IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203·261·4458
Fax 203·268·5346

SAMPLE DATA PACKAGE

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

APPENDIX A
NYSDEC ANALYTICAL DATA FORMS

JOB # : 3093-0148

CLIENT NAME : ROUX ASSOCIATES

PROJECT ID : AMTRAK SUNNYSIDE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

JOB # : 3093-0148

CUSTOMER SAMPLE CODE	LABORATORY SAMPLE CODE	ANALYTICAL REQUIREMENTS*						
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER	*OTHER
MHW-5	0148001				X			
MHW-3	0148002				X			
MHW-7	0148003				X			
MHW-6	0148004				X			
MHS-3	0148005				X			
FIELD BLANK 02/08/93	0148006				X			
MW-36	0148007				X			
MW-27	0148008				X			
MW-45	0148009	X	X		X	X		
MHW-1	0148010	X	X		X	X		
MW-43	0148011	X	X		X	X		
MW-44	0148012	X	X		X	X		
MW-46	0148013	X	X		X	X		
MW-35	0148014	X	X		X	X		
MW-42	0148015	X	X					
MHW-2	0148016	X	X		X	X		
REPLICATE	0148017	X	X		X	X		
MW-1	0148018				X	X		
MW-23	0148019	X	X		X			
MW-47	0148020	X	X		X	X		

* Check Appropriate Boxes

* CLP, Non-CLP
* HSL, Priority Pollutant

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0003

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOA - TCL + TIC's
ANALYSIS

JOB # : 3093-0149

SAMPLE ID	MATRIX	DATE COLLECTED	DATE RECVD AT LAB	DATE EXTRACTED	DATE ANALYZED
MW-45	Aqueous	02/09/93	02/10/93	NA	02/12/93
MW-1	Aqueous		02/10/93		
MW-43	Aqueous		02/10/93		02/13/93
MW-44	Aqueous		02/10/93		
MW-46	Aqueous		02/10/93		
MW-35	Aqueous		02/10/93		
MW-42	Aqueous		02/10/93		
MW-2	Aqueous		02/10/93		
REPLICATE	Aqueous		02/10/93		
MW-23	Aqueous		02/10/93		
MW-47	Aqueous		02/10/93		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
B/N-A - TCL + TIC's
ANALYSIS

JOB # : 9303-0148

SAMPLE ID	MATRIX	DATE COLLECTED	DATE RECVD AT LAB	DATE EXTRACTED	DATE ANALYZED
MW-45	Aqueous	02/09/93	02/10/93	02/11/93	02/16/93
MW-1	Aqueous		02/10/93		
MW-43	Aqueous		02/10/93		
MW-44	Aqueous		02/10/93		
MW-46	Aqueous		02/10/93		
MW-35	Aqueous		02/10/93		02/19/93
MW-42	Aqueous		02/10/93		
MW-2	Aqueous		02/10/93		
REPLICATE	Aqueous		02/10/93		
MW-23	Aqueous		02/10/93		
MW-47	Aqueous		02/10/93		
mw-45ms					02/16/93
mw-45msd					
mw-45msb		NA			
QC CHECK STD					

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0005

SAMPLE PREPARATION AND ANALYSIS SUMMARY
B/N-A - TCL + TIC's
ORGANIC ANALYSIS

JOB # : 3093-0146

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
MW-45	Aqueous	NYSDEC/91	CONT	NONE	1.0
MW-1	Aqueous				
MW-43	Aqueous				
MW-44	Aqueous				
MW-46	Aqueous				
MW-35	Aqueous				
MW-42	Aqueous				
MW-2	Aqueous				
REPLICATE	Aqueous				
MW-23	Aqueous				
MW-47	Aqueous				
MW-45MS					
MW-45MSD					
MW-45MSB					
QC CHECK STD					

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PCB
ORGANIC ANALYSIS

JOB # : 3093-0143

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
MHW-5	Aqueous	NYS89	SEPF	N	1.0
MHW-3	Aqueous	↓	↓	↓	1
MHW-7	Aqueous				5
MHW-6	Aqueous				1.0
MHS-3	Soil	NYS91	SONIC	GPC & Florisil	
FIELD BLANK 02/08/93	Aqueous	NYS89	SEPF	N	
MW-36	OIL	NYS91	Weighed out	N	
MW-27	Aqueous	NYS89	SEPF	SULFUR C/U	
MW-45	Aqueous			N	
MHW-1	Aqueous			ACID + SULFUR C/U	
MW-43	Aqueous			N	
MW-44	Aqueous				
MW-46	Aqueous				
MW-35	Aqueous			ACID + SUL C/U	
MHW-2	Aqueous			ACID + SUL C/U	
REPLICATE	Aqueous			N	
MW-1	Aqueous				
-23	Aqueous				
MW-47	Aqueous	↓	↓	↓	↓

0064

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PCB
ANALYSIS

JOB # : 3093-0148

SAMPLE ID	MATRIX	DATE COLLECTED	DATE RECVD AT LAB	DATE EXTRACTED	DATE ANALYZED
MHW-5	Aqueous		02/09/93	02-10-93	03-02-93
MHW-3	Aqueous		02/09/93		03-02-93
MHW-7	Aqueous		02/09/93		03-02-93
MHW-6	Aqueous		02/09/93		03-02-93
MHS-3	Soil		02/09/93	2/11/93 ~~CLP 3/90~~	3/9/93
FIELD BLANK 02/08/93	Aqueous		02/09/93	02-10-93	03-02-93
MW-36	OIL		02/09/93	2/11/93 ~~3/90~~	3/10/93
MW-27	Aqueous		02/09/93	02-10-93	03-03-93
MW-45	Aqueous		02/10/93	02-11-93	03-02-93
MHW-1	Aqueous		02/10/93		03-03-93
MW-43	Aqueous		02/10/93		03-02-93
MW-44	Aqueous		02/10/93		03-02-93
MW-46	Aqueous		02/10/93		03-02-93
MW-35	Aqueous		02/10/93		03-09-93
MHW-2	Aqueous		02/10/93		03-09-93
REPLICATE	Aqueous		02/10/93		03-03-93
MW-1	Aqueous		02/10/93		03-09-93
MW-23	Aqueous		02/10/93		03-03-93
MW-47	Aqueous		02/10/93		03-03-93

~~REPLICATE~~ — V — ~~2/10/93~~ ~~02-11-93~~ 03/11/93

3/16/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

ICAP

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE ANALYZED	DATE ANALYZED
MW-4	Aqueous	TAL METALS	02/10/93	2/17/93	3/2/93
MW-1	Aqueous	TAL METALS	02/10/93		
MW-3	Aqueous	TAL METALS	02/10/93		
MW-11	Aqueous	TAL METALS	02/10/93		
MW-10	Aqueous	TAL METALS	02/10/93		
MW-12	Aqueous	TAL METALS	02/10/93		
MW-2	Aqueous	TAL METALS	02/10/93		
DUPLICATE	Aqueous	TAL METALS	02/10/93		
MW	Aqueous	TAL METALS	02/10/93		
MW-17	Aqueous	TAL METALS	02/10/93		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

309 # : 3093-0148

Furnace

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
MW-45	Aqueous	TAL METALS	02/10/93	2/17/93	2/19-20 11/93
MW-1	Aqueous	TAL METALS	02/10/93		
MW-43	Aqueous	TAL METALS	02/10/93		
MW-44	Aqueous	TAL METALS	02/10/93		
MW-46	Aqueous	TAL METALS	02/10/93		
MW-35	Aqueous	TAL METALS	02/10/93		
MW-2	Aqueous	TAL METALS	02/10/93		
REPLICATE	Aqueous	TAL METALS	02/10/93		
	Aqueous	TAL METALS	02/10/93		
MW-47	Aqueous	TAL METALS	02/10/93		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

JOB # : 3093-0145

Mercury

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
MW-45	Aqueous	TAL METALS	02/10/93	2/25/93	2/26/93
MW-1	Aqueous	TAL METALS	02/10/93		
MW-42	Aqueous	TAL METALS	02/10/93		
MW-44	Aqueous	TAL METALS	02/10/93		
MW-46	Aqueous	TAL METALS	02/10/93		
MW-35	Aqueous	TAL METALS	02/10/93		
MW-2	Aqueous	TAL METALS	02/10/93		
REPLICATE	Aqueous	TAL METALS	02/10/93		
	Aqueous	TAL METALS	02/10/93		
MW-47	Aqueous	TAL METALS	02/10/93		

ILAP

Customer Sample ID	Matrix	Analysis Requested	Preservation	Matrix Modifier	Dilution Factor
MW-15	Aqueous	CLP	HNO_3, HCl	N/A	1/1
MW-	Aqueous				
MW-1	Aqueous				
MW-44	Aqueous				
MW-16	Aqueous				
MW-13	Aqueous				
MW-2	Aqueous				
DUPLICATE	Aqueous				
MW-1	Aqueous				
MW-17	Aqueous				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0145

Furnace As, Se

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
MW-45	Aqueous	CLP	$HNO_3 + H_2O_2$	Nickel Nitrate	1:1
MPW-1	Aqueous	↓	↓	↓	↓
MW-43	Aqueous				
MW-44	Aqueous				
MW-46	Aqueous				1:1
MW-35	Aqueous				1:2
MMW-2	Aqueous				1:1
REPLICATE	Aqueous				↓
MW-1	Aqueous				
MW-47	Aqueous	↓	↓	↓	1:1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0145

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LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
MW-45	Aqueous	CLP	HNO3, H2O2	H2SO4	1:1
MW-1	Aqueous				
MW-43	Aqueous				
MW-44	Aqueous				
MW-46	Aqueous				
MW-35	Aqueous				
MW-2	Aqueous				
REPLICATE	Aqueous				
MW-1	Aqueous				
MW-47	Aqueous				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # - 3093-0149

Furnace Pb

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
MW-45	Aqueous	CLP	HNO3, H2O2	m/NH4NO3, Mg(NO3)2	1:1
MW-1	Aqueous				
MW-13	Aqueous				
MW-44	Aqueous				1:1
MW-46	Aqueous				1:10
MW-35	Aqueous				1:10
MW-2	Aqueous				1:2
REPLICATE	Aqueous				1:1
MW-1	Aqueous				
MW-47	Aqueous				1:1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0149

Mercury

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
MW-45	Aqueous	CLP	Manual Cvl. Vapor	N/A	1:1
MW-1	Aqueous				
MW-41	Aqueous				
MW-44	Aqueous				
MW-46	Aqueous				
MW-35	Aqueous				
MW-2	Aqueous				
REPLICATE	Aqueous				
MW-1	Aqueous				
MW-47	Aqueous				

SDG NARRATIVE

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203·261·4458
Fax 203·268·5346 016

30930-0148
ROUX ASSOCIATES

SDG Narrative

Volatile Organics - No problems were encountered.

Semi-Volatile Organics - No problems were encountered.

PCB's - Sample MW-27 required sulfur cleanup; samples MHW-1, MW-35, MHW-2 and method blank PBLK06 required acid and sulfur cleanup.

Sample MHW-7 was diluted 1:5.

DBC recovery was out of advisory QC limits for samples MHW-7, MW-47, MW-45 STD and method blank PBLK00.

Aroclor-1248 was out of RT windows on the confirmation run (column RTX-35) in sample MHW-7, but in the analyst's opinion, it is present.

Aroclor-1260 was out of RT windows on the confirmation run (column RTX-35) in sample MW-1, but in the analyst's opinion, it is present.

DDT linearity on confirmation runs 0308GC1B and D309GC1B was greater than 10 percent, however no calculations were done from this run.

The following standard did not meet NYSDEC '89 criteria:

Date	Time	GC #	Standard	Comments
03/09/93	06:04	GC1B	Ind B	Endrin ketone out of required criteria, C_f >20% difference

The client's samples, before this affected standard, were run for PCB's only. Since the samples had been run primary twice, some samples required previous reruns due to cleanups or continuing standards out of criteria. Only enough extract remained to run the samples once on the confirmation run. The ending PCB's following the ending pesticide mixes were within continuing standard criteria.

Due to high levels of Aroclors, samples MW-36 and MHS-3 required a dilution.

The surrogates were diluted out for all samples with a dilution factor of 100 or higher.

Due to the sample matrix, TCX percent recovery could not be determined in samples MW-36, MW-36 MS and MW-36 MSD.

DCB was below advisory QC limits in method blank PBLK05 on column 2 and in sample MW-36 MS on column 1.

Due to matrix interference, TCX was above advisory QC limits in sample MW-36 DL on both columns.

DCB was above advisory QC limits in sample MW-36 DL on column 1 and in samples MW-36 MS and MW-36 MSD on column 2.

Due to the matrix interference in samples MW-36, MW-36 MS and MW-36 MSD, two different sets of peaks were chosen for column RTX-35 for the calculation of Aroclor-1260. Two separate Form 6F's have been submitted. The second peak was out of RT windows on column RTX-35 for Aroclor-1260 in samples MW-36 and MW-36 MSD.

Metals - IEC's are electronically employed by the TJA ICAP-61. However, the ICSA is utilized as a monitoring device to detect any additional adjustments that may be required. These modifications are calculated and applied manually. They are so noted in the raw data.

No problems were encountered.

I certify that this data package is in compliance with the terms of this contract, both technically and for completeness, for other than the conditions detailed above. Release of this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran
Laboratory Manager

March 17, 1993
Date

CLIENT CHAINS OF CUSTODY

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

IEA CT #3093-0148

CHAIN OF CUSTODY

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ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
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HUNTINGTON, NEW YORK 11743
(516) 673-7200 FAX. (516) 673-7216

PAGE 1 OF 1

PROJECT NAME: AMTRAK, SUNNYSIDE

PROJECT NUMBER:

PROJECT LOCATION: SUNNYSIDE, QUEENS, N.Y.C.

SAMPLER(S): D. Keohane, C. Clark, H. Gregory, P. BARZAK

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PCB's					TOTAL BOTTLES	NOTES	
MHW-5	2-8-93	1115	WATER	✓					2		001
MHW-3	2-8-93	1129	WATER	✓					2		002
MHW-7	2-8-93	1155	WATER	✓					2		003
MHW-6	2-8-93	1510	WATER	✓					2		004
MHS-3	2-8-93	1134	SOIL	✓					1		005
FIELD BLANK	2-8-93	1540	WATER	✓					2		006
MW-36	2-8-93	1630	OIL	✓					1	MS/MSD	007
MW-27	2-8-93	1640	WATER	✓					2		008

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Daniel Keohane	Roux Assoc	2/8/93		(Y) OR N					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
					[signature]	IEA CT	2/9/93	1000	(Y) OR N

DELIVERY METHOD: FED. EX #596564287 4

ANALYTICAL LABORATORY: IEA CT.

COMMENTS: LOW DETECTION LIMIT.

0018

ROUX

CHAIN OF CUSTODY

№ 013[illegible] Y

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PAGE 1 OF 2

PROJECT NAME: Amtrak/Sunnyside Yd
PROJECT NUMBER: 055264
PROJECT LOCATION: Queens, N.Y.
SAMPLER(S): AG, DK, CC, PB, JD

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOC	Metals				TOTAL BOTTLES	NOTES
MW-46	2/9/93	13:05	W	✓					3	013
MW-45		1210							3	009
MW-47		1120							3	020
MW-48		1100							3	021
MHW-1		0950							3	010
REPLICATE		—							3	017
MW-45 MS/MSD		1330			✓				6	009
MW-41		1440							3	028
MW-44		1330							3	012
MW-43		1340							3	011

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
	Roux	2/9/93	1800	(Y) OR N					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
						IEA	2-10-93	1000	(Y) OR N

DELIVERY METHOD: FED EX
COMMENTS: # 5496 5642 2211
ANALYTICAL LABORATORY: IEA, Monroe CT.

0019

ROUX

CHAIN OF CUSTODY

№ 01330 Y

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HUNTINGTON, NEW YORK 11743
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME: AMTRAK / Sunnyside 16 — PROJECT NUMBER: 055264

PROJECT LOCATION: Queens, NY.

SAMPLER(S): HG, DK, CC, PB, MG

PAGE / OF /

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PCB	BNA	Metals			TOTAL BOTTLES	NOTES
Replicate	2/9/93	—	Soil	✓	✓	✓			4	017
MW-1	↓	1600	↓	✓		✓			3	018
MW-23	↓	1130	↓	✓	✓				3	019

RELINQUISHED BY: (SAMPLER'S SIGNATURE) FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE) FOR	DATE	TIME	SEAL INTACT Y OR N
	2/9/93	1800	(Y)				
RELINQUISHED BY: (SIGNATURE) FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE) FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE) FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE) FOR	DATE	TIME	SEAL INTACT Y OR N
	# 5960564 2793			IEA	2-10-93	1000	(Y)

DELIVERY METHOD: FED Ex

ANALYTICAL LABORATORY: IEA Monroe Ct.

COMMENTS: Low detection limit

0200 - 0

CHAIN OF CUSTODY

№ 013[illegible]Y

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HUNTINGTON, NEW YORK 11743
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME: AMTRAK / Sunnyside Yd
PROJECT NUMBER: 055264
PROJECT LOCATION: Queens, NY.
SAMPLER(S): HG, PK, CC, PB, JD

ANALYSES — PAGE 1 OF 1

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PCB	BNA	Metals			TOTAL BOTTLES	NOTES
MW-45	2/9/93	1210	H_2O	✓	✓	✓			4	009
MW-46	"	1305	"	✓	✓	✓			4	013
MW-35	"	10150	"	✓	✓	✓			4	014

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	Roux	2/9/93	1930	(Y) OR N					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
					[signature]	IEA	2-10-93	1000	(Y) OR N

DELIVERY METHOD: FED Ex
ANALYTICAL LABORATORY: IEA Monroe, CT.

COMMENTS: # 596564241
Low detection Limit

P. 0021

ROUX

CHAIN OF CUSTODY

№ 013.. Y

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Consulting Ground-Water Geologists & Engineers
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HUNTINGTON, NEW YORK 11743
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PROJECT NAME: AMTRAK / Sunnyside Yd
PROJECT NUMBER: 055269
PROJECT LOCATION: Queens, NY.
SAMPLER(S): HG, DK, CC, PB, HG

ANALYSES — PAGE 1 OF 1

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PCB	BNA	Metals			TOTAL BOTTLES	NOTES
MW-42	2/9/93	1400	H2O		✓				2	015
MW-43		1340		✓	✓				3	011
MHW-2	↓	1430	↓	✓	✓	✓			4	016

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	Roux	2/9/93	1510	(Y) OR N					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
					[signature]	IEA	2-10-93	1000	

DELIVERY METHOD: FED Ex #596564279 3

ANALYTICAL LABORATORY: IEA Monroe, CT.

COMMENTS: Low detection limit

0022

ROUX

CHAIN OF CUSTODY

№ 0134 Y

ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
775 PARK AVENUE, SUITE 255
HUNTINGTON, NEW YORK 11743
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME: Amtrak/Sunnyside Yd
PROJECT NUMBER: 055269
PROJECT LOCATION: Queens, NY.
SAMPLER(S): HG, DK, CC, PB, JD

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	VOC	Metals				TOTAL BOTTLES	NOTES
MW-42	2/9/93	14:00	H_2O	✓					3	015
MW-35		10:50							3	014
MW-23		11:30							3	019
MHW-2		14:30							3	016
FBW		1010							3	023
FBS	↓	0900							3	[redacted] 022
Trip Blank	—			↓					2	029
MW-29	2/9/93	1415			✓					027

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT (Y) OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
[signature]	Roux	2/9/93	1800						
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE 2-10-93	TIME 1000	SEAL INTACT Y OR N
					[signature]	IEA			

DELIVERY METHOD: FED EX
ANALYTICAL LABORATORY: IEA, Monroe GA.

COMMENTS: #5965264224

0023

0023

ROUX

CHAIN OF CUSTODY

№ 0134 Y

ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
775 PARK AVENUE, SUITE 255
HUNTINGTON, NEW YORK 11743
(516) 673-7200 FAX. (516) 673-7216

PAGE / OF /

PROJECT NAME: MW Rail Sunnyside Yd.
PROJECT NUMBER: 055264
PROJECT LOCATION: Queens, NY
SAMPLER(S): HL, DK, CC, PB, JD

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PCB	BNA	METALS			TOTAL BOTTLES	NOTES
MW-47	2/9/93	11:20	H_2O	✓	✓	✓			4	Hold for limitive of Analysis 020
MW-48	↓	11:00	↓	✓	✓	✓			4	021
MW-44	↓	1330	↓	✓	✓				3	012

		DATE	TIME	SEAL INTACT Y OR N			DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	2/9/93	800	(Y)	RECEIVED BY: (SIGNATURE)	FOR			
RELINQUISHED BY: (SIGNATURE)	FOR				RECEIVED BY: (SIGNATURE)	FOR			
RELINQUISHED BY: (SIGNATURE)	FOR				RECEIVED BY: (SIGNATURE)	FOR IEA	2-10-93	1000	(Y)

DELIVERY METHOD: FED EX # 596544211

ANALYTICAL LABORATORY: I.E.A. - Monroe Ct.

COMMENTS: Low detection limit

0021

ROUX

CHAIN OF CUSTODY

№ 0134.Y

ROUX ASSOCIATES INC
Consulting Ground-Water Geologists & Engineers
775 PARK AVENUE, SUITE 255
HUNTINGTON, NEW YORK 11743
(516) 673-7200 FAX. (516) 673-7216

PROJECT NAME: Chronic / Sunnyside Yd
PROJECT NUMBER: 05526
PROJECT LOCATION: Queens, N.Y.
SAMPLER(S): NG, DK, CC, PB, JD

ANALYSES — PAGE 1 OF 1

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	PCB	BNA	METALS			TOTAL BOTTLES	NOTES
MW-45 MS/MSD	2/9/93	1330	H_2O	✓	✓	✓			6	009
MHW-1		9:50		✓	✓	✓			4	010
MW-43		1340				✓			1	011
MW-44		1330				✓			1	012

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
	Roux	2/9/93	1800	(Y) OR N					
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
RELINQUISHED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
						IEA	2-10-93	1030	(Y) OR N

DELIVERY METHOD: FEDEX
ANALYTICAL LABORATORY: IEA, Monroe, CT.

546584279 3

COMMENTS: Low detection limit

0025

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 5965642874

2330N 5965642874 0 0026

RECIPIENT'S COPY

1 Date 2/19/93

From (Your Name) Please Print: Mr. Christopher Clark
Your Phone Number (Very Important): (516)573-7200
Company: ROUX ASSOCIATES
Department/Floor No.:
Street Address: 775 PARK AVE STE 255
City: HUNTINGTON State: NY ZIP Required: 11743

2 To (Recipient's Name) Please Print: Sample Control
Recipient's Phone Number (Very Important): (203) 261-4458
Company: IEA, Inc.
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 200 Monroe Turnpike
City: Monroe State: CT ZIP Required: 06468

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 05526Y 30/19

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address:
City: State: ZIP Required:

3 PAYMENT 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card
5 [ ] Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)	Standard Overnight (Delivery by next business afternoon, no Saturday delivery†)
11 [X] OTHER PACKAGING	51 [ ] OTHER PACKAGING
16 [ ] FEDEX LETTER*	56 [ ] FEDEX LETTER*
12 [ ] FEDEX PAK*	52 [ ] FEDEX PAK*
13 [ ] FEDEX BOX	53 [ ] FEDEX BOX
14 [ ] FEDEX TUBE	54 [ ] FEDEX TUBE
Economy Two-Day (Delivery by second business day †)	**Government Overnight** (Restricted for authorized users only)
30 [ ] ECONOMY	45 [ ] GOVT LETTER
	41 [ ] GOVT PACKAGE
Freight Service (for packages over 150 lbs.)	
[ ] OVERNIGHT FREIGHT** (Confirmed reservation required)	80 [ ] TWO-DAY FREIGHT**

†Delivery commitment may be later in some areas. *Declared Value Limit $500. **Call for delivery schedule.

5 DELIVERY AND SPECIAL HANDLING (Check services required)

HOLD FOR PICK-UP (Fill in Box H) { 1 [X] WEEKDAY or 31 [ ] SATURDAY
DELIVER { 2 [X] WEEKDAY or 3 [ ] SATURDAY (Extra charge) (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ]
6 [ ] DRY ICE Dangerous Goods Shipper's Declaration not required. Dry Ice, 9, UN 1845 ____ X ____ kg. 18
7 [ ] OTHER SPECIAL SERVICE
9 [ ] SATURDAY PICK-UP (Extra charge)
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

6 PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See rate)
1	104	5,000
Total 1	Total 104	Total 5,000

DIM SHIPMENT (Chargeable Weight) [ ] lbs. L x W x H

Received At: 1 [ ] Regular Stop 2 [ ] On-Call Stop 3 [ ] Drop Box 4 [X] B.S.C. 5 [ ] Station

7 Release Signature:

Emp. No. Date
[ ] Cash Received [ ] Return Shipment [ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold
Street Address
City State Zip
Received By: X
Date/Time Received: 2/19/93 FedEx Employee Number: 1000

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 6-92 PART #137204 NCREC 10/92 FORMAT #136
136

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 5965642793

2330N 5965642793

RECIPIENT'S COPY

1 Date 2/19/93

From (Your Name) Please Print: Mr. Christopher Clark
Your Phone Number (Very Important): (516)573-7200
Company: ROUX ASSOCIATES
Department/Floor No.:
Street Address: 775 PARK AVE STE 255
City: HUNTINGTON State: NY ZIP Required: 11743

2 To (Recipient's Name) Please Print: Sample Control
Recipient's Phone Number (Very Important): (203) 261-4458
Company: IEA, Inc.
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 200 Monroe Turnpike
City: Monroe State: CT ZIP Required: 06468

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 05526Y 30/19

H IF HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address:
City: State: ZIP Required:

3 PAYMENT 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card
5 [ ] Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)	Standard Overnight (Delivery by next business afternoon, no Saturday delivery†)
11 [X] OTHER PACKAGING	51 [ ] OTHER PACKAGING
16 [ ] FEDEX LETTER*	56 [ ] FEDEX LETTER*
12 [ ] FEDEX PAK*	52 [ ] FEDEX PAK*
13 [ ] FEDEX BOX	53 [ ] FEDEX BOX
14 [ ] FEDEX TUBE	54 [ ] FEDEX TUBE
Economy Two-Day (Delivery by second business day †)	**Government Overnight** (Restricted for authorized users only)
30 [ ] ECONOMY	45 [ ] GOVT LETTER
	41 [ ] GOVT PACKAGE
Freight Service (for packages over 150 lbs.)	
[ ] OVERNIGHT FREIGHT** (Confirmed reservation required)	80 [ ] TWO-DAY FREIGHT**

†Delivery commitment may be later in some areas. *Declared Value Limit $500. **Call for delivery schedule.

5 DELIVERY AND SPECIAL HANDLING (Check services required)

HOLD FOR PICK-UP (Fill in Box H) { 1 [ ] WEEKDAY or 31 [ ] SATURDAY
DELIVER { 2 [X] WEEKDAY or 3 [ ] SATURDAY (Extra charge) (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)

6 PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See rate)
1	54	1,000
1	58	1,000
1	45	2,000
Total 3	Total 157	Total 4,000

Emp. No. Date
[ ] Cash Received [ ] Return Shipment [ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold
Street Address
City State Zip
Received By:

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2

FEDERAL EXPRESS

QUESTIONS? CALL 800-238-5355 TOLL FREE.

5965642211

AIRBILL PACKAGE TRACKING NUMBER 5965642211

2330N

RECIPIENT'S COPY

1 Date 2/9/93

From (Your Name) Please Print: Mr. Christopher Clark
Your Phone Number (Very Important): (516)573-7200
Company: ROUX ASSOCIATES
Department/Floor No.:
Street Address: 777 PARK AVE STE 255
City: HUNTINGTON State: NY ZIP Required: 1 1 7 4 3

2 To (Recipient's Name) Please Print: Sample Control
Recipient's Phone Number (Very Important): (203) 261-4458
Company: IEA, Inc.
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 200 Monroe Turnpike
City: Monroe State: CT ZIP Required: 06468

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.): 055204 30/21

H If HOLD FOR PICK-UP, Print FEDEX Address Here
Street Address:
City: State: ZIP Required:

3 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning)
- 11 [X] OTHER PACKAGING
- 16 [ ] FEDEX LETTER
- 12 [ ] FEDEX PAK*
- 13 [ ] FEDEX BOX
- 14 [ ] FEDEX TUBE

Standard Overnight (Delivery by next business afternoon, No Saturday delivery)
- 51 [ ] OTHER PACKAGING
- 56 [ ] FEDEX LETTER
- 52 [ ] FEDEX PAK*
- 53 [ ] FEDEX BOX
- 54 [ ] FEDEX TUBE

Economy Two-Day (Delivery by second business day.)
- 30 [ ] ECONOMY

Government Overnight (Restricted for authorized users only)
- 46 [ ] GOVT LETTER
- 41 [ ] GOVT PACKAGE

Freight Service (for packages over 150 lbs.)
- 70 [ ] OVERNIGHT FREIGHT** (Confirmed reservation required)
- 80 [ ] TWO-DAY FREIGHT**

† Delivery commitment may be later in some areas. *Declared Value Limit $500. **Call for delivery schedule.

5 DELIVERY AND SPECIAL HANDLING (Check services required)

HOLD FOR PICK-UP (Fill in Box H) { 1 [ ] WEEKDAY or 31 [ ] SATURDAY
DELIVER { 2 [X] WEEKDAY or 3 [ ] SATURDAY (Extra charge) (Not available to all locations)
4 [ ] DANGEROUS GOODS (Extra charge)
5 [ ]
6 [ ] DRY ICE Dangerous Goods Shipper's Declaration not required. Dry Ice, 9, UN 1845, ____ X ____ kg.
7 [ ] OTHER SPECIAL SERVICE
9 [ ] SATURDAY PICK-UP (Extra charge)
[ ] DESCRIPTION
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

6

PACKAGES	WEIGHT in Pounds Only	YOUR DECLARED VALUE (See right)
1	35	$5,000
1	36	1,000
1	37	1,000
1	53	1,000
Total 4	Total 149	Total $8,000

DIM SHIPMENT (Chargeable Weight) ____ lbs.: L ____ x W ____ x H ____

Received At: [ ] Regular Stop [ ] Drop Box [ ] B.S.C. [ ] Station [ ] On-Call Stop

7 Release Signature:

Emp. No. | Date
[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold
Street Address
City State Zip
Received By: X
Date/Time Received: 2-10-93 FedEx Employee Number: 1000

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

REVISION DATE 6/92 PART #137204 NCREC 10/92 FORMAT #136

136

LABORATORY CHAINS OF CUSTODY

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

: ROUX

IEA, I. CT
Internal Chain of ustody Form

IEA Job #: 3093 0148

Seal: present / absent
: intact / not intact
Chain
ody : present / absent

0148

Case # : —
Airbill #: 596564287 4

Sample #s: 001 - 008
Location : 8, A9

Tags : present / absent
: listed / not listed
rms : present / absent

Sample Custodian: E.A. JOHNSON (print) (signature) Date/Time: 2/9/93 1600

ry umber	Removed By (Full Signature)	Date	Time	Reason	Returned By (Full Signature)	Date	Time	Returned To Ref. #
,8		2/10	4pm	PIP EXT	used			
	J Ruh	2/11	2:20	PCB in Oil	J Ruh	2/11	2:00	SA
5	Hammad Malyk	2/11	9:20	PP EXT	Hammad Malyk	2/11	2:30	
5	Dea Sullo	2/18	8:00	GC P/P Analysis	Dea Sullo	2/18	4:00	
5	Dea Sullo	2/15	5:00	GC P/P Analysis	Dea Sullo	2/15	6:00	
510	Dea Sullo	2/23	4:15	GC P/P Analysis	Dea Sullo	2/23	5:15	
6-8	Bhorum	2/24	9	P/P GC And	Bhorum	2/24	5	
0	Dea Sullo	2/26	5:00	GC P/P Analysis	Dea Sullo	2/26	6	
8	Bhorum	2/01	9	—	Bhorum	3/1	11	
70	Dea Sullo	3/3	6:30	GC P/P Analysis	Dea Sullo	3/3	7:30	

0029

ROUX

IEA, I... CT
Internal Chain ... stody Form

IEA Job #: 2013 - 0190

Case # : —
Airbill #: 596564279 3

Sample #s: 9-20
Location : 36, 8, 3

Seal: ~~present~~ / absent
: ~~intact~~ / not intact

ain
dy : ~~present~~ / absent

ags : present / ~~absent~~
: listed / not listed
s : present / ~~absent~~

Sample Custodian: G. ANGON / G. [signature] Date/Time: 2-10-93
(print) (signature)

er	Removed By (Full Signature)	Date	Time	Reason	Returned By (Full Signature)	Date	Time	Returned To Ref. #
20	[signature]	2/11	4pm	PCB GXT	Used			
-20	[signature]	2/11	4pm	BNA GXT	Used			
-21	[signature]	2/11	2220	VOA	used			
	Mike Crowe	2/16	1100	BNA Anal	Mike Crowe	2/16	1600	
18,20	B. Cuddeback	2/17	940	ICAP, FURN prep	[signature]	2/17	1500	US
19-23	Mike Crowe	2/18	1125	BNA Anal	Mike Crowe	2/18	1515	
9-23	Mike Crowe	2/19	930	BNA Anal	Mike Crowe	2/19	1600	
20	[signature]	2/24	9	PIP GC Anal	[signature]	2/24	[illegible]	
6-1820	B. Cuddeback	2/25	1420	Hg-prep	[signature]	2/25	1500	US
	[signature]	3/02	1000	Hg-Prep	[signature]	3/02	1300	

Page ___ of ___

0030

ROUX

IEA, I. CT
Internal Chain of Custody Form

Case # : —
Airbill #: 596564221 1

Sample #s: 9, 21-29
Location : 36, A9, 3

Seal: ~~present~~ / absent
: ~~intact~~ / not intact
ain
dy : ~~present~~ / absent

Tags : present / ~~absent~~
: listed / not listed
ns : present / ~~absent~~

Sample Custodian: G. ANGON / G.S (print) (signature) Date/Time: 2-10-5J

ber	Removed By (Full Signature)	Date	Time	Reason	Returned By (Full Signature)	Date	Time	Returned To Ref. #
	Hamara Malyk	2/11	920	PCB EXT	Hamara Malyk	2/11	230	
	Hamara Malyk	2/11	720	PEB EXT	USED			
-24		2/14	4pm	PCB EXT	Used			
3		2/11	4pm	BNA EXT	Used			
		2/15	10:30	VOA	used			
27	B. Cadden	2/17	940	ICAP, Evap prep	Brigitte Cadden	2/17	1500	US
26	Dean Sullo	2/19	8:00	GC P/P Analysis	Dean Sullo	2/18	9:00	
-26	Dean Sullo	2/19	5:00	GC P/P Analysis	Dean Sullo	2/19	6:00	
	Dean Sullo	2/23	4:15	GC P/P Analysis	Dean Sullo	2/23	5:15	
27	B. Cadden	2/25	2:20	Hg - prep	Brigitte Cadden	2/25	1500	US
	Bhorlund	3/01	9	P/P GC Anal	Bhorlund	3/1	11	

Page ___ of ___

0031

AS:022189:0

0032

an environmental testing company
200 Monroe Turnpike
Monroe, Connecticut 06468
(203) 261-4458
FAX (203) 268-5346

CHAIN OF CUSTODY
ATOMIC SPECTROSCOPY DEPARTMENT

Job Number 030930 0148 Sample Numbers 9-14, 16-18, 20

(WATER) - SOIL - SLUDGE - EPTOX/TCLP

I confirm that I have performed the preparation below following SOP guidelines and authorize the release of this preparation:

Sample Prep

Benjamin S. Cuddeback	2-17-93	ICP/FLME
Benjamin S. Cuddeback	2-17-93	FURN
Jeff Noe	2/25/93	MERCURY
Chemist	Date(s)	

I confirm that I have performed the analysis below following SOP guidelines and authorize the release of all associated data:

Analysis

Diane Abate	3/2/93	ICP
		FLAME
Jeff Noe / Shirley Mickens	2/19-20, 22/93	FURN
Jeff Noe	2/26/93	MERCURY
Chemist	Date(s)	

I have reviewed and authorize the release of this job:

Complete David W. Hoffman 3/4/93
Supervisor Date

Batch Assignment

AS:022189:0

0033

an environmental testing company
200 Monroe Turnpike
Monroe, Connecticut 06468
(203) 261-4458
FAX (203) 268-5346

CHAIN OF CUSTODY
ATOMIC SPECTROSCOPY DEPARTMENT

Job Number 030930 0148 Sample Numbers 10 Reprep

(WATER) - SOIL - SLUDGE - EPTOX/TCLP

I confirm that I have performed the preparation below following SOP guidelines and authorize the release of this preparation:

Sample Prep _____	_____	
_____	_____	ICP/FLME
_____	_____	FURN
Jeff Noe Chemist	3/02/93 Date(s)	MERCURY

I confirm that I have performed the analysis below following SOP guidelines and authorize the release of all associated data:

Analysis _____	_____	ICP
_____	_____	FLAME
_____	_____	FURN
Jeff Noe Chemist	3/03/93 Date(s)	MERCURY

I have reviewed and authorize the release of this job:

Complete David L. Hoffman Supervisor 3/4/93 Date

atch Assignment _____

ORGANIC DATA

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

VOLATILE DATA

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0036

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	VBLKGI	106	104	100		0
02	MW-45	105	104	101		0
03	MHW-1	104	98	105		0
04	MW-43	99	105	95		0
05	MW-44	104	99	100		0
06	MW-46	106	105	95		0
07	MW-35	100	98	104		0
08	MW-42	101	96	101		0
09	MHW-2	102	101	106		0
10	REPLICATE	109	96	103		0
11	MW-23	106	94	106		0
12	MW-47	99	92	102		0
13	VBLKGK	101	107	98		0
14	MW-45MS	105	106	92		0
15	MW-45MSD	102	103	95		0
16	MSBMW-45	101	104	101		0
17	QCCHKSTD	100	105	96		0
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	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

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0037

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix Spike - EPA Sample No.: MW-45

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	47	94	59-172
Trichloroethene	50	0	56	112	62-137
Benzene	50	0	48	96	66-142
Toluene	50	0	53	106	59-139
Chlorobenzene	50	0	50	100	60-133

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50	48	96	2	22	59-172
Trichloroethene	50	56	112	0	24	62-137
Benzene	50	48	96	0	21	66-142
Toluene	50	50	100	6	21	59-139
Chlorobenzene	50	48	96	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: _____

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0038

Lab Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 0148 SAS No.: _____ SDG No.: 20148

Matrix Spike - EPA Sample No.: MSBMW-45

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MSB CONCENTRATION (ug/L)	MSB % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	50	100	61-145
Trichloroethene			52	104	71-120
Benzene			46	92	76-127
Toluene			48	96	76-125
Chlorobenzene			47	94	75-130
					(75-125)

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene					14	61-145
Trichloroethene					14	71-120
Benzene					11	76-127
Toluene					13	76-125
Chlorobenzene					13	75-130

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

* Values outside of QC limits

DPS 02/24/93

RPD: _____ out of _____ outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKGI C 0039

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: G4148.D Lab Sample ID: VBLKGI

Date Analyzed: 02/12/93 Time Analyzed: 2155

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5995G

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW-45	0148009	G4150.D	2326
02	MHW-1	0148010	G4151.D	2358
03	MW-43	0148011	G4152.D	0030
04	MW-44	0148012	G4153.D	0101
05	MW-46	0148013	G4154.D	0133
06	MW-35	0148014	G4155.D	0204
07	MW-42	0148015	G4156.D	0236
08	MHW-2	0148016	G4157.D	0308
09	REPLICATE	0148017	G4158.D	0339
10	MW-23	0148019	G4159.D	0411
11	MW-47	0148020	G4160.D	0442
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.
VBLKGK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: G4181.D Lab Sample ID: VBLKGK

Date Analyzed: 02/15/93 Time Analyzed: 1011

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5995G

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW-45MS	0148009MS	G4182.D	1058
02	MW-45MSD	0148009MSD	G4183.D	1129
03	MSBMW-45	0148009MSB	G4184.D	1201
04	QCCHKSTD	0148009STD	G4185.D	1232
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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24				
25				
26				
27				
28				
29				
30				

COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

0041

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: GB309.D BFB Injection Date: 02/09/93

Instrument ID: HP5995G BFB Injection Time: 0740

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.0
75	30.0 - 66.0% of mass 95	43.0
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	0.5 (0.7)1
174	50.0 - 120.0% of mass 95	64.6
175	4.0 - 9.0% of mass 174	5.0 (7.8)1
176	93.0 - 101.0% of mass 174	65.1 (100.7)1
177	5.0 - 9.0% of mass 176	5.8 (8.8)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	VSTD050	G4066.D	02/09/93	0909
02	VSTD010	VSTD010	G4067.D	02/09/93	1007
03	VSTD020	VSTD020	G4068.D	02/09/93	1038
04	VSTD100	VSTD100	G4069.D	02/09/93	1109
05	VSTD200	VSTD200	G4071.D	02/09/93	1212
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

0042

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: GB315.D BFB Injection Date: 02/12/93

Instrument ID: HP5995G BFB Injection Time: 1916

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.7
75	30.0 - 66.0% of mass 95	52.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.7 (0.9)1
174	50.0 - 120.0% of mass 95	86.6
175	4.0 - 9.0% of mass 174	6.1 (7.0)1
176	93.0 - 101.0% of mass 174	83.6 (96.6)1
177	5.0 - 9.0% of mass 176	6.1 (7.3)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	VSTD050	G4147.D	02/12/93	2029
02	VBLKGI	VBLKGI	G4148.D	02/12/93	2155
03	MW-45	0148009	G4150.D	02/12/93	2326
04	MHW-1	0148010	G4151.D	02/12/93	2358
05	MW-43	0148011	G4152.D	02/13/93	0030
06	MW-44	0148012	G4153.D	02/13/93	0101
07	MW-46	0148013	G4154.D	02/13/93	0133
08	MW-35	0148014	G4155.D	02/13/93	0204
09	MW-42	0148015	G4156.D	02/13/93	0236
10	MHW-2	0148016	G4157.D	02/13/93	0308
11	REPLICATE	0148017	G4158.D	02/13/93	0339
12	MW-23	0148019	G4159.D	02/13/93	0411
13	MW-47	0148020	G4160.D	02/13/93	0442
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: GB318.D BFB Injection Date: 02/15/93

Instrument ID: HP5995G BFB Injection Time: 0835

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.1
75	30.0 - 66.0% of mass 95	53.6
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	0.6 (0.9)1
174	50.0 - 120.0% of mass 95	68.4
175	4.0 - 9.0% of mass 174	5.0 (7.4)1
176	93.0 - 101.0% of mass 174	65.3 (95.5)1
177	5.0 - 9.0% of mass 176	5.2 (8.0)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	VSTD050	G4180.D	02/15/93	0914
02	VBLKGK	VBLKGK	G4181.D	02/15/93	1011
03	MW-45MS	0148009MS	G4182.D	02/15/93	1058
04	MW-45MSD	0148009MSD	G4183.D	02/15/93	1129
05	MSBMW-45	0148009MSB	G4184.D	02/15/93	1201
06	QCCHKSTD	0148009STD	G4185.D	02/15/93	1232
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

INSTRUMENT DETECTION LIMITS

Instrument G
Date: 02/05/93

UNITS: UG/L

	IDL
Chloromethane	6
Bromomethane	1
Vinyl Chloride	3
Chloroethane	1
Methylene Chloride	1
Acetone	1
Carbon Disulfide	1
1,1-Dichloroethene	1
1,1-Dichloroethane	1
1,2-Dichloroethene (total)	1
Chloroform	1
1,2-Dichloroethane	2
2-Butanone	1
1,1,1-Trichloroethane	1
Carbon Tetrachloride	1
Vinyl Acetate	1
Bromodichloromethane	1
1,2-Dichloropropane	1
cis-1,3-Dichloropropene	3
Trichloroethene	1
Dibromochloromethane	1
1,1,2-Trichloroethane	2
Benzene	1
trans-1,3-Dichloropropene	1
Bromoform	1
2-Methyl-2-Pentanone	1
2-Hexanone	2
Tetrachloroethene	1
1,1,2,2-Tetrachloroethane	2
Toluene	1
Chlorobenzene	1
Ethylbenzene	1
Styrene	2
Xylene (total)	3

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0045

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID (Standard): G4147.D Date Analyzed: 02/12/93

Instrument ID: HP5995G Time Analyzed: 2029

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	25516	10.92	132089	13.37	102891	20.49
	UPPER LIMIT	51032	11.42	264178	13.87	205782	20.99
	LOWER LIMIT	12758	10.42	66044	12.87	51446	19.99
	EPA SAMPLE No.						
01	VBLKGI	25869	11.04	133368	13.50	102287	20.61
02	MW-45	18652	11.04	94976	13.52	73880	20.66
03	MHW-1	23833	11.11	117251	13.54	92591	20.66
04	MW-43	24568	11.05	123650	13.51	96794	20.63
05	MW-44	27181	11.07	132314	13.53	101031	20.67
06	MW-46	19684	11.07	85959	13.56	63182	20.67
07	MW-35	22689	11.04	110125	13.50	88476	20.61
08	MW-42	24312	11.03	120080	13.51	96137	20.68
09	MHW-2	25005	11.09	121411	13.55	97821	20.66
10	REPLICATE	26003	11.11	136524	13.57	97252	20.70
11	MW-23	24080	11.11	117989	13.57	84574	20.68
12	MW-47	26718	11.03	138028	13.49	110614	20.68
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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 0 0046

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID (Standard): G4180.D Date Analyzed: 02/15/93

Instrument ID: HP5995G Time Analyzed: 0914

GC Column:007-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	25406	10.63	136696	13.07	109069	20.24
	UPPER LIMIT	50812	11.13	273392	13.57	218138	20.74
	LOWER LIMIT	12703	10.13	68348	12.57	54534	19.74
	EPA SAMPLE No.						
01	VBLKGK	25840	10.58	142332	13.01	107270	20.24
02	MW-45MS	27412	10.58	140679	12.99	104742	20.21
03	MW-45MSD	27600	10.60	138607	13.06	104481	20.25
04	MSBMW-45	27306	10.91	149367	13.20	111469	20.29
05	QCCHKSTD	27714	10.83	143177	13.18	109309	20.29
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-45

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

0 0047

Matrix: (soil/water) WATER Lab Sample ID: 0148009

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4150.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/12/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-45 C 0048

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4150.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/12/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 1 PAS 02/25/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN SILOXANE	18.59	11	J
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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26.					
27.					
28.					
29.					
30.					

QUANT REPORT

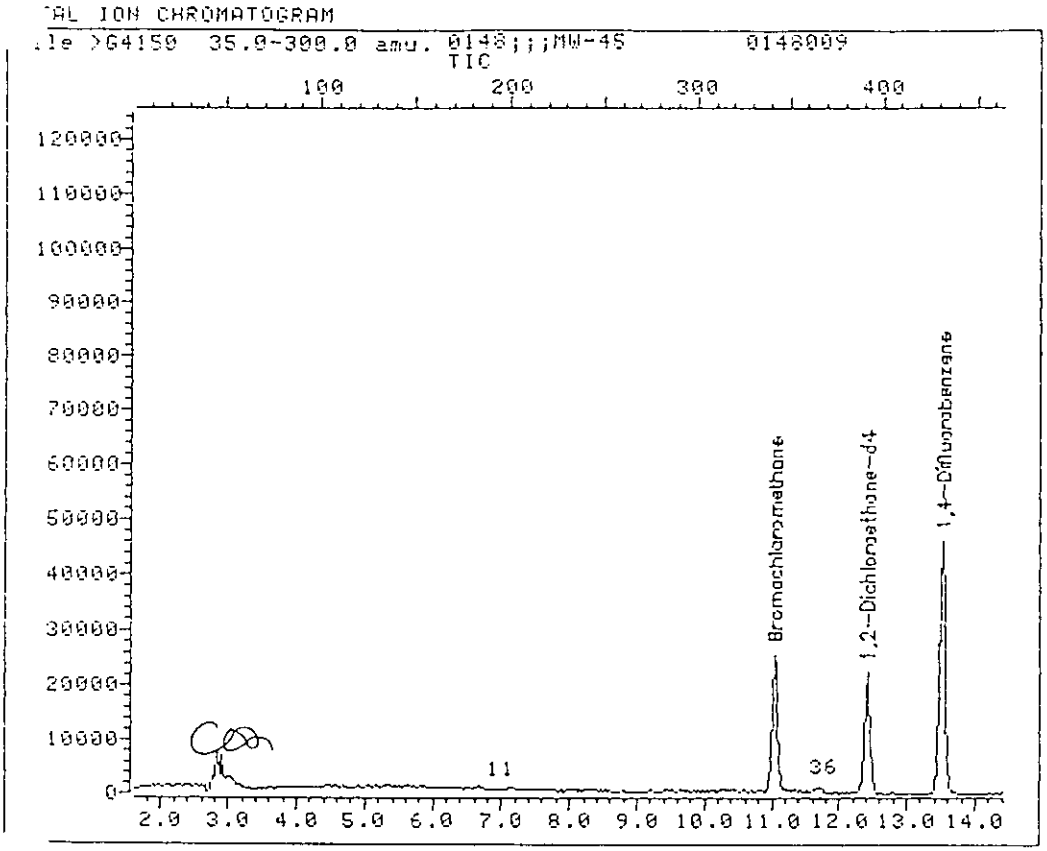
Operator ID: MSG Quant Rev: 6 Quant Time: 930212 23:54
Output File: ^G4150::QT Injected at: 930212 23:26
Data File: >G4150::G2 Dilution Factor: 1.00000
Name: 0148;;;MW-45
Misc: 0148009 HP5995:G;;;LLW;DF1 ;G1919

ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.04	127.8	18652	50.00	ug/L	83
~~12)~~	~~Acrolein~~	~~6.92~~	~~55.8~~	~~96~~	~~.83~~	~~ug/L~~	~~27~~
13)	Acetone	6.67	42.8	3317	10.13	ug/L	99
~~27)~~	~~2-Butanone~~	~~10.48~~	~~43.0~~	~~732~~	~~2.01~~	~~ug/L~~	~~50~~
30)	1,2-Dichloroethane-d4	12.42	64.8	63892	50.74	ug/L	88
34)	*1,4-Difluorobenzene	13.52	113.8	94976	50.00	ug/L	96
36)	1,1,1-Trichloroethane	11.70	96.8	3009	1.77	ug/L	95
53)	*Chlorobenzene-d5	20.66	116.8	73880	50.00	ug/L	85
61)	Toluene-d8	17.25	97.8	103589	52.50	ug/L	95
91)	Bromofluorobenzene	22.90	94.8	63106	51.82	ug/L	83

* ompound is ISTD

PAS 02/25/93

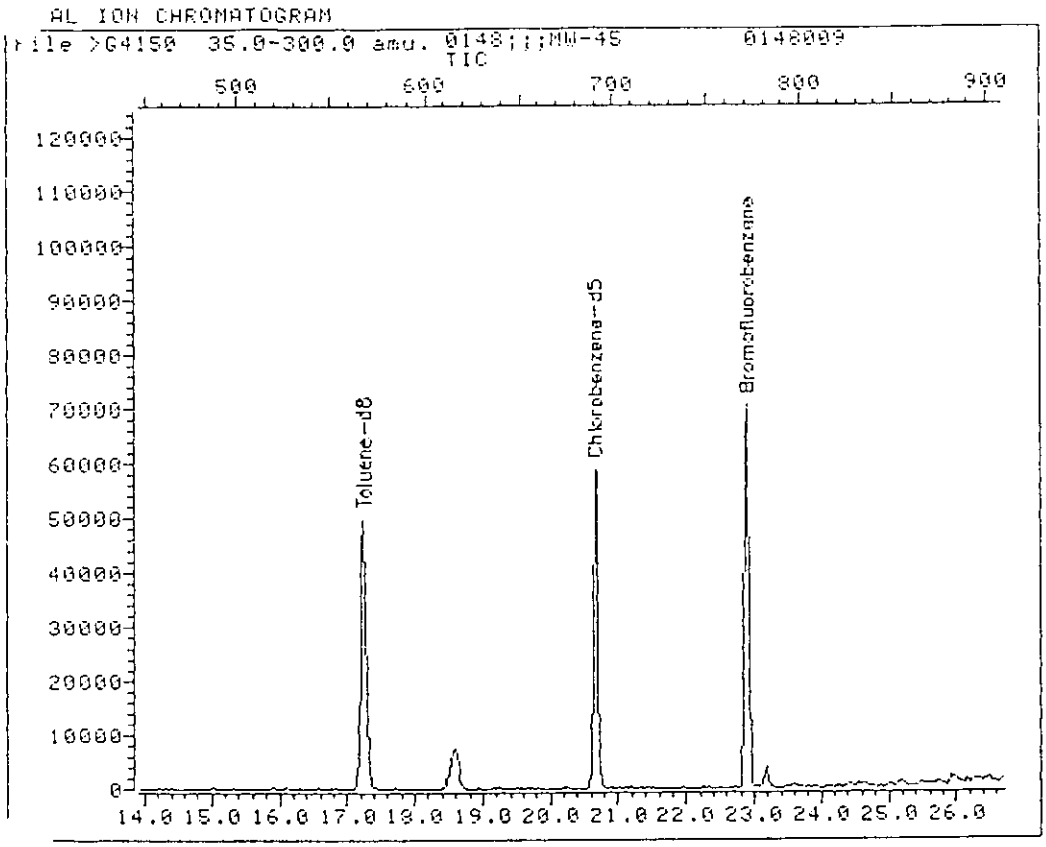


Data File: >G4150::G2 Quant Output File: ^G4150::QT
Name: 0148;;;MW-45
Misc: 0148009 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930212 23:54
Injected at: 930212 23:26

TIC page 1 of 2



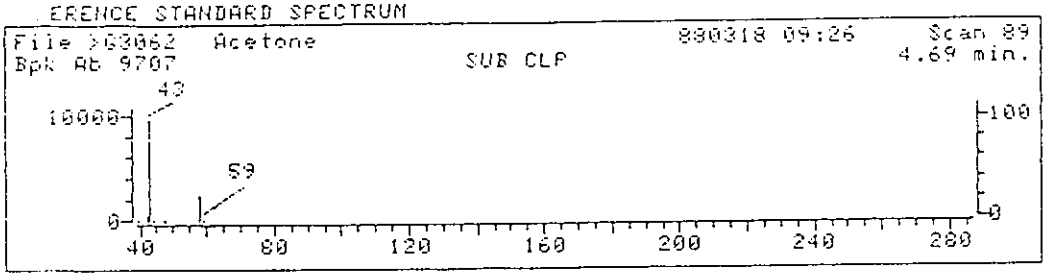
Data File: >G4150::G2 Quant Output File: ^G4150::QT
Name: 0148;;;MW-45
Misc: 0148009 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

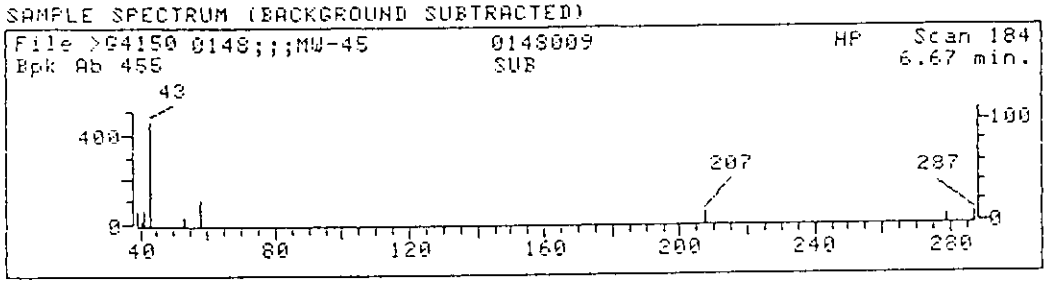
Operator ID: MSG
Quant Time: 930212 23:54
Injected at: 930212 23:26

TIC page 2 of 2

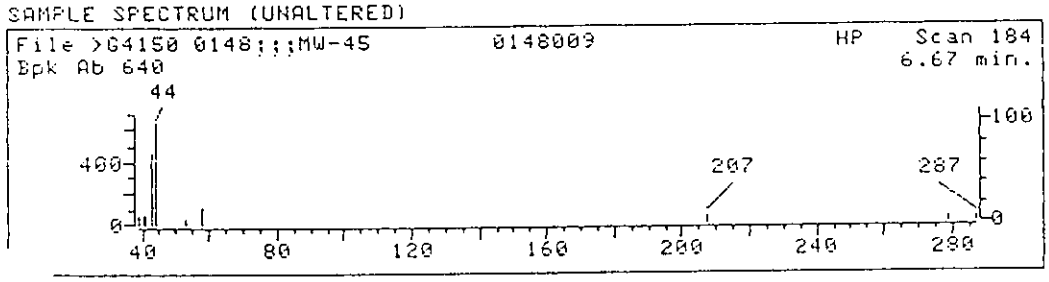
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



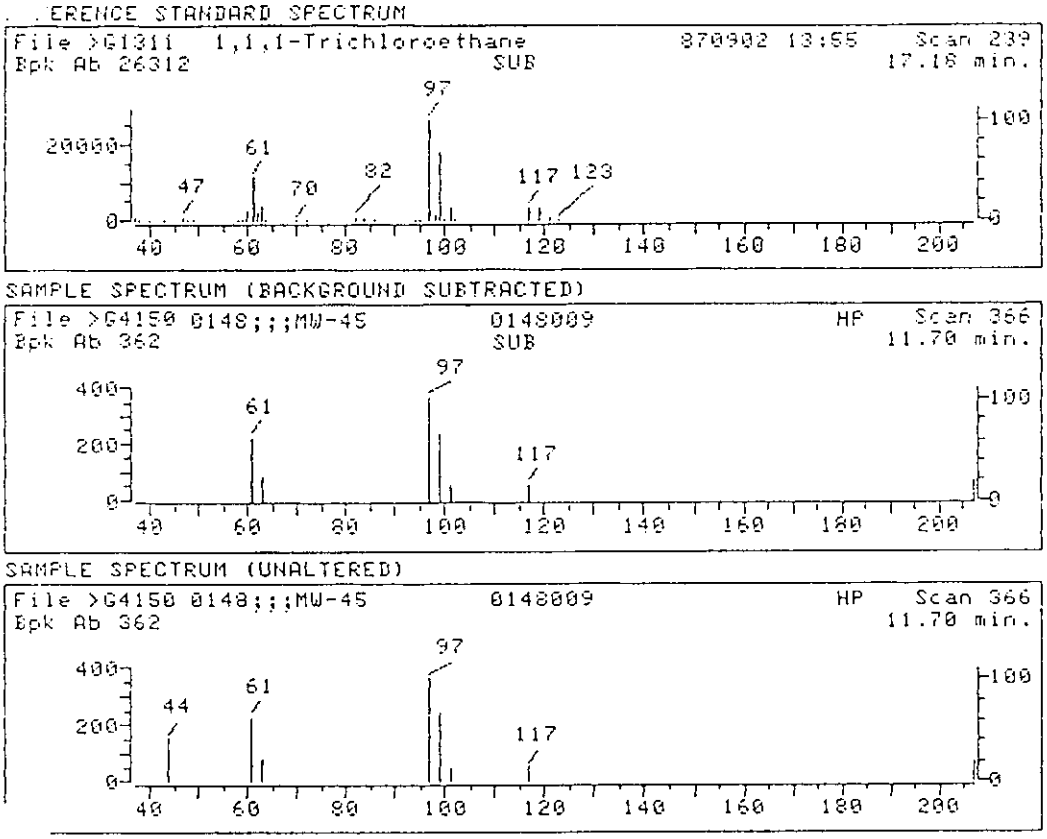
Data File: >G4150::G2
Name: 0148;;;MW-45
Misc: 0148009
Quant Time: 930212 23:54
Injected at: 930212 23:26

Quant Output File: ^G4150::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 13
Compound Name: Acetone
Scan Number: 184
Retention Time: 6.67 min.
Quant Ion: 42.8
Area: 3317
Concentration: 10.13 ug/L
q-value: 99

✓



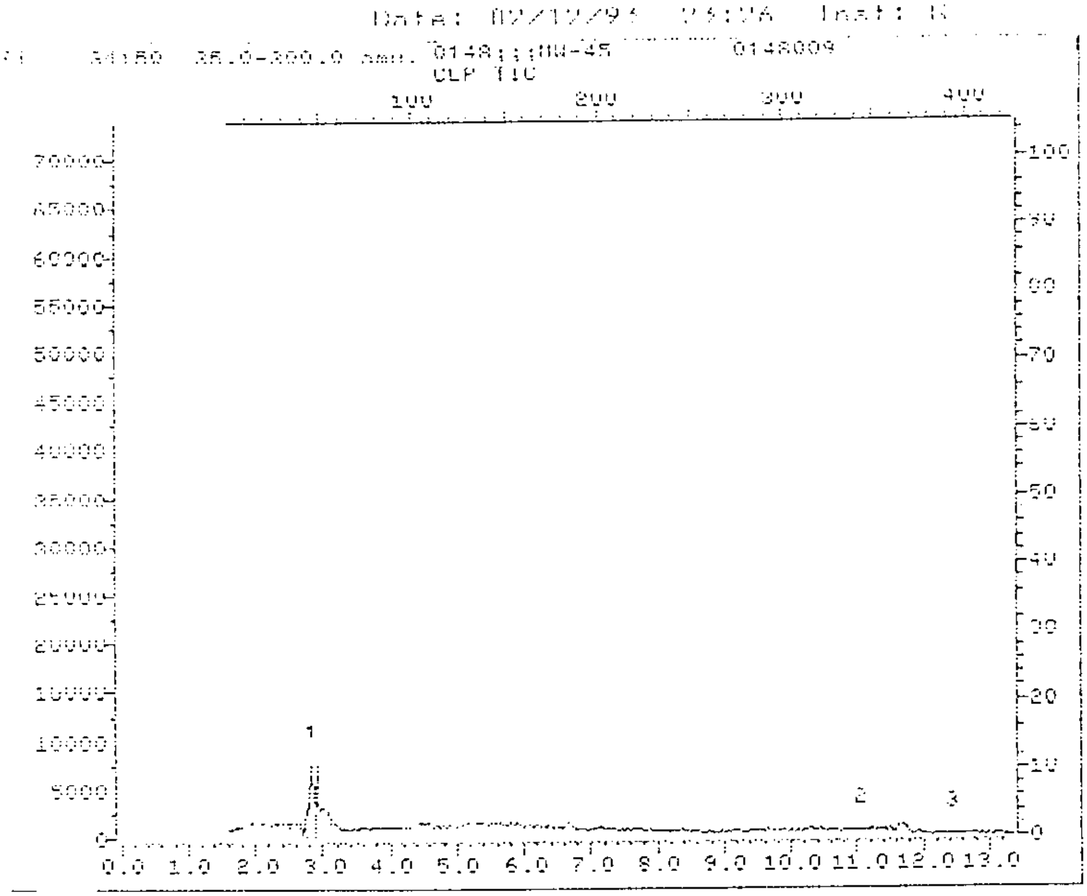
Data File: >G4150::G2 Quant Output File: ^G4150::QT
Name: 0148;;;MW-45
Misc: 0148009 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930212 23:54 Quant ID File: I_!FGW::N1
Injected at: 930212 23:26 Last Calibration: 930212 21:54

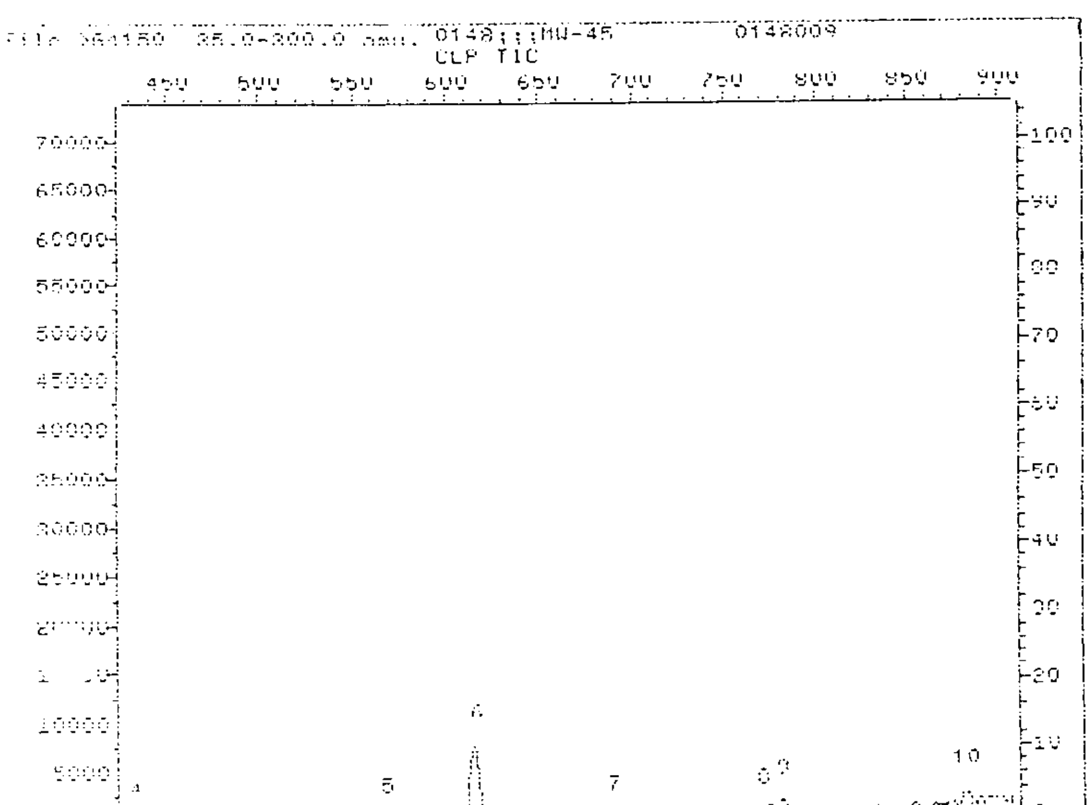
Compound No: 36
Compound Name: 1,1,1-Trichloroethane
Scan Number: 366
Retention Time: 11.70 min.
Quant Ion: 96.8
Area: 3009
Concentration: 1.77 ug/L
q-value: 95

MS Data File Header From : 3141511

Sample: 0148;;;MW-45 Operator: MSH MS 2/12/93 23:26
Misc : 0148009 HP5995:1;;;1 1W;DFT 031913
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M 1498P Tuning File: T 1S No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 189

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.5	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


35.0-300.0 amu. 0148;;;MW-45
0148009
CLP TIC
1
2
3


35.0-300.0 amu. 0148;;;MW-45
0148009
CLP TIC
5
7
10

Date: 02/17/95 09:26 Inst: 5

0.' 0056

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
TIC	7.84	34188.	11.	1.	1.000
6.	18.59	64793.	11.	3.	1.000

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
BROMOCHLOROMETHANE	11.04	149643.	0.00	12.28	8.0
1,4-DIFLUOROBENZENE	13.52	275183.	12.28	17.09	2.9
CHLOROBENZENE-D5	20.66	286032.	17.09	25.94	3.9

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	4
Target peaks matched:	0
Total TIC identified:	2

TIME : 12:23 PM MON., 15 FEB., 1995

MW-45

KP> "111>

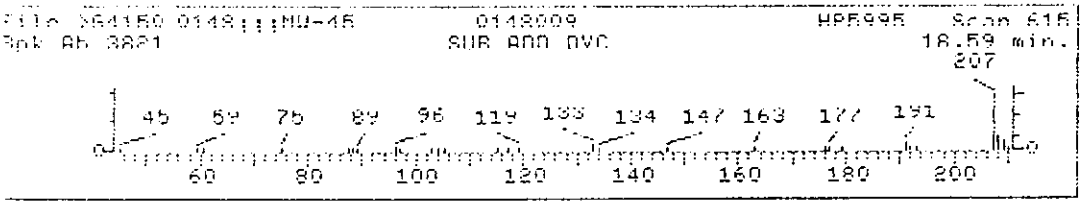
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

RPN error for command: RSF&1
RPN error: -5
Bad record length RSF

Sample file: >G4150 Spectrum #: 615

No data base entries were retrieved.

Peak#: 6 Area: 64293. Est Conc: 11. Date: 02/12/93 23:26 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MHW-1

Lab Name: IEA/CT Contract: 0 0058

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148010

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4151.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/12/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	6	JB
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	6	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	6	J
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	6	JB
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	8	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	3	J
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	51 ~~17~~	

LHD 03/03/93

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0059 | MHW-1

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148010

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4151.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/12/93

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 10

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

LHD 03/03/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1634-04-4	~~UNKNOWN~~ TERT-BUTYL METHYL ETHER	8.43	180	JN
2.		UNKNOWN C3 ALKYLBENZENE	23.45	33	JN
3.		UNKNOWN C3 ALKYLBENZENE	24.16	30	JN
4.		UNKNOWN INDENE	25.19	21	JN
5.		UNKNOWN C3 ALKYLBENZENE	24.86	18	JN
6.		UNKNOWN C3 ALKYLBENZENE	23.92	18	JN
7.		UNKNOWN C3 ALKYLBENZENE	23.56	16	JN
8.		UNKNOWN C4 ALKYLBENZENE	25.82	11	JN
9.		UNKNOWN C4 ALKYLBENZENE	25.27	9	JN
10.		UNKNOWN	8.02	8	JN
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: MSG
Output File: ^G4151::QT
Data File: >G4151::G2
Name: 0148;;;MHW-1
Misc: 0148010

Quant Rev: 6 Quant Time: 930213 00:29
Injected at: 930212 23:58
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1919

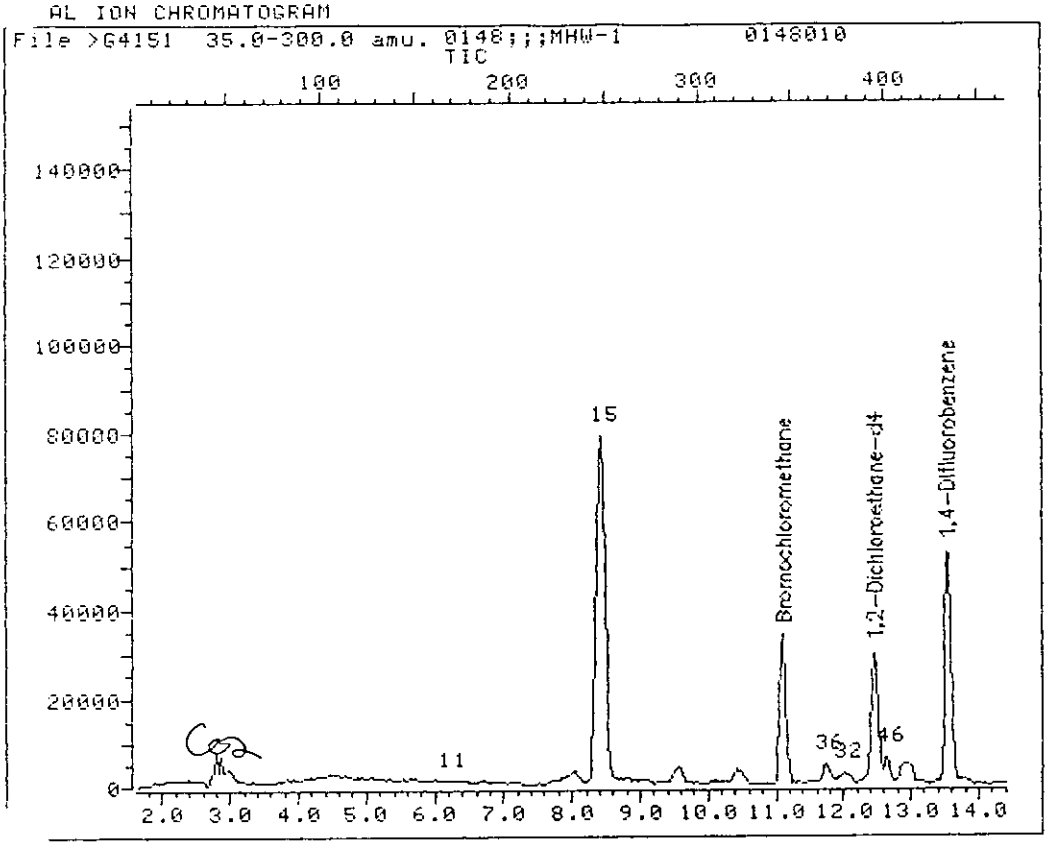
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.11	127.8	23833	50.00	ug/L	86
~~11)~~	~~Acrolein~~	~~6.19~~	~~55.8~~	~~87~~	~~1.01~~	~~ug/L~~	~~1~~
13)	Acetone	6.69	42.8	2667	6.37	ug/L	90
~~14)~~	~~Acrylonitrile~~	~~8.43~~	~~52.8~~	~~3505~~	~~17.04~~	~~ug/L~~	~~32~~
15)	Methyl tert-Butyl Ether	8.43	72.8	283174	283174.0	NO CALIB	95
28)	Chloroform	11.19	82.8	1797^	1.01	ug/L	85
30)	1,2-Dichloroethane-d4	12.47	64.8	84440	52.48	ug/L	89
32)	Cyclohexane	12.02	55.8	5826	5826.00	NO CALIB	51
34)	*1,4-Difluorobenzene	13.54	113.8	117251	50.00	ug/L	98
36)	1,1,1-Trichloroethane	11.75	96.8	11987	5.70	ug/L	93
~~47~~	~~Methyl Methacrylate~~	~~14.79~~	~~40.9~~	~~3708~~	~~3708.00~~	~~NO CALIB~~	~~64~~
48	Benzene	12.66	77.8	15260	5.80	ug/L	91
53)	*Chlorobenzene-d5	20.66	116.8	92591	50.00	ug/L	77
54)	4-Methyl-2-Pentanone	16.78	42.8	4426	6.17	ug/L	83
60)	Toluene	17.41	91.0	22969	7.59	ug/L	95
61)	Toluene-d8	17.25	97.8	128059	51.79	ug/L	92
63)	Ethylbenzene	20.93	105.8	3045	2.95	ug/L	95
65)	Xylene (total)mp	21.15	105.8	41728	33.79	ug/L	90
66)	Xylene (total)o	21.90	105.8	20621	16.86	ug/L	87
69)	Isopropylbenzene	22.59	104.8	3128	3128.00	NO CALIB	94
75)	1,3,5-Trimethylbenzene	24.16	104.8	70397	70397.00	NO CALIB	92
77)	1,2,4-Trimethylbenzene	25.16	104.8	17220	17220.00	NO CALIB	39
84)	Butylbenzene	25.16	90.8	14978	14978.00	NO CALIB	34
91)	Bromofluorobenzene	22.84	94.8	74944	49.10	ug/L	86

* Compound is ISTD

PRS 02/25/93

AL ION CHROMATOGRAM

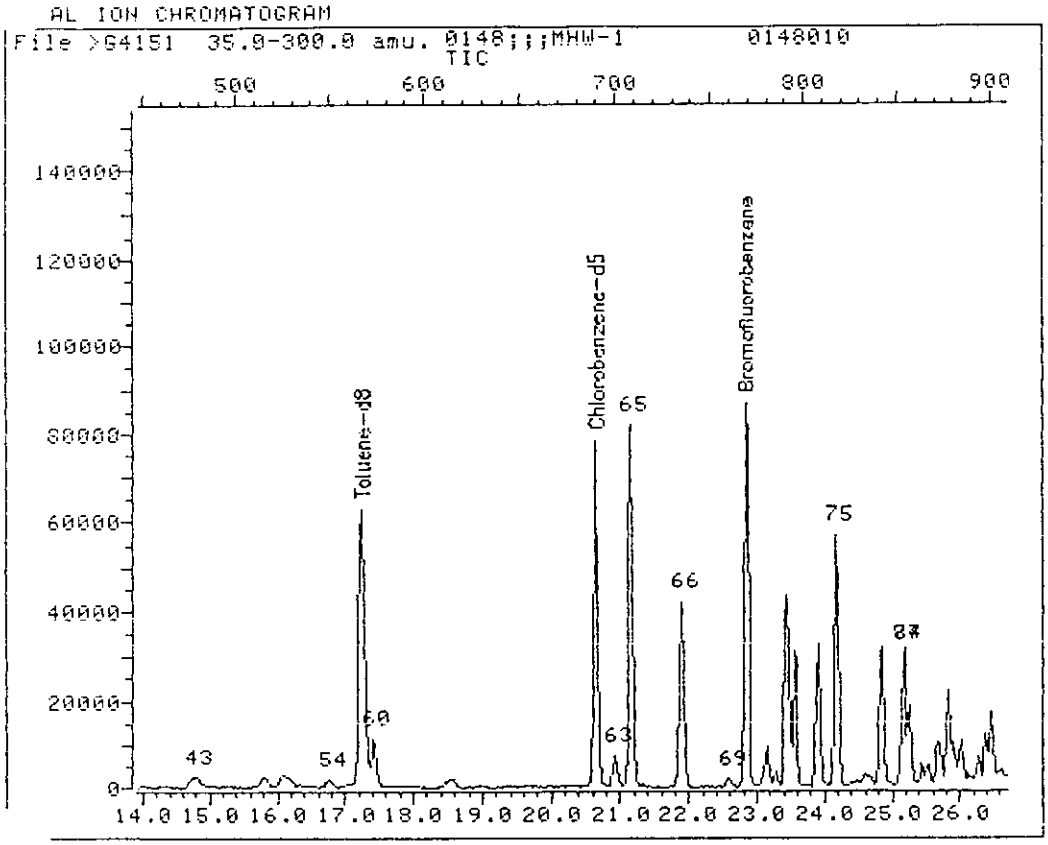


Data File: >G4151::G2 Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 00:29
Injected at: 930212 23:58

TIC page 1 of 2



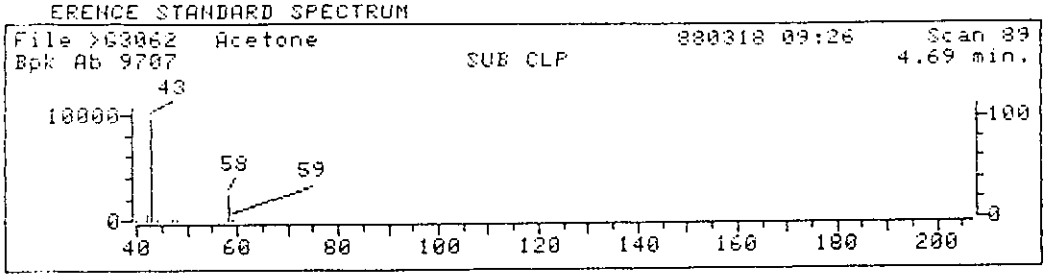
Data File: >G4151::G2 Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

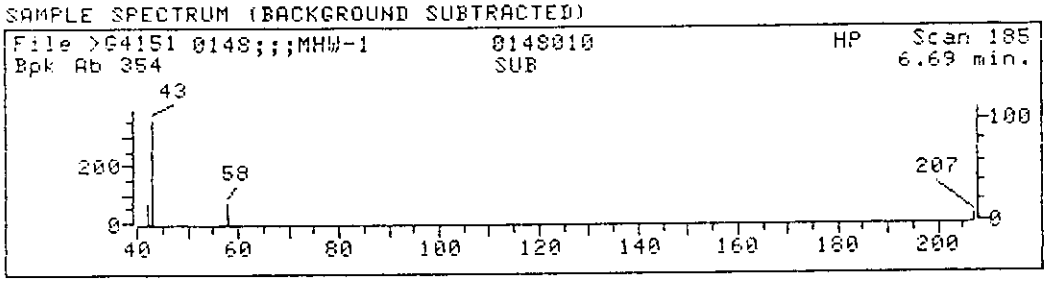
Operator ID: MSG
Quant Time: 930213 00:29
Injected at: 930212 23:58

TIC page 2 of 2

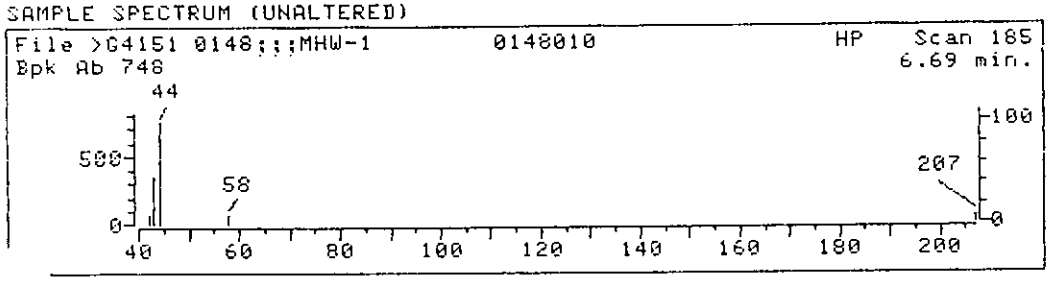
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4151::G2
Name: 0148;;;MHW-1
Misc: 0148010
Quant Time: 930213 00:29
Injected at: 930212 23:58

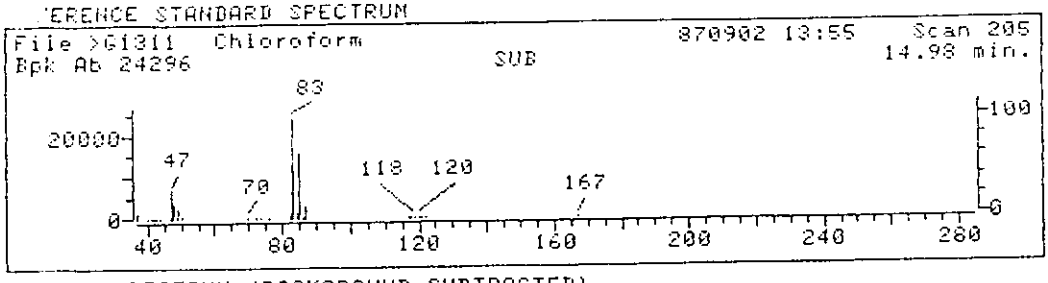
Quant Output File: ^G4151::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

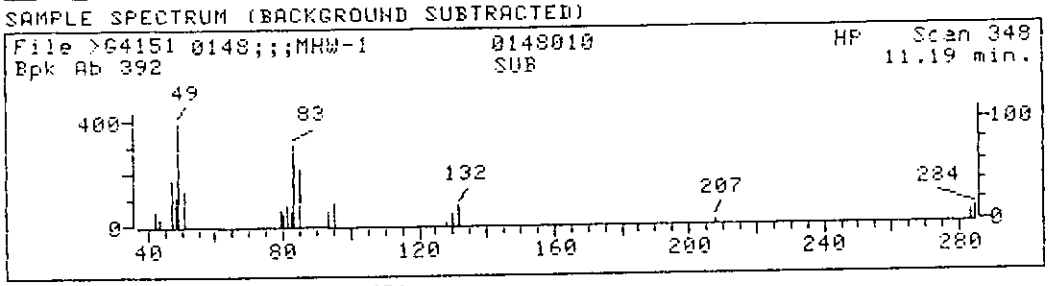
Compound No: 13
Compound Name: Acetone
Scan Number: 185
Retention Time: 6.69 min.
Quant Ion: 42.8
Area: 2667
Concentration: 6.37 ug/L
q-value: 90

✓

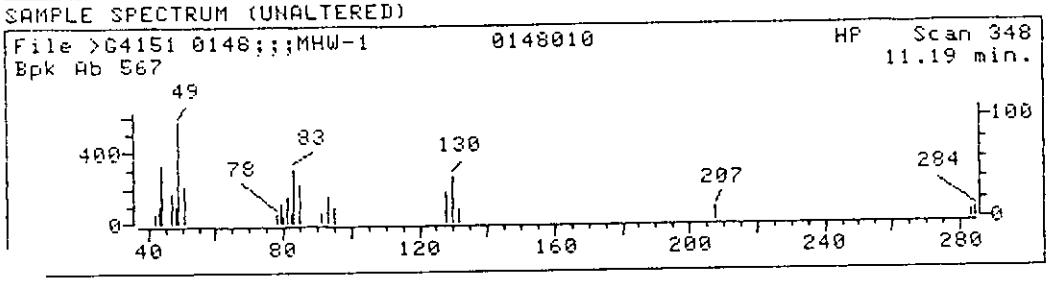
'ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



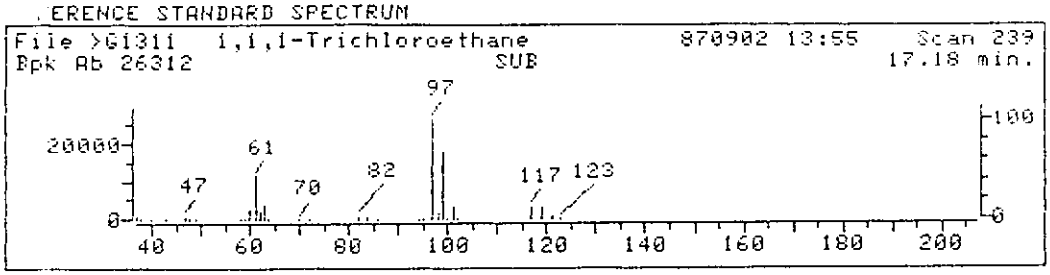
Data File: >G4151::G2
Name: 0148;;;MHW-1
Misc: 0148010
Quant Time: 930213 00:29
Injected at: 930212 23:58

Quant Output File: ^G4151::QT

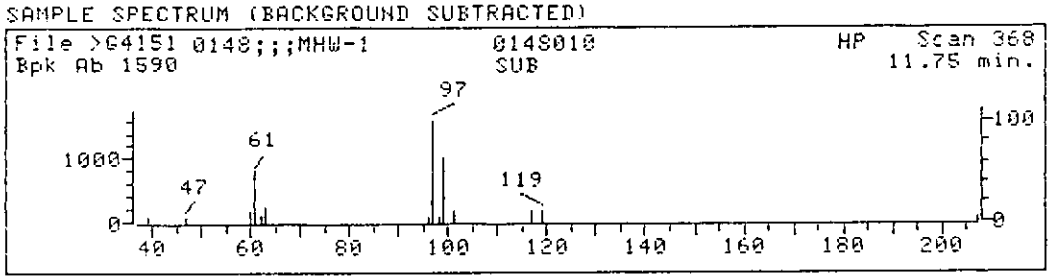
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 28
Compound Name: Chloroform
Scan Number: 348
Retention Time: 11.19 min.
Quant Ion: 82.8
Area: 1797^
Concentration: 1.01 ug/L
q-value: 85

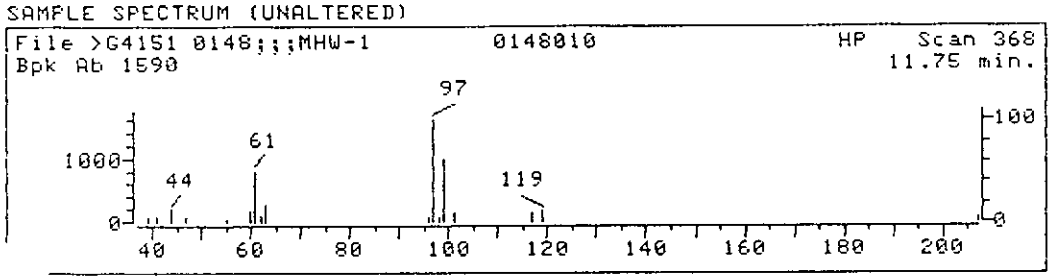
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



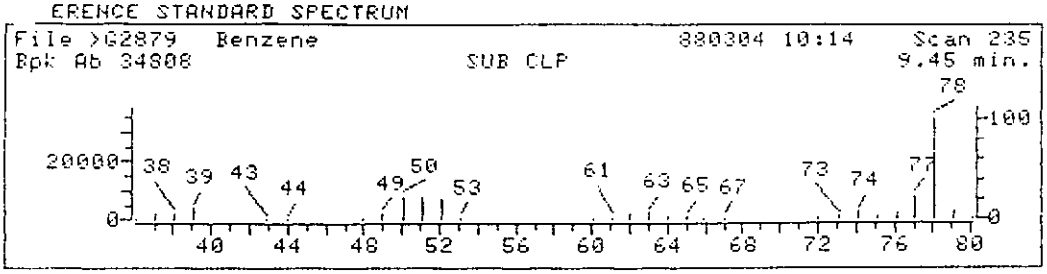
SAMPLE SPECTRUM (UNALTERED)



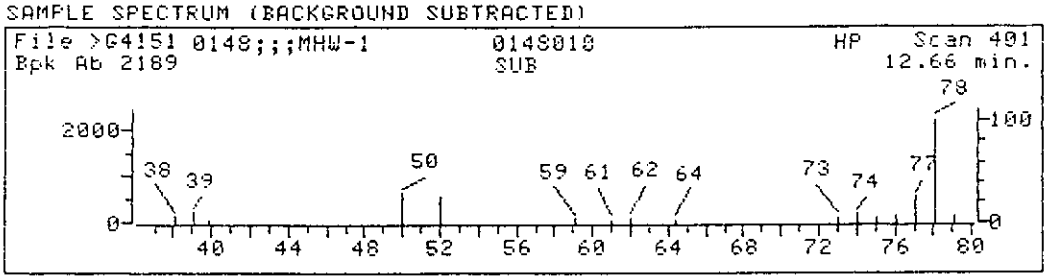
Data File: >G4151::G2 Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 00:29 Quant ID File: I_IFGW::N1
Injected at: 930212 23:58 Last Calibration: 930212 21:54

Compound No: 36
Compound Name: 1,1,1-Trichloroethane
Scan Number: 368
Retention Time: 11.75 min.
Quant Ion: 96.8
Area: 11987
Concentration: 5.70 ug/L
q-value: 93

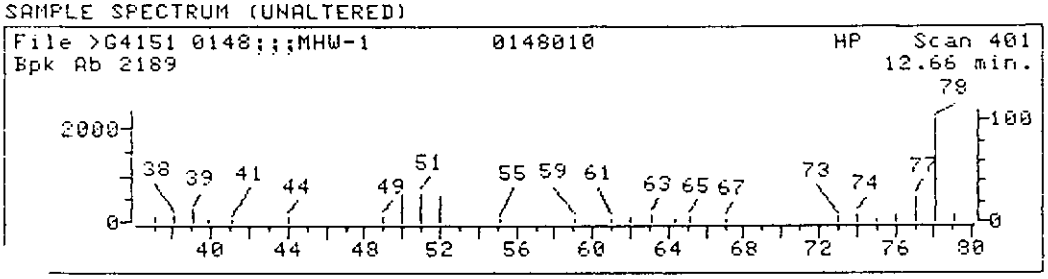
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



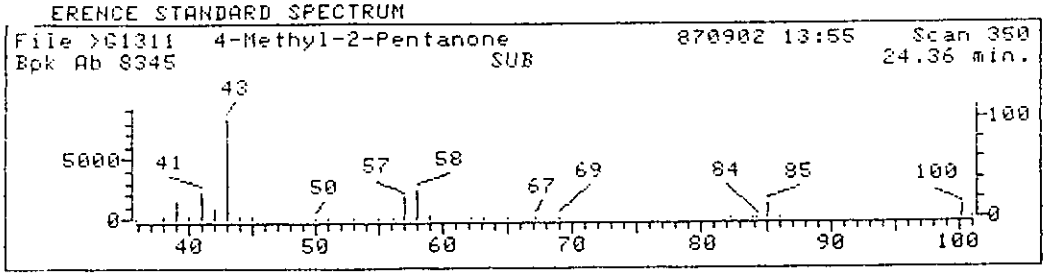
SAMPLE SPECTRUM (UNALTERED)



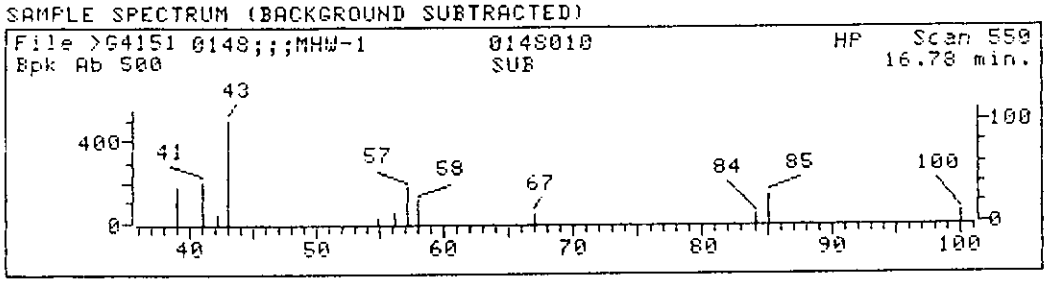
Data File: >G4151::G2 Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 00:29 Quant ID File: I_IFGW::N1
Injected at: 930212 23:58 Last Calibration: 930212 21:54

Compound No: 46
Compound Name: Benzene
Scan Number: 401
Retention Time: 12.66 min.
Quant Ion: 77.8
Area: 15260
Concentration: 5.80 ug/L
q-value: 91

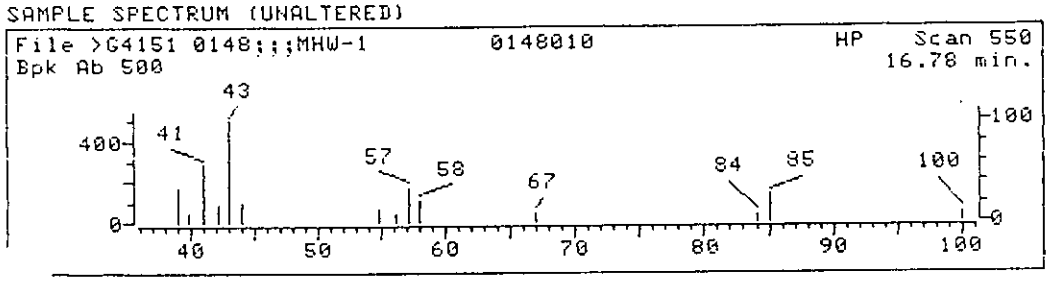
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

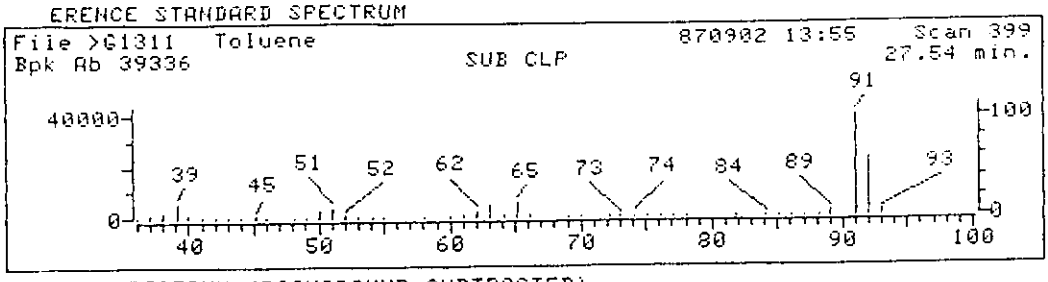


Data File: >G4151::G2 Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 00:29 Quant ID File: I_IFGW::N1
Injected at: 930212 23:58 Last Calibration: 930212 21:54

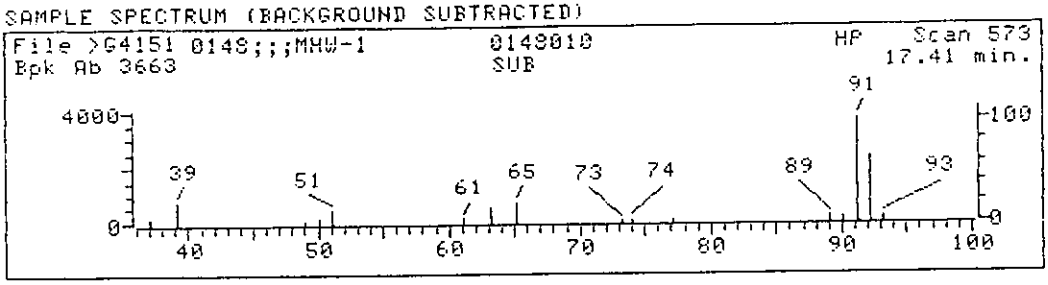
Compound No: 54
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 550
Retention Time: 16.78 min.
Quant Ion: 42.8
Area: 4426
Concentration: 6.17 ug/L
q-value: 83

✓

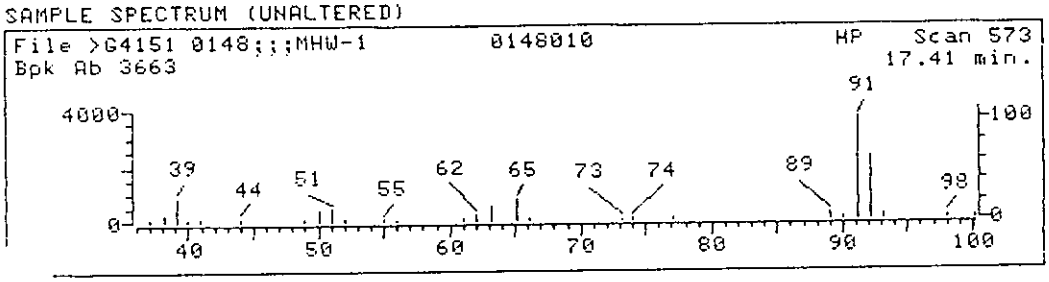
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



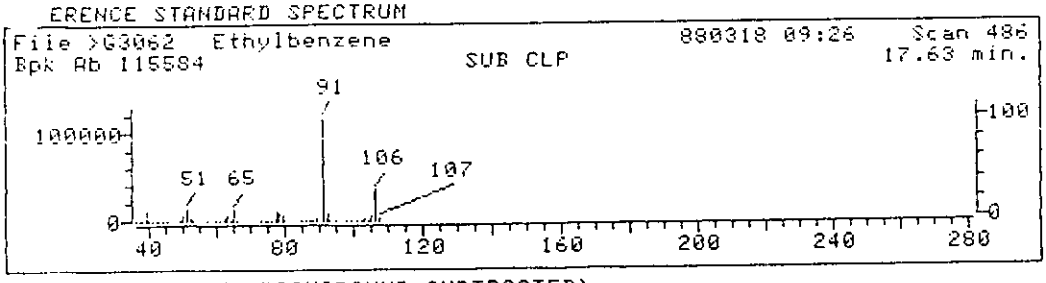
Data File: >G4151::G2
Name: 0148;;;MHW-1
Misc: 0148010
Quant Time: 930213 00:29
Injected at: 930212 23:58

Quant Output File: ^G4151::QT

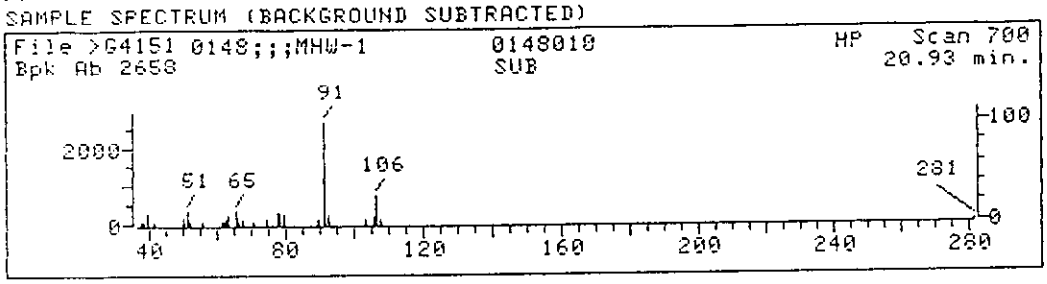
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 60
Compound Name: Toluene
Scan Number: 573
Retention Time: 17.41 min.
Quant Ion: 91.0
Area: 22969
Concentration: 7.59 ug/L
q-value: 95

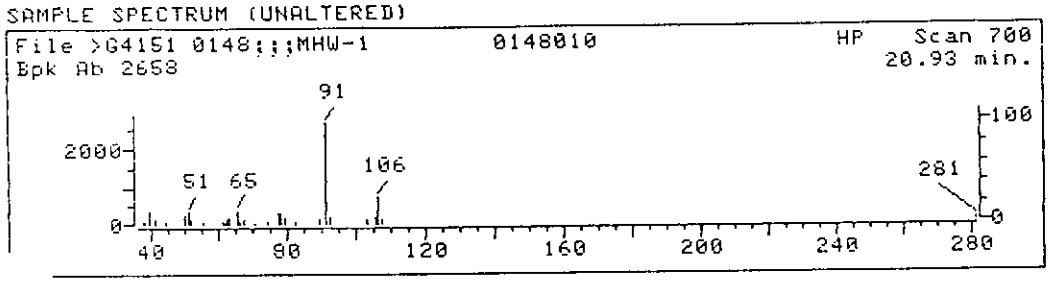
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



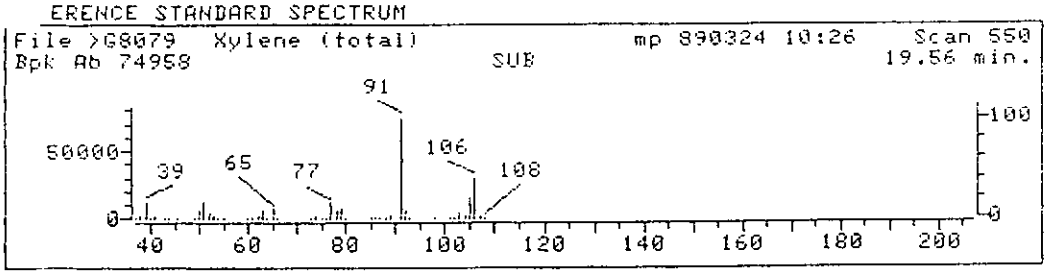
Data File: >G4151::G2
Name: 0148;;;MHW-1
Misc: 0148010
Quant Time: 930213 00:29
Injected at: 930212 23:58

Quant Output File: ^G4151::QT

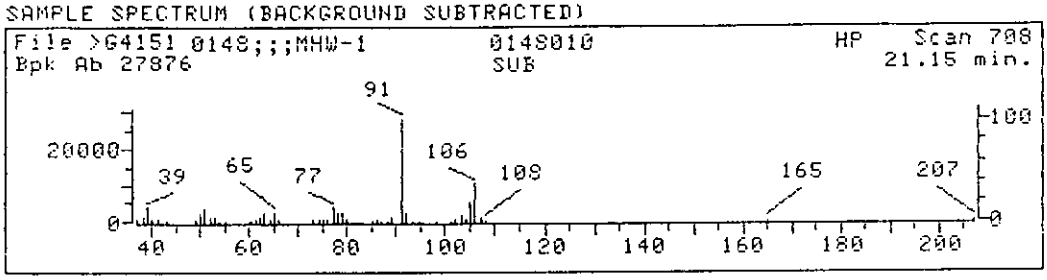
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 63
Compound Name: Ethylbenzene
Scan Number: 700
Retention Time: 20.93 min.
Quant Ion: 105.8
Area: 3045
Concentration: 2.95 ug/L
q-value: 95

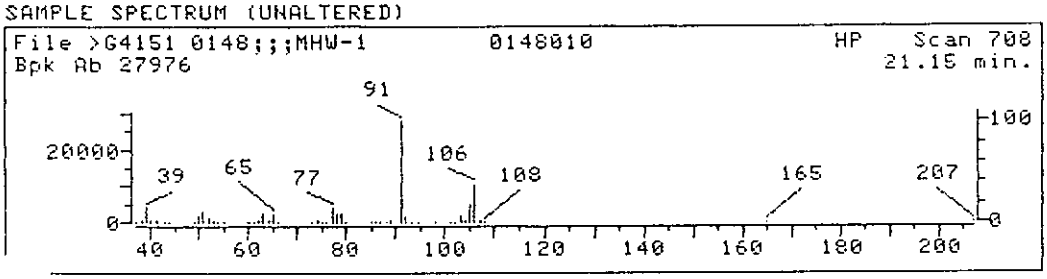
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



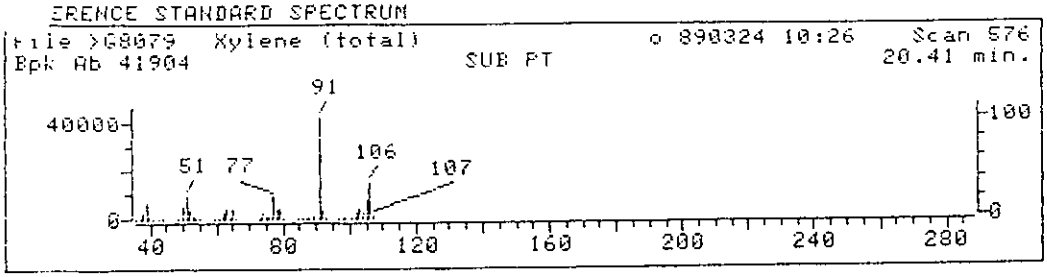
SAMPLE SPECTRUM (UNALTERED)



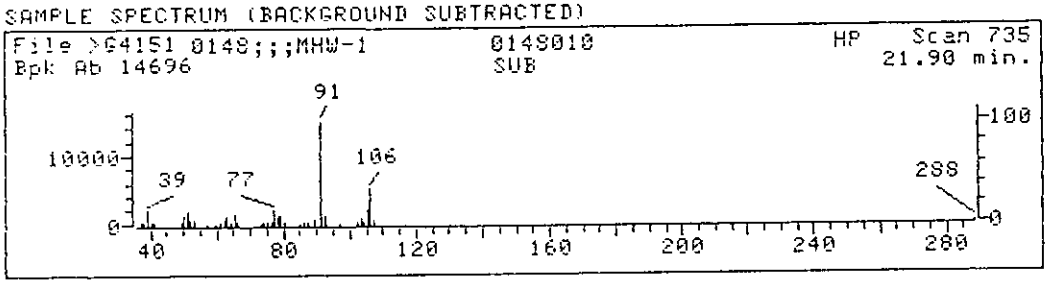
Data File: >G4151::G2 Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 00:29 Quant ID File: I_IFGW::N1
Injected at: 930212 23:58 Last Calibration: 930212 21:54

Compound No: 65
Compound Name: Xylene (total)mp
Scan Number: 708
Retention Time: 21.15 min.
Quant Ion: 105.8
Area: 41728
Concentration: 33.79 ug/L
q-value: 90

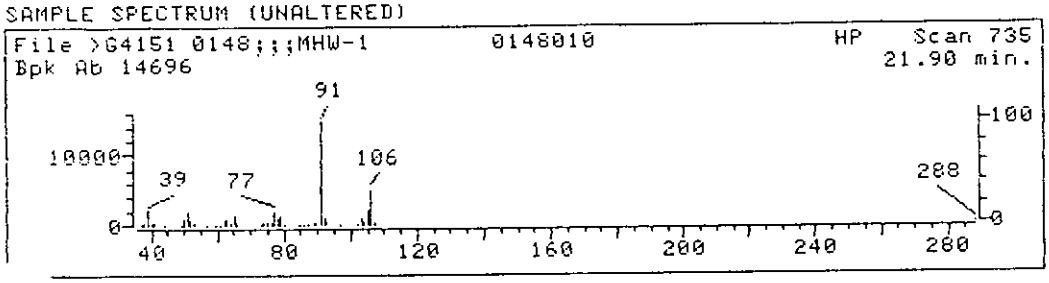
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



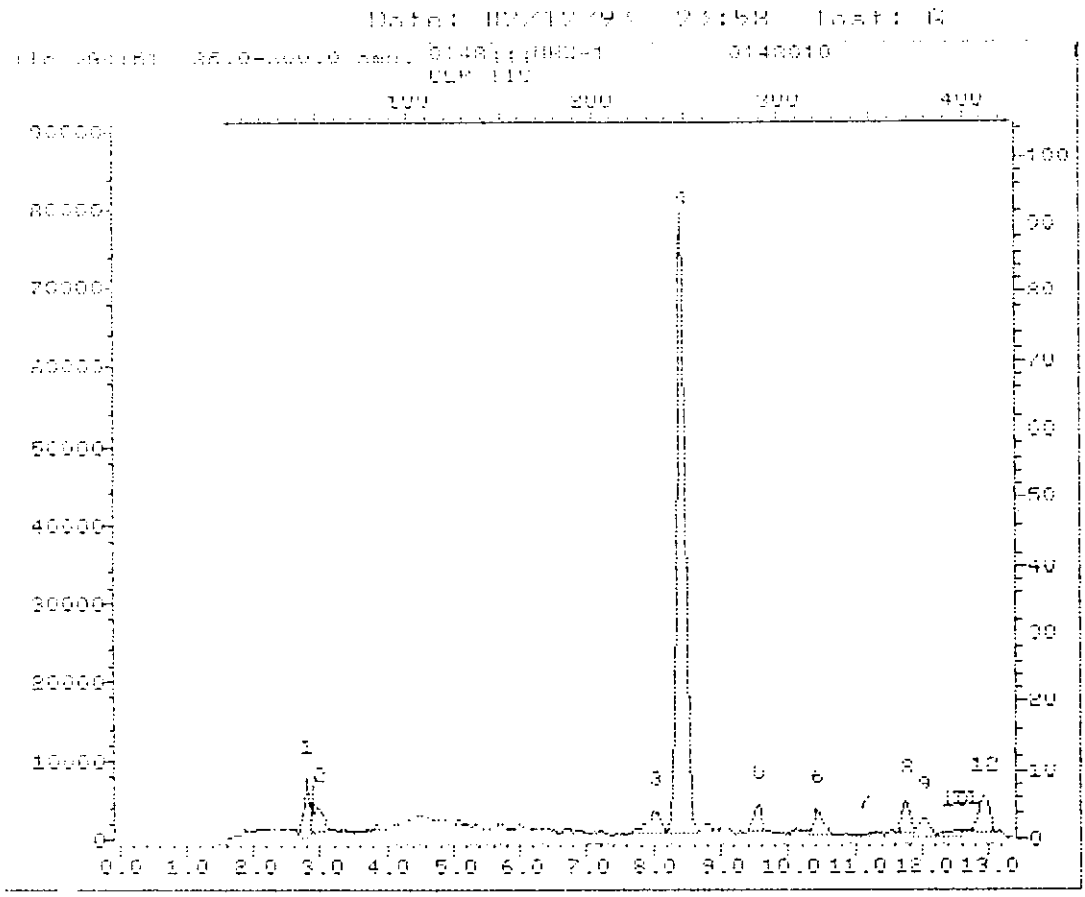
Data File: >G4151::G2
Quant Output File: ^G4151::QT
Name: 0148;;;MHW-1
Misc: 0148010
HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 00:29
Quant ID File: I_IFGW::N1
Injected at: 930212 23:58
Last Calibration: 930212 21:54

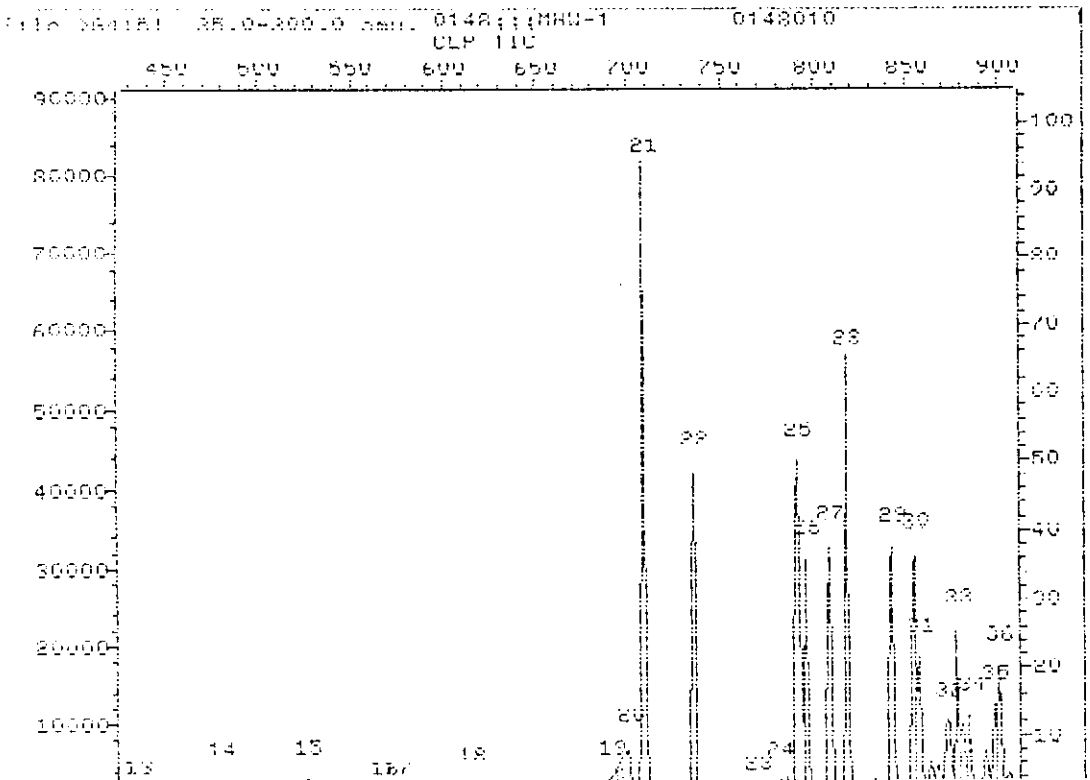
Compound No: 66
Compound Name: Xylene (total)o
Scan Number: 735
Retention Time: 21.90 min.
Quant Ion: 105.8
Area: 20621
Concentration: 16.86 ug/L
q-value: 87

