UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE RD.
HOUSTON, TEXAS 77099

MEMORANDUM

Date: February 20, 1997

Subject: **Contract Laboratory Program Data Review**

From: Melvin L. Ritter, ESAT RPO, 6MD-HC

To: Lon Biasco, 6SF-RA

Site: Wilcox Oil

Case#: 9611G675

SDG#: WS01 - O

The EPA Region 6 Houston Branch ESAT data validation team has completed a review of the submitted data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review and assessment report for this case.

The data package was found by EPA personnel to be:

(X) Acceptable: No major problems with data package.

One VOA sample had a low internal standard response which resulted in the qualifying of the quantitation limits of the associated analytes. The VOA data qualified was found to be technically provisional, however, the data package is acceptable.

Questions regarding the data review report can be addressed to me.

Attachments

cc: R. Flores, Region 6 CLP/TPO
M. El-feky, Region 6 Data Coordinator

Files (2)

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MEMORANDUM

DATE: February 12, 1997

TO: Dr. Melvin Ritter, ESAT RPO, Region VI

FROM: Dr. Tom C.H. Chiang, ESAT ETM, Region VI
Tom C.H. Chiang

SUBJECT: Superfund Data Review

REF: TDF # 6-7206A ESAT # O-1797
ESAT Contract No. 68-D6-0005

Attached is the data review summary for Case # 9611G675
SDG # WS01-O
Site Wilcox Oil

COMMENTS:

I. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

Not applicable.

II. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

The total number of results reviewed was 776 for this data package. The data package is technically provisional because of the following significant problem.

One VOA sample had low IS responses.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
HOUSTON BRANCH
10625 FALLSTONE ROAD
HOUSTON, TEXAS 77099

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	9611G675	SITE	Wilcox Oil
LABORATORY	WESTON	NO. OF SAMPLES	8
CONTRACT#	N/A	MATRIX	Soil
SDG#	WS01-O	REVIEWER (IF NOT ESD)	ESAT
SOW#	RAS SOW OLM01.8	REVIEWER'S NAME	Gene Zhu
ACCT#	7FAXJN40 SF# FAXUZZ	COMPLETION DATE	February 12, 1997

SAMPLE NO.				
	WS01-O	WS05-O		
	WS02-O	WS06-O		
	WS03-O	WS07-O		
	WS04-O	WS08-O		

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST
1. HOLDING TIMES	O	O	N/A
2. GC/MS TUNE/INSTR. PERFORM.	O	O	N/A
3. CALIBRATIONS	O	O	N/A
4. BLANKS	O	O	N/A
5. SMC/SURROGATES	O	O	N/A
6. MATRIX SPIKE/DUPLICATE	O	O	N/A
7. OTHER QC	O	O	N/A
8. INTERNAL STANDARDS	M	O	N/A
9. COMPOUND ID/QUANTITATION	O	O	N/A
10. PERFORMANCE/COMPLETENESS	O	O	N/A
11. OVERALL ASSESSMENT	M	O	N/A

O = Data had no problems.
M = Data qualified due to major or minor problems.
Z = Data unacceptable.
NA = Not applicable.

ACTION ITEMS: Not applicable.

AREA OF CONCERN: One VOA sample had low IS responses.

NOTABLE PERFORMANCE: The laboratory performed BS/BSD analyses.

COMMENTS/CLARIFICATIONS
REGION VI CLP QA REVIEW

CASE 9611G675 **SDG** WS01-O **SITE** Wilcox Oil **LAB** WESTON

The following is a summary of sample qualifiers used by Region 6 in reporting this CLP data:

No.	Acceptable	Provisional	Unacceptable
VOA	7	1	
BNA	8		
PEST	N/A		

COMMENTS: The case consisted of eight soil samples for VOA and BNA organics analysis following the CLP protocol, SOW OLM01.8. The COC Record did not designate any sample for MS/MSD analyses. The laboratory performed MS/MSD analyses on VOA sample WS-08. The laboratory extracted but did not analyze the BNA MS/MSD samples.

VOA Samples WS-02, WS-05, and WS-06 contained high concentrations (up to 2,200 µg/Kg) of acetone, toluene, and/or xylenes. Samples WS-01 and WS-03 did not contain target analytes but were diluted and analyzed because of high levels of matrix interferences. Sample WS-07 and its reanalysis had low internal standard (IS) responses, and the reviewer recommends using the reanalysis data.

BNA All samples contained non-target hydrocarbons (some at high concentrations) and high levels of matrix interferences. These high concentrations prompted the extraction at reduced sample sizes (about 1/6 of the method-specified amount) for six samples and the dilution (up to 25X) for the analysis of the remaining two samples. Five of the six samples with reduced sizes required additional dilution (up to 125X) because of TIC or TCL compound concentrations (up to 1,400,000 µg/Kg) including phenanthrene, 2-methylnaphthalene, and pyrene. The laboratory reanalyzed BNA sample WS-08 because of high IS responses, and the reviewer recommends using the original analysis data.

Some data are provisional for one VOA sample because of an IS performance problem. The technical usability of all reported sample results is indicated by ESAT's final data qualifiers in the attached Data Summary Table.

NOTE: CONTRACTUAL EVALUATION WAS NOT REQUIRED AND WAS NOT PERFORMED FOR THIS CASE.

1. Holding Times: Acceptable. All samples were extracted and analyzed in a timely manner. No technical holding time criteria exist for soil samples.

ORGANIC QA REVIEW
CONTINUATION PAGE

CASE 9611G675 **SDG** WS01-O **SITE** Wilcox Oil **LAB** WESTON

2. **Tuning/Performance:** Acceptable. The BFB and DFTPP analyses met ion abundance criteria. Sample analyses met instrument performance guidelines.

3. **Calibrations:** Acceptable. Several BNA analytes failed technical %D calibration criteria, but sample results were not affected. Other target analytes met technical calibration criteria.

4. **Blanks:** Acceptable. All method blanks met technical QC guidelines. No laboratory contaminants were reported for the blanks.

5. **System Monitoring Compounds (SMC's)/Surrogates:** Acceptable. The surrogates were diluted out for six BNA samples. The reviewer did not qualify any sample results because the associated method blanks had acceptable surrogate recoveries. SMC and surrogate recoveries met QC criteria for other samples.

6. **Matrix Spike/Matrix Spike Duplicate:** Acceptable. VOA MS/MSD results met QC criteria for precision and recovery. The laboratory extracted but did not analyze the BNA MS/MSD samples because all spiking analytes would be diluted out. The laboratory demonstrated the precision and accuracy of the method through the BS/BSD samples as discussed under section 7.

7. **Other QC:**

   Blank Spike/Blank Spike Duplicate (BS/BSD): Acceptable. All BS/BSD analyses had acceptable recovery and %RPD results.

8. **Internal Standards (IS):** Provisional. The IS performance is acceptable for the VOA and BNA samples with the following exceptions.

VOA Sample WS-07 had low IS2 and IS3 responses. The reanalysis of this sample also had a low IS3 area. The reviewer recommends using the reanalysis data but qualified all quantitation limits as estimated and biased low for the analytes associated with IS3.

BNA Sample WS-08 had high IS1, IS2, and IS3 responses, while its reanalysis had a low IS6 response. The reviewer recommends using the original analysis for this sample. Since analytes associated with IS1, IS2, and IS3 were not detected in the sample, result qualification is unnecessary.

ORGANIC QA REVIEW
CONTINUATION PAGE

CASE 9611G675 **SDG** WS01-O **SITE** Wilcox Oil **LAB** WESTON

9. Compound Identity/Quantitation: Provisional.

VOA The laboratory diluted (10X) and analyzed samples WS-02, WS-05, and WS-06 because of high concentrations (up to 2,200 µg/Kg) of acetone, toluene, and/or xylenes. Samples WS-01 and WS-03 were diluted and analyzed for high levels of matrix interferences. The submitted spectra met identification criteria.

BNA The laboratory used reduced sample sizes (about 1/6 of the method-specified amount) for six samples and further diluted (up to 125X) five samples because of high concentrations of TIC's or TCL analytes (up to 1,400,000 µg/Kg) including phenanthrene, pyrene, and 2-methylnaphthalene. The laboratory diluted (up to 25X) and analyzed the remaining two samples because of high levels of matrix interferences. Sample spectra met identification criteria for the reported target analytes.

10. Performance/Completeness: Acceptable. The data package was complete with one minor deficiency that did not require action.

11. Overall Assessment: Data are acceptable for seven VOA and all BNA samples.

VOA Some results are provisional for sample WS-07RE because of an IS performance problem.

ORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

U	Not detected at reported quantitation limit.
N	Identification is tentative.
J	Estimated value.
R	Unusable.
^	High biased. Actual concentration may be lower than the concentration reported.
v	Low biased. Actual concentration may be higher than the concentration reported.
F+	A false positive exists.
F-	A false negative exists.
B	This result may be high biased because of laboratory/field contamination. The reported concentration is above 5X or 10X the concentration reported in the method/field blank.
UJ	Estimated quantitation limit.
T	Identification is questionable because of absence of other commonly coexisting pesticides.
*	Result not recommended for use because of associated QA/QC performance inferior to that from other analysis.

ORGANIC DATA SUMMARY

Case No.: 9611G675 SDG: WS01-O Reviewer: Gene Zhu

Laboratory: WESTON Matrix: SOIL Units: ug/Kg

VOLATILES	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG
EPA SAMPLE NUMBER:	WS-01	WS-02	WS-03	WS-04	WS-05	WS-06	WS-07
Chloromethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Bromomethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Vinyl chloride	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Chloroethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Methylene chloride	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Acetone	140 U	130 U	100 U	19 U	2200	1000	11 U *
Carbon disulfide	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,1-Dichloroethene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,1-Dichloroethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,2-Dichloroethene (total)	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Chloroform	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,2-Dichloroethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
2-Butanone	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,1,1-Trichloroethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Carbon tetrachloride	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Bromodichloromethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,2-Dichloropropane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
cis-1,3-Dichloropropene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Trichloroethene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Dibromochloromethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,1,2-Trichloroethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Benzene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
trans-1,3-Dichloropropene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Bromoform	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
4-Methyl-2-pentanone	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
2-Hexanone	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Tetrachloroethene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
1,1,2,2-Tetrachloroethane	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Toluene	140 U	270	100 U	19 U	45 J	64 J	11 U *
Chlorobenzene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Ethylbenzene	140 U	63 J	100 U	19 U	90 J	110 J	11 U *
Styrene	140 U	130 U	100 U	19 U	140 U	130 U	11 U *
Xylenes (total)	140 U	280	100 U	19 U	380	450	11 U *
Sample wt (g):	5	5	5	5	5	5	5
%Moisture:	30	22	4	46	28	24	8
Dilution Factor:	10	10	10	1	10	10	1
Level:	LOW	LOW	LOW	LOW	LOW	LOW	LOW
Number of TIC's:	10	10	10	0	10	10	7

Note: For the results listed in the Data Summary Table, ESAT has replaced the laboratory assigned flags with ESAT Organic Data Qualifiers. The ESAT flags indicate the technical usability of the reported results.

ORGANIC DATA SUMMARY

Case No.: 9611G675 SDG: WS01-O Reviewer: Gene Zhu

Laboratory: WESTON Matrix: SOIL Units: ug/Kg

VOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	WS-07RE		WS-08											
Chloromethane	11	U	19	U										
Bromomethane	11	U	19	U										
Vinyl chloride	11	U	19	U										
Chloroethane	11	U	19	U										
Methylene chloride	11	U	19	U										
Acetone	11	U	19	U										
Carbon disulfide	11	U	19	U										
1,1-Dichloroethene	11	U	19	U										
1,1-Dichloroethane	11	U	19	U										
1,2-Dichloroethene (total)	11	U	19	U										
Chloroform	11	U	19	U										
1,2-Dichloroethane	11	U	19	U										
2-Butanone	11	U	19	U										
1,1,1-Trichloroethane	11	U	19	U										
Carbon tetrachloride	11	U	19	U										
Bromodichloromethane	11	U	19	U										
1,2-Dichloropropane	11	U	19	U										
cis-1,3-Dichloropropene	11	U	19	U										
Trichloroethene	11	U	19	U										
Dibromochloromethane	11	U	19	U										
1,1,2-Trichloroethane	11	U	19	U										
Benzene	11	U	19	U										
trans-1,3-Dichloropropene	11	U	19	U										
Bromoform	11	U	19	U										
4-Methyl-2-pentanone	11	UJv	19	U										
2-Hexanone	11	UJv	19	U										
Tetrachloroethene	11	UJv	19	U										
1,1,2,2-Tetrachloroethane	11	UJv	19	U										
Toluene	11	UJv	19	U										
Chlorobenzene	11	UJv	19	U										
Ethylbenzene	11	UJv	19	U										
Styrene	11	UJv	19	U										
Xylenes (total)	11	UJv	19	U										
Sample wt (g):	5		5											
%Moisture:	8		47											
Dilution Factor:	1		1											
Level:	LOW		LOW											
Number of TIC's:	1		0											

Note: For the results listed in the Data Summary Table, ESAT has replaced the laboratory assigned flags with ESAT Organic Data Qualifiers. The ESAT flags indicate the technical usability of the reported results.

ORGANIC DATA SUMMARY

Case No.: 9611G675 SDG: WS01-O Reviewer: Gene Zhu

Laboratory: WESTON Matrix: SOIL Units: ug/Kg

SEMIVOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	WS-01		WS-02		WS-03		WS-04		WS-05		WS-06		WS-07	
Phenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
bis(2-Chloroethyl)ether	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2-Chlorophenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
1,3-Dichlorobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
1,4-Dichlorobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
1,2-Dichlorobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2-Methylphenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,2'-Oxybis(1-chloropropane)	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
4-Methylphenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
N-Nitroso-di-n-propylamine	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Hexachloroethane	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Nitrobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Isophorone	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2-Nitrophenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,4-Dimethylphenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
bis(2-Chloroethoxy)methane	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,4-Dichlorophenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
1,2,4-Trichlorobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Naphthalene	70000	U	64000	U	49000	U	3600	U	300000	J	150000	J	8800	U
4-Chloroaniline	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Hexachlorobutadiene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
4-Chloro-3-methylphenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2-Methylnaphthalene	70000	U	64000	U	49000	U	3600	U	1400000		760000		8800	U
Hexachlorocyclopentadiene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,4,6-Trichlorophenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,4,5-Trichlorophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
2-Chloronaphthalene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2-Nitroaniline	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
Dimethylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Acenaphthylene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,6-Dinitrotoluene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
3-Nitroaniline	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
Acenaphthene	70000	U	64000	U	49000	U	3600	U	66000	J	33000	J	8800	U
2,4-Dinitrophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
4-Nitrophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
Dibenzofuran	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
2,4-Dinitrotoluene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Diethylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
4-Chlorophenyl-phenylether	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Fluorene	70000	U	7800	J	49000	U	3600	U	140000	J	80000	J	8800	U
4-Nitroaniline	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
4,6-Dinitro-2-methylphenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
N-Nitrosodiphenylamine	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
4-Bromophenyl-phenylether	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Hexachlorobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Pentachlorophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U	22000	U
Phenanthrene	70000	U	27000	J	49000	U	3600	U	520000		370000		8800	U
Anthracene	70000	U	64000	U	49000	U	3600	U	70000	J	320000	U	8800	U

ORGANIC DATA SUMMARY

Case No.: 9611G675 SDG: WS01-O Reviewer: Gene Zhu

Laboratory: WESTON Matrix: SOIL Units: ug/Kg

SEMIVOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	WS-01		WS-02		WS-03		WS-04		WS-05		WS-06		WS-07	
Carbazole	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Di-n-butylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Fluoranthene	70000	U	64000	U	49000	U	3600	U	340000	U	32000	J	8800	U
Pyrene	7800	J	230000		54000		3600	U	230000	J	260000	J	8800	U
Butylbenzylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
3,3'-Dichlorobenzidine	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Benzo(a)anthracene	70000	U	23000	J	49000	U	3600	U	340000	U	320000	U	8800	U
Chrysene	70000	U	49000	J	49000	U	3600	U	340000	U	66000	J	1900	J
bis(2-Ethylhexyl)phthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Di-n-octylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Benzo(b)fluoranthene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Benzo(k)fluoranthene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Benzo(a)pyrene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Indeno(1,2,3-cd)pyrene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Dibenz(a,h)anthracene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Benzo(g,h,i)perylene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U	8800	U
Sample wt (g):	5.1		5		5.3		5.2		5.1		5.2		30.6	
%Moisture:	30		22		4		46		28		24		8	
Dilution Factor:	25		25		25		1		125		125		25	
Level:	LOW		LOW		LOW		LOW		LOW		LOW		LOW	
Number of TIC's:	20		18		18		16		20		20		20	

Note: For the results listed in the Data Summary Table, ESAT has replaced the laboratory assigned flags with ESAT Organic Data Qualifiers. The ESAT flags indicate the technical usability of the reported results.

ORGANIC DATA SUMMARY

Case No.: 9611G675 SDG: WS01-O Reviewer: Gene Zhu

Laboratory: WESTON Matrix: SOIL Units: ug/Kg

SEMIVOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	WS-08		WS-08RE											
Phenol	3100	U	3100	U *										
bis(2-Chloroethyl)ether	3100	U	3100	U *										
2-Chlorophenol	3100	U	3100	U *										
1,3-Dichlorobenzene	3100	U	3100	U *										
1,4-Dichlorobenzene	3100	U	3100	U *										
1,2-Dichlorobenzene	3100	U	3100	U *										
2-Methylphenol	3100	U	3100	U *										
2,2'-Oxybis(1-chloropropane)	3100	U	3100	U *										
4-Methylphenol	3100	U	3100	U *										
N-Nitroso-di-n-propylamine	3100	U	3100	U *										
Hexachloroethane	3100	U	3100	U *										
Nitrobenzene	3100	U	3100	U *										
Isophorone	3100	U	3100	U *										
2-Nitrophenol	3100	U	3100	U *										
2,4-Dimethylphenol	3100	U	3100	U *										
bis(2-Chloroethoxy)methane	3100	U	3100	U *										
2,4-Dichlorophenol	3100	U	3100	U *										
1,2,4-Trichlorobenzene	3100	U	3100	U *										
Naphthalene	3100	U	3100	U *										
4-Chloroaniline	3100	U	3100	U *										
Hexachlorobutadiene	3100	U	3100	U *										
4-Chloro-3-methylphenol	3100	U	3100	U *										
2-Methylnaphthalene	520	J	510	*										
Hexachlorocyclopentadiene	3100	U	3100	U *										
2,4,6-Trichlorophenol	3100	U	3100	U *										
2,4,5-Trichlorophenol	7800	U	7800	U *										
2-Chloronaphthalene	3100	U	3100	U *										
2-Nitroaniline	7800	U	7800	U *										
Dimethylphthalate	3100	U	3100	U *										
Acenaphthylene	3100	U	3100	U *										
2,6-Dinitrotoluene	3100	U	3100	U *										
3-Nitroaniline	7800	U	7800	U *										
Acenaphthene	3100	U	3100	U *										
2,4-Dinitrophenol	7800	U	7800	U *										
4-Nitrophenol	7800	U	7800	U *										
Dibenzofuran	3100	U	3100	U *										
2,4-Dinitrotoluene	3100	U	3100	U *										
Diethylphthalate	3100	U	3100	U *										
4-Chlorophenyl-phenylether	3100	U	3100	U *										
Fluorene	3100	U	3100	U *										
4-Nitroaniline	7800	U	7800	U *										
4,6-Dinitro-2-methylphenol	7800	U	7800	U *										
N-Nitrosodiphenylamine	3100	U	3100	U *										
4-Bromophenyl-phenylether	3100	U	3100	U *										
Hexachlorobenzene	3100	U	3100	U *										
Pentachlorophenol	7800	U	7800	U *										
Phenanthrene	3100	U	3100	U *										
Anthracene	3100	U	3100	U *										

ORGANIC DATA SUMMARY

Case No.: 9611G675 SDG: WS01-O Reviewer: Gene Zhu

Laboratory: WESTON Matrix: SOIL Units: ug/Kg

SEMIVOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	WS-08		WS-08RE											
Carbazole	3100	U	3100	U	*									
Di-n-butylphthalate	3100	U	3100	U	*									
Fluoranthene	3100	U	3100	U	*									
Pyrene	3100	U	3100	U	*									
Butylbenzylphthalate	3100	U	3100	U	*									
3,3'-Dichlorobenzidine	3100	U	3100	U	*									
Benzo(a)anthracene	3100	U	3100	U	*									
Chrysene	1100	J	1200		*									
bis(2-Ethylhexyl)phthalate	3100	U	3100	U	*									
Di-n-octylphthalate	3100	U	3100	U	*									
Benzo(b)fluoranthene	3100	U	3100	U	*									
Benzo(k)fluoranthene	3100	U	3100	U	*									
Benzo(a)pyrene	3100	U	3100	U	*									
Indeno(1,2,3-cd)pyrene	3100	U	3100	U	*									
Dibenz(a,h)anthracene	3100	U	3100	U	*									
Benzo(g,h,i)perylene	3100	U	3100	U	*									
Sample wt (g):	30.2		30.2											
%Moisture:	47		47											
Dilution Factor:	5		5											
Level:	LOW		LOW											
Number of TIC's:	20		20											

Note: For the results listed in the Data Summary Table, ESAT has replaced the laboratory assigned flags with ESAT Organic Data Qualifiers. The ESAT flags indicate the technical usability of the reported results.

Roy F. Weston, Inc.
Suite 700
5599 San Felipe
Houston, Texas 77056-2721
713-621-1620 • Fax 713-621-6959

MANAGERS DESIGNERS/CONSULTANTS

TRANSMITTAL LETTER

TO: EPA Houston Lab
10625 Fallstone Dr.
Houston, TX 77099

CLIENT/PROJECT: EPA/ARCS
WORK ORDER NUMBER: 04606-056-026-0600
RE: Wilcox Oil ESI, Bristow, Oklahoma

ATTN: Myra Perez

DATE: 4 February 1997

WESTON TRANSMITS THE FOLLOWING:

- ☐ Letter
- ☐ Report
- ☐ Calculations
- ☐ Per Your Request
- ☐ Memo
- ☐ Drawings/Specifications
- ☐ RFW Literature
- ☐ Product Literature
- ☑ Other

ITEM NO.	NO. COPIES	DESCRIPTION	ACTION
1	1	Hard Copy of analytical data for Wilcox Oil ESI (EPA CERCLIS ID #OKD001010917), Bristow, OK. (High Concentration samples)	For data validation by ESAT

REMARKS: Myra, I spoke with Christy Macdowell this afternoon about data validation by ESAT for this site. Lon Biasco has requested that ESAT validate the analytical results for: Wilcox Oil Company, Bristow, Creek County, Oklahoma (CERCLIS ID: OKD001010917). The spill ID would be ZZ. The data is for 8 samples that were analyzed for the following paramaters:

- **Total Petroleum Hydrocarbons (EPA Method 418.1, after extraction by 9071A),**
- **TCL Cyanide and metals (USEPA CLP SOW ILM03.0)**
- **TAL Volatiles and Semivolatiles (USEPA CLP Protocol OLM01.8)**

The WESTON contact for resubmissions is Chuck Maw, Weston Environmental Metrics, Inc. (708) 534-5200. Please feel free to contact me if you have any questions. Thank you!

COPIES TO: Project File (2.1)
Robert Beck
Steve Mitchell

SIGNED: Diane G. Williams
Diane G. Williams
Associate Geoscientist

VOLATILES BY GC/MS
USEPA-WILCOX OIL
RFW#9611G675

Laboratory Chronicle 01
Chain of Custody 02
Data Summary 07
I. Case Narrative 35
II. Quality Control Summary 38
- A. System Monitoring Compound Summary (Form II)
- B. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
- C. Method Blank Summary (Form IV)
- D. GC/MS Instrument Performance Check (Form V)
- E. Internal Standard Area and RT Summary (Form VIII)

III. Sample Data Package 56
- A. Sample Data in Order of Analysis
  - 1. Tabulated Results (Form I)
  - 2. Tentatively Identified Compound (Form 1E)
  - 3. Raw Data in Order:
    - a. Reconstructed Ion Chromatograms
    - b. Quantitation Reports
    - c. HSL Mass Spectra
    - d. TIC Mass Spectra
    - e. GC/MS Library Search for TIC

IV. Standards Data Package 186
- A. Initial Calibration Data
  - 1. Form VI
  - 2. Reconstructed Ion Chromatograms and Quantitation Reports
- B. Continuing Calibration Data
  - 1. Form VII
  - 2. Reconstructed Ion Chromatograms and Quantitation Reports

V. Raw Quality Control Data Package 211
- A. GC/MS Tuning and Calibration Standard BFB
  - 1. Bar Graph
  - 2. Mass Listing
- B. Blank Data
  - 1. Tabulated Results (Form I)
  - 2. TIC Results (Form IB)
  - 3. Raw Data
    - a. Reconstructed Ion Chromatograms and Quantitation Reports
    - b. HSL Spectra
    - c. TIC Spectra
    - d. GC/MS Library Search for TIC
- C. Matrix Spike/Matrix Spike Duplicate Data
  - 1. Tabulated Results (Form I)
  - 2. Raw Data
    - a. Reconstructed Ion Chromatograms
    - b. Quantitation Reports
- D. Run Log Summary

Weston Environmental Metrics, Inc.
VOA ANALYTICAL DATA PACKAGE FOR
USEPA-Wilcox Oil

RFW LOT # :9611G675

CLIENT ID	RFW #	MTX	PREP #	COLLECTN	DATE REC	EXT/PREP	ANALYSIS
WS-01	001	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-02	002	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-03	003	S	96GVB253	11/20/96	11/21/96	N/A	12/01/96
WS-04	004	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-05	005	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-06	006	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-07	007	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-07	007 R1	S	96GVB253	11/20/96	11/21/96	N/A	12/01/96
WS-08	008	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-08	008 MS	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
WS-08	008 MSD	S	96GVB252	11/20/96	11/21/96	N/A	11/30/96
LAB QC:							
VBLKZF	MB1	S	96GVB252	N/A	N/A	N/A	11/30/96
VBLKZF	MB1 BS	S	96GVB252	N/A	N/A	N/A	11/30/96
VBLKZI	MB1	S	96GVB253	N/A	N/A	N/A	12/01/96
VBLKZI	MB1 BS	S	96GVB253	N/A	N/A	N/A	12/01/96

NY CERTIFICATION # 11006

I. CHAIN OF CUSTODY

Custody Transfer Record/Lab Work Request

WESTON

3

WESTON Analytics Use Only
9611G675

Client: USEPA-Wilcox Oil
Work Order: 04606-056-026-0600-04
Date Rec'd. 11-21-96 Date Due 12-12-96
RFW Contact: Chuck Maw
Client Contact/Phone: Diane Williams

Refrigerator#				5	8	8				
#/Type Container				1G	1G	1G				
Volume				2oz	4oz	8oz				
Preservative										
ANALYSES REQUESTED				624H	HSL Metals CN	TPHC 625H				
WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected							
001	WS-01	S	11-20-96	X	X	X				
002	WS-02									
003	WS-03									
004	WS-04									
005	WS-05									
006	WS-06									
007	WS-07									
008	WS-08									

Matrix:
S - Soil, SE - Sediment, SO - Solid
W - Water, O - Oil, A - Air, WI - Wipe
DS - Drum Solids, DL - Drum Liquids, F - Fish, L - EP/TCLP Leachate
X - Other

Special Instructions: QC + Del CLP

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
		Sherm Scott	11-21-96	1407					

WESTON Analytics Use Only

Samples Were:
1 Shipped or Hand-Delivered
NOTES: Fed-X

2 Ambient or Chilled
NOTES: 4.8°C + 2.9°C

3 Received Broken/Leaking (Improperly Sealed) Y N
NOTES:

4 Properly Preserved Y N
NOTES:

5 Received Within Holding Times Y N
NOTES:

COC Tape Was:
1 Present on Outer Package Y N
2 Unbroken on Outer Package Y N
3 Present on Sample Y N
4 Unbroken on Sample Y N
NOTES: Date + Signature

AS 11-21-96

COC Record Was:
1 Present Upon Receipt of Samples Y N

Discrepancies Between Sample Labels and COC Record? Y N
NOTES:

RFW 21-21-001/A-12/88

7-115

Weston Environmental Metrics, Inc.
Internal Sample Custody Transfer Record

RFW Lot#: 9611G675 Client: USEPA-Wilcox Oil

Sample No.	Analysis	Relinquished by:	Received by:	Date	Time	Comments
1-8	624H	KNS	[illegible]	11/21/96	1450	
1-8	metals	P. Bulut	Paul Holomyk	11-25-96	15:10	
1-8	metals	Paul Holomyk	P. Bulut	11/26/96	15:12	
1-8	ORG. EXT	K Merkle	[illegible]	11/27/96	11:00	
1-8	ORG EXT	[illegible]	P. Bulut	11/27/96	13:15	
1-8	CN	KNS	Bi D. W	11-30-96	9:05	
1-8	CN	Bi D W	KNS	11-30-96	13:04	
1-8	metals	P. Bulut	Paul Holomyk	12/3/96	13:45	
1-8	metals	Paul Holomyk	KN	12/3/96	16:12	
1-8	% Sol	P. Bulut	Dellacatigo	12-4-96	10.45	
1-8	% Sol	Dellacatigo	KNS	12-4-96	17.45	
1-8	IPHC	KN	J. Kress	12-6-96	9:05	
1-8	IPHC	J Kress	[illegible]	12-6-96	1430	
1-8	Metal	R. Henn	[illegible]	12-6-96	18:52	
1-8	Metals	[illegible]	K Merkle	12/9/96	8:40	

NVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Wilcox Oil

SAMPLERS: (Signature) Eric Tate (Eric Tate)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA	BNAs	Total Metals	TPH			REMARKS
WS-01	11/20/96	1430		X	Pond 1	3	X	X	X	X			
WS-02	11/20/96	1450		X	Pond 1	3	X	X	X	X			
WS-03	11/20/96	1310		X	Lee Residence	3	X	X	X	X			
WS-04	11/20/96	1040		X	Pond 2	3	X	X	X	X			
WS-05	11/20/96	1000		X	Pit	3	X	X	X	X			
WS-06	11/20/96	1010		X	Pit	3	X	X	X	X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Eric Tate	11/20/96 1730	FedEx - Tulsa OK			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) Merri Scott	Date / Time 11-21-96 1400	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

4[illegible]°C

6-07[illegible]35

NVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

9

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Wilcox Oil

SAMPLERS: (Signature) Eric Tate (Eric Tate)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA	BNAs	Total Metals	TPH			REMARKS
WS-07	11/20/96	1115		X	Tank Drainage Path	3	X	X	X	X			
WS-08	11/20/96	1400		X	Tank Bottom	3	X	X	X	X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Eric Tate	11/20/96 1730	FedEx - Tulsa, OK			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		Sherri Scott	11-21-96 1351		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

2.9°C

6-0[illegible]34

II. DATA SUMMARY

Weston Environmental Metrics, Inc.
2417 Bond Street
University Park, Illinois 60466-3182
Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-01
Project # 04606-056-026-0600
Lab ID: 9611G675-001
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	140	U
Bromomethane	BRL	140	U
Vinyl chloride	BRL	140	U
Chloroethane	BRL	140	U
Methylene Chloride	BRL	140	U
Acetone	BRL	140	U
Carbon Disulfide	BRL	140	U
1,1-Dichloroethene	BRL	140	U
1,1-Dichloroethane	BRL	140	U
1,2-Dichloroethene (total)	BRL	140	U
Chloroform	BRL	140	U
1,2-Dichloroethane	BRL	140	U
2-Butanone	BRL	140	U
1,1,1-Trichloroethane	BRL	140	U
Carbon Tetrachloride	BRL	140	U
Bromodichloromethane	BRL	140	U
1,2-Dichloropropane	BRL	140	U

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Project # 04606-056-026-0600
Lab ID: 9611G675-001
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	140	U
Trichloroethene	BRL	140	U
Dibromochloromethane	BRL	140	U
1,1,2-Trichloroethane	BRL	140	U
Benzene	BRL	140	U
trans-1,3-Dichloropropene	BRL	140	U
Bromoform	BRL	140	U
4-Methyl-2-pentanone	BRL	140	U
2-Hexanone	BRL	140	U
Tetrachloroethene	BRL	140	U
1,1,2,2-Tetrachloroethane	BRL	140	U
Toluene	BRL	140	U
Chlorobenzene	BRL	140	U
Ethylbenzene	BRL	140	U
Styrene	BRL	140	U
Xylene (total)	BRL	140	U

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RE: WS-01
Project # 04606-056-026-0600
Lab ID: 9611G675-001
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

10 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration	
UNKNOWN CYCLOALKANE	15.889	1300	J
UNKNOWN CYCLOALKANE	16.514	670	J
UNKNOWN CYCLOALKANE	17.823	610	J
UNKNOWN CYCLOALKANE	18.097	950	J
UNKNOWN CYCLOALKANE	19.231	2300	J
UNKNOWN CYCLOALKANE	19.641	680	J
UNKNOWN CYCLOALKANE	20.619	880	J
Unknown	21.694	660	J
UNKNOWN CYCLOALKANE	21.811	1100	J
UNKNOWN CYCLOALKANE	22.711	1000	J

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To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	130	U
Bromomethane	BRL	130	U
Vinyl chloride	BRL	130	U
Chloroethane	BRL	130	U
Methylene Chloride	BRL	130	U
Acetone	BRL	130	U
Carbon Disulfide	BRL	130	U
1,1-Dichloroethene	BRL	130	U
1,1-Dichloroethane	BRL	130	U
1,2-Dichloroethene (total)	BRL	130	U
Chloroform	BRL	130	U
1,2-Dichloroethane	BRL	130	U
2-Butanone	BRL	130	U
1,1,1-Trichloroethane	BRL	130	U
Carbon Tetrachloride	BRL	130	U
Bromodichloromethane	BRL	130	U
1,2-Dichloropropane	BRL	130	U

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Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	130	U
Trichloroethene	BRL	130	U
Dibromochloromethane	BRL	130	U
1,1,2-Trichloroethane	BRL	130	U
Benzene	BRL	130	U
trans-1,3-Dichloropropene	BRL	130	U
Bromoform	BRL	130	U
4-Methyl-2-pentanone	BRL	130	U
2-Hexanone	BRL	130	U
Tetrachloroethene	BRL	130	U
1,1,2,2-Tetrachloroethane	BRL	130	U
Toluene	270	130	
Chlorobenzene	BRL	130	U
Ethylbenzene	63	130	J
Styrene	BRL	130	U
Xylene (total)	280	130	

Weston Environmental Metrics, Inc.
2417 Bond Street
University Park, Illinois 60466-3182
Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

10 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration	
UNKNOWN CYCLOALKANE	14.852	2400	J
UNKNOWN CYCLOALKANE	15.906	4400	J
UNKNOWN HYDROCARBON	16.845	1500	J
UNKNOWN CYCLOALKANE	17.49	3000	J
UNKNOWN CYCLOALKANE	18.116	1600	J
UNKNOWN CYCLOALKANE	19.231	3300	J
UNKNOWN CYCLOALKANE	19.641	1500	J
Unknown	21.832	2600	J
UNKNOWN CYCLOALKANE	22.733	2000	J
UNKNOWN CYCLOALKANE	23.183	1700	J

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To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-03
Project # 04606-056-026-0600
Lab ID: 9611G675-003
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	100	U
Bromomethane	BRL	100	U
Vinyl chloride	BRL	100	U
Chloroethane	BRL	100	U
Methylene Chloride	BRL	100	U
Acetone	BRL	100	U
Carbon Disulfide	BRL	100	U
1,1-Dichloroethene	BRL	100	U
1,1-Dichloroethane	BRL	100	U
1,2-Dichloroethene (total)	BRL	100	U
Chloroform	BRL	100	U
1,2-Dichloroethane	BRL	100	U
2-Butanone	BRL	100	U
1,1,1-Trichloroethane	BRL	100	U
Carbon Tetrachloride	BRL	100	U
Bromodichloromethane	BRL	100	U
1,2-Dichloropropane	BRL	100	U

Weston Environmental Metrics, Inc.
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Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-03
Project # 04606-056-026-0600
Lab ID: 9611G675-003
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	100	U
Trichloroethene	BRL	100	U
Dibromochloromethane	BRL	100	U
1,1,2-Trichloroethane	BRL	100	U
Benzene	BRL	100	U
trans-1,3-Dichloropropene	BRL	100	U
Bromoform	BRL	100	U
4-Methyl-2-pentanone	BRL	100	U
2-Hexanone	BRL	100	U
Tetrachloroethene	BRL	100	U
1,1,2,2-Tetrachloroethane	BRL	100	U
Toluene	BRL	100	U
Chlorobenzene	BRL	100	U
Ethylbenzene	BRL	100	U
Styrene	BRL	100	U
Xylene (total)	BRL	100	U

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Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-03
Project # 04606-056-026-0600
Lab ID: 9611G675-003
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

10 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration	
UNKNOWN HYDROCARBON	14.16	200	J
UNKNOWN CYCLOALKANE	14.844	360	J
UNKNOWN CYCLOALKANE	15.879	620	J
UNKNOWN CYCLOALKANE	16.503	220	J
UNKNOWN CYCLOALKANE	17.46	220	J
UNKNOWN CYCLOALKANE	18.085	270	J
UNKNOWN CYCLOALKANE	19.199	570	J
Unknown	21.797	260	J
UNKNOWN CYCLOALKANE	22.697	260	J
UNKNOWN HYDROCARBON	23.655	220	J

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	19	U
Bromomethane	BRL	19	U
Vinyl chloride	BRL	19	U
Chloroethane	BRL	19	U
Methylene Chloride	BRL	19	U
Acetone	BRL	19	U
Carbon Disulfide	BRL	19	U
1,1-Dichloroethene	BRL	19	U
1,1-Dichloroethane	BRL	19	U
1,2-Dichloroethene (total)	BRL	19	U
Chloroform	BRL	19	U
1,2-Dichloroethane	BRL	19	U
2-Butanone	BRL	19	U
1,1,1-Trichloroethane	BRL	19	U
Carbon Tetrachloride	BRL	19	U
Bromodichloromethane	BRL	19	U
1,2-Dichloropropane	BRL	19	U

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Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	19	U
Trichloroethene	BRL	19	U
Dibromochloromethane	BRL	19	U
1,1,2-Trichloroethane	BRL	19	U
Benzene	BRL	19	U
trans-1,3-Dichloropropene	BRL	19	U
Bromoform	BRL	19	U
4-Methyl-2-pentanone	BRL	19	U
2-Hexanone	BRL	19	U
Tetrachloroethene	BRL	19	U
1,1,2,2-Tetrachloroethane	BRL	19	U
Toluene	BRL	19	U
Chlorobenzene	BRL	19	U
Ethylbenzene	BRL	19	U
Styrene	BRL	19	U
Xylene (total)	BRL	19	U

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

No Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	140	U
Bromomethane	BRL	140	U
Vinyl chloride	BRL	140	U
Chloroethane	BRL	140	U
Methylene Chloride	BRL	140	U
Acetone	2200	140	
Carbon Disulfide	BRL	140	U
1,1-Dichloroethene	BRL	140	U
1,1-Dichloroethane	BRL	140	U
1,2-Dichloroethene (total)	BRL	140	U
Chloroform	BRL	140	U
1,2-Dichloroethane	BRL	140	U
2-Butanone	BRL	140	U
1,1,1-Trichloroethane	BRL	140	U
Carbon Tetrachloride	BRL	140	U
Bromodichloromethane	BRL	140	U
1,2-Dichloropropane	BRL	140	U

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	140	U
Trichloroethene	BRL	140	U
Dibromochloromethane	BRL	140	U
1,1,2-Trichloroethane	BRL	140	U
Benzene	BRL	140	U
trans-1,3-Dichloropropene	BRL	140	U
Bromoform	BRL	140	U
4-Methyl-2-pentanone	BRL	140	U
2-Hexanone	BRL	140	U
Tetrachloroethene	BRL	140	U
1,1,2,2-Tetrachloroethane	BRL	140	U
Toluene	45	140	J
Chlorobenzene	BRL	140	U
Ethylbenzene	90	140	J
Styrene	BRL	140	U
Xylene (total)	380	140	

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

10 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration	
UNKNOWN HYDROCARBON	11.478	2900	J
UNKNOWN HYDROCARBON	12.259	2700	J
Unknown	13.157	4200	J
UNKNOWN HYDROCARBON	14.055	2300	J
UNKNOWN CYCLOALKANE	14.173	3500	J
UNKNOWN HYDROCARBON	14.329	3100	J
UNKNOWN CYCLOALKANE	14.876	3100	J
UNKNOWN HYDROCARBON	14.974	2300	J
UNKNOWN CYCLOALKANE	15.931	4000	J
UNKNOWN HYDROCARBON	16.85	2300	J

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	130	U
Bromomethane	BRL	130	U
Vinyl chloride	BRL	130	U
Chloroethane	BRL	130	U
Methylene Chloride	BRL	130	U
Acetone	1000	130	
Carbon Disulfide	BRL	130	U
1,1-Dichloroethene	BRL	130	U
1,1-Dichloroethane	BRL	130	U
1,2-Dichloroethene (total)	BRL	130	U
Chloroform	BRL	130	U
1,2-Dichloroethane	BRL	130	U
2-Butanone	BRL	130	U
1,1,1-Trichloroethane	BRL	130	U
Carbon Tetrachloride	BRL	130	U
Bromodichloromethane	BRL	130	U
1,2-Dichloropropane	BRL	130	U

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	130	U
Trichloroethene	BRL	130	U
Dibromochloromethane	BRL	130	U
1,1,2-Trichloroethane	BRL	130	U
Benzene	BRL	130	U
trans-1,3-Dichloropropene	BRL	130	U
Bromoform	BRL	130	U
4-Methyl-2-pentanone	BRL	130	U
2-Hexanone	BRL	130	U
Tetrachloroethene	BRL	130	U
1,1,2,2-Tetrachloroethane	BRL	130	U
Toluene	64	130	J
Chlorobenzene	BRL	130	U
Ethylbenzene	110	130	J
Styrene	BRL	130	U
Xylene (total)	450	130	

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

10 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration	
UNKNOWN HYDROCARBON	9.769	2200	J
UNKNOWN HYDROCARBON	11.467	2500	J
UNKNOWN HYDROCARBON	12.248	2400	J
Unknown	13.127	3400	J
UNKNOWN CYCLOALKANE	14.142	2800	J
UNKNOWN HYDROCARBON	14.299	2300	J
UNKNOWN CYCLOALKANE	14.846	2600	J
UNKNOWN HYDROCARBON	14.944	2300	J
UNKNOWN CYCLOALKANE	15.881	3400	J
UNKNOWN HYDROCARBON	17.777	2000	J

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Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	11	U
Bromomethane	BRL	11	U
Vinyl chloride	BRL	11	U
Chloroethane	BRL	11	U
Methylene Chloride	BRL	11	U
Acetone	BRL	11	U
Carbon Disulfide	BRL	11	U
1,1-Dichloroethene	BRL	11	U
1,1-Dichloroethane	BRL	11	U
1,2-Dichloroethene (total)	BRL	11	U
Chloroform	BRL	11	U
1,2-Dichloroethane	BRL	11	U
2-Butanone	BRL	11	U
1,1,1-Trichloroethane	BRL	11	U
Carbon Tetrachloride	BRL	11	U
Bromodichloromethane	BRL	11	U
1,2-Dichloropropane	BRL	11	U

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	11	U
Trichloroethene	BRL	11	U
Dibromochloromethane	BRL	11	U
1,1,2-Trichloroethane	BRL	11	U
Benzene	BRL	11	U
trans-1,3-Dichloropropene	BRL	11	U
Bromoform	BRL	11	U
4-Methyl-2-pentanone	BRL	11	U
2-Hexanone	BRL	11	U
Tetrachloroethene	BRL	11	U
1,1,2,2-Tetrachloroethane	BRL	11	U
Toluene	BRL	11	U
Chlorobenzene	BRL	11	U
Ethylbenzene	BRL	11	U
Styrene	BRL	11	U
Xylene (total)	BRL	11	U

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Date: Thursday January 9th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

7 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration	
Unknown	30.824	10	J
UNKNOWN CYCLOALKANE	31.273	9	J
UNKNOWN CYCLOALKANE	31.762	7	J
UNKNOWN CYCLOALKANE	33.560	18	J
UNKNOWN HYDROCARBON	35.613	11	J
Unknown	36.277	12	J
UNKNOWN HYDROCARBON	37.138	9	J

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Date: Thursday January 9th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	11	U
Bromomethane	BRL	11	U
Vinyl chloride	BRL	11	U
Chloroethane	BRL	11	U
Methylene Chloride	BRL	11	U
Acetone	BRL	11	U
Carbon Disulfide	BRL	11	U
1,1-Dichloroethene	BRL	11	U
1,1-Dichloroethane	BRL	11	U
1,2-Dichloroethene (total)	BRL	11	U
Chloroform	BRL	11	U
1,2-Dichloroethane	BRL	11	U
2-Butanone	BRL	11	U
1,1,1-Trichloroethane	BRL	11	U
Carbon Tetrachloride	BRL	11	U
Bromodichloromethane	BRL	11	U
1,2-Dichloropropane	BRL	11	U

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Date: Thursday January 9th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	11	U
Trichloroethene	BRL	11	U
Dibromochloromethane	BRL	11	U
1,1,2-Trichloroethane	BRL	11	U
Benzene	BRL	11	U
trans-1,3-Dichloropropene	BRL	11	U
Bromoform	BRL	11	U
4-Methyl-2-pentanone	BRL	11	U
2-Hexanone	BRL	11	U
Tetrachloroethene	BRL	11	U
1,1,2,2-Tetrachloroethane	BRL	11	U
Toluene	BRL	11	U
Chlorobenzene	BRL	11	U
Ethylbenzene	BRL	11	U
Styrene	BRL	11	U
Xylene (total)	BRL	11	U

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Date: Thursday January 9th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

1 Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Volatile Compound	Retention Time	Estimated Concentration
UNKNOWN CYCLOALKANE	33.547	7 J

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
Chloromethane	BRL	19	U
Bromomethane	BRL	19	U
Vinyl chloride	BRL	19	U
Chloroethane	BRL	19	U
Methylene Chloride	BRL	19	U
Acetone	BRL	19	U
Carbon Disulfide	BRL	19	U
1,1-Dichloroethene	BRL	19	U
1,1-Dichloroethane	BRL	19	U
1,2-Dichloroethene (total)	BRL	19	U
Chloroform	BRL	19	U
1,2-Dichloroethane	BRL	19	U
2-Butanone	BRL	19	U
1,1,1-Trichloroethane	BRL	19	U
Carbon Tetrachloride	BRL	19	U
Bromodichloromethane	BRL	19	U
1,2-Dichloropropane	BRL	19	U

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Date: Thursday January 9th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

VOLATILES BY GC/MS, HSL LIST

Volatile Compound	Result	Reporting Limit	Flag
cis-1,3-Dichloropropene	BRL	19	U
Trichloroethene	BRL	19	U
Dibromochloromethane	BRL	19	U
1,1,2-Trichloroethane	BRL	19	U
Benzene	BRL	19	U
trans-1,3-Dichloropropene	BRL	19	U
Bromoform	BRL	19	U
4-Methyl-2-pentanone	BRL	19	U
2-Hexanone	BRL	19	U
Tetrachloroethene	BRL	19	U
1,1,2,2-Tetrachloroethane	BRL	19	U
Toluene	BRL	19	U
Chlorobenzene	BRL	19	U
Ethylbenzene	BRL	19	U
Styrene	BRL	19	U
Xylene (total)	BRL	19	U

Weston Environmental Metrics, Inc.
2417 Bond Street
University Park, Illinois 60466-3182
Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

No Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

III. CASE NARRATIVE

Weston Environmental Metrics, Inc.
GC/MS Case Narrative

USEPA-Wilcox Oil
RFW# 9611G675
VOA DATA:

1. All volatile analyses were performed within the Method hold times.

2. All Method Blank target compounds were below reporting limits.

3. All LCS (Method Blank Spike) recoveries were within limits.

4. Matrix Spike analyses were conducted on sample -008. All recoveries and RPD's were within limits.

5. All surrogate recoveries in the volatile analyses were within QC limits.

6. All samples were analyzed following USEPA CLP Protocol OLM01.8.

7. All samples were analyzed as low level soils. Due to the nature of the matrices and very high concentrations of hydrocarbons, samples -001, 002, 003, 005 and -006 were analyzed at initial 1/10 dilutions. All reporting limits and concentrations are adjusted for the dilutions.

8. All internal standard areas and retention times are within limits, with the following exceptions. Sample -007 had two low areas. It was re-analyzed and one area was low. Booth sets of data are reported.

Marilyn Krueding
GC/MS Section Manager

1/8/97
Date

ORGANIC GLOSSARY OF DATA QUALIFIERS AND ABBREVIATIONS

Data Qualifiers

A	TIC is a suspected aldol-condensation product
B	Compound was found in the blank and the sample
C	Pesticide identification was confirmed by GC/MS
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D
E	Concentration exceeds the instrument calibration range and was subsequently diluted
I	Appears on the "results spreadsheet" and "quant reports" to indicate an interference;appears on pesticide form 8 to indicate an instrument blank without a surrogate
J	Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)
NQ	Result was qualitatively confirmed, but not quantified
P	The lower of the two values is reported when the percent difference between the results of two GC columns is greater than 25%
SP	Blank spike, blank spike duplicate, matrix spike or matrix spike duplicate
T	Compound was found in the TCLP extraction blank and the sample
U	Analyte was not detected at or above the reporting limit
X	Other specific flags may be required to properly qualify the result
*	QC result was outside the laboratory control limits

Abbreviations

Batch	Identifies a specific extraction, digestion or preparation set (equivalent to prep batch)
BS	Blank spike analysis was conducted on reagent grade water or a matrix free from the analyte of interest
BSD	Blank spike duplicate
BRL	Below reporting limit
CD	Calculation factor used by the Laboratory's Information Management System (LIMS)
Contract	Contract laboratory identification code
DF	Dilution factor
DL	Appears in the sample ID to indicate a secondary dilution
LCS/LC	Denotes laboratory control standard
LAB ID	The full 12 character Weston laboratory identification number (equivalent to RFW#)
MB	Method blank or (PB) preparation blank
MS	Matrix spike
MSD	Matrix spike duplicate
NA	Not applicable
NR	Not required
NS	Not spiked
RE	Appears in the sample ID to indicate a re-analysis
REP	Replicate analysis
Reprep	Sample was reprepared and then reanalyzed
RFW#	The full 12 character WESTON laboratory identification number (equivalent to LAB ID)
RFW Lot	The first 8 characters of the RFW#
RPD	Relative percent difference of duplicate analyses
RRF	Relative response factor
RT	Retention time /Retention time window
WO#	Work order no. WESTON code used to define a specific client, job, phase and task

NOTES:

- One or a combination of these data qualifiers and abbreviations may appear in the analytical report.
- Soil, sediment and sludge results are reported on a dry weight basis except when analyzed for landfill disposal or incineration parameters. All other results on a solid matrix are reported on an "as received" basis unless noted differently.
- Reporting limits are adjusted for preparation sample size, sample dilution and sample moisture content if analyzed on a dry weight basis.

IV. QUALITY CONTROL SUMMARY

Weston Environmental Metrics, Inc. (Gulf Coast)
VOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Report Date: 01/07/97 13:21 Page: 1a

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	Cust ID:	WS-01		WS-02		WS-03		WS-04		WS-05		WS-06	
Sample Information	RFW#:	001		002		003		004		005		006	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	10		10		10		1		10		10	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	1,2-Dichloroethane-d4	95	%	92	%	99	%	90	%	99	%	96	%
	Toluene-d8	104	%	116	%	111	%	94	%	101	%	103	%
	4-Bromofluorobenzene	84	%	63	%	84	%	81	%	94	%	84	%
			fl		fl		fl		fl		fl		fl
Chloromethane		140	U	130	U	100	U	19	U	140	U	130	U
Bromomethane		140	U	130	U	100	U	19	U	140	U	130	U
Vinyl chloride		140	U	130	U	100	U	19	U	140	U	130	U
Chloroethane		140	U	130	U	100	U	19	U	140	U	130	U
Methylene Chloride		140	U	130	U	100	U	19	U	140	U	130	U
Acetone		140	U	130	U	100	U	19	U	2200		1000	
Carbon Disulfide		140	U	130	U	100	U	19	U	140	U	130	U
1,1-Dichloroethene		140	U	130	U	100	U	19	U	140	U	130	U
1,1-Dichloroethane		140	U	130	U	100	U	19	U	140	U	130	U
1,2-Dichloroethene (total)		140	U	130	U	100	U	19	U	140	U	130	U
Chloroform		140	U	130	U	100	U	19	U	140	U	130	U
1,2-Dichloroethane		140	U	130	U	100	U	19	U	140	U	130	U
2-Butanone		140	U	130	U	100	U	19	U	140	U	130	U
1,1,1-Trichloroethane		140	U	130	U	100	U	19	U	140	U	130	U
Carbon Tetrachloride		140	U	130	U	100	U	19	U	140	U	130	U
Bromodichloromethane		140	U	130	U	100	U	19	U	140	U	130	U
1,2-Dichloropropane		140	U	130	U	100	U	19	U	140	U	130	U
cis-1,3-Dichloropropene		140	U	130	U	100	U	19	U	140	U	130	U
Trichloroethene		140	U	130	U	100	U	19	U	140	U	130	U
Dibromochloromethane		140	U	130	U	100	U	19	U	140	U	130	U
1,1,2-Trichloroethane		140	U	130	U	100	U	19	U	140	U	130	U
Benzene		140	U	130	U	100	U	19	U	140	U	130	U
trans-1,3-Dichloropropene		140	U	130	U	100	U	19	U	140	U	130	U
Bromoform		140	U	130	U	100	U	19	U	140	U	130	U
4-Methyl-2-pentanone		140	U	130	U	100	U	19	U	140	U	130	U
2-Hexanone		140	U	130	U	100	U	19	U	140	U	130	U
Tetrachloroethene		140	U	130	U	100	U	19	U	140	U	130	U
1,1,2,2-Tetrachloroethane		140	U	130	U	100	U	19	U	140	U	130	U
Toluene		140	U	270		100	U	19	U	45	J	64	J

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Page: 1b

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Cust ID:	WS-01	WS-02	WS-03	WS-04	WS-05	WS-06
RFW#:	001	002	003	004	005	006
Chlorobenzene	140 U	130 U	100 U	19 U	140 U	130 U
Ethylbenzene	140 U	63 J	100 U	19 U	90 J	110 J
Styrene	140 U	130 U	100 U	19 U	140 U	130 U
Xylene (total)	140 U	280	100 U	19 U	380	450

*= Outside of EPA CLP QC limits.

Weston Environmental Metrics, Inc. (Gulf Coast)
VOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Report Date: 01/07/97 13:21 Page: 2a

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	Cust ID:	WS-07		WS-07		WS-08		WS-08		WS-08		VBLKZF	
Sample Information	RFW#:	007		007		008		008 MS		008 MSD		96GVB252-MB1	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	1		1		1		1		1		1	
	Units:	ug/Kg		ug/Kg REPREP		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	1,2-Dichloroethane-d4	92	%	97	%	94	%	93	%	96	%	97	%
	Toluene-d8	106	%	105	%	110	%	103	%	115	%	95	%
	4-Bromofluorobenzene	69	%	85	%	76	%	79	%	77	%	93	%
			fl		fl		fl		fl		fl		fl
Chloromethane		11	U	11	U	19	U	19	U	19	U	10	U
Bromomethane		11	U	11	U	19	U	19	U	19	U	10	U
Vinyl chloride		11	U	11	U	19	U	19	U	19	U	10	U
Chloroethane		11	U	11	U	19	U	19	U	19	U	10	U
Methylene Chloride		11	U	11	U	19	U	19	U	19	U	10	U
Acetone		11	U	11	U	19	U	19	U	19	U	10	U
Carbon Disulfide		11	U	11	U	19	U	19	U	19	U	10	U
1,1-Dichloroethene		11	U	11	U	19	U	105	%	108	%	10	U
1,1-Dichloroethane		11	U	11	U	19	U	19	U	19	U	10	U
1,2-Dichloroethene (total)		11	U	11	U	19	U	19	U	19	U	10	U
Chloroform		11	U	11	U	19	U	19	U	19	U	10	U
1,2-Dichloroethane		11	U	11	U	19	U	19	U	19	U	10	U
2-Butanone		11	U	11	U	19	U	19	U	19	U	10	U
1,1,1-Trichloroethane		11	U	11	U	19	U	19	U	19	U	10	U
Carbon Tetrachloride		11	U	11	U	19	U	19	U	19	U	10	U
Bromodichloromethane		11	U	11	U	19	U	19	U	19	U	10	U
1,2-Dichloropropane		11	U	11	U	19	U	19	U	19	U	10	U
cis-1,3-Dichloropropene		11	U	11	U	19	U	19	U	19	U	10	U
Trichloroethene		11	U	11	U	19	U	85	%	90	%	10	U
Dibromochloromethane		11	U	11	U	19	U	19	U	19	U	10	U
1,1,2-Trichloroethane		11	U	11	U	19	U	19	U	19	U	10	U
Benzene		11	U	11	U	19	U	103	%	111	%	10	U
trans-1,3-Dichloropropene		11	U	11	U	19	U	19	U	19	U	10	U
Bromoform		11	U	11	U	19	U	19	U	19	U	10	U
4-Methyl-2-pentanone		11	U	11	U	19	U	19	U	19	U	10	U
2-Hexanone		11	U	11	U	19	U	19	U	19	U	10	U
Tetrachloroethene		11	U	11	U	19	U	19	U	19	U	10	U
1,1,2,2-Tetrachloroethane		11	U	11	U	19	U	19	U	19	U	10	U
Toluene		11	U	11	U	19	U	99	%	113	%	10	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Page: 2b

42

Cust ID:	WS-07	WS-07	WS-08	WS-08	WS-08	VBLKZF
RFW#:	007	007 REPREP	008	008 MS	008 MSD	96GVB252-MB1
Chlorobenzene	11 U	11 U	19 U	90 %	95 %	10 U
Ethylbenzene	11 U	11 U	19 U	19 U	19 U	10 U
Styrene	11 U	11 U	19 U	19 U	19 U	10 U
Xylene (total)	11 U	11 U	19 U	19 U	19 U	10 U

*= Outside of EPA CLP QC limits.

Weston Environmental Metrics, Inc. (Gulf Coast)
VOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Report Date: 01/07/97 13:21 Page: 3a

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	Cust ID:	VBLKZF BS		VBLKZI		VBLKZI BS	
Sample Information	RFW#:	96GVB252-MB1		96GVB253-MB1		96GVB253-MB1	
	Matrix:	SOIL		SOIL		SOIL	
	D.F.:	1		1		1	
	Units:	ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	1,2-Dichloroethane-d4	95	%	101	%	97	%
	Toluene-d8	97	%	98	%	99	%
	4-Bromofluorobenzene	94	%	95	%	96	%
Chloromethane		10	U	10	U	10	U
Bromomethane		10	U	10	U	10	U
Vinyl chloride		10	U	10	U	10	U
Chloroethane		10	U	10	U	10	U
Methylene Chloride		10	U	10	U	10	U
Acetone		10	U	10	U	10	U
Carbon Disulfide		10	U	10	U	10	U
1,1-Dichloroethene		101	%	10	U	104	%
1,1-Dichloroethane		10	U	10	U	10	U
1,2-Dichloroethene (total)		10	U	10	U	10	U
Chloroform		10	U	10	U	10	U
1,2-Dichloroethane		10	U	10	U	10	U
2-Butanone		10	U	10	U	10	U
1,1,1-Trichloroethane		10	U	10	U	10	U
Carbon Tetrachloride		10	U	10	U	10	U
Bromodichloromethane		10	U	10	U	10	U
1,2-Dichloropropane		10	U	10	U	10	U
cis-1,3-Dichloropropene		10	U	10	U	10	U
Trichloroethene		89	%	10	U	91	%
Dibromochloromethane		10	U	10	U	10	U
1,1,2-Trichloroethane		10	U	10	U	10	U
Benzene		101	%	10	U	102	%
trans-1,3-Dichloropropene		10	U	10	U	10	U
Bromoform		10	U	10	U	10	U
4-Methyl-2-pentanone		10	U	10	U	10	U
2-Hexanone		10	U	10	U	10	U
Tetrachloroethene		10	U	10	U	10	U
1,1,2,2-Tetrachloroethane		10	U	10	U	10	U
Toluene		94	%	10	U	95	%

*= Outside of EPA CLP QC limits.

Cust ID:	VBLKZF BS		VBLKZI		VBLKZI BS	
RFW#:	96GVB252-MB1		96GVB253-MB1		96GVB253-MB1	
Chlorobenzene	93	%	10	U	96	%
Ethylbenzene	10	U	10	U	10	U
Styrene	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U

*= Outside of EPA CLP QC limits.

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (DCE)#	SMC2 (TOL)#	SMC3 (BFB)#	OTHER	TOT OUT
01	VBLKZF	97	95	93		0
02	VBLKZFBS	95	97	94		0
03	WS-08	94	110	76		0
04	WS-08MS	93	103	79		0
05	WS-08MSD	96	115	77		0
06	WS-04	90	94	81		0
07	WS-07	92	106	69		0
08	WS-02	92	116	63		0
09	WS-01	95	104	84		0
10	WS-05	99	101	94		0
11	WS-06	96	103	84		0
12	VBLKZI	101	98	95		0
13	VBLKZIBS	97	99	96		0
14	WS-07RE	97	105	85		0
15	WS-03	99	111	84		0
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

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

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

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: Lab ID: 9611G675-008

Matrix Spike - EPA Sample No.: WS-08 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	93.633	0.0000	98.263	105	59-172
Trichloroethene	93.633	0.0000	79.732	85	62-137
Benzene	93.633	0.0000	96.209	103	66-142
Toluene	93.633	0.0000	92.432	99	59-139
Chlorobenzene	93.633	0.0000	84.206	90	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	93.633	101.08	108	3	22	59-172
Trichloroethene	93.633	84.794	90	6	24	62-137
Benzene	93.633	104.11	111	7	21	66-142
Toluene	93.633	105.70	113	13	21	59-139
Chlorobenzene	93.633	89.377	95	5	21	60-133

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

* Values outside of QC limits

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

COMMENTS: _____

3B
SOIL VOLATILE BLANK SPIKE RECOVERY

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: Lab ID: 96GVB252-MB1

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

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.000	0.0000	50.525	101	59-172
Trichloroethene	50.000	0.0000	44.494	89	62-137
Benzene	50.000	0.0000	50.422	101	66-142
Toluene	50.000	0.0000	47.035	94	59-139
Chlorobenzene	50.000	0.0000	46.448	93	60-133

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

* Values outside of QC limits

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

COMMENTS: _____

3B
SOIL VOLATILE BLANK SPIKE RECOVERY

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: Lab ID: 96GVB253-MB1

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

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.000	0.0000	51.970	104	59-172
Trichloroethene	50.000	0.0000	45.418	91	62-137
Benzene	50.000	0.0000	51.146	102	66-142
Toluene	50.000	0.0000	47.453	95	59-139
Chlorobenzene	50.000	0.0000	47.810	96	60-133

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

* Values outside of QC limits

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

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKZF

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: ZAB30 Lab Sample ID: 96GVB252-MB1

Date Analyzed: 11/30/96 Time Analyzed: 1351

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: GCL2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLKZFBS	96GVB252-MB1S	ZBB30	1442
02	WS-08	9611G675-008	AHG09	1547
03	WS-08MS	9611G675-008S	AHG10	1638
04	WS-08MSD	9611G675-008T	AHG11	1730
05	WS-04	9611G675-004	AHG12	1826
06	WS-07	9611G675-007	AHG13	1923
07	WS-02	9611G675-002	AHG14	2009
08	WS-01	9611G675-001	AHG16	2140
09	WS-05	9611G675-005	AHG17	2226
10	WS-06	9611G675-006	AHG18	2315
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKZI

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: ZCC01 Lab Sample ID: 96GVB253-MB1

Date Analyzed: 12/01/96 Time Analyzed: 1555

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: GCL2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VBLKZIBS	96GVB253-MB1S	ZBC01	1714
02	WS-07RE	9611G675-007	AHG19	1803
03	WS-03	9611G675-003	AHG20	1850
04				
05				
06				
07				
08				
09				
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29				
30				

COMMENTS:

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: XAB29 BFB Injection Date: 11/29/96

Instrument ID: GCL2 BFB Injection Time: 0954

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.9
75	30.0 - 66.0% of mass 95	45.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	85.3
175	4.0 - 9.0% of mass 174	6.9 (8.0)1
176	93.0 - 101.0% of mass 174	83.3 (97.7)1
177	5.0 - 9.0% of mass 176	5.5 (6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	YBB29	11/29/96	1220
02	VSTD200	VSTD200	YGB29	11/29/96	1701
03	VSTD100	VSTD100	YHB29	11/29/96	1741
04	VSTD020	VSTD020	YIB29	11/29/96	1823
05	VSTD010	VSTD010	YLB29	11/29/96	2134
06					
07					
08					
09					
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11					
12					
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14					
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17					
18					
19					
20					
21					
22					

FORM V VOA 3/90

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: XBB30 BFB Injection Date: 11/30/96

Instrument ID: GCL2 BFB Injection Time: 1204

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.7
75	30.0 - 66.0% of mass 95	45.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.1 (0.1)1
174	50.0 - 120.0% of mass 95	85.9
175	4.0 - 9.0% of mass 174	6.1 (7.1)1
176	93.0 - 101.0% of mass 174	84.4 (98.3)1
177	5.0 - 9.0% of mass 176	5.3 (6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	YAB30	11/30/96	1254
02	VBLKZF	96GVB252-MB1	ZAB30	11/30/96	1351
03	VBLKZFBS	96GVB252-MB1S	ZBB30	11/30/96	1442
04	WS-08	9611G675-008	AHG09	11/30/96	1547
05	WS-08MS	9611G675-008S	AHG10	11/30/96	1638
06	WS-08MSD	9611G675-008T	AHG11	11/30/96	1730
07	WS-04	9611G675-004	AHG12	11/30/96	1826
08	WS-07	9611G675-007	AHG13	11/30/96	1923
09	WS-02	9611G675-002	AHG14	11/30/96	2009
10	WS-01	9611G675-001	AHG16	11/30/96	2140
11	WS-05	9611G675-005	AHG17	11/30/96	2226
12	WS-06	9611G675-006	AHG18	11/30/96	2315
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: XAC01 BFB Injection Date: 12/01/96

Instrument ID: GCL2 BFB Injection Time: 1254

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.5
75	30.0 - 66.0% of mass 95	45.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	85.5
175	4.0 - 9.0% of mass 174	6.0 (7.1)1
176	93.0 - 101.0% of mass 174	84.3 (98.6)1
177	5.0 - 9.0% of mass 176	5.2 (6.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	YAC01	12/01/96	1341
02	VBLKZI	96GVB253-MB1	ZCC01	12/01/96	1555
03	VBLKZIBS	96GVB253-MB1S	ZBC01	12/01/96	1714
04	WS-07RE	9611G675-007	AHG19	12/01/96	1803
05	WS-03	9611G675-003	AHG20	12/01/96	1850
06					
07					
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22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): YAB30 Date Analyzed: 11/30/96

Instrument ID: GCL2 Time Analyzed: 1254

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	47661	13.76	207606	15.24	177376	20.22
	UPPER LIMIT	95322	14.26	415212	15.74	354752	20.72
	LOWER LIMIT	23830	13.26	103803	14.74	88688	19.72
	EPA SAMPLE NO.						
01	VBLKZF	51840	13.72	227516	15.20	203412	20.18
02	VBLKZFBS	52374	13.75	222983	15.23	193142	20.21
03	WS-08	44078	13.72	176010	15.21	129474	20.19
04	WS-08MS	47452	13.70	197819	15.17	155881	20.14
05	WS-08MSD	40658	13.72	158024	15.20	115276	20.16
06	WS-04	47010	13.73	198061	15.21	167382	20.17
07	WS-07	29053	13.71	83190*	15.20	49534*	20.17
08	WS-02	45233	13.72	168975	15.20	108861	20.17
09	WS-01	41502	13.72	154237	15.19	116703	20.15
10	WS-05	38626	13.72	155319	15.21	127699	20.19
11	WS-06	40485	13.69	150289	15.18	110166	20.14
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.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): YAC01 Date Analyzed: 12/01/96

Instrument ID: GCL2 Time Analyzed: 1341

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	50064	13.73	220009	15.21	192139	20.17
	UPPER LIMIT	100128	14.23	440018	15.71	384278	20.67
	LOWER LIMIT	25032	13.23	110004	14.71	96070	19.67
	EPA SAMPLE NO.						
01	VBLKZI	50605	13.72	229814	15.19	206757	20.18
02	VBLKZIBS	52399	13.72	225927	15.20	196110	20.18
03	WS-07RE	33302	13.73	121185	15.19	88666*	20.17
04	WS-03	40293	13.71	148468	15.20	103015	20.14
05							
06							
07							
08							
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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.

V. SAMPLE DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-01

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG16

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 30 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	140	U
74-83-9	Bromomethane	140	U
75-01-4	Vinyl Chloride	140	U
75-00-3	Chloroethane	140	U
75-09-2	Methylene Chloride	140	U
67-64-1	Acetone	140	U
75-15-0	Carbon Disulfide	140	U
75-35-4	1,1-Dichloroethene	140	U
75-34-3	1,1-Dichloroethane	140	U
540-59-0	1,2-Dichloroethene (total)	140	U
67-66-3	Chloroform	140	U
107-06-2	1,2-Dichloroethane	140	U
78-93-3	2-Butanone	140	U
71-55-6	1,1,1-Trichloroethane	140	U
56-23-5	Carbon Tetrachloride	140	U
75-27-4	Bromodichloromethane	140	U
78-87-5	1,2-Dichloropropane	140	U
10061-01-5	cis-1,3-Dichloropropene	140	U
79-01-6	Trichloroethene	140	U
124-48-1	Dibromochloromethane	140	U
79-00-5	1,1,2-Trichloroethane	140	U
71-43-2	Benzene	140	U
10061-02-6	trans-1,3-Dichloropropene	140	U
75-25-2	Bromoform	140	U
108-10-1	4-Methyl-2-pentanone	140	U
591-78-6	2-Hexanone	140	U
127-18-4	Tetrachloroethene	140	U
79-34-5	1,1,2,2-Tetrachloroethane	140	U
108-88-3	Toluene	140	U
108-90-7	Chlorobenzene	140	U
100-41-4	Ethylbenzene	140	U
100-42-5	Styrene	140	U
1330-20-7	Xylene (total)	140	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-01

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-001

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG16

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 30 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLOALKANE	15.89	1300	J
2.	UNKNOWN CYCLOALKANE	16.51	670	J
3.	UNKNOWN CYCLOALKANE	17.82	610	J
4.	UNKNOWN CYCLOALKANE	18.10	950	J
5.	UNKNOWN CYCLOALKANE	19.23	2300	J
6.	UNKNOWN CYCLOALKANE	19.64	680	J
7.	UNKNOWN CYCLOALKANE	20.62	880	J
8.	UNKNOWN	21.69	660	J
9.	UNKNOWN CYCLOALKANE	21.81	1100	J
10.	UNKNOWN CYCLOALKANE	22.71	1000	J
11.				
12.				
13.				
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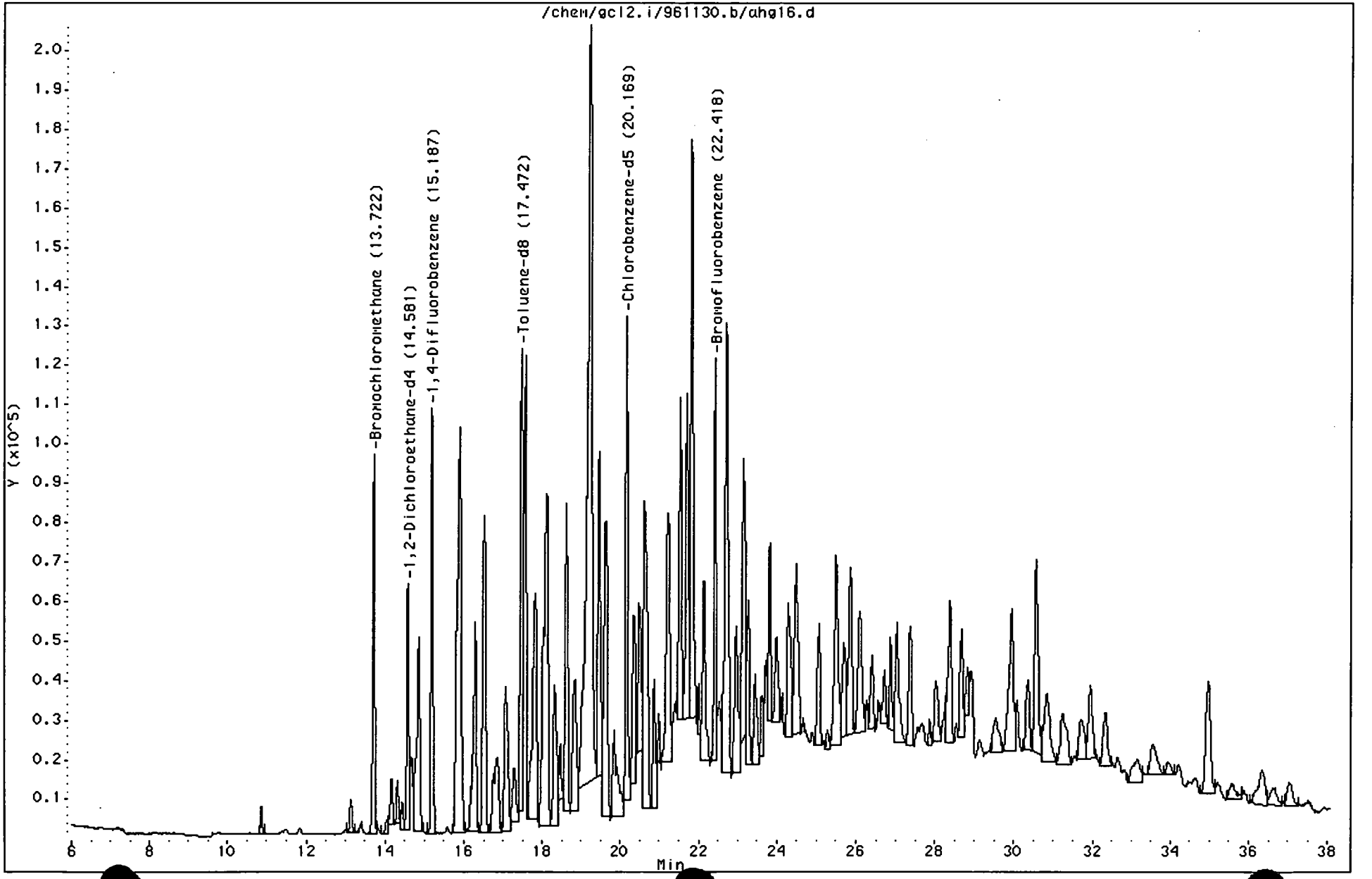
59

Data File: /chem/gcl2.i/961130.b/ahg16.d
Date : 30-NOV-1996 21:40
Client ID: WS-01
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: 0.5GSMP+5ULIS
Column diameter: 0.53

Column phase: Cap



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg16.d
Lab Smp Id: 9611G675-001 Client Smp ID: WS-01
Inj Date : 30-NOV-1996 21:40
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-001 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	30.300	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.722	13.755	(1.000)	41502	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.581	14.614	(1.063)	80807	47.393	67.995(a)
* 42 1,4-Difluorobenzene	114.00	15.187	15.239	(1.000)	154237	50.000	
$ 52 Toluene-d8	98.00	17.569	17.622	(0.872)	134871	52.205	74.900(a)
* 61 Chlorobenzene-d5	117.00	20.149	20.218	(1.000)	116703	50.000	
$ 69 Bromofluorobenzene	95.00	22.418	22.484	(1.113)	78150	41.865	60.065(a)

JK 1-7-97

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg16.d
Lab Smp Id: 9611G675-001 Client Smp ID: WS-01
Inj Date : 30-NOV-1996 21:40
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-001 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	30.300	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 42 1,4-Difluorobenzene	15.187	411738	50.000
* 61 Chlorobenzene-d5	20.149	481429	50.000

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
15.889	729987	88.647	1271.8	0		0	42
Unknown Cycloalkane					CAS #:		
16.514	383132	46.526	667.52	0		0	42
Unknown Cycloalkane					CAS #:		
17.823	407233	42.294	606.80	0		0	61

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
18.097	637497	66.209	949.91	0		0	61
Unknown Cycloalkane					CAS #:		
19.231	1543779	160.33	2300.3	0		0	61
Unknown Cycloalkane					CAS #:		
19.641	456133	47.373	679.67	0		0	61
Unknown Cycloalkane					CAS #:		
20.619	587864	61.054	875.95	0		0	61
Unknown					CAS #:		
21.694	446746	46.398	665.68	0		0	61
Unknown Cycloalkane					CAS #:		
21.811	730027	75.819	1087.8	0		0	61
Unknown Cycloalkane					CAS #:		
22.711	697206	72.410	1038.9	0		0	61

Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

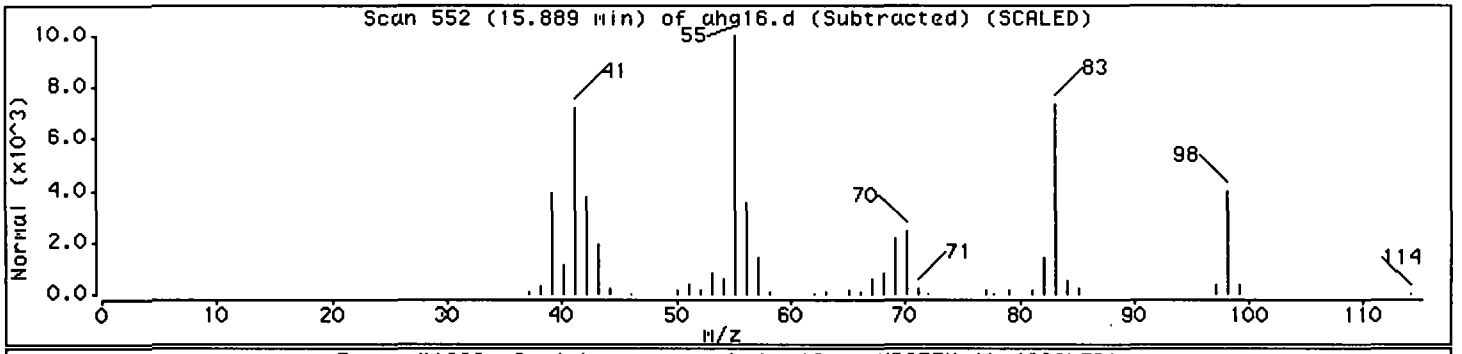
Client ID: WS-01 Instrument: gcl2.i

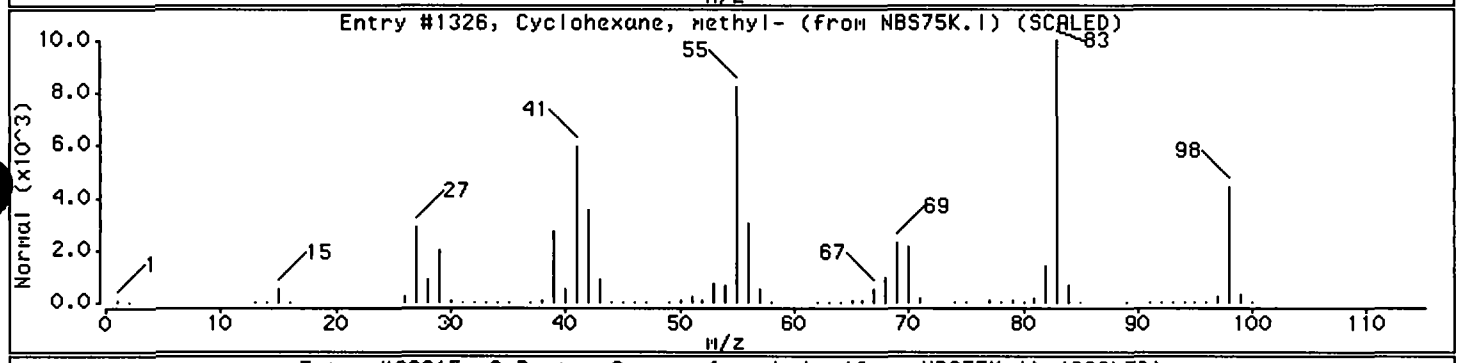
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

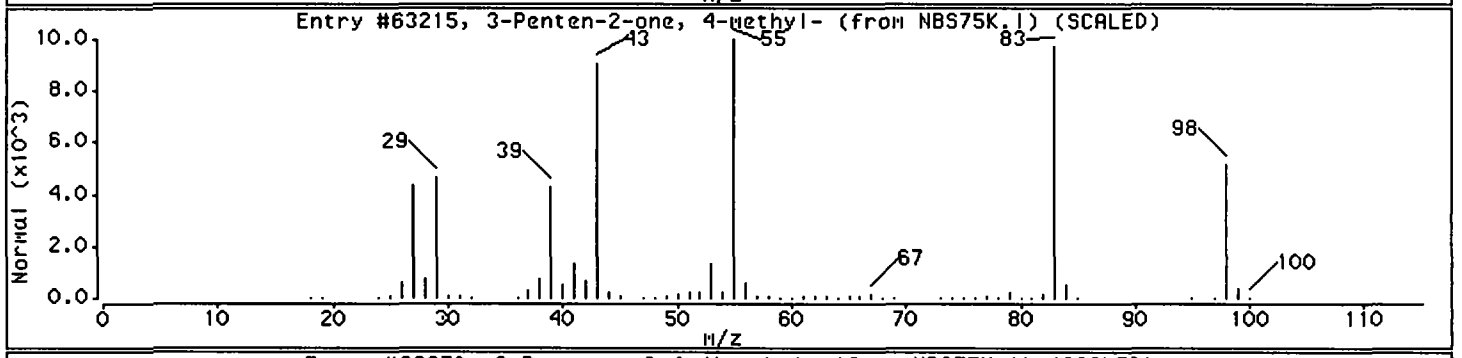
Operator: 0.5GSMP+5ULIS

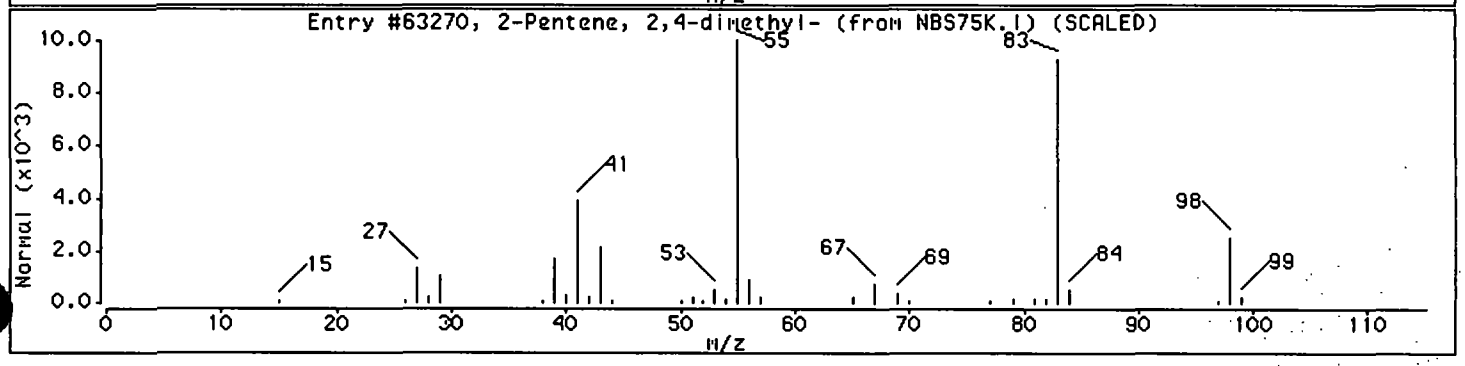
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, methyl-	108-87-2	NBS75K.l	1326	81	C7H14	98
3-Penten-2-one, 4-methyl-	141-79-7	NBS75K.l	63215	58	C6H10O	98
2-Pentene, 2,4-dimethyl-	625-65-0	NBS75K.l	63270	49	C7H14	98









Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

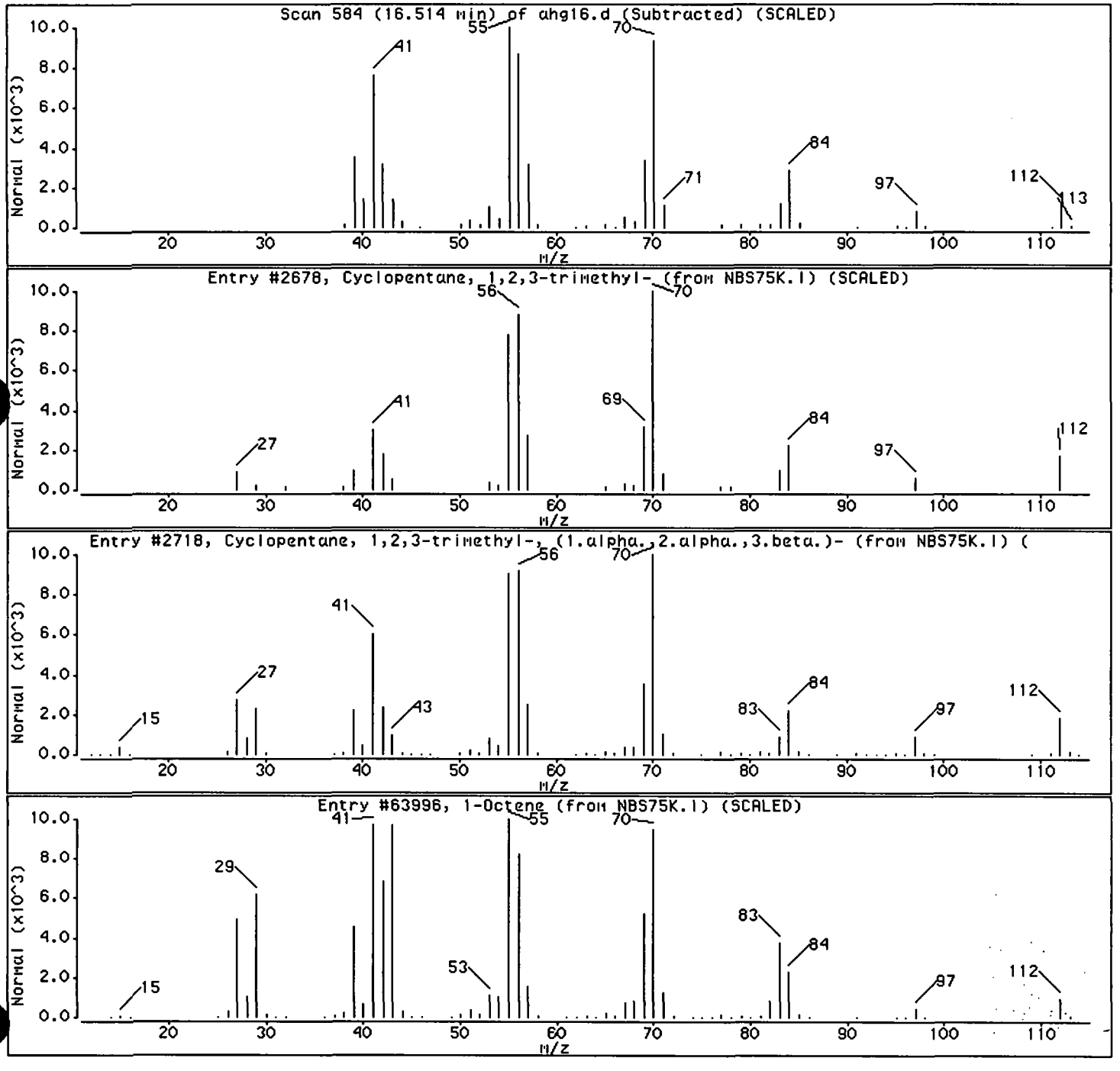
Client ID: WS-01 Instrument: gcl2.i

Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2,3-trimethyl-	2815-57-8	NBS75K.l	2678	90	C8H16	112
Cyclopentane, 1,2,3-trimethyl-, (1.alpha	15890-40-1	NBS75K.l	2718	87	C8H16	112
1-Octene	111-66-0	NBS75K.l	63996	80	C8H16	112



Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

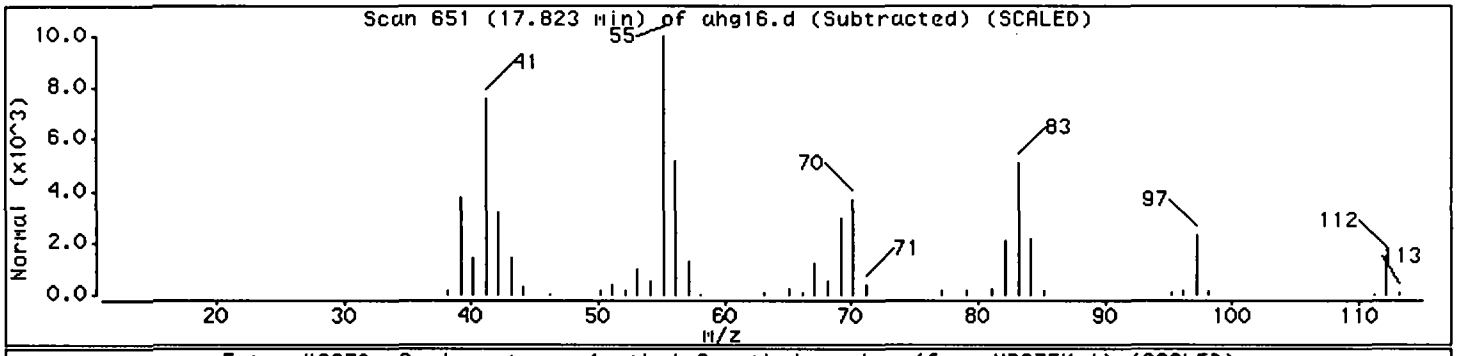
Client ID: WS-01 Instrument: gcl2.i

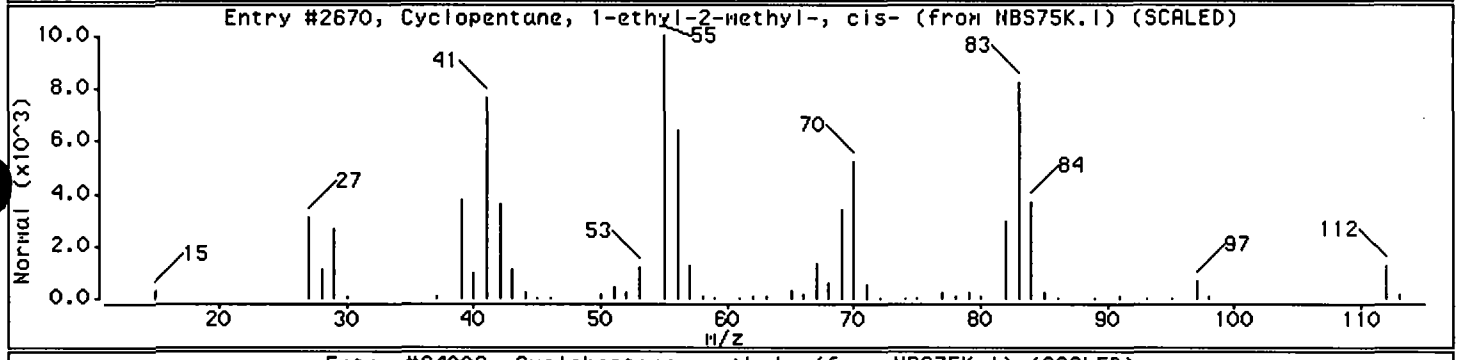
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

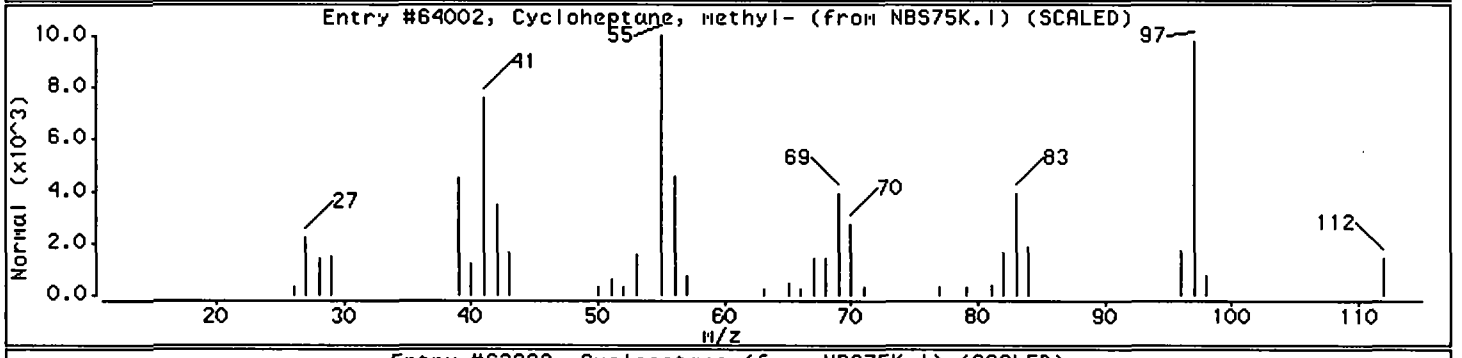
Operator: 0.5GSMP+5ULIS

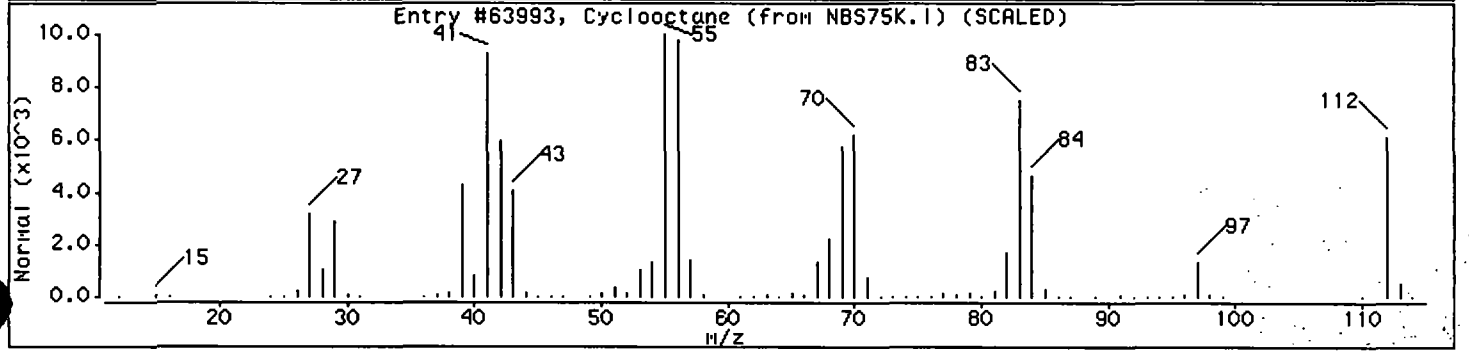
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1-ethyl-2-methyl-, cis-	930-89-2	NBS75K.l	2670	87	C8H16	112
Cycloheptane, methyl-	4126-78-7	NBS75K.l	64002	83	C8H16	112
Cyclooctane	292-64-8	NBS75K.l	63993	81	C8H16	112









Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

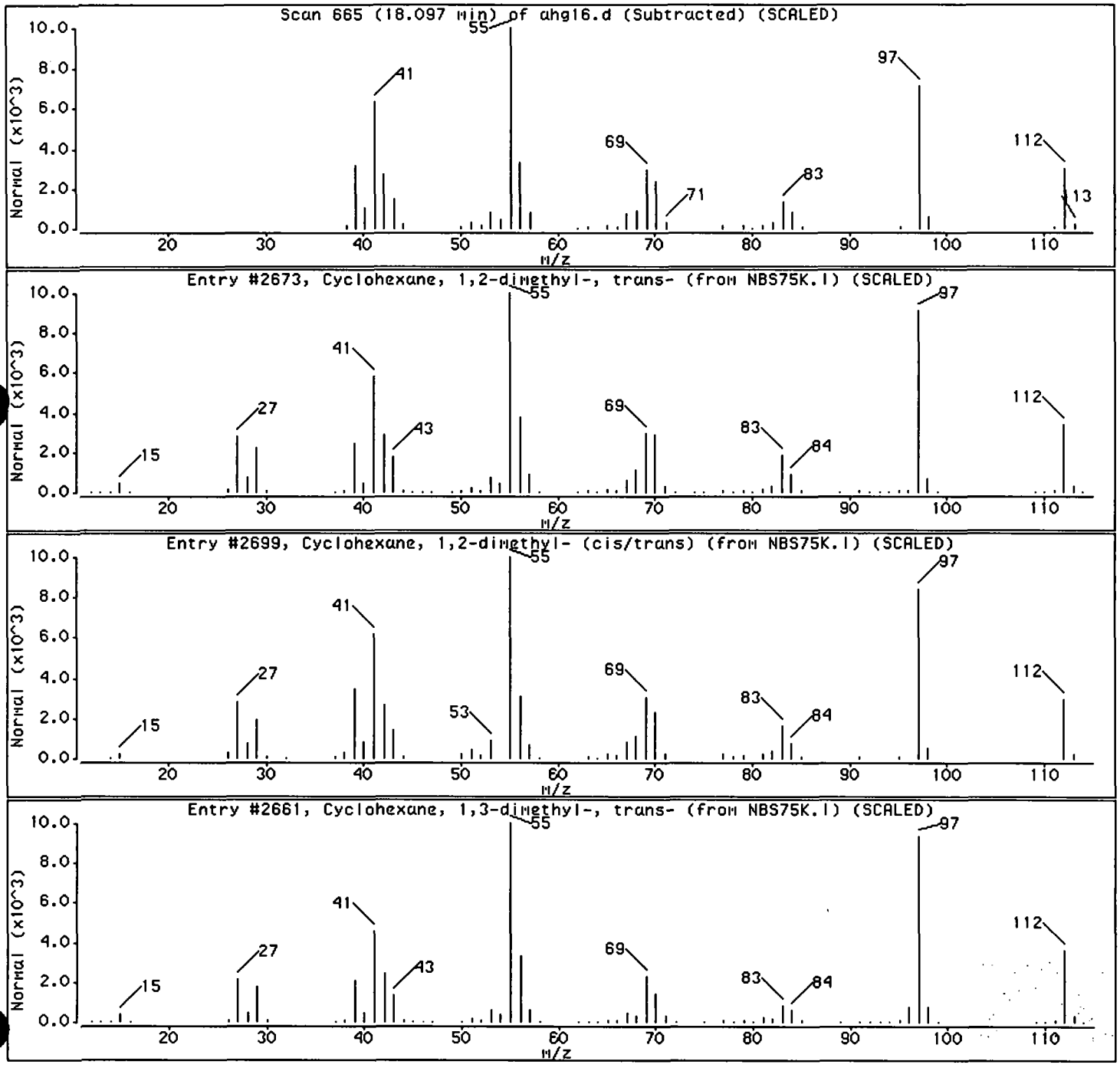
Client ID: WS-01 Instrument: gcl2.i

Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2-dimethyl-, trans-	6876-23-9	NBS75K.l	2673	96	C8H16	112
Cyclohexane, 1,2-dimethyl- (cis/trans)	583-57-3	NBS75K.l	2699	96	C8H16	112
Cyclohexane, 1,3-dimethyl-, trans-	2207-03-6	NBS75K.l	2661	90	C8H16	112



Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

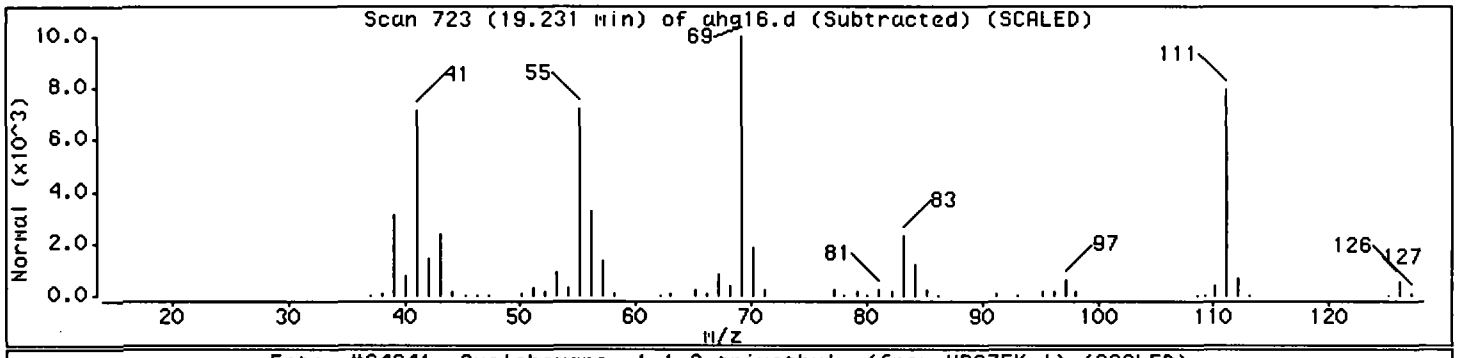
Client ID: WS-01 Instrument: gcl2.i

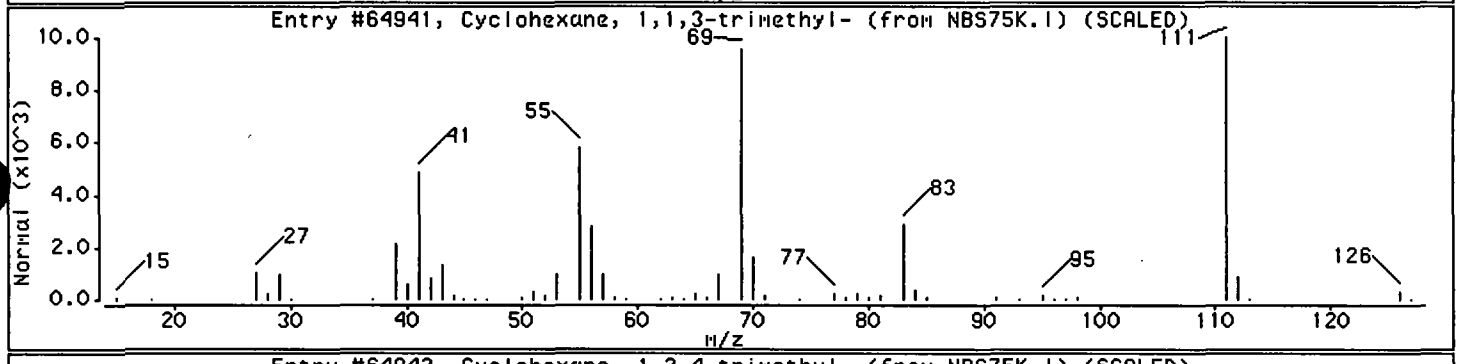
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

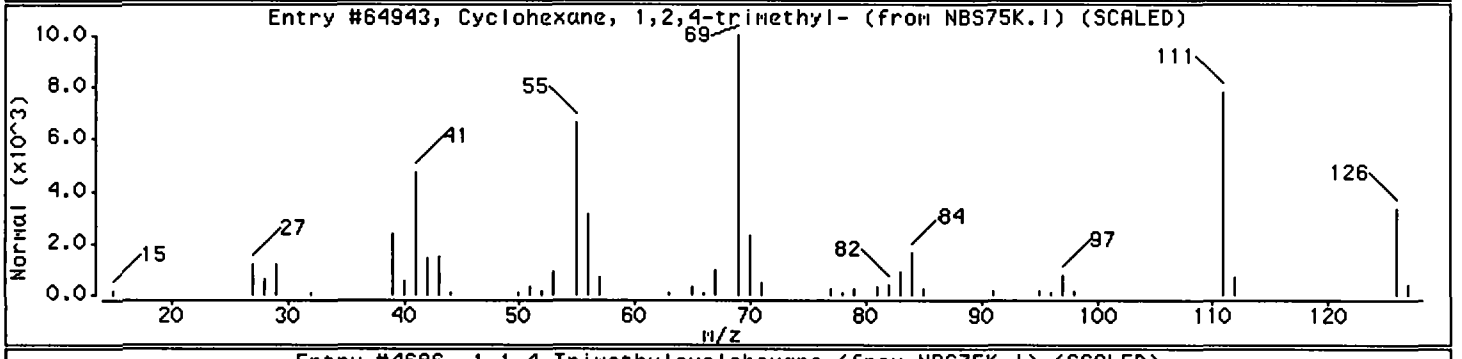
Operator: 0.5GSMP+5ULIS

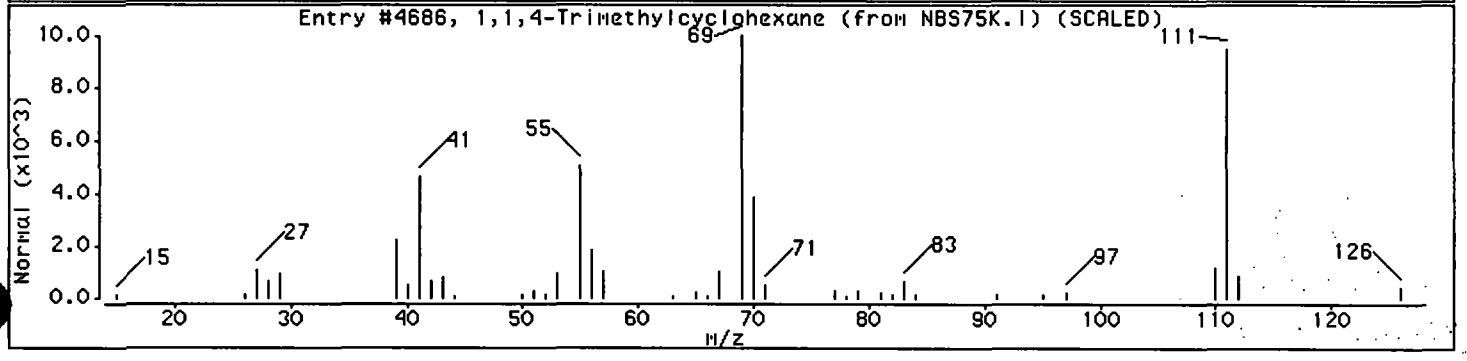
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NBS75K.l	64941	86	C9H18	126
Cyclohexane, 1,2,4-trimethyl-	2234-75-5	NBS75K.l	64943	72	C9H18	126
1,1,4-Trimethylcyclohexane	7094-27-1	NBS75K.l	4686	72	C9H18	126









Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

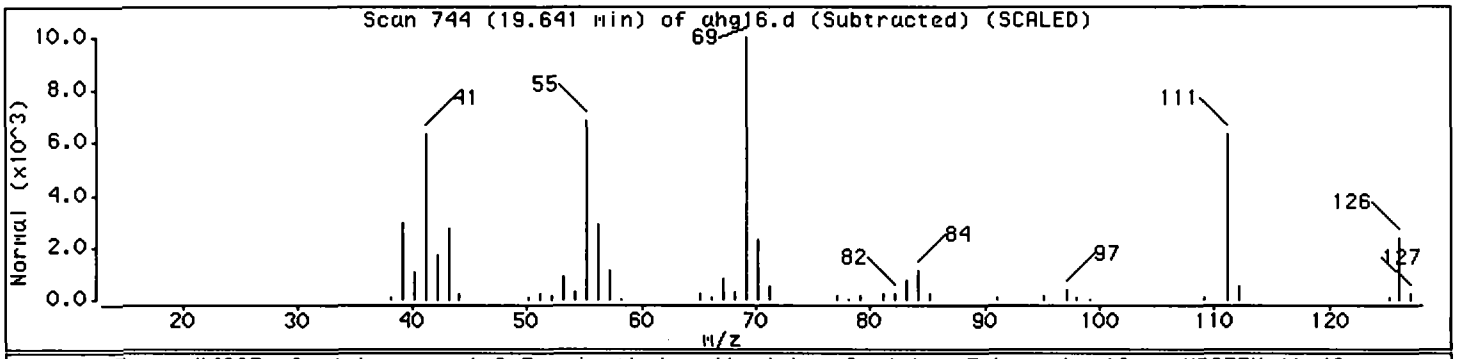
Client ID: WS-01 Instrument: gcl2.i

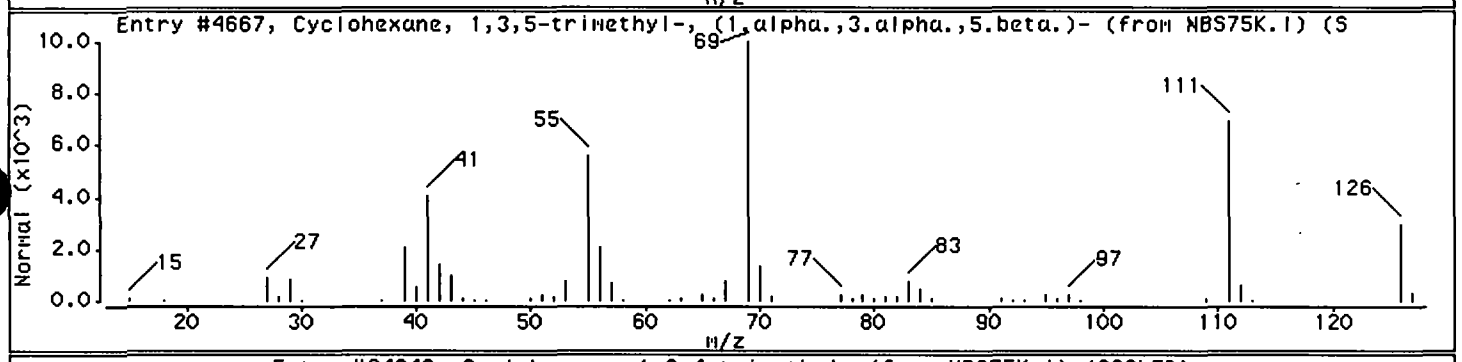
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

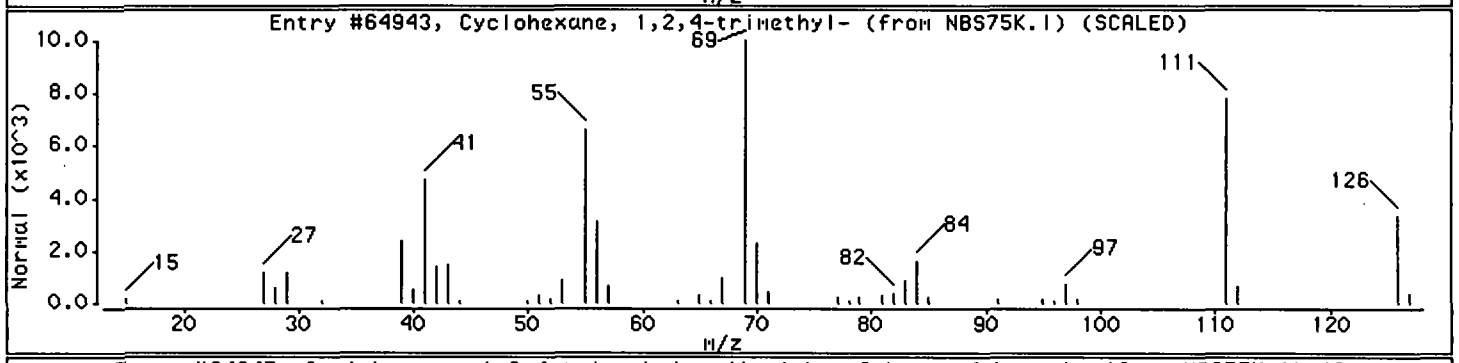
Operator: 0.5GSMP+5ULIS

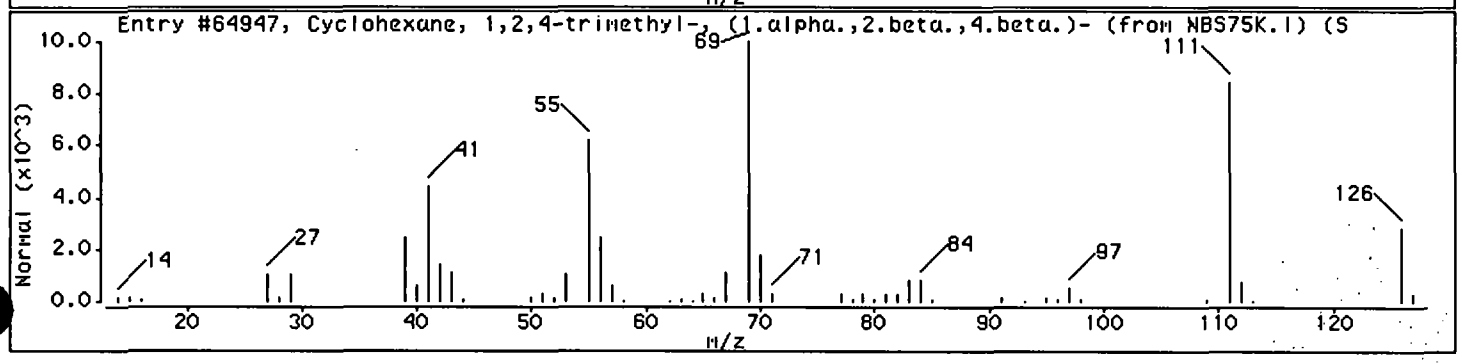
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,3,5-trimethyl-, (1.alpha.	1795-26-2	NBS75K.l	4667	90	C9H18	126
Cyclohexane, 1,2,4-trimethyl-	2234-75-5	NBS75K.l	64943	90	C9H18	126
Cyclohexane, 1,2,4-trimethyl-, (1.alpha.	7667-60-9	NBS75K.l	64947	87	C9H18	126









Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

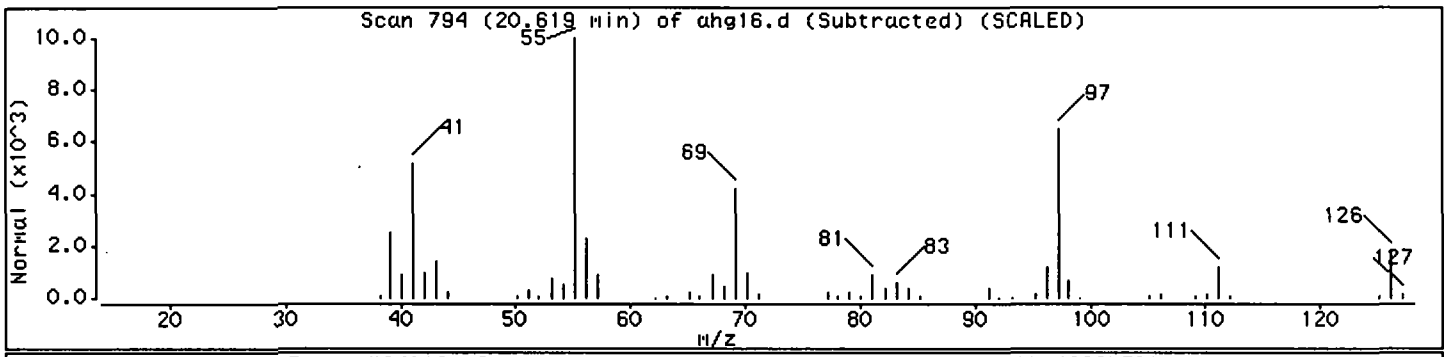
Client ID: WS-01 Instrument: gcl2.i

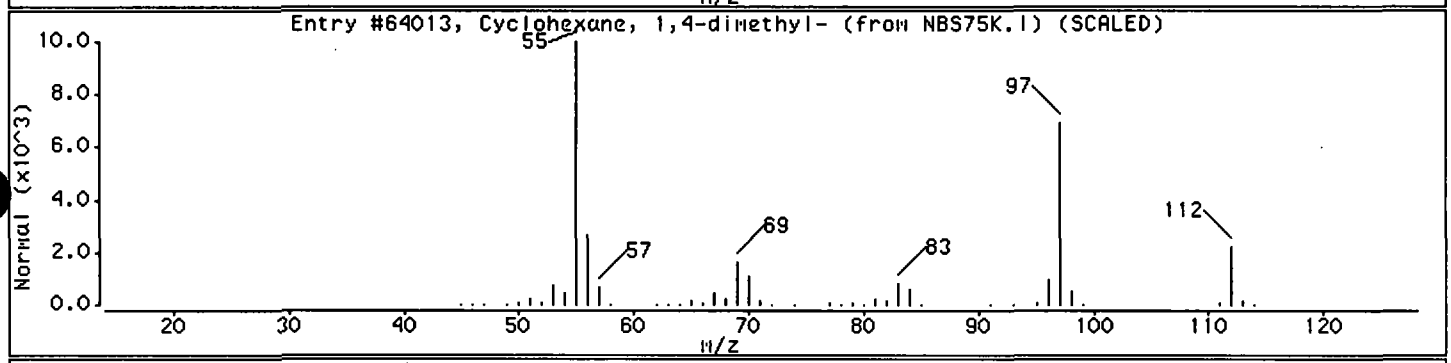
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

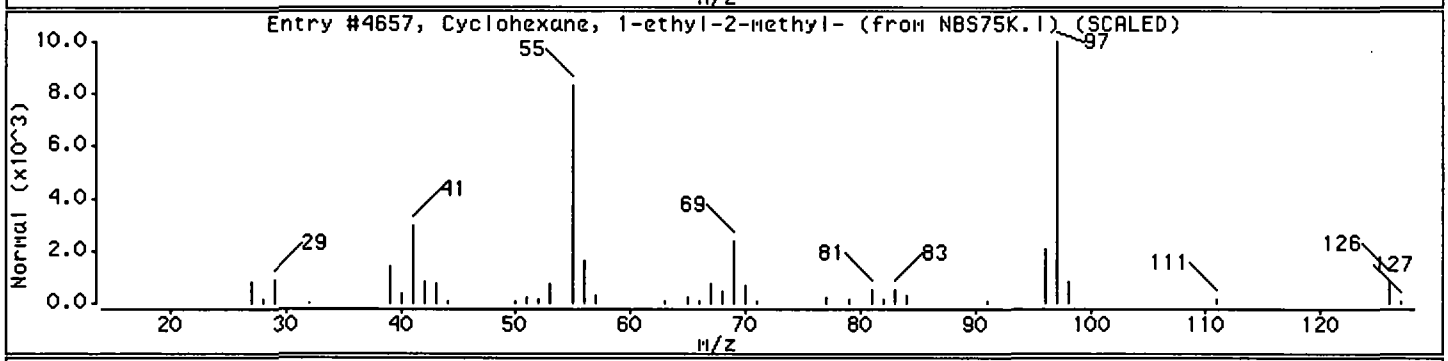
Operator: 0.5GSMP+5ULIS

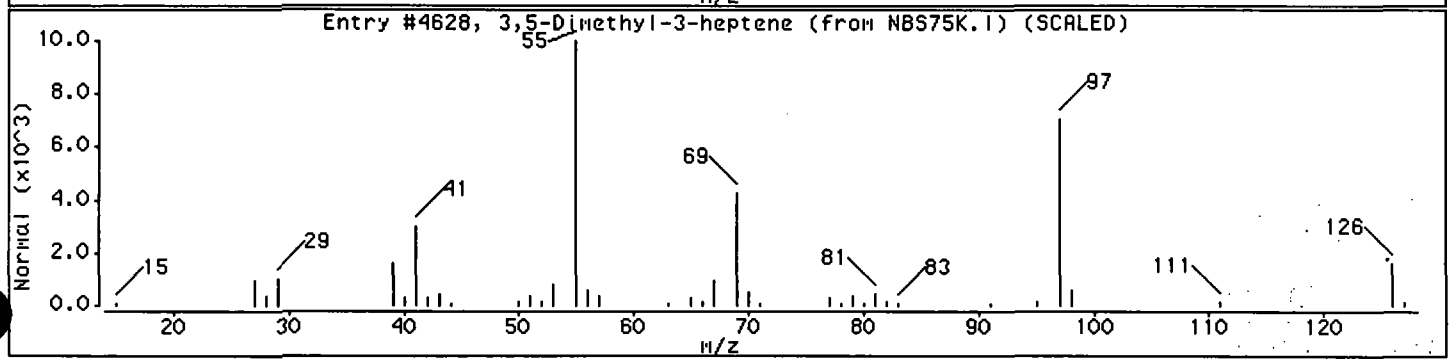
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,4-dimethyl-	589-90-2	NBS75K.l	64013	72	C8H16	112
Cyclohexane, 1-ethyl-2-methyl-	3728-54-9	NBS75K.l	4657	64	C9H18	126
3,5-Dimethyl-3-heptene	59643-68-4	NBS75K.l	4628	62	C9H18	126









Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

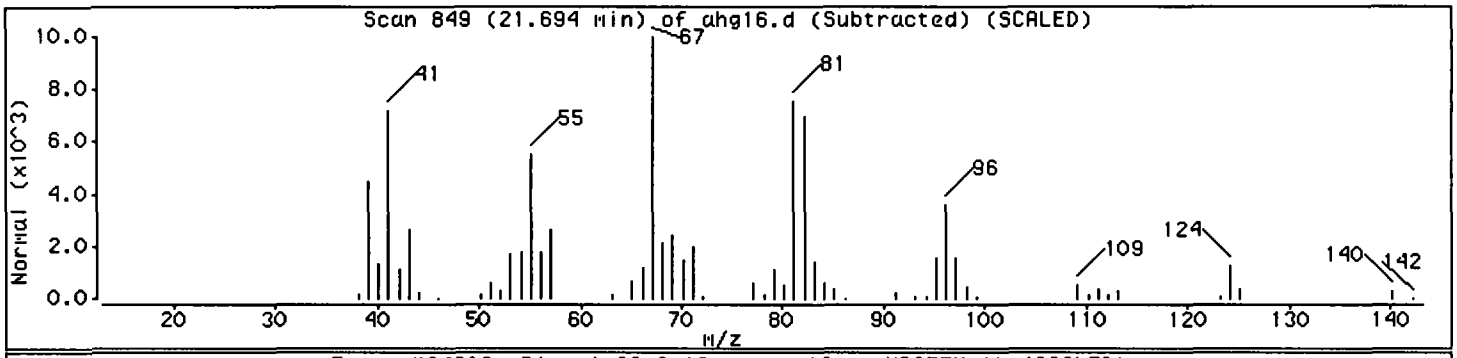
Client ID: WS-01 Instrument: gcl2.i

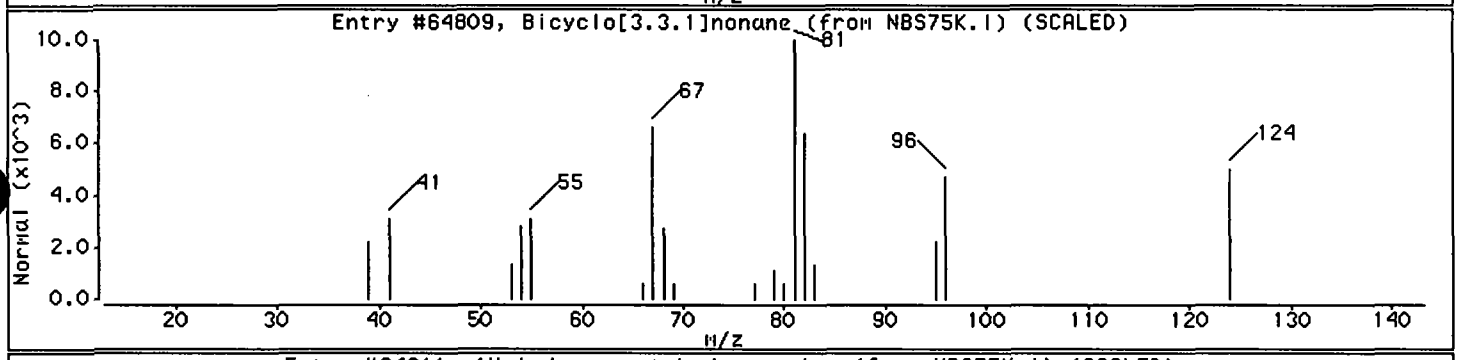
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

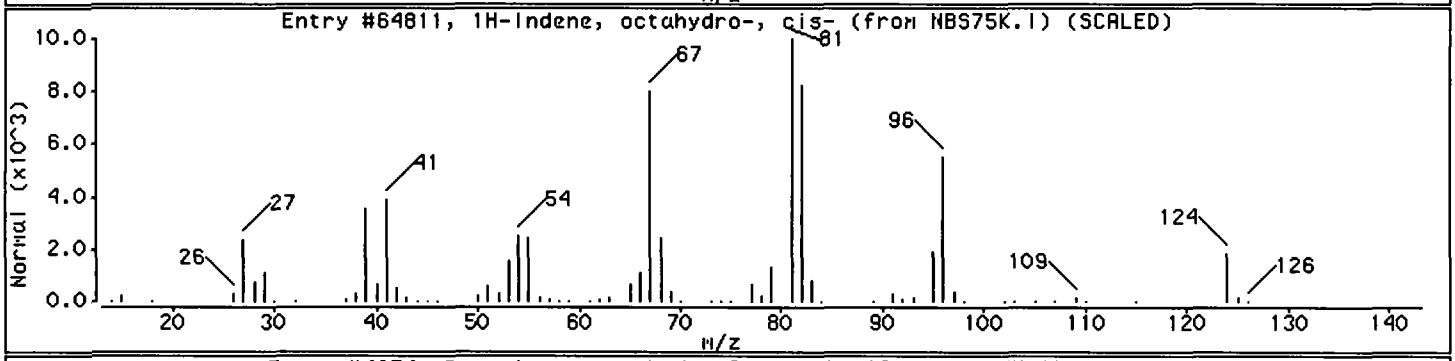
Operator: 0.5GSMP+5ULIS

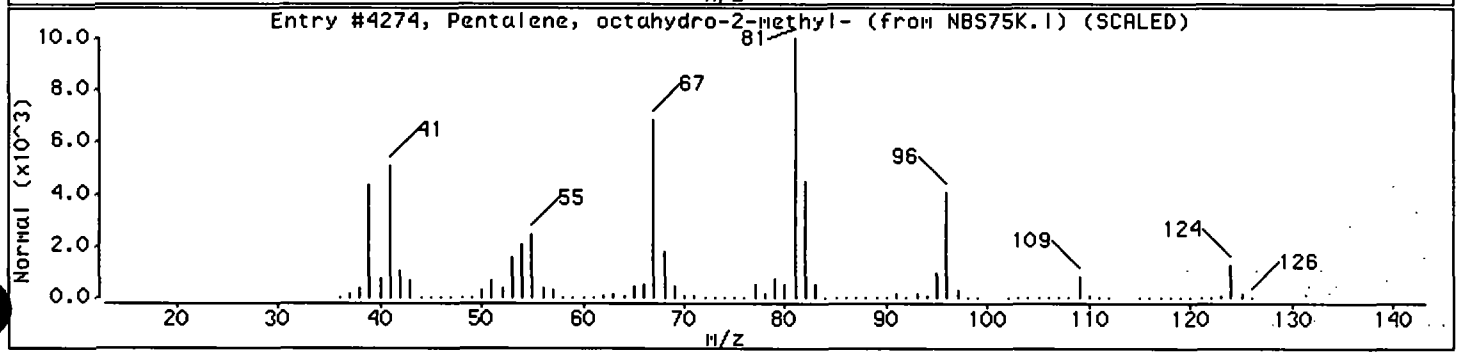
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.3.1]nonane	280-65-9	NBS75K.l	64809	89	C9H16	124
1H-Indene, octahydro-, cis-	4551-51-3	NBS75K.l	64811	76	C9H16	124
Pentalene, octahydro-2-methyl-	3868-64-2	NBS75K.l	4274	49	C9H16	124









Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

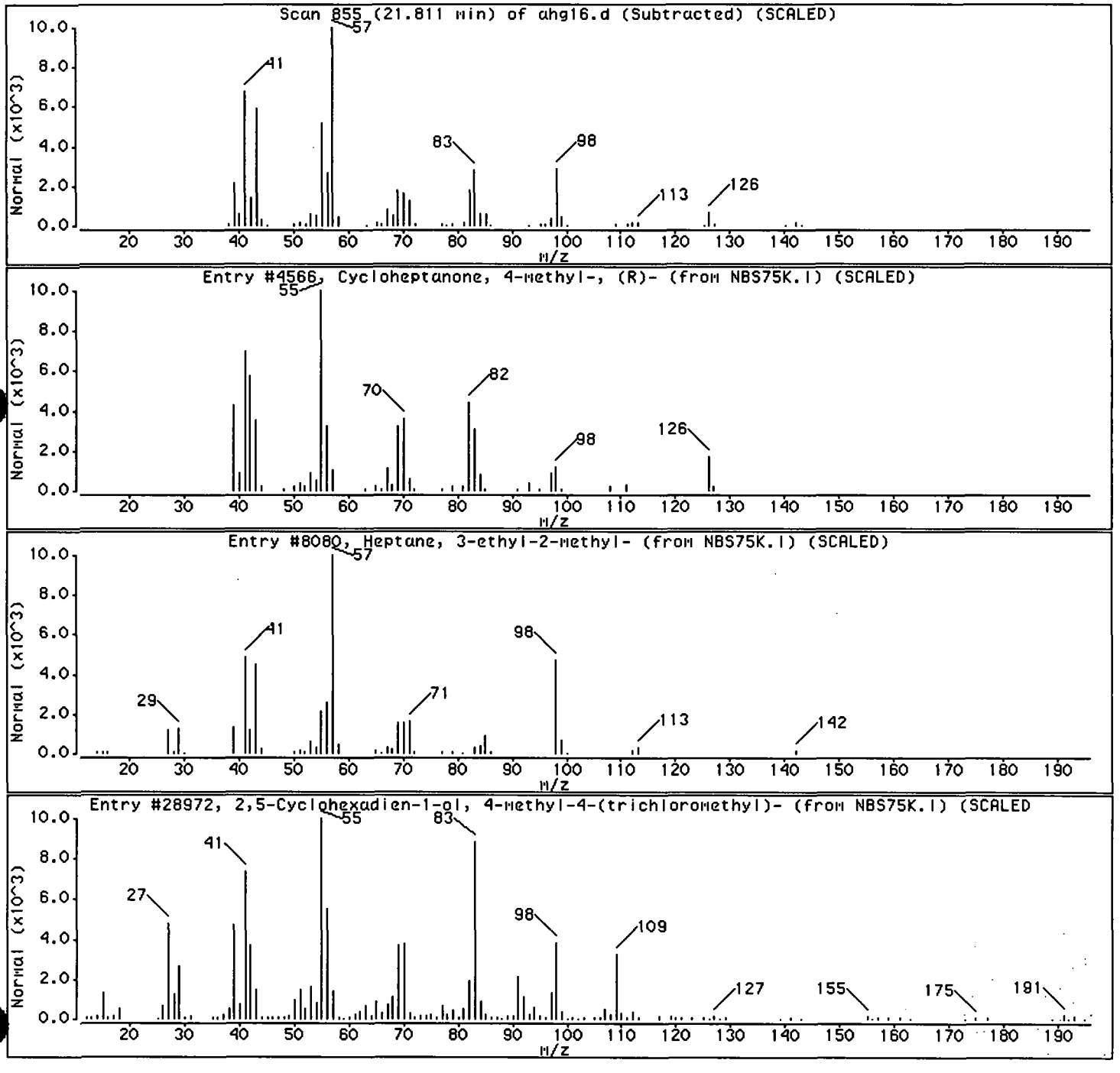
Client ID: WS-01 Instrument: gcl2.i

Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cycloheptanone, 4-methyl-, (R)-	13609-59-1	NBS75K.l	4566	38	C8H14O	126
Heptane, 3-ethyl-2-methyl-	14676-29-0	NBS75K.l	8080	38	C10H22	142
2,5-Cyclohexadien-1-ol, 4-methyl-4-(tric	13630-61-0	NBS75K.l	28972	38	C8H9Cl3O	226



Data File: /chem/gcl2.i/961130.b/ahg16.d

Date : 30-NOV-1996 21:40

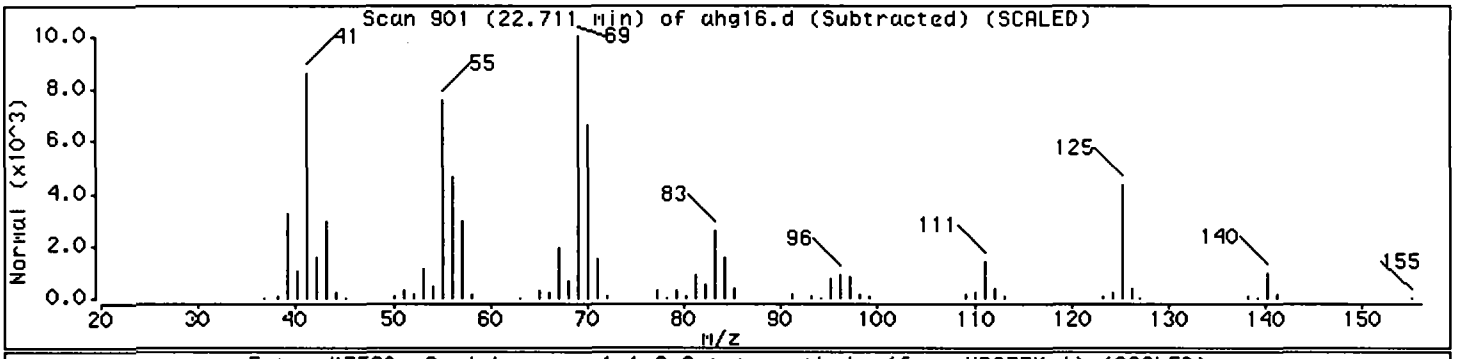
Client ID: WS-01 Instrument: gcl2.i

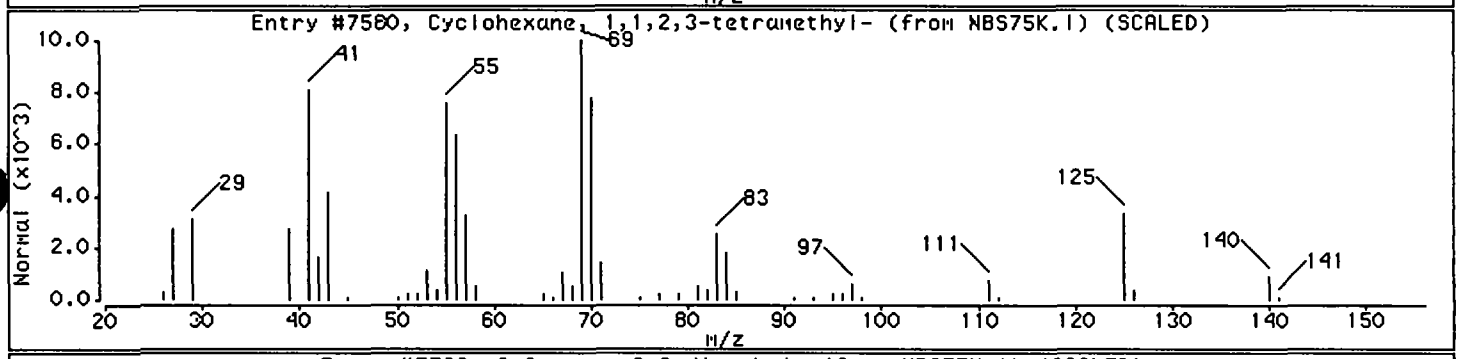
Sample Info: 9611G675-001 XBB30,[AL=0624He],[DC=00]

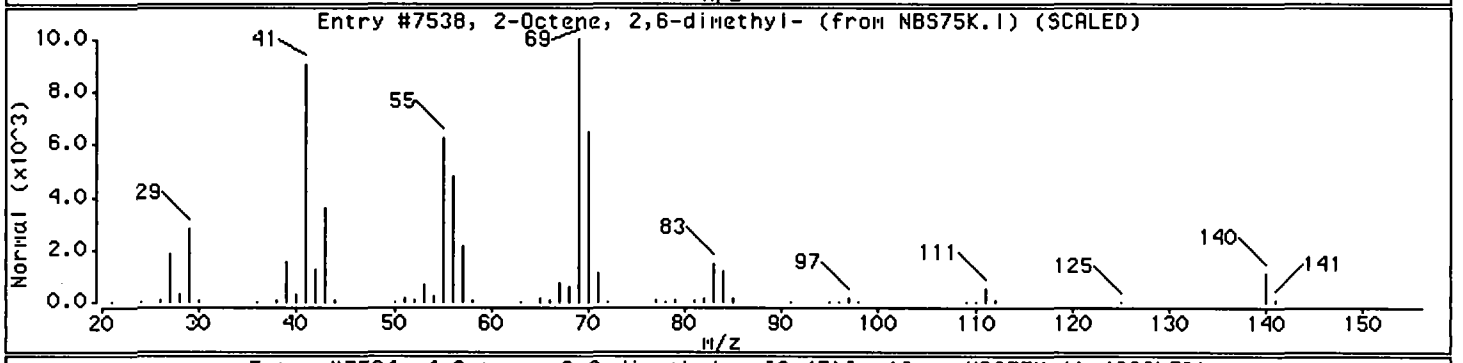
Operator: 0.5GSMP+5ULIS

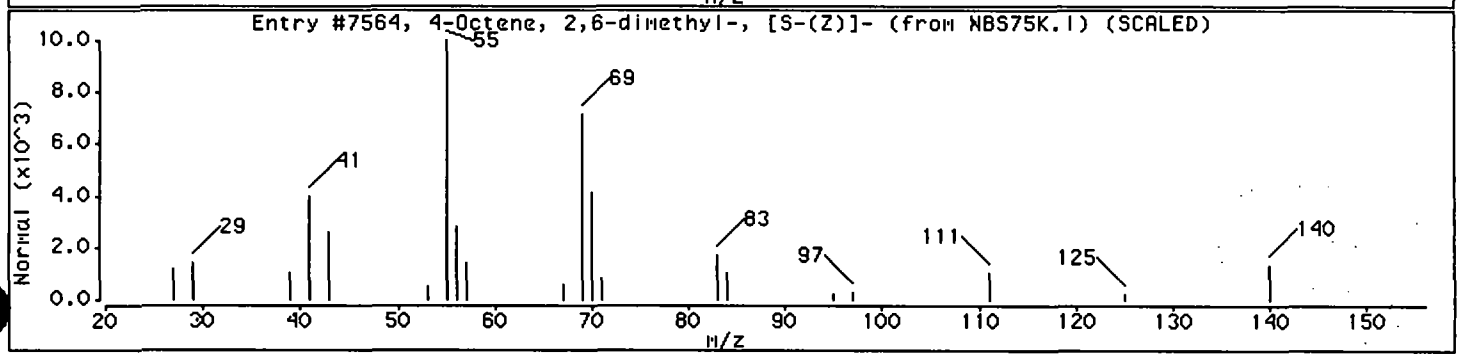
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	NBS75K.l	7580	93	C10H20	140
2-Octene, 2,6-dimethyl-	4057-42-5	NBS75K.l	7538	76	C10H20	140
4-Octene, 2,6-dimethyl-, [S-(Z)]-	62960-77-4	NBS75K.l	7564	64	C10H20	140









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-02

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG14

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 22 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	130	U
67-64-1	Acetone	130	U
75-15-0	Carbon Disulfide	130	U
75-35-4	1,1-Dichloroethene	130	U
75-34-3	1,1-Dichloroethane	130	U
540-59-0	1,2-Dichloroethene (total)	130	U
67-66-3	Chloroform	130	U
107-06-2	1,2-Dichloroethane	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	130	U
56-23-5	Carbon Tetrachloride	130	U
75-27-4	Bromodichloromethane	130	U
78-87-5	1,2-Dichloropropane	130	U
10061-01-5	cis-1,3-Dichloropropene	130	U
79-01-6	Trichloroethene	130	U
124-48-1	Dibromochloromethane	130	U
79-00-5	1,1,2-Trichloroethane	130	U
71-43-2	Benzene	130	U
10061-02-6	trans-1,3-Dichloropropene	130	U
75-25-2	Bromoform	130	U
108-10-1	4-Methyl-2-pentanone	130	U
591-78-6	2-Hexanone	130	U
127-18-4	Tetrachloroethene	130	U
79-34-5	1,1,2,2-Tetrachloroethane	130	U
108-88-3	Toluene	270	
108-90-7	Chlorobenzene	130	U
100-41-4	Ethylbenzene	63	J
100-42-5	Styrene	130	U
1330-20-7	Xylene (total)	280	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-02

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG14

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 22 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLOALKANE	14.85	2400	J
2.	UNKNOWN CYCLOALKANE	15.91	4400	J
3.	UNKNOWN HYDROCARBON	16.84	1500	J
4.	UNKNOWN CYCLOALKANE	17.49	3000	J
5.	UNKNOWN CYCLOALKANE	18.12	1600	J
6.	UNKNOWN CYCLOALKANE	19.23	3300	J
7.	UNKNOWN CYCLOALKANE	19.64	1500	J
8.	UNKNOWN	21.83	2600	J
9.	UNKNOWN CYCLOALKANE	22.73	2000	J
10.	UNKNOWN CYCLOALKANE	23.18	1700	J
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
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29.				
30.				

