| 4. Benzene, 1-methyl-3-propyl- | 134 C10H14 |
| 5. Benzene, 1-(bromomethyl)-4-methyl- | 184 C8H9Br |
| 6. Benzene, (2-chloro-1-methylethyl)- | 154 C9H11Cl |

Sample file: >I4083 Spectrum #: 838
 Search speed: 2 Tilting option: S No. of ion ranges searched: 59

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	62*	1074175	16264	NBS49K	56	27	2	0	87	28	25	42
2.	62*	1074551	16260	NBS49K	56	27	2	0	92	28	25	42
3.	49*	135988	16252	NBS49K	51	32	2	1	92	28	19	27
4.	46*	1074437	16249	NBS49K	53	34	2	2	67	31	20	30
5.	40	104814	11090	NBS49K	64	35	2	0	97	35	16	23
6.	31	824475	20125	NBS49K	43	40	2	0	100	31	12	14



000278
DRAFT

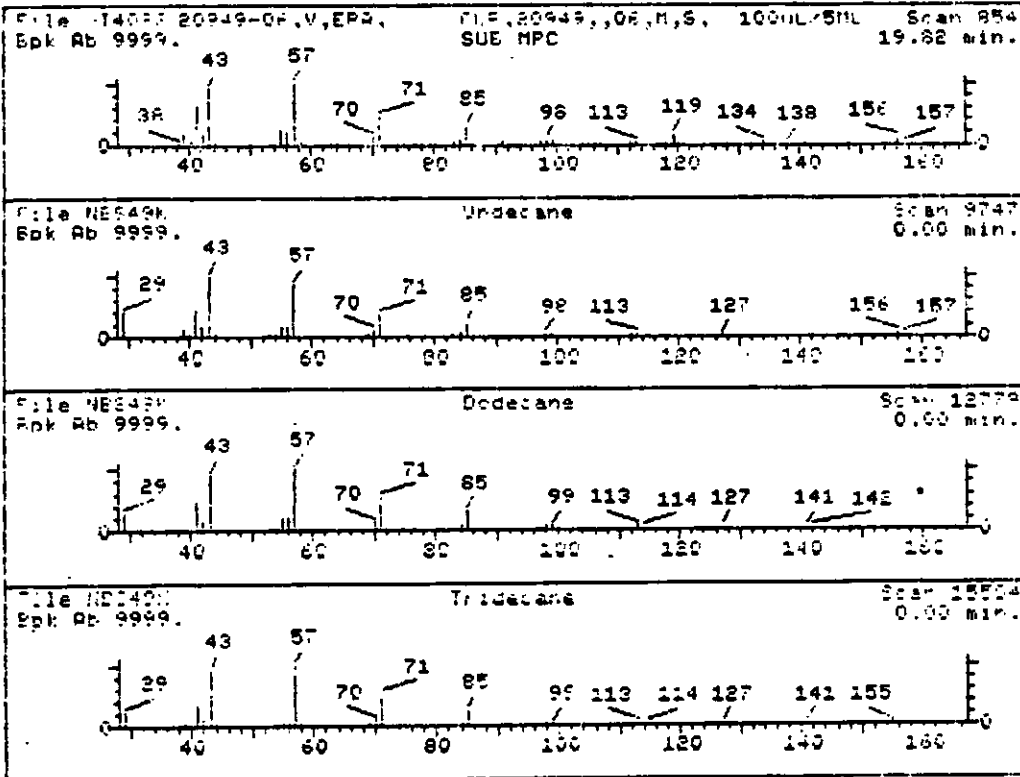
TIC NUMBER:25

1. Undecane
2. Dodecane
3. Tridecane
4. Tetradecane, 1-iodo-
5. Decane, 6-ethyl-2-methyl-
6. Heptadecane, 2,6,10,14-tetramethyl-

- 156 C11H24
- 170 C12H26
- 184 C13H28
- 324 C14H29I
- 184 C13H28
- 296 C21H44

Sample file: >I4083 Spectrum #: 854
 Search speed: 2 Tilting option: S No. of ion ranges searched: 64

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	9747	6685	NBS49K	77	20	0	0	91	8	68	93
2.	76	12779	6735	NBS49K	69	30	2	0	84	10	45	24
3.	67	15584	6764	NBS49K	68	38	1	0	89	15	34	25
4.	64	36443	6892	NBS49K	85	43	1	0	79	21	28	40
5.	63	15605	6770	NBS49K	72	27	1	0	91	17	30	35
6.	60	33430	6893	NBS49K	63	66	2	0	71	15	30	17



000279

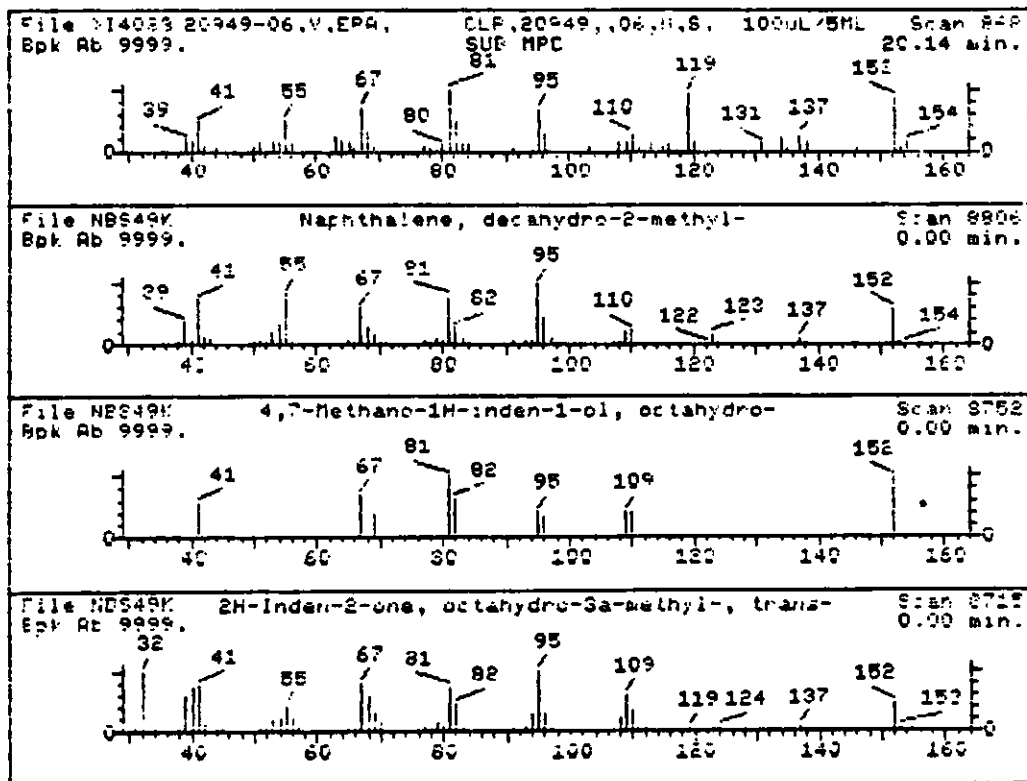
DRAFT

TIC NUMBER: 26

1. Naphthalene, decahydro-2-methyl-	152 C11H20
2. 4,7-Methano-1H-inden-1-ol, octahydro-	152 C10H16O
3. 2H-Inden-2-one, octahydro-3a-methyl-, trans-	152 C10H16O
4. Pulegone	152 C10H16O
5. Cyclohexanone, 5-methyl-2-(1-methylethenyl)-, trans-	152 C10H16O
6. Spiro[3.5]nonan-1-one, 5-methyl-, trans-	152 C10H16O

Sample file: >I4083 Spectrum #: 868
 Search speed: 2 Tilting option: S No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	34*	2958761	19829	NBS49K	55	70	1	-1	54	42	12 25
2.	32*	55255975	19817	NBS49K	51	36	3	0	74	45	12 23
3.	30*	20379991	19802	NBS49K	62	73	3	1	63	46	10 23
4.	25*	89827	19825	NBS49K	35	87	3	0	100	44	8 13
5.	20*	29606799	19813	NBS49K	42	92	3	0	72	54	5 13
6.	15*	65147560	19818	NBS49K	34	94	3	0	100	59	3 13



000280

REF T

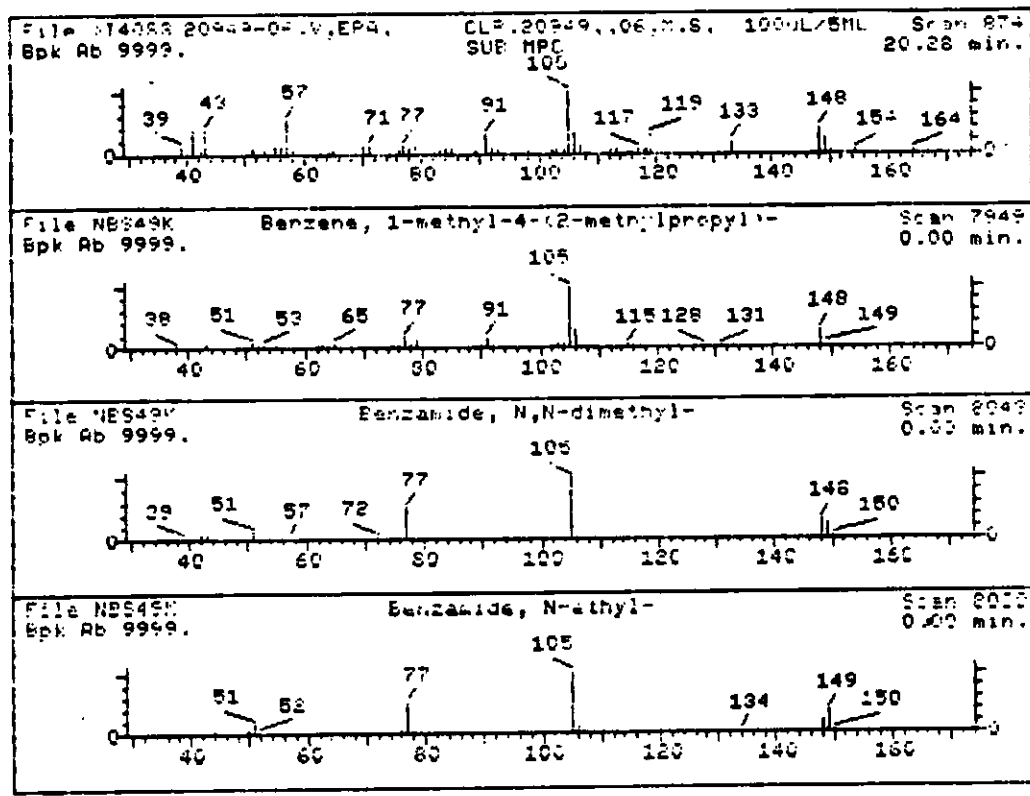
TIC NUMBER: 27

- 1. Benzene, 1-methyl-4-(2-methylpropyl)-
- 2. Benzamide, N,N-dimethyl-
- 3. Benzamide, N-ethyl-

148 C11H16
 149 C9H11NO
 149 C9H11NO

Sample file: >14083 Spectrum #: 874
 Search speed: 2 Tilting option: S No. of ion ranges searched: 56

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	23*	5161046	19044	NBS49K	40	55	0	0	82	60	6 41
2.	15*	611745	19054	NBS49K	38	49	2	0	100	56	3 19
3.	11*	614175	19052	NBS49K	34	55	2	0	73	65	2 17

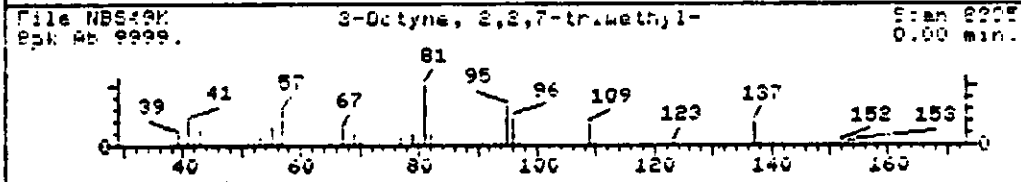
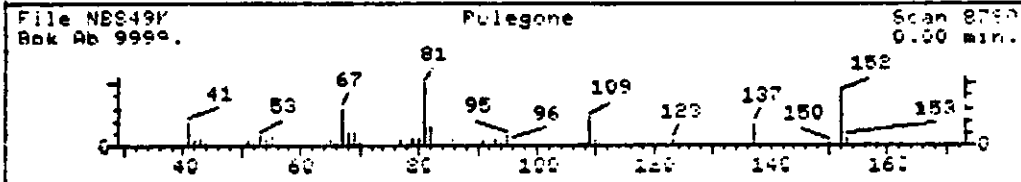
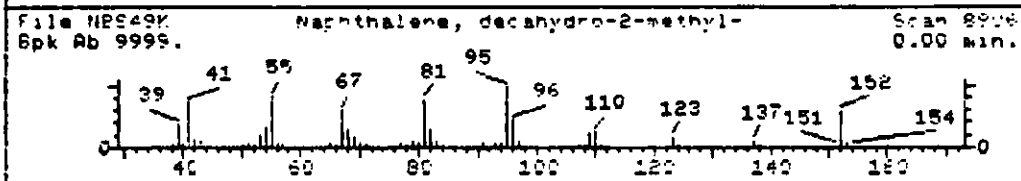
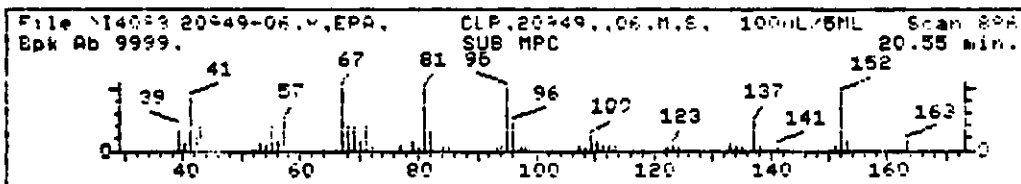


TIC NUMBER:28.

- | | |
|---|--------------|
| 1. Naphthalene, decahydro-2-methyl- | 152 C11H20 |
| 2. Pulegone | 152 C10H16O |
| 3. 3-Octyne, 2,2,7-trimethyl- | 152 C11H20 |
| 4. 4,7-Methano-1H-inden-1-ol, octahydro- | 152 C10H16O |
| 5. Bicyclo[4.1.0]heptan-2-one, 3,5,5-trimethyl- | 152 C10H16O |
| 6. 5-Decyne, 1-chloro- | 172 C10H17Cl |

Sample file: >I4083 Spectrum #: 886
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	59*	2958761	19829	NBS49K	65	60	3	0	100	25	27	33
2.	49*	89827	19825	NBS49K	62	56	2	0	98	40	19	40
3.	39*	55402136	16972	NBS49K	51	60	0	0	71	55	11	61
4.	34*	55255975	19817	NBS49K	42	45	3	0	97	33	12	17
5.	30*	29750241	19824	NBS49K	42	91	3	0	100	32	12	13
6.	25	13087	8894	NBS49K	34	45	1	0	98	48	7	12



000282 A F T

working...
draw complete...
working...
draw complete...
working...
draw complete...
working...
draw complete...

Fmp error -12 while accessing file T14083 in program TICAD at TIC10 # 12
Illegal file position

ERROR IN TIC PROCEDURE

DATA FILE:>I4083

PROGRAM:TICAD
ERROR CODE:-12

!!! TRANSFER FILE ABORTED !!!

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 00283

20949-07

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-07

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: J0761

Level: (low/med) MED

Date Received: 02/15/92

% Moisture: not dec. 11

Date Analyzed: 02/25/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 10.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14000	U
74-83-9	Bromomethane	14000	U
75-01-4	Vinyl Chloride	14000	U
75-00-3	Chloroethane	14000	U
75-09-2	Methylene Chloride	14000	U
67-64-1	Acetone	11000	J
75-15-0	Carbon Disulfide	14000	U
75-35-4	1,1-Dichloroethene	14000	U
75-34-3	1,1-Dichloroethane	14000	U
540-59-0	1,2-Dichloroethene (total)	14000	U
67-66-3	Chloroform	14000	U
107-06-2	1,2-Dichloroethane	14000	U
78-93-3	2-Butanone	14000	U
71-55-6	1,1,1-Trichloroethane	14000	U
56-23-5	Carbon Tetrachloride	14000	U
75-27-4	Bromodichloromethane	14000	U
78-87-5	1,2-Dichloropropane	14000	U
10061-01-5	cis-1,3-Dichloropropene	14000	U
79-01-6	Trichloroethene	14000	U
124-48-1	Dibromochloromethane	14000	U
79-00-5	1,1,2-Trichloroethane	14000	U
71-43-2	Benzene	14000	U
10061-02-6	trans-1,3-Dichloropropene	14000	U
75-25-2	Bromoform	14000	U
108-10-1	4-Methyl-2-Pentanone	14000	U
591-78-6	2-Hexanone	14000	U
127-18-4	Tetrachloroethene	14000	U
79-34-5	1,1,2,2-Tetrachloroethane	14000	U
108-88-3	Toluene	14000	U
108-90-7	Chlorobenzene	14000	U
100-41-4	Ethylbenzene	14000	U
100-42-5	Styrene	14000	U
1330-20-7	Xylene (total)	3100	J

000281

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-07

Site Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Matrix: (soil/water) SOIL Lab Sample ID: 20949-07
 Sample wt/vol: 4.0 (g/mL) G Lab File ID: J0761
 Level: (low/med) MED Date Received: 02/15/92
 % Moisture: not dec. 11 Date Analyzed: 02/25/92
 GC Column: CAP ID: 0.530 (mm) Dilution Factor: 10.0
 Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

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

Number TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 638-04-0	Cyclohexane, 1,3-dimethyl-,	9.35	13000	JN
2. 4126-78-7	Cycloheptane, methyl-	9.97	8700	JN
3. 1678-91-7	Cyclohexane, ethyl-	11.20	14000	JN
4.	Hydrocarbon	16.49	10000	JN
5.	Aromatic Hydrocarbon	16.80	11000	JN
6. 1678-98-4	Cyclohexane, (2-methylpropyl	17.02	9500	JN
7.	Chlorinated Hydrocarbon	17.34	11000	JN
8. 493-02-7	Naphthalene, decahydro-, tra	17.87	14000	JN
9. 17302-32-8	Nonane, 3,7-dimethyl-	18.62	16000	JN
10.	Unknown	19.25	8600	JN

QUANT REPORT

Page 1

Operator ID: CHEMIST1
 Output File: ^J0761::QT
 Data File: >J0761::D4
 Name: 20949-07,U,EPA,
 Misc: CLP,20949,,20949-07,M,S, 10 UL/5ML ANALYST TB

Quant Rev: 7 Quant Time: 920228 12:02
 Injected at: 920225 21:14
 Dilution Factor: 1.00000
 Instrument ID: VOA#1_MW

ID File: IDEPAJ::ID
 Title: ID FILE CLP INST. J + THF
 Last Calibration: 911122 17:17

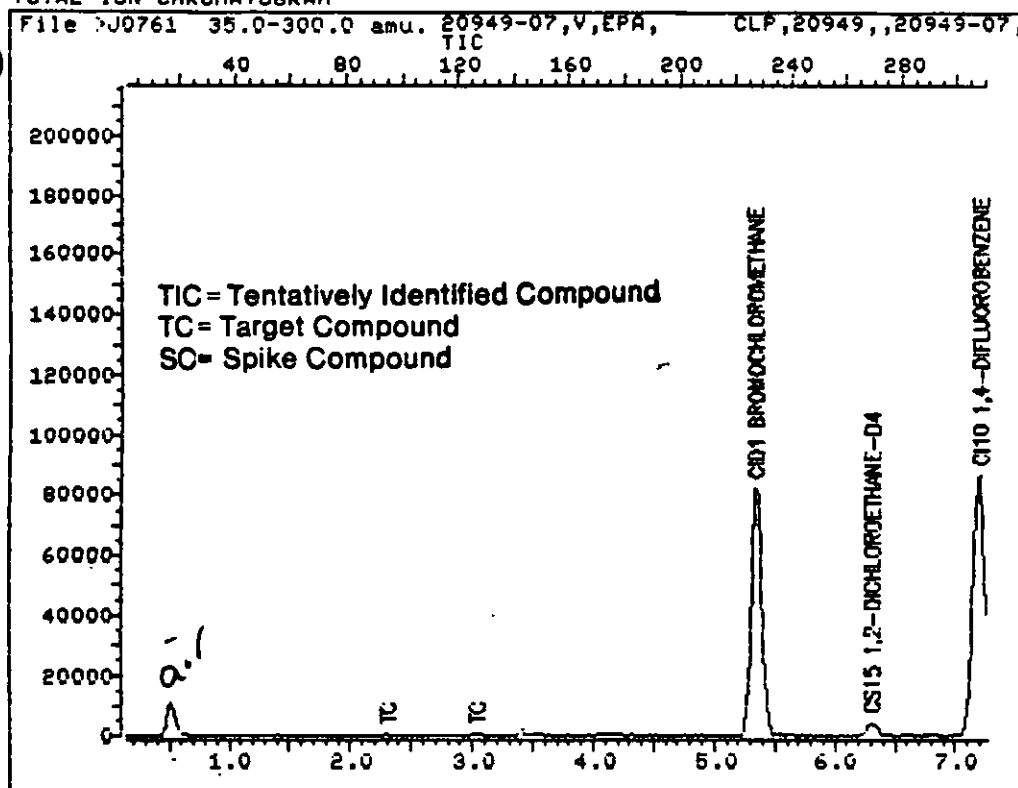
Last Qcal Time: 920225 12:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 BROMOCHLOROMETHANE	5.34	128.0	74382	50.00	UG/L	97
2)	CS15 1,2-DICHLOROETHANE-D4	6.30	65.0	8715	4.34	UG/L	85
9)	C035 ACETONE	2.30	43.0	1641	7.50	UG/L	100
10)	C030 METHYLENE CHLORIDE <i>Blue</i>	5.04	84.0	1165	.579	UG/L	98
19)	*CI10 1,4-DIFLUOROBENZENE	7.20	114.0	250198	50.00	UG/L	100
31)	*CI20 CHLOROBENZENE-D5	12.37	117.0	214185	50.00	UG/L	76
32)	CS05 TOLUENE-D8	9.62	98.0	20311	4.97	UG/L	93
33)	CS10 BROMOFLUOROBENZENE	14.93	95.0	16028	4.54	UG/L	100
39)	C240 ETHYLBENZENE <i>Blue</i>	12.93	106.0	746	.432	UG/L	80
40)	V3NK M&P-XYLENES	12.93	106.0	746	.376	UG/L	98
41)	U029 O-XYLENE	13.71	106.0	4364	2.22	UG/L	97
44)	C225 1,1,2,2-TETRACHLOROETHANE <i>Blue</i>	14.83	83.0	768	.240	UG/L	76

* Compound is ISTD

000287

TOTAL ION CHROMATOGRAM



Data File: >J0761::D4
Name: 20949-07,U,EPA,
Misc: CLP,20949,,20949-07,M,S,

Quant Output File: ^J0761::QT
Instrument ID: UOA#1_MW
10 UL/5ML ANALYST TB

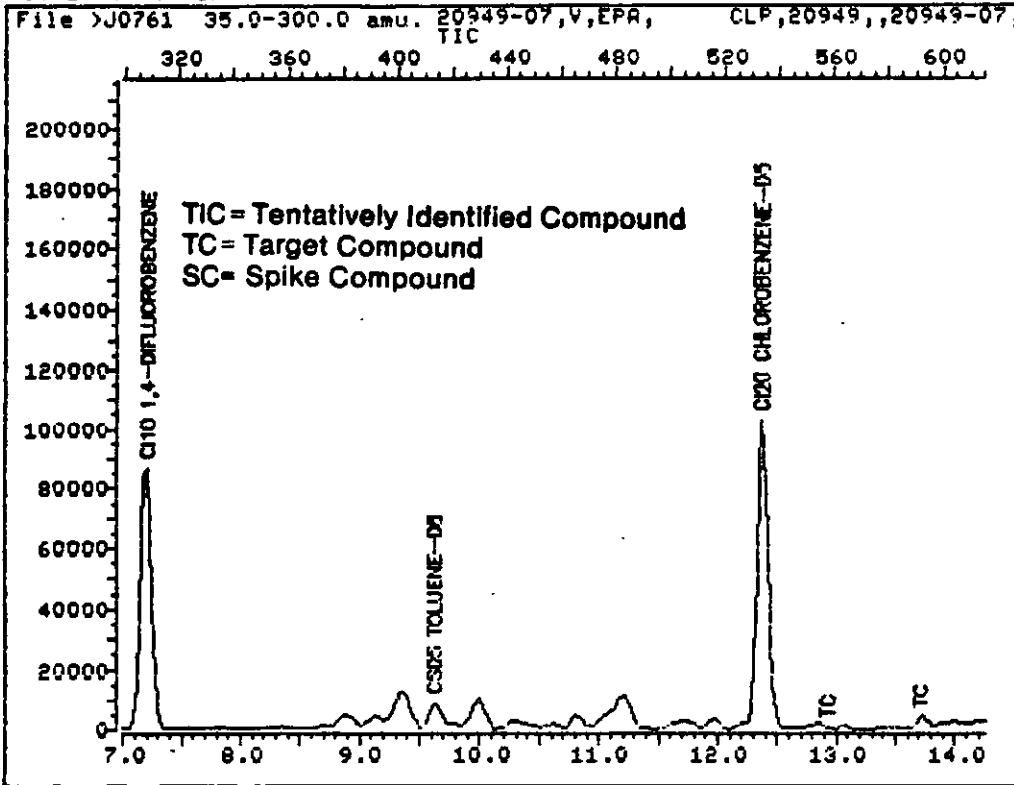
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1
Quant Time : 920228 12:02
Injected at: 920225 21:14

000288

TOTAL ION CHROMATOGRAM



Data File: >J0761::D4

Name: 20949-07,U,EPA,

Misc: CLP,20949,,20949-07,M,S,

Quant Output File: ^J0761::QT

Instrument ID: VOA#1_MW

10 UL/5ML ANALYST TB

Id File: IDEPAJ::ID

Title: ID FILE CLP INST. J + THF

Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1

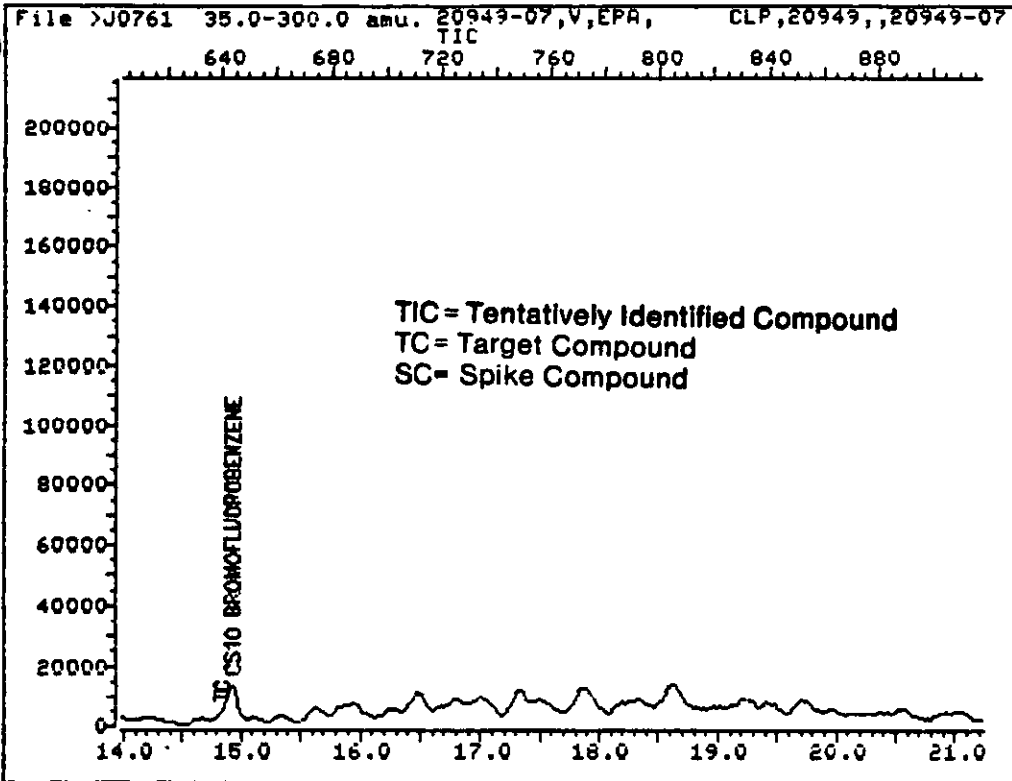
Quant Time : 920228 12:02

Injected at: 920225 21:14

Page 2 of 4

000289

TOTAL ION CHROMATOGRAM



Data File: >J0761::D4
Name: 20949-07,V,EPA,
Misc: CLP,20949,,20949-07,M,S,

Quant Output File: ^J0761::QT
Instrument ID: UOA#1_MW
10 UL/5ML ANALYST TB

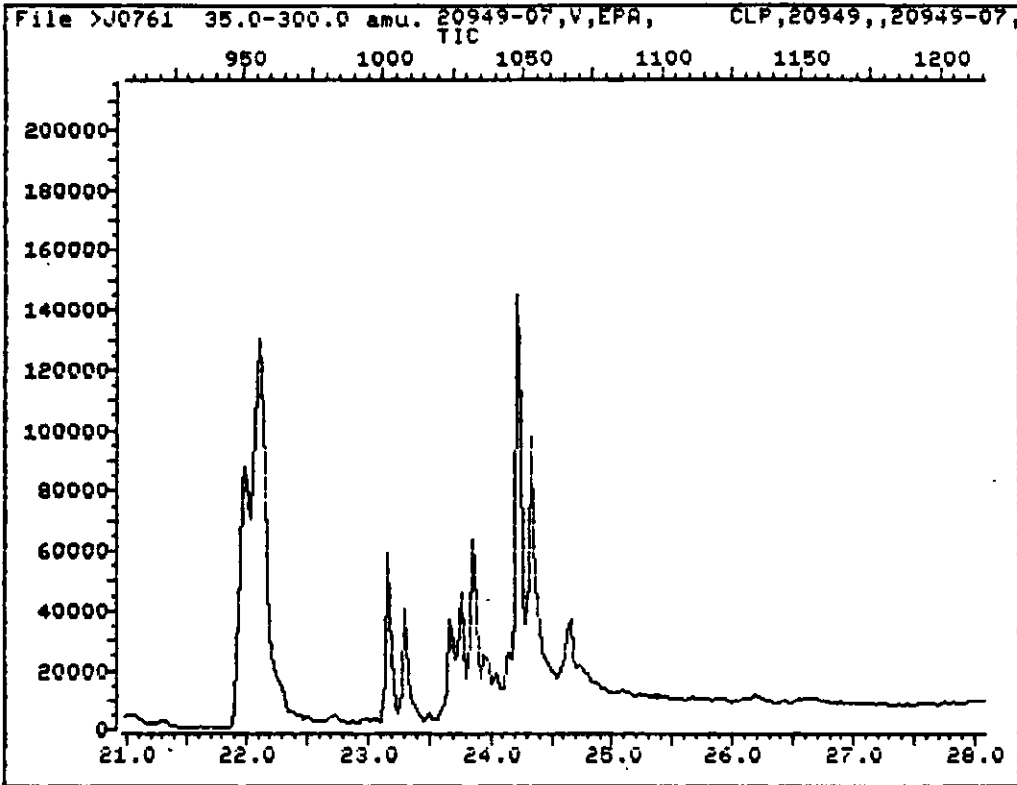
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1
Quant Time : 920228 12:02
Injected at: 920225 21:14

000290

TOTAL ION CHROMATOGRAM



Data File: >J0761::D4

Quant Output File: ^J0761::QT

Name: 20949-07,U,EPA,

Instrument ID: UOA#1_MW

Misc: CLP,20949,,20949-07,M,S,

10 UL/5ML ANALYST TB

Id File: IDEPAJ::ID

Title: ID FILE CLP INST. J + THF

Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1

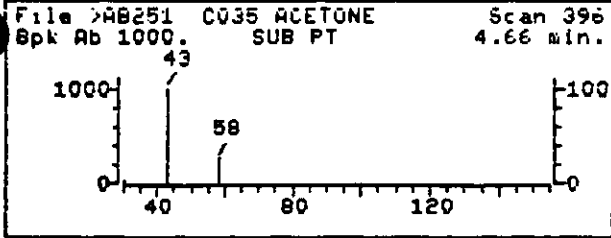
Quant Time : 920228 12:02

Injected at: 920225 21:14

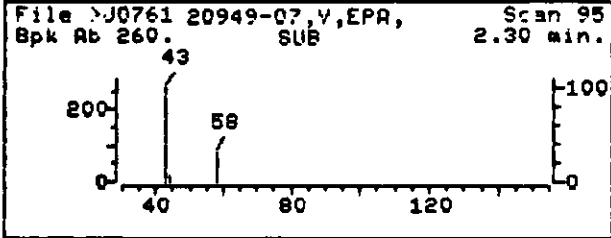
Page 4 of 4

000291

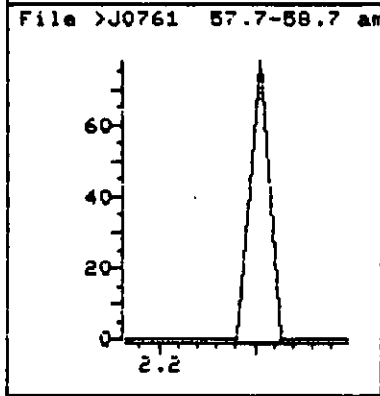
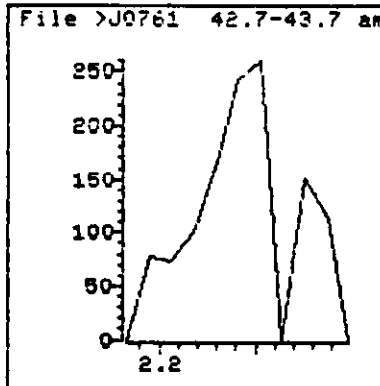
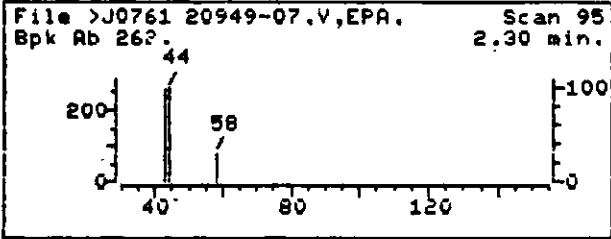
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



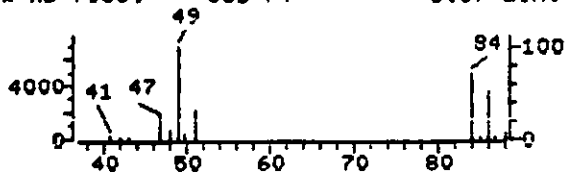
Data File: >J0761::D4
 Name: 20949-07,V,EPA,
 Misc: CLP,20949,,20949-07,M,S,
 Quant Time: 920228 12:02
 Injected at: 920225 21:14
 Last Qcal Time: 920225 12:00

Quant Output File: ^J0761::QT
 Instrument ID: VOA#1_MW
 10 UL/5ML ANALYST TB
 Quant ID File: IDEPAJ::ID
 Last Calibration: 911122 17:17

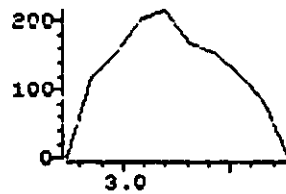
Compound No : 9
 Compound Name : C035 ACETONE
 Scan Number : 95
 Retention Time: 2.30 min.
 Quant Ion : 43.0
 Area : 1641
 Concentration : 7.50 UG/L
 q-value : 100

REFERENCE STANDARD SPECTRUM

File >AB251 C030 METHYLENE C Scan 465
Bpk Ab 7068. SUB PT 5.37 min.

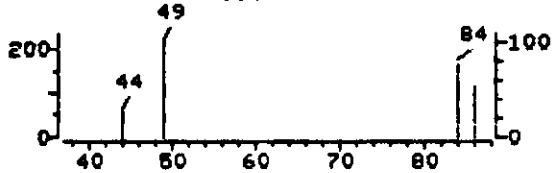


File >J0761 48.7-49.7 min

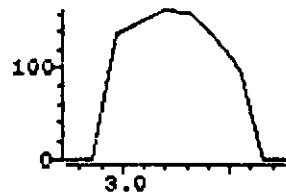


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0761 20949-07,V,EPA, Scan 127
Bpk Ab 215. SUB 3.04 min.

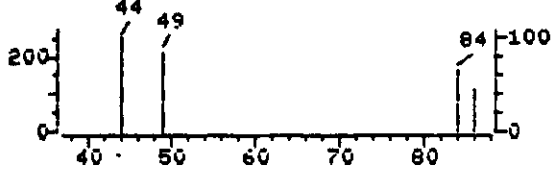


File >J0761 83.7-84.7 min

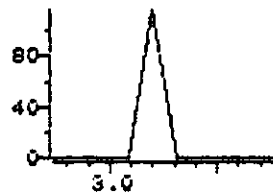


SAMPLE SPECTRUM (UNALTERED)

File >J0761 20949-07,V,EPA, Scan 127
Bpk Ab 251. 3.04 min.



File >J0761 85.7-86.7 min



Data File: >J0761::D4
Name: 20949-07,U,EPA,
Misc: CLP,20949,,20949-07,M,S,
Quant Time: 920228 12:02
Injected at: 920225 21:14
Last Qcal Time: 920225 12:00

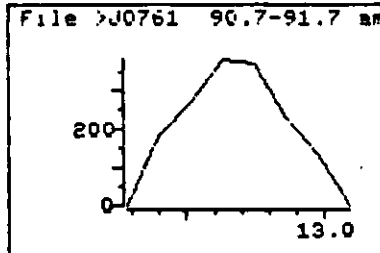
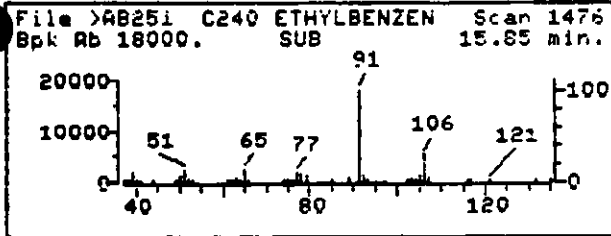
Quant Output File: ^J0761::QT
Instrument ID: UOA#1_MW
10 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 127
Retention Time: 3.04 min.
Quant Ion : 84.0
Area : 1165
Concentration : .579 UG/L
q-value : 98

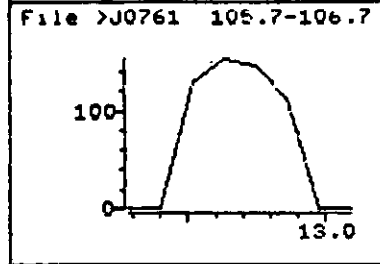
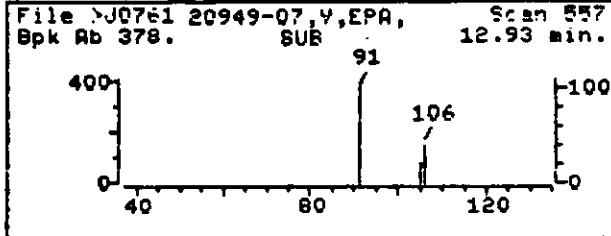
BDL

000293

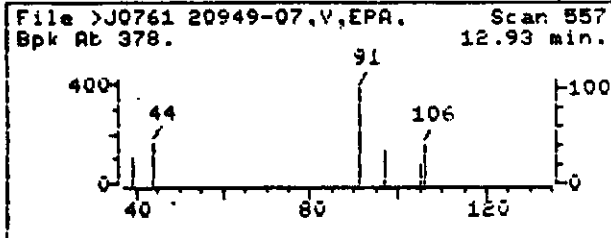
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



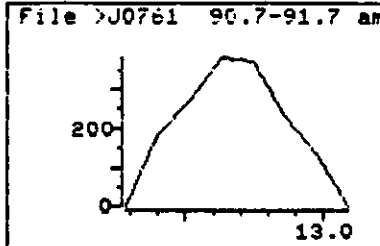
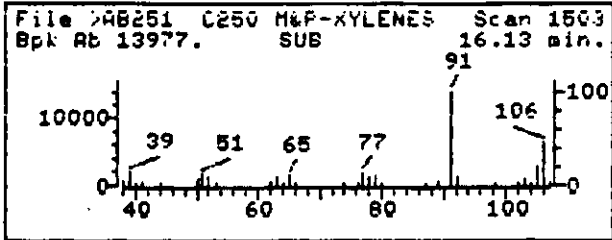
Data File: >J0761::D4
Name: 20949-07,V,EPA,
Misc: CLP,20949,,20949-07,M,S,
Quant Time: 920228 12:02
Injected at: 920225 21:14
Last Qcal Time: 920225 12:00

Quant Output File: ^J0761::QT
Instrument ID: VOA#1_MW
10 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

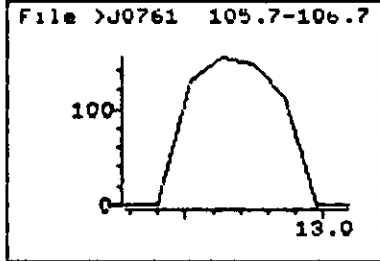
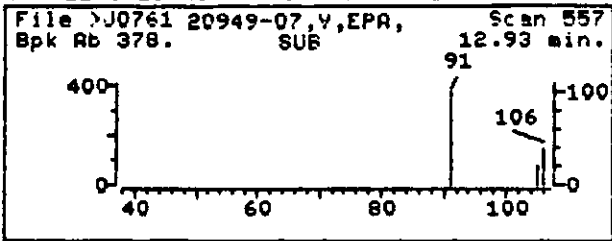
Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 557
Retention Time: 12.93 min.
Quant Ion : 106.0
Area : 746
Concentration : .432 UG/L
q-value : 80

No

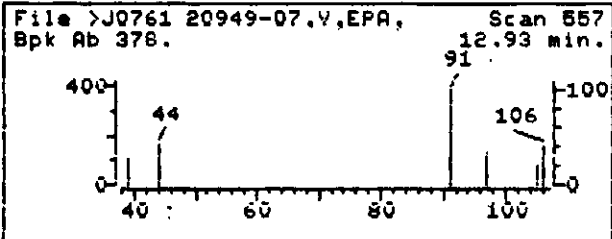
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >J0761::D4
 Name: 20949-07,V,EPA,
 Misc: CLP,20949,,20949-07,M,S,
 Quant Time: 920228 12:02
 Injected at: 920225 21:14
 Last Qcal Time: 920225 12:00

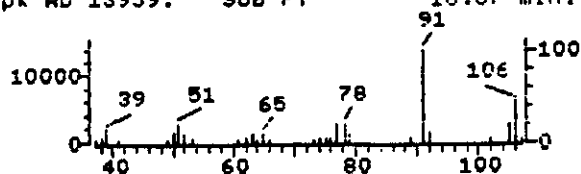
Quant Output File: ^J0761::QT
 Instrument ID: UDA#1_MW
 10 UL/5ML ANALYST TB
 Quant ID File: IDEPAJ::ID
 Last Calibration: 911122 17:17

Compound No : 40
 Compound Name : UJNK M&P-XYLENES
 Scan Number : 557
 Retention Time: 12.93 min.
 Quant Ion : 106.0
 Area : 746
 Concentration : .376 UG/L
 q-value : 98

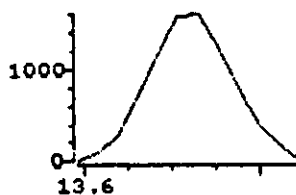
BDL

REFERENCE STANDARD SPECTRUM

File >AB251 VJNK O-XYLENE Scan 1574
Bpk Ab 13939. SUB PT 16.87 min.

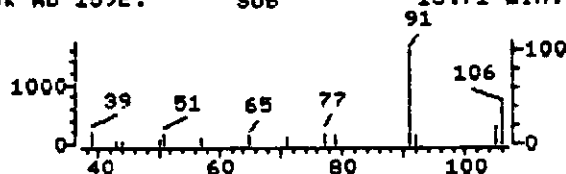


File >J0761 90.7-91.7 am

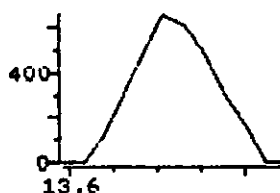


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0761 20949-07.V,EPA, Scan 591
Bpk Ab 1592. SUB 13.71 min.

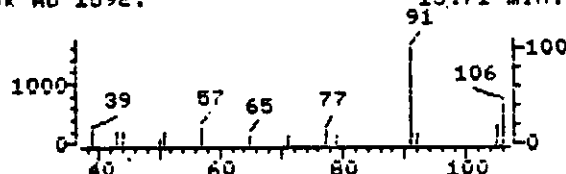


File >J0761 105.7-106.7

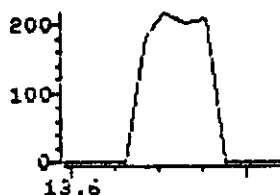


SAMPLE SPECTRUM (UNALTERED)

File >J0761 20949-07.V,EPA, Scan 591
Bpk Ab 1592. 13.71 min.



File >J0761 76.7-77.7 am



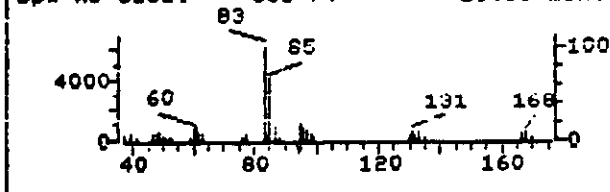
Data File: >J0761::D4
Name: 20949-07,U,EPA,
Misc: CLP,20949,,20949-07,M,S,
Quant Time: 920228 12:02
Injected at: 920225 21:14
Last Qcal Time: 920225 12:00

Quant Output File: ^J0761::QT
Instrument ID: VQA#1_MW
10 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 41
Compound Name : U029 O-XYLENE
Scan Number : 591
Retention Time: 13.71 min.
Quant Ion : 106.0
Area : 4364
Concentration : 2.22 UG/L
q-value : 97

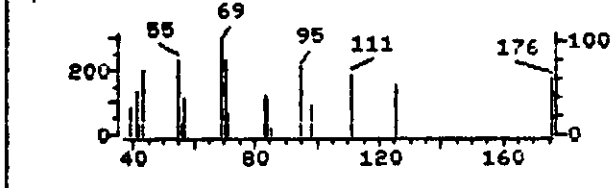
REFERENCE STANDARD SPECTRUM

File >AB251 C225 1,1,2,2-TET Scan: 1731
Bpk Ab 6251. SUB PT 18.50 min.



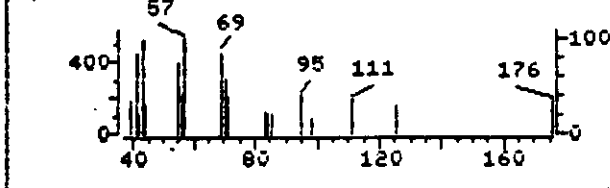
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0761 20949-07.V,EPA, Scan 640
Bpk Ab 290. SUB 14.83 min.

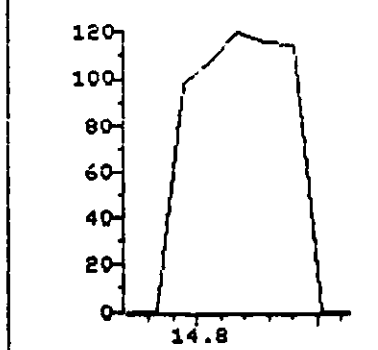


SAMPLE SPECTRUM (UNALTERED)

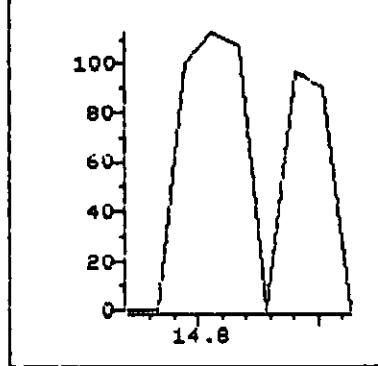
File >J0761 20949-07.V,EPA, Scan 640
Bpk Ab 525. SUB 14.83 min.



File >J0761 82.7-83.7 am



File >J0761 84.7-85.7 am



Data File: >J0761::D4
Name: 20949-07,U,EPA,
Misc: CLP,20949,,20949-07,M,S,
Quant Time: 920228 12:02
Injected at: 920225 21:14
Last Qcal Time: 920225 12:00

Quant Output File: ^J0761::QT
Instrument ID: UOA#1_MW
10 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 44
Compound Name : C225 1,1,2,2-TETRACHLOROETHANE
Scan Number : 640
Retention Time: 14.83 min.
Quant Ion : 83.0
Area : 768
Concentration : .240 UG/L
q-value : 76

No

Diagnostic Quant Report

Data File: >J0761::D4 Injected at: 21:14 02/25/92
 Quant'd : 12:02 02/28/92
 ID File : IDEPAJ::10 Calibrated : 17:17 11/22/91

Compound	- R.T. Info -				Ion	Area	RF	Conc.
	Pred	Found	Dif					
1) *C101	BROMOCHLOROMETHANE	5.32	5.34	.02	128.0	74382	1.0000	50.00
2)	CS15 1,2-DICHLOROETHANE-D	6.31	6.30	.00	65.0	8715	1.3502	4.34
3)	C010 CHLOROMETHANE	.82	0.00	--	50.0	0	.6004	0.00
4)	C020 VINYL CHLORIDE	.88	0.00	--	62.0	0	.6109	0.00
5)	C015 BROMOMETHANE	1.18	0.00	--	94.0	0	.8349	0.00
6)	C025 CHLOROETHANE	1.32	0.00	--	64.0	0	.3966	0.00
7)	C045 1,1-DICHLOROETHENE	2.32	0.00	--	96.0	0	1.0332	0.00
8)	C040 CARBON DISULFIDE	2.64	0.00	--	76.0	0	1.7087	0.00
9)D	C035 ACETONE	2.29	1.82	.47	43.0	233	.1472	1.06
9)	C035 ACETONE	2.29	2.30	.01	43.0	1641	.1472	7.50
9)D	C035 ACETONE	2.29	2.44	.15	43.0	279	.1472	1.27
10)	C030 METHYLENE CHLORIDE	3.03	3.04	.01	84.0	1165	1.3520	.58
11)	UJNK trans-1,2-DICHLOROET	3.38	0.00	--	96.0	0	1.1104	0.00
12)	C050 1,1-DICHLOROETHANE	4.05	0.00	--	63.0	0	1.9999	0.00
13)	U011 cis-1,2-DICHLOROETHE	4.97	0.00	--	96.0	0	1.2112	0.00
14)	C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.1608	0.00
15)	C110 2-BUTANONE	4.90	0.00	--	43.0	0	.2074	0.00
16)	U013 TETRAHYDROFURAN	5.52	0.00	--	42.0	0	.2314	0.00
17)	C060 CHLOROFORM	5.22	0.00	--	83.0	0	2.4365	0.00
18)	C065 1,2-DICHLOROETHANE	6.47	0.00	--	62.0	0	1.3962	0.00
19)	*C110 1,4-DIFLUOROBENZENE	7.18	7.20	.02	114.0	250198	1.0000	50.00
20)	C115 1,1,1-TRICHLOROETHAN	5.79	0.00	--	97.0	0	.5170	0.00
21)	C120 CARBONTETRACHLORIDE	6.14	0.00	--	117.0	0	.5288	0.00
22)	C165 BENZENE	6.39	0.00	--	78.0	0	.7177	0.00
23)	C150 TRICHLOROETHENE	7.50	0.00	--	130.0	0	.4299	0.00
24)	C140 1,2-DICHLOROPROPANE	7.82	0.00	--	63.0	0	.3022	0.00
25)	C130 BROMODICHLOROMETHANE	8.17	0.00	--	83.0	0	.6096	0.00
26)	C143 cis-1,3-DICHLOROPROP	9.32	0.00	--	75.0	0	.4865	0.00
27)	C172 trans-1,3-DICHLOROPR	10.31	0.00	--	75.0	0	.3668	0.00
28)	C160 1,1,2-TRICHLOROETHAN	10.50	0.00	--	97.0	0	.3506	0.00
29)	C155 CHLORODIBROMOMETHANE	11.19	0.00	--	129.0	0	.6889	0.00
30)	C180 BROMOFORM	14.14	0.00	--	173.0	0	.6234	0.00
31)	*C120 CHLOROBENZENE-D5	12.36	12.37	.02	117.0	214185	1.0000	50.00
32)	CS05 TOLUENE-D8	9.61	9.62	.00	98.0	20311	.9534	4.97
33)	CS10 BROMOFLUOROBENZENE	14.95	14.93	.03	95.0	16028	.8246	4.54
34)	C230 TOLUENE	9.75	0.00	--	91.0	0	.9628	0.00
35)	C205 4-METHYL-2-PENTANONE	9.24	0.00	--	43.0	0	.4789	0.00
36)	C220 TETRACHLOROETHENE	10.90	0.00	--	164.0	0	.4990	0.00
37)	C210 2-HEXANONE	10.88	0.00	--	43.0	0	.1401	0.00
38)	C235 CHLOROBENZENE	12.44	0.00	--	112.0	0	.8886	0.00
39)	C240 ETHYLBENZENE	12.77	12.93	.16	106.0	746	.4035	.43
40)	UJNK M&P-XYLENES	12.95	12.93	.02	106.0	746	.4627	.38
41)	U029 O-XYLENE	13.73	13.71	.03	106.0	4364	.4594	2.22
42)	C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	5110	.4611	2.59
43)	C245 STYRENE	13.83	0.00	--	104.0	0	.8177	0.00
44)	C225 1,1,2,2-TETRACHLORDE	14.98	14.83	.14	83.0	768	.7483	.24

* - Compound is an Internal Standard

D - Compound Qdel'ed

TIC Internal Standard Report

File: >J0761

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

#	Name	Q scan	Q area	RQratio	Concentration RIC scan	Flag	RIC area	% Est. RIC
1	CI01 BROMOCHLOROMETH	227.	74382.	7.294	50.000 UG/L	Ok	495606.	91.353
2	CI10 1,4-DIFLUOROBEN	308.	250198.	2.506	50.000 UG/L	Ok	582618.	92.918
3	CI20 CHLOROBENZENE-D	533.	214185.	3.094	50.000 UG/L	Ok	664998.	100.344

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 27

Number of peaks remaining: 17

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 17

Number of peaks remaining: 12

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15

Number of peaks: 12

Maximum number of peaks > number of peaks.

000299

Data Reduced by : SMS Date: 2/28/72
Data Reviewed by : A Date: 3/09/72

Data File: >J0761

Enseco TIC Report (page 1)

Sample: 20949-07,U,EPA,
Conditions: CLP,20949,,20949-07,M,S, 10Run Factor: 1250.
Analyst: CHEMIST1

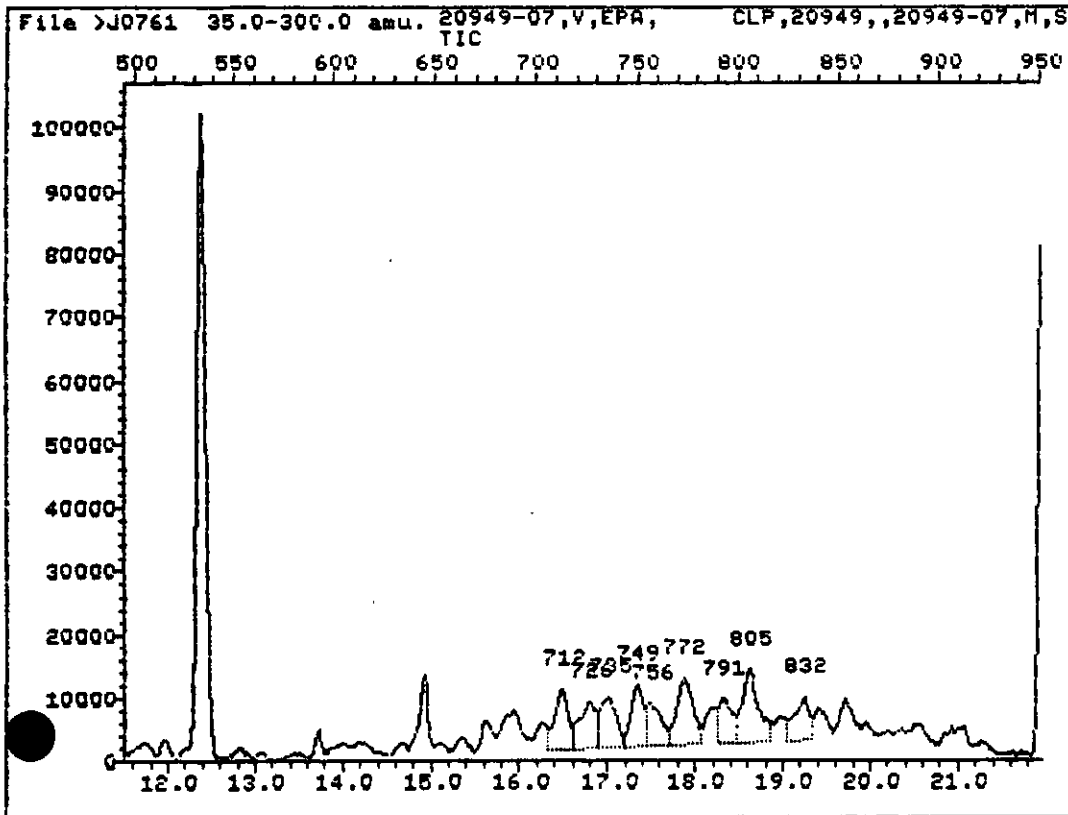
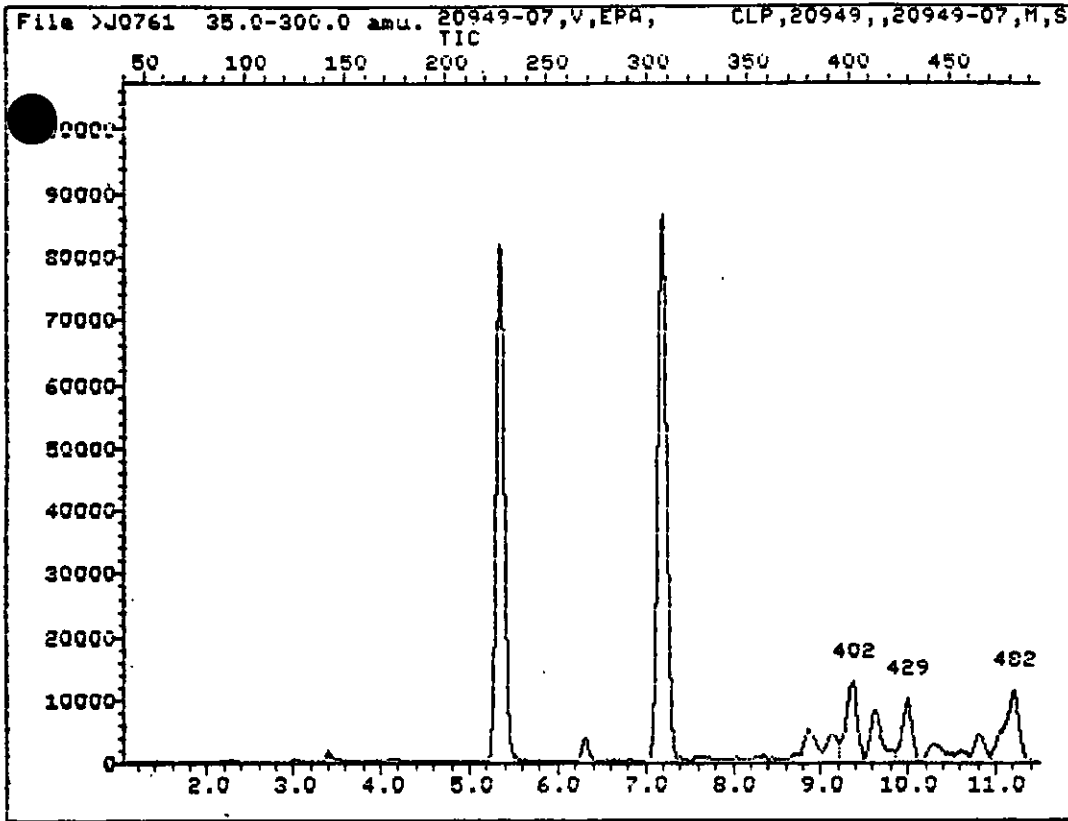
#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	402.	2		12000.	638-04-0	Cyclohexane, 1,3-dimethyl-, cis-
2	429.	2		7800.	4126-78-7	Cycloheptane, methyl-
3	482.	2		12000.	1678-91-7	Cyclohexane, ethyl-
4	712.			9300.	00-00-0	Hydrocarbon <i>unknown</i>
5	726.			9700.	00-00-0	Aromatic Hydrocarbon
6	735.	1		8500.	1678-98-4	Cyclohexane, (2-methylpropyl)-
7	749.			10000.	00-00-0	Chlorinated Hydrocarbon
8	772.	2		13000.	493-02-7	Naphthalene, decahydro-, trans-
9	805.	1		14000.	17302-32-8	Nonane, 3,7-dimethyl-
10	832.			7700.	00-00-0	Unknown

Enseco TIC Report (page 2)

$$\text{Concentration} = \text{Area(TIC)} * \text{Conc. (IS)} / \text{Area (IS)}$$

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	87	4	2	9.36	1.300	110280.	12101.	9.464
2	41	41	3	9.98	.807	82732.	10019.	6.220
3	58	18	3	11.20	.905	130924.	11031.	9.844
4			3	16.49	1.333	98880.	9581.	7.435
5			3	16.81	1.359	103646.	7348.	7.793
6	41	45	3	17.02	1.375	89944.	8046.	6.763
7			3	17.34	1.401	106273.	9577.	7.990
8	62	26	3	17.87	1.444	133364.	10400.	10.027
9	70	10	3	18.63	1.505	152027.	11257.	11.431
10			3	19.25	1.556	81560.	6606.	6.132

000301

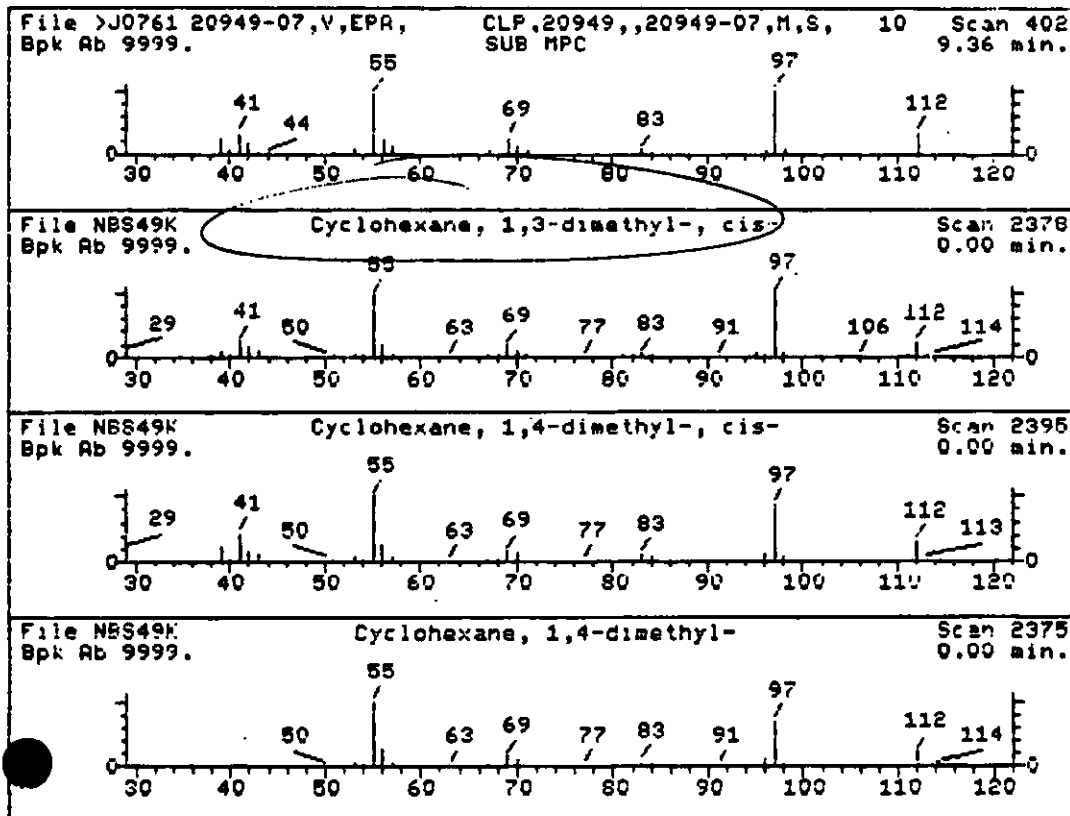


TIC NUMBER: 1

1. Cyclohexane, 1,3-dimethyl-, cis-	112 C8H16
2. Cyclohexane, 1,4-dimethyl-, cis-	112 C8H16
3. Cyclohexane, 1,4-dimethyl-	112 C8H16
4. Cyclohexane, 1,4-dimethyl-, trans-	112 C8H16
5. Cyclohexane, 1,2-dimethyl-, trans-	112 C8H16
6. Cyclohexane, 1-ethyl-2-methyl-, cis-	126 C9H18

Sample file: >J0761 Spectrum #: 402
 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.	87*	638040	9110	NBS49K	59	35	2	0	97	4	63	43
2.	87*	624293	9112	NBS49K	63	39	2	0	91	2	63	41
3.	83*	589902	12036	NBS49K	60	36	2	-2	94	2	57	29
4.	79*	2207047	9106	NBS49K	58	44	2	0	94	6	48	35
5.	78*	6876239	9108	NBS49K	37	70	3	0	94	3	55	13
6.	60	4923777	9132	NBS49K	47	45	2	0	97	14	30	14

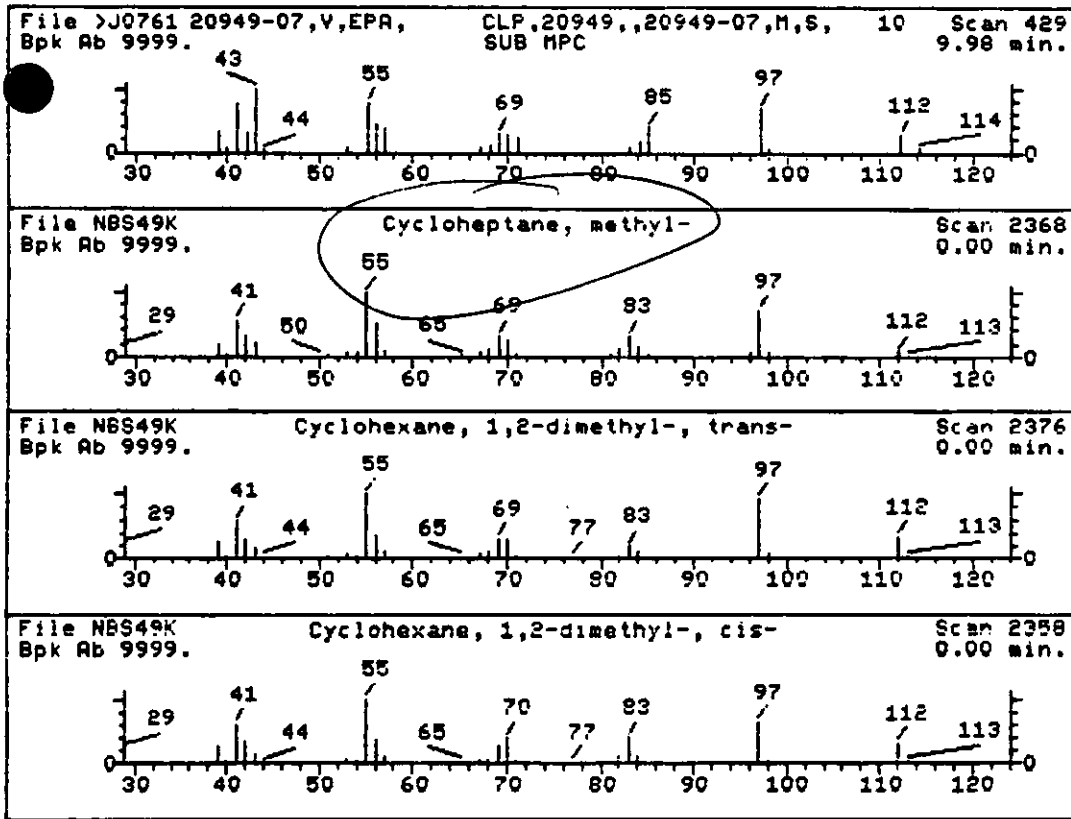


TIC NUMBER:2

- | | |
|---------------------------------------|-----------|
| 1. Cycloheptane, methyl- | 112 C8H16 |
| 2. Cyclohexane, 1,2-dimethyl-, trans- | 112 C8H16 |
| 3. Cyclohexane, 1,2-dimethyl-, cis- | 112 C8H16 |
| 4. Cyclohexane, 1,1-dimethyl- | 112 C8H16 |
| 5. TRANS-1-BUTYL-2-METHYLCYCLOPROPANE | 112 C8H16 |
| 6. Cyclohexane, 1,3-dimethyl-, trans- | 112 C8H16 |

Sample file: >J0761 Spectrum #: 429
 Search speed: 2 Tilting option: 5 No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	41*	4126787	9105	NBS49K	63	43	3	0	77	41	14	31
2.	25*	6876239	9108	NBS49K	53	54	3	0	75	46	7	16
3.	25*	2207014	12031	NBS49K	38	71	3	0	77	50	7	13
4.	20*	590669	9107	NBS49K	36	62	2	0	69	54	5	14
5.	20*	38851706	3893	NBS49K	40	67	3	0	59	52	5	13
6.	20*	2207036	9103	NBS49K	36	63	2	0	71	55	5	14



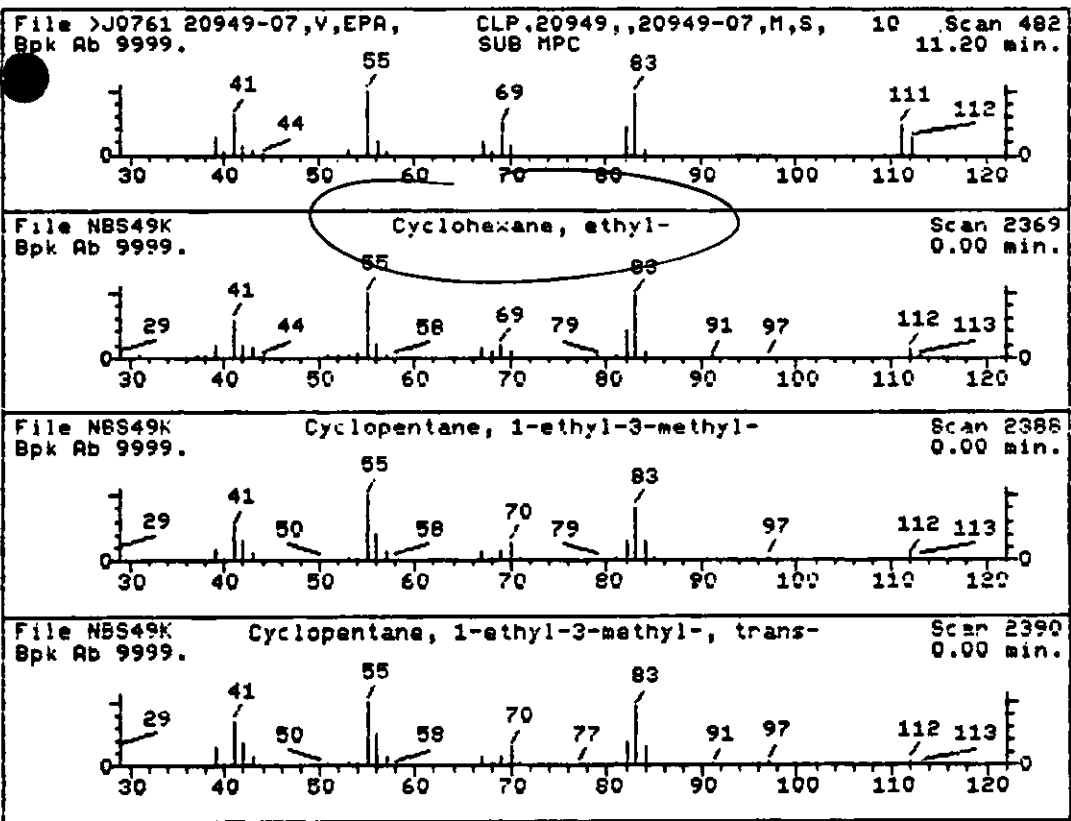
2

TIC NUMBER: 3

- | | |
|--|-----------|
| 1. Cyclohexane, ethyl- | 112 C8H16 |
| 2. Cyclopentane, 1-ethyl-3-methyl- | 112 C8H16 |
| 3. Cyclopentane, 1-ethyl-3-methyl-, trans- | 112 C8H16 |
| 4. Cyclopentane, 1-ethyl-3-methyl-, cis- | 112 C8H16 |
| 5. 2-Hexene, 2,3-dimethyl- | 112 C8H16 |
| 6. Cyclopentane, 1-ethyl-1-methyl- | 112 C8H16 |

Sample file: >J0761 Spectrum #: 482
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	58*	1678917	6160	NBS49K	51	54	2	0	82	18	25
2.	52*	3726474	6162	NBS49K	30	77	3	0	100	18	20
3.	52*	2613652	6163	NBS49K	30	78	3	0	100	18	20
4.	41*	2613663	6164	NBS49K	23	85	3	0	100	21	17
5.	40*	7145202	12046	NBS49K	44	50	2	0	85	35	16
6.	27*	16747505	6165	NBS49K	26	78	3	0	96	36	10



2

000305

TIC NUMBER:4

1. 2-Hexene, 5,5-dimethyl-, (Z)-

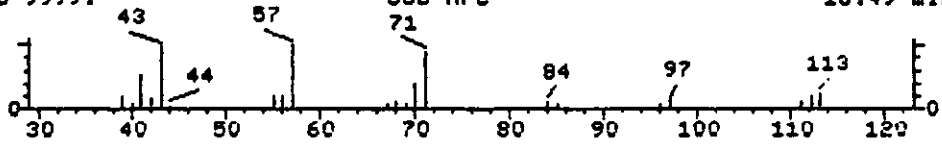
112 C8H16

Sample file: >J0761 Spectrum #: 712
Search speed: 2 Tilting option: S No. of ion ranges searched: 46

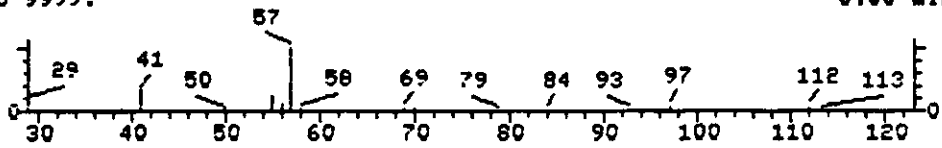
Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	11*	39761610	1245	NBS49K	22	52	2	0	81	63	2	13

unknown
~~hydrocarbon~~ 31092

File >J0761 20949-07,V,EPA, CLP,20949,,20949-07,H,S, 10 Scan 712
Bpk Ab 9999. SUB MPC 16.49 min.



File NBS49K 2-Hexene, 5,5-dimethyl-, (Z)- Scan 2404
Bpk Ab 9999. 0.00 min.



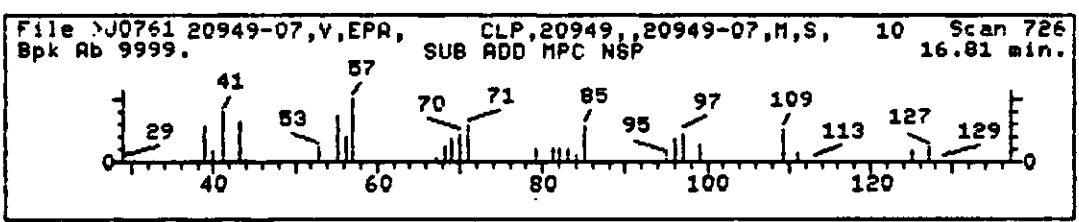
000306

TIC NUMBER:5

Sample file: >J0761 Spectrum #: 726

No data base entries were retrieved.

Aromatic hydrocarbon



000307

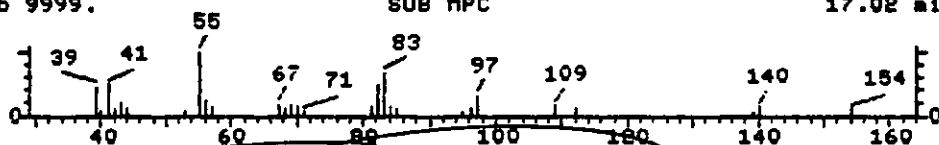
TIC NUMBER:6

1. Cyclohexane, (2-methylpropyl)-	140 C10H20
2. Cyclohexane, butyl-	140 C10H20
3. Cyclohexane, pentyl-	154 C11H22
4. Cyclohexane, (1-methylpropyl)-	140 C10H20
5. Cyclopropane, 1,1,2-trimethyl-3-(2-methylpropyl)-	140 C10H20
6. Cyclohexane, ethyl-	112 C8H16

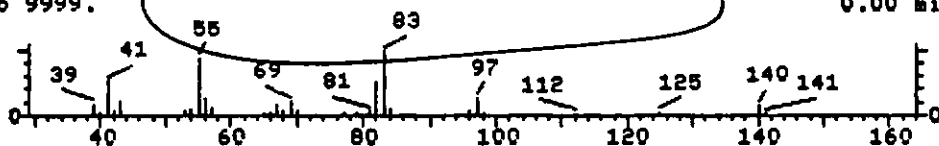
Sample file: >J0761 Spectrum #: 735
 Search speed: 2 Tilting option: S No. of ion ranges searched: 53

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	41*	1678984	6188	NBS49K	65	38	3	0	91	45	14	33
2.	28*	1678939	17708	NBS49K	25	73	2	0	53	36	10	14
3.	27*	4292926	6202	NBS49K	23	72	2	0	67	40	10	13
4.	25*	7058017	6187	NBS49K	30	71	3	0	67	43	8	13
5.	20*	41977439	6372	NBS49K	32	69	3	0	77	53	5	13
6.	20*	1678917	6160	NBS49K	33	72	1	0	63	54	5	18

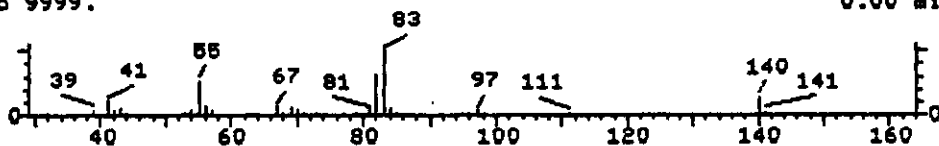
File >J0761 20949-07,V,EPA, CLP,20949,,20949-07,M,S, 10 Scan 735
 Bpk Ab 9999. SUB MPC 17.02 min.



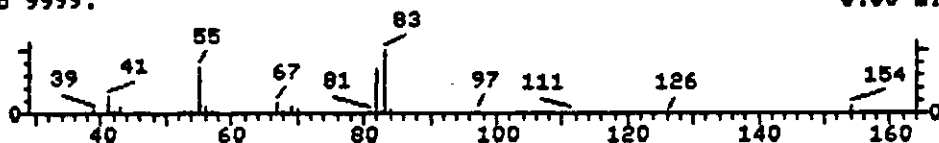
File NBS49K Cyclohexane, (2-methylpropyl)- Scan 6423
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclohexane, butyl- Scan 6401
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclohexane, pentyl- Scan 9293
 Bpk Ab 9999. 0.00 min.



000308

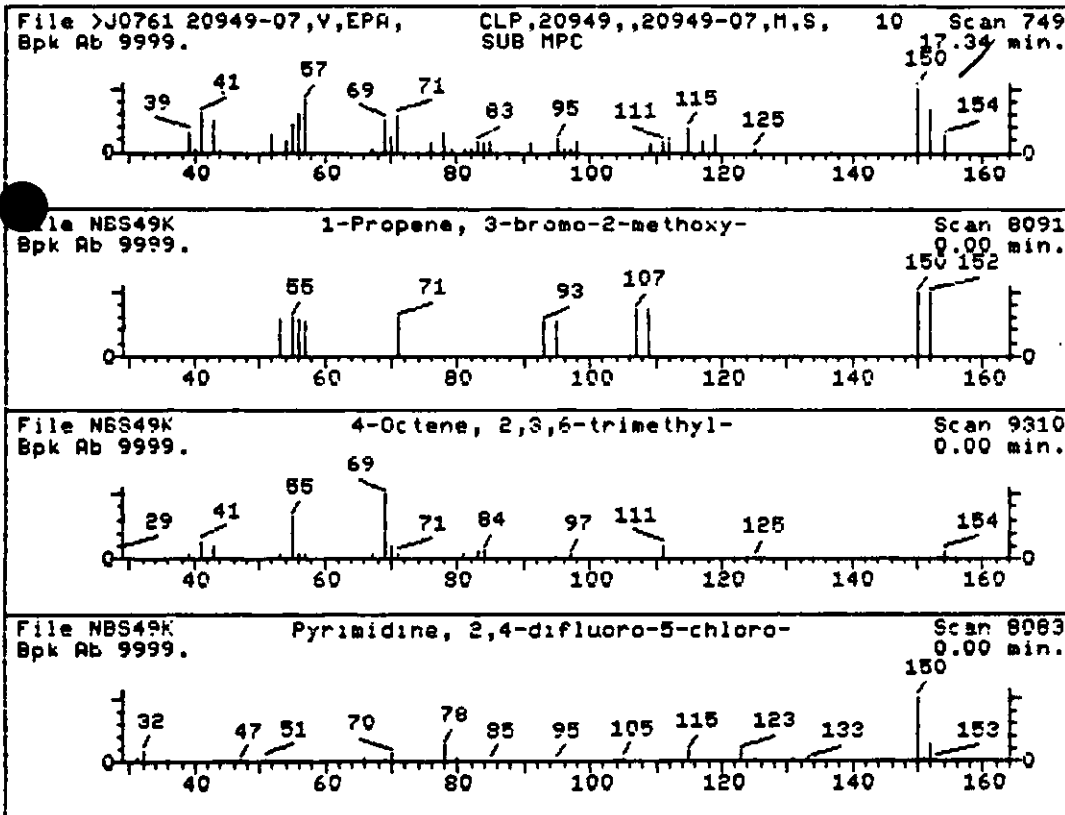
TIC NUMBER: 7

1. 1-Propene, 3-bromo-2-methoxy-
2. 4-Octene, 2,3,6-trimethyl-
3. Pyrimidine, 2,4-difluoro-5-chloro-

150 C4H7BrO
 154 C11H22
 150 C4HC1F2N2

Sample file: >J0761 Spectrum #: 749
 Search speed: 2 Tilting option: S No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	25*	26562243	19720	NBS49K	35	68	3	0	68	50	7	13
2.	21*	63830659	20163	NBS49K	38	42	0	1	38	60	5	37
3.	11*	25151079	19311	NBS49K	22	78	3	0	100	65	2	12



Chlorinated hydrocarbon

TIC NUMBER:9

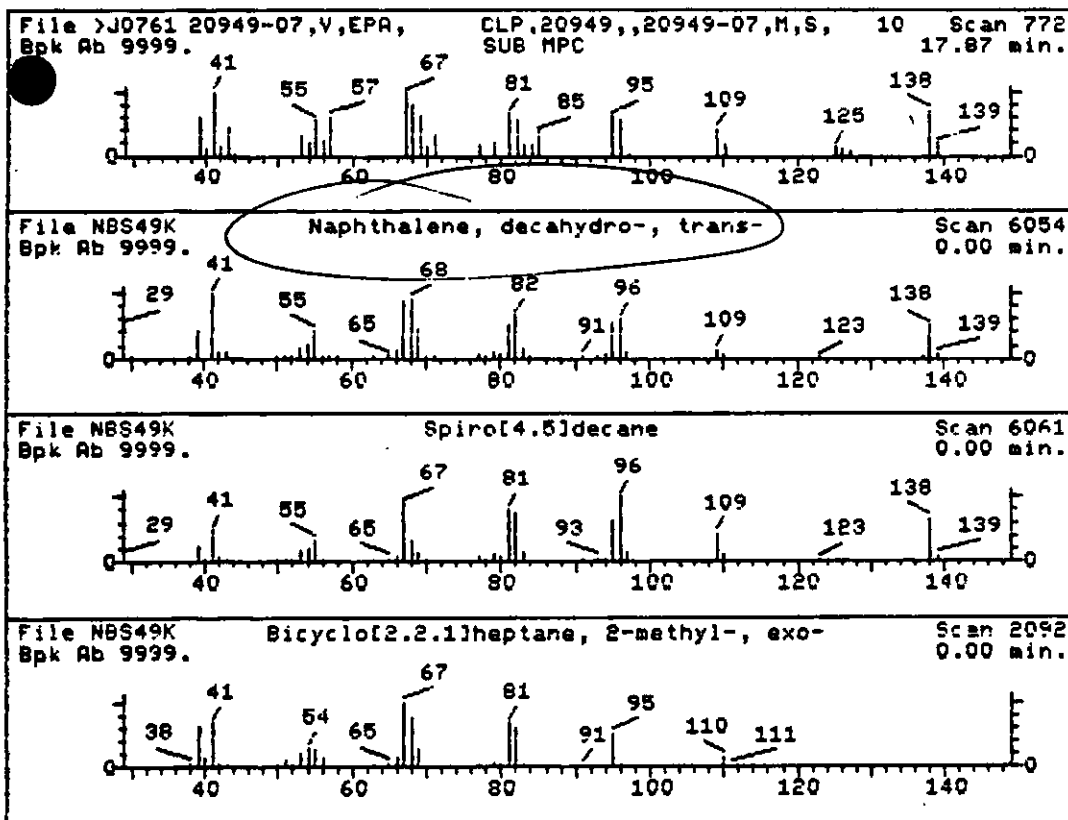
000309

1. Naphthalene, decahydro-, trans-
2. Spiro[4.5]decane
3. Bicyclo[2.2.1]heptane, 2-methyl-, exo-
4. 5-DODECENOL
5. Naphthalene, decahydro-, cis-
6. 1,6-Heptadiene, 2-methyl-

- 138 C10H18
- 138 C10H18
- 110 C8H14
- 184 C12H24O
- 138 C10H18
- 110 C8H14

Sample file: >J0761 Spectrum #: 772
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	62*	493027	17244	NBS49K	69	53	2	1	89	26	25	42
2.	47*	176636	17247	NBS49K	64	60	3	0	76	33	20	31
3.	38*	872786	3571	NBS49K	59	54	3	0	95	38	14	25
4.	32	62936123	6030	NBS49K	69	65	2	0	85	32	12	15
5.	31*	493016	17243	NBS49K	49	69	2	0	84	41	12	22
6.	30*	13643066	823	NBS49K	62	58	3	0	89	48	10	29



000310

TIC NUMBER:11

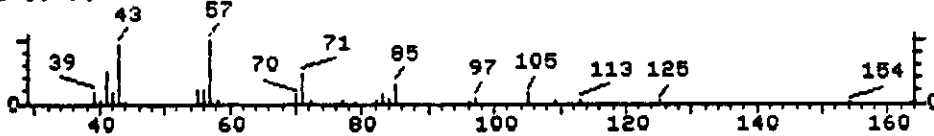
1. Nonane, 3,7-dimethyl-
2. Dodecane
3. Undecane
4. Decane, 2,9-dimethyl-
5. Octane, 3-ethyl-2,7-dimethyl-

156 C11H24
 170 C12H26
 156 C11H24
 170 C12H26
 170 C12H26

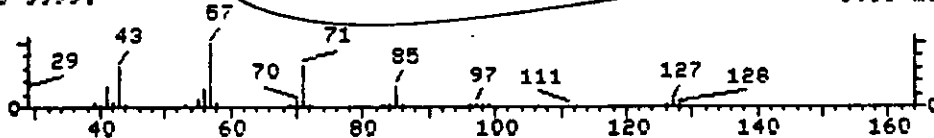
Sample file: >J0761 Spectrum #: 805
 Search speed: 2 Tilting option: S No. of ion ranges searched: 55

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	70	17302328	6677	NBS49K	46	41	2	0	71	10	42	15
2.	60	112403	6732	NBS49K	57	42	2	0	90	11	30	16
3.	60	1120214	6682	NBS49K	52	45	2	0	94	11	30	14
4.	52	1002171	6738	NBS49K	44	48	2	0	94	17	20	12
5.	52	62183555	6736	NBS49K	48	43	2	0	94	16	20	15

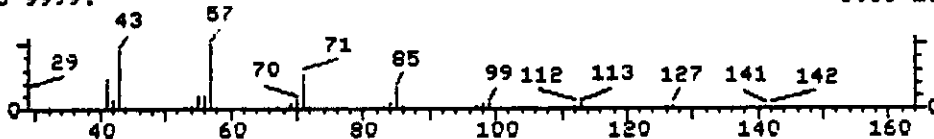
File >J0761 20949-07,V,EPA, CLP,20949,,20949-07,H,S, 10 Scan 805
 Bpk Ab 9999. SUB MPC 18.63 min.



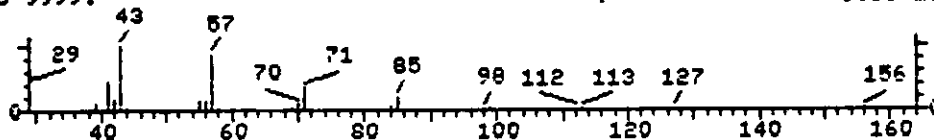
File NBS49K Nonane, 3,7-dimethyl- Scan 9738
 Bpk Ab 9999. 0.00 min.



File NBS49K Dodecane Scan 12779
 Bpk Ab 9999. 0.00 min.



File NBS49K Undecane Scan 9747
 Bpk Ab 9999. 0.00 min.



000311

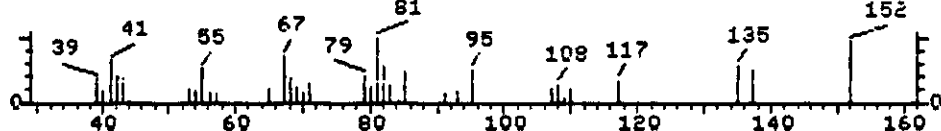
TIC NUMBER:12

- | | |
|---|-------------|
| 1. 4,7-Methano-1H-inden-1-ol, octahydro- | 152 C10H16O |
| 2. Bicyclo[4.1.0]heptan-3-one, 4,7,7-trimethyl-, [1R-(1.alpha.,4.alpha.,6.alpha.)]- | 152 C10H16O |
| 3. Bicyclo[4.1.0]heptan-3-one, 4,7,7-trimethyl-, [1R-(1.alpha.,4.beta.,6.alpha.)]- | 152 C10H16O |
| 4. Pulegone | 152 C10H16O |
| 5. TRANS-CHRYSANTHENOL | 152 C10H16O |
| 6. Cyclohexanone, 5-methyl-2-(1-methylethylidene)- | 152 C10H16O |

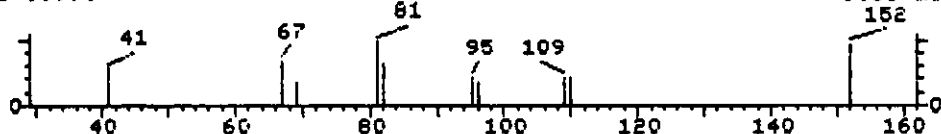
Sample file: >J0761 Spectrum #: 832
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	37*	55255975	19817	NBS49K	52	35	3	0	89	39	14	24
2.	30*	4176049	19819	NBS49K	46	81	3	0	95	32	12	13
3.	30*	4176016	19814	NBS49K	46	83	3	0	88	32	12	13
4.	27*	89827	19825	NBS49K	27	91	3	0	100	38	10	13
5.	25*	38043833	19820	NBS49K	22	67	3	0	100	47	7	12
6.	20*	15932806	19811	NBS49K	32	87	2	0	77	53	5	14

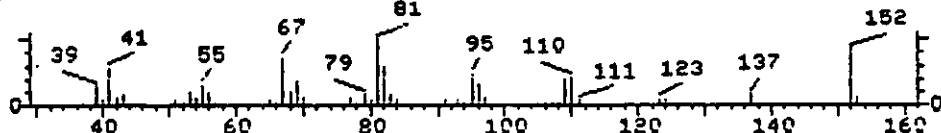
File >J0761 20949-07,V,EPA, CLP,20949,,20949-07,M,S, 10 Scan 832
 Bpk Ab 9999. SUB MPC 19.25 min.



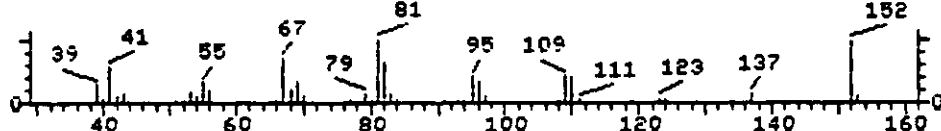
File NBS49K 4,7-Methano-1H-inden-1-ol, octahydro- Scan 8752
 Bpk Ab 9999. 0.00 min.



File NBS49K Bicyclo[4.1.0]heptan-3-one, 4,7,7-trimethyl-, [1R Scan 8754
 Bpk Ab 9999. 0.00 min.



File NBS49K Bicyclo[4.1.0]heptan-3-one, 4,7,7-trimethyl-, [1R Scan 8741
 Bpk Ab 9999. 0.00 min.



unknown

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20949-08

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-08

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: M3264

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 18

Date Analyzed: 02/25/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	61	U
74-83-9	Bromomethane	61	U
75-01-4	Vinyl Chloride	61	U
75-00-3	Chloroethane	61	U
75-09-2	Methylene Chloride	9	BJ
67-64-1	Acetone	61	U
75-15-0	Carbon Disulfide	61	U
75-35-4	1,1-Dichloroethene	61	U
75-34-3	1,1-Dichloroethane	61	U
540-59-0	1,2-Dichloroethene (total)	61	U
67-66-3	Chloroform	61	U
107-06-2	1,2-Dichloroethane	61	U
78-93-3	2-Butanone	61	U
71-55-6	1,1,1-Trichloroethane	10	J
56-23-5	Carbon Tetrachloride	61	U
75-27-4	Bromodichloromethane	61	U
78-87-5	1,2-Dichloropropane	61	U
10061-01-5	cis-1,3-Dichloropropene	61	U
79-01-6	Trichloroethene	24	J
124-48-1	Dibromochloromethane	61	U
79-00-5	1,1,2-Trichloroethane	61	U
71-43-2	Benzene	61	U
10061-02-6	trans-1,3-Dichloropropene	61	U
75-25-2	Bromoform	61	U
108-10-1	4-Methyl-2-Pentanone	61	U
591-78-6	2-Hexanone	61	U
127-18-4	Tetrachloroethene	850	
79-34-5	1,1,2,2-Tetrachloroethane	61	U
108-88-3	Toluene	61	U
108-90-7	Chlorobenzene	61	U
100-41-4	Ethylbenzene	61	U
100-42-5	Styrene	61	U
1330-20-7	Xylene (total)	580	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000313
EPA SAMPLE NO.