TF Data File Header Form : >64151

Sample: 0148:::MHW-1 Operator: MSG MS 2/12/93 23:58
File : 0148010 HP5995:6:::1.0:051 :61919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M 6BAP Tuning File: 1 6 No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


0148010
CLP 110
100
200
300
400
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0


0148010
CLP 110
450
500
550
600
650
700
750
800
850
900

Date: 03/10/93 23:58 Inst: 5

TIC PEAK REPORT

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
4.	8.43	888179.	180.	1.	1.000
25.	23.45	231525.	53.	5.	1.000
23.	24.16	208144.	50.	5.	1.000
30.	25.19	1508511.	21.	5.	1.000
21.	24.88	131188.	18.	5.	1.000
22.	23.92	124235.	18.	5.	1.000
26.	23.58	109293.	16.	5.	1.000
29.	25.82	27956.	11.	5.	1.000
31.	25.27	64000.	9.	5.	1.000
1.08	2.29	35831.	9.	1.	1.000
1.10A	12.41	55452.	8.	5.	1.000
2.	8.02	31293.	8.	1.	1.000
32.	25.69	56828.	8.	5.	1.000
6.	10.42	29229.	8.	1.	1.000
17.	12.94	48365.	7.	5.	1.000
9.	9.98	25682.	7.	1.	1.000
24.	23.14	48209.	7.	5.	1.000

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		1/2SI
BROMOCHLOROMETHANE	11.11	196002.	0.00	12.33	8.2
1,4-DIFLUOROBENZENE	13.54	335184.	12.33	17.10	2.9
CHLOROBENZENE-D5	20.66	369454.	17.10	96.46	3.8

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	7
Target peaks matched:	4
Total TIC identified:	22

TIME : 12:43 PM WED., 3 MAR., 1993

MHW-1

...n't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

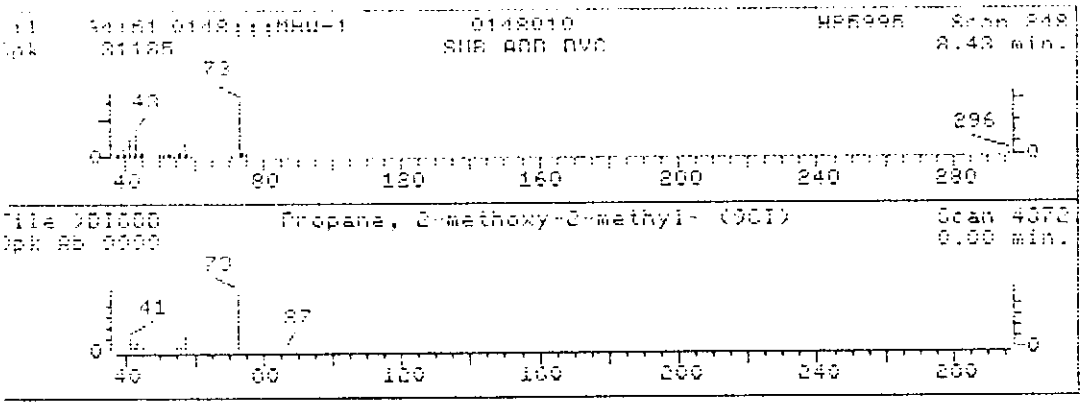
RPN error for command: RSF&3
RPN error: -5
id record length RSF

1. Propane, 2-methoxy-2-methyl- (9CI) RR C5H12O

Sample File: >144191 Spectrum #: 248
Search speed: 5 Fitting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	HUNT	K	DK	#FLG	TIT	%	CON	C	I	R	IU
1.	51	1634044	4372	"RIGOR	39	36	1	0	98	51	19	14		

Peak#: 4 Area: 488179. Est Conc: 180. Date: 02/12/93 23:58 Inst: G



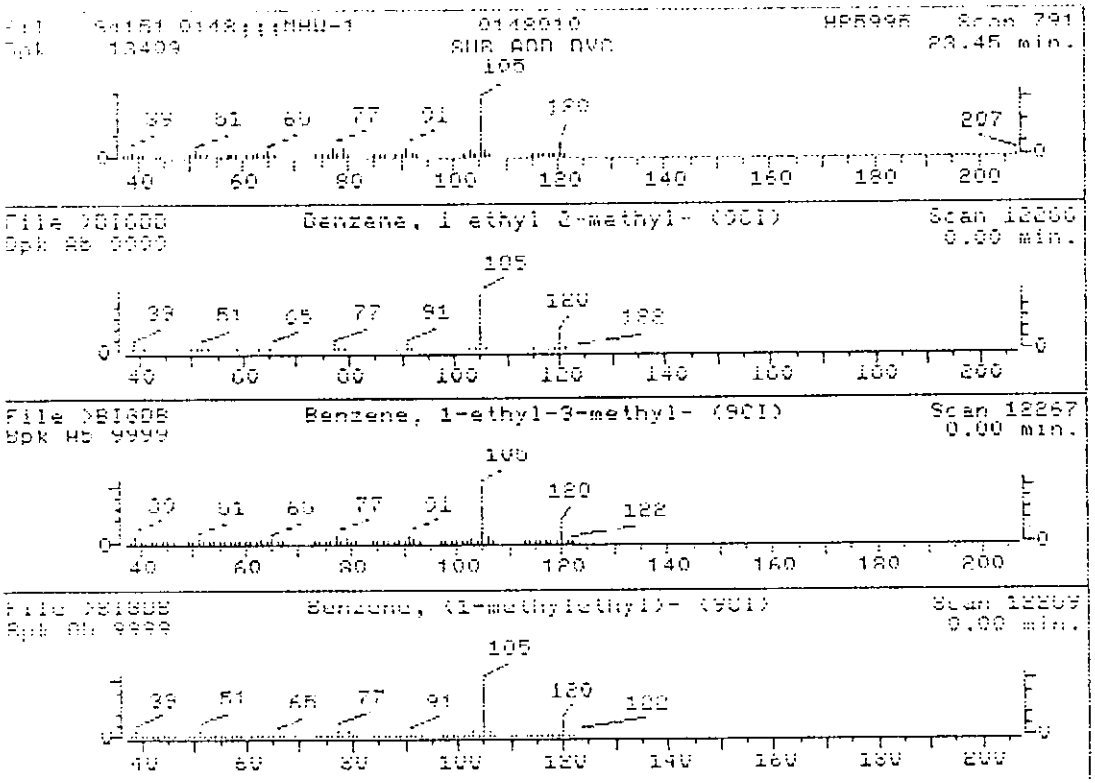
...ed length RSP

1.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
2.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
3.	Benzene, (1-methylethyl)- (9CI)	120 C9H12
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12

Sample File: >S4191 Spectrum #: 791
Search speed: 3 Tuning option: S No. of ion ranges searched: 23

	Prob.	CAS #	CON #	NAME	K	DK	#PEAKS	HIT	%	CON	C	P	IV
1.	93*	611143	12266	"BIGDB	80	5	1	3	96	1	68		80
2.	93*	620144	12267	"BIGDB	81	6	1	4	92	1	68		80
3.	84*	98828	12269	"BIGDB	69	18	11	-1	86	8	56		69
4.	84*	622968	12268	"BIGDB	69	24	1	2	94	2	56		61

Peak#: 25 Area: 231525. Est Conc: 33. Date: 02/12/93 23:58 Inst: G



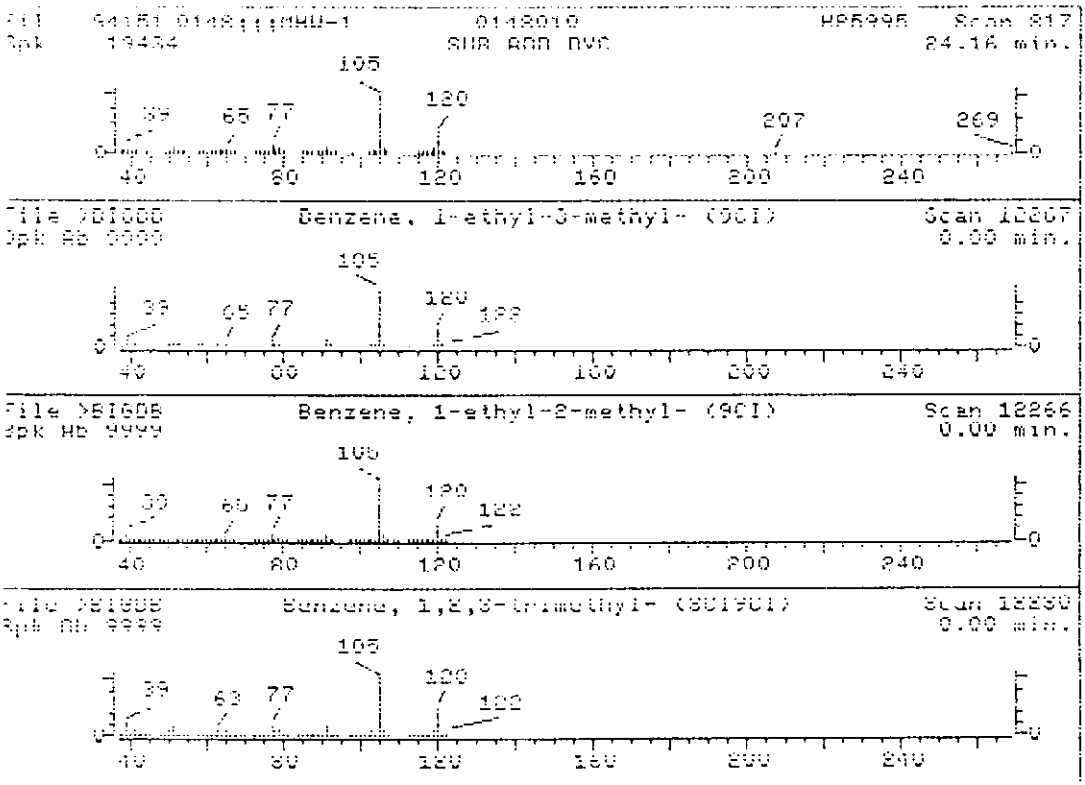
ad Lacord length RHF

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

Sample File: >B4191 Spectrum #: 817
Search speed: 3 Tilting option: S No. of ion ranges searched: 24

	Prob.	CAS #	COIN #	NAME	K	DK	#FIG	TILT	%	COIN	C I	R IO
1.	94*	620144	12267	"BIGDB	25	12	1	0	100	10	68	93
2.	93*	611143	12266	"BIGDB	25	10	1	0	100	12	64	91
3.	91*	526738	12280	"BIGDB	80	20	0	0	56	34	50	94
4.	87*	622968	12268	"BIGDB	68	12	1	0	100	12	56	80

Peak#: 28 Area: 208144. Fst Conc: 30. Date: 02/12/93 23:58 Inst: G



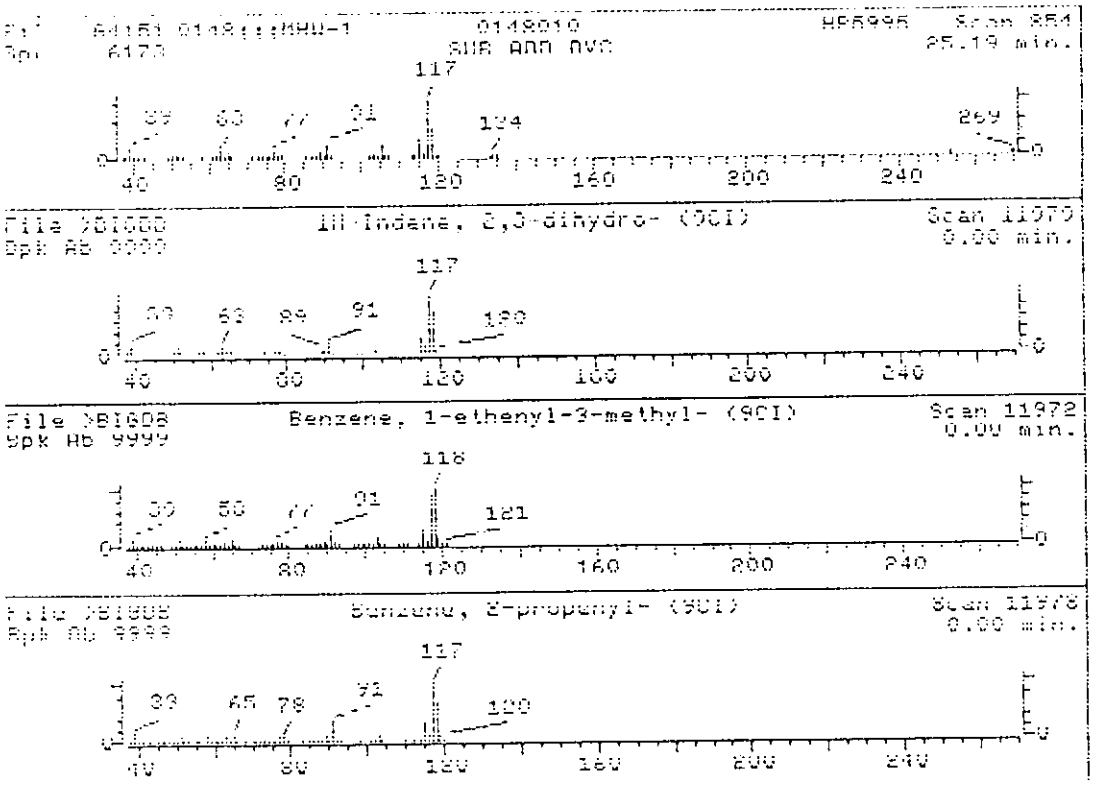
nd record length ###

1.	1H-Indene, 2,3-dihydro- (9CI)	118 C9H10
2.	Benzene, 1-ethenyl-3-methyl- (9CI)	118 C9H10
3.	Benzene, 2-propenyl- (9CI)	118 C9H10
4.	Benzene, cyclopropyl- (8CI,9CI)	118 C9H10

Sample File: >64151 Spectrum #: 854
Search speed: 3 Fitting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	NAME	K	DK	#FIG	TOT	%	CON	C	I	R	IO
1.	28*	496117	11929	"BIGDB	72	38	2	0	62	18	32	54		
2.	41*	1008811	11972	"BIGDB	57	39	1	4	58	45	14	39		
3.	40*	300572	11978	"BIGDB	55	42	1	0	50	49	12	42		
4.	55*	874494	11986	"BIGDB	58	59	2	0	55	46	11	35		

Peak#: 58 Area: 150830. Est Conc: 21. Date: 02/12/93 23:58 Inst: G



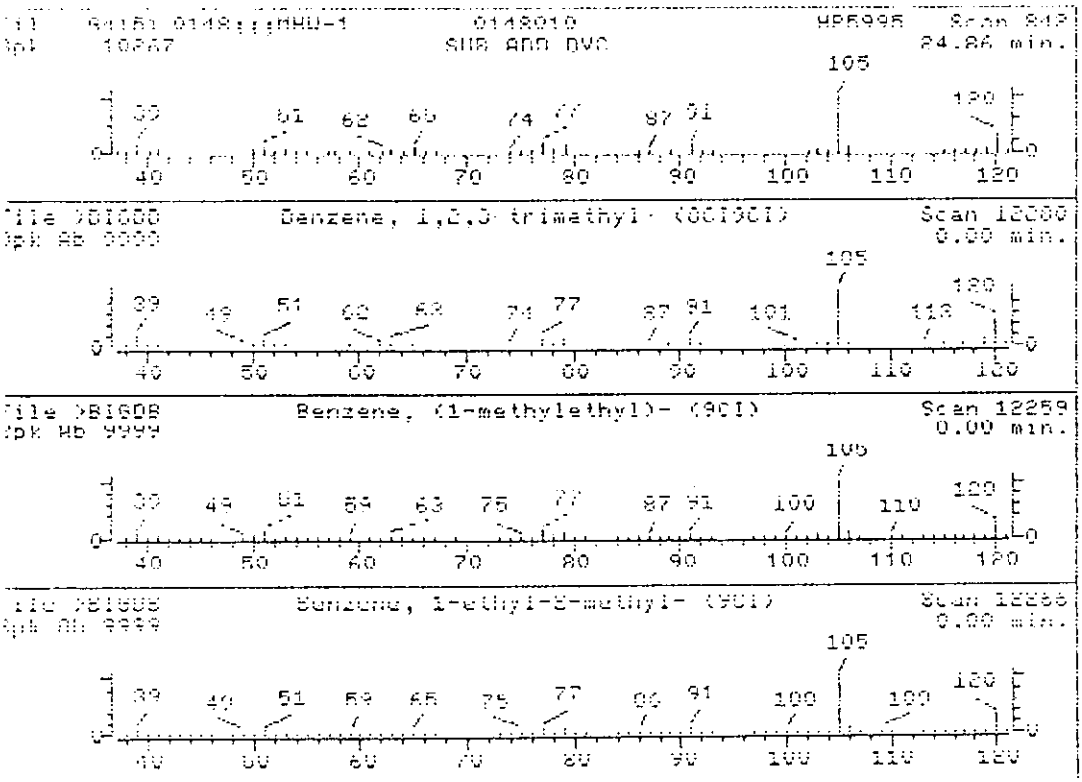
id record length RNF

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

Sample File: >R4151 Spectrum #: R42
Search speed: 3 Tilting option: S No. of ion ranges searched: 24

	Prob.	CAS #	CON #	NAME	K	DK	#HLG	TILT	%	CON	C	I	R	W
1.	96*	526738	12280	"BIGDB	90	10	0	0	68	3	72		96	
2.	96*	98828	12259	"BIGDB	76	11	0	0	92	14	64		96	
3.	89*	611143	12266	"BIGDB	68	17	1	0	100	7	62		80	
4.	89*	620144	12267	"BIGDB	69	18	1	0	100	5	66		72	

Peak#: 29 Area: 131188. Est Conc: 18. Date: 02/12/93 23:58 Inst: G



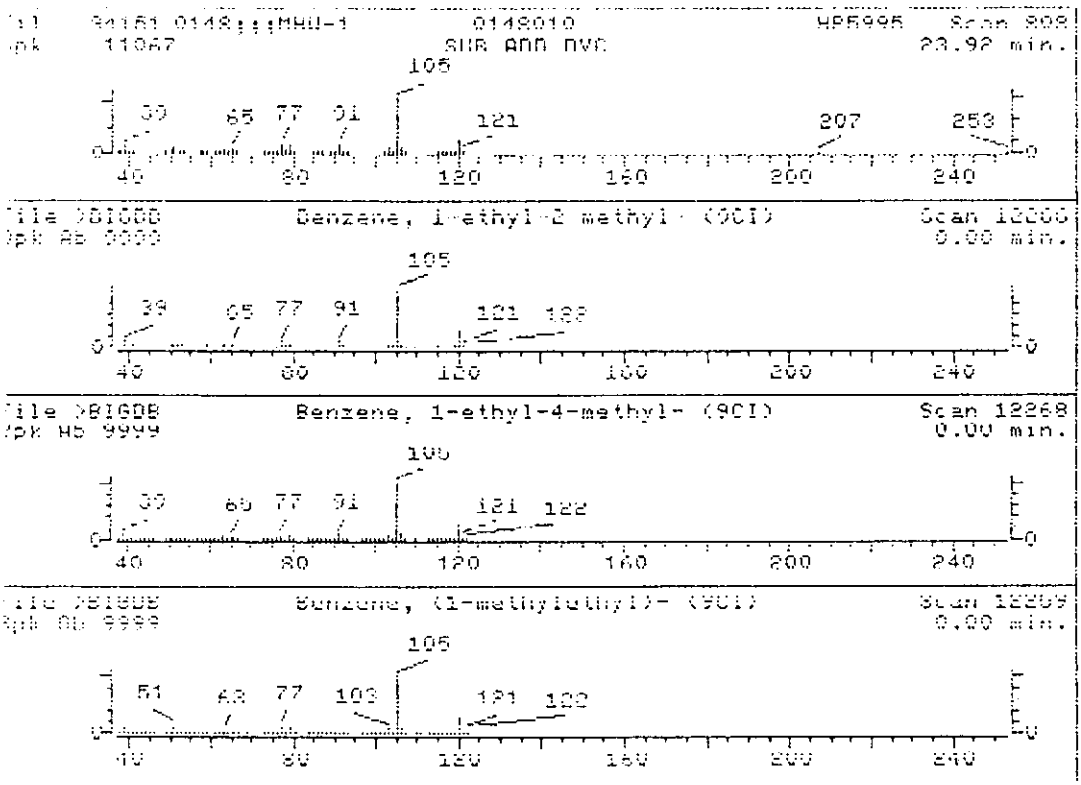
od record length RRF

1. Benzene, 1-ethyl-2-methyl- (9CI) 120 C9H12
2. Benzene, 1-ethyl-4-methyl- (9CI) 120 C9H12
3. Benzene, (1-methylethyl)- (9CI) 120 C9H12
4. Benzene, 1-ethyl-3-methyl- (9CI) 120 C9H12

Sample File: >N4151 Spectrum #: RRR
Search speed: 3 Tilting option: S No. of ion ranges searched: 24

	Prob.	CAS #	CDN #	NAME	K	DK	#PLG	TILT	%	CDN	D	R IV
1.	86*	611143	12266	"BIGDB	52	28	0	0	22	8	59	21
2.	84*	622968	12268	"BIGDB	62	24	1	0	88	7	55	62
3.	83*	98828	12259	"BIGDB	21	16	1	-1	89	8	54	59
4.	29*	620144	12267	"BIGDB	52	35	2	0	80	7	48	35

Peak#: 22 Area: 124235. Est Conc: 18. Date: 02/12/93 23:58 Inst: G



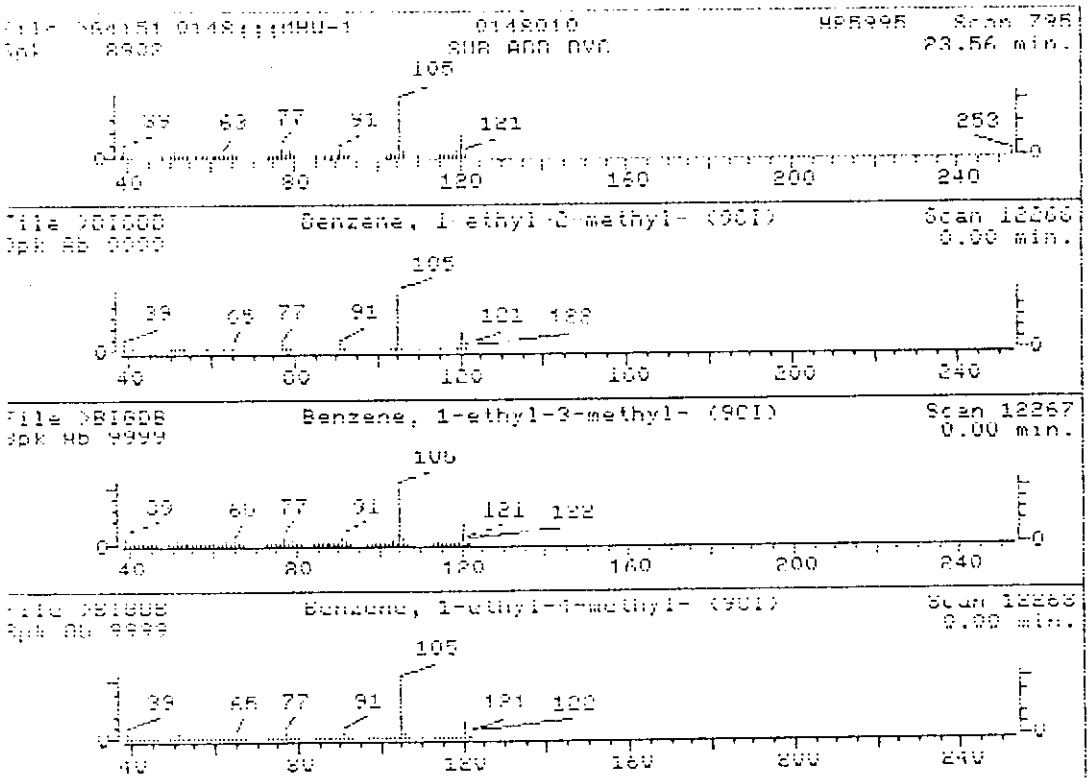
nd Library Search Report

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

Sample File: >114151 Spectrum #: 295
Search speed: 3 Fitting option: S No. of ion ranges searched: 52

	Prob.	CAS #	COIN #	NAME	K	DK	#FLG	TILT	%	COIN	C	P	IV
1.	95*	611143	12266	"BIGDB	25	10	1	0	100	12	64	93	
2.	95*	620144	12267	"BIGDB	25	12	1	0	100	11	64	93	
3.	93*	622968	12268	"BIGDB	69	16	0	0	85	25	53	94	
4.	91*	526238	12288	"BIGDB	82	18	0	0	66	32	50	94	

Peak#: 2A Area: 109793. Est Conc: 16. Date: 02/12/93 23:58 Inst: G



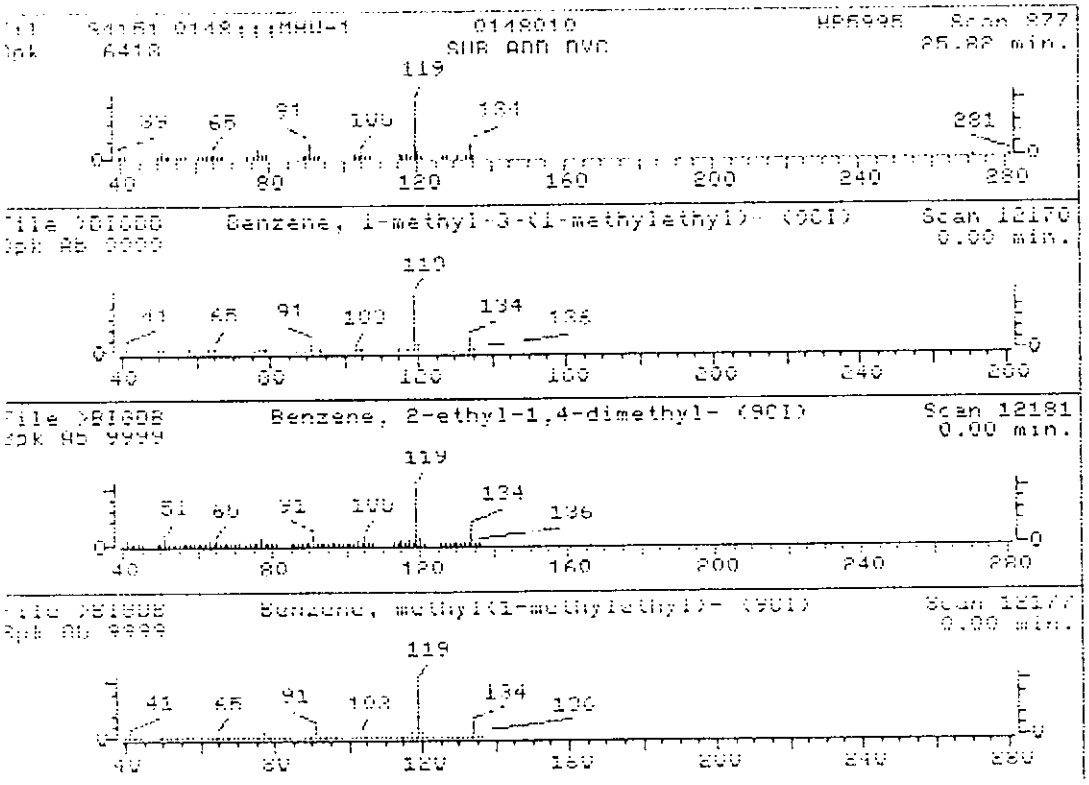
sd .econd length RAP

1.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14
2.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134 C10H14
3.	Benzene, methyl(1-methylethyl)- (9CI)	134 C10H14
4.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134 C10H14

Sample File: >R4191 Spectrum #: 877
Search speed: 5 Fitting option: S No. of ion ranges searched: 58

	Prob.	CAS #	COM #	ROOT	K	DK	#PEG	FIT	%	CON	C I R IV
1.	93*	535773	12170	"RIGDB	72	17	1	0	96	1	68 80
2.	89*	1758889	12181	"RIGDB	80	14	1	-1	70	1	66 76
3.	89*	25155151	12177	"RIGDB	72	18	2	0	97	1	66 66
4.	89*	2870844	12174	"RIGDB	71	18	1	0	90	1	66 72

Peak#: 13 Area: 72956. Est Conc: 11. Date: 02/12/93 23:58 Inst: G



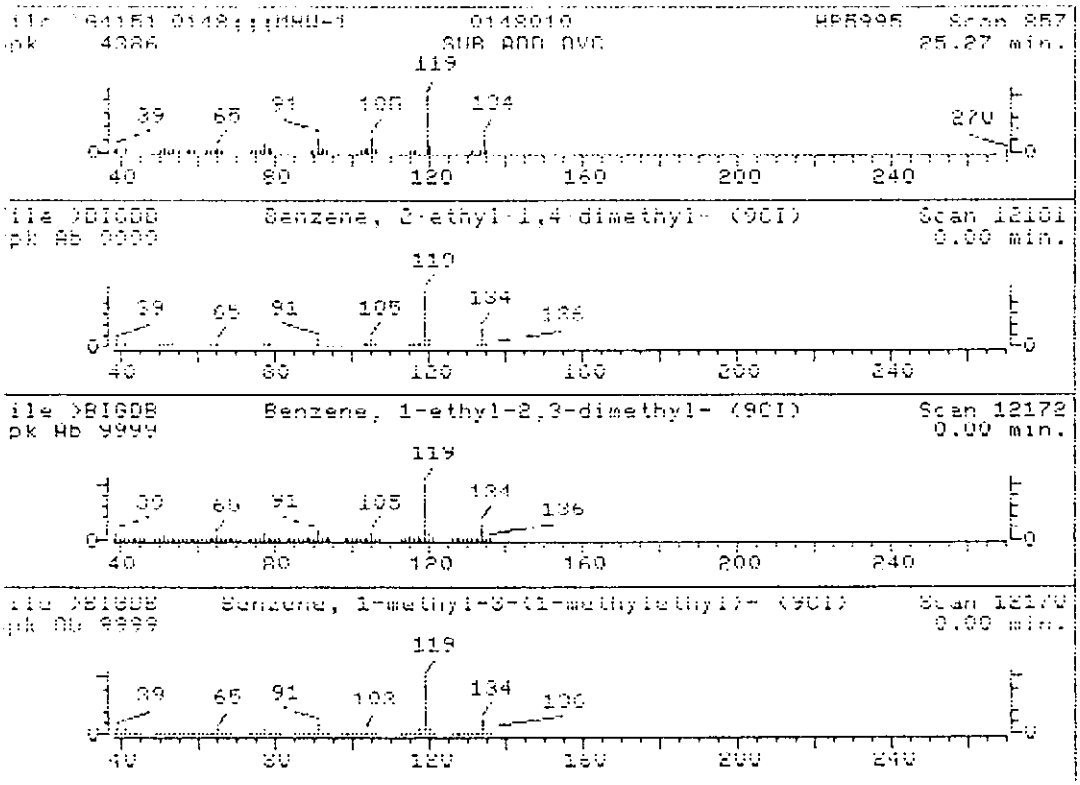
Search Report

1. Benzene, 2-ethyl-1,4-dimethyl- (9CI) 134 C10H14
2. Benzene, 1-ethyl-2,3-dimethyl- (9CI) 134 C10H14
3. Benzene, 1-methyl-3-(1-methylethyl)- (9CI) 134 C10H14
4. Benzene, 1-methyl-2-(1-methylethyl)- (9CI) 134 C10H14

Sample File: >64151 Spectrum #: 852
Search speed: 3 Hitting option: S No. of ion ranges searched: 57

	Prob.	CAS #	CON #	NAME	K	DK	#HITS	HIT	%	CON	C	I	R	IV
1.	24*	1758889	12181	"BIGDB	58	36	2	0	88	12	39	41		
2.	21*	933982	12172	"BIGDB	51	40	2	0	95	12	38	33		
3.	6*	535223	12170	"BIGDB	58	31	2	3	99	12	30	36		
4.	6*	527844	12169	"BIGDB	58	34	2	3	100	12	30	36		

Peak#: 31 Area: 64000. Est Conc: 9. Date: 02/12/93 23:58 Inst: G



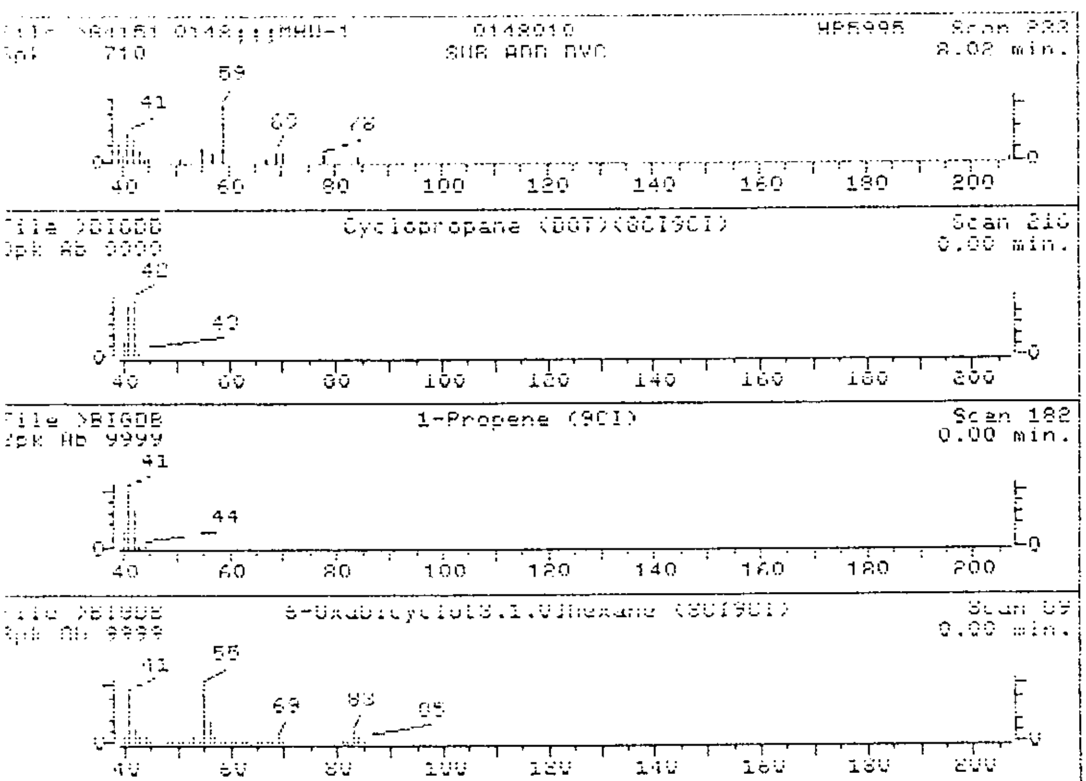
ad Word length 888

1. Cyclopropane (DOT)(8CI9CI) 42 C3H6
2. 1-Propene (9CI) 42 C3H6
3. 6-Oxabicyclo[3.1.0]hexane (8CI9CI) 84 C5H8O
4. Cyclobutane, methyl- (8CI9CI) 70 C5H10

Sample File: >S4151 Spectrum #: 233
Search speed: 3 Filting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I R IV
1.	43*	75194	216	"BIGDB	29	46	0	0	35	30	19	21
2.	41*	115071	182	"BIGDB	25	40	0	0	42	30	14	18
3.	26*	285676	59	"BIGDB	24	81	3	0	58	36	10	12
4.	25*	598618	3423	"BIGDB	22	40	2	0	129	41	8	13

Peak#: 3 Area: 31293. Est Conc: 8. Date: 02/12/93 23:58 Inst: G



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0085

MW-43

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148011

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4152.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	UB
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	11	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

AS 02/26/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0086

EPA SAMPLE NO.

MW-43

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148011

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4152.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 2 PAS 02/26/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.15	23	JN
2.		UNKNOWN SILOXANE	25.91	16	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930213 00:57
Output File: ^G4152::G4 Injected at: 930213 00:30
Data File: >G4152::G2 Dilution Factor: 1.00000
Name: 0148;;;MW-43
Misc: 0148011 HP5995:G;;;LLW;DF1 ;G1919

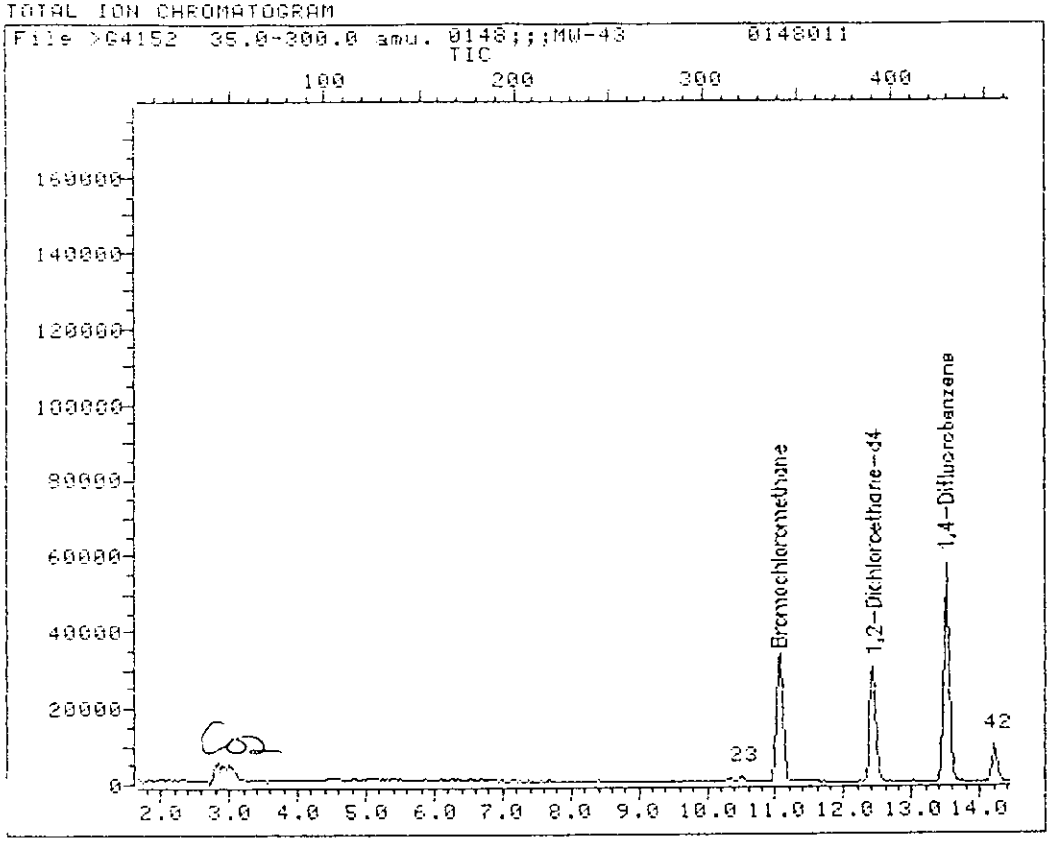
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.05	127.8	24568	50.00	ug/L	85
10)	Acetone	6.68	42.8	4199	9.74	ug/L	83
23)	1,2-Dichloroethene (total)c	10.50	95.8	1726	1.86	ug/L	91
30)	1,2-Dichloroethane-d4	12.43	64.8	85464	51.53	ug/L	90
34)	*1,4-Difluorobenzene	13.51	113.8	123650	50.00	ug/L	97
42)	Trichloroethene	14.23	129.8	9572	10.41	ug/L	92
53)	*Chlorobenzene-d5	20.63	116.8	96794	50.00	ug/L	89
61)	Toluene-d8	17.24	97.8	133817	51.77	ug/L	93
91)	Bromofluorobenzene	22.87	94.8	80951	50.74	ug/L	90

ompound is ISTD

PAS 02/26/93

TOTAL ION CHROMATOGRAM

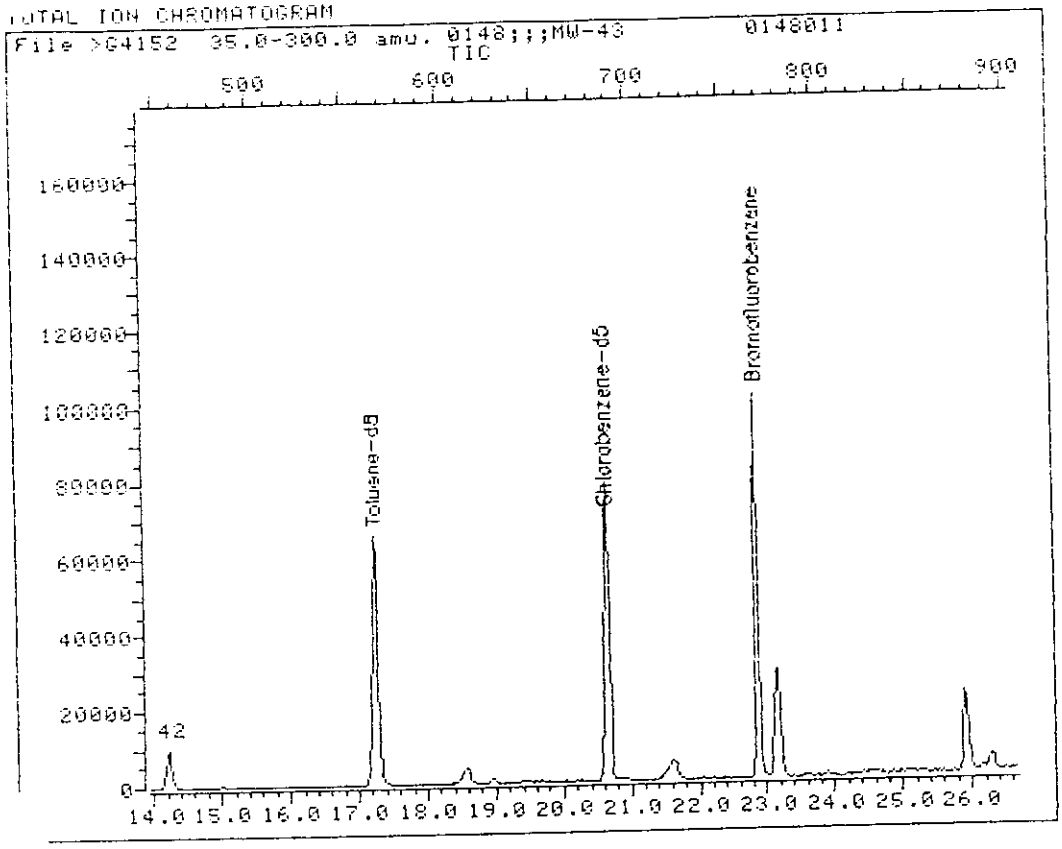


Data File: >G4152::G2 Quant Output File: ^G4152::G4
Name: 0148;;;MW-43
Misc: 0148011 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 00:57
Injected at: 930213 00:30

TIC page 1 of 2



Data File: >G4152::G2
Name: 0148;;;MW-43
Misc: 0148011

Quant Output File: ^G4152::G4

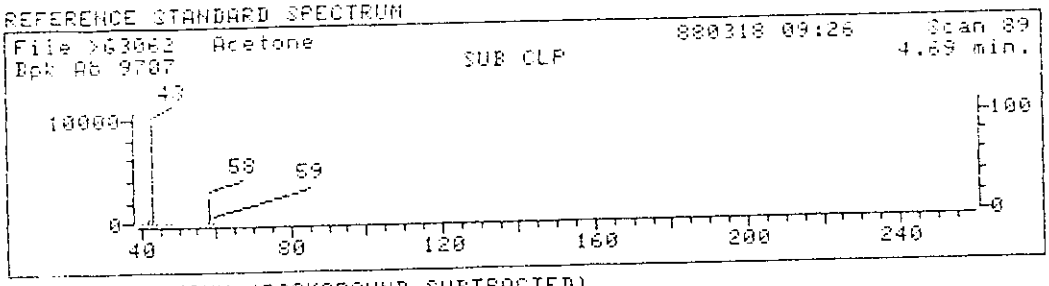
HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

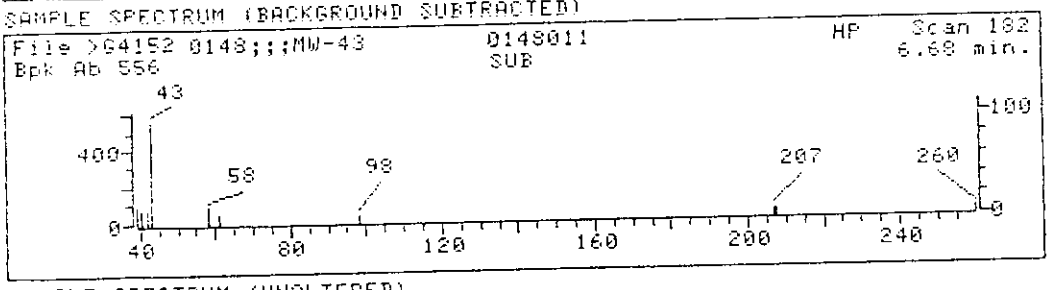
Operator ID: MSG
Quant Time: 930213 00:57
Injected at: 930213 00:30

TIC page 2 of 2

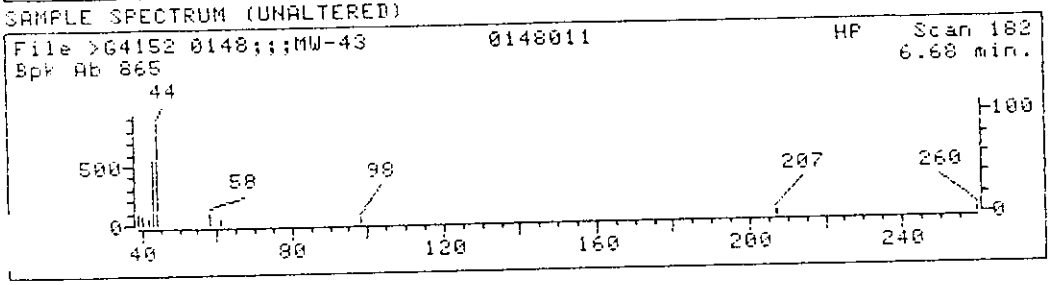
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4152::G2
Name: 0148;;;MW-43
Misc: 0148011
Quant Time: 930213 00:57
Injected at: 930213 00:30

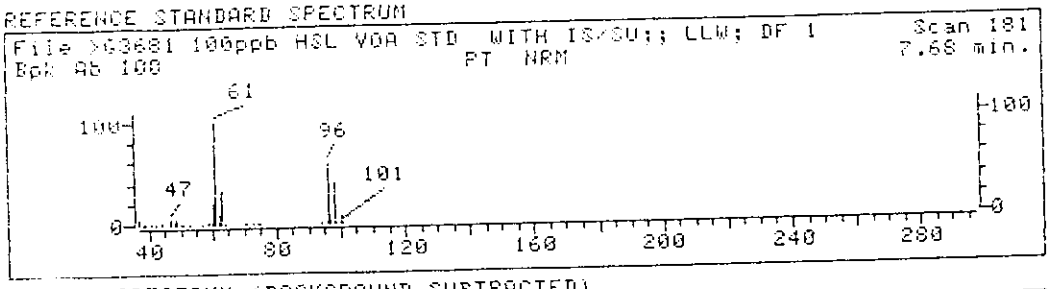
Quant Output File: ^G4152::G4

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

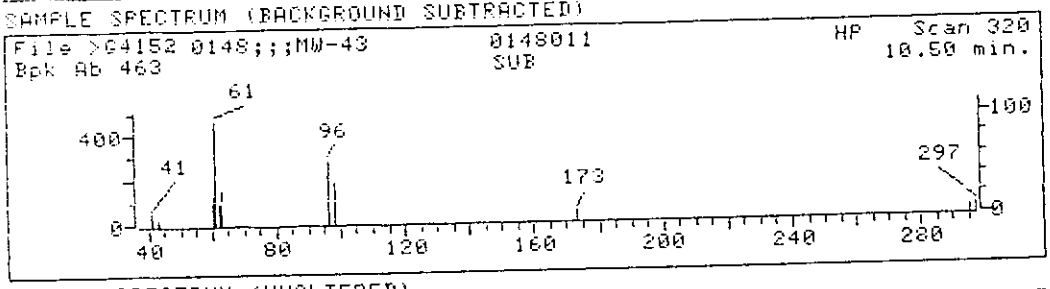
Compound No: 13
Compound Name: Acetone
Scan Number: 182
Retention Time: 6.68 min.
Quant Ion: 42.8
Area: 4199
Concentration: 9.74 ug/L
q-value: 83

✓

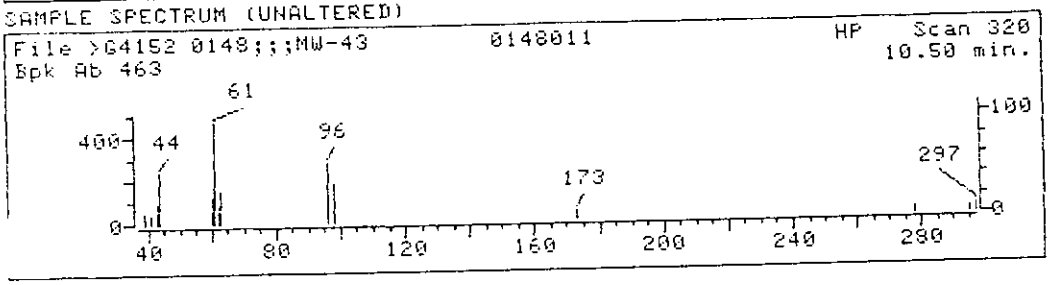
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

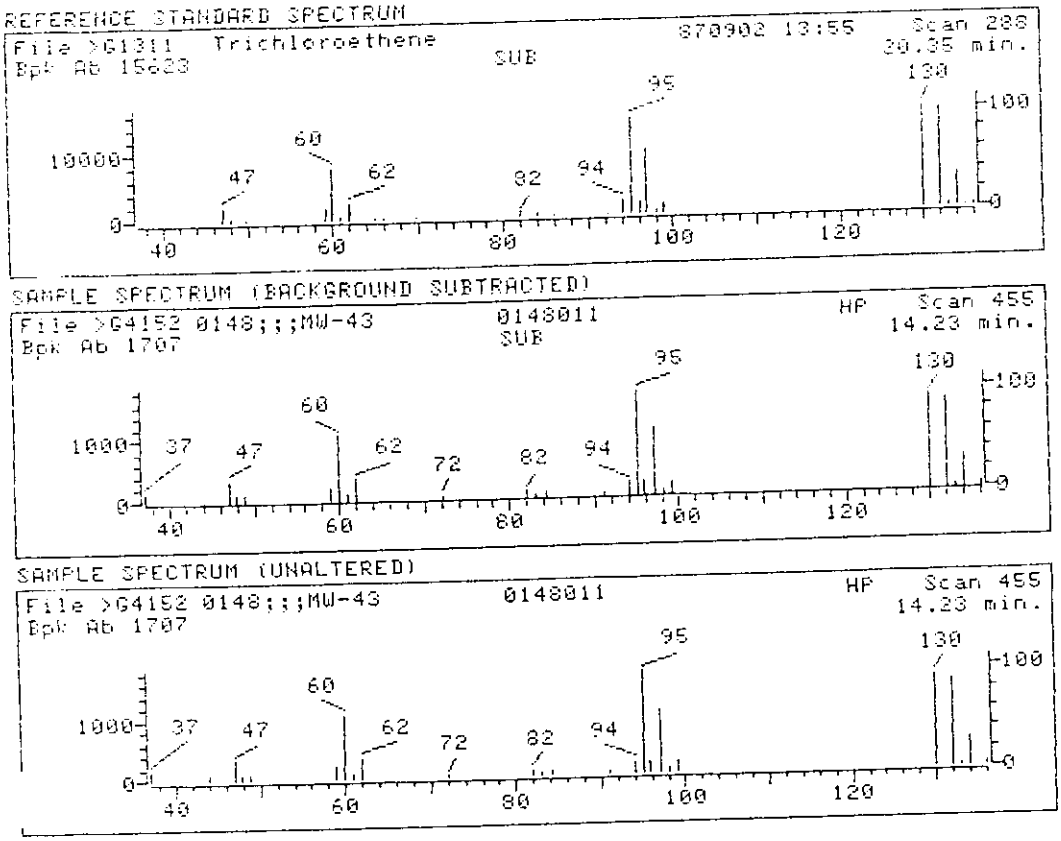


Data File: >G4152::G2
Name: 0148;;;MW-43
Misc: 0148011
Quant Time: 930213 00:57
Injected at: 930213 00:30

Quant Output File: ^G4152::G4

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 23
Compound Name: 1,2-Dichloroethene (total)c
Scan Number: 320
Retention Time: 10.50 min.
Quant Ion: 95.8
Area: 1726
Concentration: 1.86 ug/L
q-value: 91



Data File: >G4152::G2
Name: 0148;;;MW-43
Misc: 0148011
Quant Time: 930213 00:57
Injected at: 930213 00:30

Quant Output File: ^G4152::G4

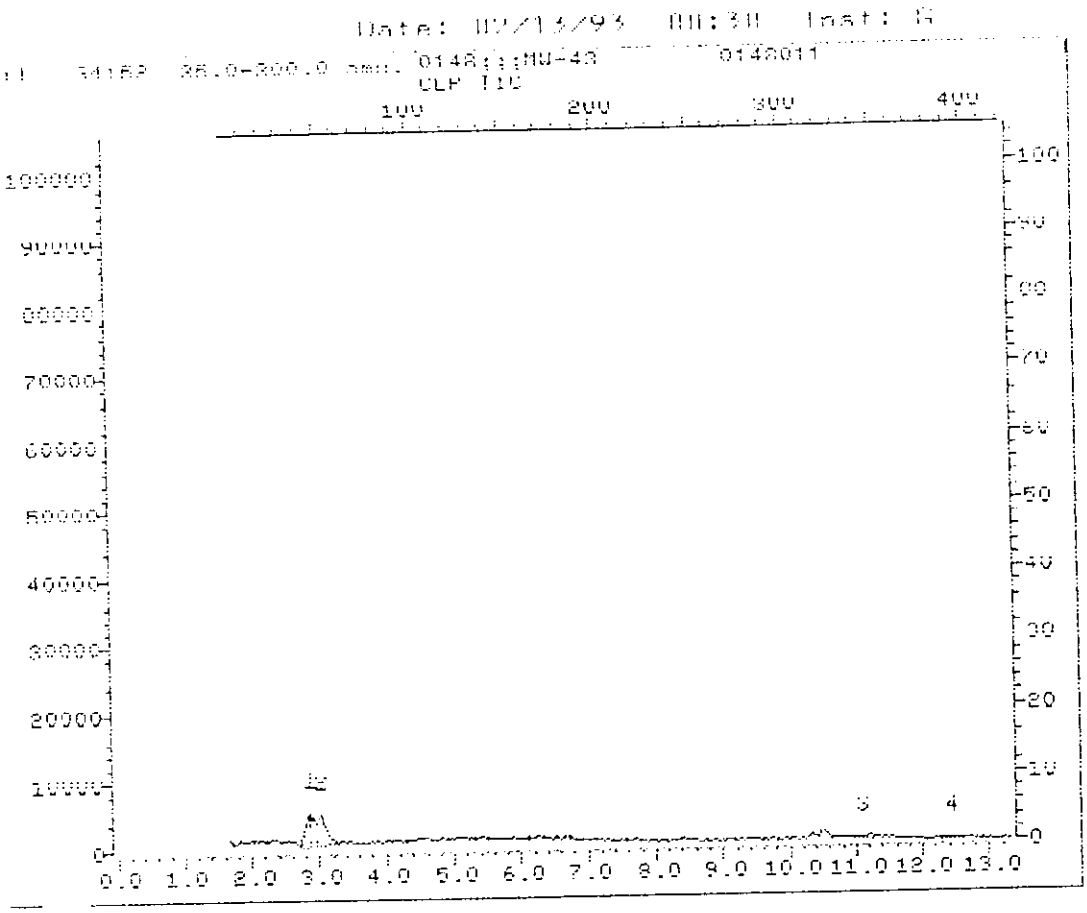
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

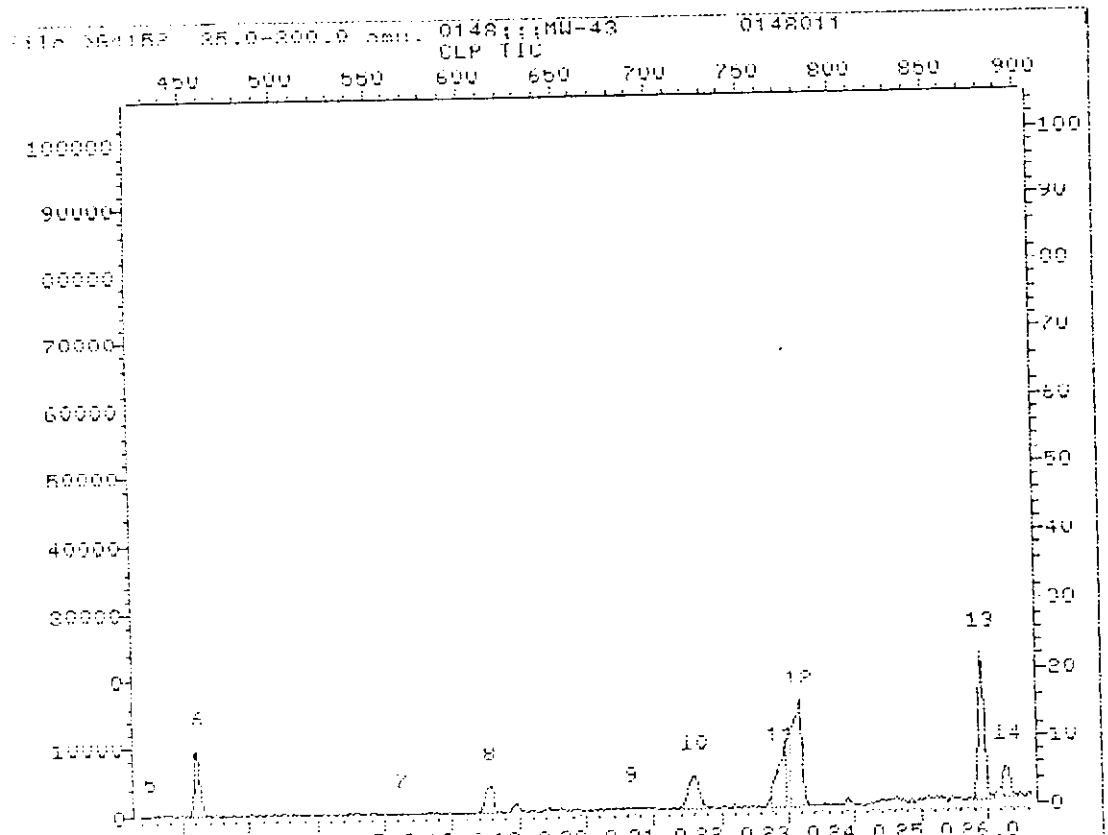
Compound No: 42
Compound Name: Trichloroethene
Scan Number: 455
Retention Time: 14.23 min.
Quant Ion: 129.8
Area: 9572
Concentration: 10.41 ug/L
q-value: 92

MS Data File header from : 934192

Sample: 0148:::MW-46 Operator: MSG MS 2/15/93 8:50
Misc : 0148003 HP5995:6:::11W:DFI :10919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M 8240 Tuning File: 1 6 No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	11.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


Date: 02/13/94 08:38 Inst: 5
35.0-300.0 amu. 0148;;MW-43 0148011
CLP TIC
100 200 300 400
100000 90000 80000 70000 60000 50000 40000 30000 20000 10000 0
100 90 80 70 60 50 40 30 20 10 0
2 3 4
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0


35.0-300.0 amu. 0148;;MW-43 0148011
CLP TIC
450 500 550 600 650 700 750 800 850 900
100000 90000 80000 70000 60000 50000 40000 30000 0 10000 0
100 90 80 70 60 50 40 30 20 10 0
6 7 8 9 10 11 12 13 14

Data: 02/15/93 08:58 Inst: 5

TIC PEAK REPORT

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
12.	25.15	168223.	23.	3.	1.000
13.	25.91	118248.	16.	3.	1.000
T.CB	3.01	40158.	10.	1.	1.000
T.CB	2.84	33004.	8.	1.	1.000
A.VOA	14.23	59594.	8.	2.	1.000
B.BNA	21.60	52412.	2.	3.	1.000

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		TI/SI
BROMOCHLOROMETHANE	11.08	194256.	0.00	12.29	2.9
1,4-DIFLUOROBENZENE	13.51	359412.	12.29	17.08	2.9
CHLOROBENZENE-D5	20.66	321361.	17.08	26.30	3.8

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	2
Target peaks matched:	0
Total TIC identified:	6

TIME : 1:22 PM MON., 15 FEB., 1993

~~MW-44~~

MW-43

RAS 02/26/93

Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

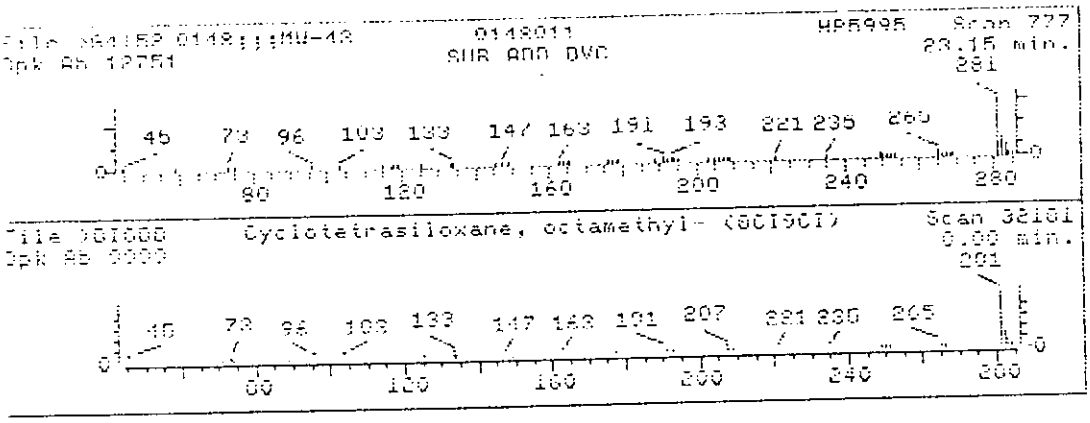
RPN error for command: RSFA3
RPN error: -5
Bad record length RSF

1. Cyclotetrasiloxane, octamethyl- (RIO19CI) 296 CRH24114S14

Sample file: >G4152 Spectrum #: 777
Search speed: 3 Tilting option: S No. of ion ranges searched: 63

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	28	556672	32181	"RIGDR	67	69	2	0	99	5	99			14

Peak#: 12 Area: 168223. Est Conc: 23. Date: 02/13/93 00:30 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

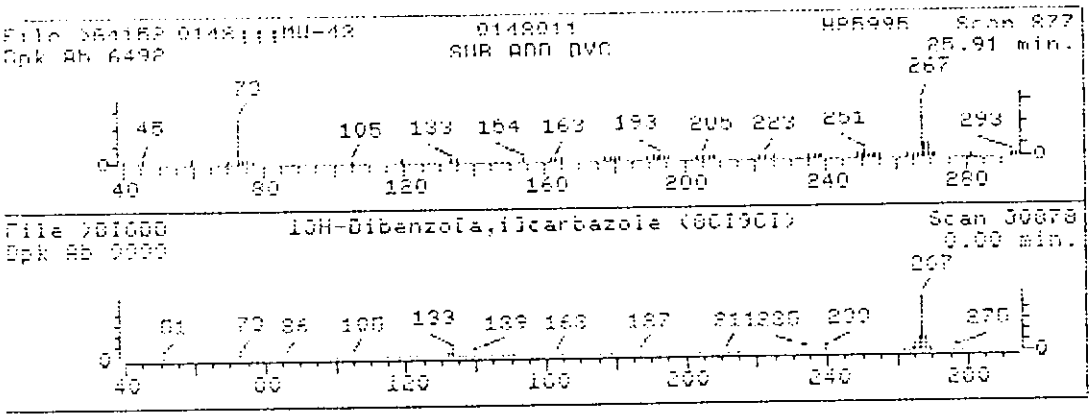
RPN error for command: RSFAC
RPN error: -5
Bad record length RSF

1. 13H-Dibenzo[a,i]carbazole (8CI)(9CI) 267 C20H13N

Sample file: >G4192 Spectrum #: 877
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	55*	239645	311828	"RIGOR	24	104	3	0	100	28	14		12	

Peak#: 13 Area: 118248. Est Conc: 16. Date: 02/13/93 00:30 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-44

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148 0098

Matrix: (soil/water) WATER Lab Sample ID: 0148012

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4153.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	46	
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	75	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	4	JB
591-78-6	2-Hexanone	3	JB
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	2	J
108-88-3	Toluene	10 ~~0.4~~	U ~~J~~
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

LHP 03/03/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 0099

MW-46 4

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 014801 32

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4158 3 .D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93 AS 02/25/93

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 02 AS 02/25/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL-	23.15	12	JN
2.		UNKNOWN SILOXANE	25.92	7	J
3.					
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0100

QUANT REPORT

Operator ID: MSG
Output File: ^G4153::QT
Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012

Quant Rev: 6 Quant Time: 930213 01:29
Injected at: 930213 01:01
Dilution Factor: 1.00000

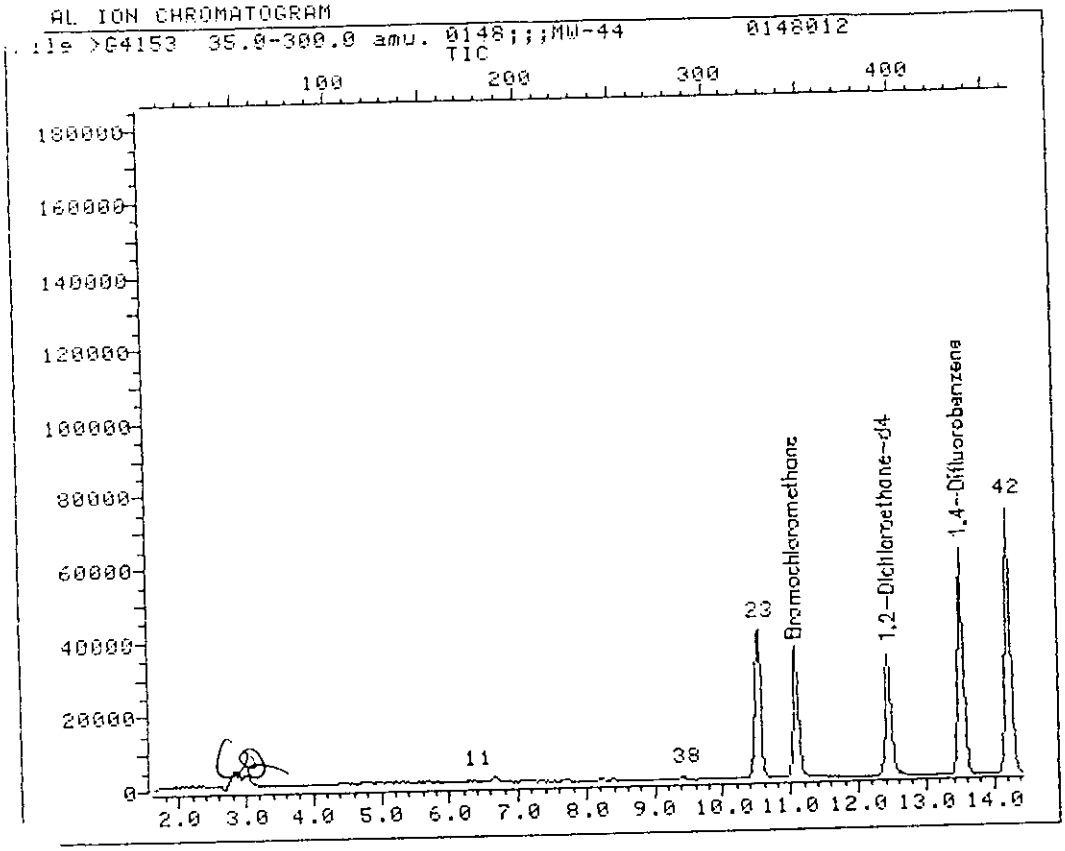
HP5995:G;;;LLW;DF1 ;G1919

ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.07	127.8	27181	50.00	ug/L	86
~~13)~~	~~Acrolein~~	~~6.37~~	~~55.8~~	~~502~~	~~5.11~~	~~ug/L~~	~~49~~
15)	Acetone	6.68	42.8	4898	10.26	ug/L	83
17)	Acrylonitrile	8.22	52.8	1871	7.98	ug/L	92
23)	1,2-Dichloroethene (total)c	10.52	95.8	46677	45.40	ug/L	93
~~24)~~	~~2-Butanone~~	~~10.52~~	~~43.8~~	~~2629~~	~~4.94~~	~~ug/L~~	~~59~~
30)	1,2-Dichloroethane-d4	12.45	64.8	91977	50.12	ug/L	88
34)	*1,4-Difluorobenzene	13.53	113.8	132314	50.00	ug/L	96
38)	Vinyl Acetate	9.41	42.8	3445	1.46	ug/L	90
42)	Trichloroethene	14.22	129.8	74162	25.37	ug/L	95
51	*Chlorobenzene-d5	20.67	116.8	101031	50.00	ug/L	77
53	4-Methyl-2-Pentanone	16.79	42.8	3002	3.83	ug/L	94
55)	2-Hexanone	18.95	42.8	1636	3.05	ug/L	99
58)	1,1,2,2-Tetrachloroethane	23.04	82.8	1658	1.97	ug/L	90
~~60)~~	~~Toluene~~	~~17.42~~	~~91.0~~	~~1341~~	~~.41~~	~~ug/L~~	~~93~~
61)	Toluene-d8	17.26	97.8	139639	51.76	ug/L	96
91)	Bromofluorobenzene	22.88	94.8	82650	49.63	ug/L	96

* Compound is ISTD

PAS 02/25/93



Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012

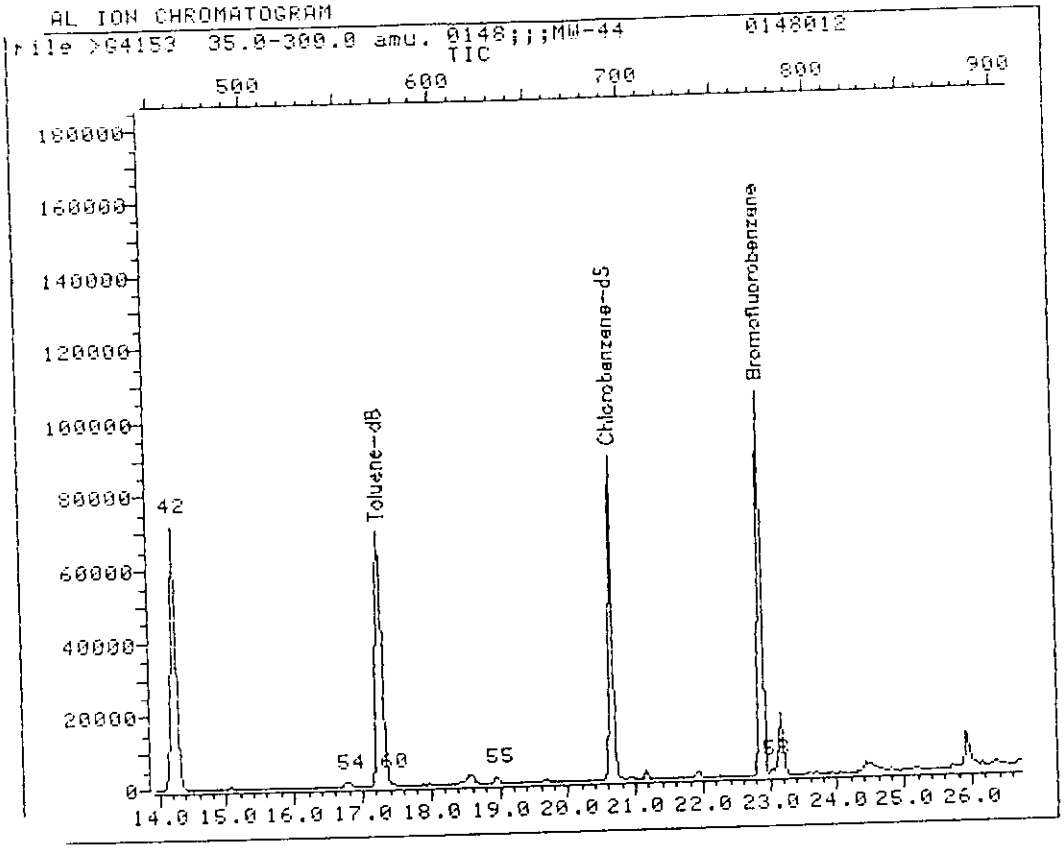
Quant Output File: ^G4153::QT

HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 01:29
Injected at: 930213 01:01

TIC page 1 of 2



Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012

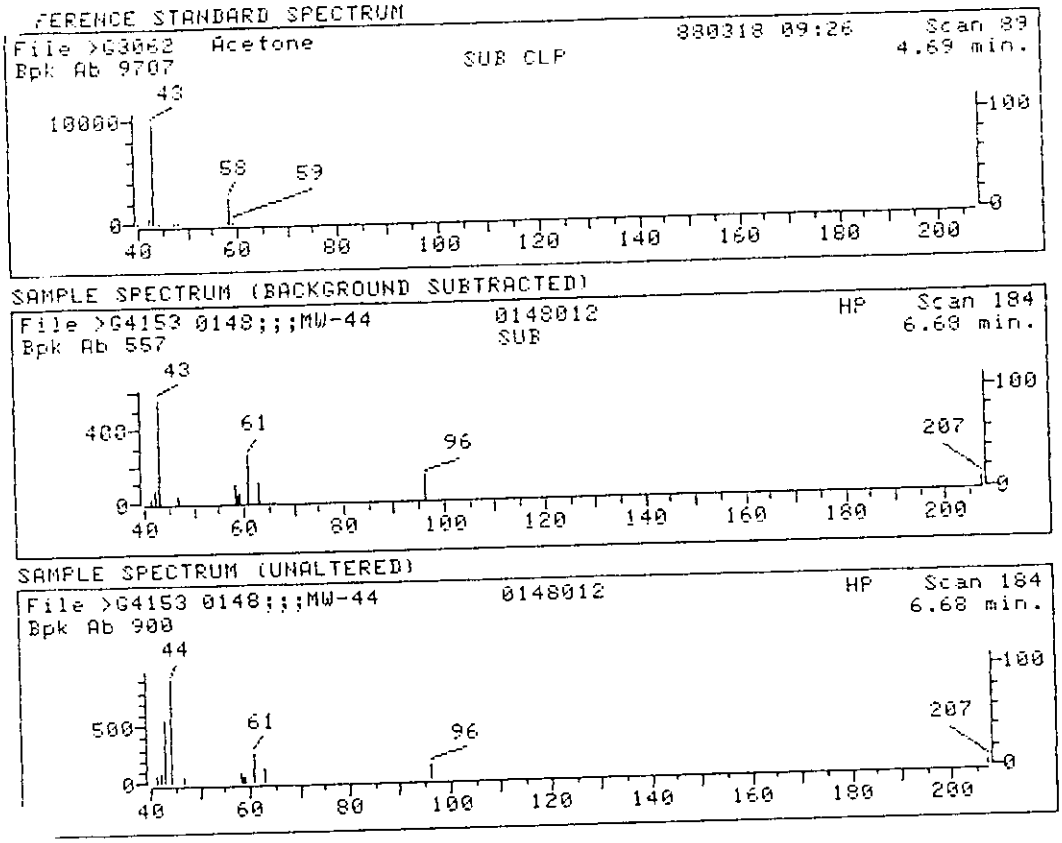
Quant Output File: ^G4153::QT

HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 01:29
Injected at: 930213 01:01

TIC page 2 of 2



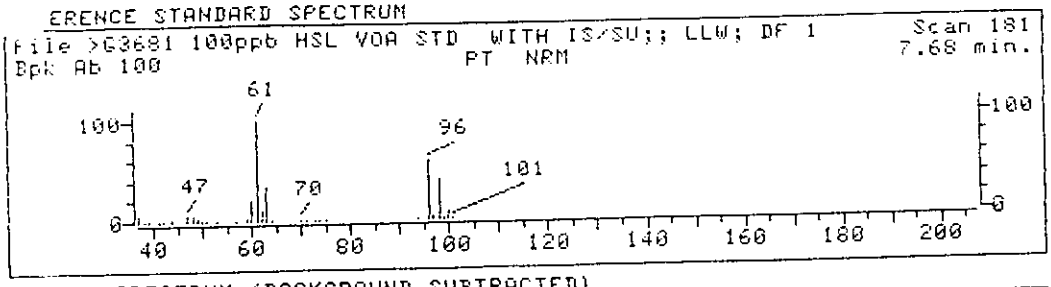
Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012
Quant Time: 930213 01:29
Injected at: 930213 01:01

Quant Output File: ^G4153::QT

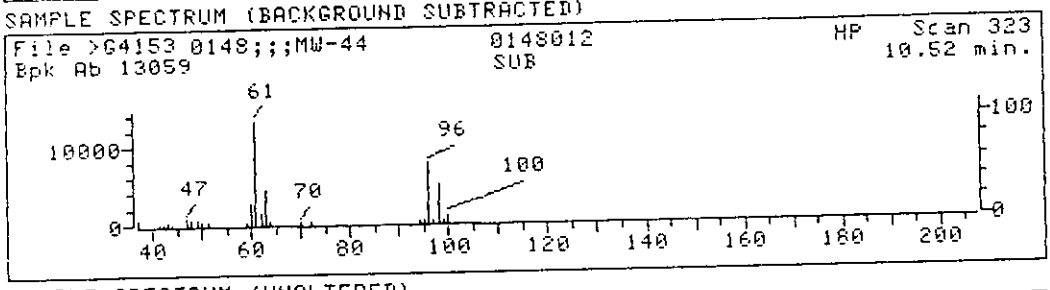
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 13
Compound Name: Acetone
Scan Number: 184
Retention Time: 6.68 min.
Quant Ion: 42.8
Area: 4898
Concentration: 10.26 ug/L
q-value: 83

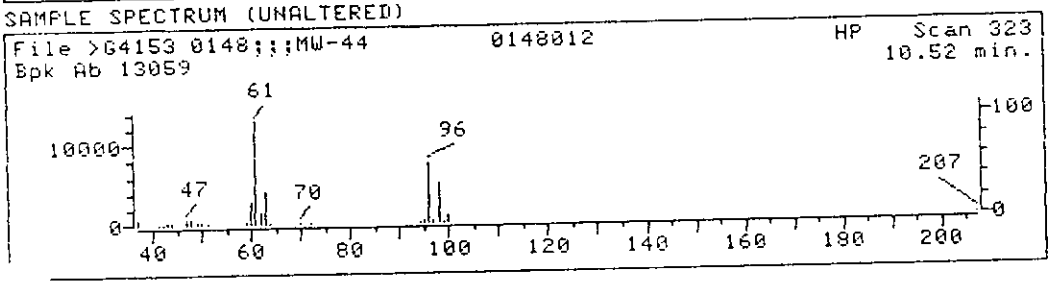
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



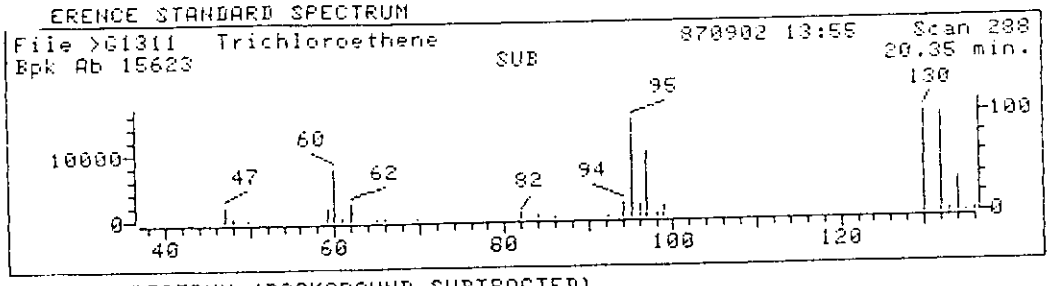
Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012
Quant Time: 930213 01:29
Injected at: 930213 01:01

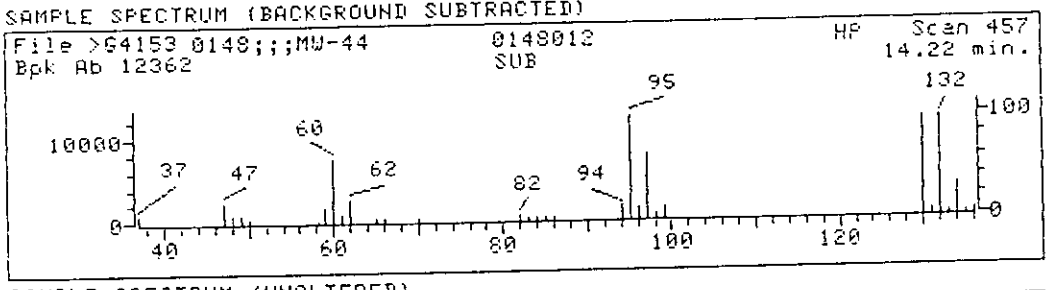
Quant Output File: ^G4153::QT

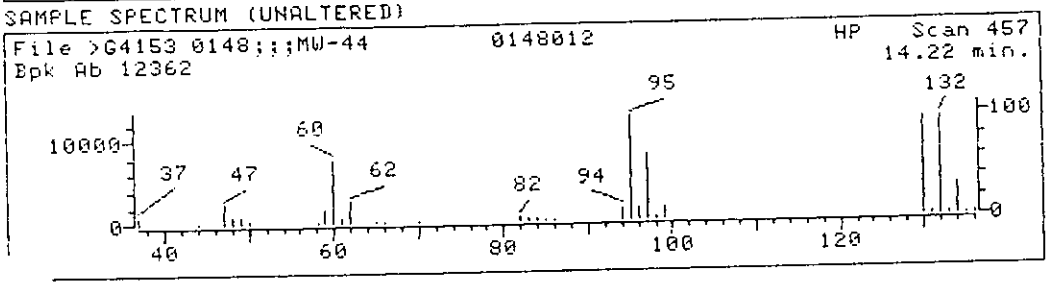
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 23
Compound Name: 1,2-Dichloroethene (total)c
Scan Number: 323
Retention Time: 10.52 min.
Quant Ion: 95.8
Area: 46677
Concentration: 45.40 ug/L
q-value: 93

✓





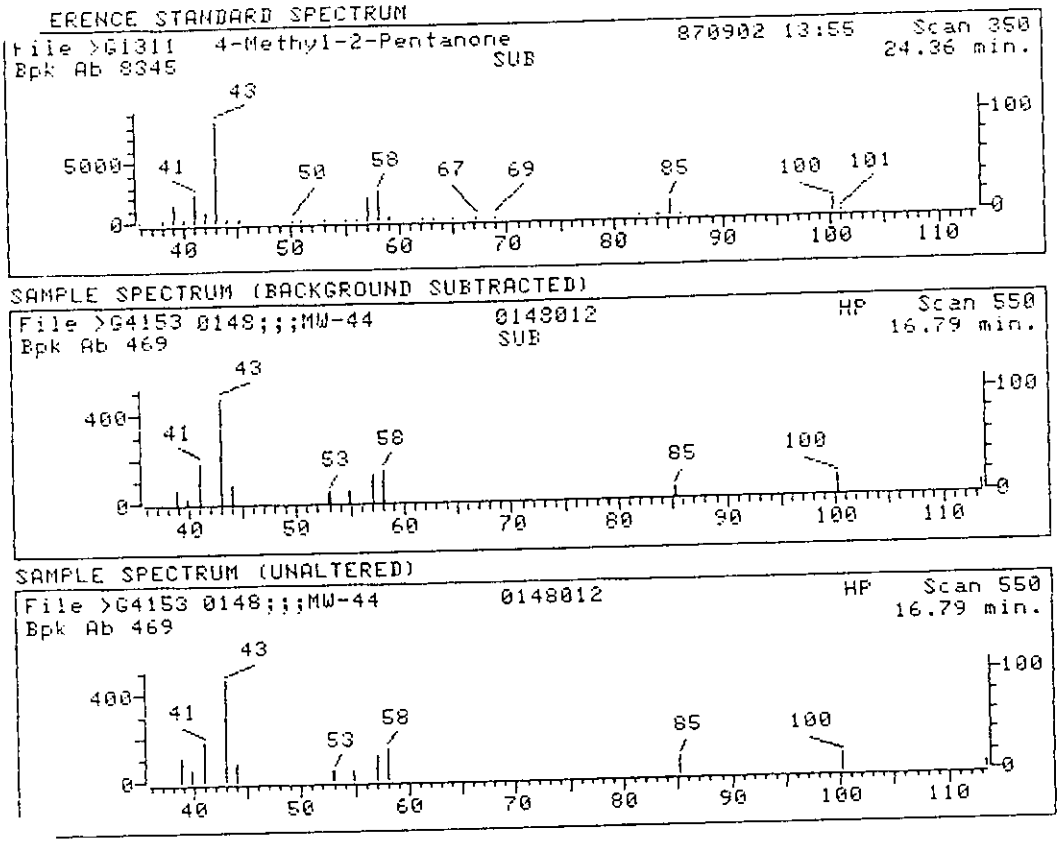


Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012
Quant Time: 930213 01:29
Injected at: 930213 01:01

Quant Output File: ^G4153::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 42
Compound Name: Trichloroethene
Scan Number: 457
Retention Time: 14.22 min.
Quant Ion: 129.8
Area: 74162
Concentration: 75.37 ug/L
q-value: 95



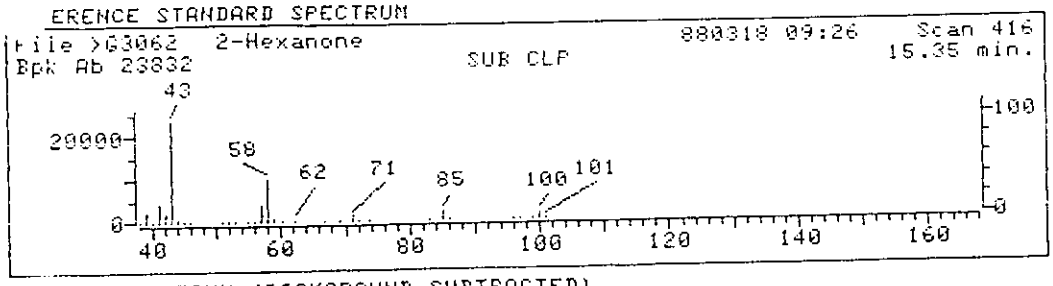
Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012
Quant Time: 930213 01:29
Injected at: 930213 01:01

Quant Output File: ^G4153::QT

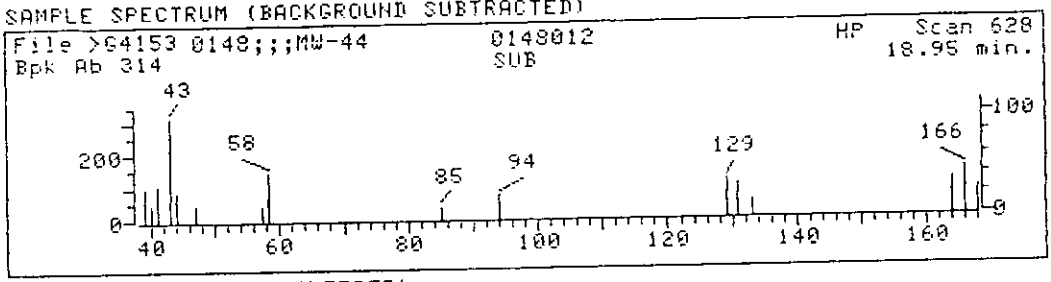
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 54
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 550
Retention Time: 16.79 min.
Quant Ion: 42.8
Area: 3002
Concentration: 3.83 ug/L
q-value: 94

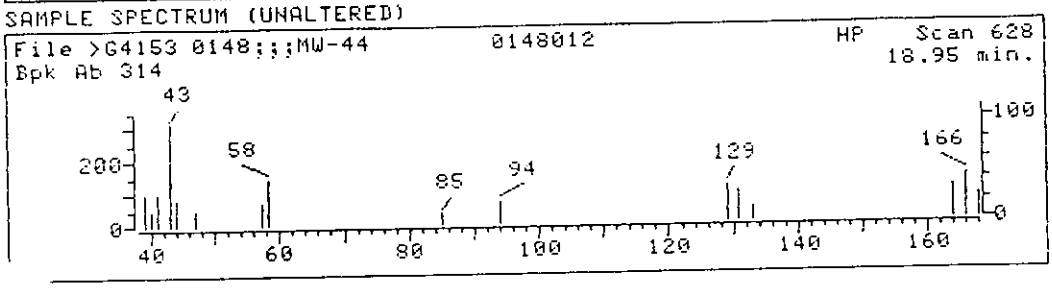
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



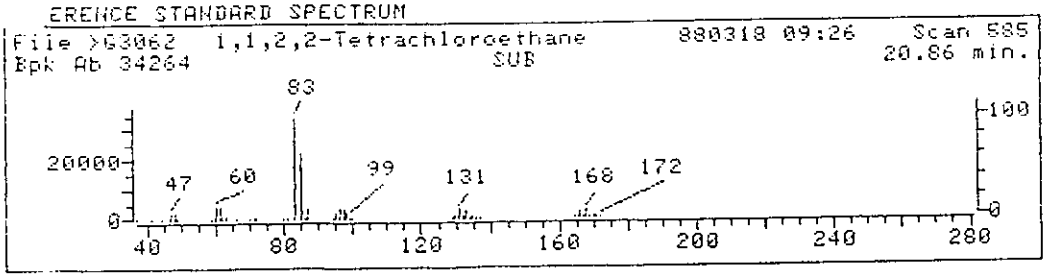
Data File: >G4153::G2
Name: 0148;;;MW-44
Misc: 0148012
Quant Time: 930213 01:29
Injected at: 930213 01:01

Quant Output File: ^G4153::QT

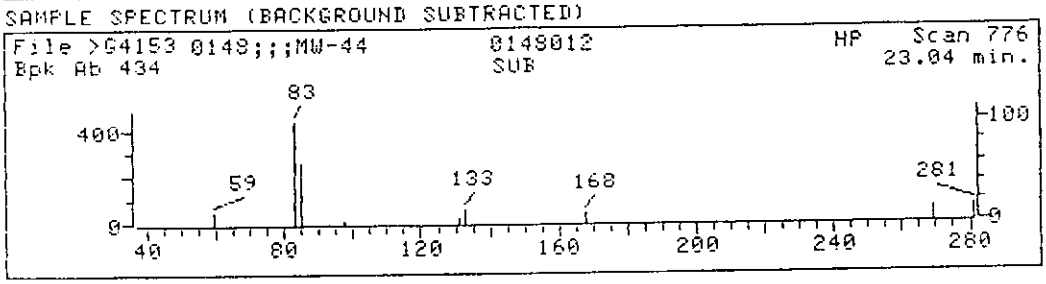
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 55
Compound Name: 2-Hexanone
Scan Number: 628
Retention Time: 18.95 min.
Quant Ion: 42.8
Area: 1636
Concentration: 3.05 ug/L
q-value: 99

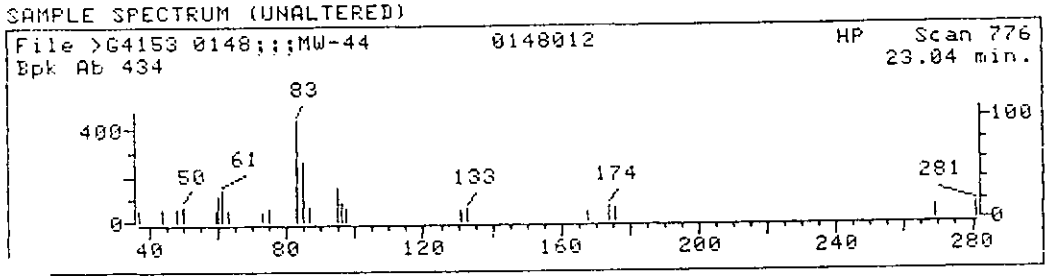
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4153::G2 Quant Output File: ^G4153::QT
Name: 0148;;;MW-44
Misc: 0148012 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 01:29 Quant ID File: I_IFGW::N1
Injected at: 930213 01:01 Last Calibration: 930212 21:54

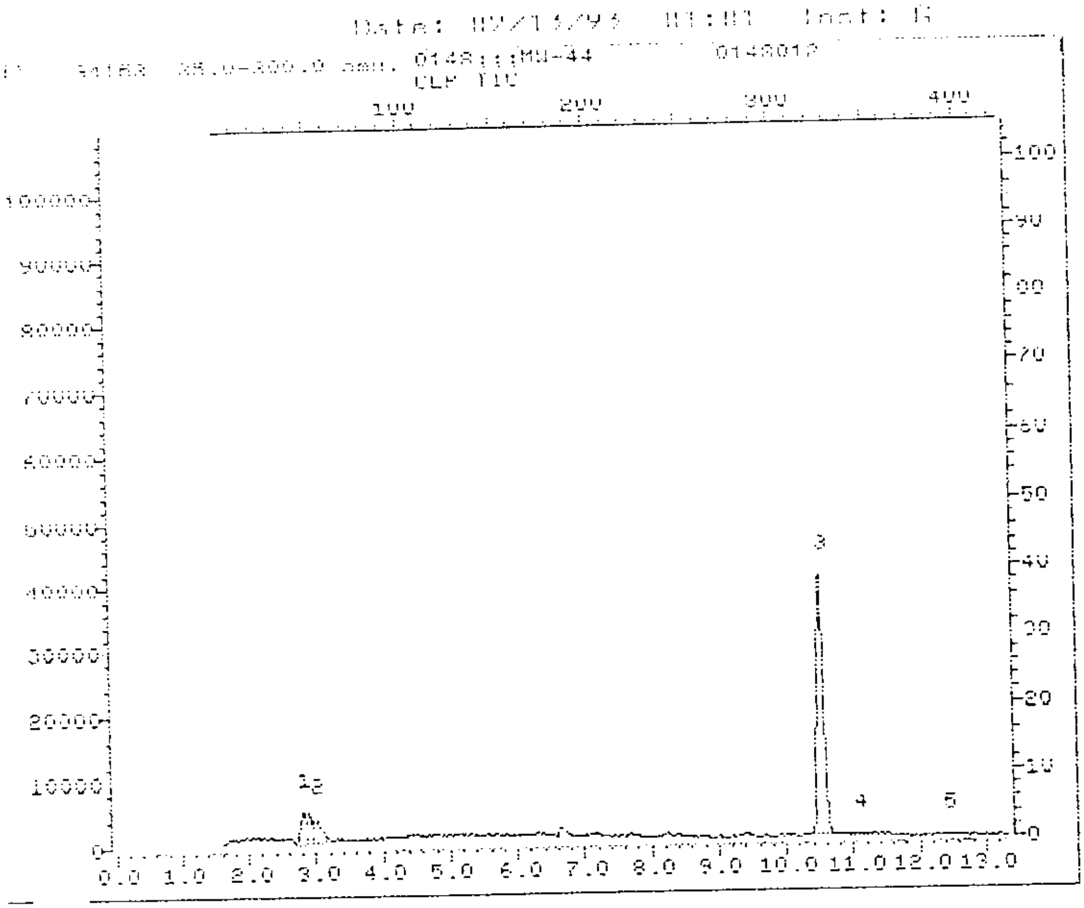
Compound No: 58
Compound Name: 1,1,2,2-Tetrachloroethane
Scan Number: 776
Retention Time: 23.04 min.
Quant Ion: 82.8
Area: 1658
Concentration: 1.97 ug/L
q-value: 90

✓

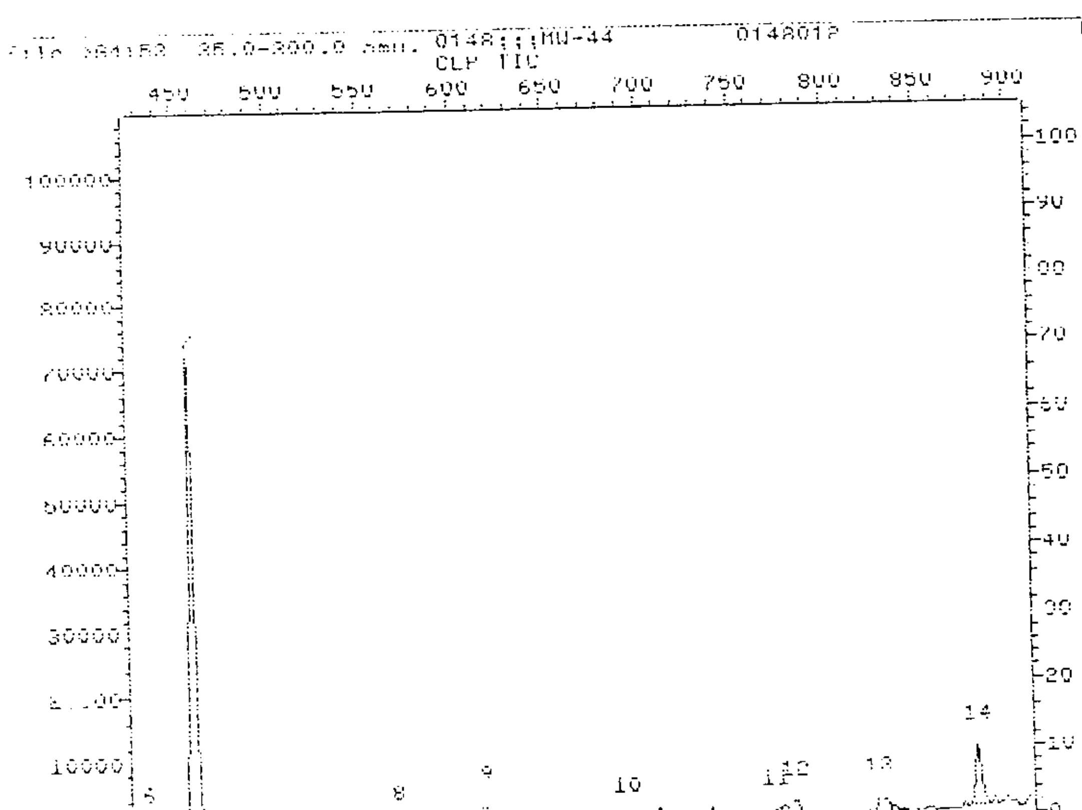
MS Data File header from : >G4193

Sample: 0148:::MW-44 Operator: MSG MS 2/13/93 1:01
Misc : 0148002 HP5995:G:::FLW:DFT :G1919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M G8AP Tuning File: T G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	300.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0



35.0-300.0 amu. 0148:::MU-44
CLP TIC
0148012



35.0-300.0 amu. 0148:::MU-44
CLP TIC
0148012

Date: 02/15/93 01:01 Inst: G

TIC PEAK REPORT

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
MGA	14.22	466758.	61.	2.	1.000
12.	23.15	96198.	12.	3.	1.000
TCA	9.81	51642.	7.	1.	1.000
2CA	3.000	28898.	7.	1.	1.000
14.	25.99	54417.	7.	3.	1.000

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		TI/SI
DICHLORODIFLUOROMETHANE	11.10	212000.	0.00	12.31	7.8
1,4-DICHLOROBENZENE	15.53	381384.	12.31	17.10	2.9
CHLOROBENZENE-D5	20.67	391242.	17.10	25.92	3.9

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	9
Target peaks matched:	1
Total TIC identified:	9

TICS : 1:32 PM MON., 15 FEB., 1993

~~MW-46~~
MW-44

PAS 02/25/93

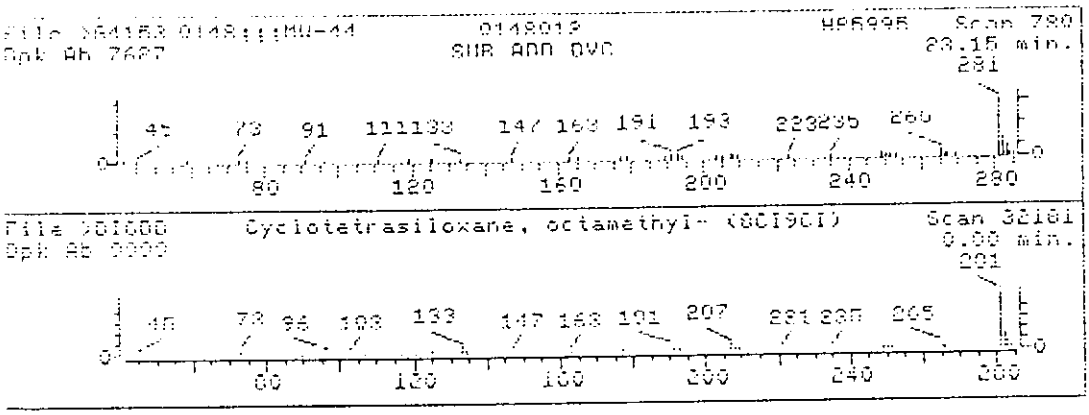
```
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.


 RPN error for command: RSEA>
 RPN error:  -5
Bad record length RSE
```

1. Cyclotetrasiloxane, octamethyl- (8CI,9CI) 29A (3H24O4S14

Sample File: >G4153 Spectrum #: 2811
Search speed: 3 Tilting option: S Nm. of ion ranges searched: 611

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C	I	R	IV
1.	2%	556A/2	32181	"B1SOB	24	62	2	0	100	5	55			18

Peak#: 19 Area: 96198. Fst Conc: 12. Date: 02/13/93 01:01 Inst: G



I'm not interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

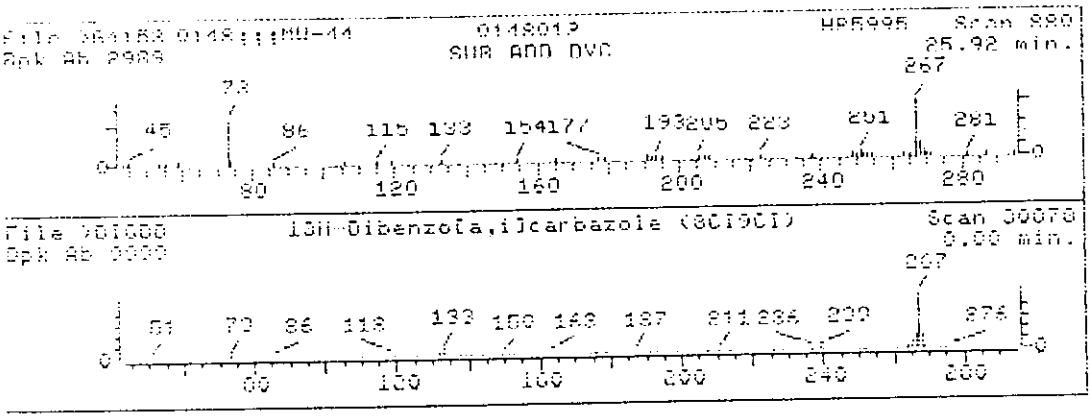
RPN error for command: RSEA9
RPN error: -5
Bad record length RSE

1. 13H-Dibenzo[a,i]carbazole (8C19CI) 9A2 C20H13N

Sample file: >H4155 Spectrum #: RBD
Search speed: 3 Fitting option: S No. of ion ranges searched: 62

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IV
1.	41*	239645	311878	"RIGOR	24	104	3	0	100	21	12	12		

Peak#: 14 Area: 54417. Est Conc: 2. Date: 02/13/93 01:01 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-46 01 14

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148013

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4154.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 0115

MW-4[illegible]6

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148012[illegible]3

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4153[illegible].D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: [illegible]3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.16	23 140	JN
2.		UNKNOWN SILOXANE	25.92	16 110	J
3.	541059	CYCLOTRISILOXANE, HEXAMETHYL	18.59	22	JN
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QUANT REPORT

Operator ID: MSG
Output File: ^G4154::QT
Data File: >G4154::G2
Name: 0148;;;MW-46
Misc: 0148013

Quant Rev: 6 Quant Time: 930213 02:01
Injected at: 930213 01:33
Dilution Factor: 1.00000

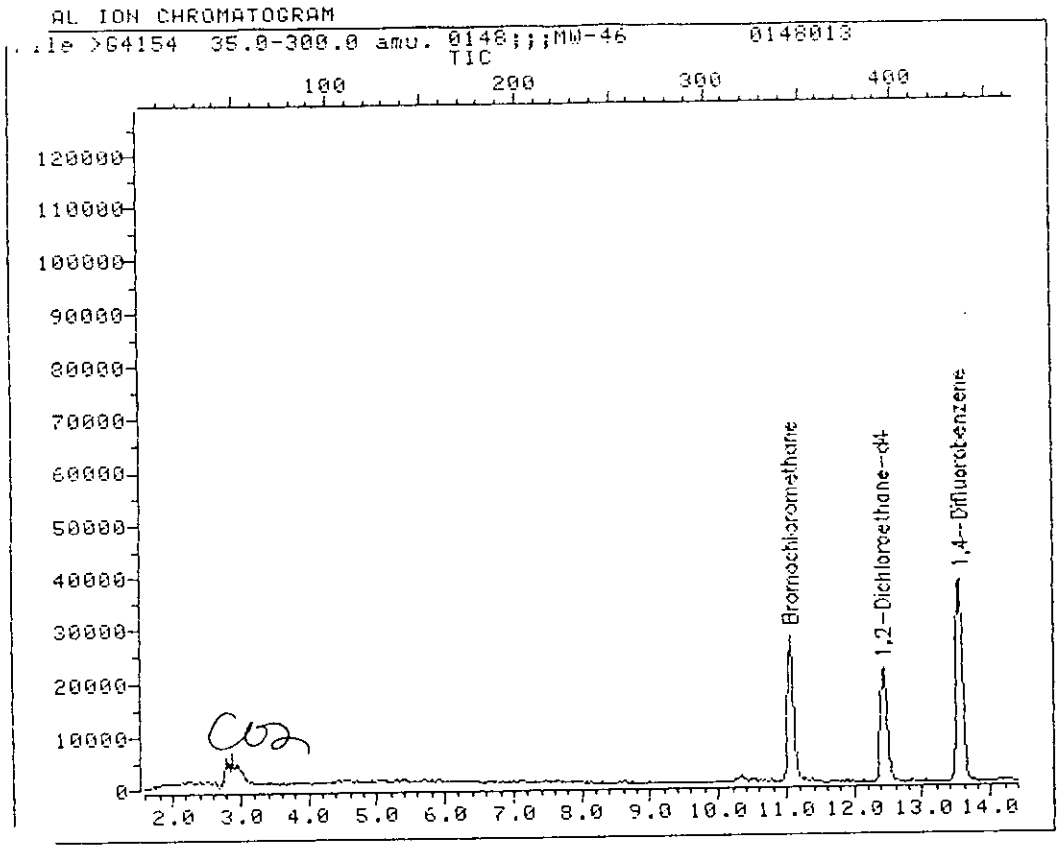
HP5995:G;;;LLW;DF1 ;G1919

ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.07	127.8	19684	50.00	ug/L	88
12)	Acetone	6.68	42.8	1423	4.12	ug/L	95
30)	1,2-Dichloroethane-d4	12.43	64.8	62981	47.39	ug/L	88
34)	*1,4-Difluorobenzene	13.56	113.8	85959	50.00	ug/L	95
53)	*Chlorobenzene-d5	20.67	116.8	63182	50.00	ug/L	75
61)	Toluene-d8	17.26	97.8	89577	53.09	ug/L	97
91)	Bromofluorobenzene	22.86	94.8	54844	52.66	ug/L	83

* Compound is ISTD

PAS 02/25/93

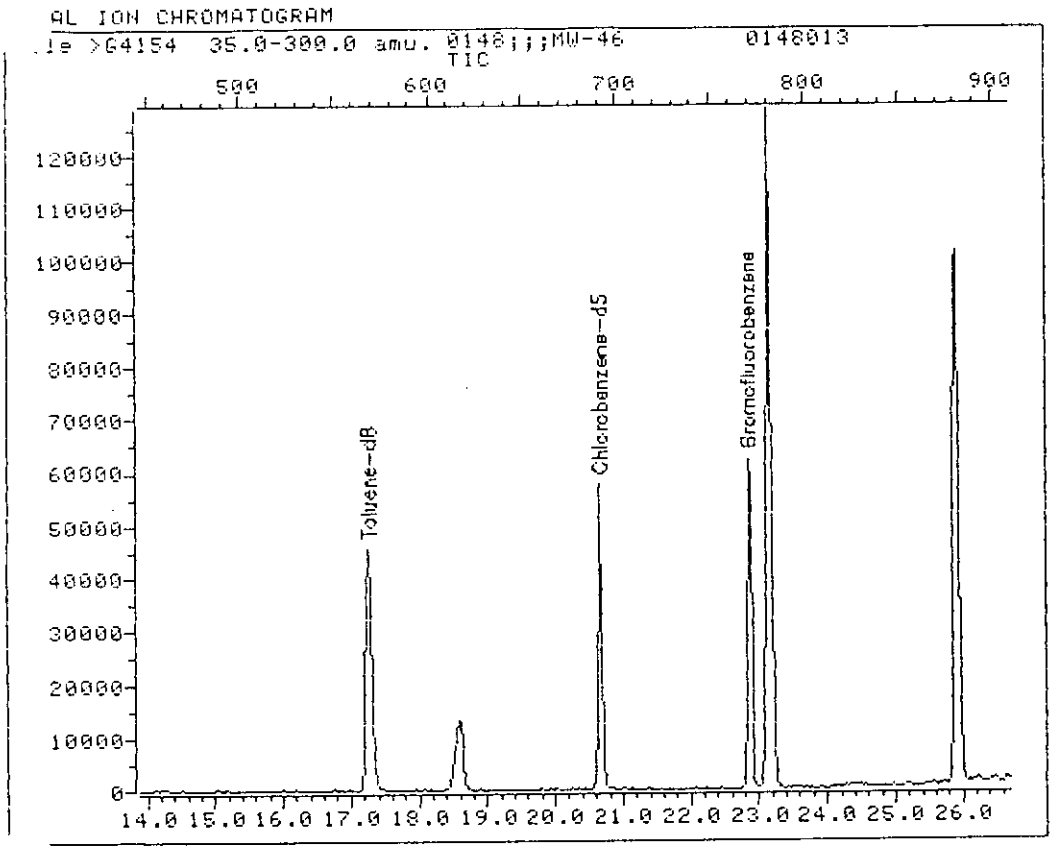


Data File: >G4154::G2 Quant Output File: ^G4154::QT
Name: 0148;;;MW-46
Misc: 0148013 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 02:01
Injected at: 930213 01:33

TIC page 1 of 2



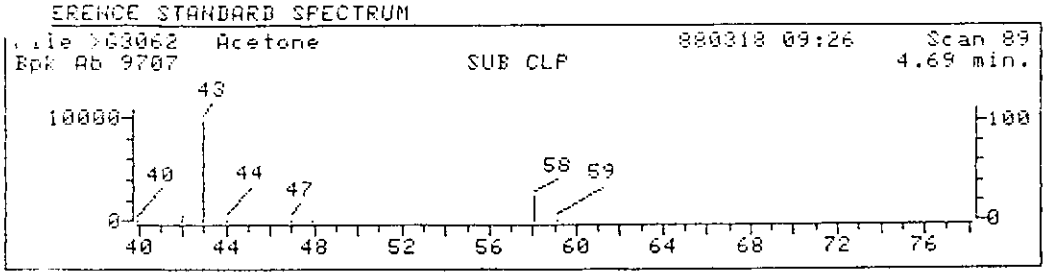
Data File: >G4154::G2 Quant Output File: ^G4154::QT
Name: 0148;;;MW-46
Misc: 0148013 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

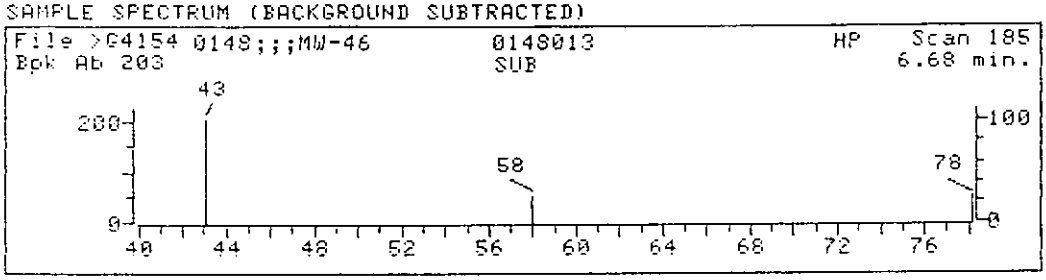
Operator ID: MSG
Quant Time: 930213 02:01
Injected at: 930213 01:33

TIC page 2 of 2

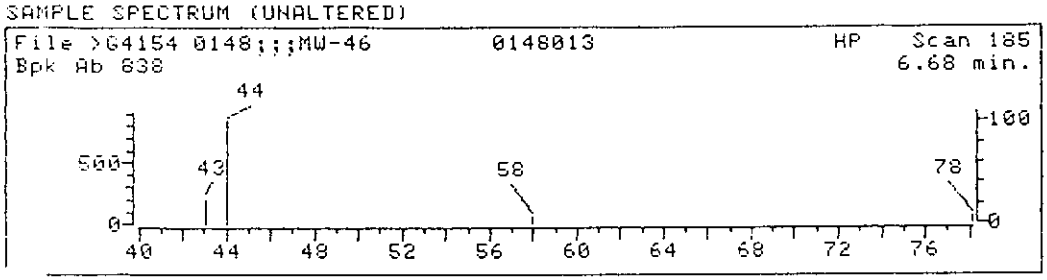
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4154::G2
Quant Output File: ^G4154::QT
Name: 0148;;;MW-46
Misc: 0148013
HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 02:01
Quant ID File: I_IFGW::N1
Injected at: 930213 01:33
Last Calibration: 930212 21:54

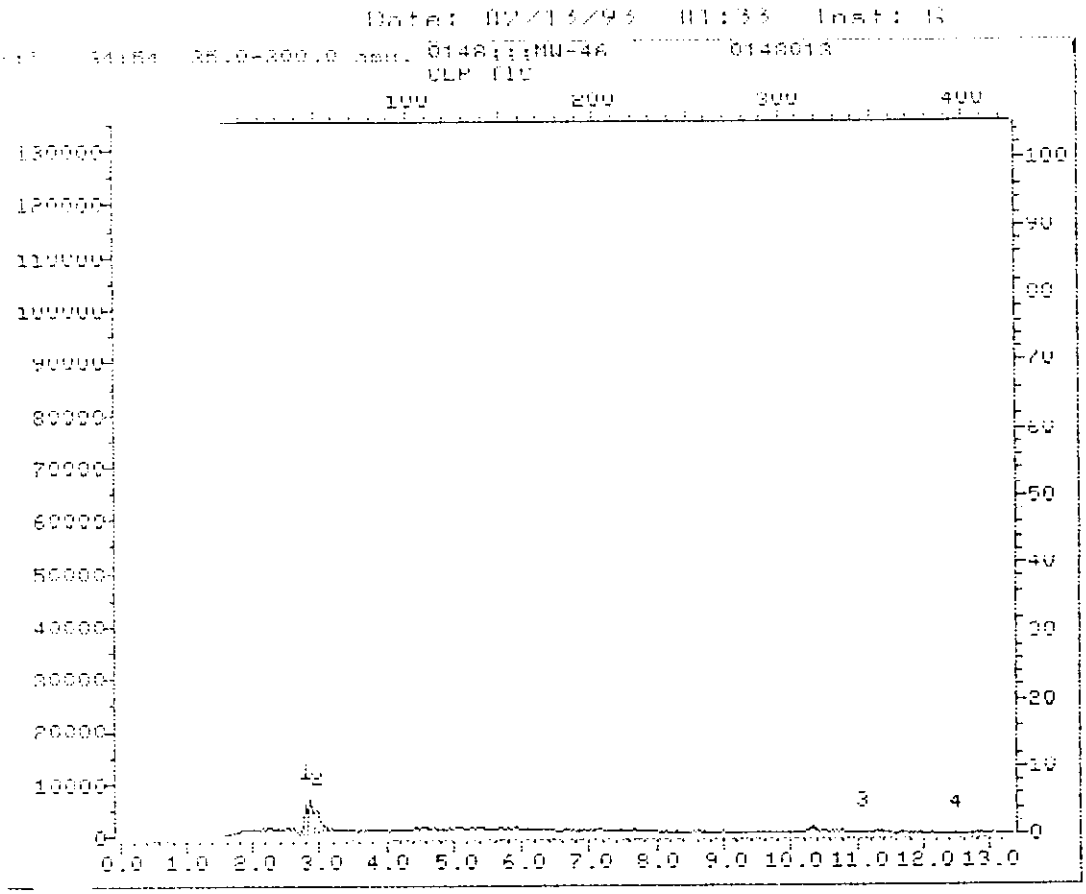
Compound No: 13
Compound Name: Acetone
Scan Number: 185
Retention Time: 6.68 min.
Quant Ion: 42.8
Area: 1423
Concentration: 4.12 ug/L
q-value: 95

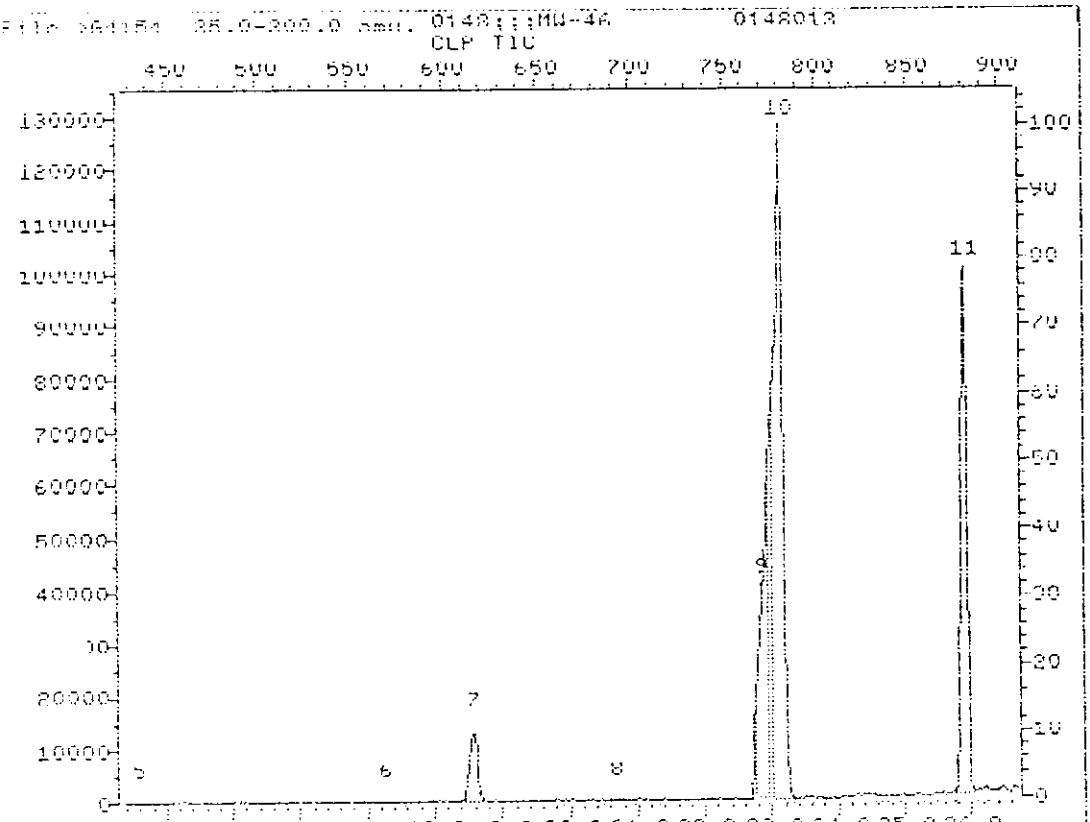
✓

MS Data File header from : >G4154

Sample: 0148;;;MW-46 Operator: MSG MS 2/13/93 1:33
Misc : 0148013 HP5995:G;;;11W;DFT ;G1919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M GCAP Tuning File: T G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


CLP TIC
0148013
100
200
300
400
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0
2
3
4


CLP TIC
0148013
450
500
550
600
650
700
750
800
850
900
10
11
7
5
6
8

Date: 02/13/93 01:33 Inst: G 0122

TIC PEAK REPORT

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
10.	24.16	218486.	140.	3.	1.00
11.	25.92	560642.	110.	3.	1.00
7.	18.52	111322.	22.	3.	1.00
TCA	2.28	26491.	8.	1.	1.00
T.Cea	2.95	22353.	7.	1.	1.00

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		T1/S1
BROMOCHLOROMETHANE	11.07	156113.	0.00	12.32	7.9
1,4-DIFLUOROBENZENE	13.56	252202.	12.32	17.12	2.9
CHLOROBENZENE-D5	20.67	250616.	17.12	25.92	4.0

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	1
Target peaks matched:	0
Total TIC identified:	5

TIME : 1:53 PM MON., 15 FEB., 1993

MW-46

Ur ^ interpret this parameter... Perhaps you have mistyped
th. run string or have forgotten the order of the run string.