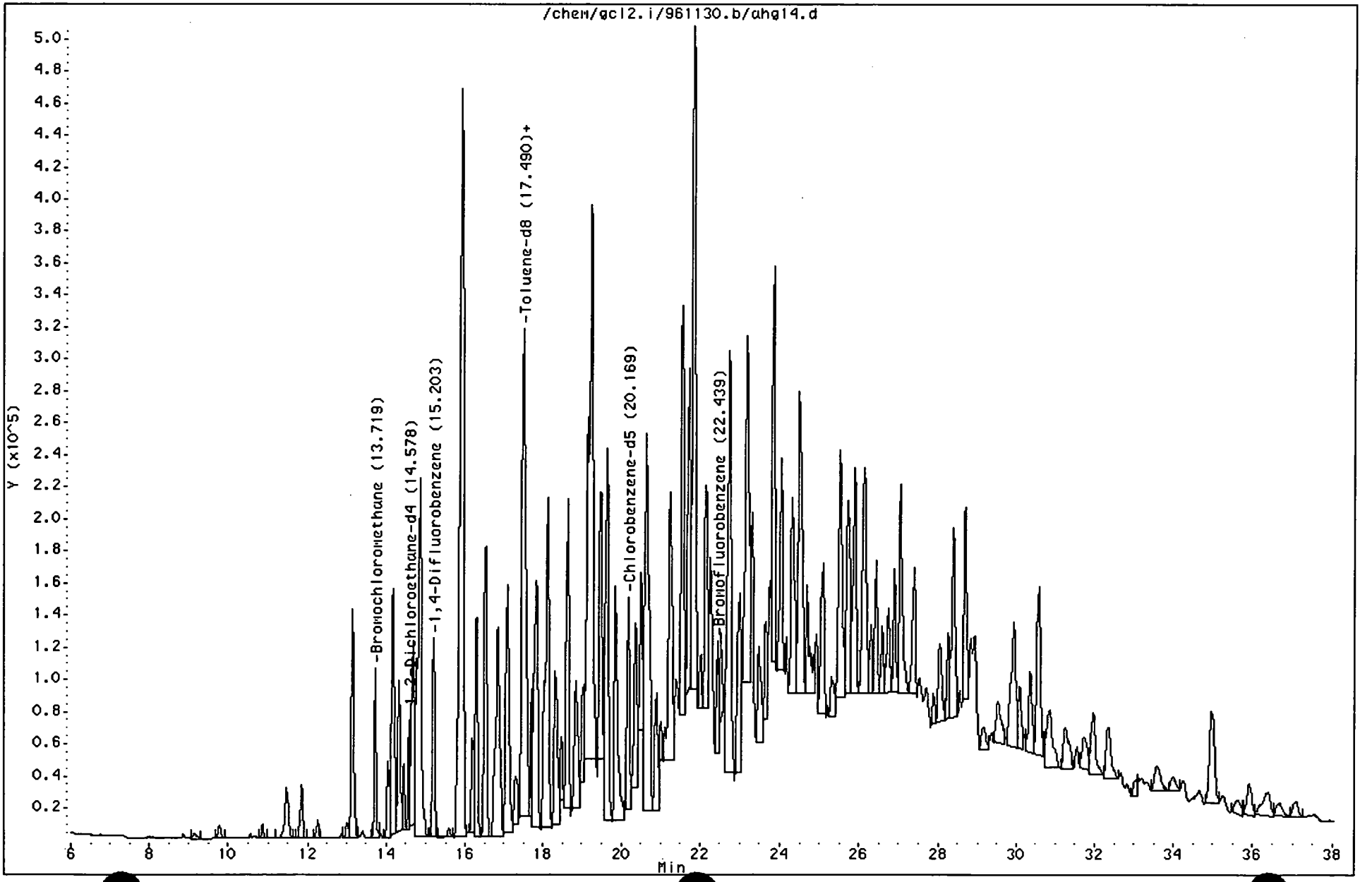
75

Data File: /chem/gcl2.i/961130.b/ahg14.d
Date : 30-NOV-1996 20:09
Client ID: WS-02
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: 0.5GSMP+5ULIS
Column diameter: 0.53

Column phase: Cap



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg14.d
Lab Smp Id: 9611G675-002 Client Smp ID: WS-02
Inj Date : 30-NOV-1996 20:09
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-002 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	22.400	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.719	13.755	(1.000)	45233	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.578	14.614	(1.063)	85870	46.208	59.547(a)
* 42 1,4-Difluorobenzene	114.00	15.203	15.239	(1.000)	168975	50.000	
$ 52 Toluene-d8	98.00	17.588	17.622	(0.872)	139781	58.003	74.746(aM)
53 Toluene	91.00	17.686	17.739	(0.877)	59905	21.323	274.78
* 61 Chlorobenzene-d5	117.00	20.169	20.218	(1.000)	108861	50.000	
63 Ethylbenzene	106.00	20.404	20.433	(1.012)	4724	4.885	62.956(aM)
65 m,p-xylene	91.00	20.619	20.668	(1.022)	52173	20.305	261.66
M 71 Xylene (total)	91.00				59660	21.974	283.17
66 o-xylene	91.00	21.402	21.430	(1.061)	7487	2.758	35.537(aM)
$ 69 Bromofluorobenzene	95.00	22.439	22.484	(1.113)	54882	31.518	40.617(aM)

JK 1-7-97

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gc12.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

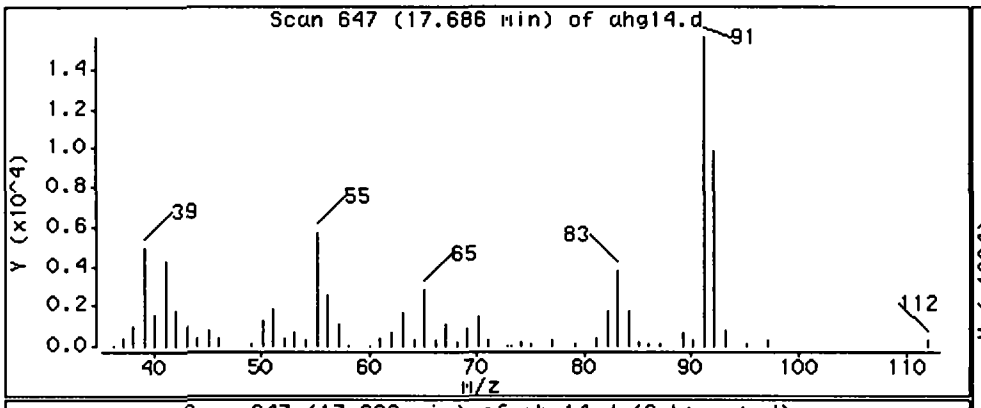
Client ID: WS-02 Instrument: gc12.i

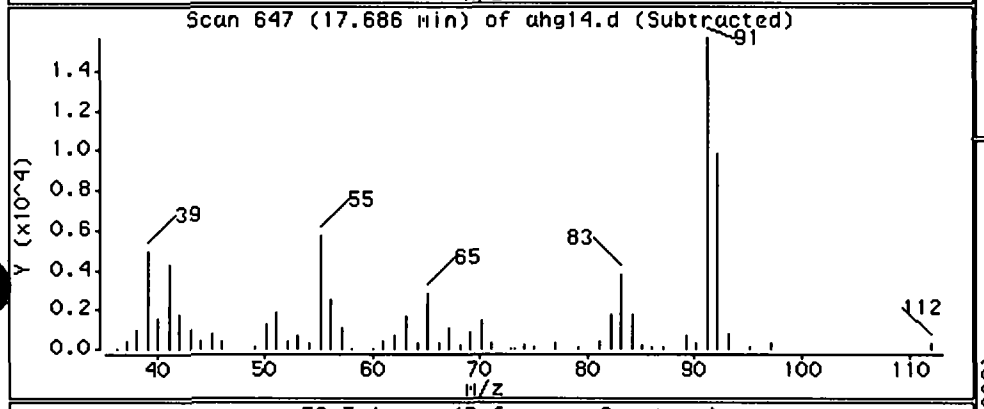
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

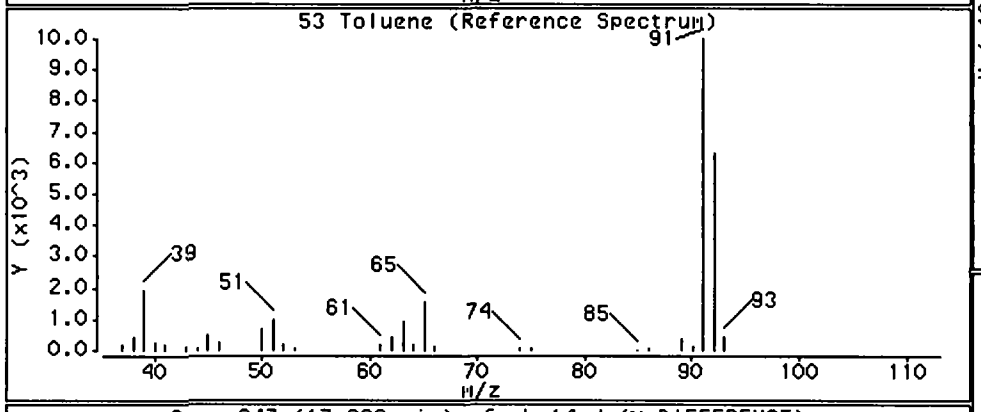
Operator: 0.5GSMP+5ULIS

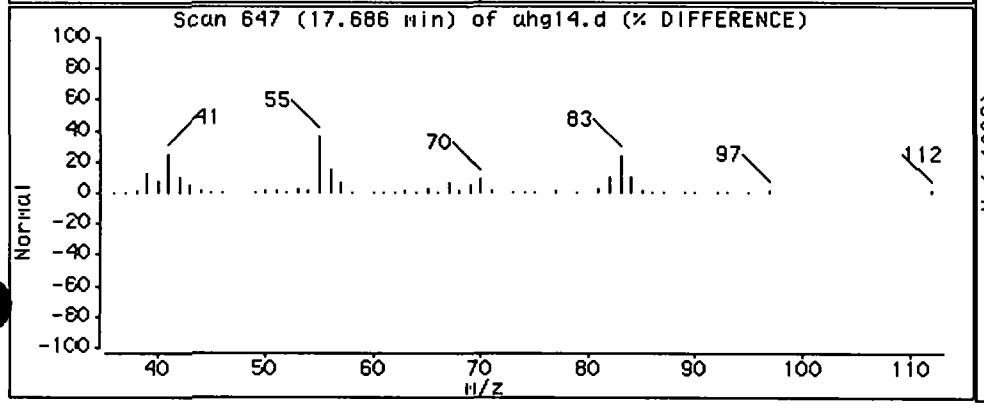
Column phase: Cap Column diameter: 0.53

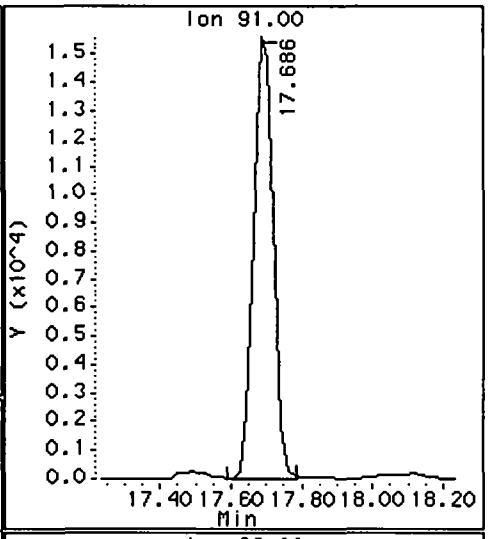
53 Toluene

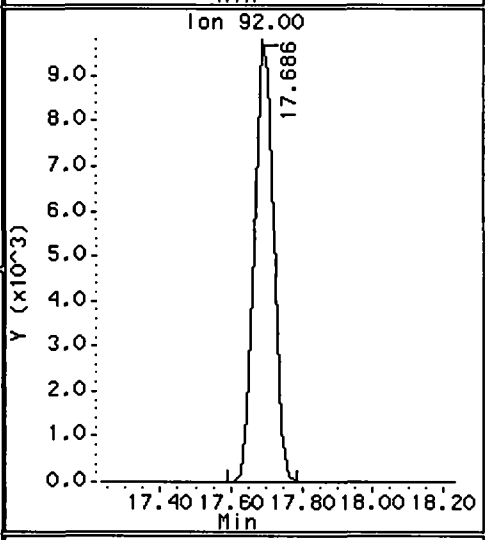


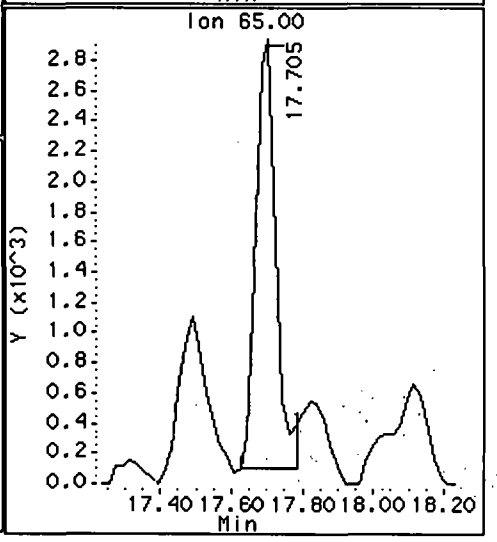












Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

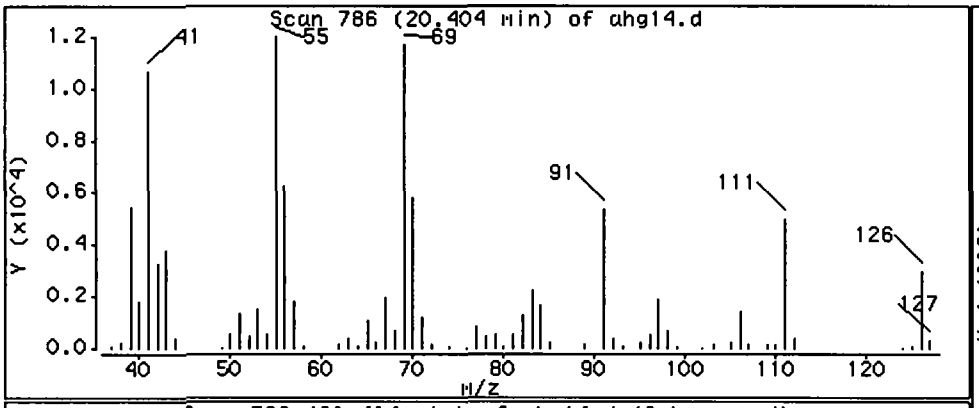
Client ID: WS-02 Instrument: gcl2.i

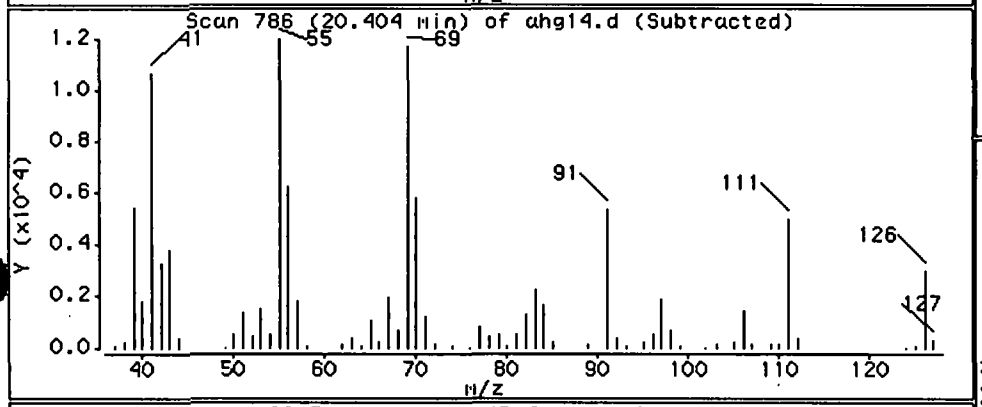
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

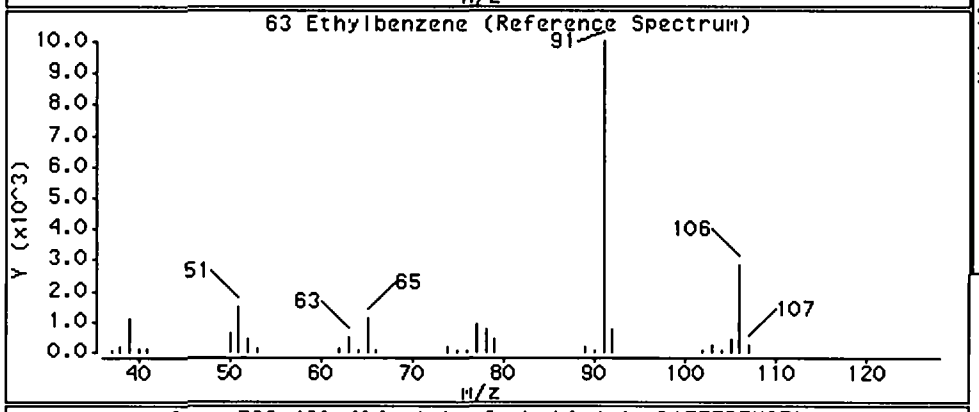
Operator: 0.5GSMP+5ULIS

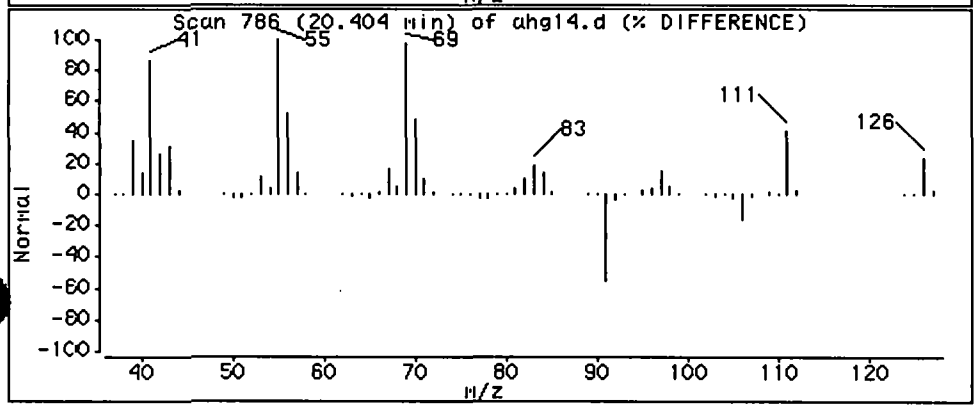
Column phase: Cap Column diameter: 0.53

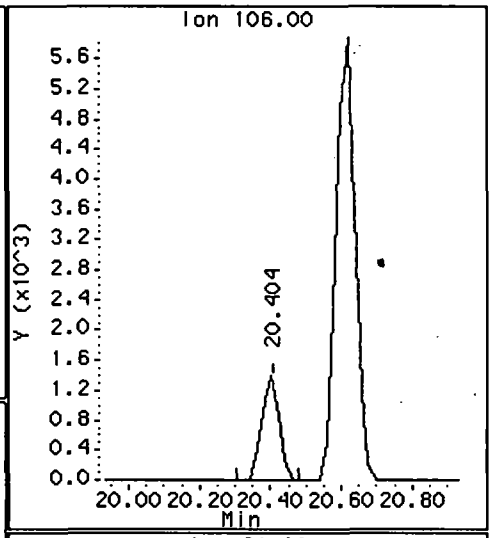
63 Ethylbenzene

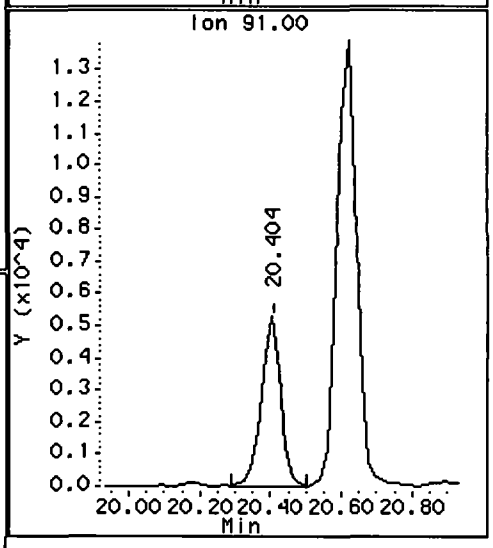


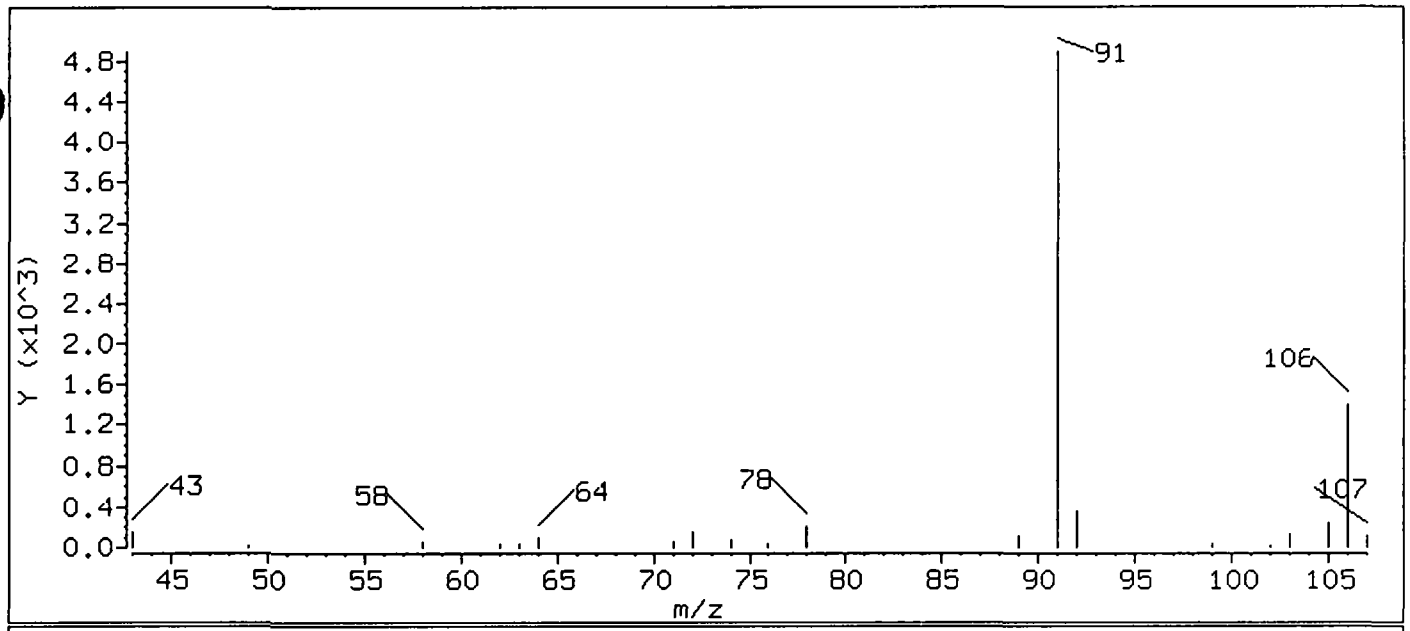


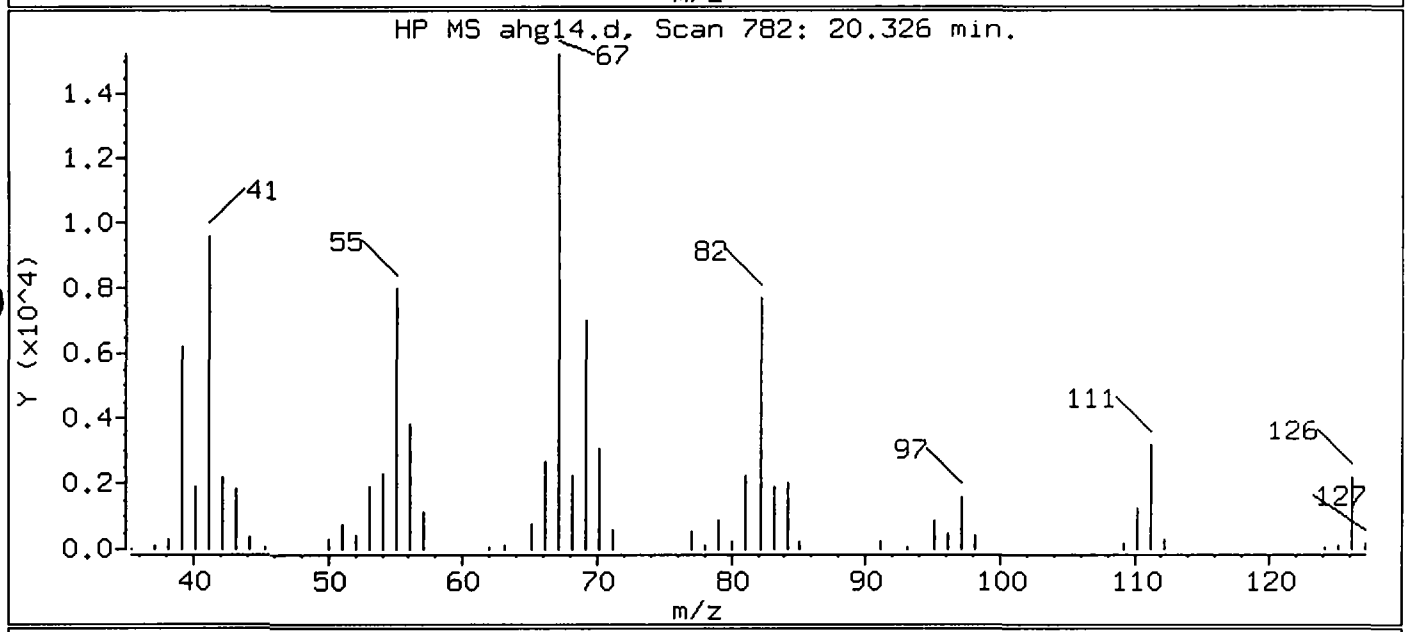


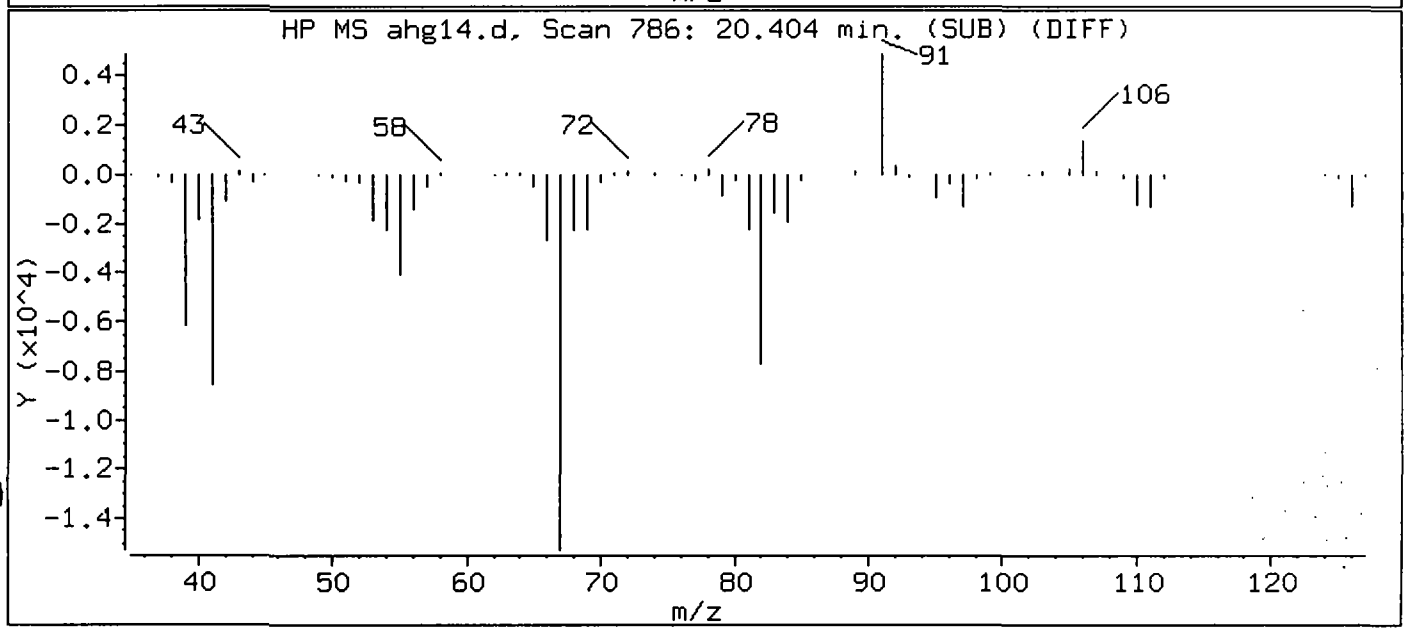







91
106
43
58
64
78
107
Y (x10^3)
m/z


HP MS ahg14.d, Scan 782: 20.326 min.
67
41
55
82
111
126
97
127
Y (x10^4)
m/z


HP MS ahg14.d, Scan 786: 20.404 min. (SUB) (DIFF)
91
106
43
58
72
78
Y (x10^4)
m/z

Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

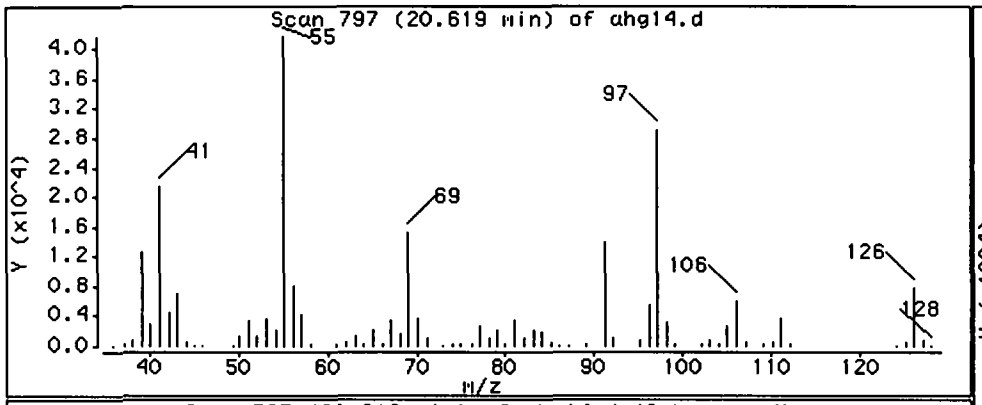
Client ID: WS-02 Instrument: gcl2.i

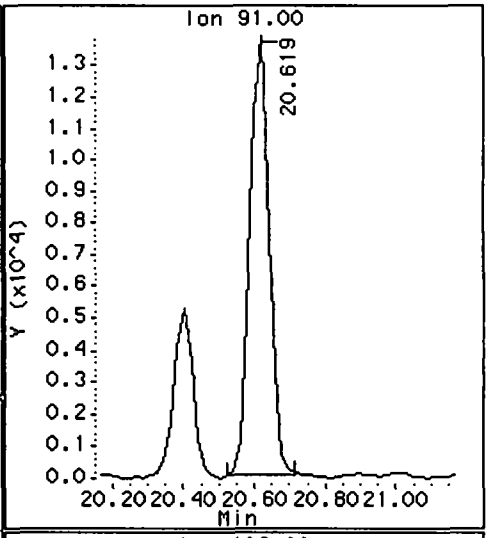
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

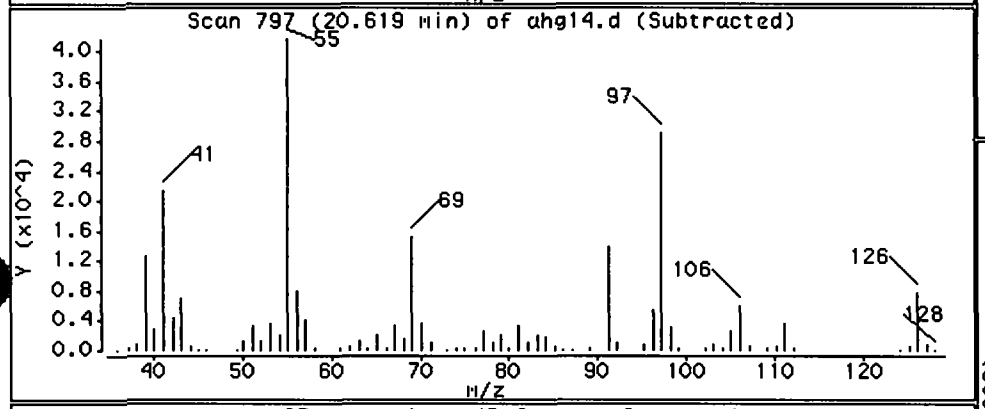
Operator: 0.5GSMP+5ULIS

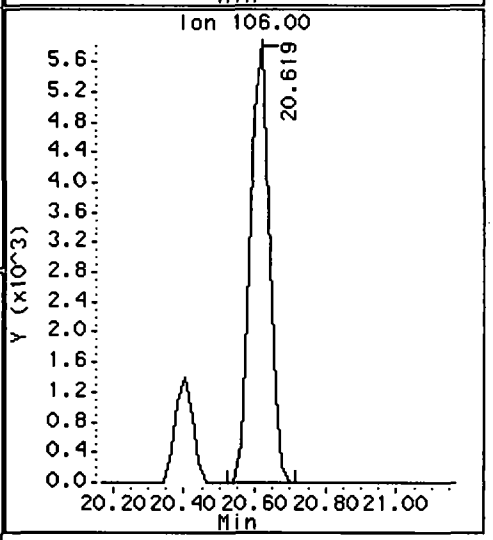
Column phase: Cap Column diameter: 0.53

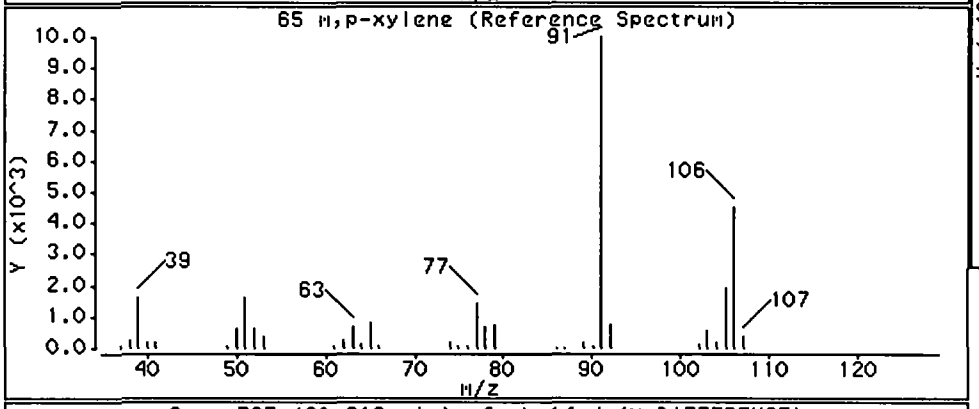
65 m,p-xylene

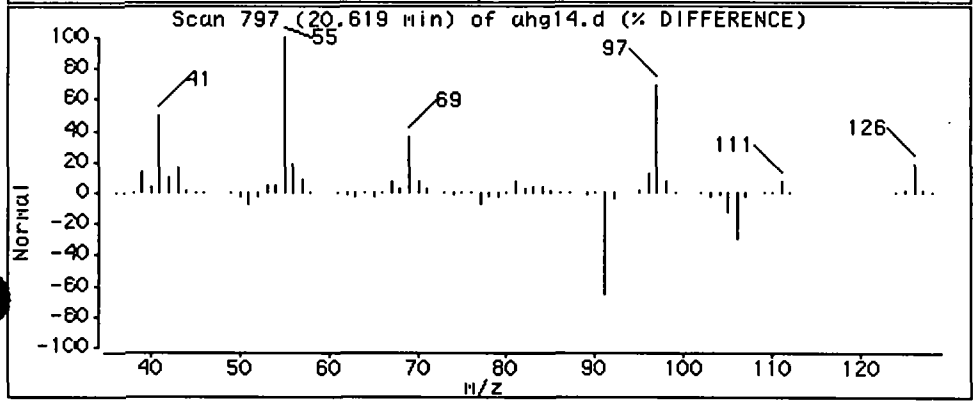


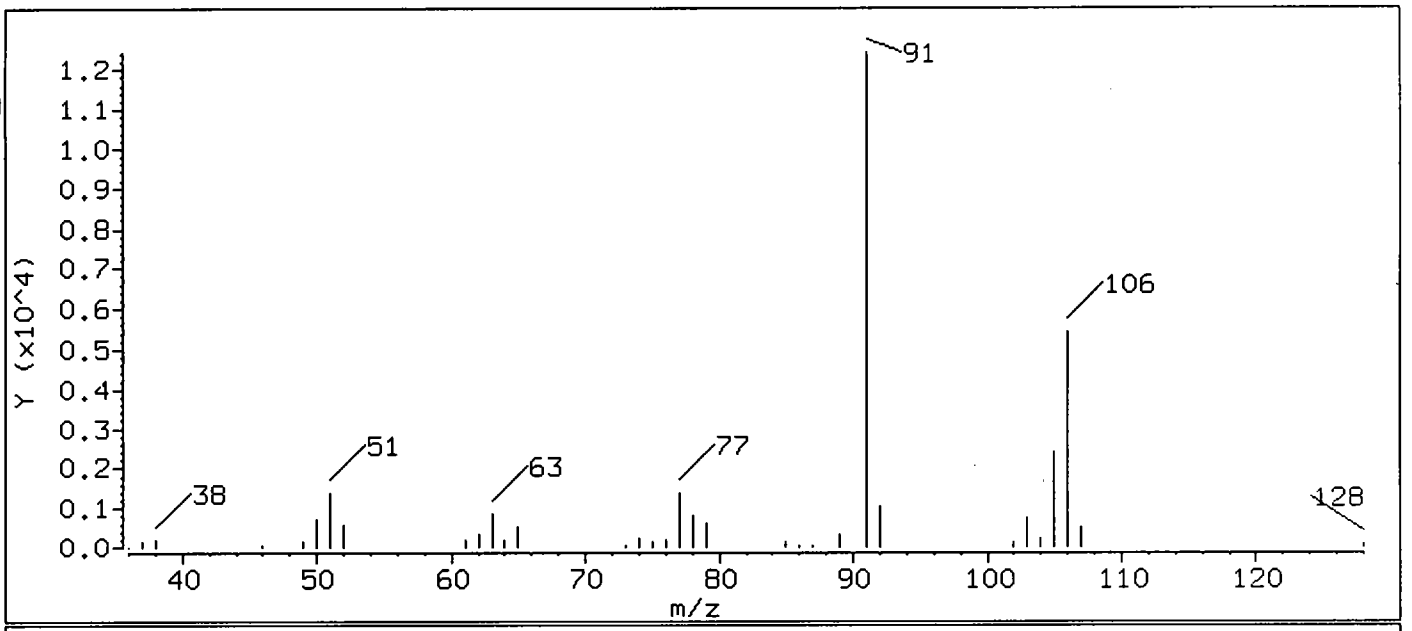


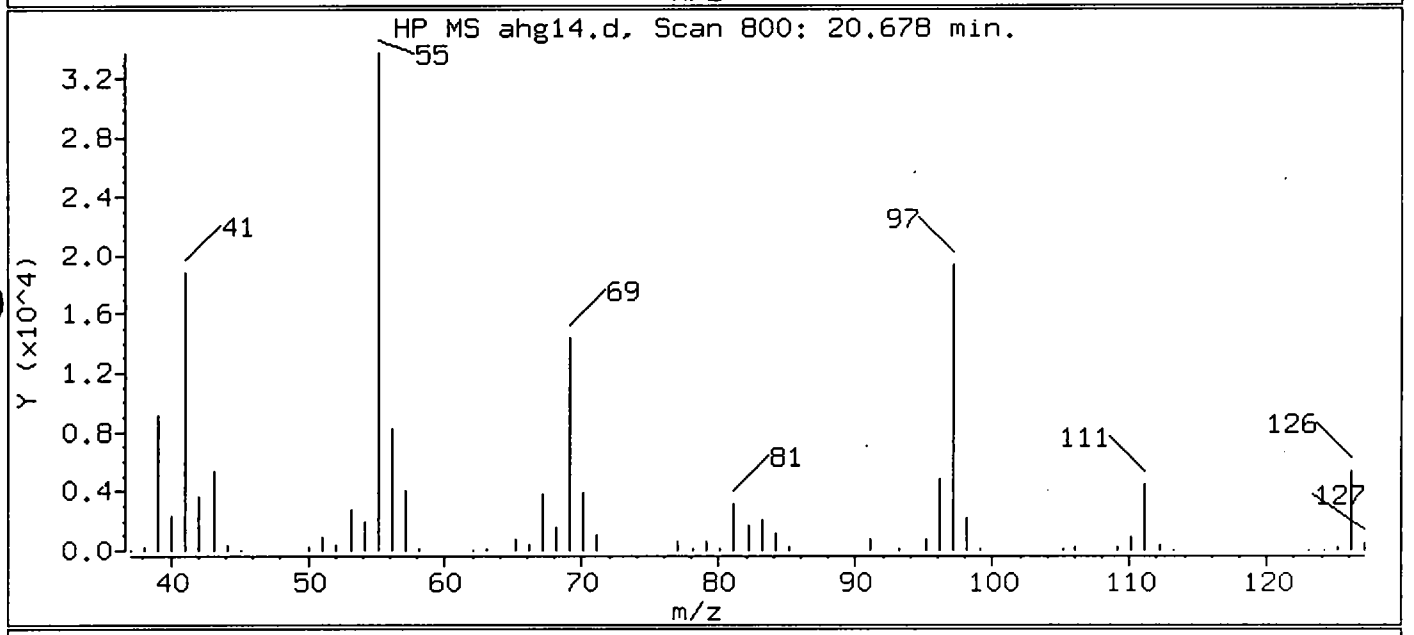









91
106
51
63
77
38
128
Y (x10^4)
m/z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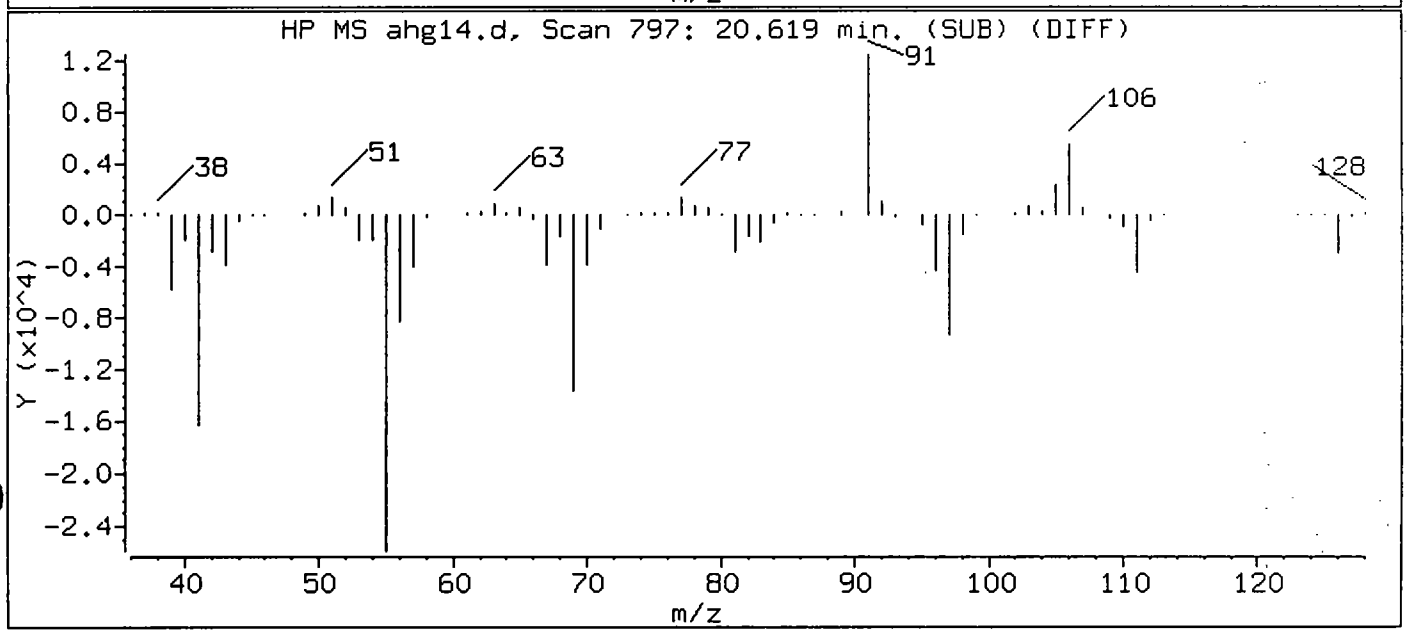
55
41
97
69
81
111
126
127
Y (x10^4)
m/z


HP MS ahg14.d, Scan 797: 20.619 min. (SUB) (DIFF)
91
106
38
51
63
77
128
Y (x10^4)
m/z

Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

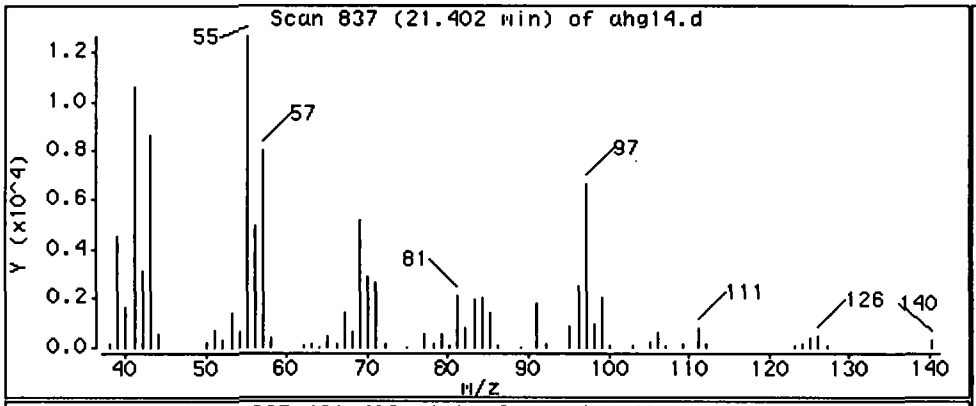
Client ID: WS-02 Instrument: gcl2.i

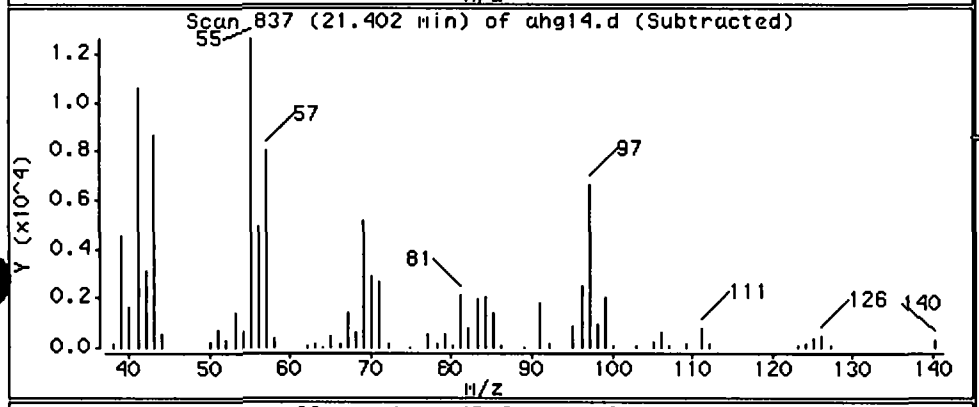
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

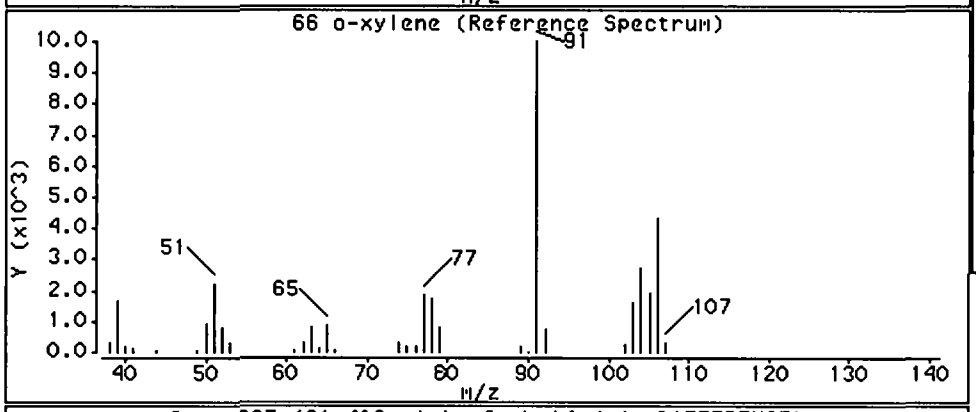
Operator: 0.5GSMP+5ULIS

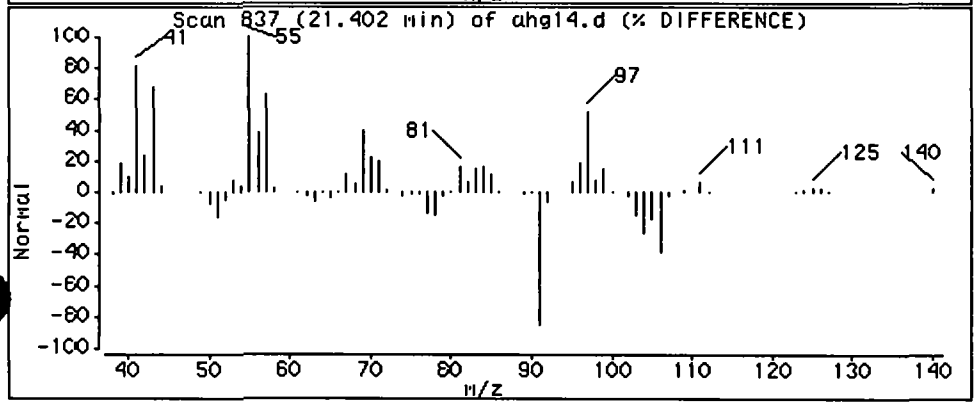
Column phase: Cap Column diameter: 0.53

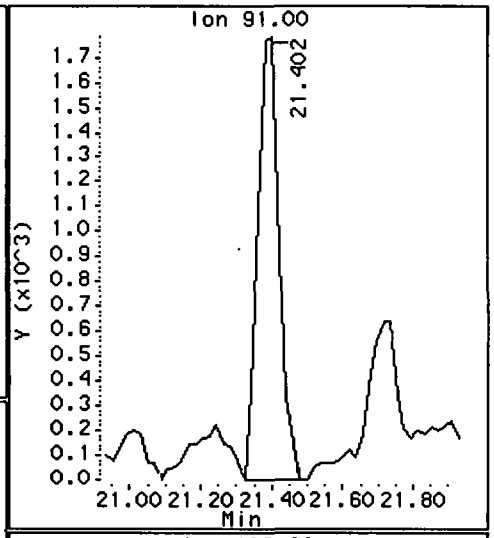
66 o-xylene

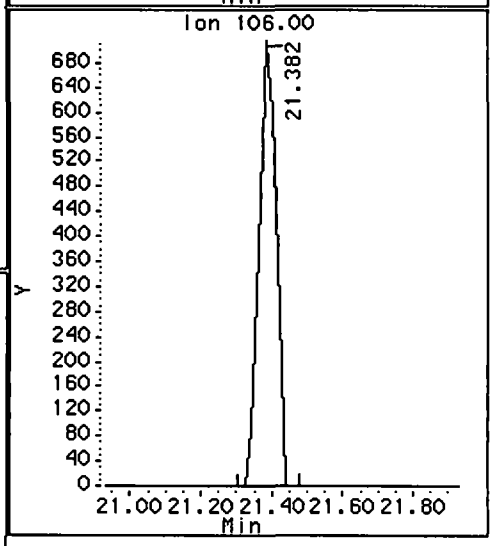


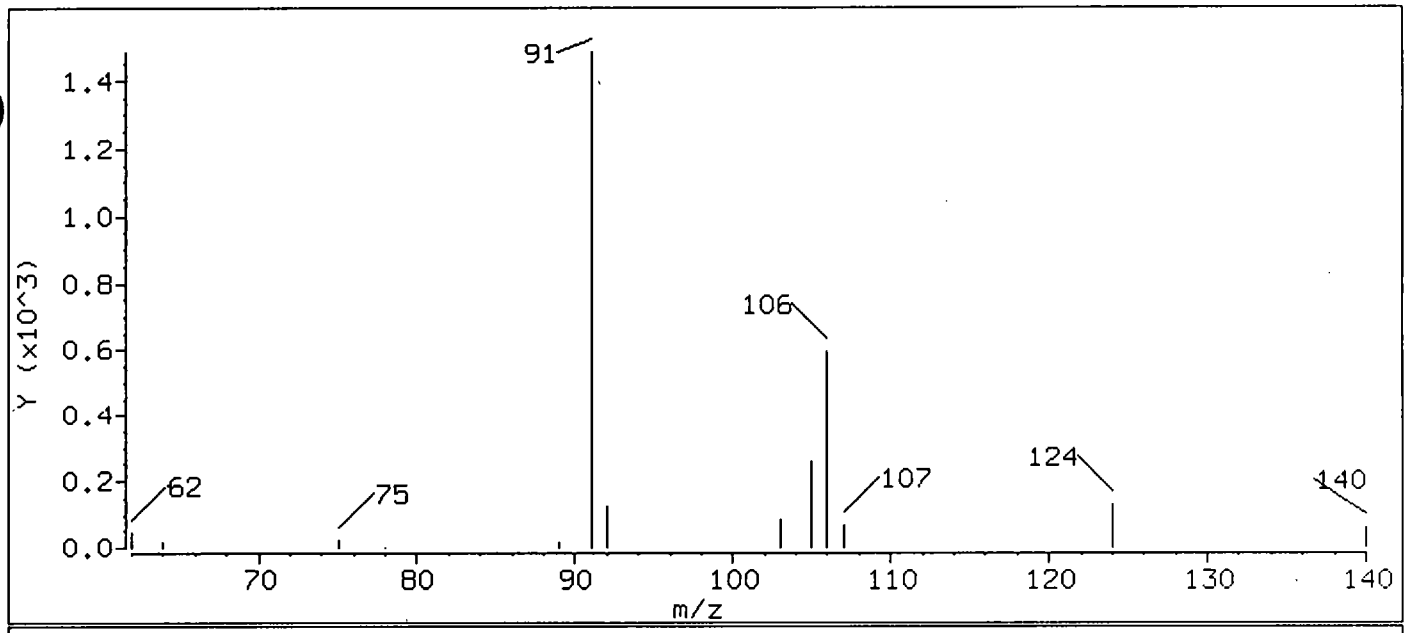


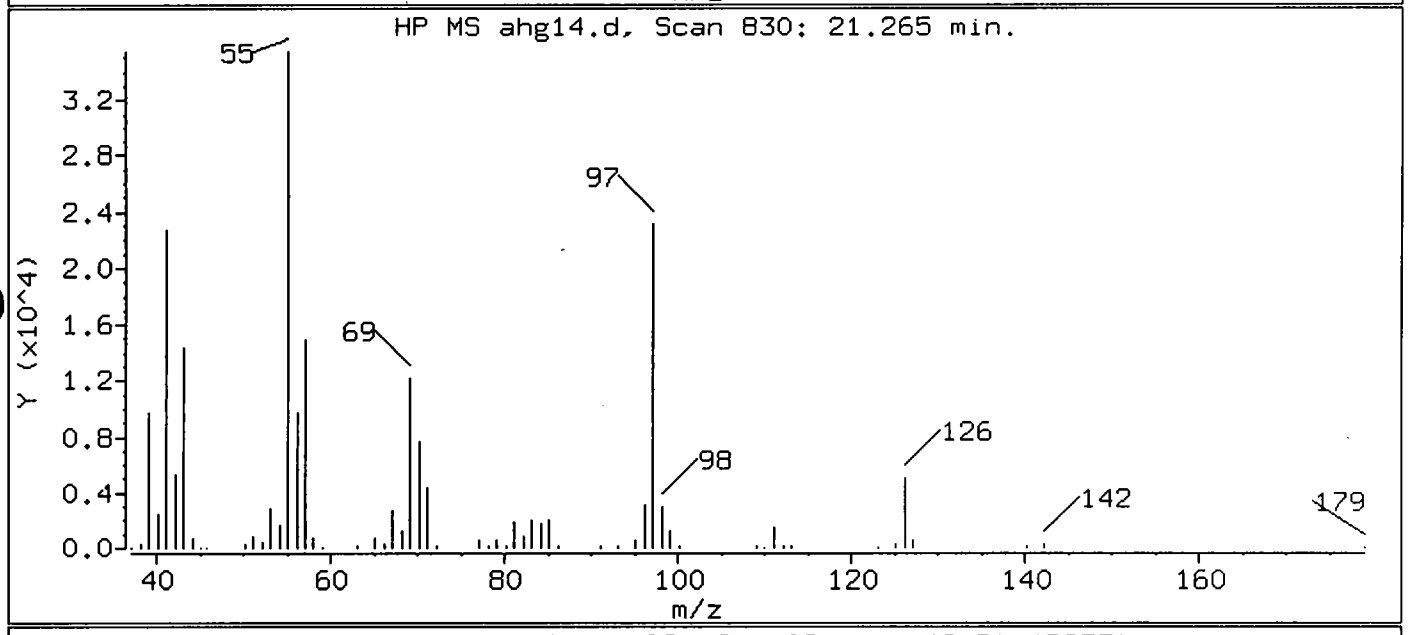









91
106
107
124
140
62
75
Y (x10^3)
m/z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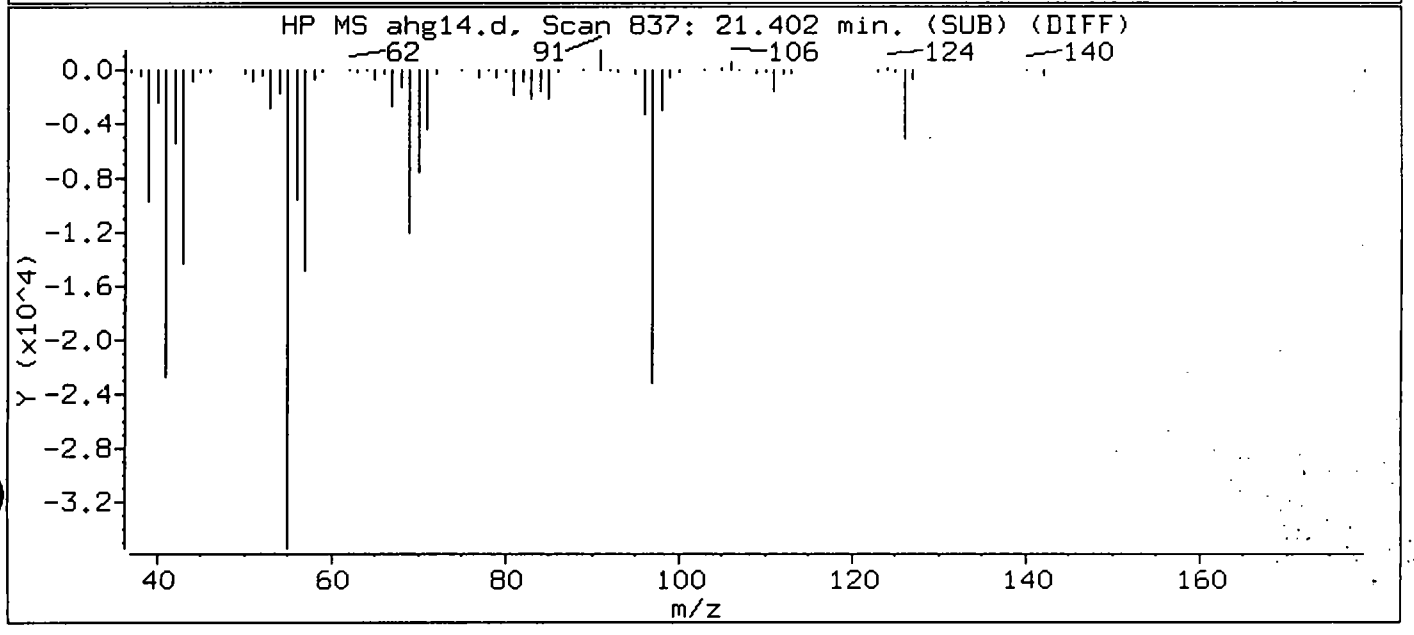
55
97
69
98
126
142
179
Y (x10^4)
m/z


HP MS ahg14.d, Scan 837: 21.402 min. (SUB) (DIFF)
62
91
106
124
140
Y (x10^4)
m/z

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg14.d
Lab Smp Id: 9611G675-002 Client Smp ID: WS-02
Inj Date : 30-NOV-1996 20:09
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-002 XBB30.[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	22.400	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 42 1,4-Difluorobenzene	15.203	444907	50.000
* 61 Chlorobenzene-d5	20.169	574830	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
14.852	1680133	188.82	2433.2	0		0	42
Unknown Cycloalkane					CAS #:		
15.906	3055052	343.34	4424.4	0		0	42
Unknown Hydrocarbon					CAS #:		
16.845	1022383	114.90	1480.6	0		0	42

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
17.490	2099560	235.95	3040.6	0		0	42
Unknown Cycloalkane					CAS #:		
18.116	1388327	120.76	1556.2	0		0	61
Unknown Cycloalkane					CAS #:		
19.231	2909207	253.05	3260.9	0		0	61
Unknown Cycloalkane					CAS #:		
19.641	1351110	117.52	1514.5	0		0	61
Unknown					CAS #:		
21.832	2284936	198.75	2561.2	0		0	61
Unknown Cycloalkane					CAS #:		
22.733	1755756	152.72	1968.0	0		0	61
Unknown Cycloalkane					CAS #:		
23.183	1528958	132.99	1713.8	0		0	61

Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

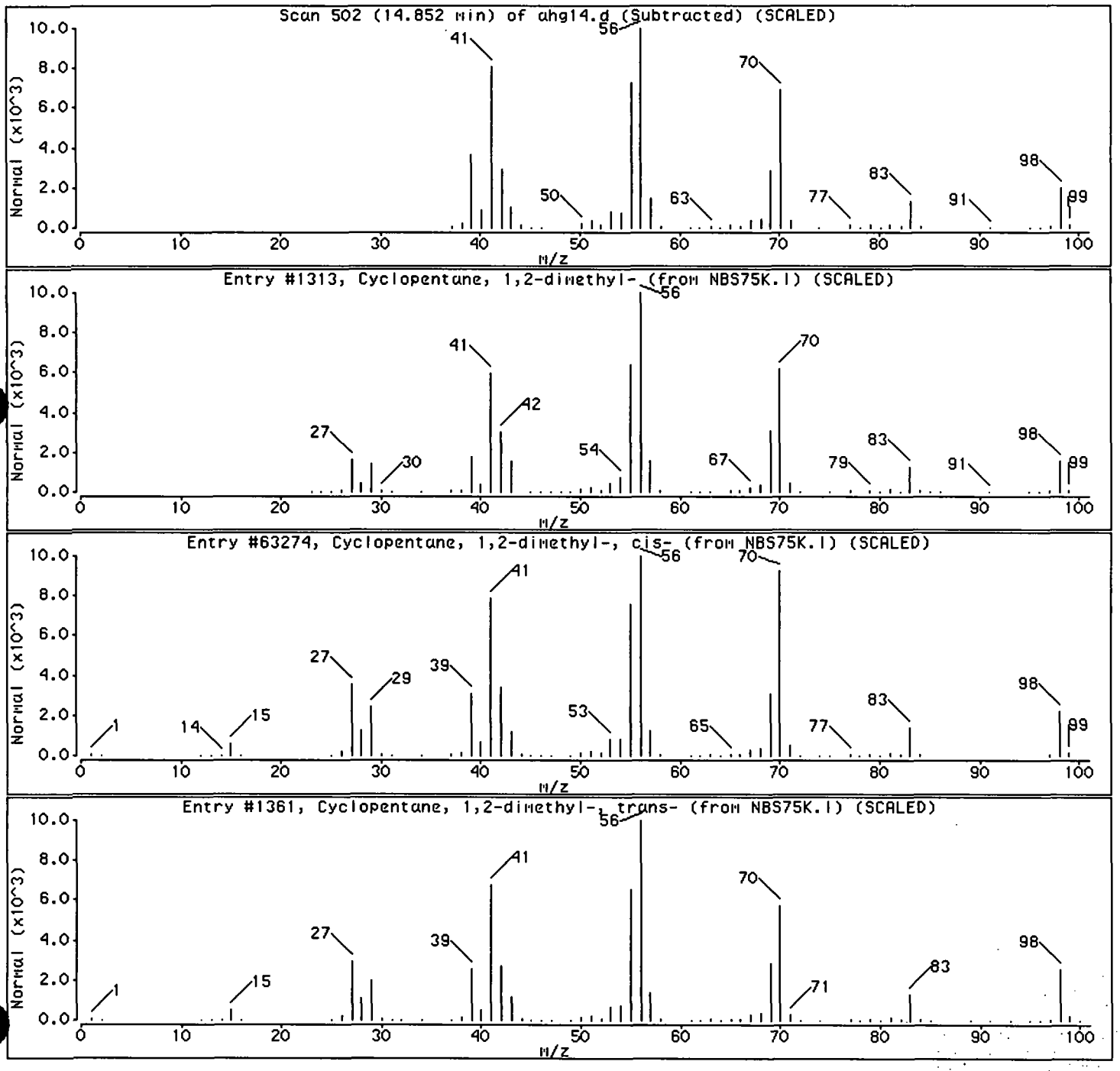
Client ID: WS-02 Instrument: gcl2.i

Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2-dimethyl-	2452-99-5	NBS75K.l	1313	97	C7H14	98
Cyclopentane, 1,2-dimethyl-, cis-	1192-18-3	NBS75K.l	63274	95	C7H14	98
Cyclopentane, 1,2-dimethyl-, trans-	822-50-4	NBS75K.l	1361	91	C7H14	98



Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

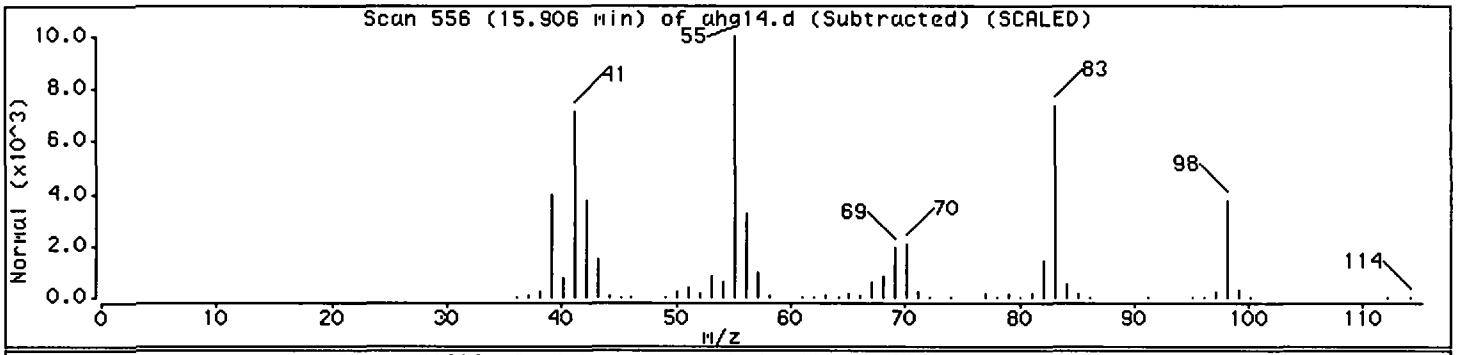
Client ID: WS-02 Instrument: gcl2.i

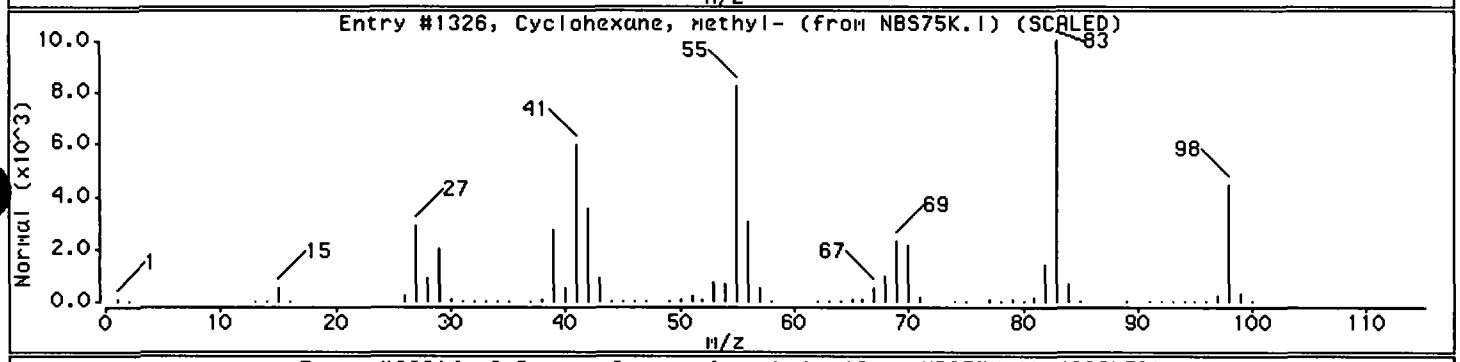
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

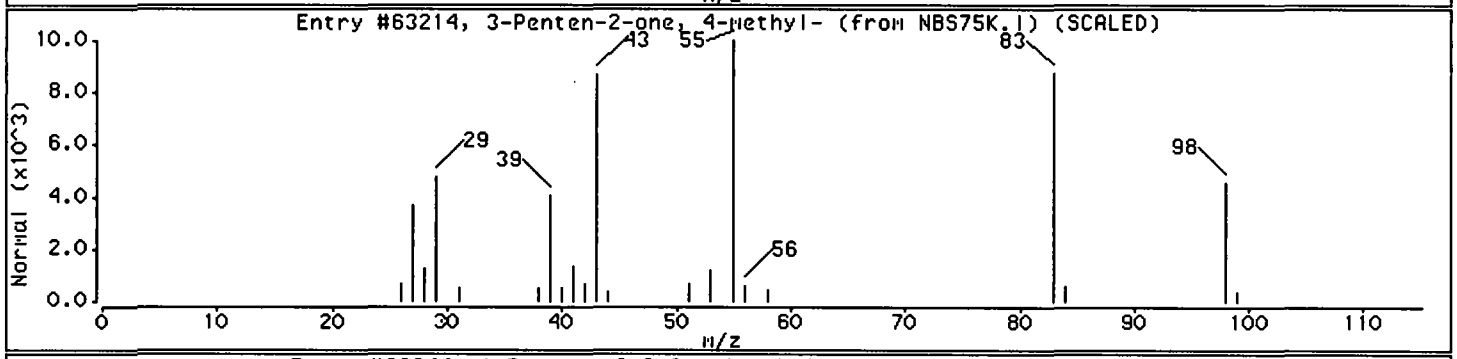
Operator: 0.5GSMP+5ULIS

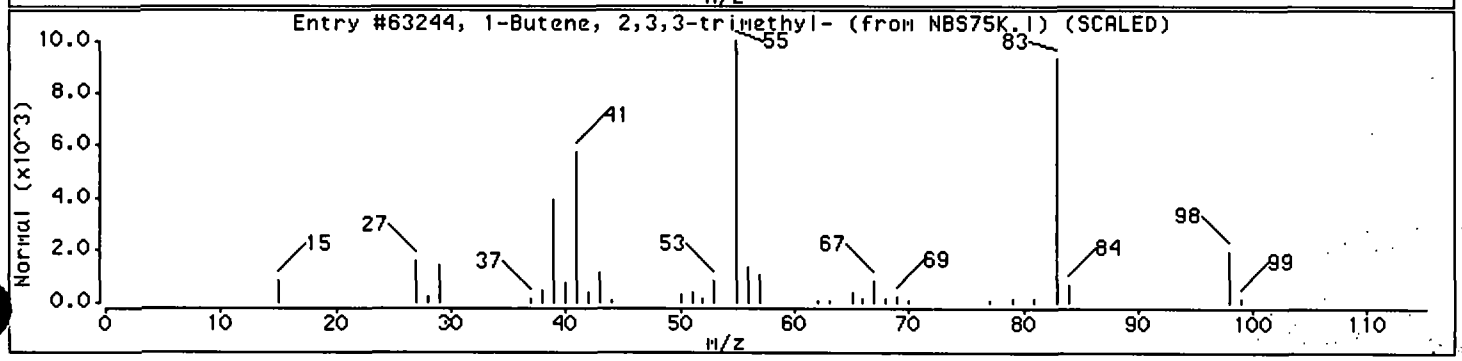
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, methyl-	108-87-2	NBS75K.l	1326	93	C7H14	98
3-Penten-2-one, 4-methyl-	141-79-7	NBS75K.l	63214	53	C6H10O	98
1-Butene, 2,3,3-trimethyl-	594-56-9	NBS75K.l	63244	53	C7H14	98









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

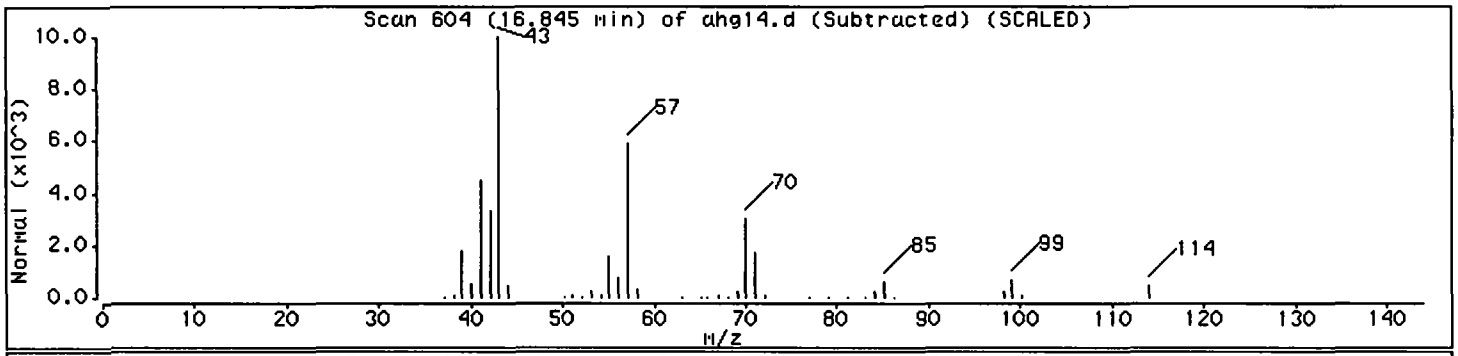
Client ID: WS-02 Instrument: gcl2.i

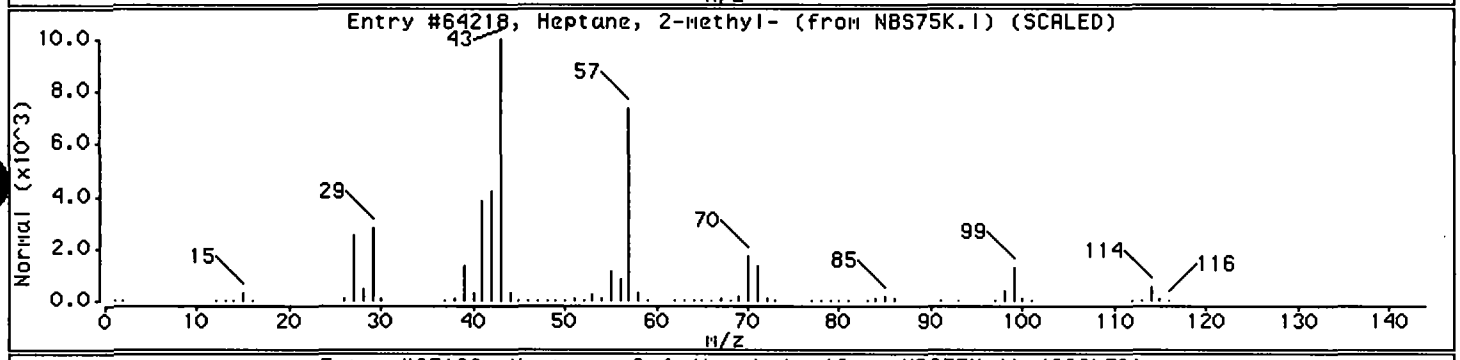
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

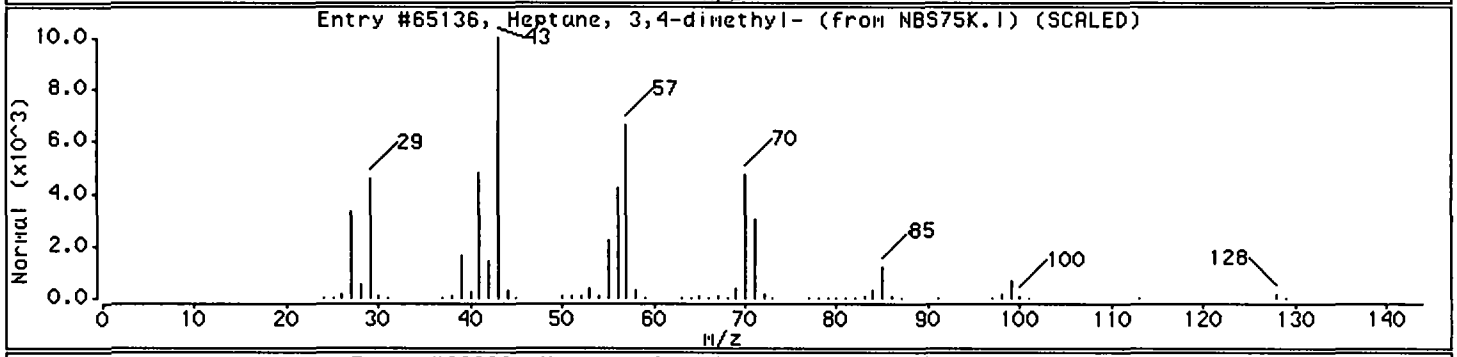
Operator: 0.5GSMP+5ULIS

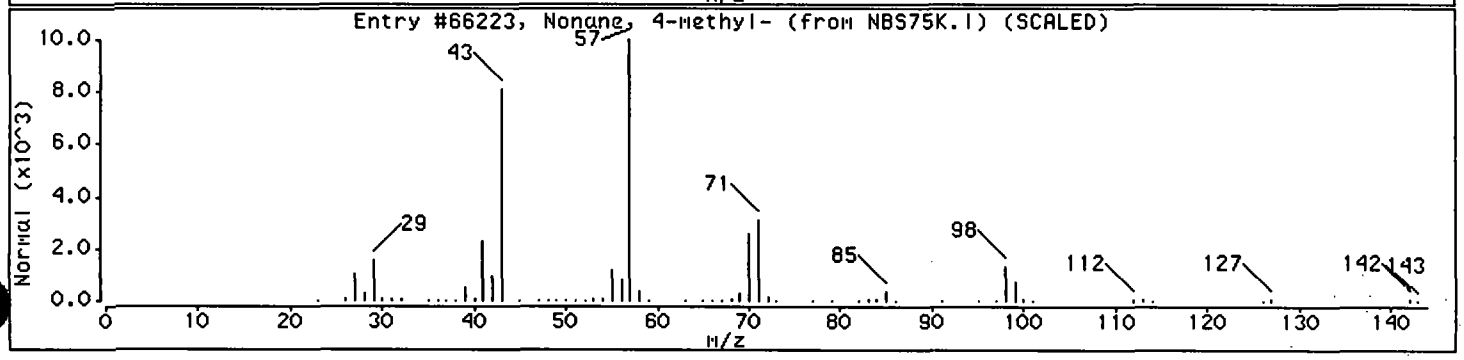
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane, 2-methyl-	592-27-8	NBS75K.l	64218	64	C8H18	114
Heptane, 3,4-dimethyl-	922-28-1	NBS75K.l	65136	53	C9H20	128
Nonane, 4-methyl-	17301-94-9	NBS75K.l	66223	50	C10H22	142









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

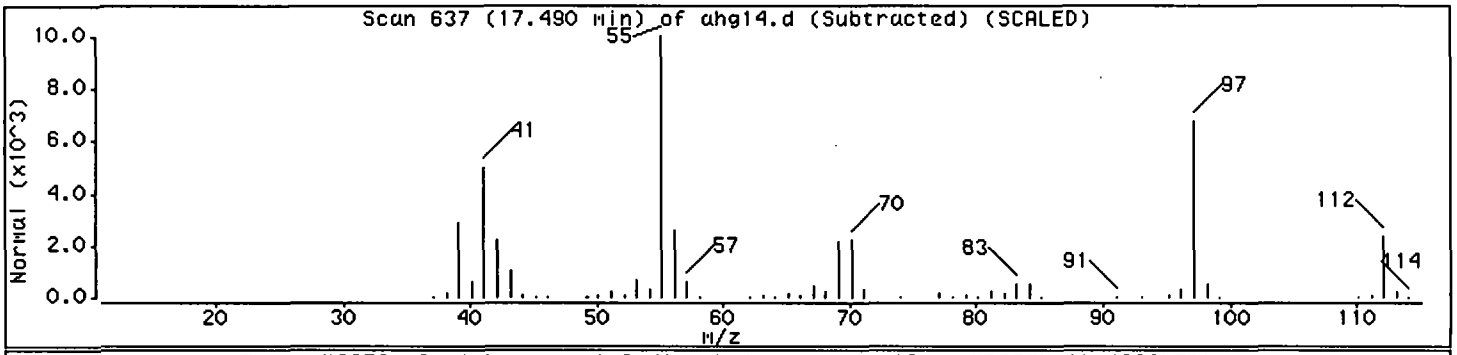
Client ID: WS-02 Instrument: gcl2.i

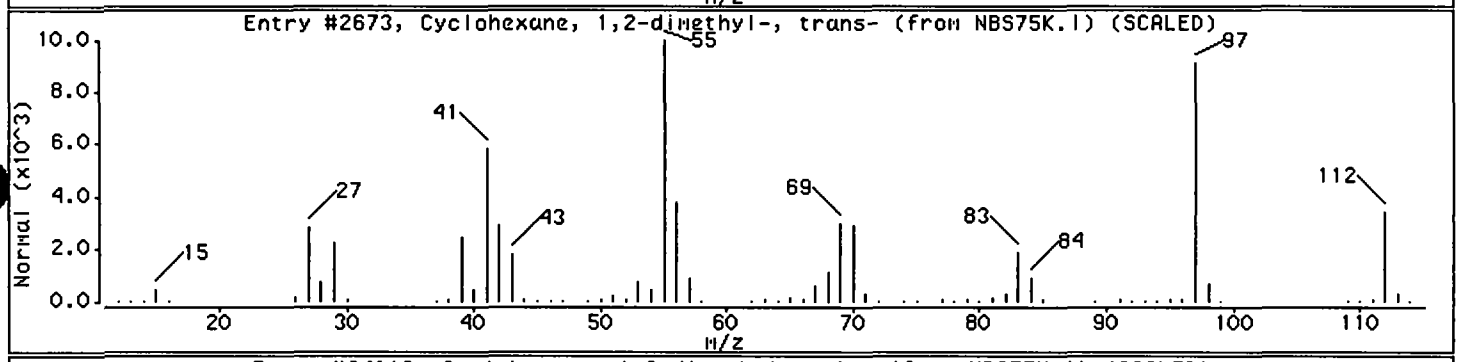
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

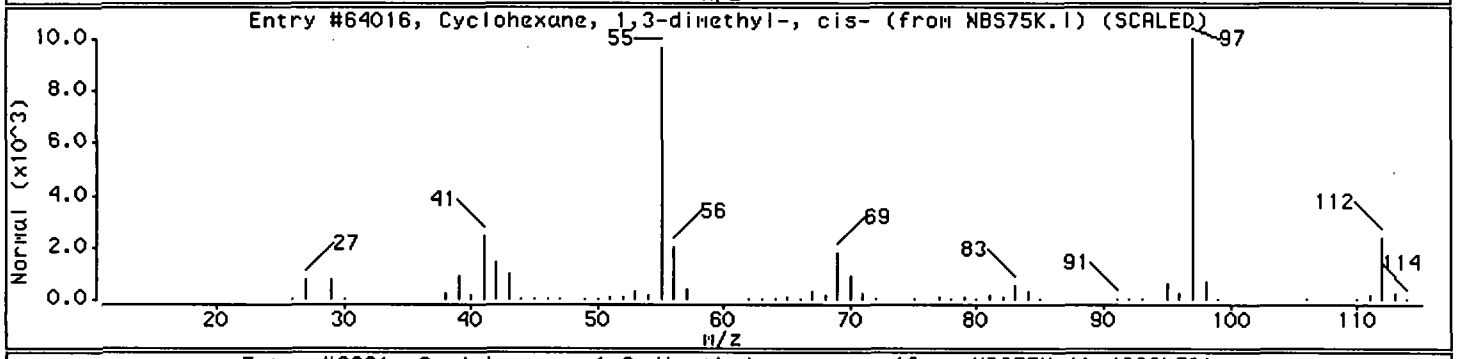
Operator: 0.5GSMP+5ULIS

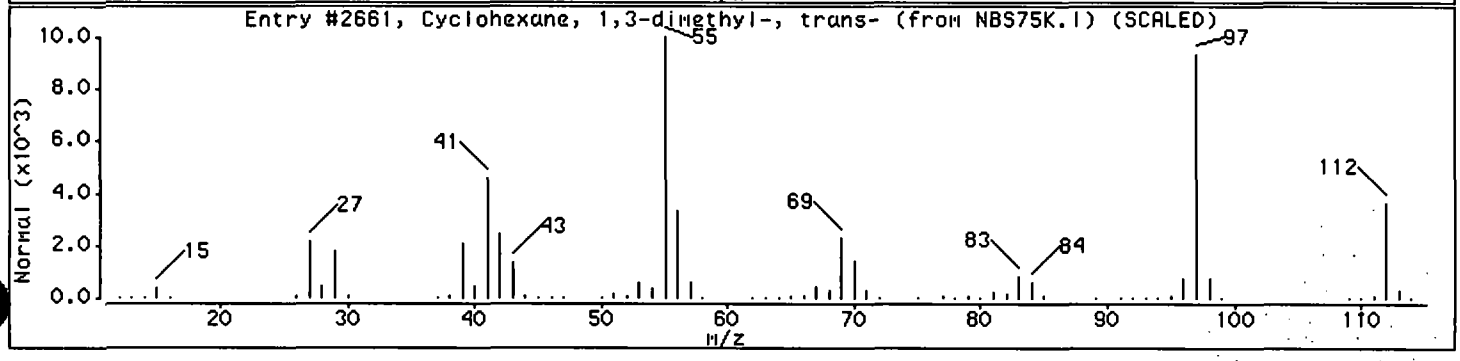
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2-dimethyl-, trans-	6876-23-9	NBS75K.l	2673	90	C8H16	112
Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	NBS75K.l	64016	83	C8H16	112
Cyclohexane, 1,3-dimethyl-, trans-	2207-03-6	NBS75K.l	2661	81	C8H16	112









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

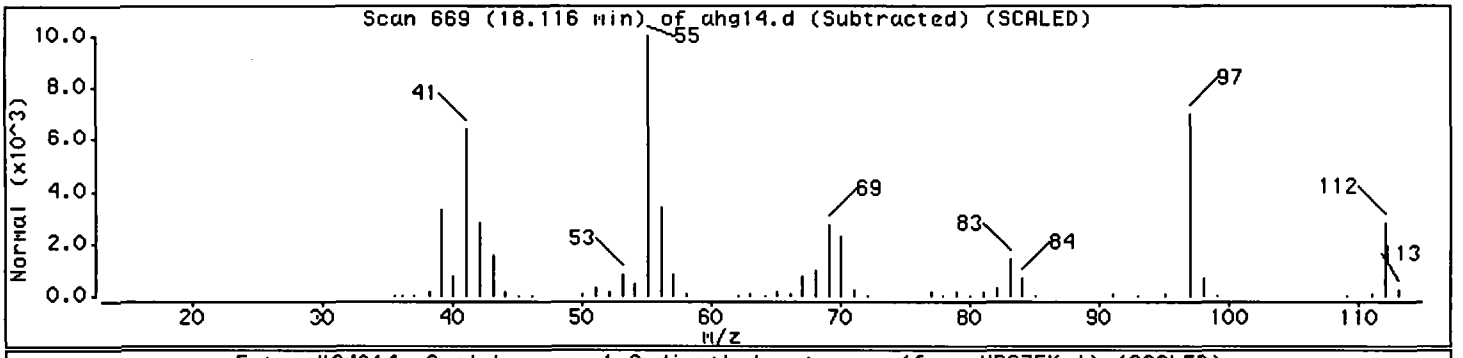
Client ID: WS-02 Instrument: gcl2.i

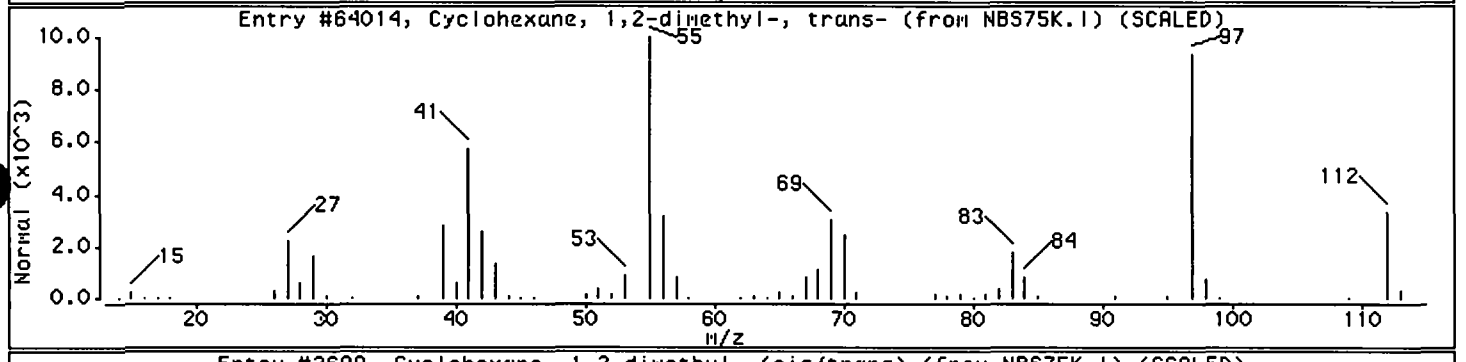
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

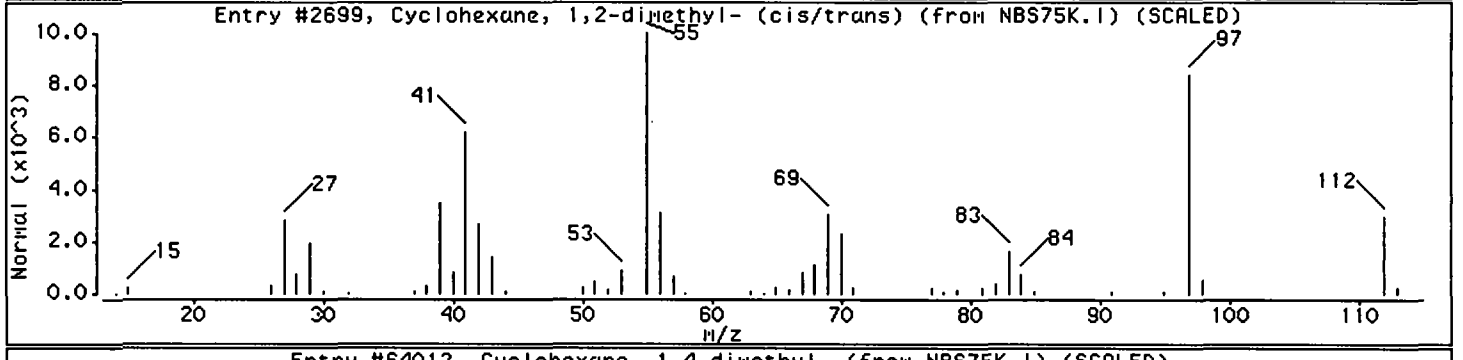
Operator: 0.5GSMP+5ULIS

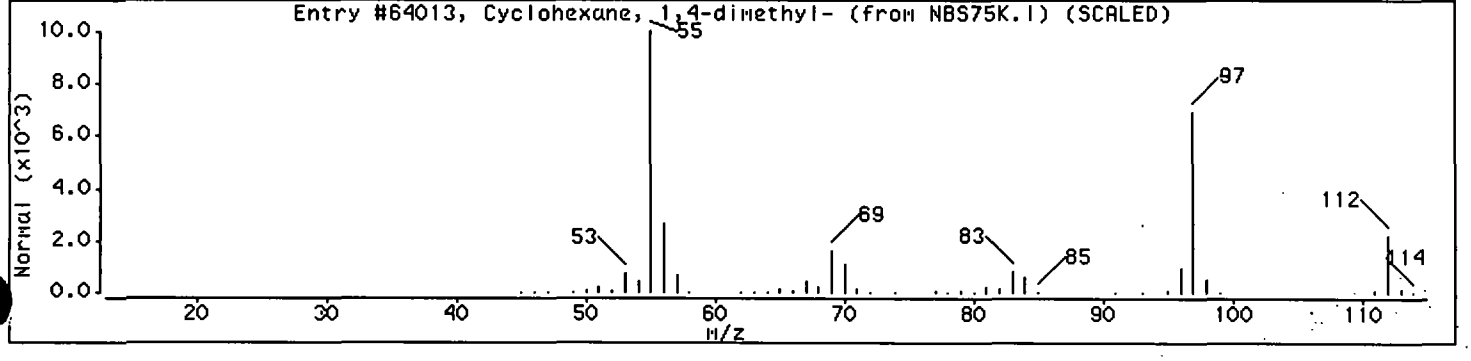
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2-dimethyl-, trans-	6876-23-9	NBS75K.l	64014	96	C8H16	112
Cyclohexane, 1,2-dimethyl- (cis/trans)	583-57-3	NBS75K.l	2699	96	C8H16	112
Cyclohexane, 1,4-dimethyl-	589-90-2	NBS75K.l	64013	87	C8H16	112









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

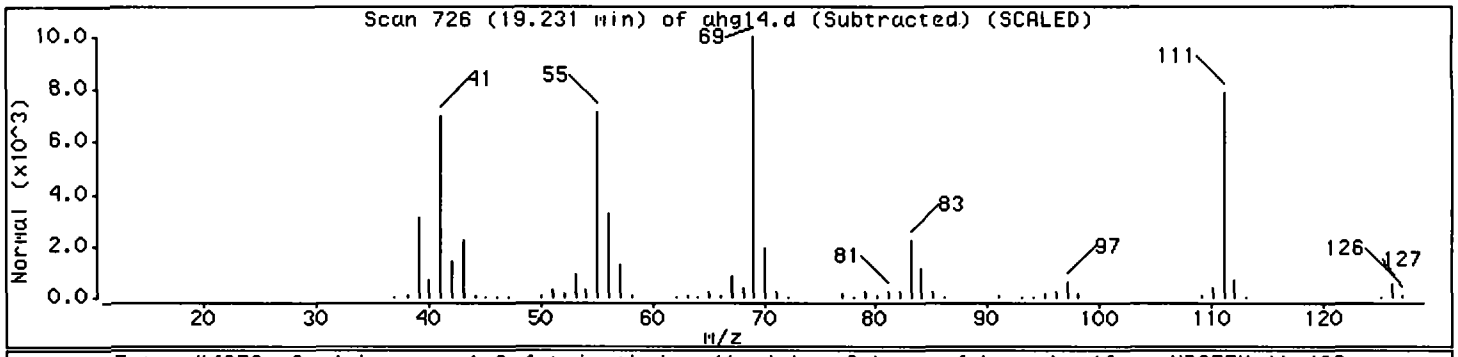
Client ID: WS-02 Instrument: gcl2.i

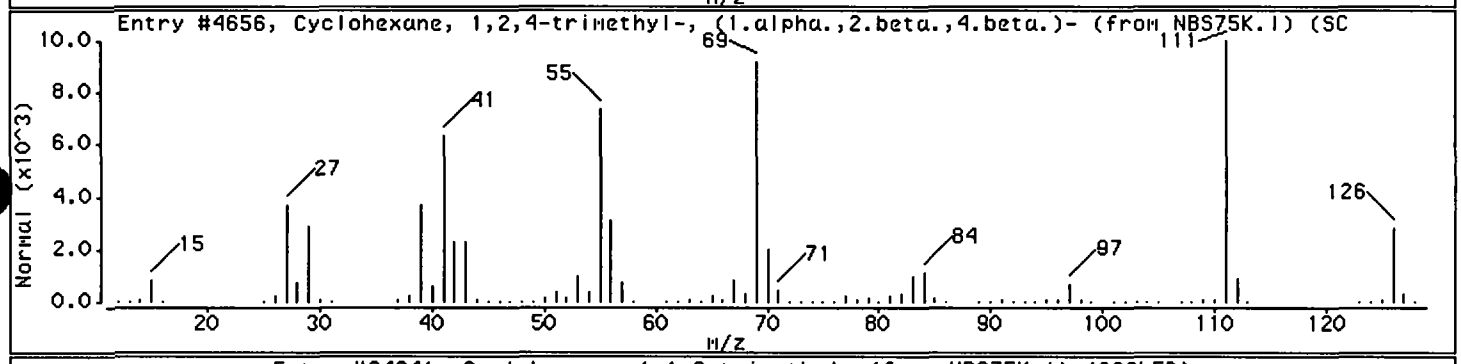
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

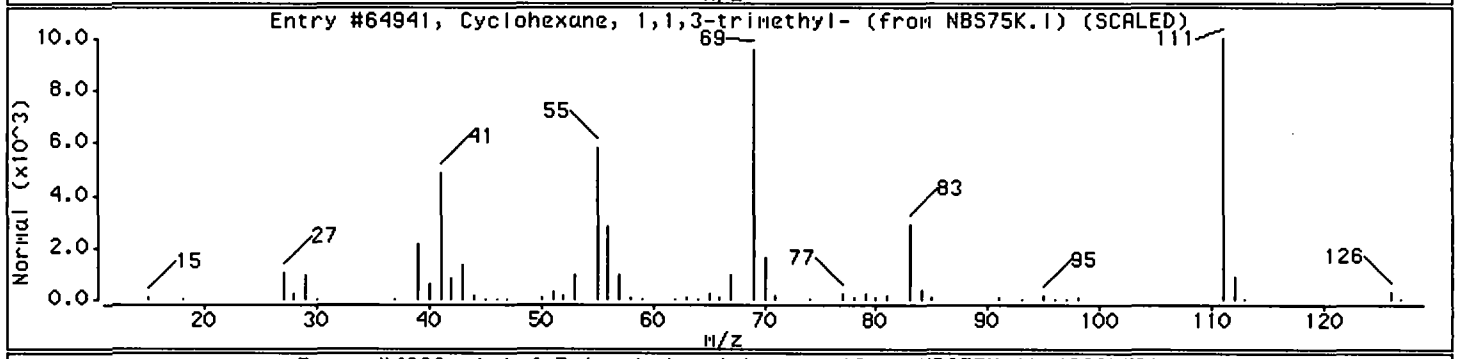
Operator: 0.5GSMP+5ULIS

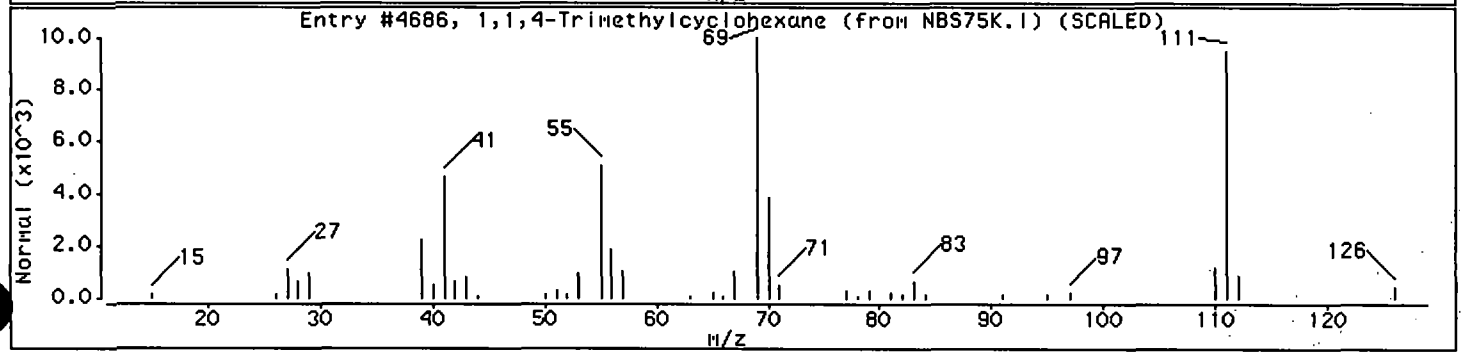
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2,4-trimethyl-, (1.alpha.	7667-60-9	NBS75K.l	4656	93	C9H18	126
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NBS75K.l	64941	86	C9H18	126
1,1,4-Trimethylcyclohexane	7094-27-1	NBS75K.l	4686	72	C9H18	126









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

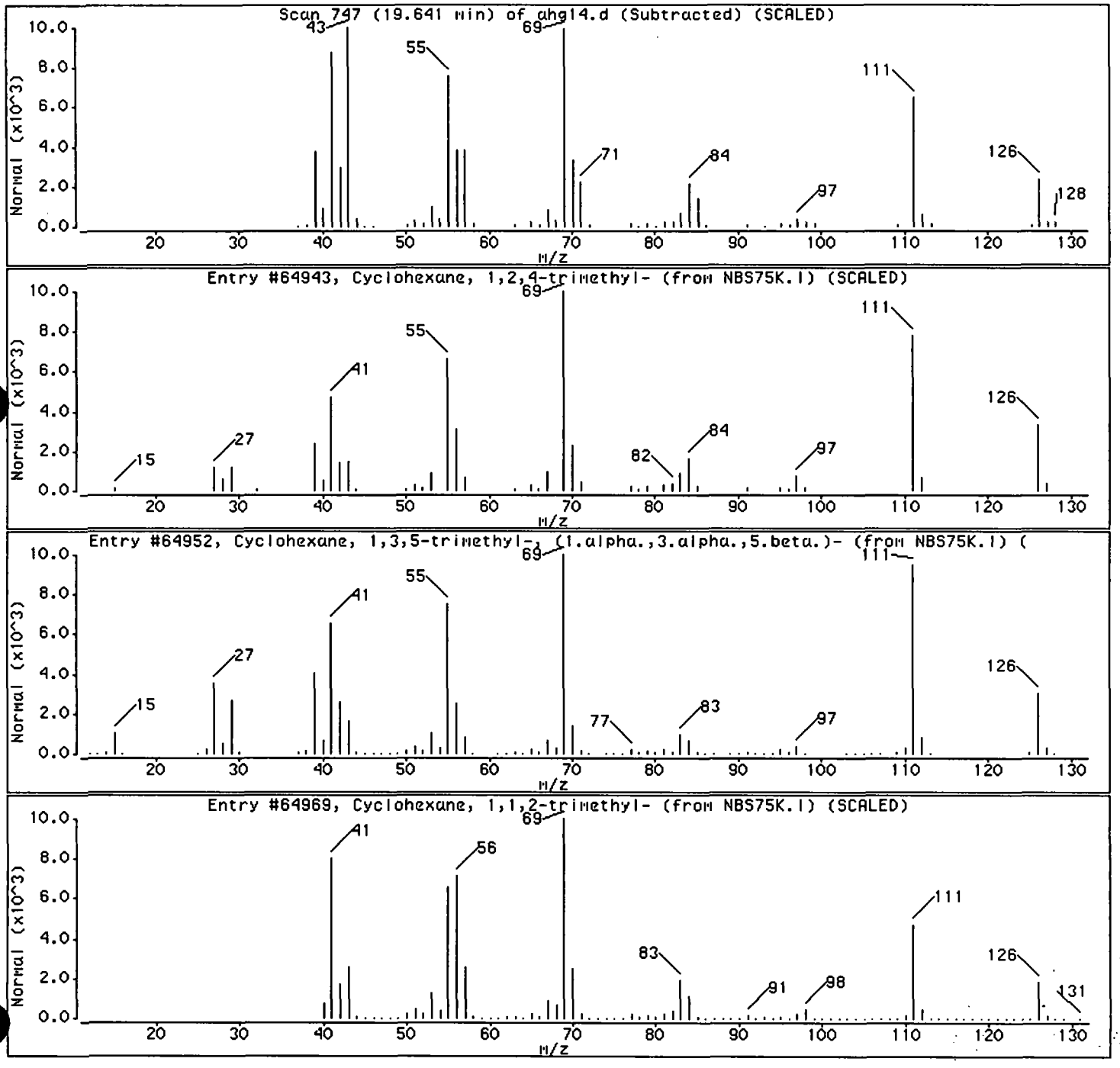
Client ID: WS-02 Instrument: gcl2.i

Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2,4-trimethyl-	2234-75-5	NBS75K.I	64943	87	C9H18	126
Cyclohexane, 1,3,5-trimethyl-, (1.alpha.	1795-26-2	NBS75K.I	64952	64	C9H18	126
Cyclohexane, 1,1,2-trimethyl-	7094-26-0	NBS75K.I	64969	64	C9H18	126



Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

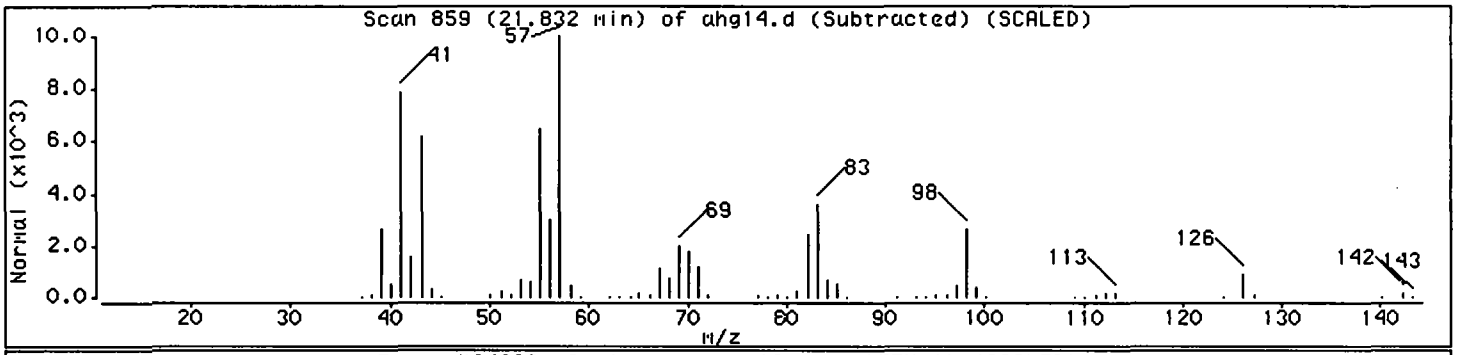
Client ID: WS-02 Instrument: gcl2.i

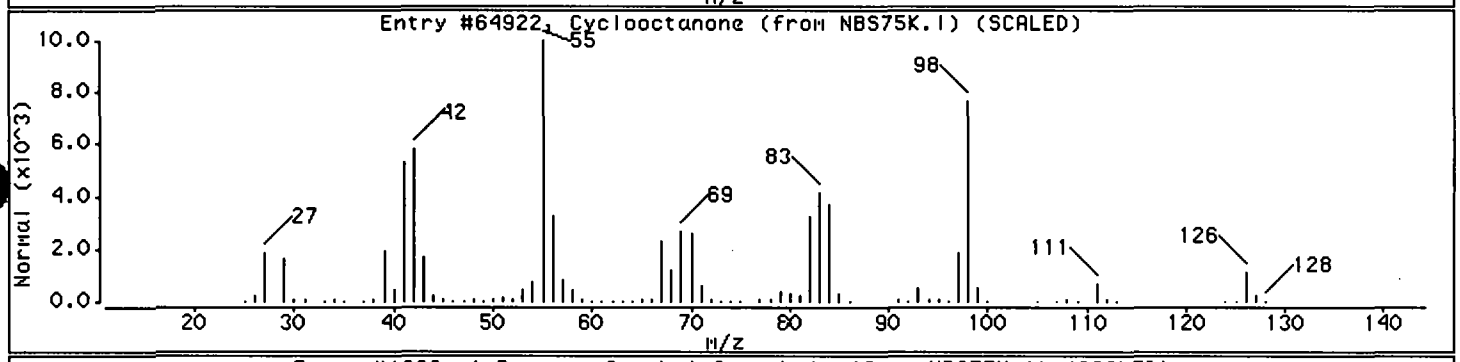
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

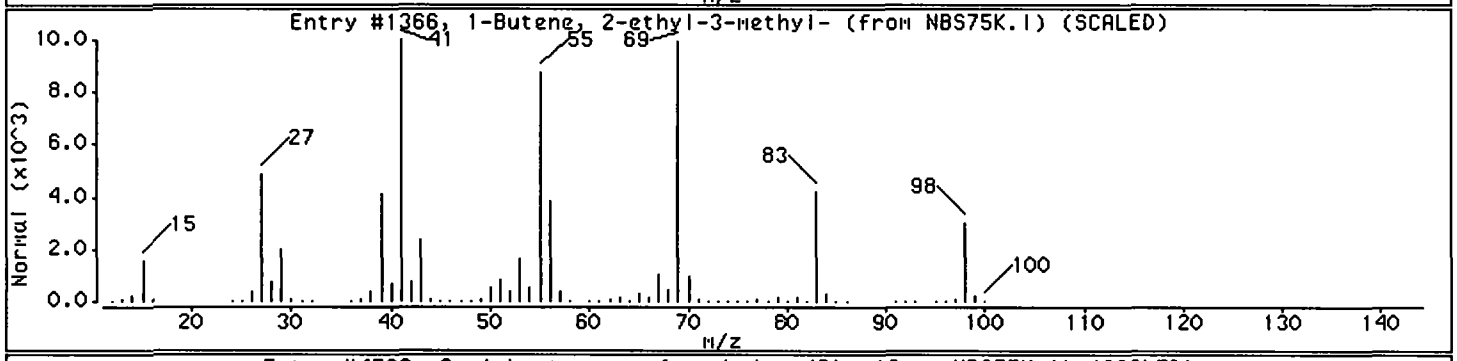
Operator: 0.5GSMP+5ULIS

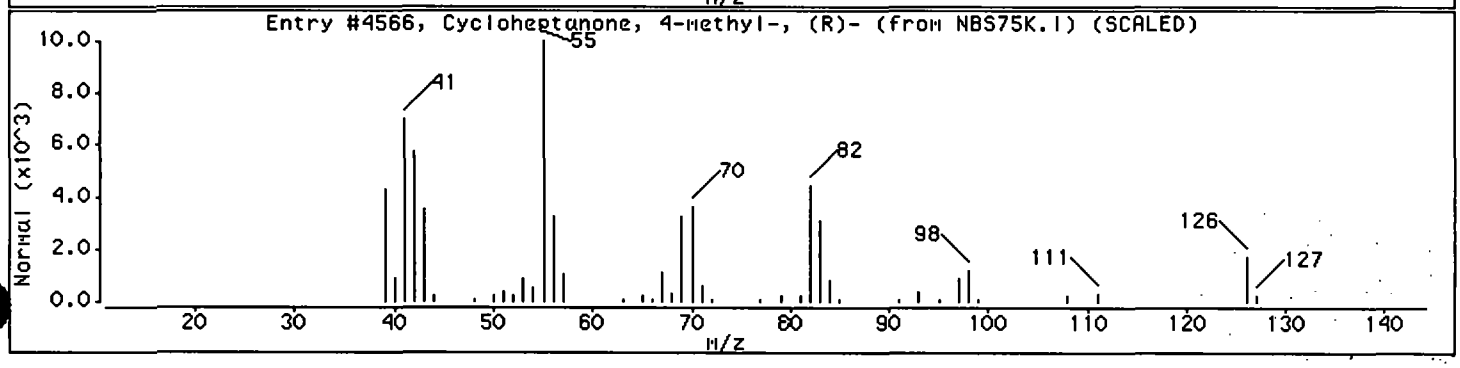
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclooctanone	502-49-8	NBS75K.l	64922	46	C8H140	126
1-Butene, 2-ethyl-3-methyl-	7357-93-9	NBS75K.l	1366	43	C7H14	98
Cycloheptanone, 4-methyl-, (R)-	13609-59-1	NBS75K.l	4566	43	C8H140	126









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

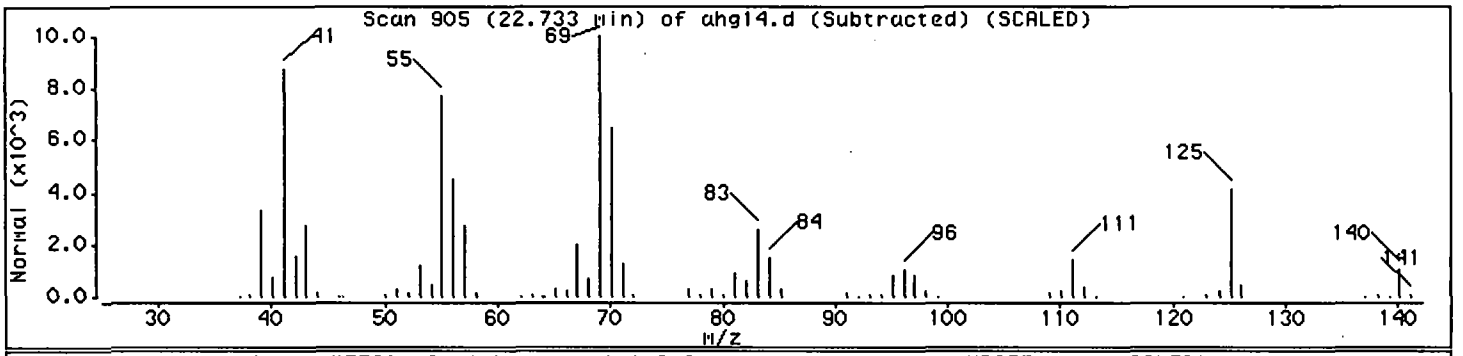
Client ID: WS-02 Instrument: gcl2.i

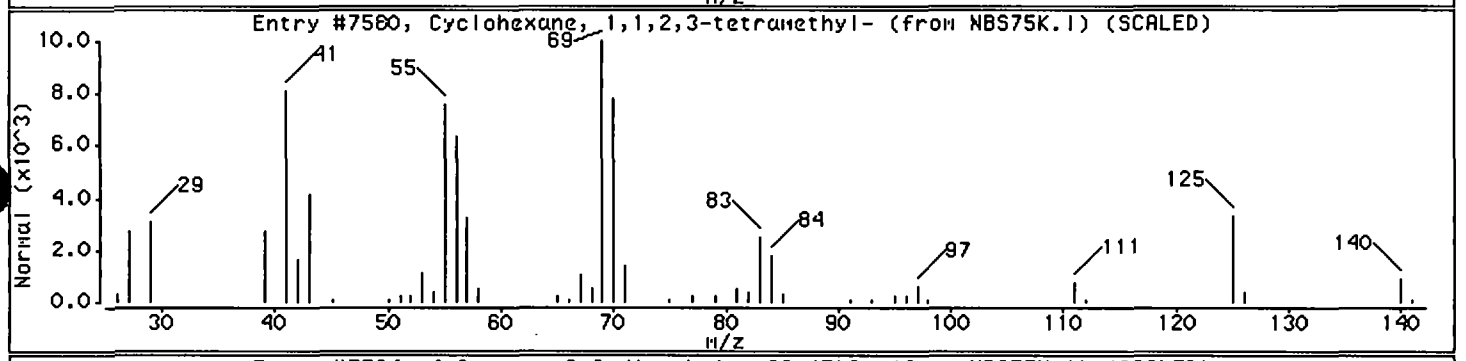
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

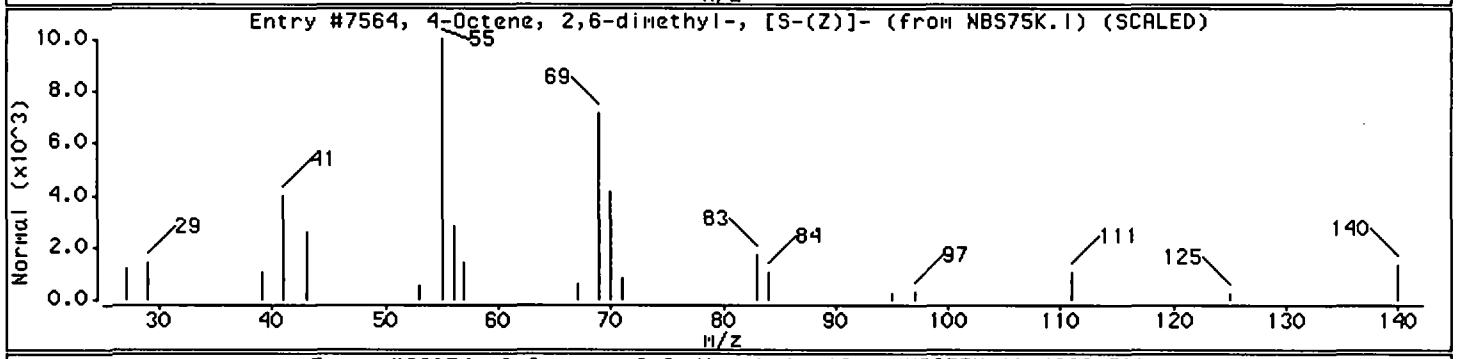
Operator: 0.5GSMP+5ULIS

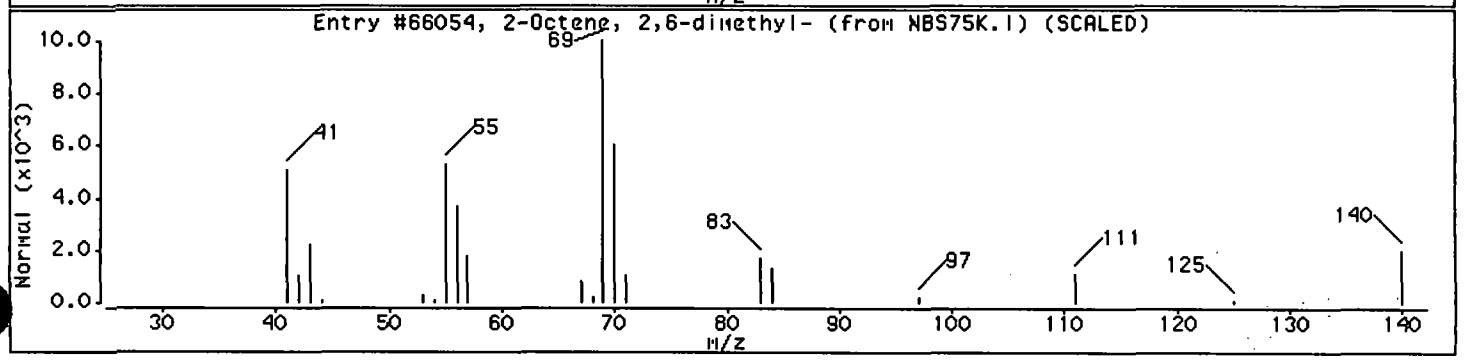
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	NBS75K.l	7580	93	C10H20	140
4-Octene, 2,6-dimethyl-, [S-(Z)]-	62960-77-4	NBS75K.l	7564	70	C10H20	140
2-Octene, 2,6-dimethyl-	4057-42-5	NBS75K.l	66054	70	C10H20	140









Data File: /chem/gcl2.i/961130.b/ahg14.d

Date : 30-NOV-1996 20:09

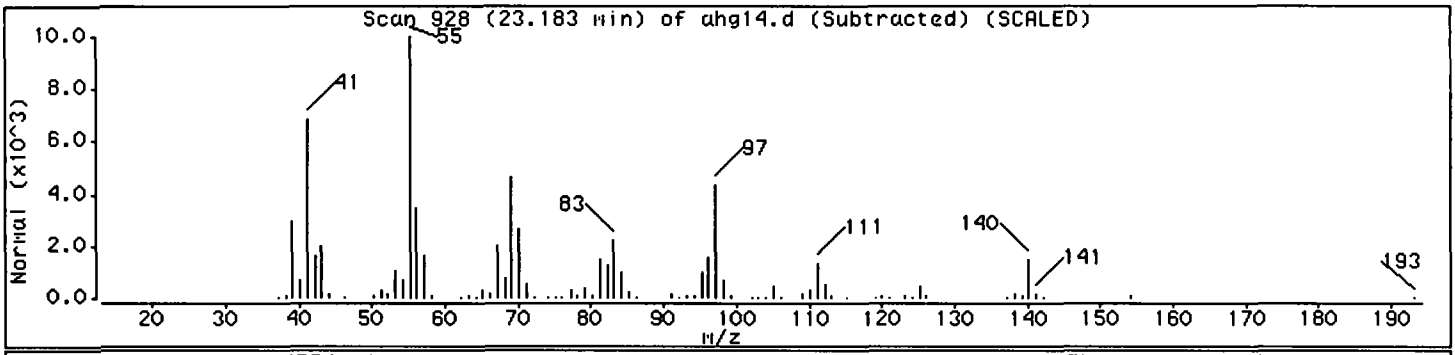
Client ID: WS-02 Instrument: gcl2.i

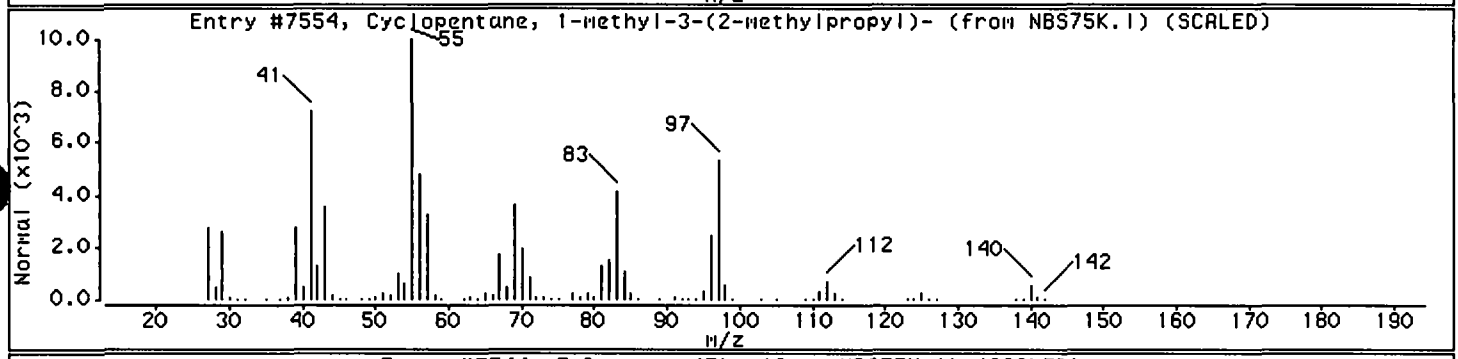
Sample Info: 9611G675-002 XBB30,[AL=0624He],[DC=00]

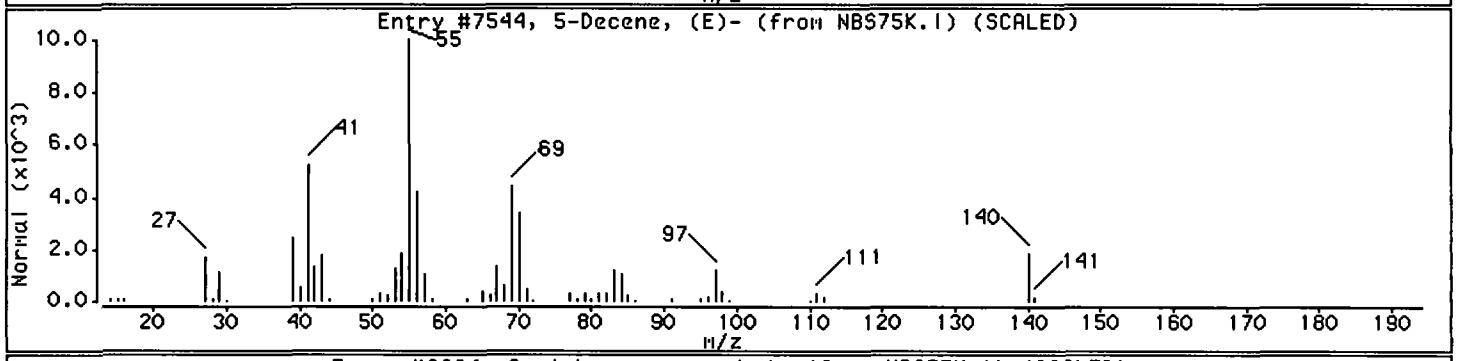
Operator: 0.5GSMP+5ULIS

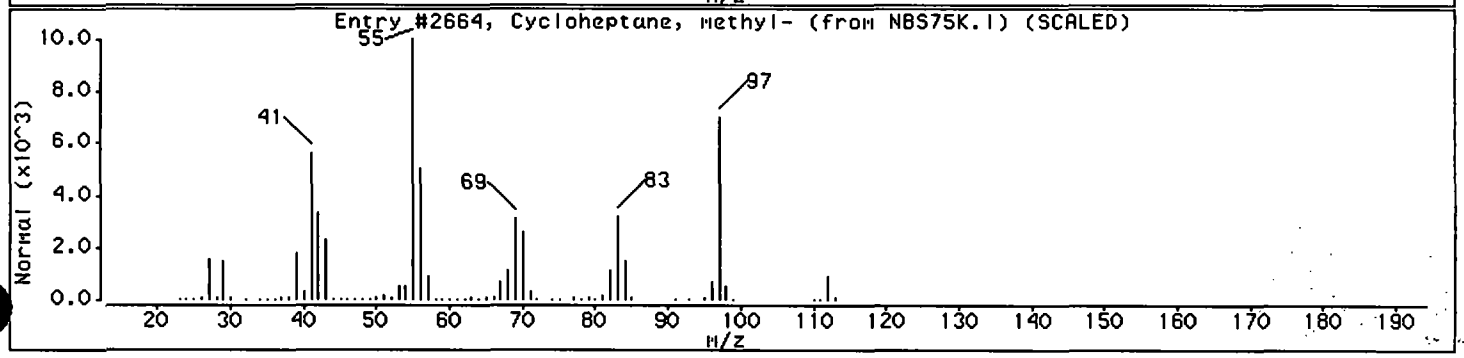
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1-methyl-3-(2-methylpropyl	29053-04-1	NBS75K.l	7554	53	C10H20	140
5-Decene, (E)-	7433-56-9	NBS75K.l	7544	50	C10H20	140
Cycloheptane, methyl-	4126-78-7	NBS75K.l	2664	49	C8H16	112









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-03

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG20

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 4 Date Analyzed: 12/01/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-03

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-003

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG20

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 4 Date Analyzed: 12/01/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	14.16	200	J
2.	UNKNOWN CYCLOALKANE	14.84	360	J
3.	UNKNOWN CYCLOALKANE	15.88	620	J
4.	UNKNOWN CYCLOALKANE	16.50	220	J
5.	UNKNOWN CYCLOALKANE	17.46	220	J
6.	UNKNOWN CYCLOALKANE	18.09	270	J
7.	UNKNOWN CYCLOALKANE	19.20	570	J
8.	UNKNOWN	21.80	260	J
9.	UNKNOWN CYCLOALKANE	22.70	260	J
10.	UNKNOWN HYDROCARBON	23.66	220	J
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

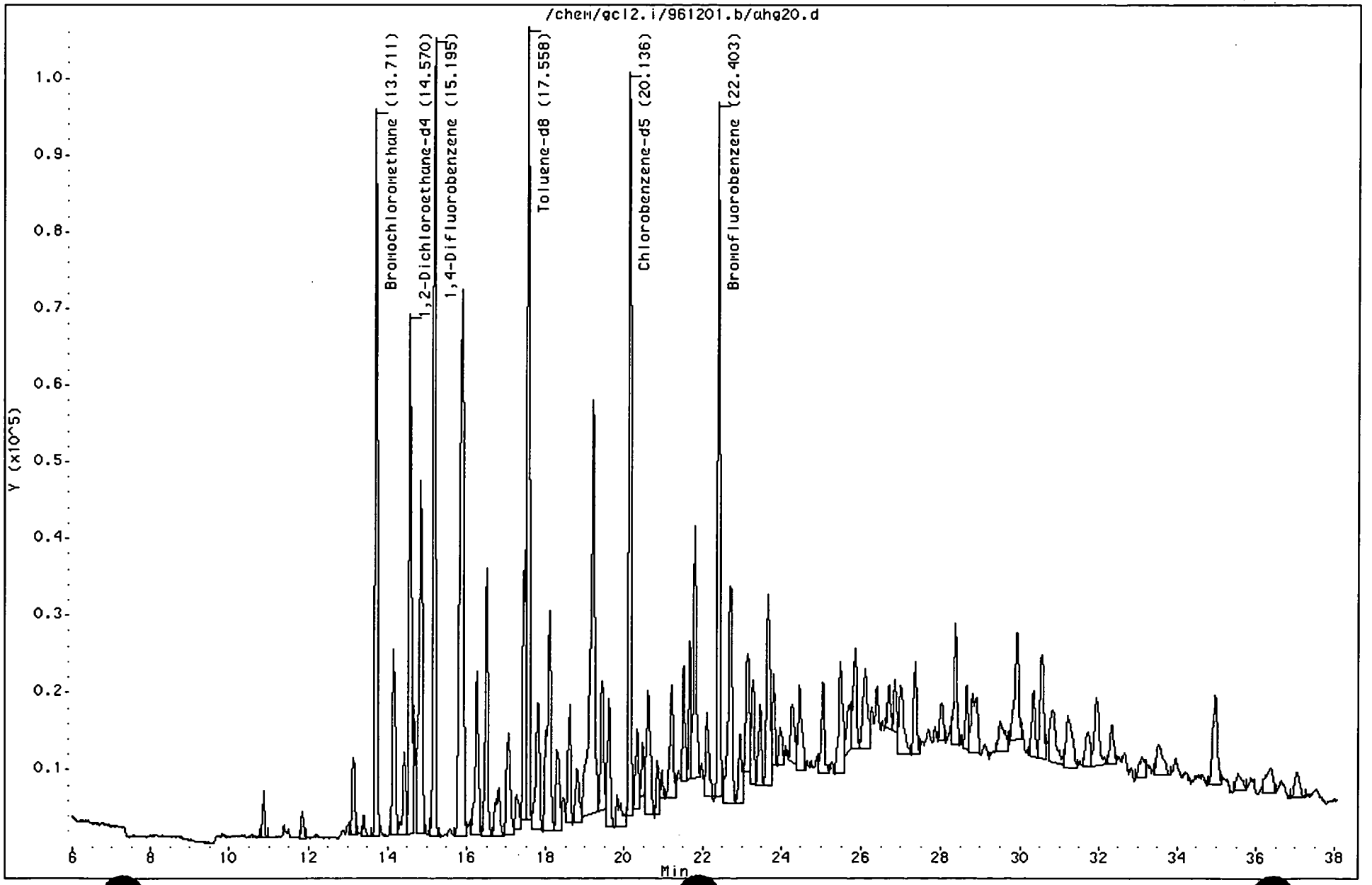
Data File: /chem/gcl2.i/961201.b/ahg20.d
Date : 01-DEC-1996 18:50
Client ID: WS-03
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: KMC

Column phase: Cap

Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961201.b/ahg20.d
Lab Smp Id: 9611G675-003 Client Smp ID: WS-03
Inj Date : 01-DEC-1996 18:50
Operator : KMC Inst ID: gcl2.i
Smp Info : 9611G675-003 XAC01,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,KMC,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk Quant Type: ISTD
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1
Dil Factor: 10.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	4.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.711	13.726	(1.000)	40293	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.570	14.586	(1.063)	81212	49.635	51.704(a)
* 42 1,4-Difluorobenzene	114.00	15.195	15.211	(1.000)	148468	50.000	
$ 52 Toluene-d8	98.00	17.558	17.573	(0.872)	123562	55.357	57.663(a)
* 61 Chlorobenzene-d5	117.00	20.136	20.170	(1.000)	103015	50.000	
$ 69 Bromofluorobenzene	95.00	22.403	22.436	(1.113)	68307	41.875	43.620(a)

1-7-97

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961201.b/ahg20.d
Lab Smp Id: 9611G675-003 Client Smp ID: WS-03
Inj Date : 01-DEC-1996 18:50
Operator : KMC Inst ID: gcl2.i
Smp Info : 9611G675-003 XAC01,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,KMC,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1
Dil Factor: 10.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	4.000	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 31 Bromochloromethane	13.711	315395	50.000
* 42 1,4-Difluorobenzene	15.195	392503	50.000
* 61 Chlorobenzene-d5	20.136	367537	50.000

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
14.160	118590	18.800	195.84	0		0	31
Unknown Cycloalkane					CAS #:		
14.844	269597	34.343	357.74	0		0	42
Unknown Cycloalkane					CAS #:		
15.879	468103	59.630	621.15	0		0	42

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
16.503	165096	21.031	219.07	0		0	42
Unknown Cycloalkane					CAS #:		
17.460	165180	21.042	219.19	0		0	42
Unknown Cycloalkane					CAS #:		
18.085	190768	25.952	270.34	0		0	61
Unknown Cycloalkane					CAS #:		
19.199	402884	54.808	570.92	0		0	61
Unknown					CAS #:		
21.797	180543	24.561	255.84	0		0	61
Unknown Cycloalkane					CAS #:		
22.697	183669	24.986	260.28	0		0	61
Unknown Hydrocarbon					CAS #:		
23.655	153617	20.898	217.69	0		0	61

Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

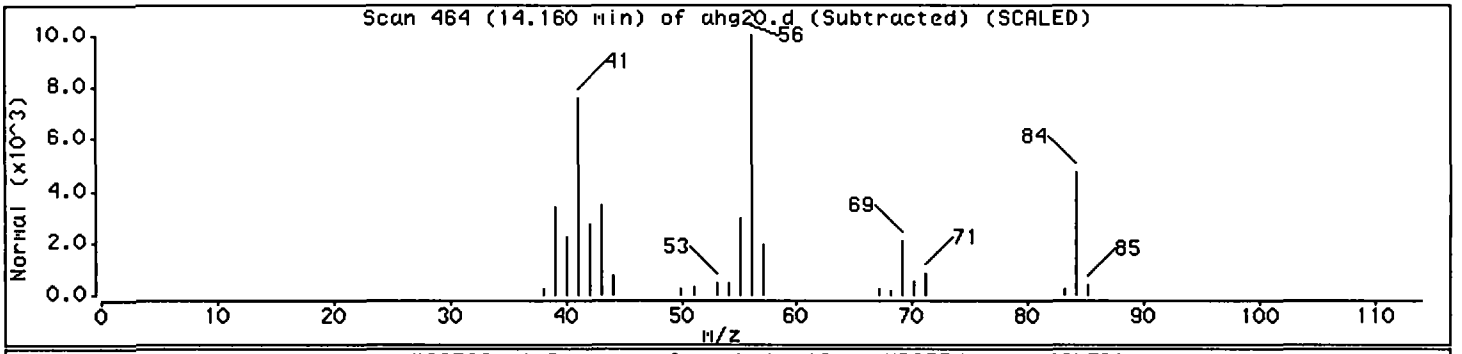
Client ID: WS-03 Instrument: gcl2.i

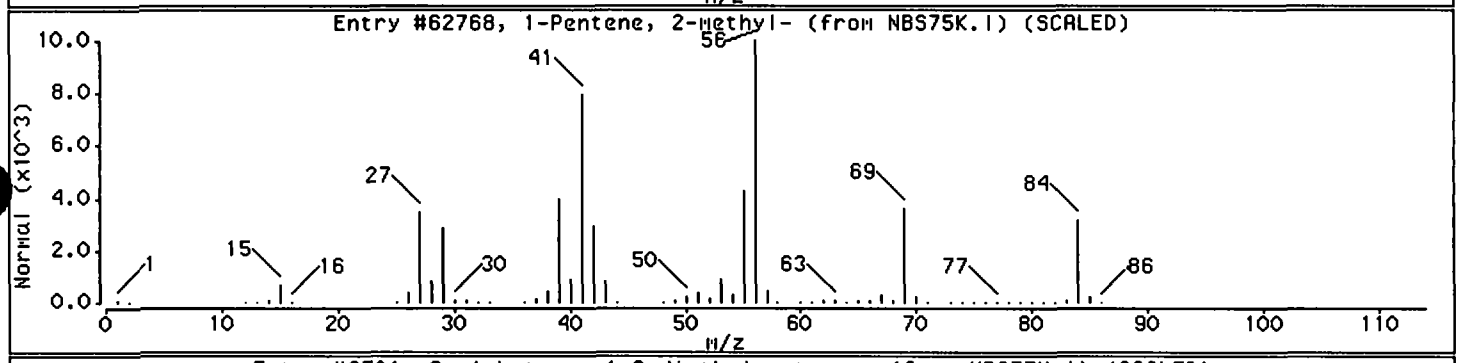
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

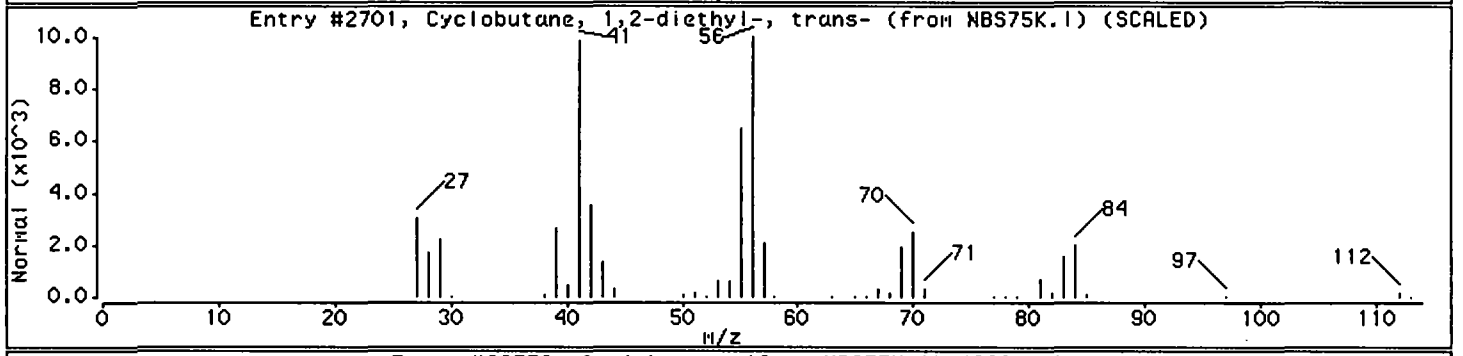
Operator: KMC

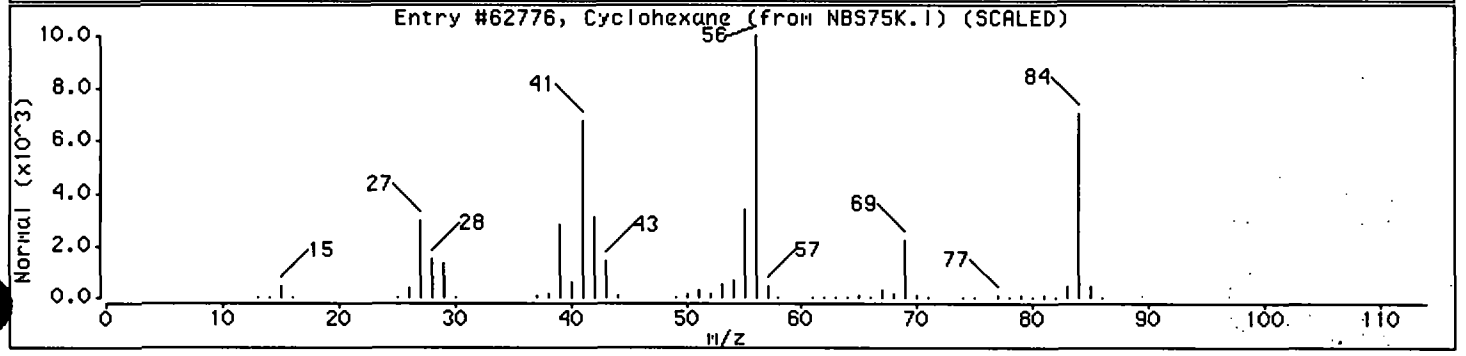
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1-Pentene, 2-methyl-	763-29-1	NBS75K.l	62768	78	C6H12	84
Cyclobutane, 1,2-diethyl-, trans-	19341-98-1	NBS75K.l	2701	59	C8H16	112
Cyclohexane	110-82-7	NBS75K.l	62776	47	C6H12	84









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

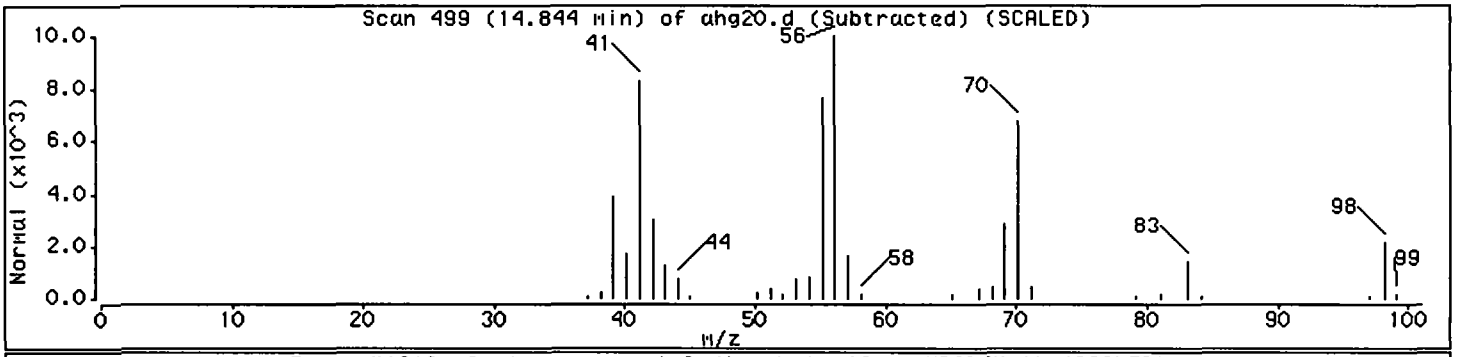
Client ID: WS-03 Instrument: gcl2.i

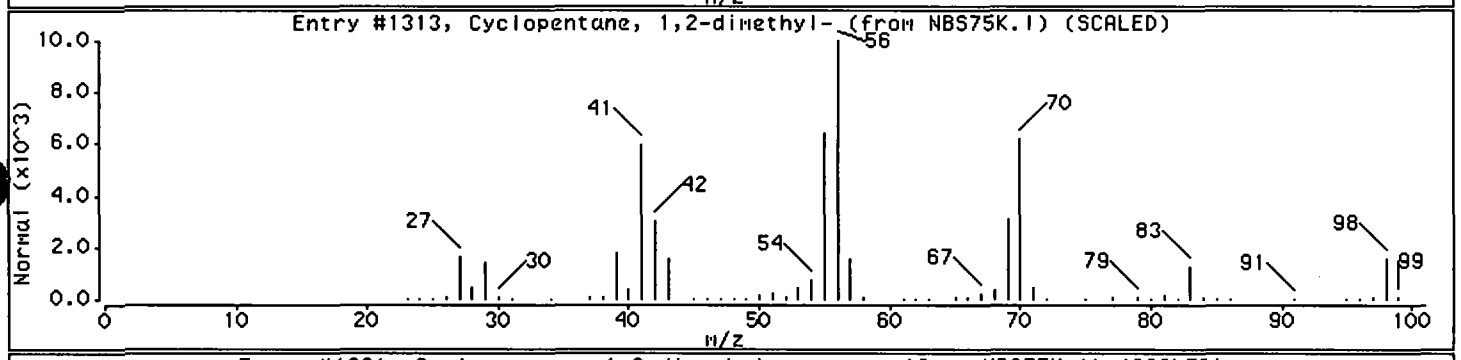
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

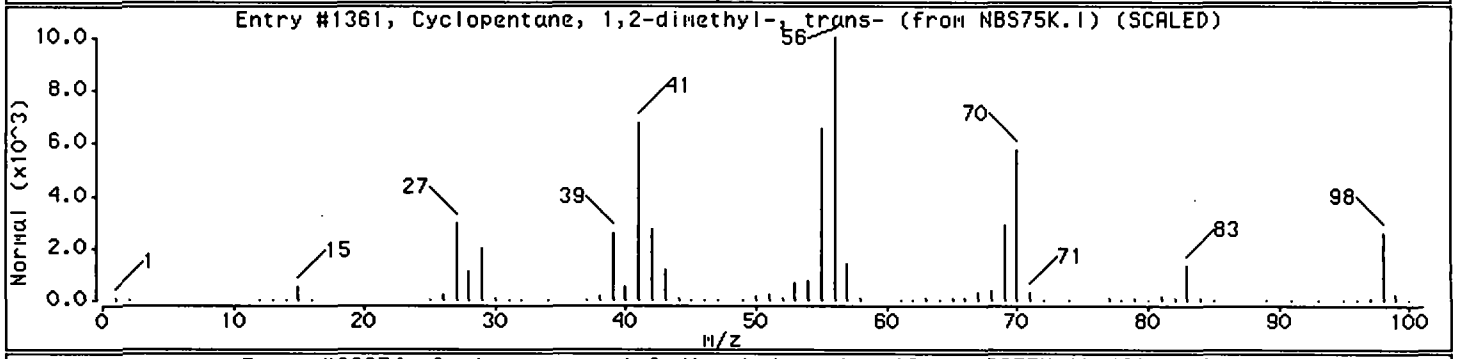
Operator: KMC

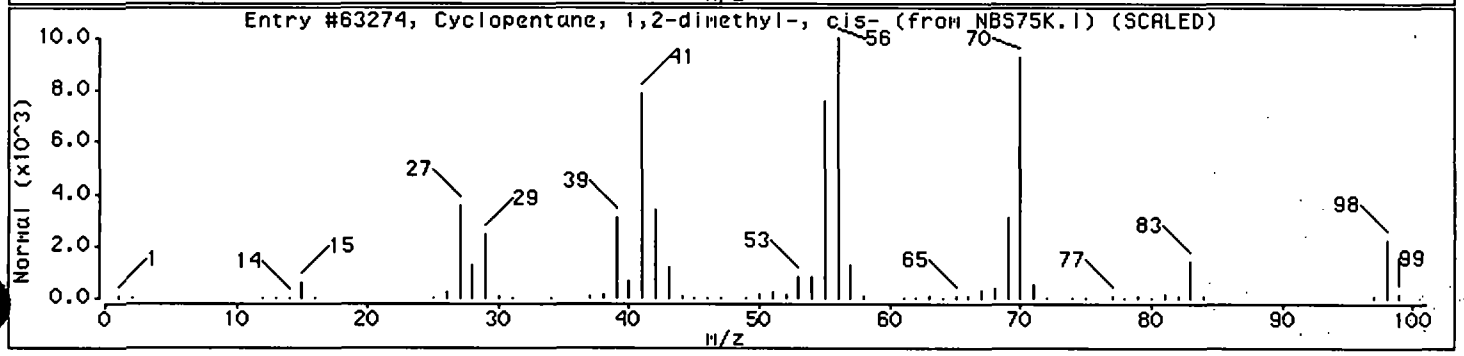
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2-dimethyl-	2452-99-5	NBS75K.l	1313	93	C7H14	98
Cyclopentane, 1,2-dimethyl-, trans-	822-50-4	NBS75K.l	1361	87	C7H14	98
Cyclopentane, 1,2-dimethyl-, cis-	1192-18-3	NBS75K.l	63274	81	C7H14	98









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

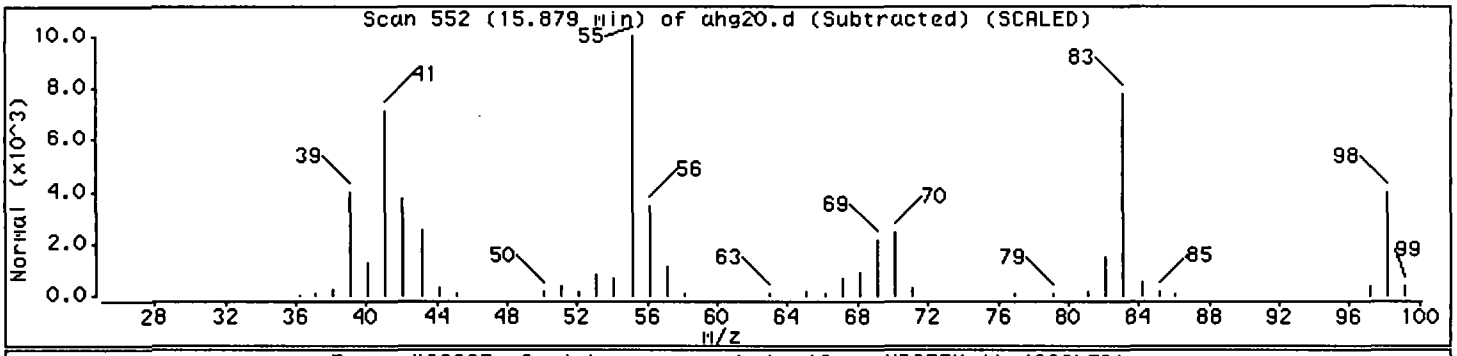
Client ID: WS-03 Instrument: gcl2.i

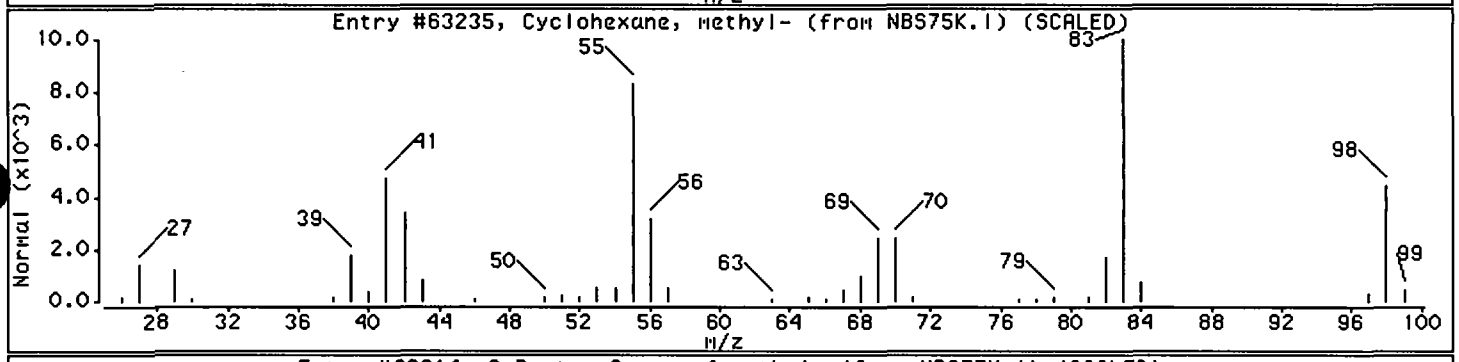
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

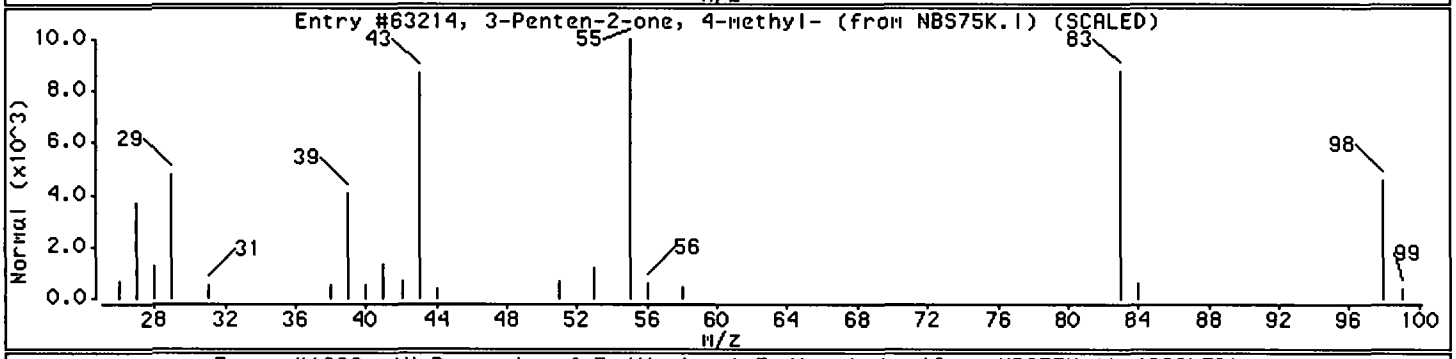
Operator: KMC

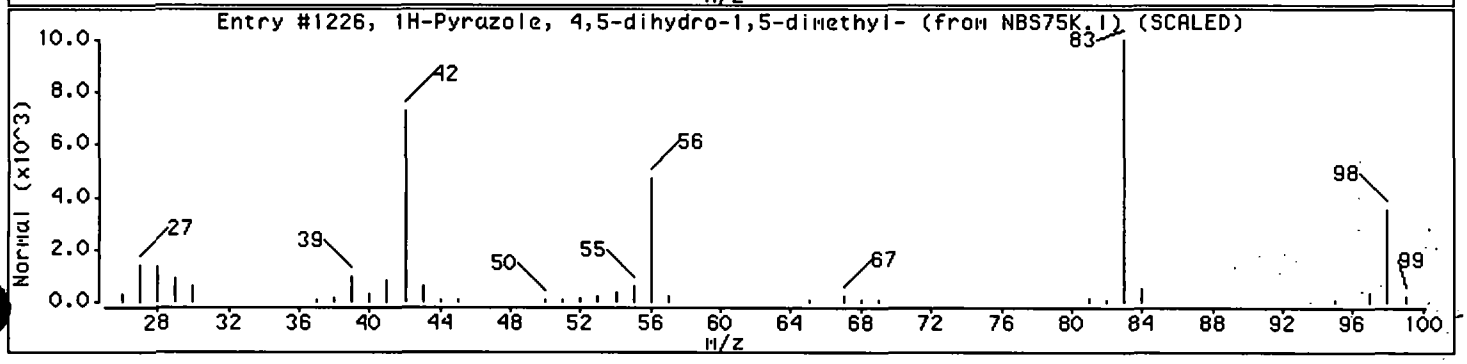
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, methyl-	108-87-2	NBS75K.I	63235	94	C7H14	98
3-Penten-2-one, 4-methyl-	141-79-7	NBS75K.I	63214	64	C6H10O	98
1H-Pyrazole, 4,5-dihydro-1,5-dimethyl-	5775-96-2	NBS75K.I	1226	58	C5H10N2	98









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

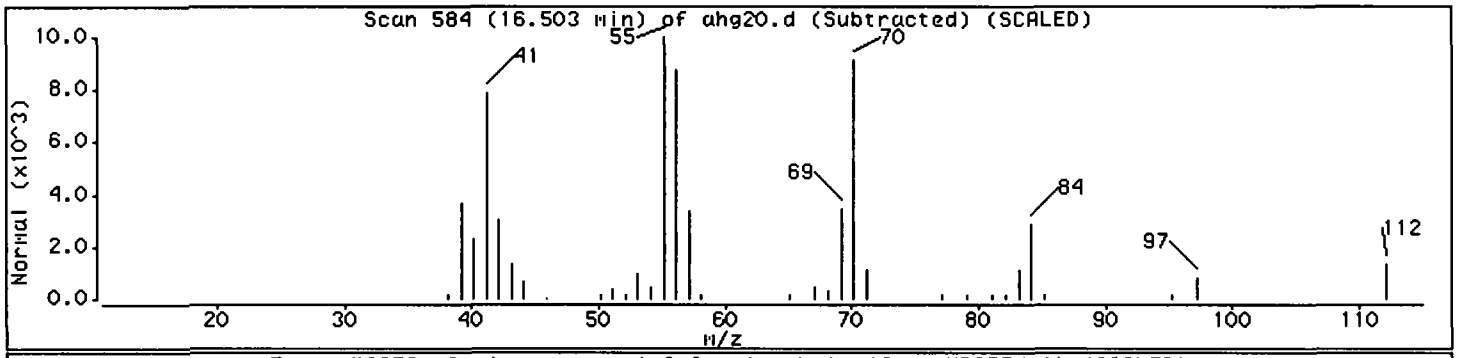
Client ID: WS-03 Instrument: gcl2.i

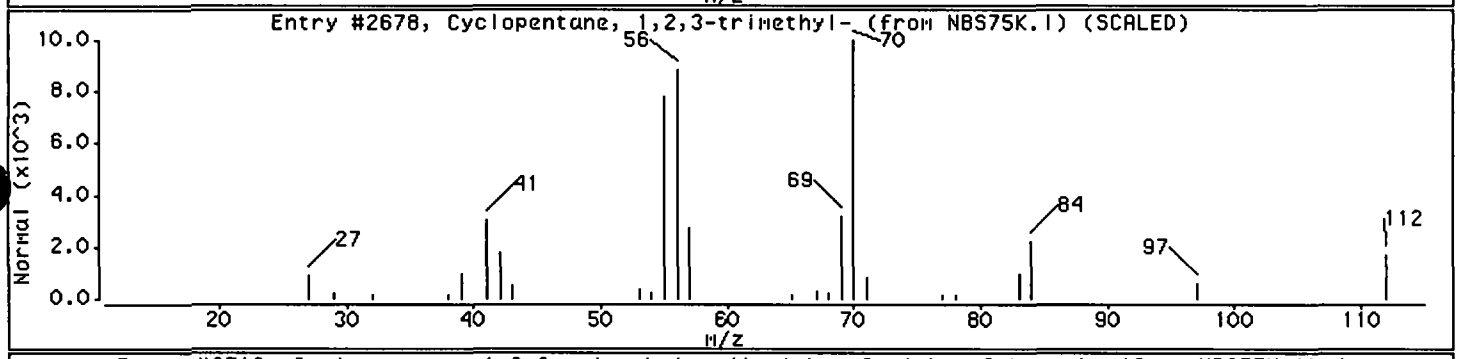
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

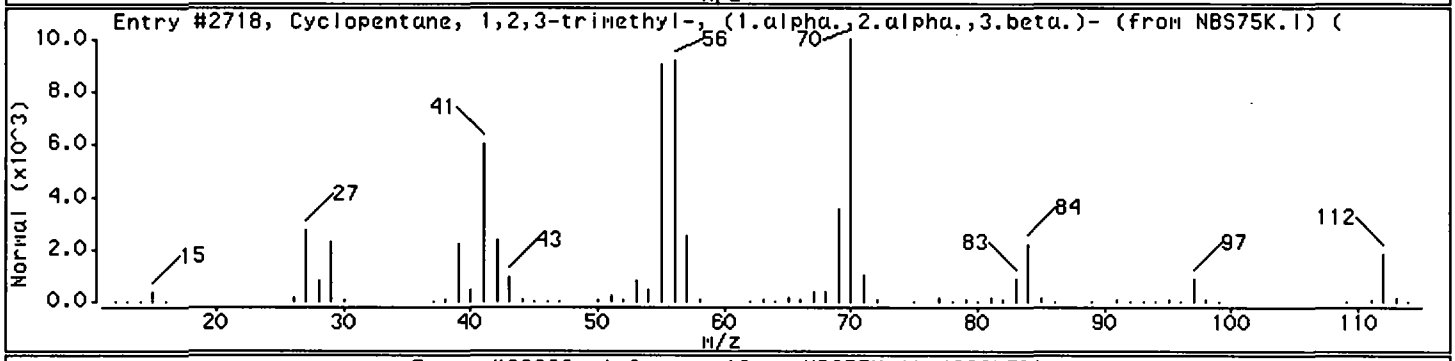
Operator: KMC

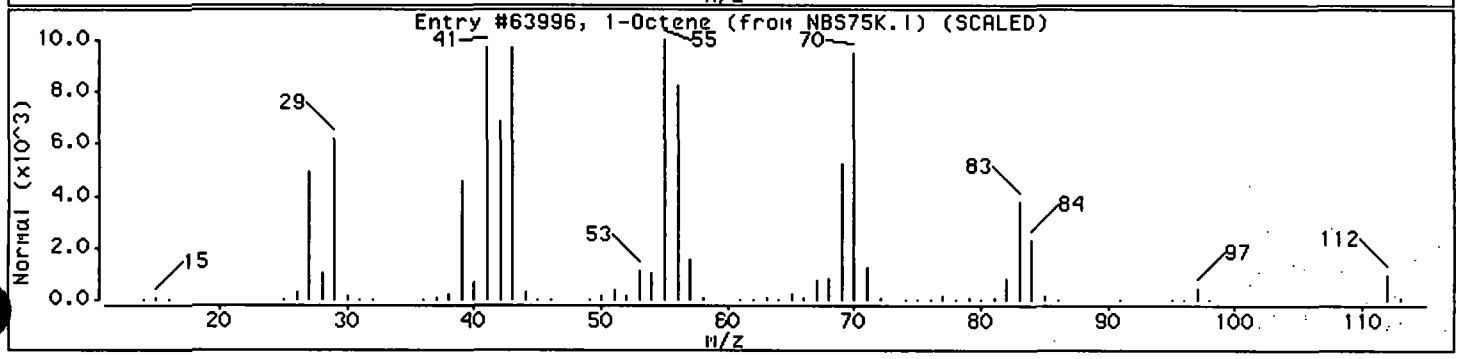
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2,3-trimethyl-	2815-57-8	NBS75K.l	2678	91	C8H16	112
Cyclopentane, 1,2,3-trimethyl-, (1.alpha	15890-40-1	NBS75K.l	2718	83	C8H16	112
1-Octene	111-66-0	NBS75K.l	63996	83	C8H16	112









