0002

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

JOB # : 9093-0060

CUSTOMER SAMPLE CODE	LABORATORY SAMPLE CODE	ANALYTICAL REQUIREMENTS*						
		*VOA GC/MS	*BNA GC/MS	*VOA GC	*PEST PCB	*METALS	*OTHER	*OTHER
S-99	0060001	X	X		X	X		
S-100	0060002	X	X		X	X		
S-101	0060003	X	X		X	X		
S-102	0060004	X	X		X	X		
SS-43	0060005		X		X	X		
FIELD BLANK	0060006	X	X		X	X		
TRIP BLANK 1/19/93	0060007	X						
SS-75	0060008		X		X			
S-103	0060009				X			
SS-51	0060010		X		X			
SS-50	0060011		X		X			
S-115	0060012				X			
S-113	0060013				X			
S-111	0060014				X			
SS-49	0060015		X					
FIELD BLANK 1/20/93	0060016				X			
S-114	0060017				X			
S-112	0060018				X			

- Check Appropriate Boxes

* CLP, Non-CLP
* HSL, Priority Pollutant

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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

JOB # : 3093-0060

0003

SAMPLE ID	MATRIX	DATE COLLECTED	DATE RECVD AT LAB	DATE EXTRACTED	DATE ANALYZED
S-99	Soil	01/18/93	01/19/93	N/A	01/26/93
S-100	Soil		01/19/93		
S-101	Soil		01/19/93		
S-102	Soil		01/19/93		
FIELD BLANK	Aqueous		01/19/93		
TRIP BLANK 1/18/93	Aqueous		01/19/93		

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0004

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

JOB # : 3093-0060

SAMPLE ID	MATRIX	DATE COLLECTED	DATE RECVD AT LAB	DATE EXTRACTED	DATE ANALYZED
S-99	Soil	01/18/93	01/19/93	01/20/93	02/02/93
S-100	Soil	↓	01/19/93	↓	02/01/93
S-101	Soil	↓	01/19/93	↓	02/01/93
S-102	Soil	↓	01/19/93	↓	01/29/93
FIELD BLANK	Aqueous	01/18/93	01/19/93	01/21/93	02/01/93
S-100MS	SOIL	01/18/93	01/19/93	01/20/93	02/02/93
S-100MSD	↓	↓	↓	↓	↓
S-101RE	↓	↓	↓	↓	02/02/93
S-102RE	↓	↓	↓	↓	02/01/93
S-100MSB	↓	NA	↓	↓	02/01/93
BQC CHECK	↓	NA	↓	↓	02/01/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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

JOB # : 3093-0060

SAMPLE ID	MATRIX	ANALYTICAL PROTOCOL	EXTRACTION METHOD	AUXILARY CLEAN UP	DIL/CONC FACTOR
S-99	Soil	NYSDEC '91	SONC.	GPC	1.0
S-100	Soil	↓	↓	↓	1.0
S-101	Soil	↓	↓	↓	8.0
S-102	Soil	↓	↓	↓	1.0
FIELD BLANK	Aqueous	↓	CONT SONC	NONE GPC	↓
S-100MS	SOIL	↓	↓	↓	↓
S-100MSD	↓	↓	↓	↓	8.0
S-101RE	↓	↓	↓	↓	1.0
S-102RE	↓	↓	↓	↓	↓
S-100MSB	↓	↓	↓	↓	↓
& QC CHECK	↓	↓	↓	↓	↓

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0006

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDE/PCB
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
S-99	SOIL	01/18/93	01/19/93	01/21/93	02/~~13~~/93
S-100					02/10/93
S-100DL					"
S-100MS					02/12/93
S-100MSD					02/13/93
S-100MSS					02/10/93
QC CHECKSTD					02/12/93
S-101					02/10/93
S-101DL					
S-102					
S-102DL					
CS-43					
CS-43DL		"	"	"	"
CS-75		01/19/93	01/21/93	01/22/93	02/11/93
CS-75DL					
S-103					
S-103DL		"			"
CS-51		01/20/93			02/16/93
CS-51DL					02/13/93
CS-50					
CS-50DL	"	"	"	"	"

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION 0007

SAMPLE PREPARATION AND ANALYSIS SUMMARY
PESTICIDE/PCB
ANALYSES

Laboratory Sample ID	Matrix	Date Collected	Date Rec'd at Lab	Date Extracted	Date Analyzed
S-115	SOIL	01/20/93	01/21/93	01/22/93	02/13/93
S-115DL	↓	↓	↓	↓	↓
S-113					↓
S-113DL					02/20/93
S-111					02/14/93
S-111DL					↓
CS-49					02/20/93
CS-49DL					02/16/93
S-114					↓
S-114DL					↓
S-112					↓
S-112DL	↓	↓	↓	↓	↓
FIELD Bl 1/18	WATER	01/18/93	01/19/93	01/19/93	02/11/93
FIELD Bl. 1/20	↓	01/20/93	01/21/93	01/22/93	02/11/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

0008

JOB # : 3093-0060

ICAP

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
S-99	Soil	TAL METALS	01/19/93	1/26/93	2/19/93
S-100	Soil	TAL METALS	01/19/93		
S-101	Soil	TAL METALS	01/19/93		
S-102	Soil	TAL METALS	01/19/93		
FIELD BLANK	Aqueous	TAL METALS	01/19/93	1/26/93	2/22/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

JOB # : 3093-0060

Furnace

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
S-99	Soil	TAL METALS	01/19/93	1/26/93	2/1-2, 5-2/93
S-100	Soil	TAL METALS	01/19/93		
S-101	Soil	TAL METALS	01/19/93		
S-102	Soil	TAL METALS	01/19/93		
FIELD BLANK	Aqueous	TAL METALS	01/19/93	1/26/93	2/1-2, 5/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0010

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

JOB # : 3093-0066

Mercury

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
S-99	Soil	TAL METALS	01/19/93	1/28/93	1/28/93
S-100	Soil	TAL METALS	01/19/93		
S-101	Soil	TAL METALS	01/19/93		
S-102	Soil	TAL METALS	01/19/93		
FIELD BLANK	Aqueous	TAL METALS	01/19/93	2/2/93	2/2/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0011

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSIS

JOB # : 3093-0060

SAMPLE ID	MATRIX	METALS REQUESTED	DATE RECEIVED	DATE DIGESTED	DATE ANALYZED
CS-43	Soil	MERCURY	01/19/93	2/12/93	2/12/93

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0060

ICAP

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
S-99	Soil	CLP	HNO_3, HCl	N/A	1:1
S-100	Soil	↓	↓	↓	↓
S-101	Soil				
S-102	Soil				
FIELD BLANK	Aqueous				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0060

Euroaca Ab, Inc.

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
S-99	Soil	CLP	HNO3, H2O2	Nickel Nitrate	1:1
S-100	Soil	↓	↓	↓	1:1
S-101	Soil				Adj 1:4 to 1:1
S-102	Soil				Adj 1:4 to 1:1
FIELD BLANK	Aqueous				1:1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0060

Furnace - TI

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
S-99	Soil	CLP	HNO3, H2O2	Heat	1:1
S-100	Soil	↓	↓	↓	↓
S-101	Soil				
S-102	Soil				
FIELD BLANK	Aqueous				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0060

Furnace - Pb

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
S-99	Soil	CLP	HNO_3, H_2O_2	Mg Nitrate, Ammon	1:50
S-100	Soil	↓	↓	↓	1:50
S-101	Soil				1:100
S-102	Soil				1:100
FIELD BLANK	Aqueous				1:1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
TAL METALS
INORGANIC ANALYSIS

JOB # : 3093-0060

Mercury

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
S-99	Soil	CLP	Manual Cold Vapor	N/A	1:1
S-100	Soil	↓	↓	↓	↓
S-101	Soil				
S-102	Soil				
FIELD BLANK	Aqueous				

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

0017

SAMPLE PREPARATION AND ANALYSIS SUMMARY
MERCURY
INORGANIC ANALYSIS

JOB # : 3093-0060

LABORATORY SAMPLE CODE	MATRIX	ANALYTICAL PROTOCOL	DIGESTION PROCEDURE	MATRIX MODIFIER	DIL/CONC FACTOR
CS-43	Soil	CLP	Manual Cold Vapor	N/A	1:10

SDG NARRATIVE

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
P.O.#	05526Y
SDG#:	Z0060
IEA ID:	30930-0060

IEA
An Aquarion Company

200 Monroe Turnpike
Monroe, Connecticut 06468

Phone 203·261·4458
Fax 203·268·5346

30930-0060
ROUX ASSOCIATES

SDG Narrative

Volatile Organics - In order to meet the 7-day from receipt holding time, the field blanks and the trip blank were analyzed along with the soil sample on a soil calibration curve.

Extractions - Sample S-100 for PCB's was inadvertently spiked with the incorrect concentration of the standard solution. The sample was re-extracted on 02/01/93 using the correct solution.

Semi-Volatile Organics - Samples S-101, S-100, S-100 MS, S-100 MSD and S-102 exhibited internal standard area suppression. Samples S-101 and S-102 were reanalyzed with similar results, therefore proving matrix interference. Samples S-100 MS and S-100MSD confirmed the matrix interference for sample S-100. Both analyses have been reported with the reanalysis designated with the suffix "RE".

PCB's - Samples S-100, S-100 MS, S-00 MSD, S-101, CS-75, S-103, CS-51, CS-50, S115, S-113, S-111, CS-49, S-114 and S-112 required dilutions because of the high concentration of aroclor 1260.

The third peak used for calculation of aroclor 1260 in sample S-112 was outside of RT windows due to matrix interference.

Samples S-102 and CS-43 required dilutions due to the sample matrix. The third peak used for calculation or aroclor 1260 in sample CS-43 was outside of RT windows.

After sample CS-43 was diluted, the aroclor present was indistinguishable on the RTX-35 column, therefore the results reported are from column DB-1701. The third peak of aroclor 1260 was outside of RT windows.

Samples CS-75 and CS-49 were confirmed by GC/MS for aroclor 1260.

There was no aroclor 1242 injected within 72 hours of the QC check standard on column 2, however the aroclors run every 72 hours are not used for quantitation, only for pattern recognition. Since this is a spike sample, aroclor 1242 is a known compound.

Because of the very high concentration of aroclor 1260 in sample S-100 and the dilution required, the spike percent recovery could not be calculated.

All samples with dilution factors of 100 and higher had surrogates diluted out.

In sample CS-50 and CS-50 DL, DCB was lost in matrix and is not reported.

DCB was below advisory QC limits on column 1 in samples FB 011893 and FB 012093 and method blank PBLK40.

DCB was below advisory QC limits on column 2 in sample FB 011893 and method blanks PBLK53, PBLk40 and PBLK51 and on column 1 in sample S-111 DL.

TCX was below advisory QC limits on column 2 in sample S-99 and method blanks PBLK44 and PBLK51.

DCB had high recovery because of interference with aroclors on column 1 in samples CS-43, S-100 MSD, CS-5-1 DL, CS-51, S-115 DL, S-113 and on column 2 in samples S-102, S-100 MS, S-100 MSD, CS-51 DL, CS-51, S-115 DL, S-111 DL, CS-49 and S-112 DL.

Many results have "P" flags due to the large percent RPD between column concentrations. This is believed to be due to the sample matrix.

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.

Copper, arsenic and selenium failed the control limits for spike recovery analysis of sample S-100, resulting in three "N" flags. It was noted during sample digestion that the sample contained numerous rocks. A problem with sample homogeneity appears to be the cause for the resultant flags.

No other problems were noted.

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 5, 1993
Date

CLIENT CHAINS OF CUSTODY

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
P.O.#	05526Y
SDG#:	Z0060
IEA ID:	30930-0060

5015 - 0060 dual extractions - H. Kingsley

CHAIN OF CUSTODY

No 013[illegible] Y 1/19/93

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 1 OF 1

PROJECT NAME: AMTRAK SUNNYSIDE
PROJECT NUMBER: 055264
PROJECT LOCATION: SUNNYSIDE YARD, QUEENS, NY
SAMPLER(S): HG, CC

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED	SAMPLE MATRIX	TAL VOC	TAL METAL	PCB/SVOC	PCB	SVOC	MERCURY	TOTAL BOTTLES	NOTES	LAB #
S-99	1/18/93	1720	SOIL	2	1	1				4		001
S-100	1/18/93	1510	SOIL	5	3	3				11	MS/MSD	002
S-101	1/18/93	1345	SOIL	2	1	1				4		003
S-102	1/18/93	1430	SOIL	2	1	1				4		004
CS-43	1/18/93	1700	SOIL	GPA 1-19-93			1		1	2		005
FIELD BLANK	1/18/93	1100	WATER	(3)	1		1	2		6		006
TRIP BLANK			WATER	2						2		007

RELINQUISHED BY: (SAMPLER'S SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N	RECEIVED BY: (SIGNATURE)	FOR	DATE	TIME	SEAL INTACT Y OR N
Christopher Jr Clark	ROUX	1/18/93	1830	(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
					Gary P. Cy	IEA CT	1-19-93	1000	(Y) OR N

DELIVERY METHOD: FED EX # 5965642911

ANALYTICAL LABORATORY: IEA (CT)

COMMENTS: ANALYSISE NYDEC ASP CATEGORY B

0021

IEA CT#3093-0060

ROUX

CHAIN OF CUSTODY

Nº 013[illegible] 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
PROJECT NUMBER: 055264
PROJECT LOCATION: SUNNYSIDE, QUEENS, N.Y.C.
SAMPLER(S): DANIEL KEOHANE, CHRIS CLARK, HARRY GREGORY

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED		SAMPLE MATRIX	PCB's				TOTAL BOTTLES	NOTES
CS-75	1-19-93	1220		✓					2	008
S-103	1-19-93	1340		✓					2	009
CS-51	1-20-93	1045		✓					2	010
CS-50	1-20-93	1105		✓					2	011
S-115	1-20-93	1145		✓					2	012
S-113	1-20-93	1200		✓					2	013
S-111	1-20-93	1220		✓					2	014
CS-49	1-20-93	1305		✓					2	015
FIELD BLANK	1-20-93	1330		✓					2	016
S-114	1-20-93	1410		✓					2	017

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	1/20/93	1700	(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	1/21/93	1000	(Y) OR N

DELIVERY METHOD: 5965642955 FEDERAL EXPRESS

ANALYTICAL LABORATORY: IEA, CT.

COMMENTS: ANALYSES NYDEC ASP CATAGORY B
Double extration for 'S' Samples ONLY

0022

IEA C7 # 3093-0060

CHAIN OF CUSTODY

№ 013[illegible] Y

ROUX ASSOCIATES INC
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(516) 673-7200 FAX. (516) 673-7216

PAGE 2 OF 2

PROJECT NAME: AMTRAK, SUNNYSIDE
PROJECT NUMBER: 05526Y
PROJECT LOCATION: SUNNYSIDE, QUEENS N.Y.C.
SAMPLER(S): DANIEL KEOHANE / CHRIS CLARK, HARRY GREGORY

ANALYSES

SAMPLE DESIGNATION/LOCATION	DATE COLLECTED	TIME COLLECTED		SAMPLE MATRIX	PCB's					TOTAL BOTTLES	NOTES
S-112	1-20-93	1450			✓					2	018

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.	1/20/93	1700	(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 C7	1/21/93	1000	(Y) OR N

DELIVERY METHOD: 5965642955 FEDERAL EXPRESS

ANALYTICAL LABORATORY: I.E.A., C.T.

COMMENTS: ANALYSE NYDEC ASP CATEGORY B
Double extraction for 'S' Samples only.

00238

FEDERAL EXPRESS

[redacted]

QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 5965642911

0024

5965642911

RECIPIENT'S COPY

[redacted] Date 1/18

From (Your Name) Please Print: Mr. Christopher Clark
Your Phone Number (Very Important): (516)673-7200
Department/Floor No.
Company: ROUX ASSOCIATES
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
Department/Floor No.
Company: IEA, Inc.
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.): 055264 · 30/17

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 [redacted]

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
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Government Overnight (Restricted for authorized users only): 46 [ ] GOVT LETTER; 41 [ ] GOVT PACKAGE
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5 DELIVERY AND SPECIAL HANDLING (Check services required)
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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)
12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

6
PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See right)
1	57	3000
Total 1	Total 57	Total 3000

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

Received At: 1 [ ] Regular Stop; 2 [ ] On-Call Stop; 3 [ ] Drop Box; 4 [ ] B.S.C.; 5 [X] 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 [signature]
Date/Time Received: 1-19-93 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
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QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 5965642955

2330N

5965642955

RECIPIENT'S COPY

1 [redacted] Date 1-20-93

From (Your Name) Please Print: Mr. Christopher Clark
Your Phone Number (Very Important): (516)673-7200
Department/Floor No.
Company: ROUX ASSOCIATES
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
Department/Floor No.
Company: IEA, Inc.
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.): 055264 · 30/17

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 [redacted]

4 SERVICES (Check only one box)
Priority Overnight (Delivery by next business morning†): 11 [X] OTHER PACKAGING; 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 †)
Government Overnight (Restricted for authorized users only)

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

6
PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See right)
1	48	3,000
Total 1	Total 48	Total 3,000

DIM SHIPMENT (Chargeable Weight)

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

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

REVISION DATE 6/92

LABORATORY CHAINS OF CUSTODY

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
P.O.#	05526Y
SDG#:	Z0060
IEA ID:	30930-0060

AS:022189:0

0026

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 0060 Sample Numbers 001-004

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 L. Caulk		1-28-93	ICP/FLME
Benjamin L. Caulk		1-28-93	FURN
Benjamin L. Caulk		1-28-93	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	2/19/93	ICP
			FLAME
Shirley Michaud		2/1-3,5,8/93	FURN
Benjamin L. Caulk		1-28-93	MERCURY
	Chemist	Date(s)	

I have reviewed and authorize the release of this job:

Complete	Stan D. Hall	2/22/93
	Supervisor	Date

Batch Assignment _____

AS:022189:0

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

0027

CHAIN OF CUSTODY
ATOMIC SPECTROSCOPY DEPARTMENT

Job Number 030430 0060 Sample Numbers 005

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
Benjamin R. Cuddeback Chemist	1-28-93 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
Benjamin R. Cuddeback Chemist	1-28-93 Date(s)	MERCURY

I have reviewed and authorize the release of this job:

Complete _____ 2/22/93
Supervisor Date

Batch Assignment _____

AS:022189:0

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

0028

CHAIN OF CUSTODY
ATOMIC SPECTROSCOPY DEPARTMENT

Job Number 030930 0060 Sample Numbers 005 reprep II

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	2/12/93 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	2/12/93 Date(s)	MERCURY

I have reviewed and authorize the release of this job:

Complete Supervisor 2/23/93 Date

Batch Assignment _____

AS:022189:0

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

0029

CHAIN OF CUSTODY
ATOMIC SPECTROSCOPY DEPARTMENT

Job Number 0060 Sample Numbers 006

(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		
Joseph Venezia	1/26/93	ICP/FLME
Joseph Venezia	1/26/93	FURN
Benjamin S. Cuddy	2/2/93	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		
Dianatate	2/22/93	ICP
		FLAME
Shirley Mickens	2/1-3,5/93	FURN
Benjamin S. Cuddy	2/3/93	MERCURY
Chemist	Date(s)	

I have reviewed and authorize the release of this job:

Complete David N. Huffo 2/23/93
Supervisor Date

Batch Assignment

IEA, I. CT
Internal Chain of Custody Form

nt : Roux

ody Seal: present / absent
: intact / not intact

d Chain
ustody : present / absent

le Tags : present / absent
: listed / not listed

Forms : present / absent

0060

IEA Job #:

Case # :
Airbill #:

Sample #s: 1-8
Location :

Sample Custodian: ______ / ______ Date/Time: ______
(print) (signature)

ratory le Number	Removed By (Full Signature)	Date	Time	Reason	Returned By (Full Signature)	Date	Time	Returned To Ref. #
6	Pamela Bel	1/19	4pm	PCB Ext	Used			
-5	J Bell	1/20	1050A	BNA Ext	Tamara Malajt	1/20	3:00 pm	
-5	Tamara Malajt	1/21	9:00A	PCB EXT	J Bell	1/21	7:30P	38
6	Tamara Malajt	1/21	3:30 PM	BNA EXT	USED			
1-4	Karen Zmijewski	1/22	9:30	T/s	Karen Zmijewski	1/22	9:40	36
6	~~Joe Venezia~~	~~1/23~~	~~10:00~~	~~Metals Prep~~	~~Joe Venezia~~	~~1/23~~	~~11:00~~	~~U.B.~~
-4	[illegible]	1/26	10:00	VOA	USED			
6	Joe Venezia	1/26	1800	Metals Prep	Joe Venezia	1/26	1900	UB
6,7	L. Del	1/26	18:50	VOA	USED			
-4,5	B Cauller	1/28	9:00	Metals-prep / Hg-prep	Benjamin Cauller	1/28	5:00 Am	SR
-5,6	Bradley B. Lutz	1/28	9:00	GC SCREENING	Bradley B. Lutz	1/28	1100	
-4,6	Mike Crowe	1/29	1204	BNA Anal	Mike Crowe	1/29	1355	
6	B. Cauller	2/1	10:30	Hg-prep	Benjamin Cauller	2/1	16:00	SR
-4,6	Mike Crowe	2/1	1120	BNA Anal	Mike Crowe	2/1	1533	
6	B. Cauller	2/2	15:10	Hg-reprep	Jeff Nee	2/2	1700	SR
2,3	Mike Crowe	2/2	1601	BNA Anal	Mike Crowe	2/2	1700	
-6	Dean Sollo	2/3	4:15	GC P/P Analysis	Dean Sollo	2/3	5:15	

0030

IEA, I. CT
Internal Chain ustody Form

0060

t : ______

dy Seal: present / absent
: intact / not intact

Chain
stody : present / absent

e Tags : present / absent
: listed / not listed
orms : present / absent

Sample Custodian: ______ (print) / ______ (signature) Date/Time: ______

IEA Job #: ______
Case # : ______
Airbill #: ______
Sample #s: 1-6
Location : ______

atory e Number	Removed By (Full Signature)	Date	Time	Reason	Returned By (Full Signature)	Date	Time	Returned To Ref. #
-5	Bradley Bl. Jr	2/4	1400	GC ANALYSIS	Bradley Bl. Jr	2/4	1700	
5	Bradley Bl. Jr	2/5	1410	G ANALYSIS	Bradley Bl. Jr	2/4	1405	
5	B. Cullen	2/11/93	9:00	1tz-prep	[illegible]	2/11/93	17:00	
-6	B. [illegible]	2/11	9:00	P/P GC and	B. [illegible]	2/11	2	
5	B. Cullen	2/12	9:00	1tz-reprep	Benjamin Cullen	2/12	11:30	VB
2 STD	Dean Sollo	2/18	8:00	GC P/P Analysis	Dean Sollo	2/18	9:00	

0031

ent : Roux

ody Seal: present / absent
: intact / not intact

d Chain
ustody : present / absent

le Tags : present / absent
: listed / not listed

Forms : present / absent

IEA, i - CT
Internal Chain of Custody Form

0060

IEA Job #: 3093 0060

Case # : –
Airbill #: 5965642955

Sample #s: 008-018
Location :

Sample Custodian: E.W.JOHNSON (print) [signature] (signature) Date/Time: 1/21/93 1000

oratory ple Number	Removed By (Full Signature)	Date	Time	Reason	Returned By (Full Signature)	Date	Time	Returned To Ref. #
5,17,18	Pamela Baehmen	1/22	9am	EXT	Tamara Malyek	1/25	10[25]	–
6	Peter Potts	1/27	100	P/P				
16	Bradley Blitz	1/29	9:30	GC SCREENING	Bradley Blitz	1/29	1000	
15,17,18	Bradley B. Litz	2/2	10:30	GC SCREENING	Bradley B. Litz	2/2	11:03	
16	Dean Sullo	2/3	4:15	GC P/P Analysis	Dean Sullo	2/3	5:15	
-15,17,18	Bradley Blitz	2/4	1400	GC ANALYSIS	Bradley Blitz	2/4	1700	
-18	BBlitz	2/11	3	P/P GC Clnd	BBlitz	2/11	2	
10-11	Dean Sullo	2/18	8:00	G/C P/P Analysis	Dean Sullo	2/18	9:00	
2,14,17,18	Dean Sullo	2/19	11:00	GC P/P Analysis	Dean Sullo	2/19	11:30	

ORGANIC DATA

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
P.O.#	05526Y
SDG#:	Z0060
IEA ID:	30930-0060

VOLATILE DATA

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
P.O.#	05526Y
SDG#:	Z0060
IEA ID:	30930-0060

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0035

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	FIELDBLANK	105	113	108		0
02	TRIPBLANK	102	107	106		0
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
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

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLKG2	101	100	110		0
02	S-99	101	96	113		0
03	S-100	108	96	112		0
04	S-101	113	94	103		0
05	S-100MS	109	101	110		0
06	S-100MSD	114	99	112		0
07	MSBS-100	100	105	110		0
08	QCCHKSTD	103	108	112		0
09	S-102	111	100	117		0
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0037

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix Spike - EPA Sample No.: S-100 Level(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	56	0	96	171	59-172
Trichloroethene	56	0	56	100	62-137
Benzene	56	0	55	98	66-142
Toluene	56	2	49	84	59-139
Chlorobenzene	56	0	51	91	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56	79	158	8	22	59-172
Trichloroethene	56	50	100	0	24	62-137
Benzene	56	54	108	10	21	66-142
Toluene	56	49	94	11	21	59-139
Chlorobenzene	56	49	98	7	21	60-133

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

* Values outside of QC limits

LMD 01/31/93

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

COMMENTS: _____

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0038

L Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 20260 SAS No.: _____ SDG No.: 20260

Matrix Spike - EPA Sample No.: MSBS-100 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS B CONCENTRATION (ug/Kg)	MS B % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50	0	80	160 *	59-172
Trichloroethene		0	54	108	62-137
Benzene		0	52	104	66-142
Toluene		0	43	86	59-139
Chlorobenzene		0	47	94	60-133
					75-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene					22	59-172
Trichloroethene					24	62-137
Benzene					21	66-142
Toluene					21	59-139
Chlorobenzene					21	60-133

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

* Values outside of QC limits

PAS 01/29/93

RPD: _____ out of _____ outside limits

Spike Recovery: 1 out of 5 outside limits

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKG2 0039

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Lab File ID: G3850.D Lab Sample ID: VBLKG2

Date Analyzed: 01/26/93 Time Analyzed: 1027

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

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	S-99	0060001	G3851.D	1123
02	S-100	0060002	G3852.D	1157
03	S-101	0060003	G3853.D	1232
04	S-100MS	0060002MS	G3855.D	1341
05	S-100MSD	0060002MSD	G3856.D	1415
06	MSBS-100	0060002MSB	G3857.D	1450
07	QCCHKSTD	0060002STD	G3858.D	1524
08	S-102	0060004	G3859.D	1559
09	FIELDBLANK	0060006	G3864.D	2006
10	TRIPBLANK	0060007	G3865.D	2041
11				
12				
13				
14				
15				
16				
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19				
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21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

0040

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Lab File ID: GB273.D BFB Injection Date: 01/25/93

Instrument ID: HP5995G BFB Injection Time: 2302

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.3
75	30.0 - 66.0% of mass 95	45.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.4 (0.6)1
174	50.0 - 120.0% of mass 95	73.9
175	4.0 - 9.0% of mass 174	6.0 (8.1)1
176	93.0 - 101.0% of mass 174	71.9 (97.2)1
177	5.0 - 9.0% of mass 176	5.0 (6.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	G3842.D	01/25/93	2353
02	VSTD020	VSTD020	G3843.D	01/26/93	0032
03	VSTD050	VSTD050	G3844.D	01/26/93	0106
04	VSTD100	VSTD100	G3845.D	01/26/93	0143
05	VSTD200	VSTD200	G3847.D	01/26/93	0251
06					
07					
08					
09					
10					
11					
12					
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14					
15					
16					
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19					
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21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

0041

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Lab File ID: GB275.D BFB Injection Date: 01/26/93

Instrument ID: HP5995G BFB Injection Time: 0859

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

m/e	ION ABUNDANCE CRITERIA		% RELATIVE ABUNDANCE	
50	8.0 - 40.0% of mass 95	26.6	25.7	
75	30.0 - 66.0% of mass 95	54.5	52.3	
95	Base peak, 100% relative abundance	100	100.0	
96	5.0 - 9.0% of mass 95	6.2	6.3	
173	Less than 2.0% of mass 174	0.0	0.0 (0.0)1	
174	50.0 - 120.0% of mass 95	64.9	67.5	
175	4.0 - 9.0% of mass 174	3.7	4.0 (~~6.0~~)1	5.7
176	93.0 - 101.0% of mass 174	62.2	65.6 (~~97.3~~)1	95.8
177	5.0 - 9.0% of mass 176	3.7	4.0 (~~6.2~~)2	5.9

LHD 01/31/94

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	G3849.D	01/26/93	0933
02	VBLKG2	VBLKG2	G3850.D	01/26/93	1027
03	S-99	0060001	G3851.D	01/26/93	1123
04	S-100	0060002	G3852.D	01/26/93	1157
05	S-101	0060003	G3853.D	01/26/93	1232
06	S-100MS	0060002MS	G3855.D	01/26/93	1341
07	S-100MSD	0060002MSD	G3856.D	01/26/93	1415
08	MSBS-100	0060002MSB	G3857.D	01/26/93	1450
09	QCCHKSTD	0060002STD	G3858.D	01/26/93	1524
10	S-102	0060004	G3859.D	01/26/93	1559
11	FIELDBLANK	0060006	G3864.D	01/26/93	2006
12	TRIPBLANK	0060007	G3865.D	01/26/93	2041
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

INSTRUMENT DETECTION LIMITS

Instrument G
Date: 07/08/92

UNITS: UG/L

	IDL
Chloromethane	4
Bromomethane	2
Vinyl Chloride	2
Chloroethane	2
Methylene Chloride	3
Acetone	4
Carbon Disulfide	2
1,1-Dichloroethene	2
1,1-Dichloroethane	2
1,2-Dichloroethene (total)	5
Chloroform	3
1,2-Dichloroethane	3
2-Butanone	2
1,1,1-Trichloroethane	3
Carbon Tetrachloride	3
Vinyl Acetate	2
Bromodichloromethane	3
1,2-Dichloropropane	3
cis-1,3-Dichloropropene	4
Trichloroethene	3
Dibromochloromethane	2
1,1,2-Trichloroethane	3
Benzene	3
trans-1,3-Dichloropropene	1
Bromoform	3
2-Methyl-2-Pentanone	1
2-Hexanone	2
Tetrachloroethene	3
1,1,2,2-Tetrachloroethane	3
Toluene	3
Chlorobenzene	3
Ethylbenzene	3
Styrene	3
Xylene (total)	2

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0043

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): G3849.D Date Analyzed: 01/26/93

Instrument ID: HP5995G Time Analyzed: 0933

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

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	25974	10.84	181237	13.30	143140	20.41
	UPPER LIMIT	51948	11.34	362474	13.80	286280	20.91
	LOWER LIMIT	12987	10.34	90618	12.80	71570	19.91
	EPA SAMPLE No.						
01	VBLKG2	24084	10.84	193377	13.27	151932	20.45
02	S-99	24415	10.81	193980	13.22	142336	20.41
03	S-100	18409	10.82	132558	13.25	94561	20.44
04	S-101	19667	10.82	124451	13.23	77483	20.42
05	S-100MS	20193	10.84	145599	13.27	100777	20.37
06	S-100MSD	19366	10.85	143999	13.31	96727	20.53
07	MSBS-100	23182	10.92	182308	13.35	142171	20.51
08	QCCHKSTD	23017	10.76	178605	13.25	140054	20.48
09	S-102	18671	10.79	147310	13.23	105239	20.53
10	FIELDBLANK	23837	10.85	188674	13.29	135456	20.52
11	TRIPBLANK	23356	10.78	177456	13.27	134384	20.44
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.

S-99

Lab Name: IEA/CT Contract: 0044

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3851.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 9 Data Analyzed: 01/26/93

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-99

Lab Name: IEA/CT Contract: 0045

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3851.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 9 Data Analyzed: 01/26/93

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/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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
Output File: ^G3851::QT
Data File: >G3851::G3
Name: 0060;;;S-99
Misc: 0060001

Quant Rev: 6 Quant Time: 930126 11:52
Injected at: 930126 11:23
Dilution Factor: 1.10000

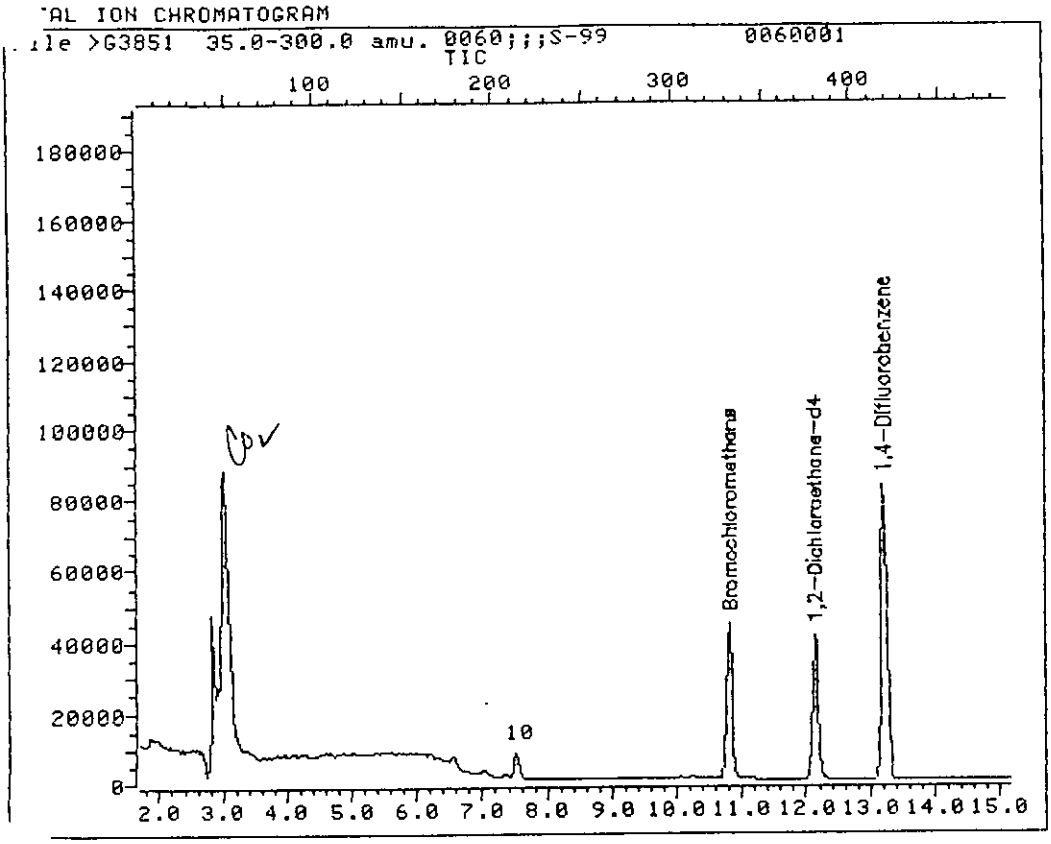
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.81	127.8	24415	50.00	ug/kg	71
10)	Methylene Chloride	7.53	83.8	7740	9.84	ug/kg	89
13)	Acetone	6.56	42.8	11507	11.51	ug/kg	93
30)	1,2-Dichloroethane-d4	12.14	64.8	96173	61.96	ug/kg	92
34)	*1,4-Difluorobenzene	13.22	113.8	193980	50.00	ug/kg	98
53)	*Chlorobenzene-d5	20.41	116.8	142336	50.00	ug/kg	88
60)	Toluene	17.12	91.0	7922	1.58	ug/kg	94
61)	Toluene-d8	16.92	97.8	199415	55.60	ug/kg	95
91)	Bromofluorobenzene	22.68	94.8	94863	52.85	ug/kg	82

* Compound is ISTD

KM2 1/28/93

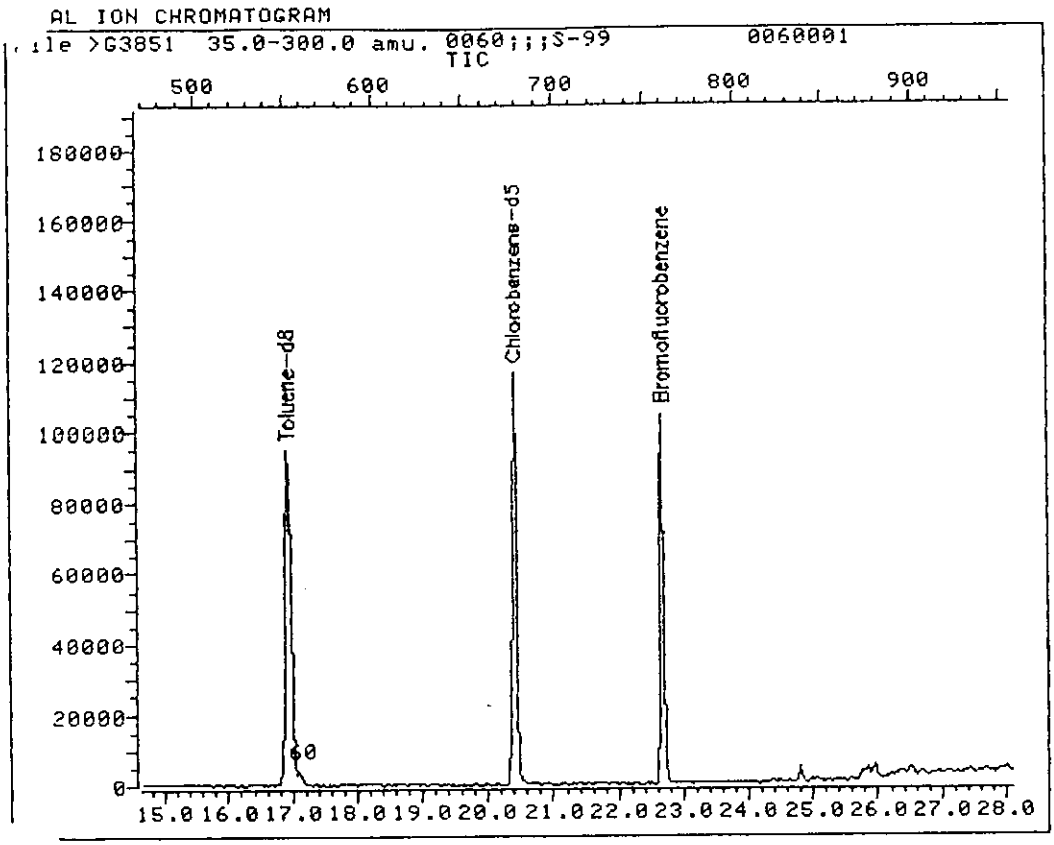


Data File: >G3851::G3 Quant Output File: ^G3851::QT
Name: 0060;;;S-99
Misc: 0060001 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 11:52
Injected at: 930126 11:23

TIC page 1 of 2



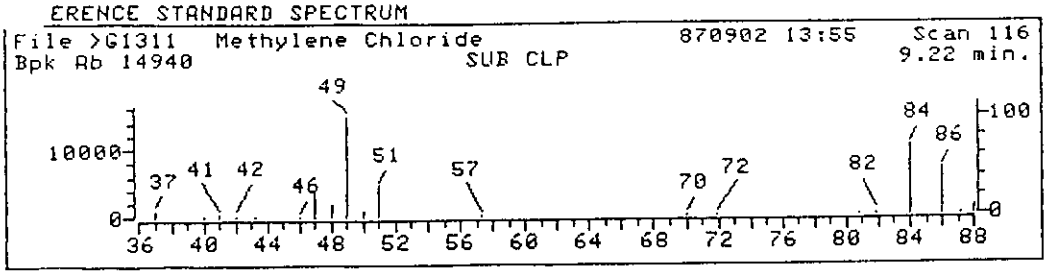
Data File: >G3851::G3 Quant Output File: ^G3851::QT
Name: 0060;;;S-99
Misc: 0060001 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

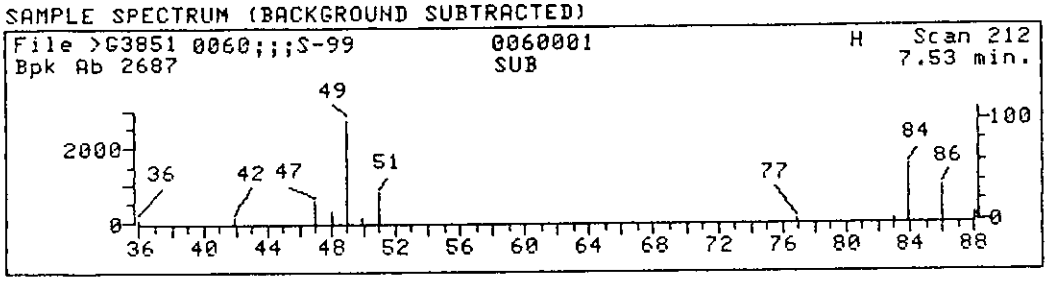
Operator ID: MSG
Quant Time: 930126 11:52
Injected at: 930126 11:23

TIC page 2 of 2

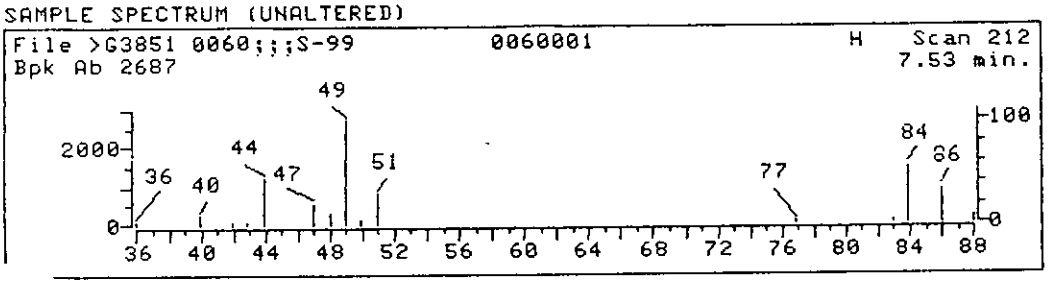
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

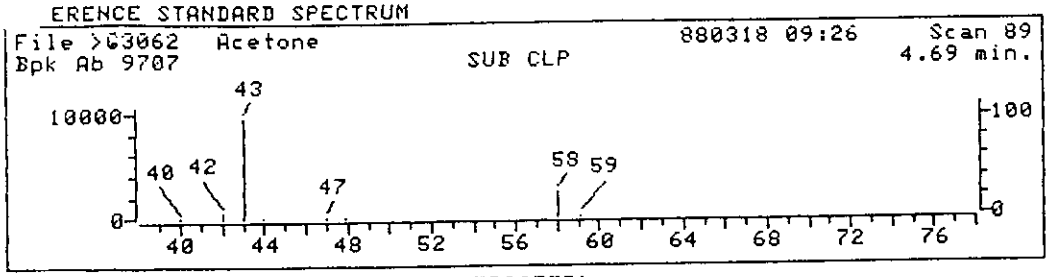


Data File: >G3851::G3
Name: 0060;;;S-99
Misc: 0060001
Quant Time: 930126 11:52
Injected at: 930126 11:23

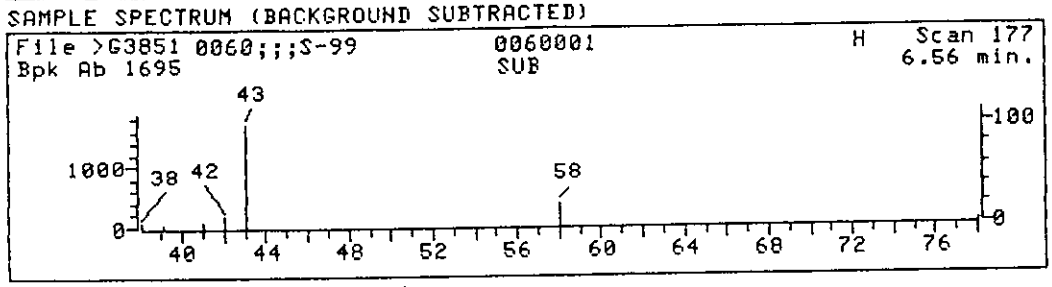
Quant Output File: ^G3851::QT
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 212
Retention Time: 7.53 min.
Quant Ion: 83.8
Area: 7740
Concentration: 9.84 ug/kg
q-value: 89

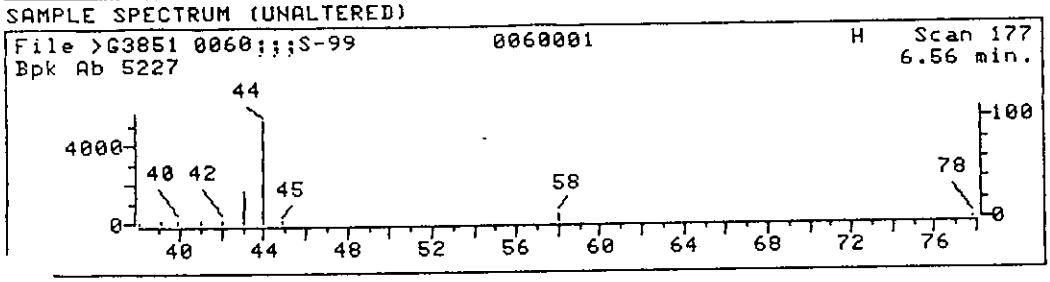
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

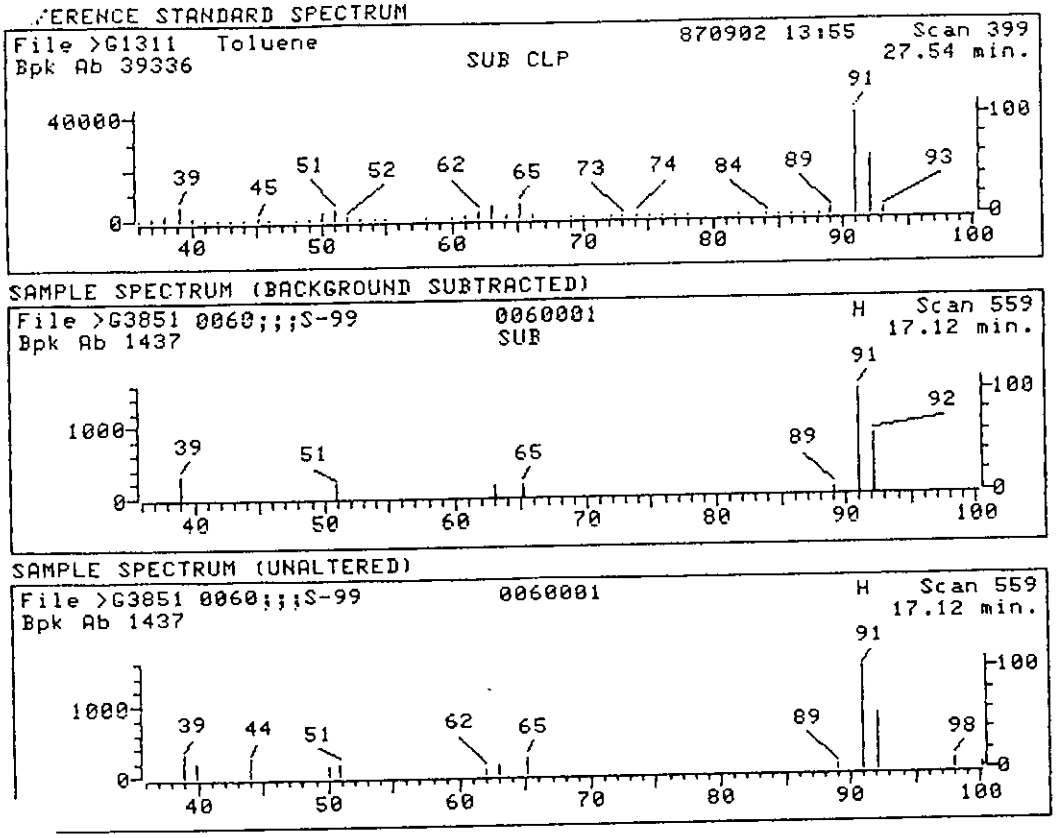


Data File: >G3851::G3
Name: 0060;;;S-99
Misc: 0060001
Quant Time: 930126 11:52
Injected at: 930126 11:23

Quant Output File: ^G3851::QT

HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 13
Compound Name: Acetone
Scan Number: 177
Retention Time: 6.56 min.
Quant Ion: 42.8
Area: 11507
Concentration: 11.51 ug/kg
q-value: 93



Data File: >G3851::G3
Name: 0060;;;S-99
Misc: 0060001
Quant Time: 930126 11:52
Injected at: 930126 11:23

Quant Output File: ^G3851::QT

HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 60
Compound Name: Toluene
Scan Number: 559
Retention Time: 17.12 min.
Quant Ion: 91.0
Area: 7922
Concentration: 1.58 ug/kg
q-value: 94

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-100 0052

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3852.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 11 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	7	JB
67-64-1	Acetone	27	B
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	11 ~~4~~	U ~~JB~~ CMD 01/31/93
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	2	JB
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
0053
S-100

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3852.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 11 Data Analyzed: 01/26/93

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/KG

Number TICs found: 2 PAS 01/28/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown ALCOHOL	7.03	9	J
2.		Unknown ALKANE	24.87	9	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
Output File: ^G3852::QT
Data File: >G3852::G3
Name: 0060;;;S-100
Misc: 0060002

Quant Rev: 6 Quant Time: 930126 12:26
Injected at: 930126 11:57
Dilution Factor: 1.12000

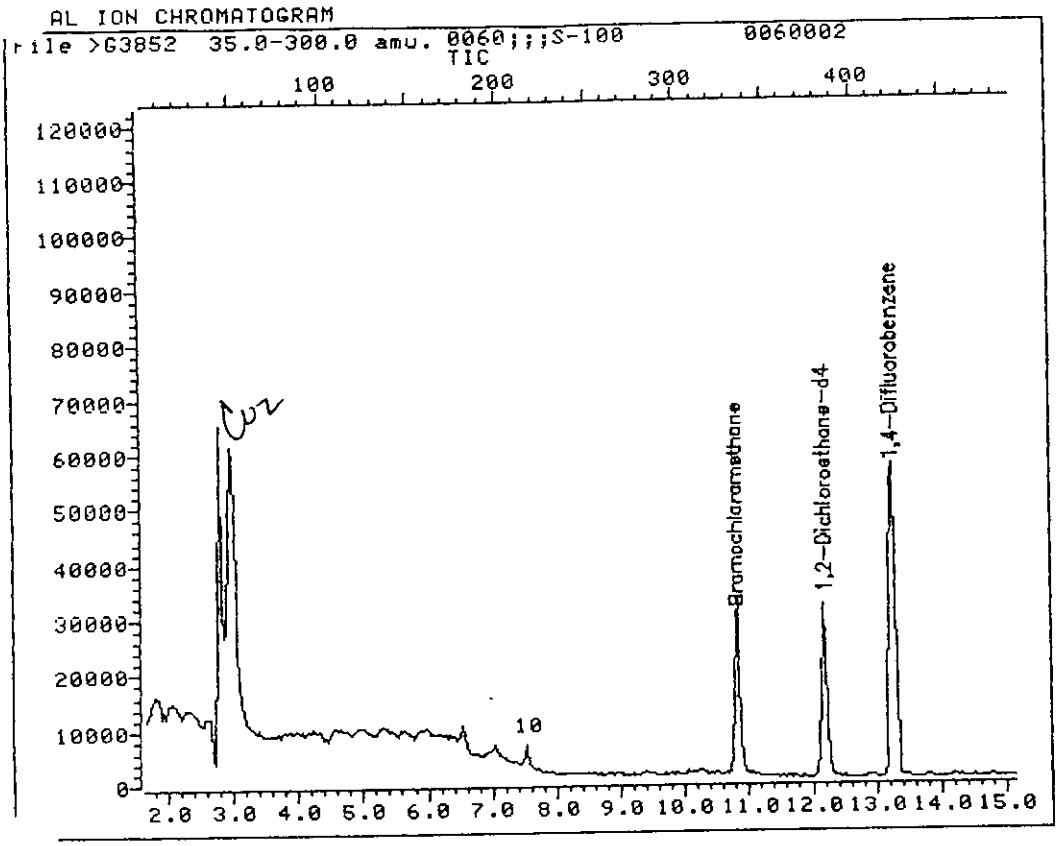
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.82	127.8	18409	50.00	ug/kg	75
10)	Methylene Chloride	7.53	83.8	4058	6.97	ug/kg	90
13)	Acetone	6.56	42.8	20223	27.32	ug/kg	97
24)	2-Butanone	10.26	43.8	4031	3.91	ug/kg	99
30)	1,2-Dichloroethane-d4	12.20	64.8	72318	62.92	ug/kg	94
34)	*1,4-Difluorobenzene	13.25	113.8	132558	50.00	ug/kg	99
53)	*Chlorobenzene-d5	20.44	116.8	94561	50.00	ug/kg	81
60)	Toluene	17.12	91.0	6415	1.96	ug/kg	91
61)	Toluene-d8	16.95	97.8	142076	60.71	ug/kg	97
91)	Bromofluorobenzene	22.68	94.8	63283	54.03	ug/kg	97

: ompound is ISTD

KWL 1/28/93



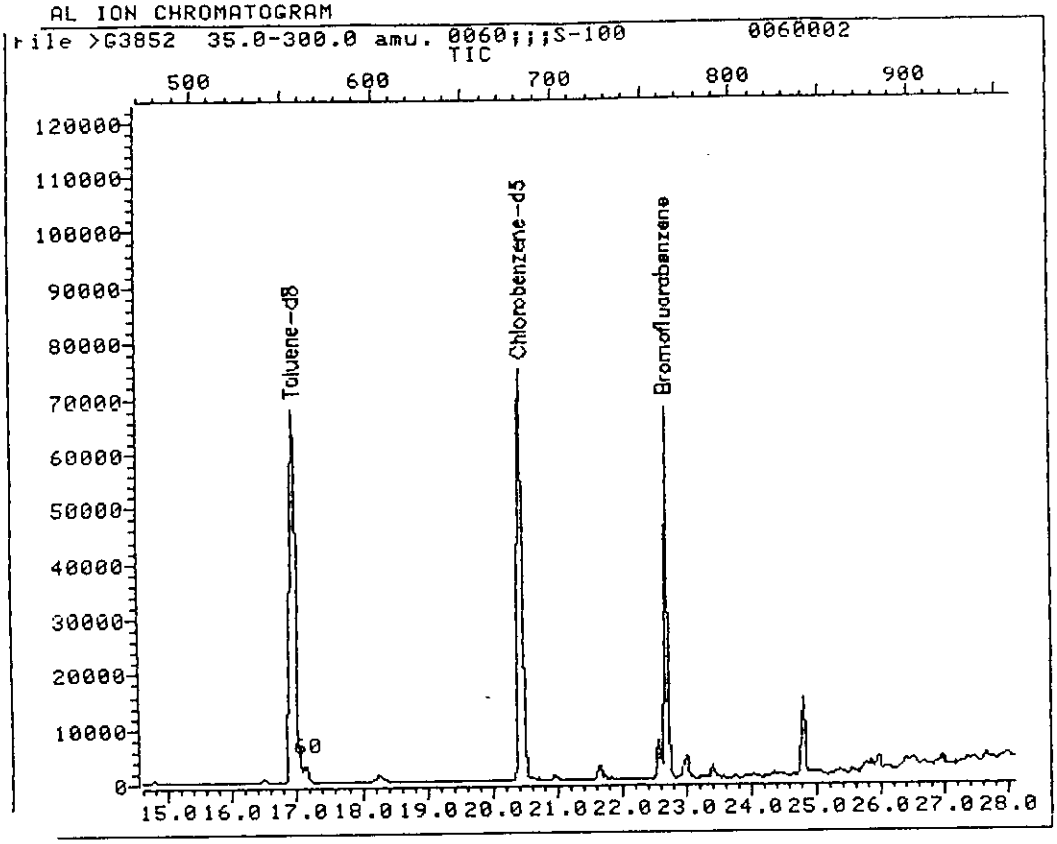
Data File: >G3852::G3
Name: 0060;;;S-100
Misc: 0060002

Quant Output File: ^G3852::QT

HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 12:26
Injected at: 930126 11:57



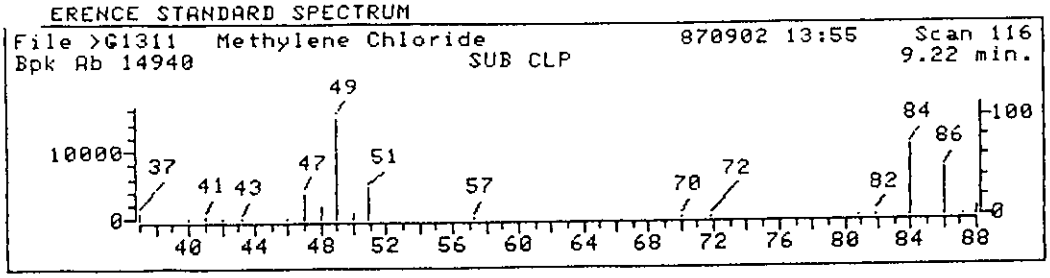
Data File: >G3852::G3 Quant Output File: ^G3852::QT
Name: 0060;;;S-100
Misc: 0060002 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

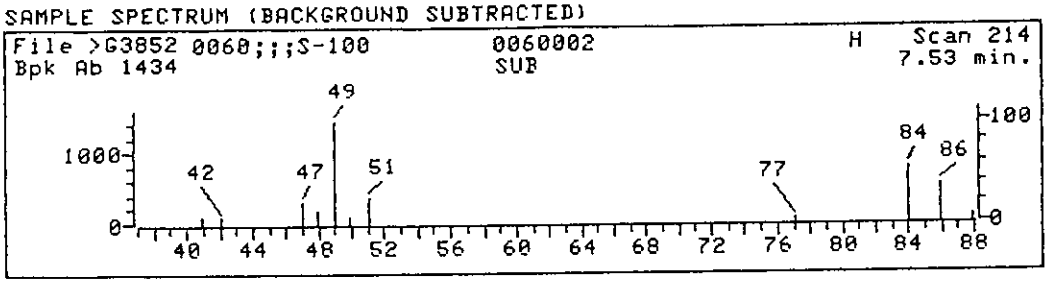
Operator ID: MSG
Quant Time: 930126 12:26
Injected at: 930126 11:57

TIC page 2 of 2

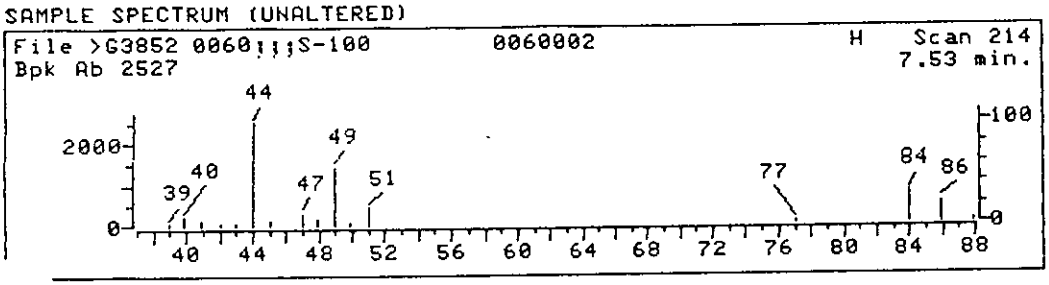
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



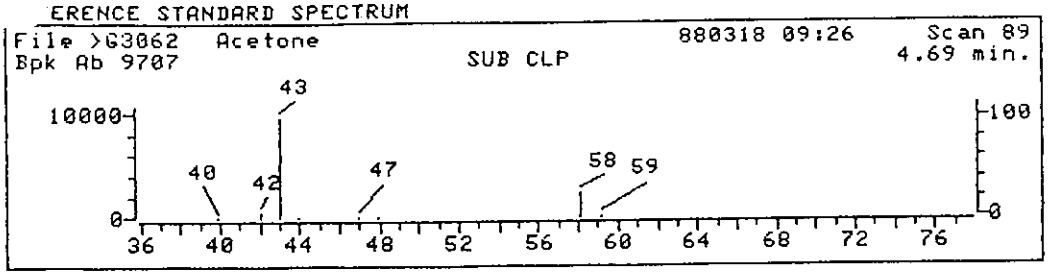
Data File: >G3852::G3
Name: 0060;;;S-100
Misc: 0060002
Quant Time: 930126 12:26
Injected at: 930126 11:57

Quant Output File: ^G3852::QT

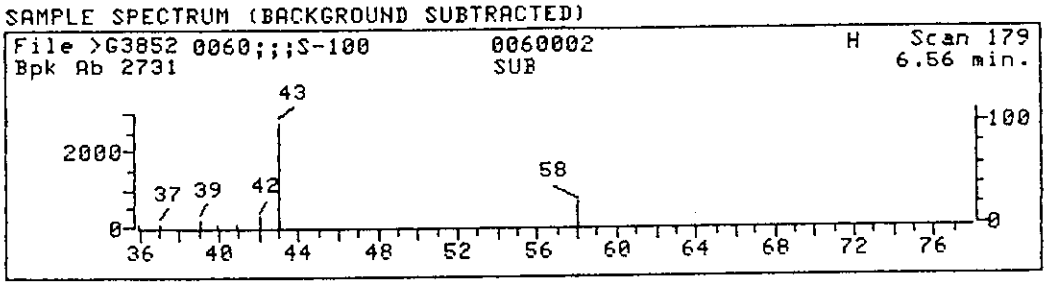
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 214
Retention Time: 7.53 min.
Quant Ion: 83.8
Area: 4058
Concentration: 6.97 ug/kg
q-value: 90

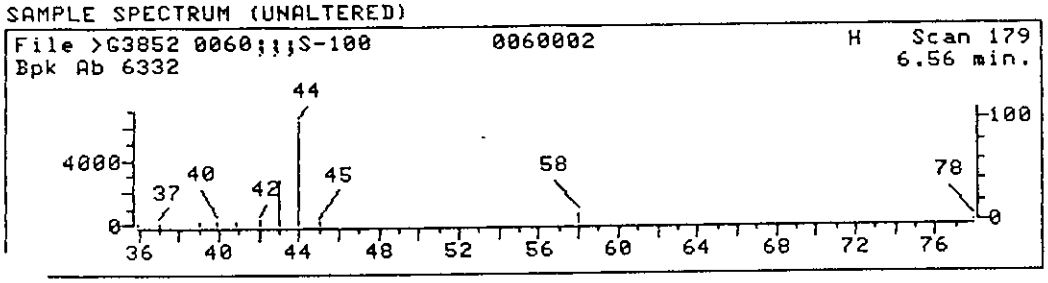
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



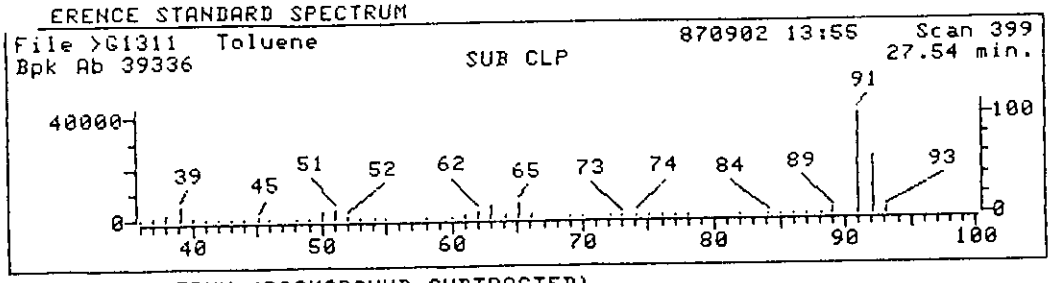
Data File: >G3852::G3
Name: 0060;;;S-100
Misc: 0060002
Quant Time: 930126 12:26
Injected at: 930126 11:57

Quant Output File: ^G3852::QT

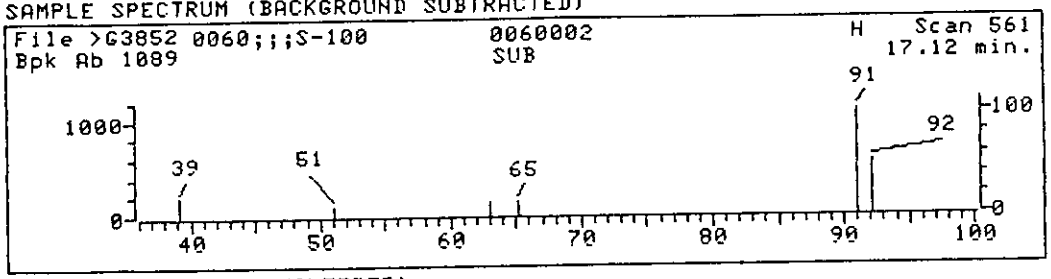
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 13
Compound Name: Acetone
Scan Number: 179
Retention Time: 6.56 min.
Quant Ion: 42.8
Area: 20223
Concentration: 27.32 ug/kg
q-value: 97

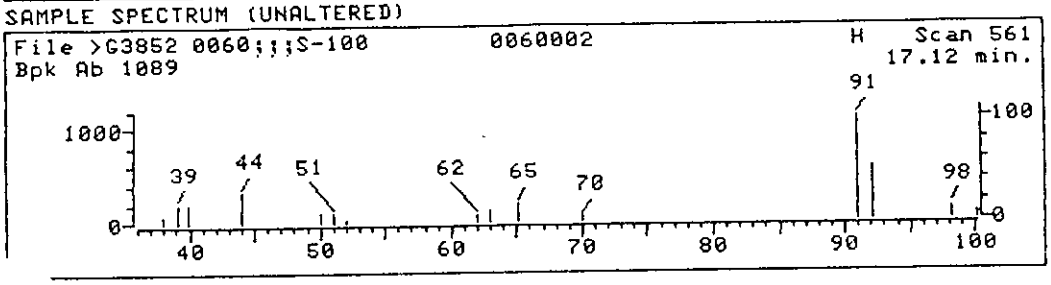
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G3852::G3
Name: 0060;;;S-100
Misc: 0060002
Quant Time: 930126 12:26
Injected at: 930126 11:57

Quant Output File: ^G3852::QT

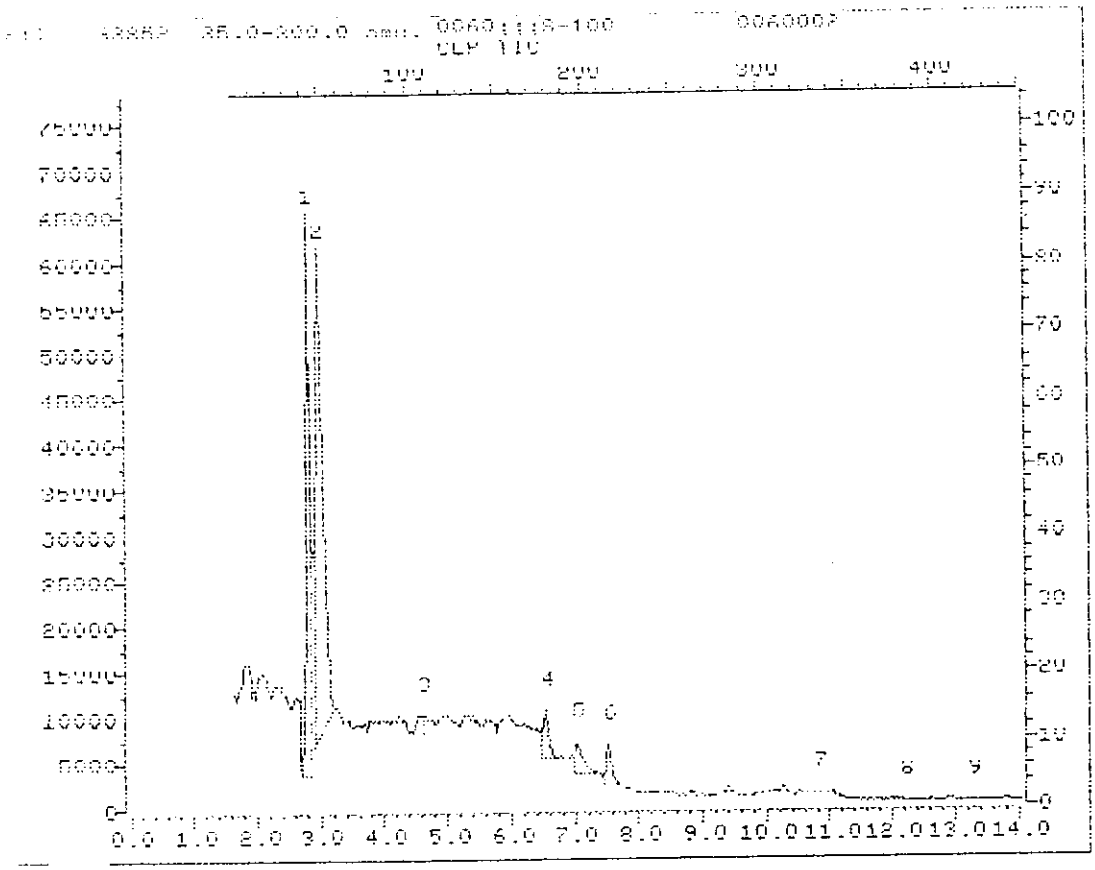
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

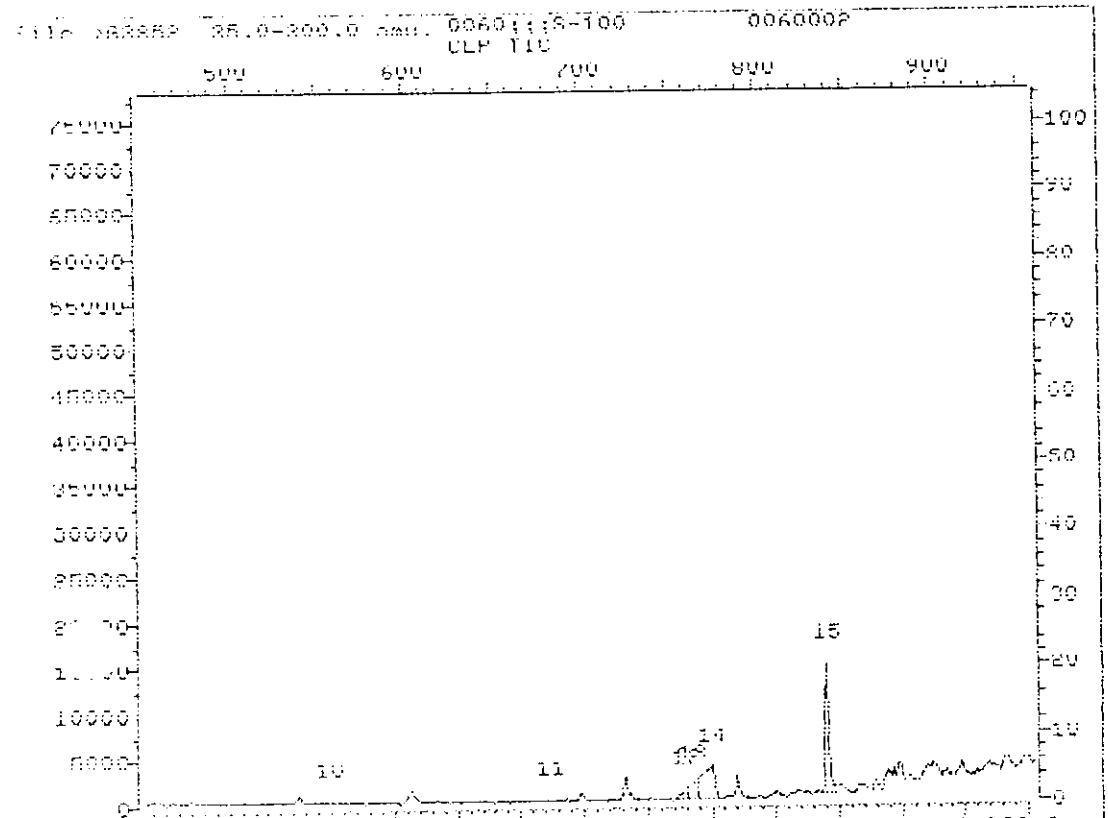
Compound No: 60
Compound Name: Toluene
Scan Number: 561
Retention Time: 17.12 min.
Quant Ion: 91.0
Area: 6415
Concentration: 1.96 ug/kg
q-value: 91

MS .ta File header from : >363852

Sample: IIIAII;;;S-1III Operator: MSG MS 1/26/93 11:57
Misc : IIIAIIIII2 HP5995:6;;;;LLS;DFT ;6519III
Sys. #: 2 MS model: 96 SW/HW rev.: 1A ALS # : 0
Method file: M 6CAP Tuning file: T 6 No. of extra records: 2
Source temp.: 224 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	3.8	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0





S-10D
01/26/93
11:59
HP5995C

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

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
[illegible]	2.92	48705.	138.	1.	1.12
[illegible]	2.80	228443.	74.	1.	1.12
5.	2.83	27809.	9.	1.	1.12
15.	24.81	55479.	9.	3.	1.12
[illegible]	4.68	181000.	6.	1.	1.12

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		RT/ST
BROMOCHLOROMETHANE	10.84	123113.	0.00	12.06	9.4
1,4-DIFLUOROBENZENE	13.28	359698.	12.06	16.86	2.7
CHLOROBENZENE-D5	20.44	339753.	16.86	24.81	3.6

ISTD peaks found:	3
Surrogate peaks found:	3
Quant target peaks expected:	3
Target peaks matched:	2
Total TIC identified:	5

TIME : 9:27 AM WED., 27 JAN., 1993

S-100
01/26/93
1:57
HP5995G

KP 'HP'

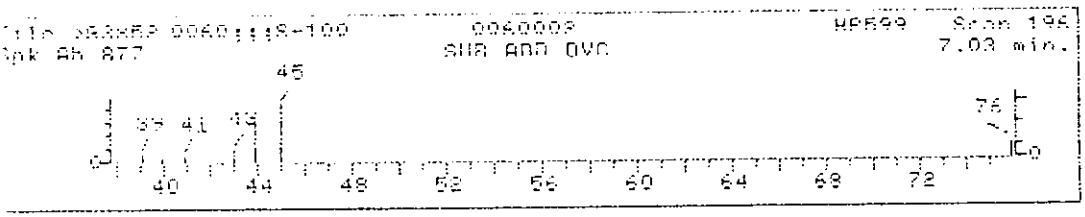
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >G3852 Spectrum #: 196

No data base entries were retrieved.