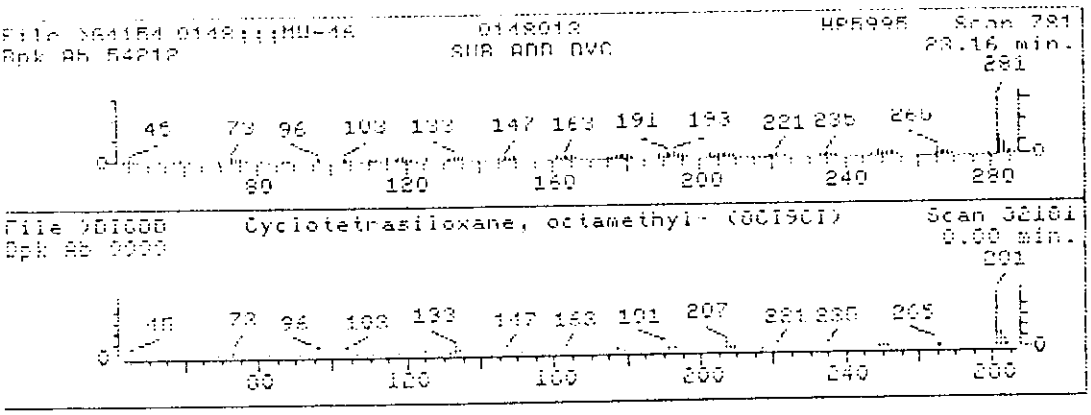
RPN error for command: RSF&9
RPN error: -5
Bad record length RSF

1. Cyclotetrasiloxane, octamethyl- (88C19CI) 29A C8H24O4Si4

Sample File: >G4154 Spectrum #: 781
Search speed: 3 Tilting option: S No. of ion ranges searched: 62

	Prob.	CAS #	CON #	RBTT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	83	556672	32181	"BTGDB	29	52	2	0	100	1	52			21

Peak#: 10 Area: 218486. Est Conc: 140. Date: 02/13/93 01:33 Inst: G



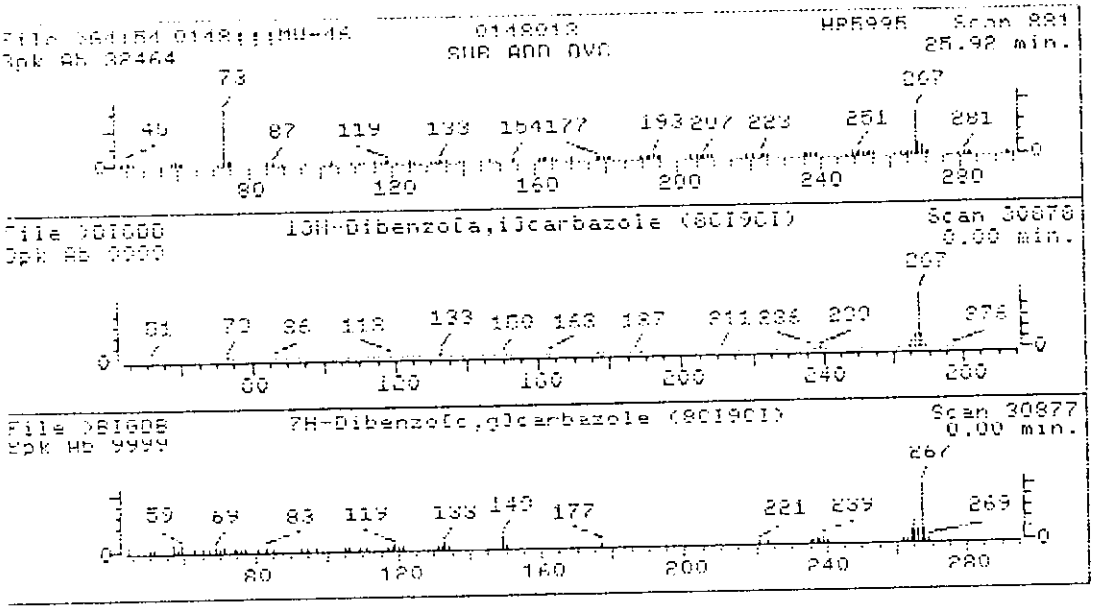
HPHI error for command: RSRA3
HPHI error: -5
AM record length RSP

1. 13H-Dibenzo[a,i]carbazole (8CI,9CI) 2A2 C20H13N
2. 7H-Dibenzo[c,g]carbazole (8CI,9CI) 2A2 C20H13N

Sample File: >H4194 Spectrum #: 881
Search speed: 5 Tilting option: S No. of ion ranges searched: 62

	Prob.	CAS #	CON #	NAME	K	DK	#PLG	TILT	%	CON	C	I	R	IO
1.	42*	239645	30828	"BIGDB	29	99	3	0	26	22	17	13		
2.	41*	194592	30827	"BIGDB	24	113	3	0	26	24	17	19		

Peak#: 11 Area: 560642. Est Conc: 110. Date: 02/13/93 01:33 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
th un string or have forgotten the order of the run string.

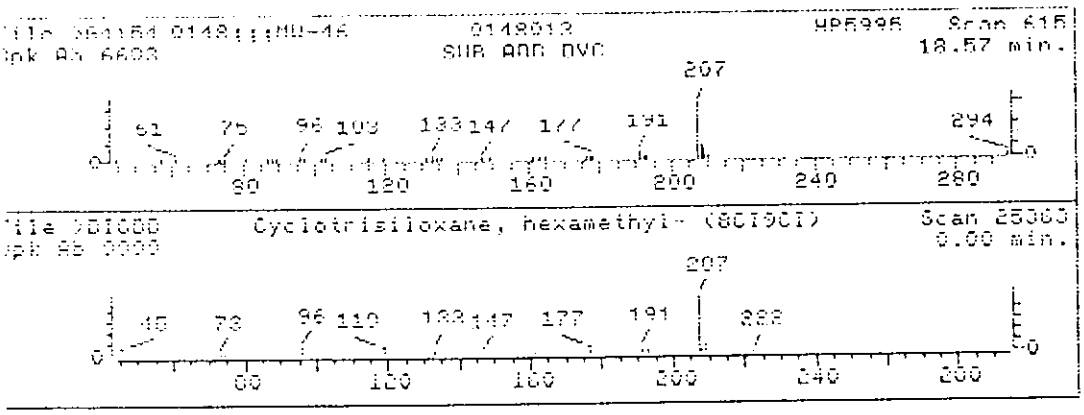
RPN error for command: RSF63
RPN error: -5
sd record length RSF

1. Cyclotrisiloxane, hexamethyl- (8CI,9CI) 999 CAH18035t3

Sample file: >G4154 Spectrum #: 615
Search speed: 3 Hiting option: S No. of ion ranges searched: 63

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IV
1.	64*	541059	25363	"SIOSIOSI	67	42	1	-3	100	99	98	44		

Peak#: 7 Area: 111527. Est Conc: 22. Date: 02/13/93 01:33 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-35 0126

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148014

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4155.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0127

MW-35

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148014

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4155.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 5 JNS 02/25/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.12	210	JN
2.		UNKNOWN SILOXANE	25.89	160	JN
3.	541059	CYCLOTRISILOXANE,HEXAMETHYL	18.51	28	JN
4.		UNKNOWN SILOXANE	24.39	14	JN
5.		UNKNOWN ALKYLBENZENE	25.17	6	JN
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: MSG
Output File: ^G4155::QT
Data File: >G4155::G2
Name: 0148;;;MW-35
Misc: 0148014

Quant Rev: 6 Quant Time: 930213 02:32
Injected at: 930213 02:04
Dilution Factor: 1.00000

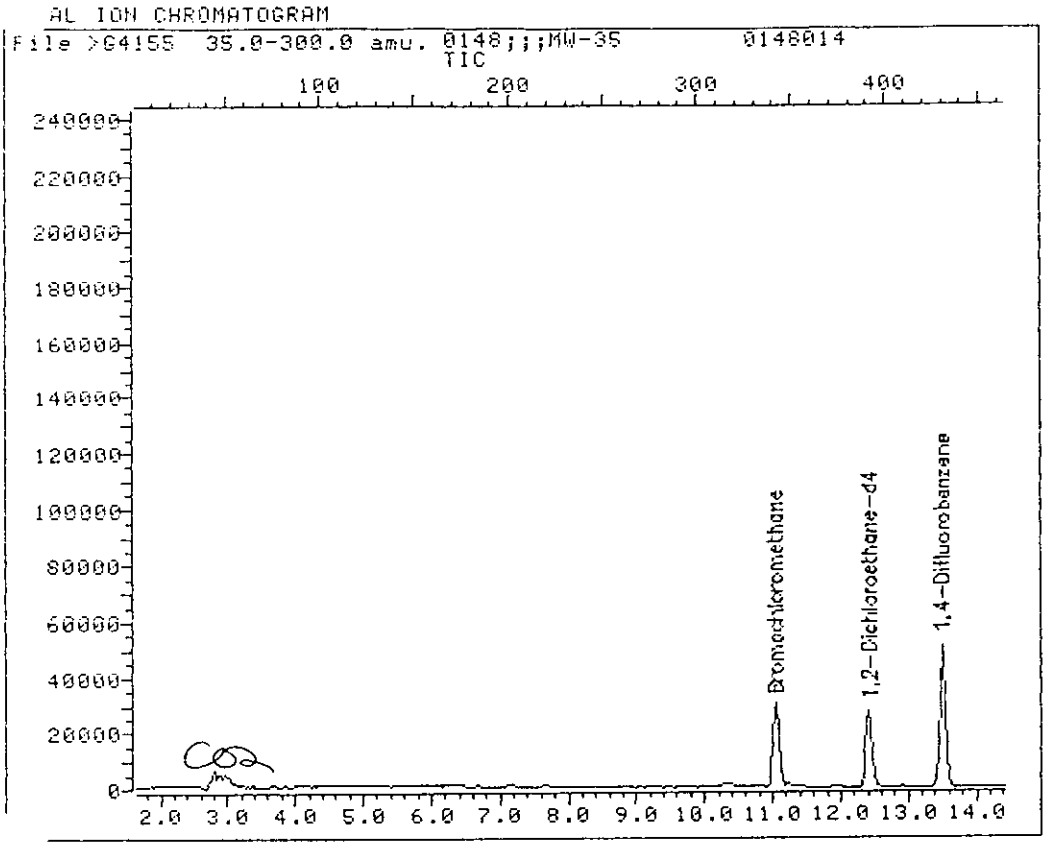
HP5995:G;;;LLW;DF1 ;G1919

ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.04	127.8	22689	50.00	ug/L	86
13)	Acetone	6.67	42.8	2949	7.40	ug/L	86
30)	1,2-Dichloroethane-d4	12.42	64.8	79310	51.78	ug/L	88
34)	*1,4-Difluorobenzene	13.50	113.8	110125	50.00	ug/L	98
53)	*Chlorobenzene-d5	20.61	116.8	88476	50.00	ug/L	81
61)	Toluene-d8	17.20	97.8	118764	50.27	ug/L	92
69)	Isopropylbenzene	22.54	104.8	5774	5774.00	NO CALIB	94
75)	1,3,5-Trimethylbenzene	23.90	104.8	2467	2467.00	NO CALIB	80
77)	1,2,4-Trimethylbenzene	25.25	104.8	3369	3369.00	NO CALIB	53
78)	sec-Butylbenzene	24.45	104.8	2625^	2625.00	NO CALIB	90
84)	Butylbenzene	24.37	90.8	2705	2705.00	NO CALIB	53
9)	Bromofluorobenzene	22.82	94.8	71595	49.09	ug/L	86

* Compound is ISTD

PAS 02/25/93

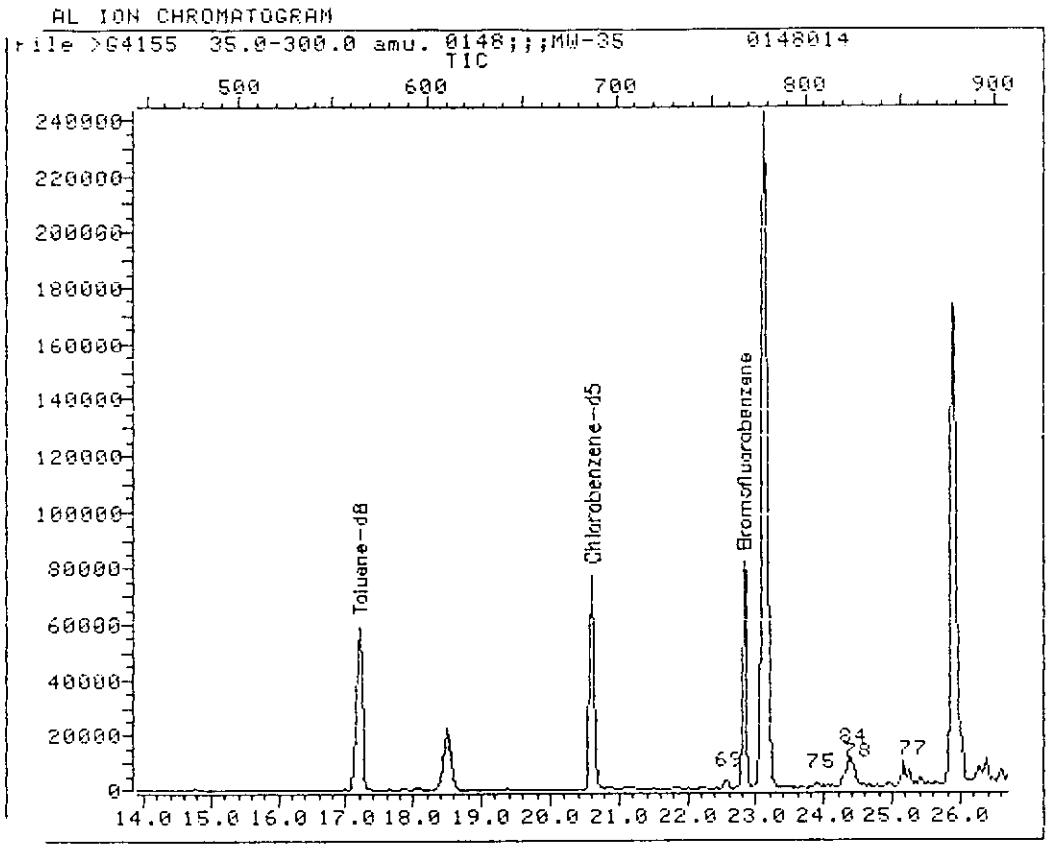


Data File: >G4155::G2 Quant Output File: ^G4155::QT
Name: 0148;;;MW-35
Misc: 0148014 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 02:32
Injected at: 930213 02:04

TIC page 1 of 2



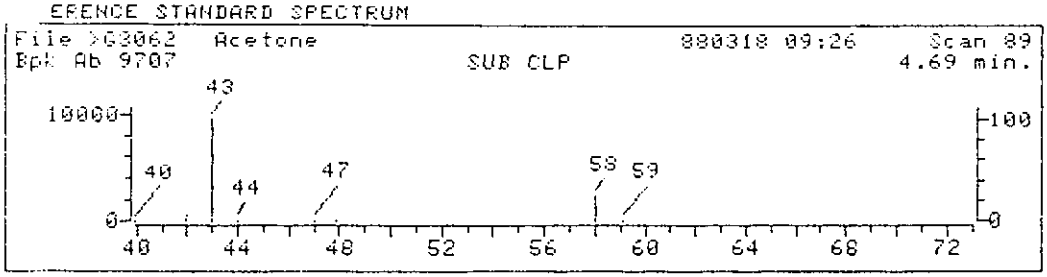
Data File: >G4155::G2 Quant Output File: ^G4155::QT
Name: 0148;;;MW-35
Misc: 0148014 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

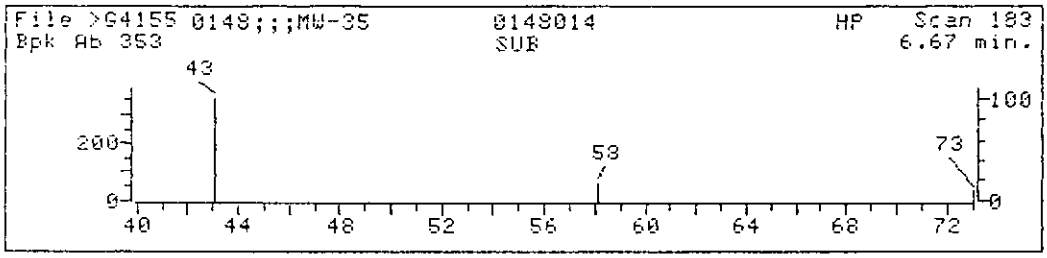
Operator ID: MSG
Quant Time: 930213 02:32
Injected at: 930213 02:04

TIC page 2 of 2

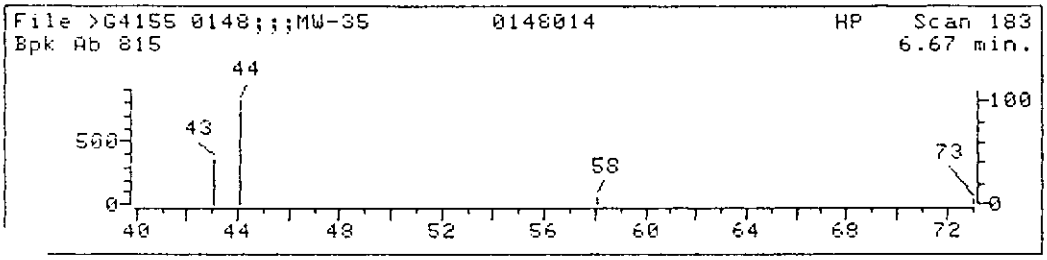
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



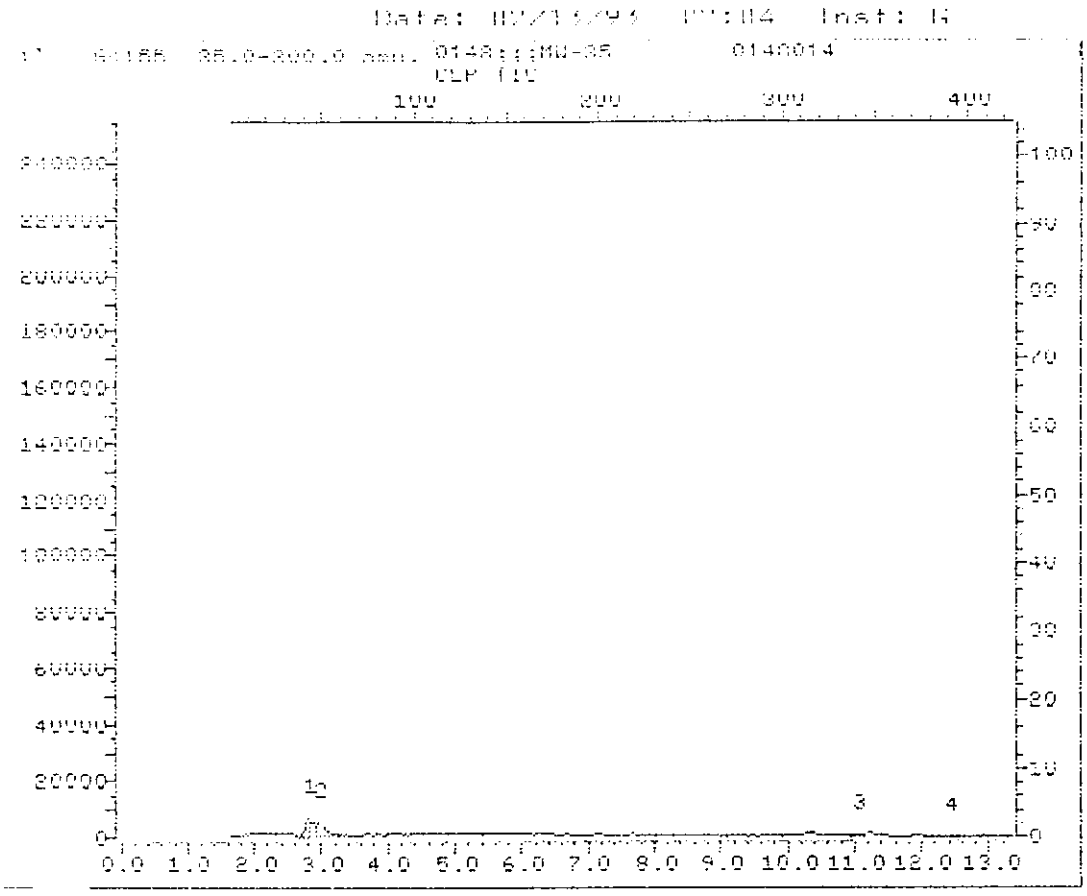
Data File: >G4155::G2 Quant Output File: ^G4155::QT
Name: 0148;;;MW-35
Misc: 0148014 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 02:32 Quant ID File: I_IFGW::N1
Injected at: 930213 02:04 Last Calibration: 930212 21:54

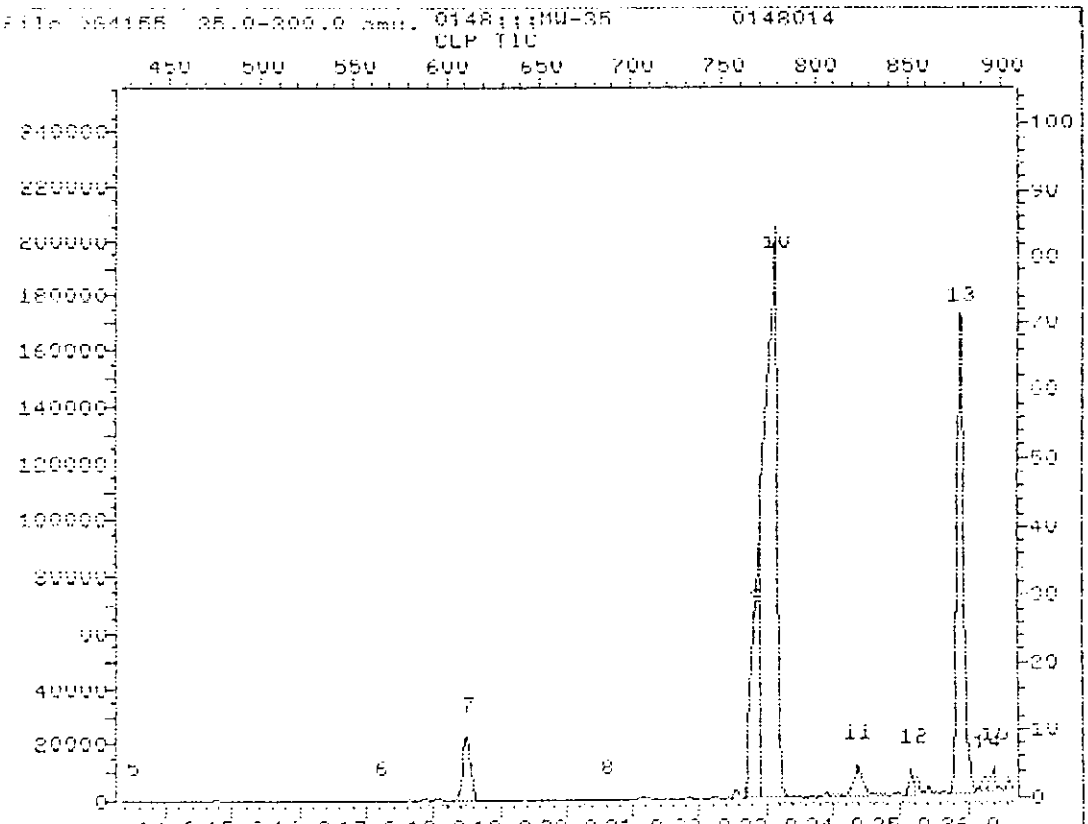
Compound No: 13
Compound Name: Acetone
Scan Number: 183
Retention Time: 6.67 min.
Quant Ion: 42.8
Area: 2949
Concentration: 7.40 ug/L
q-value: 86

MS .ta File header from : >G4155

Sample: 0148;;;MW-55 Operator: MSG MS 2/13/93 2:04
Misc : 0148014 HP5995:G;;;LIW;0ET ;G1919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method file: M G0AP Tuning file: T G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


0148014
CLP TIC
100
200
300
400
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0
1
3
4


0148014
CLP TIC
450
500
550
600
650
700
750
800
850
900
5
6
7
8
10
11
12
13

Date: 02/15/93 02:04 Inst: 5

TIC PEAK REPORT

PK#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
10.	23.12	1426520.	210.	3.	1.00
13.	25.89	1164205.	168.	3.	1.00
2.	18.51	186988.	28.	3.	1.00
11.	24.32	94682.	14.	3.	1.00
2.00	2.97	42135.	12.	1.	1.00
1.00	2.80	33521.	10.	1.	1.00
12.	25.17	42763.	6.	3.	1.00

INTERNAL STD AREA REPORT

ISTD	Compound Name	RT	Area	RT Range		TI/SI
BROMOCHLOROMETHANE		11.02	174165.	0.00	12.28	2.7
1,4-DIFLUOROBENZENE		13.50	318904.	12.28	17.05	2.9
CHLOROBENZENE-D5		21.61	334030.	17.05	26.38	3.8

ISTD peaks found:	3
Surrogate peaks found:	3
Number target peaks expected:	6
Target peaks matched:	0
Total TIC identified:	7

TIME: 2:15 PM MON., 15 FEB., 1993

MW-35

Ca ' interpret this parameter... Perhaps you have mistyped
th run string or have forgotten the order of the run string.

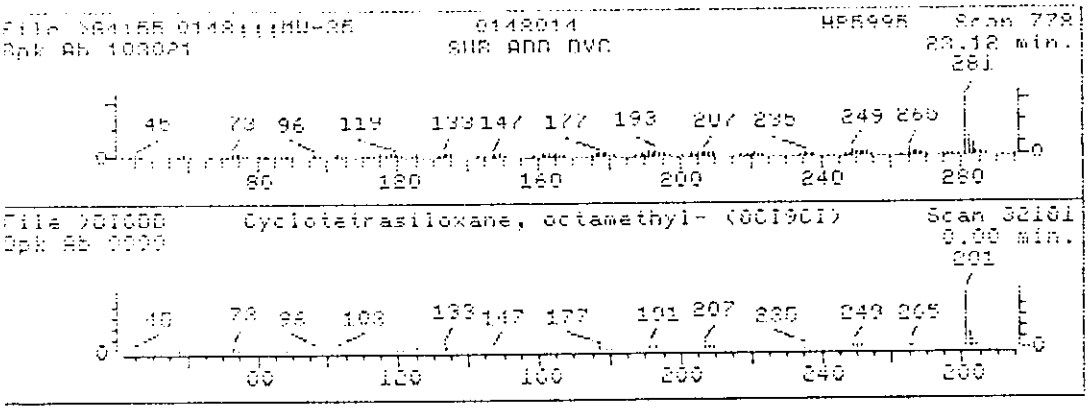
RPN error for command: RSF63
RPN error: -5
ad record length RSF

1. Cyclotetrasiloxane, octamethyl- (8CI,9CI) 296 C8H24O4Si4

Sample file: >G4155 Spectrum #: 778
Search speed: 3 Tilting option: S No. of ion ranges searched: 60

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	R	IV
1.	83	556672	32181	"RIGOR	29	52	2	0	94	5	52		21

Peak#: 10 Area: 1426520. Est Conc: 210. Date: 02/13/93 02:14 Inst: G



Da ' interpret this parameter... Perhaps you have mistyped
th run string or have forgotten the order of the run string.

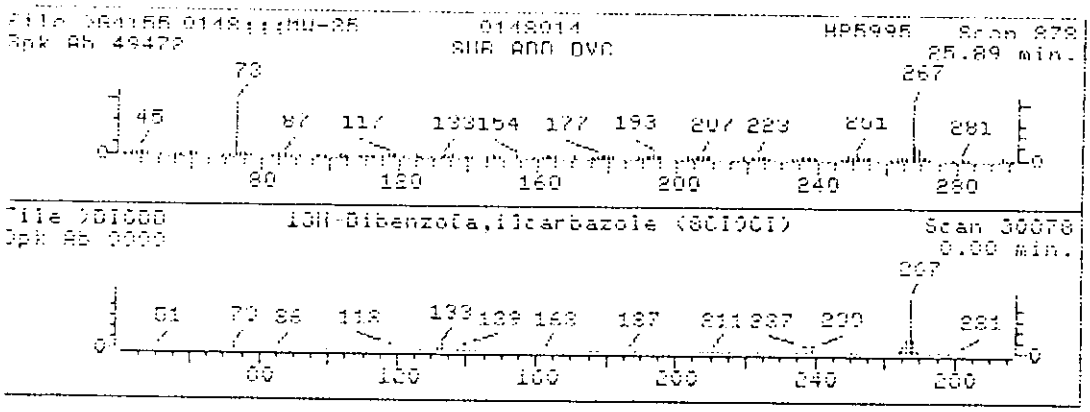
RPN error for command: RSF43
RPN error: -5
ad record length RSF

1. 13H-Dibenzola,ilcarbazole (8CI)(9CI) 267 C20H13N

Sample file: >K4155 Spectrum #: 878
Search speed: 3 Tilting option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	RMFT	K	DK	#FIG	TILT	%	CON	C	R	IO
1.	92*	239645	38878	"BIGDR	99	99	3	N	100	20	20	13	

Peak#: 13 Area: 1064205. Est Conc: 160. Date: 02/13/93 02:04 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

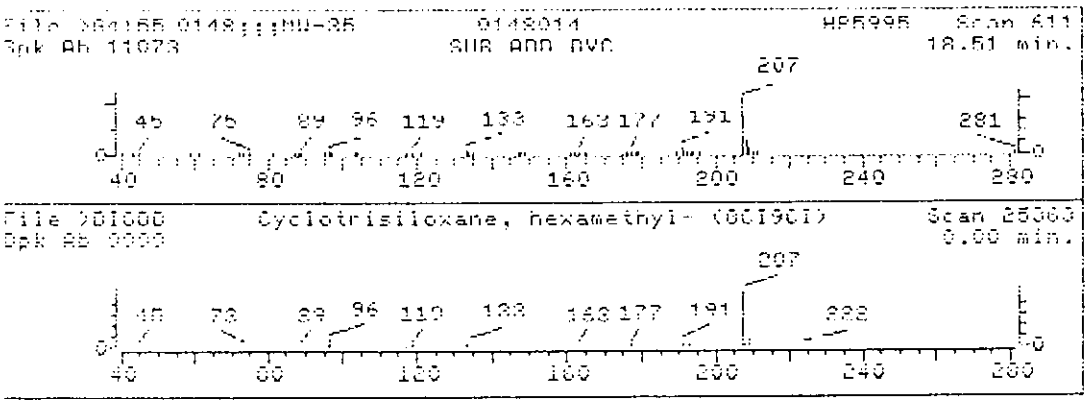
RPN error for command: RSF&S
RPN error: -5
Bad record length RSF

1. Cyclotrisiloxane, hexamethyl- (001901) 999 (AH18039)3

Sample file: >G4155 Spectrum #: 611
Search speed: 3 Tilting option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IO
1.	25*	541059	25363	"BIGDR	84	25	1	-2	99	20	35			66

Peak#: 7 Area: 186988. Est Conc: 28. Date: 02/13/93 02:14 Inst: G



RPN: 005

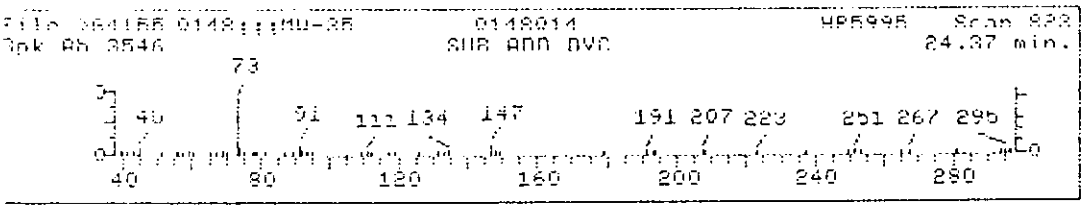
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

 RPN error for command: RSF63
 RPN error: -5
ad record length RSF

 Sample file: >G4155   Spectrum #:   823

No data base entries were retrieved.

Peak#: 11 Area: 94687. Est Conc: 14. Date: 02/13/93 02:14 Inst: G



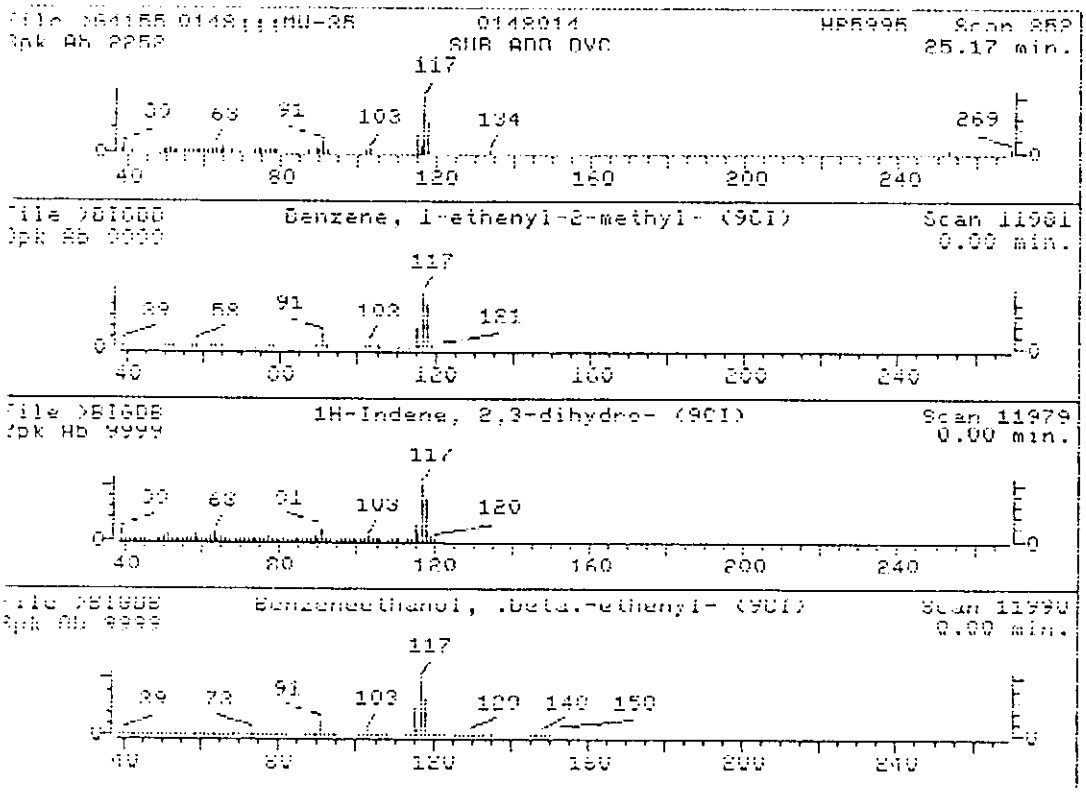
cd acard length RSH

1.	Benzene, 1-ethenyl-2-methyl- (9CI)	118 C9H10
2.	1H-Indene, 2,3-dihydro- (9CI)	118 C9H10
3.	Benzeneethanol, .beta.-ethenyl- (9CI)	148 C10H12O
4.	Benzene, cyclopropyl- (8CI9CI)	118 C9H10

Sample File: >B4155 Spectrum #: 859
Search speed: 5 Tilting option: S No. of ion ranges searched: 57

	Prob.	CAS #	CON #	ROOT	K	DK	#PLG	TILT	%	CON	C	I	R	IO
1.	74*	611154	11981	"BIGDB	56	37	2	0	20	15	39	40		
2.	21*	496117	11979	"BIGDB	61	41	2	0	21	14	38	38		
3.	68	6052632	11990	"BIGDB	45	49	2	0	20	14	30	12		
4.	52*	873494	11986	"BIGDB	56	54	3	0	22	17	20	19		

Peak#: 12 Area: 42763. Est Conc: 6. Date: 02/13/93 02:04 Inst: G



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET 0140

EPA SAMPLE NO.

MW-42

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148015

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4156.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0141

EPA SAMPLE NO.

MW-42

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148015

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4156.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 7 PAS 02/25/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.19	280	JA
2.		UNKNOWN SILOXANE	25.93	200	JA
3.		UNKNOWN SILOXANE	24.44	45	JA
4.	541059	CYCLOHEXASILOXANE, DODECAMETHYL	18.61	44	JA
5.		UNKNOWN ALKYLBENZENE	25.21	9	JA
6.		UNKNOWN ISOMER OF 1H-INDENE, 2,3-DIHYDRO	25.43	9	JA
7.		UNKNOWN ALKANE	24.99	7	JA
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
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29.					
30.					

QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930213 03:04
Output File: ^G4156::QT Injected at: 930213 02:36
Data File: >G4156::G2 Dilution Factor: 1.00000
Name: 0148;;;MW-42
Misc: 0148015 HP5995:G;;;LLW;DF1 ;G1919

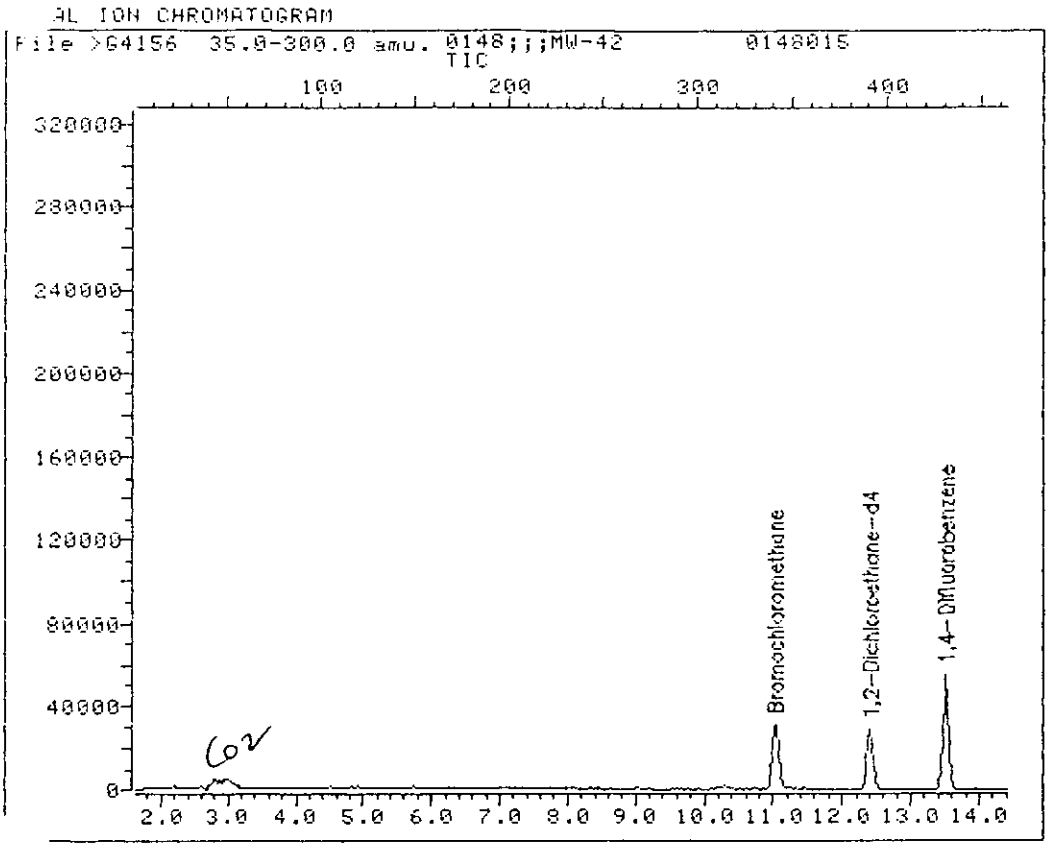
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.03	127.8	24312	50.00	ug/L	81
30)	1,2-Dichloroethane-d4	12.41	64.8	82653	50.36	ug/L	89
34)	*1,4-Difluorobenzene	13.51	113.8	120080	50.00	ug/L	96
53)	*Chlorobenzene-d5	20.68	116.8	96137	50.00	ug/L	84
61)	Toluene-d8	17.27	97.8	129870	50.59	ug/L	92
~~79)~~	~~1,4-Dichloro-2-Butene~~	~~22.89~~	~~74.8~~	~~42058~~	~~42058.00~~	~~NO CAL ID~~	~~11~~
91)	Bromofluorobenzene	22.89	94.8	76298	48.15	ug/L	91

* Compound is ISTD

PRS 02/25/93

0143

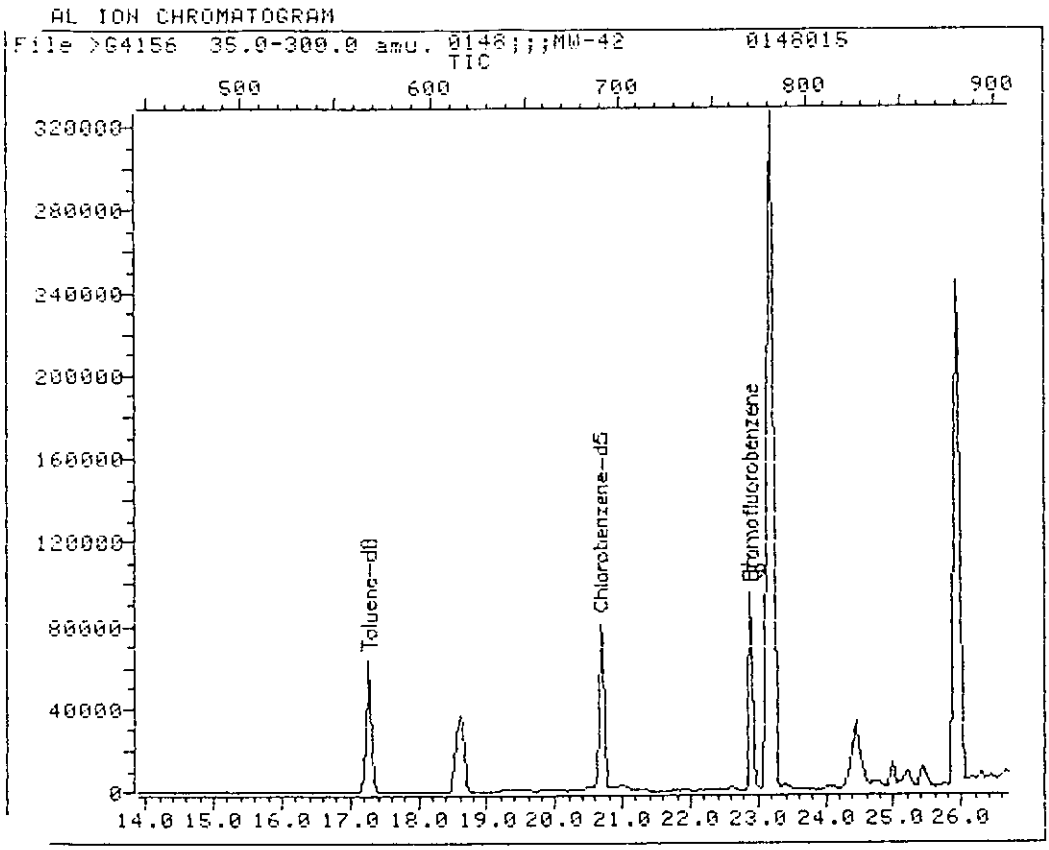


Data File: >G4156::G2 Quant Output File: ^G4156::QT
Name: 0148;;;MW-42
Misc: 0148015 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 03:04
Injected at: 930213 02:36

TIC page 1 of 2



Data File: >G4156::G2 Quant Output File: ^G4156::QT
Name: 0148;;;MW-42
Misc: 0148015 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

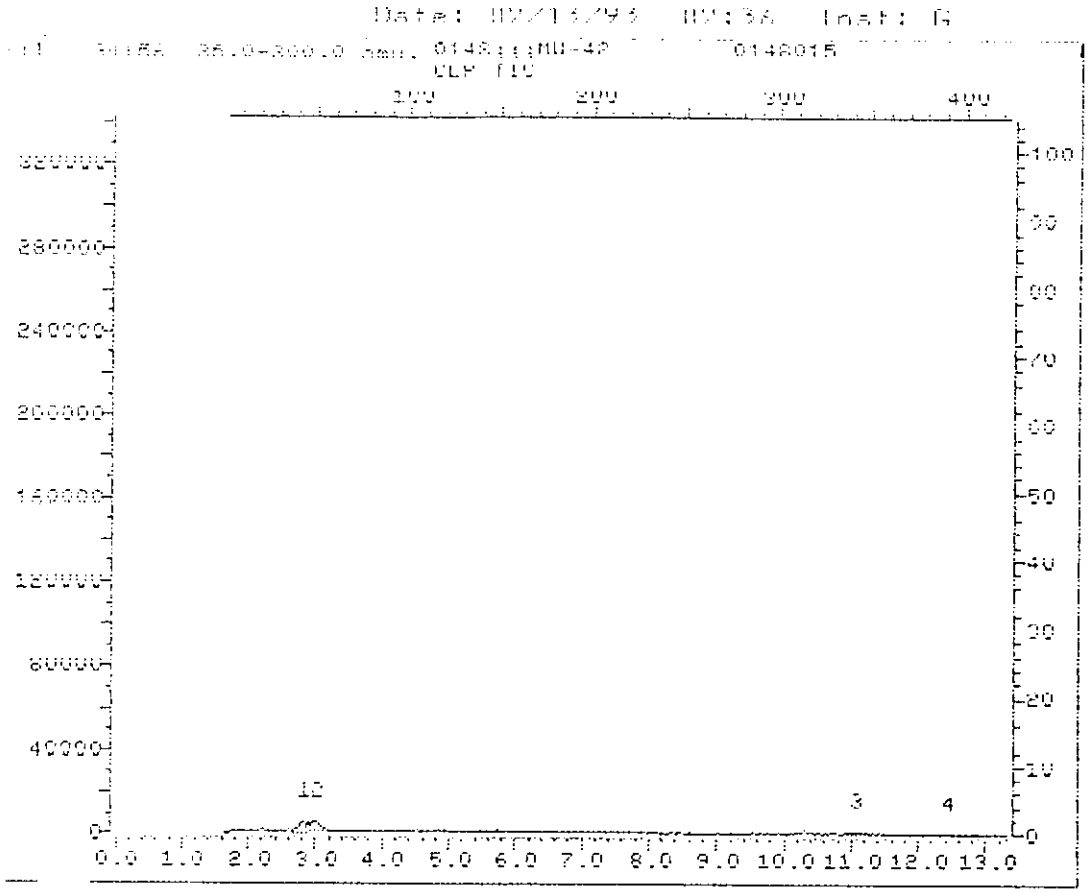
Operator ID: MSG
Quant Time: 930213 03:04
Injected at: 930213 02:36

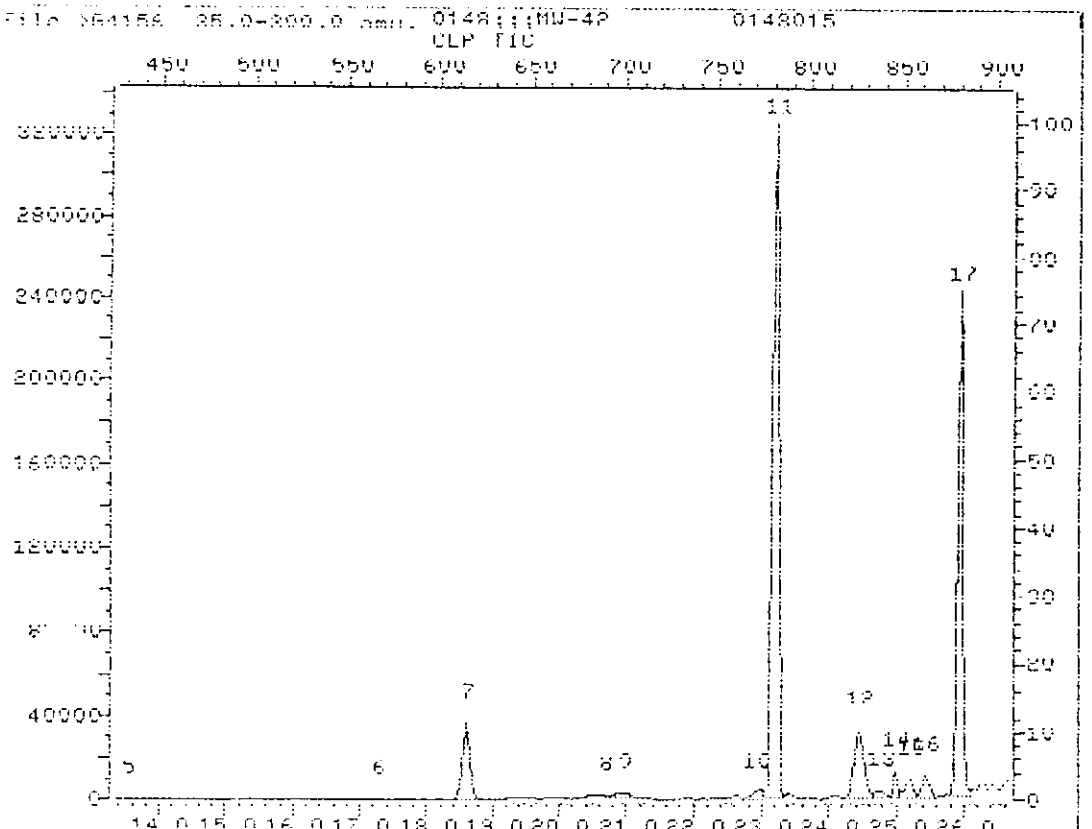
TIC page 2 of 2

MS Data File Header From : 5971A

Sample: 0148;;;MW-42 Operator: MSG MS 2/13/93 2:36
Misc : 0148015 HP5995:5;;;1 1 W;DFT ;031919
Sys. #: 2 MS model: 5A SW/HW rev.: 1A ALS # : 0
Method File: M 0CAP Tuning File: 1 5 No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	8.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


CLP TIC
0148015
12
3
4
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0


CLP TIC
0148015
11
17
7
12
5
6
14.15.16.17.18.19.20.21.22.23.24.25.26.0

Date: 02/15/93 02:36 Inst: 6

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
11.	24.19	1945429.	288.	3.	1.00
12.	25.93	1349366.	200.	3.	1.00
13.	24.44	308537.	45.	3.	1.00
7.	18.61	304821.	44.	3.	1.00
#62	2.99	36552.	10.	1.	1.00
15.	25.21	62840.	9.	3.	1.00
16.	25.43	61988.	9.	3.	1.00
#252	2.82	34888.	9.	1.	1.00
14.	24.99	50255.	7.	3.	1.00

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		T/SI
BROMOCHLOROMETHANE	11.05	190430.	0.00	12.28	2.8
1,4-DIFLUOROBENZENE	13.51	343312.	12.28	17.10	2.9
CHLOROBENZENE-D5	20.68	345133.	17.10	25.93	3.6

ISTD peaks found:	3
Surrogate peaks found:	3
Amount target peaks expected:	1
Target peaks matched:	0
Total TIC identified:	9

TICS : 2:37 PM MON., 15 FEB., 1993

MW-42

Cr t interpret this parameter... Perhaps you have mistyped
th run string or have forgotten the order of the run string.

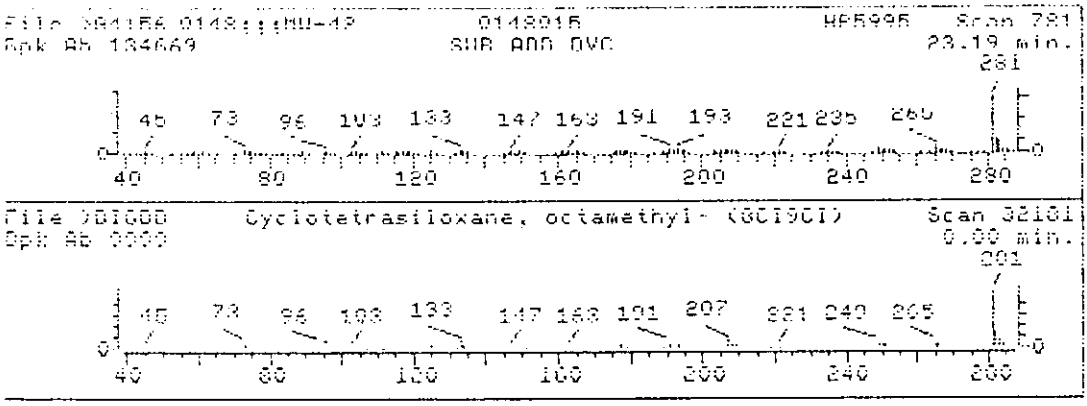
RPN error for command: RSF63
RPN error: -5
Bad record length RSF

1. Cyclotetrasiloxane, octamethyl- (8CI9CI) 99% C8H24O4Si4

Sample file: >G4196 Spectrum #: 781
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IU
1.	83	556672	32181	"BIGDR	29	52	2	0	99	3	52	21		

Peak#: 11 Area: 1945499. Est Conc: 280. Date: 02/13/93 02:36 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
th run string or have forgotten the order of the run string.

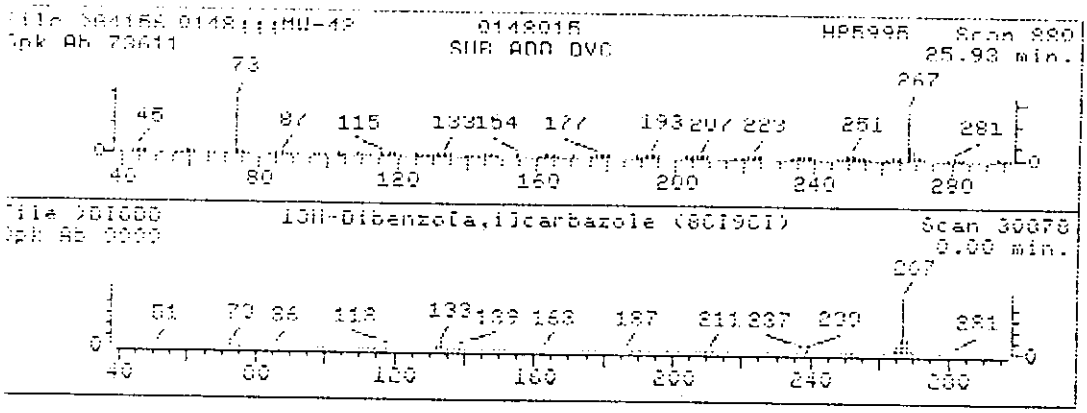
RPN error for command: RSF63
RPN error: -5
ad record length RSF

1. 13H-Dibenzo[a,j]carbazole (8CI9CI) 267 C20H13N

Sample file: >G4156 Spectrum #: 880
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	49*	239645	30828	"R1GDR	29	99	3	0	88	22	12		13	

Peak#: 17 Area: 1349366. Est Conc: 200. Date: 02/13/93 02:36 Inst: G



RPN 1115

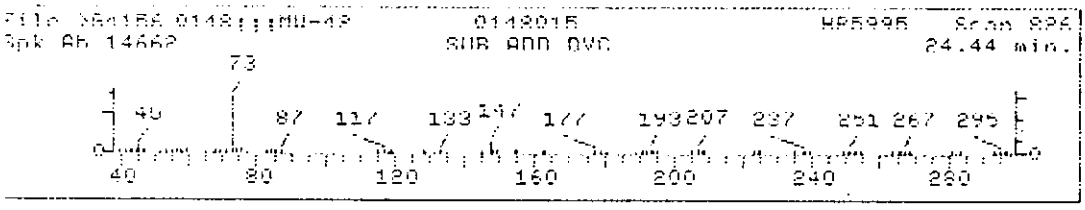
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

RPN error for command: RSF63
RPN error: -5
Ad record length RSF

Sample file: >G4156 Spectrum #: 826

No data base entries were retrieved.

Peak#: 12 Area: 3108532. Est Conc: 45. Date: 02/13/93 02:36 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

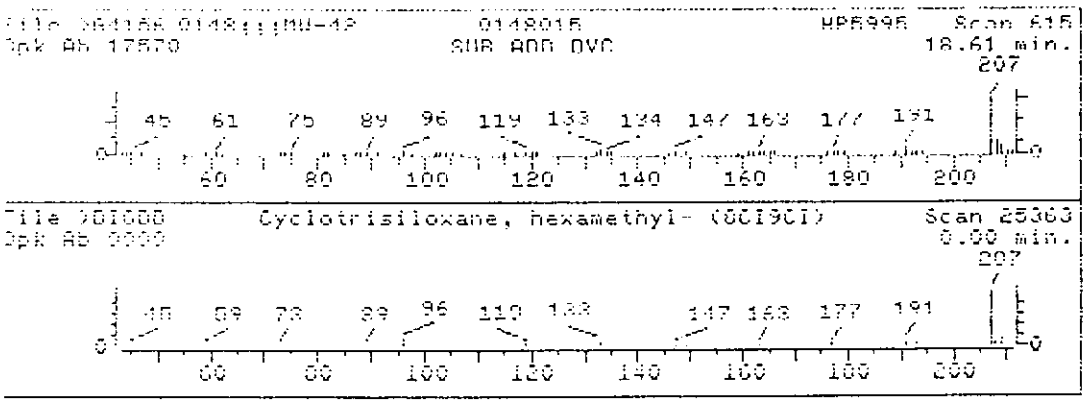
MPN error for command: RSF63
MPN error: -5
Bad record length RSF

1. Cyclotrisiloxane, hexamethyl- (8CI)(9CI) 222 C6H18O3Si3

Sample File: >64156 Spectrum #: 615
Search speed: 3 Tilting option: 5 No. of ion ranges searched: 62

	Prob.	CAS #	CUN #	RUNT	K	DK	#FLG	TILT	%	CUN	C	I	R	IV
1.	AR*	541059	25363	"BIGDB	62	49	0	-3	100	23	30			56

Peak#: 7 Area: 30682/1. Est Conc: 44. Date: 02/13/93 02:36 Inst: G

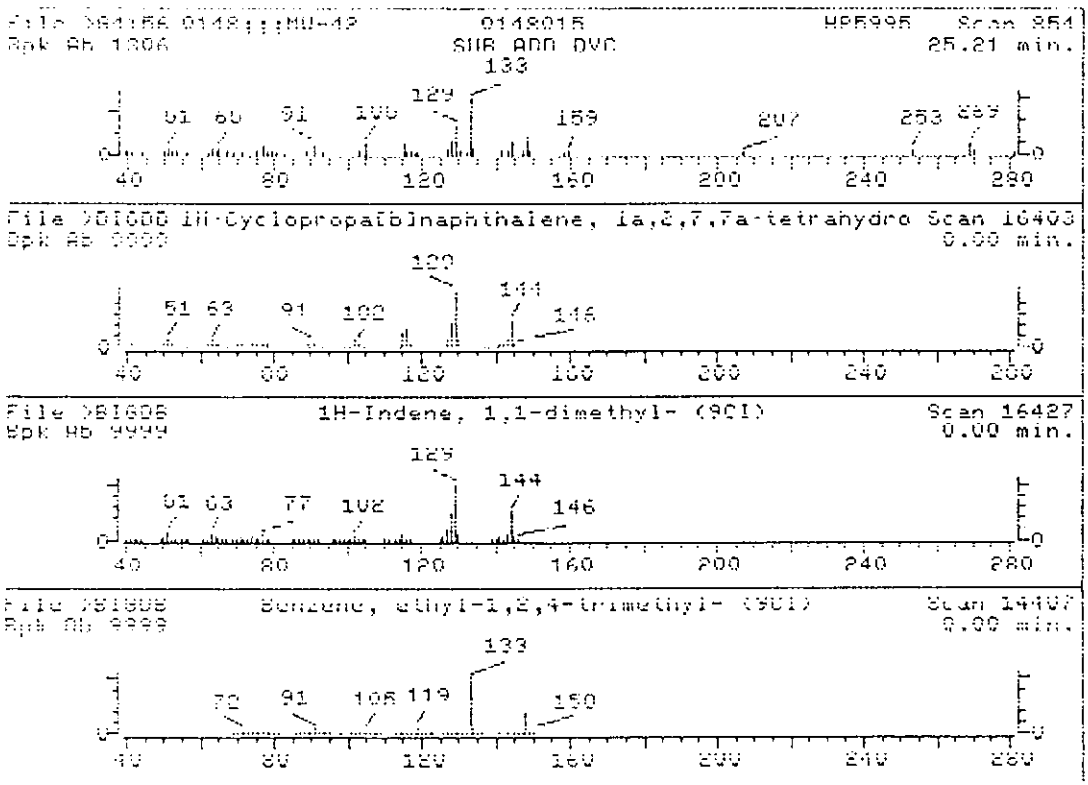


1. 1H-Cyclopropa[b]naphthalene, 1a,2,7,7a-tetrahydro- (144 C11H12
   RCI9CI)
2. 1H-Indene, 1,1-dimethyl- (9CI) 144 C11H12
3. Benzene, ethyl-1,2,4-trimethyl- (9CI) 148 C11H16
4. Benzene, 1,3-dimethyl-5-(1-methylethyl)- (9CI) 148 C11H16

Sample File: >R4156 Spectrum #: R54
Search speed: 3 Tilting option: 5 No. of ion ranges searched: 59

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IV
1.	64*	6921728	16403	"BIGDR	65	32	2	1	43	25	28	44		
2.	64*	18636550	16427	"BIGDR	64	31	2	1	40	25	28	44		
3.	31*	54210626	14402	"BIGDR	42	48	2	0	89	45	19	22		
4.	30*	47069115	14399	"BIGDR	43	47	2	0	100	47	10	23		

Peak#: 15 Area: 62841. Est Conc: 9. Date: 02/13/93 02:36 Inst: G



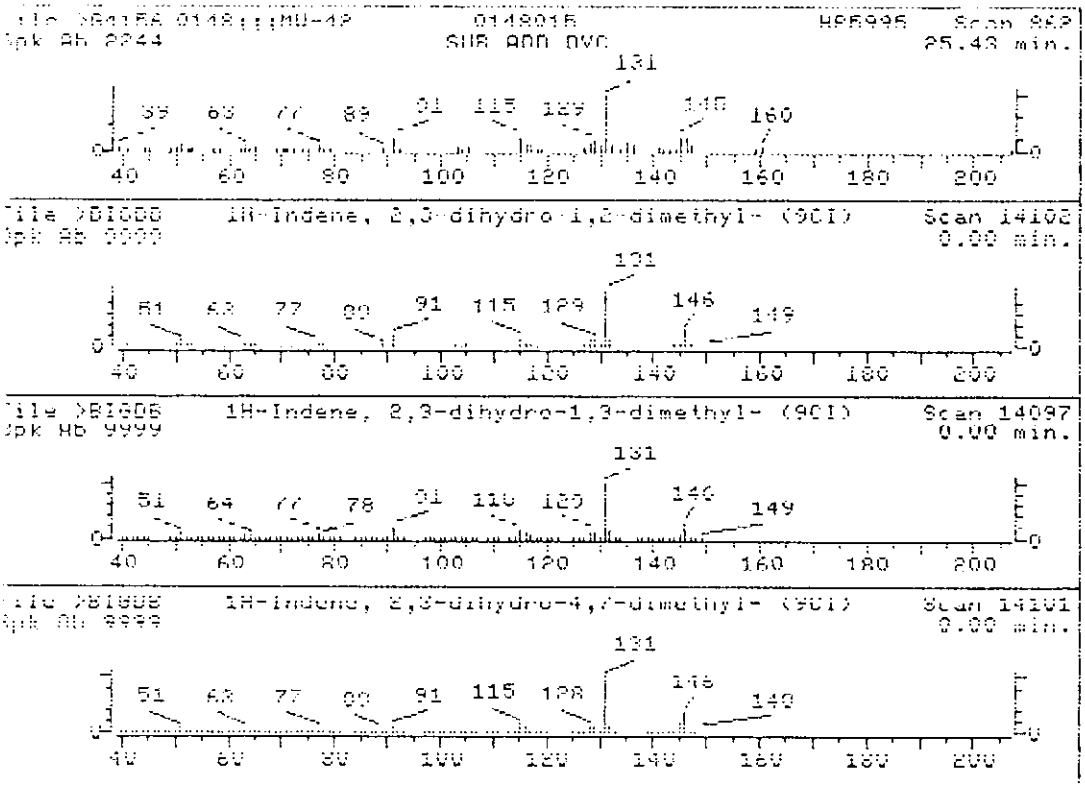
id record length 8KB

1.	1H-Indene, 2,3-dihydro-1,2-dimethyl- (9CI)	146	C11H14
2.	1H-Indene, 2,3-dihydro-1,3-dimethyl- (9CI)	146	C11H14
3.	1H-Indene, 2,3-dihydro-4,7-dimethyl- (9CI)	146	C11H14
4.	1H-Indene, 2,3-dihydro-1,6-dimethyl- (9CI)	146	C11H14

Sample File: >044196 Spectrum #: 882
Search speed: 3 Tilting option: S No. of ion ranges searched: 98

	Prob.	CAS #	CIN #	NIST	K	DK	#FLG	TILT	%	CIN	C	I	R	IU
1.	79*	17057828	14112	"BIGDB	68	36	1	0	24	22	32	66		
2.	88*	4175535	14097	"BIGDB	68	33	1	1	29	21	30	52		
3.	64*	6682219	14111	"BIGDB	43	62	0	0	21	22	28	48		
4.	64*	17057492	14099	"BIGDB	56	44	1	0	88	22	28	42		

Peak#: 16 Area: 619118. Fat Conc: 9. Date: 02/13/93 02:36 Inst: G



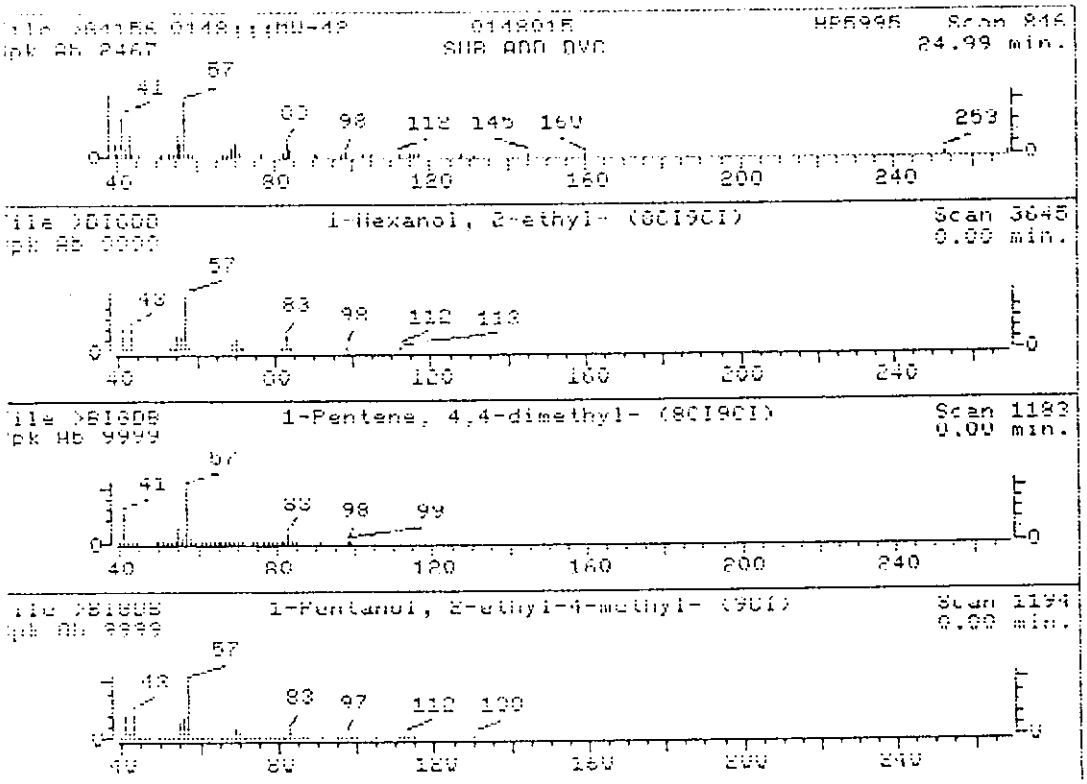
id record length MSP

1.	1-Hexanol, 2-ethyl- (8CI,9CI)	130 C8H18O
2.	1-Pentene, 4,4-dimethyl- (8CI,9CI)	98 C7H14
3.	1-Pentanol, 2-ethyl-4-methyl- (9CI)	130 C8H18O
4.	1-Hexene, 4-methyl- (8CI,9CI)	98 C7H14

Sample File: >A4156 Spectrum #: 846
Search speed: 3 Tilting option: S No. of ion ranges searched: 66

	Prob.	CAS #	COIN #	NUMT	K	DK	#FLG	TILT	%	COIN	C	I	R	IO
1.	20	104767	3645	"BIGDB	58	36	2	0	22	9	42	19		
2.	52*	262629	1183	"BIGDB	39	32	0	0	92	40	19	48		
3.	27	106672	1194	"BIGDB	41	49	1	0	22	28	14	14		
4.	32*	3249231	1052	"BIGDB	41	53	1	0	28	43	12	23		

Peak#: 14 Area: 50755. Est Conc: 7. Date: 02/13/93 02:36 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET 0155

EPA SAMPLE NO.
MHW-2

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148016

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4157.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0156

EPA SAMPLE NO.

MHW-2

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148016

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4157.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: ~~0~~ 3

AS 03/08/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.15	46	JN
2.		UNKNOWN SILOXANE	25.91	11	JN
3.		UNKNOWN SILOXANE	24.45	10	JN
4.					
5.					
6.					
7.					
8.					
9.					
10.					
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29.					
30.					

0157

QUANT REPORT

Operator ID: MSG
Output File: ^G4157::QT
Data File: >G4157::G2
Name: 0148;;;MHW-2
Misc: 0148016

Quant Rev: 6 Quant Time: 930213 03:35
Injected at: 930213 03:08
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1919

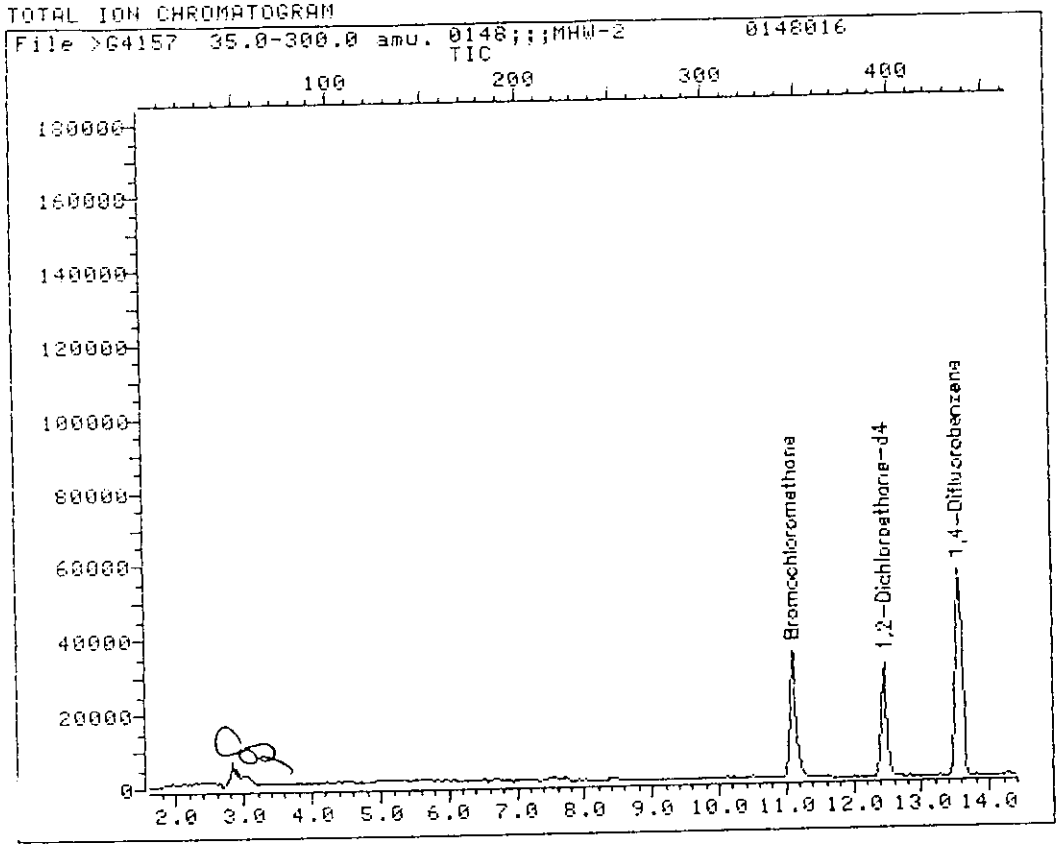
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.09	127.8	25005	50.00	ug/L	86
1/)	Acetone	6.70	42.8	3843	8.75	ug/L	93
28)	Chloroform	11.17	82.8	10115^	5.41	ug/L	88
30)	1,2-Dichloroethane-d4	12.47	64.8	89118	52.79	ug/L	87
34)	*1,4-Difluorobenzene	13.55	113.8	121411	50.00	ug/L	98
~~37~~	~~Bromodichloromethane~~	~~15.37~~	~~82.8~~	~~1293~~	.85	ug/L	91
53)	*Chlorobenzene-d5	20.66	116.8	97821	50.00	ug/L	80
61)	Toluene-d8	17.25	97.8	132895	50.87	ug/L	95
91)	Bromofluorobenzene	22.87	94.8	81487	50.54	ug/L	96

* Compound is ISTD

PRS 02/25/93

TOTAL ION CHROMATOGRAM



Data File: >G4157::G2
Name: 0148;;;MHW-2
Misc: 0148016

Quant Output File: ^G4157::QT

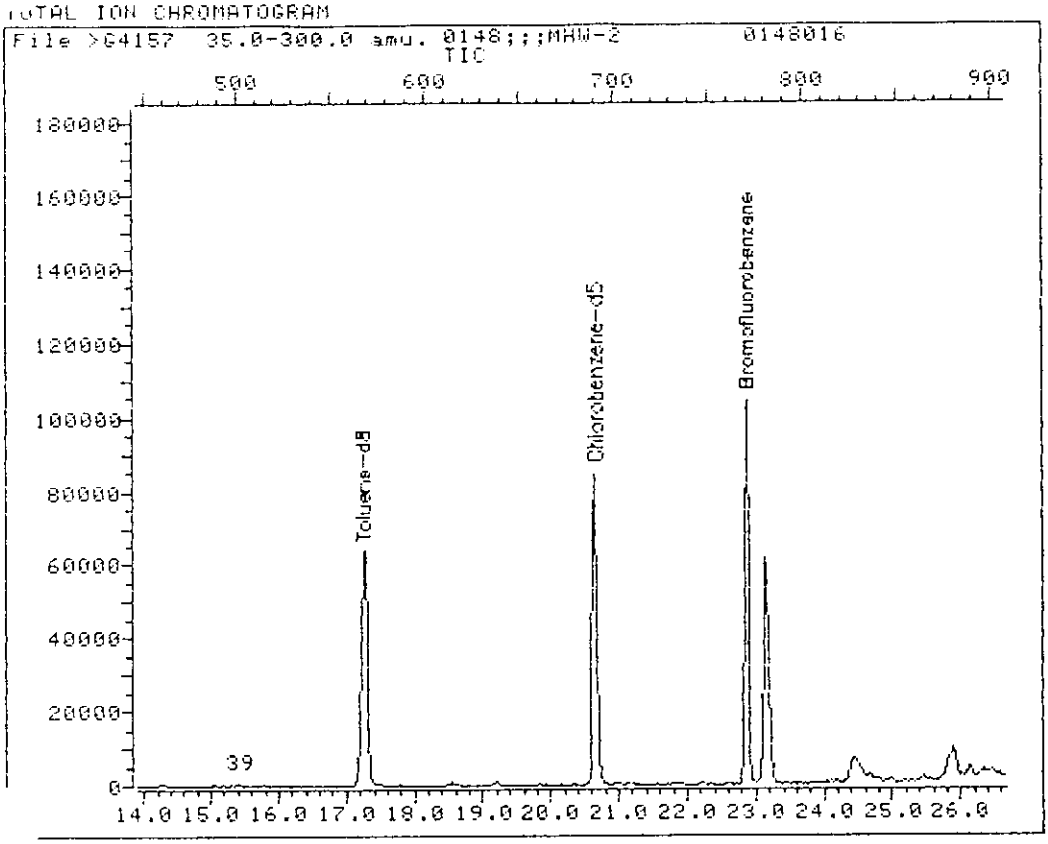
HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 03:35
Injected at: 930213 03:08

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



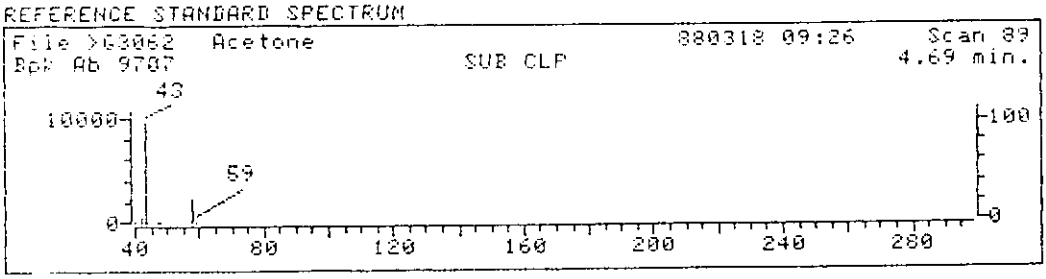
Data File: >G4157::G2 Quant Output File: ^G4157::QT
Name: 0148;;;MHW-2
Misc: 0148016 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

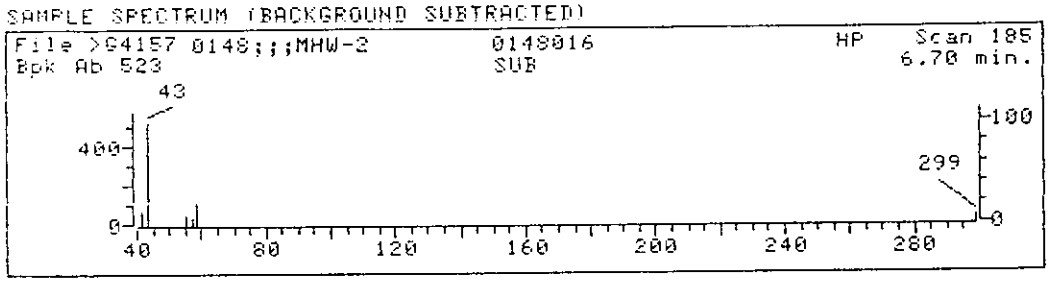
Operator ID: MSG
Quant Time: 930213 03:39
Injected at: 930213 03:08

TIC page 2 of 2

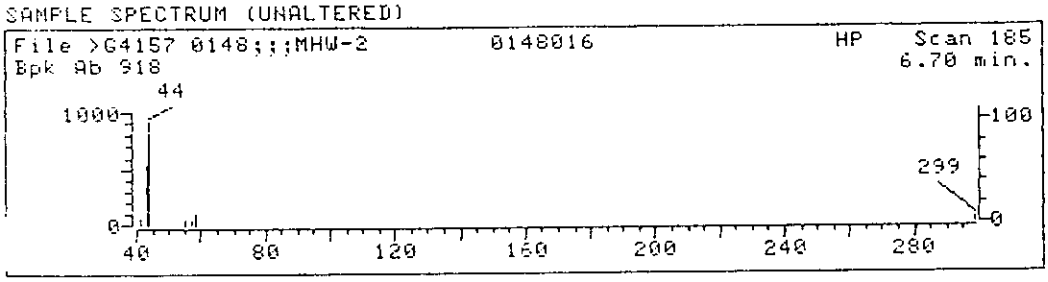
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



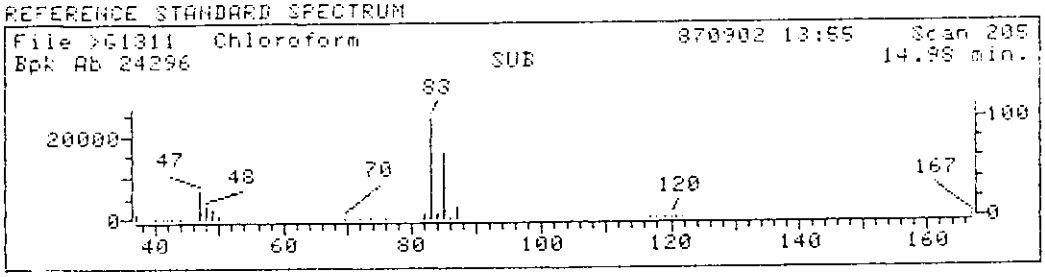
Data File: >G4157::G2
Name: 0148;;;MHW-2
Misc: 0148016
Quant Time: 930213 03:35
Injected at: 930213 03:08

Quant Output File: ^G4157::QT

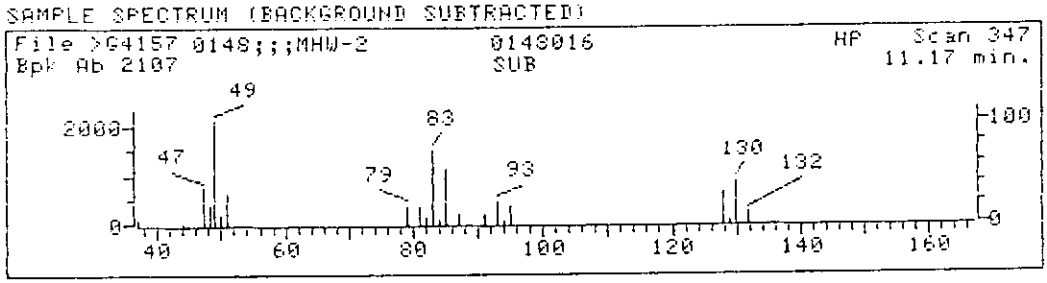
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 13
Compound Name: Acetone
Scan Number: 185
Retention Time: 6.70 min.
Quant Ion: 42.8
Area: 3843
Concentration: 8.75 ug/L
q-value: 93

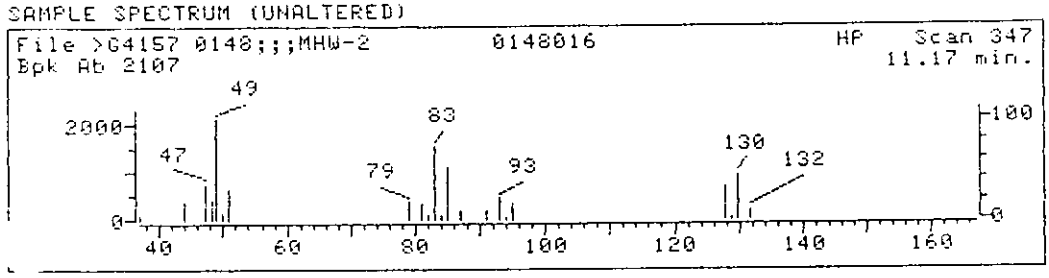
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4157::G2
Name: 0148;;;MHW-2
Misc: 0148016
Quant Time: 930213 03:35
Injected at: 930213 03:08

Quant Output File: ^G4157::QT

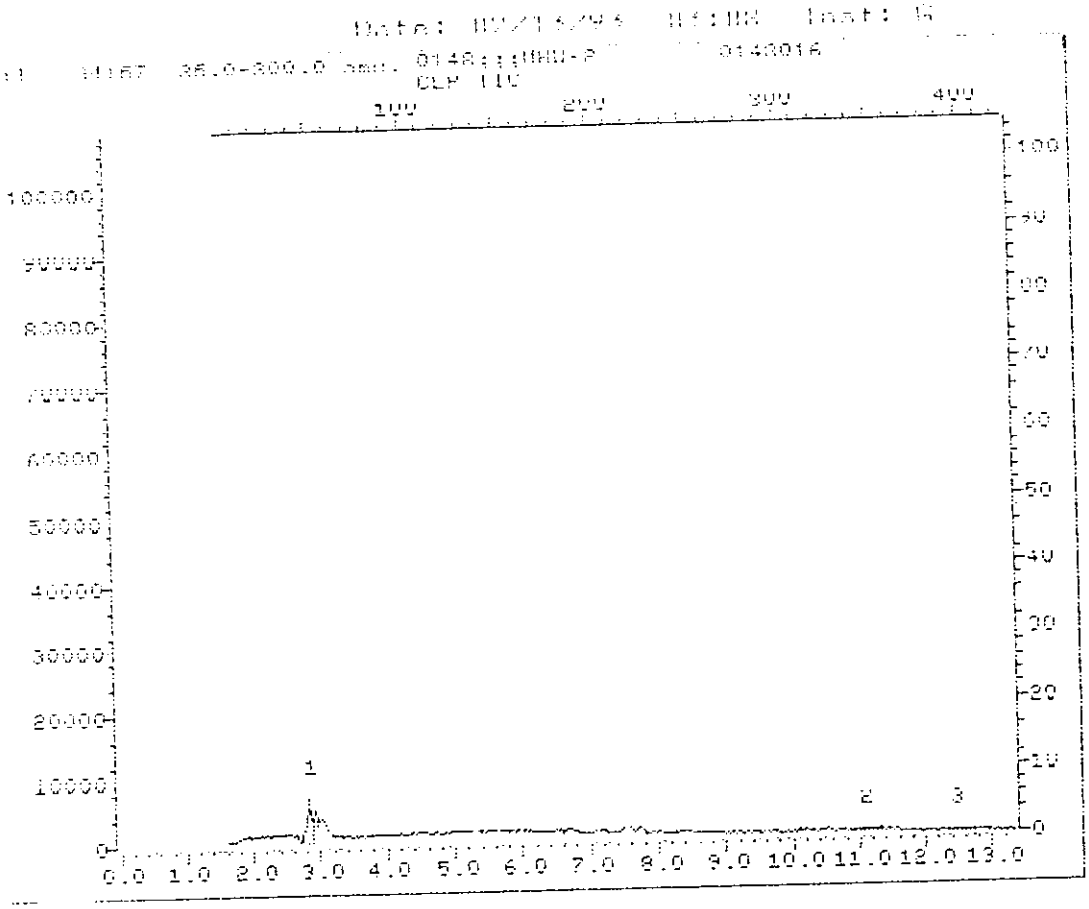
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

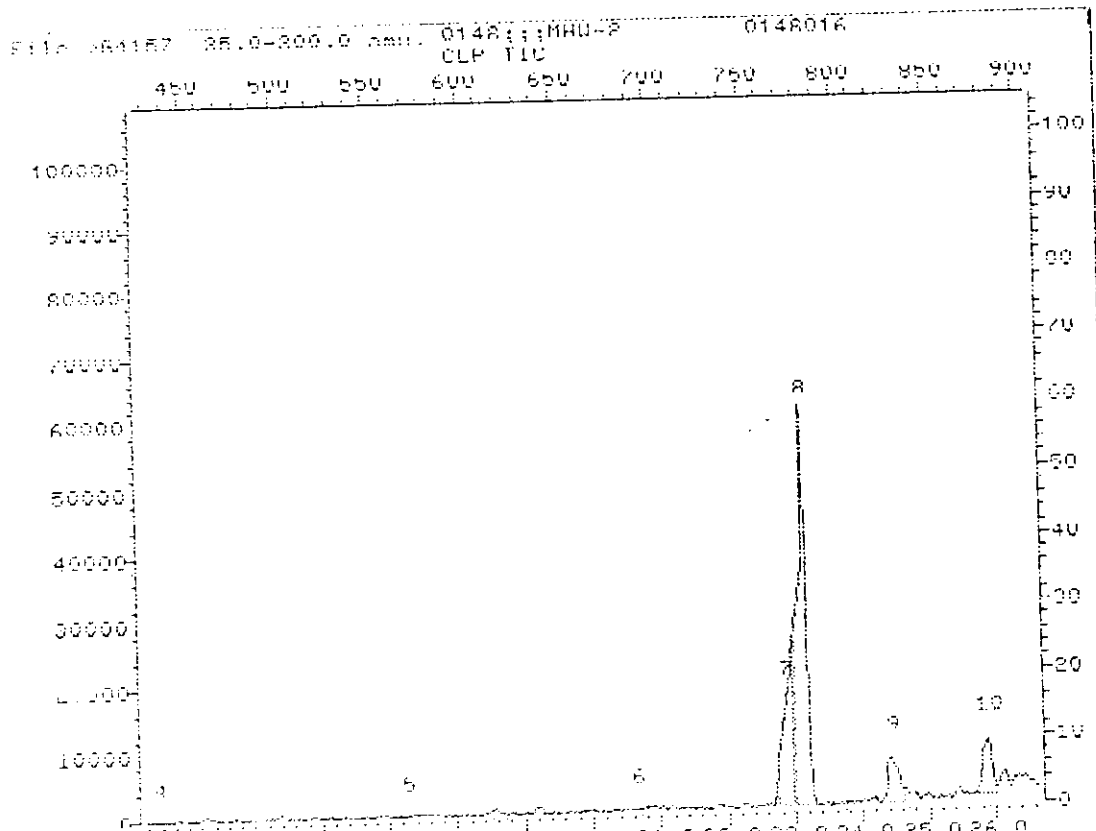
Compound No: 28
Compound Name: Chloroform
Scan Number: 347
Retention Time: 11.17 min.
Quant Ion: 82.8
Area: 10115^
Concentration: 5.41 ug/L
q-value: 88

MS ..ta File header from : >G4152

Sample: 0148;;;MHW-2 Operator: MHG MS 2/13/93 3:08
Misc : 0148016 HP5995:G;;;11W;DF1 ;G1919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M GCAP Tuning File: 1 G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


CLP TIC
0148016
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
100
200
300
400
1
2
3
0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0


CLP TIC
0148016
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
450
500
550
600
650
700
750
800
850
900
4
5
6
8
9
10

Data: 02/15/93 11:00 Cnst: 5

I S T D P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
8.	25.15	355013.	46.	5.	1.000
10.	25.91	29995.	11.	6.	1.000
9.	22.45	29657.	10.	3.	1.000
4. 602	2.83	29612.	2.	1.	1.000

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		11/51
FLUOROCHLOROMETHANE	11.09	220195.	11.00	12.32	8.8
1,4-DIFLUOROBENZENE	13.55	355166.	12.32	12.10	2.9
CHLOROBENZENE-D5	20.66	379264.	12.10	25.91	3.9

ISTD peaks found:	3
Surrogate peaks found:	6
Quant target peaks expected:	3
Target peaks matched:	11
Total TIC identified:	4

Time : 5:10 PM Mon., 15 Feb., 1993

~~MH~~

MHW-2

PAS 2/25/93

Ca t interpret this parameter... Perhaps you have mistyped
th un string or have forgotten the order of the run string.

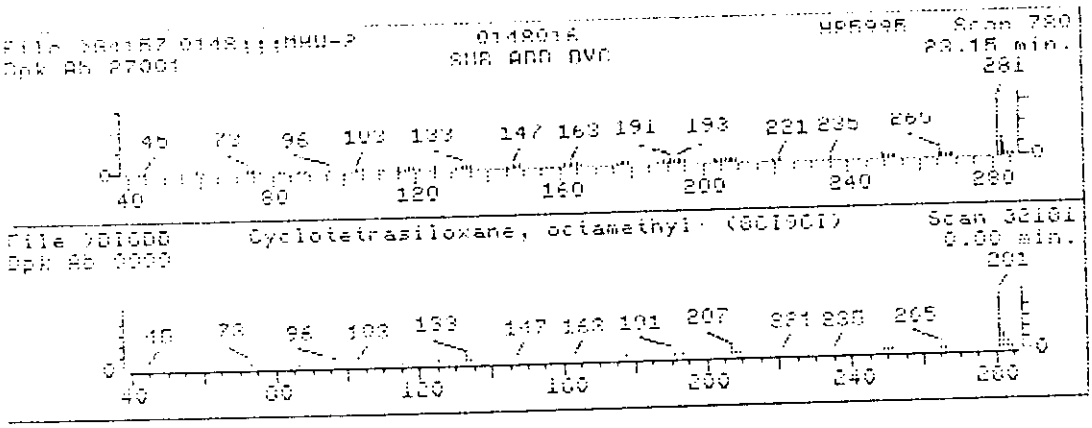
RPN error for command: RSF63
RPN error: -5
sR record length RSF

1. Cyclotetrasiloxane, octamethyl- (RI:1901) 29A CRH24145:4

Sample file: >64152 Spectrum #: /RB
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	ION #	RUNIT	K	UK	#FIG	TILT	%	CHN	C	I	R	IU
1.	/R	556672	32181	"R1GDR	AR	AR	2	U	1UU	1	55	19		

Peak#: 8 Area: 353013. Est Conc: 46. Date: 02/13/93 03:08 Inst: G



HP 205

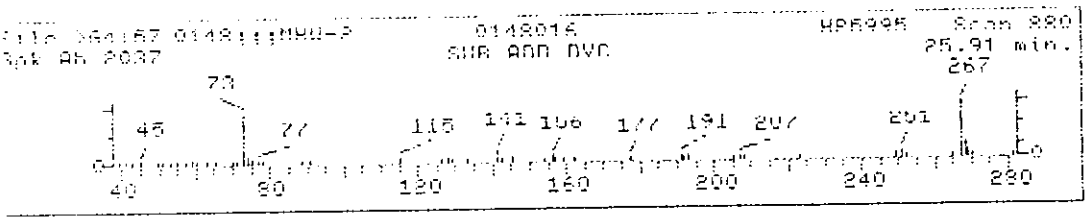
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

RPN error for command: RSEA9
RPN error: -5
ad record length RSF

Sample file: >G4152 Spectrum #: 880

No data base entries were retrieved.

Peak#: 10 Area: 29995. Est Conc: 11. Date: 02/13/93 03:08 Inst: G



Err: 000

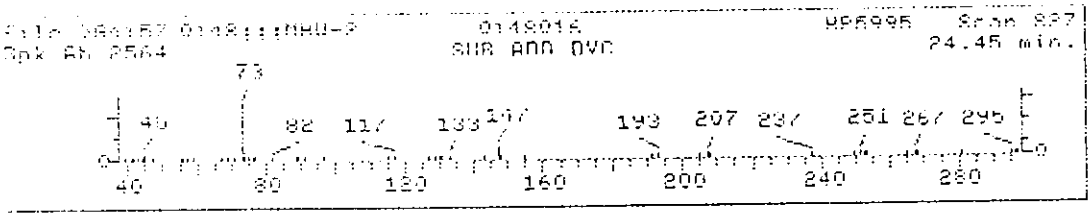
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

RPN error for command: RSF63
RPN error: -5
ad record length RSF

Sample file: >G4157 Spectrum #: 827

No data base entries were retrieved.