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

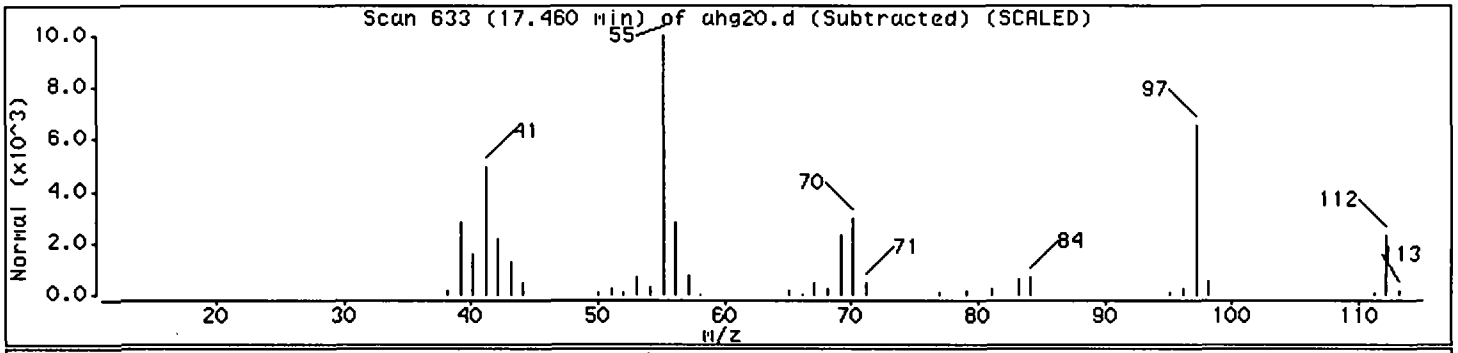
Client ID: WS-03 Instrument: gcl2.i

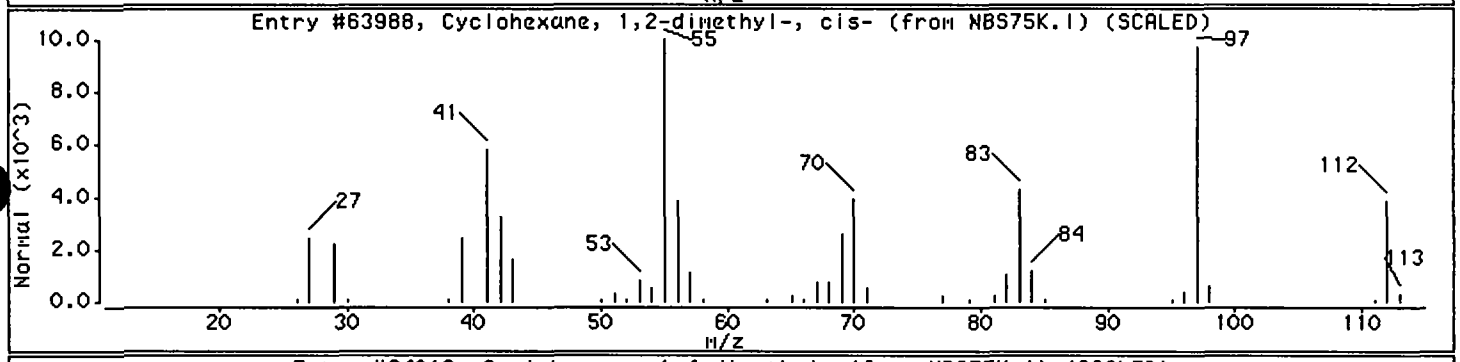
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

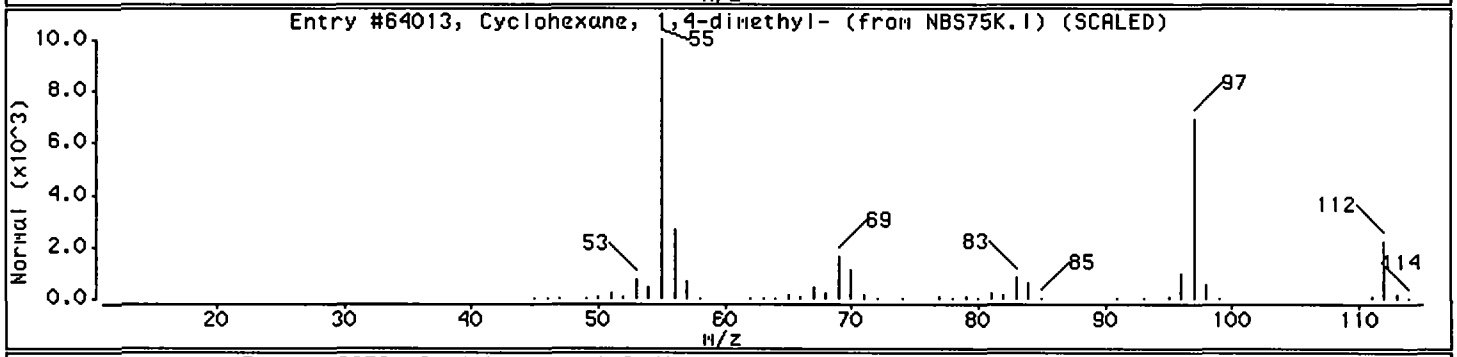
Operator: KMC

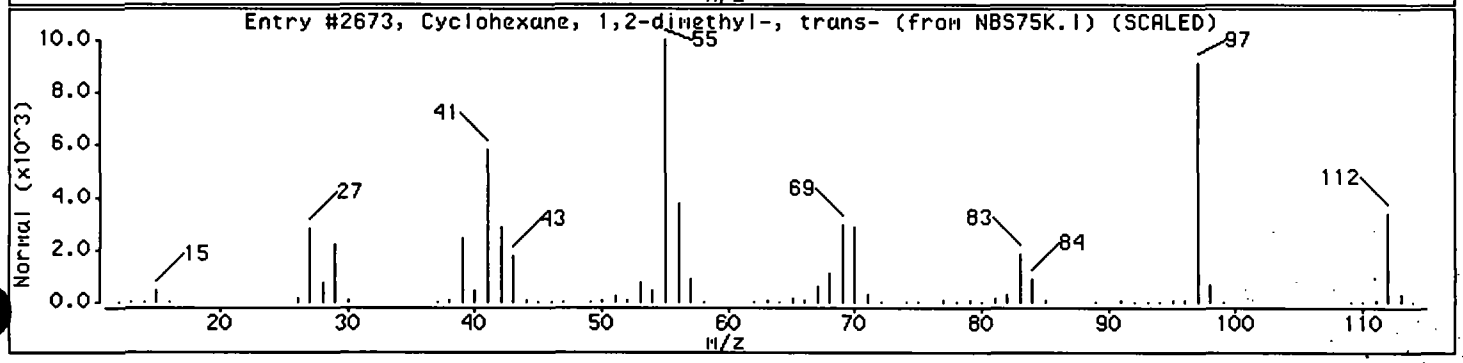
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2-dimethyl-, cis-	2207-01-4	NBS75K.l	63988	93	C8H16	112
Cyclohexane, 1,4-dimethyl-	589-90-2	NBS75K.l	64013	90	C8H16	112
Cyclohexane, 1,2-dimethyl-, trans-	6876-23-9	NBS75K.l	2673	87	C8H16	112









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

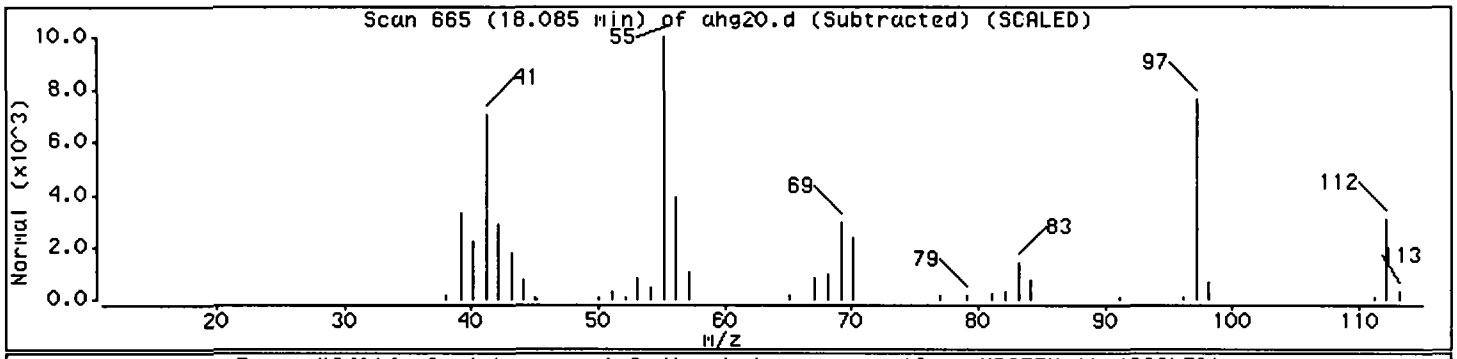
Client ID: WS-03 Instrument: gcl2.i

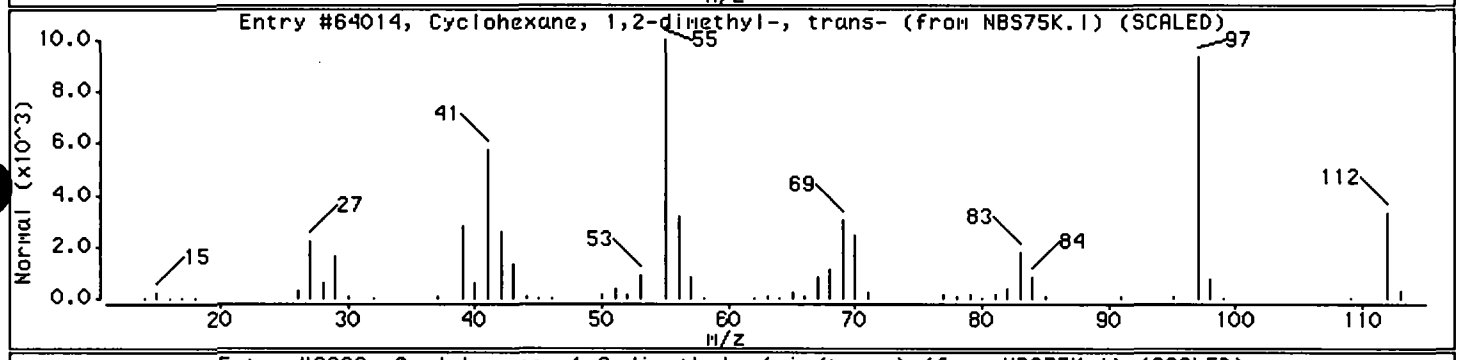
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

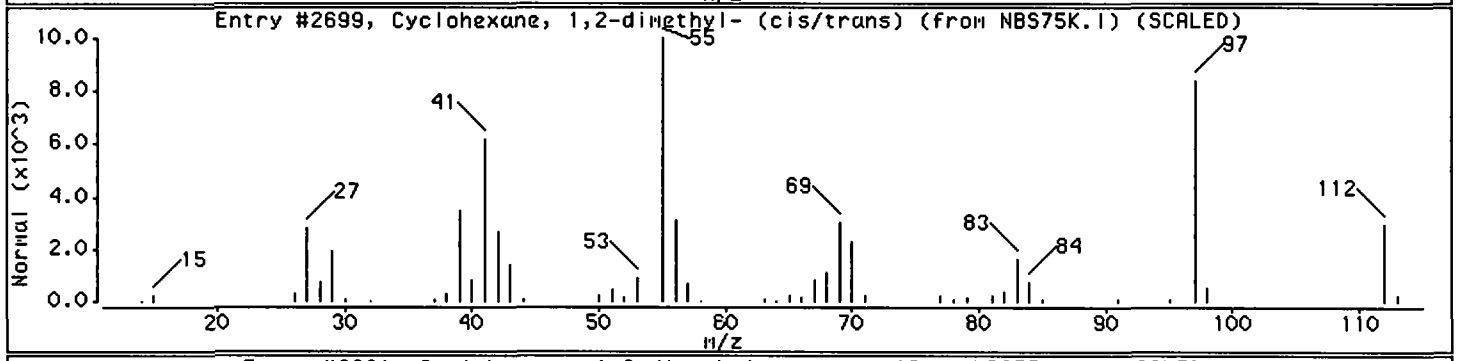
Operator: KMC

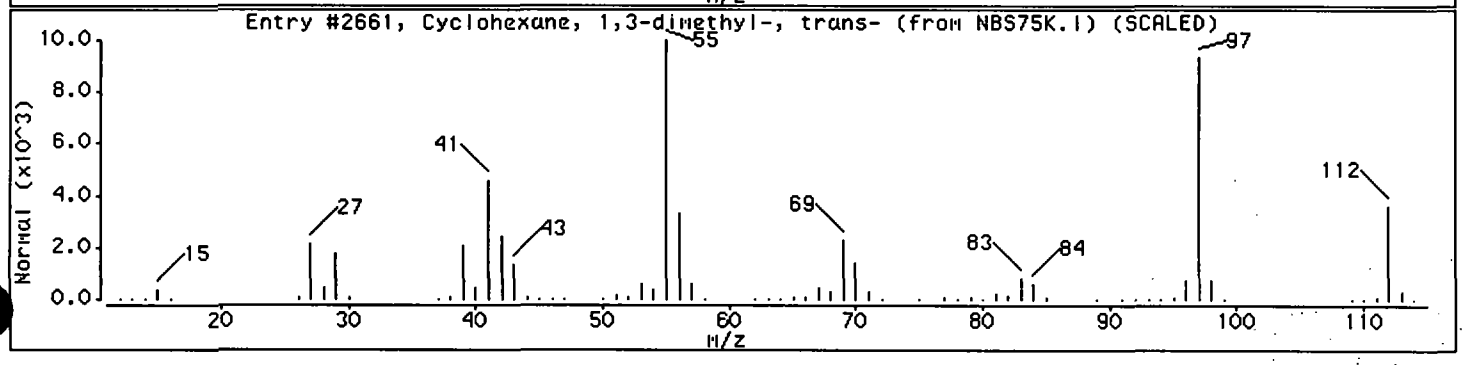
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,2-dimethyl-, trans-	6876-23-9	NBS75K.l	64014	96	C8H16	112
Cyclohexane, 1,2-dimethyl- (cis/trans)	583-57-3	NBS75K.l	2699	95	C8H16	112
Cyclohexane, 1,3-dimethyl-, trans-	2207-03-6	NBS75K.l	2661	90	C8H16	112









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

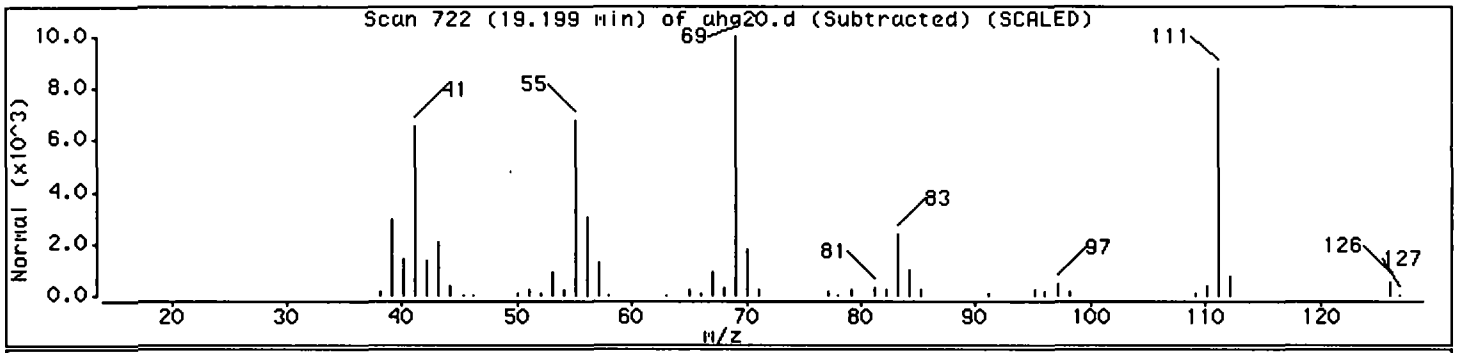
Client ID: WS-03 Instrument: gcl2.i

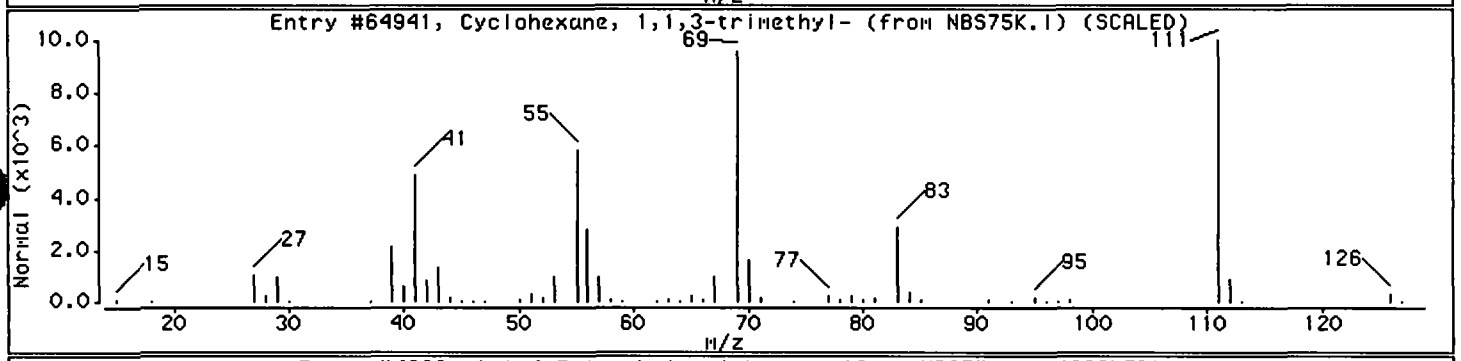
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

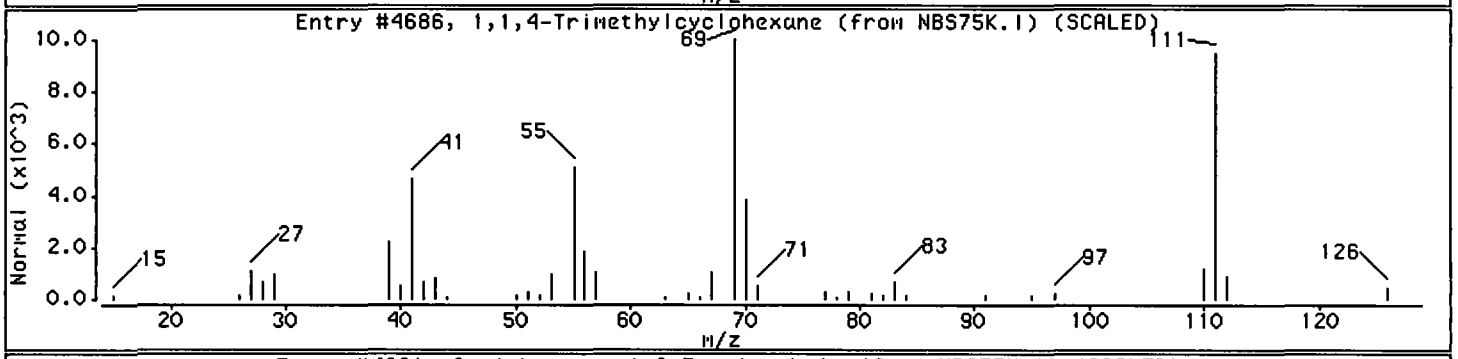
Operator: KMC

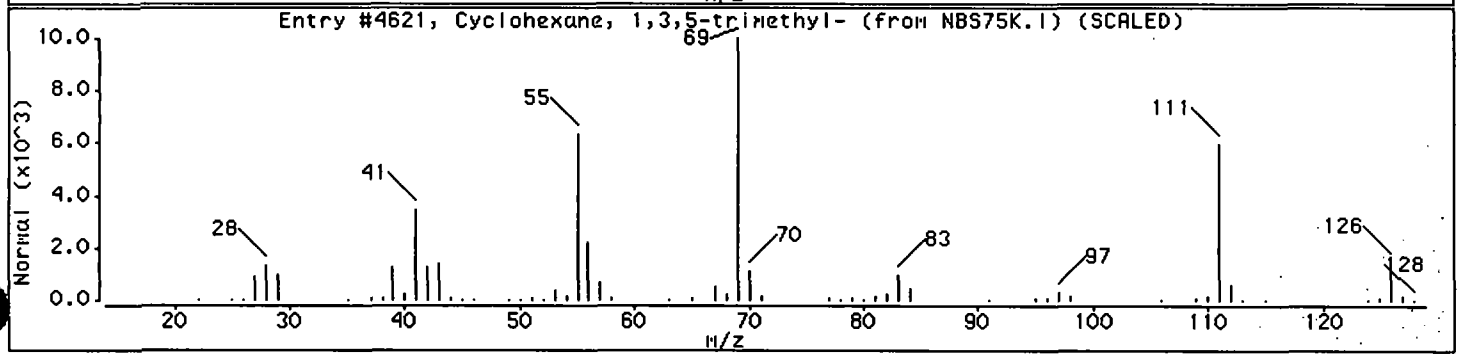
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NBS75K.l	64941	86	C9H18	126
1,1,4-Trimethylcyclohexane	7094-27-1	NBS75K.l	4686	72	C9H18	126
Cyclohexane, 1,3,5-trimethyl-	1839-63-0	NBS75K.l	4621	72	C9H18	126









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

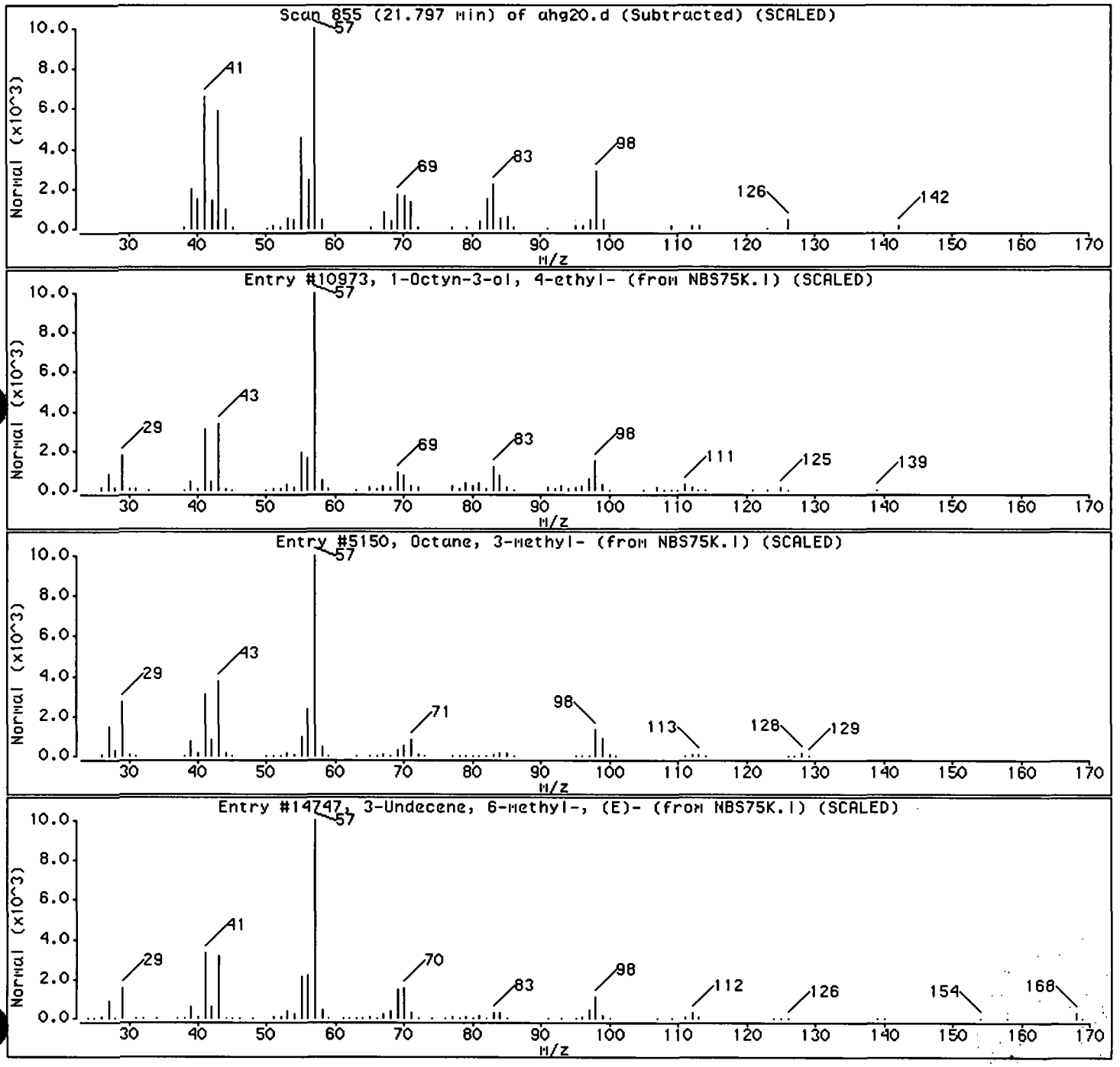
Client ID: WS-03 Instrument: gcl2.i

Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

Operator: KMC

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Octyn-3-ol, 4-ethyl-	5877-42-9	NBS75K.l	10973	50	C10H18O	154
Octane, 3-methyl-	2216-33-3	NBS75K.l	5150	47	C9H20	128
3-Undecene, 6-methyl-, (E)-	74630-52-7	NBS75K.l	14747	43	C12H24	168



Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

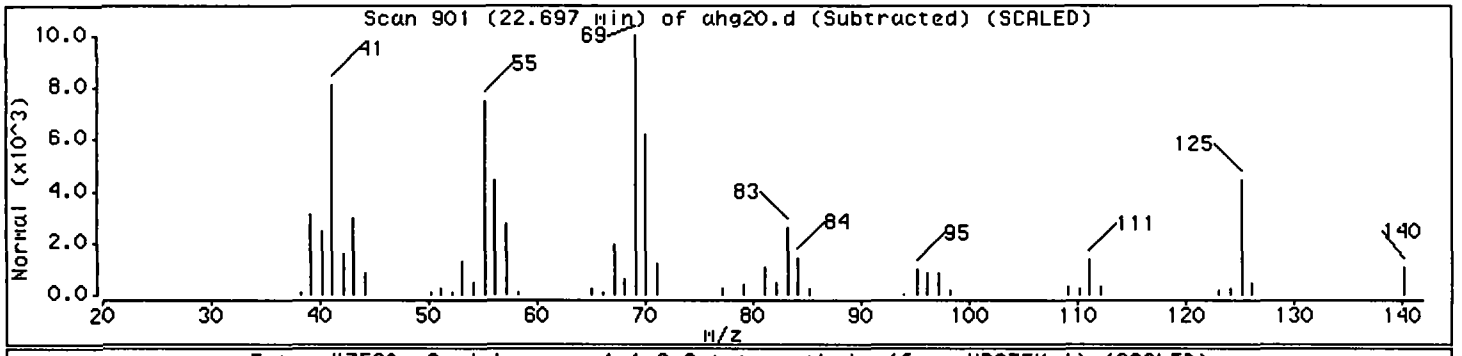
Client ID: WS-03 Instrument: gcl2.i

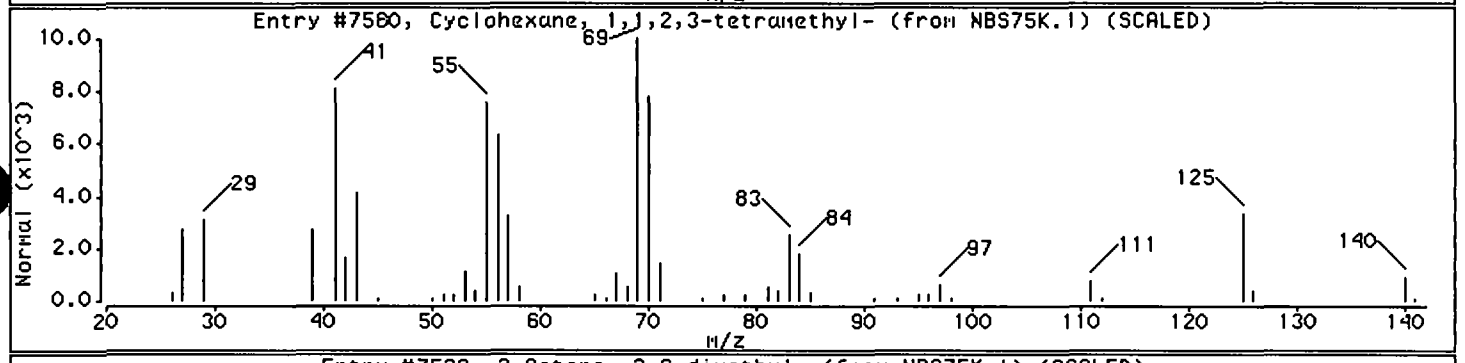
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

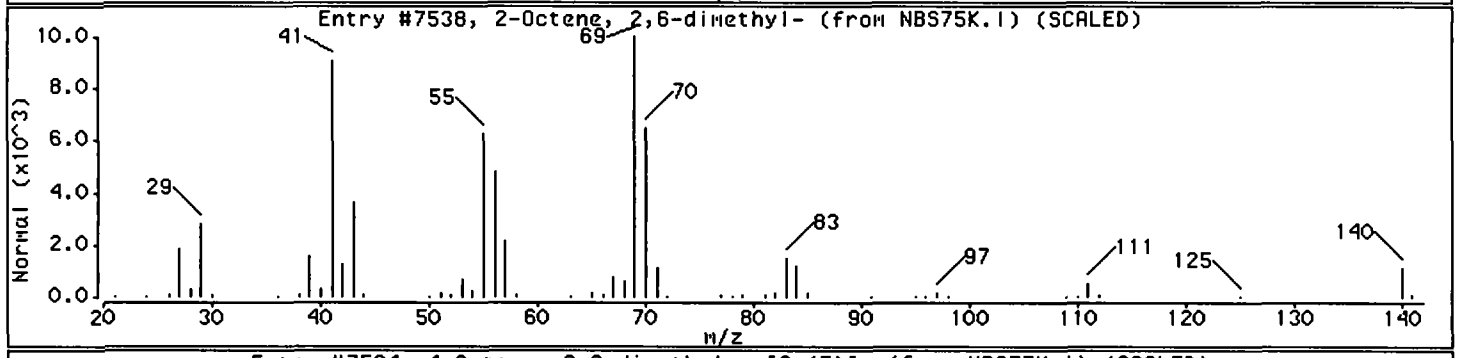
Operator: KMC

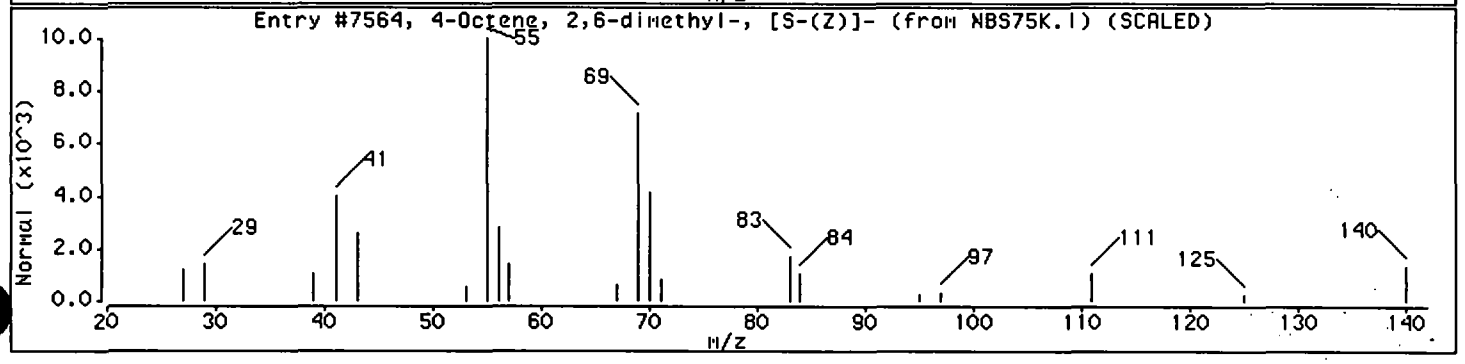
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 1,1,2,3-tetramethyl-	6783-92-2	NBS75K.l	7580	93	C10H20	140
2-Octene, 2,6-dimethyl-	4057-42-5	NBS75K.l	7538	76	C10H20	140
4-Octene, 2,6-dimethyl-, [S-(Z)]-	62960-77-4	NBS75K.l	7564	70	C10H20	140









Data File: /chem/gcl2.i/961201.b/ahg20.d

Date : 01-DEC-1996 18:50

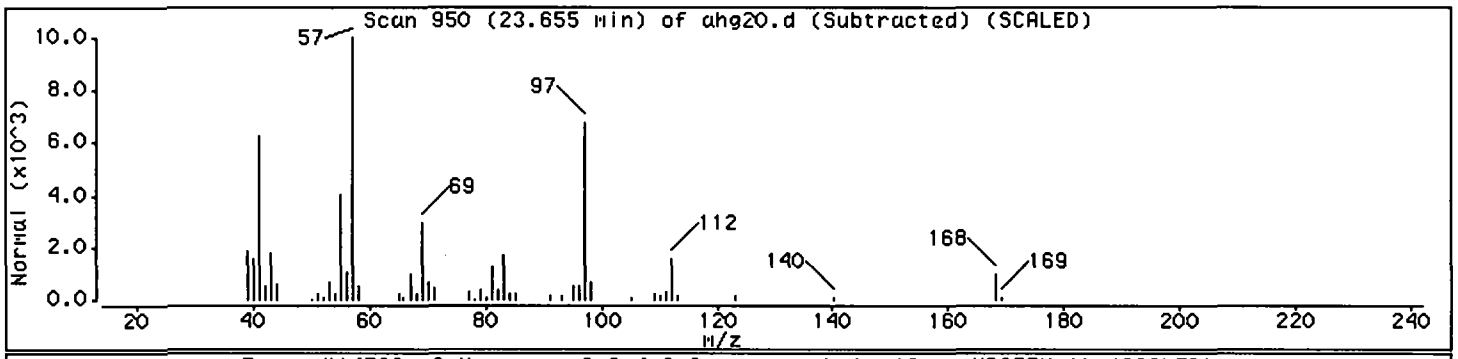
Client ID: WS-03 Instrument: gcl2.i

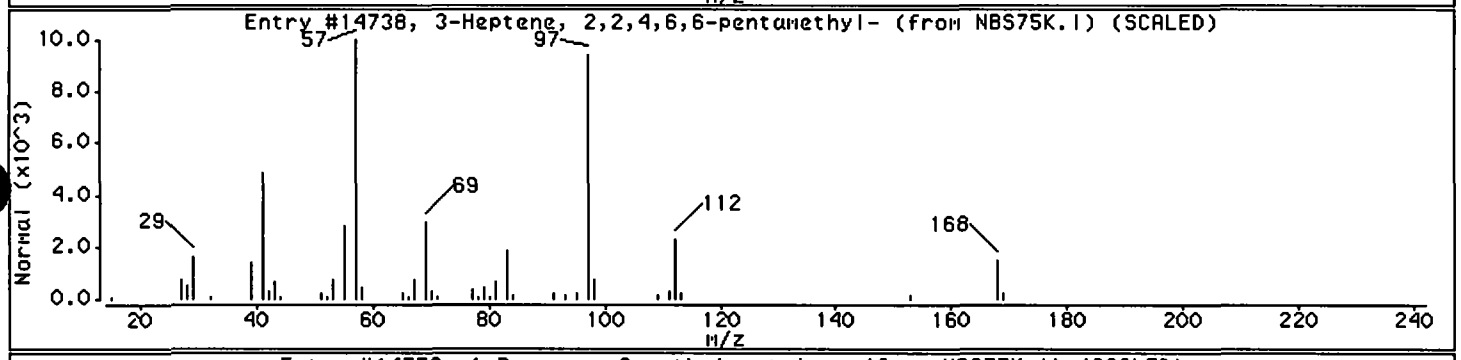
Sample Info: 9611G675-003 XAC01,[AL=0624He],[DC=00]

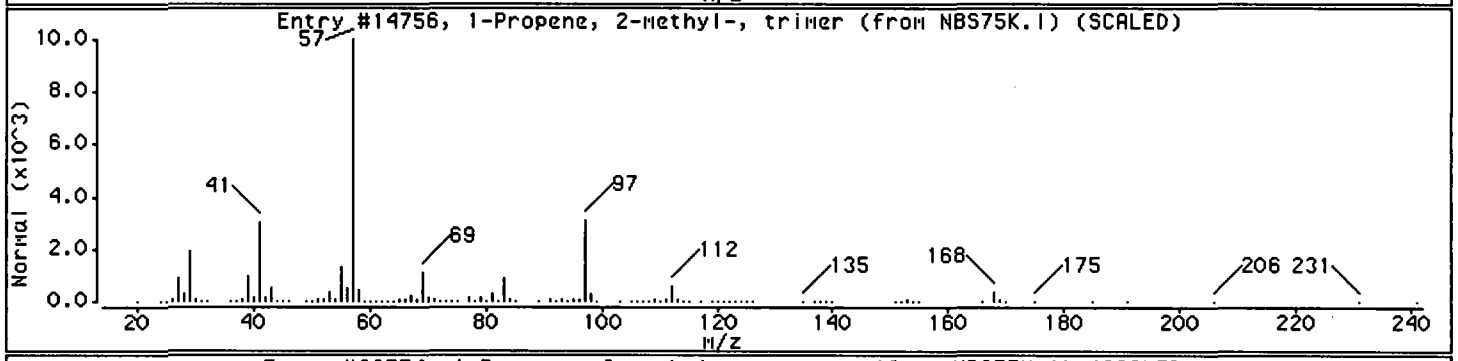
Operator: KMC

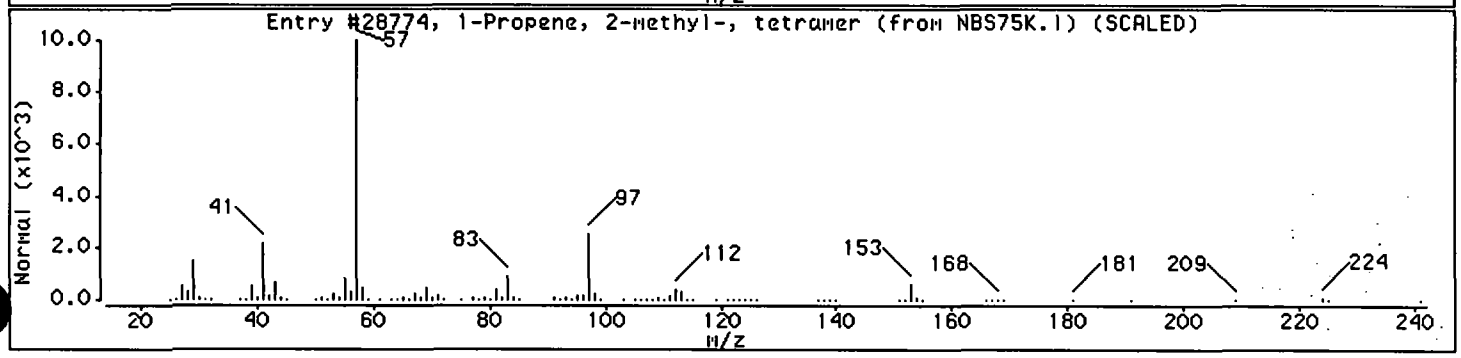
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
3-Heptene, 2,2,4,6,6-pentamethyl-	123-48-8	NBS75K.I	14738	74	C12H24	168
1-Propene, 2-methyl-, trimer	7756-94-7	NBS75K.I	14756	53	C12H24	168
1-Propene, 2-methyl-, tetramer	15220-85-6	NBS75K.I	28774	47	C16H32	224









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-04

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG12

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 46 Date Analyzed: 11/30/96

GC Column: CAP 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/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	19	U
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-04

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-004

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG12

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 46 Date Analyzed: 11/30/96

GC Column: CAP 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

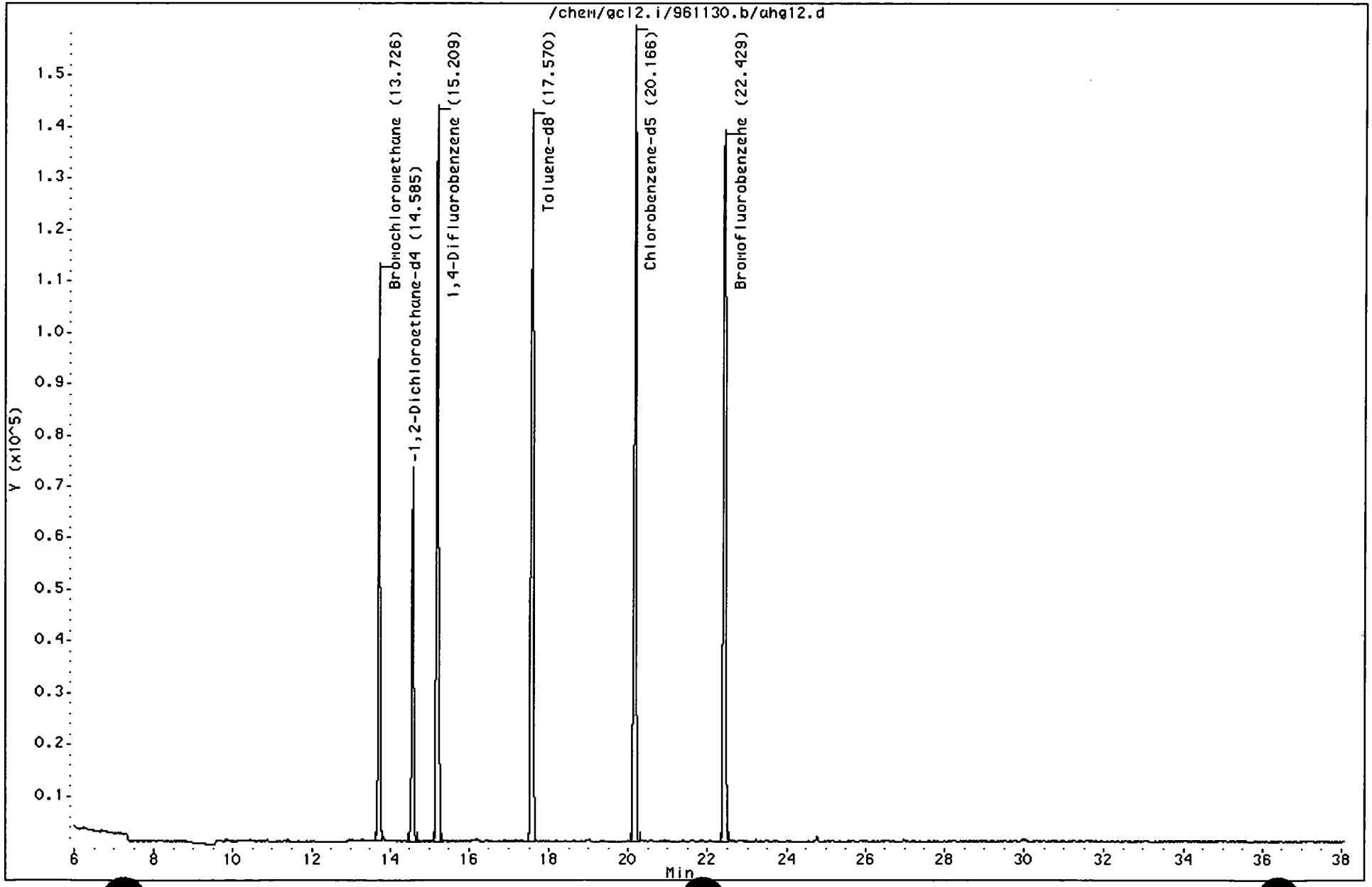
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/gcl2.i/961130.b/ahgl2.d
Date : 30-NOV-1996 18:26
Client ID: WS-04
Sample Info: 9611G675-004 XBB30,[AL=0624He],[DC=00]

Column phase: Cap

Instrument: gcl2.i

Operator: 5GSMP +5ULIS
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg12.d
Lab Smp Id: 9611G675-004 Client Smp ID: WS-04
Inj Date : 30-NOV-1996 18:26
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-004 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	46.400	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.726	13.755	(1.000)	47010	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.585	14.614	(1.063)	87275	45.189	84.308
* 42 1,4-Difluorobenzene	114.00	15.209	15.239	(1.000)	198061	50.000	
$ 52 Toluene-d8	98.00	17.570	17.622	(0.871)	174215	47.017	87.718
* 61 Chlorobenzene-d5	117.00	20.166	20.218	(1.000)	167382	50.000	
$ 69 Bromofluorobenzene	95.00	22.429	22.484	(1.112)	108527	40.536	75.626

JK 1-7-97

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg12.d
Lab Smp Id: 9611G675-004 Client Smp ID: WS-04
Inj Date : 30-NOV-1996 18:26
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-004 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-05

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG17

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 28 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	140	U
74-83-9	Bromomethane	140	U
75-01-4	Vinyl Chloride	140	U
75-00-3	Chloroethane	140	U
75-09-2	Methylene Chloride	140	U
67-64-1	Acetone	2200	
75-15-0	Carbon Disulfide	140	U
75-35-4	1,1-Dichloroethene	140	U
75-34-3	1,1-Dichloroethane	140	U
540-59-0	1,2-Dichloroethene (total)	140	U
67-66-3	Chloroform	140	U
107-06-2	1,2-Dichloroethane	140	U
78-93-3	2-Butanone	140	U
71-55-6	1,1,1-Trichloroethane	140	U
56-23-5	Carbon Tetrachloride	140	U
75-27-4	Bromodichloromethane	140	U
78-87-5	1,2-Dichloropropane	140	U
10061-01-5	cis-1,3-Dichloropropene	140	U
79-01-6	Trichloroethene	140	U
124-48-1	Dibromochloromethane	140	U
79-00-5	1,1,2-Trichloroethane	140	U
71-43-2	Benzene	140	U
10061-02-6	trans-1,3-Dichloropropene	140	U
75-25-2	Bromoform	140	U
108-10-1	4-Methyl-2-pentanone	140	U
591-78-6	2-Hexanone	140	U
127-18-4	Tetrachloroethene	140	U
79-34-5	1,1,2,2-Tetrachloroethane	140	U
108-88-3	Toluene	45	J
108-90-7	Chlorobenzene	140	U
100-41-4	Ethylbenzene	90	J
100-42-5	Styrene	140	U
1330-20-7	Xylene (total)	380	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-05

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-005

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG17

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 28 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

Number TICs found: 10

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

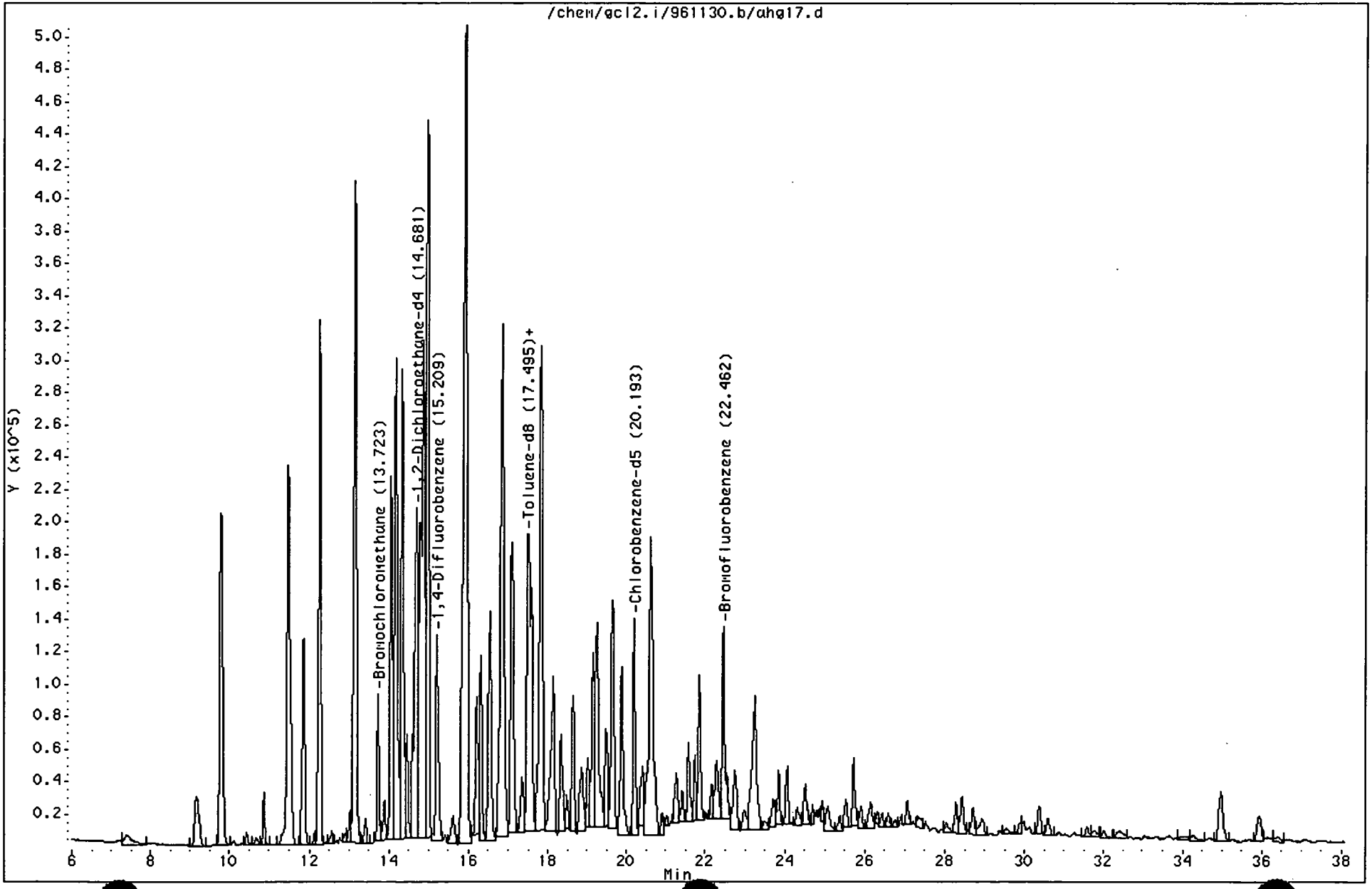
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN HYDROCARBON	11.48	2900	J
2.		UNKNOWN HYDROCARBON	12.26	2700	J
3.		UNKNOWN	13.16	4200	J
4.		UNKNOWN HYDROCARBON	14.05	2300	J
5.		UNKNOWN CYCLOALKANE	14.17	3500	J
6.		UNKNOWN HYDROCARBON	14.33	3100	J
7.		UNKNOWN CYCLOALKANE	14.88	3100	J
8.		UNKNOWN HYDROCARBON	14.97	2300	J
9.		UNKNOWN CYCLOALKANE	15.93	4000	J
10.		UNKNOWN HYDROCARBON	16.85	2300	J
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/gcl2.i/961130.b/ahg17.d
Date : 30-NOV-1996 22:26
Client ID: WS-05
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

Column phase: Cap

Instrument: gcl2.i

Operator: 0.5GSMP+5ULIS
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg17.d
Lab Smp Id: 9611G675-005 Client Smp ID: WS-05
Inj Date : 30-NOV-1996 22:26
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-005 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	28.400	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
13 Acetone	43.00	10.873	10.885	(0.792)	69113	154.67	2160.2
* 31 Bromochloromethane	127.80	13.723	13.755	(1.000)	38626	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.583	14.614	(1.063)	78873	49.703	69.417(a)
* 42 1,4-Difluorobenzene	114.00	15.209	15.239	(1.000)	155319	50.000	
$ 52 Toluene-d8	98.00	17.593	17.622	(0.871)	143382	50.720	70.839(aM)
53 Toluene	91.00	17.710	17.739	(0.877)	10541	3.198	44.672(aM)
* 61 Chlorobenzene-d5	117.00	20.193	20.218	(1.000)	127699	50.000	
63 Ethylbenzene	106.00	20.428	20.433	(1.012)	7324	6.457	90.179(aM)
65 m,p-xylene	91.00	20.643	20.668	(1.022)	68968	22.882	319.58
M 71 Xylene (total)	91.00				87796	27.567	385.01
66 o-xylene	91.00	21.405	21.430	(1.060)	18828	5.912	82.567(aM)
$ 69 Bromofluorobenzene	95.00	22.462	22.484	(1.112)	96514	47.251	65.993(a)

JK 1-7-97

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

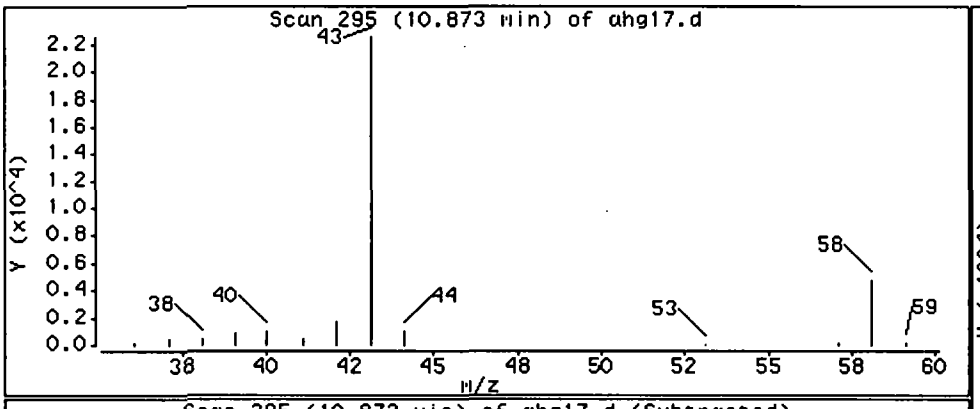
Client ID: WS-05 Instrument: gcl2.i

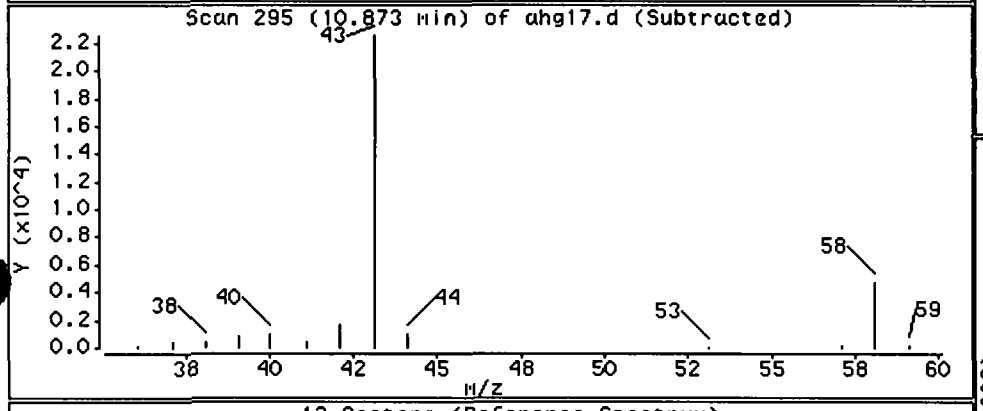
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

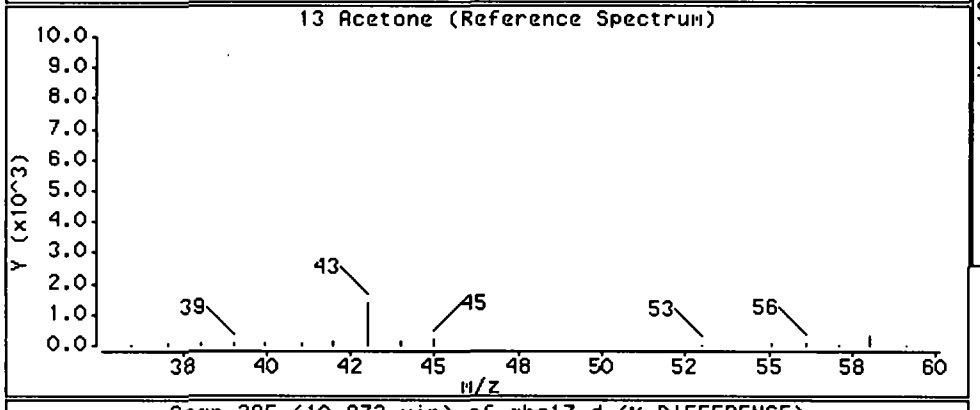
Operator: 0.5GSMP+5ULIS

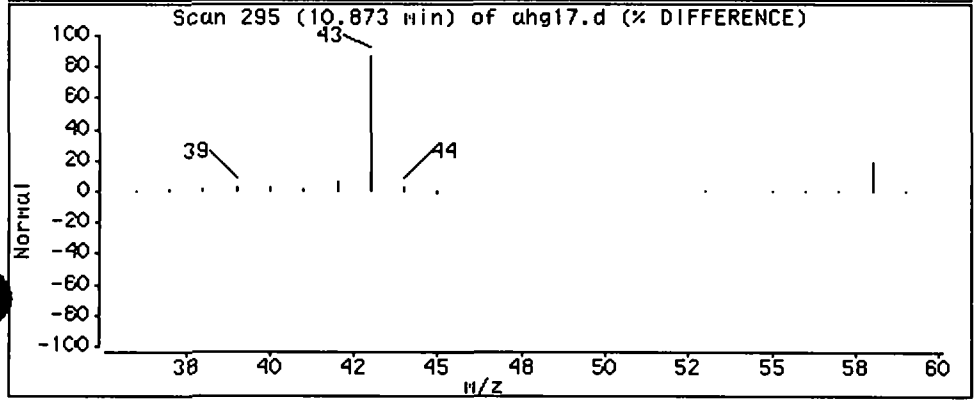
Column phase: Cap Column diameter: 0.53

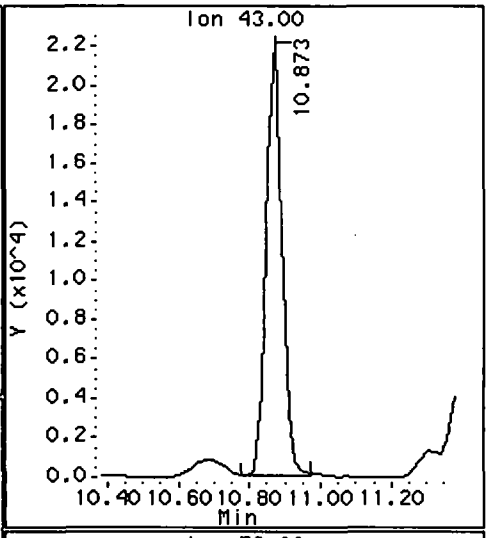
13 Acetone

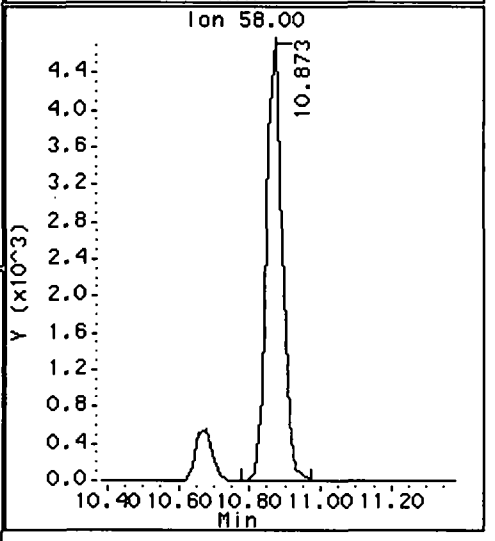












Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

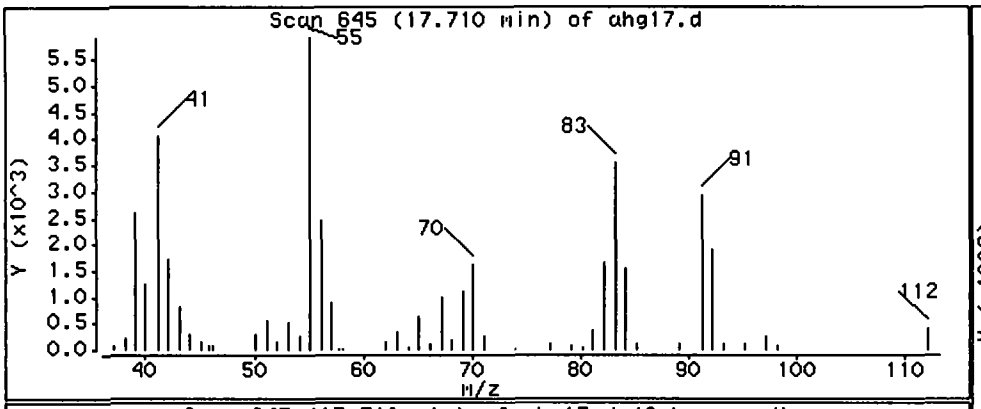
Client ID: WS-05 Instrument: gcl2.i

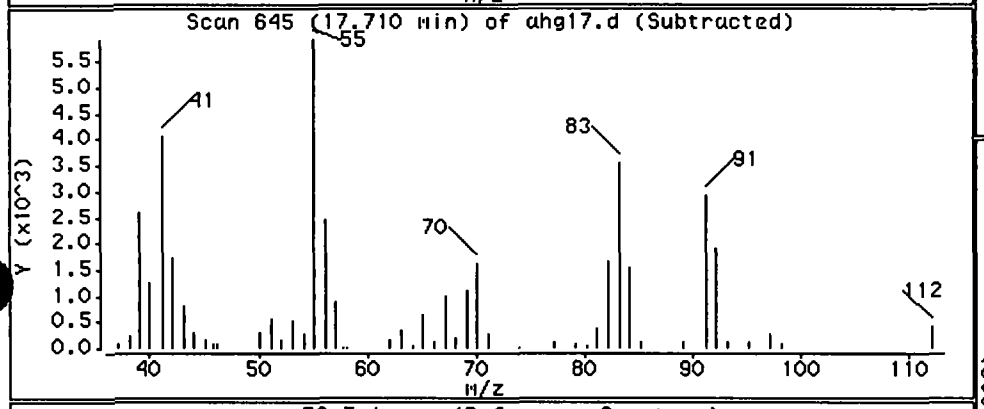
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

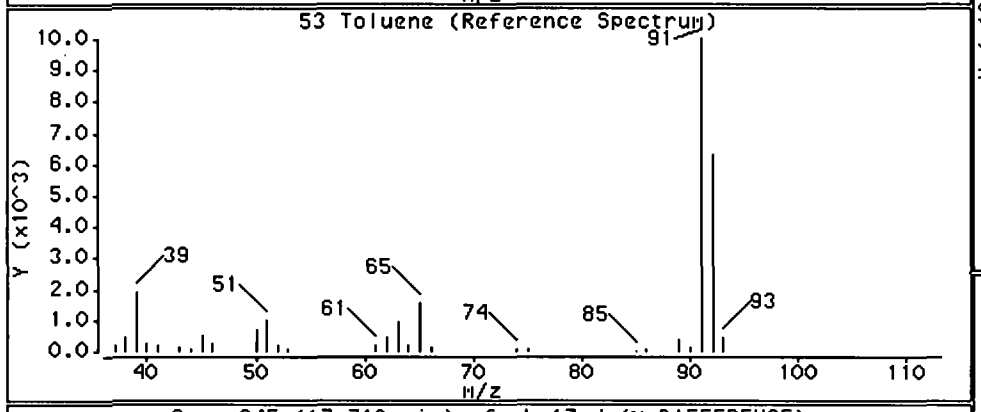
Operator: 0.5GSMP+5ULIS

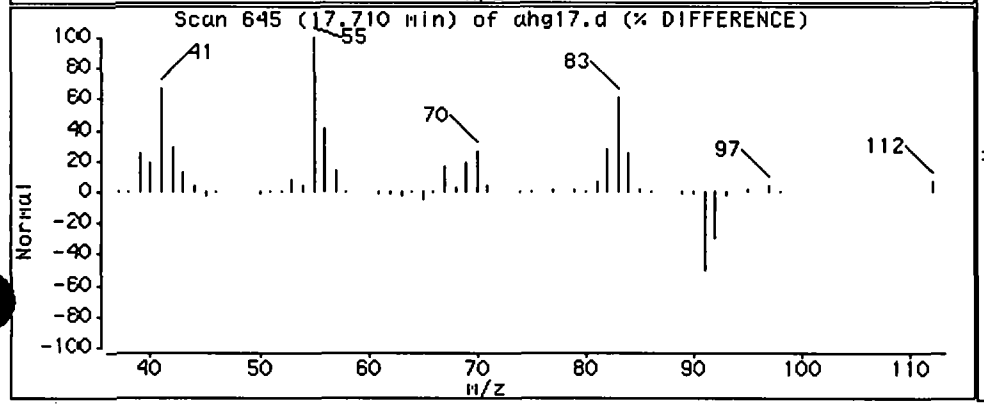
Column phase: Cap Column diameter: 0.53

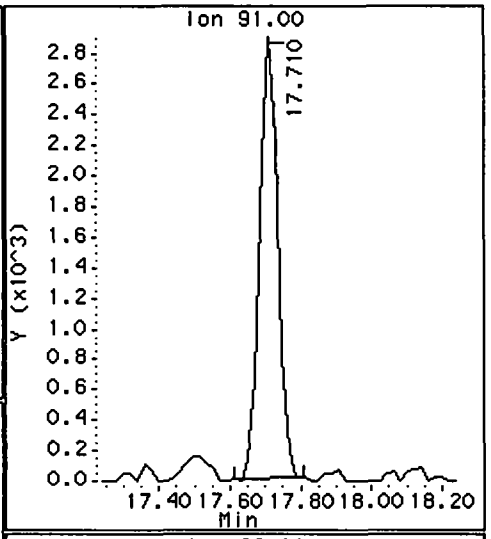
53 Toluene

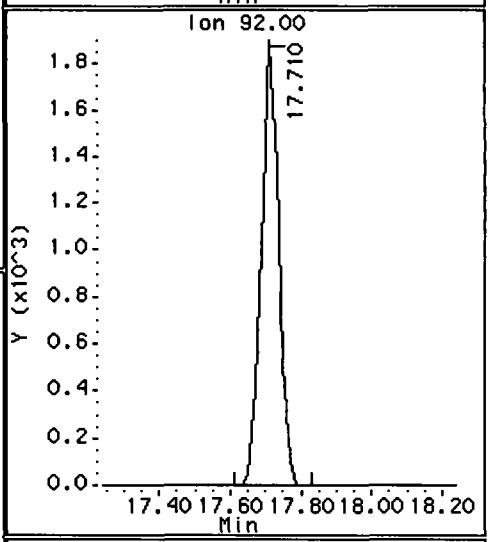


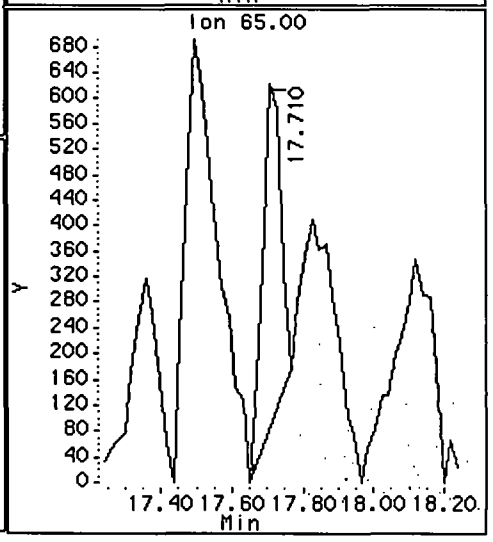


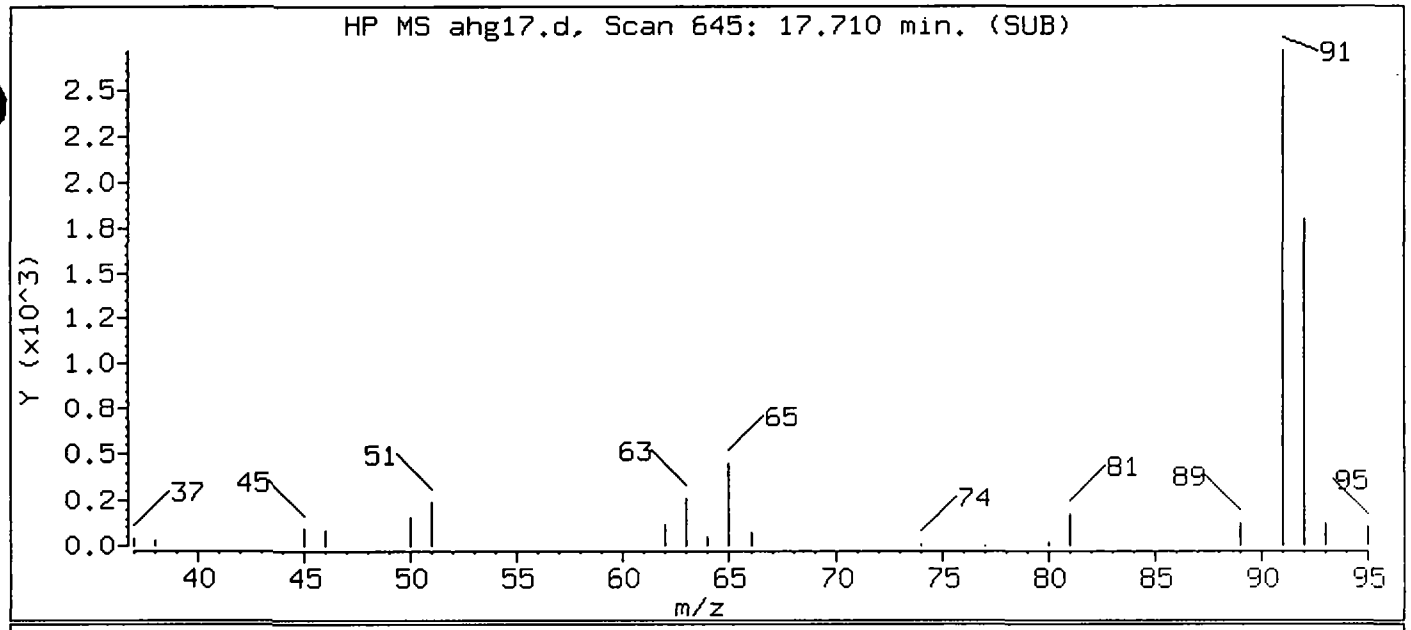


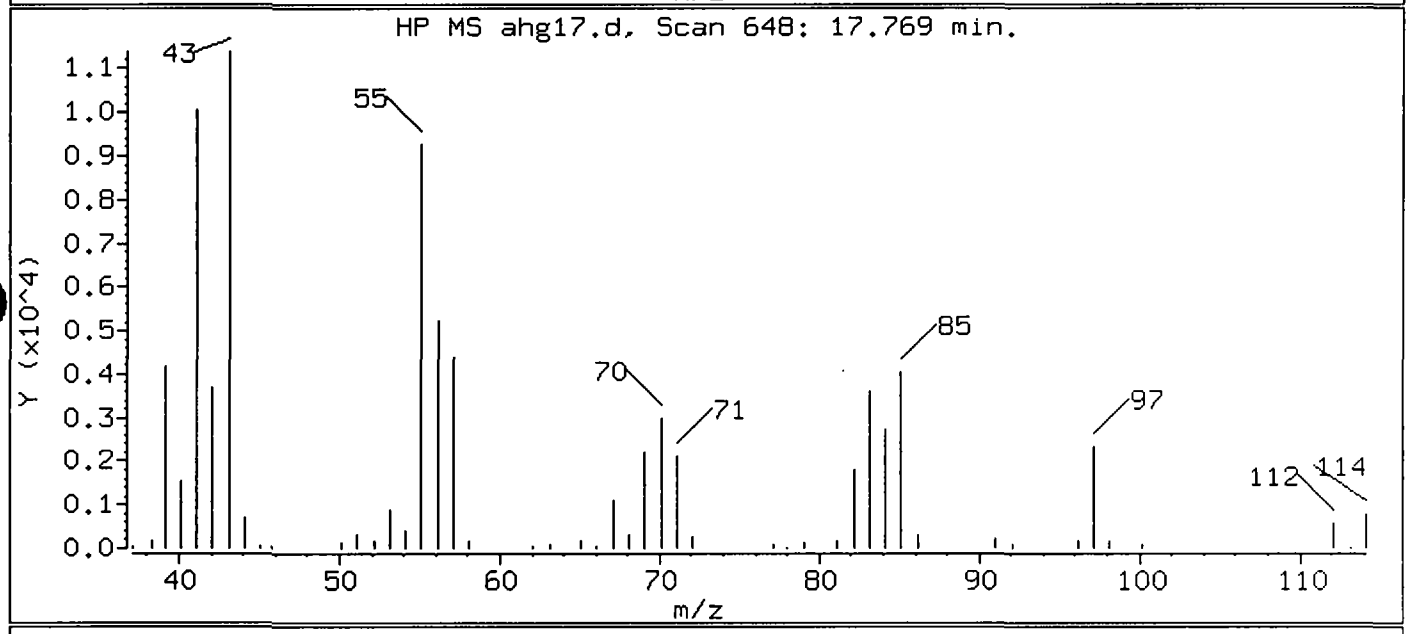


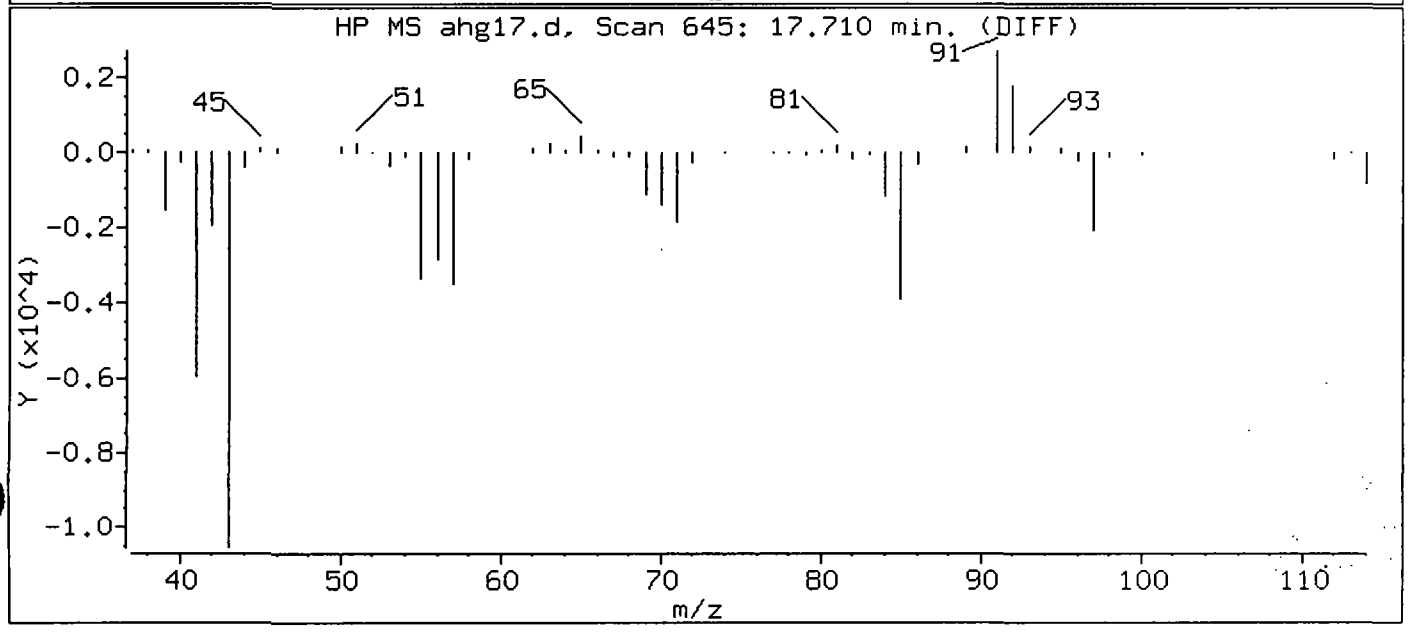







HP MS ahg17.d, Scan 645: 17.710 min. (SUB)
Y (x10^3)
m/z
91
65
63
51
45
37
74
81
89
95


HP MS ahg17.d, Scan 648: 17.769 min.
Y (x10^4)
m/z
43
55
85
70
71
97
112
114


HP MS ahg17.d, Scan 645: 17.710 min. (DIFF)
Y (x10^4)
m/z
91
45
51
65
81
93

Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

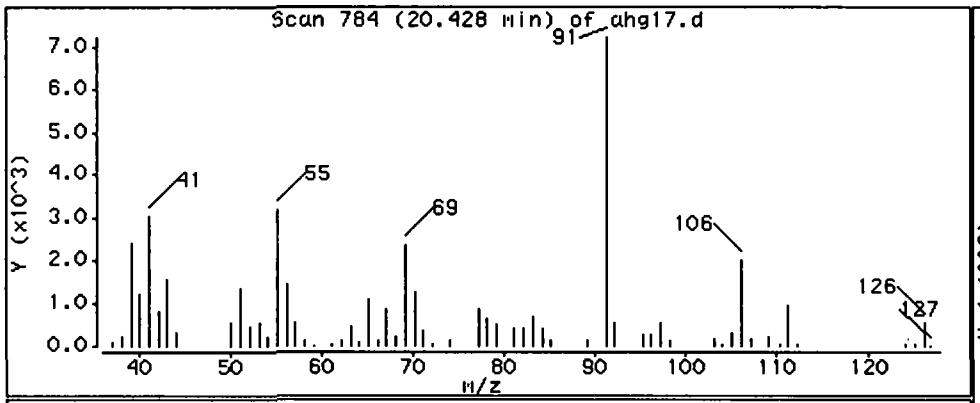
Client ID: WS-05 Instrument: gcl2.i

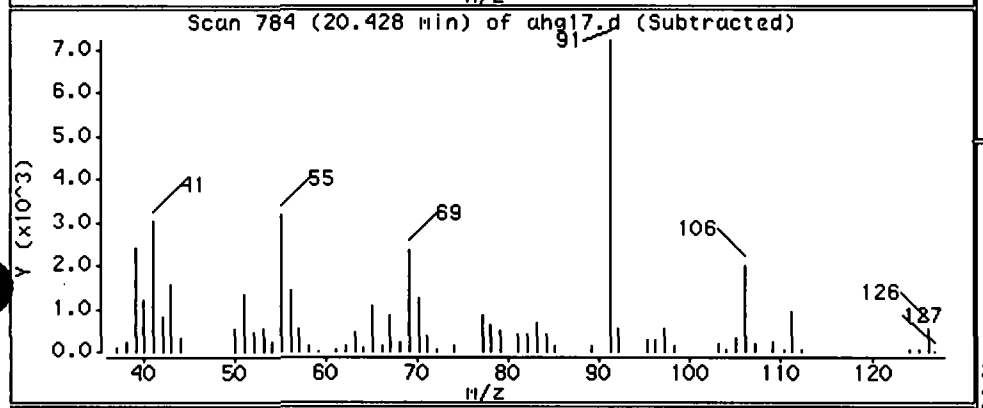
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

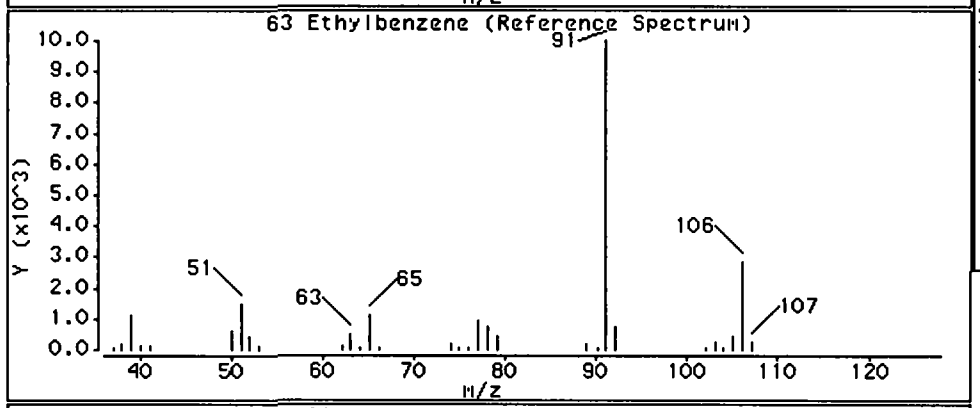
Operator: 0.5GSMP+5ULIS

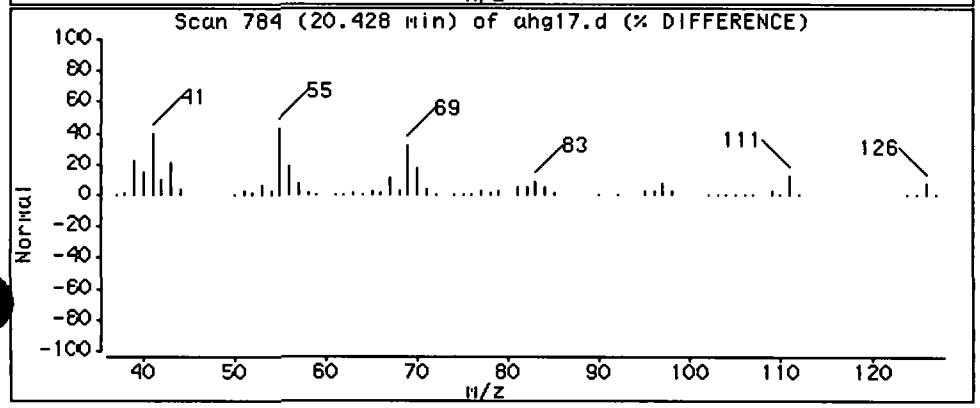
Column phase: Cap Column diameter: 0.53

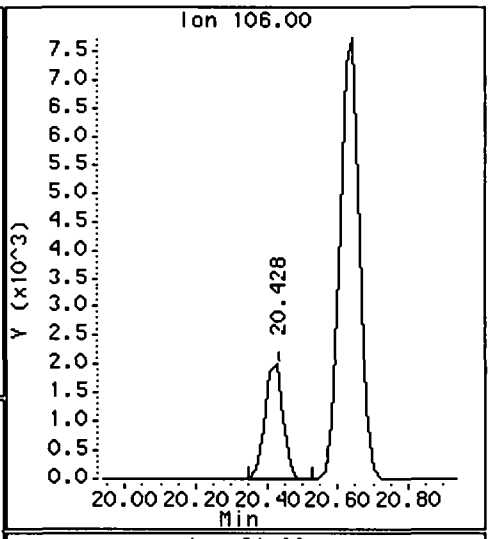
63 Ethylbenzene

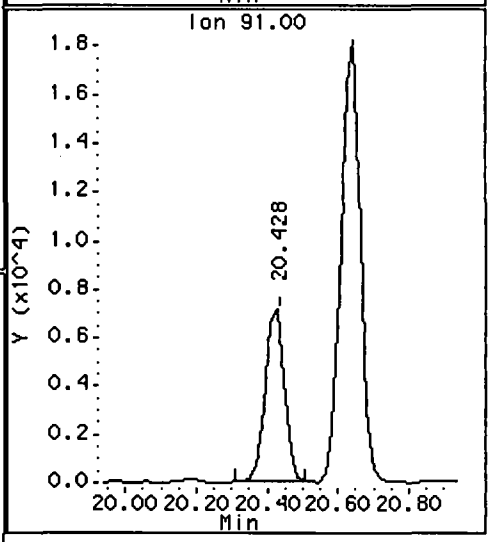












Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

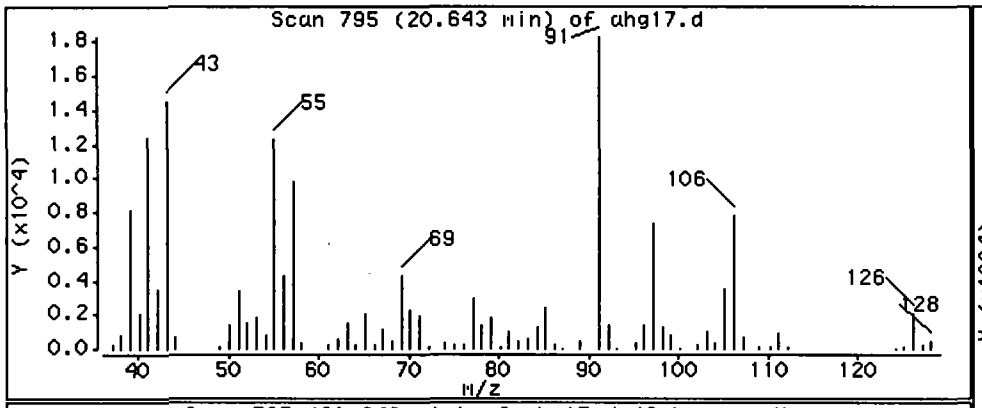
Client ID: WS-05 Instrument: gcl2.i

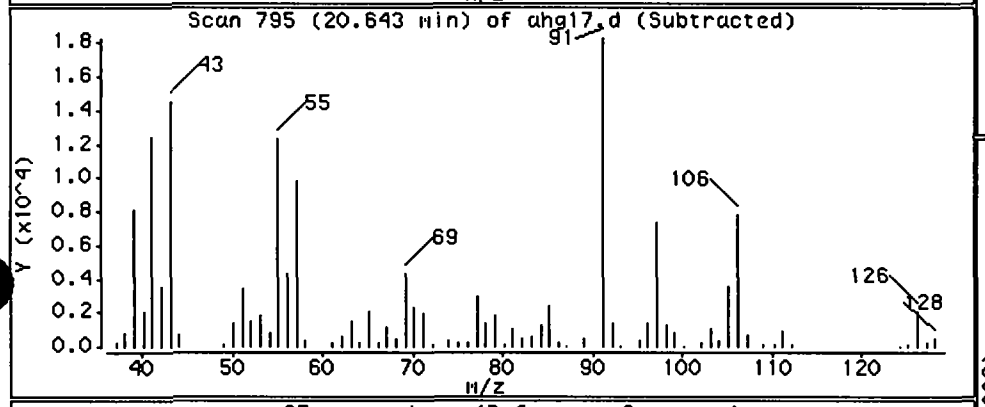
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

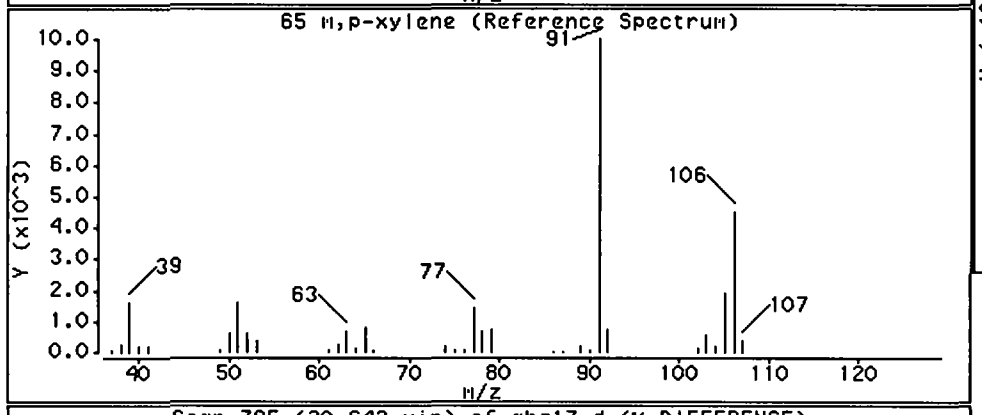
Operator: 0.5GSMP+5ULIS

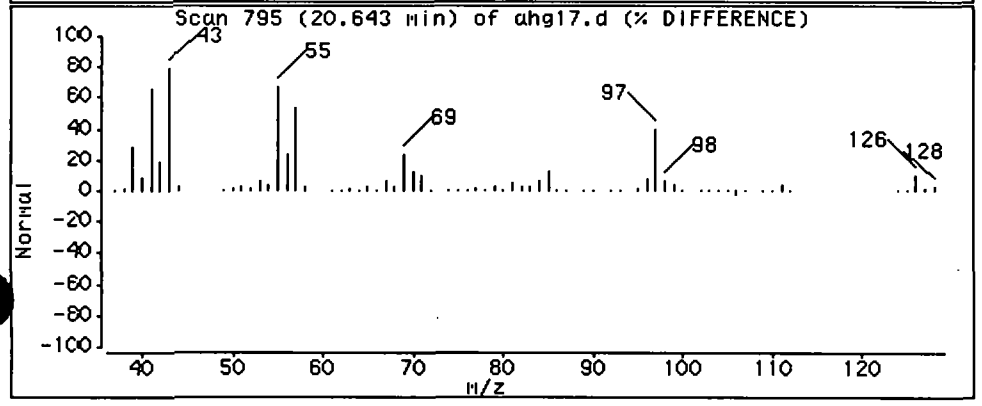
Column phase: Cap Column diameter: 0.53

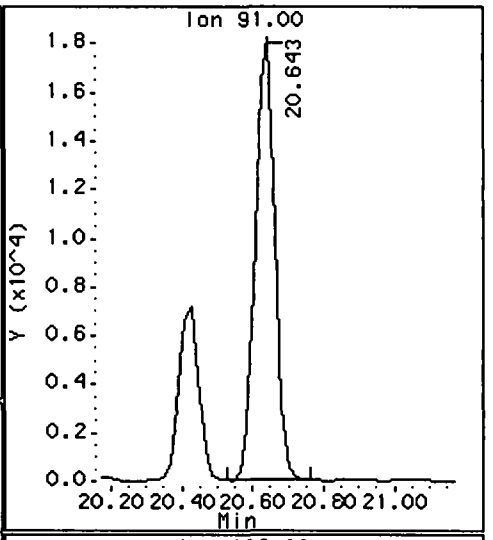
65 m,p-xylene

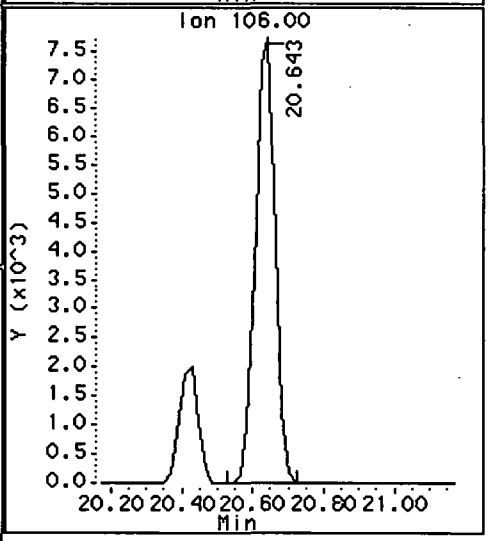


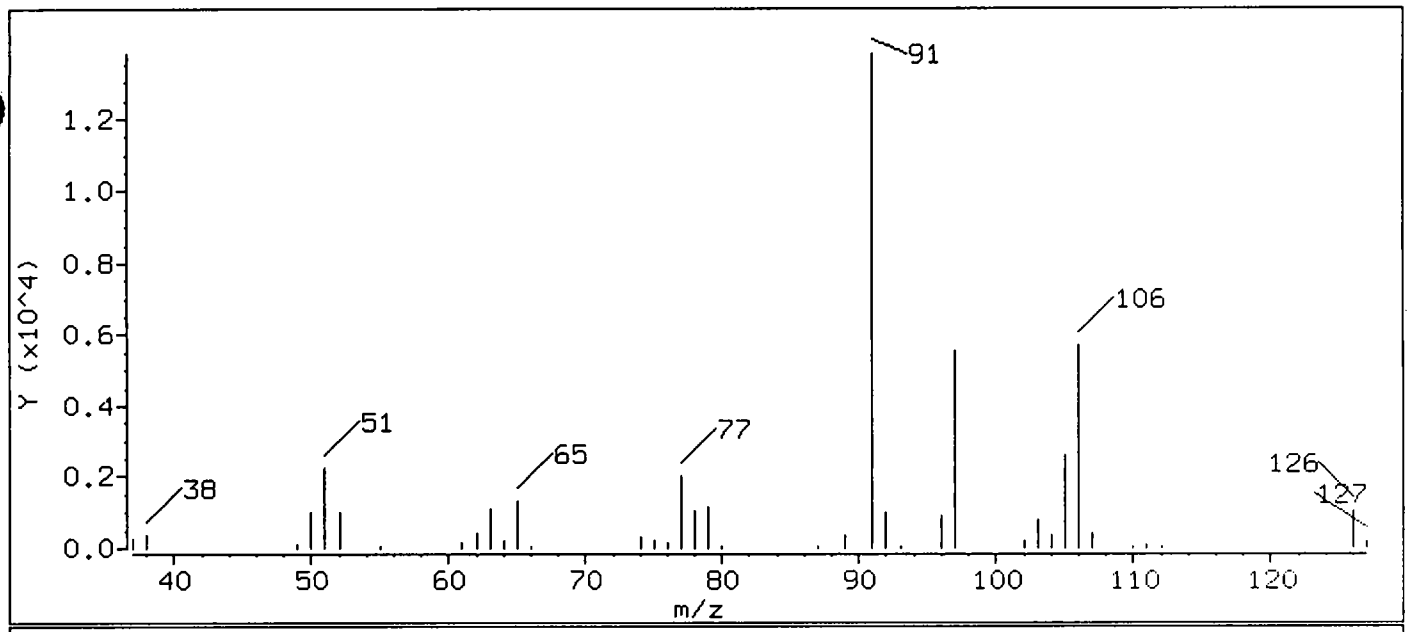


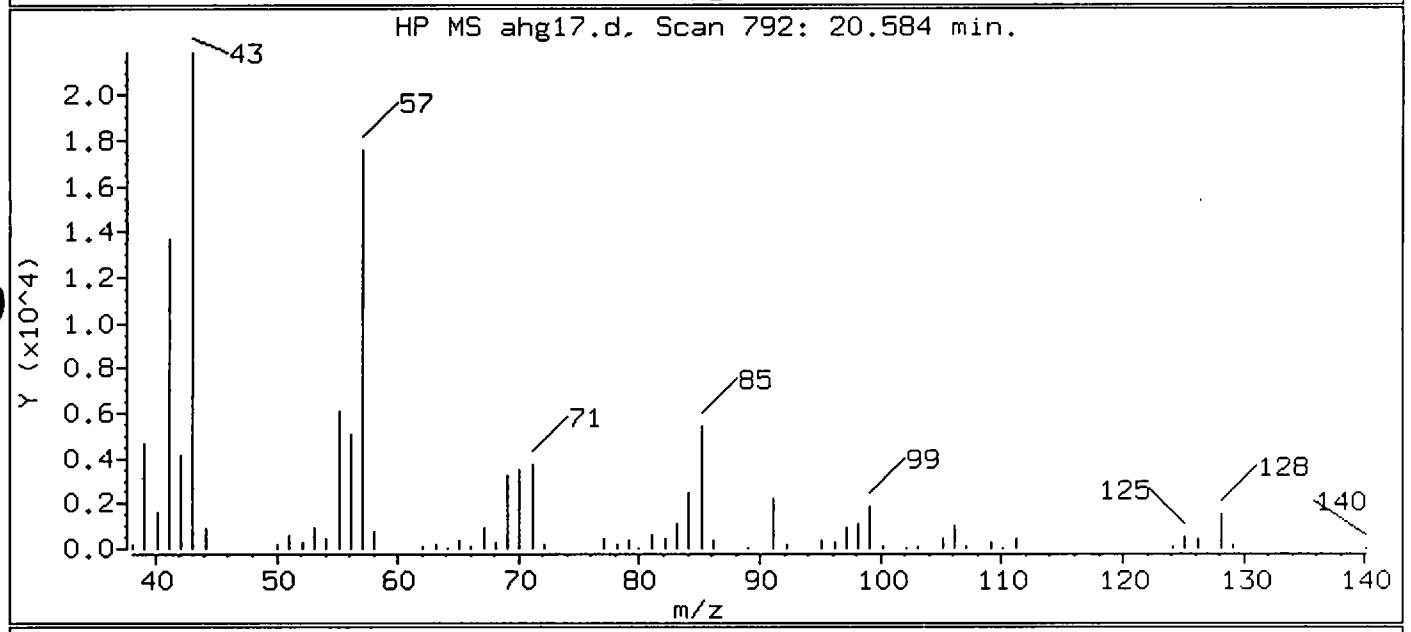


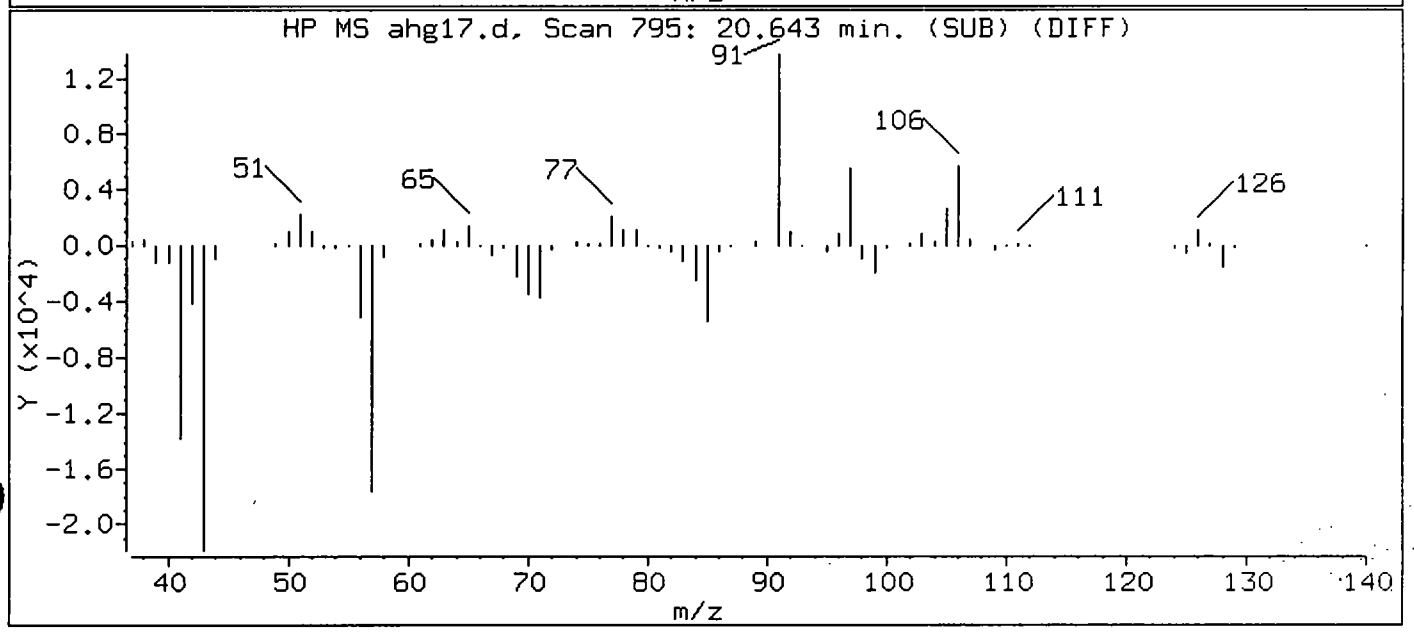







91
106
51
65
77
38
126
127
Y (x10^4)
m/z


HP MS ahg17.d, Scan 792: 20.584 min.
43
57
85
71
99
125
128
140
Y (x10^4)
m/z


HP MS ahg17.d, Scan 795: 20.643 min. (SUB) (DIFF)
91
106
51
65
77
111
126
Y (x10^4)
m/z

Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

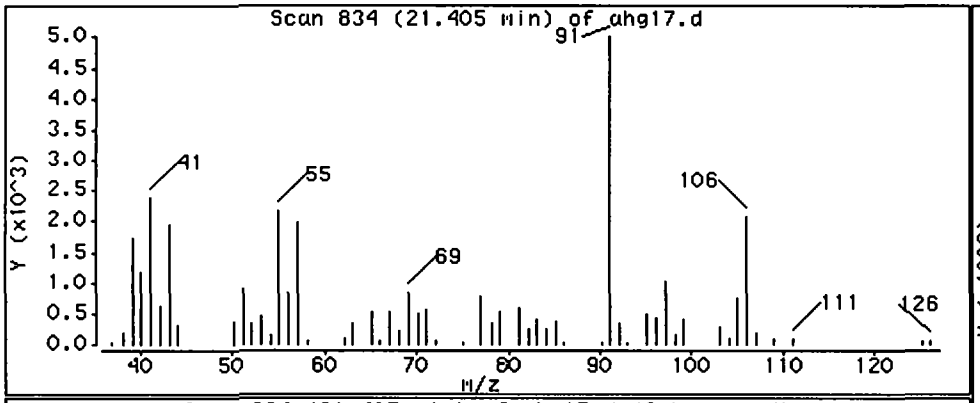
Client ID: WS-05 Instrument: gcl2.i

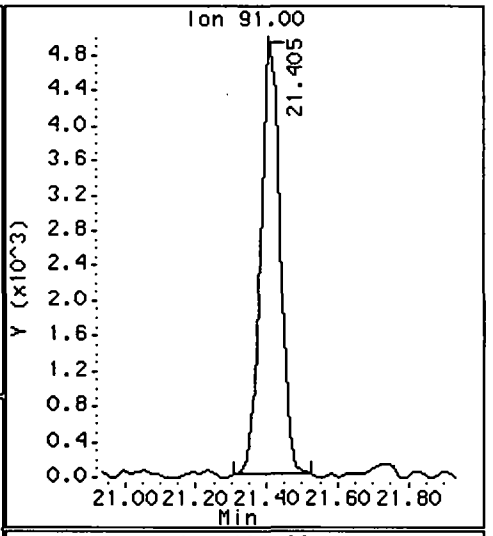
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

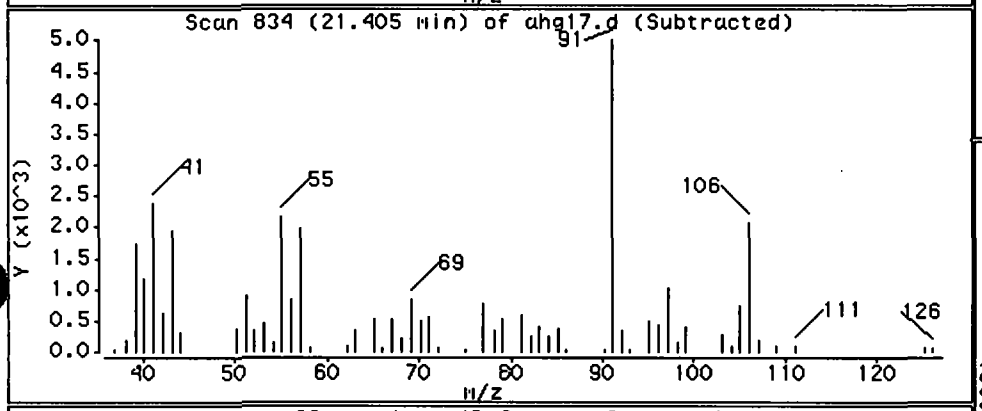
Operator: 0.5GSMP+5ULIS

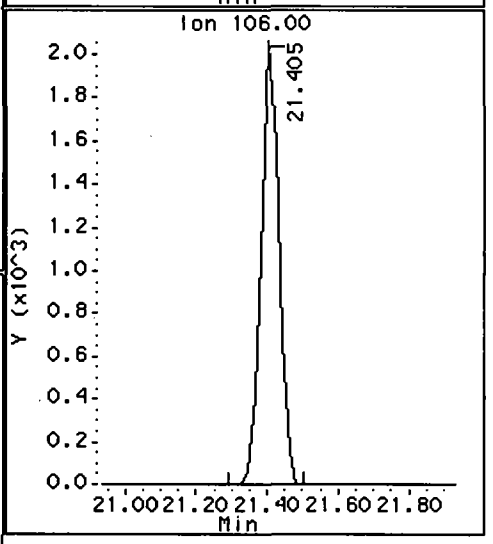
Column phase: Cap Column diameter: 0.53

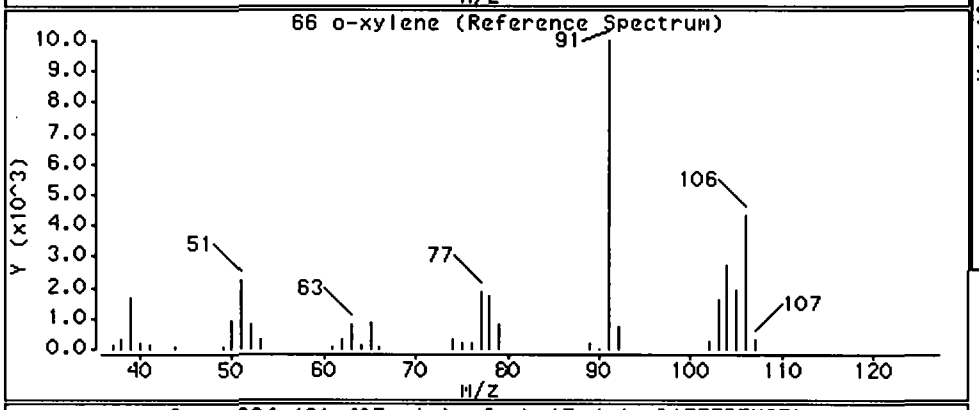
66 o-xylene

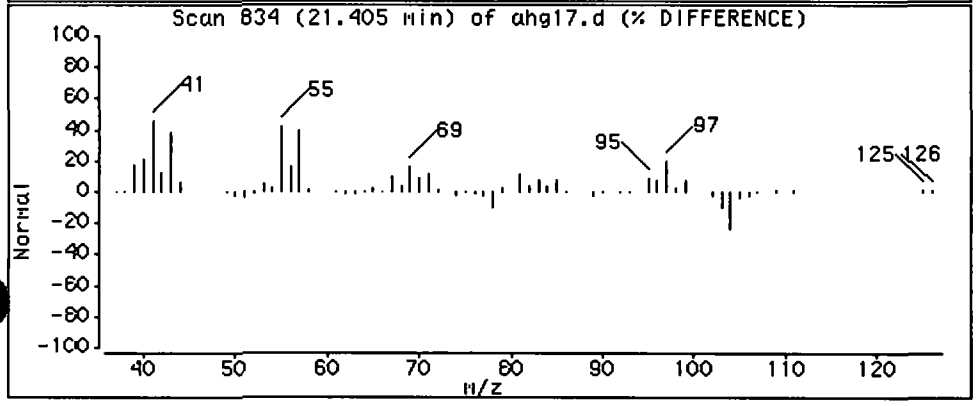












Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg17.d
Lab Smp Id: 9611G675-005 Client Smp ID: WS-05
Inj Date : 30-NOV-1996 22:26
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-005 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	28.400	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 31 Bromochloromethane	13.723	327826	50.000
* 42 1,4-Difluorobenzene	15.209	573255	50.000

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
11.478	1380937	210.62	2941.6	0		0	31
Unknown Hydrocarbon					CAS #:		
12.259	1278390	194.98	2723.2	0		0	31
Unknown					CAS #:		
13.157	1958786	298.75	4172.5	0		0	31

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
14.055	1068783	163.01	2276.7	0		0	31
Unknown Cycloalkane					CAS #:		
14.173	1627197	248.18	3466.2	0		0	31
Unknown Hydrocarbon					CAS #:		
14.329	1439627	219.57	3066.6	0		0	31
Unknown Cycloalkane					CAS #:		
14.876	2523945	220.14	3074.6	0		0	42
Unknown Hydrocarbon					CAS #:		
14.974	1927647	168.13	2348.2	0		0	42
Unknown Cycloalkane					CAS #:		
15.931	3300342	287.86	4020.4	0		0	42
Unknown Hydrocarbon					CAS #:		
16.850	1908736	166.48	2325.2	0		0	42

Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

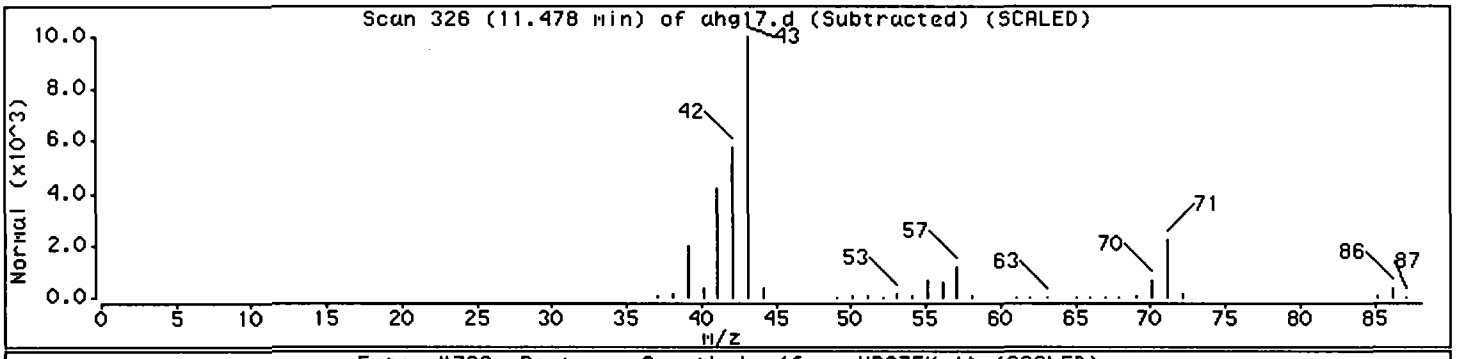
Client ID: WS-05 Instrument: gcl2.i

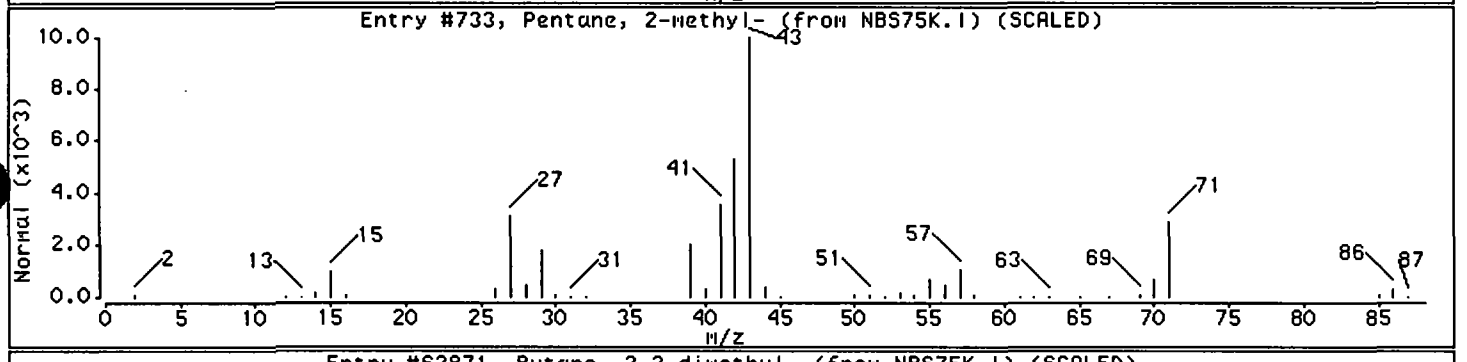
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

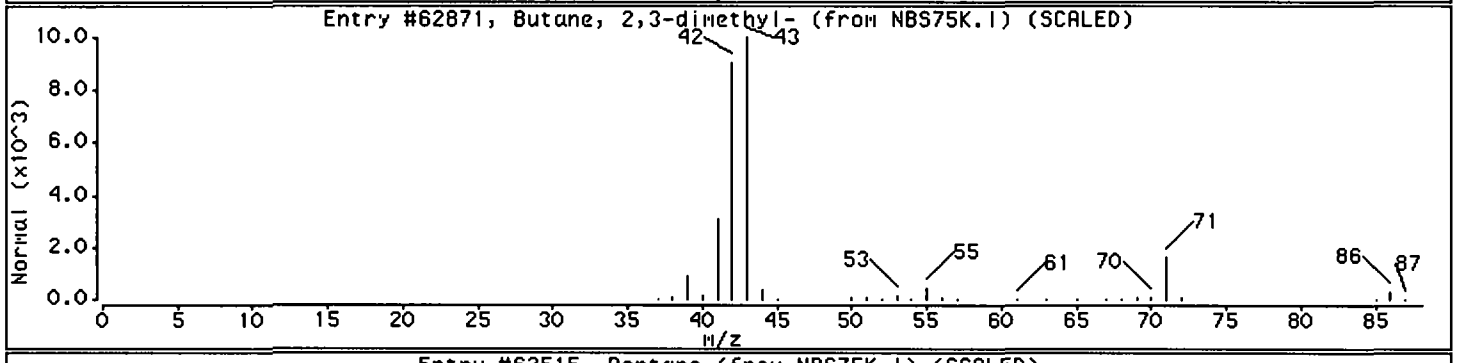
Operator: 0.5GSMP+5ULIS

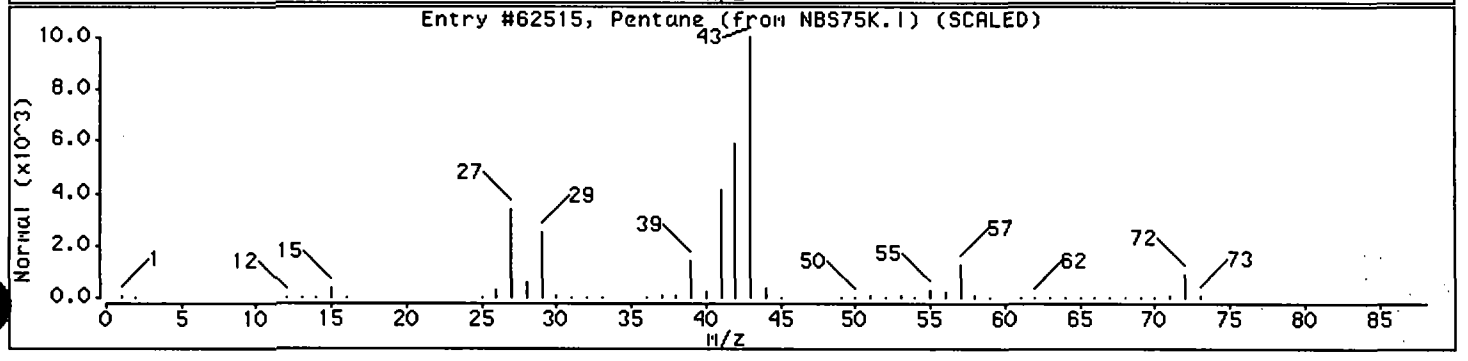
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Pentane, 2-methyl-	107-83-5	NBS75K.l	733	91	C6H14	86
Butane, 2,3-dimethyl-	79-29-8	NBS75K.l	62871	58	C6H14	86
Pentane	109-66-0	NBS75K.l	62515	53	C5H12	72









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

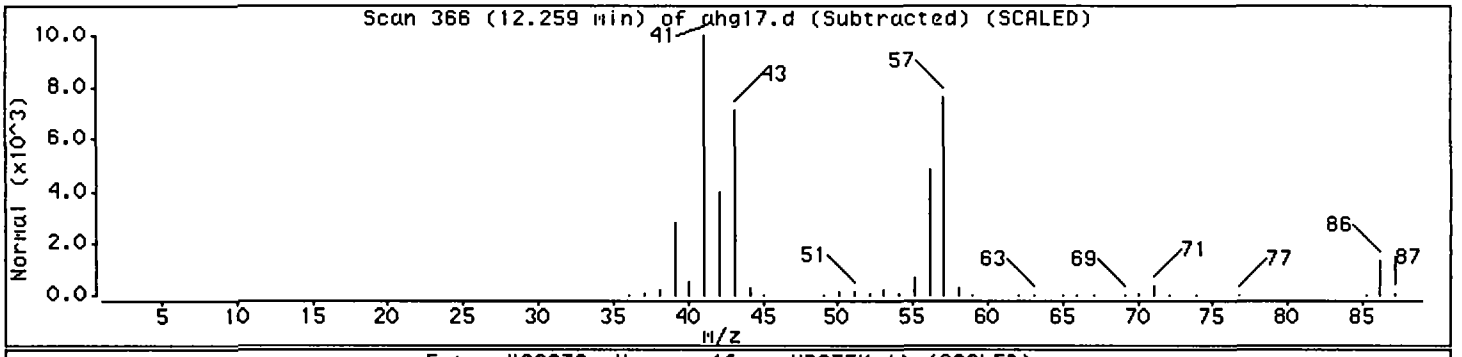
Client ID: WS-05 Instrument: gcl2.i

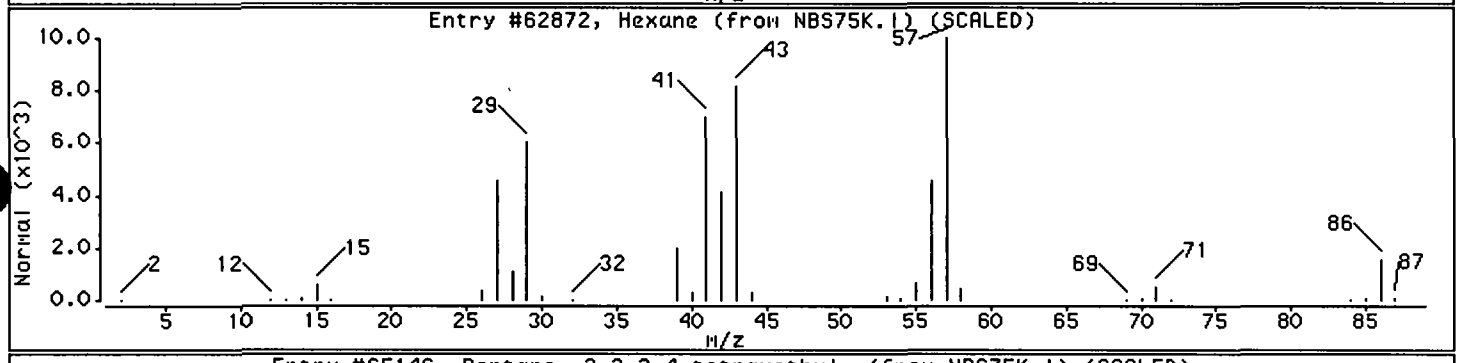
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

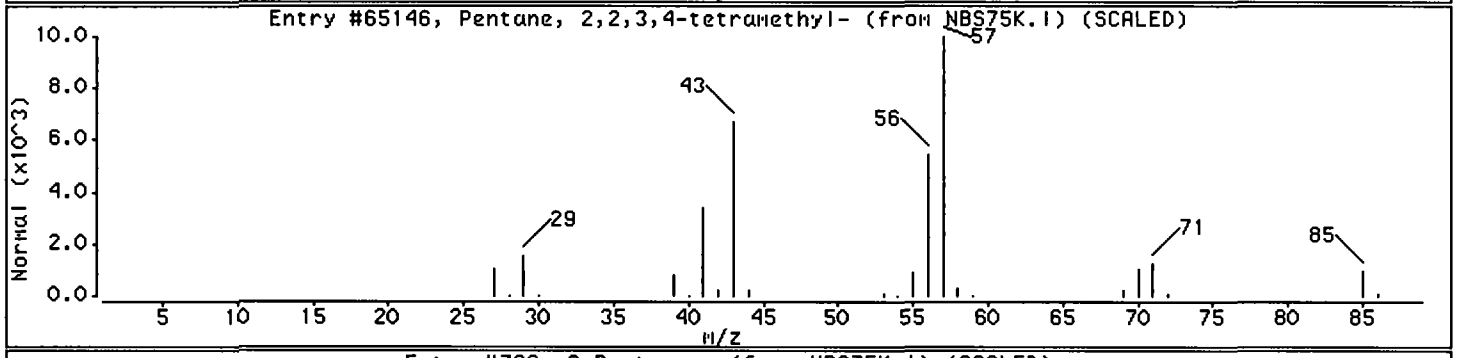
Operator: 0.5GSMP+5ULIS

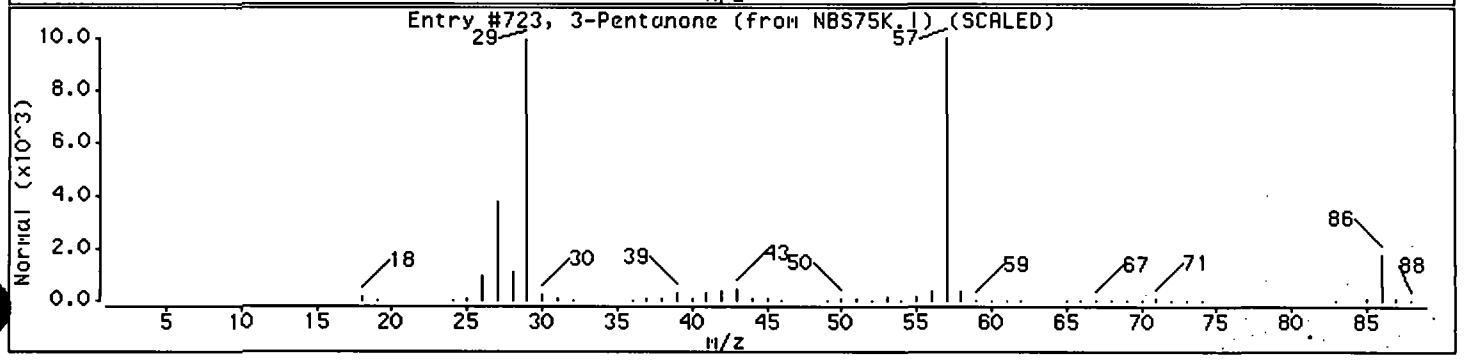
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane	110-54-3	NBS75K.l	62872	87	C6H14	86
Pentane, 2,2,3,4-tetramethyl-	1186-53-4	NBS75K.l	65146	23	C9H20	128
3-Pentanone	96-22-0	NBS75K.l	723	10	C5H10O	86









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

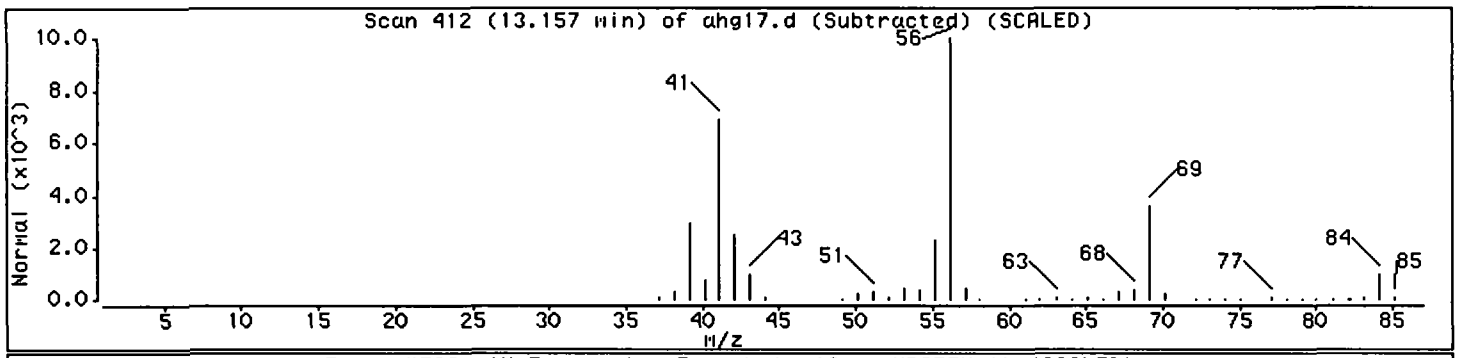
Client ID: WS-05 Instrument: gcl2.i

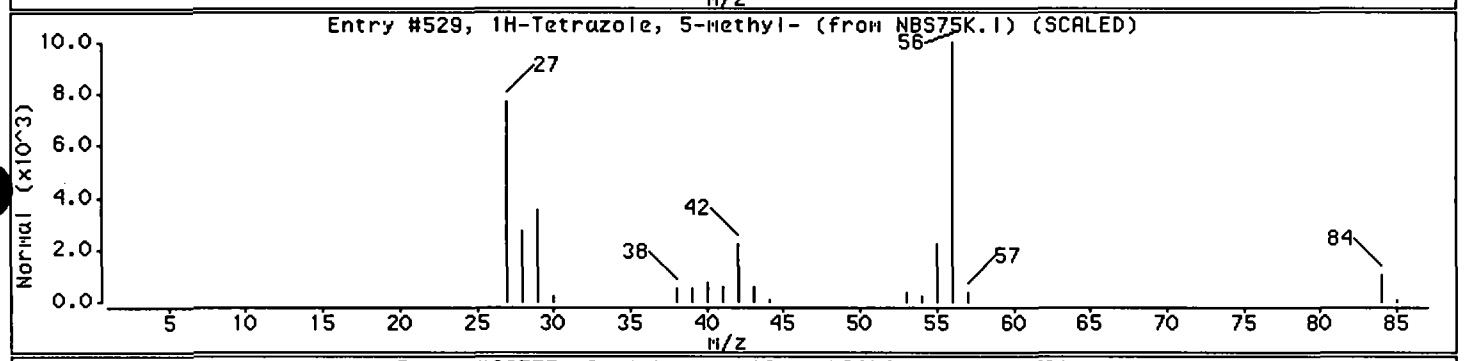
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

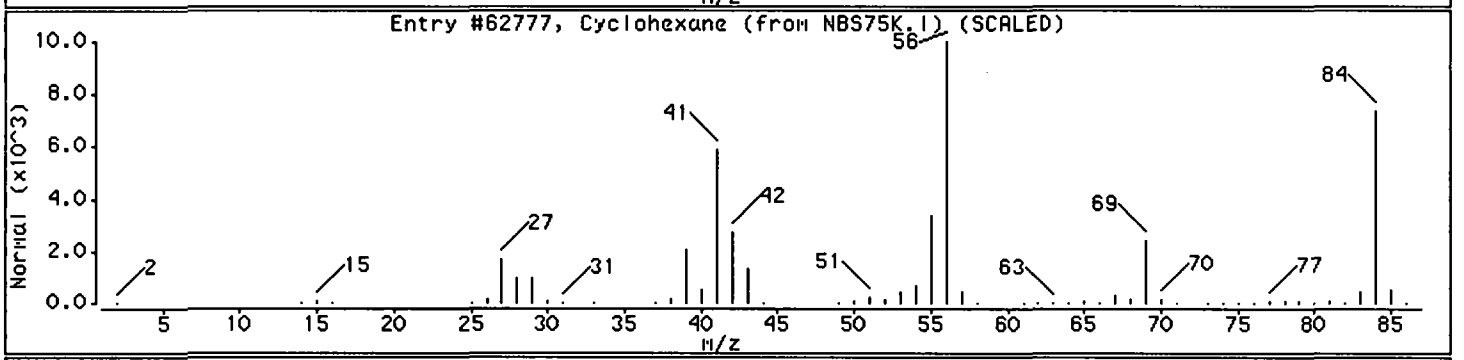
Operator: 0.5GSMP+5ULIS

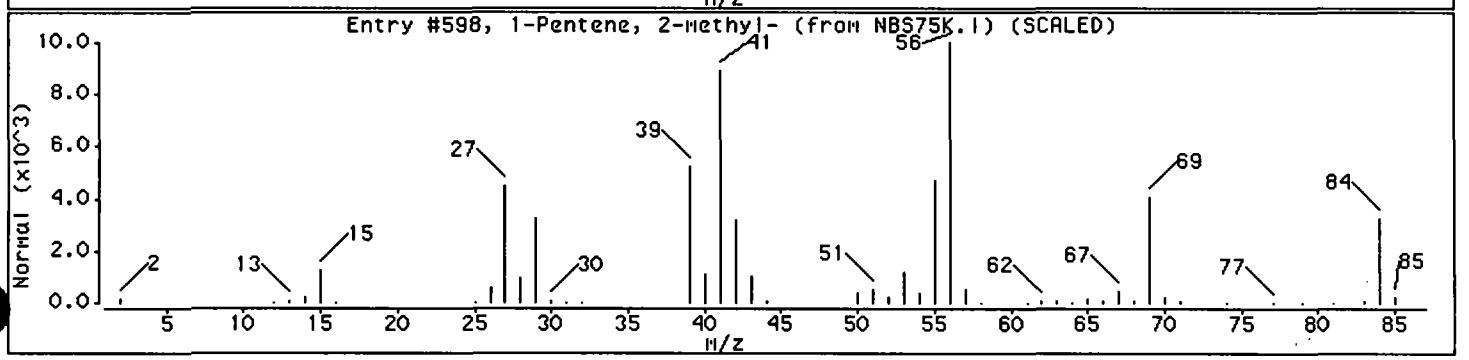
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Tetrazole, 5-methyl-	4076-36-2	NBS75K.l	529	86	C2H4N4	84
Cyclohexane	110-82-7	NBS75K.l	62777	83	C6H12	84
1-Pentene, 2-methyl-	763-29-1	NBS75K.l	598	78	C6H12	84









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

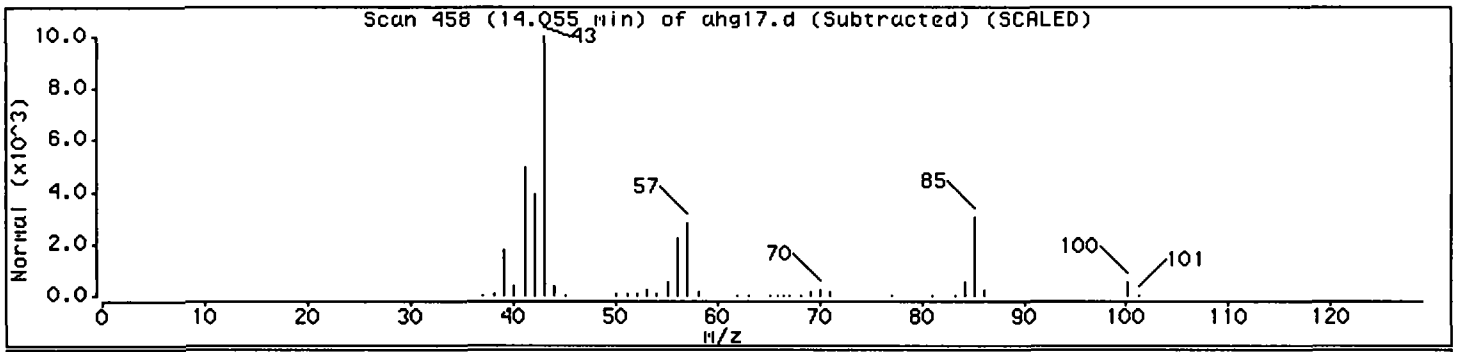
Client ID: WS-05 Instrument: gcl2.i

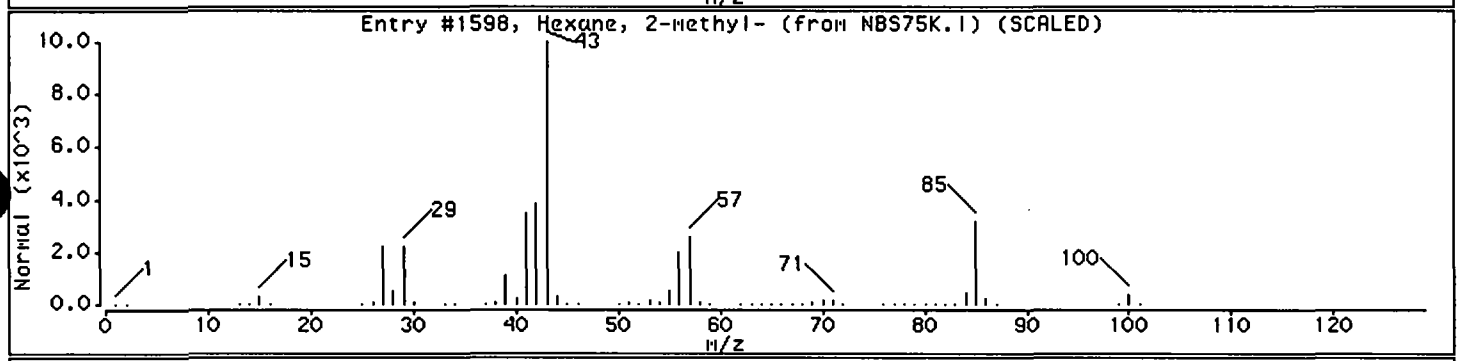
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

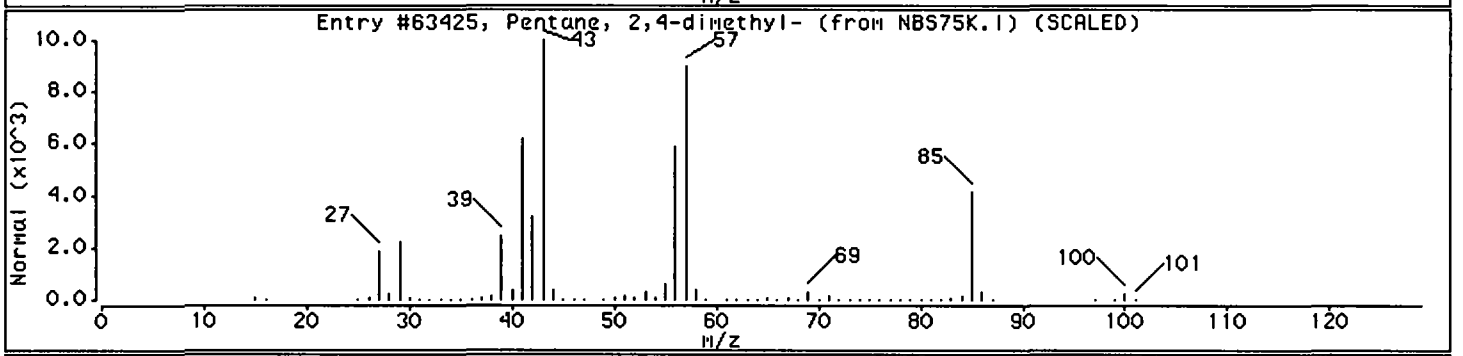
Operator: 0.5GSMP+5ULIS

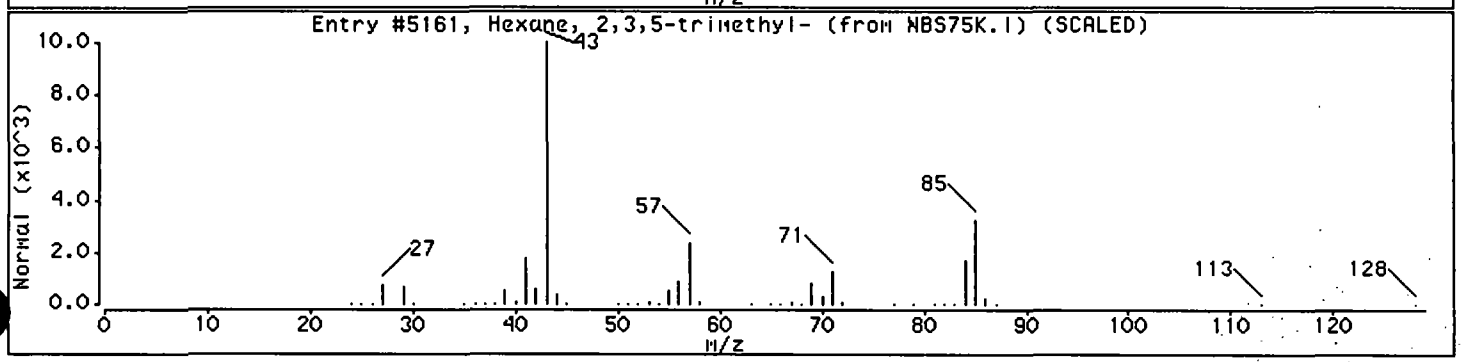
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane, 2-methyl-	591-76-4	NBS75K.l	1598	94	C7H16	100
Pentane, 2,4-dimethyl-	108-08-7	NBS75K.l	63425	45	C7H16	100
Hexane, 2,3,5-trimethyl-	1069-53-0	NBS75K.l	5161	32	C9H20	128









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

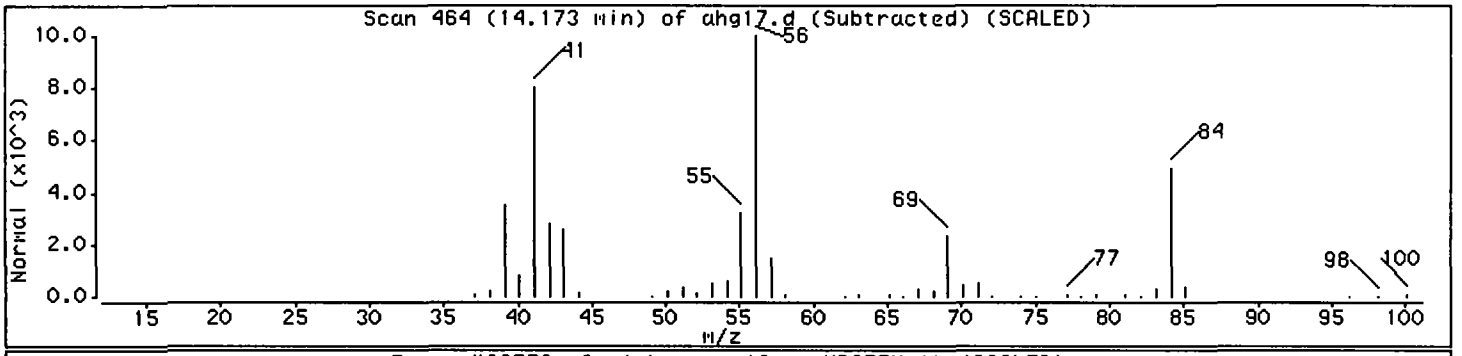
Client ID: WS-05 Instrument: gcl2.i

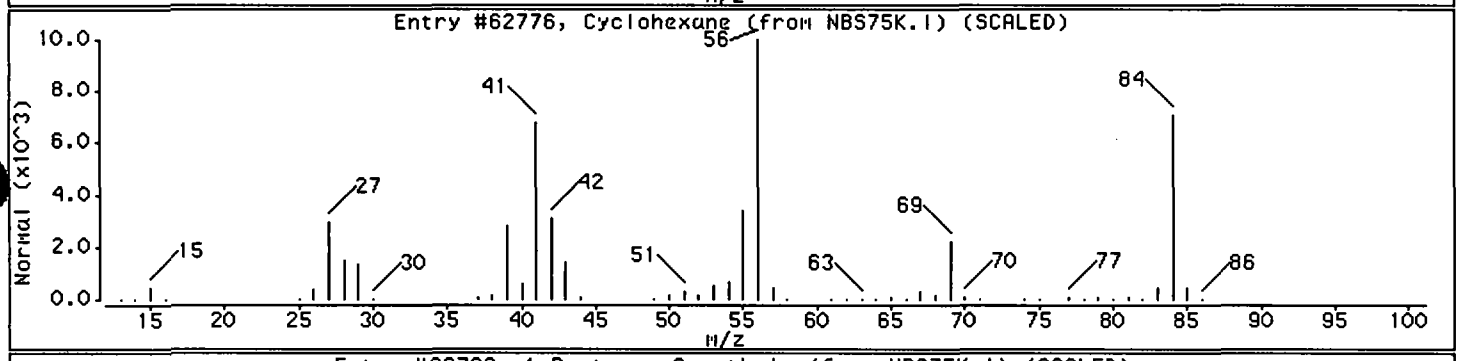
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

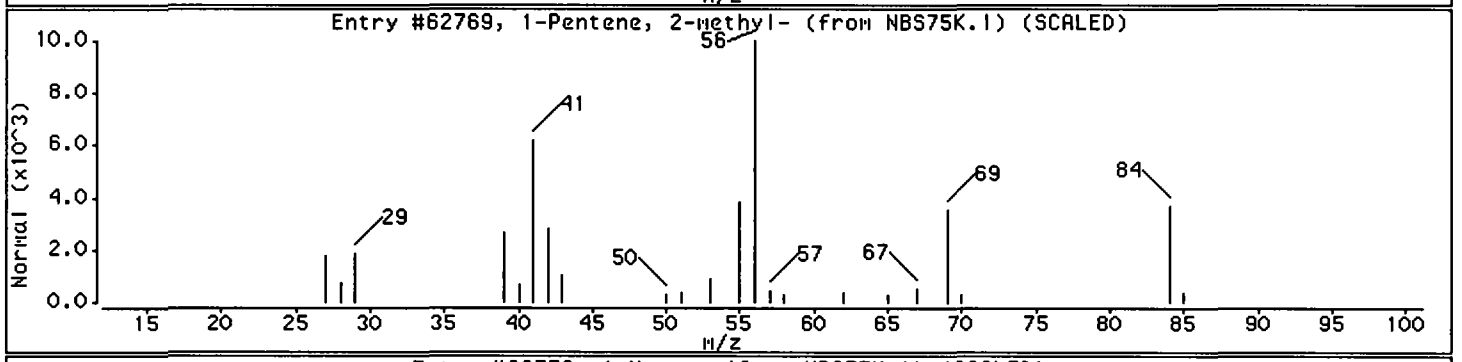
Operator: 0.5GSMP+5ULIS

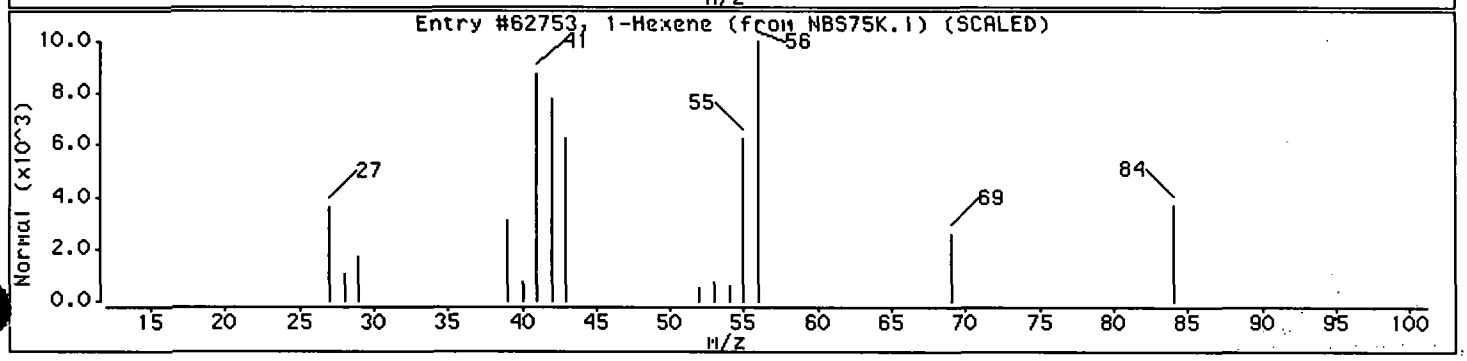
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane	110-82-7	NBS75K.l	62776	80	C6H12	84
1-Pentene, 2-methyl-	763-29-1	NBS75K.l	62769	78	C6H12	84
1-Hexene	592-41-6	NBS75K.l	62753	64	C6H12	84









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

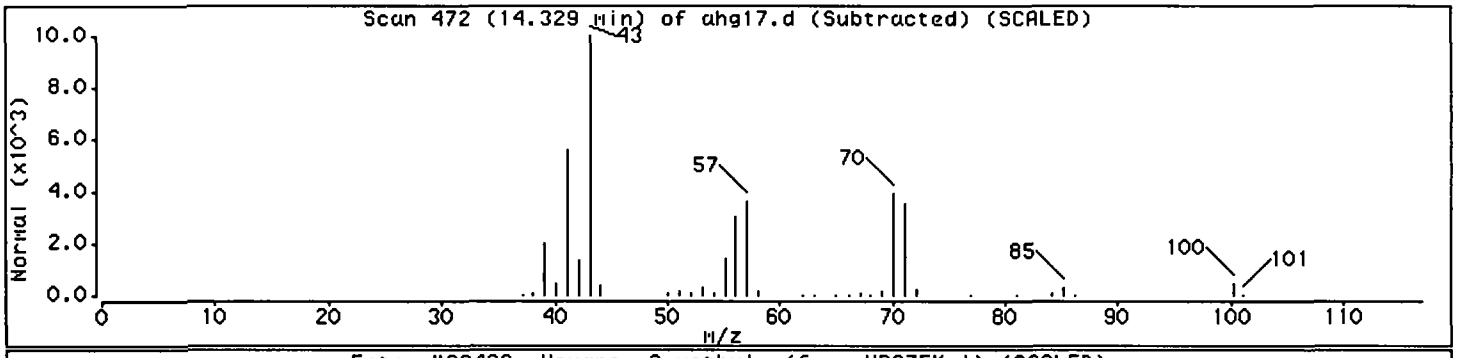
Client ID: WS-05 Instrument: gcl2.i

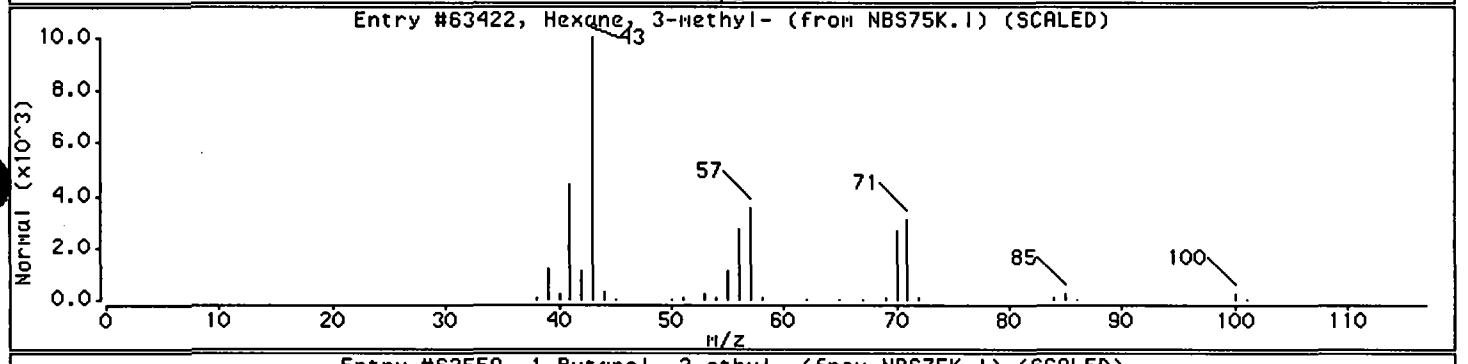
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

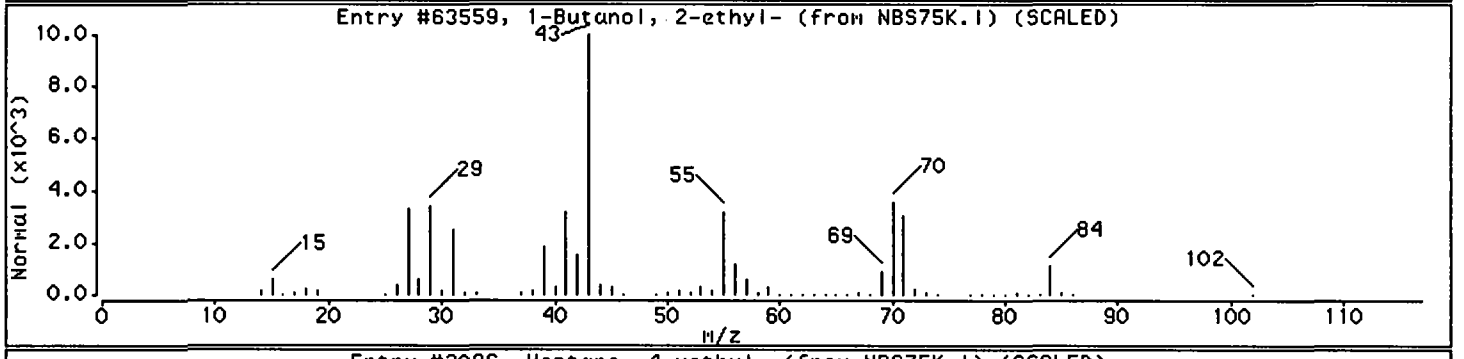
Operator: 0.5GSMP+5ULIS

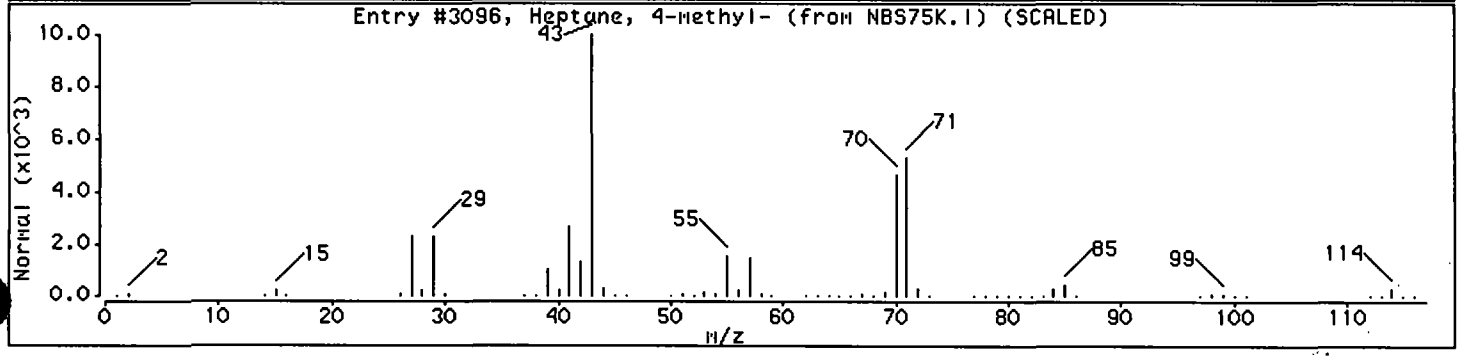
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane, 3-methyl-	589-34-4	NBS75K.l	63422	95	C7H16	100
1-Butanol, 2-ethyl-	97-95-0	NBS75K.l	63559	72	C6H14O	102
Heptane, 4-methyl-	589-53-7	NBS75K.l	3096	72	C8H18	114









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

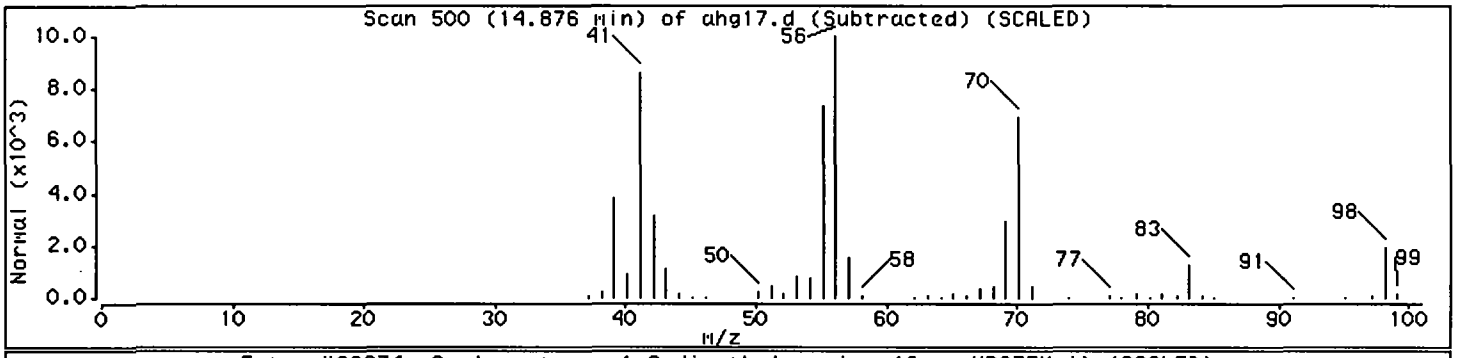
Client ID: WS-05 Instrument: gcl2.i

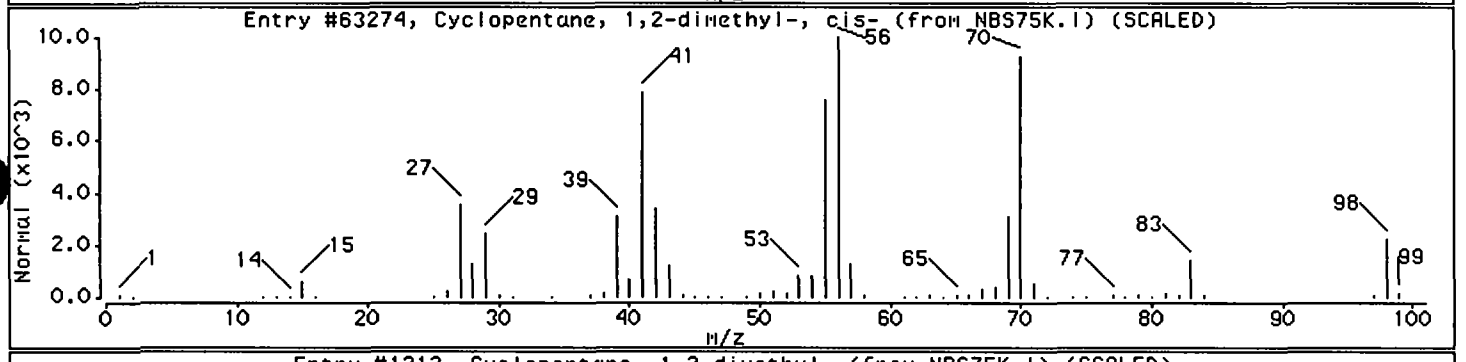
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