20949-08

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-08

Sample wt/vol: 1.0 (g/mL) G

Lab File ID: M3264

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 18

Date Analyzed: 02/25/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 815-24-7	3-Pentanone, 2,2,4,4-tetrame	18.74	130	JN
2. 873-94-9	Cyclohexanone, 3,3,5-trimeth	21.10	73	JN

QUANT REPORT

Page 1

Operator ID: LUEYI
 Output File: M3264:R1
 Data File: >M3264:L3
 Name: 20949-08, CAS-S,
 Misc: 16/5ML ANALYST RLN INST. L HEATED

Quant Rev: 2 Quant Time: 920225 23:48
 Injected at: 920225 23:19
 Dilution Factor: 1.000000
 Instrument ID: L

ID File: IDEPAL:ID

Title: ID FILE CLP INST. L + THE

Last Calibration: 911030 17:46

Last Local Time: 920225 20:28

Compound	R.T.	W ion	Area	Conc	Units	q
1) *C101 BROMOCHLOROMETHANE	7.26	128.0	98067	50.00	UG/L	99
2) CS15 1,2-DICHLOROMETHANE-D4	8.27	65.0	56344	48.16	UG/L	83
4) CS35 ACETONE ^{5.10 92}	5.89	43.0	2865	5.82	UG/L	100
10) CS30 METHYLENE CHLORIDE	4.58	84.0	1192	1.48	UG/L	86
19) *C110 1,4-DIFLUOROBENZENE	9.24	114.0	129080	50.00	UG/L	100
20) C115 1,1,1-TRICHLOROMETHANE	7.66	97.0	2148	1.59	UG/L	82
23) C150 TRICHLORUETHENE	9.54	130.0	3726	3.94	UG/L	85
31) *C120 CHLOROBENZENE-D5	14.56	117.0	100816	50.00	UG/L	87
32) CS05 TOLUENE-D8	11.81	98.0	123800	47.32	UG/L	90
33) CS10 BROMOFLUOROBENZENE	17.11	95.0	23637	46.79	UG/L	100
36) C220 TETRACHLORUETHENE	12.91	164.0	120062	139.64	UG/L	85
44) CS40 ETHYLBENZENE ^{5.10 92}	15.25	106.0	586	.731	UG/L	89
40) CSNK MPF-XYLENES ^{5.10 92}	15.25	106.0	586	.583	UG/L	88
41) CS29 M-XYLENE	16.03	106.0	586	55.36	UG/L	87

* Compound is 1510

000315

MS data file header from : >M3264:123

Sample: 20949-08,RAA-S, Operator: LDFYI PHS. GRP. 2/25/92 23:19
 Misc : 16/5ML ANALYST RDN INST. L HEATED
 Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
 Method file: SAMML Tuning file: MIBFBL No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

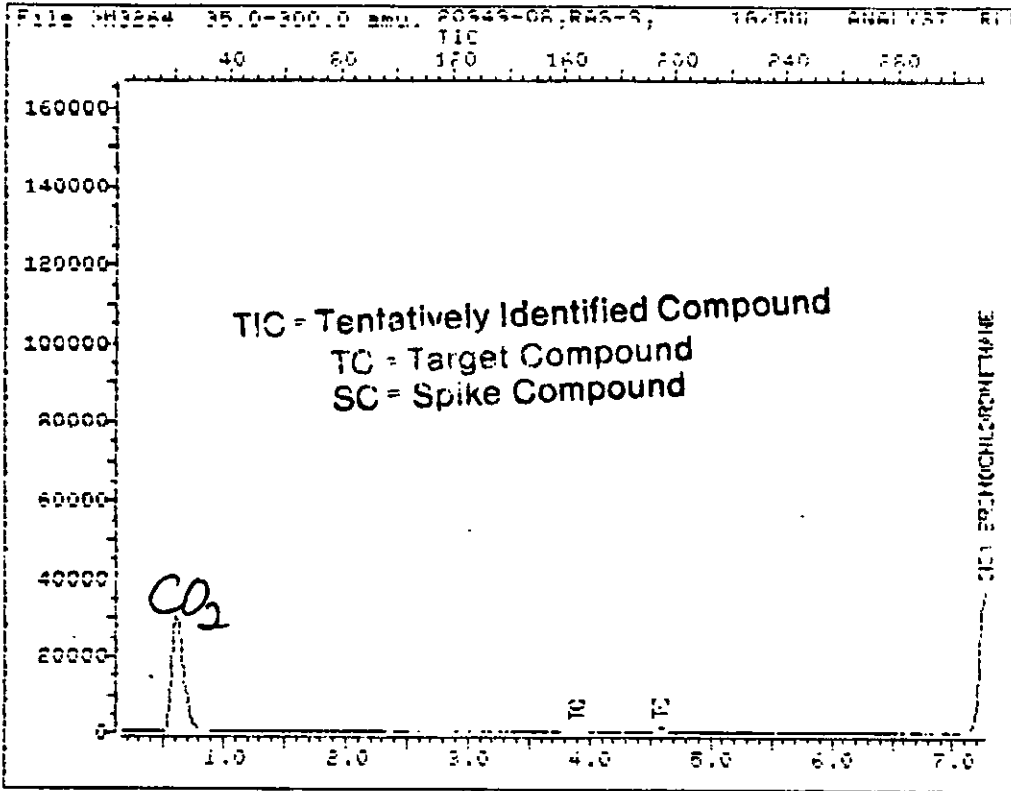
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	desired reporting units
samp_amt	16	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	NA	%moisture for soil
int_ext_vol	NA	intermediate extr ct vol/M.L. ext vo
int_ext_vol_u	NA	intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(start)/E(end)
matrix	S	sample matrix W(water)/S(oil)
unfact	5.00	calcd unifact
surfact	.0050	calcd surr vol

Performance Check: >M3260 Injection time: 2/25/92 20:02
 Sample : >M3264 Injection time: 2/25/92 23:19
 Elapsed time: 0 Y 0 D 3:17
 Sample: >M3264 Calibration Stds.: >M3261,
 Invalid Response Factor for: C055 1,2-DICHLOROETHENE TOTAL
 Invalid Response Factor for: C250 XYLENE (TOTAL)

000316

TOTAL ION CHROMATOGRAM



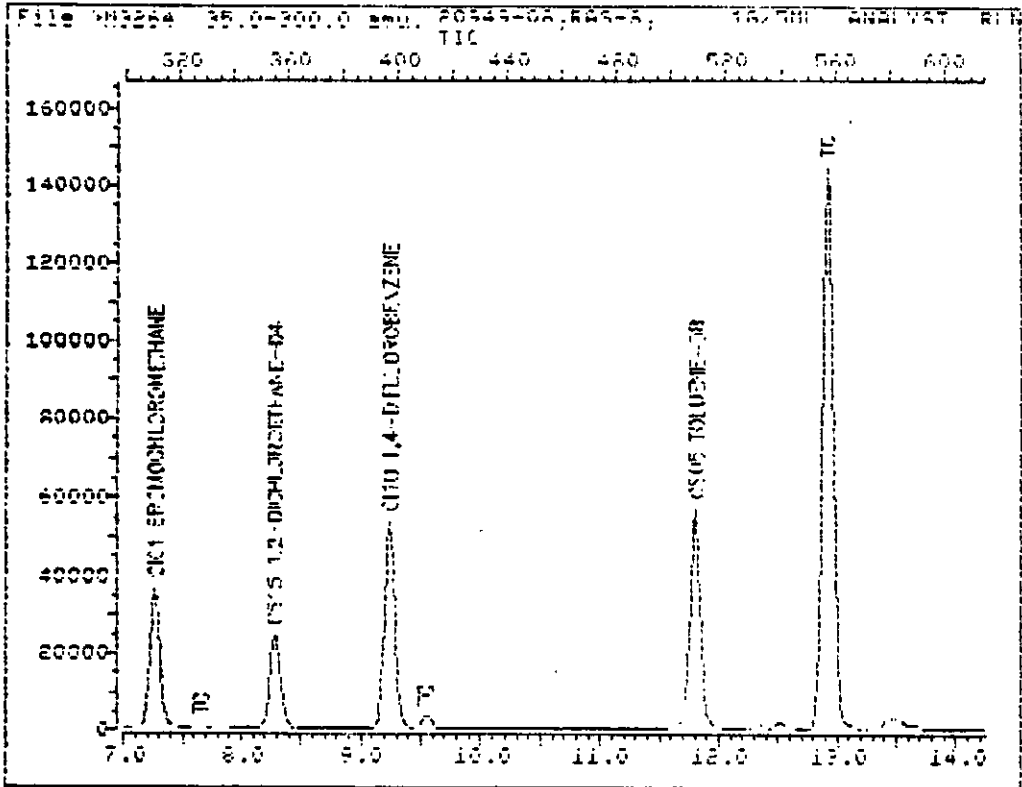
Data File: 003264::L1 Quant Output File: 003264::Q1
Name: 20749-08, RAS-5, Instrument ID: L
Misc: 16/5ML ANALYSIS RLN INST. L HEATED

Id File: IDEPAL::ID
Title: ID FILE CLR INST. L + THP
Last Calibration: 911030 17:46 Last Seal Time: 920225 20:28

Operator ID: LUEYI
Quant Time: 920225 23:48
Injected at: 920225 23:19

000317

TOTAL ION CHROMATOGRAM



Data File: >MS264:1L3
 Name: 20949-08, RAS-5,
 Misc: 1675ML ANALYST RLN INST. L HEATED

Quant Output File: >MS264:1UF
 Instrument ID: 1

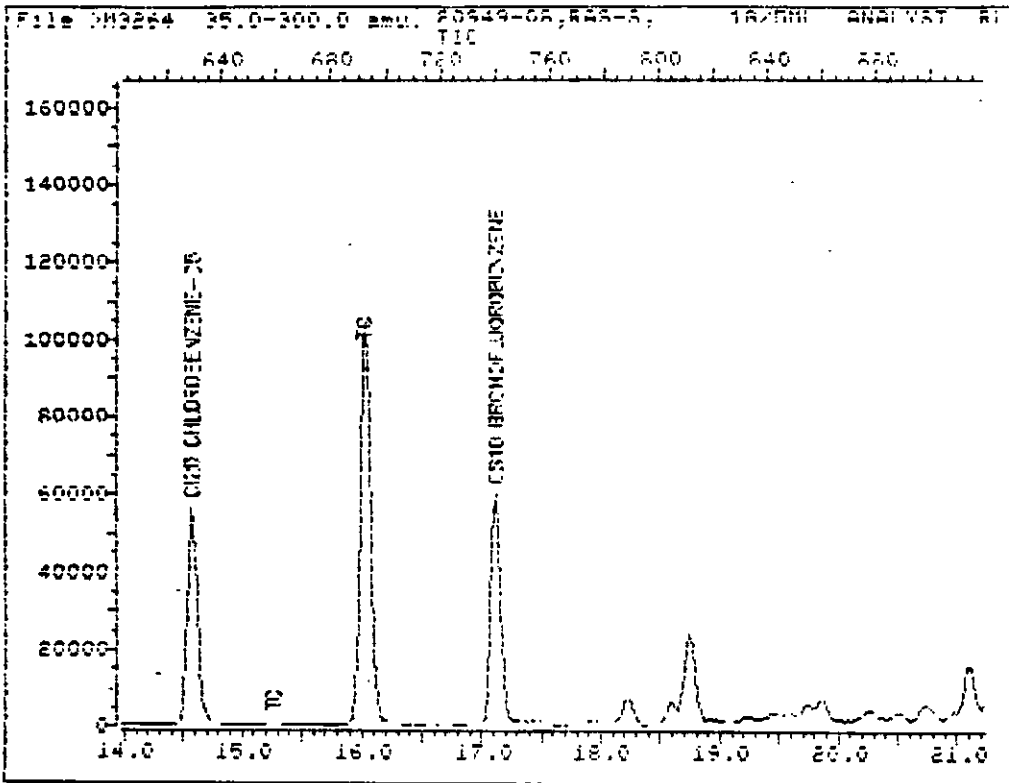
Id File: 10EPA1:110
 Title: 10 FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Used Time: 920225 20:28

Operator ID: LUEY1
 Quant time : 920225 23:48
 Injected at: 920225 23:19

000318

TOTAL ION CHROMATOGRAM



Data File: >M3264::L3

Quant Output File: 0M3264::QT

Name: 20949-08, RAS-5,

Instrument ID: L

Misc: 16/5ML ANALYST RLN INST. L HEATED

Id File: IDEPAL::ID

Title: ID FILE LLP INST. L + THF

Last Calibration: 921119 17:46

Last Inlet Time: 920225 20:28

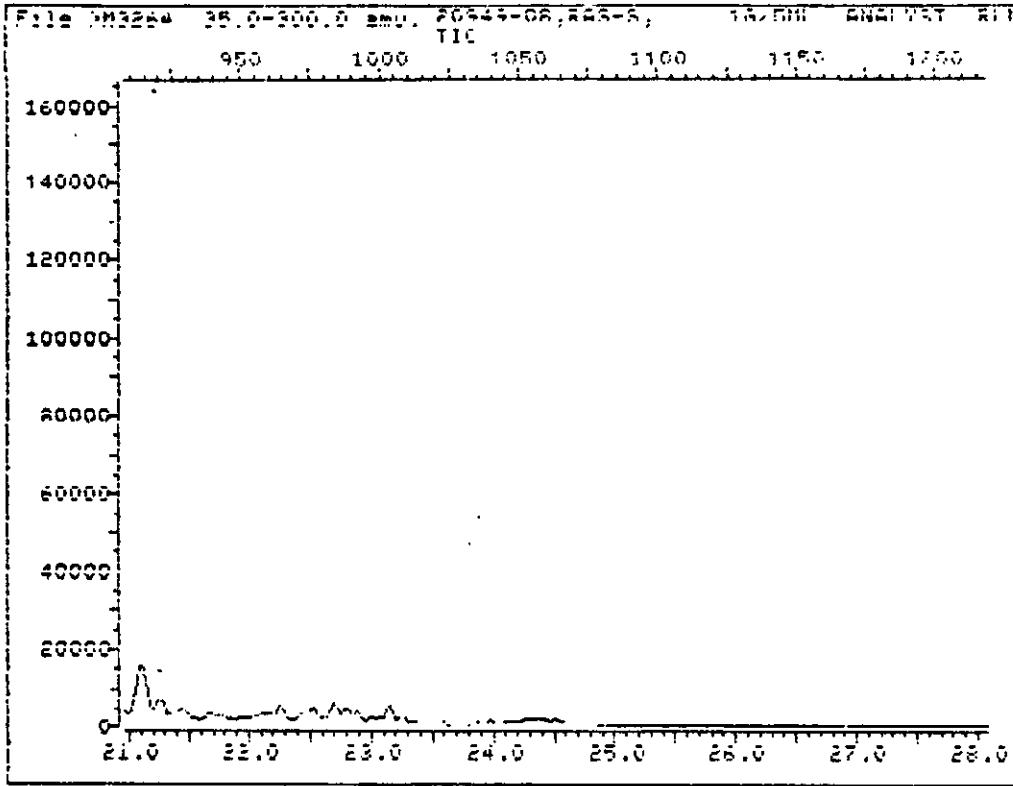
Operator ID: LUEY1

Quant time: 920225 23:48

Injected at: 920225 23:19

000319

TOTAL ION CHROMATOGRAM



Data File: >M3264::L3

Quant Output File: ^M3264::R1

Name: 20949-08, RAS-S,

Instrument ID: L

Misc: 16/5ML ANALYST RLN INST. L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THE

Last Calibration: 911030 17:46

Last Cal Time: 920225 20:28

Operator ID: LUEY1

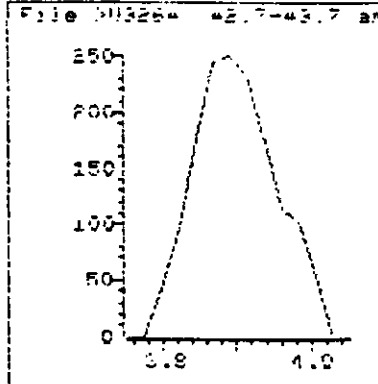
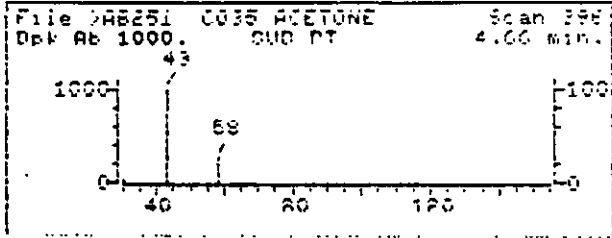
Quant Time: 920225 23:48

Injected at: 920225 23:19

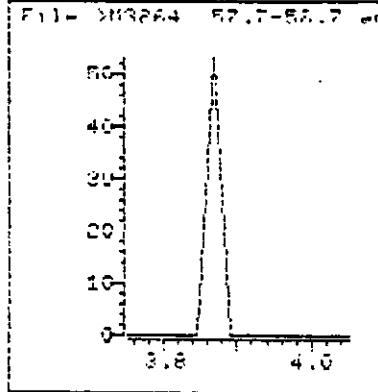
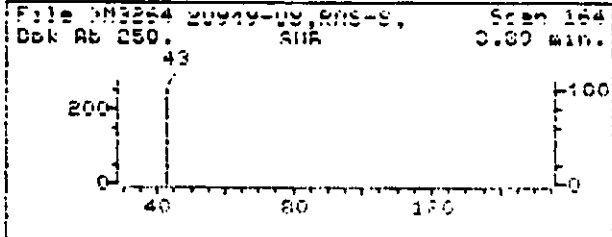
Page 4 of 4

000320

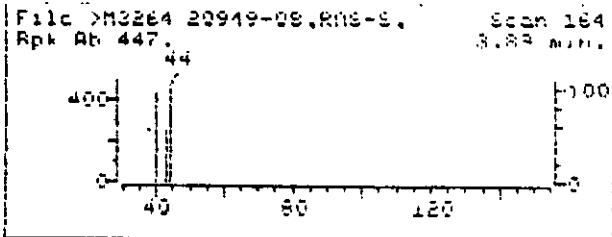
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



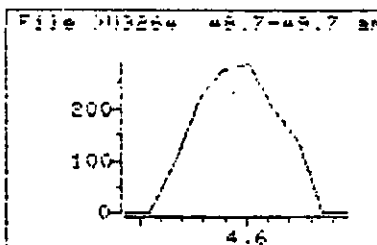
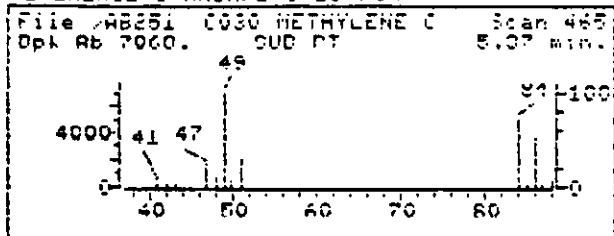
Data File: >M3264::L5
Name: 20949-08,RMS-5,
Misc: 16/5ML ANALYST:RLN INST. L HEATED
Quant time: 920225 23:48
Injected at: 920225 23:19
Last Qual time: 920225 20:28

Quant Output File: >M3264::QT
Instrument ID: L
Quant ID File: 1DLPAL::10
Last Calibration: 911050 17:46

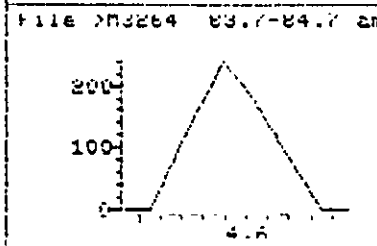
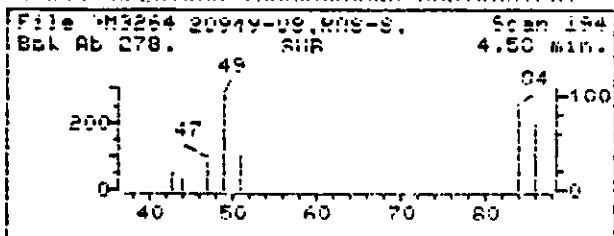
Compound No : 9
Compound Name : 10% AIB LINE
Scan Number : 164
Retention time : 3.89 min.
Quant Ion : 43.0
Area : 2165
Concentration : 5.02 UG/L
q-value : 100

000321

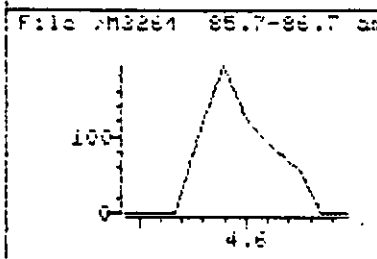
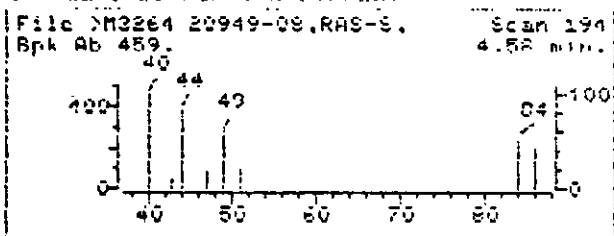
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

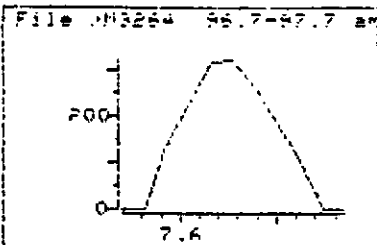
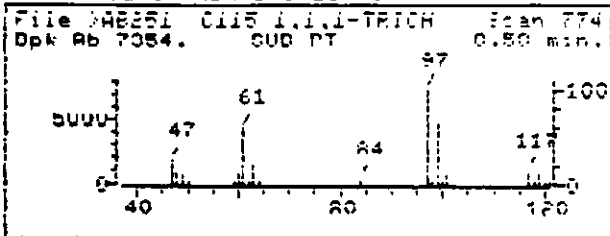


Data File: >M3264::L3
 Name: 20949-09.RAS-S,
 Misc: 16%ML ANALYST RLN INST. L HEATED
 Quant time: 920225 23:48
 Injected at: 920225 23:19
 Last Wcal time: 920225 20:28

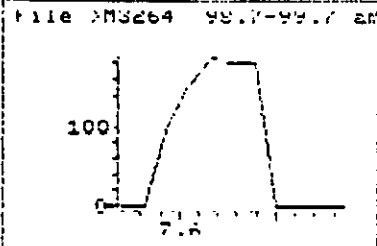
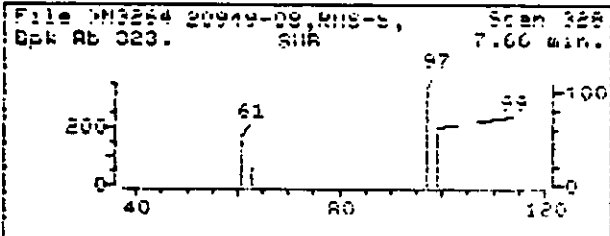
Quant Output File: >M3264::L1
 Instrument ID: 1
 Quant ID File: IDLPAI::ID
 Last Calibration: 911030 17:46

Compound No : 10
 Compound Name : 0030 METHYLENE CHLORIDE
 Scan Number : 194
 Retention time : 4.58 min.
 Quant Ion : 84.0
 Area : 1192
 Concentration : 1.48 UG/L
 q-value : 86

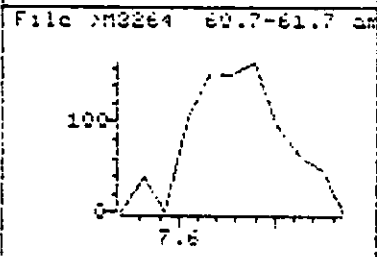
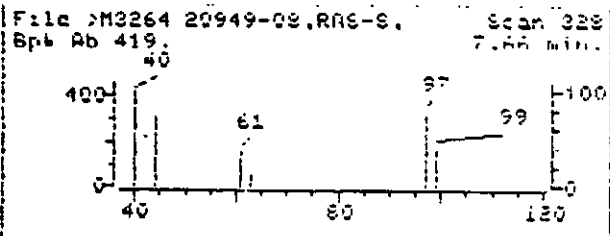
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



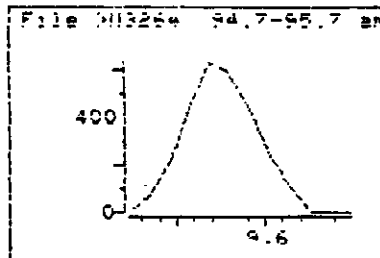
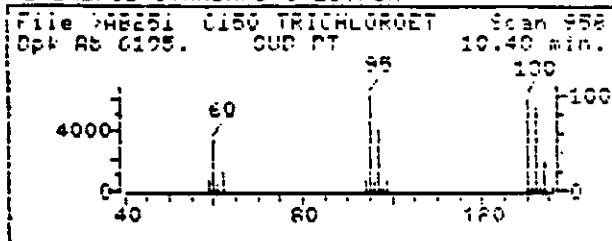
Data File: >M3264:1L5
Name: 20949-09,RMS-S,
Misc: 1G/5ML ANALYST RLN INST. L HEATED
Quant Time: 920225 23:48
Injected at: 920225 23:19
Last Qual Time: 920225 20:28

Quant Output File: >M3264:1MT
Instrument ID: L
Quant ID File: 1001AL:11D
Last Calibration: 911030 12:46

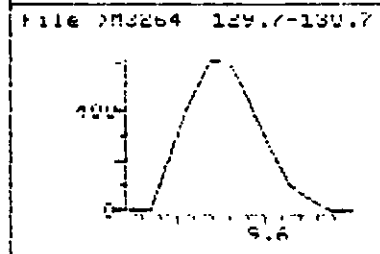
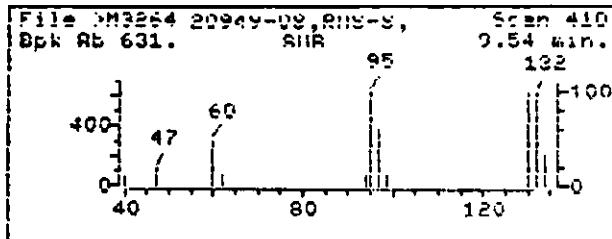
Compound No : 20
Compound Name : 1,1,1-TRICHLOROETHANE
Scan Number : 328
Retention time : 7.60 min.
Quant Ion : 97.0
Area : 7148
Concentration : 1.59 UG/L
q-value : 94

000323

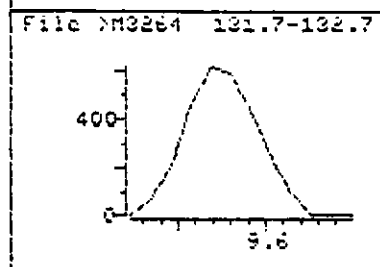
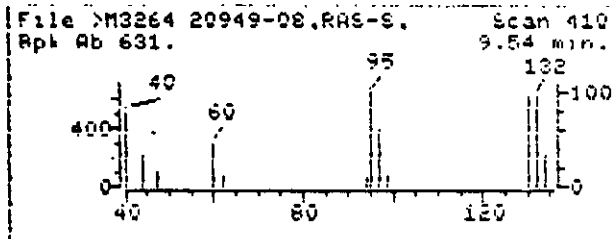
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

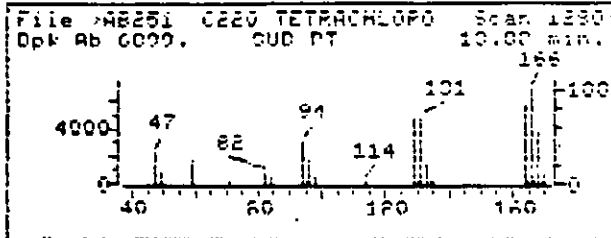


Data File: >M3264::L3
Name: 20949-08.RAS-S,
Misc: 1675ML ANALYSIS RLN INST. L HEATED
Quant time: 920225 23:48
Injected at: 920225 23:19
Last Qual time: 920225 20:28

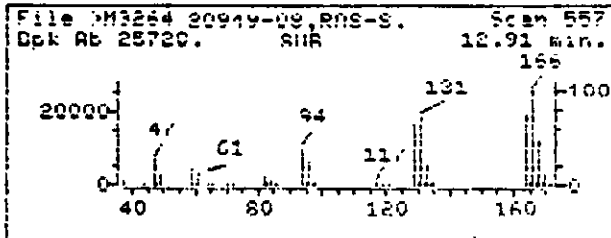
Quant Output File: ^M3264::M1
Instrument ID: L
Quant ID File: IDCPAL::10
Last Calibration: 911030 17:46

Compound No : 24
Compound Name : C150 TRICHLOROETHENE
Scan Number : 410
Retention time: 9.54 min.
Quant Ion : 150.0
Area : 3726
Concentration : 3.44 UG/L
q-value : 95

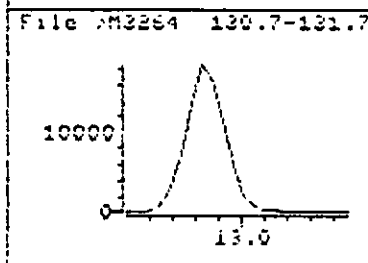
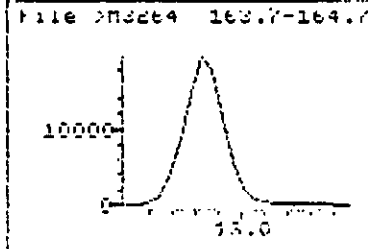
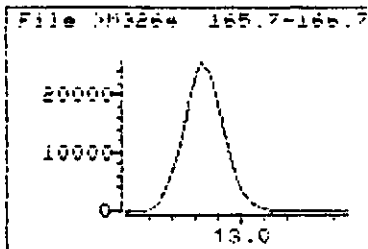
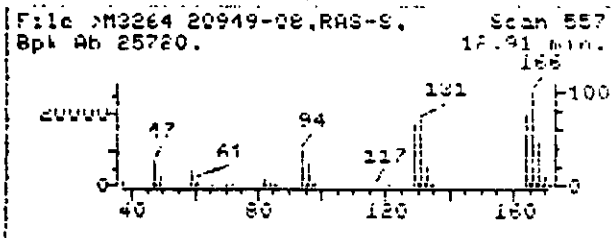
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

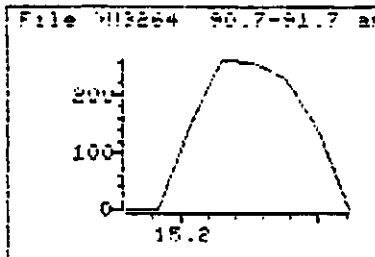
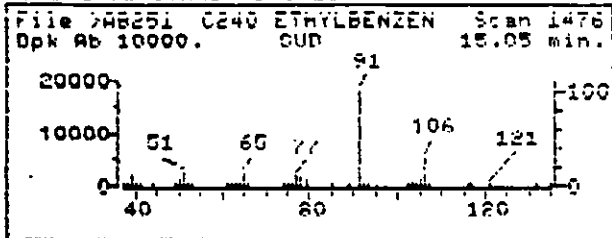


Data File: >M3264::L3
Name: 20949-08,RAS-S,
Misc: 16.5ML ANALYST RLN INST. L HEATED
Quant time: 920225 23:48
Injected at: 920225 23:19
Last Qual time: 920225 20:28

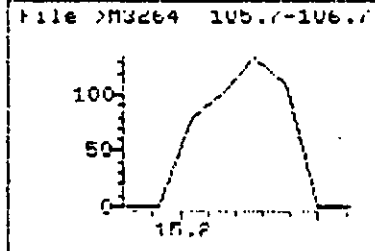
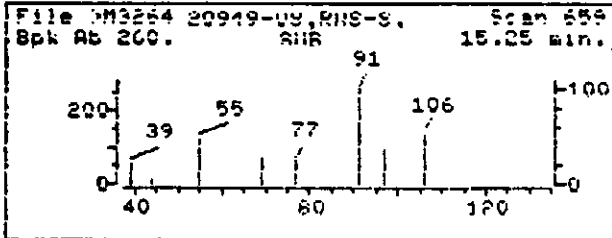
Quant Output File: >M3264::Q1
Instrument ID: L
Quant ID File: JOURNAL:ID
Last Calibration: 911030 17:46

Compound No : 36
Compound Name : C220 TETRACHLOROETHINYL
Scan Number : 557
Retention time: 12.91 min.
Quant Ion : 164.0
Area : 120062
Concentration : 139.64 UG/L
q-value : 95

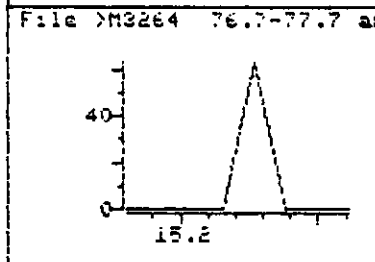
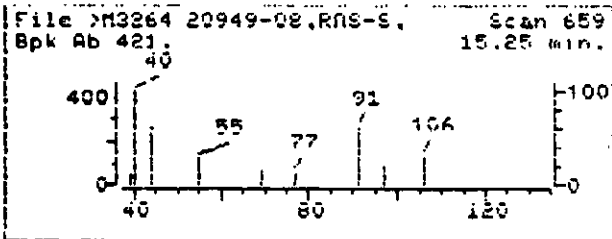
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

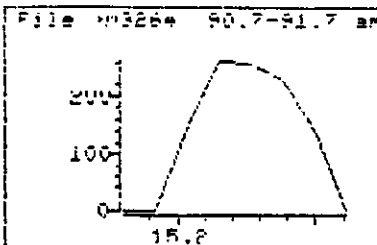
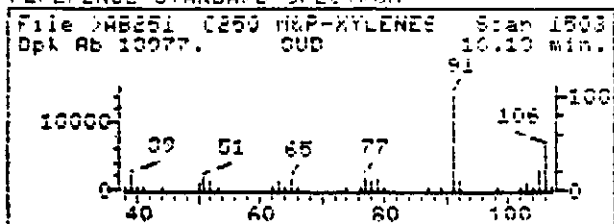


Data File: >M3264::L3
Name: 20949-08,RMS-S,
Misc: 16/5ML ANALYST RLN INST. L HEATED
Quant Time: 920225 23:48
Injected at: 920225 23:19
Last Cal time: 920225 20:28

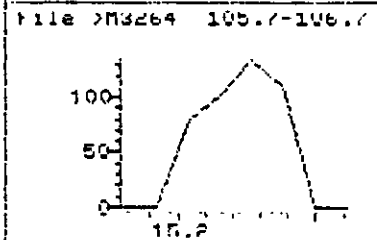
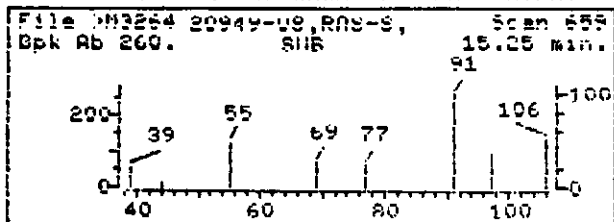
Quant Output File: ^M3264::INT
Instrument ID: L
Quant ID File: 10EPA1::10
Last Calibration: 911030 12:46

Compound No : 59
Compound Name : C240 ETHYLBENZENE
Scan Number : 659
Retention Time: 15.25 min.
Quant Ion : 106.0
Area : 536
Concentration : 0.31 UG/L
q-value : 59

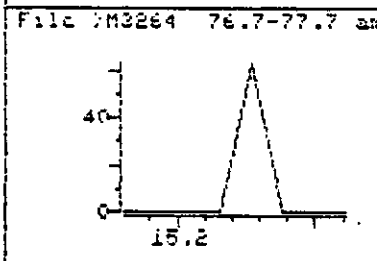
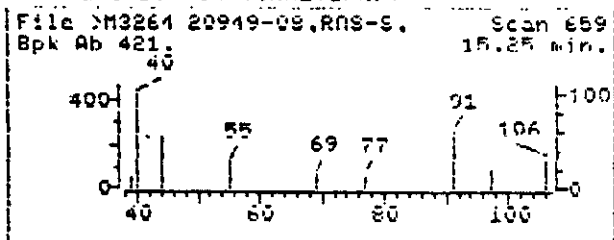
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



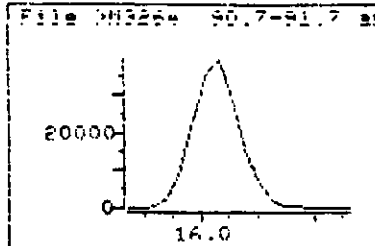
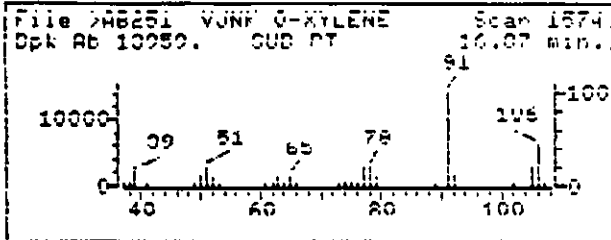
Data File: >M3264::L3
Name: 20949-U8,RAS-S,
Misc: 16/5ML ANALYST RLN INST. L HEATED
Quant time: 920225 23:48
Injected at: 920225 23:19
Last Qual time: 920225 20:28

Quant Output File: >M3264::Q1
Instrument ID: L
Quant ID File: 106PAL:10
Last Calibration: 911030 17:46

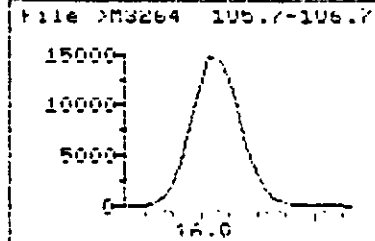
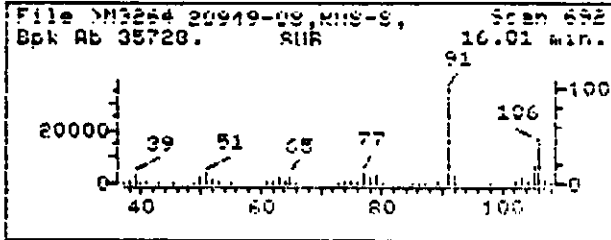
Compound No : 40
Compound Name : UNKN M&P-XYLENES
Scan Number : 659
Retention time: 15.25 min.
Quant Ion : 106.0
Area : 586
Concentration : .585 UG/L
q-value : 811

BDL

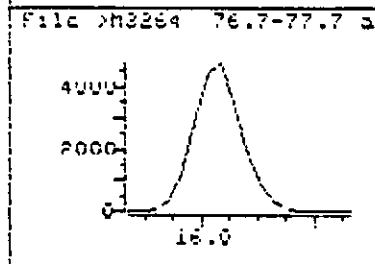
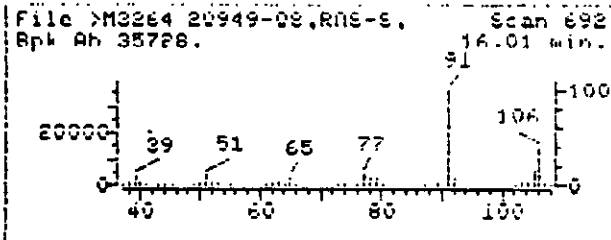
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3264::L3
Name: 20949-08,RAS-S,
Misc: 16/5ML ANALYST RIN INST. L HEATED
Quant Time: 920225 23:48
Injected at: 920225 23:19
Last Cal Time: 920225 23:28

Output File: >M3264::RT
Instrument ID: L
Quant ID File: IDENTAL::ID
Last Calibration: 911030 17:46

Compound No : 41
Compound Name : 0029 O-XYLENE
Scan Number : 692
Retention Time : 16.01 min.
Quant Ion : 106.0
Area : 92452
Concentration : 95.56 UG/L
q-value : 97

Diagnostic Quant Report

Data File: >M3264::L3 Injected at: 23:19 02/25/92
 Quant'd : 23:48 02/25/92
 ID File : IDEPAL::ID Calibrated : 12:46 10/30/91

- R.T. Info -

Compound		Pred	Found	Dif	Ion	Area	RF	Conc.
1) *C101	BROMOCHLOROMETHANE	7.26	7.26	.00	128.0	30067	1.0000	50.00
2) C515	1,2-DICHLOROETHANE-D	8.28	8.27	.01	65.0	56344	1.9455	48.16
3) C010	CHLOROMETHANE	1.13	0.00	--	50.0	0	.2812	0.00
4) C020	VINYL CHLORIDE	1.32	0.00	--	62.0	0	.8950	0.00
5) C035	BROMOMETHANE	1.80	0.00	--	94.0	0	1.0941	0.00
6) C025	CHLOROETHANE	2.07	0.00	--	64.0	0	.6085	0.00
7) C045	1,1-DICHLOROETHENE	3.52	0.00	--	96.0	0	.9339	0.00
8) C040	CARBON DISULFIDE	3.59	0.00	--	76.0	0	1.5712	0.00
9) C035	ACETONE	4.00	3.89	.11	43.0	2065	.6843	5.02
10) C030	METHYLENE CHLORIDE	4.60	4.58	.02	84.0	1192	1.3429	1.48
11) UJNK	trans-1,2-DICHLOROETH	5.06	0.00	--	96.0	0	1.0972	0.00
12) C050	1,1-DICHLOROETHANE	5.84	0.00	--	63.0	0	2.1754	0.00
13) U011	cis-1,2-DICHLOROETHENE	6.90	0.00	--	96.0	0	1.1207	0.00
14) C053	1,2-DICHLOROETHENE T	8.00	0.00	--	96.0	0	1.1089	0.00
15) C110	2-BUTANONE	7.15	0.00	--	43.0	0	1.1012	0.00
16) U013	TETRAHYDROFURAN	7.40	0.00	--	42.0	0	.6386	0.00
17) C060	CHLOROFORM	7.59	0.00	--	83.0	0	2.5695	0.00
18) C065	1,2-DICHLOROETHANE	8.41	0.00	--	62.0	0	1.8775	0.00
19) *C110	1,4-DIFLUOROBENZENE	9.24	9.24	.00	114.0	129080	1.0000	50.00
20) C115	1,1,1-TRICHLOROETHAN	7.65	7.66	.01	97.0	2148	.5236	1.59
21) C120	CARBON TETRACHLORIDE	7.91	0.00	--	117.0	0	.4937	0.00
22) C165	BENZENE	8.27	0.00	--	78.0	0	.6751	0.00
23) C150	TRICHLOROETHENE	9.54	9.54	.00	130.0	3726	.3661	3.94
24) C140	1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.2732	0.00
25) C130	BROMODICHLOROMETHANE	10.55	0.00	--	83.0	0	.5078	0.00
26) C145	cis-1,3-DICHLOROPROP	11.40	0.00	--	75.0	0	.4373	0.00
27) C172	trans-1,3-DICHLOROPR	12.52	0.00	--	75.0	0	.3877	0.00
28) C160	1,1,2-TRICHLOROETHAN	12.82	0.00	--	97.0	0	.2968	0.00
29) C155	CHLORODIBROMOMETHANE	13.49	0.00	--	129.0	0	.5126	0.00
30) C180	BROMOFORM	16.34	0.00	--	123.0	0	.4780	0.00
31) *C120	CHLOROBENZENE-D5	14.57	14.56	.01	117.0	100816	1.0000	50.00
32) C505	TOLUENE-D8	11.79	11.81	.02	98.0	123800	1.2449	49.32
33) C510	BROMOFLUOROBENZENE	12.11	12.11	.00	95.0	73637	.7805	46.79
34) C230	TOLUENE	11.90	0.00	--	91.0	0	1.0930	0.00
35) C205	4-METHYL-2-PENTANONE	11.83	0.00	--	43.0	0	.6976	0.00
36) C220	TETRACHLOROETHENE	12.91	12.91	.00	164.0	120062	.4764	139.64
37) C210	2-HEXANONE	13.49	0.00	--	43.0	0	.5688	0.00
38) C235	CHLOROBENZENE	14.61	0.00	--	117.0	0	.8190	0.00
39) C240	ETHYLBENZENE	14.96	15.25	.30	106.0	586	.3974	.73
40) UJNK	M&P-XYLENES	15.25	15.25	.02	106.0	586	.4983	.58
41) U029	O-XYLENE	16.01	16.01	.00	106.0	92452	.4808	95.36
42) C250	XYLENE (TOTAL)	0.00	0.00	0.00	106.0	93038	.4896	94.75
43) C245	STYRENE	16.08	0.00	--	104.0	0	.8081	0.00
44) C225	1,1,2,2-TETRACHLORUE	17.67	0.00	--	83.0	0	.7660	0.00

* - Compound is an internal Standard
 U - Compound Unlabeled

GC Internal Standard Report

Data File: >M3264

Maximum separation of RIC and Quan ion peaks: 5.
 Minimum RIC peak area as % of est. RIC area: 50.
 Maximum RIC peak area as % of est. RIC area: 200.

#	Name	Concentration	Flag
Q scan	Q area	RIratio RIC scan RIC area % Est. RIC	
1	C101 BROMOCHLOROMETH	50.000 US/L	UK
311.	30062.	2.294 311. 203318.	92.712
2	C110 1,4-DIFLUOROBEN	50.000 US/L	UK
397.	129080.	2.506 397. 314151.	92.113
3	C120 CHLOROBENZENE-D	50.000 US/L	UK
629.	100816.	3.094 629. 326193.	104.569

Deleting peaks from INI file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 10
 Number of peaks remaining: 10

Deleting target compounds from INI file: UDIR87

Minimum separation of RIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 10
 Number of peaks remaining: 2

Deleting all but largest peaks from INI file: UDIR87

Maximum number of peaks to keep: 15
 Number of peaks: 2
 Maximum number of peaks > number of peaks.

000330

TICE: _D

Data Reduced by : SFB Date: 3/5/92 Data File: >M3264
Data Reviewed by : AI Date: 3-10-92

Enseco TIC Report (page 1)

Sample: 20949-08,RAS-S, Run Factor: 6.10
Conditions: 1G/5ML ANALYST RLN INST. L Analyst: LUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	811.		2	130.	815-24-7	3-Pentanone, 2,2,4,4-tetramethyl-
2	914.		2	73.	873-94-9	Cyclohexanone, 3,3,5-trimethyl-

Hit return for more ...

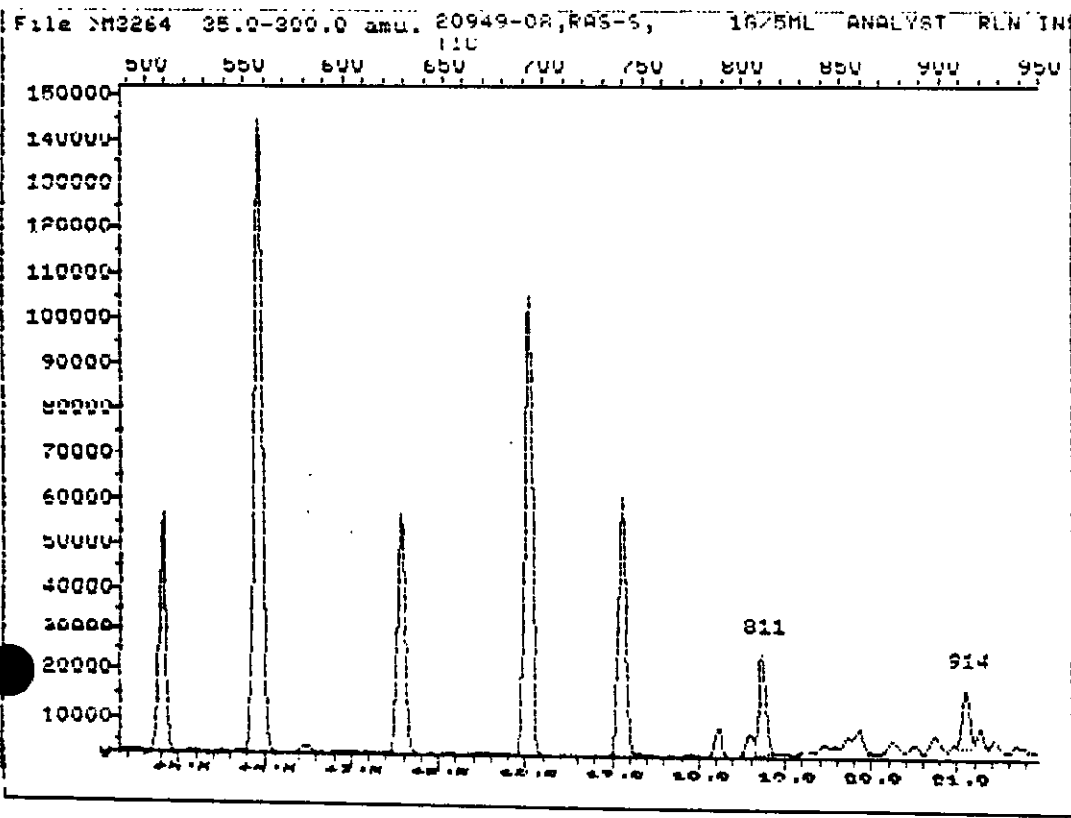
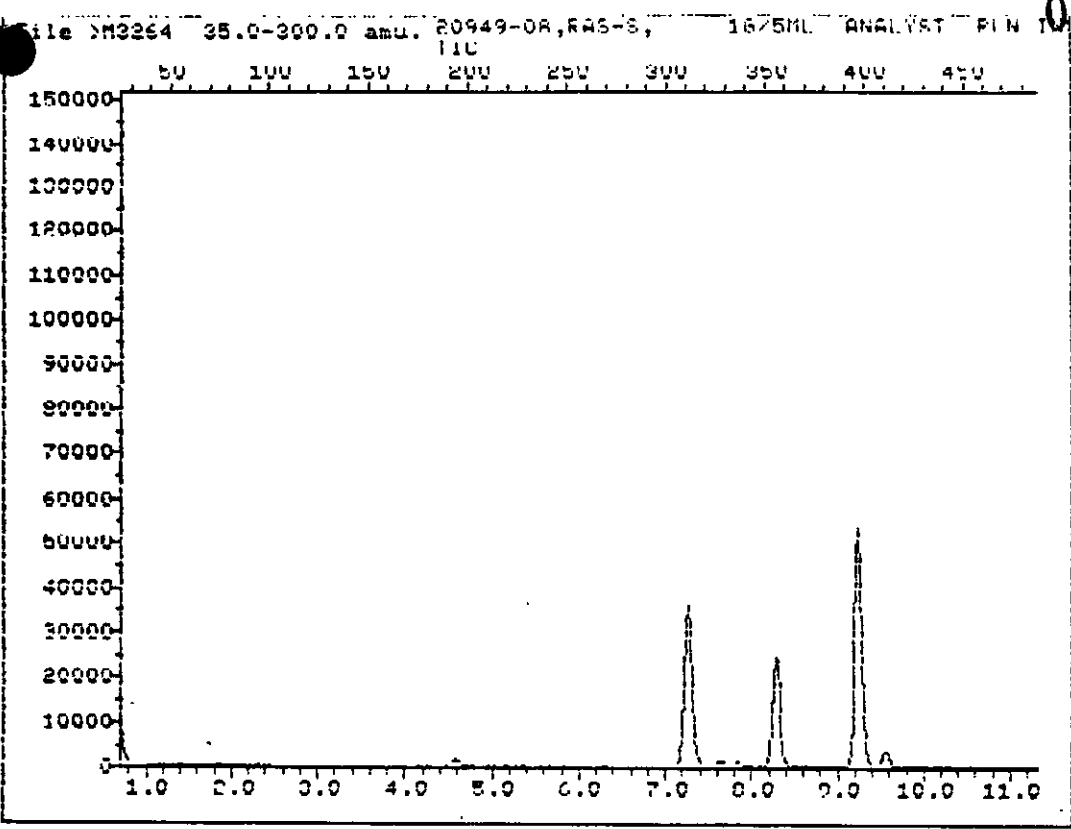
Data File: >M3264

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	88	2	3	18.74	1.287	136995.	22218.	20.999
2	79	7	3	21.11	1.449	77762.	12911.	11.920

000331



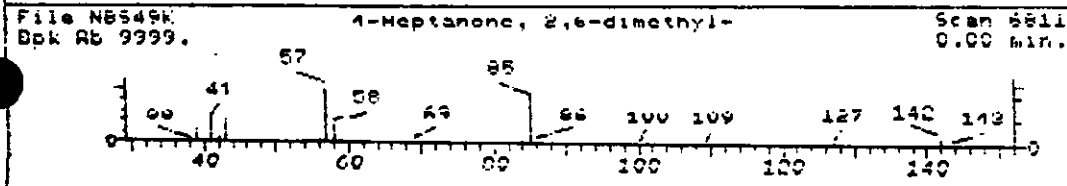
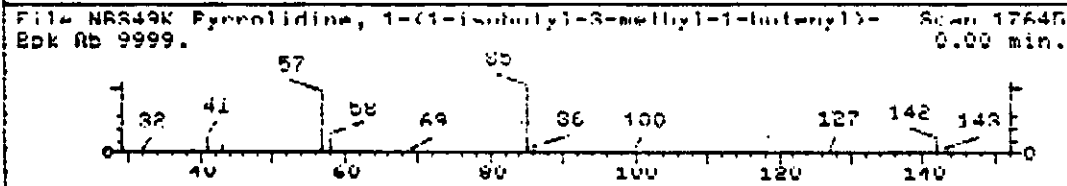
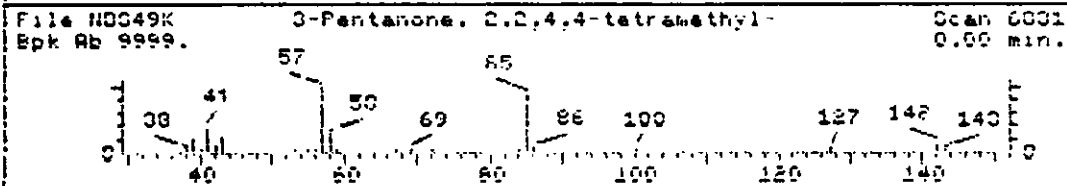
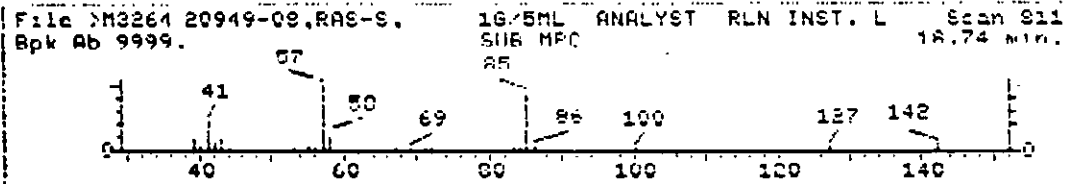
000332

FILE NUMBER: 1

- | | |
|--|-------------|
| 1. 3-Pentanone, 2,2,4,4-tetramethyl- | 142 C9H18O |
| 2. Pyrrolidine, 1-(1-isobutyl-3-methyl-1-butanyl)- | 195 C15H25N |
| 3. 4-Heptanone, 2,6-dimethyl- | 142 C9H18O |
| 4. 5-Nonanone | 142 C9H18O |
| 5. 1H-tetrazol-5-amine | 85 CH3N5 |
| 6. 4-Octanone, 2-methyl- | 142 C9H18O |

Sample file: >M3264 Spectrum #: R11
 Search speed: 2 Filtering option: 5 No. of ion ranges searched: 43

Prob.	CAS #	LUN #	RUNIT	K	DK	#FLS	FILE	%	LUN	L_I	R_IU	
1.	88*	815247	6634	NBS49K	65	28	2	0	83	2	65	50
2.	83	3494040	6797	NBS49K	80	15	2	3	88	7	57	23
3.	78*	108838	6632	NBS49K	41	58	3	0	100	1	55	15
4.	52*	502567	6633	NBS49K	33	59	3	0	97	16	20	15
5.	42*	4418615	4	NBS49K	21	104	2	0	100	21	17	13
6.	26*	7492988	6631	NBS49K	24	68	2	0	61	41	8	14



2

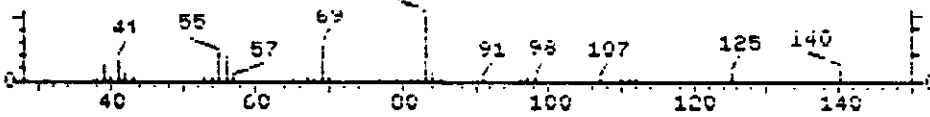
TIC NUMBER: 2

- | | |
|--|-------------|
| 1. Cyclohexanone, 3,3,5-trimethyl- | 140 C9H16O |
| 2. Cyclohexane, (2-methylpropyl)- | 140 C10H20 |
| 3. 1,3-Cyclohexanedione, 5,5-dimethyl- | 140 C8H12O2 |
| 4. 2-Octen-4-one, 2-methyl- | 140 C9H16O |
| 5. Cyclopentane, 1-ethyl-1-methyl- | 112 C8H16 |
| 6. 2-Heptene, 5-ethyl-2,4-dimethyl- | 154 C11H22 |

Sample file: >M3264 Spectrum #: 914
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CLIN #	ROUT	K	DK	#PLS	FILE	%	CON	L_T	R_10	
1.	79*	873949	6185	NBS49K	64	38	2	-2	93	7	48	32
2.	60*	1678984	6188	NBS49K	34	69	3	0	100	14	30	13
3.	42*	126818	17691	NBS49K	28	75	3	0	79	25	17	13
4.	32*	19860710	6186	NBS49K	30	55	2	0	100	34	12	15
5.	30*	16747505	6185	NBS49K	32	72	3	0	100	32	12	13
6.	26	74421060	6203	NBS49K	36	44	2	0	100	32	10	12

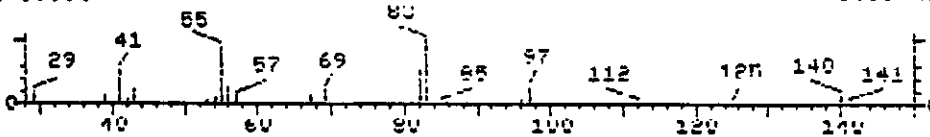
File >M3264 20949-09.RAS-S. 16.5ML ANALYST RLN INST. L Scan 914
 Bpk Ab 9999. SHR MFC 21.11 min.



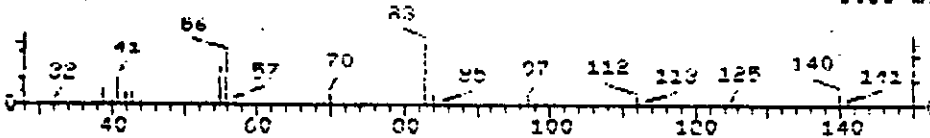
File NBS49K Cyclohexanone, 3,3,5-trimethyl- Scan 6379
 Bpk Ab 9999. 0.00 min.



File NBS49K Cyclohexane, (2-methylpropyl)- Scan 6423
 Bpk Ab 9999. 0.00 min.



File NBS49K 1,3-Cyclohexanedione, 5,5-dimethyl- Scan 6273
 Bpk Ab 9999. 0.00 min.



2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

000331

20949-09

Lab Name: ENSECO Contract:
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Matrix: (soil/water) SOIL Lab Sample ID: 20949-09
 Sample wt/vol: 4.0 (g/mL) G Lab File ID: J0793
 Level: (low/med) MED Date Received: 02/15/92
 % Moisture: not dec. 28 Date Analyzed: 02/27/92
 GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0
 Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	-----Chloromethane	1700	U
74-83-9	-----Bromomethane	1700	U
75-01-4	-----Vinyl Chloride	1700	U
75-00-3	-----Chloroethane	1700	U
75-09-2	-----Methylene Chloride	1700	U
67-64-1	-----Acetone	1700	U
75-15-0	-----Carbon Disulfide	1700	U
75-35-4	-----1,1-Dichloroethene	1700	U
75-34-3	-----1,1-Dichloroethane	1700	U
540-59-0	-----1,2-Dichloroethene (total)	1700	U
67-66-3	-----Chloroform	1700	U
107-06-2	-----1,2-Dichloroethane	1700	U
78-93-3	-----2-Butanone	1600	J
71-55-6	-----1,1,1-Trichloroethane	690	J
56-23-5	-----Carbon Tetrachloride	1700	U
75-27-4	-----Bromodichloromethane	1700	U
78-87-5	-----1,2-Dichloropropane	1700	U
10061-01-5	-----cis-1,3-Dichloropropene	1700	U
79-01-6	-----Trichloroethene	390	J
124-48-1	-----Dibromochloromethane	1700	U
79-00-5	-----1,1,2-Trichloroethane	1700	U
71-43-2	-----Benzene	1700	U
10061-02-6	-----trans-1,3-Dichloropropene	1700	U
75-25-2	-----Bromoform	1700	U
108-10-1	-----4-Methyl-2-Pentanone	1700	U
591-78-6	-----2-Hexanone	1700	U
127-18-4	-----Tetrachloroethene	35000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1700	U
108-88-3	-----Toluene	1700	U
108-90-7	-----Chlorobenzene	1700	U
100-41-4	-----Ethylbenzene	460	J
100-42-5	-----Styrene	1700	U
1330-20-7	-----Xylene (total)	640	J

Operator ID: CHEMIST1
 Output File: ^J0793::QF
 Data File: >J0793::D4
 Name: 20949-09,U,MS,
 Misc: CLP,20949,,20949-09,M,S, 100uL/5mL

Quant Rev: 7 Quant Time: 920227 15:48
 Injected at: 920227 15:19
 Dilution Factor: 1.00000
 Instrument ID: VDA#1_MW

ID File: IDEPAJ::ID
 Title: ID FILE CLP INST. J + THF
 Last Calibration: 911122 17:17

Last Qcal Time: 920227 10:11

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 BROMOCHLOROMETHANE	5.38	128.0	44612	50.00	UG/L	97
2)	CS15 1,2-DICHLOROETHANE-D4	6.33	65.0	46233	37.21	UG/L	85
15)	C110 2-BUTANONE	5.11	43.0	1337	9.39	UG/L	95
19)	*CI10 1,4-DIFLUOROBENZENE	7.20	114.0	146862	50.00	UG/L	100
20)	C115 1,1,1-TRICHLOROETHANE	5.80	97.0	5948	4.00	UG/L	97
23)	C150 TRICHLOROETHENE	7.52	130.0	2716	2.26	UG/L	98
31)	*CI20 CHLOROBENZENE-D5	12.37	117.0	132085	50.00	UG/L	74
32)	CS05 TOLUENE-D8	9.61	98.0	118361	43.09	UG/L	98
33)	CS10 BROMOFLUOROBENZENE	14.92	95.0	85873	41.69	UG/L	100
36)	C220 TETRACHLOROETHENE	10.90	164.0	259259	200.45	UG/L	96
39)	C240 ETHYLBENZENE	12.92	106.0	2450	2.67	UG/L	72
40)	UJNK M&P-XYLENES	12.92	106.0	2450	2.22	UG/L	92
41)	U029 O-XYLENE	13.73	106.0	1592	1.47	UG/L	97

* Compound is ISTD

000337

MS data file header from : >J0793::D4

Sample: 20949-09,U,MS, Operator: CHEMIST1 SUPER GRP. 2/27/92 15:19
 Misc : CLP,20949,,20949-09,M,S, 100uL/5mL
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: UDA#1_MW
 Method file: SAMMJ Tuning file: MTBFBJ No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

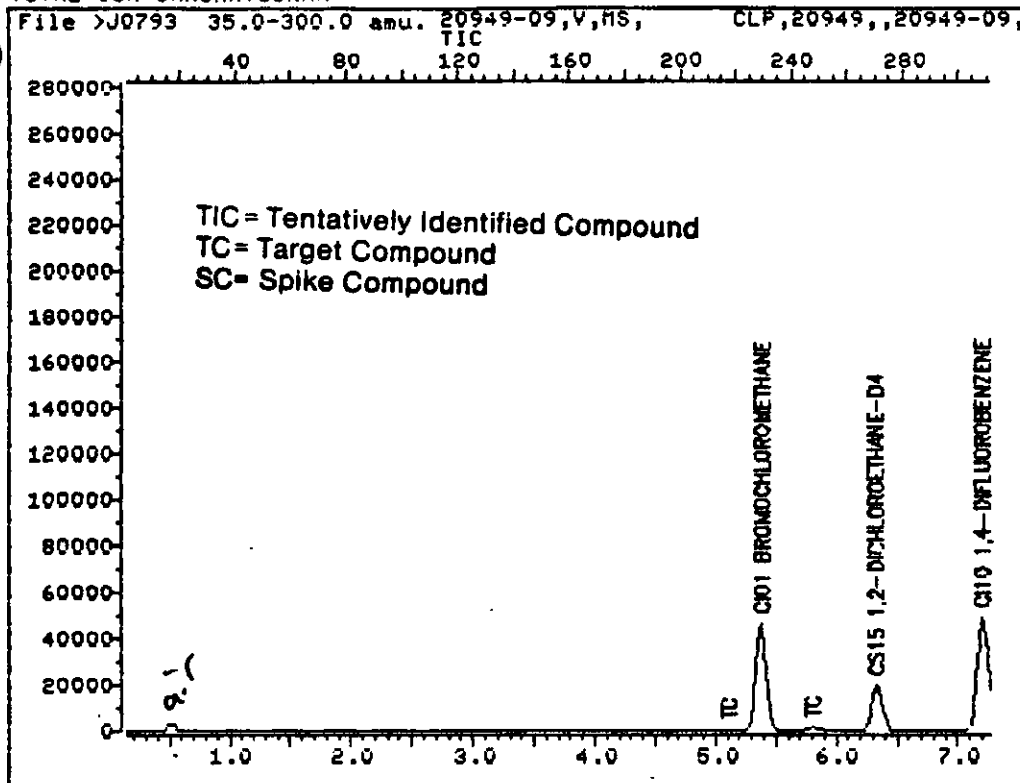
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG		desired reporting units
samp_amt	4G		amt of sample taken
ext_vol	5ML		final extract volume
q_units	UG/L		cal units from quant
ext_dil	100		dilution factor
%moist	NA	27.96%	%moisture for soil
int_ext_vol	10ML		intermediate extract vol/M.L. ext vo
int_ext_vol_u	.1ML	SMS	intermediate extract vol/M.L. vol US
spiked	S	3/5/92	Surrogate added at S tart)/E(nd)
matrix	S		sample matrix W(ater)/S(oil)
runfact	125		calcd runfactor
surfact	.500		calcd surr vol

Performance Check: >J0786 Injection Time: 2/27/92 9:35
 Sample : >J0793 Injection Time: 2/27/92 15:19
 Elapsed Time: 0 Y 0 D 5:44
 Sample: ^J0793 Calibration Stds.: ^J0787,

000338

TOTAL ION CHROMATOGRAM



Data File: >J0793::D4

Name: 20949-09,V,MS,

Misc: CLP,20949,,20949-09,M,S,

Quant Output File: ^J0793::QF

Instrument ID: VOA#1_MW

100uL/5mL

Id File: IDEPAJ::ID

Title: ID FILE CLP INST. J + THF

Last Calibration: 911122 17:17

Last Qual Time: 920227 10:11

Operator ID: CHEMIST1

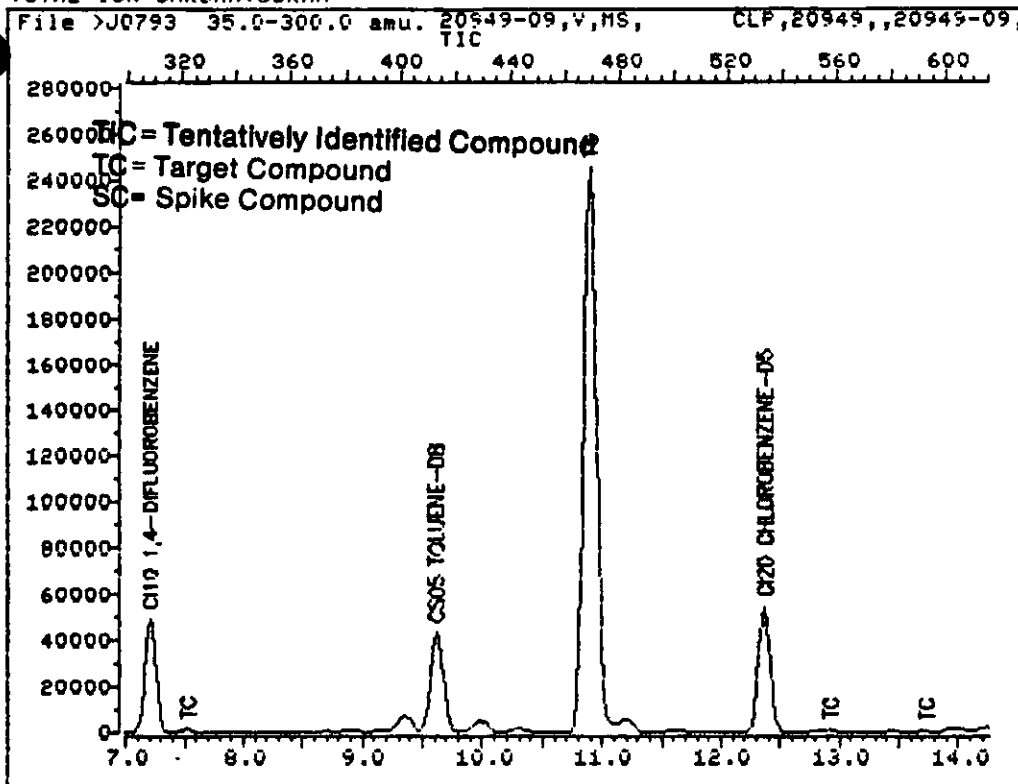
Quant Time : 920227 15:48

Injected at: 920227 15:19

Page 1 of 4

000339

TOTAL ION CHROMATOGRAM



Date File: >J0793::D4
Name: 20949-09,V,MS,
Misc: CLP,20949,,20949-09,M,S,

Quant Output File: ^J0793::QF
Instrument ID: VOA#1_MW
100uL/5mL

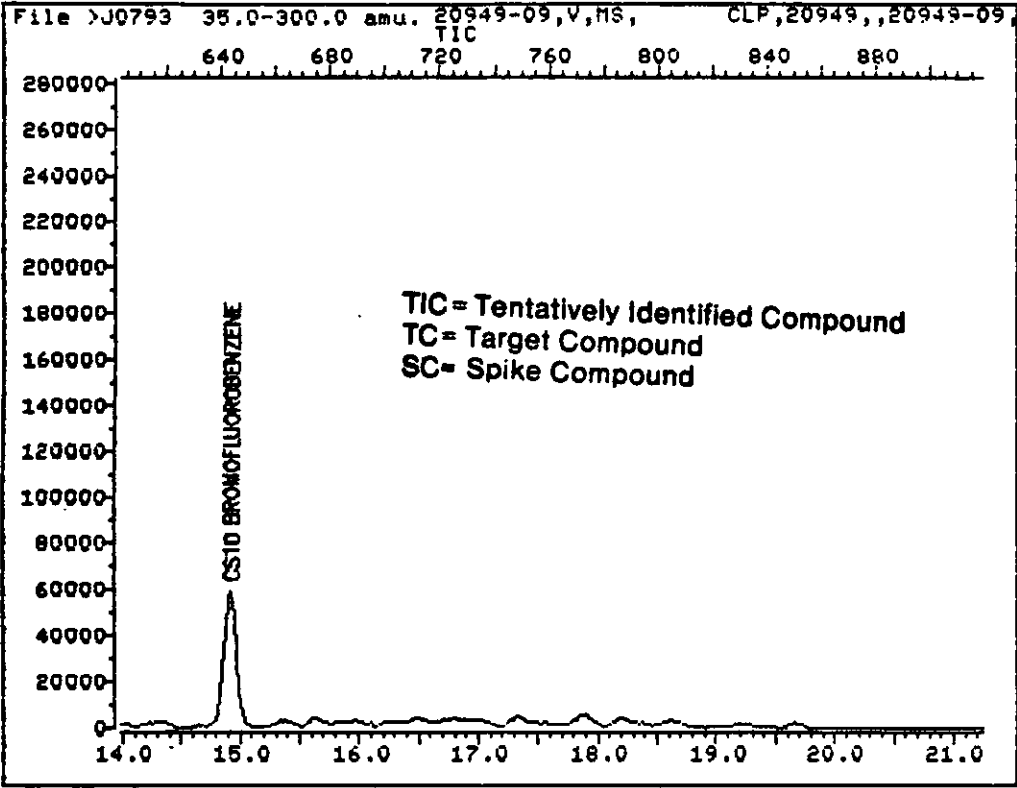
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17

Last Qcal Time: 920227 10:11

Operator ID: CHEMIST1
Quant Time : 920227 15:48
Injected at: 920227 15:19

000340

TOTAL ION CHROMATOGRAM

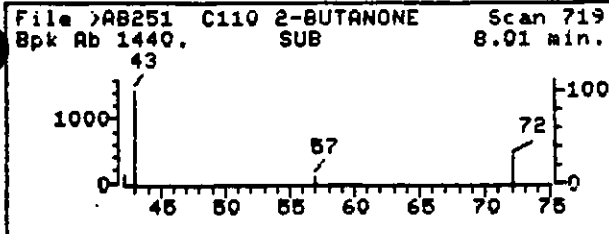


Data File: >J0793::D4 Quant Output File: ^J0793::QF
Name: 20949-09,V,MS, Instrument ID: VQA#1_MW
Misc: CLP,20949,,20949-09,M,S, 100uL/5mL

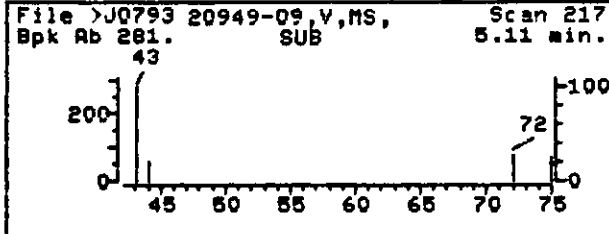
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17 Last Qcal Time: 920227 10:11

Operator ID: CHEMIST1
Quant Time : 920227 15:48
Injected at: 920227 15:19

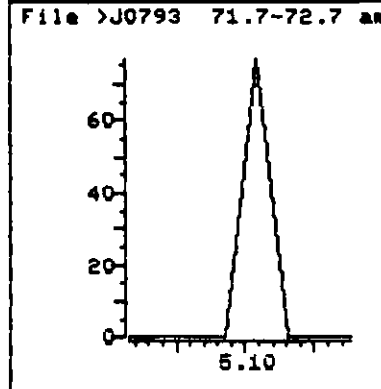
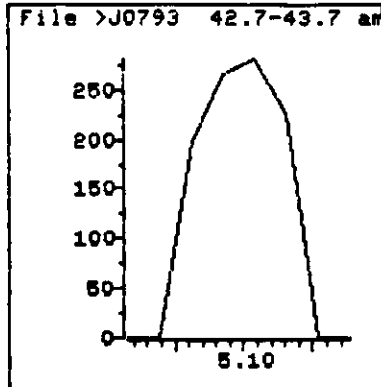
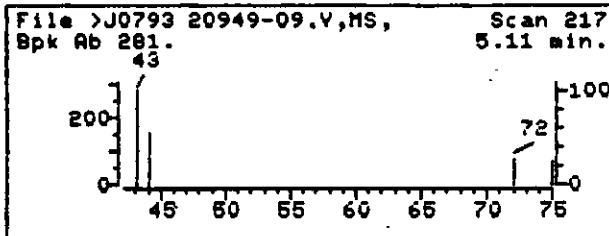
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



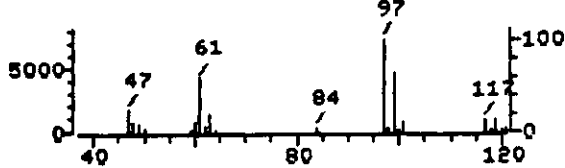
Data File: >J0793::D4
Name: 20949-09,U,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

Quant Output File: ^J0793::QF
Instrument ID: VOA#1_MW
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

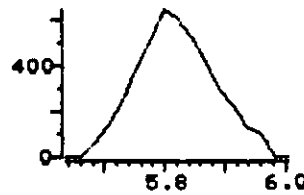
Compound No : 15
Compound Name : C110 2-BUTANONE
Scan Number : 217
Retention Time: 5.11 min.
Quant Ion : 43.8
Area : 1337
Concentration : 9.39 UG/L
q-value : 95

REFERENCE STANDARD SPECTRUM

File >AB251 C115 1,1,1-TRICH Scan 774
Bpk Ab 7354. SUB PT 8.58 min.

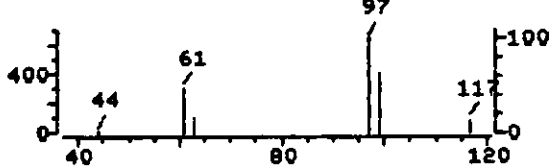


File >J0793 96.7-97.7 am

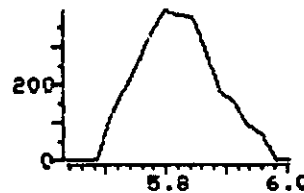


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0793 20949-09,V,MS, Scan 247
Bpk Ab 640. SUB 5.80 min.

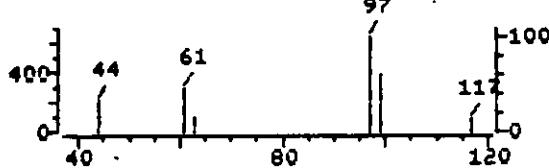


File >J0793 98.7-99.7 am

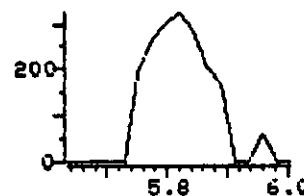


SAMPLE SPECTRUM (UNALTERED)

File >J0793 20949-09,V,MS, Scan 247
Bpk Ab 640. 5.80 min.



File >J0793 60.7-61.7 am

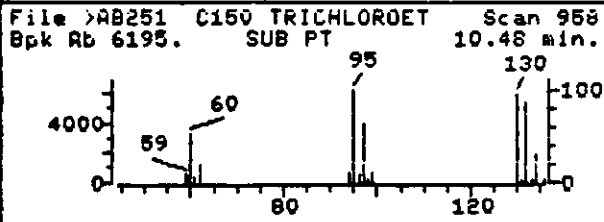


Data File: >J0793::D4
Name: 20949-09,U,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

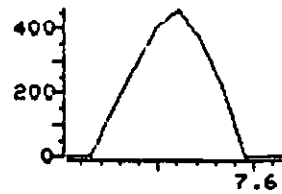
Quant Output File: ^J0793::QF
Instrument ID: UOA#1_MW
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 20
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 247
Retention Time : 5.80 min.
Quant Ion : 97.0
Area : 5948
Concentration : 4.00 UG/L
q-value : 97

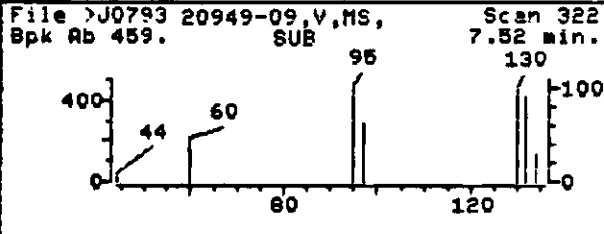
REFERENCE STANDARD SPECTRUM



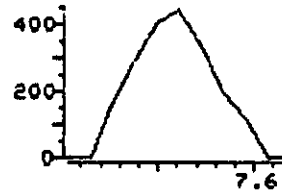
File >J0793 94.7-95.7 an



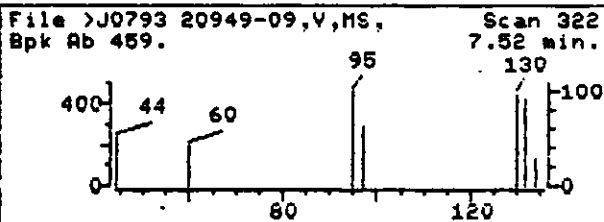
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



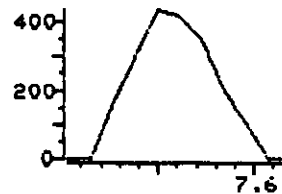
File >J0793 129.7-130.7



SAMPLE SPECTRUM (UNALTERED)



File >J0793 131.7-132.7



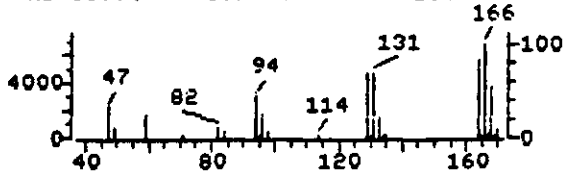
Data File: >J0793::D4
Name: 20949-09,U,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

Quant Output File: ^J0793::QF
Instrument ID: UOA#1_MW
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

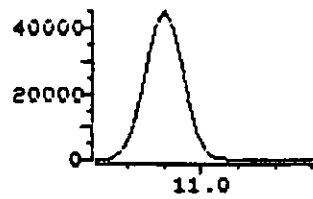
Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 322
Retention Time: 7.52 min
Quant Ion : 130.0
Area : 2716
Concentration : 2.26 UG/L
q-value : 98

REFERENCE STANDARD SPECTRUM

File >AB251 C220 TETRACHLORO Scan 1280
Bpk Ab 6899. SUB PT 13.82 min.

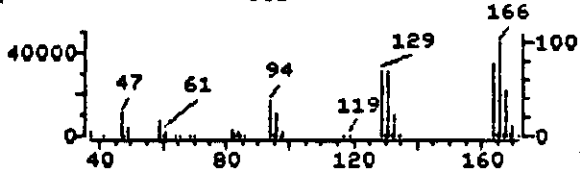


File >J0793 165.7-166.7

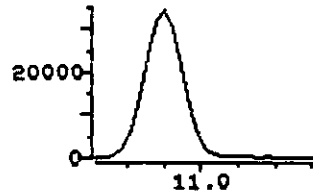


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0793 20949-09,V,MS, Scan 469
Bpk Ab 44928. SUB 10.90 min.

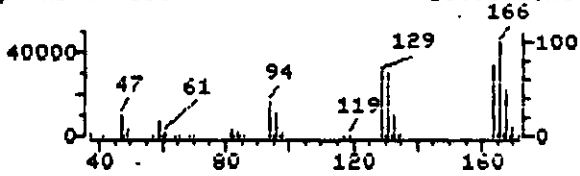


File >J0793 163.7-164.7

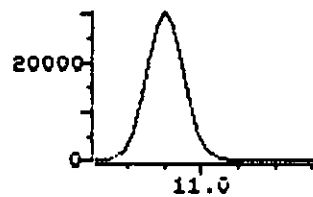


SAMPLE SPECTRUM (UNALTERED)

File >J0793 20949-09,V,MS, Scan 469
Bpk Ab 44928. SUB 10.90 min.



File >J0793 130.7-131.7

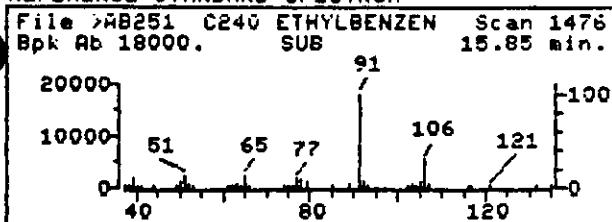


Data File: >J0793::D4
Name: 20949-09,V,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

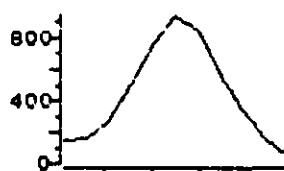
Quant Output File: ^J0793::QF
Instrument ID: UOA#1_MW
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 469
Retention Time: 10.90 min.
Quant Ion : 164.0
Area : 259259
Concentration : 200.45 UG/L
q-value : 96

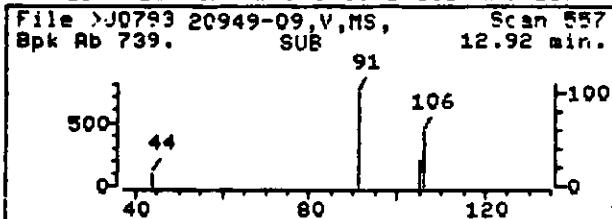
REFERENCE STANDARD SPECTRUM



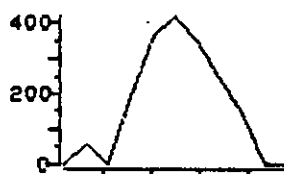
File >J0793 90.7-91.7 am



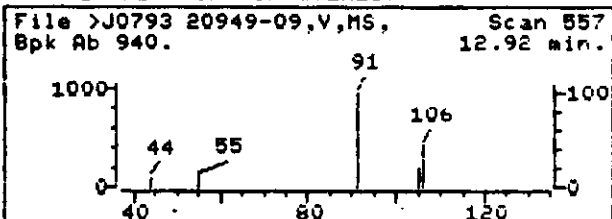
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >J0793 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)



Data File: >J0793::D4
Name: 20949-09,V,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

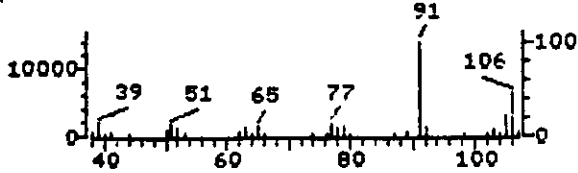
Quant Output File: ^J0793::QF
Instrument ID: VQA#1_MW
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 557
Retention Time: 12.92 min.
Quant Ion : 106.0
Area : 2450
Concentration : 2.67 UG/L
q-value : 72

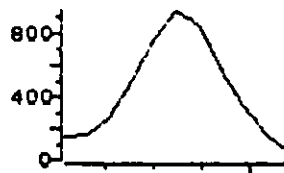
No
DRT

REFERENCE STANDARD SPECTRUM

File >AB251 C250 M&P-XYLENES Scan 1503
Bpk Ab 13977. SUB 16.13 min.

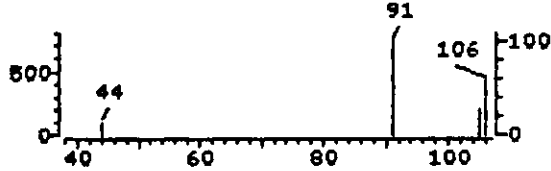


File >J0793 90.7-91.7 am

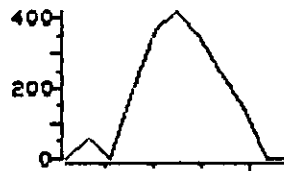


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0793 20949-09,V,MS, Scan 557
Bpk Ab 739. SUB 12.92 min.

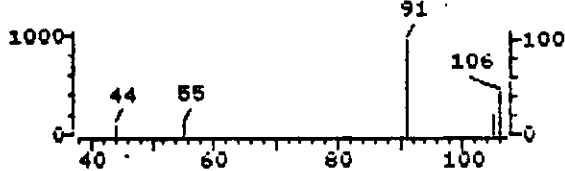


File >J0793 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)

File >J0793 20949-09,V,MS, Scan 557
Bpk Ab 940. SUB 12.92 min.

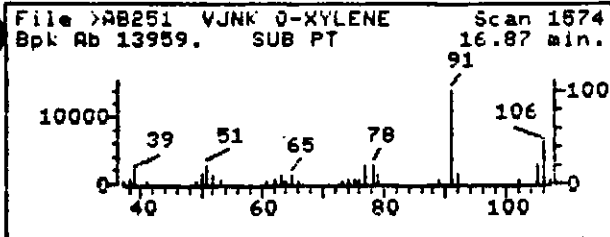


Data File: >J0793::D4
Name: 20949-09,U,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

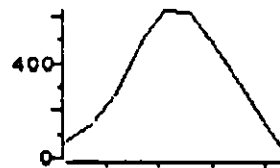
Quant Output File: ^J0793::QF
Instrument ID: VOA#1_MW
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 40
Compound Name : UJNK M&P-XYLENES
Scan Number : 557
Retention Time: 12.92 min.
Quant Ion : 106.0
Area : 2450
Concentration : 2.22 UG/L
q-value : 92

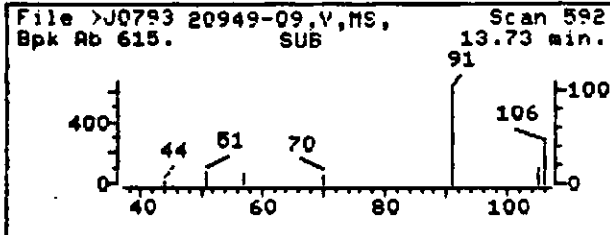
REFERENCE STANDARD SPECTRUM



File >J0793 90.7-91.7 am



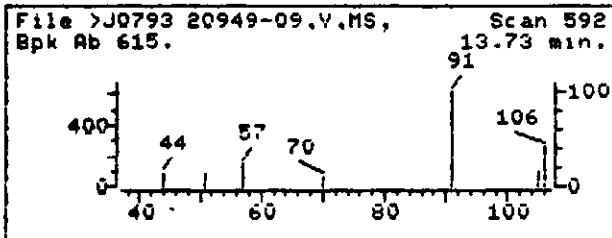
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >J0793 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)



Data File: >J0793::D4
Name: 20949-09,V,MS,
Misc: CLP,20949,,20949-09,M,S,
Quant Time: 920227 15:48
Injected at: 920227 15:19
Last Qcal Time: 920227 10:11

Quant Output File: ^J0793::QF
Instrument ID: U0A#1_Mw
100uL/5mL
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 41
Compound Name : U029 O-XYLENE
Scan Number : 592
Retention Time: 13.73 min.
Quant Ion : 106.0
Area : 1592
Concentration : 1.47 UG/L
q-value : 97

000348

Diagnostic Quant Report

Data File: >J0793::D4 Injected at: 15:19 02/27/92
 Quant'd : 15:48 02/27/92
 ID File : IDEPAJ::ID Calibrated : 17:17 11/22/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dit	Ion			
1) *C101 BROMOCHLOROMETHANE	5.34	5.38	.05	128.0	44612	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	6.36	6.33	.03	65.0	46233	1.3927	37.21
3) C010 CHLOROMETHANE	.84	0.00	--	50.0	0	.4054	0.00
4) C020 VINYL CHLORIDE	.89	0.00	--	62.0	0	.3852	0.00
5) C015 BROMOMETHANE	1.21	0.00	--	94.0	0	.5740	0.00
6) C025 CHLOROETHANE	1.37	0.00	--	64.0	0	.2062	0.00
7) C045 1,1-DICHLOROETHENE	2.32	0.00	--	96.0	0	.8217	0.00
8) C040 CARBON DISULFIDE	2.67	0.00	--	76.0	0	1.3987	0.00
9) C035 ACETONE	2.35	0.00	--	43.0	0	.1081	0.00
10) C030 METHYLENE CHLORIDE	3.04	0.00	--	84.0	0	1.2383	0.00
11) UJNK trans-1,2-DICHLOROET	3.39	0.00	--	96.0	0	.9435	0.00
12) C050 1,1-DICHLOROETHANE	4.09	0.00	--	63.0	0	1.6595	0.00
13) V011 cis-1,2-DICHLOROETHE	4.99	0.00	--	96.0	0	1.0446	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	.9941	0.00
15) C110 2-BUTANONE	4.94	5.11	.16	43.0	1337	.1596	9.39
16) V013 TETRAHYDROFURAN	5.57	0.00	--	42.0	0	.1854	0.00
17) C060 CHLOROFORM	5.27	0.00	--	83.0	0	2.2577	0.00
18) C065 1,2-DICHLOROETHANE	6.50	0.00	--	62.0	0	1.3520	0.00
19) *C110 1,4-DIFLUOROBENZENE	7.18	7.20	.02	114.0	146862	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	5.82	5.80	.02	97.0	5948	.5057	4.00
21) C120 CARBONTETRACHLORIDE	6.14	0.00	--	117.0	0	.5622	0.00
22) C165 BENZENE	6.39	0.00	--	78.0	0	.5920	0.00
23) C150 TRICHLOROETHENE	7.52	7.52	.00	130.0	2716	.4095	2.26
24) C140 1,2-DICHLOROPROPANE	7.82	0.00	--	63.0	0	.2358	0.00
25) C130 BROMODICHLOROMETHANE	8.17	0.00	--	83.0	0	.5733	0.00
26) C143 cis-1,3-DICHLOROPROP	9.32	0.00	--	75.0	0	.5282	0.00
27) C172 trans-1,3-DICHLOROPR	10.34	0.00	--	75.0	0	.3590	0.00
28) C160 1,1,2-TRICHLOROETHAN	10.50	0.00	--	97.0	0	.3599	0.00
29) C155 CHLORODIBROMOMETHANE	11.19	0.00	--	129.0	0	.7527	0.00
30) C180 BROMOFORM	14.14	0.00	--	173.0	0	.7075	0.00
31) *C120 CHLOROBENZENE-D5	12.37	12.37	.00	117.0	132085	1.0000	50.00
32) CS05 TOLUENE-D8	9.61	9.61	.00	98.0	118361	1.0398	43.09
33) CS10 BROMOFLUOROBENZENE	14.92	14.92	.00	95.0	85873	.7797	41.69
33)D CS10 BROMOFLUOROBENZENE	14.92	15.41	.48	95.0	2388	.7797	1.16
34) C230 TOLUENE	9.75	0.00	--	91.0	0	.9617	0.00
35) C205 4-METHYL-2-PENTANONE	9.20	0.00	--	43.0	0	.6543	0.00
36) C220 TETRACHLOROETHENE	10.90	10.90	.00	164.0	259259	.4896	200.45
37) C210 2-HEXANONE	10.86	0.00	--	43.0	0	.1373	0.00
38) C235 CHLOROBENZENE	12.44	0.00	--	112.0	0	.8129	0.00
39) C240 ETHYLBENZENE	12.74	12.92	.18	106.0	2450	.3479	2.67
40) UJNK M&P-XYLENES	12.92	12.92	.00	106.0	2450	.4182	2.22
41) V029 O-XYLENE	13.71	13.73	.02	106.0	1592	.4095	1.47
42) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	4042	.4139	3.70
43) C245 STYRENE	13.80	0.00	--	104.0	0	.7276	0.00
44) C225 1,1,2,2-TETRACHLOROE	14.95	0.00	--	83.0	0	.6520	0.00

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

TIC Internal Standard Report

Data File: >J0793

Maximum separation 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			
229.	44612.	7.294	229.	278655.	85.638
2 CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok			
308.	146862.	2.506	308.	319883.	86.912
3 CI20 CHLOROBENZENE-D	50.000 UG/L	Ok			
533.	132085.	3.094	533.	377991.	92.488

Deleting peaks from INT file: UDIR64

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 7

Number of peaks remaining: 7

Deleting target compounds from INT file: UDIR64

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 7

Number of peaks remaining: 0

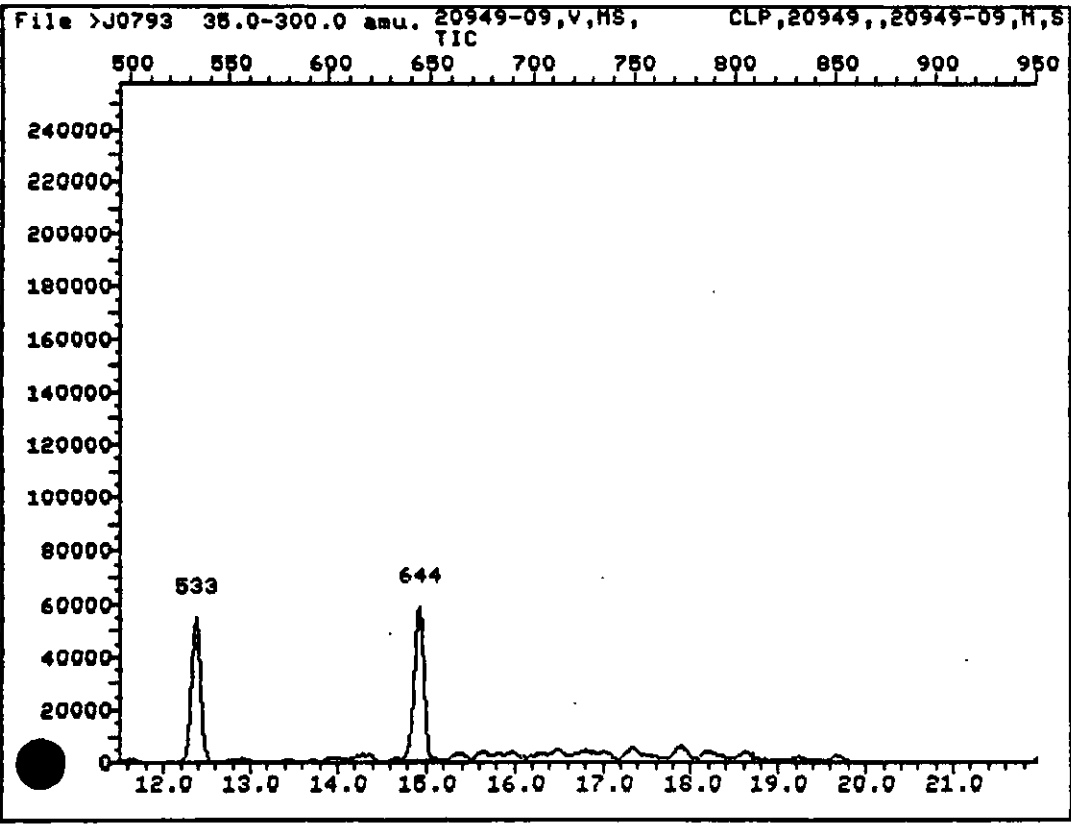
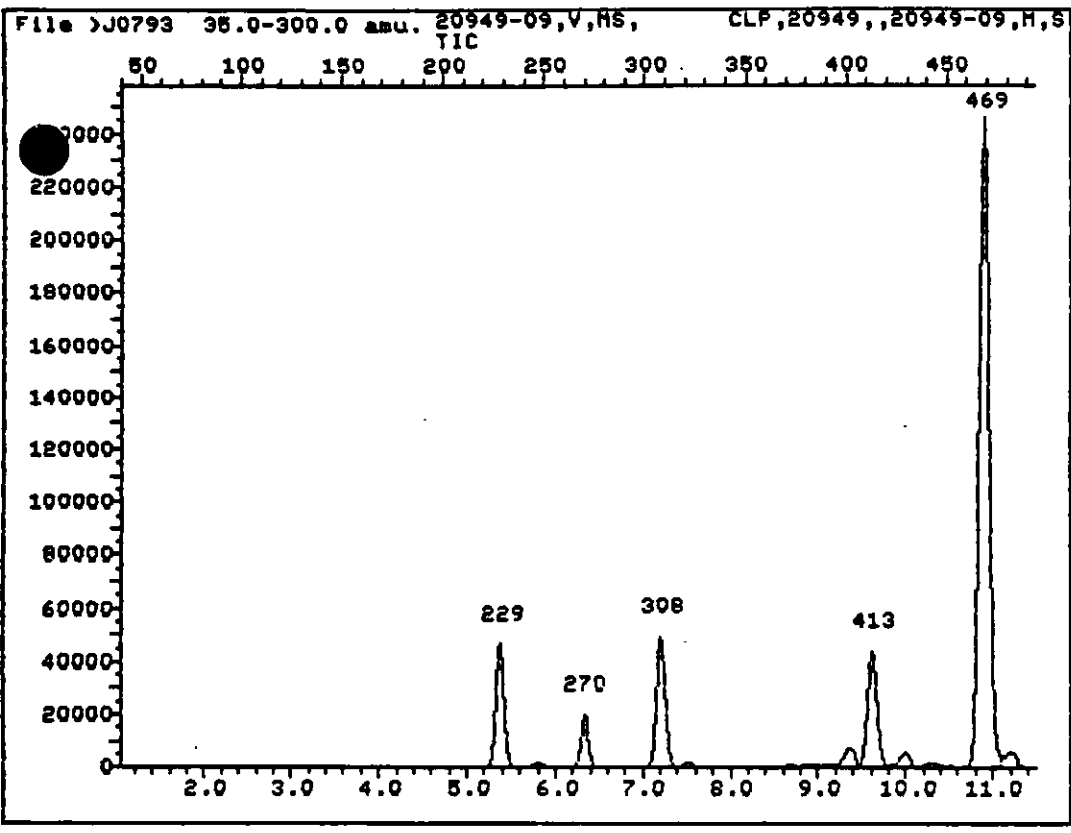
Deleting all but largest peaks from INT file: UDIR64

Maximum number of peaks to keep: 15

Number of peaks: 0

Maximum number of peaks > number of peaks.