Peak#: 9 Area: 29667. Est Conc: 10. Date: 02/13/93 03:08 Inst: 15



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0168

REPLICATE

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148017

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4158.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0169

REPLICATE

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148017

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4158.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: ~~0~~ 3
PDS 02/25/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.19	32	~~JN~~
2.	541059	CYCLOTRISILOXANE, HEXAMETHYL	18.63	23	JN
3.		UNKNOWN PAH	24.68	6	J
4.					
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0170

QUANT REPORT

Operator ID: MSG
Output File: ^G4158::QT
Data File: >G4158::G2
Name: 0148;;;REPLICATE
Misc: 0148017

Quant Rev: 6 Quant Time: 930213 04:07
Injected at: 930213 03:39
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1919

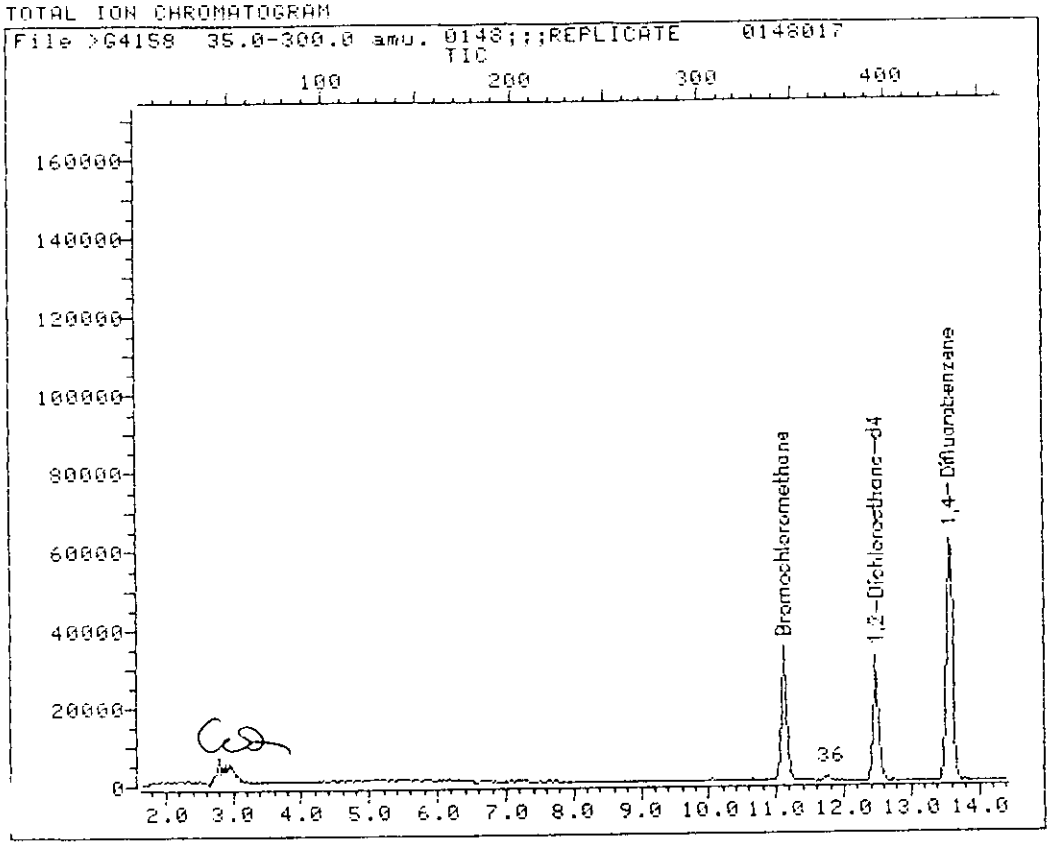
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *Bromochloromethane	11.11	127.8	26003	50.00	ug/L	88
~~28) Chloroform~~	~~11.22~~	~~82.8~~	~~1039^~~	~~.53~~	~~ug/L~~	~~55~~
30) 1,2-Dichloroethane-d4	12.49	64.8	90450	51.52	ug/L	89
34) *1,4-Difluorobenzene	13.57	113.8	136524	50.00	ug/L	97
36) 1,1,1-Trichloroethane	11.74	96.8	3033	1.24	ug/L	91
53) *Chlorobenzene-d5	20.70	116.8	97252	50.00	ug/L	83
61) Toluene-d8	17.30	97.8	141579	54.51	ug/L	94
91) Bromofluorobenzene	22.91	94.8	77117	48.10	ug/L	90

* Compound is ISTD

PAS 02/25/93

TOTAL ION CHROMATOGRAM



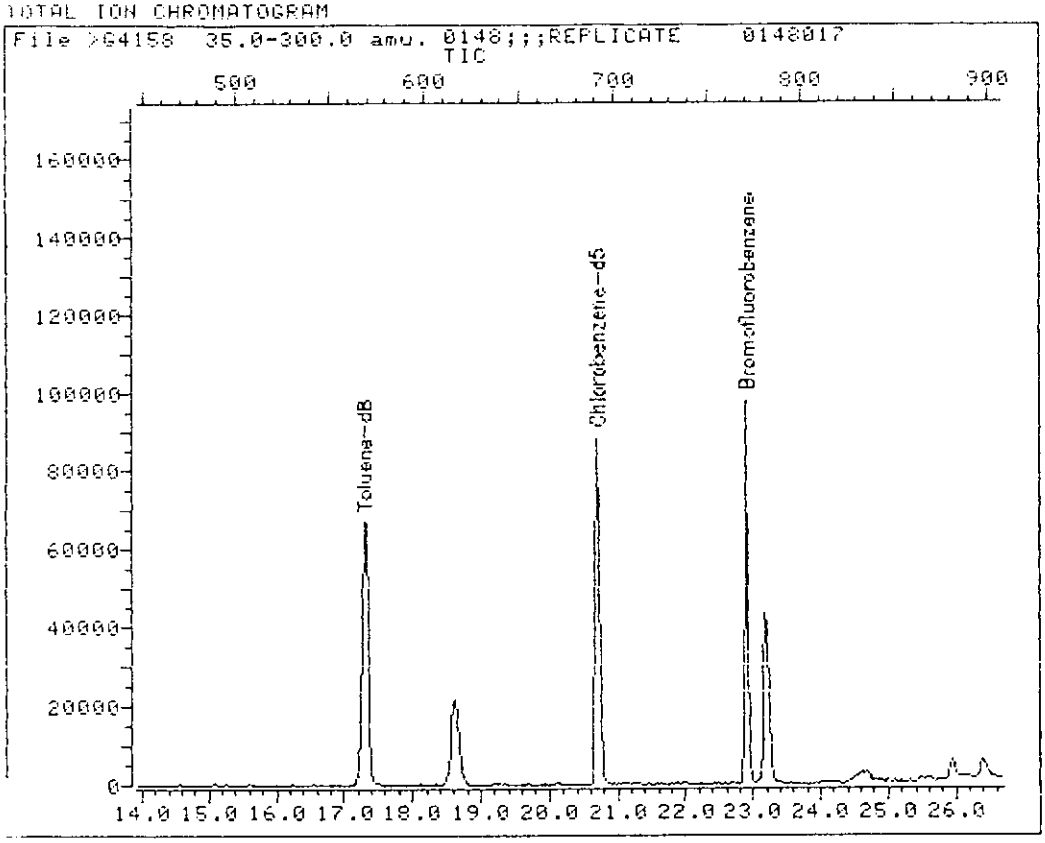
Data File: >G4158::G2 Quant Output File: ^G4158::QT
Name: 0148;;;REPLICATE
Misc: 0148017 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 04:07
Injected at: 930213 03:39

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



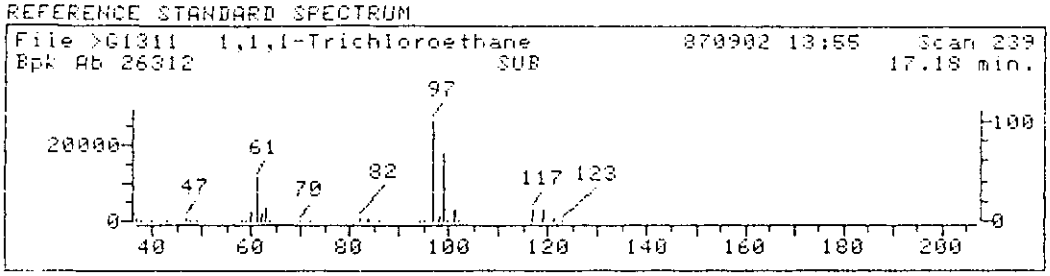
Data File: >G4158::G2 Quant Output File: ^G4158::QT
Name: 0148;;;REPLICATE
Misc: 0148017 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

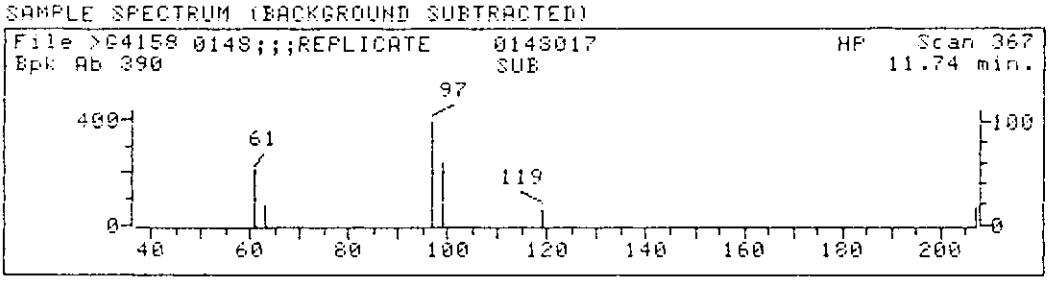
Operator ID: MSG
Quant Time: 930213 04:07
Injected at: 930213 03:39

TIC page 2 of 2

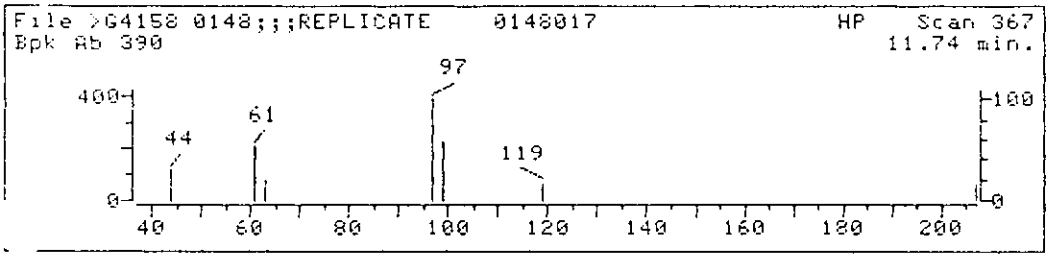
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



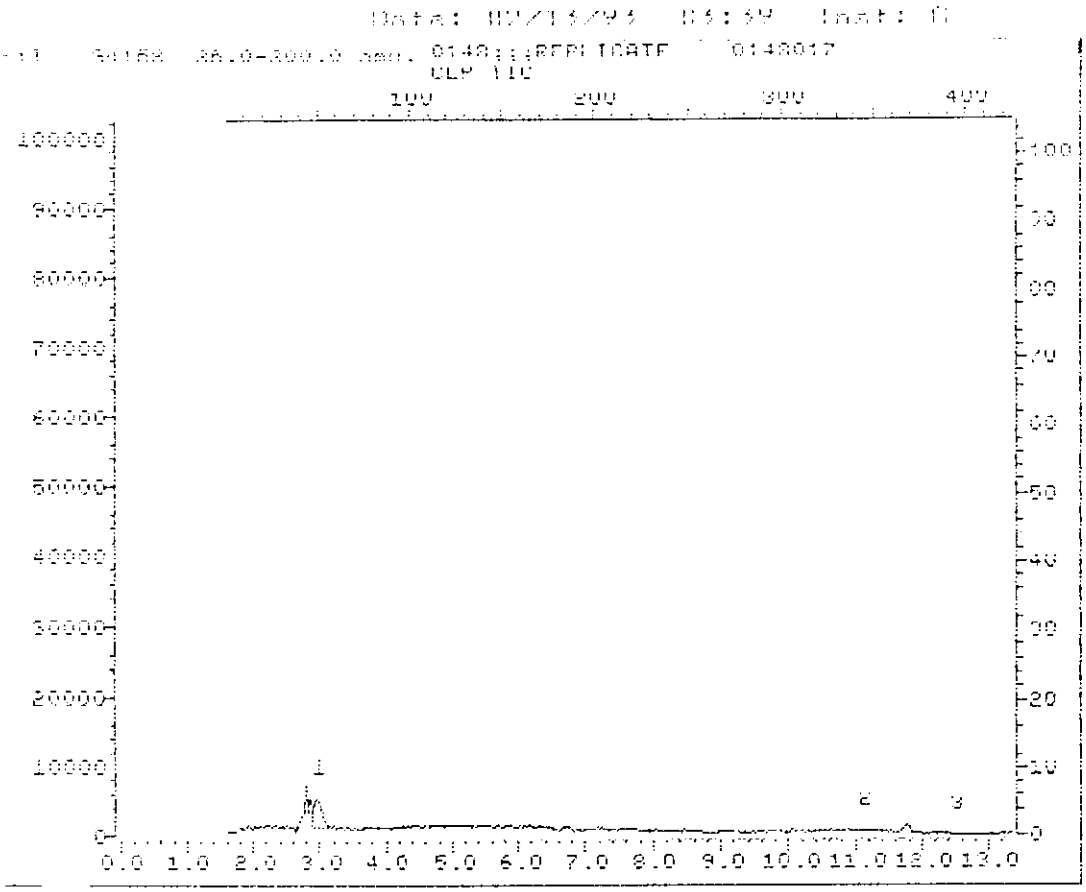
Data File: >G4158::G2 Quant Output File: ^G4158::QT
Name: 0148;;;REPLICATE
Misc: 0148017 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 04:07 Quant ID File: I_IFGW::N1
Injected at: 930213 03:39 Last Calibration: 930212 21:54

Compound No: 36
Compound Name: 1,1,1-Trichloroethane
Scan Number: 367
Retention Time: 11.74 min.
Quant Ion: 96.8
Area: 3033
Concentration: 1.24 ug/L
q-value: 91

MS Data File header from : >I64158

Sample: 0148:::REPLICATE   Operator: MSK   MS   2/13/93 5:39
Misc : 0148012   BP5995:0:::1M:DF1 :RT919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M_IGCAP   Tuning File: T_N   No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240   Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0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400
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800000
700000
600000
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400000
300000
200000
100000
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100
90
80
70
60
50
40
30
20
10
0
1
2
3
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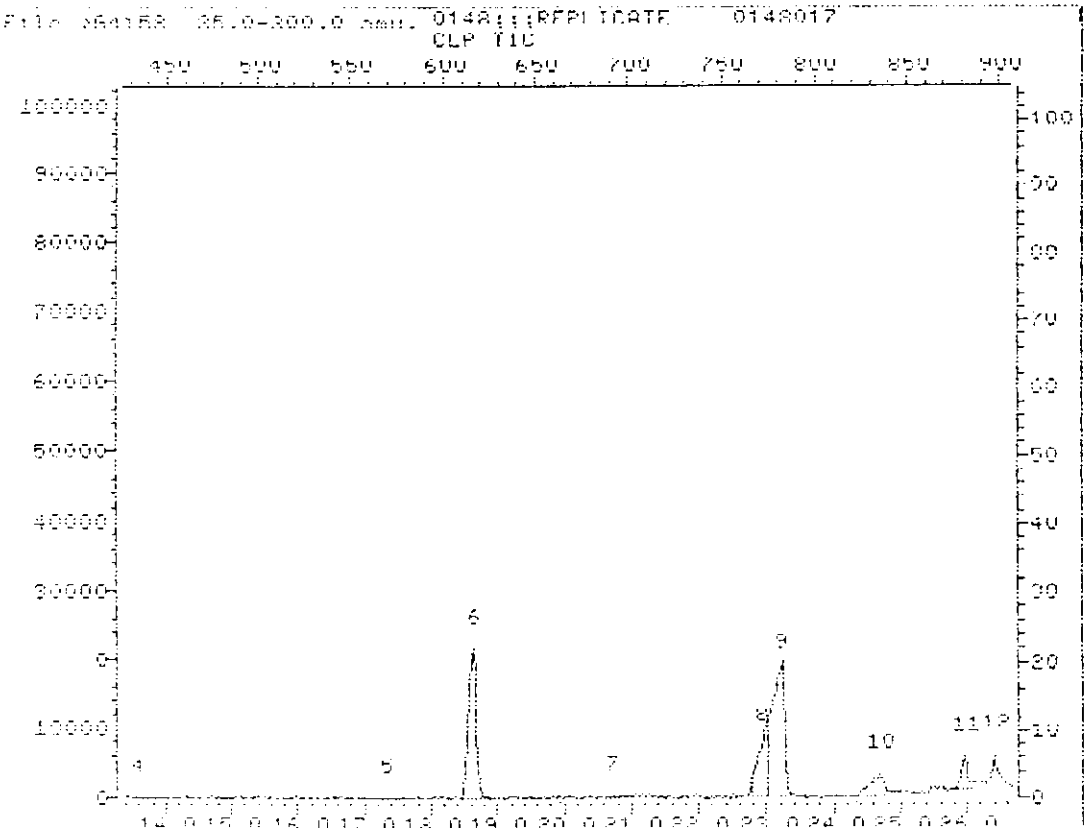
CLP TIC
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700
750
800
850
900
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600000
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400000
300000
200000
100000
0
100
90
80
70
60
50
40
30
20
10
0
4
5
6
7
8
9
10
11
12

Date: [illegible] Inst: [illegible]

TIC PEAK REPORT

Pk#	R.T.	Total Area	Pct Conc.	Assoc ISTD	DF
9.	23.19	24618A.	32.	3.	1.000
A.	18.A3	17A193.	23.	3.	1.000
TCQ	2.95	29A2B.	2.	1.	1.000
10.	24.68	44875.	A.	3.	1.000

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		T/SI
[illegible]	11.13	21A37B.	0.000	12.35	2.9
1,4-DIFLUOROBENZENE	13.52	392714.	12.55	17.13	2.9
CHLOROBENZENE-D5	20.20	329912.	17.13	26.40	3.9

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	2
Target peaks matched:	10
Total TIC identified:	4

Run : 3:28 PM MON., 15 FEB., 1993

or ' interpret this parameter... Perhaps you have mistyped
th un string or have forgotten the order of the run string.

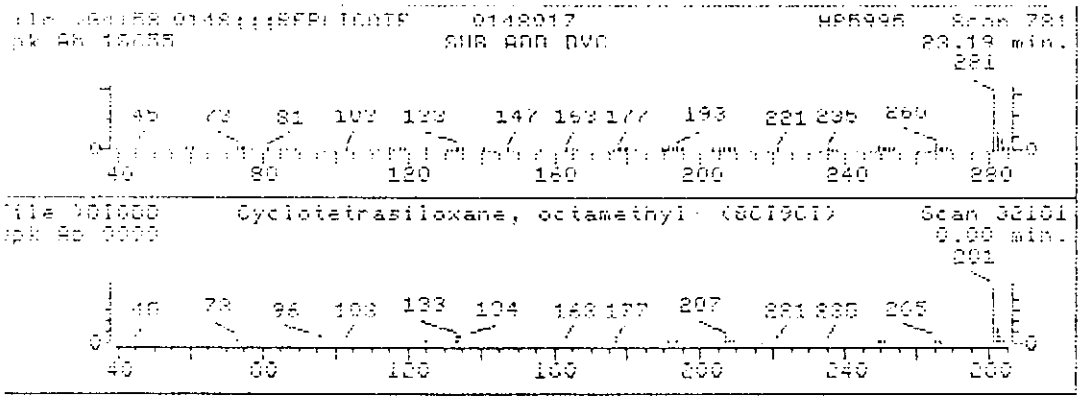
UNN error for command: RSEA4
KRN error: -5
d passed length RSF

1. Cyclotetrasiloxane, octamethyl- (8C19CI) 996 CRHV4H4Si4

Sample File: >H415R Spectrum #: /R1
Search speed: 3 Tilting option: S No. of ion ranges searched: 5R

	Prob.	CAS #	NIN #	Name	K	DK	#Fig	Tilt	%	Con	C	I	R	IU
1.	/R	556A/2	32181	"81G0R	67	69	2	N	1000	1	55			14

Peak#: 9 Area: 246062. Fat Conc: 32. Date: 02/13/93 03:39 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
th un string or have forgotten the order of the run string.

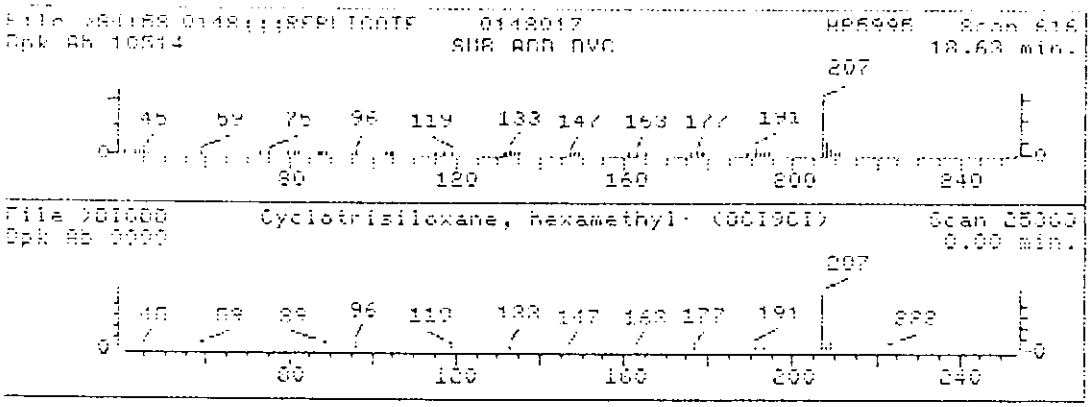
 MMN error for command: RSH61
 MMN error: -5
bad record length RSP

 1. Cyclotrisiloxane, hexamethyl- (8CI,9CI) 222 C6H18O3Si3

 Sample file: >IS419R Spectrum #: A1A
Search speed: 3 Tilting option: 5 No. of ion ranges searched: 59

	Prob.	CAS #	CON #	NAME	K	DK	#FLG	TH	T	%	CON	C	I	R	IO
1.	79*	541059	25363	"HIGOH	84	25	1	-2	100	21	35	66			

Peak#: 6 Area: 172193. Fat Conn: 23. Date: 02/13/93 03:39 Inst: G



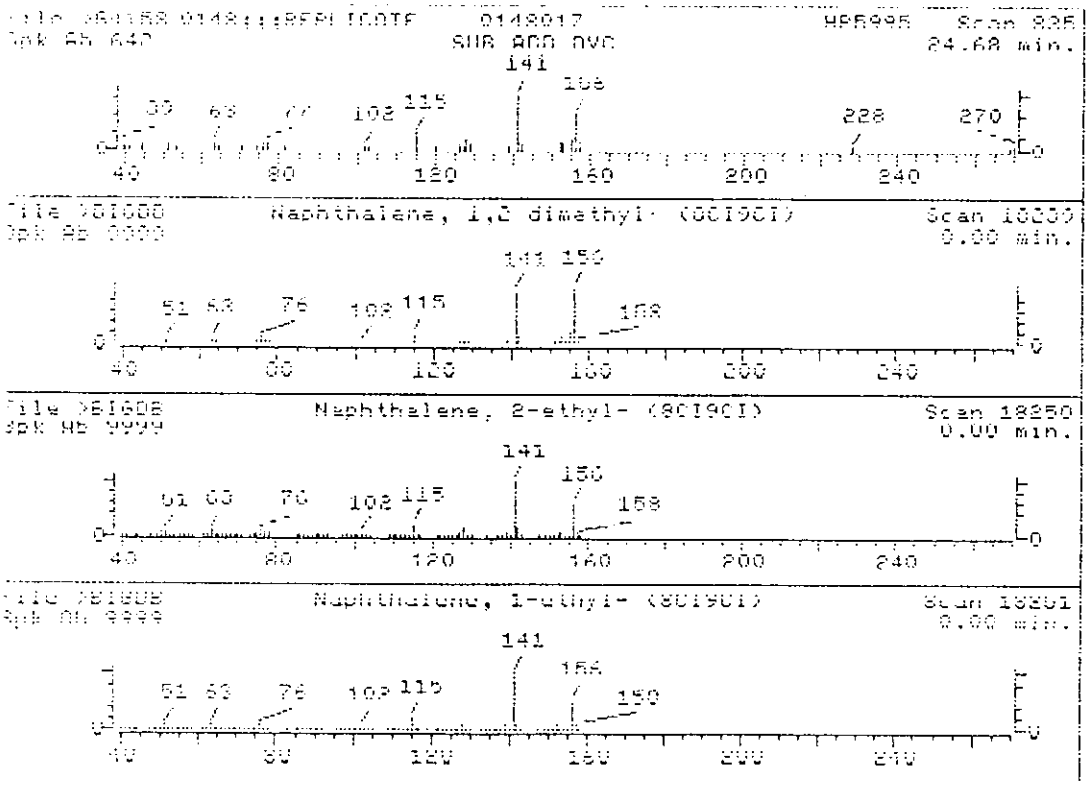
M Found Length Mol

1.	Naphthalene, 1,2-dimethyl- (80190I)	156 C12H12
2.	Naphthalene, 2-ethyl- (80190I)	156 C12H12
3.	Naphthalene, 1-ethyl- (80190I)	156 C12H12
4.	Naphthalene, 2,3-dimethyl- (80190I)	156 C12H12

Sample File: >114198 Spectrum #: 835
Search speed: 3 Tuning option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	NAME	K	DK	#PKS	TRT	%	CON	C	R	U
1.	89*	573988	18239	"BIGDB	64	49	1	0	64	39	26	63	
2.	88*	939726	18250	"BIGDB	74	52	2	0	100	24	30	56	
3.	61*	1127760	18251	"BIGDB	59	48	2	0	95	17	30	36	
4.	53*	581488	18243	"BIGDB	56	50	1	1	68	32	20	32	

Peak#: 10 Area: 44825. Fat Conc: A. Date: 02/13/93 03:39 Inst: G



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

0180 EPA SAMPLE NO.

MW-23

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148019

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4159.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

LHO
03/03/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-29 0181

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148019

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4159.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: ~~8~~ 9 PAS 02/26/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN INDENE	25.21	24	JJ
2.		UNKNOWN C4 ALKYLBENZENE	26.51	22	JJ
3.		UNKNOWN C4 ALKYLBENZENE	26.43	18	JJ
4.		UNKNOWN INDENE	26.07	18	JJ
5.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.17	16	JN
6.		UNKNOWN C4 ALKYLBENZENE	25.85	12	JJ
7.		UNKNOWN C4 ALKYLBENZENE	25.71	11	JJ
8.		UNKNOWN SILOXANE	25.93	9	JJ
9.		UNKNOWN ALKYLBENZENE	26.18	5	JJ
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

0182

QUANT REPORT

Operator ID: MSG
Output File: ^G4159::QT
Data File: >G4159::G2
Name: 0148;;;MW-23
Misc: 0148019

Quant Rev: 6 Quant Time: 930213 04:38
Injected at: 930213 04:11
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1919

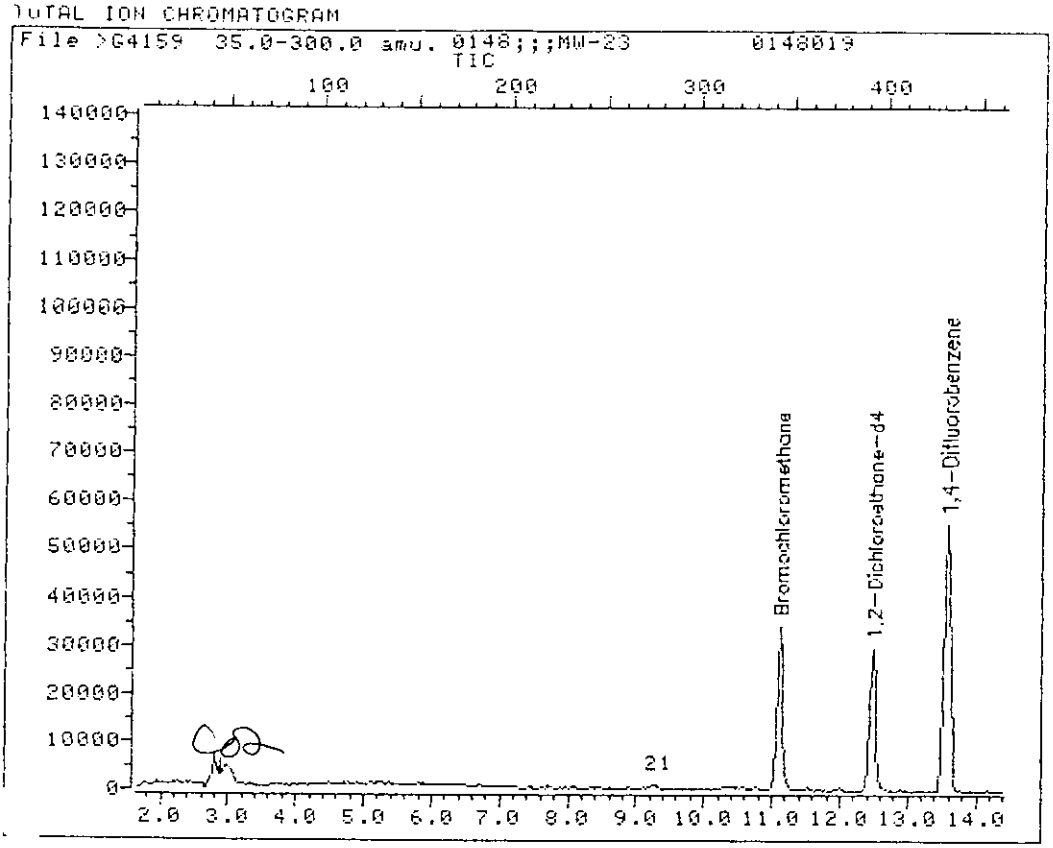
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.11	127.8	24080	50.00	ug/L	87
13)	Acetone	6.72	42.8	1321	3.12	ug/L	94
21)	1,1-Dichloroethane	9.26	62.8	3949	2.21	ug/L	95
~~24~~	~~2-Butanone~~	~~10.12~~	~~43.8~~	~~296~~	.54	ug/L	38
30)	1,2-Dichloroethane-d4	12.49	64.8	86025	52.92	ug/L	87
34)	*1,4-Difluorobenzene	13.57	113.8	117989	50.00	ug/L	97
53)	*Chlorobenzene-d5	20.68	116.8	84574	50.00	ug/L	81
61)	Toluene-d8	17.30	97.8	119777	53.03	ug/L	91
69)	Xylene (total)mp	21.18	105.8	1404	1.24	ug/L	93
69	Isopropylbenzene	22.62	104.8	5836	5836.00	NO CALIB	94
7	1,3,5-Trimethylbenzene	24.22	104.8	38400	38400.00	NO CALIB	93
77)	1,2,4-Trimethylbenzene	25.30	104.8	8468	8468.00	NO CALIB	47
78)	sec-Butylbenzene	25.16	104.8	6784^	6784.00	NO CALIB	80
91)	Bromofluorobenzene	22.89	94.8	65930	47.29	ug/L	93

* Compound is ISTD

PAS 02/25/93

TOTAL ION CHROMATOGRAM

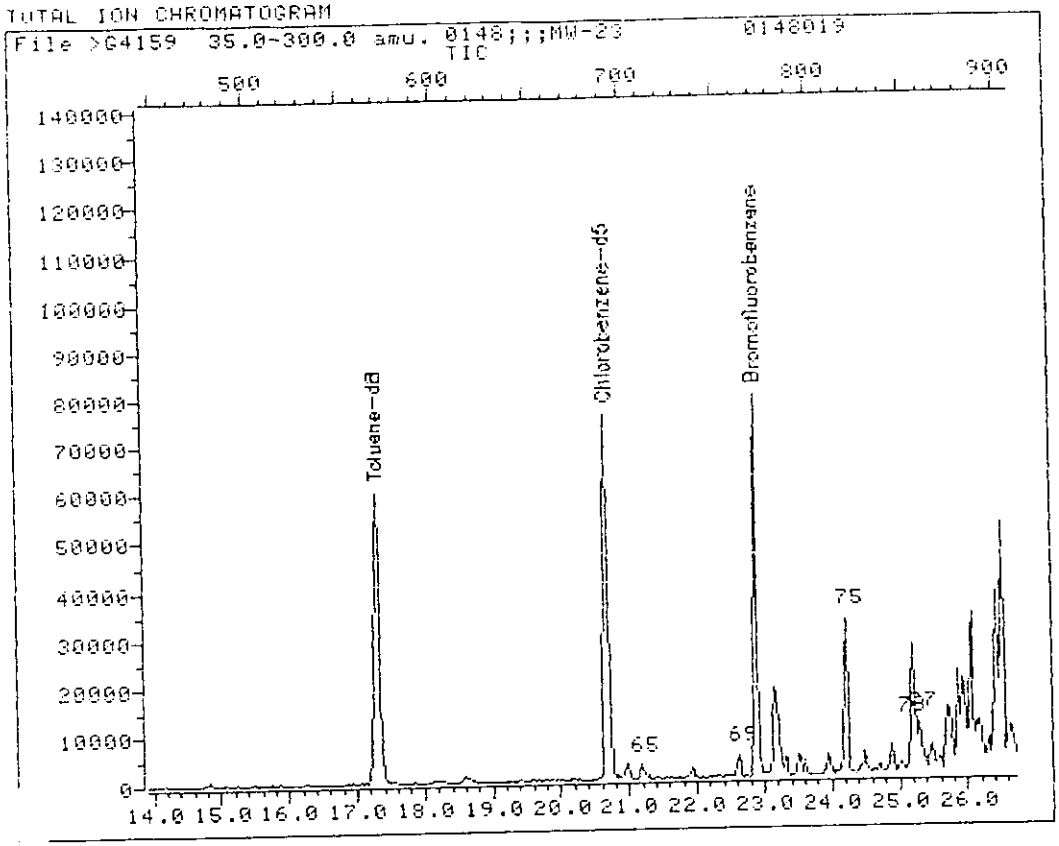


Data File: >G4159::G2 Quant Output File: ^G4159::QT
Name: 0148;;;MW-23
Misc: 0148019 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 04:38
Injected at: 930213 04:11

TIC page 1 of 2



Data File: >G4159::G2
Name: 0148;;;MW-23
Misc: 0148019

Quant Output File: ^G4159::QT

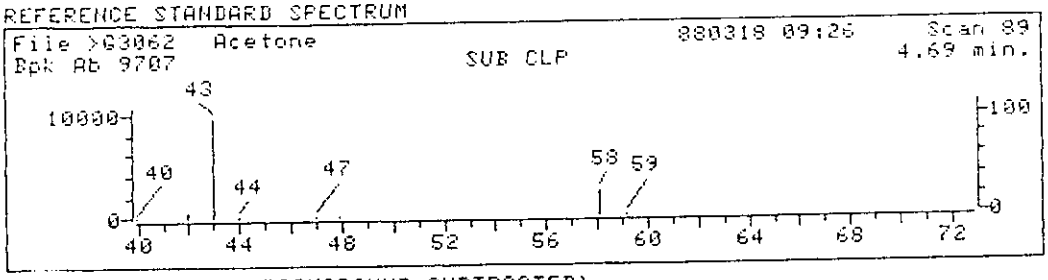
HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

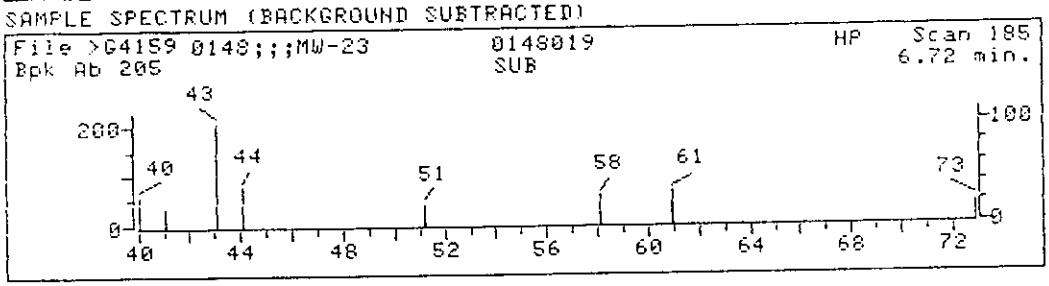
Operator ID: MSG
Quant Time: 930213 04:38
Injected at: 930213 04:11

TIC page 2 of 2

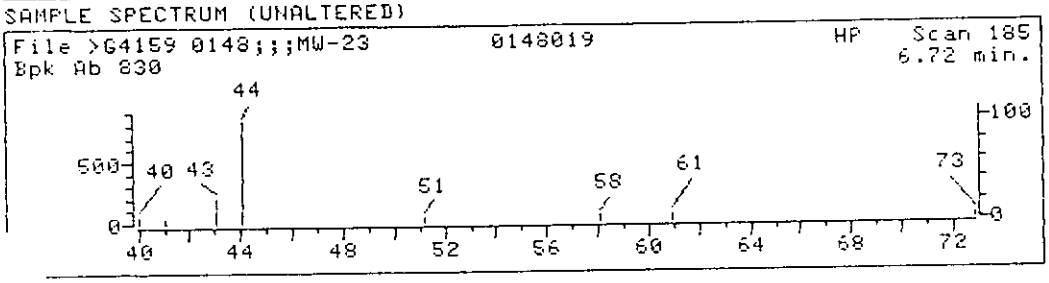
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



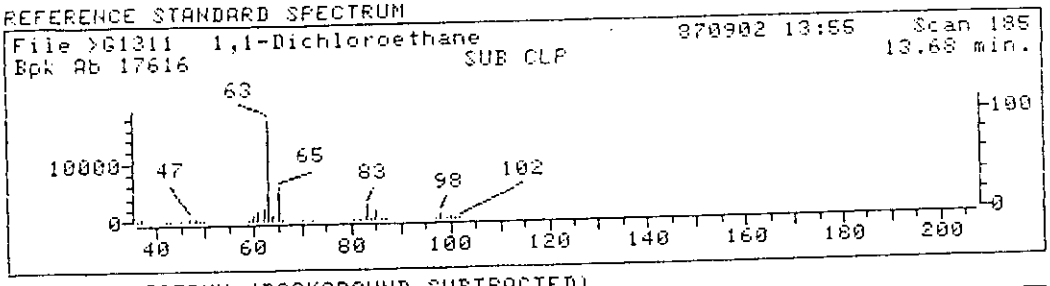
Data File: >G4159::G2
Name: 0148;;;MW-23
Misc: 0148019
Quant Time: 930213 04:38
Injected at: 930213 04:11

Quant Output File: ^G4159::QT

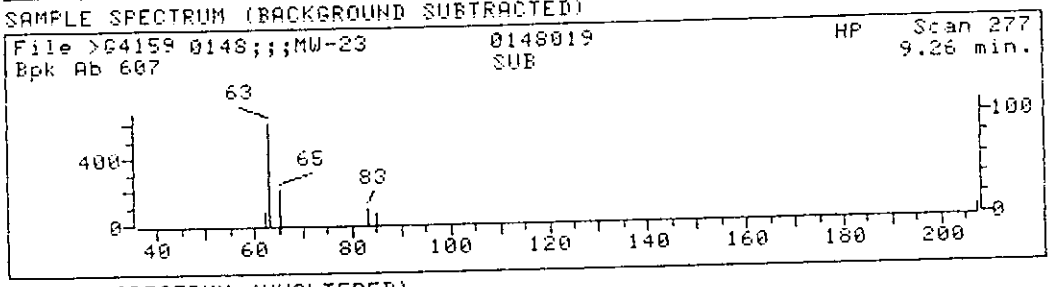
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 13
Compound Name: Acetone
Scan Number: 185
Retention Time: 6.72 min.
Quant Ion: 42.8
Area: 1321
Concentration: 3.12 ug/L
q-value: 94

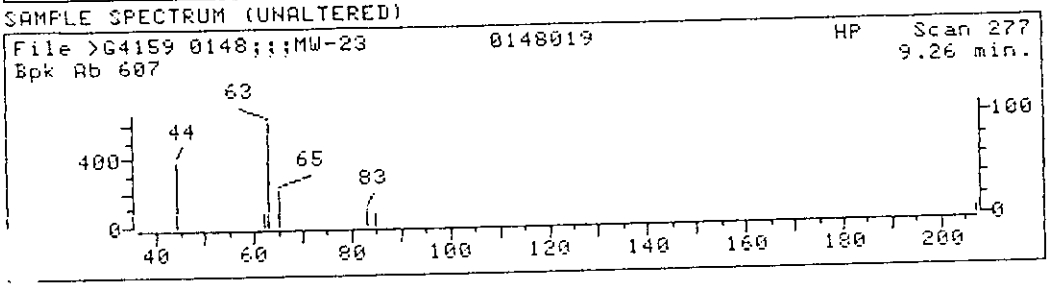
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4159::G2
Name: 0148;;;MW-23
Misc: 0148019
Quant Time: 930213 04:38
Injected at: 930213 04:11

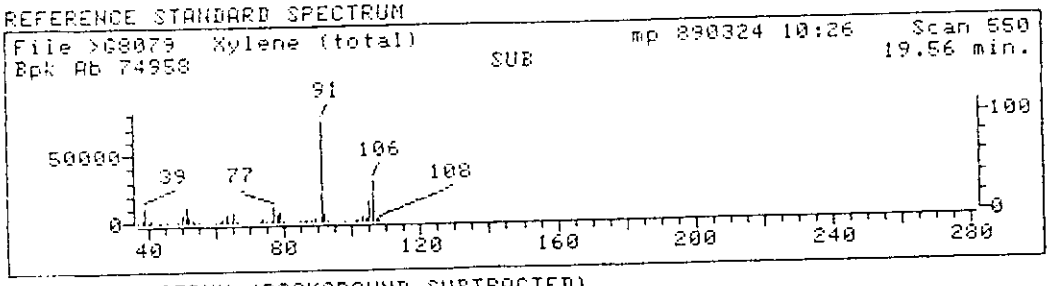
Quant Output File: ^G4159::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

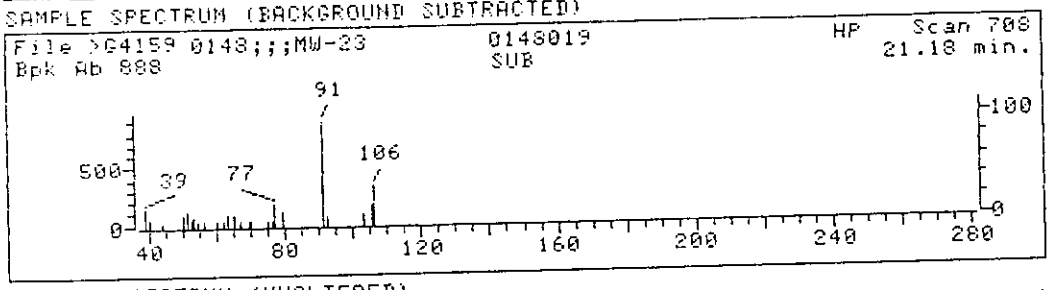
Compound No: 21
Compound Name: 1,1-Dichloroethane
Scan Number: 277
Retention Time: 9.26 min.
Quant Ion: 62.8
Area: 3949
Concentration: 2.21 ug/L
q-value: 95

✓

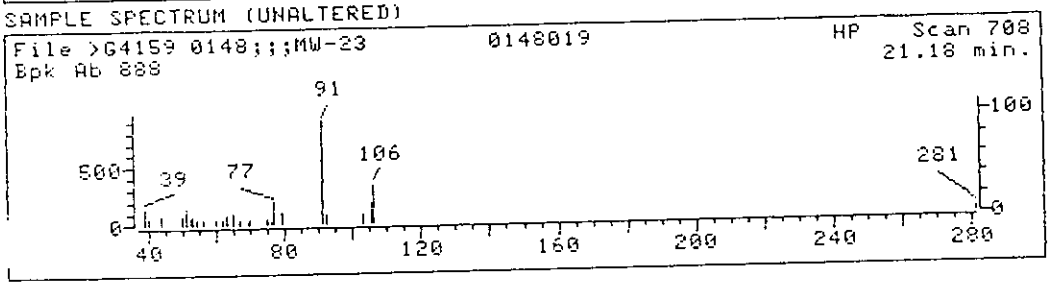
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4159::G2
Name: 0148;;;MW-23
Misc: 0148019
Quant Time: 930213 04:38
Injected at: 930213 04:11

Quant Output File: ^G4159::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 65
Compound Name: Xylene (total)mp
Scan Number: 708
Retention Time: 21.18 min.
Quant Ion: 105.8
Area: 1404
Concentration: 1.24 ug/L
q-value: 93