Peak#: 5 Area: 27815. Est Conc: 9. Date: 01/26/93 11:57 Inst: G

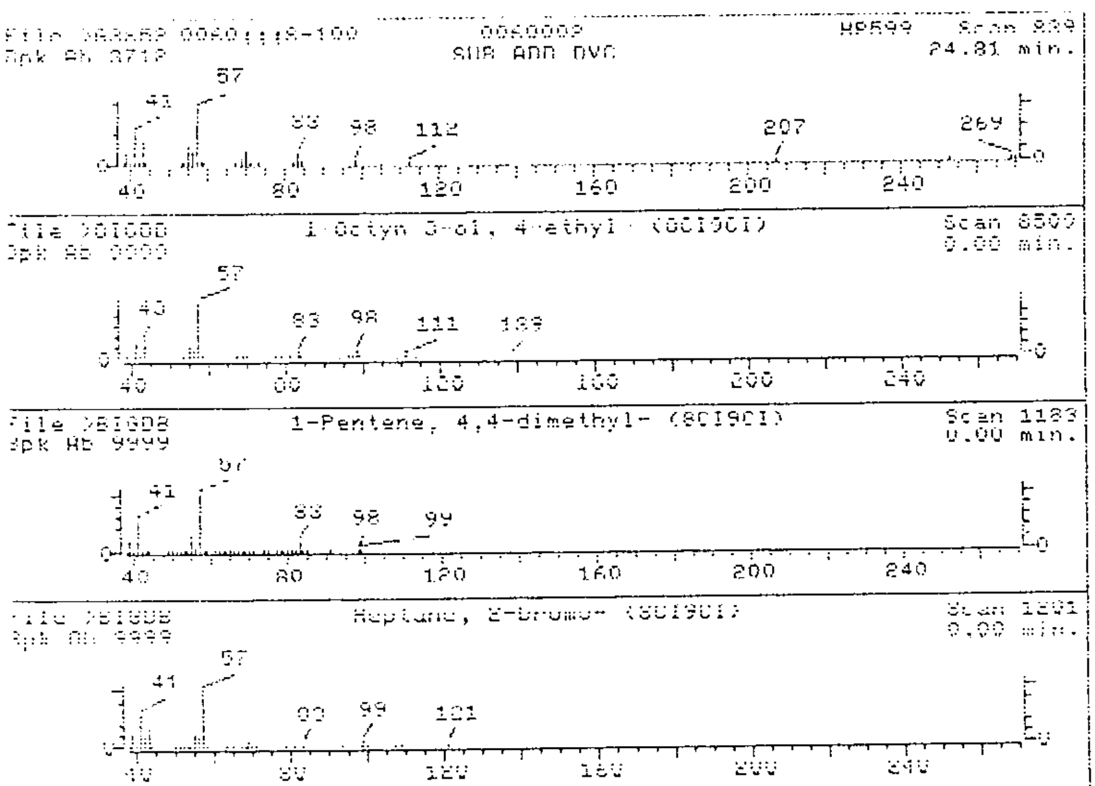


1. 1-Octyn-3-ol, 4-ethyl- (8CI9CI) 154 C10H18O
2. 1-Pentene, 4,4-dimethyl- (8CI9CI) 98 C7H14
3. Heptane, 2-bromo- (8CI9CI) 178 C7H15Br
4. 1-Octanol, 3,7,7-trimethyl-2-(1,3,3-trimethylbutyl)- (9CI) 270 C18H38O

Sample File: >G3862 Spectrum #: 839
Search speed: 3 Filtering option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C I	R IV
1.	41	5877429	8509	"BIGDB	37	49	2	0	100	24	17	12
2.	32*	762629	1183	"BIGDB	42	34	1	0	86	36	14	24
3.	31	1974045	1201	"BIGDB	41	43	2	0	20	33	12	14
4.	31*	36400983	1228	"BIGDB	25	91	2	0	93	35	12	14

Peak#: 15 Area: 55429. Est Conc: 9. Date: 01/26/93 11:57 Inst: G



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-101

Lab Name: IEA/CT Contract: 0065

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3853.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 14 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	6	JB
67-64-1	Acetone	19	B
75-15-0	Carbon Disulfide	12	U
75-35-4	1,1-Dichloroethene	12	U
75-34-3	1,1-Dichloroethane	12	U
540-59-0	1,2-Dichloroethene (total)	12	U
67-66-3	Chloroform	12	U
107-06-2	1,2-Dichloroethane	12	U
78-93-3	2-Butanone	12	U
71-55-6	1,1,1-Trichloroethane	12	U
56-23-5	Carbon Tetrachloride	12	U
75-27-4	Bromodichloromethane	12	U
78-87-5	1,2-Dichloropropane	12	U
10061-01-5	cis-1,3-Dichloropropene	12	U
79-01-6	Trichloroethene	12	U
124-48-1	Dibromochloromethane	12	U
79-00-5	1,1,2-Trichloroethane	12	U
71-43-2	Benzene	12	U
10061-02-6	trans-1,3-Dichloropropene	12	U
75-25-2	Bromoform	12	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	12	U
79-34-5	1,1,2,2-Tetrachloroethane	12	U
108-88-3	Toluene	1	JB
108-90-7	Chlorobenzene	12	U
100-41-4	Ethylbenzene	12	U
100-42-5	Styrene	12	U
1330-20-7	Xylene (total)	12	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

S-101

Lab Name: IEA/CT Contract: 0066

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3853.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 14 Data Analyzed: 01/26/93

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/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
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25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: MSG
Output File: ^G3853::QT
Data File: >G3853::G3
Name: 0060;;;S-101
Misc: 0060003

Quant Rev: 6 Quant Time: 930126 13:01
Injected at: 930126 12:32
Dilution Factor: 1.16000

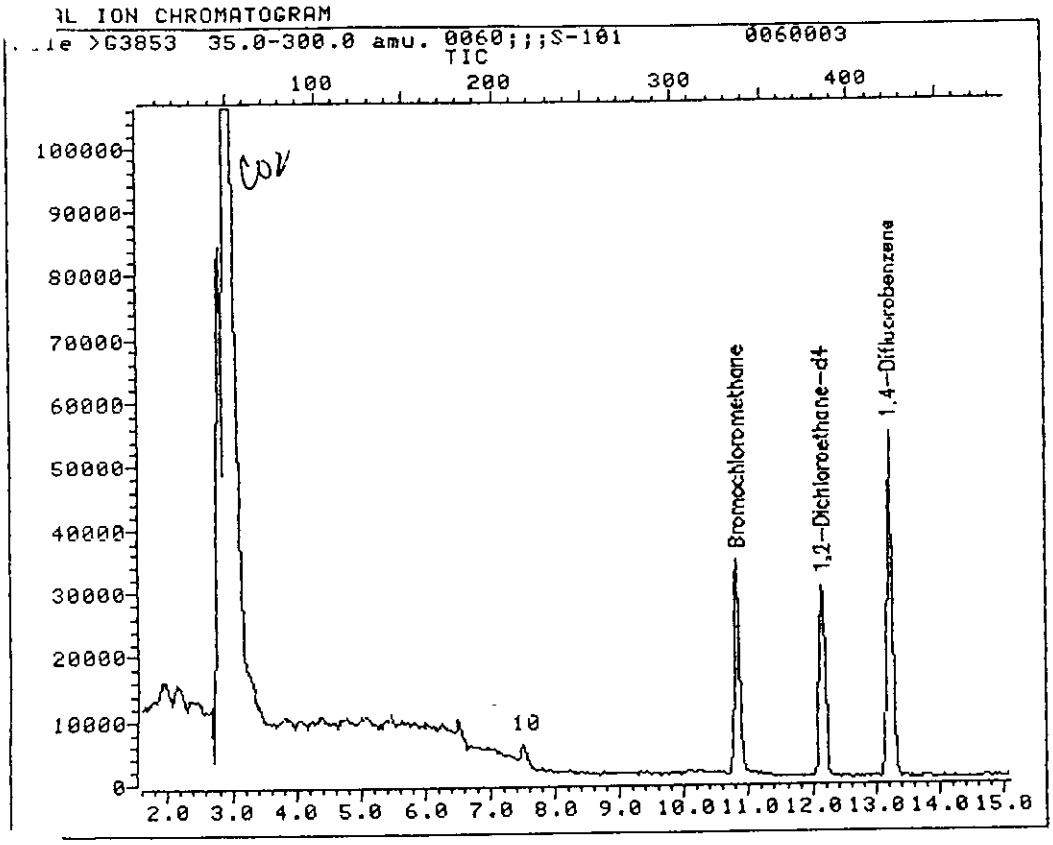
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.82	127.8	19667	50.00	ug/kg	68
10)	Methylene Chloride	7.51	83.8	3609	6.01	ug/kg	92
13)	Acetone	6.54	42.8	14254	18.67	ug/kg	96
30)	1,2-Dichloroethane-d4	12.15	64.8	70698	59.63	ug/kg	90
34)	*1,4-Difluorobenzene	13.23	113.8	124451	50.00	ug/kg	98
53)	*Chlorobenzene-d5	20.42	116.8	77483	50.00	ug/kg	87
60)	Toluene	17.10	91.0	2895	1.12	ug/kg	90
61)	Toluene-d8	16.93	97.8	121619	65.69	ug/kg	94
91)	Bromofluorobenzene	22.69	94.8	50649	54.66	ug/kg	96

* Compound is ISTD

Rev2 1/28/93

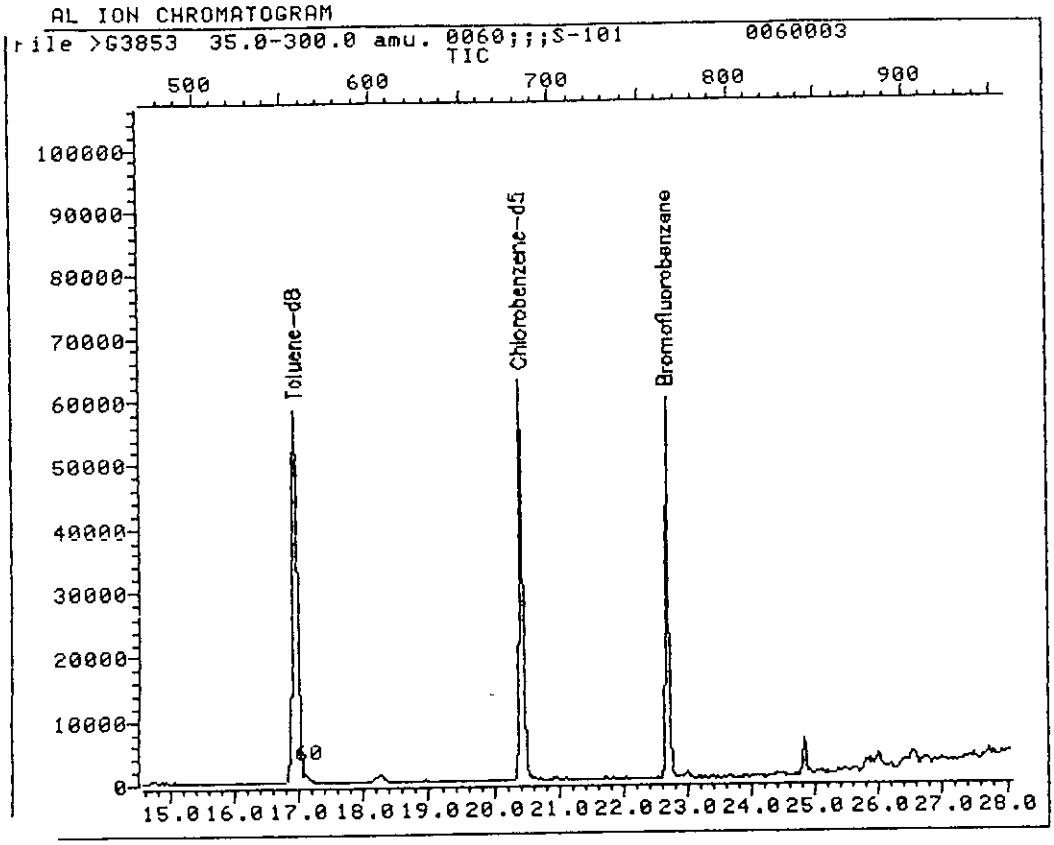


Data File: >G3853::G3 Quant Output File: ^G3853::QT
Name: 0060;;;S-101
Misc: 0060003 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 13:01
Injected at: 930126 12:32

TIC page 1 of 2



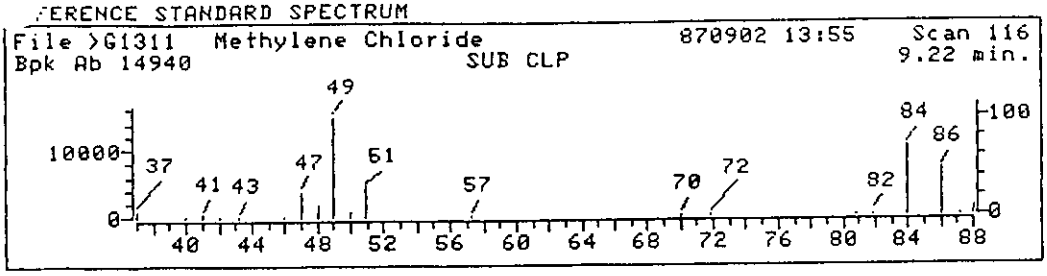
Data File: >G3853::G3 Quant Output File: ^G3853::QT
Name: 0060;;;S-101
Misc: 0060003 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

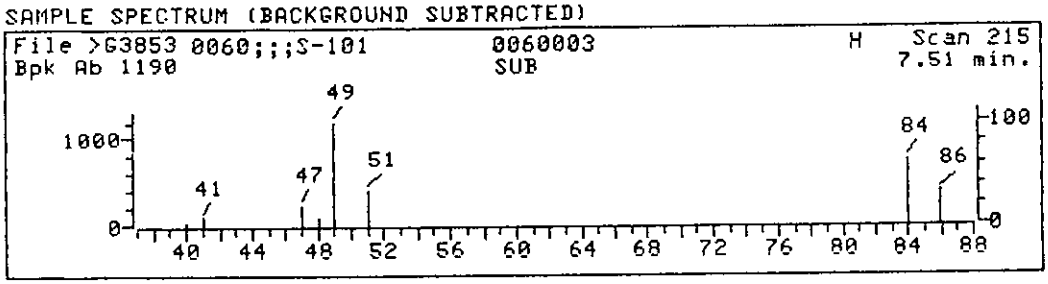
Operator ID: MSG
Quant Time: 930126 13:01
Injected at: 930126 12:32

TIC page 2 of 2

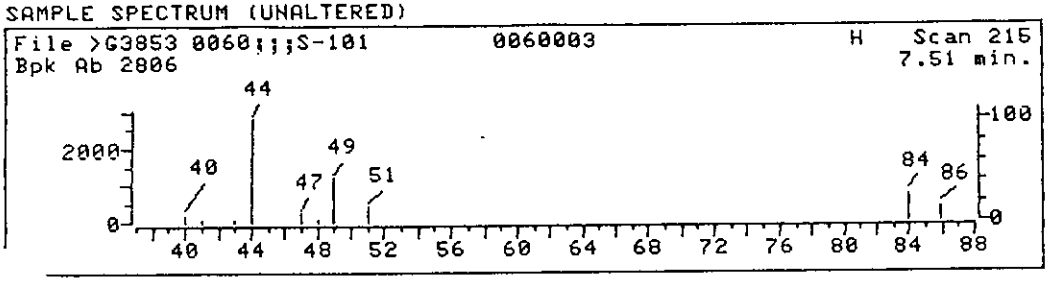
FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

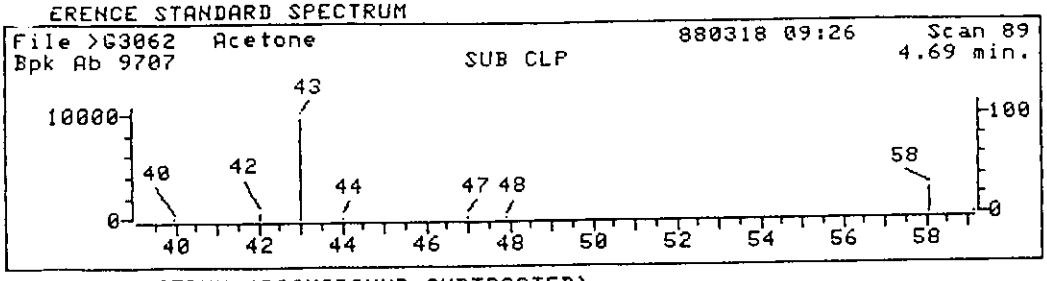


Data File: >G3853::G3
Name: 0060;;;S-101
Misc: 0060003
Quant Time: 930126 13:01
Injected at: 930126 12:32

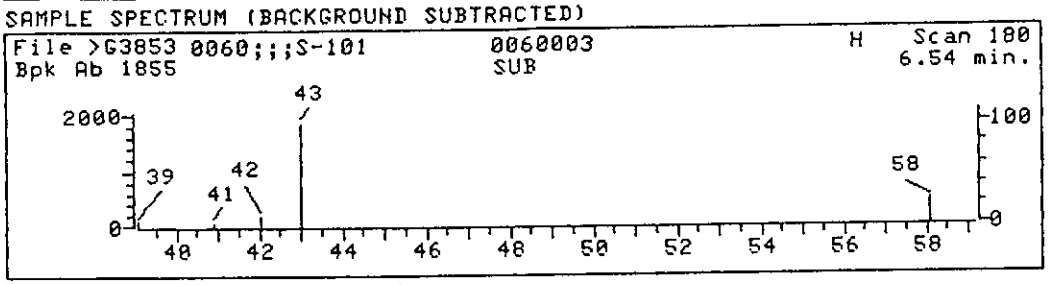
Quant Output File: ^G3853::QT
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 215
Retention Time: 7.51 min.
Quant Ion: 83.8
Area: 3609
Concentration: 6.01 ug/kg
q-value: 92

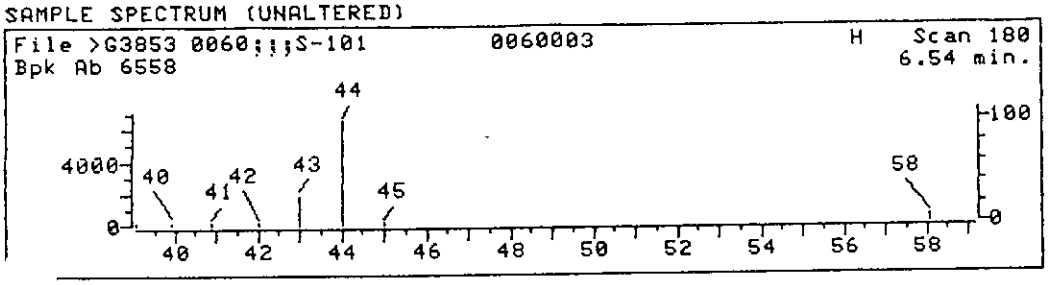
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



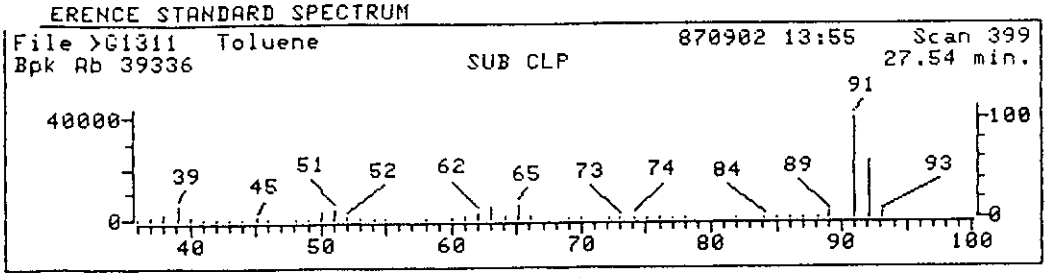
Data File: >G3853::G3
Name: 0060;;;S-101
Misc: 0060003
Quant Time: 930126 13:01
Injected at: 930126 12:32

Quant Output File: ^G3853::QT

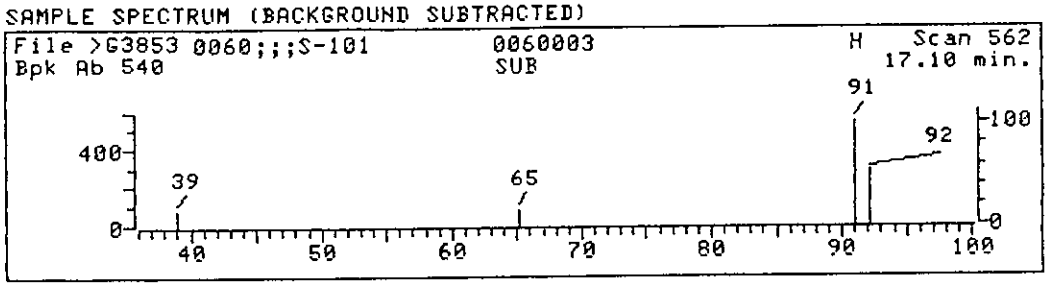
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 13
Compound Name: Acetone
Scan Number: 180
Retention Time: 6.54 min.
Quant Ion: 42.8
Area: 14254
Concentration: 18.67 ug/kg
q-value: 96

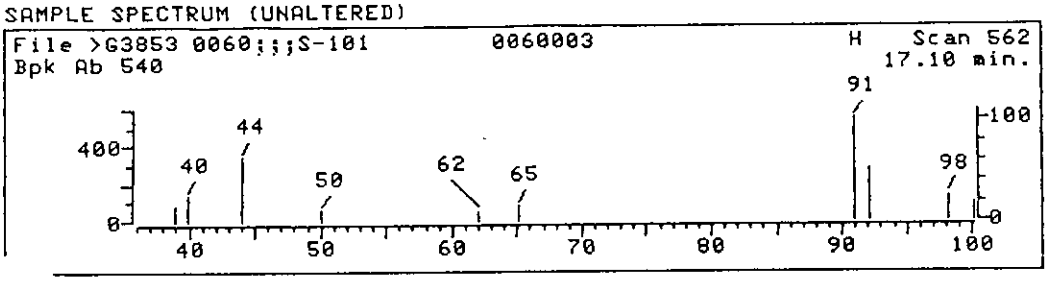
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G3853::G3
Name: 0060;;;S-101
Misc: 0060003
Quant Time: 930126 13:01
Injected at: 930126 12:32

Quant Output File: ^G3853::QT

HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 60
Compound Name: Toluene
Scan Number: 562
Retention Time: 17.10 min.
Quant Ion: 91.0
Area: 2895
Concentration: 1.12 ug/kg
q-value: 90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-102

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

0073

Matrix: (soil/water) SOIL Lab Sample ID: 0060004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3859.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 12 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	8	JB
67-64-1	Acetone	16	B
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	11	U
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	~~11~~	~~U~~ JB
71-55-6	1,1,1-Trichloroethane	11	U
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	11	U
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	11	U
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

LMO 01/31/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-102

0074

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3859.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 12 Data Analyzed: 01/26/93

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/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
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16.					
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28.					
29.					
30.					

QUANT REPORT

Operator ID: MSG
Output File: ^G3859::QT
Data File: >G3859::G3
Name: 0060;;;S-102
Misc: 0060004

Quant Rev: 6 Quant Time: 930126 16:33
Injected at: 930126 15:59
Dilution Factor: 1.14000

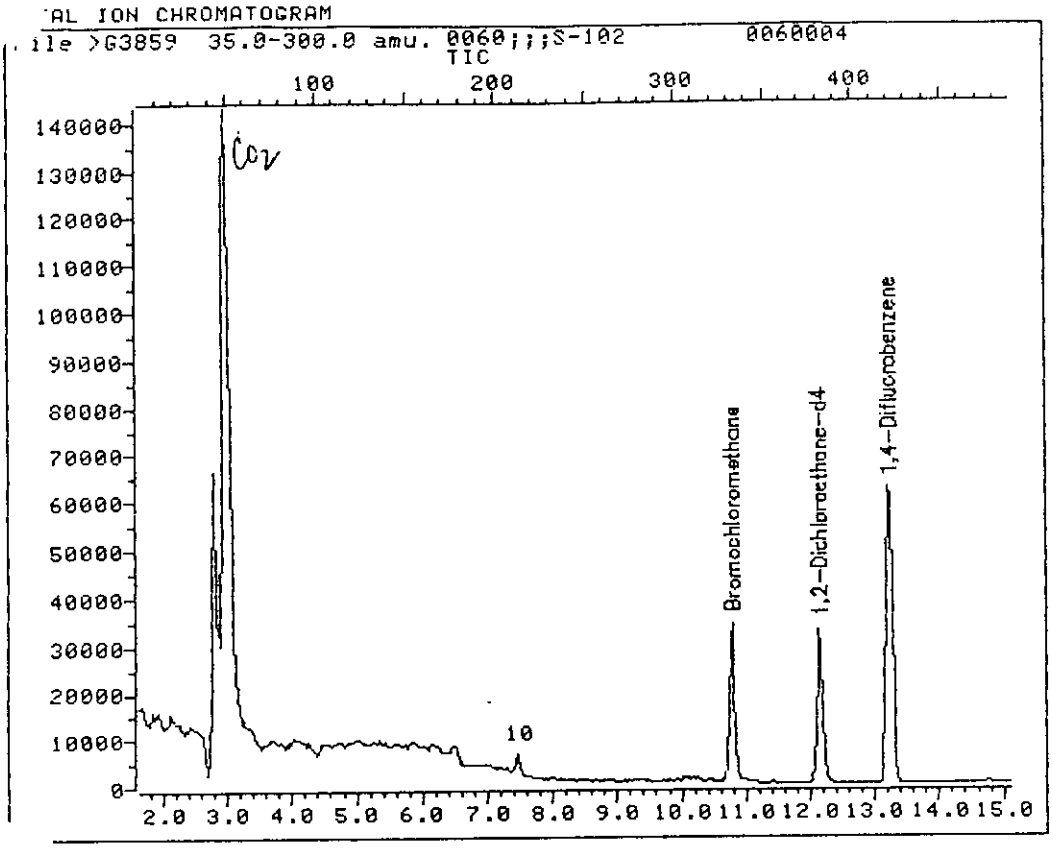
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.79	127.8	18671	50.00	ug/kg	69
J10)	Methylene Chloride	7.45	83.8	4584	7.90	ug/kg	85
J13)	Acetone	6.48	42.8	12188	16.52	ug/kg	90
~~J24)~~	~~2-Butanone~~	~~10.21~~	~~43.0~~	~~4127~~	~~4.02~~	~~ug/kg~~	~~83~~
30)	1,2-Dichloroethane-d4	12.15	64.8	76121	66.47	ug/kg	90
34)	*1,4-Difluorobenzene	13.23	113.8	147310	50.00	ug/kg	98
53)	*Chlorobenzene-d5	20.53	116.8	105239	50.00	ug/kg	85
61)	Toluene-d8	16.96	97.8	161352	63.06	ug/kg	94
91)	Bromofluorobenzene	22.88	94.8	72745	56.80	ug/kg	82

* Compound is ISTD

KAL 1/28/93

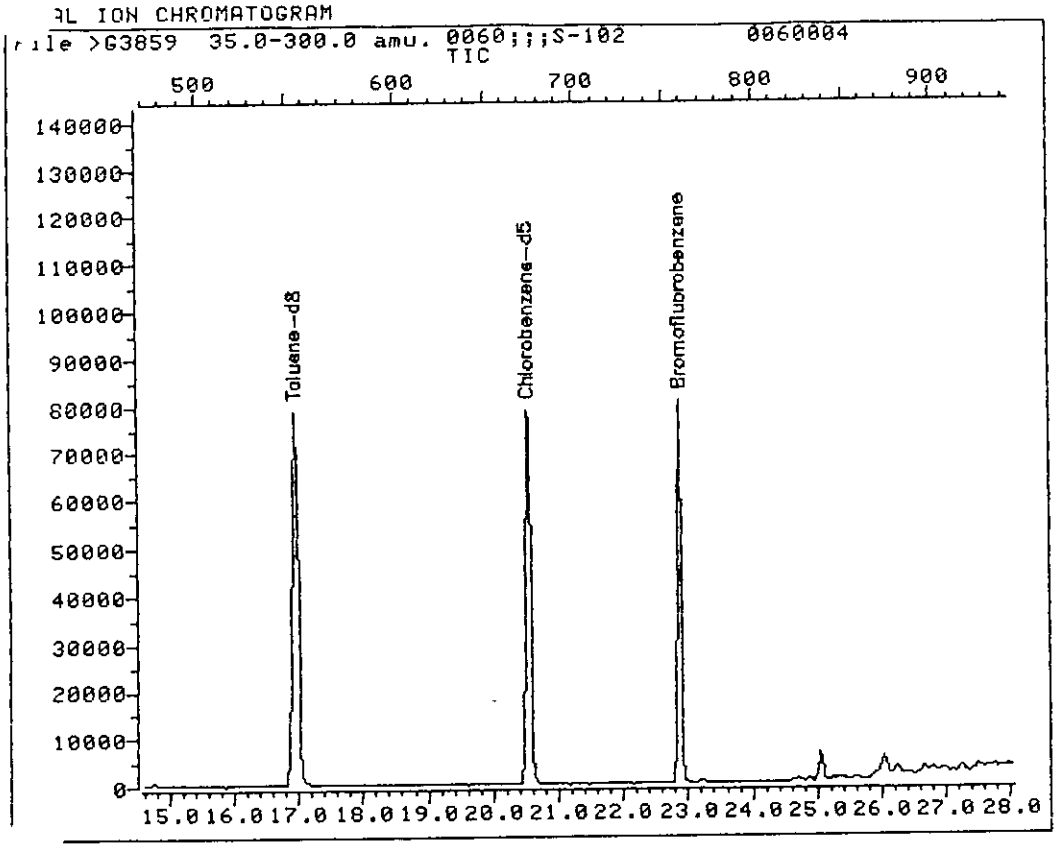


Data File: >G3859::G3 Quant Output File: ^G3859::QT
Name: 0060;;;S-102
Misc: 0060004 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 16:33
Injected at: 930126 15:59

TIC page 1 of 2



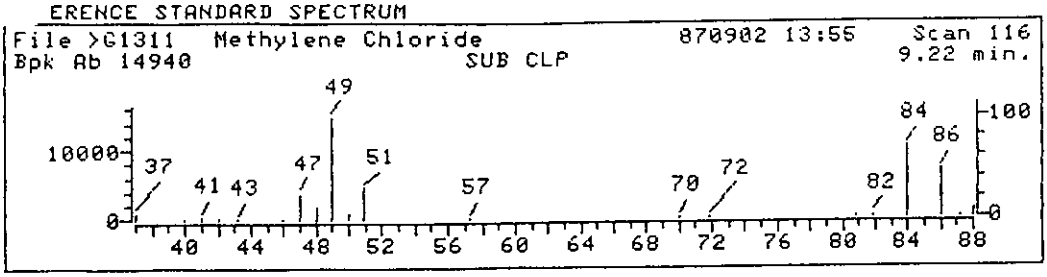
Data File: >G3859::G3 Quant Output File: ^G3859::QT
Name: 0060;;;S-102
Misc: 0060004 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

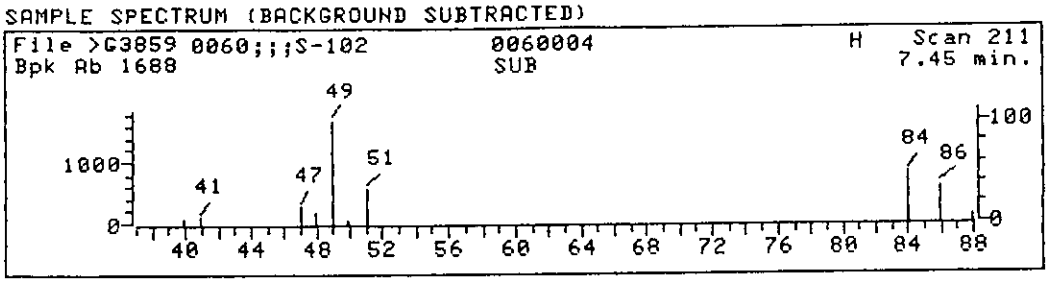
Operator ID: MSG
Quant Time: 930126 16:33
Injected at: 930126 15:59

TIC page 2 of 2

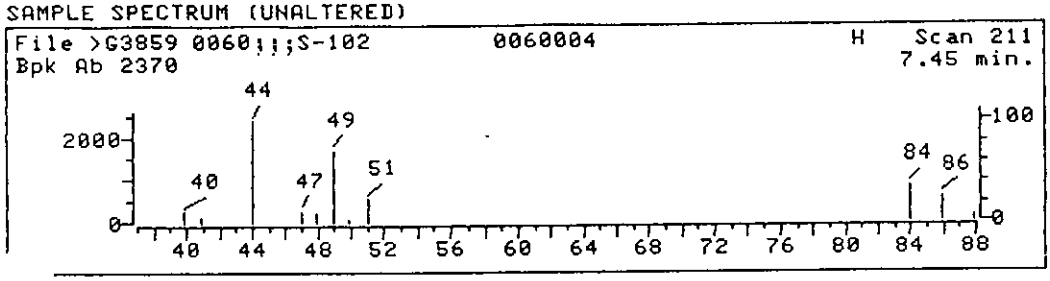
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



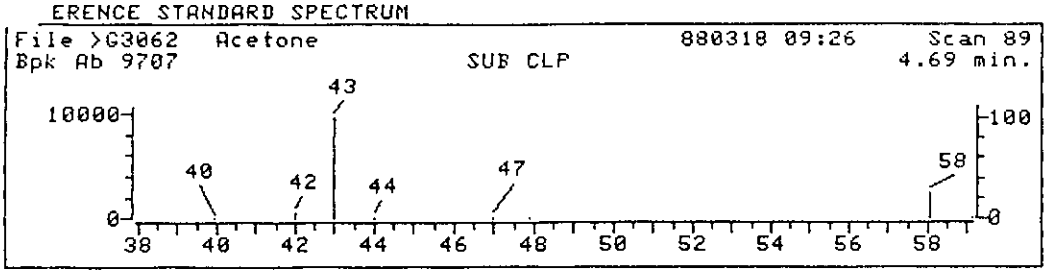
SAMPLE SPECTRUM (UNALTERED)



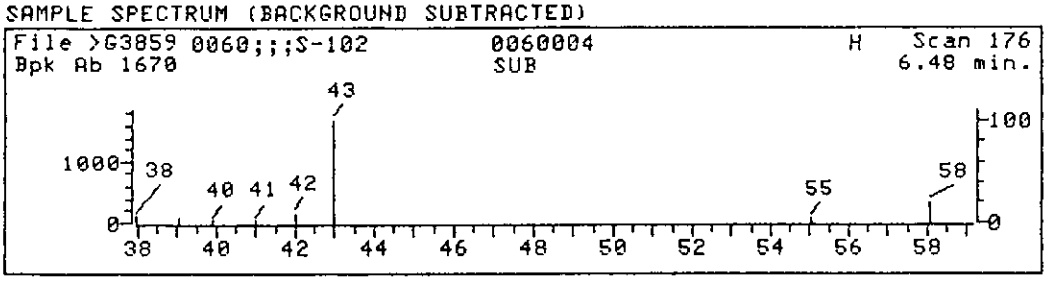
Data File: >G3859::G3
Quant Output File: ^G3859::QT
Name: 0060;;;S-102
Misc: 0060004
HP5995:G;;;LLS;DF1 ;G1900
Quant Time: 930126 16:33
Quant ID File: I_IFGS::N1
Injected at: 930126 15:59
Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 211
Retention Time: 7.45 min.
Quant Ion: 83.8
Area: 4584
Concentration: 7.90 ug/kg
q-value: 85

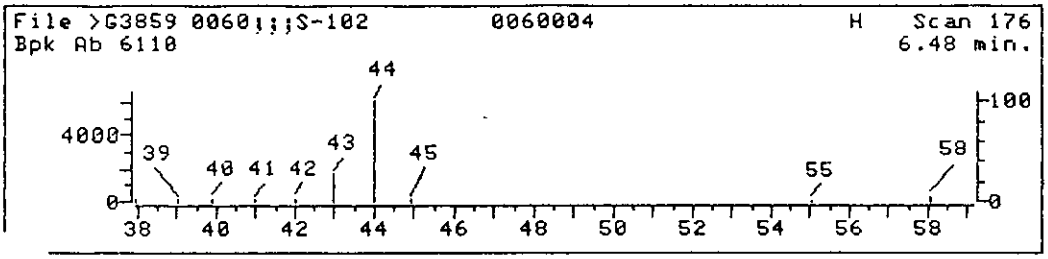
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G3859::G3 Quant Output File: ^G3859::QT
Name: 0060;;;S-102
Misc: 0060004 HP5995:G;;;LLS;DF1 ;G1900
Quant Time: 930126 16:33 Quant ID File: I_IFGS::N1
Injected at: 930126 15:59 Last Calibration: 930126 10:13

Compound No: 13
Compound Name: Acetone
Scan Number: 176
Retention Time: 6.48 min.
Quant Ion: 42.8
Area: 12188
Concentration: 16.52 ug/kg
q-value: 90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELDBLANK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) WATER Lab Sample ID: 0060006 0080

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G3864.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. _____ Data Analyzed: 01/26/93

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	J
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	B
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	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 ~~0.5~~	U ~~JB~~
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

LMD 01/31/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0081 FIELDBLANK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) WATER Lab Sample ID: 0060006

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G3864.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. _____ Data Analyzed: 01/26/93

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

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

Number TICs found: ~~0~~ 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	541059	CYCLOTETRASILOXANE, HEXAMETHYL	18.31	10	JN
2.	556672	CYCLOTETRASILOXANE, OCTAMETHYL	23.12	7	JN
3.		UNKNOWN SILOXANE	25.91	7	J
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.					

0082

QUANT REPORT

Operator ID: MSG
Output File: ^G3864::QT
Data File: >G3864::G3
Name: 0060;;;FIELD BLANK
Misc: 0060006

Quant Rev: 6 Quant Time: 930126 20:36
Injected at: 930126 20:06
Dilution Factor: 1.00000

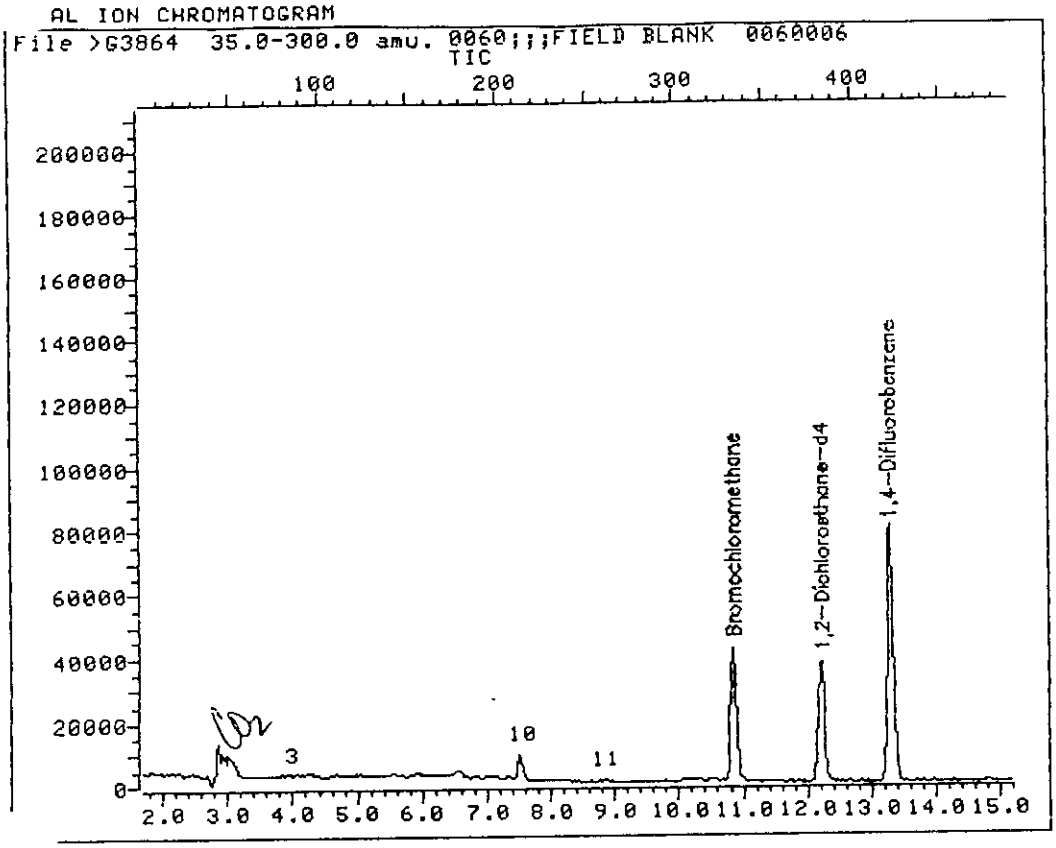
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.85	127.8	23837	50.00	ug/kg	64
3)	Chloromethane	3.97	49.8	2478	4.51	ug/kg	89
10)	Methylene Chloride	7.51	83.8	8495	10.05	ug/kg	89
11)	Acrolein	8.81	55.8	243	472.83	ug/kg	86
13)	Acetone	6.57	42.8	9418	8.77	ug/kg	96
28)	~~Chloroform~~	~~10.91~~	~~82.8~~	~~5685~~	2.11	ug/kg	~~42~~
30)	1,2-Dichloroethane-d4	12.23	64.8	90410	54.24	ug/kg	90
34)	*1,4-Difluorobenzene	13.29	113.8	188674	50.00	ug/kg	98
53)	*Chlorobenzene-d5	20.52	116.8	135456	50.00	ug/kg	87
60)	~~Toluene~~	17.18	91.0	2532	.48	ug/kg	~~95~~
61	Toluene-d8	17.02	97.8	198036	52.75	ug/kg	93
9	Bromofluorobenzene	22.81	94.8	106337	56.59	ug/kg	81

* Compound is ISTD

KM2 1/28/93



Data File: >G3864::G3
Name: 0060;;;FIELD BLANK
Misc: 0060006

Quant Output File: ^G3864::QT

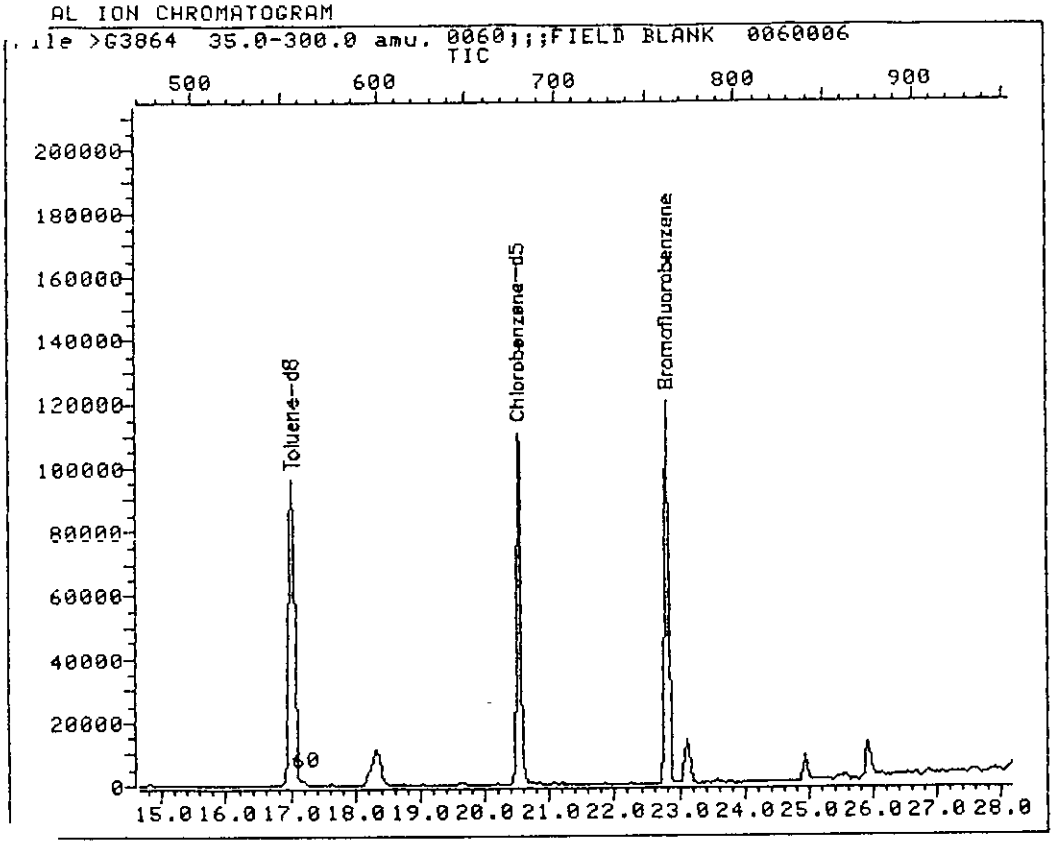
HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 20:36
Injected at: 930126 20:06

TIC page 1 of 2

AL ION CHROMATOGRAM



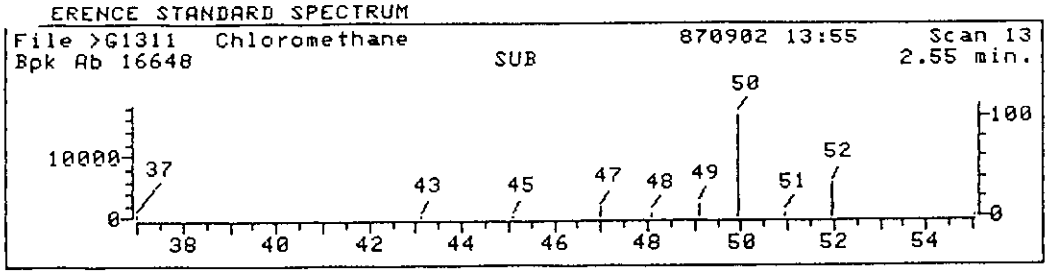
Data File: >G3864::G3 Quant Output File: ^G3864::QT
Name: 0060;;;FIELD BLANK
Misc: 0060006 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

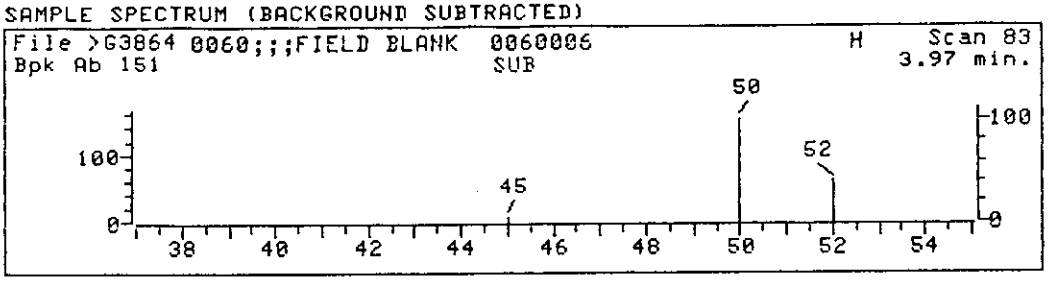
Operator ID: MSG
Quant Time: 930126 20:36
Injected at: 930126 20:06

TIC page 2 of 2

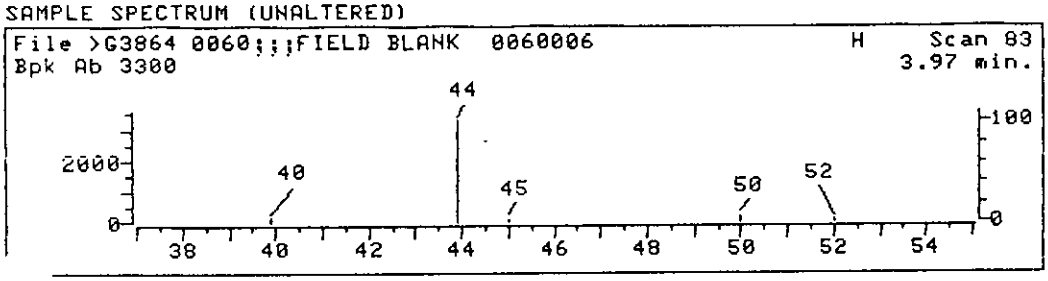
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



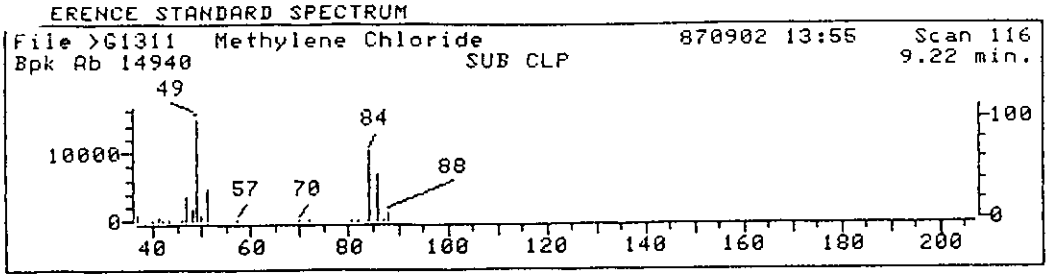
Data File: >G3864::G3
Name: 0060;;;FIELD BLANK
Misc: 0060006
Quant Time: 930126 20:36
Injected at: 930126 20:06

Quant Output File: ^G3864::QT

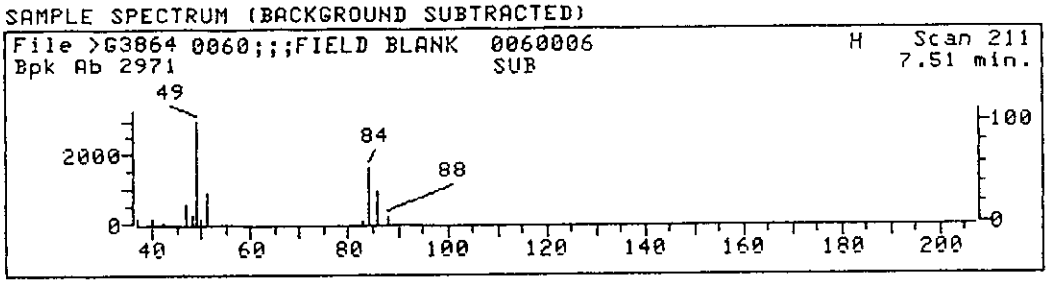
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 3
Compound Name: Chloromethane
Scan Number: 83
Retention Time: 3.97 min.
Quant Ion: 49.8
Area: 2478
Concentration: 4.51 ug/kg
q-value: 89

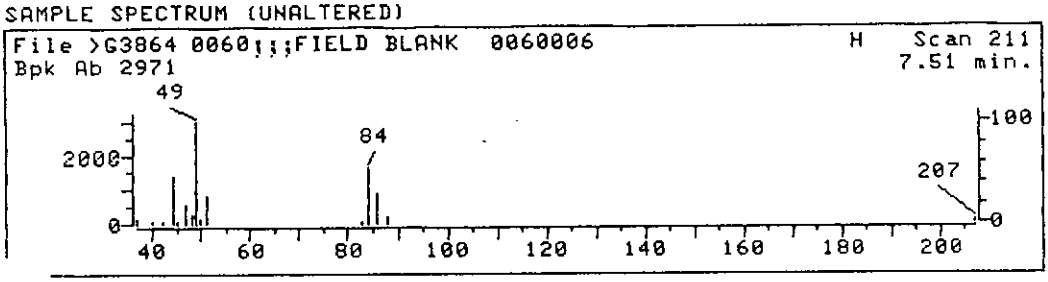
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



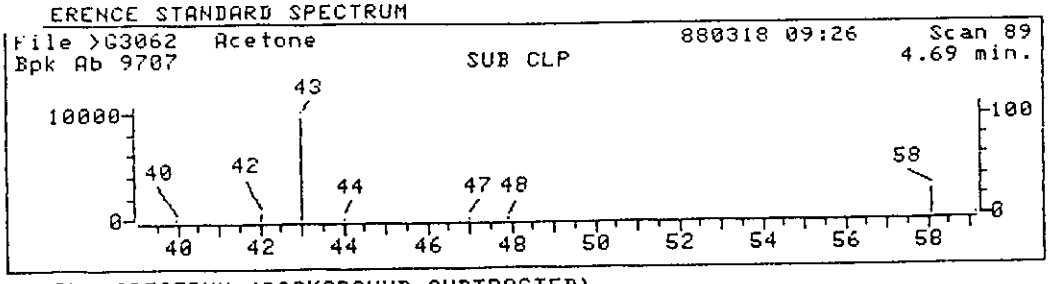
SAMPLE SPECTRUM (UNALTERED)



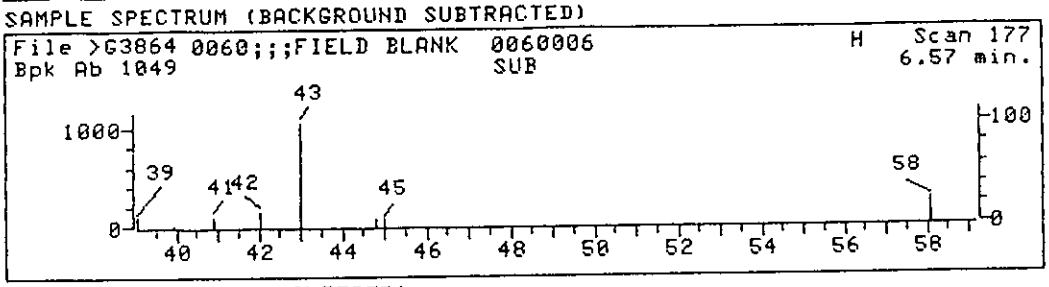
Data File: >G3864::G3
Quant Output File: ^G3864::QT
Name: 0060;;;FIELD BLANK
Misc: 0060006
HP5995:G;;;LLS;DF1 ;G1900
Quant Time: 930126 20:36
Quant ID File: I_IFGS::N1
Injected at: 930126 20:06
Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 211
Retention Time: 7.51 min.
Quant Ion: 83.8
Area: 8495
Concentration: 10.05 ug/kg
q-value: 89

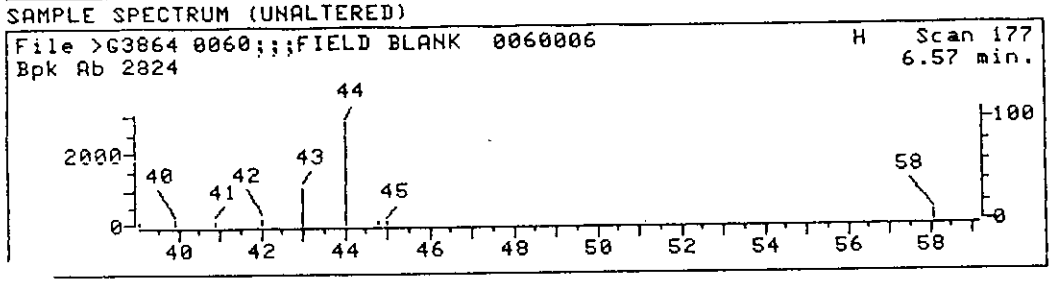
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G3864::G3
Name: 0060;;;FIELD BLANK
Misc: 0060006
Quant Time: 930126 20:36
Injected at: 930126 20:06

Quant Output File: ^G3864::QT

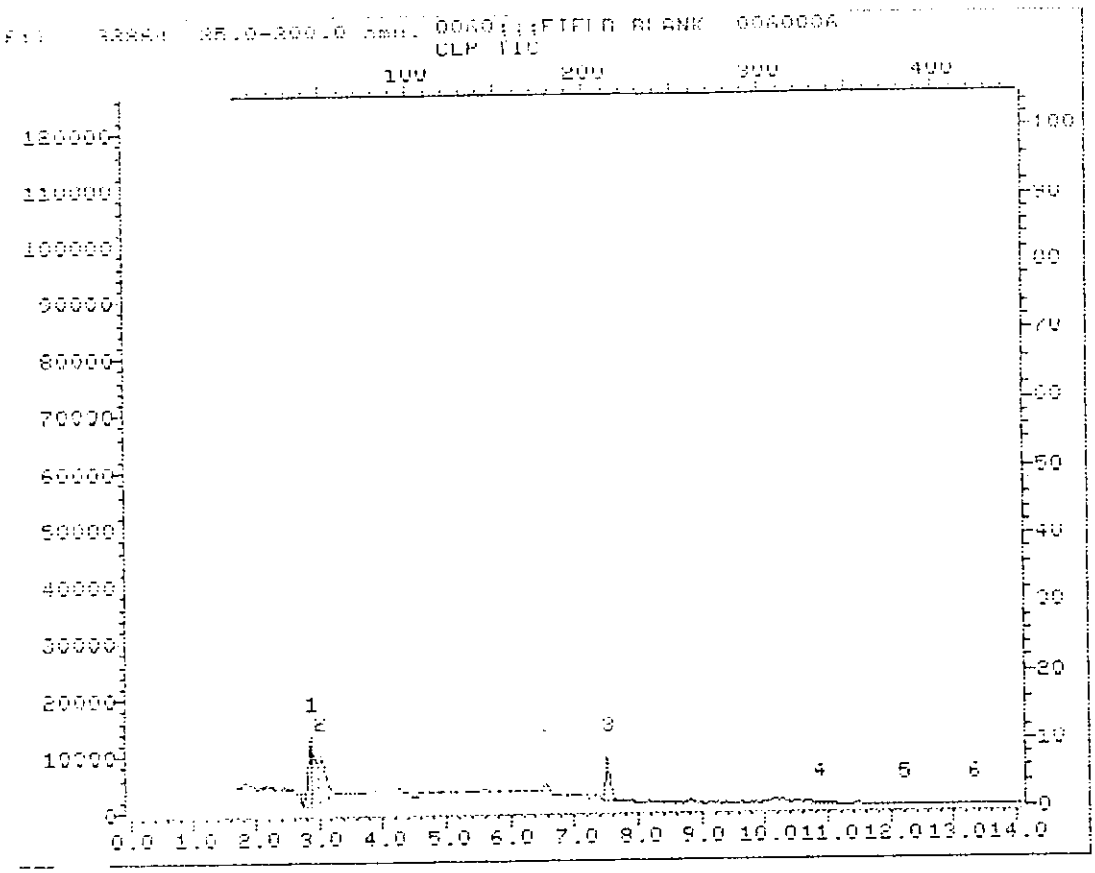
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

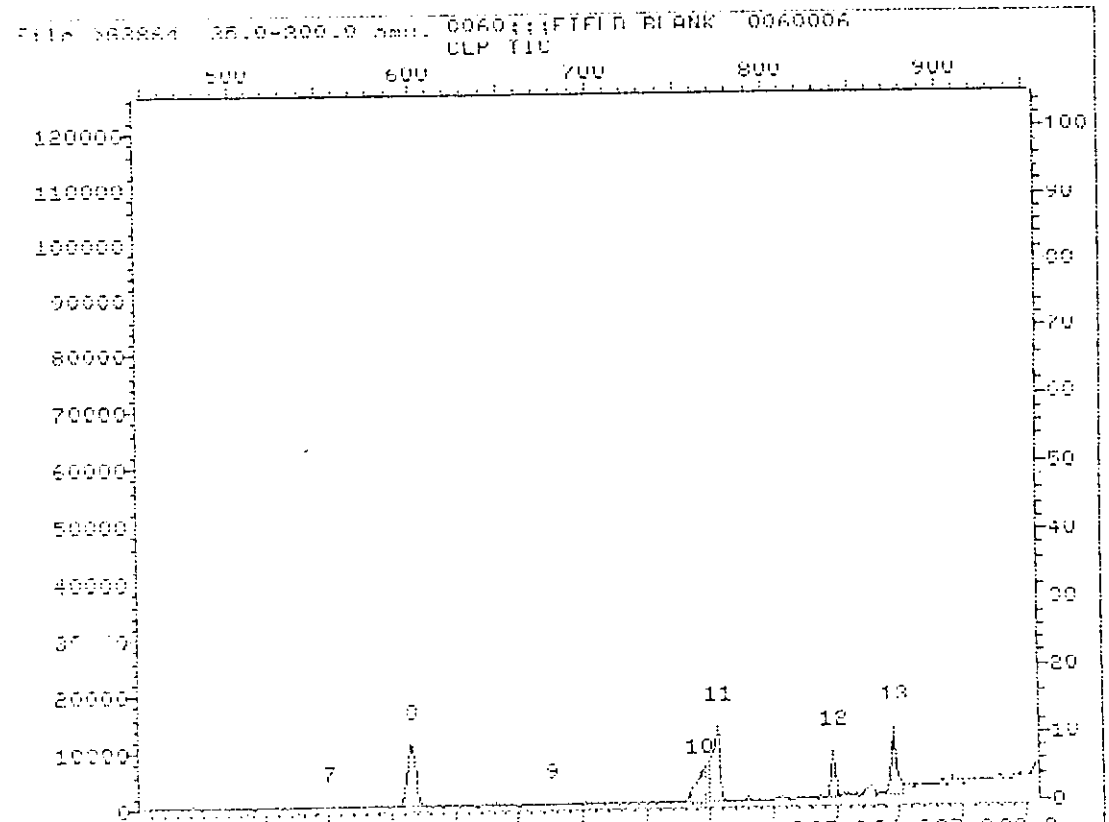
Compound No: 13
Compound Name: Acetone
Scan Number: 177
Retention Time: 6.57 min.
Quant Ion: 42.8
Area: 9418
Concentration: 8.77 ug/kg
q-value: 96

MS Data File header from : >G3864

Sample: 00AII;;;FIELD BLANK Operator: MSG MS 1/26/93 20:06
Misc : 00A00006 HP5995:5;;;115;DFT ;G19000
Sys. #: 2 MS model: 96 SW/HW rev.: 1A AUS # : 0
Method file: M_WOAP Tuning file: T_W No. of extra records: 2
Source temp.: 224 Analyzer temp.: 240 Transfer line temp. : 185

Chromatographic temperatures :	30.	100.	200.	0.	0.
Chromatographic times, min. :	4.0	0.0	3.8	0.0	0.0
Chromatographic rate, deg/min:	5.0	12.0	0.0	0.0	0.0


CCLP TIC
100
200
300
400
120000
110000
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
100
90
80
70
60
50
40
30
20
10
0
1
2
3
4
5
6
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 14.0


CCLP TIC
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600
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100000
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70000
60000
50000
40000
20000
10000
0
100
90
80
70
60
50
40
30
20
10
0
7
8
9
10
11
12
13

0090

TIC PEAK REPORT

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
T?CO2	2.82	59411.	12.	1.	1.000
2. CO2	3.00	59842.	12.	1.	1.00
8.	18.31	1000001.	10.	3.	1.000
11.	23.12	72903.	2.	3.	1.00
13.	25.91	76374.	2.	3.	1.000

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		TT/ST
BROMOCHLOROMETHANE	10.85	244641.	0.00	12.08	10.3
1,4-DIFLUOROBENZENE	13.31	515542.	12.08	16.92	2.7
CHLOROBENZENE-D5	20.52	522258.	16.92	25.91	3.9

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

TICS : 9:56 AM WED., 27 JAN., 1993

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

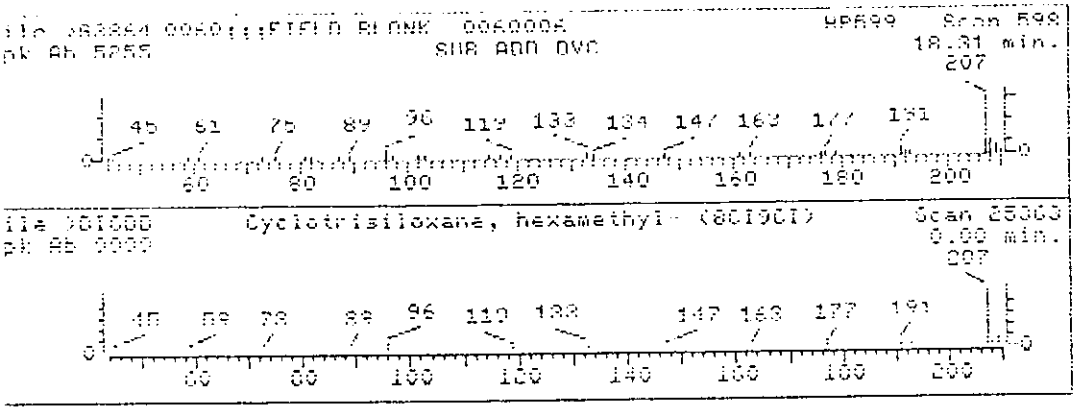
RPN error for command: RSH63
RPN error: -5
...d record length RSF

1. Cyclotrisiloxane, hexamethyl- (81:19CI) 222 C6H18O3Si3

Sample file: >G3864 Spectrum #: 598
Search speed: 3 Tilting option: S No. of ion ranges searched: 63

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	24	541059	25363	"RIGDH	83	26	1	11	88	15	39	41		

Peak#: 8 Area: 100001. Est Conc: 10. Date: 01/26/93 20:06 Inst: G



to interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

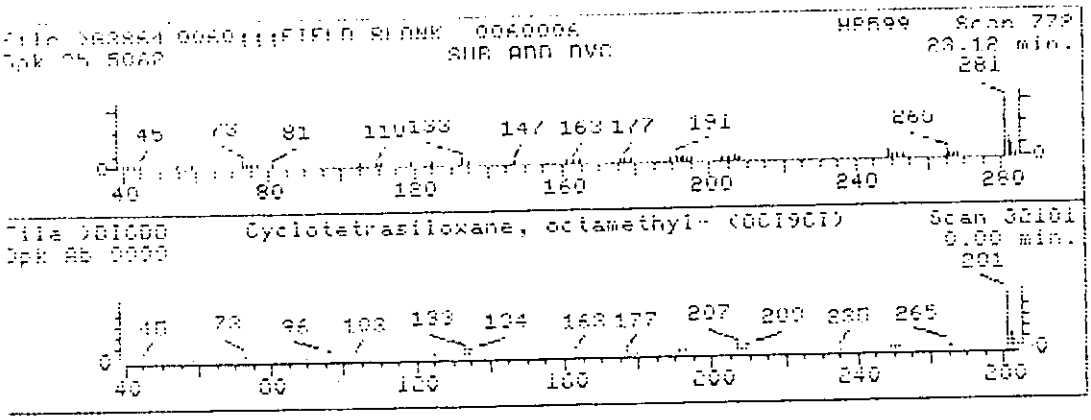
RPN error for command: RSR64
RPN error: -5
Bad record length RSR

1. Cyclotetrasiloxane, octamethyl- (81:99)   296 C8H24O4Si4

Sample file: >G3R64 Spectrum #: 222
Search speed: 3 Fitting option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C	I	R	IO
1.	84	556672	32181	"R1GDR	81	55	2	0	98	1	52			22

Peak#: 11 Area: 22903. Est Conc: 7. Date: 01/26/93 20:06 Inst: G



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

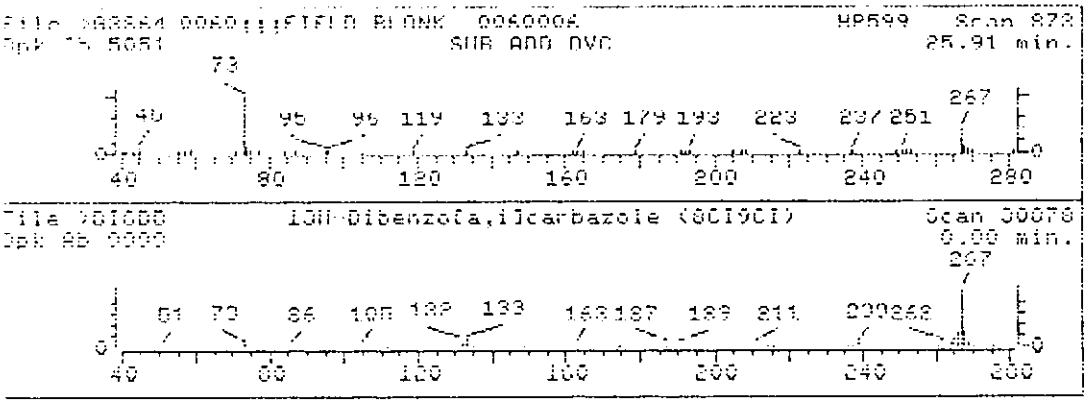
RPN error for command: RSF63
RPN error: -5
Bad record length RSF

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

Sample file: >G3864 Spectrum #: 873
Search speed: 3 Tilting option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	NAME	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	39*	239645	31B72B	"R1GDB	24	84	3	11	58	31	14		12	

Peak#: 13 Area: 26324. Est Conc: 7. Date: 01/26/93 20:16 Inst: G



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIPBLANK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) WATER Lab Sample ID: 0060007 0094

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G3865.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. _____ Data Analyzed: 01/26/93

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	20	B
67-64-1	Acetone	8	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	~~0.6~~ 10	~~U~~ JB
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

CHD 01/31/93

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0095 TRIPBLANK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) WATER Lab Sample ID: 0060007

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: G3865.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. _____ Data Analyzed: 01/26/93

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.					
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
Output File: ^G3865::QT
Data File: >G3865::G3
Name: 0060;;;TRIP BLANK
Misc: 0060007

Quant Rev: 6 Quant Time: 930126 21:10
Injected at: 930126 20:41
Dilution Factor: 1.00000

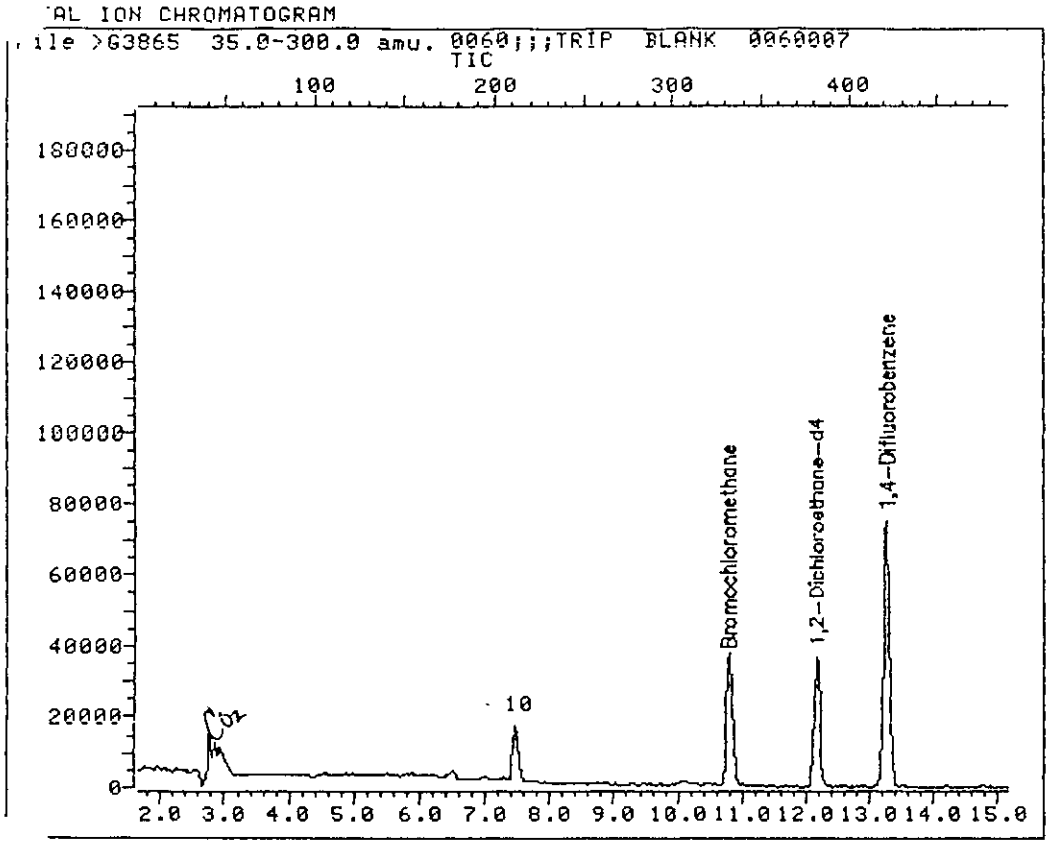
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.78	127.8	23356	50.00	ug/kg	74
10)	Methylene Chloride	7.47	83.8	16720	20.20	ug/kg	88
13)	Acetone	6.50	42.8	8956	8.51	ug/kg	98
~~28)~~	~~Chloroform~~	~~10.89~~	~~82.8~~	~~3608^~~	~~2.10~~	~~ug/kg~~	~~74~~
30)	1,2-Dichloroethane-d4	12.16	64.8	86382	52.89	ug/kg	93
34)	*1,4-Difluorobenzene	13.27	113.8	177456	50.00	ug/kg	95
53)	*Chlorobenzene-d5	20.44	116.8	134384	50.00	ug/kg	80
~~60)~~	~~Toluene~~	~~17.14~~	~~91.0~~	~~3256~~	~~.63~~	~~ug/kg~~	~~93~~
61)	Toluene-d8	16.97	97.8	189613	50.90	ug/kg	97
91)	Bromofluorobenzene	22.68	94.8	99524	53.39	ug/kg	76

ompound is ISTD

KMZ 1/28/93

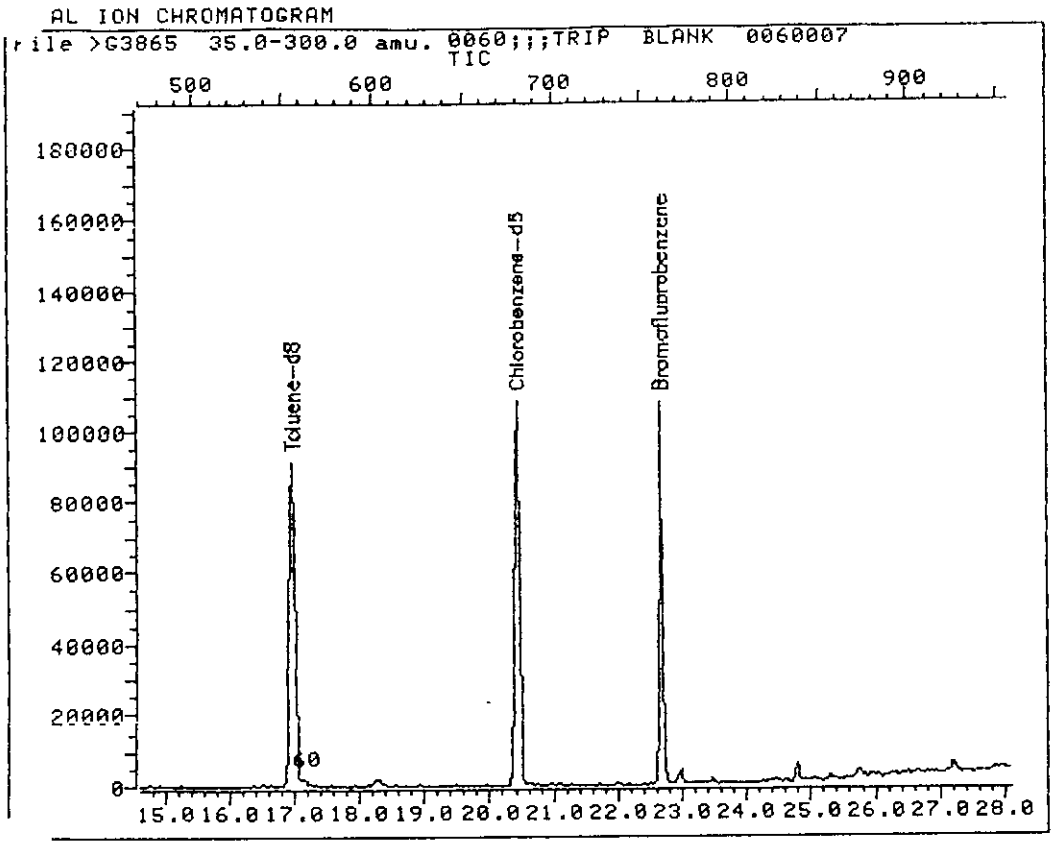


Data File: >G3865::G3 Quant Output File: ^G3865::QT
Name: 0060;;;TRIP BLANK
Misc: 0060007 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 21:10
Injected at: 930126 20:41

TIC page 1 of 2



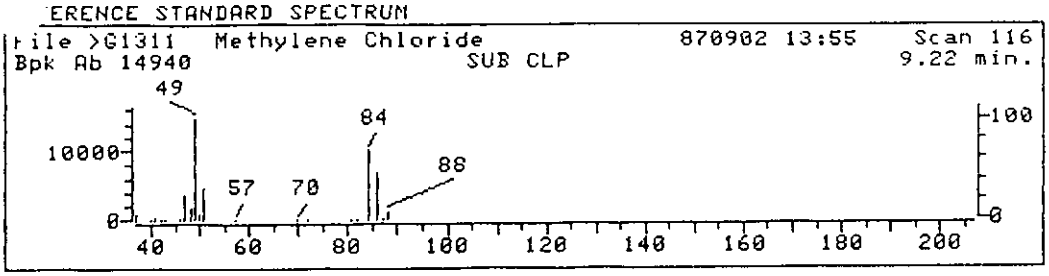
Data File: >G3865::G3 Quant Output File: ^G3865::QT
Name: 0060;;;TRIP BLANK
Misc: 0060007 HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 21:10
Injected at: 930126 20:41

TIC page 2 of 2

ERENCE STANDARD SPECTRUM



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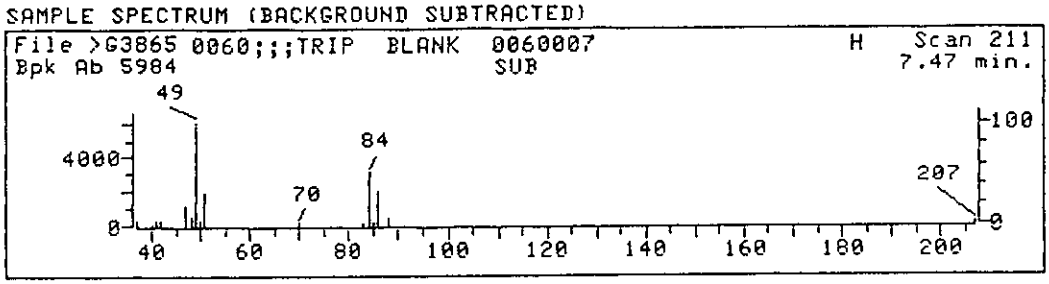
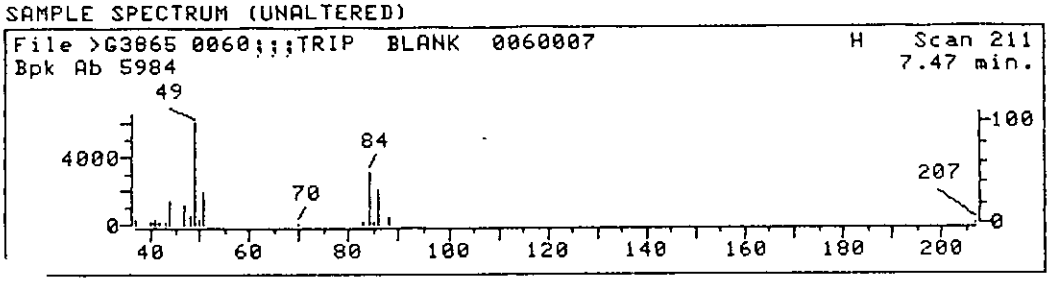
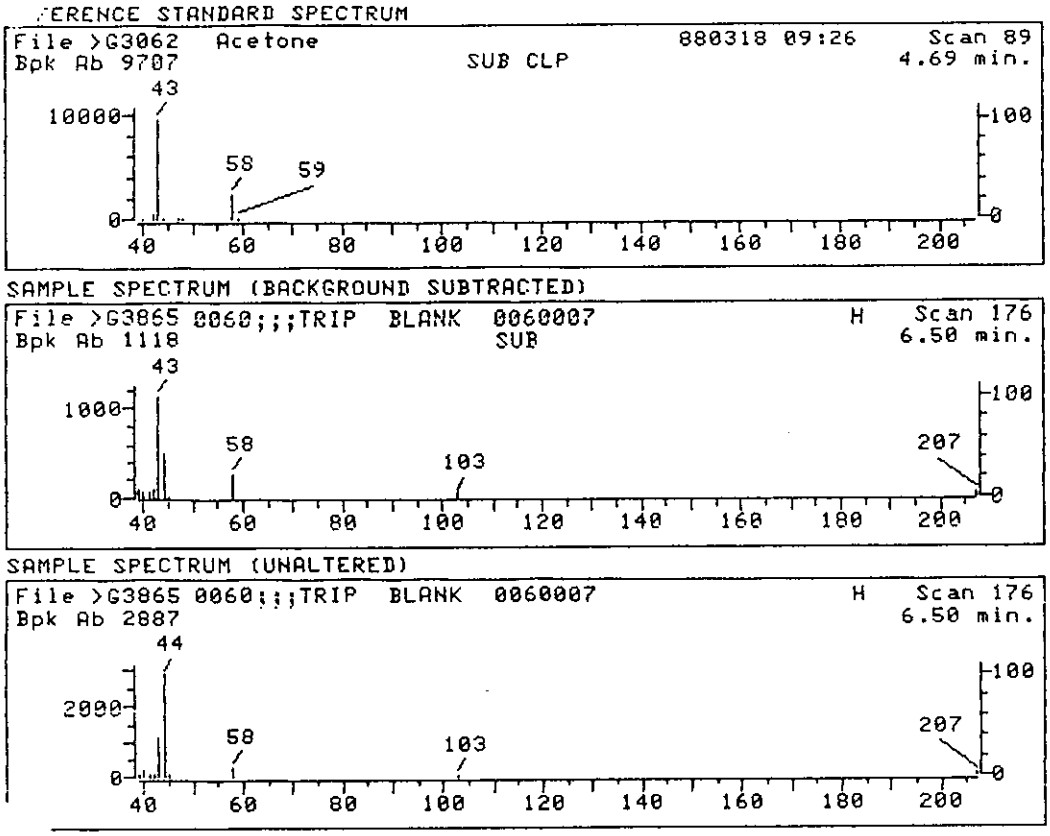


SAMPLE SPECTRUM (UNALTERED)



Data File: >G3865::G3 Quant Output File: ^G3865::QT
Name: 0060;;;TRIP BLANK
Misc: 0060007 HP5995:G;;;LLS;DF1 ;G1900
Quant Time: 930126 21:10 Quant ID File: I_IFGS::N1
Injected at: 930126 20:41 Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 211
Retention Time: 7.47 min.
Quant Ion: 83.8
Area: 16720
Concentration: 20.20 ug/kg
q-value: 88



Data File: >G3865::G3
Name: 0060;;;TRIP BLANK
Misc: 0060007
Quant Time: 930126 21:10
Injected at: 930126 20:41

Quant Output File: ^G3865::QT

HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 13
Compound Name: Acetone
Scan Number: 176
Retention Time: 6.50 min.
Quant Ion: 42.8
Area: 8956
Concentration: 8.51 ug/kg
q-value: 98

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

0101

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Instrument ID: HP5995G Calibration Date(s): 01/25/93 01/26/93

Heated Purge: (Y/N) Y Calibration Times: 2353 0251

GC Column:007-624 ID: 0.53 (mm)

LAB FILE ID: RRF10 =G3842.D RRF20 =G3843.D
RRF50 =G3844.D RRF100=G3845.D RRF200=G3847.D

COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD	
Chloromethane		1.881	1.854	1.652	2.168	1.586	1.828	12.5	
Bromomethane	*	1.256	1.069	0.888	0.852	0.690	0.951	22.9*	<-
Vinyl Chloride	*	1.732	1.757	1.681	2.046	1.873	1.818	8.0*	
Chloroethane		1.053	1.059	0.920	0.849	0.721	0.920	15.5	
Methylene Chloride		2.103	2.789	1.714	1.613	1.387	1.921	28.6	
Acetone		4.046	2.026	3.023	1.880	1.522	2.499	41.1	
Carbon Disulfide		7.896	7.420	6.879	7.712	7.155	7.412	5.5	
1,1-Dichloroethene	*	1.209	1.111	1.109	1.095	0.922	1.089	9.5*	
1,1-Dichloroethane	*	4.593	4.282	4.408	5.014	5.120	4.683	7.9*	
1,2-Dichloroethene (total)		1.356	1.245	1.257	1.405	1.365	1.326	5.3	
Chloroform	*	3.254	3.761	3.836	4.051	3.512	3.683	8.3*	
1,2-Dichloroethane	*	6.140	5.250	5.650	6.095	5.916	5.810	6.3*	
2-Butanone		3.112	2.378	4.405	2.847	2.724	3.093	25.2	
1,1,1-Trichloroethane	*	0.479	0.527	0.533	0.522	0.511	0.514	4.2*	
Carbon Tetrachloride	*	0.332	0.324	0.358	0.364	0.373	0.350	6.0*	
Bromodichloromethane	*	0.272	0.285	0.318	0.332	0.342	0.310	9.8*	
1,2-Dichloropropane		0.387	0.401	0.441	0.461	0.471	0.432	8.5	
cis-1,3-Dichloropropene	*	0.313	0.319	0.383	0.390	0.400	0.361	11.5*	
Trichloroethene	*	0.307	0.302	0.331	0.337	0.319	0.319	4.7*	
Dibromochloromethane	*	0.179	0.182	0.230	0.234	0.233	0.212	13.5*	
1,1,2-Trichloroethane	*	0.242	0.233	0.296	0.286	0.270	0.265	10.4*	
Benzene	*	1.208	1.210	1.293	1.291	1.184	1.237	4.1*	
trans-1,3-Dichloropropene	*	1.250	1.268	1.478	1.507	1.506	1.402	9.4*	
Bromoform	*	0.206	0.203	0.282	0.259	0.248	0.240	14.3*	
4-Methyl-2-Pentanone		0.795	0.682	1.469	0.960	1.036	0.988	30.6	
2-Hexanone		0.601	0.540	1.218	0.723	0.731	0.763	35.0	
Tetrachloroethene	*	0.357	0.335	0.389	0.356	0.335	0.354	6.2*	
1,1,2,2-Tetrachloroethane	*	0.627	0.584	0.875	0.715	0.738	0.708	15.9*	
Toluene	*	1.635	1.555	1.772	1.698	1.806	1.693	6.0*	
Chlorobenzene	*	0.972	0.956	1.086	1.015	1.003	1.006	5.0*	
Ethylbenzene	*	0.552	0.502	0.608	0.551	0.530	0.549	7.1*	
Styrene	*	1.087	1.049	1.189	1.027	0.937	1.058	8.7*	
Xylene (total)		0.627	0.581	0.652	0.572	0.517	0.590	8.9	
Toluene-d8		1.270	1.305	1.437	1.315	1.470	1.359	6.5	
Bromofluorobenzene	*	0.697	0.698	0.762	0.676	0.703	0.707	4.6*	
1,2-Dichloroethane-d4		3.218	3.249	2.985	3.179	3.749	3.276	8.7	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

QUANT REPORT

Operator ID: MSG
Output File: ^G3842::QT
Data File: >G3842::G3
Name: ;;;VSTD010
Misc:

Quant Rev: 6
Quant Time: 930126 00:22
Injected at: 930125 23:53
Dilution Factor: 1.00000

HP5995:G;;;LLS;DF1 ;G1897

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

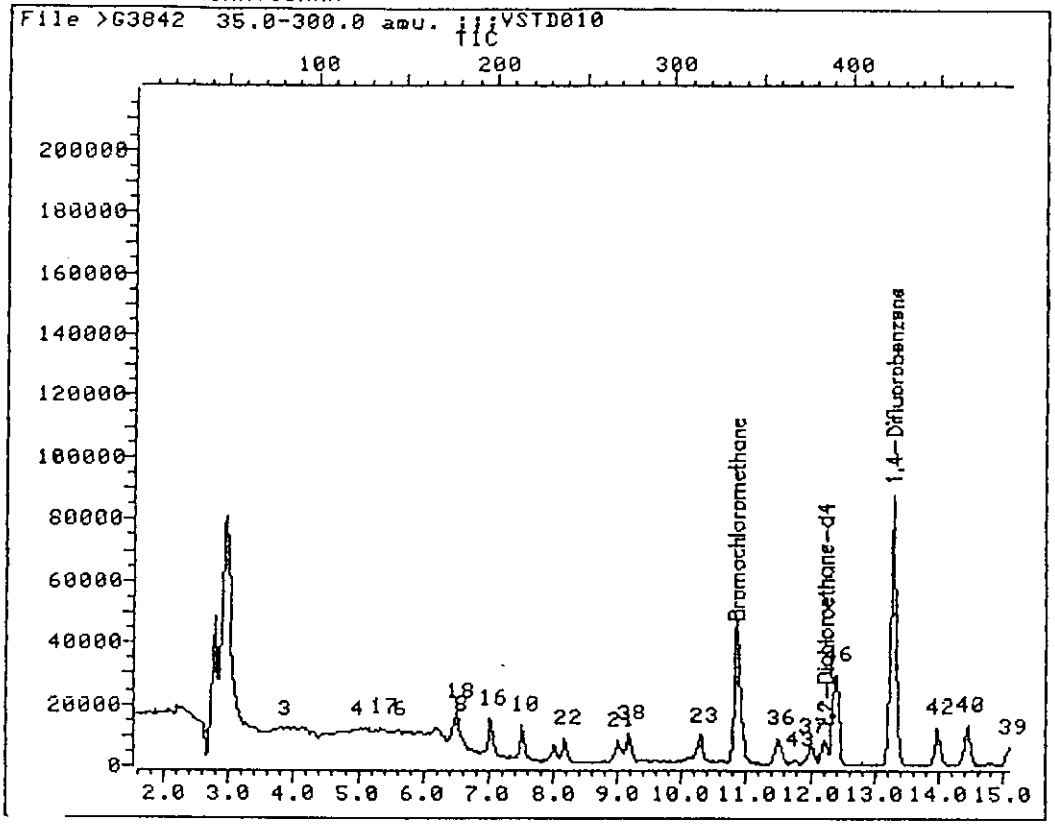
LHD 01/31/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.84	127.8	26530	50.00	ug/kg	74
3)	Chloromethane	3.84	49.8	9982M	28.65	ug/kg	97
4)	Bromomethane	4.98	93.7	6665M	9.87	ug/kg	
5)	Vinyl Chloride	4.15	61.8	9188	12.09	ug/kg	91
6)	Chloroethane	5.64	63.8	5587M	11.14	ug/kg	84
8)	1,1,2-Trichlorotrifluoroethane	6.55	101.0	16949M	32.85	ug/kg	87
10)	Methylene Chloride	7.52	83.8	11160	15.06	ug/kg	89
13)	Acetone	6.52	42.8	21467	22.28	ug/kg	99
14)	Acrylonitrile	8.02	52.8	13834	44.72	ug/kg	90
16)	Carbon Disulfide	7.02	75.8	41896	17.39	ug/kg	99
17	Trichlorofluoromethane	5.36	100.8	7373M	17.82	ug/kg	86
18)	1,1-Dichloroethene	6.50	95.8	6413	9.38	ug/kg	94
21)	1,1-Dichloroethane	9.01	62.8	24368	16.85	ug/kg	96
22)	1,2-Dichloroethene (total)t	8.18	95.8	7733	10.49	ug/kg	94
23)	1,2-Dichloroethene (total)c	10.28	95.8	6654	8.70	ug/kg	97
24)	2-Butanone	10.28	43.0	16510	17.24	ug/kg	92
28)	Chloroform	10.95	82.8	17266^	11.54	ug/kg	96
29)	1,2-Dichloroethane	12.41	61.8	32578	11.67	ug/kg	92
30)	1,2-Dichloroethane-d4	12.22	64.8	17076	9.28	ug/kg	85
34)	*1,4-Difluorobenzene	13.30	113.8	203521	50.00	ug/kg	97
36)	1,1,1-Trichloroethane	11.50	96.8	19480	5.71	ug/kg	90
37)	Carbon Tetrachloride	12.00	116.8	13525	5.29	ug/kg	90
38)	Vinyl Acetate	9.18	42.8	51405	10.66	ug/kg	94
39)	Bromodichloromethane	15.09	82.8	11067	4.69	ug/kg	91
40)	1,2-Dichloropropane	14.46	62.8	15739	13.52	ug/kg	91
41)	cis-1,3-Dichloropropene	16.31	74.8	19619	8.43	ug/kg	97
42)	Trichloroethene	13.99	129.8	12492	9.20	ug/kg	95
43)	Methyl Methacrylate	11.78	40.9	1056	1056.00	NO CALIB	68
44)	Dibromochloromethane	19.11	128.7	7278	3.86	ug/kg	97
45)	1,1,2-Trichloroethane	18.14	96.8	9837	9.82	ug/kg	87
46)	Benzene	12.38	77.8	49175	13.43	ug/kg	91
47)	trans-1,3-Dichloropropene	17.66	74.8	21362	8.57	ug/kg	95
48)	2-Chloroethylvinylether	15.92	62.8	11084	13.70	ug/kg	82
49)	1,2-Dibromoethane	19.44	106.9	15095	8.59	ug/kg	94
50)	Bromoform	22.09	172.6	8376	6.05	ug/kg	97
53	Chlorobenzene-d5	20.41	116.8	159815	50.00	ug/kg	85
54)	4-Methyl-2-Pentanone	16.50	42.8	25408	12.51	ug/kg	94
55)	2-Hexanone	18.67	42.8	19219	10.71	ug/kg	86
56)	Tetrachloroethene	18.69	163.7	11396	7.12	ug/kg	95
58)	1,1,2,2-Tetrachloroethane	22.84	82.8	20049	12.34	ug/kg	81
60)	Toluene	17.14	91.0	52254	12.00	ug/kg	95