000350



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO 00351

20949-10

Lab Name: ENSECO	Contract:
Lab Code: ENSECO	Case No.: 20949
Matrix: (soil/water) SOIL	SAS No.:
Sample wt/vol: 4.0 (g/mL) G	SDG No.:
Level: (low/med) MED	Lab Sample ID: 20949-10
% Moisture: not dec. 13	Lab File ID: J0763
GC Column: CAP	ID: 0.530 (mm)
Soil Extract Volume: 10000 (uL)	Date Received: 02/15/92
	Date Analyzed: 02/25/92
	Dilution Factor: 2.0
	Soil Aliquot Volume: 100 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	-----Chloromethane	2900	U
74-83-9	-----Bromomethane	2900	U
75-01-4	-----Vinyl Chloride	2900	U
75-00-3	-----Chloroethane	2900	U
75-09-2	-----Methylene Chloride	290	BJ
67-64-1	-----Acetone	2900	U
75-15-0	-----Carbon Disulfide	2900	U
75-35-4	-----1,1-Dichloroethene	2900	U
75-34-3	-----1,1-Dichloroethane	2900	U
540-59-0	-----1,2-Dichloroethene (total)	2900	U
67-66-3	-----Chloroform	2900	U
107-06-2	-----1,2-Dichloroethane	2900	U
78-93-3	-----2-Butanone	2900	U
71-55-6	-----1,1,1-Trichloroethane	2900	U
56-23-5	-----Carbon Tetrachloride	2900	U
75-27-4	-----Bromodichloromethane	2900	U
78-87-5	-----1,2-Dichloropropane	2900	U
10061-01-5	-----cis-1,3-Dichloropropene	2900	U
79-01-6	-----Trichloroethene	2900	U
124-48-1	-----Dibromochloromethane	2900	U
79-00-5	-----1,1,2-Trichloroethane	2900	U
71-43-2	-----Benzene	2900	U
10061-02-6	-----trans-1,3-Dichloropropene	2900	U
75-25-2	-----Bromoform	2900	U
108-10-1	-----4-Methyl-2-Pentanone	2900	U
591-78-6	-----2-Hexanone	2900	U
127-18-4	-----Tetrachloroethene	21000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	2900	U
108-88-3	-----Toluene	2900	U
108-90-7	-----Chlorobenzene	2900	U
100-41-4	-----Ethylbenzene	2900	U
100-42-5	-----Styrene	2900	U
1330-20-7	-----Xylene (total)	840	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-10

000352

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-10

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: J0763

Level: (low/med) MED

Date Received: 02/15/92

% Moisture: not dec. 13

Date Analyzed: 02/25/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 2.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	20.59	2500	JN

000353

QUANT REPORT

Page 1

Operator ID: CHEMIST1
 Output File: ^J0763::QT
 Data File: >J0763::D4
 Name: 20949-10,U,EPA,
 Misc: CLP,20949,,20949-10,M,S,

Quant Rev: 7 Quant Time: 920228 12:01
 Injected at: 920225 22:25
 Dilution Factor: 1.00000
 Instrument ID: VDA#1_MW
 50 UL/5ML ANALYST TB

ID File: IDEPAJ::ID
 Title: ID FILE CLP INST. J + THF
 Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Compound	R.T.	Q	ion	Area	Conc	Units	q
1) *C101 BROMOCHLOROMETHANE	5.36	128.0		75418	50.00	UG/L	96
2) CS15 1,2-DICHLOROETHANE-D4	6.33	65.0		49452	24.28	UG/L	78
9) C035 ACETONE	2.19	43.0		1834	7.36	UG/L	100
10) C030 METHYLENE CHLORIDE	3.11	84.0		2050	1.01	UG/L	64
19) *C110 1,4-DIFLUOROBENZENE	7.20	114.0		256901	50.00	UG/L	100
31) *C120 CHLOROBENZENE-D5	12.37	117.0		227733	50.00	UG/L	77
32) CS05 TOLUENE-D8	9.64	98.0		113264	26.08	UG/L	96
33) CS10 BROMOFLUOROBENZENE	14.95	95.0		80807	21.52	UG/L	100
36) C220 TETRACHLOROETHENE	10.90	164.0		167247	73.58	UG/L	95
41) U029 O-XYLENE	13.73	106.0		6147	2.94	UG/L	99

* Compound is ISTD

000354

MS data file header from : >J0763::D4

Sample: 20949-10,U,EPA, Operator: CHEMIST1 SUPER GRP. 2/25/92 22:25
 Misc : CLP,20949,,20949-10,M,S, 50 UL/5ML ANALYST TB
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: VOA#1_MW
 Method file: SAMMJ Tuning file: MTBFBJ No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

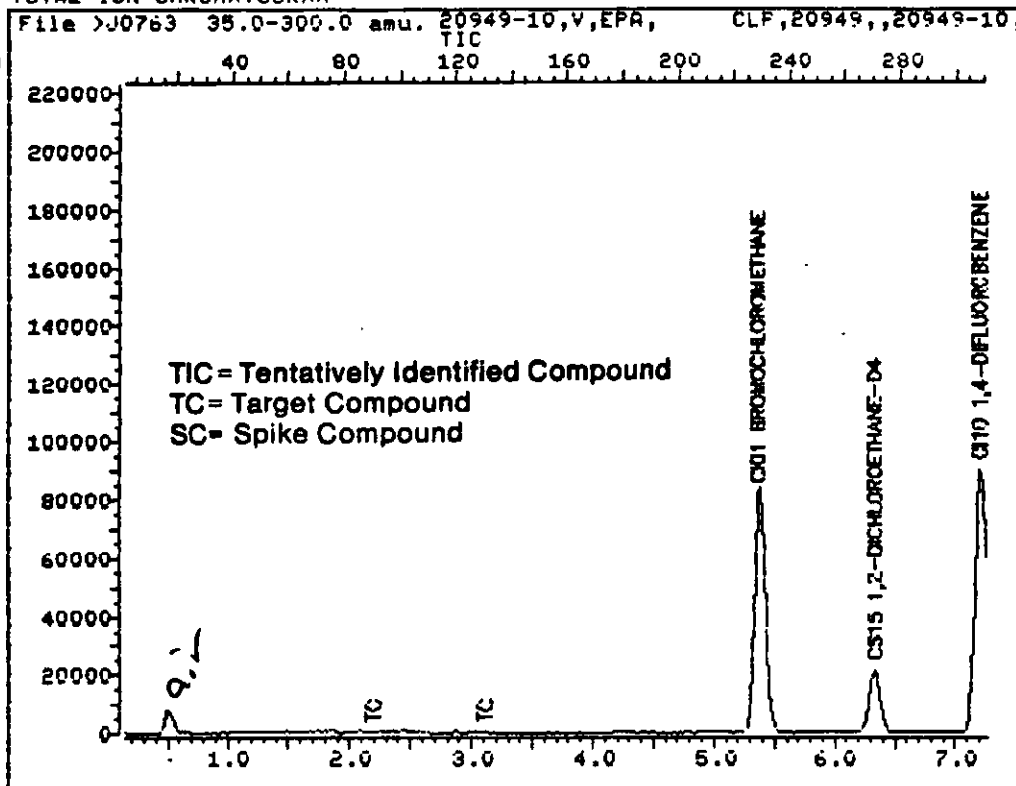
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG		ldesired reporting units
samp_amt	4G		lamt of sample taken
ext_vol	5ML		lfinal extract volume
q_units	UG/L		lcal units from quant
ext_dil	100		ldilution factor
%moist	NA	13.42%	l%moisture for soil
int_ext_vol	10		lintermediate extr ct vol/M.L. ext vo
int_ext_vol_u	0.05	SMS 3/5/92	lintermediate extract vol/M.L. vol US
spiked	S		lSurrogate added at S(start)/E(nd)
matrix	S		lsample matrix W(ater)/S(oil)
runfact	250		l calcd runfactor
surfact	1.00		l calcd surr vol

Performance Check: >J0750 Injection Time: 2/25/92 11:35
 Sample : >J0763 Injection Time: 2/25/92 22:25
 Elapsed Time: 0 Y 0 D 10:50
 Sample: ^J0763 Calibration Stds.: ^J0751,
 Invalid Response Factor for: C250 XYLENE (TOTAL)

000355

TOTAL ION CHROMATOGRAM



Data File: >J0763::D4
Name: 20949-10,U,EPA,
Misc: CLP,20949,,20949-10,M,S,

Quant Output File: ^J0763::QT
Instrument ID: UOA#1_MW
50 UL/5ML ANALYST TB

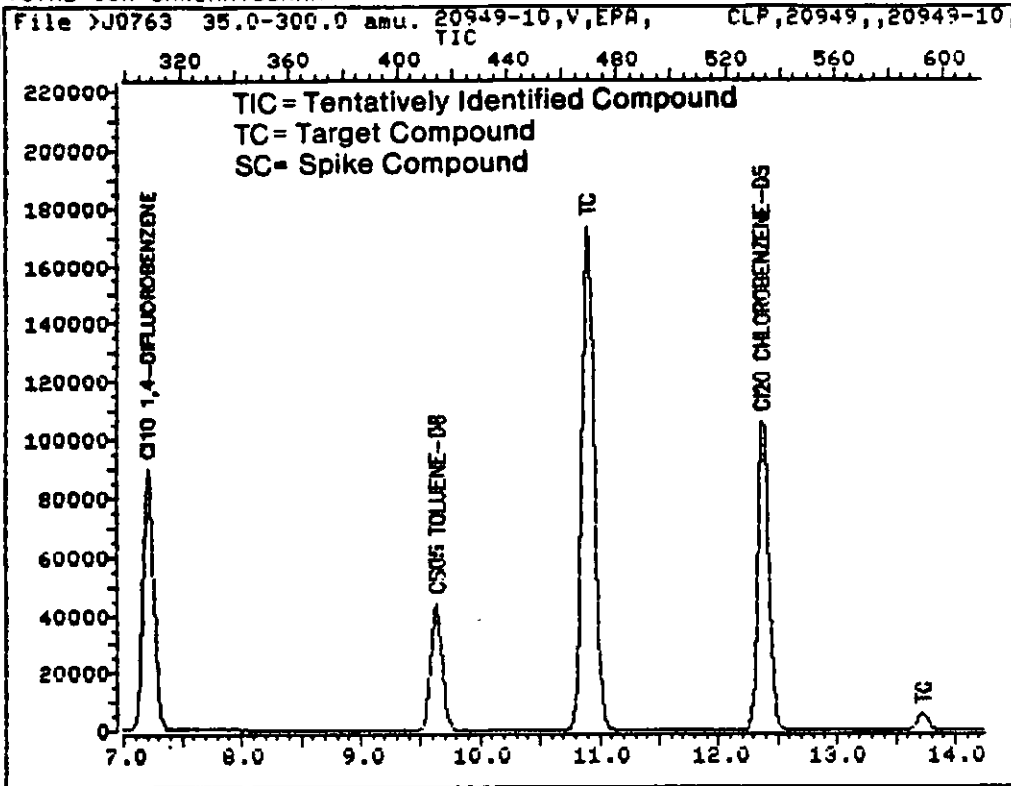
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1
Quant Time : 920228 12:01
Injected at: 920225 22:25

000356

TOTAL ION CHROMATOGRAM



Data File: >J0763::D4
Name: 20949-10,V,EPA,
Misc: CLP,20949,,20949-10,M,S,

Quant Output File: ^J0763::QT
Instrument ID: UOA#1_MW
50 UL/5ML ANALYST TB

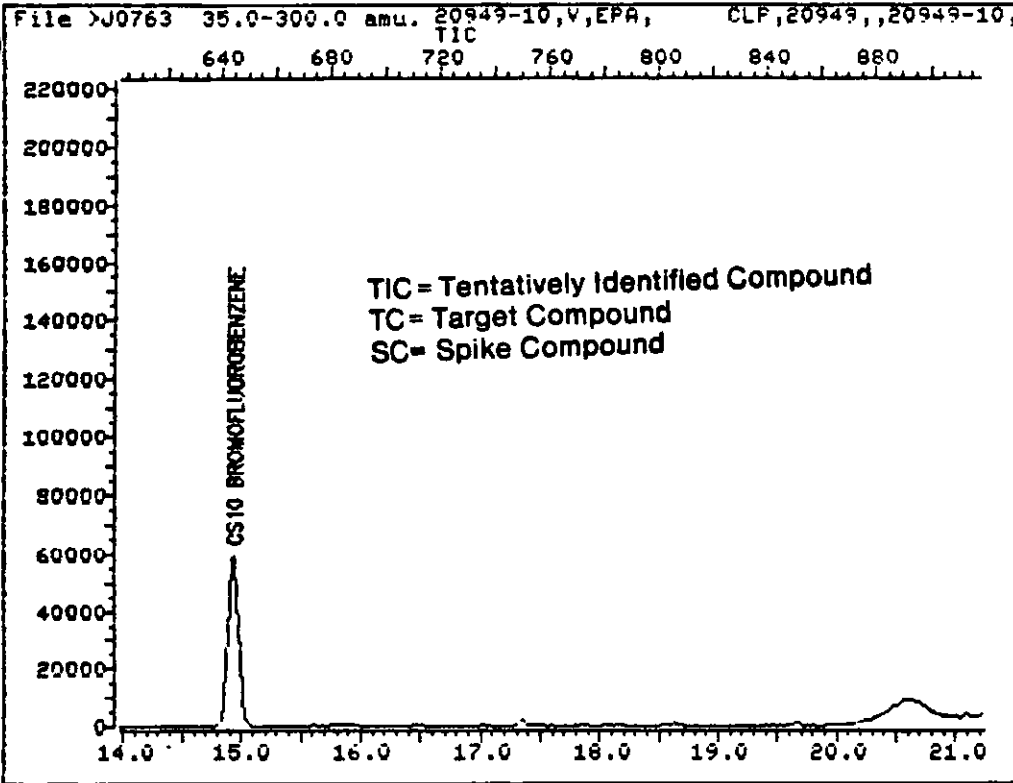
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1
Quant Time : 920228 12:01
Injected at: 920225 22:25

000357

TOTAL ION CHROMATOGRAM



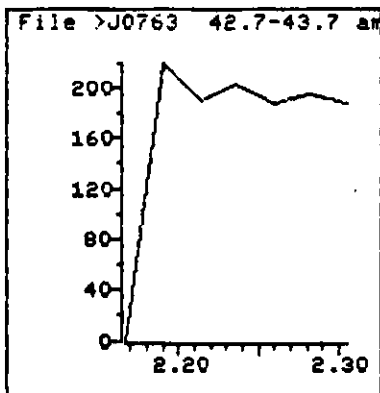
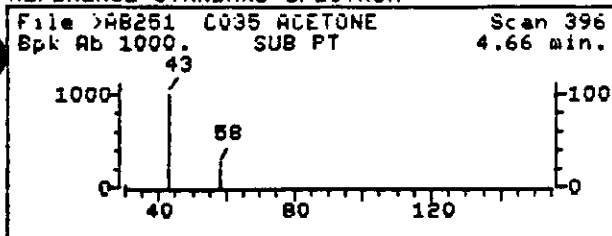
Data File: >J0763::D4 Quant Output File: ^J0763::QT
Name: 20949-10,U,EPA, Instrument ID: VOA#1_MW
Misc: CLP,20949,,20949-10,M,S, 50 UL/5ML ANALYST TB

Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17 Last Qcal Time: 920225 12:00

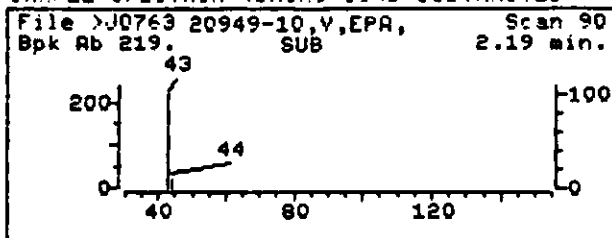
Operator ID: CHEMIST1
Quant Time : 920228 12:01
Injected at: 920225 22:25

000358

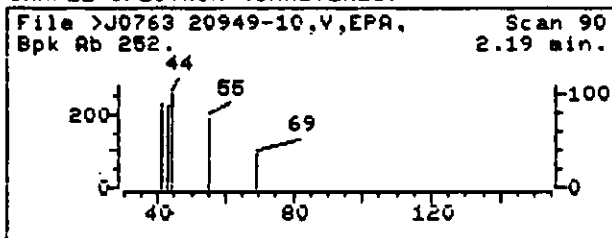
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



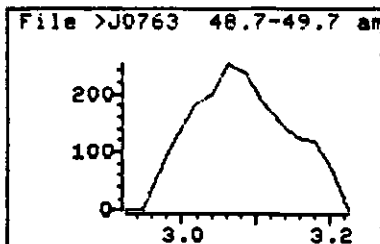
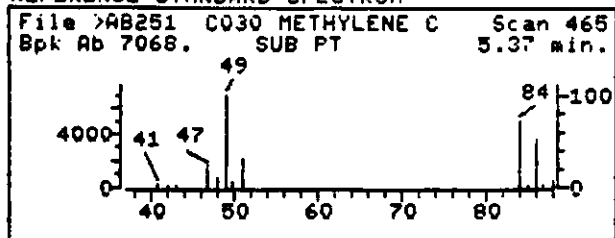
Data File: >J0763::D4
Name: 20949-10,U,EPA,
Misc: CLP,20949,,20949-10,M,S,
Quant Time: 920228 12:01
Injected at: 920225 22:25
Last Qcal Time: 920225 12:00

Quant Output File: ^J0763::QT
Instrument ID: UDA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

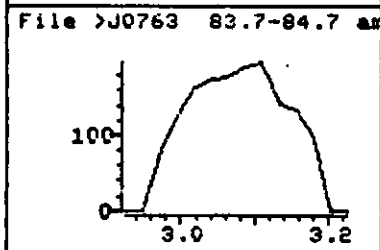
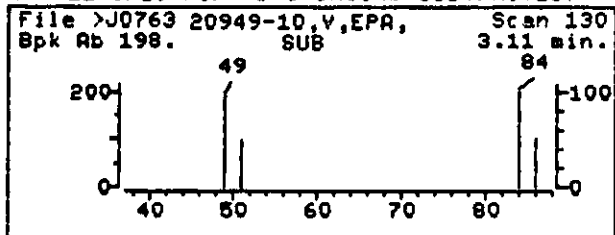
Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 90
Retention Time: 2.19 min.
Quant Ion : 43.0
Area : 1634
Concentration : 7.36 UG/L
q-value : 100

No

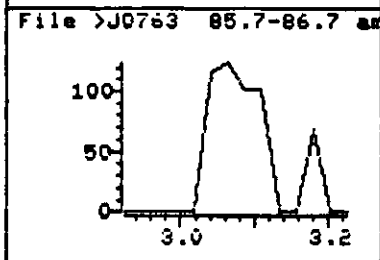
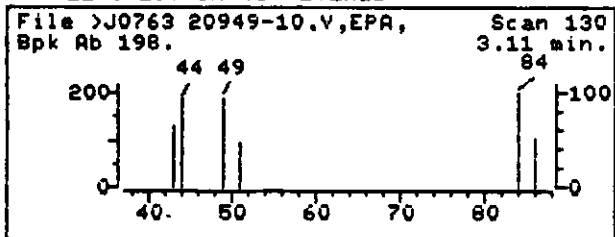
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

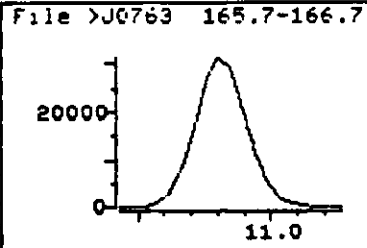
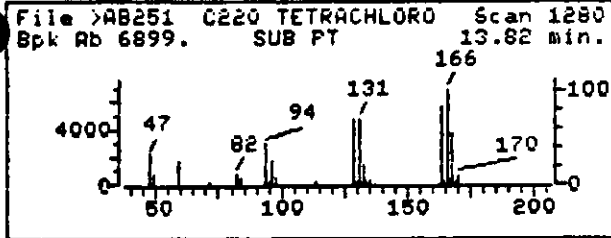


Data File: >J0763::D4
Name: 20949-10,U,EPA,
Misc: CLP,20949,,20949-10,M,S,
Quant Time: 920228 12:01
Injected at: 920225 22:25
Last Qcal Time: 920225 12:00

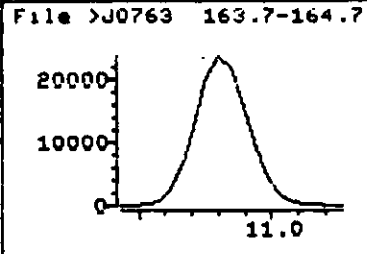
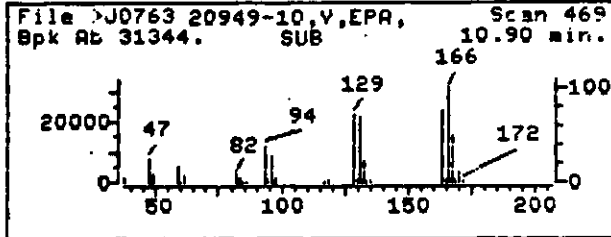
Quant Output File: ^J0763::QT
Instrument ID: UOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 130
Retention Time: 3.11 min.
Quant Ion : 84.0
Area : 2050
Concentration : 1.01 UG/L
q-value : 64

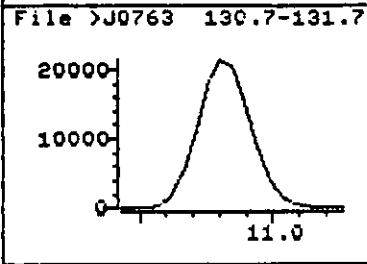
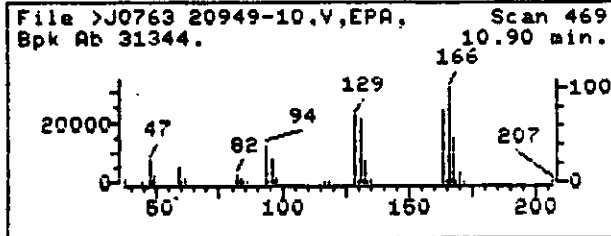
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

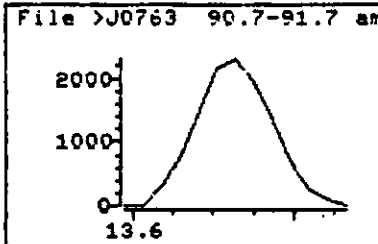
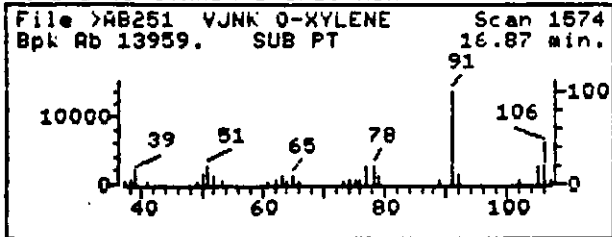


Data File: >J0763::D4
Name: 20949-10,U,EPA,
Misc: CLP,20949,,20949-10,M,S,
Quant Time: 920228 12:01
Injected at: 920225 22:25
Last Qcal Time: 920225 12:00

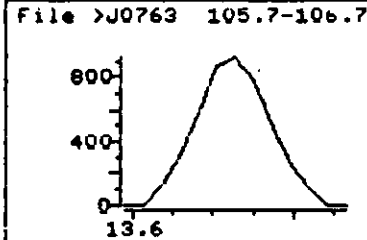
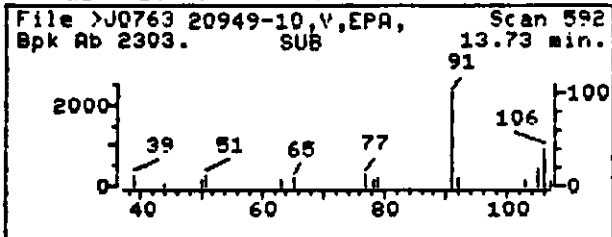
Quant Output File: ^J0763::QT
Instrument ID: UOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 469
Retention Time: 10.90 min
Quant Ion : 164.0
Area : 167247
Concentration : 73.58 UG/L
q-value : 95

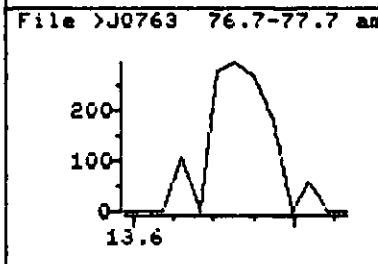
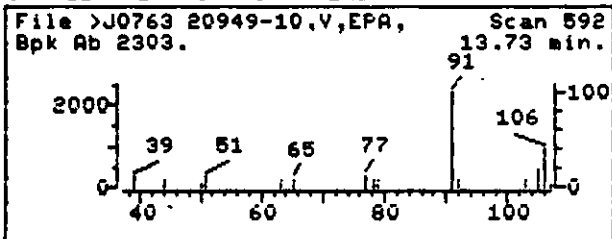
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >J0763::D4
Name: 20949-10,V,EPA,
Misc: CLP,20949,,20949-10,M,S,
Quant Time: 920228 12:01
Injected at: 920225 22:25
Last Qcal Time: 920225 12:00

Quant Output File: ^J0763::QT
Instrument ID: VOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 41
Compound Name : 0029 O-XYLENE
Scan Number : 592
Retention Time: 13.73 min.
Quant Ion : 106.0
Area : 6147
Concentration : 2.94 UG/L
q-value : 99

000362

Diagnostic Quant Report

Data File: >J0763::D4 Injected at: 22:25 02/25/92

Quant'd : 12:01 02/28/92

ID File : IDEPAJ::ID Calibrated : 17:17 11/22/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *CI01 BROMOCHLOROMETHANE	5.32	5.36	.04	128.0	75418	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	6.34	6.33	.01	65.0	49452	1.3502	24.28
3) C010 CHLOROMETHANE	.82	0.00	--	50.0	0	.6004	0.00
4) C020 VINYL CHLORIDE	.89	0.00	--	62.0	0	.6109	0.00
5) C015 BROMOMETHANE	1.19	0.00	--	94.0	0	.8349	0.00
6) C025 CHLOROETHANE	1.33	0.00	--	64.0	0	.3966	0.00
7) C045 1,1-DICHLOROETHENE	2.33	0.00	--	96.0	0	1.0332	0.00
8) C040 CARBON DISULFIDE	2.65	0.00	--	76.0	0	1.7087	0.00
9) D C035 ACETONE	2.30	2.10	.20	43.0	1345	.1472	6.06
9) C035 ACETONE	2.30	2.19	.11	43.0	1634	.1472	7.36
10) C030 METHYLENE CHLORIDE	3.05	3.11	.06	84.0	2050	1.3520	1.01
11) UJNK trans-1,2-DICHLOROET	3.39	0.00	--	96.0	0	1.1104	0.00
12) C050 1,1-DICHLOROETHANE	4.07	0.00	--	63.0	0	1.9999	0.00
13) U011 cis-1,2-DICHLOROETHE	4.99	0.00	--	96.0	0	1.2112	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.1608	0.00
15) C110 2-BUTANONE	4.92	0.00	--	43.0	0	.2074	0.00
16) U013 TETRAHYDROFURAN	5.55	0.00	--	42.0	0	.2314	0.00
17) C060 CHLOROFORM	5.25	0.00	--	83.0	0	2.4365	0.00
18) C065 1,2-DICHLOROETHANE	6.50	0.00	--	62.0	0	1.3962	0.00
19) *CI10 1,4-DIFLUOROBENZENE	7.18	7.20	.02	114.0	256901	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	5.80	0.00	--	97.0	0	.5170	0.00
21) C120 CARBONTETRACHLORIDE	6.14	0.00	--	117.0	0	.5288	0.00
22) C165 BENZENE	6.40	0.00	--	78.0	0	.7177	0.00
23) C150 TRICHLOROETHENE	7.50	0.00	--	130.0	0	.4299	0.00
24) C140 1,2-DICHLOROPROPANE	7.83	0.00	--	63.0	0	.3022	0.00
25) C130 BROMODICHLOROMETHANE	8.17	0.00	--	83.0	0	.6096	0.00
26) C143 cis-1,3-DICHLOROPROP	9.32	0.00	--	75.0	0	.4865	0.00
27) C172 trans-1,3-DICHLOROPR	10.32	0.00	--	75.0	0	.3668	0.00
28) C160 1,1,2-TRICHLOROETHAN	10.50	0.00	--	97.0	0	.3506	0.00
29) C155 CHLORODIBROMOMETHANE	11.19	0.00	--	129.0	0	.6889	0.00
30) C180 BROMOFORM	14.14	0.00	--	173.0	0	.6234	0.00
31) *CI20 CHLOROBENZENE-D5	12.36	12.37	.01	117.0	227733	1.0000	50.00
32) CS05 TOLUENE-D8	9.61	9.64	.03	98.0	113264	.9534	26.08
33) CS10 BROMOFLUOROBENZENE	14.95	14.95	.01	95.0	80807	.8246	21.52
34) C230 TOLUENE	9.75	0.00	--	91.0	0	.9628	0.00
35) C205 4-METHYL-2-PENTANONE	9.24	0.00	--	43.0	0	.4789	0.00
36) C220 TETRACHLOROETHENE	10.90	10.90	.00	164.0	167247	.4990	73.58
37) C210 2-HEXANONE	10.88	0.00	--	43.0	0	.1401	0.00
38) C235 CHLOROBENZENE	12.44	0.00	--	112.0	0	.8886	0.00
39) C240 ETHYLBENZENE	12.76	0.00	--	106.0	0	.4035	0.00
40) UJNK M&P-XYLENES	12.95	0.00	--	106.0	0	.4627	0.00
41) U029 O-XYLENE	13.73	13.73	.00	106.0	6147	.4594	2.94
42) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	6147	.4611	2.93
43) C245 STYRENE	13.82	0.00	--	104.0	0	.8177	0.00
44) C225 1,1,2,2-TETRACHLORUE	14.97	0.00	--	83.0	0	.7483	0.00

* - Compound is an Internal Standard
D - Compound Deleted

000363

TIC Internal Standard Report

Data File: >J0763

Maximum separation 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			
228.	75418.	7.294	229.	508665.	92.472
2 CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok			
308.	256901.	2.506	308.	600640.	93.293
3 CI20 CHLOROBENZENE-D	50.000 UG/L	Ok			
533.	227733.	3.094	533.	695313.	98.676

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 8

Number of peaks remaining: 8

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 8

Number of peaks remaining: 1

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15

Number of peaks: 1

Maximum number of peaks > number of peaks.

000365

Data Reduced by : SMS Date: 2/28/92
Data Reviewed by : A Date: 3/10/92

Data File: >J0763

Enseco TIC Report (page 1)

Sample: 20949-10,U,EPA,
Conditions: CLP,20949,,20949-10,M,S, 50

Run Factor: ²⁸⁷
~~250~~
Analyst: CHEMIST1 3102U

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	891.			<u>2280.03102U</u> <u>2500.</u>	00-00-0	Unknown

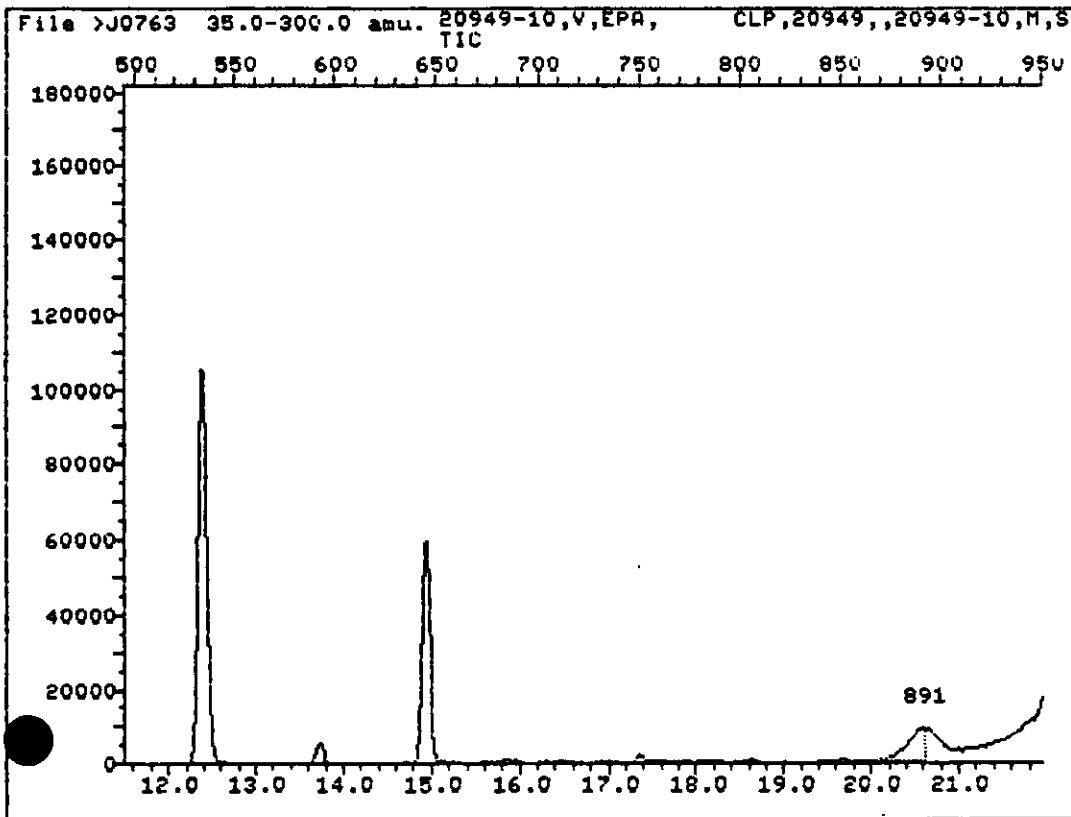
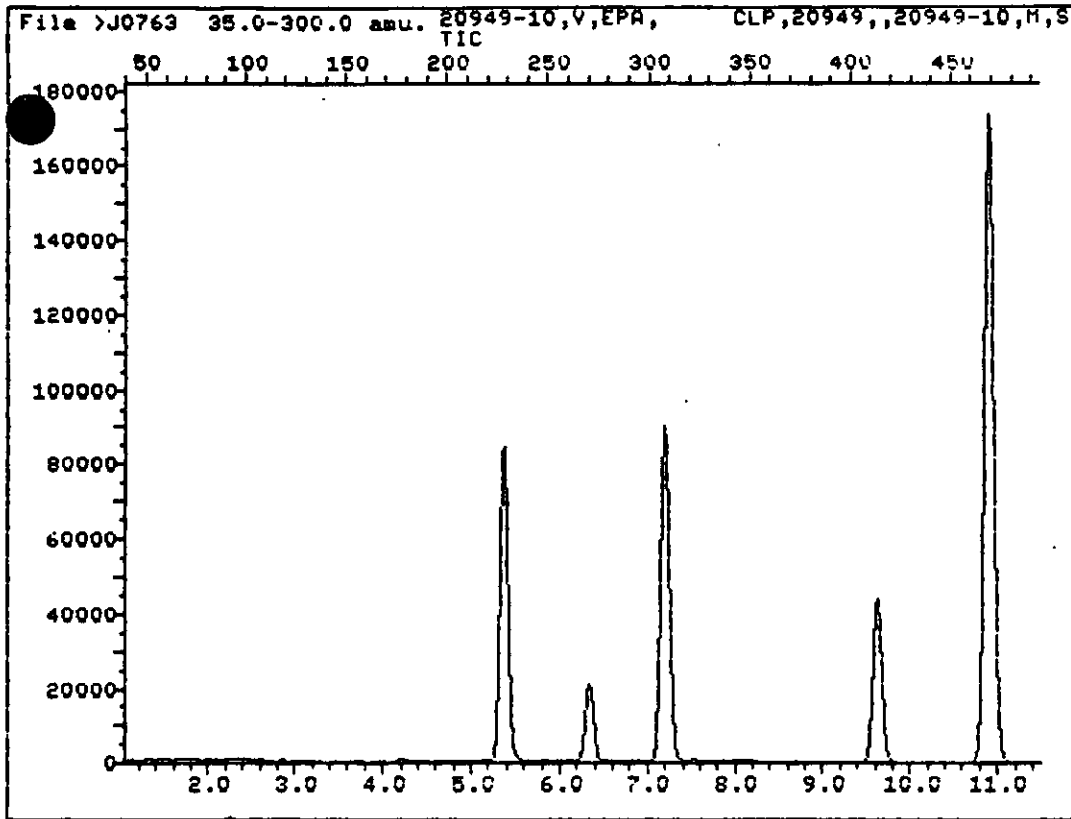
Data File: >J0763

Enseco TIC Report (page 2)

$$\text{Concentration} = \text{Area(TIC)} * \text{Conc. (IS)} / \text{Area (IS)}$$

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1			3	20.60	1.665	121558.	8833.	8.741

000367



000368

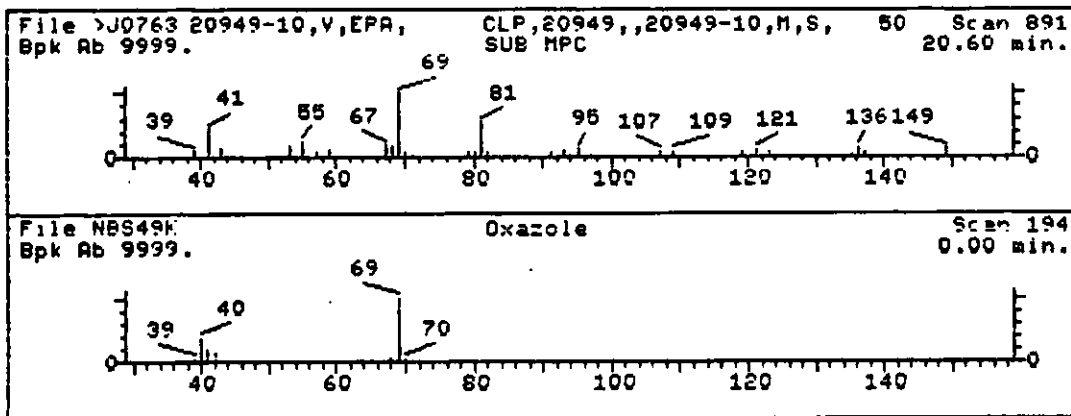
TIC NUMBER:1
1. Oxazole

69 C3H3NO

Sample file: >J0763 Spectrum #: 891
Search speed: 2 Tilting option: S No. of ion ranges searched: 59

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	27*	288426	3733	NBS49K	21	24	2	0	100	40	10	13

unknown



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000369

20949-11

Lab Name: ENSECO Contract: _____

Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 20949-11

Sample wt/vol: 4.0 (g/mL) G Lab File ID: J0764

Level: (low/med) MED Date Received: 02/15/92

% Moisture: not dec. 12 Date Analyzed: 02/25/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 2.0

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	2800	U
74-83-9	Bromomethane	2800	U
75-01-4	Vinyl Chloride	2800	U
75-00-3	Chloroethane	2800	U
75-09-2	Methylene Chloride	300	BJ
67-64-1	Acetone	2800	U
75-15-0	Carbon Disulfide	2800	U
75-35-4	1,1-Dichloroethene	2800	U
75-34-3	1,1-Dichloroethane	2800	U
540-59-0	1,2-Dichloroethene (total)	2800	U
67-66-3	Chloroform	2800	U
107-06-2	1,2-Dichloroethane	2800	U
78-93-3	2-Butanone	2800	U
71-55-6	1,1,1-Trichloroethane	2800	U
56-23-5	Carbon Tetrachloride	2800	U
75-27-4	Bromodichloromethane	2800	U
78-87-5	1,2-Dichloropropane	2800	U
10061-01-5	cis-1,3-Dichloropropene	2800	U
79-01-6	Trichloroethene	2800	U
124-48-1	Dibromochloromethane	2800	U
79-00-5	1,1,2-Trichloroethane	2800	U
71-43-2	Benzene	2800	U
10061-02-6	trans-1,3-Dichloropropene	2800	U
75-25-2	Bromoform	2800	U
108-10-1	4-Methyl-2-Pentanone	2800	U
591-78-6	2-Hexanone	2800	U
127-18-4	Tetrachloroethene	20000	U
79-34-5	1,1,2,2-Tetrachloroethane	2800	U
108-88-3	Toluene	2800	U
108-90-7	Chlorobenzene	2800	U
100-41-4	Ethylbenzene	2800	U
100-42-5	Styrene	2800	U
1330-20-7	Xylene (total)	2800	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. **000370**

20949-11

Lab Name: ENSECO Contract:
Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 20949-11
Sample wt/vol: 4.0 (g/mL) G Lab File ID: J0764
Level: (low/med) MED Date Received: 02/15/92
% Moisture: not dec. 12 Date Analyzed: 02/25/92
GC Column: CAP ID: 0.530 (mm) Dilution Factor: 2.0
Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

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

Number TICs found: 0

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

000371

QUANT REPORT

Page 1

Operator ID: CHEMIST1
 Output File: ^J0764::QT
 Data File: >J0764::D4
 Name: 20949-11,U,EPA,
 Misc: CLP,20949,,20949-11,M,S,

Quant Rev: 7 Quant Time: 920228 12:03
 Injected at: 920225 23:00
 Dilution Factor: 1.00000
 Instrument ID: VOA#1_MW
 50 UL/5ML ANALYST TB

ID File: IDEPAJ::ID
 Title: ID FILE CLP INST. J + THF
 Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *CI01 BROMOCHLOROMETHANE	5.37	128.0	77644	50.00	UG/L	98
2) CS15 1,2-DICHLOROETHANE-D4	6.33	65.0	49524	23.62	UG/L	81
9) C035 ACETONE <i>ppb</i>	2.40	43.0	2881	11.73	UG/L	100
10) C030 METHYLENE CHLORIDE	3.07	84.0	2205	1.05	UG/L	78
19) *CI10 1,4-DIFLUOROBENZENE	7.21	114.0	269144	50.00	UG/L	100
23) C150 TRICHLOROETHENE <i>ppb</i>	7.51	130.0	850	367	UG/L	90
31) *CI20 CHLOROBENZENE-D5	12.38	117.0	234870	50.00	UG/L	73
32) CS05 TOLUENE-D8	9.62	98.0	114931	25.66	UG/L	97
33) CS10 BROMOFLUOROBENZENE	14.93	95.0	82343	21.26	UG/L	100
36) C220 TETRACHLOROETHENE	10.91	164.0	165124	70.44	UG/L	96

* Compound is ISTD

000372

MS data file header from : >J0764::D4

Sample: 20949-11,U,EPA, Operator: CHEMIST1 SUPER GRP. 2/25/92 23:00
 Misc : CLP,20949,,20949-11,M,S, 50 UL/5ML ANALYST TB
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: UOA#1_MW
 Method file: SAMMJ Tuning file: MTBFBJ No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

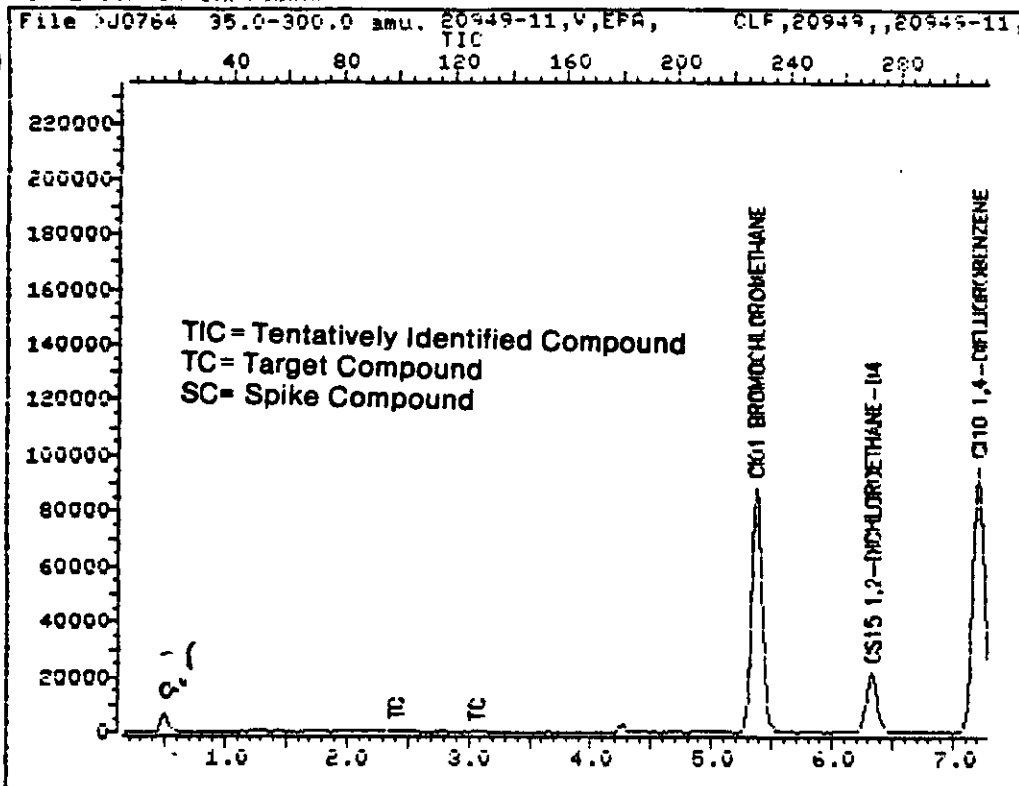
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG		Desired reporting units
samp_amt	4G		amt of sample taken
ext_vol	5ML		final extract volume
q_units	UG/L		cal units from quant
ext_dil	100		dilution factor
%moist	NA	11.86%	%moisture for soil
int_ext_vol	10		intermediate extr ct vol/M.L. ext vo
int_ext_vol_u	0.05	9ms 3/5/92	intermediate extract vol/M.L. vol US
spiked	S		Surrogate added at S(start)/E(end)
matrix	S		sample matrix W(ater)/S(oil)
runfact	250		calcd runfactor
surfact	1.00		calcd surr vol

Performance Check: >J0750 Injection Time: 2/25/92 11:35
 Sample : >J0764 Injection Time: 2/25/92 23:00
 Elapsed Time: 0 Y 0 D 11:25
 Sample: ^J0764 Calibration Stds.: ^J0751,
 Invalid Response Factor for: C250 XYLENE (TOTAL)

000373

TOTAL ION CHROMATOGRAM



Data File: >J0764::D4

Quant Output File: ^J0764::Q1T

Name: 20949-11,U,EPA,

Instrument ID: VOA#1_MW

Misc: CLP,20949,,20949-11,M,S,

50 UL/5ML ANALYST TB

Id File: IDEPAJ::ID

Title: ID FILE CLP INST. J + THF

Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1

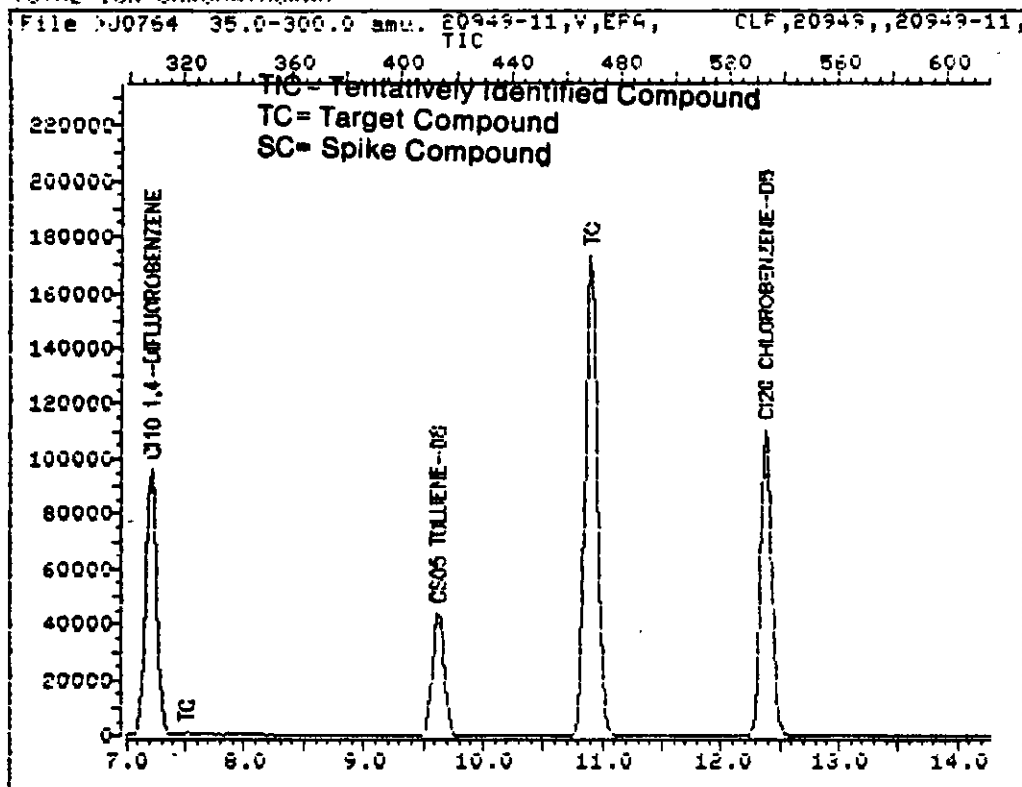
Quant Time : 920228 12:03

Injected at: 920225 23:00

Page 1 of 4

000374

TOTAL ION CHROMATOGRAM



Data File: >J0764::D4
Name: 20949-11,U,EPA,
Misc: CLP,20949,,20949-11,M,S,

Quant Output File: >J0764::QT
Instrument ID: UDA#1_MW
50 UL/5ML ANALYST TB

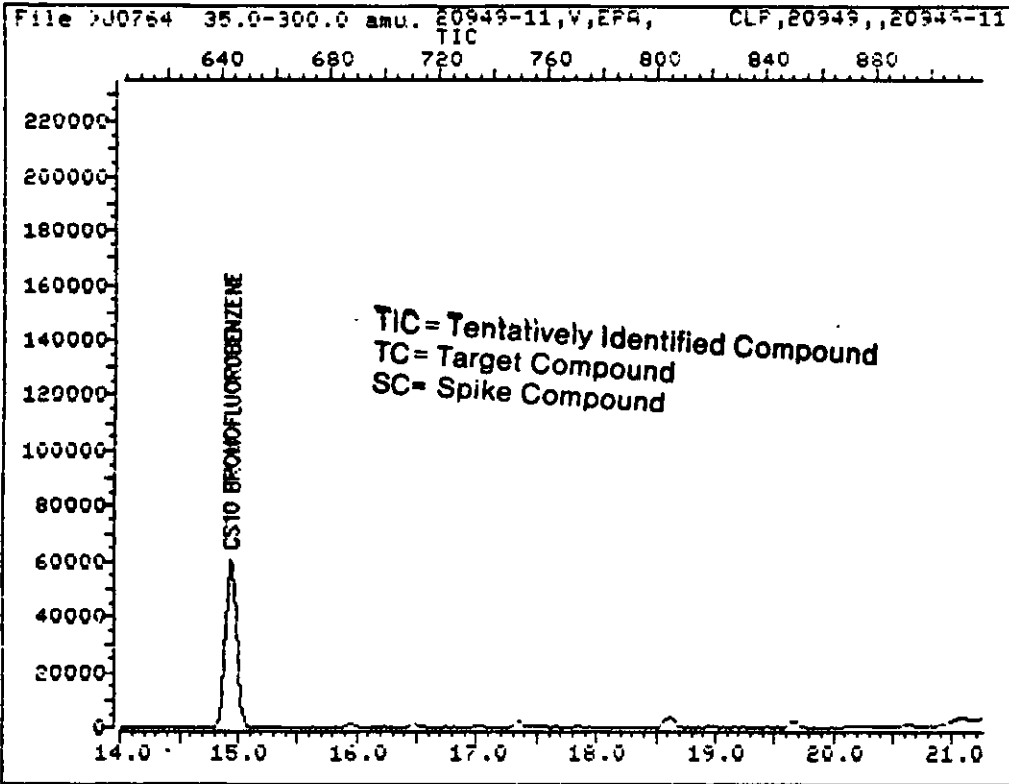
Id File: IDEPAJ::ID
Title: ID FILE CLP INST. J + THF
Last Calibration: 911122 17:17

Last Qcal Time: 920225 12:00

Operator ID: CHEMIST1
Quant Time : 920228 12:03
Injected at: 920225 23:00

000375

TOTAL ION CHROMATOGRAM



Data File: >J0764::D4

Quant Output File: ^J0764::QT

Name: 20949-11,U,EPA,

Instrument ID: VOA#1_MW

Misc: CLP,20949,,20949-11,M,S,

50 UL/5ML ANALYST TB

Id File: IDEPAJ::ID

Title: ID FILE CLP INST. J + THF

Last Calibration: 911122 17:17

Last Qual Time: 920225 12:00

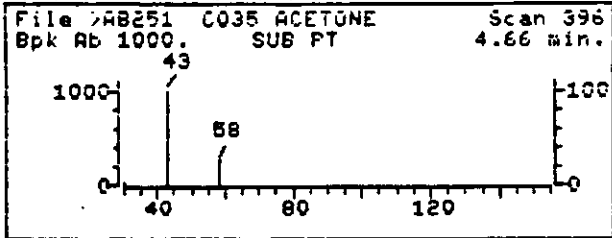
Operator ID: CHEMIST1

Quant Time : 920228 12:03

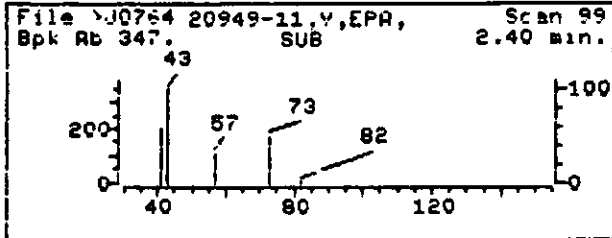
Injected at: 920225 23:00

000376

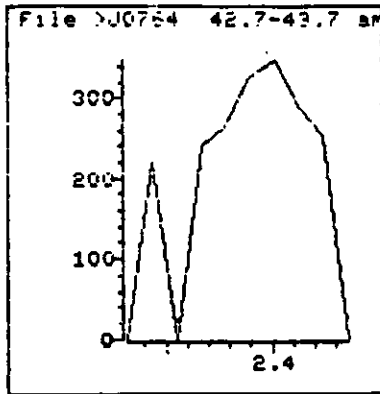
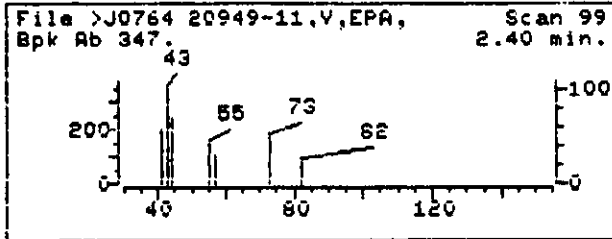
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >J0764::D4
Name: 20949-11,V,EPA,
Misc: CLP,20949,,20949-11,M,S,
Quant Time: 920228 12:03
Injected at: 920225 23:00
Last Qcal Time: 920225 12:00

Quant Output File: ^J0764::QT
Instrument ID: VOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

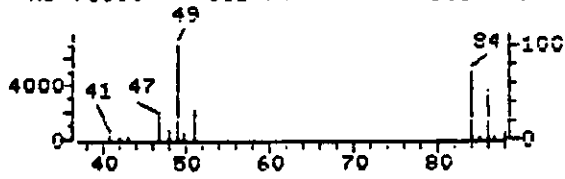
Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 99
Retention Time: 2.40 min.
Quant Ion : 43.0
Area : 2681
Concentration : 11.73 UG/L
q-value : 100

No

000377

REFERENCE STANDARD SPECTRUM

File LAB251 0030 METHYLENE C Scan 465
Bpk Ab 7068. SUB PT 3.07 min.

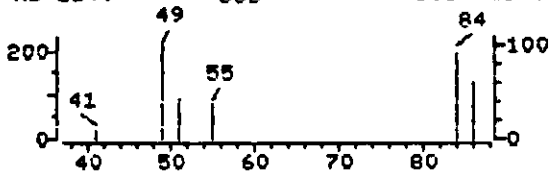


File >J0764 46.7-49.7 am

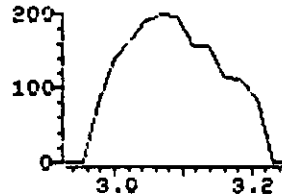


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0764 20949-11.V,EPA, Scan 128
Bpk Ab 214. SUB 3.07 min.

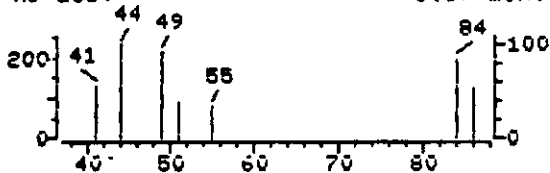


File >J0764 83.7-84.7 am

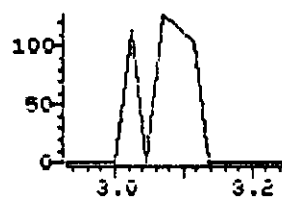


SAMPLE SPECTRUM (UNALTERED)

File >J0764 20949-11.V,EPA, Scan 128
Bpk Ab 232. 3.07 min.



File >J0764 85.7-86.7 am

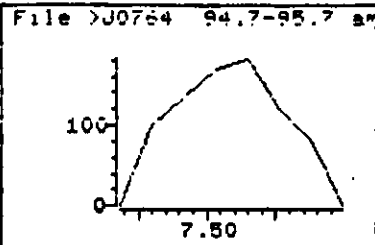
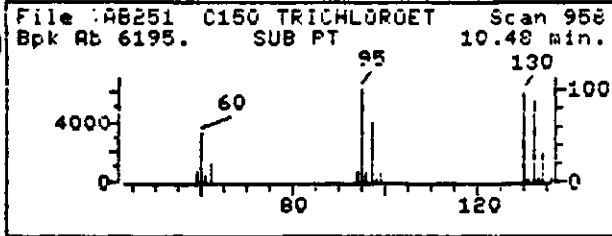


Data File: >J0764::D4
Name: 20949-11,U,EPA,
Misc: CLP,20949,,20949-11,M,S,
Quant Time: 920228 12:03
Injected at: 920225 23:00
Last Qual Time: 920225 12:00

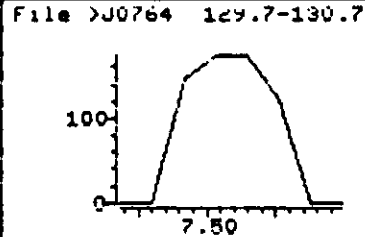
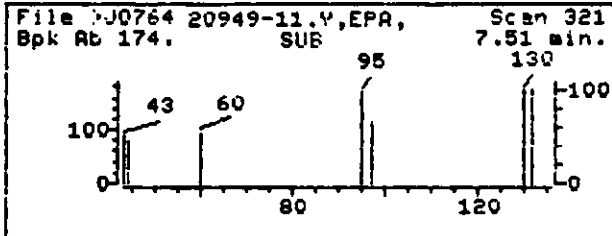
Quant Output File: ^J0764::QT
Instrument ID: UOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 10
Compound Name : 0030 METHYLENE CHLORIDE
Scan Number : 128
Retention Time : 3.07 min.
Quant Ion : 84.0
Area : 2205
Concentration : 1.05 UG/L
q-value : 78

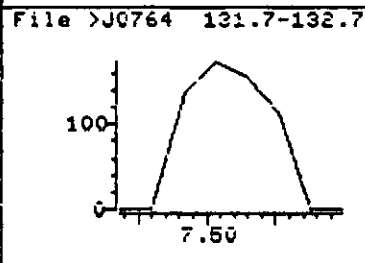
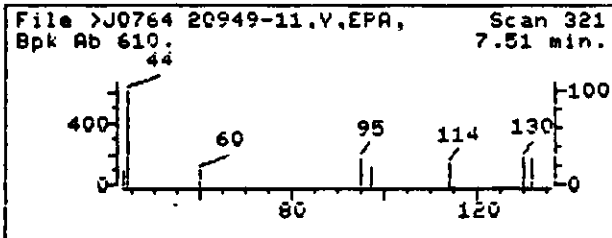
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >J0764::D4
Name: 20949-11,V,EPA,
Misc: CLP,20949,,20949-11,M,S,
Quant Time: 920228 12:03
Injected at: 920225 23:00
Last Qcal Time: 920225 12:00

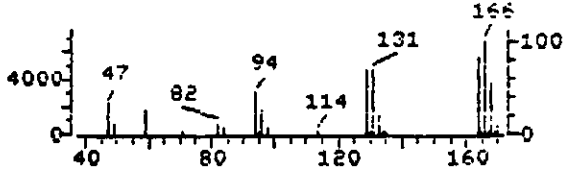
Quant Output File: ^J0764::QT
Instrument ID: VOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 321
Retention Time: 7.51 min.
Quant Ion : 130.0
Area : 850
Concentration : .367 UG/L
q-value : 90

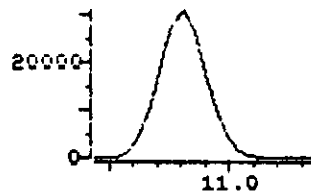
BDC

REFERENCE STANDARD SPECTRUM

File LAB251 C220 TETRACHLORO Scan 1280
Bpk Ab 6899. SUB PT 13.82 min.

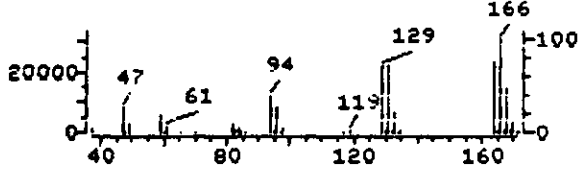


File >J0764 165.7-166.7

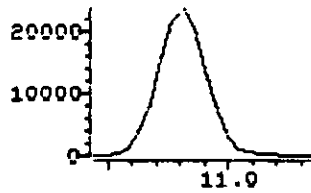


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >J0764 20949-11,V,EPA, Scan 469
Bpk Ab 30880. SUB 10.91 min.

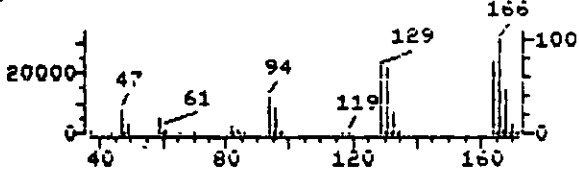


File >J0764 163.7-164.7

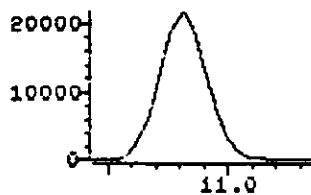


SAMPLE SPECTRUM (UNALTERED)

File >J0764 20949-11,V,EPA, Scan 469
Bpk Ab 30880. 10.91 min.



File >J0764 130.7-131.7



Data File: >J0764::D4
Name: 20949-11,V,EPA,
Misc: CLP,20949,,20949-11,M,S,
Quant Time: 920228 12:03
Injected at: 920225 23:00
Last Qual Time: 920225 12:00

Quant Output File: ^J0764::QT
Instrument ID: VOA#1_MW
50 UL/5ML ANALYST TB
Quant ID File: IDEPAJ::ID
Last Calibration: 911122 17:17

Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 469
Retention Time: 10.91 min.
Quant Ion : 164.0
Area : 165124
Concentration : 70.44 UG/L
q-value : 96

000380

Diagnostic Quant Report

Data File: >J0764::D4 Injected at: 23:00 02/25/92
 Quant'd : 12:03 02/28/92
 ID File : IDEPAJ::ID Calibrated : 17:17 11/22/91

Compound	- R.T. Info -				Ion	Area	RF	Conc.
	Pred	Found	Dif					
1) *C101 BROMOCHLOROMETHANE	5.32	5.37	.05		128.0	77644	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	6.34	6.33	.01		65.0	49524	1.3502	23.62
3) C010 CHLOROMETHANE	.82	0.00	--		50.0	0	.6004	0.00
4) C020 VINYL CHLORIDE	.89	0.00	--		62.0	0	.6109	0.00
5) C015 BROMOMETHANE	1.19	0.00	--		94.0	0	.8349	0.00
6) C025 CHLOROETHANE	1.33	0.00	--		64.0	0	.3966	0.00
7) C045 1,1-DICHLOROETHENE	2.33	0.00	--		96.0	0	1.0332	0.00
8) C040 CARBON DISULFIDE	2.65	0.00	--		76.0	0	1.7087	0.00
9)D C035 ACETONE	2.30	1.99	.32		43.0	1449	.1472	6.34
9) C035 ACETONE	2.30	2.40	.10		43.0	2681	.1472	11.73
9)D C035 ACETONE	2.30	2.79	.49		43.0	1313	.1472	5.75
10) C030 METHYLENE CHLORIDE	3.05	3.07	.02		84.0	2205	1.3520	1.05
11) UJNK trans-1,2-DICHLOROET	3.40	0.00	--		96.0	0	1.1104	0.00
12) C050 1,1-DICHLOROETHANE	4.07	0.00	--		63.0	0	1.9999	0.00
13) U011 cis-1,2-DICHLOROETHE	5.00	0.00	--		96.0	0	1.2112	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--		96.0	0	1.1608	0.00
15) C110 2-BUTANONE	4.93	0.00	--		43.0	0	.2074	0.00
16) U013 TETRAHYDROFURAN	5.55	0.00	--		42.0	0	.2314	0.00
17) C060 CHLOROFORM	5.25	0.00	--		83.0	0	2.4365	0.00
18) C065 1,2-DICHLOROETHANE	6.51	0.00	--		62.0	0	1.3962	0.00
19) *C110 1,4-DIFLUOROBENZENE	7.18	7.21	.02		114.0	269144	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	5.80	0.00	--		97.0	0	.5170	0.00
21) C120 CARBONTETRACHLORIDE	6.15	0.00	--		117.0	0	.5288	0.00
22) C165 BENZENE	6.40	0.00	--		78.0	0	.7177	0.00
23) C150 TRICHLOROETHENE	7.51	7.51	.00		130.0	850	.4299	.37
24) C140 1,2-DICHLOROPROPANE	7.83	0.00	--		63.0	0	.3022	0.00
25) C130 BROMODICHLOROMETHANE	8.18	0.00	--		83.0	0	.6096	0.00
26) C143 cis-1,3-DICHLOROPROP	9.33	0.00	--		75.0	0	.4865	0.00
27) C172 trans-1,3-DICHLOROPR	10.32	0.00	--		75.0	0	.3668	0.00
28) C160 1,1,2-TRICHLOROETHAN	10.51	0.00	--		97.0	0	.3506	0.00
29) C155 CHLORODIBROMOMETHANE	11.20	0.00	--		129.0	0	.6889	0.00
30) C180 BROMOFORM	14.15	0.00	--		173.0	0	.6234	0.00
31) *C120 CHLOROBENZENE-D5	12.36	12.38	.02		117.0	234870	1.0000	50.00
32) CS05 TOLUENE-D8	9.61	9.62	.01		98.0	114931	.9534	25.66
33) CS10 BROMOFLUOROBENZENE	14.96	14.93	.03		95.0	82343	.8246	21.26
34) C230 TOLUENE	9.75	0.00	--		91.0	0	.9628	0.00
35) C205 4-METHYL-2-PENTANONE	9.24	0.00	--		43.0	0	.4789	0.00
36) C220 TETRACHLOROETHENE	10.90	10.91	.00		164.0	165124	.4990	70.44
37) C210 2-HEXANONE	10.88	0.00	--		43.0	0	.1401	0.00
38) C235 CHLOROBENZENE	12.45	0.00	--		112.0	0	.8886	0.00
39) C240 ETHYLBENZENE	12.77	0.00	--		106.0	0	.4035	0.00
40) UJNK M&P-XYLENES	12.95	0.00	--		106.0	0	.4627	0.00
41) U029 O-XYLENE	13.74	0.00	--		106.0	0	.4594	0.00
42) C250 XYLENE (TOTAL)	0.00	0.00	--		106.0	0	.4611	0.00
43) C245 STYRENE	13.83	0.00	--		104.0	0	.8177	0.00
44) C225 1,1,2,2-TETRACHLOROE	14.98	0.00	--		83.0	0	.7483	0.00

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

000381

TIC Internal Standard Report

Data File: >J0764

Maximum separation 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
228.	77644.	7.294 228.	522226. 92.215
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
308.	269144.	2.506 308.	630262. 93.441
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
533.	234870.	3.094 533.	716022. 98.527

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 7

Number of peaks remaining: 7

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 7

Number of peaks remaining: 0

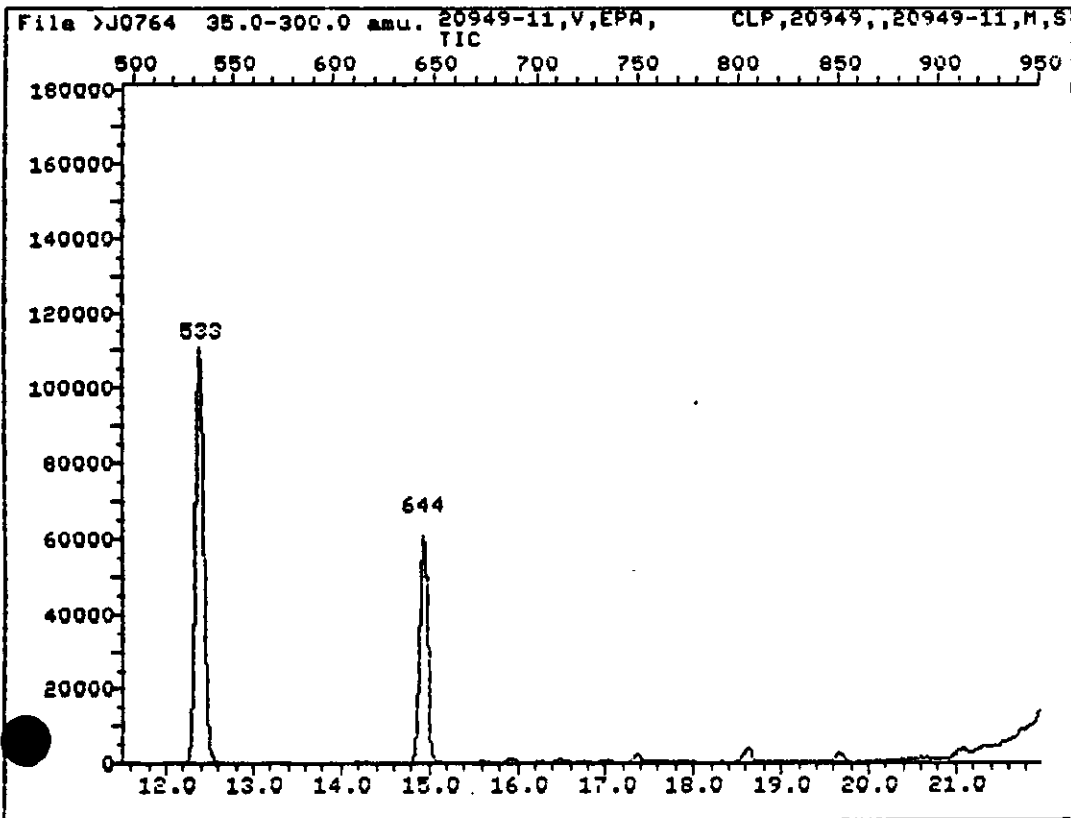
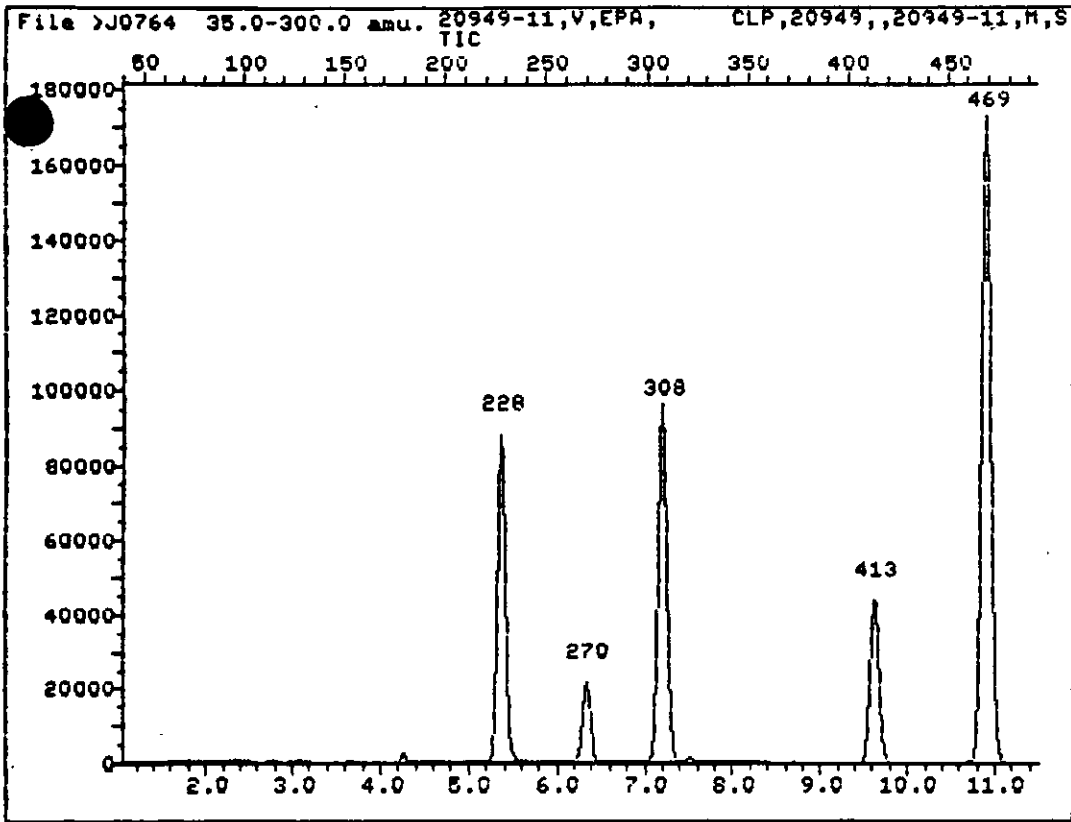
Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15

Number of peaks: 0

Maximum number of peaks > number of peaks.

000382



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000383

20949-12

Lab Name: ENSECO Contract: _____

Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 20949-12

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M3150

Level: (low/med) LOW Date Received: 02/15/92

% Moisture: not dec. 14 Date Analyzed: 02/22/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

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

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

000385

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output File: ^M3150::Q1
 Data File: >M3150::L2
 Name: 20949-12,RAS-S
 Misc: 5G/5ML ANALYST RB INST L HEATED

Quant Rev: 7 Quant Time: 920222 06:24
 Injected at: 920222 05:55
 Dilution Factor: 1.00000
 Instrument ID: L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *C101 BROMOCHLOROMETHANE	7.25	128.0	41847	50.00	UG/L	95
2) CS15 1,2-DICHLOROETHANE-D4	8.26	65.0	62140	48.04	UG/L	77
9) C035 ACETONE	3.89	43.0	3037	5.87	UG/L	100
10) C030 METHYLENE CHLORIDE	4.58	84.0	2224	1.62	UG/L	53
19) *C110 1,4-DIFLUOROBENZENE	9.20	114.0	186593	50.00	UG/L	100
31) *C120 CHLOROBENZENE-D5	14.52	117.0	135459	50.00	UG/L	77
32) CS05 TOLUENE-D8	11.77	98.0	162759	51.87	UG/L	99
3) CS10 BROMOFLUOROBENZENE	17.07	95.0	89845	45.77	UG/L	100
34) C230 TOLUENE <i>1310</i>	11.88	91.0	2297	.678	UG/L	93
36) C220 TETRACHLOROETHENE	12.87	164.0	2240	1.89	UG/L	95
39) C240 ETHYLBENZENE <i>1310</i>	15.21	106.0	739	.591	UG/L	75
40) UJNK M&P-XYLENES <i>1310</i>	15.21	106.0	739	.456	UG/L	94
41) 0029 O-XYLENE	16.01	106.0	1218	.785	UG/L	78

* Compound is ISTD

MS data file header from : >M3150::L2

Sample: 20949-12,RAS-S Operator: LUEY1 REG. GRP. 2/22/92 5:55
 Misc : 5G/5ML ANALYST RB INST L HEATED
 Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: L
 Method file: SAMML Tuning file: MTBFBL No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

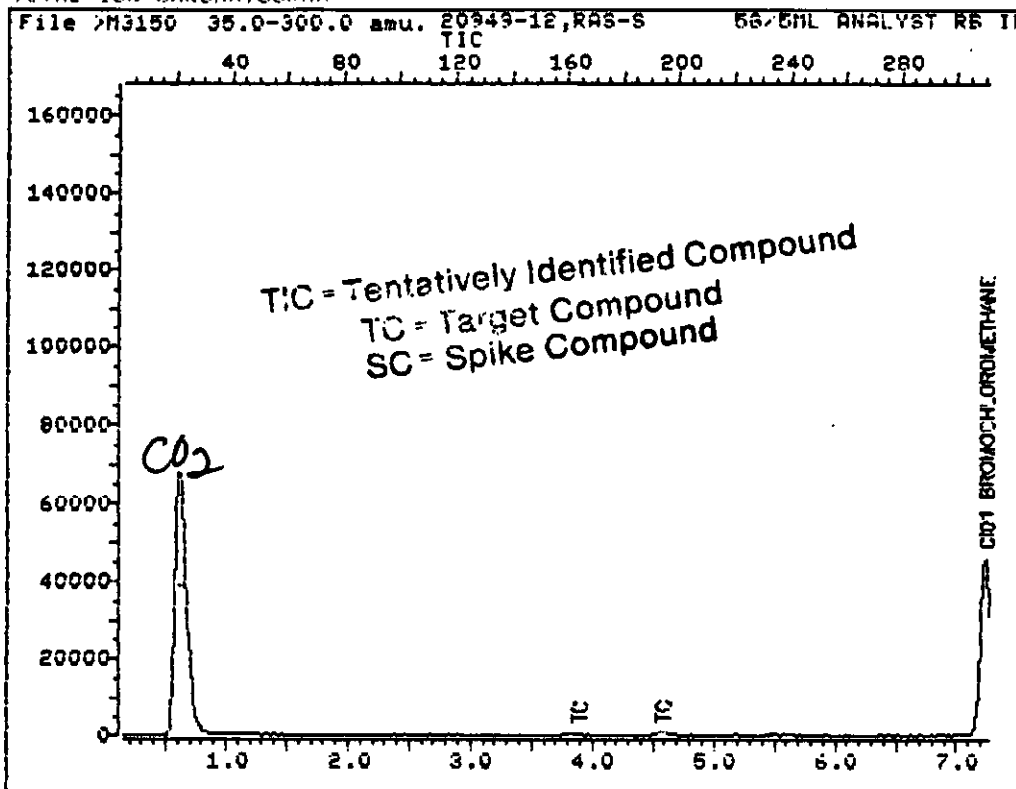
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	5G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	N/A	%moisture for soil
int_ext_vol	NA	intermediate extr ct vol/M.L. ext vo
int_ext_vol_u		intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
fact	1.00	calcd runfactor
surfact	.0050	calcd surr vol

Performance Check: >M3139 Injection Time: 2/21/92 22:14
 Sample : >M3150 Injection Time: 2/22/92 5:55
 Elapsed Time: 0 Y 0 D 7:41
 Sample: ^M3150 Calibration Stds.: ^M3140,
 Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
 Invalid Response Factor for: C250 XYLENE (TOTAL)

000387

TOTAL ION CHROMATOGRAM



Data File: >M3150::L2

Quant Output File: ^M3150::QT

Name: 20949-12,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

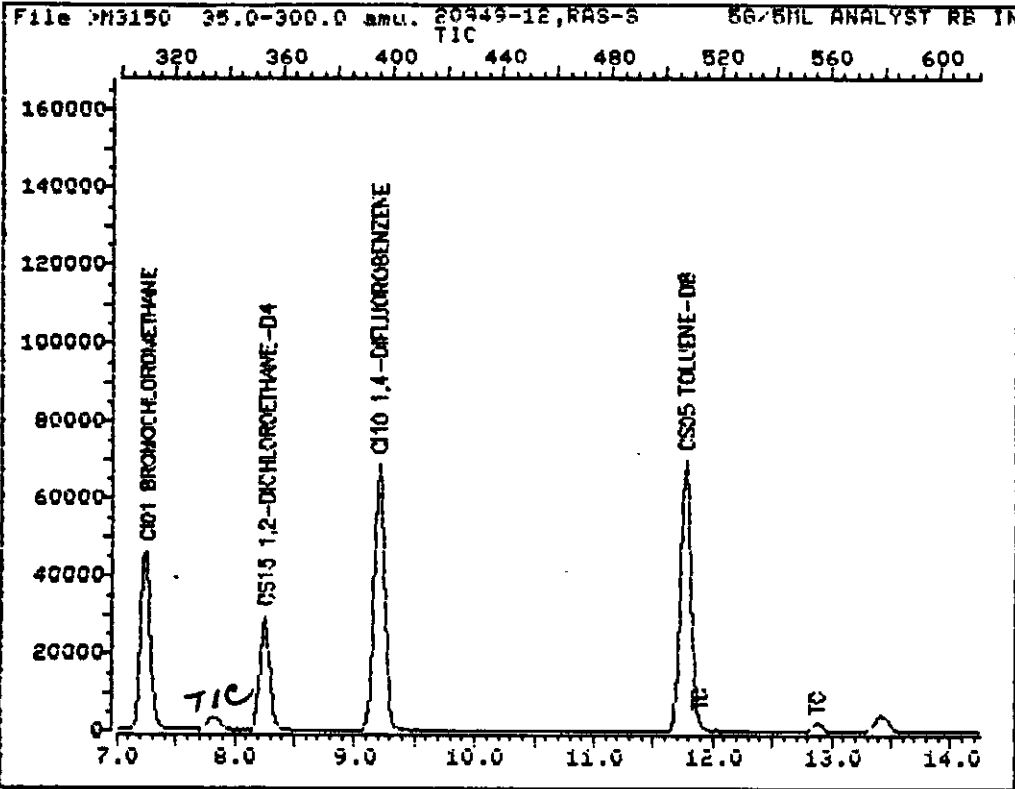
Operator ID: LUEY1

Quant Time : 920222 06:24

Injected at: 920222 05:55

000388

TOTAL ION CHROMATOGRAM



Data File: >M3150::L2

Quant Output File: ^M3150::QT

Name: 20949-12,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

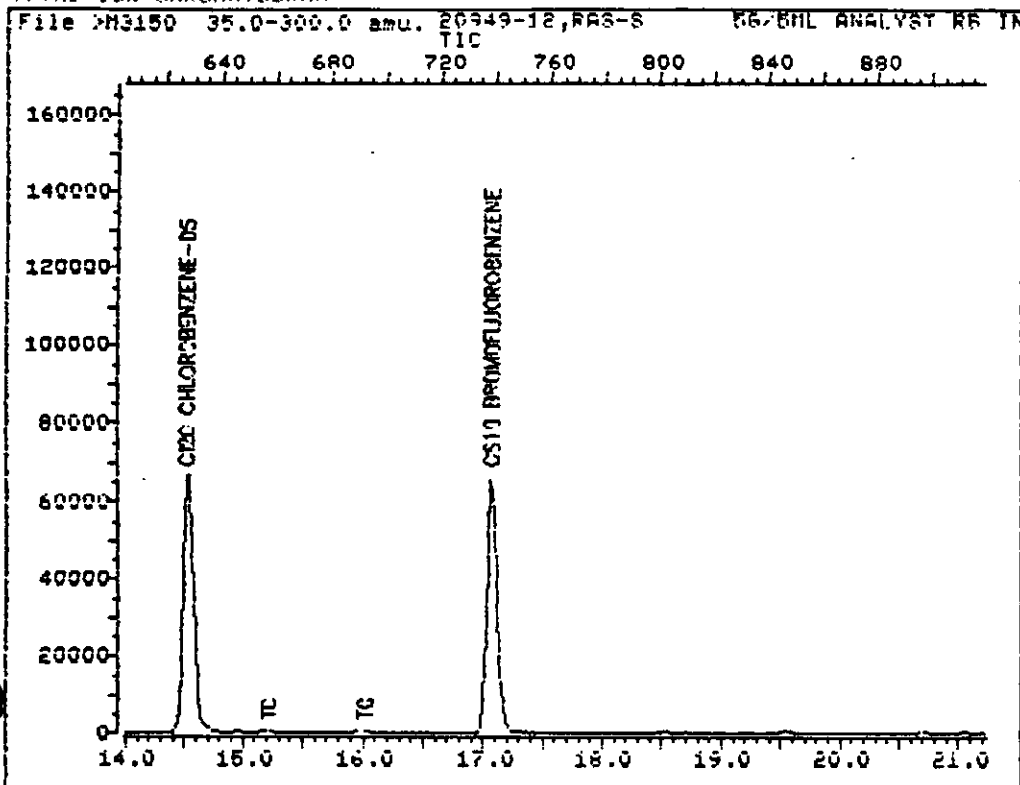
Operator ID: LUEY1

Quant Time : 920222 06:24

Injected at: 920222 05:55

000389

TOTAL ION CHROMATOGRAM



Data File: >M3150::L2

Quant Output File: ^M3150::QT

Name: 20949-12,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

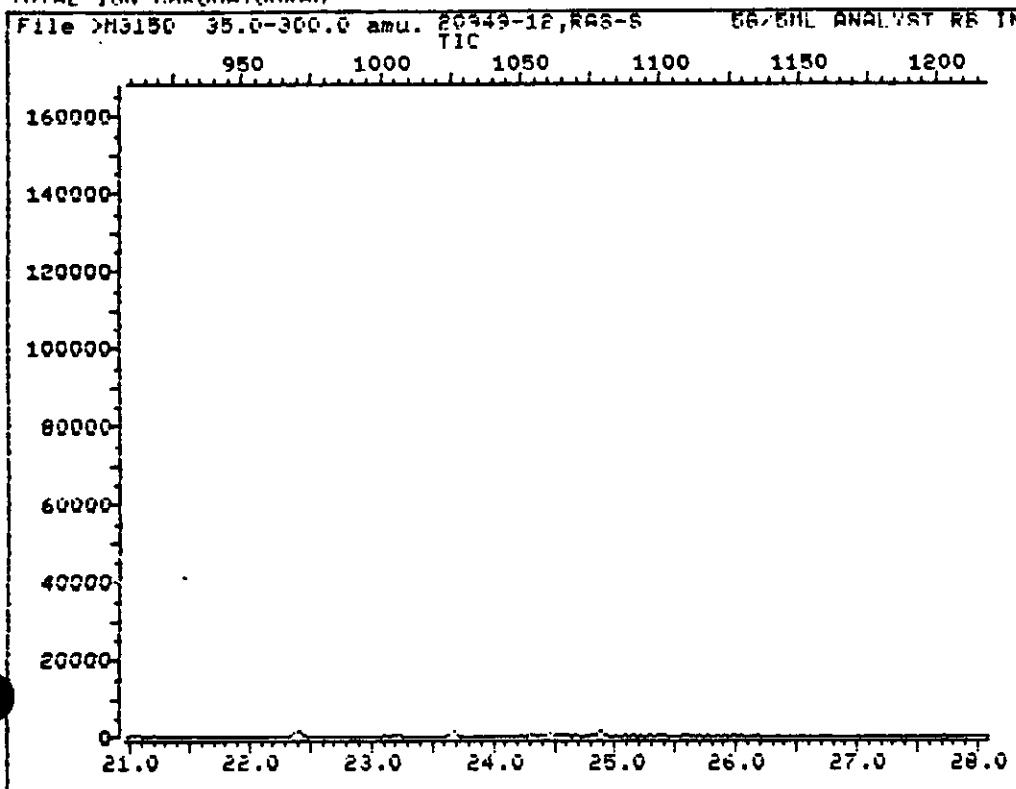
Quant Time : 920222 06:24

Injected at: 920222 05:55

Page 3 of 4

000390

TOTAL ION CHROMATOGRAM



Data File: >M3150::L2

Quant Output File: ^M3150::QT

Name: 20949-12,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

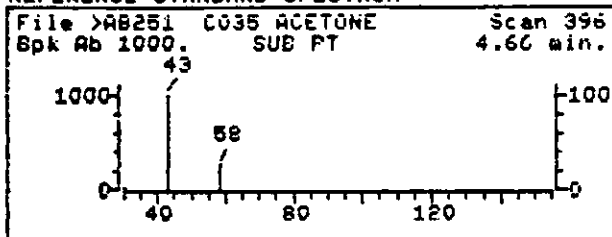
Last Qcal Time: 920221 22:44

Operator ID: LUEY1

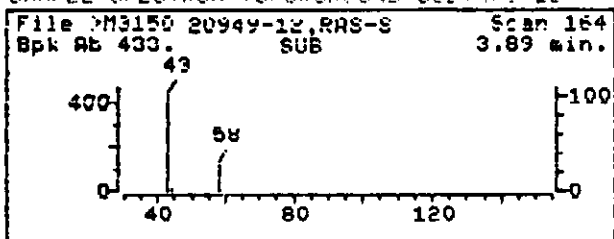
Quant Time : 920222 06:24

Injected at: 920222 05:55

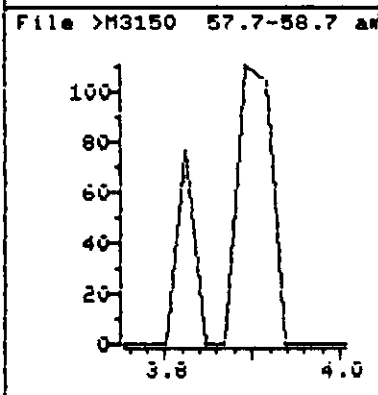
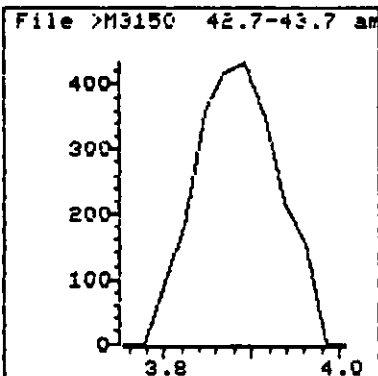
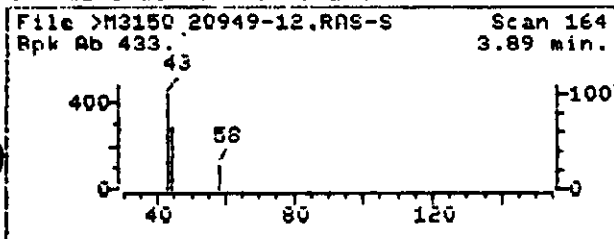
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

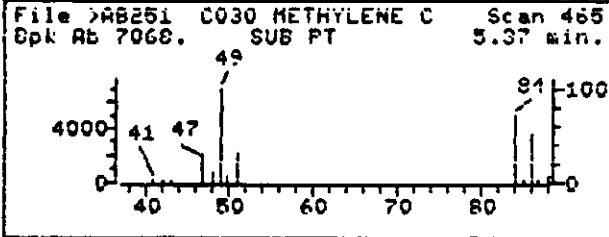


Data File: >M3150::L2
Name: 20949-12,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 06:24
Injected at: 920222 05:55
Last Qcal Time: 920221 22:44

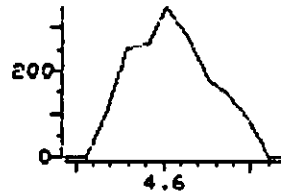
Quant Output File: ^M3150::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 164
Retention Time: 3.89 min.
Quant Ion : 43.0
Area : 3037
Concentration : 5.87 UG/L
q-value : 100

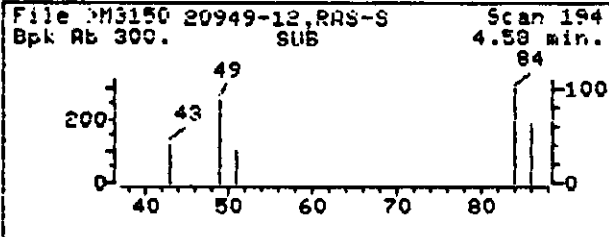
REFERENCE STANDARD SPECTRUM



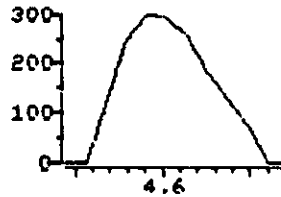
File >M3150 46.7-49.7 am



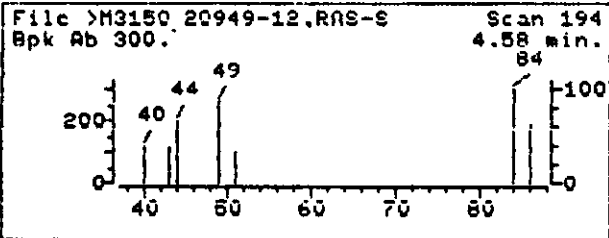
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



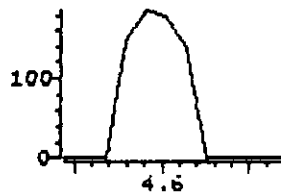
File >M3150 83.7-84.7 am



SAMPLE SPECTRUM (UNALTERED)



File >M3150 85.7-86.7 am



Data File: >M3150::L2

Name: 20949-12,RAS-S

Misc: 5G/5ML ANALYST RB INST L HEATED

Quant Time: 920222 06:24

Injected at: 920222 05:55

Last Qcal Time: 920221 22:44

Quant Output File: ^M3150::QT

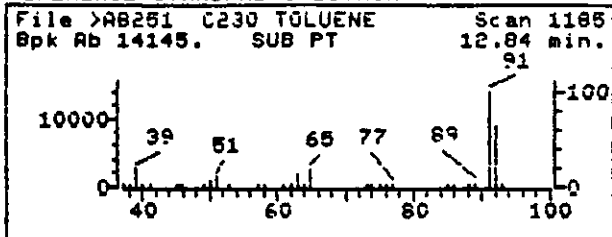
Instrument ID: L

Quant ID File: IDEPAL::ID

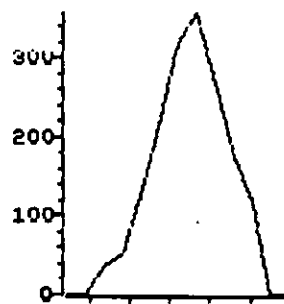
Last Calibration: 911030 17:46

Compound No : 10
 Compound Name : C030 METHYLENE CHLORIDE
 Scan Number : 194
 Retention Time : 4.58 min.
 Quant Ion : 84.0
 Area : 2224
 Concentration : 1.62 UG/L
 q-value : 53

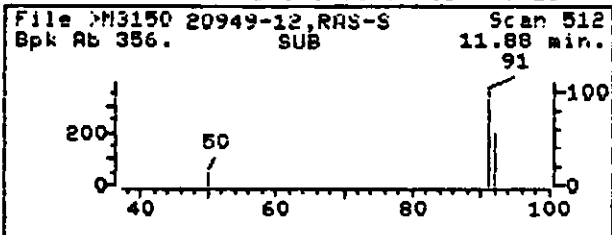
REFERENCE STANDARD SPECTRUM



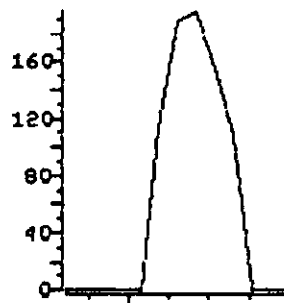
File >M3150 90.7-91.7 am



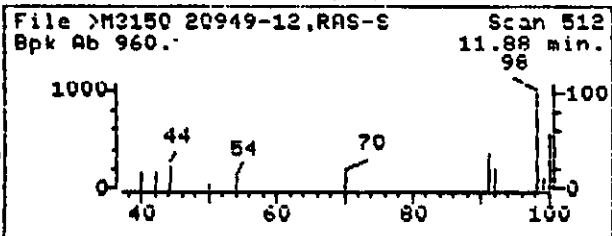
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >M3150 91.7-92.7 am



SAMPLE SPECTRUM (UNALTERED)



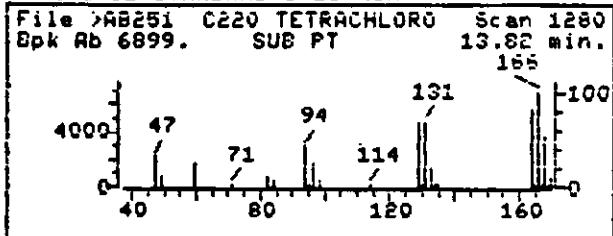
Data File: >M3150::L2
Name: 20949-12,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 06:24
Injected at: 920222 05:55
Last Qcal Time: 920221 22:44

Quant Output File: ^M3150::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

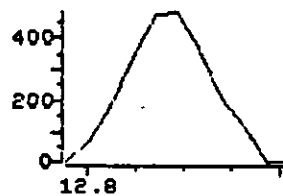
Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 512
Retention Time: 11.88 min.
Quant Ion : 91.0
Area : 2297
Concentration : .678 UG/L
q-value : 93

BDL

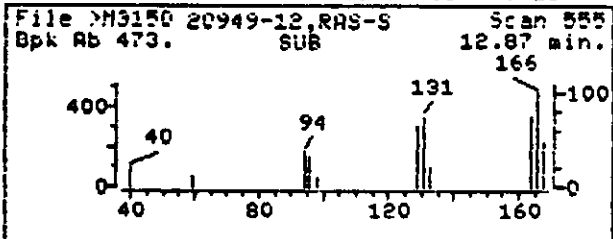
REFERENCE STANDARD SPECTRUM



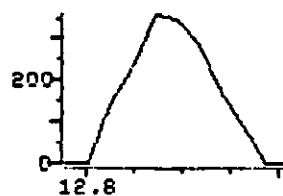
File >M3150 165.7-166.7



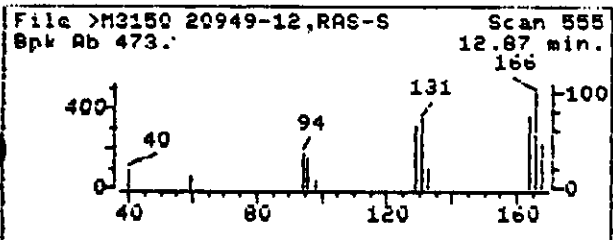
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



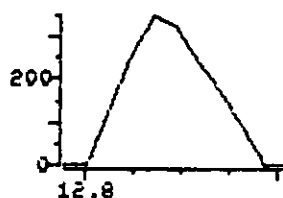
File >M3150 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >M3150 130.7-131.7

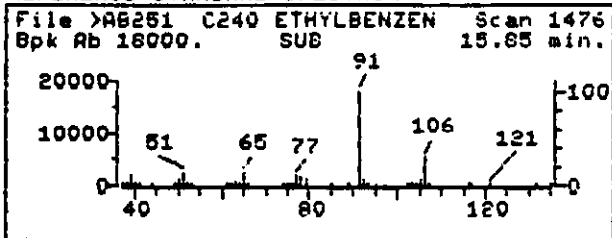


Data File: >M3150::L2
Name: 20949-12,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 06:24
Injected at: 920222 05:55
Last Qcal Time: 920221 22:44

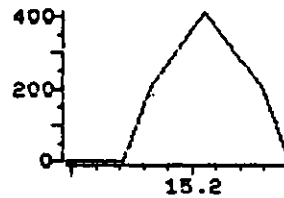
Quant Output File: ^M3150::QT
Instrument ID: L
Quant ID File: 10EPAL::ID
Last Calibration: 911030 17:46

Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 555
Retention Time: 12.87 min.
Quant Ion : 164.0
Area : 2240
Concentration : 1.89 UG/L
q-value : 95

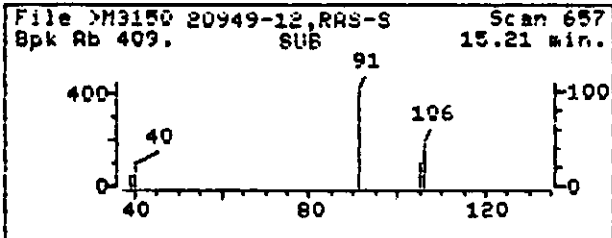
REFERENCE STANDARD SPECTRUM



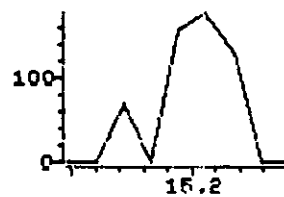
File >M3150 90.7-91.7 am



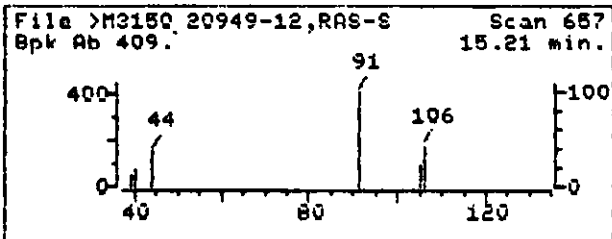
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >M3150 105.7-106.7



SAMPLE SPECTRUM (UNALTERED)



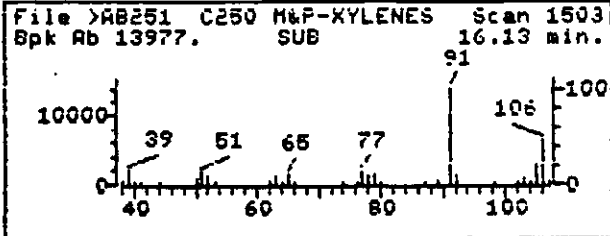
Data File: >M3150::L2
Name: 20949-12,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 06:24
Injected at: 920222 05:55
Last Qcal Time: 920221 22:44

Quant Output File: ^M3150::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

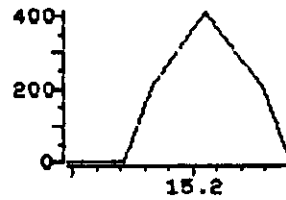
Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 657
Retention Time : 15.21 min.
Quant Ion : 106.0
Area : 739
Concentration : .591 UG/L
q-value : 75

BDL

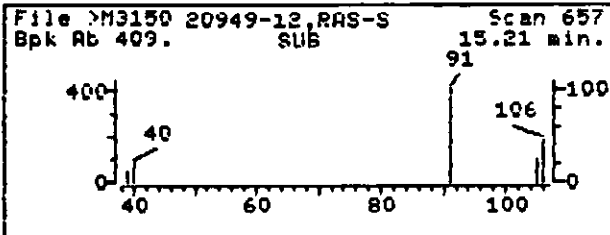
REFERENCE STANDARD SPECTRUM



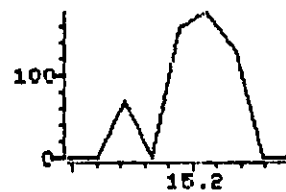
File >M3150 90.7-91.7 am



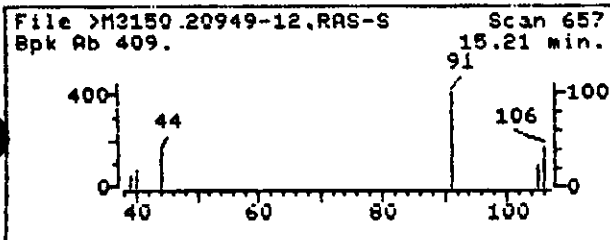
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >M3150 106.7-106.7



SAMPLE SPECTRUM (UNALTERED)



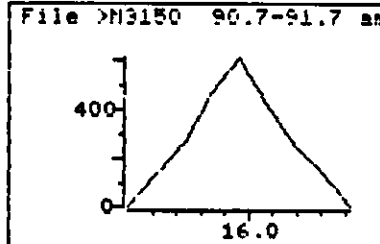
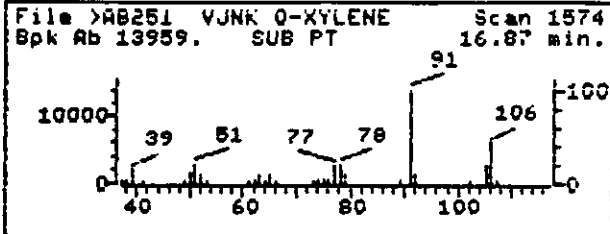
Data File: >M3150::L2
Name: 20949-12,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 06:24
Injected at: 920222 05:55
Last Qcal Time: 920221 22:44

Quant Output File: ^M3150::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

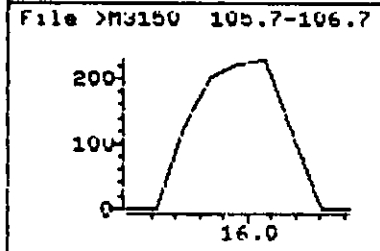
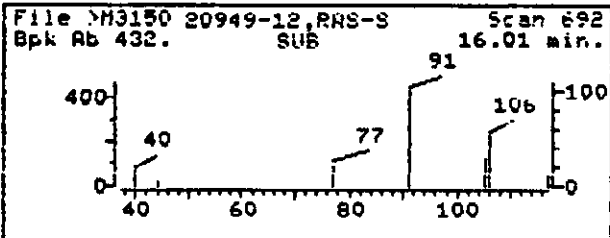
Compound No : 40
Compound Name : UJNK M&P-XYLENES
Scan Number : 657
Retention Time: 15.21 min.
Quant Ion : 106.0
Area : 739
Concentration : .456 UG/L
q-value : 94

BDL

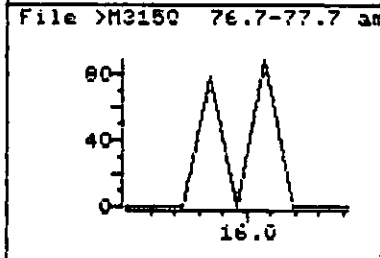
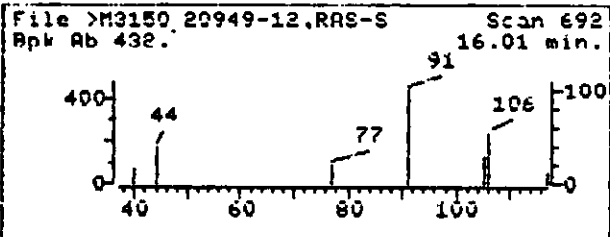
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3150::L2
Name: 20949-12,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 06:24
Injected at: 920222 05:55
Last Qual Time: 920221 22:44

Quant Output File: ^M3150::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 41
Compound Name : U029 O-XYLENE
Scan Number : 692
Retention Time: 16.01 min.
Quant Ion : 106.0
Area : 1218
Concentration : .785 UG/L
q-value : 78

BDL

Diagnostic Quant Report

Data File: >M3150::L2 Injected at: 05:55 02/22/92
 Quant'd : 06:24 02/22/92
 ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	7.31	7.25	.07	128.0	41847	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	8.25	8.26	.01	65.0	62140	1.5454	48.04
3) C010 CHLOROMETHANE	1.12	0.00	--	50.0	0	.6752	0.00
4) C020 VINYL CHLORIDE	1.33	0.00	--	62.0	0	.8468	0.00
5) C015 BROMOMETHANE	1.78	0.00	--	94.0	0	1.1498	0.00
6) C025 CHLOROMETHANE	2.05	0.00	--	64.0	0	.6141	0.00
7) C045 1,1-DICHLOROETHENE	3.49	0.00	--	96.0	0	1.0677	0.00
8) C040 CARBON DISULFIDE	3.58	0.00	--	76.0	0	1.7671	0.00
9) C035 ACETONE	4.01	3.89	.12	43.0	3037	.6178	5.87
10) C030 METHYLENE CHLORIDE	4.58	4.58	.00	84.0	2224	1.6412	1.62
11) UJNK trans-1,2-DICHLOROET	5.04	0.00	--	96.0	0	1.2769	0.00
12) C050 1,1-DICHLOROETHANE	5.81	0.00	--	63.0	0	2.3261	0.00
13) U011 cis-1,2-DICHLOROETHE	6.86	0.00	--	96.0	0	1.3491	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3130	0.00
15) C110 2-BUTANONE	7.15	0.00	--	43.0	0	1.2932	0.00
16) U013 TETRAHYDROFURAN	7.41	0.00	--	42.0	0	.7593	0.00
17) C060 CHLOROFORM	7.56	0.00	--	83.0	0	2.6596	0.00
18) C065 1,2-DICHLOROETHANE	8.36	0.00	--	62.0	0	1.7595	0.00
19) *C110 1,4-DIFLUOROBENZENE	9.24	9.20	.04	114.0	186593	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	7.64	0.00	--	97.0	0	.5005	0.00
21) C120 CARBONTETRACHLORIDE	7.89	0.00	--	117.0	0	.4865	0.00
22) C165 BENZENE	8.26	0.00	--	78.0	0	.7901	0.00
23) C150 TRICHLOROETHENE	9.52	0.00	--	130.0	0	.4176	0.00
24) C140 1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.3057	0.00
25) C130 BROMODICHLOROMETHANE	10.52	0.00	--	83.0	0	.4976	0.00
26) C143 cis-1,3-DICHLOROPROP	11.35	0.00	--	75.0	0	.4843	0.00
27) C172 trans-1,3-DICHLORUPR	12.49	0.00	--	75.0	0	.4312	0.00
28) C160 1,1,2-TRICHLOROETHAN	12.76	0.00	--	97.0	0	.3304	0.00
29) C155 CHLORODIBROMOMETHANE	13.45	0.00	--	129.0	0	.5172	0.00
30) C180 BROMOFORM	16.27	0.00	--	173.0	0	.4372	0.00
31) *C120 CHLOROBENZENE-D5	14.57	14.52	.05	117.0	135459	1.0000	50.00
32) CS05 TOLUENE-D8	11.77	11.77	.01	98.0	162759	1.1581	51.87
33) CS10 BROMOFLUOROBENZENE	17.07	17.07	.00	95.0	89845	.7245	45.77
34) C230 TOLUENE	11.89	11.88	.00	91.0	2297	1.2499	.68
35) C205 4-METHYL-2-PENTANONE	11.82	0.00	--	43.0	0	.7503	0.00
36) C220 TETRACHLOROETHENE	12.87	12.87	.00	164.0	2240	.4367	1.89
37) C210 2-HEXANONE	13.47	0.00	--	43.0	0	.6263	0.00
38) C235 CHLOROBENZENE	14.59	0.00	--	112.0	0	.9753	0.00
39) C240 ETHYLBENZENE	14.94	15.21	.28	106.0	739	.4618	.59
40) UJNK M&P-XYLENES	15.19	15.21	.02	106.0	739	.5985	.46
41) U029 O-XYLENE	15.97	16.01	.05	106.0	1218	.5731	.78
42) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	1957	.5858	1.23
43) C245 STYRENE	16.04	0.00	--	104.0	0	.9212	0.00
44) C225 1,1,2,2-TETRACHLOROE	17.62	0.00	--	83.0	0	.8826	0.00

* - Compound is an Internal Standard

TIC Internal Standard Report

Data File: >M3150

Maximum separation 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	C101 BROMOCHLOROMETH	50.000 UG/L	Ok
310.	41847.	7.294 310. 262945.	86.150
2	C110 1,4-DIFLUOROBEN	50.000 UG/L	Ok
395.	186593.	2.506 395. 409786.	87.632
3	C120 CHLOROBENZENE-D	50.000 UG/L	Ok
627.	135459.	3.094 628. 410943.	98.047

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 8
 Number of peaks remaining: 7

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 7
 Number of peaks remaining: 1

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15
 Number of peaks: 1
 Maximum number of peaks > number of peaks.