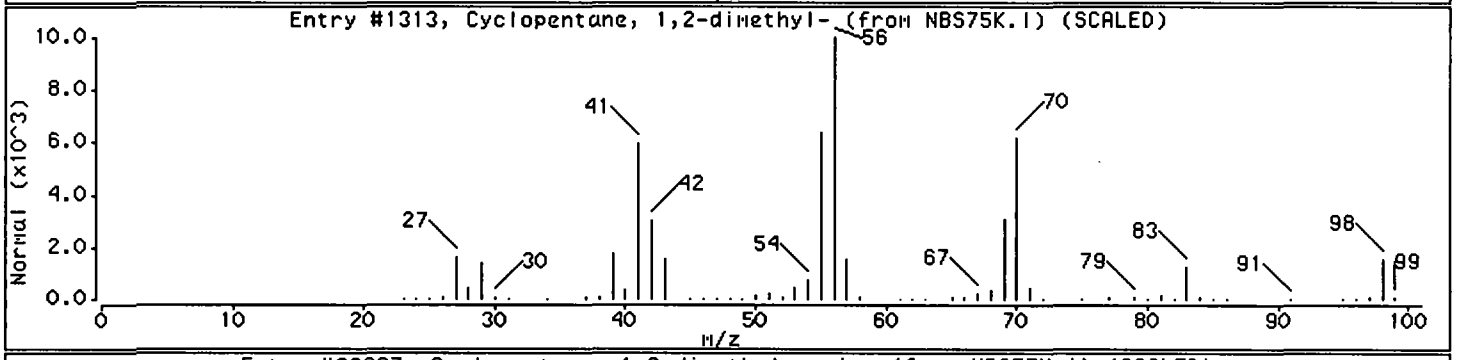
Operator: 0.5GSMP+5ULIS

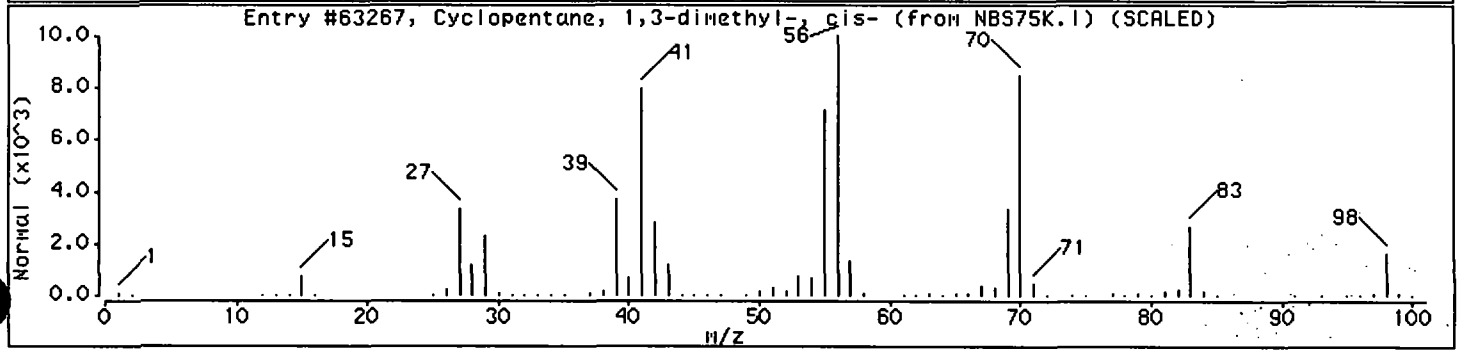
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2-dimethyl-, cis-	1192-18-3	NBS75K.l	63274	94	C7H14	98
Cyclopentane, 1,2-dimethyl-	2452-99-5	NBS75K.l	1313	94	C7H14	98
Cyclopentane, 1,3-dimethyl-, cis-	2532-58-3	NBS75K.l	63267	90	C7H14	98









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

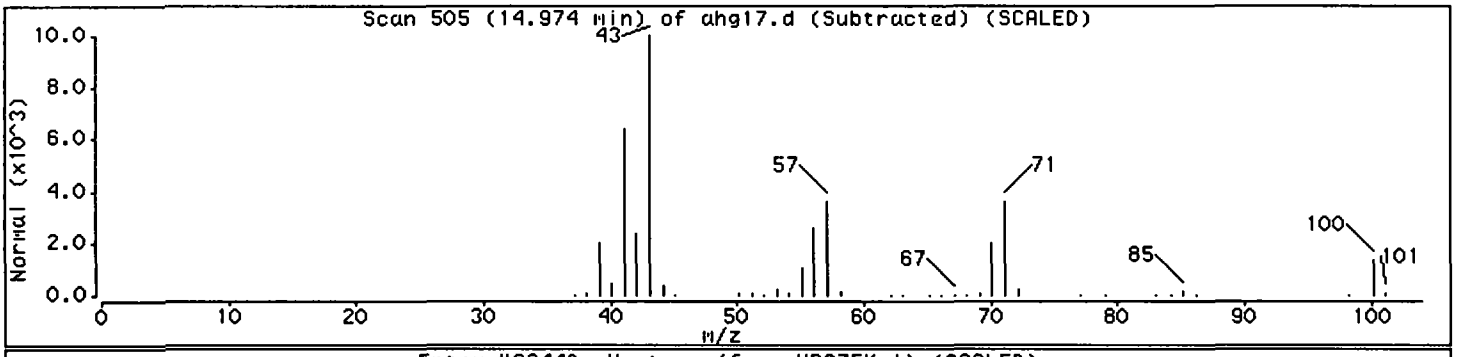
Client ID: WS-05 Instrument: gcl2.i

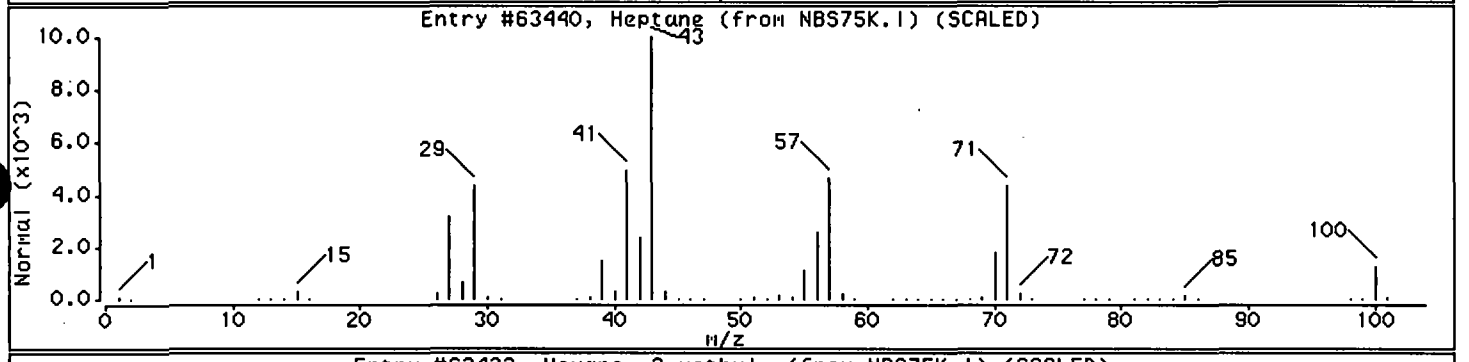
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

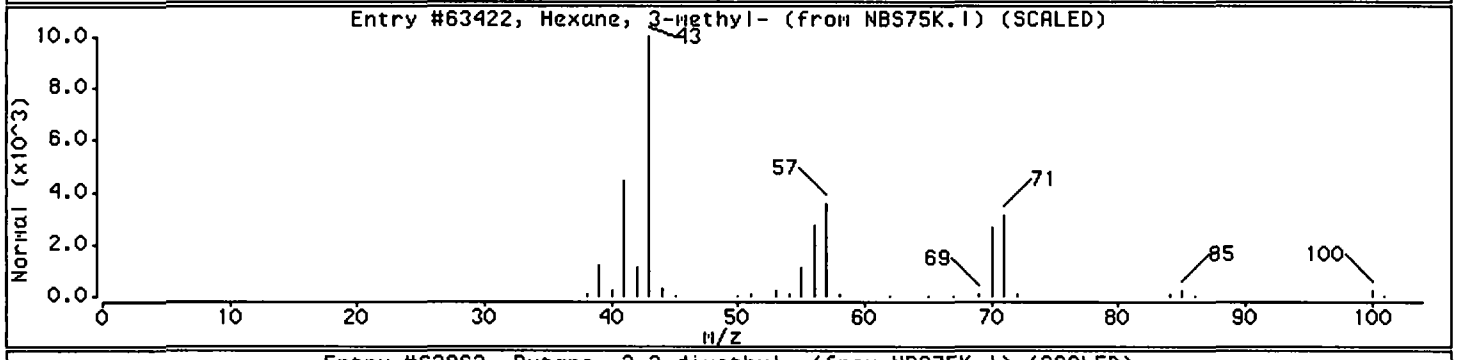
Operator: 0.5GSMP+5ULIS

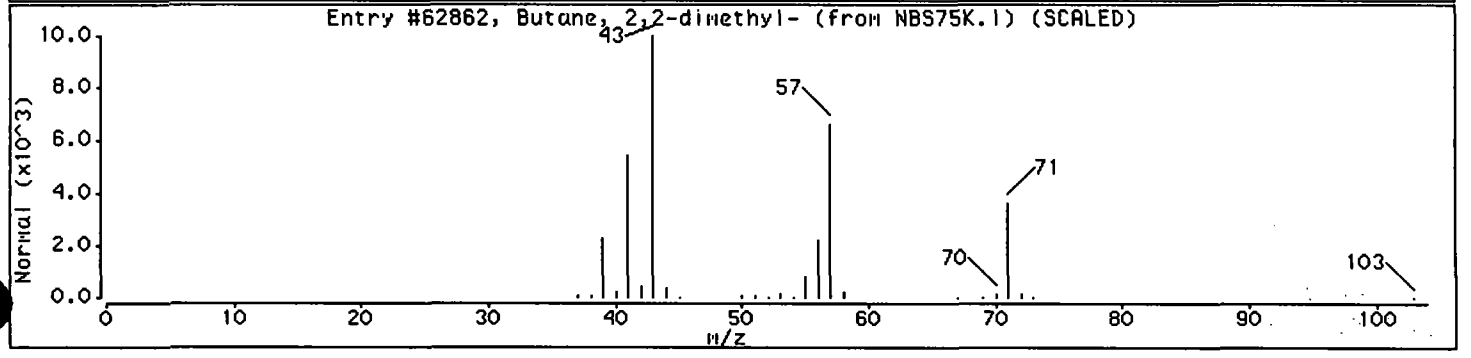
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane	142-82-5	NBS75K.l	63440	91	C7H16	100
Hexane, 3-methyl-	589-34-4	NBS75K.l	63422	64	C7H16	100
Butane, 2,2-dimethyl-	75-83-2	NBS75K.l	62862	37	C6H14	86









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

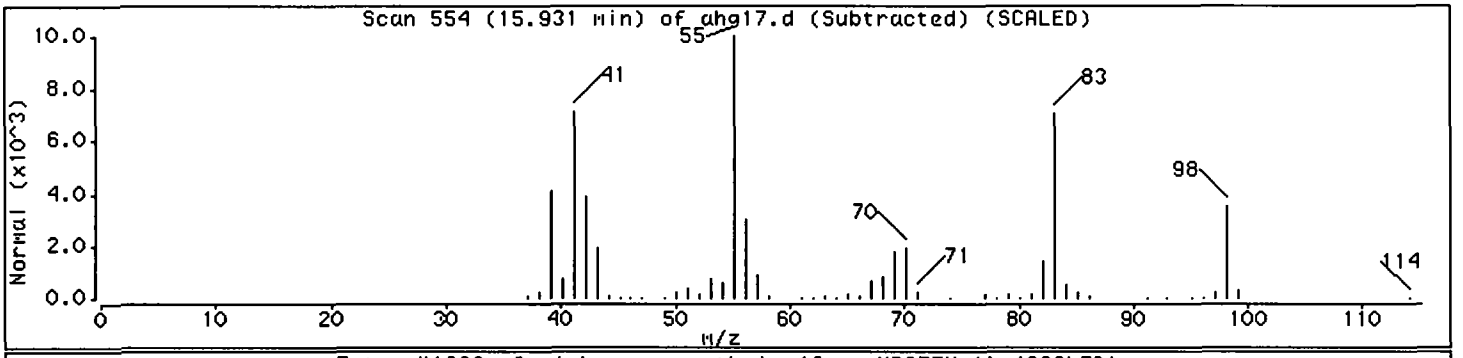
Client ID: WS-05 Instrument: gcl2.i

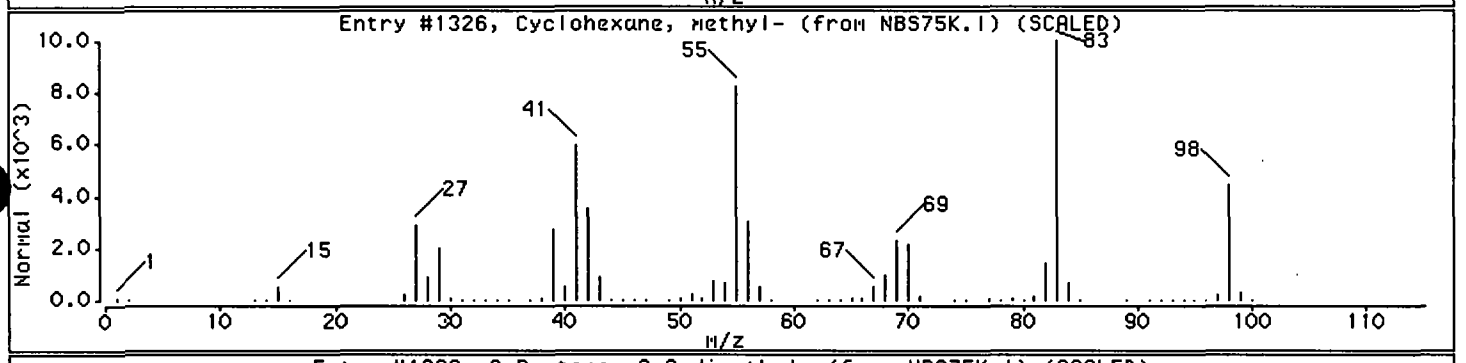
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

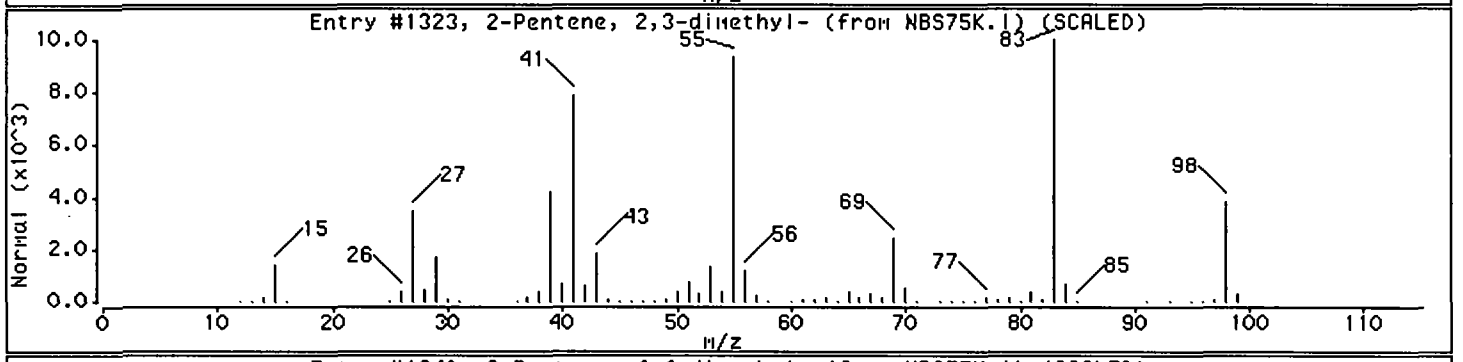
Operator: 0.5GSMP+5ULIS

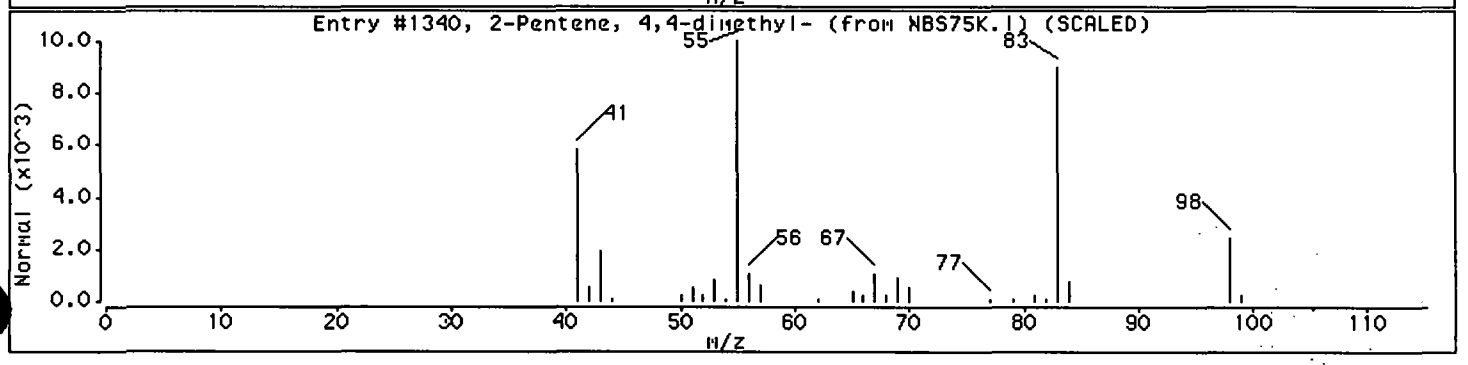
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, methyl-	108-87-2	NBS75K.l	1326	64	C7H14	98
2-Pentene, 2,3-dimethyl-	10574-37-5	NBS75K.l	1323	49	C7H14	98
2-Pentene, 4,4-dimethyl-	26232-98-4	NBS75K.l	1340	46	C7H14	98









Data File: /chem/gcl2.i/961130.b/ahg17.d

Date : 30-NOV-1996 22:26

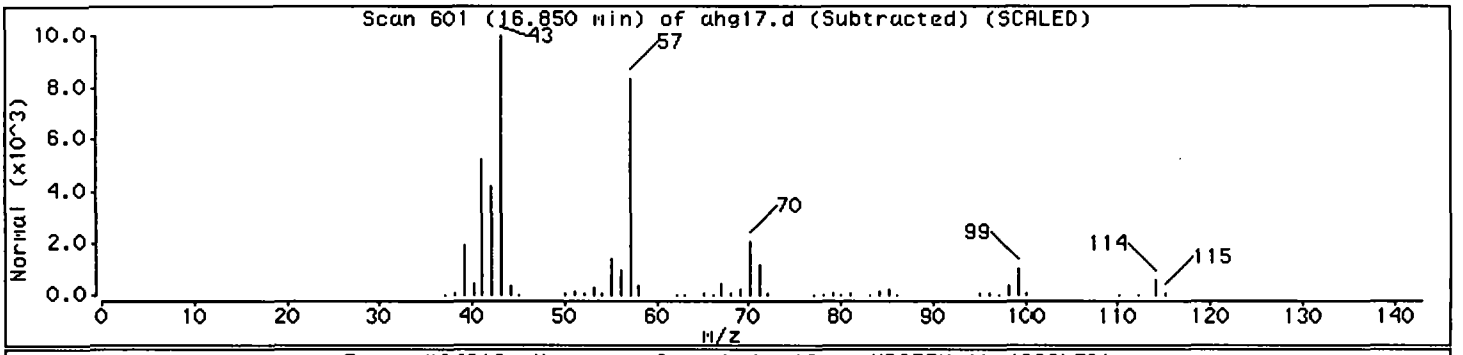
Client ID: WS-05 Instrument: gcl2.i

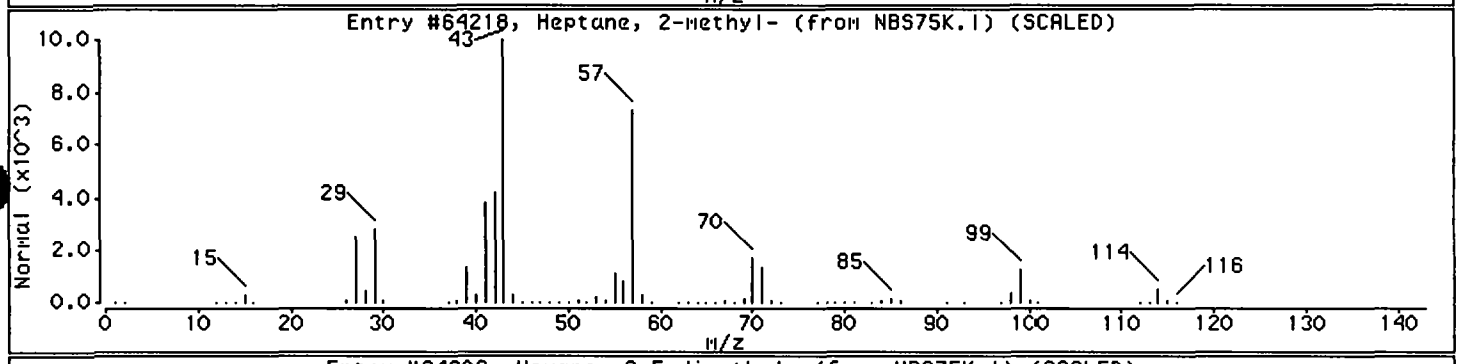
Sample Info: 9611G675-005 XBB30,[AL=0624He],[DC=00]

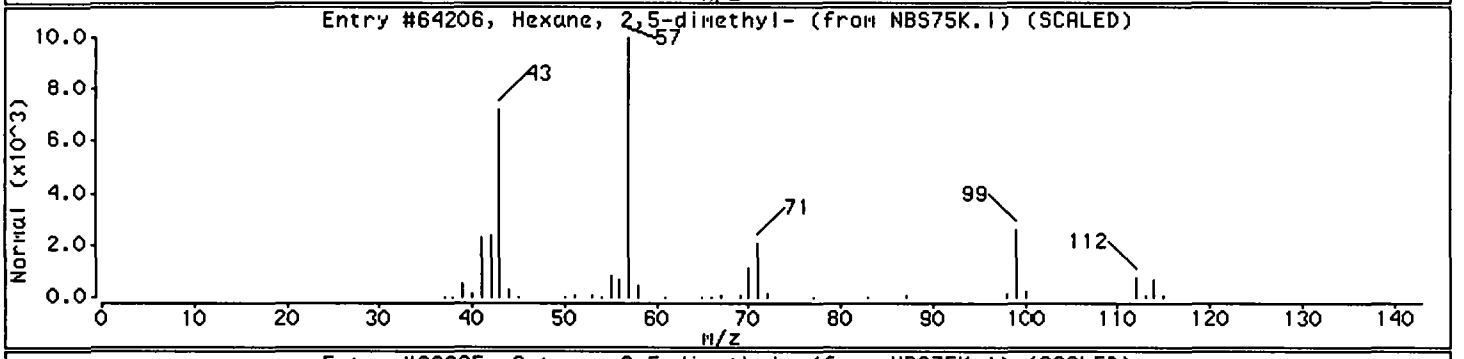
Operator: 0.5GSMP+5ULIS

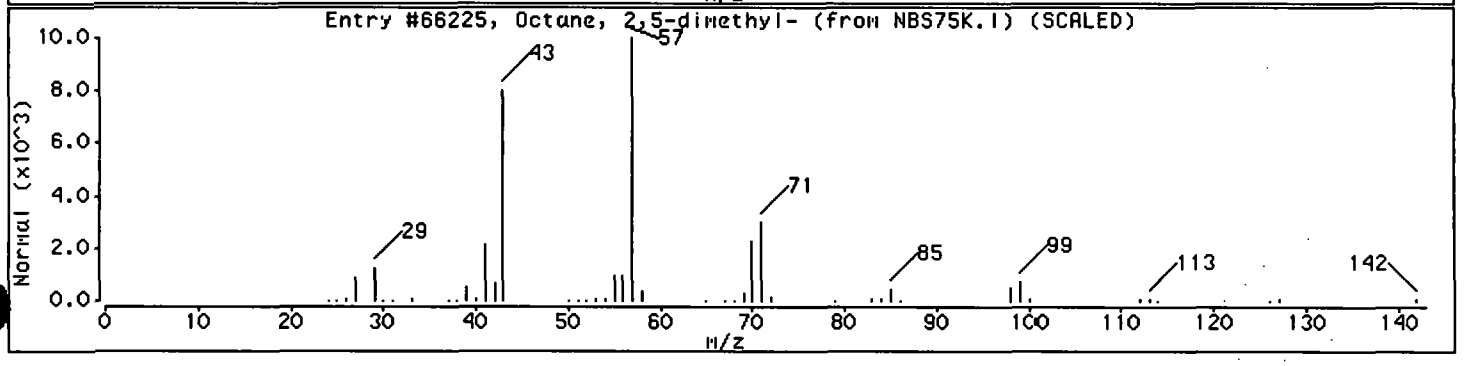
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane, 2-methyl-	592-27-8	NBS75K.l	64218	94	C8H18	114
Hexane, 2,5-dimethyl-	592-13-2	NBS75K.l	64206	80	C8H18	114
Octane, 2,5-dimethyl-	15869-89-3	NBS75K.l	66225	38	C10H22	142









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-06

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG18

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 24 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	130	U
74-83-9	Bromomethane	130	U
75-01-4	Vinyl Chloride	130	U
75-00-3	Chloroethane	130	U
75-09-2	Methylene Chloride	130	U
67-64-1	Acetone	1000	
75-15-0	Carbon Disulfide	130	U
75-35-4	1,1-Dichloroethene	130	U
75-34-3	1,1-Dichloroethane	130	U
540-59-0	1,2-Dichloroethene (total)	130	U
67-66-3	Chloroform	130	U
107-06-2	1,2-Dichloroethane	130	U
78-93-3	2-Butanone	130	U
71-55-6	1,1,1-Trichloroethane	130	U
56-23-5	Carbon Tetrachloride	130	U
75-27-4	Bromodichloromethane	130	U
78-87-5	1,2-Dichloropropane	130	U
10061-01-5	cis-1,3-Dichloropropene	130	U
79-01-6	Trichloroethene	130	U
124-48-1	Dibromochloromethane	130	U
79-00-5	1,1,2-Trichloroethane	130	U
71-43-2	Benzene	130	U
10061-02-6	trans-1,3-Dichloropropene	130	U
75-25-2	Bromoform	130	U
108-10-1	4-Methyl-2-pentanone	130	U
591-78-6	2-Hexanone	130	U
127-18-4	Tetrachloroethene	130	U
79-34-5	1,1,2,2-Tetrachloroethane	130	U
108-88-3	Toluene	64	J
108-90-7	Chlorobenzene	130	U
100-41-4	Ethylbenzene	110	J
100-42-5	Styrene	130	U
1330-20-7	Xylene (total)	450	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-06

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-006

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG18

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 24 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 10.0

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

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	9.77	2200	J
2.	UNKNOWN HYDROCARBON	11.47	2500	J
3.	UNKNOWN HYDROCARBON	12.25	2400	J
4.	UNKNOWN	13.13	3400	J
5.	UNKNOWN CYCLOALKANE	14.14	2800	J
6.	UNKNOWN HYDROCARBON	14.30	2300	J
7.	UNKNOWN CYCLOALKANE	14.85	2600	J
8.	UNKNOWN HYDROCARBON	14.94	2300	J
9.	UNKNOWN CYCLOALKANE	15.88	3400	J
10.	UNKNOWN HYDROCARBON	17.78	2000	J
11.				
12.				
13.				
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30.				

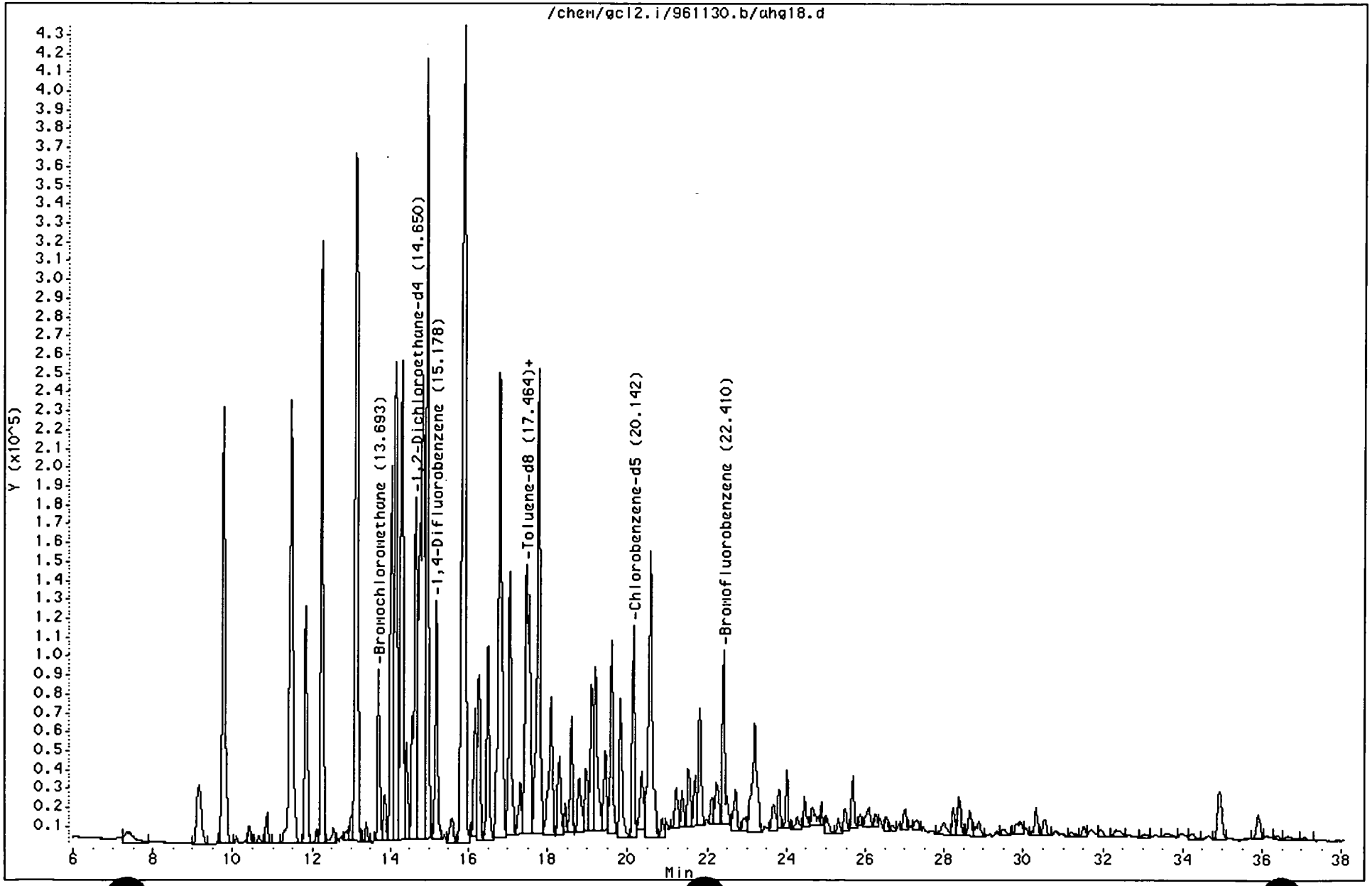
Data File: /chem/gcl2.i/961130.b/ahg18.d
Date : 30-NOV-1996 23:15
Client ID: WS-06
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

Column phase: Cap

Instrument: gcl2.i

Operator: 0.5GSMP+5ULIS
Column diameter: 0.53

142



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg18.d
Lab Smp Id: 9611G675-006 Client Smp ID: WS-06
Inj Date : 30-NOV-1996 23:15
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-006 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	24.100	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
13 Acetone	43.00	10.862	10.885	(0.793)	35605	76.023	1001.6
* 31 Bromochloromethane	127.80	13.693	13.755	(1.000)	40485	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.553	14.614	(1.063)	79890	48.032	63.283(a)
* 42 1,4-Difluorobenzene	114.00	15.178	15.239	(1.000)	150289	50.000	
$ 52 Toluene-d8	98.00	17.542	17.622	(0.871)	125311	51.383	67.698(aM)
53 Toluene	91.00	17.660	17.739	(0.877)	13775	4.845	63.835(aM)
* 61 Chlorobenzene-d5	117.00	20.142	20.218	(1.000)	110166	50.000	
63 Ethylbenzene	106.00	20.377	20.433	(1.012)	7898	8.071	106.34(aM)
65 m,p-xylene	91.00	20.592	20.668	(1.022)	74550	28.670	377.74
M 71 Xylene (total)	91.00				94858	34.525	454.87
66 o-xylene	91.00	21.354	21.430	(1.060)	20308	7.391	97.382(aM)
$ 69 Bromofluorobenzene	95.00	22.410	22.484	(1.113)	73584	41.758	55.018(a)

JK 1-7-97

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

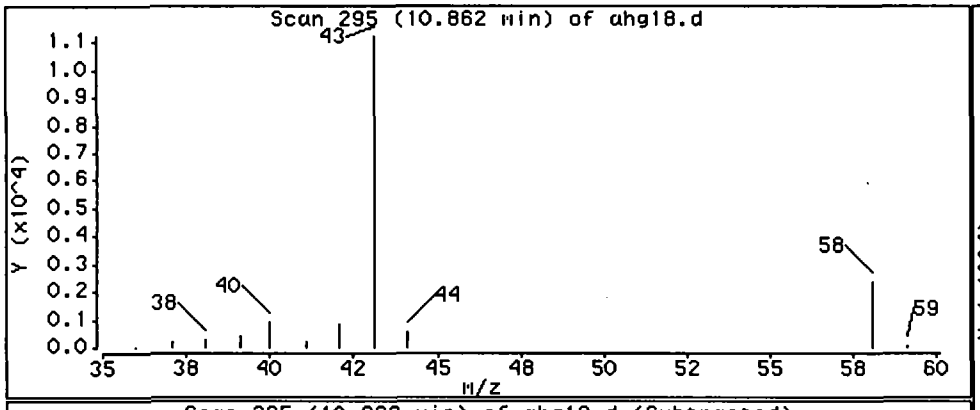
Client ID: WS-06 Instrument: gcl2.i

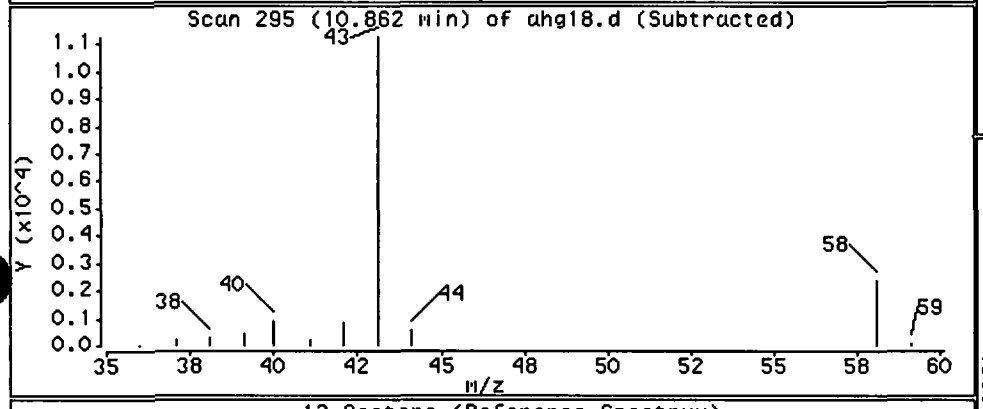
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

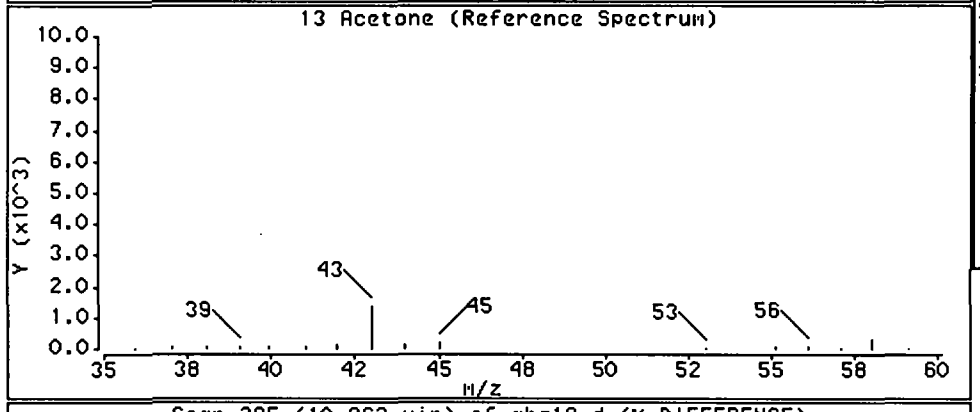
Operator: 0.5GSMP+5ULIS

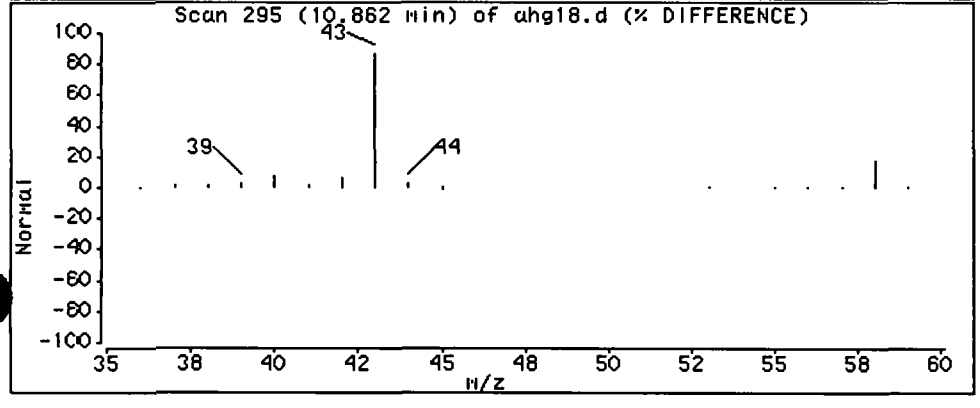
Column phase: Cap Column diameter: 0.53

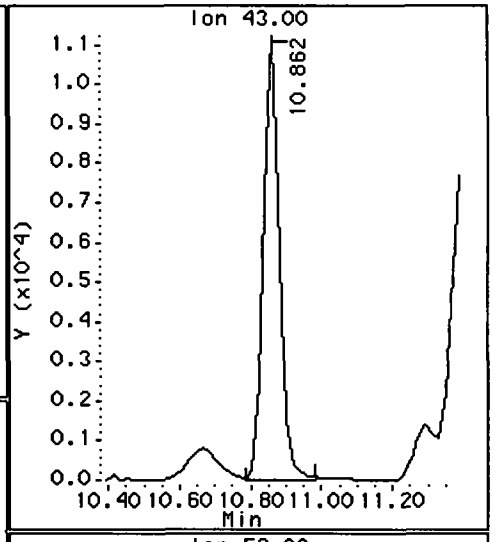
13 Acetone

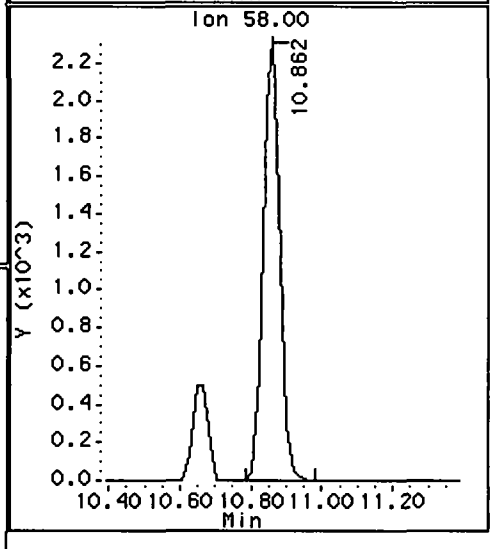












Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

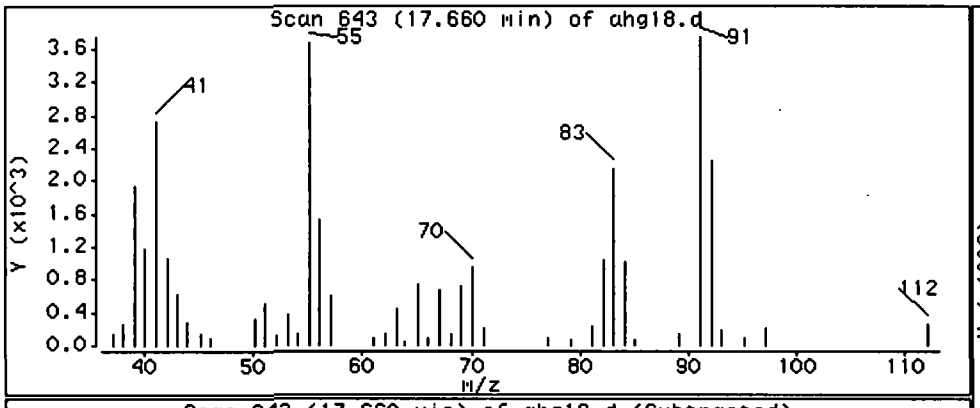
Client ID: WS-06 Instrument: gcl2.i

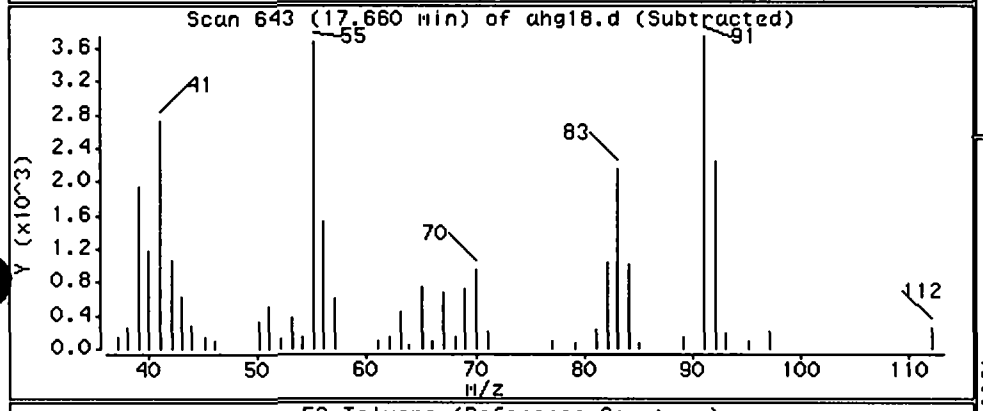
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

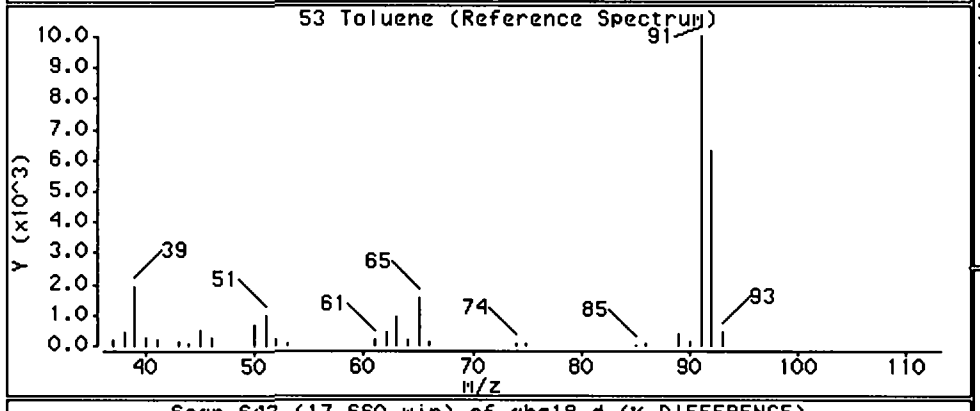
Operator: 0.5GSMP+5ULIS

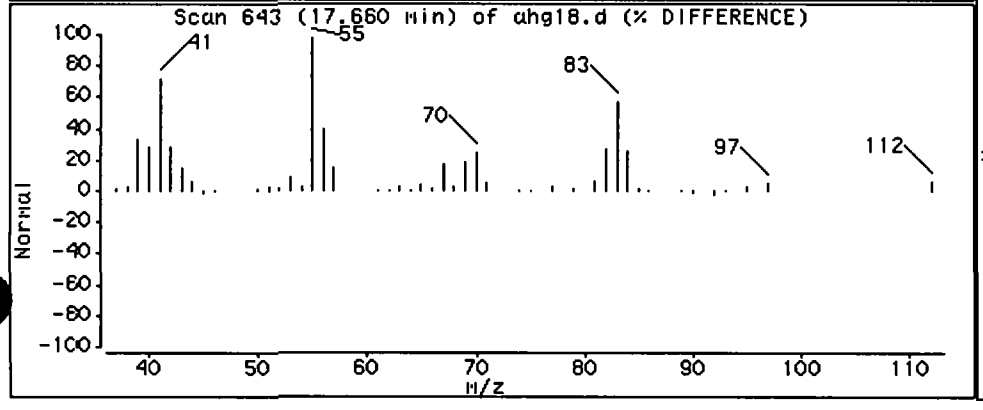
Column phase: Cap Column diameter: 0.53

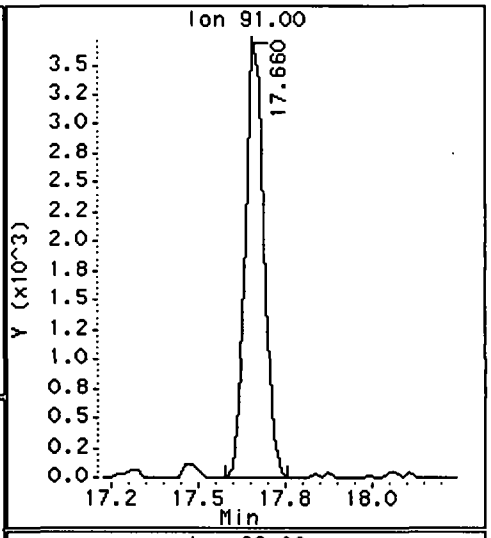
53 Toluene

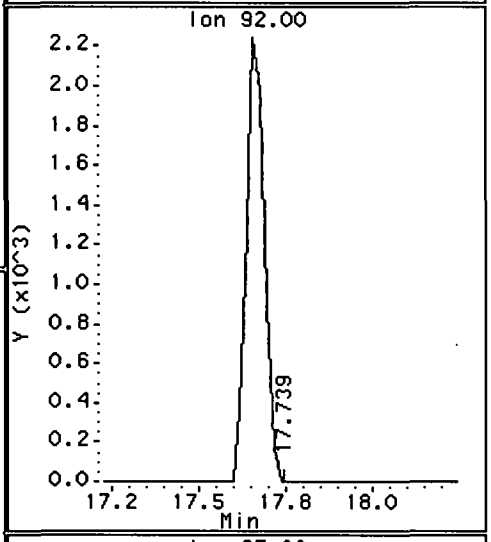


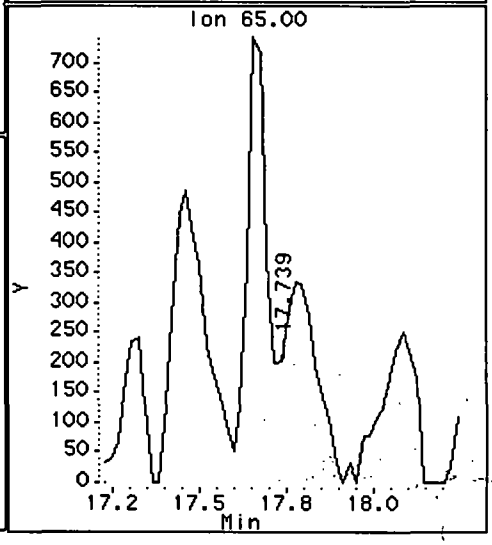


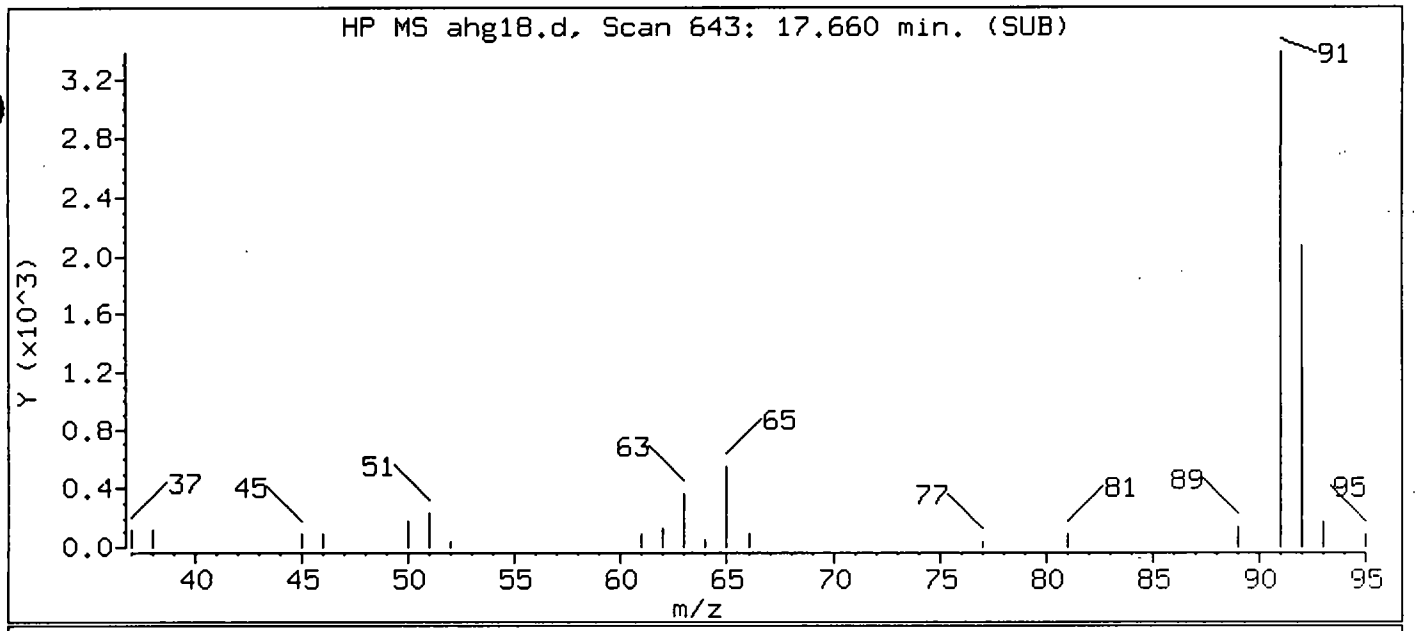


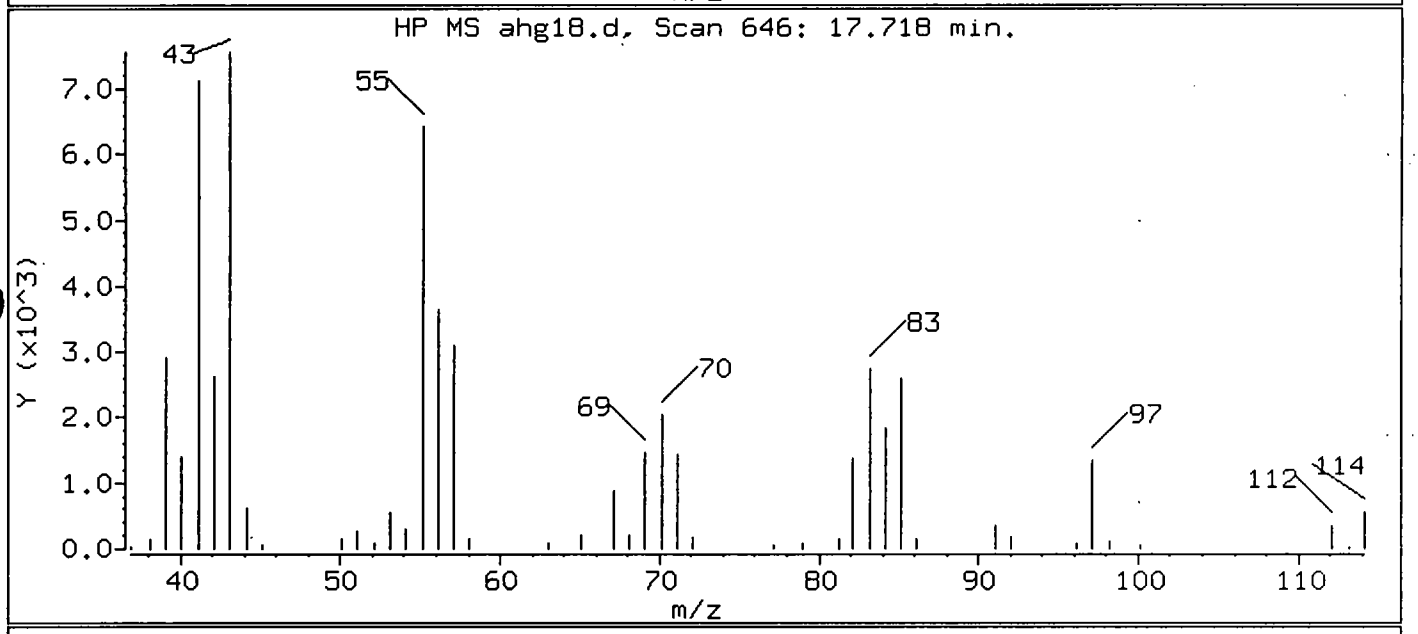









HP MS ahg18.d, Scan 643: 17.660 min. (SUB)
Y (x10^3)
m/z
91
65
63
51
37
45
77
81
89
95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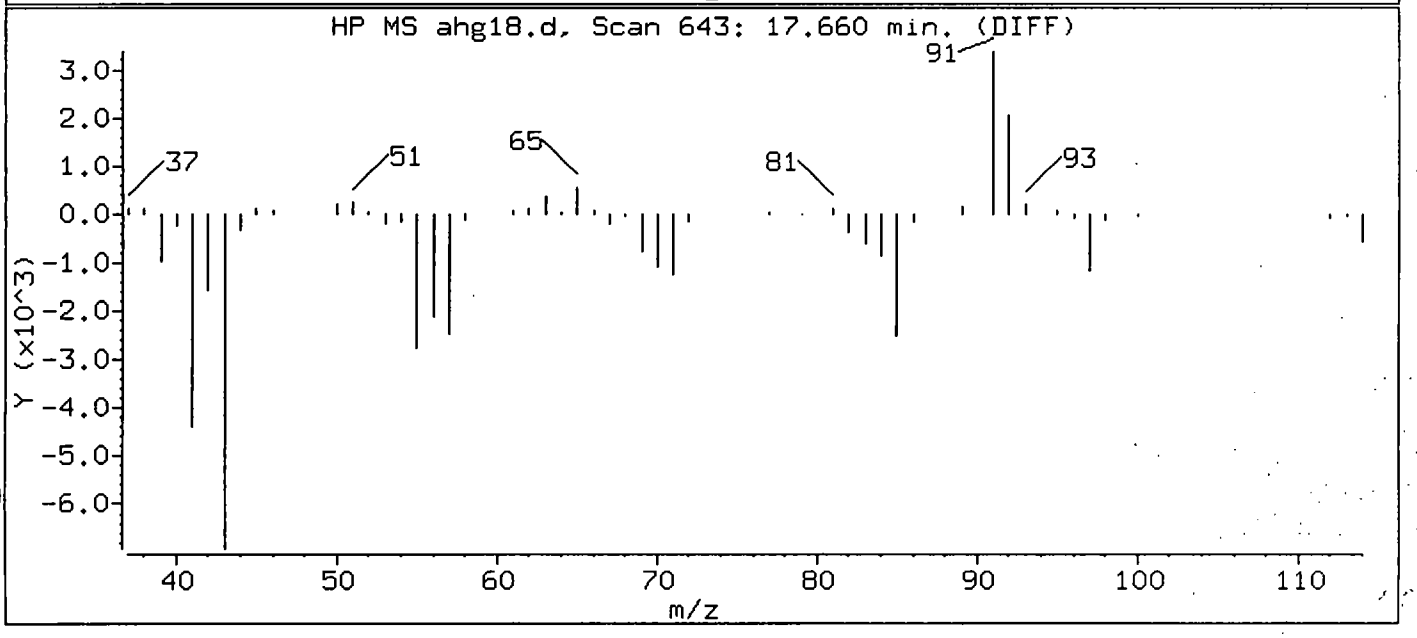
Y (x10^3)
m/z
43
55
83
70
69
97
112
114


HP MS ahg18.d, Scan 643: 17.660 min. (DIFF)
Y (x10^3)
m/z
91
37
51
65
81
93

Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

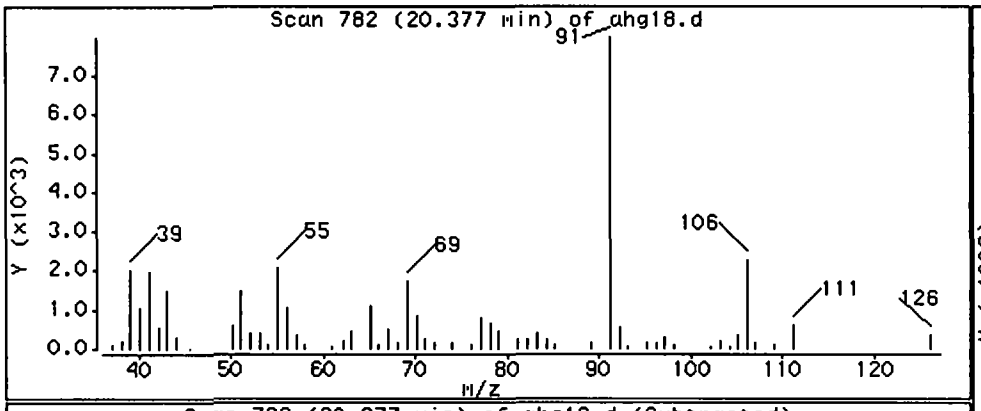
Client ID: WS-06 Instrument: gcl2.i

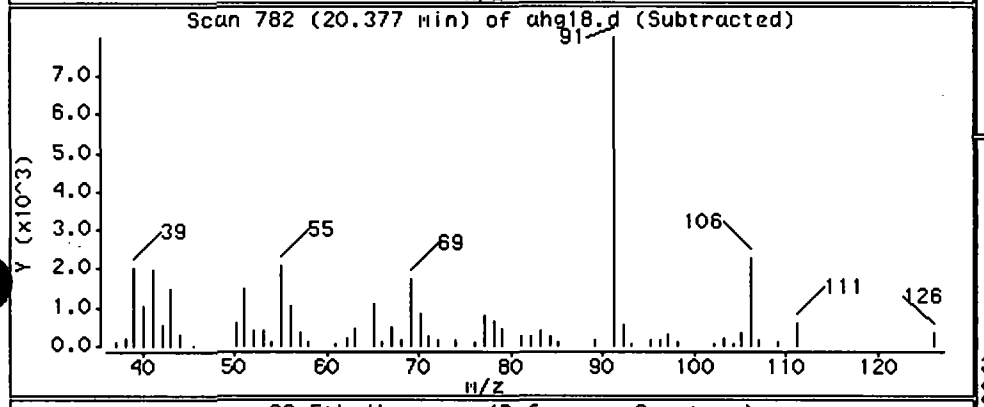
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

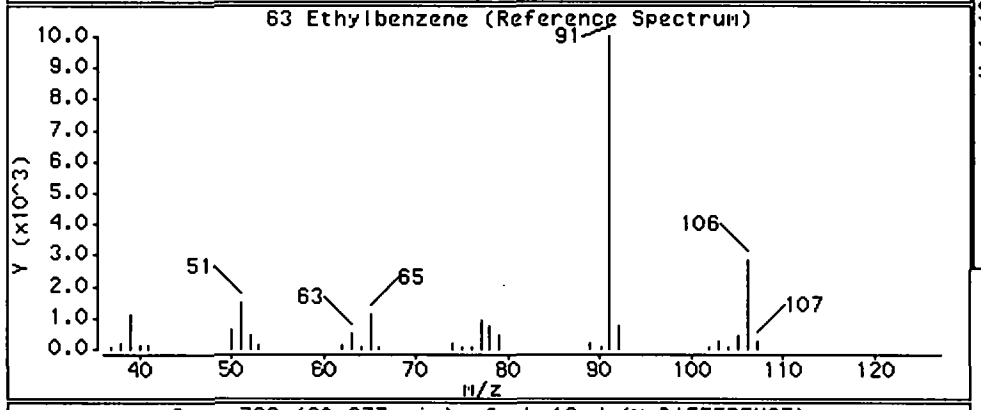
Operator: 0.5GSMP+5ULIS

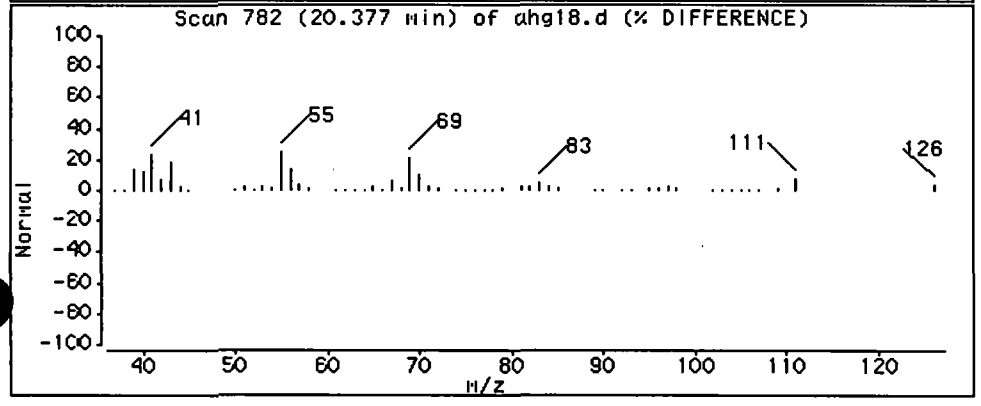
Column phase: Cap Column diameter: 0.53

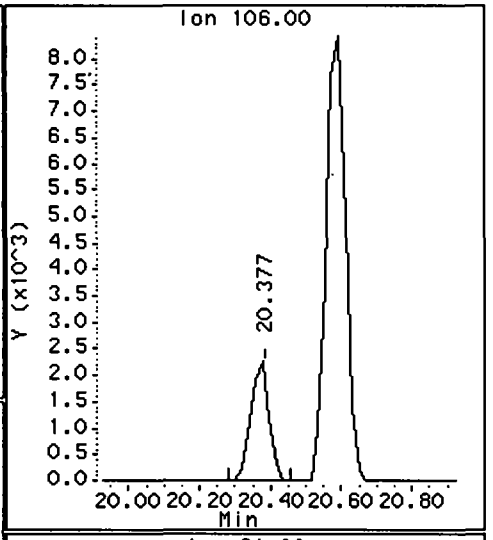
63 Ethylbenzene

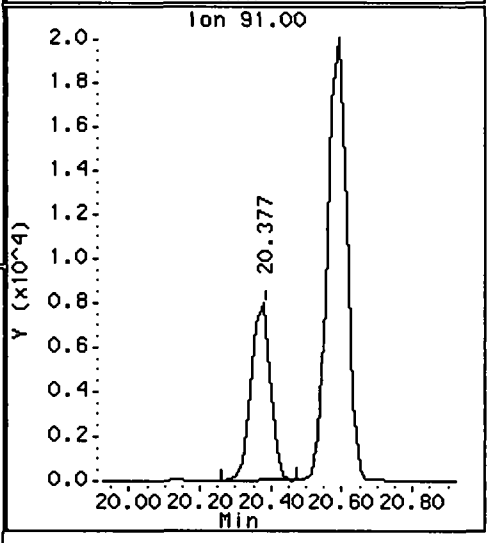












Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

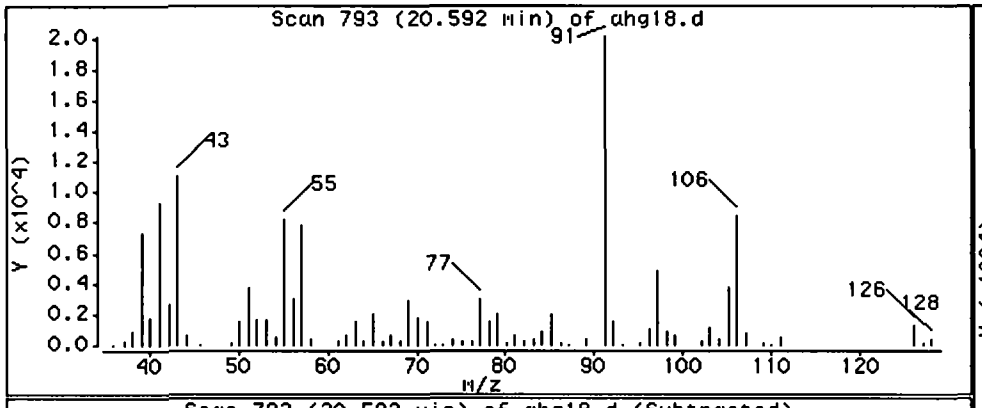
Client ID: WS-06 Instrument: gcl2.i

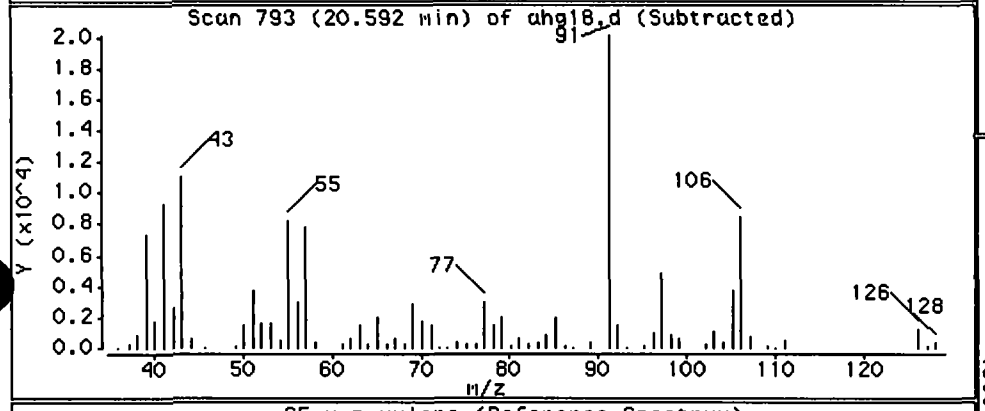
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

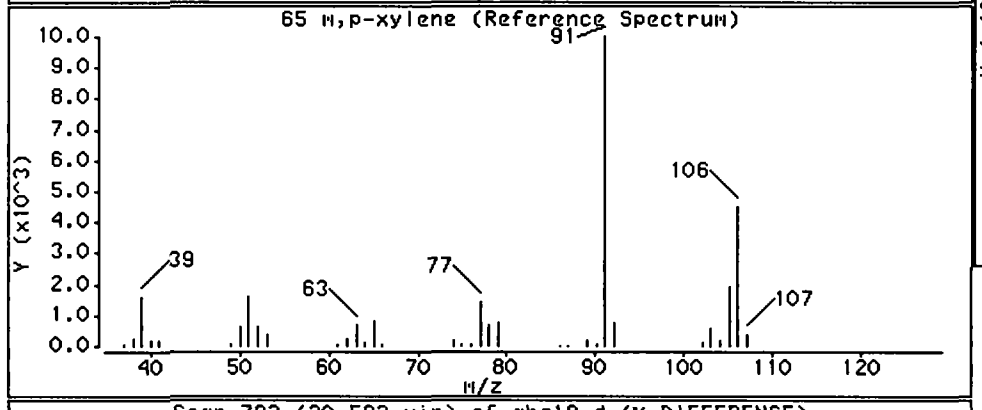
Operator: 0.5GSMP+5ULIS

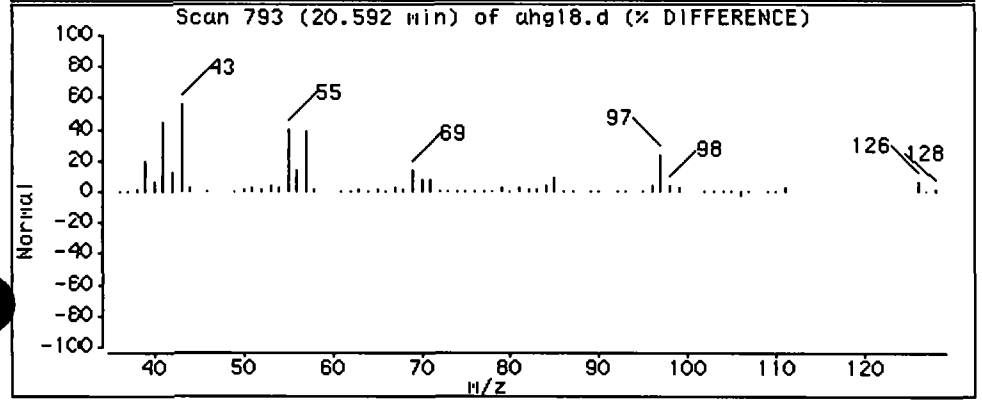
Column phase: Cap Column diameter: 0.53

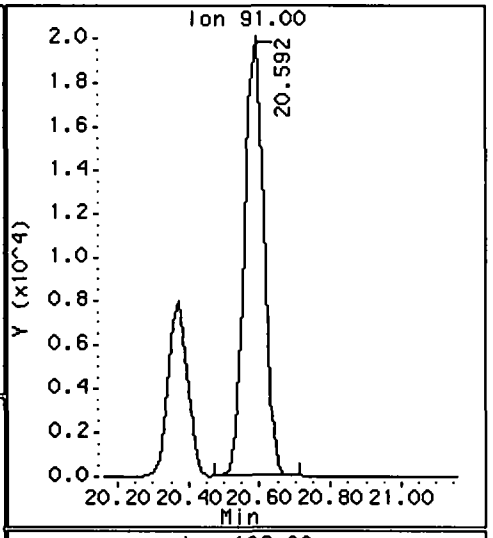
65 m,p-xylene

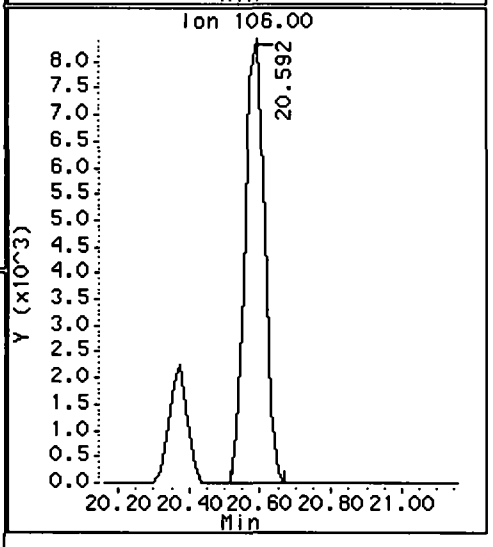












Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

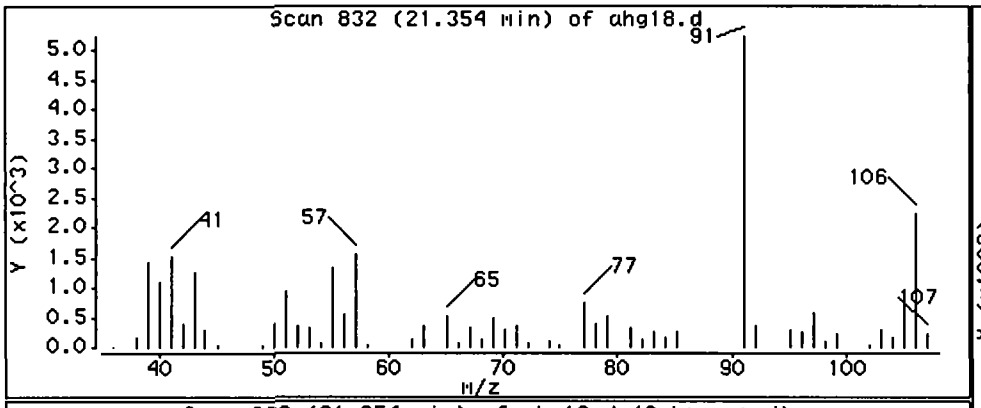
Client ID: WS-06 Instrument: gcl2.i

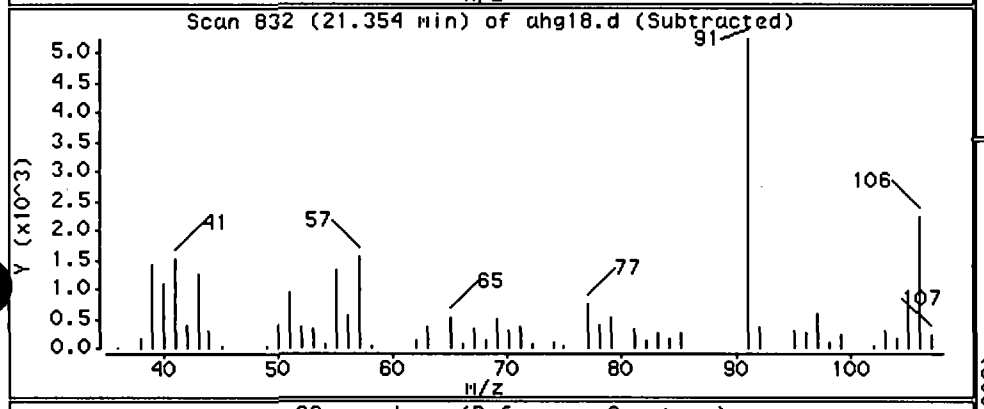
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

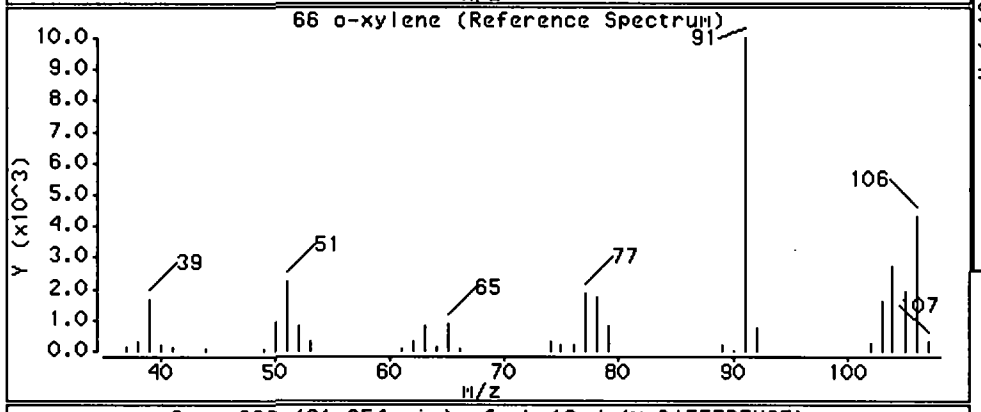
Operator: 0.5GSMP+5ULIS

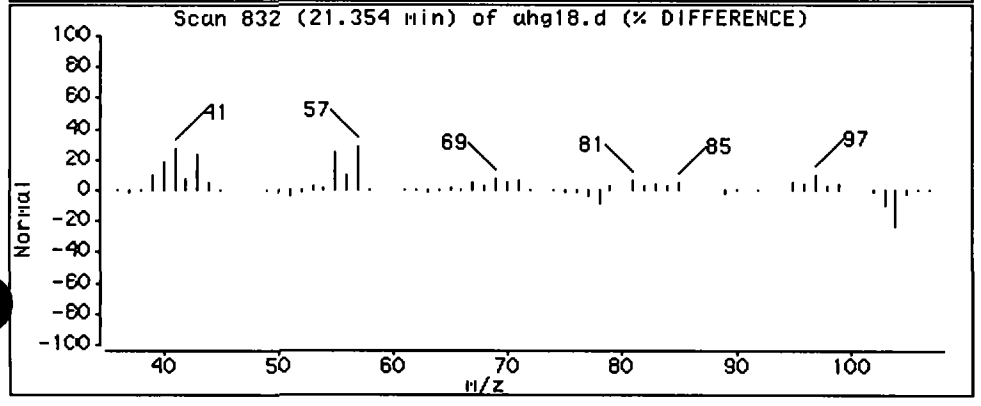
Column phase: Cap Column diameter: 0.53

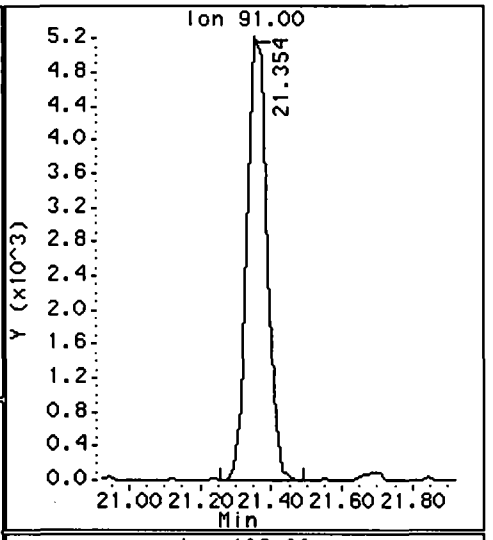
66 o-xylene

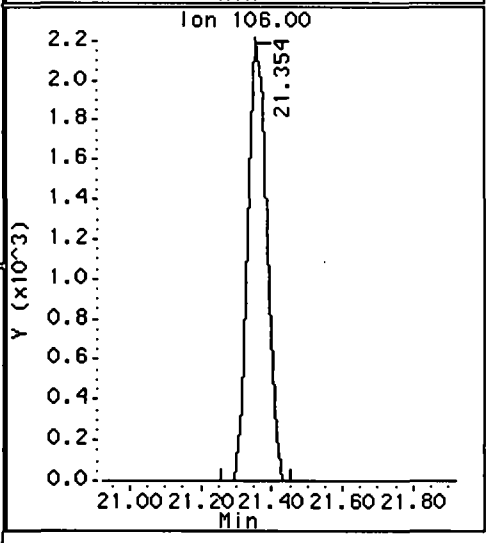












Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg18.d
Lab Smp Id: 9611G675-006 Client Smp ID: WS-06
Inj Date : 30-NOV-1996 23:15
Operator : 0.5GSMP+5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-006 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,10,0.5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 10.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	24.100	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 31 Bromochloromethane	13.693	349956	50.000
* 42 1,4-Difluorobenzene	15.178	522709	50.000
* 61 Chlorobenzene-d5	20.142	429211	50.000

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
9.769	1143679	163.40	2152.9	0		0	31
Unknown Hydrocarbon					CAS #:		
11.467	1337869	191.15	2518.4	0		0	31
Unknown Hydrocarbon					CAS #:		
12.248	1266488	180.95	2384.0	0		0	31

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown					CAS #:		
13.127	1781014	254.46	3352.6	0		0	31
Unknown Cycloalkane					CAS #:		
14.142	1464276	209.21	2756.4	0		0	31
Unknown Hydrocarbon					CAS #:		
14.299	1232861	176.14	2320.8	0		0	31
Unknown Cycloalkane					CAS #:		
14.846	2098647	200.75	2644.9	0		0	42
Unknown Hydrocarbon					CAS #:		
14.944	1843464	176.34	2323.3	0		0	42
Unknown Cycloalkane					CAS #:		
15.881	2685123	256.85	3384.0	0		0	42
Unknown Hydrocarbon					CAS #:		
17.777	1314213	153.10	2017.1	0		0	61

Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

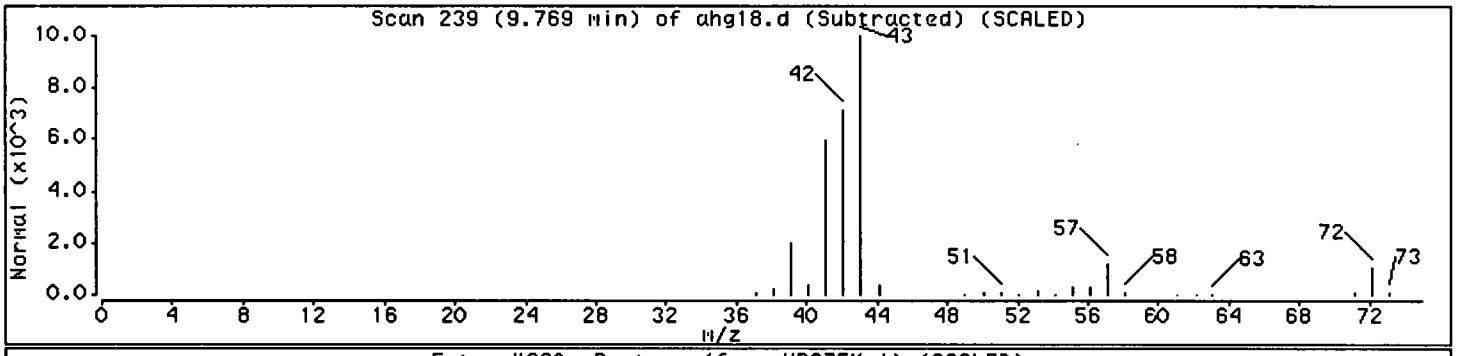
Client ID: WS-06 Instrument: gcl2.i

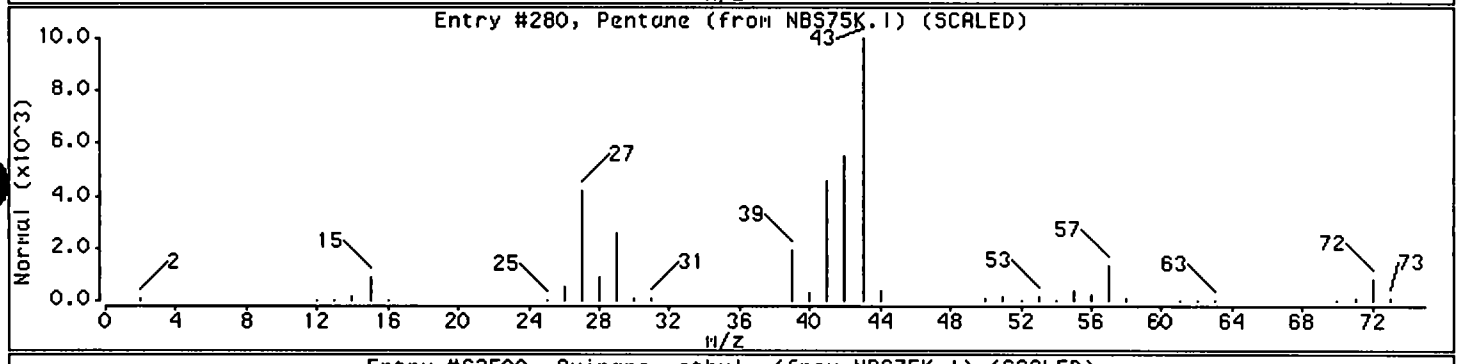
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

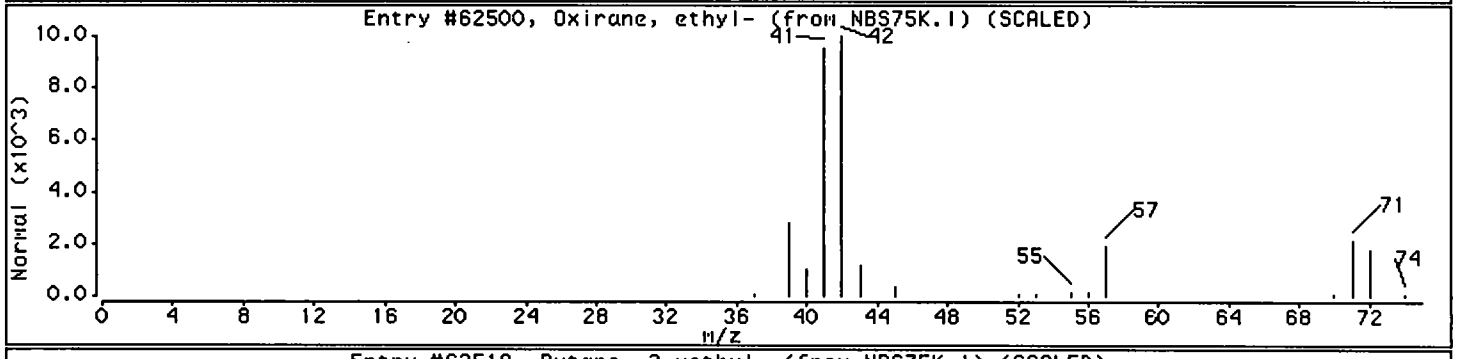
Operator: 0.5GSMP+5ULIS

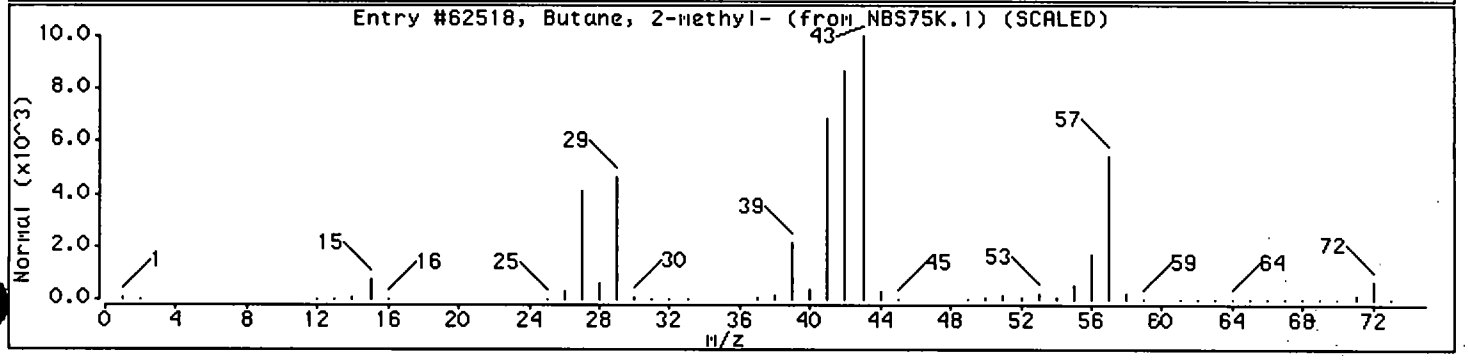
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Pentane	109-66-0	NBS75K.l	280	90	C5H12	72
Oxirane, ethyl-	106-88-7	NBS75K.l	62500	33	C4H8O	72
Butane, 2-methyl-	78-78-4	NBS75K.l	62518	9	C5H12	72









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

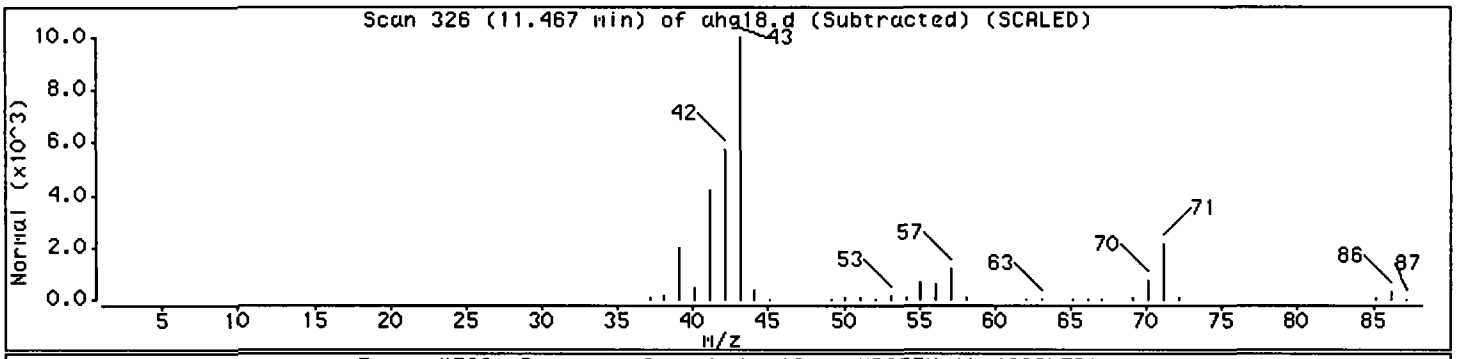
Client ID: WS-06 Instrument: gcl2.i

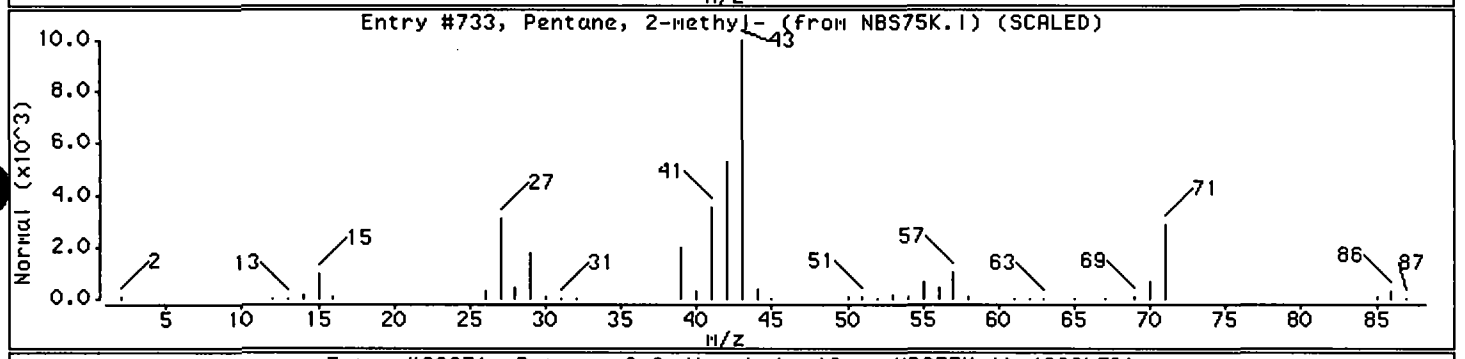
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

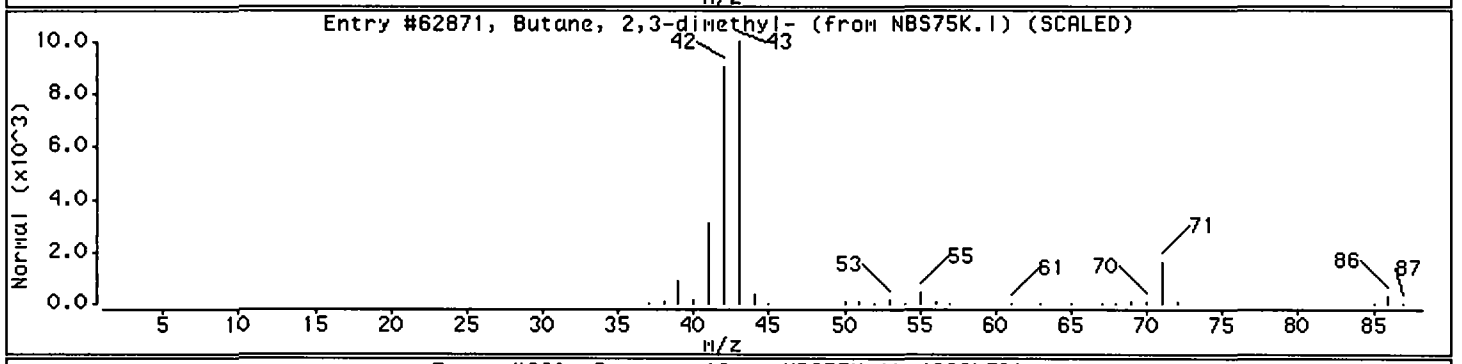
Operator: 0.5GSMP+5ULIS

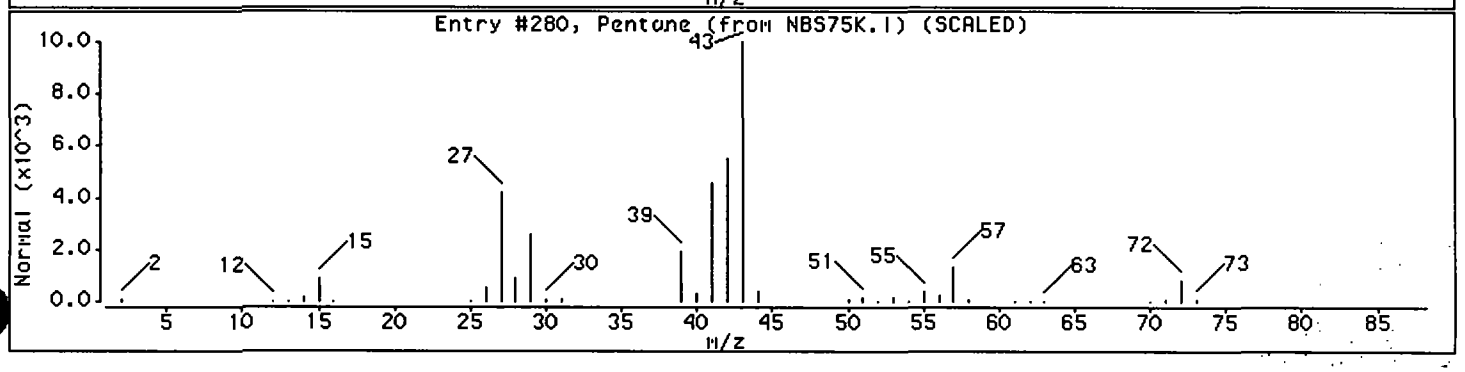
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Pentane, 2-methyl-	107-83-5	NBS75K.l	733	91	C6H14	86
Butane, 2,3-dimethyl-	79-29-8	NBS75K.l	62871	72	C6H14	86
Pentane	109-66-0	NBS75K.l	280	36	C5H12	72









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

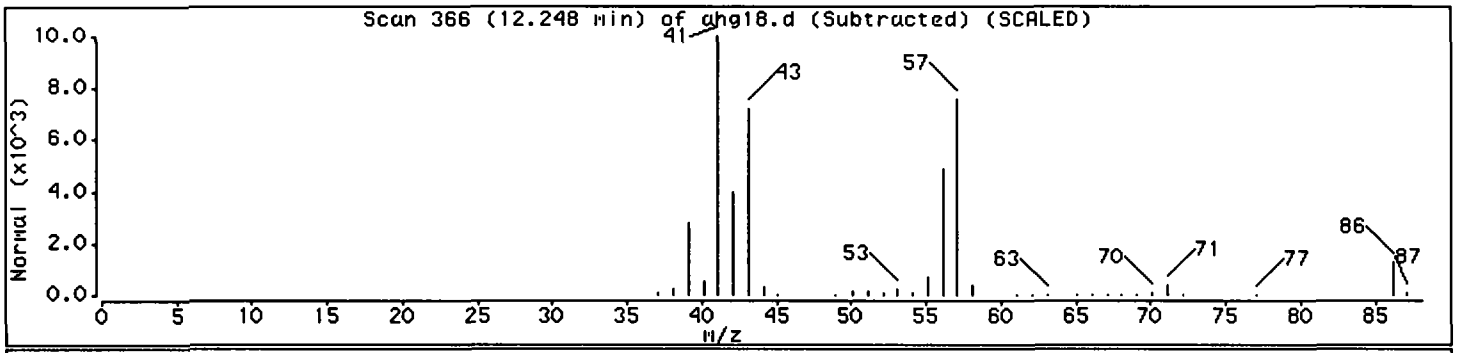
Client ID: WS-06 Instrument: gcl2.i

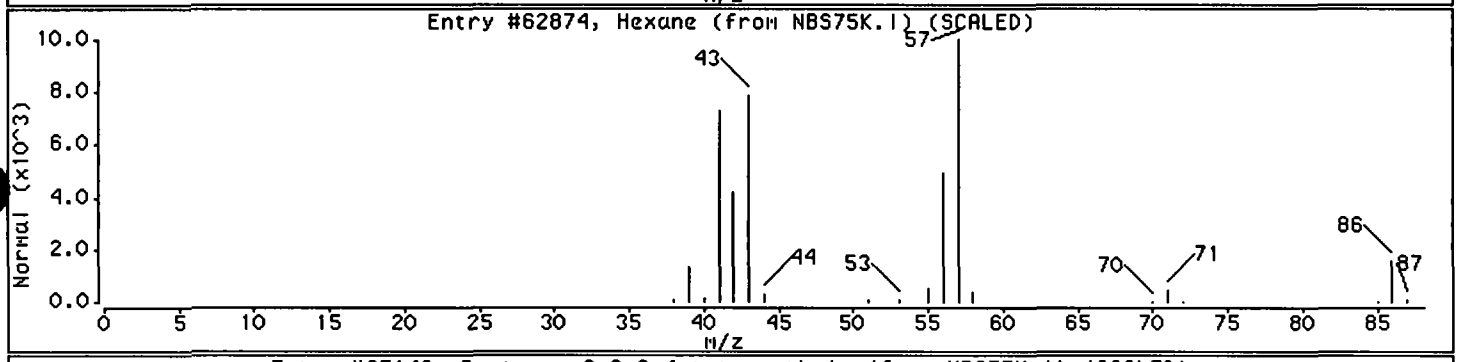
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

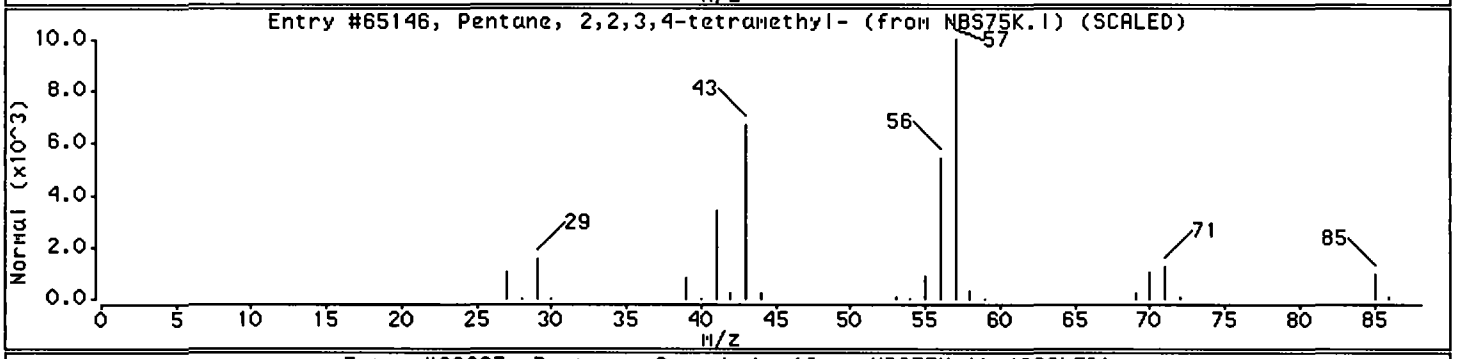
Operator: 0.5GSMP+5ULIS

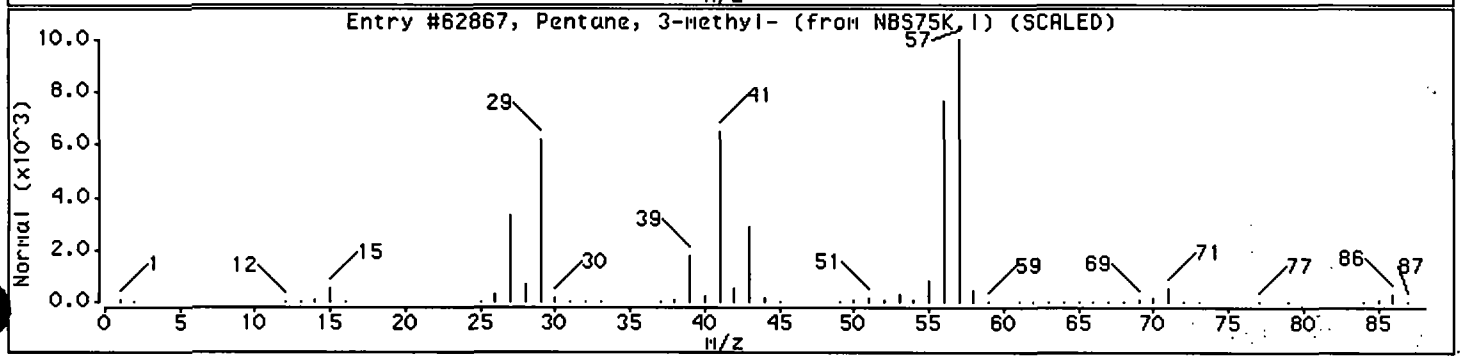
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane	110-54-3	NBS75K.l	62874	87	C6H14	86
Pentane, 2,2,3,4-tetramethyl-	1186-53-4	NBS75K.l	65146	38	C9H20	128
Pentane, 3-methyl-	96-14-0	NBS75K.l	62867	25	C6H14	86









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

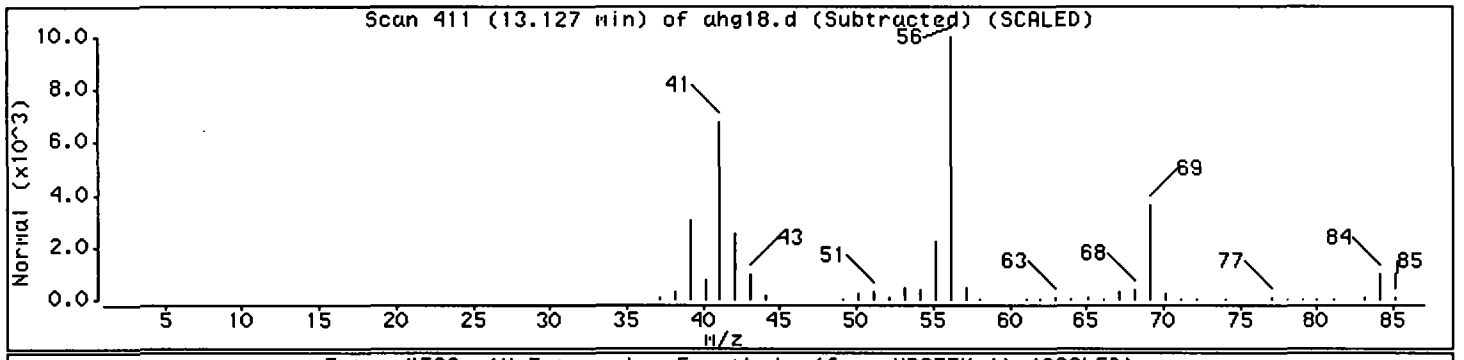
Client ID: WS-06 Instrument: gcl2.i

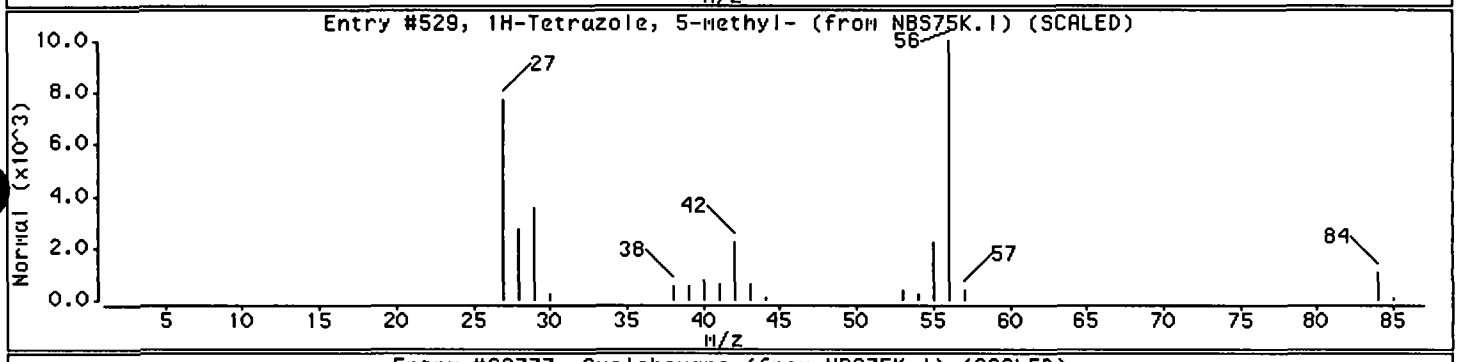
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

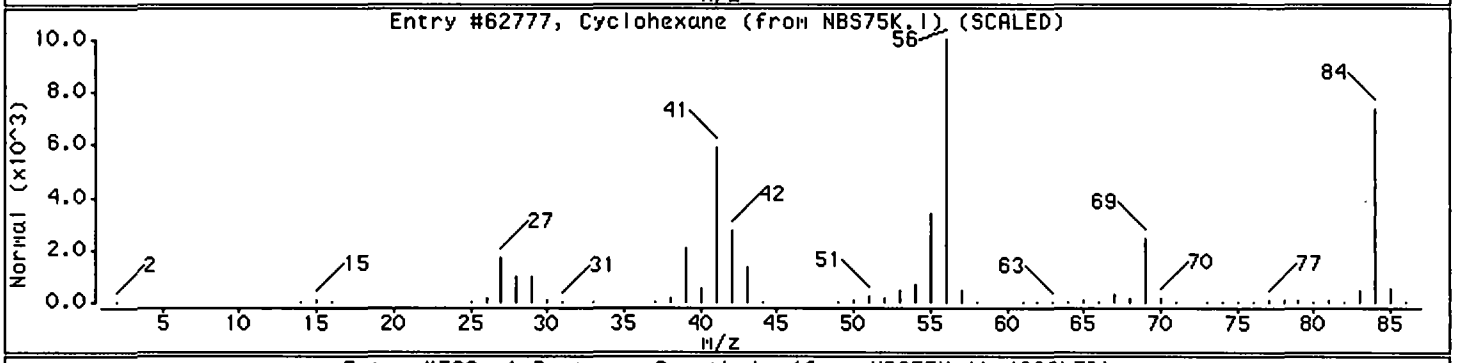
Operator: 0.5GSMP+5ULIS

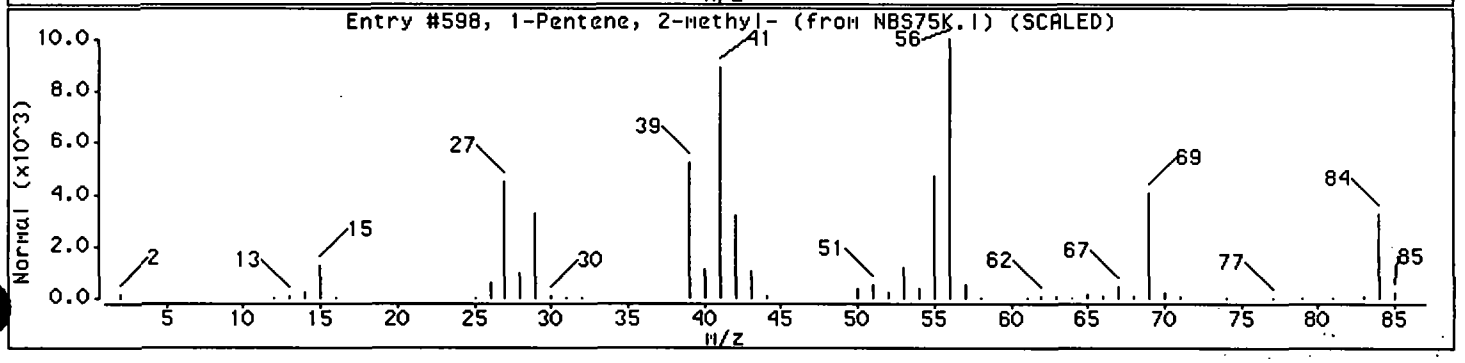
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Tetrazole, 5-methyl-	4076-36-2	NBS75K.l	529	86	C2H4N4	84
Cyclohexane	110-82-7	NBS75K.l	62777	83	C6H12	84
1-Pentene, 2-methyl-	763-29-1	NBS75K.l	598	78	C6H12	84









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

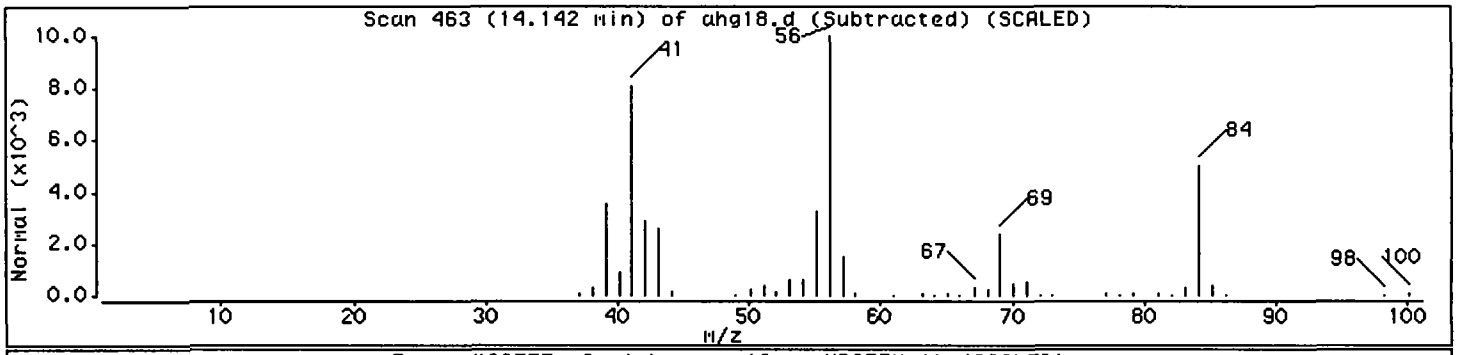
Client ID: WS-06 Instrument: gcl2.i

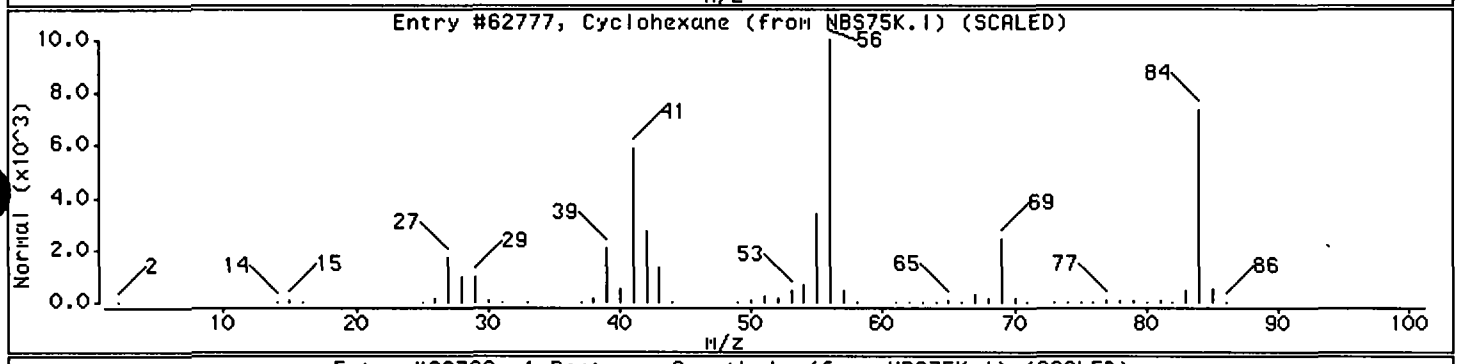
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

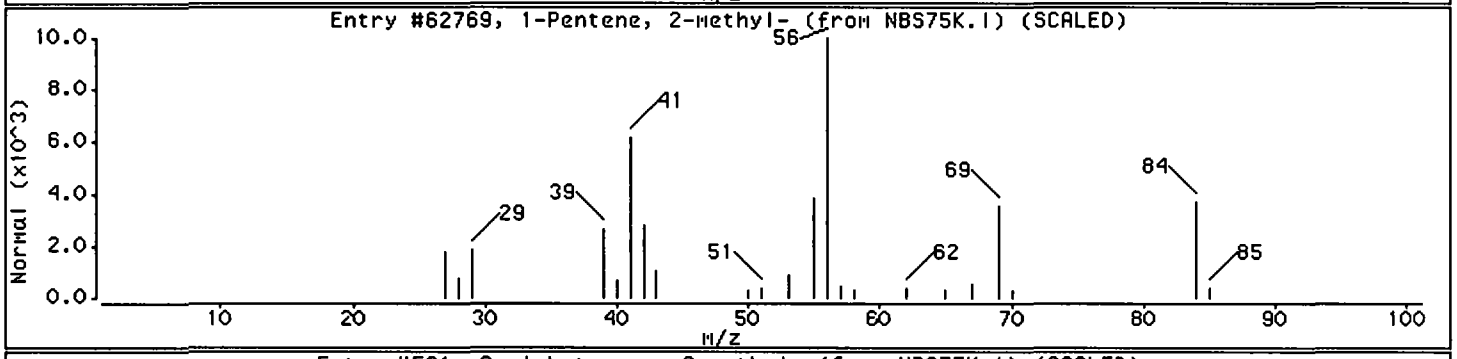
Operator: 0.5GSMP+5ULIS

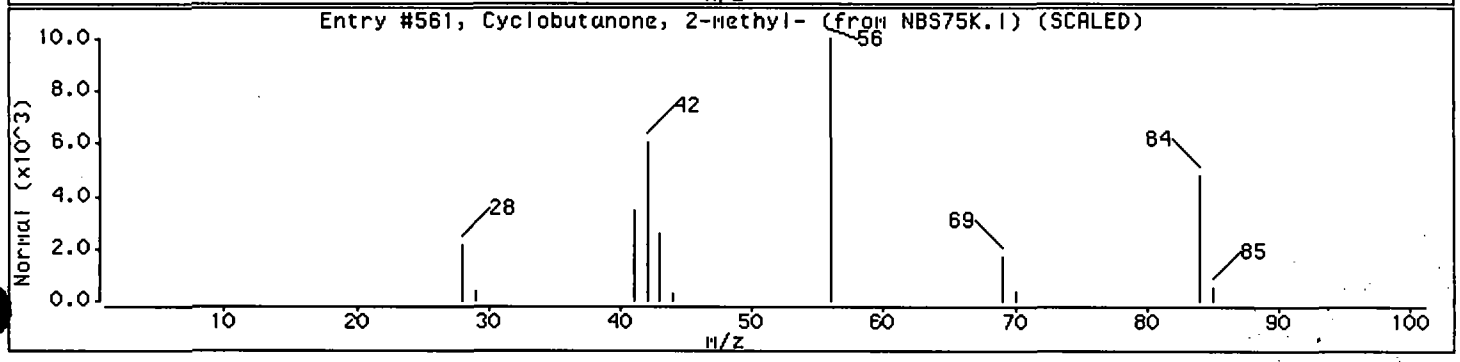
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane	110-82-7	NBS75K.l	62777	83	C6H12	84
1-Pentene, 2-methyl-	763-29-1	NBS75K.l	62769	78	C6H12	84
Cyclobutanone, 2-methyl-	1517-15-3	NBS75K.l	561	53	C5H8O	84









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

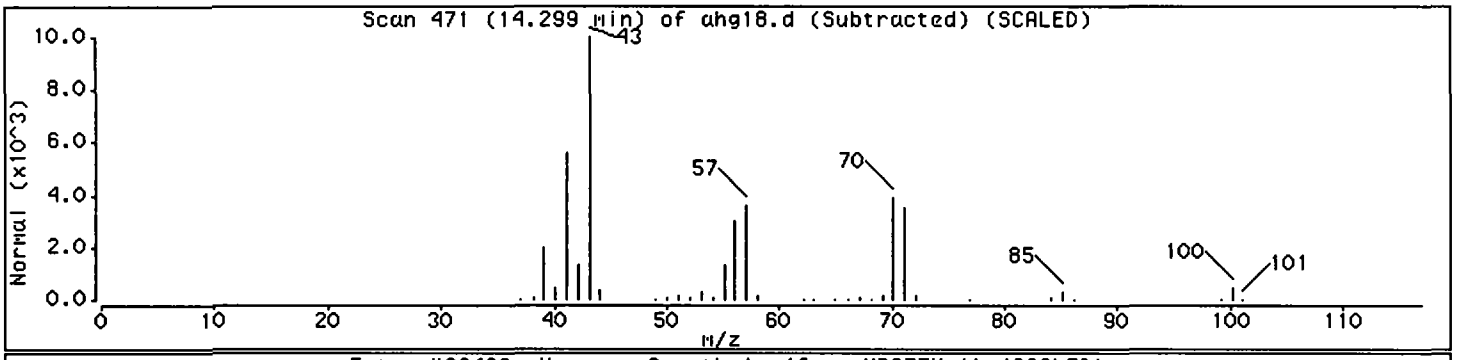
Client ID: WS-06 Instrument: gcl2.i

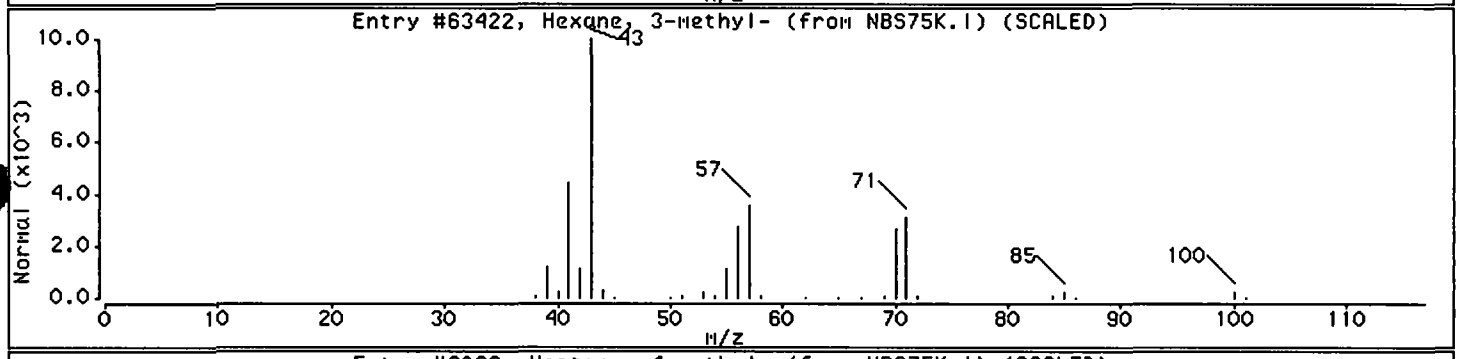
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

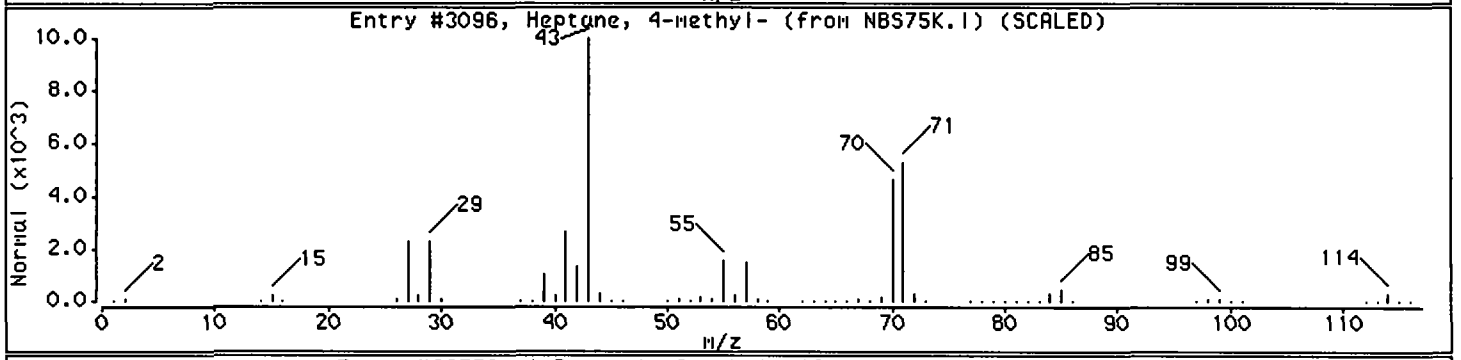
Operator: 0.5GSMP+5ULIS

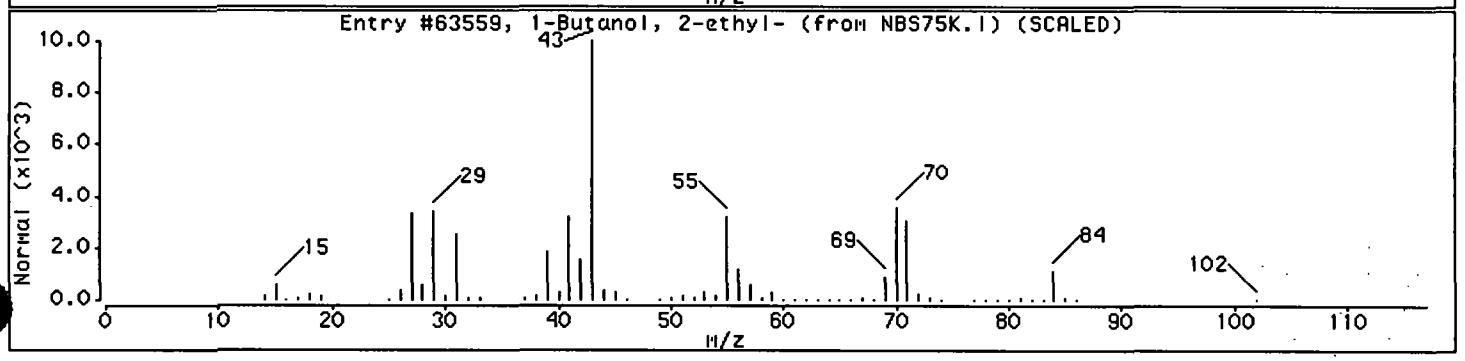
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane, 3-methyl-	589-34-4	NBS75K.l	63422	95	C7H16	100
Heptane, 4-methyl-	589-53-7	NBS75K.l	3096	72	C8H18	114
1-Butanol, 2-ethyl-	97-95-0	NBS75K.l	63559	72	C6H14O	102









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

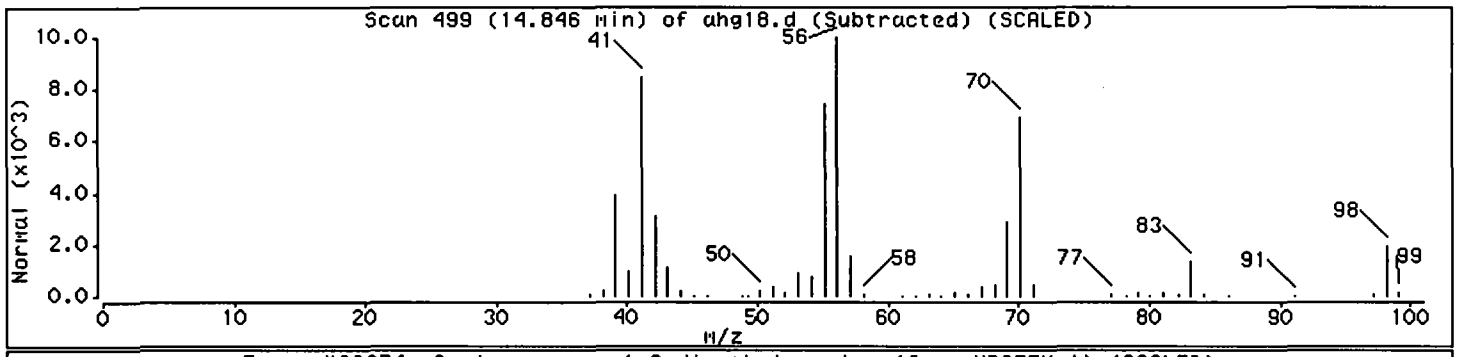
Client ID: WS-06 Instrument: gcl2.i

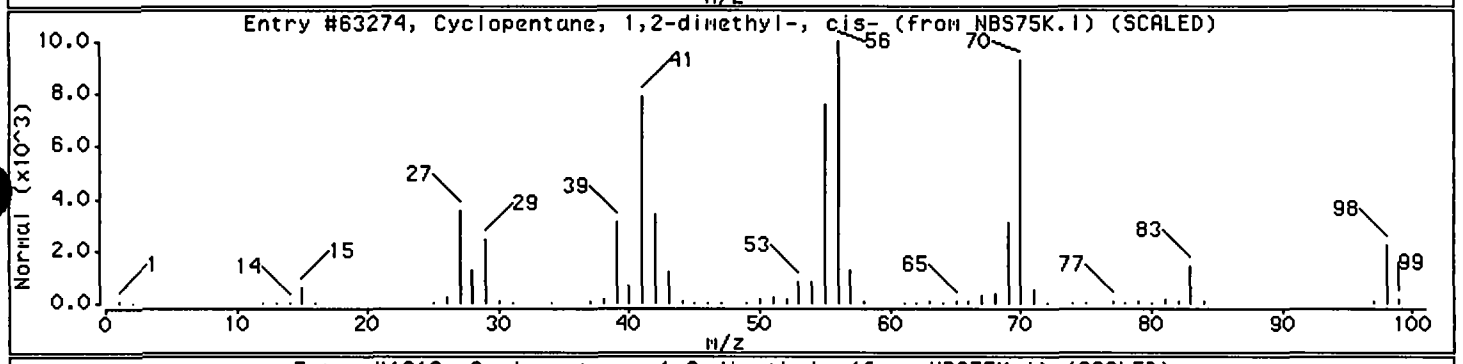
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

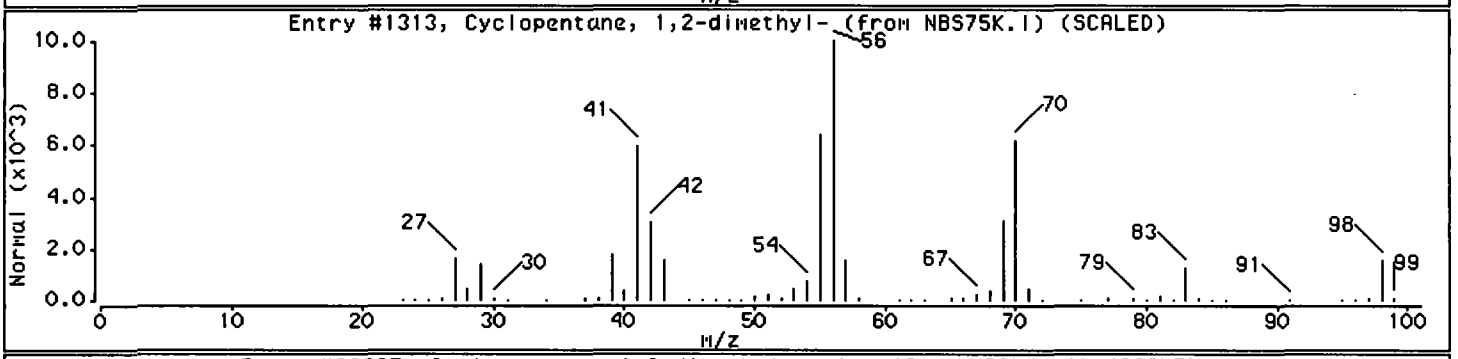
Operator: 0.5GSMP+5ULIS

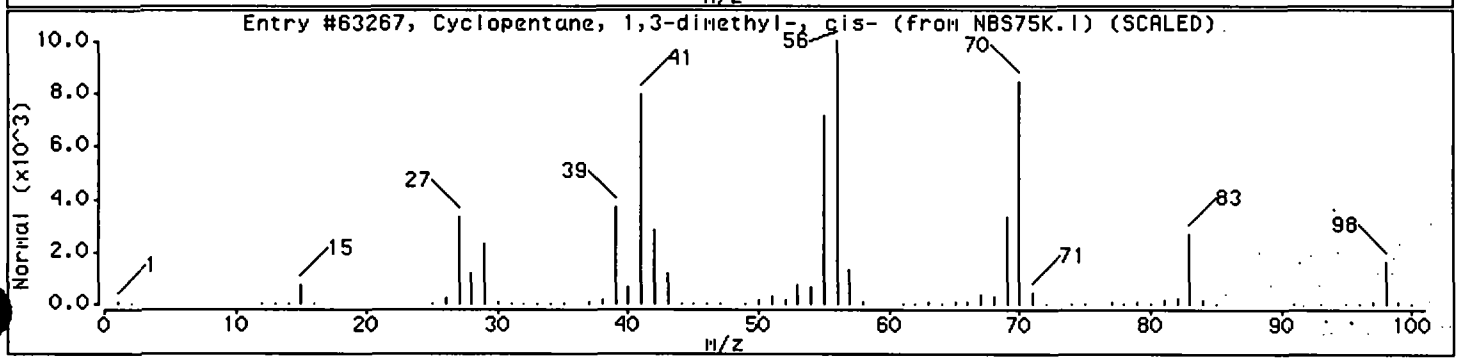
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentane, 1,2-dimethyl-, cis-	1192-18-3	NBS75K.l	63274	94	C7H14	98
Cyclopentane, 1,2-dimethyl-	2452-99-5	NBS75K.l	1313	94	C7H14	98
Cyclopentane, 1,3-dimethyl-, cis-	2532-58-3	NBS75K.l	63267	90	C7H14	98









Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

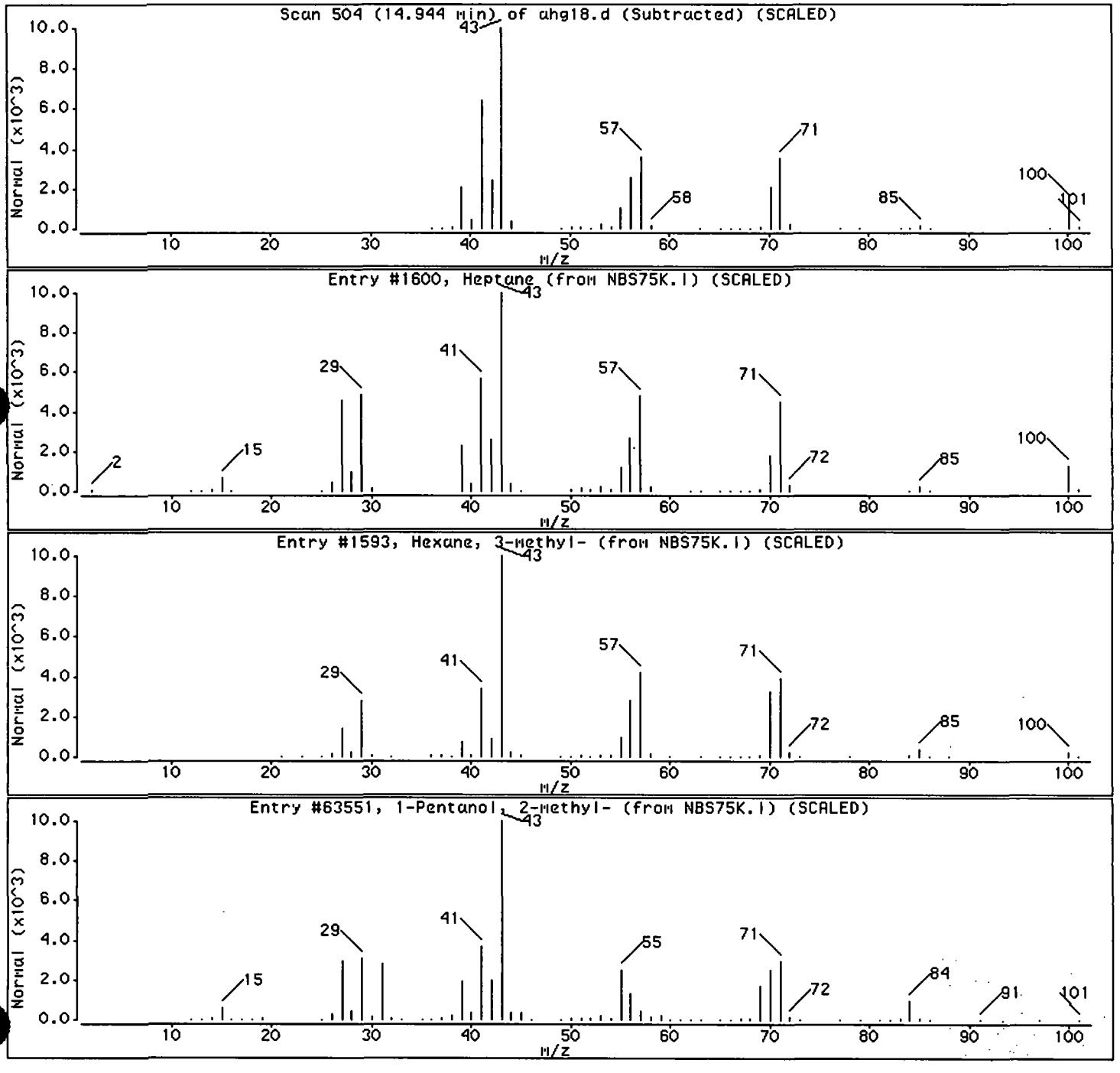
Client ID: WS-06 Instrument: gcl2.i

Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane	142-82-5	NBS75K.l	1600	87	C7H16	100
Hexane, 3-methyl-	589-34-4	NBS75K.l	1593	64	C7H16	100
1-Pentanol, 2-methyl-	105-30-6	NBS75K.l	63551	50	C6H14O	102



Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

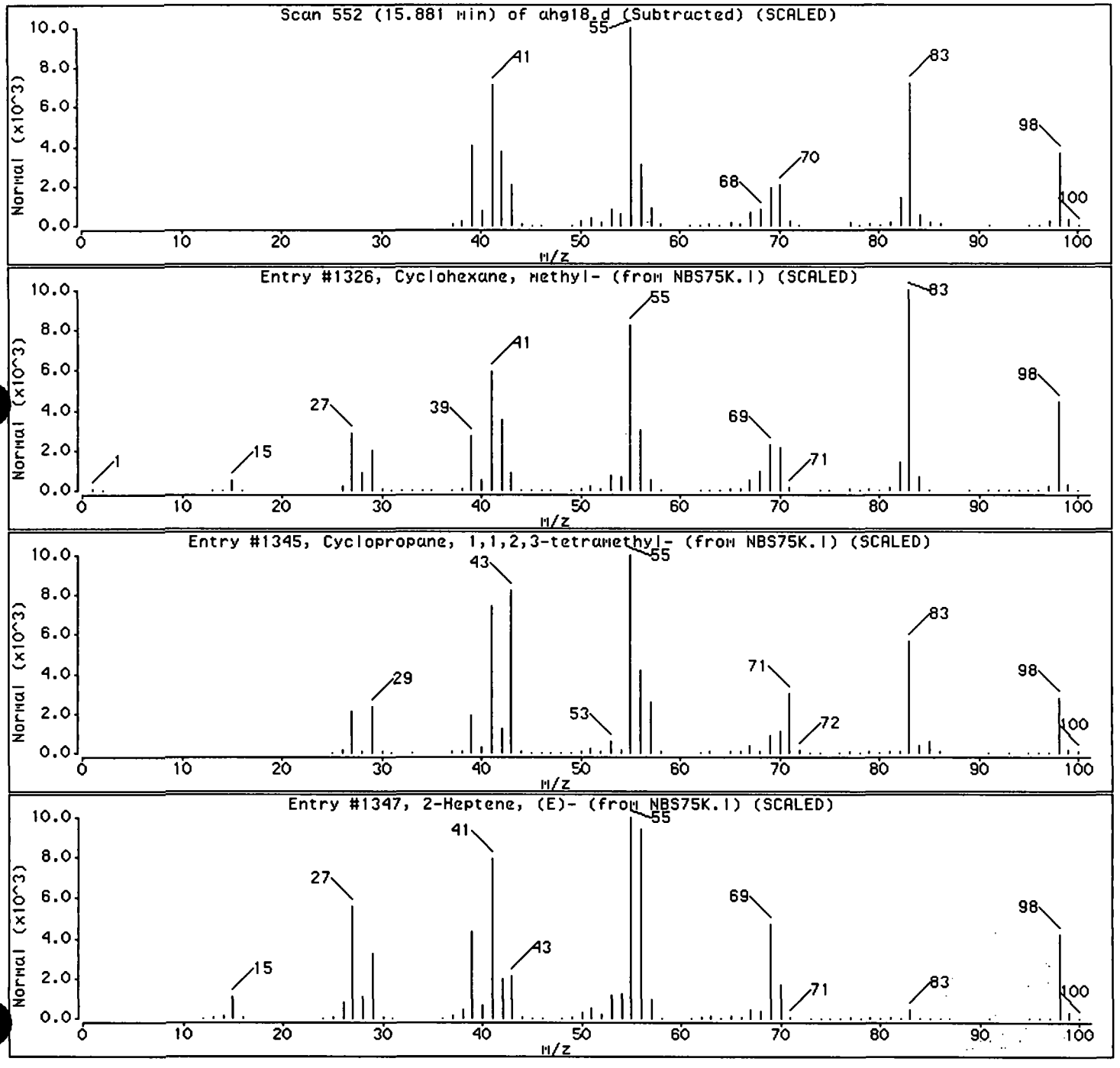
Client ID: WS-06 Instrument: gcl2.i

Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

Operator: 0.5GSMP+5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, methyl-	108-87-2	NBS75K.l	1326	93	C7H14	98
Cyclopropane, 1,1,2,3-tetramethyl-	74752-93-5	NBS75K.l	1345	47	C7H14	98
2-Heptene, (E)-	14686-13-6	NBS75K.l	1347	46	C7H14	98



Data File: /chem/gcl2.i/961130.b/ahg18.d

Date : 30-NOV-1996 23:15

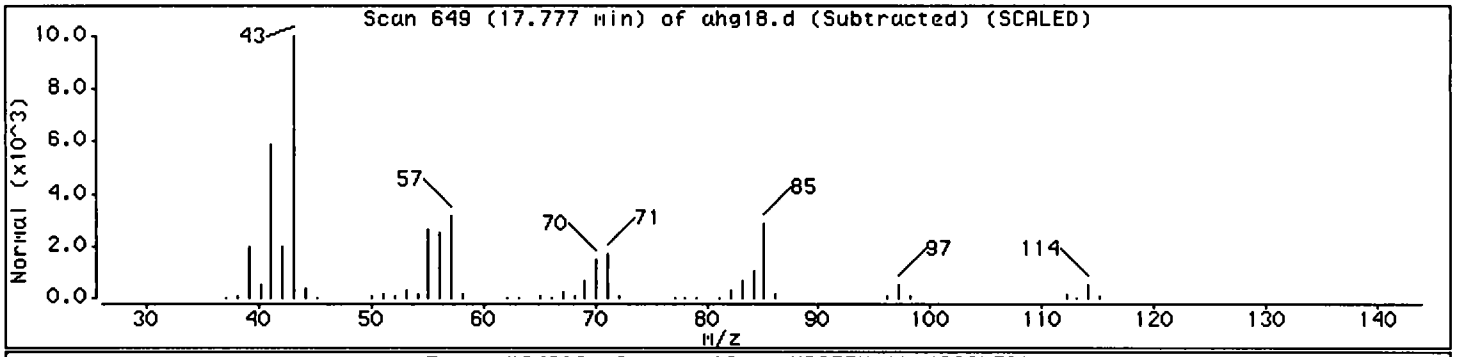
Client ID: WS-06 Instrument: gcl2.i

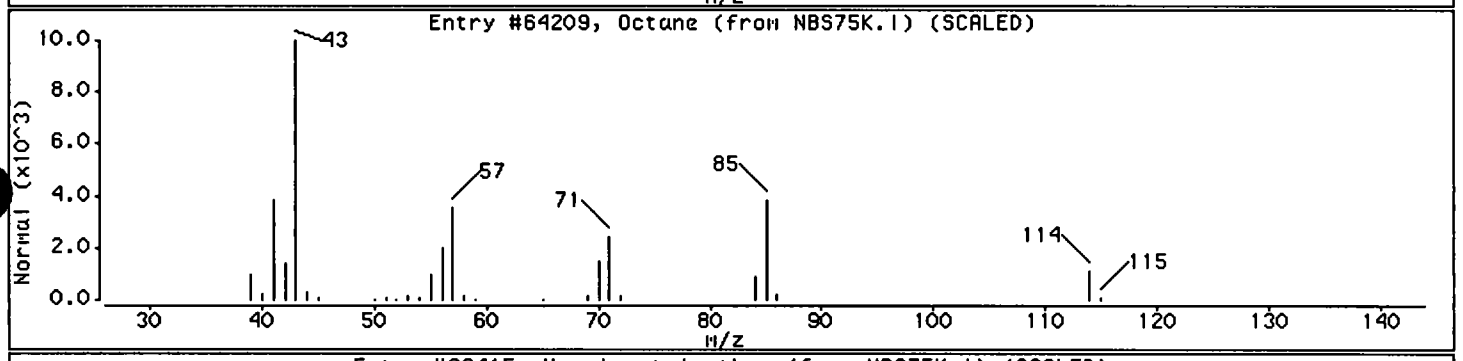
Sample Info: 9611G675-006 XBB30,[AL=0624He],[DC=00]

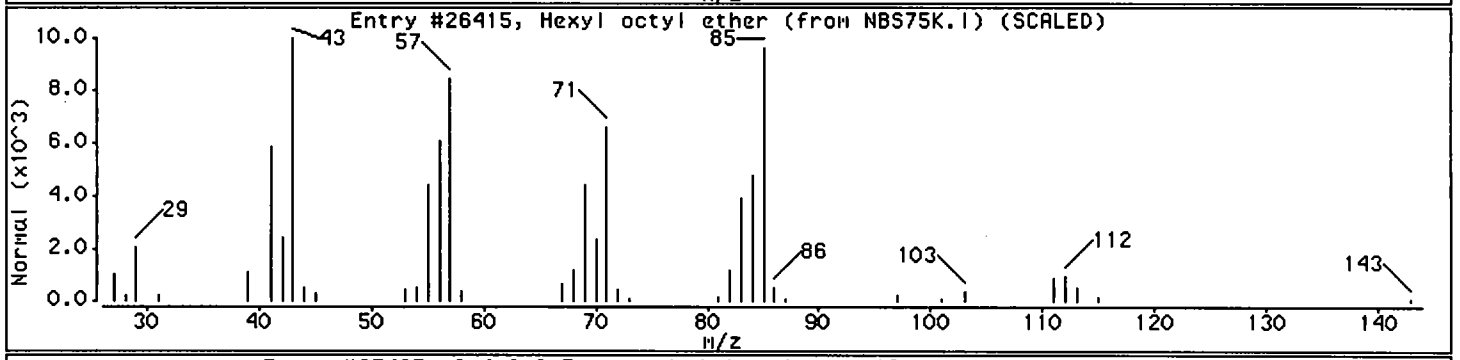
Operator: 0.5GSMP+5ULIS

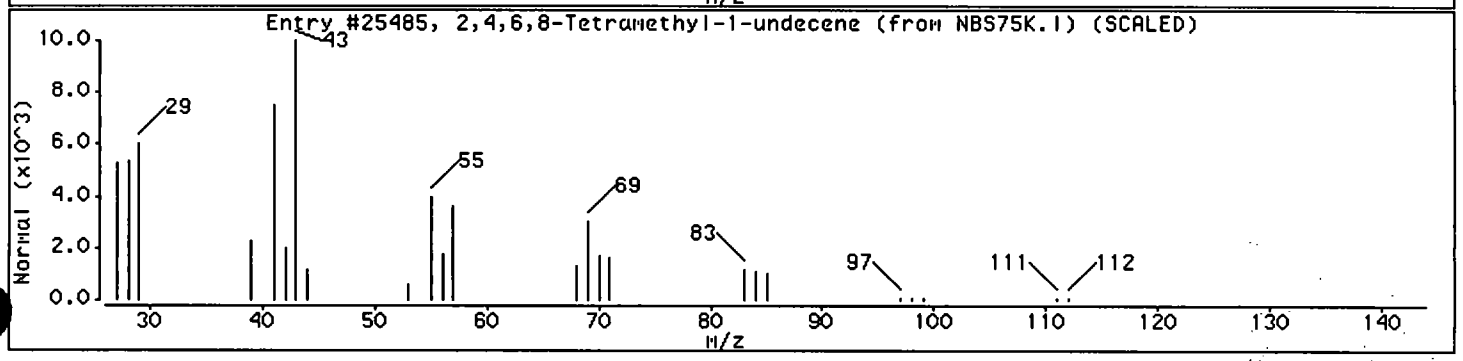
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Octane	111-65-9	NBS75K.l	64209	58	C8H18	114
Hexyl octyl ether	0-00-0	NBS75K.l	26415	53	C14H30O	214
2,4,6,8-Tetramethyl-1-undecene	59920-26-2	NBS75K.l	25485	53	C15H30	210









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-07

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG13

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 8 Date Analyzed: 11/30/96

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-07

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG13

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 8 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	30.82	10	J
2.	UNKNOWN CYCLOALKANE	31.27	9	J
3.	UNKNOWN CYCLOALKANE	31.76	7	J
4.	UNKNOWN CYCLOALKANE	33.56	18	J
5.	UNKNOWN HYDROCARBON	35.61	11	J
6.	UNKNOWN	36.28	12	J
7.	UNKNOWN HYDROCARBON	37.14	9	J
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

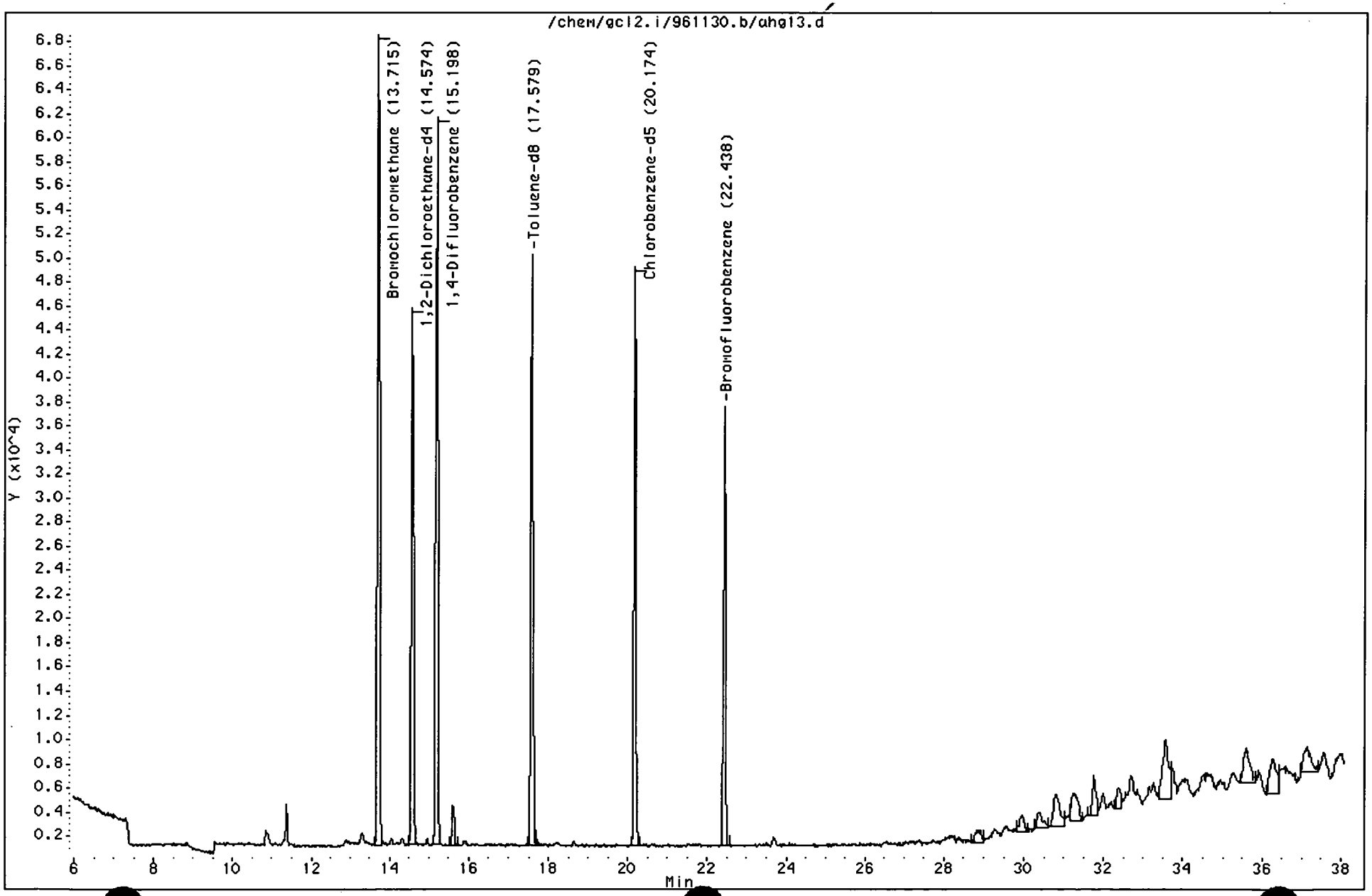
164

Data File: /chem/gcl2.i/961130.b/ahg13.d
Date : 30-NOV-1996 19:23
Client ID: WS-07
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: 5GSMP +5ULIS
Column diameter: 0.53

Column phase: Cap



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg13.d
Lab Smp Id: 9611G675-007 Client Smp ID: WS-07
Inj Date : 30-NOV-1996 19:23
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-007 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	7.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.715	13.755	(1.000)	29053	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.574	14.614	(1.063)	54933	46.023	49.808
* 42 1,4-Difluorobenzene	114.00	15.198	15.239	(1.000)	83190	50.000	
$ 52 Toluene-d8	98.00	17.579	17.622	(0.871)	57845	52.752	57.091
* 61 Chlorobenzene-d5	117.00	20.174	20.218	(1.000)	49534	50.000	
$ 69 Bromofluorobenzene	95.00	22.438	22.484	(1.112)	27245	34.387	37.215

JK 1-7-97

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg13.d
Lab Smp Id: 9611G675-007 Client Smp ID: WS-07
Inj Date : 30-NOV-1996 19:23
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-007 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	7.600	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	20.174	163978	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
30.824	31835	9.707	10.506	0		0	61
Unknown Cycloalkane					CAS #:		
31.273	27156	8.280	8.961	0		0	61
Unknown Cycloalkane					CAS #:		
31.762	20716	6.317	6.836	0		0	61
Unknown Cycloalkane					CAS #:		
33.560	54825	16.717	18.092	0		0	61

RT	AREA	CONCENTRATIONS ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
35.613	32691	9.968	10.788	0		0	61
Unknown					CAS #:		
36.277	35978	10.970	11.872	0		0	61
Unknown Hydrocarbon					CAS #:		
37.138	26604	8.112	8.779	0		0	61