	Compound	R.T.	Q ion	Area	Conc	Units	q
3)	Ethylbenzene	20.71	105.8	17631	11.73	ug/kg	96
4)	Styrene	21.74	103.8	34759	10.53	ug/kg	90
5)	Xylene (total)mp	20.93	105.8	40928	20.65	ug/kg	94
6)	Xylene (total)o	21.68	105.8	20053	10.59	ug/kg	93
1)	1,2,3-Trichloropropane	24.61	74.8	12877	8.15	ug/kg	53
0)	1,3-Dichlorobenzene	24.61	145.8	28982	8.53	ug/kg	93
2)	1,2-Dichlorobenzene	24.47	145.8	29934	8.81	ug/kg	94
1)	Bromofluorobenzene	22.68	94.8	22290	8.40	ug/kg	76

* Compound is ISTD

AL ION CHROMATOGRAM



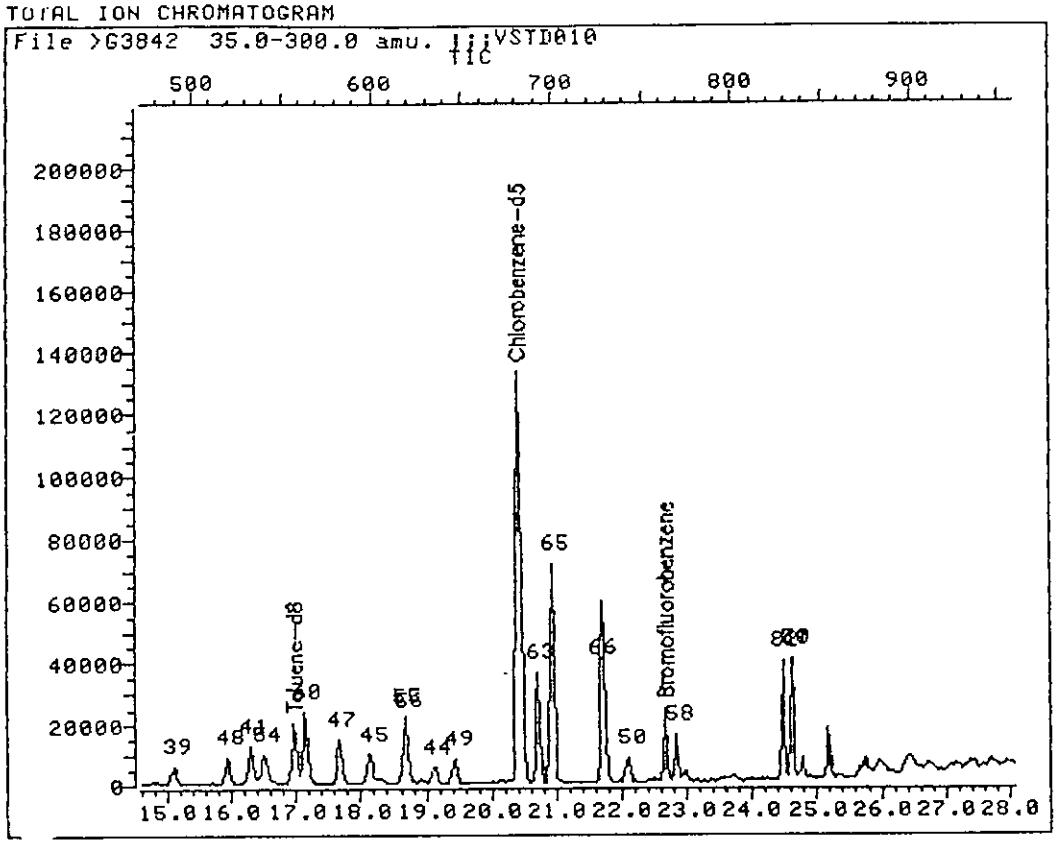
Data File: >G3842::G3 Quant Output File: ^G3842::QT
Name: ;;;VSTD010
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 00:22
Injected at: 930125 23:53

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G3842::G3 Quant Output File: ^G3842::QT
Name: ;;;VSTD010
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 00:22
Injected at: 930125 23:53

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930126 01:01
Output File: ^G3843::QT Injected at: 930126 00:32
Data File: >G3843::G3 Dilution Factor: 1.00000
Name: ;;;VSTD020
Misc: HP5995:G;;;LLS;DF1 ;G1897

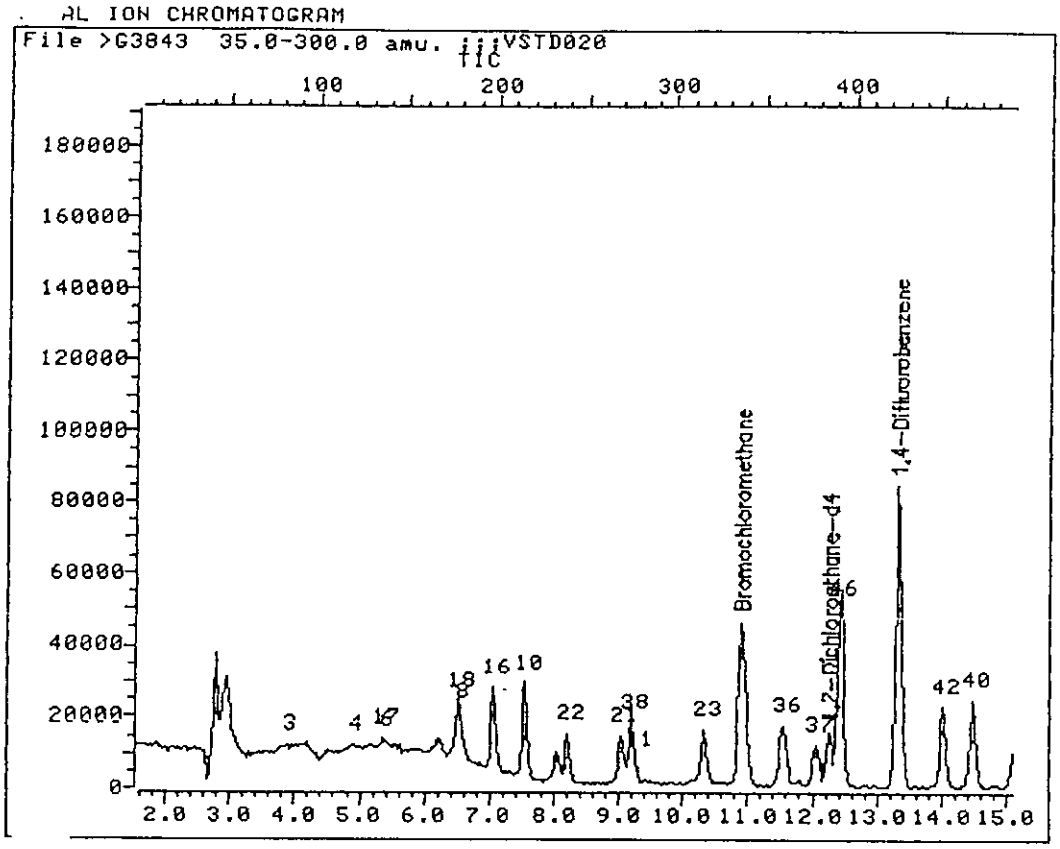
ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

LMD 01/31/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.89	127.8	26905	50.00	ug/kg	74
3)	Chloromethane	3.90	49.8	19957	56.47	ug/kg	96
4)	Bromomethane	4.92	93.7	11509M	16.80	ug/kg	
5)	Vinyl Chloride	4.15	61.8	18911	24.55	ug/kg	94
6)	Chloroethane	5.39	63.8	11398M	22.40	ug/kg	18
8)	1,1,2-Trichlorotrifluoroethane	6.55	101.0	31180M	59.59	ug/kg	86
10)	Methylene Chloride	7.55	83.8	30016	39.94	ug/kg	92
11)	Acrolein	9.26	55.8	202	202.00	NO CALIB	18
13)	Acetone	6.55	42.8	21800	22.31	ug/kg	97
14)	Acrylonitrile	8.04	52.8	23537	75.03	ug/kg	95
16	Carbon Disulfide	7.05	75.8	79849	32.69	ug/kg	97
17)	Trichlorofluoromethane	5.36	100.8	15225M	36.29	ug/kg	92
18)	1,1-Dichloroethene	6.50	95.8	11952	17.23	ug/kg	94
21)	1,1-Dichloroethane	9.04	62.8	46083	31.42	ug/kg	97
22)	1,2-Dichloroethene (total)t	8.21	95.8	13683	18.30	ug/kg	97
23)	1,2-Dichloroethene (total)c	10.34	95.8	13113	16.92	ug/kg	95
24)	2-Butanone	10.31	43.0	25597	26.36	ug/kg	90
28)	Chloroform	10.97	82.8	40471	26.66	ug/kg	91
29)	1,2-Dichloroethane	12.44	61.8	56498	19.96	ug/kg	93
30)	1,2-Dichloroethane-d4	12.25	64.8	34963	18.74	ug/kg	89
34)	*1,4-Difluorobenzene	13.32	113.8	193341	50.00	ug/kg	94
36)	1,1,1-Trichloroethane	11.56	96.8	40762	12.58	ug/kg	94
37)	Carbon Tetrachloride	12.05	116.8	25087	10.33	ug/kg	93
38)	Vinyl Acetate	9.21	42.8	92057	20.09	ug/kg	94
39)	Bromodichloromethane	15.12	82.8	22066	9.85	ug/kg	93
40)	1,2-Dichloropropane	14.49	62.8	31025	28.05	ug/kg	92
41)	cis-1,3-Dichloropropene	16.31	74.8	38004	17.18	ug/kg	96
42)	Trichloroethene	14.02	129.8	23363	18.12	ug/kg	94
44)	Dibromochloromethane	19.14	128.7	14087	7.86	ug/kg	98
45)	1,1,2-Trichloroethane	18.14	96.8	18014	18.93	ug/kg	89
46)	Benzene	12.41	77.8	93539	26.88	ug/kg	93
47)	trans-1,3-Dichloropropene	17.69	74.8	41181	17.40	ug/kg	88
48)	2-Chloroethylvinylether	15.95	62.8	20741	26.98	ug/kg	85
49)	1,2-Dibromoethane	19.44	106.9	27582	16.53	ug/kg	93
50)	Bromoform	22.10	172.6	15717	11.96	ug/kg	99
53	*Chlorobenzene-d5	20.41	116.8	159001	50.00	ug/kg	90
54	4-Methyl-2-Pentanone	16.53	42.8	43347	21.46	ug/kg	95
55)	2-Hexanone	18.67	42.8	34352	19.24	ug/kg	91
56)	Tetrachloroethene	18.70	163.7	21307	13.39	ug/kg	93
58)	1,1,2,2-Tetrachloroethane	22.87	82.8	37165	22.99	ug/kg	88
60)	Toluene	17.17	91.0	98914	22.84	ug/kg	94
				82923	19.77	ug/kg	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.71	105.8	31924	21.34	ug/kg	96
64)	Styrene	21.74	103.8	66704	20.31	ug/kg	94
65)	Xylene (total)mp	20.94	105.8	76812	38.95	ug/kg	93
66)	Xylene (total)o	21.71	105.8	36932	19.60	ug/kg	98
71)	1,2,3-Trichloropropane	24.64	74.8	23244	14.79	ug/kg	54
30)	1,3-Dichlorobenzene	24.64	145.8	50694	14.99	ug/kg	96
32)	1,2-Dichlorobenzene	24.50	145.8	54973	16.26	ug/kg	90
91)	Bromofluorobenzene	22.68	94.8	44420	16.82	ug/kg	96

* Compound is ISTD



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Name: ;;;VSTD020
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 01:01
Injected at: 930126 00:32

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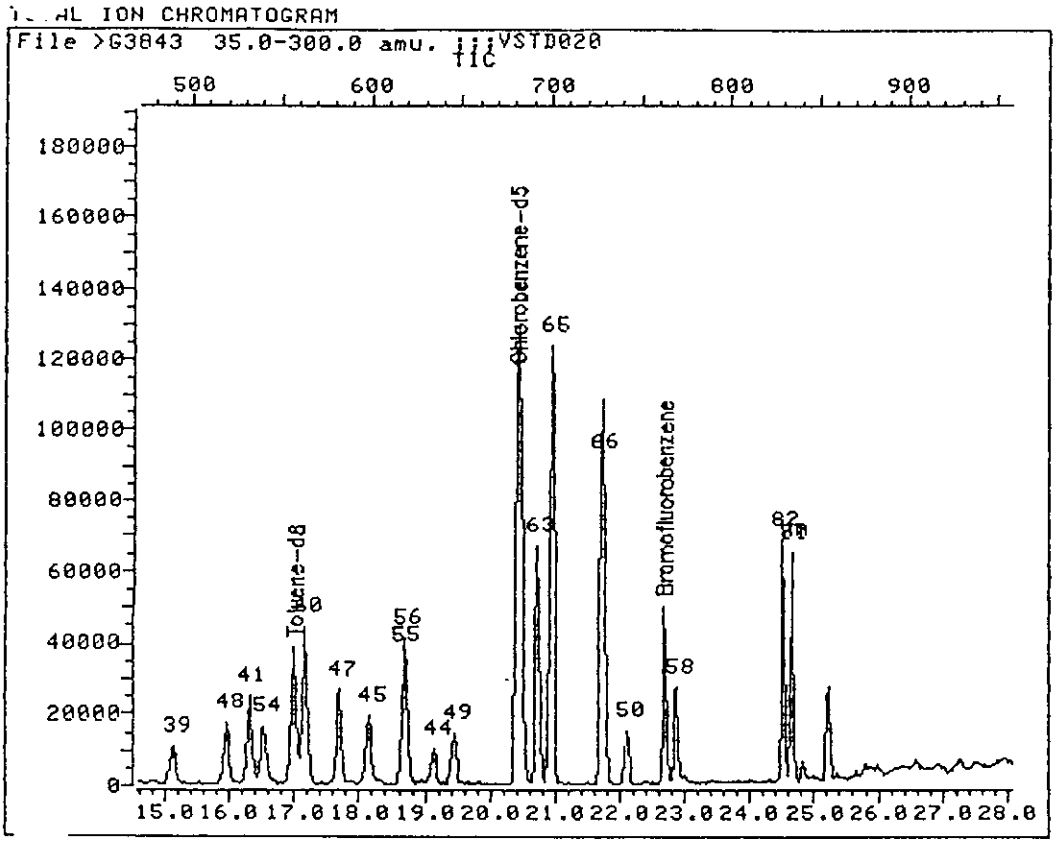


Data File: >G3843::G3 Quant Output File: ^G3843::QT
Name: ;;;VSTD020
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 01:01
Injected at: 930126 00:32

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG
Output File: ^G3844::QT
Data File: >G3844::G3
Name: ;;;VSTD050
Misc:

Quant Rev: 6 Quant Time: 930126 01:35
Injected at: 930126 01:06
Dilution Factor: 1.00000

HP5995:G;;;LLS;DF1 ;G1897

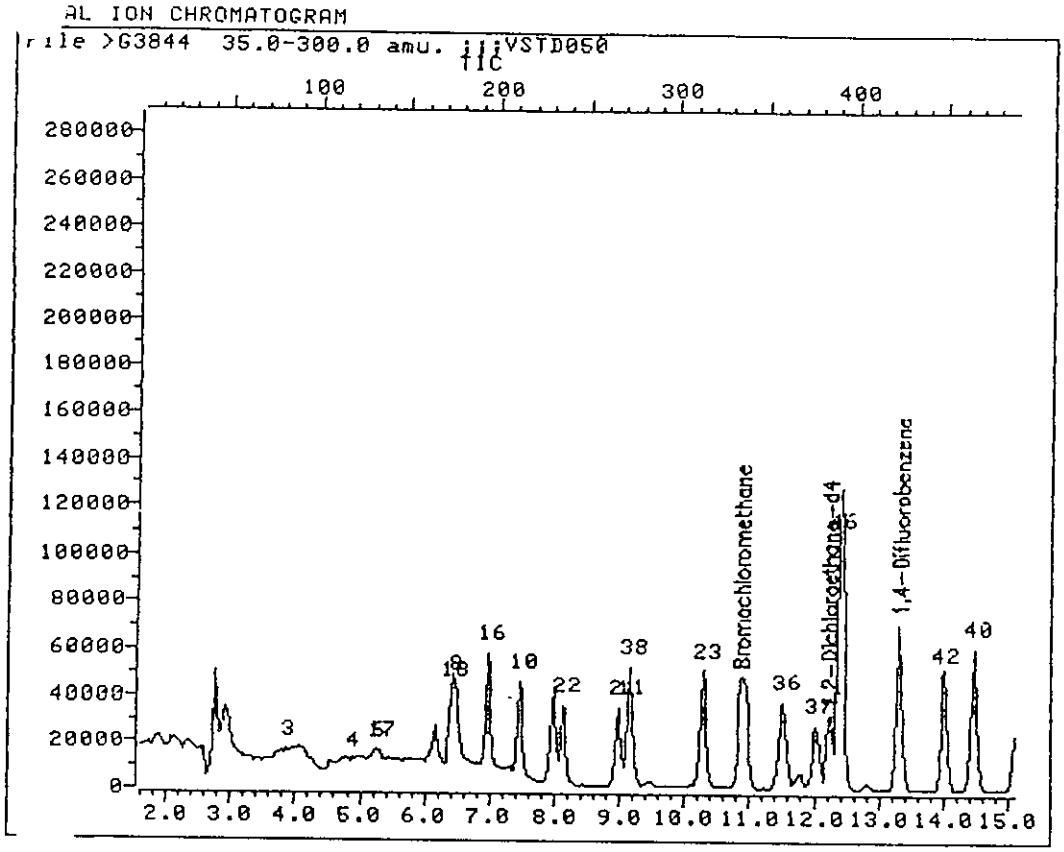
ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

LHD 01/31/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.86	127.8	25072	50.00	ug/kg	79
3)	Chloromethane	3.87	49.8	41416	125.76	ug/kg	98
4)	Bromomethane	4.87	93.7	22265M	34.88	ug/kg	86
5)	Vinyl Chloride	4.06	61.8	42140	58.69	ug/kg	98
6)	Chloroethane	5.28	63.8	23061M	48.64	ug/kg	99
8)	1,1,2-Trichlorotrifluoroethane	6.47	101.0	70909M	145.44	ug/kg	85
10)	Methylene Chloride	7.46	83.8	42966	61.34	ug/kg	89
11)	Acrolein	9.12	55.8	376	376.00	NO CALIB	73
13)	Acetone	6.50	42.8	75789	83.22	ug/kg	96
14)	Acrylonitrile	7.99	52.8	107274	366.95	ug/kg	94
16	Carbon Disulfide	6.97	75.8	172481	75.76	ug/kg	98
17)	Trichlorofluoromethane	5.28	100.8	33314M	85.20	ug/kg	98
18)	1,1-Dichloroethene	6.41	95.8	27801	43.01	ug/kg	89
21)	1,1-Dichloroethane	8.98	62.8	110514	80.87	ug/kg	94
22)	1,2-Dichloroethene (total)t	8.13	95.8	33198	47.66	ug/kg	98
23)	1,2-Dichloroethene (total)c	10.28	95.8	29823	41.28	ug/kg	96
24)	2-Butanone	10.28	43.0	110444	122.05	ug/kg	93
28)	Chloroform	10.95	82.8	96187	68.00	ug/kg	97
29)	1,2-Dichloroethane	12.41	61.8	141652	53.69	ug/kg	98
30)	1,2-Dichloroethane-d4	12.22	64.8	74829	43.04	ug/kg	90
34)	*1,4-Difluorobenzene	13.33	113.8	168801	50.00	ug/kg	97
36)	1,1,1-Trichloroethane	11.53	96.8	89917	31.79	ug/kg	95
37)	Carbon Tetrachloride	12.03	116.8	60374	28.47	ug/kg	95
38)	Vinyl Acetate	9.15	42.8	273265	68.31	ug/kg	94
39)	Bromodichloromethane	15.12	82.8	53633	27.41	ug/kg	93
40)	1,2-Dichloropropane	14.46	62.8	74361	76.99	ug/kg	94
41)	cis-1,3-Dichloropropene	16.31	74.8	99525	51.54	ug/kg	97
42)	Trichloroethene	13.99	129.8	55854	49.62	ug/kg	96
44)	Dibromochloromethane	19.14	128.7	38800	24.80	ug/kg	93
45)	1,1,2-Trichloroethane	18.14	96.8	50049	60.26	ug/kg	92
46)	Benzene	12.39	77.8	218186	71.82	ug/kg	91
47)	trans-1,3-Dichloropropene	17.69	74.8	104755	50.70	ug/kg	89
48)	2-Chloroethylvinylether	15.95	62.8	64120	95.53	ug/kg	79
49)	1,2-Dibromoethane	19.44	106.9	77273	53.04	ug/kg	93
50)	Bromoform	22.10	172.6	47624	41.51	ug/kg	98
53	Chlorobenzene-d5	20.44	116.8	132056	50.00	ug/kg	82
54)	4-Methyl-2-Pentanone	16.53	42.8	194035	115.65	ug/kg	93
55)	2-Hexanone	18.67	42.8	160901	108.50	ug/kg	95
56)	Tetrachloroethene	18.70	163.7	51349	38.84	ug/kg	89
58)	1,1,2,2-Tetrachloroethane	22.87	82.8	115521	86.03	ug/kg	83
60)	Toluene	17.17	91.0	233941	65.03	ug/kg	92
		16.92	92.8	189724	54.44	ug/kg	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
53)	Ethylbenzene	20.71	105.8	80255	64.60	ug/kg	96
54)	Styrene	21.74	103.8	156949	57.55	ug/kg	92
55)	Xylene (total)mp	20.94	105.8	180326	110.09	ug/kg	94
56)	Xylene (total)o	21.71	105.8	86124	55.02	ug/kg	94
59)	Isopropylbenzene	22.40	104.8	1285	71.58	ug/kg	88
71)	1,2,3-Trichloropropane	24.64	74.8	54209	41.53	ug/kg	53
80)	1,3-Dichlorobenzene	24.64	145.8	123008	43.80	ug/kg	95
82)	1,2-Dichlorobenzene	24.50	145.8	129340	46.05	ug/kg	94
91)	Bromofluorobenzene	22.68	94.8	100583	45.86	ug/kg	98

* Compound is ISTD



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Name: ;;;VSTD050
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 01:35
Injected at: 930126 01:06

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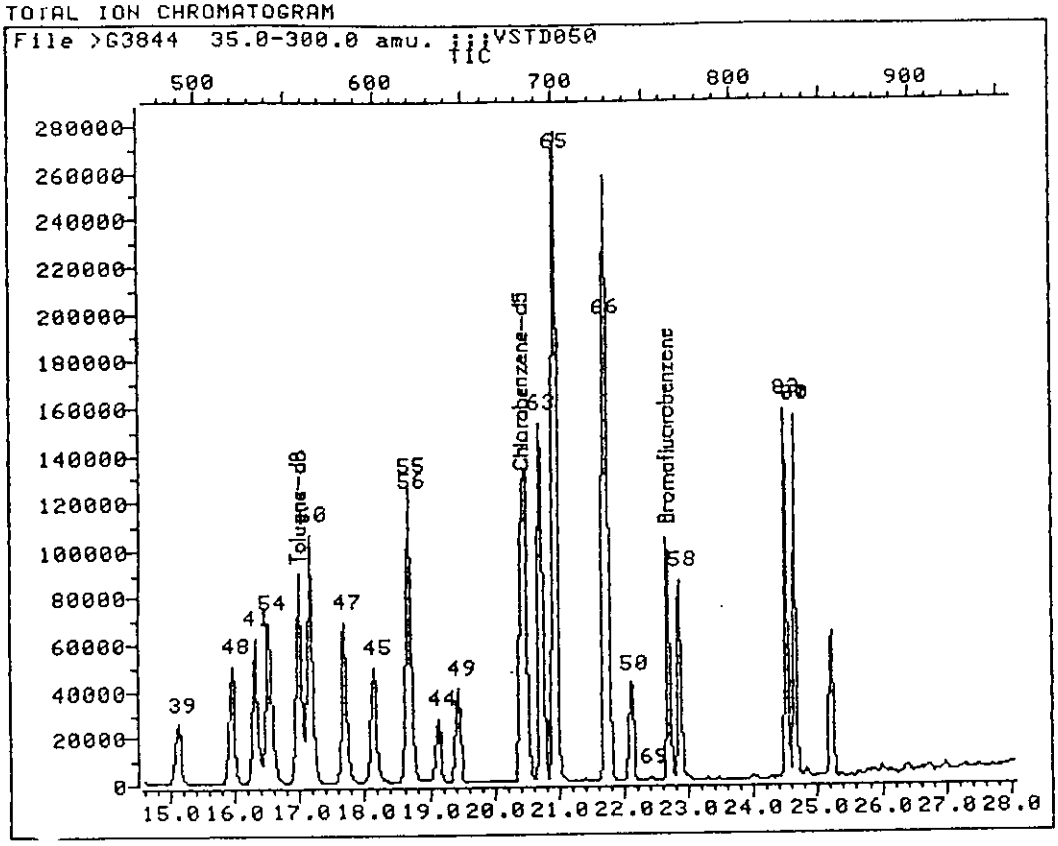
TOTAL ION CHROMATOGRAM



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Name: ;;;VSTD050
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 01:35
Injected at: 930126 01:06

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG Quant Rev: 6 Quant Time: 930126 02:12
Output File: ^G3845::QT Injected at: 930126 01:43
Data File: >G3845::G3 Dilution Factor: 1.00000
Name: ;;;VSTD100
Misc: HP5995:G;;;LLS;DF1 ;G1897

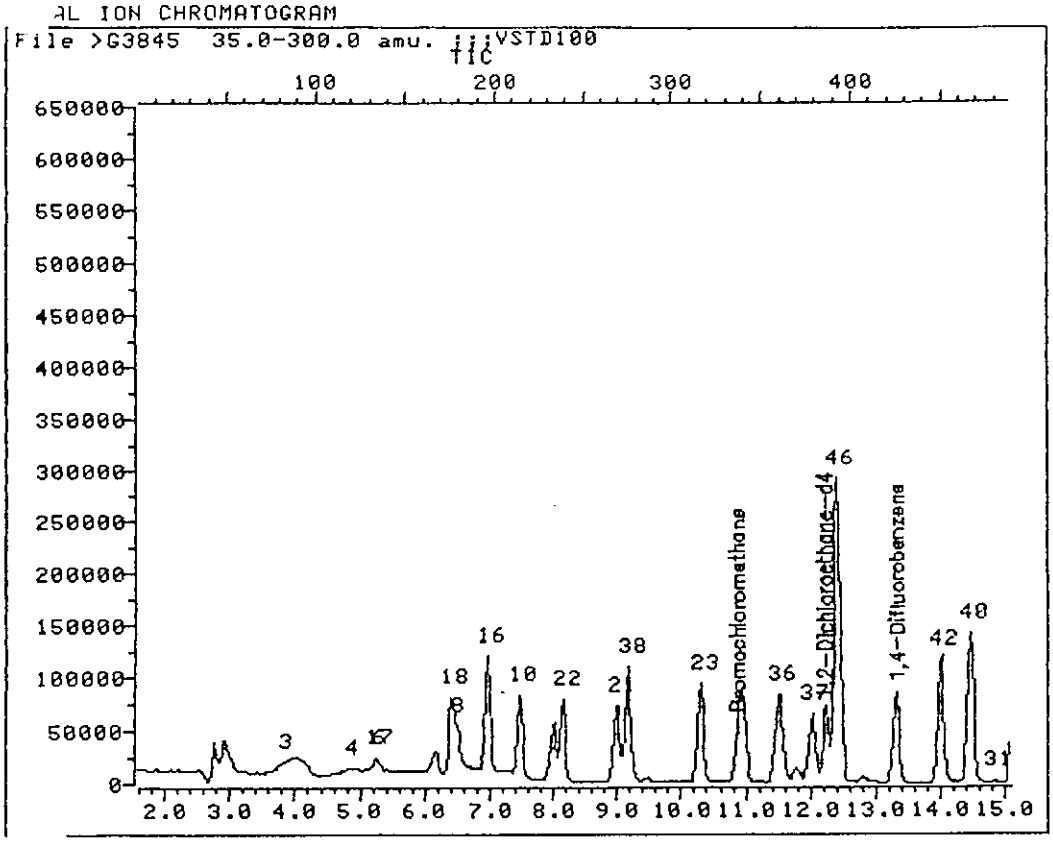
ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

LMP 01/31/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.87	127.8	25988	50.00	ug/kg	65
3)	Chloromethane	3.84	49.8	112662	330.05	ug/kg	98
4)	Bromomethane	4.87	93.7	44275M	66.92	ug/kg	85
5)	Vinyl Chloride	4.06	61.8	106326	142.88	ug/kg	97
6)	Chloroethane	5.25	63.8	44150M	89.84	ug/kg	58
8)	1,1,2-Trichlorotrifluoroethane	6.50	101.0	155743M	308.18	ug/kg	89
10)	Methylene Chloride	7.46	83.8	83859	115.51	ug/kg	91
13)	Acetone	6.50	42.8	97701	103.50	ug/kg	98
14)	Acrylonitrile	8.02	52.8	152220	502.34	ug/kg	94
16)	Carbon Disulfide	6.97	75.8	400852	169.87	ug/kg	99
17)	Trichlorofluoromethane	5.25	100.8	69050M	170.37	ug/kg	98
18)	1,1-Dichloroethene	6.41	95.8	56906	84.94	ug/kg	90
21)	1,1-Dichloroethane	9.01	62.8	260607	183.98	ug/kg	96
22)	1,2-Dichloroethene (total)t	8.16	95.8	74184	102.74	ug/kg	96
23)	1,2-Dichloroethene (total)c	10.31	95.8	71919	96.05	ug/kg	94
24)	2-Butanone	10.31	43.0	147972	157.75	ug/kg	91
28)	Chloroform	10.95	82.8	210548	143.60	ug/kg	95
29)	1,2-Dichloroethane	12.41	61.8	316799	115.85	ug/kg	99
30)	1,2-Dichloroethane-d4	12.22	64.8	165237	91.68	ug/kg	89
31)	Dibromomethane	14.82	92.9	1036	81.94	ug/kg	97
34)	*1,4-Difluorobenzene	13.33	113.8	193236	50.00	ug/kg	97
36)	1,1,1-Trichloroethane	11.50	96.8	201881	62.35	ug/kg	97
37)	Carbon Tetrachloride	12.03	116.8	140600	57.92	ug/kg	91
38)	Vinyl Acetate	9.18	42.8	570385	124.56	ug/kg	93
39)	Bromodichloromethane	15.10	82.8	128500	57.37	ug/kg	93
40)	1,2-Dichloropropane	14.46	62.8	178304	161.27	ug/kg	91
41)	cis-1,3-Dichloropropene	16.31	74.8	232222	105.05	ug/kg	97
42)	Trichloroethene	13.99	129.8	130099	100.96	ug/kg	93
44)	Dibromochloromethane	19.14	128.7	90561	50.56	ug/kg	99
45)	1,1,2-Trichloroethane	18.14	96.8	110421	116.13	ug/kg	94
46)	Benzene	12.41	77.8	498966	143.48	ug/kg	91
47)	trans-1,3-Dichloropropene	17.67	74.8	244607	103.41	ug/kg	93
48)	2-Chloroethylvinylether	15.95	62.8	129287	168.26	ug/kg	80
49)	1,2-Dibromoethane	19.44	106.9	160322	96.13	ug/kg	96
50)	Bromoform	22.10	172.6	100069	76.18	ug/kg	99
53)	*Chlorobenzene-d5	20.41	116.8	155995	50.00	ug/kg	86
54)	-Methyl-2-Pentanone	16.50	42.8	299644	151.19	ug/kg	92
55)	2-Hexanone	18.67	42.8	225533	128.74	ug/kg	97
56)	Tetrachloroethene	18.70	163.7	111138	71.17	ug/kg	90
58)	1,1,2,2-Tetrachloroethane	22.85	82.8	223004	140.59	ug/kg	86
61)	Toluene	17.17	91.0	529778	124.66	ug/kg	93

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.72	105.8	171946	117.16	ug/kg	98
64)	Styrene	21.74	103.8	320478	99.48	ug/kg	85
65)	Xylene (total)mp	20.94	105.8	366897	189.62	ug/kg	93
66)	Xylene (total)o	21.71	105.8	178477	96.53	ug/kg	86
69)	Isopropylbenzene	22.40	104.8	2539	119.73	ug/kg	94
71)	1,2,3-Trichloropropane	24.50	74.8	114188	74.05	ug/kg	53
80)	1,3-Dichlorobenzene	24.64	145.8	252768	76.19	ug/kg	89
82)	1,2-Dichlorobenzene	24.48	145.8	263041	79.29	ug/kg	89
90)	Pentachloroethane	23.95	167.0	1225	1225.00	NO CALIB	81
91)	Bromofluorobenzene	22.68	94.8	210809	81.37	ug/kg	79

* Compound is ISTD



Data File: >G3845::G3 Quant Output File: ^G3845::QT
Name: ;;;VSTD100
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 02:12
Injected at: 930126 01:43

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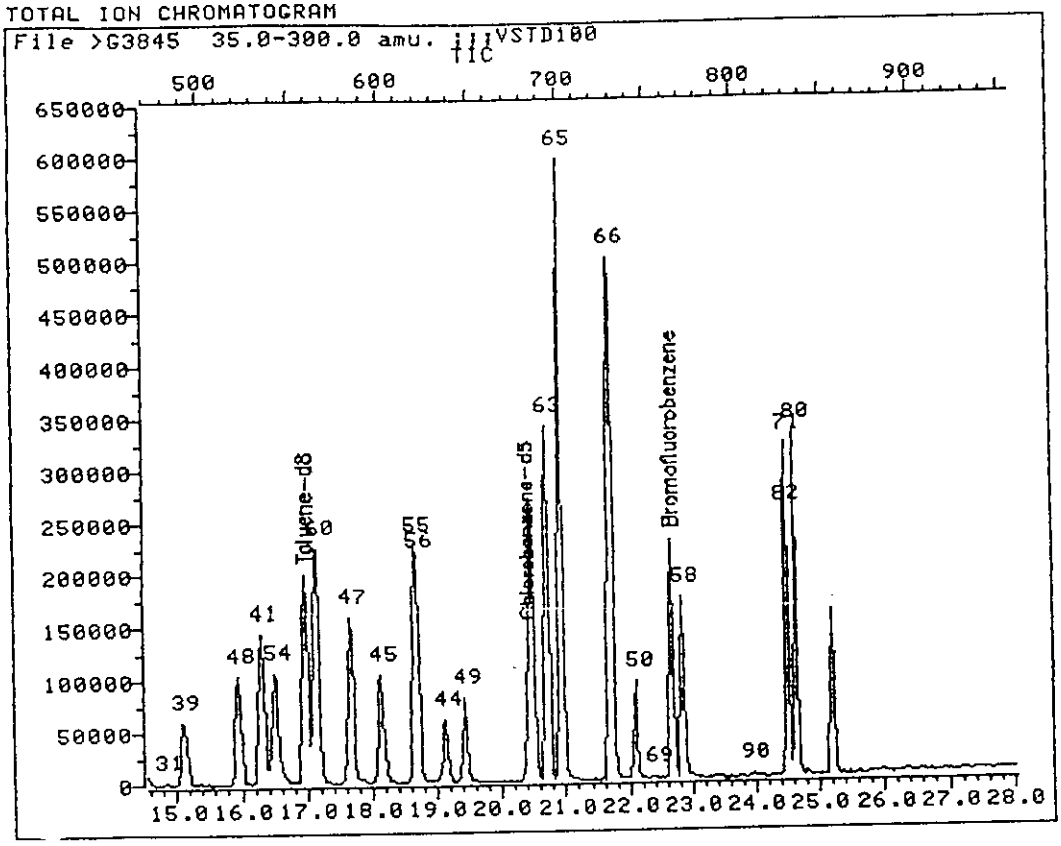
TOTAL ION CHROMATOGRAM



Data File: >G3845::G3
Name: ;;;VSTD100
Misc:

Quant Output File: ^G3845::QT

HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 02:12
Injected at: 930126 01:43

TIC page 2 of 2

QUANT REPORT

Operator ID: MSG
Output File: ^G3847::QT
Data File: >G3847::G3
Name: ;;;VSTD200
Misc:

Quant Rev: 6 Quant Time: 930126 07:50
Injected at: 930126 02:51
Dilution Factor: 1.00000

HP5995:G;;;LLS;DF1 ;G1897

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

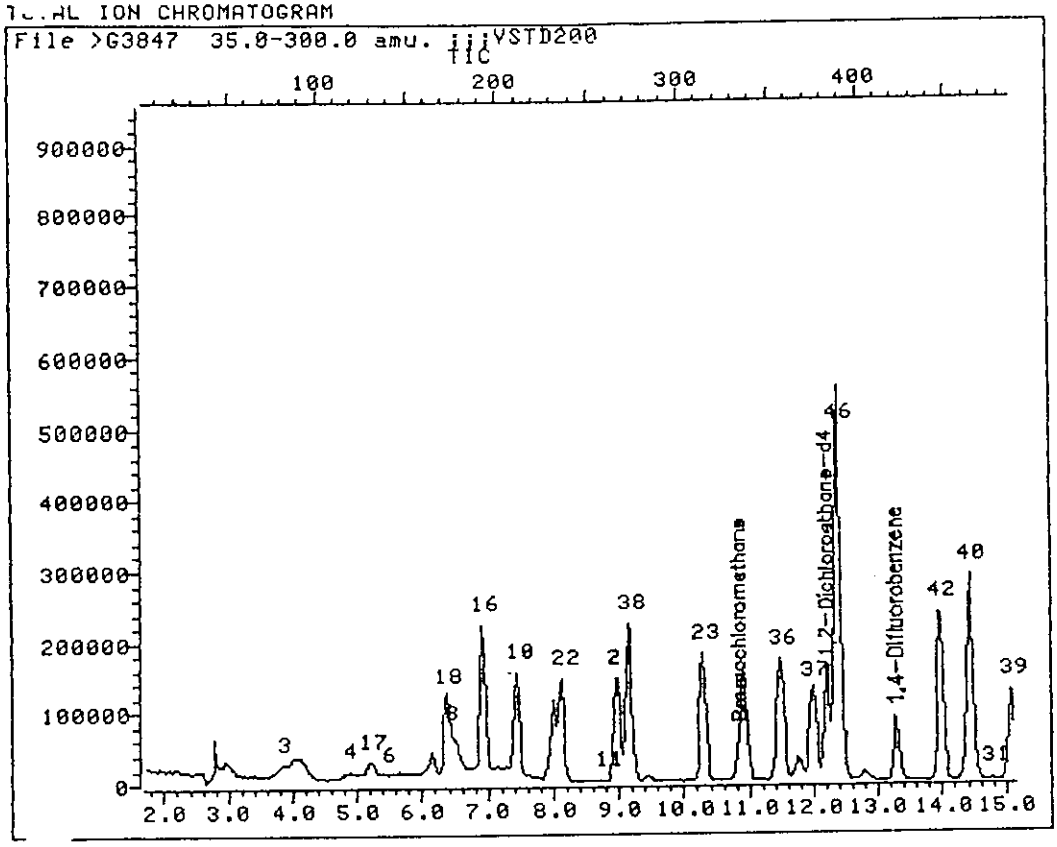
LHD 01/31/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.84	127.8	26116	50.00	ug/kg	70
3)	Chloromethane	3.87	49.8	165651	482.91	ug/kg	91
4)	Bromomethane	4.89	93.7	72071M	108.39	ug/kg	87
5)	Vinyl Chloride	4.12	61.8	195632	261.59	ug/kg	99
6)	Chloroethane	5.47	63.8	75292M	152.47	ug/kg	62
8)	1,1,2-Trichlorotrifluoroethane	6.44	101.0	96728	190.46	ug/kg	84
10)	Methylene Chloride	7.44	83.8	144914	198.63	ug/kg	86
11)	Acrolein	8.79	55.8	345	345.00	NO CALIB	74
13)	Acetone	6.52	42.8	158989	167.61	ug/kg	97
14)	Acrylonitrile	7.99	52.8	306236	1005.65	ug/kg	96
16	Carbon Disulfide	6.91	75.8	747443	315.20	ug/kg	99
17)	Trichlorofluoromethane	5.20	100.8	52304	128.42	ug/kg	93
18)	1,1-Dichloroethene	6.36	95.8	96306	143.05	ug/kg	90
19)	3-Chloro-1-Propene	7.44	40.9	11559^11559.00		NO CALIB	60
21)	1,1-Dichloroethane	8.99	62.8	534830	375.73	ug/kg	96
22)	1,2-Dichloroethene (total)t	8.13	95.8	136671	188.35	ug/kg	94
23)	1,2-Dichloroethene (total)c	10.29	95.8	148517	197.37	ug/kg	96
24)	2-Butanone	10.31	43.0	284542	301.87	ug/kg	90
28)	Chloroform	10.92	82.8	366893	249.01	ug/kg	99
29)	1,2-Dichloroethane	12.41	61.8	618004	224.89	ug/kg	98
30)	1,2-Dichloroethane-d4	12.19	64.8	391656	216.25	ug/kg	93
31)	Dibromomethane	14.79	92.9	1227	96.57	ug/kg	93
34)	*1,4-Difluorobenzene	13.27	113.8	202762	50.00	ug/kg	99
36)	1,1,1-Trichloroethane	11.47	96.8	414795	122.09	ug/kg	94
37)	Carbon Tetrachloride	11.97	116.8	302385	118.71	ug/kg	88
38)	Vinyl Acetate	9.15	42.8	1234712	256.97	ug/kg	93
39)	Bromodichloromethane	15.07	82.8	277487	118.07	ug/kg	94
40)	1,2-Dichloropropane	14.43	62.8	381678	329.00	ug/kg	93
41)	cis-1,3-Dichloropropene	16.28	74.8	499142	215.18	ug/kg	97
42)	Trichloroethene	13.96	129.8	258450	191.15	ug/kg	94
44)	Dibromochloromethane	19.14	128.7	189147	100.63	ug/kg	97
45)	1,1,2-Trichloroethane	18.12	96.8	218982	219.48	ug/kg	91
46)	Benzene	12.36	77.8	960489	263.22	ug/kg	91
47)	trans-1,3-Dichloropropene	17.67	74.8	513118	206.74	ug/kg	87
48)	2-Chloroethylvinylether	15.93	62.8	291318	361.33	ug/kg	79
49)	1,2-Dibromoethane	19.45	106.9	343906	196.52	ug/kg	94
50	Bromoform	22.10	172.6	201176	145.96	ug/kg	97
51)	Butyl Acetate	18.67	55.8	3327	3327.00	NO CALIB	59
53)	*Chlorobenzene-d5	20.41	116.8	153613	50.00	ug/kg	90
54)	4-Methyl-2-Pentanone	16.51	42.8	636393	326.07	ug/kg	90
55)	2-Hexanone	18.67	42.8	448874	260.21	ug/kg	94
56)	Tetrachloroethene	18.78	163.7	206946	134.80	ug/kg	89

	Compound	R.T.	Q ion	Area	Conc	Units	q
60)	Toluene	17.14	91.0	1109827	265.21	ug/kg	98
61)	Toluene-d8	16.95	97.8	903357	222.80	ug/kg	94
62)	Chlorobenzene	20.50	111.8	616389	212.09	ug/kg	86
63)	Ethylbenzene	20.72	105.8	325875	225.49	ug/kg	98
64)	Styrene	21.77	103.8	575715	181.48	ug/kg	84
65)	Xylene (total)mp	20.94	105.8	626337	328.72	ug/kg	92
66)	Xylene (total)o	21.71	105.8	317672	174.47	ug/kg	89
69)	Isopropylbenzene	22.40	104.8	5126	245.48	ug/kg	93
71)	1,2,3-Trichloropropane	24.67	74.8	219805	144.76	ug/kg	54
74)	4-Chlorotoluene	23.12	90.8	1161	1161.00	NO CALIB	70
80)	1,3-Dichlorobenzene	24.53	145.8	478304	146.41	ug/kg	85
81)	1,4-Dichlorobenzene	24.67	145.8	469371	146.87	ug/kg	84
82)	1,2-Dichlorobenzene	24.53	145.8	478304	146.41	ug/kg	85
90)	Pentachloroethane	23.98	167.0	2609	2609.00	NO CALIB	75
91)	Bromofluorobenzene	22.71	94.8	431861	169.29	ug/kg	80

* Compound is ISTD

TOTAL ION CHROMATOGRAM

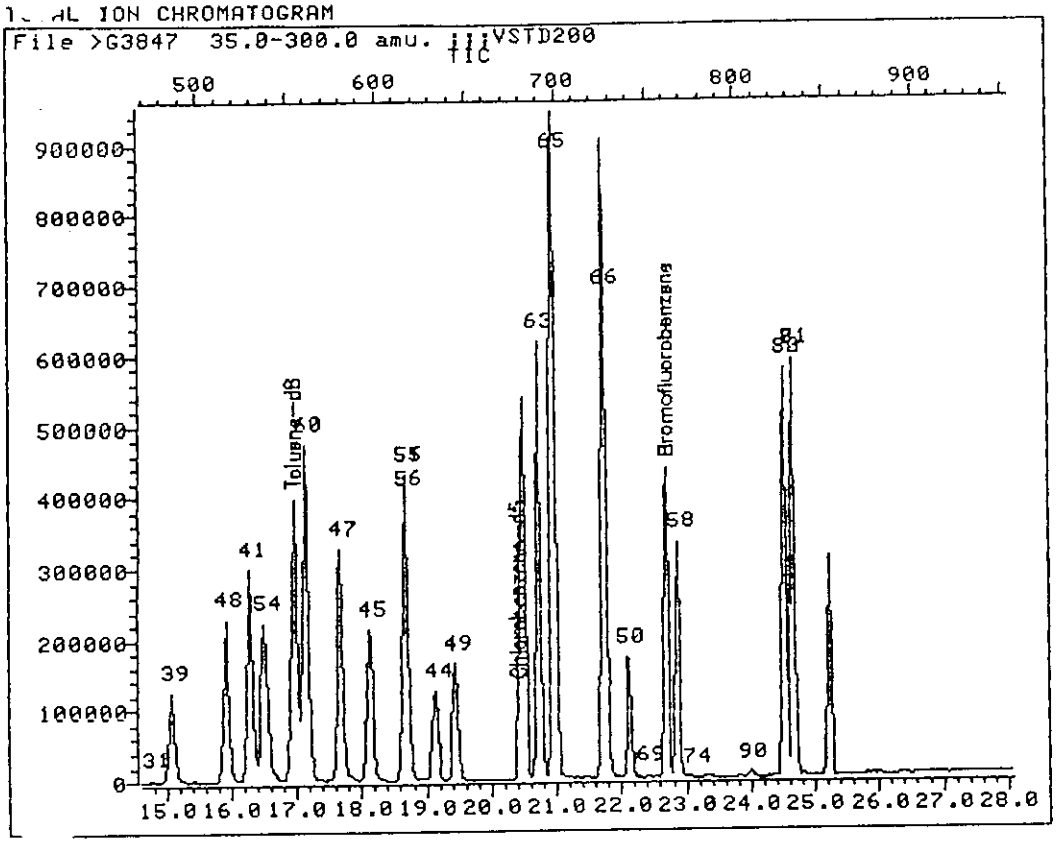


Data File: >G3847::G3 Quant Output File: ^G3847::QT
Name: ;;;VSTD200
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 07:50
Injected at: 930126 02:51

TIC page 1 of 2



Data File: >G3847::G3 Quant Output File: ^G3847::QT
Name: ;;;VSTD200
Misc: HP5995:G;;;LLS;DF1 ;G1897

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 07:50
Injected at: 930126 02:51

TIC page 2 of 2

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Instrument ID: HP5995G Calibration Date: 01/26/93 Time: 0933

Lab File ID: G3849.D Init. Calibration Date(s): 01/25/93 01/26/93

Heated Purge: (Y/N) Y Init. Calibration Times: 2353 -- 0251

GC Column:007-624 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.828	1.152		37.0	
Bromomethane	0.951	1.040	0.100	-9.4	25.0
Vinyl Chloride	1.818	1.582	0.100	13.0	25.0
Chloroethane	0.920	1.055		-14.6	
Methylene Chloride	1.921	1.772		7.8	
Acetone	2.499	2.252		9.9	
Carbon Disulfide	7.412	7.373		0.5	
1,1-Dichloroethene	1.089	1.174	0.100	-7.8	25.0
1,1-Dichloroethane	4.683	4.386	0.200	6.4	25.0
1,2-Dichloroethene (total)	1.326	1.310		1.2	
Chloroform	3.683	3.670	0.200	0.3	25.0
1,2-Dichloroethane	5.810	6.070	0.100	-4.5	25.0
2-Butanone	3.093	3.132		-1.3	
1,1,1-Trichloroethane	0.514	0.536	0.100	-4.1	25.0
Carbon Tetrachloride	0.350	0.386	0.100	-10.1	25.0
Bromodichloromethane	0.310	0.337	0.200	-8.6	25.0
1,2-Dichloropropane	0.432	0.425		1.7	
cis-1,3-Dichloropropene	0.361	0.382	0.200	-5.8	25.0
Trichloroethene	0.319	0.324	0.300	-1.6	25.0
Dibromochloromethane	0.212	0.234	0.100	-10.6	25.0
1,1,2-Trichloroethane	0.265	0.291	0.100	-9.7	25.0
Benzene	1.237	1.276	0.500	-3.2	25.0
trans-1,3-Dichloropropene	1.402	1.536	0.100	-9.6	25.0
Bromoform	0.240	0.272	0.100	-13.6	25.0
4-Methyl-2-Pentanone	0.988	1.027		-3.9	
2-Hexanone	0.763	0.807		-5.8	
Tetrachloroethene	0.354	0.362	0.200	-2.1	25.0
1,1,2,2-Tetrachloroethane	0.708	0.790	0.500	-11.6	25.0
Toluene	1.693	1.935	0.400	-14.3	25.0
Chlorobenzene	1.006	1.047	0.500	-4.0	25.0
Ethylbenzene	0.549	0.547	0.100	0.3	25.0
Styrene	1.058	1.099	0.300	-3.9	25.0
Xylene (total)	0.590	0.638	0.300	-8.2	25.0
Toluene-d8	1.359	1.386		-1.9	
Bromofluorobenzene	0.707	0.694	0.200	1.9	25.0
1,2-Dichloroethane-d4	3.276	3.496		-6.7	

All other compounds must meet a minimum RRF of 0.010.

QUANT REPORT

Operator ID: MSG
Output File: ^G3849::QT
Data File: >G3849::G3
Name: ;;;VSTD050
Misc:

Quant Rev: 6 Quant Time: 930126 10:02
Injected at: 930126 09:33
Dilution Factor: 1.00000

HP5995:G;;;LLS;DF1 ;G1900

MH 1/26/93

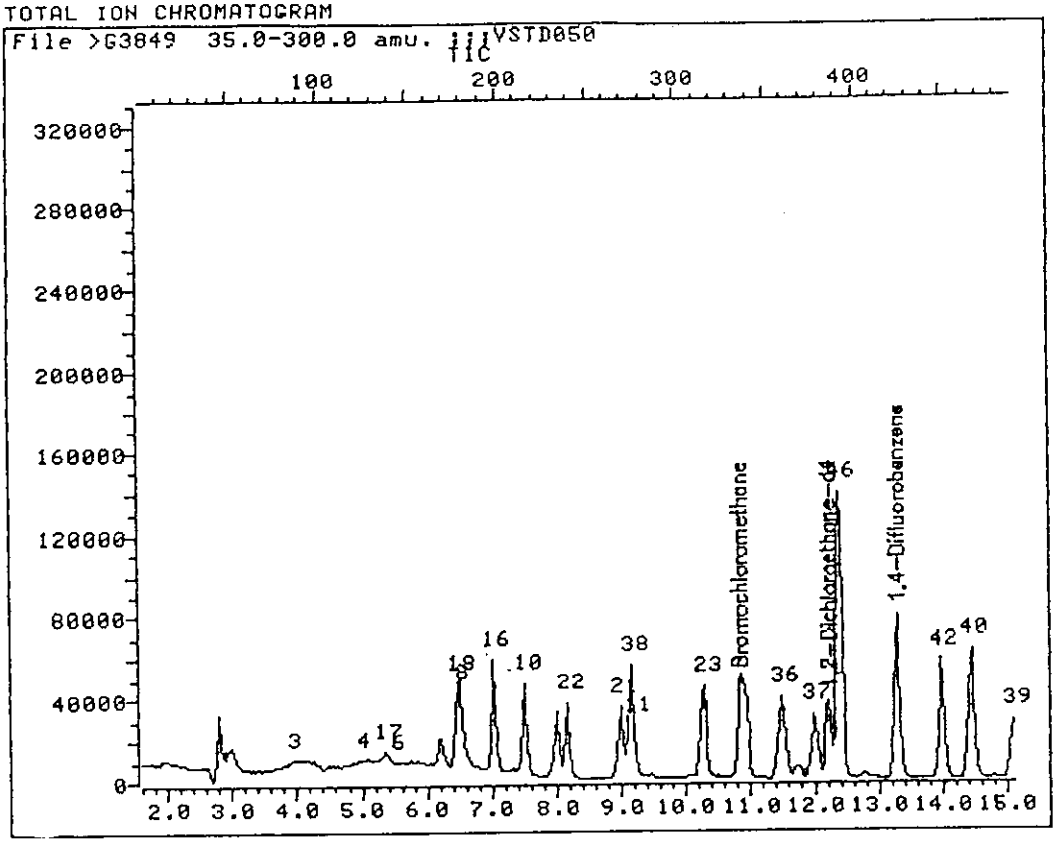
ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.84	127.8	25974	50.00	ug/kg	78
3)	Chloromethane	3.93	49.8	29922	87.71	ug/kg	97
4)	Bromomethane	5.00	93.7	27024M	40.87	ug/kg	73
5)	Vinyl Chloride	4.17	61.8	41094	55.25	ug/kg	97
6)	Chloroethane	5.53	63.8	27397M	55.78	ug/kg	63
8)	1,1,2-Trichlorotrifluoroethane	6.52	101.0	45902	90.88	ug/kg	91
10)	Methylene Chloride	7.49	83.8	46033	63.44	ug/kg	93
11)	Acrolein	9.21	55.8	56	56.00	NO CALIB	1
13)	Acetone	6.52	42.8	58496	62.00	ug/kg	98
14)	Acrylonitrile	7.99	52.8	82350	271.91	ug/kg	96
16	Carbon Disulfide	7.02	75.8	191503	81.20	ug/kg	99
17)	Trichlorofluoromethane	5.34	100.8	16723	41.28	ug/kg	96
18)	1,1-Dichloroethene	6.47	95.8	30483	45.53	ug/kg	89
21)	1,1-Dichloroethane	8.98	62.8	113914	80.46	ug/kg	98
22)	1,2-Dichloroethene (total)t	8.16	95.8	34504	47.81	ug/kg	96
23)	1,2-Dichloroethene (total)c	10.28	95.8	33555	44.84	ug/kg	96
24)	2-Butanone	10.26	43.0	81361	86.79	ug/kg	91
28)	Chloroform	10.92	82.8	95337	65.06	ug/kg	98
29)	1,2-Dichloroethane	12.41	61.8	157671	57.69	ug/kg	94
30)	1,2-Dichloroethane-d4	12.22	64.8	90815	50.42	ug/kg	92
34)	*1,4-Difluorobenzene	13.30	113.8	181237	50.00	ug/kg	99
36)	1,1,1-Trichloroethane	11.50	96.8	97054	31.96	ug/kg	94
37)	Carbon Tetrachloride	12.00	116.8	69873	30.69	ug/kg	93
38)	Vinyl Acetate	9.15	42.8	284243	66.18	ug/kg	94
39)	Bromodichloromethane	15.09	82.8	61019	29.05	ug/kg	93
40)	1,2-Dichloropropane	14.46	62.8	76980	74.24	ug/kg	89
41)	cis-1,3-Dichloropropene	16.28	74.8	106570	51.40	ug/kg	98
42)	Trichloroethene	13.99	129.8	58765	48.62	ug/kg	95
44)	Dibromochloromethane	19.14	128.7	42444	25.26	ug/kg	96
45)	1,1,2-Trichloroethane	18.14	96.8	52740	59.14	ug/kg	94
46)	Benzene	12.38	77.8	231336	70.93	ug/kg	90
47)	trans-1,3-Dichloropropene	17.66	74.8	116952	52.72	ug/kg	93
48)	2-Chloroethylvinylether	15.92	62.8	61154	84.86	ug/kg	85
49)	1,2-Dibromoethane	19.44	106.9	78369	50.10	ug/kg	94
50)	Bromoform	22.10	172.6	49347	40.06	ug/kg	97
53	*Chlorobenzene-d5	20.41	116.8	143140	50.00	ug/kg	88
54	4-Methyl-2-Pentanone	16.50	42.8	146981	80.82	ug/kg	94
55)	2-Hexanone	18.67	42.8	115480	71.84	ug/kg	95
56)	Tetrachloroethene	18.70	163.7	51789	36.14	ug/kg	92
58)	1,1,2,2-Tetrachloroethane	22.84	82.8	113113	77.71	ug/kg	86
60)	Toluene	17.14	91.0	276979	71.03	ug/kg	95
				198322	52.51	ug/kg	94

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.71	105.8	78321	58.16	ug/kg	97
64)	Styrene	21.74	103.8	157379	53.24	ug/kg	89
65)	Xylene (total)mp	20.93	105.8	184394	103.85	ug/kg	94
66)	Xylene (total)o	21.71	105.8	91362	53.85	ug/kg	91
71)	1,2,3-Trichloropropane	24.61	74.8	55792	39.43	ug/kg	53
80)	1,3-Dichlorobenzene	24.61	145.8	131259	43.12	ug/kg	97
82)	1,2-Dichlorobenzene	24.47	145.8	140231	46.07	ug/kg	94
91)	Bromofluorobenzene	22.68	94.8	99286	41.77	ug/kg	83

* Compound is ISTD

TOTAL ION CHROMATOGRAM



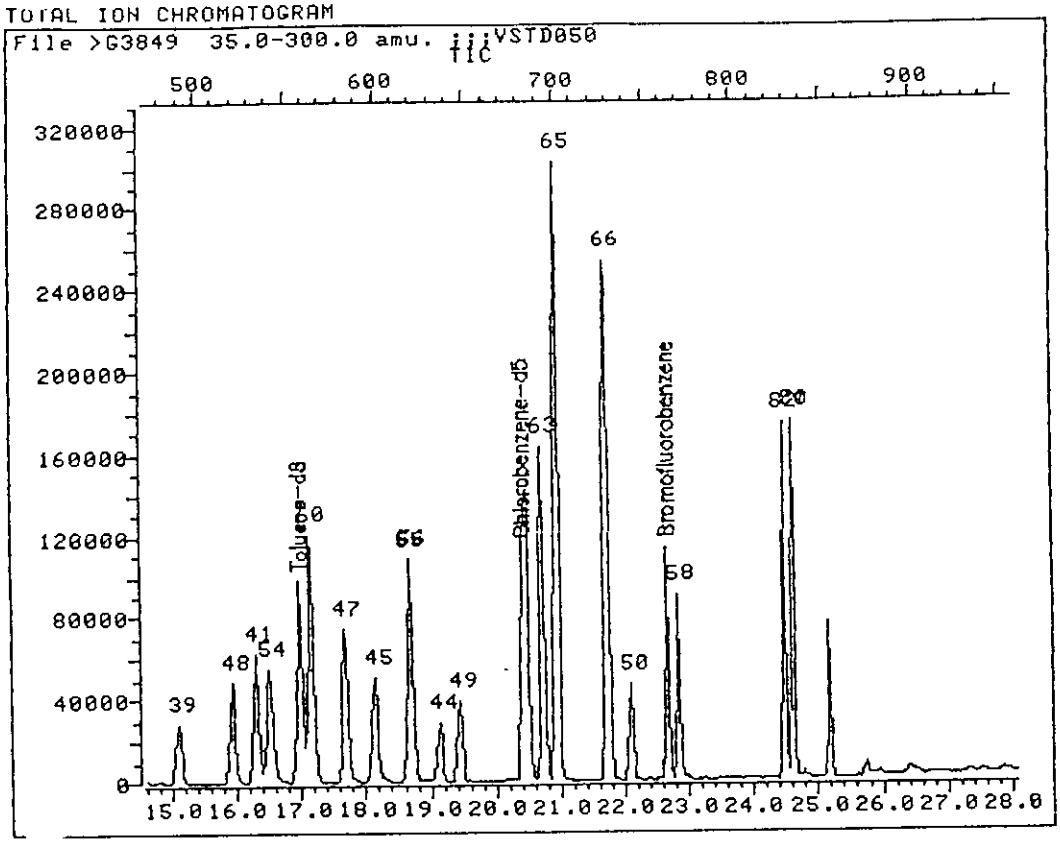
Data File: >G3849::G3 Quant Output File: ^G3849::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

Operator ID: MSG
Quant Time: 930126 10:02
Injected at: 930126 09:33

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >G3849::G3 Quant Output File: ^G3849::QT
Name: ;;;VSTD050
Misc: HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 921228 11:24

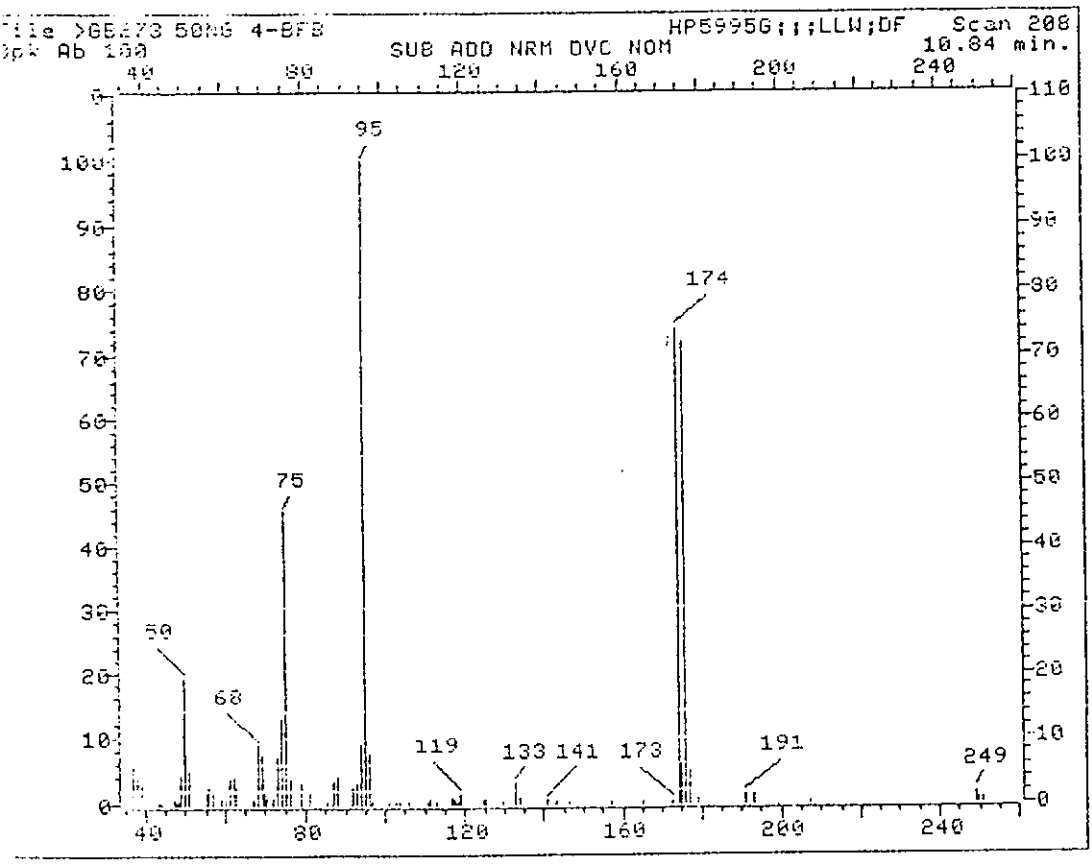
Operator ID: MSG
Quant Time: 930126 10:02
Injected at: 930126 09:33

TIC page 2 of 2

MS data file header from : >GB273

Sample: 50NG 4-BFB Operator: MSG MS 1/25/93 23:02
Misc : HP5995G;;;LLW;DF1 ;G1899
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.: 224 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 : >GB273

Sample: 50NG 4-BFB Operator: MSD MS 1/29/93 23:02
Misc : HP5995G;;;LLW;DF1 ;G1899
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.: 224 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

>GB273 50NG 4-BFB HP5995G;;;LLW;DF1 ;G1899

208 SUB ADD NRM DVC NOM

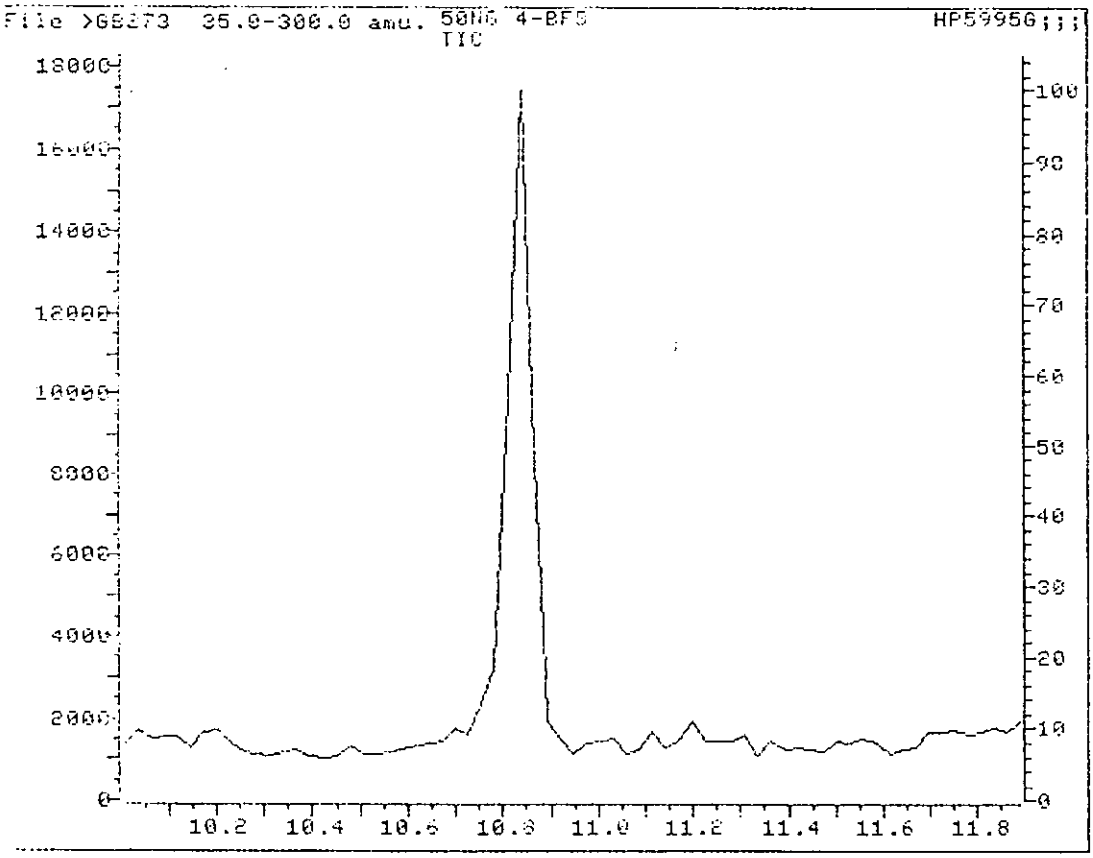
File: >GB273 Scan #: 208 Retn. time: 10.84

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	.718	62.95	2.461	94.05	9.140	129.75	.527	249.85	.586
36.95	5.595	67.25	.703	95.05	100.000	132.90	3.222	250.85	.615
37.95	4.497	67.95	9.096	96.05	7.690	133.70	.996	265.10	2.007
39.05	2.622	69.05	7.412	96.75	.322	140.90	.644	266.20	.366
43.10	.498	69.95	1.567	100.85	.469	142.80	.352	268.50	.674
44.00	.176	70.05	.879	102.80	.527	146.20	.234	270.20	.308
47.00	.703	71.70	.879	103.70	.410	157.15	.220	275.05	.644
47.90	.293	73.00	7.163	106.10	.278	164.90	.234	281.05	24.139
48.10	.352	74.00	12.993	110.80	.278	172.70	.410	282.05	6.416
48.90	4.438	75.00	45.569	111.10	.644	174.00	73.927	283.05	4.219
50.00	19.320	76.00	3.852	113.10	.395	174.90	5.962	284.15	1.348
51.00	5.185	78.90	2.959	116.85	1.011	176.00	71.876	285.55	.498
55.05	1.904	80.80	2.153	116.95	.644	176.90	4.980	285.75	.527
55.95	2.270	85.20	.278	117.95	.234	178.95	.732	292.00	.586
56.95	1.772	86.95	3.413	118.25	.220	191.05	1.406	294.00	.527
58.85	.732	87.95	4.160	118.95	1.523	192.95	1.230	294.80	.762
59.95	.615	91.95	2.432	124.85	.703	207.00	.454	295.90	.249
60.95	3.662	93.05	2.988	125.25	.732	248.95	1.846	296.60	.615
61.95	4.087								

MS data file header from : >GB273

Sample: 50NG 4-BFB Operator: MSG MS 1/29/93 23:02
Misc : HP5995G;;;LLW;DF1 ;G1899
Sys. #: 2 MS model: 96 SW/HW rev.: IA ALS # : 0
Method file: M_G8CP Tuning file: T_G No. of extra records: 2
Source temp.: 224 Analyzer temp.: 240 Transfer line temp. : 185

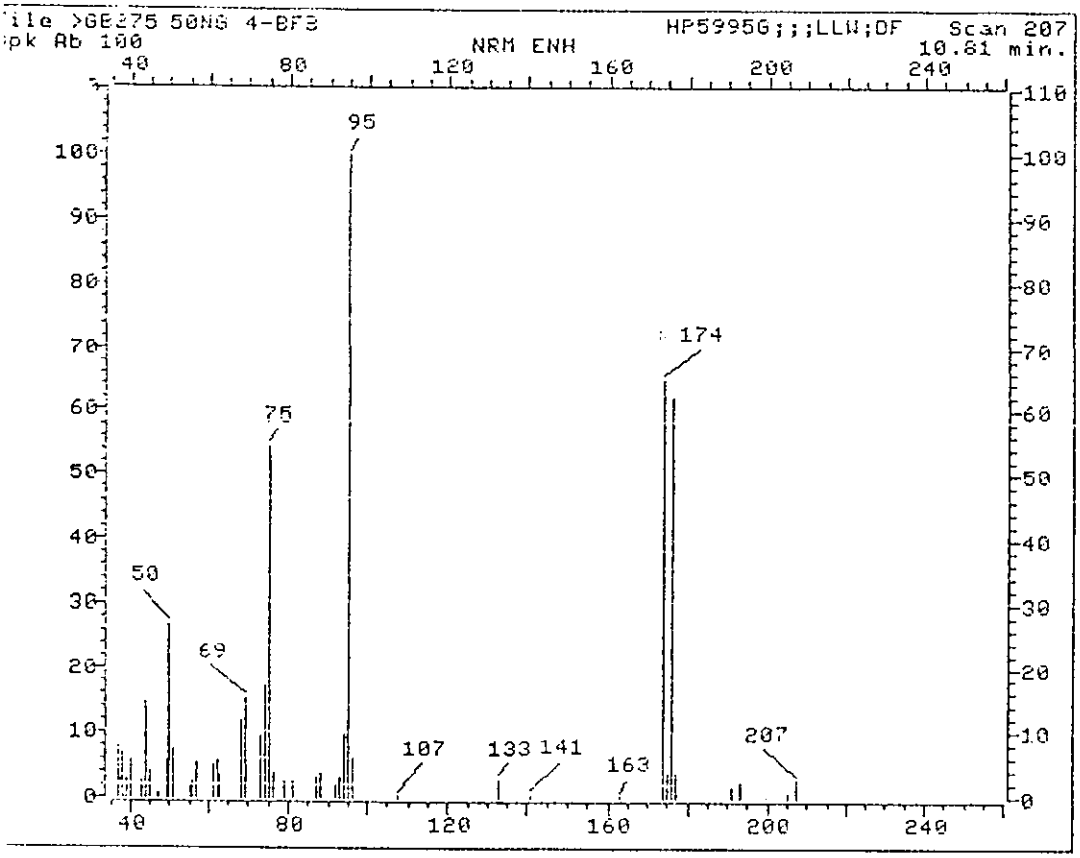
Chromatographic temperatures :	50.	180.	0.	0.	0.
Chromatographic times, min. :	1.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	12.0	0.0	0.0	0.0	0.0



MS data file header from : >GB275

Sample: 50NG 4-BFB Operator: MSS MS 1/26/93 8:59
Misc : HP5995G;;;LLW;DF1 ;G1900
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.: 224 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 : >GB275

Sample: 50NG 4-BFB Operator: MSG MS 1/26/93 8:59
Misc : HP5995G;;;LLW;DF1 ;G1900
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.: 224 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

>GB275 50NG 4-BFB HP5995G;;;LLW;DF1 ;G1900

207 NRM ENH

File: >GB275 Scan #: 207 Retn. time: 10.81

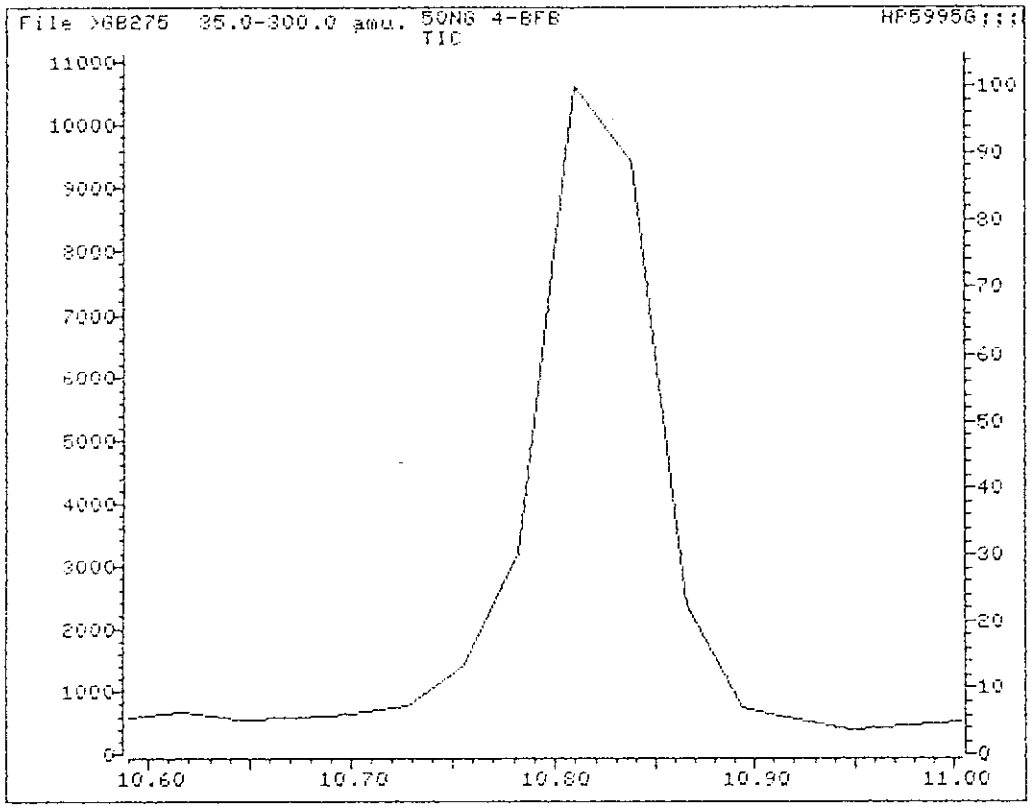
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	7.648	57.05	5.278	86.95	3.138	175.00	3.658	284.05	.478
38.05	6.899	60.95	4.988	87.95	3.803	175.90	62.240	284.95	.707
38.95	2.743	61.95	5.632	91.95	2.203	176.90	3.658	291.00	.374
39.90	5.736	62.95	3.554	93.05	2.930	191.05	1.725	292.00	.810
43.00	2.411	67.95	11.825	94.05	9.913	192.95	2.286	293.40	.831
43.90	14.568	69.05	15.150	95.05	100.000	205.10	.561	293.80	.416
45.00	4.115	73.00	9.497	96.05	6.234	207.10	2.722	294.00	1.247
47.10	.582	74.00	17.124	107.50	.333	265.00	2.348	295.80	.769
49.00	5.756	75.00	54.530	133.00	2.889	267.10	.436	296.80	.914
49.90	26.600	76.00	3.845	140.80	.457	281.05	24.169	297.10	.395
51.00	7.440	78.90	2.328	162.75	.312	282.05	6.941	298.90	.852
55.05	1.746	80.90	2.224	173.90	64.900	283.05	4.115	299.40	.831
55.95	2.244								

MS data file header from : >GB275

Sample: 50NG 4-BFB Operator: MSG MS 1/26/93 8:59
Misc : HP5995G;;;LLW;DF1 ;G1900
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.: 224 Analyzer temp.: 240 Transfer line temp. : 185

0132

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



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKG2

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: VBLKG2 0133

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3850.D

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

% Moisture: not dec. 0 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	J
67-64-1	Acetone	10	
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~~ LHD 01/31/93
71-55-6	1,1,1-Trichloroethane	~~10~~ 0.6	~~U~~ 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	2	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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKG2

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060**0134**

Matrix: (soil/water) SOIL Lab Sample ID: VBLKG2

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3850.D

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

% Moisture: not dec. 0 Data Analyzed: 01/26/93

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/KG

Number TICs found: 0

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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
Output File: ^G3850::QT
Data File: >G3850::G3
Name: ;;;VBLKG2
Misc:

Quant Rev: 6 Quant Time: 930126 10:56
Injected at: 930126 10:27
Dilution Factor: 1.00000