000400.

CE: _D

Data Reduced by : SFB Date: 3/5/92 Data File: >M3150
Data Reviewed by : AJ Date: 3/20/92

Enseco TIC Report (page 1)

Sample: 20949-12,RAS-S Run Factor: 1.16
Conditions: 5G/5ML ANALYST RB INST L HEATE Analyst: LUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	334.	2		6.0	1066-40-6	Silanol, trimethyl-

Hit return for more ...

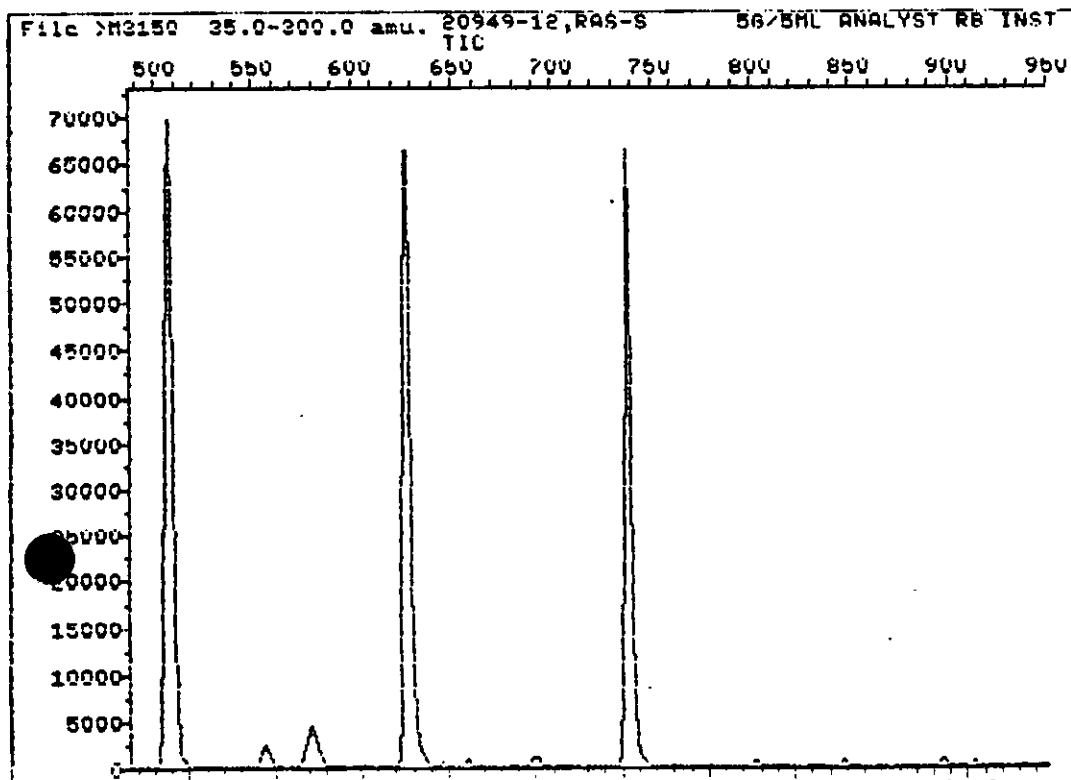
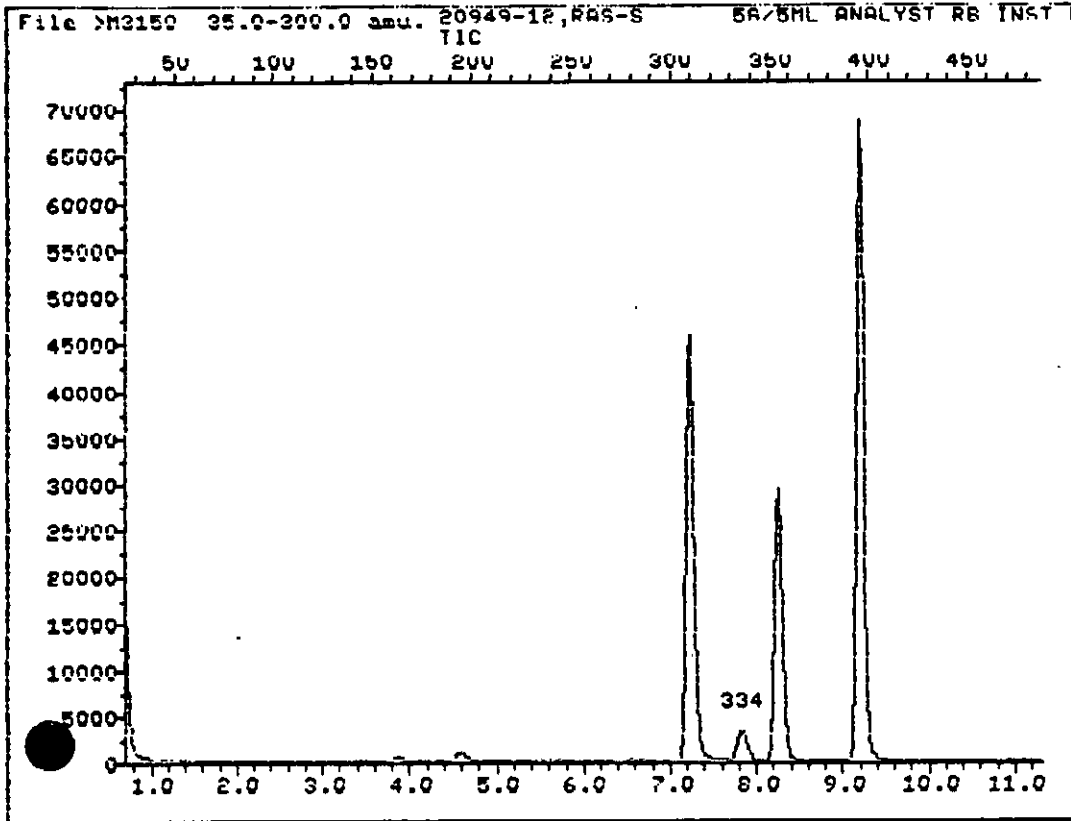
Data File: >M3150

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	60	13	1	7.80	1.076	27317.	3218.	5.194

000401



000402

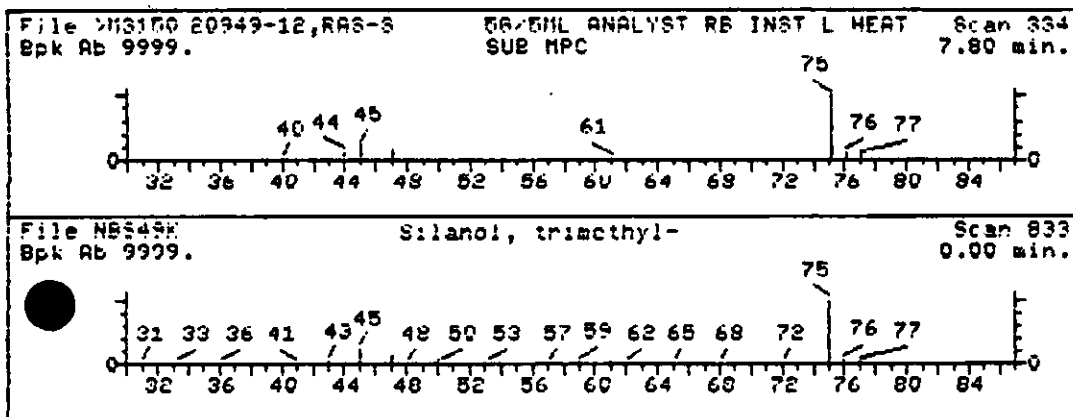
TIC NUMBER:1

1. Silanol, trimethyl-

90 C3H10OSi

Sample file: >M3150 Spectrum #: 334
Search speed: 2 Tilting option: S No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROUT	K	UK	#FLG	TILT	%	CON	C_I	R_IV	
1.	60	1066406	4954	NBS49K	35	49	2	0	88	13	30	12



2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000403

20949-13

Name: ENSECO Contract: _____

Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 20949-13

Sample wt/vol: 5.0 (g/mL) G Lab File ID: M3224

Level: (low/med) LOW Date Received: 02/15/92

% Moisture: not dec. 9 Date Analyzed: 02/24/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND	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	2 J
67-64-1	Acetone	11 U
75-15-0	Carbon Disulfide	11 U
75-35-4	1,1-Dichloroethene	11 U
75-34-3	1,1-Dichloroethane	11 U
540-59-0	1,2-Dichloroethene (total)	11 U
67-66-3	Chloroform	11 U
107-06-2	1,2-Dichloroethane	11 U
78-93-3	2-Butanone	11 U
71-55-6	1,1,1-Trichloroethane	11 U
56-23-5	Carbon Tetrachloride	11 U
75-27-4	Bromodichloromethane	11 U
78-87-5	1,2-Dichloropropane	11 U
10061-01-5	cis-1,3-Dichloropropene	11 U
79-01-6	Trichloroethene	11 U
124-48-1	Dibromochloromethane	11 U
79-00-5	1,1,2-Trichloroethane	11 U
71-43-2	Benzene	11 U
10061-02-6	trans-1,3-Dichloropropene	11 U
75-25-2	Bromoform	11 U
108-10-1	4-Methyl-2-Pentanone	11 U
591-78-6	2-Hexanone	11 U
127-18-4	Tetrachloroethene	2 J
79-34-5	1,1,2,2-Tetrachloroethane	11 U
108-88-3	Toluene	11 U
108-90-7	Chlorobenzene	11 U
100-41-4	Ethylbenzene	11 U
100-42-5	Styrene	11 U
1330-20-7	Xylene (total)	11 U

000404

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-13

Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-13

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: M3224

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 9

Date Analyzed: 02/24/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	13.45	9	JN

000405

QUANT REPORT

Page 1

Operator ID: LUEY1 Quant Rev: 7 Quant Time: 920224 19:38
 Output File: ^M3224::QT Injected at: 920224 19:10
 Data File: >M3224::L3 Dilution Factor: 1.00000
 Name: 20949-13,U,EPA, Instrument ID: L
 Misc: CLP,,,13,L,S, 5G/5ML 824U-RAS-S SFB INSTR.L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

	Compound	R.T.	Q	ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	7.24	128.0		26861	50.00	UG/L	95
2)	CS15 1,2-DICHLOROETHANE-D4	8.28	65.0		49611	47.58	UG/L	83
9)	CS35 ACETONE	3.87	43.0		1009	2.58	UG/L	100
10)	C030 METHYLENE CHLORIDE	4.56	84.0		1229	1.38	UG/L	79
19)	*C110 1,4-DIFLUOROBENZENE	9.22	114.0		112370	50.00	UG/L	100
31)	*C120 CHLOROBENZENE-D5	14.57	117.0		81131	50.00	UG/L	81
32)	CS05 TOLUENE-D8	11.79	98.0		99440	53.07	UG/L	95
33)	CS10 BROMOFLUOROBENZENE	17.09	95.0		56089	45.19	UG/L	100
34)	C238 TOLUENE	11.90	41.0		629	329	UG/L	93
36)	C220 TETRAHLOROETHENE	12.91	164.0		1144	1.46	UG/L	91

* Compound is ISTD

000406

5 data file header from : >M3224::L3

Sample: 20949-13,U,EPA, Operator: LUEY1 REG. GRP. 2/24/92 19:10
 Misc : CLP,,,13,L,S, 5G/5ML R240-RAS-S SFB INSTR.L
 Sys. #: 2 MS model: 700 SW/HW rev.: LF ALS #: 0 Equip ID: L
 Method file: SAMML Tuning file: MIBFBL No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

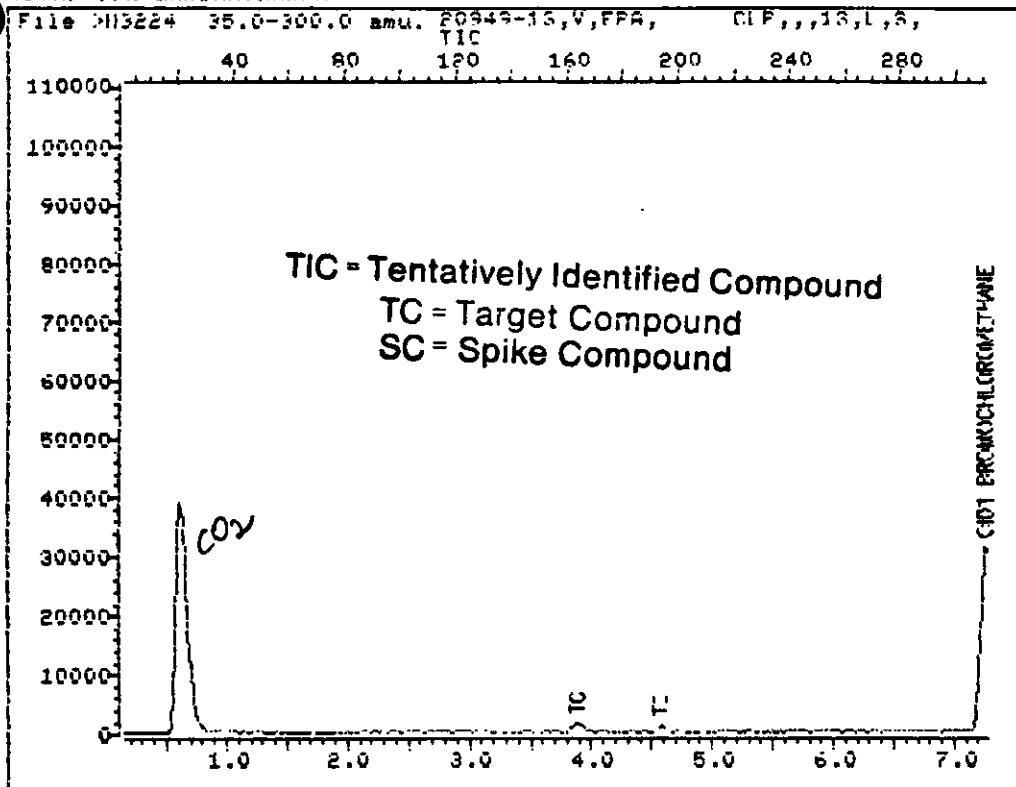
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	5G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	NA	%moisture for soil
int_ext_vol	NA	intermediate extract vol/M.L. ext vo
int_ext_vol_u	NA	intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
runfact	1.00	calcd runfactor
surfact	.0050	calcd surr vol

Performance Check: >M3212 Injection Time: 2/24/92 10:29
 Sample : >M3224 Injection Time: 2/24/92 19:10
 Elapsed Time: 0 Y 0 D 8:41 ✓
 Sample: ^M3224 Calibration Stds.: ^M3213,
 Invalid Response Factor for: C053 1,2 DICHLORDETHENE TOTAL

000407

TOTAL ION CHROMATOGRAM



Data File: >M3224::L3
Name: 20949-13,U,EPA,
Misc: CLP,,,13,L,S,

Quant Output File: ^M3224::Q1
Instrument ID: L
5G/5ML B240-RAS-S SFB INSTR.L

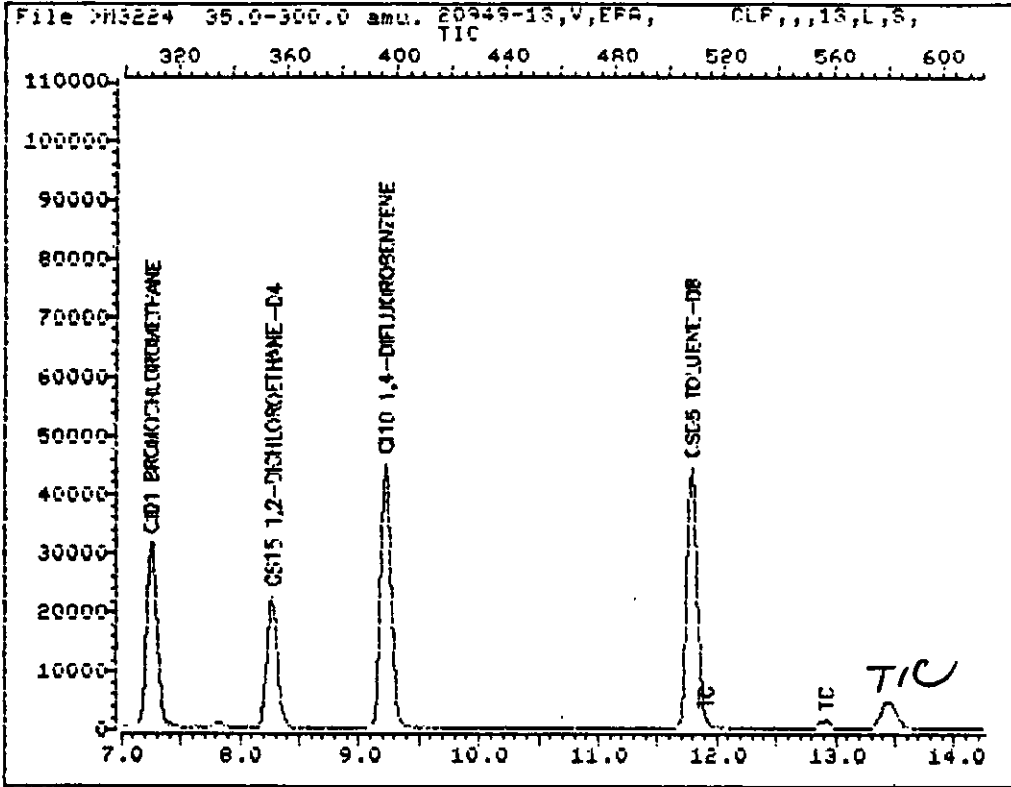
Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 19:38
Injected at: 920224 19:10

000408

TOTAL ION CHROMATOGRAM



Data File: >M3224::L3
Name: 20949-13,U,EPA,
Misc: CLP,,,13,L,S,

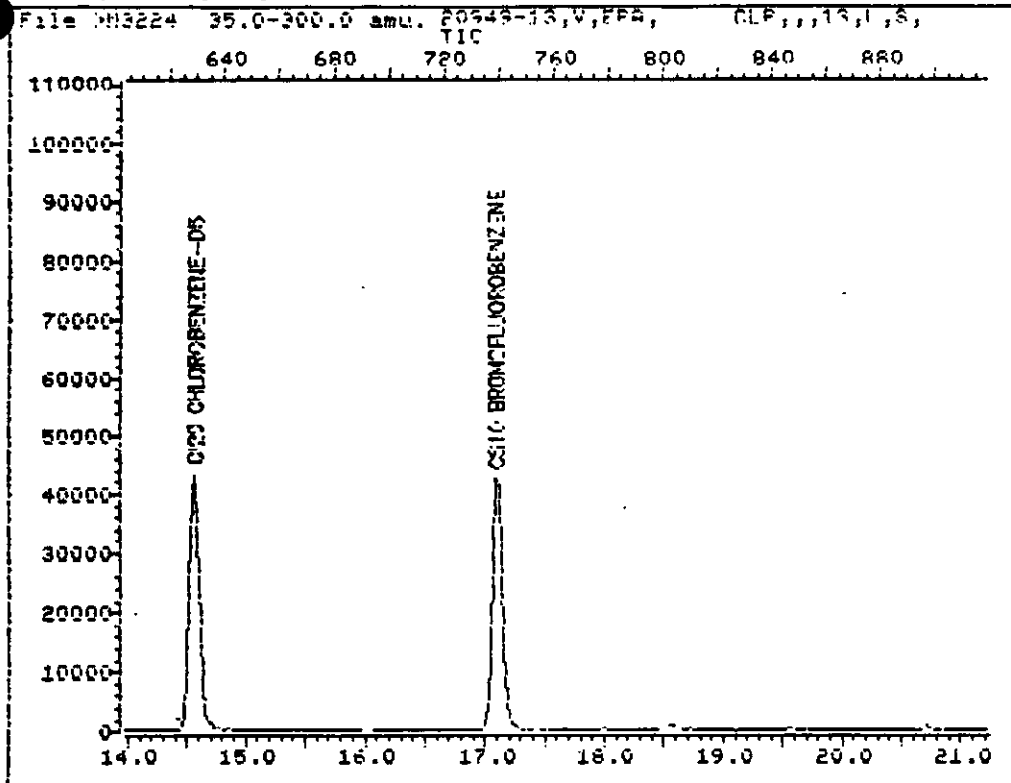
Quant Output File: ^M3224::Q1
Instrument ID: L
5G/5ML B240-RAS-S SFB INSTR.L

Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46

Last Cal Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 19:38
Injected at: 920224 19:10

TOTAL ION CHROMATOGRAM



Data File: >M3224::L3
Name: 20949-13,U,EPA,
Misc: CLP,,,13,L,S,

Quant Output File: ^M3224::QI
Instrument ID: L
5G/5ML 8240-RAS-S SFB INSTR.L

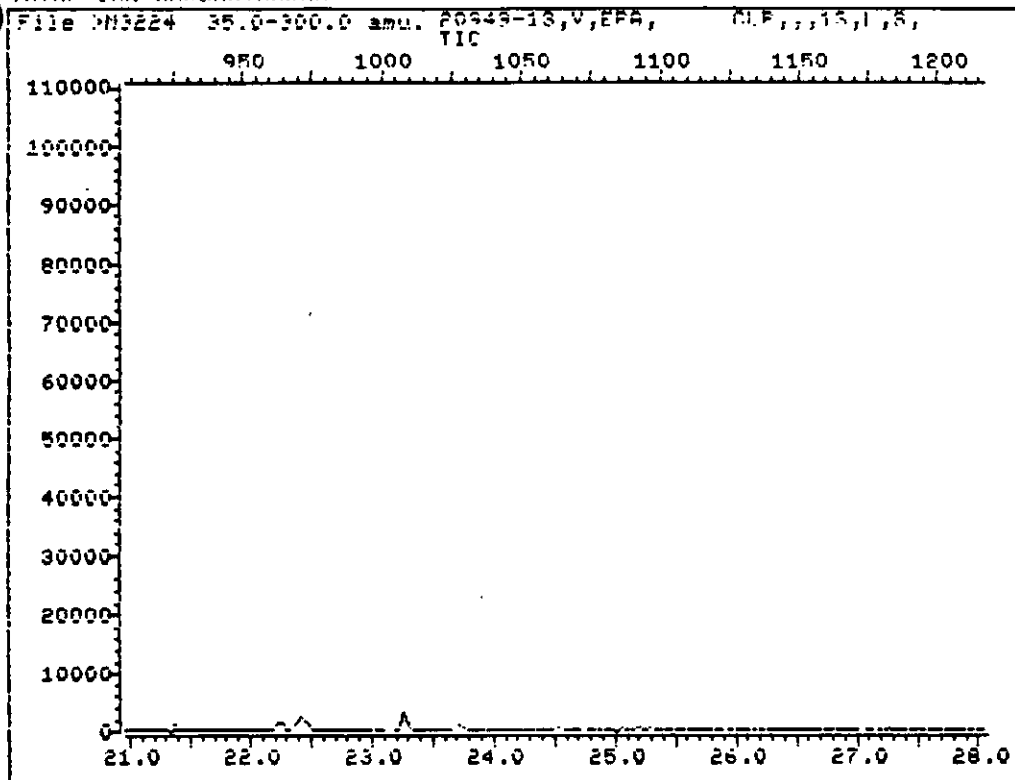
Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THE
Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

Operator ID: LUEY1
Quant Time : 920224 19:38
Injected at: 920224 19:10

000410

TOTAL ION CHROMATOGRAM



Data File: >M3224::L3
Name: 20949-13,U,EPA,
Misc: CLP,,,13,L,S,

Quant Output File: ^M3224::QF
Instrument ID: L
5G/5ML 8240-RAS-S SFB INSTR.L

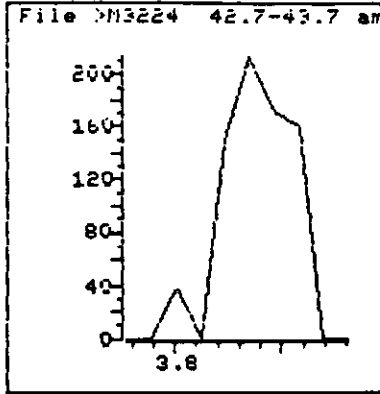
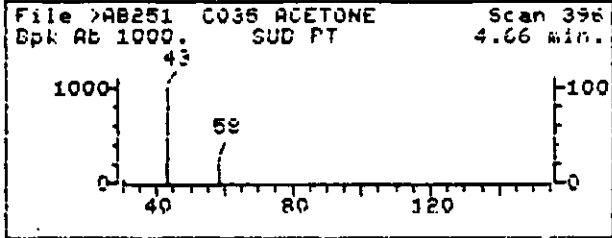
Id File: IDEPAL::ID
Title: ID FILE CLP INST. L + THF
Last Calibration: 911030 17:46

Last Qual Time: 920224 11:05

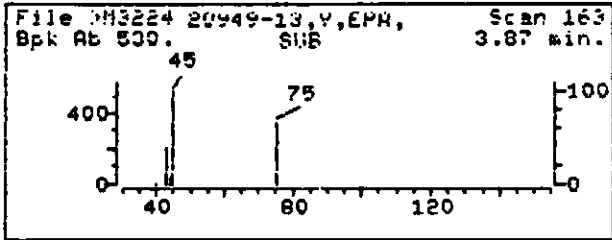
Operator ID: LUEY1
Quant Time : 920224 19:38
Injected at: 920224 19:10

000411

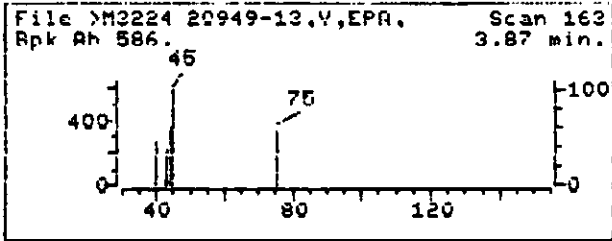
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

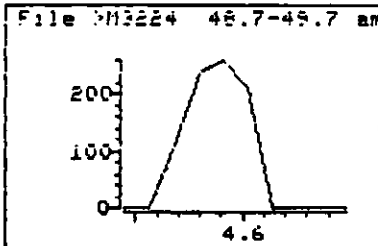
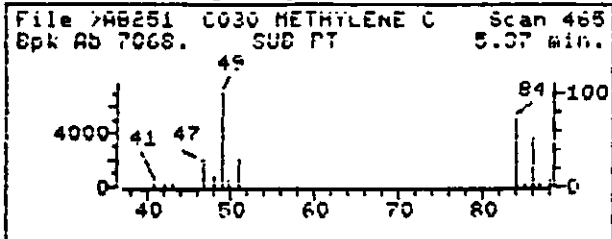


Data File: >M3224::L3
Name: 20949-13,U,EPA,
Misc: CLP,,,13,L,S, 5G/5ML
Quant Time: 920224 19:38
Injected at: 920224 19:10
Last Qual Time: 920224 11:05

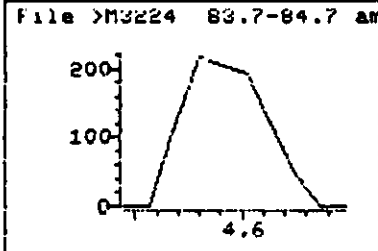
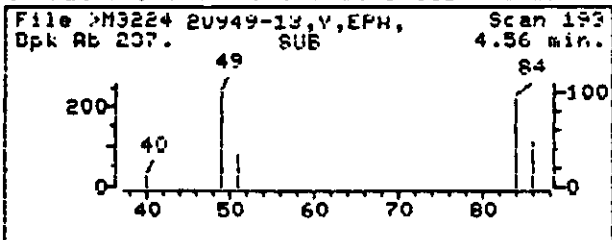
Quant Output File: ^M3224::QT
Instrument ID: L
8240-RAS-S SFB INSIR.L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 163
Retention Time: 3.87 min.
Quant Ion : 43.0
Area : 1009
Concentration : 2.58 UG/L
q-value : 100

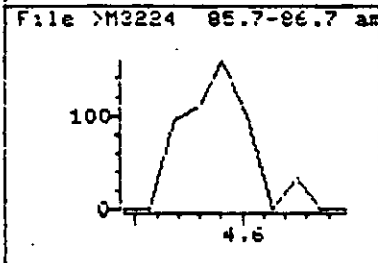
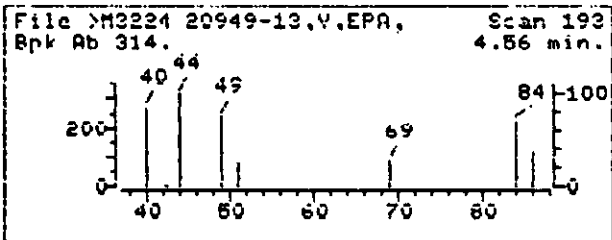
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

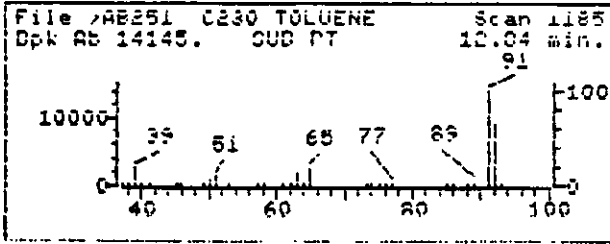


Data File: >M3224::L3 Quant Output File: ^M3224::QT
Name: 20949-13,U,EPA, Instrument ID: L
Misc: CLP,,,13,L,S, 5G/5ML 8240-RAS-S SFB INSTR.L
Quant Time: 920224 19:38 Quant ID File: IDEPAL::ID
Injected at: 920224 19:10 Last Calibration: 911030 17:46
Last Qual Time: 920224 11:05

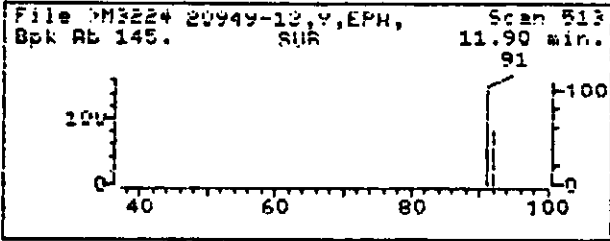
Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 193
Retention Time: 4.56 min.
Quant Ion : 84.0
Area : 1229
Concentration : 1.38 UG/L
q-value : 79

000413

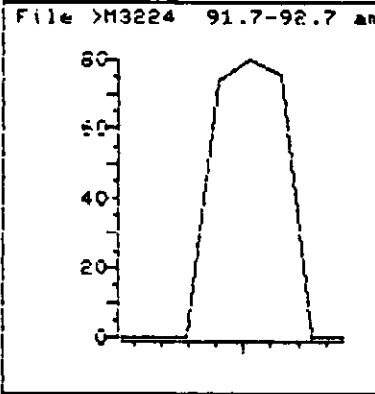
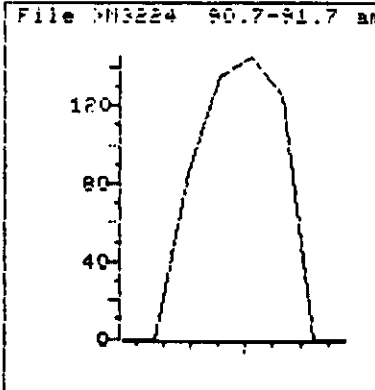
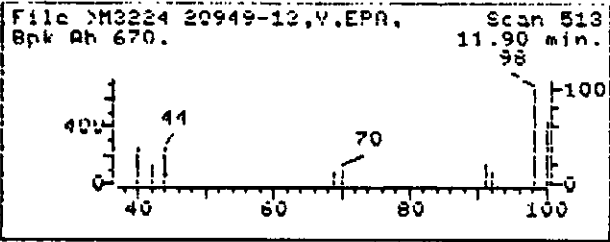
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



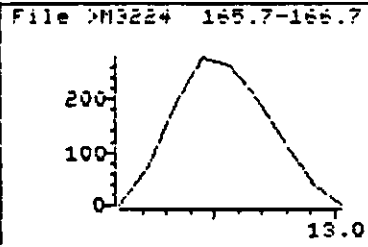
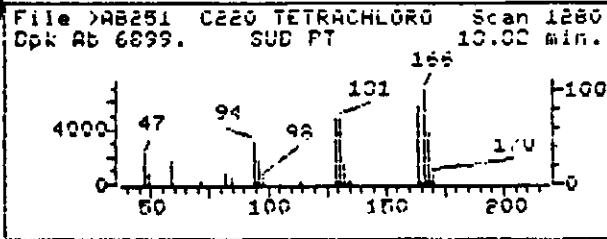
Data File: >M3224::L3
 Name: 20949-13,U,EPA,
 Misc: CLP,,,13,L,S, 5G/5ML
 Quant Time: 920224 19:38
 Injected at: 920224 19:10
 Last Qual Time: 920224 11:05

Quant Output File: ^M3224::Q1
 Instrument ID: L
 8240-RAS-S SFB INSTR.L
 Quant ID File: IDEPAL::ID
 Last Calibration: 911030 17:46

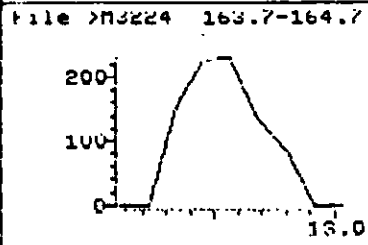
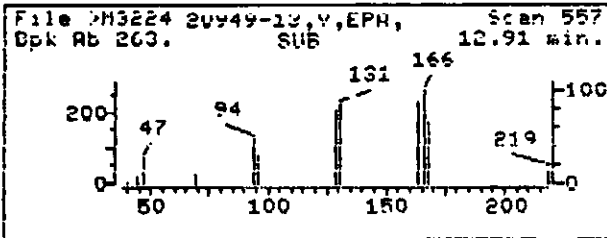
Compound No : 34
 Compound Name : C230 TOLUENE
 Scan Number : 513
 Retention Time: 11.90 min.
 Quant Ion : 91.0
 Area : 679
 Concentration : .329 UG/L
 q-value : 93

BDL

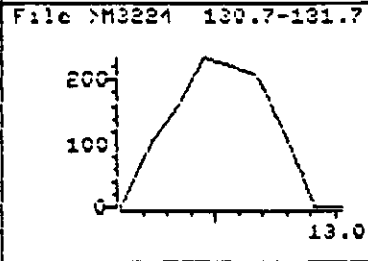
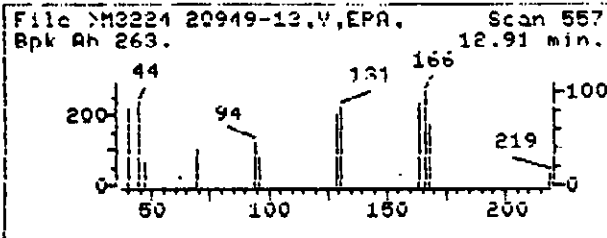
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3224::L3
 Name: 20949-13,U,EPA,
 Misc: CLP,,,13,L,S, 5G/5ML 824U-RAS-S SFB INSTR.L
 Quant Time: 920224 19:38
 Injected at: 920224 19:10
 Last Qual Time: 920224 11:09

Quant Output File: >M3224::Q1
 Instrument ID: L
 Quant ID File: IDEPAL::ID
 Last Calibration: 911030 17:46

Compound No : 36
 Compound Name : C220 TETRACHLOROETHENE
 Scan Number : 557
 Retention Time: 12.91 min.
 Quant Ion : 164.0
 Area : 1144
 Concentration : 1.46 UG/L
 q-value : 91

000415

Diagnostic Quant Report

Data File: >M3224::L3 Injected at: 19:10 02/24/92
 Quant'd : 19:38 02/24/92
 ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	7.29	7.24	.04	128.0	26861	1.0000	50.00
2) C515 1,2-DICHLOROETHANE-D	8.25	8.28	.03	65.0	49611	1.9409	47.58
3) C110 CHLOROMETHANE	1.15	0.00	--	50.0	0	.9219	0.00
4) C020 VINYL CHLORIDE	1.35	0.00	--	62.0	0	1.0481	0.00
5) C115 BROMOMETHANE	1.81	0.00	--	94.0	0	1.2863	0.00
6) C025 CHLOROETHANE	2.04	0.00	--	64.0	0	.7070	0.00
7) C045 1,1-DICHLOROETHENE	3.50	0.00	--	96.0	0	1.0416	0.00
8) C040 CARBON DISULFIDE	3.59	0.00	--	76.0	0	1.7723	0.00
9) C135 ACETONE	4.02	3.87	.15	43.0	1009	.7278	2.58
10) C030 METHYLENE CHLORIDE	4.60	4.56	.04	84.0	1229	1.6523	1.38
11) UJNK trans-1,2-DICHLOROET	5.05	0.00	--	96.0	0	1.3021	0.00
12) C050 1,1-DICHLOROETHANE	5.81	0.00	--	63.0	0	2.5245	0.00
13) U011 cis-1,2-DICHLORIDEHE	6.88	0.00	--	96.0	0	1.3859	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3440	0.00
15) C110 2-BUTANONE	7.15	0.00	--	43.0	0	1.2485	0.00
16) U013 TETRAHYDROFURAN	7.40	0.00	--	42.0	0	.8447	0.00
17) C060 CHLOROFORM	7.56	0.00	--	83.0	0	2.9977	0.00
18) C065 1,2-DICHLOROETHANE	8.39	0.00	--	62.0	0	2.1639	0.00
19) *C110 1,4-DIFLUOROBENZENE	9.24	9.22	.02	114.0	112370	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	7.64	0.00	--	97.0	0	.5915	0.00
21) C120 CARBONTETRACHLORIDE	7.91	0.00	--	117.0	0	.5525	0.00
22) C165 BENZENE	8.28	0.00	--	78.0	0	.8484	0.00
23) C150 TRICHLOROETHENE	9.54	0.00	--	130.0	0	.4426	0.00
24) C140 1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.3401	0.00
25) C130 BROMODICHLOROMETHANE	10.55	0.00	--	83.0	0	.5965	0.00
26) C143 cis-1,3-DICHLOROPROP	11.37	0.00	--	75.0	0	.5336	0.00
27) C172 trans-1,3-DICHLOROPR	12.52	0.00	--	75.0	0	.4817	0.00
28) C160 1,1,2-TRICHLOROETHAN	12.79	0.00	--	97.0	0	.3574	0.00
29) C155 CHLORODIBROMOMETHANE	13.46	0.00	--	129.0	0	.6261	0.00
30) C180 BROMOFORM	16.30	0.00	--	173.0	0	.5647	0.00
31) *C120 CHLOROBENZENE-D5	14.57	14.57	.00	117.0	81131	1.0000	50.00
32) C505 TOLUENE-D8	11.79	11.79	.00	98.0	99440	1.1547	53.07
33) C510 BROMOFLUOROBENZENE	17.12	17.09	.02	95.0	56089	.7650	45.14
34) C230 TOLUENE	11.90	11.90	.00	91.0	679	1.2730	.33
35) C205 4-METHYL-2-PENTANONE	11.86	0.00	--	43.0	0	.8176	0.00
36) C220 TETRACHLOROETHENE	12.91	12.91	.00	164.0	1144	.4842	1.46
37) C210 2-HEXANONE	13.51	0.00	--	43.0	0	.6679	0.00
38) C235 CHLOROBENZENE	14.61	0.00	--	112.0	0	.9993	0.00
39) C240 ETHYLBENZENE	14.98	0.00	--	106.0	0	.4643	0.00
40) UJNK M&P-XYLENES	15.23	0.00	--	106.0	0	.5735	0.00
41) U029 O-XYLENE	16.01	0.00	--	106.0	0	.5773	0.00
42) C250 XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.5754	0.00
43) C245 STYRENE	16.08	0.00	--	104.0	0	.9250	0.00
44) C225 1,1,2,2-TETRACHLOROE	17.67	0.00	--	83.0	0	.9352	0.00

* - Compound is an Internal Standard
 0 - Compound Qded

000416

TIC Internal Standard Report

Data File: >M3224

Maximum separation 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
310.	26861.	7.294 310.	185238. 94.550
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
396.	112370.	2.506 396.	267680. 95.053
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
629.	81131.	3.094 629.	249812. 99.514

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.

Number of peaks: 7

Number of peaks remaining: 7

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.

Maximum fraction of RIC peak from targets: 40. %

Number of peaks: 7

Number of peaks remaining: 1

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15

Number of peaks: 1

Maximum number of peaks > number of peaks.

000417

TICE: _D

Data Reduced by : SEB Date: 3/5/92 Data File: >M3224
Data Reviewed by : A Date: 3/10/92

Enseco TIC Report (page 1)

Sample: 20949-13,U,EPA, Run Factor: 1.10
Conditions: CLP,,,13,L,S, 5G/5ML 82 Analyst: LUEY1

# Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	581.	2	9.1	541-05-9	Cyclotrisiloxane, hexamethyl-

Hit return for more ...

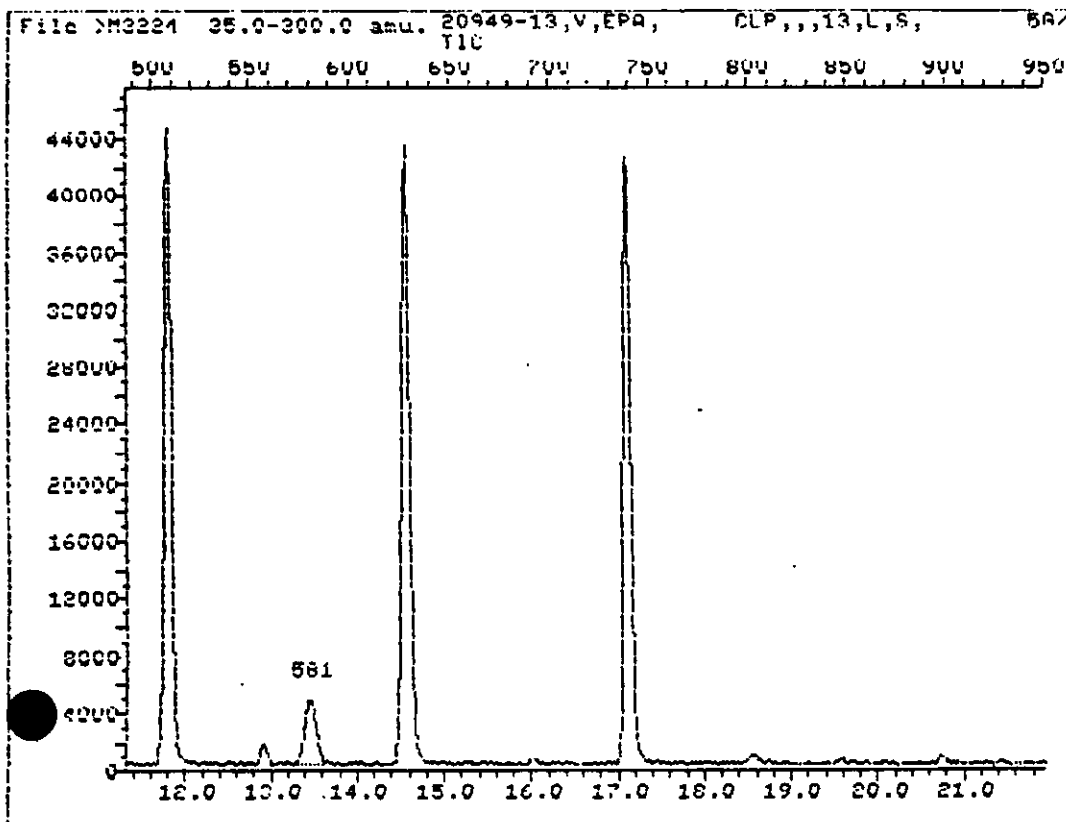
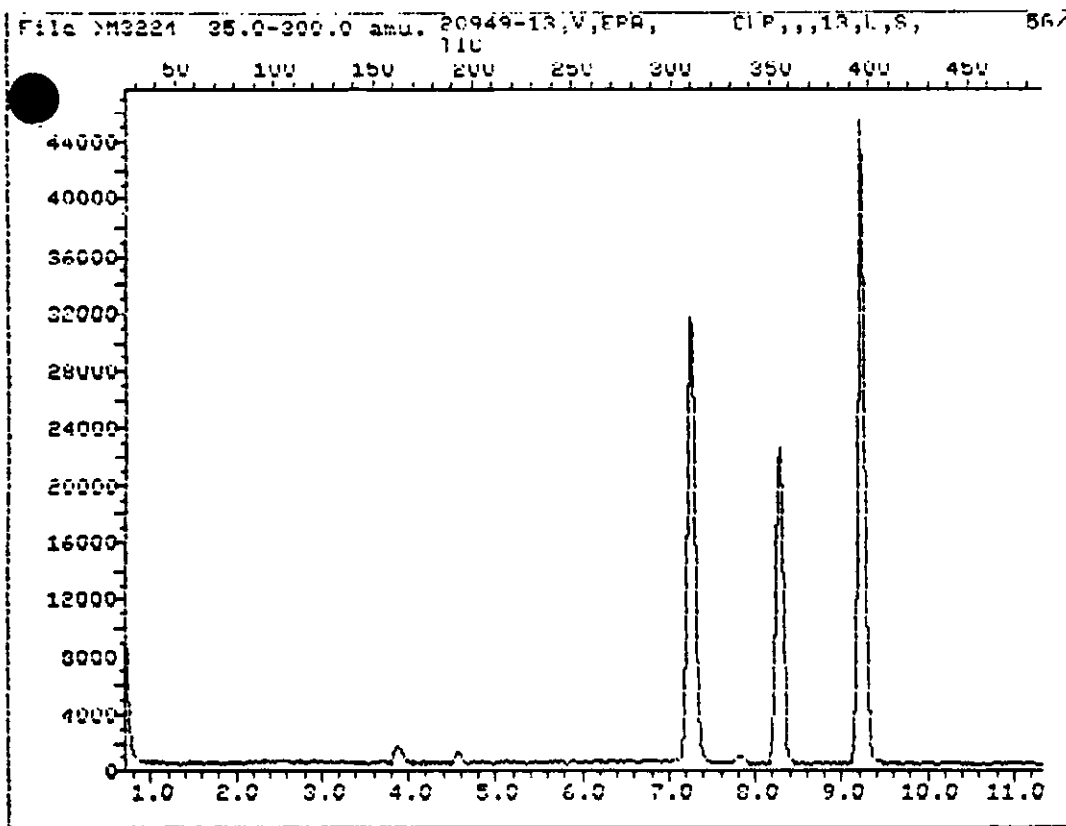
Data File: >M3224

Enseco TIC Report (page 2)

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

#	Prob.	Cont.	Int. Std.	RT	PRT	Area	Height	Conc. As Analyzed (UG/L)
1	60	11	3	13.46	.924	41489.	4492.	8.304

TICE: _



000419

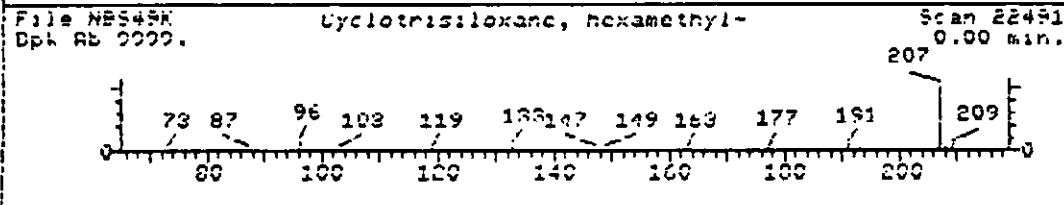
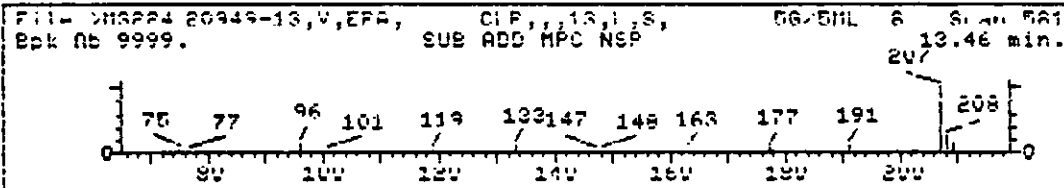
TIC NUMBER: 1

1. Cyclotrisiloxane, hexamethyl-

222 C6H18O3Si3

Sample file: >M3224 Spectrum #: 581
Search speed: 2 Tilting option: S No. of ion ranges searched: 69

Prob.	IAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	L_I	R_IO
1.	60	541049	28491	NBS49K	59	50	1	0	100	11	30 17



2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

20949-14

b Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-14

Sample wt/vol: 2.0 (g/mL) G

Lab File ID: M3152

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 16

Date Analyzed: 02/22/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	30	U
74-83-9	Bromomethane	30	U
75-01-4	Vinyl Chloride	30	U
75-00-3	Chloroethane	30	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	12	J
75-15-0	Carbon Disulfide	30	U
75-35-4	1,1-Dichloroethene	30	U
75-34-3	1,1-Dichloroethane	8	J
540-59-0	1,2-Dichloroethene (total)	11	J
67-66-3	Chloroform	30	U
107-06-2	1,2-Dichloroethane	30	U
78-93-3	2-Butanone	30	U
71-55-6	1,1,1-Trichloroethane	140	U
56-23-5	Carbon Tetrachloride	30	U
75-27-4	Bromodichloromethane	30	U
78-87-5	1,2-Dichloropropane	30	U
10061-01-5	cis-1,3-Dichloropropene	30	U
79-01-6	Trichloroethene	35	U
124-48-1	Dibromochloromethane	30	U
79-00-5	1,1,2-Trichloroethane	30	U
71-43-2	Benzene	30	U
10061-02-6	trans-1,3-Dichloropropene	30	U
75-25-2	Bromoform	30	U
108-10-1	4-Methyl-2-Pentanone	6	J
591-78-6	2-Hexanone	29	J
127-18-4	Tetrachloroethene	150	U
79-34-5	1,1,2,2-Tetrachloroethane	30	U
108-88-3	Toluene	30	U
108-90-7	Chlorobenzene	30	U
100-41-4	Ethylbenzene	30	U
100-42-5	Styrene	30	U
1330-20-7	Xylene (total)	30	U

000421

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-14

Name: ENSECO Contract: 20949-14

Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 20949-14

Sample wt/vol: 2.0 (g/mL) G Lab File ID: M3152

Level: (low/med) LOW Date Received: 02/15/92

% Moisture: not dec. 16 Date Analyzed: 02/22/92

GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 15

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 5911-04-6	Nonane, 3-methyl-	16.64	210	JN
2. 14676-29-0	Heptane, 3-ethyl-2-methyl-	16.84	170	JN
3. 15869-89-3	Octane, 2,5-dimethyl-	17.44	540	JN
4. 5911-04-6	Nonane, 3-methyl-	17.72	170	JN
5. 4926-90-3	Cyclohexane, 1-ethyl-1-methyl-	18.14	260	JN
6. 124-18-5	Decane	18.52	510	JN
7. 17302-23-7	Nonane, 4,5-dimethyl-	18.94	330	JN
8. 2847-72-5	Decane, 4-methyl-	19.19	440	JN
9. 593-49-7	Heptacosane	19.52	600	JN
10. 72993-32-9	Cyclopentane, 1-butyl-2-ethyl-	19.90	220	JN
11. 91-17-8	Naphthalene, decahydro-	20.20	490	JN
12. 13151-34-3	Decane, 3-methyl-	20.49	280	JN
13. 61142-70-9	Cyclohexane, 2,4-diethyl-1-methyl-	20.74	200	JN
14. 1120-21-4	Undecane	21.22	810	JN
15. 629-62-9	Pentadecane	21.64	170	JN

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output File: ^M3152::QT
 Data File: >M3152::L2
 Name: 20949-14,RAS-S
 Misc: 2G/5ML ANALYST RB INST L HEATED

Quant Rev: 7 Quant Time: 920222 07:46
 Injected at: 920222 07:18
 Dilution Factor: 1.00000
 Instrument ID: L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	7.24	128.0	42418	50.00	UG/L	93
2)	CS15 1,2-DICHLOROETHANE-D4	8.25	65.0	63065	48.10	UG/L	80
9)	C035 ACETONE	4.03	43.0	2154	4.11	UG/L	100
10)	C030 METHYLENE CHLORIDE	4.63	84.0	1628	1.17	UG/L	75
12)	C050 1,1-DICHLOROETHANE	5.82	63.0	5326	2.70	UG/L	97
13)	U011 cis-1,2-DICHLOROETHENE	6.88	96.0	3936	3.44	UG/L	69
19)	*C110 1,4-DIFLUOROBENZENE	9.20	114.0	182068	50.00	UG/L	100
20)	C115 1,1,1-TRICHLOROETHANE	7.61	97.0	86831	47.65	UG/L	90
21)	C120 CARBONTETRACHLORIDE	7.61	117.0	12114	6.84	UG/L	83
23)	C150 TRICHLOROETHENE	9.52	130.0	18144	11.93	UG/L	93
31)	*C120 CHLORIBENZENE-D5	14.53	117.0	115959	50.00	UG/L	81
32)	CS05 TOLUENE-D8	11.75	98.0	140914	52.46	UG/L	93
33)	CS10 BROMOFLUOROBENZENE	17.05	95.0	88655	52.76	UG/L	100
35)	C205 4-METHYL-2-PENTANONE	11.79	43.0	3258	1.87	UG/L	94
36)	C220 TETRACHLOROETHENE	12.87	164.0	49795	49.16	UG/L	98
37)	C210 2-HEXANONE	13.61	43.0	14063	9.68	UG/L	46
44)	C225 1,1,2,2-TETRACHLOROETHANE	17.84	83.0	22028	10.76	UG/L	54

* Compound is ISTD

MS data file header from : >M3152::L2

Sample: 20949-14,RAS-S Operator: LUEY1 REG. GRP. 2/22/92 7:18
 Misc : 2G/5ML ANALYST RB INST L HEATED
 Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
 Method file: SAMML Tuning file: MTBFBL No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

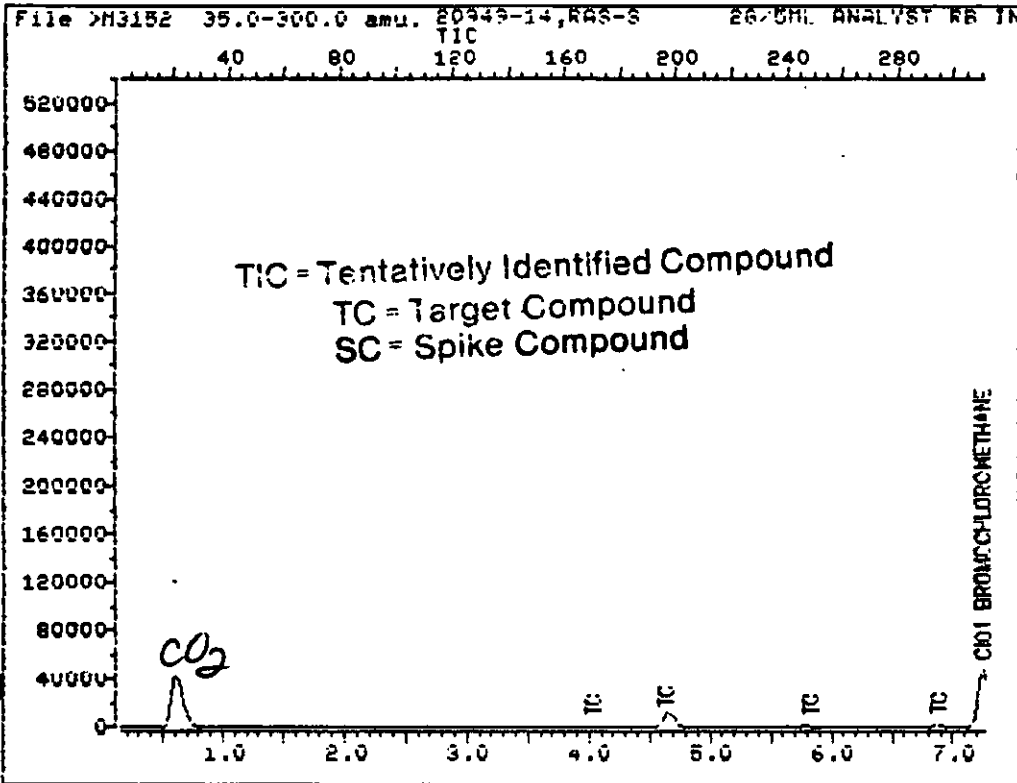
Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	ldesired reporting units
samp_amt	2G	lamt of sample taken
ext_vol	5ML	lfinal extract volume
q_units	UG/L	lcal units from quant
ext_dil	100	ldilution factor
%moist	N/A	l%moisture for soil
int_ext_vol	NA	lintermediate extr ct vol/M.L. ext vo
int_ext_vol_u		lintermediate extract vol/M.L. vol US
spiked	E	lSurrogate added at S(tart)/E(nd)
matrix	S	lsample matrix W(ater)/S(oil)
rfact	2.50	l calcd runfactor
surfact	.0050	l calcd surr vol

Performance Check: >M3139 Injection Time: 2/21/92 22:14
 Sample : >M3152 Injection Time: 2/22/92 7:18
 Elapsed Time: 0 Y 0 D 9:04
 Sample: ^M3152 Calibration Stds.: ^M3140,
 Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
 Invalid Response Factor for: C250 XYLENE (TOTAL)

TOTAL ION CHROMATOGRAM



Data File: >M3152::L2

Quant Output File: ^M3152::QT

Name: 20949-14,RAS-S

Instrument ID: L

Misc: 2G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

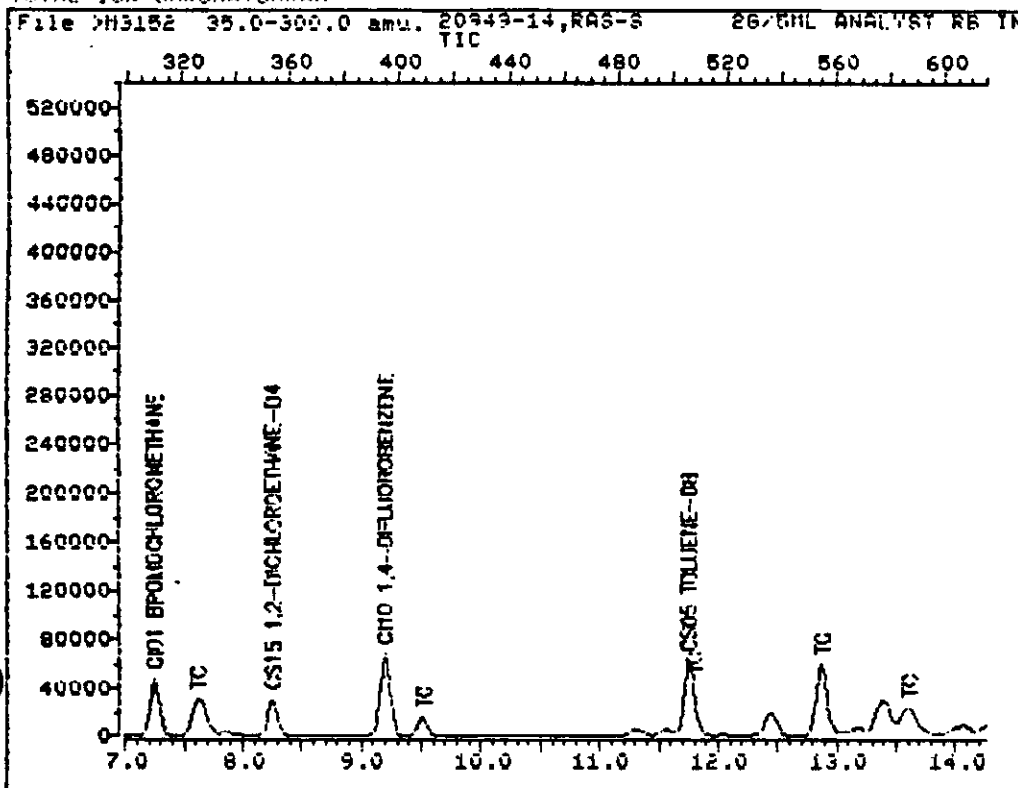
Operator ID: LUEY1

Quant Time : 920222 07:46

Injected at: 920222 07:18

000425

TOTAL ION CHROMATOGRAM



Data File: >M3152::L2

Quant Output File: ^M3152::QT

Name: 20949-14,RAS-S

Instrument ID: L

Misc: 26/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

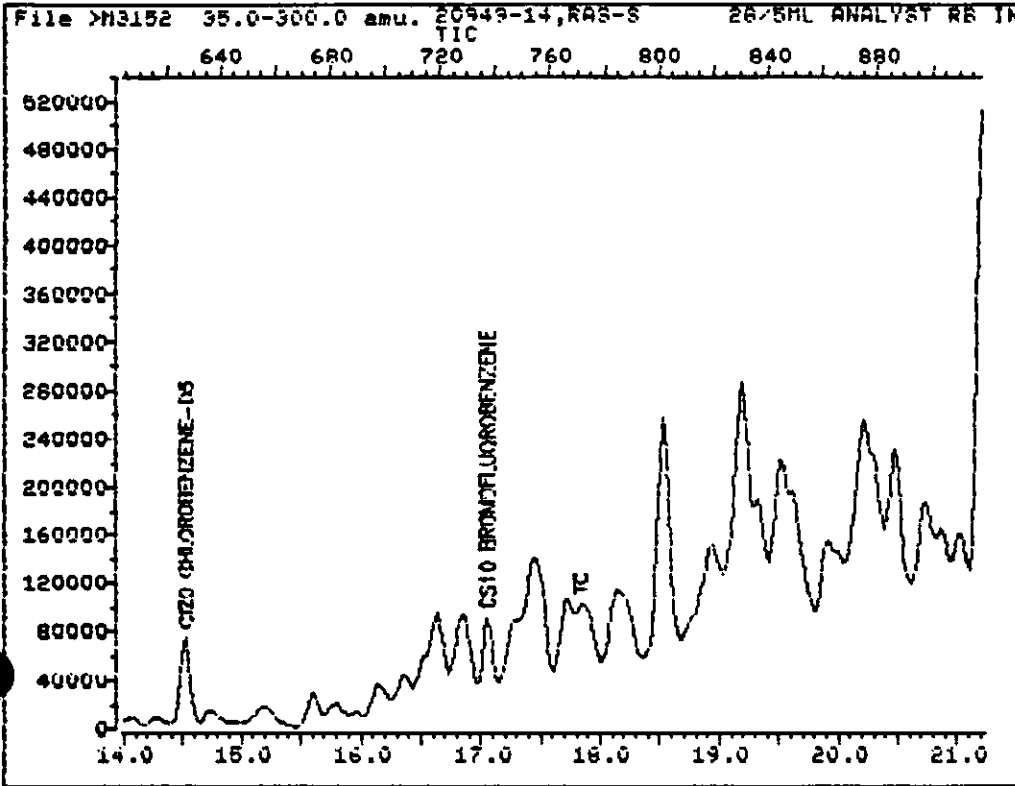
Operator ID: LUEY1

Quant Time : 920222 07:46

Injected at: 920222 07:18

000426

TOTAL ION CHROMATOGRAM



Data File: >M3152::L2

Quant Output File: ^M3152::WT

Name: 20949-14,RAS-S

Instrument ID: L

Misc: 2G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

Operator ID: LUEY1

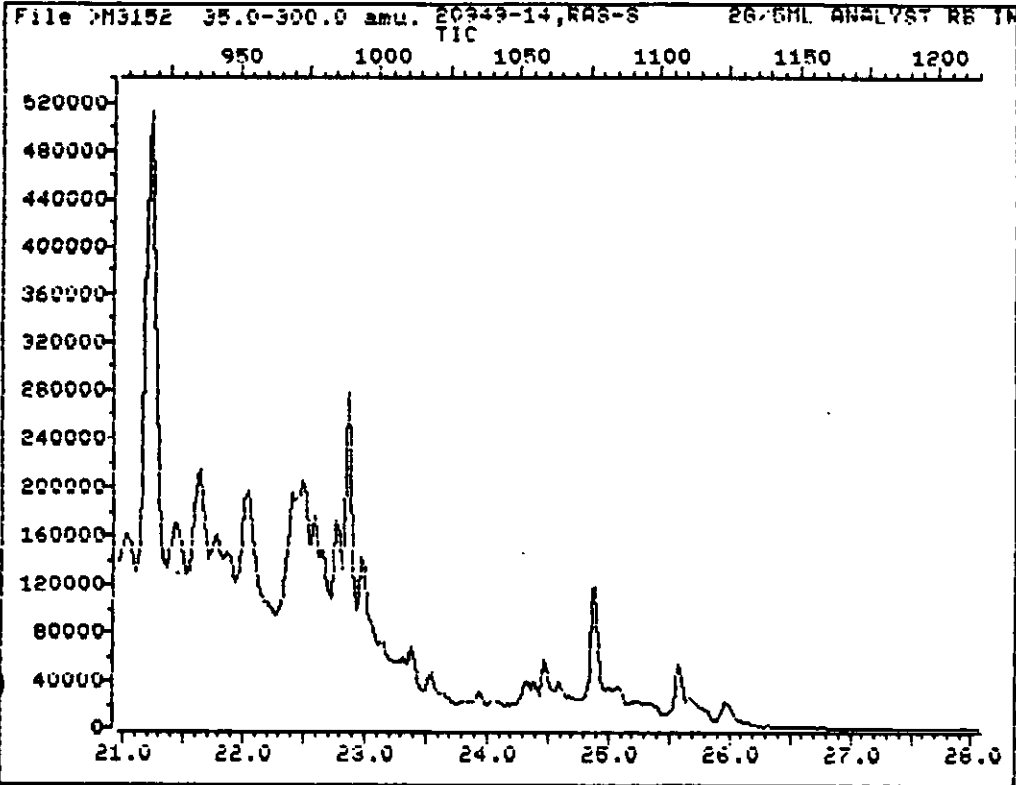
Quant Time : 920222 07:46

Injected at: 920222 07:18

Page 3 of 4

000427

TOTAL ION CHROMATOGRAM



Data File: >M3152::L2

Quant Output File: ^M3152::QT

Name: 20949-14,RAS-S

Instrument ID: L

Misc: 2G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

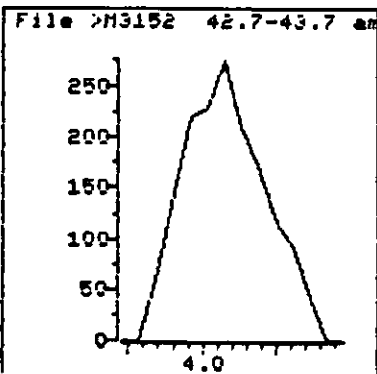
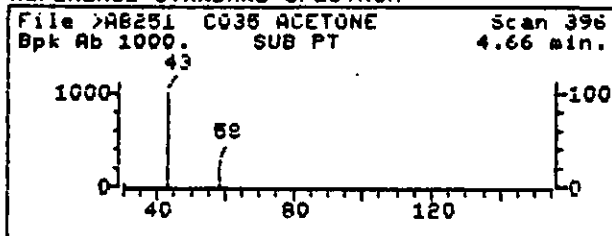
Operator ID: LUEY1

Quant Time : 920222 07:46

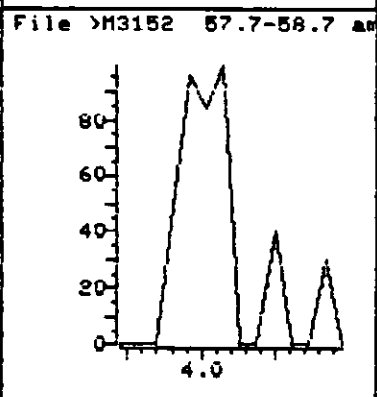
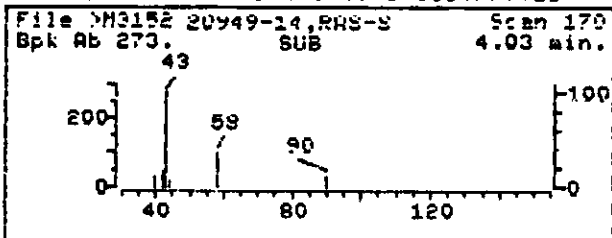
Injected at: 920222 07:18

000428

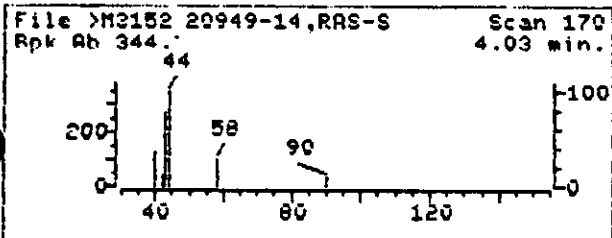
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



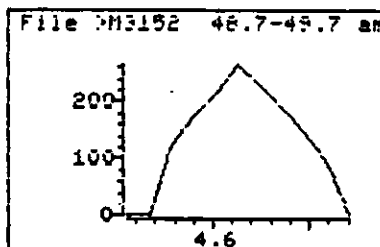
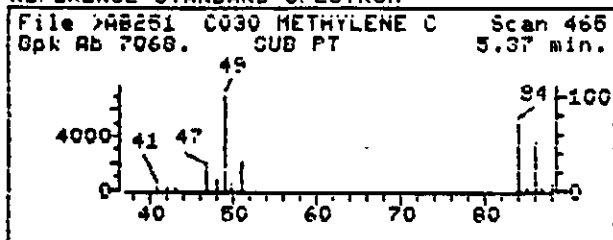
Data File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221 22:44

Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

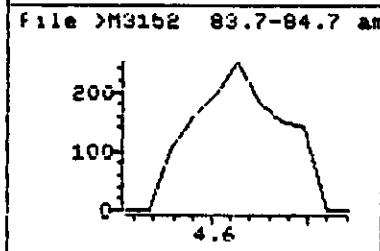
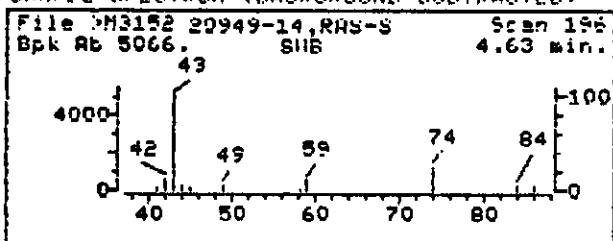
Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 170
Retention Time: 4.03 min.
Quant Ion : 43.0
Area : 2154
Concentration : 4.11 UG/L
q-value : 100

000429

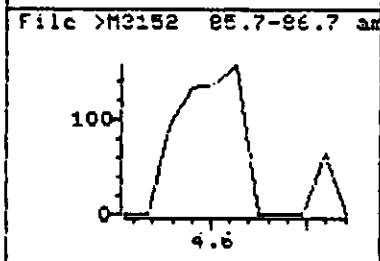
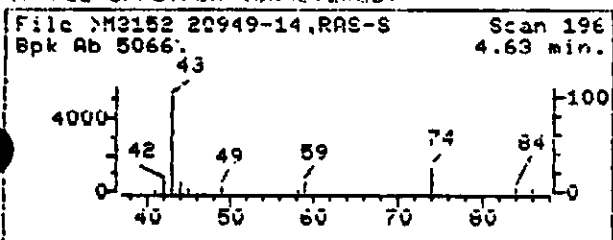
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

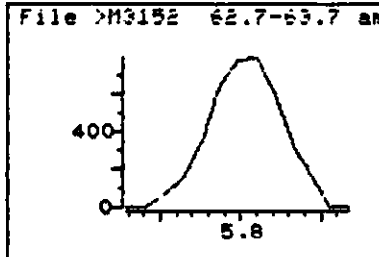
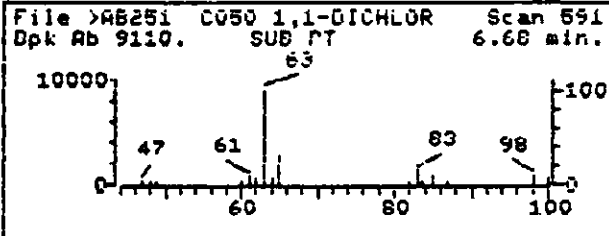


Data File: >M3152::L2 Quant Output File: ^M3152::QT
Name: 20949-14,RAS-S Instrument ID: L
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46 Quant ID File: IDEPAL::ID
Injected at: 920222 07:18 Last Calibration: 911030 17:46
Last Qual Time: 920221 22:44

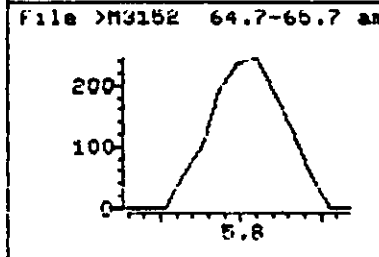
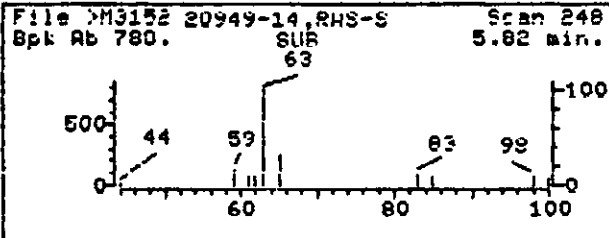
Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 196
Retention Time: 4.63 min.
Quant Ion : 84.0
Area : 1628
Concentration : 1.17 UG/L
q-value : 75

000430

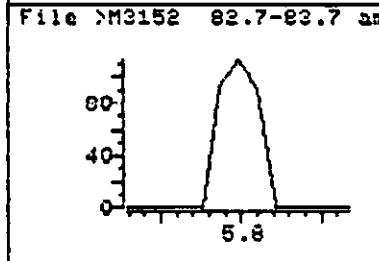
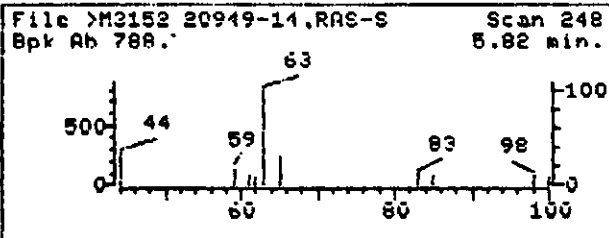
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

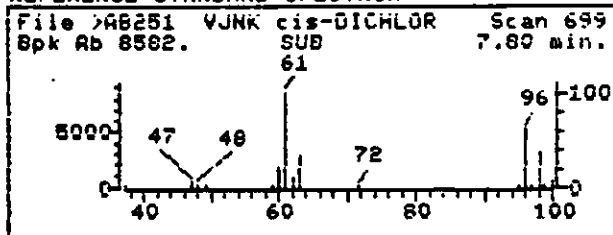


Data File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221-22:44

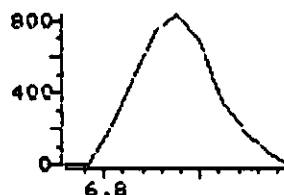
Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: 10&PAL::ID
Last Calibration: 911030 17:46

Compound No : 12
Compound Name : C050 1,1-DICHLOROETHANE
Scan Number : 248
Retention Time: 5.82 min.
Quant Ion : 63.8
Area : 5326
Concentration : 2.70 UG/L
q-value : 97

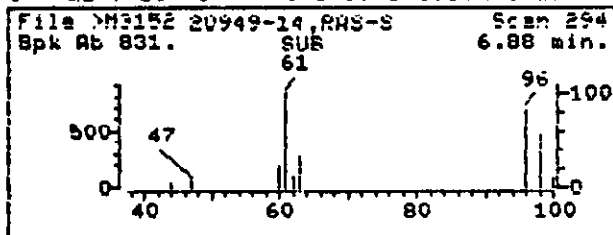
REFERENCE STANDARD SPECTRUM



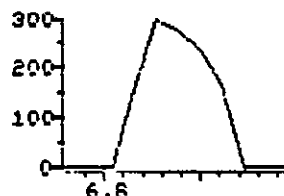
File >M3152 60.7-61.7 am



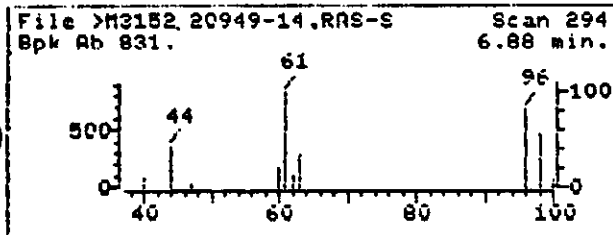
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



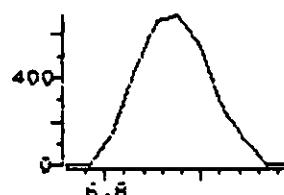
File >M3152 62.7-63.7 am



SAMPLE SPECTRUM (UNALTERED)



File >M3152 95.7-96.7 am



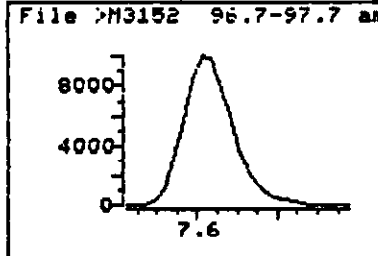
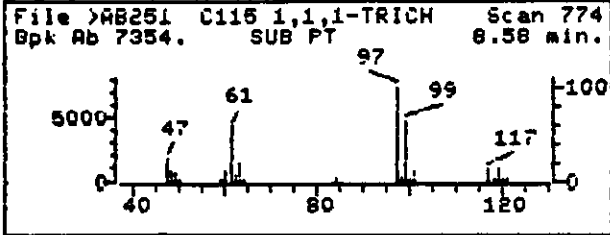
Date File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221 22:44

Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

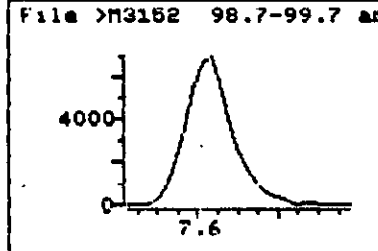
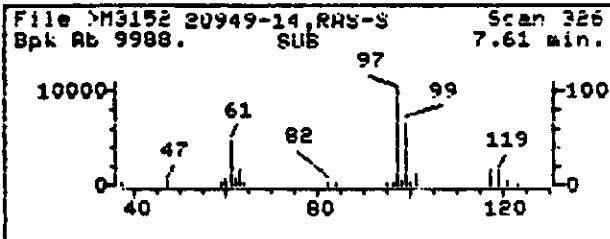
Compound No : 13
Compound Name : U011 cis-1,2-DICHLOROETHENE
Scan Number : 294
Retention Time: 6.88 min.
Quant Ion : 96.0
Area : 3936
Concentration : 3.44 UG/L
q-value : 69

000432

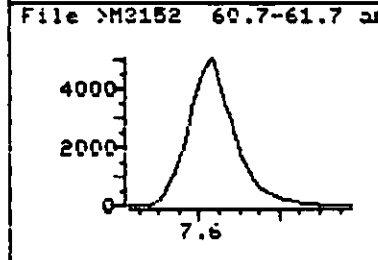
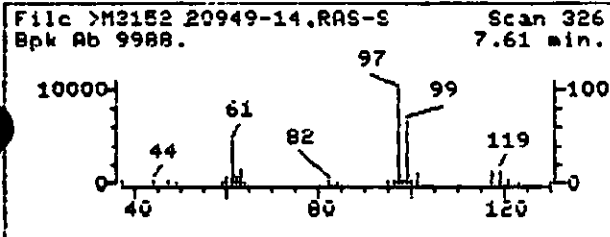
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



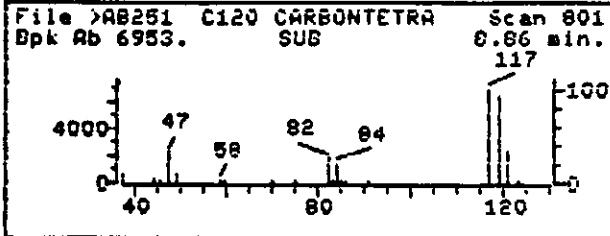
SAMPLE SPECTRUM (UNALTERED)



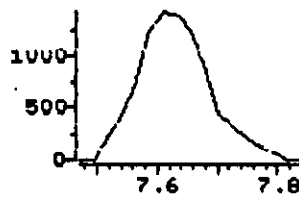
Data File: >M3152::L2 Quant Output File: ^M3152::QT
Name: 20949-14,RAS-S Instrument ID: L
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46 Quant ID File: IDEPAL::ID
Injected at: 920222 07:18 Last Calibration: 911030 17:46
Last Qcal Time: 920221 22:44

Compound No : 20
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 326
Retention Time: 7.61 min.
Quant Ion : 97.0
Area : 86831
Concentration : 47.65 UG/L
q-value : 90

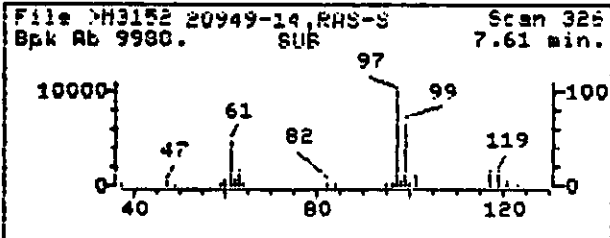
REFERENCE STANDARD SPECTRUM



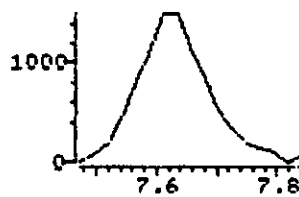
File >M3152 116.7-117.7



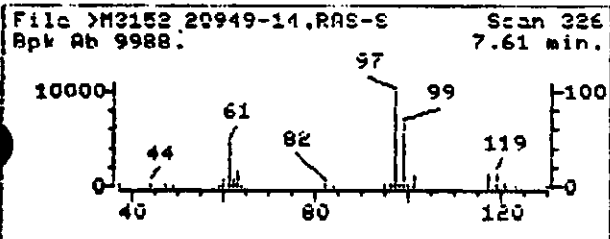
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



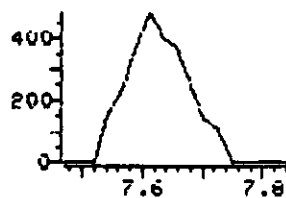
File >M3152 118.7-119.7



SAMPLE SPECTRUM (UNALTERED)



File >M3152 120.7-121.7



Data File: >M3152::L2

Quant Output File: ^M3152::QT

Name: 20949-14,RAS-S

Instrument ID: L

Misc: 2G/5ML ANALYST RB INST L HEATED

Quant Time: 920222 07:46

Quant ID File: IDEPAL::ID

Injected at: 920222 07:18

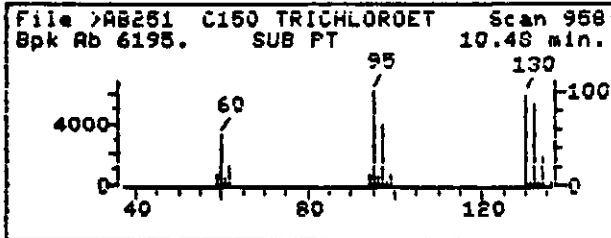
Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

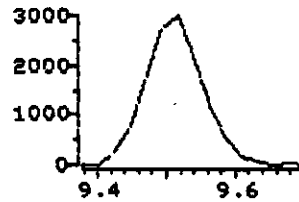
Compound No : 21
 Compound Name : C120 CARBONTETRACHLORIDE
 Scan Number : 326
 Retention Time: 7.61 min.
 Quant Ion : 117.0
 Area : 12114
 Concentration : 6.84 UG/L
 q-value : 83

ret time 83

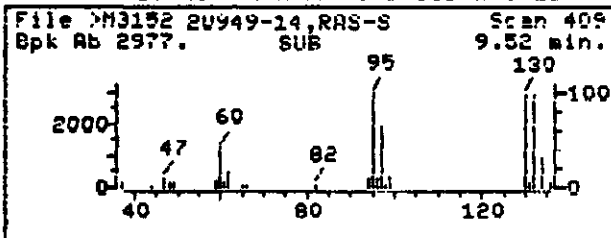
REFERENCE STANDARD SPECTRUM



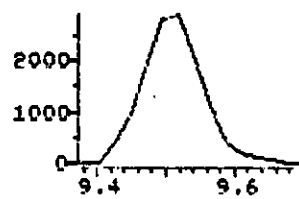
File >M3152 94.7-95.7 am



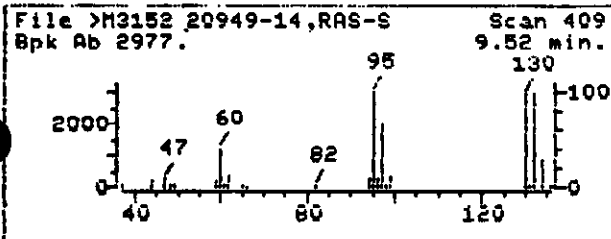
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



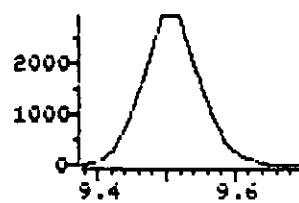
File >M3152 129.7-130.7



SAMPLE SPECTRUM (UNALTERED)



File >M3152 131.7-132.7

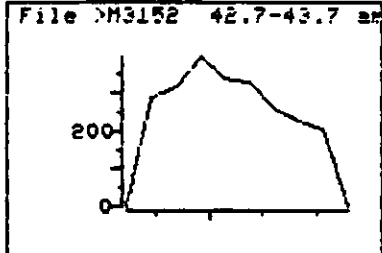
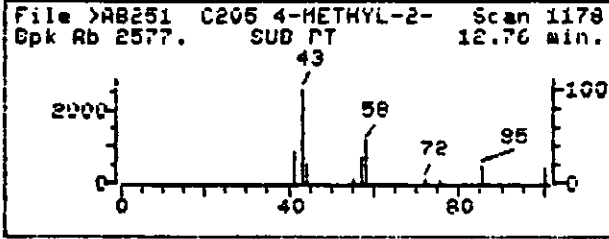


Data File: >M3152::L2
 Name: 20949-14,RAS-S
 Misc: 2G/5ML ANALYST RB INST L HEATED
 Quant Time: 920222 07:46
 Injected at: 920222 07:18
 Last Qcal Time: 920221 22:44

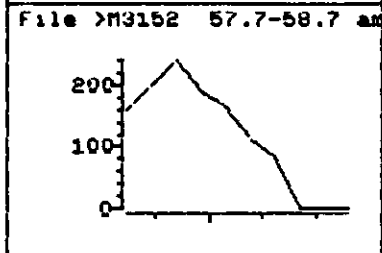
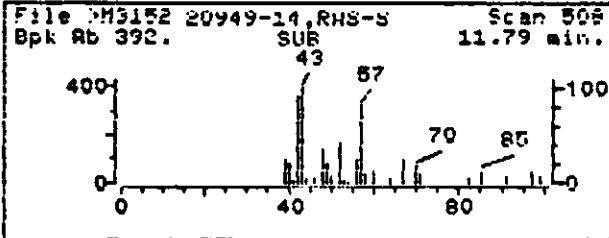
Quant Output File: ^M3152::QT
 Instrument ID: L
 Quant ID File: IDEPAL::ID
 Last Calibration: 911030 17:46

Compound No : 23
 Compound Name : C150 TRICHLOROETHENE
 Scan Number : 409
 Retention Time: 9.52 min.
 Quant Ion : 130.0
 Area : 18144
 Concentration : 11.93 UG/L
 q-value : 93

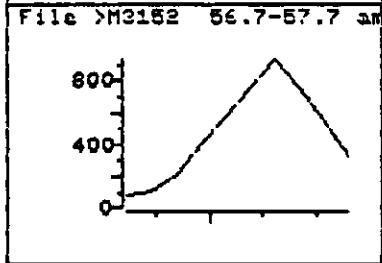
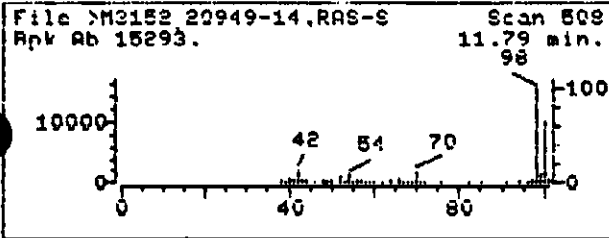
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



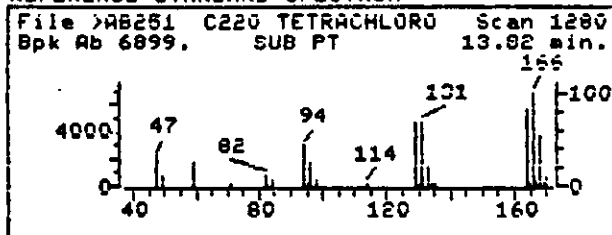
Data File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221 22:44

Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

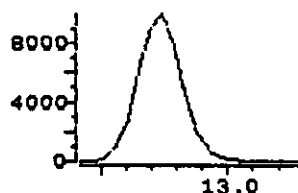
Compound No : 35
Compound Name : C205 4-METHYL-2-PENTANONE
Scan Number : 508
Retention Time: 11.79 min.
Quant Ion : 43.0
Area : 3258
Concentration : 1.87 UG/L
q-value : 94

OK 2 31092

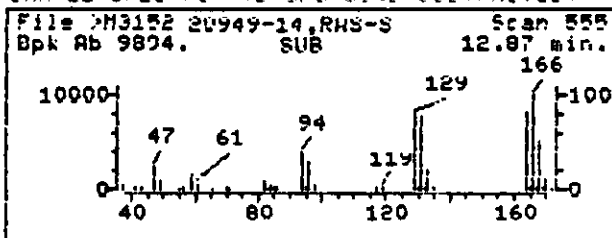
REFERENCE STANDARD SPECTRUM



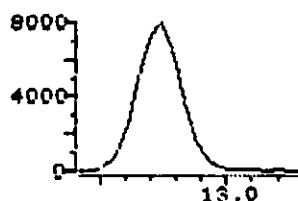
File >M3152 165.7-166.7



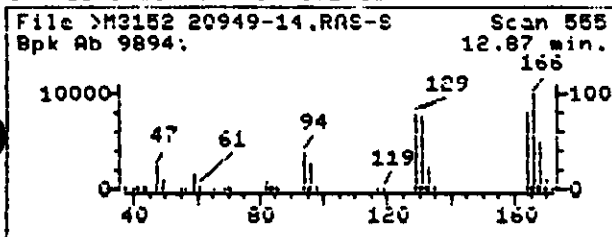
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



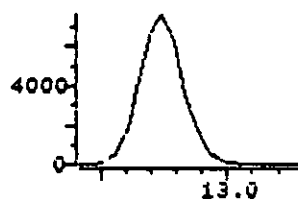
File >M3152 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >M3152 130.7-131.7



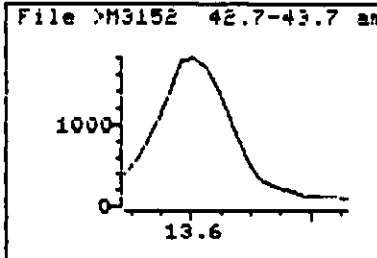
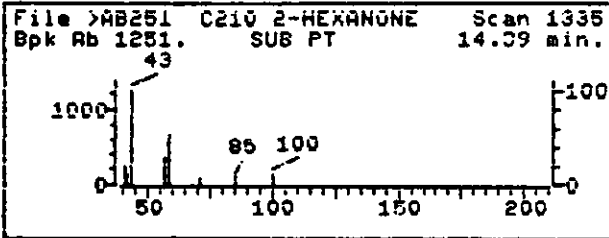
Data File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST KB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221 22:44

Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

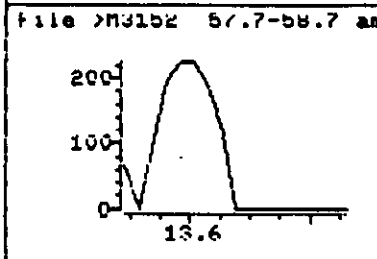
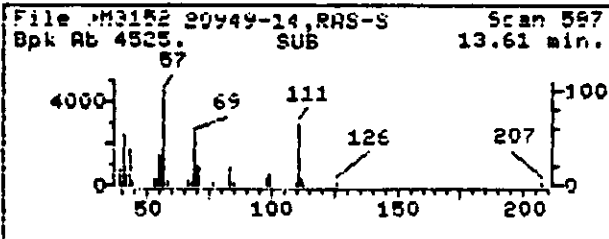
Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 555
Retention Time : 12.87 min.
Quant Ion : 164.0
Area : 49795
Concentration : 49.16 UG/L
q-value : 98

000437

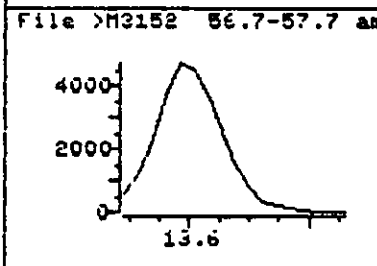
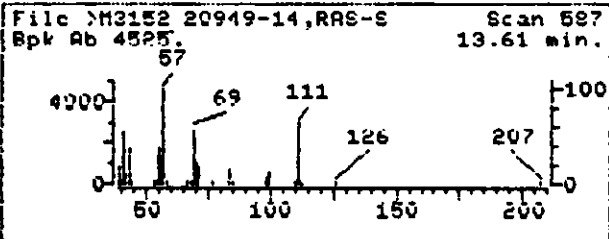
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

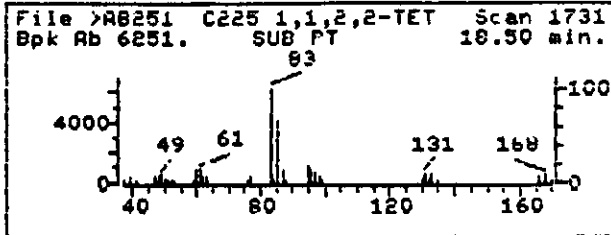


Data File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221 22:44

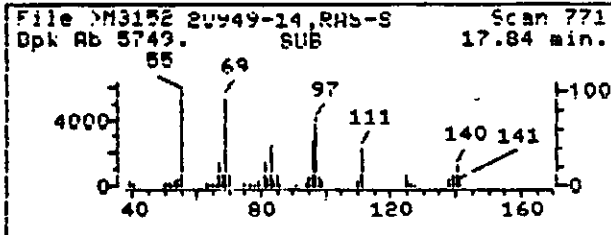
Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 37
Compound Name : C210 2-HEXANONE
Scan Number : 587
Retention Time: 13.61 min.
Quant Ion : 43.0
Area : 14063
Concentration : 9.68 UG/L
q-value : 46