✓

```
MS Data File Header From : >S4199

Sample: 0148;;;MW-23              Operator: MSG        MS          2/13/93  4:11
Misc  : 0148039                     HP5995:S;;;CLW;DF1    ;S1919
Sys. #:     2  MS model:  96  SW/HW rev.: 1A  ALS # :  0
  Method file: M_KCAP     Tuning file: T_5       No. of extra records:  2
 Source temp.:  212   Analyzer temp.:  240      Transfer line temp. : 185

      Chromatographic temperatures :  35.    100.   200.     0.      0.
      Chromatographic times, min.  :  4.0    0.0     .3     0.0     0.0
      Chromatographic rate, deg/min:  5.0   12.0    0.0     0.0     0.0
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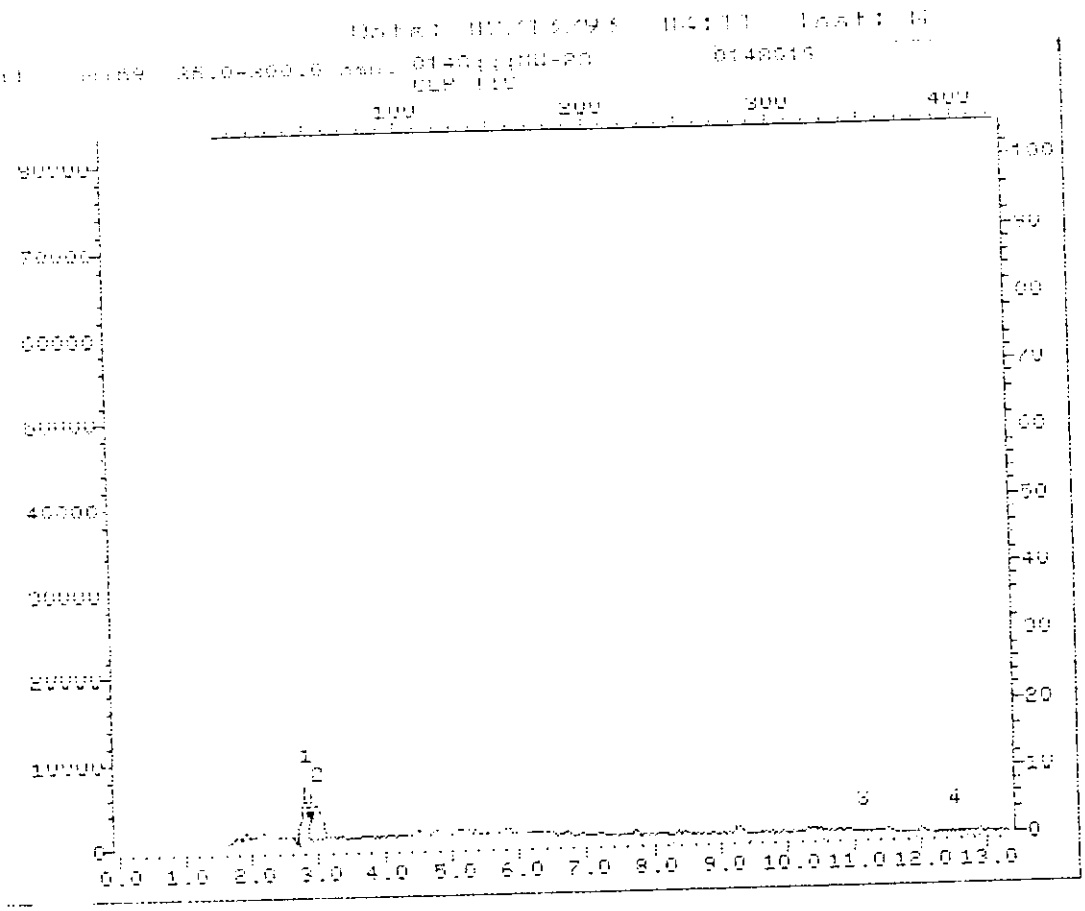
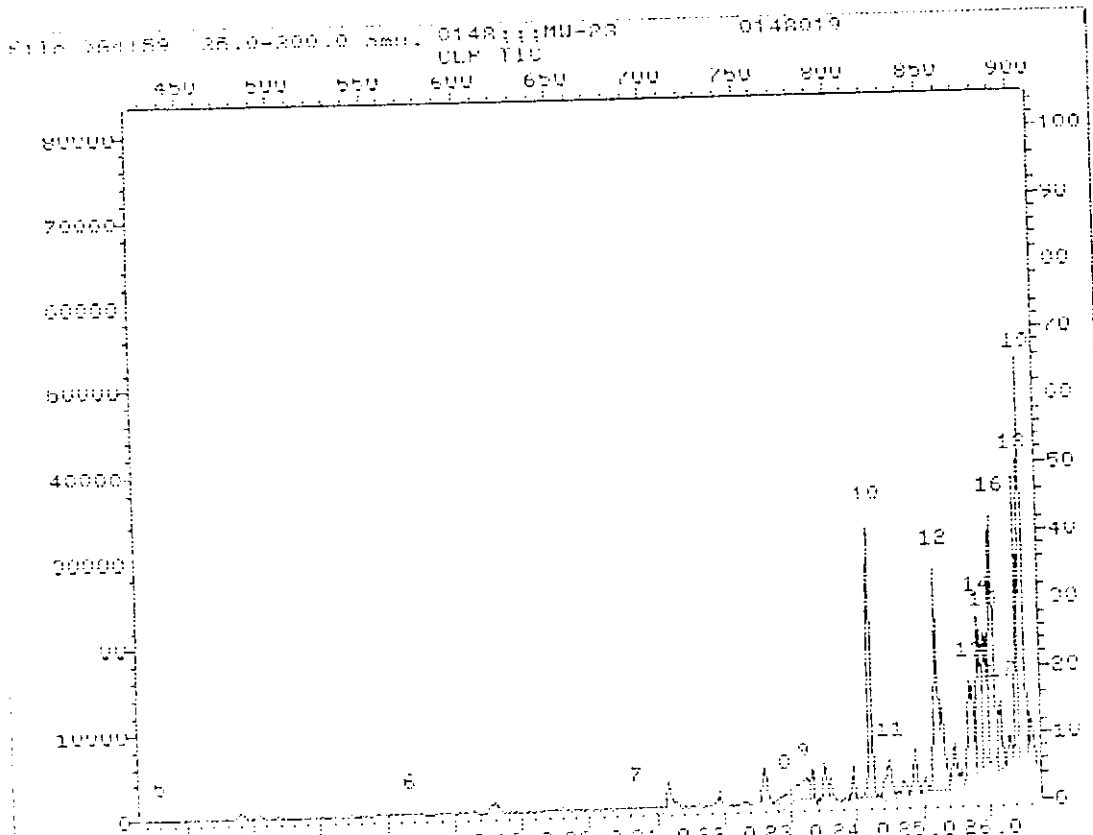




Date: 2/15/93 04:11 Inst: 4

I I S P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
12.	25.21	155454.	24.	5.	1.000
19.	26.51	142376.	22.	3.	1.000
18.	26.45	119149.	18.	5.	1.000
16.	26.02	118548.	18.	3.	1.000
9.	23.12	118542.	18.	3.	1.000
14.	25.86	25832.	12.	3.	1.000
13.	25.21	22246.	11.	3.	1.000
TCB	2.80	34848.	9.	1.	1.000
TCB	2.96	34655.	9.	1.	1.000
15.	25.93	55130.	9.	3.	1.000
17.	26.18	32296.	5.	3.	1.000

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		IT/ST
BROMOCHLOROMETHANE	11.11	195471.	0.00	12.34	8.1
1,4-DIFLUOROBENZENE	13.52	339834.	12.34	17.13	9.9
CHLOROBENZENE-D5	20.48	322255.	17.13	26.51	3.8

ISTD peaks found: 3
Surrogate peaks found: 3
Giant target peaks expected: 8
Target peaks matched: 1
Total TIC identified: 11

TIME : 5:48 PM MON., 15 FEB., 1993

MW-23

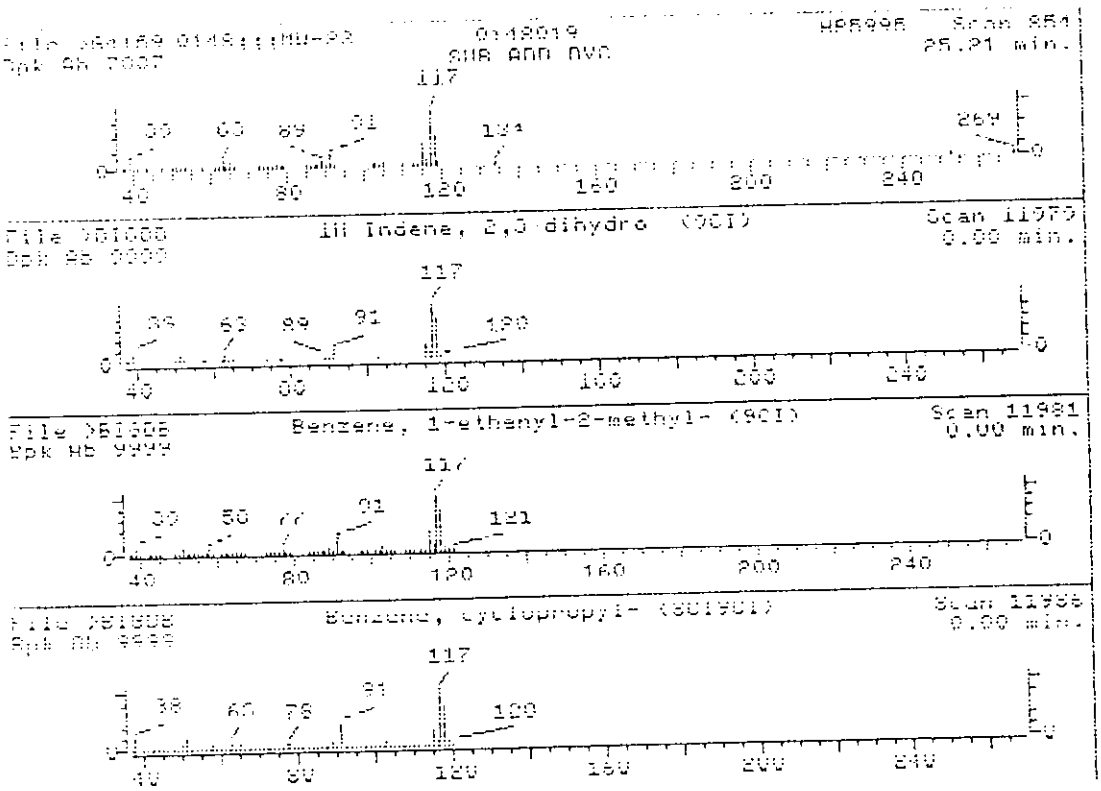
W Search Length MW

1. 1H Indene, 2,3-dihydro- (9CI) C9H10
2. Benzene, 1-ethenyl-2-methyl- (9CI) C9H10
3. Benzene, cyclopropyl- (8CI,9CI) C9H10
4. Benzene, 2-propenyl- (9CI) C9H10

Sample File: >B1499 Spectrum #: 854
Search speed: 3 Fitting option: S No. of ion ranges searched: 56

	Prob.	CAS #	COM #	NAME	K	DK	#PIS	FIT	%	CON	C I R ID
1.	71*	496112	11979	"B1G0R	62	56	1	11	65	58	66
2.	44*	611154	11981	"B1G0R	62	51	2	11	69	21	28 48
3.	40*	874494	11986	"B1G0R	56	54	3	11	22	12	38 19
4.	39*	300570	11978	"B1G0R	61	56	2	-1	62	21	22 38

Peak#: 12 Area: 156564. Fst Conn: 24. Date: 02/13/93 14:11 Inst: G



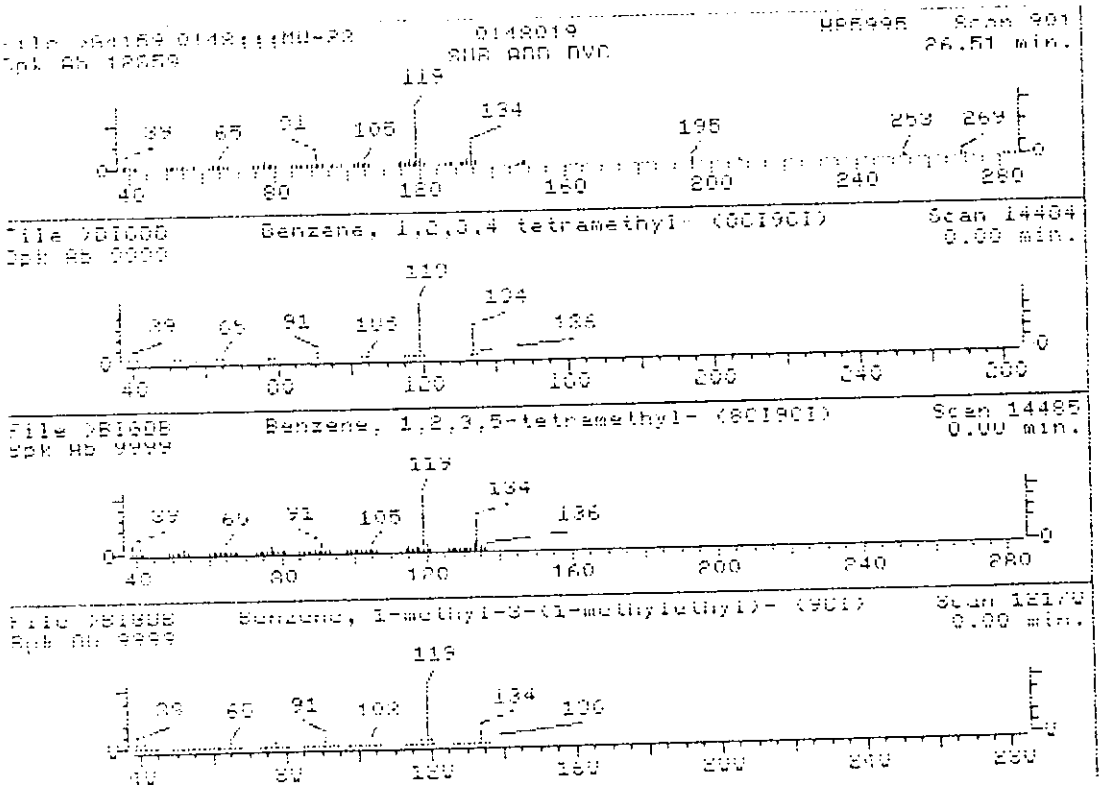
Search length XXX

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

Sample File: >144159 Spectrum #: 9811
Search speed: 3 Fitting option: S No. of ion ranges searched: 52

	Prob.	CAS #	ION #	NAME	K	DK	#PEG	HIT	%	ION	I	R	IO
1.	96*	488733	14484	"BIGDB	85	9	11	11	26	2	68		96
2.	95*	527532	14485	"BIGDB	91	2	11	4	85	2	68		94
3.	94*	535723	12171	"BIGDB	79	10	1	11	98	12	64		95
4.	81*	98211144	12124	"BIGDB	72	12	1	-4	1111	8	54		59

Peak#: 19 Area: 142376. Fat Conn: 22. Date: 02/13/93 14:11 Inst: G



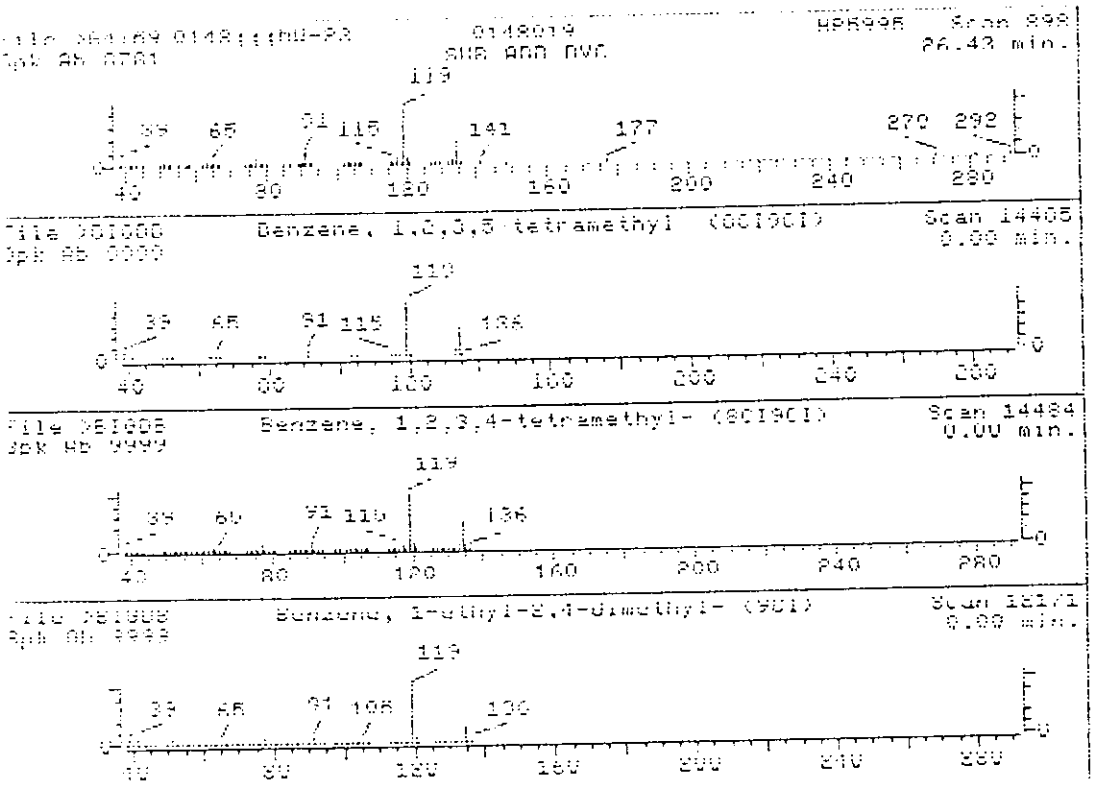
sd search length 999

1.	Benzene, 1,2,3,5-tetramethyl- (RCI9CI)	134 C10H14
2.	Benzene, 1,2,3,4-tetramethyl- (RCI9CI)	134 C10H14
3.	Benzene, 1-ethyl-2,4-dimethyl- (9CI)	134 C10H14
4.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134 C10H14

Sample File: >R4159 Spectrum #: 898
Search speed: 5 Hitting option: 5 No. of ion ranges searched: 52

	Prob.	CAS #	DIN #	RUN	K	DK	#HIT	DIT	%	DIN	I	E	IV
1.	95*	527-53-7	1448S	"R1S0R	84	9	11	4	78	5	22	93	
2.	94*	488-23-3	1448A	"R1S0R	79	15	1	8	78	3	68	89	
3.	88*	874-41-9	1217I	"R1S0R	66	22	1	-2	95	4	65	54	
4.	87*	28711-14-4	1212A	"R1S0R	62	22	2	0	96	4	63	49	

Peak#: 1R Area: 113149. Est Conc: 1R. Date: 02/13/93 04:11 Inst: G



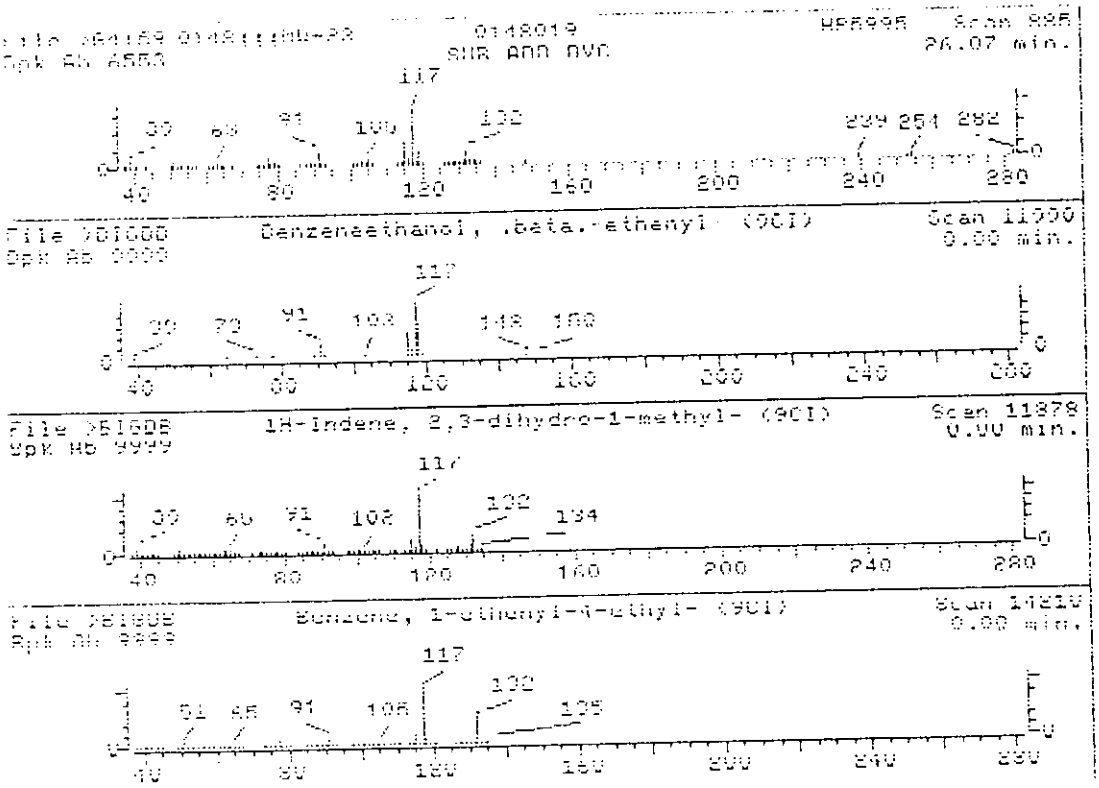
A Guard length KB

1. Benzeneethanol, .beta.-ethenyl- (9CI) 148 C10H12O
2. 1H-Indene, 2,3-dihydro-1-methyl- (9CI) 132 C10H12
3. Benzene, 1-ethenyl-4-ethyl- (9CI) 132 C10H12
4. Benzene, (2-bromocyclopropyl)- (9CI) 196 C9H9Br

Sample File: >64159 Spectrum #: 885
Search speed: 3 Fitting option: S No. of ion ranges searched: 5A

	Prob.	CAS #	COIN #	NAME	K	DK	#PEG	COL	%	COIN	C I R IO
1.	47*	4192642	11991	"BIGDB	46	48	2	B	82	50	19 25
2.	44*	7625RR	11R7R	"BIGDB	51	46	2	B	85	54	16 22
3.	41	5454122	14210	"BIGDB	64	29	1	B	100	44	14 30
4.	37	6661204	11868	"BIGDB	67	45	2	B	98	26	14 14

Peak#: 16 Area: 118548. Est Conc: 18. Date: 02/13/93 04:11 Inst: G



... interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

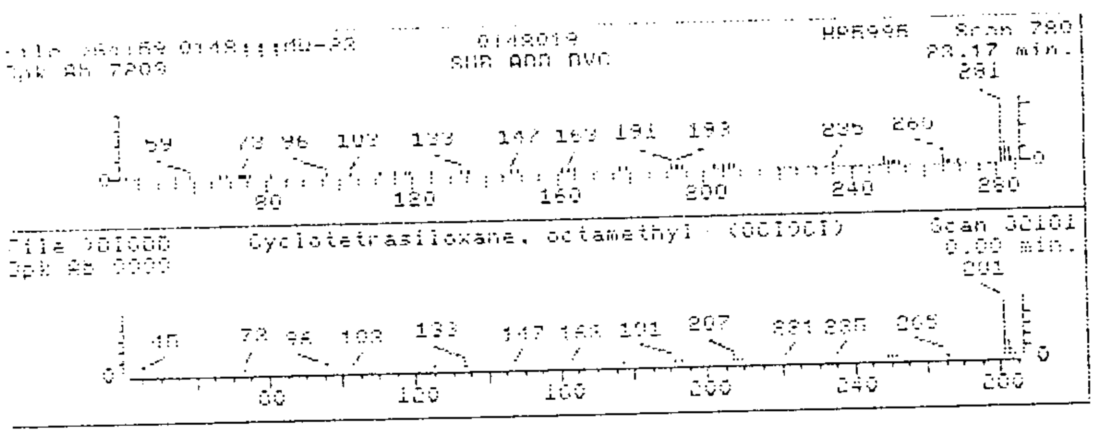
RPN error for command: RSF63
RPN error: -5
... record length RSF

1. Cyclotetrasiloxane, octamethyl- (8CI9CI) 296 C8H24O4Si4

Sample File: >B4159 Spectrum #: 280
Search speed: 3 Tilting option: S No. of ion ranges searched: 60

	Prob.	CAS #	CON #	RODI	K	DK	#FLG	TILT	%	CON	C I R IU
1.	83	556672	32181	*B1808	88	56	2	0	100	1	52 21

Peak#: 9 Area: 105542. Est Conc: 16. Date: 02/13/93 04:11 Inst: G



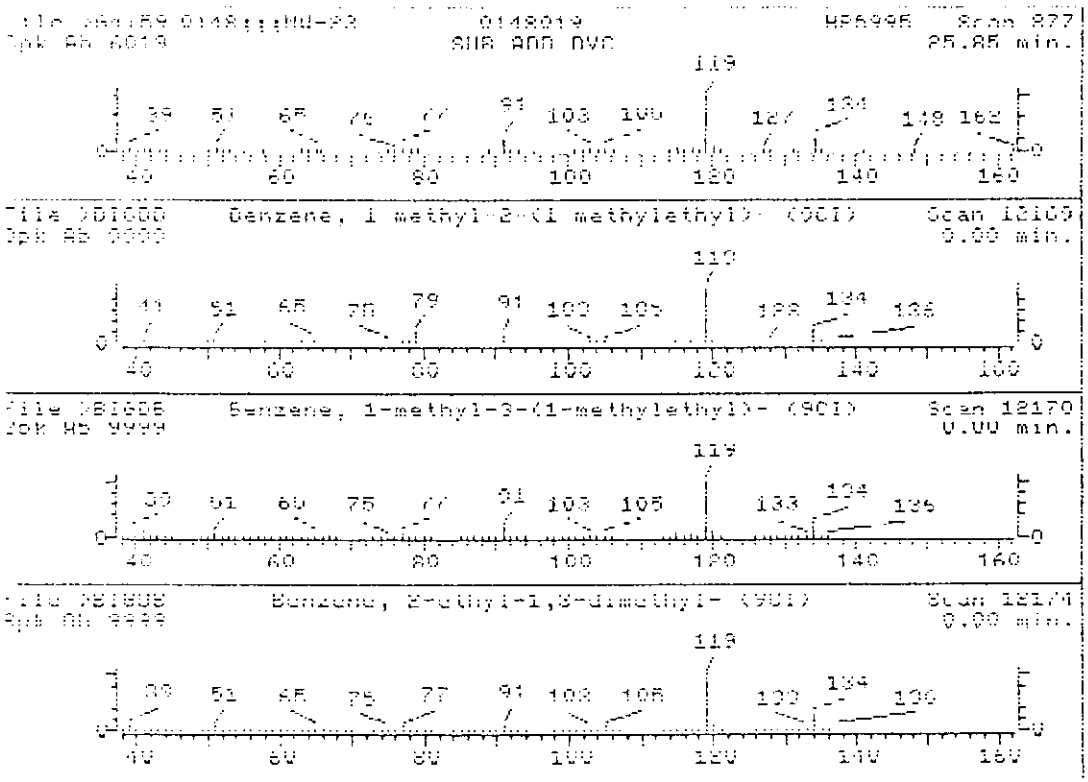
Peak Search Results

1.	Benzene, 1-methyl-2-(1-methylethyl)- (9CI)	134 C10H14
2.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14
3.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134 C10H14
4.	Benzene, 1-ethyl-2,4-dimethyl- (9CI)	134 C10H14

Sample File: 364159 Spectrum #: 877
Search speed: 3 Fitting option: 5 No. of ion ranges searched: 5

	Prob.	CAS #	DBN #	NAME	K	DK	#FIG	FIT	%	DIN	C I R IO
1.	95*	52/844	12169	"BIGDB	84	8	1	2	95	3	AB AB
2.	95*	535/23	12128	"BIGDB	27	17	1	11	1111	3	AB BB
3.	89*	28/1144	12174	"BIGDB	72	17	2	11	99	3	AA AA
4.	89*	87/419	12171	"BIGDB	71	17	2	11	1111	3	AA AA

Peak#: 14 Area: 75192. Fat Conc: 12. Date: 02/13/93 04:11 Inst: 6



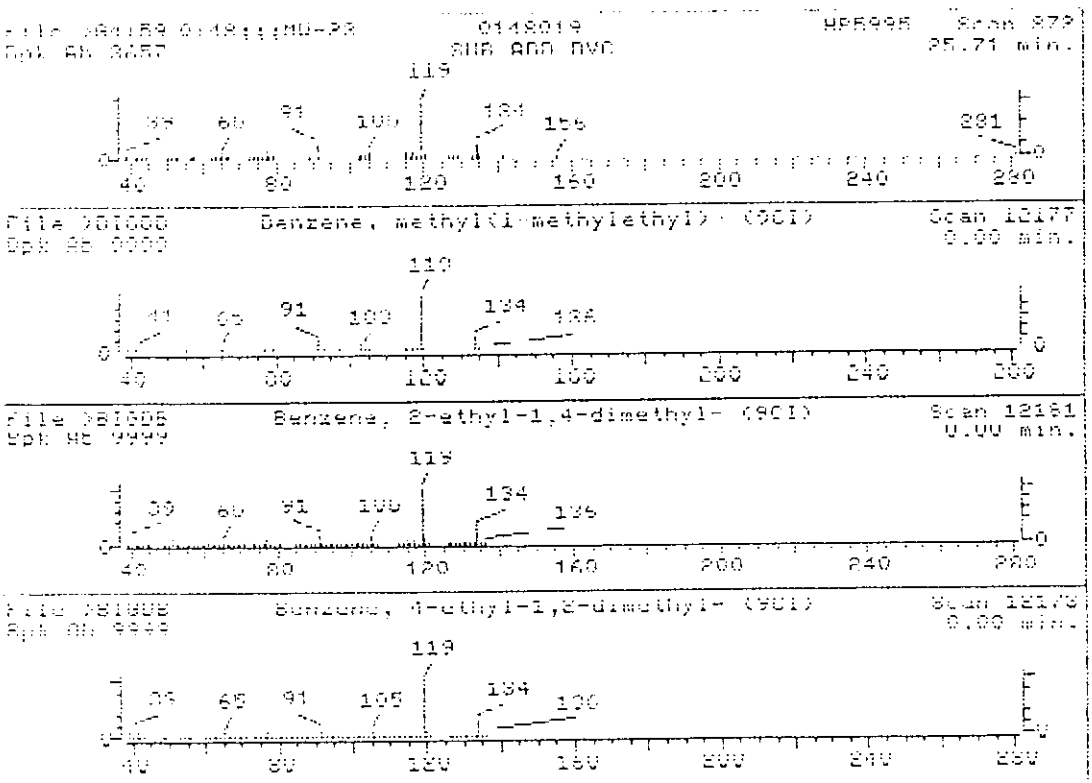
A Search length 813

1.	Benzene, methyl(1-methylethyl)- (9CI)	134 C10H14
2.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134 C10H14
3.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134 C10H14
4.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14

Sample File: >164199 Spectrum #: 872
Search speed: 5 Fitting option: S No. of ion ranges searched: 52

	Prob.	CAS #	COIN #	NAME	K	DK	#PKS	HIT	%	COIN	C	I	R	IQ
1.	89*	25155151	12172	"BIGDB	75	15	7	2	98	5	66			611
2.	89*	1758889	12181	"BIGDB	75	19	1	0	81	5	66			76
3.	89*	954815	12173	"BIGDB	68	25	1	0	95	5	66			66
4.	84*	535775	12178	"BIGDB	69	28	1	5	96	6	55			69

Peak#: 14 Area: 22746. Est Conc: 11. Date: 02/13/93 14:11 Inst: G



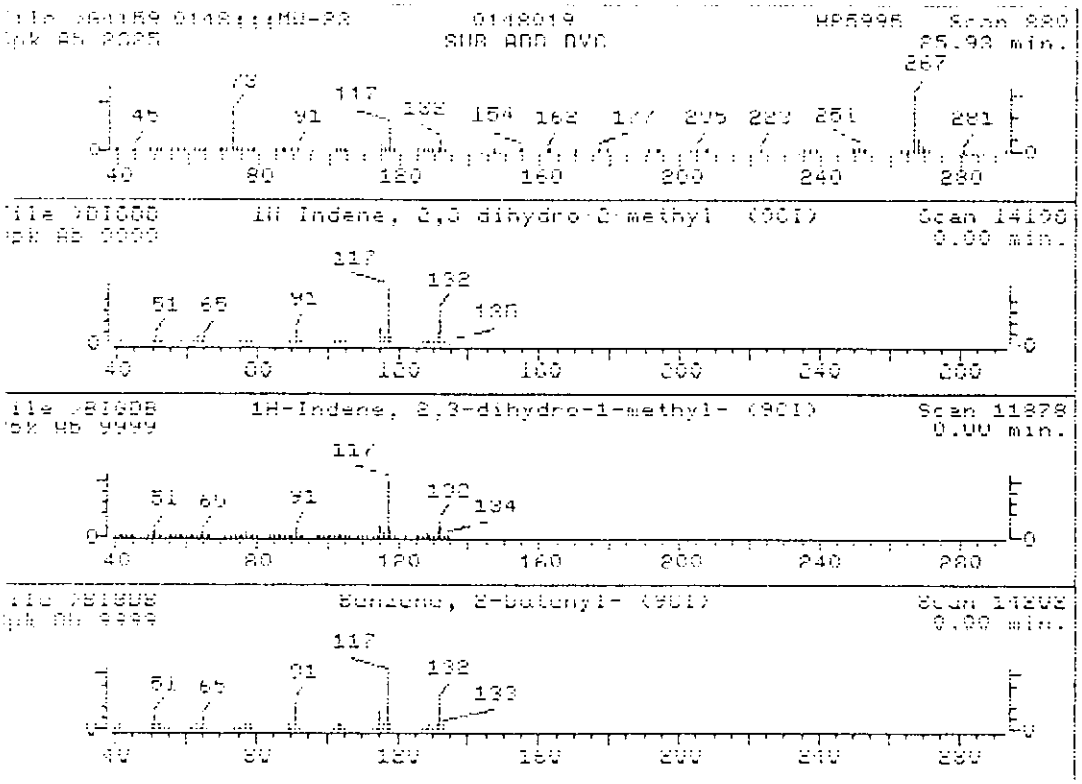
54 Found Lengths MSD

1. 1H-Indene, 2,3-dihydro-2-methyl- (9CI) 132 C10H12
2. 1H-Indene, 2,3-dihydro-1-methyl- (9CI) 132 C10H12
3. Benzene, 2-butenyl- (9CI) 132 C10H12
4. 1H-Indene, 2,3-dihydro-5-methyl- (9CI) 132 C10H12

Sample File: >N4199 Spectrum #: 8888
Search speed: 5 Fitting option: S No. of ion ranges searched: 58

	Prob.	CAS #	FDN #	NAME	K	DK	#PIG	FIT	%	FDN	C	I	R	IU
1.	41*	R24A65	14198	"RIISDR	55	21	9	1	18	42	14	54		
2.	40*	2A/58R	11828	"RIISDR	54	46	9	-1	54	55	16	23		
3.	55*	15A11861	14282	"RIISDR	51	43	9	-1	59	55	12	16		
4.	51*	R/4451	14199	"RIISDR	58	41	9	-1	48	55	12	14		

Peak#: 15 Area: 55150. Fst Conn: 9. Date: 02/13/93 04:11 Inst: G

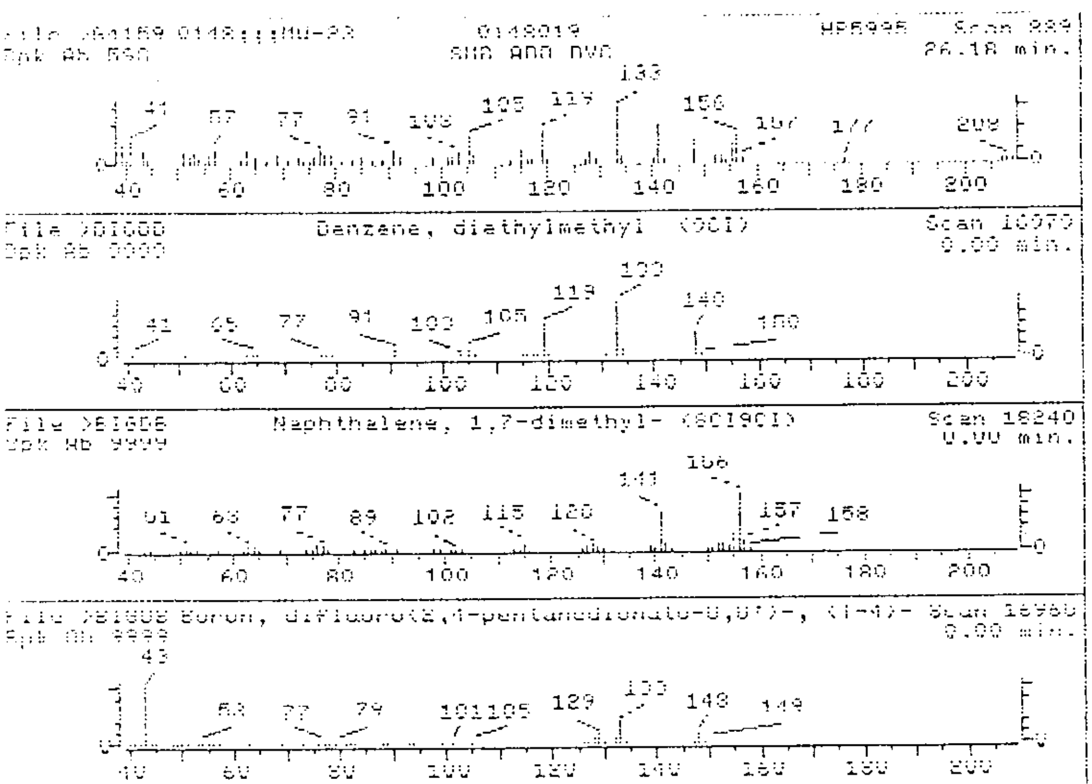


1. Benzene, diethylmethyl- (9CI) 148 C11H16
2. Naphthalene, 1,7-dimethyl- (8CI9CI) 156 C12H12
3. Boron, difluoro(2,4-pentanedionato-O,O')-, (T-4)- (9CI) 148 C5H7BF2O2
4. Benzene, 1-ethyl-2,4,5-trimethyl- (8CI) 148 C11H16

Sample File: >G4159 Spectrum #: 889
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	RUN	K	DK	#FLG	TILT	%	CON	C I R	IV
1.	25*	25550134	16929	"BIGDB	42	61	2	0	82	42	2	15
2.	20*	575371	18240	"BIGDB	40	68	1	2	54	55	5	15
3.	20*	15398252	16965	"BIGDB	31	61	3	0	239	54	5	13
4.	20*	17851273	14406	"BIGDB	29	20	2	0	100	54	5	14

Peak#: 17 Area: 52296. Est Conc: 5. Date: 02/13/93 04:11 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-47 0200

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148020

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4160.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
0201
MW-47

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148020

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4160.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/13/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTRISILOXANE, HEXAMETHYL-	23.22	21	JN
2.		UNKNOWN PAH	24.48	21	JN
3.		UNKNOWN SILOXANE	25.99	19	JN
4.		UNKNOWN ~~PAH~~ INDENE	24.82	16	JN
5.		UNKNOWN INDENE	21.18	11	JN
6.		UNKNOWN INDENE	25.54	10	JN
7.		UNKNOWN ALKYLBENZENE	20.15	9	JN
8.		UNKNOWN INDENE	24.16	9	JN
9.		UNKNOWN ALKYLBENZENE	25.29	8	JN
10.		UNKNOWN PAH	22.72	7	JN
11.					
12.					
13.					
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29.					
30.					

BEV 02/26/93

QUANT REPORT

Operator ID: MSG
Output File: ^G4160::QT
Data File: >G4160::G2
Name: 0148;;;MW-47
Misc: 0148020

Quant Rev: 6 Quant Time: 930213 05:10
Injected at: 930213 04:42
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1919

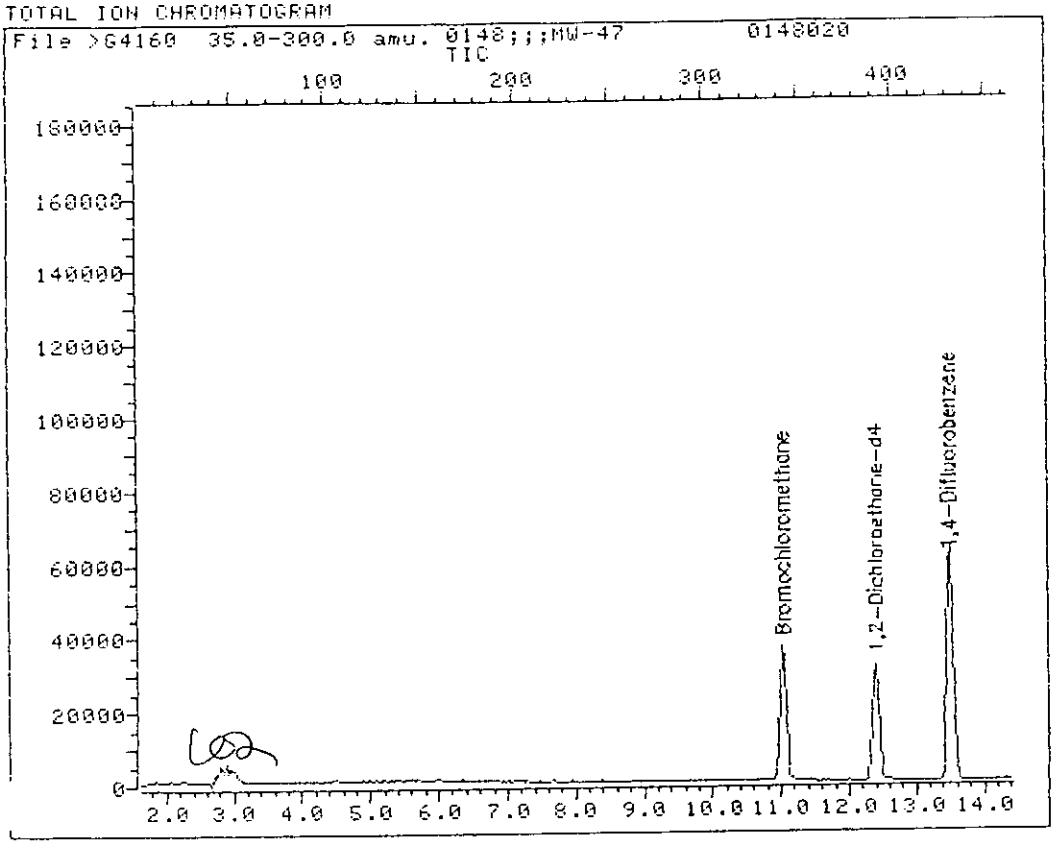
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.03	127.8	26718	50.00	ug/L	88
13)	Acetone	6.69	42.8	1890	4.03	ug/L	79
30)	1,2-Dichloroethane-d4	12.41	64.8	91546	50.75	ug/L	89
34)	*1,4-Difluorobenzene	13.49	113.8	138028	50.00	ug/L	98
53)	*Chlorobenzene-d5	20.68	116.8	110614	50.00	ug/L	82
61)	Toluene-d8	17.22	97.8	146109	49.46	ug/L	87
75)	1,3,5-Trimethylbenzene	24.27	104.8	3586	3586.00	NO CALIB	71
78)	sec-Butylbenzene	24.91	104.8	3002^	3002.00	NO CALIB	2
79)	1,4-Dichloro-2-Butene	22.92	74.8	47271	47271.00	NO CALIB	11
91)	Bromofluorobenzene	22.92	94.8	84185	46.17	ug/L	94

* Compound is ISTD

PAS 02/25/93

TOTAL ION CHROMATOGRAM



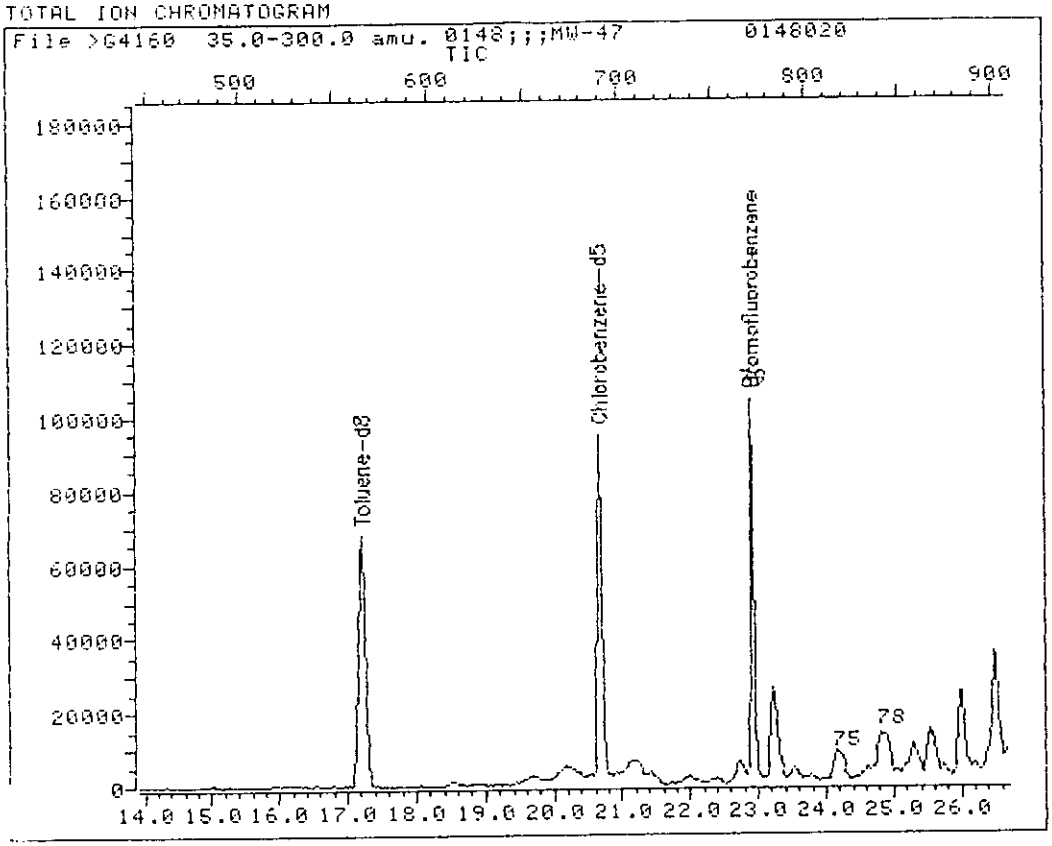
Data File: >G4160::G2 Quant Output File: ^G4160::QT
Name: 0148;;;MW-47
Misc: 0148020 HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930213 05:10
Injected at: 930213 04:42

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G4160::G2
Name: 0148;;;MW-47
Misc: 0148020

Quant Output File: ^G4160::QT

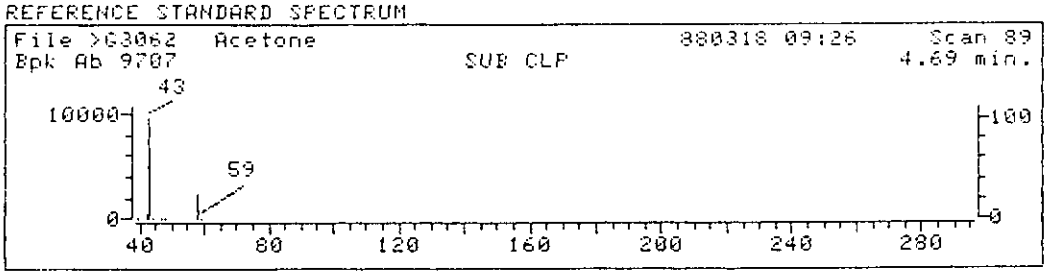
HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

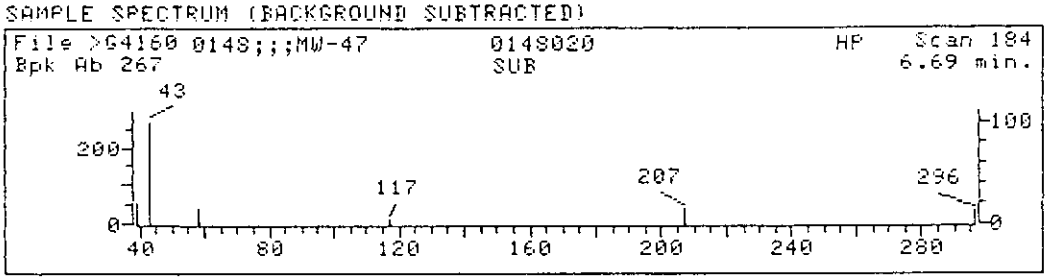
Operator ID: MSG
Quant Time: 930213 05:10
Injected at: 930213 04:42

TIC page 2 of 2

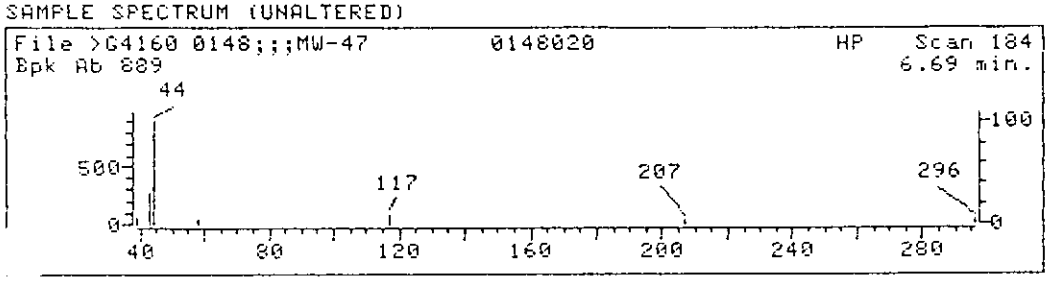
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



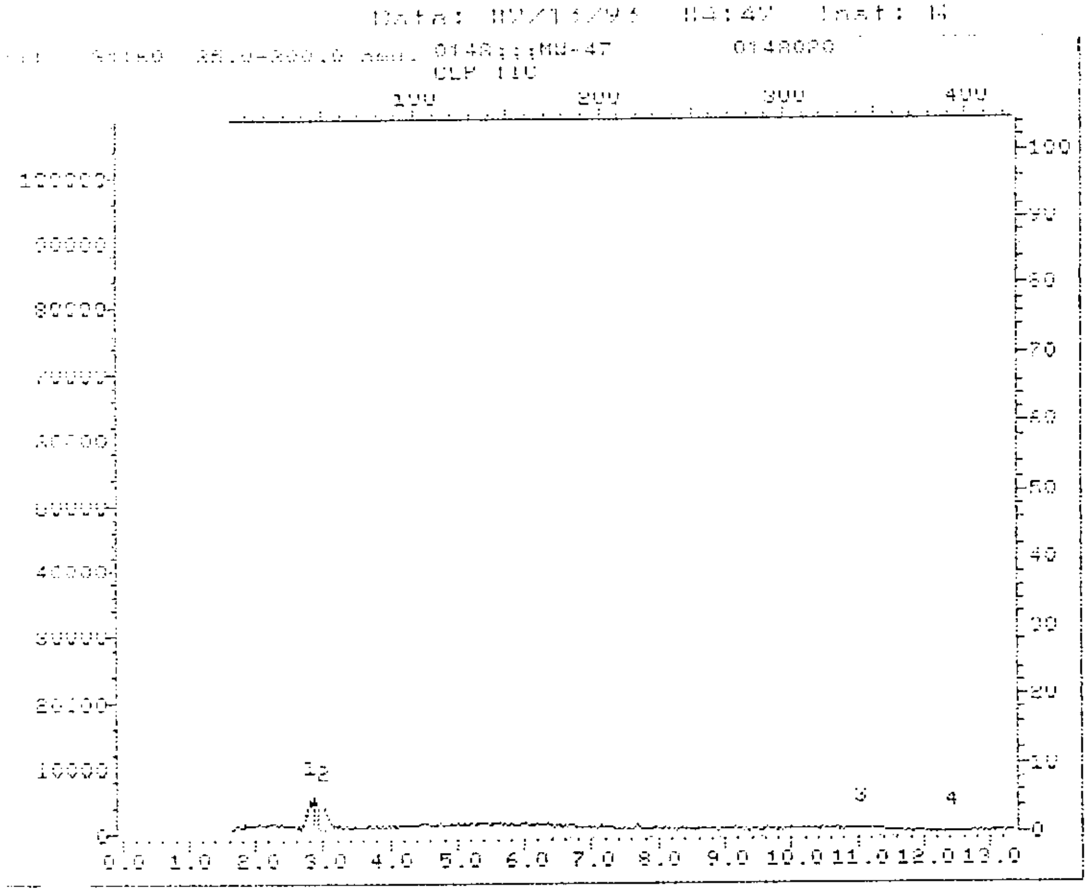
Data File: >G4160::G2 Quant Output File: ^G4160::QT
Name: 0148;;;MW-47
Misc: 0148020 HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930213 05:10 Quant ID File: I_IFGW::N1
Injected at: 930213 04:42 Last Calibration: 930212 21:54

Compound No: 13
Compound Name: Acetone
Scan Number: 184
Retention Time: 6.69 min.
Quant Ion: 42.8
Area: 1890
Concentration: 4.03 ug/L
q-value: 79

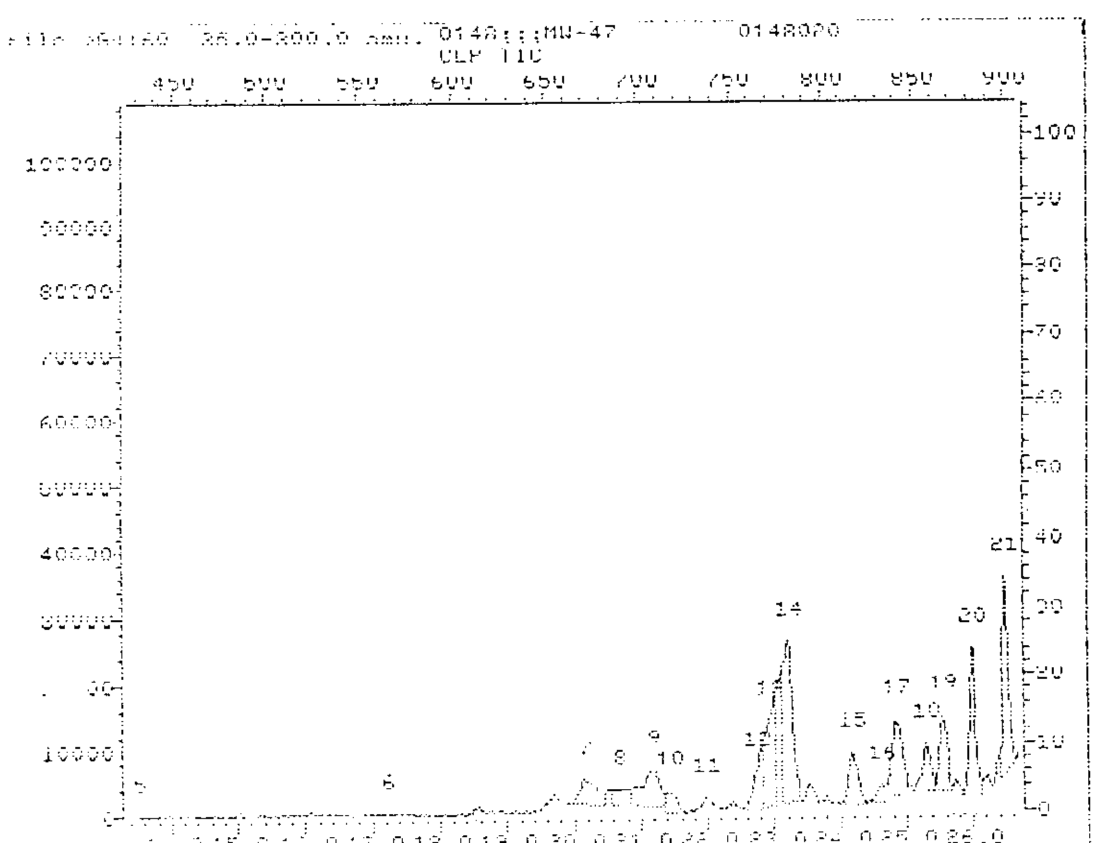
Data file header from : 134168

Sample: 0148;;;MW-4/ Operator: MSG MS 2/13/95 4:42
Misc : 0148020 HP5995;G;;;LOW;DFT ;031919
Sys. #: 2 MS model: 95 SW/HW rev.: 3A ALS # : 0
Method file: M1BOAP Tuning file: 1 G No. of extra records: 2
Source temp.: 210 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	50.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.5	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0



0148:::MW-47
CLP TIC
0148020



0148:::MW-47
CLP TIC
0148020

Data: [illegible] 08:40 Inst: R

I I C P E A K R E P O R T

PK#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
14.	23.27	167427.	21.	5.	1.000
21.	26.48	165594.	21.	5.	1.000
20.	25.99	159923.	19.	5.	1.000
17.	24.82	138780.	16.	5.	1.000
9.	21.18	85944.	11.	5.	1.000
19.	25.54	83852.	10.	3.	1.000
7.	20.15	69285.	9.	5.	1.000
15.	24.16	75794.	9.	3.	1.000
18.	25.29	69212.	8.	3.	1.000
4.62	2.96	31614.	2.	1.	1.000
11.	22.27	59982.	2.	5.	1.000
4.62	2.29	31120.	2.	1.	1.000

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
[illegible]	11.13	219982.	8.08	12.22	8.0
1 4-DIFLUOROBENZENE	13.51	594691.	12.22	17.18	2.9
1 [illegible]-D5	20.68	488841.	17.18	24.48	5.6

ISTD peaks found: 3
Surrogate peaks found: 3
Quant target peaks expected: 4
Target peaks matched: 8
Total TIC identified: 12

Time: 4:59 PM MON., 15 FEB., 1993

... interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

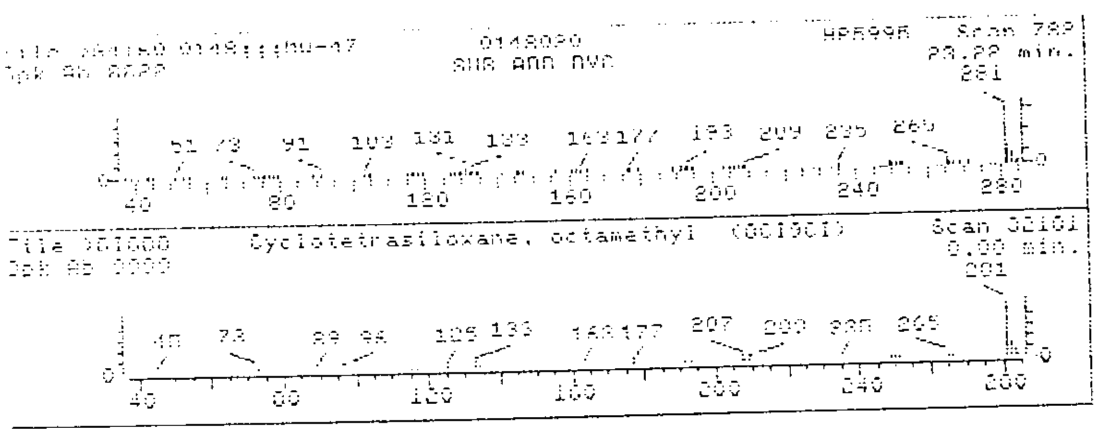
RMH error for command: RMRA
RMH error: -5
nd record length RMR

1. Cyclotetrasiloxane, octamethyl- (8CI9CI)   296 C8H24O4Si4

Sample file: >R416H   Spectrum #:   782   No. of ion ranges searched: 56
Search speed: 3   Tilting option: N

	Prob.	CAS #	CON #	RUHH	K	DK	#FLG	TILT	%	CON	C I	R IU
1.	78	556672	32181	"R1RDR	73	63	2	0	100	5	55	18

Peak#: 14 Area: 167422. Est Conc: 21. Date: 02/13/93 04:42 Inst: G



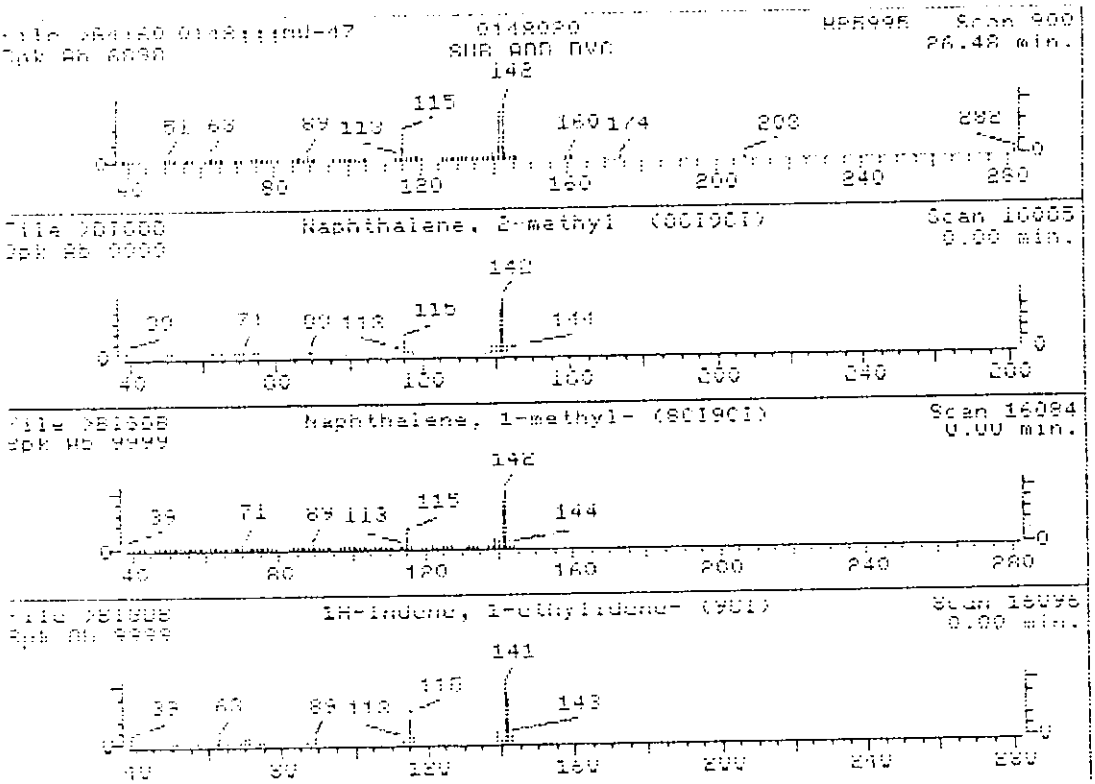
Wiley Registered Library NBS

1.	Naphthalene, 2-methyl- (RCI9CI)	142 C11H10
2.	Naphthalene, 1-methyl- (RCI9CI)	142 C11H10
3.	1H-Indene, 1-ethylidene- (9CI)	142 C11H10
4.	1,4-Methanonaphthalene, 1,4-dihydro- (RCI9CI)	142 C11H10

Sample file: >644168 Spectrum #: 9888
Search speed: 5 Lifting option: 5 No. of ion ranges searched: 52

	Prob.	CAS #	IDN #	Name	K	DK	#Pig	Hit	%	IDN	C I R IO
1.	79*	91576	168885	"RIIGDR	62	56	9	9	86	7	48 58
2.	78*	90129	168884	"RIIGDR	56	44	9	9	84	6	45 72
3.	48*	2427182	168896	"RIIGDR	21	29	2	11	46	22	38 59
4.	47*	4456911	168898	"RIIGDR	56	46	9	-9	98	14	34 71

Peak#: 21 Area: 165594. Est Conc: 21. Date: 02/13/93 14:42 Inst: G



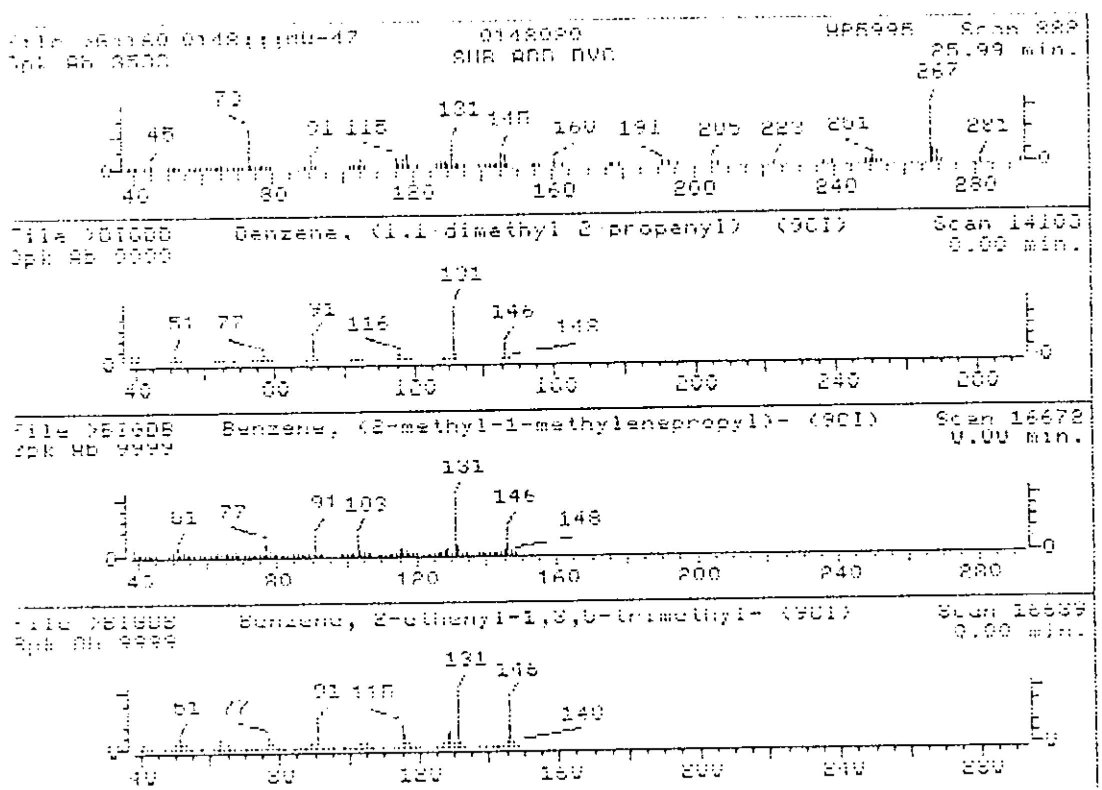
..d record length 88?

1. Benzene, (1,1-dimethyl-2-propenyl)- (9CI) 146 C11H14
2. Benzene, (2-methyl-1-methylenepropyl)- (9CI) 146 C11H14
3. Benzene, 2-ethenyl-1,3,5-trimethyl- (9CI) 146 C11H14
4. Benzene, (2-methyl-1-butenyl)- (9CI) 146 C11H14

Sample File: >HA1A0 Spectrum #: 882
Search speed: 3 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	RDB	K	DK	#FLG	TILT	%	CON	C I R	IV
1.	59*	18321363	14183	"RIGDB	47	25	0	1	23	39	21	52
2.	49*	17498714	16622	"RIGDB	55	32	1	-1	41	34	28	33
3.	47*	769255	16639	"RIGDB	44	51	0	1	12	44	16	42
4.	36*	56253646	16684	"RIGDB	45	31	1	2	14	34	12	19

Peak #: 20 Area: 152923. Est Conc: 19. Date: 02/13/93 04:42 Inst: G



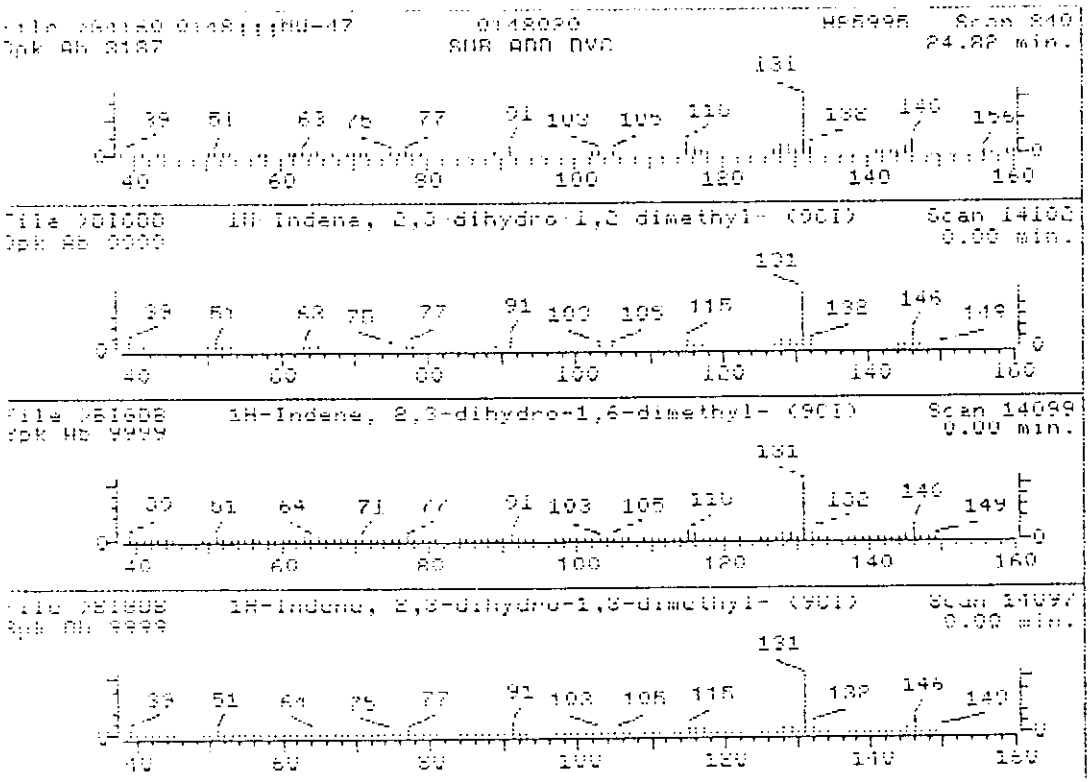
nd Library Search Report

1. 1H-Indene, 2,3-dihydro-1,2-dimethyl- (9CI) 146 C11H14
2. 1H-Indene, 2,3-dihydro-1,6-dimethyl- (9CI) 146 C11H14
3. 1H-Indene, 2,3-dihydro-1,3-dimethyl- (9CI) 146 C11H14
4. Naphthalene, 1,2,3,4-tetrahydro-1-methyl- (8CI,9CI) 146 C11H14

Sample File: >164168 Spectrum #: R4II
Search speed: 3 Fitting option: S No. of ion ranges searched: 92

	Prob.	CAS #	CIN #	NIST	K	DK	#RIG	FIT	%	CIN	D I R IV
1.	89*	17057828	14102	"BIGDR	82	22	1	-1	211	3	66 66
2.	87*	17057482	14099	"BIGDR	69	58	2	2	91	3	63 45
3.	85*	4175535	14097	"BIGDR	24	22	1	-2	24	6	54 52
4.	71*	1559815	14111	"BIGDR	62	42	2	1	22	12	38 33

Peak#: 12 Area: 130780. Est Conc: 16. Date: 02/13/93 14:42 Inst: G



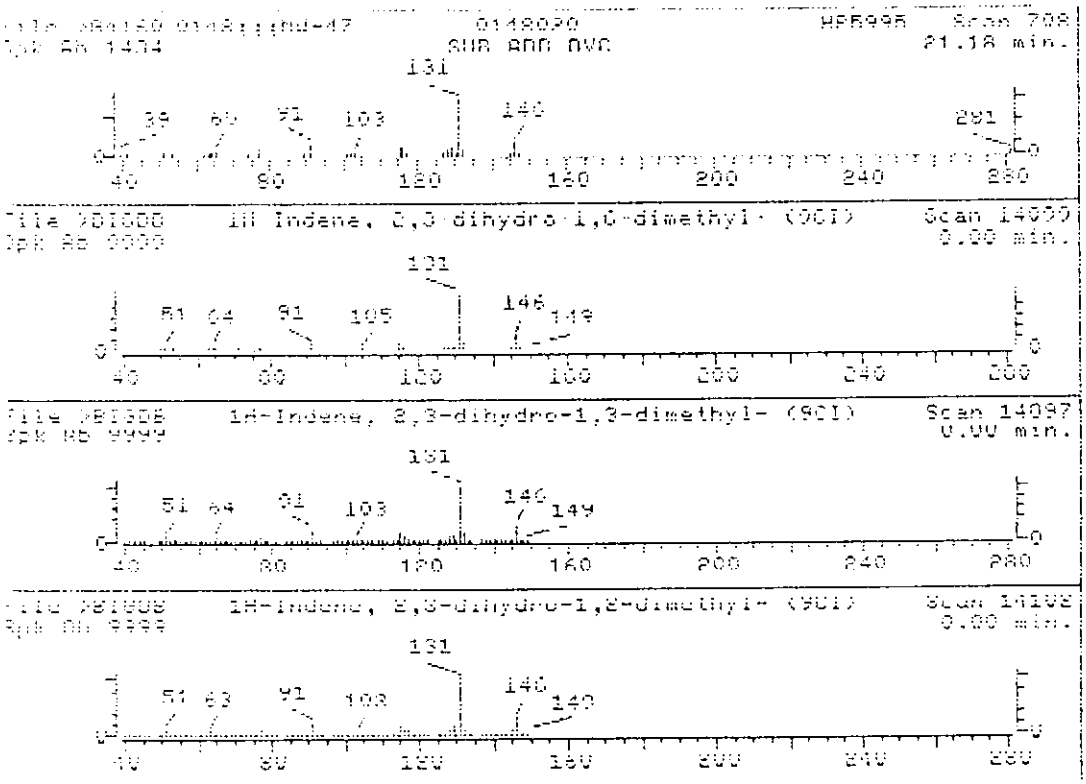
...d Library Search

1.	1H-Indene, 2,3-dihydro-1,6-dimethyl- (9CI)	146	C11H14
2.	1H-Indene, 2,3-dihydro-1,3-dimethyl- (9CI)	146	C11H14
3.	1H-Indene, 2,3-dihydro-1,2-dimethyl- (9CI)	146	C11H14
4.	Naphthalene, 1,2,3,4-tetrahydro-1-methyl- (8CI,9CI)	146	C11H14

Sample File: >S41611 Spectrum #: /UN
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	DIN #	NAME	K	DK	#PKS	TOL	%	DIN	C	R	IV
1.	88*	17059482	14099	"RIGOR	73	76	9	8	79	4	65		96
2.	87*	41755-55	14097	"RIGOR	69	69	9	8	79	4	63		49
3.	87*	17057828	14102	"RIGOR	65	69	9	8	71	4	63		44
4.	85*	1559815	14108	"RIGOR	74	78	9	8	78	9	54		56

Peak#: 9 Area: 85954. Fat Conc: 11. Date: 02/13/93 14:42 Inst: G



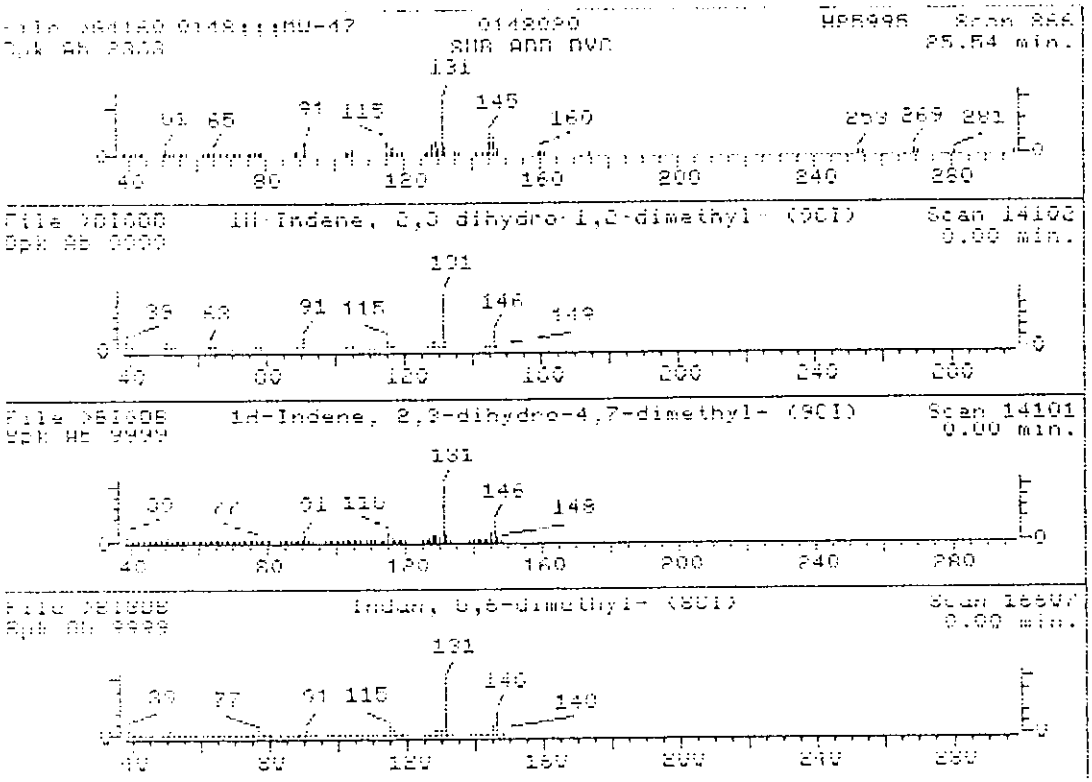
.d Search Length 500

1.	1H-Indene, 2,3-dihydro-1,2-dimethyl- (9CI)	146 C11H14
2.	1H-Indene, 2,3-dihydro-4,7-dimethyl- (9CI)	146 C11H14
3.	Indan, 5,6-dimethyl- (8CI)	146 C11H14
4.	1H-Indene, 2,3-dihydro-4,6-dimethyl- (9CI)	146 C11H14

Sample File: >164168 Spectrum #: 866
Search speed: 3 Hitting option: S No. of ion ranges searched: 62

	Prob.	CAS #	COIN #	NAME	K	DK	#FIG	HIT	%	COIN	C	I	R	IV
1.	71*	17057828	14102	"RIGOR	28	26	2	0	100	29	29	60		
2.	67*	6689219	14101	"RIGOR	49	56	0	0	86	26	32	59		
3.	65*	1075225	14002	"RIGOR	49	54	0	0	75	32	24	59		
4.	65*	1685821	14096	"RIGOR	45	55	0	0	88	32	24	53		

Peak#: 19 Area: 83852. Est Conc: Ret. Date: 02/13/93 14:42 Inst: G



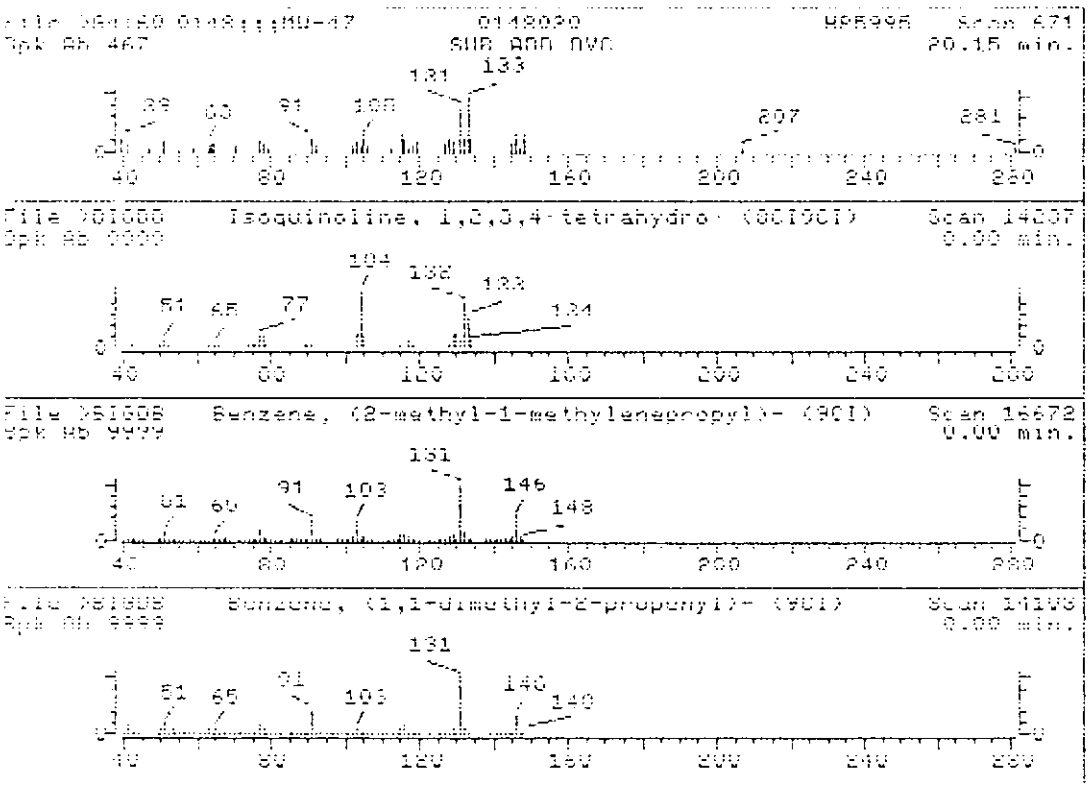
Full Mass Length Mode

1.	Isoquinoline, 1,2,3,4-tetrahydro- (RCIVCI)	133 C9H11N
2.	Benzene, (2-methyl-1-methylenepropyl)- (9CI)	146 C11H14
3.	Benzene, (1,1-dimethyl-2-propenyl)- (9CI)	146 C11H14
4.	Benzene, ethyl-1,2,4-trimethyl- (9CI)	148 C11H16

Sample file: >G4168 Spectrum #: 671
Search speed: 5 Fitting option: S No. of ion ranges searched: 62

	Prob.	CAS #	DIN #	NAME	K	DK	#HIG	DIF	%	DIN	C	I	R	IO
1.	95*	91214	14232	"RIGOR	92	96	5	0	185	58	7			12
2.	18*	17498214	16672	"RIGOR	59	68	11	-9	61	68	4			25
3.	18*	18521563	14113	"RIGOR	79	73	8	0	81	56	4			21
4.	15*	54211676	14412	"RIGOR	51	59	7	11	95	58	3			15

Peak#: 2 Area: 69215. Est Conc: 9. Date: 02/13/93 14:42 Inst: G



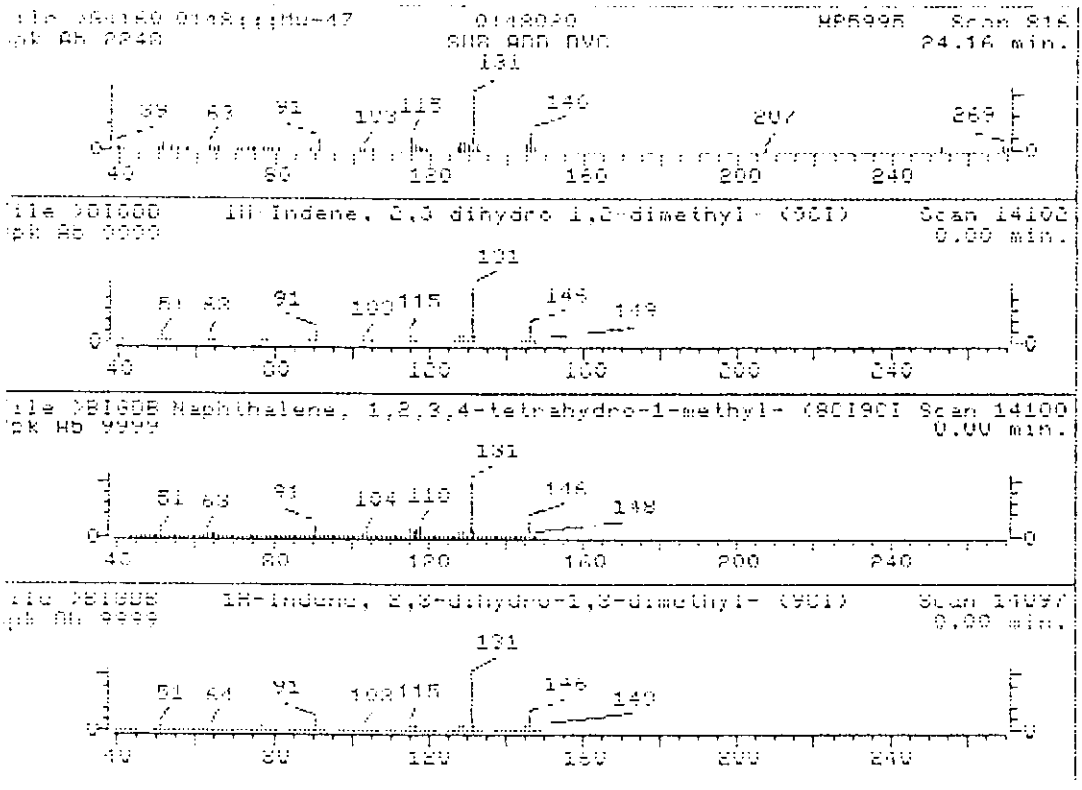
A ... Length NIST

1. 1H-Indene, 2,3-dihydro-1,2-dimethyl- (9CI) 146 C11H14
2. Naphthalene, 1,2,3,4-tetrahydro-1-methyl- (8CI,9CI) 146 C11H14
3. 1H-Indene, 2,3-dihydro-1,3-dimethyl- (9CI) 146 C11H14
4. 1H-Indene, 2,3-dihydro-4,7-dimethyl- (9CI) 146 C11H14

Sample file: >164168 Spectrum #: 816
Search speed: 5 Hitting option: S No. of ion ranges searched: 58

	Prob.	CAS #	ION #	NAME	K	DK	#PEAK	HIT	%	ION	C	R	IV
1.	81*	17057828	14102	"B1GDB	89	15	1	-2	83	15	91		24
2.	79*	15599815	14100	"B1GDB	58	46	2	11	100	9	48		59
3.	76*	41755655	14097	"B1GDB	76	25	1	-2	92	15	41		55
4.	75*	6682719	14101	"B1GDB	64	41	1	11	75	18	35		63

Peak#: 15 Area: 25794. Fat Conc: 9. Date: 02/13/93 04:42 Inst: G



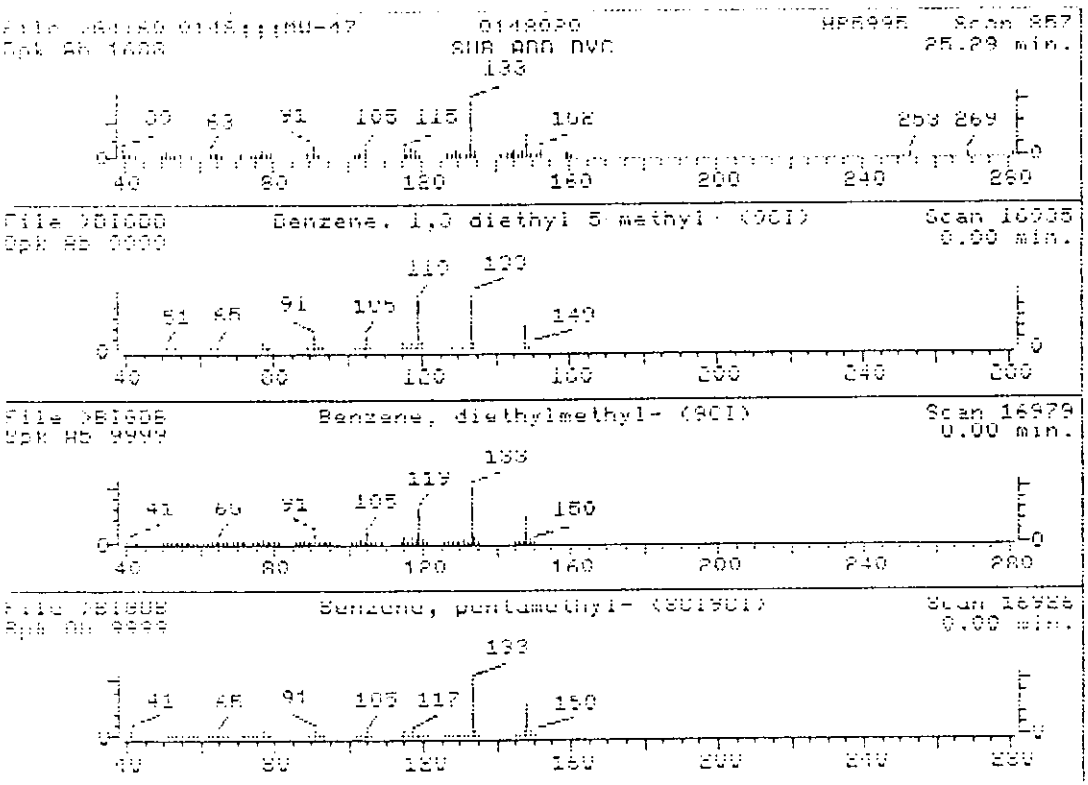
[illegible] mixed length KOV

1.	Benzene, 1,3-diethyl-5-methyl- (9CI)	14X C11H16
2.	Benzene, diethylmethyl- (9CI)	14X C11H16
3.	Benzene, pentamethyl- (8CI,9CI)	14X C11H16
4.	Benzene, 1-ethyl-3-(1-methylethyl)- (9CI)	14X C11H16

Sample File: >1441A11 Spectrum #: 852
Search speed: 3 Fitting option: S No. of ion ranges searched: 6U

	Prob.	CAS #	COM #	NAME	K	DK	#FLG	UNIT	%	CON	C	I	R	IO
1.	5U*	2U58U4U	16955	"BIGOR	5U	8U	3	U	1UU	12		2U		13
2.	5U*	2555U154	16979	"BIGOR	59	44	3	-1	89	2U		2U		14
3.	51*	2UUU129	16926	"BIGOR	43	48	2	U	24	23		22		23
4.	4R*	4921994	14411U	"BIGOR	5R	16	2	U	93	23		12		19

Peak#: 1R Area: 62212. Fat Conc: 8. Date: 02/13/93 14:42 Inst: G



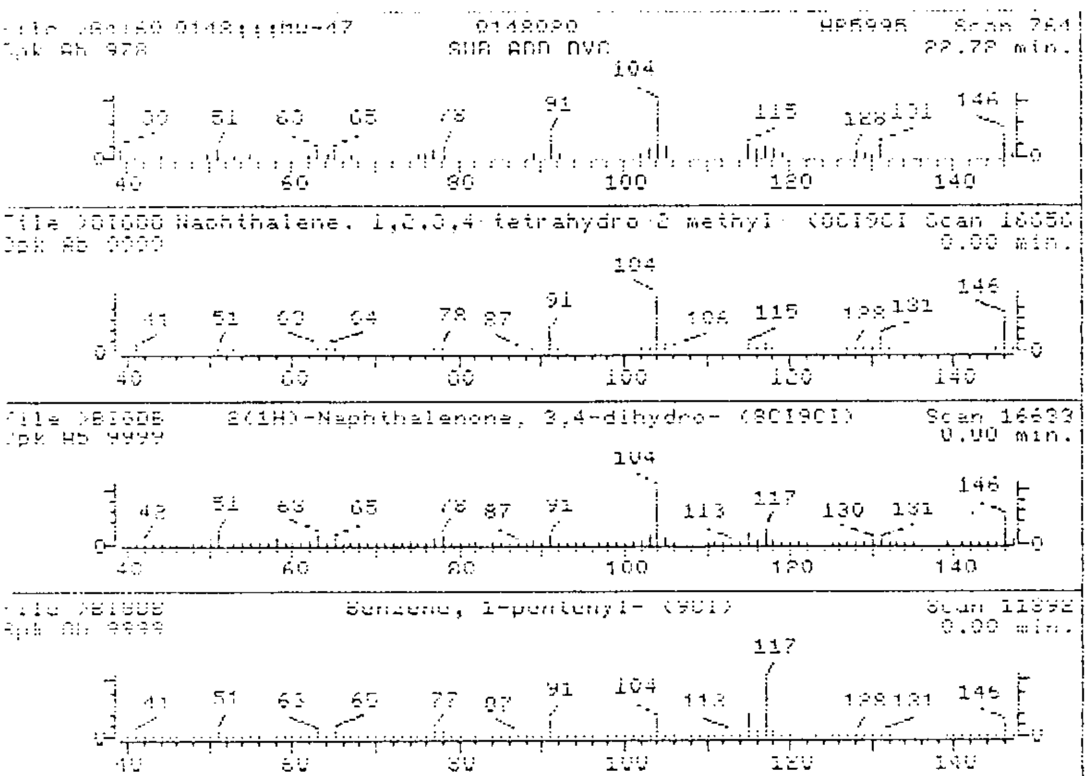
Best scored length KB

1. Naphthalene, 1,2,3,4-tetrahydro-2-methyl- (8CI9CI) 146 C11H14
2. 2(1H)-Naphthalenone, 3,4-dihydro- (8CI9CI) 146 C10H10O
3. Benzene, 1-pentenyl- (9CI) 146 C11H14
4. Benzene, cyclopentyl- (8CI9CI) 146 C11H14

Sample File: >B41A8 Spectrum #: 264
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	CON #	RBB	K	DK	#FLG	TILT	%	CON	C I	R IV
1.	78*	3877198	16656	"BIGDB	64	39	1	1	81	16	32	54
2.	64*	530938	16633	"BIGDB	63	41	2	0	88	21	28	41
3.	38*	826186	11892	"BIGDB	28	23	3	0	201	35	12	13
4.	25*	700889	16638	"BIGDB	49	62	2	1	63	42	2	14

Peak#: 12 Area: 529802. Est Conc: 2. Date: 02/13/93 04:42 Inst: G



6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

0 0219

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Instrument ID: HP5995G Calibration Date(s): 02/09/93

Heated Purge: (Y/N) N Calibration Times: 0909 1212

GC Column:007-624 ID: 0.53 (mm)

LAB FILE ID: RRF10 =G4067.D RRF20 =G4068.D
RRF50 =G4066.D RRF100=G4069.D RRF200=G4071.D

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
Chloromethane		1.683	1.396	1.233	1.515	1.282	1.422	12.8	
Bromomethane	*	1.607	1.686	1.656	1.472	1.282	1.541	10.8*	
Vinyl Chloride	*	2.104	2.070	2.047	1.749	1.935	1.981	7.3*	
Chloroethane		0.984	1.321	1.424	1.272	1.120	1.224	14.2	
Methylene Chloride		2.276	2.142	1.994	1.904	1.708	2.005	10.9	
Acetone		2.168	1.623	1.310	1.129	1.104	1.467	30.2	
Carbon Disulfide		5.958	6.038	6.243	5.829	5.352	5.884	5.7	
1,1-Dichloroethene	*	1.804	1.806	1.792	1.682	1.572	1.731	5.9*	
1,1-Dichloroethane	*	3.840	4.078	4.126	4.013	3.906	3.993	3.0*	
1,2-Dichloroethene (total)		1.940	2.038	2.013	1.874	1.823	1.938	4.7	
Chloroform	*	3.693	3.980	3.892	3.645	3.519	3.746	5.0*	
1,2-Dichloroethane	*	6.141	6.625	6.477	6.133	5.610	6.197	6.3*	
2-Butanone		1.223	1.645	1.366	1.259	1.268	1.352	12.7	
1,1,1-Trichloroethane	*	0.752	0.688	0.643	0.738	0.615	0.687	8.6*	
Carbon Tetrachloride	*	0.512	0.566	0.558	0.563	0.538	0.547	4.1*	
Bromodichloromethane	*	0.534	0.579	0.564	0.572	0.550	0.560	3.2*	
1,2-Dichloropropane		0.341	0.333	0.342	0.348	0.324	0.338	2.7	
cis-1,3-Dichloropropene	*	0.365	0.373	0.384	0.380	0.356	0.371	3.0*	
Trichloroethene	*	0.347	0.355	0.361	0.350	0.323	0.347	4.2*	
Dibromochloromethane	*	0.335	0.358	0.379	0.389	0.371	0.366	5.6*	
1,1,2-Trichloroethane	*	0.232	0.237	0.245	0.261	0.233	0.242	5.0*	
Benzene	*	1.117	1.197	1.139	1.146	1.041	1.128	5.0*	
trans-1,3-Dichloropropene	*	1.677	1.526	1.613	1.626	1.478	1.584	5.1*	
Bromoform	*	0.228	0.253	0.284	0.307	0.276	0.270	11.3*	
4-Methyl-2-Pentanone		0.462	0.529	0.507	0.489	0.441	0.486	7.2	
2-Hexanone		0.334	0.345	0.383	0.334	0.302	0.339	8.5	
Tetrachloroethene	*	0.471	0.505	0.472	0.442	0.411	0.460	7.7*	
1,1,2,2-Tetrachloroethane	*	0.448	0.499	0.495	0.463	0.444	0.470	5.5*	<-
Toluene	*	1.636	1.714	1.703	1.609	1.580	1.648	3.6*	
Chlorobenzene	*	1.041	1.109	1.046	1.008	0.974	1.036	4.8*	
Ethylbenzene	*	0.552	0.566	0.552	0.531	0.508	0.542	4.2*	
Styrene	*	1.138	1.151	1.138	1.041	0.924	1.078	9.0*	
Xylene (total)		0.641	0.679	0.643	0.587	0.524	0.614	9.8	
Toluene-d8		1.559	1.421	1.390	1.396	1.367	1.426	5.4	
Bromofluorobenzene	*	1.066	0.956	0.915	0.881	0.784	0.921	11.2*	
1,2-Dichloroethane-d4		4.172	3.716	3.725	3.686	3.630	3.786	5.8	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

0220

QUANT REPORT

Operator ID: MSG
Output File: ^G4066::QT
Data File: >G4066::G2
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1914

Quant Rev: 6 Quant Time: 930209 09:37
Injected at: 930209 09:09
Dilution Factor: 1.00000

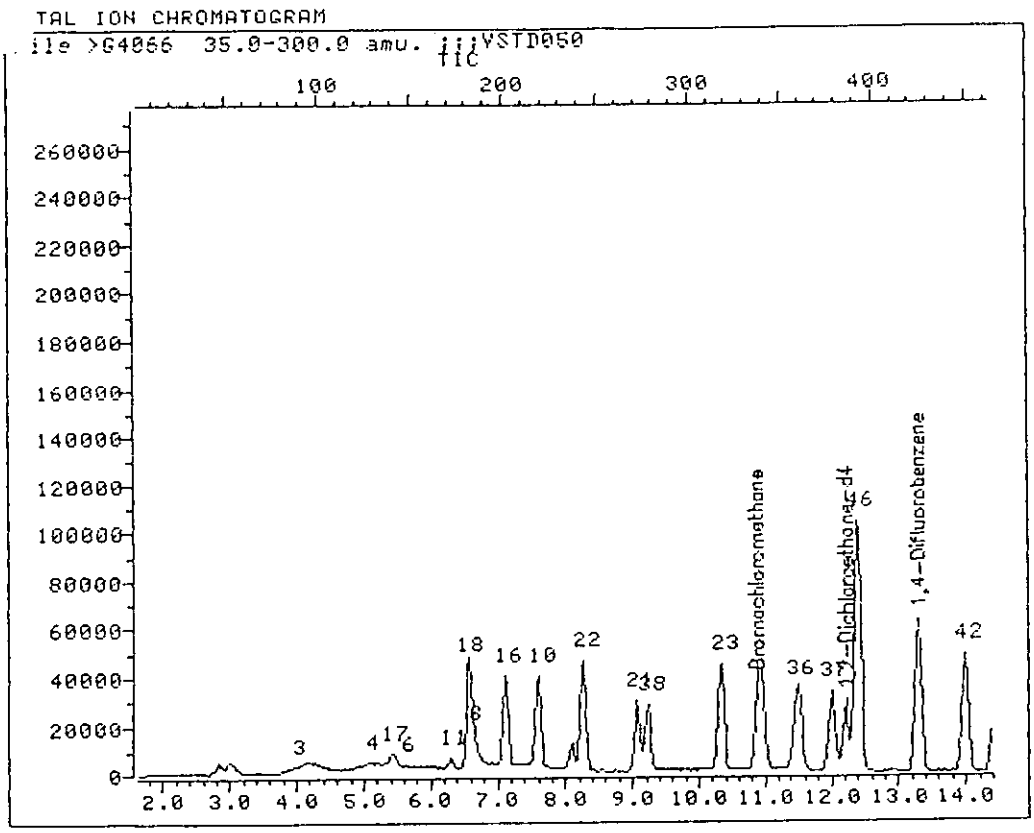
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

DFS 2/25/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.87	127.8	22180	50.00	ug/L	80
3)	Chloromethane	4.01	49.8	27348	230.96	ug/L	100
4)	Bromomethane	5.12	93.7	36729	84.92	ug/L	100
5)	Vinyl Chloride	4.21	61.8	45397	125.54	ug/L	100
6)	Chloroethane	5.64	63.8	31592M	88.49	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.67	101.0	29097	49.34	ug/L	92
10)	Methylene Chloride	7.61	83.8	44230	80.00	ug/L	97
11)	Acrolein	6.31	55.8	12953	120.00	ug/L	86
13)	Acetone	6.64	42.8	29056	36.57	ug/L	92
14)	Acrylonitrile	8.10	52.8	29145	103.45	ug/L	97
16)	Carbon Disulfide	7.11	75.8	138462	61.84	ug/L	99
	Trichlorofluoromethane	5.42	100.8	17871	69.13	ug/L	95
	1,1-Dichloroethene	6.56	95.8	39749	88.36	ug/L	91
21)	1,1-Dichloroethane	9.07	62.8	91513	55.21	ug/L	96
22)	1,2-Dichloroethene (total)t	8.27	95.8	44547	86.66	ug/L	96
23)	1,2-Dichloroethene (total)c	10.34	95.8	44769	87.65	ug/L	96
24)	2-Butanone	10.31	43.0	30294	43.64	ug/L	99
28)	Chloroform	10.95	82.8	86334	60.94	ug/L	92
29)	1,2-Dichloroethane	12.41	61.8	143656	67.83	ug/L	86
30)	1,2-Dichloroethane-d4	12.22	64.8	82614	69.39	ug/L	90
34)	*1,4-Difluorobenzene	13.30	113.8	136814	50.00	ug/L	91
36)	1,1,1-Trichloroethane	11.47	96.8	87987	43.65	ug/L	92
37)	Carbon Tetrachloride	12.00	116.8	76316	49.88	ug/L	94
38)	Vinyl Acetate	9.24	42.8	141340	41.36	ug/L	97
39)	Bromodichloromethane	15.10	82.8	77219	73.22	ug/L	90
40)	1,2-Dichloropropane	14.43	62.8	46784	52.58	ug/L	69
41)	cis-1,3-Dichloropropene	16.31	74.8	80808	84.74	ug/L	88
42)	Trichloroethene	13.99	129.8	49427	55.90	ug/L	93
44)	Dibromochloromethane	19.17	128.7	51807	77.44	ug/L	94
45)	1,1,2-Trichloroethane	18.18	96.8	33541	55.92	ug/L	94
46)	Benzene	12.39	77.8	155765	49.27	ug/L	91
47)	trans-1,3-Dichloropropene	17.69	74.8	92661	22.82	ug/L	87
48)	2-Chloroethylvinylether	15.92	62.8	28423	69.05	ug/L	72
49)	1,2-Dibromoethane	19.48	106.9	50489	53.13	ug/L	95
50)	Bromoform	22.19	172.6	38848	58.73	ug/L	98
53)	*Chlorobenzene-d5	20.50	116.8	107630	50.00	ug/L	78
54)	4-Methyl-2-Pentanone	16.50	42.8	54609	53.22	ug/L	92
	2-Hexanone	18.70	42.8	41187	57.29	ug/L	97
	Tetrachloroethene	18.73	163.7	50729	57.74	ug/L	94
58)	1,1,2,2-Tetrachloroethane	22.96	82.8	53330	50.65	ug/L	90
60)	Toluene	17.17	91.0	183316	50.42	ug/L	95
61)	Toluene-d8	16.97	97.8	149624	50.44	ug/L	95
62)	Chlorobenzene	20.56	111.8	112530	51.59	ug/L	88

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.80	105.8	59408	52.35	ug/L	97
64)	Styrene	21.83	103.8	122484	52.09	ug/L	84
65)	Xylene (total)mp	21.03	105.8	142031	100.53	ug/L	91
66)	Xylene (total)o	21.80	105.8	69174	50.23	ug/L	91
71)	1,2,3-Trichloropropane	24.62	74.8	47179	54.42	ug/L	54
80)	1,3-Dichlorobenzene	24.59	145.8	108084	53.42	ug/L	91
81)	1,4-Dichlorobenzene	24.73	145.8	105014	54.99	ug/L	93
82)	1,2-Dichlorobenzene	25.28	145.8	45828	53.27	ug/L	94
91)	Bromofluorobenzene	22.79	94.8	98482	69.70	ug/L	82

* Compound is ISTD



Data File: >G4066::G2 Quant Output File: ^G4066::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 09:37
Injected at: 930209 09:09

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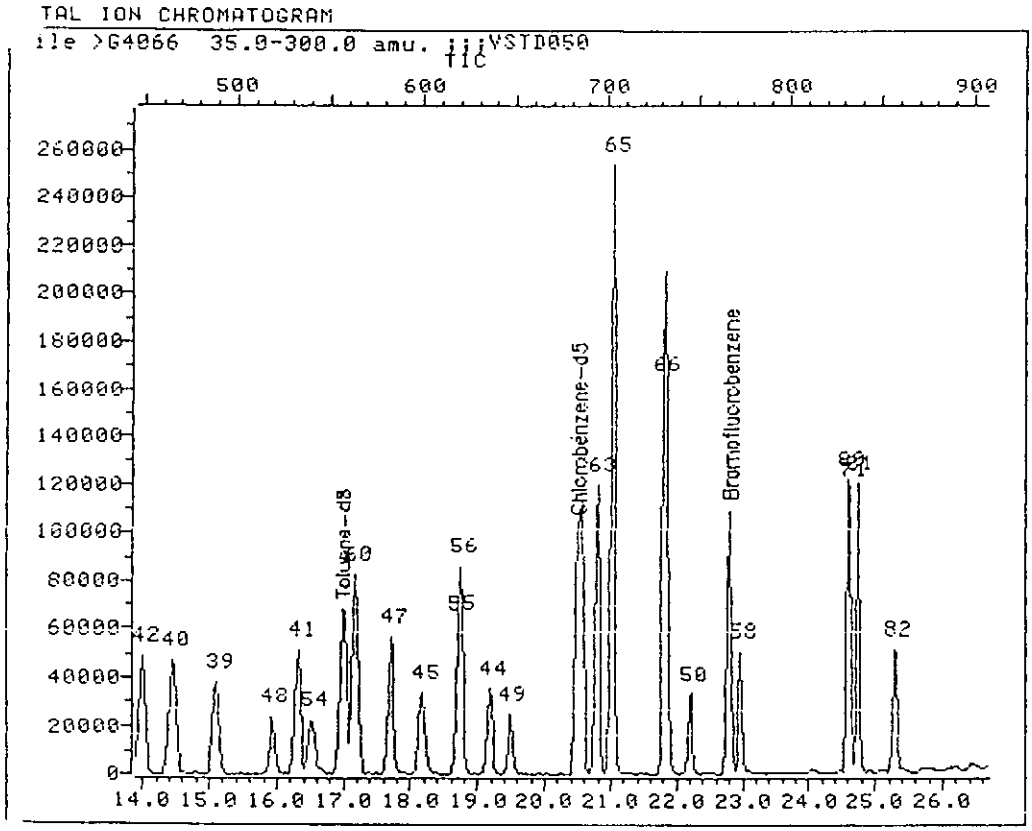


Data File: >G4066::G2 Quant Output File: ^G4066::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 09:37
Injected at: 930209 09:09

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG
Output File: ^G4067::QT
Data File: >G4067::G2
Name: ;;;VSTD010
Misc: HP5995:G;;;LLW;DF1 ;G1914

Quant Rev: 6 Quant Time: 930209 10:34
Injected at: 930209 10:07
Dilution Factor: 1.00000

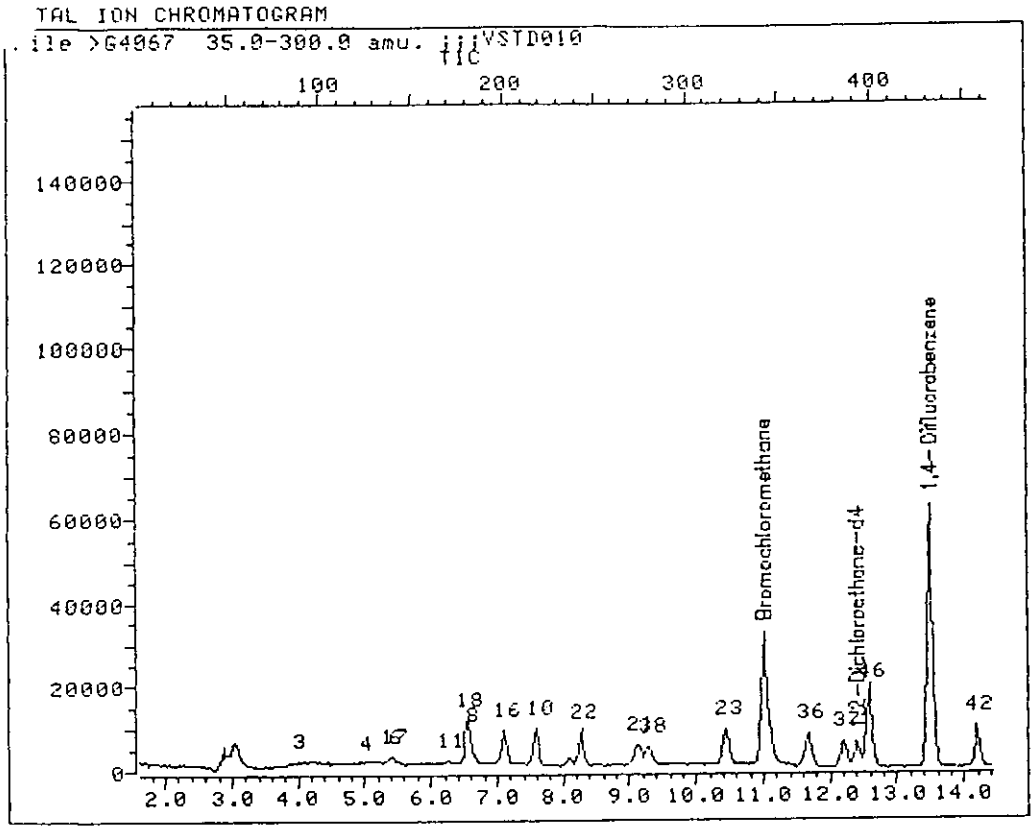
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

PAS 02/25/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.02	127.8	22647	50.00	ug/L	78
3)	Chloromethane	4.00	49.8	7623	63.05	ug/L	100
4)	Bromomethane	4.99	93.7	7279M	16.48	ug/L	100
5)	Vinyl Chloride	4.25	61.8	9531	25.81	ug/L	100
6)	Chloroethane	5.43	63.8	4457M	12.23	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.60	101.0	7791	12.94	ug/L	91
10)	Methylene Chloride	7.59	83.8	10307	18.26	ug/L	97
11)	Acrolein	6.26	55.8	2705	24.54	ug/L	75
13)	Acetone	6.57	42.8	9822	12.11	ug/L	98
14)	Acrylonitrile	8.09	52.8	5222	18.15	ug/L	98
16)	Carbon Disulfide	7.09	75.8	26987	11.81	ug/L	97
	Trichlorofluoromethane	5.41	100.8	4372	16.56	ug/L	95
	1,1-Dichloroethene	6.54	95.8	8169	17.78	ug/L	94
21)	1,1-Dichloroethane	9.11	62.8	17395	10.28	ug/L	95
22)	1,2-Dichloroethene (total)t	8.25	95.8	8752	16.67	ug/L	93
23)	1,2-Dichloroethene (total)c	10.44	95.8	8824	16.92	ug/L	96
24)	2-Butanone	10.41	43.0	5540	7.82	ug/L	99
28)	Chloroform	11.10	82.8	16726	11.56	ug/L	98
29)	1,2-Dichloroethane	12.59	61.8	27815	12.86	ug/L	87
30)	1,2-Dichloroethane-d4	12.40	64.8	18897	15.55	ug/L	92
34)	*1,4-Difluorobenzene	13.50	113.8	134298	50.00	ug/L	94
36)	1,1,1-Trichloroethane	11.68	96.8	20211	10.21	ug/L	93
37)	Carbon Tetrachloride	12.21	116.8	13750	9.15	ug/L	94
38)	Vinyl Acetate	9.30	42.8	24339	7.26	ug/L	98
39)	Bromodichloromethane	15.33	82.8	14340	13.85	ug/L	92
40)	1,2-Dichloropropane	14.67	62.8	9170	10.50	ug/L	64
41)	cis-1,3-Dichloropropene	16.54	74.8	15082	16.11	ug/L	89
42)	Trichloroethene	14.20	129.8	9310	10.73	ug/L	93
44)	Dibromochloromethane	19.38	128.7	8998	13.70	ug/L	97
45)	1,1,2-Trichloroethane	18.41	96.8	6232	10.58	ug/L	91
46)	Benzene	12.56	77.8	30015	9.67	ug/L	92
47)	trans-1,3-Dichloropropene	17.95	74.8	18918	4.75	ug/L	87
48)	2-Chloroethylvinylether	16.18	62.8	4685	11.59	ug/L	60
49)	1,2-Dibromoethane	19.68	106.9	9361	10.04	ug/L	88
50)	Bromoform	22.28	172.6	6119	9.42	ug/L	97
53)	*Chlorobenzene-d5	20.65	116.8	108108	50.00	ug/L	79
54)	4-Methyl-2-Pentanone	16.77	42.8	9979	9.68	ug/L	95
	2-Hexanone	18.93	42.8	7222	10.00	ug/L	93
	Tetrachloroethene	18.93	163.7	10182	11.53	ug/L	95
58)	1,1,2,2-Tetrachloroethane	23.00	82.8	9695	9.17	ug/L	92
60)	Toluene	17.40	91.0	35381	9.69	ug/L	92
61)	Toluene-d8	17.24	97.8	33706	11.31	ug/L	95
62)	Chlorobenzene	20.70	111.8	22513	10.28	ug/L	90

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.92	105.8	11937	10.47	ug/L	93
64)	Styrene	21.92	103.8	24615	10.42	ug/L	83
65)	Xylene (total)mp	21.15	105.8	29041	20.46	ug/L	90
66)	Xylene (total)o	21.89	105.8	13850	10.01	ug/L	93
71)	1,2,3-Trichloropropane	24.77	74.8	9600	11.02	ug/L	55
80)	1,3-Dichlorobenzene	24.77	145.8	21262	10.46	ug/L	88
82)	1,2-Dichlorobenzene	25.32	145.8	9154	10.59	ug/L	92
91)	Bromofluorobenzene	22.83	94.8	23047	16.24	ug/L	94

* Compound is ISTD



Data File: >G4067::G2 Quant Output File: ^G4067::QT
Name: ;;;VSTD010
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 10:34
Injected at: 930209 10:07

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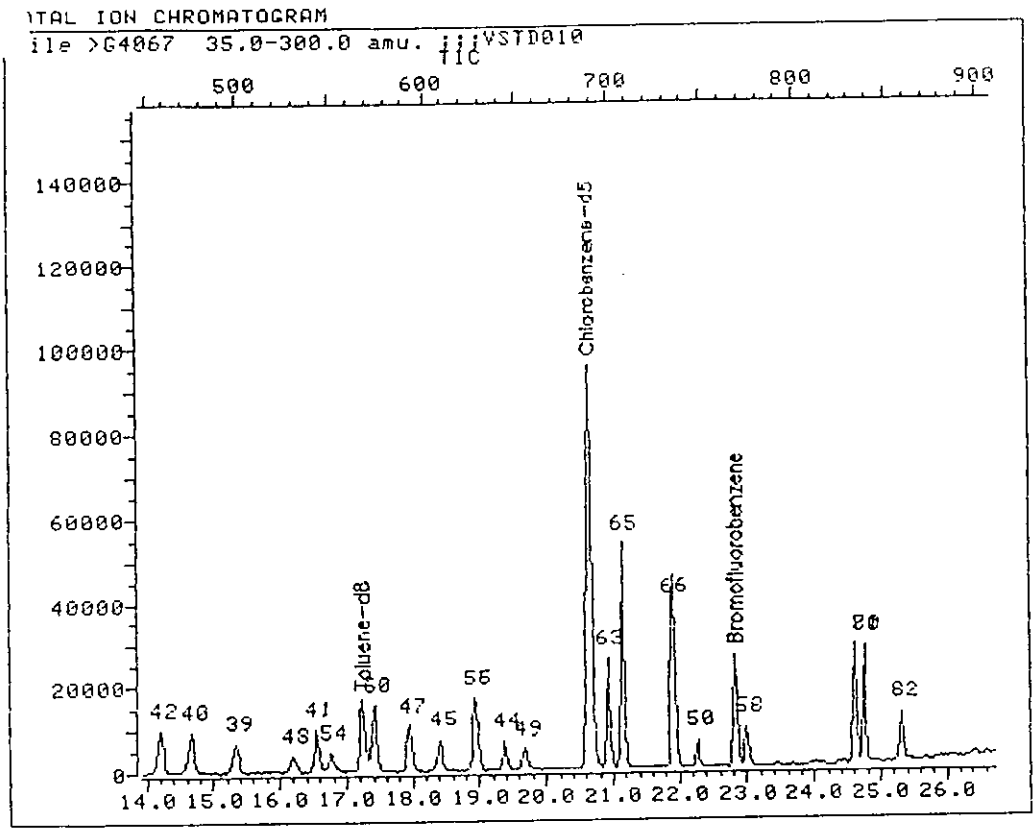


Data File: >G4067::G2 Quant Output File: ^G4067::QT
Name: ;;;VSTD010
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 10:34
Injected at: 930209 10:07

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG
Output File: ^G4068::QT
Data File: >G4068::G2
Name: ;;;VSTD020
Misc: HP5995:G;;;LLW;DF1 ;G1914

Quant Rev: 6 Quant Time: 930209 11:05
Injected at: 930209 10:38
Dilution Factor: 1.00000

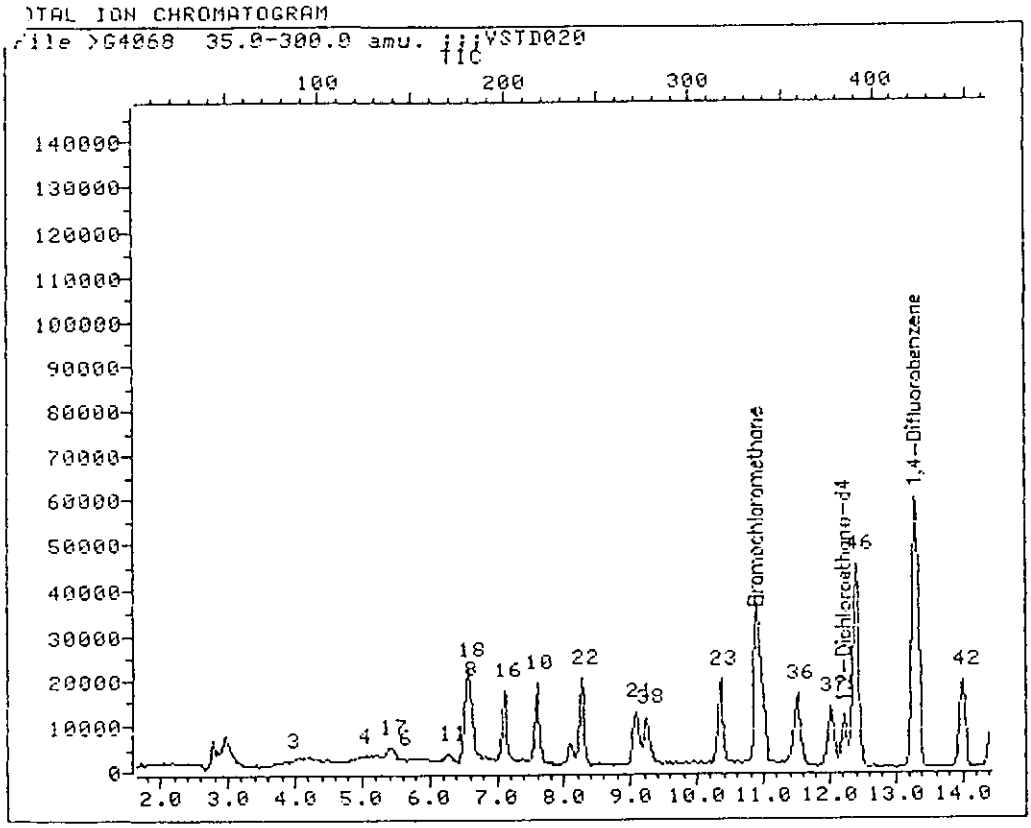
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

PAS 02/25/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.89	127.8	22178	50.00	ug/L	83
3)	Chloromethane	3.95	49.8	12382M	104.58	ug/L	100
4)	Bromomethane	5.03	93.7	14956M	34.58	ug/L	100
5)	Vinyl Chloride	4.17	61.8	18364M	50.79	ug/L	100
6)	Chloroethane	5.61	63.8	11717M	32.82	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.60	101.0	13010	22.06	ug/L	96
10)	Methylene Chloride	7.60	83.8	18998	34.37	ug/L	97
11)	Acrolein	6.30	55.8	5492	50.88	ug/L	90
13)	Acetone	6.60	42.8	14397	18.12	ug/L	93
14)	Acrylonitrile	8.09	52.8	11035	39.17	ug/L	96
16)	Carbon Disulfide	7.10	75.8	53564	23.93	ug/L	98
17)	Trichlorofluoromethane	5.41	100.8	8158	31.56	ug/L	95
19)	1,1-Dichloroethene	6.57	95.8	16021	35.62	ug/L	94
21)	1,1-Dichloroethane	9.09	62.8	36176	21.83	ug/L	98
22)	1,2-Dichloroethene (total)t	8.26	95.8	17735	34.50	ug/L	97
23)	1,2-Dichloroethene (total)c	10.36	95.8	18425	36.08	ug/L	95
24)	2-Butanone	10.33	43.0	14596	21.03	ug/L	93
28)	Chloroform	10.97	82.8	35304	24.92	ug/L	95
29)	1,2-Dichloroethane	12.40	61.8	58772	27.75	ug/L	85
30)	1,2-Dichloroethane-d4	12.21	64.8	32966	27.69	ug/L	90
34)	*1,4-Difluorobenzene	13.29	113.8	136090	50.00	ug/L	96
36)	1,1,1-Trichloroethane	11.52	96.8	37446	18.67	ug/L	95
37)	Carbon Tetrachloride	12.02	116.8	30805	20.24	ug/L	92
38)	Vinyl Acetate	9.25	42.8	55128	16.22	ug/L	95
39)	Bromodichloromethane	15.11	82.8	31510	30.04	ug/L	89
40)	1,2-Dichloropropane	14.45	62.8	18146	20.50	ug/L	64
41)	cis-1,3-Dichloropropene	16.33	74.8	31261	32.96	ug/L	84
42)	Trichloroethene	14.01	129.8	19313	21.96	ug/L	92
44)	Dibromochloromethane	19.17	128.7	19509	29.32	ug/L	96
45)	1,1,2-Trichloroethane	18.15	96.8	12891	21.61	ug/L	95
46)	Benzene	12.40	77.8	65187	20.73	ug/L	89
47)	trans-1,3-Dichloropropene	17.71	74.8	34891	8.64	ug/L	85
48)	2-Chloroethylvinylether	15.97	62.8	10234	24.99	ug/L	72
49)	1,2-Dibromoethane	19.48	106.9	18987	20.09	ug/L	97
50)	Bromoform	22.18	172.6	13773	20.93	ug/L	98
53)	*Chlorobenzene-d5	20.50	116.8	101987	50.00	ug/L	79
54)	4-Methyl-2-Pentanone	16.52	42.8	21597	22.21	ug/L	94
57)	2-Hexanone	18.70	42.8	14055	20.63	ug/L	88
58)	Tetrachloroethene	18.73	163.7	20613	24.74	ug/L	95
60)	1,1,2,2-Tetrachloroethane	22.93	82.8	20338	20.38	ug/L	91
61)	Toluene	17.19	91.0	69932	20.30	ug/L	95
62)	Toluene-d8	16.99	97.8	57953	20.62	ug/L	98
	Chlorobenzene	20.55	111.8	45250	21.89	ug/L	89

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.80	105.8	23098	21.48	ug/L	98
64)	Styrene	21.83	103.8	46947	21.07	ug/L	84
65)	Xylene (total)mp	21.02	105.8	57677	43.08	ug/L	88
66)	Xylene (total)o	21.80	105.8	27688	21.22	ug/L	91
71)	1,2,3-Trichloropropane	24.56	74.8	19588	23.84	ug/L	54
80)	1,3-Dichlorobenzene	24.56	145.8	44903	23.42	ug/L	91
81)	1,4-Dichlorobenzene	24.70	145.8	42108	23.27	ug/L	92
82)	1,2-Dichlorobenzene	25.25	145.8	18382	22.55	ug/L	92
91)	Bromofluorobenzene	22.76	94.8	39012	29.14	ug/L	82

* Compound is ISTD



Data File: >G4068::G2 Quant Output File: ^G4068::QT
Name: ;;;VSTD020
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 11:05
Injected at: 930209 10:38

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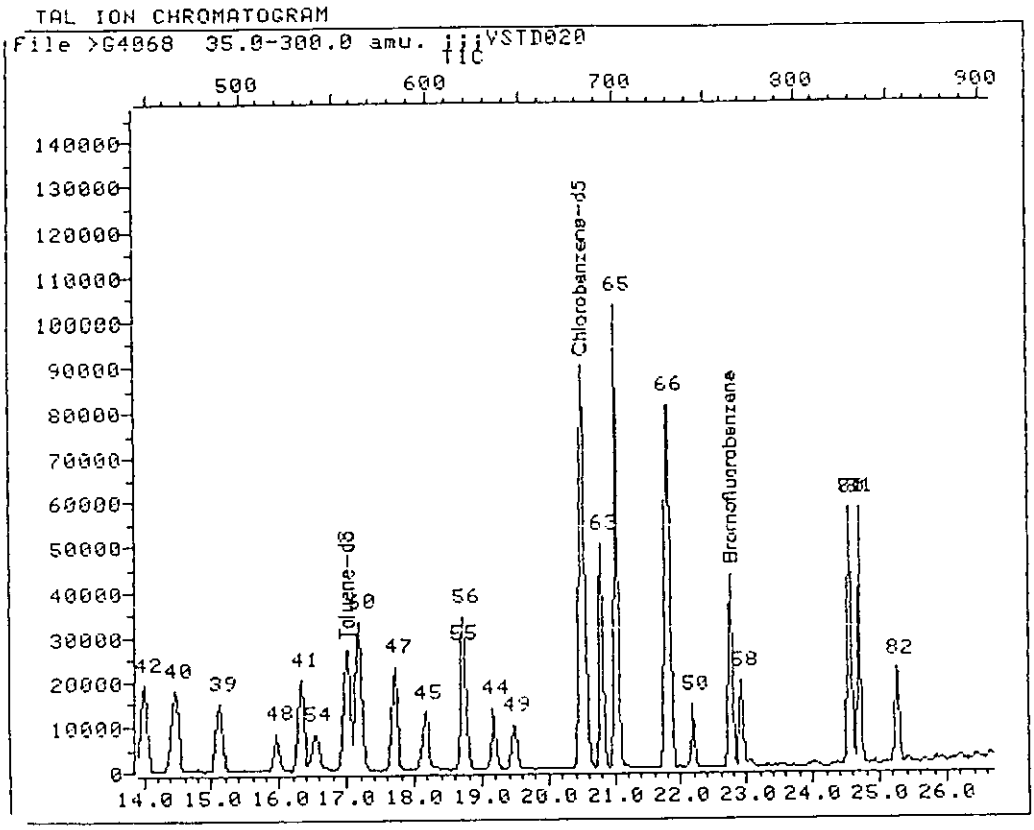


Data File: >G4068::G2 Quant Output File: ^G4068::QT
Name: ;;;VSTD020
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 11:05
Injected at: 930209 10:38

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG
Output File: ^G4069::QT
Data File: >G4069::G2
Name: ;;;VSTD100
Misc:

Quant Rev: 6 Quant Time: 930209 11:37
Injected at: 930209 11:09
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1914

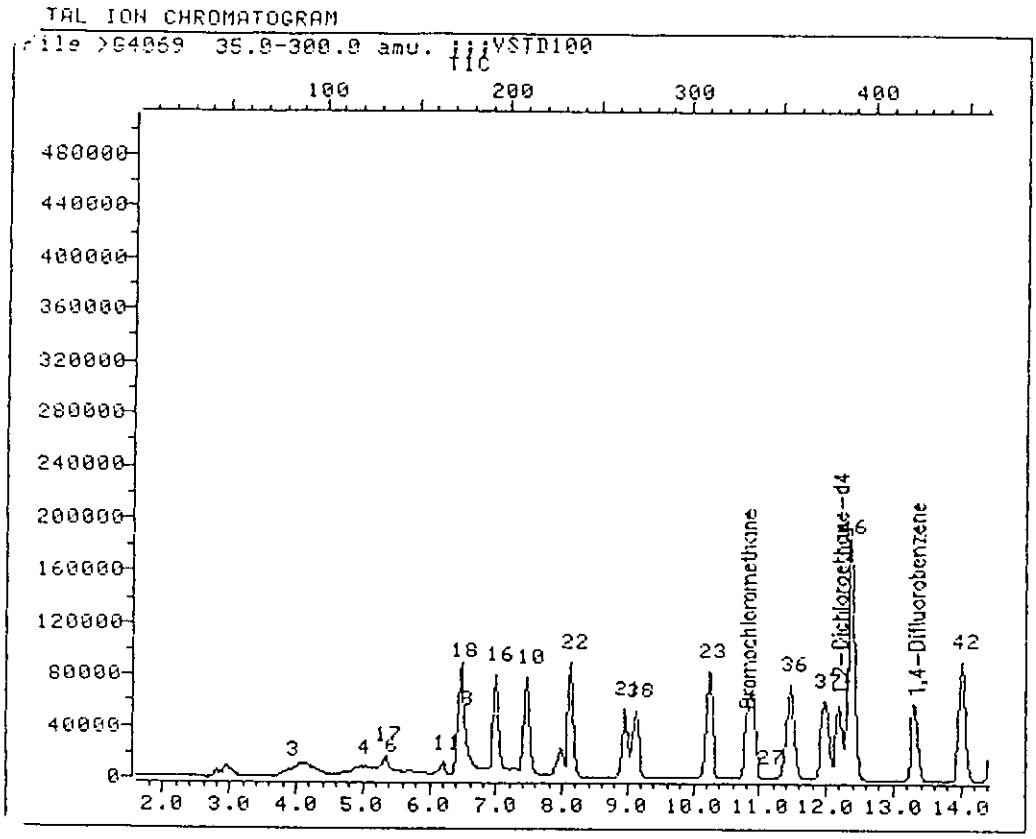
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

PAS 02/25/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.81	127.8	22029	50.00	ug/L	81
3)	Chloromethane	3.94	49.8	66729	567.40	ug/L	100
4)	Bromomethane	5.01	93.7	64838	150.94	ug/L	100
5)	Vinyl Chloride	4.10	61.8	77067	214.58	ug/L	100
6)	Chloroethane	5.39	63.8	56049M	158.07	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.53	101.0	53283	90.97	ug/L	95
10)	Methylene Chloride	7.47	83.8	83865	152.73	ug/L	96
11)	Acrolein	6.20	55.8	24421	227.78	ug/L	92
13)	Acetone	6.53	42.8	49721	63.01	ug/L	92
14)	Acrylonitrile	7.96	52.8	54608	195.16	ug/L	98
16)	Carbon Disulfide	7.00	75.8	256828	115.50	ug/L	99
	Trichlorofluoromethane	5.34	100.8	36848	143.51	ug/L	97
	1,1-Dichloroethene	6.44	95.8	74127	165.91	ug/L	91
21)	1,1-Dichloroethane	8.96	62.8	176826	107.40	ug/L	93
22)	1,2-Dichloroethene (total)t	8.13	95.8	81812	160.24	ug/L	96
23)	1,2-Dichloroethene (total)c	10.23	95.8	83274	164.15	ug/L	94
24)	2-Butanone	10.23	43.0	55451	80.44	ug/L	99
27)	2-Methyl-2-Propenenitrile	11.12	40.9	1276	1276.00	NO CALIB	37
28)	Chloroform	10.89	82.8	160599	114.14	ug/L	97
29)	1,2-Dichloroethane	12.39	61.8	270204	128.46	ug/L	84
30)	1,2-Dichloroethane-d4	12.19	64.8	162403	137.35	ug/L	90
34)	*1,4-Difluorobenzene	13.33	113.8	131890	50.00	ug/L	92
36)	1,1,1-Trichloroethane	11.47	96.8	194658	100.17	ug/L	97
37)	Carbon Tetrachloride	11.97	116.8	148563	100.72	ug/L	95
38)	Vinyl Acetate	9.13	42.8	273321	82.97	ug/L	96
39)	Bromodichloromethane	15.15	82.8	150886	148.41	ug/L	92
40)	1,2-Dichloropropane	14.49	62.8	91705	106.91	ug/L	68
41)	cis-1,3-Dichloropropene	16.39	74.8	154210	167.75	ug/L	81
42)	Trichloroethene	14.02	129.8	92381	108.38	ug/L	92
44)	Dibromochloromethane	19.25	128.7	102500	158.93	ug/L	98
45)	1,1,2-Trichloroethane	18.26	96.8	68932	119.21	ug/L	94
46)	Benzene	12.36	77.8	302240	99.16	ug/L	90
47)	trans-1,3-Dichloropropene	17.78	74.8	180188	46.04	ug/L	88
48)	2-Chloroethylvinylether	16.01	62.8	55239	139.20	ug/L	73
49)	1,2-Dibromoethane	19.56	106.9	97446	106.38	ug/L	93
50)	Bromoform	22.21	172.6	81094	127.18	ug/L	94
53)	*Chlorobenzene-d5	20.55	116.8	109041	50.00	ug/L	78
	4-Methyl-2-Pentanone	16.62	42.8	106669	102.62	ug/L	91
	2-Hexanone	18.78	42.8	72901	100.09	ug/L	93
56)	Tetrachloroethene	18.81	163.7	96404	108.20	ug/L	94
58)	1,1,2,2-Tetrachloroethane	22.96	82.8	100922	94.60	ug/L	91
60)	Toluene	17.25	91.0	350850	95.26	ug/L	95
61)	Toluene-d8	17.08	97.8	304342	101.28	ug/L	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
62)	Chlorobenzene	20.61	111.8	219761	99.44	ug/L	88
63)	Ethylbenzene	20.86	105.8	115798	100.72	ug/L	98
64)	Styrene	21.85	103.8	226952	95.27	ug/L	82
65)	Xylene (total)mp	21.08	105.8	256173	178.97	ug/L	90
66)	Xylene (total)o	21.82	105.8	127991	91.73	ug/L	91
71)	1,2,3-Trichloropropane	24.59	74.8	90070	102.55	ug/L	54
80)	1,3-Dichlorobenzene	24.73	145.8	191313	93.34	ug/L	93
81)	1,4-Dichlorobenzene	24.73	145.8	191313	98.88	ug/L	93
82)	1,2-Dichlorobenzene	25.28	145.8	87846	100.80	ug/L	93
90)	Pentachloroethane	24.06	167.0	1295	1295.00	NO CALIB	92
91)	Bromofluorobenzene	22.79	94.8	192203	134.27	ug/L	88

* Compound is ISTD



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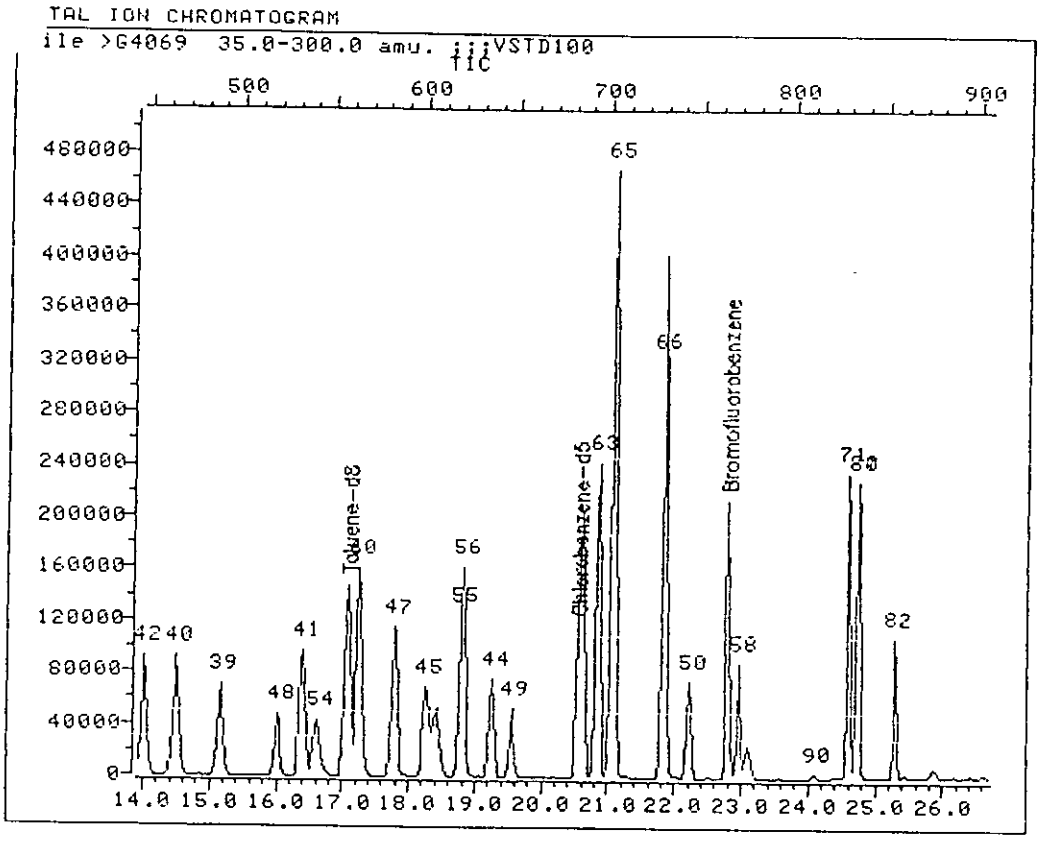
Name: ;;;VSTD100
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 11:37
Injected at: 930209 11:09

TIC page 1 of 2



Data File: >G4069::G2 Quant Output File: ^G4069::QT
Name: ;;;VSTD100
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 11:37
Injected at: 930209 11:09

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG
Output File: ^G4071::QT
Data File: >G4071::G2
Name: ;;;VSTD200
Misc:

Quant Rev: 6 Quant Time: 930209 12:39
Injected at: 930209 12:12
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1914

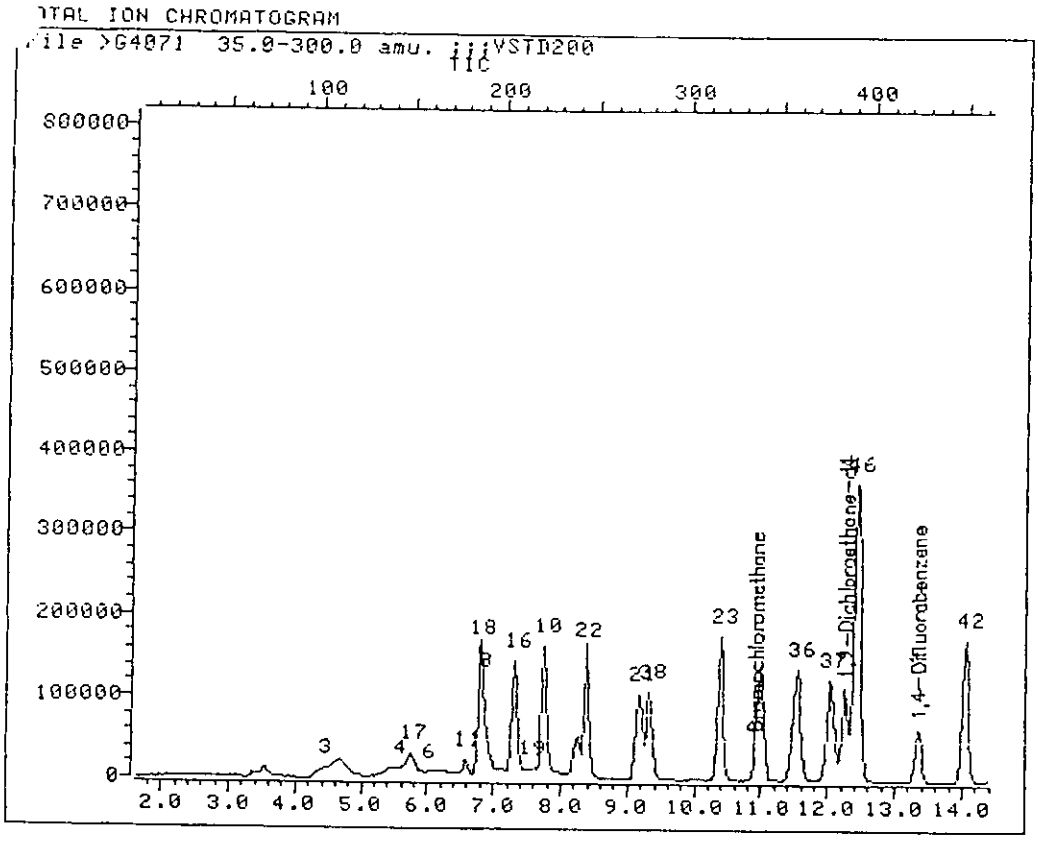
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

PAS 02/25/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.90	127.8	22360	50.00	ug/L	89
3)	Chloromethane	4.44	49.8	114675	960.65	ug/L	100
4)	Bromomethane	5.57	93.7	114674M	263.00	ug/L	100
5)	Vinyl Chloride	4.66	61.8	173058	474.73	ug/L	100
6)	Chloroethane	6.01	63.8	100187M	278.36	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.84	101.0	86326	145.20	ug/L	89
10)	Methylene Chloride	7.75	83.8	152792	274.14	ug/L	94
11)	Acrolein	6.57	55.8	45356	416.79	ug/L	94
13)	Acetone	6.90	42.8	98764	123.31	ug/L	92
14)	Acrylonitrile	8.25	52.8	109614	385.95	ug/L	97
16)	Carbon Disulfide	7.31	75.8	478639	212.07	ug/L	98
1	Trichlorofluoromethane	5.74	100.8	62260	238.90	ug/L	96
1	1,1-Dichloroethene	6.79	95.8	140598	310.02	ug/L	90
19)	3-Chloro-1-Propene	7.53	40.9	2851^	2851.00	NO CALIB	83
21)	1,1-Dichloroethane	9.16	62.8	349335	209.04	ug/L	97
22)	1,2-Dichloroethene (total)t	8.36	95.8	157213	303.36	ug/L	96
23)	1,2-Dichloroethene (total)c	10.38	95.8	168833	327.87	ug/L	96
24)	2-Butanone	10.38	43.0	113414	162.08	ug/L	96
28)	Chloroform	10.99	82.8	314700	220.35	ug/L	97
29)	1,2-Dichloroethane	12.45	61.8	501780	235.02	ug/L	90
30)	1,2-Dichloroethane-d4	12.26	64.8	324679	270.52	ug/L	90
34)	*1,4-Difluorobenzene	13.34	113.8	141645	50.00	ug/L	95
36)	1,1,1-Trichloroethane	11.54	96.8	348603	167.03	ug/L	97
37)	Carbon Tetrachloride	12.04	116.8	304662	192.32	ug/L	92
38)	Vinyl Acetate	9.33	42.8	555993	157.16	ug/L	96
39)	Bromodichloromethane	15.16	82.8	311412	285.20	ug/L	91
40)	1,2-Dichloropropane	14.50	62.8	183429	199.11	ug/L	66
41)	cis-1,3-Dichloropropene	16.40	74.8	310814	314.82	ug/L	80
42)	Trichloroethene	14.06	129.8	183145	200.07	ug/L	91
44)	Dibromochloromethane	19.26	128.7	210157	303.42	ug/L	97
45)	1,1,2-Trichloroethane	18.26	96.8	131985	212.54	ug/L	92
46)	Benzene	12.43	77.8	589697	180.15	ug/L	93
47)	trans-1,3-Dichloropropene	17.79	74.8	351779	83.69	ug/L	87
48)	2-Chloroethylvinylether	16.02	62.8	100912	236.79	ug/L	78
49)	1,2-Dibromoethane	19.54	106.9	192168	195.33	ug/L	91
50)	Bromoform	22.19	172.6	156480	228.50	ug/L	94
53)	*Chlorobenzene-d5	20.53	116.8	111938	50.00	ug/L	77
5	4-Methyl-2-Pentanone	16.63	42.8	197472	185.06	ug/L	95
5	2-Hexanone	18.79	42.8	135128	180.72	ug/L	93
56)	Tetrachloroethene	18.82	163.7	184247	201.44	ug/L	92
58)	1,1,2,2-Tetrachloroethane	22.94	82.8	198933	181.65	ug/L	91
60)	Toluene	17.26	91.0	707285	187.06	ug/L	92
61)	Toluene-d8	17.07	97.8	611992	198.38	ug/L	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
62)	Chlorobenzene	20.59	111.8	436239	192.30	ug/L	88
63)	Ethylbenzene	20.84	105.8	227288	192.58	ug/L	98
64)	Styrene	21.86	103.8	413643	169.14	ug/L	84
65)	Xylene (total)mp	21.06	105.8	450520	306.61	ug/L	91
66)	Xylene (total)o	21.80	105.8	234411	163.65	ug/L	92
69)	Isopropylbenzene	22.49	104.8	3458	3458.00	NO CALIB	92
71)	1,2,3-Trichloropropane	24.57	74.8	164157	182.06	ug/L	54
80)	1,3-Dichlorobenzene	24.71	145.8	355734	169.06	ug/L	91
81)	1,4-Dichlorobenzene	24.71	145.8	355734	179.11	ug/L	91
82)	1,2-Dichlorobenzene	25.26	145.8	175253	195.88	ug/L	88
90)	Pentachloroethane	24.04	167.0	2650	2650.00	NO CALIB	91
91)	Bromofluorobenzene	22.77	94.8	351060	238.89	ug/L	88

* Compound is ISTD

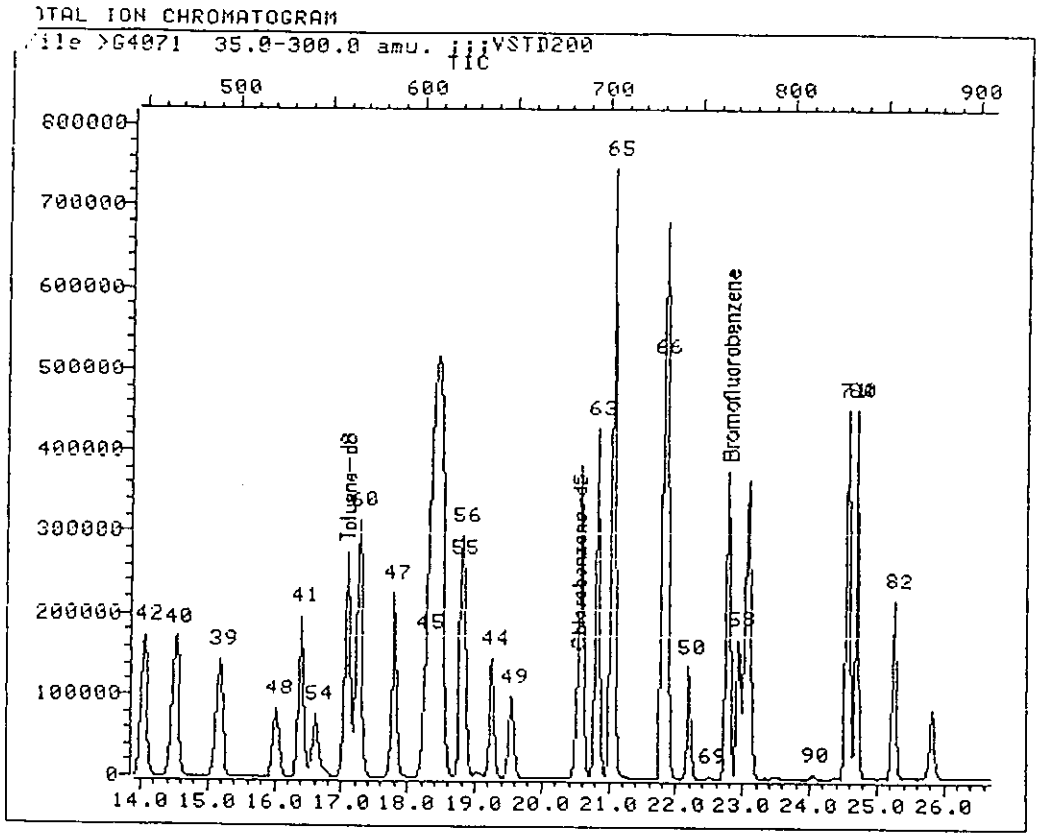


Data File: >G4071::G2 Quant Output File: ^G4071::QT
Name: ;;;VSTD200
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 12:39
Injected at: 930209 12:12

TIC page 1 of 2



Data File: >G4071::G2 Quant Output File: ^G4071::QT
Name: ;;;VSTD200
Misc: HP5995:G;;;LLW;DF1 ;G1914

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930205 10:47

Operator ID: MSG
Quant Time: 930209 12:39
Injected at: 930209 12:12

TIC page 2 of 2

7A
VOLATILE CONTINUING CALIBRATION CHECK

0240

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Instrument ID: HP5995G Calibration Date: 02/12/93 Time: 2029

Lab File ID: G4147.D Init. Calibration Date(s): 02/09/93

Heated Purge: (Y/N) N Init. Calibration Times: 0909 1212

GC Column:007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	1.422	1.257		11.6		
Bromomethane	1.541	1.628	0.100	-5.7	25.0	
Vinyl Chloride	1.981	1.873	0.100	5.4	25.0	
Chloroethane	1.224	1.178		3.7		
Methylene Chloride	2.005	1.797		10.3		
Acetone	1.467	0.878		40.2		
Carbon Disulfide	5.884	5.500		6.5		
1,1-Dichloroethene	1.731	1.645	0.100	5.0	25.0	
1,1-Dichloroethane	3.993	3.707	0.200	7.2	25.0	
1,2-Dichloroethene (total)	1.938	1.878		3.1		
Chloroform	3.746	3.735	0.200	0.3	25.0	
1,2-Dichloroethane	6.197	5.901	0.100	4.8	25.0	
2-Butanone	1.352	0.978		27.7		
1,1,1-Trichloroethane	0.687	0.897	0.100	-30.5	25.0	<-
Carbon Tetrachloride	0.547	0.652	0.100	-19.2	25.0	
Bromodichloromethane	0.560	0.625	0.200	-11.7	25.0	
1,2-Dichloropropane	0.338	0.308		8.9		
cis-1,3-Dichloropropene	0.371	0.349	0.200	6.0	25.0	
Trichloroethene	0.347	0.372	0.300	-7.1	25.0	
Dibromochloromethane	0.366	0.395	0.100	-7.8	25.0	
1,1,2-Trichloroethane	0.242	0.231	0.100	4.4	25.0	
Benzene	1.128	1.122	0.500	0.6	25.0	
trans-1,3-Dichloropropene	1.584	1.566	0.100	1.2	25.0	
Bromoform	0.270	0.290	0.100	-7.4	25.0	
4-Methyl-2-Pentanone	0.486	0.388		20.2		
2-Hexanone	0.339	0.265		21.9		
Tetrachloroethene	0.460	0.501	0.200	-8.8	25.0	
1,1,2,2-Tetrachloroethane	0.470	0.416	0.500	11.4	25.0	<-
Toluene	1.648	1.635	0.400	0.8	25.0	
Chlorobenzene	1.036	1.054	0.500	-1.7	25.0	
Ethylbenzene	0.542	0.558	0.100	-2.9	25.0	
Styrene	1.078	1.087	0.300	-0.8	25.0	
Xylene (total)	0.614	0.661	0.300	-7.5	25.0	
Toluene-d8	1.426	1.335		6.4		
Bromofluorobenzene	0.921	0.824	0.200	10.5	25.0	
1,2-Dichloroethane-d4	3.786	3.376		10.8		

All other compounds must meet a minimum RRF of 0.010.

QUANT REPORT

Operator ID: MSG
Output File: ^G4147::QT
Data File: >G4147::G2
Name: ;;;VSTD050
Misc: RMD 02/12/93

Quant Rev: 6 Quant Time: 930212 20:57
Injected at: 930212 20:29
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1919

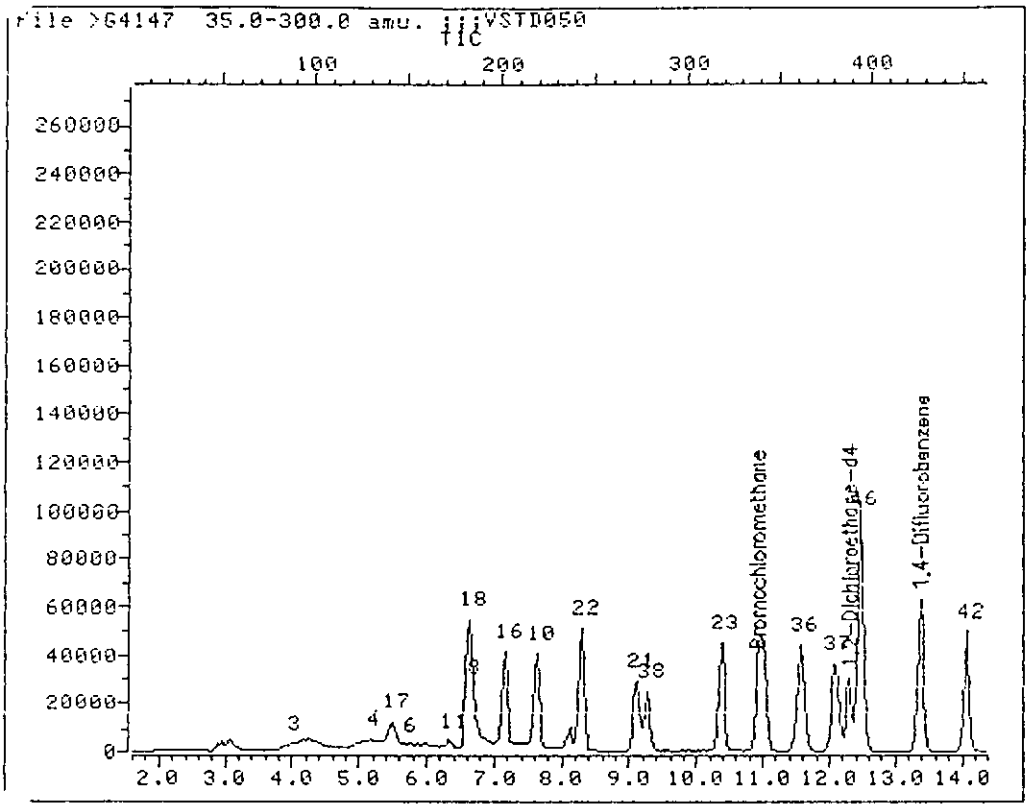
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 10:30

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.92	127.8	25516	50.00	ug/L	89
3)	Chloromethane	4.01	49.8	32067	57.70	ug/L	100
4)	Bromomethane	5.19	93.7	41531	51.20	ug/L	100
5)	Vinyl Chloride	4.28	61.8	47795	53.71	ug/L	100
6)	Chloroethane	5.75	63.8	30069M	51.03	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.69	101.0	74077M	119.81	ug/L	94
10)	Methylene Chloride	7.63	83.8	45858	54.54	ug/L	94
11)	Acrolein	6.36	55.8	9228	97.19	ug/L	91
13)	Acetone	6.66	42.8	22398	50.54	ug/L	89
14)	Acrylonitrile	8.12	52.8	22018	101.29	ug/L	88
16)	Carbon Disulfide	7.16	75.8	140344	52.54	ug/L	98
	Trichlorofluoromethane	5.50	100.8	48527M	92.73	ug/L	96
1[illegible]	1,1-Dichloroethene	6.63	95.8	41975	49.98	ug/L	90
21)	1,1-Dichloroethane	9.12	62.8	94591	51.59	ug/L	95
22)	1,2-Dichloroethene (total)t	8.29	95.8	47596	52.15	ug/L	97
23)	1,2-Dichloroethene (total)c	10.36	95.8	48260	51.13	ug/L	91
24)	2-Butanone	10.36	43.0	24955	47.61	ug/L	96
28)	Chloroform	11.00	82.8	95308	52.40	ug/L	97
29)	1,2-Dichloroethane	12.49	61.8	150581	51.37	ug/L	84
30)	1,2-Dichloroethane-d4	12.30	64.8	86132	51.25	ug/L	87
34)	*1,4-Difluorobenzene	13.37	113.8	132089	50.00	ug/L	95
36)	1,1,1-Trichloroethane	11.58	96.8	118470	53.41	ug/L	94
37)	Carbon Tetrachloride	12.08	116.8	86159	50.24	ug/L	94
38)	Vinyl Acetate	9.26	42.8	118003	47.70	ug/L	99
39)	Bromodichloromethane	15.17	82.8	82572	50.08	ug/L	90
40)	1,2-Dichloropropane	14.54	62.8	40619	48.69	ug/L	51
41)	cis-1,3-Dichloropropene	16.36	74.8	70979	73.19	ug/L	87
42)	Trichloroethene	14.07	129.8	49116	50.33	ug/L	95
44)	Dibromochloromethane	19.19	128.7	52169	45.57	ug/L	95
45)	1,1,2-Trichloroethane	18.19	96.8	30515	46.97	ug/L	89
46)	Benzene	12.46	77.8	148140	50.16	ug/L	88
47)	trans-1,3-Dichloropropene	17.74	74.8	86857	19.59	ug/L	91
48)	2-Chloroethylvinylether	16.00	62.8	21843	46.20	ug/L	79
49)	1,2-Dibromoethane	19.49	106.9	46017	47.63	ug/L	96
50)	Bromoform	22.17	172.6	38274	46.84	ug/L	96
53)	*Chlorobenzene-d5	20.49	116.8	102891	50.00	ug/L	83
54)	4-Methyl-2-Pentanone	16.58	42.8	39873	49.96	ug/L	96
[illegible]	2-Hexanone	18.75	42.8	27270	50.17	ug/L	87
5[illegible]	Tetrachloroethene	18.75	163.7	51530	50.89	ug/L	89
58)	1,1,2,2-Tetrachloroethane	22.92	82.8	42841	49.12	ug/L	91
60)	Toluene	17.22	91.0	168249	51.92	ug/L	94
61)	Toluene-d8	17.05	97.8	137385	49.87	ug/L	99
62)	Chlorobenzene	20.54	111.8	108413	50.87	ug/L	92

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.79	105.8	57374	50.34	ug/L	98
64)	Styrene	21.81	103.8	111864	47.53	ug/L	73
65)	Xylene (total)mp	21.01	105.8	137229	99.77	ug/L	87
66)	Xylene (total)o	21.79	105.8	67961	51.58	ug/L	88
71)	1,2,3-Trichloropropane	24.55	74.8	47206	51.32	ug/L	54
80)	1,3-Dichlorobenzene	24.55	145.8	106366	50.46	ug/L	94
81)	1,4-Dichlorobenzene	24.55	145.8	106366	51.55	ug/L	94
82)	1,2-Dichlorobenzene	24.69	145.8	98992	112.43	ug/L	93
91)	Bromofluorobenzene	22.75	94.8	84803	51.54	ug/L	88

* Compound is ISTD

TAL ION CHROMATOGRAM

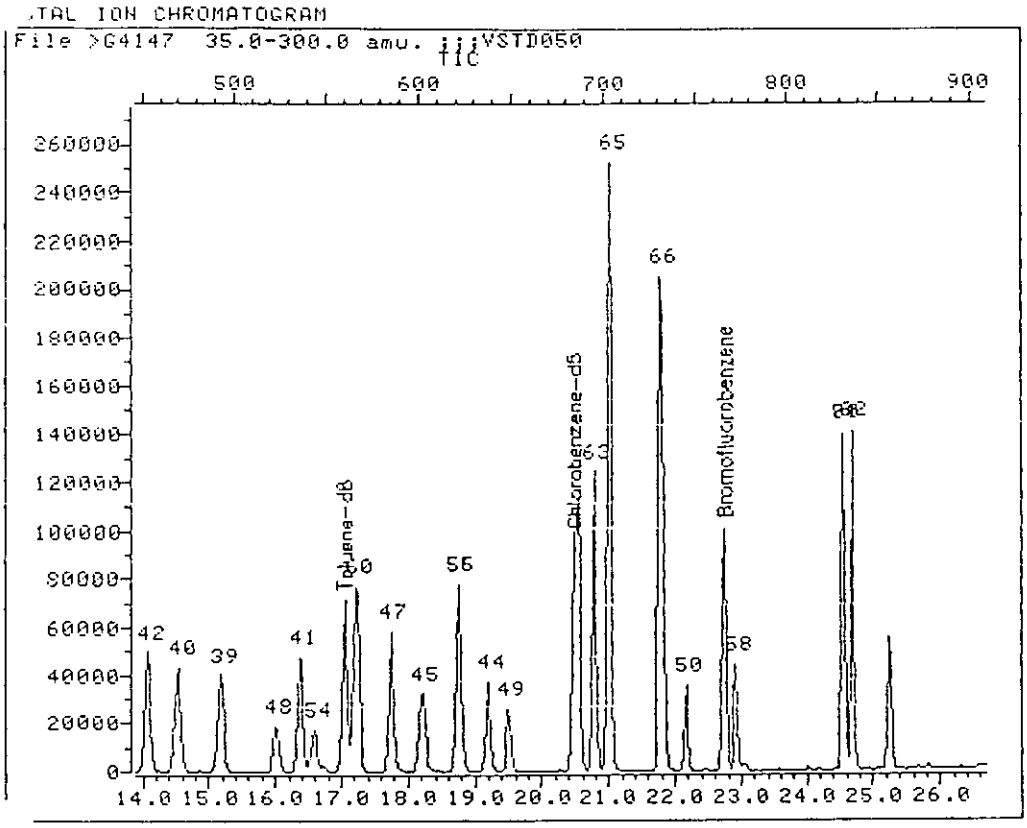


Data File: >G4147::G2 Quant Output File: ^G4147::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 10:30

Operator ID: MSG
Quant Time: 930212 20:57
Injected at: 930212 20:29

TIC page 1 of 2



Data File: >G4147::G2 Quant Output File: ^G4147::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 10:30

Operator ID: MSG
Quant Time: 930212 20:57
Injected at: 930212 20:29

TIC page 2 of 2

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Instrument ID: HP5995G Calibration Date: 02/15/93 Time: 0914

Lab File ID: G4180.D Init. Calibration Date(s): 02/09/93

Heated Purge: (Y/N) N Init. Calibration Times: 0909 1212

GC Column:007-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D	
Chloromethane	1.422	1.202		15.4		
Bromomethane	1.541	1.711	0.100	-11.1	25.0	
Vinyl Chloride	1.981	1.929	0.100	2.6	25.0	
Chloroethane	1.224	1.371		-11.9		
Methylene Chloride	2.005	1.981		1.2		
Acetone	1.467	1.137		22.5		
Carbon Disulfide	5.884	5.843		0.7		
1,1-Dichloroethene	1.731	1.775	0.100	-2.5	25.0	
1,1-Dichloroethane	3.993	3.889	0.200	2.6	25.0	
1,2-Dichloroethene (total)	1.938	1.959		-1.1		
Chloroform	3.746	4.020	0.200	-7.3	25.0	
1,2-Dichloroethane	6.197	6.402	0.100	-3.3	25.0	
2-Butanone	1.352	1.145		15.3		
1,1,1-Trichloroethane	0.687	0.920	0.100	-33.9	25.0	<-
Carbon Tetrachloride	0.547	0.676	0.100	-23.5	25.0	
Bromodichloromethane	0.560	0.658	0.200	-17.5	25.0	
1,2-Dichloropropane	0.338	0.336		0.3		
cis-1,3-Dichloropropene	0.371	0.382	0.200	-2.8	25.0	
Trichloroethene	0.347	0.360	0.300	-3.6	25.0	
Dibromochloromethane	0.366	0.429	0.100	-17.0	25.0	
1,1,2-Trichloroethane	0.242	0.260	0.100	-7.6	25.0	
Benzene	1.128	1.122	0.500	0.5	25.0	
trans-1,3-Dichloropropene	1.584	1.733	0.100	-9.4	25.0	
Bromoform	0.270	0.295	0.100	-9.3	25.0	
4-Methyl-2-Pentanone	0.486	0.424		12.8		
2-Hexanone	0.339	0.315		7.3		
Tetrachloroethene	0.460	0.486	0.200	-5.6	25.0	
1,1,2,2-Tetrachloroethane	0.470	0.458	0.500	2.6	25.0	<-
Toluene	1.648	1.618	0.400	1.9	25.0	
Chlorobenzene	1.036	1.078	0.500	-4.0	25.0	
Ethylbenzene	0.542	0.562	0.100	-3.8	25.0	
Styrene	1.078	1.154	0.300	-7.0	25.0	
Xylene (total)	0.614	0.644	0.300	-4.7	25.0	
Toluene-d8	1.426	1.392		2.4		
Bromofluorobenzene	0.921	0.798	0.200	13.3	25.0	
1,2-Dichloroethane-d4	3.786	3.674		2.9		

All other compounds must meet a minimum RRF of 0.010.

QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930215 09:41
Output File: ^G4180::QT Injected at: 930215 09:14
Data File: >G4180::G2 Dilution Factor: 1.00000
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1921

ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

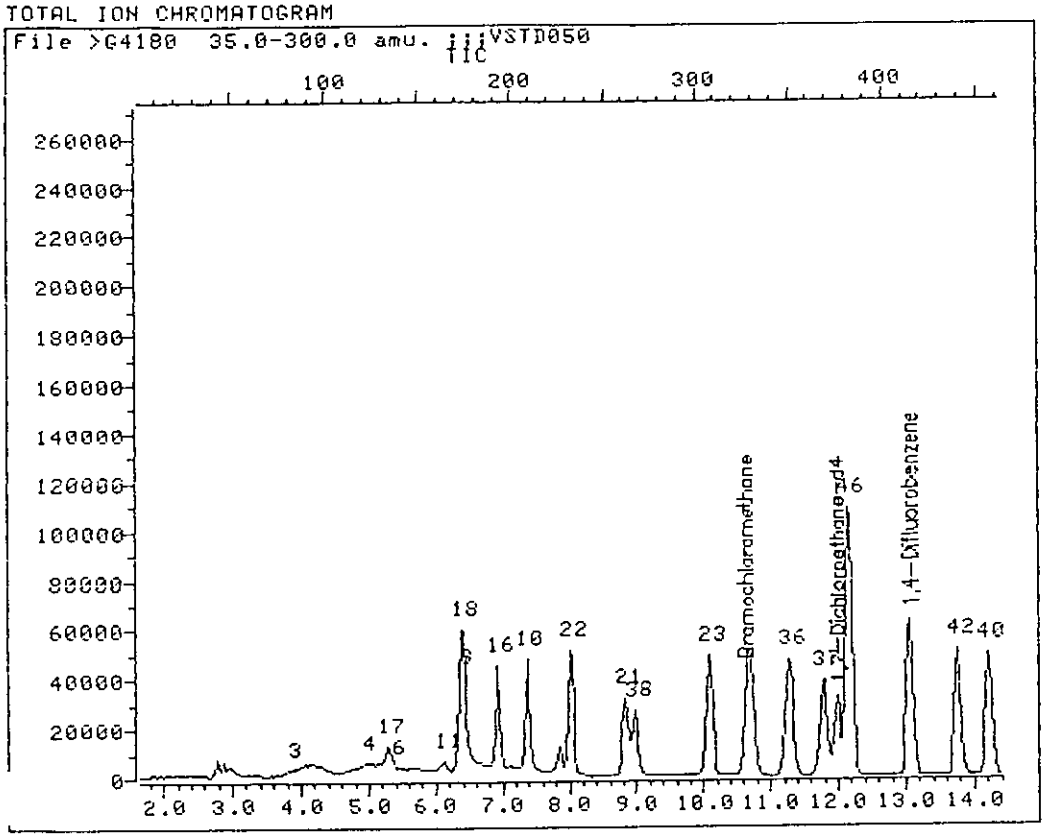
2/15/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.63	127.8	25406	50.00	ug/L	85
3)	Chloromethane	3.89	49.8	30547	47.84	ug/L	100
4)	Bromomethane	5.00	93.7	43468	52.56	ug/L	100
5)	Vinyl Chloride	4.19	61.8	49017	51.50	ug/L	100
6)	Chloroethane	5.44	63.8	34819M	58.15	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.43	101.0	35257	23.90	ug/L	93
10)	Methylene Chloride	7.37	83.8	50319	55.10	ug/L	98
11)	Acrolein	6.13	55.8	11142	121.26	ug/L	99
13)	Acetone	6.41	42.8	28892	64.78	ug/L	89
14)	Acrylonitrile	7.84	52.8	26743	121.99	ug/L	96
16	Carbon Disulfide	6.93	75.8	148438	53.11	ug/L	99
17)	Trichlorofluoromethane	5.30	100.8	28546	29.54	ug/L	94
18)	1,1-Dichloroethene	6.38	95.8	45086	53.94	ug/L	91
21)	1,1-Dichloroethane	8.84	62.8	98795	52.45	ug/L	97
22)	1,2-Dichloroethene (total)t	8.01	95.8	49156	51.86	ug/L	95
23)	1,2-Dichloroethene (total)c	10.08	95.8	50405	52.45	ug/L	92
24)	2-Butanone	10.08	43.0	29090	58.54	ug/L	97
28)	Chloroform	10.72	82.8	102134	53.81	ug/L	96
29)	1,2-Dichloroethane	12.18	61.8	162659	54.24	ug/L	85
30)	1,2-Dichloroethane-d4	11.99	64.8	93354	54.43	ug/L	87
34)	*1,4-Difluorobenzene	13.07	113.8	136696	50.00	ug/L	95
36)	1,1,1-Trichloroethane	11.27	96.8	125810	51.31	ug/L	95
37)	Carbon Tetrachloride	11.77	116.8	92420	51.83	ug/L	95
38)	Vinyl Acetate	8.98	42.8	134877	55.22	ug/L	99
39)	Bromodichloromethane	14.86	82.8	89917	52.61	ug/L	91
40)	1,2-Dichloropropane	14.20	62.8	45997	54.71	ug/L	52
41)	cis-1,3-Dichloropropene	16.05	74.8	80375	84.25	ug/L	88
42)	Trichloroethene	13.76	129.8	49186	48.38	ug/L	90
44)	Dibromochloromethane	18.91	128.7	58597	54.27	ug/L	97
45)	1,1,2-Trichloroethane	17.90	96.8	35528	56.25	ug/L	88
46)	Benzene	12.15	77.8	153433	50.04	ug/L	85
47)	trans-1,3-Dichloropropene	17.43	74.8	99524	23.25	ug/L	95
48)	2-Chloroethylvinylether	15.69	62.8	26419	58.44	ug/L	80
49)	1,2-Dibromoethane	19.21	106.9	50167	52.67	ug/L	92
50)	Bromoform	21.95	172.6	40281	50.85	ug/L	92
53)	*Chlorobenzene-d5	20.24	116.8	109069	50.00	ug/L	83
54	4-Methyl-2-Pentanone	16.27	42.8	46208	54.66	ug/L	95
55)	2-Hexanone	18.44	42.8	34328	59.38	ug/L	89
56)	Tetrachloroethene	18.47	163.7	53007	48.52	ug/L	86
58)	1,1,2,2-Tetrachloroethane	22.72	82.8	49937	54.98	ug/L	91
60)	Toluene	16.91	91.0	176468	49.47	ug/L	96
61)	Toluene-d8	16.74	97.8	151806	52.12	ug/L	89

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.54	105.8	61314	50.41	ug/L	97
64)	Styrene	21.59	103.8	125883	53.08	ug/L	84
65)	Xylene (total)mp	20.76	105.8	143965	98.97	ug/L	90
66)	Xylene (total)o	21.56	105.8	70192	48.72	ug/L	85
71)	1,2,3-Trichloropropane	24.38	74.8	50982	50.94	ug/L	54
82)	1,2-Dichlorobenzene	24.38	145.8	111941	53.34	ug/L	92
91)	Bromofluorobenzene	22.53	94.8	87078	48.43	ug/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



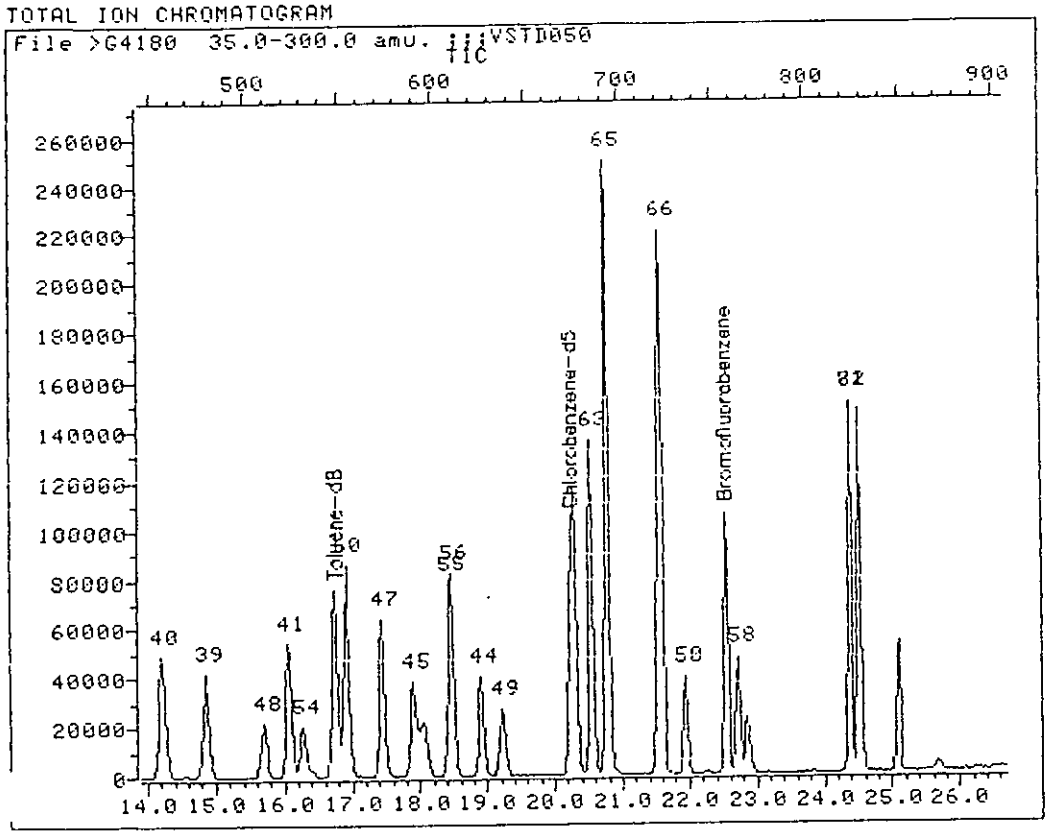
Data File: >G4180::G2 Quant Output File: ^G4180::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930215 09:41
Injected at: 930215 09:14

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G4180::G2 Quant Output File: ^G4180::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

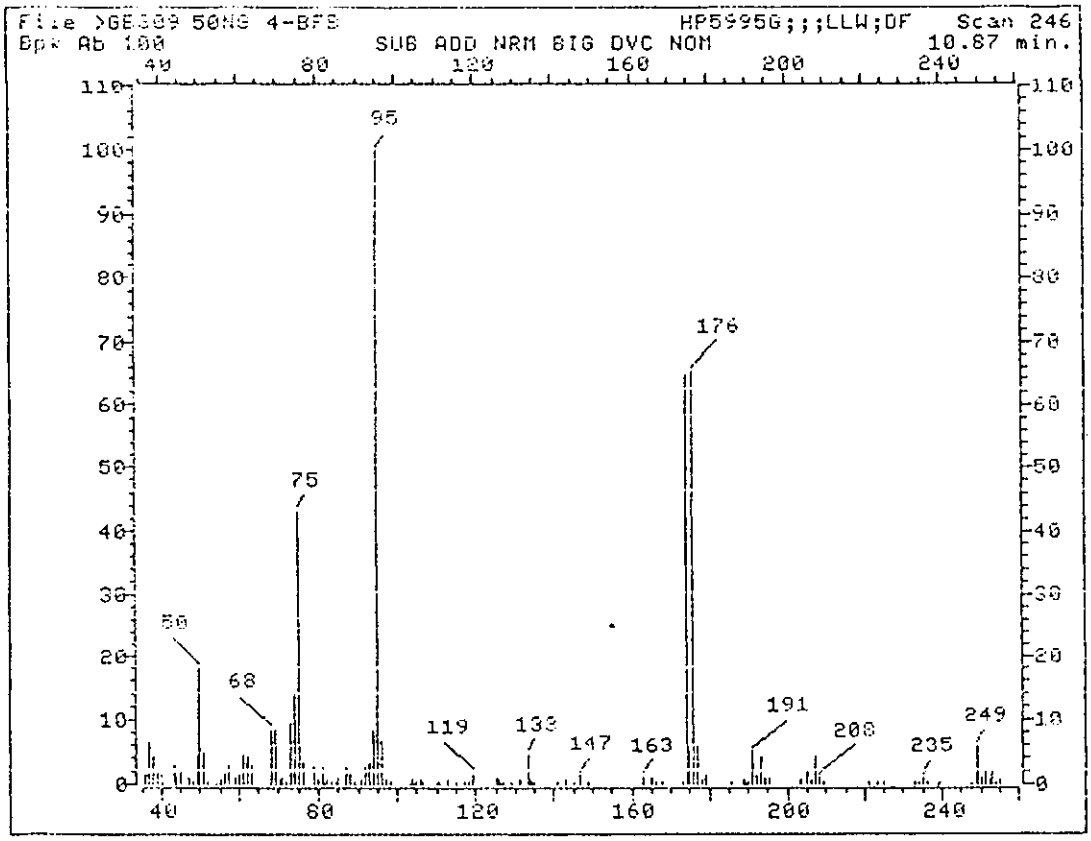
Operator ID: MSG
Quant Time: 930215 09:41
Injected at: 930215 09:14

TIC page 2 of 2

MS data file header from : >GB309

Sample: 50NG 4-BFB Operator: MSG MS 2/09/93 7:40
Misc : HP5995G;;;LLW;DF1 ;G1914
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # :***
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0



MS data file header from : >GB309

Sample: 50NG 4-BF8 Operator: MSL MS 2/09/93 7:40
Misc : HP5995G;;;LLW;DF1 ;G1914
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # :***
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0

>GB309 50NG 4-BF8 HP5995G;;;LLW;DF1 ;G1914

246 SUB ADD NRM BIG DVC NOM

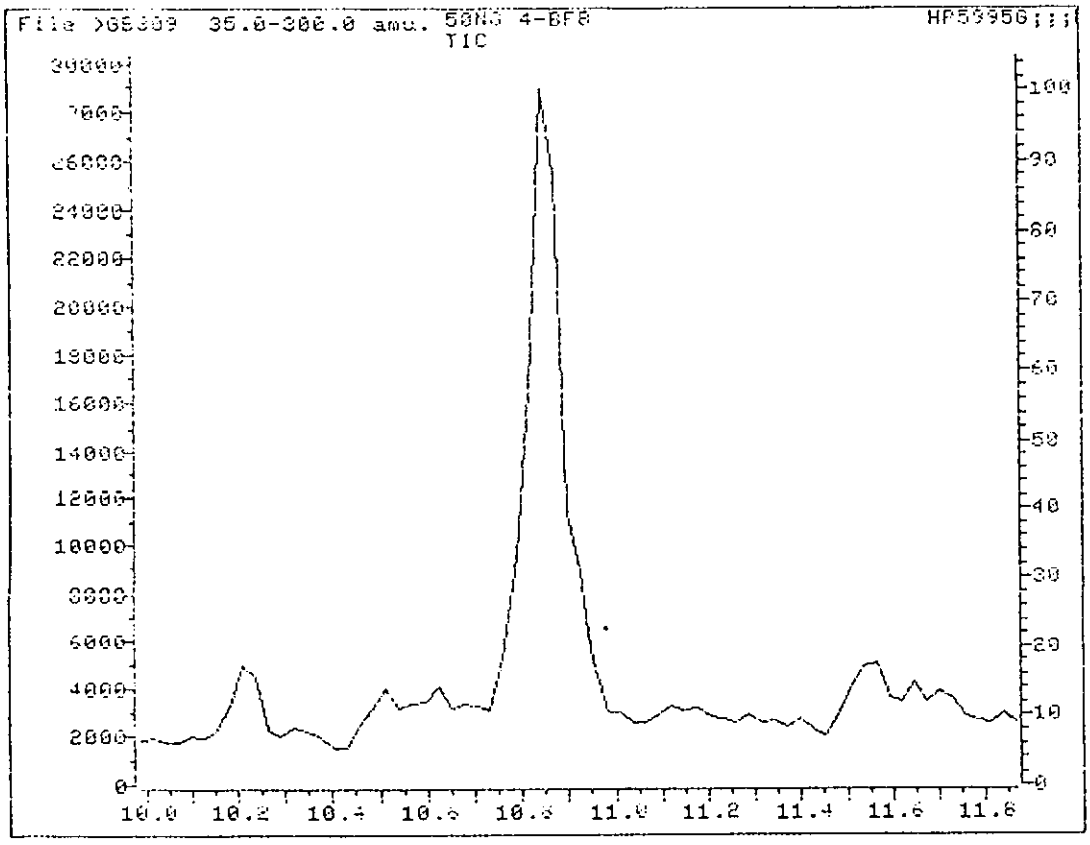
File: >GB309 Scan #: 246 Retn. time: 10.87

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.463	75.05	43.035	113.05	.853	179.10	1.416	251.20	1.902
37.05	6.417	76.05	3.232	115.05	.321	185.75	.297	252.20	.814
.05	4.030	78.95	2.332	116.95	.274	189.05	.571	253.10	2.050
.05	1.620	79.95	.298	118.05	.376	189.25	.180	254.10	.517
39.95	1.307	81.05	2.324	119.05	1.510	189.85	.329	255.10	.751
43.15	2.637	81.65	.203	125.00	.923	191.05	4.907	265.15	6.128
44.05	1.158	81.95	.673	125.90	.618	191.95	1.237	266.25	1.863
45.05	2.043	82.95	.266	126.30	.470	193.15	4.187	267.05	1.589
47.05	.916	83.45	.423	126.80	.509	193.95	.877	268.15	.657
48.05	.454	84.05	.376	129.10	.313	195.05	1.057	269.15	3.991
49.00	4.390	85.05	.877	130.90	.783	203.20	.704	270.25	.806
50.00	18.000	87.00	2.230	133.10	4.516	205.10	2.058	271.15	.626
51.00	4.766	88.00	1.737	133.80	.767	206.10	.657	274.55	.149
52.10	.360	88.90	.391	134.20	.227	207.10	4.023	275.75	.172
54.00	.157	91.00	.712	135.20	.477	208.10	.900	279.10	.157
55.10	.642	92.00	2.356	141.00	.485	209.20	.407	280.20	.250
56.00	1.730	93.00	3.162	143.00	.720	221.05	.470	281.20	67.413
57.10	2.794	94.10	8.382	145.35	.297	223.15	.391	282.20	18.931
58.90	1.190	95.10	100.000	147.05	1.276	225.05	.376	283.20	11.348
60.10	1.299	96.10	6.644	149.05	.282	233.05	.282	284.20	2.911
61.00	4.281	97.00	.736	163.00	1.127	234.15	.297	285.20	1.002
62.10	3.952	98.20	.344	165.10	1.041	235.15	.994	288.20	.329
63.10	2.723	102.90	.196	166.00	.219	236.15	.344	290.50	.227
68.05	8.468	103.80	.673	168.00	.407	236.15	.477	291.30	.149
69.05	8.358	104.10	.188	173.00	.470	239.00	.180	291.90	.203
70.05	.849	105.00	.297	174.00	64.650	239.20	.274	293.00	.188
70.95	.884	105.95	.548	175.00	5.024	239.70	.282	293.70	.329
71.95	.337	106.15	.532	176.10	65.128	247.30	.172	296.55	.657
.05	9.289	110.35	.438	177.10	5.752	249.00	5.682	297.75	.376
.05	14.118	110.95	.532	177.90	.689	250.10	.877	299.05	.470

MS data file header from : >GB309

Sample: 50NG 4-BFB Operator: MSD MS 2/09/93 7:40
Misc : HP5995G;;;LLW;DF1 ;G1914
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # :***
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 189

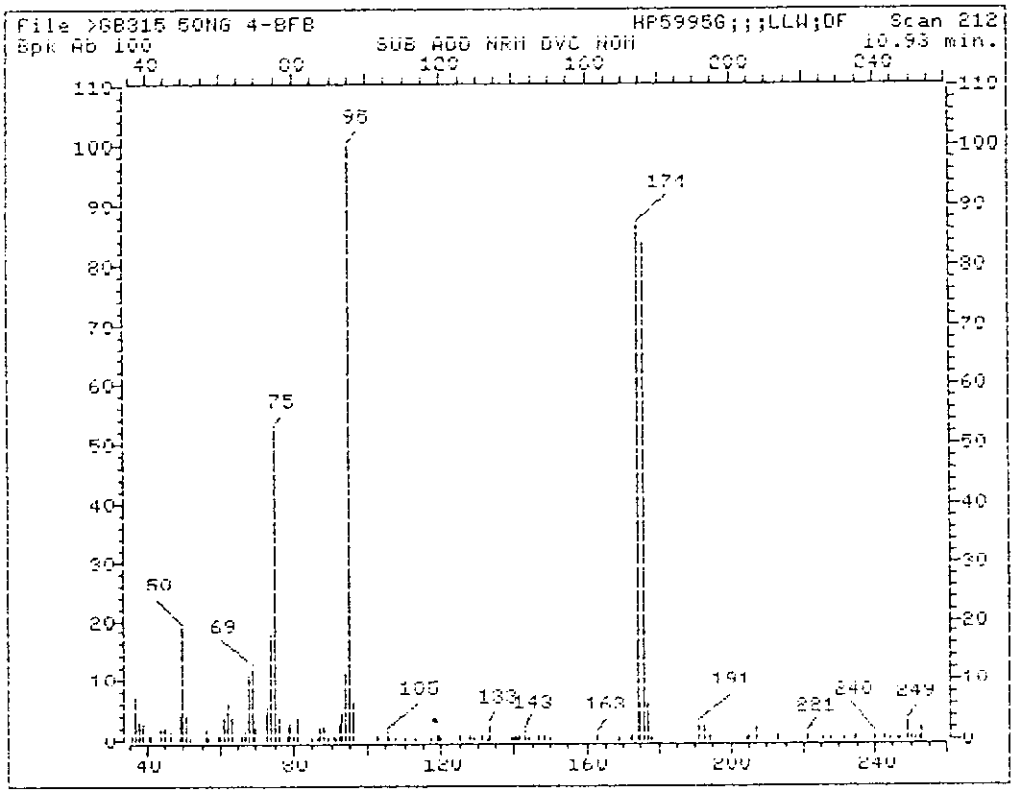
Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0



MS data file header from : >GB315

Sample: 50NG 4-BFB Operator: MSG MS 2/12/93 15:16
Misc : HP5995G;;;LLW;DF1 ;G1913
Sys. #: 2 MS model: 5B SW/HW rev.: 1A ALS # : 0
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0



Sample: S0NG 4-BFB Operator: MSG MS 2/12/93 19:16
Misc : HP59956;;;LLW;DFI ;61919
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method file: M_GBDP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures : 50. 180. 0. 0. 0.
Chromatographic times, min. : 1.0 0.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 12.0 0.0 0.0 0.0 0.0

>68315 50NG 4-BFB HP59956;;;LLW;DFI ;61919

212 SUB ADD NRM DVC NOM

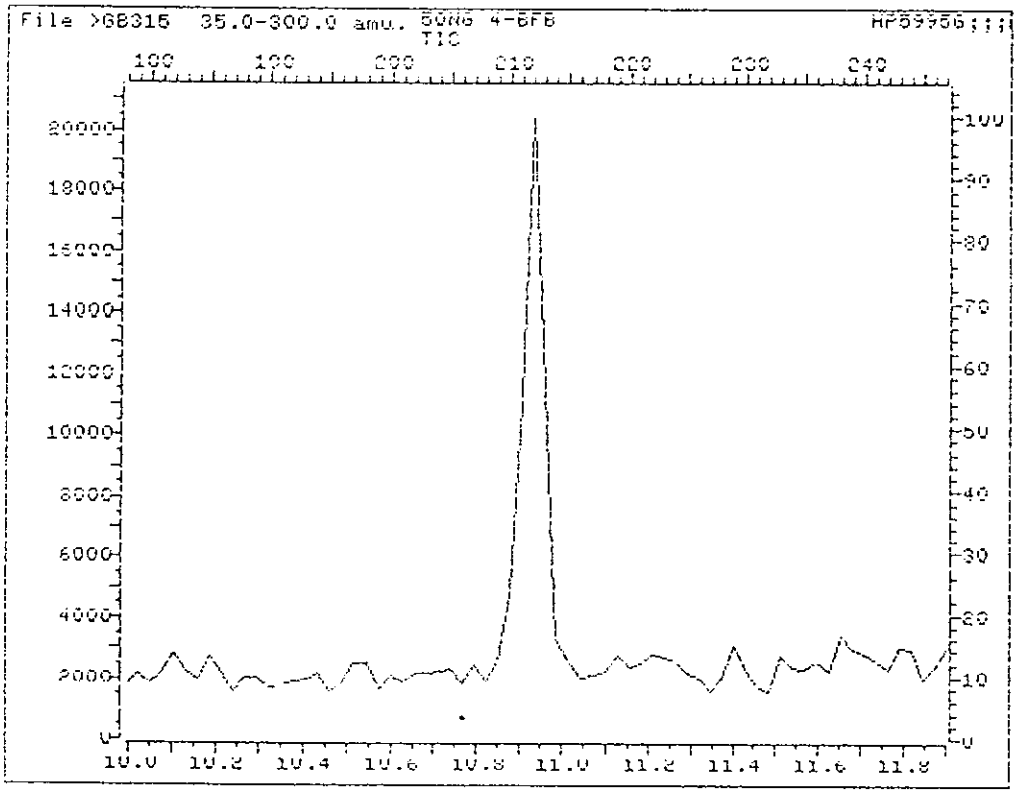
File: >68315 Scan #: 212 Retn. time: 10.93

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	.552	69.05	11.801	105.65	.254	163.10	.627	246.40	.298
37.05	7.116	69.95	1.954	106.05	.358	169.10	.313	247.00	.507
37.95	3.208	73.05	5.430	107.55	.298	172.20	.224	249.20	2.899
39.05	2.700	74.05	17.559	110.15	.358	172.90	.746	250.00	.985
40.85	.865	75.05	52.260	112.95	.283	174.00	86.618	251.10	.507
41.15	.806	76.05	3.730	117.05	.492	175.00	6.087	252.30	.477
44.05	1.596	78.25	.612	118.75	.686	176.00	83.649	253.10	1.939
45.15	2.029	79.05	2.626	119.05	.835	177.00	6.102	265.25	3.715
46.75	1.313	79.05	1.313	119.75	.298	178.00	.254	266.95	1.865
49.10	4.088	79.75	.746	125.20	1.104	191.05	2.551	269.25	.746
50.00	18.678	79.95	.806	127.80	1.014	192.85	2.551	270.25	.865
51.00	3.998	80.95	3.580	128.90	.507	193.95	.656	271.05	.776
51.70	.358	84.65	.373	131.00	.567	194.25	.746	272.15	.343
56.00	1.850	86.30	.492	132.60	.194	204.20	.328	273.95	.716
56.20	.865	87.00	1.925	133.10	2.402	205.10	1.104	278.80	.358
57.00	.298	87.10	1.193	139.20	.298	207.10	2.014	280.20	.254
59.30	.806	88.00	2.238	139.80	.269	212.90	.627	281.20	33.224
59.50	.925	89.20	.448	140.30	1.014	221.25	.776	282.20	8.116
60.10	.612	90.70	.776	140.90	.224	225.35	.477	283.10	4.520
61.00	3.849	91.20	.522	141.40	.597	227.35	.254	284.20	2.133
62.10	6.027	92.10	2.760	143.00	1.477	231.65	.298	286.20	.597
63.10	3.864	93.10	4.535	144.15	.283	234.45	.627	287.90	.298
65.80	.656	94.00	10.995	146.85	.746	234.75	.537	288.40	.119
66.20	.746	95.10	100.000	148.55	.716	240.00	.895	290.80	.791
66.80	.418	96.10	6.534	150.25	.522	242.90	.597	293.60	.418
67.10	1.223	102.50	.895	163.00	1.014	244.20	.537	298.65	.895
68.05	10.741	105.25	1.223						

MS data file header from : >GB315

Sample: 50NG 4-BFB Operator: MSG MS 2/12/93 19:16
Misc : HP59556:::LLW;DFi ;G1319
Sys. #: 2 MS model: 86 SW/HW rev.: 1A ALS # : 0
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

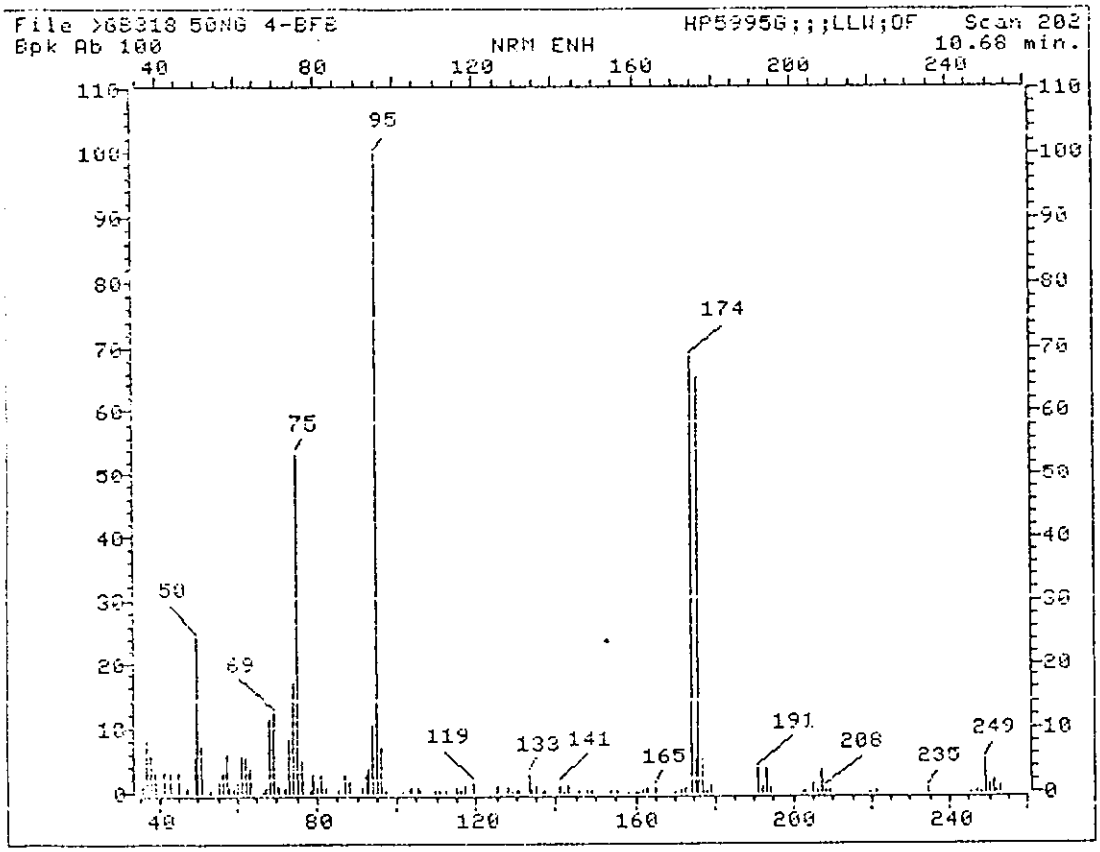
Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0



MS data file header from : >GB318

Sample: 50NG 4-BFB Operator: MSD MS 2/15/93 8:39
Misc : HP5995G;;;LLW;DF1 ;G1921
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0



MS data file header from : >GB318

Sample: 50NG 4-BPB Operator: MSD MS 2/15/93 8:35
Misc : HP5995G;;;LLW;DF1 ;G1921
Sys. #: 2 MS model: 95 SW/HW rev.: IA ALS # : 0
Method file: M_GBCP Tuning file: T_G No. of extra records: 2
Source temp.: 210 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0

>GB318 50NG 4-BPB HP5995G;;;LLW;DF1 ;G1921

202 NRM ENH

File: >GB318 Scan #: 202 Retn. time: 10.68

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	1.154	72.15	.784	110.85	.366	160.35	.080	219.45	.147
37.05	8.102	73.05	8.520	112.15	.366	161.05	.203	221.15	.239
39.05	5.981	74.05	16.948	114.95	.617	162.05	.283	234.85	.684
05	3.307	75.05	53.554	116.05	.326	163.00	.680	245.40	.068
41.15	3.343	76.05	4.930	117.05	1.066	164.90	.768	247.10	.239
43.05	2.945	78.25	.298	119.05	1.488	170.00	.096	248.30	.139
45.05	3.215	78.95	2.658	125.00	.883	171.40	.115	249.10	4.938
47.15	.676	79.95	.641	128.00	.557	171.70	.338	250.20	1.273
49.00	5.292	81.05	2.865	129.00	.131	172.90	.625	251.10	1.926
50.00	24.103	81.95	.688	130.00	.338	174.00	68.357	252.10	.414
51.10	7.266	85.15	.462	130.50	.302	175.10	5.042	253.20	1.027
53.10	.291	87.00	2.694	133.10	2.833	176.10	65.281	265.15	5.456
55.10	1.767	88.00	1.823	133.90	.497	177.10	5.217	266.25	1.496
56.10	3.223	91.10	.704	135.10	.919	178.10	.406	267.15	1.715
57.10	6.240	92.10	2.702	136.30	.147	179.10	.931	269.95	.255
58.10	.593	93.00	3.780	136.70	.064	191.05	3.641	281.20	60.553
59.00	.545	94.10	10.394	137.10	.207	192.05	.931	282.20	17.776
60.10	1.349	95.10	100.000	141.10	1.047	193.05	3.593	283.20	11.174
61.10	5.802	96.10	7.055	142.10	.088	194.15	.824	284.20	2.300
62.10	5.571	97.20	.330	143.10	.975	202.50	.175	285.10	.907
63.10	3.717	101.40	.155	145.95	.219	203.10	.505	286.40	.283
66.70	.115	102.90	.840	147.95	.366	205.10	1.433	287.40	.068
67.10	.601	103.90	.625	149.05	.430	206.10	.434	291.40	.084
68.05	11.421	105.20	.593	153.95	.211	207.10	3.271	297.85	.076
69.05	12.360	105.95	.350	155.15	.354	208.10	.529	298.25	.255
70.05	1.158	109.35	.314	157.95	.096	209.20	.247		

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0258

VBLKGI

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4148.D

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

% Moisture: not dec. _____ Data Analyzed: 02/12/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	4	J
591-78-6	2-Hexanone	6	J
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0259

VBLKGI

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4148.D

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

% Moisture: not dec. _____ Data Analyzed: 02/12/93

GC Column:007-624 ID: 0.53 (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/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
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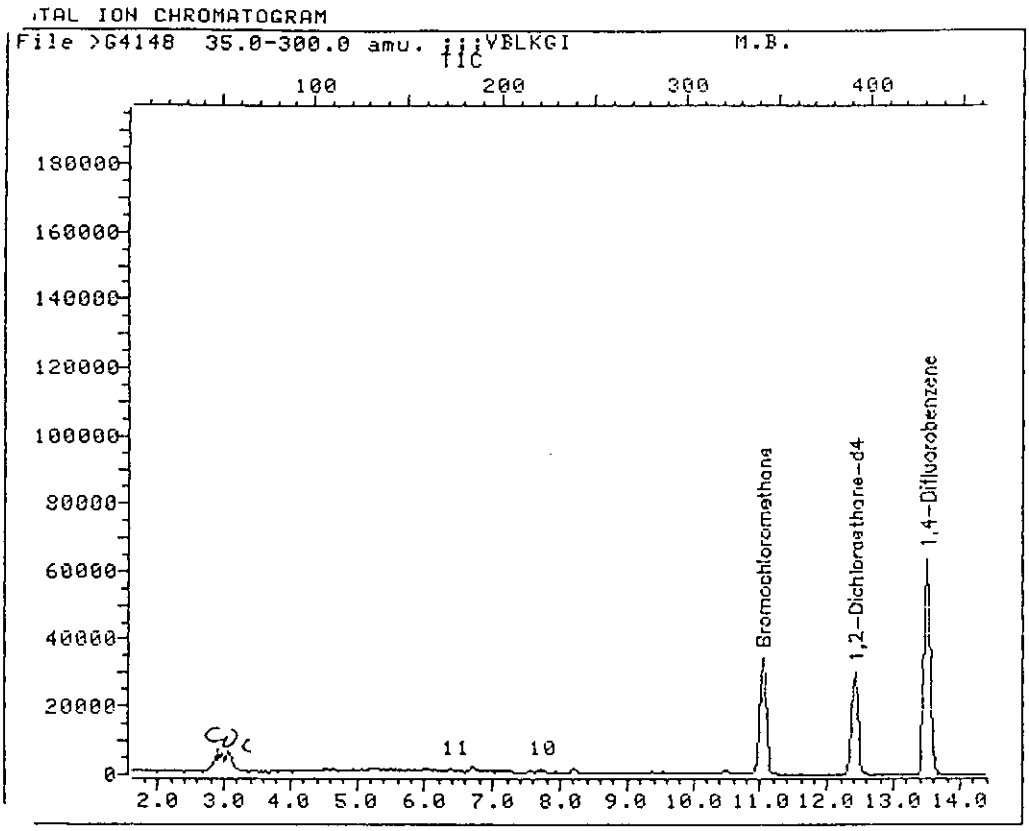
QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930212 22:23
Output File: ^G4148::QT Injected at: 930212 21:55
Data File: >G4148::G2 Dilution Factor: 1.00000
Name: ;;;VBLKGI
Misc: M.B. HP5995:G;;;LLW;DF1 ;G1919
RMD 2/13/93
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	11.04	127.8	25869	50.00	ug/L	79
10)	Methylene Chloride	7.70	83.8	1261	1.36	ug/L	93
~~11)~~	~~Acrolein~~	~~6.40~~	~~55.8~~	~~794~~	~~0.49~~	~~ug/L~~	65
13)	Acetone	6.71	42.8	7811	17.20	ug/L	93
14)	Acrylonitrile	8.20	52.8	3054	13.68	ug/L	92
24)	2-Butanone	10.49	43.0	5279	10.43	ug/L	99
30)	1,2-Dichloroethane-d4	12.43	64.8	87398	50.04	ug/L	89
34)	*1,4-Difluorobenzene	13.50	113.8	133368	50.00	ug/L	97
53)	*Chlorobenzene-d5	20.61	116.8	102287	50.00	ug/L	79
54)	4-Methyl-2-Pentanone	16.74	42.8	3506	4.42	ug/L	99
55)	2-Hexanone	18.87	42.8	3456	6.37	ug/L	89
5	~~1,1,2,2-Tetrachloroethane~~	~~23.02~~	~~82.8~~	~~1254~~	~~2.06~~	~~ug/L~~	~~94~~
6	Toluene-d8	17.18	97.8	144661	52.96	ug/L	91
91)	Bromofluorobenzene	22.85	94.8	87884	52.12	ug/L	98

* Compound is ISTD

LHD 02/15/93

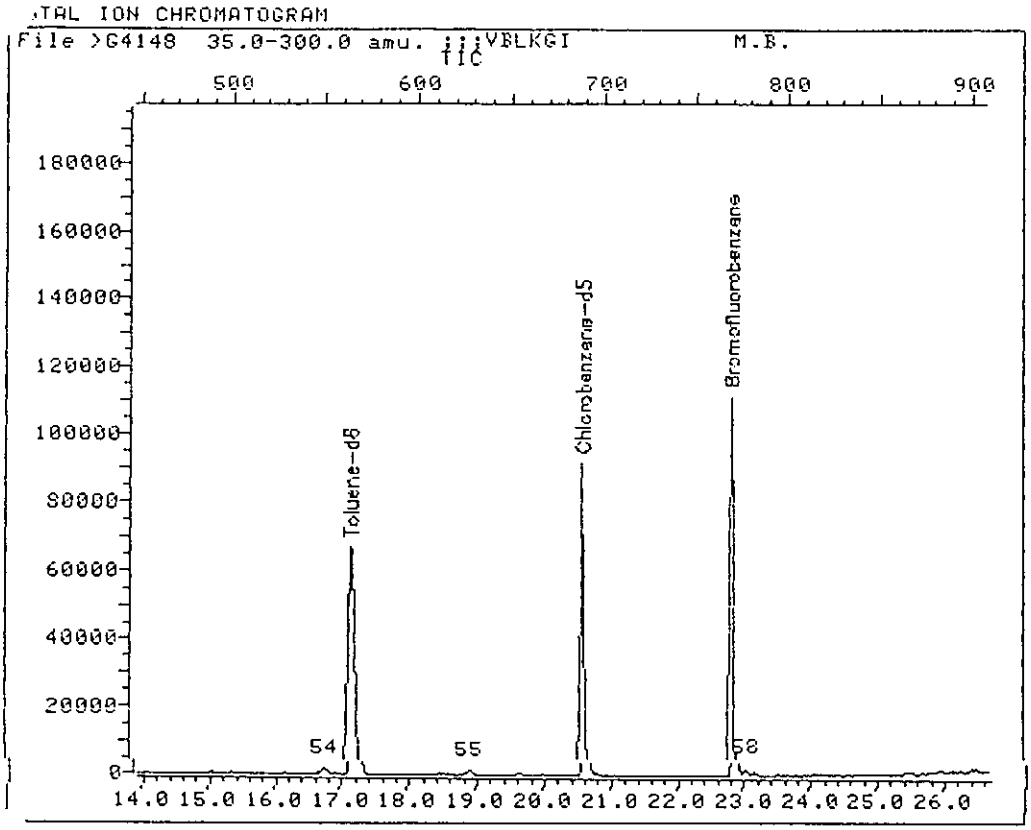


Data File: >G4148::G2 Quant Output File: ^G4148::QT
Name: ;;;VBLKGI
Misc: M.B. HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

Operator ID: MSG
Quant Time: 930212 22:23
Injected at: 930212 21:55

TIC page 1 of 2



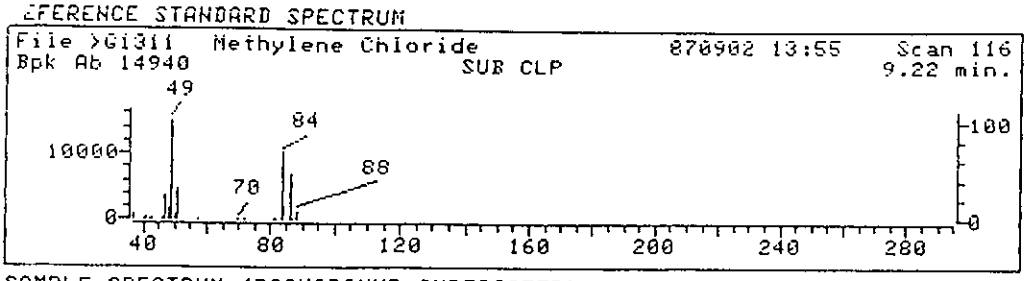
Data File: >G4148::G2 Quant Output File: ^G4148::QT
Name: ;;;VBLKGI
Misc: M.B. HP5995:G;;;LLW;DF1 ;G1919

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930212 21:54

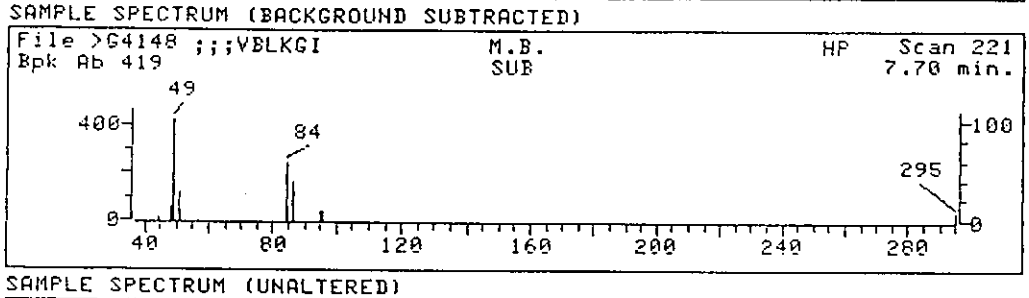
Operator ID: MSG
Quant Time: 930212 22:23
Injected at: 930212 21:55

TIC page 2 of 2

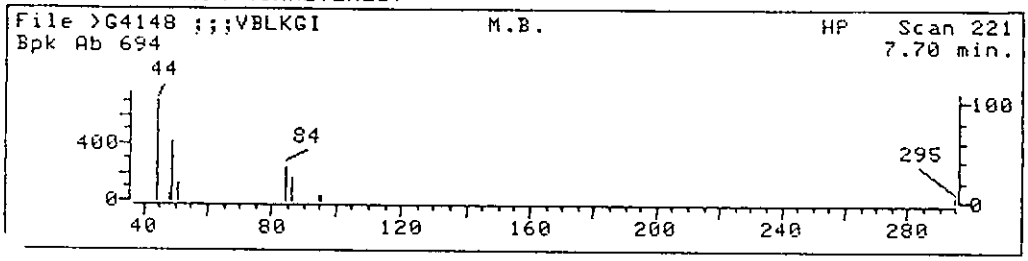
EFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

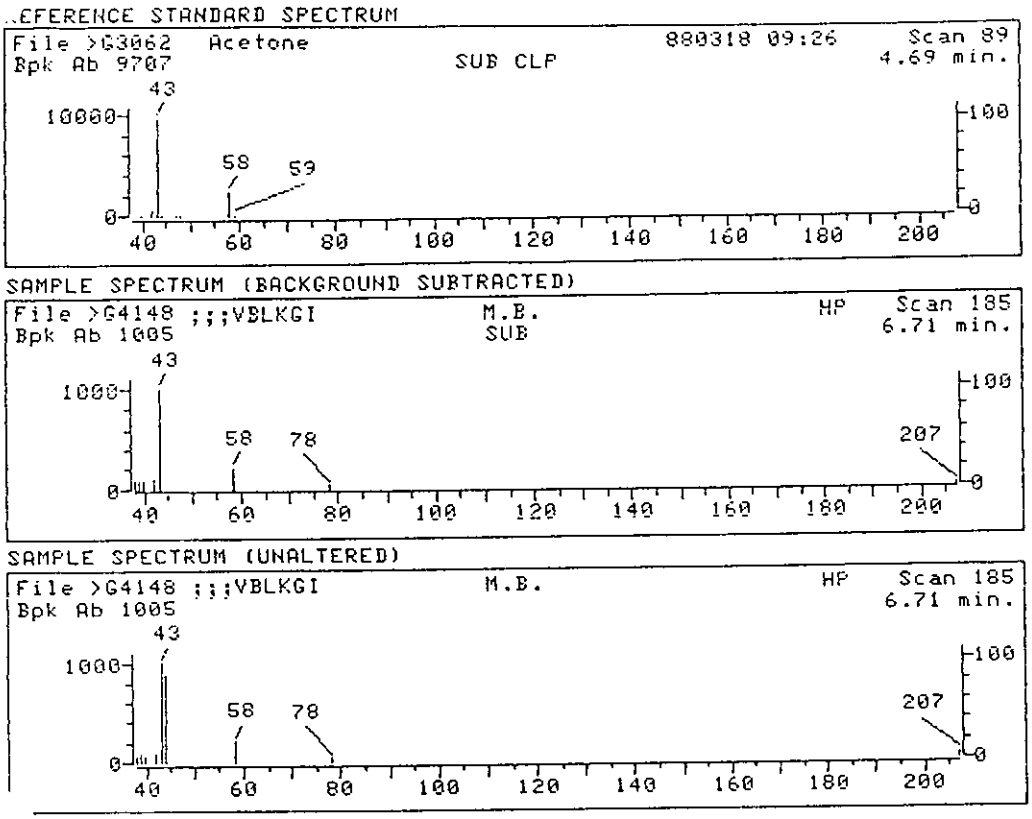


SAMPLE SPECTRUM (UNALTERED)



Data File: >G4148::G2 Quant Output File: ^G4148::QT
Name: ;;;VBLKGI
Misc: M.B. HP5995:G;;;LLW;DF1 ;G1919
Quant Time: 930212 22:23 Quant ID File: I_IFGW::N1
Injected at: 930212 21:55 Last Calibration: 930212 21:54

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 221
Retention Time: 7.70 min.
Quant Ion: 83.8
Area: 1261
Concentration: 1.36 ug/L
q-value: 93

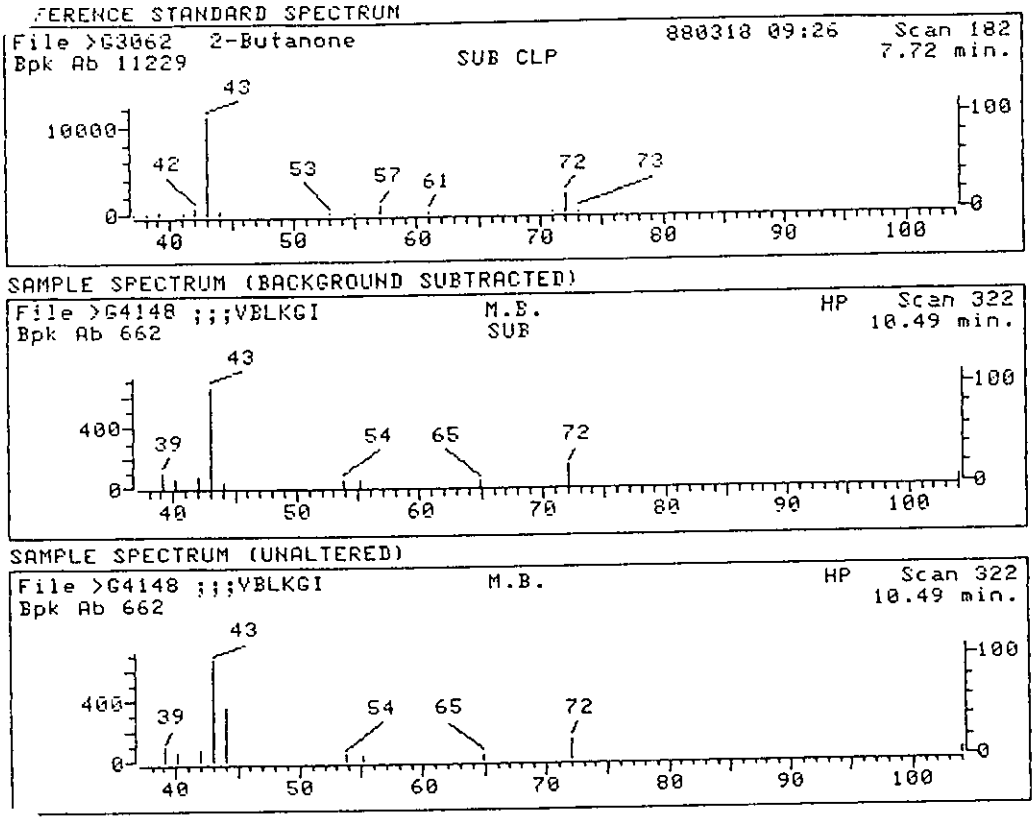


Data File: >G4148::G2
Name: ;;;VBLKGI
Misc: M.B.
Quant Time: 930212 22:23
Injected at: 930212 21:55

Quant Output File: ^G4148::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 13
Compound Name: Acetone
Scan Number: 185
Retention Time: 6.71 min.
Quant Ion: 42.8
Area: 7811
Concentration: 17.20 ug/L
q-value: 93



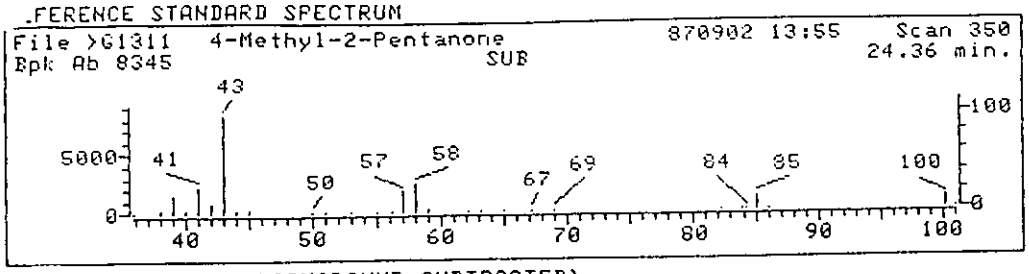
Data File: >G4148::G2
Name: ;;;VBLKGI
Misc: M.B.
Quant Time: 930212 22:23
Injected at: 930212 21:55

Quant Output File: ^G4148::QT

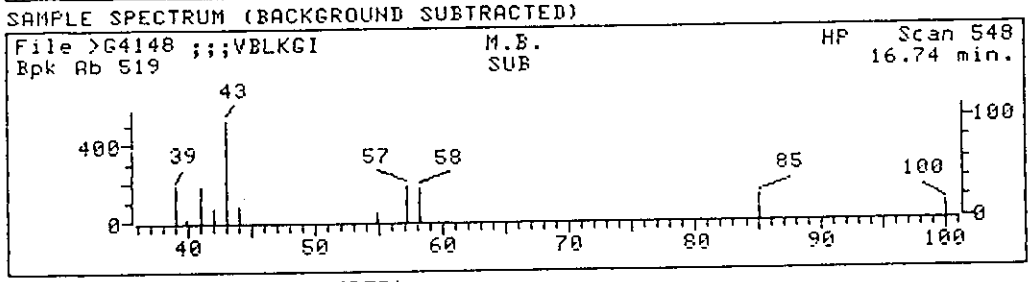
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 24
Compound Name: 2-Butanone
Scan Number: 322
Retention Time: 10.49 min.
Quant Ion: 43.0
Area: 5279
Concentration: 10.43 ug/L
q-value: 99

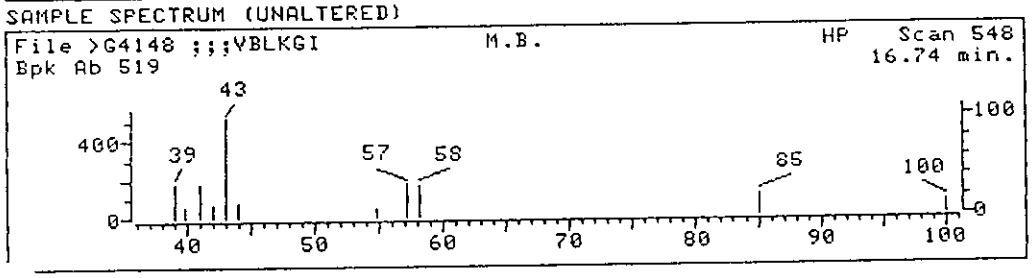
.FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



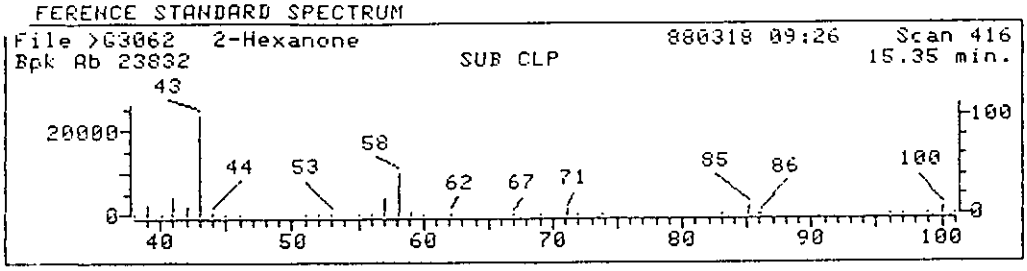
Data File: >G4148::G2
Name: ;;;VBLKGI
Misc: M.B.
Quant Time: 930212 22:23
Injected at: 930212 21:55

Quant Output File: ^G4148::QT

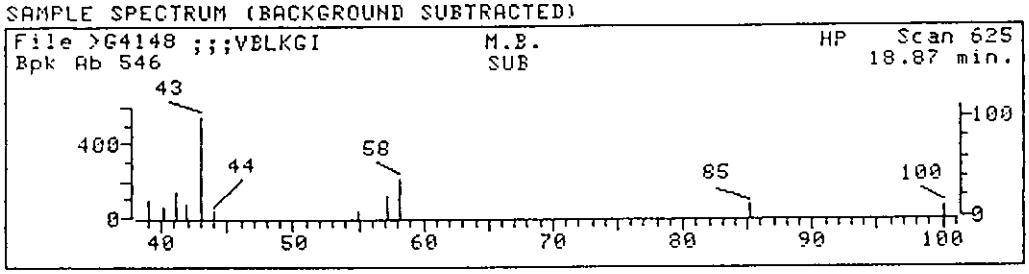
HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 54
Compound Name: 4-Methyl-2-Pentanone
Scan Number: 548
Retention Time: 16.74 min.
Quant Ion: 42.8
Area: 3506
Concentration: 4.42 ug/L
q-value: 99

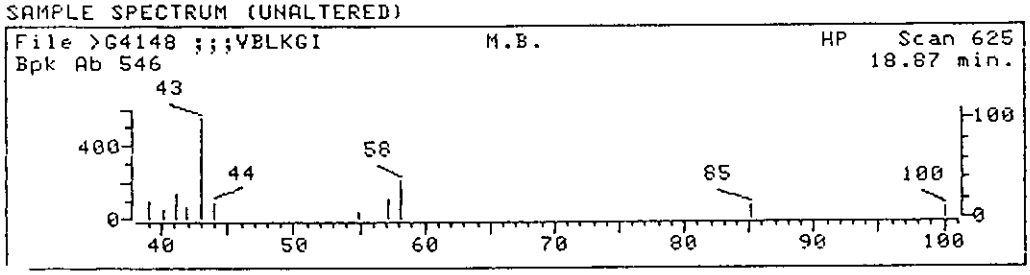
FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4148::G2
Name: ;;;VBLKGI
Misc: M.B.
Quant Time: 930212 22:23
Injected at: 930212 21:55

Quant Output File: ^G4148::QT

HP5995:G;;;LLW;DF1 ;G1919
Quant ID File: I_IFGW::N1
Last Calibration: 930212 21:54

Compound No: 55
Compound Name: 2-Hexanone
Scan Number: 625
Retention Time: 18.87 min.
Quant Ion: 42.8
Area: 3456
Concentration: 6.37 ug/L
q-value: 89

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKGK 0268

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4181.D

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

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKGK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148 0269

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4181.D

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

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (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/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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0 0270

QUANT REPORT

Operator ID: MSG
Output File: ^G4181::QT
Data File: >G4181::G2
Name: ;;;VBLKGK
Misc:

Quant Rev: 6 Quant Time: 930215 10:38
Injected at: 930215 10:11
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1921

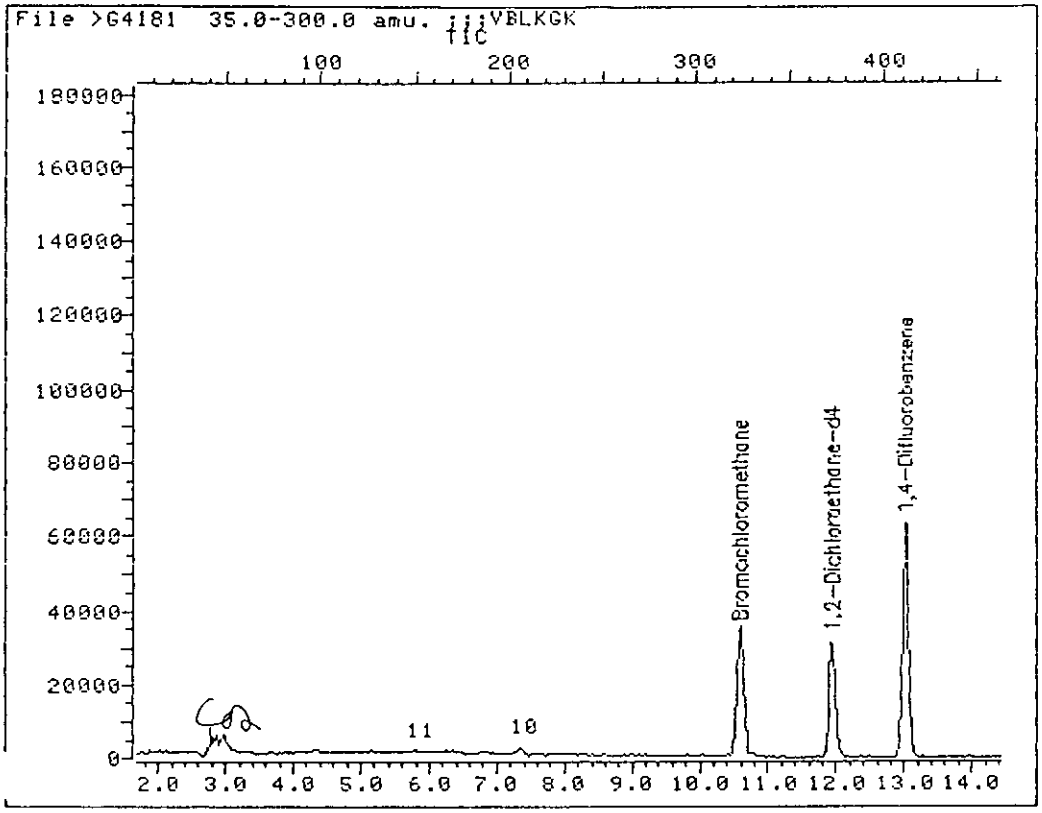
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.58	127.8	25840	50.00	ug/L	89
10)	Methylene Chloride	7.35	83.8	2291	2.24	ug/L	96
~~11)~~	~~Acrolein~~	~~5.83~~	~~55.8~~	~~72~~	~~.64~~	~~ug/L~~	~~35~~
13)	Acetone	6.38	42.8	3912	6.66	ug/L	95
~~20)~~	~~Chloroform~~	~~10.69~~	~~82.8~~	~~1107^~~	~~.53~~	~~ug/L~~	~~62~~
30)	1,2-Dichloroethane-d4	11.93	64.8	92705	48.82	ug/L	90
34)	*1,4-Difluorobenzene	13.01	113.8	142332	50.00	ug/L	95
53)	*Chlorobenzene-d5	20.24	116.8	107270	50.00	ug/L	84
61)	Toluene-d8	16.74	97.8	151447	50.72	ug/L	87
91)	Bromofluorobenzene	22.56	94.8	91366	53.34	ug/L	82

* Compound is ISTD

8/15/93

TOTAL ION CHROMATOGRAM



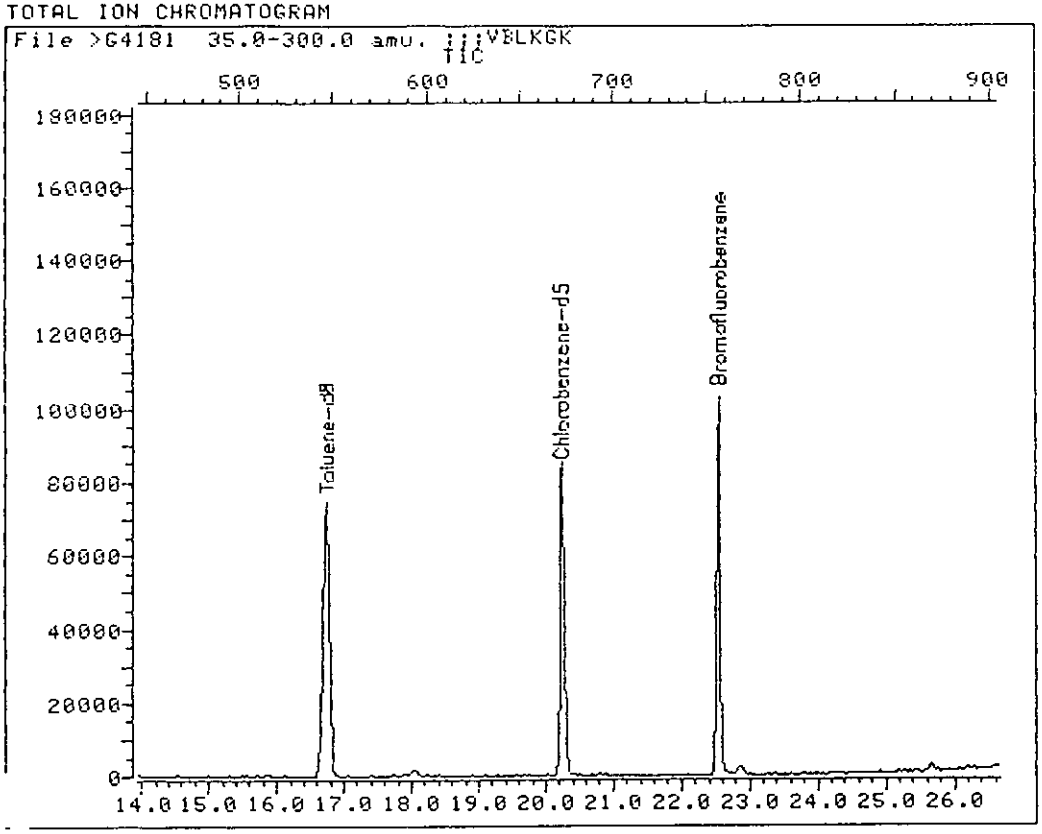
Data File: >G4181::G2 Quant Output File: ^G4181::QT
Name: ;;;VBLKGK
Misc: HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 10:38
Injected at: 930215 10:11

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



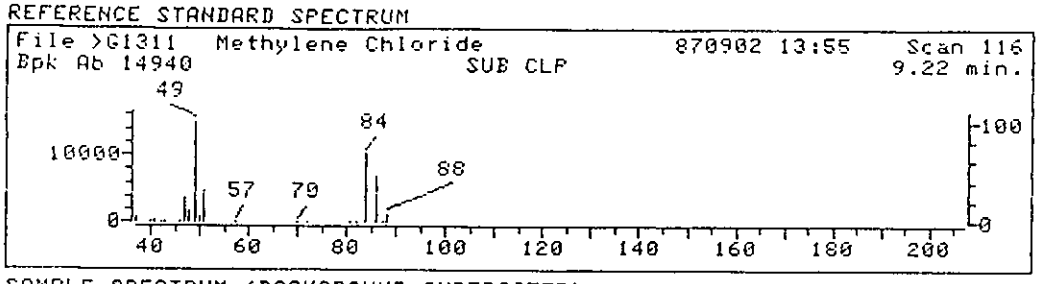
Data File: >G4181::G2 Quant Output File: ^G4181::QT
Name: ;;;VBLKGK
Misc: HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

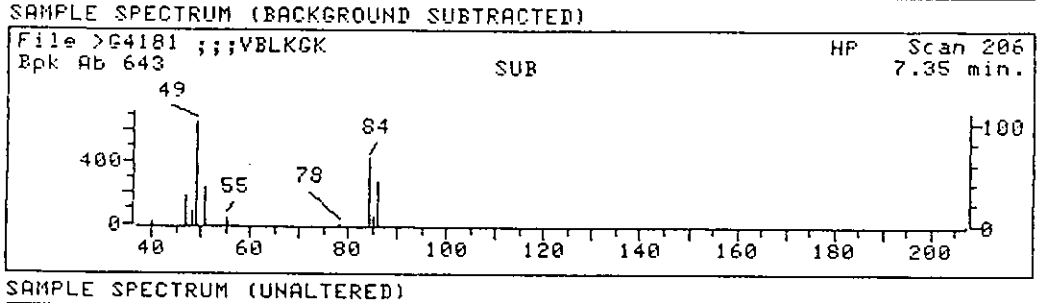
Operator ID: MSG
Quant Time: 930215 10:38
Injected at: 930215 10:11

TIC page 2 of 2

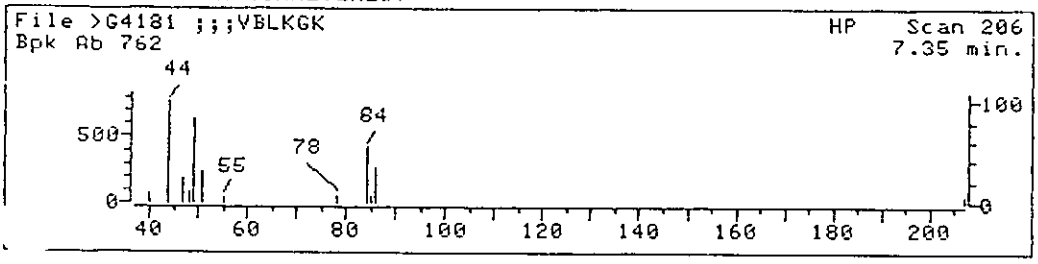
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



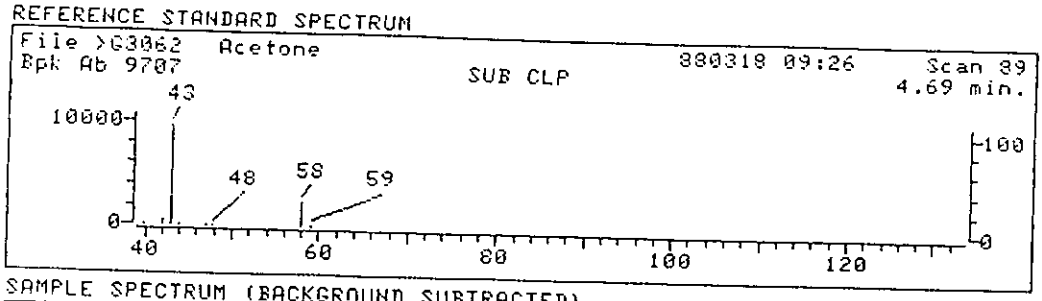
SAMPLE SPECTRUM (UNALTERED)



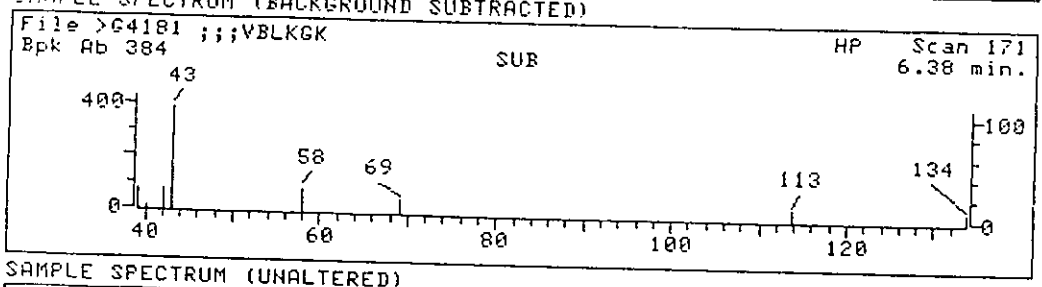
Data File: >G4181::G2 Quant Output File: ^G4181::QT
Name: ;;;VBLKGK
Misc: HP5995:G;;;LLW;DF1 ;G1921
Quant Time: 930215 10:38 Quant ID File: I_IFGW::N1
Injected at: 930215 10:11 Last Calibration: 930215 09:56

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 206
Retention Time: 7.35 min.
Quant Ion: 83.8
Area: 2291
Concentration: 2.24 ug/L
q-value: 96

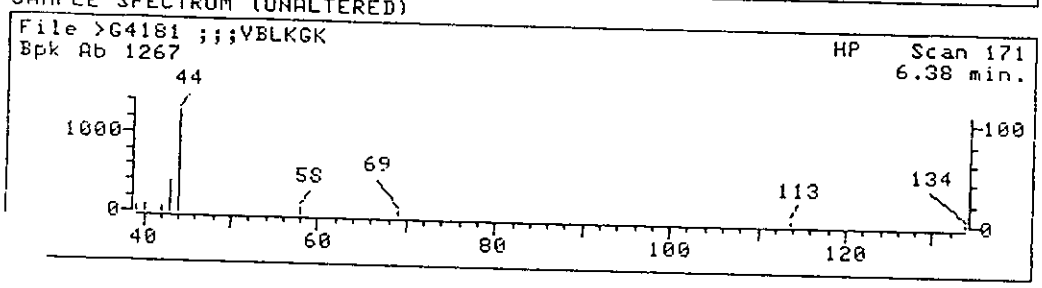
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G4181::G2
Name: ;;;VBLKGK
Misc:
Quant Time: 930215 10:38
Injected at: 930215 10:11

Quant Output File: ^G4181::QT

HP5995:G;;;LLW;DF1 ;G1921
Quant ID File: I_IFGW::N1
Last Calibration: 930215 09:56

Compound No: 13
Compound Name: Acetone
Scan Number: 171
Retention Time: 6.38 min.
Quant Ion: 42.8
Area: 3912
Concentration: 6.66 ug/L
q-value: 95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
0 0275
MSBMW-45

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009MSB

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4184.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	50	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	4	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	52	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	46	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	48	
108-90-7	Chlorobenzene	47	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MSBMW-45

0276

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009MSB

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4184.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 2

PMS 03/03/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	22.86	10	JN
2.		UNKNOWN SILOXANE	25.68	6	J
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

0277

QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930215 12:28
Output File: ^G4184::QT Injected at: 930215 12:01
Data File: >G4184::G2 Dilution Factor: 1.00000
Name: 0148;;;MSBMW-45
Misc: 0148009MSB HP5995:G;;;LLW;DF1 ;G1921

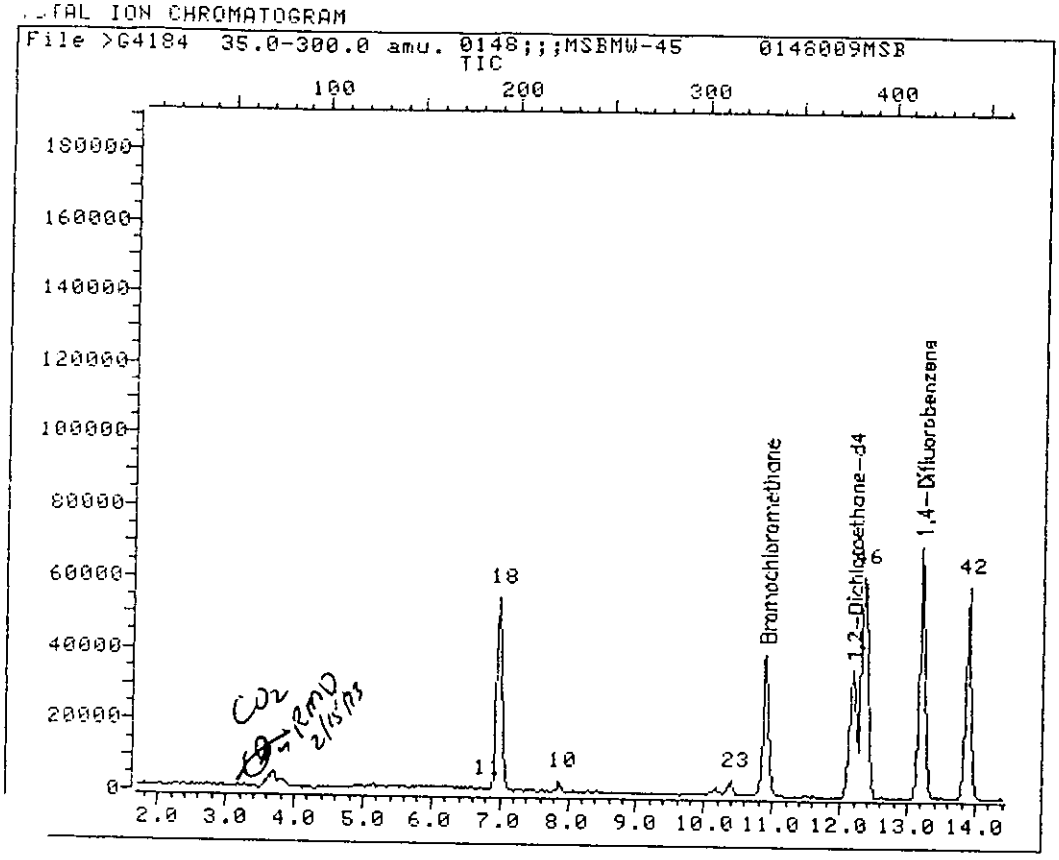
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.91	127.8	27306	50.00	ug/L	85
10)	Methylene Chloride	7.87	83.8	3005	2.78	ug/L	93
11)	Acrolein	6.76	55.8	81	.68	ug/L	58
~~13)~~	~~Acetone~~	~~7.01~~	~~42.8~~	~~6063~~	~~9.76~~	~~ug/L~~	~~94~~
18)	1,1-Dichloroethene	6.99	95.8	47983	49.51	ug/L	87
23)	1,2-Dichloroethene (total)c	10.38	95.8	3941	3.64	ug/L	94
~~24)~~	~~2-Butanone~~	~~10.36~~	~~43.0~~	~~1273~~	~~2.04~~	~~ug/L~~	~~97~~
30)	1,2-Dichloroethane-d4	12.18	64.8	101163	50.41	ug/L	89
34)	*1,4-Difluorobenzene	13.20	113.8	149367	50.00	ug/L	98
42)	Trichloroethene	13.89	129.8	55745	51.86	ug/L	91
4[illegible]	Benzene	12.35	77.8	154223	45.99	ug/L	91
53)	*Chlorobenzene-d5	20.29	116.8	111469	50.00	ug/L	80
60)	Toluene	16.99	91.0	172665	47.87	ug/L	95
61)	Toluene-d8	16.82	97.8	157190	50.66	ug/L	93
62)	Chlorobenzene	20.35	111.8	112310	46.75	ug/L	90
91)	Bromofluorobenzene	22.56	94.8	92532	51.99	ug/L	94

* Compound is ISTD

RMD 02/15/93

0278



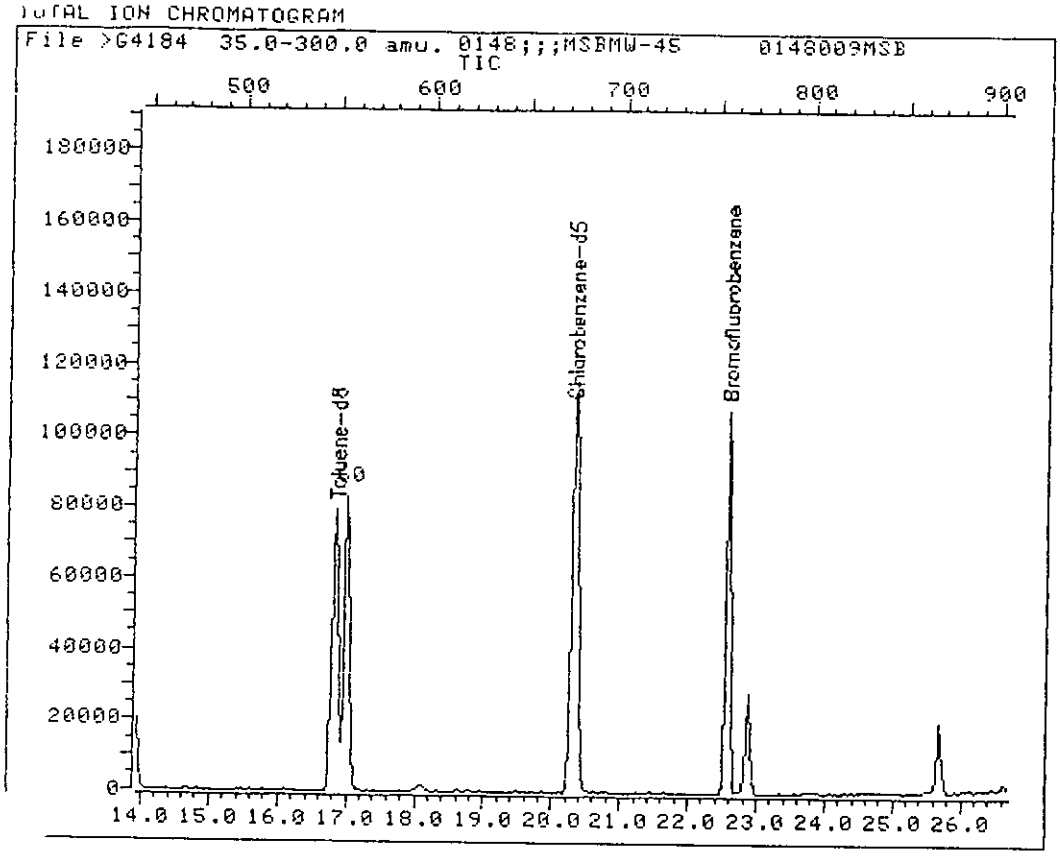
Data File: >G4184::G2 Quant Output File: ^G4184::QT
Name: 0148;;;MSBMW-45
Misc: 0148009MSB HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 12:28
Injected at: 930215 12:01

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G4184::G2 Quant Output File: ^G4184::QT
Name: 0148;;;MSBMW-45
Misc: 0148009MSB HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

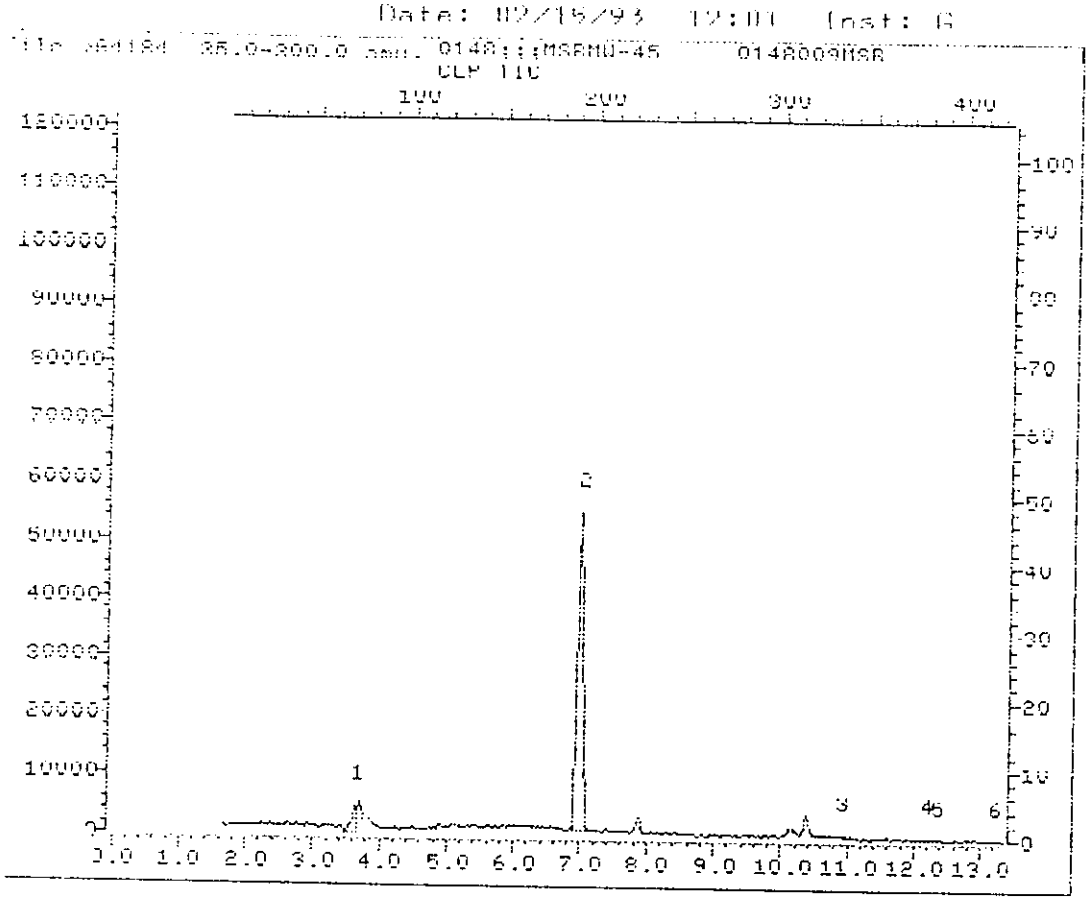
Operator ID: MSG
Quant Time: 930215 12:28
Injected at: 930215 12:01

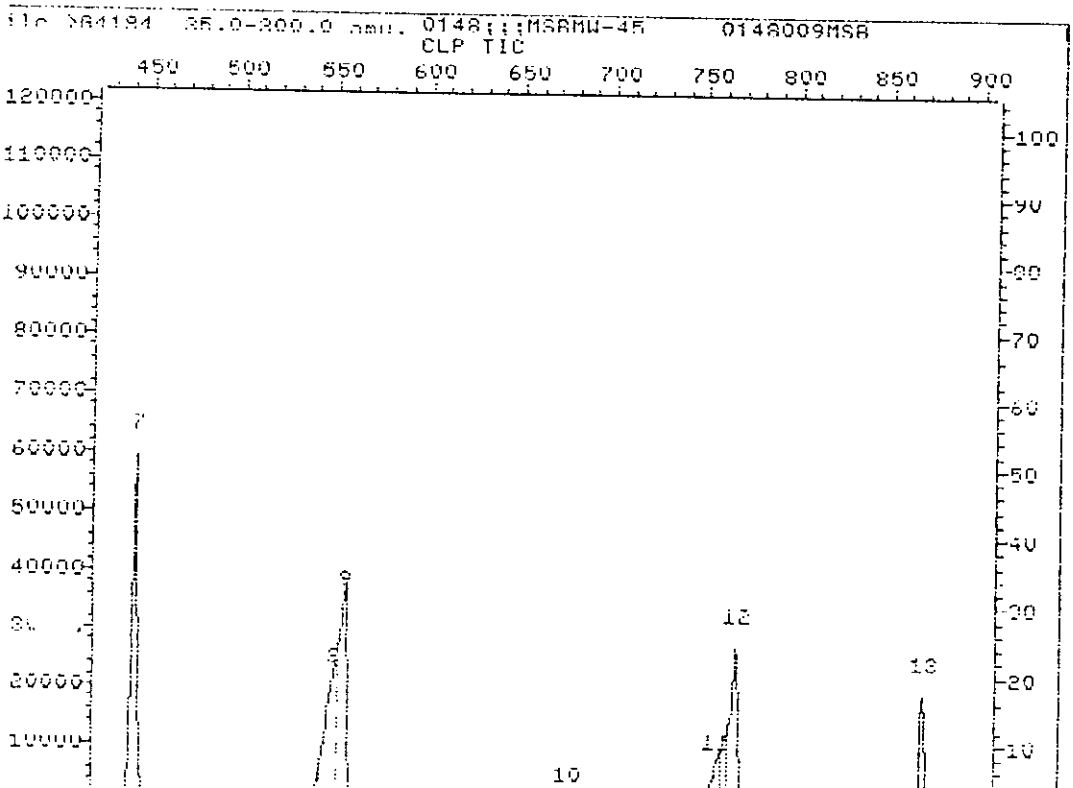
TIC page 2 of 2

MS data file header from : >G4184

Sample: 0148;;;MSHMW-45 Operator: MSR MS 2/15/93 12:01
Misc : 0148IIII9MSH HP5995:G;;;LLW;DF1 ;G1921
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method file: M GCAP Tuning file: T G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


Date: 02/15/93 12:01 (ast: 6
CLP TIC
0148009MSB
100
200
300
400
1
2
3
45
6
1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0


CLP TIC
0148009MSB
450 500 550 600 650 700 750 800 850 900
7
8
10
12
13

0282

Date: 02/15/93 12:00 Inst: G

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
7. WA	12.35	416231.	42.	2.	1.00
7. WA	13.89	359408.	42.	2.	1.00
10. WA	16.99	486667.	29.	3.	1.00
12.	22.86	159551.	10.	3.	1.00
1. CO2	3.64	25634.	6.	1.	1.00
13.	25.68	100387.	6.	3.	1.00

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
BROMOCHLOROMETHANE	10.91	225382.	0.00	12.06	8.3
1,4-DIFLUOROBENZENE	13.20	430371.	12.06	16.78	2.9
CHLOROBENZENE-D5	20.35	831282.	16.78	25.68	2.5

ISTD peaks found:	3
Surrogate peaks found:	3
Or ot target peaks expected:	5
Target peaks matched:	1
Total TIC identified:	6

TICS : 3:43 PM WED., 3 MAR., 1993

MSBMW-45

Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

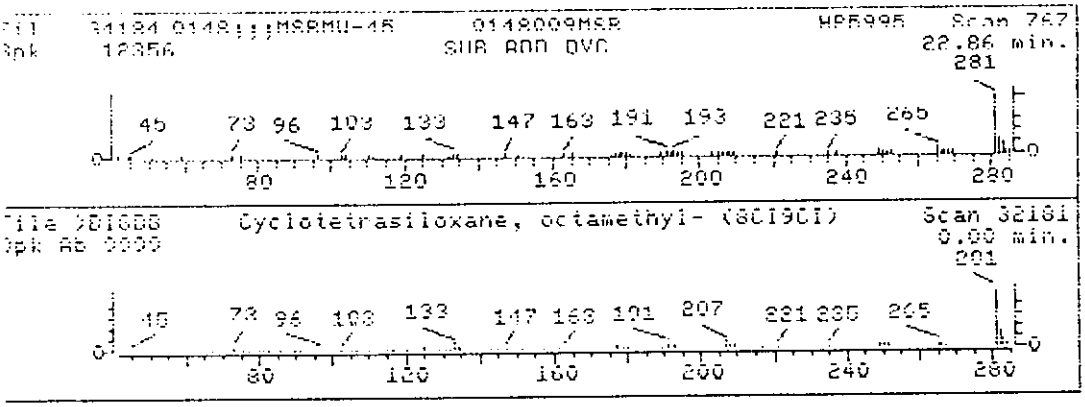
RPN error for command: RSF63
RPN error: -5
ad record length RSF

1. Cyclotetrasiloxane, octamethyl- (8CI9CI) 29A C8H24O4Si4

Sample file: >G4184 Spectrum #: 767
Search speed: 3 Tilting option: S No. of ion ranges searched: 60

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	28	556672	32181	"BIGDB	73	63	2	0	97	5	55			18

Peak#: 12 Area: 159551. Est Conc: 10. Date: 02/15/93 12:01 Inst: G