Data File: /chem/gcl2.i/961130.b/ahg13.d

Date : 30-NOV-1996 19:23

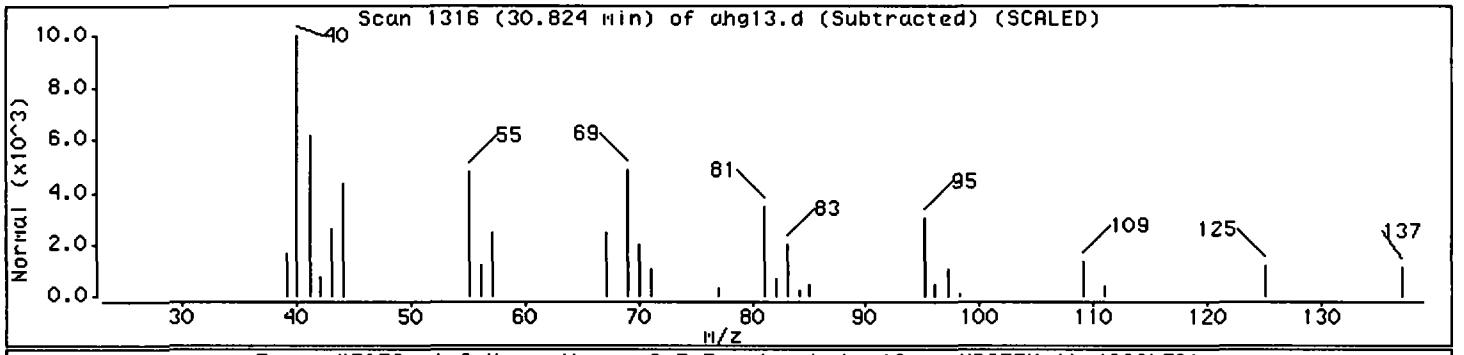
Client ID: WS-07 Instrument: gcl2.i

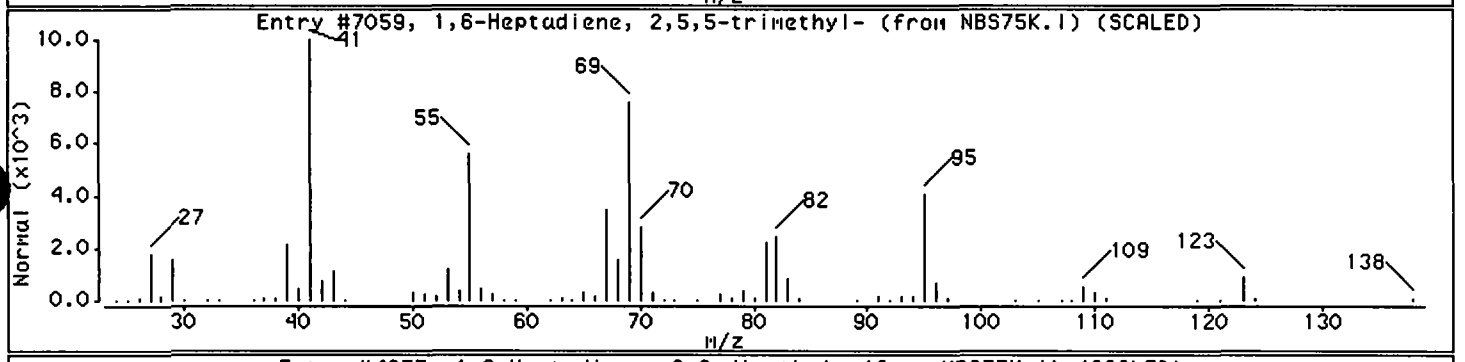
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

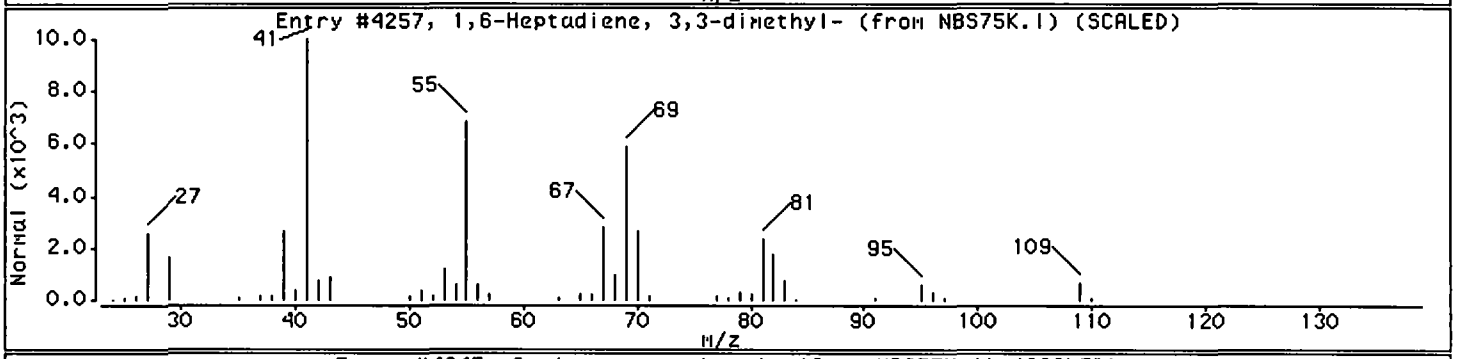
Operator: 5GSMP +5ULIS

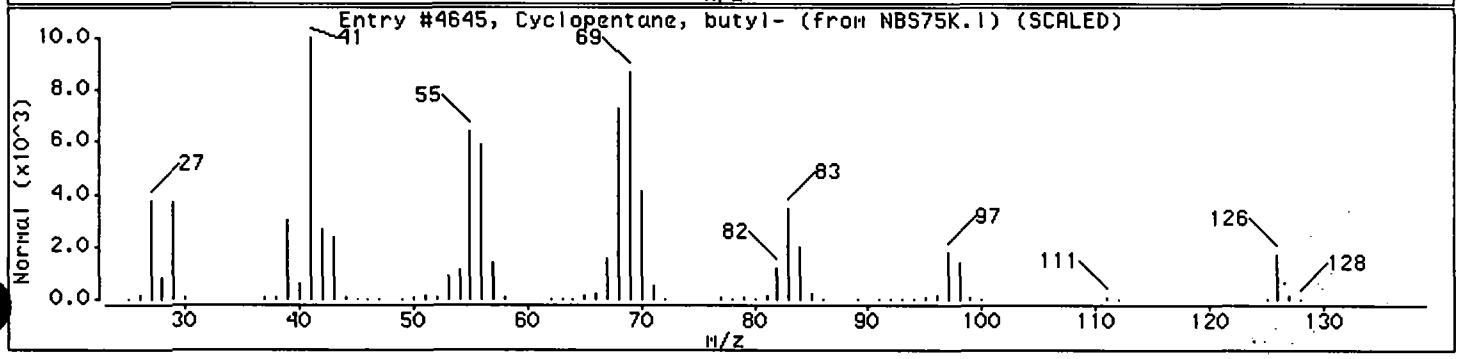
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,6-Heptadiene, 2,5,5-trimethyl-	62238-28-2	NBS75K.l	7059	12	C10H18	138
1,6-Heptadiene, 3,3-dimethyl-	68701-61-1	NBS75K.l	4257	12	C9H16	124
Cyclopentane, butyl-	2040-95-1	NBS75K.l	4645	10	C9H18	126









Data File: /chem/gcl2.i/961130.b/ahg13.d

Date : 30-NOV-1996 19:23

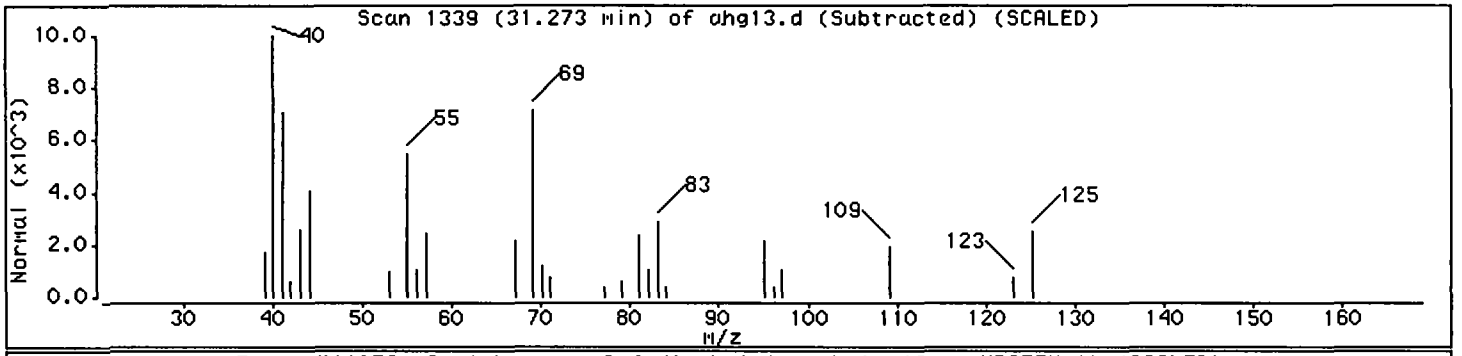
Client ID: WS-07 Instrument: gcl2.i

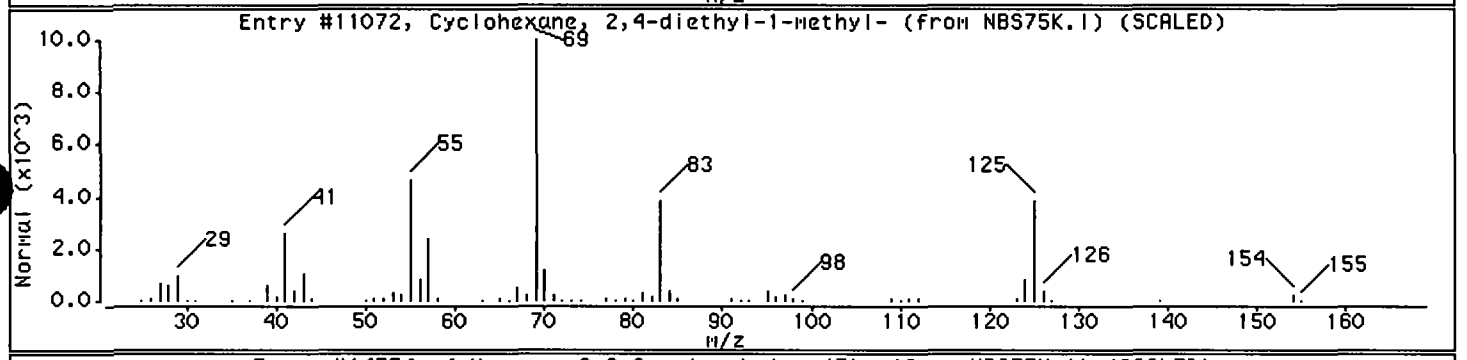
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

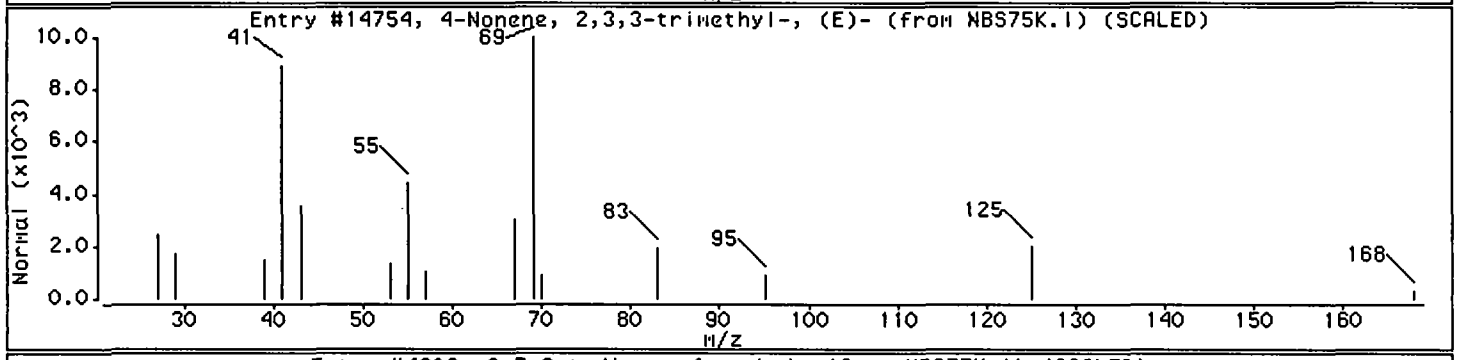
Operator: 5GSMP +5ULIS

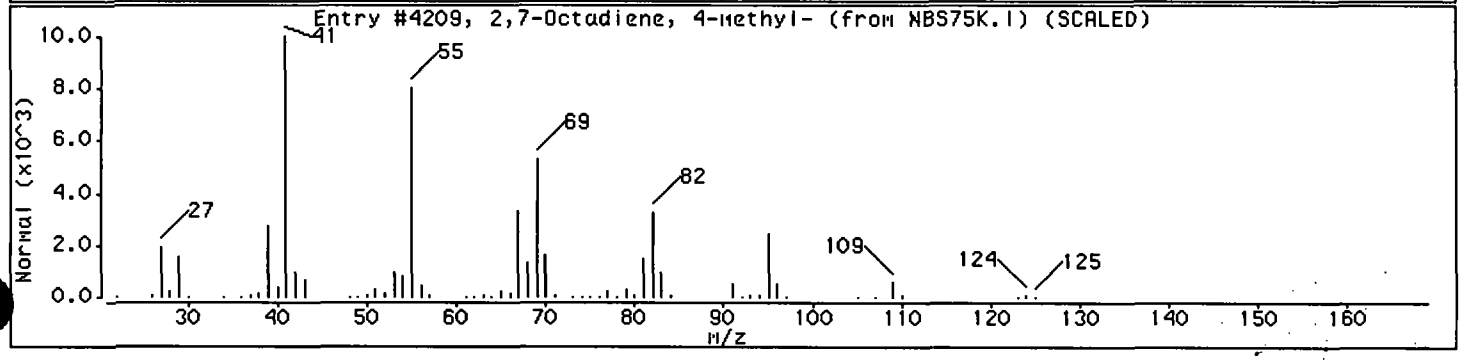
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 2,4-diethyl-1-methyl-	61142-70-9	NBS75K.l	11072	22	C11H22	154
4-Nonene, 2,3,3-trimethyl-, (E)-	63830-67-1	NBS75K.l	14754	22	C12H24	168
2,7-Octadiene, 4-methyl-	0-00-0	NBS75K.l	4209	12	C9H16	124









Data File: /chem/gcl2.i/961130.b/ahgl3.d

Date : 30-NOV-1996 19:23

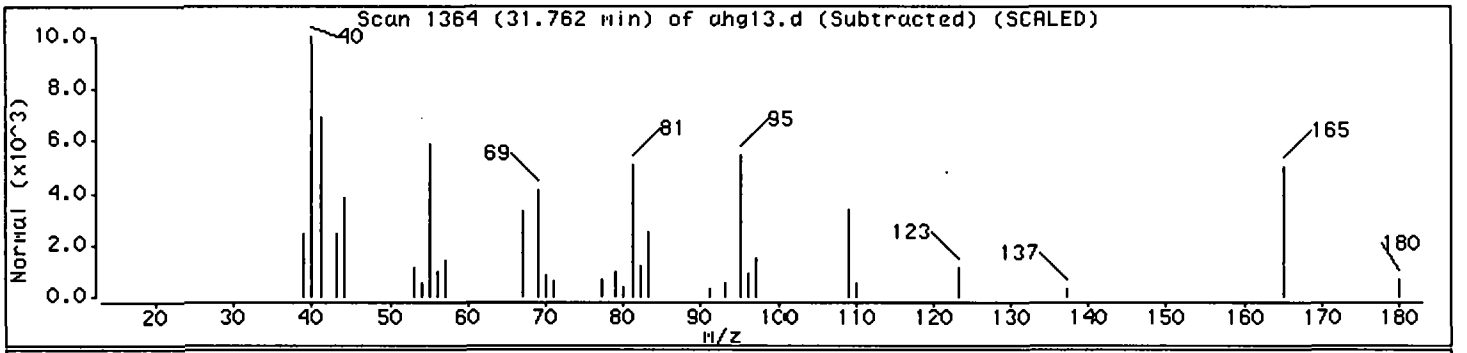
Client ID: WS-07 Instrument: gcl2.i

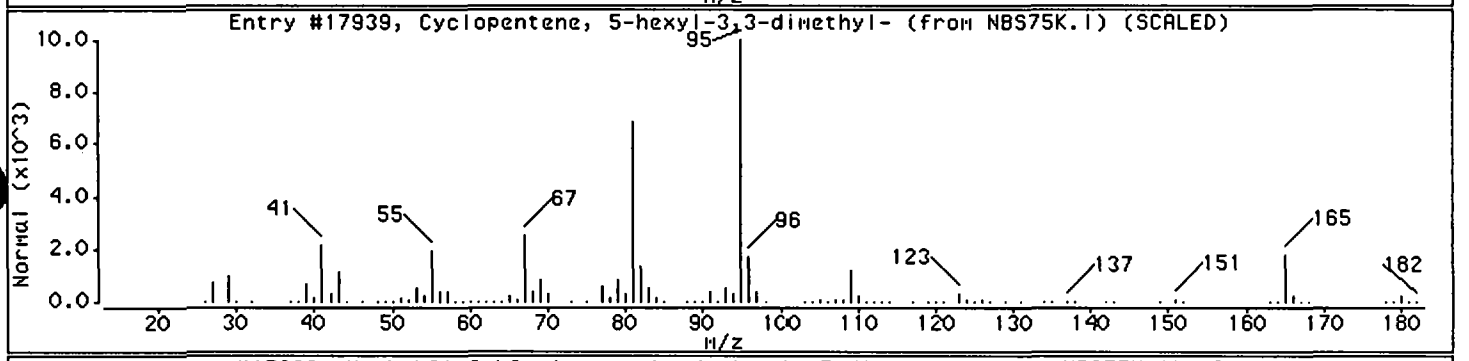
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

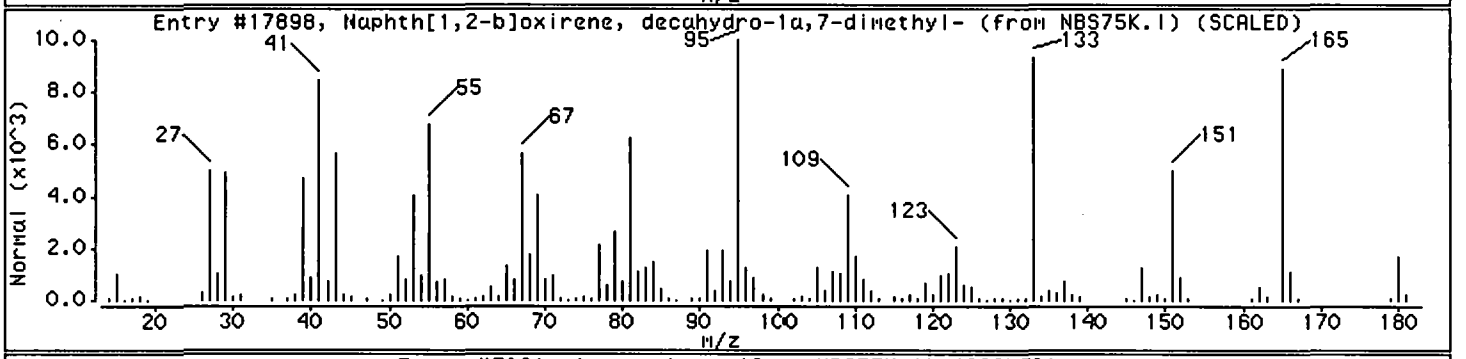
Operator: 5GSMP +5ULIS

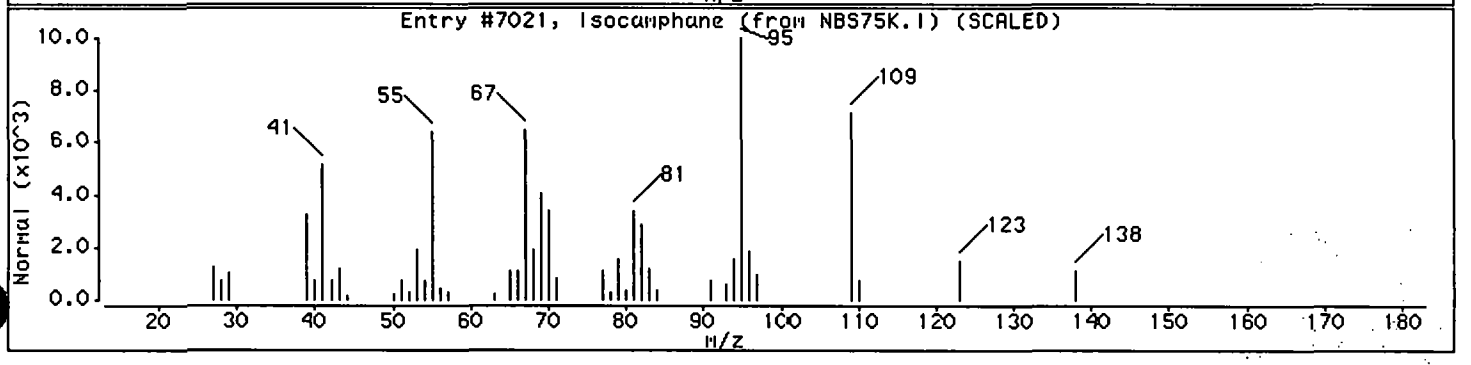
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclopentene, 5-hexyl-3,3-dimethyl-	61142-66-3	NBS75K.l	17939	43	C13H24	180
Naphth[1,2-b]oxirene, decahydro-1a,7-dim	55976-08-4	NBS75K.l	17898	40	C12H20O	180
Isocamphane	0-00-0	NBS75K.l	7021	35	C10H18	138









Data File: /chem/gcl2.i/961130.b/ahg13.d

Date : 30-NOV-1996 19:23

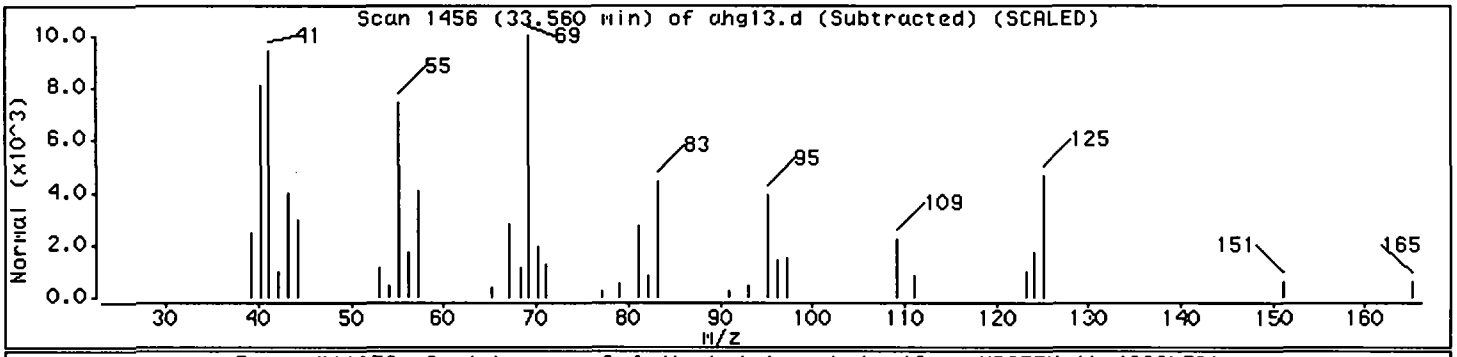
Client ID: WS-07 Instrument: gcl2.i

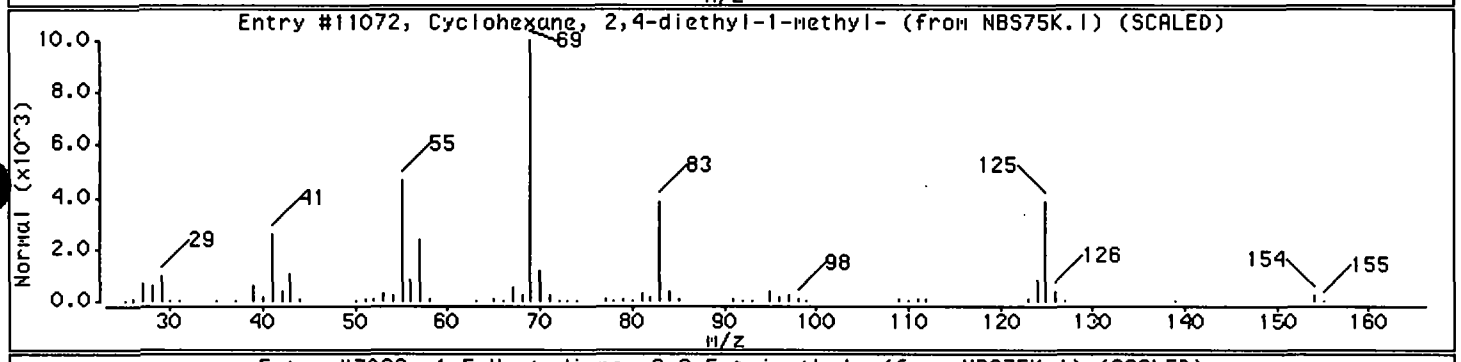
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

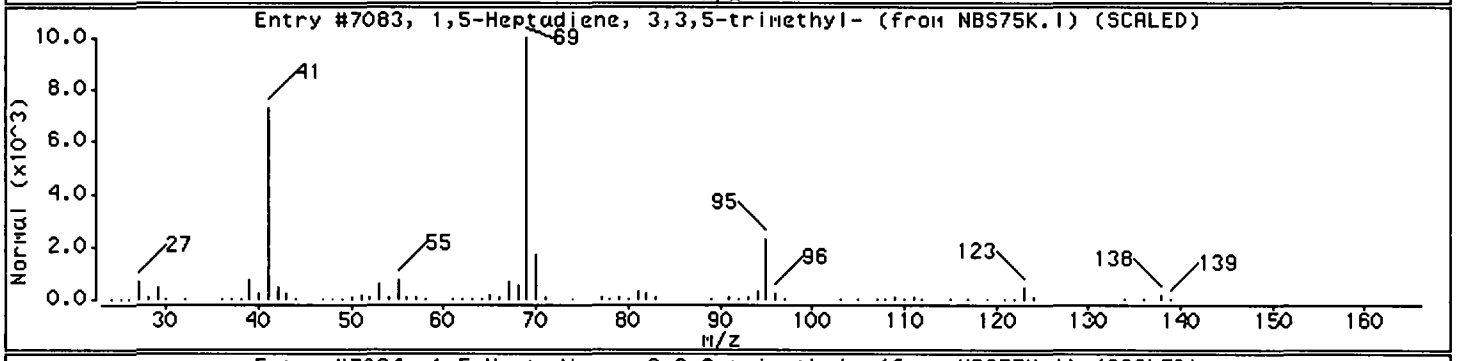
Operator: 5GSMP +5ULIS

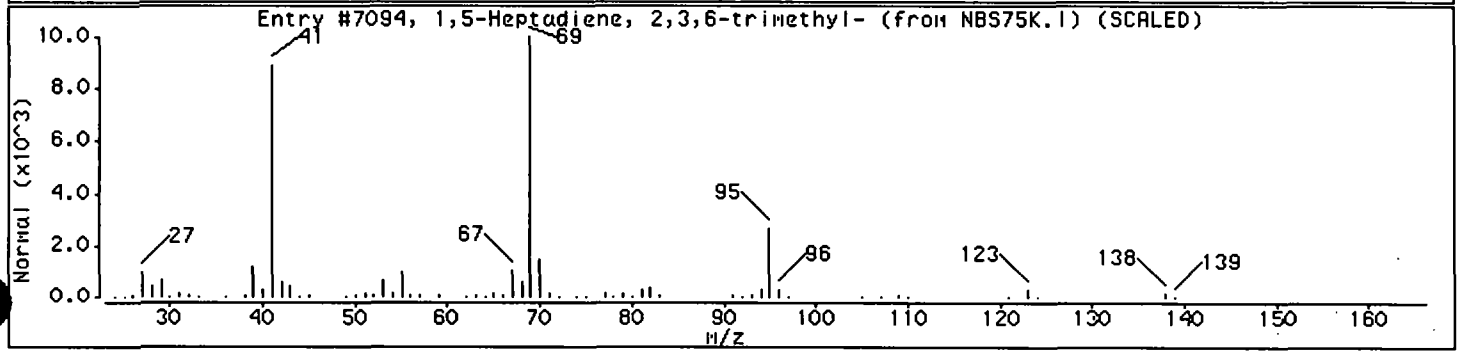
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 2,4-diethyl-1-methyl-	61142-70-9	NBS75K.l	11072	50	C11H22	154
1,5-Heptadiene, 3,3,5-trimethyl-	74630-29-8	NBS75K.l	7083	43	C10H18	138
1,5-Heptadiene, 2,3,6-trimethyl-	33501-88-1	NBS75K.l	7094	43	C10H18	138









Data File: /chem/gcl2.i/961130.b/ahgl3.d

Date : 30-NOV-1996 19:23

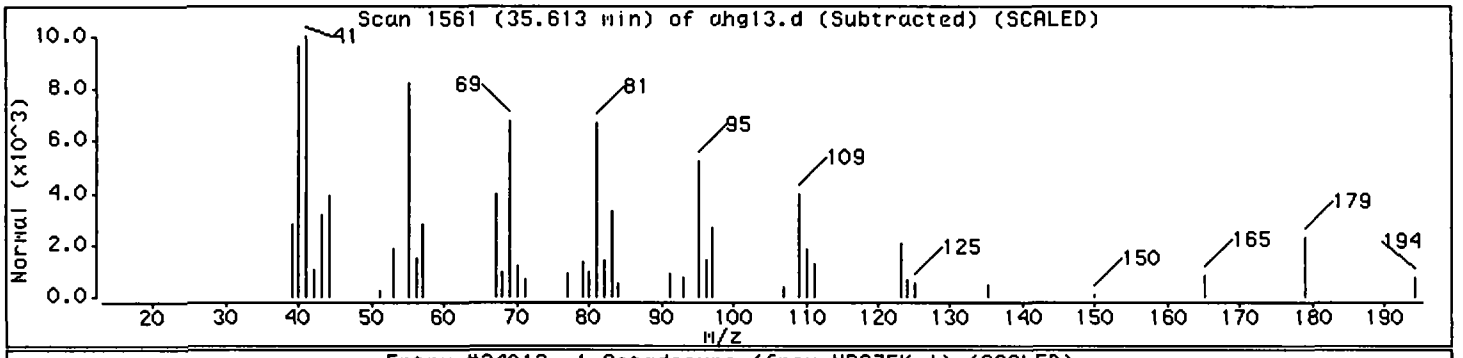
Client ID: WS-07 Instrument: gcl2.i

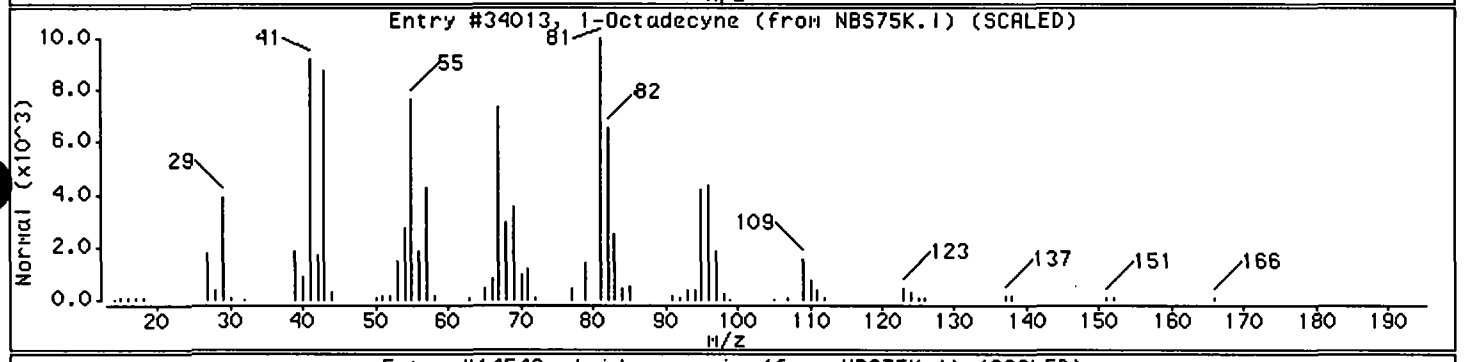
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

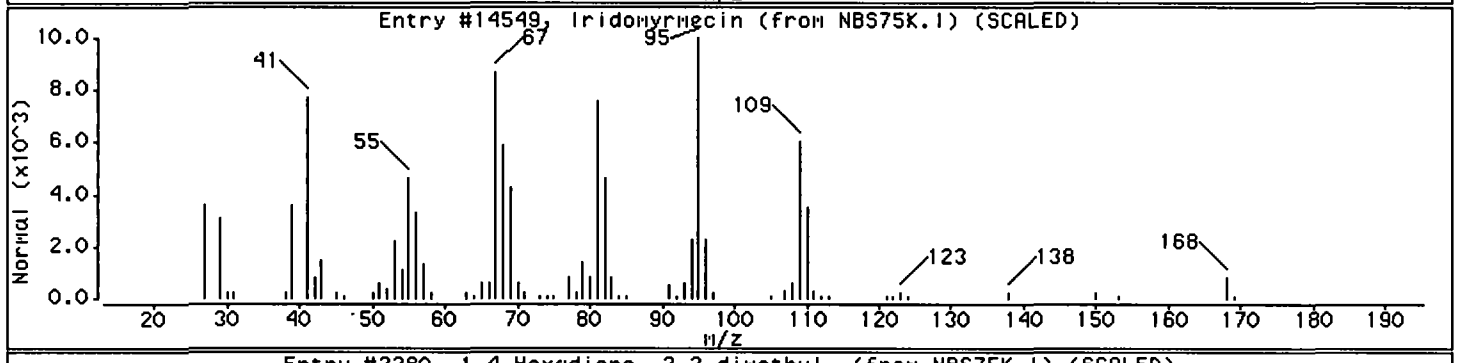
Operator: 5GSMP +5ULIS

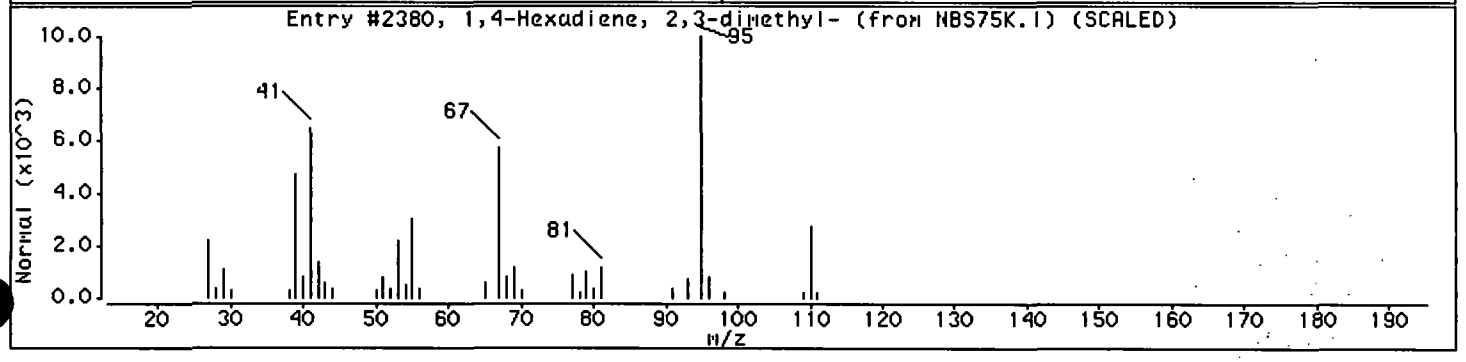
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1-Octadecyne	629-89-0	NBS75K.l	34013	53	C18H34	250
Iridomyrmecin	485-43-8	NBS75K.l	14549	32	C10H16O2	168
1,4-Hexadiene, 2,3-dimethyl-	18669-52-8	NBS75K.l	2380	25	C8H14	110









Data File: /chem/gcl2.i/961130.b/ahg13.d

Date : 30-NOV-1996 19:23

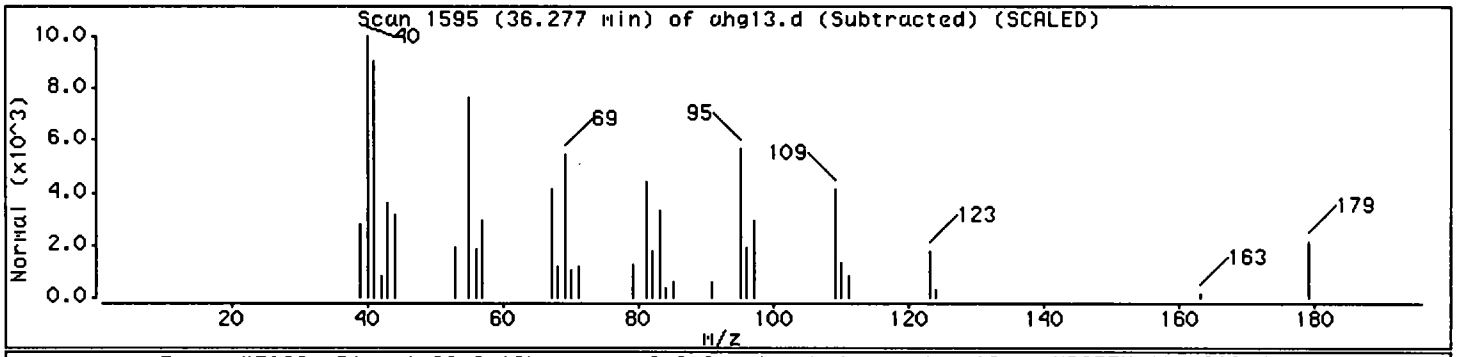
Client ID: WS-07 Instrument: gcl2.i

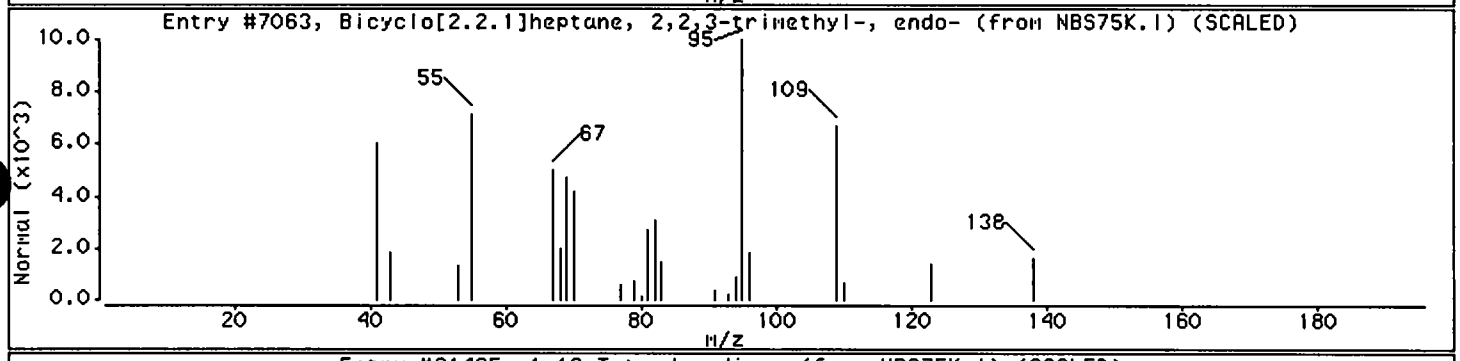
Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

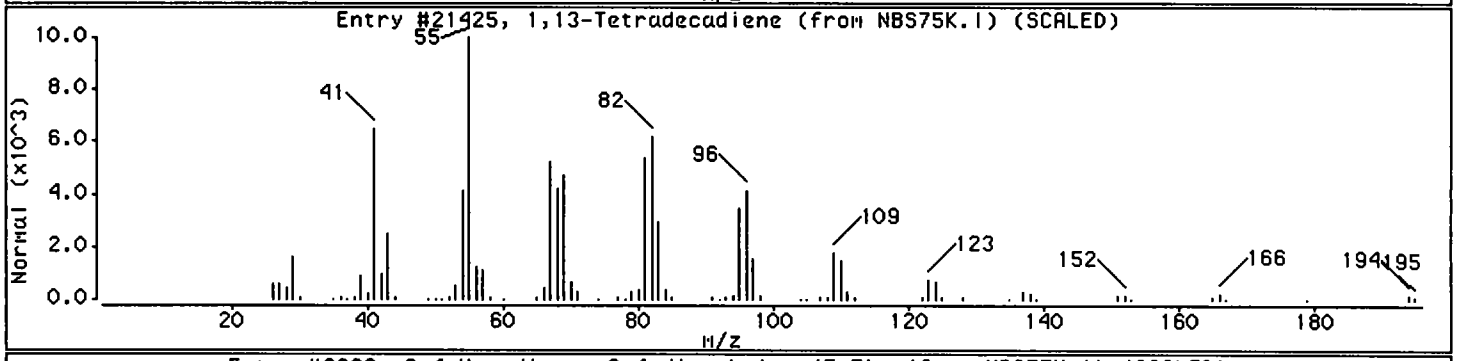
Operator: 5GSMP +5ULIS

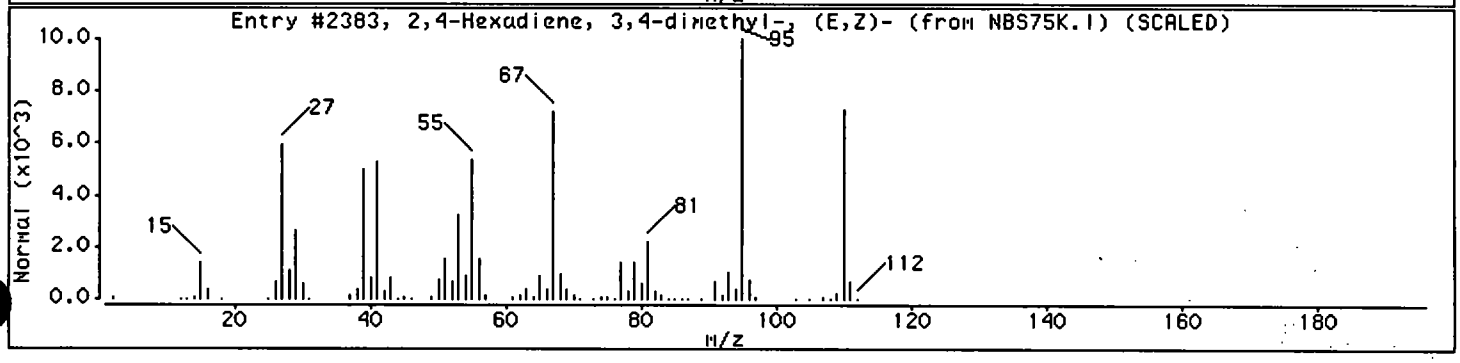
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[2.2.1]heptane, 2,2,3-trimethyl-,	20536-40-7	NBS75K.l	7063	40	C10H18	138
1,13-Tetradecadiene	21964-49-8	NBS75K.l	21425	37	C14H26	194
2,4-Hexadiene, 3,4-dimethyl-, (E,Z)-	2417-88-1	NBS75K.l	2383	30	C8H14	110









Data File: /chem/gcl2.i/961130.b/ahgl3.d

Date : 30-NOV-1996 19:23

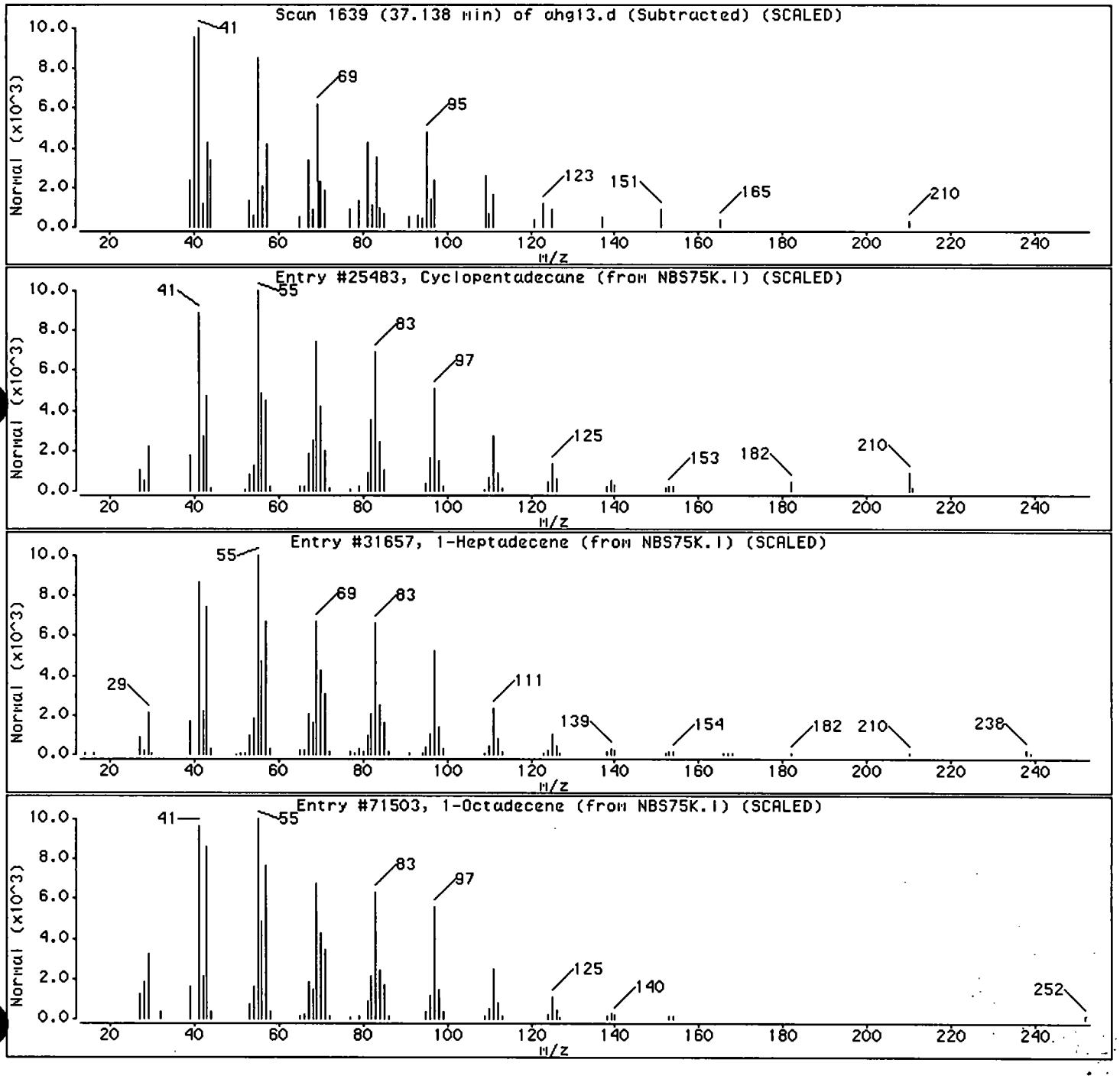
Client ID: WS-07 Instrument: gcl2.i

Sample Info: 9611G675-007 XBB30,[AL=0624He],[DC=00]

Operator: 5GSMP +5ULIS

Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Cyclopentadecane	295-48-7	NBS75K.I	25483	46	C15H30	210
1-Heptadecene	6765-39-5	NBS75K.I	31657	38	C17H34	238
1-Octadecene	112-88-9	NBS75K.I	71503	38	C18H36	252



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-07RE

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG19

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 8 Date Analyzed: 12/01/96

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-07RE

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG19

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 8 Date Analyzed: 12/01/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLOALKANE	33.55	7	J
2.				
3.				
4.				
5.				
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24.				
25.				
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28.				
29.				
30.				

177

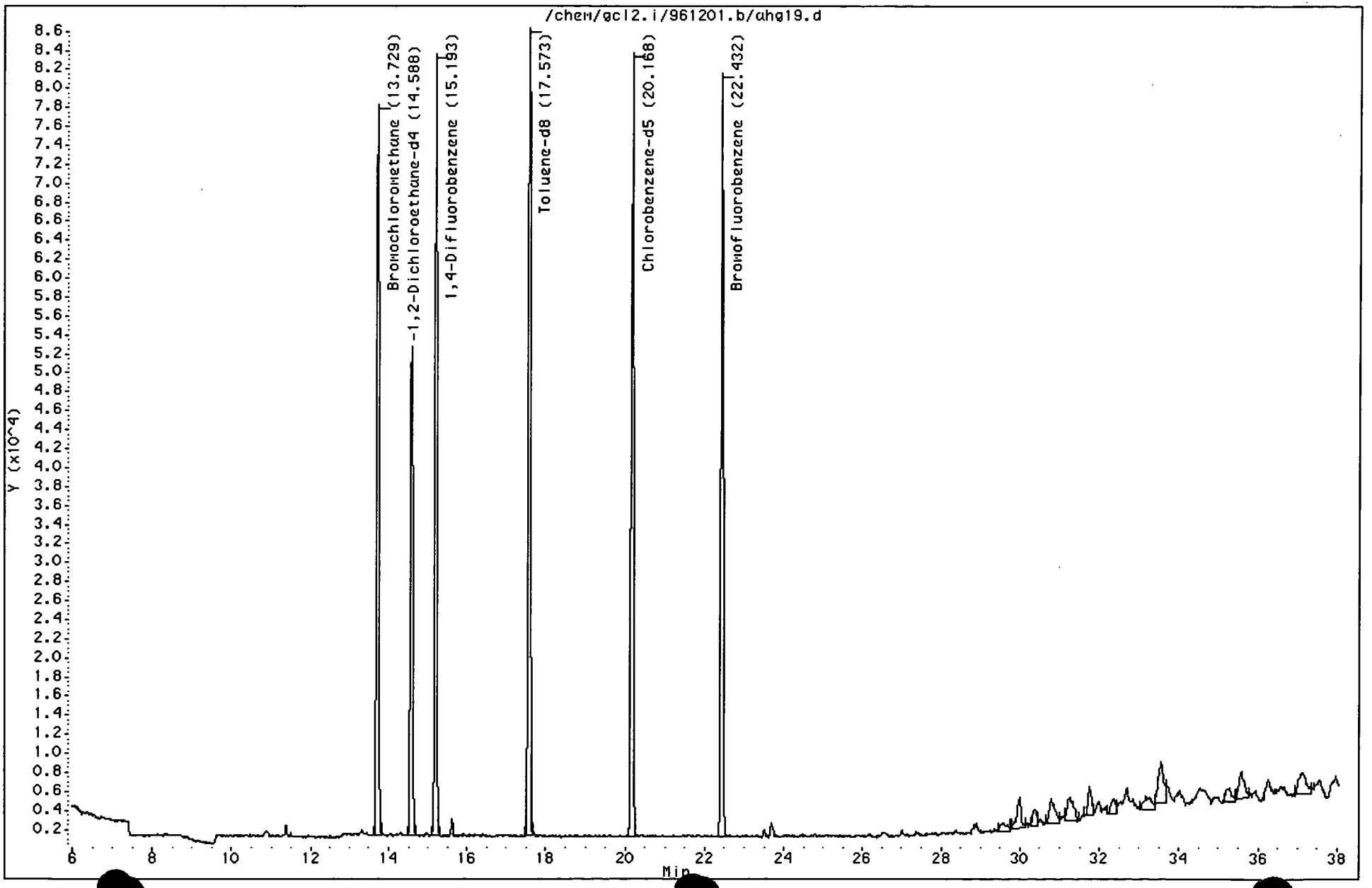
Data File: /chem/gcl2.i/961201.b/ahg19.d
Date : 01-DEC-1996 18:03
Client ID: WS-07RE
Sample Info: 9611G675-007 XAC01,[AL=0624He],[DC=R1]

Instrument: gcl2.i

Operator: KMC

Column phase: Cap

Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961201.b/ahg19.d
Lab Smp Id: 9611G675-007 Client Smp ID: WS-07RE
Inj Date : 01-DEC-1996 18:03
Operator : KMC Inst ID: gcl2.i
Smp Info : 9611G675-007 XAC01,[AL=0624He],[DC=R1]
Misc Info : GCL#2,1,KMC,5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk Quant Type: ISTD
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	7.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.729	13.726	(1.000)	33302	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.588	14.586	(1.063)	65903	48.734	52.743
* 42 1,4-Difluorobenzene	114.00	15.193	15.211	(1.000)	121185	50.000	
$ 52 Toluene-d8	98.00	17.573	17.573	(0.871)	101001	52.572	56.896
* 61 Chlorobenzene-d5	117.00	20.168	20.170	(1.000)	88666	50.000	
$ 69 Bromofluorobenzene	95.00	22.432	22.436	(1.112)	59547	42.412	45.901

JK 1-7-97

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961201.b/ahg19.d
Lab Smp Id: 9611G675-007 Client Smp ID: WS-07RE
Inj Date : 01-DEC-1996 18:03
Operator : KMC Inst ID: gcl2.i
Smp Info : 9611G675-007 XAC01,[AL=0624He],[DC=R1]
Misc Info : GCL#2,1,KMC,5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	7.600	% Moisture (not decanted)

ISTD	RT	AREA	AMOUNT
* 61 Chlorobenzene-d5	20.168	297059	50.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ug/L)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
33.547	40576	6.830	7.391	0		0	61

Data File: /chem/gcl2.i/961201.b/ahg19.d

Date : 01-DEC-1996 18:03

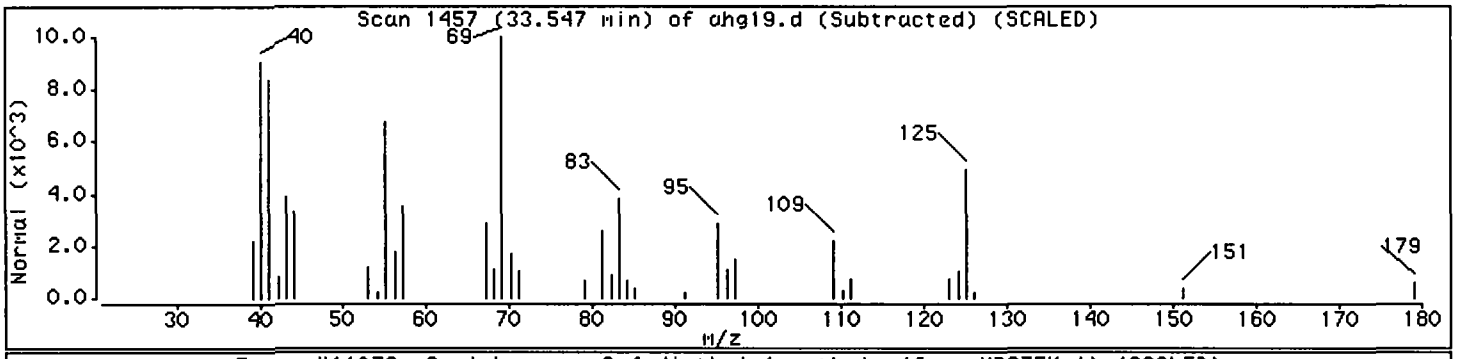
Client ID: WS-07RE Instrument: gcl2.i

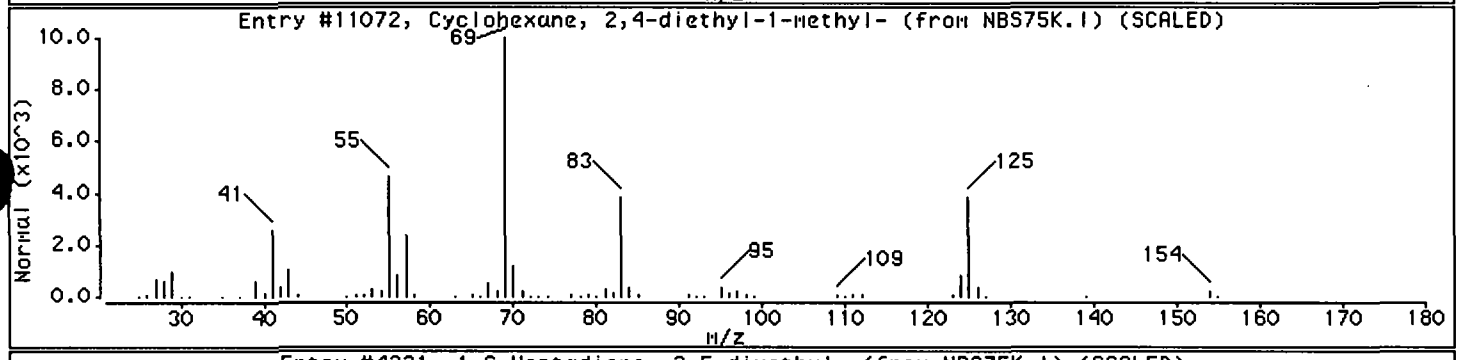
Sample Info: 9611G675-007 XAC01,[AL=0624He],[DC=R1]

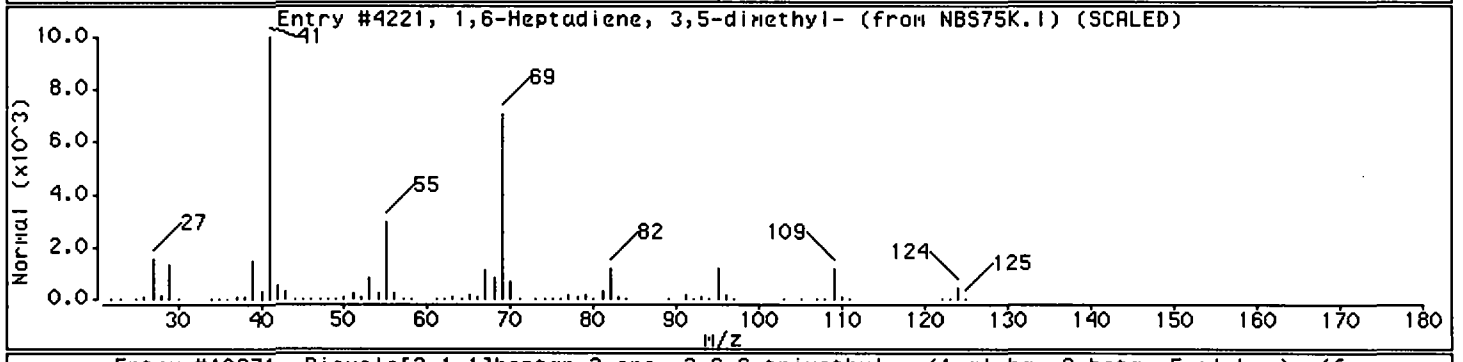
Operator: KMC

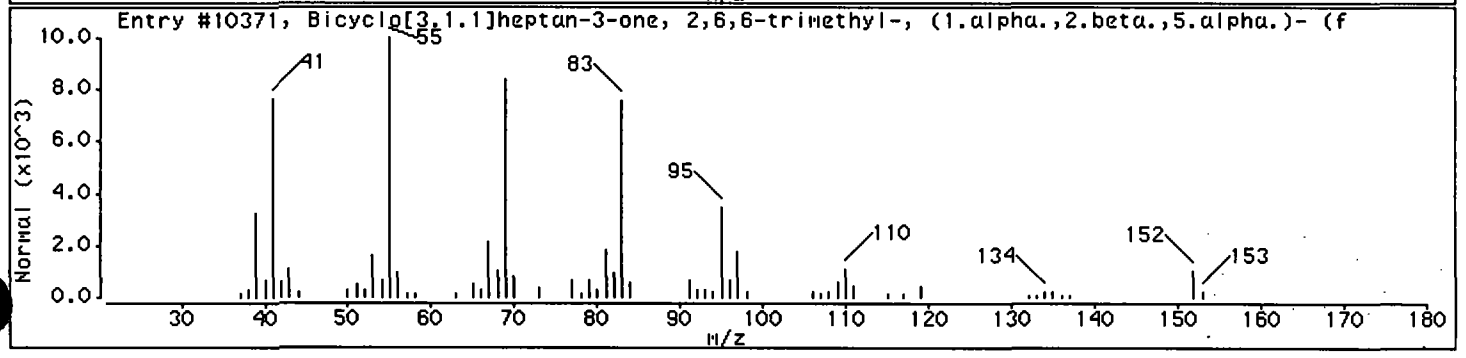
Column phase: Cap Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 2,4-diethyl-1-methyl-	61142-70-9	NBS75K.l	11072	50	C11H22	154
1,6-Heptadiene, 3,5-dimethyl-	68701-99-5	NBS75K.l	4221	38	C9H16	124
Bicyclo[3.1.1]heptan-3-one, 2,6,6-trimet	15358-88-0	NBS75K.l	10371	32	C10H16O	152









1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG09

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 47 Date Analyzed: 11/30/96

GC Column: CAP 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/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	19	U
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	19	U
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	19	U
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	19	U
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	19	U
108-90-7	Chlorobenzene	19	U
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-08

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG09

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 47 Date Analyzed: 11/30/96

GC Column: CAP 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.					
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30.					

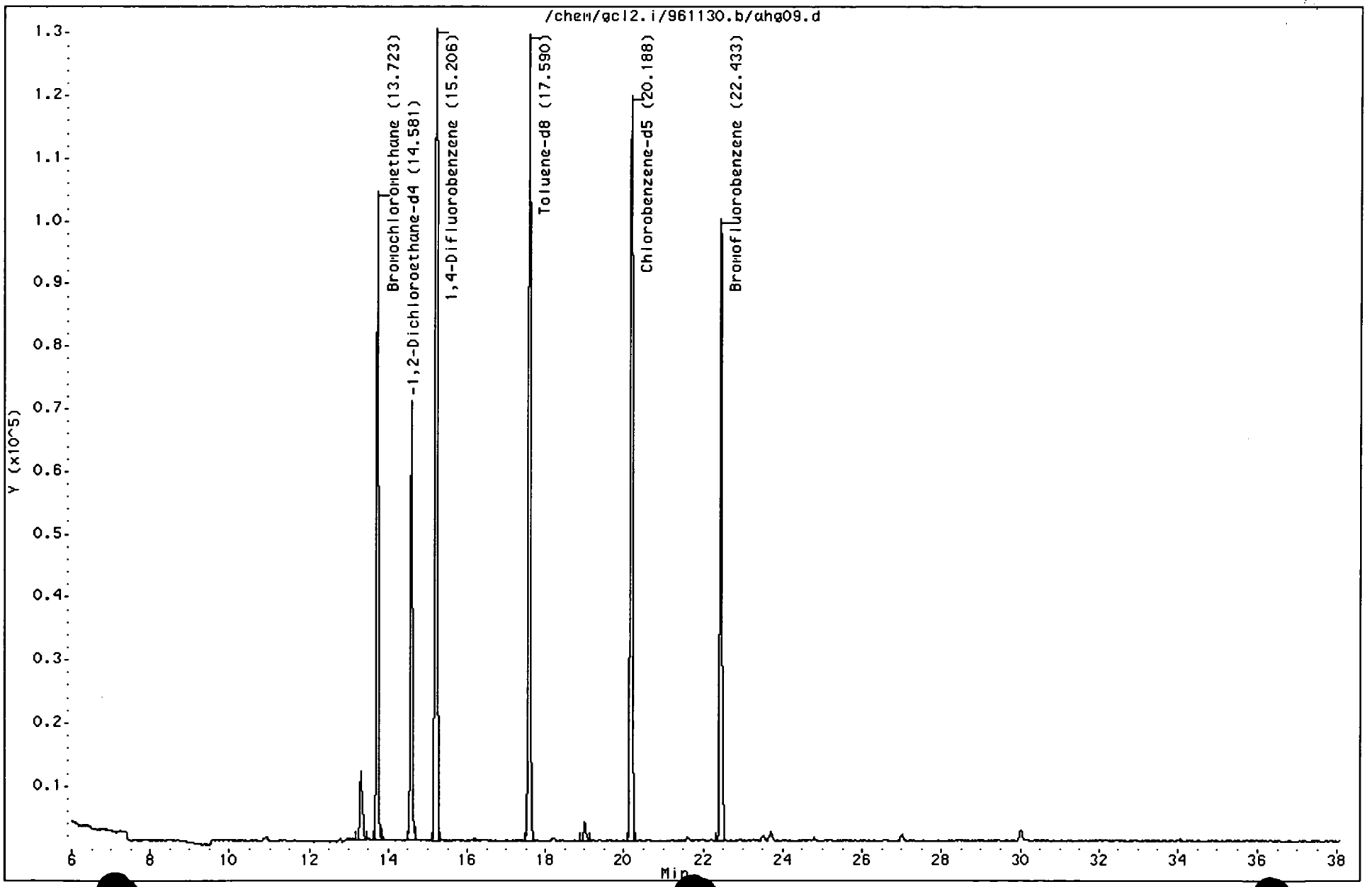
Data File: /chem/gcl2.i/961130.b/ahg09.d
Date : 30-NOV-1996 15:47
Client ID: WS-08
Sample Info: 9611G675-008 XBB30,[AL=0624He],[DC=00]

Column phase: Cap

Instrument: gcl2.i

Operator: 5GSMP +5ULIS
Column diameter: 0.53

183



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg09.d
Lab Smp Id: 9611G675-008 Client Smp ID: WS-08
Inj Date : 30-NOV-1996 15:47
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-008 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	46.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.723	13.755	(1.000)	44078	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.581	14.614	(1.063)	85606	47.273	88.527
* 42 1,4-Difluorobenzene	114.00	15.206	15.239	(1.000)	176010	50.000	
$ 52 Toluene-d8	98.00	17.590	17.622	(0.871)	157250	54.864	102.74
* 61 Chlorobenzene-d5	117.00	20.188	20.218	(1.000)	129474	50.000	
$ 69 Bromofluorobenzene	95.00	22.452	22.484	(1.112)	78335	37.825	70.834

JK 1-7-97

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/ahg09.d
Lab Smp Id: 9611G675-008 Client Smp ID: WS-08
Inj Date : 30-NOV-1996 15:47
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-008 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

VI. STANDARDS DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL2 Calibration Date(s): 11/29/96 11/29/96

Heated Purge: (Y/N) Y Calibration Time(s): 1220 2134

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF10 =YLB29 RRF20 =YIB29
RRF50 =YBB29 RRF100=YHB29 RRF200=YGB29

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Chloromethane	1.583	2.060	1.738	1.672	1.676	1.746	10.6
Bromomethane *	1.425	1.911	1.537	1.501	1.498	1.574	12.2*
Vinyl Chloride *	1.696	2.227	1.929	1.850	1.862	1.913	10.2*
Chloroethane	0.624	0.802	0.705	0.664	0.650	0.689	10.1
Methylene Chloride	0.936	1.016	1.006	0.939	0.865	0.952	6.4
Acetone	0.758	0.659	0.592	0.945	0.492	0.689	25.1
Carbon Disulfide	3.514	3.797	3.842	3.443	3.265	3.572	6.8
1,1-Dichloroethene *	0.860	0.951	0.947	0.858	0.755	0.874	9.2*
1,1-Dichloroethane *	1.696	1.809	1.856	1.708	1.572	1.728	6.4*
1,2-Dichloroethene (total)	1.223	1.292	1.264	1.135	1.010	1.185	9.6
Chloroform *	3.050	3.167	3.007	2.783	2.450	2.891	9.8*
1,2-Dichloroethane *	2.550	2.692	2.618	2.429	2.130	2.484	8.9*
2-Butanone	1.643	1.493	1.362	1.884	1.328	1.542	14.8
1,1,1-Trichloroethane *	0.508	0.554	0.536	0.507	0.455	0.512	7.3*
Carbon Tetrachloride *	0.478	0.512	0.480	0.461	0.414	0.469	7.6*
Bromodichloromethane *	0.636	0.683	0.625	0.607	0.535	0.617	8.7*
1,2-Dichloropropane	0.425	0.457	0.421	0.412	0.362	0.415	8.3
cis-1,3-Dichloropropene *	0.548	0.611	0.573	0.557	0.482	0.554	8.5*
Trichloroethene *	0.441	0.470	0.426	0.384	0.318	0.408	14.5*
Dibromochloromethane *	0.555	0.598	0.526	0.508	0.418	0.521	12.8*
1,1,2-Trichloroethane *	0.364	0.382	0.336	0.332	0.271	0.337	12.5*
Benzene *	1.068	1.126	1.017	0.962	0.808	0.996	12.2*
trans-1,3-Dichloropropene *	0.485	0.537	0.496	0.492	0.435	0.489	7.5*
Bromoform *	0.603	0.665	0.560	0.546	0.410	0.557	16.9*
4-Methyl-2-pentanone	0.954	0.976	0.880	1.012	0.956	0.956	5.0
2-Hexanone	0.830	0.690	0.661	0.825	0.730	0.747	10.4
Tetrachloroethene *	0.540	0.570	0.513	0.470	0.377	0.494	15.2*
1,1,2,2-Tetrachloroethane *	0.701	0.798	0.690	0.727	0.626	0.708	8.8*
Toluene *	1.285	1.361	1.252	1.175	1.049	1.224	9.7*
Chlorobenzene *	0.957	1.012	0.907	0.853	0.727	0.891	12.3*
Ethylbenzene *	0.435	0.472	0.427	0.396	0.329	0.412	13.1*
Styrene *	0.979	1.015	0.901	0.774	0.599	0.854	19.9*
Xylene (total) *	1.280	1.372	1.209	1.059	0.849	1.154	17.8*
1,2-Dichloroethane-d4	1.931	2.037	2.067	1.905	1.714	1.931	7.2
Toluene-d8	1.122	1.134	1.094	0.995	0.898	1.049	9.6
Bromofluorobenzene *	0.804	0.827	0.826	0.725	0.631	0.763	11.1*

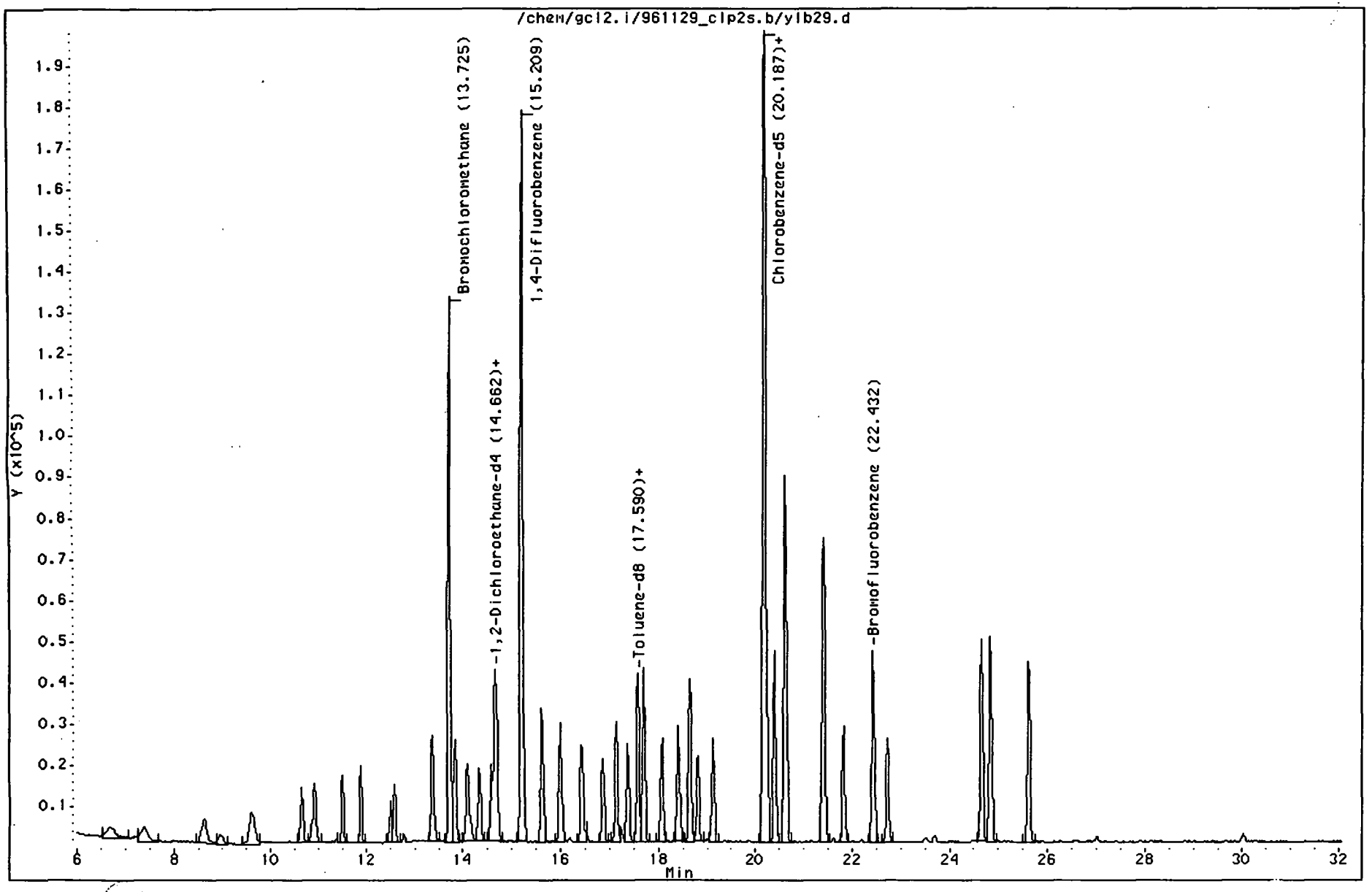
* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

Data File: /chem/gcl2.i/961129_clp2s.b/ylb29.d
Date : 29-NOV-1996 21:34
Client ID: VSTD010
Sample Info: VSTD010 XAB29

Column phase: Cap

Instrument: gcl2.i

Operator: JSO
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961129_clp2s.b/ylb29.d
Lab Smp Id: VSTD010 Client Smp ID: VSTD010
Inj Date : 29-NOV-1996 21:34
Operator : JSO Inst ID: gcl2.i
Smp Info : VSTD010 XAB29
Misc Info : GCL#2,1,JSO,5ML0FW5ULIS,SS
Comment :
Method : /chem/gcl2.i/961129_clp2s.b/clp2s.m
Meth Date : 30-Nov-1996 10:36 naranjoe Quant Type: ISTD
Cal Date : 29-NOV-1996 12:20 Cal File: ybb29.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
2 Chloromethane	50.00	6.692	6.692	(0.488)	17611	10.000	9.066(aM)
3 Vinyl Chloride	62.00	7.395	7.395	(0.539)	18868	10.000	8.865(aM)
4 Bromomethane	94.00	8.624	8.624	(0.628)	15858	10.000	9.052(aM)
5 Chloroethane	64.00	8.944	8.944	(0.652)	6942	10.000	9.055(aM)
10 1.1-Dichloroethene	96.00	10.622	10.622	(0.774)	9565	10.000	9.833(a)
13 Acetone	43.00	10.856	10.856	(0.791)	8435	10.000	10.998(M)
12 Carbon Disulfide	76.00	10.915	10.915	(0.795)	39104	10.000	9.838(aM)
18 Methylene Chloride	84.00	11.500	11.500	(0.838)	10420	10.000	9.833(a)
19 trans-1.2-Dichloroethene	96.00	11.890	11.890	(0.866)	9449	10.000	10.004
23 1.1-Dichloroethane	63.00	12.515	12.515	(0.912)	18872	10.000	9.812(aM)
M 26 1.2-Dichloroethene (total)	96.00				27224	20.000	20.644
28 cis-1.2-Dichloroethene	96.00	13.354	13.354	(0.973)	17775	10.000	10.500
29 2-Butanone	43.00	13.413	13.413	(0.977)	18279	10.000	10.654(M)
* 31 Bromochloromethane	127.80	13.725	13.725	(1.000)	55633	50.000	
33 Chloroform	83.00	13.842	13.842	(1.009)	33933	10.000	10.547
34 1.1.1-Trichloroethane	97.00	14.096	14.096	(0.927)	24449	10.000	9.914(aM)
35 Carbon Tetrachloride	116.80	14.330	14.330	(0.942)	22999	10.000	10.184(M)
$ 36 1.2-Dichloroethane-d4	65.00	14.584	14.584	(1.063)	21488	10.000	10.001(M)
37 Benzene	78.00	14.662	14.662	(0.964)	51450	10.000	10.723
39 1.2-Dichloroethane	62.00	14.701	14.701	(1.071)	28374	10.000	10.267(M)
* 42 1.4-Difluorobenzene	114.00	15.209	15.209	(1.000)	240759	50.000	

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
44 Trichloroethene	130.00	15.619	15.619	(1.027)	21230	10.000	10.811
45 1,2-Dichloropropane	63.00	15.990	15.990	(1.051)	20449	10.000	10.230
48 Bromodichloromethane	83.00	16.419	16.419	(1.080)	30622	10.000	10.303(M)
50 cis-1,3-Dichloropropene	75.00	17.141	17.141	(1.127)	26382	10.000	9.885(aM)
51 4-Methyl-2-pentanone	43.00	17.376	17.376	(0.862)	41134	10.000	9.984(aM)
$ 52 Toluene-d8	98.00	17.590	17.590	(0.872)	48334	10.000	10.696(M)
53 Toluene	91.00	17.708	17.708	(0.878)	55382	10.000	10.493
54 trans-1,3-Dichloropropene	75.00	18.078	18.078	(1.189)	23341	10.000	9.913(aM)
56 1,1,2-Trichloroethane	97.00	18.410	18.410	(1.210)	17519	10.000	10.802
57 Tetrachloroethene	164.00	18.645	18.645	(0.924)	23262	10.000	10.924
58 2-Hexanone	43.00	18.820	18.820	(0.933)	35780	10.000	11.111(M)
59 Dibromochloromethane	129.00	19.133	19.133	(1.258)	26716	10.000	10.647(M)
* 61 Chlorobenzene-d5	117.00	20.167	20.167	(1.000)	215486	50.000	
62 Chlorobenzene	112.00	20.226	20.226	(1.003)	41247	10.000	10.740
63 Ethylbenzene	106.00	20.402	20.402	(1.012)	18754	10.000	10.564
65 m,p-xylene	91.00	20.616	20.616	(1.022)	109500	20.000	23.161(M)
M 71 Xylene (total)	91.00				164648	10.000	33.117
66 o-xylene	91.00	21.397	21.397	(1.061)	55148	10.000	11.092
67 Styrene	104.00	21.417	21.417	(1.062)	42189	10.000	11.469
68 Bromoform	173.00	21.827	21.827	(1.435)	29018	10.000	10.822
$ 69 Bromofluorobenzene	95.00	22.432	22.432	(1.112)	34673	10.000	10.548
70 1,1,2,2-Tetrachloroethane	83.00	22.725	22.725	(1.127)	30208	10.000	9.890(aM)

QC Flag Legend

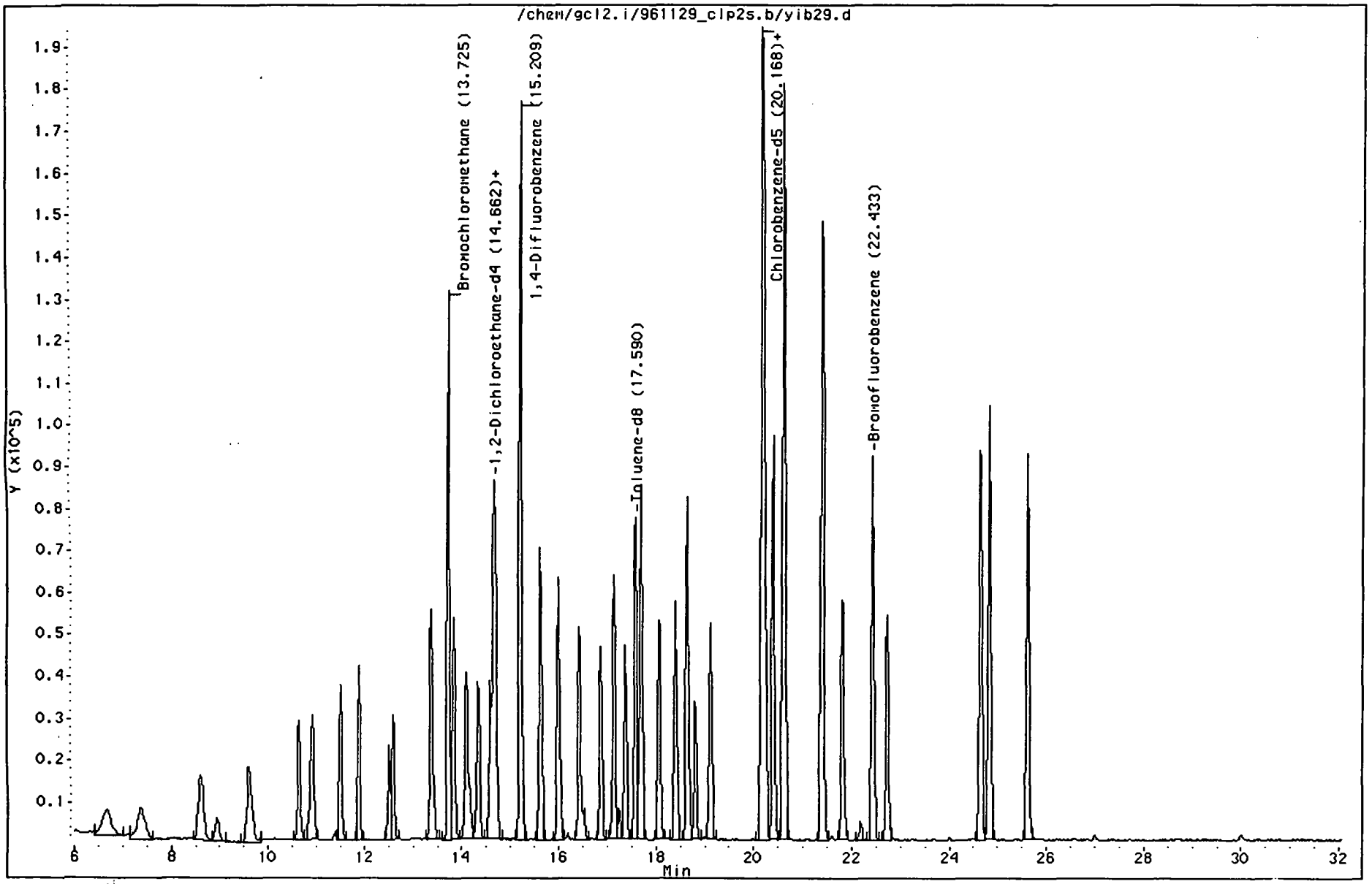
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gcl2.i/961129_clp2s.b/yib29.d
Date : 29-NOV-1996 18:23
Client ID: VSTD020
Sample Info: VSTD020 XAB29

Column phase: Cap

Instrument: gcl2.i

Operator: JMP
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961129_clp2s.b/yib29.d
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 29-NOV-1996 18:23
Operator : JMP Inst ID: gcl2.i
Smp Info : VSTD020 XAB29
Misc Info : GCL#2,1,JMP,5MLOFW+5ULIS
Comment :
Method : /chem/gcl2.i/961129_clp2s.b/clp2s.m
Meth Date : 30-Nov-1996 10:36 naranjoe Quant Type: ISTD
Cal Date : 29-NOV-1996 12:20 Cal File: ybb29.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	2 Chloromethane	50.00	6.668	6.668	(0.486)	45694	20.000	23.603(M)
	3 Vinyl Chloride	62.00	7.371	7.371	(0.537)	49394	20.000	23.285(M)
	4 Bromomethane	94.00	8.600	8.600	(0.627)	42382	20.000	24.275
	5 Chloroethane	64.00	8.940	8.940	(0.651)	17794	20.000	23.288
	10 1,1-Dichloroethene	96.00	10.637	10.637	(0.775)	21093	20.000	21.758
	13 Acetone	43.00	10.872	10.872	(0.792)	14617	20.000	19.123(M)
	12 Carbon Disulfide	76.00	10.911	10.911	(0.795)	84209	20.000	21.258(M)
	18 Methylene Chloride	84.00	11.497	11.497	(0.838)	22535	20.000	21.337
	19 trans-1,2-Dichloroethene	96.00	11.889	11.889	(0.866)	20440	20.000	21.714
	23 1,1-Dichloroethane	63.00	12.514	12.514	(0.912)	40130	20.000	20.936(M)
M	26 1,2-Dichloroethene (total)	96.00				57323	40.000	43.616
	28 cis-1,2-Dichloroethene	96.00	13.374	13.374	(0.974)	36883	20.000	21.860
	29 2-Butanone	43.00	13.413	13.413	(0.977)	33113	20.000	19.365(M)
*	31 Bromochloromethane	127.80	13.725	13.725	(1.000)	55446	50.000	
	33 Chloroform	83.00	13.842	13.842	(1.009)	70250	20.000	21.910
	34 1,1,1-Trichloroethane	97.00	14.096	14.096	(0.927)	52195	20.000	21.641(M)
	35 Carbon Tetrachloride	116.80	14.330	14.330	(0.942)	48247	20.000	21.843
$	36 1,2-Dichloroethane-d4	65.00	14.584	14.584	(1.063)	45183	20.000	21.100
	37 Benzene	78.00	14.662	14.662	(0.964)	106082	20.000	22.607
	39 1,2-Dichloroethane	62.00	14.701	14.701	(1.071)	59710	20.000	21.678(M)
*	42 1,4-Difluorobenzene	114.00	15.209	15.209	(1.000)	235469	50.000	

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	44 Trichloroethene	130.00	15.619	15.619	(1.027)	44268	20.000	23.050
	45 1,2-Dichloropropane	63.00	15.989	15.989	(1.051)	43050	20.000	22.021
	48 Bromodichloromethane	83.00	16.419	16.419	(1.080)	64348	20.000	22.137(M)
	50 cis-1,3-Dichloropropene	75.00	17.141	17.141	(1.127)	57548	20.000	22.048
	51 4-Methyl-2-pentanone	43.00	17.376	17.376	(0.862)	81135	20.000	20.416(M)
$	52 Toluene-d8	98.00	17.571	17.571	(0.871)	94272	20.000	21.627
	53 Toluene	91.00	17.688	17.688	(0.877)	113191	20.000	22.233
	54 trans-1,3-Dichloropropene	75.00	18.059	18.059	(1.187)	50616	20.000	21.979
	56 1,1,2-Trichloroethane	97.00	18.411	18.411	(1.211)	35974	20.000	22.680
	57 Tetrachloroethene	164.00	18.645	18.645	(0.924)	47407	20.000	23.079
	58 2-Hexanone	43.00	18.801	18.801	(0.932)	57329	20.000	18.455(M)
	59 Dibromochloromethane	129.00	19.114	19.114	(1.257)	56330	20.000	22.953(M)
*	61 Chlorobenzene-d5	117.00	20.168	20.168	(1.000)	207863	50.000	
	62 Chlorobenzene	112.00	20.226	20.226	(1.003)	84151	20.000	22.715
	63 Ethylbenzene	106.00	20.402	20.402	(1.012)	39281	20.000	22.939
	65 m,p-xylene	91.00	20.617	20.617	(1.022)	218338	40.000	47.890(M)
M	71 Xylene (total)	91.00				332422	20.000	69.314
	66 o-xylene	91.00	21.378	21.378	(1.060)	114084	20.000	23.788
	67 Styrene	104.00	21.417	21.417	(1.062)	84400	20.000	23.786
	68 Bromoform	173.00	21.808	21.808	(1.434)	62649	20.000	23.889
$	69 Bromofluorobenzene	95.00	22.433	22.433	(1.112)	68728	20.000	21.675
	70 1,1,2,2-Tetrachloroethane	83.00	22.726	22.726	(1.127)	66397	20.000	22.535(M)

QC Flag Legend

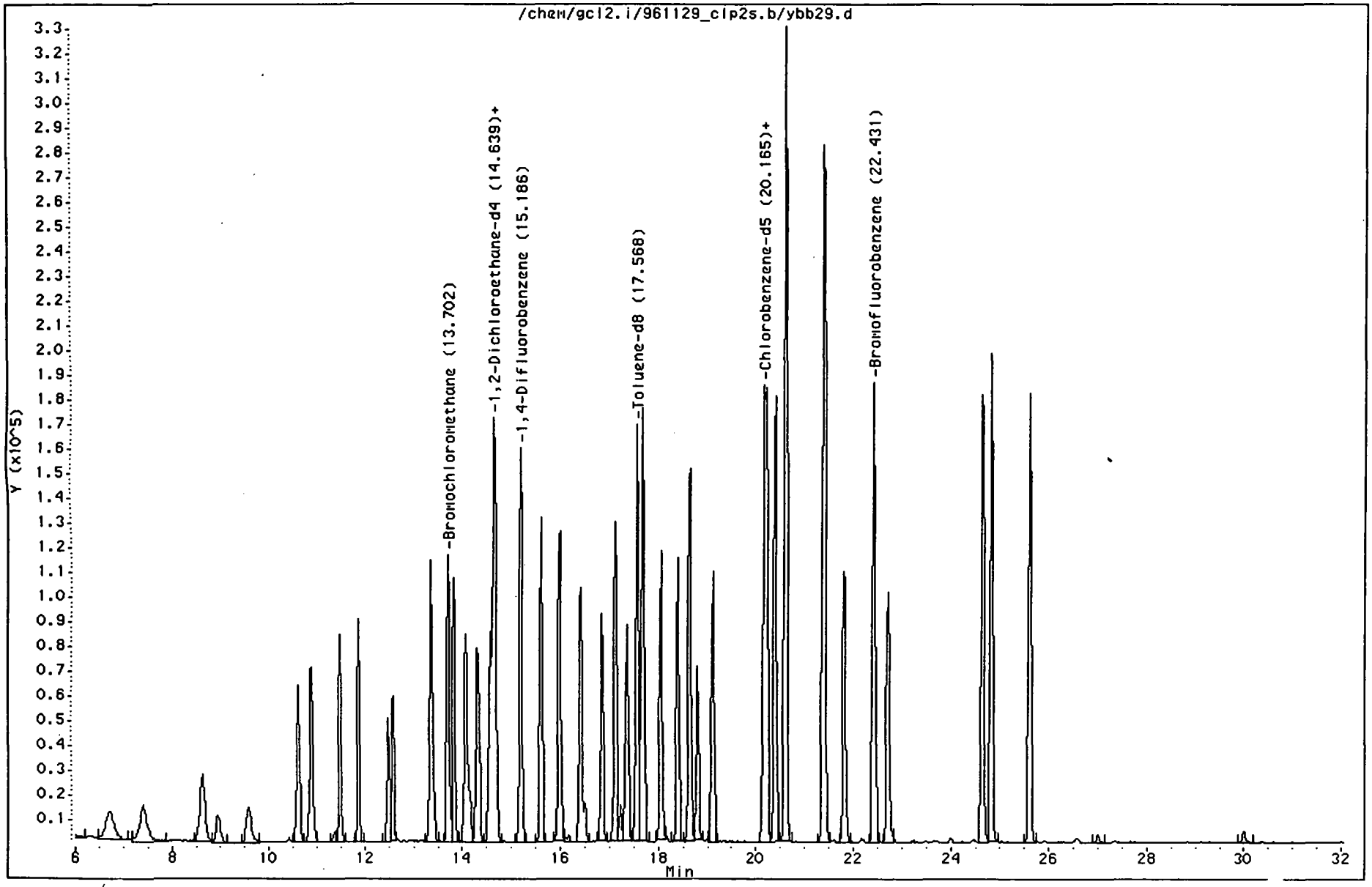
M - Compound response manually integrated.

Data File: /chem/gcl2.i/961129_clp2s.b/ybb29.d
Date : 29-NOV-1996 12:20
Client ID: VSTD050
Sample Info: VSTD050 XAB29

Column phase: Cap

Instrument: gcl2.i

Operator: JSO
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961129_clp2s.b/ybb29.d
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 29-NOV-1996 12:20
Operator : JSO Inst ID: gcl2.i
Smp Info : VSTD050 XAB29
Misc Info : GCL#2,1,JSO,5MLOFW5ULIS,SS
Comment :
Method : /chem/gcl2.i/961129_clp2s.b/clp2s.m
Meth Date : 30-Nov-1996 10:36 naranjoe Quant Type: ISTD
Cal Date : 29-NOV-1996 12:20 Cal File: ybb29.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	2 Chloromethane	50.00	6.703	6.703	(0.489)	83335	50.000	49.782(M)
	3 Vinyl Chloride	62.00	7.386	7.386	(0.539)	92482	50.000	50.420
	4 Bromomethane	94.00	8.616	8.616	(0.629)	73677	50.000	48.802
	5 Chloroethane	64.00	8.936	8.936	(0.652)	33793	50.000	51.147
	10 1,1-Dichloroethene	96.00	10.596	10.596	(0.773)	45405	50.000	54.165
	13 Acetone	43.00	10.850	10.850	(0.792)	28397	50.000	42.963
	12 Carbon Disulfide	76.00	10.889	10.889	(0.795)	184198	50.000	53.775
	18 Methylene Chloride	84.00	11.476	11.476	(0.838)	48225	50.000	52.805
	19 trans-1,2-Dichloroethene	96.00	11.867	11.867	(0.866)	44196	50.000	54.298
	23 1,1-Dichloroethane	63.00	12.491	12.491	(0.912)	89008	50.000	53.701
M	26 1,2-Dichloroethene (total)	96.00				121221	100.00	106.67
	28 cis-1,2-Dichloroethene	96.00	13.350	13.350	(0.974)	77025	50.000	52.795
	29 2-Butanone	43.00	13.409	13.409	(0.979)	65279	50.000	44.150(M)
*	31 Bromochloromethane	127.80	13.702	13.702	(1.000)	47944	50.000	
	33 Chloroform	83.00	13.819	13.819	(1.009)	144160	50.000	51.996
	34 1,1,1-Trichloroethane	97.00	14.073	14.073	(0.927)	112754	50.000	52.365
	35 Carbon Tetrachloride	116.80	14.307	14.307	(0.942)	100823	50.000	51.129
$	36 1,2-Dichloroethane-d4	65.00	14.561	14.561	(1.063)	99121	50.000	53.532
	37 Benzene	78.00	14.639	14.639	(0.964)	213852	50.000	51.048
	39 1,2-Dichloroethane	62.00	14.678	14.678	(1.071)	125504	50.000	52.695
*	42 1,4-Difluorobenzene	114.00	15.186	15.186	(1.000)	210216	50.000	

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	44 Trichloroethene	130.00	15.596	15.596	(1.027)	89571	50.000	52.241
	45 1,2-Dichloropropane	63.00	15.967	15.967	(1.051)	88462	50.000	50.686
	48 Bromodichloromethane	83.00	16.416	16.416	(1.081)	131475	50.000	50.664
	50 cis-1,3-Dichloropropene	75.00	17.119	17.119	(1.127)	120472	50.000	51.700
	51 4-Methyl-2-pentanone	43.00	17.354	17.354	(0.861)	158334	50.000	46.060
$	52 Toluene-d8	98.00	17.568	17.568	(0.871)	196781	50.000	52.188
	53 Toluene	91.00	17.686	17.686	(0.877)	225116	50.000	51.118
	54 trans-1,3-Dichloropropene	75.00	18.057	18.057	(1.189)	104367	50.000	50.764
	56 1,1,2-Trichloroethane	97.00	18.389	18.389	(1.211)	70530	50.000	49.809
	57 Tetrachloroethene	164.00	18.623	18.623	(0.923)	92259	50.000	51.923
	58 2-Hexanone	43.00	18.799	18.799	(0.932)	118827	50.000	44.222
	59 Dibromochloromethane	129.00	19.111	19.111	(1.258)	110677	50.000	50.516(M)
*	61 Chlorobenzene-d5	117.00	20.165	20.165	(1.000)	179803	50.000	
	62 Chlorobenzene	112.00	20.224	20.224	(1.003)	163129	50.000	50.905
	63 Ethylbenzene	106.00	20.400	20.400	(1.012)	76832	50.000	51.869
	65 m,p-xylene	91.00	20.615	20.615	(1.022)	414868	100.00	105.28
M	71 Xylene (total)	91.00				632181	50.000	152.39
	66 o-xylene	91.00	21.376	21.376	(1.060)	217313	50.000	52.384
	67 Styrene	104.00	21.415	21.415	(1.062)	161937	50.000	52.759
	68 Bromoform	173.00	21.806	21.806	(1.436)	117778	50.000	50.306
$	69 Bromofluorobenzene	95.00	22.431	22.431	(1.112)	148568	50.000	54.167
	70 1,1,2,2-Tetrachloroethane	83.00	22.724	22.724	(1.127)	124133	50.000	48.705

QC Flag Legend

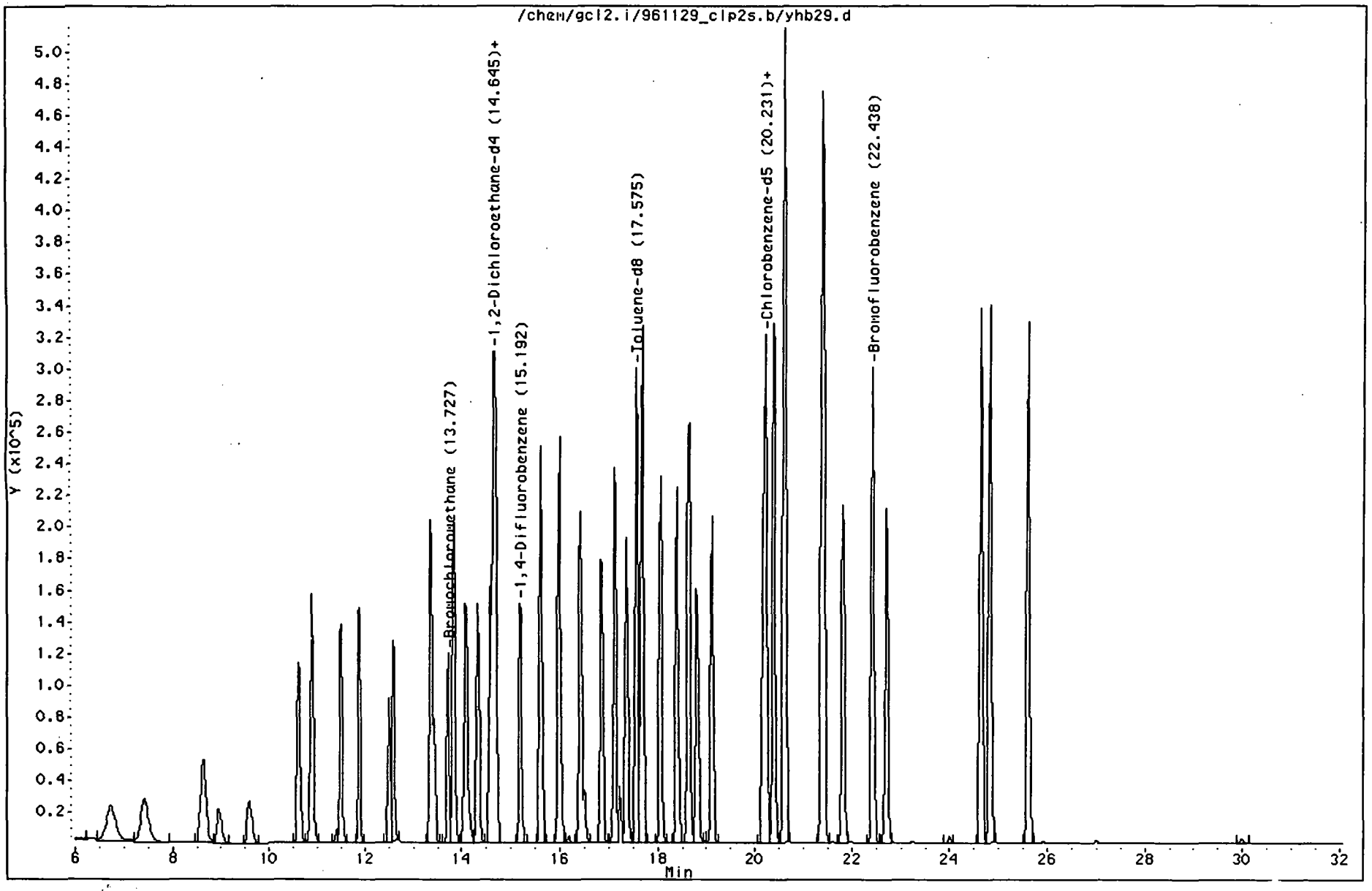
M - Compound response manually integrated.

Data File: /chem/gcl2.i/961129_clp2s.b/yhb29.d
Date : 29-NOV-1996 17:41
Client ID: VSTD100
Sample Info: VSTD100 XAB29

Column phase: Cap

Instrument: gcl2.i

Operator: JMP
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961129_clp2s.b/yhb29.d
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 29-NOV-1996 17:41
Operator : JMP Inst ID: gcl2.i
Smp Info : VSTD100 XAB29
Misc Info : GCL#2,1,JMP,5MLOFW+5ULIS
Comment :
Method : /chem/gcl2.i/961129_clp2s.b/clp2s.m
Meth Date : 30-Nov-1996 10:36 naranjoe Quant Type: ISTD
Cal Date : 29-NOV-1996 12:20 Cal File: ybb29.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	2 Chloromethane	50.00	6.729	6.729	(0.490)	168472	100.00	95.778(M)
	3 Vinyl Chloride	62.00	7.432	7.432	(0.541)	186418	100.00	96.722
	4 Bromomethane	94.00	8.625	8.625	(0.628)	151206	100.00	95.317
	5 Chloroethane	64.00	8.945	8.945	(0.652)	66898	100.00	96.360
	10 1,1-Dichloroethene	96.00	10.604	10.604	(0.772)	86496	100.00	98.198
	13 Acetone	43.00	10.897	10.897	(0.794)	95211	100.00	137.09
	12 Carbon Disulfide	76.00	10.897	10.897	(0.794)	346912	100.00	96.386
	18 Methylene Chloride	84.00	11.483	11.483	(0.836)	94581	100.00	98.560
	19 trans-1,2-Dichloroethene	96.00	11.873	11.873	(0.865)	82700	100.00	96.693
	23 1,1-Dichloroethane	63.00	12.517	12.517	(0.912)	172150	100.00	98.845
M	26 1,2-Dichloroethene (total)	96.00				228811	200.00	191.61
	28 cis-1,2-Dichloroethene	96.00	13.356	13.356	(0.973)	146111	100.00	95.310
	29 2-Butanone	43.00	13.434	13.434	(0.979)	189856	100.00	122.20
*	31 Bromochloromethane	127.80	13.727	13.727	(1.000)	50378	50.000	
	33 Chloroform	83.00	13.844	13.844	(1.009)	280409	100.00	96.252
	34 1,1,1-Trichloroethane	97.00	14.079	14.079	(0.927)	216929	100.00	99.023
	35 Carbon Tetrachloride	116.80	14.333	14.333	(0.943)	197387	100.00	98.386
$	36 1,2-Dichloroethane-d4	65.00	14.586	14.586	(1.063)	191966	100.00	98.665
	37 Benzene	78.00	14.645	14.645	(0.964)	411604	100.00	96.571
	39 1,2-Dichloroethane	62.00	14.704	14.704	(1.071)	244730	100.00	97.789
*	42 1,4-Difluorobenzene	114.00	15.192	15.192	(1.000)	213875	50.000	

JK 1-7-97

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	44 Trichloroethene	130.00	15.621	15.621	(1.028)	164355	100.00	94.218
	45 1,2-Dichloropropane	63.00	15.992	15.992	(1.053)	176027	100.00	99.133
	48 Bromodichloromethane	83.00	16.422	16.422	(1.081)	259491	100.00	98.284
	50 cis-1,3-Dichloropropene	75.00	17.125	17.125	(1.127)	238336	100.00	100.53
	51 4-Methyl-2-pentanone	43.00	17.379	17.379	(0.862)	364458	100.00	105.91
$	52 Toluene-d8	98.00	17.575	17.575	(0.871)	358298	100.00	94.926
	53 Toluene	91.00	17.692	17.692	(0.877)	423127	100.00	95.983
	54 trans-1,3-Dichloropropene	75.00	18.063	18.063	(1.189)	210257	100.00	100.52
	56 1,1,2-Trichloroethane	97.00	18.395	18.395	(1.211)	141950	100.00	98.531
	57 Tetrachloroethene	164.00	18.630	18.630	(0.924)	169302	100.00	95.184
	58 2-Hexanone	43.00	18.806	18.806	(0.932)	297154	100.00	110.47
	59 Dibromochloromethane	129.00	19.118	19.118	(1.258)	217208	100.00	97.444
*	61 Chlorobenzene-d5	117.00	20.172	20.172	(1.000)	179989	50.000	
	62 Chlorobenzene	112.00	20.231	20.231	(1.003)	306921	100.00	95.676
	63 Ethylbenzene	106.00	20.387	20.387	(1.011)	142509	100.00	96.108
	65 m,p-xylene	91.00	20.622	20.622	(1.022)	713591	200.00	180.89
M	71 Xylene (total)	91.00				1094709	100.00	263.61
	66 o-xylene	91.00	21.383	21.383	(1.060)	381118	100.00	91.775
	67 Styrene	104.00	21.423	21.423	(1.062)	278657	100.00	90.693
	68 Bromoform	173.00	21.813	21.813	(1.436)	233564	100.00	98.055
$	69 Bromofluorobenzene	95.00	22.438	22.438	(1.112)	260903	100.00	95.025
	70 1,1,2,2-Tetrachloroethane	83.00	22.712	22.712	(1.126)	261810	100.00	102.62

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gcl2.i/961129_clp2s.b/ygb29.d

Date : 29-NOV-1996 17:01

Client ID: VSTD200

Sample Info: VSTD200 XAB29

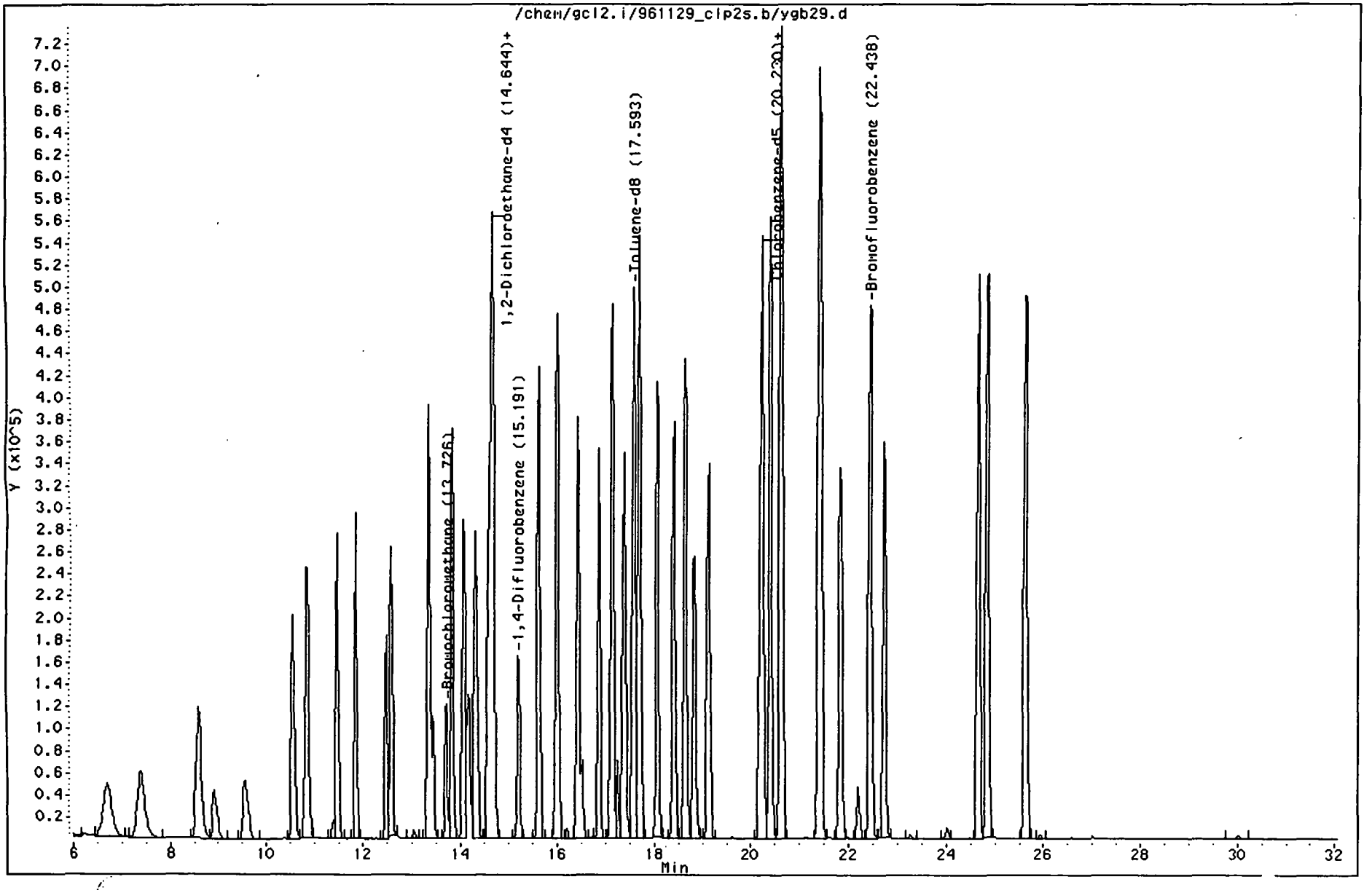
Column phase: Cap

Instrument: gcl2.i

Operator: JMP

Column diameter: 0.53

200



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961129_clp2s.b/ygb29.d
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 29-NOV-1996 17:01
Operator : JMP Inst ID: gcl2.i
Smp Info : VSTD200 XAB29
Misc Info : GCL#2,1,JMP,5ML0FW+5ULIS
Comment :
Method : /chem/gcl2.i/961129_clp2s.b/clp2s.m
Meth Date : 30-Nov-1996 10:36 naranjoe Quant Type: ISTD
Cal Date : 29-NOV-1996 12:20 Cal File: ybb29.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
2 Chloromethane	50.00	6.729	6.729	(0.491)	367328	200.00	191.96(M)
3 Vinyl Chloride	62.00	7.393	7.393	(0.539)	408295	200.00	194.73
4 Bromomethane	94.00	8.603	8.603	(0.628)	328518	200.00	190.36
5 Chloroethane	64.00	8.923	8.923	(0.651)	142529	200.00	188.72
10 1,1-Dichloroethene	96.00	10.544	10.544	(0.769)	165484	200.00	172.70
13 Acetone	43.00	10.856	10.856	(0.792)	107877	200.00	142.78
12 Carbon Disulfide	76.00	10.837	10.837	(0.791)	715674	200.00	182.78
18 Methylene Chloride	84.00	11.461	11.461	(0.836)	189623	200.00	181.64
19 trans-1,2-Dichloroethene	96.00	11.852	11.852	(0.865)	160219	200.00	172.20
23 1,1-Dichloroethane	63.00	12.496	12.496	(0.912)	344632	200.00	181.90
M 26 1,2-Dichloroethene (total)	96.00				443070	400.00	341.06
28 cis-1,2-Dichloroethene	96.00	13.355	13.355	(0.974)	282851	200.00	169.60
29 2-Butanone	43.00	13.433	13.433	(0.980)	291150	200.00	172.26
* 31 Bromochloromethane	127.80	13.706	13.706	(1.000)	54805	50.000	
33 Chloroform	83.00	13.843	13.843	(1.010)	537091	200.00	169.47
34 1,1,1-Trichloroethane	97.00	14.077	14.077	(0.927)	424034	200.00	177.80
35 Carbon Tetrachloride	116.80	14.312	14.312	(0.942)	385737	200.00	176.61
$ 36 1,2-Dichloroethane-d4	65.00	14.585	14.585	(1.064)	375744	200.00	177.52
37 Benzene	78.00	14.644	14.644	(0.964)	752292	200.00	162.13
39 1,2-Dichloroethane	62.00	14.703	14.703	(1.073)	466993	200.00	171.53
* 42 1,4-Difluorobenzene	114.00	15.191	15.191	(1.000)	232833	50.000	

JK 1-7-97

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	44 Trichloroethene	130.00	15.620	15.620	(1.028)	296011	200.00	155.87
	45 1,2-Dichloropropane	63.00	15.991	15.991	(1.053)	336688	200.00	174.17
	48 Bromodichloromethane	83.00	16.421	16.421	(1.081)	498228	200.00	173.34
	50 cis-1,3-Dichloropropene	75.00	17.144	17.144	(1.129)	448935	200.00	173.94
	51 4-Methyl-2-pentanone	43.00	17.378	17.378	(0.862)	704765	200.00	200.08(A)
$	52 Toluene-d8	98.00	17.574	17.574	(0.871)	661485	200.00	171.20
	53 Toluene	91.00	17.691	17.691	(0.877)	773254	200.00	171.36
	54 trans-1,3-Dichloropropene	75.00	18.062	18.062	(1.189)	404989	200.00	177.85
	56 1,1,2-Trichloroethane	97.00	18.414	18.414	(1.212)	252264	200.00	160.84
	57 Tetrachloroethene	164.00	18.648	18.648	(0.924)	277973	200.00	152.67
	58 2-Hexanone	43.00	18.844	18.844	(0.934)	538020	200.00	195.40
	59 Dibromochloromethane	129.00	19.137	19.137	(1.260)	389666	200.00	160.58
*	61 Chlorobenzene-d5	117.00	20.172	20.172	(1.000)	184242	50.000	
	62 Chlorobenzene	112.00	20.230	20.230	(1.003)	535526	200.00	163.08
	63 Ethylbenzene	106.00	20.406	20.406	(1.012)	242299	200.00	159.63
	65 m,p-xylene	91.00	20.621	20.621	(1.022)	1115381	400.00	276.21(M)
M	71 Xylene (total)	91.00				1741046	200.00	409.57
	66 o-xylene	91.00	21.383	21.383	(1.060)	625665	200.00	147.18
	67 Styrene	104.00	21.442	21.442	(1.063)	441378	200.00	140.34
	68 Bromoform	173.00	21.832	21.832	(1.437)	382051	200.00	147.33
$	69 Bromofluorobenzene	95.00	22.438	22.438	(1.112)	465329	200.00	165.57
	70 1,1,2,2-Tetrachloroethane	83.00	22.731	22.731	(1.127)	461738	200.00	176.80

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL2 Calibration Date: 11/30/96 Time: 1254

Lab File ID: YAB30 Init. Calib. Date(s): 11/29/96 11/29/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1220 2134

GC Column: CAP ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.746	1.698		2.7	
Bromomethane	1.574	1.595	0.100	1.3	25.0
Vinyl Chloride	1.913	1.869	0.100	2.3	25.0
Chloroethane	0.689	0.697		1.2	
Methylene Chloride	0.952	1.008		5.9	
Acetone	0.689	0.578		16.1	
Carbon Disulfide	3.572	3.659		2.4	
1,1-Dichloroethene	0.874	0.913	0.100	4.5	25.0
1,1-Dichloroethane	1.728	1.841	0.200	6.5	25.0
1,2-Dichloroethene (total)	1.185	1.287		8.6	
Chloroform	2.891	3.070	0.200	6.2	25.0
1,2-Dichloroethane	2.484	2.646	0.100	6.5	25.0
2-Butanone	1.542	1.294		16.1	
1,1,1-Trichloroethane	0.512	0.538	0.100	5.1	25.0
Carbon Tetrachloride	0.469	0.486	0.100	3.6	25.0
Bromodichloromethane	0.617	0.657	0.200	6.5	25.0
1,2-Dichloropropane	0.415	0.442		6.5	
cis-1,3-Dichloropropene	0.554	0.607	0.200	9.6	25.0
Trichloroethene	0.408	0.436	0.300	6.9	25.0
Dibromochloromethane	0.521	0.567	0.100	8.8	25.0
1,1,2-Trichloroethane	0.337	0.365	0.100	8.3	25.0
Benzene	0.996	1.058	0.500	6.2	25.0
trans-1,3-Dichloropropene	0.489	0.534	0.100	9.2	25.0
Bromoform	0.557	0.621	0.100	11.5	25.0
4-Methyl-2-pentanone	0.956	0.999		4.5	
2-Hexanone	0.747	0.630		15.7	
Tetrachloroethene	0.494	0.537	0.200	8.7	25.0
1,1,2,2-Tetrachloroethane	0.708	0.785	0.500	10.9	25.0
Toluene	1.224	1.290	0.400	5.4	25.0
Chlorobenzene	0.891	0.956	0.500	7.3	25.0
Ethylbenzene	0.412	0.444	0.100	7.8	25.0
Styrene	0.854	0.945	0.300	10.6	25.0
Xylene (total)	1.154	1.247	0.300	8.0	25.0
1,2-Dichloroethane-d4	1.931	2.054		6.4	
Toluene-d8	1.049	1.107		5.5	
Bromofluorobenzene	0.763	0.800	0.200	4.8	25.0

All other compounds must meet a minimum RRF of 0.010.

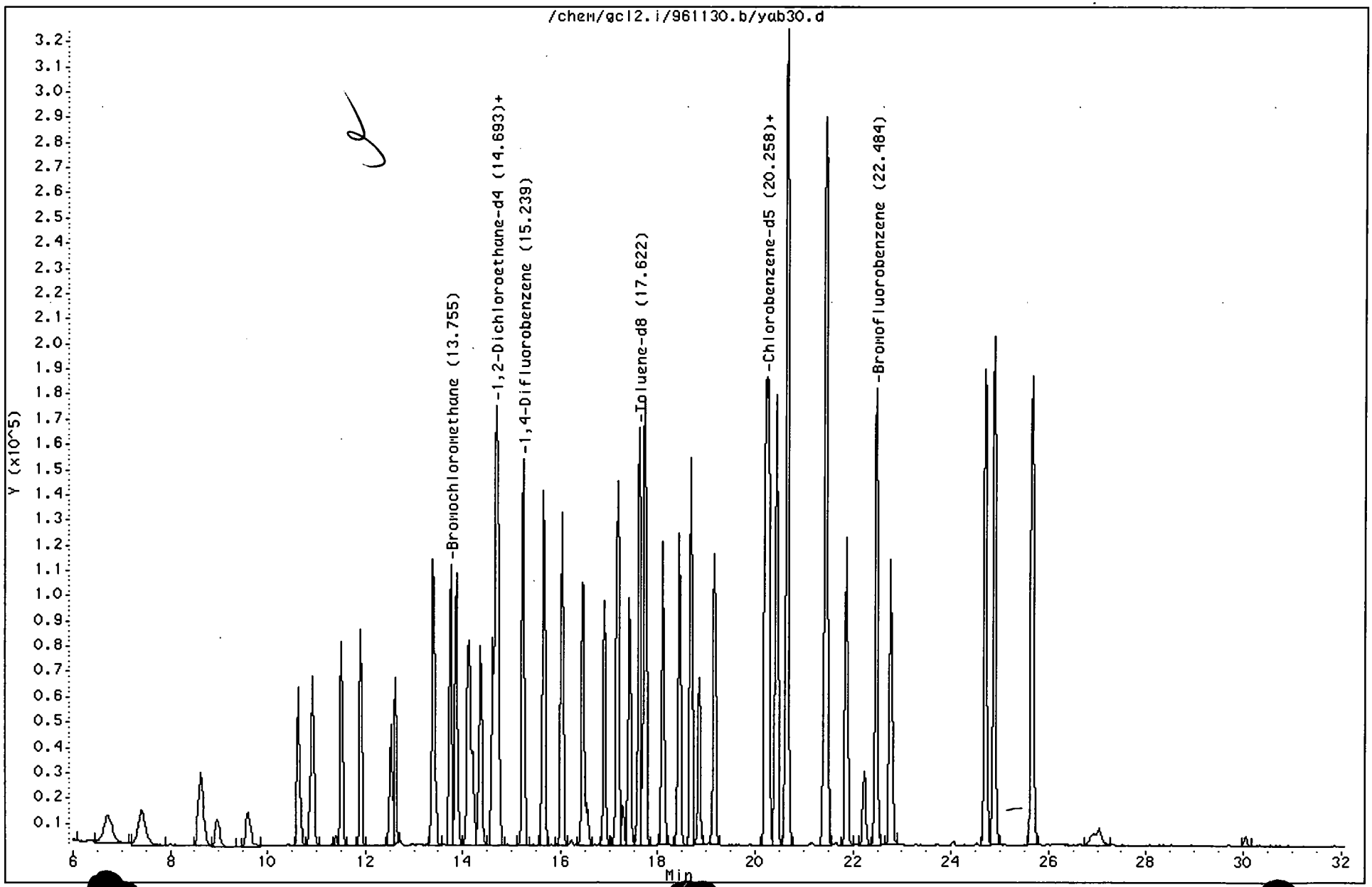
Data File: /chem/gcl2.i/961130.b/yab30.d
Date : 30-NOV-1996 12:54
Client ID: VSTD050
Sample Info: VSTD050 XBB30

Column phase: Cap

Instrument: gcl2.i

Operator: EMN
Column diameter: 0.53

204



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/yab30.d
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 30-NOV-1996 12:54
Operator : EMN Inst ID: gcl2.i
Smp Info : VSTD050 XBB30
Misc Info : GCL#2,1,EMN,5MLOFW5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

12-3-96

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	2 Chloromethane	50.00	6.720	6.720	(0.489)	80924	50.000	48.629(M)
	3 Vinyl Chloride	62.00	7.404	7.404	(0.538)	89079	50.000	48.853
	4 Bromomethane	94.00	8.633	8.633	(0.628)	76008	50.000	50.645
	5 Chloroethane	64.00	8.953	8.953	(0.651)	33218	50.000	50.575
	10 1,1-Dichloroethene	96.00	10.631	10.631	(0.773)	43505	50.000	52.206
	13 Acetone	43.00	10.885	10.885	(0.791)	27568	50.000	41.957
	12 Carbon Disulfide	76.00	10.924	10.924	(0.794)	174374	50.000	51.210
	18 Methylene Chloride	84.00	11.510	11.510	(0.837)	48022	50.000	52.895
	19 trans-1,2-Dichloroethene	96.00	11.900	11.900	(0.865)	43249	50.000	53.450
	23 1,1-Dichloroethane	63.00	12.525	12.525	(0.911)	87734	50.000	53.247
M	26 1,2-Dichloroethene (total)	96.00				122659	100.00	108.57
	28 cis-1,2-Dichloroethene	96.00	13.384	13.384	(0.973)	79410	50.000	54.753
	29 2-Butanone	43.00	13.443	13.443	(0.977)	61656	50.000	41.948(M)
*	31 Bromochloromethane	127.80	13.755	13.755	(1.000)	47661	50.000	
	33 Chloroform	83.00	13.872	13.872	(1.009)	146321	50.000	53.089
	34 1,1,1-Trichloroethane	97.00	14.126	14.126	(0.927)	111610	50.000	52.486
	35 Carbon Tetrachloride	116.80	14.361	14.361	(0.942)	100828	50.000	51.774
$	36 1,2-Dichloroethane-d4	65.00	14.614	14.614	(1.062)	97904	50.000	53.188
	37 Benzene	78.00	14.673	14.673	(0.963)	219727	50.000	53.109
	39 1,2-Dichloroethane	62.00	14.732	14.732	(1.071)	126128	50.000	53.271
*	42 1,4-Difluorobenzene	114.00	15.239	15.239	(1.000)	207606	50.000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	44 Trichloroethene	130.00	15.649	15.649	(1.027)	90495	50.000	53.444
	45 1,2-Dichloropropane	63.00	16.020	16.020	(1.051)	91854	50.000	53.291
	48 Bromodichloromethane	83.00	16.450	16.450	(1.079)	136331	50.000	53.196
	50 cis-1,3-Dichloropropene	75.00	17.172	17.172	(1.127)	126012	50.000	54.758
	51 4-Methyl-2-pentanone	43.00	17.407	17.407	(0.861)	177146	50.000	52.238
$	52 Toluene-d8	98.00	17.622	17.622	(0.872)	196331	50.000	52.781
	53 Toluene	91.00	17.739	17.739	(0.877)	228879	50.000	52.684
	54 trans-1,3-Dichloropropene	75.00	18.110	18.110	(1.188)	110934	50.000	54.637
	56 1,1,2-Trichloroethane	97.00	18.442	18.442	(1.210)	75746	50.000	54.165
	57 Tetrachloroethene	164.00	18.676	18.676	(0.924)	95210	50.000	54.317
	58 2-Hexanone	43.00	18.852	18.852	(0.932)	111757	50.000	42.160
	59 Dibromochloromethane	129.00	19.164	19.164	(1.258)	117707	50.000	54.400(M)
*	61 Chlorobenzene-d5	117.00	20.218	20.218	(1.000)	177376	50.000	
	62 Chlorobenzene	112.00	20.277	20.277	(1.003)	169522	50.000	53.623
	63 Ethylbenzene	106.00	20.433	20.433	(1.011)	78778	50.000	53.910
	65 m,p-xylene	91.00	20.668	20.668	(1.022)	418661	100.00	107.58
M	71 Xylene (total)	91.00				639849	50.000	156.35
	66 o-xylene	91.00	21.430	21.430	(1.060)	221188	50.000	54.048
	67 Styrene	104.00	21.469	21.469	(1.062)	167690	50.000	55.381
	68 Bromoform	173.00	21.860	21.860	(1.434)	128989	50.000	55.787
$	69 Bromofluorobenzene	95.00	22.484	22.484	(1.112)	141859	50.000	52.428
	70 1,1,2,2-Tetrachloroethane	83.00	22.778	22.778	(1.127)	139281	50.000	55.396

11-2

QC Flag Legend

M - Compound response manually integrated.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL2 Calibration Date: 12/01/96 Time: 1341

Lab File ID: YAC01 Init. Calib. Date(s): 11/29/96 11/29/96

Heated Purge: (Y/N) Y Init. Calib. Times: 1220 2134

GC Column: CAP ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	1.746	2.110		20.8	
Bromomethane	1.574	1.739	0.100	10.5	25.0
Vinyl Chloride	1.913	2.204	0.100	15.2	25.0
Chloroethane	0.689	0.783		13.6	
Methylene Chloride	0.952	1.040		9.2	
Acetone	0.689	0.595		13.6	
Carbon Disulfide	3.572	3.852		7.8	
1,1-Dichloroethene	0.874	0.978	0.100	11.9	25.0
1,1-Dichloroethane	1.728	1.934	0.200	11.9	25.0
1,2-Dichloroethene (total)	1.185	1.346		13.6	
Chloroform	2.891	3.256	0.200	12.6	25.0
1,2-Dichloroethane	2.484	2.730	0.100	9.9	25.0
2-Butanone	1.542	1.444		6.4	
1,1,1-Trichloroethane	0.512	0.572	0.100	11.7	25.0
Carbon Tetrachloride	0.469	0.523	0.100	11.5	25.0
Bromodichloromethane	0.617	0.678	0.200	9.9	25.0
1,2-Dichloropropane	0.415	0.464		11.8	
cis-1,3-Dichloropropene	0.554	0.620	0.200	11.9	25.0
Trichloroethene	0.408	0.477	0.300	16.9	25.0
Dibromochloromethane	0.521	0.580	0.100	11.3	25.0
1,1,2-Trichloroethane	0.337	0.368	0.100	9.2	25.0
Benzene	0.996	1.090	0.500	9.4	25.0
trans-1,3-Dichloropropene	0.489	0.541	0.100	10.6	25.0
Bromoform	0.557	0.622	0.100	11.7	25.0
4-Methyl-2-pentanone	0.956	0.979		2.4	
2-Hexanone	0.747	0.676		9.5	
Tetrachloroethene	0.494	0.538	0.200	8.9	25.0
1,1,2,2-Tetrachloroethane	0.708	0.760	0.500	7.3	25.0
Toluene	1.224	1.341	0.400	9.6	25.0
Chlorobenzene	0.891	0.973	0.500	9.2	25.0
Ethylbenzene	0.412	0.456	0.100	10.7	25.0
Styrene	0.854	0.957	0.300	12.1	25.0
Xylene (total)	1.154	1.278	0.300	10.7	25.0
1,2-Dichloroethane-d4	1.931	2.030		5.1	
Toluene-d8	1.049	1.083		3.2	
Bromofluorobenzene	0.763	0.792	0.200	3.8	25.0

All other compounds must meet a minimum RRF of 0.010.

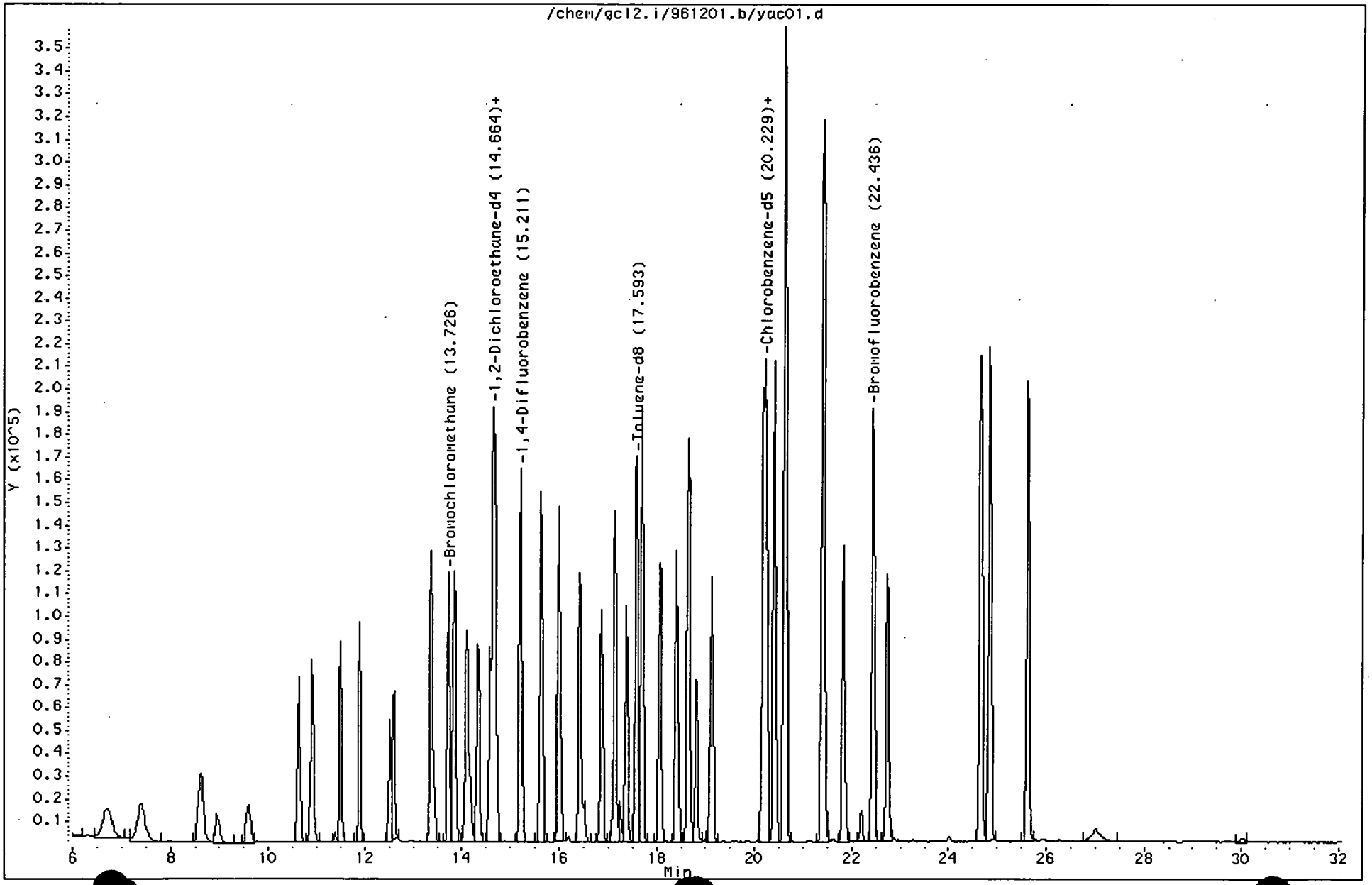
208

Data File: /chem/gcl2.i/961201.b/yac01.d
Date : 01-DEC-1996 13:41
Client ID: VSTD050
Sample Info: VSTD050 XAC01

Instrument: gcl2.i

Operator: EMN
Column diameter: 0.53

Column phase: Cap



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961201.b/yac01.d
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 01-DEC-1996 13:41
Operator : EMN Inst ID: gcl2.i
Smp Info : VSTD050 XAC01
Misc Info : GCL#2,1,EMN,5MLOFW+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk Quant Type: ISTD
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	2 Chloromethane	50.00	6.713	6.713	(0.489)	105619	50.000	60.422(M)
	3 Vinyl Chloride	62.00	7.415	7.415	(0.540)	110324	50.000	57.600(M)
	4 Bromomethane	94.00	8.625	8.625	(0.628)	87050	50.000	55.219
	5 Chloroethane	64.00	8.945	8.945	(0.652)	39185	50.000	56.796
	10 1,1-Dichloroethene	96.00	10.623	10.623	(0.774)	48970	50.000	55.944
	13 Acetone	43.00	10.877	10.877	(0.792)	29778	50.000	43.145
	12 Carbon Disulfide	76.00	10.897	10.897	(0.794)	192830	50.000	53.912
	18 Methylene Chloride	84.00	11.502	11.502	(0.838)	52057	50.000	54.587
	19 trans-1,2-Dichloroethene	96.00	11.892	11.892	(0.866)	47925	50.000	56.386
	23 1,1-Dichloroethane	63.00	12.516	12.516	(0.912)	96828	50.000	55.946
M	26 1,2-Dichloroethene (total)	96.00				134781	100.00	113.58
	28 cis-1,2-Dichloroethene	96.00	13.375	13.375	(0.974)	86856	50.000	57.013
	29 2-Butanone	43.00	13.434	13.434	(0.979)	72283	50.000	46.817(M)
*	31 Bromochloromethane	127.80	13.726	13.726	(1.000)	50064	50.000	
	33 Chloroform	83.00	13.844	13.844	(1.009)	163018	50.000	56.308
	34 1,1,1-Trichloroethane	97.00	14.098	14.098	(0.927)	125751	50.000	55.802
	35 Carbon Tetrachloride	116.80	14.332	14.332	(0.942)	115144	50.000	55.792
$	36 1,2-Dichloroethane-d4	65.00	14.586	14.586	(1.063)	101647	50.000	52.571
	37 Benzene	78.00	14.664	14.664	(0.964)	239728	50.000	54.677
	39 1,2-Dichloroethane	62.00	14.703	14.703	(1.071)	136686	50.000	54.959
*	42 1,4-Difluorobenzene	114.00	15.211	15.211	(1.000)	220009	50.000	

JK 12-1-96

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	44 Trichloroethene	130.00	15.621	15.621	(1.027)	104957	50.000	58.490
	45 1,2-Dichloropropane	63.00	15.992	15.992	(1.051)	101982	50.000	55.832
	48 Bromodichloromethane	83.00	16.421	16.421	(1.080)	149189	50.000	54.931
	50 cis-1,3-Dichloropropene	75.00	17.143	17.143	(1.127)	136404	50.000	55.932
	51 4-Methyl-2-pentanone	43.00	17.378	17.378	(0.862)	188159	50.000	51.222
$	52 Toluene-d8	98.00	17.573	17.573	(0.871)	208161	50.000	51.662
	53 Toluene	91.00	17.691	17.691	(0.877)	257612	50.000	54.742
	54 trans-1,3-Dichloropropene	75.00	18.062	18.062	(1.187)	119100	50.000	55.352
	56 1,1,2-Trichloroethane	97.00	18.413	18.413	(1.211)	81077	50.000	54.709
	57 Tetrachloroethene	164.00	18.647	18.647	(0.924)	103334	50.000	54.422
	58 2-Hexanone	43.00	18.823	18.823	(0.933)	129909	50.000	45.242
	59 Dibromochloromethane	129.00	19.116	19.116	(1.257)	127659	50.000	55.673(M)
*	61 Chlorobenzene-d5	117.00	20.170	20.170	(1.000)	192139	50.000	
	62 Chlorobenzene	112.00	20.229	20.229	(1.003)	186944	50.000	54.591
	63 Ethylbenzene	106.00	20.405	20.405	(1.012)	87586	50.000	55.333
	65 m,p-xylene	91.00	20.620	20.620	(1.022)	465351	100.00	110.39
M	71 Xylene (total)	91.00				710879	50.000	160.36
	66 o-xylene	91.00	21.401	21.401	(1.061)	245528	50.000	55.386
	67 Styrene	104.00	21.420	21.420	(1.062)	183824	50.000	56.045
	68 Bromoform	173.00	21.830	21.830	(1.435)	136848	50.000	55.850
$	69 Bromofluorobenzene	95.00	22.436	22.436	(1.112)	152123	50.000	51.902
	70 1,1,2,2-Tetrachloroethane	83.00	22.729	22.729	(1.127)	146112	50.000	53.648

QC Flag Legend

M - Compound response manually integrated.

VII. QUALITY CONTROL DATA

Data File: /chem/gcl2.i/961129_clp2s.b/xab29.d

Date : 29-NOV-96 09:54

Client ID: BFBTUNE

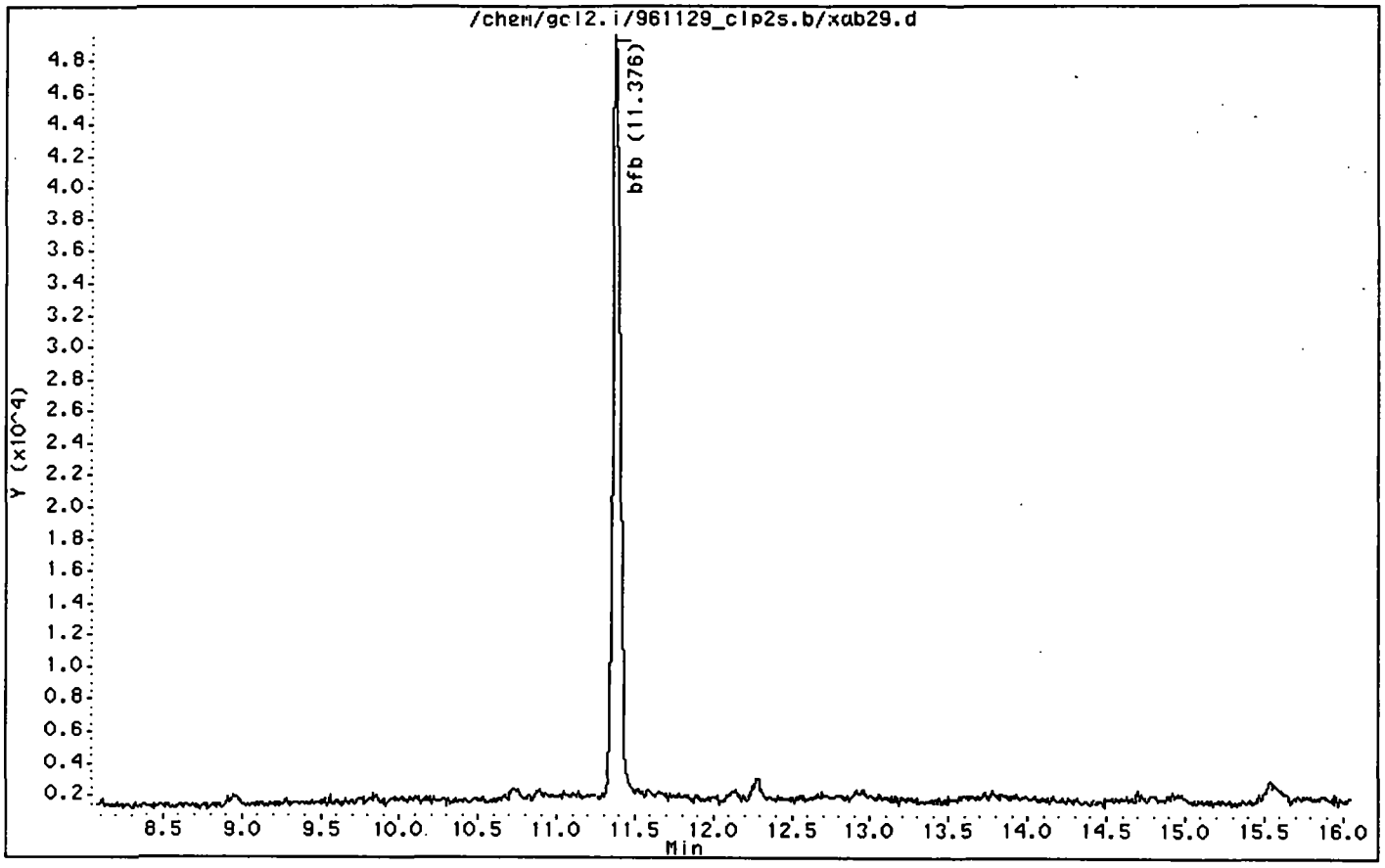
Instrument: gcl2.i

Sample Info: BFBTUNE XBB28

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53



Data File: /chem/gcl2.i/961129_clp2s.b/xab29.d

Date : 29-NOV-96 09:54

Client ID: BFBTUNE

Instrument: gcl2.i

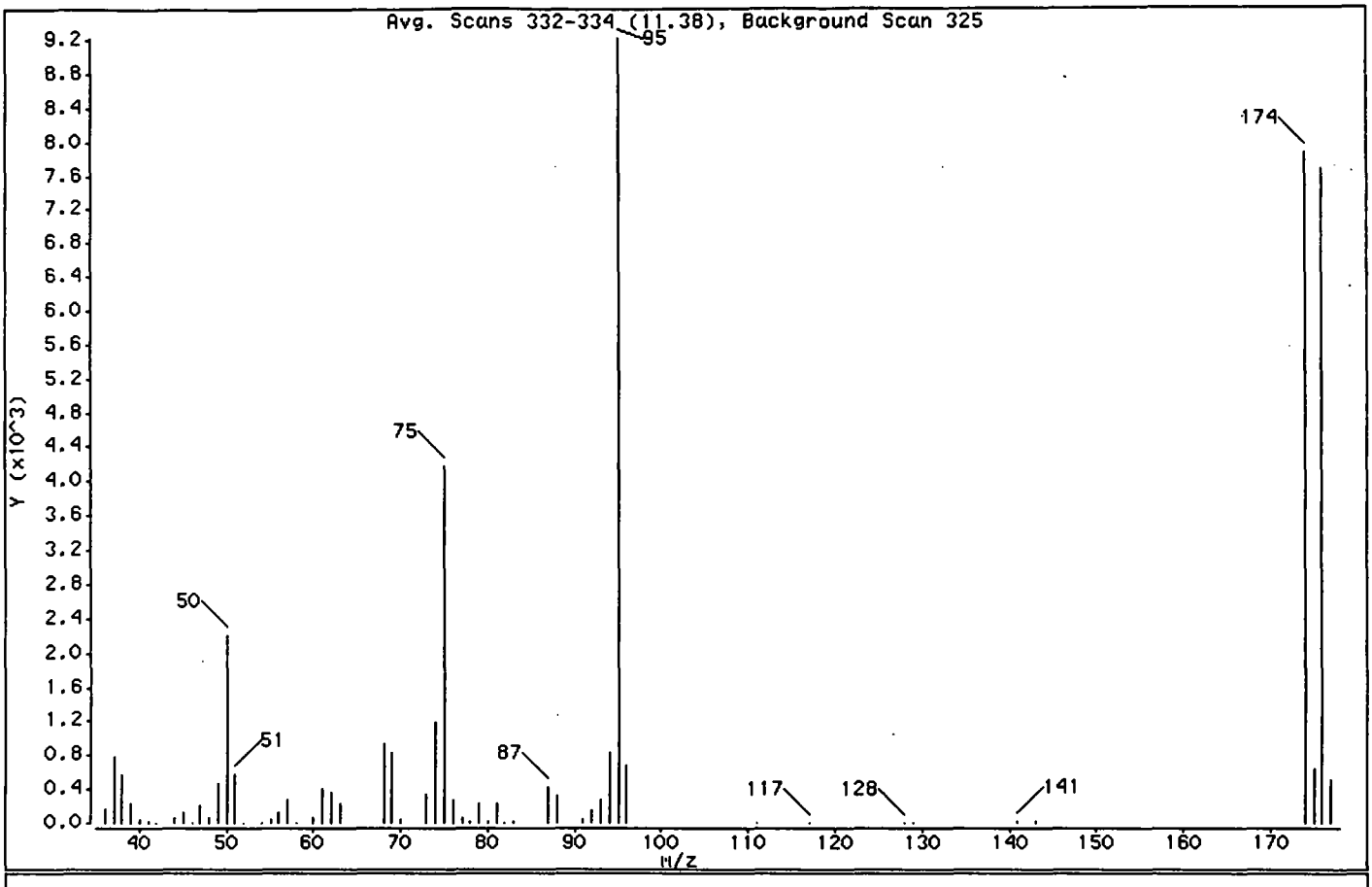
Sample Info: BFBTUNE XBB28

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53

1 bfb



M/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.86
75	30.00 - 66.00% of mass 95	45.19
96	5.00 - 9.00% of mass 95	7.24
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	85.28
175	4.00 - 9.00% of mass 174	6.85 (8.04)
176	93.00 - 101.00% of mass 174	83.28 (97.66)
177	5.00 - 9.00% of mass 176	5.48 (6.57)

Data File: /chem/gcl2.i/961129_clp2s.b/xab29.d
Date : 29-NOV-96 09:54
Client ID: BFBTUNE
Instrument: gcl2.i
Sample Info: BFBTUNE XBB28
Operator: PERKINS
Column phase: Cap
Column diameter: 0.53

Data File: xab29.d
Spectrum : Avg. Scans 332-334 (11.38), Background Scan 325
Largest m/z: 95.00
Number of peaks: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	170	52.00	9	75.00	4168	95.00	9223
37.00	782	54.00	3	76.00	285	96.00	668
38.00	578	55.00	42	77.00	56	111.00	4
39.00	225	56.00	130	78.00	27	117.00	7
40.00	44	57.00	273	79.00	238	128.00	2
41.00	27	58.00	4	80.00	17	129.00	1
42.00	9	60.00	72	81.00	243	141.00	26
44.00	67	61.00	404	82.00	5	143.00	12
45.00	130	62.00	371	83.00	17	174.00	7865
46.00	3	63.00	236	87.00	416	175.00	632
47.00	207	68.00	925	88.00	324	176.00	7681
48.00	55	69.00	834	91.00	35	177.00	505
49.00	472	70.00	42	92.00	154		
50.00	2201	73.00	337	93.00	276		
51.00	583	74.00	1179	94.00	830		

Data File: /chem/gcl2.i/961130.b/xbb30.d

Date : 30-NOV-1996 12:04

Client ID: BFBTUNE

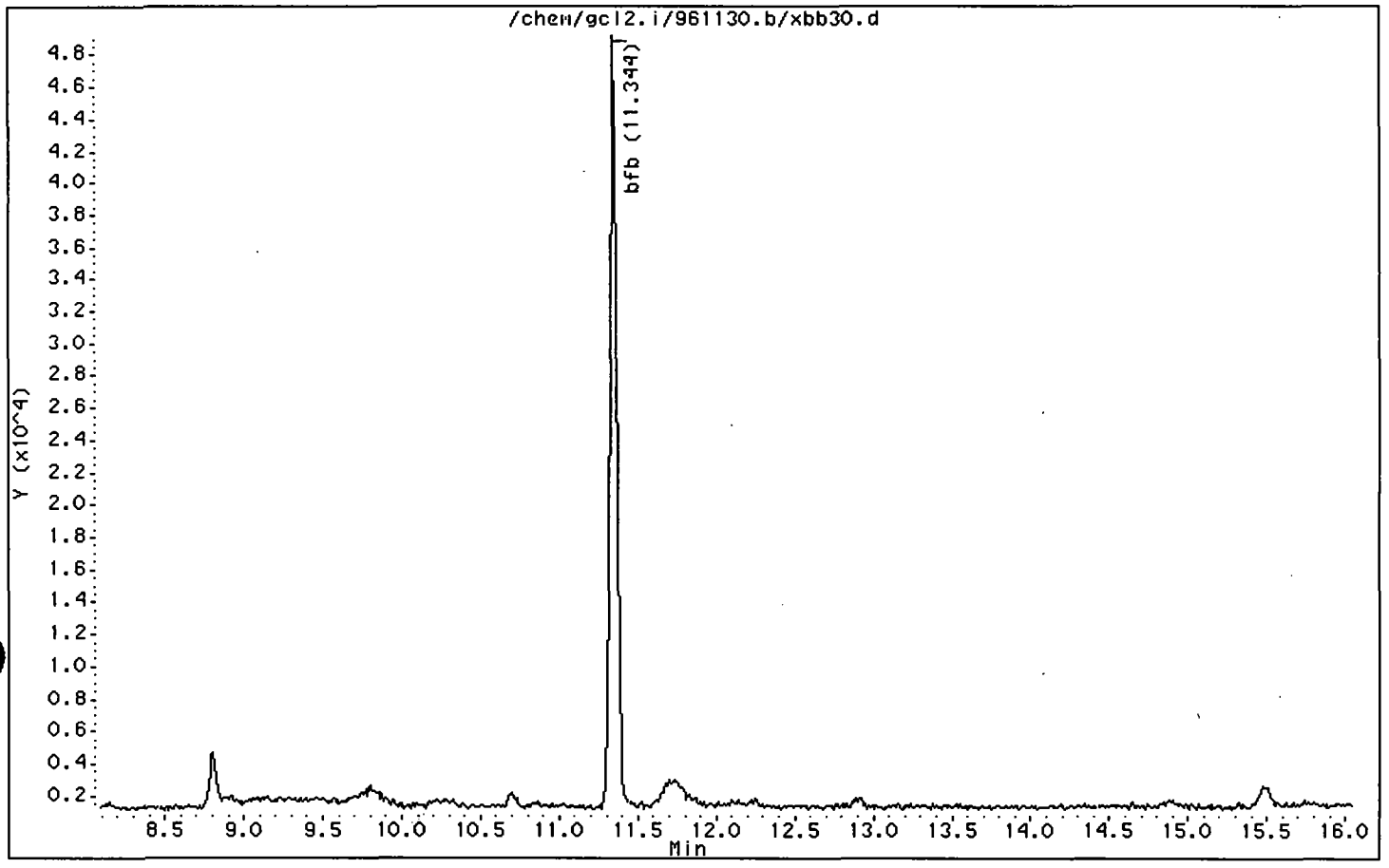
Instrument: gcl2.i

Sample Info: BFBTUNE XBB30

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53



Data File: /chem/gcl2.i/961130.b/xbb30.d

Date : 30-NOV-1996 12:04

Client ID: BFBTUNE

Instrument: gcl2.i

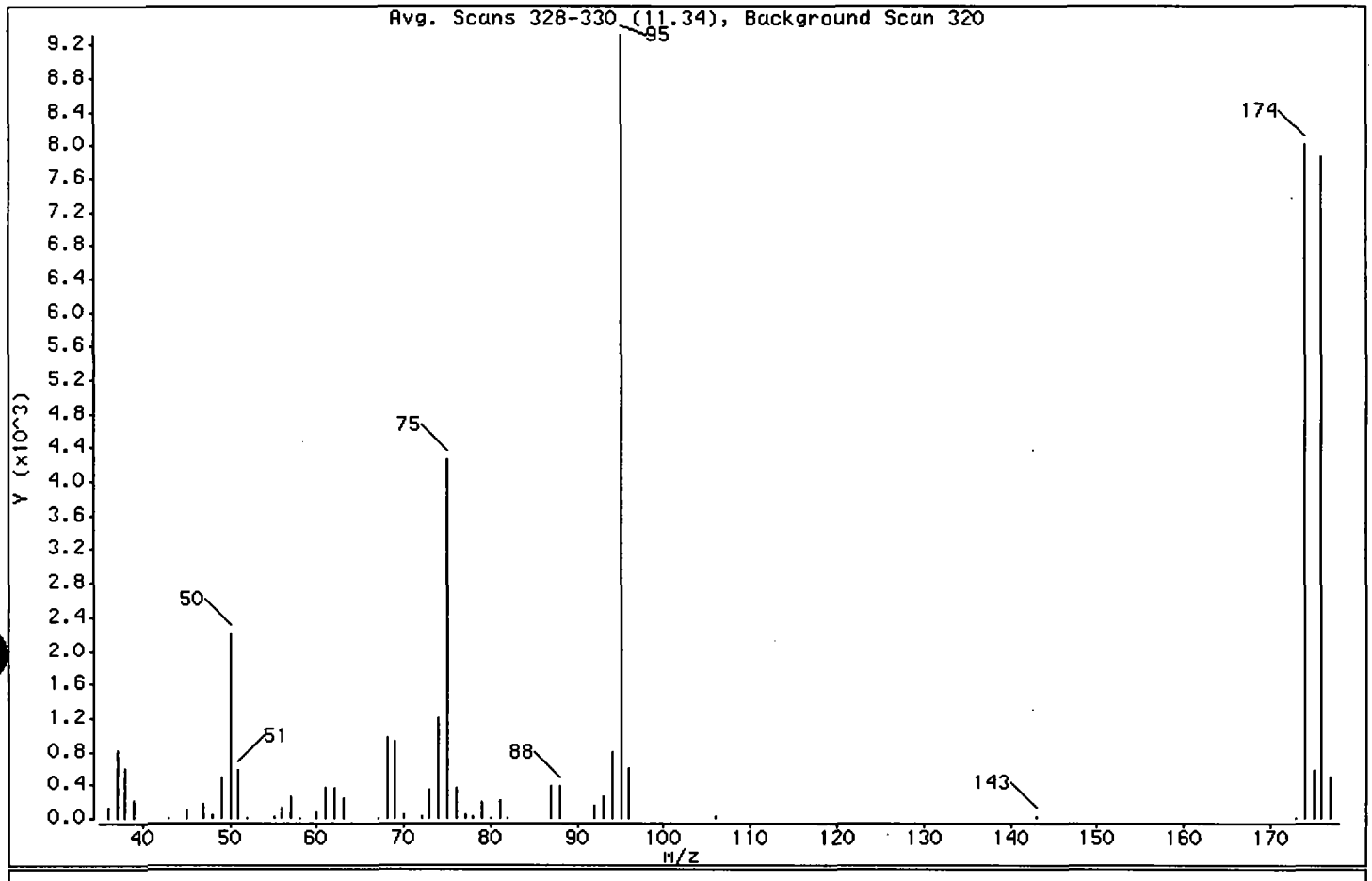
Sample Info: BFBTUNE XBB30

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	23.70
75	30.00 - 66.00% of mass 95	45.69
96	5.00 - 9.00% of mass 95	6.36
173	Less than 2.00% of mass 174	0.08 (0.09)
174	50.00 - 120.00% of mass 95	85.89
175	4.00 - 9.00% of mass 174	6.13 (7.14)
176	93.00 - 101.00% of mass 174	84.41 (98.27)
177	5.00 - 9.00% of mass 176	5.31 (6.29)

Data File: /chem/gcl2.i/961130.b/xbb30.d

Date : 30-NOV-1996 12:04

Client ID: BFBTUNE

Instrument: gcl2.i

Sample Info: BFBTUNE XBB30

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53

Data File: xbb30.d
Spectrum : Avg. Scans 328-330 (11.34), Background Scan 320
Largest m/z: 95.00
Number of peaks: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	121	56.00	127	74.00	1206	94.00	795
37.00	804	57.00	257	75.00	4254	95.00	9311
38.00	605	58.00	2	76.00	359	96.00	592
39.00	223	60.00	67	77.00	33	106.00	17
43.00	2	61.00	369	78.00	22	143.00	23
45.00	88	62.00	363	79.00	186	173.00	7
47.00	172	63.00	228	80.00	6	174.00	7997
48.00	51	67.00	8	81.00	218	175.00	571
49.00	491	68.00	954	82.00	9	176.00	7859
50.00	2207	69.00	918	87.00	379	177.00	494
51.00	582	70.00	48	88.00	384		
52.00	6	72.00	21	92.00	160		
55.00	29	73.00	349	93.00	267		

Data File: /chem/gcl2.i/961201.b/xac01.d

Date : 01-DEC-1996 12:54

Client ID: BFBTUNE

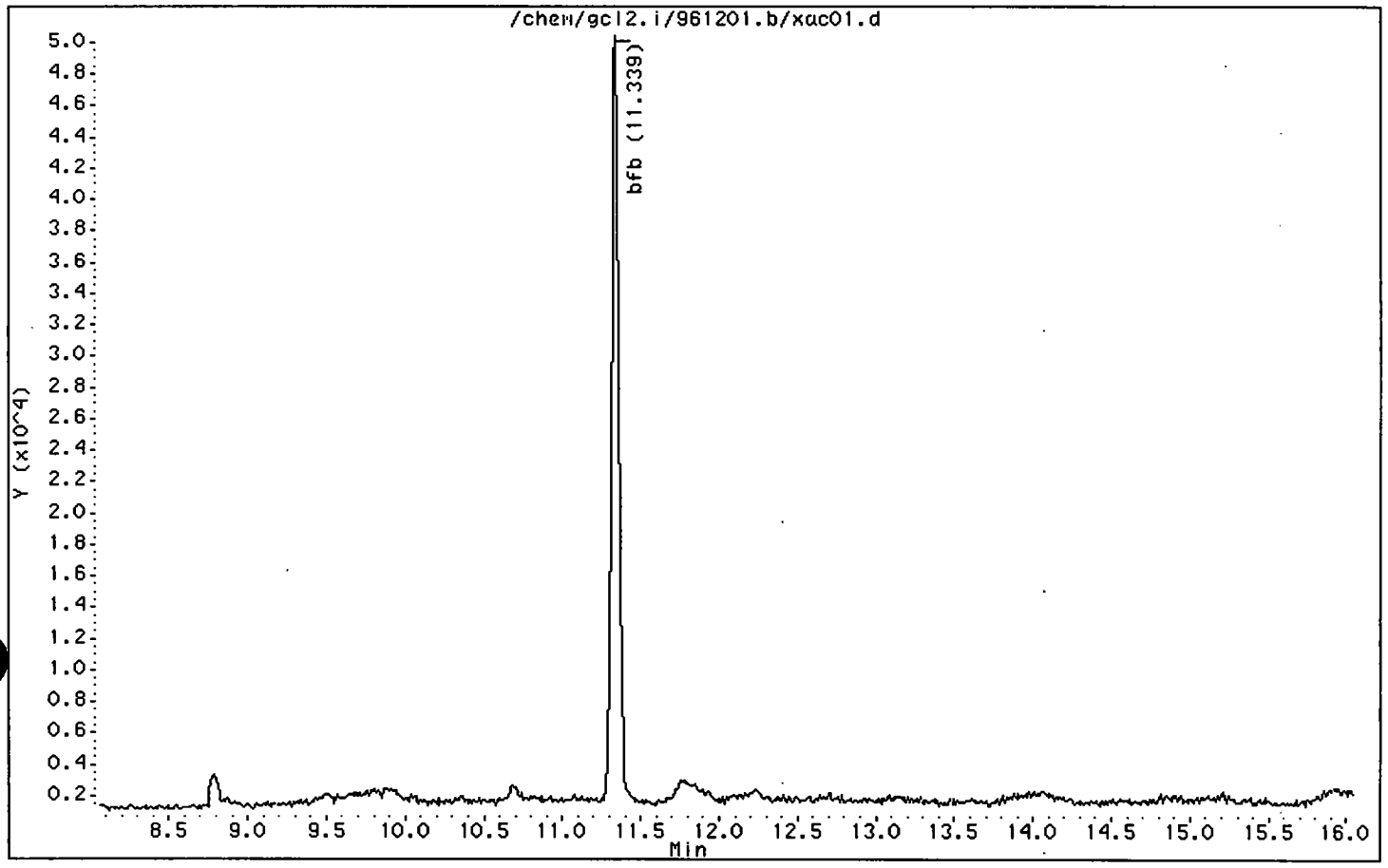
Instrument: gcl2.i

Sample Info: BFBTUNE XAC01

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53



Data File: /chem/gcl2.i/961201.b/xac01.d

Date : 01-DEC-1996 12:54

Client ID: BFBTUNE

Instrument: gcl2.i

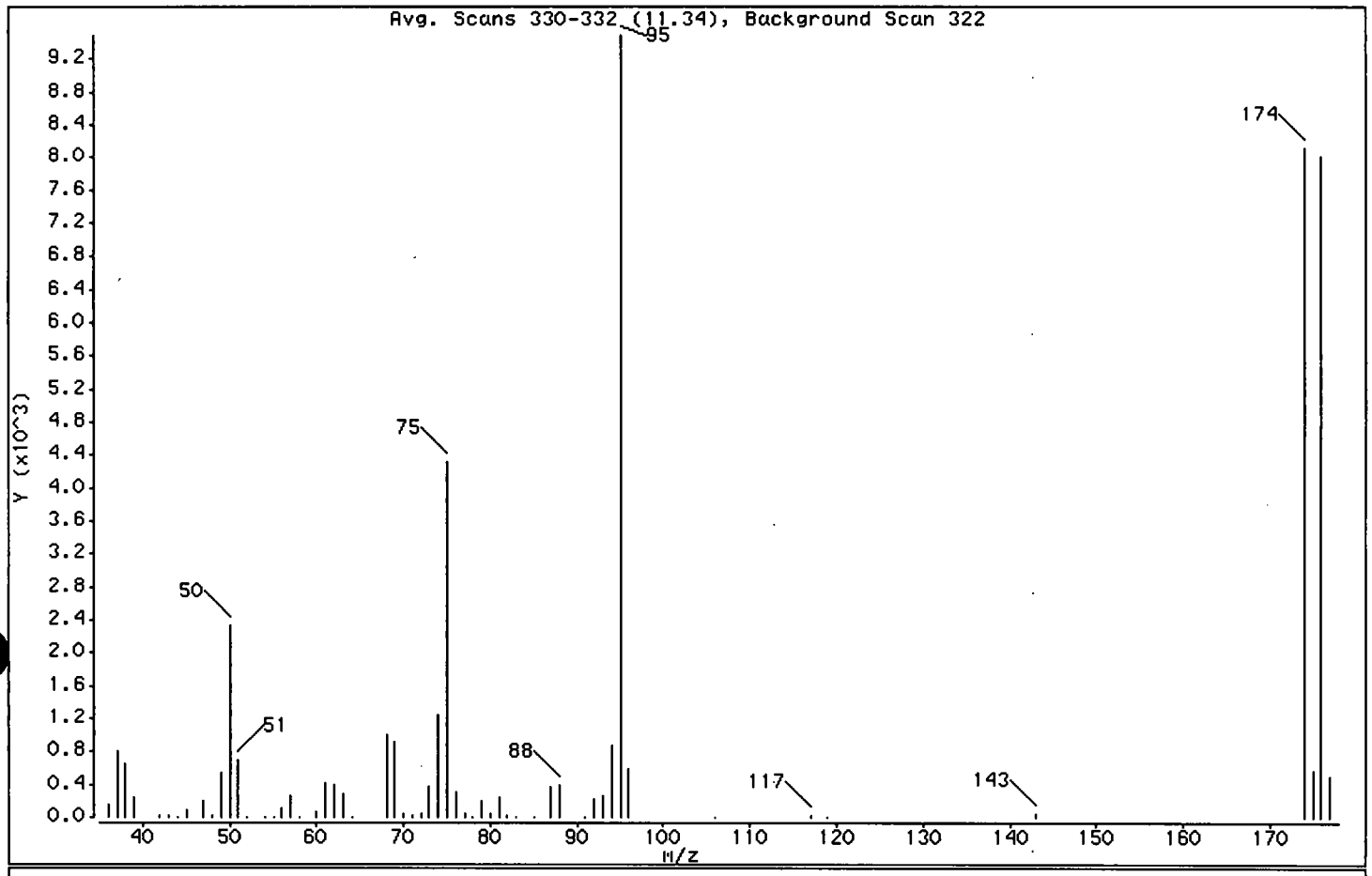
Sample Info: BFBTUNE XAC01

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	24.55
75	30.00 - 66.00% of mass 95	45.46
96	5.00 - 9.00% of mass 95	6.26
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 120.00% of mass 95	85.54
175	4.00 - 9.00% of mass 174	6.05 (7.07)
176	93.00 - 101.00% of mass 174	84.33 (98.58)
177	5.00 - 9.00% of mass 176	5.25 (6.22)

Data File: /chem/gcl2.i/961201.b/xac01.d

Date : 01-DEC-1996 12:54

Client ID: BFBTUNE

Instrument: gcl2.i

Sample Info: BFBTUNE XAC01

Operator: PERKINS

Column phase: Cap

Column diameter: 0.53

Data File: xac01.d

Spectrum : Avg. Scans 330-332 (11.34), Background Scan 322

Largest m/z: 95.00

Number of peaks: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	147	55.00	3	74.00	1247	93.00	271
37.00	816	56.00	106	75.00	4315	94.00	868
38.00	663	57.00	264	76.00	312	95.00	9491
39.00	246	58.00	3	77.00	38	96.00	594
42.00	26	60.00	71	78.00	7	106.00	9
43.00	13	61.00	406	79.00	194	117.00	16
44.00	4	62.00	392	80.00	42	119.00	6
45.00	98	63.00	279	81.00	235	143.00	47
47.00	187	64.00	5	82.00	30	174.00	8119
48.00	31	68.00	994	83.00	7	175.00	574
49.00	546	69.00	917	85.00	3	176.00	8004
50.00	2330	70.00	38	87.00	375	177.00	498
51.00	690	71.00	20	88.00	387		
52.00	4	72.00	33	91.00	9		
54.00	5	73.00	368	92.00	210		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKZF

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GVB252-MB1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: ZAB30

Level: (low/med) LOW Date Received: 11/30/96

% Moisture: not dec. _____ Date Analyzed: 11/30/96

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKZF

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GVB252-MB1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: ZAB30

Level: (low/med) LOW Date Received: 11/30/96

% Moisture: not dec. _____ Date Analyzed: 11/30/96

GC Column: CAP 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.					