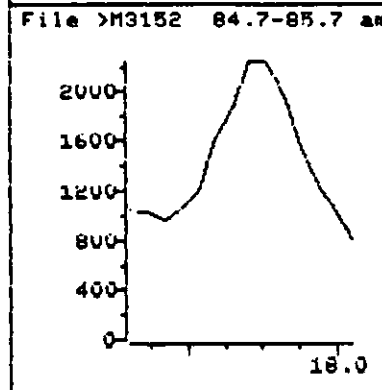
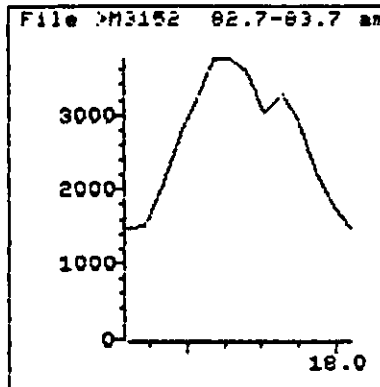
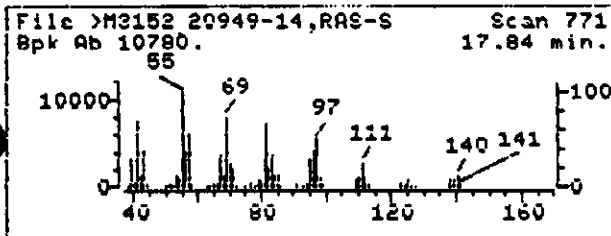
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3152::L2
Name: 20949-14,RAS-S
Misc: 2G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 07:46
Injected at: 920222 07:18
Last Qcal Time: 920221 22:44

Quant Output File: ^M3152::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 44
Compound Name : C225 1,1,2,2-TETRACHLORUETHANE
Scan Number : 771
Retention Time: 17.84 min.
Quant Ion : 83.0
Area : 220287
Concentration : 10.76 UG/L
q-value : 54

Diagnostic Quant Report

Data File: >M3152::L2 Injected at: 07:18 02/22/92

Quant'd : 07:46 02/22/92

ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	7.31	7.24	.07	128.0	42418	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	8.25	8.25	.01	65.0	63065	1.5454	48.10
3) C010 CHLOROMETHANE	1.12	0.00	--	50.0	0	.6752	0.00
4) C020 VINYL CHLORIDE	1.33	0.00	--	62.0	0	.8468	0.00
5) C015 BROMOMETHANE	1.78	0.00	--	94.0	0	1.1498	0.00
6) C025 CHLOROETHANE	2.05	0.00	--	64.0	0	.6141	0.00
7) C045 1,1-DICHLOROETHENE	3.49	0.00	--	96.0	0	1.0677	0.00
8) C040 CARBON DISULFIDE	3.58	0.00	--	76.0	0	1.7671	0.00
9) C035 ACETONE	4.01	4.03	.02	43.0	2154	.6178	4.11
9) C035 ACETONE	4.01	4.37	.36	43.0	428	.6178	.82
10) C030 METHYLENE CHLORIDE	4.58	4.63	.05	84.0	1628	1.6412	1.17
11) UJNK trans-1,2-DICHLORJET	5.04	0.00	--	96.0	0	1.2769	0.00
12) C050 1,1-DICHLOROETHANE	5.81	5.82	.01	63.0	5326	2.3261	2.70
13) U011 cis-1,2-DICHLOROETHE	6.86	6.88	.02	96.0	3936	1.3491	3.44
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	0.00	96.0	3936	1.3130	3.53
15) C110 2-BUTANONE	7.15	0.00	--	43.0	0	1.2932	0.00
16) U013 TETRAHYDROFURAN	7.40	0.00	--	42.0	0	.7593	0.00
17) C060 CHLOROFORM	7.56	0.00	--	83.0	0	2.6596	0.00
18) C065 1,2-DICHLOROETHANE	8.36	0.00	--	62.0	0	1.7595	0.00
19) *C110 1,4-DIFLUOROBENZENE	9.24	9.20	.05	114.0	182068	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	7.64	7.61	.03	97.0	86831	.5005	47.65
21) C120 CARBONTETRACHLORIDE	7.89	7.61	.28	117.0	12114	.4865	6.84
22) C165 BENZENE	8.26	0.00	--	78.0	0	.7901	0.00
23) C150 TRICHLOROETHENE	9.52	9.52	.00	130.0	18144	.4176	11.93
24) C140 1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.3057	0.00
25) C130 BROMODICHLOROMETHANE	10.52	0.00	--	83.0	0	.4976	0.00
26) C143 cis-1,3-DICHLOROPROP	11.34	0.00	--	75.0	0	.4843	0.00
27) C172 trans-1,3-DICHLOROPR	12.49	0.00	--	75.0	0	.4312	0.00
28) C160 1,1,2-TRICHLOROETHAN	12.76	0.00	--	97.0	0	.3304	0.00
29) C155 CHLORODIBROMOMETHANE	13.45	0.00	--	129.0	0	.5172	0.00
30) C180 BROMOFORM	16.26	0.00	--	173.0	0	.4372	0.00
31) *C120 CHLOROBENZENE-D5	14.57	14.53	.05	117.0	115959	1.0000	50.00
32) CS05 TOLUENE-D8	11.78	11.75	.03	98.0	140914	1.1581	52.46
33) CS10 BROMOFLUOROBENZENE	17.07	16.80	.27	95.0	19191	.7245	11.42
33) CS10 BROMOFLUOROBENZENE	17.07	17.05	.02	95.0	88655	.7245	52.76
33) CS10 BROMOFLUOROBENZENE	17.07	17.45	.37	95.0	8987	.7245	5.35
34) C230 TOLUENE	11.89	0.00	--	91.0	0	1.2499	0.00
35) C205 4-METHYL-2-PENTANONE	11.82	11.79	.03	43.0	3258	.7503	1.87
36) C220 TETRACHLOROETHENE	12.88	12.87	.00	164.0	49795	.4367	49.16
37) C210 2-HEXANONE	13.47	13.61	.14	43.0	14063	.6263	9.68
38) C235 CHLOROBENZENE	14.60	0.00	--	112.0	0	.9753	0.00
39) C240 ETHYLBENZENE	14.94	0.00	--	106.0	0	.4618	0.00
40) UJNK M&P-XYLENES	15.19	0.00	--	106.0	0	.5985	0.00
41) U029 O-XYLENE	15.97	0.00	--	106.0	0	.5731	0.00
42) C250 XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.5858	0.00
43) C225 STYRENE	16.02	0.00	--	106.0	0	.9212	0.00

* - Compound is an Internal Standard

000440

D - Compound Qdet'ed

000441

TIC Internal Standard Report

Data File: >M3152

Maximum separation 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	C101 BROMOCHLOROMETH	50.000 UG/L	Ok
310.	42418.	7.294 310. 268434.	86.764
2	C110 1,4-DIFLUOROBEN	50.000 UG/L	Ok
395.	182068.	2.506 395. 416332.	91.244
3	C120 CHLOROBENZENE-D	50.000 UG/L	Ok
627.	115959.	3.094 627. 410329.	114.377

Deleting peaks from INT file: VDIR87
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 35
Number of peaks remaining: 35

Deleting target compounds from INT file: VDIR87
Minimum separation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 35
Number of peaks remaining: 27

Deleting all but largest peaks from INT file: VDIR87
Maximum number of peaks to keep: 15
Number of peaks: 27
Number of peaks remaining: 15

000442

Data Reduced by : SFB Date: 3/5/92
 Data Reviewed by : AJ Date: 3-10-92

Data File: >M3152

Enseco TIC Report (page 1)

Sample: 20949-14,RAS-S Run Factor: 2.98
 Conditions: 2G/5ML ANALYST RB INST L HEATE Analyst: LUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	719.		2	210.	5911-04-6	Nonane, 3-methyl-
2	728.		1	170.	14676-29-0	Heptane, 3-ethyl-2-methyl-
3	754.		1	540.	15869-89-3	Octane, 2,5-dimethyl-
4	766.		2	170.	5911-04-6	Nonane, 3-methyl-
5	784.		2	260.	4926-90-3	Cyclohexane, 1-ethyl-1-methyl-
6	801.		2	510.	124-18-5	Decane
7	819.		2	330.	17302-23-7	Nonane, 4,5-dimethyl-
8	830.		2	440.	2847-72-5	Decane, 4-methyl-
9	844.		1	600.	593-49-7	Heptacosane
10	861.		2	220.	72993-32-9	Cyclopentane, 1-butyl-2-ethyl-
11	874.		1	490.	91-17-8	Naphthalene, decahydro-
12	886.		1	280.	13151-34-3	Decane, 3-methyl-
13	897.		2	200.	61142-70-9	Cyclohexane, 2,4-diethyl-1-methyl-
14	918.		2	810.	1120-21-4	Undecane
15	936.		2	170.	629-62-9	Pentadecane

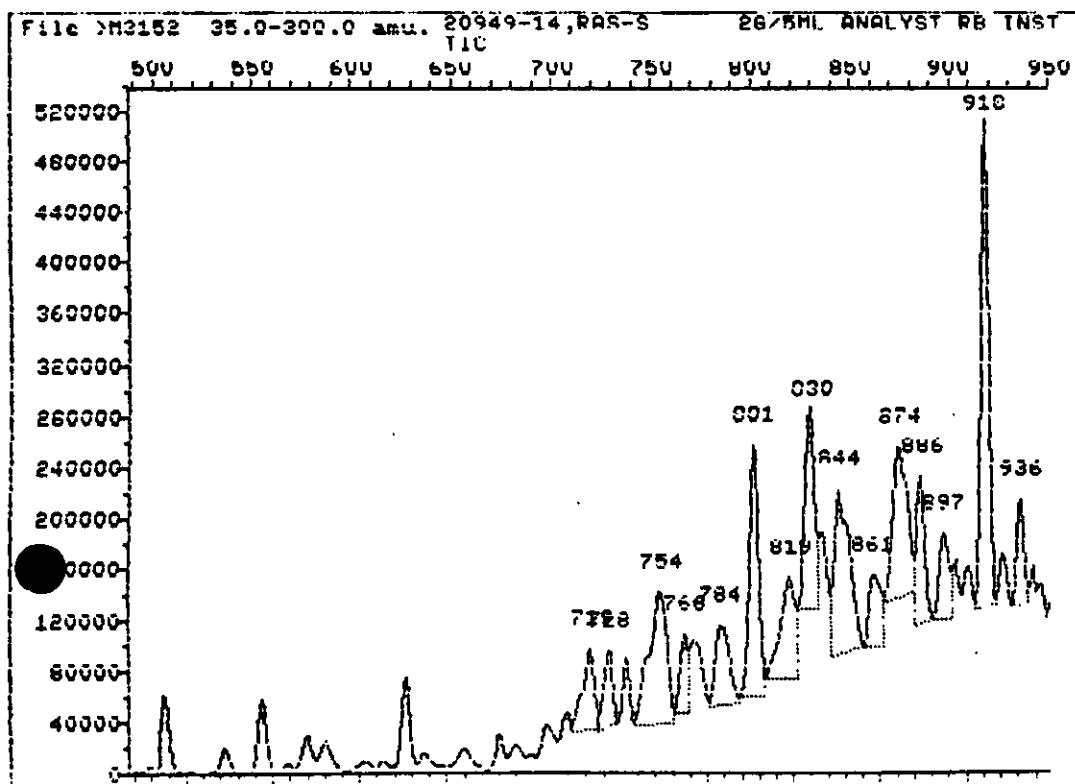
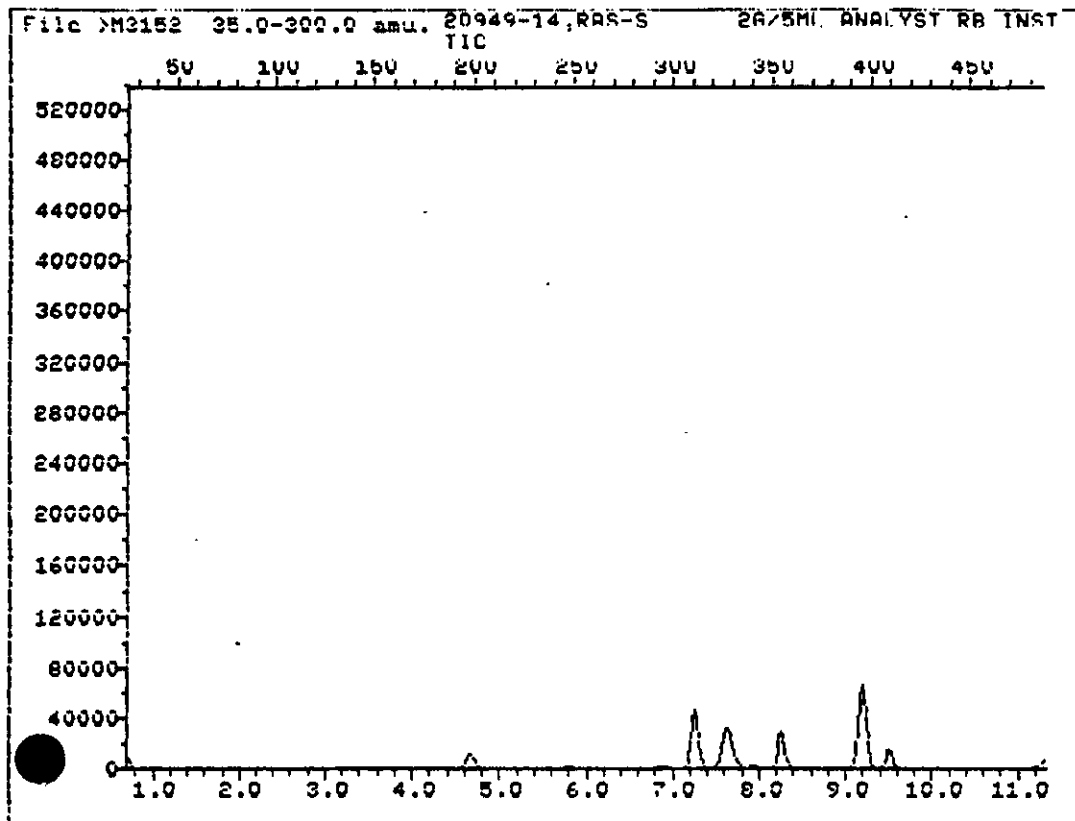
Data File: >M3152

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	86	6	3	16.64	1.146	568117.	61928.	69.219
2	48	29	3	16.85	1.160	471666.	56739.	57.467
3	71	28	3	17.45	1.201	1495372.	103476.	182.194
4	60	15	3	17.72	1.220	455580.	60791.	55.507
5	42	36	3	18.14	1.249	717161.	59056.	87.378
6	44	51	3	18.53	1.275	1401705.	197275.	170.782
7	64	31	3	18.94	1.304	916973.	78803.	111.723
8	67	30	3	19.20	1.321	1222054.	159963.	148.893
9	25	48	3	19.52	1.344	1650507.	125502.	201.095
10	59	22	3	19.91	1.371	606269.	56765.	73.867
11	35	49	3	20.21	1.391	1354621.	115350.	165.045
12	71	12	3	20.48	1.410	777560.	111888.	94.737
13	63	16	3	20.74	1.428	539902.	68301.	65.781
14	89	21	3	21.22	1.461	2239719.	381725.	272.884
15	43	21	3	21.64	1.489	459433.	83781.	55.977

000441



000445

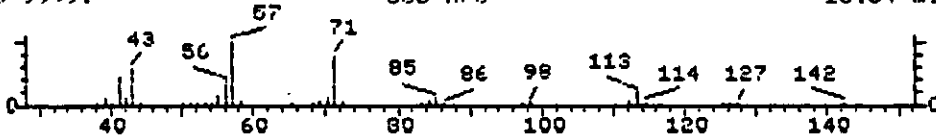
TIC NUMBER: 1

- | | |
|-------------------------------|------------|
| 1. Nonane, 3-methyl- | 142 C10H22 |
| 2. Octane, 2,6-dimethyl- | 142 C10H22 |
| 3. Octane, 3,6-dimethyl- | 142 C10H22 |
| 4. Octane, 2,3,7-trimethyl- | 156 C11H24 |
| 5. Heptane, 3-ethyl-5-methyl- | 142 C10H22 |
| 6. Nonane, 2,6-dimethyl- | 156 C11H24 |

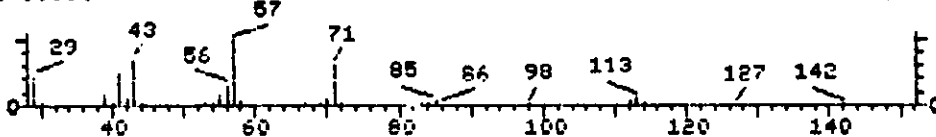
Sample file: >M3152 Spectrum #: 719
 Search speed: 2 Tilting option: S No. of ion ranges searched: 46

Prob:	CAS #	CON #	ROOT	K	DK	#PLG	TILT	%	CON	C_I	R_IU	
1.	86*	5911046	12331	NBS49K	61	36	0	0	84	6	59	73
2.	83*	2051301	12332	NBS49K	58	37	3	0	100	4	57	28
3.	74*	15869940	12333	NBS49K	41	48	0	0	100	11	39	46
4.	67	62016346	4357	NBS49K	56	37	1	0	69	13	34	23
5.	64*	52896909	4332	NBS49K	44	50	0	0	65	33	22	49
6.	60	17302282	4354	NBS49K	44	49	2	0	104	15	30	12

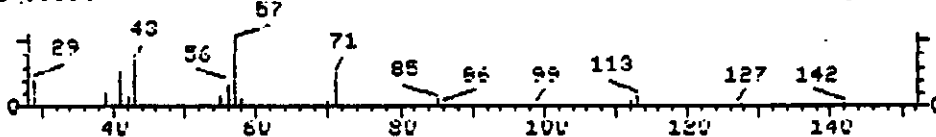
File >M3152 20949-14.RAS-S 20.5ML ANALYST RB INST L HEAT Scan 719
 Rpk Ab 9999. SUB MPC 16.64 min.



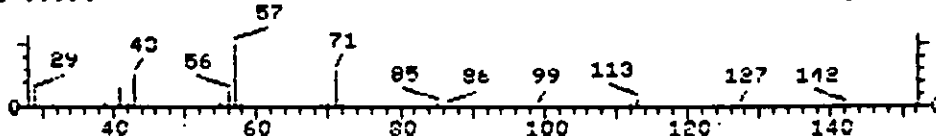
File NBS49K Nonane, 3-methyl- Scan 6849
 Rpk Ab 9999. 0.00 min.



File NBS49K Octane, 2,6-dimethyl- Scan 6874
 Rpk Ab 9999. 0.00 min.



File NBS49K Octane, 3,6-dimethyl- Scan 6880
 Rpk Ab 9999. 0.00 min.



2

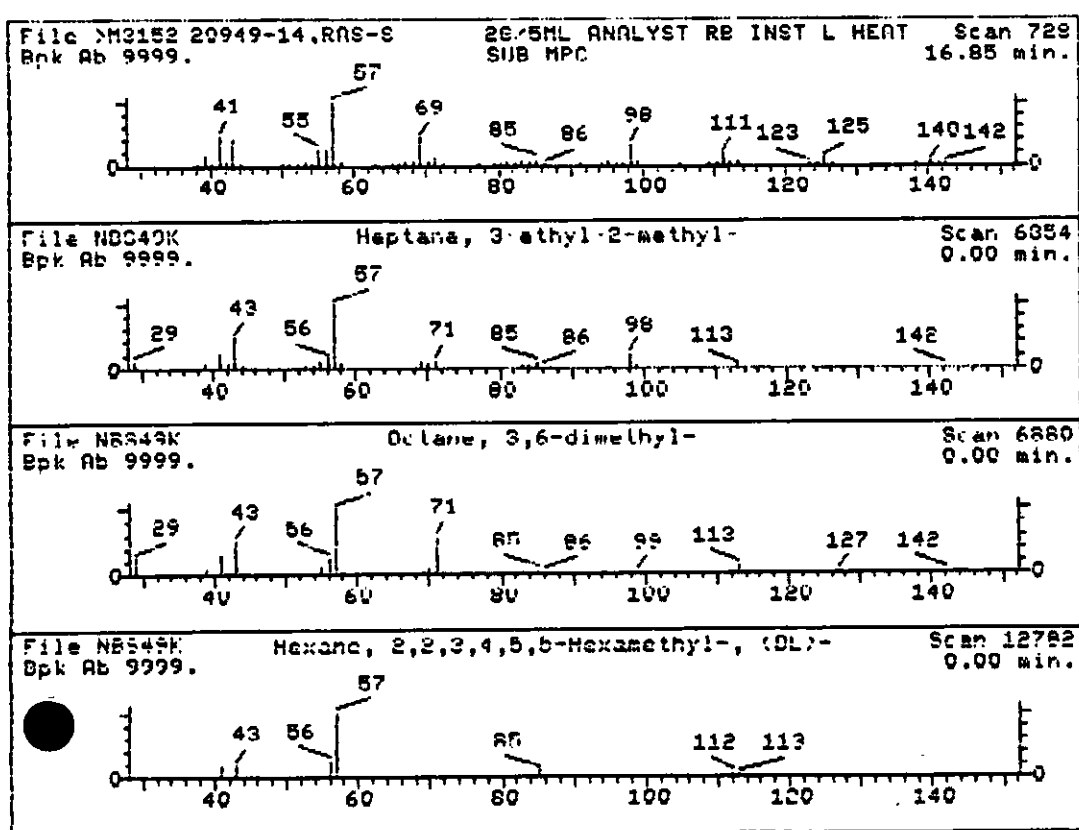
000446

TIC NUMBER: 2

- | | |
|---|------------|
| 1. Heptane, 3-ethyl-2-methyl- | 142 C10H22 |
| 2. Octane, 3,6-dimethyl- | 142 C10H22 |
| 3. Hexane, 2,2,3,4,5,5-Hexamethyl-, (DL)- | 170 C12H26 |
| 4. Nonane, 3-methyl- | 142 C10H22 |
| 5. Octane, 2,5,6-trimethyl- | 156 C11H24 |
| 6. 3-Undecene, 6-methyl-, (E)- | 168 C12H24 |

Sample file: >M3152 Spectrum #: 728
 Search speed: 2 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CUN #	ROOT	K	DK	#-FLG	TILT	%	CUN	C_I	R_IV
1.	48	14676290	9509	NBS49K	45	40	0	0	84	29	19	26
2.	42*	15869940	12333	NBS49K	45	44	3	0	100	29	14	19
3.	40	55258156	1285	NBS49K	31	9	0	0	83	29	14	17
4.	38*	5911046	12331	NBS49K	36	61	2	0	86	27	14	15
5.	37	62016142	6680	NBS49K	43	44	2	0	83	30	14	14
	37	74630527	9550	NBS49K	44	43	2	0	100	30	14	14



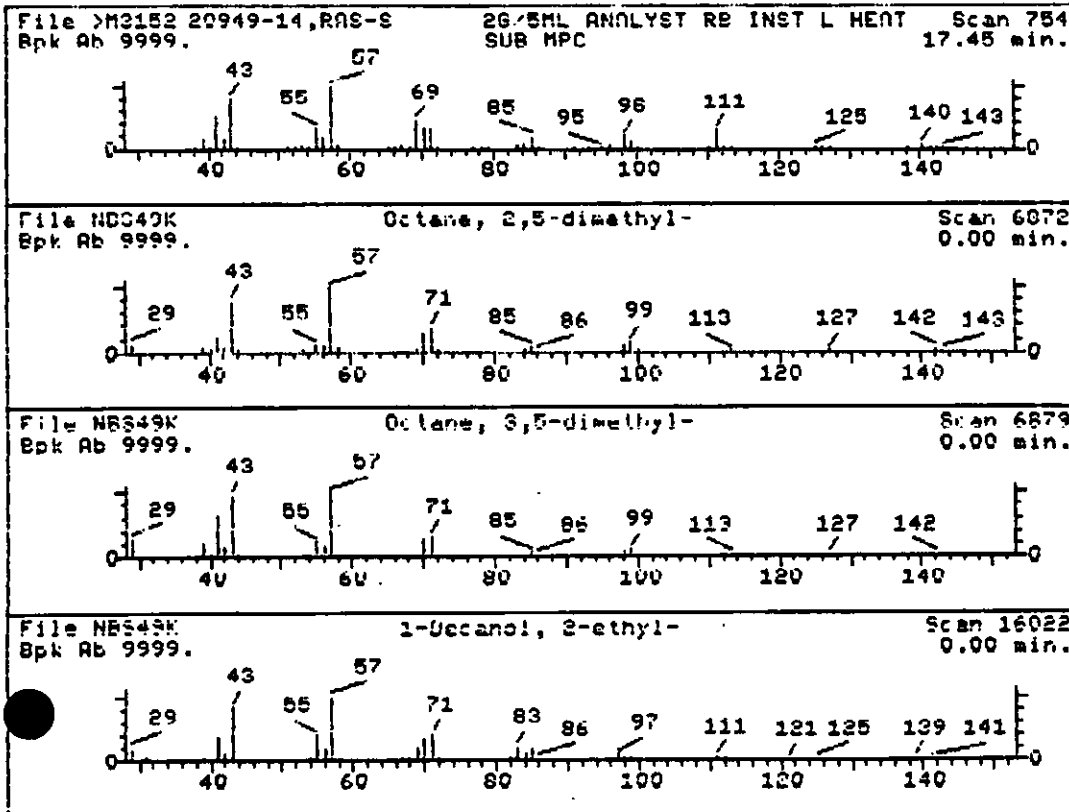
000447

TIC NUMBER:3

- | | |
|------------------------------|-------------|
| 1. Octane, 2,5-dimethyl- | 142 C10H22 |
| 2. Octane, 3,5-dimethyl- | 142 C10H22 |
| 3. 1-Decanol, 2-ethyl- | 186 C12H26O |
| 4. Heptane, 2,3,4-trimethyl- | 142 C10H22 |
| 5. Decane | 142 C10H22 |
| 6. Nonane, 2-methyl- | 142 C10H22 |

Sample file: >M3152 Spectrum #: 754
 Search speed: 2 Tilting option: S No. of ion ranges searched: 59

Prob.	CAS #	CUN #	ROOT	K	DK	#PLG	TILT	%	CUN	C_1	R_IV	
1.	71*	15869893	9754	NBS49K	53	39	0	0	69	28	29	65
2.	71*	15869939	4025	NBS49K	50	43	0	0	84	28	29	60
3.	46	21078659	6787	NBS49K	71	46	2	0	81	23	17	17
4.	46	52896954	9753	NBS49K	50	40	0	0	77	31	16	29
5.	45	124185	18079	NBS49K	65	35	2	0	80	27	19	23
6.	42*	871830	9512	NBS49K	48	48	2	0	80	31	16	25



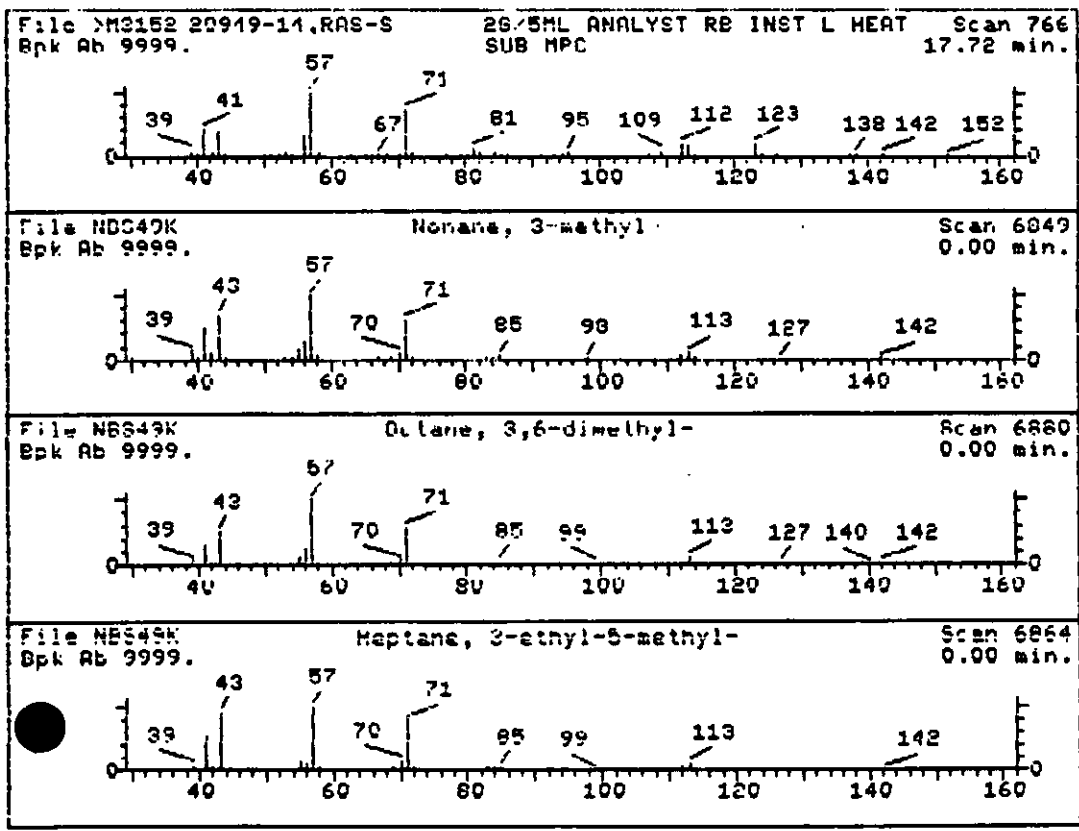
000448

TIC NUMBER: 4

- 1. Nonane, 3-methyl- 142 C10H22
- 2. Octane, 3,6-dimethyl- 142 C10H22
- 3. Heptane, 3-ethyl-5-methyl- 142 C10H22
- 4. Undecane, 6,6-dimethyl- 184 C13H28
- 5. Octane, 2,6-dimethyl- 142 C10H22
- 6. Methane, isocyanato- 57 C2H3NO

Sample file: >M3152 Spectrum #: 766
Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CUN #	RUOT	K	DK	#FLG	TILT	%	CUN	C_I	R_IV	
1.	60*	5911046	12331	NBS49K	47	50	3	0	100	15	30	15
2.	58*	15869940	12333	NBS49K	51	38	3	0	100	16	25	23
3.	51*	52896909	4332	NBS49K	45	49	2	0	76	22	22	23
4.	41	17312764	12432	NBS49K	56	42	2	2	80	23	17	12
5.	36*	2051301	12332	NBS49K	42	53	2	0	85	32	12	19
6.	15*	624839	1000	NBS49K	22	42	1	0	80	58	3	14



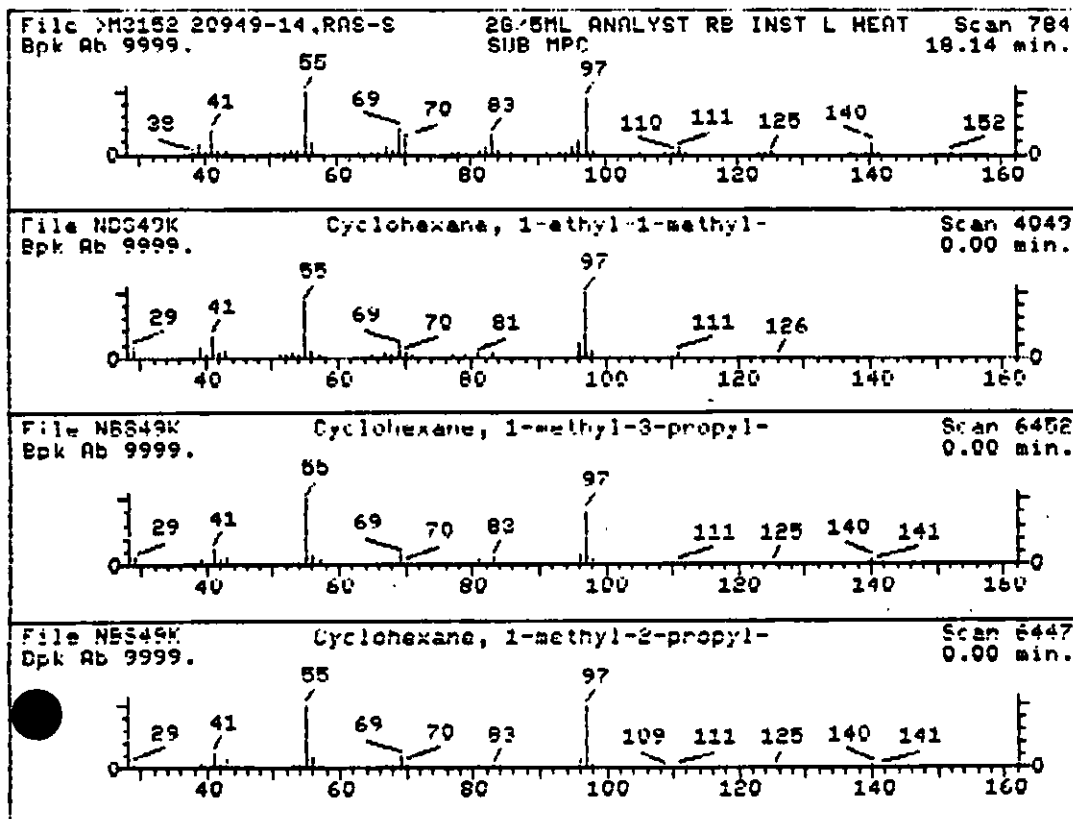
2

TIC NUMBER:5

1. Cyclohexane, 1-ethyl-1-methyl-	126 C9H18
2. Cyclohexane, 1-methyl-3-propyl-	140 C10H20
3. Cyclohexane, 1-methyl-2-propyl-	140 C10H20
4. TRANS-2-OXABICYCLO[4.4.0]DECANE	140 C9H16O
5. 3-Hexene, 3-ethyl-2,5-dimethyl-	140 C10H20
6. Cyclohexane, 1-ethyl-4-methyl-, trans-	126 C9H18

Sample file: >M3152 Spectrum #: 784
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CUN #	RJOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	42	4926903	9135	NBS49K	52	39	0	0	91	36	17	31
2.	36*	4291809	9176	NBS49K	40	52	1	0	97	36	14	23
3.	35*	4291796	9174	NBS49K	44	45	1	0	94	44	12	26
4.	33*	59958462	9164	NBS49K	35	55	1	U	70	40	10	19
5.	32*	62338083	9168	NBS49K	38	61	2	0	100	35	12	15
6.	31	6236880	9137	NBS49K	55	39	2	0	100	43	8	19



2

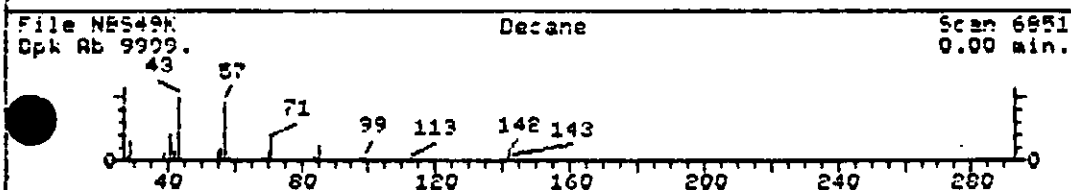
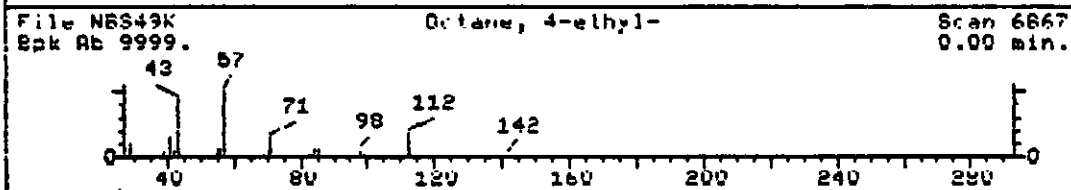
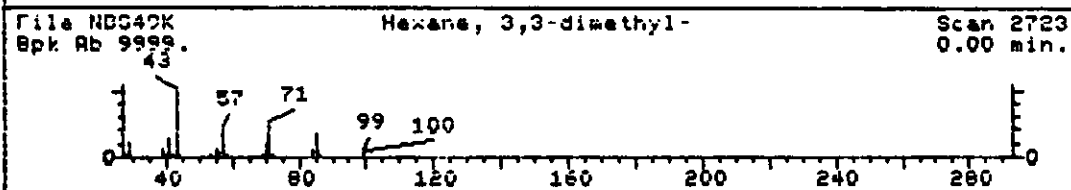
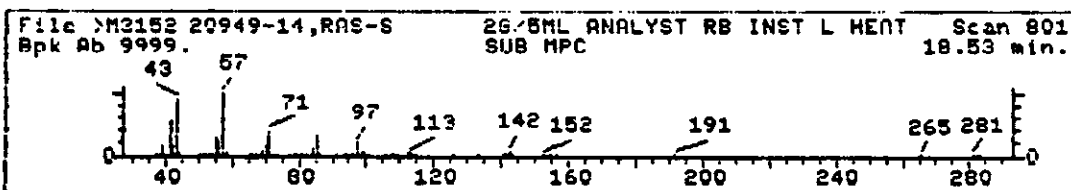
000450

TIC NUMBER:6

- | | |
|--------------------------|------------|
| 1. Hexane, 3,3-dimethyl- | 114 C8H18 |
| 2. Octane, 4-ethyl- | 142 C10H22 |
| 3. Decane | 142 C10H22 |
| 4. Dodecane | 170 C12H26 |
| 5. Undecane | 156 C11H24 |
| 6. Pentadecane | 212 C15H32 |

Sample file: >M3152 Spectrum #: BU1
 Search speed: 2 Tilting option: S No. of ion ranges searched: 57

Prob.	CAS #	CON #	ROOT	K	DK	#PLG	TILT	%	CON	C_I	R_IV	
1.	46	563166	6560	NBS49K	51	39	0	0	82	33	20	30
2.	45*	15869860	12088	NBS49K	48	45	1	0	100	37	17	34
3.	44*	124185	18079	NBS49K	55	45	0	0	78	51	11	66
4.	42	112403	6732	NBS49K	60	39	2	0	73	28	14	19
5.	40	1120214	6682	NBS49K	63	34	3	0	108	28	14	17
6.	37	629629	6819	NBS49K	64	56	2	0	62	28	14	14



2

000451

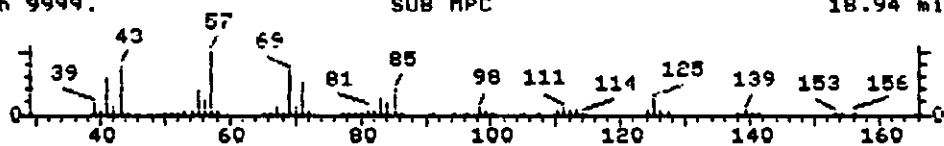
TIC NUMBER:7

1. Nonane, 4,5-dimethyl-	156 C11H24
2. Decane, 3,6-dimethyl-	170 C12H26
3. Decane, 2,4-dimethyl-	170 C12H26
4. Tritetracontane	604 C43H88
5. Undecane, 2,7-dimethyl-	184 C13H28
6. Undecane, 3,7-dimethyl-	184 C13H28

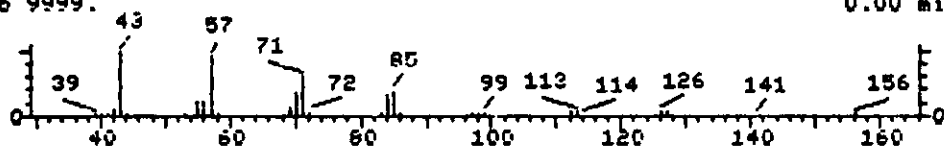
Sample file: >M3152 Spectrum #: 819
 Search speed: 2 Tilting option: S No. of ion ranges searched: 56

Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CUN	C_I	R_IV	
1.	64*	17302237	6683	NBS49K	69	36	2	0	78	31	22	49
2.	37	17312537	12405	NBS49K	68	30	2	0	80	40	14	24
3.	37	2801845	6737	NBS49K	57	30	1	0	128	38	14	24
4.	36	7098217	6916	NBS49K	63	111	2	0	76	29	14	13
5.	36	17301245	6785	NBS49K	65	35	2	0	110	36	14	23
6.	33	17301290	6765	NBS49K	64	39	2	0	78	36	10	19

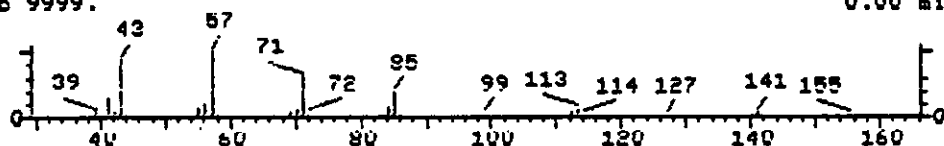
File >M3152 20949-14.RAS-S 2G/BML ANALYST RB INST L HEAT Scan 819
 Bpk Ab 9999. SUB MPC 18.94 min.



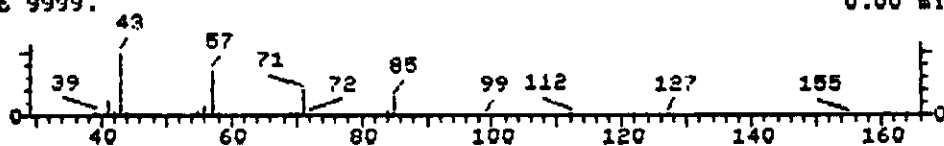
File NBS49K Nonane, 4,5-dimethyl- Scan 9748
 Bpk Ab 9999. 0.00 min.



File NBS49K Decane, 3,6-dimethyl- Scan 12780
 Bpk Ab 9999. 0.00 min.



File NBS49K Decane, 2,4-dimethyl- Scan 12791
 Bpk Ab 9999. 0.00 min.



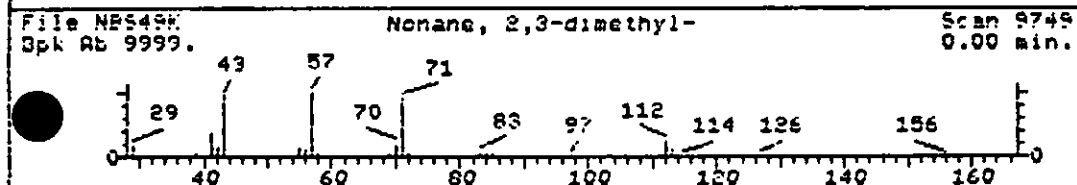
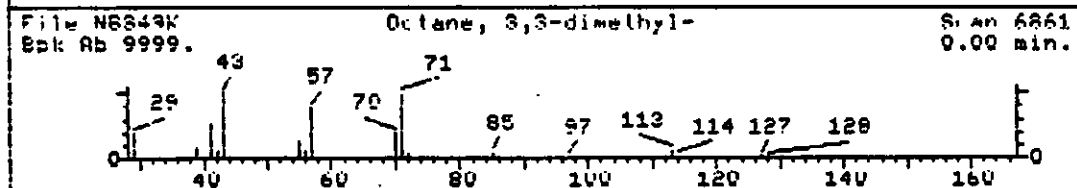
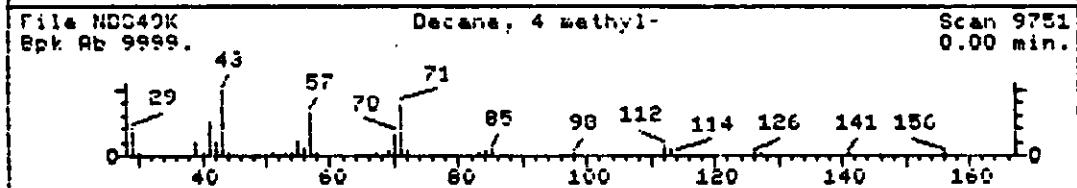
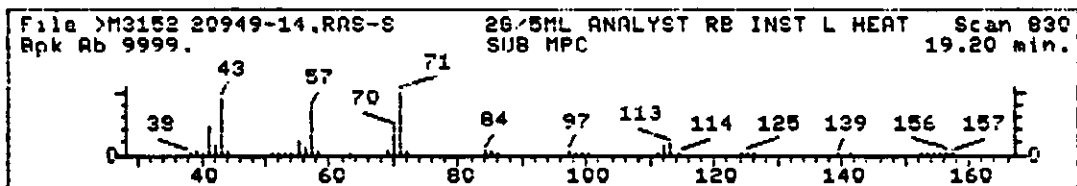
2

TIC NUMBER:8

1. Decane, 4-methyl-	156 C11H24
2. Octane, 3,3-dimethyl-	142 C10H22
3. Nonane, 2,3-dimethyl-	156 C11H24
4. Heptane, 5-ethyl-2-methyl-	142 C10H22
5. Heptane, 2,5,5-trimethyl-	142 C10H22
6. Heptane, 4-azido-	141 C7H15N3

Sample file: >M3152 Spectrum #: 830
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CUN	C_I	R_IV	
1.	67*	2847725	4358	NBS49K	61	40	1	0	77	30	27	57
2.	60	4110445	4329	NBS49K	53	45	1	0	72	14	30	17
3.	56*	2884062	12128	NBS49K	53	48	2	0	75	22	22	28
4.	53	13475780	4333	NBS49K	63	38	0	0	77	32	20	37
5.	52	1189997	4328	NBS49K	49	41	2	0	90	17	20	17
6.	41*	27126223	4018	NBS49K	35	47	0	1	61	39	17	30

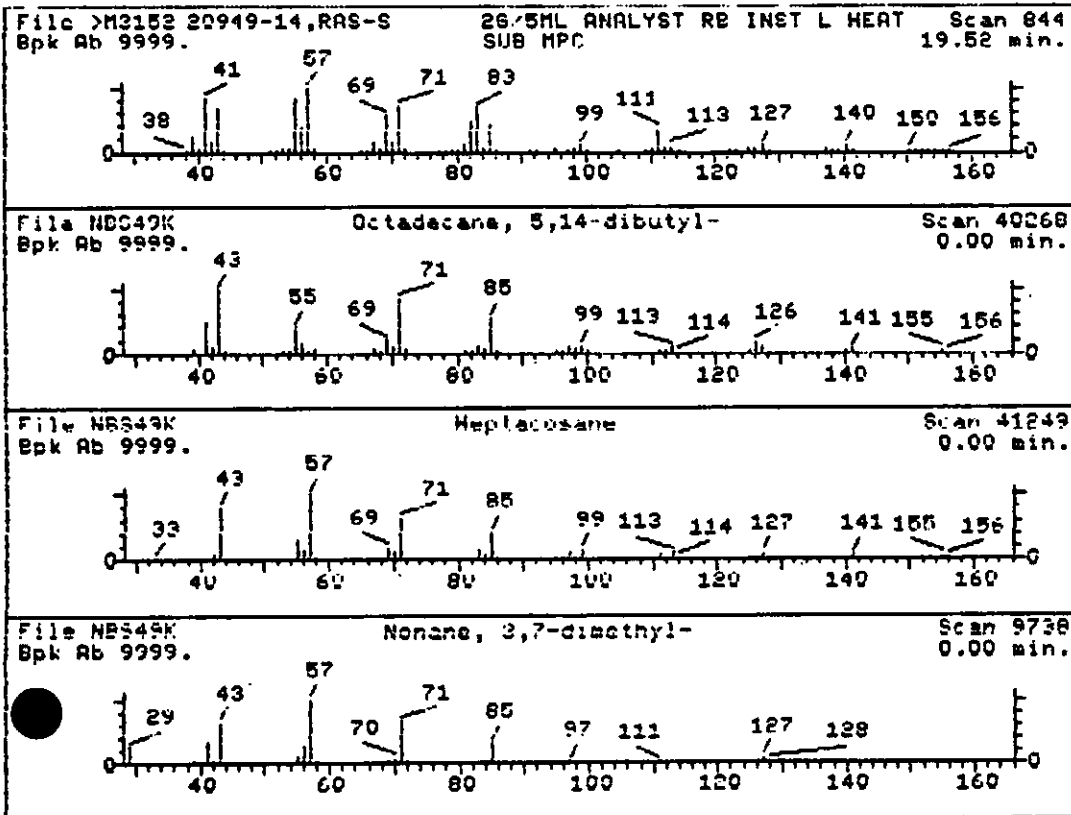


TIC NUMBER:9

- | | | |
|--------------------------------|-----|--------|
| 1. Octadecane, 5,14-dibutyl- | 366 | C26H54 |
| 2. Heptacosane | 380 | C27H56 |
| 3. Nonane, 3,7-dimethyl- | 156 | C11H24 |
| 4. Eicosane | 282 | C20H42 |
| 5. Nonane, 3-methyl-5-propyl- | 184 | C13H28 |
| 6. Nonane, 5-(2-methylpropyl)- | 184 | C13H28 |

Sample file: >M3152 Spectrum #: 844
 Search speed: 2 Tilting option: S No. of ion ranges searched: 54

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CUN	C_I	R_IV
1.	25	55282138	69U1	NBS49K	68	88	2	0	66	50	7 15
2.	25	593497	6904	NBS49K	63	92	2	0	80	48	7 13
3.	21	17302328	6677	NBS49K	67	20	1	0	92	58	5 32
4.	20	112958	6H71	NBS49K	62	77	2	0	72	55	5 13
5.	20	31081182	6784	NBS49K	56	49	2	0	88	55	5 12
6.	18	62185539	14867	NBS49K	71	38	1	0	67	56	4 27



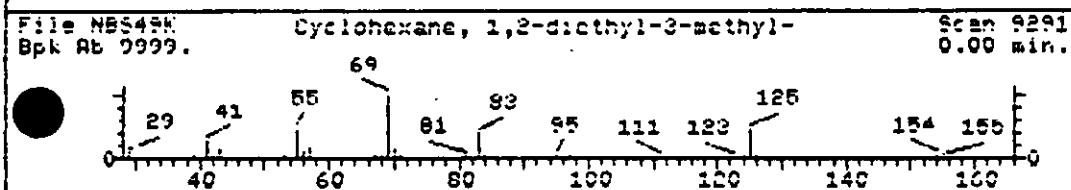
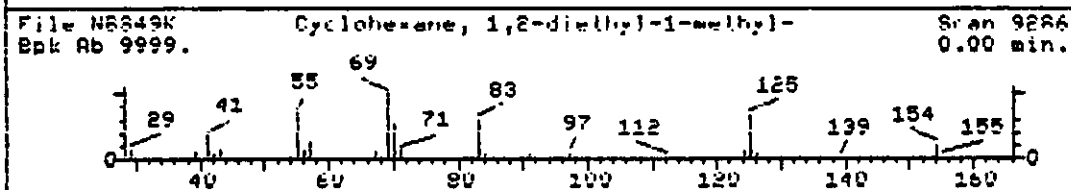
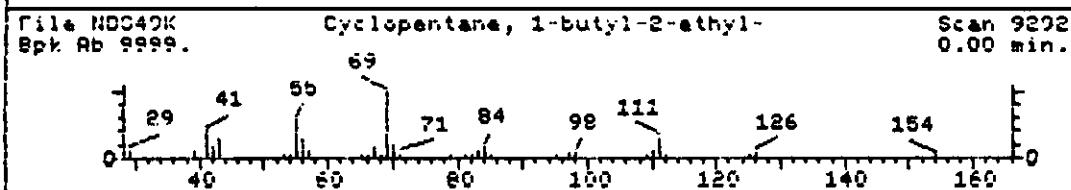
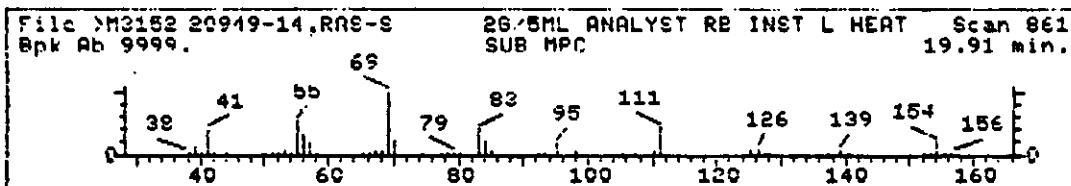
000454

TIC NUMBER: 10

- | | |
|--|------------|
| 1. Cyclopentane, 1-butyl-2-ethyl- | 154 C11H22 |
| 2. Cyclohexane, 1,2-diethyl-1-methyl- | 154 C11H22 |
| 3. Cyclohexane, 1,2-diethyl-3-methyl- | 154 C11H22 |
| 4. Cyclohexane, 1-ethyl-2-propyl- | 154 C11H22 |
| 5. Cyclohexane, 1,3,5-trimethyl- | 126 C9H18 |
| 6. Cyclohexane, 1,1-dimethyl-2-propyl- | 154 C11H22 |

Sample file: >M3152 Spectrum #: 861
 Search speed: 2 Tilting option: S No. of ion ranges searched: 47

Prob.	CAS #	CUN #	ROOT	K	DK	#PLG	TILT	%	CON	C_I	R_IV	
1.	59*	72993329	118H4	NBS49K	58	46	2	0	100	22	27	35
2.	36*	61141795	145U2	NBS49K	38	69	3	0	67	27	14	13
3.	31*	61141808	145O3	NBS49K	29	69	2	0	100	35	12	14
4.	31*	62238339	145U5	NBS49K	31	71	2	0	100	31	12	14
5.	27*	1839630	11836	NBS49K	37	61	2	0	67	41	8	15
6.	25*	81983713	64U6	NBS49K	29	74	2	0	39	50	7	14



2

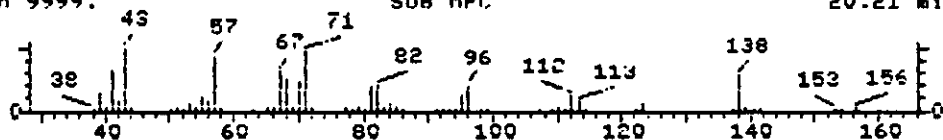
TIC NUMBER:11

1. Naphthalene, decahydro-	138 C10H18
2. Naphthalene, decahydro-, trans-	138 C10H18
3. Decane, 4-methyl-	156 C11H24
4. Pentalene, octahydro-, cis-	110 C8H14
5. Naphthalene, decahydro-, cis-	138 C10H18
6. 1,3-Pentadiene, 3-methyl-, (Z)-	82 C6H10

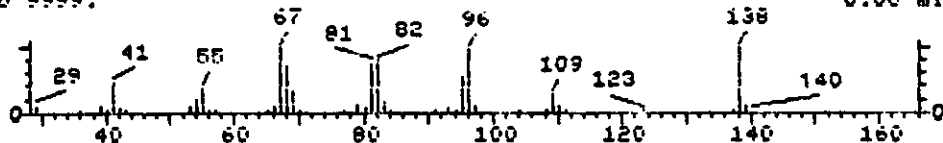
Sample file: >M3152 Spectrum #: 874
 Search speed: 2 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	35*	91178	17232	NBS49K	61	51	2	0	39	49	11	38
2.	35*	493027	17244	NBS49K	58	49	2	0	46	49	11	35
3.	31*	2847725	4358	NBS49K	68	33	1	0	100	59	8	66
4.	24*	1755051	5879	NBS49K	47	49	1	1	59	54	7	26
5.	20*	493016	17243	NBS49K	55	63	3	0	65	54	5	18
	20*	2787453	5855	NBS49K	39	53	2	1	64	54	5	12

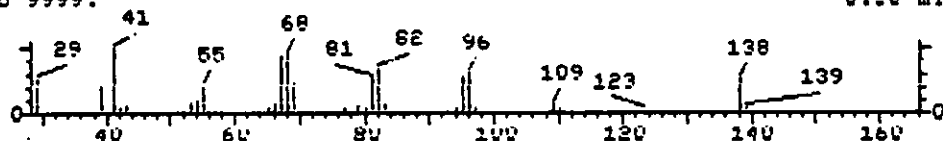
File >M3152 20949-14,RMS-S 26.5ML ANALYST RE INST L HEAT Scan 874
 Bpk Ab 9999. SUB MPC 20.21 min.



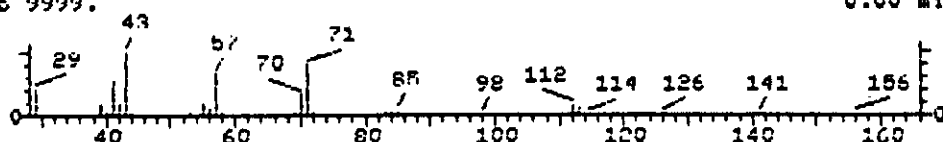
File NBS49K Naphthalene, decahydro- Scan 5995
 Bpk Ab 9999. 0.00 min.



File NBS49K Naphthalene, decahydro-, trans- Scan 6054
 Bpk Ab 9999. 0.00 min.



File NBS49K Decane, 4-methyl- Scan 9751
 Bpk Ab 9999. 0.00 min.



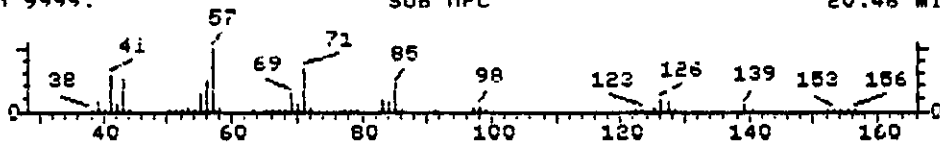
TIC NUMBER: 12

1. Decane, 3-methyl-	156 C11H24
2. Undecane, 3,4-dimethyl-	184 C13H28
3. Nonane, 3,7-dimethyl-	156 C11H24
4. 1-Undecene, 4-methyl-	168 C12H24
5. Decane, 2,4,6-trimethyl-	184 C13H28
6. Octane, 2,4,6-trimethyl-	156 C11H24

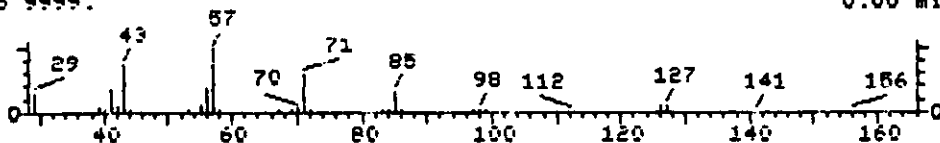
Sample file: >M3152 Spectrum #: 886
 Search speed: 2 Tilting option: S No. of ion ranges searched: 49

Prob.	CAS #	CON #	ROOT	K	DK	#PLG	TILT	%	CON	C_I	R_IV	
1.	71*	13151343	15040	NBS49K	52	42	1	0	100	12	38	36
2.	60	17312786	14866	NBS49K	63	53	2	0	81	12	30	13
3.	42	17302328	6677	NBS49K	58	29	2	0	100	30	14	19
4.	39	74630390	14834	NBS49K	53	46	1	0	86	28	14	16
5.	36	62108274	6774	NBS49K	57	47	2	0	117	30	14	13
6.	35	62016379	6679	NBS49K	36	49	2	0	187	30	14	12

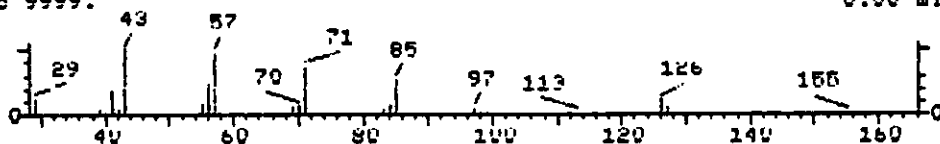
File >M3152 20949-14, RNS-S 26.5ML ANALYST RE INST L HEAT Scan 886
 Bpk Ab 9999. SUB MPC 20.48 min.



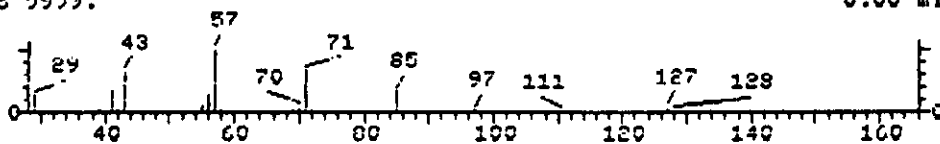
File NBS49K Decane, 3-methyl- Scan 9741
 Bpk Ab 9999. 0.00 min.



File NBS49K Undecane, 3,4-dimethyl- Scan 10086
 Bpk Ab 9999. 0.00 min.



File NBS49K Nonane, 3,7-dimethyl- Scan 9738
 Bpk Ab 9999. 0.00 min.

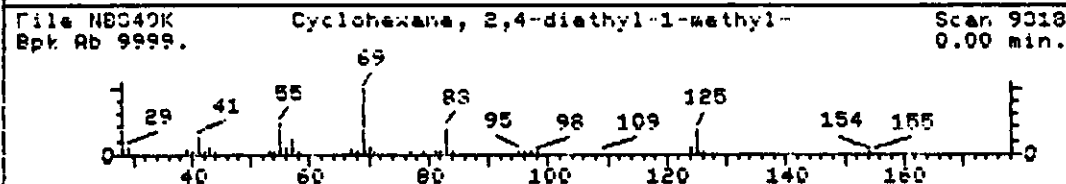
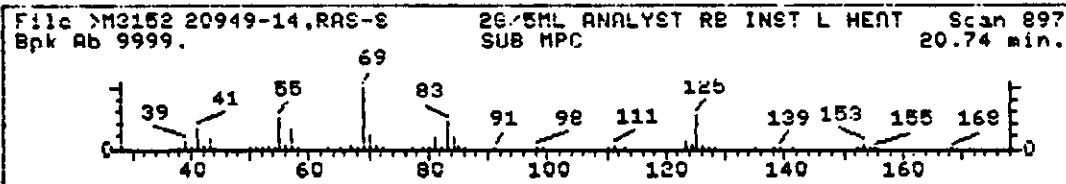


TIC NUMBER:13

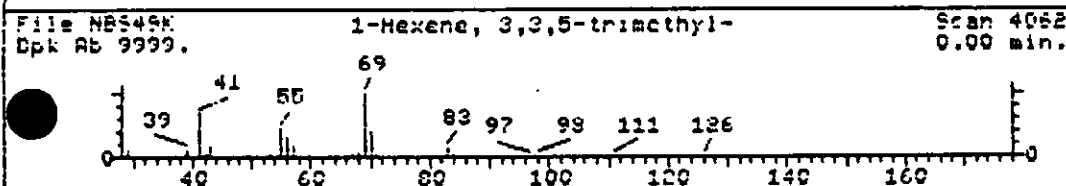
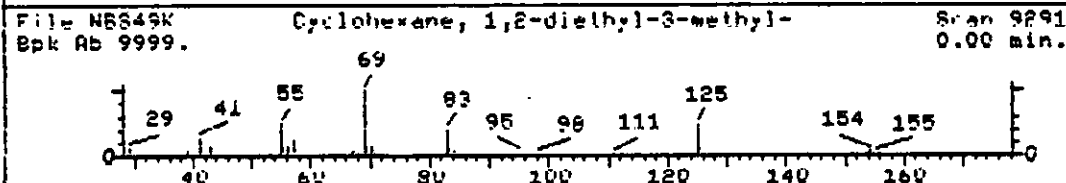
- | | |
|---------------------------------------|------------|
| 1. Cyclohexane, 2,4-diethyl-1-methyl- | 154 C11H22 |
| 2. Cyclohexane, 1,2-diethyl-3-methyl- | 154 C11H22 |
| 3. 1-Hexene, 3,3,5-trimethyl- | 126 C9H18 |
| 4. 2,6-Octadiene, 4,5-dimethyl- | 138 C10H18 |
| 5. 2,6-Octadiene, 4-methyl- | 124 C9H16 |
| 6. 1,5-Heptadiene, 3,6-dimethyl- | 124 C9H16 |

Sample file: >M3152 Spectrum #: 897
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#-LG	TILT	%	CON	C_1	R_IV	
1.	63*	61142709	14506	NBS49K	55	39	2	1	100	16	30	34
2.	52	61141808	14503	NBS49K	51	47	2	0	81	18	20	13
3.	15*	13427435	3954	NBS49K	29	64	3	0	100	57	3	13
4.	11*	18476578	3754	NBS49K	29	44	3	0	100	62	2	14
5.	11*	74498945	3748	NBS49K	29	49	3	0	100	61	2	14
6.	11*	34891106	3747	NBS49K	24	59	3	0	100	61	2	12



2



000458

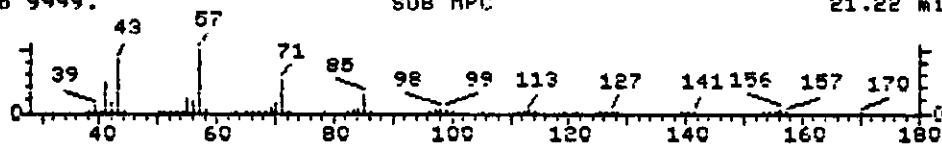
TIC NUMBER:14

1. Undecane	156 C11H24
2. Tetradecane	198 C14H30
3. Dodecane	170 C12H26
4. Tridecane	184 C13H28
5. Octacosane	394 C28H58
6. Decane, 6-ethyl-2-methyl-	184 C13H28

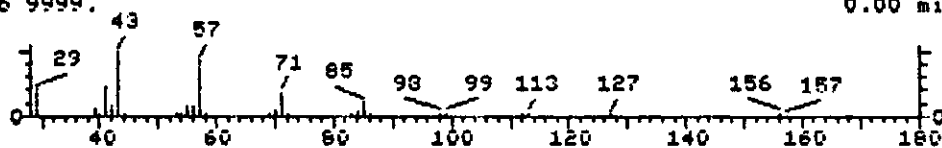
Sample file: >M3152 Spectrum #: 918
 Search speed: 2 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CUN	C_I	R_IU
1.	89*	1120214	6682	NBS49K	71	26	0	0	85	21	47	89
2.	83	629594	6804	NBS49K	75	33	2	1	99	5	57	21
3.	81	112403	6732	NBS49K	87	12	1	2	85	10	53	45
4.	81	629505	6761	NBS49K	82	24	1	0	94	7	53	44
5.	78	630024	6906	NBS49K	78	63	2	1	81	5	55	13
	76	62108218	6767	NBS49K	74	25	2	0	100	7	45	27

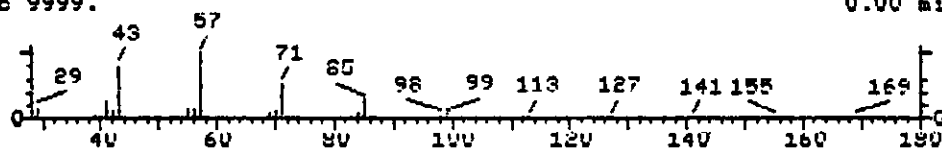
File >M3152 20949-14.RNS-S 26.5ML ANALYST RB INST L HEAT Scan 919
 Bpk Ab 9999. SUB MPC 21.22 min.



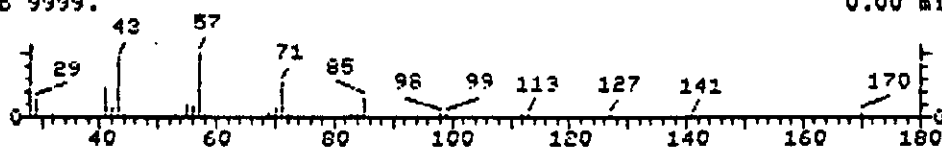
File NBS49K Undecane Scan 9747
 Bpk Ab 9999. 0.00 min.



File NBS49K Tetradecane Scan 16383
 Bpk Ab 9999. 0.00 min.



File NBS49K Dodecane Scan 12779
 Bpk Ab 9999. 0.00 min.



2

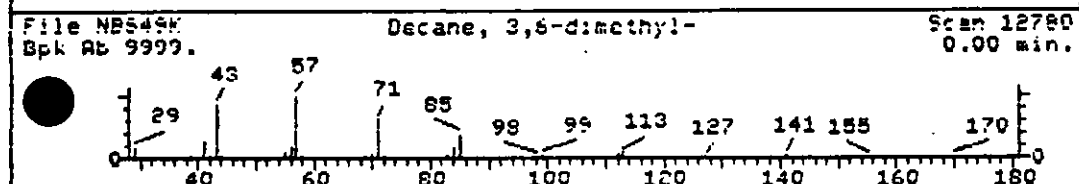
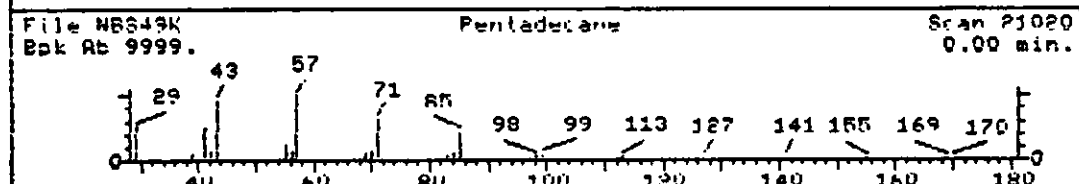
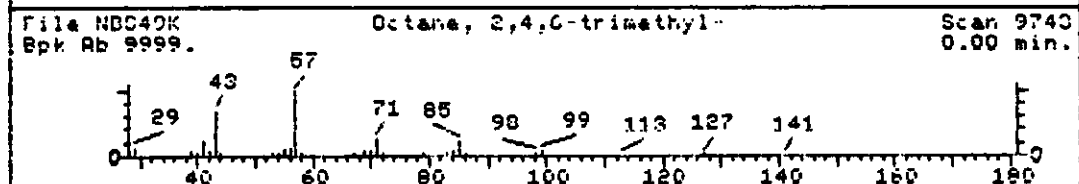
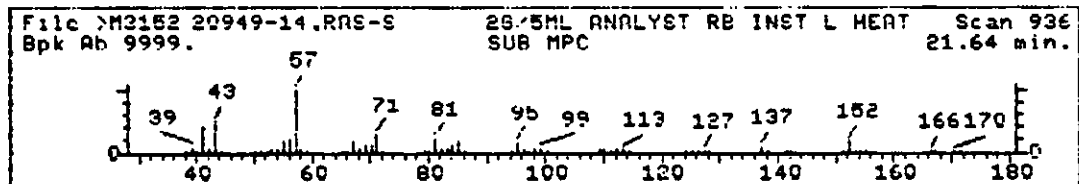
000459

TIC NUMBER: 15

- | | |
|-----------------------------|------------|
| 1. Octane, 2,4,6-trimethyl- | 156 C11H24 |
| 2. Pentadecane | 212 C15H32 |
| 3. Decane, 3,6-dimethyl- | 170 C12H26 |
| 4. Undecane, 3,8-dimethyl- | 184 C13H28 |
| 5. Dodecane, 3-methyl- | 184 C13H28 |
| 6. Dodecane | 170 C12H26 |

Sample file: >M3152 Spectrum #: 936
 Search speed: 2 Tilting option: S No. of ion ranges searched: 67

Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	51	62016379	6679	NBS49K	57	28	0	0	81	35	20	35
2.	43	629629	6819	NBS49K	50	52	1	0	42	21	17	14
3.	40*	17312537	12405	NBS49K	35	48	2	0	46	29	14	17
4.	39	17301303	6766	NBS49K	49	42	2	0	37	29	14	16
5.	30	17312571	6768	NBS49K	62	37	2	0	69	43	12	21
	30	112403	6732	NBS49K	58	41	2	1	51	35	12	13



2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

20949-15

000461

Lab Name: ENSECO Contract:
Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 20949-15
Sample wt/vol: 5.0 (g/mL) G Lab File ID: M3153
Level: (low/med) LOW Date Received: 02/15/92
% Moisture: not dec. 14 Date Analyzed: 02/22/92
GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0
Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

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

Number TICs found: 2

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 1066-40-6	Silanol, trimethyl-	7.78	7	JN
2. 1120-21-4	Undecane	21.22	6	JN

000462

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output File: ^M3153::QT
 Data File: >M3153::L2
 Name: 20949-15,RAS-S
 Misc: 5G/5ML ANALYST KB INST L HEATED

Quant Rev: 7 Quant Time: 920222 08:26
 Injected at: 920222 07:57
 Dilution Factor: 1.00000
 Instrument ID: L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + 1HF
 Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	7.22	128.0	43790	50.00	UG/L	97
2)	CS15 1,2-DICHLORIDETHANE-D4	8.23	65.0	65293	48.24	UG/L	76
9)	C035 ACETONE <i>flow</i>	3.87	43.0	3632	6.71	UG/L	100
10)	C030 METHYLENE CHLORIDE	4.55	84.0	2603	1.81	UG/L	57
19)	*C110 1,4-DIFLUOROBENZENE	9.19	114.0	187817	50.00	UG/L	100
20)	C115 1,1,1-TRICHLORIDETHANE <i>flow</i>	7.59	97.0	1049	.558	UG/L	89
23)	C150 TRICHLOROETHENE <i>flow</i>	9.49	130.0	1056	.673	UG/L	88
31)	*C120 CHLOROBENZENE-D5	14.52	117.0	141118	50.00	UG/L	75
32)	CS05 TOLUENE-D8	11.74	98.0	169110	51.74	UG/L	95
33)	CS10 BROMOFLUOROBENZENE	17.07	95.0	91488	44.74	UG/L	100
34)	C230 TOLUENE <i>flow</i>	11.86	91.0	1518	.430	UG/L	97
36)	C220 TETRACHLOROETHENE <i>flow</i>	12.89	164.0	694	.563	UG/L	91

* Compound is ISTD

000463

MS data file header from : >M3153::L2

Sample: 20949-15,RAS-S Operator: LUEY1 REG. GRP. 2/22/92 7:57
Misc : 5G/5ML ANALYST RB INST L HEATED
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
Method file: SAMML Tuning file: MTBFBL No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

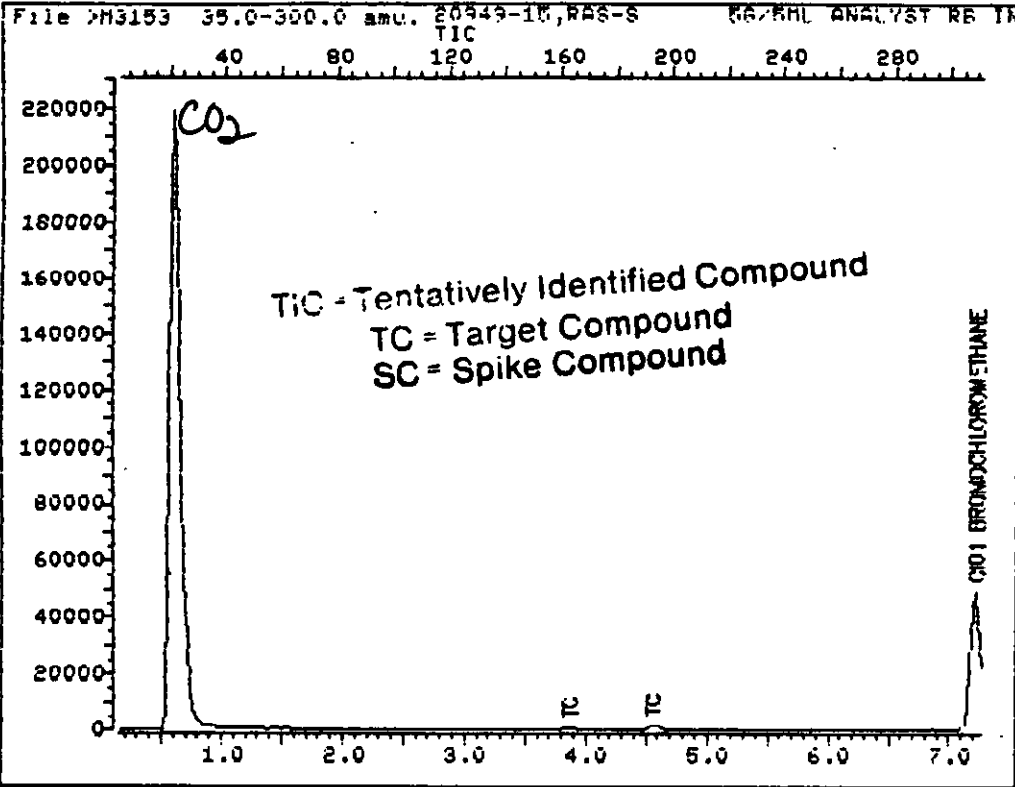
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	ldesired reporting units
samp_amt	5G	lamt of sample taken
ext_vol	5ML	lfinal extract volume
q_units	UG/L	lcal units from quant
ext_dil	100	ldilution factor
%moist	N/A	l%moisture for soil
int_ext_vol	NA	lintermediate extr ct vol/M.L. ext vo
int_ext_vol_u		lintermediate extract vol/M.L. vol US
spiked	E	lSurrogate added at S(tart)/E(nd)
matrix	S	lsample matrix W(ater)/S(oil)
runfact	1.00	l calcd runfactor
surfact	.0050	l calcd surr vol

Performance Check: >M3139 Injection Time: 2/21/92 22:14
Sample : >M3153 Injection Time: 2/22/92 7:57
Elapsed Time: 0 Y 0 D 9:43
Sample: ^M3153 Calibration Stds.: ^M3140,
Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
Invalid Response Factor for: C250 XYLENE (TOTAL)

000464

TOTAL ION CHROMATOGRAM



Data File: >M3153::L2

Quant Output File: >M3153::QT

Name: 20949-15,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

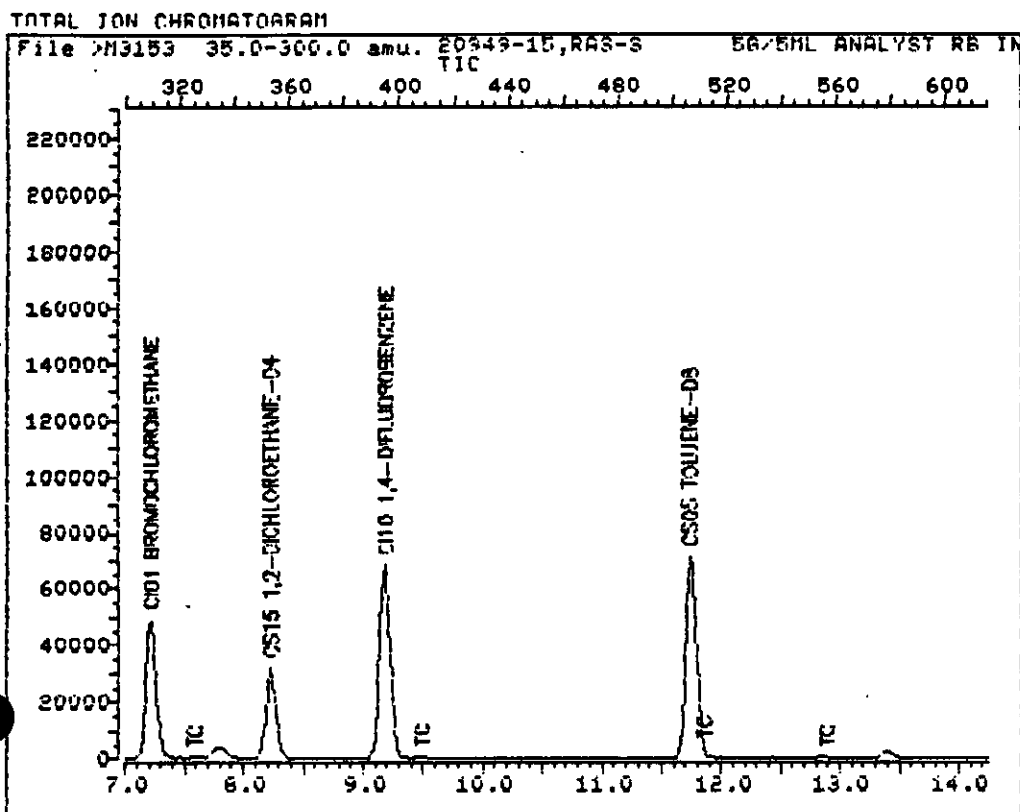
Last Qcal Time: 920221 22:44

Operator ID: LUEY1

Quant Time : 920222 08:26

Injected at: 920222 07:57

000465



Data File: >M3153::L2

Quant Output File: ^M3153::QT

Name: 20949-15,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

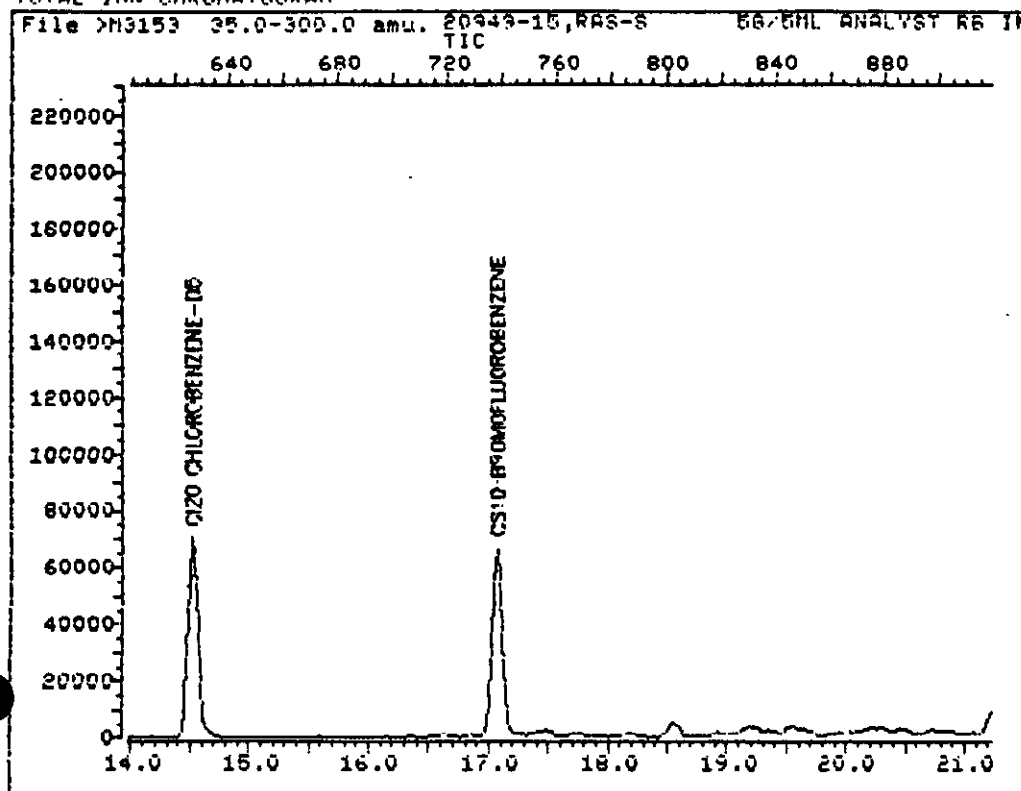
Quant Time : 920222 08:26

Injected at: 920222 07:57

Page 2 of 4

000466

TOTAL ION CHROMATOGRAM



Data File: >M3153::L2

Quant Output File: ^M3153::Q1

Name: 20949-15,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

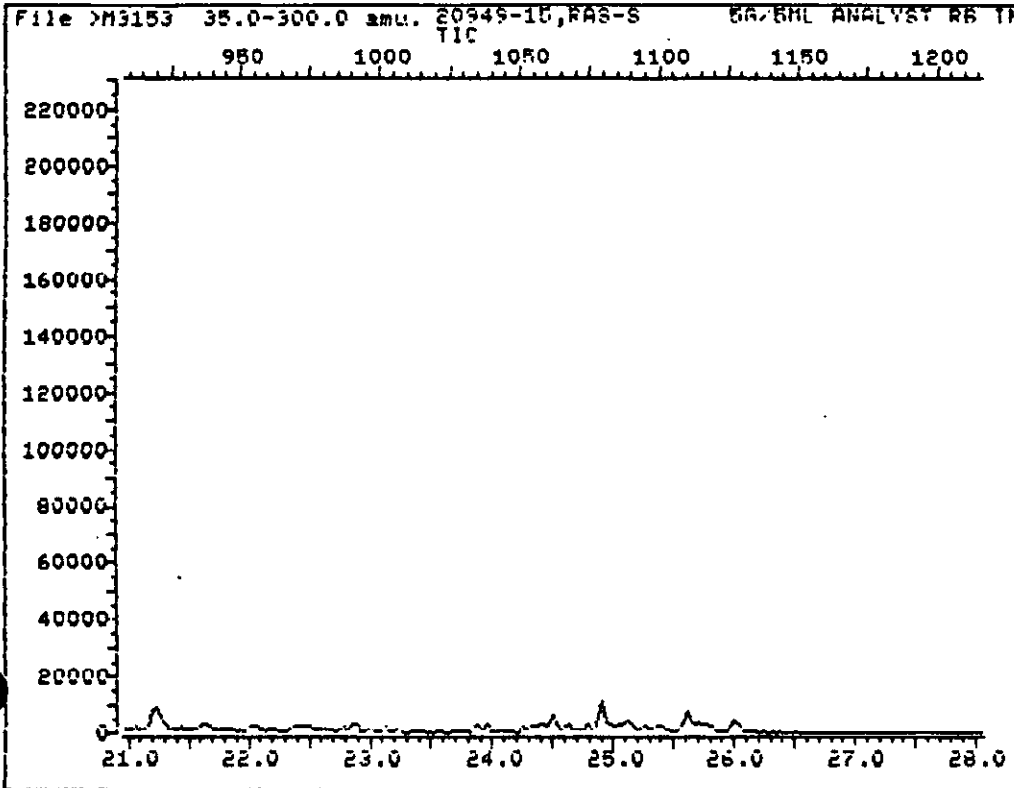
Quant Time : 920222 08:26

Injected at: 920222 07:57

Page 3 of 4

000467

TOTAL ION CHROMATOGRAM



Data File: >M3153::L2

Quant Output File: ^M3153::Q1

Name: 20949-15,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

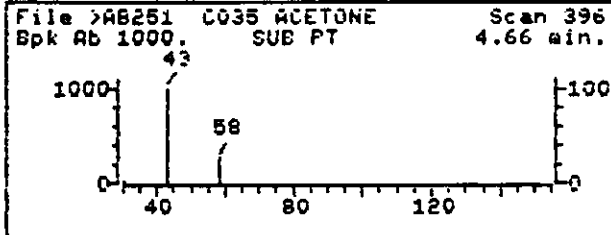
Operator ID: LUEY1

Quant Time : 920222 08:26

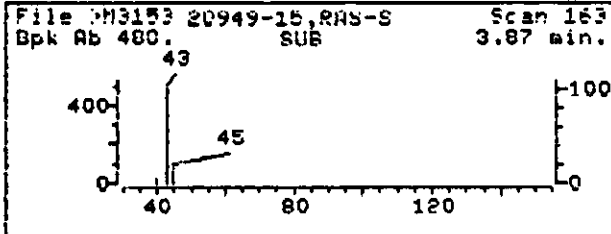
Injected at: 920222 07:57

Page 4 of 4

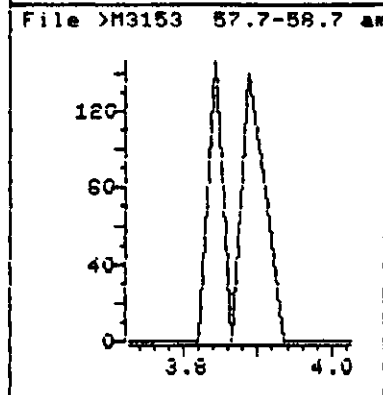
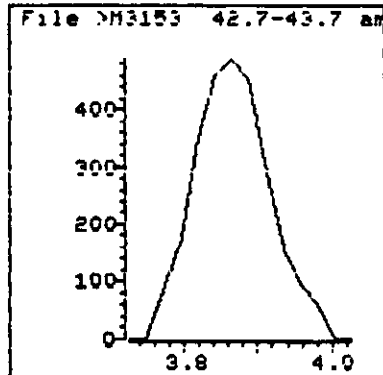
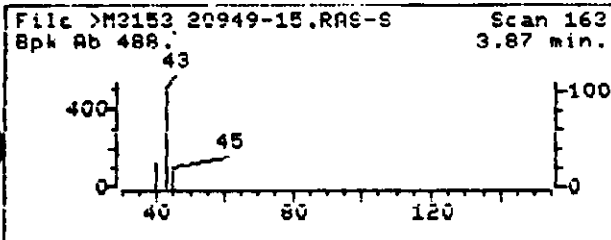
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

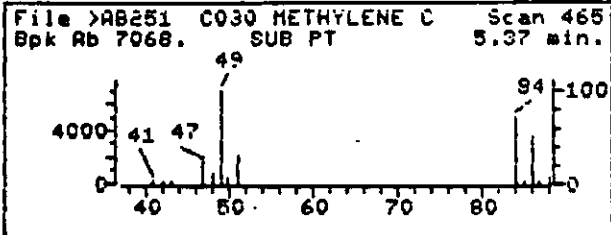


Data File: >M3153::L2
Name: 20949-15,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 08:26
Injected at: 920222 07:57
Last Qcal Time: 920221 22:44

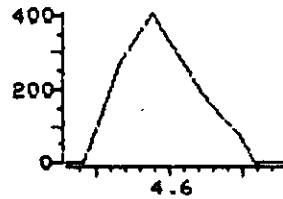
Quant Output File: ^M3153::Q1
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 163
Retention Time: 3.87 min.
Quant Ion : 43.0
Area : 3632
Concentration : 6.71 UG/L
q-value : 100

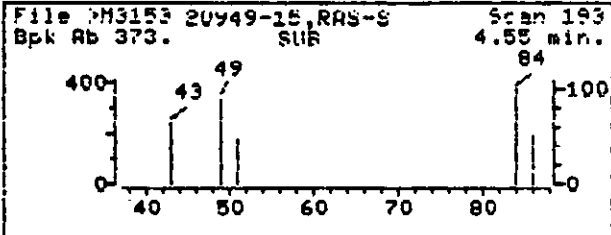
REFERENCE STANDARD SPECTRUM



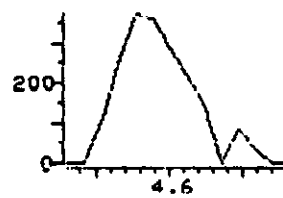
File >M3153 48.7-49.7 am



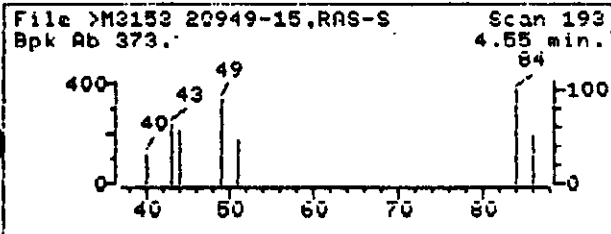
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



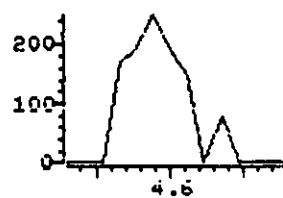
File >M3153 83.7-84.7 am



SAMPLE SPECTRUM (UNALTERED)



File >M3153 85.7-86.7 am

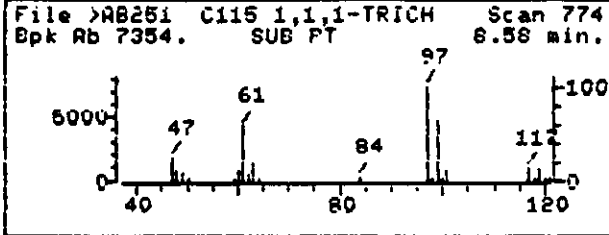


Data File: >M3153::L2
Name: 20949-15,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 08:26
Injected at: 920222 07:57
Last Qual Time: 920221 22:44

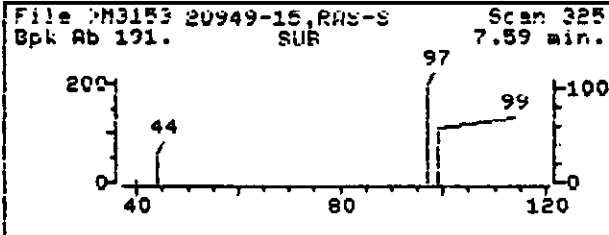
Quant Output File: ^M3153::QT
Instrument ID: L
Quant ID File: IDEPAL::10
Last Calibration: 911030 17:46

Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 193
Retention Time: 4.55 min.
Quant Ion : 84.0
Area : 2603
Concentration : 1.81 UG/L
q-value : 57

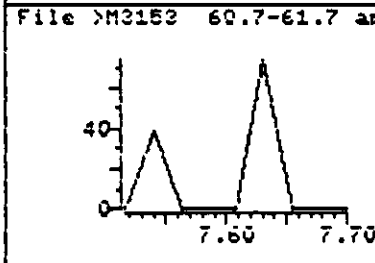
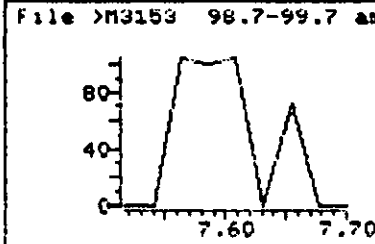
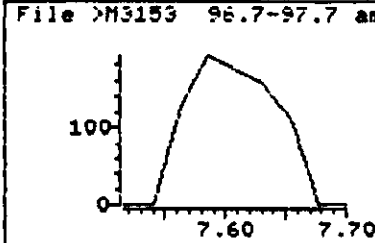
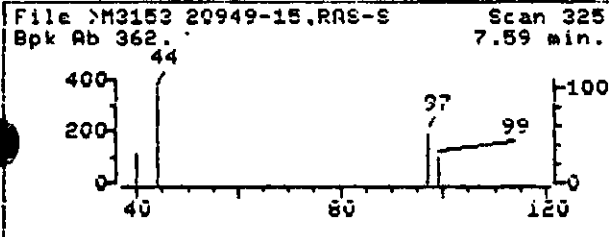
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



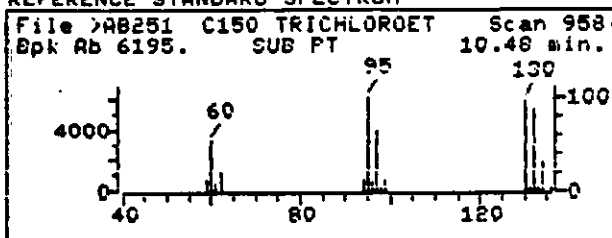
Data File: >M3153::L2
Name: 20949-15,RAS-S
Misc: 5G/>ML ANALYST RB INST L HEATED
Quant Time: 920222 08:26
Injected at: 920222 07:57
Last Qcal Time: 920221 22:44

Quant Output File: ^M3153::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

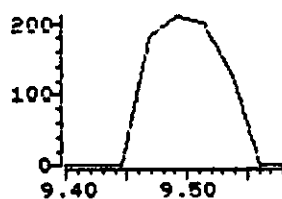
Compound No : 20
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 325
Retention Time: 7.59 min.
Quant Ion : 97.0
Area : 1049
Concentration : .558 UG/L
q-value : 89

BDL

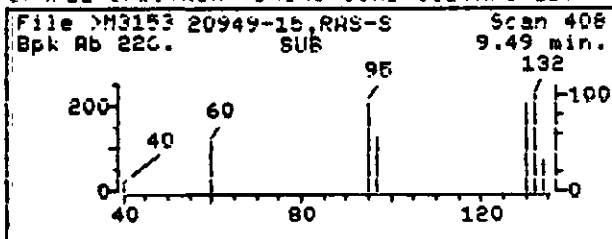
REFERENCE STANDARD SPECTRUM



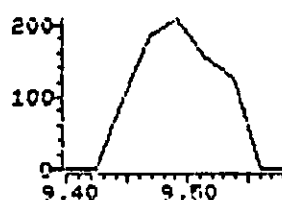
File >M3153 94.7-95.7 am



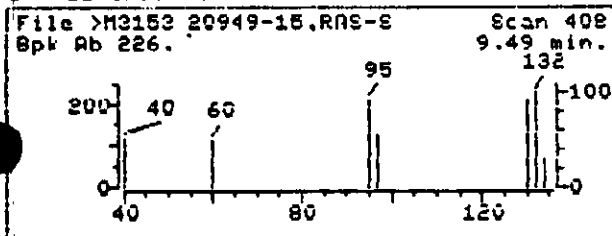
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



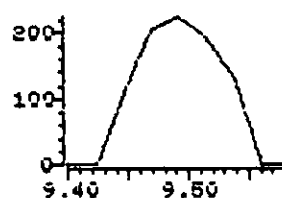
File >M3153 129.7-130.7



SAMPLE SPECTRUM (UNALTERED)



File >M3153 131.7-132.7



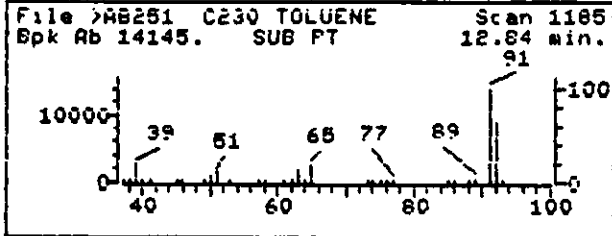
Data File: >M3153::L2
Name: 20949-15,RAS-S
Misc: 5G/5ML ANALYST KB INST L HEATED
Quant Time: 920222 08:26
Injected at: 920222 07:57
Last Qcal Time: 920221 22:44

Quant Output File: ^M3153::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

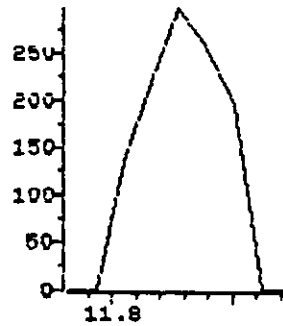
Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 408
Retention Time: 9.49 min.
Quant Ion : 130.0
Area : 1056
Concentration : .673 UG/L
q-value : 88

BDL

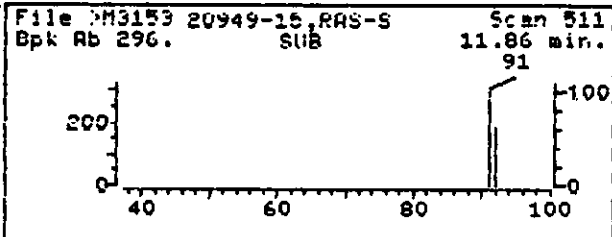
REFERENCE STANDARD SPECTRUM



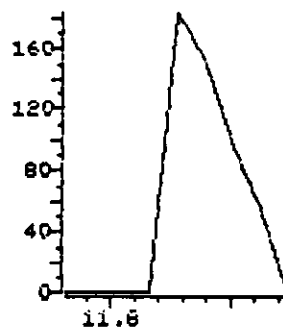
File >M3153 90.7-91.7 am



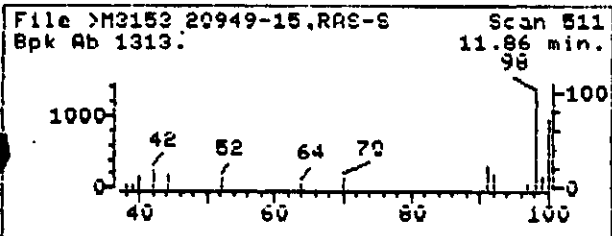
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >M3153 91.7-92.7 am



SAMPLE SPECTRUM (UNALTERED)



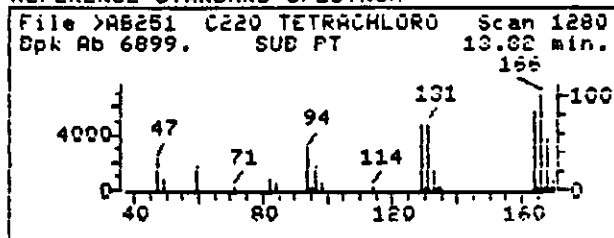
Data File: >M3153::L2
Name: 20949-15,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 08:26
Injected at: 920222 07:57
Last Qcal Time: 920221 22:44

Quant Output File: ^M3153::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

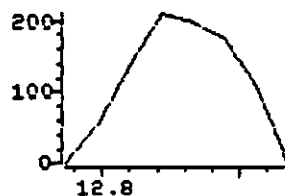
Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 511
Retention Time: 11.86 min.
Quant Ion : 91.0
Area : 1518
Concentration : .430 UG/L
q-value : 97

BDL

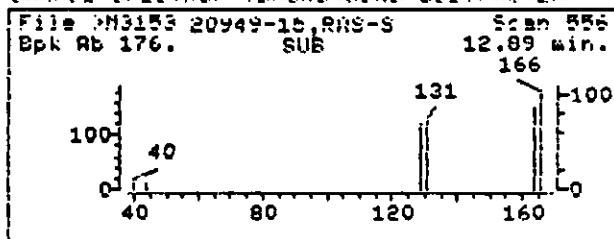
REFERENCE STANDARD SPECTRUM



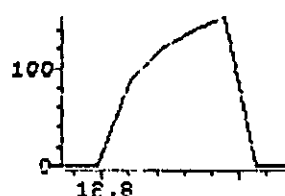
File >M3153 163.7-166.7



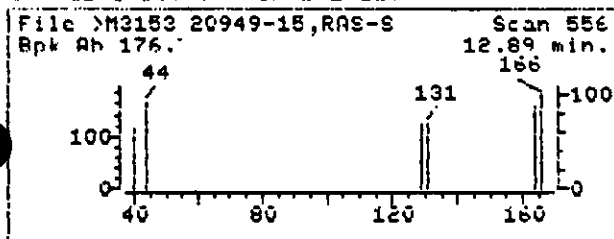
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



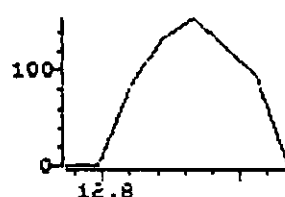
File >M3153 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >M3153 130.7-131.7



Data File: >M3153::L2
Name: 20949-15,RAS-S
Misc: 5G/5ML ANALYST KB INST L HEATED
Quant Time: 920222 08:26
Injected at: 920222 07:57
Last Qcal Time: 920221 22:44

Quant Output File: ^M3153::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 556
Retention Time: 12.89 min.
Quant Ion : 164.0
Area : 694
Concentration : .563 UG/L
q-value : 91

BDL

Diagnostic Quant Report

Data File: >M3153::L2 Injected at: 07:57 02/22/92
 Quant'd : 08:26 02/22/92
 ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	7.31	7.22	.09	128.0	43790	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	8.22	8.23	.01	65.0	65293	1.5454	48.24
3) C010 CHLOROMETHANE	1.12	0.00	--	50.0	0	.6752	0.00
4) C020 VINYL CHLORIDE	1.32	0.00	--	62.0	0	.8468	0.00
5) C015 BROMOMETHANE	1.78	0.00	--	94.0	0	1.1498	0.00
6) C025 CHLOROETHANE	2.05	0.00	--	64.0	0	.6141	0.00
7) C045 1,1-DICHLOROETHENE	3.48	0.00	--	96.0	0	1.0677	0.00
8) C040 CARBON DISULFIDE	3.57	0.00	--	76.0	0	1.7671	0.00
9) C035 ACETONE	4.00	3.87	.13	43.0	3632	.6178	6.71
10) C030 METHYLENE CHLORIDE	4.56	4.55	.01	84.0	2603	1.6412	1.81
11) UJNK trans-1,2-DICHLOROET	5.02	0.00	--	96.0	0	1.2769	0.00
12) C050 1,1-DICHLOROETHANE	5.79	0.00	--	63.0	0	2.3261	0.00
13) U011 cis-1,2-DICHLOROETHE	6.83	0.00	--	96.0	0	1.3491	0.00
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3130	0.00
15) C110 2-BUTANONE	7.13	0.00	--	43.0	0	1.2932	0.00
16) U013 TETRAHYDROFURAN	7.38	0.00	--	42.0	0	.7593	0.00
17) C060 CHLOROFORM	7.54	0.00	--	83.0	0	2.6596	0.00
18) C065 1,2-DICHLOROETHANE	8.33	0.00	--	62.0	0	1.7595	0.00
19) *C110 1,4-DIFLUOROBENZENE	9.24	9.19	.05	114.0	187817	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	7.64	7.59	.05	97.0	1049	.5005	.56
21) C120 CARBONTETRACHLORIDE	7.89	0.00	--	117.0	0	.4865	0.00
22) C165 BENZENE	8.26	0.00	--	78.0	0	.7901	0.00
23) C150 TRICHLOROETHENE	9.51	9.49	.02	130.0	1056	.4176	.67
24) C140 1,2-DICHLOROPROPANE	9.88	0.00	--	63.0	0	.3057	0.00
25) C130 BROMODICHLOROMETHANE	10.52	0.00	--	83.0	0	.4976	0.00
26) C143 cis-1,3-DICHLOROPROP	11.34	0.00	--	75.0	0	.4843	0.00
27) C172 trans-1,3-DICHLOROPR	12.48	0.00	--	75.0	0	.4312	0.00
28) C160 1,1,2-TRICHLOROETHAN	12.76	0.00	--	97.0	0	.3304	0.00
29) C155 CHLORODIBROMOMETHANE	13.44	0.00	--	129.0	0	.5172	0.00
30) C180 BROMOFORM	16.26	0.00	--	173.0	0	.4372	0.00
31) *C120 CHLOROBENZENE-D5	14.57	14.52	.06	117.0	141118	1.0000	50.00
32) CS05 TOLUENE-D8	11.77	11.74	.03	98.0	169110	1.1581	51.74
33) CS10 BROMOFLUOROBENZENE	17.06	17.07	.00	95.0	91488	.7245	44.74
33) CS10 BROMOFLUOROBENZENE	17.06	17.44	.37	95.0	813	.7245	.40
34) C230 TOLUENE	11.89	11.86	.03	91.0	1518	1.2499	.43
35) C205 4-METHYL-2-PENTANONE	11.82	0.00	--	43.0	0	.7503	0.00
36) C220 TETRACHLOROETHENE	12.87	12.89	.02	164.0	694	.4367	.56
37) C210 2-HEXANONE	13.46	0.00	--	43.0	0	.6263	0.00
38) C235 CHLORIBENZENE	14.59	0.00	--	112.0	0	.9753	0.00
39) C240 ETHYLBENZENE	14.93	0.00	--	106.0	0	.4618	0.00
40) UJNK M&P-XYLENES	15.18	0.00	--	106.0	0	.5985	0.00
41) U029 O-XYLENE	15.96	0.00	--	106.0	0	.5731	0.00
42) C250 XYLENE (TOTAL)	0.00	0.00	--	106.0	0	.5858	0.00
43) C245 STYRENE	16.03	0.00	--	104.0	0	.9212	0.00
44) C225 1,1,2,2-TETRACHLORUE	17.61	0.00	--	83.0	0	.8826	0.00

TIC Internal Standard Report

Data File: >M3153

Maximum separation 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
309.	43790.	7.294 309. 277477.	86.877
2	CI10 1,4-DIFLUOROBEN	50.000 UG/L	Ok
395.	187817.	2.506 395. 418761.	88.967
3	CI20 CHLOROBENZENE-D	50.000 UG/L	Ok
627.	141118.	3.094 627. 419299.	96.028

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
 Number of peaks: 11
 Number of peaks remaining: 8

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
 Maximum fraction of RIC peak from targets: 40. %
 Number of peaks: 8
 Number of peaks remaining: 2

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15
 Number of peaks: 2
 Maximum number of peaks > number of peaks.