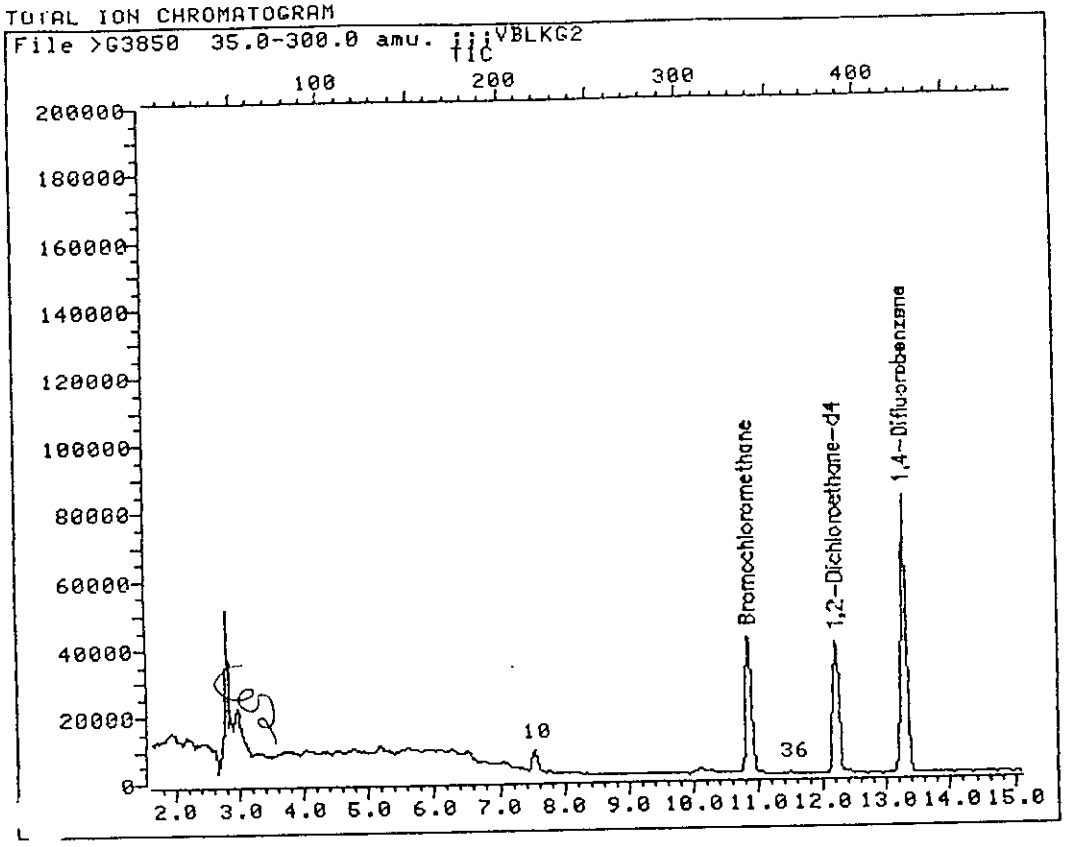
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.84	127.8	24084	50.00	ug/kg	79
10)	Methylene Chloride	7.52	83.8	7040	8.25	ug/kg	96
13)	Acetone	6.55	42.8	11489	10.59	ug/kg	96
~~24)~~	~~2-Butanone~~	~~10.29~~	~~43.8~~	~~3476~~	~~2.30~~	~~ug/kg~~	~~95~~
~~28)~~	~~Chloroform~~	~~10.92~~	~~82.8~~	~~1501^~~	~~.85~~	~~ug/kg~~	~~42~~
30)	1,2-Dichloroethane-d4	12.19	64.8	92902	55.16	ug/kg	91
34)	*1,4-Difluorobenzene	13.27	113.8	193377	50.00	ug/kg	99
~~36)~~	~~1,1,1-Trichloroethane~~	~~11.50~~	~~96.8~~	~~1341~~	~~.65~~	~~ug/kg~~	~~89~~
53)	*Chlorobenzene-d5	20.45	116.8	151932	50.00	ug/kg	83
~~55)~~	~~2-Hexanone~~	~~18.60~~	~~42.8~~	~~1573~~	~~.64~~	~~ug/kg~~	~~98~~
60	Toluene	17.14	91.0	13467	2.29	ug/kg	91
61)	Toluene-d8	16.97	97.8	213292	50.65	ug/kg	94
~~62)~~	~~Chlorobenzene~~	~~20.50~~	~~111.8~~	~~1126^~~	~~.35~~	~~ug/kg~~	~~60~~
~~64)~~	~~Styrene~~	~~21.75~~	~~103.8~~	~~1109~~	~~.33~~	~~ug/kg~~	~~81~~
80)	1,3-Dichlorobenzene	24.65	145.8	1501	.54	ug/kg	89
82)	1,2-Dichlorobenzene	24.65	145.8	1501	.50	ug/kg	89
91)	Bromofluorobenzene	22.72	94.8	105219	49.92	ug/kg	79

* Compound is ISTD

MH 1/26/93

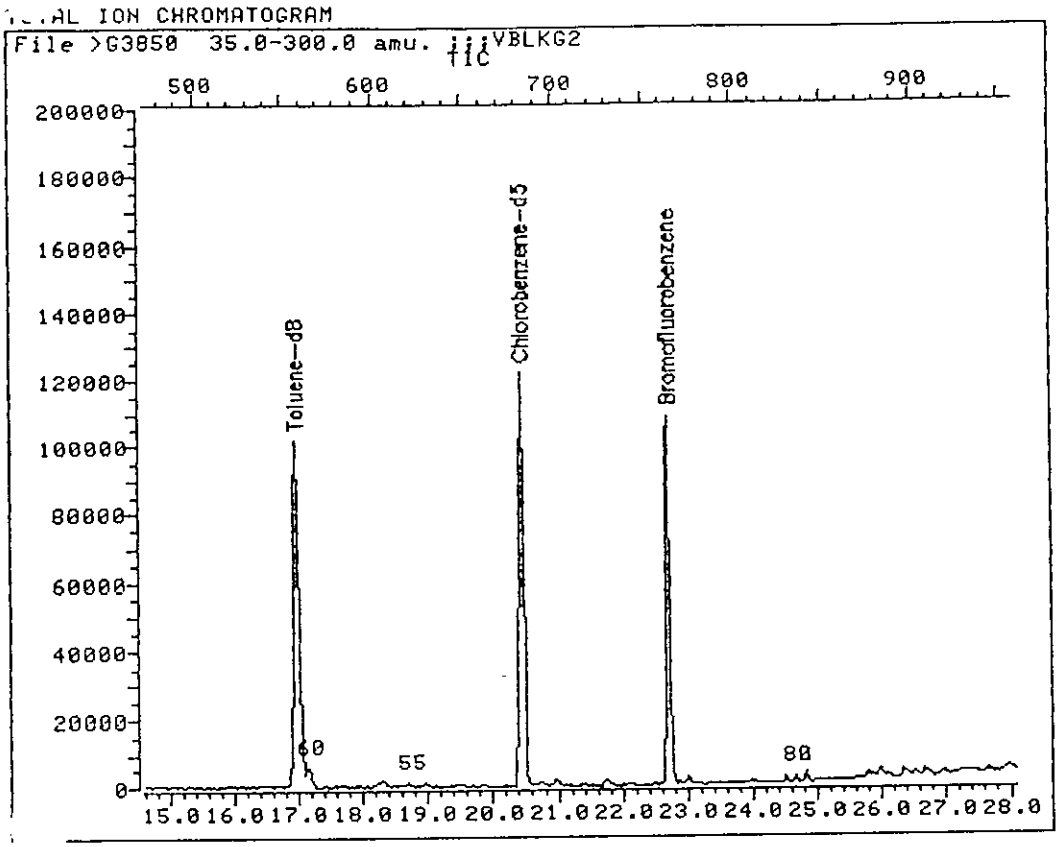


Data File: >G3850::G3 Quant Output File: ^G3850::QT
Name: ;;;VBLKG2
Misc: HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSG
Quant Time: 930126 10:56
Injected at: 930126 10:27

TIC page 1 of 2



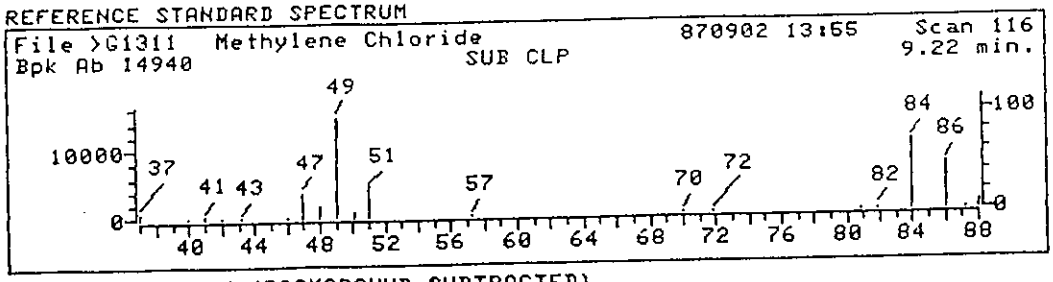
Data File: >G3850::G3 Quant Output File: ^G3850::QT
Name: ;;;VBLKG2
Misc: HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

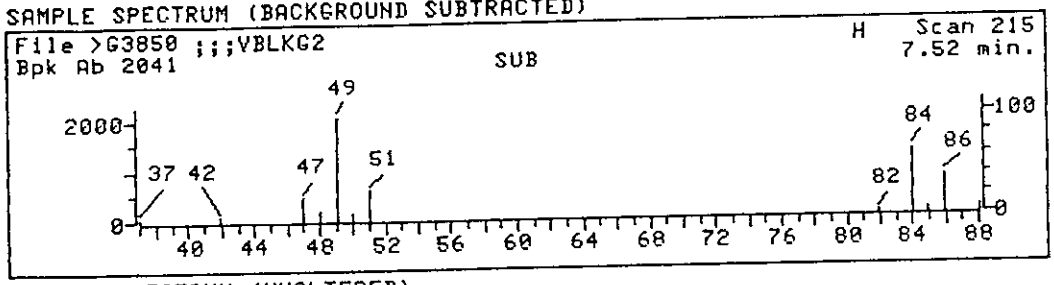
Operator ID: MSG
Quant Time: 930126 10:56
Injected at: 930126 10:27

TIC page 2 of 2

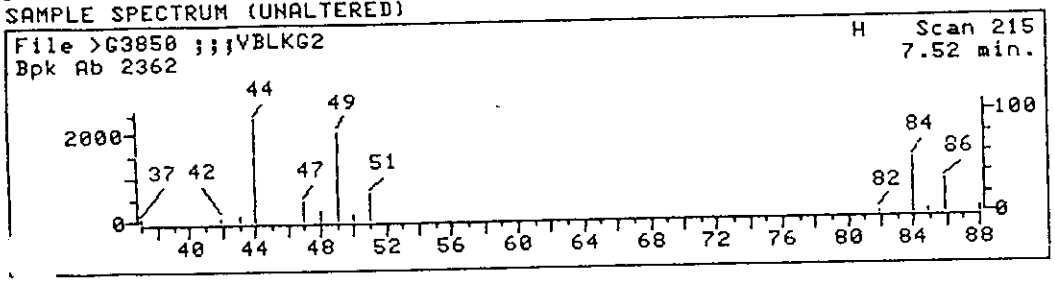
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



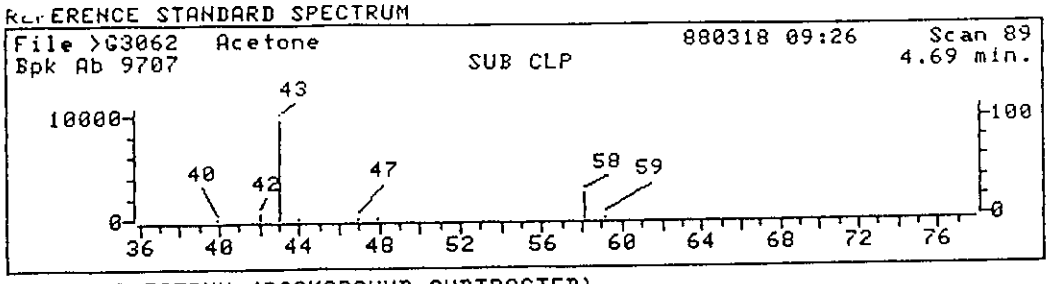
Data File: >G3850::G3
Name: ;;;VBLKG2
Misc:
Quant Time: 930126 10:56
Injected at: 930126 10:27

Quant Output File: ^G3850::QT

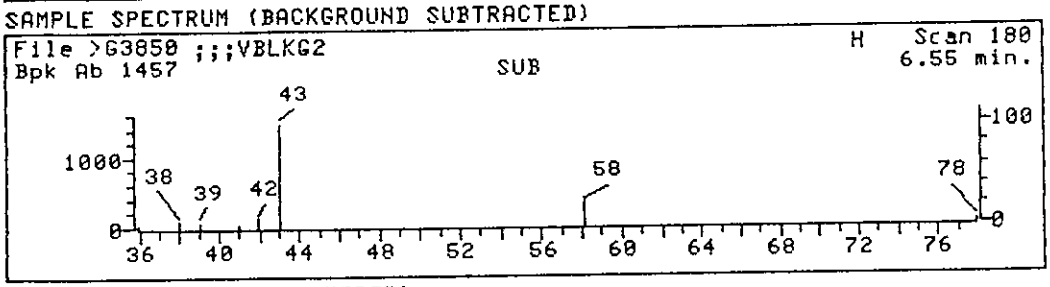
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 10
Compound Name: Methylene Chloride
Scan Number: 215
Retention Time: 7.52 min.
Quant Ion: 83.8
Area: 7040
Concentration: 8.25 ug/kg
q-value: 96

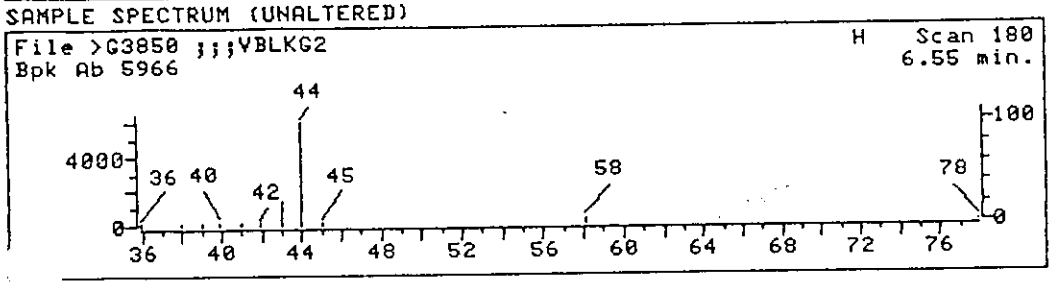
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



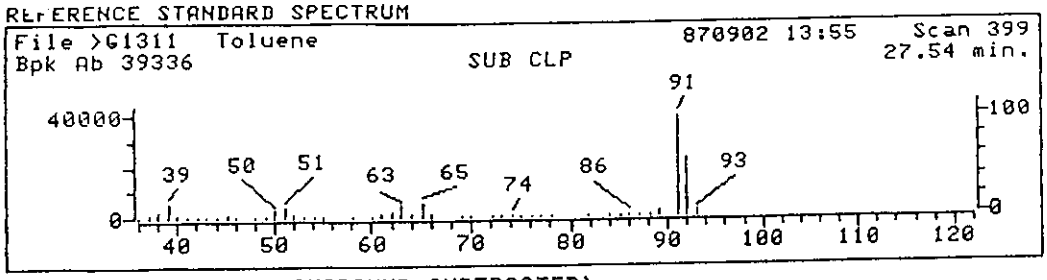
Data File: >G3850::G3
Name: ;;;VBLKG2
Misc:
Quant Time: 930126 10:56
Injected at: 930126 10:27

Quant Output File: ^G3850::QT

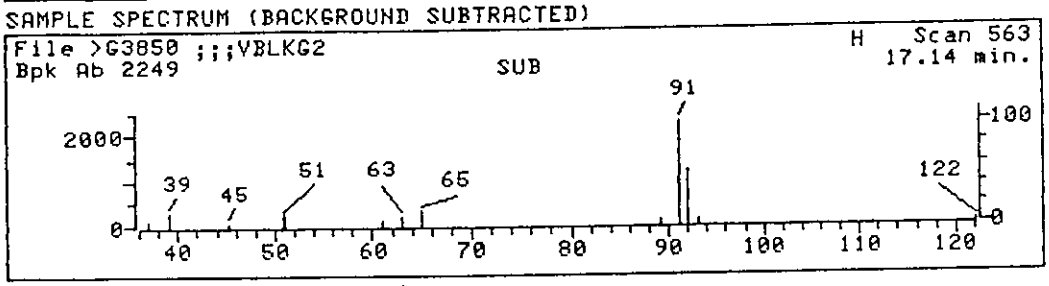
HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 13
Compound Name: Acetone
Scan Number: 180
Retention Time: 6.55 min.
Quant Ion: 42.8
Area: 11489
Concentration: 10.59 ug/kg
q-value: 96

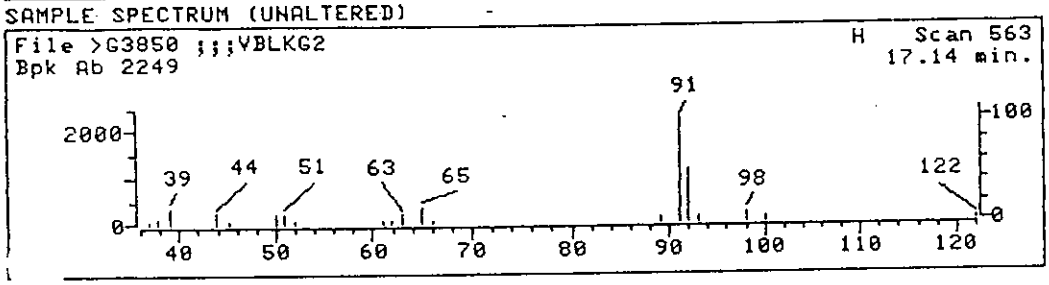
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >G3850::G3
Name: ;;;VBLKG2
Misc:
Quant Time: 930126 10:56
Injected at: 930126 10:27

Quant Output File: ^G3850::QT

HP5995:G;;;LLS;DF1 ;G1900
Quant ID File: I_IFGS::N1
Last Calibration: 930126 10:13

Compound No: 60
Compound Name: Toluene
Scan Number: 563
Retention Time: 17.14 min.
Quant Ion: 91.0
Area: 13467
Concentration: 2.29 ug/kg
q-value: 91

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MSBS-100

0141

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002MSB

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3857.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 0 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	JB
67-64-1	Acetone	// ~~10~~	~~B~~ U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	80	
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 ~~JB~~
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	54	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	52	
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	43	B
108-90-7	Chlorobenzene	47	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

PAS 2/09/93

LHP 01/31/93

QUANT REPORT

Operator ID: MSC
Output File: ^G3857::QT
Data File: >G3857::G3
Name: 0060;;;MSB S-100
Misc: 0060002MSB

Quant Rev: 6 Quant Time: 930126 15:19
Injected at: 930126 14:50
Dilution Factor: 1.00000

HP5995:G;;;LLS;DF1 ;G1900

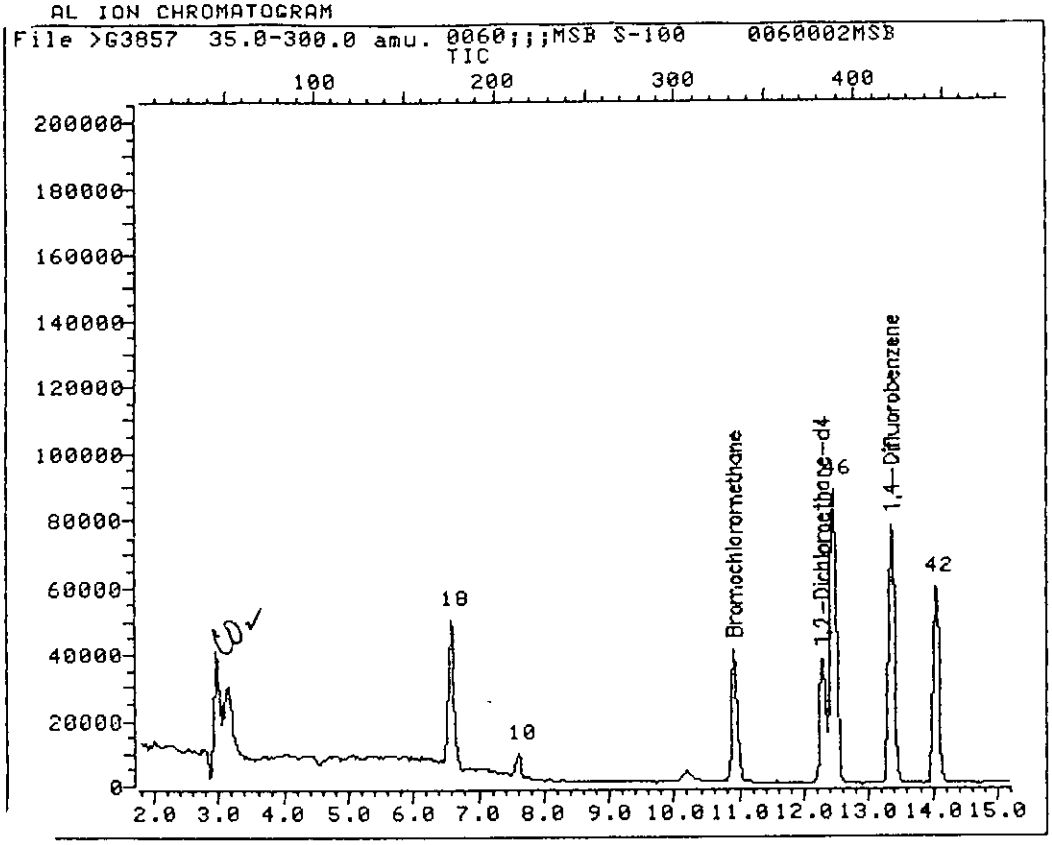
ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.92	127.8	23182	50.00	ug/kg	76
10)	Methylene Chloride	7.60	83.8	7135	8.68	ug/kg	85
17)	Acetone	6.63	42.8	11130	10.66	ug/kg	91
18)	1,1-Dichloroethene	6.58	95.8	43553	80.04	ug/kg	87
24)	2-Butanone	10.37	43.0	4276	2.94	ug/kg	87
30)	1,2-Dichloroethane-d4	12.27	64.8	89545	55.24	ug/kg	89
34)	*1,4-Difluorobenzene	13.35	113.8	182308	50.00	ug/kg	96
42)	Trichloroethene	14.04	129.8	64436	54.50	ug/kg	95
46)	Benzene	12.47	77.8	240800	51.74	ug/kg	94
53)	*Chlorobenzene-d5	20.51	116.8	142171	50.00	ug/kg	84
60)	Toluene	17.19	91.0	238330	43.32	ug/kg	95
6.	Toluene-d8	17.03	97.8	197756	50.18	ug/kg	95
62)	Chlorobenzene	20.57	111.8	139631	46.92	ug/kg	92
91)	Bromofluorobenzene	22.80	94.8	103771	52.61	ug/kg	78

* Compound is ISTD

KM2 1/28/93

AL ION CHROMATOGRAM

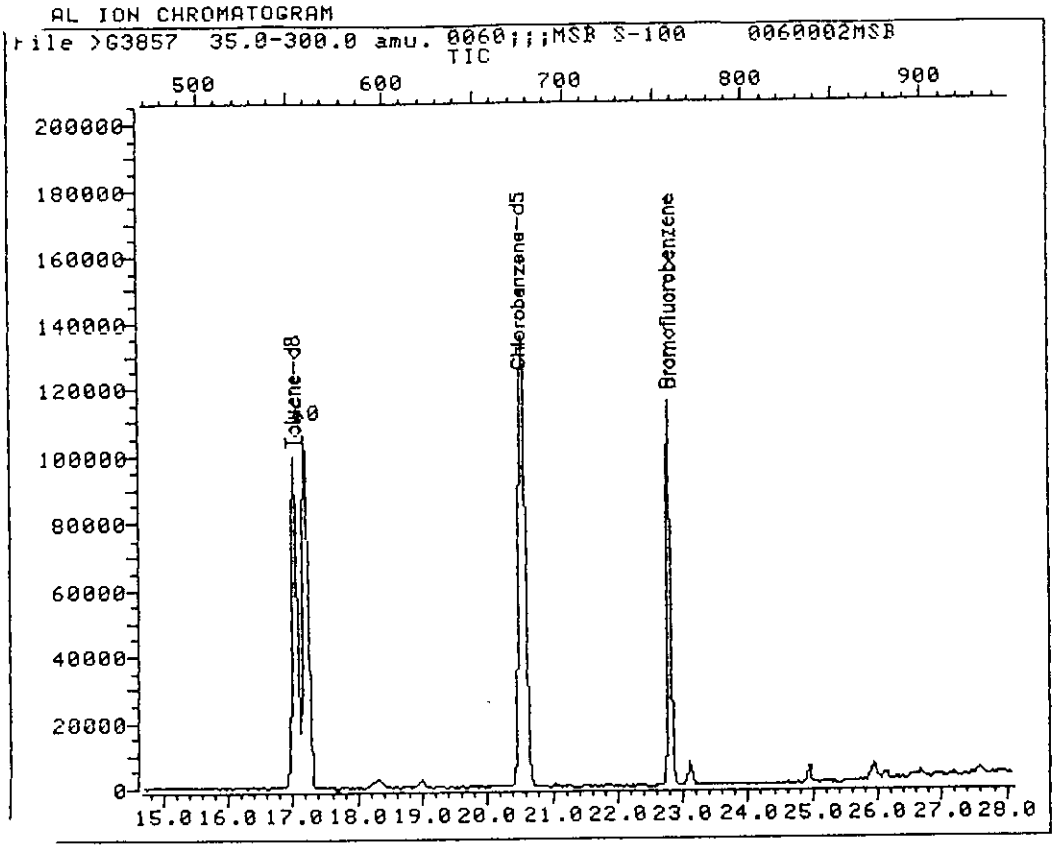


Data File: >G3857::G3 Quant Output File: ^G3857::QT
Name: 0060;;;MSB S-100
Misc: 0060002MSB HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 15:19
Injected at: 930126 14:50

TIC page 1 of 2



Data File: >G3857::G3 Quant Output File: ^G3857::QT
Name: 0060;;;MSB S-100
Misc: 0060002MSB HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 15:19
Injected at: 930126 14:50

TIC page 2 of 2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-100MS

0145

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002MS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3855.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 11 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	9	JB
75-15-0	Carbon Disulfide	11	U
75-35-4	1,1-Dichloroethene	96	
75-34-3	1,1-Dichloroethane	11	U
540-59-0	1,2-Dichloroethene (total)	11	U
67-66-3	Chloroform	11	U
107-06-2	1,2-Dichloroethane	11	U
78-93-3	2-Butanone	4	JB
71-55-6	1,1,1-Trichloroethane	1	JB
56-23-5	Carbon Tetrachloride	11	U
75-27-4	Bromodichloromethane	11	U
78-87-5	1,2-Dichloropropane	11	U
10061-01-5	cis-1,3-Dichloropropene	11	U
79-01-6	Trichloroethene	56	
124-48-1	Dibromochloromethane	11	U
79-00-5	1,1,2-Trichloroethane	11	U
71-43-2	Benzene	55	
10061-02-6	trans-1,3-Dichloropropene	11	U
75-25-2	Bromoform	11	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	11	U
79-34-5	1,1,2,2-Tetrachloroethane	11	U
108-88-3	Toluene	49	
108-90-7	Chlorobenzene	51	
100-41-4	Ethylbenzene	11	U
100-42-5	Styrene	11	U
1330-20-7	Xylene (total)	11	U

QUANT REPORT

Operator ID: MSC
Output File: ^G3855::QT
Data File: >G3855::G3
Name: 0060;;;S-100MS
Misc: 0060002MS

Quant Rev: 6 Quant Time: 930126 14:13
Injected at: 930126 13:41
Dilution Factor: 1.12000

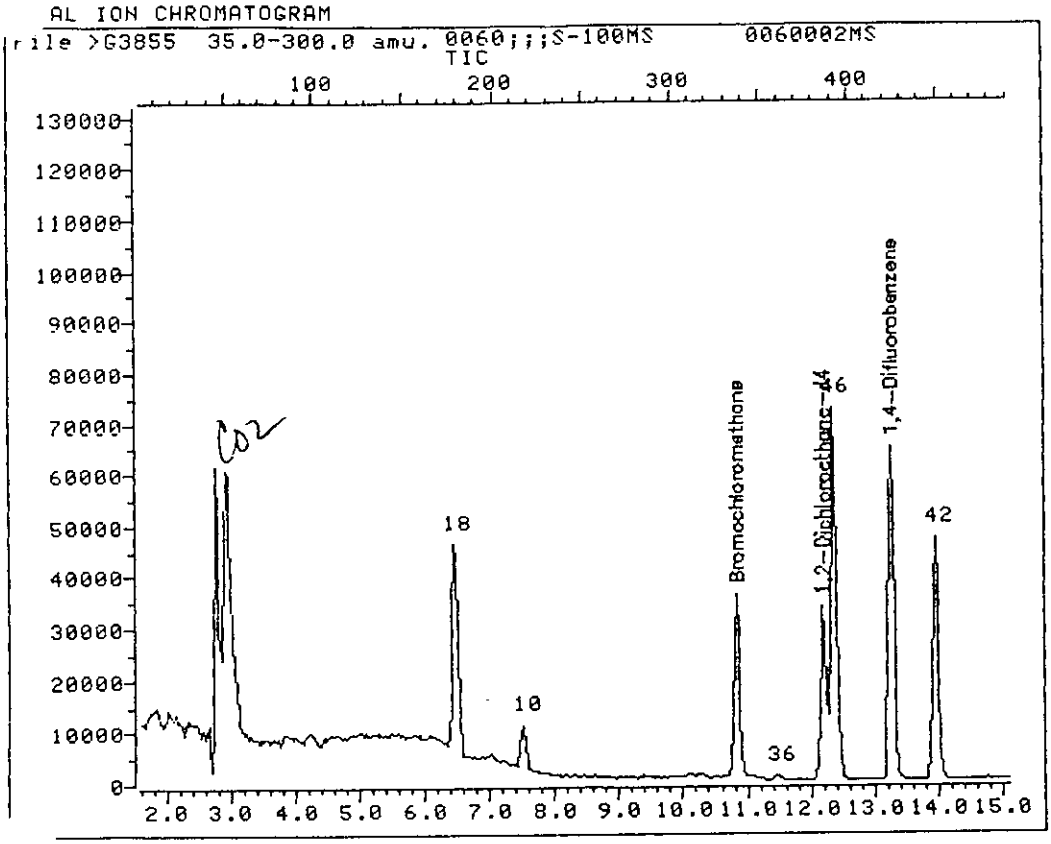
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.84	127.8	20193	50.00	ug/kg	69
/10)	Methylene Chloride	7.52	83.8	9349	14.63	ug/kg	87
/13)	Acetone	6.53	42.8	7374	9.08	ug/kg	87
/18)	1,1-Dichloroethene	6.47	95.8	40618	95.98	ug/kg	92
/24)	2-Butanone	10.29	43.0	4279	3.79	ug/kg	98
~~28)~~	~~Chloroform~~	~~10.92~~	~~82.8~~	~~1237^~~	~~.93~~	~~ug/kg~~	~~58~~
30)	1,2-Dichloroethane-d4	12.19	64.8	77616	61.56	ug/kg	92
34)	*1,4-Difluorobenzene	13.27	113.8	145599	50.00	ug/kg	98
/36)	1,1,1-Trichloroethane	11.47	96.8	1570	1.13	ug/kg	91
/42)	Trichloroethene	13.96	129.8	47524	56.37	ug/kg	95
/47	Benzene	12.36	77.8	182942	55.12	ug/kg	95
5.	*Chlorobenzene-d5	20.37	116.8	100777	50.00	ug/kg	87
/60)	Toluene	17.11	91.0	171669	49.30	ug/kg	96
61)	Toluene-d8	16.95	97.8	152023	60.95	ug/kg	93
/62)	Chlorobenzene	20.46	111.8	95852	50.89	ug/kg	88
91)	Bromofluorobenzene	22.64	94.8	70893	56.79	ug/kg	92

* Compound is ISTD

KM2 1/28/93

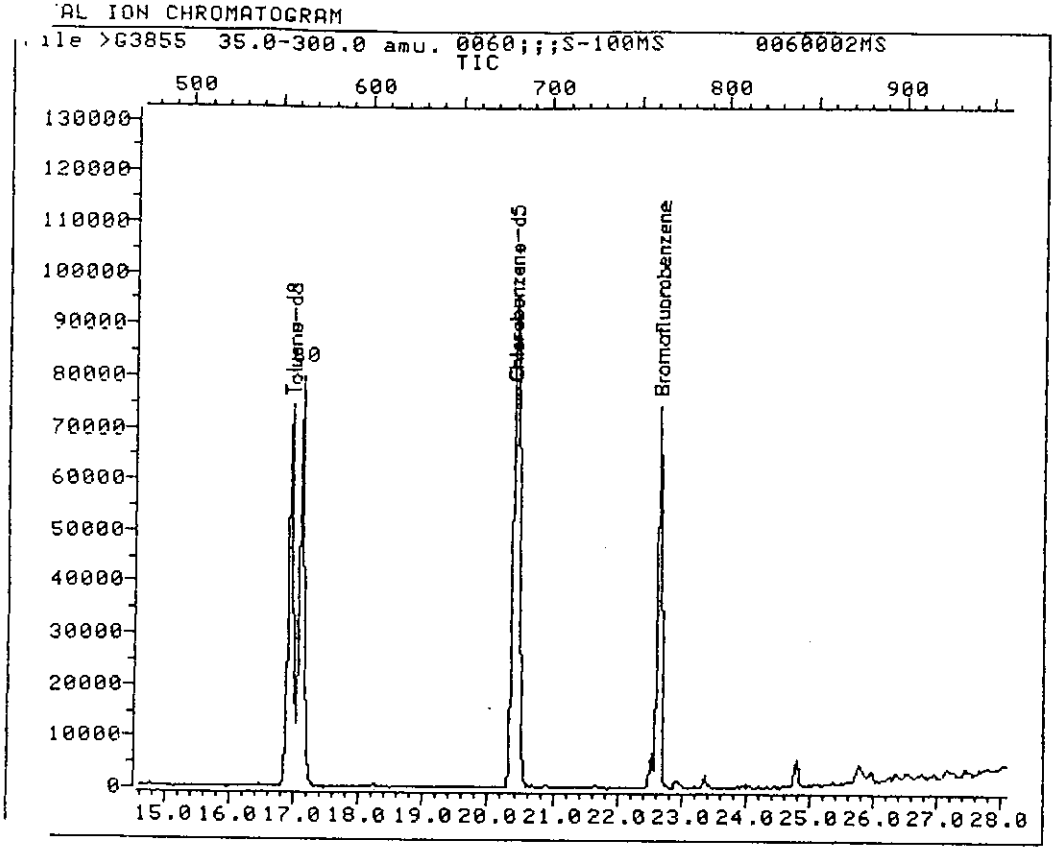


Data File: >G3855::G3 Quant Output File: ^G3855::QT
Name: 0060;;;S-100MS
Misc: 0060002MS HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 14:13
Injected at: 930126 13:41

TIC page 1 of 2



Data File: >G3855::G3 Quant Output File: ^G3855::QT
Name: 0060;;;S-100MS
Misc: 0060002MS HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 14:13
Injected at: 930126 13:41

TIC page 2 of 2

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-100MSD 0149

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002MSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3856.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. ~~0~~ || LHD 02/24/93 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	13 ~~12~~	B
67-64-1	Acetone	13 ~~11~~	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	89 ~~79~~	
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	6 ~~5~~	JB
71-55-6	1,1,1-Trichloroethane	1	JB
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	57 ~~50~~	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	61 ~~54~~	
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	55 ~~49~~	
108-90-7	Chlorobenzene	55 ~~49~~	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

LHD 02/24/93

QUANT REPORT

Operator ID: MSC
Output File: ^G3856::QT
Data File: >G3856::G3
Name: 0060;;;S-100MSD
Misc: 0060002MSD

Quant Rev: 6 Quant Time: 930126 14:53
Injected at: 930126 14:15
Dilution Factor: 1.12000

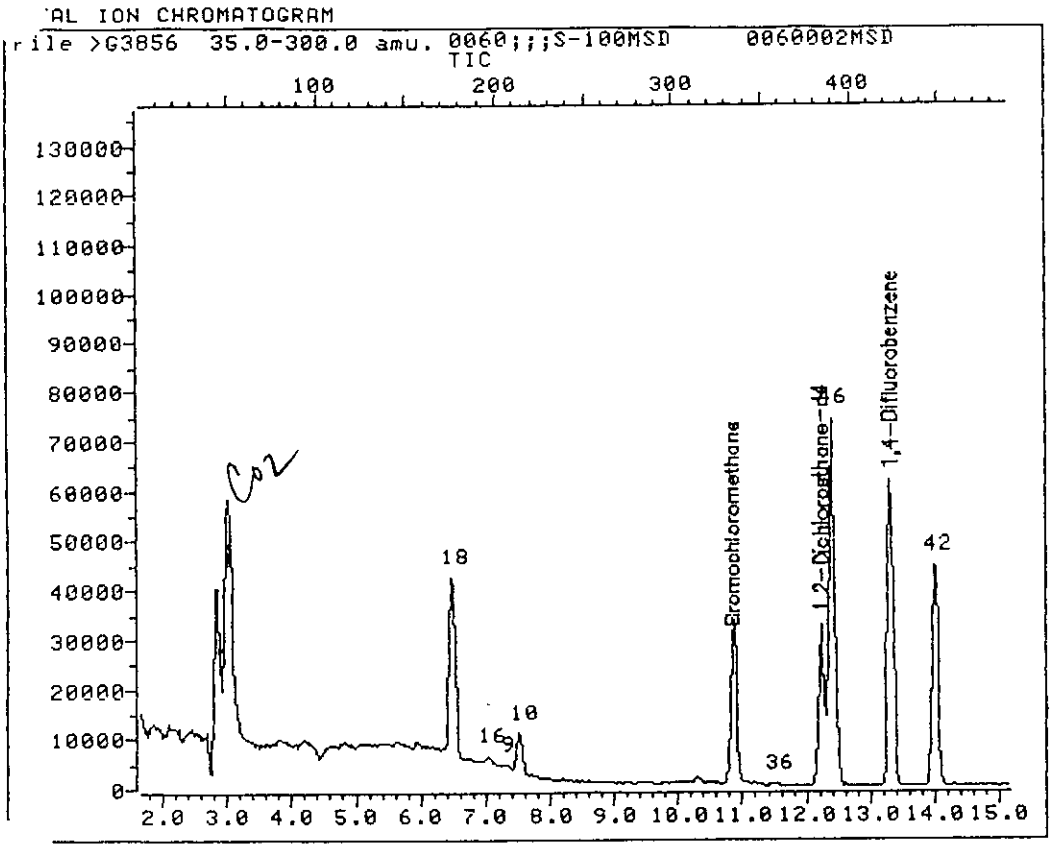
HP5995:G;;;LLS;DF1 ;G1900

ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.85	127.8	19366	50.00	ug/kg	79
9)	Ethyl Acetate	7.34	43.0	3529	3529.00	NO CALIB	81
/10)	Methylene Chloride	7.53	83.8	8097	13.21	ug/kg	90
/13)	Acetone	6.54	42.8	9840	12.63	ug/kg	97
~~16)~~	~~Carbon Disulfide~~	~~7.83~~	~~75.8~~	~~1331~~	~~.52~~	~~ug/kg~~	~~61~~
/18)	1,1-Dichloroethene	6.48	95.8	36111	88.98	ug/kg	88
/24)	2-Butanone	10.30	43.0	6189	5.71	ug/kg	89
~~28)~~	~~Chloroform~~	~~10.96~~	~~82.8~~	~~1216^~~	~~.96~~	~~ug/kg~~	~~67~~
30)	1,2-Dichloroethane-d4	12.23	64.8	75924	62.79	ug/kg	92
34)	*1,4-Difluorobenzene	13.31	113.8	143999	50.00	ug/kg	99
/36)	1,1,1-Trichloroethane	11.51	96.8	1558	1.13	ug/kg	91
/4	Trichloroethene	14.00	129.8	47154	56.56	ug/kg	94
/46)	Benzene	12.40	77.8	199646	60.83	ug/kg	95
53)	*Chlorobenzene-d5	20.53	116.8	96727	50.00	ug/kg	84
/60)	Toluene	17.18	91.0	182999	54.75	ug/kg	94
61)	Toluene-d8	16.98	97.8	153484	64.12	ug/kg	95
/62)	Chlorobenzene	20.58	111.8	99951	55.29	ug/kg	93
91)	Bromofluorobenzene	22.85	94.8	66328	55.36	ug/kg	82

* Compound is ISTD

KMK 1/28/93

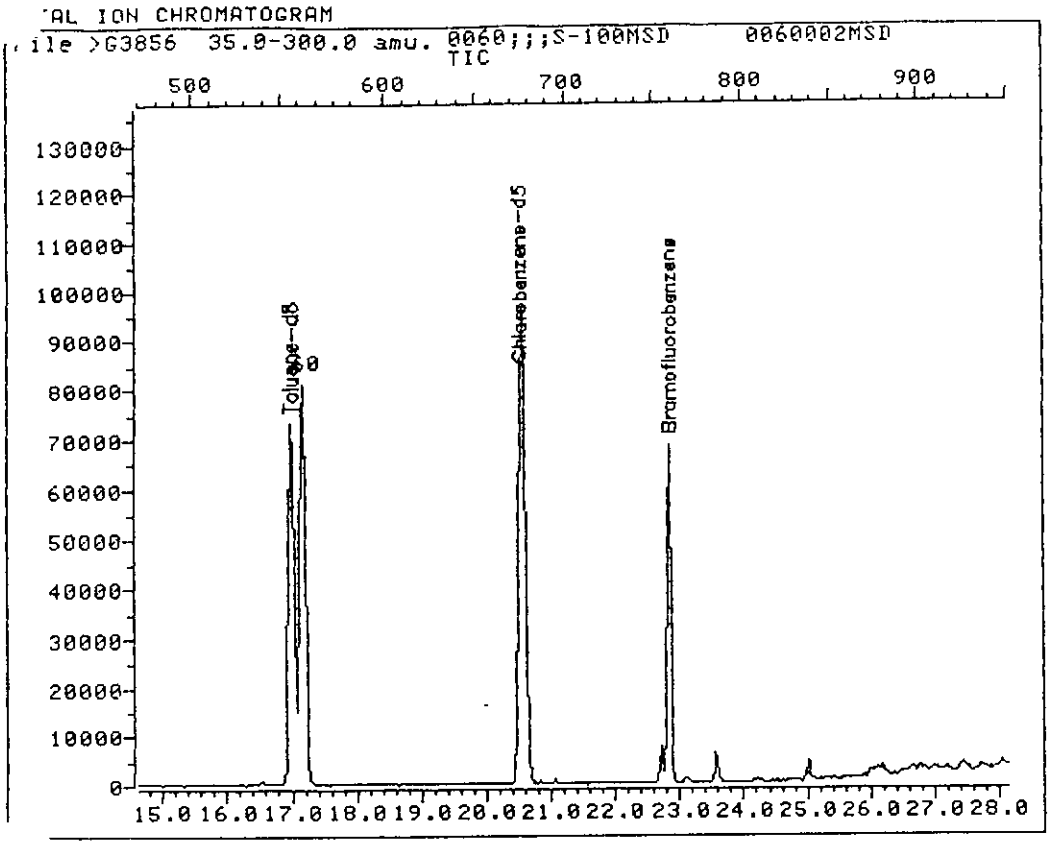


Data File: >G3856::G3 Quant Output File: ^G3856::QT
Name: 0060;;;S-100MSD
Misc: 0060002MSD HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 14:53
Injected at: 930126 14:15

TIC page 1 of 2



Data File: >G3856::G3 Quant Output File: ^G3856::QT
Name: 0060;;;S-100MSD
Misc: 0060002MSD HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 14:53
Injected at: 930126 14:15

TIC page 2 of 2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QCCHKSTD 0153

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002STD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3858.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: not dec. 0 Data Analyzed: 01/26/93

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	46	
74-83-9	Bromomethane	36	
75-01-4	Vinyl Chloride	47	
75-00-3	Chloroethane	42	
75-09-2	Methylene Chloride	44	B
67-64-1	Acetone	70	B
75-15-0	Carbon Disulfide	41	
75-35-4	1,1-Dichloroethene	41	
75-34-3	1,1-Dichloroethane	53	
540-59-0	1,2-Dichloroethene (total)	95	
67-66-3	Chloroform	44	
107-06-2	1,2-Dichloroethane	53	
78-93-3	2-Butanone	71	B
71-55-6	1,1,1-Trichloroethane	46	B
56-23-5	Carbon Tetrachloride	44	
75-27-4	Bromodichloromethane	48	
78-87-5	1,2-Dichloropropane	52	
10061-01-5	cis-1,3-Dichloropropene	74	
79-01-6	Trichloroethene	54	
124-48-1	Dibromochloromethane	49	
79-00-5	1,1,2-Trichloroethane	6	J
71-43-2	Benzene	49	
10061-02-6	trans-1,3-Dichloropropene	19	
75-25-2	Bromoform	50	
108-10-1	4-Methyl-2-Pentanone	61	
591-78-6	2-Hexanone	55	
127-18-4	Tetrachloroethene	49	
79-34-5	1,1,2,2-Tetrachloroethane	46	
108-88-3	Toluene	43	B
108-90-7	Chlorobenzene	49	
100-41-4	Ethylbenzene	49	
100-42-5	Styrene	50	
1330-20-7	Xylene (total)	48	

QUANT REPORT

Operator ID: MSC
Output File: ^G3858::QT
Data File: >G3858::G3
Name: 0060;;;STD S-100
Misc: 0060002STD

Quant Rev: 6 Quant Time: 930126 15:54
Injected at: 930126 15:24
Dilution Factor: 1.00000

HP5995:G;;;LLS;DF1 ;G1900

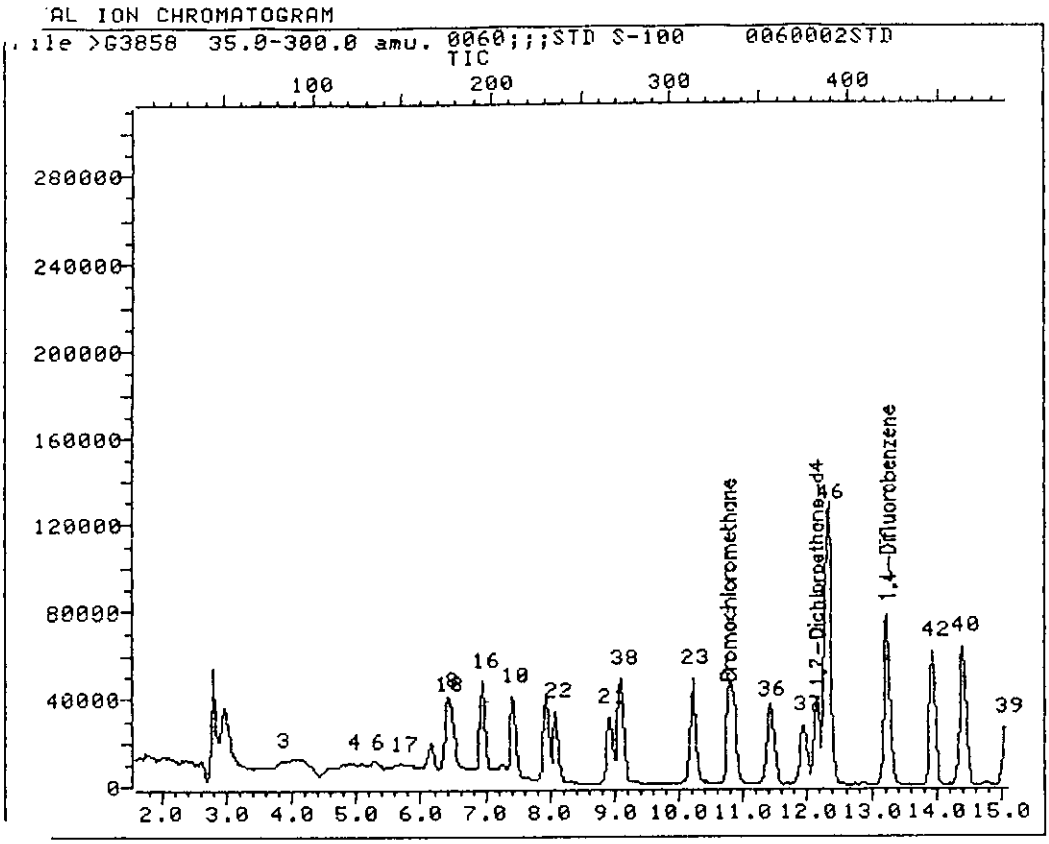
ID File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

LHD 01/26/93

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	10.76	127.8	23017	50.00	ug/kg	67
3)	Chloromethane	3.85	49.8	24510	46.22	ug/kg	95
4)	Bromomethane	4.96	93.7	17371	36.27	ug/kg	83
5)	Vinyl Chloride	4.10	61.8	34268	47.05	ug/kg	95
6)	Chloroethane	5.32	63.8	20370M	41.95	ug/kg	67
8)	1,1,2-Trichlorotrifluoroethane	6.45	101.0	24591	30.23	ug/kg	85
10)	Methylene Chloride	7.42	83.8	36189	44.36	ug/kg	88
13)	Acetone	6.48	42.8	72646	70.07	ug/kg	98
14)	Acrylonitrile	7.94	52.8	91303	125.12	ug/kg	97
16)	Carbon Disulfide	6.95	75.8	138633	40.85	ug/kg	98
17)	Trichlorofluoromethane	5.70	100.8	11733	39.59	ug/kg	80
18	1,1-Dichloroethene	6.40	95.8	22169	41.03	ug/kg	85
19)	3-Chloro-1-Propene	7.42	40.9	3046^	3046.00	NO CALIB	58
21)	1,1-Dichloroethane	8.91	62.8	107163	53.08	ug/kg	98
22)	1,2-Dichloroethene (total)t	8.08	95.8	28049	45.87	ug/kg	92
23)	1,2-Dichloroethene (total)c	10.21	95.8	29443	49.51	ug/kg	96
24)	2-Butanone	10.21	43.0	102117	70.82	ug/kg	85
28)	Chloroform	10.85	82.8	75276	44.55	ug/kg	95
29)	1,2-Dichloroethane	12.34	61.8	147309	52.72	ug/kg	97
30)	1,2-Dichloroethane-d4	12.15	64.8	90532	56.25	ug/kg	92
34)	*1,4-Difluorobenzene	13.25	113.8	178605	50.00	ug/kg	95
36)	1,1,1-Trichloroethane	11.40	96.8	89028	46.54	ug/kg	93
37)	Carbon Tetrachloride	11.95	116.8	61163	44.41	ug/kg	96
38)	Vinyl Acetate	9.11	42.8	257594	45.98	ug/kg	92
39)	Bromodichloromethane	15.08	82.8	57558	47.86	ug/kg	90
40)	1,2-Dichloropropane	14.41	62.8	78851	51.97	ug/kg	90
41)	cis-1,3-Dichloropropene	16.27	74.8	100827	75.75	ug/kg	97
42)	Trichloroethene	13.94	129.8	62154	53.66	ug/kg	93
44)	Dibromochloromethane	19.15	128.7	40912	48.91	ug/kg	97
45)	1,1,2-Trichloroethane	18.06	96.8	6588	6.34	ug/kg	92
46)	Benzene	12.31	77.8	222234	48.74	ug/kg	90
47)	trans-1,3-Dichloropropene	17.68	74.8	106744	17.23	ug/kg	84
48)	2-Chloroethylvinylether	15.91	62.8	49010	40.66	ug/kg	79
49)	1,2-Dibromoethane	19.46	106.9	75379	48.80	ug/kg	98
50)	Bromoform	22.17	172.6	48719	50.09	ug/kg	99
53)	*Chlorobenzene-d5	20.48	116.8	140054	50.00	ug/kg	81
54	4-Methyl-2-Pentanone	16.49	42.8	176099	61.23	ug/kg	93
55	2-Hexanone	18.66	42.8	125280	55.44	ug/kg	96
56)	Tetrachloroethene	18.68	163.7	49928	49.27	ug/kg	92
58)	1,1,2,2-Tetrachloroethane	22.94	82.8	102526	46.32	ug/kg	87
60)	Toluene	17.15	91.0	235231	43.40	ug/kg	94
61)	Toluene-d8	16.96	97.8	199672	51.44	ug/kg	98

	Compound	R.T.	Q ion	Area	Conc	Units	q
63)	Ethylbenzene	20.78	105.8	74554	48.64	ug/kg	98
64)	Styrene	21.81	103.8	152799	49.61	ug/kg	84
65)	Xylene (total)mp	21.01	105.8	168882	93.61	ug/kg	89
66)	Xylene (total)o	21.78	105.8	86514	48.39	ug/kg	93
71)	1,2,3-Trichloropropane	24.74	74.8	53173	48.70	ug/kg	54
80)	1,3-Dichlorobenzene	24.71	145.8	148368	57.76	ug/kg	91
82)	1,2-Dichlorobenzene	24.57	145.8	150475	54.83	ug/kg	92
91)	Bromofluorobenzene	22.75	94.8	105217	54.15	ug/kg	97

* Compound is ISTD

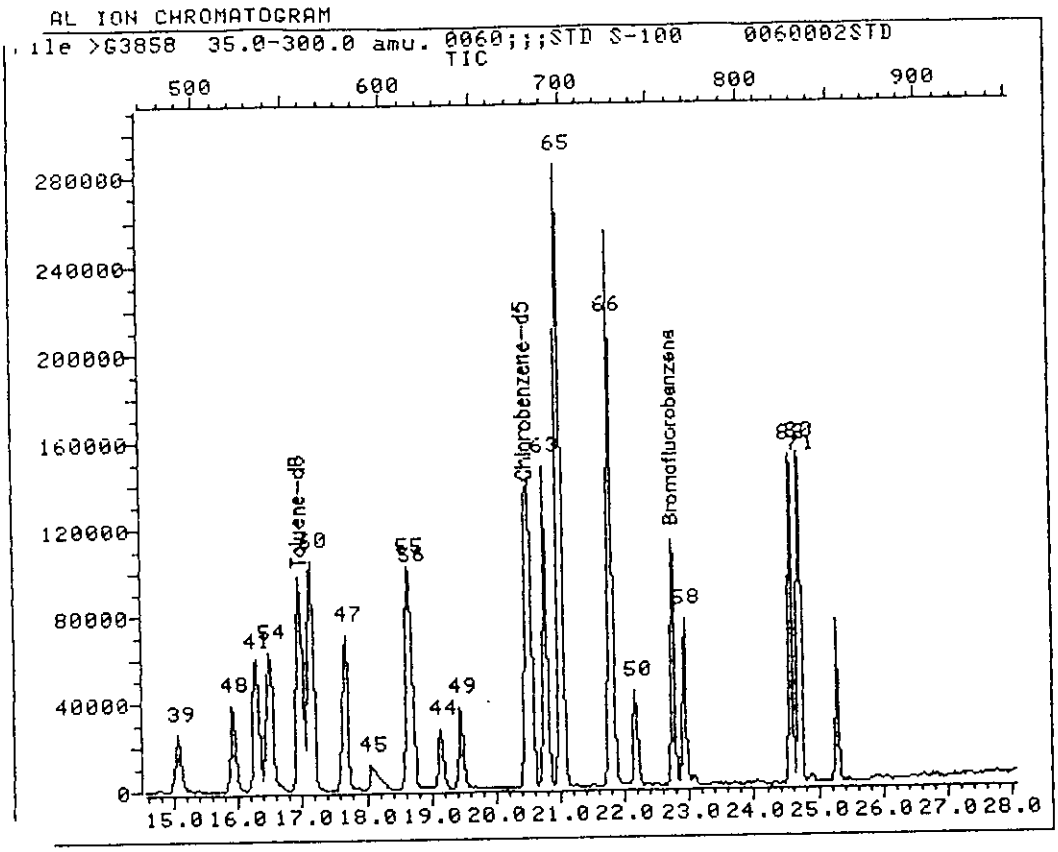


Data File: >G3858::G3 Quant Output File: ^G3858::QT
Name: 0060;;;STD S-100
Misc: 0060002STD HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 15:54
Injected at: 930126 15:24

TIC page 1 of 2



Data File: >G3858::G3
Name: 0060;;;STD S-100
Misc: 0060002STD

Quant Output File: ^G3858::QT

HP5995:G;;;LLS;DF1 ;G1900

Id File: I_IFGS::N1
Title: PURGEABLE ORGANIC COMPOUNDS
Last Calibration: 930126 10:13

Operator ID: MSC
Quant Time: 930126 15:54
Injected at: 930126 15:24

TIC page 2 of 2

SEMI-VOLATILE DATA

CLIENT:	ROUX ASSOCIATES
PROJECT ID:	AMTRAK SUNNYSIDE
P.O.#	05526Y
SDG#:	Z0060
IEA ID:	30930-0060

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	S7 (2CP)#	S8 (DCB)#	TOT OUT
01	SBLK51	71	66	82	76	64	84	72	69	0
02	S-102	64	78	136	73	56	102	60	54	0
03	2-100MSB	61	54	83	63	65	55	60	66	0
04	QCCHECKSTD	54	60	73	52	50	67	47	49	0
05	S-100	59	68	70	66	60	78	51	56	0
06	S-101	61D	83D	94D	75D	72D	87D	84D	80D	0
07	S-102RE	61	72	75	66	58	90	59	59	0
08	s-99	50	62	73	59	54	70	51	54	0
09	S-100MS	62	79	80	70	63	105	66	67	0
10	S-100MSD	56	70	79	68	65	92	64	60	0
11	S-101RE	58D	96D	101D	75D	69D	100D	78D	71D	0
12										
13										
14										
15										
16										
17										
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19										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(20-130)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

0160

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Concentration

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	SBLK53	78	80	98	82	74	92	84	83	0
02	FIELDBLANK	80	73	78	73	65	94	75	72	0
03										
04										
05										
06										
07										
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28										
29										
30										

		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

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: LEA/CT Contract: 0161

Lab Code: LEACT Case No.: 0000 SAS No.: _____ SDG No.: 70000

Matrix Spike - EPA Sample No.: S-100 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2800	0	2000	71	26- 90
2-Chlorophenol	2800		1900	68	25-102
1,4-Dichlorobenzene	1900		1300	68	28-104
N-Nitroso-di-n-prop.(1)	1900		1500	79	41-126
1,2,4-Trichlorobenzene	1900		1400	74	38-107
4-Chloro-3-methylphenol	2800		2400	85	26-103
Acenaphthene	1900	74	1700	89	31-137
4-Nitrophenol	2800	0	3200	114	11-114
2,4-Dinitrotoluene	1900		1700	89	28- 89
Pentachlorophenol	2800		1600	57	17-109
Pyrene	1900		2000	105	35-142

GMC 2/12/93

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2800	1900	68	4	35	26- 90
2-Chlorophenol	2800	1900	68	0	50	25-102
1,4-Dichlorobenzene	1900	1200	63	8	27	28-104
N-Nitroso-di-n-prop.(1)	1900	1400	74	7	38	41-126
1,2,4-Trichlorobenzene	1900	1300	68	8	23	38-107
4-Chloro-3-methylphenol	2800	2400	86	1	33	26-103
Acenaphthene	1900	1600	~~84~~ 80	7	19	31-137
4-Nitrophenol	2800	2900	104	9	50	11-114
2,4-Dinitrotoluene	1900	1400	74	18	47	28- 89
Pentachlorophenol	2800	1600	57	0	47	17-109
Pyrene	1900	2000	105	0	36	35-142

(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: 0 out of 22 outside limits

COMMENTS: _____

3D MSB

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0162

La. Name: IEA/CT Contract: _____

Lab Code: IEACT Case No.: 00000 SAS No.: _____ SDG No.: 70060

Matrix Spike - EPA Sample No.: S-100 MSB Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	2500	Ø	1500	60	26- 90
2-Chlorophenol	2500		1500	60	25-102
1,4-Dichlorobenzene	1700		1100	65	28-104
N-Nitroso-di-n-prop.(1)	1700		1100	65	41-126
1,2,4-Trichlorobenzene	1700		1000	59	38-107
4-Chloro-3-methylphenol	2500		1500	60	26-103
Acenaphthene	1700		916	54	31-137
4-Nitrophenol	2500		1700	68	11-114
2,4-Dinitrotoluene	1700		1100	65	28- 89
Pentachlorophenol	2500		1500	60	17-109
Pyrene	1700		1100	65	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol					35	26- 90
2-Chlorophenol					50	25-102
1,4-Dichlorobenzene					27	28-104
N-Nitroso-di-n-prop.(1)					38	41-126
1,2,4-Trichlorobenzene					23	38-107
4-Chloro-3-methylphenol					33	26-103
Acenaphthene					19	31-137
4-Nitrophenol					50	11-114
2,4-Dinitrotoluene					47	28- 89
Pentachlorophenol					47	17-109
Pyrene					36	35-142

(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: ___ out of ___ outside limits
Spike Recovery: 0 out of 11 outside limits

COMMENTS: _____

QC CHECK
~~1B~~ FORM 3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QCCHECKSTD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

0163

Matrix: (soil/water) SOIL Lab Sample ID: 0060002STD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5914.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1800	108
111-44-4	bis(2-Chloroethyl)ether	1700	102
95-57-8	2-Chlorophenol	1600	96
541-73-1	1,3-Dichlorobenzene	1600	96
106-46-7	1,4-Dichlorobenzene	1500	90
95-50-1	1,2-Dichlorobenzene	1500	90
95-48-7	2-Methylphenol	1900	114
108-60-1	2,2'-oxybis(1-Chloropropane)	1900	114
106-44-5	4-Methylphenol	1900	114
621-64-7	N-Nitroso-di-n-propylamine	1900	114
67-72-1	Hexachloroethane	1500	90
98-95-3	Nitrobenzene	1800	108
78-59-1	Isophorone	2100	126
88-75-5	2-Nitrophenol	1900	114
105-67-9	2,4-Dimethylphenol	1600	96
111-91-1	bis(2-Chloroethoxy)methane	1900	114
120-83-2	2,4-Dichlorophenol	1900	114
120-82-1	1,2,4-Trichlorobenzene	1600	96
91-20-3	Naphthalene	1700	102
106-47-8	4-Chloroaniline	4700	282
87-68-3	Hexachlorobutadiene	1500	90
59-50-7	4-Chloro-3-methylphenol	2400	144
91-57-6	2-Methylnaphthalene	1600	96
77-47-4	Hexachlorocyclopentadiene	1200	72
88-06-2	2,4,6-Trichlorophenol	2100	126
95-95-4	2,4,5-Trichlorophenol	1900	114
91-58-7	2-Chloronaphthalene	1700	102
88-74-4	2-Nitroaniline	2600	156
131-11-3	Dimethylphthalate	2100	126
208-96-8	Acenaphthylene	1800	108
606-20-2	2,6-Dinitrotoluene	1900	114
99-09-2	3-Nitroaniline	16000	960
83-32-9	Acenaphthene	1700	102

Cmc 2/12/93

QC CHECK FORM 3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QCCHECKSTD

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002STD 0164

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5914.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	2900	174
100-02-7	4-Nitrophenol	2700	162
132-64-9	Dibenzofuran	1700	102
121-14-2	2,4-Dinitrotoluene	2200	132
84-66-2	Diethylphthalate	1900	114 B
7005-72-3	4-Chlorophenyl-phenylether	1400	84
86-73-7	Fluorene	1700	102
100-01-6	4-Nitroaniline	5400	323
534-52-1	4,6-Dinitro-2-methylphenol	2700	162
86-30-6	N-Nitrosodiphenylamine (1)	2800	168
101-55-3	4-Bromophenyl-phenylether	2000	120
118-74-1	Hexachlorobenzene	2000	120
87-86-5	Pentachlorophenol	2600	156
85-01-8	Phenanthrene	2100	126
120-12-7	Anthracene	2000	120
86-74-8	Carbazole	6700	402
84-74-2	Di-n-butylphthalate	2100	126 B
206-44-0	Fluoranthene	2300	138
129-00-0	Pyrene	2200	132
85-68-7	Butylbenzylphthalate	2100	126 B
91-94-1	3,3'-Dichlorobenzidine	3300	198
56-55-3	Benzo(a)anthracene	2400	144
218-01-9	Chrysene	2000	120
117-81-7	bis(2-Ethylhexyl)phthalate	1700	102 B
117-84-0	Di-n-octylphthalate	2200	132
205-99-2	Benzo(b)fluoranthene	1200	72
207-08-9	Benzo(k)fluoranthene	1300	78
50-32-8	Benzo(a)pyrene	2700	162
193-39-5	Indeno(1,2,3-cd)pyrene	790	47
53-70-3	Dibenz(a,h)anthracene	1300	78
191-24-2	Benzo(g,h,i)perylene	1200	72

Gmc 3/90 2/12pm

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK51

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID: C5902.D Lab Sample ID: SBLK51

Instrument ID: HP5970C Date Extracted: 01/20/93

Matrix: (soil/water) SOIL Date Analyzed: 01/29/93

Level: (low/med) LOW Time Analyzed: 1206

0165

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	S-102	0060004	C5908.D	01/29/93
02	2-100MSB	0060002MSB	C5913.D	02/01/93
03	QCCHECKSTD	0060002STD	C5914.D	02/01/93
04	S-100	0060002	C5920.D	02/01/93
05	S-101	0060003	C5921.D	02/01/93
06	S-102RE	0060004RE	C5922.D	02/01/93
07	s-99	0060001	C5931.D	02/02/93
08	S-100MS	0060002MS	C5932.D	02/02/93
09	S-100MSD	0060002MSD	C5933.D	02/02/93
10	S-101RE	0060003RE	C5934.D	02/02/93
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK53

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

0166

Lab File ID: C5903.D Lab Sample ID: SBLK53

Instrument ID: HP5970C Date Extracted: 01/21/93

Matrix: (soil/water) WATER Date Analyzed: 01/29/93

Level: (low/med) LOW Time Analyzed: 1309

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	FIELDBLANK	0060006	C5915.D	02/01/93
02				
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COMMENTS:

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0167

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID: C5895.D DFTPP Injection Date: 01/28/93

Instrument ID: HP5970C DFTPP Injection Time: 1145

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	59.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	63.9
70	Less than 2.0% of mass 69	0.4 (0.6)1
127	25.0 - 75.0% of mass 198	41.9
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	6.8
275	10.0 - 30.0% of mass 198	18.6
365	Greater than 0.75% of mass 198	2.60
441	Present, but less than mass 443	13.1
442	40.0 - 110.0% of mass 198	97.4
443	15.0 - 24.0% of mass 442	17.6 (18.1)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	C5895.D	01/28/93	1145
02	SSTD160	SSTD160	C5896.D	01/28/93	1328
03	SSTD020	SSTD020	C5897.D	01/28/93	1501
04	SSTD080	SSTD080	C5898.D	01/28/93	1602
05	SSTD120	SSTD120	C5899.D	01/28/93	1704
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: IEA/CT Contract: 0168

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID: C5900.D DFTPP Injection Date: 01/29/93

Instrument ID: HP5970C DFTPP Injection Time: 0928

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	60.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	44.9
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	6.5
275	10.0 - 30.0% of mass 198	24.2
365	Greater than 0.75% of mass 198	2.35
441	Present, but less than mass 443	13.2
442	40.0 - 110.0% of mass 198	88.4
443	15.0 - 24.0% of mass 442	18.3 (20.7)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	C5900.D	01/29/93	0928
02	SBLK51	SBLK51	C5902.D	01/29/93	1206
03	SBLK53	SBLK53	C5903.D	01/29/93	1309
04	S-102	0060004	C5908.D	01/29/93	1819
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0169

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID: C5912.D DFTPP Injection Date: 02/01/93

Instrument ID: HP5970C DFTPP Injection Time: 1216

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	48.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	54.3
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	40.3
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	6.8
275	10.0 - 30.0% of mass 198	28.1
365	Greater than 0.75% of mass 198	2.67
441	Present, but less than mass 443	17.0
442	40.0 - 110.0% of mass 198	94.0
443	15.0 - 24.0% of mass 442	21.1 (22.5)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	C5912.D	02/01/93	1216
02	2-100MSB	0060002MSB	C5913.D	02/01/93	1338
03	QCCHECKSTD	0060002STD	C5914.D	02/01/93	1439
04	FIELDBLANK	0060006	C5915.D	02/01/93	1540
05	S-100	0060002	C5920.D	02/01/93	2048
06	S-101	0060003	C5921.D	02/01/93	2150
07	S-102RE	0060004RE	C5922.D	02/01/93	2251
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

0170

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID: C5924.D DFTPP Injection Date: 02/02/93

Instrument ID: HP5970C DFTPP Injection Time: 1118

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.2
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Area 69 relative abundance	60.0
70	Less than 2.0% of mass 69	0.1 (0.1)1
127	25.0 - 75.0% of mass 198	40.2
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	6.7
275	10.0 - 30.0% of mass 198	20.9
365	Greater than 0.75% of mass 198	2.05
441	Present, but less than mass 443	13.4
442	40.0 - 110.0% of mass 198	80.2
443	15.0 - 24.0% of mass 442	17.8 (22.2)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	C5924.D	02/02/93	1118
02	s-99	0060001	C5931.D	02/02/93	1959
03	S-100MS	0060002MS	C5932.D	02/02/93	2100
04	S-100MSD	0060002MSD	C5933.D	02/02/93	2201
05	S-101RE	0060003RE	C5934.D	02/02/93	2303
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INSTRUMENT DETECTION LIMITS

Page 1 of 2

0171

Instrument C
Date: 01/07/93

UNITS: UG/L

	IDL
Phenol	1
bis(2-Chloroethyl)ether	2
2-Chlorophenol	1
1,3-Dichlorobenzene	1
1,4-Dichlorobenzene	1
Benzyl alcohol	1
1,2-Dichlorobenzene	1
2-Methylphenol	3
bis(2-Chloroisopropyl)ether	1
4-Methylphenol	1
N-Nitroso-Di-N-propylamine	1
Hexachloroethane	1
Nitrobenzene	1
Isophorone	2
2-Nitrophenol	2
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	10
Hexachlorobutadiene	1
4-Chloro-3-methylphenol	2
2-Methylnaphthalene	1
Hexachlorocyclopentadiene	2
2,4,6-Trichlorophenol	2
2,4,5-Trichlorophenol	2
2-Chloronaphthalene	1
2-Nitroaniline	2
Dimethylphthalate	2
Acenaphthylene	2
2,6-Dinitrotoluene	2
3-Nitroaniline	4
Acenaphthene	2
2,4-Dinitrophenol	2
4-Nitrophenol	1
Dibenzofuran	1
2,4-Dinitrotoluene	1
Diethylphthalate	2
4-Chlorophenyl-phenylether	2
Fluorene	2
4-Nitroaniline	11
4,6-Dinitro-2-methylphenol	2
N-Nitrosodiphenylamine(1)	1
4-Bromophenyl-phenylether	3
Hexachlorobenzene	3
Pentachlorophenol	2

Instrument C
Date: 01/07/93

UNITS: UG/L

	IDL
Phenanthrene	2
Anthracene	2
Di-N-butylphthalate	1
Fluoranthene	1
Pyrene	5
Butylbenzylphthalate	10
3,3'-Dichlorobenzidine	5
Benzo(a)anthracene	4
Chrysene	1
bis(2-Ethylhexyl)phthalate	3
Di-N-octylphthalate	1
Benzo(b)fluoranthene	3
Benzo(k)fluoranthene	4
Benzo(a)pyrene	2
Indeno(1,2,3-cd)pyrene	4
Dibenzo(a,h)anthracene	1
Benzo(g,h,i)perylene	3
Nitrobenzene-d5	1
2-Fluorobiphenyl	1
Terphenyl-d14	8
Phenol-d5	1
2-Fluorophenol	1
2,4,6-Tribromophenol	1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0173

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): C5900.D CMC 2/12/93 Date Analyzed: 01/29/93

Instrument ID: HP5970C Time Analyzed: 0928

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	36871	12.28	140387	15.55	89315	20.20
	UPPER LIMIT	73742	12.78	280774	16.05	178630	20.70
	LOWER LIMIT	18436	11.78	70194	15.05	44658	19.70
	EPA SAMPLE No.						
01	SBLK51	32178	12.30	128738	15.55	81641	20.23
02	SBLK53	33040	12.27	132728	15.53	77614	20.20
03	S-102	29163	12.29	126456	15.55	78307	20.22
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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 0174

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): C5900.D Date Analyzed: 01/29/93

Instrument ID: HP5970C Time Analyzed: 0928

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	153800	24.10	131326	31.52	104503	38.61
	UPPER LIMIT	307600	24.60	262652	32.02	209006	39.11
	LOWER LIMIT	76900	23.60	65663	31.02	52252	38.11
	EPA SAMPLE No.						
01	SBLK51	150352	24.12	113972	31.51	86078	38.59
02	SBLK53	146754	24.10	87461	31.49	59973	38.55
03	S-102	95249	24.15	12601*	31.56	8811*	38.64
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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

0175

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): C5912.D 0mc2/12/9m Date Analyzed: 02/01/93

Instrument ID: HP5970C Time Analyzed: 1216

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	30668	12.13	121572	15.38	71044	20.03
	UPPER LIMIT	61336	12.63	243144	15.88	142088	20.53
	LOWER LIMIT	15334	11.63	60786	14.88	35522	19.53
	EPA SAMPLE No.						
01	2-100MSB	28727	12.13	119412	15.37	73719	20.03
02	QCCHECKSTD	30028	12.13	122436	15.39	80552	20.04
03	FIELDBLANK	29571	12.12	109792	15.37	72532	20.02
04	S-100	27910	12.17	110865	15.41	69230	20.07
05	S-101	25702	12.10	107963	15.35	62886	20.01
06	S-102RE	28059	12.12	117246	15.36	81765	20.01
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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

0176

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): C5912.D amc2102p3 Date Analyzed: 02/01/93

Instrument ID: HP5970C Time Analyzed: 1216

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	145774	23.92	112561	31.25	106859	38.10
	UPPER LIMIT	291548	24.42	225122	31.75	213718	38.60
	LOWER LIMIT	72887	23.42	56280	30.75	53430	37.60
	EPA SAMPLE No.						
01	2-100MSB	139116	23.92	98779	31.22	76345	38.06
02	QCCHECKSTD	142838	23.94	112558	31.28	123548	38.11
03	FIELDBLANK	136329	23.90	117766	31.22	92878	38.06
04	S-100	131794	23.97	103107	31.40	49587*	38.24
05	S-101	129976	23.91	104060	31.30	44642*	38.15
06	S-102RE	109031	23.96	18592*	31.43	11299*	38.14
07							
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13							
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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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0177

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): C5924.D Date Analyzed: 02/02/93

Instrument ID: HP5970C Time Analyzed: 1118

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	35902	12.17	136695	15.43	89550	20.10
	UPPER LIMIT	71804	12.67	273390	15.93	179100	20.60
	LOWER LIMIT	17951	11.67	68348	14.93	44775	19.60
	EPA SAMPLE No.						
01	s-99	29828	12.18	124654	15.43	79049	20.08
02	S-100MS	24332	12.17	96083	15.43	59600	20.09
03	S-100MSD	23506	12.18	96227	15.43	67553	20.08
04	S-101RE	25959	12.19	107614	15.45	64059	20.11
05							
06							
07							
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21							
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

0178

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Lab File ID (Standard): C5924.D amc2112(am) Date Analyzed: 02/02/93

Instrument ID: HP5970C Time Analyzed: 1118

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	162227	23.99	129748	31.34	100452	38.26
	UPPER LIMIT	324454	24.49	259496	31.84	200904	38.76
	LOWER LIMIT	81114	23.49	64874	30.84	50226	37.76
	EPA SAMPLE No.						
01	s-99	140301	23.97	131032	31.32	95840	38.24
02	S-100MS	143980	23.99	100269	31.43	43694*	38.39
03	S-100MSD	149079	23.99	85664	31.46	29336*	38.35
04	S-101RE	143905	24.02	101370	31.45	37337*	38.43
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
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.