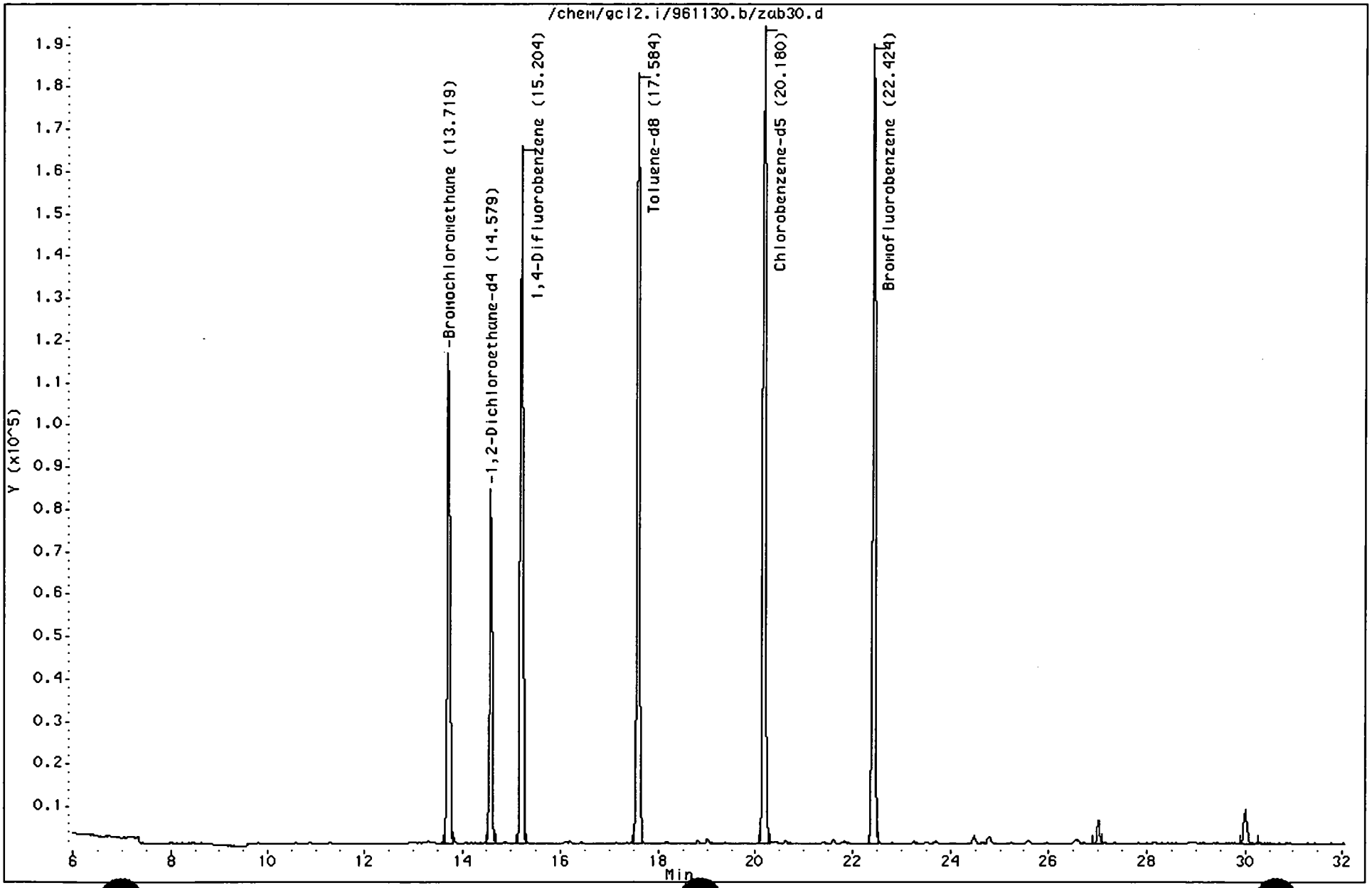
Data File: /chem/gcl2.i/961130.b/zab30.d
Date : 30-NOV-1996 13:51
Client ID: VBLKZF
Sample Info: 96GVB252-MB1 XBB30,[AL=0624He],[DC=00]

Column phase: Cap

Instrument: gcl2.i

Operator: EMN
Column diameter: 0.53

223



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/zab30.d
Lab Smp Id: 96GVB252-MB1 Client Smp ID: VBLKZF
Inj Date : 30-NOV-1996 13:51
Operator : EMN Inst ID: gcl2.i
Smp Info : 96GVB252-MB1 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,EMN,5MLOFW+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.719	13.755	(1.000)	51840	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.579	14.614	(1.063)	103383	48.542	48.542
* 42 1,4-Difluorobenzene	114.00	15.204	15.239	(1.000)	227516	50.000	
$ 52 Toluene-d8	98.00	17.584	17.622	(0.871)	214318	47.595	47.595
* 61 Chlorobenzene-d5	117.00	20.180	20.218	(1.000)	203412	50.000	
$ 69 Bromofluorobenzene	95.00	22.424	22.484	(1.111)	150682	46.312	46.312

JK 1-7-97

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961130.b/zab30.d
Lab Smp Id: 96GVB252-MB1 Client Smp ID: VBLKZF
Inj Date : 30-NOV-1996 13:51
Operator : EMN Inst ID: gcl2.i
Smp Info : 96GVB252-MB1 XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,EMN,5MLOFW+50LIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKZI

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GVB253-MB1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: ZCC01

Level: (low/med) LOW Date Received: 12/01/96

% Moisture: not dec. _____ Date Analyzed: 12/01/96

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKZI

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GVB253-MB1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: ZCC01

Level: (low/med) LOW Date Received: 12/01/96

% Moisture: not dec. _____ Date Analyzed: 12/01/96

GC Column: CAP 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.					

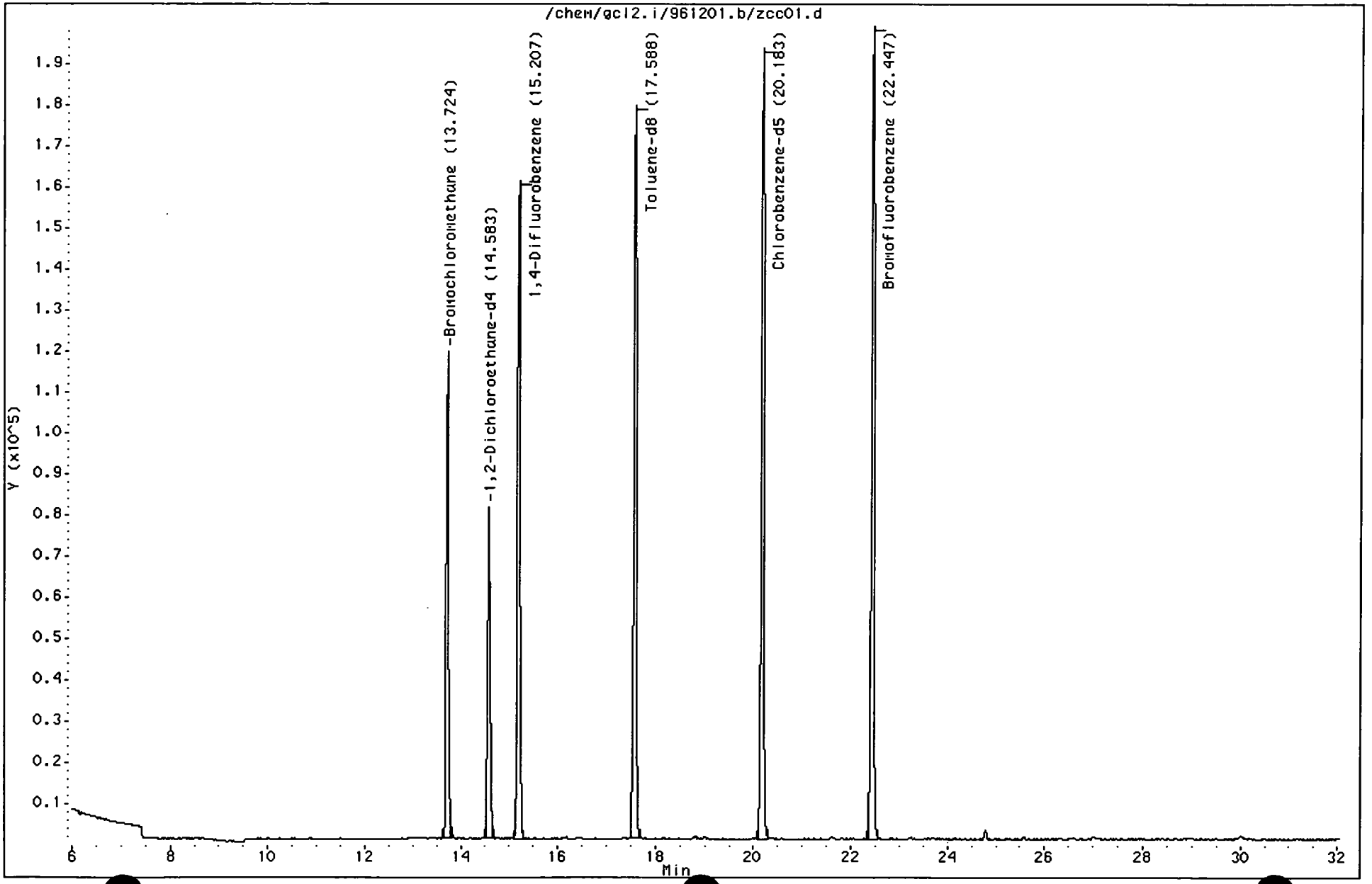
228

Data File: /chem/gcl2.i/961201.b/zcc01.d
Date : 01-DEC-1996 15:55
Client ID: VBLKZI
Sample Info: 96GVB253-MB1 XAC01,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: JAK
Column diameter: 0.53

Column phase: Cap



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961201.b/zcc01.d
Lab Smp Id: 96GVB253-MB1 Client Smp ID: VBLKZI
Inj Date : 01-DEC-1996 15:55
Operator : JAK Inst ID: gcl2.i
Smp Info : 96GVB253-MB1 XAC01,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,JAK,5MLOFW+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk Quant Type: ISTD
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
* 31 Bromochloromethane	127.80	13.724	13.726	(1.000)	50605	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.583	14.586	(1.063)	103523	50.378	50.378
* 42 1,4-Difluorobenzene	114.00	15.188	15.211	(1.000)	229814	50.000	
$ 52 Toluene-d8	98.00	17.588	17.573	(0.871)	219912	49.088	49.088
* 61 Chlorobenzene-d5	117.00	20.183	20.170	(1.000)	206757	50.000	
$ 69 Bromofluorobenzene	95.00	22.447	22.436	(1.112)	156212	47.714	47.714

JK 1-7-97

Unknown Compounds Quantitation Report

Data file : /chem/gcl2.i/961201.b/zcc01.d
Lab Smp Id: 96GVB253-MB1 Client Smp ID: VBLKZI
Inj Date : 01-DEC-1996 15:55
Operator : JAK Inst ID: gcl2.i
Smp Info : 96GVB253-MB1 XAC01,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,JAK,5MLOFW+50LIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0624He.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08MS

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008S

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG10

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 47 Date Analyzed: 11/30/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

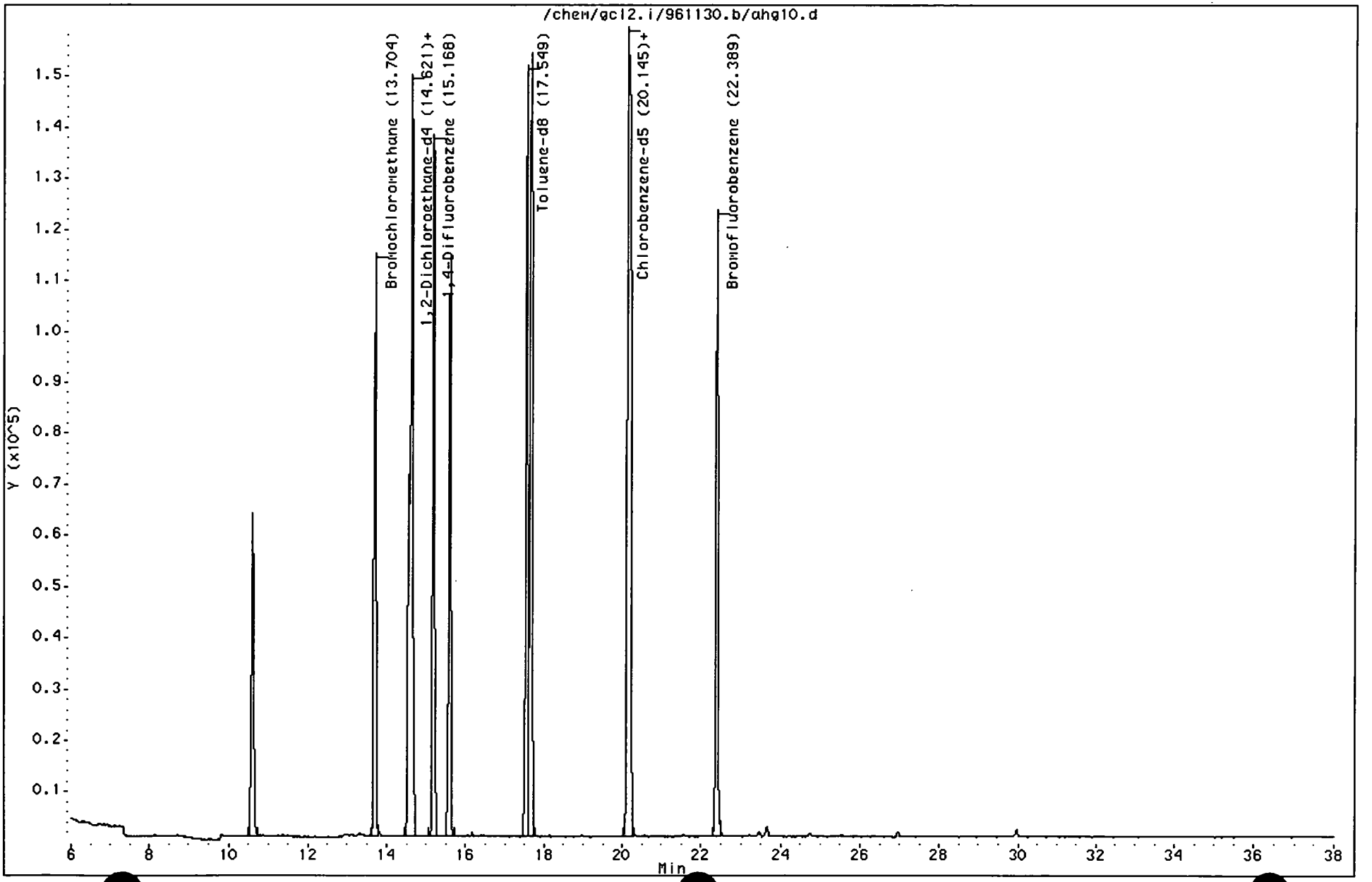
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	19	U
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	98	
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	80	
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	96	
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	92	
108-90-7	Chlorobenzene	84	
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

Data File: /chem/gcl2.i/961130.b/ahg10.d
Date : 30-NOV-1996 16:38
Client ID: WS-08MS
Sample Info: 9611G675-008S XBB30,[AL=0624He],[DC=00]

Column phase: Cap

Instrument: gcl2.i

Operator: 5GSMP +5ULIS
Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg10.d
Lab Smp Id: 9611G675-008S Client Smp ID: WS-08MS
Inj Date : 30-NOV-1996 16:38
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-008S XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1 QC Sample: MS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	46.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
10 1,1-Dichloroethene	96.00	10.602	10.631	(0.774)	45456	52.472	98.263
* 31 Bromochloromethane	127.80	13.704	13.755	(1.000)	47452	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.562	14.614	(1.063)	90840	46.597	87.260
37 Benzene	78.00	14.621	14.673	(0.964)	215128	51.375	96.209
* 42 1,4-Difluorobenzene	114.00	15.168	15.239	(1.000)	197819	50.000	
44 Trichloroethene	130.00	15.598	15.649	(1.028)	73427	42.577	79.732
$ 52 Toluene-d8	98.00	17.549	17.622	(0.871)	177338	51.391	96.237
53 Toluene	91.00	17.667	17.739	(0.877)	198563	49.359	92.432
* 61 Chlorobenzene-d5	117.00	20.145	20.218	(1.000)	155881	50.000	
62 Chlorobenzene	112.00	20.203	20.277	(1.003)	133980	44.966	84.206
$ 69 Bromofluorobenzene	95.00	22.389	22.484	(1.111)	98466	39.491	73.954

JK 1-7-97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08MSD

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008T

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AHG11

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: not dec. 47 Date Analyzed: 11/30/96

GC Column: CAP 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/KG	Q
74-87-3	Chloromethane	19	U
74-83-9	Bromomethane	19	U
75-01-4	Vinyl Chloride	19	U
75-00-3	Chloroethane	19	U
75-09-2	Methylene Chloride	19	U
67-64-1	Acetone	19	U
75-15-0	Carbon Disulfide	19	U
75-35-4	1,1-Dichloroethene	100	
75-34-3	1,1-Dichloroethane	19	U
540-59-0	1,2-Dichloroethene (total)	19	U
67-66-3	Chloroform	19	U
107-06-2	1,2-Dichloroethane	19	U
78-93-3	2-Butanone	19	U
71-55-6	1,1,1-Trichloroethane	19	U
56-23-5	Carbon Tetrachloride	19	U
75-27-4	Bromodichloromethane	19	U
78-87-5	1,2-Dichloropropane	19	U
10061-01-5	cis-1,3-Dichloropropene	19	U
79-01-6	Trichloroethene	85	
124-48-1	Dibromochloromethane	19	U
79-00-5	1,1,2-Trichloroethane	19	U
71-43-2	Benzene	100	
10061-02-6	trans-1,3-Dichloropropene	19	U
75-25-2	Bromoform	19	U
108-10-1	4-Methyl-2-pentanone	19	U
591-78-6	2-Hexanone	19	U
127-18-4	Tetrachloroethene	19	U
79-34-5	1,1,2,2-Tetrachloroethane	19	U
108-88-3	Toluene	100	
108-90-7	Chlorobenzene	89	
100-41-4	Ethylbenzene	19	U
100-42-5	Styrene	19	U
1330-20-7	Xylene (total)	19	U

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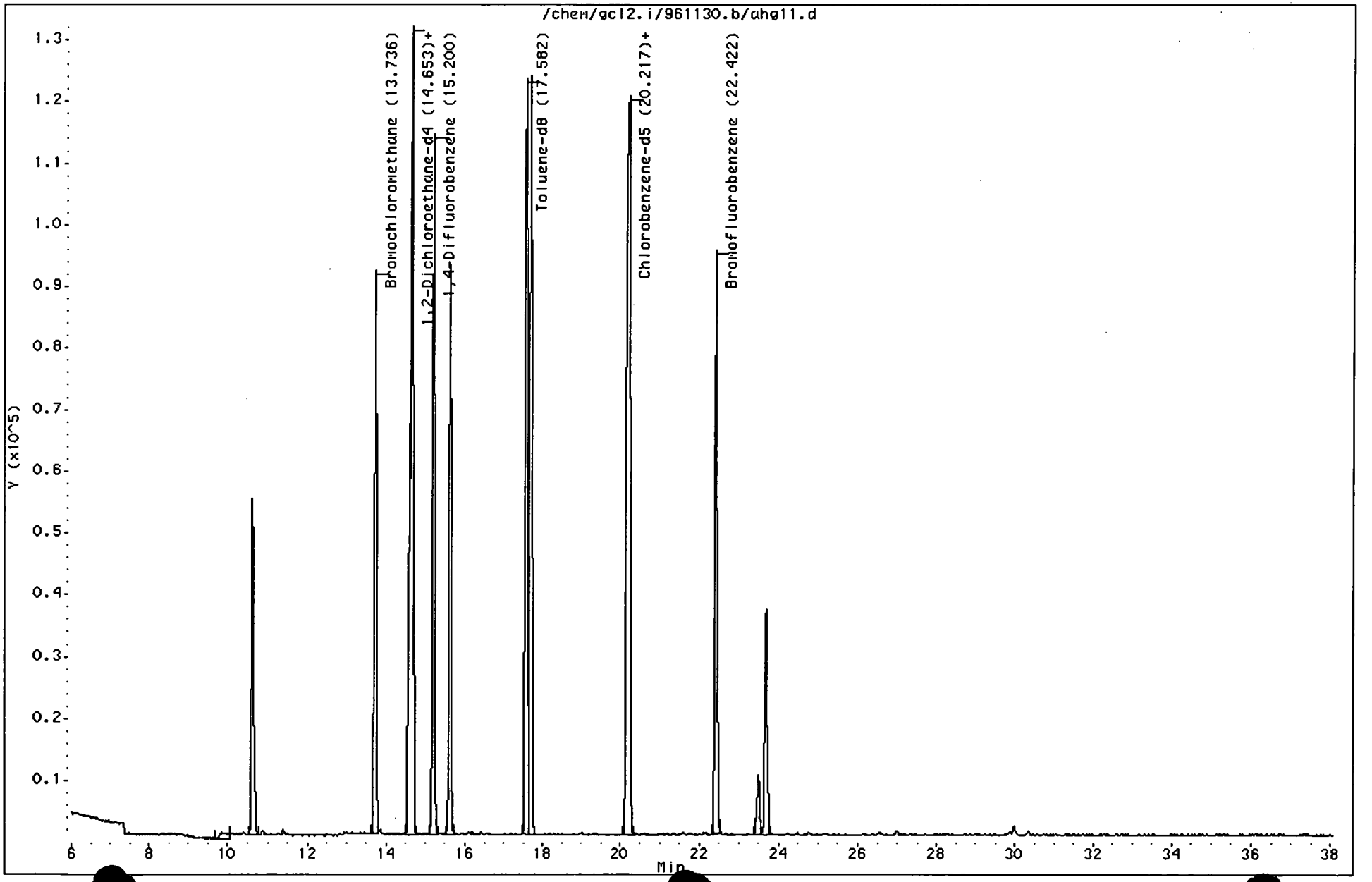
Data File: /chem/gcl2.i/961130.b/ahg11.d
Date : 30-NOV-1996 17:30
Client ID: WS-08MSD
Sample Info: 9611G675-008T XBB30,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: 5GSMP +5ULIS
Column diameter: 0.53

Column phase: Cap



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/ahg11.d
Lab Smp Id: 9611G675-008T Client Smp ID: WS-08MSD
Inj Date : 30-NOV-1996 17:30
Operator : 5GSMP +5ULIS Inst ID: gcl2.i
Smp Info : 9611G675-008T XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,5GSMP +5ULIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1 QC Sample: MSD
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	46.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
10 1,1-Dichloroethene	96.00	10.614	10.631	(0.774)	40064	53.976	101.08
* 31 Bromochloromethane	127.80	13.716	13.755	(1.000)	40658	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.594	14.614	(1.064)	80583	48.242	90.342
37 Benzene	78.00	14.653	14.673	(0.964)	185958	55.593	104.11
* 42 1,4-Difluorobenzene	114.00	15.200	15.239	(1.000)	158024	50.000	
44 Trichloroethene	130.00	15.611	15.649	(1.027)	62380	45.280	84.794
$ 52 Toluene-d8	98.00	17.582	17.622	(0.872)	147147	57.662	107.98
53 Toluene	91.00	17.699	17.739	(0.878)	167914	56.442	105.70
* 61 Chlorobenzene-d5	117.00	20.158	20.218	(1.000)	115276	50.000	
62 Chlorobenzene	112.00	20.217	20.277	(1.003)	105164	47.727	89.377
$ 69 Bromofluorobenzene	95.00	22.422	22.484	(1.112)	71286	38.661	72.399

JK 1-7-97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKZFBS

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GVB252-MB1S

Sample wt/vol: 5.0 (g/mL) G Lab File ID: ZBB30

Level: (low/med) LOW Date Received: 11/30/96

% Moisture: not dec. _____ Date Analyzed: 11/30/96

GC Column: CAP 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/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	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	50	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	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	44	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	50	
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	47	
108-90-7	Chlorobenzene	46	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

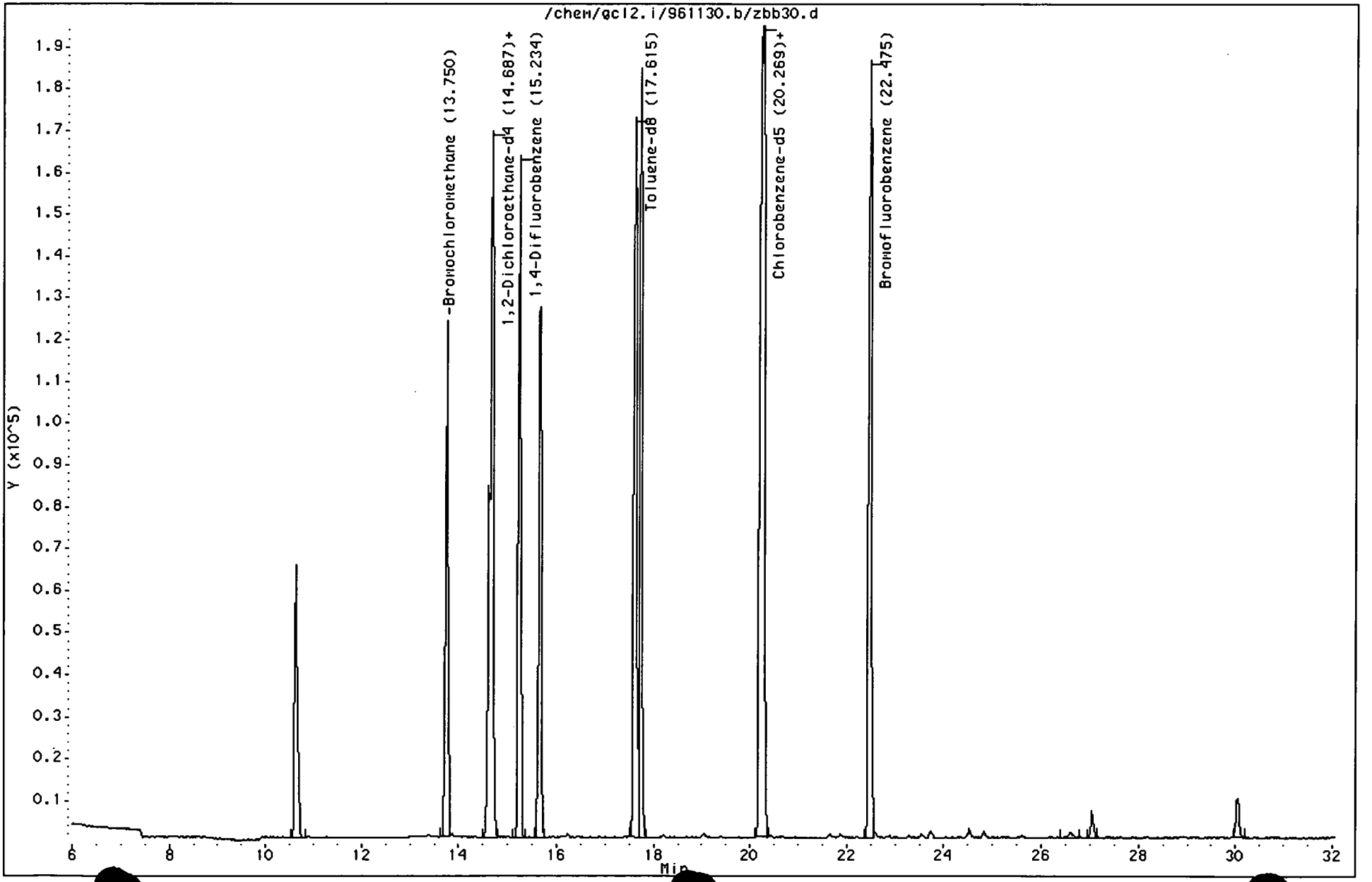
Data File: /chem/gcl2.i/961130.b/zbb30.d
Date : 30-NOV-1996 14:42
Client ID: VBLKZFBS
Sample Info: 96GVB252-MB1S XBB30,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: EMN

Column phase: Cap

Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961130.b/zbb30.d
Lab Smp Id: 96GVB252-MB1S Client Smp ID: VBLKZFBS
Inj Date : 30-NOV-1996 14:42
Operator : EMN Inst ID: gcl2.i
Smp Info : 96GVB252-MB1S XBB30,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,EMN,5MLOFW+50LIS,SS
Comment :
Method : /chem/gcl2.i/961130.b/clp2s.m
Meth Date : 30-Nov-1996 13:29 naranjoe Quant Type: ISTD
Cal Date : 30-NOV-1996 12:54 Cal File: yab30.d
Als bottle: 1 QC Sample: BS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
10 1,1-Dichloroethene	96.00	10.628	10.631	(0.773)	48309	50.525	50.525
* 31 Bromochloromethane	127.80	13.750	13.755	(1.000)	52374	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.609	14.614	(1.062)	102006	47.407	47.407
37 Benzene	78.00	14.687	14.673	(0.964)	237996	50.422	50.422
* 42 1,4-Difluorobenzene	114.00	15.234	15.239	(1.000)	222983	50.000	
44 Trichloroethene	130.00	15.644	15.649	(1.027)	86494	44.494	44.494
$ 52 Toluene-d8	98.00	17.615	17.622	(0.872)	207796	48.600	48.600
53 Toluene	91.00	17.732	17.739	(0.877)	234444	47.035	47.035
* 61 Chlorobenzene-d5	117.00	20.211	20.218	(1.000)	193142	50.000	
62 Chlorobenzene	112.00	20.269	20.277	(1.003)	171477	46.448	46.448
$ 69 Bromofluorobenzene	95.00	22.475	22.484	(1.112)	145773	47.185	47.185

JK 1-7-97

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKZIBS

Lab Name: WESTON/ENV. METRICS INC. Contract: 1104-09-001

Lab Code: WESTON' Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GVB253-MB1S

Sample wt/vol: 5.0 (g/mL) G Lab File ID: ZBC01

Level: (low/med) LOW Date Received: 12/01/96

% Moisture: not dec. _____ Date Analyzed: 12/01/96

GC Column: CAP 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/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	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	52	
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	45	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	51	
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	47	
108-90-7	Chlorobenzene	48	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

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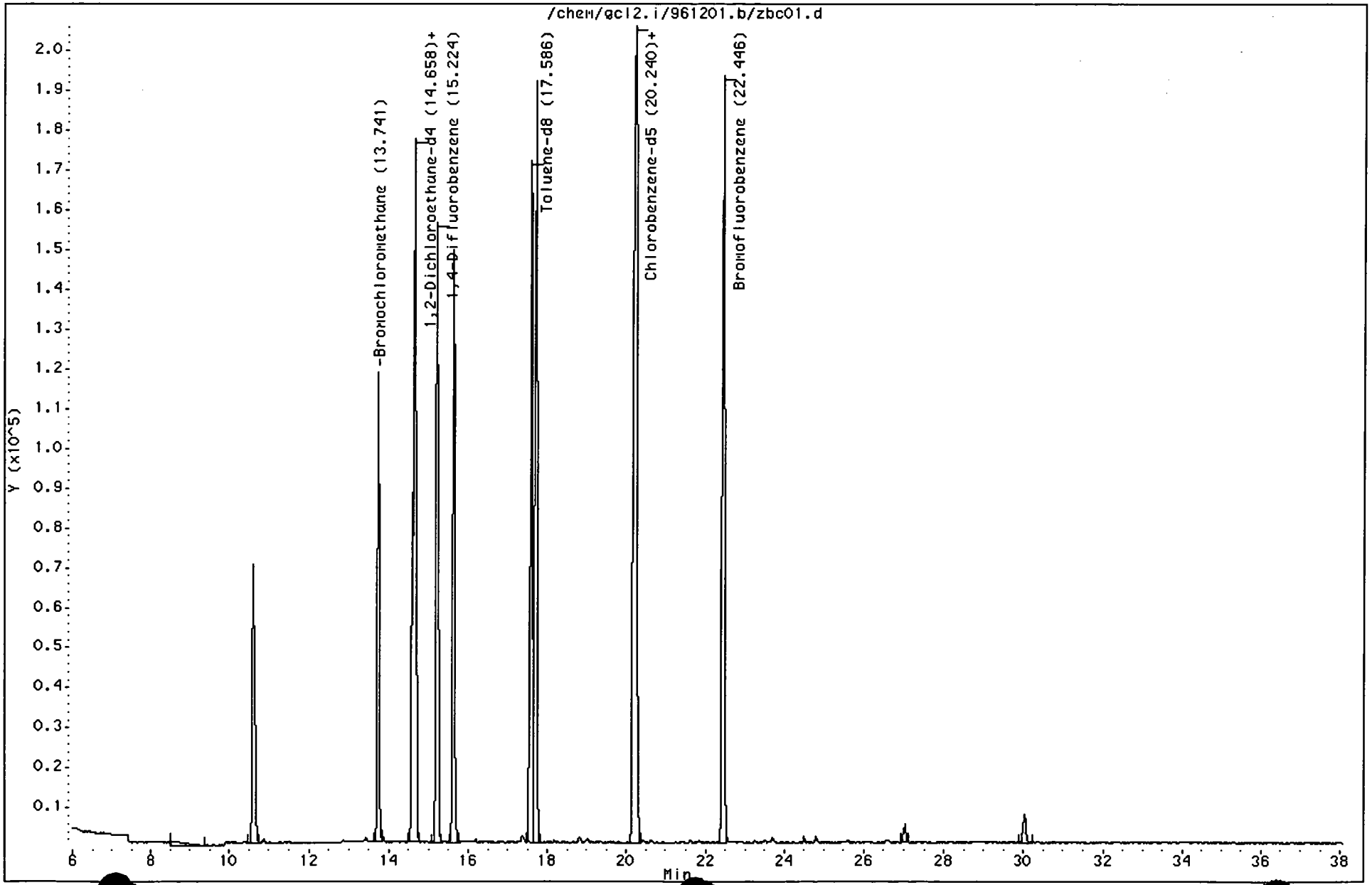
Data File: /chem/gcl2.i/961201.b/zbc01.d
Date : 01-DEC-1996 17:14
Client ID: VBLKZIBS
Sample Info: 96GVB253-MB1S XAC01,[AL=0624He],[DC=00]

Instrument: gcl2.i

Operator: KMC

Column phase: Cap

Column diameter: 0.53



VOLATILE REPORT CLP OLM01.8 SOILS

Data file : /chem/gcl2.i/961201.b/zbc01.d
Lab Smp Id: 96GVB253-MB1S Client Smp ID: VBLKZIBS
Inj Date : 01-DEC-1996 17:14
Operator : KMC Inst ID: gcl2.i
Smp Info : 96GVB253-MB1S XAC01,[AL=0624He],[DC=00]
Misc Info : GCL#2,1,KMC,5GSMP+5ULIS,SS
Comment :
Method : /chem/gcl2.i/961201.b/clp2s.m
Meth Date : 01-Dec-1996 14:26 culverk Quant Type: ISTD
Cal Date : 01-DEC-1996 13:41 Cal File: yac01.d
Als bottle: 1 QC Sample: BS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0624He.sub
Target Version: 3.12
Concentration Formula: Uf * 1/(Ws * (100-M)/100)

Name	Value	Description
Uf	5.000	ng unit correction factor
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
10 1,1-Dichloroethene	96.00	10.600	10.623	(0.772)	53273	51.970	51.970
* 31 Bromochloromethane	127.80	13.722	13.726	(1.000)	52399	50.000	
$ 36 1,2-Dichloroethane-d4	65.00	14.600	14.586	(1.064)	103171	48.488	48.488
37 Benzene	78.00	14.658	14.664	(0.964)	251819	51.146	51.146
* 42 1,4-Difluorobenzene	114.00	15.205	15.211	(1.000)	225927	50.000	
44 Trichloroethene	130.00	15.634	15.621	(1.028)	97903	45.418	45.418
$ 52 Toluene-d8	98.00	17.586	17.573	(0.871)	210953	49.645	49.645
53 Toluene	91.00	17.703	17.691	(0.877)	249543	47.453	47.453
* 61 Chlorobenzene-d5	117.00	20.181	20.170	(1.000)	196110	50.000	
62 Chlorobenzene	112.00	20.240	20.229	(1.003)	182449	47.810	47.810
$ 69 Bromofluorobenzene	95.00	22.446	22.436	(1.112)	148976	47.974	47.974

JK 1-7-97

Reviewer: _____ Date: _____

Weston Environmental Metrics, Inc.
GC/MS Volatile Analysis Logbook

Instrument ID# 2

RFW 21-21G-1621/C-11/96

243

Analysis Date/Time	File Name	RFW Number YYMM G XXX	RFW Number XXX	Sample ID	Sparge No.	Sample Wt./Vol.	Instr. Dil.	Int. Std. No.	pH <2	Comments (MUST include SRN's)	Analyst Initials
1550	YFB29	VSTD 200		STD	16	5u OFW		327 328		5ul FS + 20ul SS + 10ul 371, 372	[illegible]
1701	YGB29	200			13						[illegible]
1741	YHB29	100			14					5ul FS 10ul SS 5ul 371 372	
1823	YIB29	20			15					2ul SS 1ul 371 372	
1904	YJB29	10			16					1ul SS 0.5ul 371 372	
2023	YKB29	200			12						[illegible]
2134	YLB29	10			13						[illegible]
1111	XAB30	BFB tune			1	5ml OFW				2ul 350	[illegible]
1204	XBB30	↓			↓	↓				↓	
1254	YAB30	STD50			2	↓		327 328		5ul FS SS 2.5ul 371 372	
1351	ZAB30	96GVB252-MB1			4						
1442	ZBB30		MB1S		5	5ml OFW				+ 10ul 282	[illegible]
1547	AHG09	9611G675-008			8	5g					
1638	AHG10		008S		9						
1730	AHG11		008T		10						

Analyst Signature/Date: [illegible] 11-30-96 Reviewer Signature/Date: [illegible] 12/1/96 Page 11

Comments:

Reviewer: _____ Date: _____

Weston Environmental Metrics, Inc.
GC/MS Volatile Analysis Logbook

Instrument ID# 2

RFW 21-21G-1621/C-11/96

244

Analysis Date/Time 11/30	File Name	RFW Number YYMM G XXX	RFW Number XXX	Sample ID	Sparge No.	Sample Wt./Vol.	Instr. Dil.	Int. Std. No.	pH <2	Comments (MUST include SRN's)	Analyst Initials
1026	AHG12	96116675	004		12	5g		327 328		5 ℓ IS SS	[illegible]
1123	AHG13		007		13						
2009	AHG14		002		14	0.5g	1/10				
2054	AHG15		003		15						
2140	AHG16		001		16						
2226	AHG17		005		1						
2315	AHG18		006		2						
1203	XAC01	BFB Tue		Tue	2	5mL				+2 ℓ 350 [illegible]	[illegible]
1254	XBC01	"		"	2						
1341	YAC01	V Std	50	Std	4			327 328		5 ℓ IS SS +2.5 ℓ 372, 373	
1456	ZAC01	96GVB253	MB1	Blank	5						[illegible]
1555	ZCC01		MB1 ~~MB1S~~	Blank ~~Spike~~	5						[illegible]
1714	ZBC01		MB1S		6					+10 ℓ 282	
1803	AHG19	96116675	007		9	5g					
1850	AHG20		003		10	0.5g					

Analyst Signature/Date: [signature] 12/1/96 Reviewer Signature/Date: [signature] 12-2-96 Page No. 13

Weston Environmental Metrics, Inc.
% Sol. / % Ash / % Vol. / % Mst.

Method: Solids 2540 G, Std. Methods 17Ed.	Detection Limit: 0.10%	LIMS Batch: 96GTS652

Codes:

TARE	= B
WET	= C
DRY	= A
MUFFLE	= D

Calculations:

% Solids = (A - B) / (C - B) X 100
% Ash "A" = (D - B) / (C - B) X 100
% Ash "D" = (D - B) / (A - B) X 100
% Volatiles = (A - D) / (A - B) X 100
% Moisture = 100 - % Solids

INSTRUMENT CHECKS

Control Limits: 10 +/-0.0005 g | 103-105°C | 550 +/-50°C

Balance #	Gram Wt.	Reading	Oven #	Pre Temp\Post Temp	Furnace #	Furnace Temp
106	10.0	10.0001	225	105.0°C 103.0°C		

I have verified that the weights obtained by the balance interface software match the readings from the analytical balance listed above.

Analyst Signature: Della Tayo Date: 12-5-96

Reviewer Signature: Lynn M. Biedelman Date: 12/5/96

RFW	Dish	Tests	Result (%)	RPD	Weight Name	Weights (grams)	Date	Time	Analyst
96GTS652-MB1	23	I%SOL	0.0		TARE:	1.2546			
					WET:	11.6820	12/04/96	17:13:32	DJT
					DRY:	1.2569	12/05/96	10:45:07	DJT
9611G675-001	24	I%SOL	69.7		TARE:	1.2491			
					WET:	10.3126	12/04/96	17:15:56	DJT
					DRY:	7.5659	12/05/96	10:44:14	DJT
9611G675-002	25	I%SOL	77.6		TARE:	1.2526			
					WET:	11.6087	12/04/96	17:16:43	DJT
					DRY:	9.2864	12/05/96	10:43:41	DJT
9611G675-003	26	I%SOL	96.0		TARE:	1.2642			
					WET:	10.9664	12/04/96	17:18:03	DJT
					DRY:	10.5771	12/05/96	10:44:25	DJT
1G675-004	27	I%SOL	53.6		TARE:	1.2640			
					WET:	12.0169	12/04/96	17:20:29	DJT
					DRY:	7.0269	12/05/96	10:44:48	DJT

Weston Environmental Metrics, Inc.
% Sol. / % Ash / % Vol. / % Mst.

LIMS Batch: 96GTS652

RFW	Dish	Tests	Result (%)	RPD	Weight Name	Weights (grams)	Date	Time	Analyst
9611G675-005	28	I%SOL	71.6		TARE:	1.2622			
					WET:	10.6971	12/04/96	17:21:44	DJT
					DRY:	8.0161	12/05/96	10:43:23	DJT
9611G675-006	29	I%SOL	75.9		TARE:	1.2650			
					WET:	11.6024	12/04/96	17:22:36	DJT
					DRY:	9.1078	12/05/96	10:42:34	DJT
9611G675-007	30	I%SOL	92.4		TARE:	1.2629			
					WET:	10.5920	12/04/96	17:23:24	DJT
					DRY:	9.8786	12/05/96	10:42:24	DJT
9611G675-008	31	I%SOL	53.4		TARE:	1.2538			
					WET:	11.6039	12/04/96	17:24:31	DJT
					DRY:	6.7855	12/05/96	10:44:37	DJT
1G770-001	32	I%SOL	84.0		TARE:	1.2564			
					WET:	11.7927	12/04/96	17:25:35	DJT
					DRY:	10.1076	12/05/96	10:44:02	DJT
9611G789-001	33	I%SOL	55.6		TARE:	1.2560			
					WET:	10.7057	12/04/96	17:26:19	DJT
					DRY:	6.5086	12/05/96	10:43:52	DJT
9612G832-001	34	I%SOL	54.3		TARE:	1.2532			
					WET:	12.1494	12/04/96	17:27:13	DJT
					DRY:	7.1705	12/05/96	10:42:45	DJT
9612G833-001	35	I%SOL	55.9		TARE:	1.2549			
					WET:	11.5018	12/04/96	17:28:27	DJT
					DRY:	6.9827	12/05/96	10:42:57	DJT
9612G833-001R	36	I%SOLR	56.3	0.7	TARE:	1.2660			
					WET:	11.1208	12/04/96	17:29:24	DJT
					DRY:	6.8114	12/05/96	10:43:09	DJT

*** End of % Solids Report ***

SEMIVOLATILES BY GC/MS
USEPA-WILCOX OIL
RFW# 9611G675

Laboratory Chronicle 01
Chain of Custody 02
Data Summary 07
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- A. Surrogate Recovery Summary (Form II)
- B. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
- C. Method Blank Summary (Form IV)
- D. Instrument Performance Check (Form V)
- E. Internal Standard Area and RT Summary (Form VIII)

III. Sample Data Package 83
- A. Sample Data in Order of Analysis
  - 1. Tabulated Results (Form I)
  - 2. Tentatively Identified Compound (Form 1E)
  - 3. Raw Data in Order
    - a. Reconstructed Ion Chromatograms
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IV. Standards Data Package 358
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V. Raw Quality Control Data Package 902
- A. GC/MS Tuning and Calibration Standard DFTPP
  - 1. Bar Graph
  - 2. Mass Listing
- B. Blank Data
  - 1. Tabulated Results (Form I)
  - 2. TIC Results (Form IB)
  - 3. Raw Data
    - a. Reconstructed Ion Chromatograms and Quantitation Reports
    - b. HSL Spectra
    - c. TIC Spectra
    - d. GC/MS Library Search for TIC
- C. Matrix Spike/Matrix Spike Duplicate Data
  - 1. Tabulated Results (Form I)
  - 2. Raw Data
    - a. Reconstructed Ion Chromatograms
    - b. Quantitation Reports
- D. Run Log Summary

Weston Environmental Metrics, Inc.
BNA ANALYTICAL DATA PACKAGE FOR
USEPA-Wilcox Oil

RFW LOT # :9611G675

CLIENT ID	RFW #	MTX	PREP #	COLLECTN	DATE REC	EXT/PREP	ANALYSIS
WS-01	001	S	96GB0654	11/20/96	11/21/96	11/27/96	12/12/96
WS-02	002	S	96GB0654	11/20/96	11/21/96	11/27/96	12/12/96
WS-03	003	S	96GB0654	11/20/96	11/21/96	11/27/96	12/12/96
WS-04	004	S	96GB0654	11/20/96	11/21/96	11/27/96	12/12/96
WS-05	005	S	96GB0654	11/20/96	11/21/96	11/27/96	12/13/96
WS-06	006	S	96GB0654	11/20/96	11/21/96	11/27/96	12/13/96
WS-07	007	S	96GB0654	11/20/96	11/21/96	11/27/96	12/16/96
WS-08	008	S	96GB0654	11/20/96	11/21/96	11/27/96	12/13/96
WS-08	008 A1	S	96GB0654	11/20/96	11/21/96	11/27/96	12/16/96
LAB QC:							
SBLKBS	MB1	S	96GB0654	N/A	N/A	11/27/96	12/12/96
SBLKBS	MB1 BS	S	96GB0654	N/A	N/A	11/27/96	12/12/96
SBLKBS	MB1 BSD	S	96GB0654	N/A	N/A	11/27/96	12/12/96

NY CERTIFICATION # 11006

WESTON
MANAGERS DESIGNERS/CONSULTANTS

I. CHAIN OF CUSTODY

Custody Transfer Record/Lab Work Request

WESTON

3

WESTON Analytics Use Only
9611G675

Client: USEPA-Wilcox Oil
Work Order: 04606-056-026-0600-04
Date Rec'd.: 11-2-96 Date Due: 12-12-96
RFW Contact: Chuck Maw
Client Contact/Phone: Diane Williams

Refrigerator#				5	8	8				
#/Type Container				1G	1G	1G				
Volume				2oz	4oz	8oz				
Preservative										
ANALYSES REQUESTED				624/1	HSL Metals CN	TPHC 625/1				
WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected							
001	WS-01	S	11-20-96	X	X	X				
002	WS-02	↓	↓	↓	↓	↓				
003	WS-03									
004	WS-04									
005	WS-05									
006	WS-06									
007	WS-07									
008	WS-08	↓	↓	↓	↓	↓				

Matrix:
S - Soil, SE - Sediment, SO - Solid
W - Water, O - Oil, A - Air, WI - Wipe
DS - Drum Solids, DL - Drum Liquids, F - Fish, L - EP/TCLP Leachate
X - Other

Special Instructions: QC + Del CLP

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
		Sherri Scott	11-21-96	1407					

WESTON Analytics Use Only

Samples Were:
1 Shipped or Hand-Delivered
NOTES: Fed-X

2 Ambient or Chilled
NOTES: 4.8°C + 2.9°C

3 Received Broken/Leaking (Improperly Sealed)
Y N
NOTES:

4 Properly Preserved
Y N
NOTES:

5 Received Within Holding Times
Y N
NOTES:

COC Tape Was:
1 Present on Outer Package Y N
2 Unbroken on Outer Package Y N
3 Present on Sample Y N
4 Unbroken on Sample Y N
NOTES: Date + Signature

SS 11-21-96

COC Record Was:
1 Present Upon Receipt of Samples Y N

Discrepancies Between Sample Labels and COC Record? Y N
NOTES:

RFW 21-21-001/A-12/88

Weston Environmental Metrics, Inc.
Internal Sample Custody Transfer Record

RFW Lot#: 9611G675 Client: USEPA-Wilcox Oil

Sample No.	Analysis	Relinquished by:	Received by:	Date	Time	Comments
1-8	624H	KNS	[illegible]	11/21/96	1450	
1-8	metals	P. Buhrt	Paul Holmgren	11-25-96	15:10	
1-8	metals	Paul Holmgren	P. Buhrt	11/26/96	15:12	
1-8	ORG. EXT	K Merkle	[illegible]	11/27/96	11:00	
1-8	ORG EXT	[illegible]	P. Buhrt	11/27/96	13:15	
1-8	CN	KNS	Bi D. W	11-30-96	9:05	
1-8	CN	Bi D W	KNS	11-30-96	13:04	
1-8	metals	P. Buhrt	Paul Holmgren	12/3/96	13:45	
1-8	metals	Paul Holmgren	KN	12/3/96	16:12	
1-8	% Sol	P. Buhrt	Dellacatigo	12-4-96	10.45	
1-8	% Sol	Dellacatigo	KNS	12-4-96	17.45	
1-8	IPHC	KN	J. Kress	12-6-96	9:05	
1-8	IPHC	J Kress	Sherri Scott	12-6-96	1430	
1-8	Metal	R. Henn	[illegible]	12-6-96	18:52	
1-8	Metals	[illegible] Bonner	K Merkle	12/9/96	8:40	

RFW No. 21-21G-0801/A-1/96

NVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Wilcox Oil

SAMPLERS: (Signature) Eric Tate (Eric Tate)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA	BNAs	Total Metals	TPH			REMARKS
WS-01	11/20/96	1430		X	Pond 1	3	X	X	X	X			
WS-02	11/20/96	1450		X	Pond 1	3	X	X	X	X			
WS-03	11/20/96	1310		X	Lee Residence	3	X	X	X	X			
WS-04	11/20/96	1040		X	Pond 2	3	X	X	X	X			
WS-05	11/20/96	1000		X	Pit	3	X	X	X	X			
WS-06	11/20/96	1010		X	Pit	3	X	X	X	X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Eric Tate	11/20/96 1730	FedEx - Tulsa OK			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		Sherri Scott	11-21-96 1400		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

4°C

6-07435

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Wilcox Oil

SAMPLERS: (Signature) Eric Tate (Eric Tate)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	VOA	BNAs	Total Metals	TPH			REMARKS
WS-07	11/20/96	1115		X	Tank Drainage Path	3	X	X	X	X			
WS-08	11/20/96	1400		X	Tank Bottom	3	X	X	X	X			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Eric Tate	11/20/96 1730	FedEx - Tulsa, OK			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		Sherri Scott	11-21-96 1351		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

2.9°C

6-07434

II. DATA SUMMARY

Weston Environmental Metrics, Inc.
2417 Bond Street
University Park, Illinois 60466-3182
Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-01
Project # 04606-056-026-0600
Lab ID: 9611G675-001
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	70000	U
bis(2-Chloroethyl)ether	BRL	70000	U
2-Chlorophenol	BRL	70000	U
1,3-Dichlorobenzene	BRL	70000	U
1,4-Dichlorobenzene	BRL	70000	U
1,2-Dichlorobenzene	BRL	70000	U
2-Methylphenol	BRL	70000	U
2,2'-oxybis(1-Chloropropane)	BRL	70000	U
4-Methylphenol	BRL	70000	U
N-Nitroso-di-n-propylamine	BRL	70000	U
Hexachloroethane	BRL	70000	U
Nitrobenzene	BRL	70000	U
Isophorone	BRL	70000	U
2-Nitrophenol	BRL	70000	U
2,4-Dimethylphenol	BRL	70000	U
bis(2-Chloroethoxy)methane	BRL	70000	U
2,4-Dichlorophenol	BRL	70000	U

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Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	70000	U
Naphthalene	BRL	70000	U
4-Chloroaniline	BRL	70000	U
Hexachlorobutadiene	BRL	70000	U
4-Chloro-3-methylphenol	BRL	70000	U
2-Methylnaphthalene	BRL	70000	U
Hexachlorocyclopentadiene	BRL	70000	U
2,4,6-Trichlorophenol	BRL	70000	U
2,4,5-Trichlorophenol	BRL	180000	U
2-Chloronaphthalene	BRL	70000	U
2-Nitroaniline	BRL	180000	U
Dimethylphthalate	BRL	70000	U
Acenaphthylene	BRL	70000	U
2,6-Dinitrotoluene	BRL	70000	U
3-Nitroaniline	BRL	180000	U
Acenaphthene	BRL	70000	U
2,4-Dinitrophenol	BRL	180000	U

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Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	180000	U
Dibenzofuran	BRL	70000	U
2,4-Dinitrotoluene	BRL	70000	U
Diethylphthalate	BRL	70000	U
4-Chlorophenyl-phenylether	BRL	70000	U
Fluorene	BRL	70000	U
4-Nitroaniline	BRL	180000	U
4,6-Dinitro-2-methylphenol	BRL	180000	U
N-Nitrosodiphenylamine (1)	BRL	70000	U
4-Bromophenyl-phenylether	BRL	70000	U
Hexachlorobenzene	BRL	70000	U
Pentachlorophenol	BRL	180000	U
Phenanthrene	BRL	70000	U
Anthracene	BRL	70000	U
Carbazole	BRL	70000	U
Di-n-butylphthalate	BRL	70000	U
Fluoranthene	BRL	70000	U

(1) - Cannot be separated from Diphenylamine.

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Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	7800	70000	J
Butylbenzylphthalate	BRL	70000	U
3,3'-Dichlorobenzidine	BRL	70000	U
Benzo(a)anthracene	BRL	70000	U
Chrysene	BRL	70000	U
bis(2-Ethylhexyl)phthalate	BRL	70000	U
Di-n-octylphthalate	BRL	70000	U
Benzo(b)fluoranthene	BRL	70000	U
Benzo(k)fluoranthene	BRL	70000	U
Benzo(a)pyrene	BRL	70000	U
Indeno(1,2,3-cd)pyrene	BRL	70000	U
Dibenzo(a,h)anthracene	BRL	70000	U
Benzo(g,h,i)perylene	BRL	70000	U

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Lab ID: 9611G675-001
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

20 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN KETONE	5.262	19000	JBA
SUBST NAPHTHALENE	10.208	17000	J
UNKNOWN CYCLOALKANE	10.558	19000	J
SUBST. NAPHTHALENE	11.210	15000	J
UNKNOWN ALKANE	12.758	21000	J
UNKNOWN ALKANE	13.634	31000	J
UNKNOWN CYCLOALKANE	13.732	18000	J
UNKNOWN HYDROCARBON	14.696	22000	J
UNKNOWN ALKANE	15.075	41000	J
UNKNOWN ALKANE	16.195	67000	J

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Lab ID: 9611G675-001
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN ALKANE	19.106	280000	J
HEXADECANE, 2,6,10,14-TETRAM	20.235	320000	NJ
UNKNOWN ALKANE	21.101	170000	J
UNKNOWN CYCLOALKANE	22.922	180000	J
UNKNOWN ALKANE	24.372	240000	J
UNKNOWN HYDROCARBON	25.083	240000	J
UNKNOWN HYDROCARBON	26.466	130000	J
UNKNOWN HYDROCARBON	26.563	120000	J
Unknown	30.535	260000	J
Unknown	31.985	350000	J

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	64000	U
bis(2-Chloroethyl)ether	BRL	64000	U
2-Chlorophenol	BRL	64000	U
1,3-Dichlorobenzene	BRL	64000	U
1,4-Dichlorobenzene	BRL	64000	U
1,2-Dichlorobenzene	BRL	64000	U
2-Methylphenol	BRL	64000	U
2,2'-oxybis(1-Chloropropane)	BRL	64000	U
4-Methylphenol	BRL	64000	U
N-Nitroso-di-n-propylamine	BRL	64000	U
Hexachloroethane	BRL	64000	U
Nitrobenzene	BRL	64000	U
Isophorone	BRL	64000	U
2-Nitrophenol	BRL	64000	U
2,4-Dimethylphenol	BRL	64000	U
bis(2-Chloroethoxy)methane	BRL	64000	U
2,4-Dichlorophenol	BRL	64000	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	64000	U
Naphthalene	BRL	64000	U
4-Chloroaniline	BRL	64000	U
Hexachlorobutadiene	BRL	64000	U
4-Chloro-3-methylphenol	BRL	64000	U
2-Methylnaphthalene	BRL	64000	U
Hexachlorocyclopentadiene	BRL	64000	U
2,4,6-Trichlorophenol	BRL	64000	U
2,4,5-Trichlorophenol	BRL	160000	U
2-Chloronaphthalene	BRL	64000	U
2-Nitroaniline	BRL	160000	U
Dimethylphthalate	BRL	64000	U
Acenaphthylene	BRL	64000	U
2,6-Dinitrotoluene	BRL	64000	U
3-Nitroaniline	BRL	160000	U
Acenaphthene	BRL	64000	U
2,4-Dinitrophenol	BRL	160000	U

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Date: Wednesday January 8th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	160000	U
Dibenzofuran	BRL	64000	U
2,4-Dinitrotoluene	BRL	64000	U
Diethylphthalate	BRL	64000	U
4-Chlorophenyl-phenylether	BRL	64000	U
Fluorene	7800	64000	J
4-Nitroaniline	BRL	160000	U
4,6-Dinitro-2-methylphenol	BRL	160000	U
N-Nitrosodiphenylamine (1)	BRL	64000	U
4-Bromophenyl-phenylether	BRL	64000	U
Hexachlorobenzene	BRL	64000	U
Pentachlorophenol	BRL	160000	U
Phenanthrene	27000	64000	J
Anthracene	BRL	64000	U
Carbazole	BRL	64000	U
Di-n-butylphthalate	BRL	64000	U
Fluoranthene	BRL	64000	U

(1) - Cannot be separated from Diphenylamine.

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	230000	64000	
Butylbenzylphthalate	BRL	64000	U
3,3'-Dichlorobenzidine	BRL	64000	U
Benzo(a)anthracene	23000	64000	J
Chrysene	49000	64000	J
bis(2-Ethylhexyl)phthalate	BRL	64000	U
Di-n-octylphthalate	BRL	64000	U
Benzo(b)fluoranthene	BRL	64000	U
Benzo(k)fluoranthene	BRL	64000	U
Benzo(a)pyrene	BRL	64000	U
Indeno(1,2,3-cd)pyrene	BRL	64000	U
Dibenzo(a,h)anthracene	BRL	64000	U
Benzo(g,h,i)perylene	BRL	64000	U

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To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

18 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN ALKANE	15.104	18000	J
SUBST NAPHTHALENE	15.610	14000	J
SUBST NAPHTHALENE	15.785	19000	J
SUBST NAPHTHALENE	15.844	14000	J
UNKNOWN ALKANE	16.223	46000	J
SUBST NAPHTHALENE	16.885	21000	J
SUBST NAPHTHALENE	17.129	14000	J
SUBST NAPHTHALENE	17.392	24000	J
UNKNOWN ALKANE	17.508	14000	J
UNKNOWN ALKANE	19.144	440000	J

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Attn: Ms. Diane Williams

Date: Thursday January 9th, 1997

RE: WS-02
Project # 04606-056-026-0600
Lab ID: 9611G675-002
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN ALKANE	20.283	560000	J
UNKNOWN ALKANE	21.149	360000	J
UNKNOWN PAH	21.675	310000	J
Unknown	22.172	340000	J
Unknown	22.960	360000	J
UNKNOWN HC + UNKNOWN	24.625	390000	J
UNKNOWN HYDROCARBON	25.10	380000	J
UNKNOWN	32.08	380000	J

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-03
Project # 04606-056-026-0600
Lab ID: 9611G675-003
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	49000	U
bis(2-Chloroethyl)ether	BRL	49000	U
2-Chlorophenol	BRL	49000	U
1,3-Dichlorobenzene	BRL	49000	U
1,4-Dichlorobenzene	BRL	49000	U
1,2-Dichlorobenzene	BRL	49000	U
2-Methylphenol	BRL	49000	U
2,2'-oxybis(1-Chloropropane)	BRL	49000	U
4-Methylphenol	BRL	49000	U
N-Nitroso-di-n-propylamine	BRL	49000	U
Hexachloroethane	BRL	49000	U
Nitrobenzene	BRL	49000	U
Isophorone	BRL	49000	U
2-Nitrophenol	BRL	49000	U
2,4-Dimethylphenol	BRL	49000	U
bis(2-Chloroethoxy)methane	BRL	49000	U
2,4-Dichlorophenol	BRL	49000	U

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Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	49000	U
Naphthalene	BRL	49000	U
4-Chloroaniline	BRL	49000	U
Hexachlorobutadiene	BRL	49000	U
4-Chloro-3-methylphenol	BRL	49000	U
2-Methylnaphthalene	BRL	49000	U
Hexachlorocyclopentadiene	BRL	49000	U
2,4,6-Trichlorophenol	BRL	49000	U
2,4,5-Trichlorophenol	BRL	120000	U
2-Chloronaphthalene	BRL	49000	U
2-Nitroaniline	BRL	120000	U
Dimethylphthalate	BRL	49000	U
Acenaphthylene	BRL	49000	U
2,6-Dinitrotoluene	BRL	49000	U
3-Nitroaniline	BRL	120000	U
Acenaphthene	BRL	49000	U
2,4-Dinitrophenol	BRL	120000	U

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Sample Date: 11/20/96
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Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	120000	U
Dibenzofuran	BRL	49000	U
2,4-Dinitrotoluene	BRL	49000	U
Diethylphthalate	BRL	49000	U
4-Chlorophenyl-phenylether	BRL	49000	U
Fluorene	BRL	49000	U
4-Nitroaniline	BRL	120000	U
4,6-Dinitro-2-methylphenol	BRL	120000	U
N-Nitrosodiphenylamine (1)	BRL	49000	U
4-Bromophenyl-phenylether	BRL	49000	U
Hexachlorobenzene	BRL	49000	U
Pentachlorophenol	BRL	120000	U
Phenanthrene	BRL	49000	U
Anthracene	BRL	49000	U
Carbazole	BRL	49000	U
Di-n-butylphthalate	BRL	49000	U
Fluoranthene	BRL	49000	U

(1) - Cannot be separated from Diphenylamine.

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Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	54000	49000	
Butylbenzylphthalate	BRL	49000	U
3,3'-Dichlorobenzidine	BRL	49000	U
Benzo(a)anthracene	BRL	49000	U
Chrysene	BRL	49000	U
bis(2-Ethylhexyl)phthalate	BRL	49000	U
Di-n-octylphthalate	BRL	49000	U
Benzo(b)fluoranthene	BRL	49000	U
Benzo(k)fluoranthene	BRL	49000	U
Benzo(a)pyrene	BRL	49000	U
Indeno(1,2,3-cd)pyrene	BRL	49000	U
Dibenzo(a,h)anthracene	BRL	49000	U
Benzo(g,h,i)perylene	BRL	49000	U

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RE: WS-03
Project # 04606-056-026-0600
Lab ID: 9611G675-003
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

18 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN CYCLOALKANE	13.534	11000	J
UNKNOWN ALKANE	13.660	16000	J
UNKNOWN ALKANE	16.230	40000	J
UNKNOWN ALKANE	19.141	170000	J
UNKNOWN ALKANE	19.648	24000	J
UNKNOWN ALKANE	20.271	180000	J
UNKNOWN ALKANE	21.127	94000	J
Unknown	22.150	75000	J
Unknown	22.928	87000	J
UNKNOWN ALKANE	24.369	130000	J

Weston Environmental Metrics, Inc.
2417 Bond Street
University Park, Illinois 60466-3182
Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-03
Project # 04606-056-026-0600
Lab ID: 9611G675-003
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN ALKANE	25.070	130000	J
Unknown	25.255	52000	J
Unknown	25.606	100000	J
UNKNOWN HYDROCARBON	26.988	62000	J
UNKNOWN HYDROCARBON	27.776	56000	J
Unknown	27.893	55000	J
UNKNOWN HYDROCARBON	28.351	43000	J
UNKNOWN HYDROCARBON	29.324	63000	J

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5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	3600	U
bis(2-Chloroethyl)ether	BRL	3600	U
2-Chlorophenol	BRL	3600	U
1,3-Dichlorobenzene	BRL	3600	U
1,4-Dichlorobenzene	BRL	3600	U
1,2-Dichlorobenzene	BRL	3600	U
2-Methylphenol	BRL	3600	U
2,2'-oxybis(1-Chloropropane)	BRL	3600	U
4-Methylphenol	BRL	3600	U
N-Nitroso-di-n-propylamine	BRL	3600	U
Hexachloroethane	BRL	3600	U
Nitrobenzene	BRL	3600	U
Isophorone	BRL	3600	U
2-Nitrophenol	BRL	3600	U
2,4-Dimethylphenol	BRL	3600	U
bis(2-Chloroethoxy)methane	BRL	3600	U
2,4-Dichlorophenol	BRL	3600	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	3600	U
Naphthalene	BRL	3600	U
4-Chloroaniline	BRL	3600	U
Hexachlorobutadiene	BRL	3600	U
4-Chloro-3-methylphenol	BRL	3600	U
2-Methylnaphthalene	BRL	3600	U
Hexachlorocyclopentadiene	BRL	3600	U
2,4,6-Trichlorophenol	BRL	3600	U
2,4,5-Trichlorophenol	BRL	9000	U
2-Chloronaphthalene	BRL	3600	U
2-Nitroaniline	BRL	9000	U
Dimethylphthalate	BRL	3600	U
Acenaphthylene	BRL	3600	U
2,6-Dinitrotoluene	BRL	3600	U
3-Nitroaniline	BRL	9000	U
Acenaphthene	BRL	3600	U
2,4-Dinitrophenol	BRL	9000	U

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Date: Wednesday January 8th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	9000	U
Dibenzofuran	BRL	3600	U
2,4-Dinitrotoluene	BRL	3600	U
Diethylphthalate	BRL	3600	U
4-Chlorophenyl-phenylether	BRL	3600	U
Fluorene	BRL	3600	U
4-Nitroaniline	BRL	9000	U
4,6-Dinitro-2-methylphenol	BRL	9000	U
N-Nitrosodiphenylamine (1)	BRL	3600	U
4-Bromophenyl-phenylether	BRL	3600	U
Hexachlorobenzene	BRL	3600	U
Pentachlorophenol	BRL	9000	U
Phenanthrene	BRL	3600	U
Anthracene	BRL	3600	U
Carbazole	BRL	3600	U
Di-n-butylphthalate	BRL	3600	U
Fluoranthene	BRL	3600	U

(1) - Cannot be separated from Diphenylamine.

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Date: Wednesday January 8th, 1997

RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	BRL	3600	U
Butylbenzylphthalate	BRL	3600	U
3,3'-Dichlorobenzidine	BRL	3600	U
Benzo(a)anthracene	BRL	3600	U
Chrysene	BRL	3600	U
bis(2-Ethylhexyl)phthalate	BRL	3600	U
Di-n-octylphthalate	BRL	3600	U
Benzo(b)fluoranthene	BRL	3600	U
Benzo(k)fluoranthene	BRL	3600	U
Benzo(a)pyrene	BRL	3600	U
Indeno(1,2,3-cd)pyrene	BRL	3600	U
Dibenzo(a,h)anthracene	BRL	3600	U
Benzo(g,h,i)perylene	BRL	3600	U

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RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

16 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN KETONE	5.372	32000	JBA
UNKNOWN HYDROCARBON	5.684	3800	JB
UNKNOWN HYDROCARBON	5.908	3100	JB
UNKNOWN HYDROCARBON	5.966	2200	JB
Unknown	6.064	740	J
UNKNOWN ALKANE	6.132	4200	JB
UNKNOWN HYDROCARBON	6.560	760	JB
Unknown	7.621	7000	J
Unknown	7.981	3200	JB
Unknown	8.974	14000	JB

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RE: WS-04
Project # 04606-056-026-0600
Lab ID: 9611G675-004
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN KETONE	9.374	1300	JB
Unknown	10.328	44000	J
Unknown	12.060	740	J
HEXADECANOIC ACID	21.776	5300	NJB
UNKNOWN ACID	23.646	880	J
Unknown	26.469	3800	JB

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	340000	U
bis(2-Chloroethyl)ether	BRL	340000	U
2-Chlorophenol	BRL	340000	U
1,3-Dichlorobenzene	BRL	340000	U
1,4-Dichlorobenzene	BRL	340000	U
1,2-Dichlorobenzene	BRL	340000	U
2-Methylphenol	BRL	340000	U
2,2'-oxybis(1-Chloropropane)	BRL	340000	U
4-Methylphenol	BRL	340000	U
N-Nitroso-di-n-propylamine	BRL	340000	U
Hexachloroethane	BRL	340000	U
Nitrobenzene	BRL	340000	U
Isophorone	BRL	340000	U
2-Nitrophenol	BRL	340000	U
2,4-Dimethylphenol	BRL	340000	U
bis(2-Chloroethoxy)methane	BRL	340000	U
2,4-Dichlorophenol	BRL	340000	U

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Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	340000	U
Naphthalene	300000	340000	J
4-Chloroaniline	BRL	340000	U
Hexachlorobutadiene	BRL	340000	U
4-Chloro-3-methylphenol	BRL	340000	U
2-Methylnaphthalene	1400000	340000	
Hexachlorocyclopentadiene	BRL	340000	U
2,4,6-Trichlorophenol	BRL	340000	U
2,4,5-Trichlorophenol	BRL	860000	U
2-Chloronaphthalene	BRL	340000	U
2-Nitroaniline	BRL	860000	U
Dimethylphthalate	BRL	340000	U
Acenaphthylene	BRL	340000	U
2,6-Dinitrotoluene	BRL	340000	U
3-Nitroaniline	BRL	860000	U
Acenaphthene	66000	340000	J
2,4-Dinitrophenol	BRL	860000	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	860000	U
Dibenzofuran	BRL	340000	U
2,4-Dinitrotoluene	BRL	340000	U
Diethylphthalate	BRL	340000	U
4-Chlorophenyl-phenylether	BRL	340000	U
Fluorene	140000	340000	J
4-Nitroaniline	BRL	860000	U
4,6-Dinitro-2-methylphenol	BRL	860000	U
N-Nitrosodiphenylamine (1)	BRL	340000	U
4-Bromophenyl-phenylether	BRL	340000	U
Hexachlorobenzene	BRL	340000	U
Pentachlorophenol	BRL	860000	U
Phenanthrene	520000	340000	
Anthracene	70000	340000	J
Carbazole	BRL	340000	U
Di-n-butylphthalate	BRL	340000	U
Fluoranthene	BRL	340000	U

(1) - Cannot be separated from Diphenylamine.

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	230000	340000	J
Butylbenzylphthalate	BRL	340000	U
3,3'-Dichlorobenzidine	BRL	340000	U
Benzo(a)anthracene	BRL	340000	U
Chrysene	BRL	340000	U
bis(2-Ethylhexyl)phthalate	BRL	340000	U
Di-n-octylphthalate	BRL	340000	U
Benzo(b)fluoranthene	BRL	340000	U
Benzo(k)fluoranthene	BRL	340000	U
Benzo(a)pyrene	BRL	340000	U
Indeno(1,2,3-cd)pyrene	BRL	340000	U
Dibenzo(a,h)anthracene	BRL	340000	U
Benzo(g,h,i)perylene	BRL	340000	U

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To: USEPA-Wilcox Oil
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5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

20 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN ALKANE	12.601	250000	J
UNKNOWN ALKANE	12.796	250000	J
UNKNOWN ALKANE	13.663	310000	J
SUBST. NAPHTHALENE	14.120	1500000	J
SUBST. NAPHTHALENE	14.334	930000	J
Unknown	14.734	420000	J
UNKNOWN ALKANE	15.123	470000	J
SUBST BENZENE	15.396	400000	J
SUBST NAPHTHALENE	15.814	1500000	J
SUBST NAPHTHALENE	15.872	1400000	J

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Date: Wednesday January 8th, 1997

RE: WS-05
Project # 04606-056-026-0600
Lab ID: 9611G675-005
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN ALKANE	16.233	960000	J
SUBST NAPHTHALENE	16.914	1200000	J
SUBST NAPHTHALENE	17.411	480000	J
SUBST NAPHTHALENE	17.469	360000	J
UNKNOWN ALKANE	17.518	360000	J
UNKNOWN ALKANE	20.273	1500000	J
UNKNOWN ALKANE	21.120	910000	J
UNKNOWN ALKANE	21.246	880000	J
UNKNOWN ALKANE	22.230	850000	J
UNKNOWN HYDROCARBON	27.360	680000	J

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	320000	U
bis(2-Chloroethyl)ether	BRL	320000	U
2-Chlorophenol	BRL	320000	U
1,3-Dichlorobenzene	BRL	320000	U
1,4-Dichlorobenzene	BRL	320000	U
1,2-Dichlorobenzene	BRL	320000	U
2-Methylphenol	BRL	320000	U
2,2'-oxybis(1-Chloropropane)	BRL	320000	U
4-Methylphenol	BRL	320000	U
N-Nitroso-di-n-propylamine	BRL	320000	U
Hexachloroethane	BRL	320000	U
Nitrobenzene	BRL	320000	U
Isophorone	BRL	320000	U
2-Nitrophenol	BRL	320000	U
2,4-Dimethylphenol	BRL	320000	U
bis(2-Chloroethoxy)methane	BRL	320000	U
2,4-Dichlorophenol	BRL	320000	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	320000	U
Naphthalene	150000	320000	J
4-Chloroaniline	BRL	320000	U
Hexachlorobutadiene	BRL	320000	U
4-Chloro-3-methylphenol	BRL	320000	U
2-Methylnaphthalene	760000	320000	
Hexachlorocyclopentadiene	BRL	320000	U
2,4,6-Trichlorophenol	BRL	320000	U
2,4,5-Trichlorophenol	BRL	790000	U
2-Chloronaphthalene	BRL	320000	U
2-Nitroaniline	BRL	790000	U
Dimethylphthalate	BRL	320000	U
Acenaphthylene	BRL	320000	U
2,6-Dinitrotoluene	BRL	320000	U
3-Nitroaniline	BRL	790000	U
Acenaphthene	33000	320000	J
2,4-Dinitrophenol	BRL	790000	U

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Date: Wednesday January 8th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	790000	U
Dibenzofuran	BRL	320000	U
2,4-Dinitrotoluene	BRL	320000	U
Diethylphthalate	BRL	320000	U
4-Chlorophenyl-phenylether	BRL	320000	U
Fluorene	80000	320000	J
4-Nitroaniline	BRL	790000	U
4,6-Dinitro-2-methylphenol	BRL	790000	U
N-Nitrosodiphenylamine (1)	BRL	320000	U
4-Bromophenyl-phenylether	BRL	320000	U
Hexachlorobenzene	BRL	320000	U
Pentachlorophenol	BRL	790000	U
Phenanthrene	370000	320000	
Anthracene	BRL	320000	U
Carbazole	BRL	320000	U
Di-n-butylphthalate	BRL	320000	U
Fluoranthene	32000	320000	J

(1) - Cannot be separated from Diphenylamine.

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Date: Wednesday January 8th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	260000	320000	J
Butylbenzylphthalate	BRL	320000	U
3,3'-Dichlorobenzidine	BRL	320000	U
Benzo(a)anthracene	BRL	320000	U
Chrysene	66000	320000	J
bis(2-Ethylhexyl)phthalate	BRL	320000	U
Di-n-octylphthalate	BRL	320000	U
Benzo(b)fluoranthene	BRL	320000	U
Benzo(k)fluoranthene	BRL	320000	U
Benzo(a)pyrene	BRL	320000	U
Indeno(1,2,3-cd)pyrene	BRL	320000	U
Dibenzo(a,h)anthracene	BRL	320000	U
Benzo(g,h,i)perylene	BRL	320000	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

20 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
SUBST BENZENE	11.828	190000	J
UNKNOWN ALKANE	12.032	110000	J
UNKNOWN ALKANE	12.597	180000	J
UNKNOWN ALKANE	12.782	160000	J
UNKNOWN ALKANE	13.658	220000	J
SUBST. NAPHTHALENE	14.330	500000	J
Unknown	14.729	200000	J
UNKNOWN ALKANE	15.108	180000	J
SUBST NAPHTHALENE	15.459	690000	J
SUBST NAPHTHALENE	15.858	470000	J

Weston Environmental Metrics, Inc.
2417 Bond Street
University Park, Illinois 60466-3182
Phone: (708) 534-5200 Fax: (708) 534-5211

To: USEPA-Wilcox Oil
Roy F. Weston, Incorporated
5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-06
Project # 04606-056-026-0600
Lab ID: 9611G675-006
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
SUBST NAPHTHALENE	16.063	250000	J
UNKNOWN ALKANE	16.228	350000	J
UNKNOWN ALKANE	16.734	350000	J
SUBST NAPHTHALENE	17.231	190000	J
UNKNOWN ALKANE	18.487	1300000	J
UNKNOWN ALKANE	19.139	2200000	J
UNKNOWN ALKANE	20.268	1600000	J
UNKNOWN ALKANE	21.115	1000000	J
UNKNOWN ALKANE	21.232	710000	J
UNKNOWN ALKANE	22.235	610000	J

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To: USEPA-Wilcox Oil
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5599 San Felipe, Suite 700
Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	8800	U
bis(2-Chloroethyl)ether	BRL	8800	U
2-Chlorophenol	BRL	8800	U
1,3-Dichlorobenzene	BRL	8800	U
1,4-Dichlorobenzene	BRL	8800	U
1,2-Dichlorobenzene	BRL	8800	U
2-Methylphenol	BRL	8800	U
2,2'-oxybis(1-Chloropropane)	BRL	8800	U
4-Methylphenol	BRL	8800	U
N-Nitroso-di-n-propylamine	BRL	8800	U
Hexachloroethane	BRL	8800	U
Nitrobenzene	BRL	8800	U
Isophorone	BRL	8800	U
2-Nitrophenol	BRL	8800	U
2,4-Dimethylphenol	BRL	8800	U
bis(2-Chloroethoxy)methane	BRL	8800	U
2,4-Dichlorophenol	BRL	8800	U

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Houston, TX 77056-2721

Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	8800	U
Naphthalene	BRL	8800	U
4-Chloroaniline	BRL	8800	U
Hexachlorobutadiene	BRL	8800	U
4-Chloro-3-methylphenol	BRL	8800	U
2-Methylnaphthalene	BRL	8800	U
Hexachlorocyclopentadiene	BRL	8800	U
2,4,6-Trichlorophenol	BRL	8800	U
2,4,5-Trichlorophenol	BRL	22000	U
2-Chloronaphthalene	BRL	8800	U
2-Nitroaniline	BRL	22000	U
Dimethylphthalate	BRL	8800	U
Acenaphthylene	BRL	8800	U
2,6-Dinitrotoluene	BRL	8800	U
3-Nitroaniline	BRL	22000	U
Acenaphthene	BRL	8800	U
2,4-Dinitrophenol	BRL	22000	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	22000	U
Dibenzofuran	BRL	8800	U
2,4-Dinitrotoluene	BRL	8800	U
Diethylphthalate	BRL	8800	U
4-Chlorophenyl-phenylether	BRL	8800	U
Fluorene	BRL	8800	U
4-Nitroaniline	BRL	22000	U
4,6-Dinitro-2-methylphenol	BRL	22000	U
N-Nitrosodiphenylamine (1)	BRL	8800	U
4-Bromophenyl-phenylether	BRL	8800	U
Hexachlorobenzene	BRL	8800	U
Pentachlorophenol	BRL	22000	U
Phenanthrene	BRL	8800	U
Anthracene	BRL	8800	U
Carbazole	BRL	8800	U
Di-n-butylphthalate	BRL	8800	U
Fluoranthene	BRL	8800	U

(1) - Cannot be separated from Diphenylamine.

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Date: Wednesday January 8th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	BRL	8800	U
Butylbenzylphthalate	BRL	8800	U
3,3'-Dichlorobenzidine	BRL	8800	U
Benzo(a)anthracene	BRL	8800	U
Chrysene	1900	8800	J
bis(2-Ethylhexyl)phthalate	BRL	8800	U
Di-n-octylphthalate	BRL	8800	U
Benzo(b)fluoranthene	BRL	8800	U
Benzo(k)fluoranthene	BRL	8800	U
Benzo(a)pyrene	BRL	8800	U
Indeno(1,2,3-cd)pyrene	BRL	8800	U
Dibenzo(a,h)anthracene	BRL	8800	U
Benzo(g,h,i)perylene	BRL	8800	U

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Date: Wednesday January 8th, 1997

RE: WS-07
Project # 04606-056-026-0600
Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

20 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
Unknown	12.786	2600	J
Unknown	13.555	3700	J
Unknown	13.935	8500	J
Unknown	18.004	7600	J
Unknown	18.091	6800	J
Unknown	18.685	18000	J
Unknown	19.862	4600	J
Unknown	19.999	4100	J
Unknown	20.573	7900	J
Unknown	20.768	12000	J

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Lab ID: 9611G675-007
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
Unknown	20.953	5600	J
Unknown	21.702	20000	J
Unknown	23.561	14000	J
Unknown	24.496	5200	J
Unknown	27.026	14000	J
Unknown	28.224	27000	J
Unknown	28.486	18000	J
Unknown	29.498	23000	J
Unknown	29.830	40000	J
Unknown	30.628	15000	J

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	3100	U
bis(2-Chloroethyl)ether	BRL	3100	U
2-Chlorophenol	BRL	3100	U
1,3-Dichlorobenzene	BRL	3100	U
1,4-Dichlorobenzene	BRL	3100	U
1,2-Dichlorobenzene	BRL	3100	U
2-Methylphenol	BRL	3100	U
2,2'-oxybis(1-Chloropropane)	BRL	3100	U
4-Methylphenol	BRL	3100	U
N-Nitroso-di-n-propylamine	BRL	3100	U
Hexachloroethane	BRL	3100	U
Nitrobenzene	BRL	3100	U
Isophorone	BRL	3100	U
2-Nitrophenol	BRL	3100	U
2,4-Dimethylphenol	BRL	3100	U
bis(2-Chloroethoxy)methane	BRL	3100	U
2,4-Dichlorophenol	BRL	3100	U

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Date: Wednesday January 8th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	3100	U
Naphthalene	BRL	3100	U
4-Chloroaniline	BRL	3100	U
Hexachlorobutadiene	BRL	3100	U
4-Chloro-3-methylphenol	BRL	3100	U
2-Methylnaphthalene	520	3100	J
Hexachlorocyclopentadiene	BRL	3100	U
2,4,6-Trichlorophenol	BRL	3100	U
2,4,5-Trichlorophenol	BRL	7800	U
2-Chloronaphthalene	BRL	3100	U
2-Nitroaniline	BRL	7800	U
Dimethylphthalate	BRL	3100	U
Acenaphthylene	BRL	3100	U
2,6-Dinitrotoluene	BRL	3100	U
3-Nitroaniline	BRL	7800	U
Acenaphthene	BRL	3100	U
2,4-Dinitrophenol	BRL	7800	U

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Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	7800	U
Dibenzofuran	BRL	3100	U
2,4-Dinitrotoluene	BRL	3100	U
Diethylphthalate	BRL	3100	U
4-Chlorophenyl-phenylether	BRL	3100	U
Fluorene	BRL	3100	U
4-Nitroaniline	BRL	7800	U
4,6-Dinitro-2-methylphenol	BRL	7800	U
N-Nitrosodiphenylamine (1)	BRL	3100	U
4-Bromophenyl-phenylether	BRL	3100	U
Hexachlorobenzene	BRL	3100	U
Pentachlorophenol	BRL	7800	U
Phenanthrene	BRL	3100	U
Anthracene	BRL	3100	U
Carbazole	BRL	3100	U
Di-n-butylphthalate	BRL	3100	U
Fluoranthene	BRL	3100	U

(1) - Cannot be separated from Diphenylamine.

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Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	BRL	3100	U
Butylbenzylphthalate	BRL	3100	U
3,3'-Dichlorobenzidine	BRL	3100	U
Benzo(a)anthracene	BRL	3100	U
Chrysene	1100	3100	J
bis(2-Ethylhexyl)phthalate	BRL	3100	U
Di-n-octylphthalate	BRL	3100	U
Benzo(b)fluoranthene	BRL	3100	U
Benzo(k)fluoranthene	BRL	3100	U
Benzo(a)pyrene	BRL	3100	U
Indeno(1,2,3-cd)pyrene	BRL	3100	U
Dibenzo(a,h)anthracene	BRL	3100	U
Benzo(g,h,i)perylene	BRL	3100	U

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Date: Wednesday January 8th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

20 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN KETONE	5.353	7700	JBA
UNKNOWN HYDROCARBON	5.713	1300	JB
UNKNOWN HYDROCARBON	5.937	1000	JB
UNKNOWN HYDROCARBON	5.996	830	JB
UNKNOWN HYDROCARBON	6.161	1600	JB
UNKNOWN HYDROCARBON	8.020	3900	JB
Unknown	8.293	1000	J
Unknown	8.945	2400	JB
Unknown	25.116	3100	J
Unknown	25.846	3600	J

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RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
Unknown	28.601	3700	J
Unknown	28.835	5000	J
Unknown	29.127	3300	J
Unknown	29.399	6000	J
Unknown	29.584	2000	J
Unknown	29.643	2500	J
Unknown	30.032	7100	J
Unknown	30.626	5200	J
Unknown	30.694	3800	J
Unknown	31.113	5300	J

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Date: Wednesday January 8th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Phenol	BRL	3100	U
bis(2-Chloroethyl)ether	BRL	3100	U
2-Chlorophenol	BRL	3100	U
1,3-Dichlorobenzene	BRL	3100	U
1,4-Dichlorobenzene	BRL	3100	U
1,2-Dichlorobenzene	BRL	3100	U
2-Methylphenol	BRL	3100	U
2,2'-oxybis(1-Chloropropane)	BRL	3100	U
4-Methylphenol	BRL	3100	U
N-Nitroso-di-n-propylamine	BRL	3100	U
Hexachloroethane	BRL	3100	U
Nitrobenzene	BRL	3100	U
Isophorone	BRL	3100	U
2-Nitrophenol	BRL	3100	U
2,4-Dimethylphenol	BRL	3100	U
bis(2-Chloroethoxy)methane	BRL	3100	U
2,4-Dichlorophenol	BRL	3100	U

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Date: Wednesday January 8th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
1,2,4-Trichlorobenzene	BRL	3100	U
Naphthalene	BRL	3100	U
4-Chloroaniline	BRL	3100	U
Hexachlorobutadiene	BRL	3100	U
4-Chloro-3-methylphenol	BRL	3100	U
2-Methylnaphthalene	510	3100	J
Hexachlorocyclopentadiene	BRL	3100	U
2,4,6-Trichlorophenol	BRL	3100	U
2,4,5-Trichlorophenol	BRL	7800	U
2-Chloronaphthalene	BRL	3100	U
2-Nitroaniline	BRL	7800	U
Dimethylphthalate	BRL	3100	U
Acenaphthylene	BRL	3100	U
2,6-Dinitrotoluene	BRL	3100	U
3-Nitroaniline	BRL	7800	U
Acenaphthene	BRL	3100	U
2,4-Dinitrophenol	BRL	7800	U

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RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
4-Nitrophenol	BRL	7800	U
Dibenzofuran	BRL	3100	U
2,4-Dinitrotoluene	BRL	3100	U
Diethylphthalate	BRL	3100	U
4-Chlorophenyl-phenylether	BRL	3100	U
Fluorene	BRL	3100	U
4-Nitroaniline	BRL	7800	U
4,6-Dinitro-2-methylphenol	BRL	7800	U
N-Nitrosodiphenylamine (1)	BRL	3100	U
4-Bromophenyl-phenylether	BRL	3100	U
Hexachlorobenzene	BRL	3100	U
Pentachlorophenol	BRL	7800	U
Phenanthrene	BRL	3100	U
Anthracene	BRL	3100	U
Carbazole	BRL	3100	U
Di-n-butylphthalate	BRL	3100	U
Fluoranthene	BRL	3100	U

(1) - Cannot be separated from Diphenylamine.

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Project # 04606-056-026-0600
Lab ID: 9611G675-008 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

SEMIVOLATILES BY GC/MS, HSL LIST

Semivolatile Compound	Result	Reporting Limit	Flag
Pyrene	BRL	3100	U
Butylbenzylphthalate	BRL	3100	U
3,3'-Dichlorobenzidine	BRL	3100	U
Benzo(a)anthracene	BRL	3100	U
Chrysene	1200	3100	J
bis(2-Ethylhexyl)phthalate	BRL	3100	U
Di-n-octylphthalate	BRL	3100	U
Benzo(b)fluoranthene	BRL	3100	U
Benzo(k)fluoranthene	BRL	3100	U
Benzo(a)pyrene	BRL	3100	U
Indeno(1,2,3-cd)pyrene	BRL	3100	U
Dibenzo(a,h)anthracene	BRL	3100	U
Benzo(g,h,i)perylene	BRL	3100	U

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Attn: Ms. Diane Williams

Date: Wednesday January 8th, 1997

RE: WS-08
Project # 04606-056-026-0600
Lab ID: 9611G675-008 RE
Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

20 Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any target compounds, surrogates or internal standards.

Semivolatile Compound	Retention Time	Estimated Concentration	
UNKNOWN KETONE	4.269	10000	JBA
UNKNOWN HYDROCARBON	4.659	1900	JB
UNKNOWN HYDROCARBON	4.912	1300	JB
UNKNOWN HYDROCARBON	4.980	840	JB
UNKNOWN HYDROCARBON	5.165	1800	JB
Unknown	7.199	4800	J
Unknown	7.472	670	JB
Unknown	8.163	1300	J
Unknown	9.525	1600	J
Unknown	24.077	1500	J

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Sample Date: 11/20/96
Date Received: 11/21/96
Units: ug/Kg

Tentatively Identified Compounds

Semivolatile Compound	Retention Time	Estimated Concentration	
Unknown	24.456	1400	J
Unknown	27.678	2700	J
Unknown	27.950	4000	J
Unknown	28.233	3000	J
Unknown	28.496	3900	J
Unknown	28.700	2500	J
Unknown	29.060	7300	J
UNKNOWN HYDROCARBON	29.527	3900	J
Unknown	29.576	2600	J
Unknown	29.897	5700	J

III. CASE NARRATIVE

Weston Environmental Metrics, Inc.
GC/MS Case Narrative

USEPA-Wilcox Oil
RFW# 9611G675
BNA DATA: TCL

1. All extractions and analyses were performed within recommended hold times.

2. All of the Method Blanks had all target analytes below the reporting limits. There were TIC's detected in blank GB0654; same TIC's in associated samples are flagged with a "B".

3. The LCS (Laboratory Control Sample) sample was 96GB0654BS/BSD. The BNA CLP spike solution was used and 500 ul was spiked in the LCS samples. All of the spike recoveries and the %RPD values were within the QC limits.

4. Matrix Spike analyses were extracted this RFW#. Due to final volumes prior to GPC and bench dilutions, all spike compounds were diluted out. The samples were not analyzed.

5. All surrogate recoveries were within QC limits. Samples -001, 002, 003, 005, 006 and -007 had all surrogates diluted out and are flagged with "D" on the appropriate form.

6. All analyses were performed following USEPA CLP Protocol OLM01.8. All of the internal standard are surrogates are labeled by name. All of the samples had internal standard areas and retention times within the acceptance criteria as compared to the corresponding continuing calibration standard, except for the following. Sample -008 had three high areas. It was re-analyzed and one area was low outside limits. Both sets of data are reported.

7. The samples were extracted as low level soils. Samples -001, 002, 003, 005, 006, 007 and -008 had a final volume of 50 mls prior to GPC. All samples were screened by GC/FID prior to GC/MS analysis. Based on the screens, samples -001, 002, 003 and -007 were analyzed at an additional 1/5 dilution at the bench. Samples -005 and -006 were analyzed at an additional 1/25 at the bench. All reporting limits and concentrations are adjusted for the final volume prior to GPC, bench level dilutions and percent moisture.

Marilyn Krueding
GC/MS Section Manager

1/8/97
Date

ORGANIC GLOSSARY OF DATA QUALIFIERS AND ABBREVIATIONS

Data Qualifiers

A	TIC is a suspected aldol-condensation product
B	Compound was found in the blank and the sample
C	Pesticide identification was confirmed by GC/MS
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D
E	Concentration exceeds the instrument calibration range and was subsequently diluted
I	Appears on the "results spreadsheet" and "quant reports" to indicate an interference;appears on pesticide form 8 to indicate an instrument blank without a surrogate
J	Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)
NQ	Result was qualitatively confirmed, but not quantified
P	The lower of the two values is reported when the percent difference between the results of two GC columns is greater than 25%
SP	Blank spike, blank spike duplicate, matrix spike or matrix spike duplicate
T	Compound was found in the TCLP extraction blank and the sample
U	Analyte was not detected at or above the reporting limit
X	Other specific flags may be required to properly qualify the result
*	QC result was outside the laboratory control limits

Abbreviations

Batch	Identifies a specific extraction, digestion or preparation set (equivalent to prep batch)
BS	Blank spike analysis was conducted on reagent grade water or a matrix free from the analyte of interest
BSD	Blank spike duplicate
BRL	Below reporting limit
CD	Calculation factor used by the Laboratory's Information Management System (LIMS)
Contract	Contract laboratory identification code
DF	Dilution factor
DL	Appears in the sample ID to indicate a secondary dilution
LCS/LC	Denotes laboratory control standard
LAB ID	The full 12 character Weston laboratory identification number (equivalent to RFW#)
MB	Method blank or (PB) preparation blank
MS	Matrix spike
MSD	Matrix spike duplicate
NA	Not applicable
NR	Not required
NS	Not spiked
RE	Appears in the sample ID to indicate a re-analysis
REP	Replicate analysis
Reprep	Sample was reprepared and then reanalyzed
RFW#	The full 12 character WESTON laboratory identification number (equivalent to LAB ID)
RFW Lot	The first 8 characters of the RFW#
RPD	Relative percent difference of duplicate analyses
RRF	Relative response factor
RT	Retention time /Retention time window
WO#	Work order no. WESTON code used to define a specific client, job, phase and task

NOTES:

- One or a combination of these data qualifiers and abbreviations may appear in the analytical report.
- Soil, sediment and sludge results are reported on a dry weight basis except when analyzed for landfill disposal or incineration parameters. All other results on a solid matrix are reported on an "as received" basis unless noted differently.
- Reporting limits are adjusted for preparation sample size, sample dilution and sample moisture content if analyzed on a dry weight basis.

IV. QUALITY CONTROL SUMMARY

Weston Environmental Metrics, Inc. (Gulf Coast)
SEMIVOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Report Date: 01/06/97 11:56 Page: 1a

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Cust ID:	WS-01	WS-02	WS-03	WS-04	WS-05	WS-06
Sample Information RFW#:	001	002	003	004	005	006
Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
D.F.:	25	25	25	1	1205	1205
Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate Recovery Nitrobenzene-d5	0 D %	0 D %	0 D %	62 D %	0 D %	0 D %
2-Fluorobiphenyl	0 %	0 %	0 %	76 %	0 %	0 %
p-Terphenyl-d14	0 %	0 %	0 %	69 %	0 %	0 %
Phenol-d5	0 %	0 %	0 %	31 %	0 %	0 %
2-Fluorophenol	0 %	0 %	0 %	58 %	0 %	0 %
2,4,6-Tribromophenol	0 %	0 %	0 %	89 %	0 %	0 %
2-Chlorophenol-d4	0 %	0 %	0 %	58 %	0 %	0 %
1,2-Dichlorobenzene-d4	0 %	0 %	0 %	52 %	0 %	0 %
Phenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
bis(2-Chloroethyl)ether	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2-Chlorophenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
1,3-Dichlorobenzene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
1,4-Dichlorobenzene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
1,2-Dichlorobenzene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2-Methylphenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2,2'-oxybis(1-Chloropropane)	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
4-Methylphenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
N-Nitroso-di-n-propylamine	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
Hexachloroethane	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
Nitrobenzene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
Isophorone	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2-Nitrophenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2,4-Dimethylphenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
bis(2-Chloroethoxy)methane	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2,4-Dichlorophenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
1,2,4-Trichlorobenzene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
Naphthalene	70000 U	64000 U	49000 U	3600 U	300000 J	150000 J
4-Chloroaniline	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
Hexachlorobutadiene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
4-Chloro-3-methylphenol	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U
2-Methylnaphthalene	70000 U	64000 U	49000 U	3600 U	1400000	760000
Hexachlorocyclopentadiene	70000 U	64000 U	49000 U	3600 U	340000 U	320000 U

*= Outside of EPA CLP QC limits.

Cust ID:	WS-01		WS-02		WS-03		WS-04		WS-05		WS-06	
RFW#:	001		002		003		004		005		006	
2,4,6-Trichlorophenol	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
2,4,5-Trichlorophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
2-Chloronaphthalene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
2-Nitroaniline	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
Dimethylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Acenaphthylene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
2,6-Dinitrotoluene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
3-Nitroaniline	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
Acenaphthene	70000	U	64000	U	49000	U	3600	U	66000	J	33000	J
2,4-Dinitrophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
4-Nitrophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
Dibenzofuran	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
2,4-Dinitrotoluene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Diethylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
4-Chlorophenyl-phenylether	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Fluorene	70000	U	7800	J	49000	U	3600	U	140000	J	80000	J
4-Nitroaniline	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
4,6-Dinitro-2-methylphenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
N-Nitrosodiphenylamine (1)	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
4-Bromophenyl-phenylether	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Hexachlorobenzene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Pentachlorophenol	180000	U	160000	U	120000	U	9000	U	860000	U	790000	U
Phenanthrene	70000	U	27000	J	49000	U	3600	U	520000		370000	
Anthracene	70000	U	64000	U	49000	U	3600	U	70000	J	320000	U
Carbazole	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Di-n-butylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Fluoranthene	70000	U	64000	U	49000	U	3600	U	340000	U	32000	J
Pyrene	7800	J	230000		54000		3600	U	230000	J	260000	J
Butylbenzylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
3,3'-Dichlorobenzidine	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Benzo(a)anthracene	70000	U	23000	J	49000	U	3600	U	340000	U	320000	U
Chrysene	70000	U	49000	J	49000	U	3600	U	340000	U	66000	J
bis(2-Ethylhexyl)phthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Di-n-octylphthalate	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Benzo(b)fluoranthene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Benzo(k)fluoranthene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Benzo(a)pyrene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Indeno(1,2,3-cd)pyrene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Dibenzo(a,h)anthracene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U
Benzo(g,h,i)perylene	70000	U	64000	U	49000	U	3600	U	340000	U	320000	U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

Weston Environmental Metrics, Inc. (Gulf Coast)
SEMIVOLATILES BY GC/MS, HSL LIST

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Report Date: 01/06/97 11:56 Page: 2a

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	Cust ID:	WS-07		WS-08		WS-08		SBLKBS		SBLKBS BS		SBLKBS BSD	
Sample Information	RFW#:	007		008		008 RE		96GB0654-MB1		96GB0654-MB1		96GB0654-MB1	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	25		5		5		1		1		1	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	0	%	96	%	84	%	80	%	78	%	54	%
	2-Fluorobiphenyl	0	%	102	%	103	%	75	%	70	%	63	%
	p-Terphenyl-d14	0	%	98	%	124	%	81	%	77	%	72	%
	Phenol-d5	0	%	73	%	82	%	67	%	67	%	57	%
	2-Fluorophenol	0	%	78	%	82	%	56	%	51	%	43	%
	2,4,6-Tribromophenol	0	%	92	%	94	%	57	%	56	%	55	%
	2-Chlorophenol-d4	0	%	81	%	89	%	60	%	58	%	49	%
	1,2-Dichlorobenzene-d4	0	%	78	%	82	%	67	%	55	%	45	%
	Phenol	8800	U	3100	U	3100	U	330	U	64	%	56	%
	bis(2-Chloroethyl)ether	8800	U	3100	U	3100	U	330	U	330	U	330	U
	2-Chlorophenol	8800	U	3100	U	3100	U	330	U	58	%	51	%
	1,3-Dichlorobenzene	8800	U	3100	U	3100	U	330	U	330	U	330	U
	1,4-Dichlorobenzene	8800	U	3100	U	3100	U	330	U	59	%	52	%
	1,2-Dichlorobenzene	8800	U	3100	U	3100	U	330	U	330	U	330	U
	2-Methylphenol	8800	U	3100	U	3100	U	330	U	330	U	330	U
	2,2'-oxybis(1-Chloropropane)	8800	U	3100	U	3100	U	330	U	330	U	330	U
	4-Methylphenol	8800	U	3100	U	3100	U	330	U	330	U	330	U
	N-Nitroso-di-n-propylamine	8800	U	3100	U	3100	U	330	U	63	%	53	%
	Hexachloroethane	8800	U	3100	U	3100	U	330	U	330	U	330	U
	Nitrobenzene	8800	U	3100	U	3100	U	330	U	330	U	330	U
	Isophorone	8800	U	3100	U	3100	U	330	U	330	U	330	U
	2-Nitrophenol	8800	U	3100	U	3100	U	330	U	330	U	330	U
	2,4-Dimethylphenol	8800	U	3100	U	3100	U	330	U	330	U	330	U
	bis(2-Chloroethoxy)methane	8800	U	3100	U	3100	U	330	U	330	U	330	U
	2,4-Dichlorophenol	8800	U	3100	U	3100	U	330	U	330	U	330	U
	1,2,4-Trichlorobenzene	8800	U	3100	U	3100	U	330	U	75	%	63	%
	Naphthalene	8800	U	3100	U	3100	U	330	U	330	U	330	U
	4-Chloroaniline	8800	U	3100	U	3100	U	330	U	330	U	330	U
	Hexachlorobutadiene	8800	U	3100	U	3100	U	330	U	330	U	330	U
	4-Chloro-3-methylphenol	8800	U	3100	U	3100	U	330	U	65	%	60	%
	2-Methylnaphthalene	8800	U	520	J	510	J	330	U	330	U	330	U
	Hexachlorocyclopentadiene	8800	U	3100	U	3100	U	330	U	330	U	330	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9611G675 Client: USEPA-Wilcox Oil Work Order: 4606-56-0 Page: 2b

Cust ID:	WS-07		WS-08		WS-08		SBLKBS		SBLKBS BS		SBLKBS BSD	
RFW#:	007		008		008 RE		96GB0654-MB1		96GB0654-MB1		96GB0654-MB1	
2,4,6-Trichlorophenol	8800	U	3100	U	3100	U	330	U	330	U	330	U
2,4,5-Trichlorophenol	22000	U	7800	U	7800	U	830	U	830	U	830	U
2-Chloronaphthalene	8800	U	3100	U	3100	U	330	U	330	U	330	U
2-Nitroaniline	22000	U	7800	U	7800	U	830	U	830	U	830	U
Dimethylphthalate	8800	U	3100	U	3100	U	330	U	330	U	330	U
Acenaphthylene	8800	U	3100	U	3100	U	330	U	330	U	330	U
2,6-Dinitrotoluene	8800	U	3100	U	3100	U	330	U	330	U	330	U
3-Nitroaniline	22000	U	7800	U	7800	U	830	U	830	U	830	U
Acenaphthene	8800	U	3100	U	3100	U	330	U	72	%	66	%
2,4-Dinitrophenol	22000	U	7800	U	7800	U	830	U	830	U	830	U
4-Nitrophenol	22000	U	7800	U	7800	U	830	U	94	%	93	%
Dibenzofuran	8800	U	3100	U	3100	U	330	U	330	U	330	U
2,4-Dinitrotoluene	8800	U	3100	U	3100	U	330	U	80	%	75	%
Diethylphthalate	8800	U	3100	U	3100	U	330	U	330	U	330	U
4-Chlorophenyl-phenylether	8800	U	3100	U	3100	U	330	U	330	U	330	U
Fluorene	8800	U	3100	U	3100	U	330	U	330	U	330	U
4-Nitroaniline	22000	U	7800	U	7800	U	830	U	830	U	830	U
4,6-Dinitro-2-methylphenol	22000	U	7800	U	7800	U	830	U	830	U	830	U
N-Nitrosodiphenylamine (1)	8800	U	3100	U	3100	U	330	U	330	U	330	U
4-Bromophenyl-phenylether	8800	U	3100	U	3100	U	330	U	330	U	330	U
Hexachlorobenzene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Pentachlorophenol	22000	U	7800	U	7800	U	830	U	97	%	91	%
Phenanthrene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Anthracene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Carbazole	8800	U	3100	U	3100	U	330	U	330	U	330	U
Di-n-butylphthalate	8800	U	3100	U	3100	U	330	U	330	U	330	U
Fluoranthene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Pyrene	8800	U	3100	U	3100	U	330	U	83	%	78	%
Butylbenzylphthalate	8800	U	3100	U	3100	U	330	U	330	U	330	U
3,3'-Dichlorobenzidine	8800	U	3100	U	3100	U	330	U	330	U	330	U
Benzo(a)anthracene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Chrysene	1900	J	1100	J	1200	J	330	U	330	U	330	U
bis(2-Ethylhexyl)phthalate	8800	U	3100	U	3100	U	330	U	330	U	330	U
Di-n-octylphthalate	8800	U	3100	U	3100	U	330	U	330	U	330	U
Benzo(b)fluoranthene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Benzo(k)fluoranthene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Benzo(a)pyrene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Indeno(1,2,3-cd)pyrene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Dibenzo(a,h)anthracene	8800	U	3100	U	3100	U	330	U	330	U	330	U
Benzo(g,h,i)perylene	8800	U	3100	U	3100	U	330	U	330	U	330	U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

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	SBLKBS	80	75	81	67	56	57	60	67	0
02	SBLKBSBS	78	70	77	67	51	56	58	55	0
03	SBLKBSBSD	54	63	72	57	43	55	49	45	0
04	WS-04	62	76	69	31	58	89	58	52	0
05	WS-01	0D	0D	0D	0D	0D	0D	0D	0D	0
06	WS-02	0D	0D	0D	0D	0D	0D	0D	0D	0
07	WS-03	0D	0D	0D	0D	0D	0D	0D	0D	0
08	WS-05	0D	0D	0D	0D	0D	0D	0D	0D	0
09	WS-06	0D	0D	0D	0D	0D	0D	0D	0D	0
10	WS-08	96	102	98	73	78	92	81	78	0
11	WS-07	0D	0D	0D	0D	0D	0D	0D	0D	0
12	WS-08RE	84	103	124	82	82	94	89	82	0
13										
14										
15										
16										
17										
18										
19										
20										
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

3D
SOIL SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: Lab ID: 96GB0654-MB1

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

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC. LIMITS REC.
Phenol	2500.0	0.0000	1606.3	64	26- 90
2-Chlorophenol	2500.0	0.0000	1456.7	58	25-102
1,4-Dichlorobenzene	1666.7	0.0000	983.42	59	28-104
N-Nitroso-di-n-prop.(1)	1666.7	0.0000	1051.4	63	41-126
1,2,4-Trichlorobenzene	1666.7	0.0000	1253.0	75	38-107
4-Chloro-3-methylphenol	2500.0	0.0000	1634.2	65	26-103
Acenaphthene	1666.7	0.0000	1205.6	72	31-137
4-Nitrophenol	2500.0	0.0000	2361.2	94	11-114
2,4-Dinitrotoluene	1666.7	0.0000	1333.6	80	28- 89
Pentachlorophenol	2500.0	0.0000	2426.0	97	17-109
Pyrene	1666.7	0.0000	1383.8	83	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	BSD CONCENTRATION (ug/Kg)	BSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	2500.0	1392.3	56	13	35	26- 90
2-Chlorophenol	2500.0	1275.5	51	13	50	25-102
1,4-Dichlorobenzene	1666.7	859.68	52	13	27	28-104
N-Nitroso-di-n-prop.(1)	1666.7	889.37	53	17	38	41-126
1,2,4-Trichlorobenzene	1666.7	1048.6	63	17	23	38-107
4-Chloro-3-methylphenol	2500.0	1500.1	60	8	33	26-103
Acenaphthene	1666.7	1108.3	66	9	19	31-137
4-Nitrophenol	2500.0	2327.2	93	1	50	11-114
2,4-Dinitrotoluene	1666.7	1258.3	75	6	47	28- 89
Pentachlorophenol	2500.0	2273.3	91	6	47	17-109
Pyrene	1666.7	1309.8	78	6	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: _____

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLKBS

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: DCBP04 Lab Sample ID: 96GB0654-MB1

Instrument ID: GCL4 Date Extracted: 11/27/96

Matrix: (soil/water) SOIL Date Analyzed: 12/12/96

Level:(low/med) LOW Time Analyzed: 1204

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SBLKBSBS	96GB0654-MB1S	DCBP05	12/12/96
02	SBLKBSBSD	96GB0654-MB1T	DCBP06	12/12/96
03	WS-04	9611G675-004	DCBR01	12/12/96
04	WS-01	9611G675-001	DCBR02	12/12/96
05	WS-02	9611G675-002	DCBR05	12/12/96
06	WS-03	9611G675-003	DCBR06	12/12/96
07	WS-05	9611G675-005	DCBR07	12/13/96
08	WS-06	9611G675-006	DCBR08	12/13/96
09	WS-08	9611G675-008	DCBR10	12/13/96
10	WS-07	9611G675-007	DCBW12	12/16/96
11	WS-08RE	9611G675-008	DCBW13	12/16/96
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COMMENTS:

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: DFAC06 DFTPP Injection Date: 12/06/96

Instrument ID: GCL4 DFTPP Injection Time: 0732

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	44.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	48.9
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	6.7
275	10.0 - 30.0% of mass 198	16.9
365	Greater than 0.75% of mass 198	1.65
441	Present, but less than mass 443	6.9
442	40.0 - 110.0% of mass 198	51.6
443	15.0 - 24.0% of mass 442	10.8 (20.9)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	SSTD160	SSTD160	DGAC06	12/06/96	0755
02	SSTD120	SSTD120	DGBC06	12/06/96	0839
03	SSTD080	SSTD080	DGCC06	12/06/96	0924
04	SSTD050	SSTD050	DGDC06	12/06/96	1008
05	SSTD020	SSTD020	DGEC06	12/06/96	1053
06					
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: DFAC12 DFTPP Injection Date: 12/12/96

Instrument ID: GCL4 DFTPP Injection Time: 0856

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	38.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	52.0
70	Less than 2.0% of mass 69	0.4 (0.8)1
127	25.0 - 75.0% of mass 198	46.2
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	7.1
275	10.0 - 30.0% of mass 198	21.7
365	Greater than 0.75% of mass 198	2.13
441	Present, but less than mass 443	10.3
442	40.0 - 110.0% of mass 198	69.0
443	15.0 - 24.0% of mass 442	13.9 (20.1)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	DGAC12	12/12/96	0916
02	SBLKBS	96GB0654-MB1	DCBP04	12/12/96	1204
03	SBLKBSBS	96GB0654-MB1S	DCBP05	12/12/96	1246
04	SBLKBSBSD	96GB0654-MB1T	DCBP06	12/12/96	1328
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: DFBC12 DFTPP Injection Date: 12/12/96

Instrument ID: GCL4 DFTPP Injection Time: 1857

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	39.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	53.1
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	25.0 - 75.0% of mass 198	45.9
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	7.2
275	10.0 - 30.0% of mass 198	21.0
365	Greater than 0.75% of mass 198	2.11
441	Present, but less than mass 443	10.9
442	40.0 - 110.0% of mass 198	67.7
443	15.0 - 24.0% of mass 442	14.1 (20.8)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	DGBC12	12/12/96	1918
02	WS-04	9611G675-004	DCBR01	12/12/96	2000
03	WS-01	9611G675-001	DCBR02	12/12/96	2042
04	WS-02	9611G675-002	DCBR05	12/12/96	2248
05	WS-03	9611G675-003	DCBR06	12/12/96	2330
06	WS-05	9611G675-005	DCBR07	12/13/96	0012
07	WS-06	9611G675-006	DCBR08	12/13/96	0054
08	WS-08	9611G675-008	DCBR10	12/13/96	0217
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5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID: DFAC16 DFTPP Injection Date: 12/16/96

Instrument ID: GCL4 DFTPP Injection Time: 1304

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	50.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	61.2
70	Less than 2.0% of mass 69	0.5 (0.8)1
127	25.0 - 75.0% of mass 198	50.9
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	7.6
275	10.0 - 30.0% of mass 198	20.0
365	Greater than 0.75% of mass 198	2.11
441	Present, but less than mass 443	8.9
442	40.0 - 110.0% of mass 198	60.4
443	15.0 - 24.0% of mass 442	11.7 (19.4)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	DGAC16	12/16/96	1323
02	WS-07	9611G675-007	DCBW12	12/16/96	2207
03	WS-08RE	9611G675-008	DCBW13	12/16/96	2247
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FORM V SV 3/90

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): DGAC12 Date Analyzed: 12/12/96

Instrument ID: GCL4 Time Analyzed: 0916

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	1356933	9.40	4562233	12.40	2044374	16.57
	UPPER LIMIT	2713866	9.90	9124466	12.90	4088748	17.07
	LOWER LIMIT	678466	8.90	2281116	11.90	1022187	16.07
	EPA SAMPLE NO.						
01	SBLKBS	1464256	9.40	4323838	12.38	2194006	16.57
02	SBLKBSBS	1526047	9.41	4222754	12.39	2490056	16.57
03	SBLKBSBSD	1338998	9.40	4364976	12.40	2408962	16.57
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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 internal standard area values with an asterisk.
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): DGAC12 Date Analyzed: 12/12/96

Instrument ID: GCL4 Time Analyzed: 0916

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	3200466	20.10	1782259	26.39	1742060	29.53
	UPPER LIMIT	6400932	20.60	3564518	26.89	3484120	30.03
	LOWER LIMIT	1600233	19.60	891130	25.89	871030	29.03
	EPA SAMPLE NO.						
01	SBLKBS	3286972	20.08	1858919	26.37	1647677	29.53
02	SBLKBSBS	3570475	20.09	2224193	26.37	2053659	29.53
03	SBLKBSBSD	3474984	20.09	2215760	26.38	2090326	29.52
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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 internal standard area values with an asterisk.
* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): DGBC12 Date Analyzed: 12/12/96

Instrument ID: GCL4 Time Analyzed: 1918

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	822525	9.32	2932490	12.32	1565016	16.50
	UPPER LIMIT	1645050	9.82	5864980	12.82	3130032	17.00
	LOWER LIMIT	411262	8.82	1466245	11.82	782508	16.00
	EPA SAMPLE NO.						
01	WS-04	954125	9.32	3178104	12.32	1596965	16.49
02	WS-01	1291444	9.33	4401503	12.33	2354243	16.52
03	WS-02	1405350	9.36	4760659	12.37	2421181	16.55
04	WS-03	1512597	9.38	4957533	12.38	2460999	16.57
05	WS-05	1285947	9.37	3949731	12.38	1879287	16.57
06	WS-06	1337142	9.36	4162549	12.37	2154834	16.57
07	WS-08	2044070*	9.38	6692333*	12.38	3607060*	16.58
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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 internal standard area values with an asterisk.
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): DGBC12 Date Analyzed: 12/12/96

Instrument ID: GCL4 Time Analyzed: 1918

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	2456197	20.01	1329718	26.30	1280781	29.44
	UPPER LIMIT	4912394	20.51	2659436	26.80	2561562	29.94
	LOWER LIMIT	1228098	19.51	664859	25.80	640390	28.94
	EPA SAMPLE NO.						
01	WS-04	2423231	20.00	1596706	26.29	1516036	29.44
02	WS-01	3476620	20.05	1299360	26.43	1430096	29.64
03	WS-02	2883656	20.12	1250177	26.52	1056407	29.75
04	WS-03	3183256	20.12	1832305	26.48	1657234	29.69
05	WS-05	2483183	20.12	1534045	26.45	1485687	29.64
06	WS-06	2858313	20.11	1810536	26.45	1536088	29.64
07	WS-08	4103532	20.13	1631687	26.54	836785	29.81
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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 internal standard area values with an asterisk.
* Values outside of QC limits.

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): DGAC16 Date Analyzed: 12/16/96

Instrument ID: GCL4 Time Analyzed: 1323

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	1410970	8.52	4405209	11.54	2175022	15.68
	UPPER LIMIT	2821940	9.02	8810418	12.04	4350044	16.18
	LOWER LIMIT	705485	8.02	2202604	11.04	1087511	15.18
	EPA SAMPLE NO.						
01	WS-07	1444166	8.52	4879894	11.55	1611009	15.73
02	WS-08RE	1573469	8.54	5549584	11.56	2901432	15.73
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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 internal standard area values with an asterisk.
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Lab File ID (Standard): DGAC16 Date Analyzed: 12/16/96

Instrument ID: GCL4 Time Analyzed: 1323

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	2845875	19.18	1723078	25.43	1895816	28.52
	UPPER LIMIT	5691750	19.68	3446156	25.93	3791632	29.02
	LOWER LIMIT	1422938	18.68	861539	24.93	947908	28.02
	EPA SAMPLE NO.						
01	WS-07	2276342	19.26	1102932	25.59	983731	28.73
02	WS-08RE	4086266	19.23	1327099	25.59	760510*	28.80
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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 internal standard area values with an asterisk.
* Values outside of QC limits.