```
 RPN error for command: RSEA3
 RPN error:  -5
ad record length RSF
```

1. 7H-Dibenzo[c,g]carbazole (8CI,9CI) 267 C20H13N
2. 13H-Dibenzo[a,i]carbazole (8CI,9CI) 267 C20H13N

```
 Sample file: >G4184    Spectrum #:       869
Search speed: 3      Tilting option: S      No. of ion ranges searched:   60
```

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	41*	194592	30877	"BIGDB	24	113	3	0	100	24	17		12	
2.	39*	239645	30878	"BIGDB	24	104	3	0	100	26	14		12	

```
Peak#:  13 Area:  100387. Est Conc:       6. Date: 02/15/93  12:01 Inst: G
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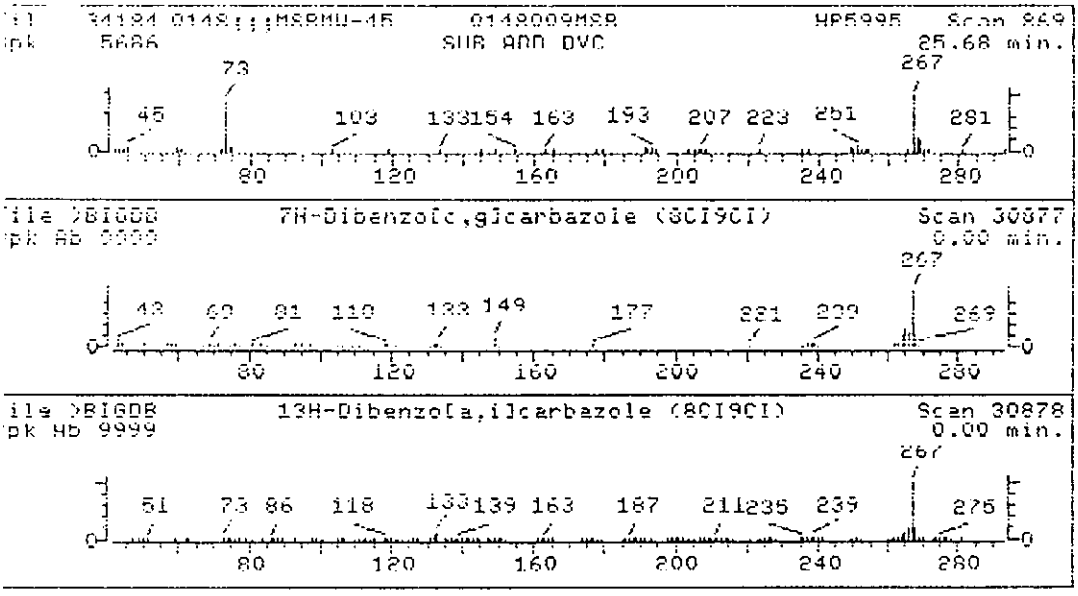


1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-45MS

Lab Name: IEA/CT Contract: 0285

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009MS

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4182.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	47	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	1	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	56	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	48	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	53	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

QUANT REPORT

Operator ID: MSG
Output File: ^G4182::QT
Data File: >G4182::G2
Name: 0148;;;MW-45MS
Misc: 0148009MS

Quant Rev: 6
HP5995:G;;;LLW;DF1 ;G1921

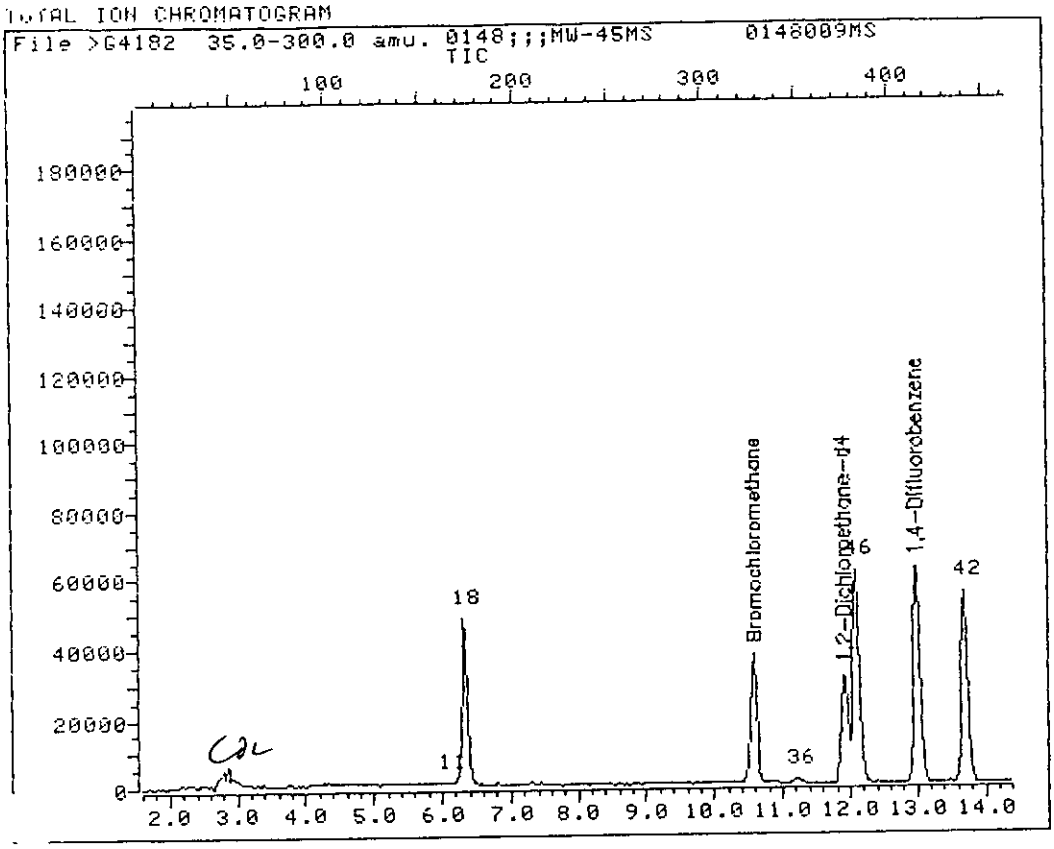
Quant Time: 930215 11:26
Injected at: 930215 10:58
Dilution Factor: 1.00000

ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.58	127.8	27412	50.00	ug/L	85
11)	Acrolein	6.11	55.8	126	1.05	ug/L	2
~~13)~~	~~Acetone~~	~~6.38~~	~~42.8~~	~~2273~~	~~3.65~~	~~ug/L~~	~~70~~
18)	1,1-Dichloroethene	6.33	95.8	45719	46.99	ug/L	89
30)	1,2-Dichloroethane-d4	11.91	64.8	93070	46.20	ug/L	88
34)	*1,4-Difluorobenzene	12.99	113.8	140679	50.00	ug/L	96
36)	1,1,1-Trichloroethane	11.22	96.8	3708	1.43	ug/L	89
42)	Trichloroethene	13.71	129.8	56898	56.20	ug/L	92
46)	Benzene	12.10	77.8	151569	47.99	ug/L	90
53)	*Chlorobenzene-d5	20.21	116.8	104742	50.00	ug/L	84
60)	Toluene	16.86	91.0	179129	52.85	ug/L	91
61)	Toluene-d8	16.69	97.8	153547	52.66	ug/L	95
62)	Chlorobenzene	20.29	111.8	114102	50.55	ug/L	82
91)	Bromofluorobenzene	22.50	94.8	88520	52.93	ug/L	93

* Compound is ISTD

RMD 02/15/93



Data File: >G4182::G2
Name: 0148;;;MW-45MS
Misc: 0148009MS

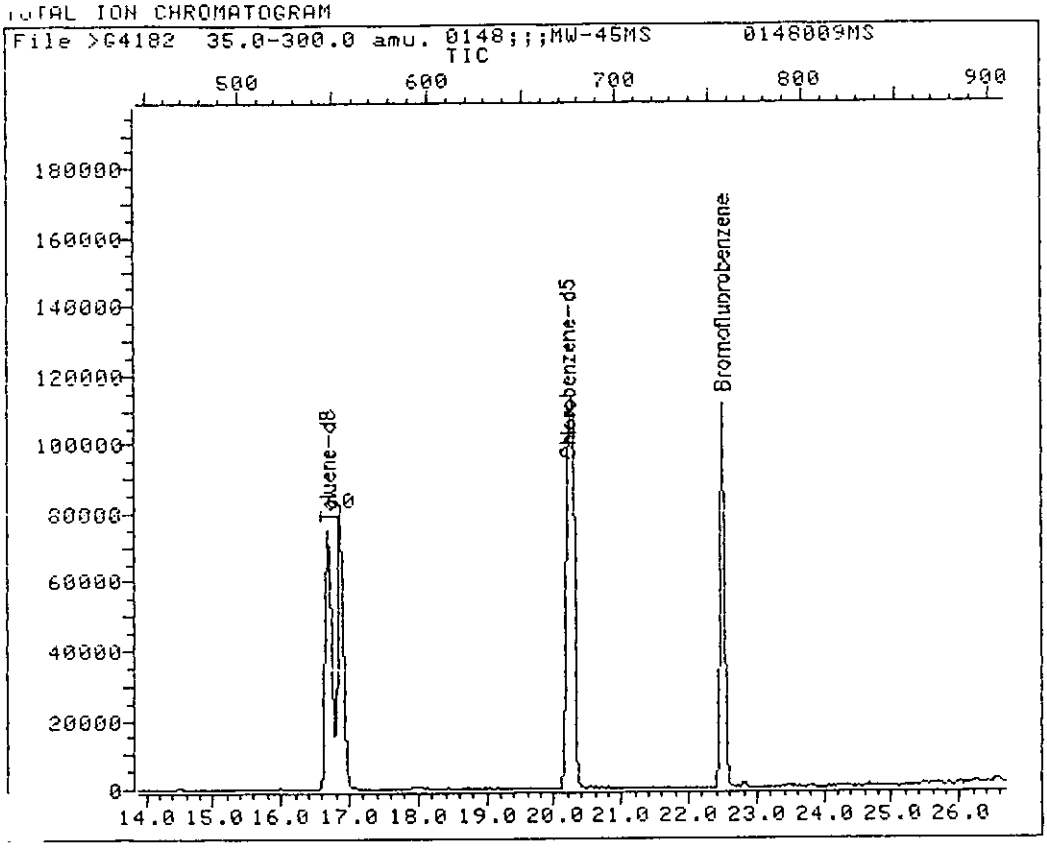
Quant Output File: ^G4182::QT

HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 11:26
Injected at: 930215 10:58

TIC page 1 of 2



Data File: >G4182::G2 Quant Output File: ^G4182::QT
Name: 0148;;;MW-45MS
Misc: 0148009MS HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 11:26
Injected at: 930215 10:58

TIC page 2 of 2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-45MSD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009MSD 0289

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4183.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	48	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	56	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	48	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	48	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

QUANT REPORT

Operator ID: MSG
Output File: ^G4183::QT
Data File: >G4183::G2
Name: 0148;;;MW-45MSD
Misc: 0148009MSD

Quant Rev: 6 Quant Time: 930215 11:57
Injected at: 930215 11:29
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1921

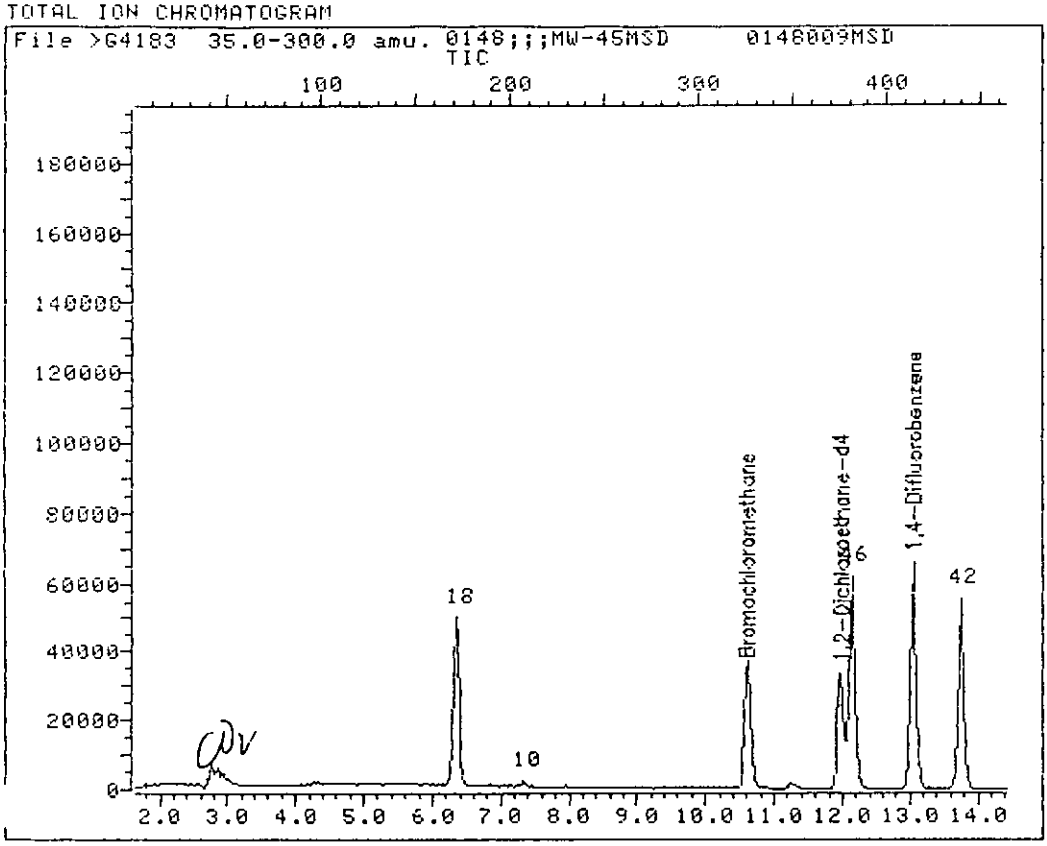
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.60	127.8	27600	50.00	ug/L	86
~~10)~~	~~Methylene Chloride~~	~~7.34~~	~~83.8~~	~~1852~~	~~1.69~~	~~ug/L~~	~~90~~
~~15)~~	~~Acetone~~	~~6.37~~	~~42.0~~	~~1098~~	~~3.02~~	~~ug/L~~	~~97~~
18)	1,1-Dichloroethene	6.34	95.8	47402	48.39	ug/L	92
30)	1,2-Dichloroethane-d4	11.98	64.8	96826	47.74	ug/L	85
34)	*1,4-Difluorobenzene	13.06	113.8	138607	50.00	ug/L	94
42)	Trichloroethene	13.75	129.8	55588	55.73	ug/L	93
46)	Benzene	12.15	77.8	148159	47.62	ug/L	94
53)	*Chlorobenzene-d5	20.25	116.8	104481	50.00	ug/L	80
60)	Toluene	16.93	91.0	170255	50.36	ug/L	95
61)	Toluene-d8	16.73	97.8	148880	51.19	ug/L	96
62)	Chlorobenzene	20.31	111.8	108557	48.21	ug/L	92
91)	Bromofluorobenzene	22.54	94.8	86069	51.59	ug/L	91

* Compound is ISTD

RMD 02/15/93

TOTAL ION CHROMATOGRAM



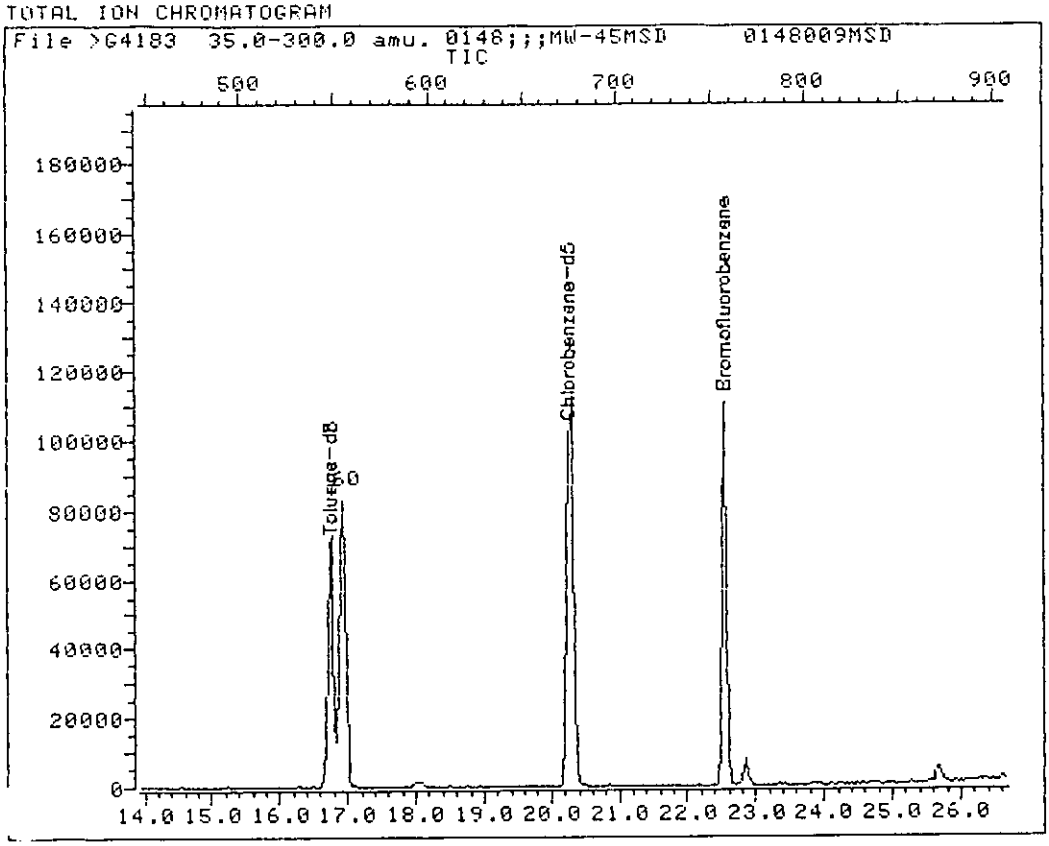
Data File: >G4183::G2 Quant Output File: ^G4183::QT
Name: 0148;;;MW-45MSD
Misc: 0148009MSD HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 11:57
Injected at: 930215 11:29

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G4183::G2 Quant Output File: ^G4183::QT
Name: 0148;;;MW-45MSD
Misc: 0148009MSD HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 11:57
Injected at: 930215 11:29

TIC page 2 of 2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QCCHKSTD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148 0293

Matrix: (soil/water) WATER Lab Sample ID: 0148009STD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4185.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column: 007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	4 Ce ~~10~~	U
74-83-9	Bromomethane	42	
75-01-4	Vinyl Chloride	44	
75-00-3	Chloroethane	15	
75-09-2	Methylene Chloride	47	B
67-64-1	Acetone	43	B
75-15-0	Carbon Disulfide	47	
75-35-4	1,1-Dichloroethene	46	
75-34-3	1,1-Dichloroethane	47	
540-59-0	1,2-Dichloroethene (total)	92	
67-66-3	Chloroform	45	
107-06-2	1,2-Dichloroethane	46	
78-93-3	2-Butanone	49	
71-55-6	1,1,1-Trichloroethane	47	
56-23-5	Carbon Tetrachloride	48	
75-27-4	Bromodichloromethane	48	
78-87-5	1,2-Dichloropropane	45	
10061-01-5	cis-1,3-Dichloropropene	70	
79-01-6	Trichloroethene	51	
124-48-1	Dibromochloromethane	49	
79-00-5	1,1,2-Trichloroethane	47	
71-43-2	Benzene	46	
10061-02-6	trans-1,3-Dichloropropene	20	
75-25-2	Bromoform	52	
108-10-1	4-Methyl-2-Pentanone	56	
591-78-6	2-Hexanone	51	
127-18-4	Tetrachloroethene	51	
79-34-5	1,1,2,2-Tetrachloroethane	47	
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	50	
100-42-5	Styrene	49	
1330-20-7	Xylene (total)	48	

PAS 02/26/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

QCCHKSTD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148 0294

Matrix: (soil/water) WATER Lab Sample ID: 0148009STD

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G4185.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: not dec. _____ Data Analyzed: 02/15/93

GC Column:007-624 ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 04 PDS 03/03/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	541731	BENZENE, 1,3-DICHLORO	24.32	29	JN
2.	106467	BENZENE, 1,4-DICHLORO	24.52	27	JN
3.	110758	ETHENE, (2-CHLOROETHOXY)	15.77	15	JN
4.	95501	BENZENE, 1,2-DICHLORO	25.07	12	JN
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
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20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: MSG
Output File: ^G4185::G4
Data File: >G4185::G2
Name: 0148;;;STD
Misc: 0148009STD

Quant Rev: 6 Quant Time: 930215 13:00
Injected at: 930215 12:32
Dilution Factor: 1.00000

HP5995:G;;;LLW;DF1 ;G1921

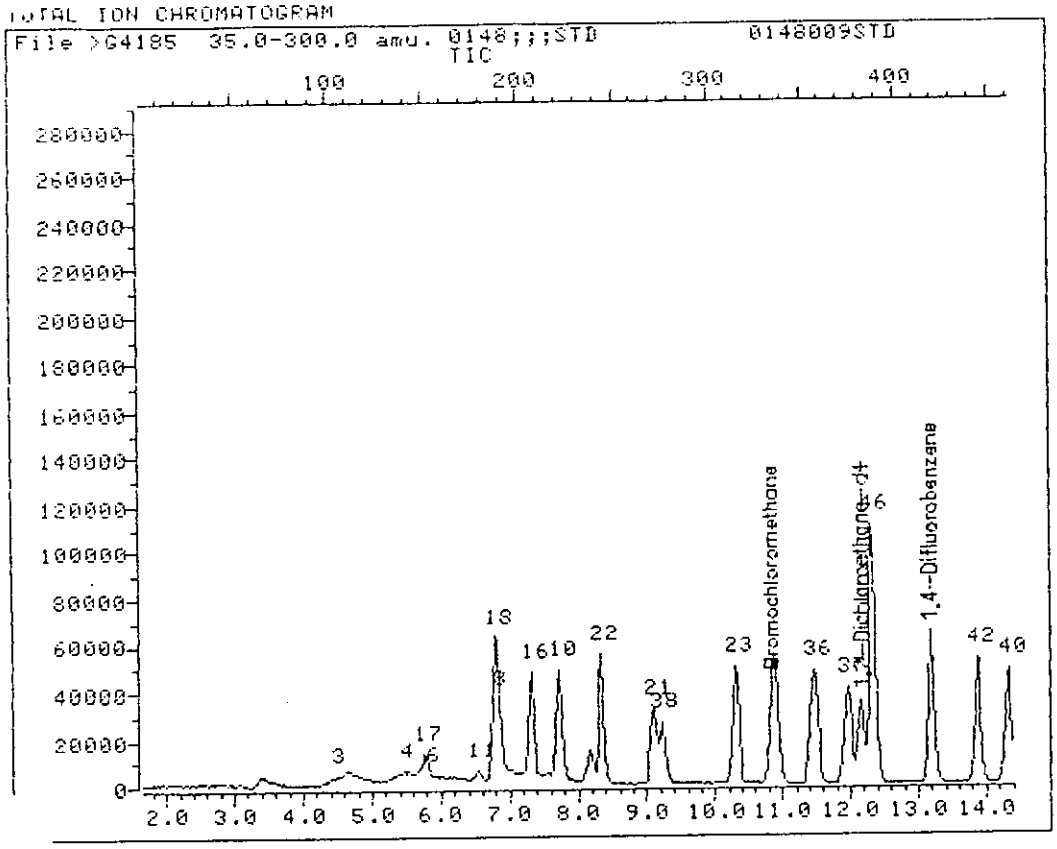
ID File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

PAS 02 Aug 93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.83	127.8	27714	50.00	ug/L	87
3)	Chloromethane	4.50	49.8	30511M	45.78	ug/L	
4)	Bromomethane	5.49	93.7	39361	41.51	ug/L	100
5)	Vinyl Chloride	4.69	61.8	47681	44.59	ug/L	100
6)	Chloroethane	5.88	63.8	11430	15.05	ug/L	100
8)	1,1,2-Trichlorotrifluoroethane	6.85	101.0	43090	56.02	ug/L	93
10)	Methylene Chloride	7.73	83.8	51965	47.34	ug/L	98
11)	Acrolein	6.54	55.8	11699	96.25	ug/L	96
13)	Acetone	6.82	42.8	27317	43.34	ug/L	90
14)	Acrylonitrile	8.17	52.8	31012	106.31	ug/L	94
16)	Carbon Disulfide	7.32	75.8	153058	47.26	ug/L	99
17)	Trichlorofluoromethane	5.77	100.8	26723	42.91	ug/L	99
18)	1,1-Dichloroethene	6.79	95.8	45718	46.48	ug/L	88
21)	1,1-Dichloroethane	9.11	62.8	101687	47.18	ug/L	97
22)	1,2-Dichloroethene (total)t	8.34	95.8	48934	45.63	ug/L	95
23)	1,2-Dichloroethene (total)c	10.30	95.8	51108	46.48	ug/L	92
24)	2-Butanone	10.27	43.0	30849	48.61	ug/L	96
28)	Chloroform	10.91	82.8	99553	44.68	ug/L	97
29)	1,2-Dichloroethane	12.35	61.8	162841	45.89	ug/L	84
30)	1,2-Dichloroethane-d4	12.15	64.8	97499	47.87	ug/L	88
34)	*1,4-Difluorobenzene	13.18	113.8	143177	50.00	ug/L	97
36)	1,1,1-Trichloroethane	11.46	96.8	124198	47.13	ug/L	95
37)	Carbon Tetrachloride	11.96	116.8	92535	47.80	ug/L	95
38)	Vinyl Acetate	9.22	42.8	139468	49.36	ug/L	99
39)	Bromodichloromethane	14.97	82.8	89692	47.62	ug/L	89
40)	1,2-Dichloropropane	14.34	62.8	43451	45.09	ug/L	45
41)	cis-1,3-Dichloropropene	16.16	74.8	76851	70.29	ug/L	83
42)	Trichloroethene	13.87	129.8	52496	50.95	ug/L	91
44)	Dibromochloromethane	18.99	128.7	60336	49.15	ug/L	96
45)	1,1,2-Trichloroethane	17.99	96.8	34715	46.64	ug/L	90
46)	Benzene	12.32	77.8	147974	46.04	ug/L	80
47)	trans-1,3-Dichloropropene	17.52	74.8	97541	19.65	ug/L	86
48)	2-Chloroethylvinylether	15.77	62.8	26856	48.53	ug/L	81
49)	1,2-Dibromoethane	19.30	106.9	51767	49.26	ug/L	95
50)	Bromoform	21.98	172.6	44039	52.19	ug/L	98
52)	*Chlorobenzene-d5	20.29	116.8	109309	50.00	ug/L	79
54)	4-Methyl-2-Pentanone	16.35	42.8	52102	56.25	ug/L	96
55)	2-Hexanone	18.49	42.8	35163	51.10	ug/L	95
56)	Tetrachloroethene	18.55	163.7	53958	50.79	ug/L	93
58)	1,1,2,2-Tetrachloroethane	22.72	82.8	47517	47.47	ug/L	92
60)	Toluene	16.99	91.0	178184	50.38	ug/L	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.59	105.8	61321	49.90	ug/L	98
64)	Styrene	21.62	103.8	123155	48.81	ug/L	84
65)	Xylene (total)mp	20.82	105.8	145004	100.50	ug/L	89
66)	Xylene (total)o	21.59	105.8	67371	47.89	ug/L	85
71)	1,2,3-Trichloropropane	24.38	74.8	48950	47.90	ug/L	54
80)	1,3-Dichlorobenzene	24.38	145.8	111520	111520.0	NO CALIB	94
81)	1,4-Dichlorobenzene	24.38	145.8	111520	111520.0	NO CALIB	94
82)	1,2-Dichlorobenzene	24.38	145.8	111520	49.70	ug/L	94
91)	Bromofluorobenzene	22.56	94.8	91805	52.60	ug/L	98

* Compound is ISTD



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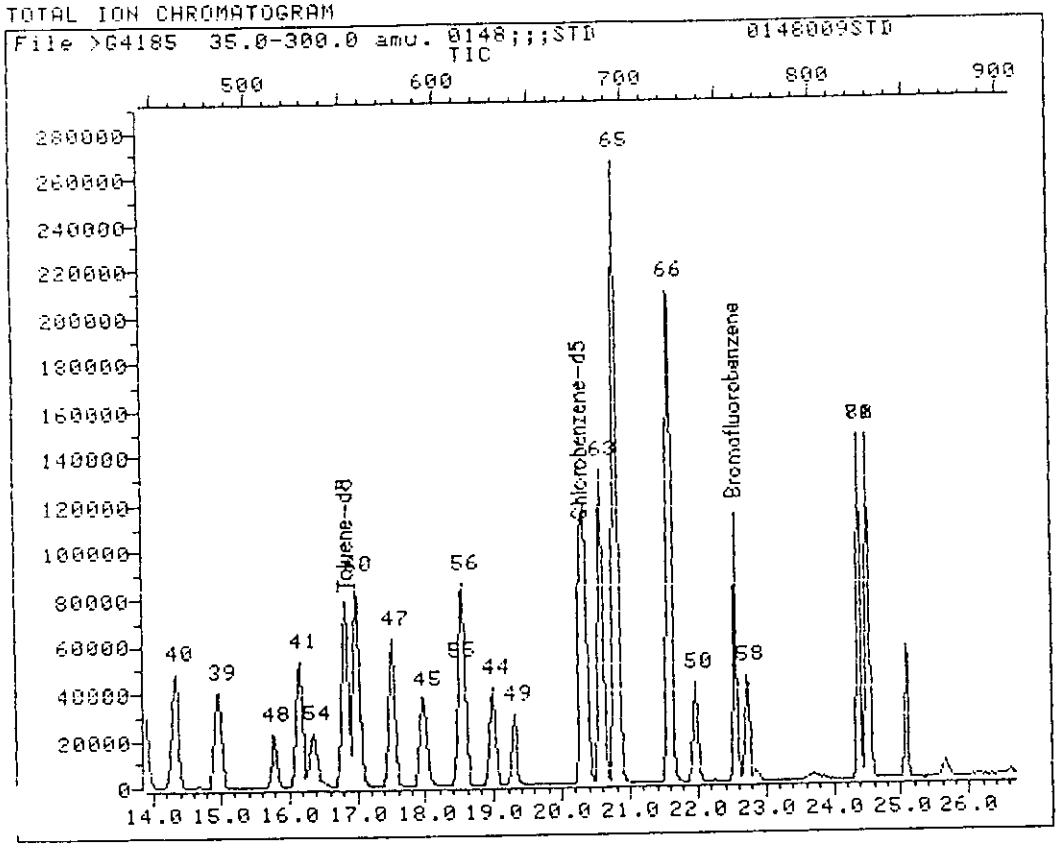
Name: 0148;;;STD
Misc: 0148009STD HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

Operator ID: MSG
Quant Time: 930215 13:00
Injected at: 930215 12:32

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G4185
Name: 0148;;;STD
Misc: 0148009STD

Quant Output File: ^G4185::G4

HP5995:G;;;LLW;DF1 ;G1921

Id File: I_IFGW::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930215 09:56

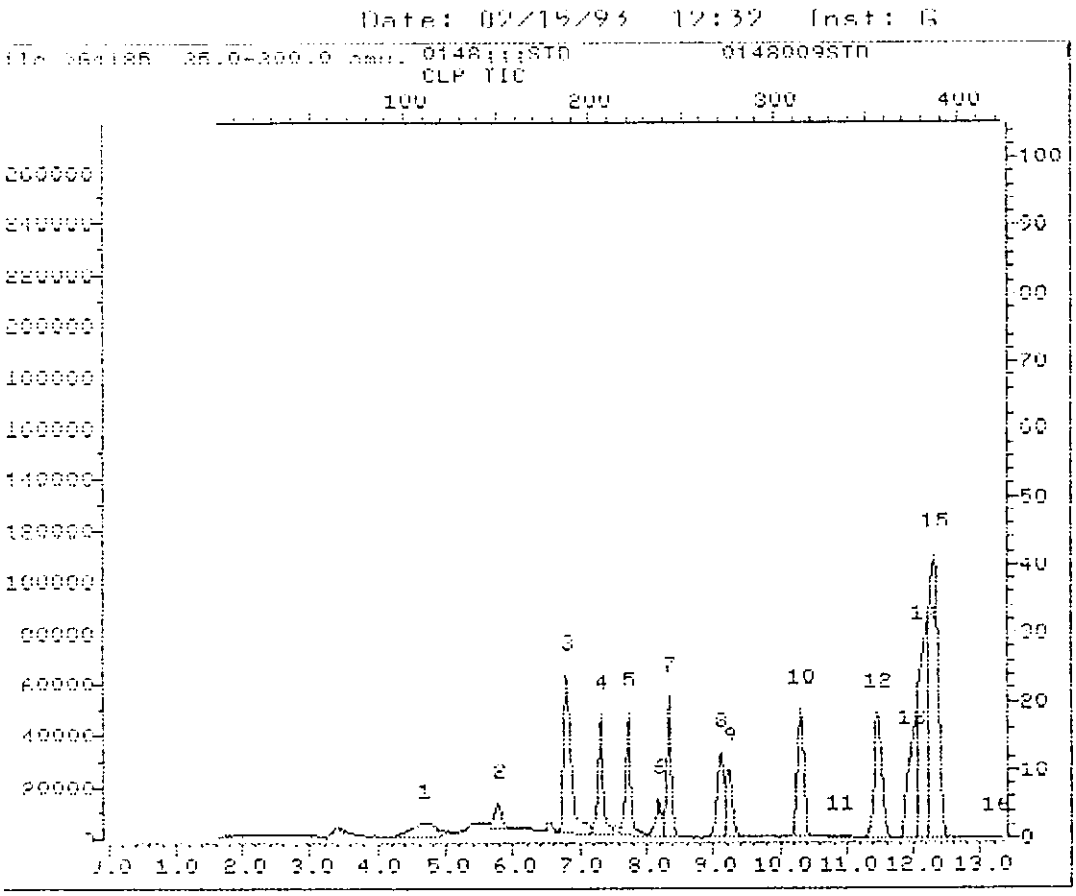
Operator ID: MSG
Quant Time: 930215 13:00
Injected at: 930215 12:32

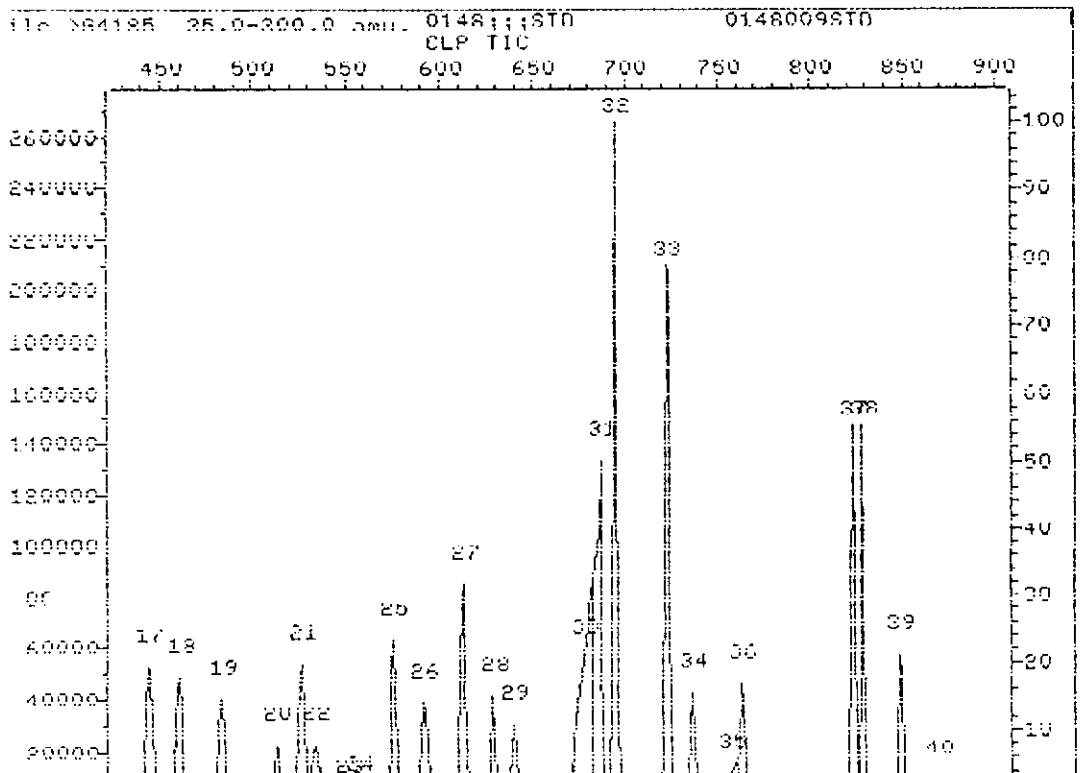
TIC page 2 of 2

MS data file header from : >G4189

Sample: 0148;;;STD Operator: MSG MS 2/15/93 12:32
Misc : 0148000STD HP5995:G;;;LLW:OFF ;G1921
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method File: M GCAP Tuning File: T G No. of extra records: 2
Source temp.: 212 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	.3	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


Date: 02/15/94 12:32 Inst: G
CLP TIC
0148009STD
100
200
300
400
1.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0


CLP TIC
0148009STD
450
500
550
600
650
700
750
800
850
900

0301

Date: 02/15/93 12:39 Inst: K

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
~~17.~~	12.39	235089.	82.	2.	1.00
~~17.~~	13.87	333150.	40.	2.	1.00
~~18.~~	14.34	331235.	39.	2.	1.00
~~21.~~	16.16	306727.	32.	2.	1.00
32.	24.38	515209.	29.	3.	1.00
~~24.~~	16.99	506182.	28.	3.	1.00
38.	24.52	482928.	22.	3.	1.00
20.	15.77	129315.	15.	2.	1.00
39.	25.02	2119539.	12.	3.	1.00

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
BROMOCHLOROMETHANE	10.88	475957.	0.00	12.04	17.2
1,4-DIFLUOROBENZENE	13.20	420092.	12.04	16.78	2.9
CHLOROBENZENE-D5	20.35	895234.	16.78	25.65	8.2

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	38
Target peaks matched:	24
Total TIC identified:	9

TICS : 3:17 PM WED., 3 MAR., 1993

QCCHKSTD

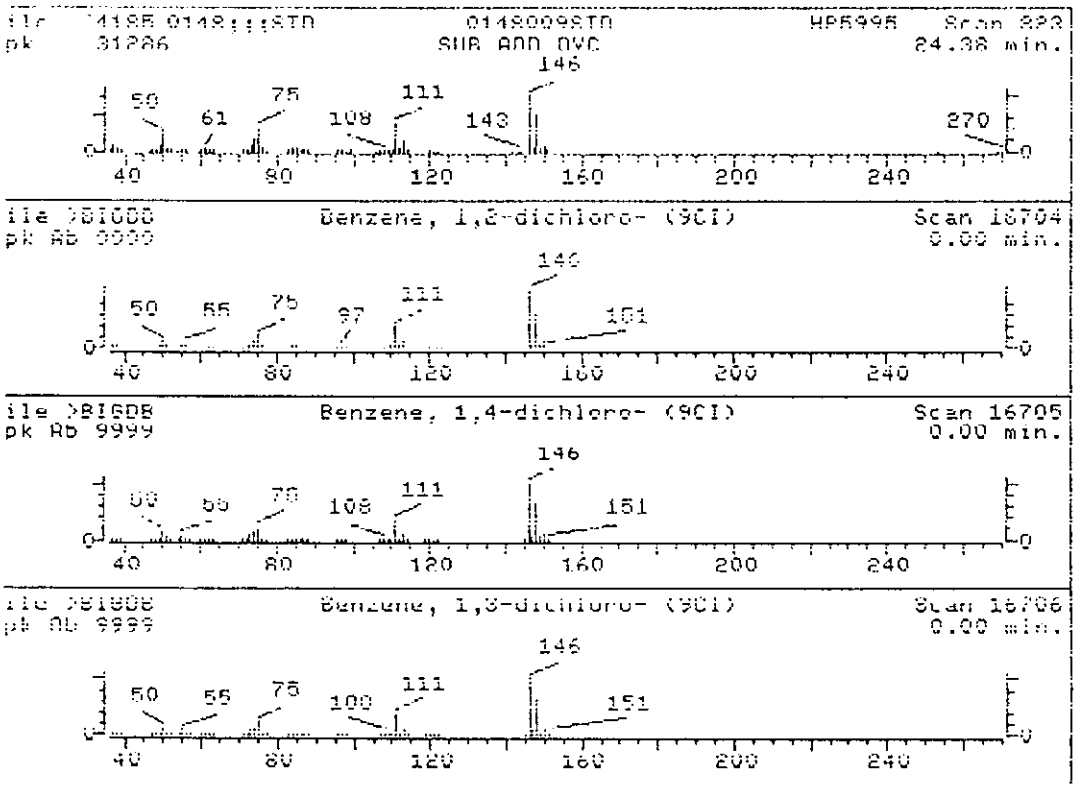
ad record length RSF

1.	Benzene, 1,2-dichloro- (9CI)	146	C6H4Cl2
2.	Benzene, 1,4-dichloro- (9CI)	146	C6H4Cl2
3.	Benzene, 1,3-dichloro- (9CI)	146	C6H4Cl2
4.	Peroxide, bis(dichlorobenzoyl) (9CI)	378	C14H6Cl4O4

Sample file: >B4185 Spectrum #: 823
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	94*	95501	16704	"BIGDB	82	29	0	0	97	17	60			94
2.	87*	106467	16705	"BIGDB	68	40	0	0	97	15	55			83
3.	87*	541731	16706	"BIGDB	68	40	0	0	95	15	55			83
4.	63	28804902	16707	"BIGDB	96	51	2	0	171	18	30			30

Peak#: 37 Area: 5152119. Est Conc: 29. Date: 02/15/93 12:32 Inst: G



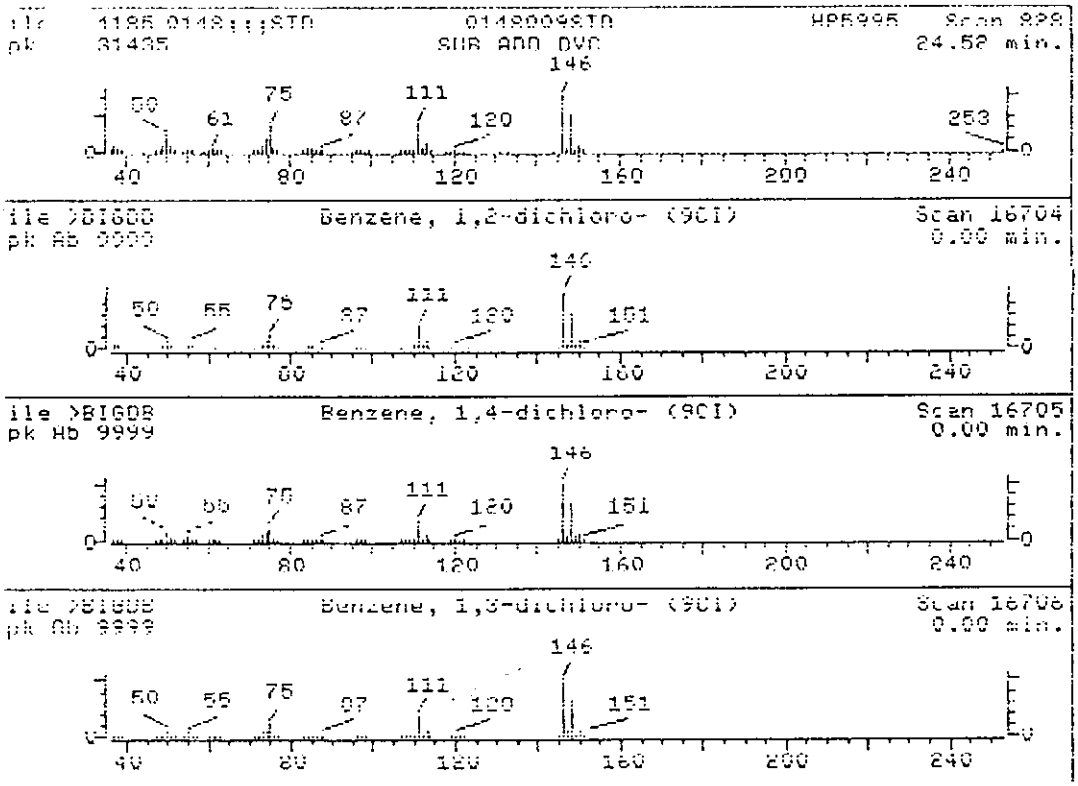
ad record length RSF

1.	Benzene, 1,2-dichloro- (9CI)	146 C6H4Cl2
2.	Benzene, 1,4-dichloro- (9CI)	146 C6H4Cl2
3.	Benzene, 1,3-dichloro- (9CI)	146 C6H4Cl2
4.	Peroxide, bis(dichlorobenzoyl) (9CI)	378 C14H6Cl4O4

Sample file: >G4185 Spectrum #: 828
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CHN #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	94*	95501	16704	"BIGDB	81	30	0	0	96	20	60	94		
2.	86*	106467	16705	"BIGDB	68	40	0	0	96	17	50	83		
3.	86*	541731	16706	"BIGDB	68	40	0	0	95	19	50	83		
4.	79	28804902	16707	"BIGDB	110	32	1	0	169	14	43	67		

Peak#: 38 Area: 482928. Est Conc: 27. Date: 02/15/93 12:32 Inst: G



Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

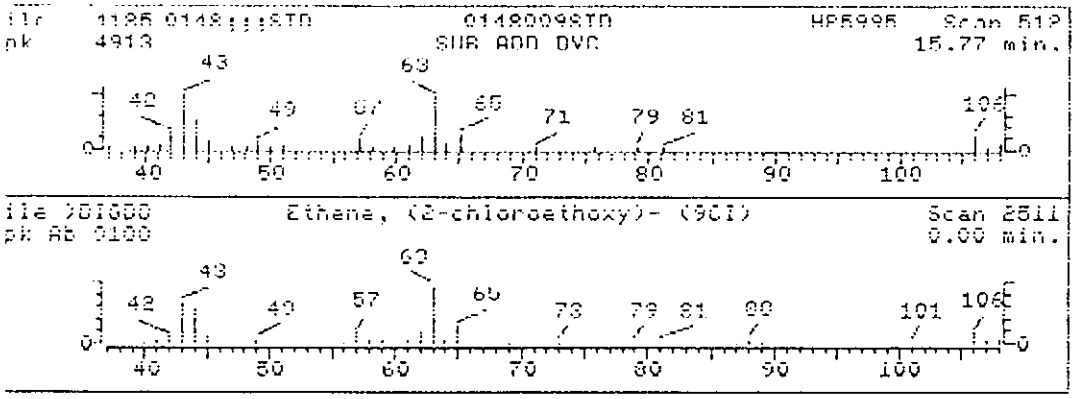
RPN error for command: RSF63
RPN error: -5
ad record length RSF

1. Ethene, (2-chloroethoxy)- (9CI) 106 C4H7ClO

Sample file: >G4185 Spectrum #: 512
Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	24*	110758	2511	"BIGDB	62	52	2	0	96	11	39			40

Peak#: 20 Area: 129305. Est Conc: 15. Date: 02/15/93 12:32 Inst: G



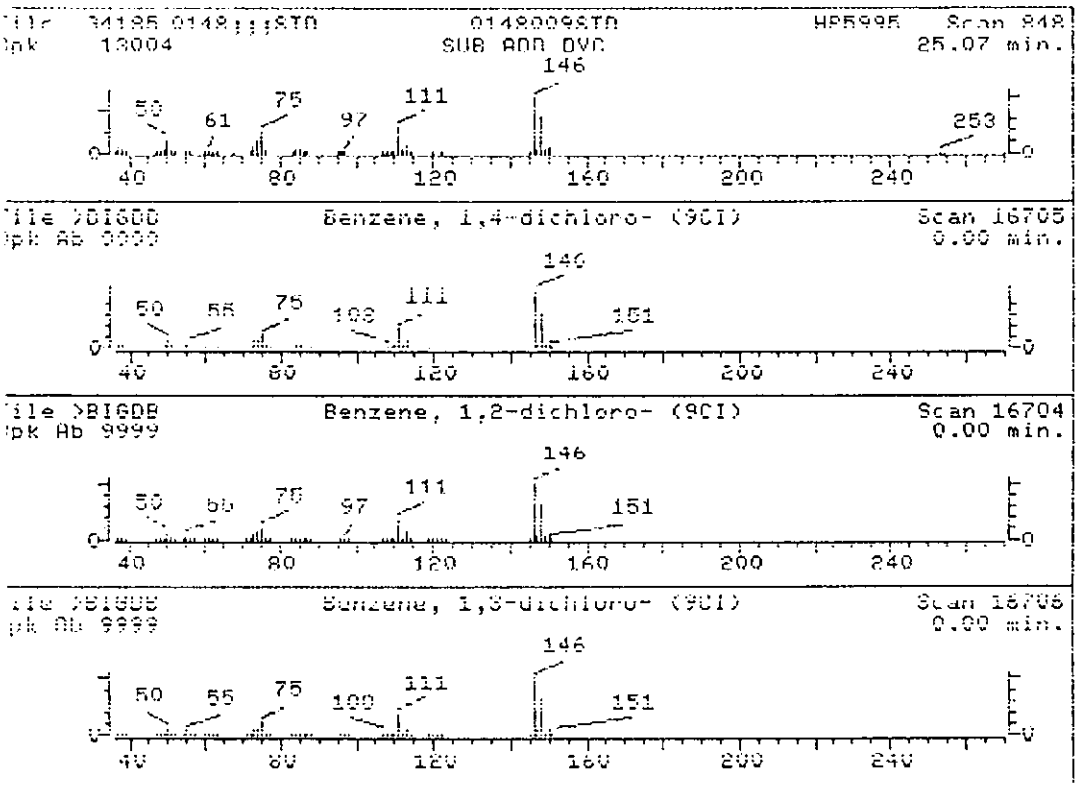
Load record length 8SE

1.	Benzene, 1,4-dichloro- (9CI)	146 C6H4Cl2
2.	Benzene, 1,2-dichloro- (9CI)	146 C6H4Cl2
3.	Benzene, 1,3-dichloro- (9CI)	146 C6H4Cl2
4.	Peroxide, bis(dichlorobenzoyl) (9CI)	328 C14H6Cl4O4

Sample File: >S4185 Spectrum #: 848
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	95*	106467	16705	"BIGDB	100	8	1	2	92	0	72			93
2.	94*	95501	16704	"BIGDB	81	30	0	0	93	11	64			94
3.	89*	541731	16706	"BIGDB	67	41	0	0	91	9	62			80
4.	79	28804902	16707	"BIGDB	97	50	2	0	185	8	48			31

Peak#: 39 Area: 209539. Est Conc: 12. Date: 02/15/93 12:32 Inst: G



SEMI-VOLATILE DATA

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
SDG#:	Z0148
IEA ID:	30930-0148

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

0307

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	SBLK86	64	60	62	64	63	64	64	64	0
02	MSBMW-45	64	56	61	60	60	62	61	64	0
03	MW-45	69	62	56	67	66	68	65	70	0
04	MW-45MS	69	60	55	60	60	50	61	67	0
05	MW-45MSD	69	61	55	62	63	52	64	66	0
06	QCCHKSTD	58	65	64	54	60	78	57	41	0
07	MHW-1	54	54	47	56	54	64	56	57	0
08	MW-43	67	60	39	65	63	70	63	64	0
09	MW-44	66	60	35	65	65	68	63	66	0
10	MW-46	65	58	29*	50	48	44	53	64	1
11	MW-35	54	61	28*	58	54	60	54	56	1
12	MW-42	78	79	50	79	73	81	77	81	0
13	MHW-2	70	69	61	74	69	83	72	74	0
14	REPLICATE	78	77	68	76	70	79	74	80	0
15	MW-23	76	73	68	80	74	76	73	77	0
16	MW~~37~~47	82	79	67	84	78	90	81	86	0
17										
18										
19										
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		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(35-114)	
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)	
S3 (TPH)	= Terphenyl-d14	(33-141)	
S4 (PHL)	= Phenol-d5	(10-110)	
S5 (2FP)	= 2-Fluorophenol	(21-110)	
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)	
S7 (2CP)	= 2-Chlorophenol-d4	(33-110)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(16-110)	(advisory)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix Spike - EPA Sample No.: MW-45

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	77	0	38	49	12-110
2-Chlorophenol	77	0	40	52	27-123
1,4-Dichlorobenzene	51	0	31	61	36- 97
N-Nitroso-di-n-prop.(1)	51	0	37	72	41-116
1,2,4-Trichlorobenzene	51	0	34	67	39- 98
4-Chloro-3-methylphenol	77	0	46	60	23- 97
Acenaphthene	51	0	28	55	46-118
4-Nitrophenol	77	0	80	104*	10- 80
2,4-Dinitrotoluene	51	0	43	84	24- 96
Pentachlorophenol	77	0	51	66	9-103
Pyrene	51	0	20	39	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	77	42	54	10	42	12-110
2-Chlorophenol	77	44	57	9	40	27-123
1,4-Dichlorobenzene	51	32	63	3	28	36- 97
N-Nitroso-di-n-prop.(1)	51	35	69	4	38	41-116
1,2,4-Trichlorobenzene	51	33	65	3	28	39- 98
4-Chloro-3-methylphenol	77	49	64	6	42	23- 97
Acenaphthene	51	29	57	4	31	46-118
4-Nitrophenol	77	56	73	35	50	10- 80
2,4-Dinitrotoluene	51	38	74	13	38	24- 96
Pentachlorophenol	77	54	70	6	50	9-103
Pyrene	51	22	43	10	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS: _____
_____

QC CK FORM 3

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0309

EPA SAMPLE NO.