S-99 0179

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5931.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	9	J
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	11	J
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	380	U
208-96-8	Acenaphthylene	16	J
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	380	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-99 0180

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5931.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	8	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	24	JB
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	380	U
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	45	J
120-12-7	Anthracene	17	J
86-74-8	Carbazole	26	J
84-74-2	Di-n-butylphthalate	36	JB
206-44-0	Fluoranthene	100	J
129-00-0	Pyrene	77	J
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	65	J
218-01-9	Chrysene	110	J
117-81-7	bis(2-Ethylhexyl)phthalate	100	JB
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	100	J
207-08-9	Benzo(k)fluoranthene	110	J
50-32-8	Benzo(a)pyrene	88	J
193-39-5	Indeno(1,2,3-cd)pyrene	110	J
53-70-3	Dibenz(a,h)anthracene	13	J
191-24-2	Benzo(g,h,i)perylene	80	J

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

S-99 0 0181

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

cmc 2/12/93

Matrix: (soil/water) SOIL Lab Sample ID: 0060001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5931.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/02/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.0

Number TICs found: 21

CMC 2/11/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL CONDENSATION PRODUCT	8.50	13000	JAB
2.		UNKNOWN	12.91	2600	J
3.			7.91	1100	B
4.			10.81	730	B
5.			7.77	720	B
6.		UNKNOWN C8H8	9.58	620	
7.		UNKNOWN ACID	14.92	540	
8.		UNKNOWN	30.76	480	
9.			10.43	470	
10.			10.12	410	
11.		UNKNOWN C3 ALKYL BENZENE	10.35	280	
12.		UNKNOWN ALKANE	8.19	230	
13.		UNKNOWN	20.107	220	B
14.			23.07	170	
15.		UNKNOWN ACID	25.40	140	
16.		UNKNOWN	13.86	140	
17.			12.74	130	
18.			11.21	120	
19.			7.27	120	
20.			11.13	120	
21.		UNKNOWN ALKANE	24.76	100	
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

QUANT REPORT

Operator ID: MSC
Output File: ^C5931::QT
Data File: >C5931::C1
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953

Quant Rev: 6 Quant Time: 930202 20:54
Injected at: 930202 19:59
Dilution Factor: 18.94000

BTL# 7

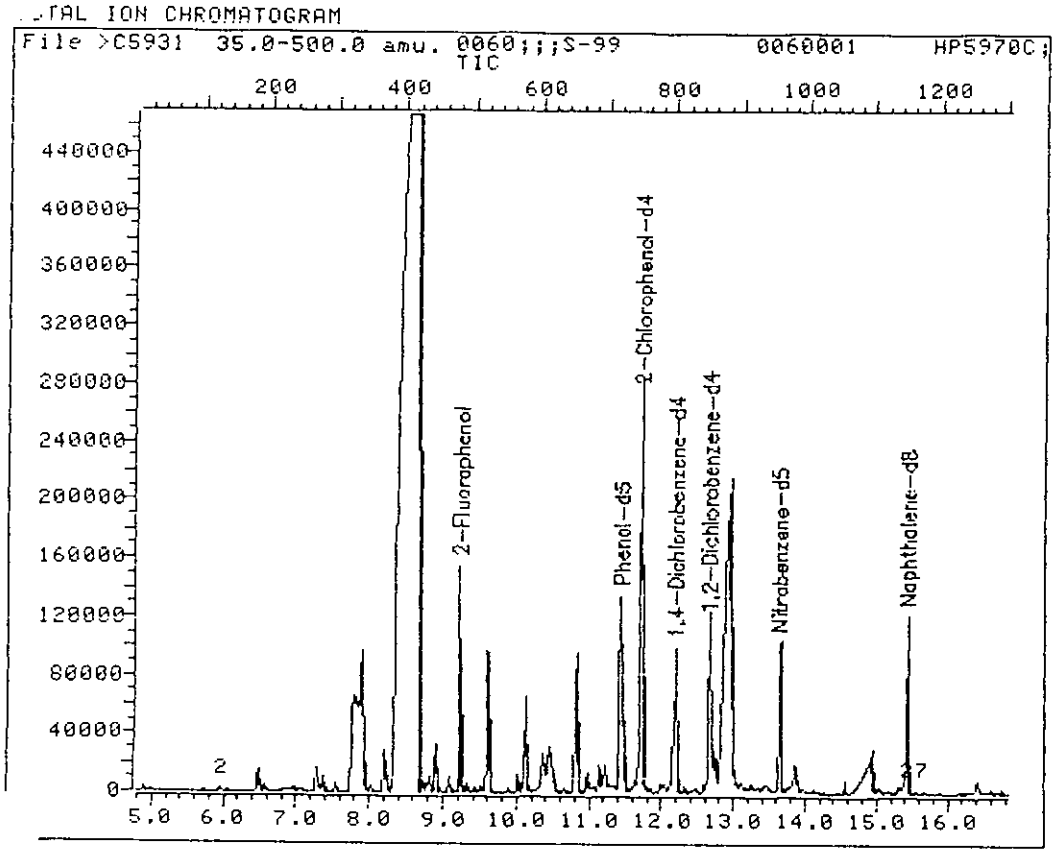
ID File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930202 15:36

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.18	151.8	29828	40.00	ug	84
2)	Pyridine	5.94	52.0	1898	38.88	ug	96
3)	2-Chlorophenol-d4	11.71	132.0	69214	1456.02	ug	98
4)	2-Fluorophenol	9.22	111.8	70621	1529.83	ug	92
5)	Phenol-d5	11.43	98.8	103106	1664.89	ug	89
11)	1,2-Dichlorobenzene-d4	12.64	152.0	36642	1024.48	ug	91
18)	*Naphthalene-d8	15.43	135.9	124654	40.00	ug	97
19)	Nitrobenzene-d5	13.63	81.8	69161	940.53	ug	85
27)	Naphthalene	15.47	127.9	1431	9.29	ug	95
31)	2-Methylnaphthalene	17.28	141.9	1268	11.14	ug	87
3	*Acenaphthene-d10	20.08	163.9	79049	40.00	ug	85
36)	2-Fluorobiphenyl	18.29	171.8	145814	1167.58	ug	97
40)	Acenaphthylene	19.67	152.0	2480	16.19	ug	98
~~42)~~	~~Acenaphthene~~	~~20.17~~	~~152.9~~	~~342~~	~~3.14~~	~~ug~~	~~95~~
~~45)~~	~~4-Nitrophenol~~	~~20.66~~	~~108.8~~	~~373~~	~~23.04~~	~~ug~~	~~1~~
46)	Dibenzofuran	20.58	167.8	1249	7.99	ug	84
48)	Diethylphthalate	21.33	148.8	3546	23.91	ug	97
52)	2,4,6-Tribromophenol	22.19	329.6	70992	1988.47	ug	98
53)	*Phenanthrene-d10	23.97	187.9	140301	40.00	ug	97
~~55)~~	~~N-Nitrosodiphenylamine (1)~~	~~21.81~~	~~168.9~~	~~458~~	~~8.16~~	~~ug~~	~~75~~
~~58)~~	~~Pentachlorophenol~~	~~23.63~~	~~265.6~~	~~668~~	~~19.61~~	~~ug~~	~~96~~
59)	Phenanthrene	24.04	177.9	7956	44.71	ug	92
60)	Carbazole	24.58	166.8	2017	26.29	ug	90
61)	Anthracene	24.15	177.9	3075	16.69	ug	98
62)	Di-n-butylphthalate	25.61	148.8	9492	35.68	ug	98
63)	Fluoranthene	27.21	201.9	21313	104.81	ug	93
64)	*Chrysene-d12	31.32	240.0	131032	40.00	ug	91
65)	Pyrene	27.81	201.9	18843	77.30	ug	97
66)	Terphenyl-d14	28.22	244.0	255003	1375.60	ug	87
~~67)~~	~~Butylbenzylphthalate~~	~~29.58~~	~~148.8~~	~~1223~~	~~9.84~~	~~ug~~	~~87~~
~~68)~~	~~3,3'-Dichlorobenzidine~~	~~31.45~~	~~251.9~~	~~343~~	~~14.87~~	~~ug~~	~~37~~
69)	Benzo(a)anthracene	31.25	228.0	12101	64.86	ug	92
70)	Chrysene	31.40	228.0	17284	112.66	ug	96
71)	bis(2-Ethylhexyl)phthalate	31.45	148.8	16091	100.70	ug	82
72)	*Perylene-d12	38.24	264.0	95840^	40.00	ug	90
~~73~~	~~Di-n-octylphthalate~~	~~33.99~~	~~149.9~~	~~4151~~	~~15.87~~	~~ug~~	~~87~~
7	Benzo(b)fluoranthene	35.98	252.0	16701	99.66	ug	96
~~74)~~	~~Benzo(b)fluoranthene~~	~~36.09~~	~~252.0~~	~~16359~~	~~97.62~~	~~ug~~	~~91~~
~~75)~~	~~Benzo(k)fluoranthene~~	~~35.98~~	~~252.0~~	~~16701~~	~~115.94~~	~~ug~~	~~92~~
75)	Benzo(k)fluoranthene	36.09	252.0	16359	113.57	ug	91
76)	Benzo(a)pyrene	37.85	252.0	11840	88.45	ug	95

	Compound	R.T.	Q ion	Area	Conc	Units	q
79)	Benzo(g,h,i)perylene	49.33	276.0	8843	79.90	ug	84

* Compound is ISTD

GMC 2/9/93



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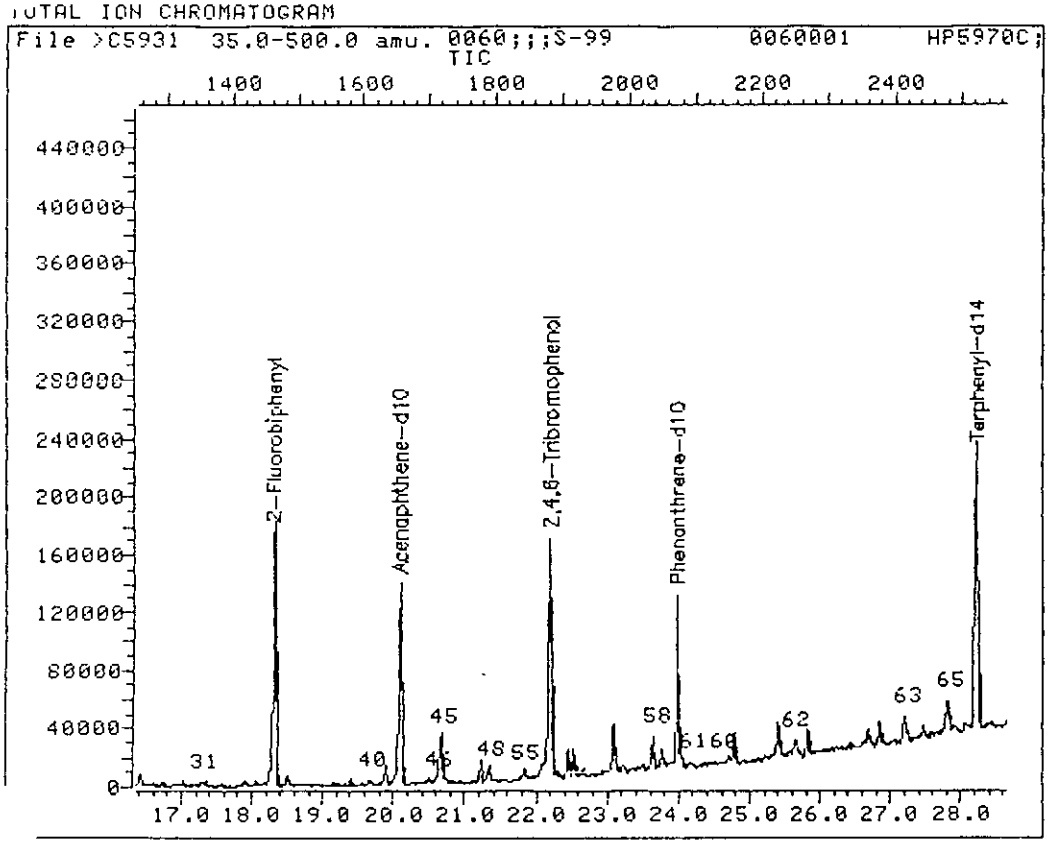
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930202 15:36

Operator ID: MSC
Quant Time: 930202 20:54
Injected at: 930202 19:59

TIC page 1 of 4

TOTAL ION CHROMATOGRAM



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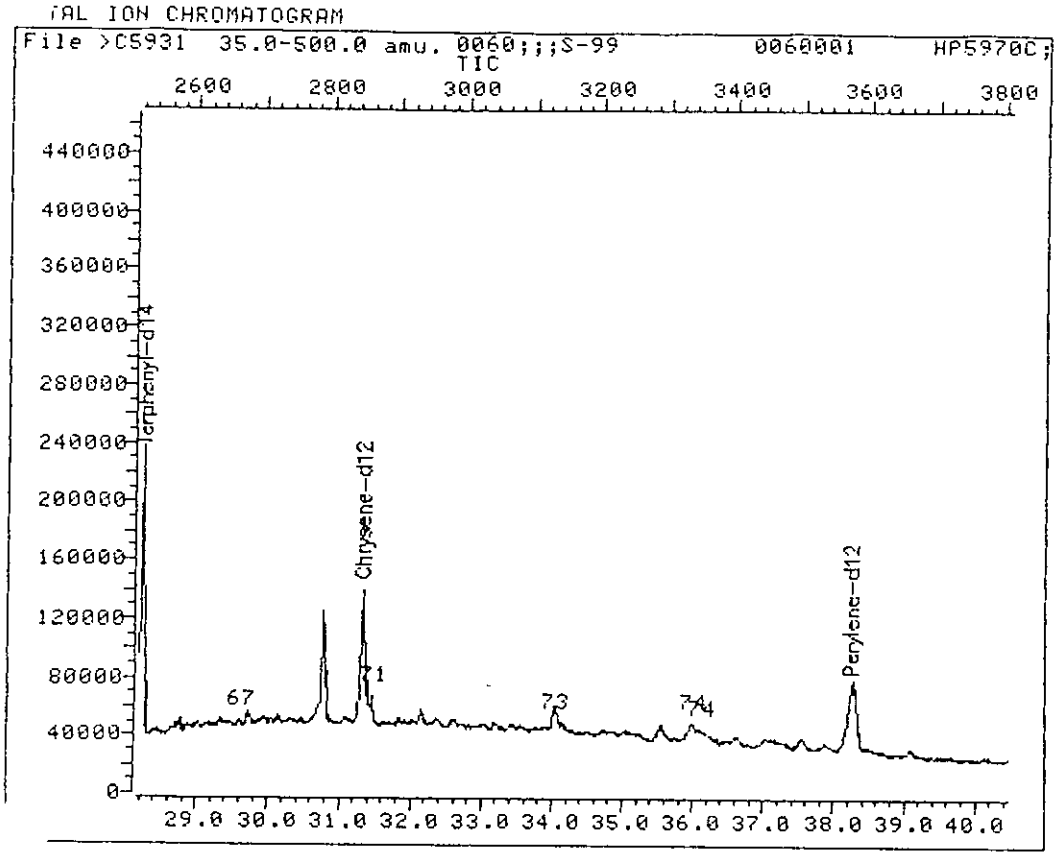
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930202 15:36

Operator ID: MSC
Quant Time: 930202 20:54
Injected at: 930202 19:59

TIC page 2 of 4



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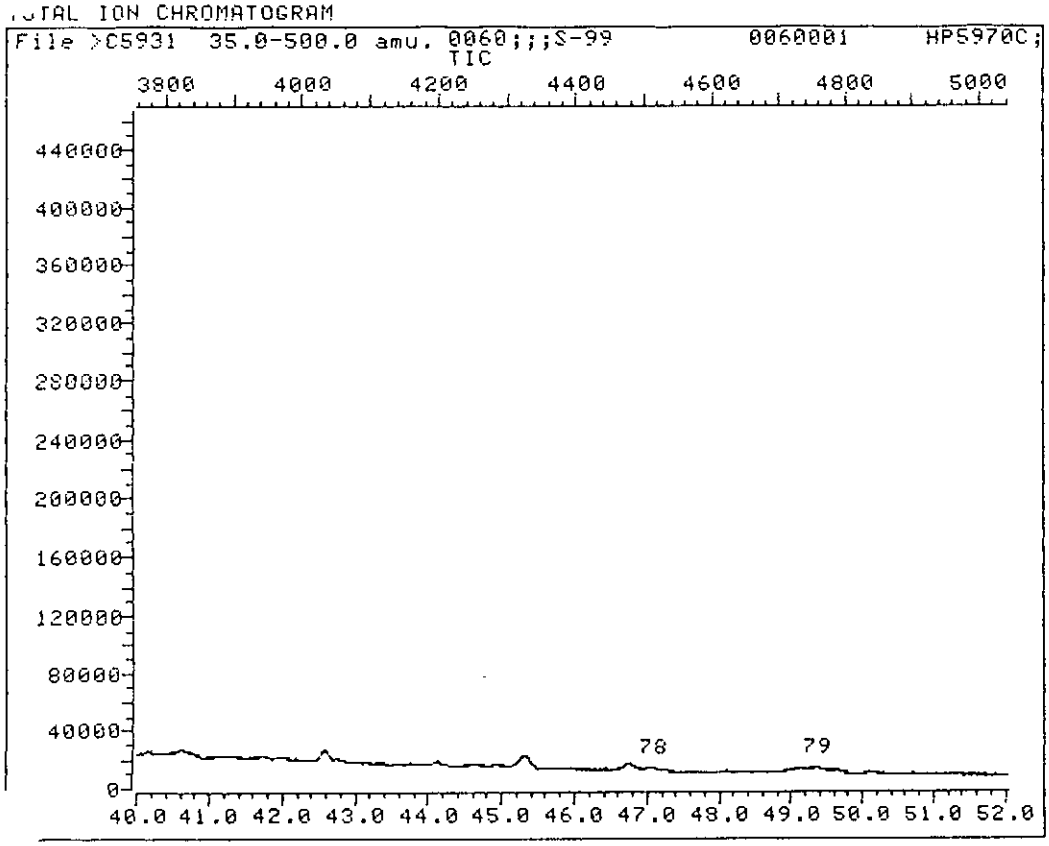
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930202 15:36

Operator ID: MSC
Quant Time: 930202 20:54
Injected at: 930202 19:59

TIC page 3 of 4

TOTAL ION CHROMATOGRAM



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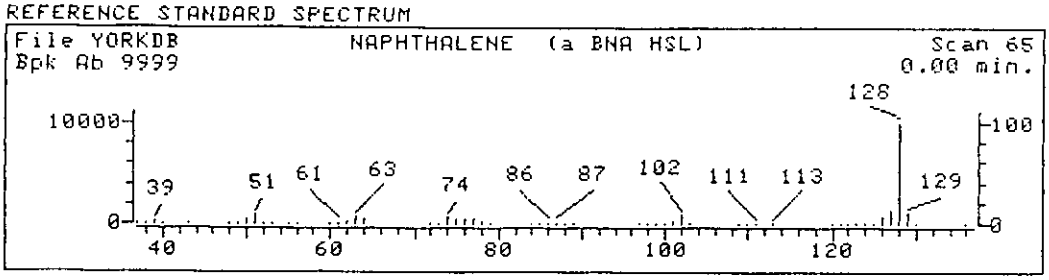
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930202 15:36

Operator ID: MSC
Quant Time: 930202 20:54
Injected at: 930202 19:59

TIC page 4 of 4

REFERENCE STANDARD SPECTRUM



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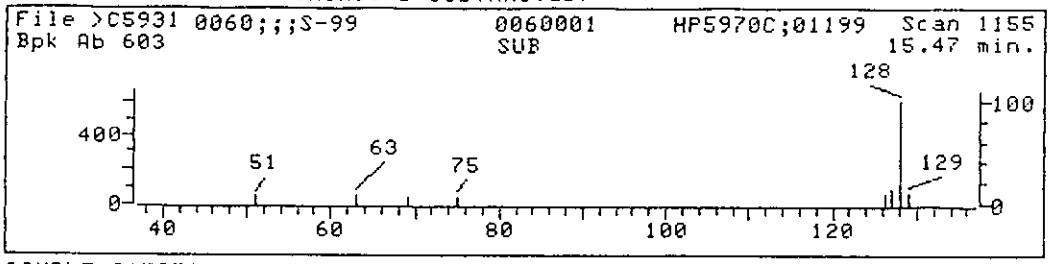

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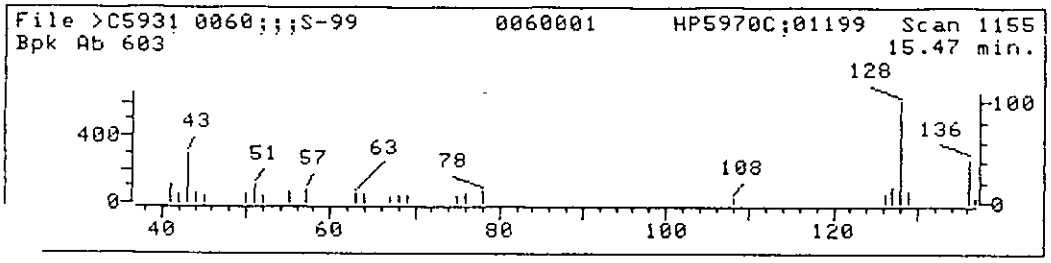

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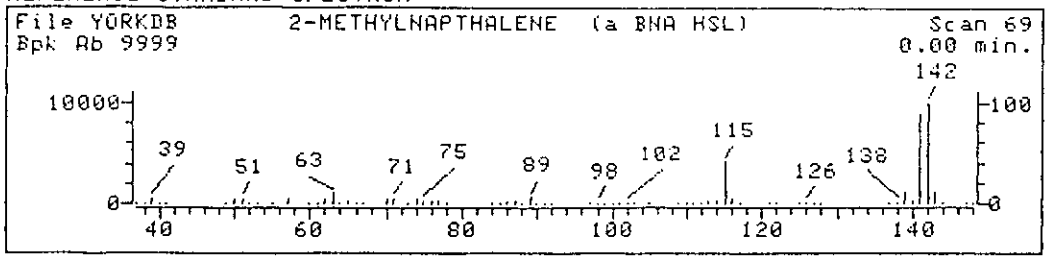
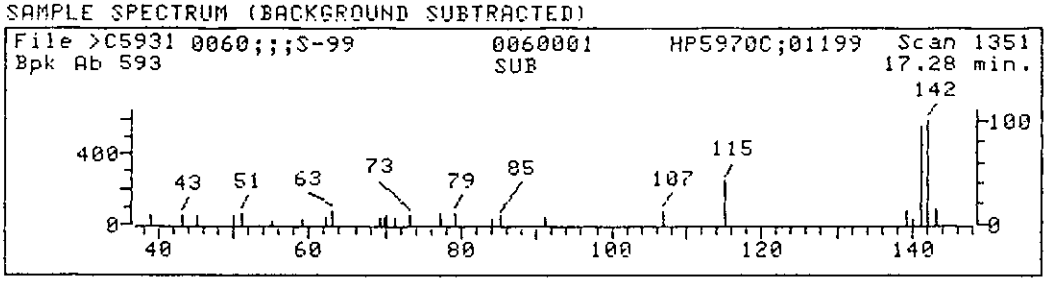
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 27
Compound Name: Naphthalene
Scan Number: 1156
Retention Time: 15.47 min.
Quant Ion: 127.9
Area: 1431
Concentration: 9.29 ug
q-value: 95

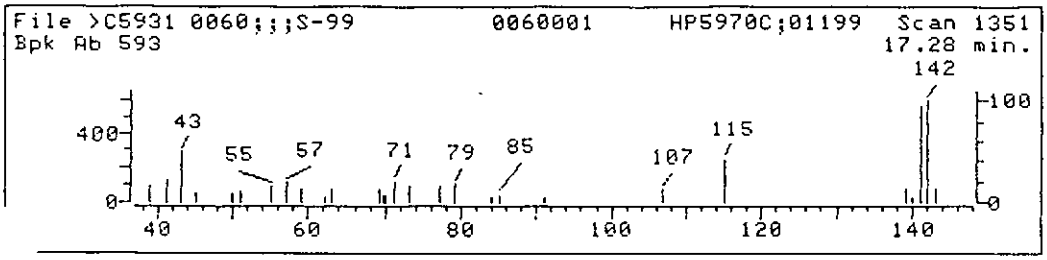
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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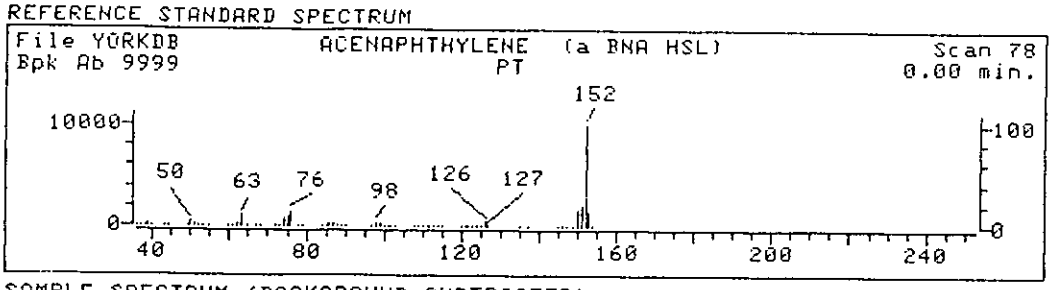
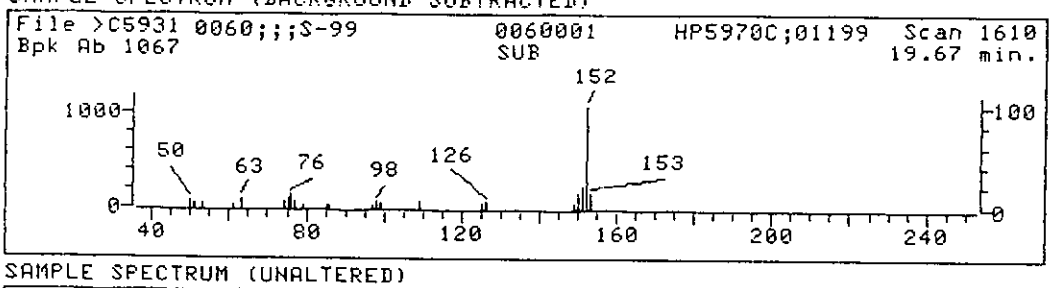
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 31
Compound Name: 2-Methylnaphthalene
Scan Number: 1351
Retention Time: 17.28 min.
Quant Ion: 141.9
Area: 1268
Concentration: 11.14 ug
q-value: 87

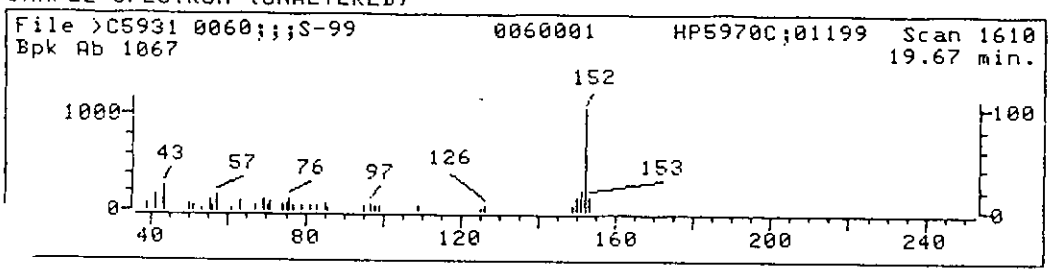
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



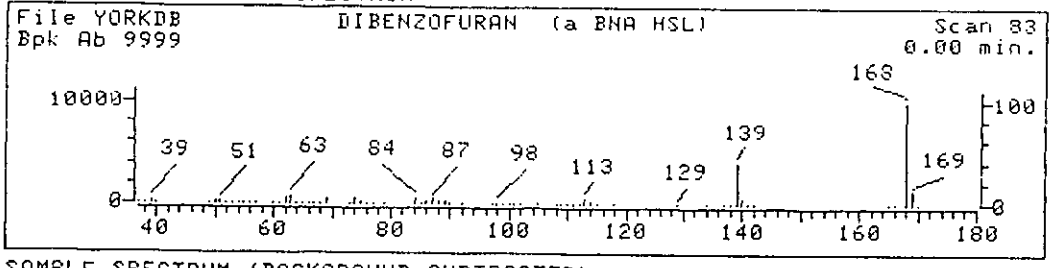
SAMPLE SPECTRUM (UNALTERED)



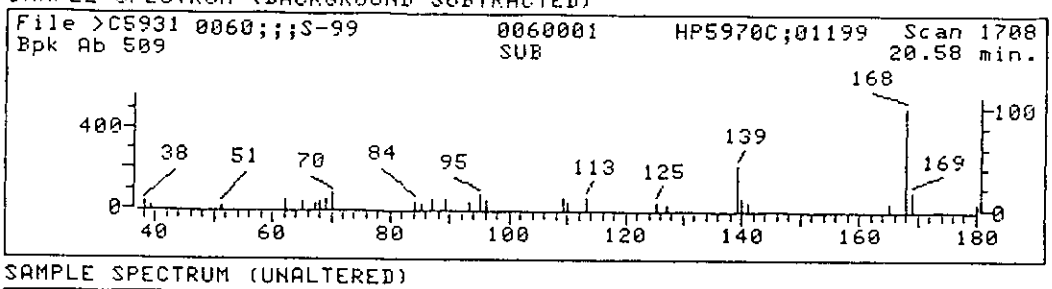
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 40
Compound Name: Acenaphthylene
Scan Number: 1610
Retention Time: 19.67 min.
Quant Ion: 152.0
Area: 2480
Concentration: 16.19 ug
q-value: 98

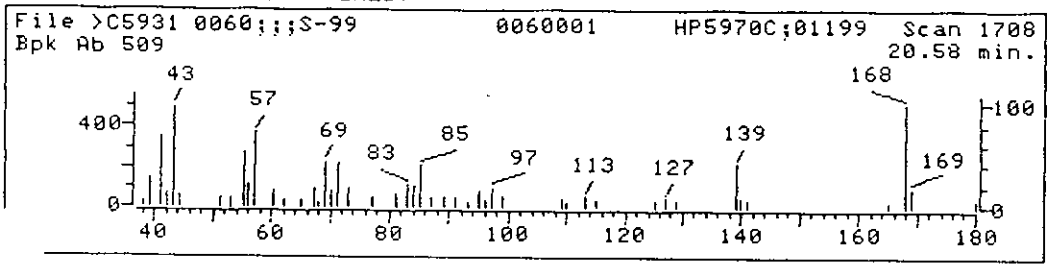
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



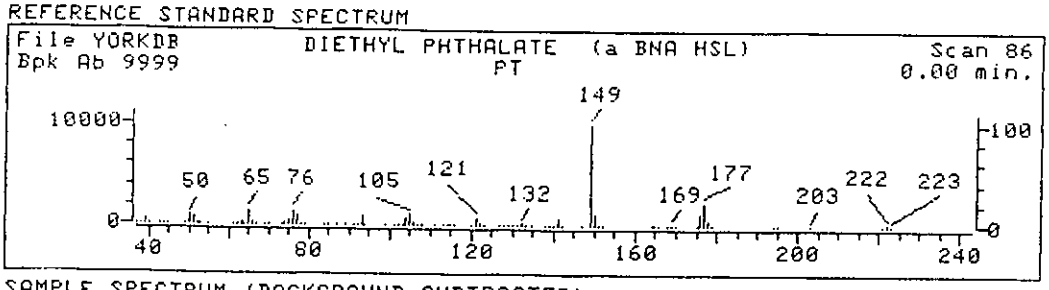
SAMPLE SPECTRUM (UNALTERED)



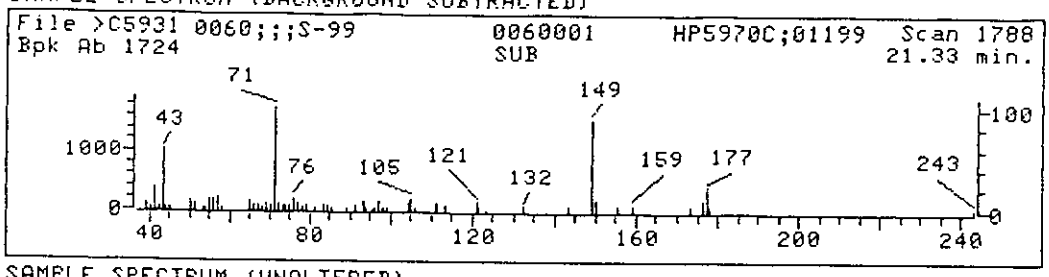
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 46
Compound Name: Dibenzofuran
Scan Number: 1708
Retention Time: 20.58 min.
Quant Ion: 167.8
Area: 1249
Concentration: 7.99 ug
q-value: 84

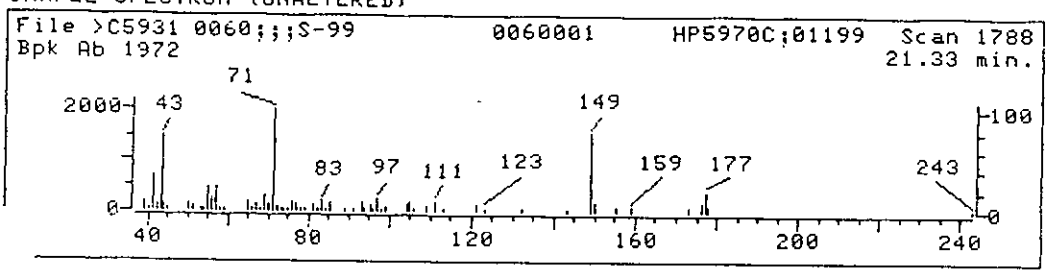
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



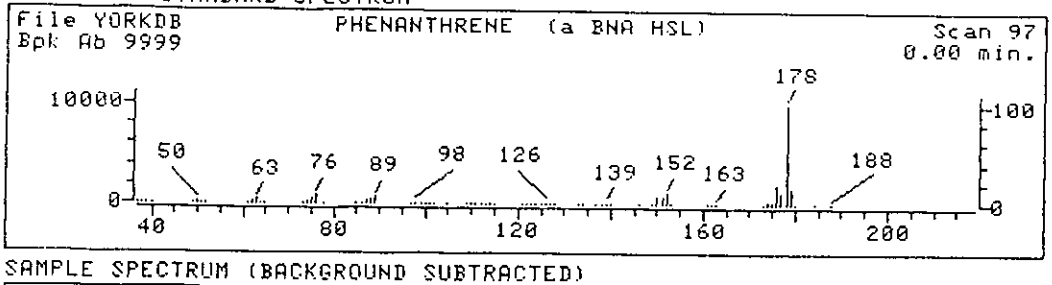
SAMPLE SPECTRUM (UNALTERED)



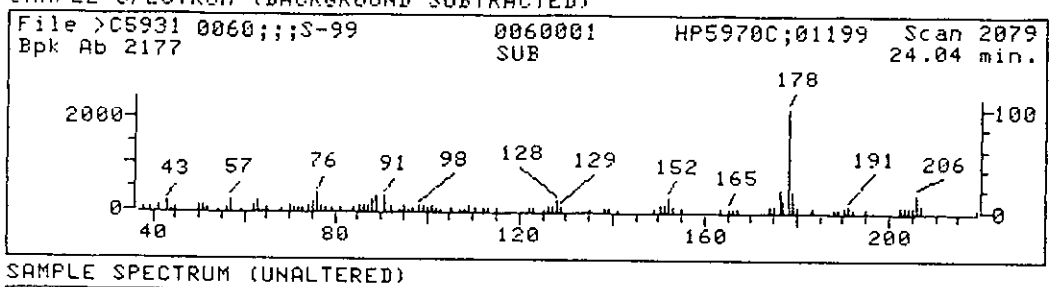
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 48
Compound Name: Diethylphthalate
Scan Number: 1788
Retention Time: 21.33 min.
Quant Ion: 148.8
Area: 3546
Concentration: 23.91 ug
q-value: 97

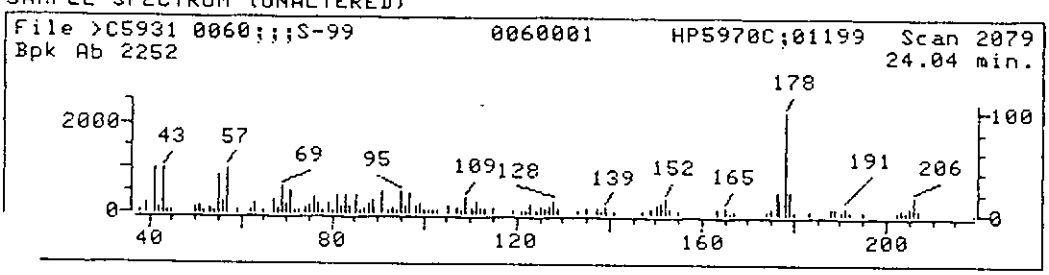
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



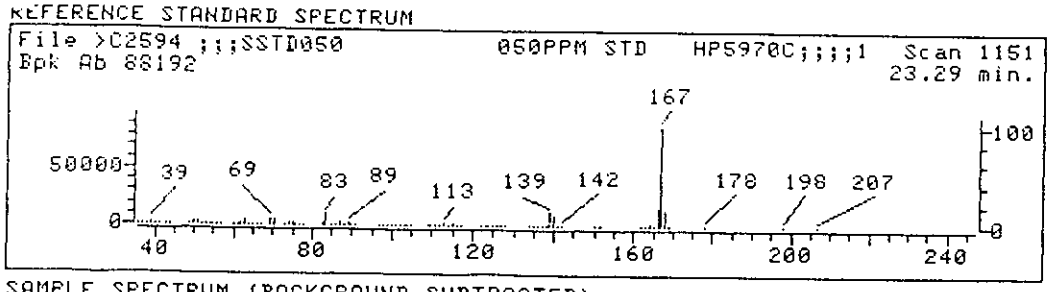
SAMPLE SPECTRUM (UNALTERED)



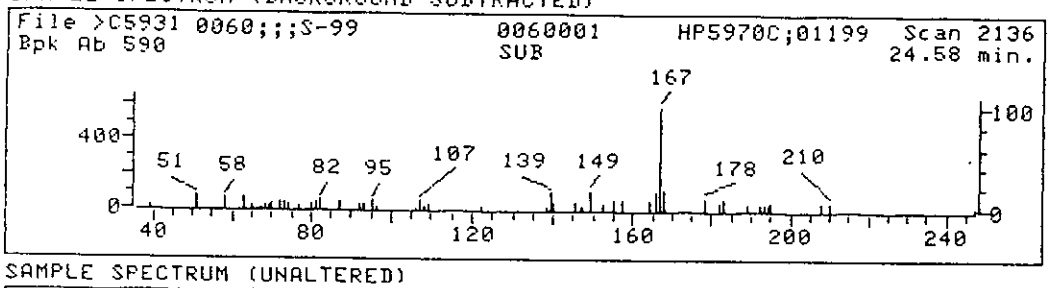
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 59
Compound Name: Phenanthrene
Scan Number: 2078
Retention Time: 24.04 min.
Quant Ion: 177.9
Area: 7956
Concentration: 44.71 ug
q-value: 92

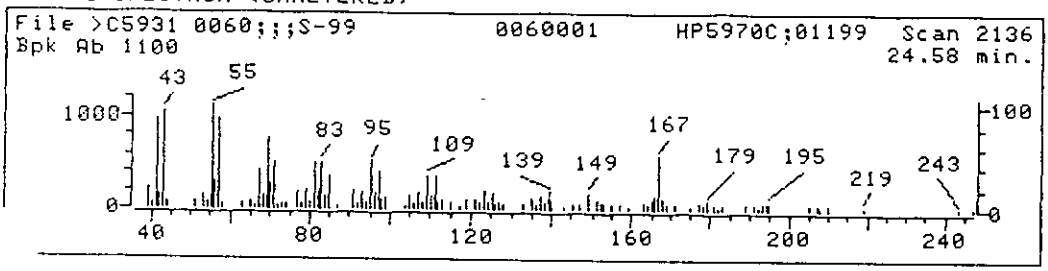
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



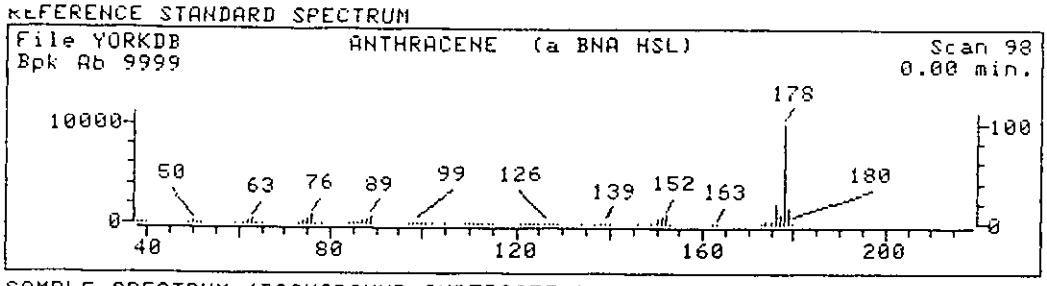
SAMPLE SPECTRUM (UNALTERED)



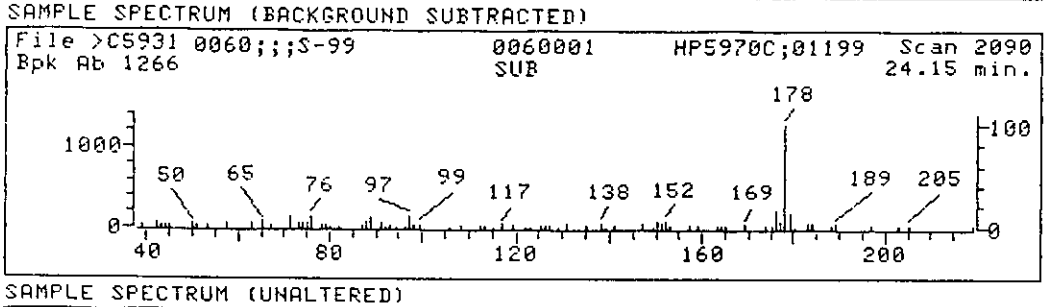
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 60
Compound Name: Carbazole
Scan Number: 2136
Retention Time: 24.58 min.
Quant Ion: 166.8
Area: 2017
Concentration: 26.29 ug
q-value: 90

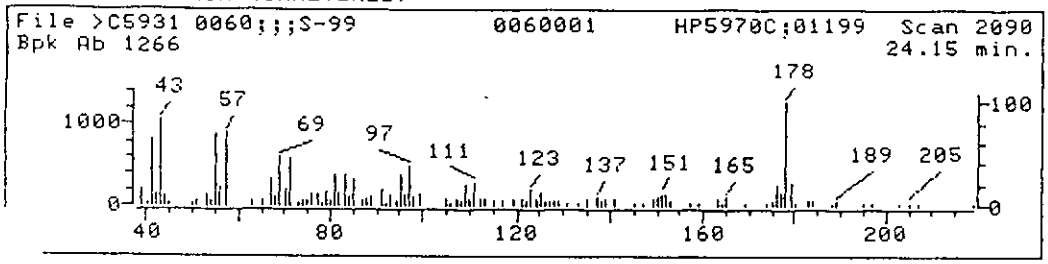
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



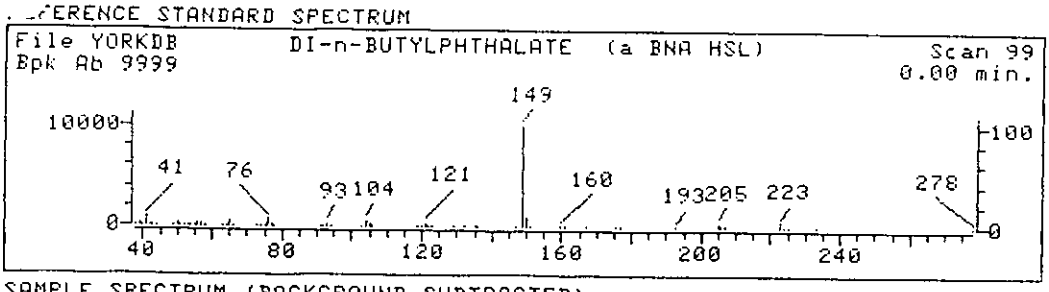
SAMPLE SPECTRUM (UNALTERED)



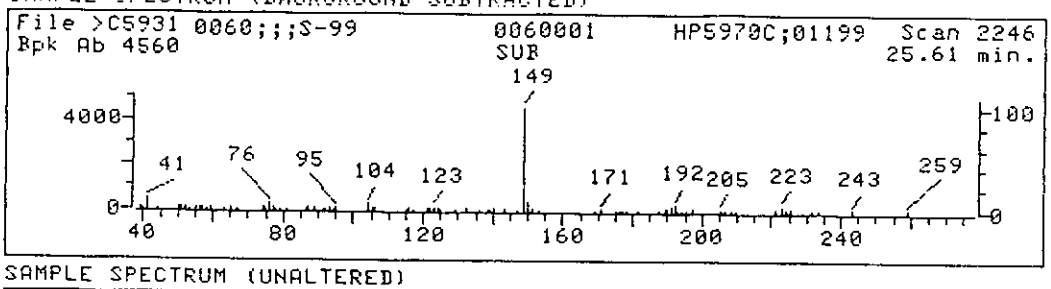
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 61
Compound Name: Anthracene
Scan Number: 2090
Retention Time: 24.15 min.
Quant Ion: 177.9
Area: 3075
Concentration: 16.69 ug
q-value: 98

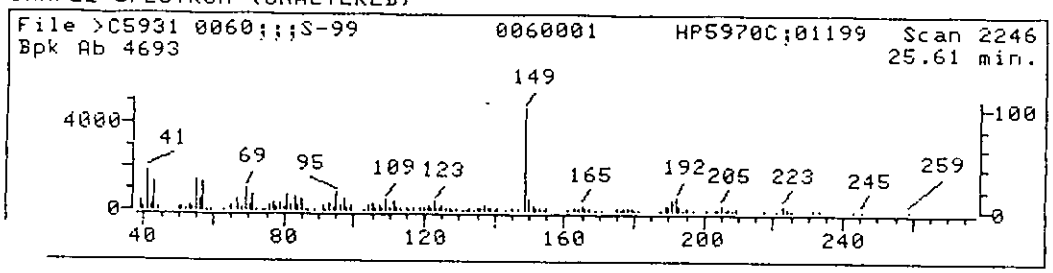
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



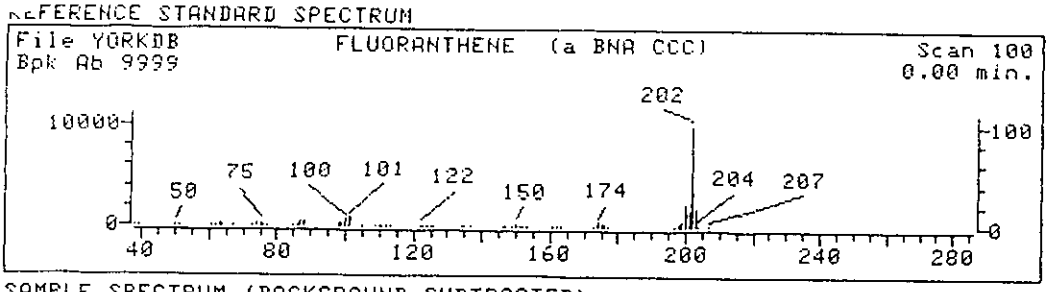
SAMPLE SPECTRUM (UNALTERED)



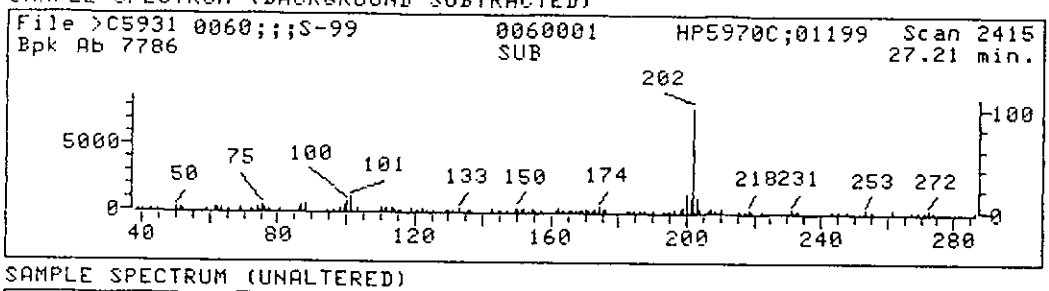
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 62
Compound Name: Di-n-butylphthalate
Scan Number: 2246
Retention Time: 25.61 min.
Quant Ion: 148.8
Area: 9492
Concentration: 35.68 ug
q-value: 98

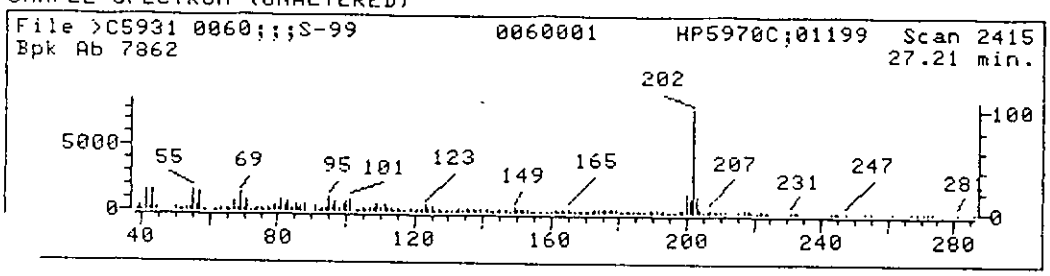
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



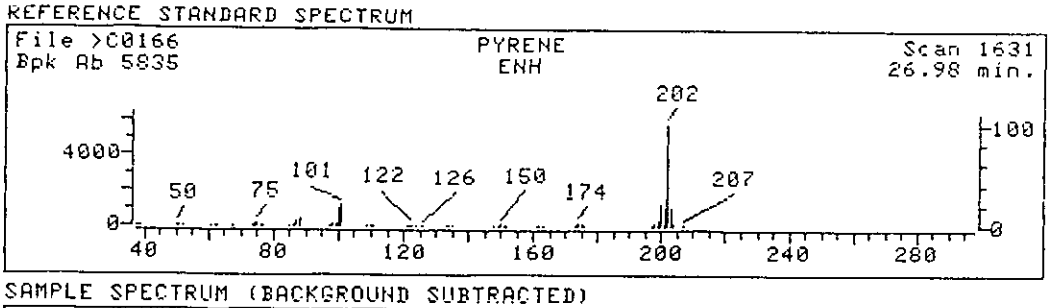
SAMPLE SPECTRUM (UNALTERED)



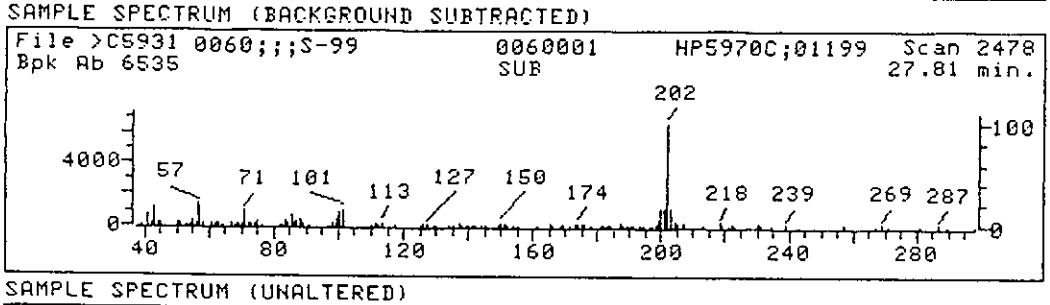
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 63
Compound Name: Fluoranthene
Scan Number: 2415
Retention Time: 27.21 min.
Quant Ion: 201.9
Area: 21313
Concentration: 104.81 ug
q-value: 93

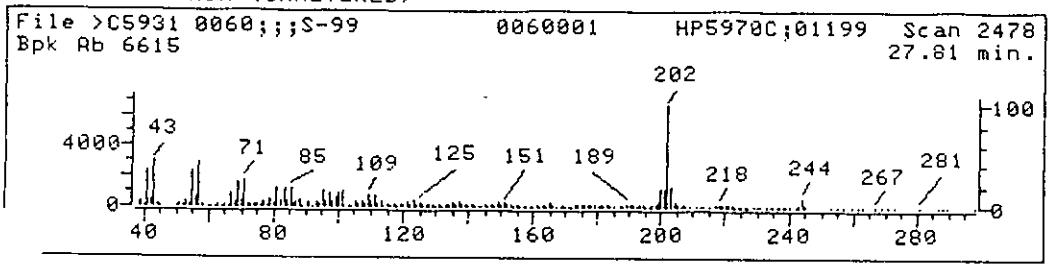
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



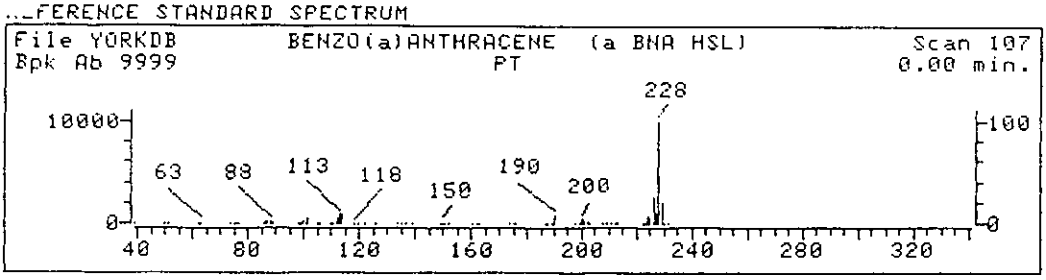
SAMPLE SPECTRUM (UNALTERED)



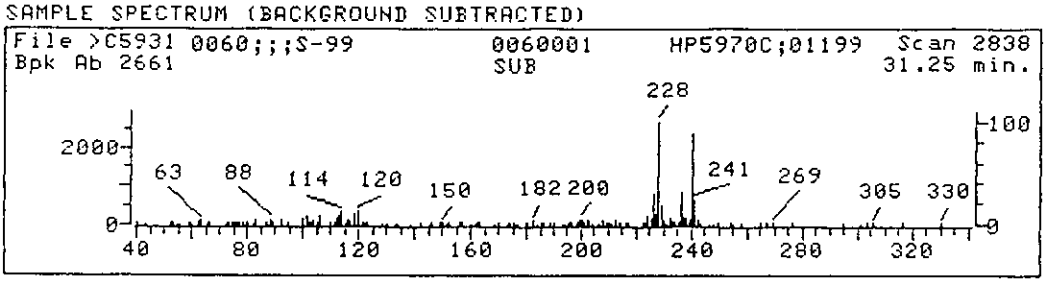
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 65
Compound Name: Pyrene
Scan Number: 2478
Retention Time: 27.81 min.
Quant Ion: 201.9
Area: 18843
Concentration: 77.30 ug
q-value: 97

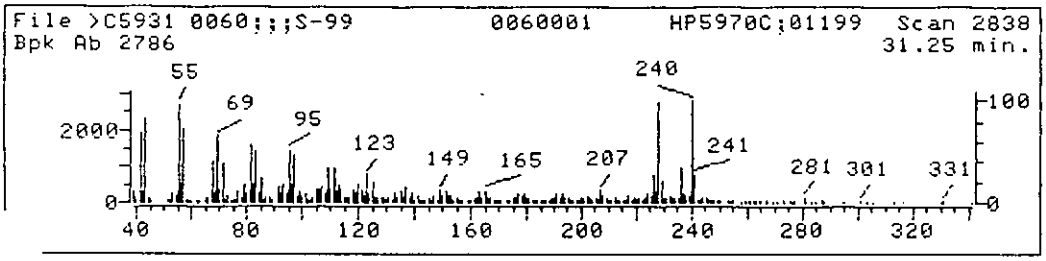
...FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



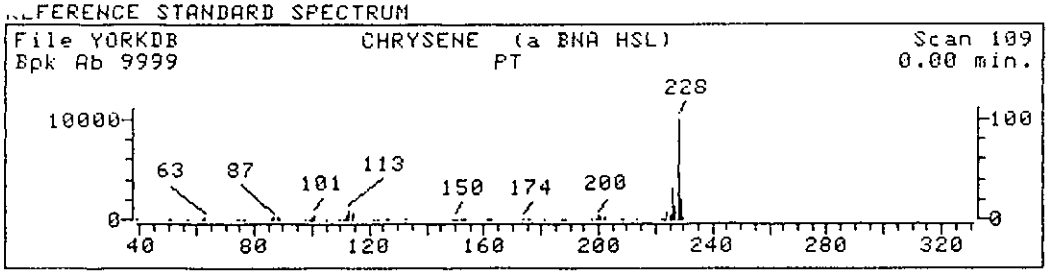
SAMPLE SPECTRUM (UNALTERED)



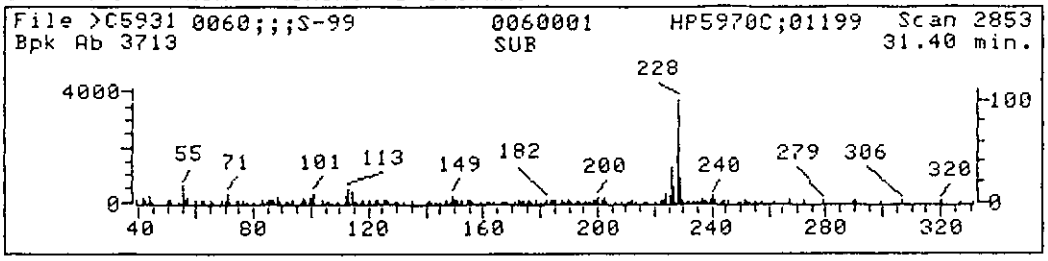
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 69
Compound Name: Benzo(a)anthracene
Scan Number: 2838
Retention Time: 31.25 min.
Quant Ion: 228.0
Area: 12101
Concentration: 64.86 ug
q-value: 92

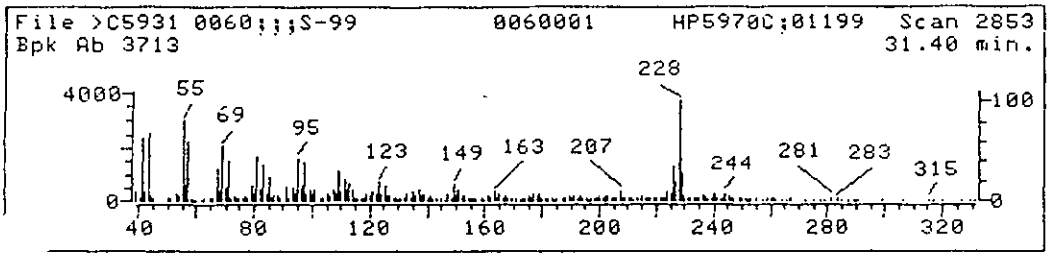
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



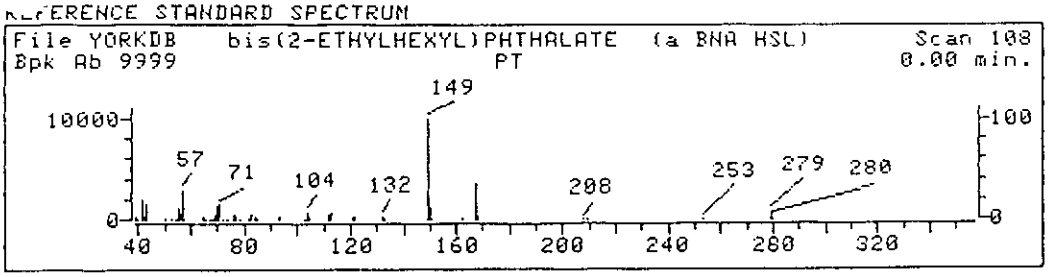
SAMPLE SPECTRUM (UNALTERED)



Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

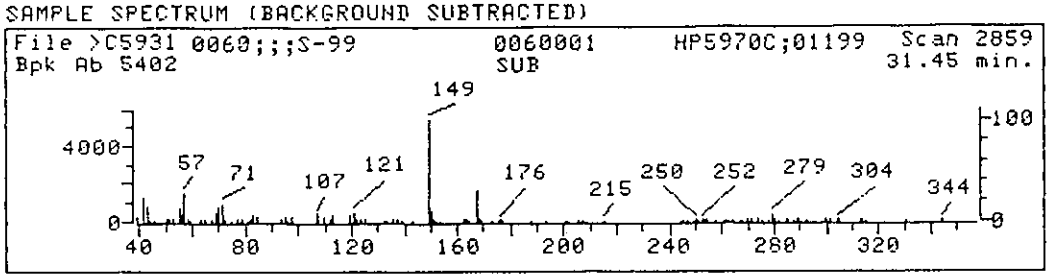
Compound No: 70
Compound Name: Chrysene
Scan Number: 2854
Retention Time: 31.40 min.
Quant Ion: 228.0
Area: 17284
Concentration: 112.66 ug
q-value: 96

REFERENCE STANDARD SPECTRUM

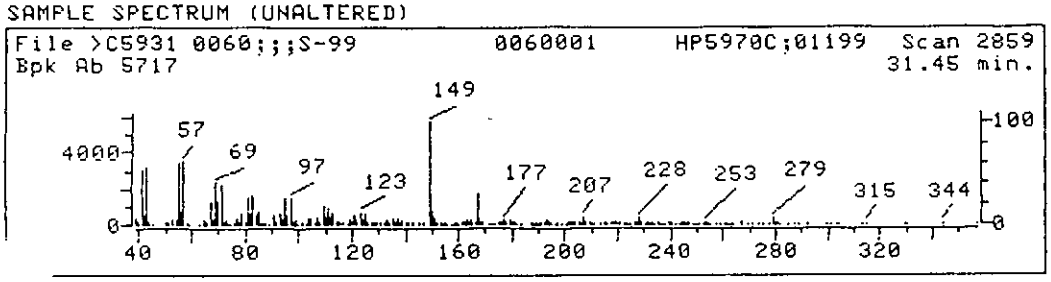


0201

SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



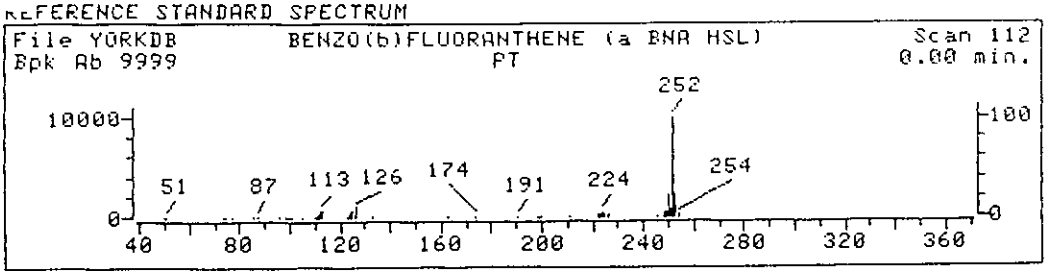
SAMPLE SPECTRUM (UNALTERED)



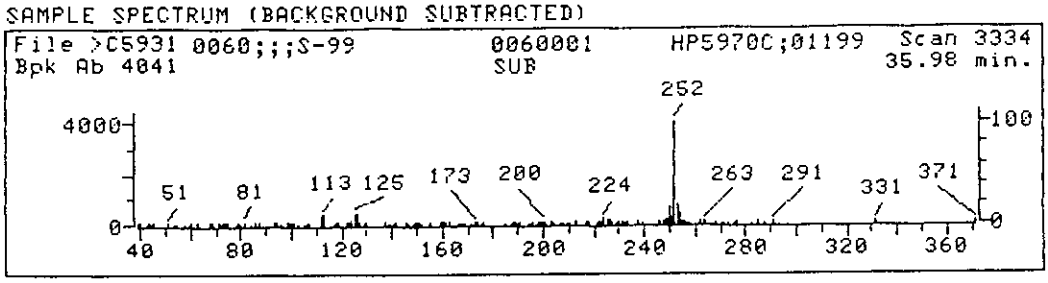
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 71
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2859
Retention Time: 31.45 min.
Quant Ion: 148.8
Area: 16091
Concentration: 100.70 ug
q-value: 82

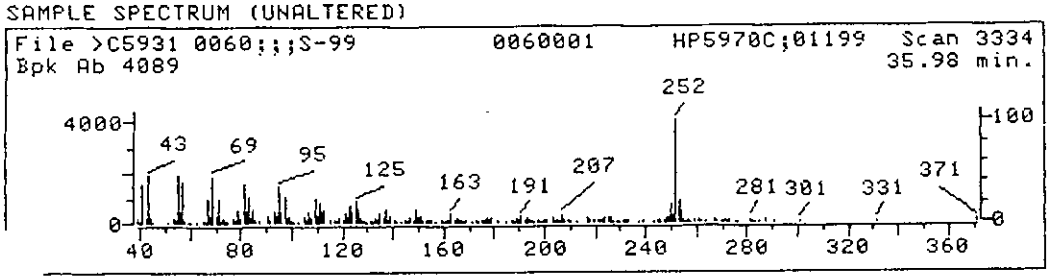
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



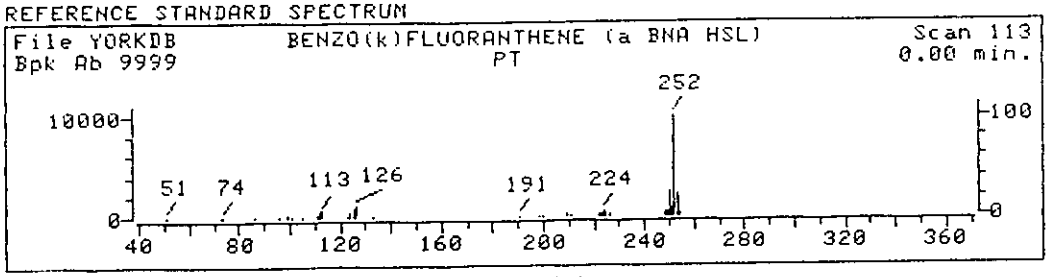
SAMPLE SPECTRUM (UNALTERED)



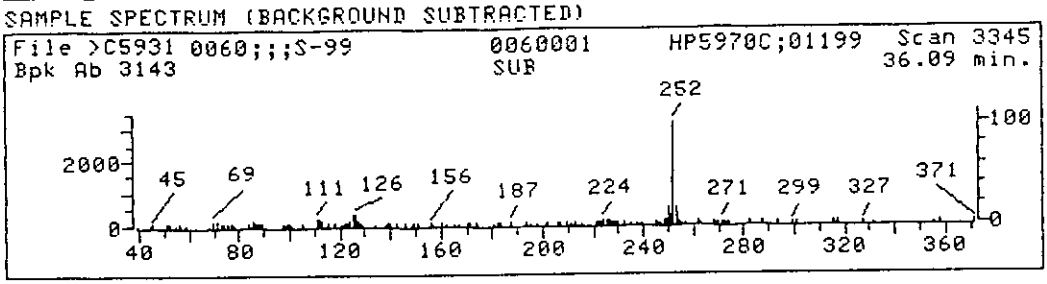
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 74
Compound Name: Benzo(b)fluoranthene
Scan Number: 3334
Retention Time: 35.98 min.
Quant Ion: 252.0
Area: 16701
Concentration: 99.66 ug
q-value: 96

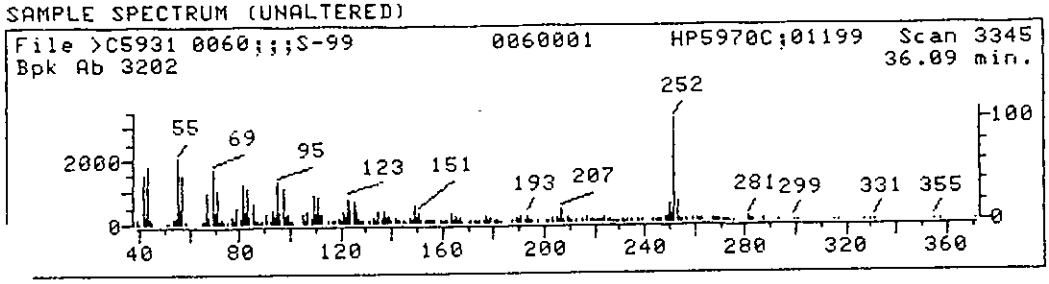
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



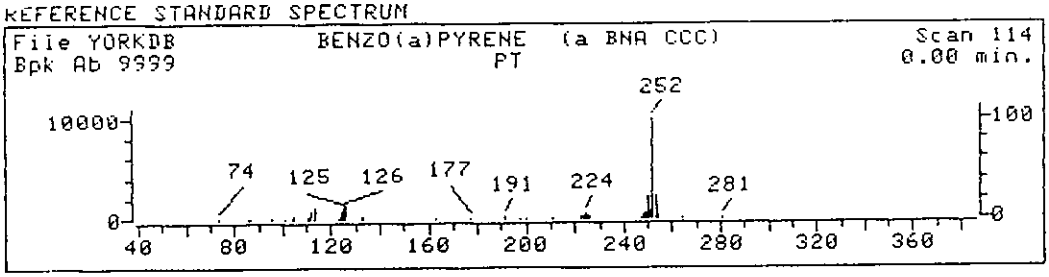
SAMPLE SPECTRUM (UNALTERED)



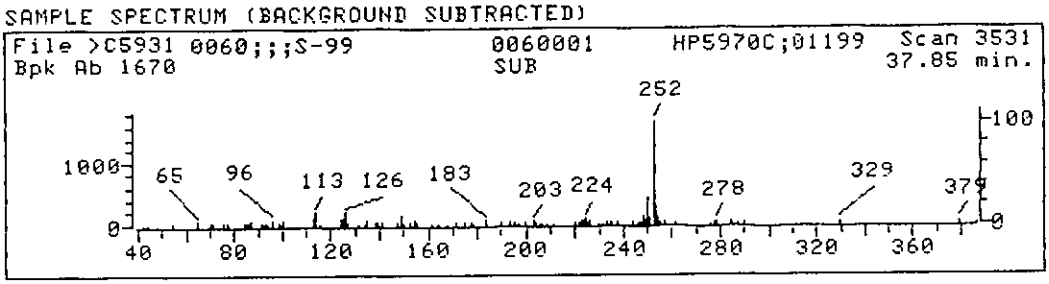
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 75
Compound Name: Benzo(k)fluoranthene
Scan Number: 3345
Retention Time: 36.09 min.
Quant Ion: 252.0
Area: 16359
Concentration: 113.57 ug
q-value: 91

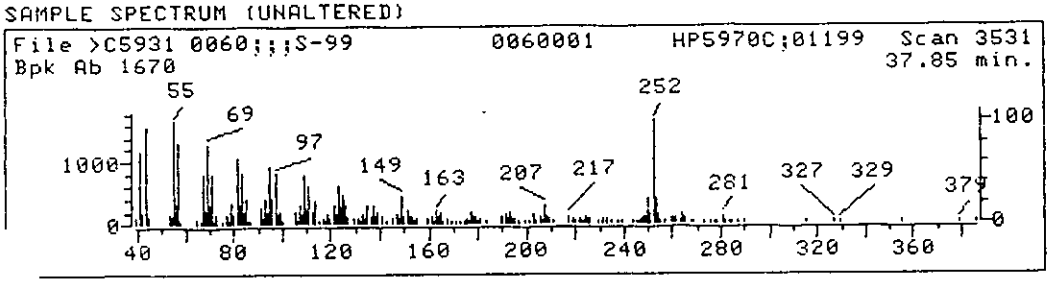
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



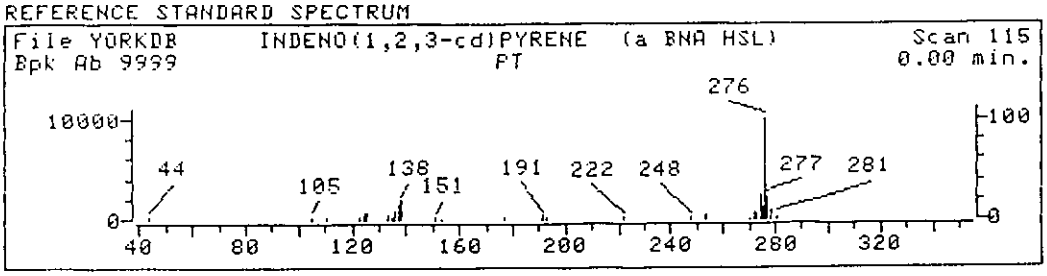
SAMPLE SPECTRUM (UNALTERED)



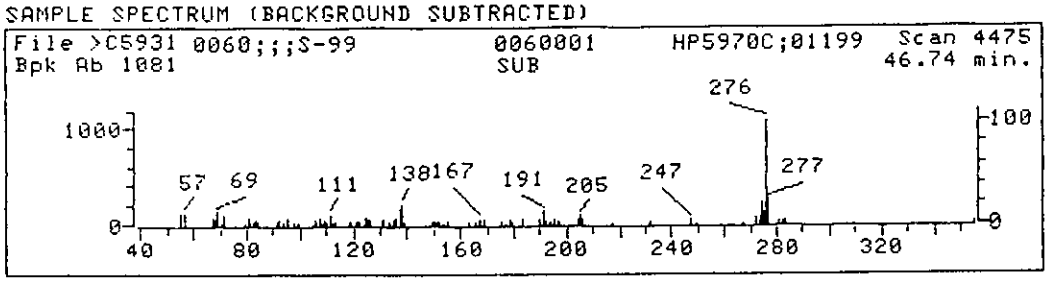
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 76
Compound Name: Benzo(a)pyrene
Scan Number: 3531
Retention Time: 37.85 min.
Quant Ion: 252.0
Area: 11840
Concentration: 88.45 ug
q-value: 95

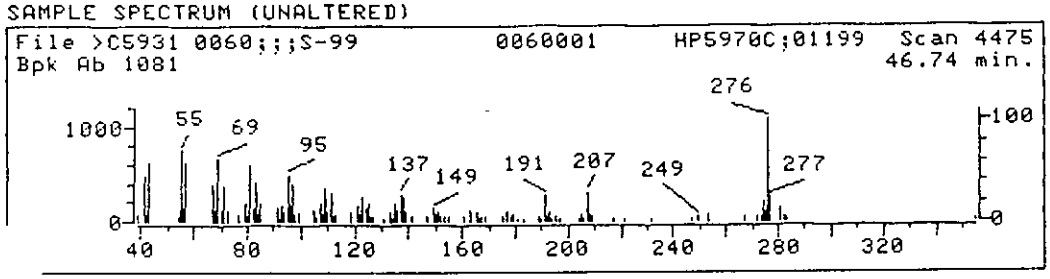
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



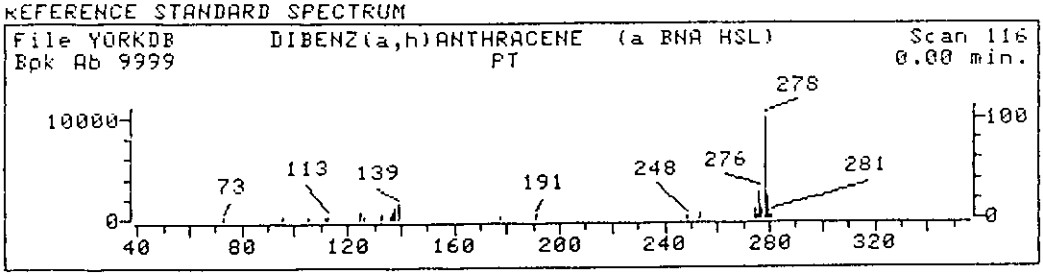
SAMPLE SPECTRUM (UNALTERED)



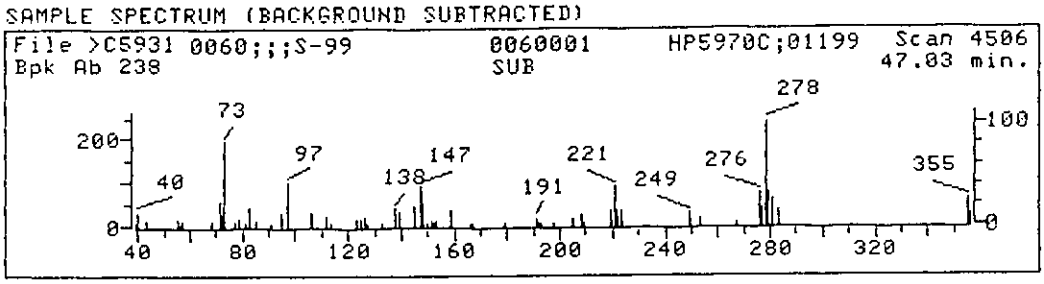
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 77
Compound Name: Indeno(1,2,3-cd)pyrene
Scan Number: 4475
Retention Time: 46.74 min.
Quant Ion: 276.0
Area: 11321
Concentration: 106.56 ug
q-value: 95

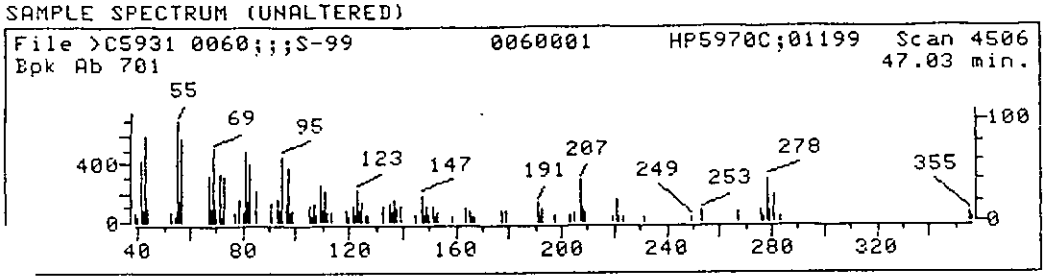
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



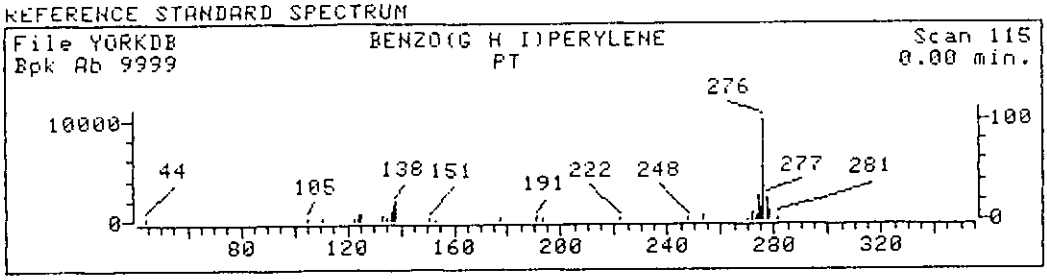
SAMPLE SPECTRUM (UNALTERED)



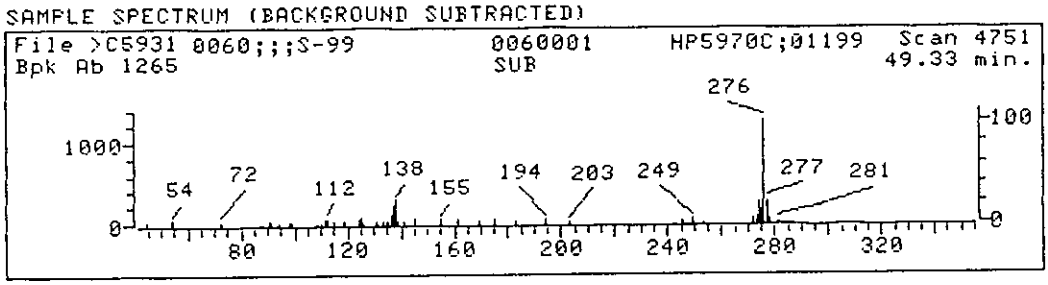
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

Compound No: 78
Compound Name: Dibenz(a,h)anthracene
Scan Number: 4506
Retention Time: 47.03 min.
Quant Ion: 278.0
Area: 1420
Concentration: 13.37 ug
q-value: 84

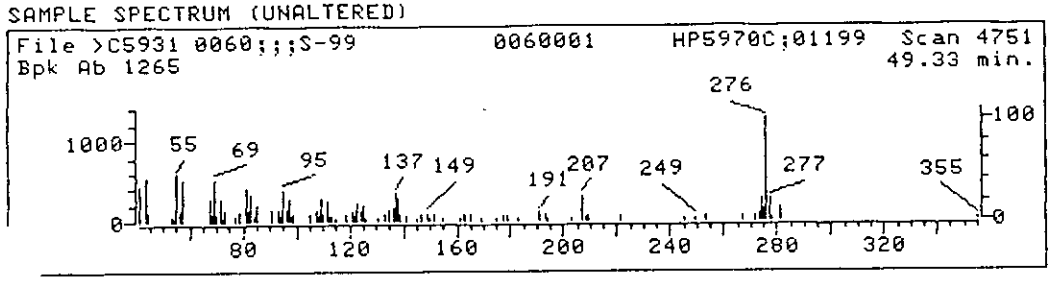
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



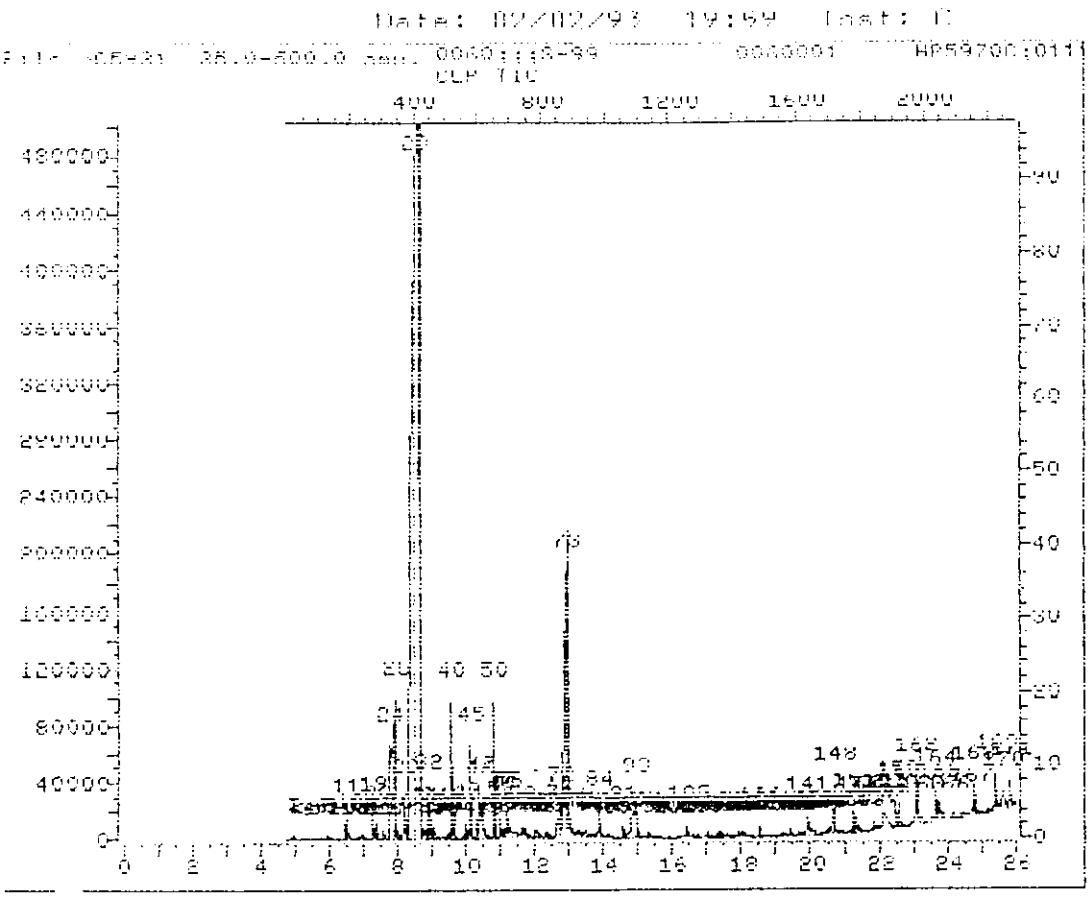
Data File: >C5931::C1 Quant Output File: ^C5931::QT
Name: 0060;;;S-99
Misc: 0060001 HP5970C;011993;012093;LLS;1;;5.0;C0953 BTL# 7
Quant Time: 930202 20:54 Quant ID File: I_EPA::N1
Injected at: 930202 19:59 Last Calibration: 930202 15:36

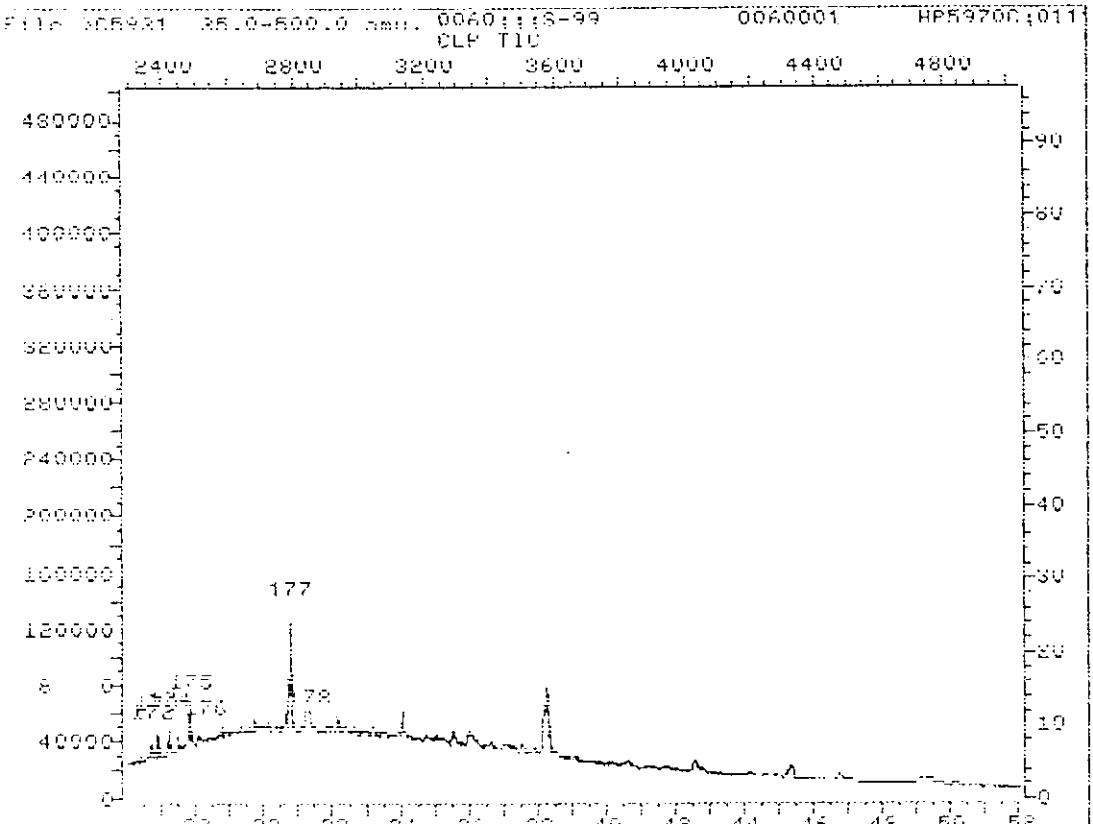
Compound No: 79
Compound Name: Benzo(g,h,i)perylene
Scan Number: 4751
Retention Time: 49.33 min.
Quant Ion: 276.0
Area: 8843
Concentration: 79.90 ug
q-value: 84

MS ...ta File header from : >15931

Sample: IIIAII;;;S-99 Operator: MSC MS 2/02/93 19:59
Misc : IIIAIIIII HP5972IC;II1993;II2893;ILS;1;;5.0;C0953 RTL# 7
Sys. #: 1 MS model: 20 SW/HW rev.: 1A ALS # : 0
Method File: M U Tuning File: T C No. of extra records: 2
Source temp.: 0 Analyzer temp.: 290 Transfer line temp. : 0

Chromatographic temperatures :	40.	290.	0.	0.	0.
Chromatographic times, min. :	4.0	23.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	10.0	0.0	0.0	.5	0.0


Date: 02/02/93 19:59 Inst: C
CLP TIC
400 800 1200 1600 2000
480000
440000
400000
360000
320000
280000
240000
200000
160000
120000
80000
40000
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26
100
90
80
70
60
50
40
30
20
10
0
40 50
45
148


CLP TIC
2400 2800 3200 3600 4000 4400 4800
480000
440000
400000
360000
320000
280000
240000
200000
160000
120000
80000
40000
0
177
178
176
175
100
90
80
70
60
50
40
30
20
10
0

Data: 02/02/93 19:59 Inst: C

S-990210
HP5970C

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

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
99.	8.98	5827883.	150000.	1.	18.94
73.	12.91	2911498.	26000.	1.	18.94
25.	2.91	318893.	11000.	1.	18.94
50.	10.81	218513.	230.	1.	18.94
24.	2.22	212081.	230.	1.	18.94
40.	9.58	189623.	630.	1.	18.94
93.	14.92	192082.	540.	2.	18.94
122	30.26	240638.	480.	5.	18.94
42.	10.43	141032.	470.	1.	18.94
45.	10.12	121767.	410.	1.	18.94
46.	10.39	83624.	280.	1.	18.94
28.	8.19	49822.	230.	1.	18.94
148	20.62	108251.	220.	3.	18.94
~~32~~	~~8.90~~	~~69418.~~	~~210.~~	~~1.~~	~~18.94~~ VOA
162	23.02	23599.	120.	4.	18.94
169	25.40	60320.	140.	4.	18.94
84.	15.86	51433.	140.	2.	18.94
72.	12.74	38480.	130.	1.	18.94
56.	11.21	34824.	120.	1.	18.94
19.	7.27	36258.	120.	1.	18.94
55.	11.13	34829.	120.	1.	18.94
~~1~~	~~27.81~~	~~55572.~~	~~110.~~	~~5.~~	~~18.94~~ target
16.	24.26	43081.	100.	4.	18.94
159	22.45	41900.	99.	4.	18.94
164	23.63	41416.	99.	4.	18.94
31.	8.81	26385.	88.	1.	18.94
121	29.82	32225.	88.	4.	18.94

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-DICHLORUBENZENE-D4	12.18	226744.	0.00	13.80	7.6
NAPHTHALENE-D8	15.43	276742.	13.80	17.26	2.2
ACENAPHTHENE-D10	20.08	368651.	17.26	22.03	4.7
PHENANTHRENE-D10	23.92	321886.	22.03	27.64	2.3
CHRYSENE-D12	31.32	376586.	27.64	34.20	2.9
PERYLENE-D12	38.09	5620.	34.20	49.33	.1

ISTD peaks found:	6
Surrogate peaks found:	8
Quant target peaks expected:	26
Target peaks matched:	7
Total TIC identified:	31

TICS : 12:19 AM FRI., 5 FEB., 1993

RPN 0005

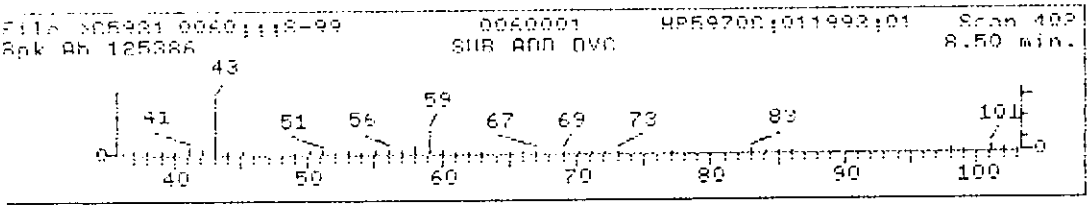
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

RPN error for command: RSB63
RPN error: -5
Bad record length RSF

Sample file: >C5931 Spectrum #: 402

No data base entries were retrieved.