V. SAMPLE DATA

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-01

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-001

Sample wt/vol: 5.1 (g/mL) G Lab File ID: DCBR02

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 30 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	70000	U
111-44-4	bis(2-Chloroethyl)ether	70000	U
95-57-8	2-Chlorophenol	70000	U
541-73-1	1,3-Dichlorobenzene	70000	U
106-46-7	1,4-Dichlorobenzene	70000	U
95-50-1	1,2-Dichlorobenzene	70000	U
95-48-7	2-Methylphenol	70000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	70000	U
106-44-5	4-Methylphenol	70000	U
621-64-7	N-Nitroso-di-n-propylamine	70000	U
67-72-1	Hexachloroethane	70000	U
98-95-3	Nitrobenzene	70000	U
78-59-1	Isophorone	70000	U
88-75-5	2-Nitrophenol	70000	U
105-67-9	2,4-Dimethylphenol	70000	U
111-91-1	bis(2-Chloroethoxy)methane	70000	U
120-83-2	2,4-Dichlorophenol	70000	U
120-82-1	1,2,4-Trichlorobenzene	70000	U
91-20-3	Naphthalene	70000	U
106-47-8	4-Chloroaniline	70000	U
87-68-3	Hexachlorobutadiene	70000	U
59-50-7	4-Chloro-3-methylphenol	70000	U
91-57-6	2-Methylnaphthalene	70000	U
77-47-4	Hexachlorocyclopentadiene	70000	U
88-06-2	2,4,6-Trichlorophenol	70000	U
95-95-4	2,4,5-Trichlorophenol	180000	U
91-58-7	2-Chloronaphthalene	70000	U
88-74-4	2-Nitroaniline	180000	U
131-11-3	Dimethylphthalate	70000	U
208-96-8	Acenaphthylene	70000	U
606-20-2	2,6-Dinitrotoluene	70000	U
99-09-2	3-Nitroaniline	180000	U
83-32-9	Acenaphthene	70000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-01

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-001

Sample wt/vol: 5.1 (g/mL) G Lab File ID: DCBR02

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 30 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	180000	U
100-02-7	4-Nitrophenol	180000	U
132-64-9	Dibenzofuran	70000	U
121-14-2	2,4-Dinitrotoluene	70000	U
84-66-2	Diethylphthalate	70000	U
7005-72-3	4-Chlorophenyl-phenylether	70000	U
86-73-7	Fluorene	70000	U
100-01-6	4-Nitroaniline	180000	U
534-52-1	4,6-Dinitro-2-methylphenol	180000	U
86-30-6	n-Nitrosodiphenylamine (1)	70000	U
101-55-3	4-Bromophenyl-phenylether	70000	U
118-74-1	Hexachlorobenzene	70000	U
87-86-5	Pentachlorophenol	180000	U
85-01-8	Phenanthrene	70000	U
120-12-7	Anthracene	70000	U
86-74-8	Carbazole	70000	U
84-74-2	Di-n-butylphthalate	70000	U
206-44-0	Fluoranthene	70000	U
129-00-0	Pyrene	7800	J
85-68-7	Butylbenzylphthalate	70000	U
91-94-1	3,3'-Dichlorobenzidine	70000	U
56-55-3	Benzo(a)anthracene	70000	U
218-01-9	Chrysene	70000	U
117-81-7	bis(2-Ethylhexyl)phthalate	70000	U
117-84-0	Di-n-octylphthalate	70000	U
205-99-2	Benzo(b)fluoranthene	70000	U
207-08-9	Benzo(k)fluoranthene	70000	U
50-32-8	Benzo(a)pyrene	70000	U
193-39-5	Indeno(1,2,3-cd)pyrene	70000	U
53-70-3	Dibenzo(a,h)anthracene	70000	U
191-24-2	Benzo(g,h,i)perylene	70000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-01

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-001

Sample wt/vol: 5.1 (g/mL) G Lab File ID: DCBR02

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 30 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

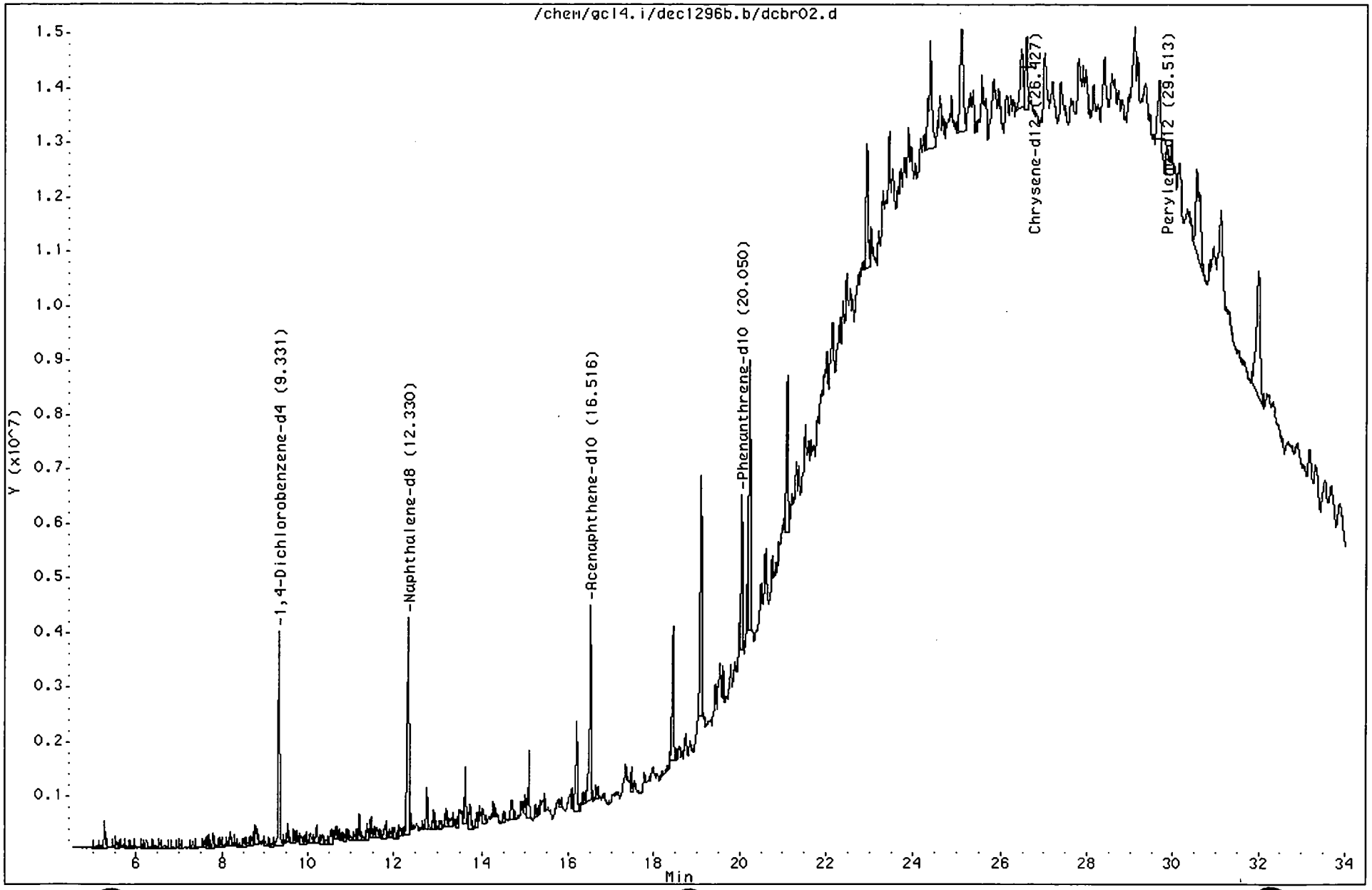
Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN KETONE	5.26	19000	JBA
2.		SUBST NAPHTHALENE	10.21	17000	J
3.		UNKNOWN CYCLOALKANE	10.56	19000	J
4.		SUBST. NAPHTHALENE	11.21	15000	J
5.		UNKNOWN ALKANE	12.76	21000	J
6.		UNKNOWN ALKANE	13.63	31000	J
7.		UNKNOWN CYCLOALKANE	13.73	18000	J
8.		UNKNOWN HYDROCARBON	14.70	22000	J
9.		UNKNOWN ALKANE	15.08	41000	J
10.		UNKNOWN ALKANE	16.19	67000	J
11.		UNKNOWN ALKANE	19.11	280000	J
12.	638-36-8	HEXADECANE, 2,6,10,14-TETRAM	20.23	320000	NJ
13.		UNKNOWN ALKANE	21.10	170000	J
14.		UNKNOWN CYCLOALKANE	22.92	180000	J
15.		UNKNOWN ALKANE	24.37	240000	J
16.		UNKNOWN HYDROCARBON	25.08	240000	J
17.		UNKNOWN HYDROCARBON	26.47	130000	J
18.		UNKNOWN HYDROCARBON	26.56	120000	J
19.		UNKNOWN	30.53	260000	J
20.		UNKNOWN	31.99	350000	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d
Date : 12-DEC-1996 20:42
Client ID: WS-01
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr02.d
Lab Smp Id: 9611G675-001 Client Smp ID: WS-01
Inj Date : 12-DEC-1996 20:42
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-001 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 2
Dil Factor: 25.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.100	Weigth of sample extracted (g)
M	30.300	% Moisture

69.7

MB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.331	9.325	(1.000)	1291444	40.000	
* 26 Naphthalene-d8	136.00	12.330	12.323	(1.000)	4401503	40.000	
* 41 Acenaphthene-d10	164.00	16.516	16.500	(1.000)	2354243	40.000	
* 56 Phenanthrene-d10	188.00	20.050	20.014	(1.000)	3476620	40.000	(M)
* 67 Chrysene-d12	240.00	26.427	26.303	(1.000)	1299360	40.000	
* 75 Perylene-d12	264.00	29.639	29.438	(1.000)	1430096	40.000	(M)
63 Pyrene	202.00	23.486	23.392	(0.889)	124487	2.214	7785.5(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

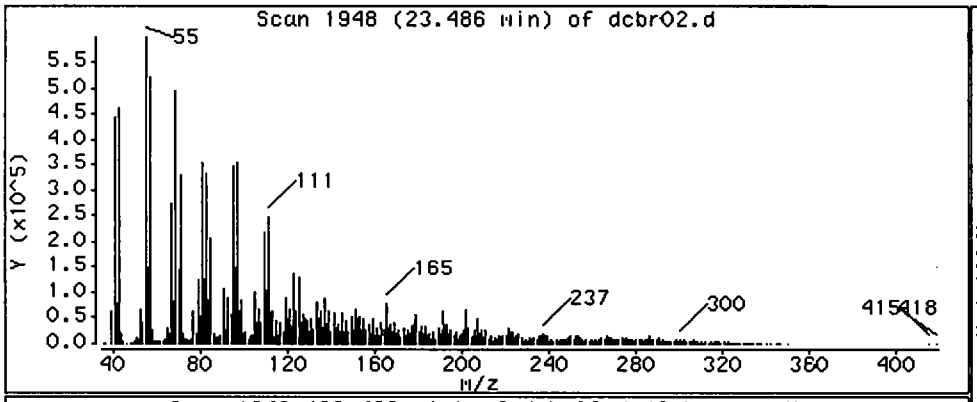
Client ID: WS-01 Instrument: gcl4.i

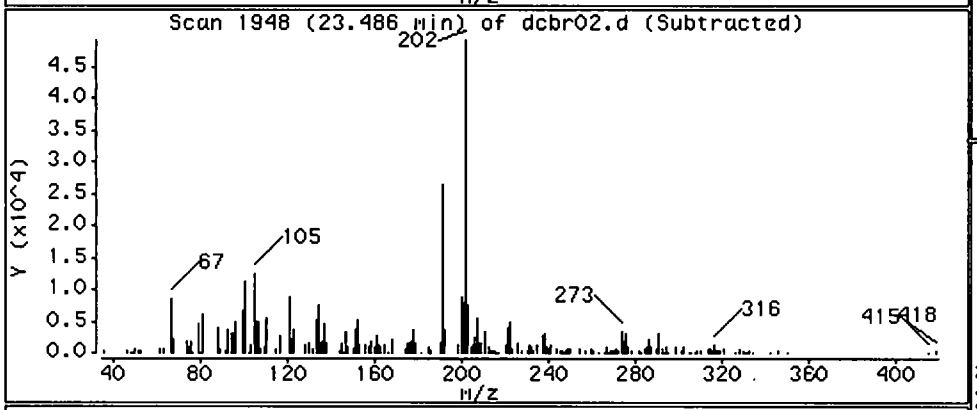
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

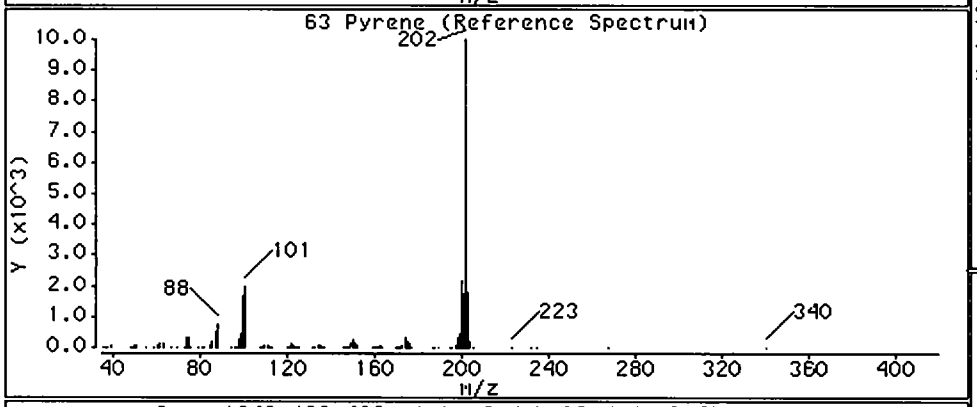
Volume Injected (uL): 2.0 Operator: GES

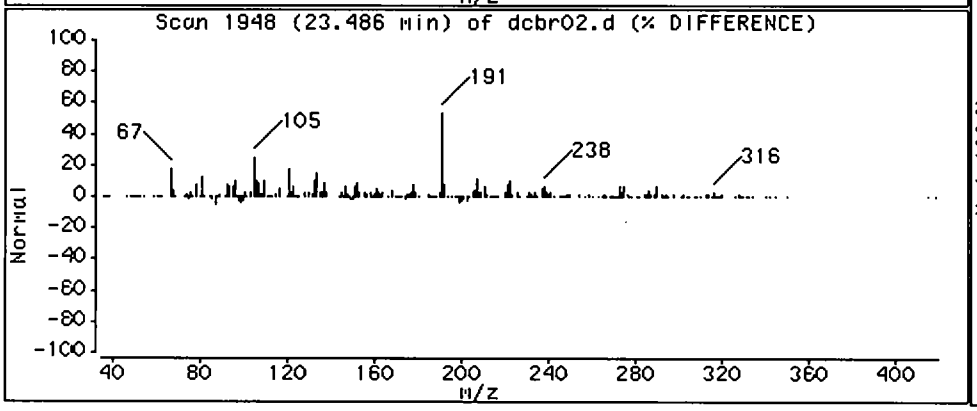
Column phase: Column diameter: 2.00

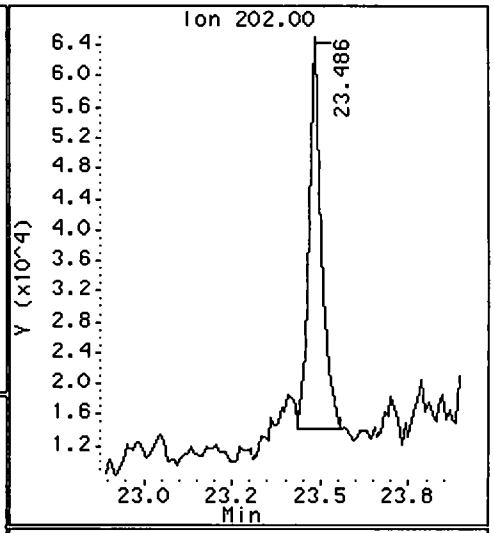
63 Pyrene

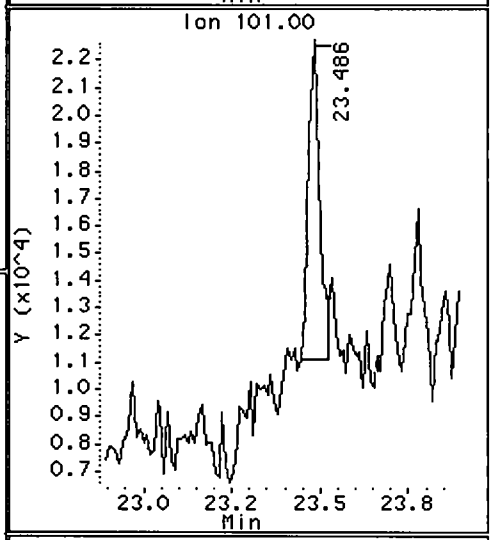


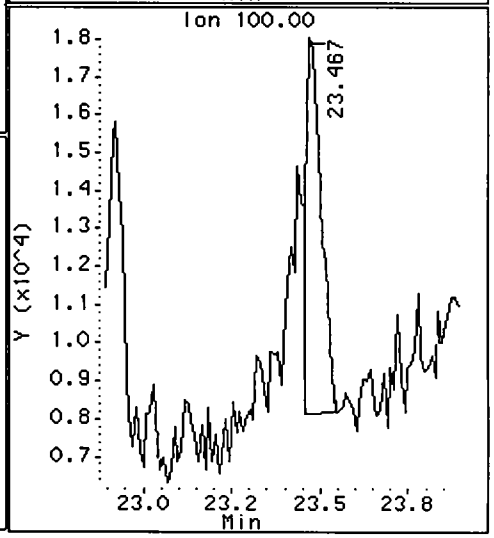












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296b.b/dcbr02.d
Lab Smp Id: 9611G675-001 Client Smp ID: WS-01
Inj Date : 12-DEC-1996 20:42
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-001 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 2
Dil Factor: 25.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.100	Weigth of sample extracted (g)
M	30.300	% Moisture

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	9.331	8658122	40.000
* 26 Naphthalene-d8	12.330	10292331	40.000
* 41 Acenaphthene-d10	16.516	9619472	40.000
* 56 Phenanthrene-d10	20.050	5782791	40.000

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Ketone					CAS #:		
5.262	1196481	5.528	19438	0		0	8

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Subst Naphthalene					CAS #:		
10.208	1069620	4.942	17377	0		0	8
Unknown Cycloalkane					CAS #:		
10.558	1156071	5.341	18781	0		0	8
Subst. Naphthalene					CAS #:		
11.210	1082590	4.207	14795	0		0	26
Unknown Alkane					CAS #:		
12.758	1572484	6.111	21490	0		0	26
Unknown Alkane					CAS #:		
13.634	2258935	8.779	30871	0		0	26
Unknown Cycloalkane					CAS #:		
13.732	1319289	5.127	18030	0		0	26
Unknown Hydrocarbon					CAS #:		
14.695	1480562	6.156	21649	0		0	41
Unknown Alkane					CAS #:		
15.075	2797933	11.634	40912	0		0	41
Unknown Alkane					CAS #:		
16.195	4614375	19.188	67473	0		0	41
Unknown Alkane					CAS #:		
19.106	11357597	78.561	276260	0		0	56
Hexadecane, 2,6,10,14-tetramethyl-					CAS #: 638-36-8		
20.235	13294900	91.962	323380	91	NBS75K.1	39868	56
Unknown Alkane					CAS #:		
21.101	7100558	49.115	172710	0		0	56
Unknown Cycloalkane					CAS #:		
22.922	7612924	52.659	185170	0		0	56(ML)
Unknown Alkane					CAS #:		
24.372	9783544	67.673	237970	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
25.083	9683069	66.978	235530	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
26.466	5436009	37.601	132220	0		0	56(ML)

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
26.563	5067969	35.056	123270	0		0	56(ML)
Unknown					CAS #:		
30.535	10815715	74.813	263080	0		0	56(ML)
Unknown					CAS #:		
31.985	14583381	100.87	354720	0		0	56(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

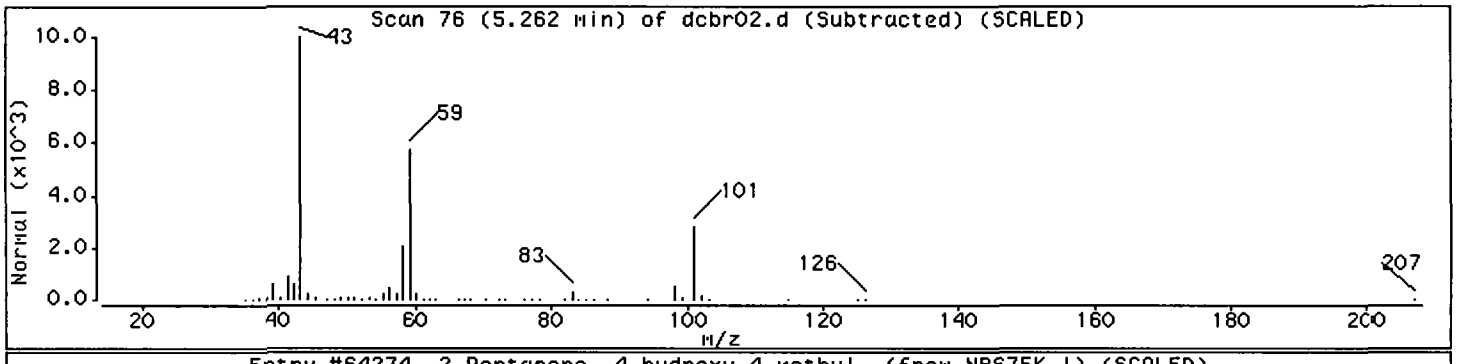
Client ID: WS-01 Instrument: gc14.i

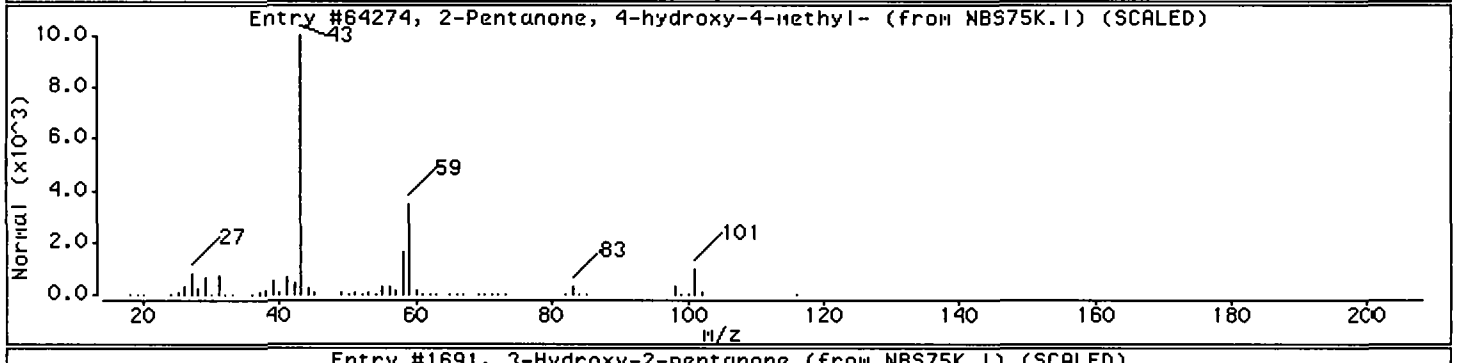
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

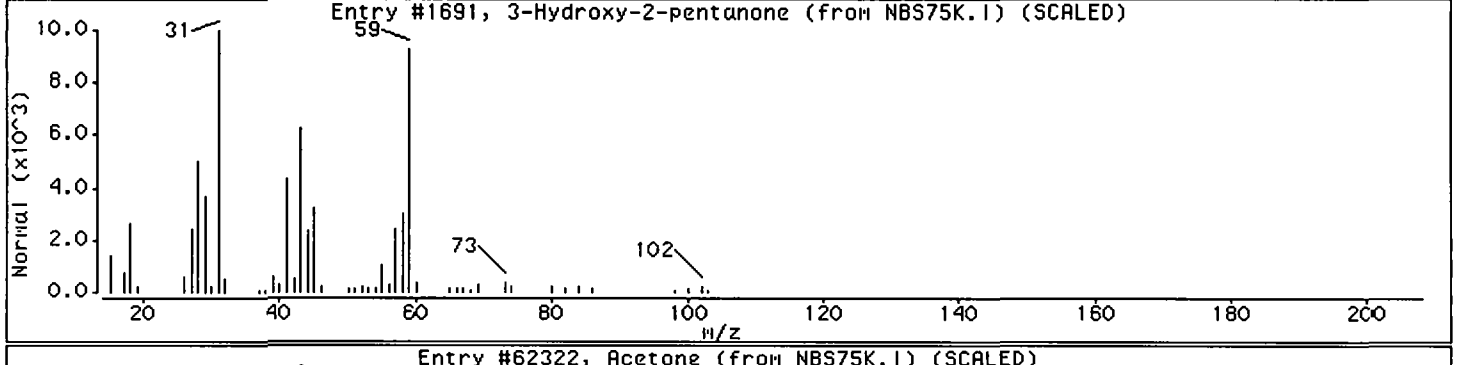
Volume Injected (uL): 2.0 Operator: GES

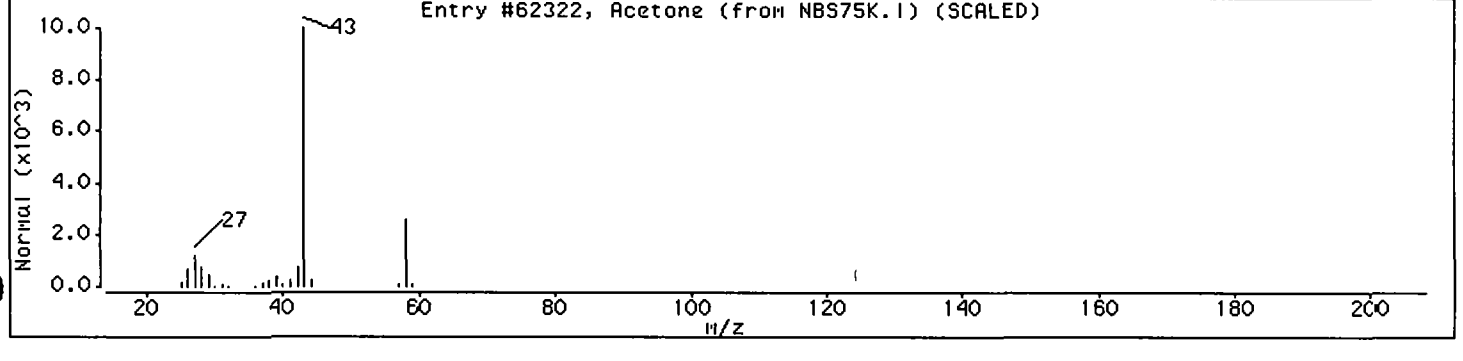
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	53	C6H12O2	116
3-Hydroxy-2-pentanone	3142-66-3	NBS75K.l	1691	37	C5H10O2	102
Acetone	67-64-1	NBS75K.l	62322	14	C3H6O	58









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

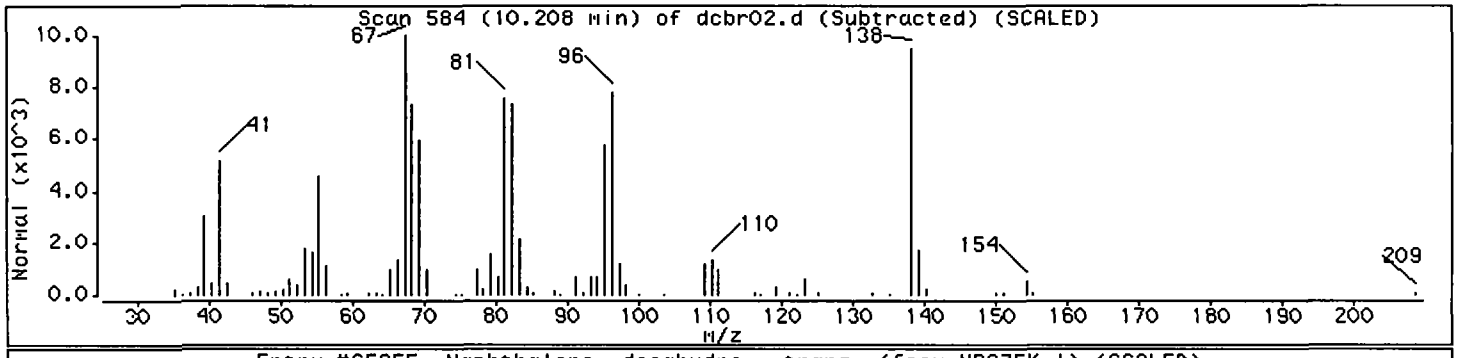
Client ID: WS-01 Instrument: gcl4.i

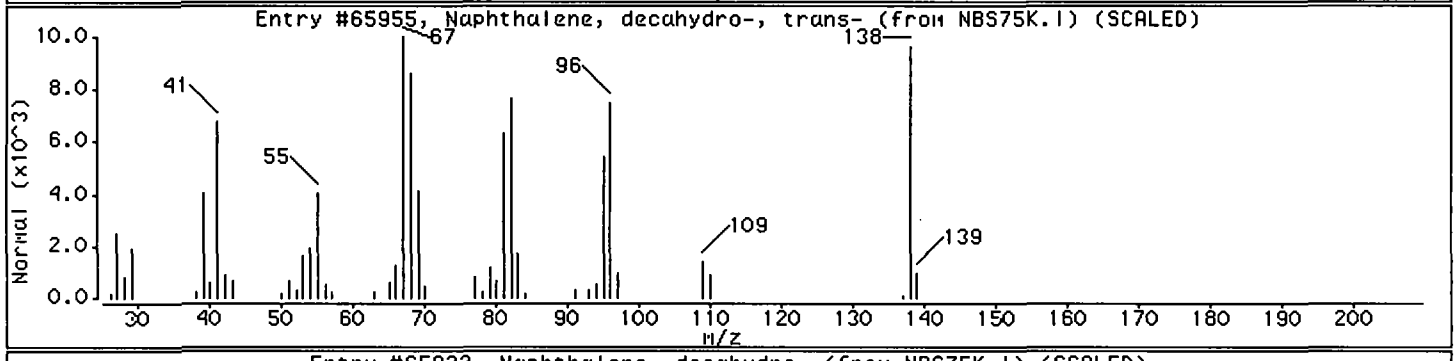
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

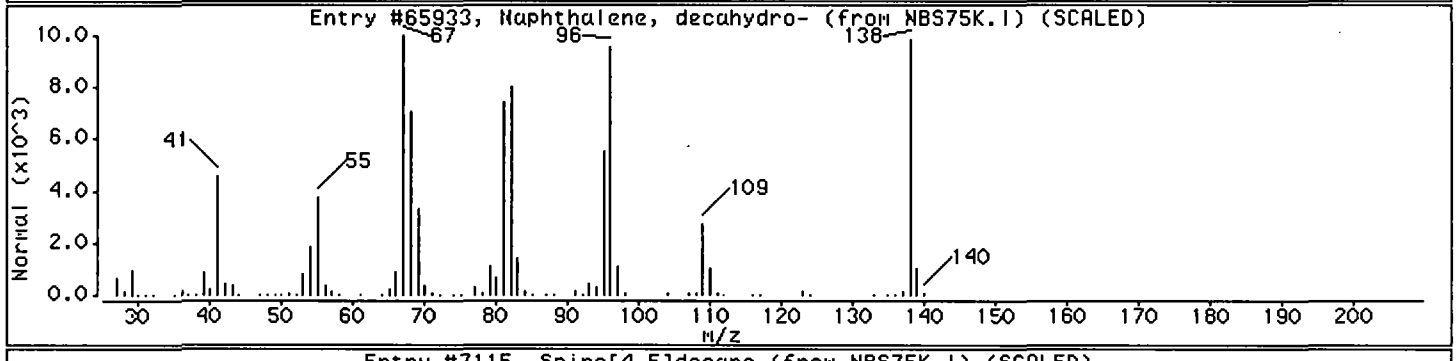
Volume Injected (uL): 2.0 Operator: GES

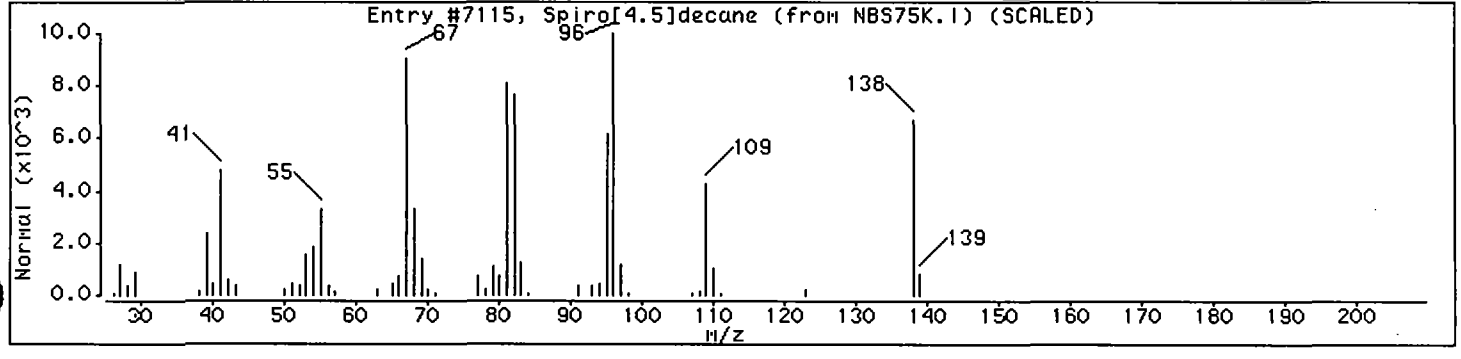
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, decahydro-, trans-	493-02-7	NBS75K.l	65955	98	C10H18	138
Naphthalene, decahydro-	91-17-8	NBS75K.l	65933	95	C10H18	138
Spiro[4.5]decane	176-63-6	NBS75K.l	7115	91	C10H18	138









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

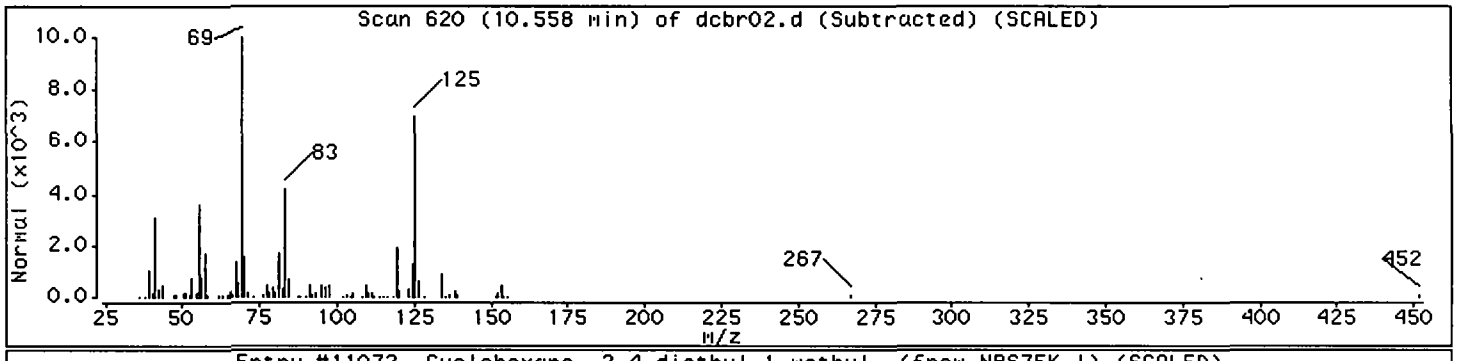
Client ID: WS-01 Instrument: gc14.i

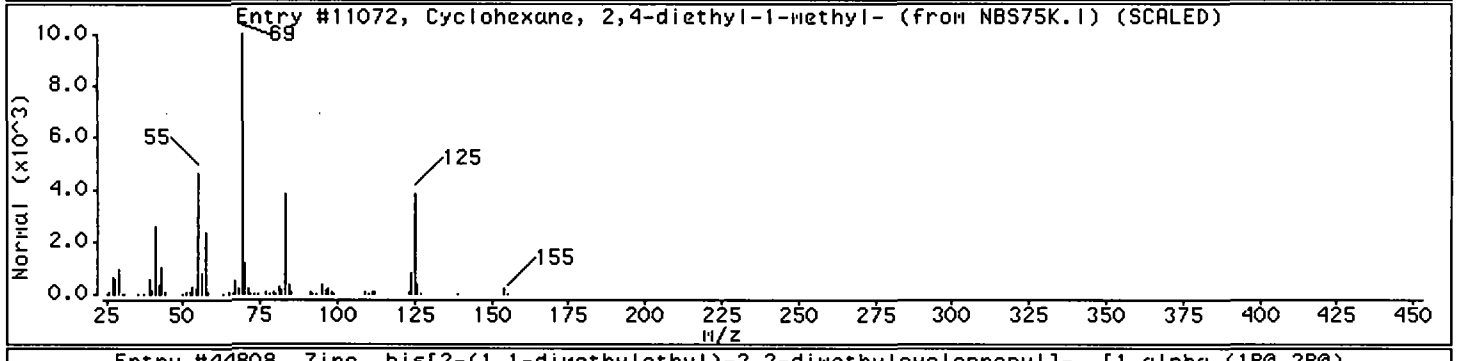
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

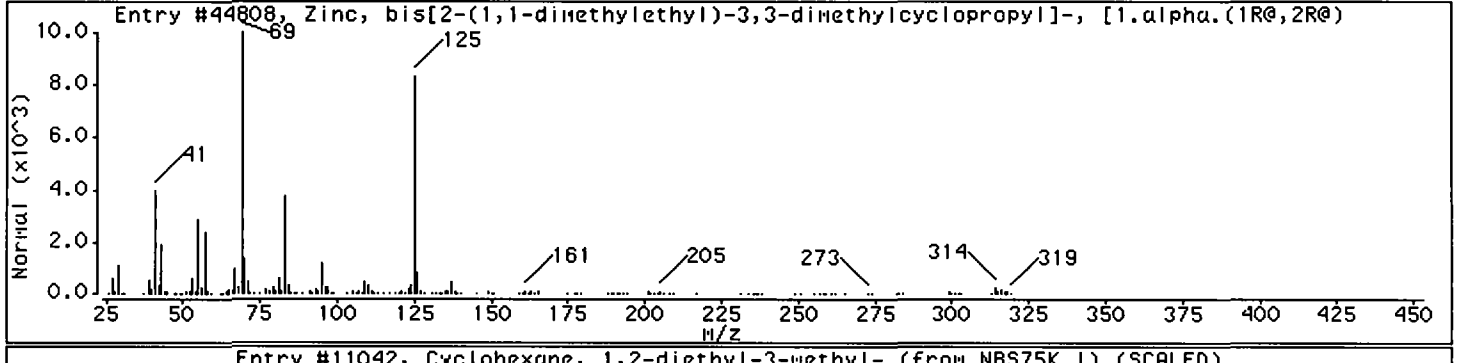
Volume Injected (uL): 2.0 Operator: GES

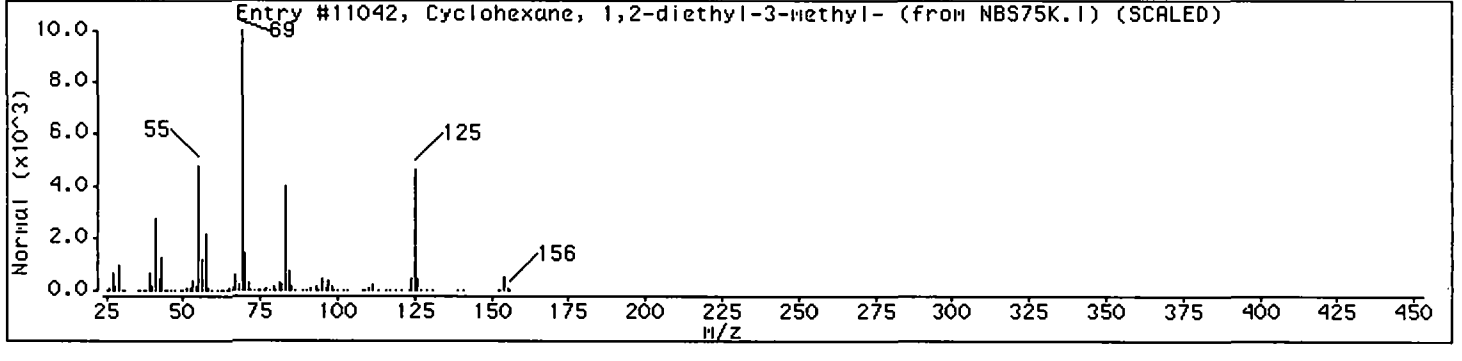
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 2,4-diethyl-1-methyl-	61142-70-9	NBS75K.l	11072	64	C11H22	154
Zinc, bis[2-(1,1-dimethylethyl)-3,3-dime	74793-36-5	NBS75K.l	44808	64	C18H34Zn	314
Cyclohexane, 1,2-diethyl-3-methyl-	61141-80-8	NBS75K.l	11042	50	C11H22	154









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

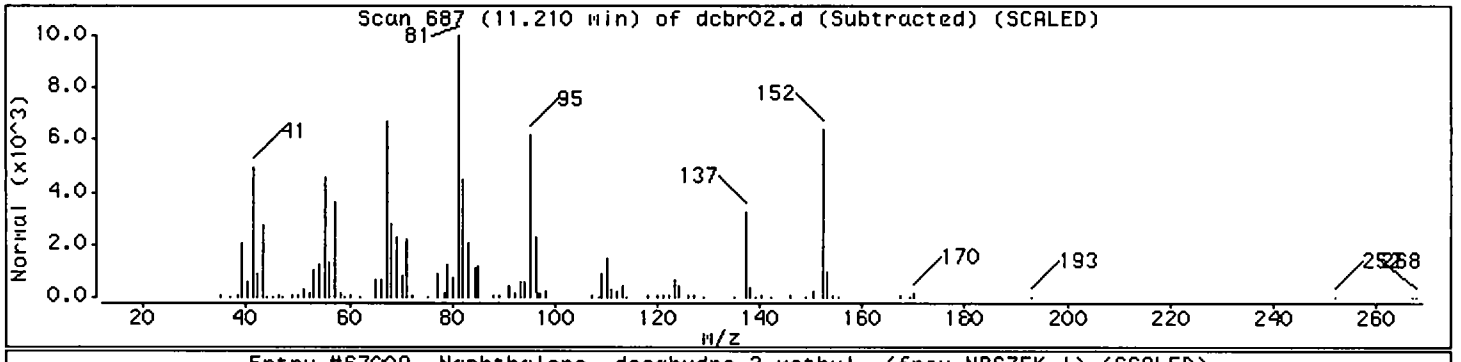
Client ID: WS-01 Instrument: gcl4.i

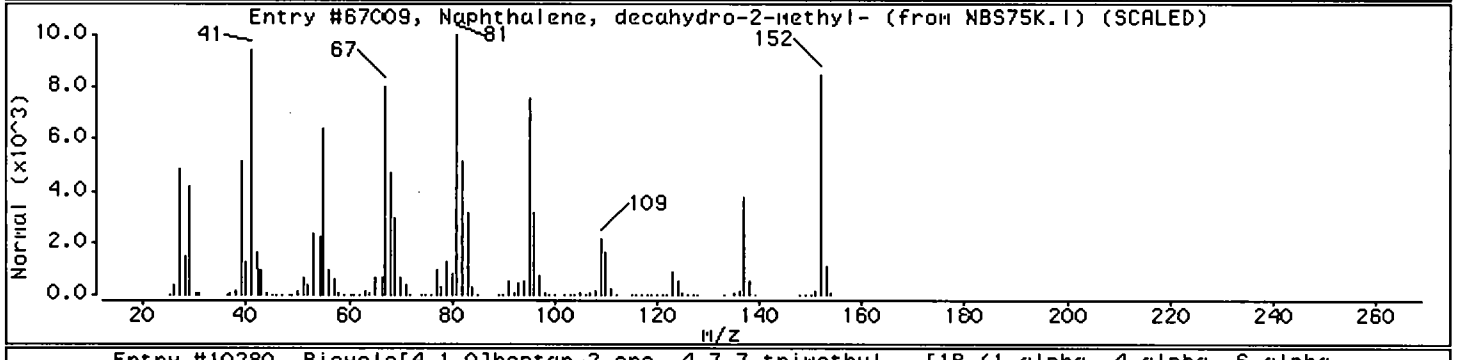
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

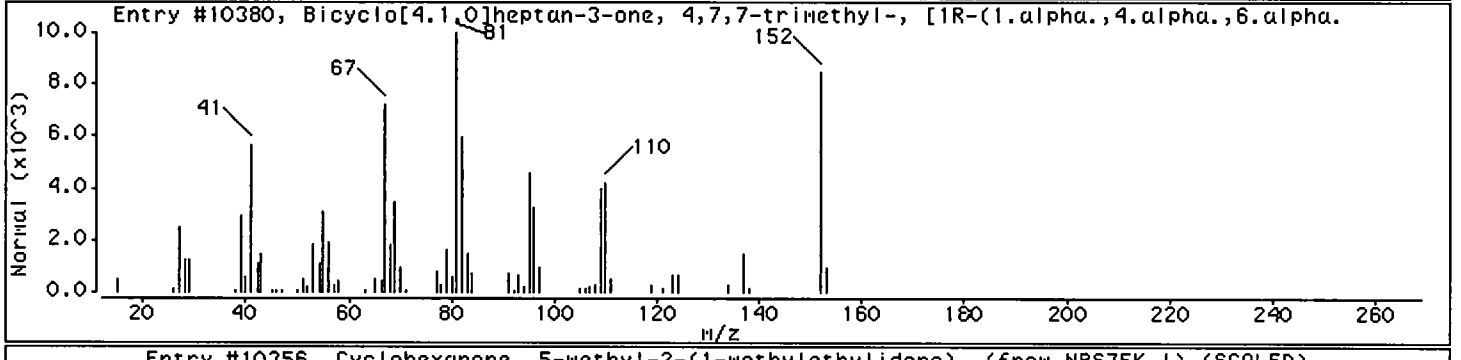
Volume Injected (uL): 2.0 Operator: GES

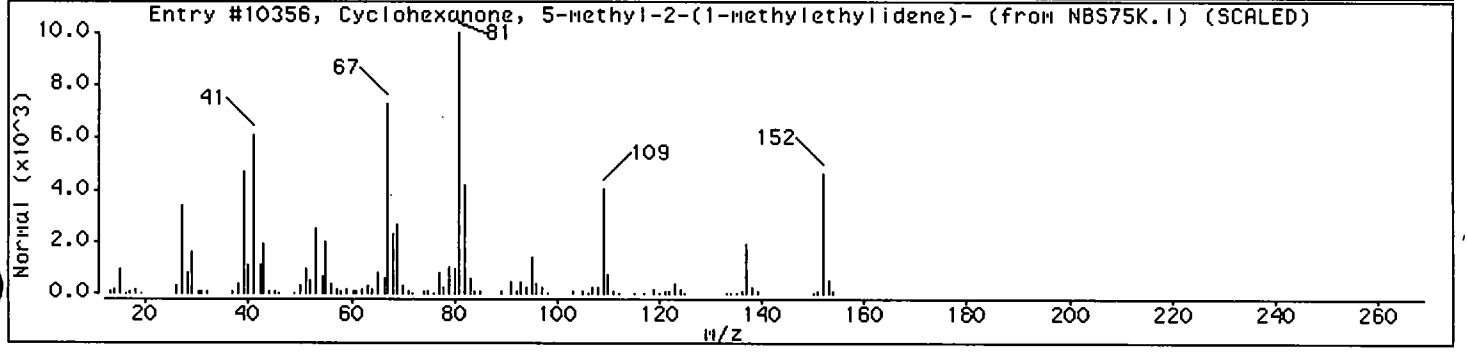
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst. Naphthalene						
Naphthalene, decahydro-2-methyl-	2958-76-1	NBS75K.l	67009	89	C11H20	152
Bicyclo[4.1.0]heptan-3-one, 4,7,7-trimet	4176-04-9	NBS75K.l	10380	81	C10H16O	152
Cyclohexanone, 5-methyl-2-(1-methylethyl	15932-80-6	NBS75K.l	10356	72	C10H16O	152









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

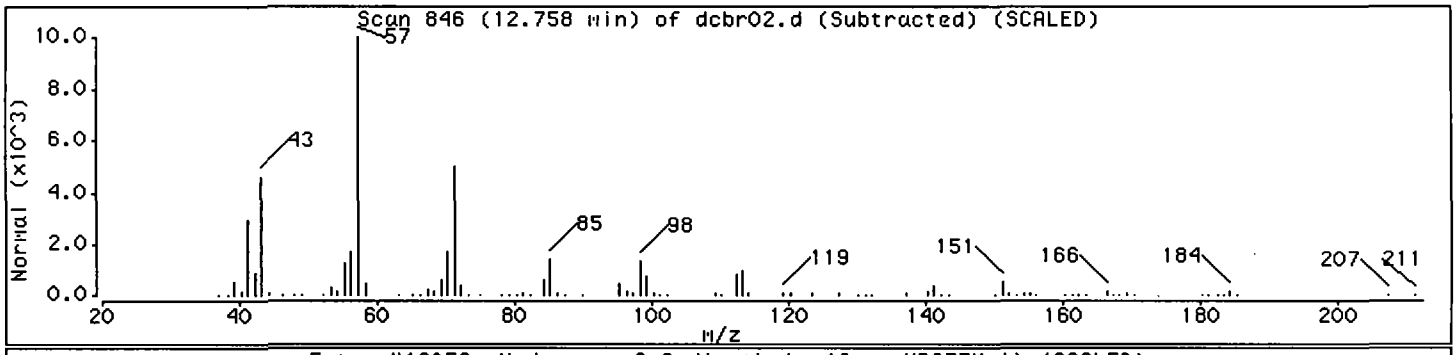
Client ID: WS-01 Instrument: gc14.i

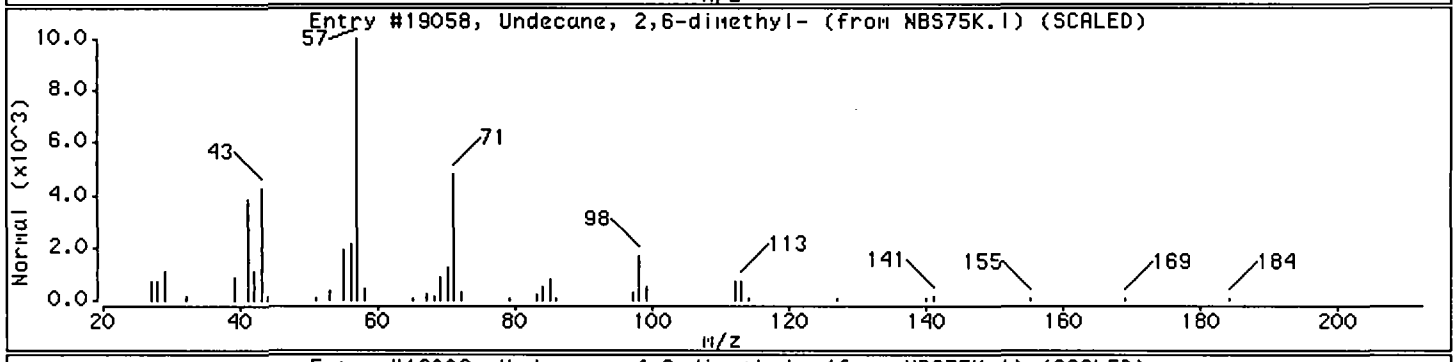
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

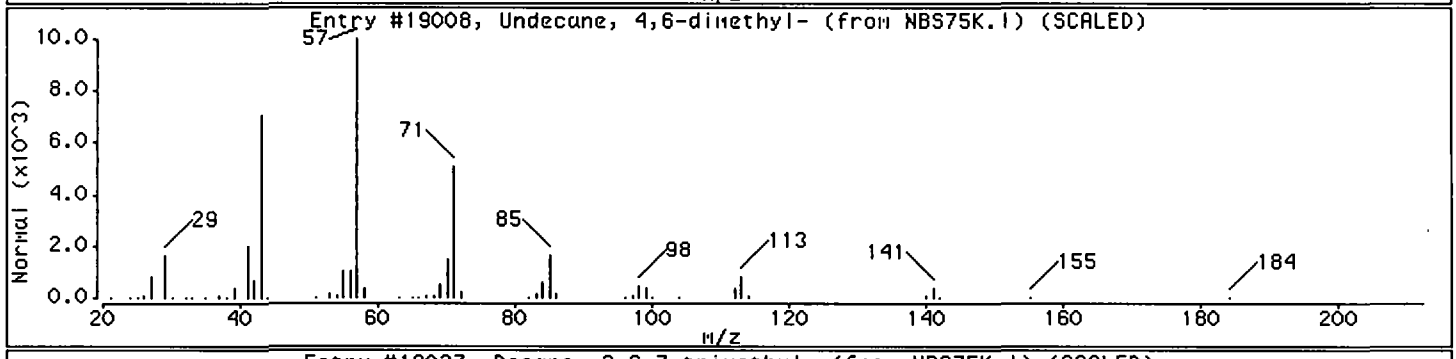
Volume Injected (uL): 2.0 Operator: GES

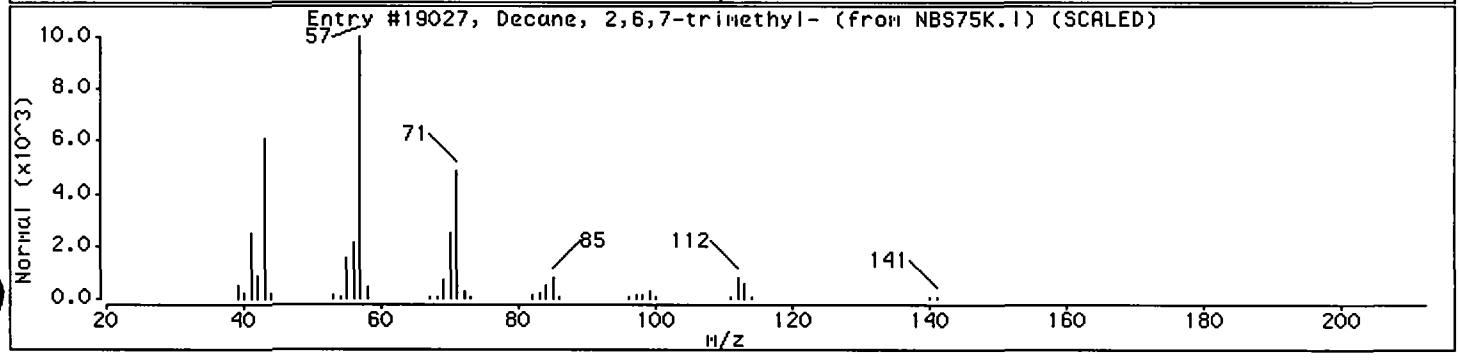
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Undecane, 2,6-dimethyl-	17301-23-4	NBS75K.l	19058	87	C13H28	184
Undecane, 4,6-dimethyl-	17312-82-2	NBS75K.l	19008	72	C13H28	184
Decane, 2,6,7-trimethyl-	62108-25-2	NBS75K.l	19027	64	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

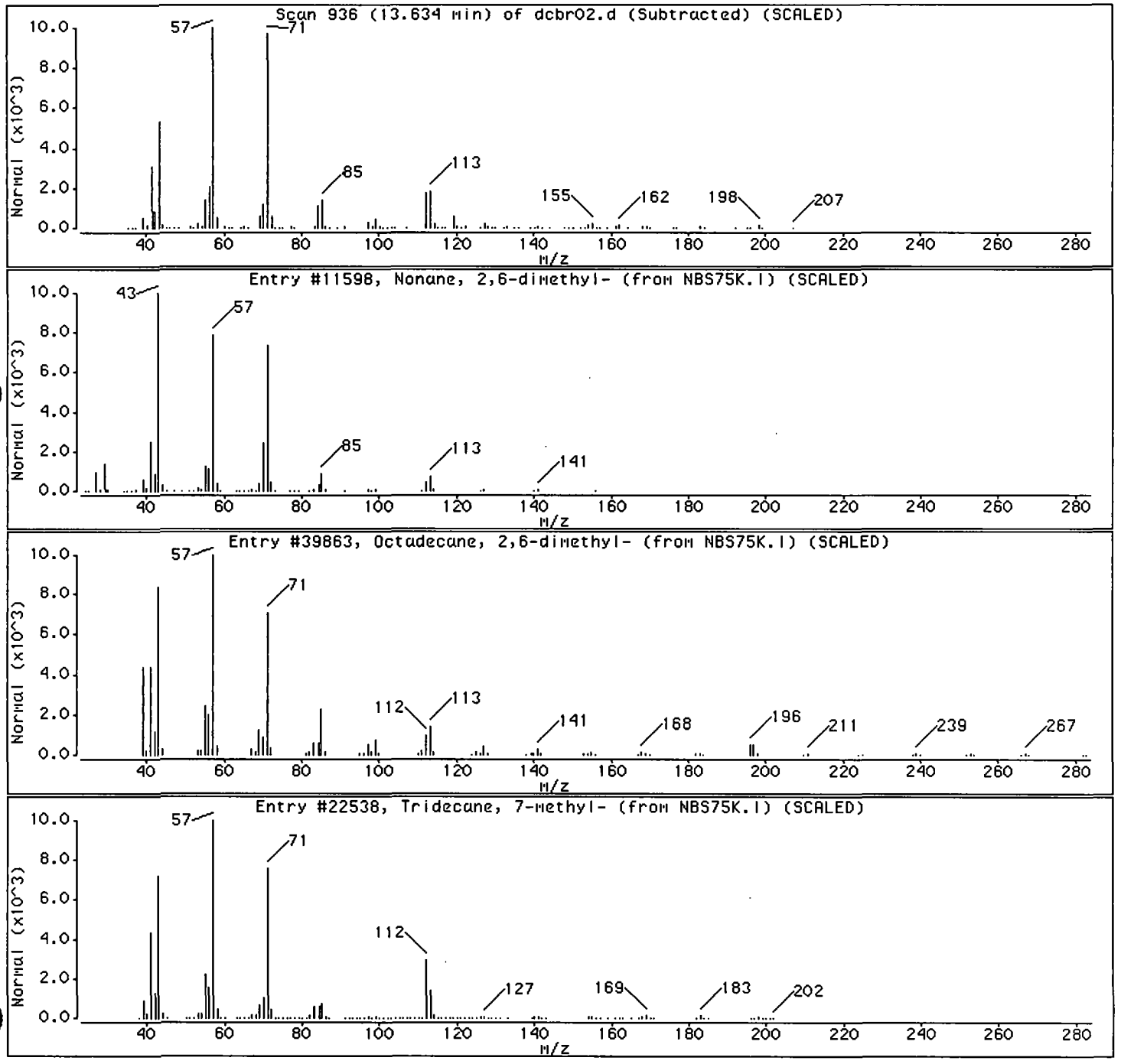
Client ID: WS-01 Instrument: gcl4.i

Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

Volume Injected (uL): 2.0 Operator: GES

Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Nonane, 2,6-dimethyl-	17302-28-2	NBS75K.l	11598	80	C11H24	156
Octadecane, 2,6-dimethyl-	75163-97-2	NBS75K.l	39863	78	C20H42	282
Tridecane, 7-methyl-	26730-14-3	NBS75K.l	22538	74	C14H30	198



Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

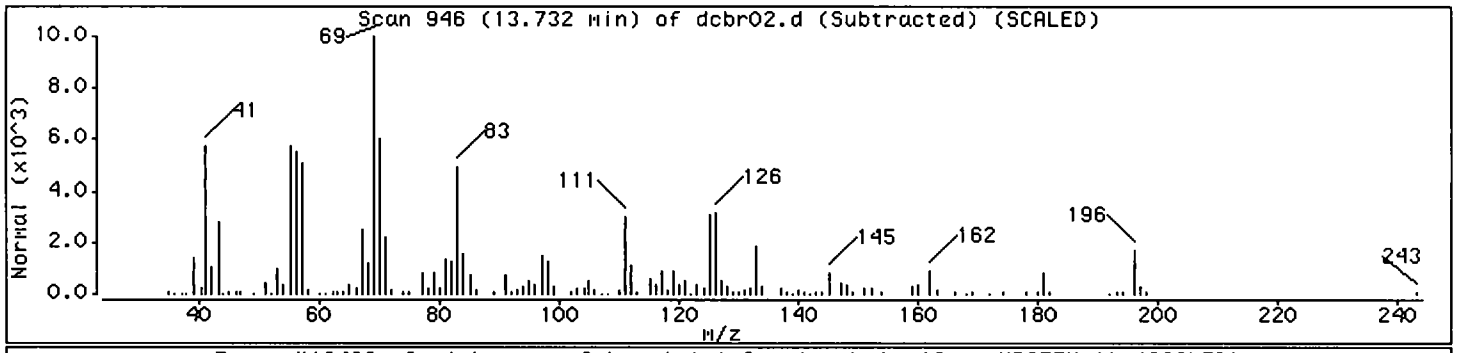
Client ID: WS-01 Instrument: gcl4.i

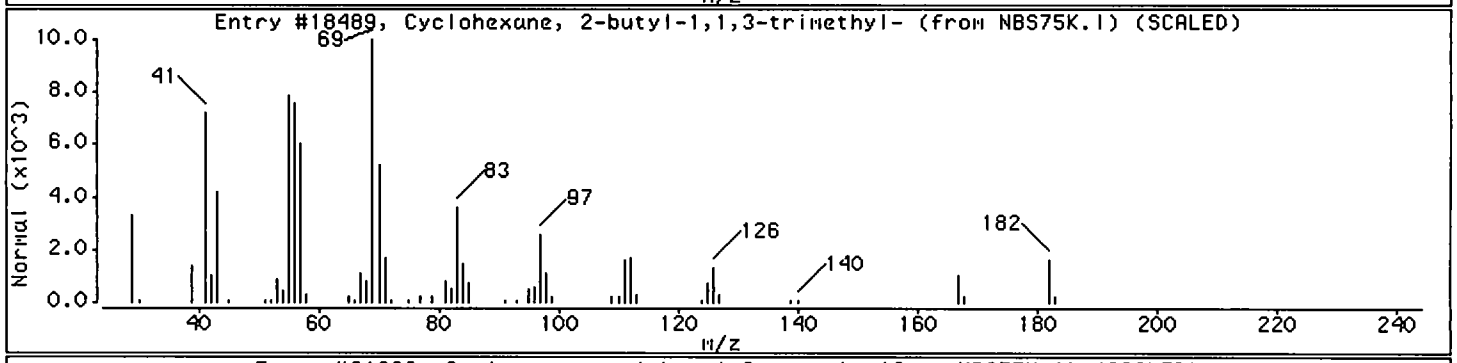
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

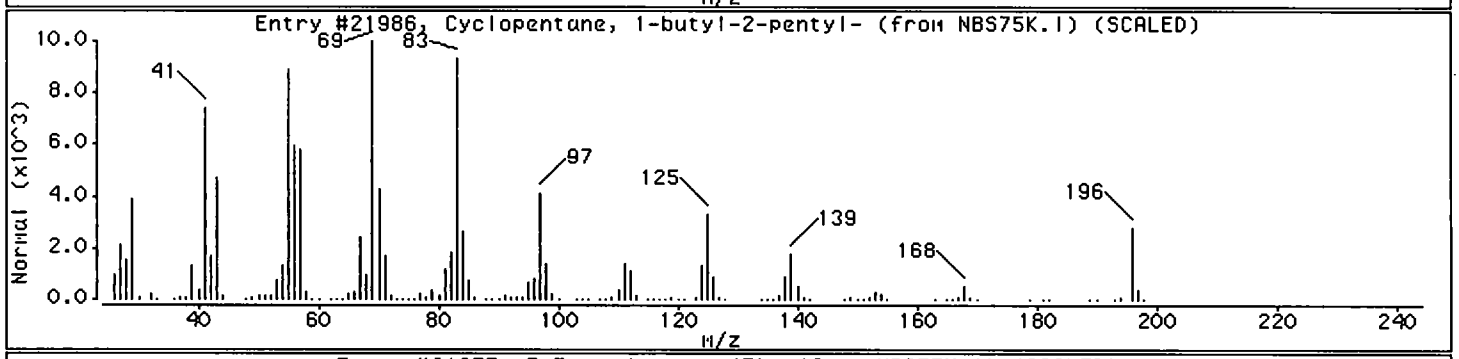
Volume Injected (uL): 2.0 Operator: GES

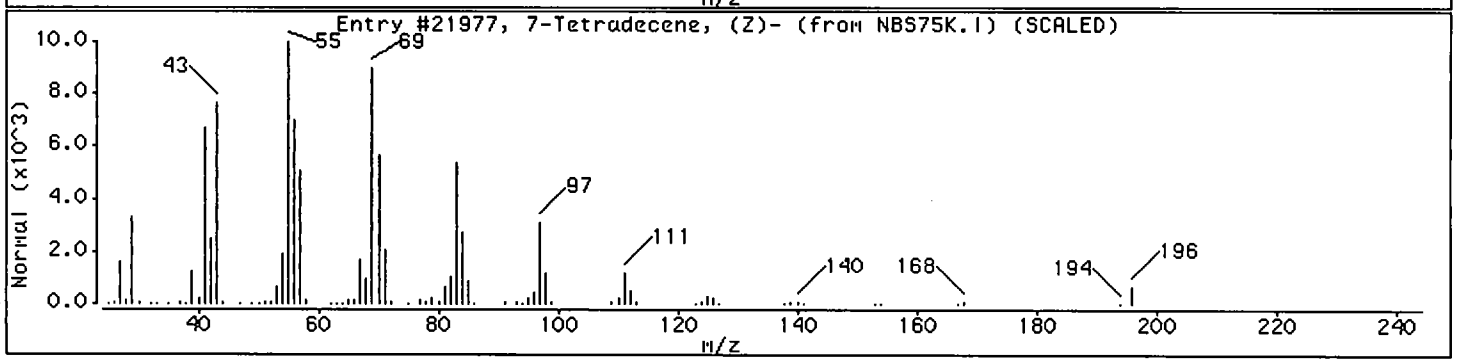
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 2-butyl-1,1,3-trimethyl-	54676-39-0	NBS75K.l	18489	64	C13H26	182
Cyclopentane, 1-butyl-2-pentyl-	61142-52-7	NBS75K.l	21986	58	C14H28	196
7-Tetradecene, (Z)-	41446-60-0	NBS75K.l	21977	55	C14H28	196









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

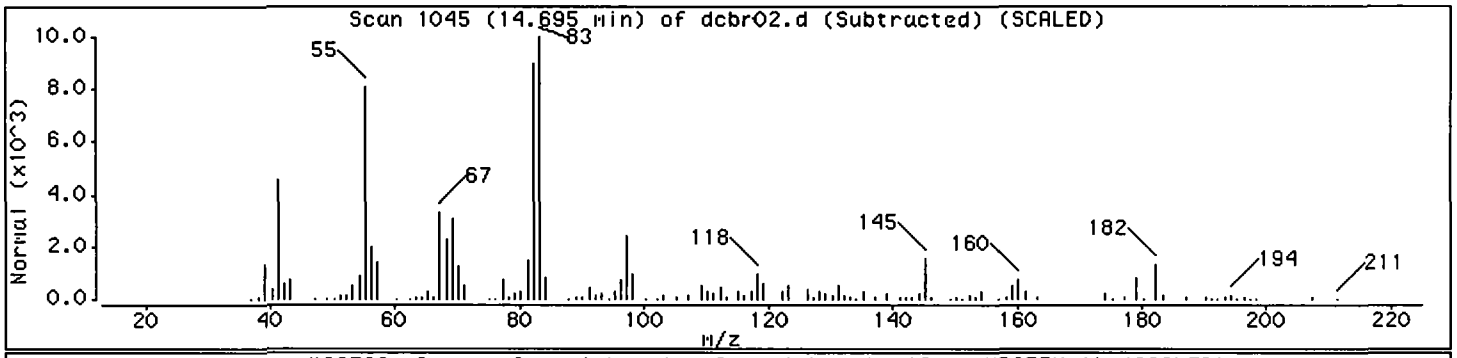
Client ID: WS-01 Instrument: gcl4.i

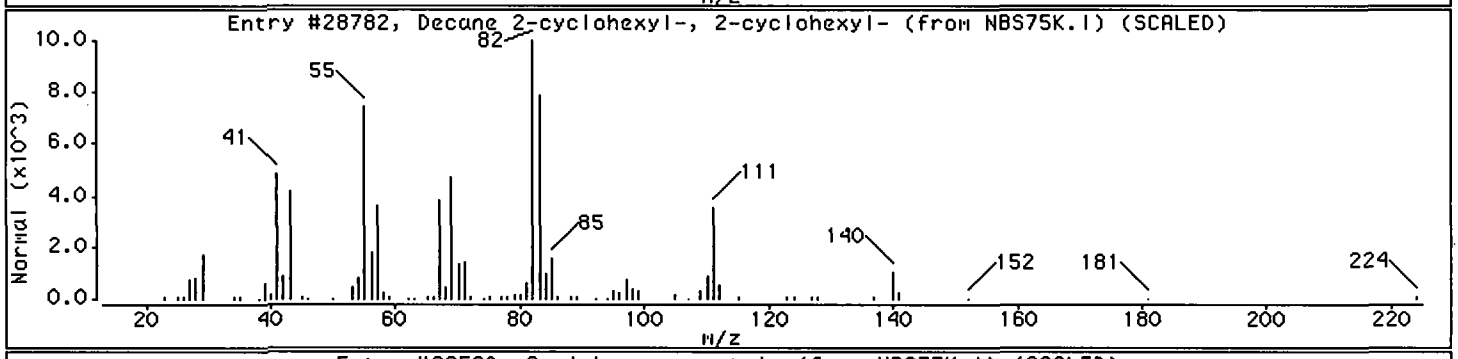
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

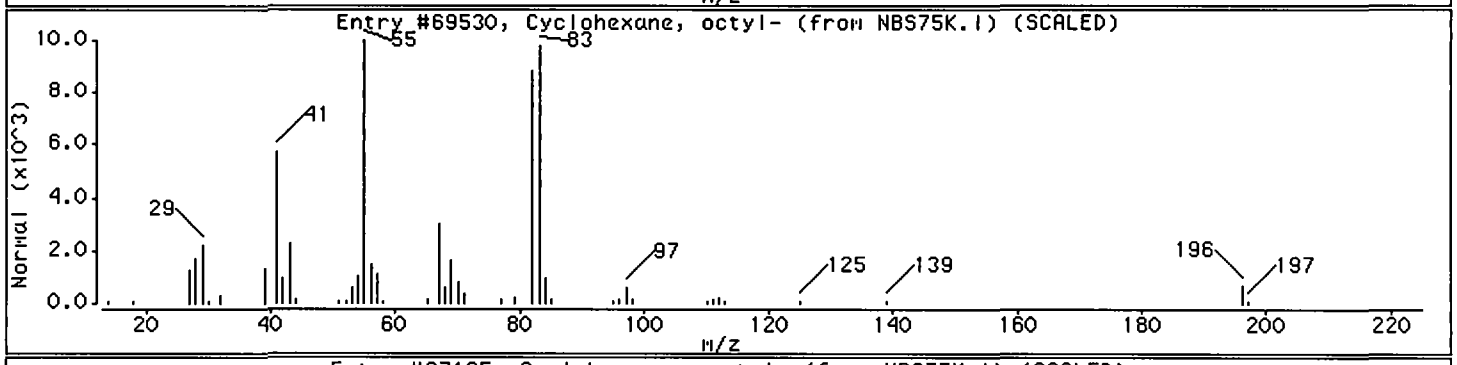
Volume Injected (uL): 2.0 Operator: GES

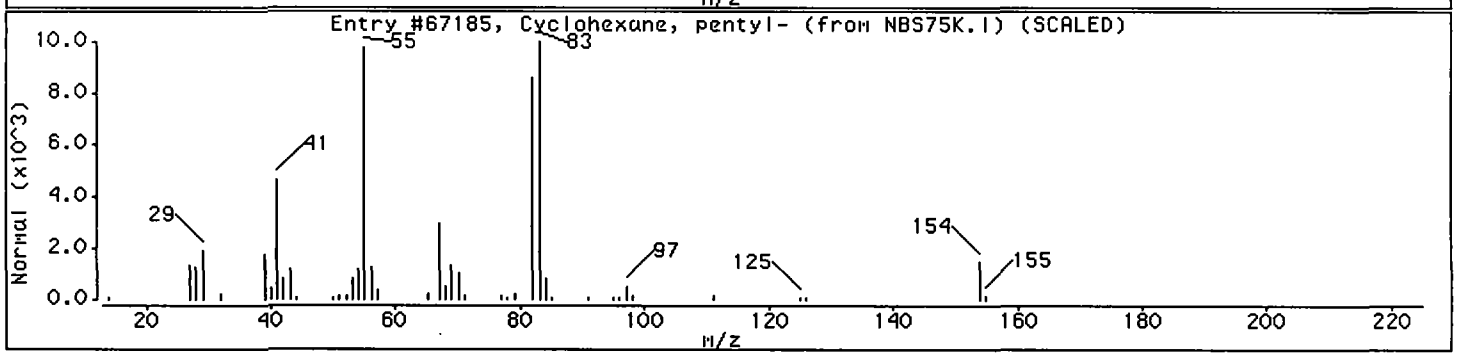
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Decane 2-cyclohexyl-, 2-cyclohexyl-	13151-73-0	NBS75K.l	28782	59	C16H32	224
Cyclohexane, octyl-	1795-15-9	NBS75K.l	69530	53	C14H28	196
Cyclohexane, pentyl-	4292-92-6	NBS75K.l	67185	53	C11H22	154









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

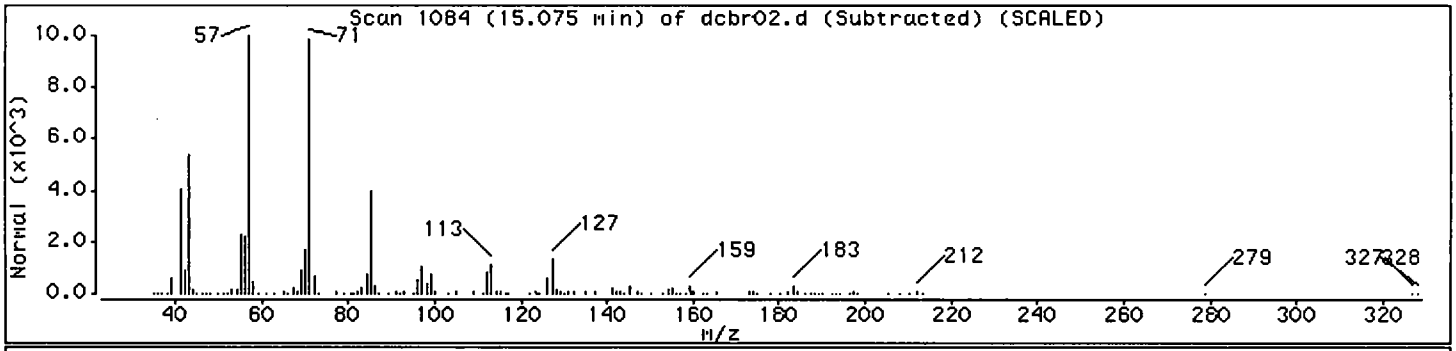
Client ID: WS-01 Instrument: gc14.i

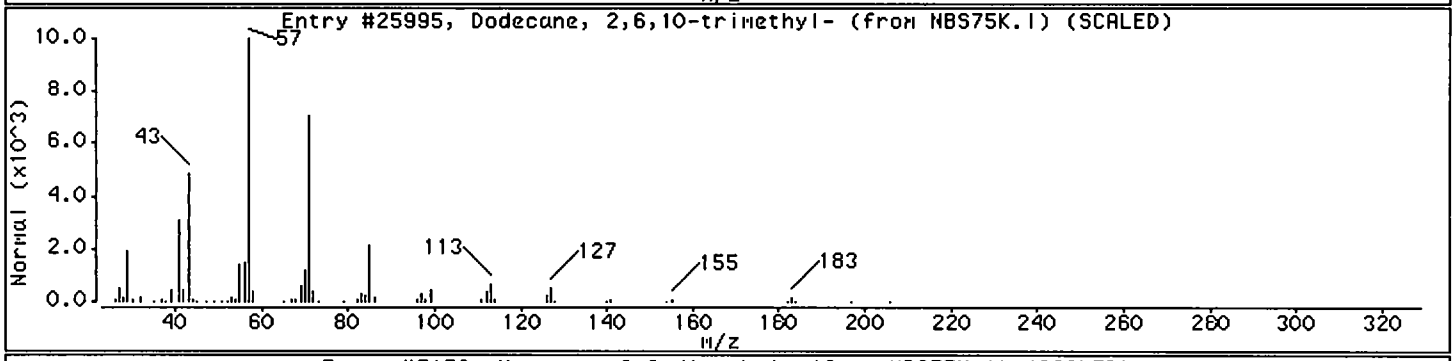
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

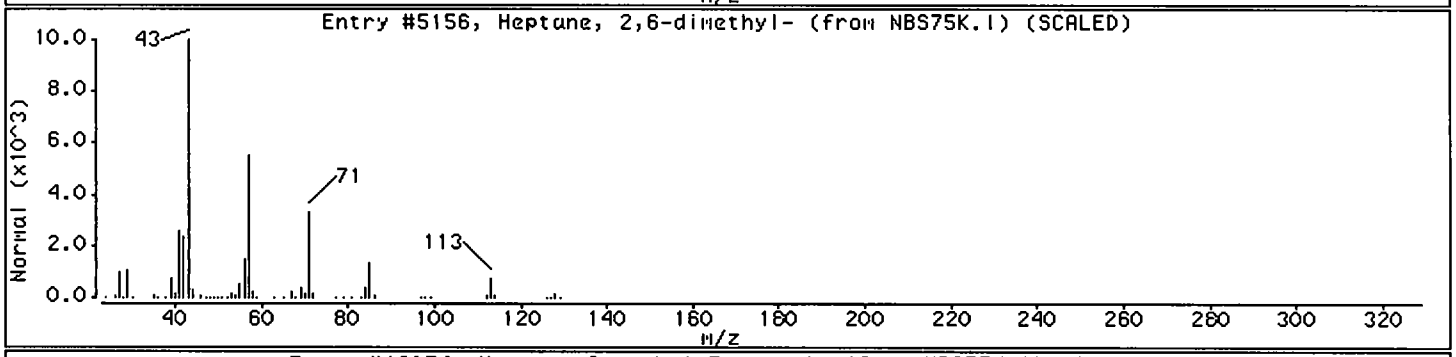
Volume Injected (uL): 2.0 Operator: GES

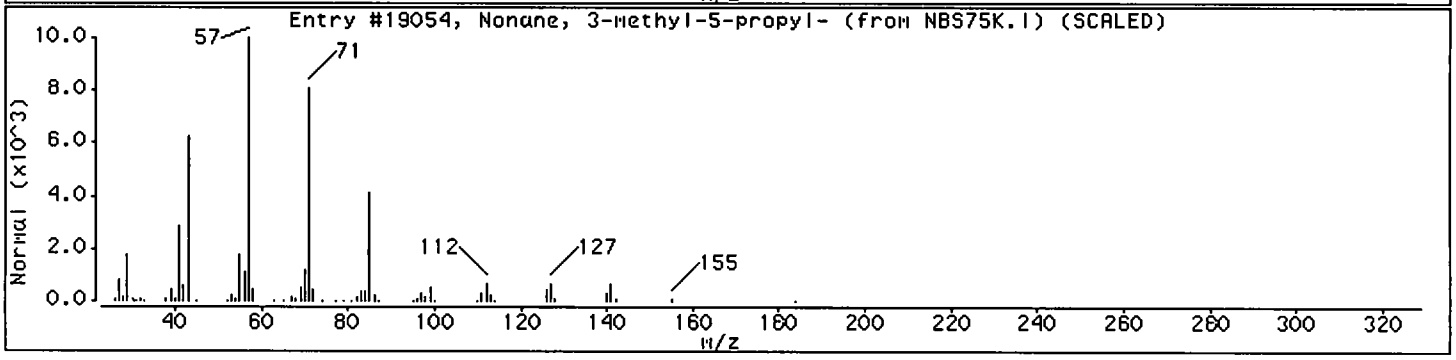
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	25995	80	C15H32	212
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.l	5156	74	C9H20	128
Nonane, 3-methyl-5-propyl-	31081-18-2	NBS75K.l	19054	72	C13H28	184









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

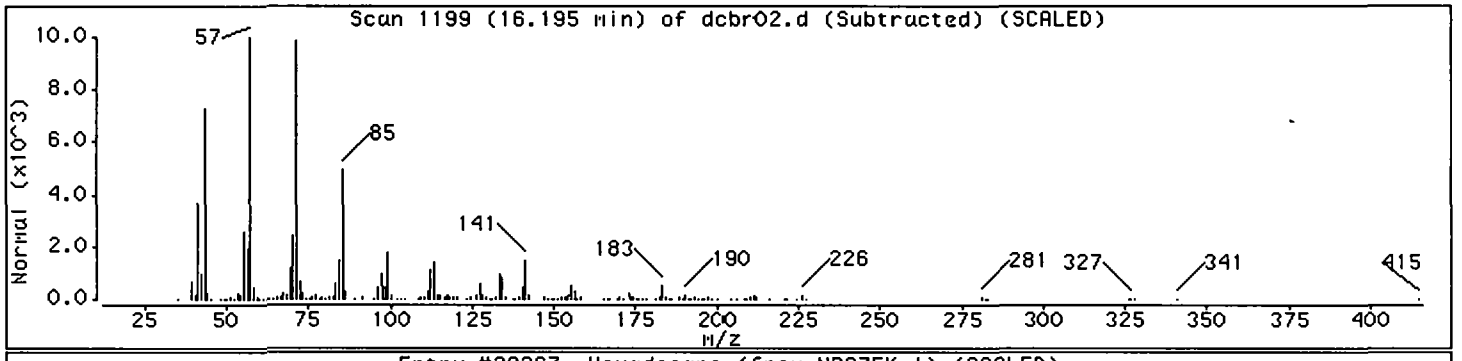
Client ID: WS-01 Instrument: gc14.i

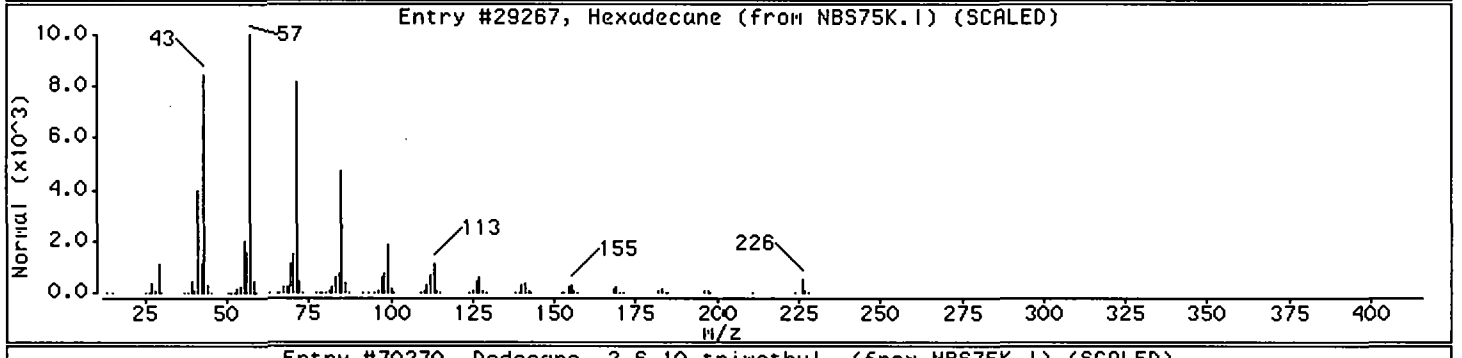
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

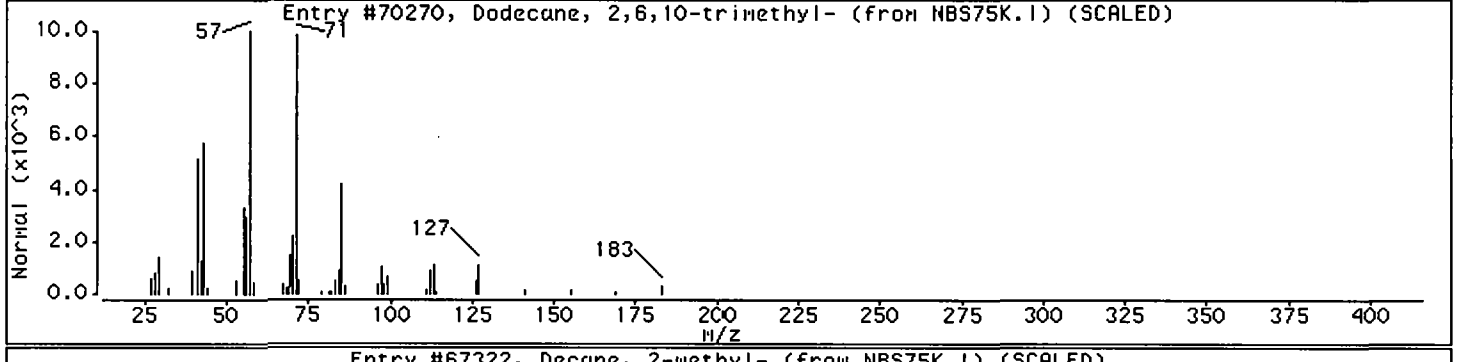
Volume Injected (uL): 2.0 Operator: GES

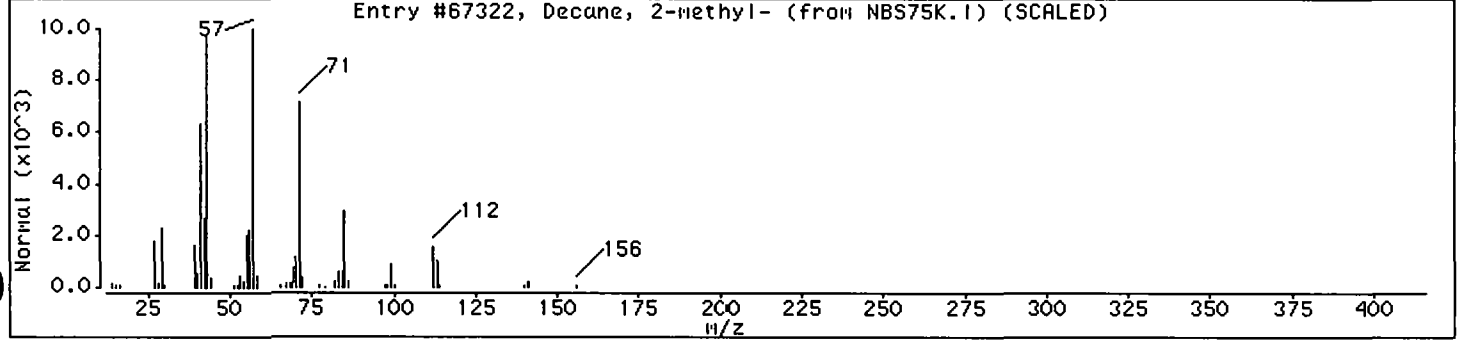
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane	544-76-3	NBS75K.l	29267	81	C16H34	226
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	70270	80	C15H32	212
Decane, 2-methyl-	6975-98-0	NBS75K.l	67322	72	C11H24	156









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

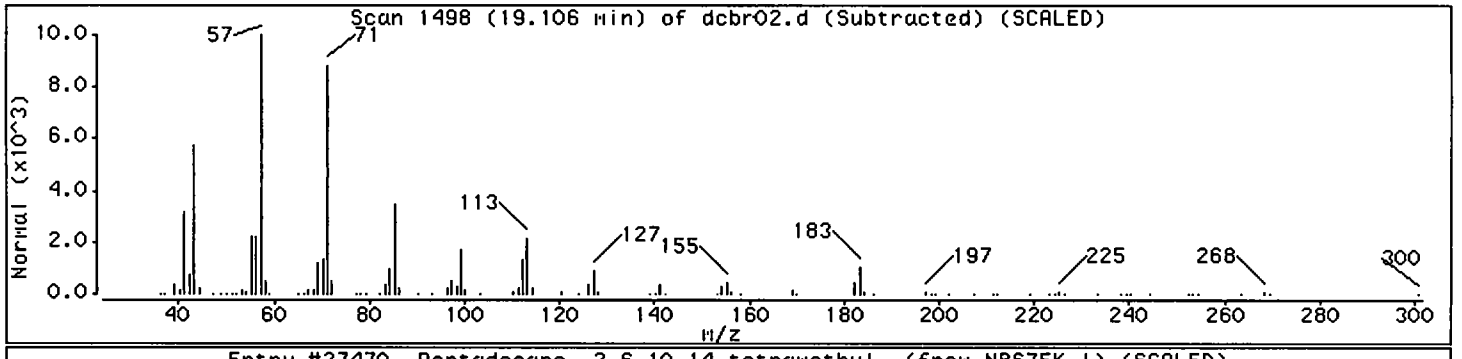
Client ID: WS-01 Instrument: gc14.i

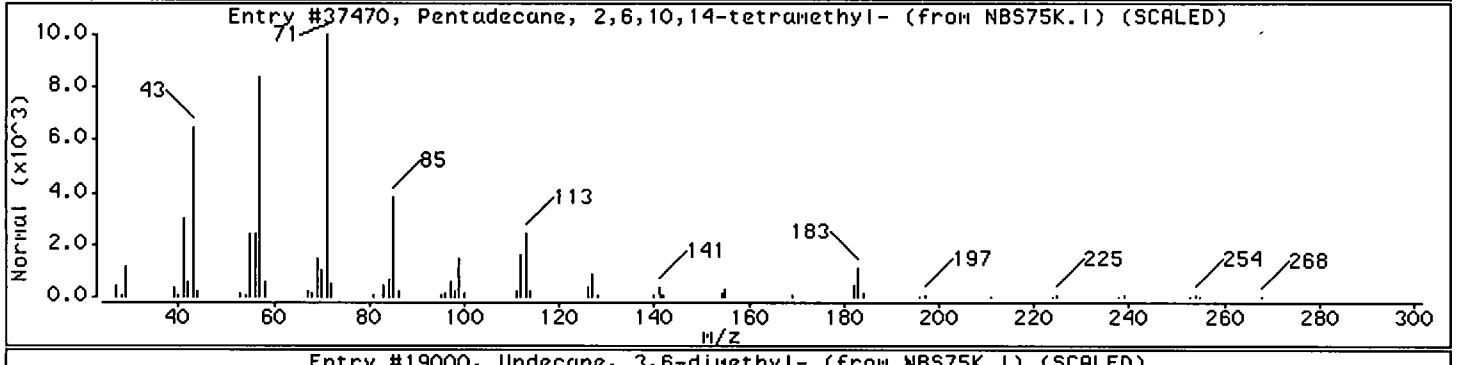
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

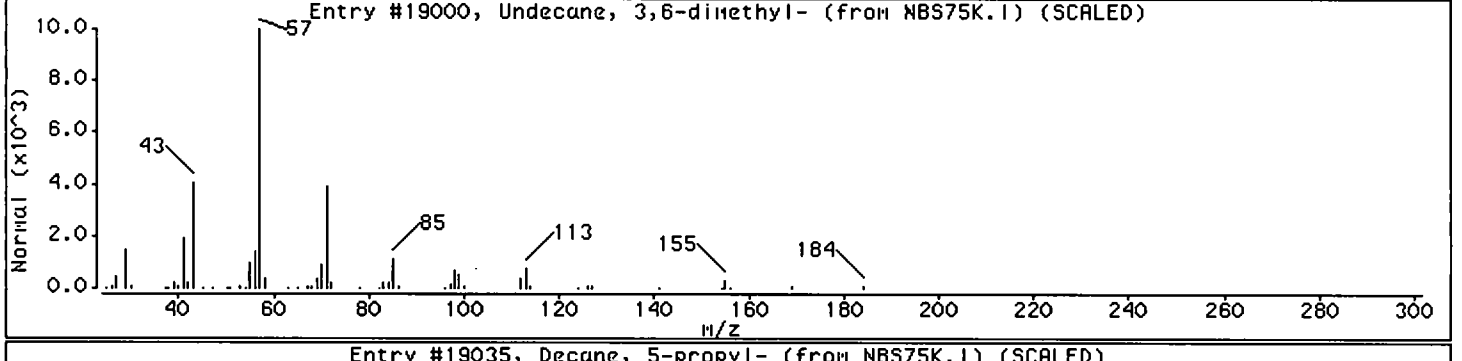
Volume Injected (uL): 2.0 Operator: GES

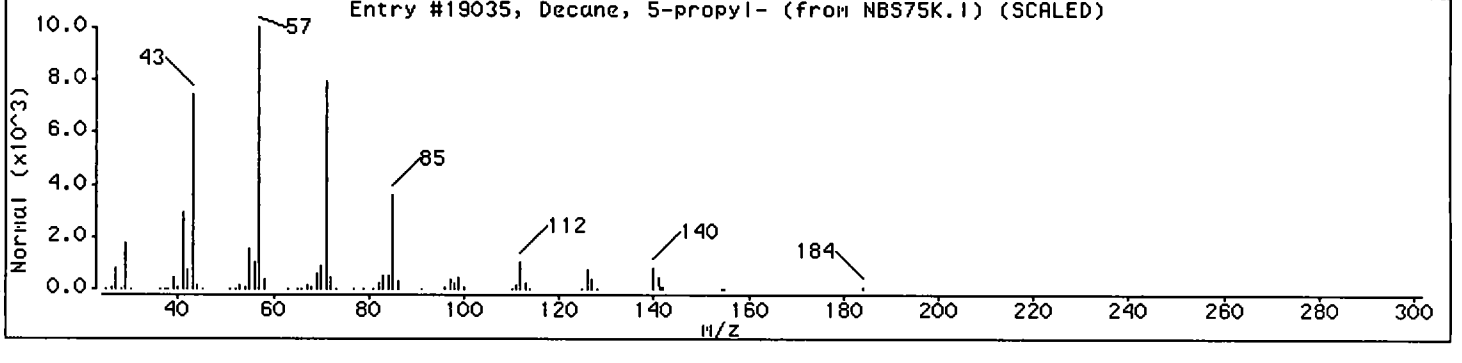
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	37470	96	C19H40	268
Undecane, 3,6-dimethyl-	17301-28-9	NBS75K.l	19000	72	C13H28	184
Decane, 5-propyl-	17312-62-8	NBS75K.l	19035	70	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

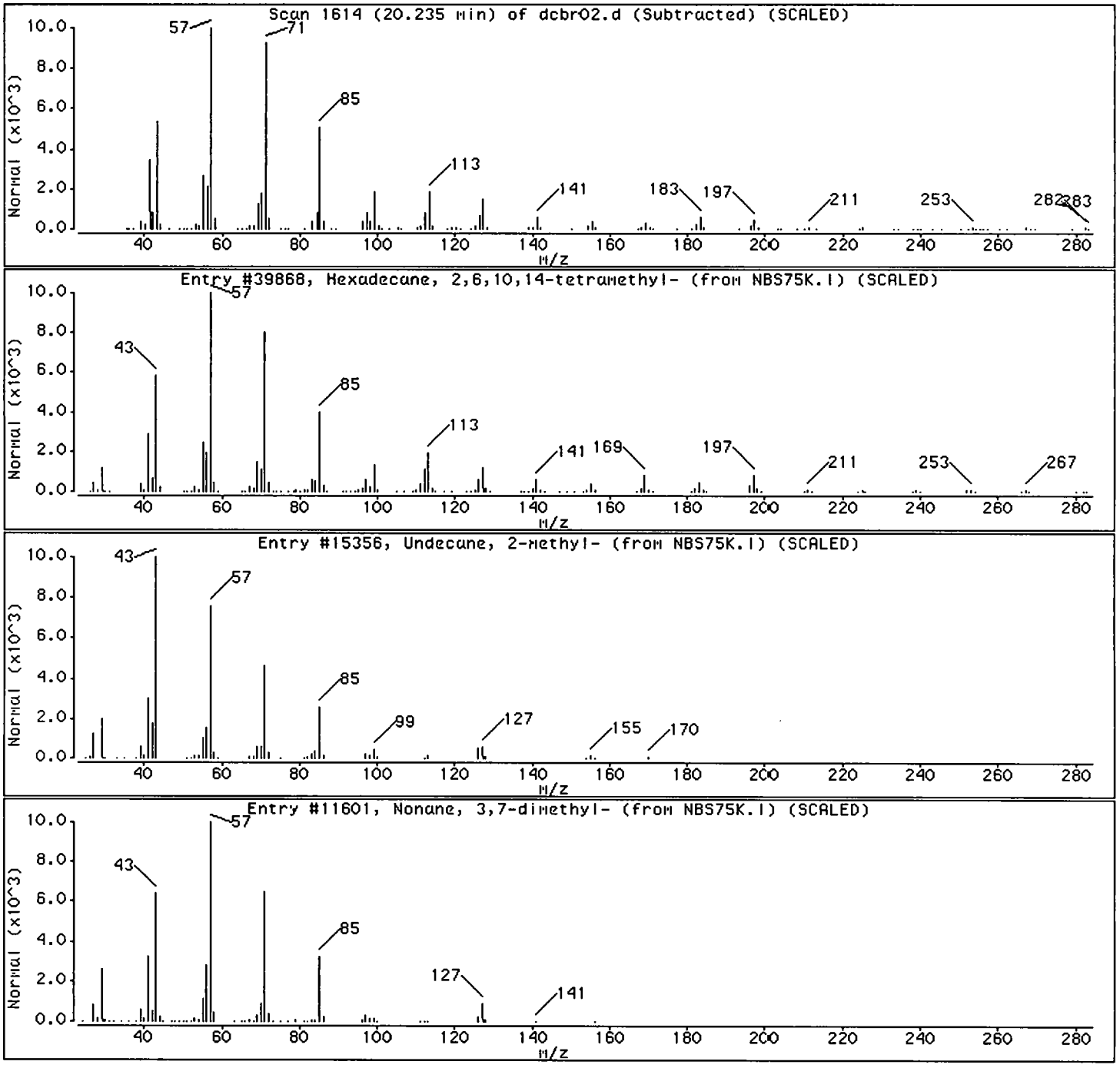
Client ID: WS-01 Instrument: gcl4.i

Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

Volume Injected (uL): 2.0 Operator: GES

Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	39868	91	C20H42	282
Undecane, 2-methyl-	7045-71-8	NBS75K.l	15356	90	C12H26	170
Nonane, 3,7-dimethyl-	17302-32-8	NBS75K.l	11601	87	C11H24	156



Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

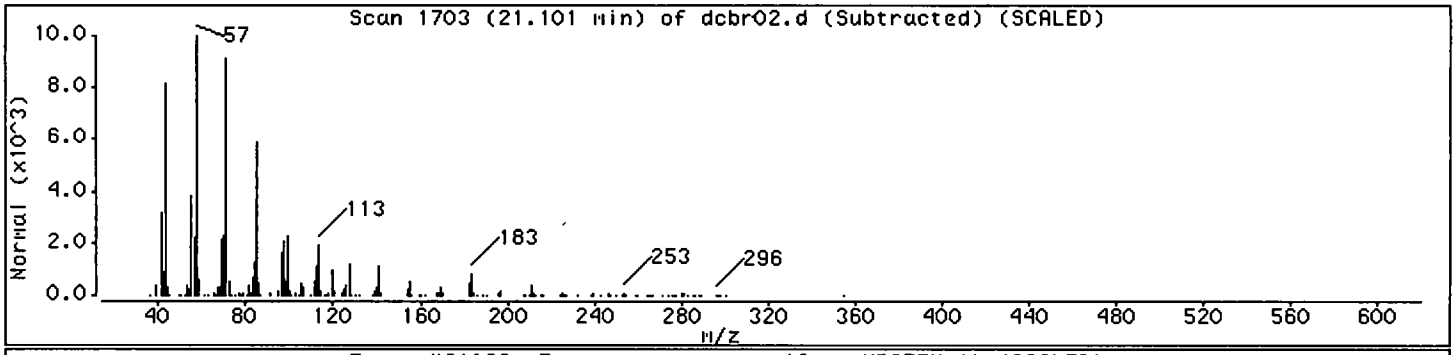
Client ID: WS-01 Instrument: gcl4.i

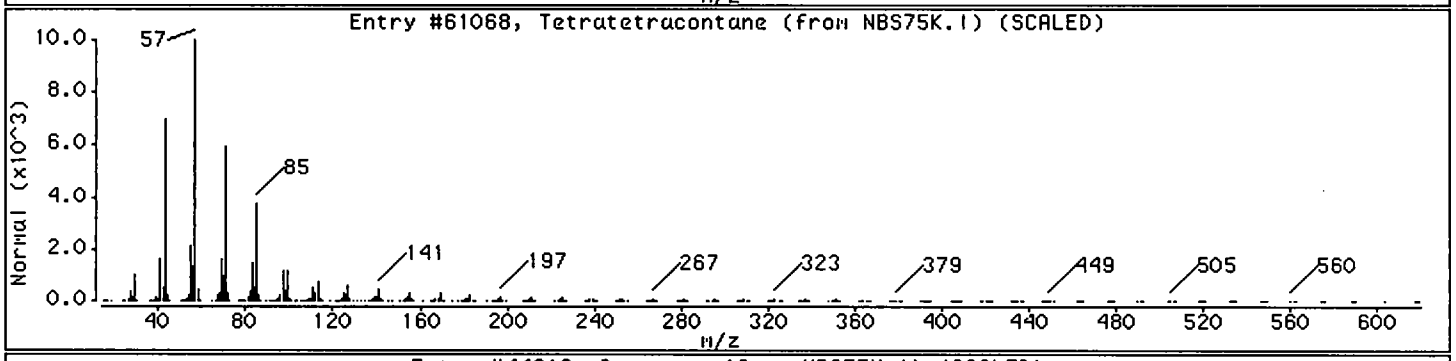
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

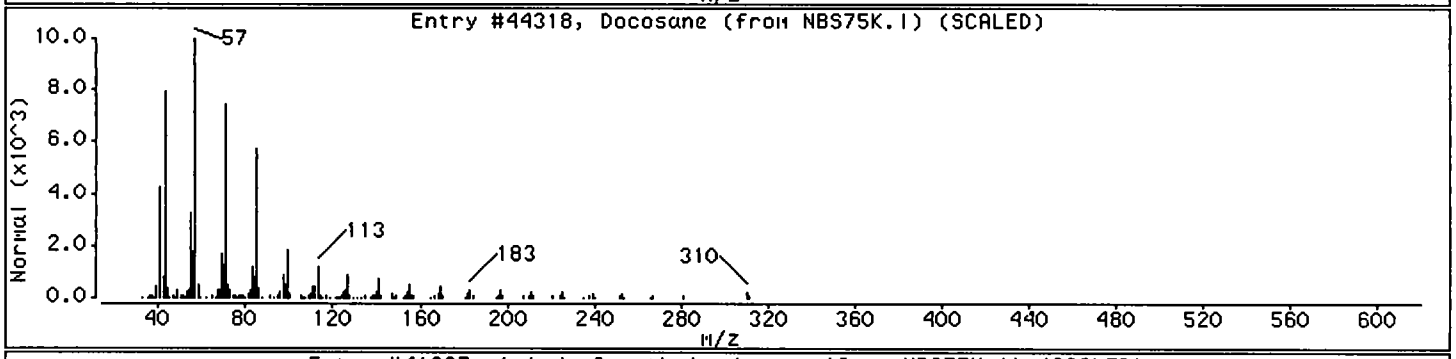
Volume Injected (uL): 2.0 Operator: GES

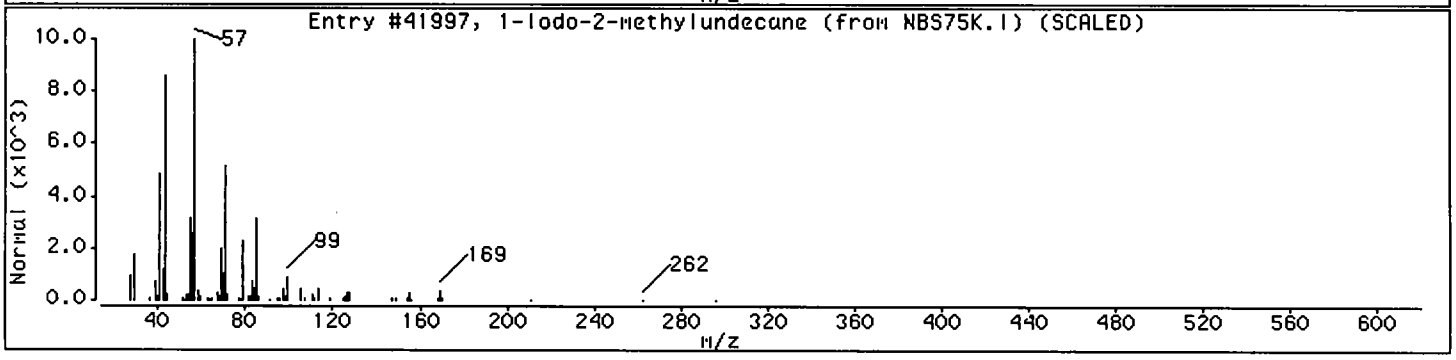
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetratetracontane	7098-22-8	NBS75K.l	61068	72	C44H90	619
Docosane	629-97-0	NBS75K.l	44318	68	C22H46	310
1-Iodo-2-methylundecane	73105-67-6	NBS75K.l	41997	68	C12H25I	296









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

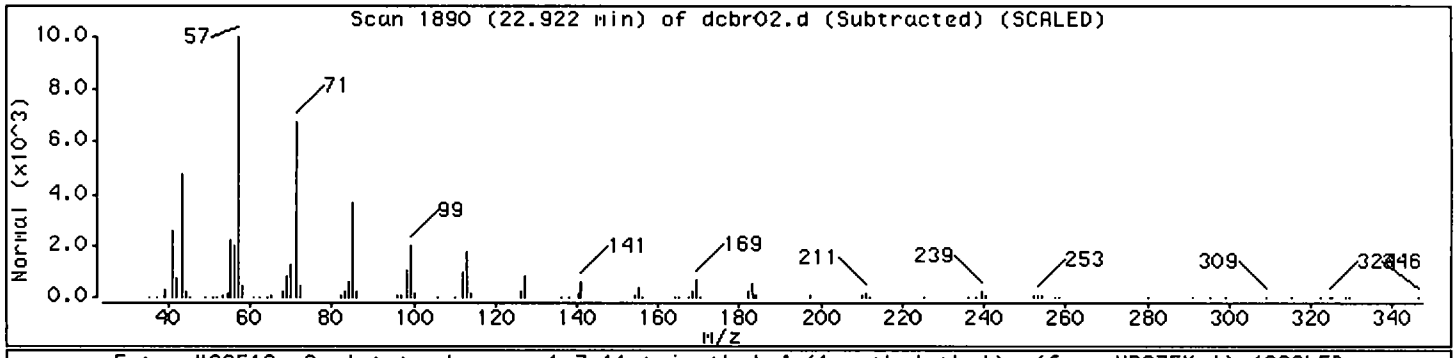
Client ID: WS-01 Instrument: gcl4.i

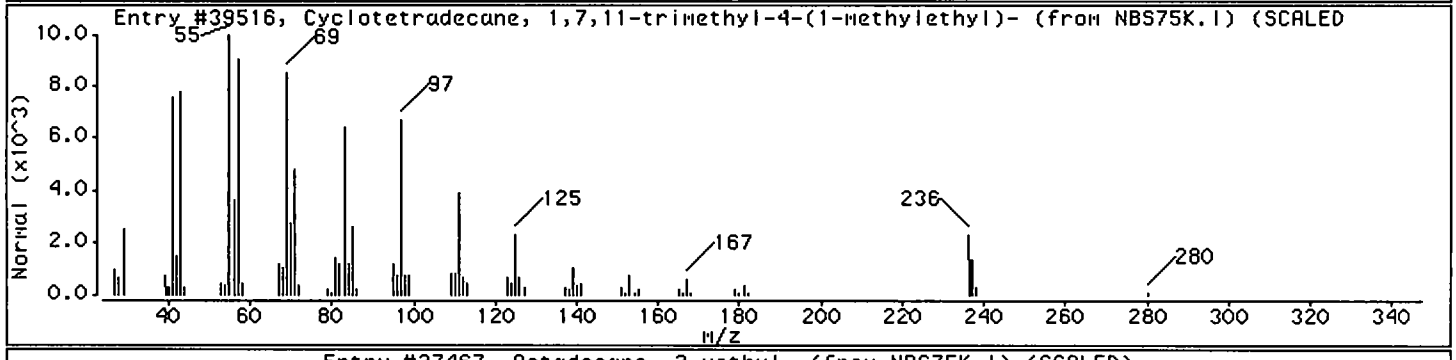
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

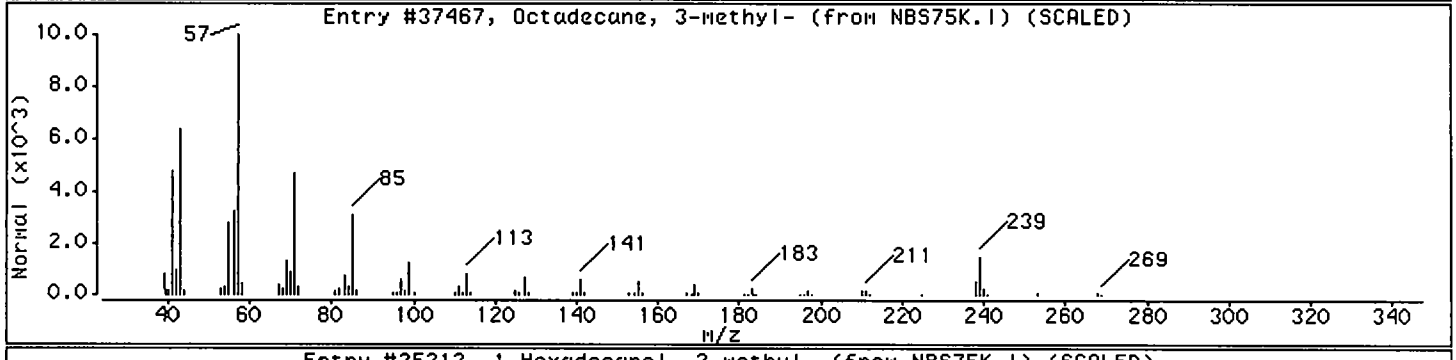
Volume Injected (uL): 2.0 Operator: GES

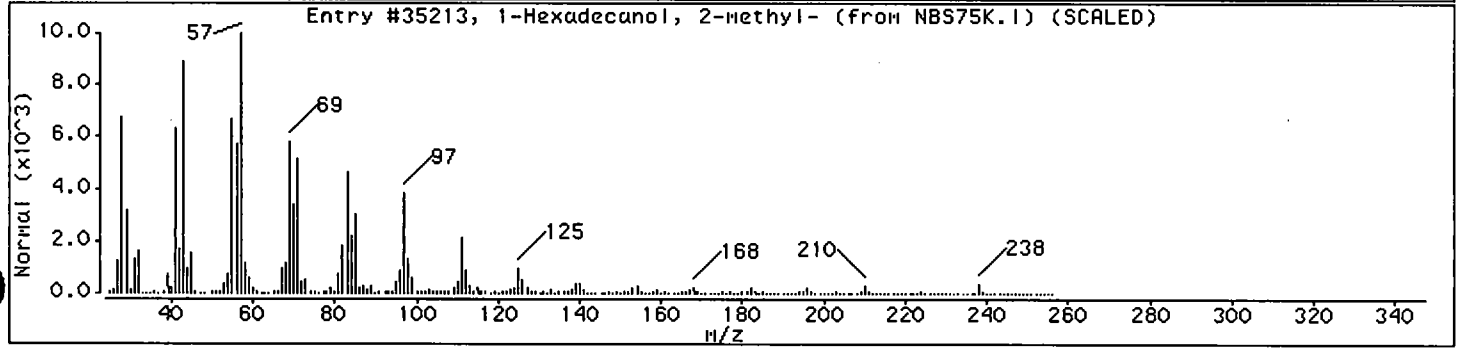
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	39516	95	C20H40	280
Octadecane, 3-methyl-	6561-44-0	NBS75K.l	37467	70	C19H40	268
1-Hexadecanol, 2-methyl-	2490-48-4	NBS75K.l	35213	62	C17H360	256









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

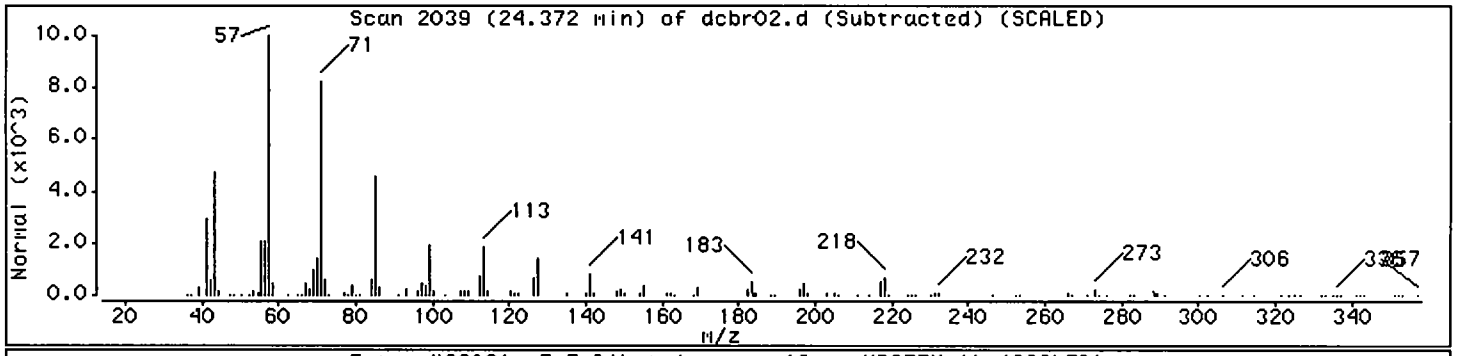
Client ID: WS-01 Instrument: gc14.i

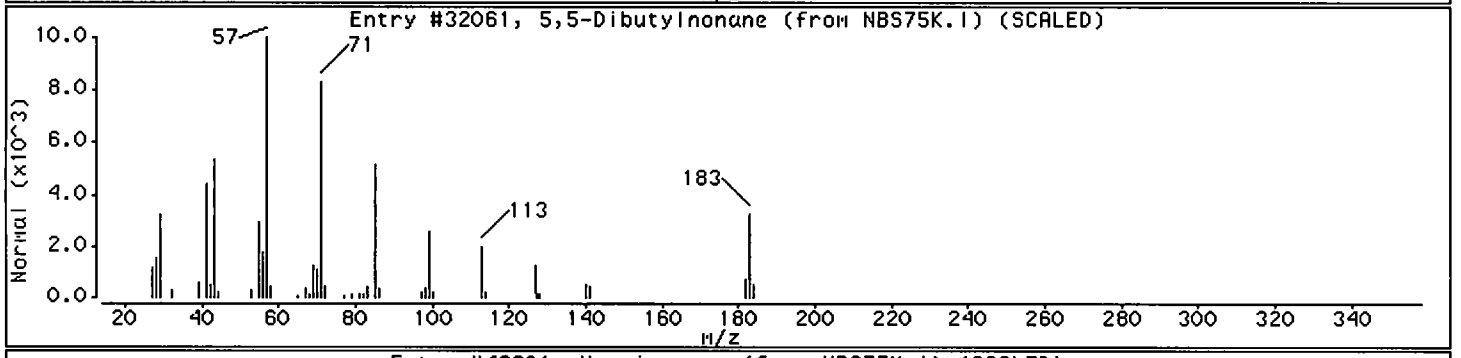
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

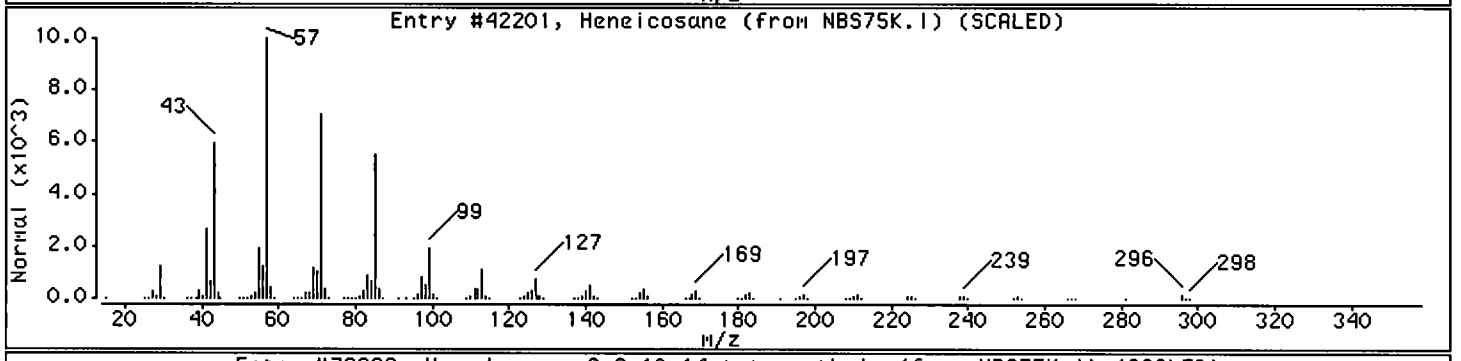
Volume Injected (uL): 2.0 Operator: GES

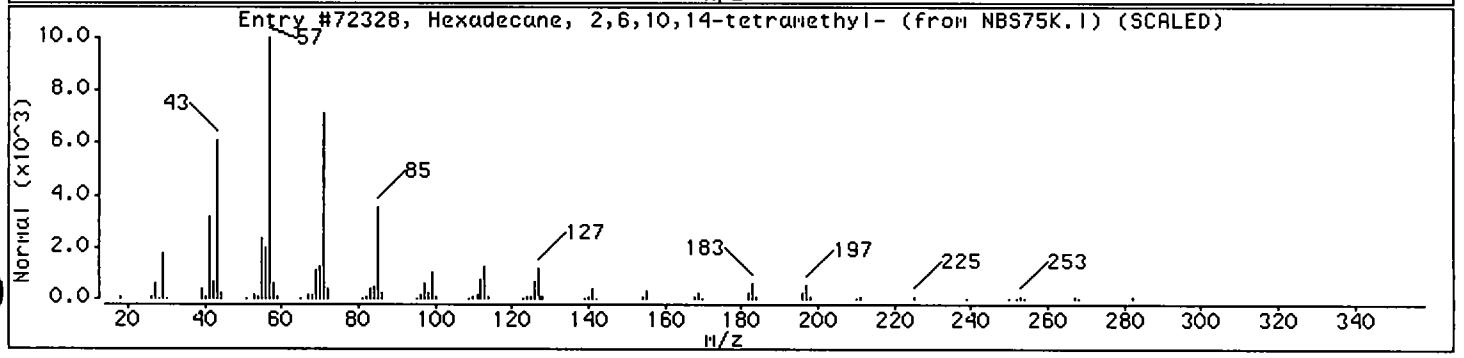
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
5,5-Dibutylnonane	0-00-0	NBS75K.l	32061	86	C17H36	240
Heneicosane	629-94-7	NBS75K.l	42201	80	C21H44	296
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	72328	80	C20H42	282









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

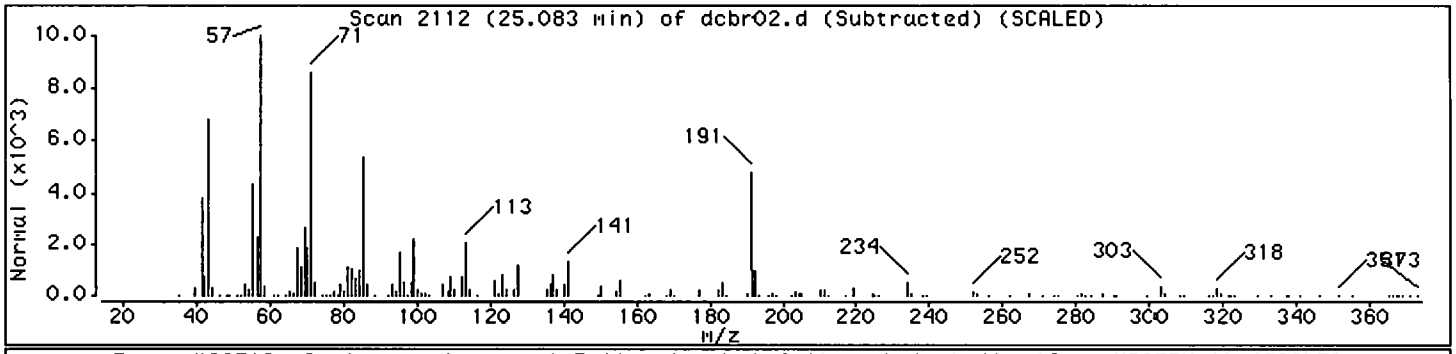
Client ID: WS-01 Instrument: gc14.i

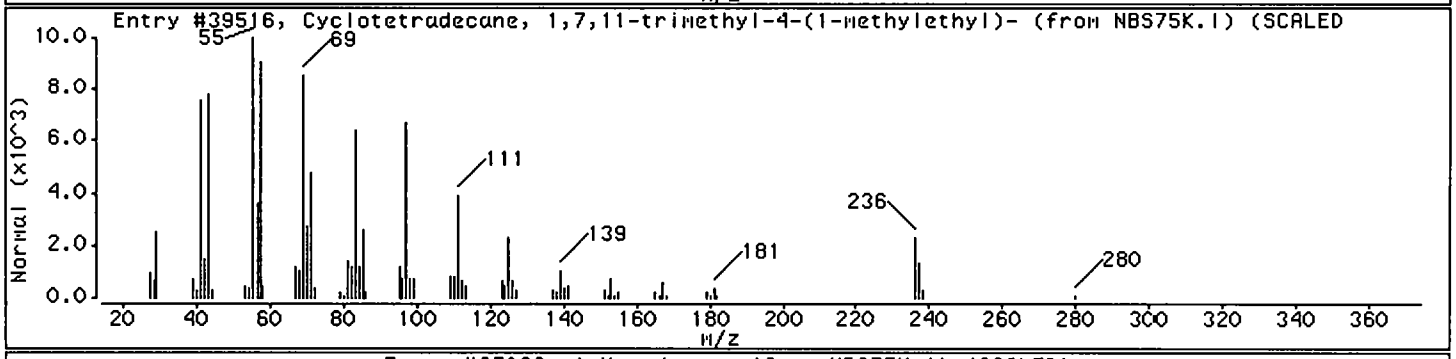
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

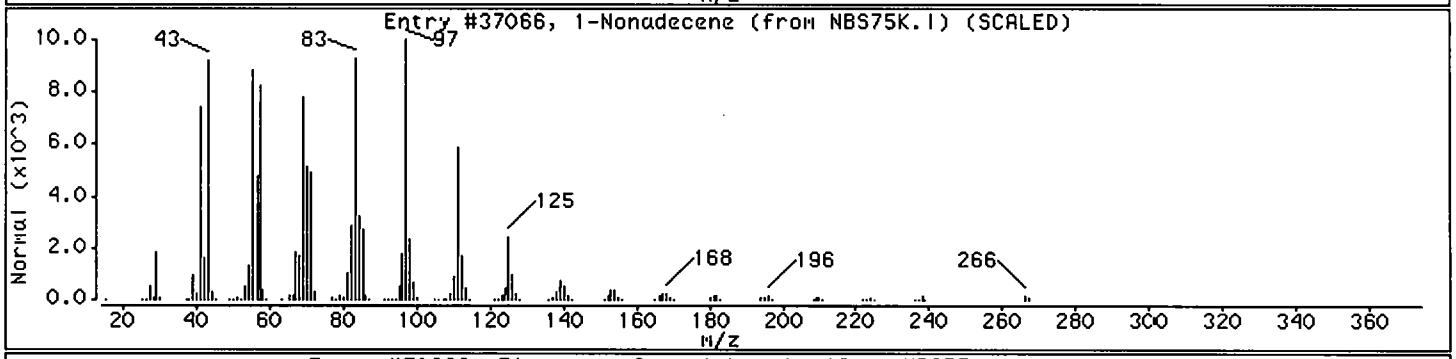
Volume Injected (uL): 2.0 Operator: GES

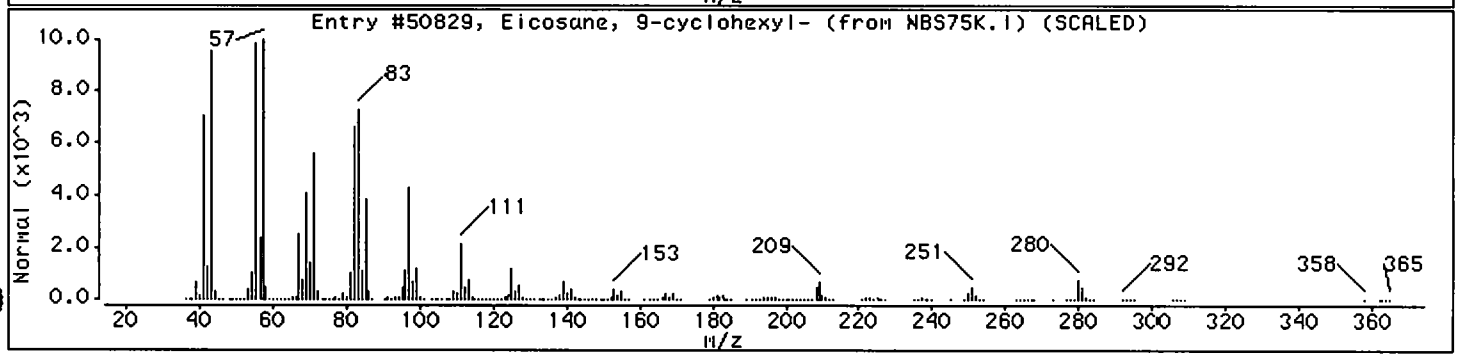
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	39516	60	C20H40	280
1-Nonadecene	18435-45-5	NBS75K.l	37066	53	C19H38	266
Eicosane, 9-cyclohexyl-	4443-61-2	NBS75K.l	50829	51	C26H52	364









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

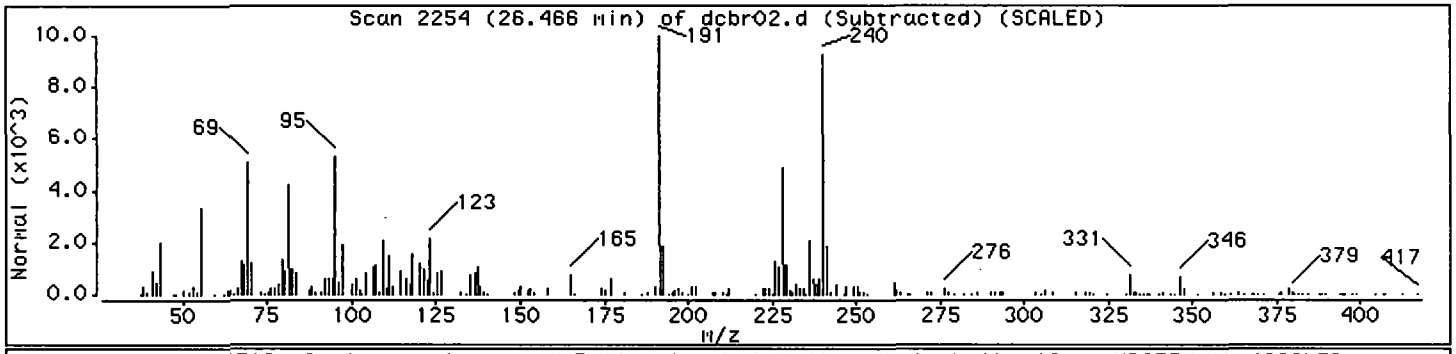
Client ID: WS-01 Instrument: gc14.i

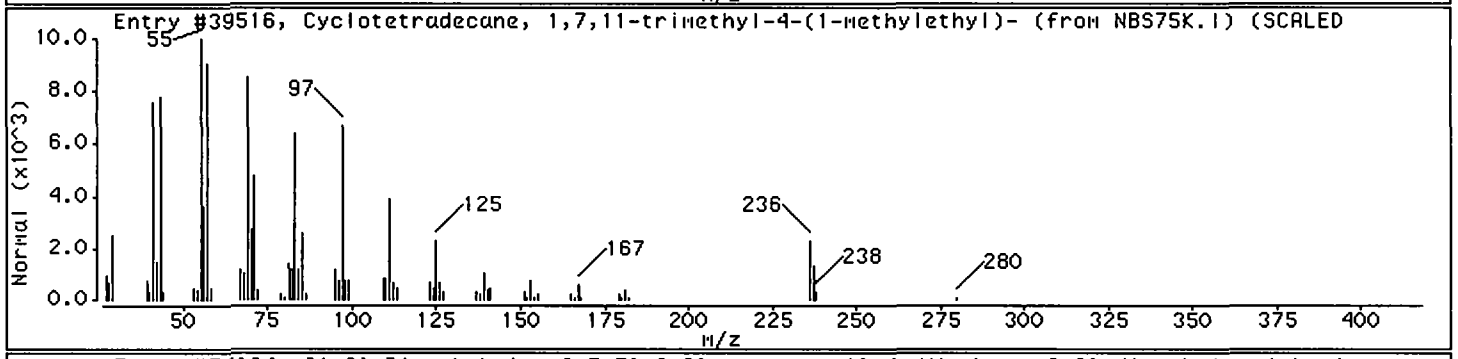
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

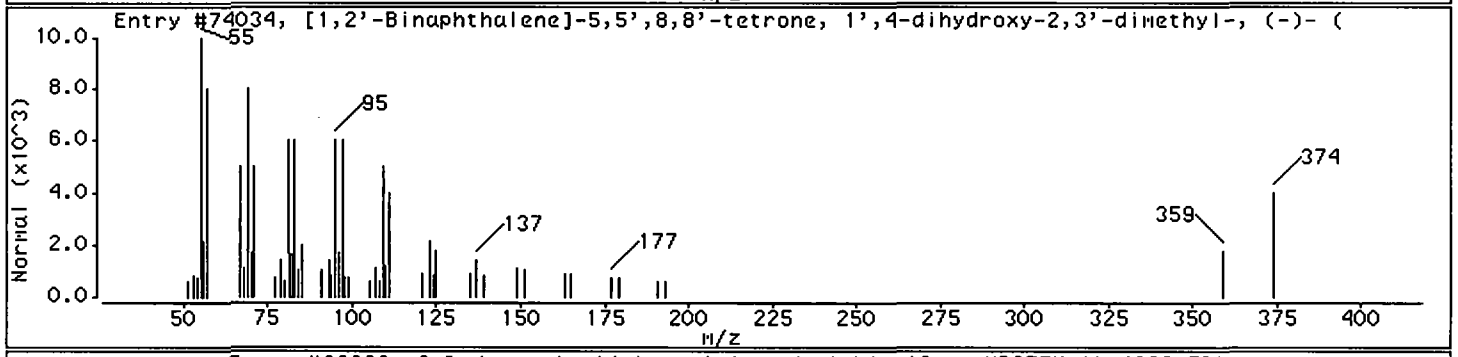
Volume Injected (uL): 2.0 Operator: GES

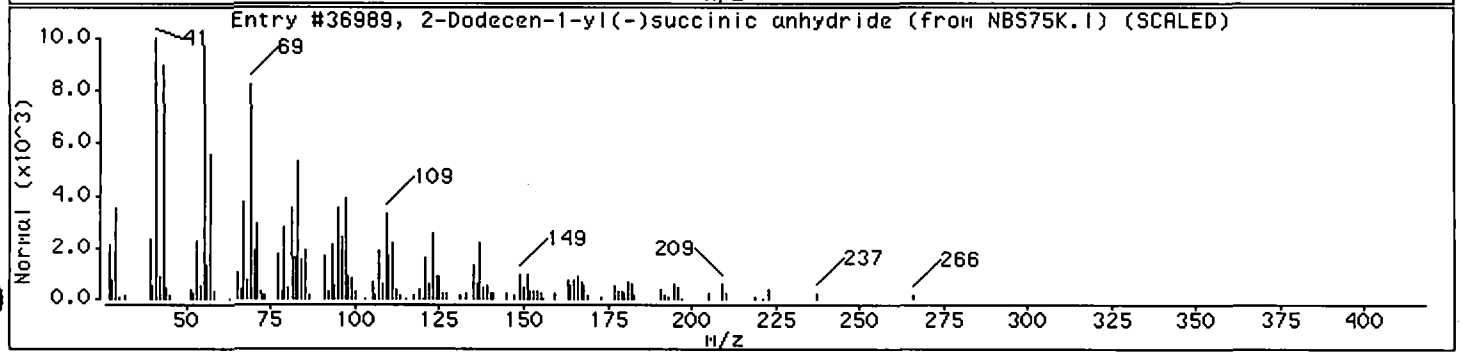
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	39516	93	C20H40	280
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	87	C22H14O6	374
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	70	C16H26O3	266









Data File: /chem/gc14.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

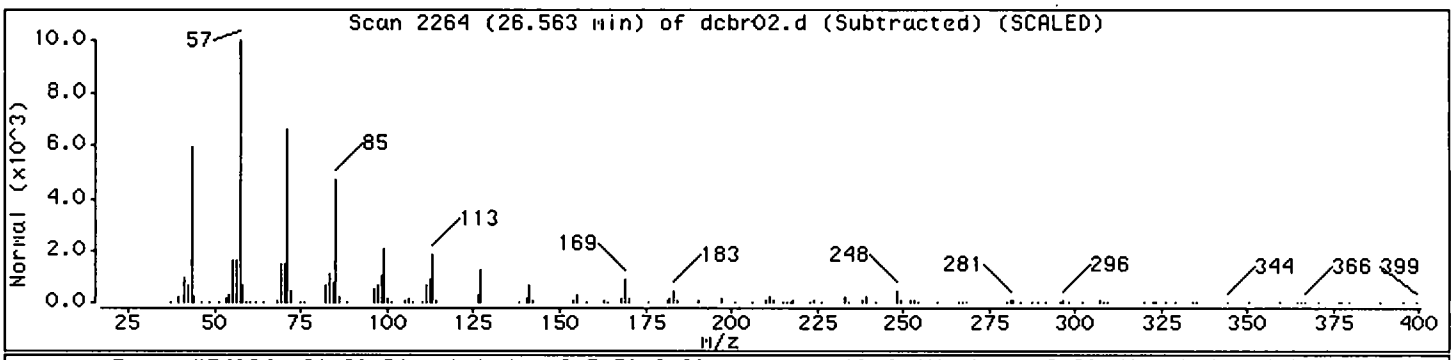
Client ID: WS-01 Instrument: gc14.i

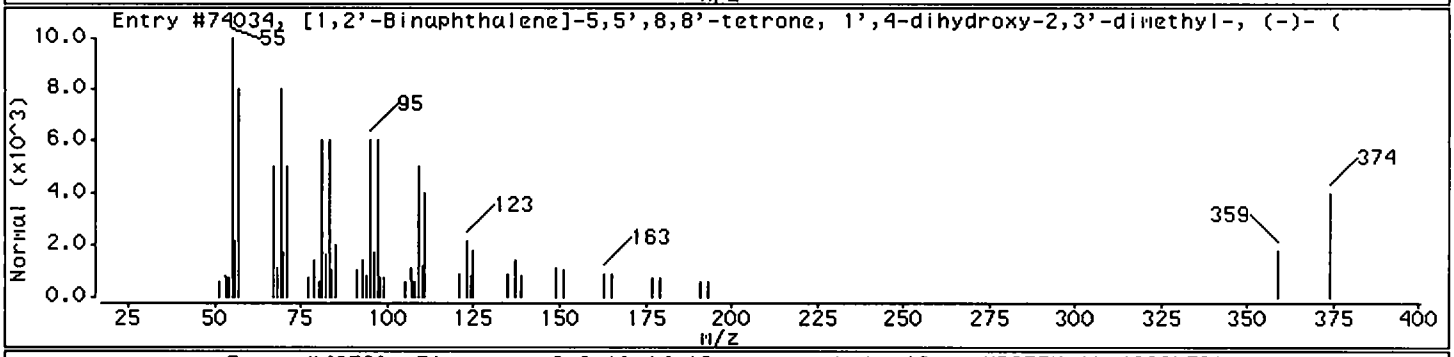
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

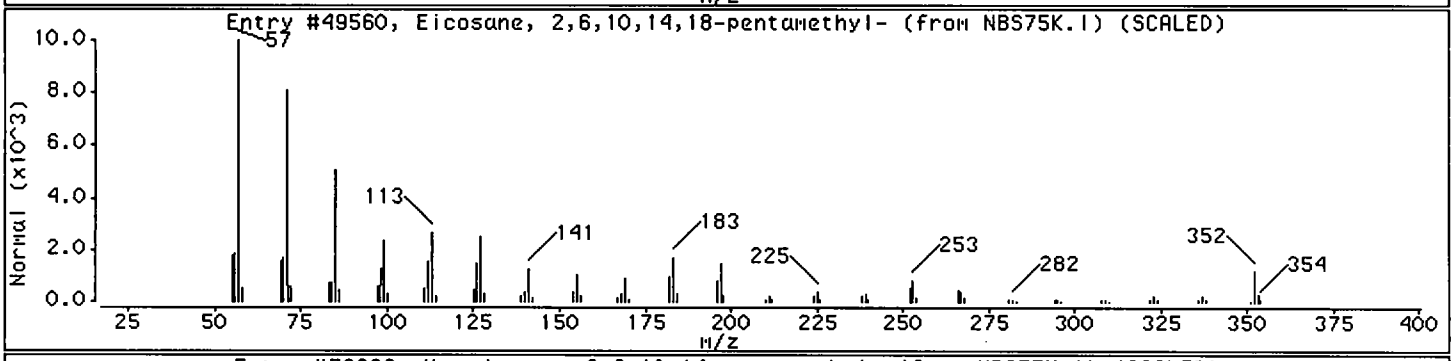
Volume Injected (uL): 2.0 Operator: GES

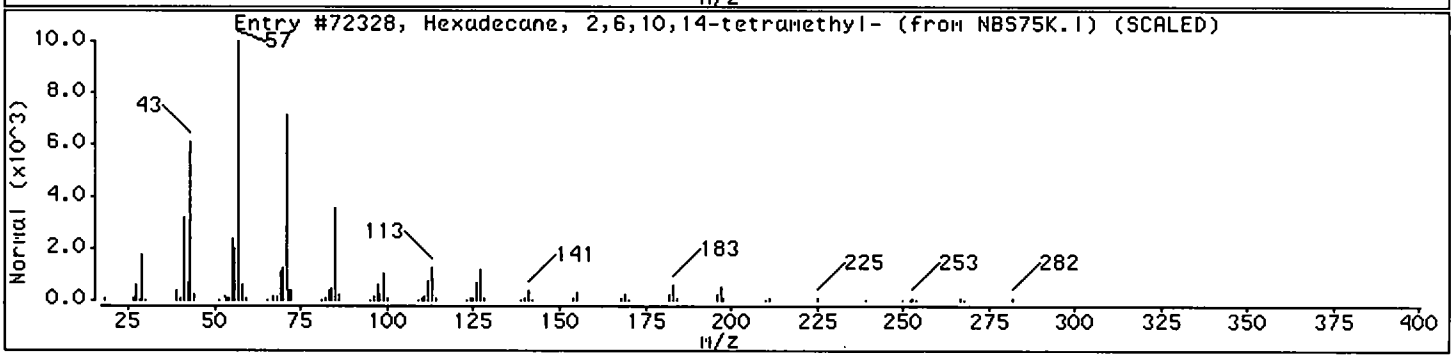
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	95	C22H14O6	374
Eicosane, 2,6,10,14,18-pentamethyl-	51794-16-2	NBS75K.l	49560	68	C25H52	352
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	72328	60	C20H42	282









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

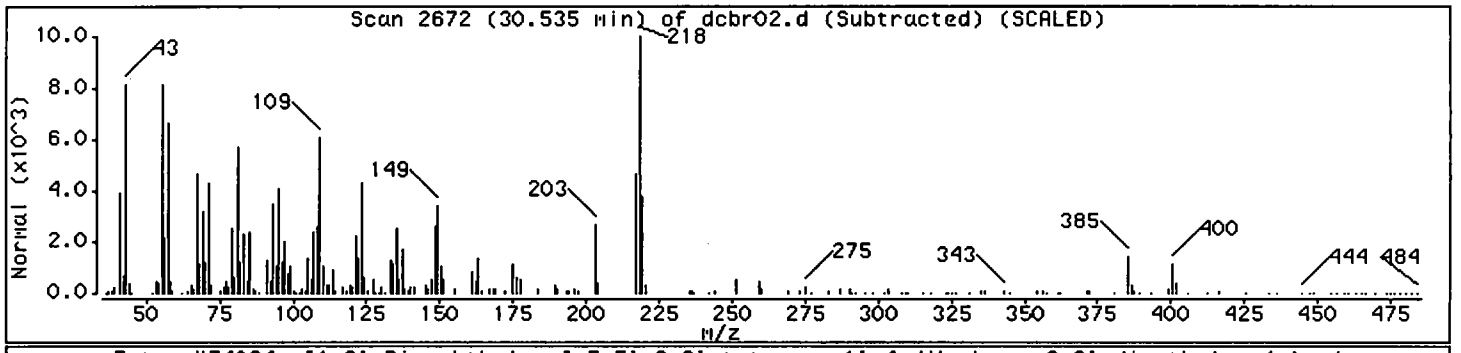
Client ID: WS-01 Instrument: gcl4.i

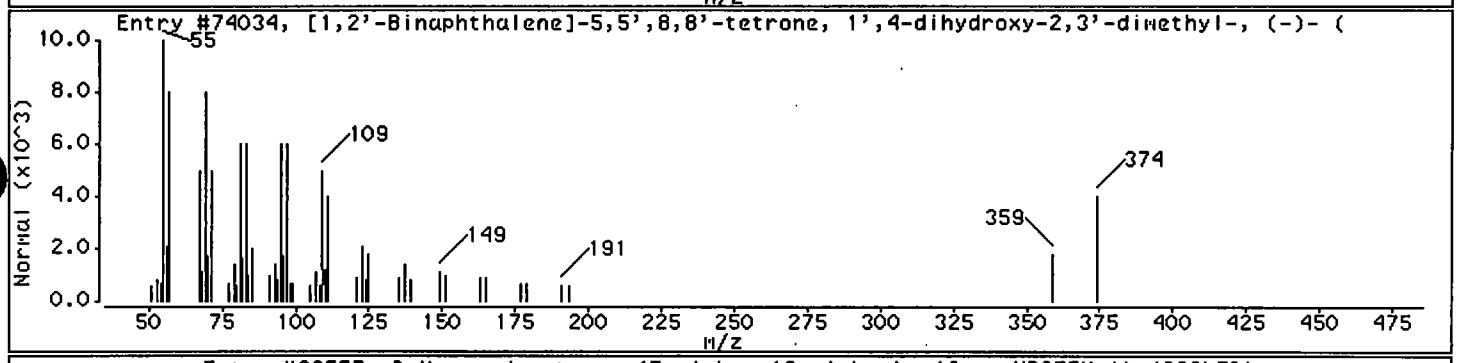
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

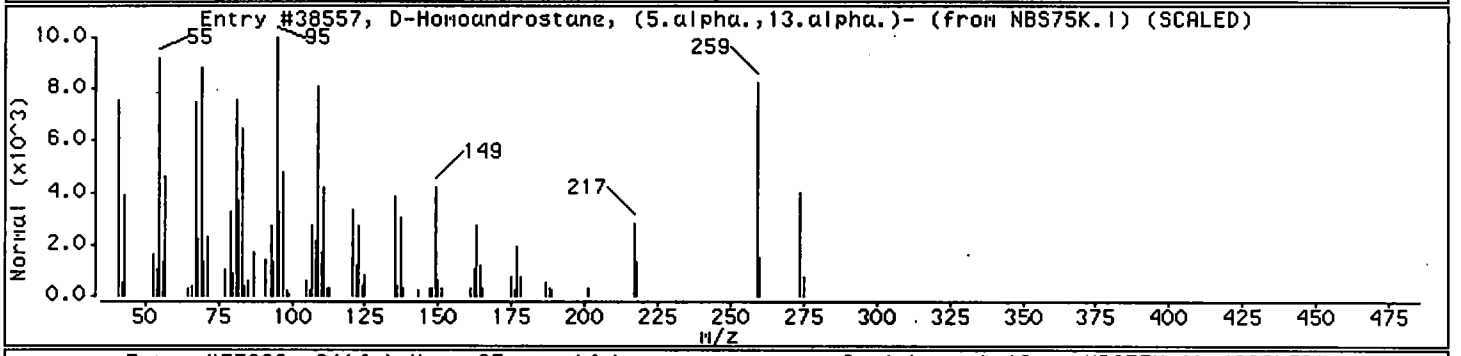
Volume Injected (uL): 2.0 Operator: GES

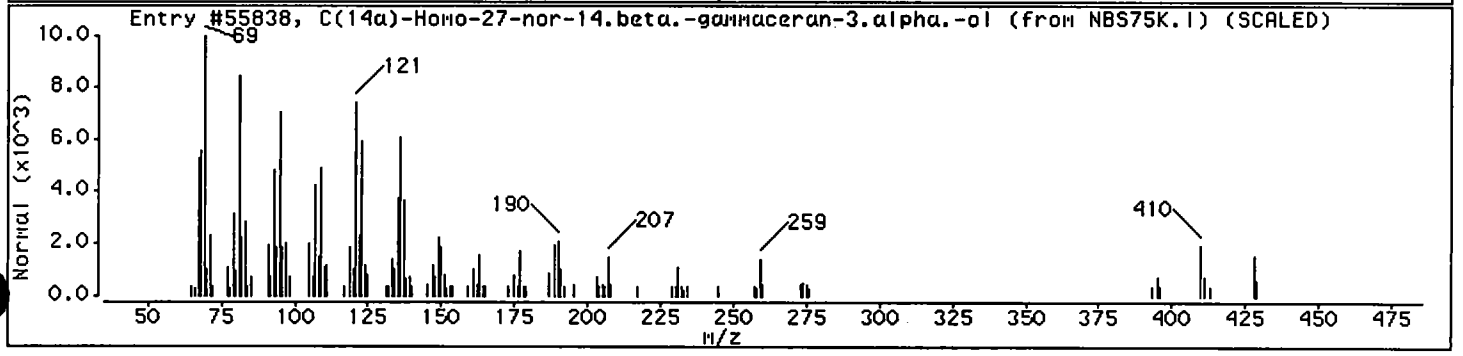
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	95	C22H1406	374
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	53	C20H34	274
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	50	C30H520	428









Data File: /chem/gcl4.i/dec1296b.b/dcbr02.d

Date : 12-DEC-1996 20:42

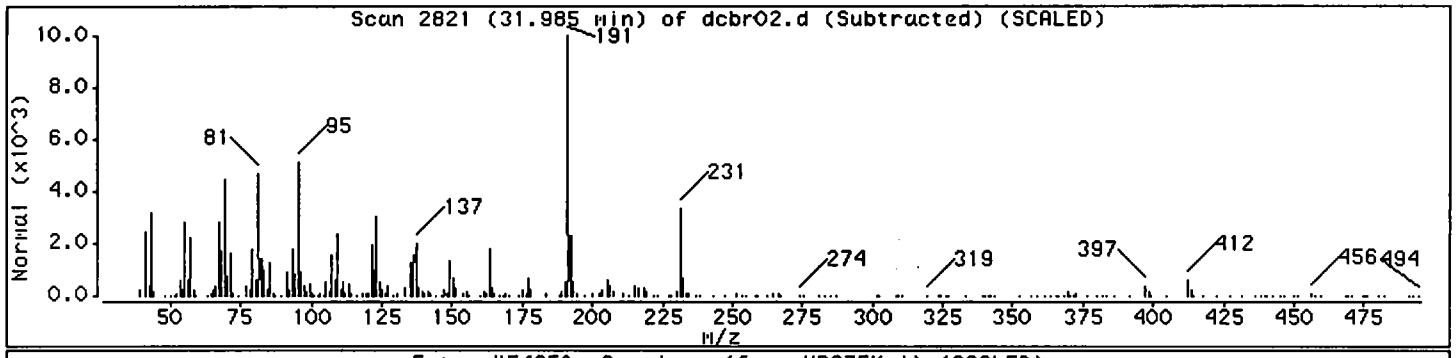
Client ID: WS-01 Instrument: gcl4.i

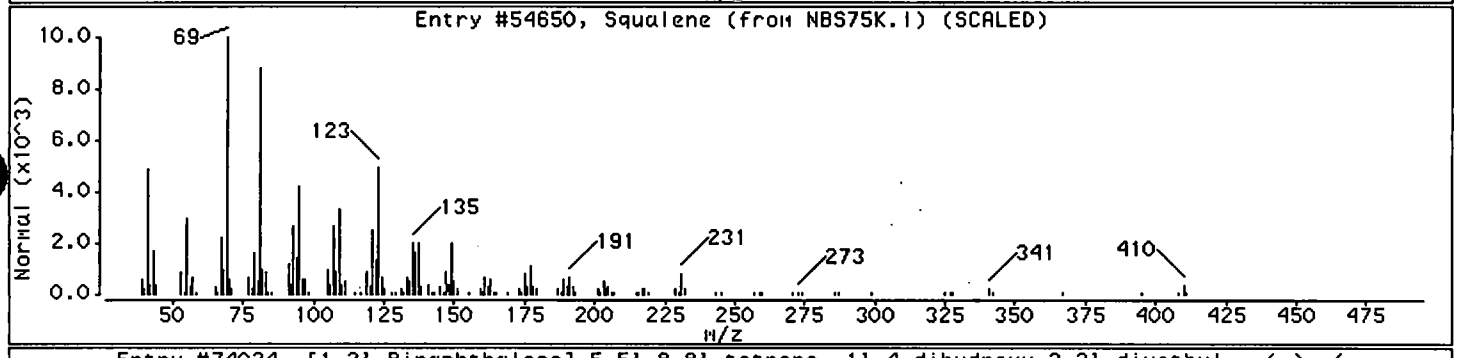
Sample Info: 9611G675-001 DFBC12,[AL=0625HS],[DC=00]

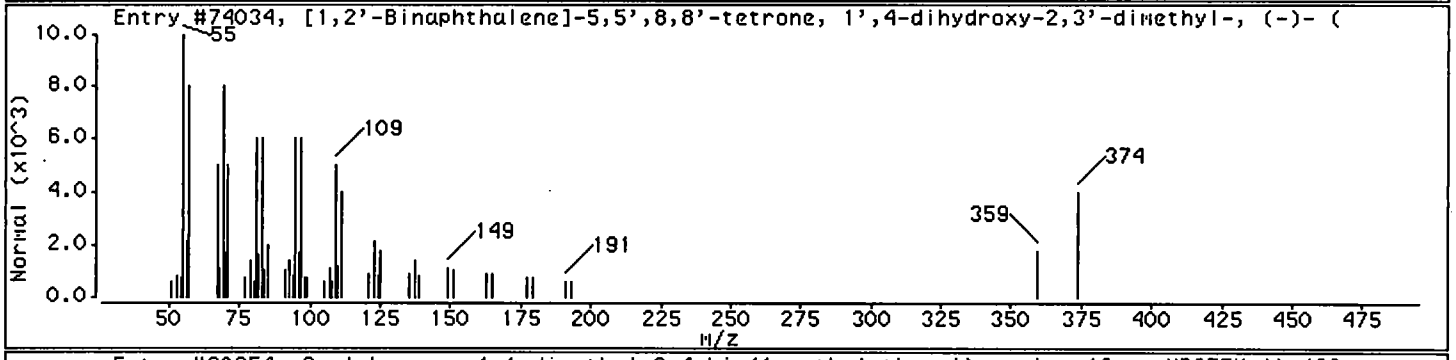
Volume Injected (uL): 2.0 Operator: GES

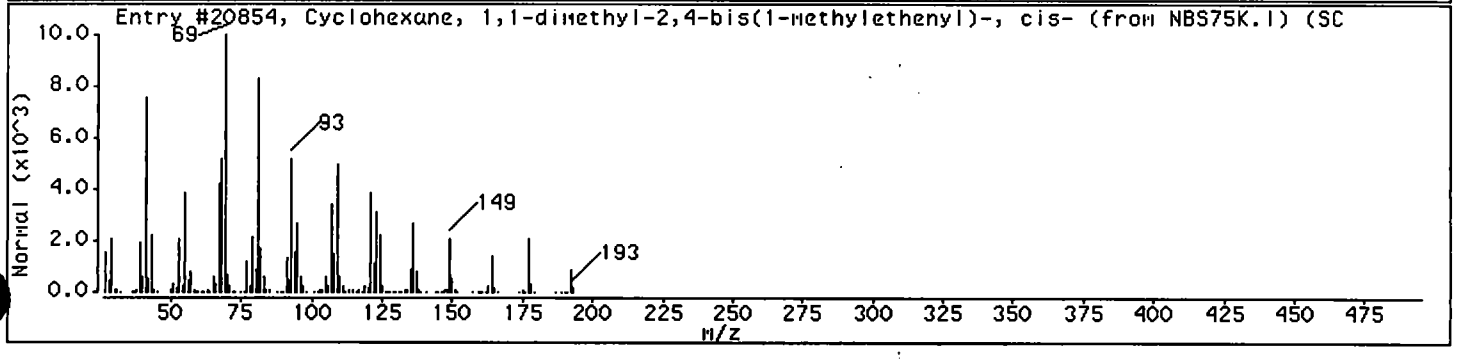
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Squalene	7683-64-9	NBS75K.l	54650	53	C30H50	410
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	50	C22H1406	374
Cyclohexane, 1,1-dimethyl-2,4-bis(1-meth	62337-98-8	NBS75K.l	20854	49	C14H24	192









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-02

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: DCBR05

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 22 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	64000	U
111-44-4	bis(2-Chloroethyl)ether	64000	U
95-57-8	2-Chlorophenol	64000	U
541-73-1	1,3-Dichlorobenzene	64000	U
106-46-7	1,4-Dichlorobenzene	64000	U
95-50-1	1,2-Dichlorobenzene	64000	U
95-48-7	2-Methylphenol	64000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	64000	U
106-44-5	4-Methylphenol	64000	U
621-64-7	N-Nitroso-di-n-propylamine	64000	U
67-72-1	Hexachloroethane	64000	U
98-95-3	Nitrobenzene	64000	U
78-59-1	Isophorone	64000	U
88-75-5	2-Nitrophenol	64000	U
105-67-9	2,4-Dimethylphenol	64000	U
111-91-1	bis(2-Chloroethoxy)methane	64000	U
120-83-2	2,4-Dichlorophenol	64000	U
120-82-1	1,2,4-Trichlorobenzene	64000	U
91-20-3	Naphthalene	64000	U
106-47-8	4-Chloroaniline	64000	U
87-68-3	Hexachlorobutadiene	64000	U
59-50-7	4-Chloro-3-methylphenol	64000	U
91-57-6	2-Methylnaphthalene	64000	U
77-47-4	Hexachlorocyclopentadiene	64000	U
88-06-2	2,4,6-Trichlorophenol	64000	U
95-95-4	2,4,5-Trichlorophenol	160000	U
91-58-7	2-Chloronaphthalene	64000	U
88-74-4	2-Nitroaniline	160000	U
131-11-3	Dimethylphthalate	64000	U
208-96-8	Acenaphthylene	64000	U
606-20-2	2,6-Dinitrotoluene	64000	U
99-09-2	3-Nitroaniline	160000	U
83-32-9	Acenaphthene	64000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-02

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: DCBR05

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 22 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	160000	U
100-02-7	4-Nitrophenol	160000	U
132-64-9	Dibenzofuran	64000	U
121-14-2	2,4-Dinitrotoluene	64000	U
84-66-2	Diethylphthalate	64000	U
7005-72-3	4-Chlorophenyl-phenylether	64000	U
86-73-7	Fluorene	7800	J
100-01-6	4-Nitroaniline	160000	U
534-52-1	4,6-Dinitro-2-methylphenol	160000	U
86-30-6	n-Nitrosodiphenylamine (1)	64000	U
101-55-3	4-Bromophenyl-phenylether	64000	U
118-74-1	Hexachlorobenzene	64000	U
87-86-5	Pentachlorophenol	160000	U
85-01-8	Phenanthrene	27000	J
120-12-7	Anthracene	64000	U
86-74-8	Carbazole	64000	U
84-74-2	Di-n-butylphthalate	64000	U
206-44-0	Fluoranthene	64000	U
129-00-0	Pyrene	230000	
85-68-7	Butylbenzylphthalate	64000	U
91-94-1	3,3'-Dichlorobenzidine	64000	U
56-55-3	Benzo(a)anthracene	23000	J
218-01-9	Chrysene	49000	J
117-81-7	bis(2-Ethylhexyl)phthalate	64000	U
117-84-0	Di-n-octylphthalate	64000	U
205-99-2	Benzo(b)fluoranthene	64000	U
207-08-9	Benzo(k)fluoranthene	64000	U
50-32-8	Benzo(a)pyrene	64000	U
193-39-5	Indeno(1,2,3-cd)pyrene	64000	U
53-70-3	Dibenzo(a,h)anthracene	64000	U
191-24-2	Benzo(g,h,i)perylene	64000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-02

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-002

Sample wt/vol: 5.0 (g/mL) G Lab File ID: DCBR05

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 22 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 18

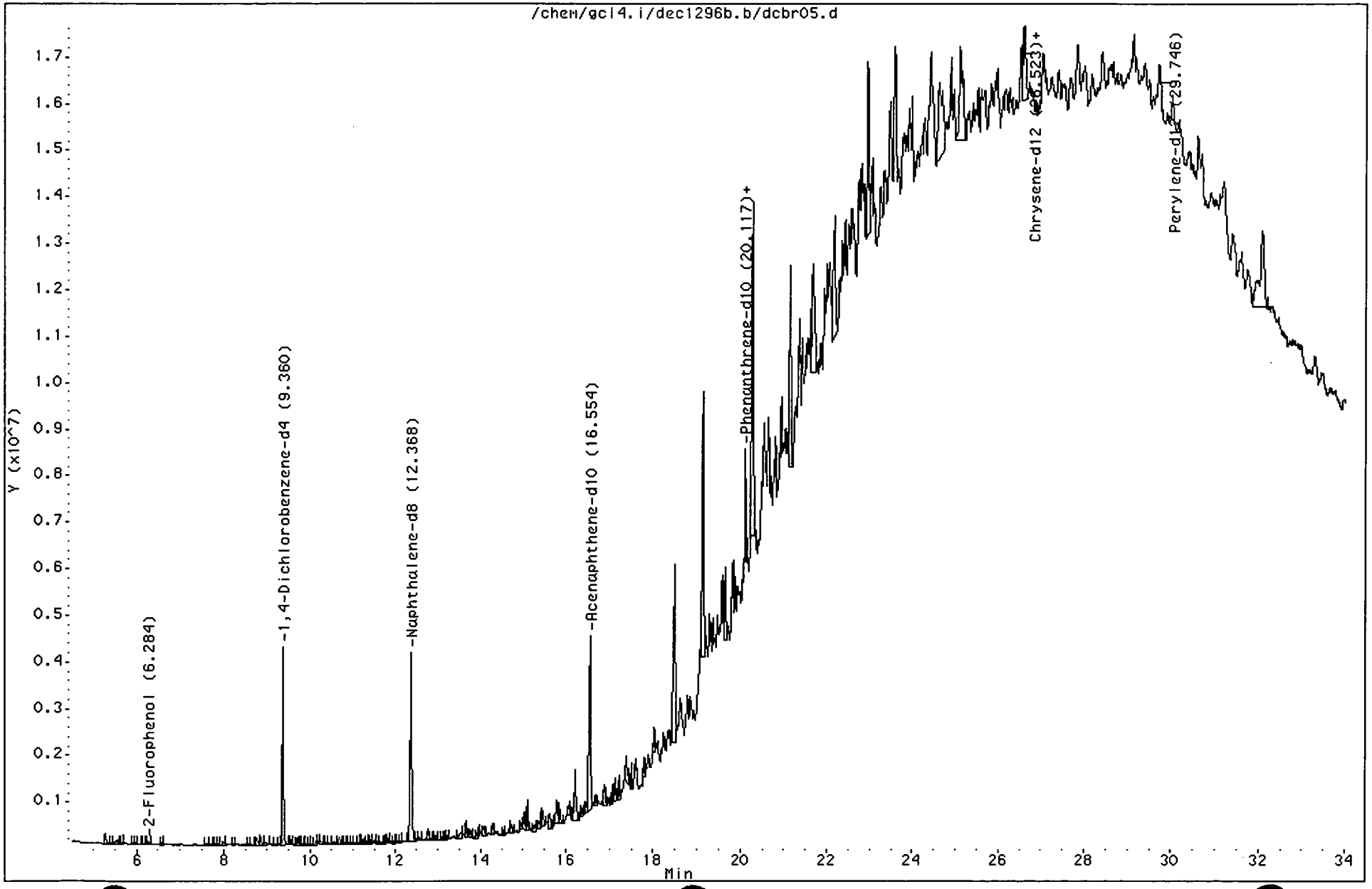
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	15.10	18000	J
2.		SUBST NAPHTHALENE	15.61	14000	J
3.		SUBST NAPHTHALENE	15.79	19000	J
4.		SUBST NAPHTHALENE	15.84	14000	J
5.		UNKNOWN ALKANE	16.22	46000	J
6.		SUBST NAPHTHALENE	16.89	21000	J
7.		SUBST NAPHTHALENE	17.13	14000	J
8.		SUBST NAPHTHALENE	17.39	24000	J
9.		UNKNOWN ALKANE	17.51	14000	J
10.		UNKNOWN ALKANE	19.14	440000	J
11.		UNKNOWN ALKANE	20.28	560000	J
12.		UNKNOWN ALKANE	21.15	360000	J
13.		UNKNOWN PAH	21.68	310000	J
14.		UNKNOWN	22.17	340000	J
15.		UNKNOWN	22.96	360000	J
16.		UNKNOWN HC + UNKNOWN	24.62	390000	J
17.		UNKNOWN HYDROCARBON	25.10	380000	J
18.		UNKNOWN	32.08	380000	J
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

116

Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d
Date : 12-DEC-1996 22:48
Client ID: WS-02
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr05.d
Lab Smp Id: 9611G675-002 Client Smp ID: WS-02
Inj Date : 12-DEC-1996 22:48
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-002 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.5.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 5
Dil Factor: 25.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.000	Weigth of sample extracted (g)
M	22.400	% Moisture

77.6

WMB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.360	9.325	(1.000)	1405350	40.000	
* 26 Naphthalene-d8	136.00	12.368	12.323	(1.000)	4760659	40.000	
* 41 Acenaphthene-d10	164.00	16.554	16.500	(1.000)	2421181	40.000	
* 56 Phenanthrene-d10	188.00	20.117	20.014	(1.000)	2883656	40.000	
* 67 Chrysene-d12	240.00	26.523	26.303	(1.000)	1250177	40.000	
* 75 Perylene-d12	264.00	29.746	29.438	(1.000)	1056407	40.000	
63 Pyrene	202.00	23.593	23.392	(0.890)	3811399	70.452	226970(M)
47 Fluorene	166.00	17.878	17.814	(1.080)	176257	2.426	7817.5(a)
57 Phenanthrene	178.00	20.166	20.072	(1.002)	564966	8.305	26756(a)
66 Benzo(a)anthracene	228.00	26.504	26.284	(0.999)	240198	7.148	23027(aM)
69 Chrysene	228.00	26.562	26.361	(1.001)	589765	15.313	49332(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

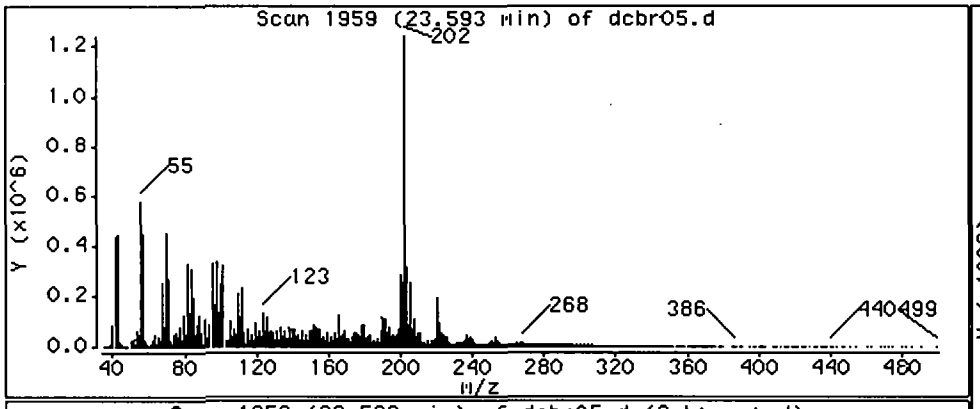
Client ID: WS-02 Instrument: gcl4.i

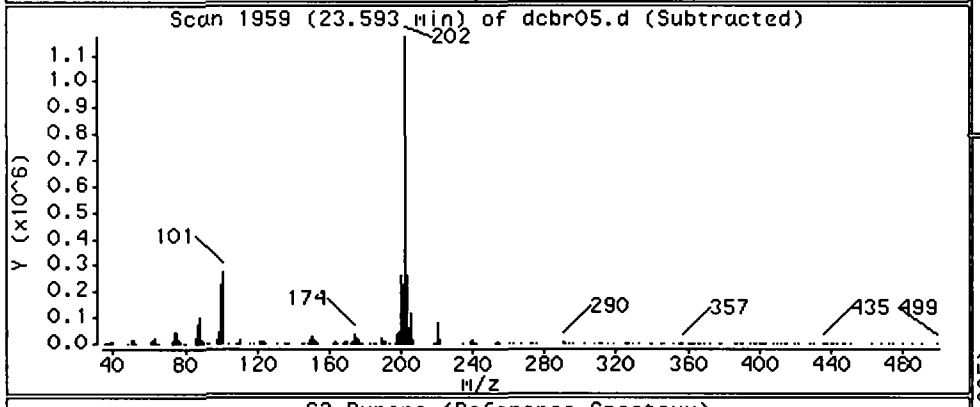
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

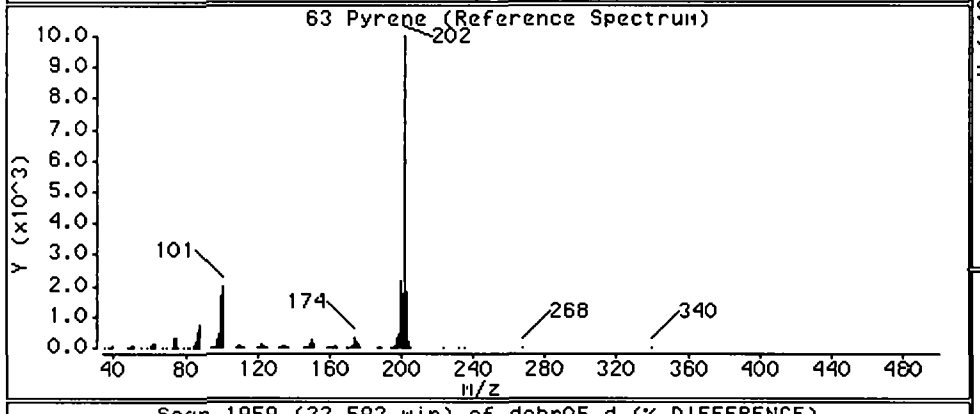
Volume Injected (uL): 2.0 Operator: GES

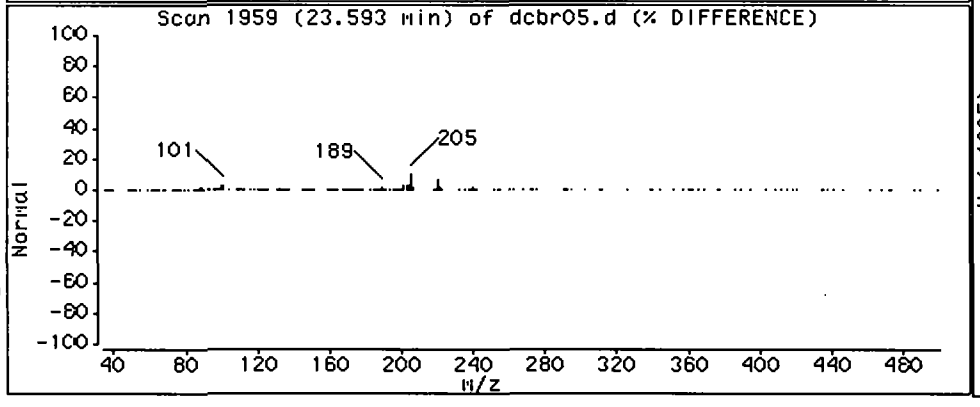
Column phase: Column diameter: 2.00

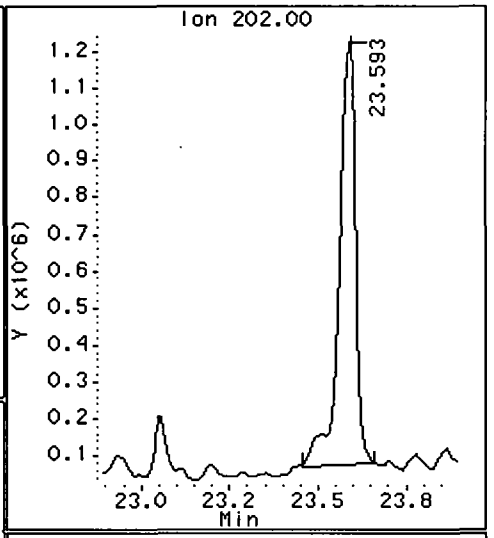
63 Pyrene

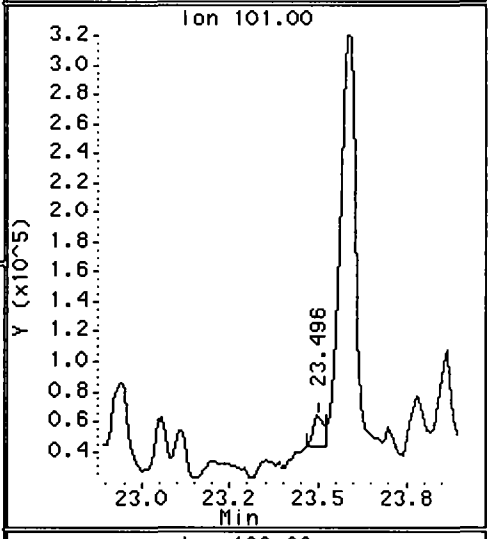


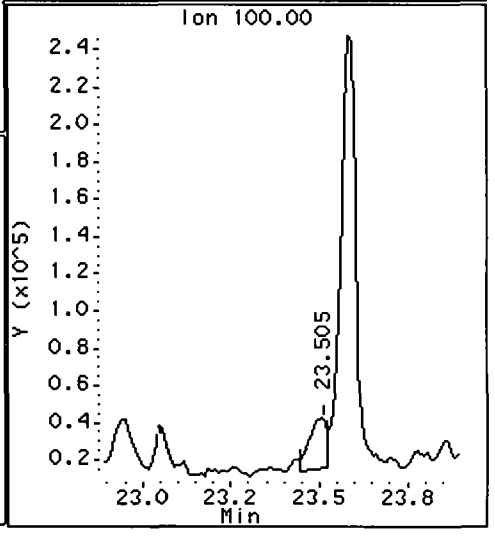












Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

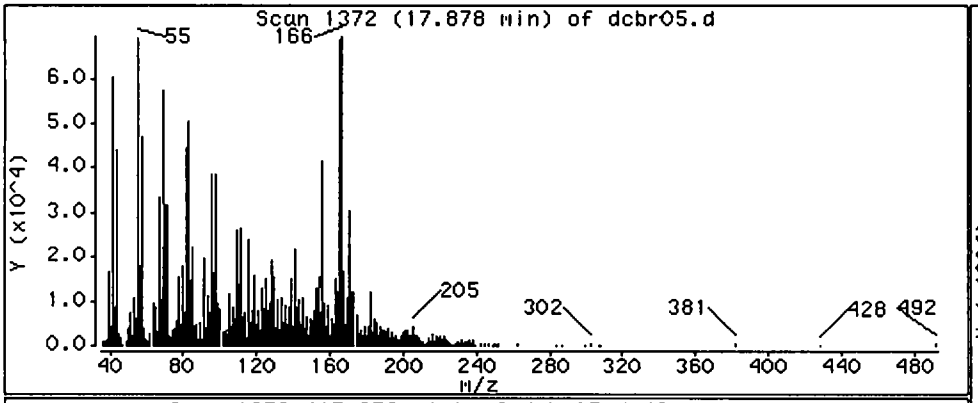
Client ID: WS-02 Instrument: gcl4.i

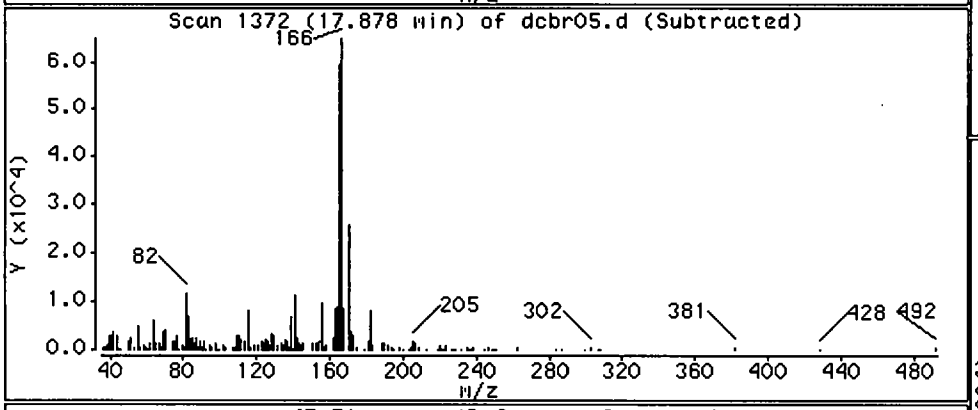
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