QCCHKSTD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009STD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3285.D

Level: (low/med) LOW Date Received: 02/~~02~~10/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	% RECOVERY
108-95-2	Phenol	49	49
111-44-4	bis(2-Chloroethyl)ether	54	54
95-57-8	2-Chlorophenol	50	50
541-73-1	1,3-Dichlorobenzene	42	42
106-46-7	1,4-Dichlorobenzene	41	41
95-50-1	1,2-Dichlorobenzene	34	34
95-48-7	2-Methylphenol	45	45
108-60-1	2,2'-oxybis(1-Chloropropane)	36	36
106-44-5	4-Methylphenol	42	42
621-64-7	N-Nitroso-di-n-propylamine	45	45
67-72-1	Hexachloroethane	41	41
98-95-3	Nitrobenzene	55	55
78-59-1	Isophorone	58	58
88-75-5	2-Nitrophenol	61	61
105-67-9	2,4-Dimethylphenol	47	47
111-91-1	bis(2-Chloroethoxy)methane	47	47
120-83-2	2,4-Dichlorophenol	49	49
120-82-1	1,2,4-Trichlorobenzene	48	48
91-20-3	Naphthalene	44	44
106-47-8	4-Chloroaniline	260	260
87-68-3	Hexachlorobutadiene	49	49
59-50-7	4-Chloro-3-methylphenol	60	60
91-57-6	2-Methylnaphthalene	39	39
77-47-4	Hexachlorocyclopentadiene	5	5 J
88-06-2	2,4,6-Trichlorophenol	68	68
95-95-4	2,4,5-Trichlorophenol	64	64
91-58-7	2-Chloronaphthalene	57	57
88-74-4	2-Nitroaniline	81 ~~25~~	81 J
131-11-3	Dimethylphthalate	71	71
208-96-8	Acenaphthylene	55	55
606-20-2	2,6-Dinitrotoluene	72	72
99-09-2	3-Nitroaniline	600	~~750~~ 600
83-32-9	Acenaphthene	60	60

amc 2/28/93

QC CK FORMS

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0310

EPA SAMPLE NO.

QCCHKSTD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009STD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3285.D

Level: (low/med) LOW Date Received: 02/~~02~~10/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	% RECOVERY
51-28-5	2,4-Dinitrophenol	200	200
100-02-7	4-Nitrophenol	110	110
132-64-9	Dibenzofuran	55	55
121-14-2	2,4-Dinitrotoluene	89	89
84-66-2	Diethylphthalate	67	67
7005-72-3	4-Chlorophenyl-phenylether	66	66
86-73-7	Fluorene	67	67
100-01-6	4-Nitroaniline	100	100
534-52-1	4,6-Dinitro-2-methylphenol	81	81
86-30-6	N-Nitrosodiphenylamine (1)	55	55
101-55-3	4-Bromophenyl-phenylether	54	54
118-74-1	Hexachlorobenzene	56	56
87-86-5	Pentachlorophenol	69	69
85-01-8	Phenanthrene	54	54
120-12-7	Anthracene	50	50
86-74-8	Carbazole	160	160
84-74-2	Di-n-butylphthalate	51	51 B
206-44-0	Fluoranthene	55	55
129-00-0	Pyrene	60	60
85-68-7	Butylbenzylphthalate	58	58
91-94-1	3,3'-Dichlorobenzidine	100	100
56-55-3	Benzo(a)anthracene	61	61
218-01-9	Chrysene	58	58
117-81-7	bis(2-Ethylhexyl)phthalate	58	58 B
117-84-0	Di-n-octylphthalate	51	51
205-99-2	Benzo(b)fluoranthene	78	78
207-08-9	Benzo(k)fluoranthene	40	40
50-32-8	Benzo(a)pyrene	63	63
193-39-5	Indeno(1,2,3-cd)pyrene	36	36
53-70-3	Dibenz(a,h)anthracene	66	66
191-24-2	Benzo(g,h,i)perylene	44	44

Amz 2/25/93

0311

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK86

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: I3280.D Lab Sample ID: SBLK86

Instrument ID: HP5971I Date Extracted: 02/11/93

Matrix: (soil/water) WATER Date Analyzed: 02/16/93

Level:(low/med) LOW Time Analyzed: 1059

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	MSBMW-45	0148009MSB	I3281.D	02/16/93
02	MW-45	0148009	I3282.D	02/16/93
03	MW-45MS	0148009MS	I3283.D	02/16/93
04	MW-45MSD	0148009MSD	I3284.D	02/16/93
05	QCCHKSTD	0148009STD	I3285.D	02/16/93
06	MHW-1	0148010	I3286.D	02/16/93
07	MW-43	0148011	I3287.D	02/16/93
08	MW-44	0148012	I3288.D	02/16/93
09	MW-46	0148013	I3289.D	02/16/93
10	MW-35	0148014	I3303.D	02/19/93
11	MW-42	0148015	I3304.D	02/19/93
12	MHW-2	0148016	I3305.D	02/19/93
13	REPLICATE	0148017	I3306.D	02/19/93
14	MW-23	0148019	I3307.D	02/19/93
15	MW-~~37~~47	0148020	I3308.D	02/19/93
16				
17				
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27				
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30				

amc 2/25/93

COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: I3226.D DFTPP Injection Date: 02/03/93

Instrument ID: HP5971I DFTPP Injection Time: 1702

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	32.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	49.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	40.4
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.0
275	10.0 - 30.0% of mass 198	17.0
365	Greater than 0.75% of mass 198	4.38
441	Present, but less than mass 443	13.3
442	40.0 - 110.0% of mass 198	71.8
443	15.0 - 24.0% of mass 442	14.4 (20.0)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD050	SSTD050	I3226.D	02/03/93	1702
02	SSTD020	SSTD020	I3227.D	02/03/93	1853
03	SSTD080	SSTD080	I3228.D	02/03/93	1956
04	SSTD120	SSTD120	I3229.D	02/03/93	2059
05	SSTD160	SSTD160	I3230.D	02/03/93	2202
06					
07					
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22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0313

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: I3279.D DFTPP Injection Date: 02/16/93

Instrument ID: HP5971I DFTPP Injection Time: 0848

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	31.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	48.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	40.4
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.2
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 0.75% of mass 198	3.63
441	Present, but less than mass 443	9.2
442	40.0 - 110.0% of mass 198	69.4
443	15.0 - 24.0% of mass 442	14.3 (20.6)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD050	SSTD050	I3279.D	02/16/93	0848
02	SBLK86	SBLK86	I3280.D	02/16/93	1059
03	MSBMW-45	0148009MSB	I3281.D	02/16/93	1201
04	MW-45	0148009	I3282.D	02/16/93	1302
05	MW-45MS	0148009MS	I3283.D	02/16/93	1404
06	MW-45MSD	0148009MSD	I3284.D	02/16/93	1508
07	QCCHKSTD	0148009STD	I3285.D	02/16/93	1610
08	MHW-1	0148010	I3286.D	02/16/93	1712
09	MW-43	0148011	I3287.D	02/16/93	1815
10	MW-44	0148012	I3288.D	02/16/93	1917
11	MW-46	0148013	I3289.D	02/16/93	2019
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0 0314

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID: I3302.D DFTPP Injection Date: 02/19/93

Instrument ID: HP5971I DFTPP Injection Time: 1028

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	30.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	47.3
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	40.5
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	8.2
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 0.75% of mass 198	2.65
441	Present, but less than mass 443	9.0
442	40.0 - 110.0% of mass 198	67.6
443	15.0 - 24.0% of mass 442	15.0 (22.3)2

1-Value is % mass 69 2-Value is % mass 442

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	SSTD050	SSTD050	I3302.D	02/19/93	1028
02	MW-35	0148014	I3303.D	02/19/93	1139
03	MW-42	0148015	I3304.D	02/19/93	1242
04	MHW-2	0148016	I3305.D	02/19/93	1342
05	REPLICATE	0148017	I3306.D	02/19/93	1443
06	MW-23	0148019	I3307.D	02/19/93	1543
07	MW-~~37-47~~	0148020	I3308.D	02/19/93	1644
08					
09					
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11					
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21					
22					

CMC 2/26/93

INSTRUMENT DETECTION LIMITS

0315

Instrument I
Date: 01/08/93

UNITS: UG/L

	IDL
Phenol	1
bis(2-Chloroethyl)ether	1
2-Chlorophenol	1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
Benzyl alcohol	1
1,2-Dichlorobenzene	1
2-Methylphenol	1
bis(2-Chloroisopropyl)ether	1
4-Methylphenol	3
N-Nitroso-Di-N-propylamine	1
Hexachloroethane	1
Nitrobenzene	1
Isophorone	1
2-Nitrophenol	1
2,4-Dimethylphenol	1
Benzoic acid	1
bis(2-Chloroethoxy)methane	2
2,4-Dichlorophenol	1
1,2,4-Trichlorobenzene	1
Naphthalene	1
4-Chloroaniline	4
Hexachlorobutadiene	1
4-Chloro-3-methylphenol	1
2-Methylnaphthalene	1
Hexachlorocyclopentadiene	1
2,4,6-Trichlorophenol	1
2,4,5-Trichlorophenol	1
2-Chloronaphthalene	1
2-Nitroaniline	1
Dimethylphthalate	1
Acenaphthylene	1
2,6-Dinitrotoluene	1
3-Nitroaniline	1
Acenaphthene	1
2,4-Dinitrophenol	1
4-Nitrophenol	3
Dibenzofuran	1
2,4-Dinitrotoluene	1
Diethylphthalate	1
4-Chlorophenyl-phenylether	1
Fluorene	1
4-Nitroaniline	2
4,6-Dinitro-2-methylphenol	1
N-Nitrosodiphenylamine(1)	1
4-Bromophenyl-phenylether	1
Hexachlorobenzene	1
Pentachlorophenol	2

Instrument I
Date: 01/08/93

UNITS: UG/L

	IDL
Phenanthrene	1
Anthracene	3
Di-N-butylphthalate	1
Fluoranthene	1
Pyrene	1
Butylbenzylphthalate	1
3,3'-Dichlorobenzidine	1
Benzo(a)anthracene	1
Chrysene	1
bis(2-Ethylhexyl)phthalate	1
Di-N-octylphthalate	1
Benzo(b)fluoranthene	2
Benzo(k)fluoranthene	3
Benzo(a)pyrene	1
Indeno(1,2,3-cd)pyrene	1
Dibenzo(a,h)anthracene	1
Benzo(g,h,i)perylene	1
Nitrobenzene-d5	1
2-Fluorobiphenyl	1
Terphenyl-d14	1
Phenol-d5	1
2-Fluorophenol	1
2,4,6-Tribromophenol	2

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: IEA/CT Contract: 0317

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID (Standard): I3279.D Date Analyzed: 02/16/93

Instrument ID: HP5971I Time Analyzed: 0848

	EPA SAMPLE No.	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	20683	12.10	74721	15.37	43101	20.03
	UPPER LIMIT	41366	12.60	149442	15.87	86202	20.53
	LOWER LIMIT	10342	11.60	37360	14.87	21550	19.53
01	SBLK86	21312	12.09	78929	15.35	46491	20.01
02	MSBMW-45	21886	12.09	80760	15.35	48978	20.01
03	MW-45	22963	12.09	85296	15.35	49581	20.01
04	MW-45MS	26583	12.11	100458	15.37	58049	20.03
05	MW-45MSD	22213	12.11	80050	15.38	46801	20.04
06	QCCHKSTD	21504	12.12	80375	15.40	39022	20.05
07	MHW-1	15974	12.11	57680	15.37	33042	20.04
08	MW-43	23471	12.12	86269	15.38	49669	20.05
09	MW-44	22562	12.12	83299	15.39	48293	20.05
10	MW-46	24449	12.13	91127	15.39	52965	20.05
11							
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0318

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID (Standard): I3279.D Date Analyzed: 02/16/93

Instrument ID: HP5971I Time Analyzed: 0848

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	83757	23.93	67348	31.23	65591	38.03
	UPPER LIMIT	167514	24.43	134696	31.73	131182	38.53
	LOWER LIMIT	41878	23.43	33674	30.73	32796	37.53
	EPA SAMPLE No.						
01	SBLK86	87206	23.90	77461	31.20	79920	38.02
02	MSBMW-45	92288	23.90	79475	31.20	81360	38.00
03	MW-45	91948	23.91	80902	31.23	84145	38.08
04	MW-45MS	109779	23.94	98632	31.25	107141	38.12
05	MW-45MSD	88663	23.94	78931	31.27	81116	38.14
06	QCCHKSTD	91743	23.97	67982	31.33	82308	38.21
07	MHW-1	56847	23.93	48545	31.26	50603	38.09
08	MW-43	93428	23.95	80940	31.28	83356	38.17
09	MW-44	90407	23.94	80035	31.27	83140	38.15
10	MW-46	95101	23.94	79440	31.29	84056	38.18
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22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0319

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID (Standard): I3302.D Date Analyzed: 02/19/93

Instrument ID: HP5971I Time Analyzed: 1028

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	20283	12.01	74046	15.26	42698	19.92
	UPPER LIMIT	40566	12.51	148092	15.76	85396	20.42
	LOWER LIMIT	10142	11.51	37023	14.76	21349	19.42
	EPA SAMPLE No.						
01	MW-35	26640	12.00	95882	15.25	46310	19.91
02	MW-42	17668	12.00	64201	15.24	35826	19.90
03	MHW-2	17941	12.00	66768	15.25	38722	19.90
04	REPLICATE	17548	12.00	65172	15.24	36697	19.90
05	MW-23	19167	12.00	67185	15.25	39069	19.90
06	MW-~~37~~47	18520	12.00	69292	15.25	40202	19.90
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amc 2/25/93

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0320

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Lab File ID (Standard): I3302.D Date Analyzed: 02/19/93

Instrument ID: HP5971I Time Analyzed: 1028

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	81493	23.80	65562	31.08	66706	37.75
	UPPER LIMIT	162986	24.30	131124	31.58	133412	38.25
	LOWER LIMIT	40746	23.30	32781	30.58	33353	37.25
	EPA SAMPLE No.						
01	MW-35	81306	23.83	87707	31.12	87178	37.83
02	MW-42	66822	23.79	55988	31.06	55618	37.74
03	MHW-2	72759	23.79	59093	31.07	60212	37.74
04	REPLICATE	67110	23.79	56813	31.07	57650	37.73
05	MW-23	67753	23.79	59038	31.07	56449	37.74
06	MW-~~37-47~~	73983	23.79	60586	31.06	62457	37.73
07							
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19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0321 | MW-45

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009

Sample wt/vol: 975 (g/mL) ML Lab File ID: I3282.D

Level: (low/med) LOW Date Received: 02/~~02~~/19/93 3/15/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0322

EPA SAMPLE NO.

MW-45

ab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009

Sample wt/vol: 975 (g/mL) ML Lab File ID: I3282.D

Level: (low/med) LOW Date Received: 02/10/93 Case 3/15/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.5	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0323 EPA SAMPLE NO.

MW-45

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148009

Sample wt/vol: 975 (g/mL) ML Lab File ID: I3282.D

Level: (low/med) LOW Date Received: 02/~~02~~10/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:_____

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

Number TICs found: 021

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	30.72	120	J
2.	~~23278521~~	~~2,5,8,11,14 PENTAOXAHEXADECANE~~ UNKNOWN	32.22	88	~~J~~
3.		UNKNOWN	29.23	68	J
4.			44.16	67	
5.			26.55	58	
6.			23.46	38	
7.			37.42	34	
8.			32.60	28	
9.			29.45	20	
10.			19.92	16	
11.			26.71	12	
12.	124072	OCTANOIC ACID	14.95	11	
13.		UNKNOWN	45.42	9	
14.			8.68	7	JJB
15.			17.46	5	J
16.			23.60	5	J
17.			9.47	4	JB
18.			17.92	4	J
19.		ALDOL CONDENSATION PRODUCT	8.27	4	JAB
20.	112356	ETHANOL, 2-[2-(2-METHOXYETHOXY)ETH	15.69	3	JBN
21.		UNKNOWN	39.73	2	J
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: USER1 Quant Rev: 7 Quant Time: 930223 14:00
Output File: ^I3282::A6 Injected at: 930216 13:02
Data File: >I3282::A4 Dilution Factor: .51000
Name: 0148;;;MW-45 Instrument ID: **MSD
Misc: 0148009 HP5971I;0210931;021193;LLW;1;;;IO

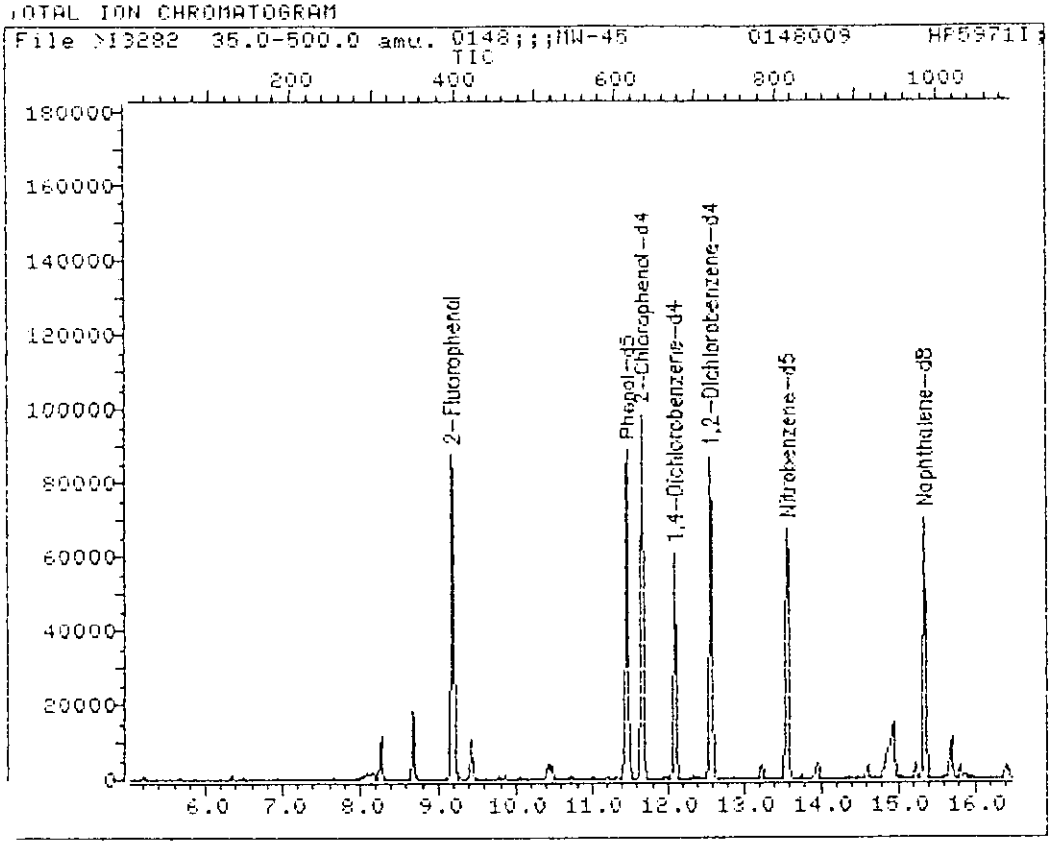
ID File: 1_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.09	151.8	22963	40.00	ug	96
2)	2-Chlorophenol-d4	11.67	132.0	71256	49.93	ug	81
3)	2-Fluorophenol	9.18	111.8	72079	50.85	ug	74
4)	Phenol-d5	11.47	98.8	101433	51.31	ug	65
10)	1,2-Dichlorobenzene-d4	12.57	152.0	34054	35.54	ug	95
17)	*Naphthalene-d8	15.35	135.9	85296	40.00	ug	96
18)	Nitrobenzene-d5	13.57	81.8	56006	35.24	ug	73
31)	*Acenaphthene-d10	20.01	163.9	49581	40.00	ug	99
)	2-Fluorobiphenyl	18.24	171.8	94627	31.37	ug	98
~~41)~~	~~Diethylphthalate~~	~~21.25~~	~~140.0~~	~~1047~~	~~.295~~	~~ug~~	~~71~~
51)	2,4,6-Tribromophenol	22.15	329.6	35895	51.64	ug	91
52)	*Phenanthrene-d10	23.91	187.9	91948	40.00	ug	98
~~61)~~	~~Di-n-butylphthalate~~	~~25.54~~	~~140.0~~	~~2624~~	~~.442~~	~~ug~~	~~61~~
63)	*Chrysene-d12	31.23	240.0	80902	40.00	ug	97
65)	Terphenyl-d14	28.16	244.0	100179	28.69	ug	97
~~66)~~	~~Butylbenzylphthalate~~	~~29.51~~	~~148.8~~	~~1634~~	~~.593~~	~~ug~~	~~49~~
70)	bis(2-Ethylhexyl)phthalate	31.34	148.8	1934	.544	ug	80
71)	*Perylene-d12	38.08	264.0	84145	40.00	ug	97

* Compound is ISTD

Cmc 2/23/93

TOTAL ION CHROMATOGRAM

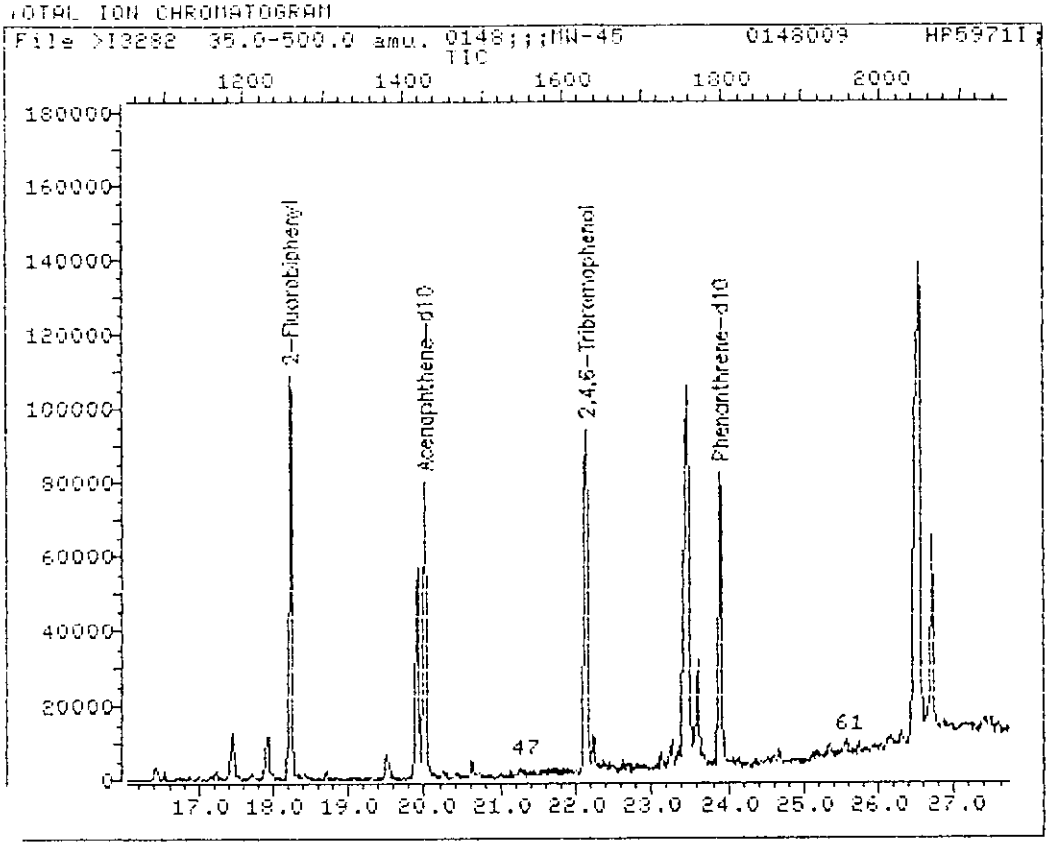


Data File: >I3282::A4 Quant Output File: ^I3282::A6
Name: 0148;;;MW-45 Instrument ID: **MSD
Misc: 0148009 HP5971I;0210931;021193;LLW;1;;;10

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:00
Injected at: 930216 13:02

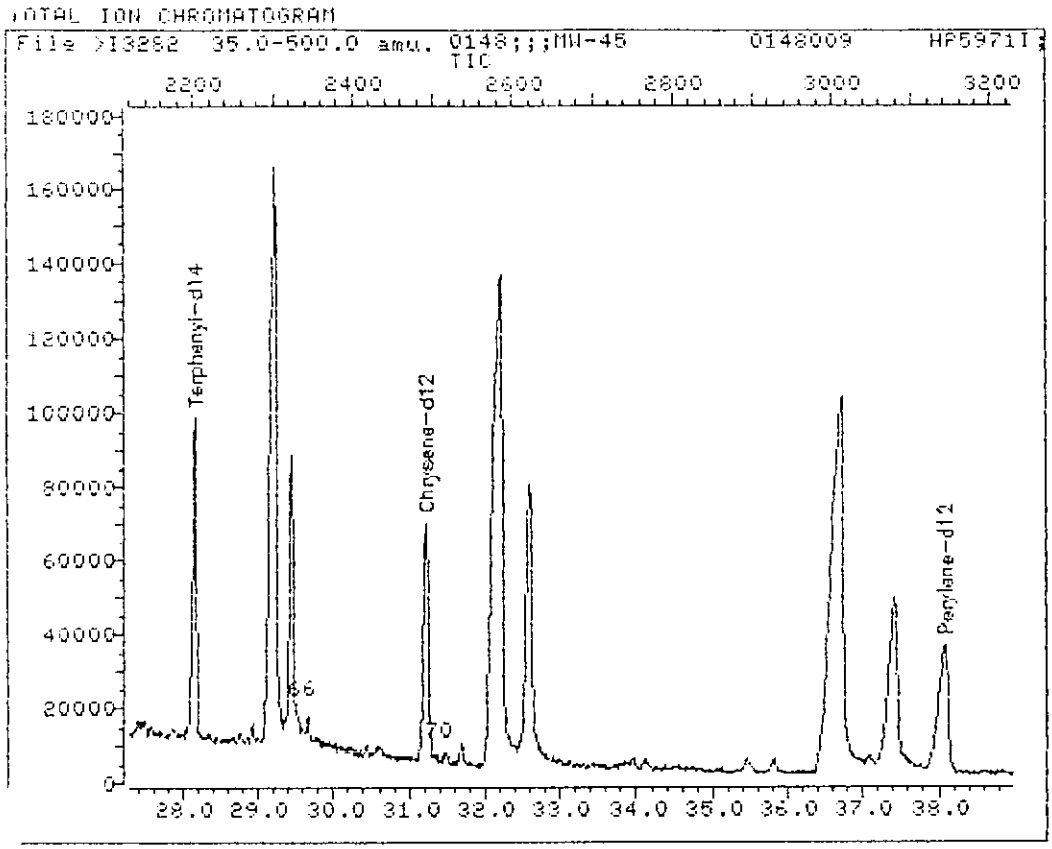
TOTAL ION CHROMATOGRAM



Data File: >I3282::A4 Quant Output File: ^I3282::A6
Name: 0148;;;MW-45 Instrument ID: **MSD
Misc: 0148009 HP5971I;0210931;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

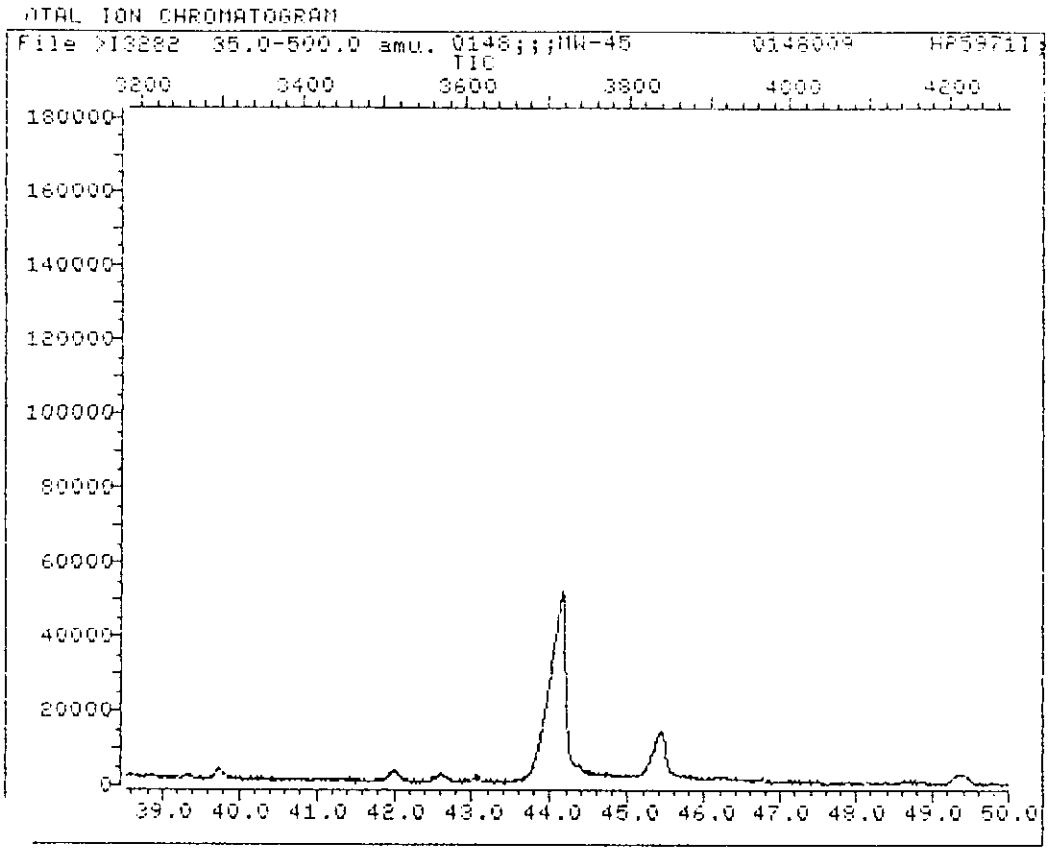
Operator ID: USER1
Quant Time : 930223 14:00
Injected at: 930216 13:02



Data File: >I3282::A4 Quant Output File: ^I3282::A6
Name: 0148;;;MW-45 Instrument ID: **MSD
Misc: 0148009 HP5971I;0210931;021193;LLW;1;;;10

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:00
Injected at: 930216 13:02

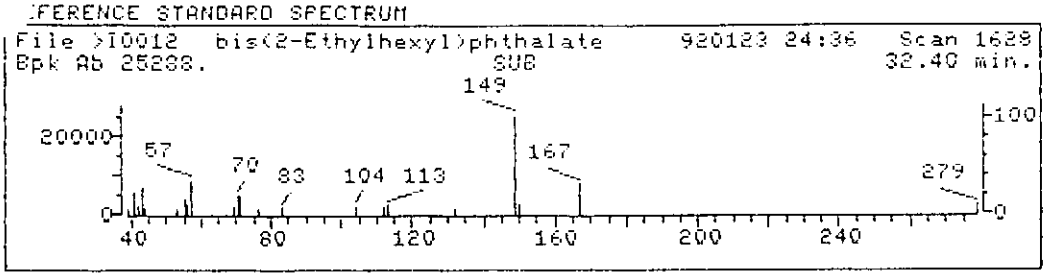


Data File: >I3282::A4 Quant Output File: ^I3282::A6
Name: 0148;;;MW-45 Instrument ID: **MSD
Misc: 0148009 HP5971I;0210931;021193;LLW;1;;;I0

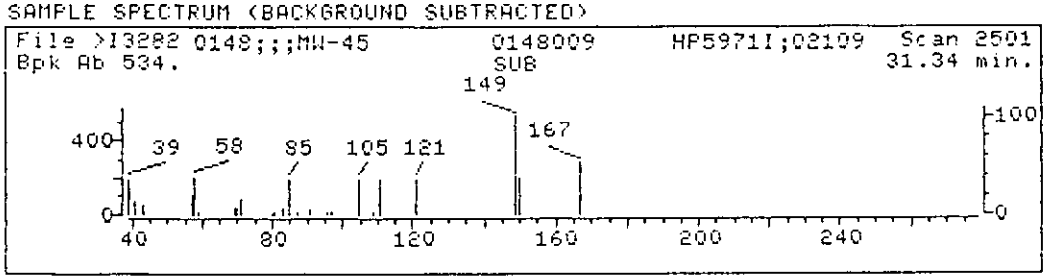
Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:00
Injected at: 930216 13:02

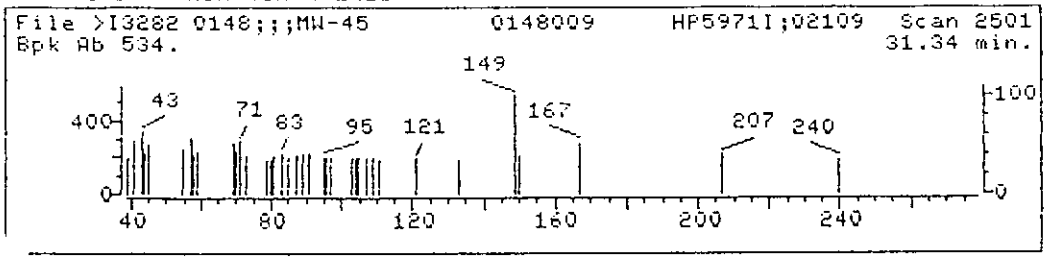
:FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



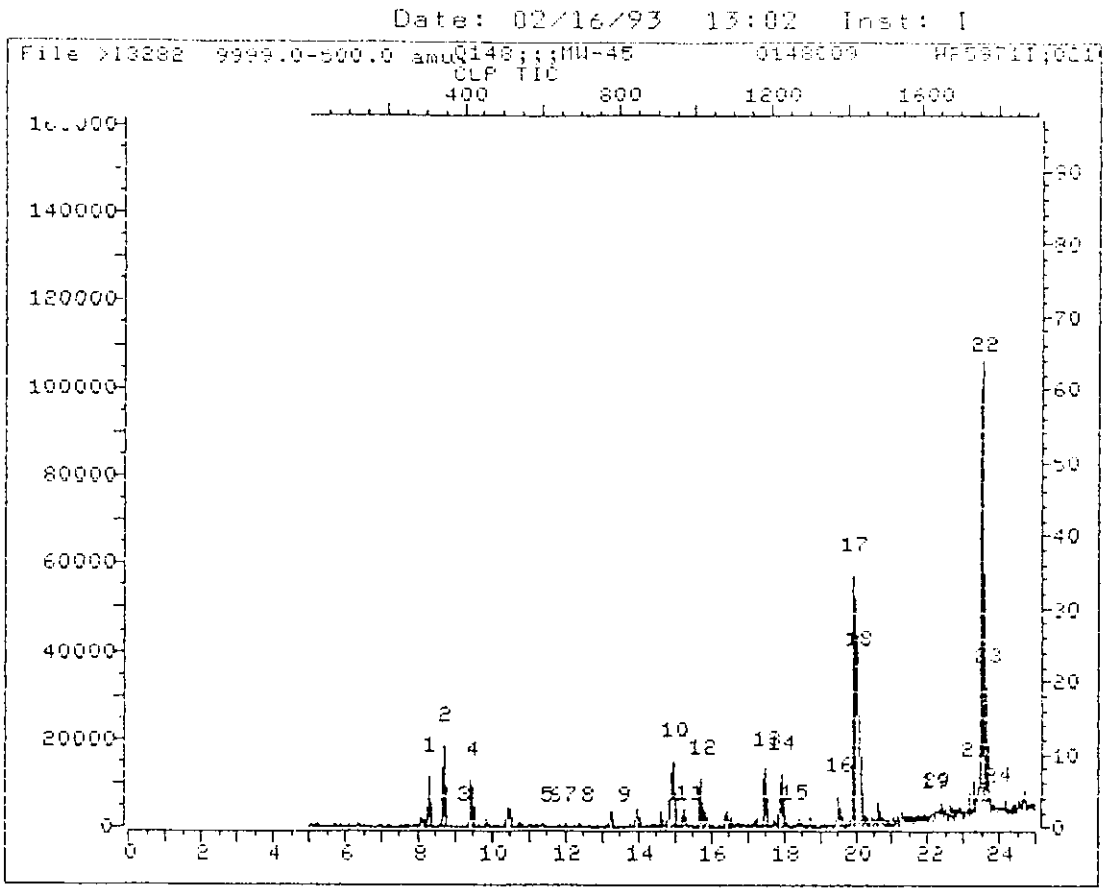
Data File: >I3282::A5 Quant Output File: ^I3282::A6
Name: 0148;;;MW-45 Instrument ID: **MSD
Misc: 0148009 HP5971I;0210931;021193;LLW;1;;;10
Quant Time: 930216 13:58 Quant ID File: I_IFI::A5
Injected at: 930216 13:02 Last Calibration: 910116 11:52
Last Qcal Time: 930216 08:48

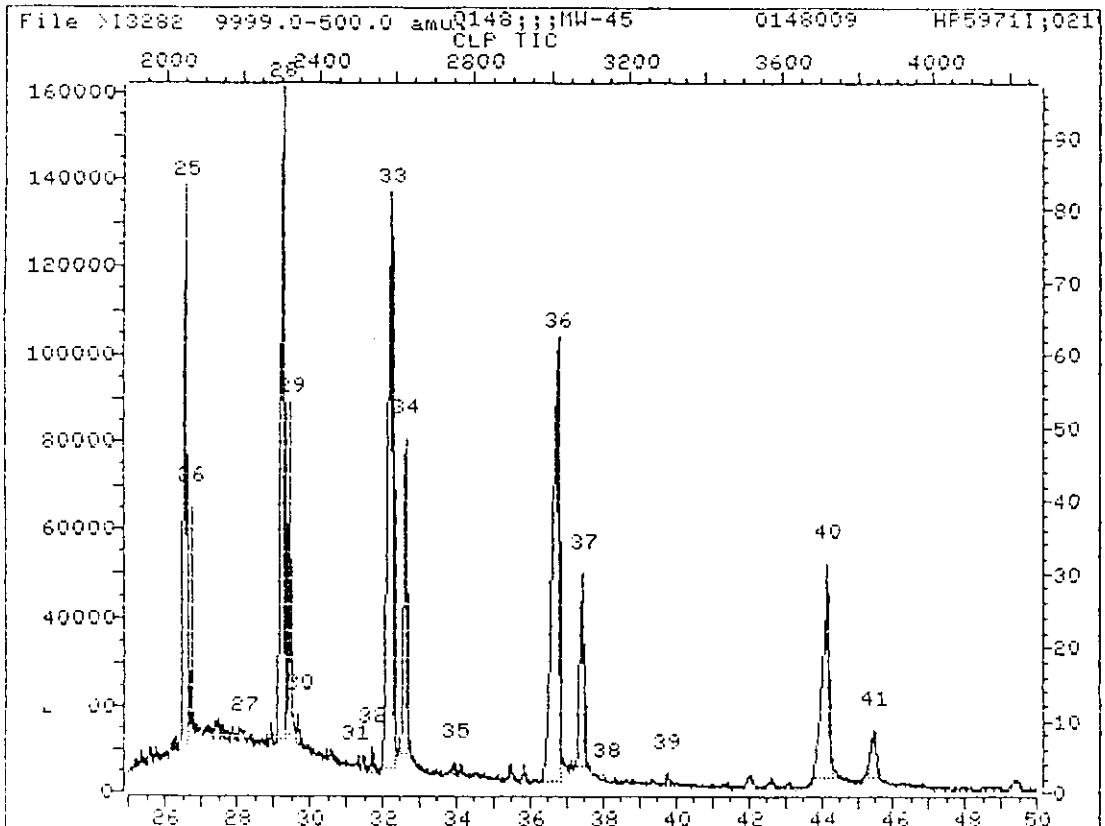
Compound No : 70
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 2501
Retention Time: 31.34 min.
Quant Ion : 148.8
Area : 1934
Concentration : .524 ug
q-value : 80

Data file header from : >I3282::A5

Sample: 0148;;;MW-45 Operator: USER1 2/16/93 13:02
Misc : 0148009 HP59711;021031;021193;LLW;1;;;I0
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS # : 3 Equip ID: **MSD
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0


Date: 02/16/93 13:02 Inst: I
File >I3282 9999.0-500.0 amuQ148;;;MW-45 0148009 HP5971I;021
CLP TIC


File >I3282 9999.0-500.0 amuQ148;;;MW-45 0148009 HP5971I;021
CLP TIC

0332

MW-45
HP5971I

Date: 02/16/93 13:02 Inst: I

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
36.	36.72	1179530.	120.	6.	.51
33.	32.22	1170026.	88.	5.	.51
28.	29.23	907382.	68.	5.	.51
40.	44.16	657729.	67.	6.	.51
25.	26.55	680729.	58.	4.	.51
22.	23.48	439966.	38.	4.	.51
37.	37.42	337075.	34.	6.	.51
34.	32.60	367989.	28.	5.	.51
29.	29.45	267553.	20.	5.	.51
17.	19.92	168836.	16.	3.	.51
26.	26.71	144409.	12.	4.	.51
10.	14.95	90392.	11.	2.	.51
41.	45.42	90517.	9.	6.	.51
2.	8.68	41146.	7.	1.	.51
13.	17.46	44336.	5.	2.	.51
23.	23.60	54507.	5.	4.	.51
4.	9.42	23142.	4.	1.	.51
14.	17.92	40593.	4.	3.	.51
1.	8.27	23645.	4.	1.	.51
12.	15.69	26269.	3.	2.	.51
39.	39.73	21044.	2.	6.	.51

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
1,4-DICHLOROBENZENE-D4	12.09	124989.	0.00	13.72	5.4
NAPHTHALENE-D8	15.35	169073.	13.72	17.68	2.0
ACENAPHTHENE-D10	20.01	215198.	17.68	21.96	4.3
PHENANTHRENE-D10	23.91	238451.	21.96	27.57	2.6
CHRYSENE-D12	31.23	270676.	27.57	34.65	3.3
PERYLENE-D12	38.07	201505.	34.65	45.42	2.4

ISTD peaks found:	6
Surrogate peaks found:	8
Quant target peaks expected:	4
Target peaks matched:	0
Total TIC identified:	21

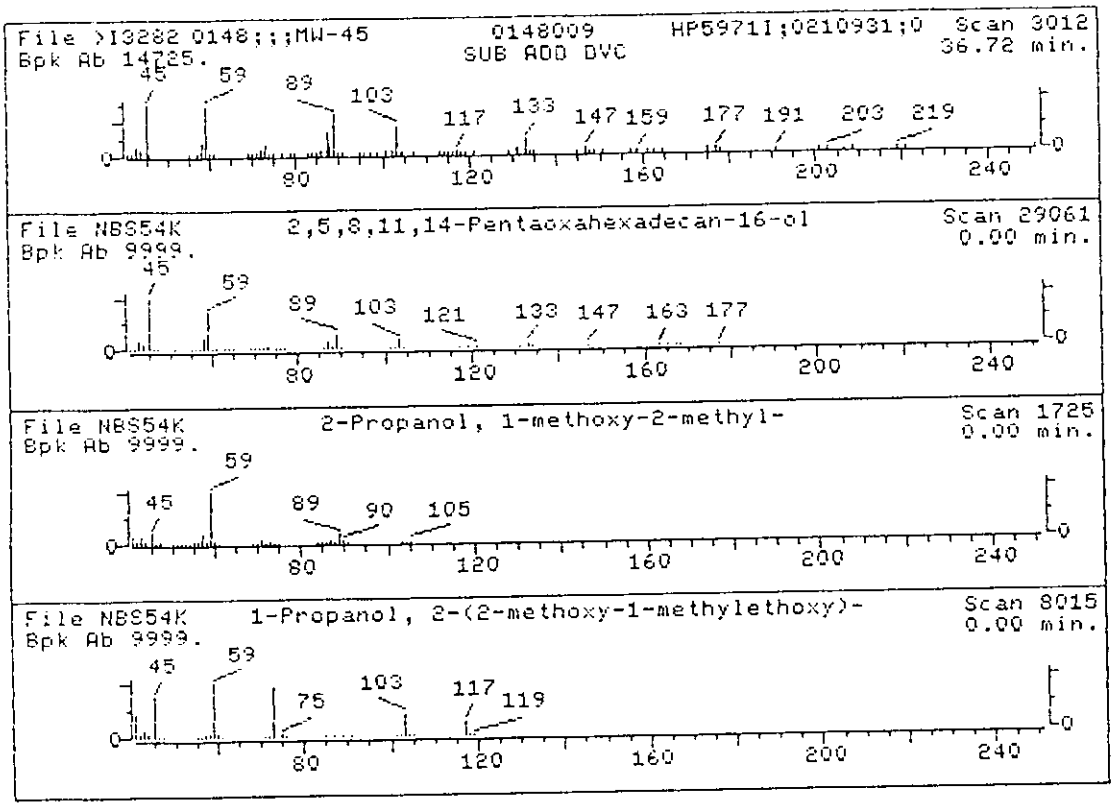
TICS : 11:48 AM MON., 22 FEB., 1993

2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H2406
_. 2-Propanol, 1-methoxy-2-methyl-	104	C5H1202
3. 1-Propanol, 2-(2-methoxy-1-methylethoxy)-	148	C7H1603
4. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H1604
5. 2-Propanol, 1-ethoxy-	104	C5H1202

Sample File: >I3282 Spectrum #: 3012
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	29	23778521	8670	NBS54K	43	86	0	0	100	39	10	15
2.	25*	3587642	1855	NBS54K	22	69	3	0	518	50	7	12
3.	25	55956213	1970	NBS54K	55	48	2	0	97	47	7	12
4.	20	112356	8547	NBS54K	33	66	0	0	84	53	5	15
5.	15*	1569024	1853	NBS54K	34	60	1	0	83	56	3	18

Peak#: 36 Area: 1179530. Est Conc: 120. Date: 02/16/93 13:02 Inst: I

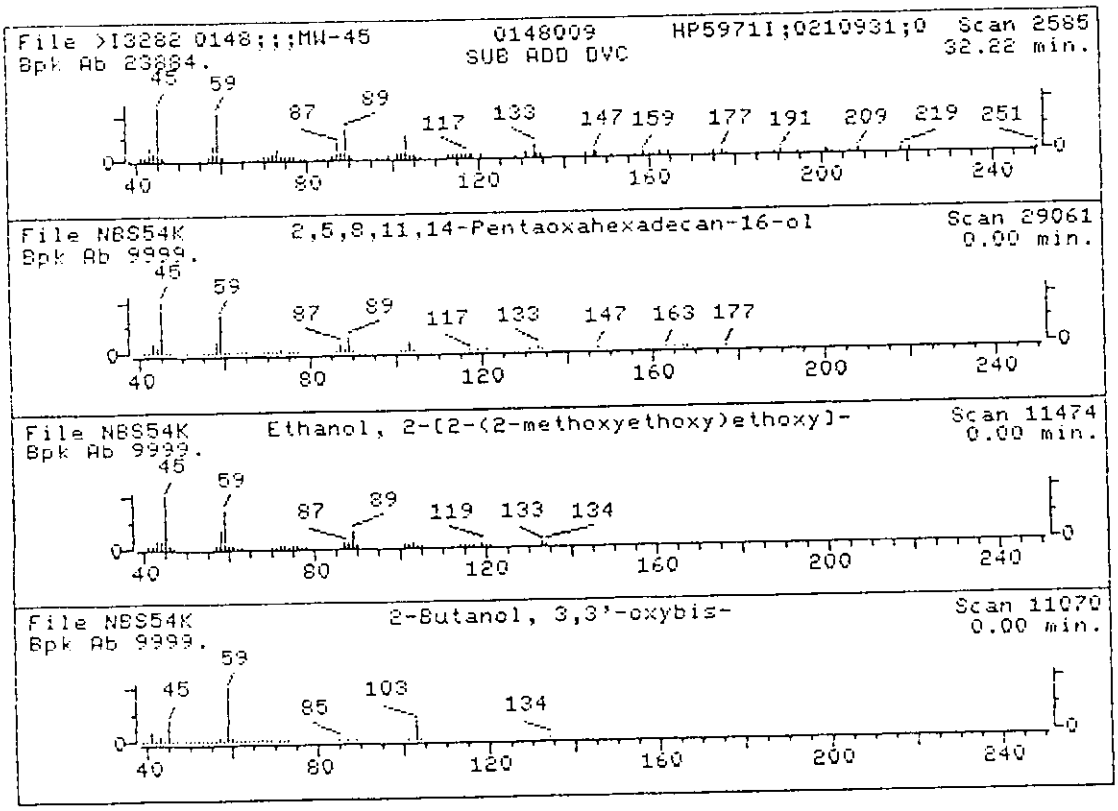


2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H2406
.. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H1604
3. 2-Butanol, 3,3'-oxybis-	162	C8H1803
4. Propanoic acid, 3-methoxy-, methyl ester	118	C5H1003
5. 2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H2606

Sample file: >I3282 Spectrum #: 2585
Search speed: 1 Tilting option: N No. of ion ranges searched: 44

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42	23778521	8670	NBS54K	48	81	0	0	100	28	14	19
2.	28	112356	8547	NBS54K	39	60	0	0	72	43	8	16
3.	20	54305612	2000	NBS54K	37	48	1	0	87	55	5	14
4.	20*	3852093	8054	NBS54K	32	70	3	0	100	52	5	13
5.	20	1191873	2071	NBS54K	28	88	0	0	76	54	5	14

Peak#: 33 Area: 1170026. Est Conc: 88. Date: 02/16/93 13:02 Inst: I

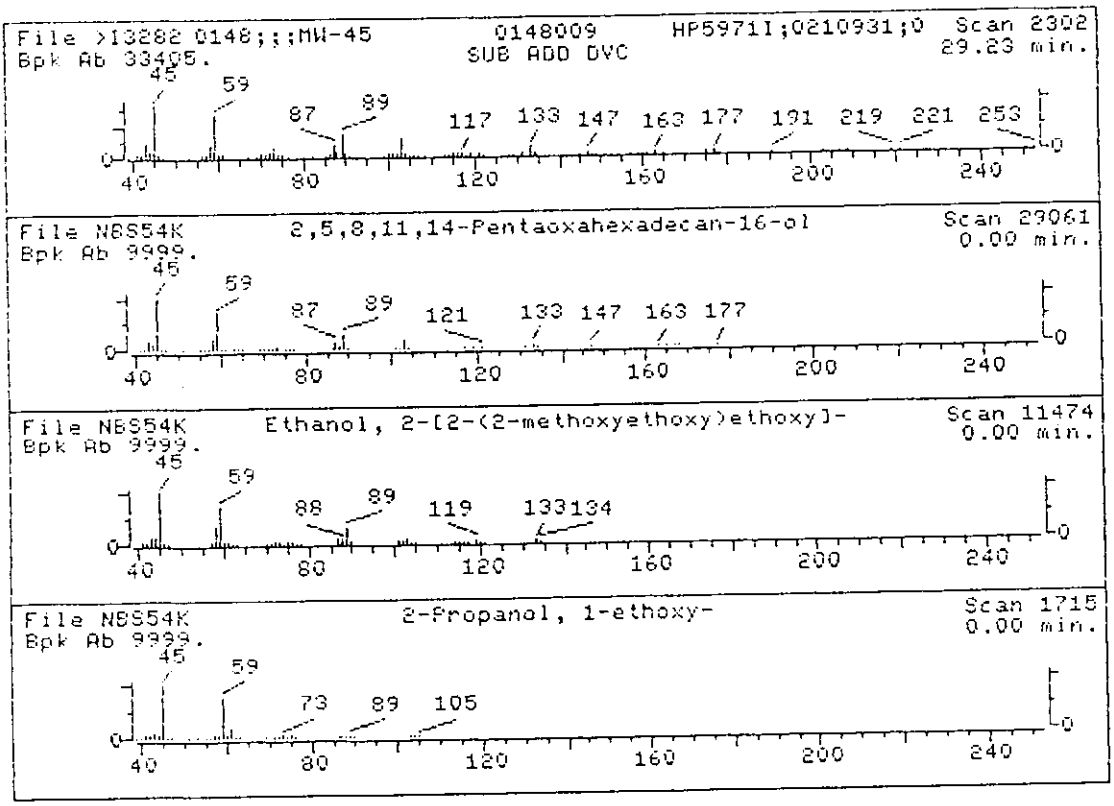


2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H24O6
. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H16O4
3. 2-Propanol, 1-ethoxy-	104	C5H12O2
4. 2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6
5. Butane, 1,2,4-trimethoxy-	148	C7H16O3

Sample file: >I3282 Spectrum #: 2302
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	58	23778521	8670	NBS54K	58	71	0	0	86	16	25	27
2.	48	112356	8547	NBS54K	57	42	1	0	100	22	17	19
3.	26*	1569024	1853	NBS54K	28	66	2	0	100	41	8	14
4.	25	1191873	2071	NBS54K	42	74	0	0	70	48	7	15
5.	15	20637483	11281	NBS54K	39	47	2	0	100	60	3	13

Peak#: 28 Area: 907382. Est Conc: 68. Date: 02/16/93 13:02 Inst: I

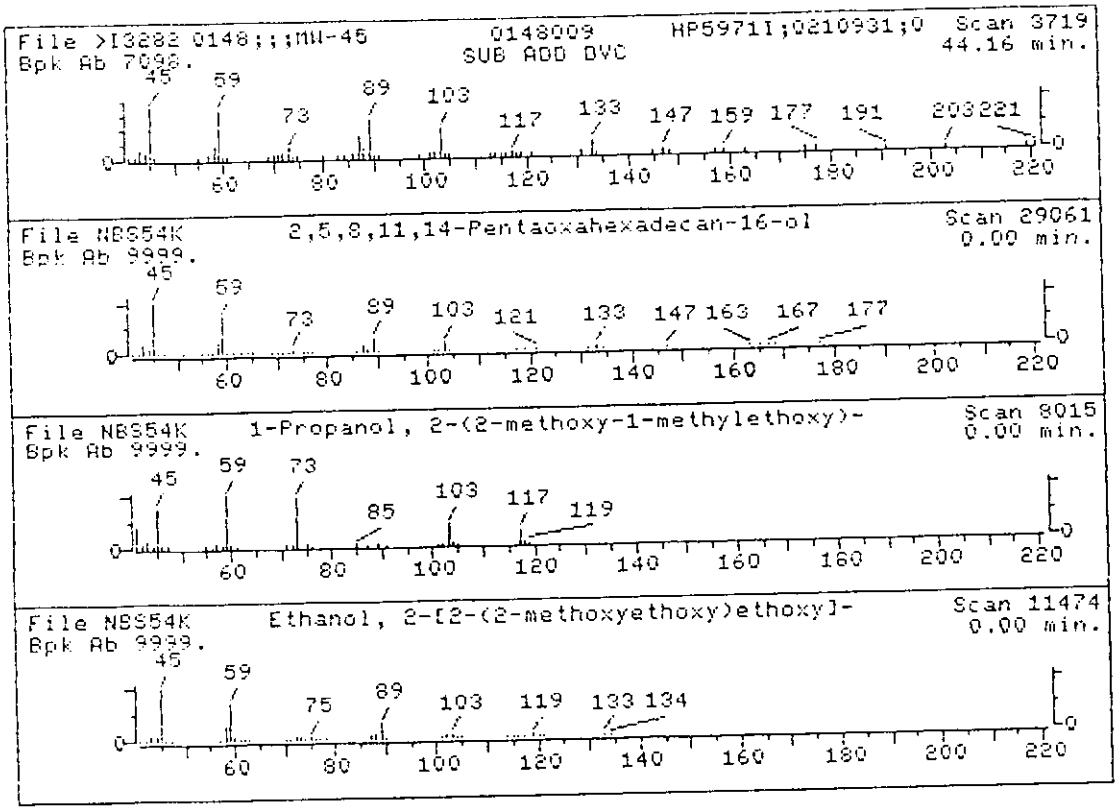


. 2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H2406
.. 1-Propanol, 2-(2-methoxy-1-methylethoxy)-	148	C7H1603
3. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H1604
4. 2-Propanol, 1-ethoxy-	104	C5H12D2
5. 1-Propanol, 3-[3-(1-methylethoxy)propoxy]-	176	C9H2003

Sample file: >I3282 Spectrum #: 3719
Search speed: 1 Tilting option: N No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	32	23278521	8670	NBS54K	38	91	0	0	100	33	12	15
2.	27	55956213	1970	NBS54K	60	43	2	0	93	41	8	15
3.	25	112356	8547	NBS54K	27	72	0	0	79	48	7	14
4.	20*	1569024	1853	NBS54K	34	60	1	0	92	51	5	18
5.	20	54518035	2023	NBS54K	26	73	0	0	74	55	5	13

Peak#: 40 Area: 657729. Est Conc: 67. Date: 02/16/93 13:02 Inst: I

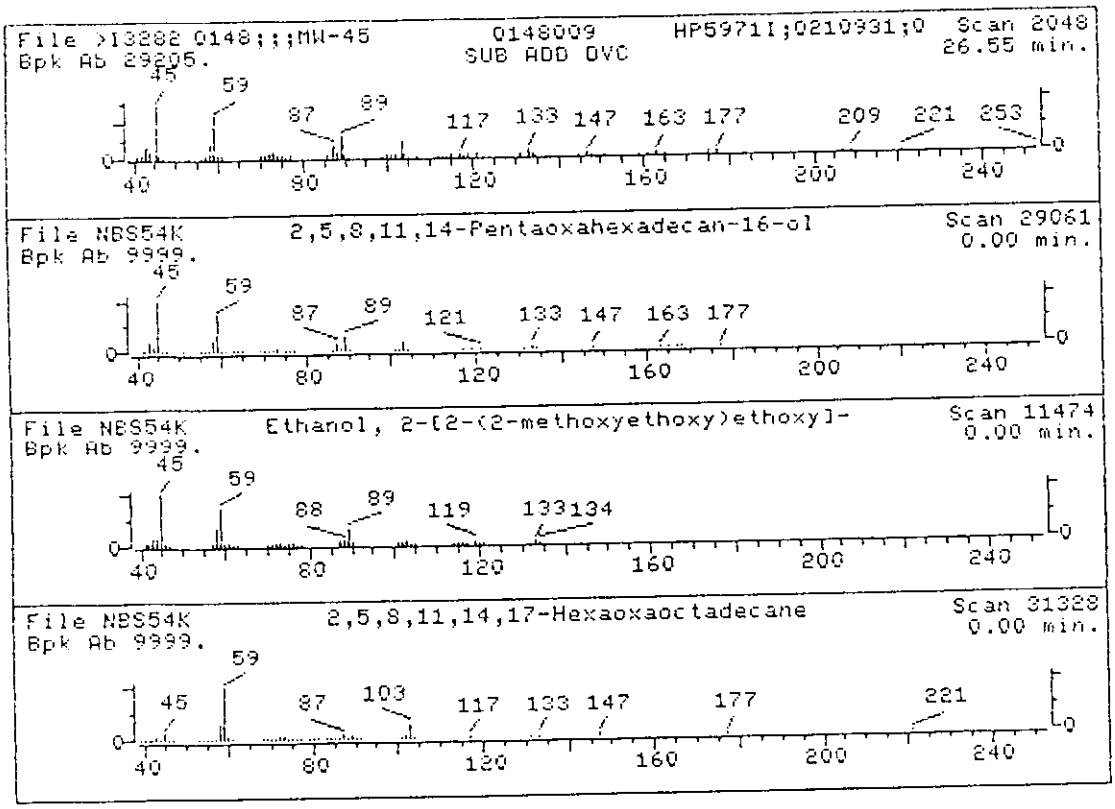


.	2,5,8,11,14-Pentaoxahexadecan-16-ol	252 C11H24O6
.	Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164 C7H16O4
3.	2,5,8,11,14,17-Hexaoxaoctadecane	266 C12H26O6
4.	2-Propanol, 1-ethoxy-	104 C5H12O2
5.	Silane, ethyldimethyl-	88 C4H12Si

Sample file: >I3282 Spectrum #: 2048
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89	23778521	8670	NBS54K	98	31	0	0	100	3	66	71
2.	45	112356	8547	NBS54K	57	42	2	0	100	22	17	16
3.	30	1191873	2071	NBS54K	51	65	0	0	79	46	10	22
4.	26*	1569024	1853	NBS54K	24	70	2	0	100	41	8	14
5.	20*	758214	1807	NBS54K	31	67	3	0	79	51	5	13

Peak#: 25 Area: 680729. Est Conc: 58. Date: 02/16/93 13:02 Inst: I

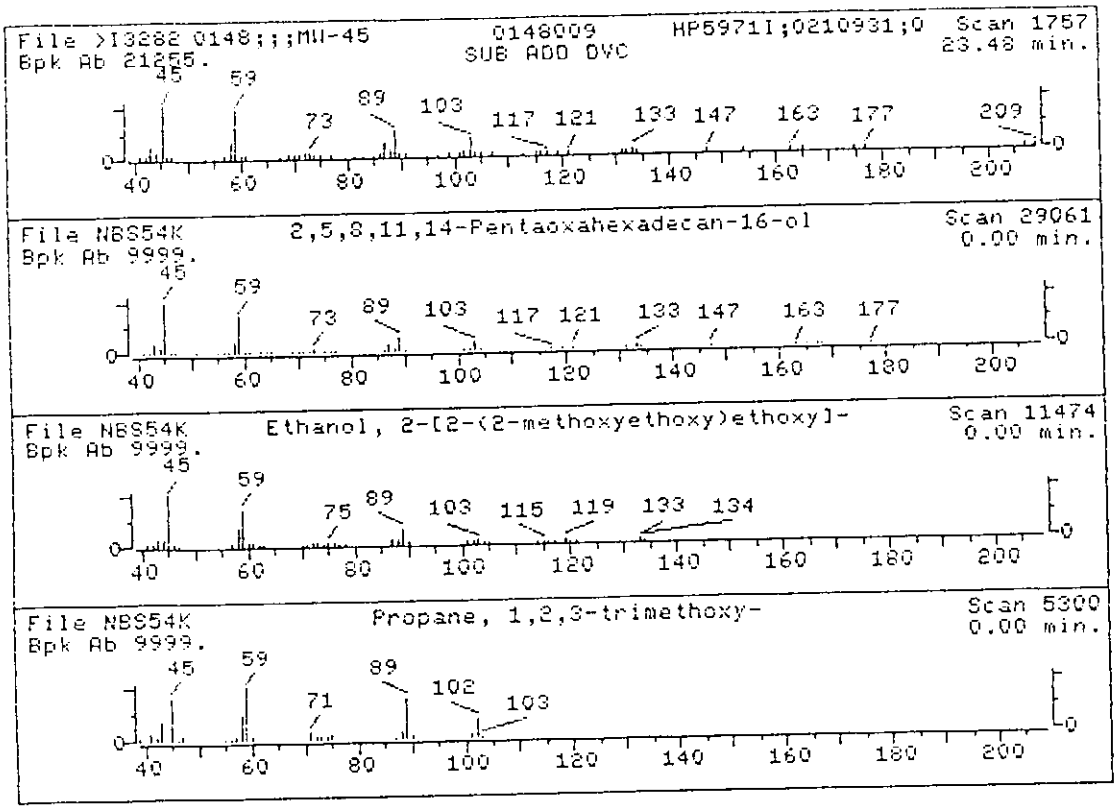


2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H2406
_. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H1604
3. Propane, 1,2,3-trimethoxy-	134	C6H1403
4. 2-Propanol, 1-ethoxy-	104	C5H1202
5. 2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H2606

Sample file: >I3282 Spectrum #: 1757
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	79	23778521	8670	NBS54K	81	48	0	0	100	15	43	60
2.	59	112356	8547	NBS54K	56	43	0	0	98	21	27	31
3.	31	20637494	8497	NBS54K	67	45	2	0	63	31	12	14
4.	26*	1569024	1853	NBS54K	28	66	2	0	100	41	8	14
5.	25	1191873	2071	NBS54K	57	59	1	0	90	47	7	15

Peak#: 22 Area: 439966. Est Conc: 38. Date: 02/16/93 13:02 Inst: I

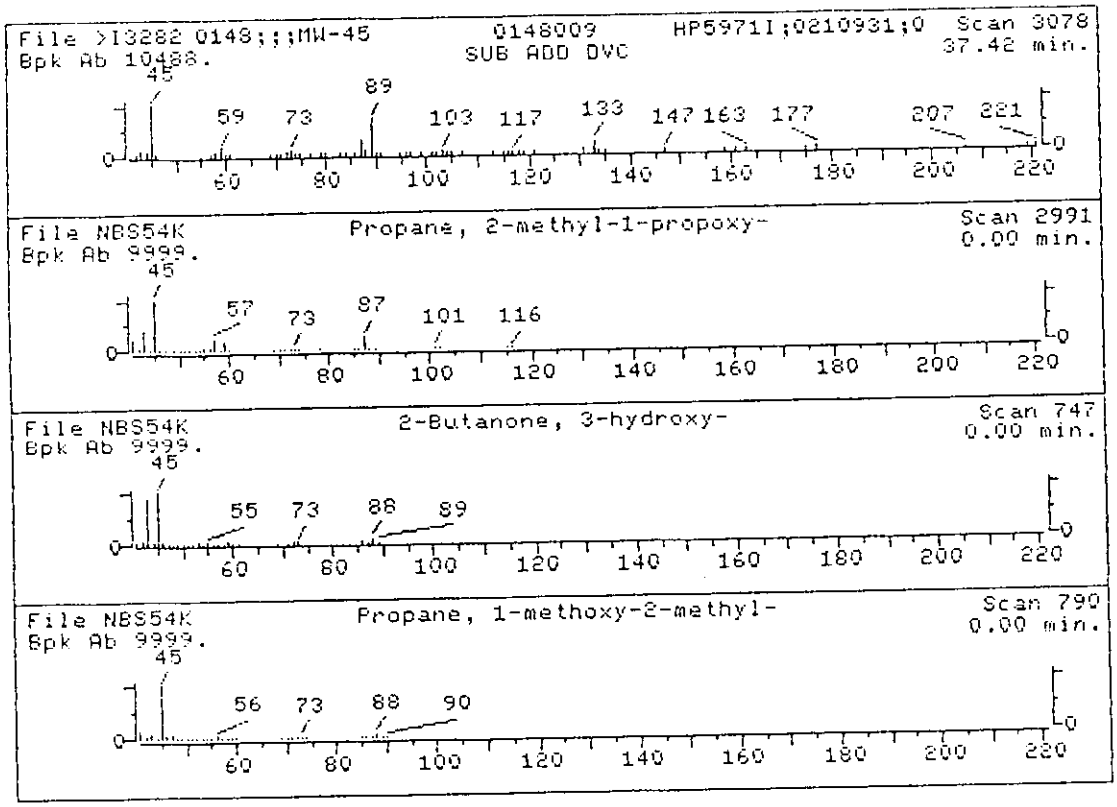


. Propane, 2-methyl-1-propoxy-	116	C7H16O
.. 2-Butanone, 3-hydroxy-	88	C4H8O2
3. Propane, 1-methoxy-2-methyl-	88	C5H12O
4. Acetaldehyde, methoxy-	74	C3H6O2
5. 1,3-Butanediol	90	C4H10O2

Sample file: >I3282 Spectrum #: 3078
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	24*	15268492	7618	NBS54K	22	64	3	0	100	44	8	12
2.	20*	513860	346	NBS54K	29	56	2	0	100	52	5	14
3.	20*	625445	348	NBS54K	27	55	2	0	100	52	5	14
4.	15*	10312831	339	NBS54K	25	27	1	0	90	57	3	14
5.	15*	107880	351	NBS54K	26	49	2	0	100	57	3	14

Peak#: 37 Area: 337075. Est Conc: 34. Date: 02/16/93 13:02 Inst: I

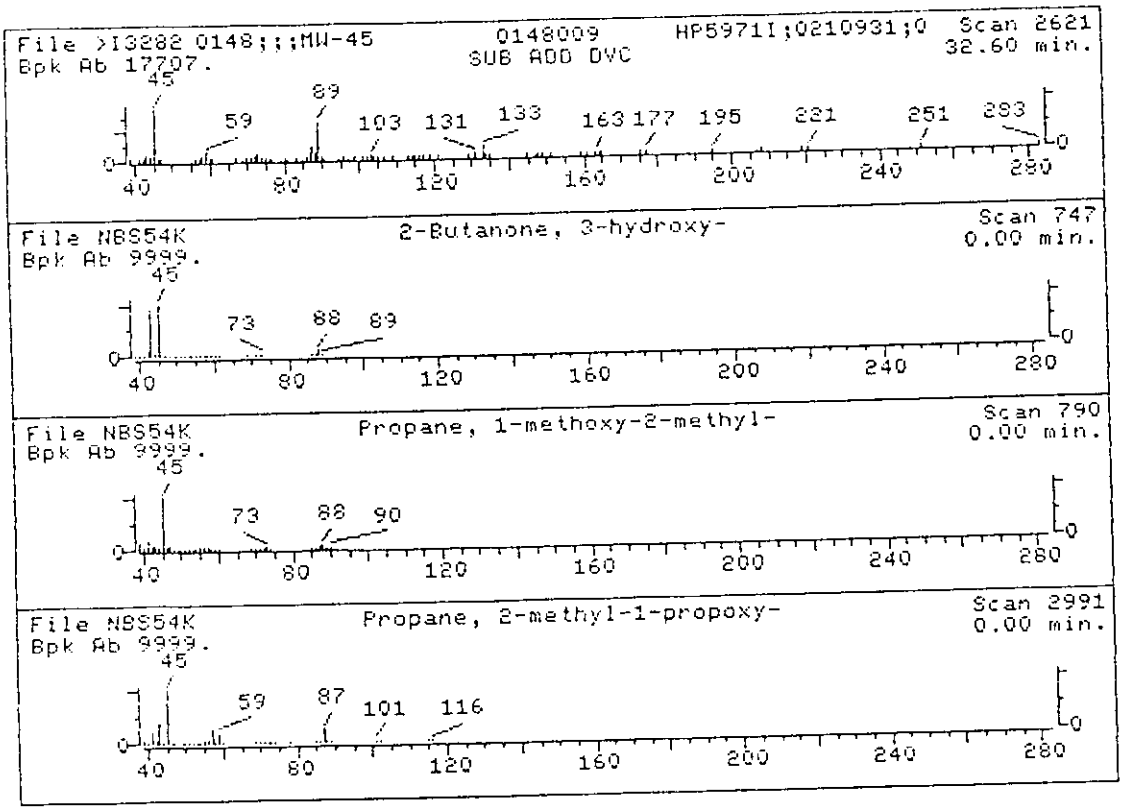


2-Butanone, 3-hydroxy-	88	C4H8O2
2. Propane, 1-methoxy-2-methyl-	88	C5H12O
3. Propane, 2-methyl-1-propoxy-	116	C7H16O
4. 1,3-Butanediol	90	C4H10O2
5. 2,3-Butanediol	90	C4H10O2

Sample file: >I3282 Spectrum #: 2621
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	513860	346	NBS54K	29	56	2	0	100	50	7	14
2.	25*	625445	348	NBS54K	27	55	2	0	100	50	7	14
3.	24*	15268492	7618	NBS54K	22	64	3	0	100	43	8	12
4.	15*	107880	351	NBS54K	30	45	2	0	100	56	3	15
5.	15*	513859	350	NBS54K	21	60	2	0	100	56	3	13

Peak#: 34 Area: 367989. Est Conc: 28. Date: 02/16/93 13:02 Inst: I

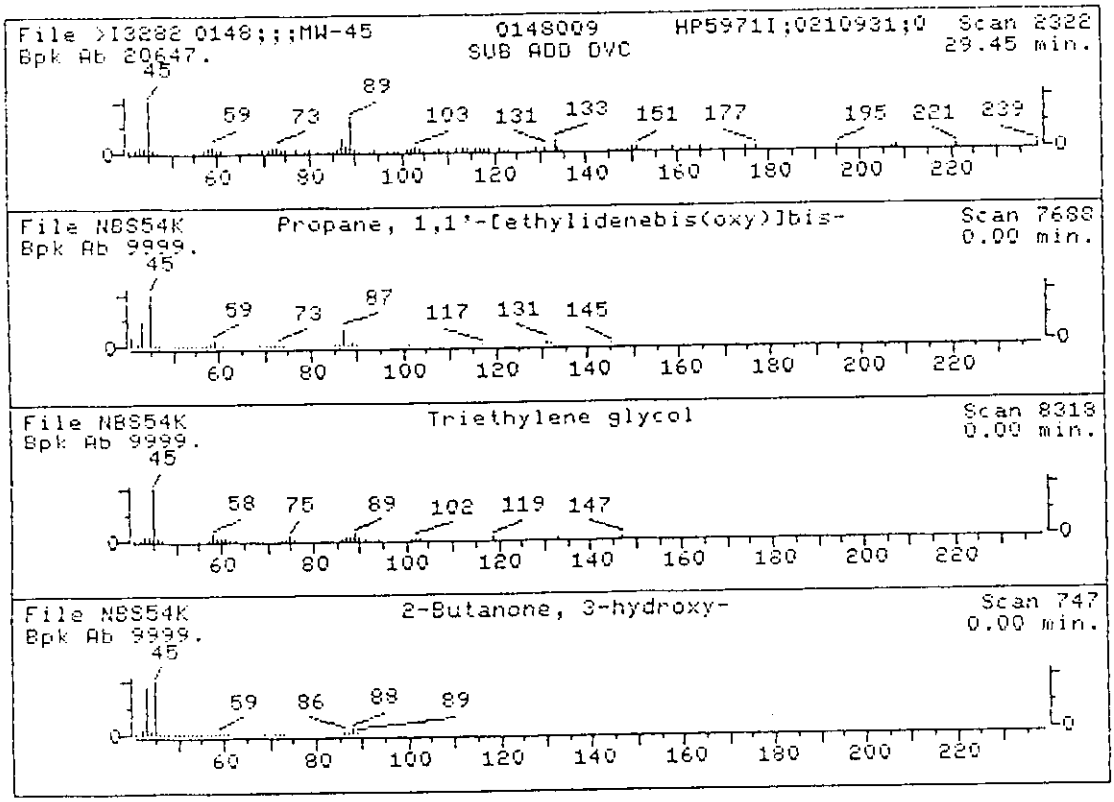


'.	Propane, 1,1'-[ethylidenebis(oxy)]bis-	146 C8H18O2
.	Triethylene glycol	150 C6H14O4
3.	2-Butanone, 3-hydroxy-	88 C4H8O2
4.	Propane, 1-methoxy-2-methyl-	88 C5H12O
5.	1,3-Butanediol	90 C4H10O2

Sample file: >I3282 Spectrum #: 2322
Search speed: 1 Tilting option: N No. of ion ranges searched: 49

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	27	105828	7722	NBS54K	40	53	1	0	73	39	10	13
2.	25	112276	8525	NBS54K	34	50	1	0	78	49	7	12
3.	25*	513860	346	NBS54K	29	56	2	0	100	47	7	14
4.	25*	625445	348	NBS54K	27	55	2	0	100	49	7	14
5.	20*	107880	351	NBS54K	24	51	2	0	100	53	5	14

Peak#: 29 Area: 267553. Est Conc: 20. Date: 02/16/93 13:02 Inst: I

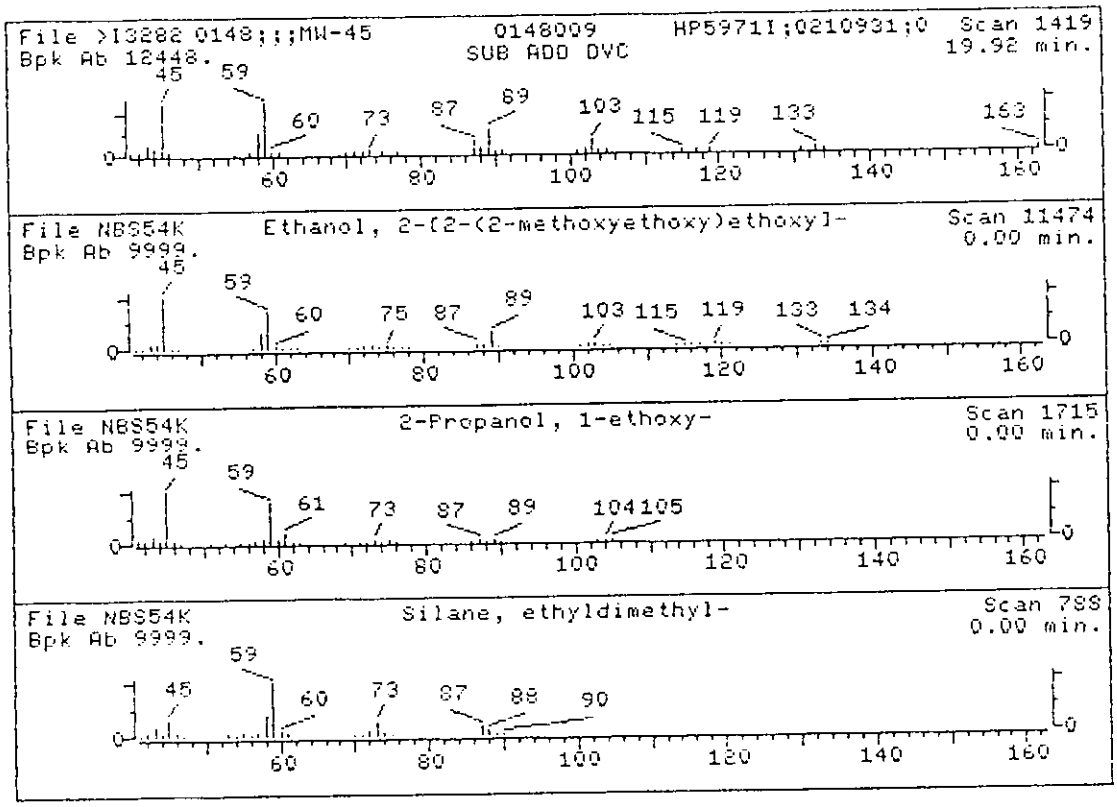


	Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164 C7H16O4
_.	2-Propanol, 1-ethoxy-	104 C5H12O2
3.	Silane, ethyldimethyl-	88 C4H12Si
4.	Ethane, 1,1'-oxybis[2-methoxy-	134 C6H14O3
5.	2,5,8,11,14-Pentaoxapentadecane	222 C10H22O5

Sample file: >I3282 Spectrum #: 1419
Search speed: 1 Tilting option: N No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	58	112356	8547	NBS54K	62	37	1	0	98	19	25	23
2.	31*	1569024	1853	NBS54K	39	55	1	0	89	45	12	22
3.	26*	758214	1807	NBS54K	36	62	2	0	100	43	8	14
4.	25	111966	1938	NBS54K	27	63	0	0	90	48	7	14
5.	25	143248	2097	NBS54K	26	84	0	0	100	49	7	13

Peak#: 17 Area: 168836. Est Conc: 16. Date: 02/16/93 13:02 Inst: 1

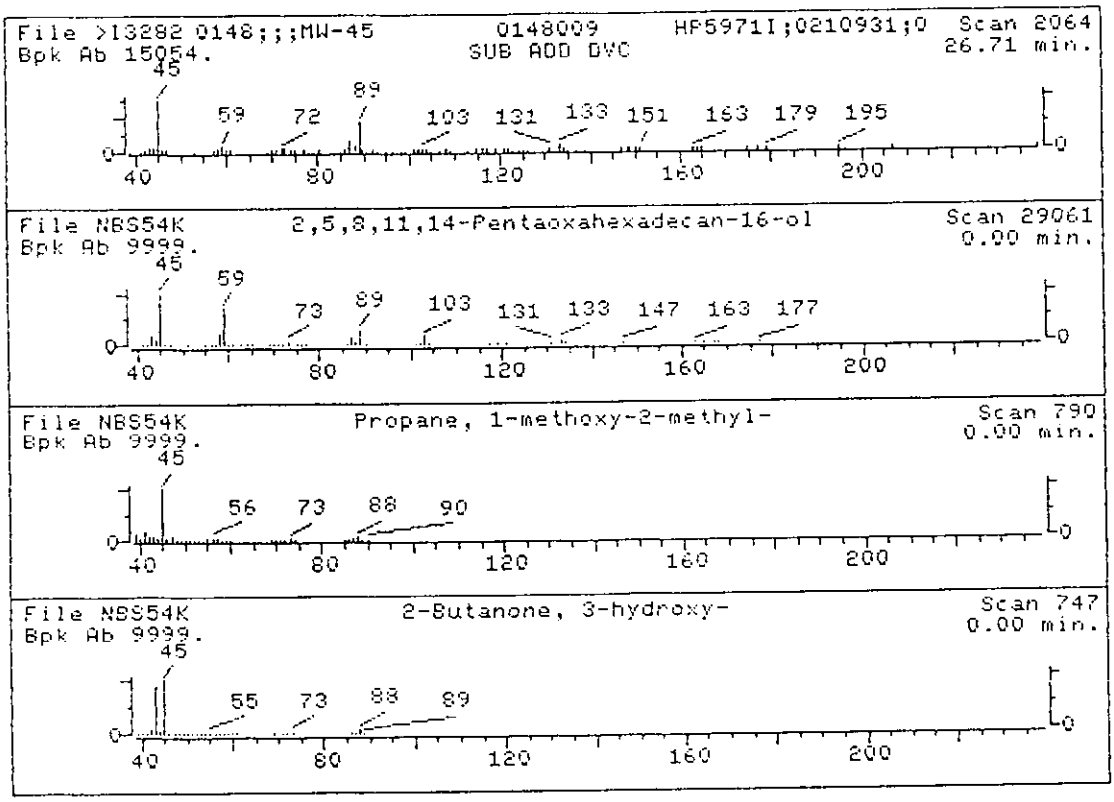


	2,5,8,11,14-Pentaoxahexadecan-16-ol	292 C11H24O6
2.	Propane, 1-methoxy-2-methyl-	88 C5H12O
3.	2-Butanone, 3-hydroxy-	88 C4H8O2
4.	Acetaldehyde, methoxy-	74 C3H6O2
5.	1,3-Butanediol	90 C4H10O2

Sample file: >13282 Spectrum #: 2064
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52	23778521	8670	NBS54K	70	59	2	0	99	18	20	16
2.	25*	625445	348	NBS54K	23	59	2	0	100	49	7	13
3.	25*	513860	346	NBS54K	24	61	2	0	100	47	7	14
4.	20*	10312831	339	NBS54K	22	30	1	0	68	54	5	14
5.	20*	107880	351	NBS54K	30	45	2	0	100	53	5	15

Peak#: 26 Area: 144409. Est Conc: 12. Date: 02/16/93 13:02 Inst: 1

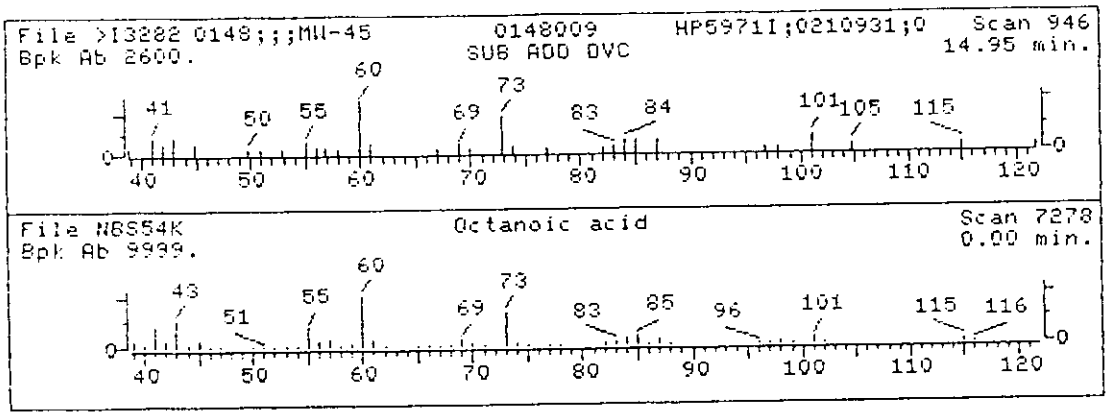


1. Octanoic acid 144 C8H16O2

Sample file: >I3282 Spectrum #: 946
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	34	124072	2166	NBS54K	64	40	2	0	91	39	12	17

Peak#: 10 Area: 90392. Est Conc: 11. Date: 02/16/93 13:02 Inst: I

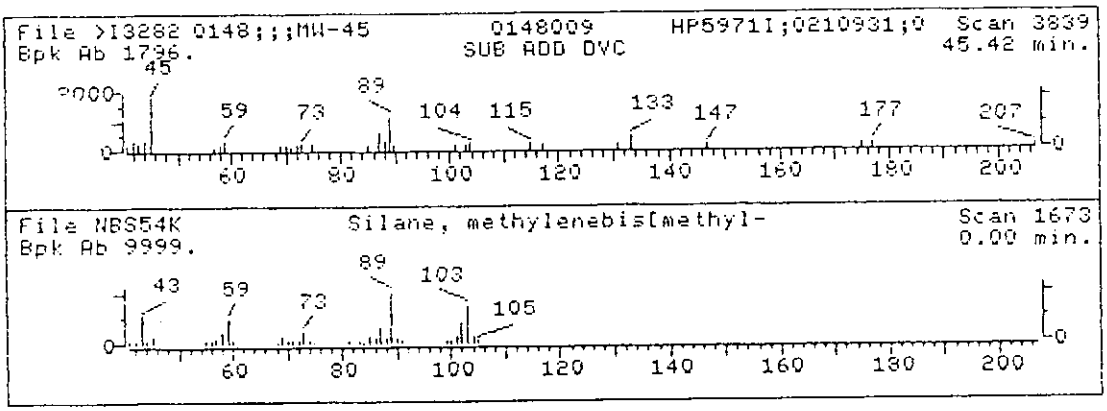


. Silane, methylenebis[methyl- 104 C3H12Si2

Sample file: >I3282 Spectrum #: 3839
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	5654057	8465	NBS54K	24	103	3	0	63	64	2	12

Peak#: 41 Area: 90517. Est Conc: 9. Date: 02/16/93 13:02 Inst: I

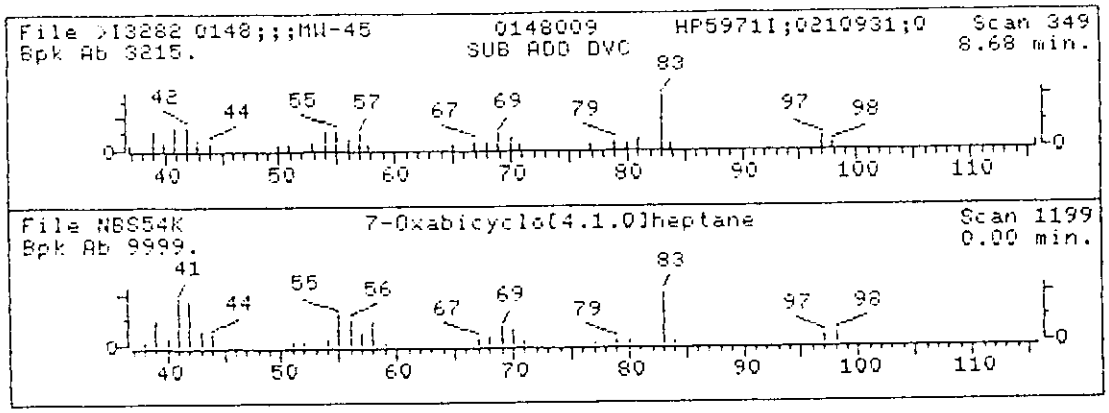


.. 7-Oxabicyclo[4.1.0]heptane 98 C6H10O

Sample file: >I3282 Spectrum #: 349
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

#	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	286204	6469	NBS54K	27	73	1	0	36	59	3	15

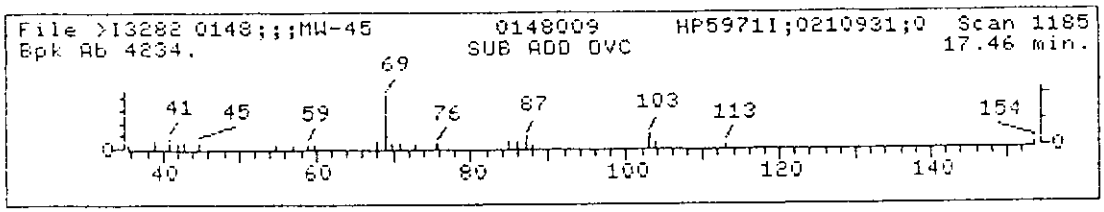
Peak#: 2 Area: 41146. Est Conc: 7. Date: 02/16/93 13:02 Inst: 1



Sample file: >I3282 Spectrum #: 1185

No data base entries were retrieved.

Peak#: 13 Area: 44336. Est Conc: 5. Date: 02/16/93 13:02 Inst: I

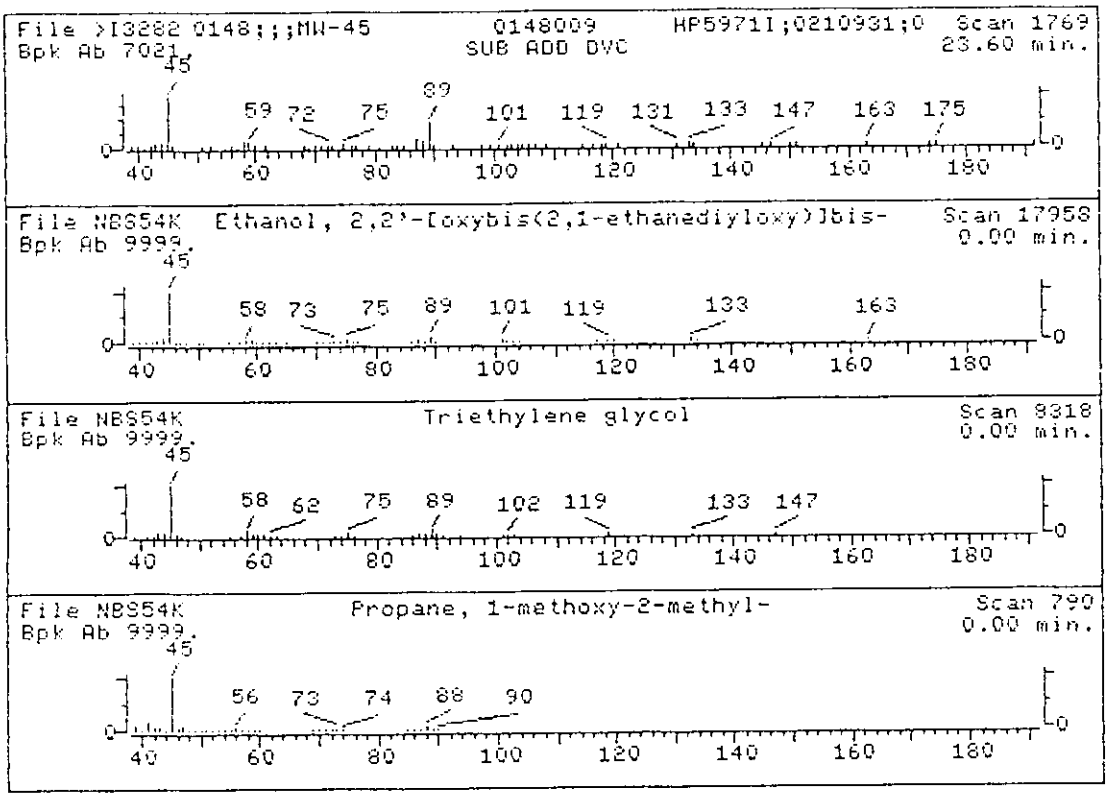


.	Ethanol, 2,2'-[oxybis(2,1-ethanediyloxy)]bis-	194 C8H18O5
.	Triethylene glycol	150 C6H14O4
3.	Propane, 1-methoxy-2-methyl-	88 C5H12O
4.	2-Butanone, 3-hydroxy-	88 C4H8O2
5.	1,3-Butanediol	90 C4H10O2

Sample file: >I3282 Spectrum #: 1769
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	33	112607	8603	NBS54K	37	56	0	0	94	37	10	19
2.	32	112276	8525	NBS54K	35	49	0	0	85	40	10	18
3.	26*	625445	348	NBS54K	28	54	2	0	100	42	8	14
4.	26*	513860	346	NBS54K	24	61	2	0	100	42	8	14
5.	25*	107880	351	NBS54K	30	45	2	0	100	48	7	15

Peak#: 23 Area: 54507. Est Conc: 5. Date: 02/16/93 13:02 Inst: 1

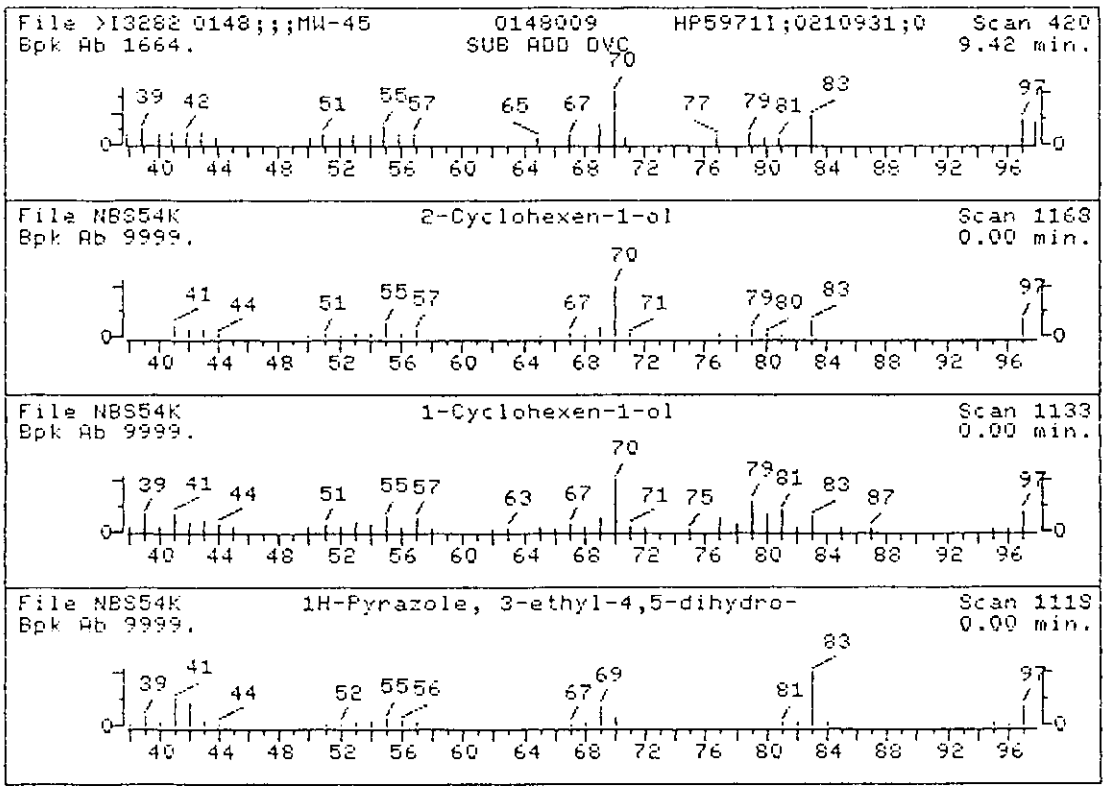


.	2-Cyclohexen-1-ol	98	C6H10O
2.	1-Cyclohexen-1-ol	98	C6H10O
3.	1H-Pyrazole, 3-ethyl-4,5-dihydro-	98	C5H10N2
4.	1H-Imidazole, 4,5-dihydro-2,4-dimethyl-	98	C5H10N2

Sample file: >I3282 Spectrum #: 420
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52*	822673	4036	NBS54K	44	55	1	0	100	25	22	24
2.	52*	4065810	4033	NBS54K	40	73	3	0	81	18	20	13
3.	11*	5920296	9888	NBS54K	23	66	2	0	49	62	2	13
4.	11*	930610	9889	NBS54K	24	85	3	0	52	62	2	12

Peak#: 4 Area: 23142. Est Conc: 4. Date: 02/16/93 13:02 Inst: I

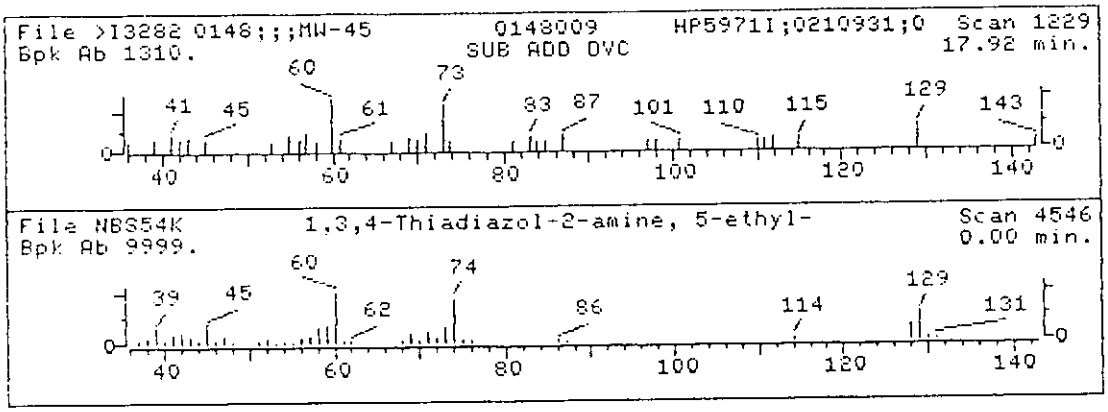


1. 1,3,4-Thiadiazol-2-amine, 5-ethyl- 129 C4H7N3S

Sample file: >I3282 Spectrum #: 1229
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	14068532	2140	NBS54K	26	98	3	0	81	90	7	13

Peak#: 14 Area: 40593. Est Conc: 4. Date: 02/16/93 13:02 Inst: I

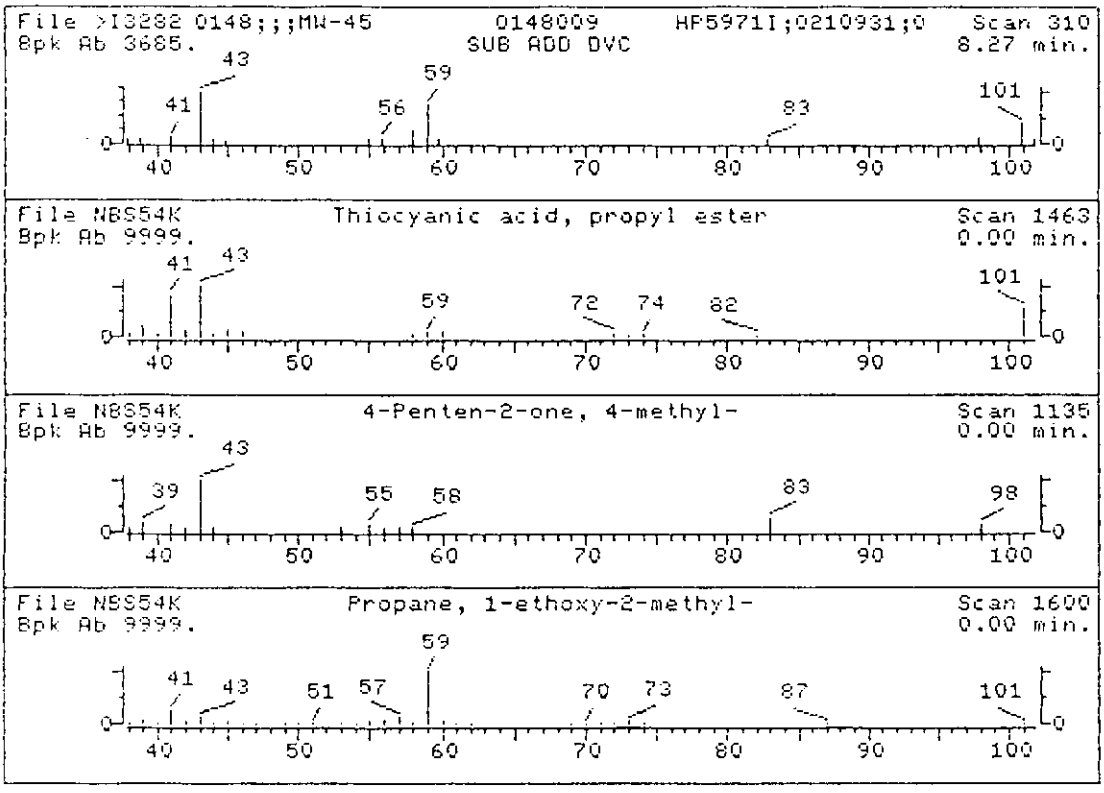


.	Thiocyanic acid, propyl ester	101	C4H7NS
2.	4-Penten-2-one, 4-methyl-	98	C6H10O
3.	Propane, 1-ethoxy-2-methyl-	102	C6H14O
4.	Butane, 1-ethoxy-	102	C6H14O

Sample file: >I3282 Spectrum #: 310
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	4251165	10744	NBS54K	26	72	3	0	71	45	8	13
2.	15*	3744023	9897	NBS54K	31	48	2	0	75	56	3	15
3.	11*	627021	1844	NBS54K	30	61	3	0	74	62	2	13
4.	11*	628819	1845	NBS54K	24	68	3	0	74	62	2	12

Peak#: 1 Area: 23645. Est Conc: 4. Date: 02/16/93 13:02 Inst: I

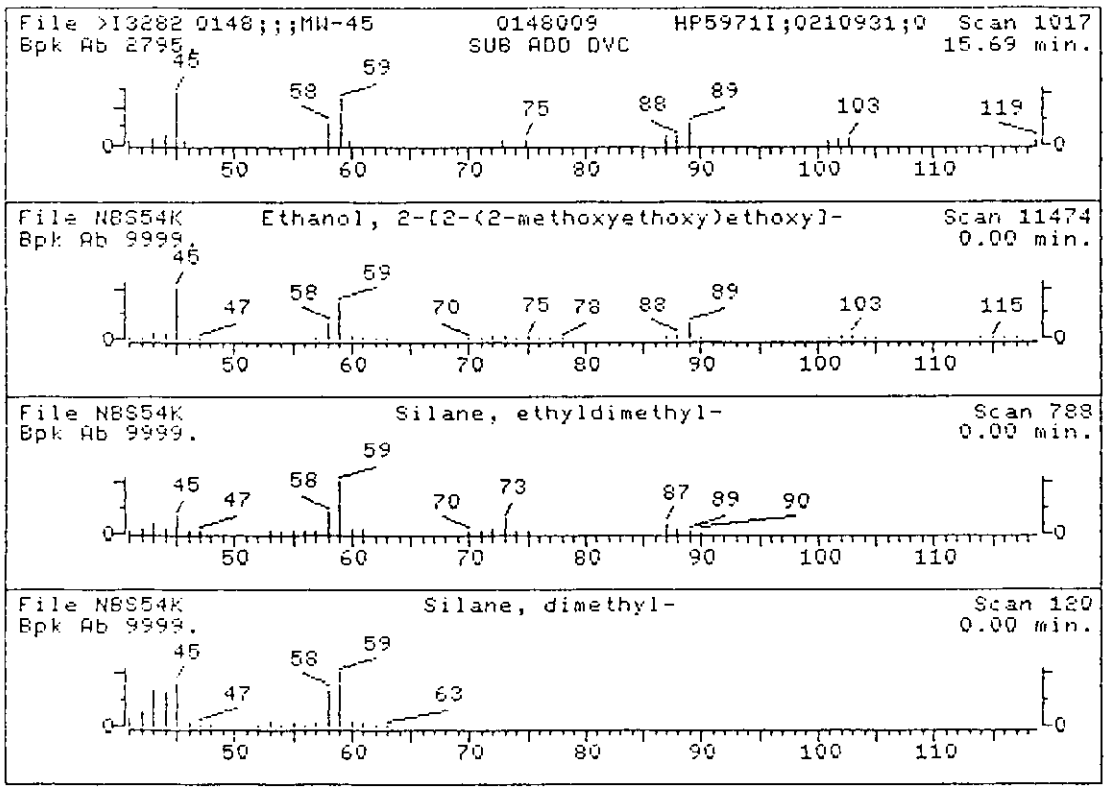


.	Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H16O4
.	Silane, ethyldimethyl-	88	C4H12Si
3.	Silane, dimethyl-	60	C2H8Si
4.	2-Hydroxy-3-pentanone	102	C5H10O2
5.	Butane, 2-methoxy-	88	C5H12O

Sample file: >I3282 Spectrum #: 1017
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	78	112356	8547	NBS54K	58	41	2	0	100	4	55	17
2.	26*	758214	1807	NBS54K	31	67	2	0	82	44	8	14
3.	25*	1111746	1791	NBS54K	31	78	3	0	60	43	8	13
4.	25*	5704201	1833	NBS54K	22	87	3	0	100	49	7	12
5.	20*	6795875	1810	NBS54K	22	70	3	0	865	51	5	12

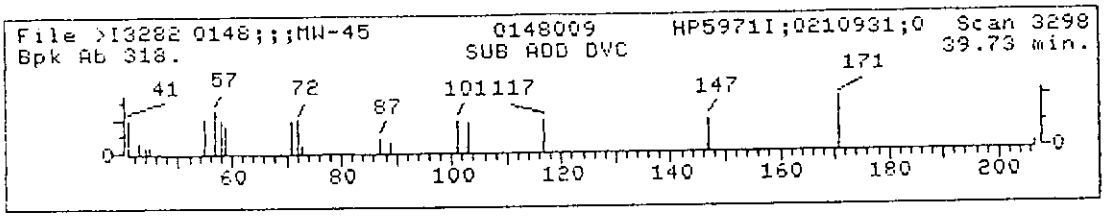
Peak#: 12 Area: 26269. Est Conc: 3. Date: 02/16/93 13:02 Inst: I



Sample file: >I3282 Spectrum #: 3298

No data base entries were retrieved.