Peak#: 29 Area: 3821001. Est Conc: 13000. Date: 02/02/93 19:59 Inst: C



RPN: 3115

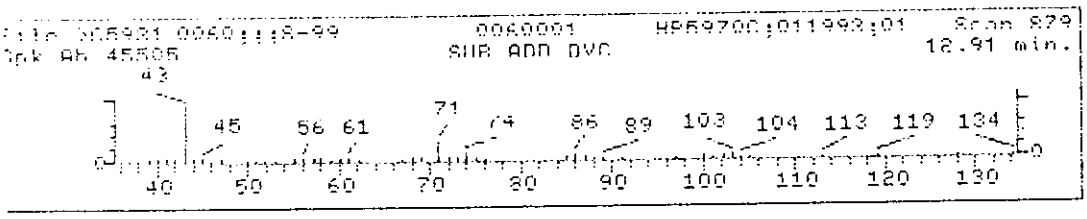
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >C5931 Spectrum #: 879

No data base entries were retrieved.

Peak#: 73 Area: 790498. Est Conc: 2610. Date: 02/02/93 19:59 Inst: C



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

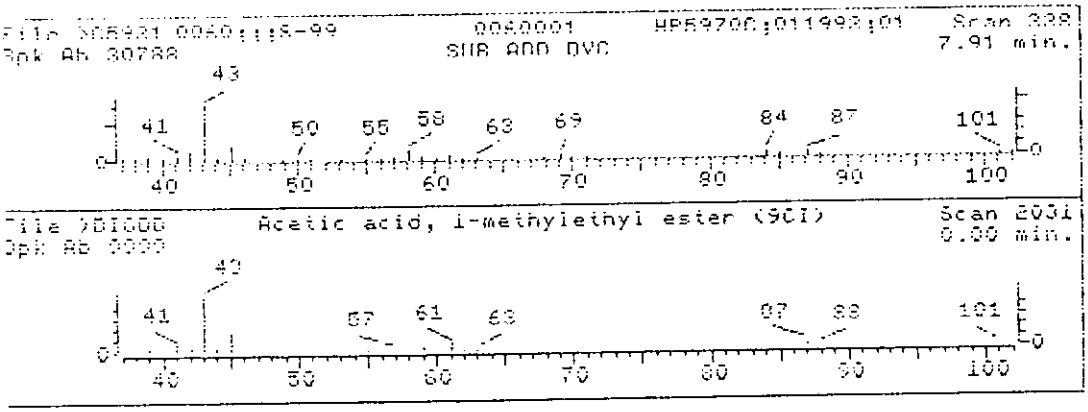
RPN error for command: RSF63
RPN error: -9
Bad record length RSF

1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2

Sample file: >C5931 Spectrum #: 338
Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	26	108214	2031	"BIGDR	41	38	1	0	58	42	8			14

Peak#: 25 Area: 318893. Est Conc: 1100. Date: 02/02/93 19:59 Inst: C



RPN 0005

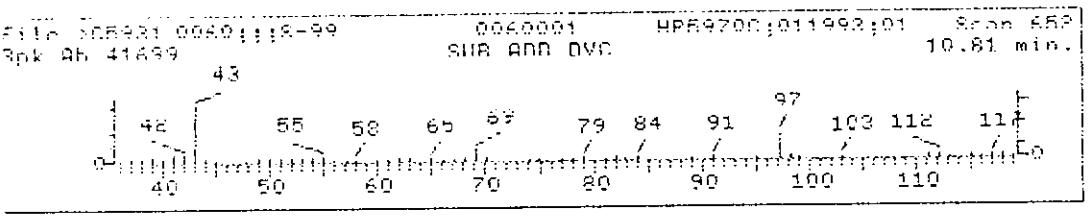
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >C5931 Spectrum #: 652

No data base entries were retrieved.

Peak#: 50 Area: 218513. Est Conc: 230. Date: 02/02/93 19:59 Inst: C



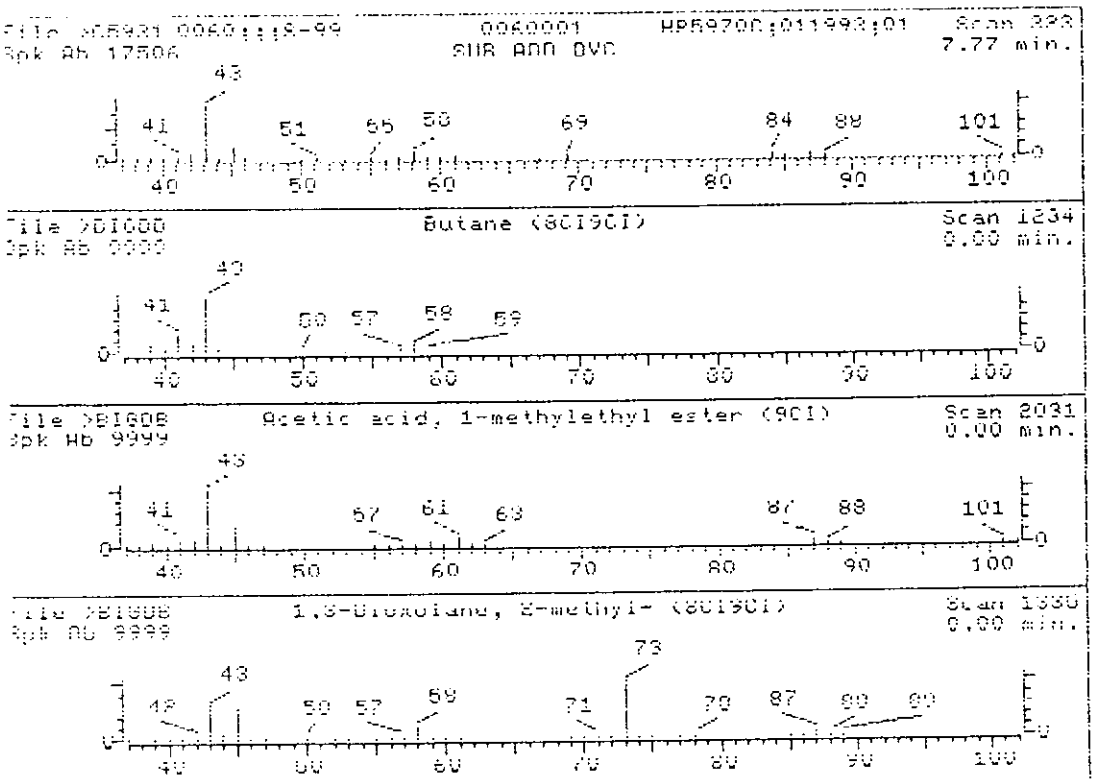
```
RMM error for command: RSR63
F    error:   -5
Bad record length RSF
```

1. Butane (8CI,9CI) 58 C4H10
2. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2
3. 1,3-Dioxolane, 2-methyl- (8CI,9CI) 88 C4H8O2

Sample file: >C5931 Spectrum #: 323
Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IO
1.	38*	106978	1734	"BIGDB	23	56	2	0	86	33	12		13	
2.	26	108214	2031	"BIGDB	41	38	1	0	51	42	8		14	
3.	28*	497262	1335	"BIGDB	32	41	2	0	41	55	5		16	

Peak#: 24 Area: 217181. Est Conc: 730. Date: 02/02/93 19:59 Inst: C



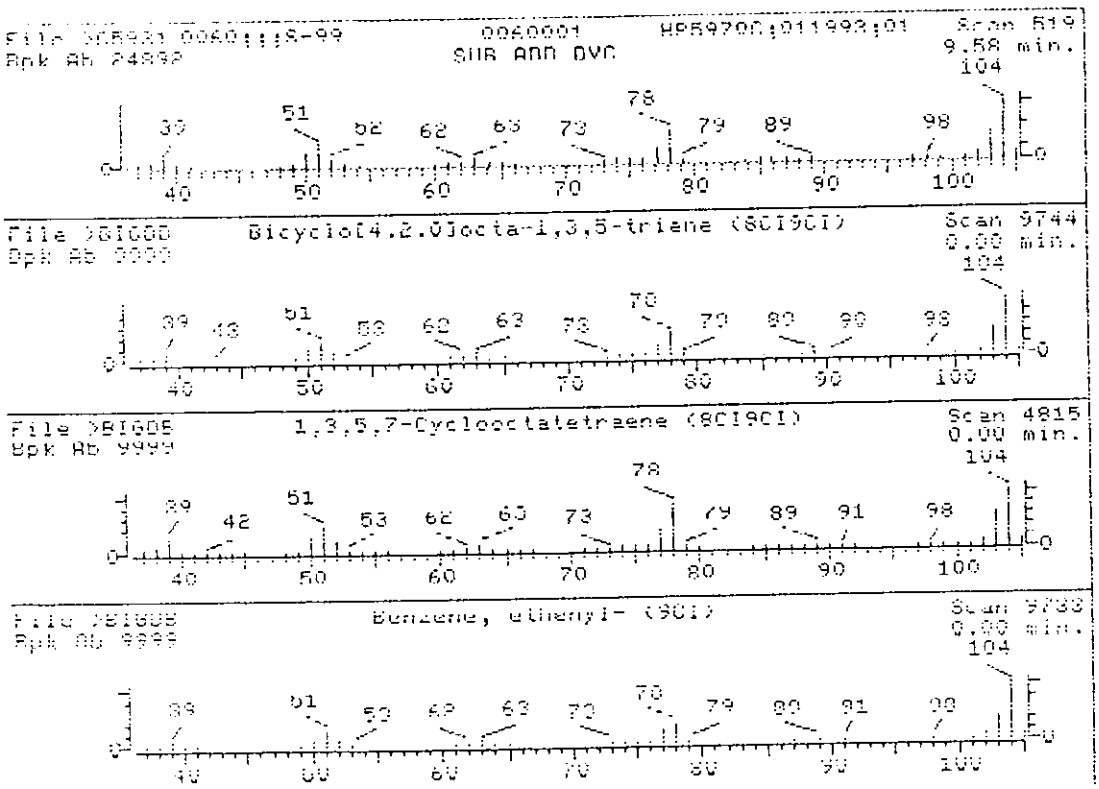
And scand length RSF

1. Bicyclo[4.2.0]octa-1,3,5-triene (8CI)(9CI) 104 C8H8
2. 1,3,5,7-Cyclooctatetraene (8CI)(9CI) 104 C8H8
3. Benzene, ethenyl- (9CI) 104 C8H8
4. 1,3,5,7-Octatrien-5-yne (8CI) 104 C8H8

Sample File: >C5931 Spectrum #: 519
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CDN #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	84*	694871	9744	"BIGDB	29	24	1	1	67	8	55			66
2.	75*	629209	4815	"BIGDB	86	33	2	0	53	12	35			66
3.	75*	100425	9733	"BIGDB	71	32	1	2	71	18	35			60
4.	41*	16817725	4816	"BIGDB	50	76	3	0	52	25	17			14

Peak#: 40 Area: 189623. Est Conc: 630. Date: 02/02/93 19:59 Inst: C

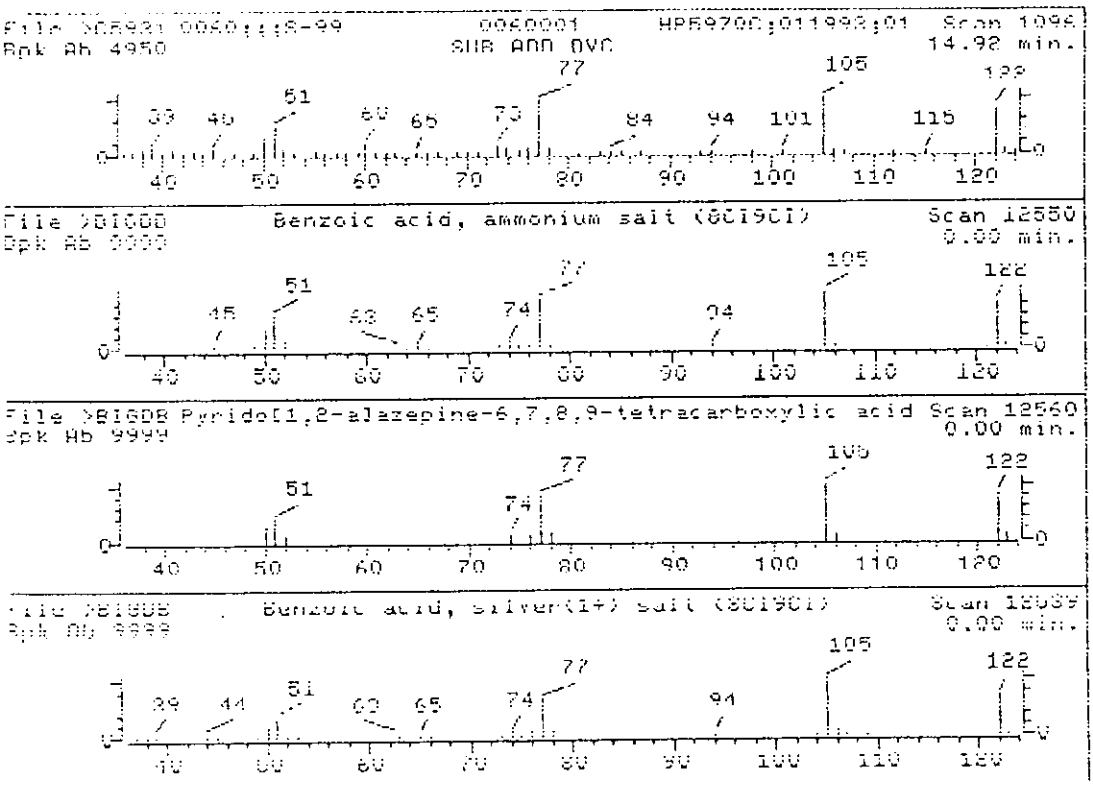


1. Benzoic acid, ammonium salt (8CI,9CI)	139	C7H9NO2
2. Pyrido[1,2-a]azepine-6,7,8,9-tetracarboxylic acid, 1 11-(benzoyloxy)-6,7-dihydro-, tetramethyl ester (9CI)	497	C25H23NO10
3. Benzoic acid, silver(1+) salt (8CI,9CI)	0	
4. Benzoic acid (AICN)(8CI,9CI)	122	C7H6O2

Sample file: >D5931 Spectrum #: 1096
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	93	1863634	12550	"BIGDB	99	2	0	0	78	4	68	83		
2.	83	71122725	12560	"BIGDB	61	23	2	0	99	5	57	21		
3.	28	532318	12539	"BIGDB	72	38	2	2	100	4	55	12		
4.	74*	65850	12524	"BIGDB	61	34	2	0	90	11	39	44		

Peak#: 93 Area: 197082. Est Conc: 540. Date: 02/02/93 19:59 Inst: C



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

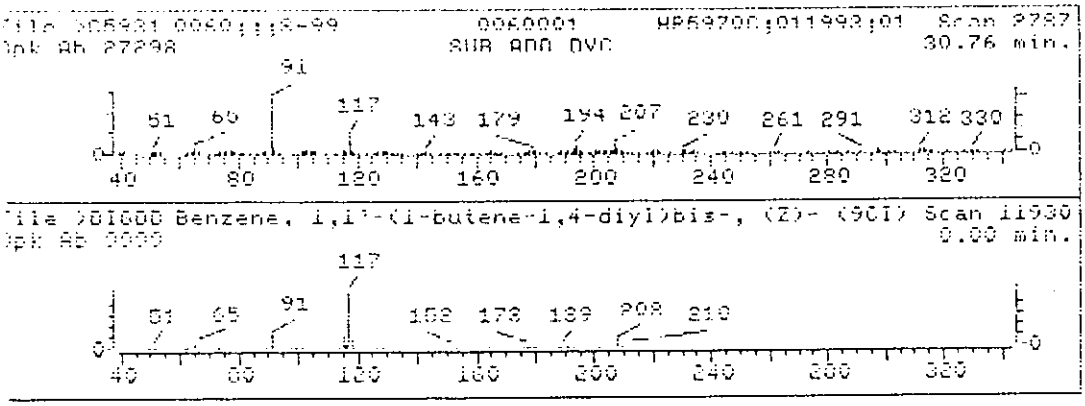
RPN error for command: RSF63
RPN error: -5
ad record length RSF

1. Benzene, 1,1'-(1-butene-1,4-diyl)bis-, (Z)- (9CI) 208 C16H16

Sample file: >C5931 Spectrum #: 2787
Search speed: 3 Tilting option: S No. of ion ranges searched: 28

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	19*	2113884652	11930	"R1GDR	28	34	1	0	24	60	3			19

Peak#: 127 Area: 240638. Est Conc: 480. Date: 02/02/93 19:59 Inst: C



RPN-1113

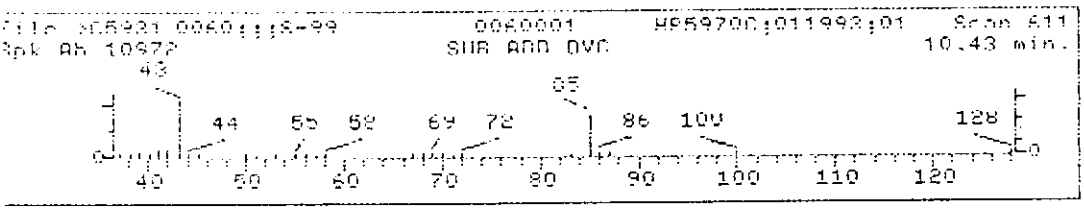
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >C5931 Spectrum #: 611

No data base entries were retrieved.

Peak#: 47 Area: 141137. Fat Conc: 470. Date: 02/02/93 19:59 Inst: C



RPN: 005

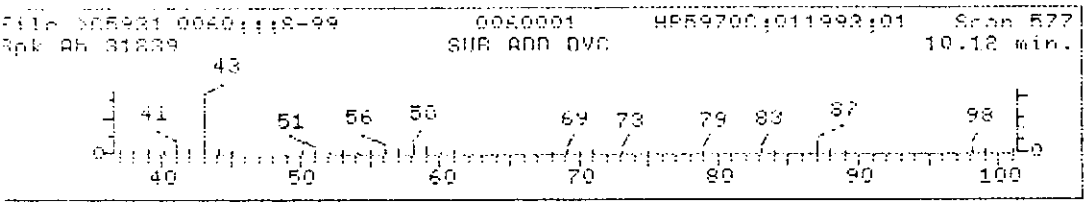
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >C5931 Spectrum #: 577

No data base entries were retrieved.

Peak#: 45 Area: 121767. Est Conc: 410. Date: 02/02/93 19:59 Inst: C



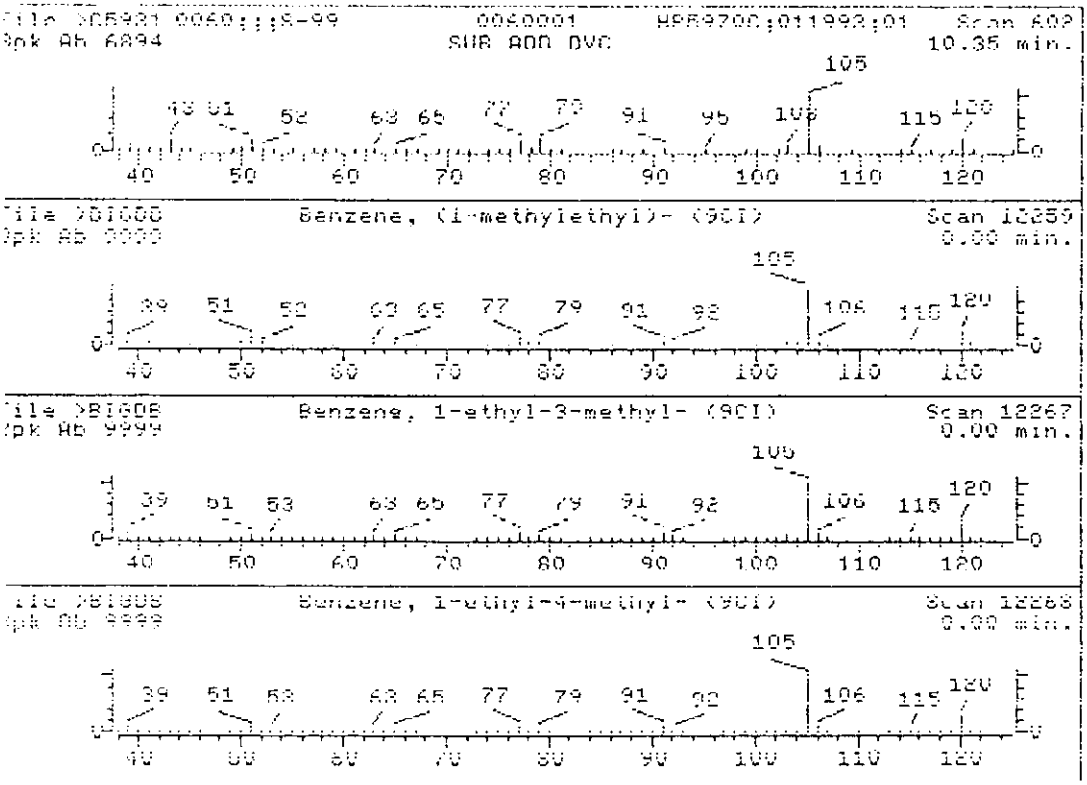
bad record length RKF

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

Sample file: >C5931 Spectrum #: 602
Search speed: 3 Tilting option: S No. of ion ranges searched: 2

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C	I	R	IV
1.	89*	98828	12259	"BIGDB	81	6	1	2	87	6	62	80		
2.	46*	620144	12262	"BIGDB	35	52	2	0	21	21	17	17		
3.	44*	622968	12268	"BIGDB	30	55	2	0	79	21	17	15		
4.	44*	611143	12266	"BIGDB	30	55	2	0	76	21	17	15		

Peak#: 46 Area: 83624. Est Conc: 280. Date: 02/02/93 19:59 Inst: C



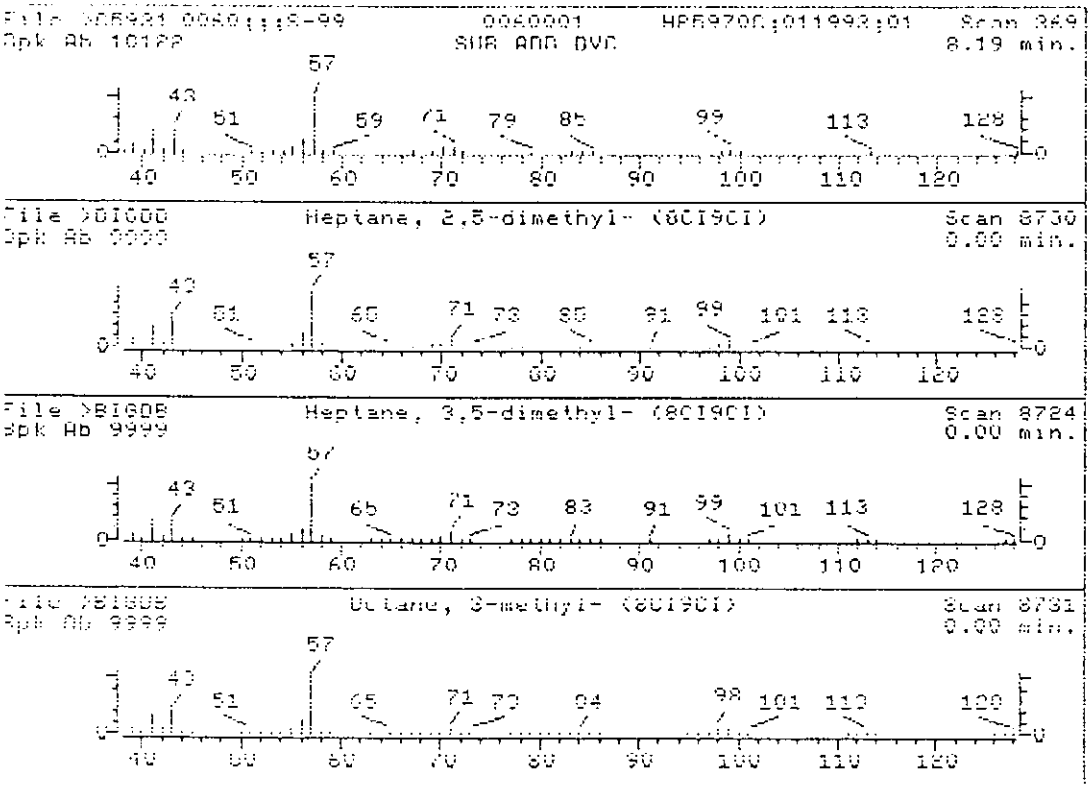
ead record length KSS

1. Heptane, 2,5-dimethyl- (8CI,9CI) 128 C9H20
2. Heptane, 3,5-dimethyl- (8CI,9CI) 128 C9H20
3. Octane, 3-methyl- (8CI,9CI) 128 C9H20
4. Heptane, 3-ethyl- (8CI,9CI) 128 C9H20

Sample file: >D5931 Spectrum #: 369
Search speed: 3 Tilting option: S No. of ion ranges searched: 60

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IU
1.	95*	2216300	8730	"BIGDB	71	15	0	0	68	7	68	95		
2.	89*	926829	8724	"BIGDB	60	22	0	0	79	10	62	80		
3.	78	2216333	8731	"BIGDB	52	32	1	0	84	5	55	19		
4.	59*	15869804	8664	"BIGDB	49	39	2	0	68	23	27	30		

Peak#: 28 Area: 69822. Est Conc: 230. Date: 02/02/93 19:59 Inst: C



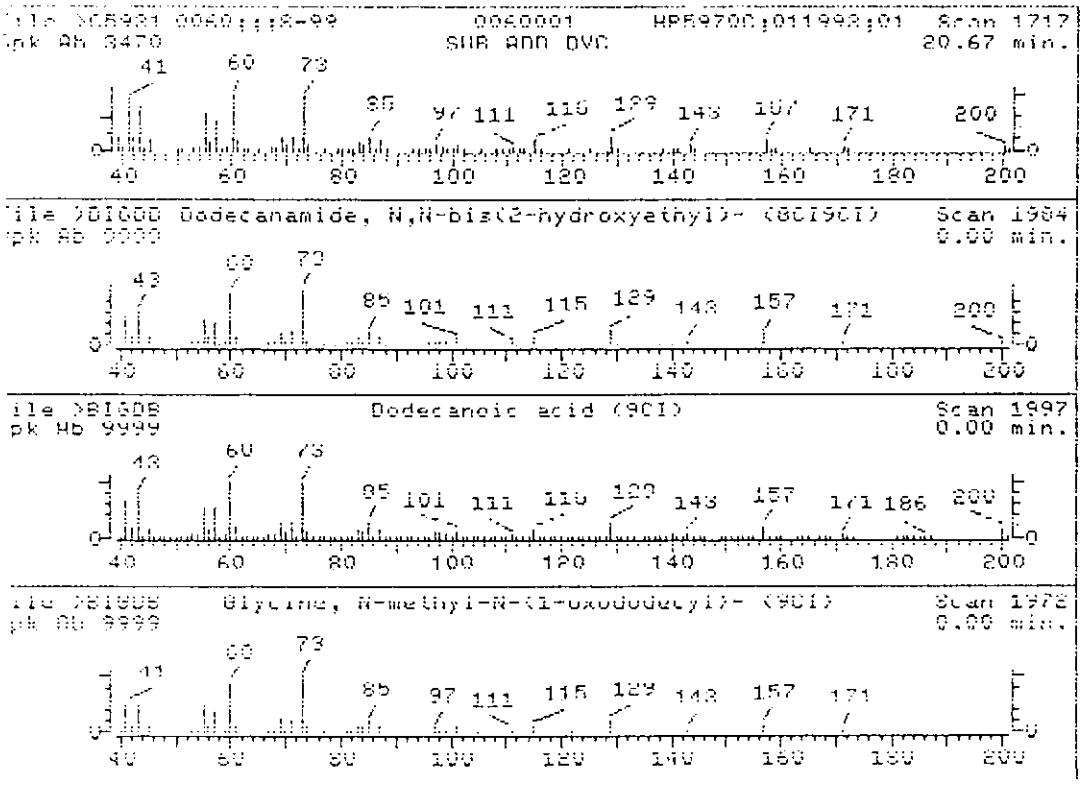
ad record length MSP

1.	Dodecanamide, N,N-bis(2-hydroxyethyl)- (8CI,9CI)	287 C16H33N03
2.	Dodecanoic acid (9CI)	200 C12H2402
3.	Glycine, N-methyl-N-(1-oxododecyl)- (9CI)	271 C15H29N03
4.	Octanoic acid (8CI,9CI)	144 C8H1602

Sample File: >C5931 Spectrum #: 1717
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	COM #	ROOT	K	OK	#FLG	TILT	%	COM	C	I	R	IO
1.	96	120401	1984	"BIGDB	143	10	0	0	79	4	72			94
2.	88	143072	1992	"BIGDB	101	37	2	0	81	4	60			35
3.	83	97289	1972	"BIGDB	109	41	0	0	95	13	51			77
4.	69*	124072	1907	"BIGDB	65	39	2	0	100	34	22			44

Peak#: 148 Area: 108251. Est Conc: 220. Date: 02/02/93 19:59 Inst: C



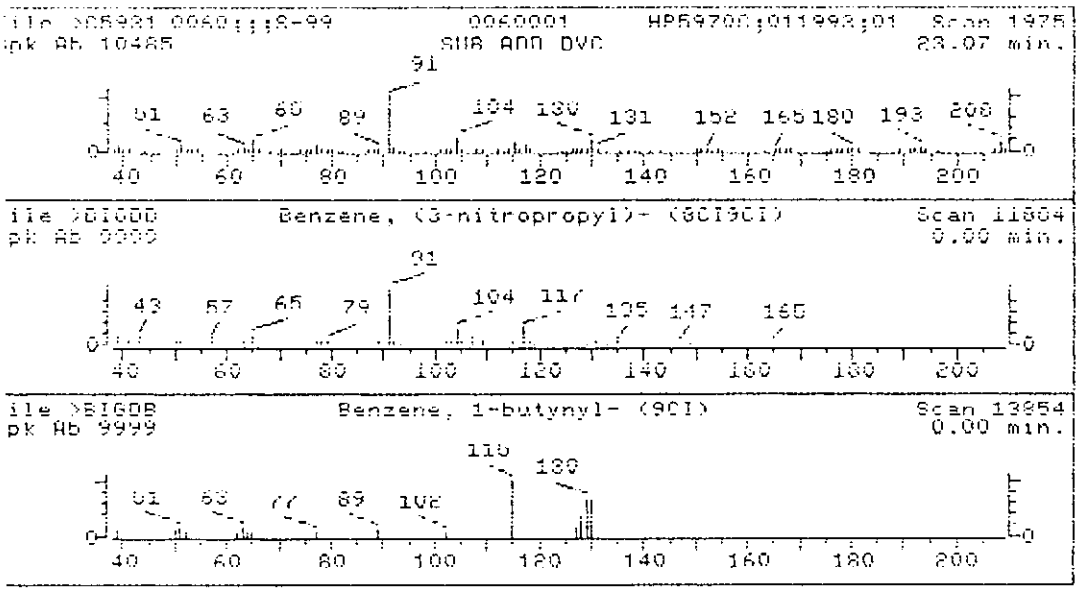
RPN error for command: RSF63
RPN error: -5
nd record length RSF

1. Benzene, (3-nitropropyl)- (8CI,9CI) 149 C9H11NO2
2. Benzene, 1-butynyl- (9CI) 130 C10H10

Sample File: >C5931 Spectrum #: 1975
Search speed: 3 Tilting option: S No. of ion ranges searched: 68

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	99*	22818695	11884	"BIGDB	92	73	3	0	100	32	12		12	
2.	96*	622764	13854	"BIGDB	38	36	2	1	14	40	10		19	

Peak#: 162 Area: 73599. Est Conc: 170. Date: 02/02/93 19:59 Inst: C



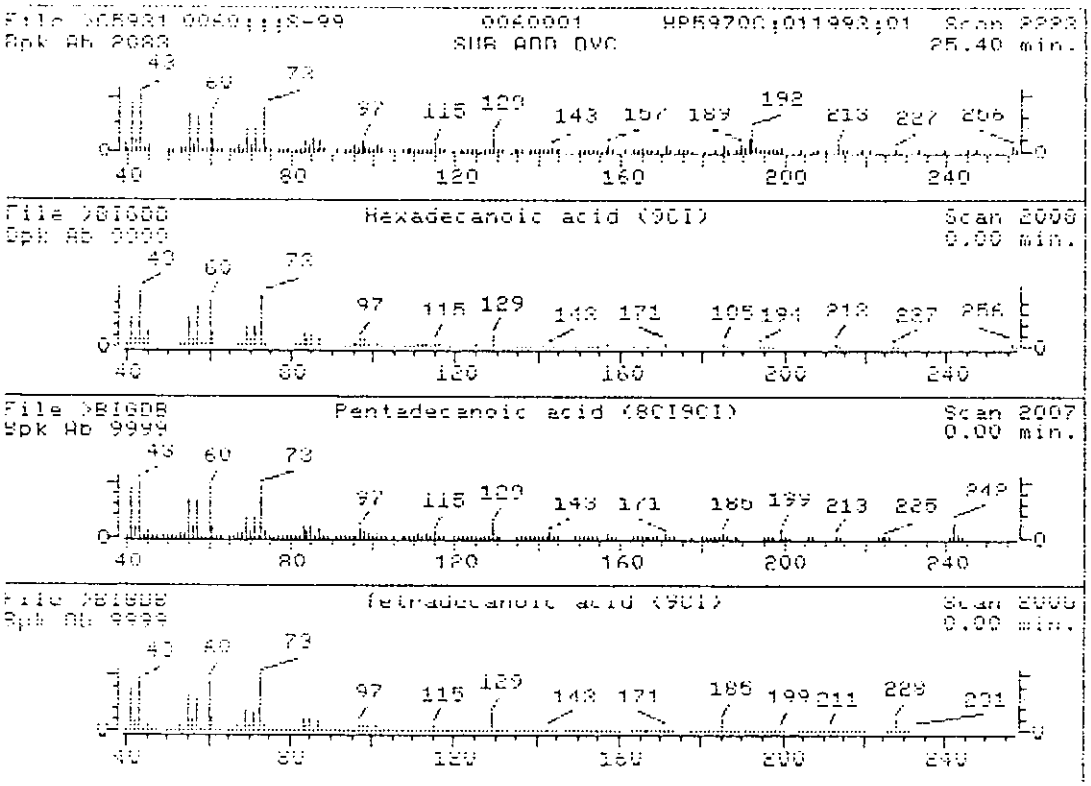
bad record length RSP

1.	Hexadecanoic acid (9CI)	256	C16H32O2
2.	Pentadecanoic acid (8CI,9CI)	242	C15H30O2
3.	Tetradecanoic acid (9CI)	228	C14H28O2
4.	D-Glucose, 4-O-.beta.-D-galactopyranosyl- (9CI)	342	C12H22O11

Sample File: >C5931 Spectrum #: 2223
Search speed: 3 Tilting option: S No. of ion ranges searched: 93

	Prob.	CAS #	COM #	NAME	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	84*	57103	2008	"BIGDB	93	58	1	0	71	41	43			92
2.	9%	1002842	2002	"BIGDB	60	90	2	0	69	52	5			19
3.	1%	544638	2005	"BIGDB	88	58	2	0	69	56	4			25
4.	1%	63423	1956	"BIGDB	83	69	2	0	60	56	4			23

Peak#: 169 Area: 60320. Fst Conc: 140. Date: 02/02/93 19:59 Inst: C



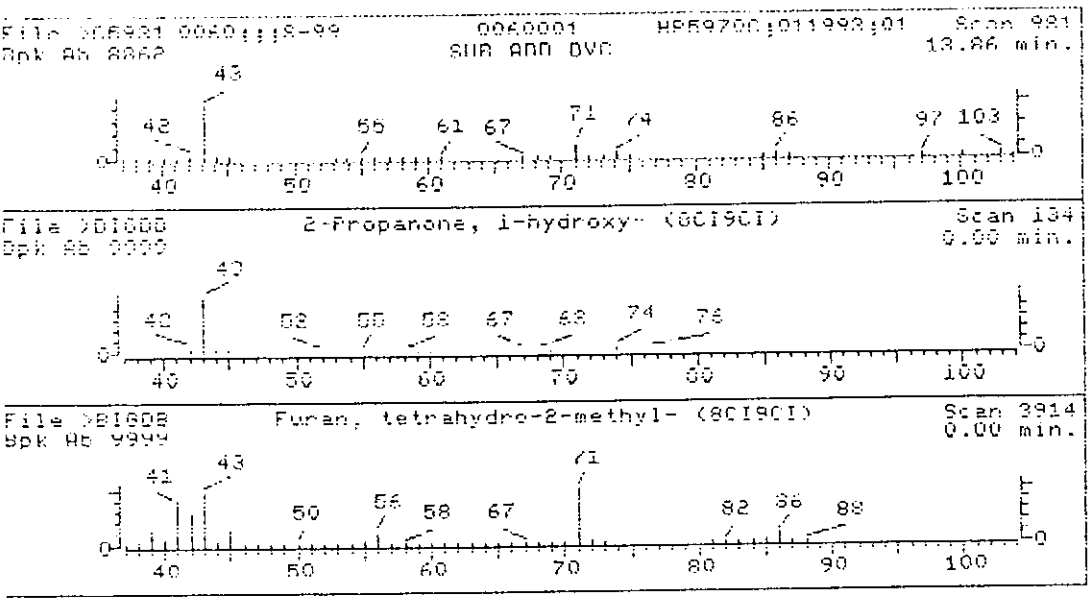
RPN error for command: RSF63
RPN error: -5
Bad record length RSF

1. 2-Propanone, 1-hydroxy- (8C19CI) 74 C3H6O2
2. Furan, tetrahydro-2-methyl- (8C19CI) 86 C5H10O

Sample File: >C5931 Spectrum #: 981
Search speed: 3 Tilting option: 5 No. of ion ranges searched: 63

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IU
1.	66*	116096	134	"81GDB	27	46	0	0	88	32	12			19
2.	11*	96479	3914	"81GDB	20	54	2	0	23	64	2			13

Peak#: 84 Area: 51433. Est Conc: 140. Date: 02/02/93 19:59 Inst: C



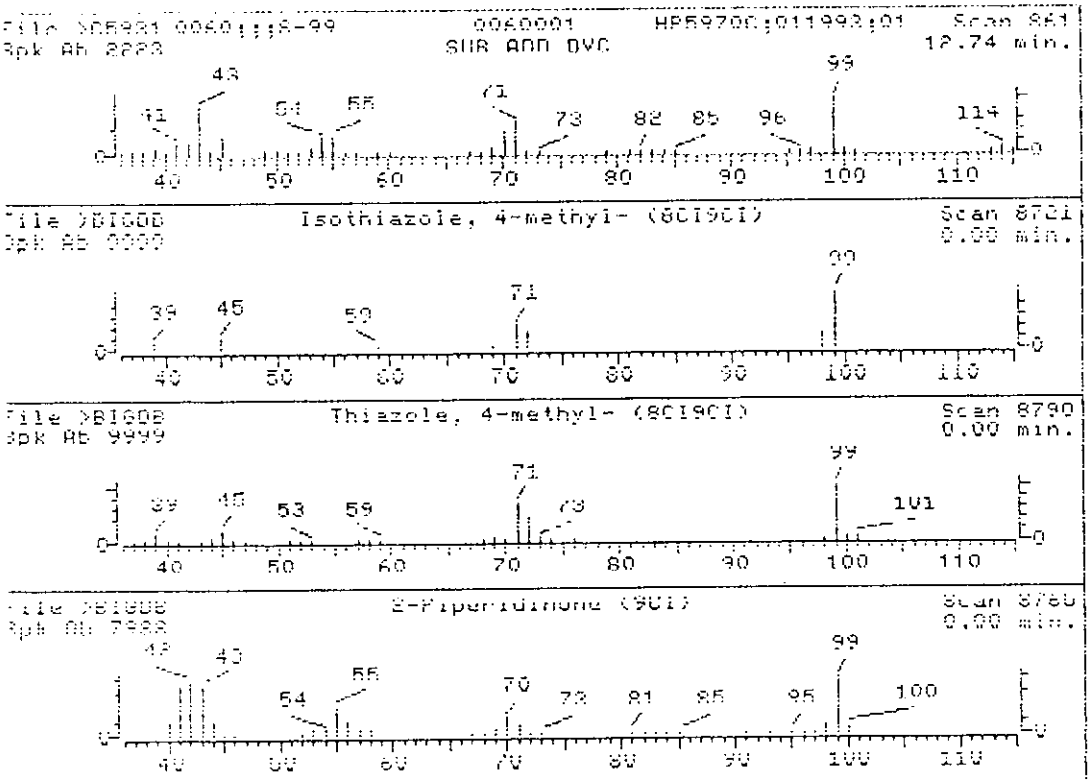
lad ecord length RSF

1. Isothiazole, 4-methyl- (8CI,9CI)	99	C4H5NS
2. Thiazole, 4-methyl- (8CI,9CI)	99	C4H5NS
3. 2-Piperidinone (9CI)	99	C5H9NO
4. Oxirane, 2-methyl-2-(2-methylpropyl)- (9CI)	114	C7H14O

Sample File: >C5931 Spectrum #: 861
Search speed: 3 Tilting option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	ROOT	K	DK	#PLG	TILT	%	CON	C	I	R	IV
1.	37*	693903	8721	"BIGDB	30	32	3	0	100	30	14		14	
2.	36*	693958	8790	"BIGDB	32	63	3	0	80	30	14		13	
3.	24*	675207	8765	"BIGDB	22	89	3	0	125	43	8		12	
4.	19*	63897317	8728	"BIGDB	27	75	3	0	100	56	3		13	

Peak#: 22 Area: 38480. Est Conc: 130. Date: 02/02/93 19:59 Inst: C



RPN-0005

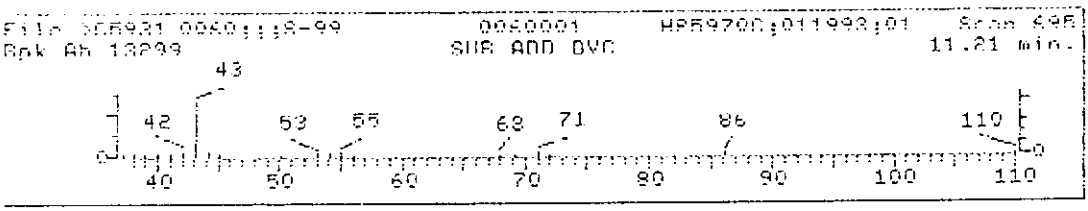
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >C5931 Spectrum #: 695

No data base entries were retrieved.

Peak#: 56 Area: 34824. Est Conc: 120. Date: 02/02/93 19:59 Inst: C



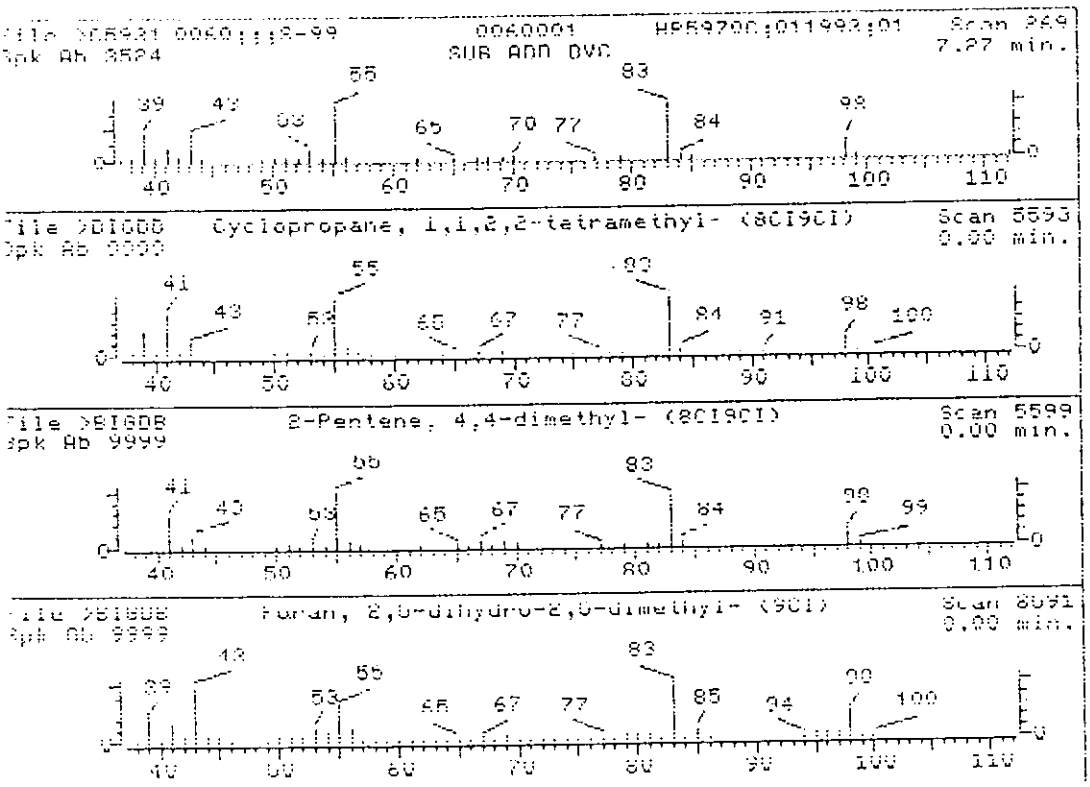
Ad scord length MAF

1.	Cyclopropane, 1,1,2,2-tetramethyl- (8CI9CI)	98 C7H14
2.	2-Pentene, 4,4-dimethyl- (8CI9CI)	98 C7H14
3.	Furan, 2,5-dihydro-2,5-dimethyl- (9CI)	98 C6H10O
4.	2-Pentene, 4,4-dimethyl-, (Z)- (8CI9CI)	98 C7H14

Sample File: >D5931 Spectrum #: 269
Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	COM #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	76*	4127473	5593	"BIGDB	52	45	2	0	99	9	45			28
2.	45*	26232984	5599	"BIGDB	44	46	2	0	99	29	19			23
3.	43*	59242272	8591	"BIGDB	31	74	2	0	70	21	17			14
4.	40*	762630	5590	"BIGDB	44	48	2	0	100	33	16			23

Peak#: 19 Area: 36758. Est Conc: 120. Date: 02/02/93 19:59 Inst: C



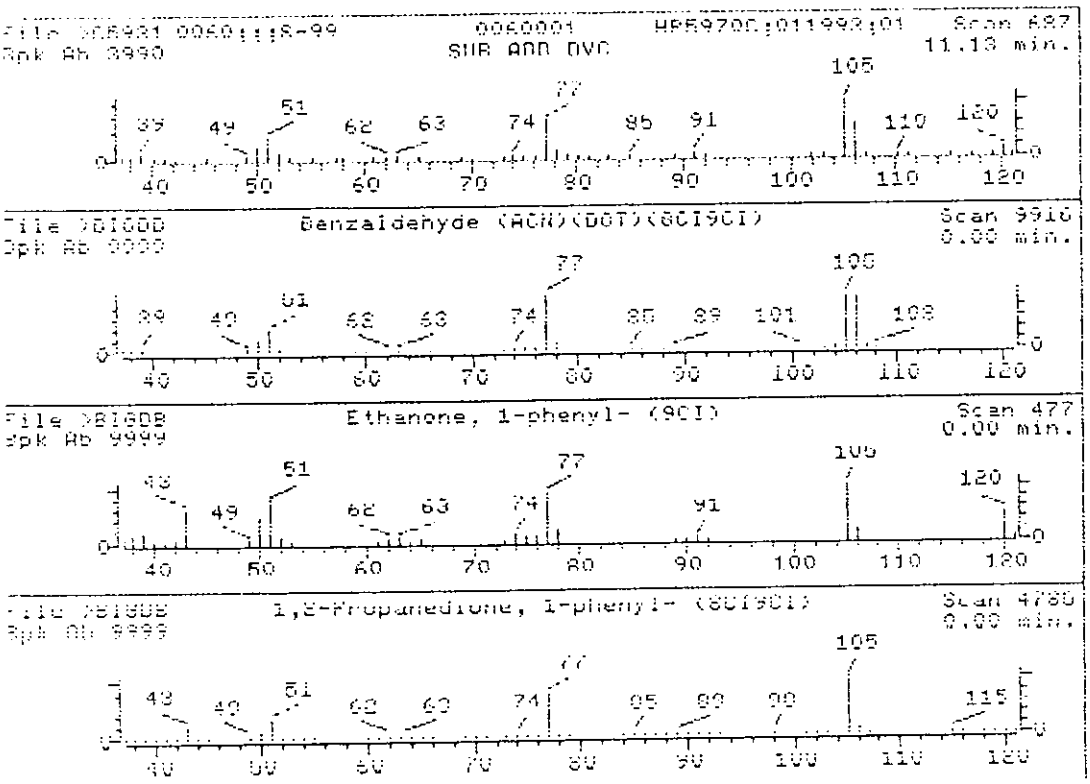
Cal ecard length RSF

1.	Benzaldehyde (ACN)(DUT)(8CI9CI)	106 C7H6O
2.	Ethanone, 1-phenyl- (9CI)	120 C8H8O
3.	1,3-Propanedione, 1-phenyl- (8CI9CI)	148 C9H8O2
4.	2,4,6-Cycloheptatrien-1-one (8CI9CI)	106 C7H6O

Sample file: >C5931 Spectrum #: 687
Search speed: 3 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	RUNT	K	DK	#FLG	TOT	%	CON	C	I	R	IV
1.	65*	100527	9916	"BIGDB	60	40	2	2	55	20	30	33		
2.	56*	98862	477	"BIGDB	64	39	0	2	29	46	14	66		
3.	43	579077	4785	"BIGDB	37	48	1	0	89	25	17	14		
4.	32*	5398111	4819	"BIGDB	62	48	2	0	74	52	9	40		

Peak#: 55 Area: 34829. Est Conc: 120. Date: 02/02/93 19:59 Inst: C



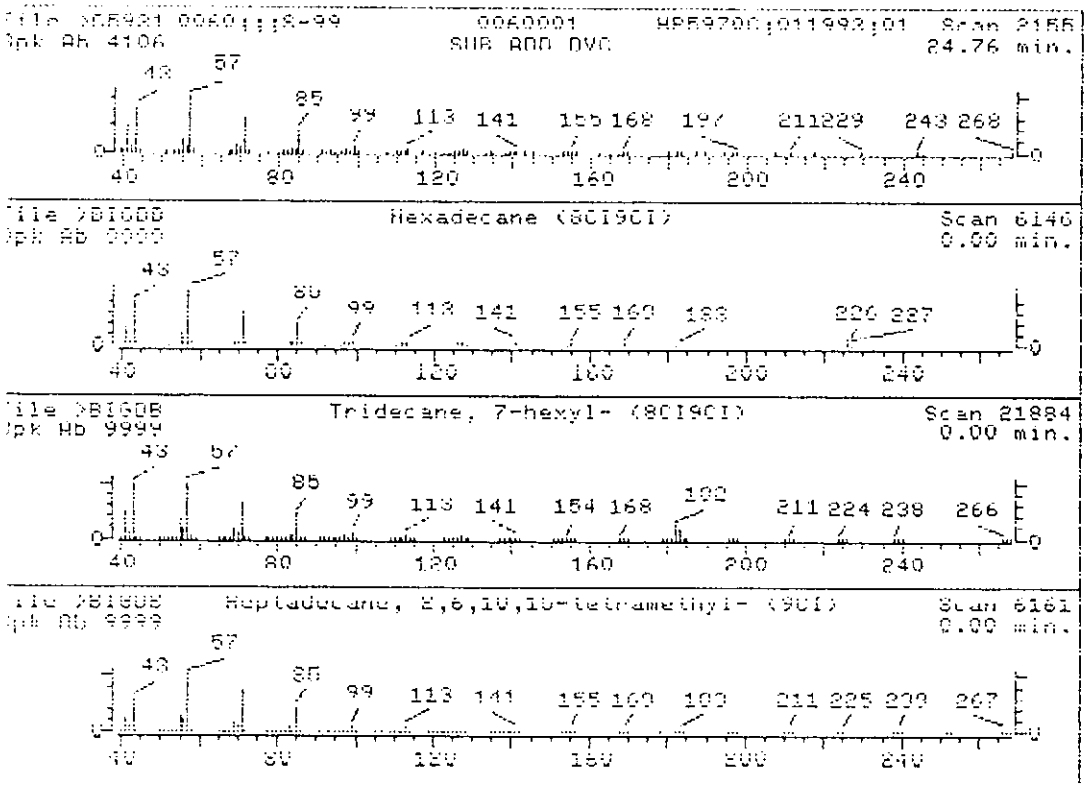
Std Reverse Length RSF

1.	Hexadecane (8CI9CI)	226 C16H34
2.	Tridecane, 7-hexyl- (8CI9CI)	268 C19H40
3.	Heptadecane, 2,6,10,15-tetramethyl- (9CI)	296 C21H44
4.	Pentadecane, 8-hexyl- (8CI)	296 C21H44

Sample File: >C5931 Spectrum #: 2155
Search speed: 3 Tilting option: S No. of ion ranges searched: 26

	Prob.	CAS #	CON #	NAME	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	83	544763	6146	"BIGDB	80	40	2	0	83	4	57	21		
2.	81*	2225663	21884	"BIGDB	86	44	3	1	75	8	53	44		
3.	28	54833486	6161	"BIGDB	82	51	3	0	80	4	55	15		
4.	28	13425252	24006	"BIGDB	74	63	3	0	78	4	55	13		

Peak#: 168 Area: 43181. Fst Conc: 100. Date: 02/02/93 19:59 Inst: C



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0232

EPA SAMPLE NO.

S-100

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5920.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
108-60-1	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-di-n-propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
111-91-1	bis(2-Chloroethoxy)methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	85	J
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
91-57-6	2-Methylnaphthalene	81	J
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	910	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	910	U
131-11-3	Dimethylphthalate	380	U
208-96-8	Acenaphthylene	380	
606-20-2	2,6-Dinitrotoluene	380	U
99-09-2	3-Nitroaniline	910	U
83-32-9	Acenaphthene	74	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0233

S-100

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5920.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	910	U
100-02-7	4-Nitrophenol	910	U
132-64-9	Dibenzofuran	70	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	110	J
100-01-6	4-Nitroaniline	910	U
534-52-1	4,6-Dinitro-2-methylphenol	910	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	910	U
85-01-8	Phenanthrene	1000	
120-12-7	Anthracene	460	
86-74-8	Carbazole	480	
84-74-2	Di-n-butylphthalate	160	JB
206-44-0	Fluoranthene	1700	
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380 ~~210~~	~~JB~~ U
91-94-1	3,3'-Dichlorobenzidine	380	U
56-55-3	Benzo(a)anthracene	1100	
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)phthalate	1600	B
117-84-0	Di-n-octylphthalate	380	U
205-99-2	Benzo(b)fluoranthene	1000	
207-08-9	Benzo(k)fluoranthene	940	
50-32-8	Benzo(a)pyrene	1200	
193-39-5	Indeno(1,2,3-cd)pyrene	280	J
53-70-3	Dibenz(a,h)anthracene	51	J
191-24-2	Benzo(g,h,i)perylene	150	J

amc 2/11/93

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0234

S-100

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060

amc 2/12/93

Matrix: (soil/water) SOIL Lab Sample ID: 0060002

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5920.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 12 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

Number TICs found: 021

amc 2/11/93

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL CONDENSATION PRODUCT	8.48	14000	JAB
2.		UNKNOWN	12.90	3100	J
3.			10.14	2600	
4.			7.76	1400	B
5.			10.80	850	
6.			10.11	500	B
7.			11.20	260	
8.		UNKNOWN ALKANE	8.18	240	
9.		UNKNOWN	7.25	170	
10.			12.73	110	
11.			9.07	110	
12.		UNKNOWN	13.84	110	J
13.			6.42	100	
14.			20.15	100	
15.		UNKNOWN	20.608	100	J
16.			17.55	99	
17.		UNKNOWN ALKANE	19.88	99	
18.			12.58	96	
19.			22.52	91	
20.			13.09	69	
21.			21.20	66	
22.		UNKNOWN	8.60	85	
23.		UNKNOWN ALKANE	12.32	84	
24.					
25.					
26.					
27.					
28.					
29.					
30.					

amc 2/11/93

0235

QUANT REPORT

Operator ID: MSC Quant Rev: 6 Quant Time: 930201 21:43
Output File: ^C5920::QT Injected at: 930201 20:48
Data File: >C5920::C5 Dilution Factor: 18.94000
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8

ID File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

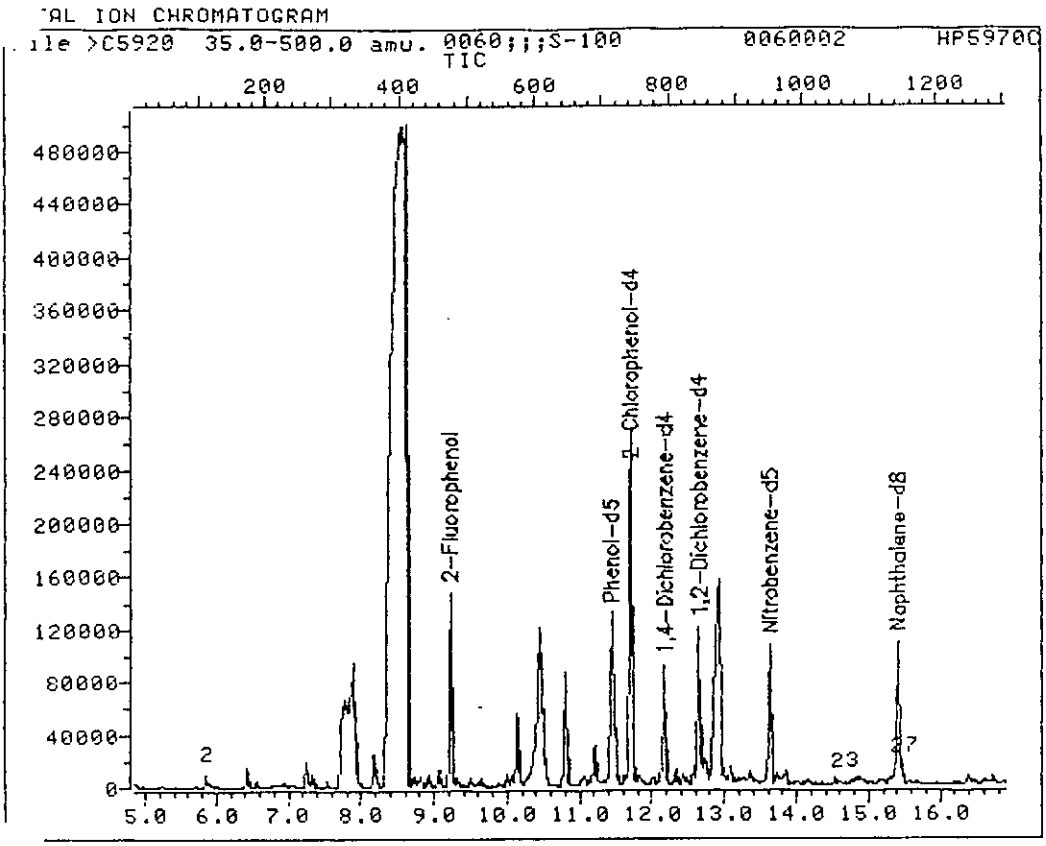
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.17	151.8	27910	40.00	ug	96
2)	Pyridine	5.83	52.0	9109	207.54	ug	94
3)	2-Chlorophenol-d4	11.70	132.0	68475	1457.85	ug	95
4)	2-Fluorophenol	9.21	111.8	70628	1720.93	ug	87
5)	Phenol-d5	11.43	98.8	110733	1865.69	ug	79
11)	1,2-Dichlorobenzene-d4	12.64	152.0	35641	1069.08	ug	97
18)	*Naphthalene-d8	15.41	135.9	110865	40.00	ug	97
19)	Nitrobenzene-d5	13.63	81.8	68903	1113.44	ug	93
23)	2,4-Dimethylphenol	14.61	186.8	356	6.46	ug	86
27)	Naphthalene	15.46	127.9	11613	85.50	ug	86
31)	2-Methylnaphthalene	17.26	141.9	8334	80.67	ug	96
3	*Acenaphthene-d10	20.07	163.9	69230	40.00	ug	92
36)	2-Fluorobiphenyl	18.29	171.8	143890	1298.39	ug	97
40)	Acenaphthylene	19.65	152.0	56737	384.81	ug	95
43)	Acenaphthene	20.15	152.9	8279	73.96	ug	85
45)	4-Nitrophenol	20.26	108.8	97	5.83	ug	33
46)	Dibenzofuran	20.56	167.8	10435	70.22	ug	98
47)	2,4-Dinitrotoluene	20.84	164.8	280	5.82	ug	44
48)	Diethylphthalate	21.32	148.8	2600	17.89	ug	97
50)	Fluorene	21.48	165.9	11130	106.77	ug	83
52)	2,4,6-Tribromophenol	22.18	329.6	76967	2208.70	ug	99
53)	*Phenanthrene-d10	23.97	187.9	131794	40.00	ug	97
55)	N-Nitrosodiphenylamine (1)	21.80	168.9	561^	9.42	ug	49
58)	Pentachlorophenol	23.65	265.6	485	12.31	ug	79
59)	Phenanthrene	24.04	177.9	181450	1027.80	ug	96
60)	Carbazole	24.57	166.8	25025	478.86	ug	95
61)	Anthracene	24.14	177.9	82006	462.64	ug	99
62)	Di-n-butylphthalate	25.63	148.8	39332	157.96	ug	98
63)	Fluoranthene	27.24	201.9	314459	1661.87	ug	99
64)	*Chrysene-d12	31.40	240.0	103107	40.00	ug	91
65)	Pyrene	27.93	201.9	1848	9.50	ug	85
66)	Terphenyl-d14	28.25	244.0	199828	1335.91	ug	99
67)	Butylbenzylphthalate	29.61	148.8	23067	211.95	ug	76
68)	3,3'-Dichlorobenzidine	30.96	251.9	2374	96.48	ug	71
69)	Benzo(a)anthracene	31.33	228.0	183014	1094.38	ug	99
70)	Chrysene	31.48	228.0	119806	831.11	ug	93
	bis(2-Ethylhexyl)phthalate	31.52	148.8	224099	1554.67	ug	94
7	*Perylene-d12	38.24	264.0	49587	40.00	ug	91
73)	Di-n-octylphthalate	34.15	149.9	2558	21.79	ug	78
74)	Benzo(b)fluoranthene	36.04	252.0	79891	1022.46	ug	95
74)	Benzo(b)fluoranthene	36.07	252.0	78350	988.35	ug	85
75)	Benzo(k)fluoranthene	36.04	252.0	79891	1072.41	ug	95

0236

	Compound	R.T.	Q ion	Area	Conc	Units	q
76)	Benzo(a)pyrene	37.91	252.0	81748	1238.97	ug	93
77)	Indeno(1,2,3-cd)pyrene	46.59	276.0	14915	275.12	ug	96
78)	Dibenz(a,h)anthracene	46.77	278.0	2818	50.74	ug	94
79)	Benzo(g,h,i)perylene	49.03	276.0	8255^	147.61	ug	78

* Compound is ISTD

Conc 4/9/93



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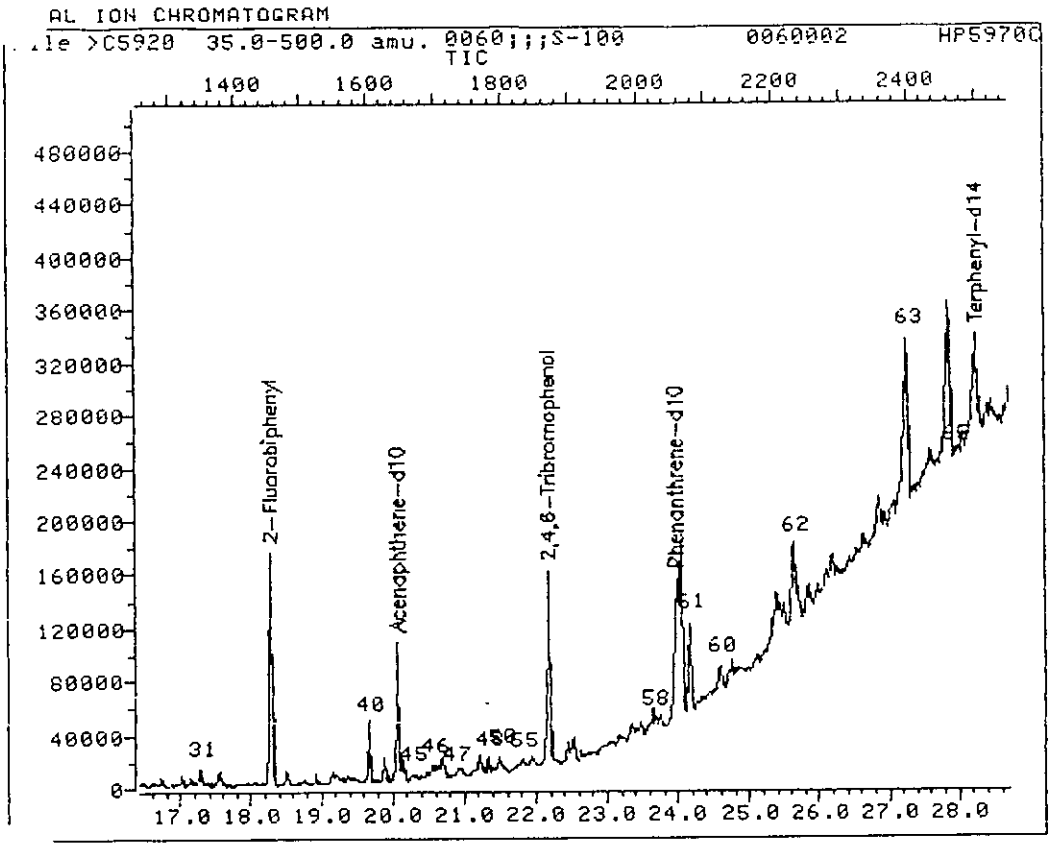
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

Operator ID: MSC
Quant Time: 930201 21:43
Injected at: 930201 20:48

TIC page 1 of 4



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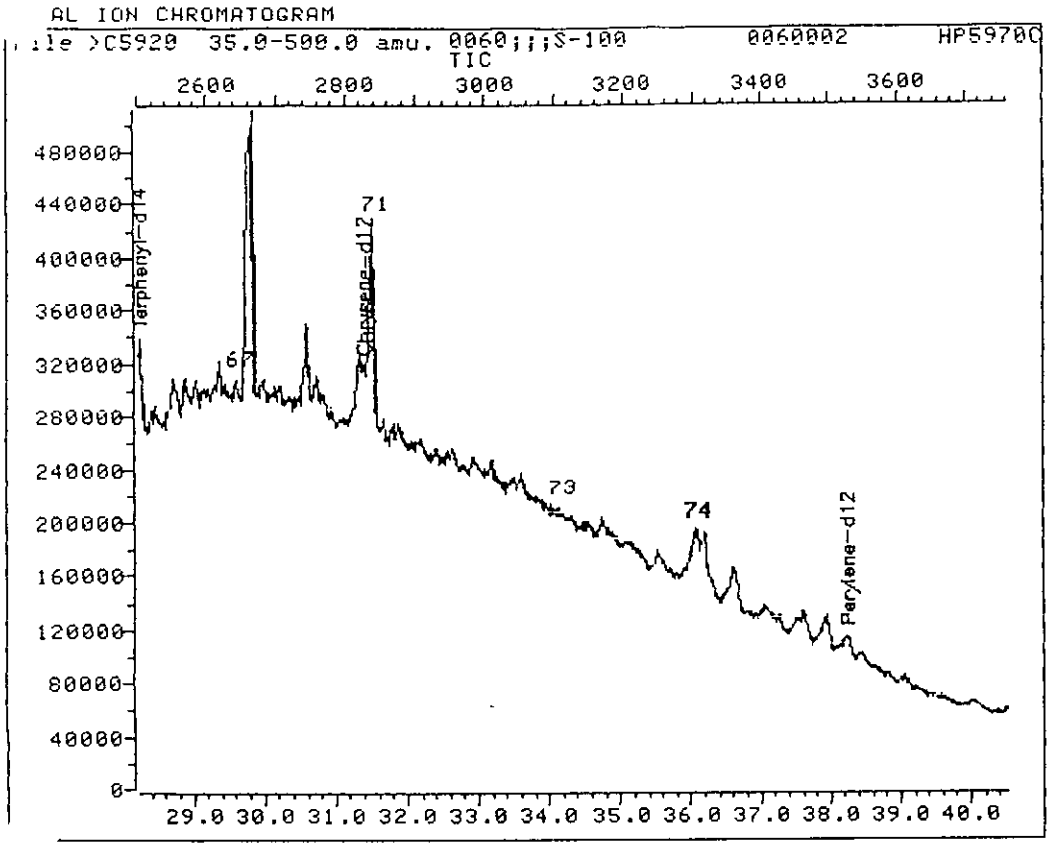
Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

Operator ID: MSC
Quant Time: 930201 21:43
Injected at: 930201 20:48

TIC page 2 of 4



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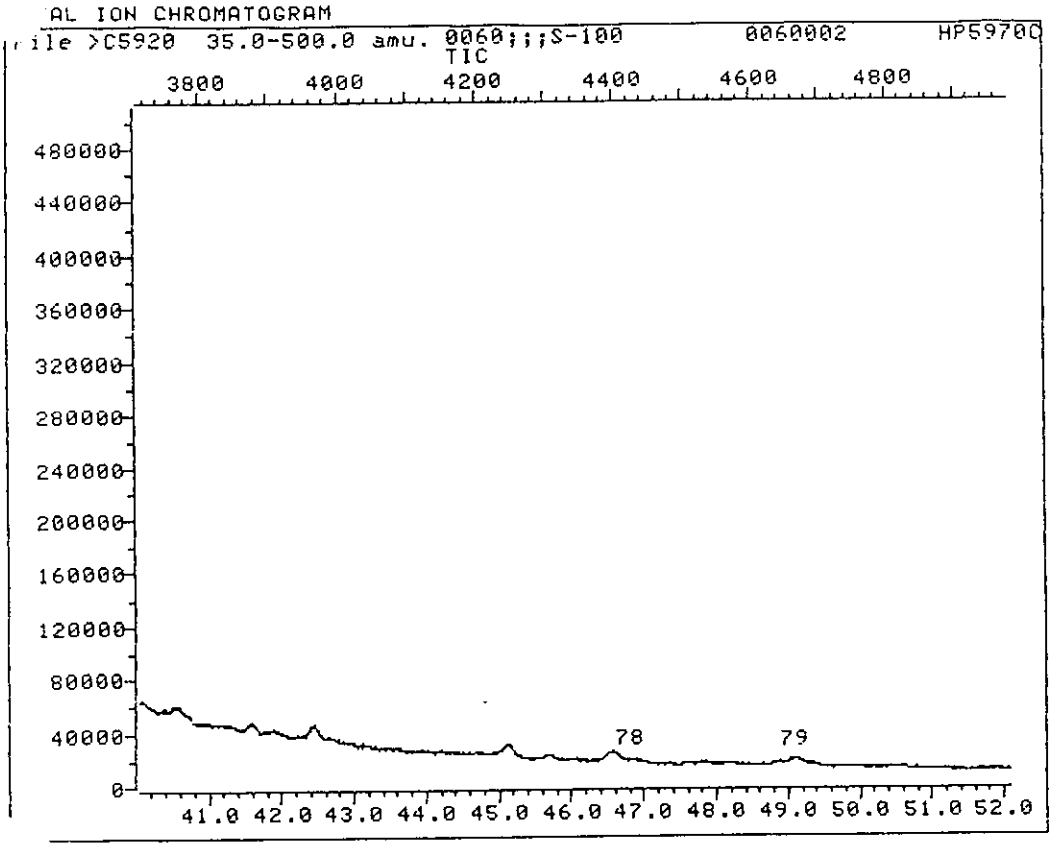
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

Operator ID: MSC
Quant Time: 930201 21:43
Injected at: 930201 20:48

TIC page 3 of 4



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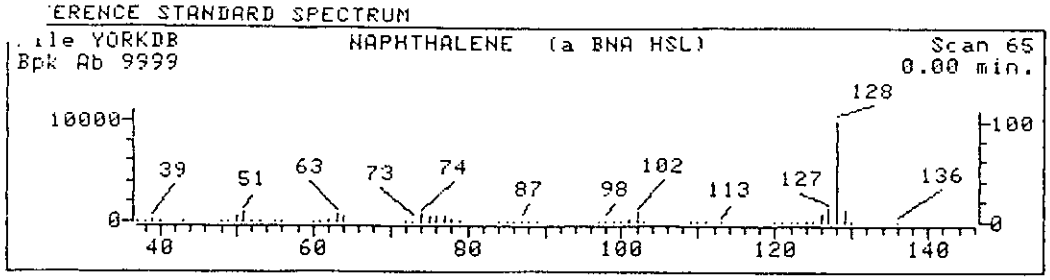
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

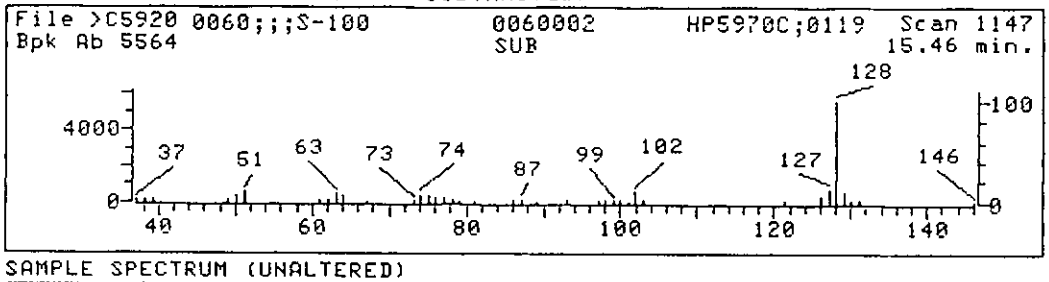
Operator ID: MSC
Quant Time: 930201 21:43
Injected at: 930201 20:48

TIC page 4 of 4

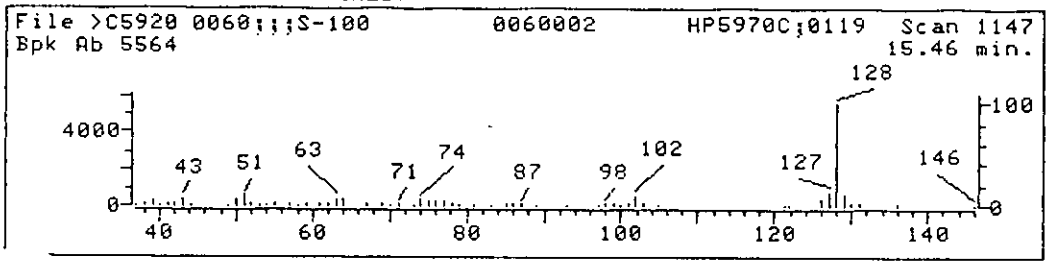
ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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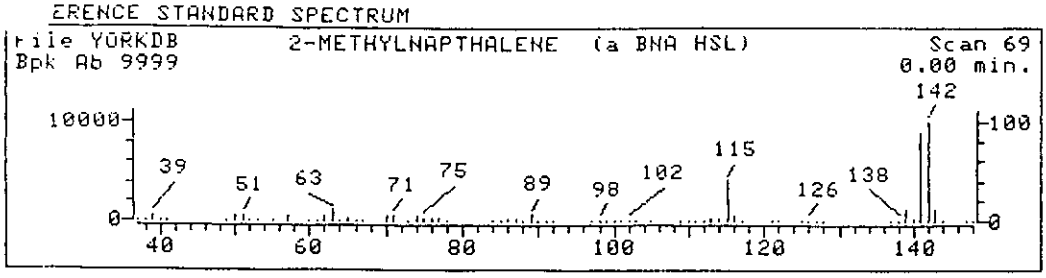
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 27
Compound Name: Naphthalene
Scan Number: 1147
Retention Time: 15.46 min.
Quant Ion: 127.9
Area: 11613
Concentration: 85.50 ug
q-value: 86

ERENCE STANDARD SPECTRUM



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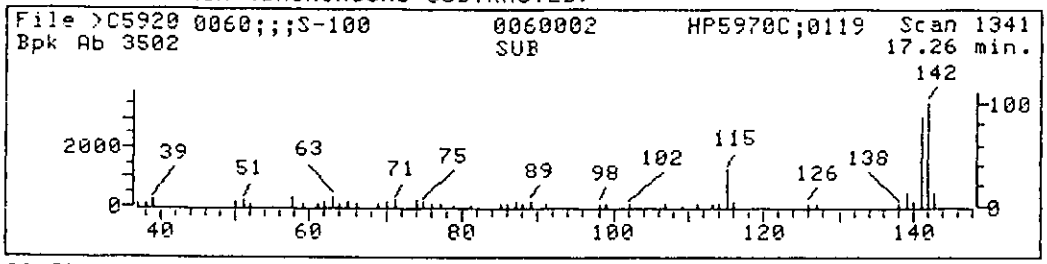

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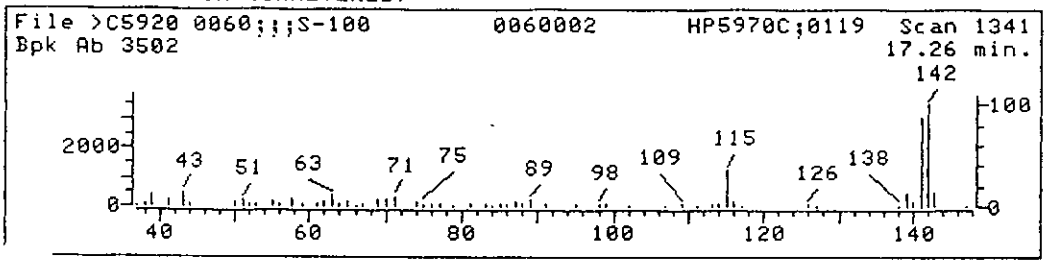

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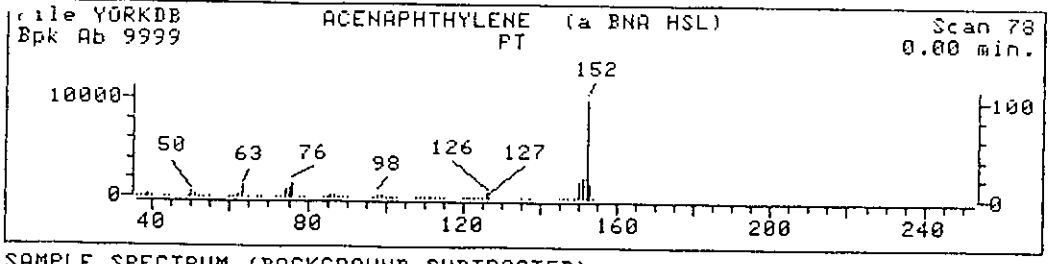
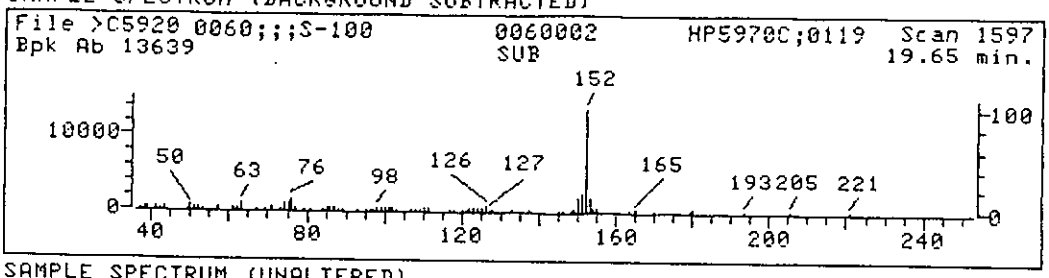
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 31
Compound Name: 2-Methylnaphthalene
Scan Number: 1341
Retention Time: 17.26 min.
Quant Ion: 141.9
Area: 8334
Concentration: 80.67 ug
q-value: 96

ERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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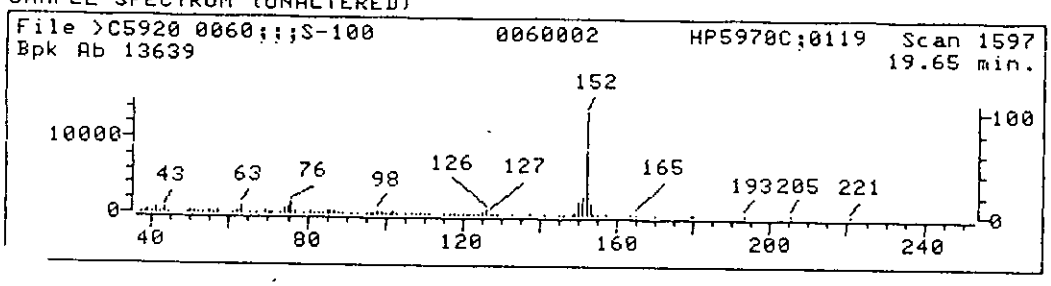