TICE: _D

Data Reduced by : SEB Date: 3/5/92
 Data Reviewed by : A Date: 3-10-92

Data File: >M3153

Enseco TIC Report (page 1)

Sample: 20949-15,RAS-S Run Factor: 1.16
 Conditions: 5G/5ML ANALYST RE INST L HEATE Analyst: LUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	334.		2	6.6	1066-40-6	Silanol, trimethyl-
2	919.		2	6.0	1120-21-4	Undecane

Hit return for more ...

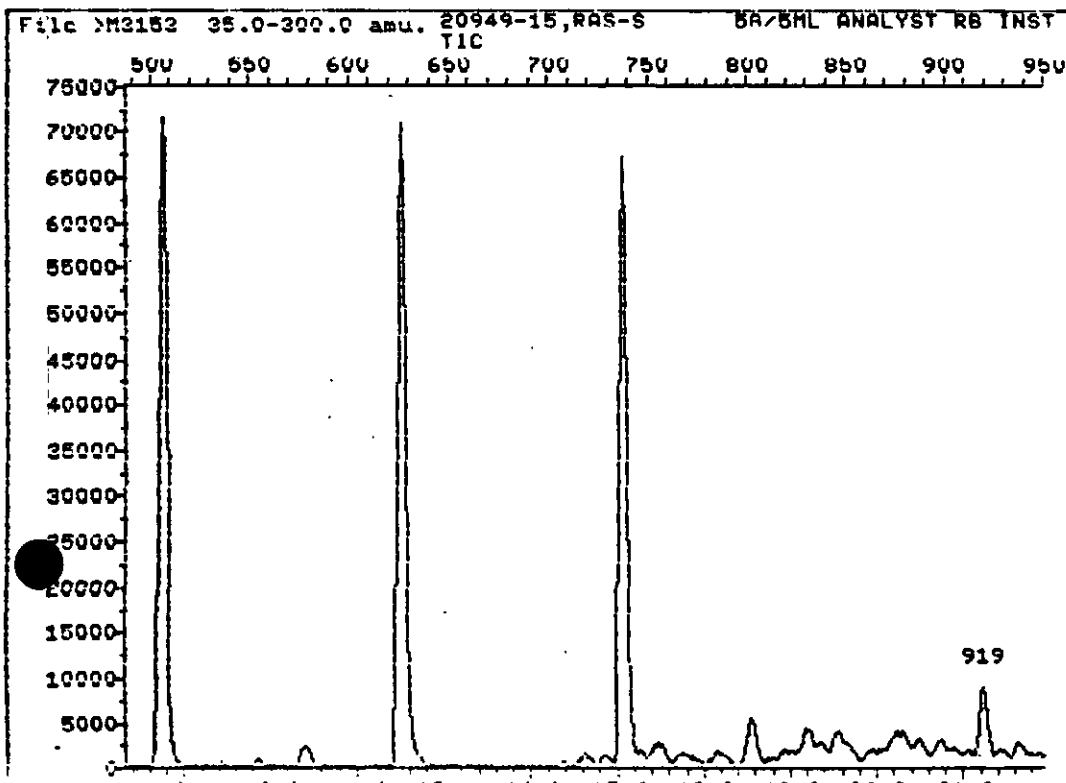
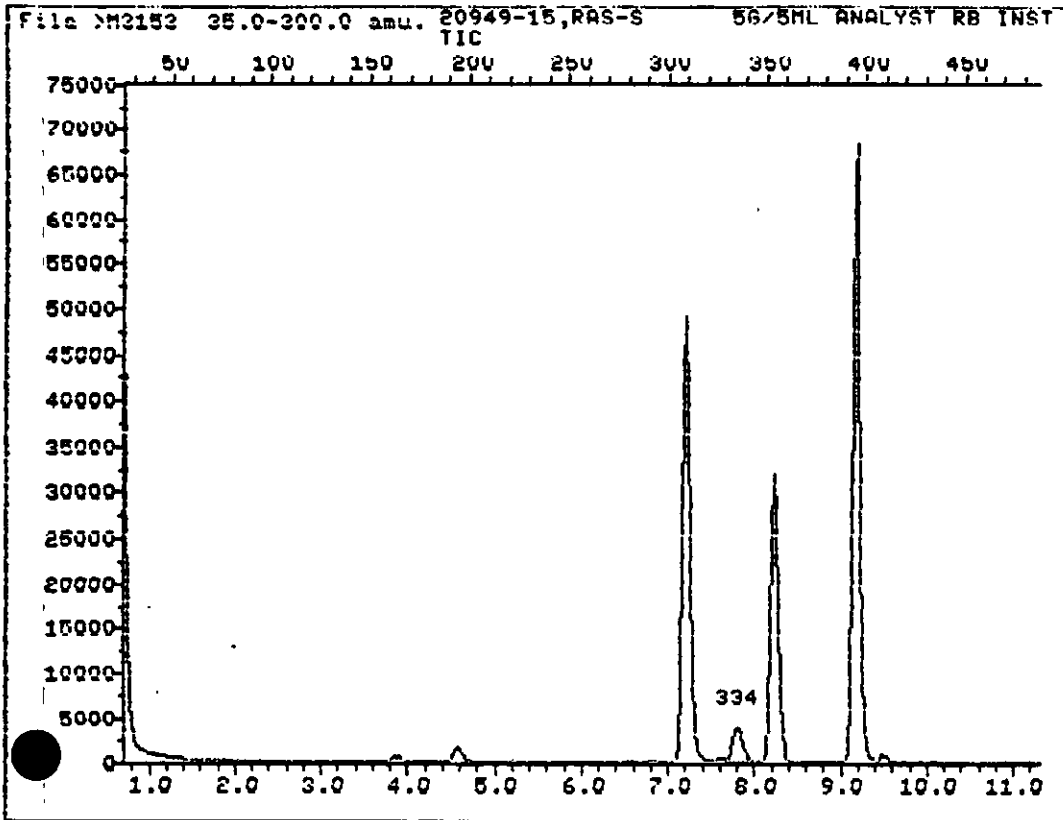
Data File: >M3153

Enseco TIC Report (page 2)

$$\text{Concentration} = \text{Area(TIC)} * \text{Conc. (IS)} / \text{Area (IS)}$$

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	70	9	1	7.79	1.079	31546.	3764.	5.684
2	81	10	3	21.23	1.462	43390.	7552.	5.174

000477



000478

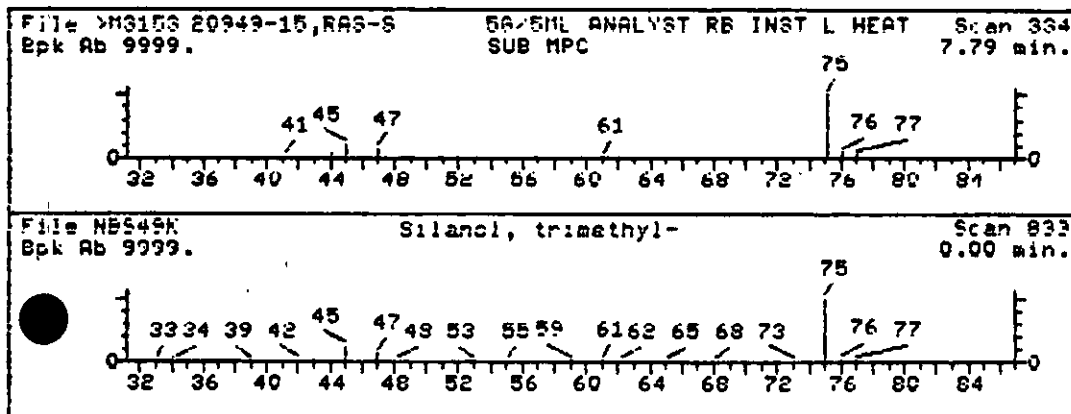
TIC NUMBER:1

1. Silanol, trimethyl-

90 C3H10OS1

Sample file: >M3153 Spectrum #: 334
Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	70	1066406	4954	NBS49K	35	49	2	0	83	9	42	12



2

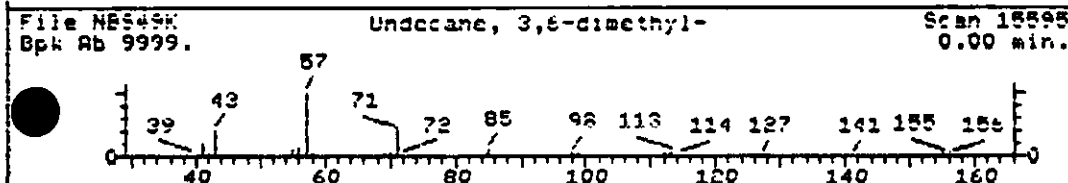
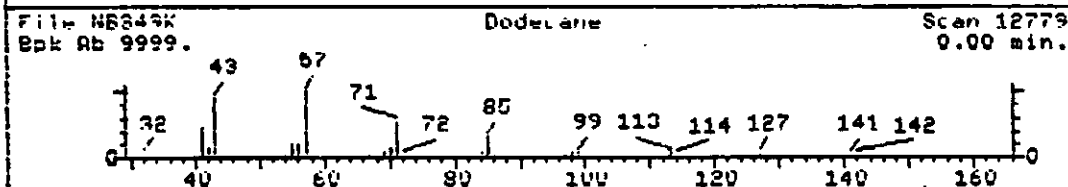
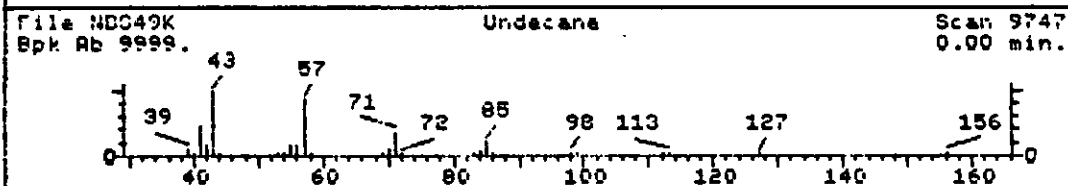
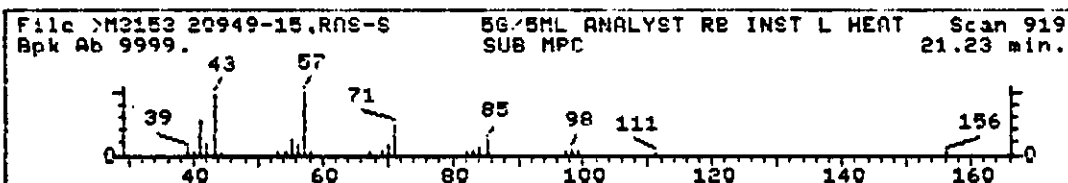
000479

TIC NUMBER:2

1. Undecane	156 C11H24
2. Dodecane	170 C12H26
3. Undecane, 3,6-dimethyl-	184 C13H28
4. Hexacosane	366 C26H54
5. Decane, 6-ethyl-2-methyl-	184 C13H28
6. Decane, 2,9-dimethyl-	170 C12H26

Sample file: >M3153 Spectrum #: 919
 Search speed: 2 Tilting option: S No. of ion ranges searched: 54

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	81*	1120214	6682	NBS49K	63	34	2	0	96	10	53	44
2.	76	112403	6732	NBS49K	62	37	2	0	78	7	45	21
3.	60	17301289	4386	NBS49K	48	49	2	0	100	15	30	12
4.	60	630013	6903	NBS49K	67	75	2	0	80	13	30	14
5.	60	62108218	6767	NBS49K	59	40	2	0	96	11	30	17
6.	45	1002171	6738	NBS49K	50	42	2	0	84	23	17	16



2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO
000480

20949-16

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-16

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: M3154

Level: (low/med) LOW

Date Received: 02/15/92

% Moisture: not dec. 13

Date Analyzed: 02/22/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

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	2	J
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	1	J
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	2	J
71-55-6	1,1,1-Trichloroethane	9	J
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	9	J
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	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	11	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000481
 EPA SAMPLE NO.

20949-16

Lab Name: ENSECO Contract: _____
 Lab Code: ENSECO Case No.: 20949 SAS No.: _____ SDG No.: _____
 Matrix: (soil/water) SOIL Lab Sample ID: 20949-16
 Sample wt/vol: 5.0 (g/mL) G Lab File ID: M3154
 Level: (low/med) LOW Date Received: 02/15/92
 % Moisture: not dec. 13 Date Analyzed: 02/22/92
 GC Column: CAP ID: 0.530 (mm) Dilution Factor: 1.0
 Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

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

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 1066-40-6	Silanol, trimethyl-	7.95	7	JN
2. 541-05-9	Cyclotrisiloxane, hexamethyl	13.44	9	JN
3.	Saturated Hydrocarbon	18.55	7	JN
4. 25151-07-9	Pyrimidine, 2,4-difluoro-5-c	19.57	6	JN

000482

QUANT REPORT

Page 1

Operator ID: LUEY1
 Output File: ^M3154::QT
 Data File: >M3154::L2
 Name: 20949-16,RAS-S
 Misc: 5G/5ML ANALYST RB INST L HEATED

Quant Rev: 7 Quant Time: 920222 09:04
 Injected at: 920222 08:35
 Dilution Factor: 1.00000
 Instrument ID: L

ID File: IDEPAL::ID
 Title: ID FILE CLP INST. L + THF
 Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*C101 BROMOCHLOROMETHANE	7.26	128.0	45953	50.00	UG/L	95
2)	CS15 1,2-DICHLOROETHANE-D4	8.27	65.0	68836	48.47	UG/L	82
9)	C035 ACETONE	4.02	43.0	5759	10.14	UG/L	100
10)	C030 METHYLENE CHLORIDE	4.60	84.0	2285	1.51	UG/L	78
13)	U011 cis-1,2-DICHLOROETHENE	6.87	96.0	1377	1.11	UG/L	72
15)	C110 2-BUTANONE	7.12	43.0	2379	2.00	UG/L	94
9)	*C110 1,4-DIFLUOROBENZENE	9.21	114.0	206925	50.00	UG/L	100
20)	C115 1,1,1-TRICHLOROETHANE	7.63	97.0	16350	7.89	UG/L	91
21)	C120 CARBONTETRACHLORIDE	7.63	117.0	2090	1.04	UG/L	97
23)	C150 TRICHLOROETHENE	9.51	130.0	13877	8.03	UG/L	89
31)	*C120 CHLOROBENZENE-D5	14.54	117.0	156620	50.00	UG/L	74
32)	CS05 TOLUENE-D8	11.76	98.0	180265	49.69	UG/L	95
33)	CS10 BROMOFLUOROBENZENE	17.09	95.0	101344	44.66	UG/L	100
34)	C230 TOLUENE	11.90	91.0	4304	1.10	UG/L	86
36)	C220 TETRACHLOROETHENE	12.89	164.0	5610	4.10	UG/L	96
41)	U029 O-XYLENE	16.81	106.0	1417	..787	UG/L	83

* Compound is ISTD

000483

MS data file header from : >M3154::L2

Sample: 20949-16,RAS-S Operator: LUEY1 REG. GRP. 2/22/92 8:35
Misc : 5G/5ML ANALYST RB INST L HEATED
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: L
Method file: SAMML Tuning file: MTBFBL No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

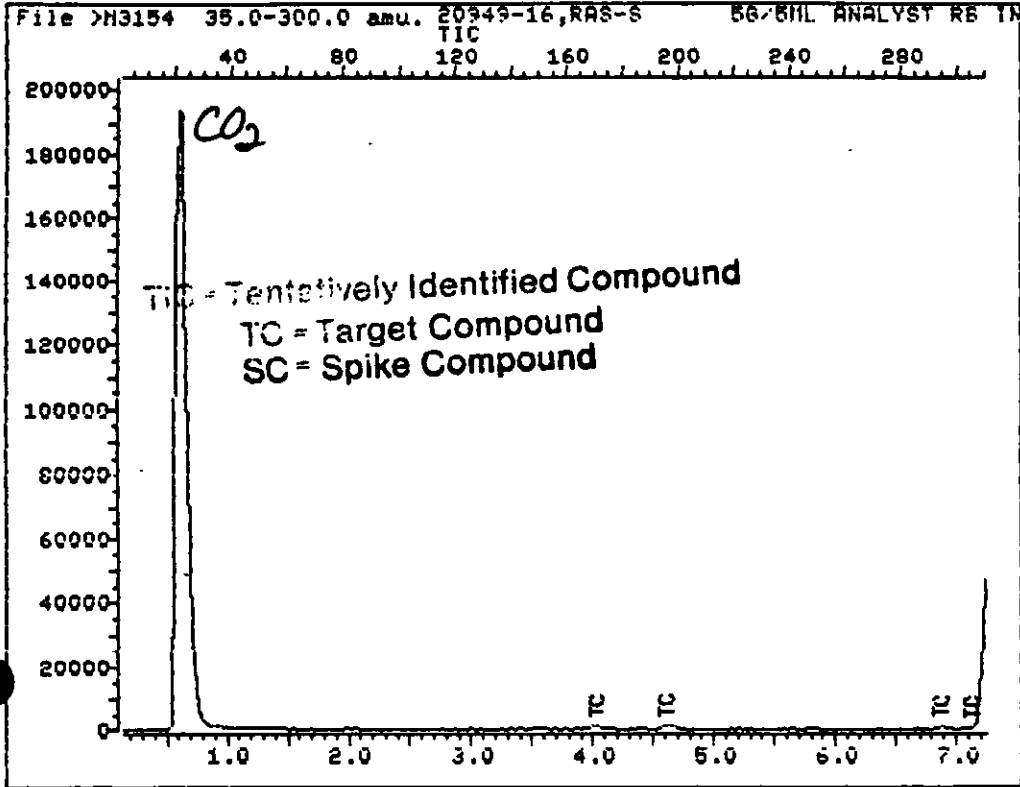
CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	5G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	N/A	%moisture for soil
int_ext_vol	NA	intermediate extr ct vol/M.L. ext vo
int_ext_vol_u		intermediate extract vol/M.L. vol US
spiked	E	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
r_fact	1.00	calcd runfactor
surfact	.0050	calcd surr vol

Performance Check: >M3139 Injection Time: 2/21/92 22:14
Sample : >M3154 Injection Time: 2/22/92 8:35
Elapsed Time: 0 Y 0 D 10:21
Sample: ^M3154 Calibration Stds.: ^M3140,
Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
Invalid Response Factor for: C250 XYLENE (TOTAL)

000484

TOTAL ION CHROMATOGRAM



Data File: >M3154::L2

Quant Output File: ^M3154::QT

Name: 20949-16,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

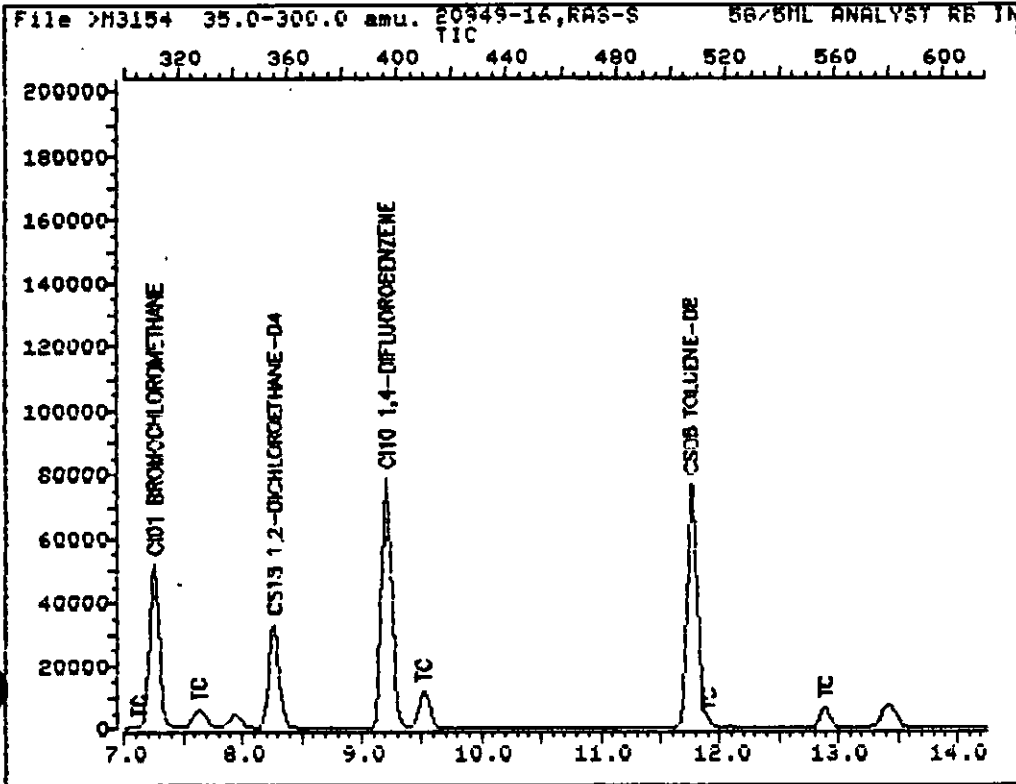
Operator ID: LUEY1

Quant Time : 920222 09:04

Injected at: 920222 08:35

000485

TOTAL ION CHROMATOGRAM



Data File: >M3154::L2

Quant Output File: ^M3154::QT

Name: 20949-16,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

Operator ID: LUEY1

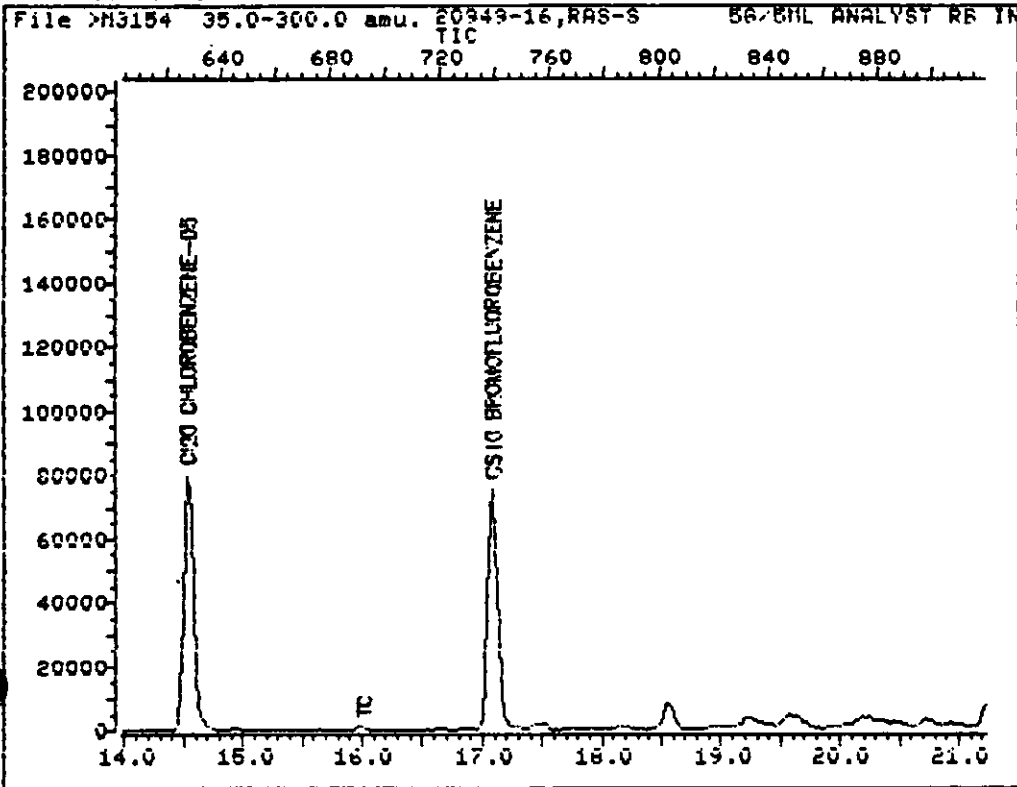
Quant Time : 920222 09:04

Injected at: 920222 08:35

Page 2 of 4

000486

TOTAL ION CHROMATOGRAM



Data File: >M3154::L2

Quant Output File: ^M3154::QT

Name: 20949-16,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qcal Time: 920221 22:44

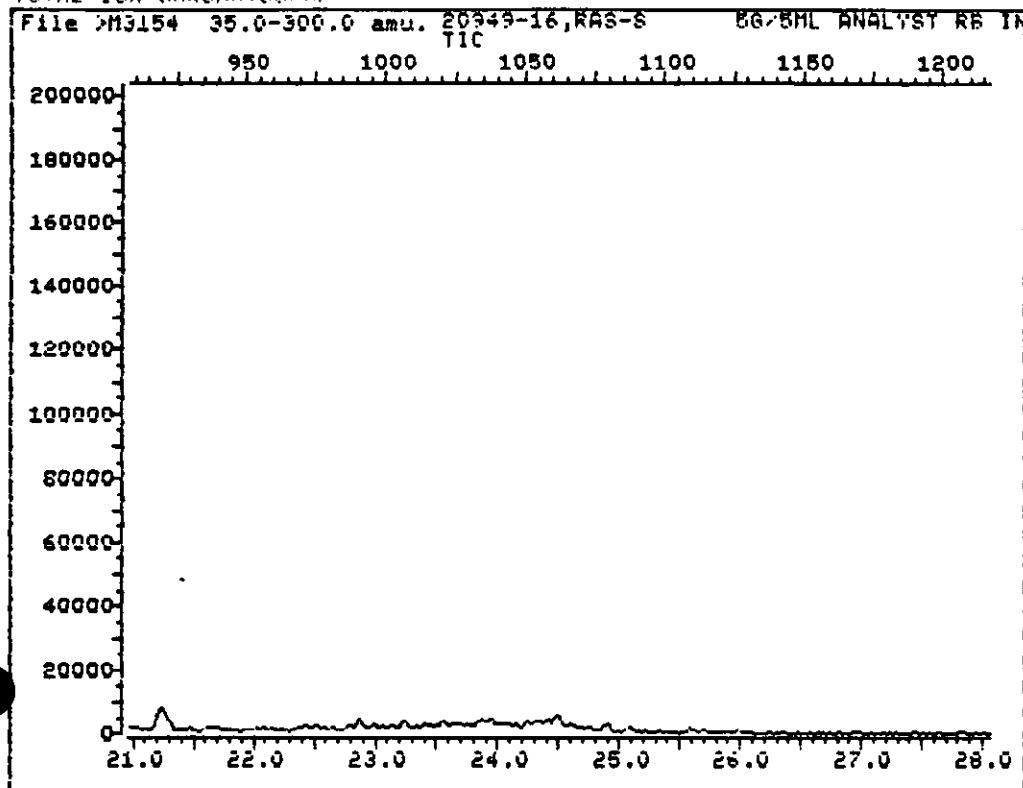
Operator ID: LUEY1

Quant Time : 920222 09:04

Injected at: 920222 08:35

000487

TOTAL ION CHROMATOGRAM



Data File: >M3154::L2

Quant Output File: ^M3154::QT

Name: 20949-16,RAS-S

Instrument ID: L

Misc: 5G/5ML ANALYST RB INST L HEATED

Id File: IDEPAL::ID

Title: ID FILE CLP INST. L + THF

Last Calibration: 911030 17:46

Last Qual Time: 920221 22:44

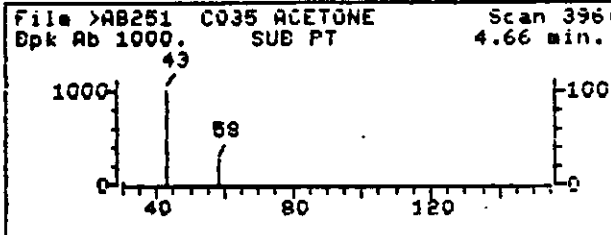
Operator ID: LUEY1

Quant Time : 920222 09:04

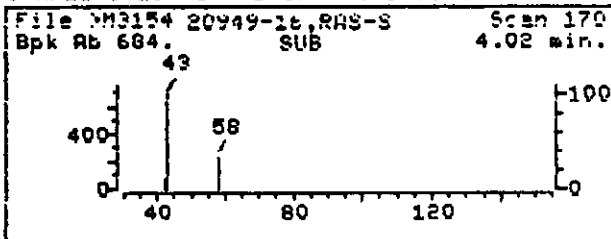
Injected at: 920222 08:35

Page 4 of 4

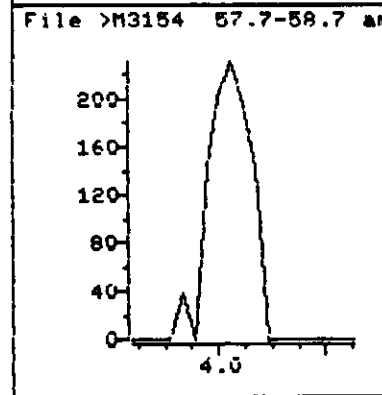
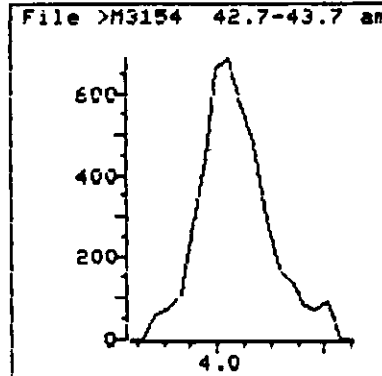
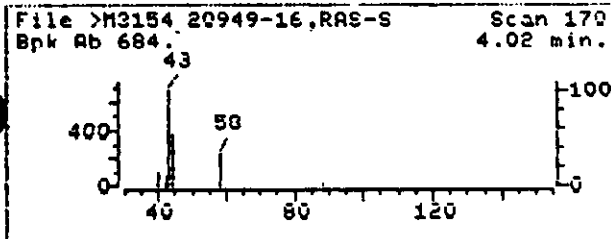
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

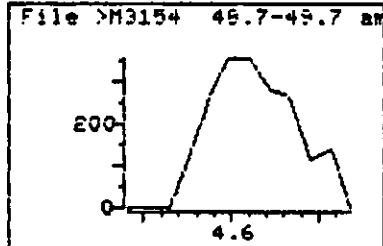
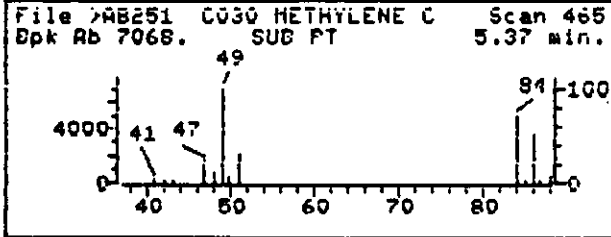


Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

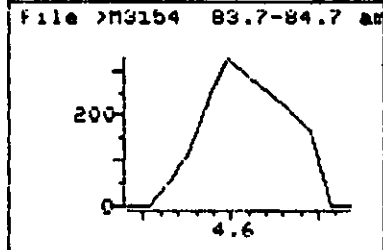
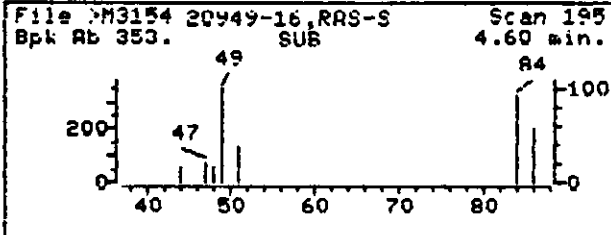
Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 170
Retention Time: 4.02 min.
Quant Ion : 43.0
Area : 5759
Concentration : 10.14 UG/L
q-value : 100

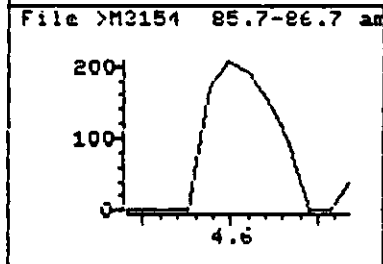
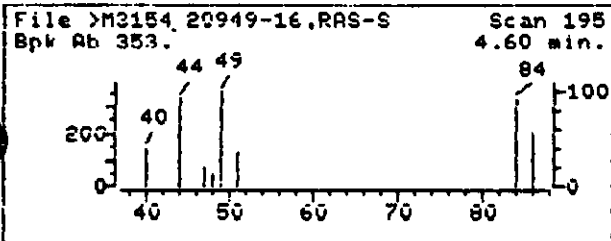
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

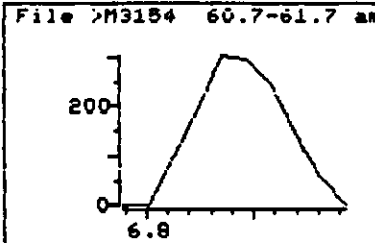
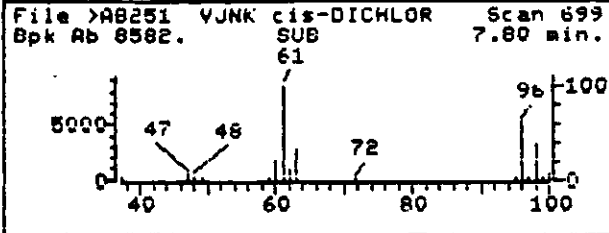


Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST KB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

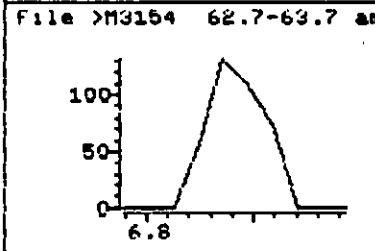
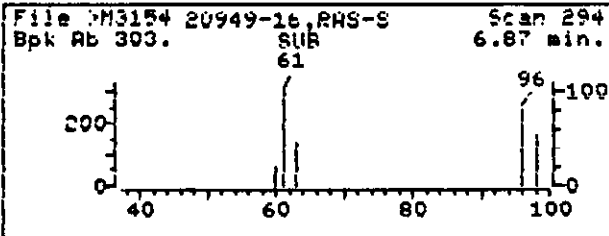
Quant Output File: ^M3154::Q1
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 195
Retention Time: 4.60 min.
Quant Ion : 84.0
Area : 2285
Concentration : 1.51 UG/L
q-value : 78

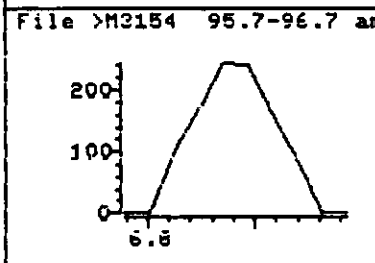
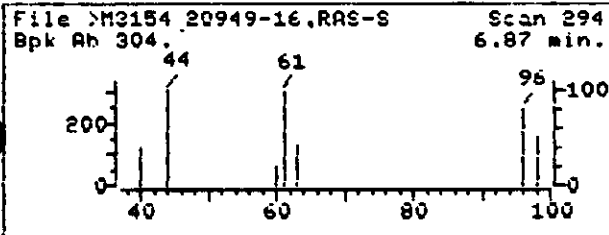
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

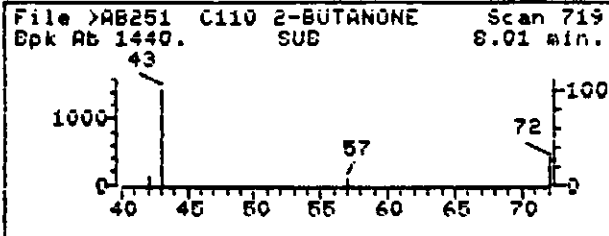


Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

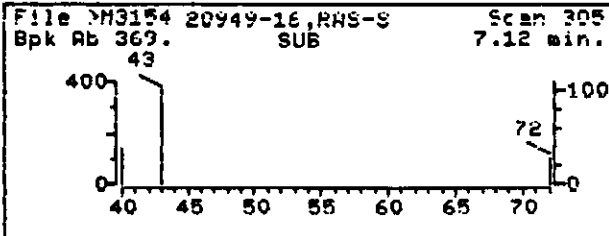
Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 13
Compound Name : U011 cis-1,2-DICHLOROETHENE
Scan Number : 294
Retention Time : 6.87 min.
Quant Ion : 96.0
Area : 1377
Concentration : 1.11 UG/L
q-value : 72

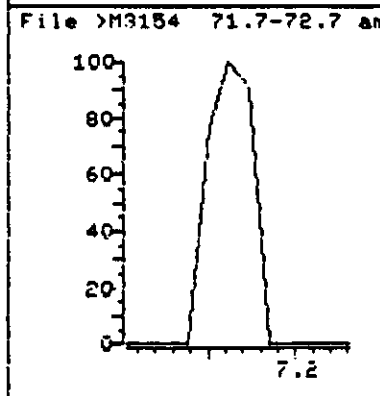
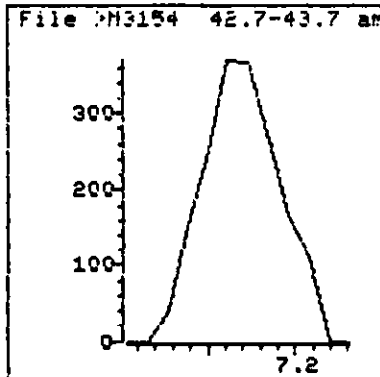
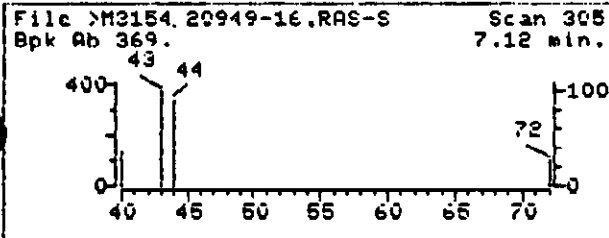
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

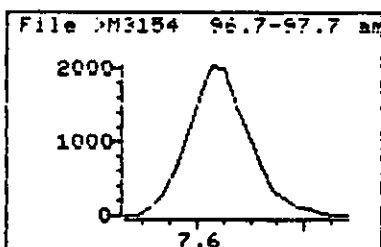
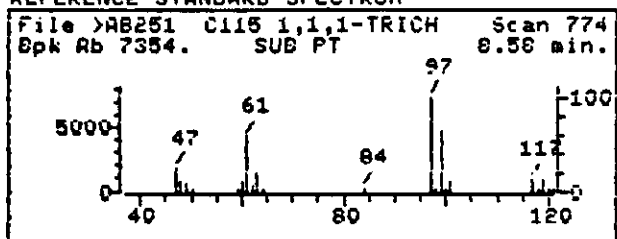


Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

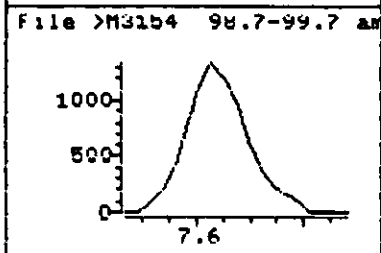
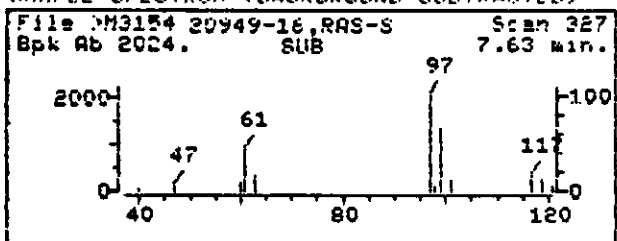
Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 15
Compound Name : C110 2-BUTANONE
Scan Number : 305
Retention Time: 7.12 min.
Quant Ion : 43.0
Area : 2379
Concentration : 2.00 UG/L
q-value : 94

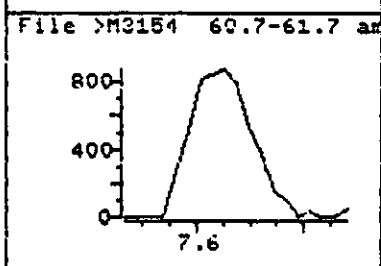
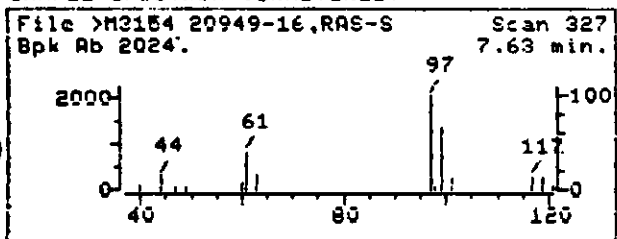
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

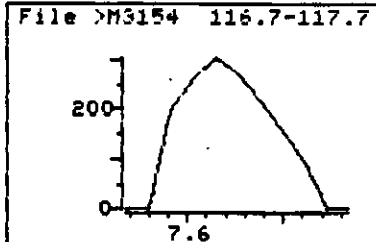
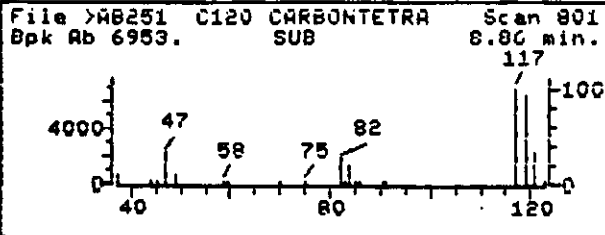


Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST KB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

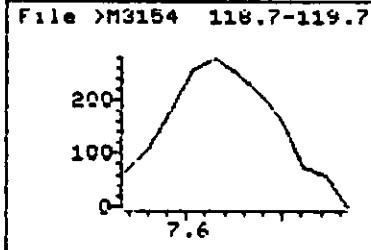
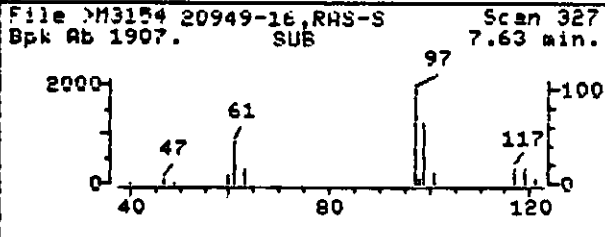
Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 20
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 327
Retention Time: 7.63 min.
Quant Ion : 97.0
Area : 16350
Concentration : 7.89 UG/L
q-value : 91

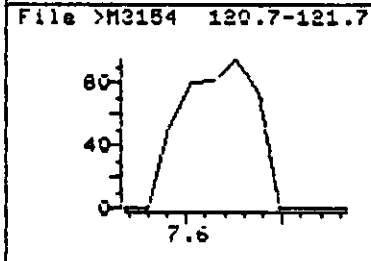
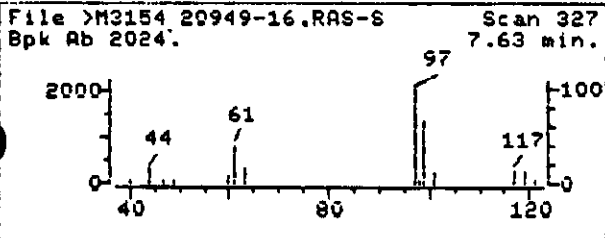
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



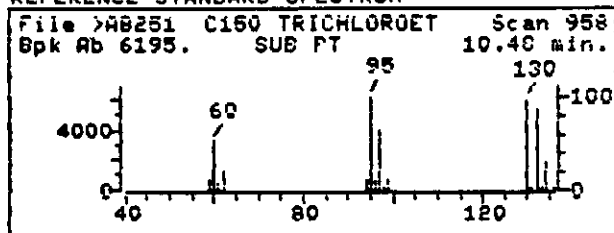
Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

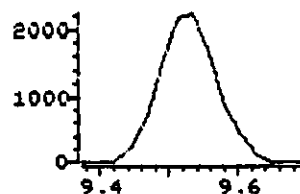
Compound No : 21
Compound Name : C120 CARBONTETRACHLORIDE
Scan Number : 327
Retention Time: 7.63 min.
Quant Ion : 117.0
Area : 2090
Concentration : 1.04 UG/L
q-value : 97

ret time 80

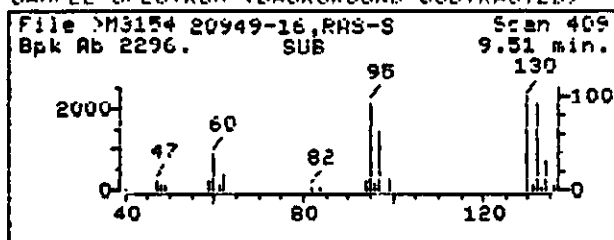
REFERENCE STANDARD SPECTRUM



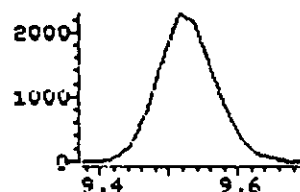
File >M3154 94.7-95.7 am



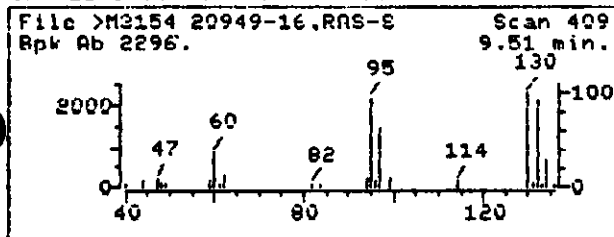
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



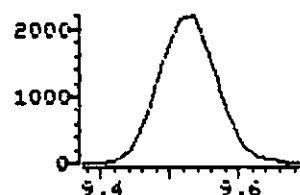
File >M3154 129.7-130.7



SAMPLE SPECTRUM (UNALTERED)



File >M3154 131.7-132.7



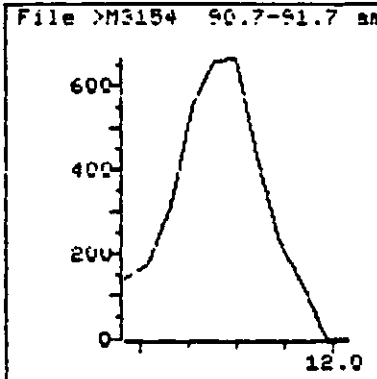
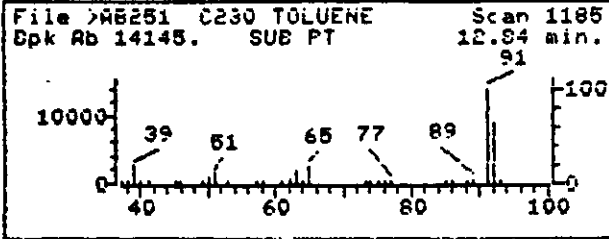
Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qual Time: 920221 22:44

Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

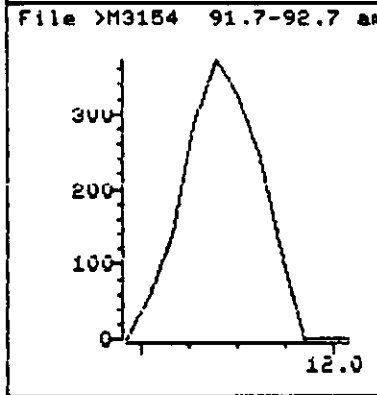
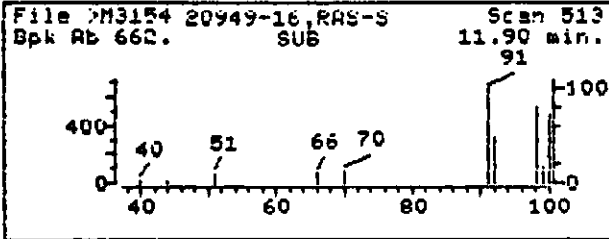
Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 409
Retention Time : 9.51 min.
Quant Ion : 130.0
Area : 13877
Concentration : 8.03 UG/L
q-value : 89

000495

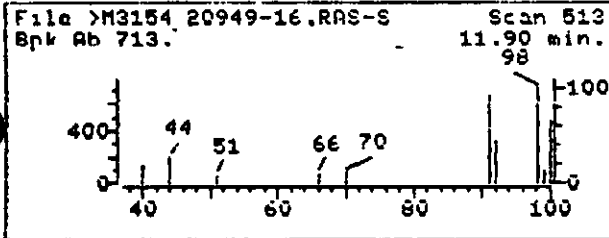
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

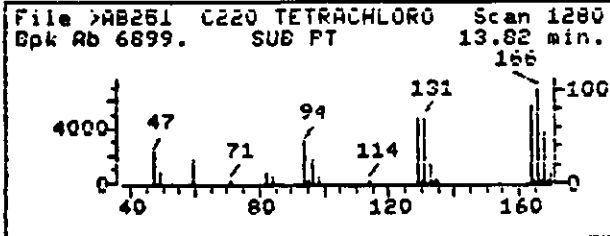


Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

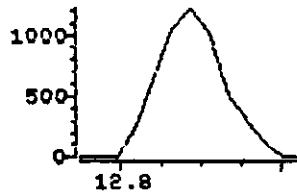
Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 513
Retention Time : 11.90 min.
Quant Ion : 91.0
Area : 4304
Concentration : 1.10 UG/L
q-value : 86

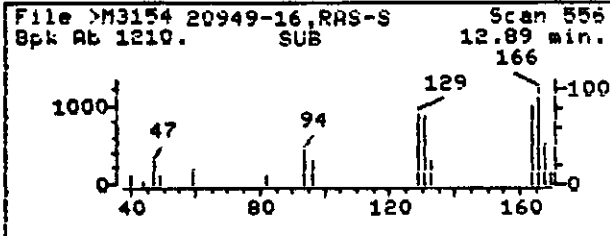
REFERENCE STANDARD SPECTRUM



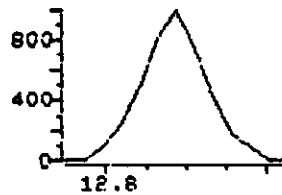
File >M3154 165.7-166.7



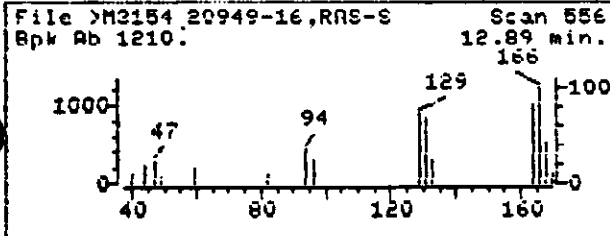
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



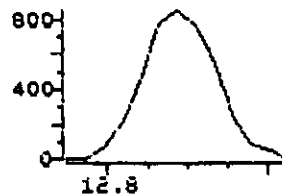
File >M3154 163.7-164.7



SAMPLE SPECTRUM (UNALTERED)



File >M3154 130.7-131.7



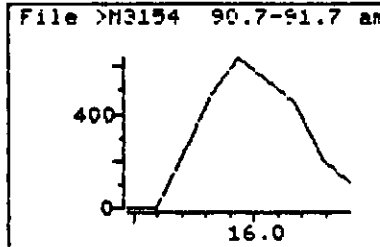
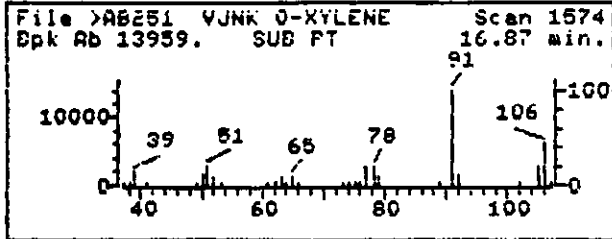
Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

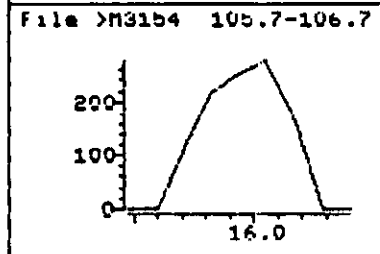
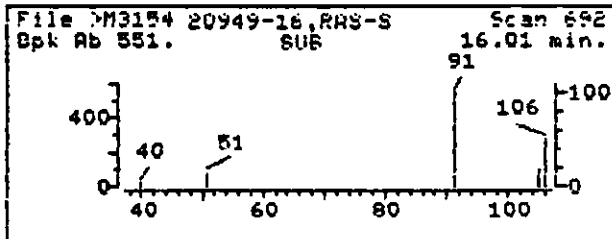
Compound No : 36
Compound Name : C220 TETRACHLOROETHENE
Scan Number : 556
Retention Time: 12.89 min.
Quant Ion : 164.0
Area : 5610
Concentration : 4.10 UG/L
q-value : 96

000497

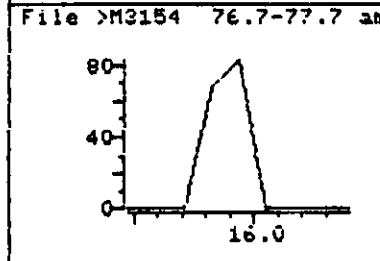
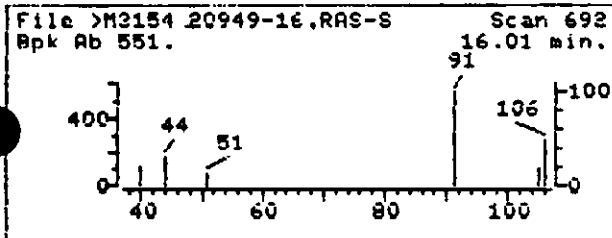
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >M3154::L2
Name: 20949-16,RAS-S
Misc: 5G/5ML ANALYST RB INST L HEATED
Quant Time: 920222 09:04
Injected at: 920222 08:35
Last Qcal Time: 920221 22:44

Quant Output File: ^M3154::QT
Instrument ID: L
Quant ID File: IDEPAL::ID
Last Calibration: 911030 17:46

Compound No : 41
Compound Name : U029 O-XYLENE
Scan Number : 692
Retention Time: 16.01 min.
Quant Ion : 106.0
Area : 1417
Concentration : .789 UG/L
q-value : 83

BA

000498

Diagnostic Quant Report

Data File: >M3154::L2 Injected at: 08:35 02/22/92

Quant'd : 09:04 02/22/92

ID File : IDEPAL::ID Calibrated : 17:46 10/30/91

Compound	- R.T. Info -				Area	RF	Conc.
	Pred	Found	Dif	Ion			
1) *C101 BROMOCHLOROMETHANE	7.31	7.26	.05	128.0	45953	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	8.27	8.27	.01	65.0	68836	1.5454	48.47
3) C010 CHLOROMETHANE	1.12	0.00	--	50.0	0	.6752	0.00
4) C020 VINYL CHLORIDE	1.33	0.00	--	62.0	0	.8468	0.00
5) C015 BROMOMETHANE	1.79	0.00	--	94.0	0	1.1498	0.00
6) C025 CHLOROETHANE	2.06	0.00	--	64.0	0	.6141	0.00
7) C045 1,1-DICHLOROETHENE	3.50	0.00	--	96.0	0	1.0677	0.00
8) C040 CARBON DISULFIDE	3.59	0.00	--	76.0	0	1.7671	0.00
9) C035 ACETONE	4.02	4.02	.00	43.0	5759	.6178	10.14
10) C030 METHYLENE CHLORIDE	4.59	4.60	.01	84.0	2285	1.6412	1.51
11) UJNK trans-1,2-DICHLOROET	5.05	0.00	--	96.0	0	1.2769	0.00
12) C050 1,1-DICHLOROETHANE	5.82	0.00	--	63.0	0	2.3261	0.00
13) U011 cis-1,2-DICHLOROETHE	6.87	6.87	.00	96.0	1377	1.3491	1.11
14) C053 1,2 DICHLOROETHENE T	0.00	0.00	0.00	96.0	1377	1.3130	1.14
15) C110 2-BUTANONE	7.17	7.12	.05	43.0	2379	1.2932	2.00
16) U013 TETRAHYDROFURAN	7.42	0.00	--	42.0	0	.7593	0.00
17) C060 CHLOROFORM	7.58	0.00	--	83.0	0	2.6596	0.00
18) C065 1,2-DICHLOROETHANE	8.38	0.00	--	62.0	0	1.7595	0.00
19) *C110 1,4-DIFLUOROBENZENE	9.24	9.21	.03	114.0	206925	1.0000	50.00
20) C115 1,1,1-TRICHLOROETHAN	7.66	7.63	.03	97.0	16350	.5005	7.89
21) C120 CARBONTETRACHLORIDE	7.91	7.63	.28	117.0	2090	.4865	1.04
22) C165 BENZENE	8.28	0.00	--	78.0	0	.7901	0.00
23) C150 TRICHLOROETHENE	9.54	9.51	.02	130.0	13877	.4176	8.03
24) C140 1,2-DICHLOROPROPANE	9.90	0.00	--	63.0	0	.3057	0.00
25) C130 BROMODICHLOROMETHANE	10.54	0.00	--	83.0	0	.4976	0.00
26) C143 cis-1,3-DICHLOROPROP	11.37	0.00	--	75.0	0	.4843	0.00
27) C172 trans-1,3-DICHLOROPR	12.51	0.00	--	75.0	0	.4312	0.00
28) C160 1,1,2-TRICHLOROETHAN	12.79	0.00	--	97.0	0	.3304	0.00
29) C155 CHLORODIBROMOMETHANE	13.48	0.00	--	129.0	0	.5172	0.00
30) C180 BROMOFORM	16.30	0.00	--	173.0	0	.4372	0.00
31) *C120 CHLOROBENZENE-D5	14.57	14.54	.03	117.0	156620	1.0000	50.00
32) CS05 TOLUENE-DB	11.79	11.76	.03	98.0	180265	1.1581	49.69
33) CS10 BROMOFLUOROBENZENE	17.09	17.09	.00	95.0	101344	.7245	44.66
33) D CS10 BROMOFLUOROBENZENE	17.09	17.43	.34	95.0	1049	.7245	.46
34) C230 TOLUENE	11.90	11.90	.00	91.0	4304	1.2499	1.10
35) C205 4-METHYL-2-PENTANONE	11.83	0.00	--	43.0	0	.7503	0.00
36) C220 TETRACHLOROETHENE	12.89	12.89	.00	164.0	5610	.4367	4.10
37) C210 2-HEXANONE	13.49	0.00	--	43.0	0	.6263	0.00
38) C235 CHLOROBENZENE	14.61	0.00	--	112.0	0	.9753	0.00
39) C240 ETHYLBENZENE	14.95	0.00	--	106.0	0	.4618	0.00
40) UJNK M&P-XYLENES	15.21	0.00	--	106.0	0	.5985	0.00
41) U029 O-XYLENE	15.99	16.01	.02	106.0	1417	.5731	.79
42) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	1417	.5858	.77
43) C245 STYRENE	16.06	0.00	--	104.0	0	.9212	0.00
44) C225 1,1,2,2-TETRACHLORUE	17.64	0.00	--	83.0	0	.8826	0.00

000499

TIC Internal Standard Report

Data File: >M3154

Maximum separation 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	RIratio RIC scan RIC area	% Est. RIC
1	C101 BROMOCHLOROMETH	50.000 UG/L	Ok
311.	45953.	7.294 311. 294601.	87.897
2	C110 1,4-DIFLUOROBEN	50.000 UG/L	Ok
396.	206925.	2.506 396. 458360.	88.388
3	C120 CHLOROBENZENE-D	50.000 UG/L	Ok
628.	156620.	3.094 628. 464189.	95.787

Deleting peaks from INT file: UDIR87

Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 15
Number of peaks remaining: 12

Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 12
Number of peaks remaining: 4

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 15
Number of peaks: 4
Maximum number of peaks > number of peaks.

000500

TICE: _D

Data Reduced by : SFB Date: 3/5/92
Data Reviewed by : AJ Date: 3/10/92

Data File: >M3154

Enseco TIC Report (page 1)

Sample: 20949-16,RAS-S Run Factor: 1.15
Conditions: 5G/5ML ANALYST RB INST L HEATE Analyst: LUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	341.	2	6.7	6.7	1066-40-6	Silanol, trimethyl-
2	580.	2	8.6	8.6	541-05-9	Cyclotrisiloxane, hexamethyl-
3	803.		6.9	6.9	00-00-0	Saturated Hydrocarbon
4	847.	1	6.2	6.2	25151-07-9	Pyrimidine, 2,4-difluoro-5-chloro-

Hit return for more ...

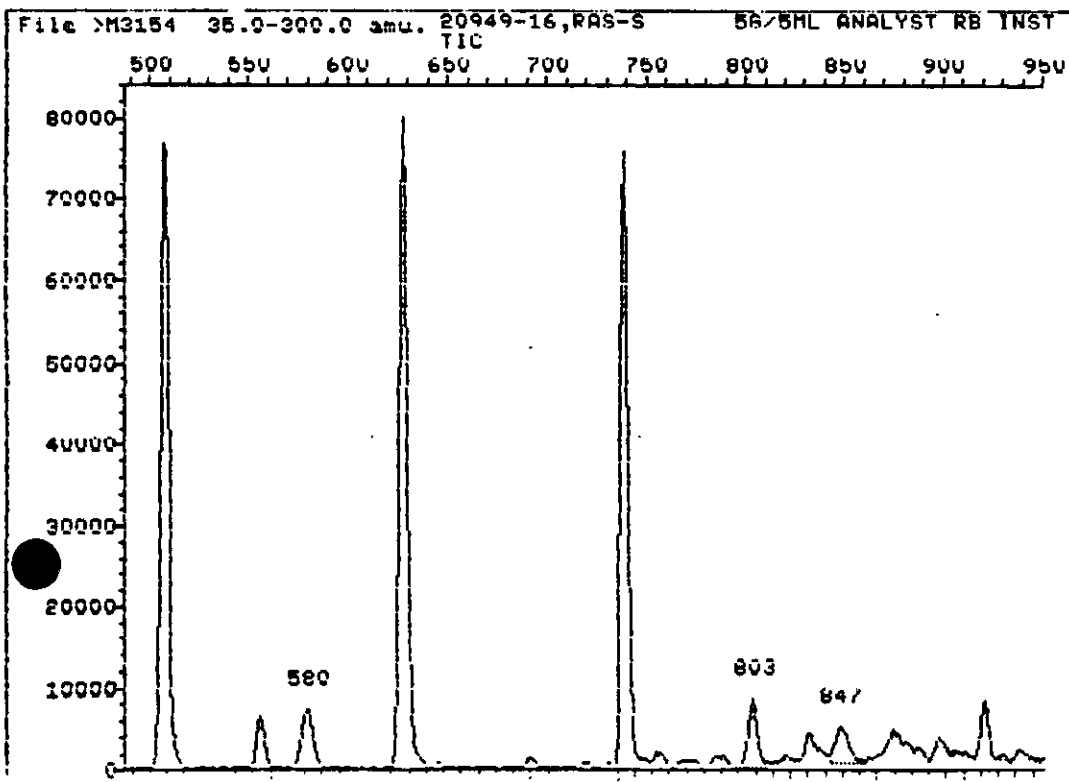
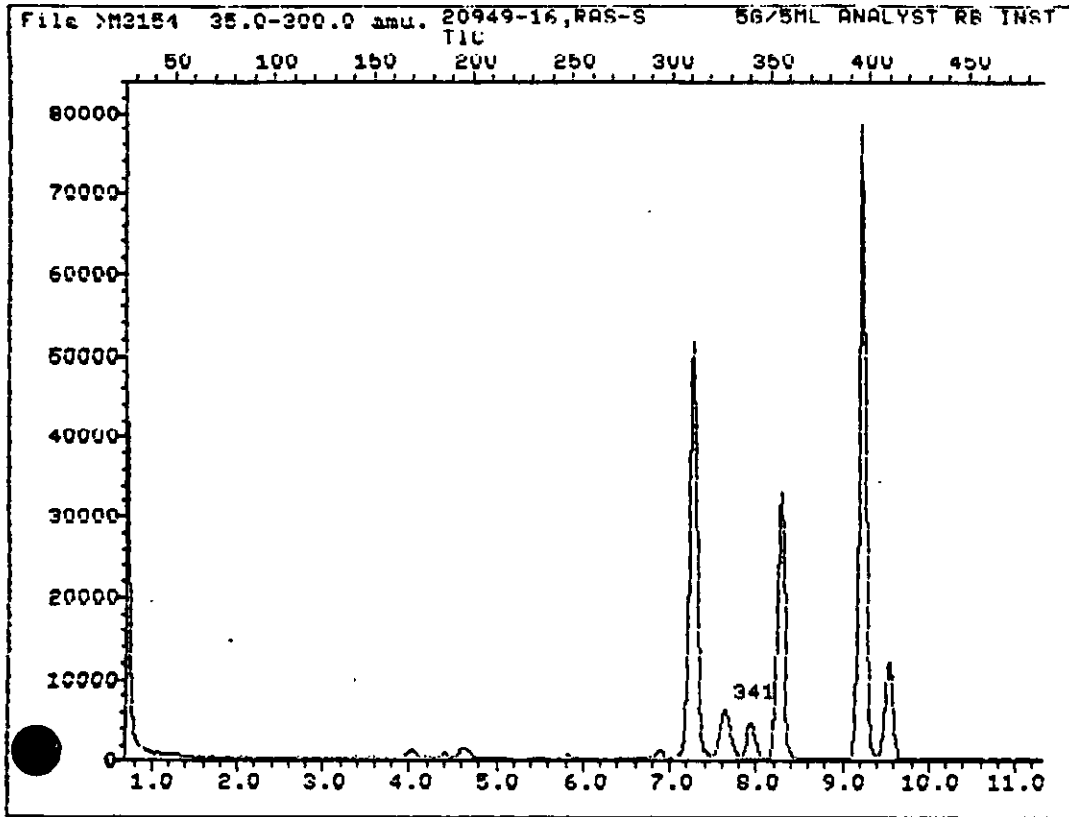
Data File: >M3154

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	60	12	1	7.95	1.095	34118.	4504.	5.791
2	67	13	3	13.44	.924	69624.	7322.	7.500
3			3	18.56	1.276	55991.	8088.	6.031
4	15	56	3	19.57	1.346	49770.	4377.	5.361

000501



000502

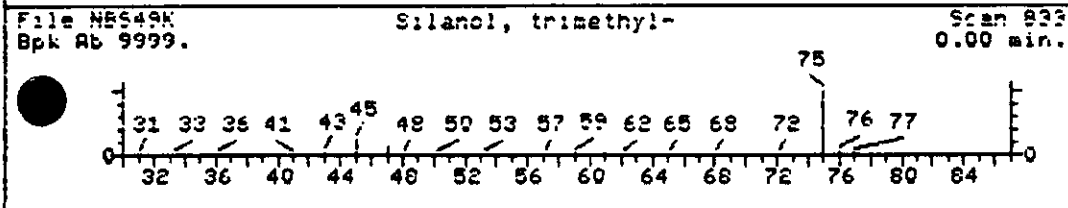
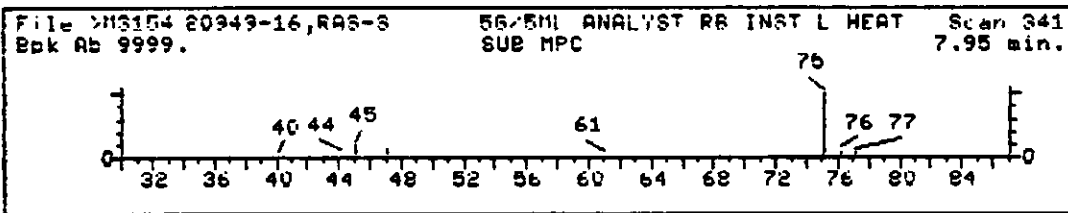
TIC NUMBER:1

1. Silanol, trimethyl-

90 C3H100Si

Sample file: >M3154 Spectrum #: 341
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.	60	1066406	4954	NBS49K	35	49	2	0	74	12	30	12



2

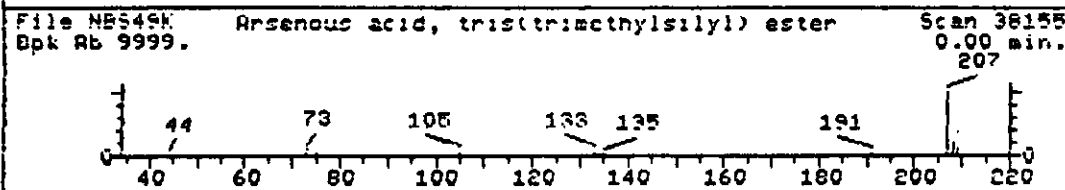
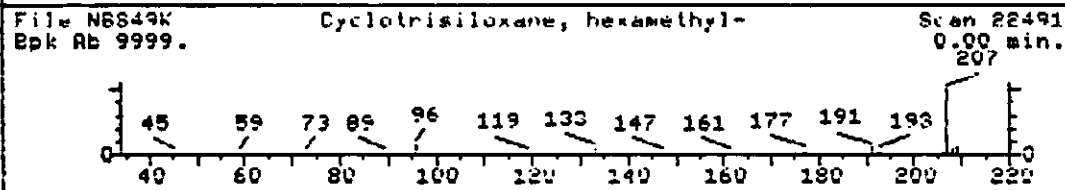
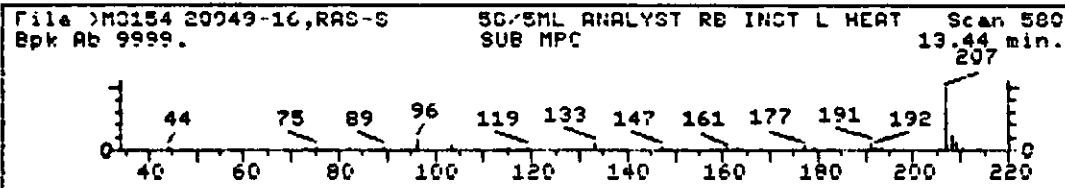
TIC NUMBER:2

1. Cyclotrisiloxane, hexamethyl-
2. Arsenous acid, tris(trimethylsilyl) ester

222 C6H18O3Si3
342 C9H27AsO3Si3

Sample file: >M3154 Spectrum #: 580
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#-FLG	TILT	%	CON	C_I	R_IV	
1.	67	541059	28991	NBS49K	78	31	1	1	67	13	34	29
2.	60	55429293	29060	NBS49K	52	47	2	0	100	14	30	13



2

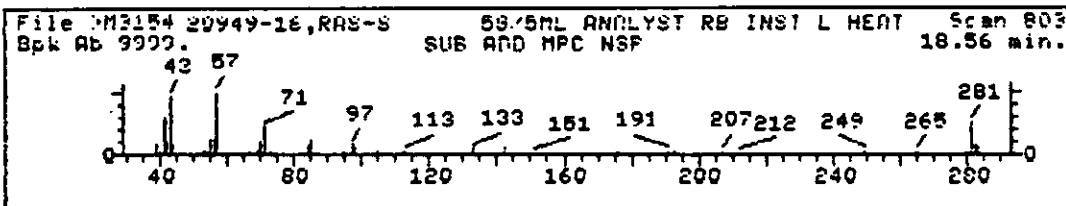
000504

TIC NUMBER: 3

Sample file: >M3154 Spectrum #: 803

No data base entries were retrieved.

estimated hydrocarbon



000505

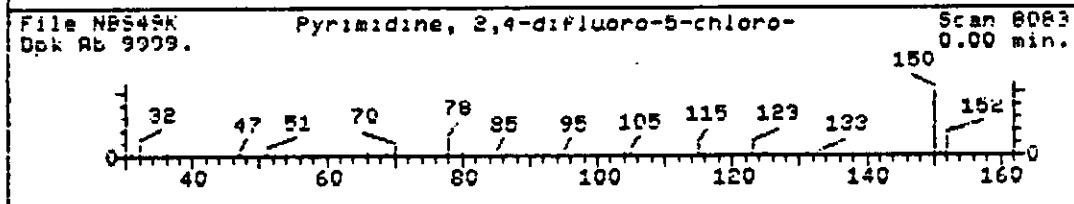
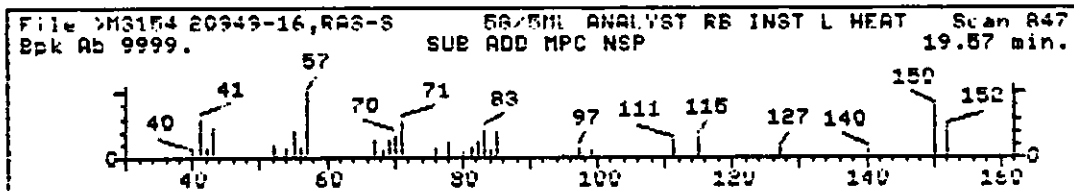
TIC NUMBER:4

1. Pyrimidine, 2,4-difluoro-5-chloro-

150 C4HC1F2N2

Sample file: >M3154 Spectrum #: 847
Search speed: 2 Tilting option: S No. of ion ranges searched: 34

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	15*	25151079	19311	NBS49K	22	78	1	0	76	56	3 14



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO
000506

20949-17

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-17

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: D1765

Level: (low/med) MED

Date Received: 02/15/92

% Moisture: not dec. 14

Date Analyzed: 02/27/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 20.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

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

CAS NO.

COMPOUND

Q

74-87-3	-----Chloromethane	29000	U
74-83-9	-----Bromomethane	29000	U
75-01-4	-----Vinyl Chloride	29000	U
75-00-3	-----Chloroethane	29000	U
75-09-2	-----Methylene Chloride	29000	U
67-64-1	-----Acetone	29000	U
75-15-0	-----Carbon Disulfide	29000	U
75-35-4	-----1,1-Dichloroethene	29000	U
75-34-3	-----1,1-Dichloroethane	29000	U
540-59-0	-----1,2-Dichloroethene (total)	29000	U
67-66-3	-----Chloroform	29000	U
107-06-2	-----1,2-Dichloroethane	29000	U
78-93-3	-----2-Butanone	29000	U
71-55-6	-----1,1,1-Trichloroethane	29000	U
56-23-5	-----Carbon Tetrachloride	29000	U
75-27-4	-----Bromodichloromethane	29000	U
78-87-5	-----1,2-Dichloropropane	29000	U
10061-01-5	-----cis-1,3-Dichloropropene	29000	U
79-01-6	-----Trichloroethene	29000	U
124-48-1	-----Dibromochloromethane	29000	U
79-00-5	-----1,1,2-Trichloroethane	29000	U
71-43-2	-----Benzene	29000	U
10061-02-6	-----trans-1,3-Dichloropropene	29000	U
75-25-2	-----Bromoform	29000	U
108-10-1	-----4-Methyl-2-Pentanone	29000	U
591-78-6	-----2-Hexanone	29000	U
127-18-4	-----Tetrachloroethene	29000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	29000	U
108-88-3	-----Toluene	29000	U
108-90-7	-----Chlorobenzene	29000	U
100-41-4	-----Ethylbenzene	48000	
100-42-5	-----Styrene	29000	U
1330-20-7	-----Xylene (total)	220000	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE 000507

20949-17

Lab Name: ENSECO Contract: 20949-17
 Lab Code: ENSECO Case No.: 20949 SAS No.: SDG No.:
 Matrix: (soil/water) SOIL Lab Sample ID: 20949-17
 Sample wt/vol: 4.0 (g/mL) G Lab File ID: D1765
 Level: (low/med) MED Date Received: 02/15/92
 % Moisture: not dec. 14 Date Analyzed: 02/27/92
 GC Column: CAP ID: 0.530 (mm) Dilution Factor: 20.0
 Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

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

Number TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 15869-93-9	Octane, 3,5-dimethyl-	17.39	25000	JN
2. 123-75-1	Pyrrolidine	19.24	48000	JN
3. 107-39-1	1-Pentene, 2,4,4-trimethyl-	19.45	17000	JN
4. 98-82-8	Benzene, (1-methylethyl)-	19.75	52000	JN
5. 526-73-8	Benzene, 1,2,3-trimethyl-	19.95	64000	JN
6. 871-83-0	Nonane, 2-methyl-	20.27	140000	JN
7. 526-73-8	Benzene, 1,2,3-trimethyl-	20.69	190000	JN
8. 4292-75-5	Cyclohexane, hexyl-	21.19	23000	JN
9. 620-14-4	Benzene, 1-ethyl-3-methyl-	21.47	60000	JN
10. 6052-63-7	Benzeneethanol, .beta.-ethen	21.84	53000	JN

000508

QUANT REPORT

Page 1

Operator ID: DUEY1
 Output File: ^D1765::QT
 Data File: >D1765::D2
 Name: 20949-17,U,EPA,
 Misc: CLP,20949,,17,M,S,

Quant Rev: 7 Quant Time: 920227 22:59
 Injected at: 920227 22:30
 Dilution Factor: 1.00000
 Instrument ID: D
 100UL/5ML/100%/4G/10ML

ID File: IDEPAD::ID
 Title: ID FILE CLP INST. D + THF
 Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 BROMOCHLOROMETHANE	9.11	128.0	14247	50.00	UG/L	96
10)	C035 ACETONE	5.49	43.0	227	3.69	UG/L	100
20)	*CI10 1,4-DIFLUOROBENZENE	11.09	114.0	58794	50.00	UG/L	100
21)	C115 1,1,1 TRICHLOROETHANE	9.50	97.0	812	1.32	UG/L	86
32)	*CI20 CHLOROBENZENE-D5	16.40	117.0	44142	50.00	UG/L	82
33)	CS05 TOLUENE-D8	13.66	98.0	2596	2.35	UG/L	92
34)	CS10 BROMOFLUOROBENZENE	18.89	95.0	1826	3.04	UG/L	100
35)	C230 TOLUENE	13.78	91.0	781	.682	UG/L	88
40)	C240 ETHYLBENZENE	16.80	106.0	6164	16.35	UG/L	99
41)	UJNK M&P-XYLENES	17.05	106.0	25865	55.07	UG/L	86
2)	UD29 O-XYLENE	17.81	106.0	9176	20.43	UG/L	89

* Compound is ISTD

000509

MS data file header from : >D1765::D2

Sample: 20949-17,U,EPA, Operator: DJEY1 REG. GRP. 2/27/92 22:30
Misc : CLP,20949,,17,M,S, 100UL/5ML/100%/4G/10ML
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: D
Method file: SAMMD Tuning file: MTBFBD No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

CONCENTRATION DILUTION INFORMATION

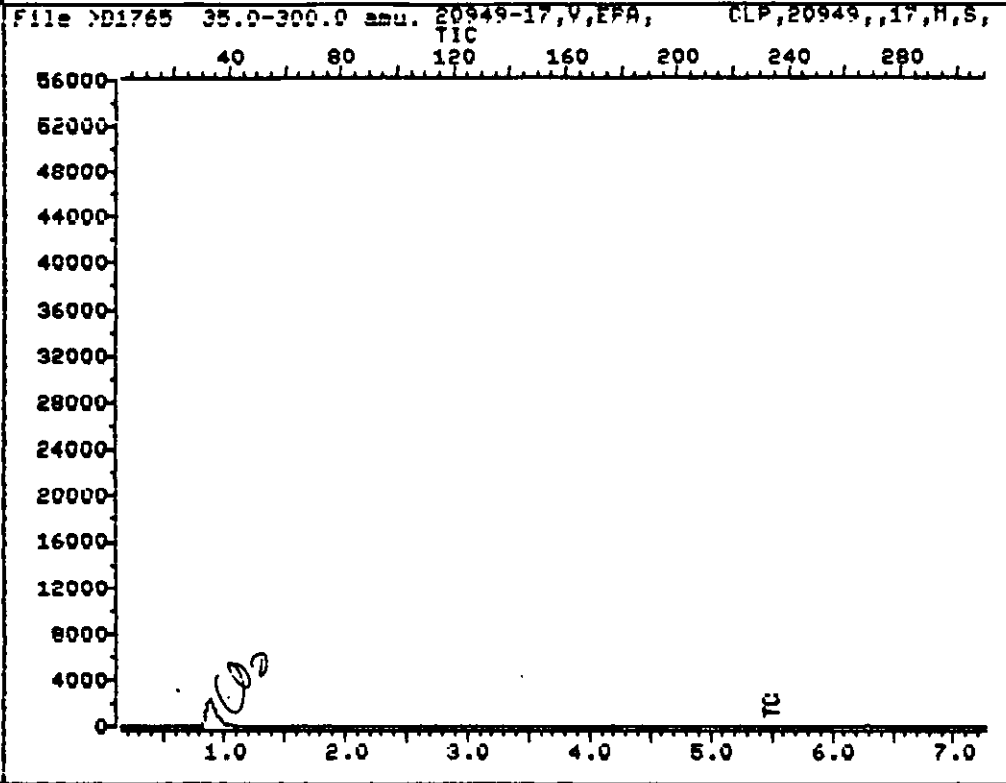
Performance Check: >D1750 Injection Time: 2/27/92 10:32
Sample : >D1765 Injection Time: 2/27/92 22:30
Elsed Time: 0 Y 0 D 11:58
Sample: ^D1765 Calibration Stds.: ^D1751,

TIC = Tentatively Identified Compound

TC = Target Compound
SC = Spike Compound

000510

TOTAL ION CHROMATOGRAM



Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,

Quant Output File: ^D1765::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML

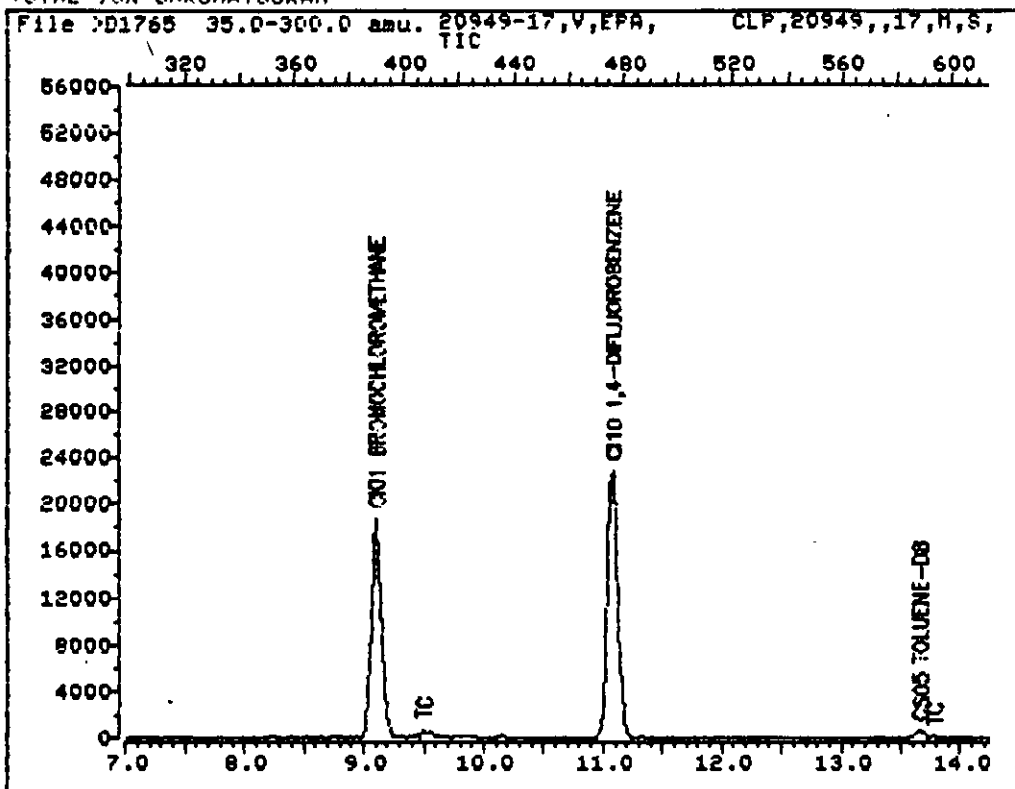
Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 22:59
Injected at: 920227 22:30

TIC = Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1765::D2
Name: 20949-17,V,EPA,
Misc: CLP,20949,,17,M,S,

Quant Output File: ^D1765::QT
Instrument ID: 0
100UL/5ML/100%/4G/10ML

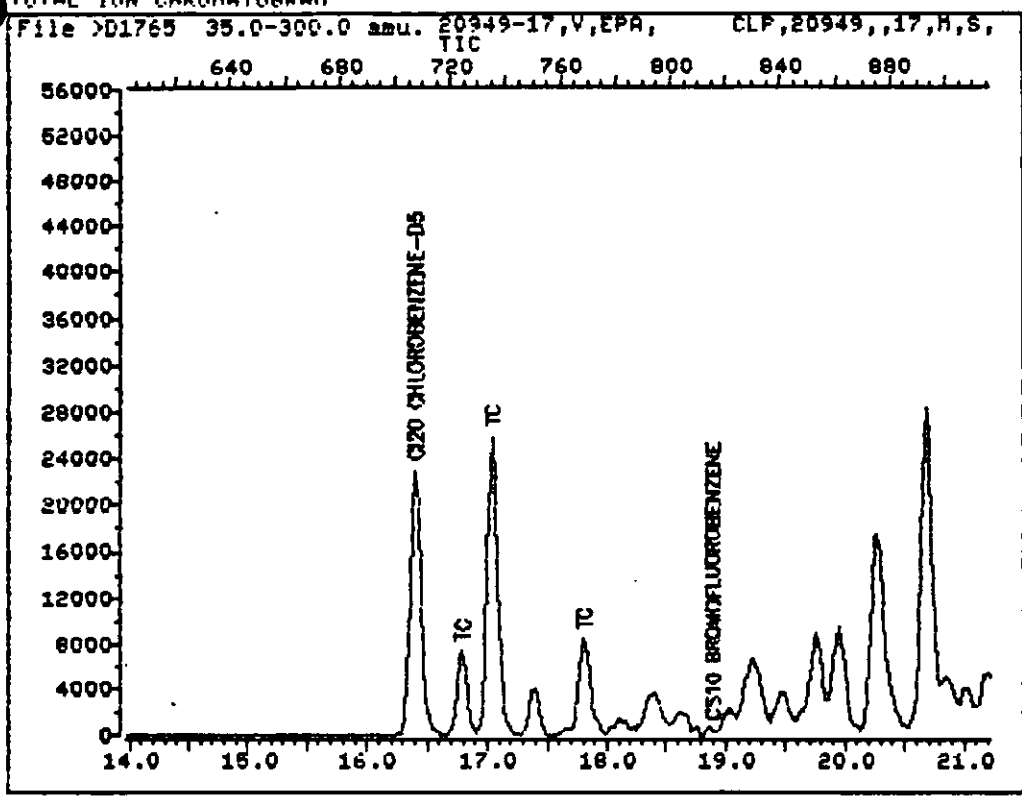
Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qual Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 22:59
Injected at: 920227 22:30

TIC = Tentative Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



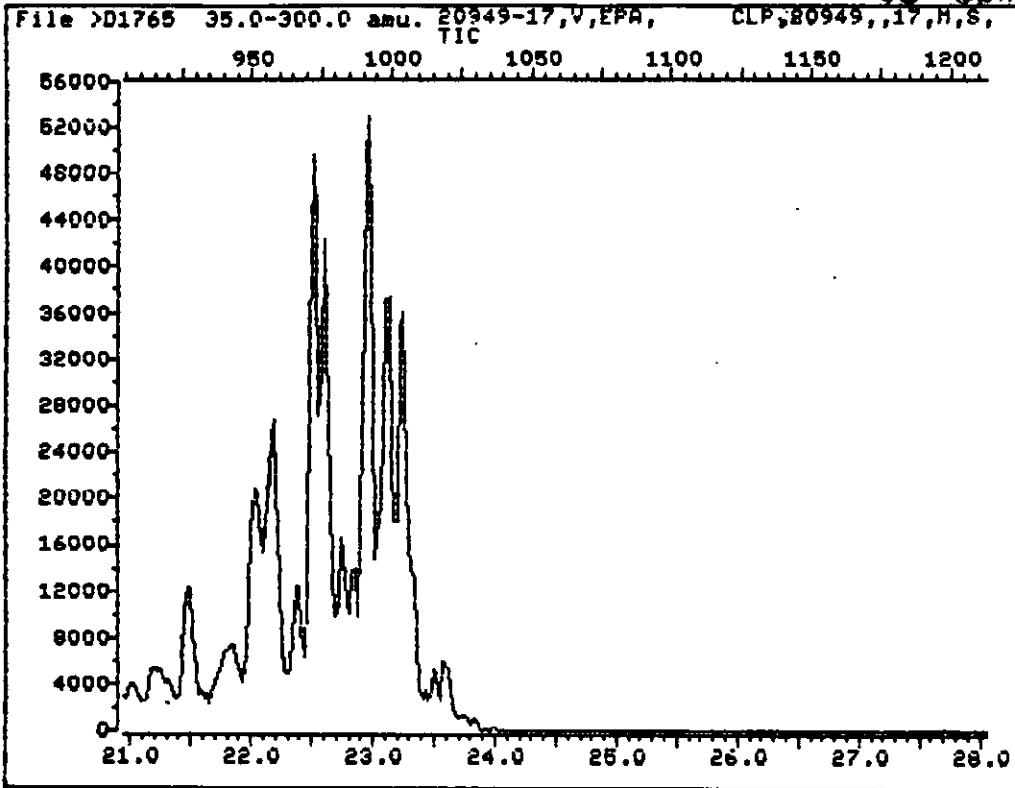
Data File: >D1765::D2 Quant Output File: ^D1765::QT
Name: 20949-17,U,EPA, Instrument ID: D
Misc: CLP,20949,,17,M,S, 100UL/5ML/100%/4G/10ML

Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39 Last Qcal Time: 920227 10:56

Operator ID: DUEY1
Quant Time : 920227 22:59
Injected at: 920227 22:30

000513
TIC - Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,

Quant Output File: ^D1765::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML

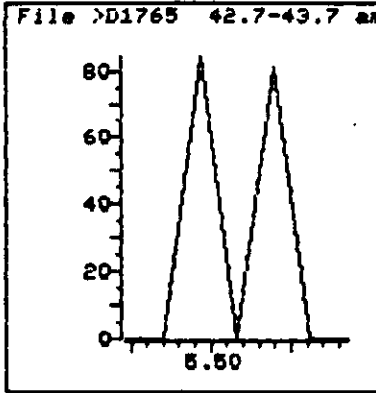
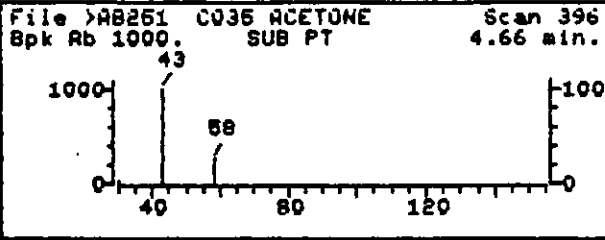
Id File: IDEPAD::ID
Title: ID FILE CLP INST. D + THF
Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

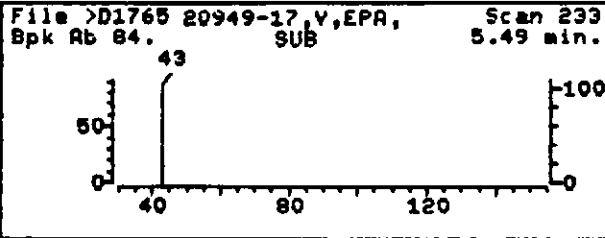
Operator ID: DUEY1
Quant Time : 920227 22:59
Injected at: 920227 22:30

000514

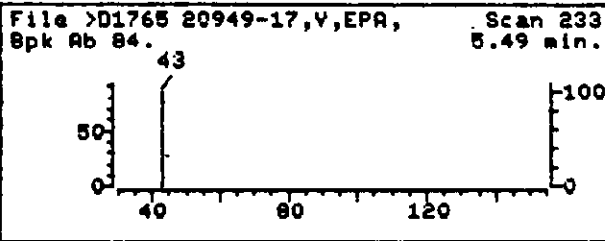
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



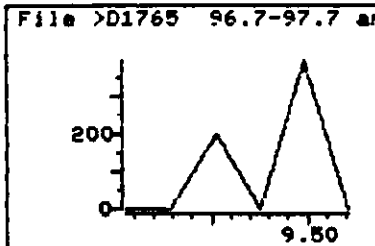
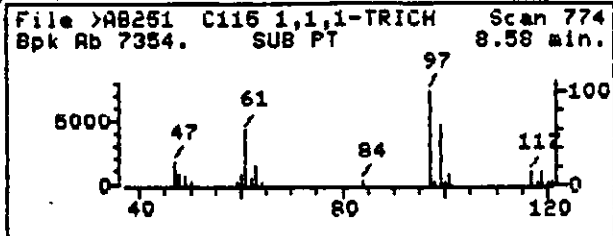
Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,
Quant Time: 920227 22:59
Injected at: 920227 22:30
Last Qcal Time: 920227 10:56

Quant Output File: ^D1765::QT
Instrument ID: 0
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

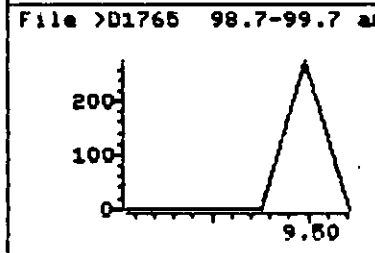
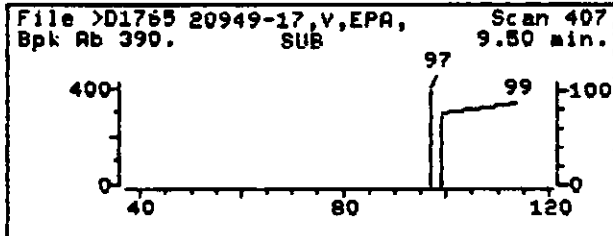
Compound No : 10
Compound Name : C035 ACETONE
Scan Number : 233
Retention Time: 5.49 min.
Quant Ion : 43.0
Area : 227
Concentration : 3.69 UG/L
q-value : 100

NO

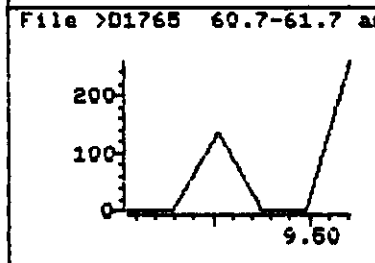
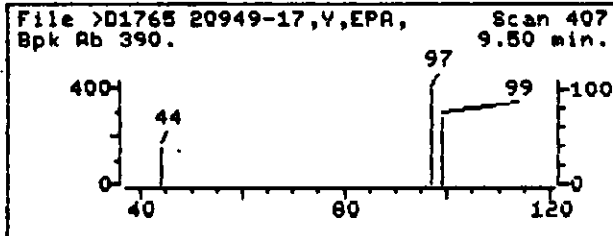
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



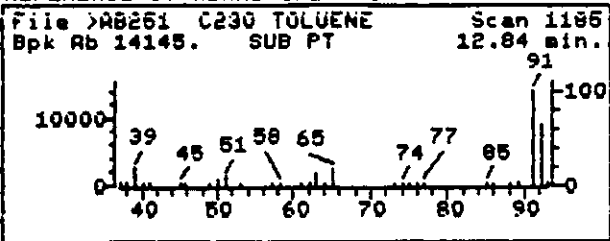
Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,
Quant Time: 920227 22:59
Injected at: 920227 22:30
Last Qcal Time: 920227 10:56