Peak#: 39 Area: 21044. Est Conc: 2. Date: 02/16/93 13:02 Inst: 1



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MHW-1

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148010

0354

Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3286.D

Level: (low/med) LOW Date Received: 02/~~02~~10/93 Case 3/15/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	2	J
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	1	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MHW-1

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

0355

Matrix: (soil/water) WATER Lab Sample ID: 0148010

Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3286.D

Level: (low/med) LOW Date Received: 02/~~02~~10/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MHW-1

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148356

Matrix: (soil/water) WATER Lab Sample ID: 0148010

Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3286.D

Level: (low/med) LOW Date Received: 02/10/93 cal 3/15/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:_____

Number TICs found: 021 GDC 2/25/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	27.38	80	J
2.		UNKNOWN ACID	25.47	64	
3.		UNKNOWN ACID	27.54	34	
4.		UNKNOWN	9.06	27	
5.			5.20	20	
6.			29.45	20	
7.			26.57	15	
8.		UNKNOWN ACID	20.70	14	
9.		UNKNOWN	29.18	7	
10.			32.11	6	
11.			42.45	6	
12.		UNKNOWN ACID	23.13	5	
13.		UNKNOWN	36.52	5	
14.			23.45	5	
15.			16.49	4	
16.			43.71	4	
17.			22.82	3	
18.			26.68	3	
19.		UNKNOWN MW=118	12.64	3	
20.		UNKNOWN	8.70	3	JP
21.		ALDOL CONDENSATION PRODUCT	8.29	3	JAB
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Operator ID: USER1 Quant Rev: 7 Quant Time: 930223 14:20357
Output File: ^I3286::A6 Injected at: 930216 17:12
Data File: >I3286::A4 Dilution Factor: .50000
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;0210931;021193;LLW;1;;;IO

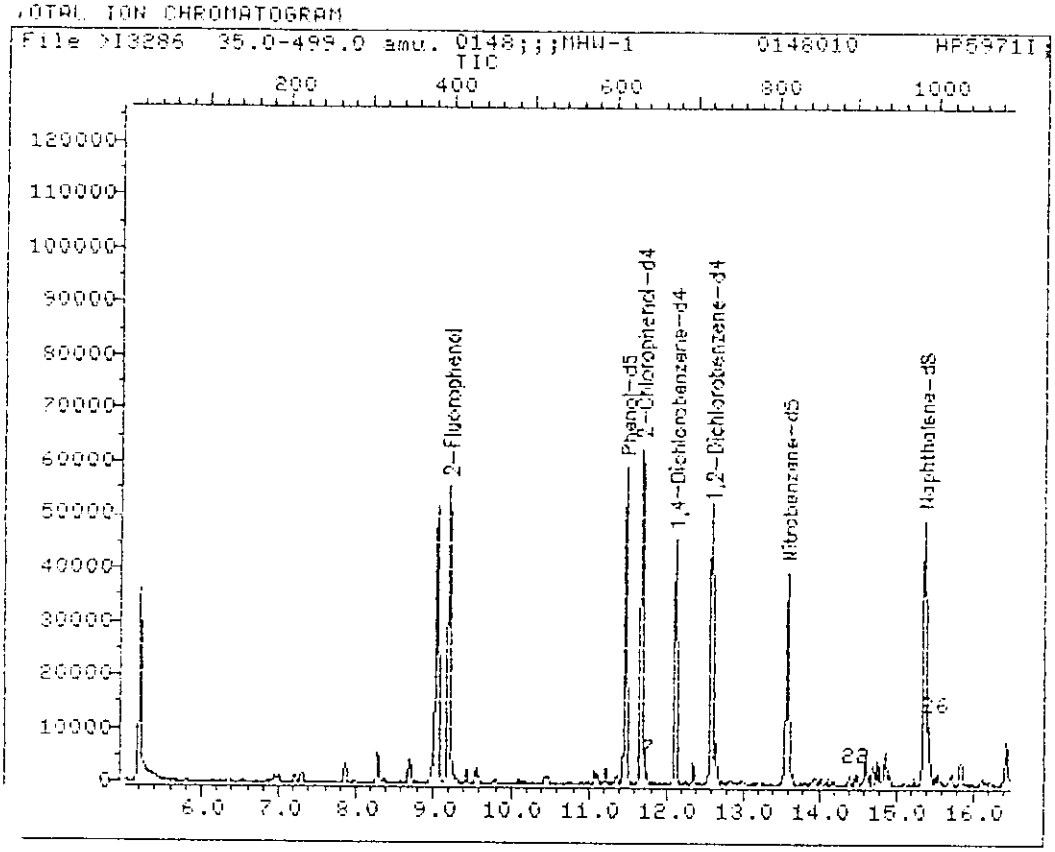
ID File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.11	151.8	15974	40.00	ug	95
2)	2-Chlorophenol-d4	11.69	132.0	42820	42.28	ug	79
3)	2-Fluorophenol	9.20	111.8	40975	40.74	ug	72
4)	Phenol-d5	11.47	98.8	58890	41.98	ug	59
~~5)~~	~~2-Chlorophenol~~	~~11.72~~	~~127.8~~	~~285~~	~~.271~~	~~ug~~	~~37~~
10)	1,2-Dichlorobenzene-d4	12.60	152.0	19402	28.54	ug	92
17)	*Naphthalene-d8	15.37	135.9	57680	40.00	ug	97
19)	Nitrobenzene-d5	13.58	81.8	29453	26.87	ug	71
~~23)~~	~~2,4-Dimethylphenol~~	~~14.40~~	~~136.0~~	~~670~~	~~.627~~	~~ug~~	~~86~~
26)	Naphthalene	15.42	127.9	6590	2.40	ug	84
30)	2-Methylnaphthalene	17.51	141.9	2669	1.33	ug	94
31)	*Acenaphthene-d10	20.04	163.9	33042	40.00	ug	97
35)	2-Fluorobiphenyl	18.26	171.8	55051	26.85	ug	97
~~42)~~	~~Acenaphthene~~	~~20.11~~	~~152.9~~	~~1472~~	~~.890~~	~~ug~~	~~87~~
~~47)~~	~~Diethylphthalate~~	~~21.29~~	~~148.8~~	~~970~~	~~.485~~	~~ug~~	~~12~~
51)	2,4,6-Tribromophenol	22.16	329.6	22695	48.03	ug	94
52)	*Phenanthrene-d10	23.93	187.9	56847	40.00	ug	98
~~61)~~	~~Di-n-butylphthalate~~	~~25.57~~	~~148.8~~	~~1673~~	~~.453~~	~~ug~~	~~36~~
63)	*Chrysene-d12	31.26	240.0	48545	40.00	ug	99
65)	Terphenyl-d14	28.18	244.0	50155	23.47	ug	98
~~66)~~	~~Butylbenzylphthalate~~	~~29.54~~	~~149.0~~	~~950~~	~~.530~~	~~ug~~	~~38~~
70)	bis(2-Ethylhexyl)phthalate	31.38	149.8	2832	1.30	ug	99
71)	*Perylene-d12	38.09	264.0	50603	40.00	ug	97

* Compound is ISTD

GMC 2/23/93

TOTAL ION CHROMATOGRAM



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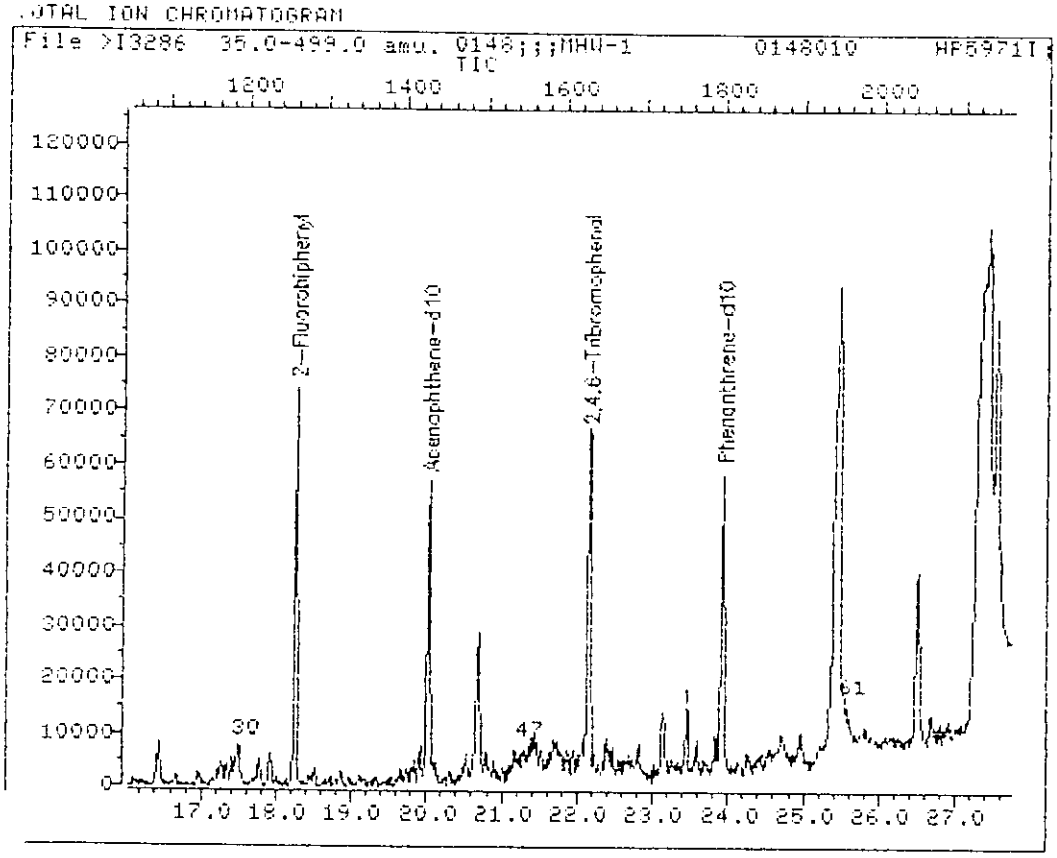
Misc: 0148010 HP5971I;021093I;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:26
Injected at: 930216 17:12

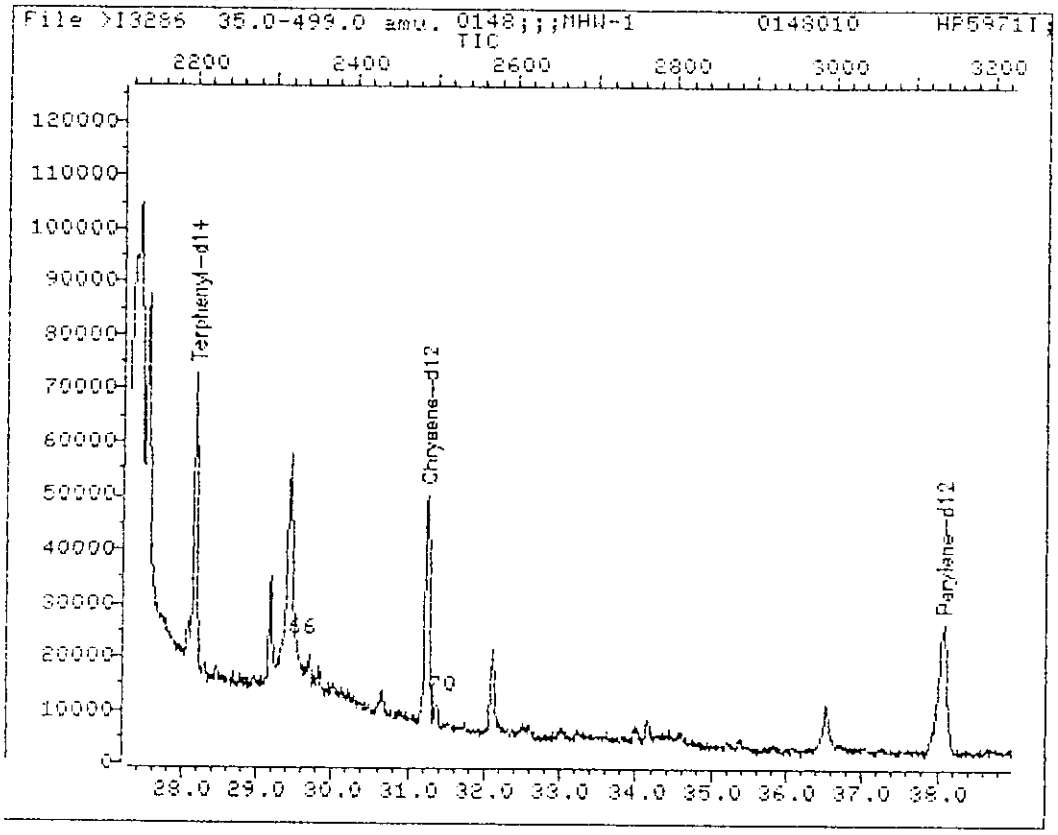


Data File: >I3286::A4 Quant Output File: ^I3286::A6
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;0210931;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:26
Injected at: 930216 17:12

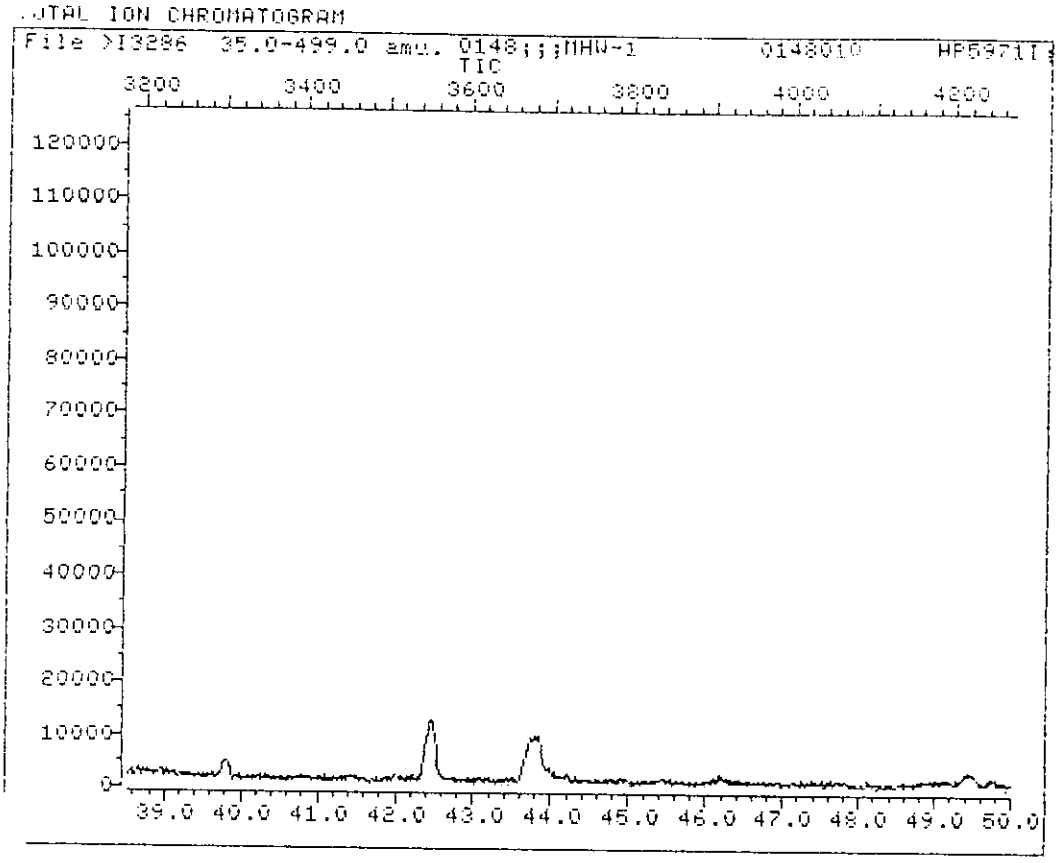
TOTAL ION CHROMATOGRAM



Data File: >I3286::A4 Quant Output File: ^I3286::A6
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;021093;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:26
Injected at: 930216 17:12

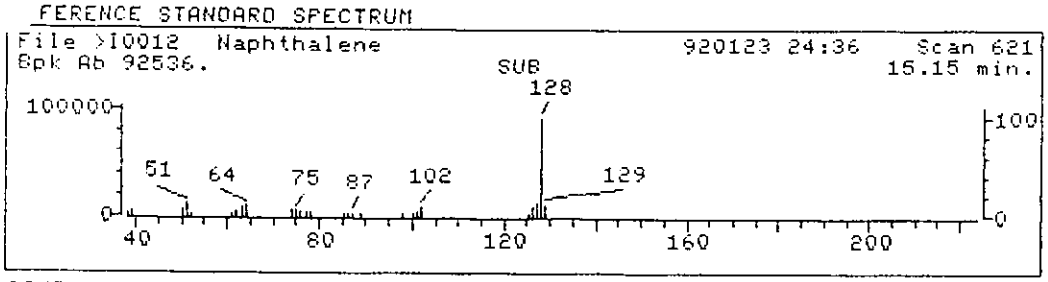


Data File: >I3286::A4 Quant Output File: ^I3286::A6
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;0210931;021193;LLW;1;;;I0

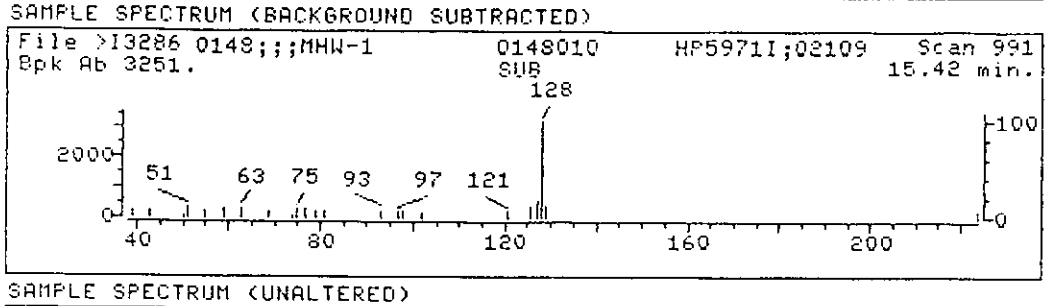
Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:26
Injected at: 930216 17:12

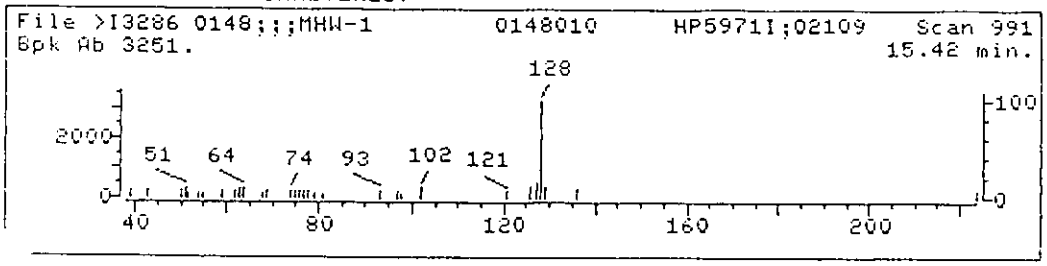
FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



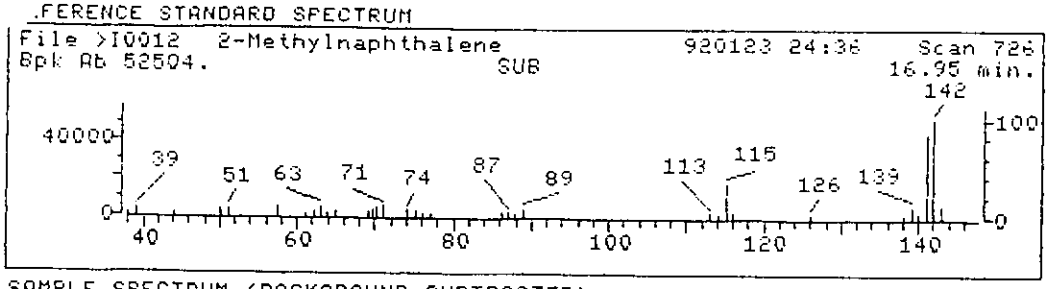
SAMPLE SPECTRUM (UNALTERED)



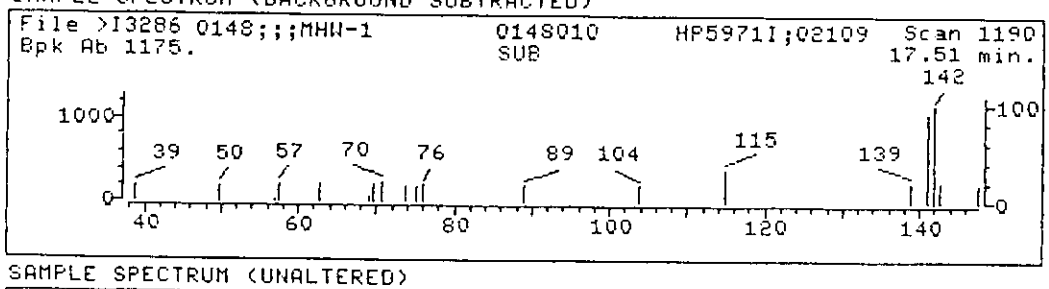
Data File: >I3286::A5 Quant Output File: ^I3286::A6
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;0210931;021193;LLW;1;;;I0
Quant Time: 930216 18:09 Quant ID File: I_IFI::A5
Injected at: 930216 17:12 Last Calibration: 910116 11:52
Last Qcal Time: 930216 08:48

Compound No : 26
Compound Name : Naphthalene
Scan Number : 991
Retention Time: 15.42 min.
Quant Ion : 127.9
Area : 6590
Concentration : 2.40 ug
q-value : 84

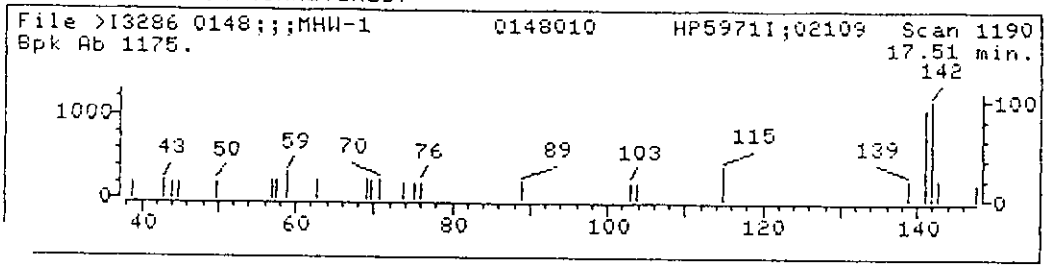
.FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



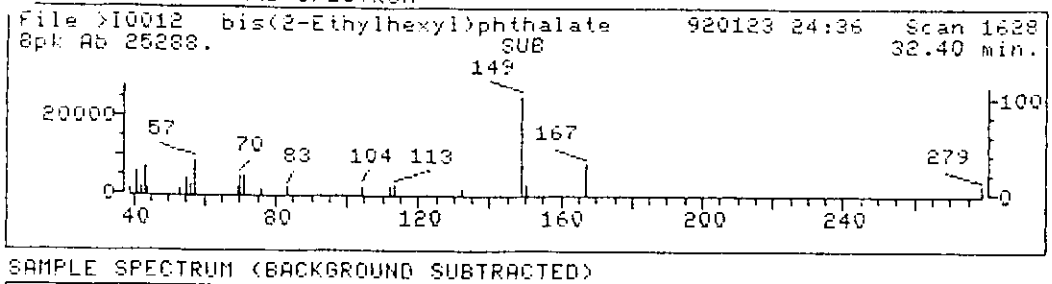
SAMPLE SPECTRUM (UNALTERED)



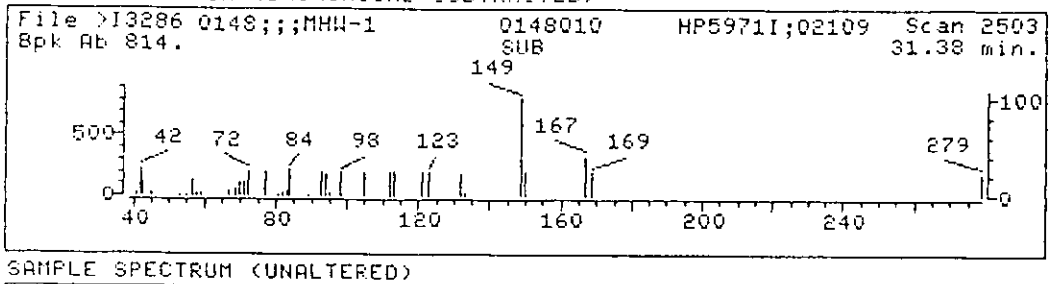
Data File: >I3286::A5 Quant Output File: ^I3286::A6
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;0210931;021193;LLW;1;;;10
Quant Time: 930216 18:09 Quant ID File: I_IFI::A5
Injected at: 930216 17:12 Last Calibration: 910116 11:52
Last Qcal Time: 930216 08:48

Compound No : 30
Compound Name : 2-Methylnaphthalene
Scan Number : 1190
Retention Time: 17.51 min.
Quant Ion : 141.9
Area : 2669
Concentration : 1.33 ug
q-value : 94

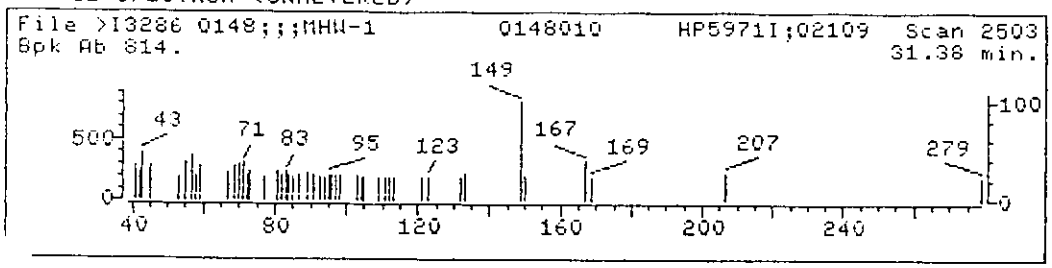
FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



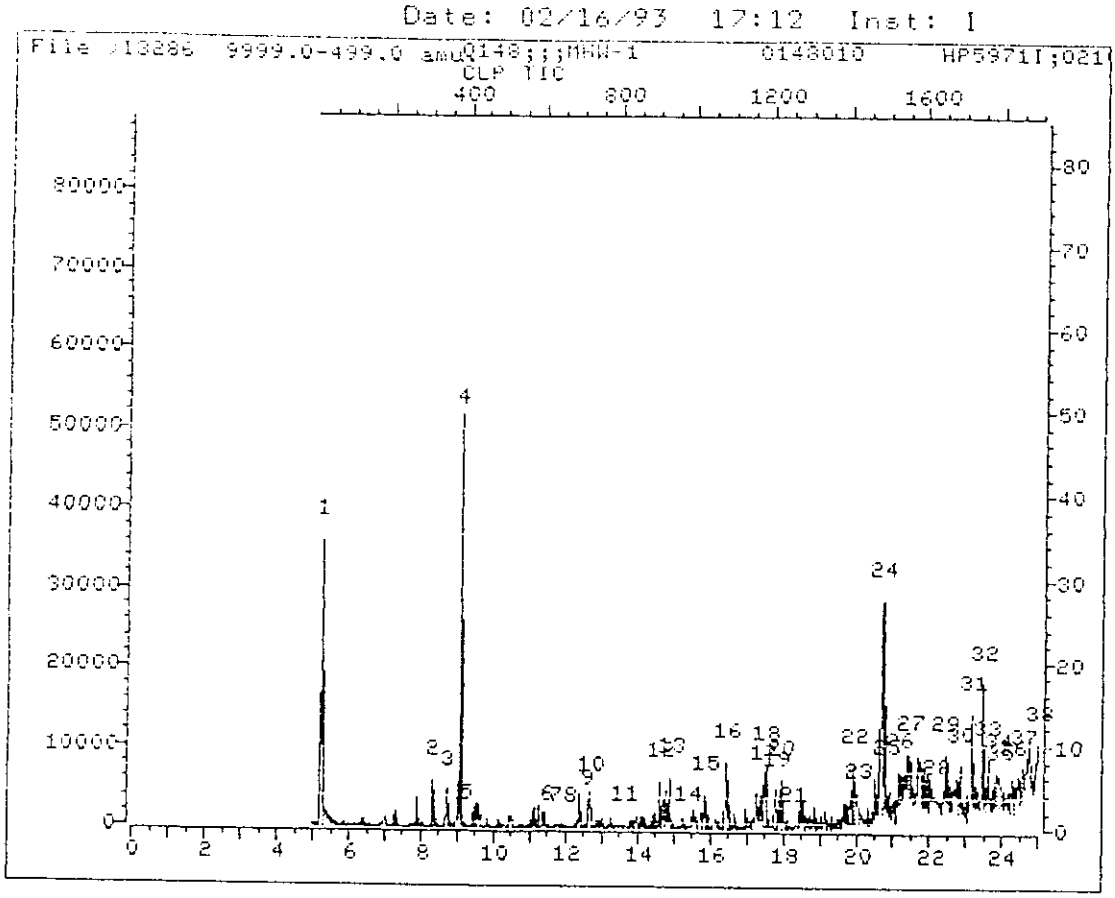
Data File: >I3286::A5 Quant Output File: ^I3286::A6
Name: 0148;;;MHW-1 Instrument ID: **MSD
Misc: 0148010 HP5971I;0210931;021193;LLW;1;;;I0
Quant Time: 930216 18:09 Quant ID File: I_IFI::A5
Injected at: 930216 17:12 Last Calibration: 910116 11:52
Last Qcal Time: 930216 08:48

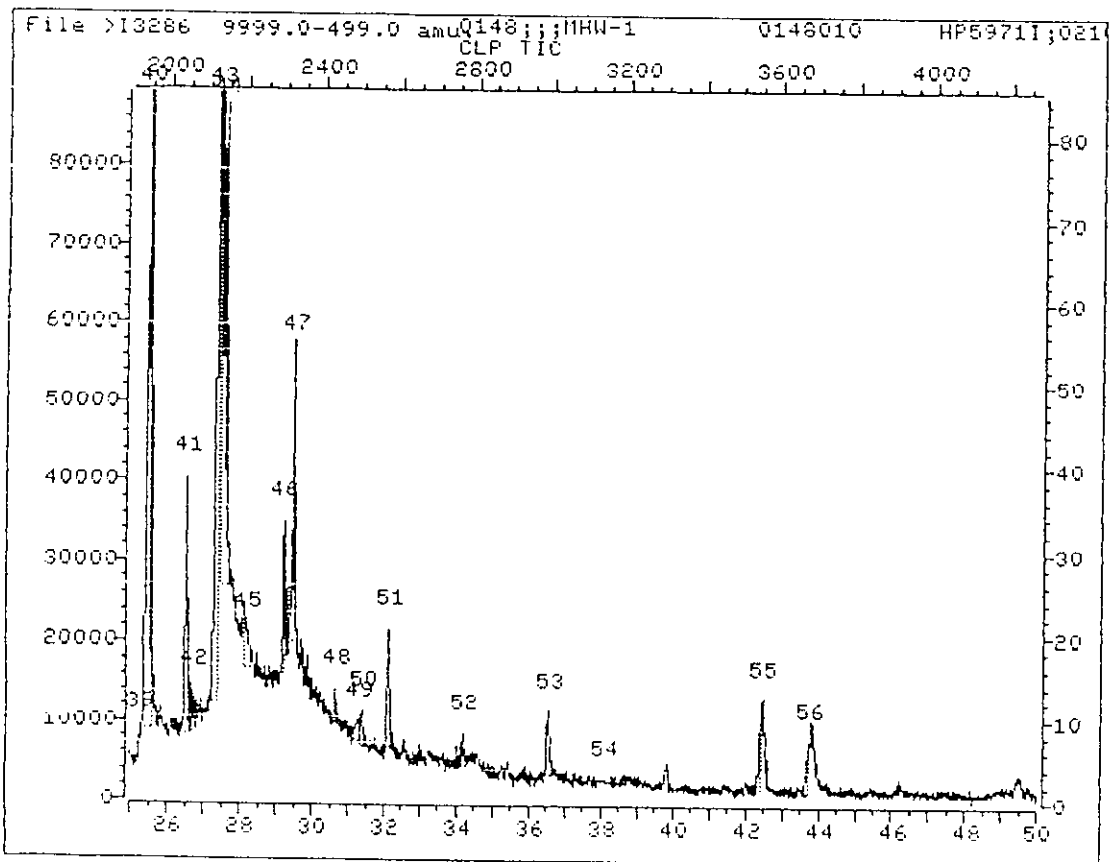
Compound No : 70
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 2503
Retention Time: 31.38 min.
Quant Ion : 148.8
Area : 2832
Concentration : 1.25 ug
q-value : 99

M data file header from : >I3286::A5

Sample: 0148;;;MHW-1 Operator: USER1 2/16/93 17:12
Misc : 0148010 HP59711;0210931;021193;LLW;1;;;I0
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS # : 7 Equip ID: **MSD
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0


Date: 02/16/93 17:12 Inst: I
File >I3286 9999.0-499.0 amuQ148;;;MHW-1 0148010 HP5971I;021
CLP TIC


File >I3286 9999.0-499.0 amuQ148;;;MHW-1 0148010 HP5971I;021
CLP TIC

MHW-1
HP5971I

0367

Date: 02/16/93 17:12 Inst: I

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
43.	27.38	619700.	80.	4.	.50
40.	25.47	498002.	64.	4.	.50
44.	27.54	267581.	34.	4.	.50
4.	9.06	123098.	27.	1.	.50
1.	6.20	90144.	20.	1.	.50
47.	29.45	166252.	20.	5.	.50
41.	26.51	113742.	15.	4.	.50
24.	20.70	100693.	14.	3.	.50
46.	29.18	59055.	7.	5.	.50
51.	32.11	50283.	6.	5.	.50
55.	42.45	53817.	6.	6.	.50
31.	23.13	40895.	5.	4.	.50
53.	36.52	45642.	5.	6.	.50
32.	23.45	38361.	5.	4.	.50
16.	16.44	25219.	4.	2.	.50
56.	43.71	32168.	4.	6.	.50
30.	22.82	20678.	3.	4.	.50
42.	26.68	19667.	3.	4.	.50
10.	12.64	14226.	3.	1.	.50
3.	8.70	11774.	3.	1.	.50
2.	8.29	12721.	3.	1.	.50
20.	17.92	14596.	2.	3.	.50
.	19.92	16460.	2.	3.	.50
..7.	23.59	17848.	2.	4.	.50
34.	23.83	17976.	2.	4.	.50
38.	24.98	16910.	2.	4.	.50
15.	15.84	12220.	2.	2.	.50
27.	21.45	15150.	2.	3.	.50
13.	14.88	12649.	2.	2.	.50

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
1,4-DICHLOROBENZENE-D4	12.11	89676.	0.00	13.74	5.6
NAPHTHALENE-D8	15.37	119338.	13.74	17.70	2.1
ACENAPHTHENE-D10	20.04	142872.	17.70	21.98	4.3
PHENANTHRENE-D10	23.93	155778.	21.98	27.60	2.7
CHRYSENE-D12	31.26	170101.	27.60	34.67	3.5
PERYLENE-D12	38.09	178579.	34.67	43.71	3.5

ISTD peaks found: 6
Surrogate peaks found: 8
Quant target peaks expected: 7
Target peaks matched: 2
Total TIC identified: 29

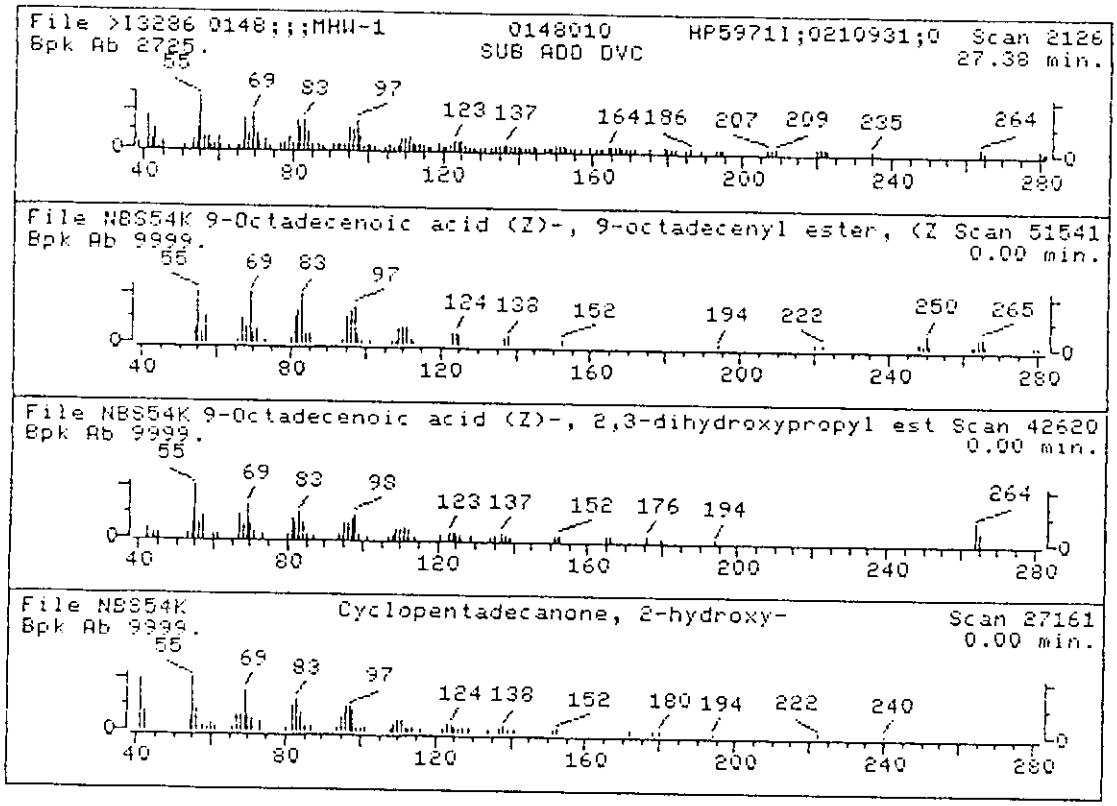
TICS : 12:23 PM MON., 22 FEB., 1993

	9-Octadecenoic acid (Z)-, 9-octadecenyl ester, (Z)-	532	C36H68O2
.	9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester	356	C21H40O4
3.	Cyclopentadecanone, 2-hydroxy-	240	C15H28O2
4.	1,12-Tridecadiene	180	C13H24
5.	1-Octadecanol	270	C18H38O

Sample file: >I3286 Spectrum #: 2126
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	30	3687454	38446	NBS54K	74	144	3	0	59	32	12	13
2.	24	111035	38333	NBS54K	106	87	3	0	100	55	7	26
3.	21	4727188	9781	NBS54K	83	77	1	0	59	58	5	36
4.	17*	21964487	6347	NBS54K	49	72	0	0	76	65	4	59
5.	15	112925	9812	NBS54K	83	87	3	0	61	58	3	15

Peak#: 43 Area: 619700. Est Conc: 80. Date: 02/16/93 17:12 Inst: I

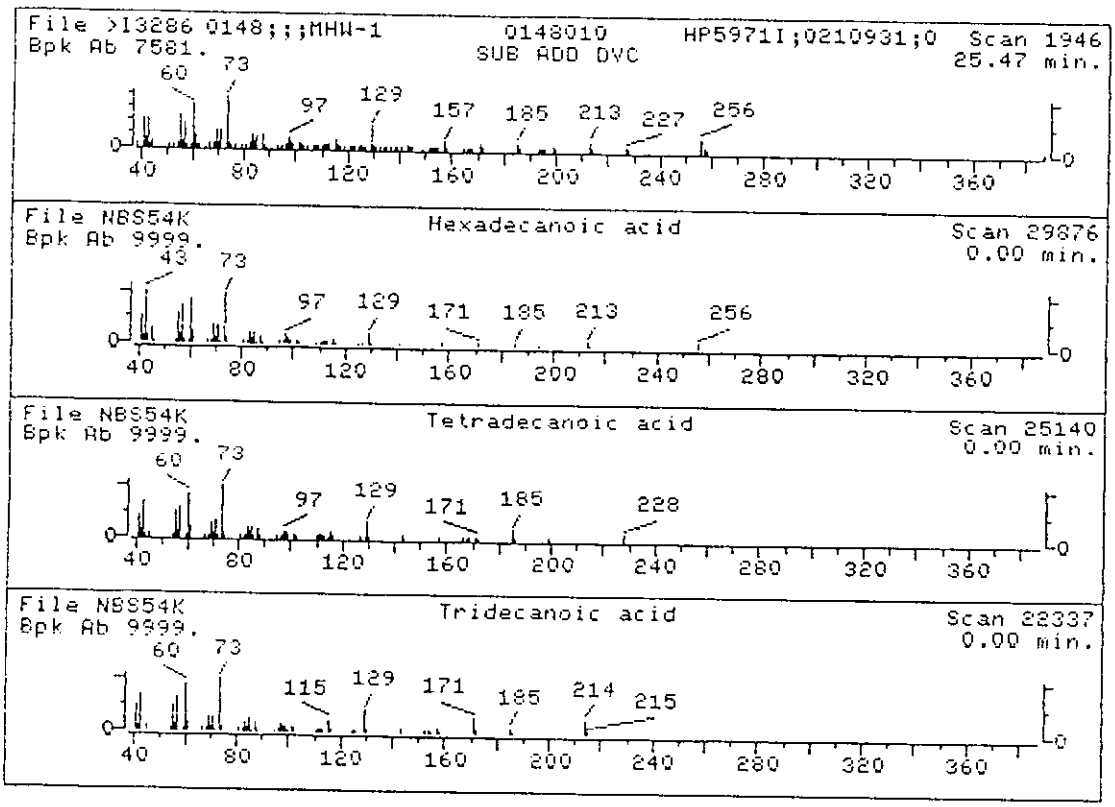


. Hexadecanoic acid	256	C16H32O2
. Tetradecanoic acid	228	C14H28O2
3. Tridecanoic acid	214	C13H26O2
4. Decanoic acid, silver(1+) salt	279	C10H20AgO2
5. Dodecanoic acid	200	C12H24O2

Sample file: >I3286 Spectrum #: 1946
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	65*	57103	2257	NBS54K	73	78	2	0	85	34	24	55
2.	51	544638	2250	NBS54K	97	45	2	0	97	26	24	31
3.	47	638539	2243	NBS54K	87	55	2	0	77	26	19	25
4.	41	13126675	2261	NBS54K	71	88	3	0	88	21	17	12
5.	41	143077	2233	NBS54K	77	61	1	0	79	36	17	30

Peak#: 40 Area: 498002. Est Conc: 64. Date: 02/16/93 17:12 Inst: I

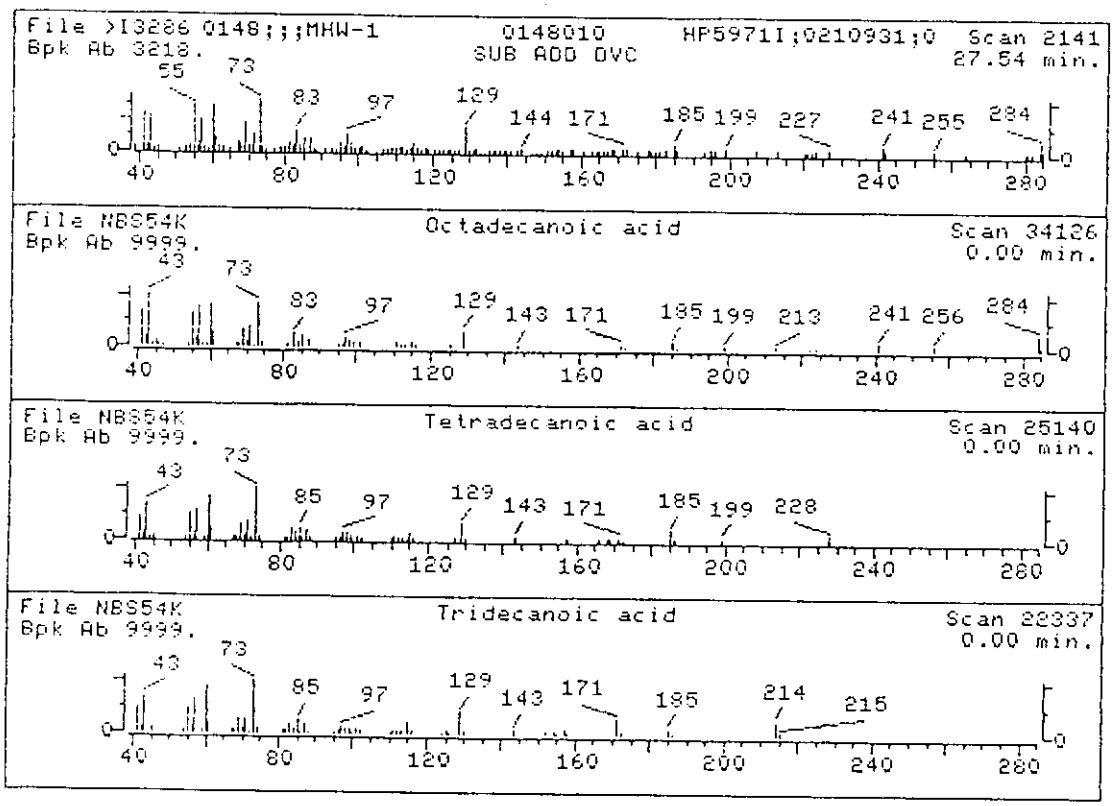


	Octadecanoic acid	284 C18H36O2
2.	Tetradecanoic acid	228 C14H28O2
3.	Tridecanoic acid	214 C13H26O2
4.	Heptanoic acid	130 C7H14O2
5.	Glycine, N-methyl-N-(1-oxododecyl)-	271 C15H29NO3

Sample file: >I3286 Spectrum #: 2141
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	54*	57114	40813	NBS54K	75	90	2	0	67	41	17	57
2.	41	544638	2250	NBS54K	80	62	1	0	85	44	14	31
3.	41	638539	2243	NBS54K	71	71	3	0	97	25	17	12
4.	32*	111148	2146	NBS54K	41	56	0	0	63	51	9	43
5.	30	97789	2259	NBS54K	54	96	0	0	68	48	10	24

Peak#: 44 Area: 267581. Est Conc: 34. Date: 02/16/93 17:12 Inst: I



. 1-Iodo-2,3-epoxypropane
2. 1,1'-Biphenyl, 3-methoxy-

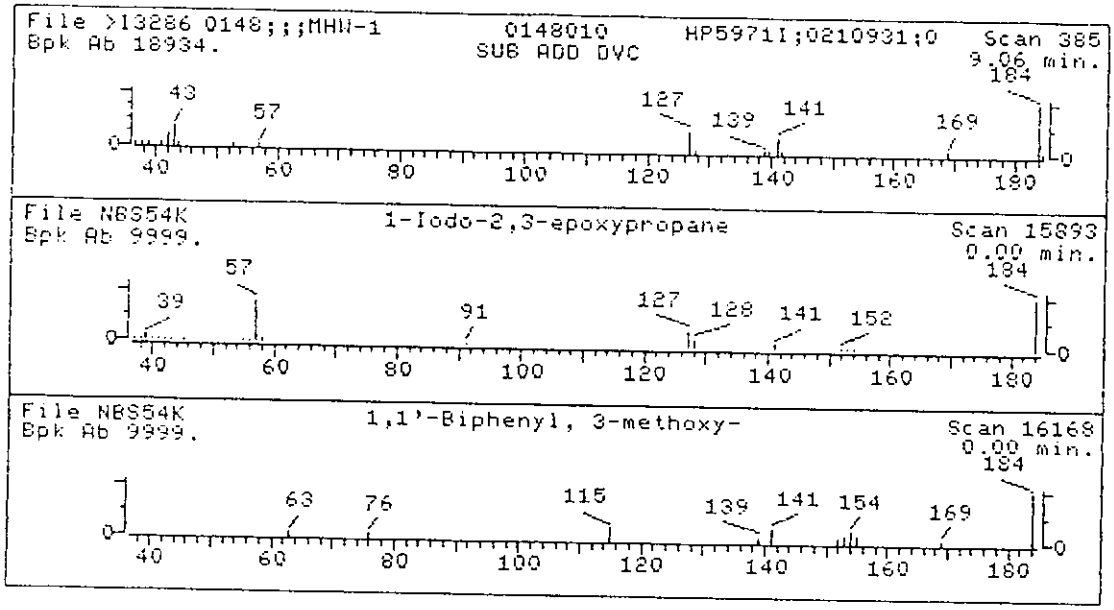
8. 0371

184 C3H5IO
184 C13H12O

Sample file: >I3286 Spectrum #: 385
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	52*	624577	26599	NBS54K	28	86	3	0	100	19	20	13
2.	29*	2113566	26685	NBS54K	23	68	3	0	100	33	12	12

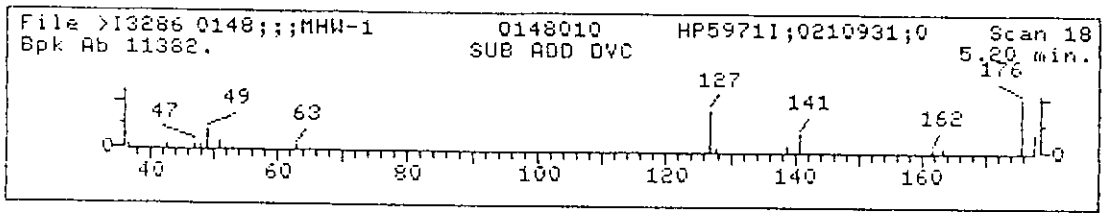
Peak#: 4 Area: 123098. Est Conc: 27. Date: 02/16/93 17:12 Inst: I



Sample file: >I3286 Spectrum #: 18

No data base entries were retrieved.

Peak#: 1 Area: 90144. Est Conc: 20. Date: 02/16/93 17:12 Inst: I



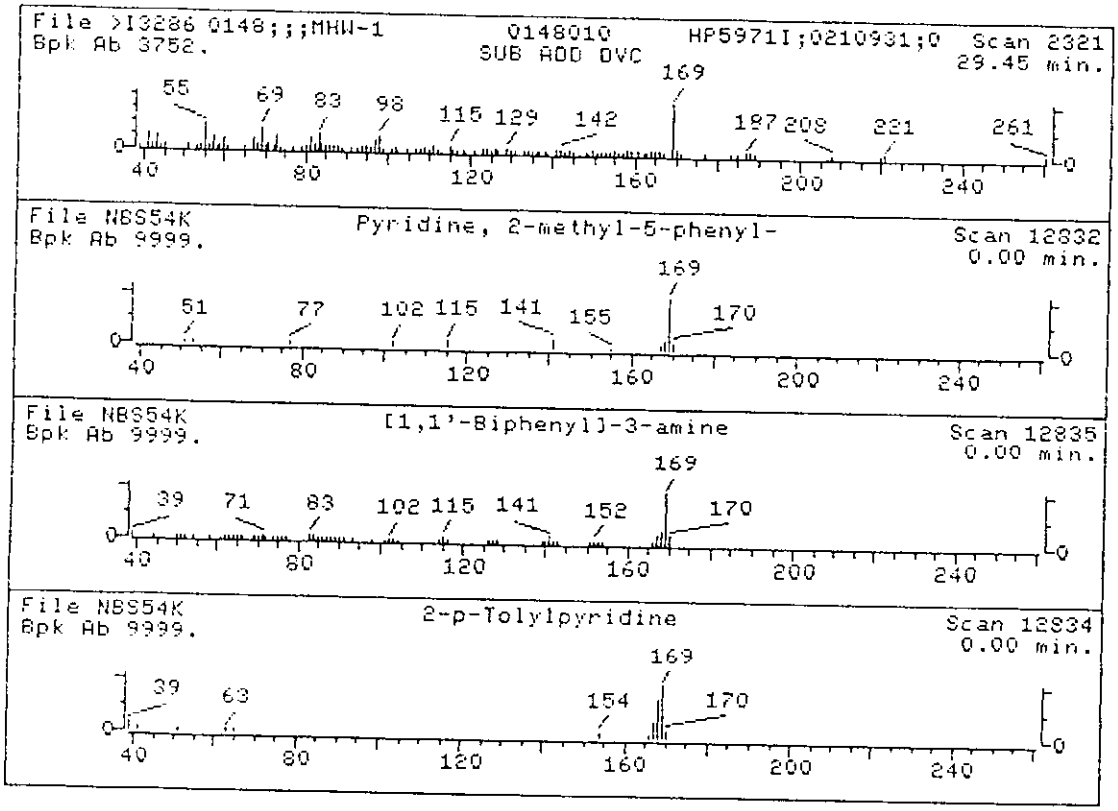
	Pyridine, 2-methyl-5-phenyl-	169 C12H11N
..	[1,1'-Biphenyl]-3-amine	169 C12H11N
3.	2-p-Tolylpyridine	169 C12H11N
4.	[1,1'-Biphenyl]-2-amine	169 C12H11N
5.	Thieno[2,3-b]pyridine, 3-chloro-	169 C7H4ClNS

0373

Sample file: >I3286 Spectrum #: 2321
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	31*	3256880	24082	NBS54K	34	40	2	0	73	37	10	17
2.	29*	2243472	24084	NBS54K	35	61	2	0	74	37	10	15
3.	28*	4467065	24083	NBS54K	28	44	2	0	74	37	10	14
4.	27*	90415	24080	NBS54K	32	71	3	0	100	37	10	13
5.	27*	53399363	24052	NBS54K	22	67	2	0	91	37	10	13

Peak#: 47 Area: 166252. Est Conc: 20. Date: 02/16/93 17:12 Inst: I

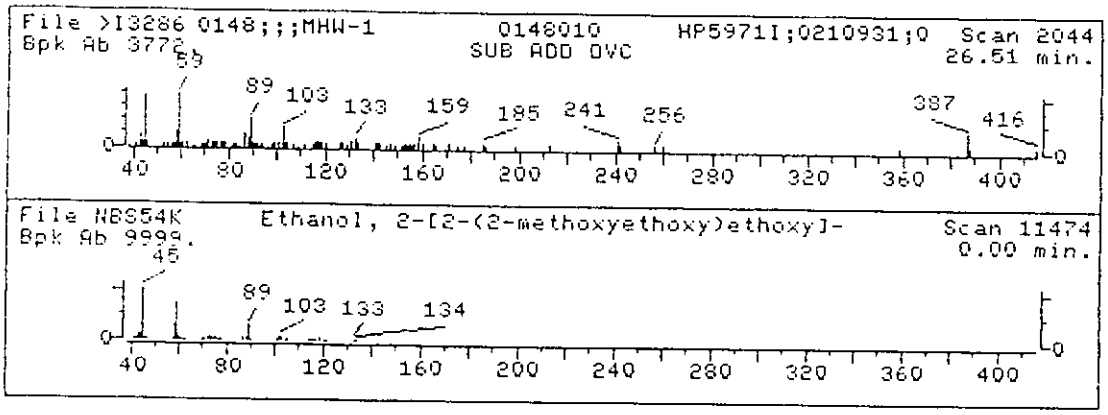


. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 $C_7H_{16}O_4$ 0374

Sample file: >I3286 Spectrum #: 2044
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25	112356	8547	NBS54K	44	55	1	0	97	50	7	12

Peak#: 41 Area: 113742. Est Conc: 15. Date: 02/16/93 17:12 Inst: I



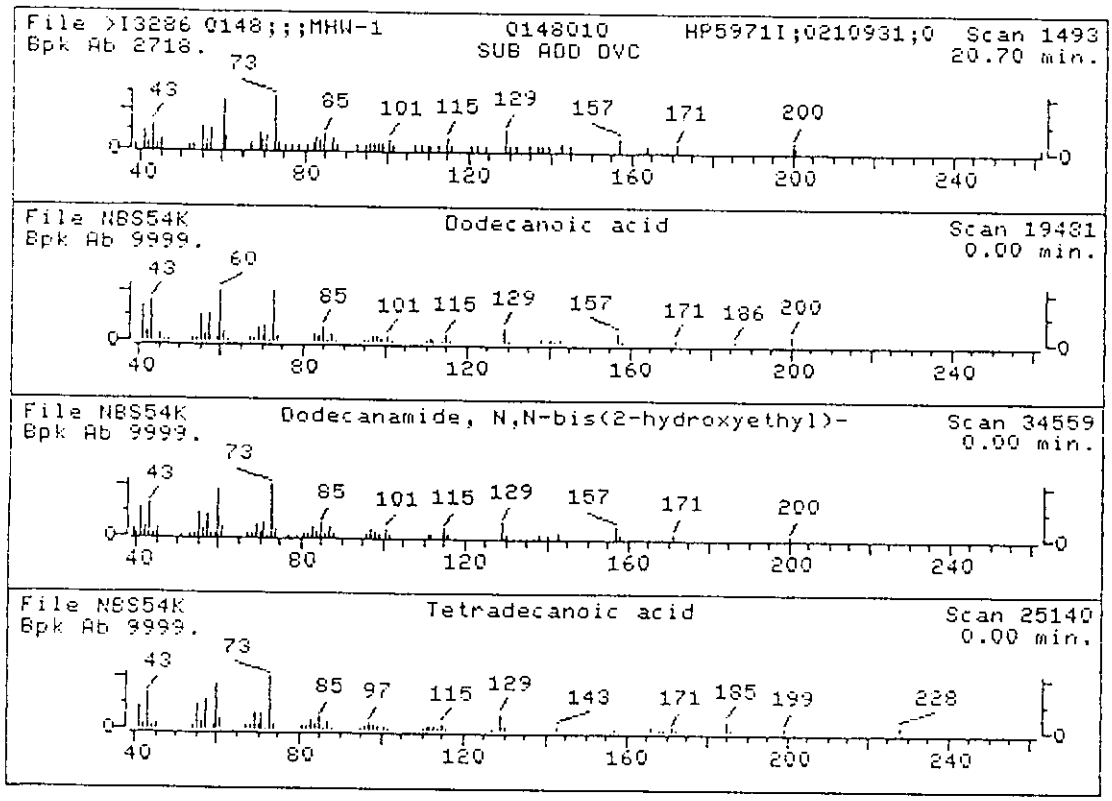
	Dodecanoic acid	200 C12H24O2
.	Dodecanamide, N,N-bis(2-hydroxyethyl)-	287 C16H33NO3
3.	Tetradecanoic acid	228 C14H28O2
4.	Tridecanoic acid	214 C13H26O2
5.	Decanoic acid, silver(1+) salt	279 C10H20AgO2

0375

Sample file: >I3286 Spectrum #: 1493
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	143077	2233	NBS54K	86	52	0	0	81	12	64	95
2.	89	120401	2265	NBS54K	120	33	0	0	93	10	62	83
3.	70	544638	2250	NBS54K	99	43	1	0	100	20	32	59
4.	62	638539	2243	NBS54K	91	51	1	0	85	27	25	49
5.	62	13126675	2261	NBS54K	85	74	1	0	85	30	25	40

Peak#: 24 Area: 100693. Est Conc: 14. Date: 02/16/93 17:12 Inst: I



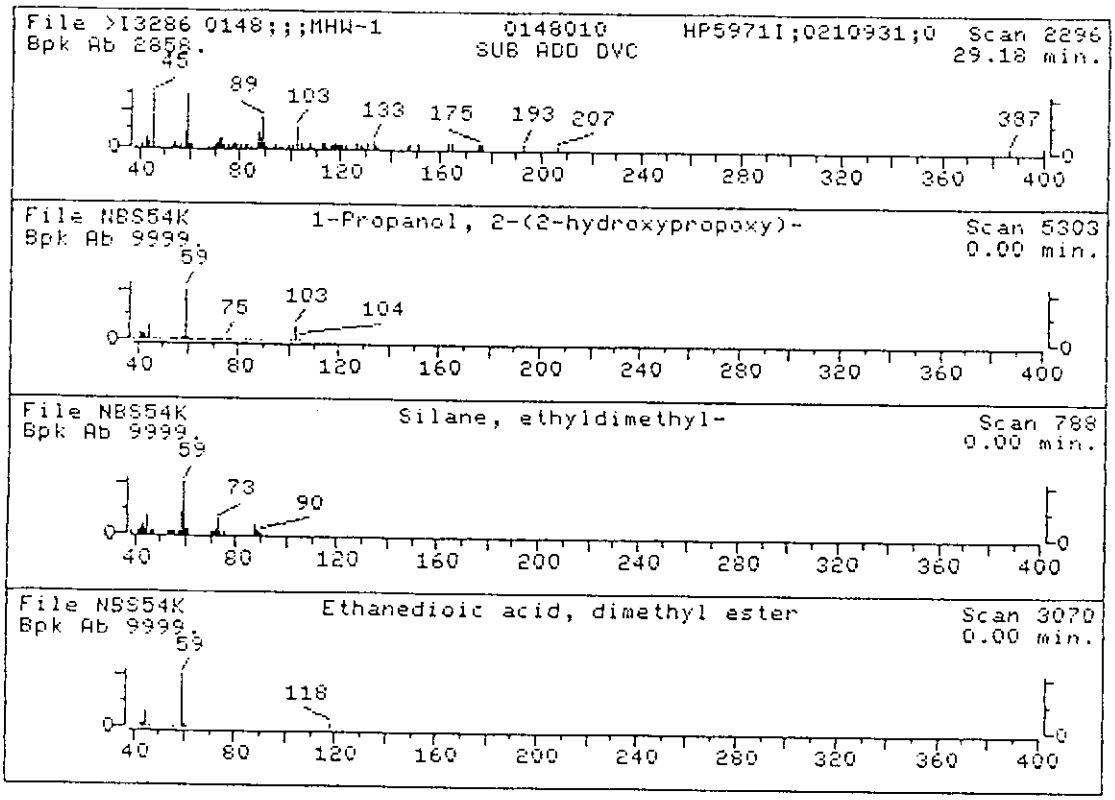
. 1-Propanol, 2-(2-hydroxypropoxy)- 134 C6H1403
2. Silane, ethyldimethyl- 88 C4H12Si
3. Ethanedioic acid, dimethyl ester 118 C4H604
4. 2-Butanol, 1-methoxy- 104 C5H1202

0376

Sample file: >I3286 Spectrum #: 2296
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25	106627	1939	NBS54K	36	50	1	0	98	50	7	13
2.	15*	758214	1807	NBS54K	27	71	2	0	77	59	3	14
3.	11*	553902	1888	NBS54K	23	60	0	0	76	65	2	16
4.	11*	53778737	1854	NBS54K	22	74	2	0	98	65	2	13

Peak#: 46 Area: 59055. Est Conc: 7. Date: 02/16/93 17:12 Inst: I



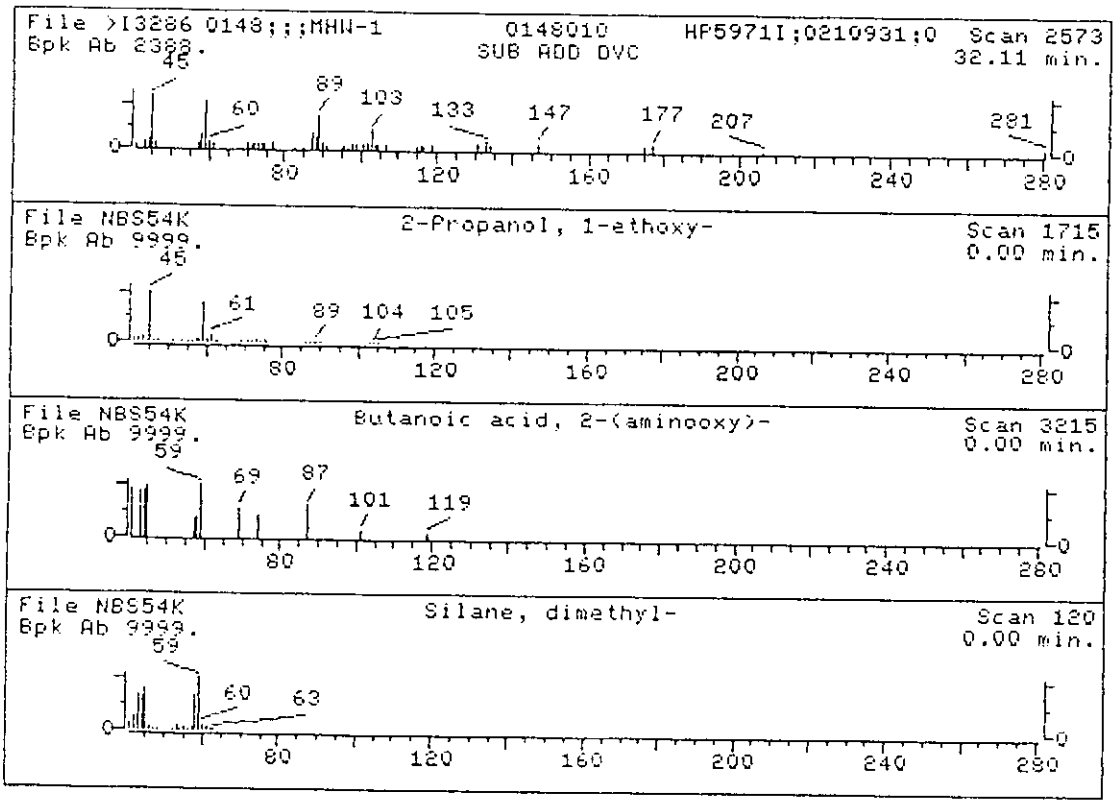
. 2-Propanol, 1-ethoxy-	104	C5H12O2
. Butanoic acid, 2-(aminooxy)-	119	C4H9NO3
3. Silane, dimethyl-	60	C2H8Si
4. Silane, ethyldimethyl-	88	C4H12Si
5. Hydrazine, (1-methylpropyl)-	88	C4H12N2

0377

Sample file: >I3286 Spectrum #: 2573
Search speed: 1 Tilting option: N No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	26*	1569024	1853	NBS54K	24	70	1	0	100	42	8	14
2.	26*	4385959	7630	NBS54K	24	82	3	0	89	36	10	12
3.	25*	1111746	1791	NBS54K	32	77	3	0	89	43	8	13
4.	15*	758214	1807	NBS54K	31	67	3	0	89	58	3	13
5.	15*	30924142	8034	NBS54K	30	72	2	0	84	59	3	14

Peak#: 51 Area: 50283. Est Conc: 6. Date: 02/16/93 17:12 Inst: I

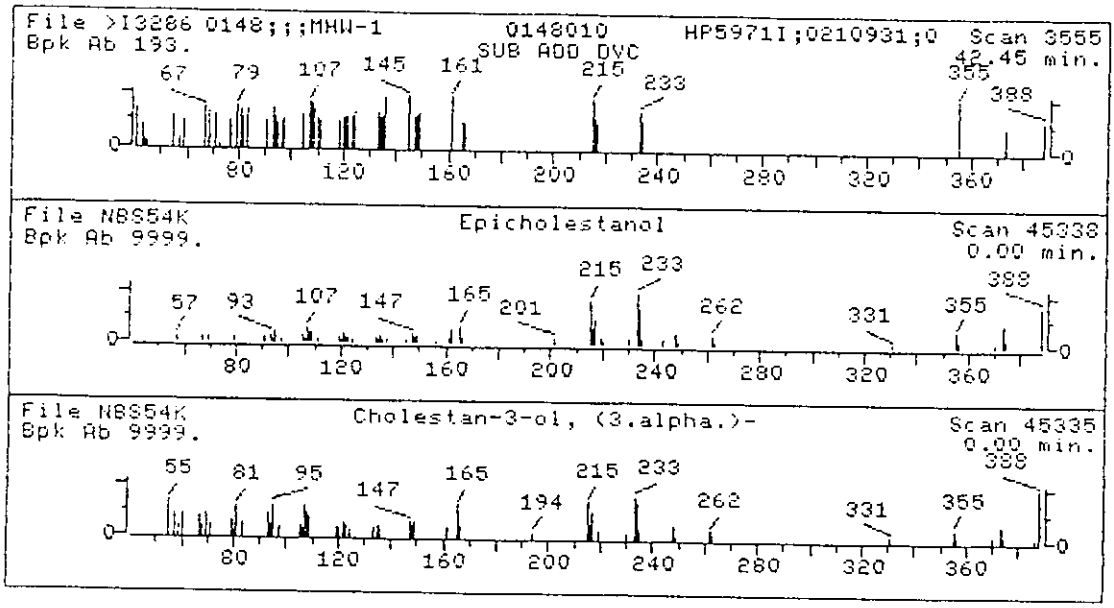


1. Epicholestanol — 388 C27H48O
2. Cholestan-3-ol, (3.alpha.)- — 388 C27H48O

Sample file: >I3286 Spectrum #: 3555
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	55*	516950	48950	NBS54K	53	158	0	0	71	50	14	65
2.	12*	18769465	48947	NBS54K	40	181	1	0	59	62	2	21

Peak#: 55 Area: 53817. Est Conc: 6. Date: 02/16/93 17:12 Inst: I

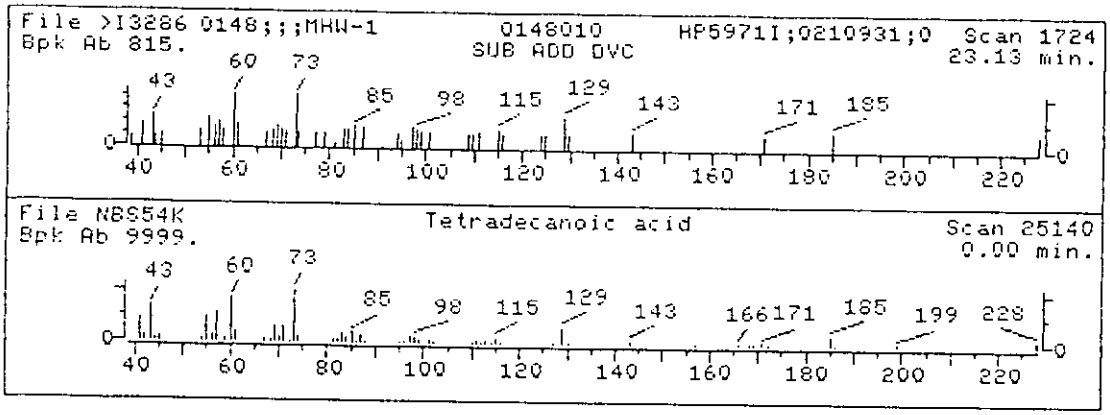


. Tetradecanoic acid 228 C14H28O2

Sample file: >I3286 Spectrum #: 1724
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	544638	2250	NBS54K	25	117	1	0	92	56	3	14

Peak#: 31 Area: 40895. Est Conc: 5. Date: 02/16/93 17:12 Inst: I



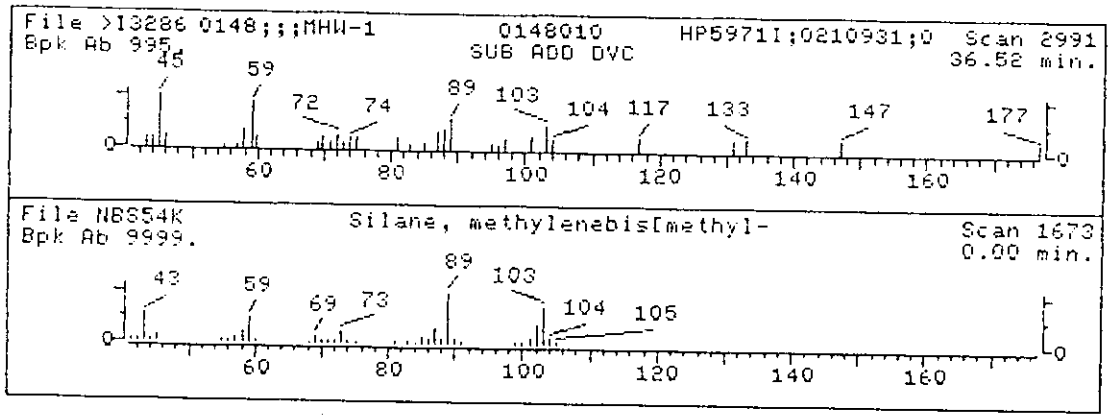
0380

.. Silane, methylenebis[methyl- 104 C3H12Si2

Sample file: >I3286 Spectrum #: 2991
Search speed: 1 Tilting option: N No. of ion ranges searched: 50

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	5654057	8465	NBS54K	28	99	3	0	58	65	2	13

Peak#: 53 Area: 45642. Est Conc: 5. Date: 02/16/93 17:12 Inst: I

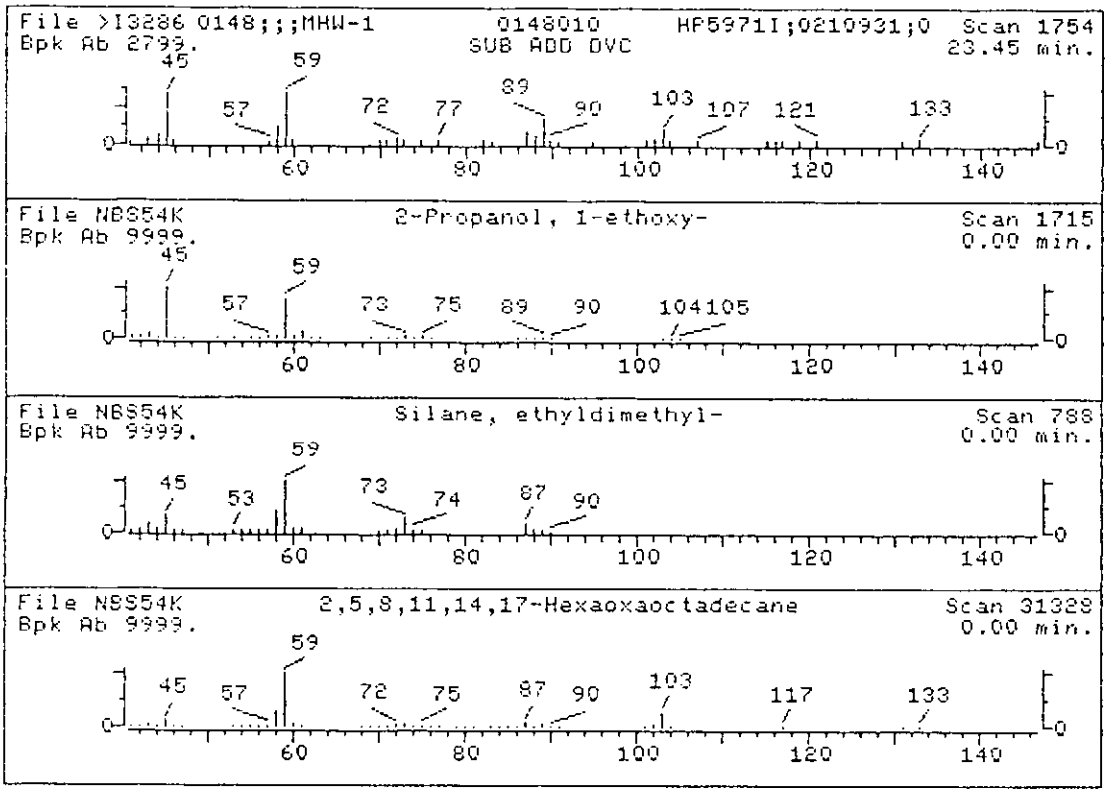


.	2-Propanol, 1-ethoxy-	104	C5H12O2
.	Silane, ethyldimethyl-	88	C4H12Si
3.	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6
4.	Hydrazine, 1-butyl-1-methyl-	102	C5H14N2
5.	2-Hydroxy-3-pentanone	102	C5H10O2

Sample file: >I3286 Spectrum #: 1754
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	30*	1569024	1853	NBS54K	29	65	1	0	95	40	10	16
2.	20*	758214	1807	NBS54K	34	64	2	0	84	52	5	14
3.	20	1191873	2071	NBS54K	30	86	0	0	99	51	5	15
4.	11*	20240624	1839	NBS54K	32	59	1	0	75	64	2	17
5.	11*	5704201	1833	NBS54K	22	87	3	0	95	64	2	12

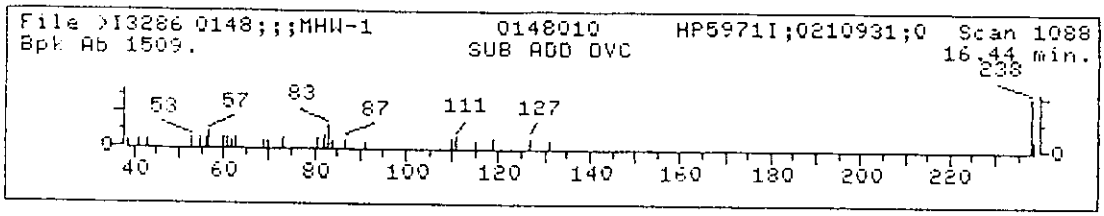
Peak#: 32 Area: 38361. Est Conc: 5. Date: 02/16/93 17:12 Inst: I



Sample file: >I3286 Spectrum #: 1088

No data base entries were retrieved.

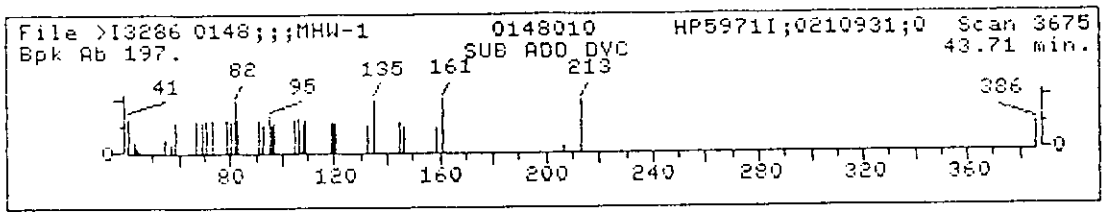
Peak#: 16 Area: 25219. Est Conc: 4. Date: 02/16/93 17:12 Inst: I



Sample file: >I3286 Spectrum #: 3675

No data base entries were retrieved.

Peak#: 56 Area: 32168. Est Conc: 4. Date: 02/16/93 17:12 Inst: I

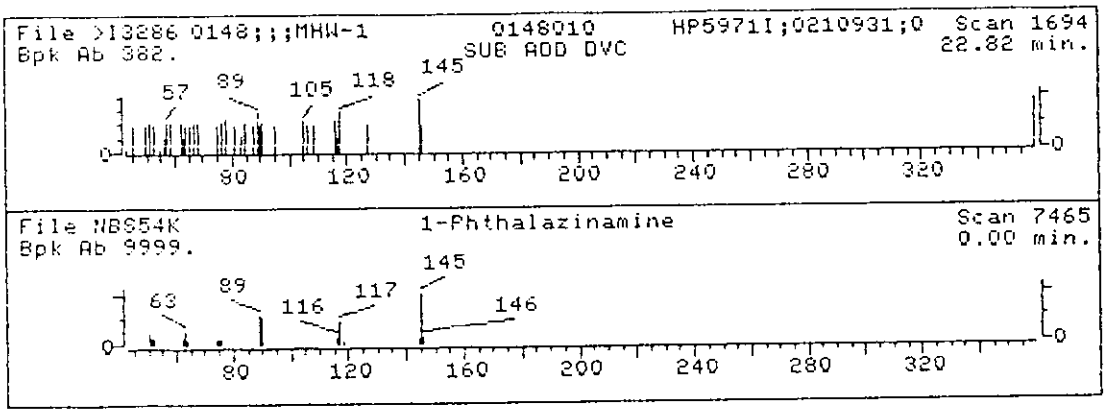


. 1-Phthalazinamine 145 C8H7N3

Sample file: >I3286 Spectrum #: 1694
Search speed: 1 Tilting option: N No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	19064698	2543	NBS54K	28	94	3	0	94	63	2	13

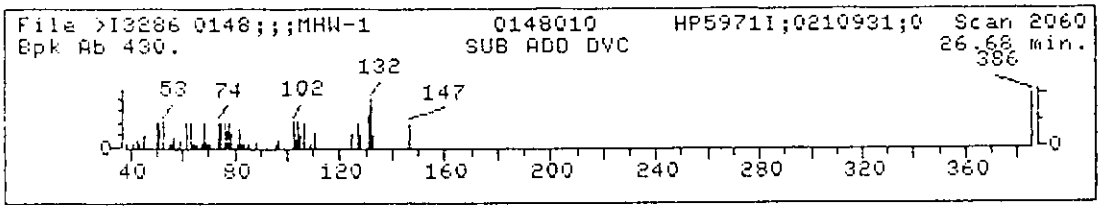
Peak#: 30 Area: 20678. Est Conc: 3. Date: 02/16/93 17:12 Inst: I



Sample file: >I3286 Spectrum #: 2060

No data base entries were retrieved.

Peak#: 42 Area: 19667. Est Conc: 3. Date: 02/16/93 17:12 Inst: I

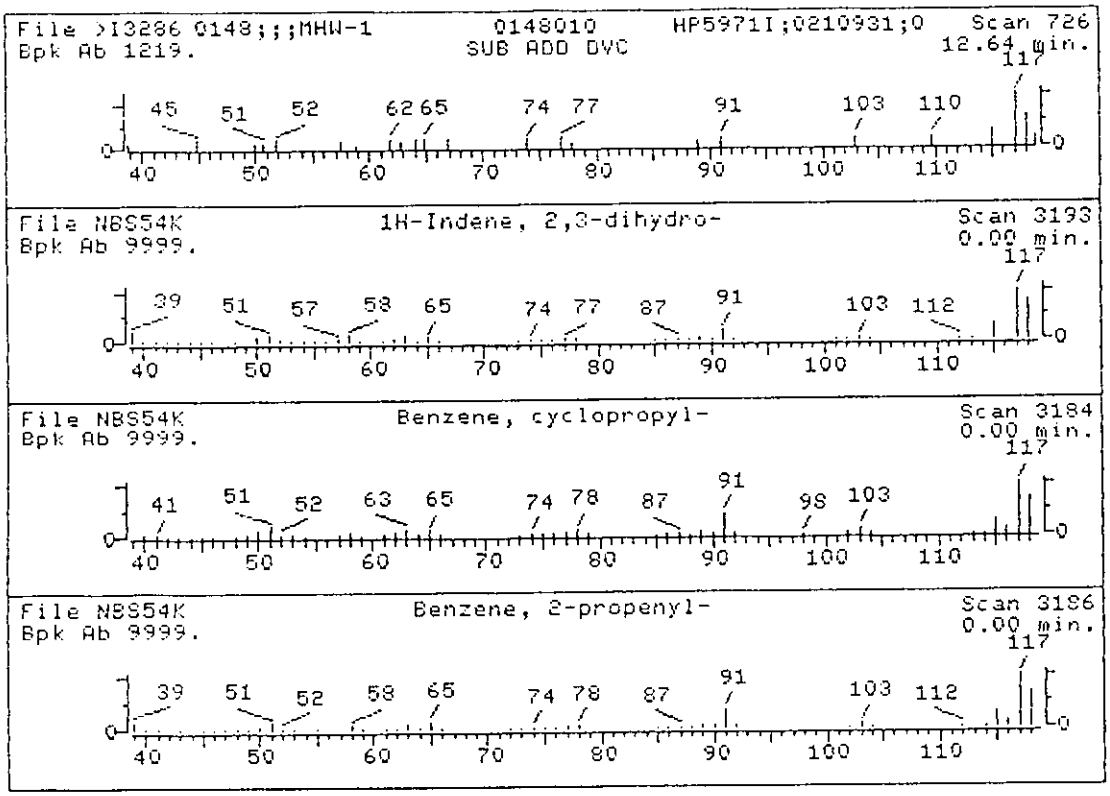


.	1H-Indene, 2,3-dihydro-	118 C9H10
2.	Benzene, cyclopropyl-	118 C9H10
3.	Benzene, 2-propenyl-	118 C9H10
4.	Benzene, 1-propenyl-	118 C9H10

Sample file: >I3286 Spectrum #: 726
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	36*	496117	14051	NBS54K	38	60	3	0	73	26	14	13
2.	36*	873494	14043	NBS54K	43	67	3	0	82	26	14	13
3.	35*	300572	14045	NBS54K	24	73	3	0	84	28	14	12
4.	35*	637503	14046	NBS54K	24	74	3	0	84	28	14	12

Peak#: 10 Area: 14226. Est Conc: 3. Date: 02/16/93 17:12 Inst: I

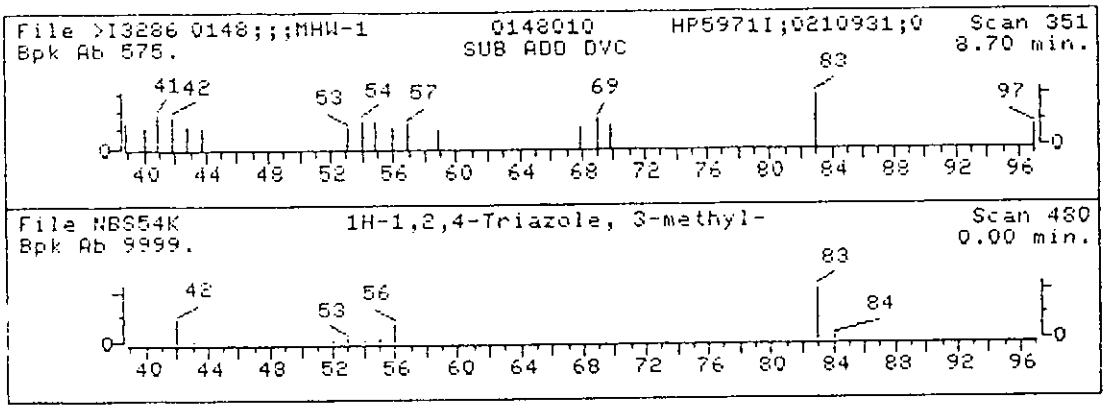


. 1H-1,2,4-Triazole, 3-methyl- 83 C3H5N3

Sample file: >I3286 Spectrum #: 351
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	7170016	6459	NBS54K	24	31	2	0	100	54	5	14

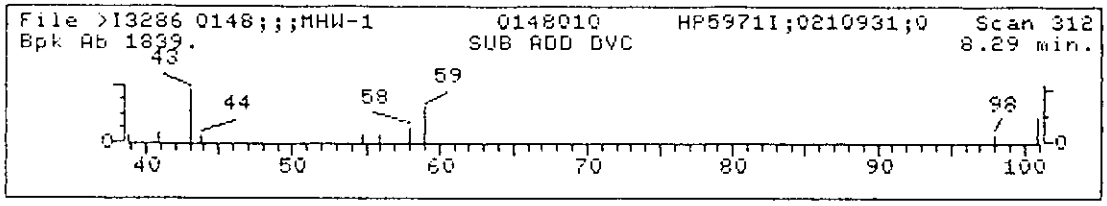
Peak#: 3 Area: 11774. Est Conc: 3. Date: 02/16/93 17:12 Inst: I



Sample file: >I3286 Spectrum #: 312

No data base entries were retrieved.

Peak#: 2 Area: 12721. Est Conc: 3. Date: 02/16/93 17:12 Inst: I



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-43

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148011 0389

Sample wt/vol: 975 (g/mL) ML Lab File ID: I3287.D

Level: (low/med) LOW Date Received: 02/10/93 3/15/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-43

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: 0148011

Sample wt/vol: 975 (g/mL) ML Lab File ID: I3287.D

Level: (low/med) LOW Date Received: 02/10/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

0390

Case 3/15/93

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.6	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.5	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-43

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148 0391

Matrix: (soil/water) WATER Lab Sample ID: 0148011

Sample wt/vol: 975 (g/mL) ML Lab File ID: I3287.D

Level: (low/med) LOW Date Received: 02/02/93 cal 3/15/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:_____

Number TICs found: 0/21 CMC 2/25/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	36.74	59	J
2.			32.24	58	
3.			26.56	45	
4.			29.25	43	
5.			23.51	27	
6.			44.16	27	
7.			39.89	20	
8.			32.666	20	
9.			49.61	20	
10.			37.47	18	
11.			29.49	17	
12.			34.21	14	
13.			19.94	13	
14.			37.98	11	
15.			26.74	11	
16.			46.82	9	
17.			30.666	9	
18.			5.21	6	
19.			33.06	5	
20.		ALDOL CONDENSATION PRODUCT	8.30	4	JAB
21.		UNKNOWN	23.29	4	J
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

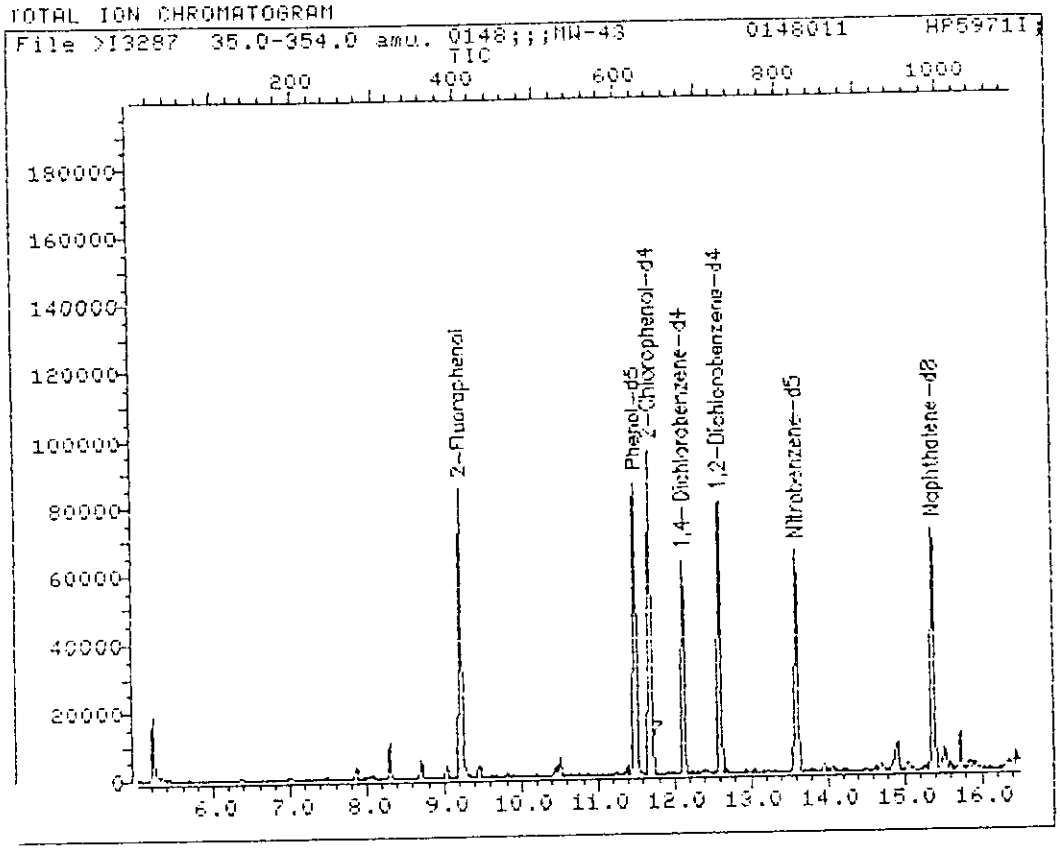
Operator ID: USER1 Quant Rev: 7 Quant Time: 930223 14:30 0392
Output File: ^I3287::A6 Injected at: 930216 18:19
Data File: >I3287::A4 Dilution Factor: .91000
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;0210931;021193;LLW;1;;;IO

ID File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.12	151.8	23471	40.00	ug	93
2)	2-Chlorophenol-d4	11.70	132.0	70571	48.38	ug	81
3)	2-Fluorophenol	9.22	111.8	69565	48.02	ug	73
4)	Phenol-d5	11.50	98.8	100614	49.79	ug	66
~~9)~~	~~Phenol~~	~~11.52~~	~~93.9~~	~~588^~~	~~.302~~	~~ug~~	~~79~~
~~3)~~	~~*2-Chlorophenol~~	~~11.73~~	~~127.8~~	~~503^~~	~~.332~~	~~ug~~	~~46~~
10)	1,2-Dichlorobenzene-d4	12.61	152.0	32203	32.88	ug	93
17)	*Naphthalene-d8	15.38	135.9	86269	40.00	ug	97
	Nitrobenzene-d5	13.60	81.8	54819	34.11	ug	70
31)	*Acenaphthene-d10	20.05	163.9	49669	40.00	ug	99
35)	2-Fluorobiphenyl	18.27	171.8	91919	30.42	ug	97
~~44)~~	~~4-Nitrophenol~~	~~20.36~~	~~108.8~~	~~1134~~	~~2.87~~	~~ug~~	~~7~~
~~47)~~	~~Diethylphthalate~~	~~21.29~~	~~140.0~~	~~1174~~	~~.330~~	~~ug~~	~~39~~
51)	2,4,6-Tribromophenol	22.18	329.6	37598	53.99	ug	89
52)	*Phenanthrene-d10	23.95	187.9	93428	40.00	ug	97
61)	Di-n-butylphthalate	25.58	148.8	3637	.612	ug	67
63)	*Chrysene-d12	31.28	240.0	80940	40.00	ug	98
65)	Terphenyl-d14	28.19	244.0	68854	19.71	ug	98
~~66)~~	~~Butylbenzylphthalate~~	~~29.54~~	~~148.8~~	~~1595~~	~~.545~~	~~ug~~	~~47~~
70)	bis(2-Ethylhexyl)phthalate	31.38	148.8	1861	.523	ug	80
71)	*Perylene-d12	38.17	264.0	83356	40.00	ug	98
~~72)~~	~~Di-n-octylphthalate~~	~~34.02~~	~~148.9~~	~~2749~~	~~.366~~	~~ug~~	~~41~~

* Compound is ISTD

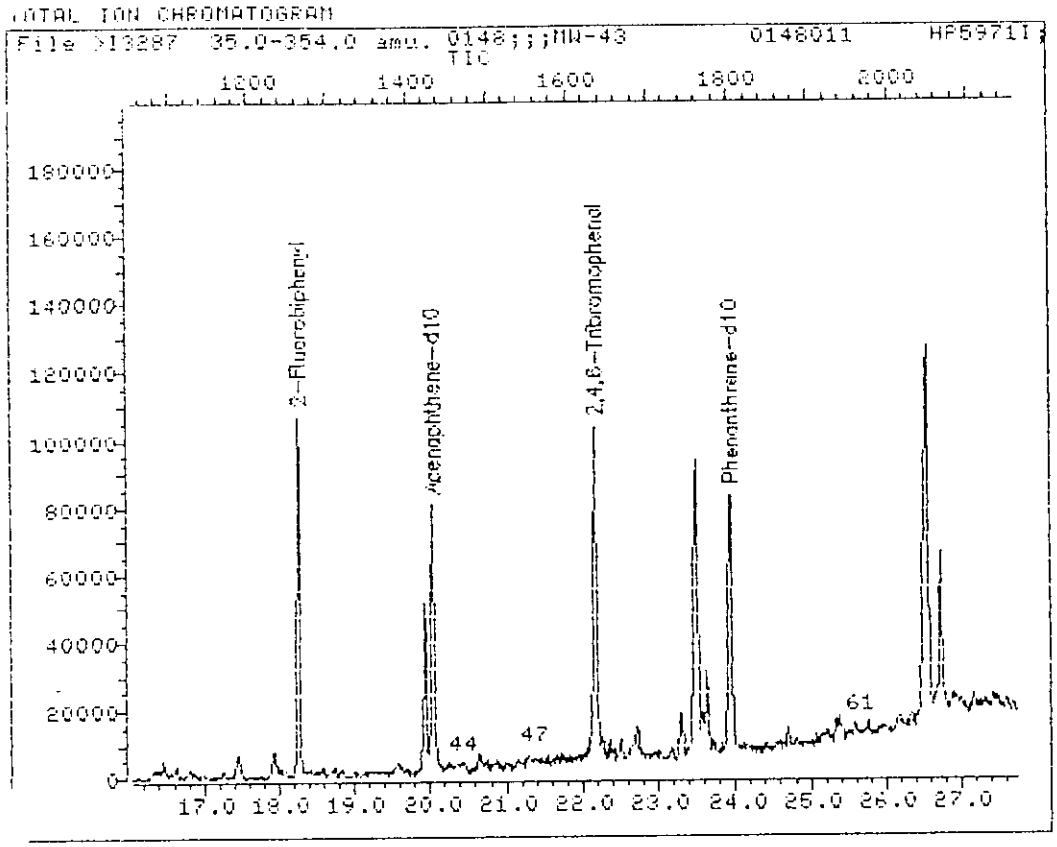
CMC 7/22/93



Data File: >I3287::A4 Quant Output File: ^I3287::A6
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;021093I;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

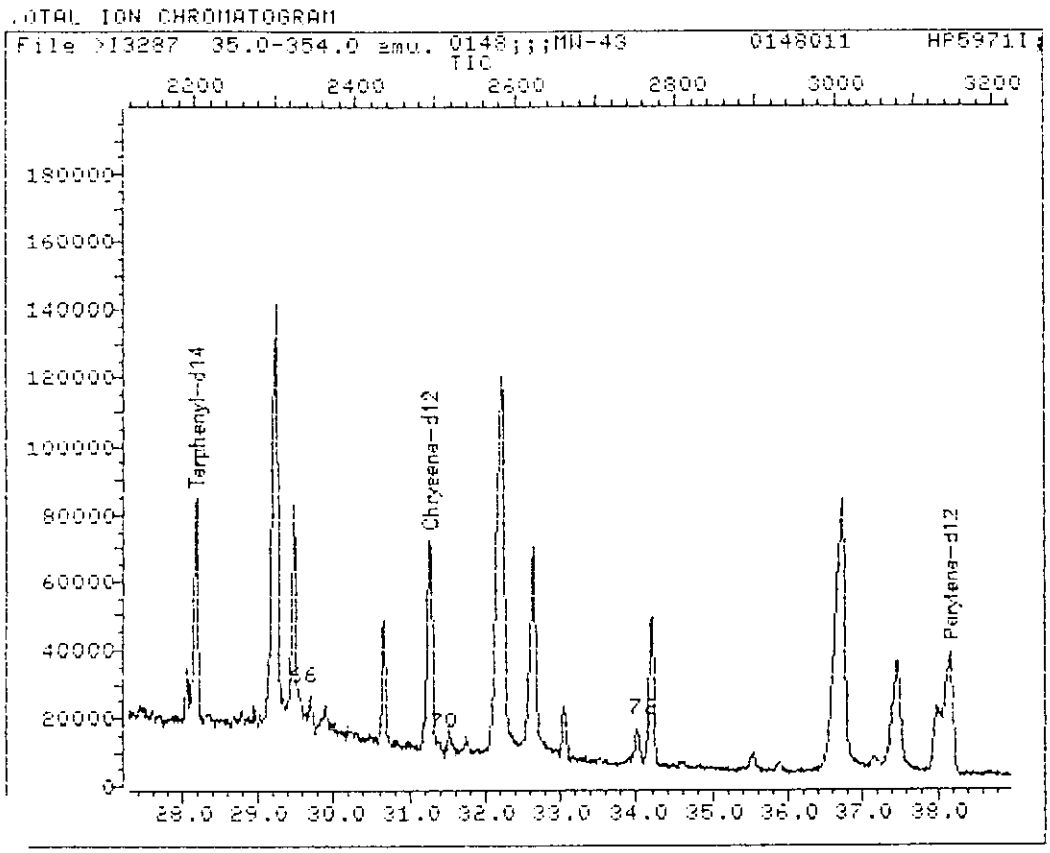
Operator ID: USER1
Quant Time : 930223 14:30
Injected at: 930216 18:15



Data File: >I3287::A4 Quant Output File: ^I3287::A6
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;0210931;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

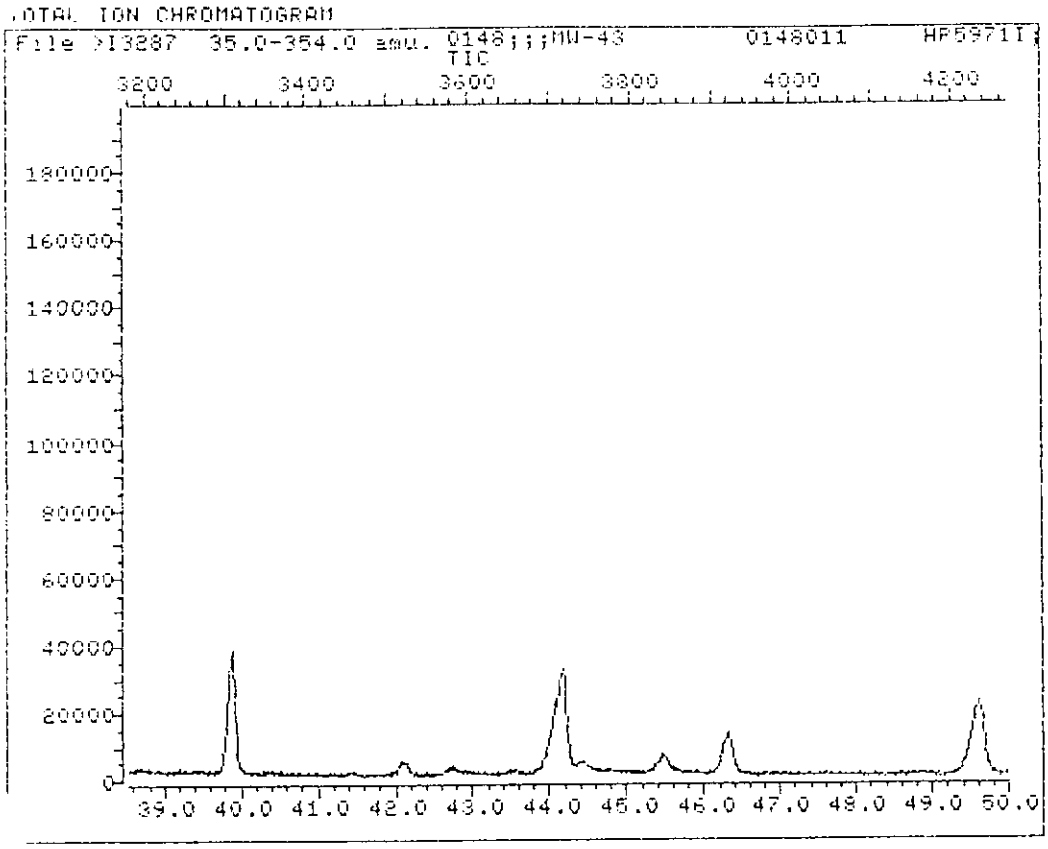
Operator ID: USER1
Quant Time : 930223 14:30
Injected at: 930216 18:15



Data File: >I3287::A4 Quant Output File: ^I3287::A6
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;0210931;021193;LLW;1;;;I0

Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:30
Injected at: 930216 18:15

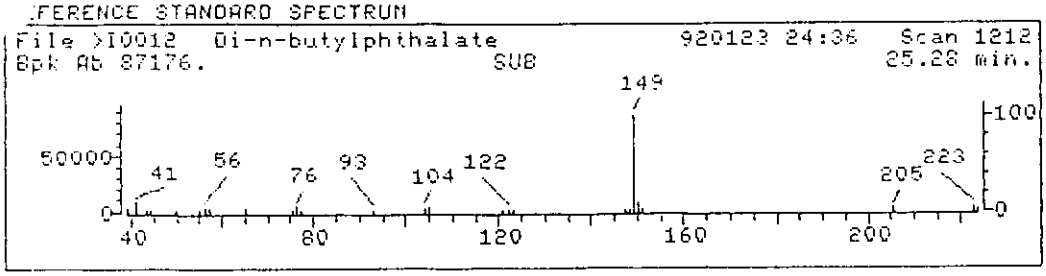


Data File: >I3287::A4 Quant Output File: ^I3287::A6
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;0210931;021193;LLW;1;;;I0

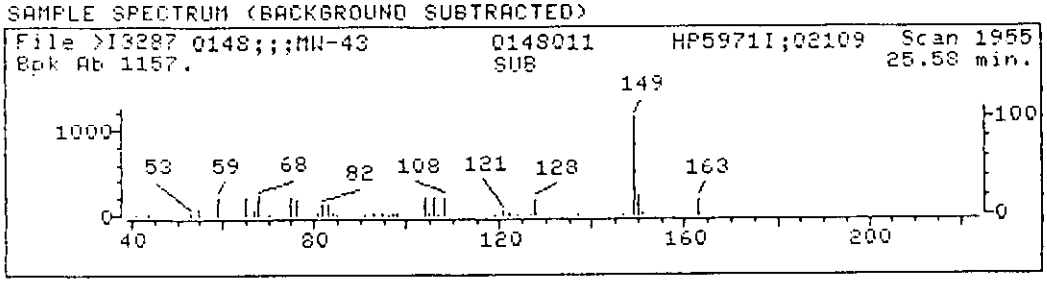
Id File: I_IFI::A5
Title: IFB-OLM01.8 BNA COMPOUNDS
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1
Quant Time : 930223 14:30
Injected at: 930216 18:15

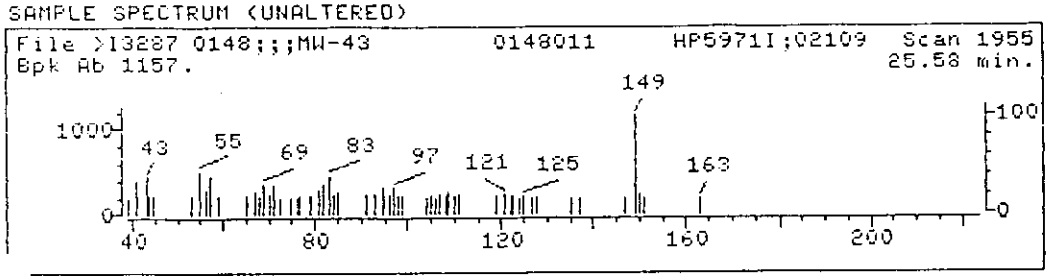
FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



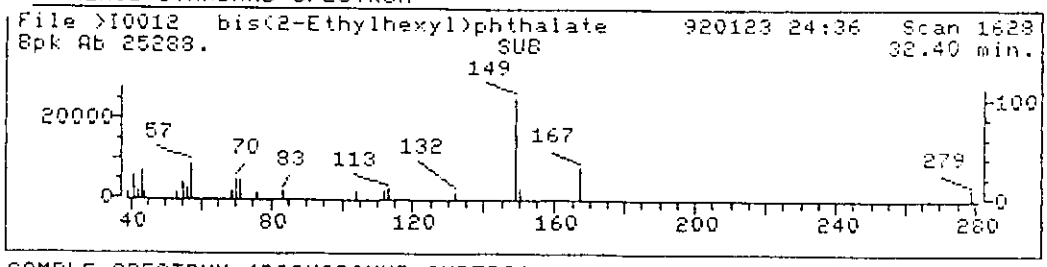
SAMPLE SPECTRUM (UNALTERED)



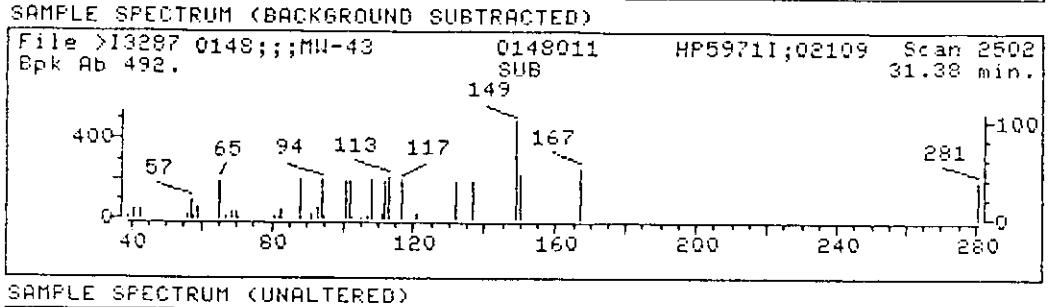
Data File: >I3287::A5 Quant Output File: ^I3287::A6
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;0210931;021193;LLW;1;;;I0
Quant Time: 930216 19:12 Quant ID File: I_IFI::A5
Injected at: 930216 18:15 Last Calibration: 910116 11:52
Last Qcal Time: 930216 08:48

Compound No : 61
Compound Name : Di-n-butylphthalate
Scan Number : 1955
Retention Time: 25.58 min.
Quant Ion : 148.8
Area : 3637
Concentration : .612 ug
q-value : 67

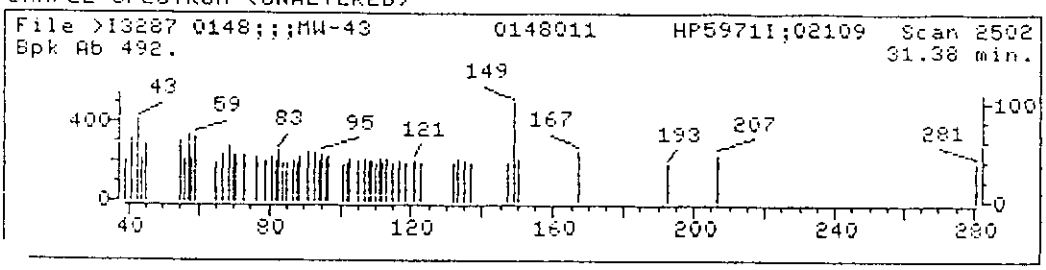
FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >I3287::A5 Quant Output File: ^I3287::A6
Name: 0148;;;MW-43 Instrument ID: **MSD
Misc: 0148011 HP5971I;0210931;021193;LLW;1;;;I0
Quant Time: 930216 19:12 Quant ID File: I_IFI::A5
Injected at: 930216 18:15 Last Calibration: 910116 11:52
Last Qcal Time: 930216 08:48

Compound No : 70
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 2502
Retention Time: 31.38 min.
Quant Ion : 148.8
Area : 1861
Concentration : .504 ug
q-value : 80

M: data file header from : >I328?::A5

Sample: 0148;;;MW-43 Operator: USER1 2/16/93 18:15
Misc : 0148011 HP5971I;0210931;021193;LLW;1;;;10
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS # : 8 Equip ID: **MSD
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0