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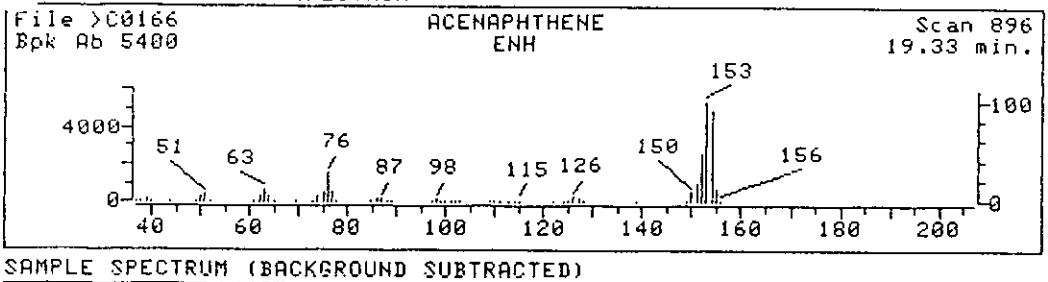
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 40
Compound Name: Acenaphthylene
Scan Number: 1598
Retention Time: 19.65 min.
Quant Ion: 152.0
Area: 56737
Concentration: 384.81 ug
q-value: 95

ERENCE STANDARD SPECTRUM



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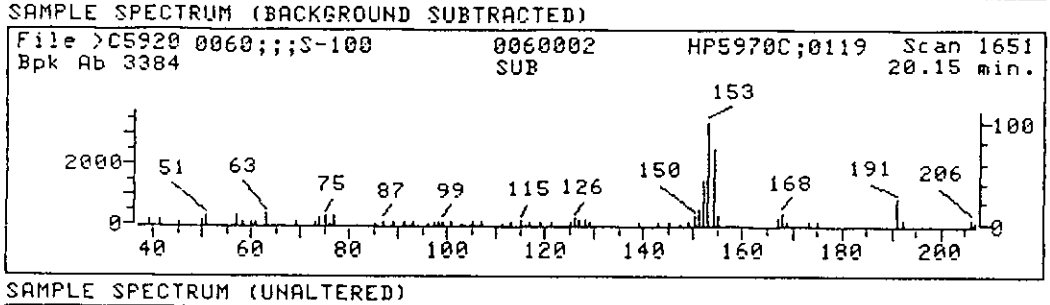

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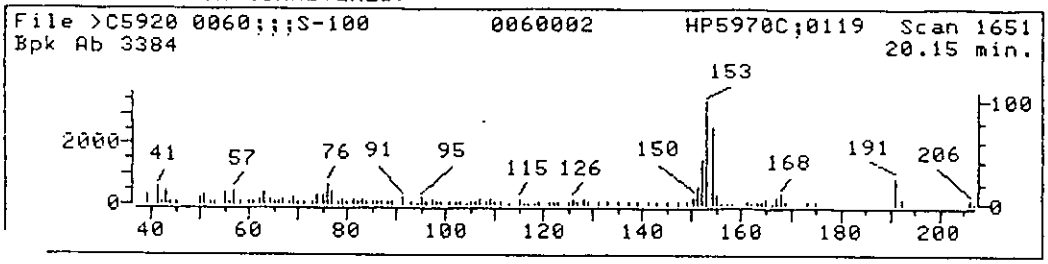
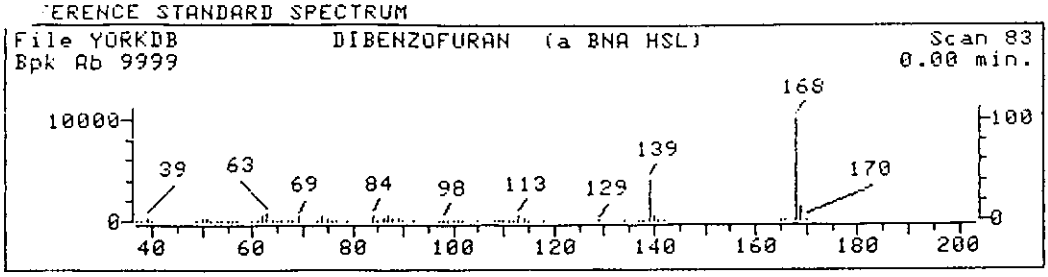


Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 43
Compound Name: Acenaphthene
Scan Number: 1651
Retention Time: 20.15 min.
Quant Ion: 152.9
Area: 8279
Concentration: 73.96 ug
q-value: 85

'ERENCE STANDARD SPECTRUM



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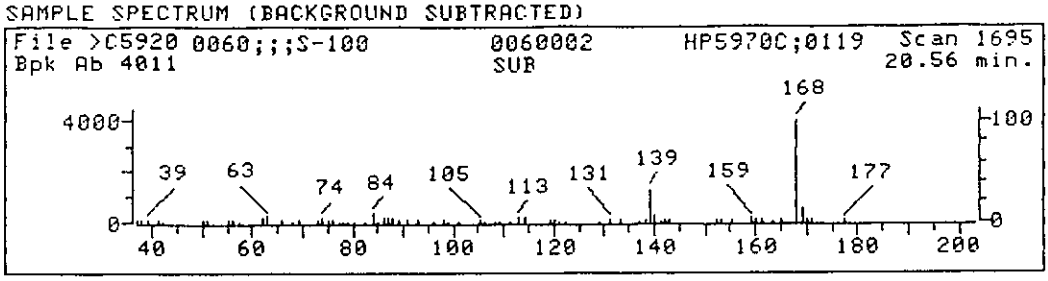

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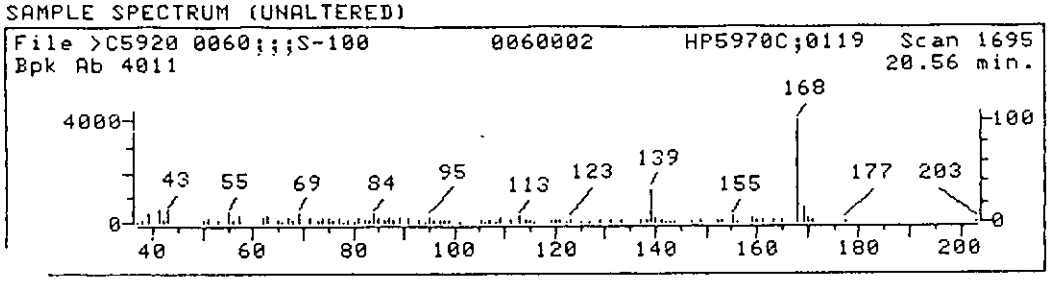

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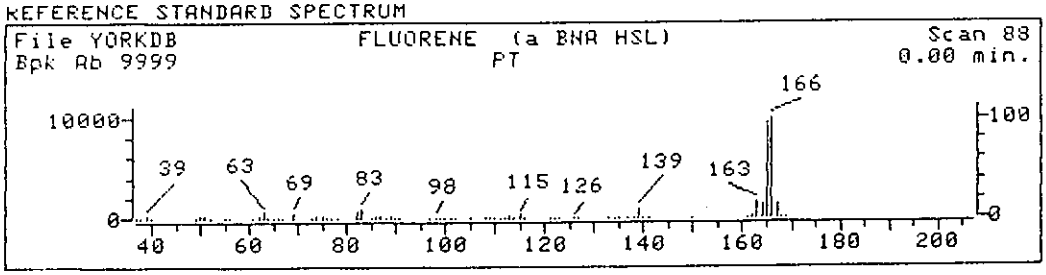
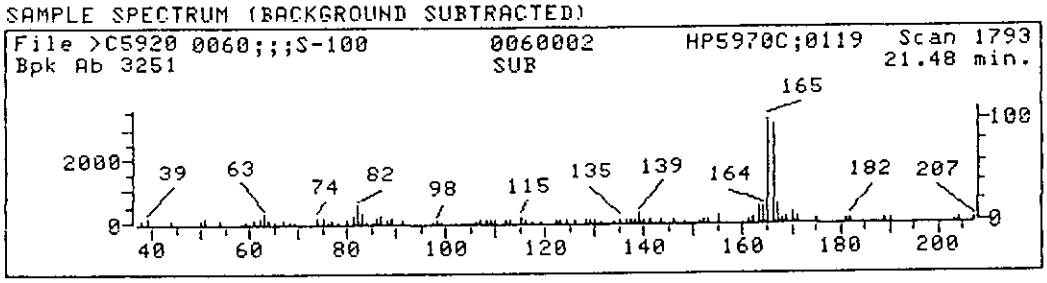
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 46
Compound Name: Dibenzofuran
Scan Number: 1695
Retention Time: 20.56 min.
Quant Ion: 167.8
Area: 10435
Concentration: 70.22 ug
q-value: 98

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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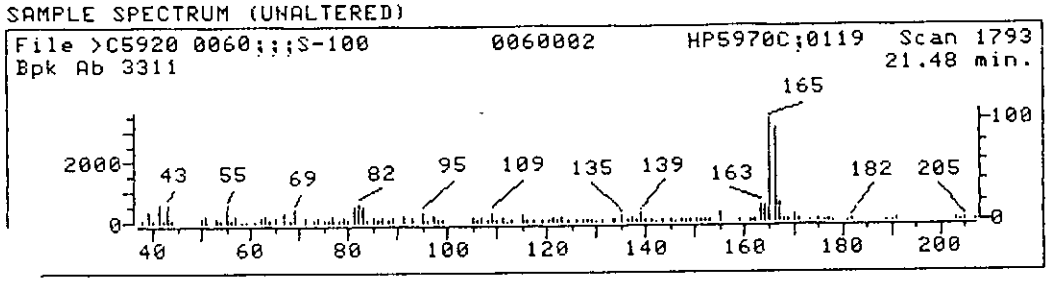

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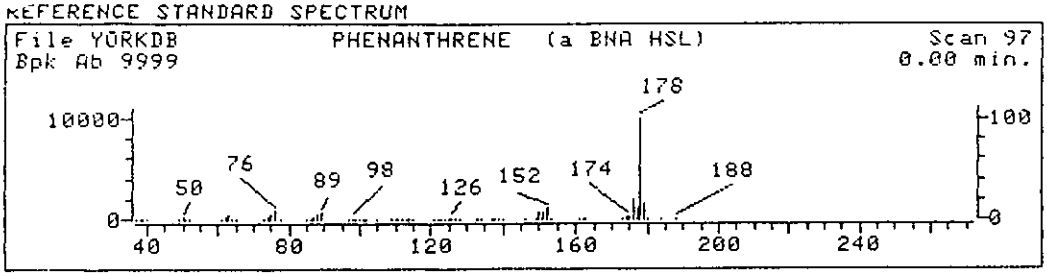
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 50
Compound Name: Fluorene
Scan Number: 1793
Retention Time: 21.48 min.
Quant Ion: 165.9
Area: 11130
Concentration: 106.77 ug
q-value: 83

REFERENCE STANDARD SPECTRUM



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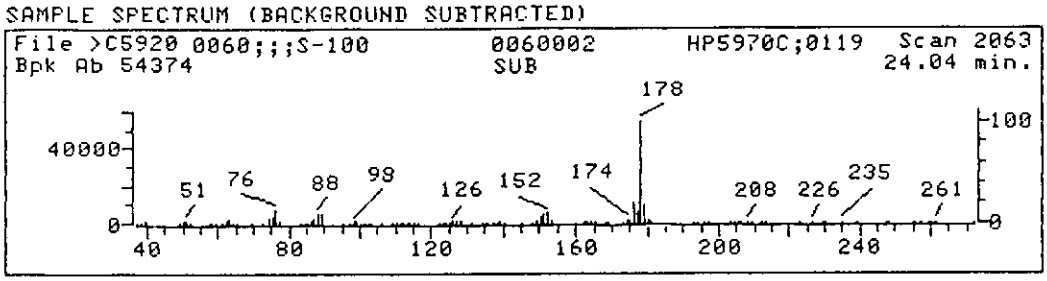

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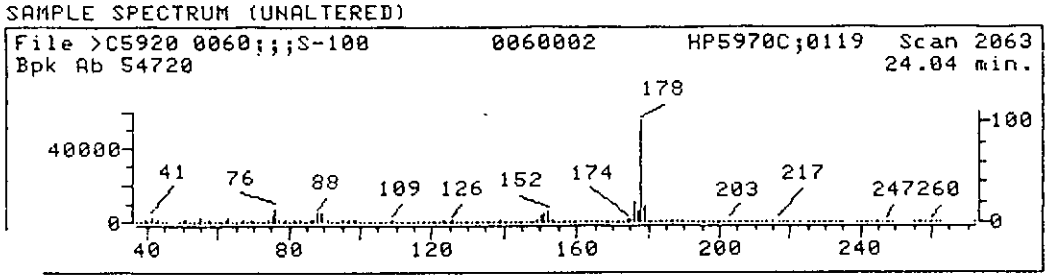

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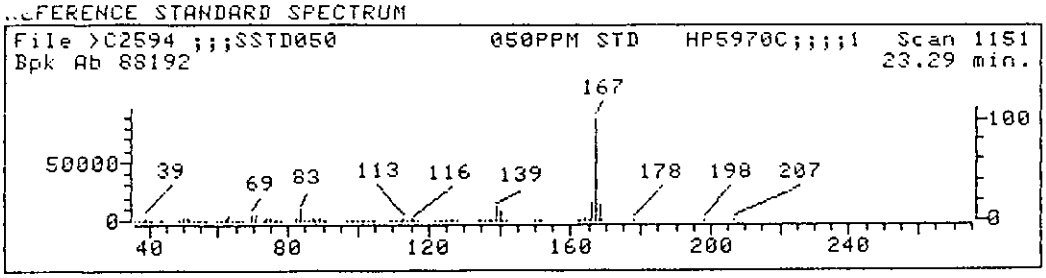
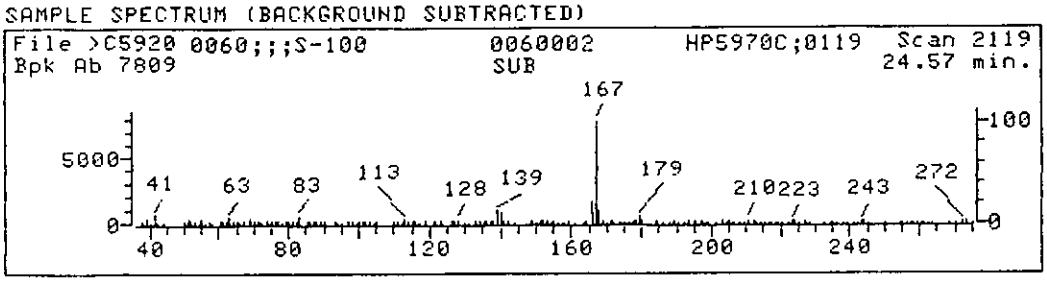
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 59
Compound Name: Phenanthrene
Scan Number: 2063
Retention Time: 24.04 min.
Quant Ion: 177.9
Area: 181450
Concentration: 1027.80 ug
q-value: 96

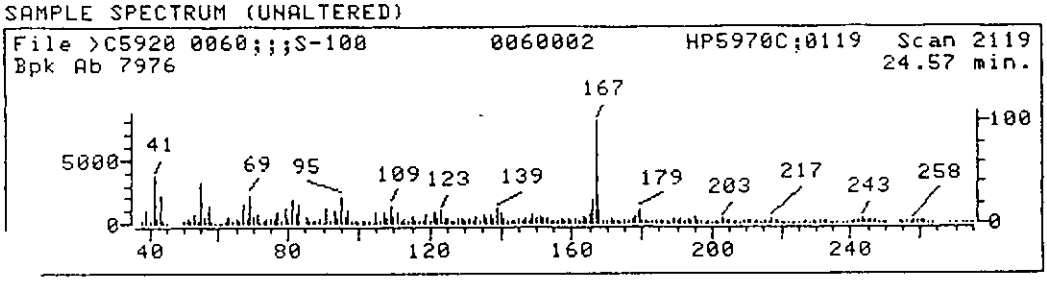
..CFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C5920::C5 Quant Output File: ^C5920::QT
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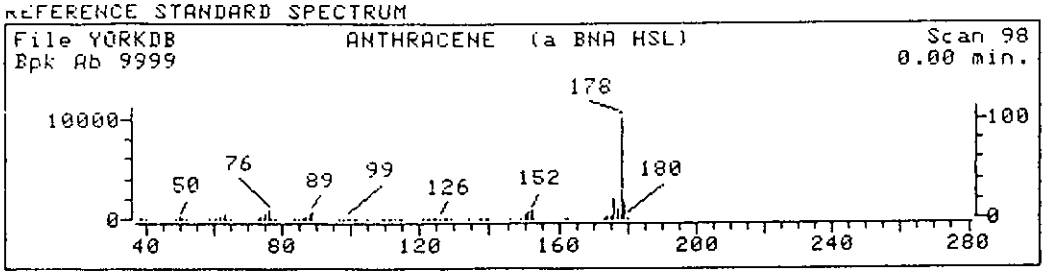
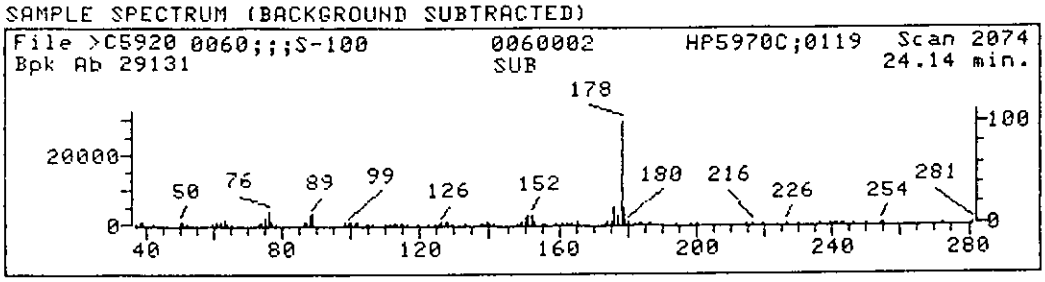
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 60
Compound Name: Carbazole
Scan Number: 2119
Retention Time: 24.57 min.
Quant Ion: 166.8
Area: 25025
Concentration: 478.86 ug
q-value: 95

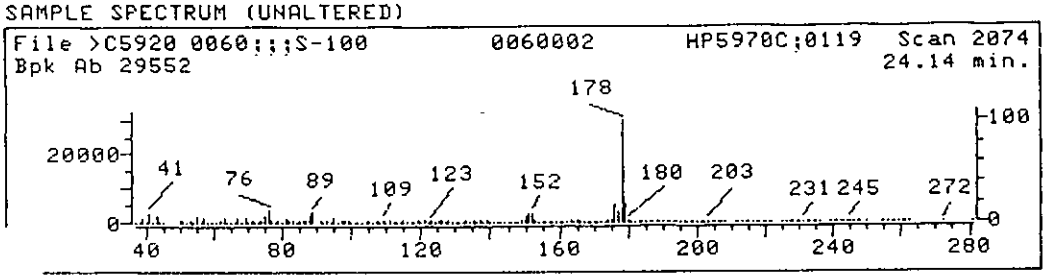
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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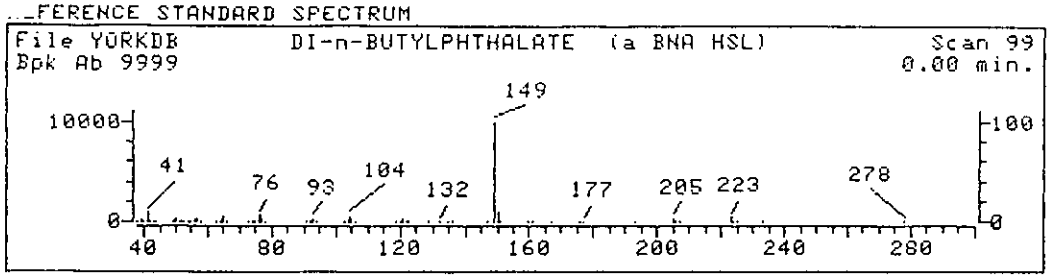
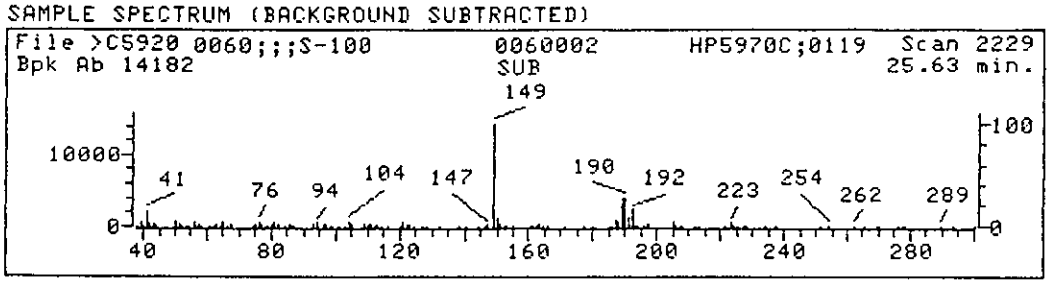
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 61
Compound Name: Anthracene
Scan Number: 2074
Retention Time: 24.14 min.
Quant Ion: 177.9
Area: 82006
Concentration: 462.64 ug
q-value: 99

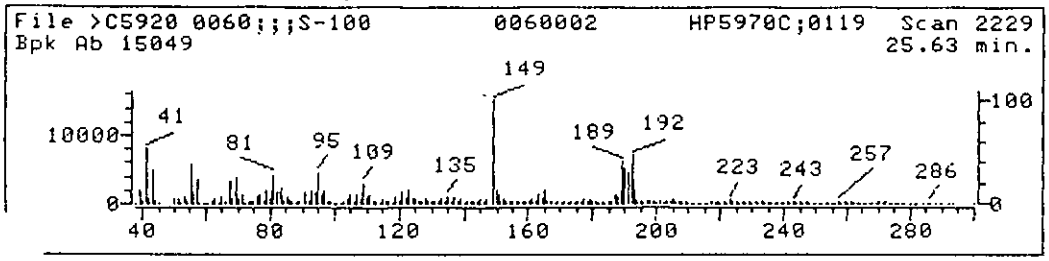
..FERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



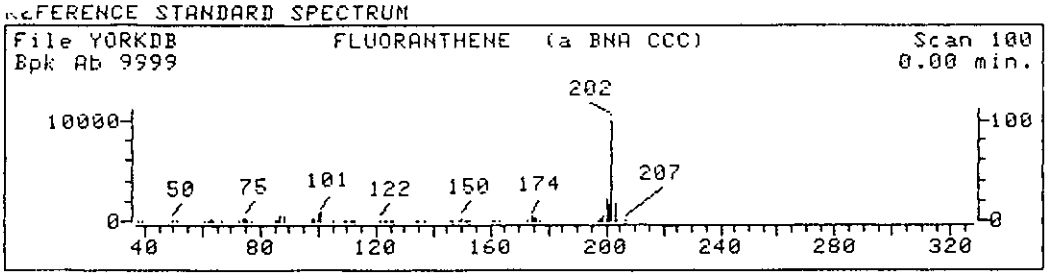
SAMPLE SPECTRUM (UNALTERED)



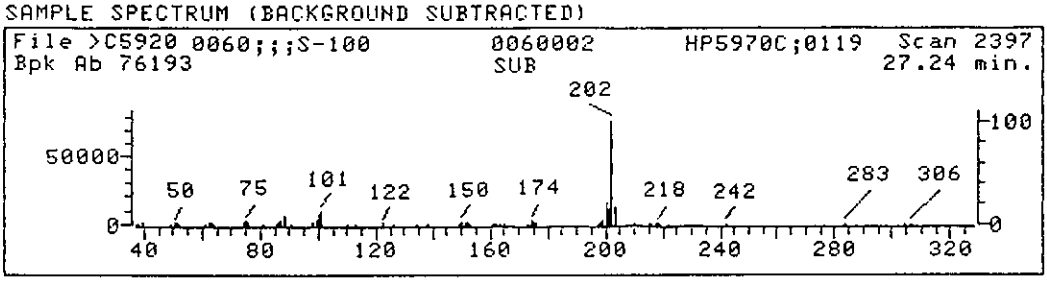
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 62
Compound Name: Di-n-butylphthalate
Scan Number: 2229
Retention Time: 25.63 min.
Quant Ion: 148.8
Area: 39332
Concentration: 157.96 ug
q-value: 98

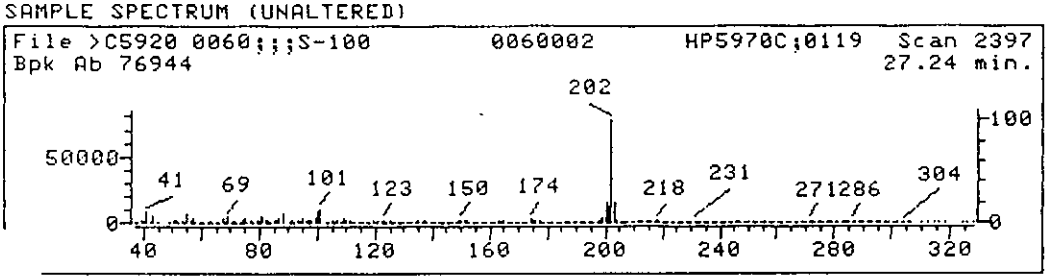
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



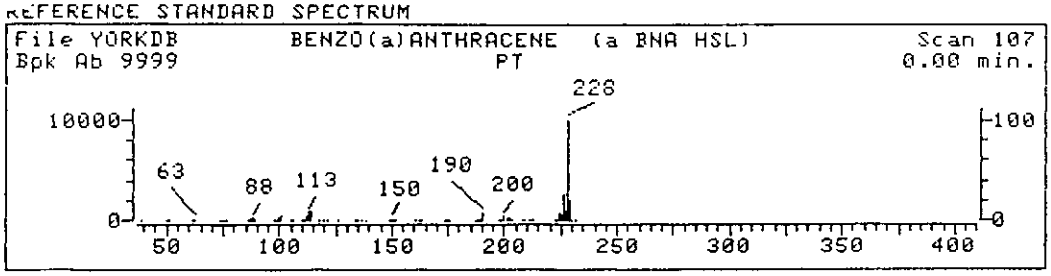
SAMPLE SPECTRUM (UNALTERED)



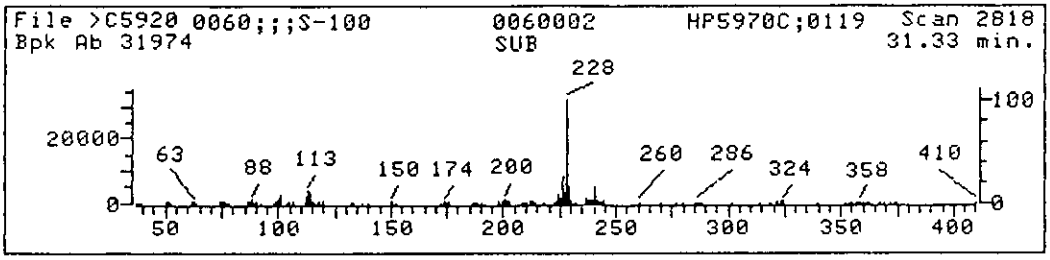
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 63
Compound Name: Fluoranthene
Scan Number: 2397
Retention Time: 27.24 min.
Quant Ion: 201.9
Area: 314459
Concentration: 1661.87 ug
q-value: 99

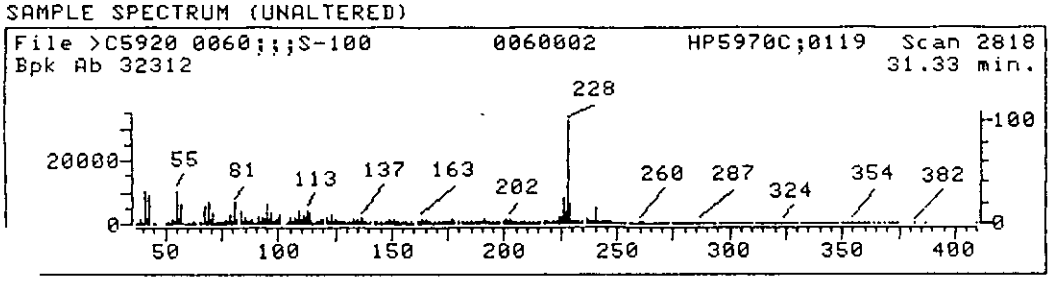
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



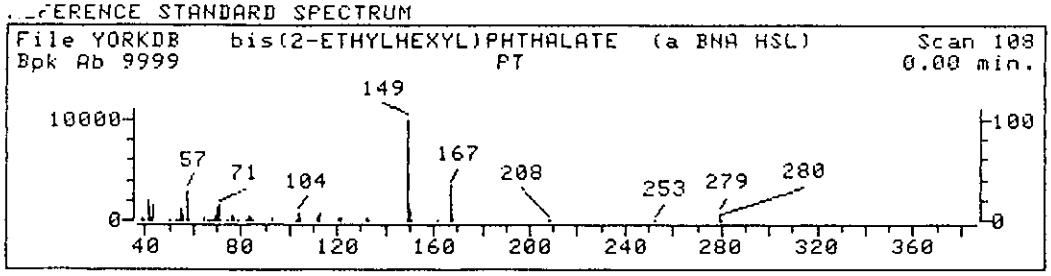
SAMPLE SPECTRUM (UNALTERED)



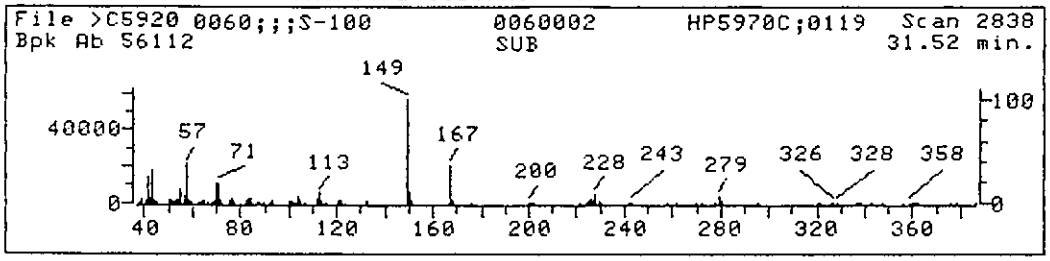
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 69
Compound Name: Benzo(a)anthracene
Scan Number: 2818
Retention Time: 31.33 min.
Quant Ion: 228.0
Area: 183014
Concentration: 1094.38 ug
q-value: 99

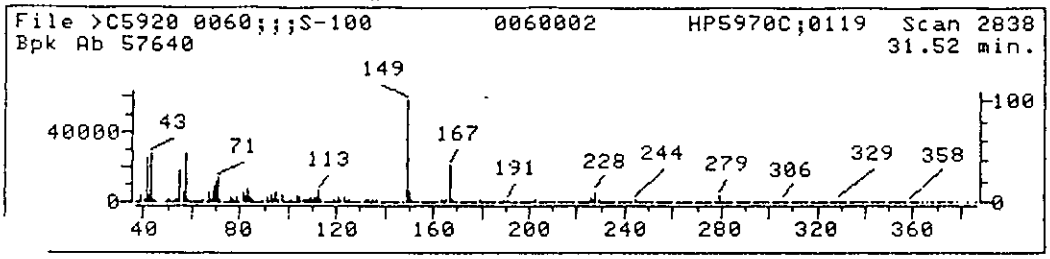
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



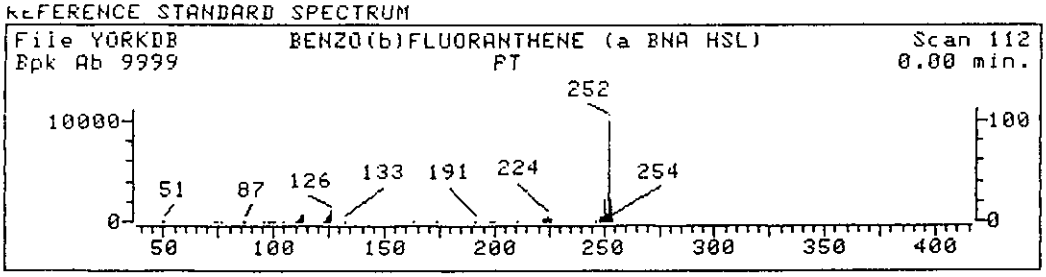
SAMPLE SPECTRUM (UNALTERED)



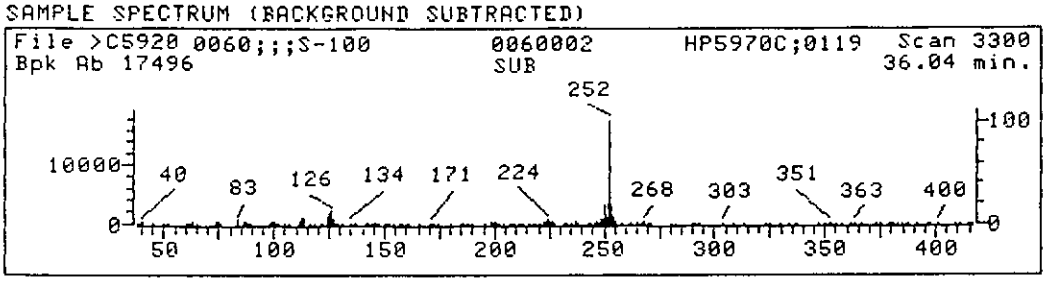
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 71
Compound Name: bis(2-Ethylhexyl)phthalate
Scan Number: 2838
Retention Time: 31.52 min.
Quant Ion: 148.8
Area: 224099
Concentration: 1554.67 ug
q-value: 94

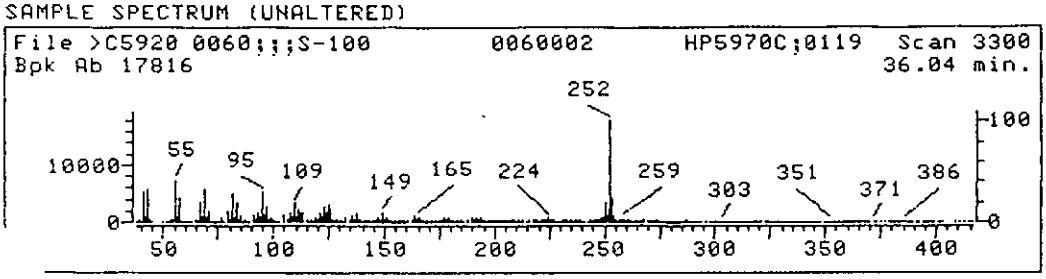
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



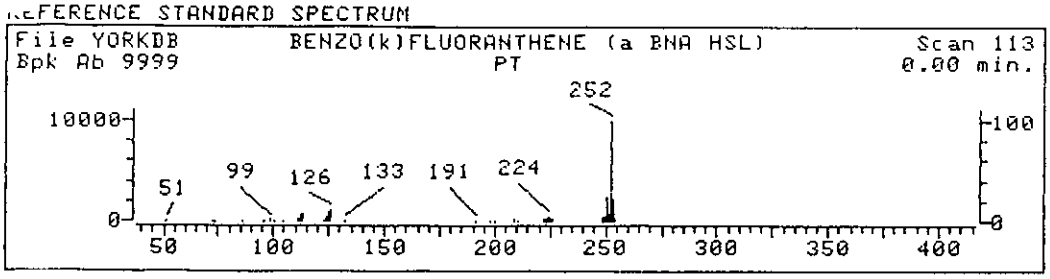
SAMPLE SPECTRUM (UNALTERED)



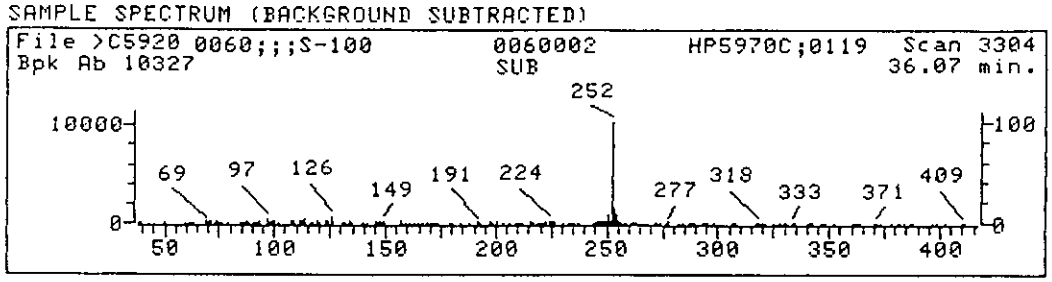
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 74
Compound Name: Benzo(b)fluoranthene
Scan Number: 3300
Retention Time: 36.04 min.
Quant Ion: 252.0
Area: 79891
Concentration: 1022.46 ug
q-value: 95

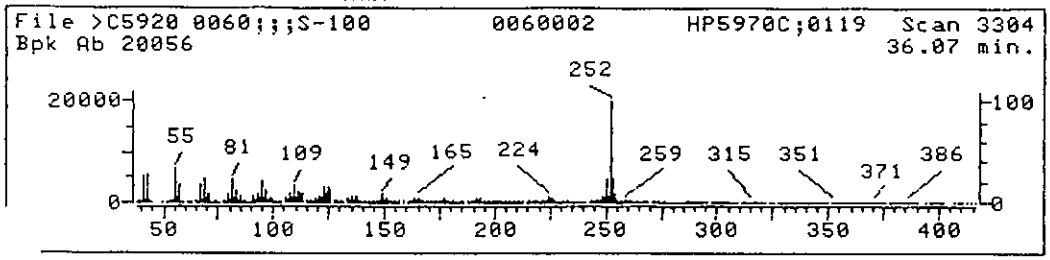
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



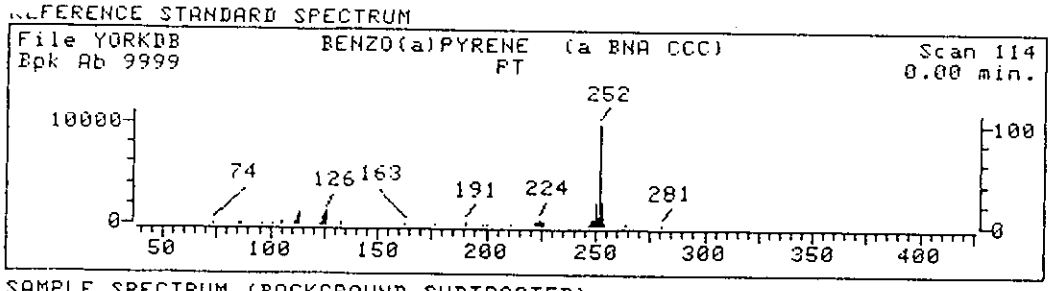
SAMPLE SPECTRUM (UNALTERED)



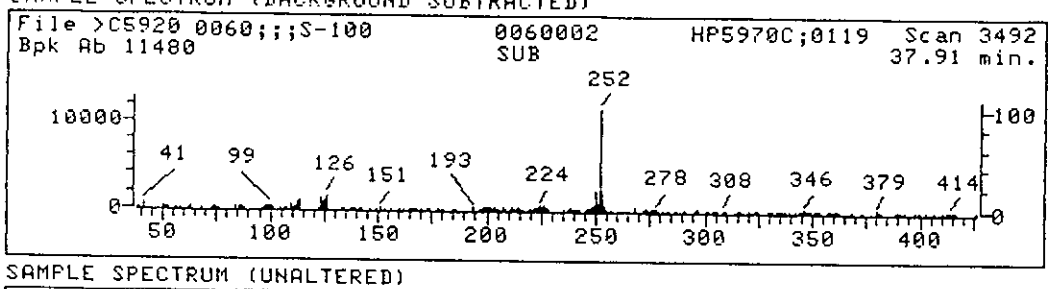
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 75
Compound Name: Benzo(k)fluoranthene
Scan Number: 3304
Retention Time: 36.07 min.
Quant Ion: 252.0
Area: 70350
Concentration: 944.33 ug
q-value: 81

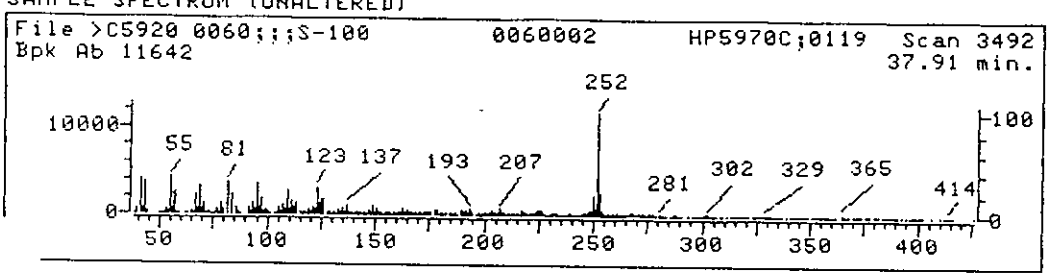
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



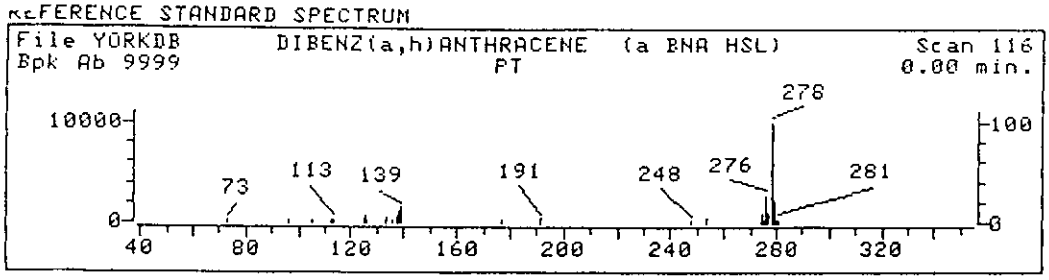
SAMPLE SPECTRUM (UNALTERED)



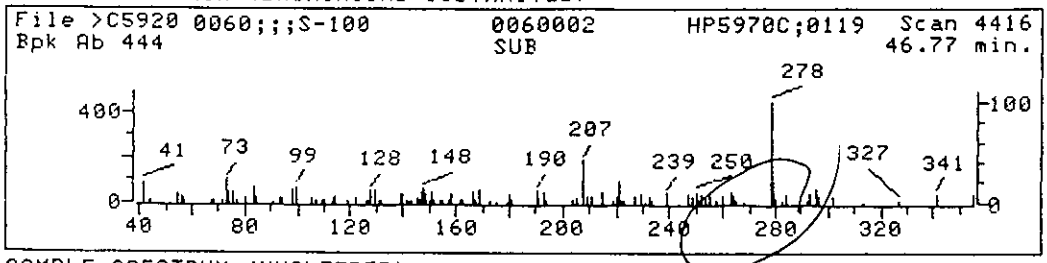
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 76
Compound Name: Benzo(a)pyrene
Scan Number: 3492
Retention Time: 37.91 min.
Quant Ion: 252.0
Area: 81748
Concentration: 1238.97 ug
q-value: 93

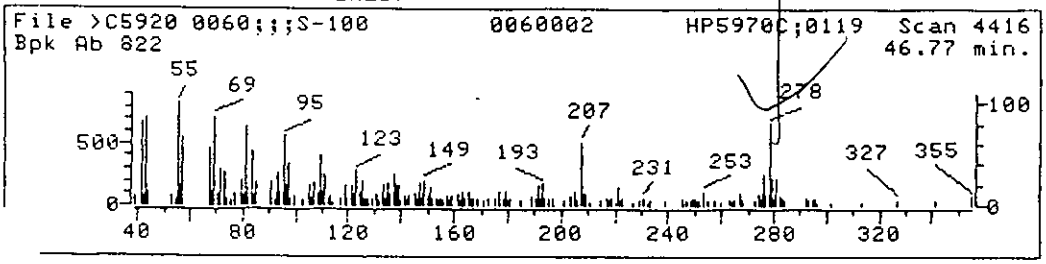
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

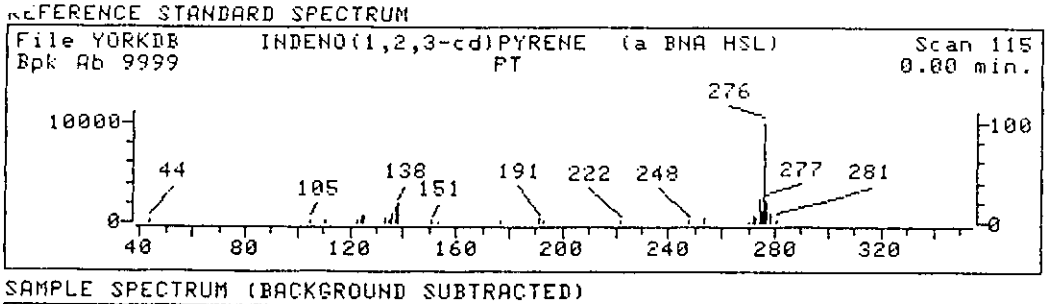


Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

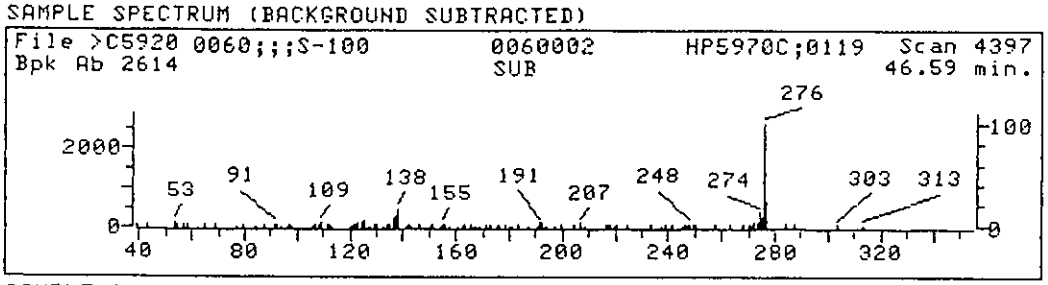
Compound No: 78
Compound Name: Dibenz(a,h)anthracene
Scan Number: 4416
Retention Time: 46.77 min.
Quant Ion: 278.0
Area: 2818
Concentration: 50.74 ug
q-value: 94

0258

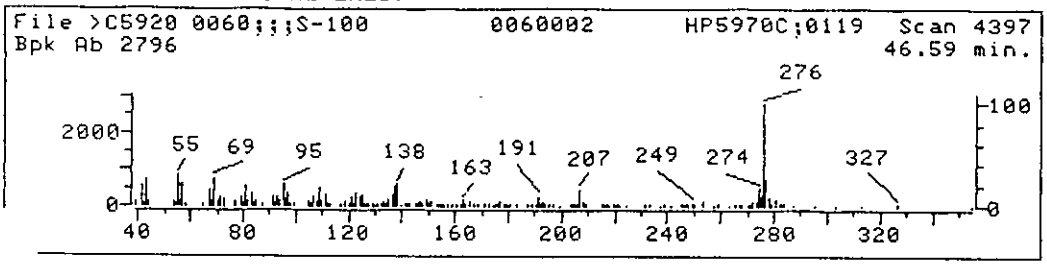
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



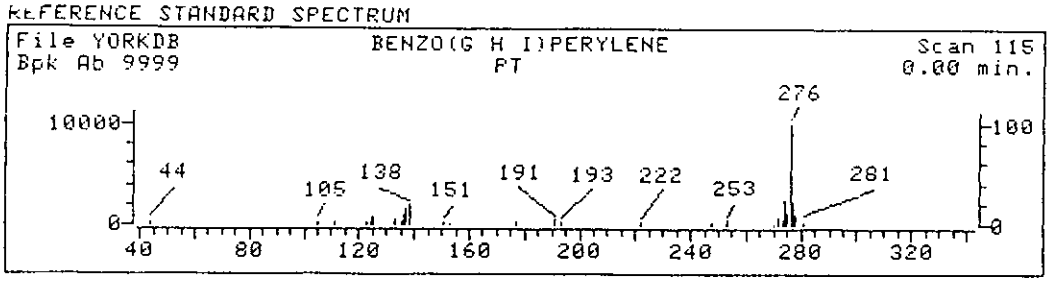
SAMPLE SPECTRUM (UNALTERED)



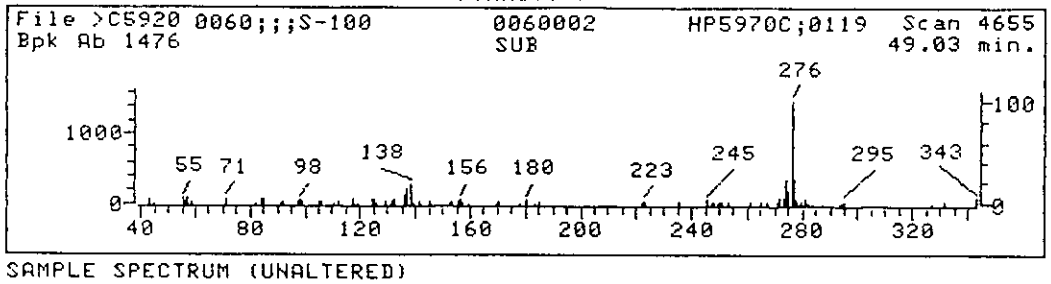
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

Compound No: 77
Compound Name: Indeno(1,2,3-cd)pyrene
Scan Number: 4397
Retention Time: 46.59 min.
Quant Ion: 276.0
Area: 14915
Concentration: 275.12 ug
q-value: 96

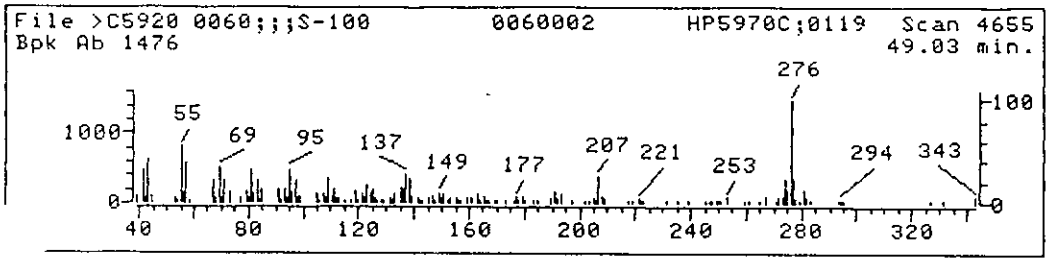
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



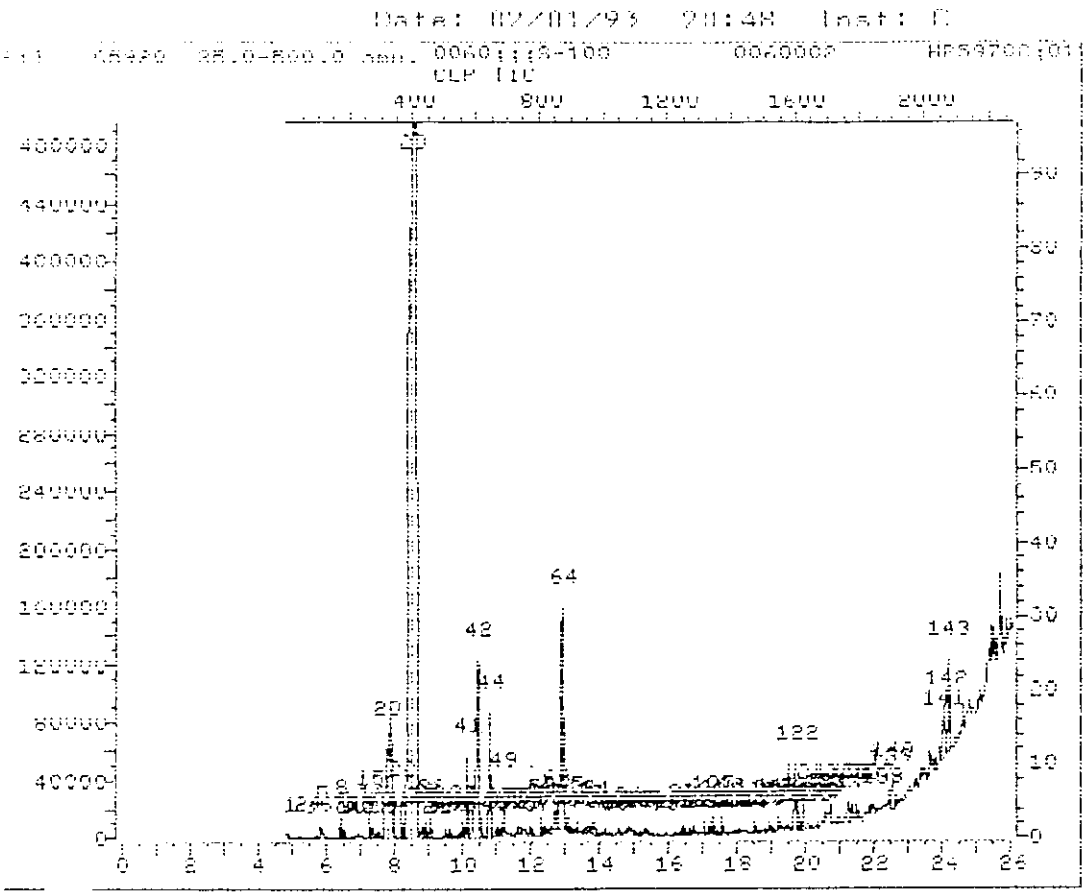
Data File: >C5920::C5 Quant Output File: ^C5920::QT
Name: 0060;;;S-100
Misc: 0060002 HP5970C;011993;012093;LLS;1.0;;7.4;C0952 BTL# 8
Quant Time: 930201 21:43 Quant ID File: I_EPA::N1
Injected at: 930201 20:48 Last Calibration: 930201 13:46

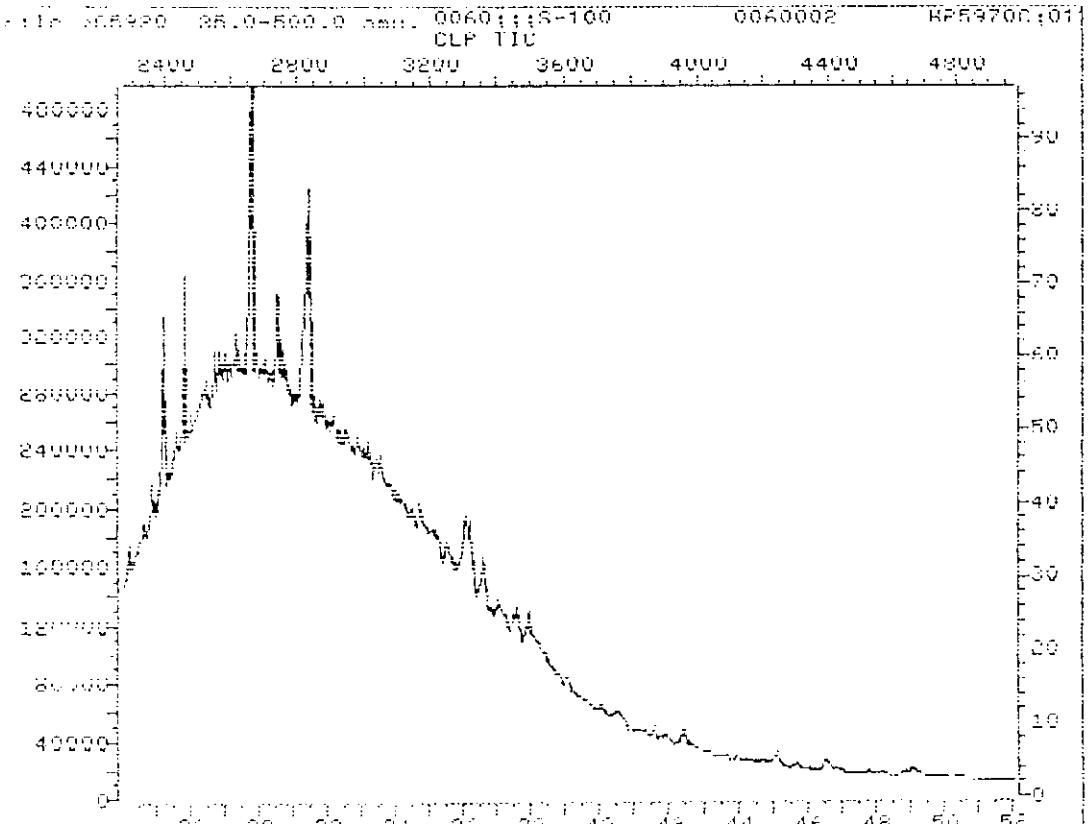
Compound No: 79
Compound Name: Benzo(g,h,i)perylene
Scan Number: 4655
Retention Time: 49.03 min.
Quant Ion: 276.0
Area: 8255^
Concentration: 147.61 ug
q-value: 78

MS .ta file header from : 010992

Sample: 0060;;;S-100 Operator: MSD MS 2/01/93 20:48
Misc : 00600002 HP5972A;01993;012093;ILS;1.0;;2.4;00952 RTI # 8
Sys. #: 1 MS model: 20 SW/HW rev.: 1A ALS # : 0
Method file: M 0 Tuning file: T 0 No. of extra records: 2
Source temp.: 0 Analyzer temp.: 290 Transfer line temp. : 0

Chromatographic temperatures :	40.	290.	0.	0.	0.
Chromatographic times, min. :	4.0	23.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	10.0	0.0	0.0	.5	0.0


Date: 07/01/93 21:48 Inst: 1
CLP TIC
400
800
1200
1600
2000
4000000
3600000
3200000
2800000
2400000
2000000
1600000
1200000
800000
400000
0
2
4
6
8
10
12
14
16
18
20
22
24
26
64
42
14
20
41
49
122
143
142
141


CLP TIC
2400
2800
3200
3600
4000
4400
4800
4000000
3600000
3200000
2800000
2400000
2000000
1600000
1200000
800000
400000
0

S-100 0262
HP5970C

Date: 02/07/94 20:48 Inst: C

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

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
21.	8.48	3521218.	14000.	1.	18.94
64.	12.90	784320.	3100.	1.	18.94
47.	10.44	651896.	2600.	1.	18.94
20.	7.26	363659.	1400.	1.	18.94
44.	10.80	212965.	850.	1.	18.94
41.	10.11	126304.	500.	1.	18.94
49.	11.20	66232.	260.	1.	18.94
22.	8.18	61694.	240.	1.	18.94
15.	7.25	42054.	170.	1.	18.94
63.	12.73	28745.	110.	1.	18.94
28.	9.02	27181.	110.	1.	18.94
24.	13.84	32909.	110.	2.	18.94
8.	6.42	25095.	100.	1.	18.94
126	20.15	43492.	100.	3.	18.94
132	20.68	44049.	100.	3.	18.94
108	17.55	34507.	99.	2.	18.94
124	19.88	42326.	99.	3.	18.94
61.	12.58	24146.	96.	1.	18.94
140	22.52	48140.	91.	4.	18.94
65.	13.09	22316.	89.	1.	18.94
134	21.20	37623.	88.	3.	18.94
2*	8.80	21374.	86.	1.	18.94
5	12.32	21101.	84.	1.	18.94

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		T1/S1
1,4-DICHLOROBENZENE-D4	12.17	190856.	0.00	13.29	6.8
NAPHTHALENE-D8	15.41	264900.	13.29	17.24	2.4
ACENAPHTHENE-D10	20.07	324070.	17.24	22.02	4.7
PHENANTHRENE-D10	23.92	399919.	22.02	27.66	3.0
CHRYSENE-D12	31.35	220094.	27.66	34.87	2.1
PERYLENE-D12	38.40	10528.	34.87	49.03	.2

ISTD peaks found: 6
Surrogate peaks found: 2
Quant target peaks expected: 28
Target peaks matched: 8
Total TIC identified: 23

TICS : 2:53 PM THU., 4 FEB., 1993

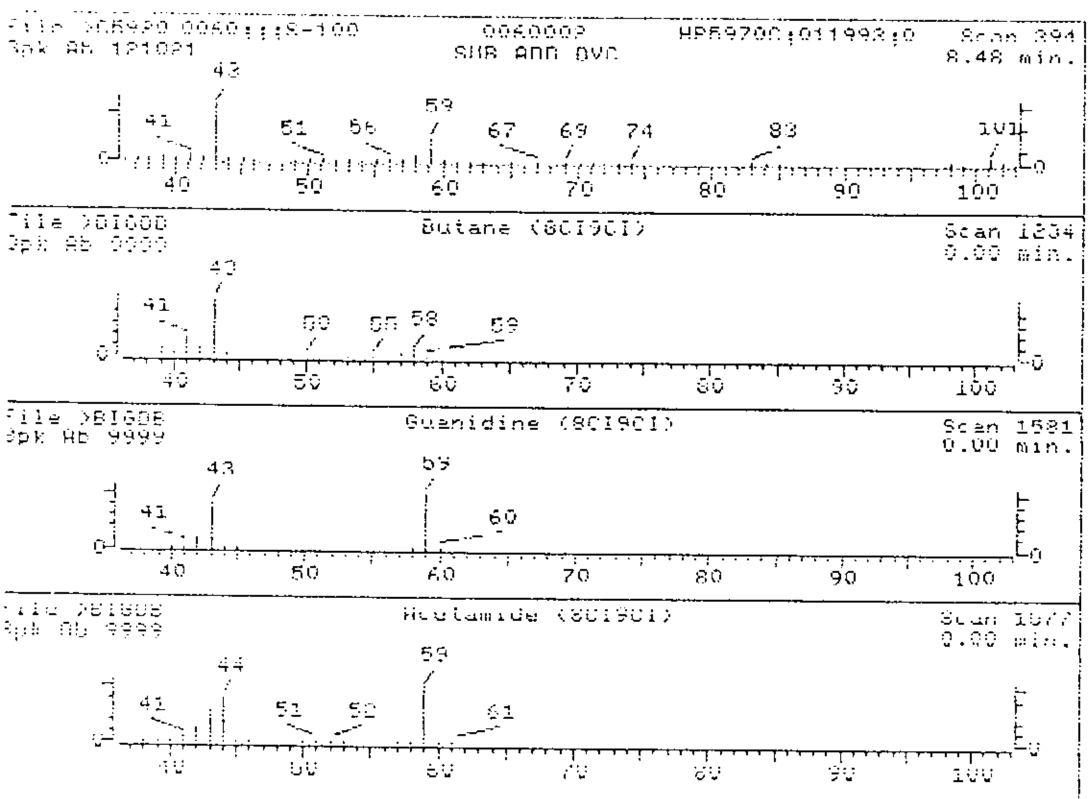
R' error for command: RHF6>
5 error: -5
Bad record length RSF

1. Butane (8CI9CI) 58 C4H10
2. Guanidine (8CI9CI) 59 CH5N3
3. Acetamide (8CI9CI) 59 C2H5NO

Sample file: >C5920 Spectrum #: 394
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C I	R IU
1.	22*	106978	1234	"BIGDB	21	58	2	0	26	40	10	13
2.	20*	113008	1581	"BIGDB	20	34	1	0	37	55	5	14
3.	11*	60355	1577	"BIGDB	22	38	1	0	28	63	2	14

Peak#: 23 Area: 3521718. Est Conc: 14000. Date: 02/01/93 20:48 Inst: C



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

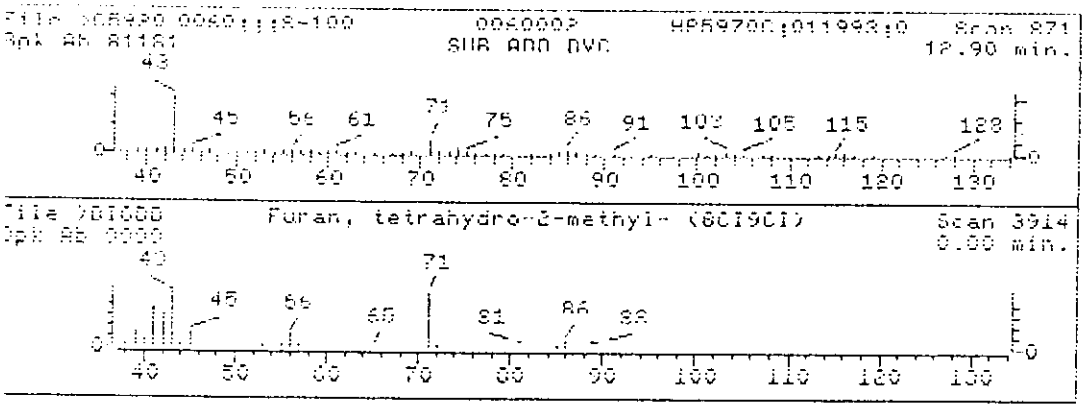
RPN error for command: RSF&3
RPN error: -5
Bad record length RSF

1. Furan, tetrahydro-2-methyl- (8CI,9CI) 86 C5H10O

Sample File: >D6920 Spectrum #: 871
Search speed: 3 Tilting option: S No. of ion ranges searched: 62

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	11*	96479	3914	"RIGOR	23	51	2	0	24	64	2		13	

Peak#: 64 Area: 784320. Est Conc: 3100. Date: 02/01/93 20:48 Inst: C



RSP "115

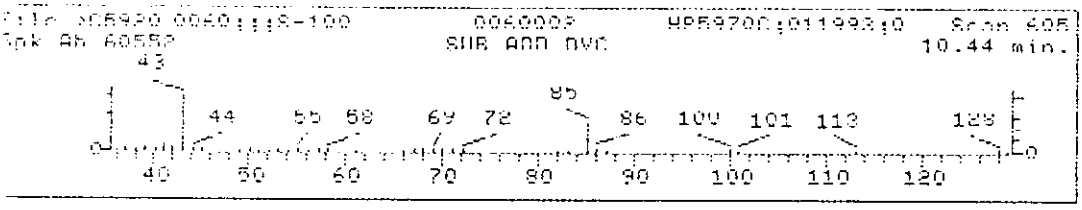
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >C5920 Spectrum #: 605

No data base entries were retrieved.

Peak#: 42 Area: 651096. Est Conc: 2600. Date: 02/01/93 20:48 Inst: C



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

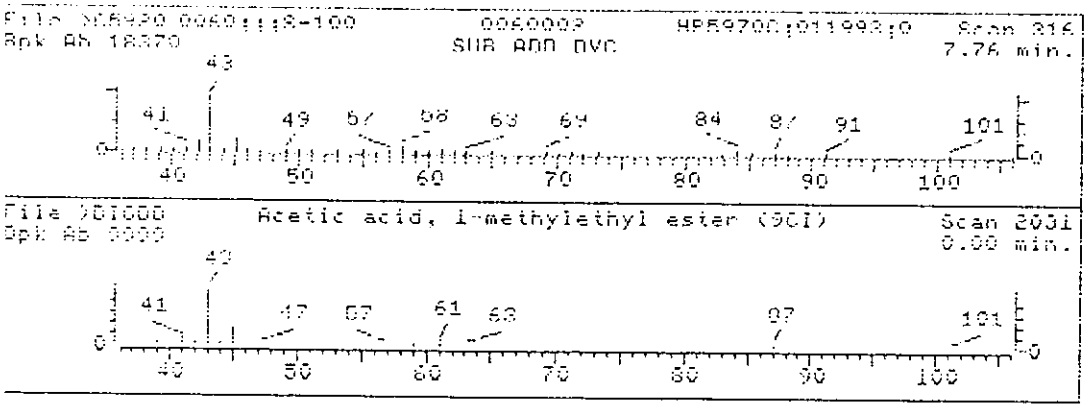
 RPN error for command: RSF63
 RPN error: -5
Bad record length RSF

 1. Acetic acid, 1-methylethyl ester (9CI) 102 C5H10O2

 Sample file: >C5920 Spectrum #: 316
Search speed: 3 Tilting option: S No. of ion ranges searched: 52

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C	I	R	IO
1.	28	108214	2031	"BIGOB	27	32	0	0	45	51	5		14	

Peak#: 20 Area: 363659. Est Conc: 1400. Date: 02/01/93 20:48 Inst: C



RPN: DUP

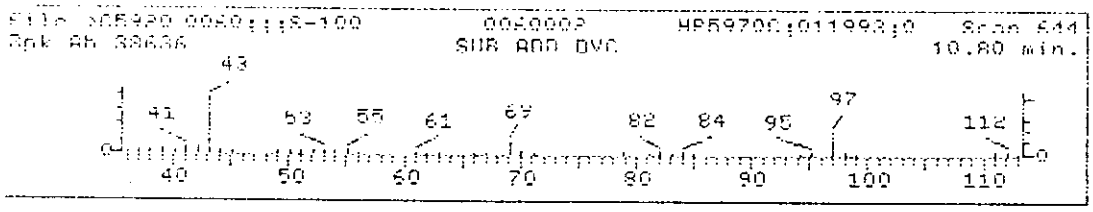
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

RPN error for command: RSRA?
RPN error: -5
Bad record length RSF

Sample file: >C5920 Spectrum #: 644

No data base entries were retrieved.

Peak#: 44 Area: 212965. Est Conc: 850. Date: 02/01/93 20:48 Inst: C



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

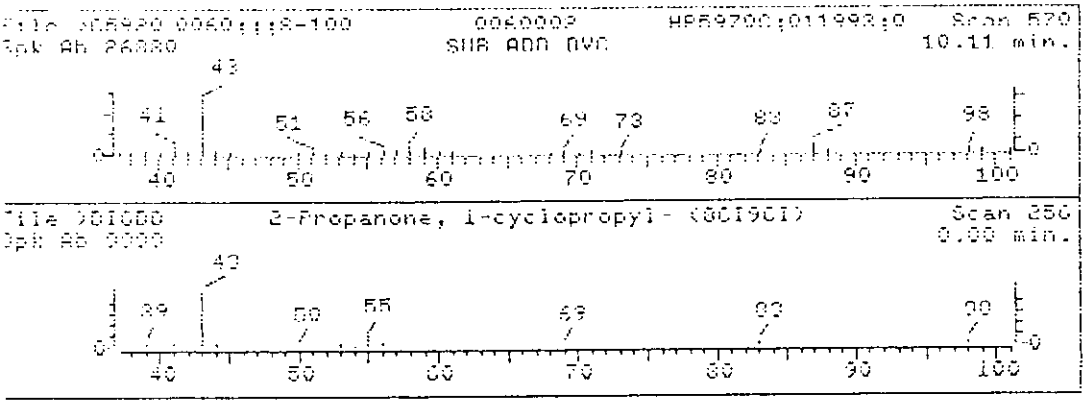
RPN error for command: RSFA3
RPN error: -5
Bad record length RSF

1. 2-Propanone, 1-cyclopropyl- (RICI9CI) 98 C4H10O

Sample File: >DC9920 Spectrum #: 570
Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	ROOT	K	DK	#FIG	TILT	%	CON	C	I	R	IO
1.	98*	4160252	256	"R1GOR	21	44	2	0	100	33	12	13		

Peak#: 41 Area: 126304. Est Conc: 500. Date: 02/01/93 20:48 Inst: C



RPN: 005

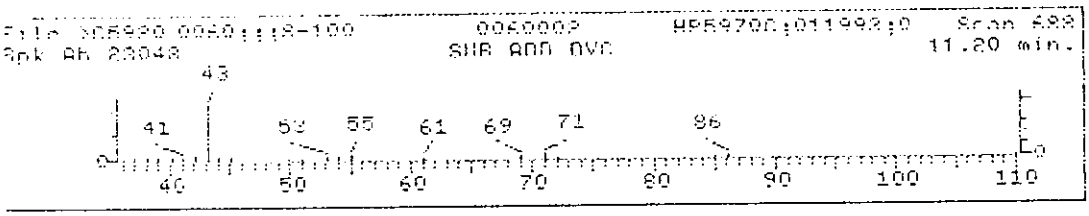
Can't interpret this parameter... Perhaps you have mistyped
the run string or have forgotten the order of the run string.

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

Sample file: >D9920 Spectrum #: 688

No data base entries were retrieved.