Quant Output File: ^D1765::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

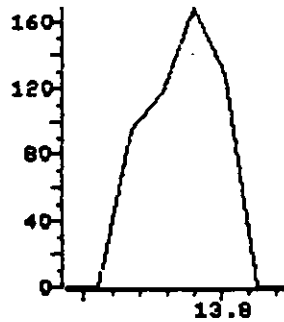
Compound No : 21
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 407
Retention Time: 9.50 min.
Quant Ion : 97.0
Area : 812
Concentration : 1.32 UG/L
q-value : 86

140

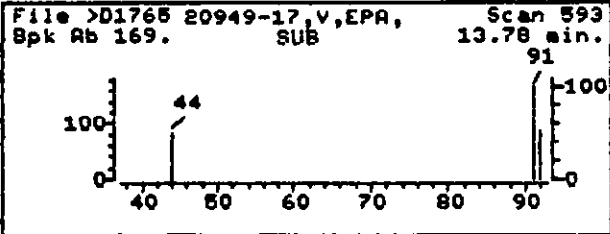
REFERENCE STANDARD SPECTRUM



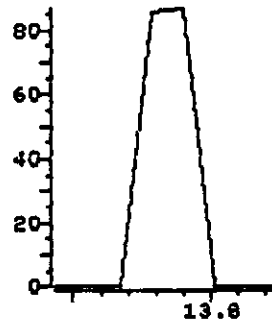
File >D1765 90.7-91.7 am



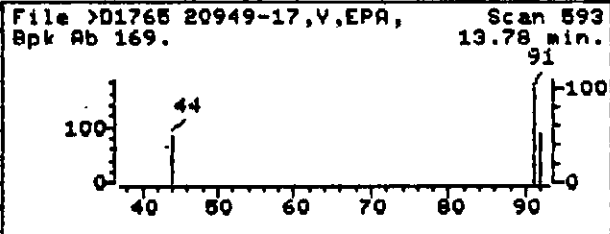
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >D1765 91.7-92.7 am



SAMPLE SPECTRUM (UNALTERED)



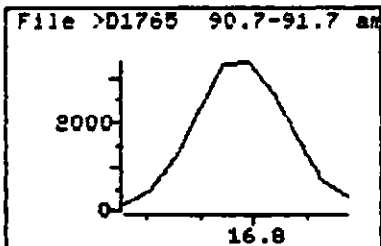
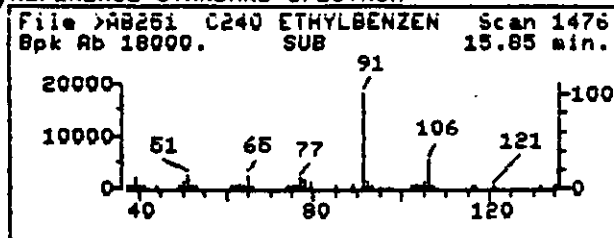
Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,
Quant Time: 920227 22:59
Injected at: 920227 22:30
Last Qcal Time: 920227-10:56

Quant Output File: ^D1765::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

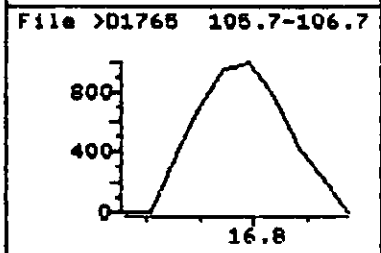
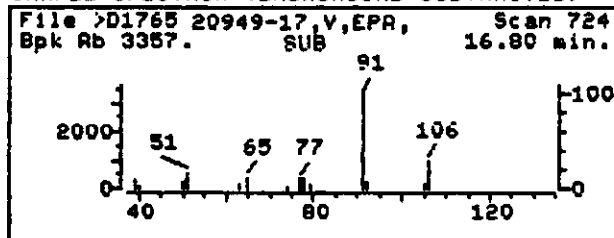
Compound No : 35
Compound Name : C230 TOLUENE
Scan Number : 593
Retention Time: 13.78 min.
Quant Ion : 91.0
Area : 701
Concentration : .682 UG/L
q-value : 88

BDL

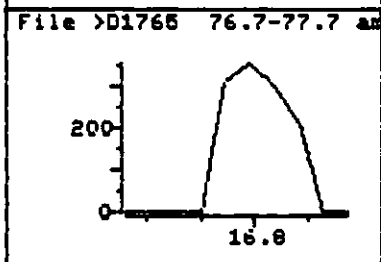
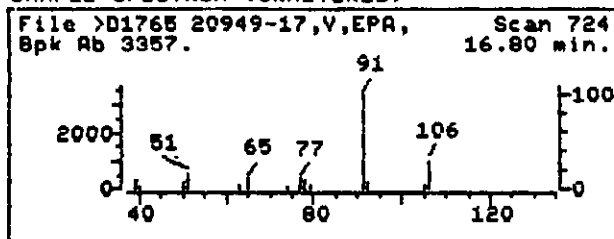
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

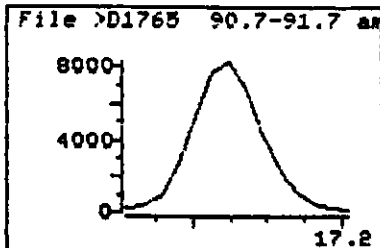
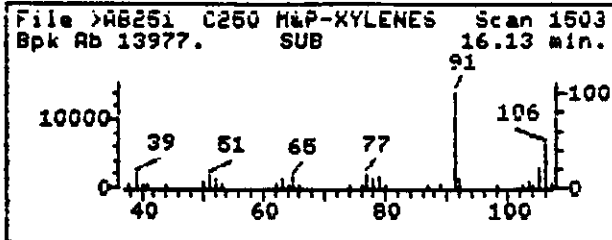


Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,
Quant Time: 920227 22:59
Injected at: 920227 22:30
Last Qcal Time: 920227 10:56

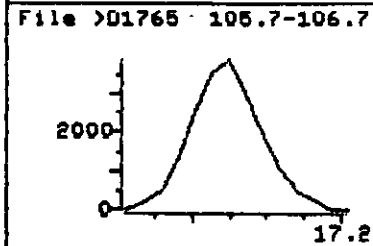
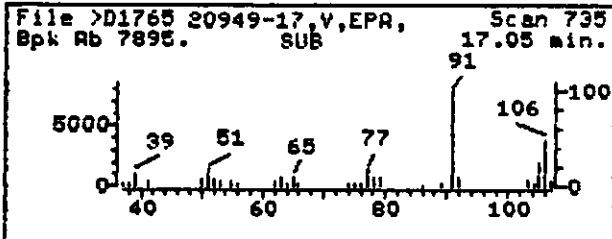
Quant Output File: ^D1765::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 40
Compound Name : C240 ETHYLBENZENE
Scan Number : 724
Retention Time: 16.80 min.
Quant Ion : 106.0
Area : 6164
Concentration : 16.35 UG/L
q-value : 99

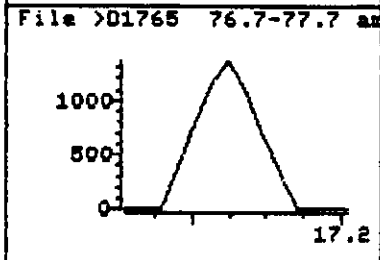
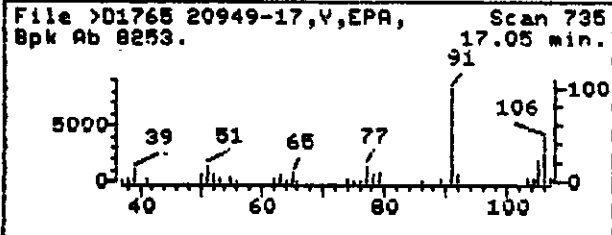
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D1765::D2

Name: 20949-17,U,EPA,

Misc: CLP,20949,,17,M,S,

Quant Time: 920227 22:59

Injected at: 920227 22:30

Last Qcal Time: 920227-10:56

Quant Output File: ^D1765::QT

Instrument ID: D

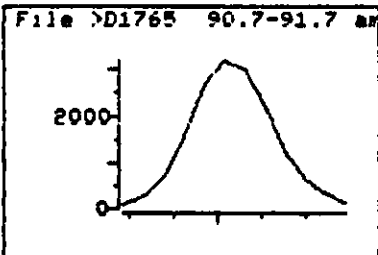
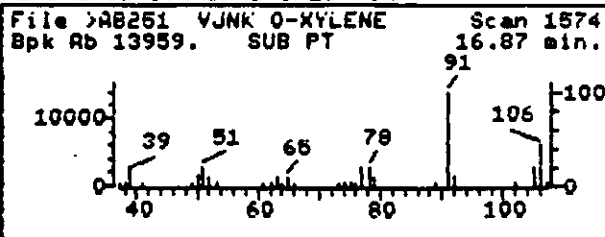
100UL/5ML/100%/4G/10ML

Quant ID File: IDEPAD::ID

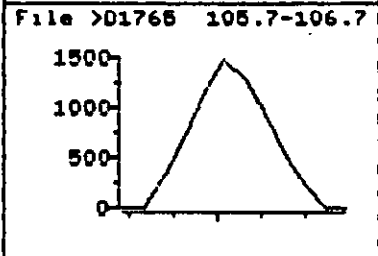
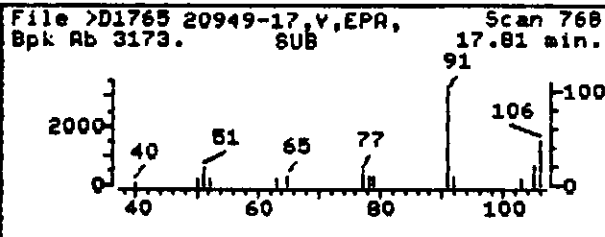
Last Calibration: 920108 14:39

Compound No : 41
 Compound Name : UJNK M&P-XYLENES
 Scan Number : 735
 Retention Time: 17.05 min.
 Quant Ion : 106.0
 Area : 25865
 Concentration : 55.07 UG/L
 q-value : 86

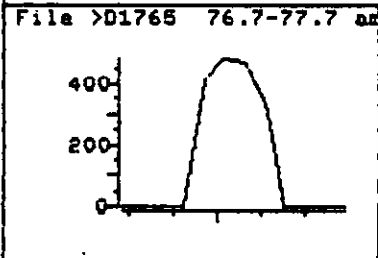
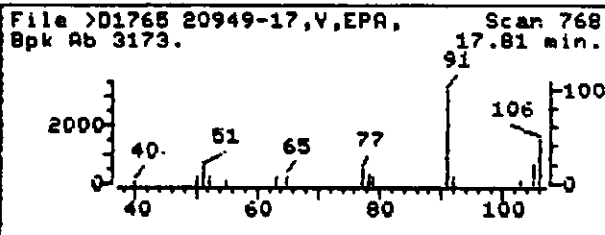
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D1765::D2
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,
Quant Time: 920227 22:59
Injected at: 920227 22:30
Last Qcal Time: 920227 10:56

Quant Output File: ^D1765::QT
Instrument ID: D
100UL/5ML/100%/4G/10ML
Quant ID File: IDEPAD::ID
Last Calibration: 920108 14:39

Compound No : 42
Compound Name : U029 O-XYLENE
Scan Number : 768
Retention Time: 17.81 min.
Quant Ion : 106.0
Area : 9176
Concentration : 20.43 UG/L
q-value : 89

000520

Diagnostic Quant Report

Data File: >D1765::D2 Injected at: 22:30 02/27/92
 Quant'd : 22:59 02/27/92
 ID File : IDEPAD::ID Calibrated : 14:39 01/08/92

Compound	- R.T. Info -			Ion	Area	RF	Conc.
	Pred	Found	Dif				
1) *C101 BROMOCHLOROMETHANE	9.08	9.11	.03	128.0	14247	1.0000	50.00
2) CS15 1,2-DICHLOROETHANE-D	10.15	0.00	--	65.0	0	1.7357	0.00
3) C010 CHLOROMETHANE	1.74	0.00	--	50.0	0	1.0291	0.00
4) C020 VINYL CHLORIDE	2.04	0.00	--	62.0	0	1.2378	0.00
5) C015 BROMOMETHANE	2.80	0.00	--	94.0	0	1.3246	0.00
6) C025 CHLOROETHANE	3.17	0.00	--	64.0	0	.8416	0.00
7) C045 1,1-DICHLOROETHENE	5.06	0.00	--	96.0	0	1.3207	0.00
8) U015 TRICHLORO-TRIFLUOROE	5.32	0.00	--	151.0	0	1.1911	0.00
9) C040 CARBON DISULFIDE	5.18	0.00	--	76.0	0	2.3987	0.00
10) C035 ACETONE	5.55	5.49	.06	43.0	227	.2160	3.69
11) C030 METHYLENE CHLORIDE	6.27	0.00	--	84.0	0	1.7748	0.00
12) UJNK trans-1,2-DICHLOROET	6.80	0.00	--	96.0	0	1.3047	0.00
13) C050 1,1-DICHLOROETHANE	7.61	0.00	--	63.0	0	2.7955	0.00
14) U011 cis-1,2-DICHLOROETHE	8.71	0.00	--	96.0	0	1.4126	0.00
15) C053 1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.3587	0.00
16) C110 2-BUTANONE	8.92	0.00	--	43.0	0	.4131	0.00
17) U013 TETRAHYDROFURAN	9.25	0.00	--	42.0	0	.1945	0.00
18) C060 CHLOROFORM	9.41	0.00	--	83.0	0	3.0091	0.00
19) C065 1,2-DICHLOROETHANE	10.29	0.00	--	62.0	0	1.8182	0.00
20) *C110 1,4-DIFLUOROBENZENE	11.06	11.09	.03	114.0	58794	1.0000	50.00
21) C115 1,1,1-TRICHLOROETHAN	9.52	9.50	.02	97.0	812	.5218	1.32
22) C120 CARBONTETRACHLORIDE	9.79	0.00	--	117.0	0	.4951	0.00
23) C165 BENZENE	10.16	0.00	--	78.0	0	.8941	0.00
24) C150 TRICHLOROETHENE	11.41	0.00	--	130.0	0	.3791	0.00
25) C140 1,2-DICHLOROPROPANE	11.78	0.00	--	63.0	0	.3892	0.00
26) C130 BROMODICHLOROMETHANE	12.40	0.00	--	83.0	0	.6236	0.00
27) C143 cis-1,3-DICHLOROPROP	13.23	0.00	--	75.0	0	.5411	0.00
28) C172 trans-1,3-DICHLOROPR	14.37	0.00	--	75.0	0	.4289	0.00
29) C160 1,1,2-TRICHLOROETHAN	14.64	0.00	--	97.0	0	.3033	0.00
30) C155 CHLORO Dibromomethane	15.31	0.00	--	129.0	0	.4809	0.00
31) C180 BROMOFORM	18.11	0.00	--	173.0	0	.2986	0.00
32) *C120 CHLOROBENZENE-D5	16.35	16.40	.05	117.0	44142	1.0000	50.00
33) CS05 TOLUENE-D8	13.68	13.66	.01	98.0	2596	1.2507	2.35
34) CS10 BROMOFLUOROBENZENE	18.88	18.89	.02	95.0	1826	.6795	3.04
35) C230 TOLUENE	13.79	13.78	.01	91.0	701	1.1651	.68
36) C205 4-METHYL-2-PENTANONE	13.68	0.00	--	43.0	0	.3933	0.00
37) C220 TETRACHLOROETHENE	14.76	0.00	--	164.0	0	.3423	0.00
38) C210 2-HEXANONE	15.29	0.00	--	43.0	0	.2348	0.00
39) C235 CHLOROBENZENE	16.45	0.00	--	112.0	0	.8381	0.00
40) C240 ETHYLBENZENE	16.77	16.80	.02	106.0	6164	.4270	16.35
40) D C240 ETHYLBENZENE	16.77	17.05	.28	106.0	25865	.4270	68.62
41) D UJNK M&P-XYLENES	17.03	16.80	.23	106.0	6164	.5320	13.12
41) UJNK M&P-XYLENES	17.03	17.05	.02	106.0	25865	.5320	55.07
42) U029 O-XYLENE	17.81	17.81	.00	106.0	9176	.5086	20.43
43) C250 XYLENE (TOTAL)	0.00	0.00	0.00	106.0	35041	.5203	76.28
44) C245 STYRENE	17.86	0.00	--	104.0	0	.8082	0.00
45) C225 1,1,2,2-TETRACHLOROE	19.38	0.00	--	83.0	0	.7925	0.00

* - Compound is an Internal Standard

000521

D - Compound Qdel'ed

000522

TIC Internal Standard Report

Data File: >D1765

Maximum separation 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	Q area	RQratio	Concentration	RIC scan	RIC area	Flag	% Est. RIC
1	CI01 BROMOCHLOROMETH			50.000 UG/L			Ok	
	390.	14247.	7.294	390.	109357.	105.239		
2	CI10 1,4-DIFLUOROBEN			50.000 UG/L			Ok	
	476.	58794.	2.506	476.	142544.	96.742		
3	CI20 CHLOROBENZENE-D			50.000 UG/L			Ok	
	707.	44142.	3.094	707.	146944.	107.587		

Deleting peaks from INT file: UDIR71
Minimum area: 10 % of area of closest Int. Std.
Number of peaks: 21
Number of peaks remaining: 18

Deleting target compounds from INT file: UDIR71
Minimum separation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 18
Number of peaks remaining: 12

Deleting all but largest peaks from INT file: UDIR71
Maximum number of peaks to keep: 15
Number of peaks: 12
Maximum number of peaks > number of peaks.

000523

Data Reduced by : CAW Date: 3/11/92
 Data Reviewed by : _____ Date: _____

Data File: D1765

Enseco TIC Report (page 1)

Sample: 20949-17,U,EPA, Run Factor: 2910.
 Conditions: CLP,20949,,17,M,S, 100UL/5M Analyst: DUEY1

#	Scan	Q	C	Concentration In Sample (UG/KG)	CAS #	Compound
1	33.			20000.	00-00-0	Air
2	750.	2		25000.	15869-93-9	Octane, 3,5-dimethyl-
3	794.			29000.	00-00-0	Hydrocarbon
4	830.	1		48000.	123-75-1	Pyrrolidine
5	840.	1		17000.	107-39-1	1-Pentene, 2,4,4-trimethyl-
6	853.	2		52000.	98-82-8	Benzene, (1-methylethyl)-
7	861.	2		64000.	526-73-8	Benzene, 1,2,3-trimethyl-
8	875.	2		140000.	871-83-0	Nonane, 2-methyl-
9	893.	2		190000.	526-73-8	Benzene, 1,2,3-trimethyl-
	915.	2		23000.	4292-75-5	Cyclohexane, hexyl-
	927.	2		60000.	620-14-4	Benzene, 1-ethyl-3-methyl-
12	943.	1		53000.	6052-63-7	Benzeneethanol, .beta.-ethenyl-

000524

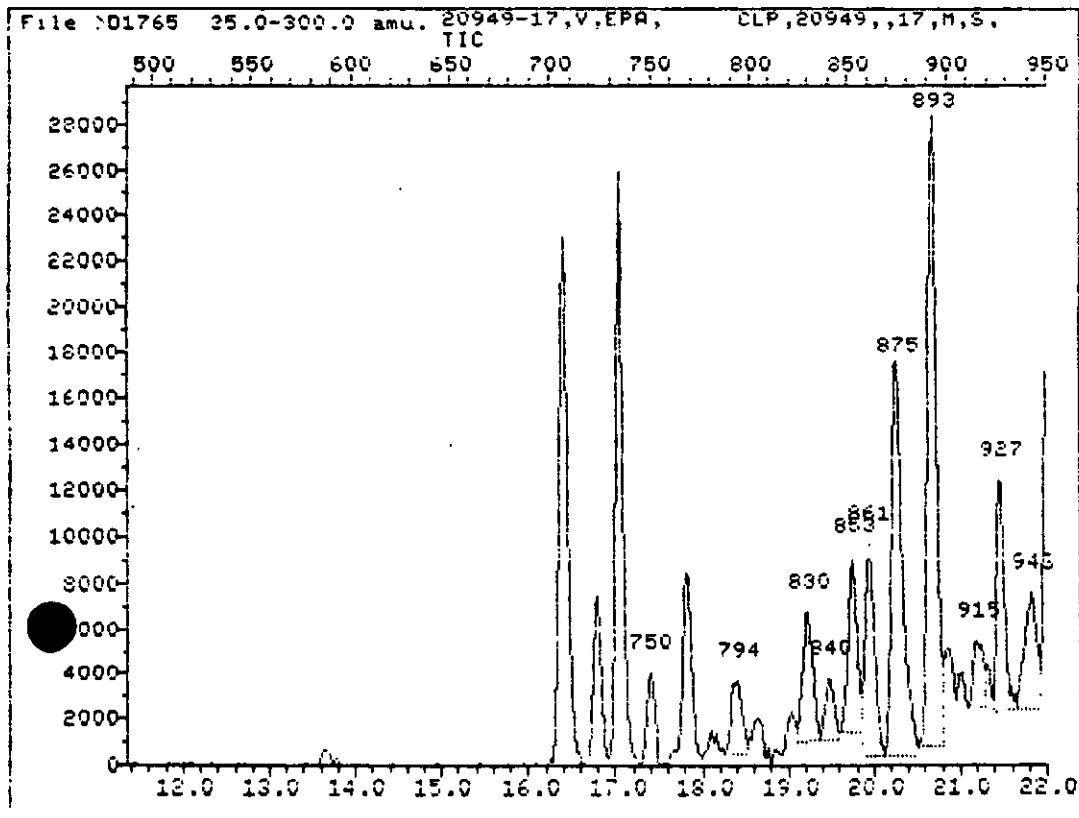
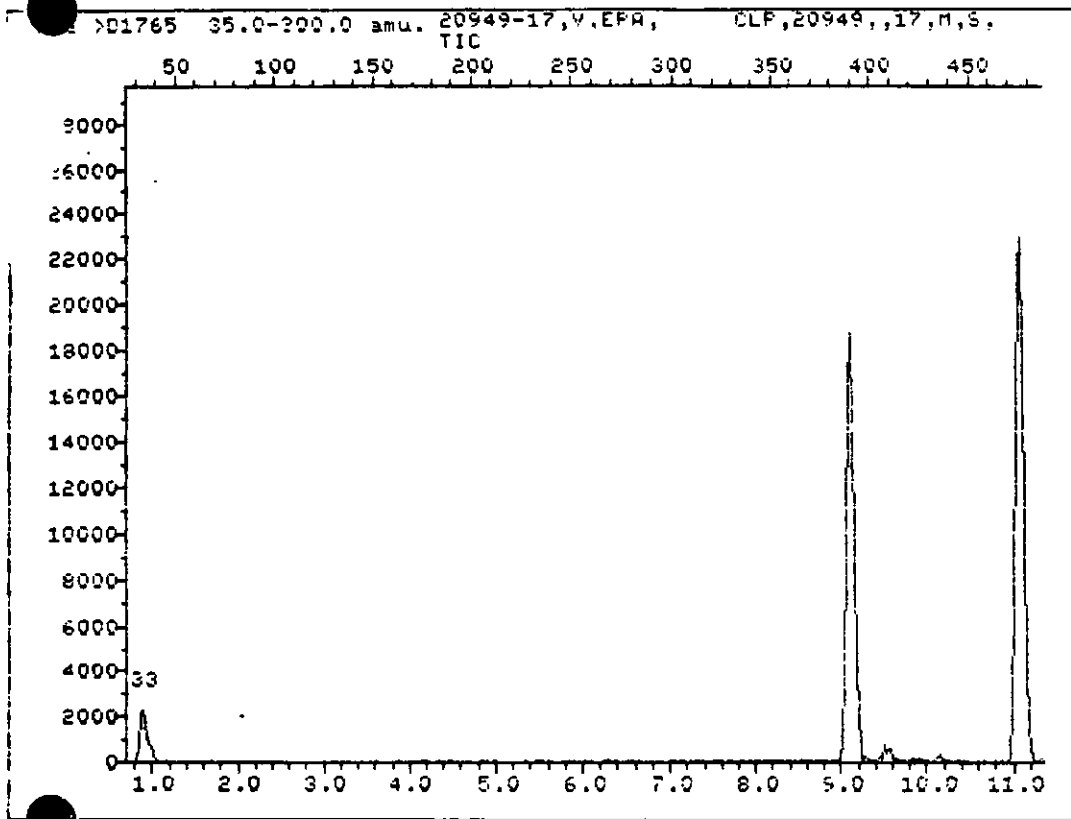
a File: >D1765

Enseco TIC Report (page 2)

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

#	Prob.	Cont.	Int. Std.	RT	RRT	Area	Height	Conc. As Analyzed (UG/L)
1	0	0	1	.89	.098	14800.	2351.	6.767
2	52	18	3	17.39	1.060	25345.	4056.	8.624
3	0	0	3	18.41	1.122	29588.	3172.	10.068
4	20	51	3	19.24	1.173	48514.	5559.	16.508
5	25	47	3	19.47	1.187	17348.	2581.	5.903
6	79	6	3	19.77	1.205	52854.	7689.	17.984
7	66	16	3	19.95	1.216	64224.	9156.	21.853
8	42	21	3	20.27	1.236	143065.	17182.	48.680
9	84	6	3	20.69	1.261	188039.	27506.	63.983
10	30	32	3	21.19	1.292	22851.	2863.	7.775
11	79	9	3	21.47	1.309	60991.	9938.	20.753
12	12	64	3	21.84	1.331	53474.	5063.	18.195

000525



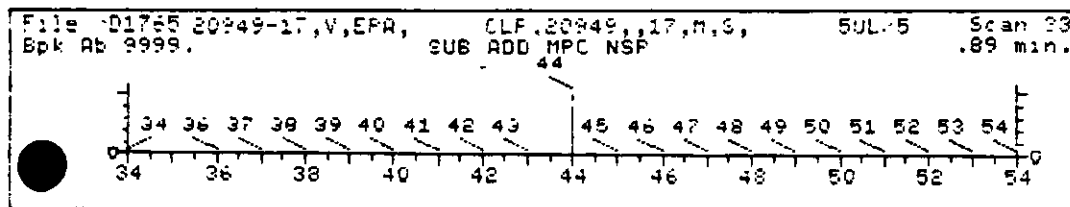
000526

IC NUMBER:1

Sample file: >D1765 Spectrum #: 33

No data base entries were retrieved.

Air



000527

NUMBER:2

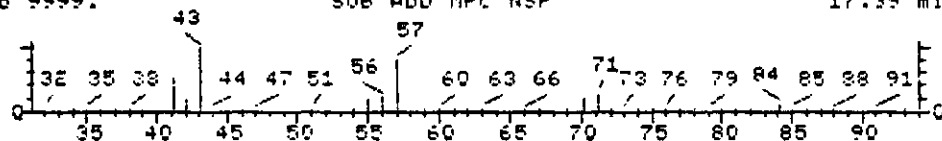
- 1. Octane, 3,5-dimethyl-
- 2. Sulfone, butyl isopropyl

142 C10H22
164 C7H16O2S

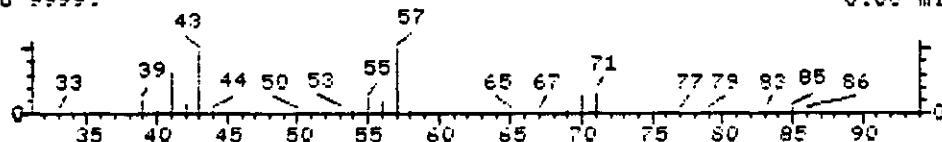
Sample file: >D1765 Spectrum #: 750
Search speed: 2 Tilting option: S No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52	15869939	4025	NBS49K	39	54	1	0	74	18	20	13
2.	25	31124400	1279	NBS49K	40	47	1	0	85	49	7	14

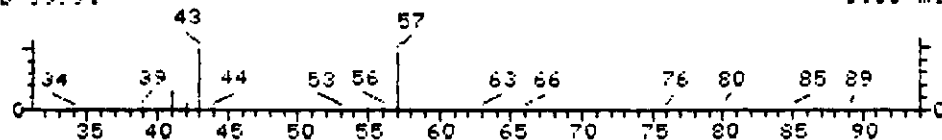
File >D1765 20949-17.V.EPR. CLP,20949..17,M,S, 5UL/5 Scan 750
Bpk Ab 9999. SUB ADD MPC NSP 17.39 min.



File NBS49K Octane, 3,5-dimethyl- Scan 6879
Bpk Ab 9999. 0.00 min.



File NBS49K Sulfone, butyl isopropyl Scan 1185
Bpk Ab 9999. 0.00 min.



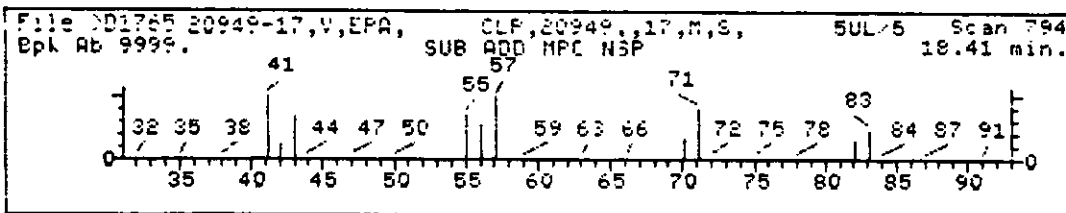
000528

TIC NUMBER:3

Sample file: >D1765 Spectrum #: 794

No data base entries were retrieved.

Hydrocarbon



000529

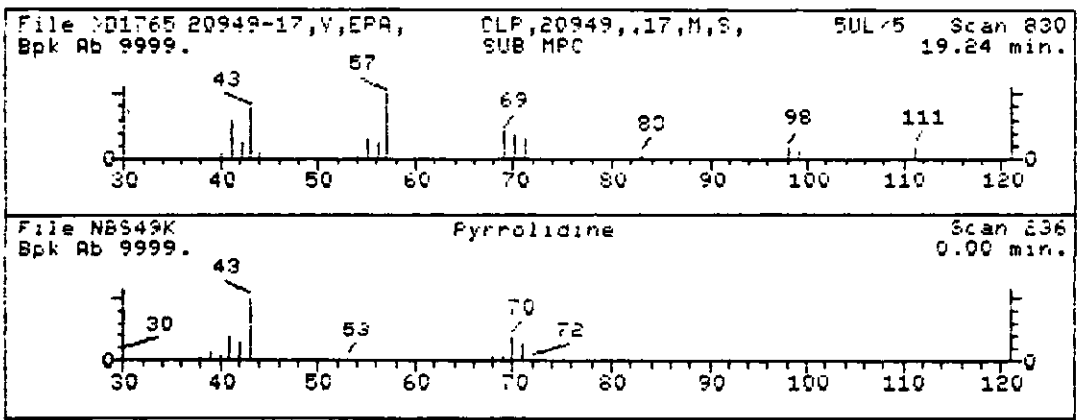
TIC NUMBER:4

1. Pyrrolidine

71 C4H9N

Sample file: >D1765 Spectrum #: 830
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.	20*	123751	3822	NBS49K	28	60	2	0	76	51	5 14



000530.

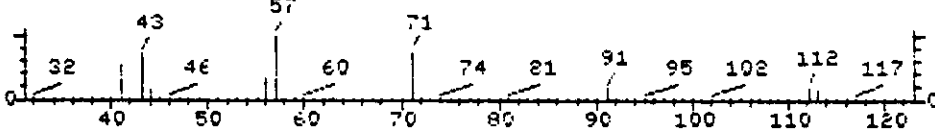
TIC NUMBER:5

1. 1-Pentene, 2,4,4-trimethyl-	112 C8H16
2. Methane, isocyanato-	57 C2H3NO
3. Sulfone, butyl isopropyl	164 C7H16O2S
4. 2-Furanmethanol, tetrahydro-, acetate	144 C7H12O3
5. Furan, tetrahydro-2-(methoxymethyl)-	116 C6H12O2
6. Butenol, methyl-	86 C5H10O

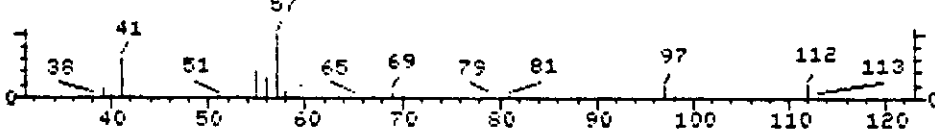
Sample file: >D1765 Spectrum #: 840
 Search speed: 2 Tilting option: S No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	25*	107391	12039	NBS49K	36	52	2	0	84	47	7 18
2.	20*	624839	1000	NBS49K	20	44	1	0	82	52	5 14
3.	11	31124400	1279	NBS49K	40	47	1	0	73	61	2 14
4.	11	637649	4334	NBS49K	36	47	2	0	73	62	2 12
5.	11*	19354279	4294	NBS49K	20	60	2	0	74	62	2 13
6.	11*	60766009	4255	NBS49K	24	71	3	0	74	62	2 12

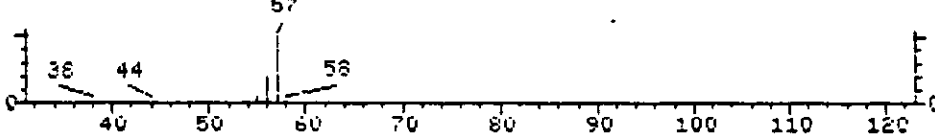
File >D1765 20949-17,V.EPA, CLP,20949,,17.M.S. 5UL/5 Scan 840
 Bpk Ab 9999. SUB ADD MPC NSF 19.47 min.



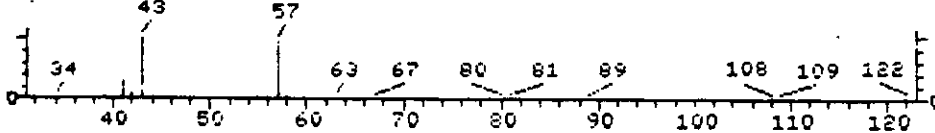
File NBS49K 1-Pentene, 2,4,4-trimethyl- Scan 2386
 Bpk Ab 9999. 0.00 min.



File NBS49K Methane, isocyanato- Scan 93
 Bpk Ab 9999. 0.00 min.



File NBS49K Sulfone, butyl isopropyl Scan 11185
 Bpk Ab 9999. 0.00 min.



000531

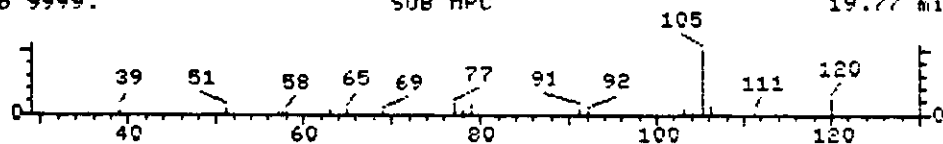
TIC NUMBER:6

1. Benzene, (1-methylethyl)-	120 C9H12
2. Benzene, 1-ethyl-3-methyl-	120 C9H12
3. Benzene, 1-ethyl-2-methyl-	120 C9H12
4. Benzene, 1-ethyl-4-methyl-	120 C9H12
5. Benzene, (1-methyl-3-butenyl)-	146 C11H14

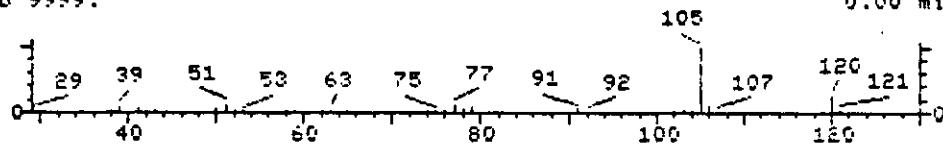
Sample file: >D1765 Spectrum #: 853
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	79*	98828	13667	NBS49K	49	38	2	0	73	6	48	30
2.	71*	620144	13671	NBS49K	49	38	2	0	78	14	38	30
3.	67*	611143	13669	NBS49K	42	43	2	0	83	14	34	22
4.	58*	622968	13672	NBS49K	48	37	2	0	86	17	25	28
5.	52	10340495	10939	NBS49K	45	35	2	0	100	19	20	15

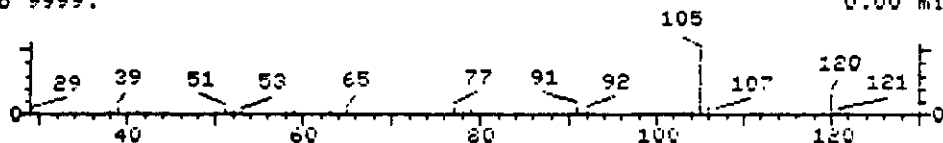
>D1765 20949-17,V,EPA, CLP,20949.,17.M.S, 5UL-5 Scan 853
 Bpk Ab 9999. SUB MPC 19.77 min.



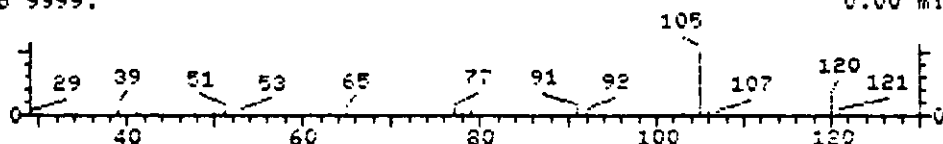
File NBS49K Benzene, (1-methylethyl)- Scan 3291
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-3-methyl- Scan 3297
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-2-methyl- Scan 3293
 Bpk Ab 9999. 0.00 min.



2

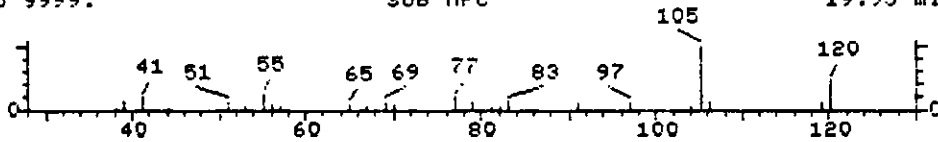
TIC NUMBER:7

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

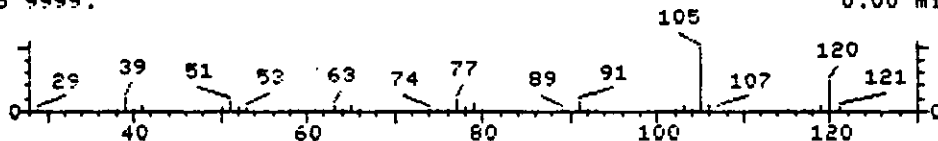
Sample file: >D1765 Spectrum #: 861
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	66*	526738	13674	NBS49K	63	37	2	0	81	16	31	41
2.	52*	108678	13673	NBS49K	39	49	2	0	71	16	20	19
3.	52*	620144	13671	NBS49K	37	50	2	0	100	18	20	18
4.	52*	3141024	13677	NBS49K	36	68	3	0	75	16	20	13
5.	39*	98828	13667	NBS49K	42	45	2	0	100	32	16	22
6.	31*	95636	13676	NBS49K	39	56	2	0	64	37	10	17

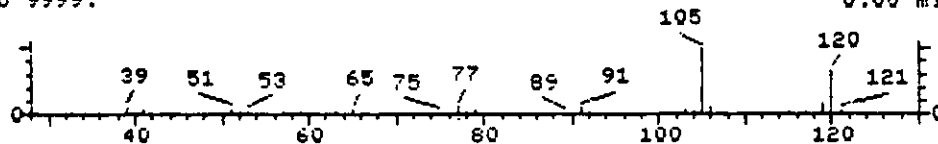
File >D1765 20949-17,V,EPA, CLP,20949.,17.M.S, 5UL/5 Scan 861
 Bpk Ab 9999. SUB MPC 19.95 min.



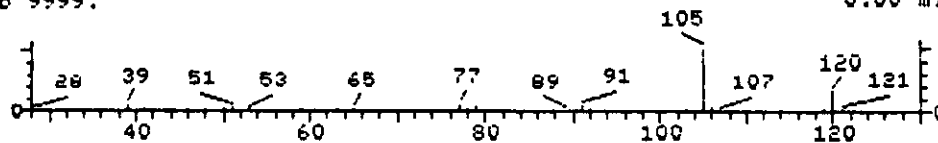
File NBS49K Benzene, 1,2,3-trimethyl- Scan 3300
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1,3,5-trimethyl- Scan 3299
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-3-methyl- Scan 3297
 Bpk Ab 9999. 0.00 min.



2

000533

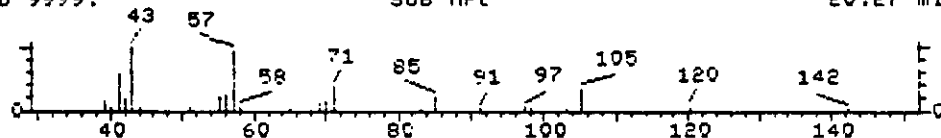
TIC NUMBER:8

1. Nonane, 2-methyl-	142 C10H22
2. Heptane, 3-ethyl-5-methyl-	142 C10H22
3. Octane, 3,5-dimethyl-	142 C10H22
4. Butane, 1-chloro-2-methyl-	106 C5H11Cl
5. Propane, 2-methyl-1-nitro-	103 C4H9NO2
6. 1-Pentene, 4,4-dimethyl-	98 C7H14

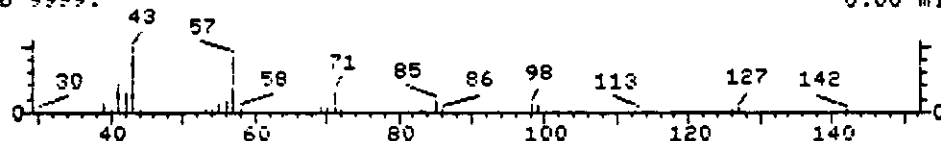
Sample file: >D1765 Spectrum #: 875
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	42*	871830	9512	NBS49K	35	61	3	0	100	21	17	13
2.	30*	52896909	4332	NBS49K	30	64	3	0	94	34	12	13
3.	27*	15869939	4025	NBS49K	38	55	3	0	94	37	10	13
4.	25	616137	1242	NBS49K	35	54	1	0	78	46	7	13
5.	25*	625741	1240	NBS49K	30	19	2	0	107	48	7	15
6.	20*	762629	1234	NBS49K	27	49	2	0	72	53	5	14

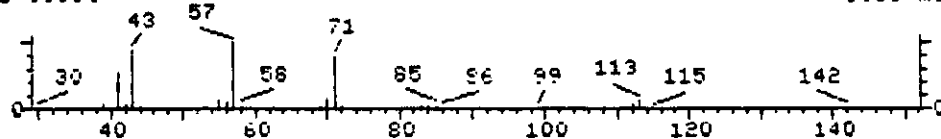
File >D1765 20949-17,V.EPA, CLP,20949,,17,M.9, SUL/5 Scan 875
 Bpk Ab 9999. SUB MPC 20.27 min.



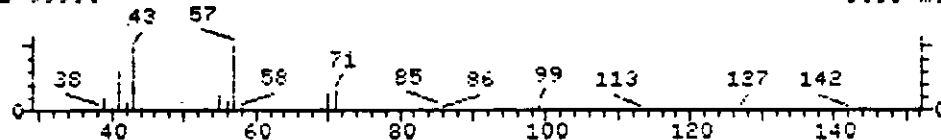
File NBS49K Nonane, 2-methyl- Scan 6865
 Bpk Ab 9999. 0.00 min.



File NBS49K Heptane, 3-ethyl-5-methyl- Scan 6864
 Bpk Ab 9999. 0.00 min.



File NBS49K Octane, 3,5-dimethyl- Scan 6879
 Bpk Ab 9999. 0.00 min.



2

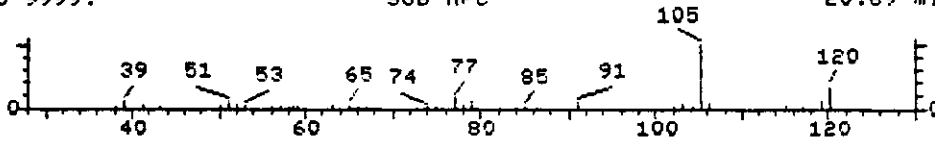
TIC NUMBER:9

1. Benzene, 1,2,3-trimethyl-	120	C9H12
2. Benzene, 1-ethyl-2-methyl-	120	C9H12
3. Benzene, 1-ethyl-3-methyl-	120	C9H12
4. Benzene, (1-methylethyl)-	120	C9H12
5. Benzene, 1-ethyl-4-methyl-	120	C9H12
6. Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis-	196	C15H16

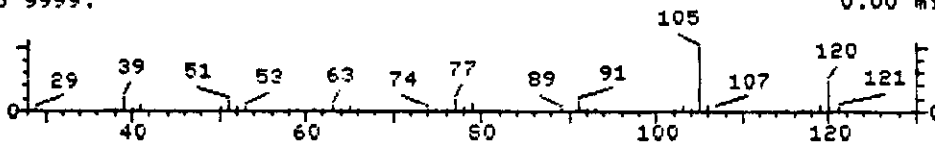
Sample file: >D1765 Spectrum #: 893
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	84*	526738	13674	NBS49K	79	21	2	0	74	6	55 61
2.	81*	611143	13669	NBS49K	58	27	2	0	97	7	53 44
3.	81*	620144	13671	NBS49K	58	29	2	0	98	6	53 44
4.	79*	98828	13667	NBS49K	67	20	2	-1	100	9	48 37
5.	74*	622968	13672	NBS49K	58	27	2	0	100	11	39 44
6.	52	5814857	10954	NBS49K	56	43	2	0	85	20	20 15

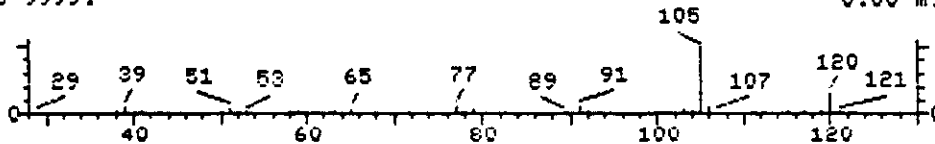
File >D1765 20949-17,V,EPA, CLP,20949,,17.M.S, 5UL/5 Scan 893
 Bpk Ab 9999. SUB MPC 20.69 min.



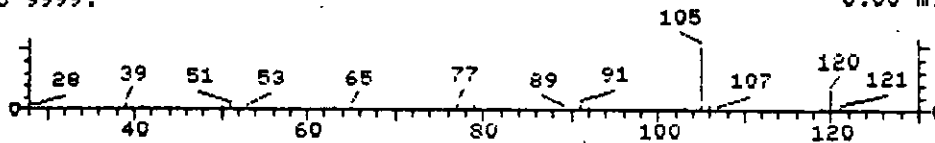
File NBS49K Benzene, 1,2,3-trimethyl- Scan 3300
 Bpk Ab 9999. SUB MPC 0.00 min.



File NBS49K Benzene, 1-ethyl-2-methyl- Scan 3293
 Bpk Ab 9999. SUB MPC 0.00 min.



File NBS49K Benzene, 1-ethyl-3-methyl- Scan 3297
 Bpk Ab 9999. SUB MPC 0.00 min.



2

000535

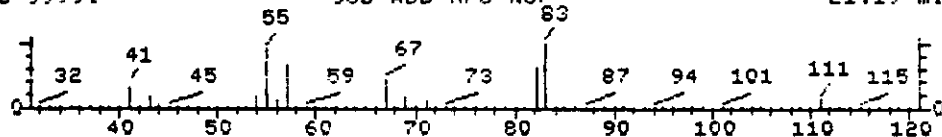
TIC NUMBER:10

- | | |
|---|--------------|
| 1. Cyclohexane, hexyl- | 168 C12H24 |
| 2. Cyclopentane, 1-ethyl-1-methyl- | 112 C8H16 |
| 3. 5-CYANO-1,2,3-THIADIAZOLE | 111 C3HN3S |
| 4. Hexanoic acid, 3-hexenyl ester, (Z)- | 198 C12H22O2 |
| 5. Pyridine, 2,3,4,5-tetrahydro- | 83 C5H9N |
| 6. 2-Hexen-1-ol, (Z)- | 100 C6H12O |

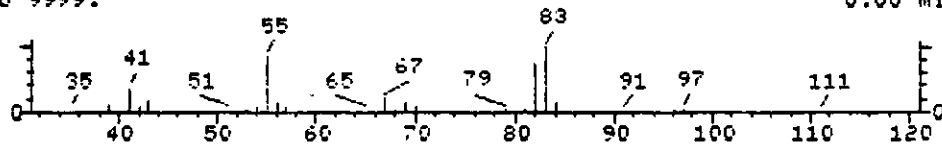
Sample file: >D1765 Spectrum #: 915
 Search speed: 2 Tilting option: S No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	30	4292755	6213	NBS49K	42	53	1	0	77	32	12	13
2.	26*	16747505	6165	NBS49K	33	71	2	0	75	45	8	14
3.	25*	57352020	6152	NBS49K	24	63	1	0	78	46	7	14
4.	20	31501118	6044	NBS49K	53	55	1	0	64	53	5	12
5.	11*	505180	6132	NBS49K	25	68	1	0	78	62	2	14
6.	11*	928949	5870	NBS49K	22	76	3	0	104	61	2	12

File >D1765 20949-17.V,EPA, CLP,20949..17.M,S, 5UL/5 Scan 915
 Bpk Ab 9999. SUB ADD MPC NSP 21.19 min.

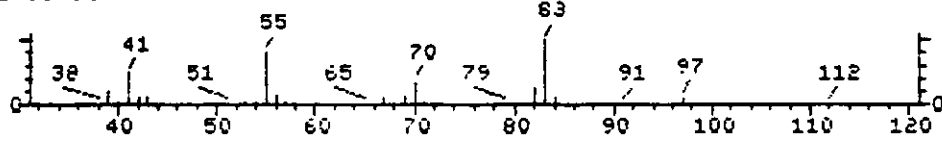


File NBS49K Cyclohexane, hexyl- Scan 12319
 Bpk Ab 9999. 0.00 min.

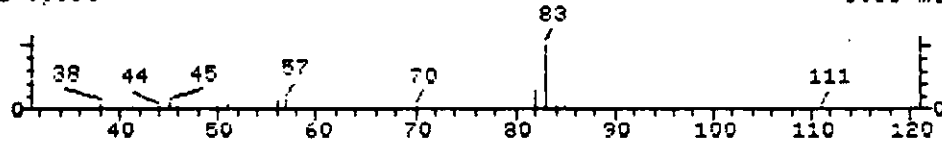


2

File NBS49K Cyclopentane, 1-ethyl-1-methyl- Scan 2413
 Bpk Ab 9999. 0.00 min.



File NBS49K 5-CYANO-1,2,3-THIADIAZOLE Scan 2139
 Bpk Ab 9999. 0.00 min.



000536

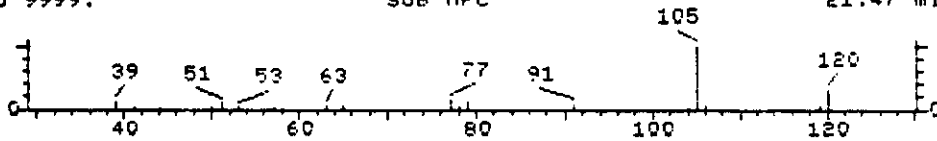
TIC NUMBER:11

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

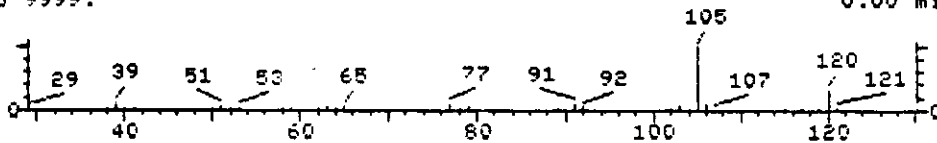
Sample file: >D1765 Spectrum #: 927
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	79*	620144	13671	NBS49K	53	34	2	2	78	9	48	30
2.	76*	98828	13667	NBS49K	56	31	2	-2	100	9	45	25
3.	67*	611143	13669	NBS49K	48	37	2	0	86	14	34	28
4.	58*	622968	13672	NBS49K	47	38	2	0	100	16	25	27
5.	36*	526738	13674	NBS49K	47	53	2	0	65	35	12	19
6.	28*	95636	13676	NBS49K	37	58	2	0	56	41	8	16

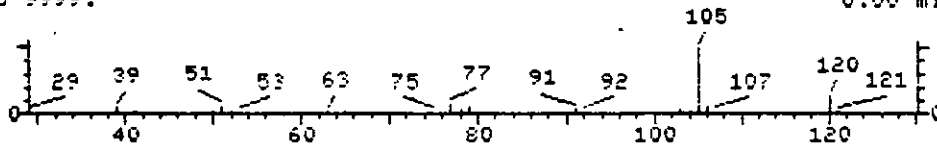
File >D1765 20949-17,V.EPA, CLP,20949..17.M.G. 5UL45 Scan 927
 Bpk Ab 9999. SUB MPC 21.47 min.



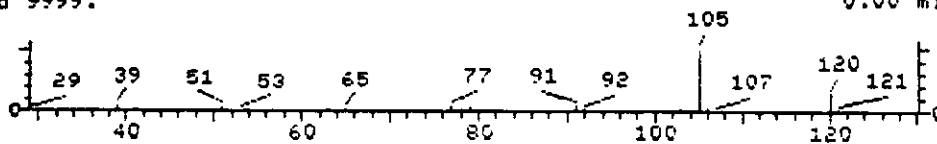
File NBS49K Benzene, 1-ethyl-3-methyl- Scan 3297
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, (1-methylethyl)- Scan 3291
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-2-methyl- Scan 3293
 Bpk Ab 9999. 0.00 min.



2

000537

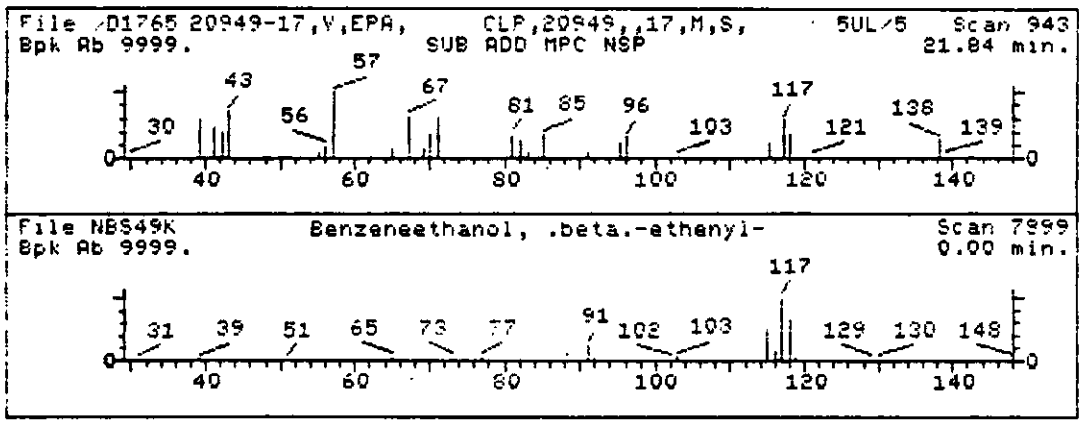
TIC NUMBER:12

1. Benzeneethanol, .beta.-ethenyl-

148 C10H12O

Sample file: >D1765 Spectrum #: 943
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.	12*	6052637	13383	NBS49K	48	31	2	0	47	64	2	28



000538

DRAFT

QUANT REPORT

Page 1

Operator ID: HUEY1
 Output File: ^I4069::QT
 Data File: >I4069::H3
 Name: 20949-17,U,EPA,
 Misc: CLP,20949,,17,M,S,

Quant Rev: 7 Quant Time: 920225 18:50
 Injected at: 920225 18:21
 Dilution Factor: 1.00000
 Instrument ID: H

5uL/5ML/100%/4G/10ML

ID File: IDEPAH::ID
 Title: ID FILE CLP INST. H + THF
 Last Calibration: 910722 16:57

Last Qcal Time: 920225 16:07

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 BROMOCHLOROMETHANE	6.21	128.0	42538	50.00	UG/L	99
2)	CS15 1,2-DICHLOROETHANE-D4	7.20	65.0	5543	3.17	UG/L	87
9)	C035 ACETONE	3.12	43.0	1277	2.46	UG/L	100
10)	C030 METHYLENE CHLORIDE	3.76	84.0	8080	5.87	UG/L	88
19)	*CI10 1,4-DIFLUOROBENZENE	8.11	114.0	173260	50.00	UG/L	100
20)	C115 1,1,1-TRICHLOROETHANE	6.58	97.0	16126	6.24	UG/L	98
21)	C120 CARBONTETRACHLORIDE	6.58	117.0	1522	.565	UG/L	81
23)	C150 TRICHLOROETHENE	8.39	130.0	1786	1.21	UG/L	91
31)	*CI20 CHLOROENZENE-D5	13.19	117.0	133129	50.00	UG/L	86
32)	CS05 TOLUENE-D8	10.53	98.0	7920	2.50	UG/L	96
33)	CS10 BROMOFLUOROBENZENE	15.66	95.0	8269	3.65	UG/L	100
34)	C230 TOLUENE	10.65	91.0	2130	.682	UG/L	80
39)	C240 ETHYLBENZENE	13.60	106.0	19832	17.38	UG/L	94
40)	UJNK M&P-XYLENES	13.85	106.0	74712	51.02	UG/L	88
41)	U029 O-XYLENE	14.61	106.0	29959	21.75	UG/L	96

* Compound is ISTD

000539

DRAFT

MS data file header from : >I4069::H3

Sample: 20949-17,U,EPA, Operator: HUEY1 REG. GRP. 2/25/92 18:21
 Misc : CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
 Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS #: 0 Equip ID: H
 Method file: SAMMH Tuning file: MTBFBH No. of extra records: 2
 Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures : -10. 100. 118. 210. 0.
 Chromatographic times, min. : 1.5 0.0 0.0 4.7 0.0
 Chromatographic rate, deg/min: 6.0 8.3 70.0 .5 0.0

CONCENTRATION DILUTION INFORMATION

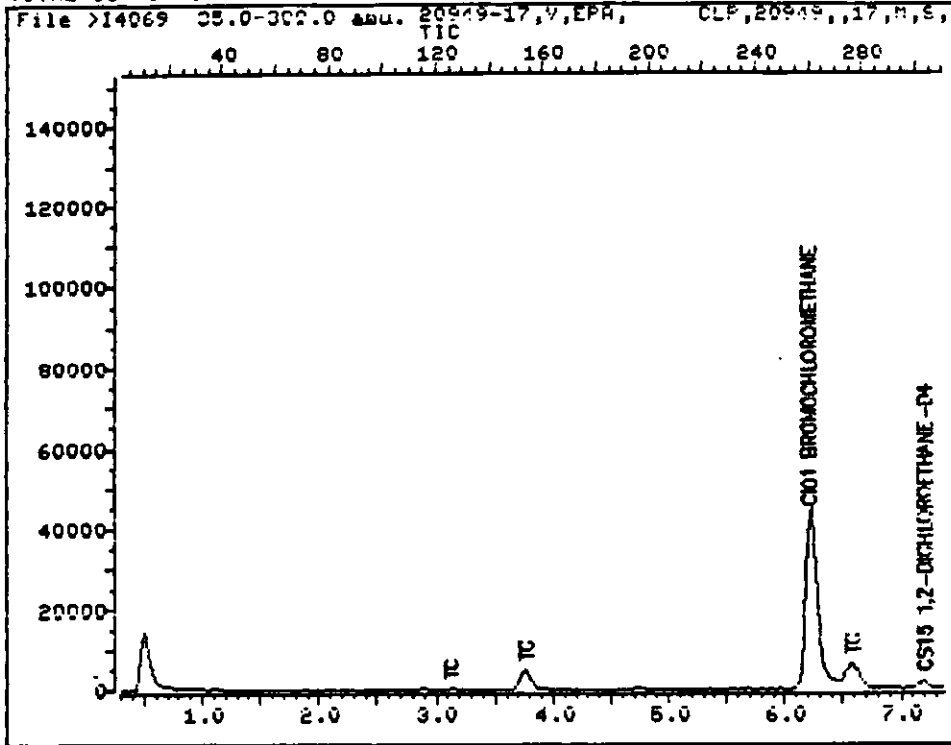
rep_units	UG/KG	Desired reporting units
samp_amt	4G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	N/A	%moisture for soil
int_ext_vol	10ML	intermediate extract vol/M.L. ext vo
int_ext_vol_u	.005ML	intermediate extract vol/M.L. vol US
spiked	S	Surrogate added at S(start)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
runfact	2500	calcd runfactor
surfact	10.0	calcd surr vol

Performance Check: >I4065 Injection Time: 2/25/92 15:27
 Sample : >I4069 Injection Time: 2/25/92 18:21
 Elapsed Time: 0 Y 0 D 2:54
 Sample: ^I4069 Calibration Stds.: ^I4066,
 Invalid Response Factor for: C053 1,2 DICHLOROETHENE TOTAL
 Invalid Response Factor for: C250 XYLENE (TOTAL)

000540

DEPT

TOTAL ION CHROMATOGRAM



Data File: >I4069::H3
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,

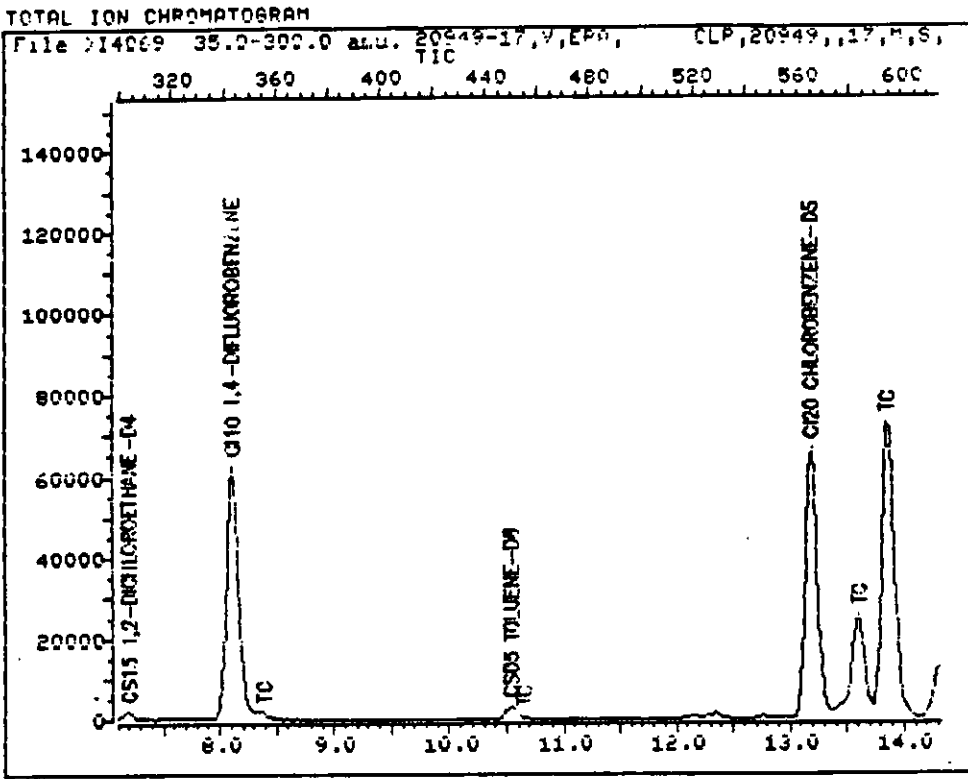
Quant Output File: ^I4069::QT
Instrument ID: H
5uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57

Last Qcal Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920225 18:50
Injected at: 920225 18:21

000541
DRAFT



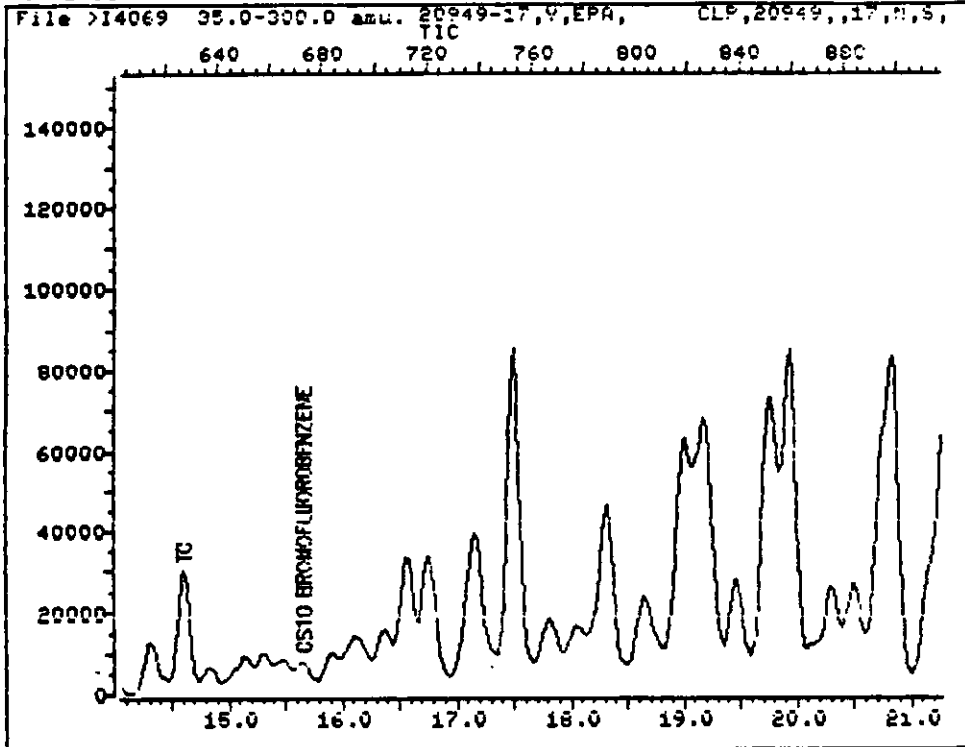
Data File: >I4069::H3 Quant Output File: ^I4069::QT
Name: 20949-17,U,EPA, Instrument ID: H
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57 Last Qcal Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920225 18:50
Injected at: 920225 18:21

000542 DRAFT

TOTAL ION CHROMATOGRAM



Data File: >I4069::H3

Quant Output File: ^I4069::QT

Name: 20949-17,U,EPA,

Instrument ID: H

Misc: CLP,20949,,17,M,S,

5uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID

Title: ID FILE CLP INST. H + THF

Last Calibration: 910722 16:57

Last Qual Time: 920225 16:07

Operator ID: HUEY1

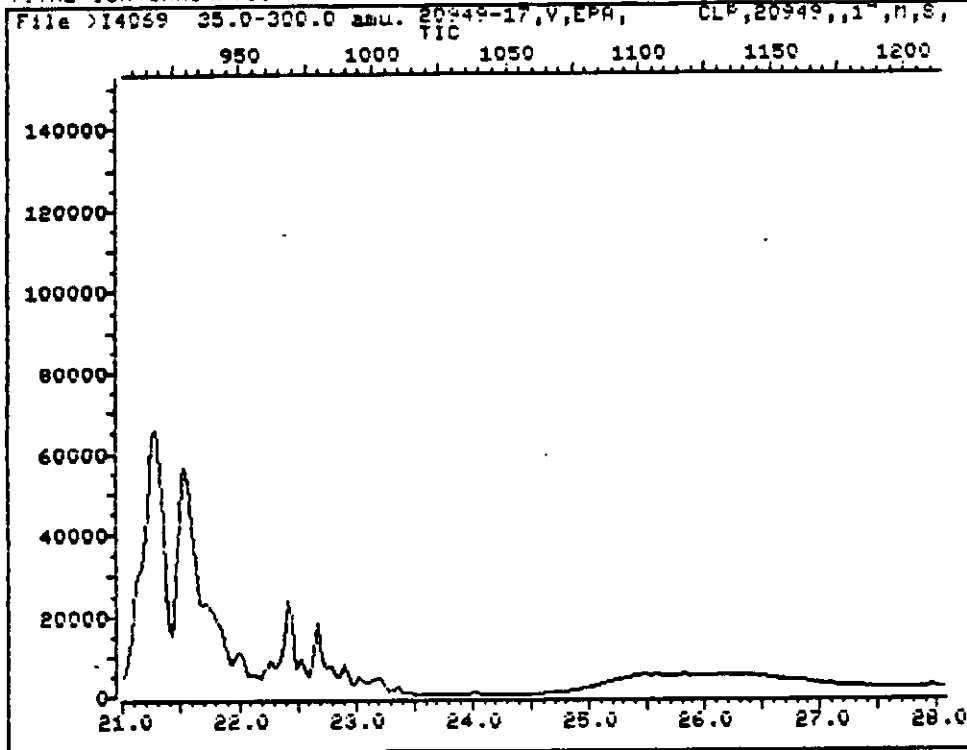
Quant Time : 920225 18:50

Injected at: 920225 18:21

Page 3 of 4

DRAFT
000543

TOTAL ION CHROMATOGRAM



Data File: >I4069::H3
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S,

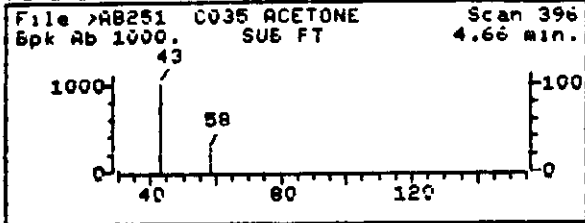
Quant Output File: ^I4069::QT
Instrument ID: H
5uL/5ML/100%/4G/10ML

Id File: IDEPAH::ID
Title: ID FILE CLP INST. H + THF
Last Calibration: 910722 16:57

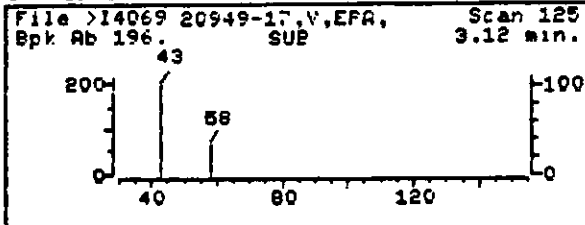
Last Qcal Time: 920225 16:07

Operator ID: HUEY1
Quant Time : 920225 18:50
Injected at: 920225 18:21

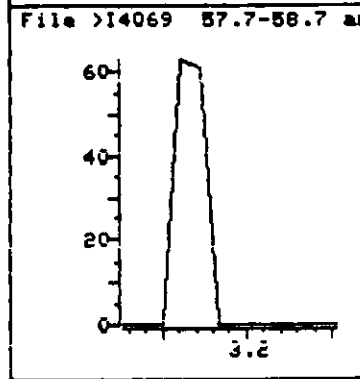
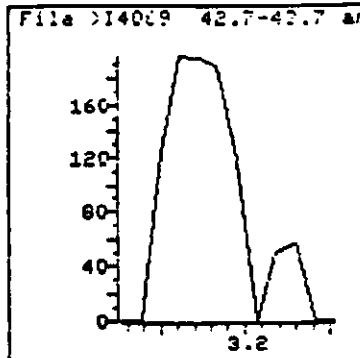
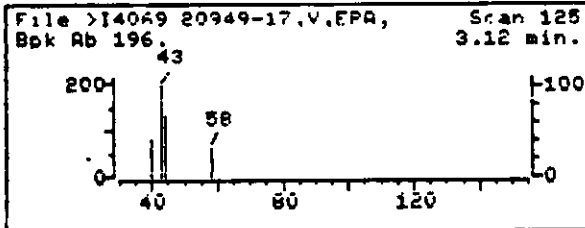
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

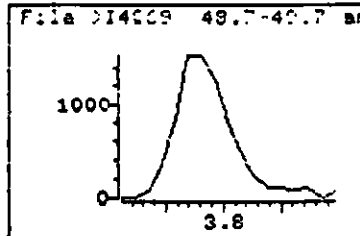
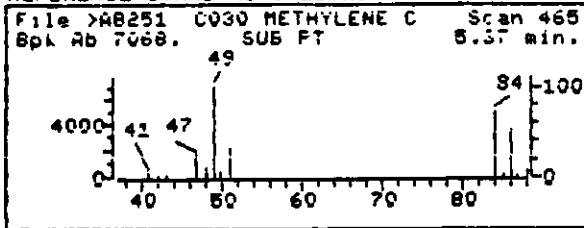


Data File: >I4069::H3
Name: 20949-17.V,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

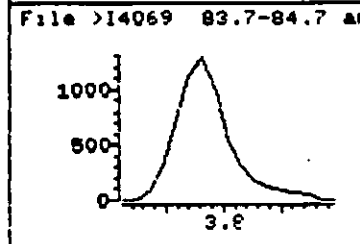
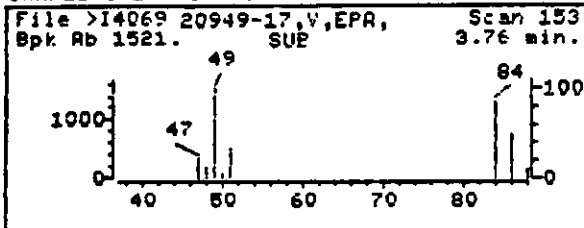
Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 9
Compound Name : C035 ACETONE
Scan Number : 125
Retention Time: 3.12 min.
Quant Ion : 43.0
Area : 1277
Concentration : 2.46 UG/L
q-value : 100

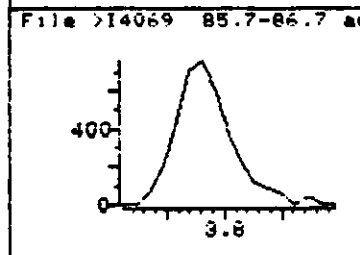
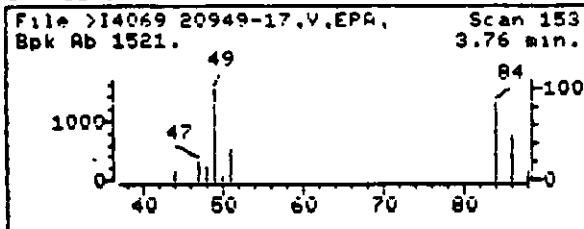
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



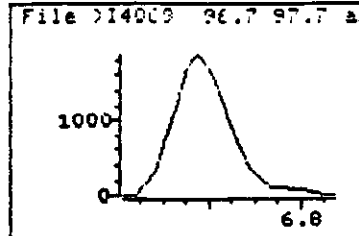
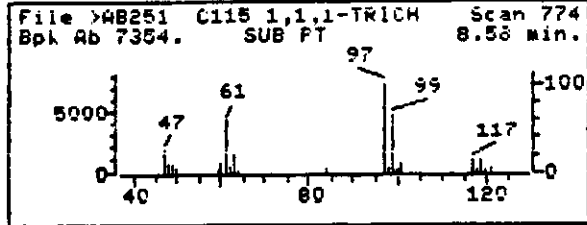
Data File: >I4069::H3
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

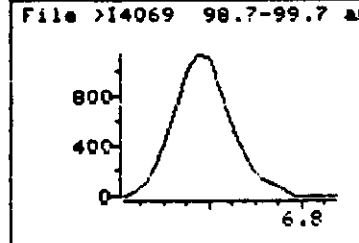
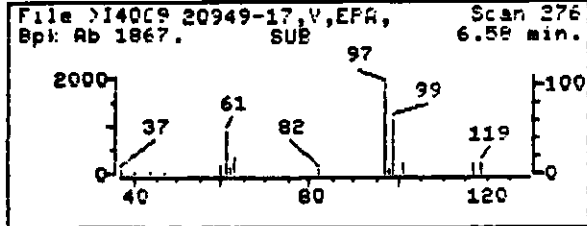
Compound No : 10
Compound Name : C030 METHYLENE CHLORIDE
Scan Number : 153
Retention Time: 3.76 min.
Quant Ion : 84.0
Area : 8080
Concentration : 5.87 UG/L
q-value : 88

000546AFT

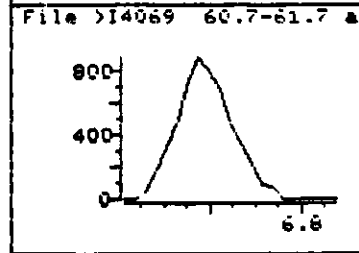
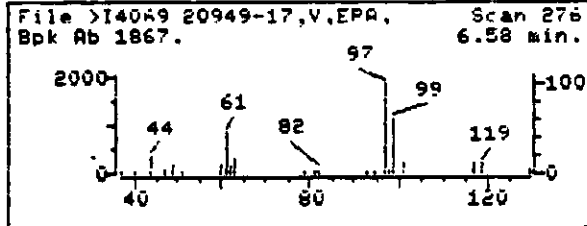
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



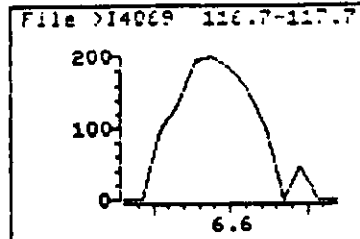
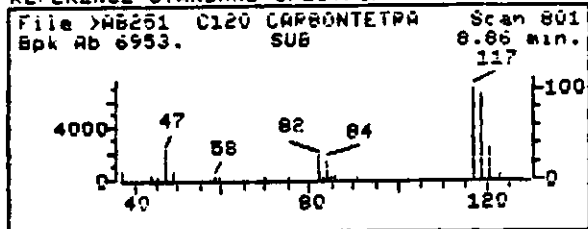
Data File: >I4069::H3
Name: 20949-17,V,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

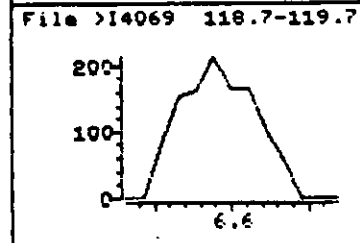
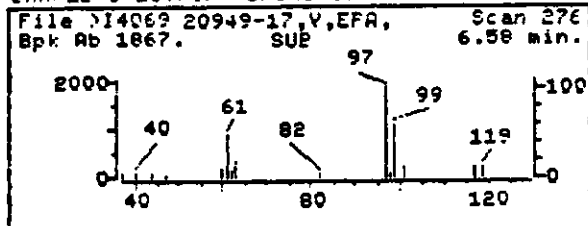
Compound No : 20
Compound Name : C115 1,1,1-TRICHLOROETHANE
Scan Number : 276
Retention Time: 6.58 min.
Quant Ion : 97.0
Area : 16126
Concentration : 6.24 UG/L
q-value : 98

000547
DRAFT

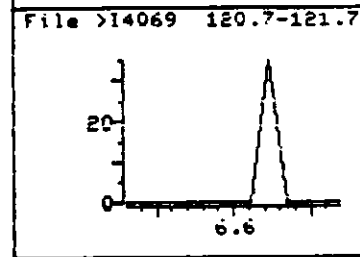
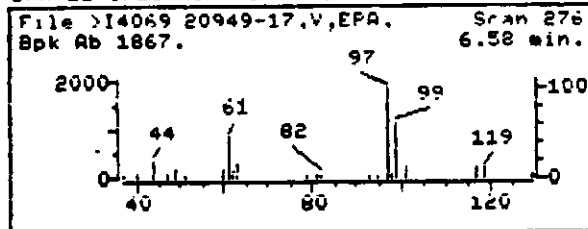
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



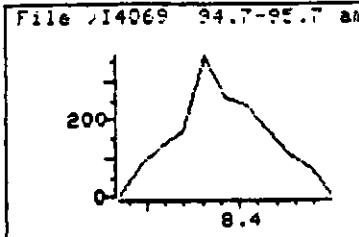
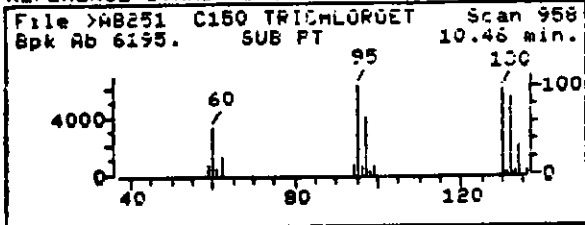
Data File: >I4069::H3
Name: 20949-17,V,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

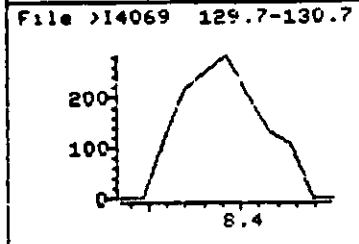
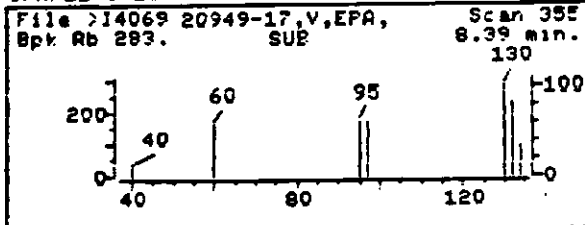
Compound No : 21
Compound Name : C120 CARBONTETRACHLORIDE
Scan Number : 276
Retention Time: 6.58 min.
Quant Ion : 117.0
Area : 1522
Concentration : .565 UG/L
q-value : 81

000548
DRAFT

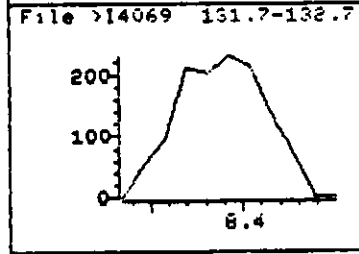
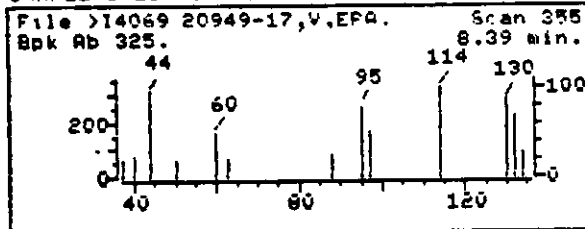
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

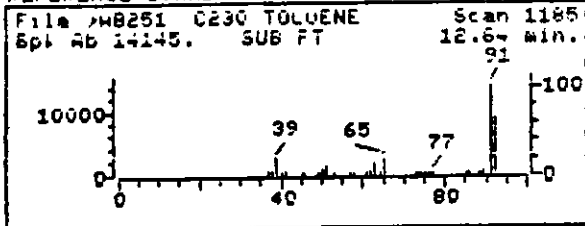


Data File: >I4069::H3
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

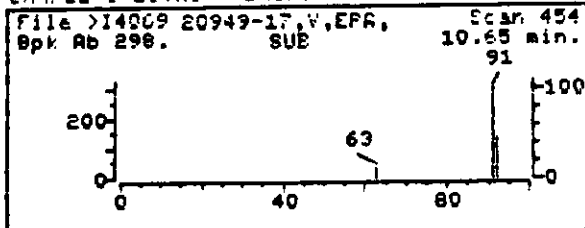
Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 23
Compound Name : C150 TRICHLOROETHENE
Scan Number : 355
Retention Time : 8.39 min.
Quant Ion : 130.0
Area : 1786
Concentration : 1.21 UG/L
q-value : 91

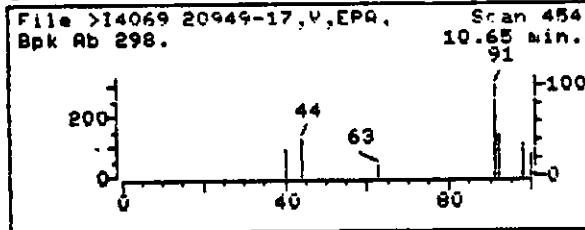
REFERENCE STANDARD SPECTRUM



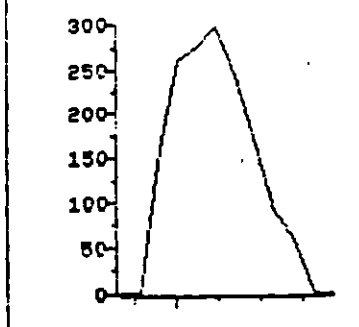
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



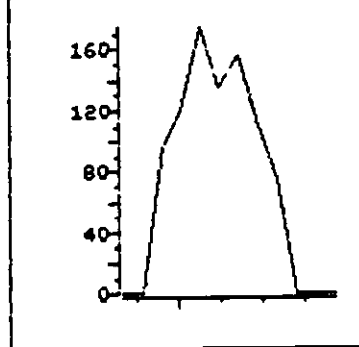
SAMPLE SPECTRUM (UNALTERED)



File >I4069 90.7-91.7 min



File >I4069 91.7-92.7 min



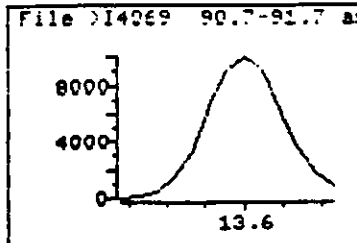
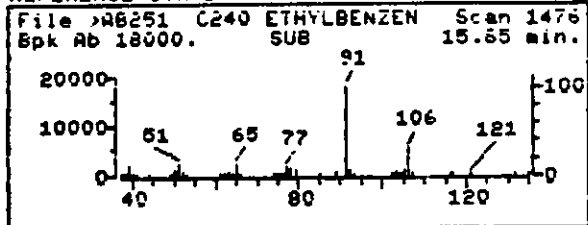
Data File: >I4069::H3
Name: 20949-17,V,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

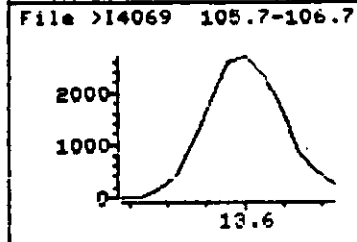
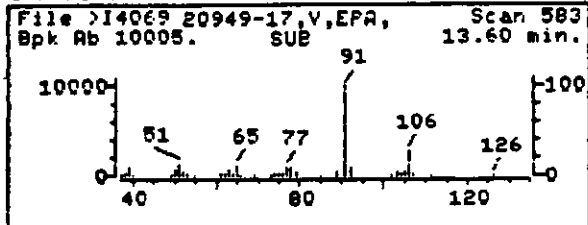
Compound No : 34
Compound Name : C230 TOLUENE
Scan Number : 454
Retention Time: 10.65 min.
Quant Ion : 91.0
Area : 2130
Concentration : .682 UG/L
q-value : 80

0005A FT

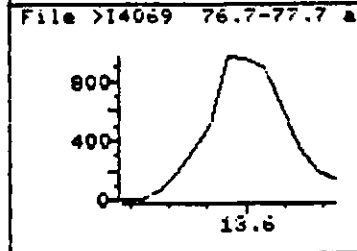
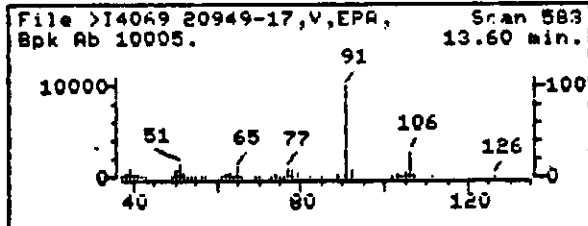
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

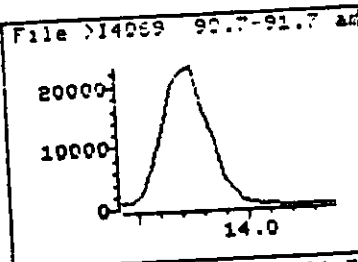
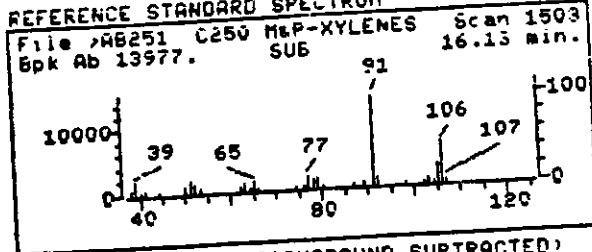


Date File: >I4069::H3
Name: 20949-17,U,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

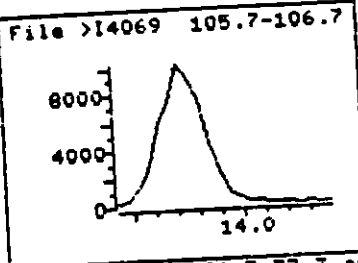
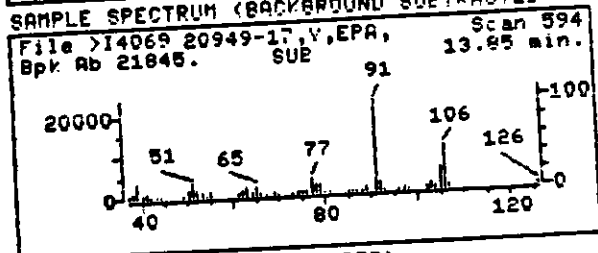
Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 39
Compound Name : C240 ETHYLBENZENE
Scan Number : 583
Retention Time: 13.60 min.
Quant Ion : 106.0
Area : 19832
Concentration : 17.38 UG/L
q-value : 94

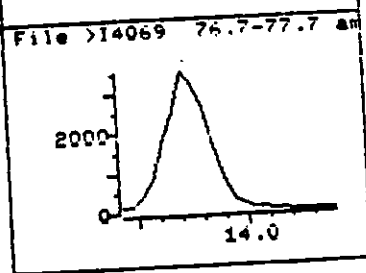
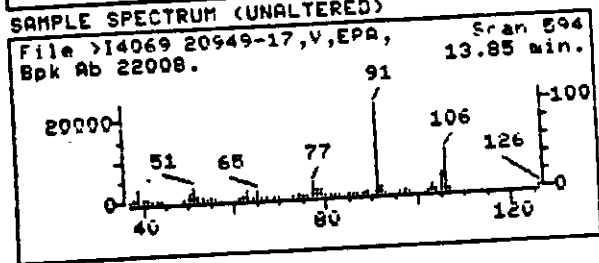
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



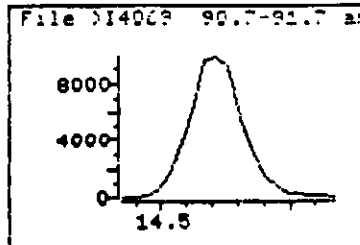
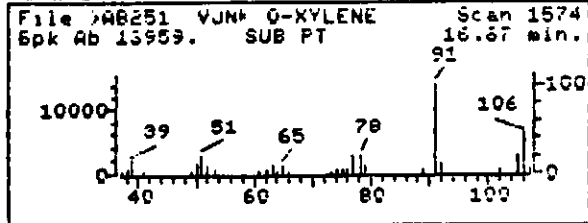
Data File: >I4069::H3
Name: 20949-17,V,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

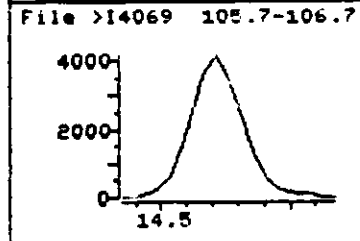
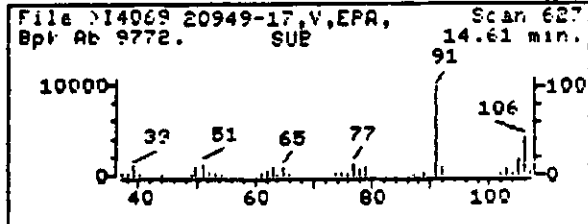
Compound No : 40
Compound Name : UJNK M&P-XYLENES
Scan Number : 594
Retention Time: 13.85 min.
Quant Ion : 106.0
Area : 74712
Concentration : 51.02 UG/L
q-value : 88

DRAFT
000552 FT

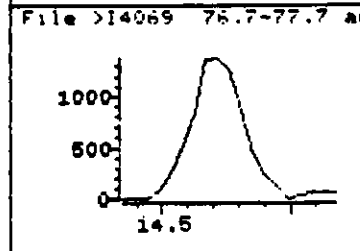
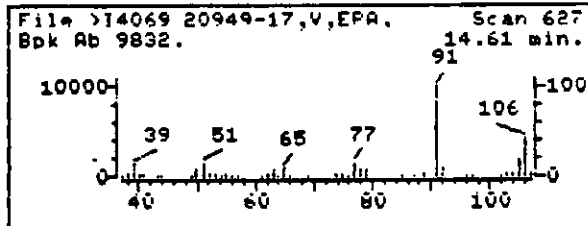
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I4069::H3
Name: 20949-17,V,EPA,
Misc: CLP,20949,,17,M,S, 5uL/5ML/100%/4G/10ML
Quant Time: 920225 18:50
Injected at: 920225 18:21
Last Qcal Time: 920225 16:07

Quant Output File: ^I4069::QT
Instrument ID: H
Quant ID File: IDEPAH::ID
Last Calibration: 910722 16:57

Compound No : 41
Compound Name : U029 O-XYLENE
Scan Number : 627
Retention Time: 14.61 min.
Quant Ion : 106.0
Area : 29959
Concentration : 21.75 UG/L
q-value : 96

DRAFT

Diagnostic Quant Report

Data File: >I4069::H3 Injected at: 18:21 02/25/92
 Quant'd : 18:50 02/25/92
 ID File : IDEPAH::ID Calibrated : 16:57 07/22/91

		- R.T. Info -				Area	RF	Conc.	
Compound		Pred	Found	Dif	Ion				
1)	*CI01	BROMOCHLOROMETHANE	6.23	6.21	.02	128.0	42538	1.0000	50.00
2)	CS15	1,2-DICHLOROETHANE-D	7.17	7.20	.03	65.0	5543	2.0529	3.17
3)	C010	CHLOROMETHANE	.83	0.00	--	50.0	0	.6955	0.00
4)	C020	VINYL CHLORIDE	.96	0.00	--	62.0	0	.7947	0.00
5)	C015	BROMOMETHANE	1.37	0.00	--	94.0	0	.9780	0.00
6)	C025	CHLOROETHANE	1.60	0.00	--	64.0	0	.6445	0.00
7)	C045	1,1-DICHLOROETHENE	2.79	0.00	--	96.0	0	1.0839	0.00
8)	C040	CARBON DISULFIDE	2.86	0.00	--	76.0	0	1.7506	0.00
9)	C035	ACETONE	3.24	3.12	.12	43.0	1277	.6096	2.46
10)	C030	METHYLENE CHLORIDE	3.77	3.76	.01	84.0	8020	1.6176	5.87
11)	UJNK	trans-1,2-DICHLOROET	4.18	0.00	--	96.0	0	1.4324	0.00
12)	C050	1,1-DICHLOROETHANE	4.89	0.00	--	63.0	0	2.7081	0.00
13)	U011	cis-1,2-DICHLOROETHE	5.87	0.00	--	96.0	0	1.5215	0.00
14)	C053	1,2 DICHLOROETHENE T	0.00	0.00	--	96.0	0	1.4770	0.00
15)	C110	2-BUTANONE	6.12	0.00	--	43.0	0	.5995	0.00
16)	U013	TETRAHYDROFURAN	6.35	0.00	--	42.0	0	.2064	0.00
17)	C060	CHLOROFORM	6.53	0.00	--	83.0	0	3.2173	0.00
18)	C065	1,2-DICHLOROETHANE	7.28	0.00	--	62.0	0	2.1836	0.00
19)	*CI10	1,4-DIFLUOROBENZENE	8.11	8.11	.00	114.0	173260	1.0000	50.00
20)	C115	1,1,1-TRICHLOROETHAN	6.60	6.58	.02	97.0	16126	.7461	6.24
21)	C120	CARBONTETRACHLORIDE	6.83	6.58	.25	117.0	1522	.7771	.57
22)	C165	BENZENE	7.19	0.00	--	78.0	0	.7461	0.00
23)	C150	TRICHLOROETHENE	8.39	8.39	.00	130.0	1786	.4263	1.21
24)	C140	1,2-DICHLOROPROPANE	8.71	0.00	--	63.0	0	.3252	0.00
25)	C130	BROMODICHLOROMETHANE	9.37	0.00	--	83.0	0	.6946	0.00
26)	C143	cis-1,3-DICHLOROPROP	10.17	0.00	--	75.0	0	.5216	0.00
27)	C172	trans-1,3-DICHLOROPR	11.27	0.00	--	75.0	0	.5036	0.00
28)	C160	1,1,2-TRICHLOROETHAN	11.55	0.00	--	97.0	0	.2623	0.00
29)	C155	CHLORODIBROMOMETHANE	12.16	0.00	--	129.0	0	.5313	0.00
30)	C180	BROMOFORM	14.89	0.00	--	173.0	0	.3981	0.00
31)	*CI20	CHLOROBENZENE-D5	13.19	13.19	.00	117.0	133129	1.0000	50.00
32)	CS05	TOLUENE-D8	10.53	10.53	.00	98.0	7920	1.1892	2.50
33)D	CS10	BROMOFLUOROBENZENE	15.64	15.39	.25	95.0	1689	.8506	.75
33)	CS10	BROMOFLUOROBENZENE	15.64	15.66	.02	95.0	8269	.8506	3.65
33)D	CS10	BROMOFLUOROBENZENE	15.64	16.01	.37	95.0	1648	.8506	.73
34)	C230	TOLUENE	10.65	10.65	.00	91.0	2130	1.1729	.68
35)	C205	4-METHYL-2-PENTANONE	10.62	0.00	--	43.0	0	.3454	0.00
36)	C220	TETRACHLOROETHENE	11.59	0.00	--	164.0	0	.4456	0.00
37)	C210	2-HEXANONE	12.23	0.00	--	43.0	0	.3389	0.00
38)	C235	CHLOROBENZENE	13.23	0.00	--	112.0	0	.9102	0.00
39)	C240	ETHYLBENZENE	13.58	13.60	.02	106.0	19832	.4285	17.38
39)D	C240	ETHYLBENZENE	13.58	13.85	.27	106.0	74712	.4285	65.48
40)D	UJNK	M&P-XYLENES	13.85	13.60	.25	106.0	19832	.5500	13.54
40)	UJNK	M&P-XYLENES	13.85	13.85	.00	106.0	74712	.5500	51.02
41)	U029	O-XYLENE	14.58	14.61	.02	106.0	29959	.5173	21.75
42)	C250	XYLENE (TOTAL)	0.00	0.00	0.00	106.0	104671	.5337	73.66
43)	C245	STYRENE	14.68	0.00	--	104.0	0	.8556	0.00
44)	C225	1,1,2,2-TETRACHLOROE	16.26	0.00	--	83.0	0	.6045	0.00

000554 A F T

TIC Internal Standard Report

Data File: >I4069

Maximum separation 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	Q scan	Q area	RQratio	Concentration RIC scan	Flag RIC area	% Est. RIC
1	CI01 BROMOCHLOROMETH	260.	42538.	7.294	50.000 UG/L 261.	Ok 315951.	101.835
2	CI10 1,4-DIFLUOROBEN	343.	173260.	2.506	50.000 UG/L 343.	Ok 463610.	106.771
3	CI20 CHLOROENZENE-D	565.	133129.	3.094	50.000 UG/L 565.	Ok 479436.	116.390

Deleting peaks from INT file: UDIR87

Minimum area: 0 % of area of closest Int. Std.
Number of peaks: 30
Number of peaks remaining: 30

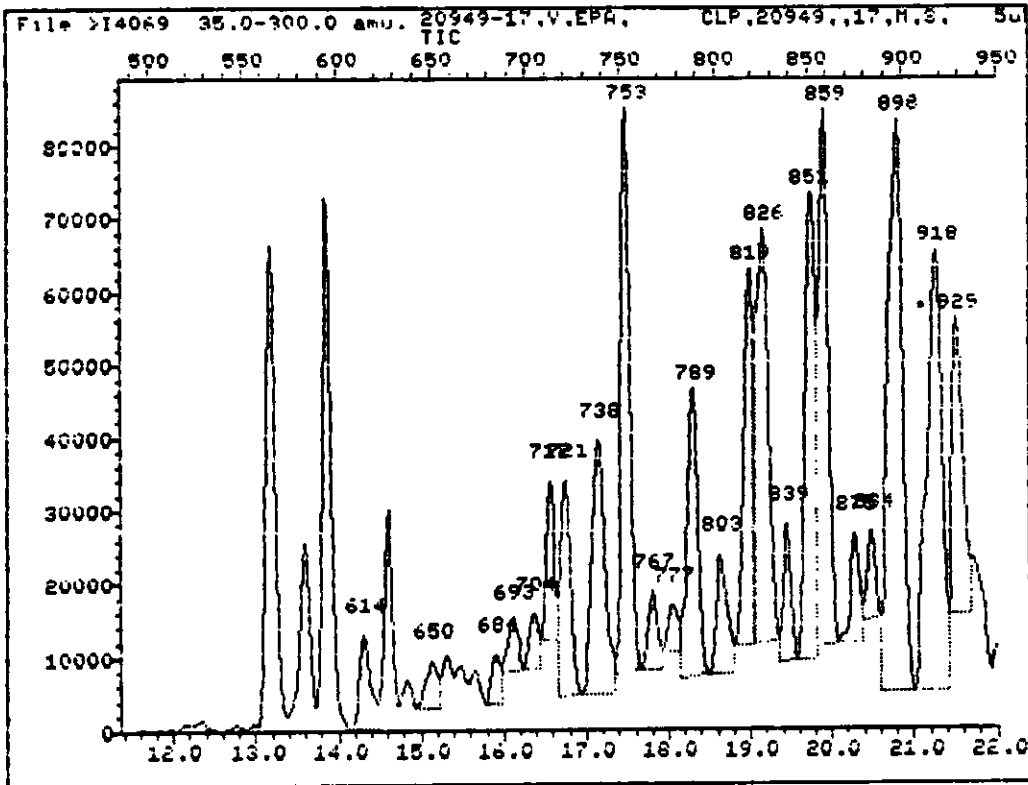
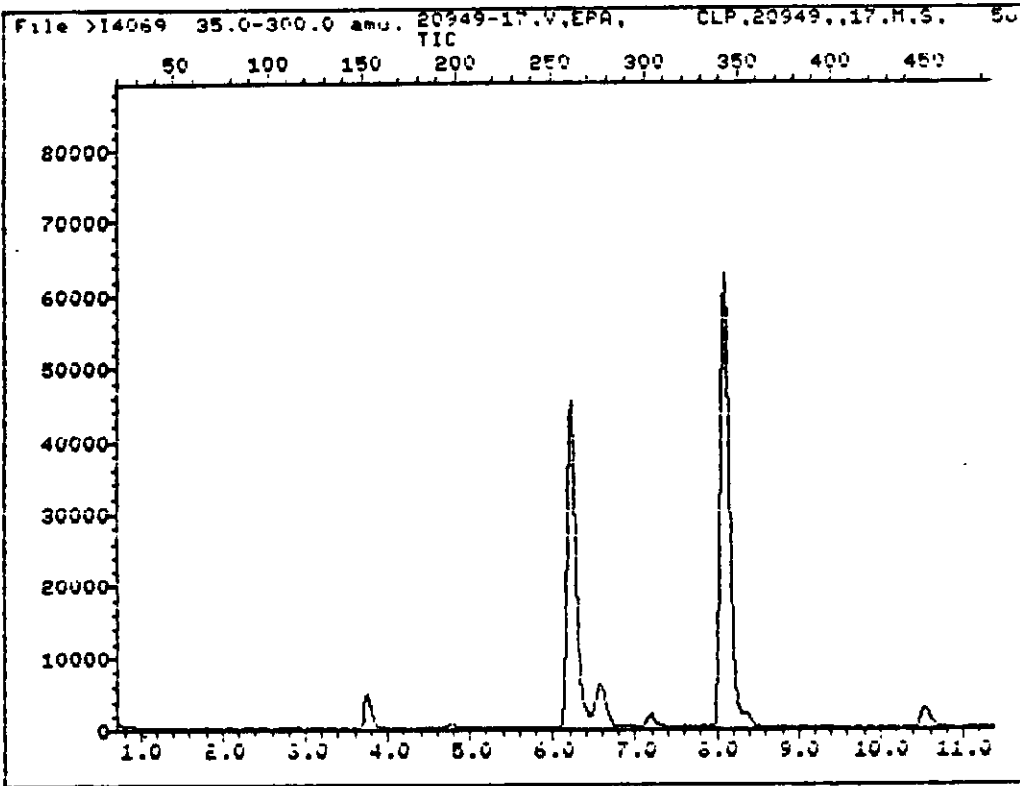
Deleting target compounds from INT file: UDIR87

Minimum separation of TIC and target: 5.
Maximum fraction of RIC peak from targets: 40. %
Number of peaks: 30
Number of peaks remaining: 23

Deleting all but largest peaks from INT file: UDIR87

Maximum number of peaks to keep: 50
Number of peaks: 23
Maximum number of peaks > number of peaks.