Peak#: 49 Area: 66232. Fat Conc: 260. Date: 02/01/93 20:48 Inst: C



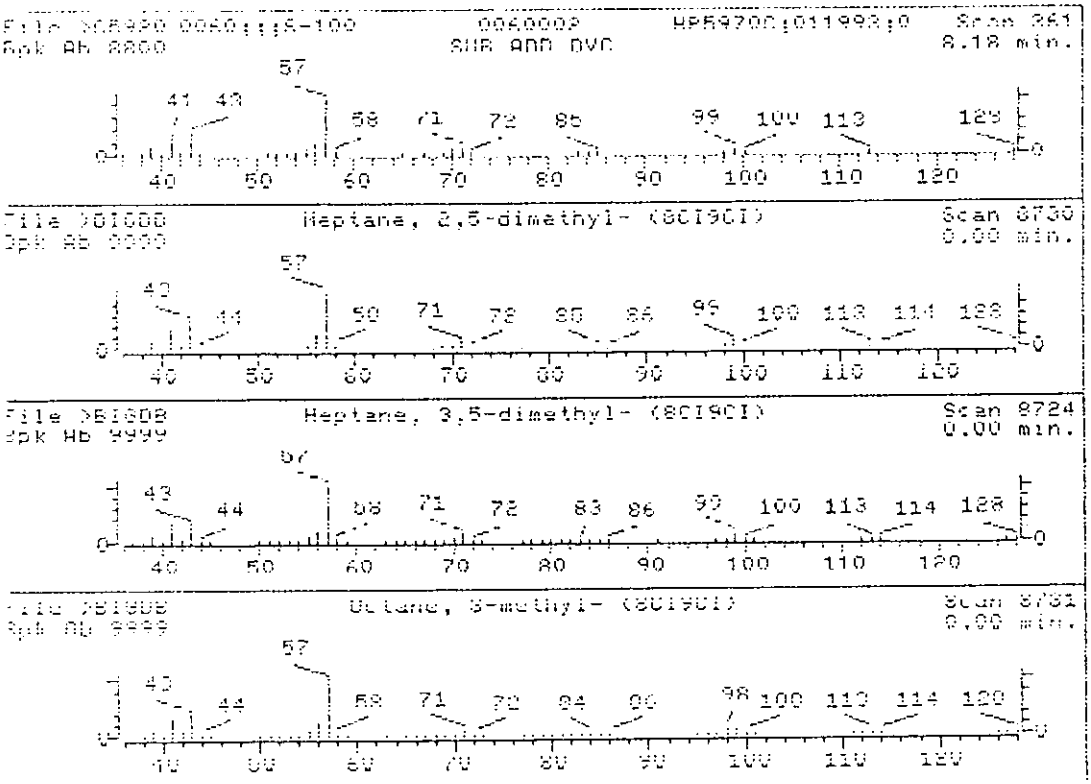
Load passed length RSP

1.	Heptane, 2,5-dimethyl- (8C19CI)	128 C9H20
2.	Heptane, 3,5-dimethyl- (8C19CI)	128 C9H20
3.	Octane, 3-methyl- (8C19CI)	128 C9H20
4.	Undecane, 6-methyl- (8C19CI)	170 C12H26

Sample File: >159211 Spectrum #: 361
Search speed: 3 Tilting option: S No. of ion ranges searched: 68

	Prob.	CAS #	CON #	NAME	K	DK	#FLG	TIT	%	CON	C	R	IV
1.	95*	2216300	8730	"BIGDB	21	19	0	0	20	3	22	95	
2.	89*	926829	8724	"BIGDB	60	22	0	0	24	10	62	80	
3.	70	2216333	8731	"BIGDB	52	32	2	0	83	7	42	18	
4.	52	17302339	8562	"BIGDB	36	42	2	0	100	16	20	12	

Peak#: 22 Area: 61694. Est Conc: 240. Date: 02/01/93 20:48 Inst: C



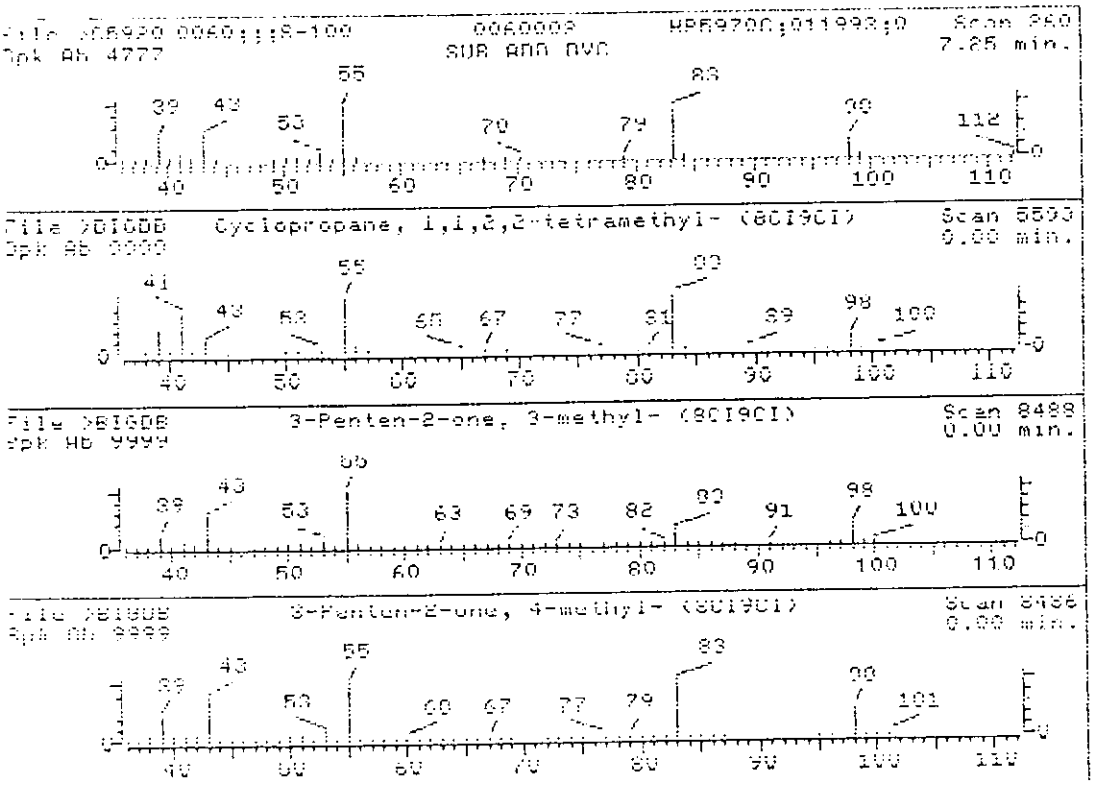
sd search length RSP

1.	Cyclopropane, 1,1,2,2-tetramethyl- (8CI9CI)	98 C7H14
2.	3-Penten-2-one, 3-methyl- (8CI9CI)	98 C6H10O
3.	3-Penten-2-one, 4-methyl- (8CI9CI)	98 C6H10O
4.	2-Pentene, 3,4-dimethyl-, (E)- (8CI9CI)	98 C7H14

Sample File: >D9920 Spectrum #: 260
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CON #	NAME	K	DK	#PLG	TILT	%	CON	C	I	R	IV
1.	88*	4127473	5593	"BIGDB	57	40	2	0	91	5	60	35		
2.	84*	565628	8488	"BIGDB	62	30	0	0	74	42	20	24		
3.	82*	141797	8486	"BIGDB	62	36	2	0	80	22	25	41		
4.	52*	4914925	5596	"BIGDB	41	55	2	0	89	19	20	18		

Peak#: 15 Area: 42054. Est Conc: 170. Date: 02/01/93 20:48 Inst: C



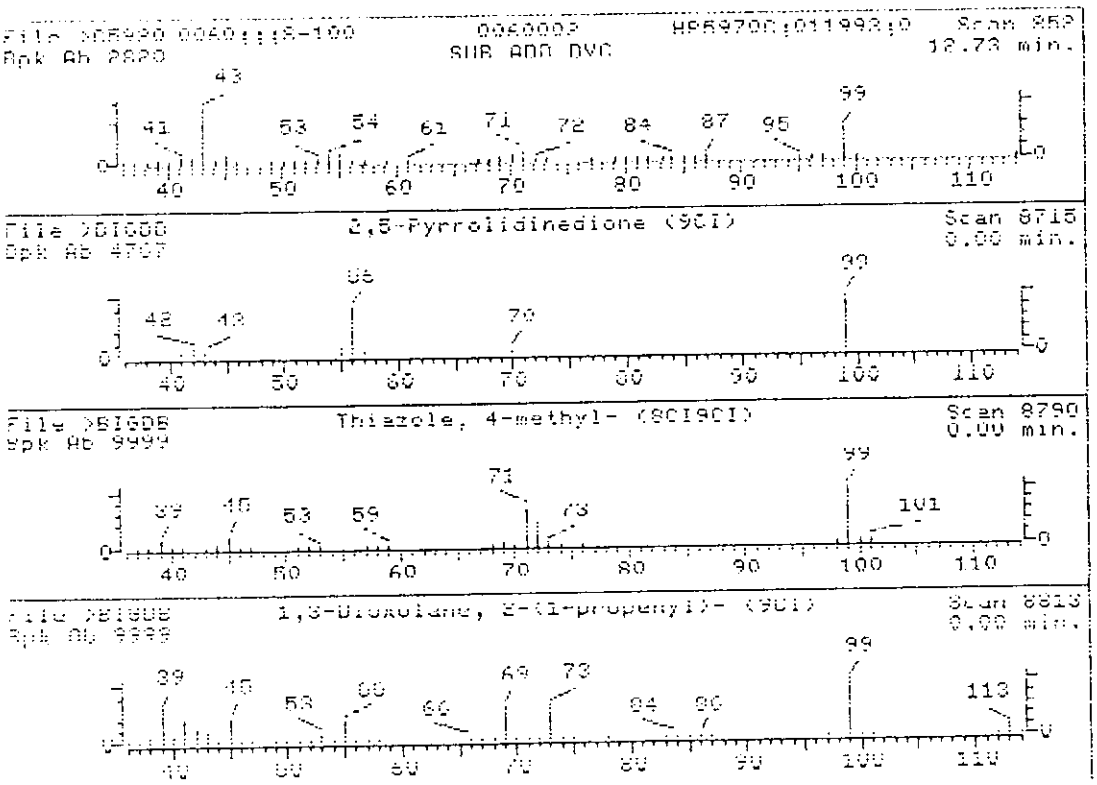
Mod record length RSK

1.	2,5-Pyrrolidinedione (9CI)	99 C4H5NO2
2.	Thiazole, 4-methyl- (8CI,9CI)	99 C4H5NS
3.	1,3-Dioxolane, 2-(1-propenyl)- (9CI)	114 C6H10O2
4.	Oxirane, 2-methyl-2-(2-methylpropyl)- (9CI)	114 C7H14O

Sample File: >059211 Spectrum #: 859
Search speed: 3 Tilting option: S No. of ion ranges searched: 55

	Prob.	CAS #	CON #	RWTI	K	DK	#PKS	TILT	%	CON	C	I	R	IU
1.	28*	123568	8715	"BIGDB	24	46	2	0	52	32	11			14
2.	22*	693958	8791	"BIGDB	22	48	3	0	52	40	11			13
3.	22*	4628261	8813	"BIGDB	25	84	3	0	52	32	11			13
4.	25*	53897317	8728	"BIGDB	28	74	3	0	52	43	8			13

Peak#: 63 Area: 28745. Est Conc: 110. Date: 02/01/93 20:48 Inst: C



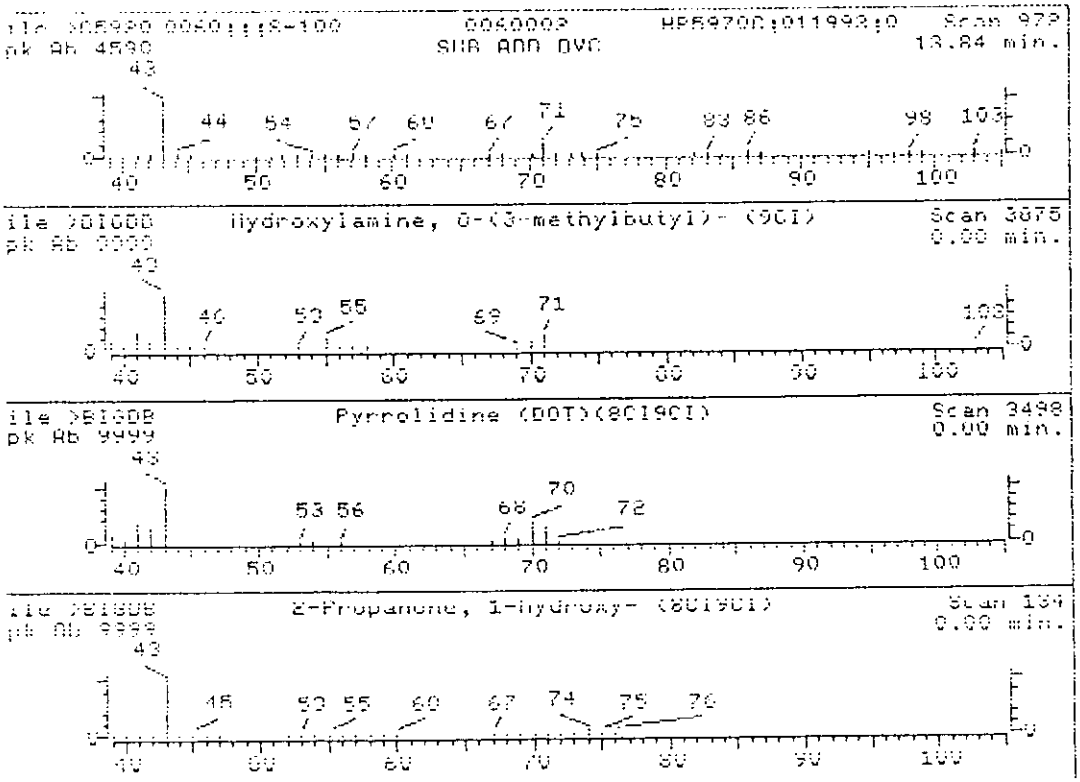
ad scand length BGP

1.	Hydroxylamine, O-(3-methylbutyl)- (9CI)	103 C5H13NO
2.	Pyrrolidine (DOT)(8CI9CI)	71 C4H9N
3.	2-Propanone, 1-hydroxy- (8CI9CI)	74 C3H6O2
4.	1-Propanol, 2-methyl- (9CI)	74 C4H10O

Sample File: >135920 Spectrum #: 972
Search speed: 3 Tilting option: S No. of ion ranges searched: 65

	Prob.	CAS #	CON #	RUDT	K	DK	#HLG	TILT	%	CON	C	I	R	IU
1.	50*	19411455	3875	"BIGDB	22	59	2	0	83	17	20		13	
2.	50*	123251	3498	"BIGDB	21	67	2	0	74	19	20		13	
3.	33*	116096	134	"BIGDB	23	50	0	0	98	33	12		16	
4.	31*	78831	152	"BIGDB	24	22	2	0	100	31	12		14	

Peak#: 24 Area: 329119. Est Conc: 110. Date: 02/01/93 20:48 Inst: C



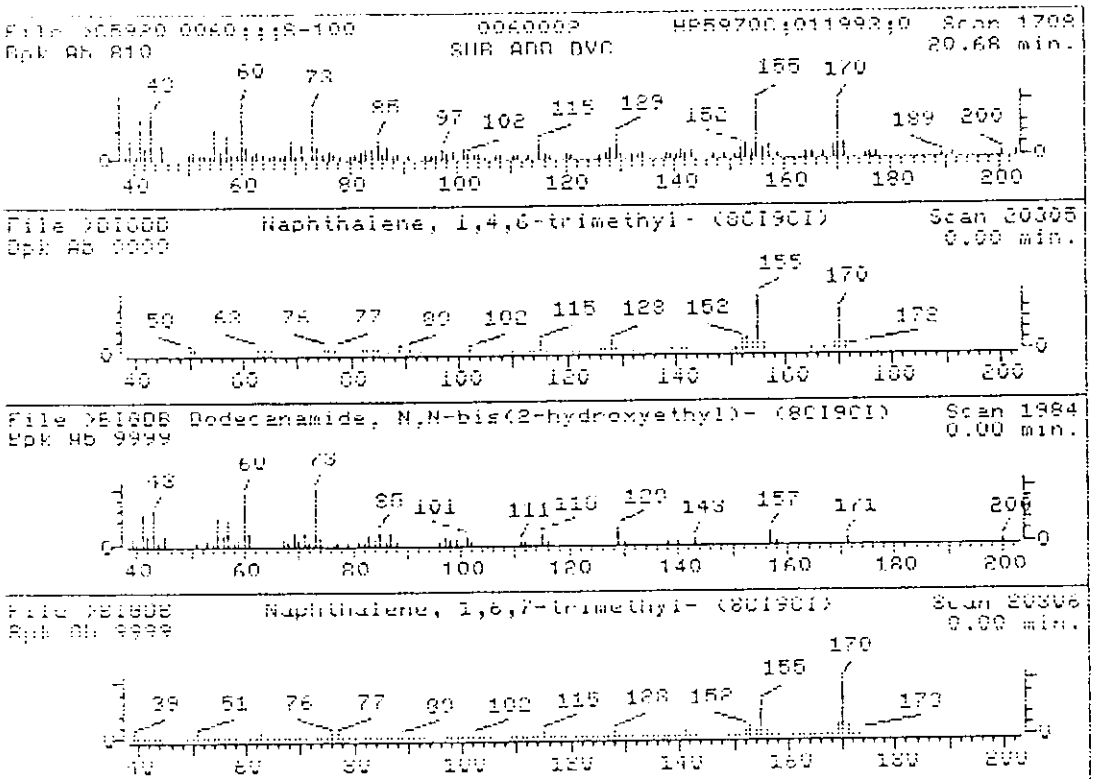
NIST search length RMF

1.	Naphthalene, 1,4,6-trimethyl- (8C19CI)	170 C13H14
2.	Dodecanamide, N,N-bis(2-hydroxyethyl)- (8C19CI)	287 C16H33N03
3.	Naphthalene, 1,6,7-trimethyl- (8C19CI)	170 C13H14
4.	Naphthalene, 2,3,6-trimethyl- (8C19CI)	170 C13H14

Sample File: >159208 Spectrum #: 1708
Search speed: 3 Tilting option: S No. of ion ranges searched: 57

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C	I	R	IO
1.	66*	2131422	20305	"BIGDB	74	30	1	-3	28	16	31			49
2.	52	1211411	1984	"BIGDB	88	44	0	2	45	44	17			55
3.	47*	2245387	20306	"BIGDB	70	38	1	0	96	55	11			69
4.	41*	829265	20308	"BIGDB	64	45	1	0	86	55	11			63

Peak#: 132 Area: 44049. Est Conc: 100. Date: 02/01/93 20:48 Inst: C



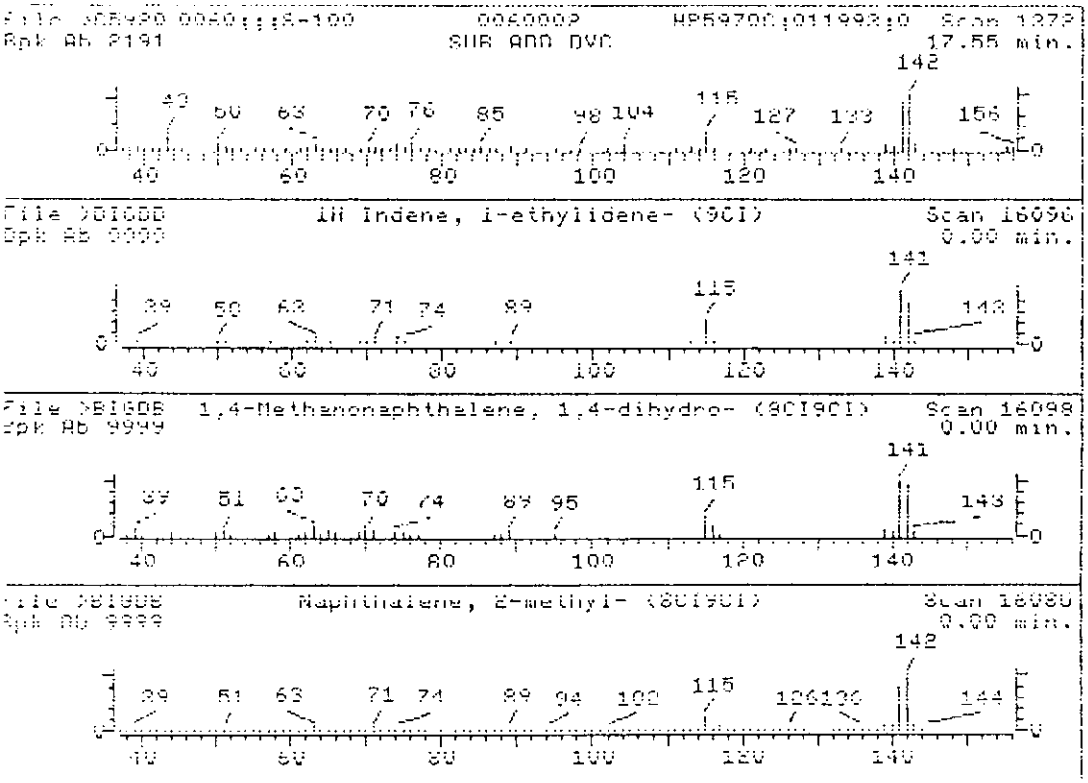
Load record length MAX

1.	1H-Indene, 1-ethylidene- (9CI)	142	C11H10
2.	1,4-Methanonaphthalene, 1,4-dihydro- (8CI,9CI)	142	C11H10
3.	Naphthalene, 2-methyl- (8CI,9CI)	142	C11H10
4.	Naphthalene, 1-methyl- (8CI,9CI)	142	C11H10

Sample File: >I59211 Spectrum #: 1322
Search speed: 3 Tilting option: S No. of ion ranges searched: 56

	Prob.	CAS #	CON #	RIUT	K	OK	#PLG	TILT	%	CON	C	I	R	IV
1.	91*	2471832	16096	"BIGDB	76	24	0	0	63	28	57	93		
2.	24*	4453911	16098	"BIGDB	20	32	2	-2	83	15	39	40		
3.	21*	91576	16085	"BIGDB	57	41	2	0	96	13	38	34		
4.	21*	911211	16084	"BIGDB	57	43	2	0	94	13	38	34		

Peak#: 108 Area: 34507. Est Conc: 99. Date: 02/01/93 20:48 Inst: C



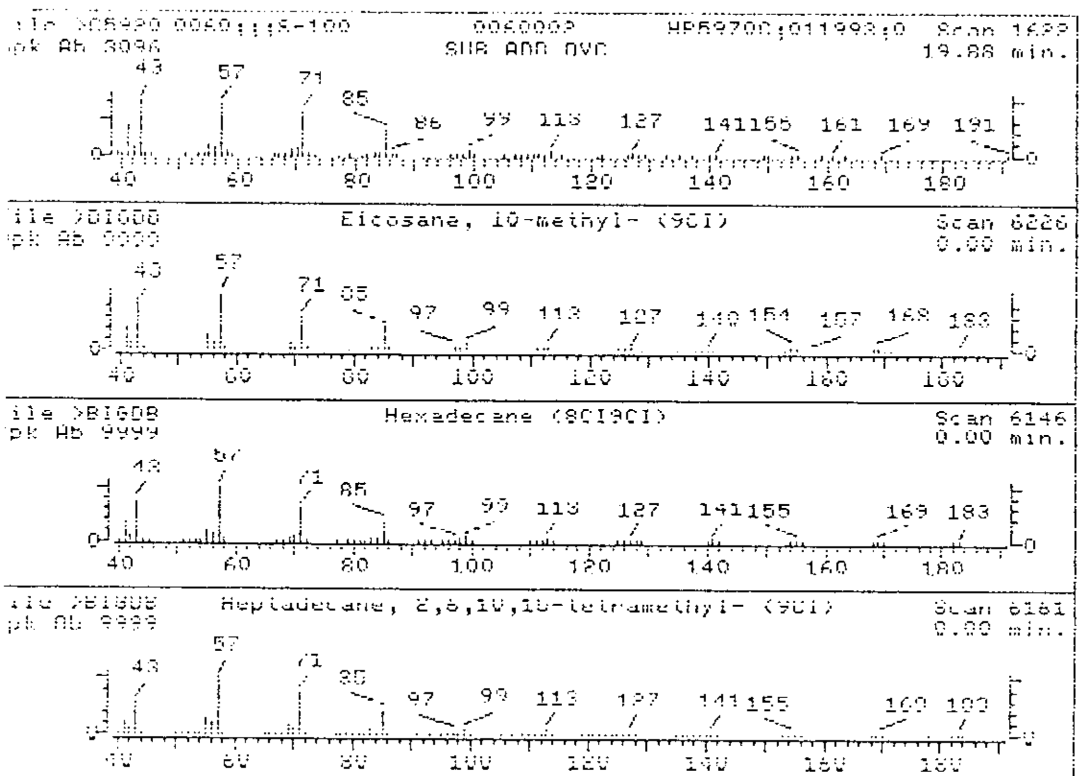
5d Record length 85k

1. Eicosane, 10-methyl- (9CI) — 296 C21H44
2. Hexadecane (8CI9CI) — 226 C16H34
3. Heptadecane, 2,6,10,15-tetramethyl- (9CI) — 296 C21H44
4. Tritetracontane (8CI9CI) — 604 C43H88

Sample File: >C5920   Spectrum #:   1622
Search speed: 3   Tilting option: S   No. of ion ranges searched: 63

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C I R IV	
1.	83	54833237	6226	"BIGDB	96	37	2	1	97	5	57	23
2.	83	544763	6146	"BIGDB	88	32	2	0	93	5	57	26
3.	83	54833486	6161	"BIGDB	89	44	2	0	76	4	57	26
4.	78	7098217	6150	"BIGDB	75	93	2	0	89	5	55	19

Peak#: 124 Area: 42326. Est Conc: 99. Date: 02/01/93   20:48 Inst: C



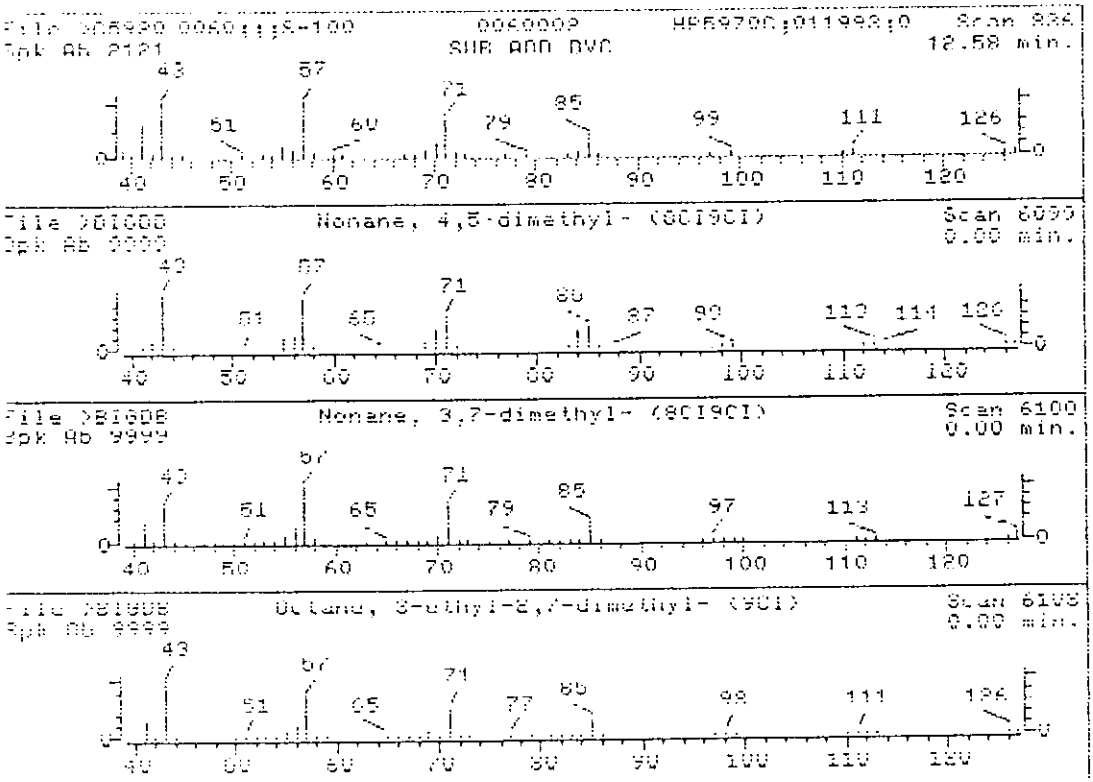
ad search length RSF

1.	Nonane, 4,5-dimethyl- (8CI,9CI)	156 C11H24
2.	Nonane, 3,7-dimethyl- (8CI,9CI)	156 C11H24
3.	Octane, 3-ethyl-2,7-dimethyl- (9CI)	170 C12H26
4.	Hexane, 2,4,4-trimethyl- (8CI,9CI)	128 C9H20

Sample File: >C99Y11 Spectrum #: 836
Search speed: 3 Tilting option: S No. of ion ranges searched: 60

	Prob.	CAS #	CON #	NAME	K	DK	#PKS	TILT	%	CON	C	I	R	IV
1.	28	17302737	6099	"BIGDB	58	47	2	0	81	7	42		13	
2.	28	17302328	61111	"BIGDB	38	48	2	0	1111	11	38		12	
3.	28	62183555	6118	"BIGDB	51	40	2	0	99	13	38		17	
4.	48	16747311	3925	"BIGDB	55	33	2	0	86	21	17		19	

Peak#: 61 Area: 24146. Est Conc: 96. Date: 02/01/93 20:48 Inst: C



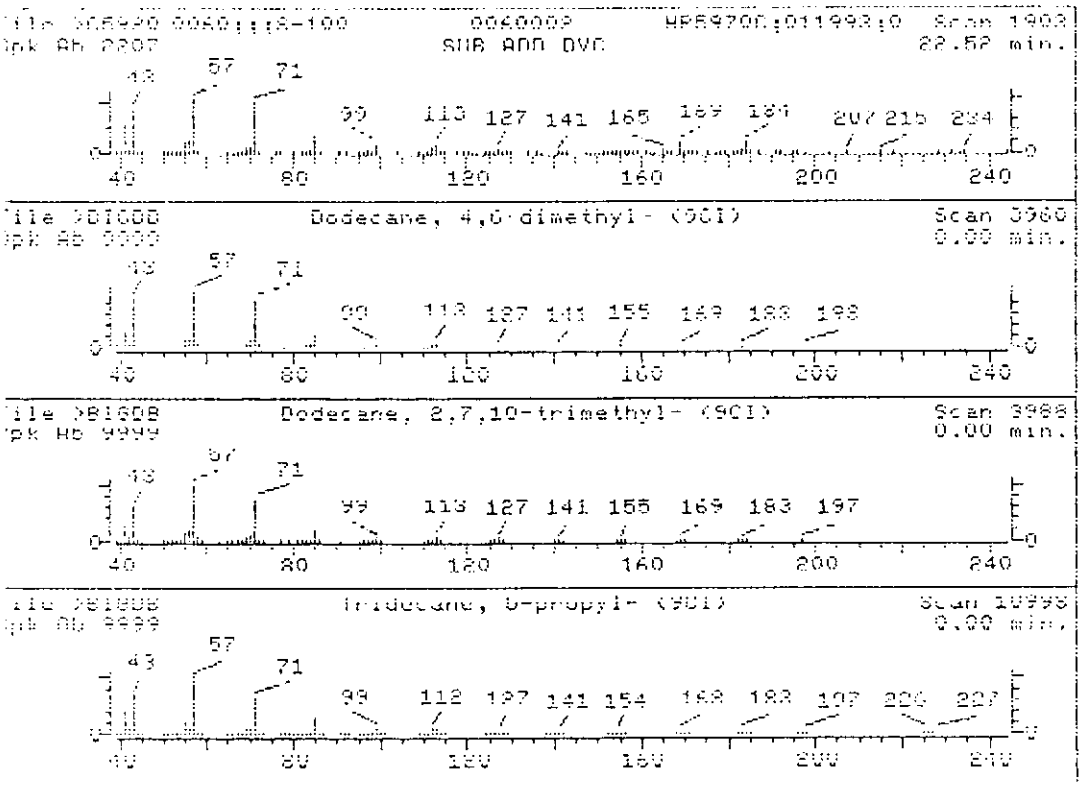
Std record length RSP

1.	Dodecane, 4,6-dimethyl- (9CI)	198 C14H30
2.	Dodecane, 2,7,10-trimethyl- (9CI)	212 C15H32
3.	Tridecane, 5-propyl- (9CI)	226 C16H34
4.	Decane, 5-propyl- (8CI)	184 C13H28

Sample File: >C99211 Spectrum #: 1983
Search speed: 3 Tilting option: 5 No. of ion ranges searched: 63

	Peak	CAS #	CON #	RUNT	K	DK	#FLG	TILT	%	CON	C	I	R	IV
1.	68*	61141728	3960	"BIGDB	61	49	1	0	91	25	30			52
2.	66	74645980	3988	"BIGDB	82	22	1	-1	100	19	31			41
3.	63	55145119	10998	"BIGDB	86	27	2	0	100	20	30			31
4.	62*	12312628	4003	"BIGDB	69	42	2	0	98	28	25			49

Peak#: 140 Area: 48140. Est Conc: 91. Date: 02/01/93 20:48 Inst: C



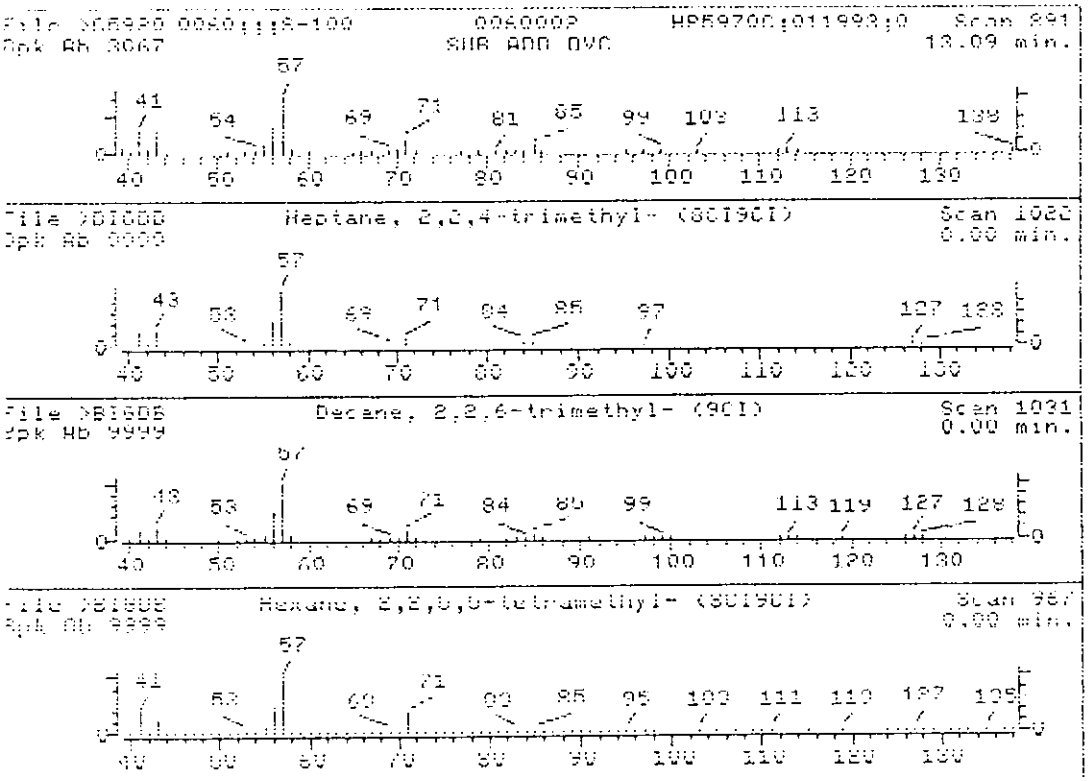
sd record length RSF

1.	Heptane, 2,2',4-trimethyl- (8CI,9CI)	142 C10H22
2.	Decane, 2,2,6-trimethyl- (9CI)	184 C13H28
3.	Hexane, 2,2',5,5-tetramethyl- (8CI,9CI)	142 C10H22
4.	Heptane, 2,2-dimethyl- (8CI,9CI)	128 C9H20

Sample File: >C5920 Spectrum #: 891
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.	68	14720742	1022	"BIGOR	38	43	2	0	94	14	30			13
2.	68	6223272	1031	"BIGOR	39	48	2	0	91	13	30			12
3.	68	1021814	967	"BIGOR	52	27	2	0	81	14	30			18
4.	58	1021267	1093	"BIGOR	48	31	0	0	92	12	25			27

Peak#: 65 Area: 22916. Est Conc: 89. Date: 02/01/93 20:48 Inst: C



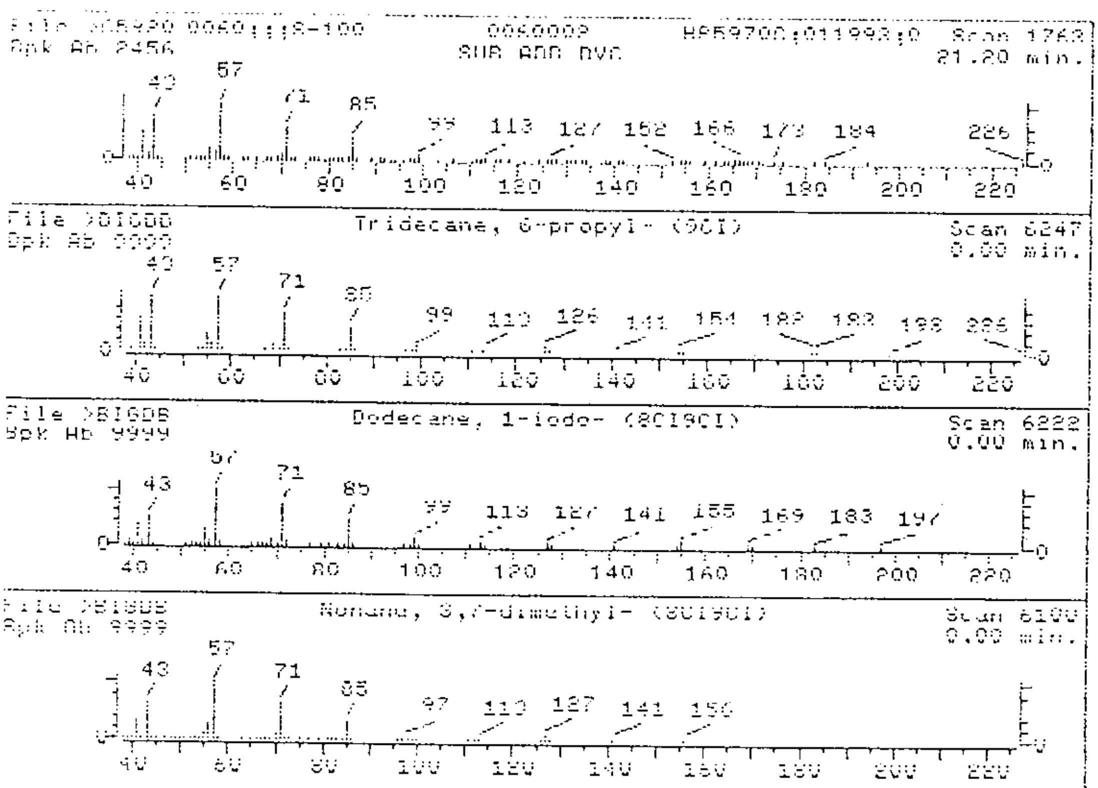
Std Record length RSF

1. Tridecane, 6-propyl- (9CI) 226 C16H34
2. Dodecane, 1-iodo- (8CI9CI) 296 C12H25I
3. Nonane, 3,7-dimethyl- (8CI9CI) 156 C11H24
4. Dodecane, 2-methyl-6-propyl- (9CI) 226 C16H34

Sample File: >C5920   Spectrum #: 1263
Search speed: 3   Tilting option: S   No. of ion ranges searched: 29

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C I	R IU
1.	70*	55045108	6247	"BIGDB	24	55	2	0	26	19	32	56
2.	59	4292192	6222	"BIGDB	100	29	1	1	62	36	21	50
3.	59*	17302328	6100	"BIGDB	54	32	2	0	89	29	24	39
4.	59*	55045084	6244	"BIGDB	65	54	3	0	85	21	22	33

Peak#: 134 Area: 37623. Est Conc: 88. Date: 02/01/93 20:48 Inst: C



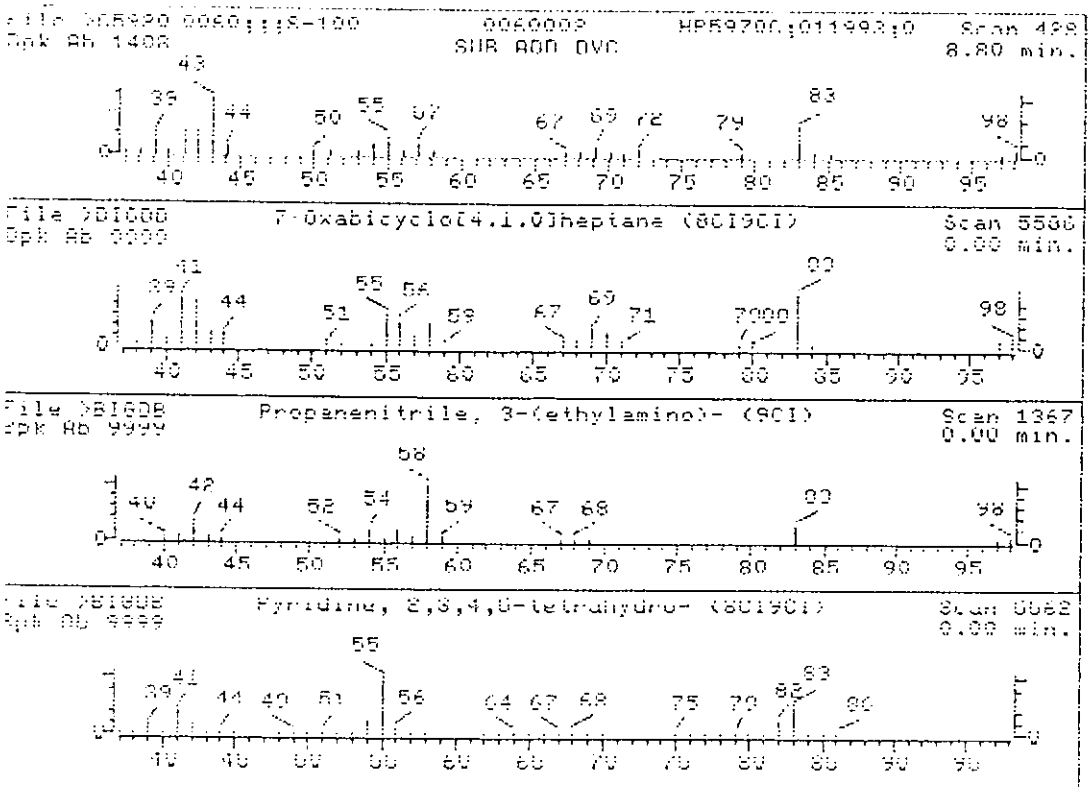
Load reverse library RSP

1.	7-Oxabicyclo[4.1.0]heptane (8CI,9CI)	98 C6H10O
2.	Propanenitrile, 3-(ethylamino)- (9CI)	98 C5H10N2
3.	Pyridine, 2,3,4,5-tetrahydro- (8CI,9CI)	83 C5H9N
4.	Cyclopropane, 1,1,2,2-tetramethyl- (8CI,9CI)	98 C7H14

Sample File: >C59211 Spectrum #: 428
Search speed: 3 Tilting option: S No. of ion ranges searched: 59

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	FILT	%	CON	C	I	R	IV
1.	52*	286214	5586	"BIGDB	36	64	2	0	42	17	21			14
2.	31*	2159429	1367	"BIGDB	26	64	2	0	92	34	12			14
3.	25*	505180	5562	"BIGDB	23	20	3	0	94	46	2			12
4.	24*	4122423	5593	"BIGDB	45	52	2	0	51	55	2			21

Peak#: 25 Area: 21574. Est Conc: 85. Date: 02/01/93 20:48 Inst: C

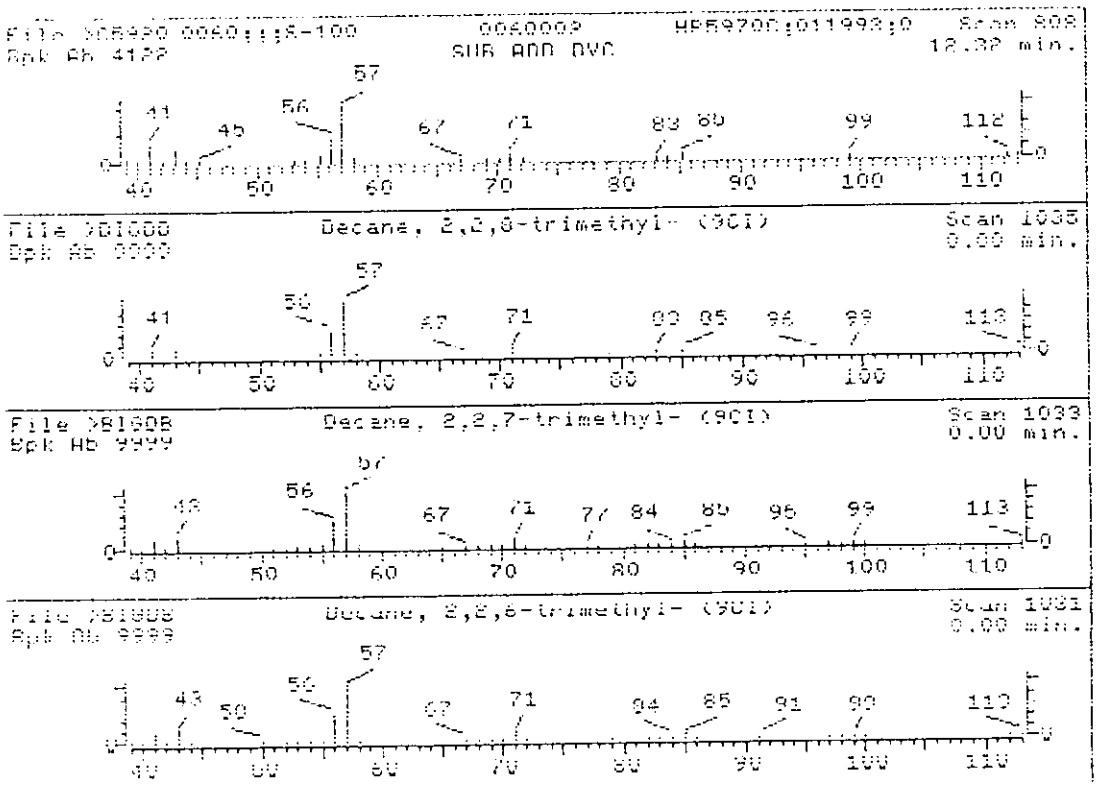


1.	Decane, 2,2,8-trimethyl- (9CI)	184 C13H28
2.	Decane, 2,2,7-trimethyl- (9CI)	184 C13H28
3.	Decane, 2,2,6-trimethyl- (9CI)	184 C13H28
4.	Heptane, 2,2,4,6,6-pentamethyl- (8CI,9CI)	120 C12H26

Sample File: >B9920 Spectrum #: BUR
Search speed: 3 Tilting option: S No. of ion ranges searched: 58

	Prob.	CAS #	COIN #	NAME	K	DK	#HIG	TILT	%	CON	C	R	U
1.	28	62238011	1165	"BIGDB	41	46	2	0	93	4	55	13	
2.	28	62237994	1133	"BIGDB	55	33	2	0	87	4	55	19	
3.	28	62237922	1031	"BIGDB	50	32	2	0	82	3	55	17	
4.	26	15476826	1186	"BIGDB	46	29	0	0	100	2	45	26	

Peak#: 58 Area: 21101. Est Conc: 84. Date: 02/01/93 20:48 Inst: C



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-101

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

0283

Matrix: (soil/water) SOIL Lab Sample ID: 0060003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5921.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3100	U
111-44-4	bis(2-Chloroethyl)ether	3100	U
95-57-8	2-Chlorophenol	3100	U
541-73-1	1,3-Dichlorobenzene	3100	U
106-46-7	1,4-Dichlorobenzene	3100	U
95-50-1	1,2-Dichlorobenzene	3100	U
95-48-7	2-Methylphenol	3100	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3100	U
106-44-5	4-Methylphenol	3100	U
621-64-7	N-Nitroso-di-n-propylamine	3100	U
67-72-1	Hexachloroethane	3100	U
98-95-3	Nitrobenzene	3100	U
78-59-1	Isophorone	3100	U
88-75-5	2-Nitrophenol	3100	U
105-67-9	2,4-Dimethylphenol	41	J
111-91-1	bis(2-Chloroethoxy)methane	3100	U
120-83-2	2,4-Dichlorophenol	3100	U
120-82-1	1,2,4-Trichlorobenzene	3100	U
91-20-3	Naphthalene	700	J
106-47-8	4-Chloroaniline	3100	U
87-68-3	Hexachlorobutadiene	3100	U
59-50-7	4-Chloro-3-methylphenol	3100	U
91-57-6	2-Methylnaphthalene	430	J
77-47-4	Hexachlorocyclopentadiene	3100	U
88-06-2	2,4,6-Trichlorophenol	3100	U
95-95-4	2,4,5-Trichlorophenol	7400	U
91-58-7	2-Chloronaphthalene	3100	U
88-74-4	2-Nitroaniline	7400	U
131-11-3	Dimethylphthalate	3100	U
208-96-8	Acenaphthylene	2500	J
606-20-2	2,6-Dinitrotoluene	3100	U
99-09-2	3-Nitroaniline	7400	U
83-32-9	Acenaphthene	240	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

S-101

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: 0060 SAS No.: SDG No.: Z0060

Matrix: (soil/water) SOIL Lab Sample ID: 0060003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5921.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(UL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

0284

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	7400	U
100-02-7	4-Nitrophenol	7400	U
132-64-9	Dibenzofuran	500	J
121-14-2	2,4-Dinitrotoluene	3100	U
84-66-2	Diethylphthalate	3100	U
7005-72-3	4-Chlorophenyl-phenylether	3100	U
86-73-7	Fluorene	460	J
100-01-6	4-Nitroaniline	7400	U
534-52-1	4,6-Dinitro-2-methylphenol	7400	U
86-30-6	N-Nitrosodiphenylamine (1)	3100	U
101-55-3	4-Bromophenyl-phenylether	3100	U
118-74-1	Hexachlorobenzene	3100	U
87-86-5	Pentachlorophenol	7400	U
85-01-8	Phenanthrene	3100	
120-12-7	Anthracene	3100	
86-74-8	Carbazole	3600	
84-74-2	Di-n-butylphthalate	3100	U
206-44-0	Fluoranthene	7000	
129-00-0	Pyrene	6900	
85-68-7	Butylbenzylphthalate	3100	U
91-94-1	3,3'-Dichlorobenzidine	3100	U
56-55-3	Benzo(a)anthracene	3900	
218-01-9	Chrysene	4900	
117-81-7	bis(2-Ethylhexyl)phthalate	1900	JB
117-84-0	Di-n-octylphthalate	3100	U
205-99-2	Benzo(b)fluoranthene	3200	
207-08-9	Benzo(k)fluoranthene	5100	
50-32-8	Benzo(a)pyrene	5700	
193-39-5	Indeno(1,2,3-cd)pyrene	920	J
53-70-3	Dibenz(a,h)anthracene	3100	U
191-24-2	Benzo(g,h,i)perylene	700	J

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

S-101

Lab Name: IEA/CT Contract:

Lab Code: IEACT Case No.: Z0060 SAS No.: SDG No.: Z0060 0285

Matrix: (soil/water) SOIL conc. 2/12/93 Lab Sample ID: 0060003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: C5921.D

Level: (low/med) LOW Date Received: 01/19/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 01/20/93

Concentrated Extract Volume: 500(uL) Date Analyzed: 02/01/93

Injection Volume: 2.0(uL) Dilution Factor: 155.0

GPC Cleanup: (Y/N) Y pH: 7.3

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

Number TICs found: 6 conc 2/12/93

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL CONDENSATION PRODUCT	8.37	59000	JAB
2.		UNKNOWN	7.67	3700	JB
3.			10.32	3100	J
4.			12.78	1900	
5.			10.35	1100	
6.		UNKNOWN ALKANE	22.46	760	
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: MSC Quant Rev: 6 Quant Time: 930201 22:45
Output File: ^C5921::QT Injected at: 930201 21:50
Data File: >C5921::C1 Dilution Factor: 155.0400
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9

ID File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

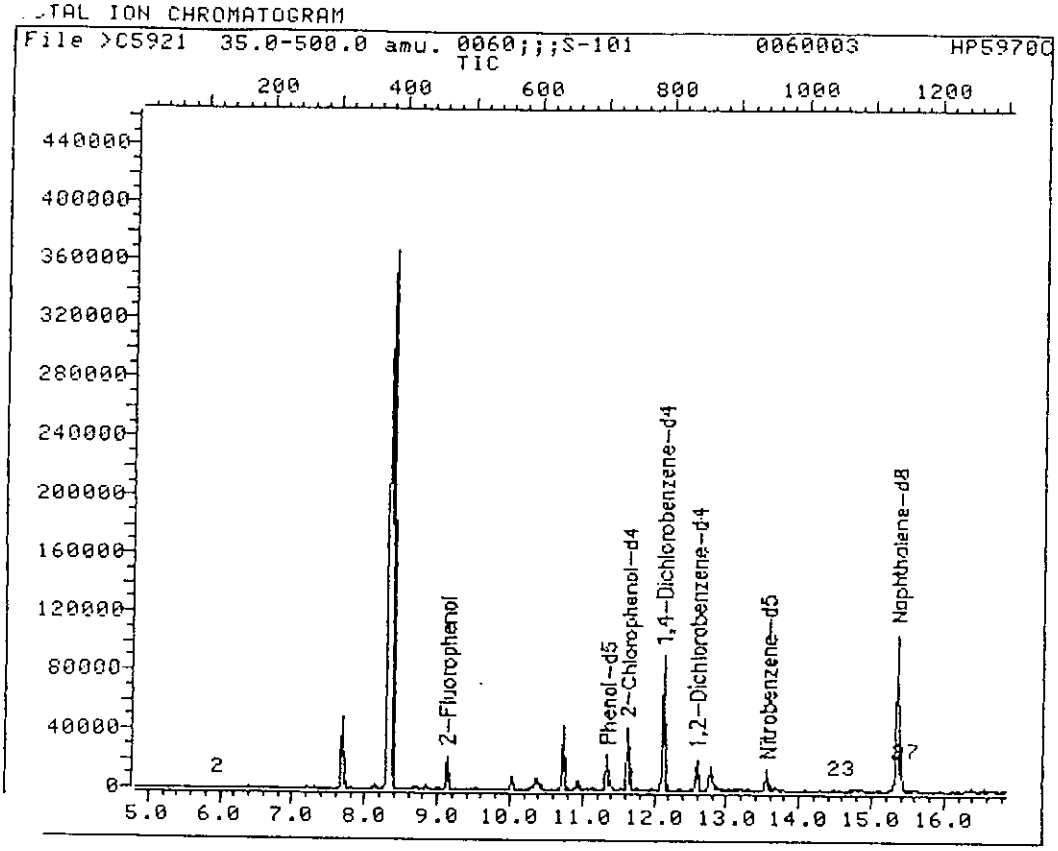
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.10	151.8	25702	40.00	ug	92
2)	Pyridine	5.92	52.0	659	133.47	ug	97
3)	2-Chlorophenol-d4	11.62	132.0	12897	2440.76	ug	93
4)	2-Fluorophenol	9.11	111.8	9646	2089.25	ug	69
5)	Phenol-d5	11.34	98.8	14498	2171.33	ug	92
6)	Phenol	11.36	93.9	413^	61.83	ug	76
11)	1,2-Dichlorobenzene-d4	12.57	152.0	5837	1556.34	ug	93
18)	*Naphthalene-d8	15.35	135.9	107963	40.00	ug	98
19)	Nitrobenzene-d5	13.55	81.8	8649	1174.84	ug	91
23)	2,4-Dimethylphenol	14.54	106.8	271	41.37	ug	99
24)	Naphthalene	15.41	127.9	11357	702.86	ug	86
31)	2-Methylnaphthalene	17.21	141.9	5302	431.41	ug	91
32)	*Acenaphthene-d10	20.01	163.9	62886	40.00	ug	86
36)	2-Fluorobiphenyl	18.23	171.8	19754	1606.33	ug	87
40)	Acenaphthylene	19.61	152.0	41596	2542.37	ug	91
43)	Acenaphthene	20.08	152.9	3051	245.60	ug	83
45)	4-Nitrophenol	20.23	108.8	166	89.86	ug	82
46)	Dibenzofuran	20.49	167.8	8312	504.03	ug	96
50)	Fluorene	21.42	165.9	5338	461.44	ug	95
52)	2,4,6-Tribromophenol	22.10	329.6	9802	2534.84	ug	84
53)	*Phenanthrene-d10	23.91	187.9	129976	40.00	ug	98
58)	Pentachlorophenol	23.57	265.6	488	123.11	ug	93
59)	Phenanthrene	23.96	177.9	65876	3097.23	ug	96
60)	Carbazole	24.51	166.8	22451	3565.90	ug	96
61)	Anthracene	24.08	177.9	65810	3081.68	ug	96
62)	Di-n-butylphthalate	25.56	148.8	4984	166.14	ug	87
63)	Fluoranthene	27.16	201.9	158727	6962.74	ug	98
64)	*Chrysene-d12	31.30	240.0	104060	40.00	ug	89
65)	Pyrene	27.77	201.9	163142	6862.64	ug	93
66)	Terphenyl-d14	28.16	244.0	33525	1817.85	ug	95
67)	Butylbenzylphthalate	29.35	149.0	3420	254.89	ug	38
68)	3,3'-Dichlorobenzidine	30.88	252.9	3706	1247.95	ug	32
69)	Benzo(a)anthracene	31.24	228.0	80934	3925.40	ug	89
70)	Chrysene	31.39	228.0	86853	4886.92	ug	94
71)	bis(2-Ethylhexyl)phthalate	31.42	148.8	34477	1939.98	ug	73
72)	*Perylene-d12	38.15	264.0	44642	40.00	ug	98
73)	Di-n-octylphthalate	33.54	149.0	2970	230.04	ug	82
74)	Benzo(b)fluoranthene	35.93	252.0	27439^	3193.03	ug	87
74)	Benzo(b)fluoranthene	35.98	252.0	41697	4852.21	ug	82
75)	Benzo(k)fluoranthene	35.93	252.0	27439^	3349.02	ug	93
75)	Benzo(k)fluoranthene	35.98	252.0	41697	5089.25	ug	90
76)	Benzo(a)pyrene	37.51	252.0	41201	5627.29	ug	90

287

	Compound	R.T.	Q ion	Area	Conc	Units	q
~~78)~~	~~Dibenz(a,h)anthracene~~	~~46.70~~	~~278.0~~	~~481~~	~~73.76~~	~~ug~~	~~97~~
79)	Benzo(g,h,i)perylene	49.04	276.0	4302	699.47	ug	74

* Compound is ISTD

mc 2/9/93



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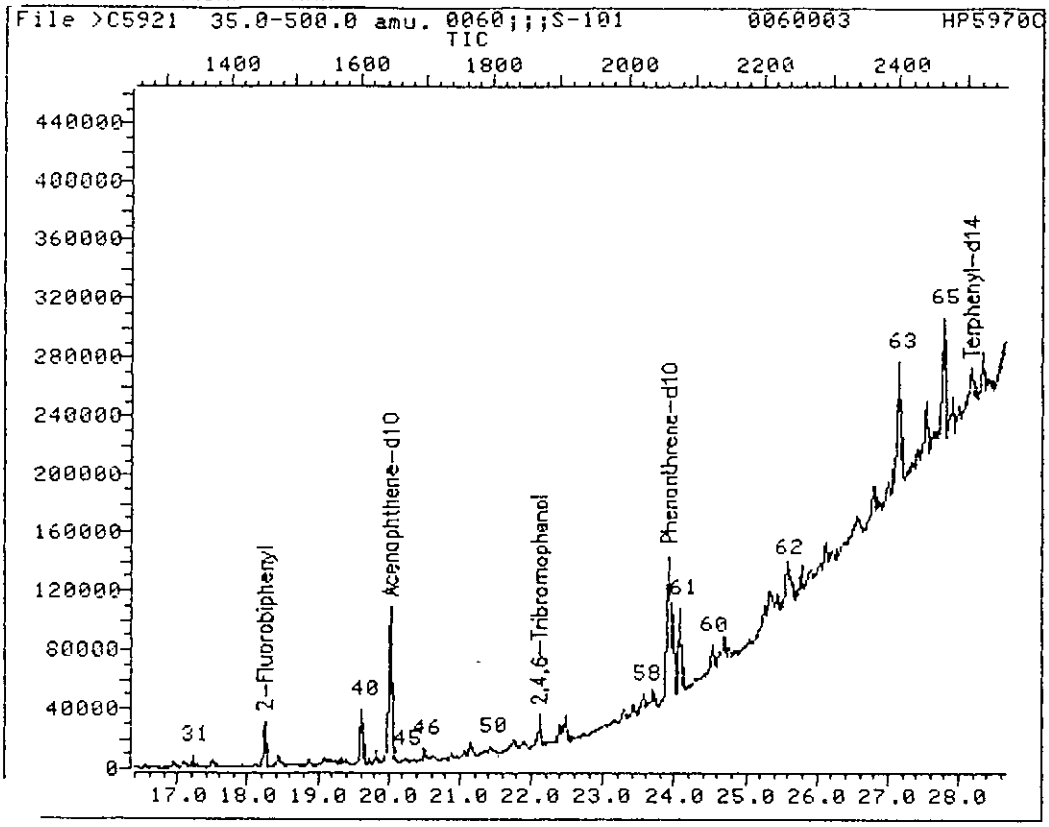
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

Operator ID: MSC
Quant Time: 930201 22:45
Injected at: 930201 21:50

TIC page 1 of 4

TAL ION CHROMATOGRAM



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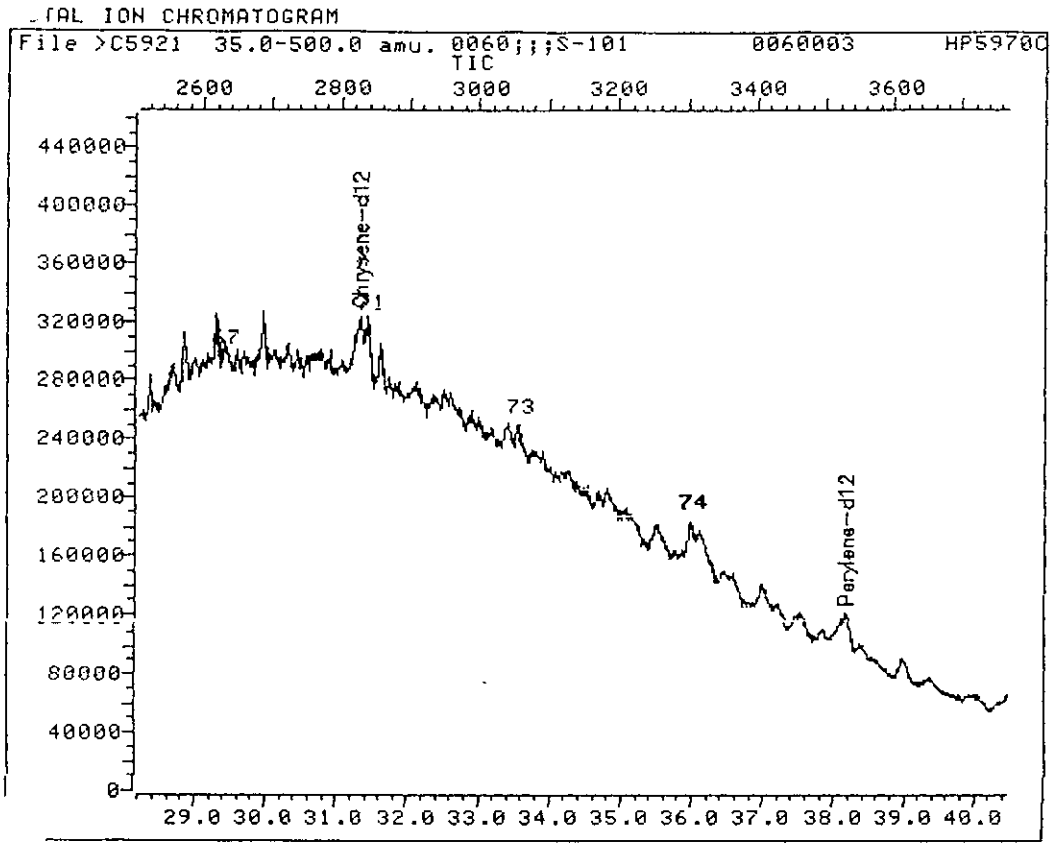
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

Operator ID: MSC
Quant Time: 930201 22:45
Injected at: 930201 21:50

TIC page 2 of 4



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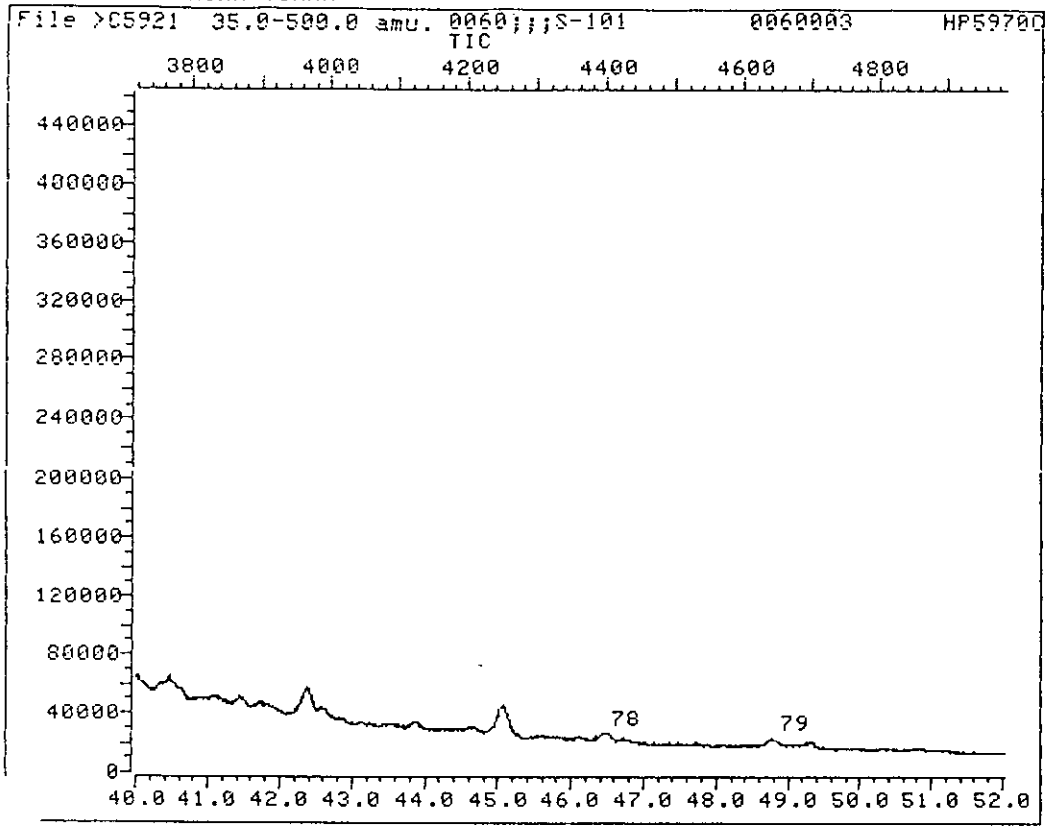
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

Operator ID: MSC
Quant Time: 930201 22:45
Injected at: 930201 21:50

TIC page 3 of 4

TAL ION CHROMATOGRAM



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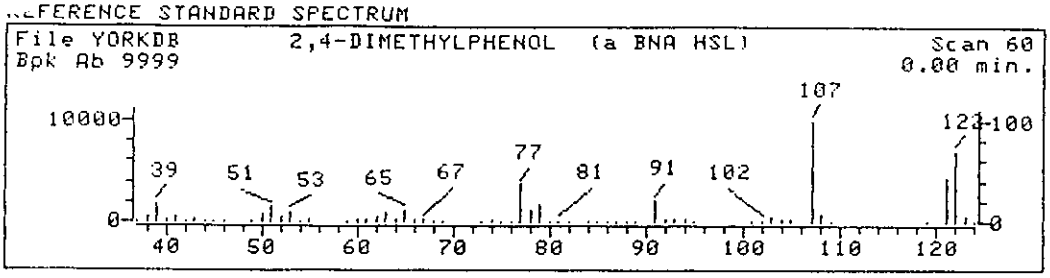
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9

Id File: I_EPA::N1
Title: CLP-OLM01.8 BNA COMPOUNDS
Last Calibration: 930201 13:46

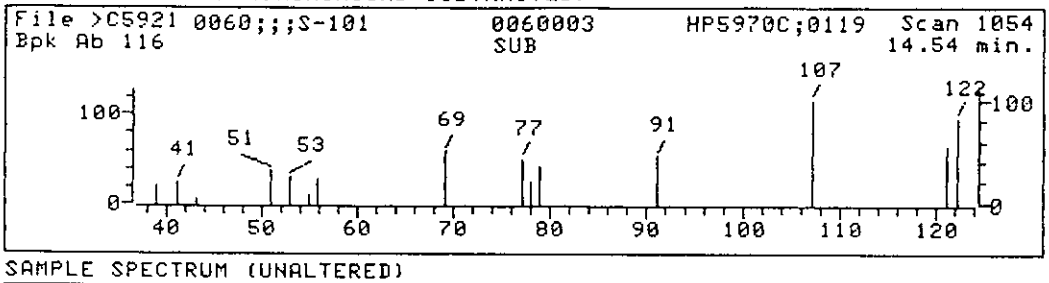
Operator ID: MSC
Quant Time: 930201 22:45
Injected at: 930201 21:50

TIC page 4 of 4

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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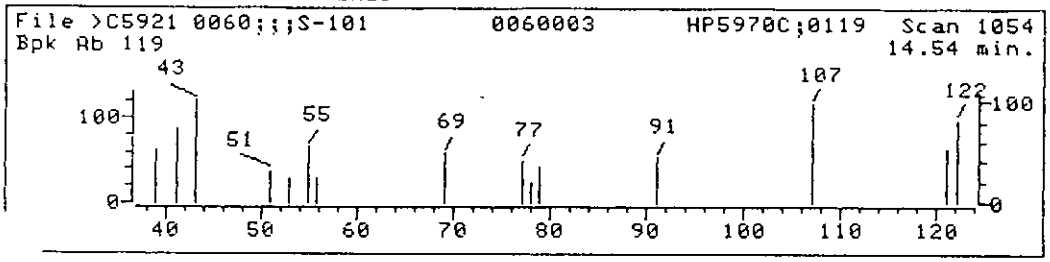

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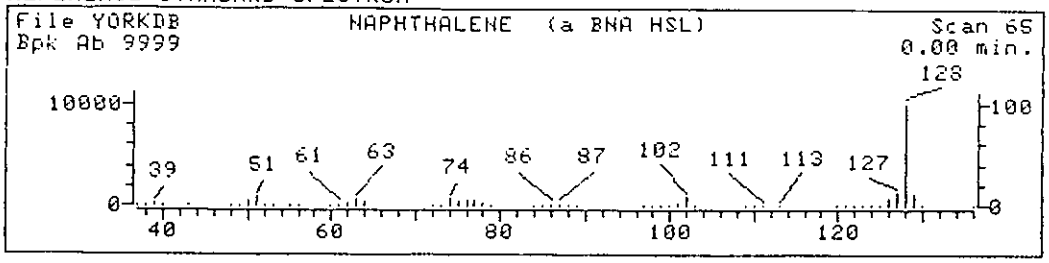
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

Compound No: 23
Compound Name: 2,4-Dimethylphenol
Scan Number: 1054
Retention Time: 14.54 min.
Quant Ion: 106.8
Area: 271
Concentration: 41.37 ug
q-value: 99

REFERENCE STANDARD SPECTRUM



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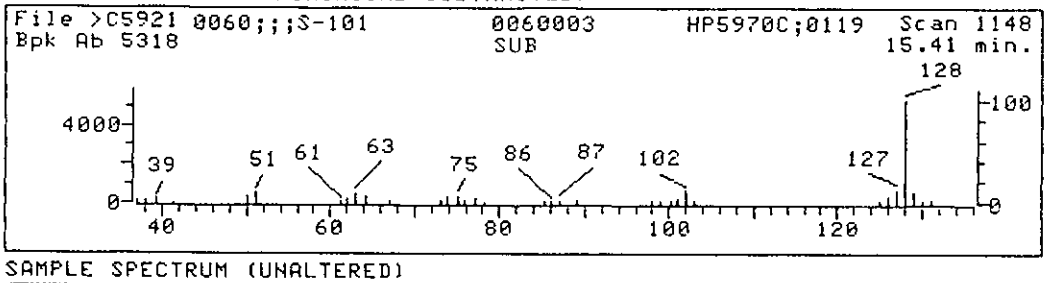

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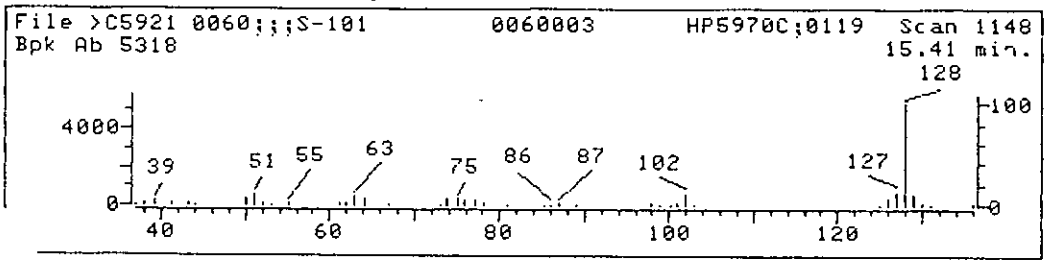

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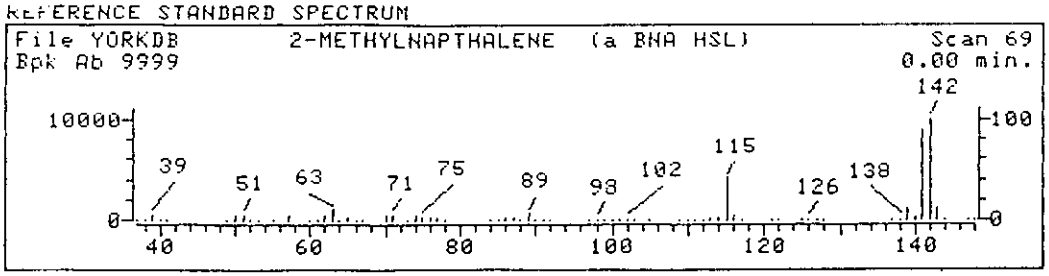
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

Compound No: 27
Compound Name: Naphthalene
Scan Number: 1148
Retention Time: 15.41 min.
Quant Ion: 127.9
Area: 11357
Concentration: 702.86 ug
q-value: 86

REFERENCE STANDARD SPECTRUM



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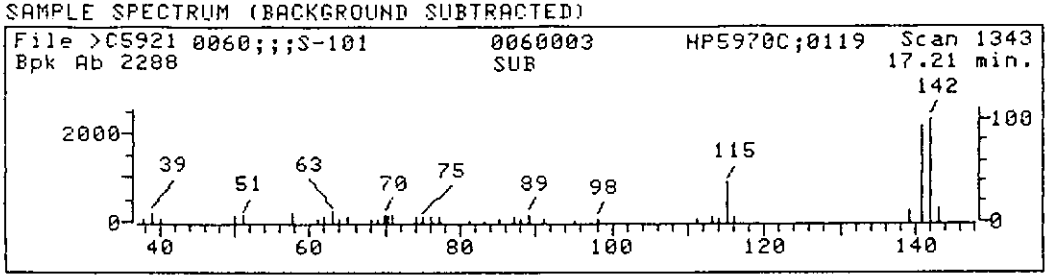

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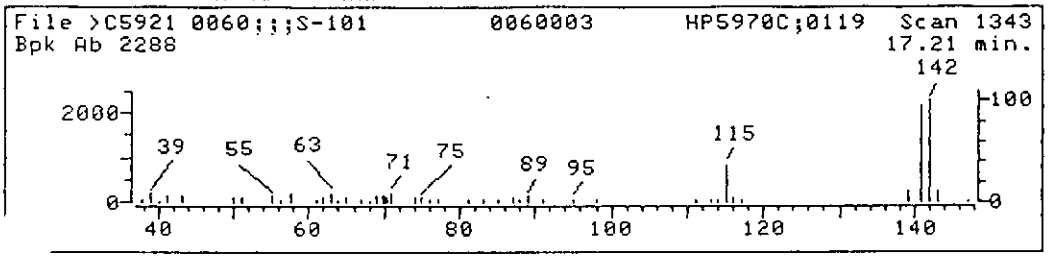

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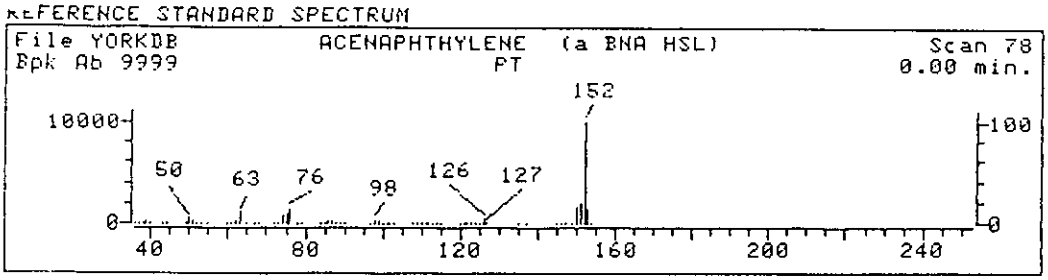
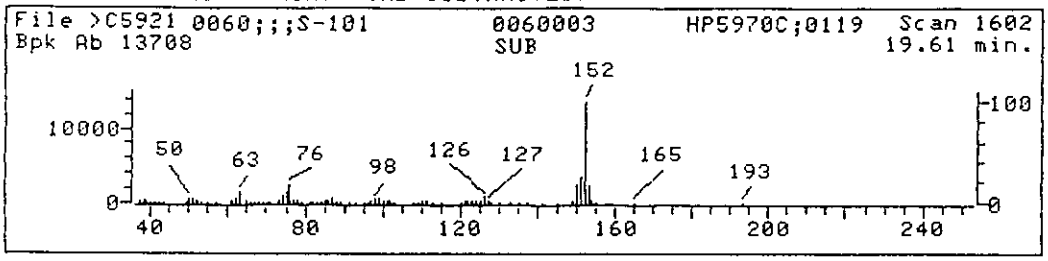
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

Compound No: 31
Compound Name: 2-Methylnaphthalene
Scan Number: 1343
Retention Time: 17.21 min.
Quant Ion: 141.9
Area: 5302
Concentration: 431.41 ug
q-value: 91

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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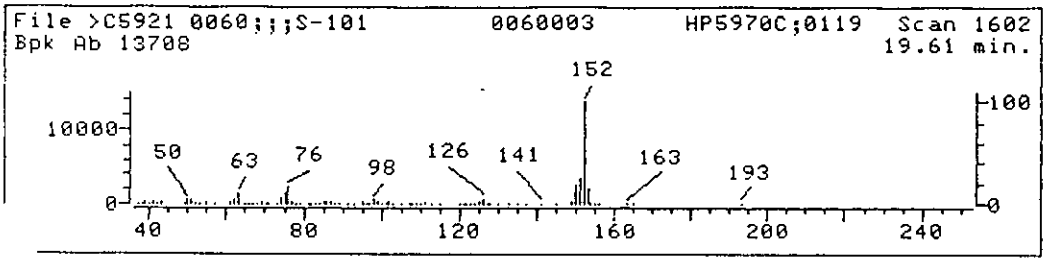
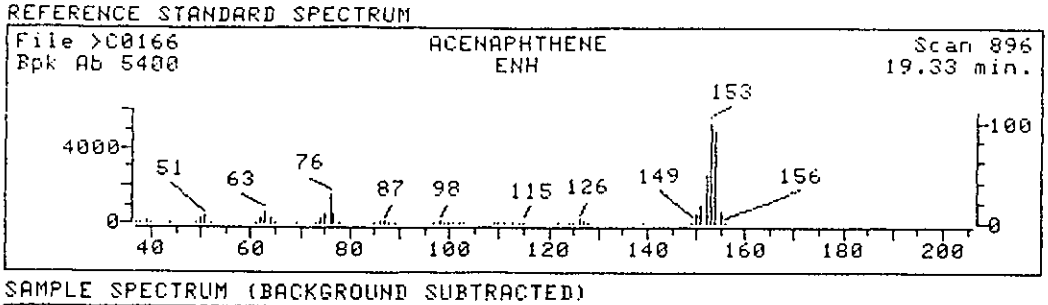


Data File: >C5921::C1 Quant Output File: ^C5921::QT
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

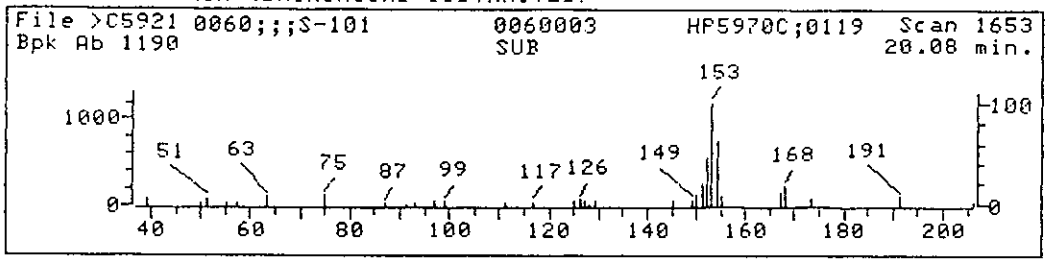
Compound No: 40
Compound Name: Acenaphthylene
Scan Number: 1602
Retention Time: 19.61 min.
Quant Ion: 152.0
Area: 41596
Concentration: 2542.37 ug
q-value: 91

0296

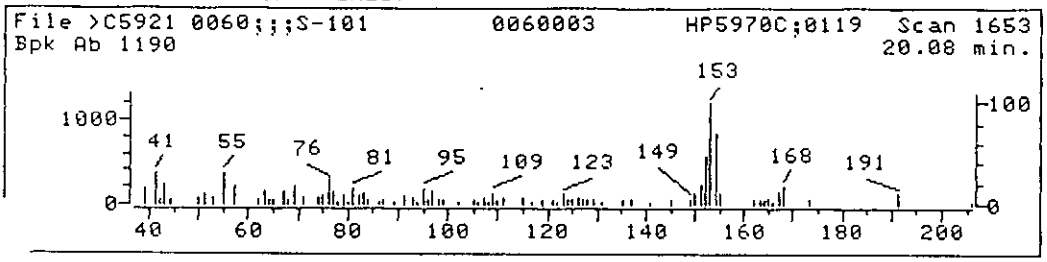
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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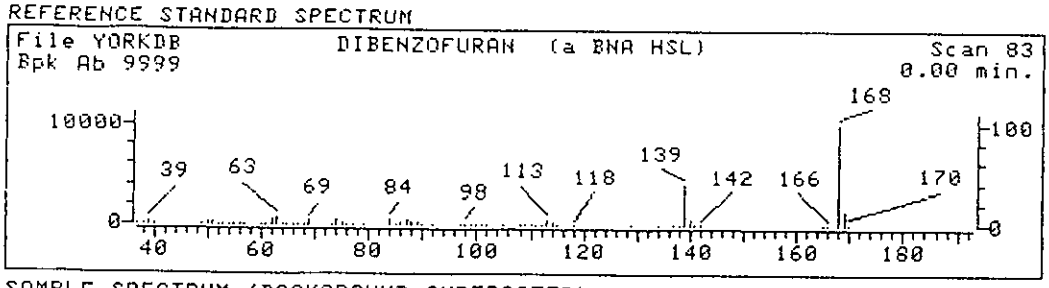
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

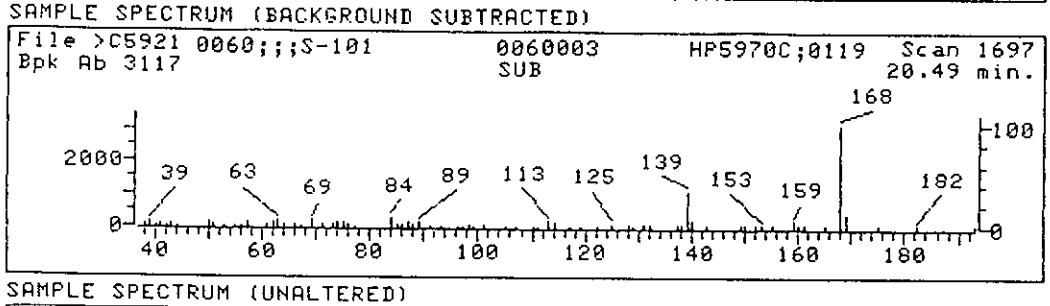
Compound No: 43
Compound Name: Acenaphthene
Scan Number: 1653
Retention Time: 20.08 min.
Quant Ion: 152.9
Area: 3051
Concentration: 245.60 ug
q-value: 83

0297

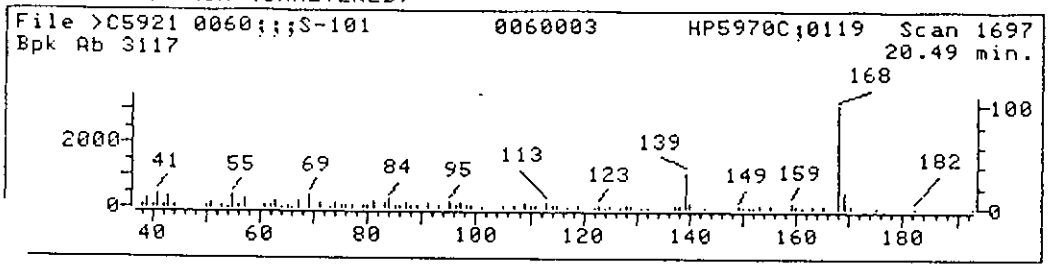
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



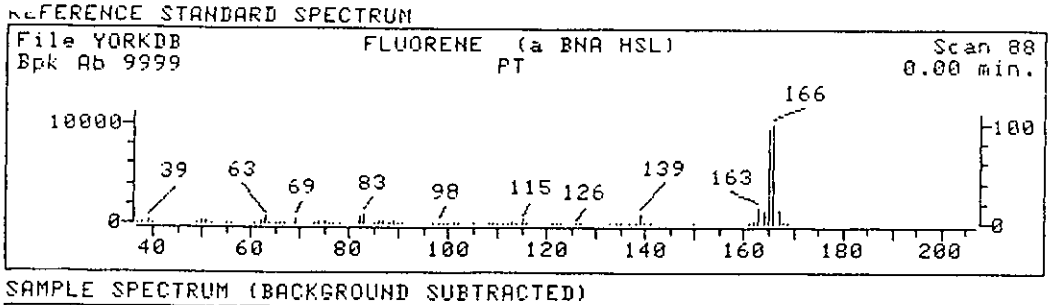
SAMPLE SPECTRUM (UNALTERED)



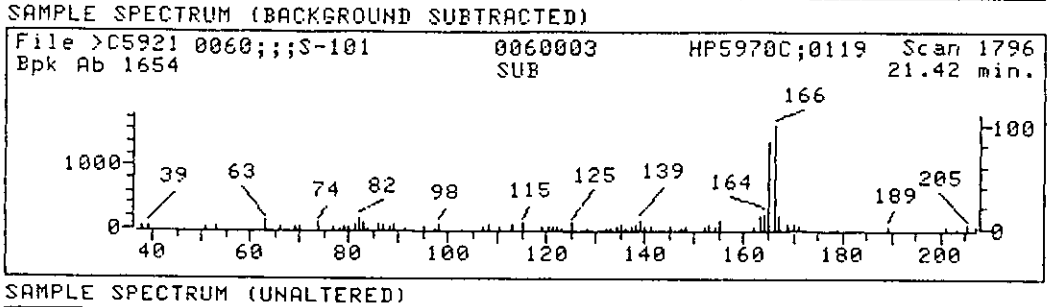
Data File: >C5921::C1 Quant Output File: ^C5921::QT
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

Compound No: 46
Compound Name: Dibenzofuran
Scan Number: 1697
Retention Time: 20.49 min.
Quant Ion: 167.8
Area: 8312
Concentration: 504.03 ug
q-value: 96

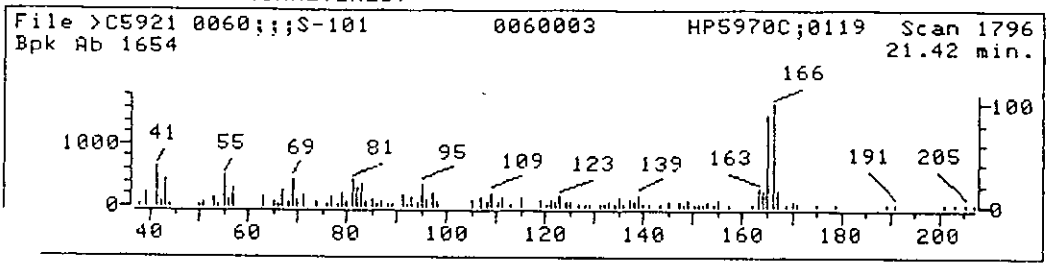
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



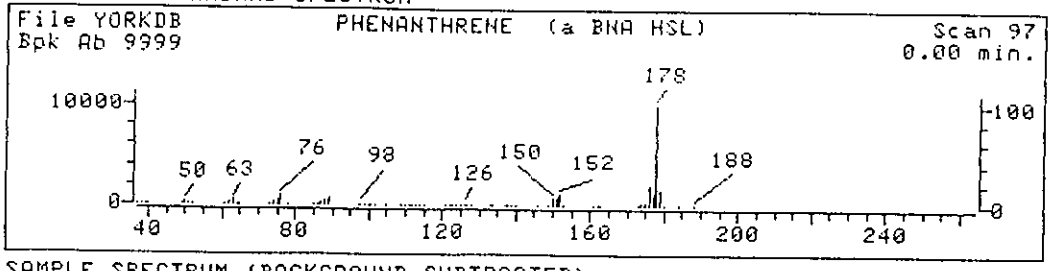
SAMPLE SPECTRUM (UNALTERED)



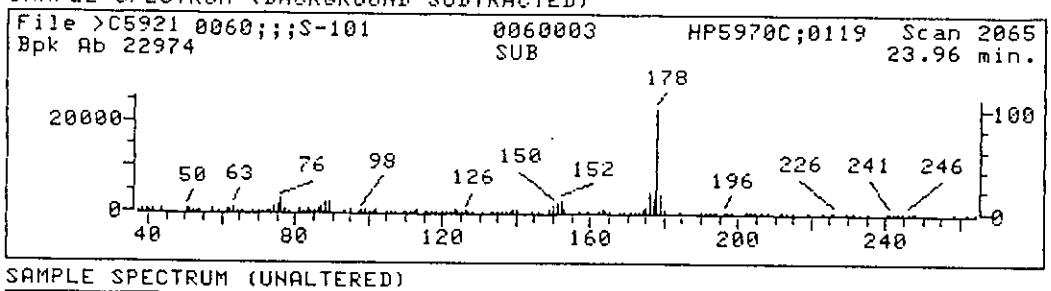
Data File: >C5921::C1 Quant Output File: ^C5921::QT
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

Compound No: 50
Compound Name: Fluorene
Scan Number: 1796
Retention Time: 21.42 min.
Quant Ion: 165.9
Area: 5338
Concentration: 461.44 ug
q-value: 95

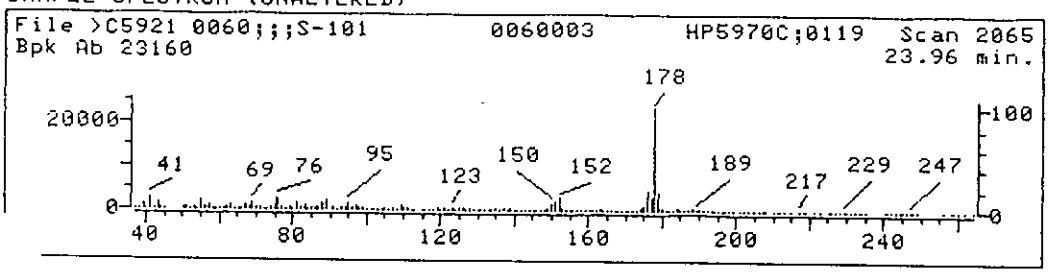
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >C5921::C1 Quant Output File: ^C5921::QT
Name: 0060;;;S-101
Misc: 0060003 HP5970C;011993;012093;LLS;8.0;;7.3;C0952 BTL# 9
Quant Time: 930201 22:45 Quant ID File: I_EPA::N1
Injected at: 930201 21:50 Last Calibration: 930201 13:46

Compound No: 59
Compound Name: Phenanthrene
Scan Number: 2065
Retention Time: 23.96 min.
Quant Ion: 177.9
Area: 65876
Concentration: 3097.23 ug
q-value: 96