000555 E T



000556

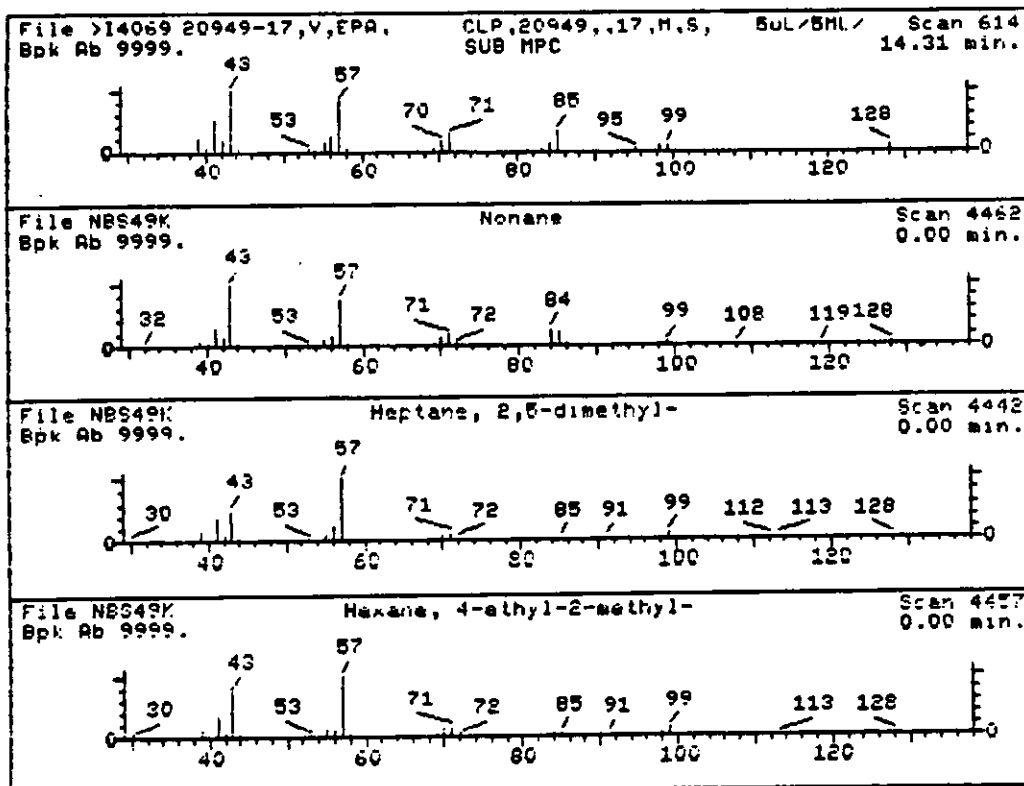
D
I
E
T

TIC NUMBER:1

1. Nonane	128 C9H20
2. Heptane, 2,5-dimethyl-	128 C9H20
3. Hexane, 4-ethyl-2-methyl-	128 C9H20
4. Hexane, 3-ethyl-4-methyl-	128 C9H20
5. Heptane, 2-bromo-	178 C7H15Br
6. Octane, 3-methyl-	128 C9H20

Sample file: >I4069 Spectrum #: 614
 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.	70*	4462	6612	NBS49K	59	37	3	-1	100	9	42	16
2.	59*	2216300	9707	NBS49K	36	50	0	0	81	28	24	39
3.	43*	3074757	9710	NBS49K	29	60	0	0	74	30	19	21
4.	42*	4461	3967	NBS49K	36	60	3	0	81	23	17	13
5.	42	14108	1290	NBS49K	50	34	0	0	70	40	14	29
6.	39*	2216333	9708	NBS49K	29	55	1	0	81	30	14	16



000557

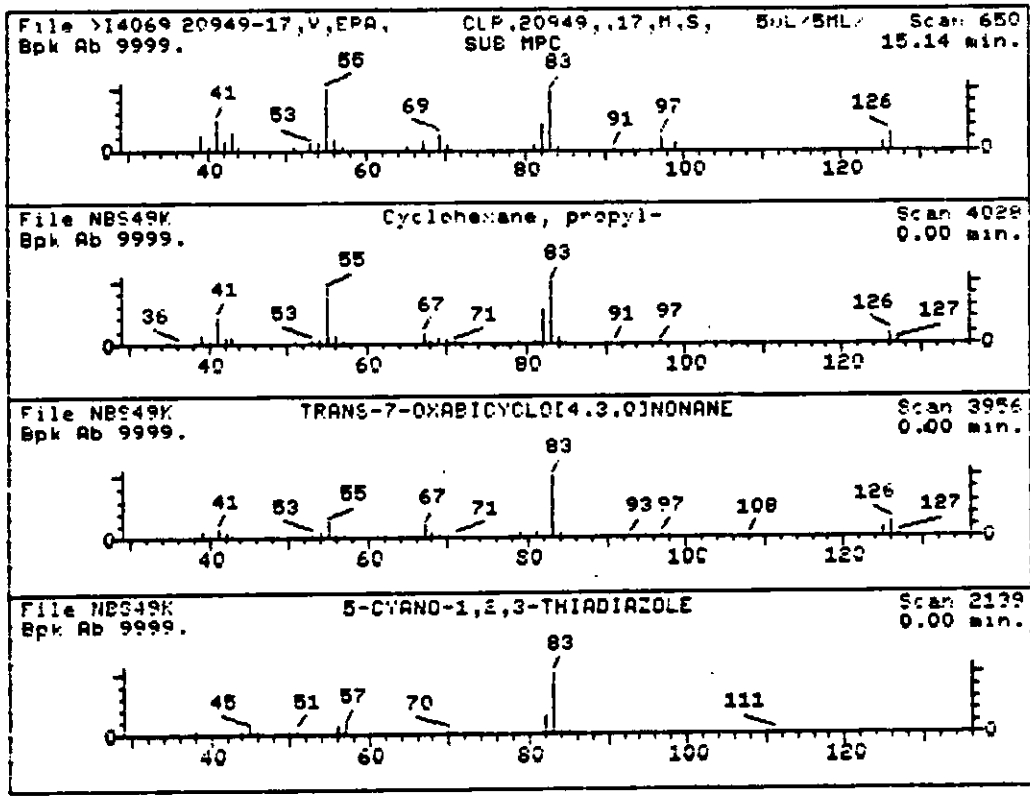
D E A

TIC NUMBER:2

- | | |
|---|--------------|
| 1. Cyclohexane, propyl- | 126 C9H18 |
| 2. TRANS-7-OXABICYCLO[4.3.0]NONANE | 126 C8H14O |
| 3. 5-CYANO-1,2,3-THIADIAZOLE | 111 C3HN3S |
| 4. 2-Pyrazoline, 1-methyl-4-propyl- | 126 C7H14N2 |
| 5. Glycine, N-(2-methyl-1-oxo-2-butenyl)-, methyl ester, (E)- | 171 C8H13NO3 |
| 6. Cyclohexane, (1-methylethyl)- | 126 C9H18 |

Sample file: >I4069 Spectrum #: 650
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	43*	4028	6182	NBS49K	48	49	3	1	76	22	17	14
2.	28*	27345706	14757	NBS49K	33	56	2	0	72	42	8	16
3.	26	2139	6155	NBS49K	38	49	2	0	95	38	10	12
4.	25*	33063773	14750	NBS49K	23	63	3	0	95	47	7	12
5.	25	12855	6220	NBS49K	39	25	2	0	83	45	8	13
6.	20*	4061	6184	NBS49K	42	52	3	0	97	52	5	14



000558
DRAFT

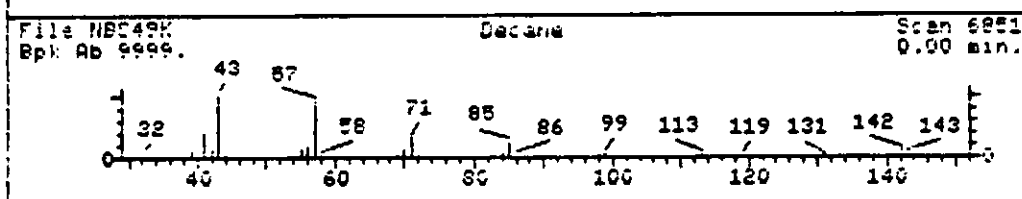
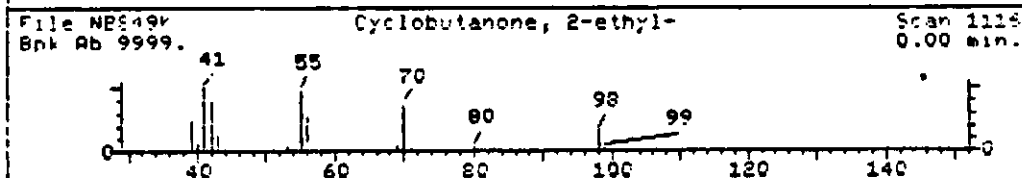
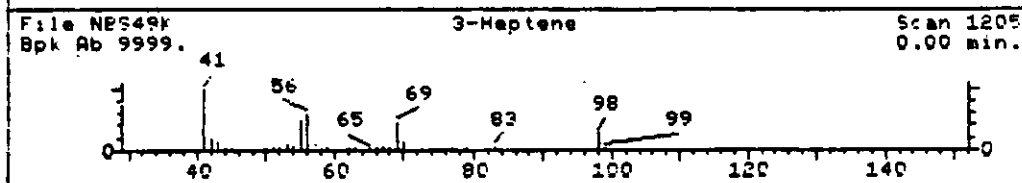
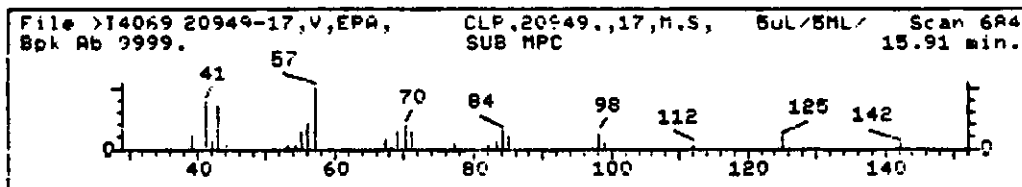
TIC NUMBER:3

1. 3-Heptene
2. Cyclobutanone, 2-ethyl-
3. Decane
4. Cyclobutanone, 3-ethyl-
5. Cyclobutanone, 2,2-dimethyl-
6. Nonane, 4-methyl-

98 C7H14
 98 C6H10O
 142 C10H22
 98 C6H10O
 98 C6H10O
 142 C10H22

Sample file: >I4069 Spectrum #: 684
 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.	35*	592789	9449	NBS49K	54	37	1	-1	59	50	11	31
2.	20*	1116	3843	NBS49K	27	72	3	0	78	51	5	13
3.	15*	124185	18079	NBS49K	41	59	2	0	68	57	3	15
4.	15*	1142	3845	NBS49K	33	57	3	0	65	57	3	13
5.	15*	1173	3849	NBS49K	21	50	2	0	47	58	3	13
6.	15*	6870	4027	NBS49K	32	68	2	0	55	58	3	14

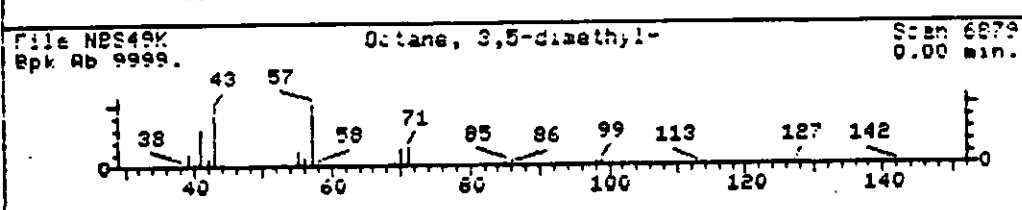
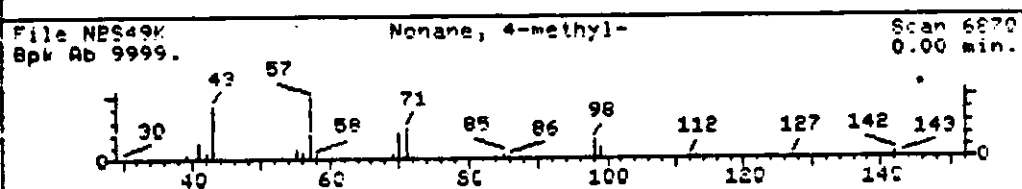
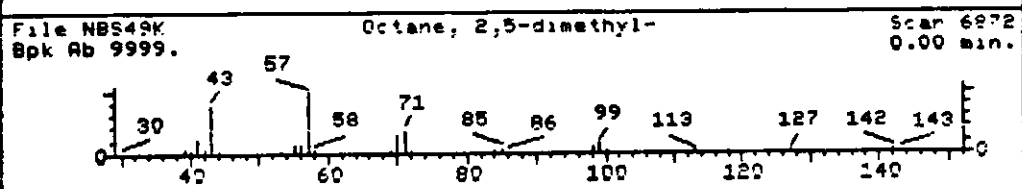
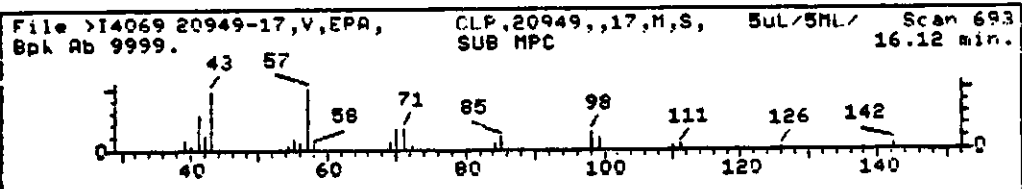


TIC NUMBER:4

- | | |
|--------------------------|------------|
| 1. Octane, 2,5-dimethyl- | 142 C10H22 |
| 2. Nonane, 4-methyl- | 142 C10H22 |
| 3. Octane, 3,5-dimethyl- | 142 C10H22 |
| 4. Heptane, 3-ethyl- | 128 C9H20 |
| 5. Nonane, 2-methyl- | 142 C10H22 |
| 6. Octane, 2,7-dimethyl- | 142 C10H22 |

Sample file: >I4069 Spectrum #: 693
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	59*	15869893	9754	NBS49K	53	39	2	0	98	22	27	36
2.	52*	6870	4027	NBS49K	44	56	2	0	69	17	20	17
3.	42*	6879	4028	NBS49K	27	66	0	0	78	30	14	19
4.	36	15869804	9483	NBS49K	35	53	1	0	100	27	14	13
5.	36*	871830	9512	NBS49K	28	68	3	0	96	26	14	13
6.	35	1072168	9751	NBS49K	54	39	3	0	96	29	14	12



DRAFT
000560

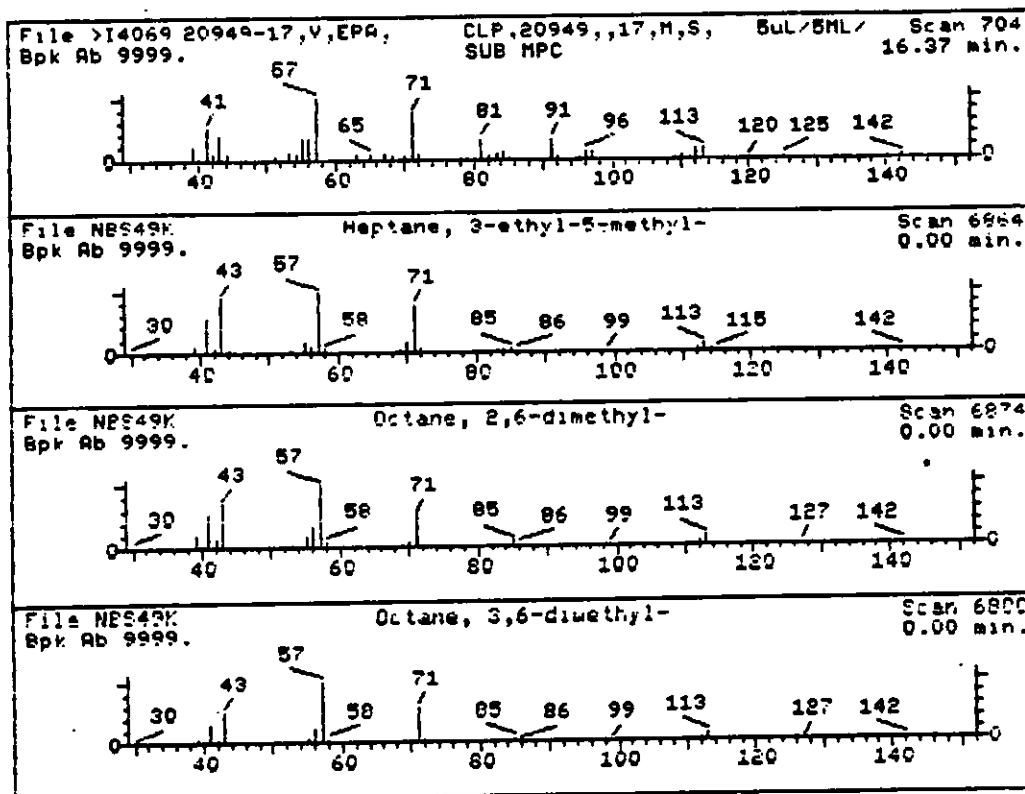
TIC NUMBER:5

1. Heptane, 3-ethyl-5-methyl-
2. Octane, 2,6-dimethyl-
3. Octane, 3,6-dimethyl-
4. Nonane, 3-methyl-
5. 1-Hexene, 5,5-dimethyl-
6. Propanal, 2-propenylhydrazone

142 C10H22
142 C10H22
142 C10H22
142 C10H22
112 C8H16
112 C6H12N2

Sample file: >I4069 Spectrum #: 704
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.	52*	6864	4335	NBS49K	40	54	3	0	95	19	20	13
2.	52*	2051301	12332	NBS49K	36	59	3	0	100	17	20	13
3.	52*	15869940	12333	NBS49K	32	57	2	0	100	19	20	16
4.	52*	5911046	12331	NBS49K	30	67	2	0	100	18	20	14
5.	20*	7116861	9104	NBS49K	24	59	3	0	100	53	5	12
6.	20*	2278	4287	NBS49K	27	72	2	0	75	53	5	14



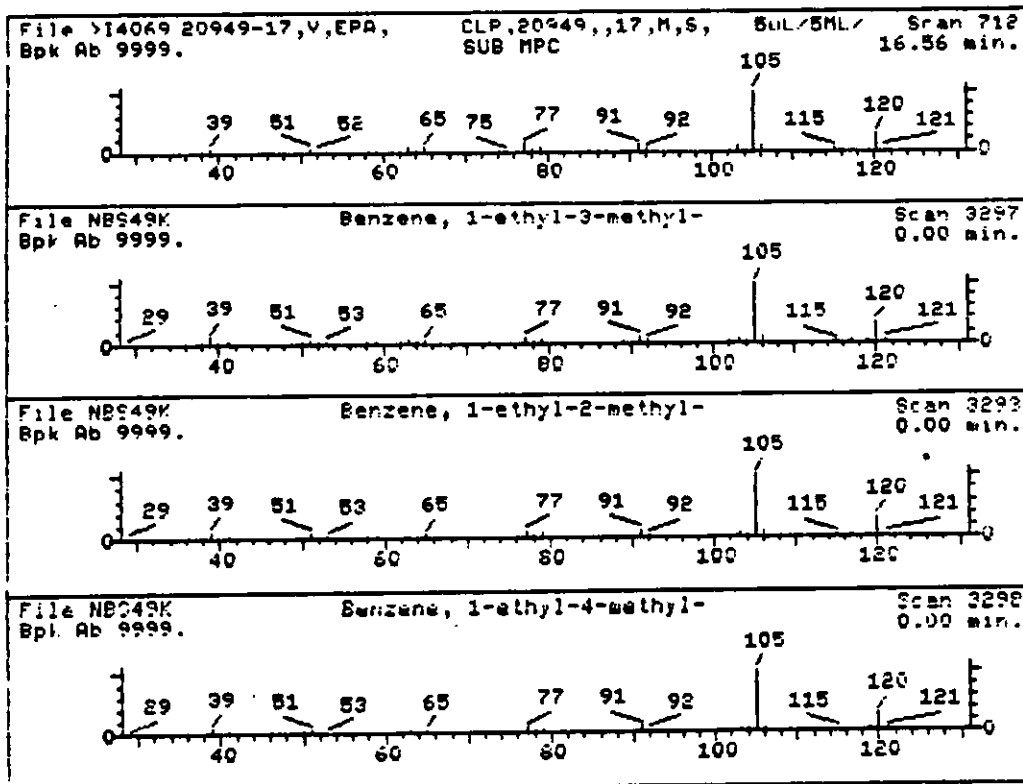
DRAFT
000561

TIC NUMBER:6

- | | |
|---|------------|
| 1. Benzene, 1-ethyl-3-methyl- | 120 C9H12 |
| 2. Benzene, 1-ethyl-2-methyl- | 120 C9H12 |
| 3. Benzene, 1-ethyl-4-methyl- | 120 C9H12 |
| 4. Benzene, (1-methylethyl)- | 120 C9H12 |
| 5. Benzene, 1,1'-(1-methyl-1,2-ethanediy)bis- | 196 C15H16 |
| 6. Benzene, 1,2,3-trimethyl- | 120 C9H12 |

Sample file: >I4069 Spectrum #: 712
 Search speed: 2 Tilting option: S No. of ion ranges searched: 54

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	95*	620144	13671	NBS49K	79	8	1	0	81	7	68	95
2.	95*	611143	13669	NBS49K	78	7	1	0	83	7	68	95
3.	93*	622968	13672	NBS49K	73	12	1	0	86	9	68	92
4.	87*	98828	13667	NBS49K	70	17	1	0	97	12	55	80
5.	49	5814857	10954	NBS49K	62	37	2	0	94	21	22	21
6.	49*	526738	13674	NBS49K	61	39	2	0	59	38	17	38

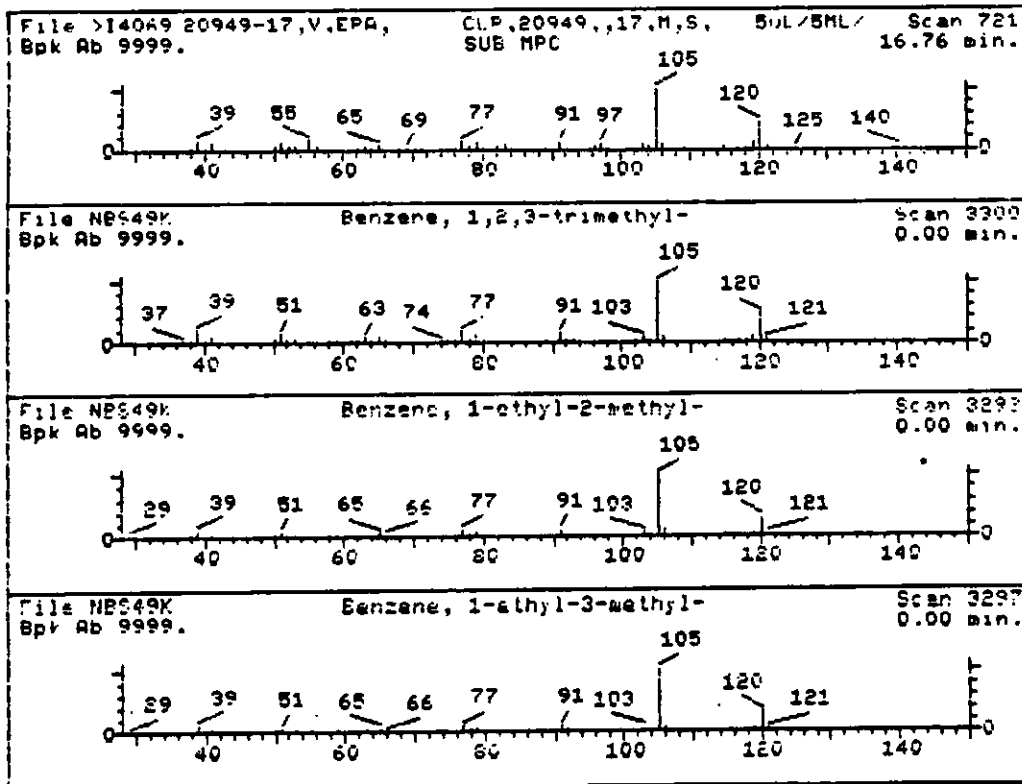


TIC NUMBER:7

- | | |
|-------------------------------|-----------|
| 1. Benzene, 1,2,3-trimethyl- | 120 C9H12 |
| 2. Benzene, 1-ethyl-2-methyl- | 120 C9H12 |
| 3. Benzene, 1-ethyl-3-methyl- | 120 C9H12 |
| 4. Benzene, 1,2,4-trimethyl- | 120 C9H12 |
| 5. Benzene, 1,3,5-trimethyl- | 120 C9H12 |
| 6. Benzene, 1-ethyl-4-methyl- | 120 C9H12 |

Sample file: >I4069 Spectrum #: 721
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DI	#FLG	TILT	%	CON	C_I	R_IV	
1.	95*	526738	13674	NBS49K	90	10	0	0	73	11	64	96
2.	93*	611143	13669	NBS49K	75	10	1	0	100	17	60	93
3.	93*	620144	13671	NBS49K	75	12	1	0	100	16	60	93
4.	89*	95636	13676	NBS49K	73	22	0	0	63	35	50	92
5.	79*	108678	13673	NBS49K	72	16	2	0	69	11	43	66
6.	78*	622968	13672	NBS49K	66	19	1	0	100	29	37	76



DRAFT
000563

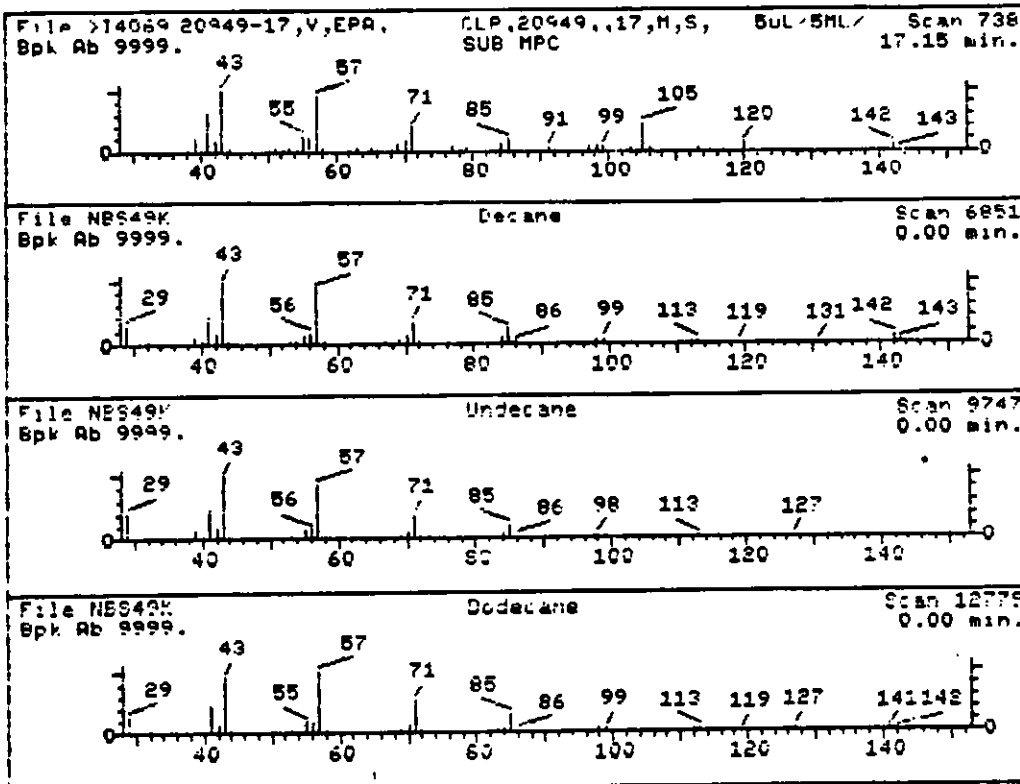
TIC NUMBER:8

1. Decane
2. Undecane
3. Dodecane
4. Tetradecane, 1-chloro-
5. Undecane, 2,9-dimethyl-
6. Decane, 2,9-dimethyl-

- 142 C10H22
- 156 C11H24
- 170 C12H26
- 232 C14H29Cl
- 184 C13H28
- 170 C12H26

Sample file: >I4069 Spectrum #: 738
 Search speed: 2 Tilting option: S No. of ion ranges searched: 63

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	124185	18079	NBS49K	84	16	0	88	9	68	95
2.	67	9747	6625	NBS49K	65	32	2	100	15	34	23
3.	46	12779	6735	NBS49K	59	40	2	67	21	17	17
4.	41	24391	6842	NBS49K	72	62	3	79	21	17	12
5.	41	17301267	9852	NBS49K	53	48	2	72	23	17	12
6.	38	12792	6741	NBS49K	60	32	2	84	31	16	21



000564AFT

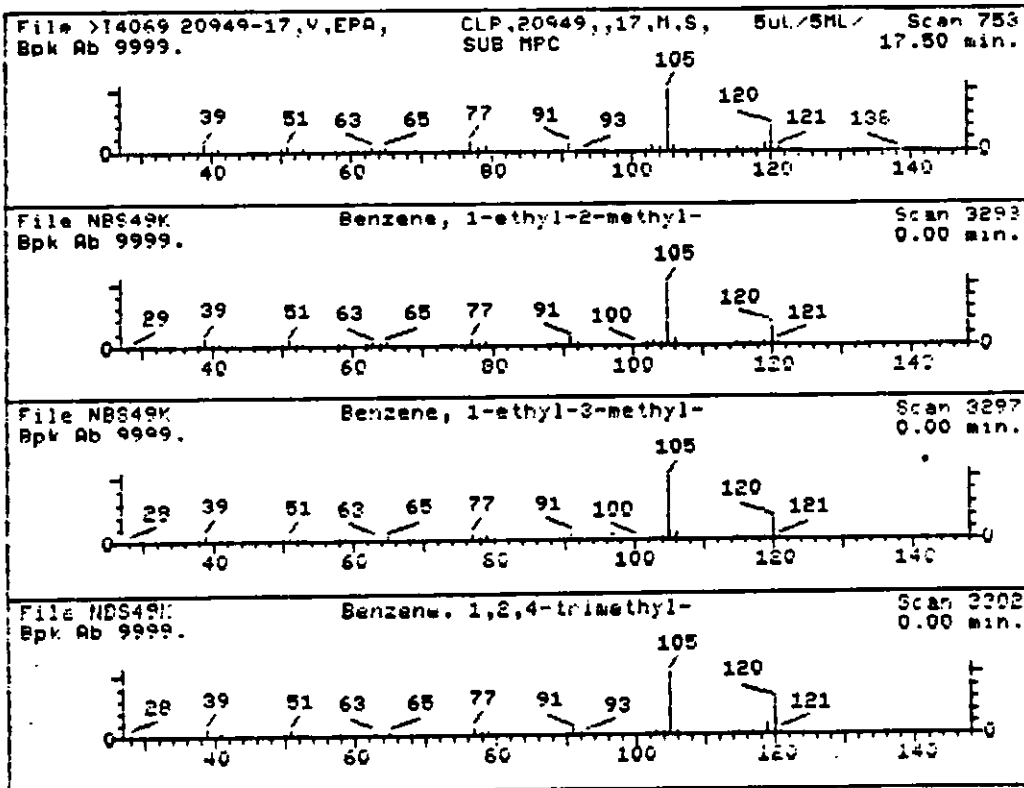
TIC NUMBER:9

1. Benzene, 1-ethyl-2-methyl-
2. Benzene, 1-ethyl-3-methyl-
3. Benzene, 1,2,4-trimethyl-
4. Benzene, 1,2,3-trimethyl-
5. Benzene, 1-ethyl-4-methyl-
6. Benzene, 1,3,5-trimethyl-

120 C9H12
 120 C9H12
 120 C9H12
 120 C9H12
 120 C9H12
 120 C9H12

Sample file: >14069 Spectrum #: 753
 Search speed: 2 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	611143	13669	NBS49K	75	10	1	0	100	12	64	93
2.	93*	620144	13671	NBS49K	75	12	1	0	100	11	64	93
3.	89*	95636	13676	NBS49K	86	9	1	1	67	6	62	89
4.	89*	526738	13674	NBS49K	84	16	1	0	67	7	62	83
5.	87*	622968	13672	NBS49K	68	17	1	0	100	12	55	80
6.	84*	108678	13673	NBS49K	78	10	2	4	75	6	55	61



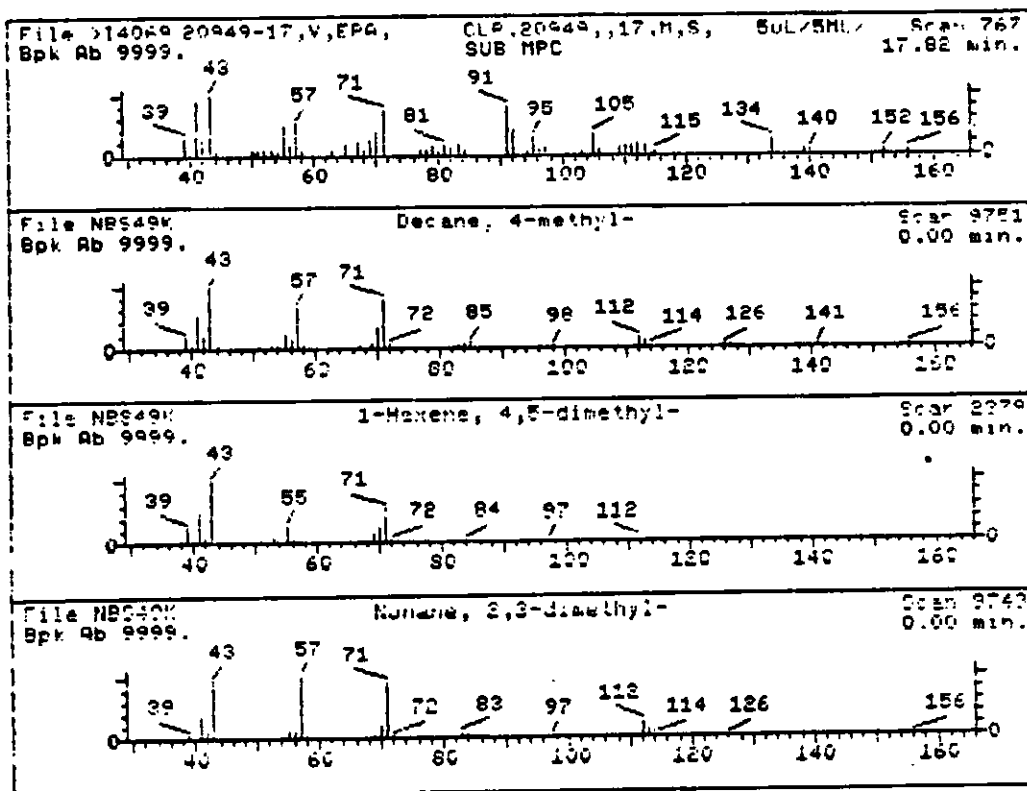
TIC NUMBER:10

1. Decane, 4-methyl-
2. 1-Hexene, 4,5-dimethyl-
3. Nonane, 2,3-dimethyl-
4. Pentane, 2,3,4-trimethyl-
5. Hydroxylamine, O-(3-methylbutyl)-
6. Propanal, 2-propenylhydrazone

156 C11H24
 112 C8H16
 156 C11H24
 114 C8H18
 107 C5H13NO
 112 C6H12N2

Sample file: >I4069 Spectrum #: 767
 Search speed: 2 Tilting option: S No. of ion ranges searched: 61

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	44*	9751	4361	NBS49K	56	45	2	0	81	38	17	33
2.	35*	2379	4288	NBS49K	48	39	1	0	137	48	11	35
3.	27*	2884062	12128	NBS49K	42	59	2	0	74	43	8	15
4.	25	2728	3921	NBS49K	34	46	1	0	93	50	7	12
5.	25*	1642	4286	NBS49K	30	51	3	0	237	50	7	14
6.	25*	2278	4287	NBS49K	20	79	2	0	74	48	7	13

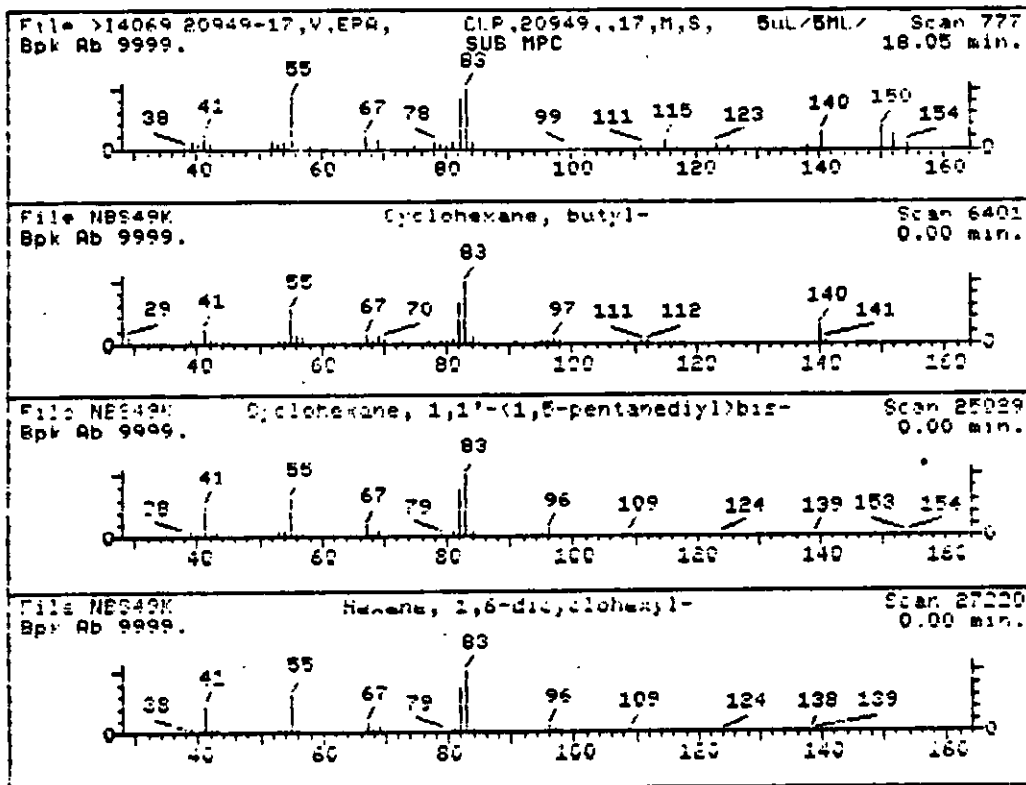


TIC NUMBER:11

- | | |
|---|------------|
| 1. Cyclohexane, butyl- | 140 C10H20 |
| 2. Cyclohexane, 1,1'-(1,5-pentanediylo)bis- | 236 C17H32 |
| 3. Hexane, 1,6-dicyclohexyl- | 250 C18H34 |
| 4. Heptanenitrile | 111 C7H13N |
| 5. Cyclohexane, hexyl- | 169 C12H24 |
| 6. Cyclohexane, octyl- | 196 C14H28 |

Sample file: >I4069 Spectrum #: 777
 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.	46*	1678939	17708	NBS49K	52	46	2	1	99	27	19	24
2.	31	25029	6083	NBS49K	65	52	2	0	100	35	12	14
3.	28	27220	6091	NBS49K	64	57	2	0	100	36	10	14
4.	27*	2172	5890	NBS49K	30	72	3	0	83	36	10	13
5.	26	12319	6216	NBS49K	47	48	2	0	83	36	10	12
6.	26	17940	6238	NBS49K	59	49	2	0	100	36	10	12

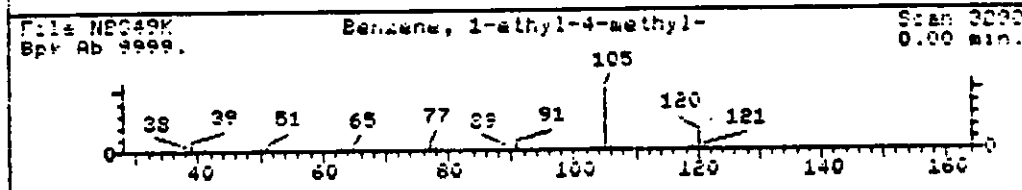
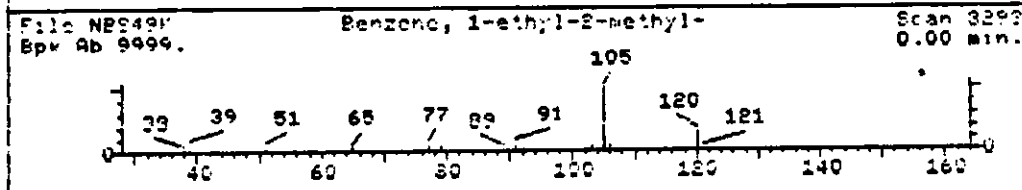
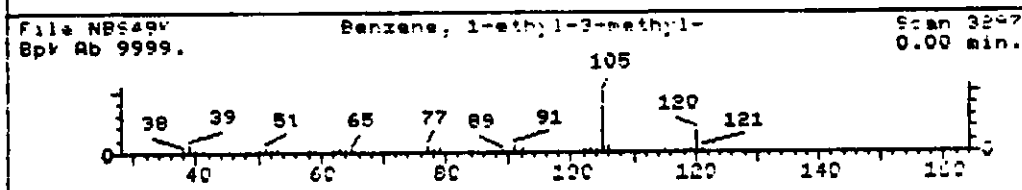
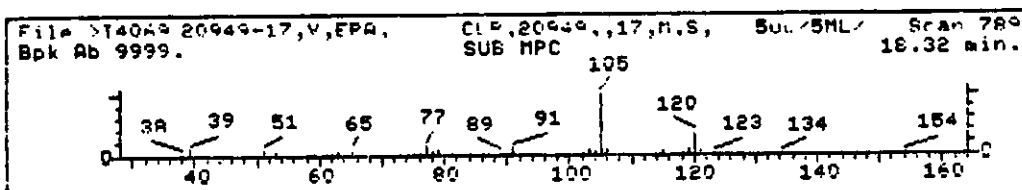


TIC NUMBER:12

- | | |
|--|------------|
| 1. Benzene, 1-ethyl-3-methyl- | 120 C9H12 |
| 2. Benzene, 1-ethyl-2-methyl- | 120 C9H12 |
| 3. Benzene, 1-ethyl-4-methyl- | 120 C9H12 |
| 4. Benzene, (1-methylethyl)- | 120 C9H12 |
| 5. Benzene, 1,2,3-trimethyl- | 120 C9H12 |
| 6. Benzene, 1,1'-(1-methyl-1,2-ethanediy1)bis- | 196 C15H16 |

Sample file: >I4069 Spectrum #: 789
 Search speed: 2 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	96*	620144	13671	NBS49K	81	6	1	0	100	5	72	96
2.	94*	611143	13669	NBS49K	75	10	1	0	100	7	68	93
3.	94*	622968	13672	NBS49K	75	10	1	0	100	7	68	93
4.	94*	98828	13667	NBS49K	75	12	1	0	100	7	68	93
5.	91*	526738	13674	NBS49K	80	20	0	0	60	33	50	94
6.	54	5814857	10954	NBS49K	72	27	2	0	91	25	22	26



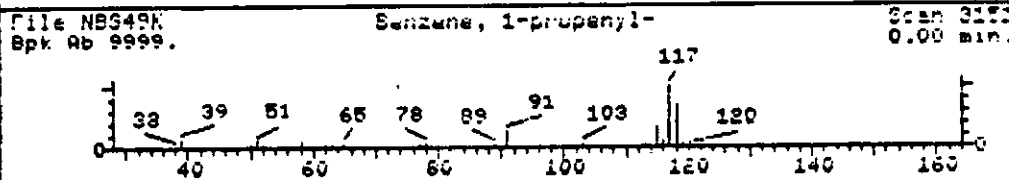
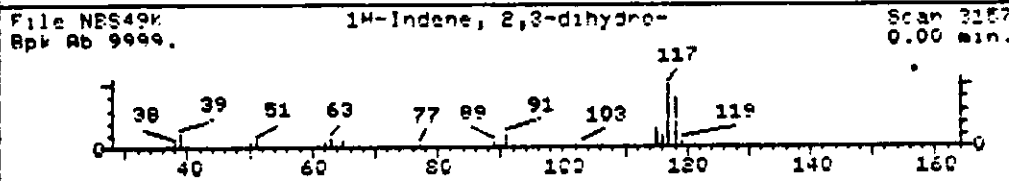
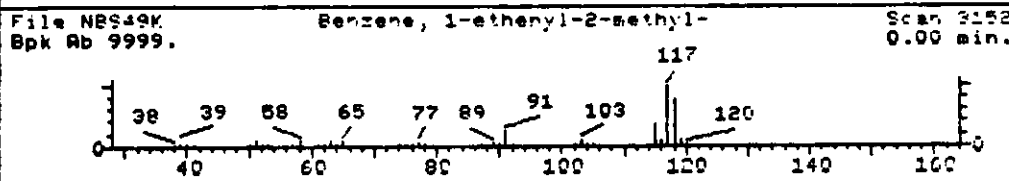
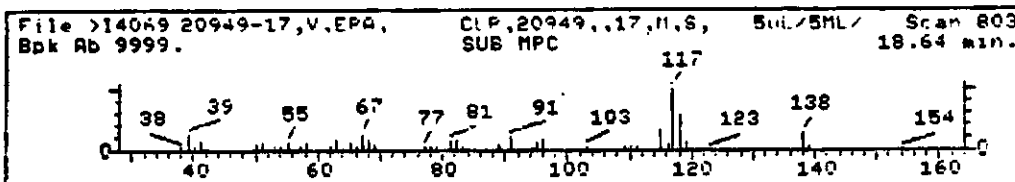
TIC NUMBER:13

1. Benzene, 1-ethenyl-2-methyl-
2. 1H-Indene, 2,3-dihydro-
3. Benzene, 1-propenyl-
4. Benzene, 1-ethenyl-3-methyl-
5. Benzene, ethenylmethyl-
6. Benzene, 1-ethenyl-4-methyl-

- 118 C9H10
- 118 C9H10
- 118 C9H10
- 118 C9H10
- 118 C9H10
- 118 C9H10

Sample file: >I4069 Spectrum #: 803
 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.	56*	611154	13346	NBS49K	58	35	2	1	74	28	24 36
2.	53*	496117	13350	NBS49K	56	44	2	0	72	26	24 33
3.	44*	637503	13345	NBS49K	54	44	2	1	70	31	16 27
4.	25*	100801	13349	NBS49K	37	59	2	0	56	48	7 15
5.	25*	25013154	13348	NBS49K	37	60	2	0	56	48	7 15
6.	25*	622979	13347	NBS49K	33	72	2	0	56	47	7 14

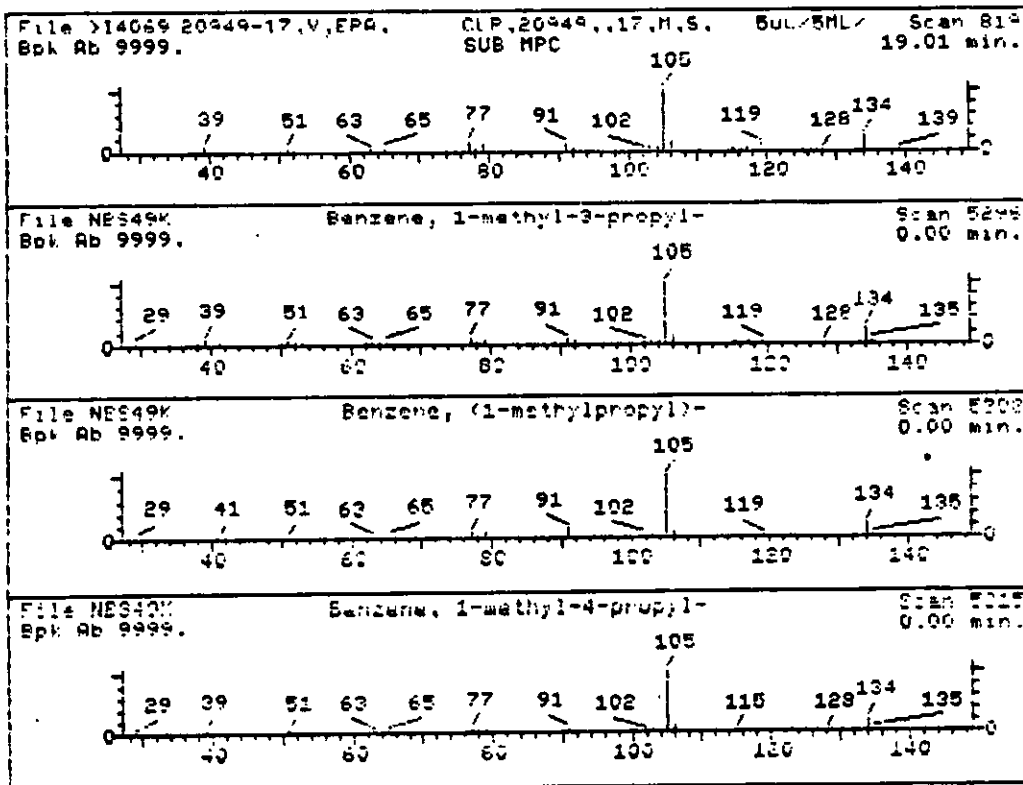


TIC NUMBER:14

- | | |
|---|------------|
| 1. Benzene, 1-methyl-3-propyl- | 134 C10H14 |
| 2. Benzene, (1-methylpropyl)- | 134 C10H14 |
| 3. Benzene, 1-methyl-4-propyl- | 134 C10H14 |
| 4. Benzene, 1-methyl-2-propyl- | 134 C10H14 |
| 5. Benzene, 1,1'-(1-methyl-1,2-ethanediy)bis- | 196 C15H16 |
| 6. Benzene, 1-(bromomethyl)-2-methyl- | 184 C8H9Br |

Sample file: >I4069 Spectrum #: 819
 Search speed: 2 Tilting option: S No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	95*	1074437	16249	NBS49K	74	13	0	0	100	10	68	95
2.	83*	135988	16252	NBS49K	59	24	0	0	83	12	51	77
3.	79*	1074551	16260	NBS49K	56	27	0	1	90	13	43	67
4.	79*	1074175	16264	NBS49K	54	29	0	0	100	13	43	67
5.	36	5814857	10954	NBS49K	52	47	2	0	100	29	14	13
6.	30	89929	11089	NBS49K	56	46	2	0	89	31	12	13



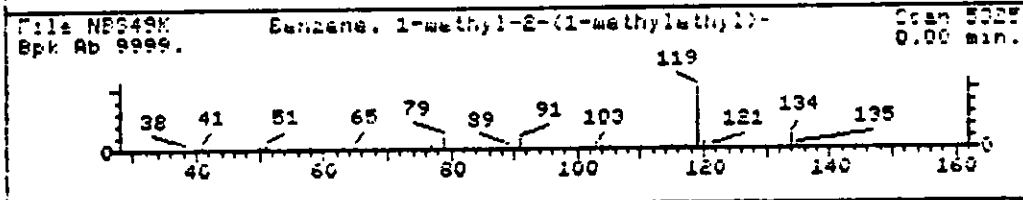
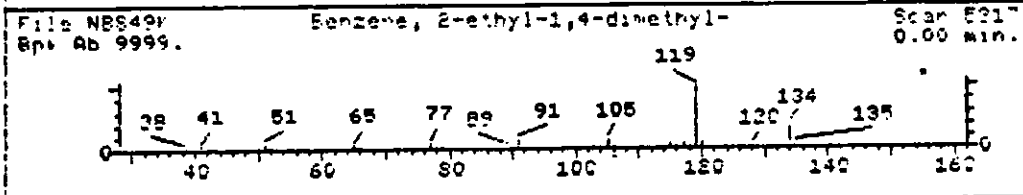
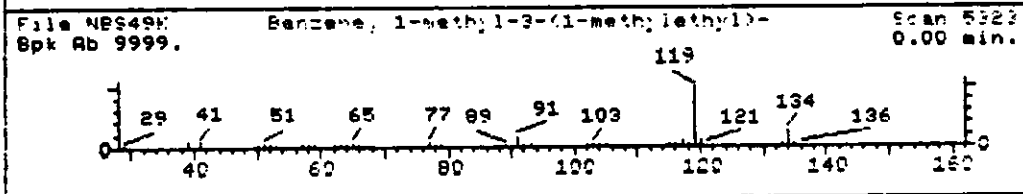
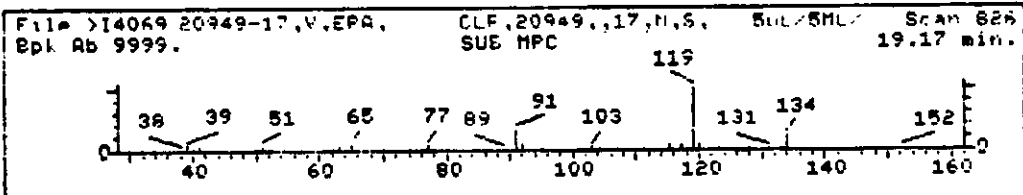
000570 AFT

TIC NUMBER: 15

- | | |
|---|------------|
| 1. Benzene, 1-methyl-3-(1-methylethyl)- | 134 C10H14 |
| 2. Benzene, 2-ethyl-1,4-dimethyl- | 134 C10H14 |
| 3. Benzene, 1-methyl-2-(1-methylethyl)- | 134 C10H14 |
| 4. Benzene, 1-ethyl-2,4-dimethyl- | 134 C10H14 |
| 5. Benzene, 4-ethyl-1,2-dimethyl- | 134 C10H14 |
| 6. Benzene, 1-ethyl-2,3-dimethyl- | 134 C10H14 |

Sample file: >I4069 Spectrum #: 826
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	535773	13538	NBS49K	66	23	1	0	67	1	66
2.	88*	1758889	13535	NBS49K	68	26	2	0	69	3	65
3.	87*	527844	13539	NBS49K	62	30	2	0	96	1	63
4.	87*	874419	13536	NBS49K	60	28	2	0	85	3	63
5.	87*	934805	13534	NBS49K	61	32	2	0	79	3	63
6.	87*	933982	13533	NBS49K	56	35	2	0	74	3	63

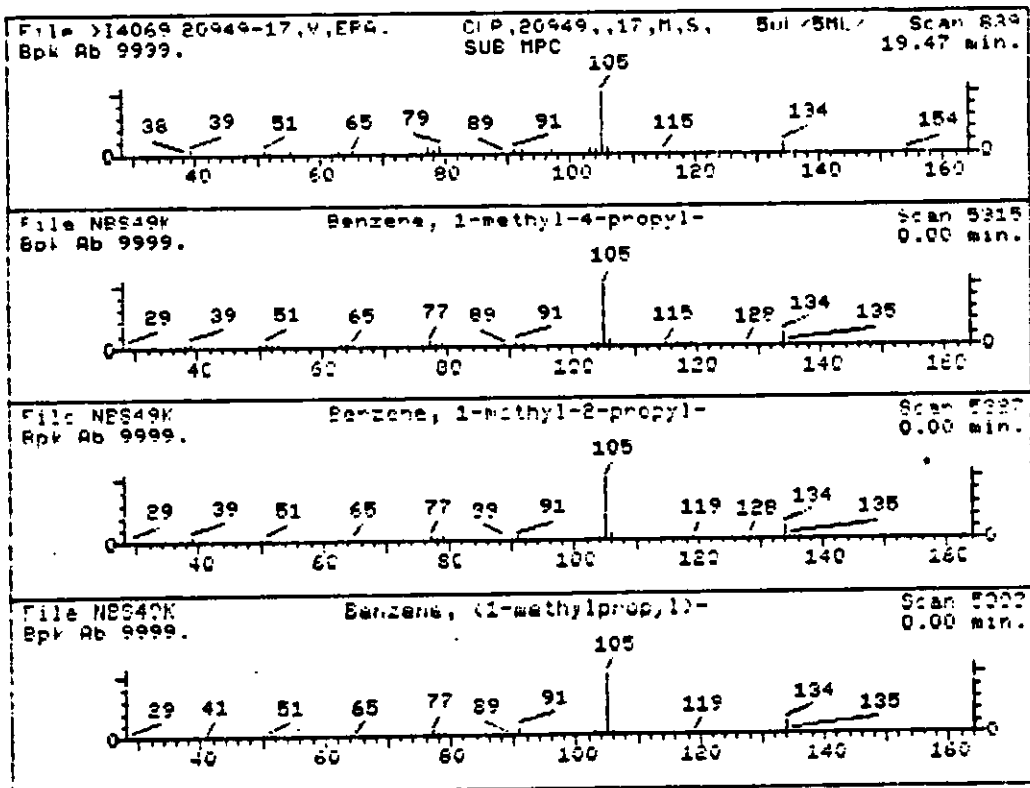


TIC NUMBER: 16

- | | |
|---|------------|
| 1. Benzene, 1-methyl-4-propyl- | 134 C10H14 |
| 2. Benzene, 1-methyl-2-propyl- | 134 C10H14 |
| 3. Benzene, (1-methylpropyl)- | 134 C10H14 |
| 4. Benzene, (1,3-dimethylbutyl)- | 162 C12H18 |
| 5. Benzene, (1-methyl-3-butenyl)- | 146 C11H14 |
| 6. Benzene, 1,1'-(1,2-dimethyl-1,2-ethanediy)bis- | 210 C16H18 |

Sample file: >I4069 Spectrum #: 839
 Search speed: 2 Tilting option: S No. of ion ranges searched: 52

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	1074551	16260	NBS49K	72	11	1	0	86	10	62 89
2.	75*	1074175	16264	NBS49K	61	22	1	0	82	16	35 69
3.	74*	135988	16252	NBS49K	61	22	2	0	83	12	39 48
4.	52	19219842	11065	NBS49K	35	44	2	0	100	20	20 12
5.	52	10340495	10939	NBS49K	59	21	2	0	89	18	20 19
6.	52	5789355	10901	NBS49K	53	37	2	0	100	20	20 18



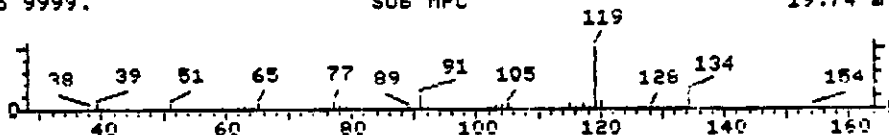
TIC NUMBER:17

1. Benzene, 4-ethyl-1,2-dimethyl-	134 C10H14
2. Benzene, 1-methyl-3-(1-methylethyl)-	134 C10H14
3. Benzene, 1-methyl-2-(1-methylethyl)-	134 C10H14
4. Benzene, 2-ethyl-1,3-dimethyl-	134 C10H14
5. Benzene, 1-ethyl-2,4-dimethyl-	134 C10H14
6. Benzene, methyl(1-methylethyl)-	134 C10H14

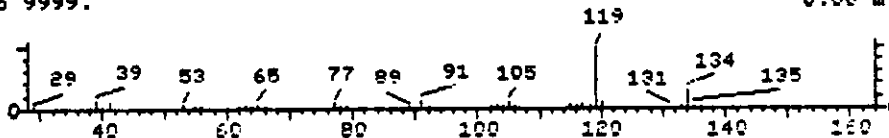
Sample file: >I4069 Spectrum #: 851
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_1	R_10	
1.	96*	934805	13534	NBS49K	77	16	0	0	70	3	72	94
2.	94*	535773	13538	NBS49K	71	18	0	0	74	1	72	92
3.	93*	527844	13539	NBS49K	83	9	1	1	85	1	68	86
4.	89*	2870044	13529	NBS49K	72	17	2	0	95	3	66	66
5.	89*	874419	13536	NBS49K	69	19	1	2	86	3	66	71
6.	87*	25155151	13531	NBS49K	62	28	2	0	100	3	63	49

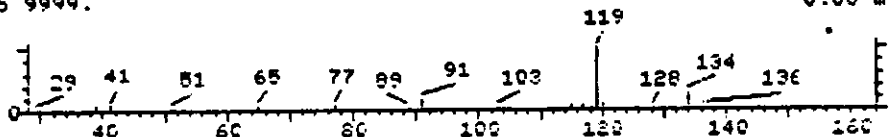
File >I4069 20949-17,V,EPA, CLP,20949,,17,H,S, 5ul,75ML Scan 851
 Bpk Ab 9999. SUB MPC 19.74 min.



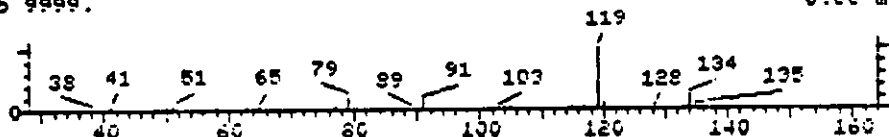
File NBS49K Benzene, 4-ethyl-1,2-dimethyl- Scan 5216
 Bpk Ab 9999. SUB MPC 0.00 min.



File NBS49K Benzene, 1-methyl-3-(1-methylethyl)- Scan 5223
 Bpk Ab 9999. SUB MPC 0.00 min.



File NBS49K Benzene, 1-methyl-2-(1-methylethyl)- Scan 5225
 Bpk Ab 9999. SUB MPC 0.00 min.



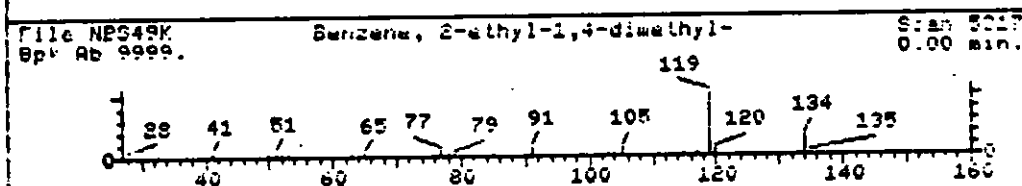
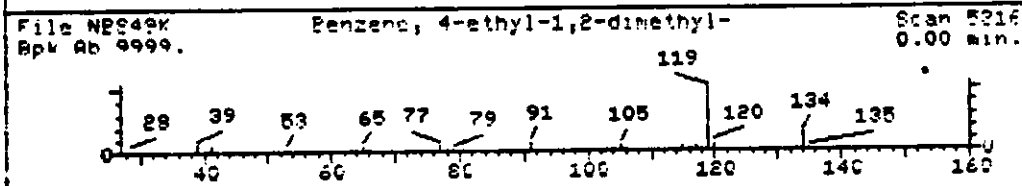
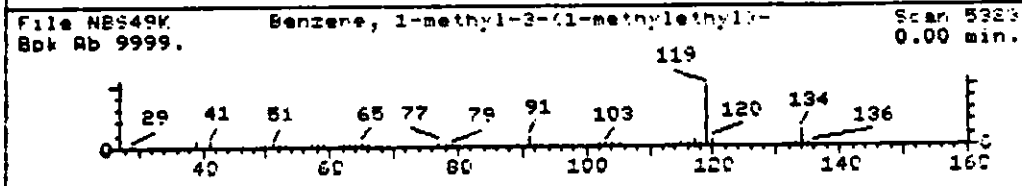
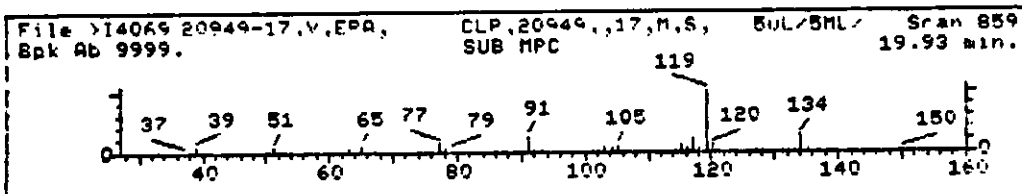
000573

TIC NUMBER:18

- | | |
|---|------------|
| 1. Benzene, 1-methyl-3-(1-methylethyl)- | 134 C10H14 |
| 2. Benzene, 4-ethyl-1,2-dimethyl- | 134 C10H14 |
| 3. Benzene, 2-ethyl-1,4-dimethyl- | 134 C10H14 |
| 4. Benzene, 1-methyl-2-(1-methylethyl)- | 134 C10H14 |
| 5. Benzene, 1-ethyl-2,4-dimethyl- | 134 C10H14 |
| 6. Benzene, methyl(1-methylethyl)- | 134 C10H14 |

Sample file: >I4069 Spectrum #: 859
 Search speed: 2 Tilting option: S No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	87*	535773	13538	NBS49K	73	16	0	1	93	14	55	89
2.	87*	934805	13534	NBS49K	72	21	0	0	92	14	55	89
3.	81*	1758889	13535	NBS49K	64	30	0	0	69	19	45	77
4.	75*	527844	13539	NBS49K	68	24	1	2	100	17	35	61
5.	75*	874419	13536	NBS49K	65	23	1	2	100	19	35	65
6.	74*	25155151	13531	NBS49K	67	23	2	1	100	14	39	49



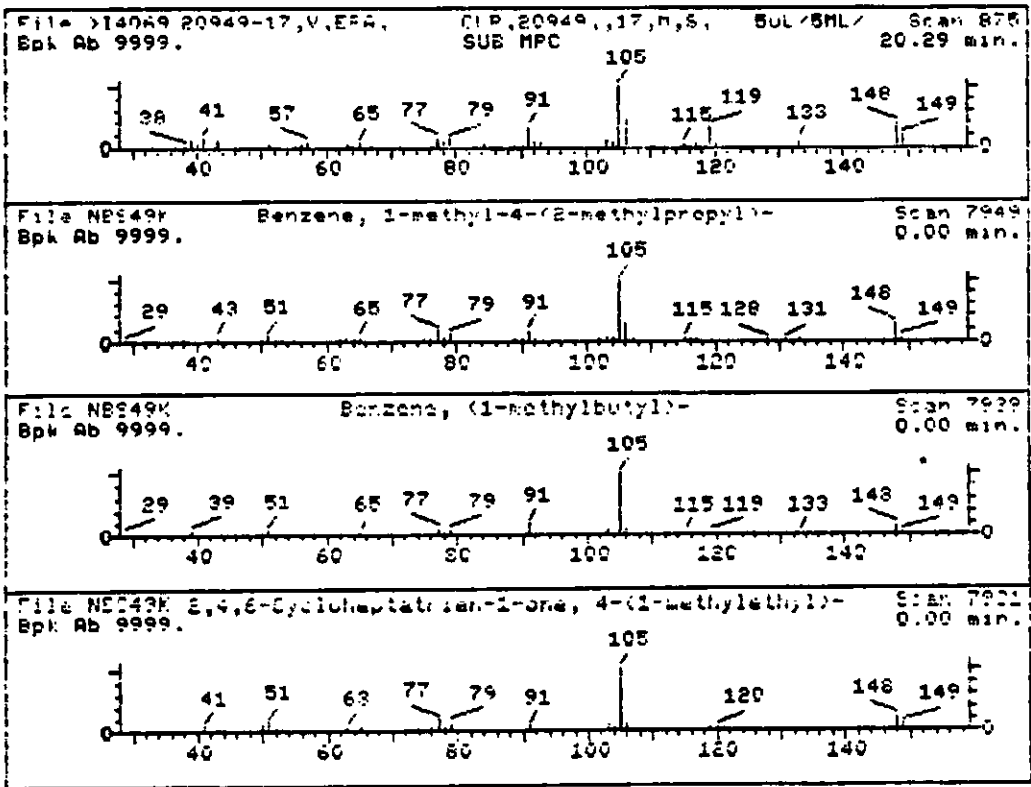
000574 R A F I

TIC NUMBER:19

- | | |
|--|-------------|
| 1. Benzene, 1-methyl-4-(2-methylpropyl)- | 148 C11H16 |
| 2. Benzene, (1-methylbutyl)- | 148 C11H16 |
| 3. 2,4,6-Cycloheptatrien-1-one, 4-(1-methylethyl)- | 148 C10H12O |
| 4. 2,4-Heptadien-6-ynal, (E,E)- | 106 C7H6O |
| 5. Benzene, (1,2-dimethylpropyl)- | 148 C11H16 |
| 6. Benzene, 1-(bromomethyl)-2-methyl- | 184 C8H9Br |

Sample file: >14069 Spectrum #: 875
 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.	71*	5161046	19044	NBS49K	51	44	0	0	89	30	29	61
2.	30*	2719520	19040	NBS49K	34	54	1	0	100	45	8	18
3.	26*	13656810	19036	NBS49K	33	71	2	0	81	43	8	14
4.	25*	7200046	11004	NBS49K	25	63	2	0	100	50	7	14
5.	25*	4481305	19039	NBS49K	22	67	0	0	88	46	7	16
6.	25	89929	11089	NBS49K	68	34	2	2	100	46	7	17



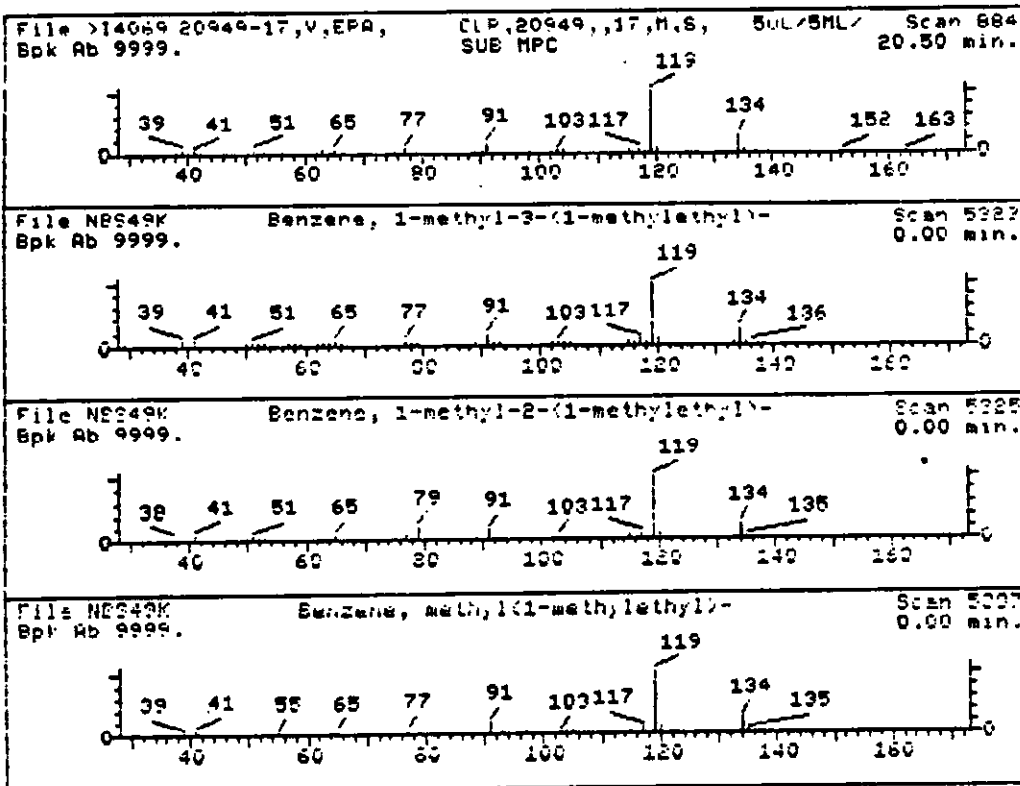
000575
DRAFT

TIC NUMBER:20

- | | |
|---|------------|
| 1. Benzene, 1-methyl-3-(1-methylethyl)- | 134 C10H14 |
| 2. Benzene, 1-methyl-2-(1-methylethyl)- | 134 C10H14 |
| 3. Benzene, methyl(1-methylethyl)- | 134 C10H14 |
| 4. Benzene, 2-ethyl-1,3-dimethyl- | 134 C10H14 |
| 5. Benzene, 1-ethyl-2,4-dimethyl- | 134 C10H14 |
| 6. Benzene, (1,1-dimethylethyl)- | 134 C10H14 |

Sample file: >I4069 Spectrum #: 884
 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.	83*	535773	13538	NBS49K	68	21	2	2	77	7	54	50
2.	83*	527844	13539	NBS49K	68	24	1	-2	80	7	54	55
3.	83*	25155151	13531	NBS49K	66	24	2	0	81	7	54	56
4.	81*	2870044	13529	NBS49K	56	33	2	0	97	7	53	42
5.	81*	874419	13536	NBS49K	55	33	2	0	100	7	53	41
6.	60*	98066	13528	NBS49K	37	58	3	0	100	11	30	13



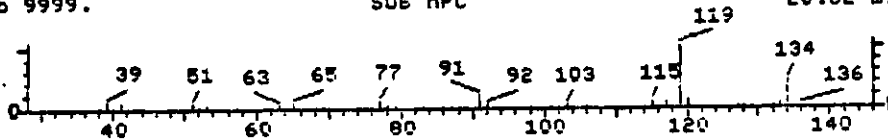
TIC NUMBER:21

- | | |
|-----------------------------------|------------|
| 1. Benzene, 1,2,3,4-tetramethyl- | 134 C10H14 |
| 2. Benzene, 2-ethyl-1,4-dimethyl- | 134 C10H14 |
| 3. Benzene, 1-ethyl-3,5-dimethyl- | 134 C10H14 |
| 4. Benzene, 1,2,3,5-tetramethyl- | 134 C10H14 |
| 5. Benzene, 4-ethyl-1,2-dimethyl- | 134 C10H14 |
| 6. Benzene, 1-ethyl-2,3-dimethyl- | 134 C10H14 |

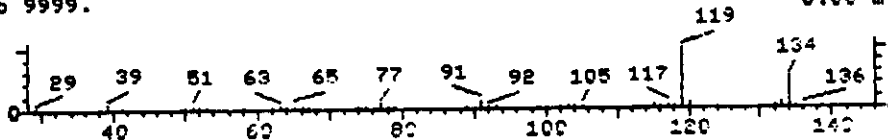
Sample file: >I4069 Spectrum #: 898
 Search speed: 2 Tilting option: S No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	488233	16251	NBS49K	75	19	1	3	67	1	66 72
2.	88*	1758889	13535	NBS49K	66	28	2	0	97	1	65 50
3.	87*	934747	13532	NBS49K	66	29	2	1	100	1	63 46
4.	87*	527537	16261	NBS49K	61	32	2	0	80	4	63 46
5.	87*	934805	13534	NBS49K	58	35	2	0	99	1	63 43
6.	86*	933982	13533	NBS49K	59	32	2	1	100	3	60 38

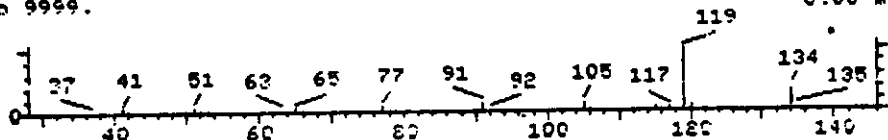
File >I4069 20949-17.V,EP4, CLP,20949,,17,M,S, Sol./BML/ Scan 898
 Bpk Ab 9999. SUB MPC 20.82 min.



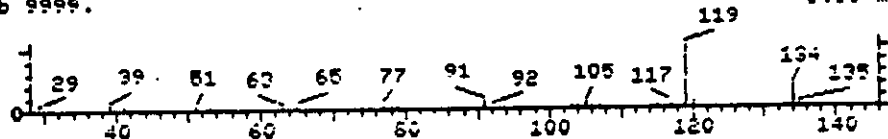
File NBS49K Benzene, 1,2,3,4-tetramethyl- Scan 8902
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 2-ethyl-1,4-dimethyl- Scan 8917
 Bpk Ab 9999. 0.00 min.



File NBS49K Benzene, 1-ethyl-3,5-dimethyl- Scan 8909
 Bpk Ab 9999. 0.00 min.



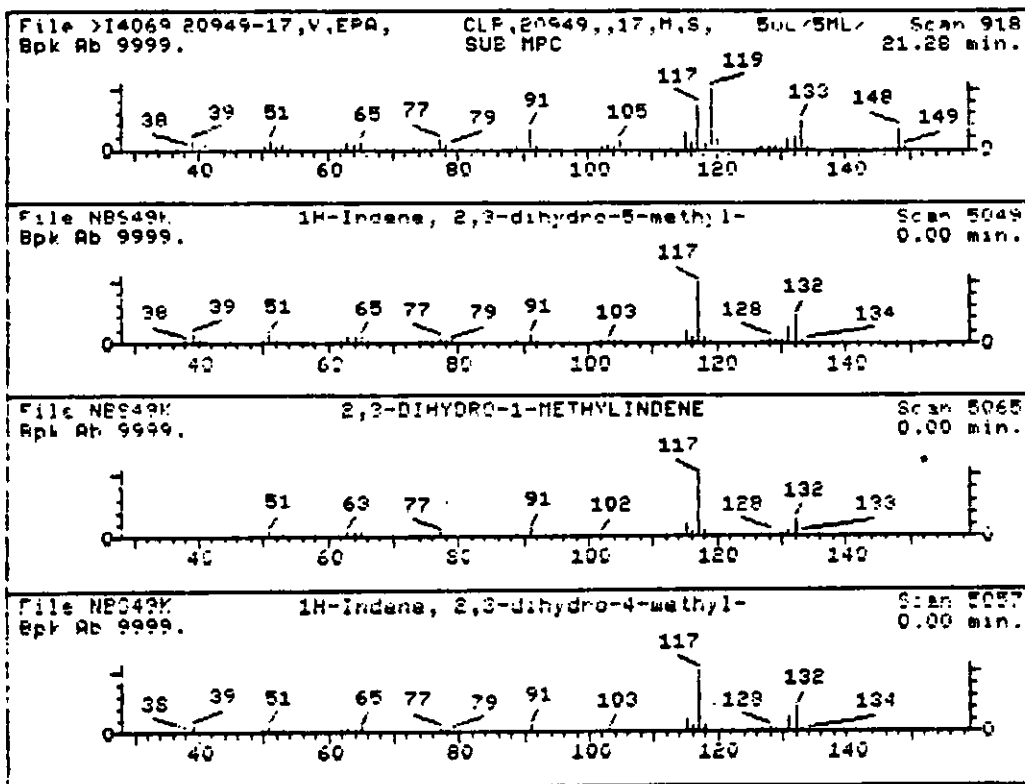
000577AFT

TIC NUMBER:22

- | | |
|--------------------------------------|------------|
| 1. 1H-Indene, 2,3-dihydro-5-methyl- | 132 C10H12 |
| 2. 2,3-DIHYDRO-1-METHYLINDENE | 132 C10H12 |
| 3. 1H-Indene, 2,3-dihydro-4-methyl- | 132 C10H12 |
| 4. Benzene, 1-methyl-2-(2-propenyl)- | 132 C10H12 |
| 5. 1H-Indene, 2,3-dihydro-1-methyl- | 132 C10H12 |
| 6. Benzene, (2-methyl-1-propenyl)- | 132 C10H12 |

Sample file: >I4069 Spectrum #: 918
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	65*	874351	15898	NBS49K	64	42	1	2	52	32	24	54
2.	61*	27133933	13208	NBS49K	47	48	0	2	73	33	22	46
3.	51*	824226	15903	NBS49K	64	43	2	1	57	32	20	35
4.	48	1587048	15897	NBS49K	80	27	1	2	73	34	20	32
5.	43*	767588	13205	NBS49K	47	50	1	2	73	33	16	26
6.	35	768490	15906	NBS49K	70	36	2	1	73	34	12	18



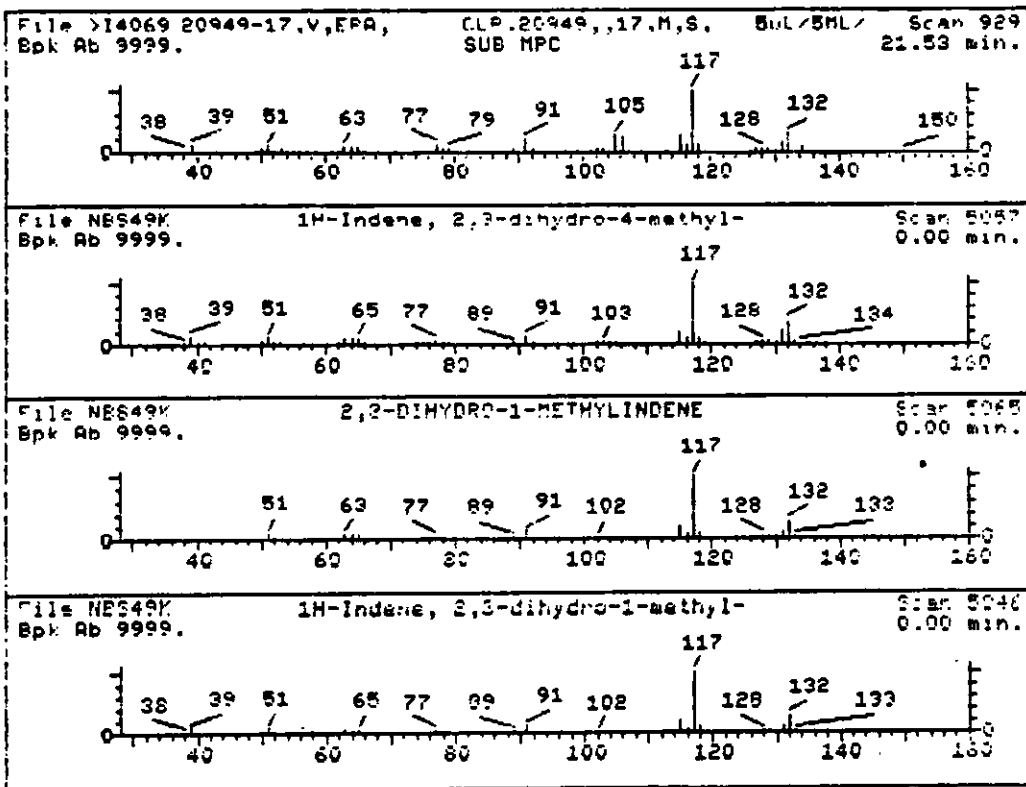
000573
DRAFT

TIC NUMBER:23

- | | |
|--|------------|
| 1. 1H-Indene, 2,3-dihydro-4-methyl- | 132 C10H12 |
| 2. 2,3-DIHYDRO-1-METHYLINDENE | 132 C10H12 |
| 3. 1H-Indene, 2,3-dihydro-1-methyl- | 132 C10H12 |
| 4. Benzene, (1-methyl-1-propenyl)-, (E)- | 132 C10H12 |
| 5. Benzene, 2-ethenyl-1,4-dimethyl- | 132 C10H12 |
| 6. 1H-Indene, 2,3-dihydro-5-methyl- | 132 C10H12 |

Sample file: >I4069 Spectrum #: 929
 Search speed: 2 Tilting option: S No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	68*	824226	15903	NBS49K	70	37	2	0	69	24	30	50
2.	66*	27133933	13208	NBS49K	61	34	2	0	100	16	31	44
3.	63*	767588	13205	NBS49K	57	40	2	0	100	16	30	35
4.	61*	768003	15889	NBS49K	73	33	2	3	55	33	22	46
5.	61*	2039896	15893	NBS49K	65	27	2	2	49	33	22	46
6.	41*	874351	15898	NBS49K	59	47	2	0	59	44	14	36



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 000579

20949-18

Lab Name: ENSECO	Contract:
Lab Code: ENSECO	Case No.: 20949
Matrix: (soil/water) SOIL	SAS No.:
Sample wt/vol: 4.0 (g/mL) G	SDG No.:
Level: (low/med) MED	Lab Sample ID: 20949-18
% Moisture: not dec. 8	Lab File ID: D1757
GC Column: CAP	ID: 0.530 (mm)
Soil Extract Volume: 10000 (uL)	Date Received: 02/15/92
	Date Analyzed: 02/27/92
	Dilution Factor: 1.0
	Soil Aliquot Volume: 100 (uL)

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

CAS NO.	COMPOUND	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	1400 U
67-64-1	Acetone	1400 U
75-15-0	Carbon Disulfide	1400 U
75-35-4	1,1-Dichloroethene	1400 U
75-34-3	1,1-Dichloroethane	1400 U
540-59-0	1,2-Dichloroethene (total)	1400 U
67-66-3	Chloroform	1400 U
107-06-2	1,2-Dichloroethane	1400 U
78-93-3	2-Butanone	1400 U
71-55-6	1,1,1-Trichloroethane	1400 U
56-23-5	Carbon Tetrachloride	1400 U
75-27-4	Bromodichloromethane	1400 U
78-87-5	1,2-Dichloropropane	1400 U
10061-01-5	cis-1,3-Dichloropropene	1400 U
79-01-6	Trichloroethene	1400 U
124-48-1	Dibromochloromethane	1400 U
79-00-5	1,1,2-Trichloroethane	1400 U
71-43-2	Benzene	1400 U
10061-02-6	trans-1,3-Dichloropropene	1400 U
75-25-2	Bromoform	1400 U
108-10-1	4-Methyl-2-Pentanone	1400 U
591-78-6	2-Hexanone	1400 U
127-18-4	Tetrachloroethene	1400 U
79-34-5	1,1,2,2-Tetrachloroethane	1400 U
108-88-3	Toluene	560 J
108-90-7	Chlorobenzene	1400 U
100-41-4	Ethylbenzene	880 J
100-42-5	Styrene	1400 U
1330-20-7	Xylene (total)	6400

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000580
EPA SAMPLE NO.

20949-18

Lab Name: ENSECO

Contract:

Lab Code: ENSECO

Case No.: 20949

SAS No.:

SDG No.:

Matrix: (soil/water) SOIL

Lab Sample ID: 20949-18

Sample wt/vol: 4.0 (g/mL) G

Lab File ID: D1757

Level: (low/med) MED

Date Received: 02/15/92

% Moisture: not dec. 8

Date Analyzed: 02/27/92

GC Column: CAP ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 10000 (uL)

Soil Aliquot Volume: 100 (uL)

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

Number TICs found: 15

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-87-2	Cyclohexane, methyl-	11.65	1100	JN
2. 592-27-8	Heptane, 2-methyl-	13.15	10000	JN
3. 589-81-1	Heptane, 3-methyl-	13.40	5500	JN
4. 2213-23-2	Heptane, 2,4-dimethyl-	14.27	15000	JN
5. 6876-23-9	Cyclohexane, 1,2-dimethyl-,	14.42	1100	JN
6. 75-83-2	Butane, 2,2-dimethyl-	15.20	1900	JN
7. 1678-91-7	Cyclohexane, ethyl-	15.39	6000	JN
8. 111-84-2	Nonane	17.37	1800	JN
9. 6261-22-9	2-Pentyn-1-ol	18.37	1300	JN
10. 2216-30-0	Heptane, 2,5-dimethyl-	19.19	3200	JN
11. 124-18-5	Decane	20.24	6700	JN
12. 526-73-8	Benzene, 1,2,3-trimethyl-	20.67	1500	JN
13. 18729-48-1	Cyclopentanol, 3-methyl-	20.82	1900	JN
14. 22058-71-5	Methylamine, N-(1-methylhexy	21.22	3500	JN
15. 493-02-7	Naphthalene, decahydro-, tra	21.82	1000	JN

000581

QUANT REPORT

Page 1

Operator ID: DUEY1 Quant Rev: 7 Quant Time: 920227 17:33
 Output File: ^D1757::QT Injected at: 920227 17:04
 Data File: >D1757::D2 Dilution Factor: 1.00000
 Name: 20949-18,U,EPA, Instrument ID: D
 Misc: CLP,20949,,18,M,S, 100UL/5ML/100%/4G/10ML CAW D

ID File: IDEPAD::ID
 Title: ID FILE CLP INST. D + THF
 Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*CI01 BROMOCHLOROMETHANE	9.13	128.0	12060	50.00	UG/L	98
2)	CS15 1,2-DICHLOROETHANE-D4	10.17	65.0	19159	45.76	UG/L	80
20)	*CI10 1,4-DIFLUOROBENZENE	11.09	114.0	48172	50.00	UG/L	100
32)	*CI20 CHLOROBENZENE-D5	16.39	117.0	34822	50.00	UG/L	87
33)	CS05 TOLUENE-DB	13.65	98.0	44586	51.19	UG/L	93
4)	CS10 BROMOFLUOROBENZENE	18.85	95.0	23717	50.12	UG/L	100
35)	C230 TOLUENE	13.76	91.0	3361	4.14	UG/L	96
40)	C240 ETHYLBENZENE	16.78	106.0	1933	6.50	UG/L	96
41)	UJNK M&P-XYLENES	17.03	106.0	13912	37.55	UG/L	85
42)	U029 O-XYLENE	17.79	106.0	3031	8.56	UG/L	95

* Compound is ISTD

000582

MS data file header from : >D1757::D2

Sample: 20949-18,U,EPA, Operator: DUEY1 REG. GRP. 2/27/92 17:04
Misc : CLP,20949,,18,M,S, 100UL/5ML/100%/4G/10ML CAW D
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: D
Method file: SAMMD Tuning file: MTBFBD No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp.: 0

Chromatographic temperatures :	-10.	100.	118.	210.	0.
Chromatographic times, min. :	1.5	0.0	0.0	4.7	0.0
Chromatographic rate, deg/min:	6.0	8.3	70.0	.5	0.0

CONCENTRATION DILUTION INFORMATION

rep_units	UG/KG	Desired reporting units
samp_amt	4G	amt of sample taken
ext_vol	5ML	final extract volume
q_units	UG/L	cal units from quant
ext_dil	100	dilution factor
%moist	N/A	%moisture for soil
int_ext_vol	10	intermediate extract vol/M.L. ext vo
int_ext_vol_u	.100	intermediate extract vol/M.L. vol US
spiked	S	Surrogate added at S(tart)/E(nd)
matrix	S	sample matrix W(ater)/S(oil)
infect	125	calcd runfactor
surfact	.500	calcd surr vol

Performance Check: >D1750 Injection Time: 2/27/92 10:32
Sample : >D1757 Injection Time: 2/27/92 17:04
Elapsed Time: 0 Y 0 D 6:32
Sample: ^D1757 Calibration Stds.: ^D1751,

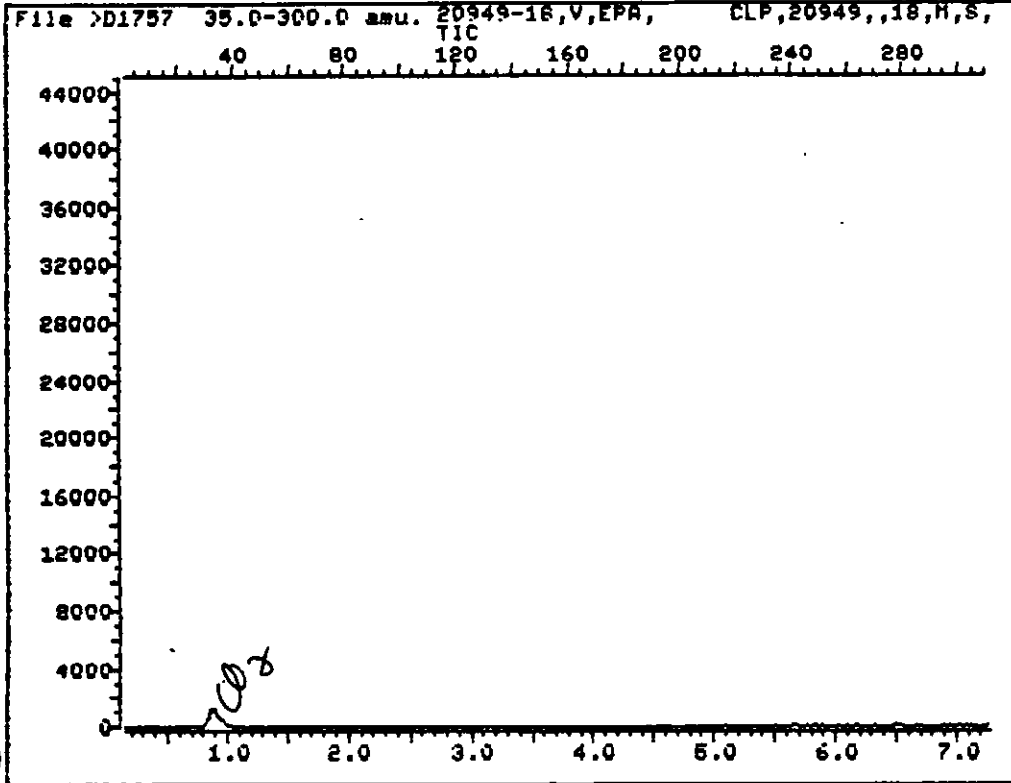
000583

TIC = Tentatively Identified Compound

TC = Target Compound

SC = Spike Compound

TOTAL ION CHROMATOGRAM



Data File: >D1757::D2

Quant Output File: ^D1757::QT

Name: 20949-18,U,EPA,

Instrument ID: D

Misc: CLP,20949,,18,M,S, 100UL/5ML/100%/4G/10ML CAW D

Id File: IDEPAD::ID

Title: ID FILE CLP INST. D + THF

Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1

Quant Time : 920227 17:33

Injected at: 920227 17:04

Page 1 of 4

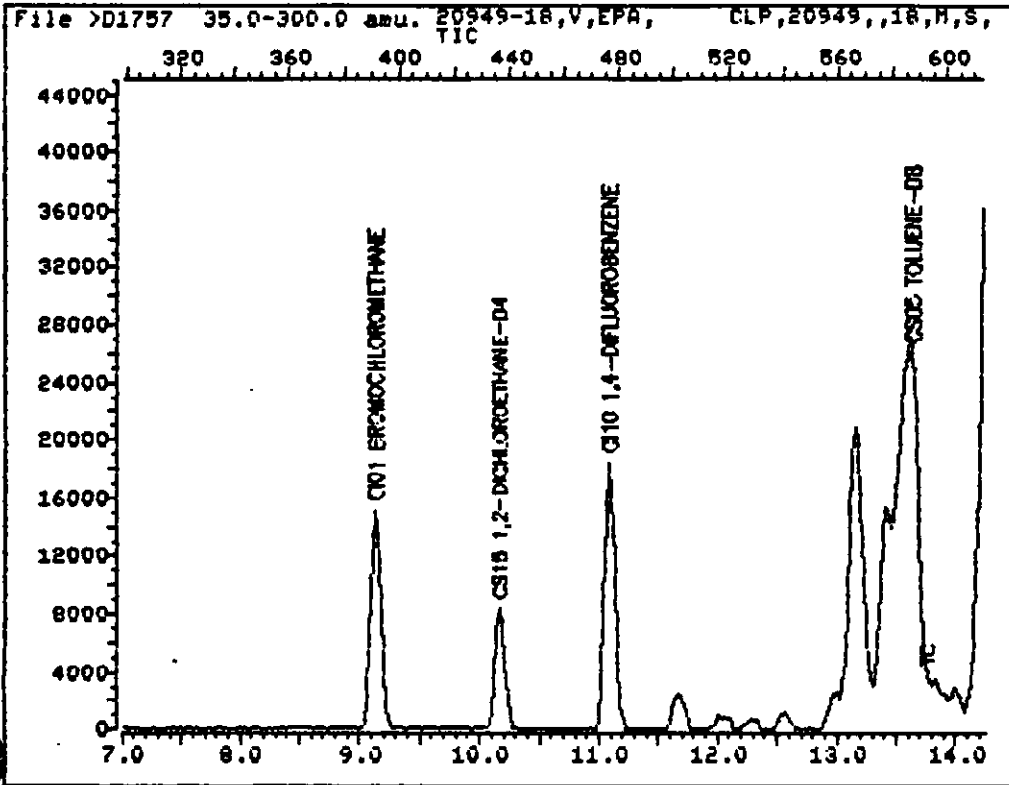
000584

TC = Tentative Compound

TC = Tentative Compound

SC = Standard Compound

TOTAL ION CHROMATOGRAM



Data File: >D1757::D2

Quant Output File: ^D1757::QT

Name: 20949-18,V,EPA,

Instrument ID: D

Misc: CLP,20949,,18,M,S,

100UL/5ML/100%/4G/10ML CAW D

Id File: IDEPAD::ID

Title: ID FILE CLP INST. D + THF

Last Calibration: 920108 14:39

Last Qcal Time: 920227 10:56

Operator ID: DUEY1

Quant Time : 920227 17:33

Injected at: 920227 17:04