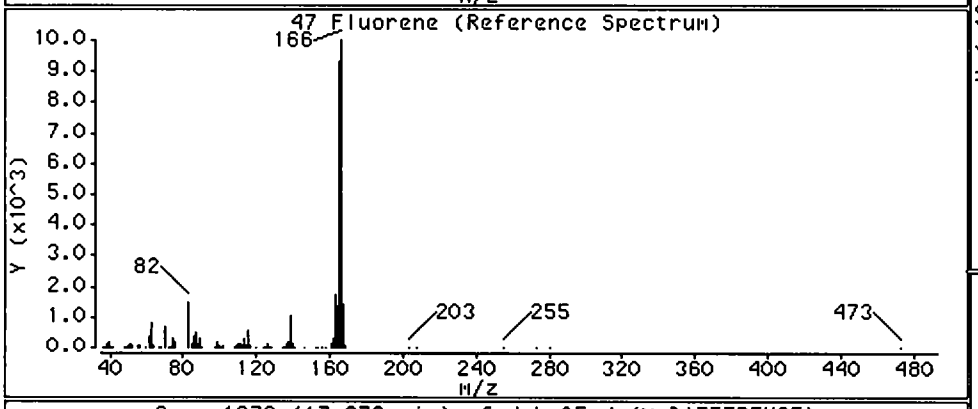
Volume Injected (uL): 2.0 Operator: GES

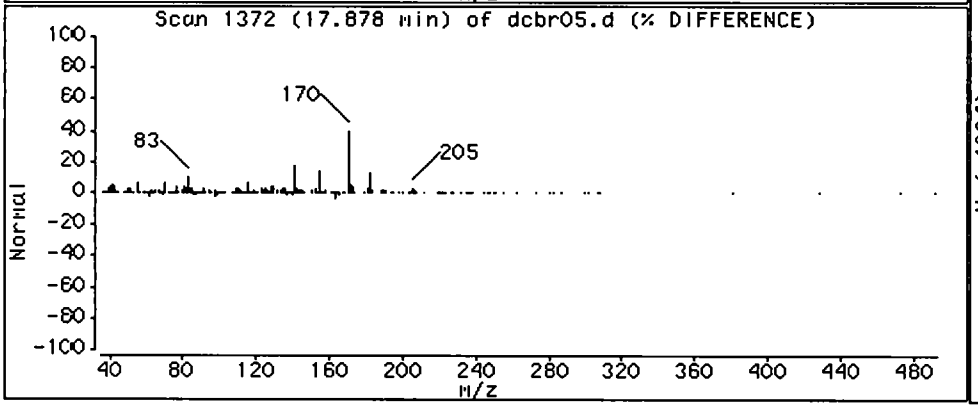
Column phase: Column diameter: 2.00

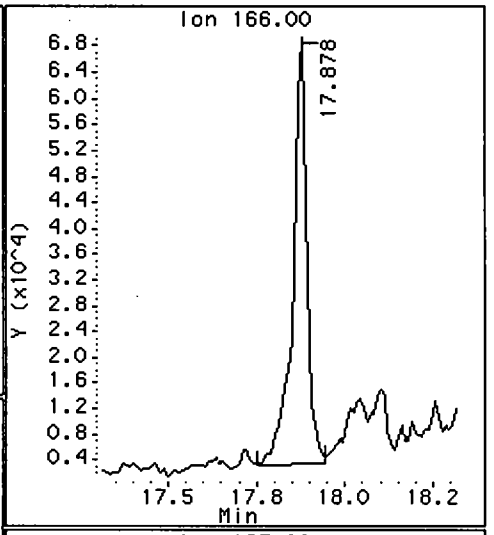
47 Fluorene

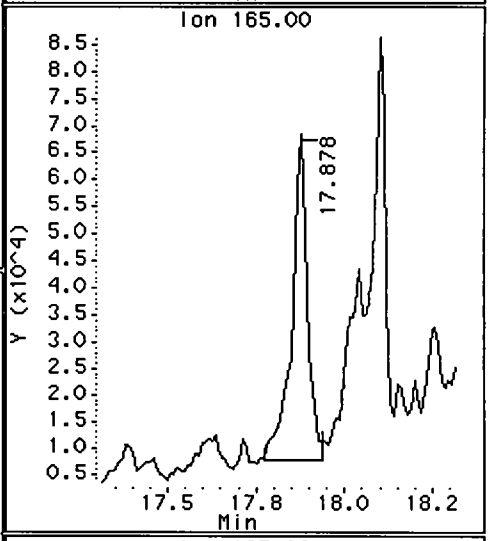


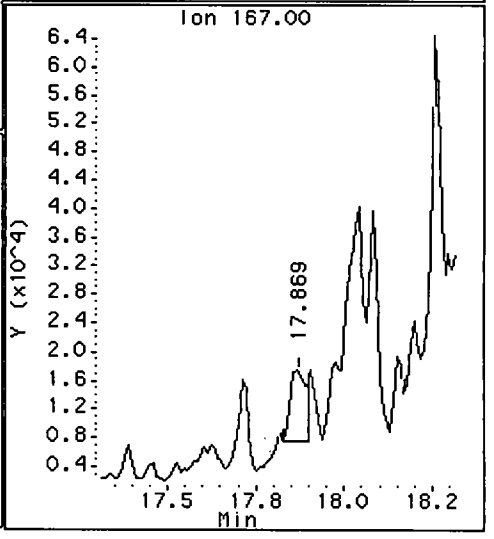












Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

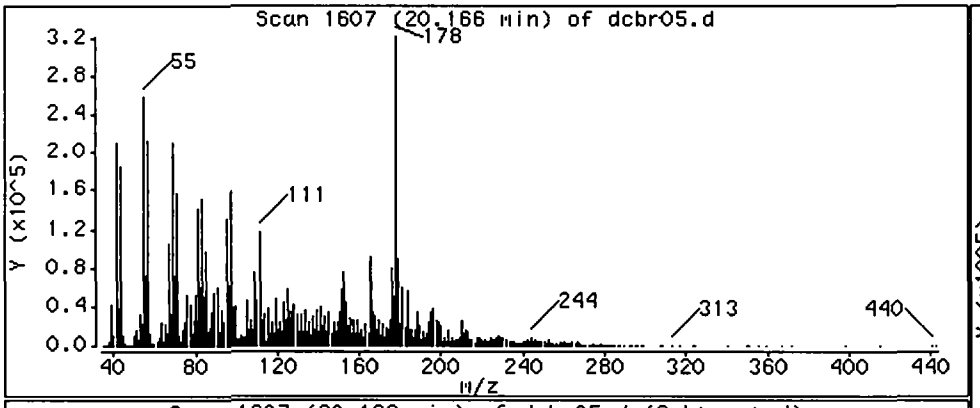
Client ID: WS-02 Instrument: gcl4.i

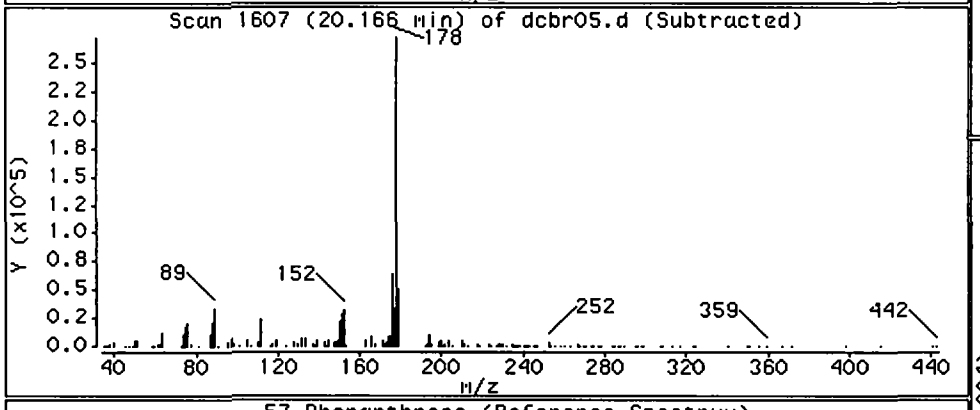
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

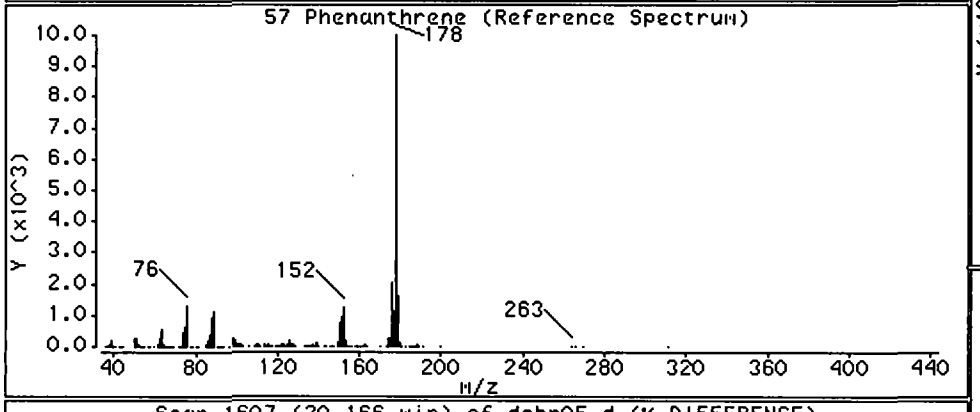
Volume Injected (uL): 2.0 Operator: GES

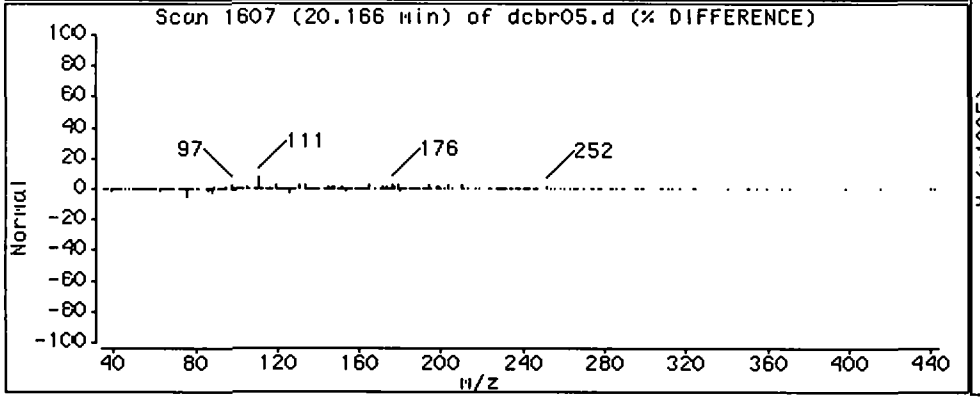
Column phase: Column diameter: 2.00

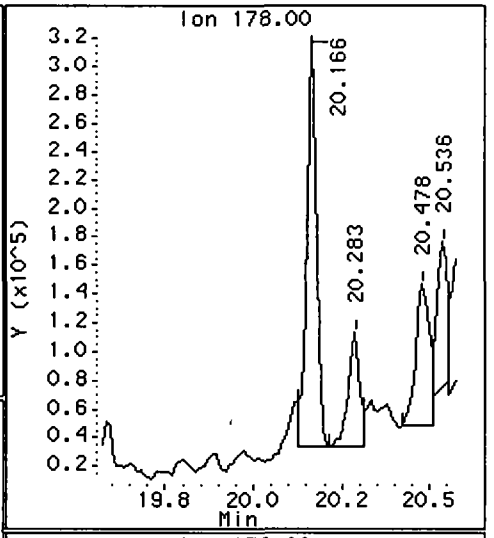
57 Phenanthrene

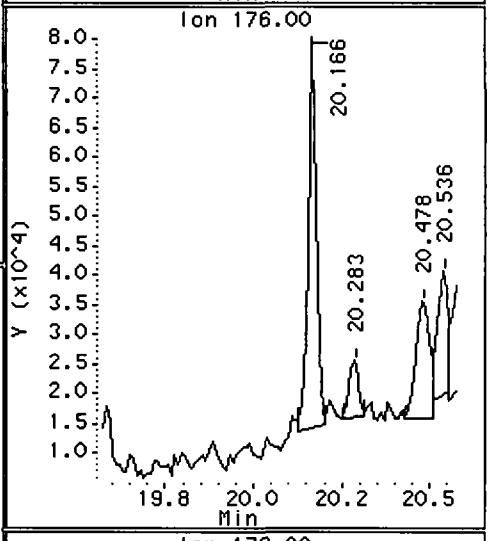


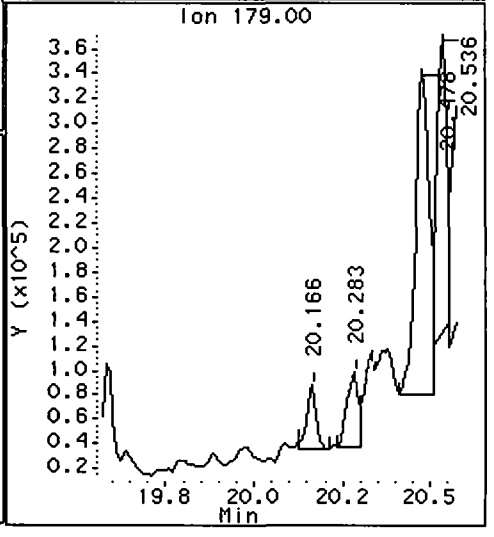












Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

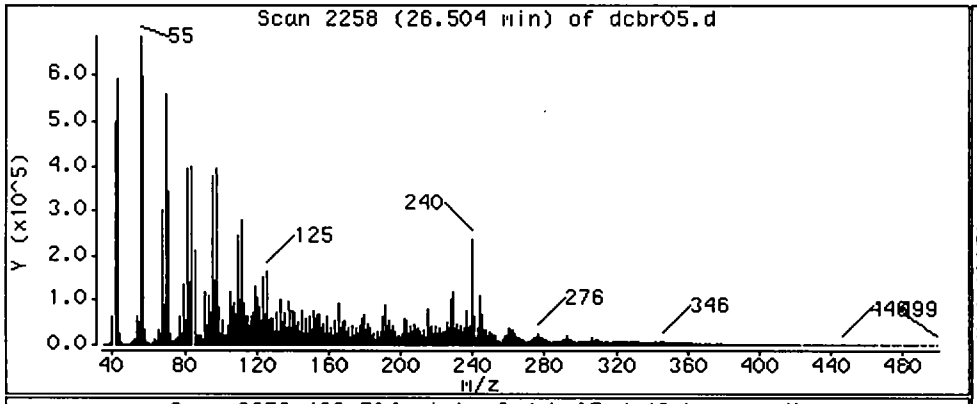
Client ID: WS-02 Instrument: gcl4.i

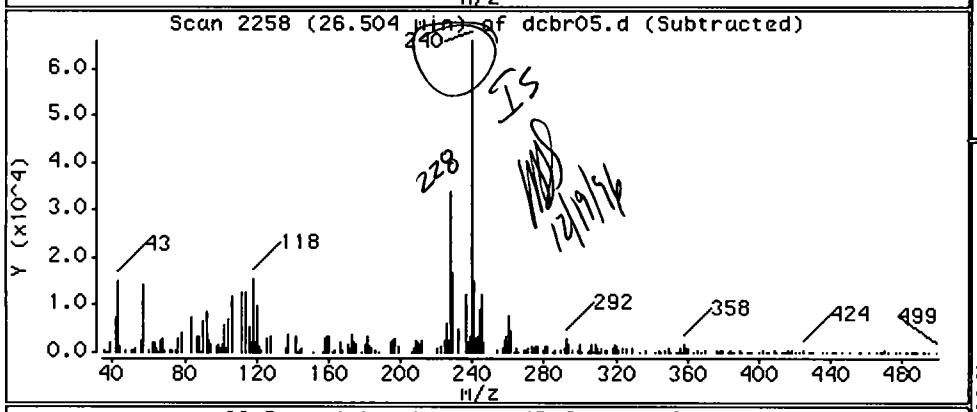
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

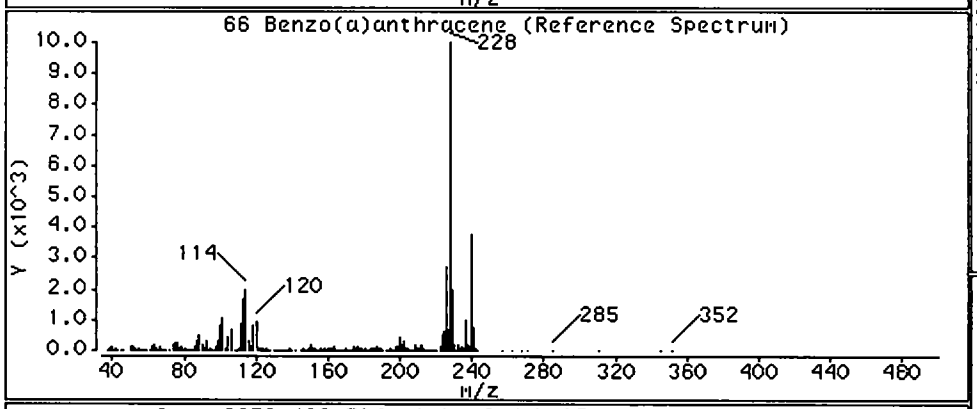
Volume Injected (uL): 2.0 Operator: GES

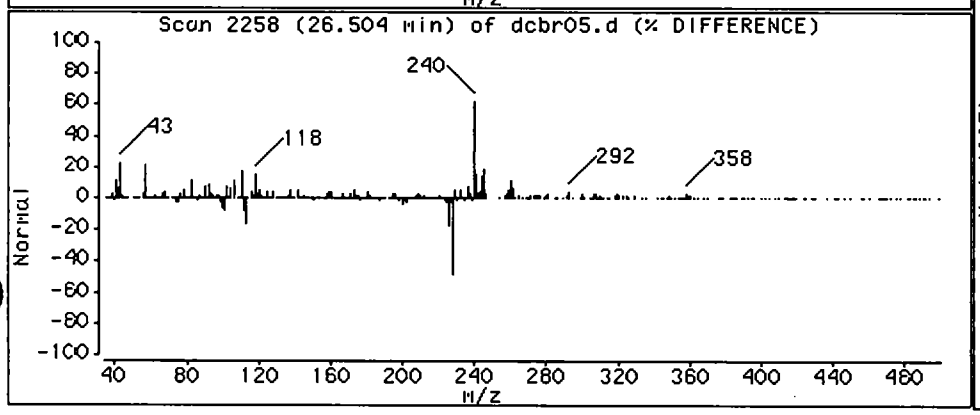
Column phase: Column diameter: 2.00

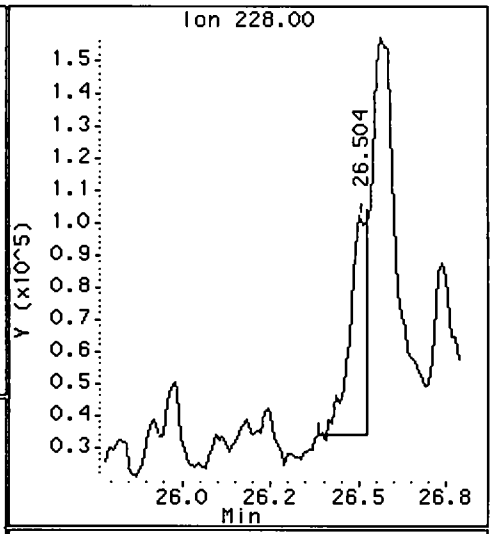
66 Benzo(a)anthracene

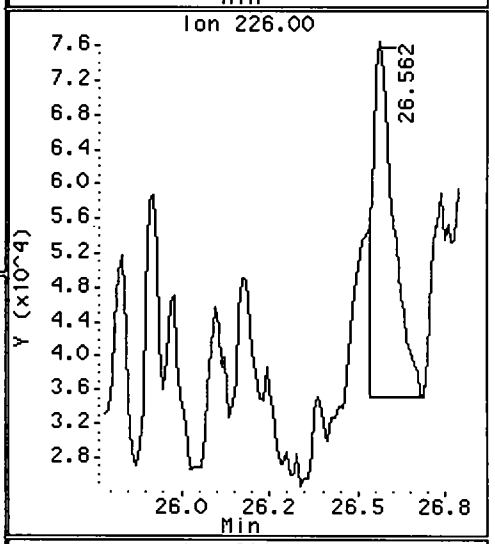


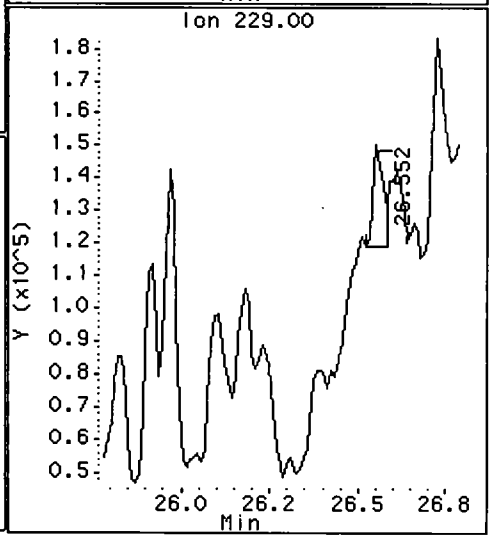












Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

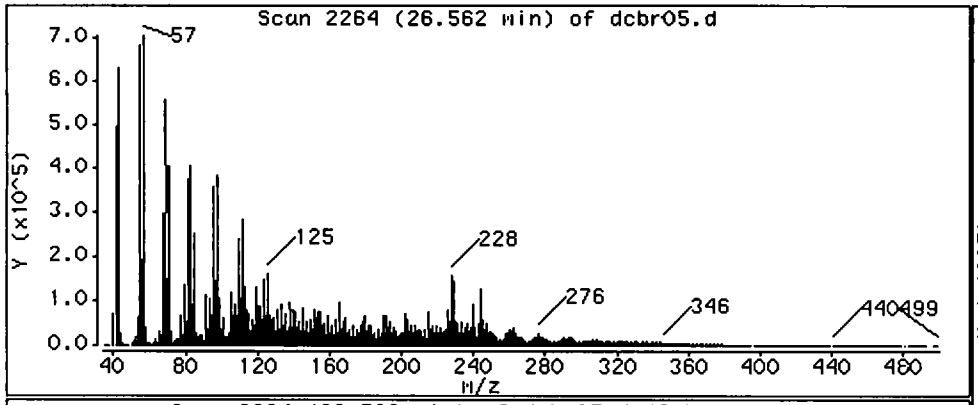
Client ID: WS-02 Instrument: gcl4.i

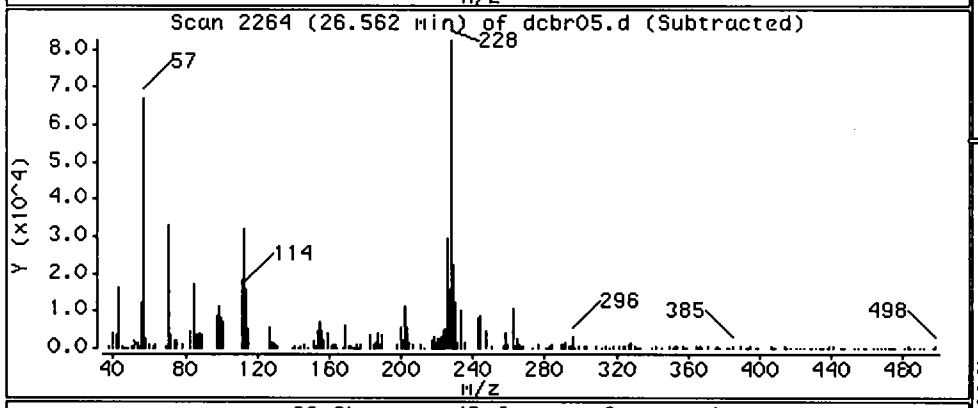
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

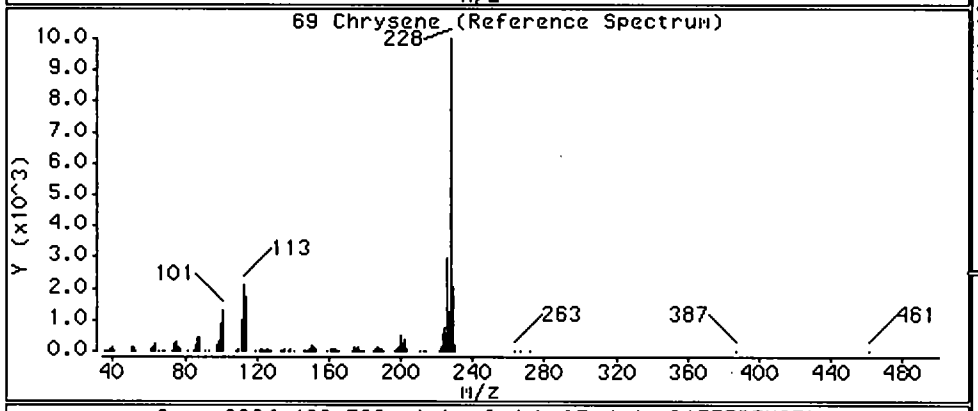
Volume Injected (uL): 2.0 Operator: GES

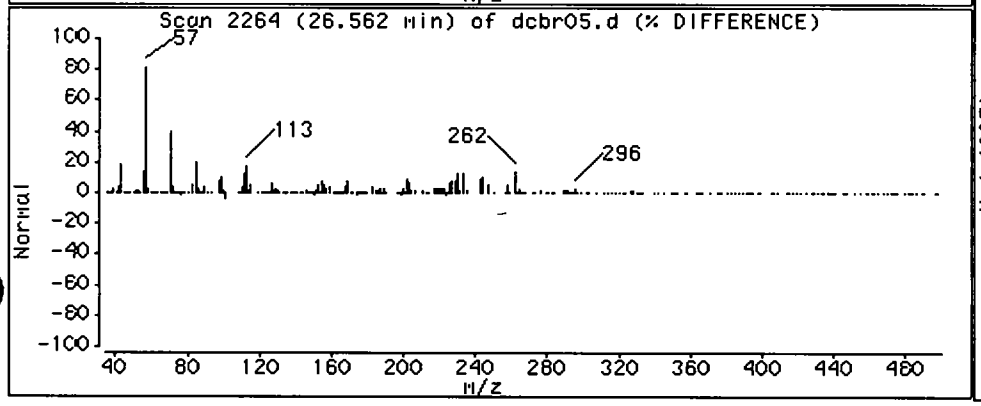
Column phase: Column diameter: 2.00

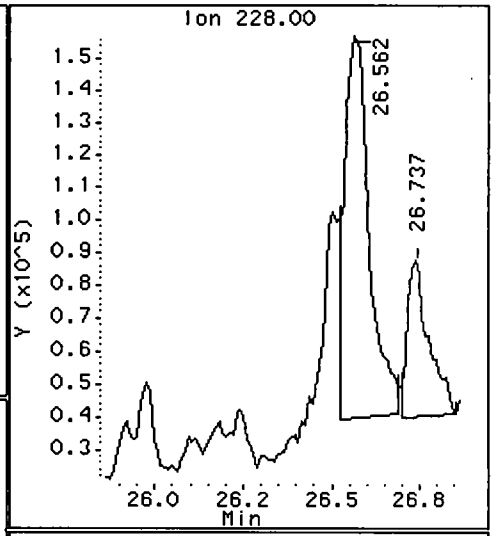
69 Chrysene

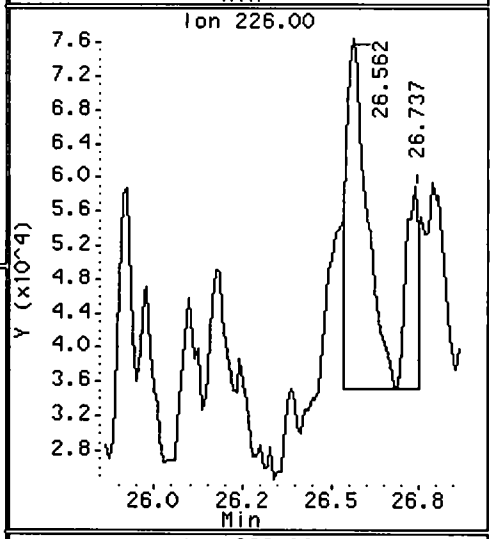


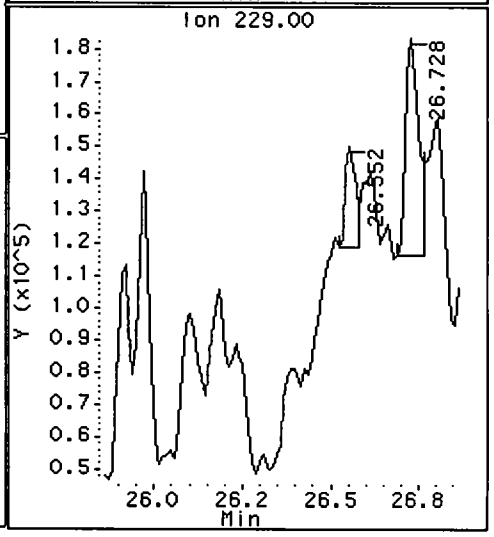












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296b.b/dcbr05.d
Lab Smp Id: 9611G675-002 Client Smp ID: WS-02
Inj Date : 12-DEC-1996 22:48
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-002 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.5.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 5
Dil Factor: 25.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.000	Weigth of sample extracted (g)
M	22.400	% Moisture

ISTD	RT	AREA	AMOUNT
* 41 Acenaphthene-d10	16.554	9471850	40.000
* 56 Phenanthrene-d10	20.117	4065291	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Alkane					CAS #:		
15.104	1294709	5.468	17615	0		0	41
Subst Naphthalene					CAS #:		
15.610	1042563	4.403	14184	0		0	41
Subst Naphthalene					CAS #:		
15.785	1388458	5.864	18890	0		0	41

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Subst Naphthalene					CAS #:		
15.844	1053288	4.448	14330	0		0	41
Unknown Alkane					CAS #:		
16.223	3421902	14.451	46555	0		0	41
Subst Naphthalene					CAS #:		
16.885	1575118	6.652	21430	0		0	41
Subst Naphthalene					CAS #:		
17.129	1006971	4.252	13700	0		0	41
Subst Naphthalene					CAS #:		
17.392	1781520	7.523	24238	0		0	41
Unknown Alkane					CAS #:		
17.508	997693	4.213	13574	0		0	41
Unknown Alkane					CAS #:		
19.144	13935444	137.12	441740	0		0	56
Unknown Alkane					CAS #:		
20.283	17676592	173.93	560330	0		0	56
Unknown Alkane					CAS #:		
21.149	11519930	113.35	365170	0		0	56
Unknown PAH					CAS #:		
21.675	9752569	95.959	309150	0		0	56(ML)
Unknown					CAS #:		
22.172	10623443	104.53	336750	0		0	56(ML)
Unknown					CAS #:		
22.960	11216055	110.36	355540	0		0	56(ML)
Unknown HC + Unknown					CAS #:		
24.625	12300920	121.03	389930	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
25.102	11935377	117.44	378340	0		0	56(ML)
Unknown					CAS #:		
32.082	12030128	118.37	381340	0		0	56(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

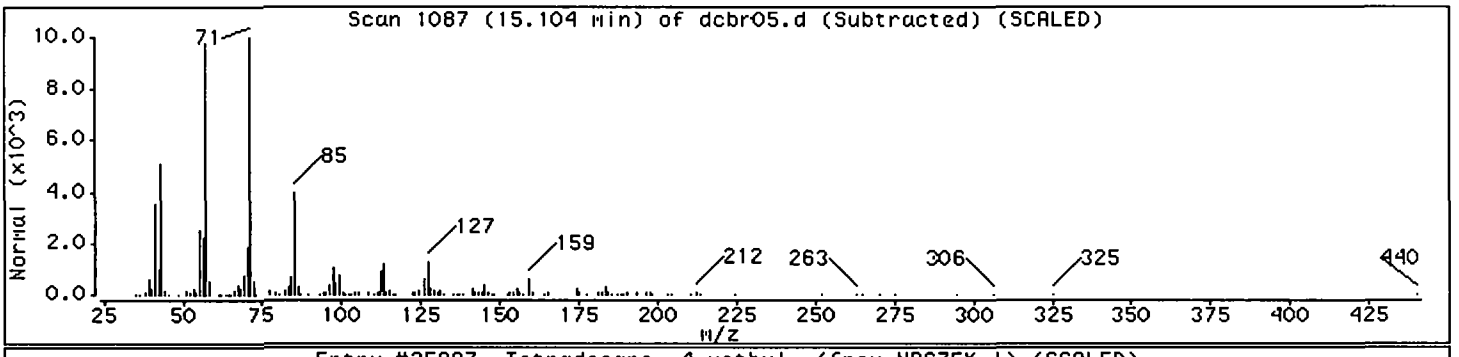
Client ID: WS-02 Instrument: gc14.i

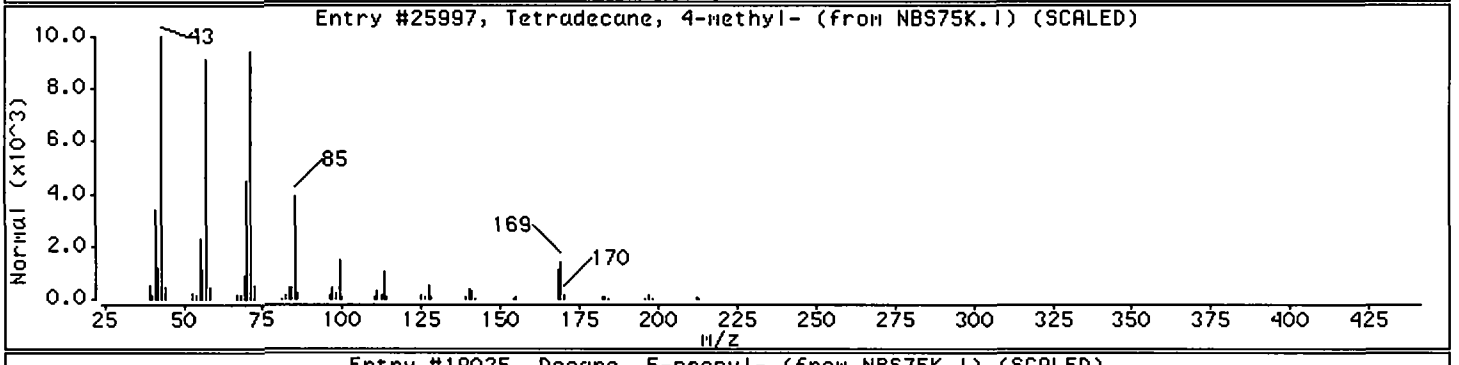
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

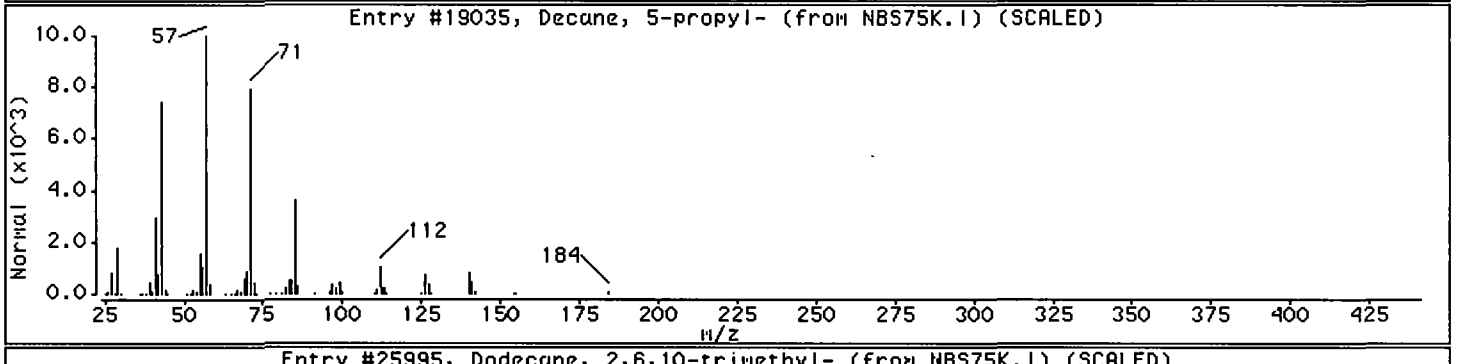
Volume Injected (uL): 2.0 Operator: GES

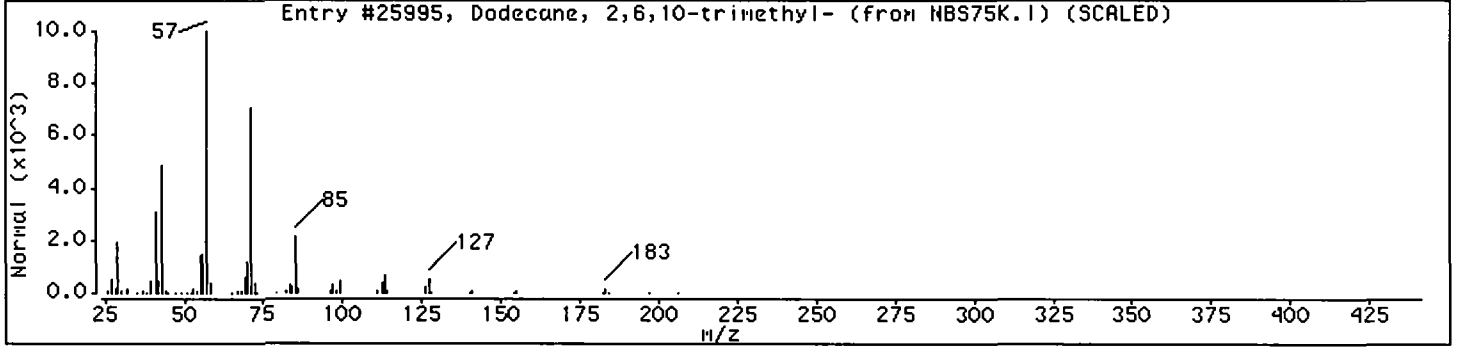
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetradecane, 4-methyl-	25117-24-2	NBS75K.l	25997	80	C15H32	212
Decane, 5-propyl-	17312-62-8	NBS75K.l	19035	72	C13H28	184
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	25995	72	C15H32	212









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

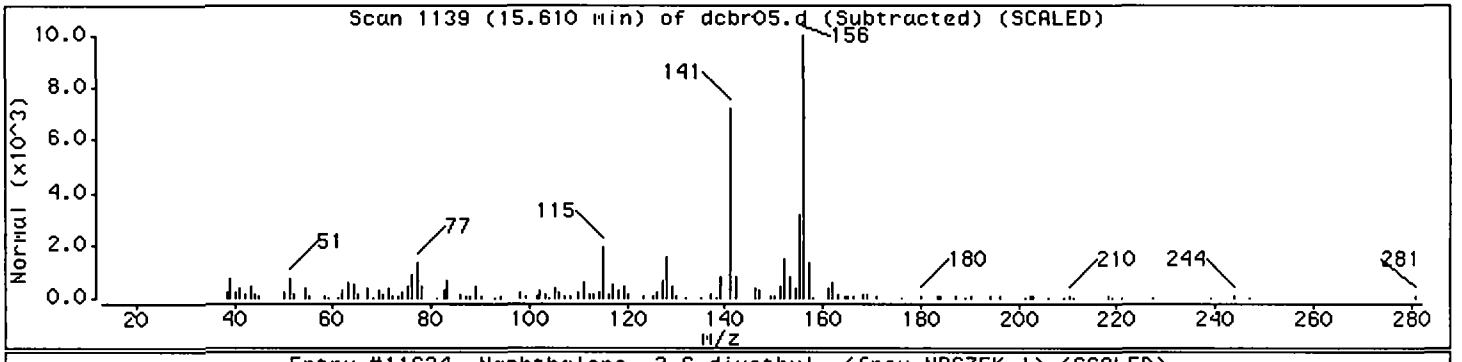
Client ID: WS-02 Instrument: gcl4.i

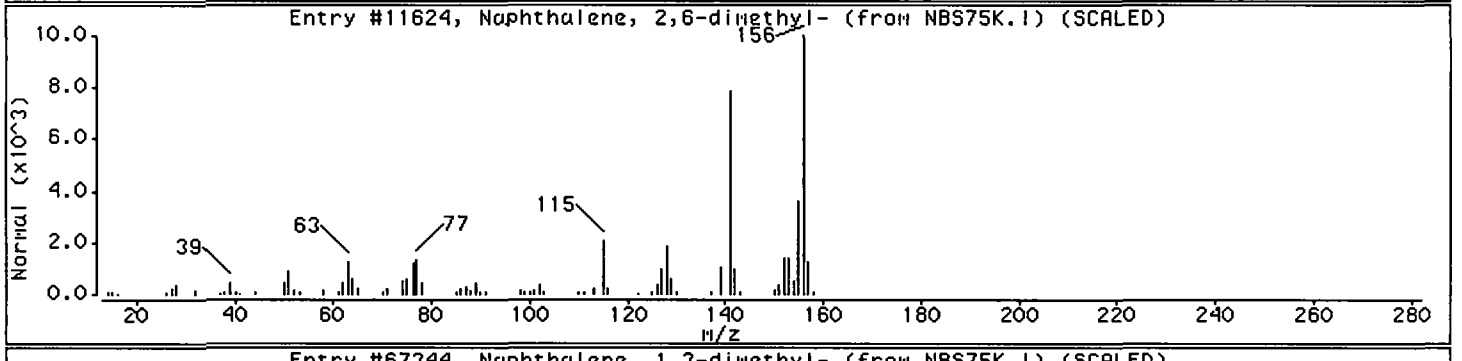
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

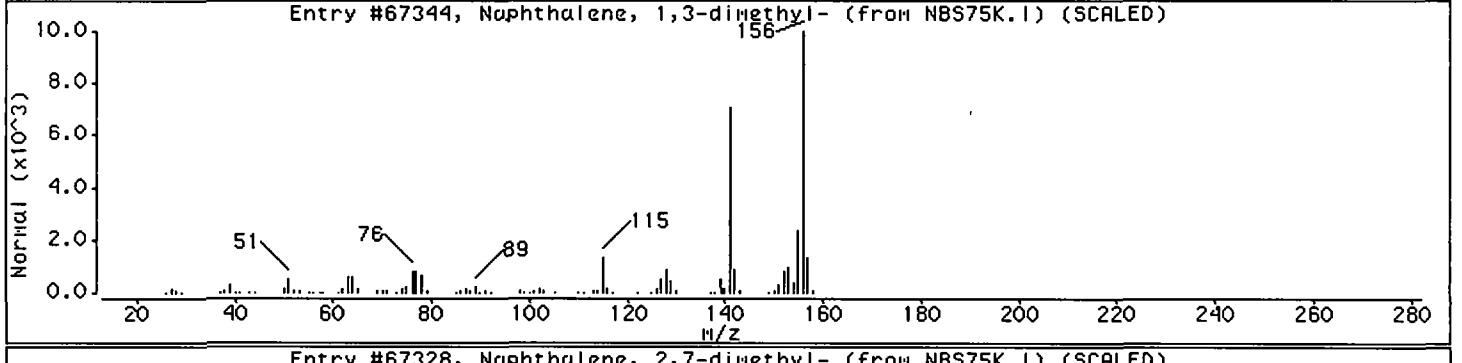
Volume Injected (uL): 2.0 Operator: GES

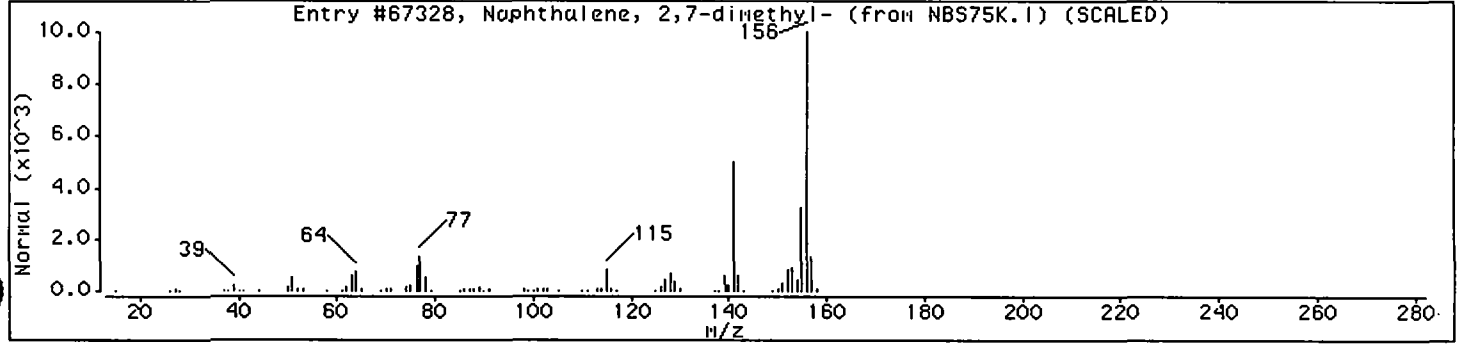
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 2,6-dimethyl-	581-42-0	NBS75K.l	11624	98	C12H12	156
Naphthalene, 1,3-dimethyl-	575-41-7	NBS75K.l	67344	96	C12H12	156
Naphthalene, 2,7-dimethyl-	582-16-1	NBS75K.l	67328	96	C12H12	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

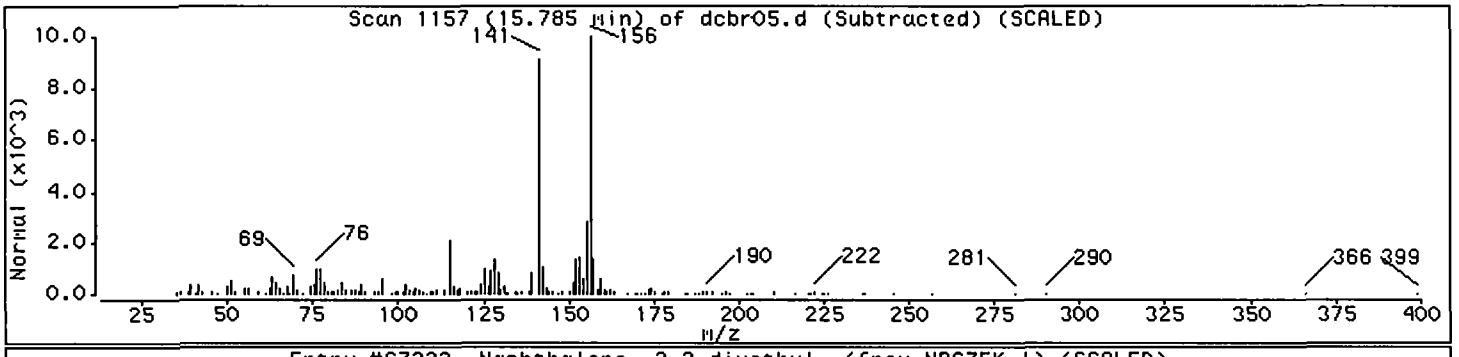
Client ID: WS-02 Instrument: gcl4.i

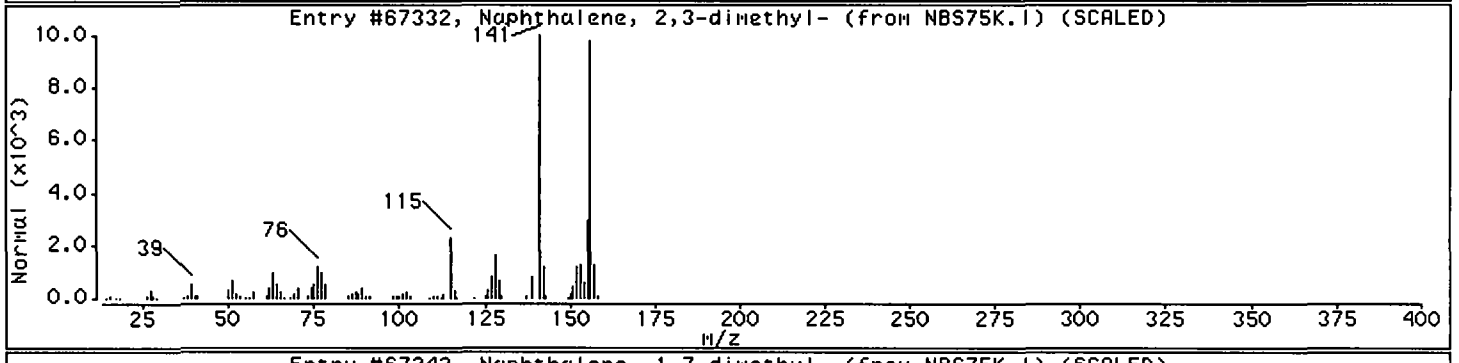
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

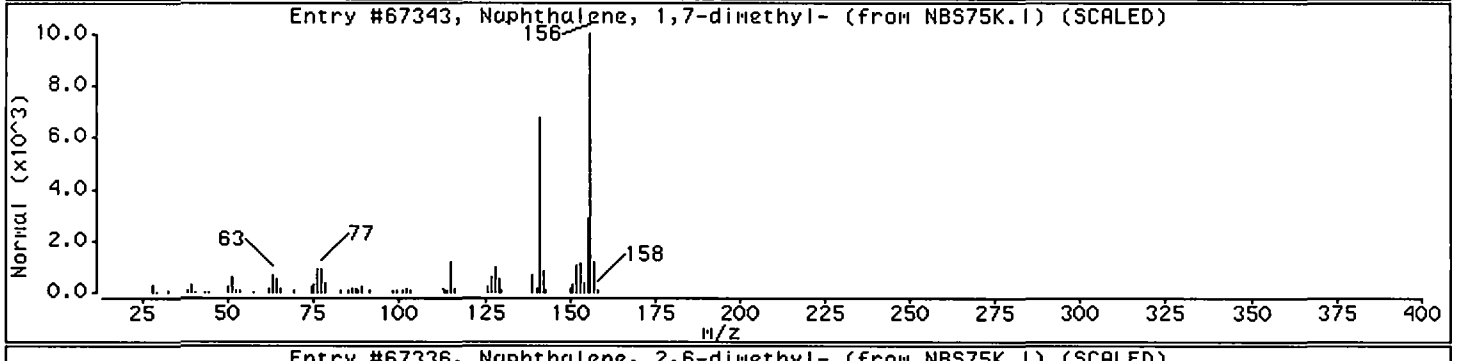
Volume Injected (uL): 2.0 Operator: GES

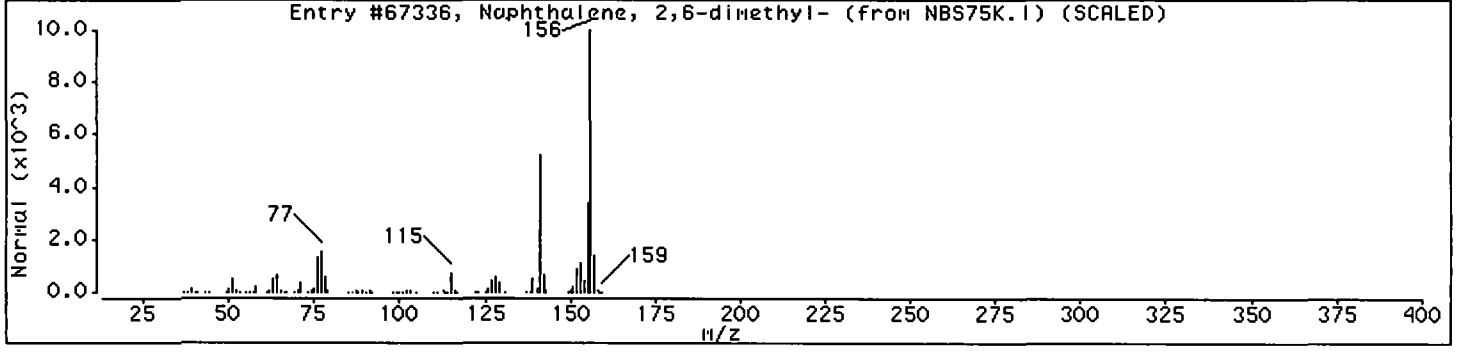
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 2,3-dimethyl-	581-40-8	NBS75K.l	67332	98	C12H12	156
Naphthalene, 1,7-dimethyl-	575-37-1	NBS75K.l	67343	97	C12H12	156
Naphthalene, 2,6-dimethyl-	581-42-0	NBS75K.l	67336	97	C12H12	156









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

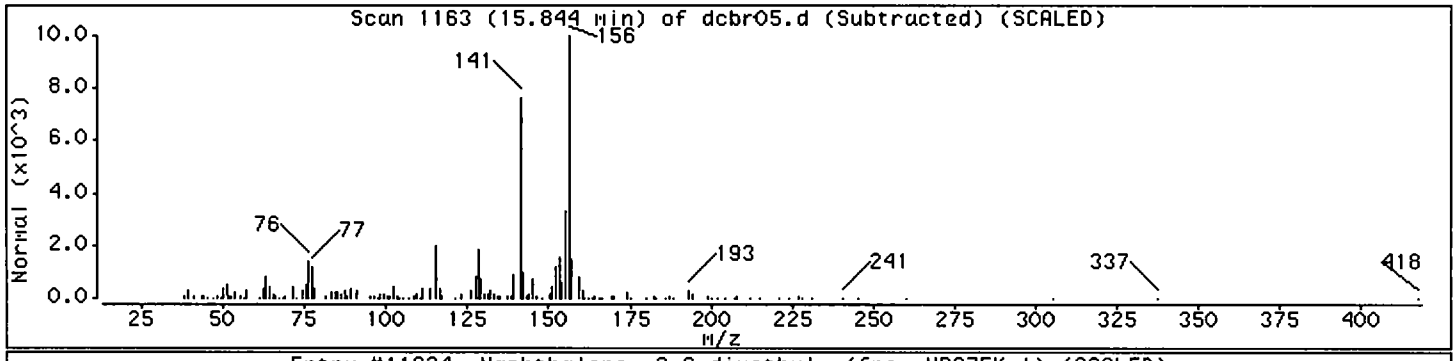
Client ID: WS-02 Instrument: gc14.i

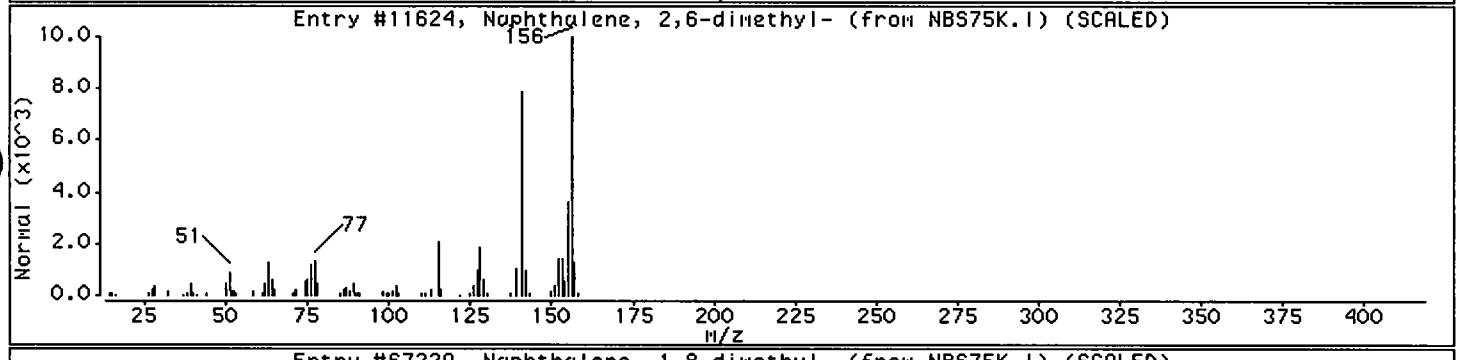
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

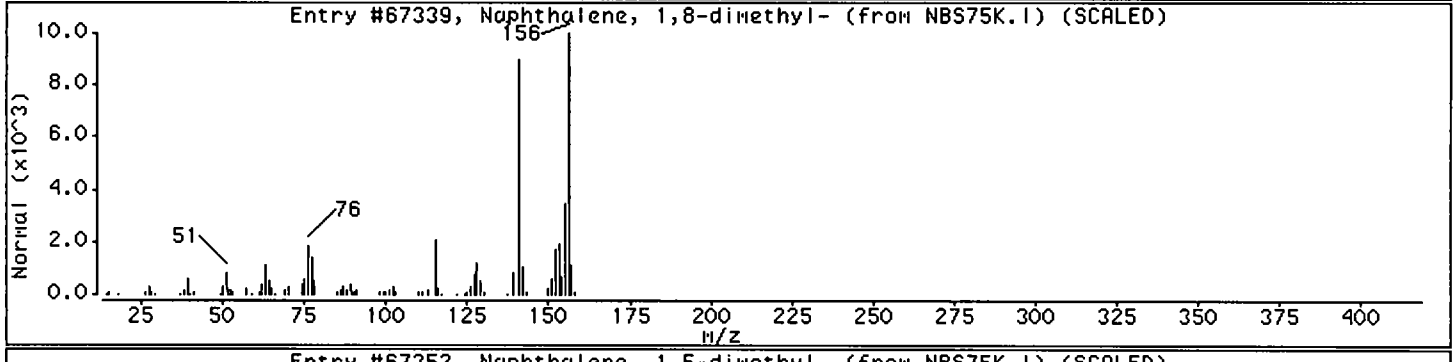
Volume Injected (uL): 2.0 Operator: GES

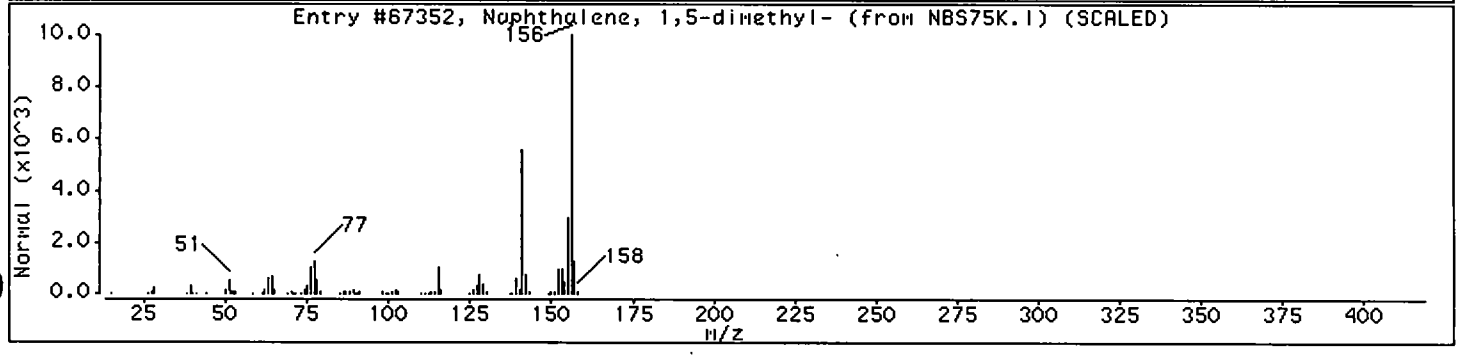
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 2,6-dimethyl-	581-42-0	NBS75K.l	11624	98	C12H12	156
Naphthalene, 1,8-dimethyl-	569-41-5	NBS75K.l	67339	98	C12H12	156
Naphthalene, 1,5-dimethyl-	571-61-9	NBS75K.l	67352	97	C12H12	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

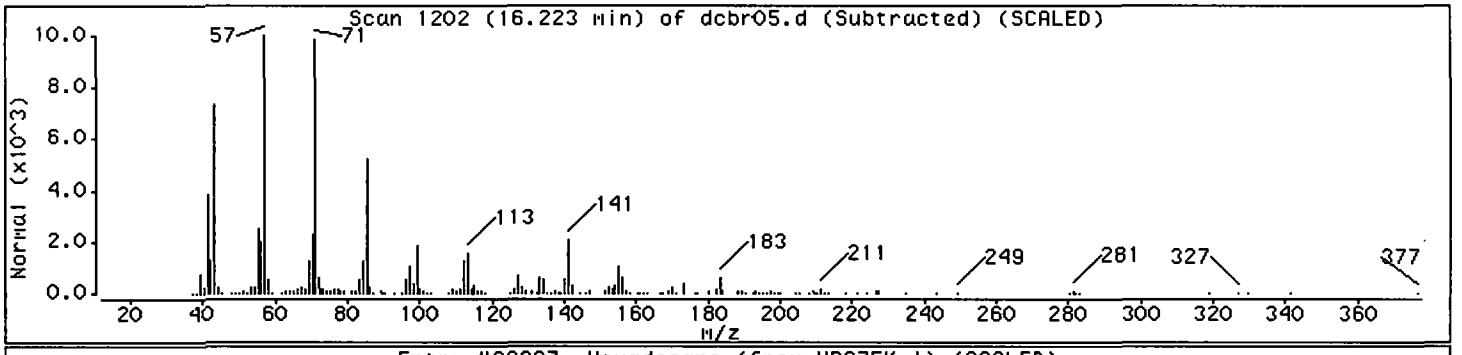
Client ID: WS-02 Instrument: gcl4.i

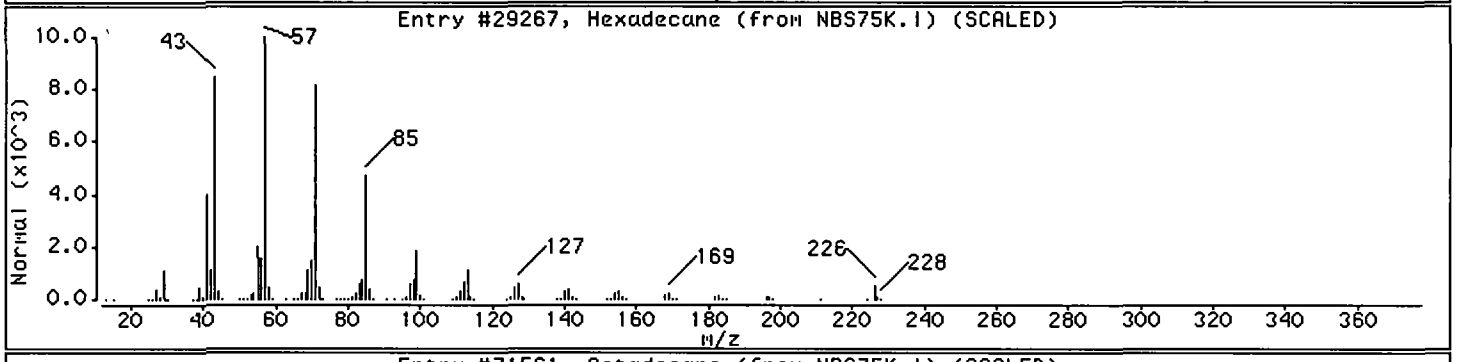
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

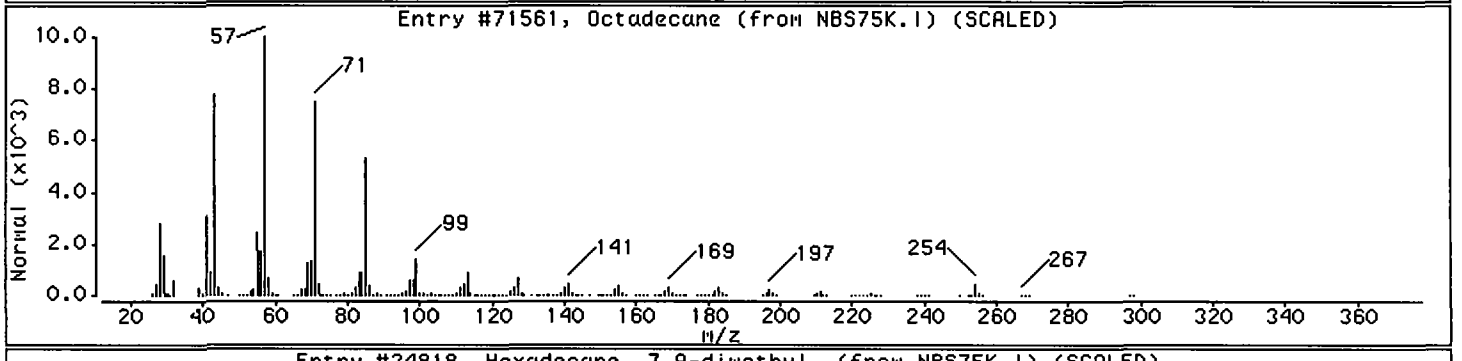
Volume Injected (uL): 2.0 Operator: GES

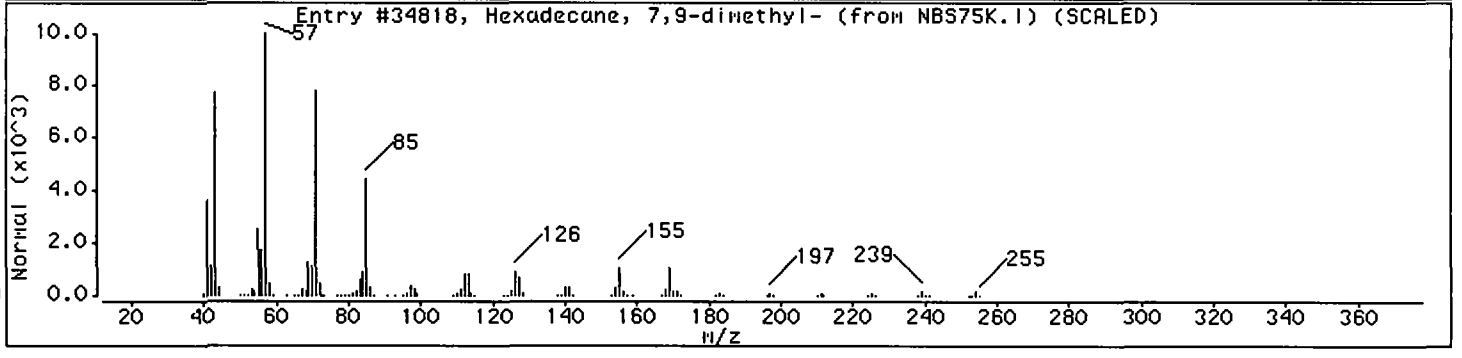
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane	544-76-3	NBS75K.l	29267	80	C16H34	226
Octadecane	593-45-3	NBS75K.l	71561	80	C18H38	254
Hexadecane, 7,9-dimethyl-	21164-95-4	NBS75K.l	34818	72	C18H38	254









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

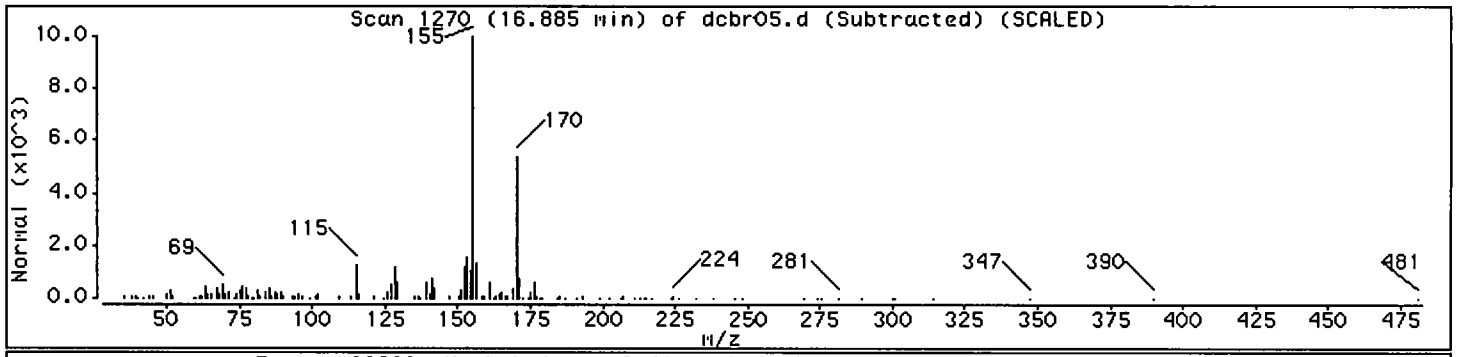
Client ID: WS-02 Instrument: gc14.i

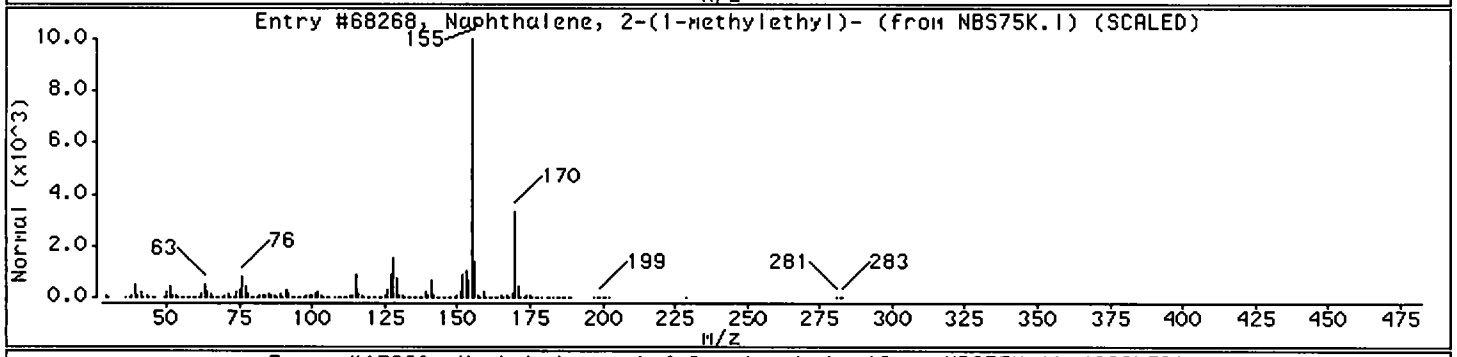
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

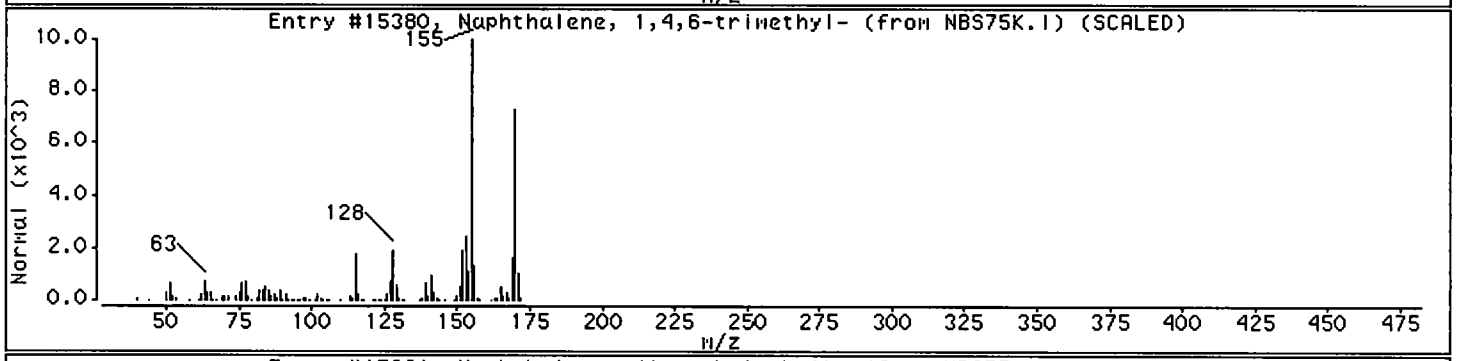
Volume Injected (uL): 2.0 Operator: GES

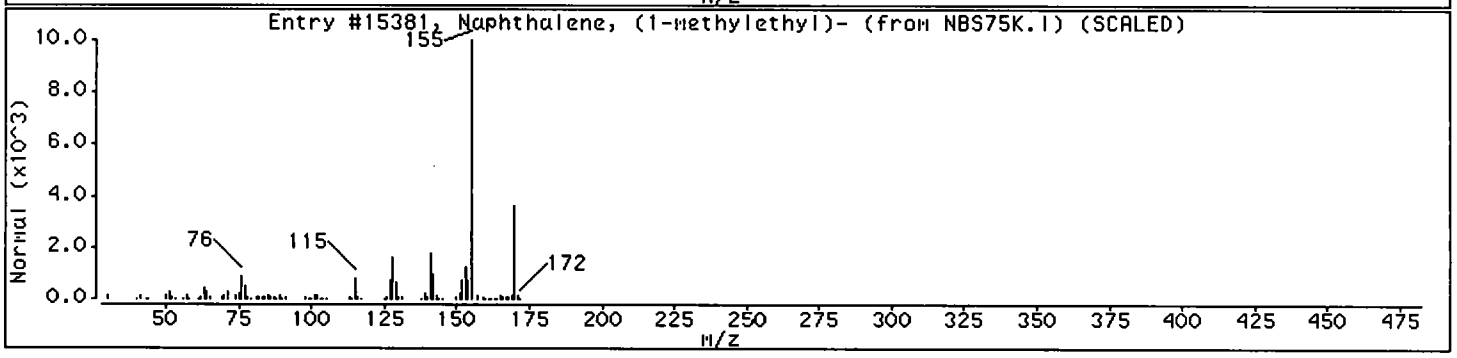
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 2-(1-methylethyl)-	2027-17-0	NBS75K.l	68268	94	C13H14	170
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	92	C13H14	170
Naphthalene, (1-methylethyl)-	29253-36-9	NBS75K.l	15381	87	C13H14	170









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

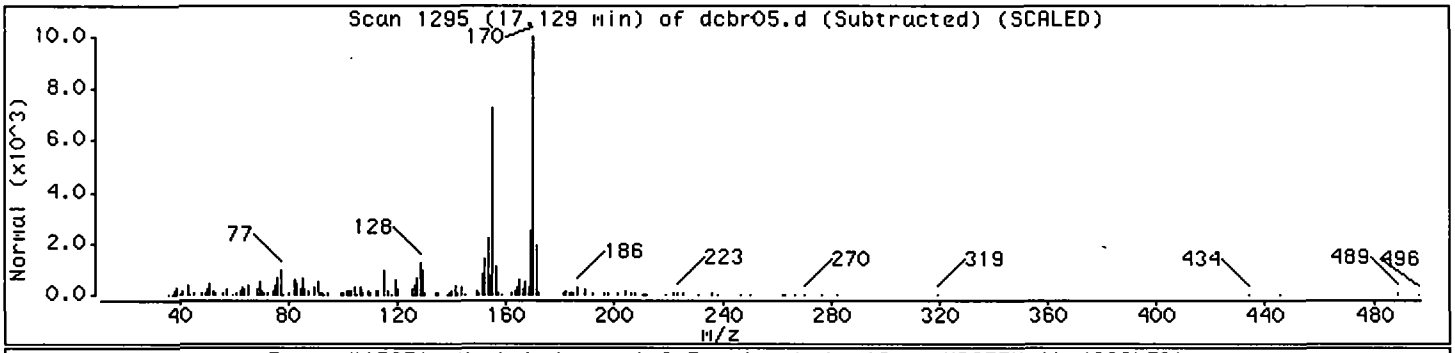
Client ID: WS-02 Instrument: gcl4.i

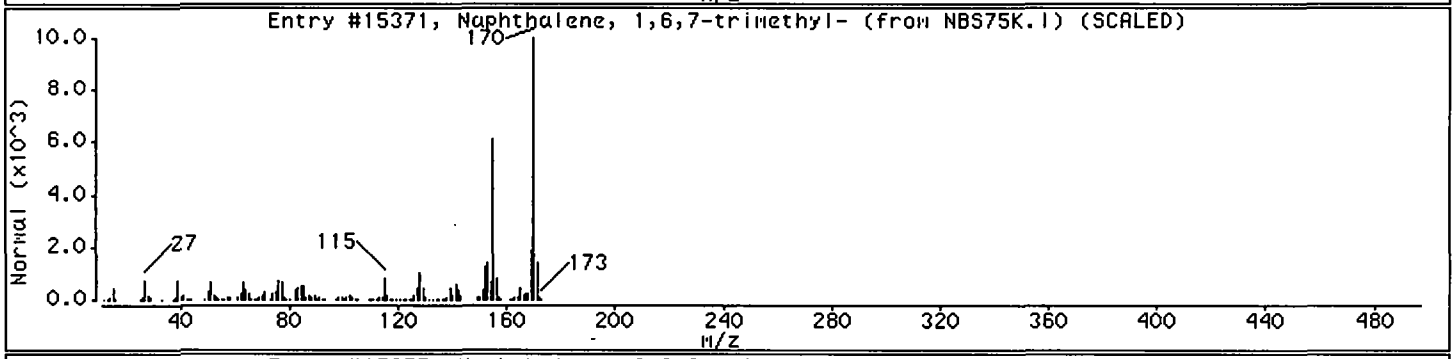
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

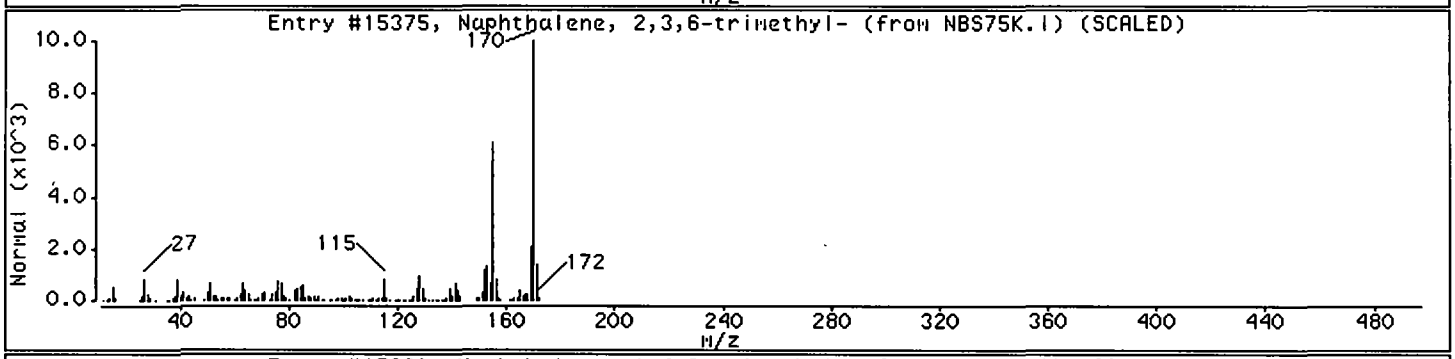
Volume Injected (uL): 2.0 Operator: GES

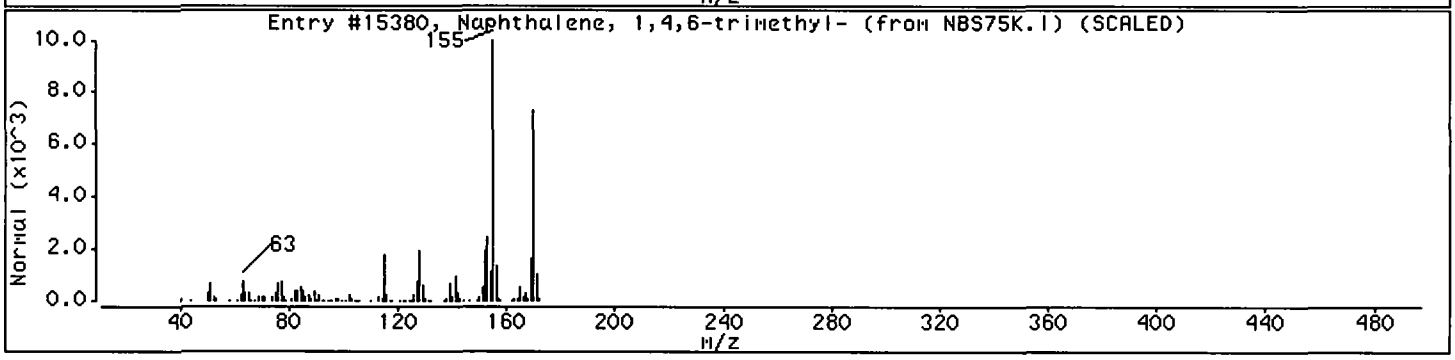
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,6,7-trimethyl-	2245-38-7	NBS75K.l	15371	94	C13H14	170
Naphthalene, 2,3,6-trimethyl-	829-26-5	NBS75K.l	15375	94	C13H14	170
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	91	C13H14	170









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

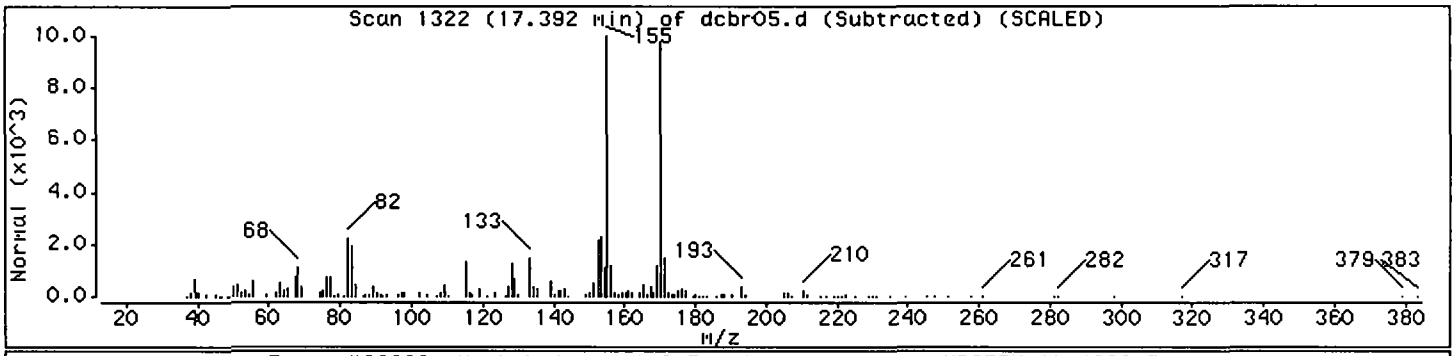
Client ID: WS-02 Instrument: gc14.i

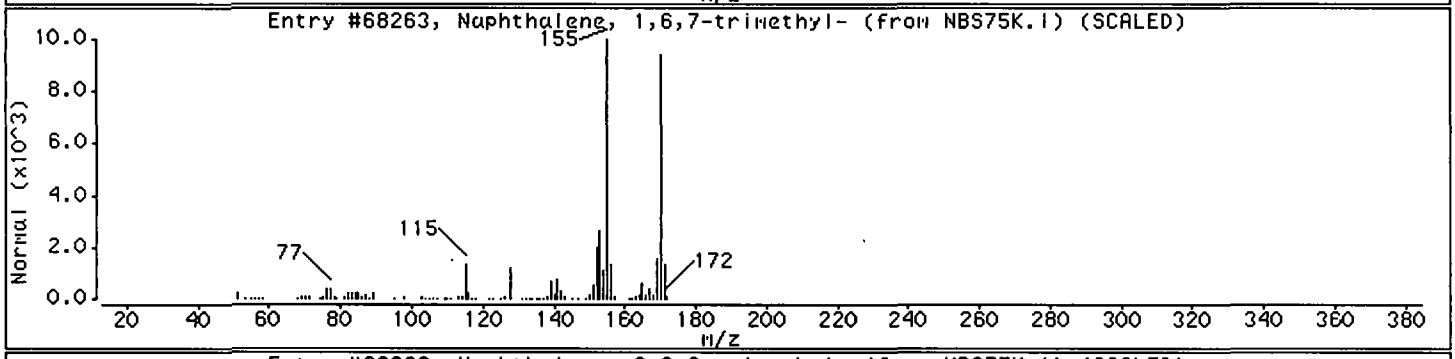
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

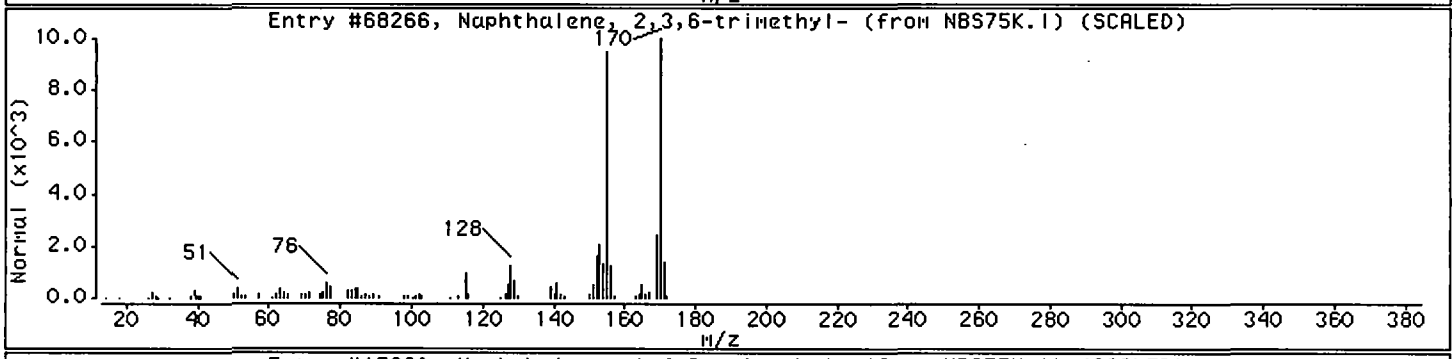
Volume Injected (uL): 2.0 Operator: GES

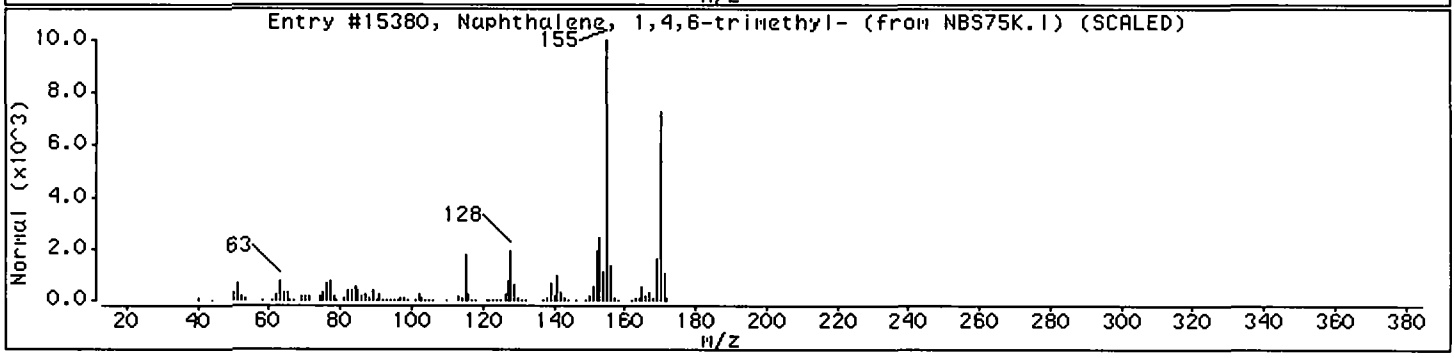
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,6,7-trimethyl-	2245-38-7	NBS75K.l	68263	93	C13H14	170
Naphthalene, 2,3,6-trimethyl-	829-26-5	NBS75K.l	68266	93	C13H14	170
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	93	C13H14	170









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

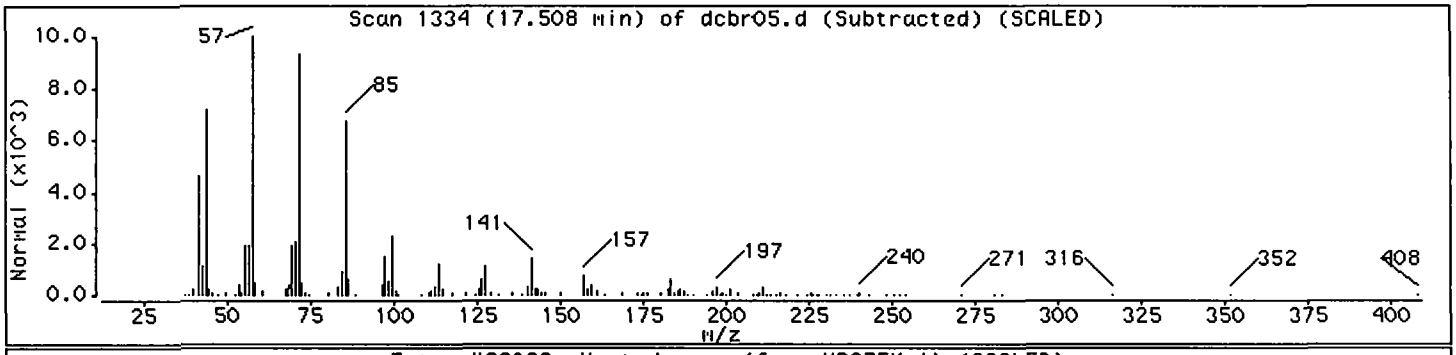
Client ID: WS-02 Instrument: gc14.i

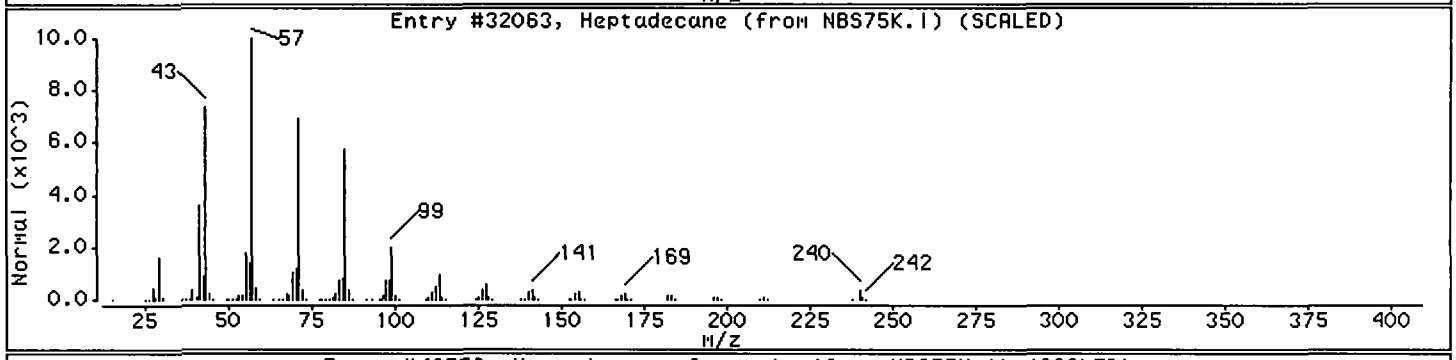
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

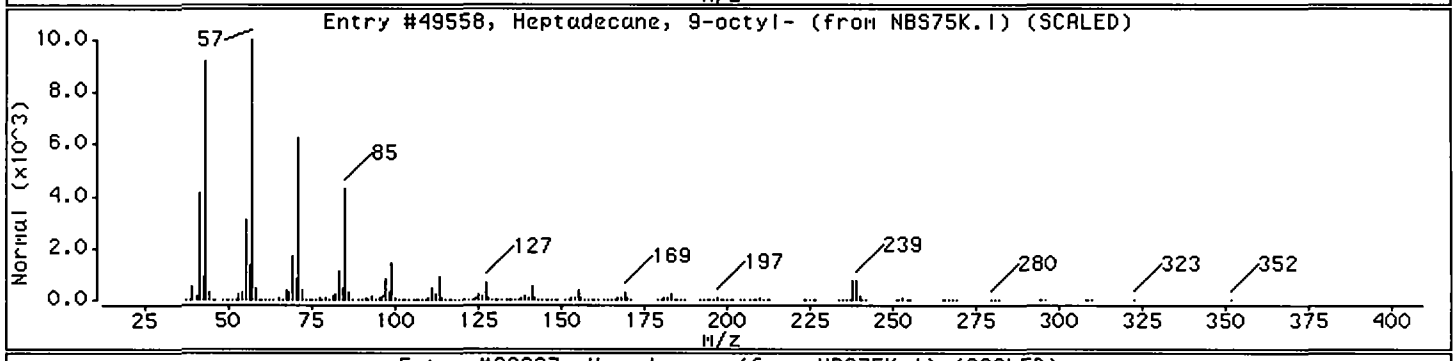
Volume Injected (uL): 2.0 Operator: GES

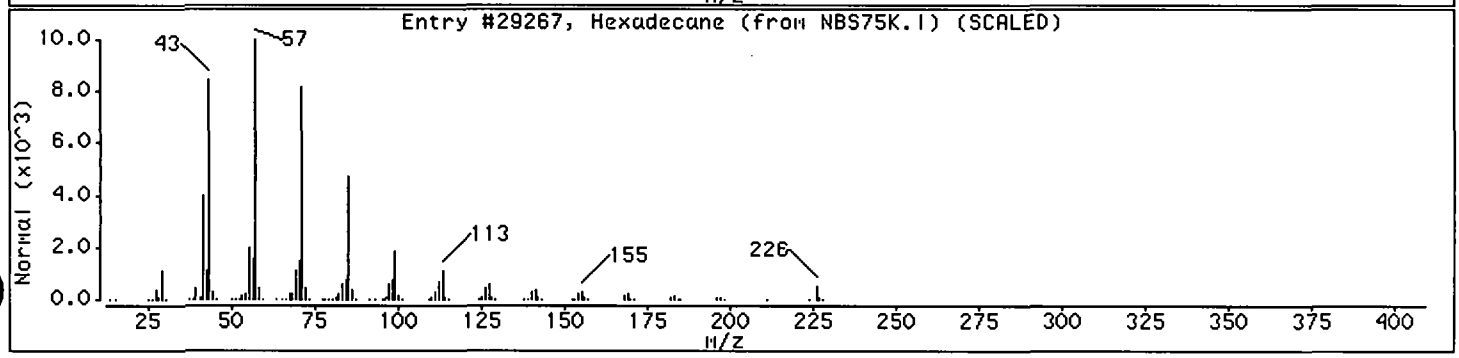
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptadecane	629-78-7	NBS75K.l	32063	86	C17H36	240
Heptadecane, 9-octyl-	7225-64-1	NBS75K.l	49558	83	C25H52	352
Hexadecane	544-76-3	NBS75K.l	29267	83	C16H34	226









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

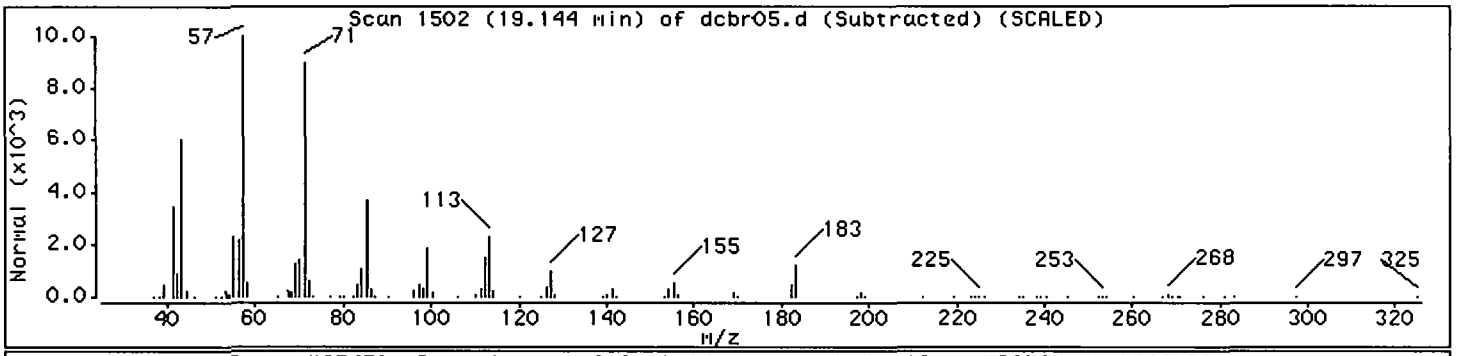
Client ID: WS-02 Instrument: gcl4.i

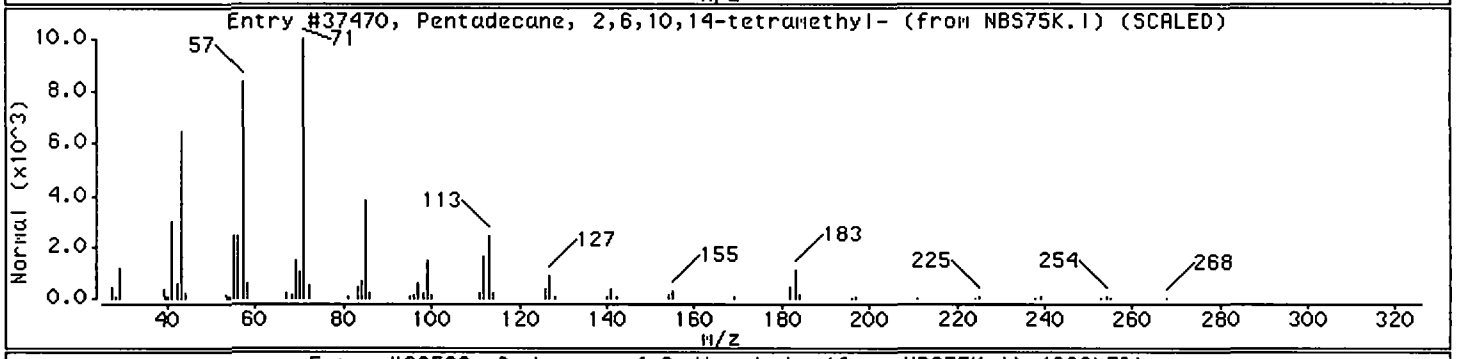
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

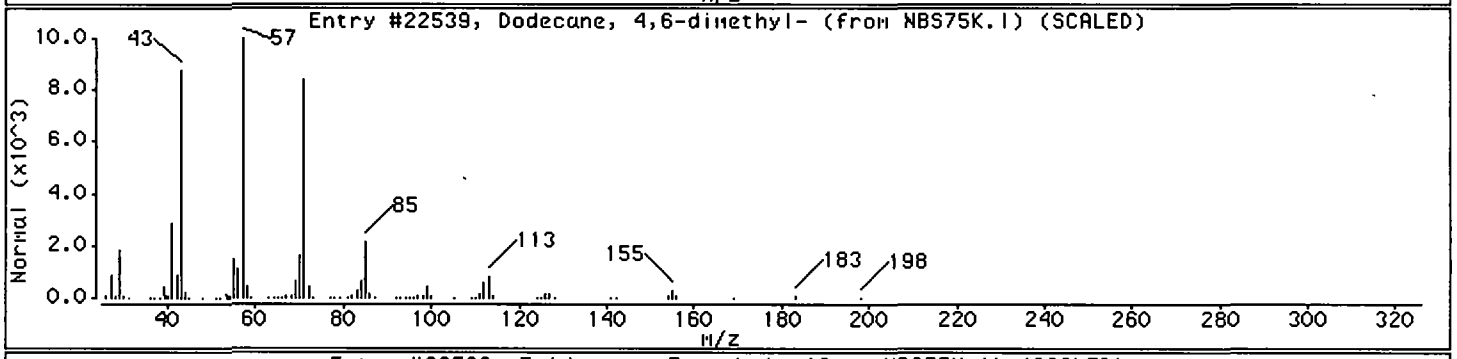
Volume Injected (uL): 2.0 Operator: GES

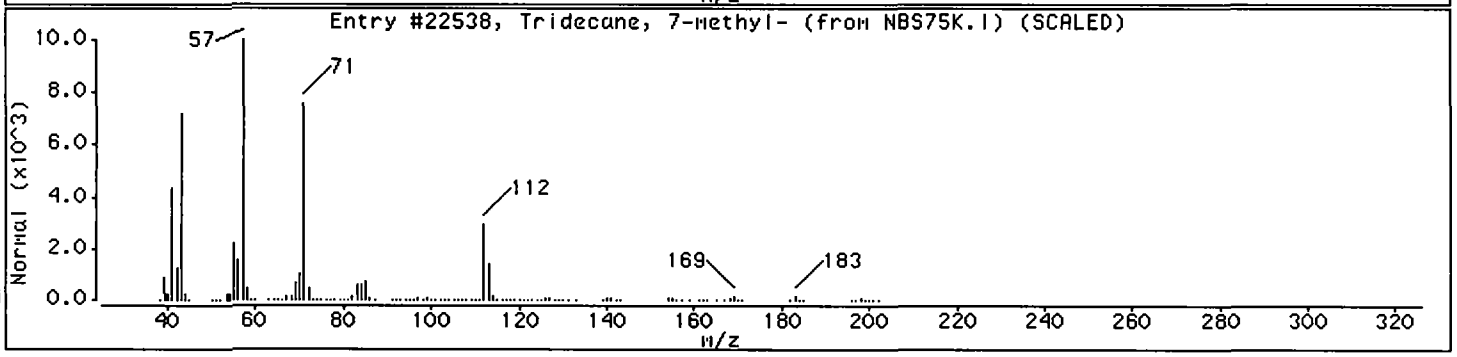
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	37470	98	C19H40	268
Dodecane, 4,6-dimethyl-	61141-72-8	NBS75K.l	22539	87	C14H30	198
Tridecane, 7-methyl-	26730-14-3	NBS75K.l	22538	70	C14H30	198









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

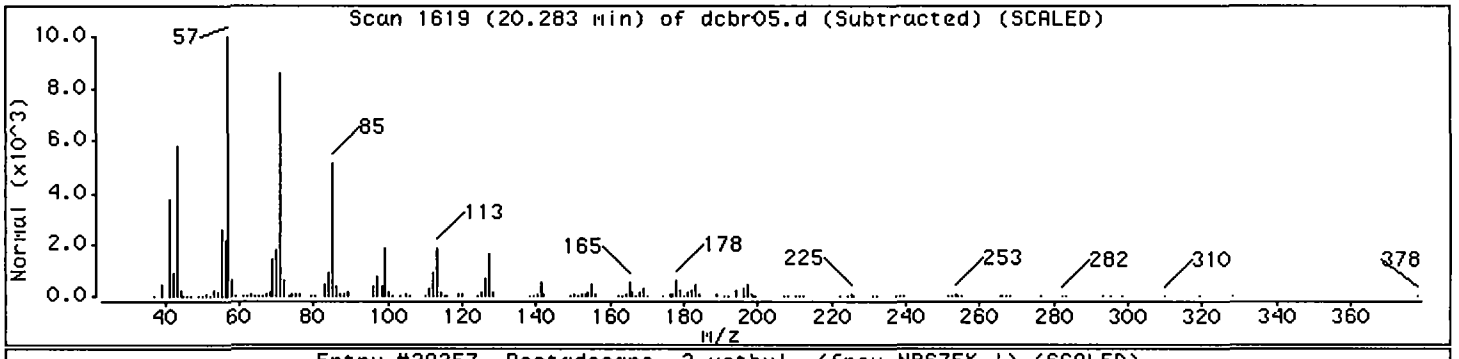
Client ID: WS-02 Instrument: gc14.i

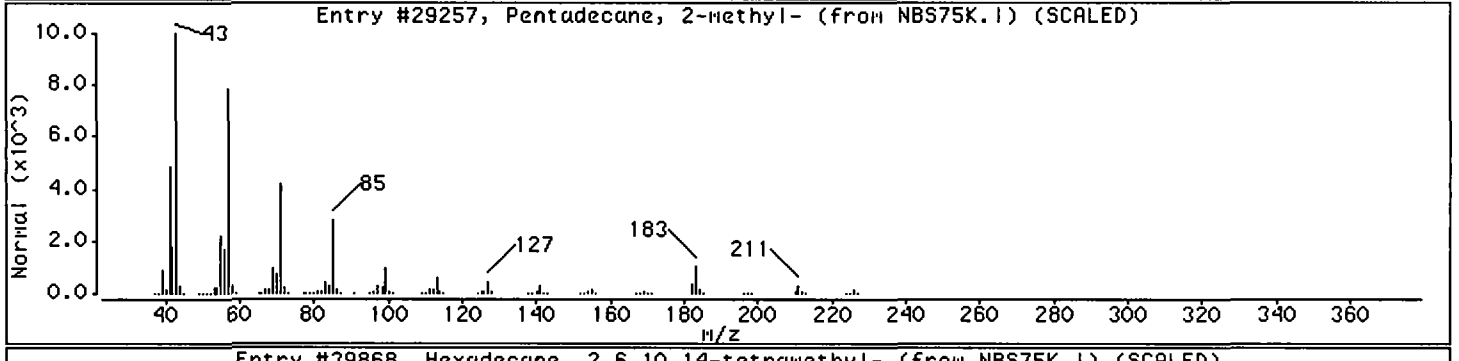
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

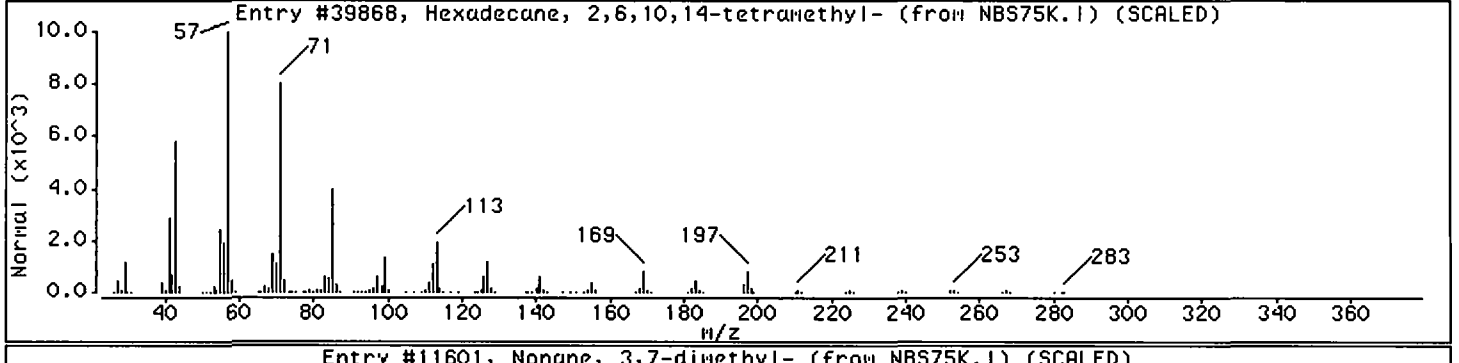
Volume Injected (uL): 2.0 Operator: GES

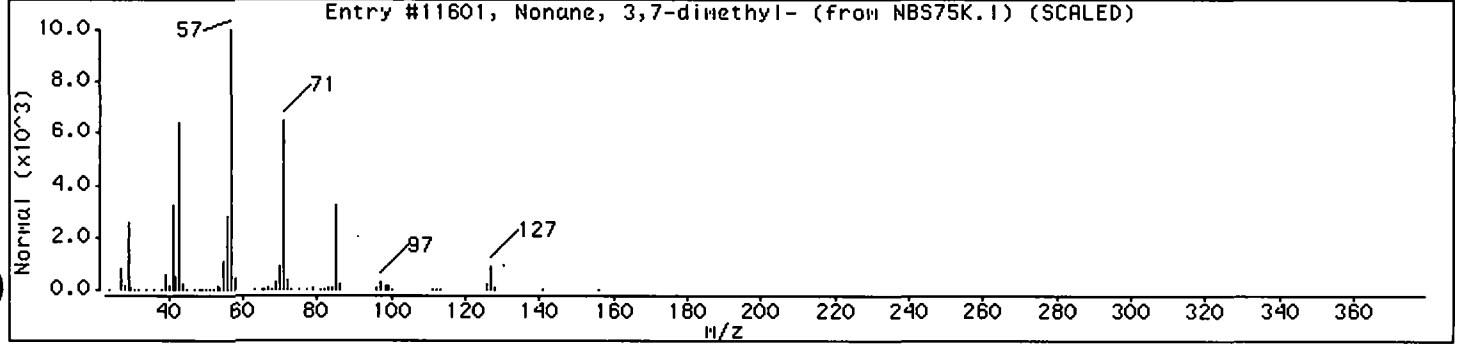
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Pentadecane, 2-methyl-	1560-93-6	NBS75K.l	29257	93	C16H34	226
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	39868	91	C20H42	282
Nonane, 3,7-dimethyl-	17302-32-8	NBS75K.l	11601	91	C11H24	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

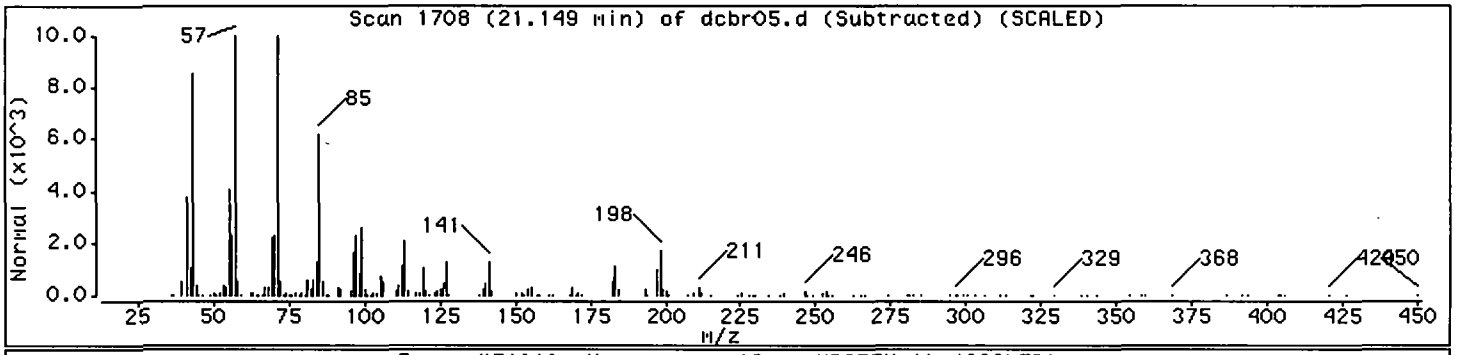
Client ID: WS-02 Instrument: gcl4.i

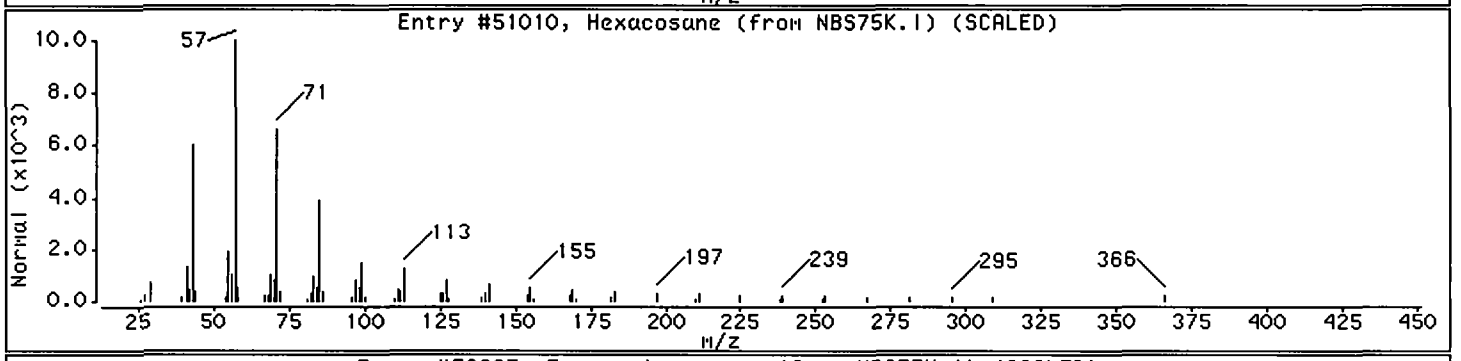
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

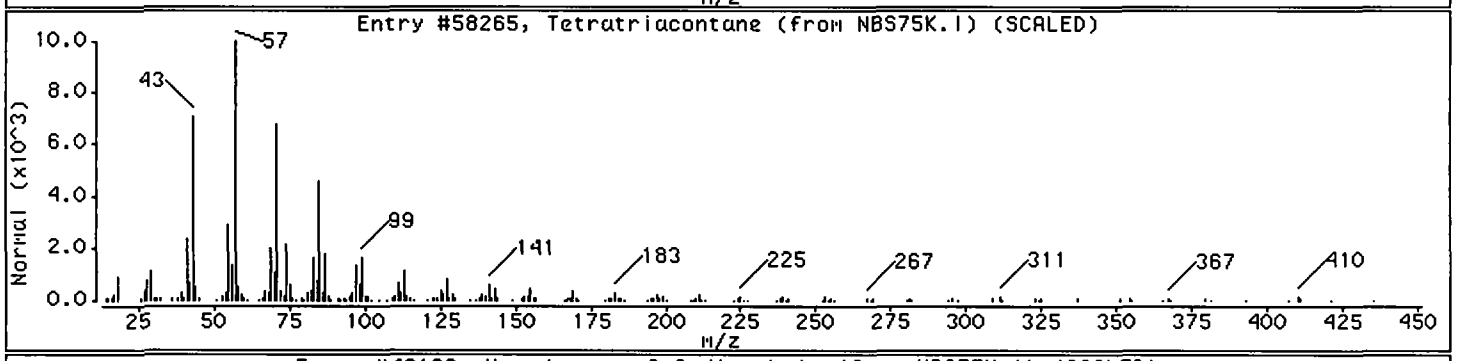
Volume Injected (uL): 2.0 Operator: GES

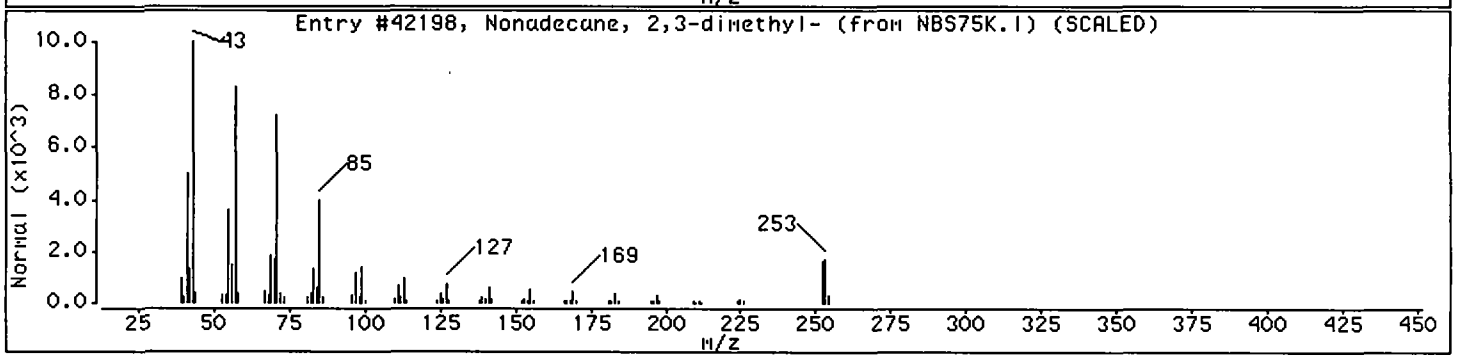
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexacosane	630-01-3	NBS75K.l	51010	80	C26H54	366
Tetratriacontane	14167-59-0	NBS75K.l	58265	80	C34H70	479
Nonadecane, 2,3-dimethyl-	75163-99-4	NBS75K.l	42198	78	C21H44	296









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

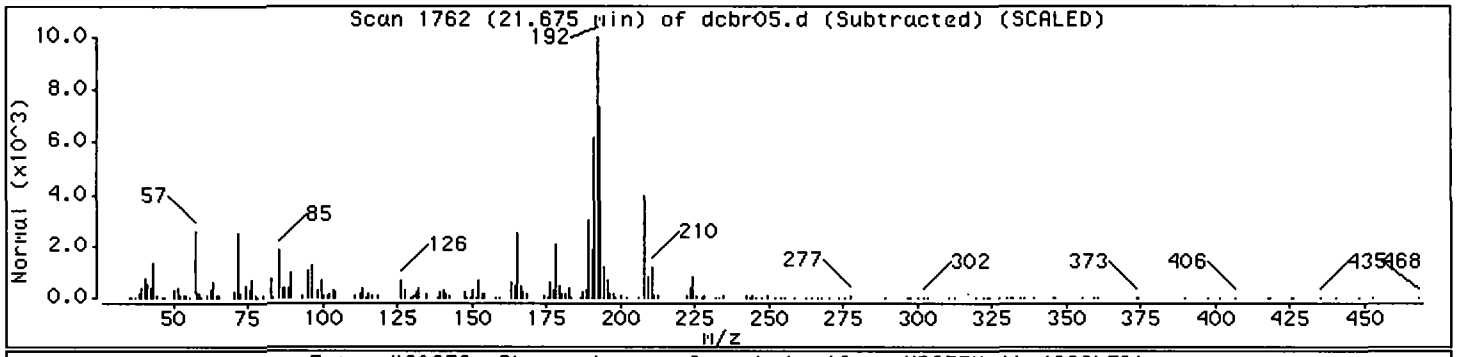
Client ID: WS-02 Instrument: gc14.i

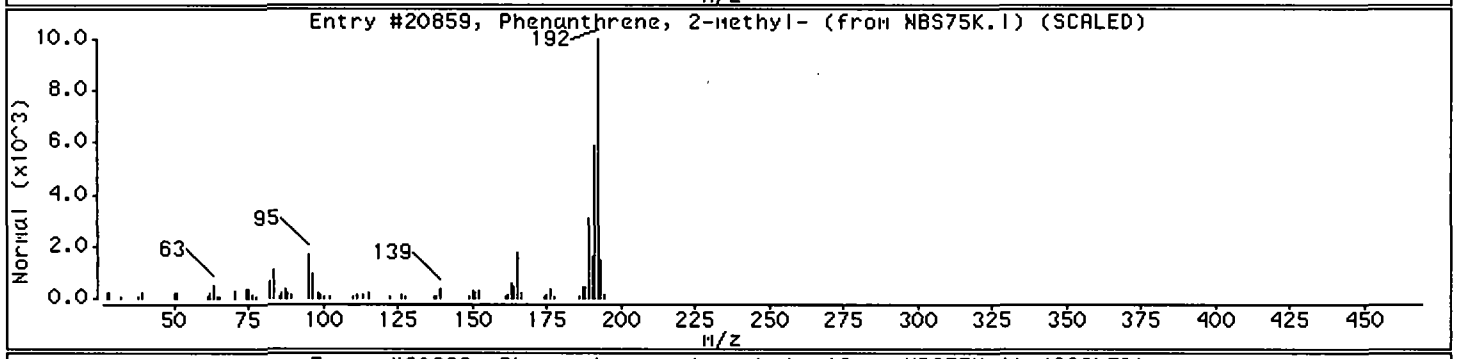
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

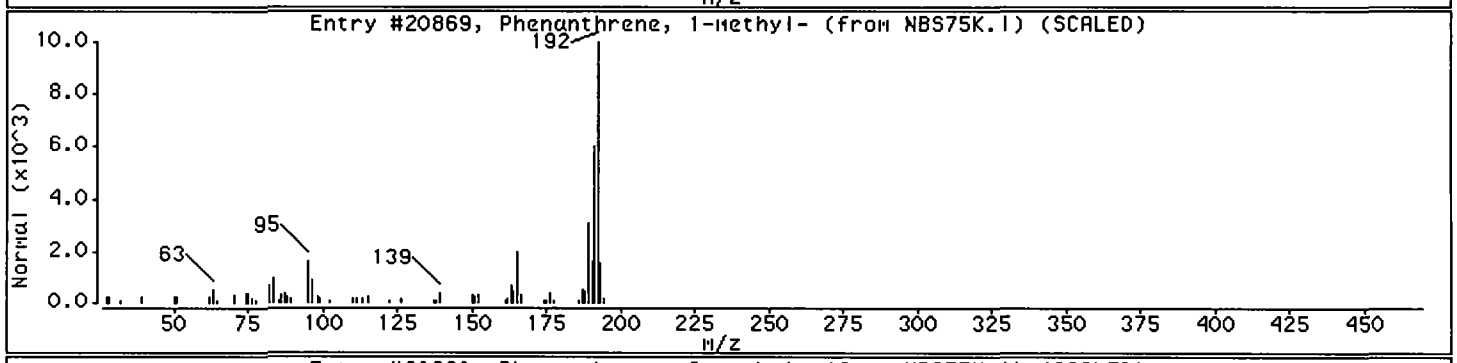
Volume Injected (uL): 2.0 Operator: GES

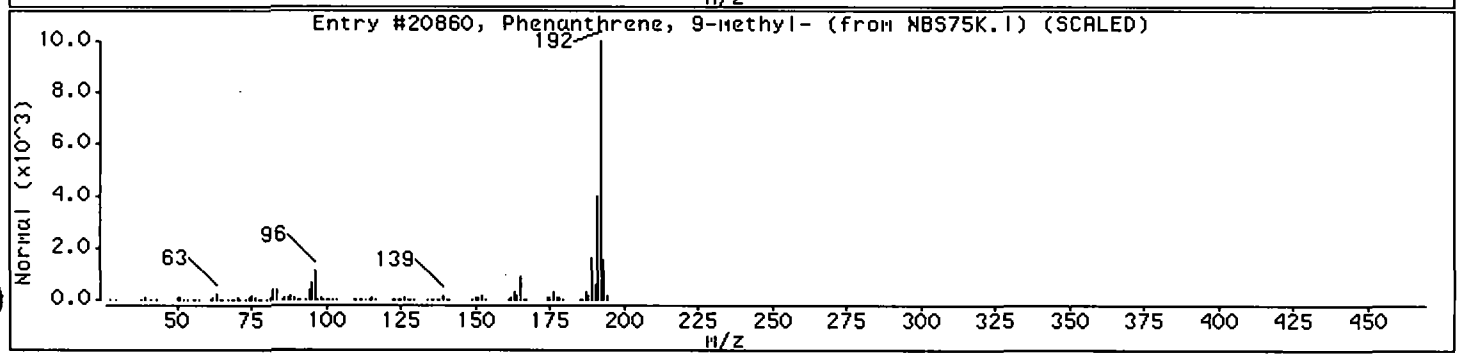
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown PAH						
Phenanthrene, 2-methyl-	2531-84-2	NBS75K.l	20859	70	C15H12	192
Phenanthrene, 1-methyl-	832-69-9	NBS75K.l	20869	70	C15H12	192
Phenanthrene, 9-methyl-	883-20-5	NBS75K.l	20860	50	C15H12	192









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

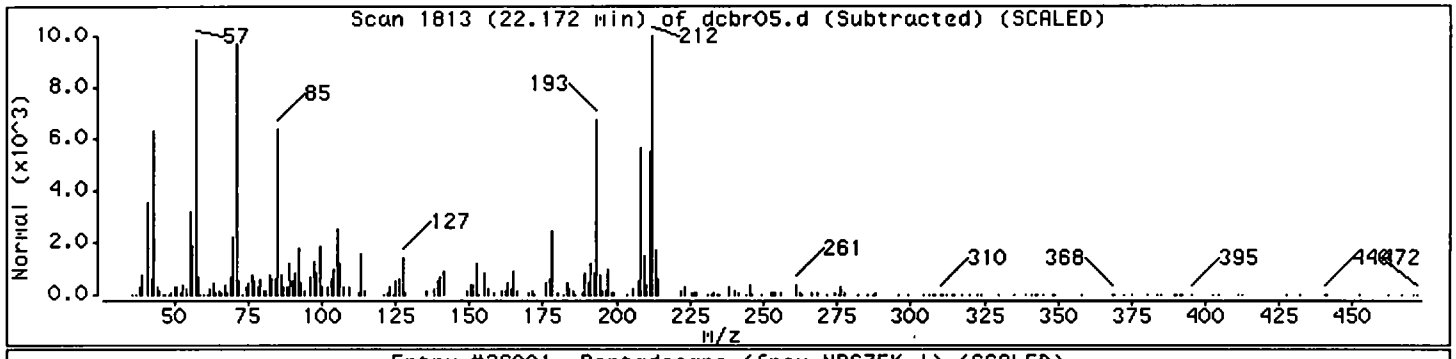
Client ID: WS-02 Instrument: gc14.i

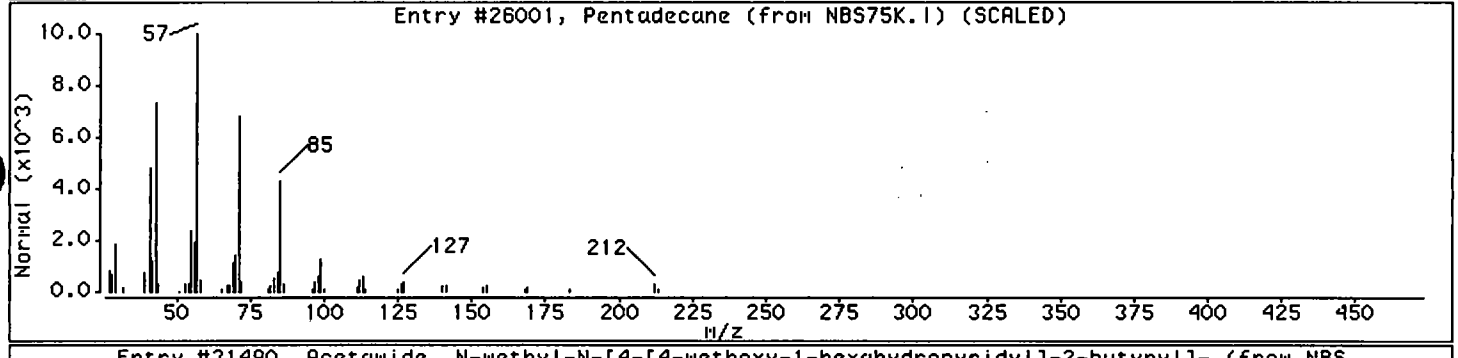
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

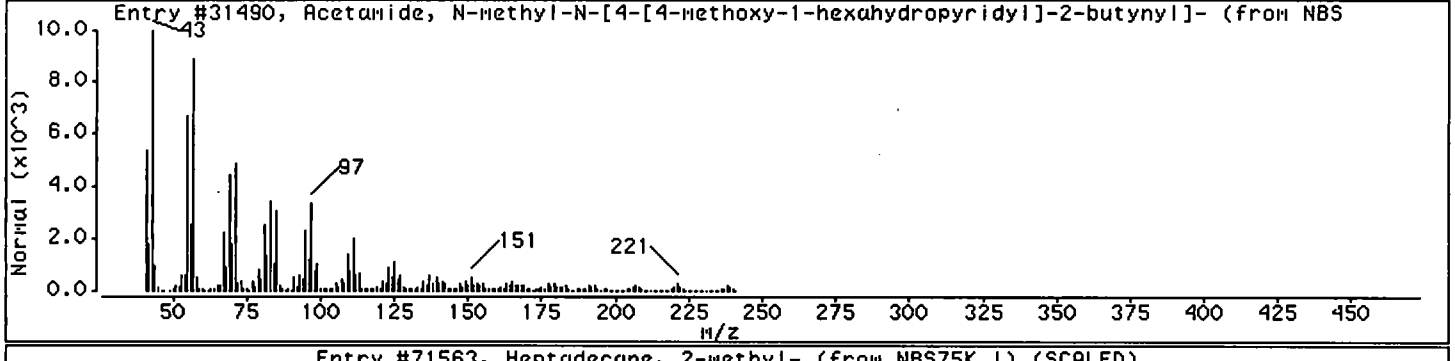
Volume Injected (uL): 2.0 Operator: GES

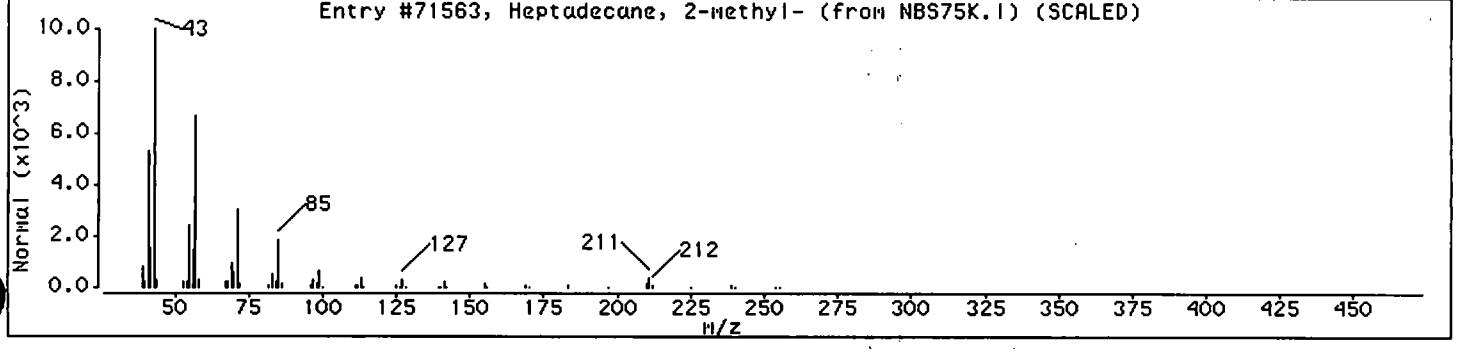
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pentadecane	629-62-9	NBS75K.l	26001	86	C15H32	212
Acetamide, N-methyl-N-[4-[4-methoxy-1-he	0-00-0	NBS75K.l	31490	86	C13H22N2O2	238
Heptadecane, 2-methyl-	1560-89-0	NBS75K.l	71563	70	C18H38	254









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

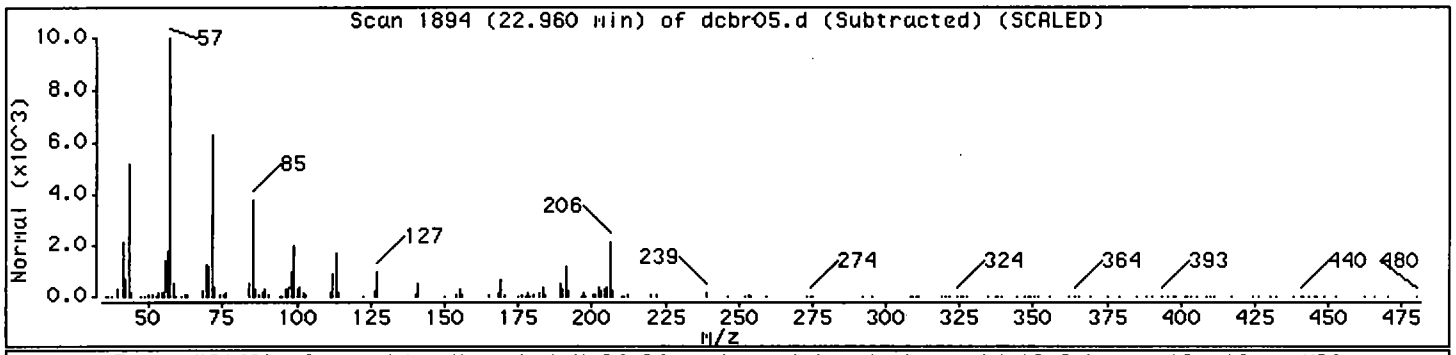
Client ID: WS-02 Instrument: gcl4.i

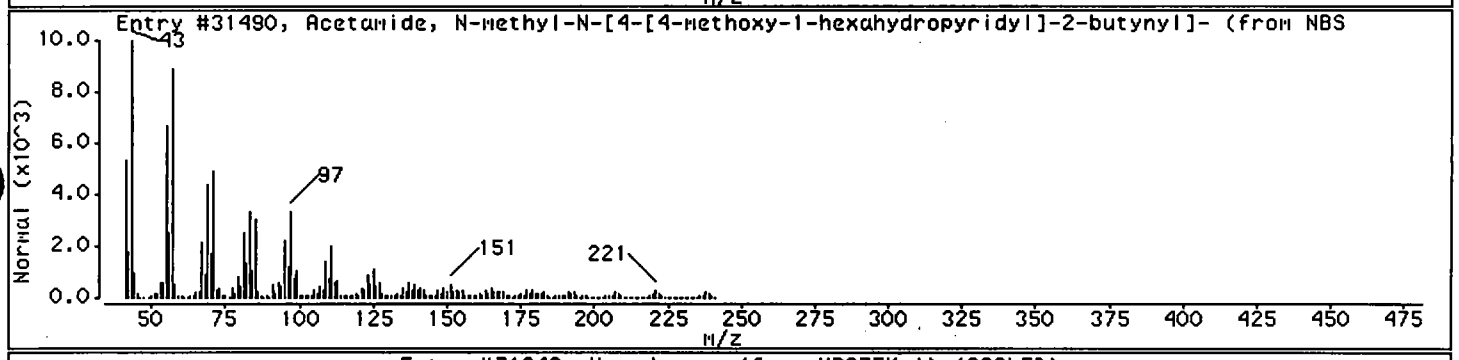
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

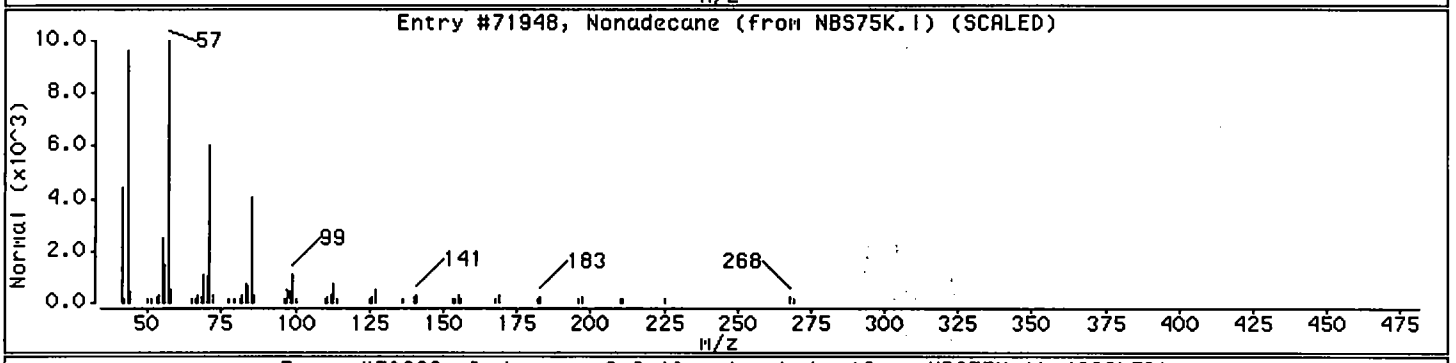
Volume Injected (uL): 2.0 Operator: GES

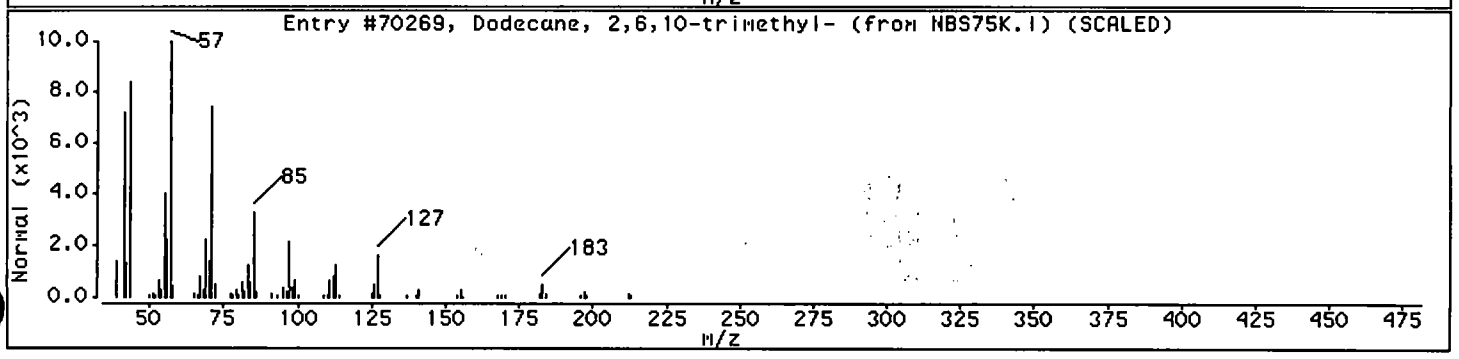
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, N-methyl-N-[4-[4-methoxy-1-he	0-00-0	NBS75K.l	31490	86	C13H22N2O2	238
Nonadecane	629-92-5	NBS75K.l	71948	84	C19H40	268
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	70269	70	C15H32	212









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

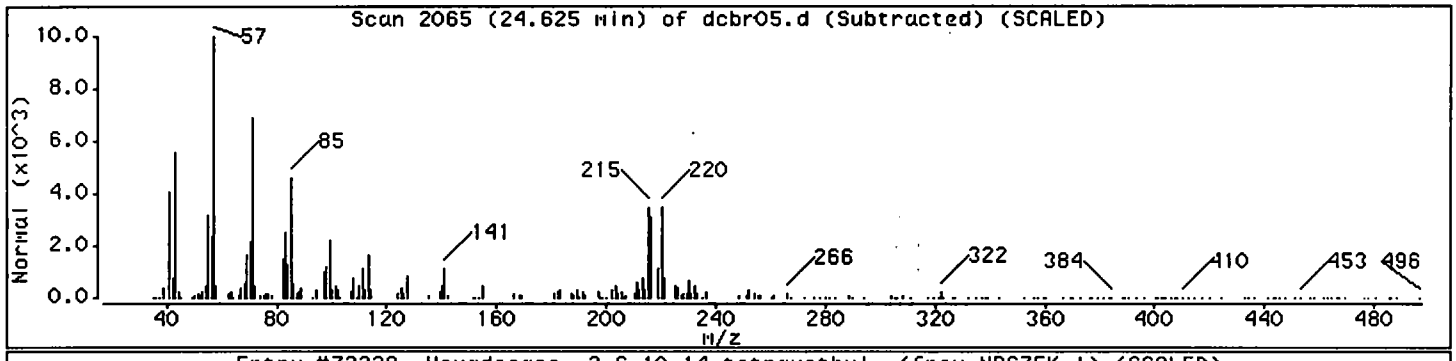
Client ID: WS-02 Instrument: gc14.i

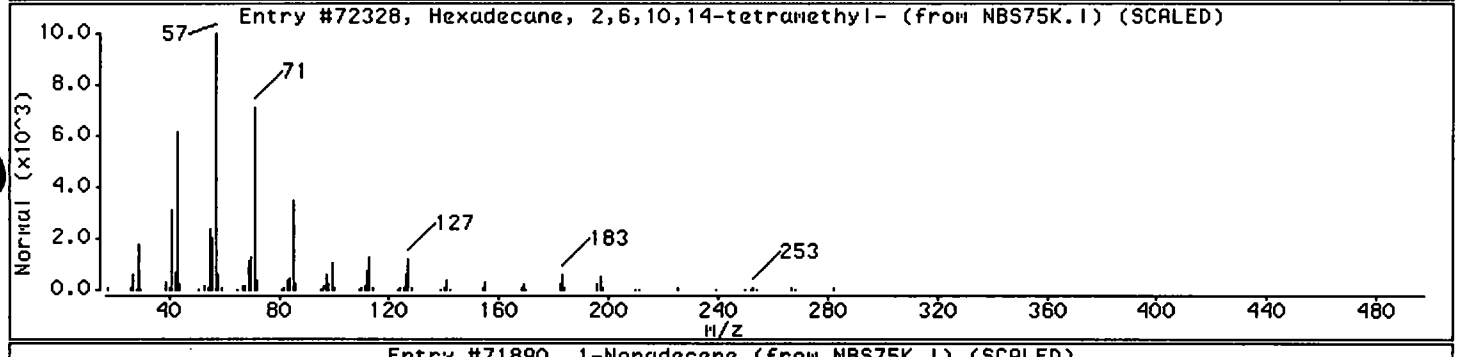
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

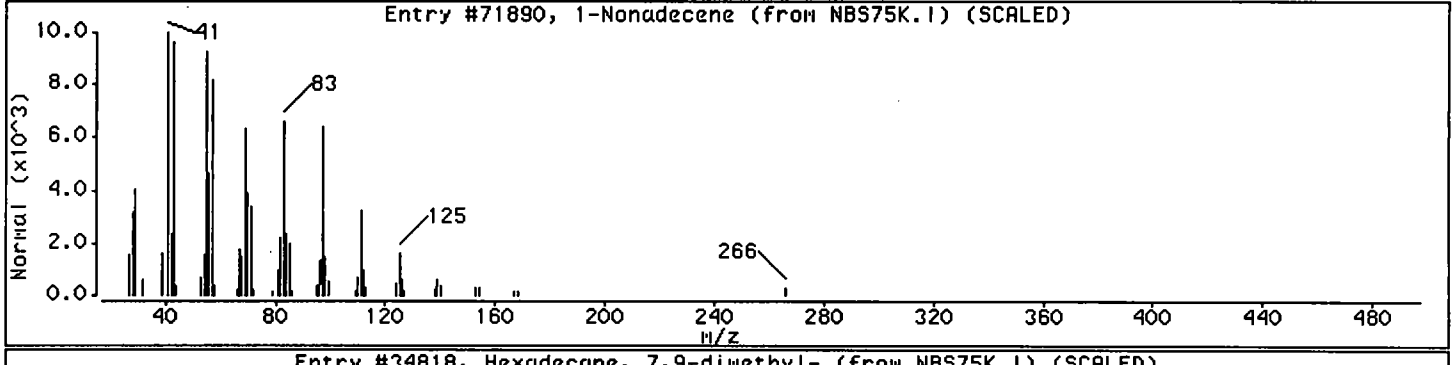
Volume Injected (uL): 2.0 Operator: GES

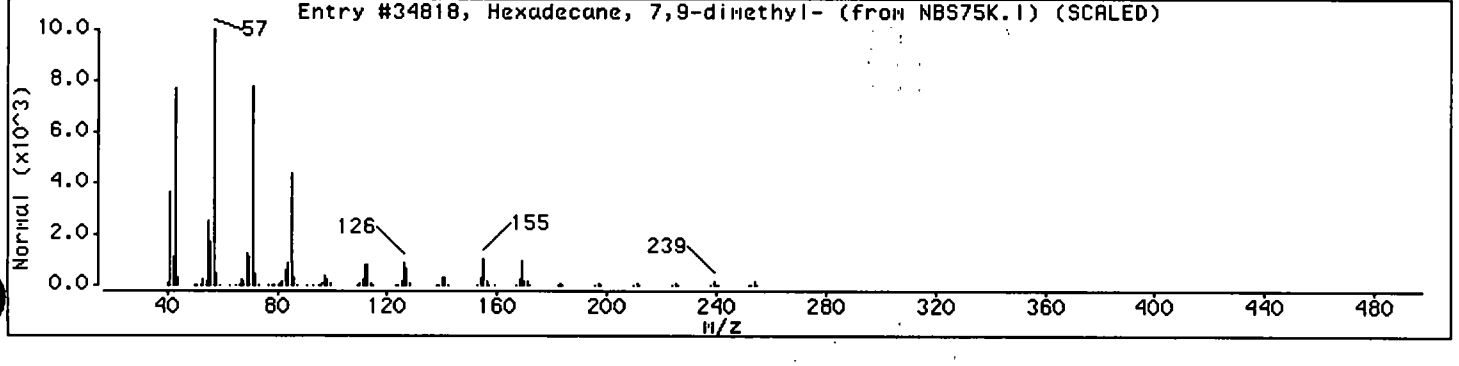
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown HC + Unknown						
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	72328	93	C20H42	282
1-Nonadecene	18435-45-5	NBS75K.l	71890	92	C19H38	266
Hexadecane, 7,9-dimethyl-	21164-95-4	NBS75K.l	34818	80	C18H38	254









Data File: /chem/gcl4.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

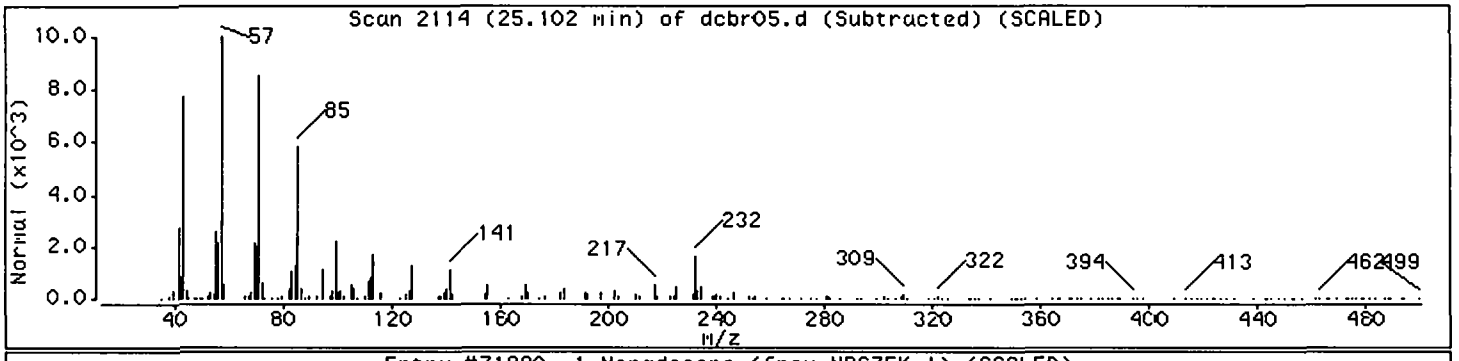
Client ID: WS-02 Instrument: gcl4.i

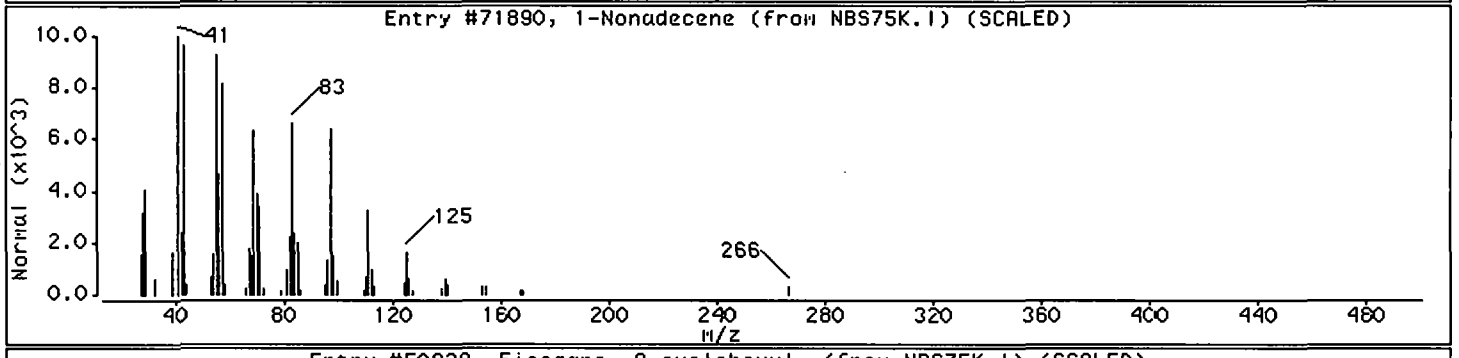
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

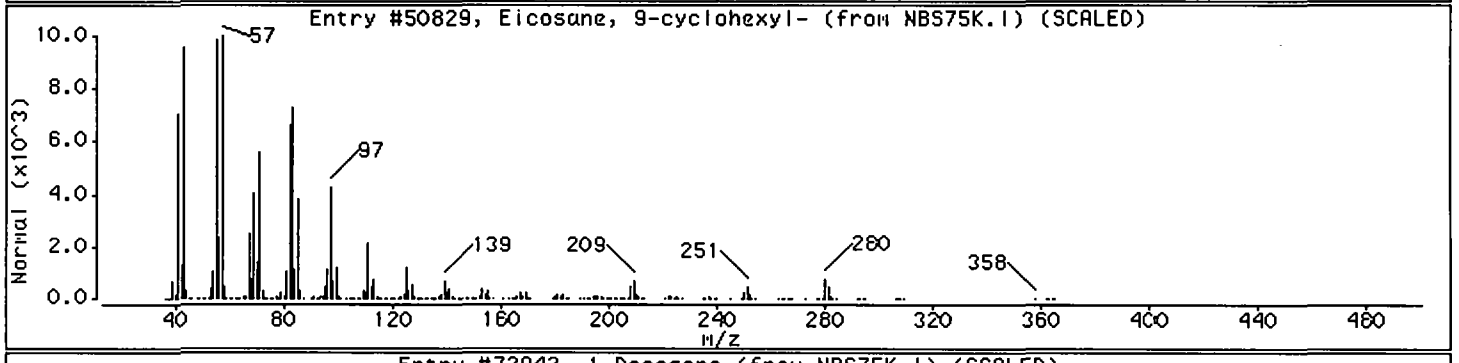
Volume Injected (uL): 2.0 Operator: GES

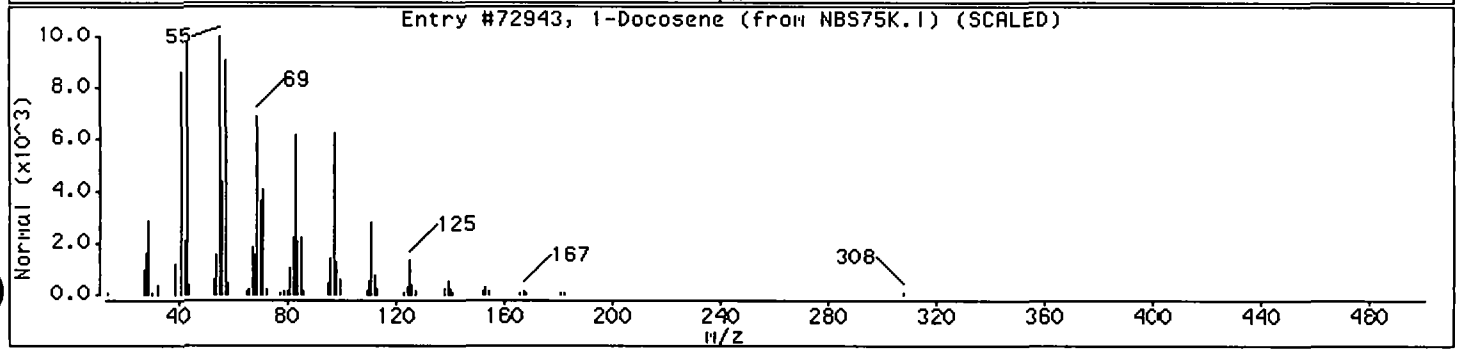
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1-Nonadecene	18435-45-5	NBS75K.l	71890	93	C19H38	266
Eicosane, 9-cyclohexyl-	4443-61-2	NBS75K.l	50829	87	C26H52	364
1-Docosene	1599-67-3	NBS75K.l	72943	83	C22H44	308









Data File: /chem/gc14.i/dec1296b.b/dcbr05.d

Date : 12-DEC-1996 22:48

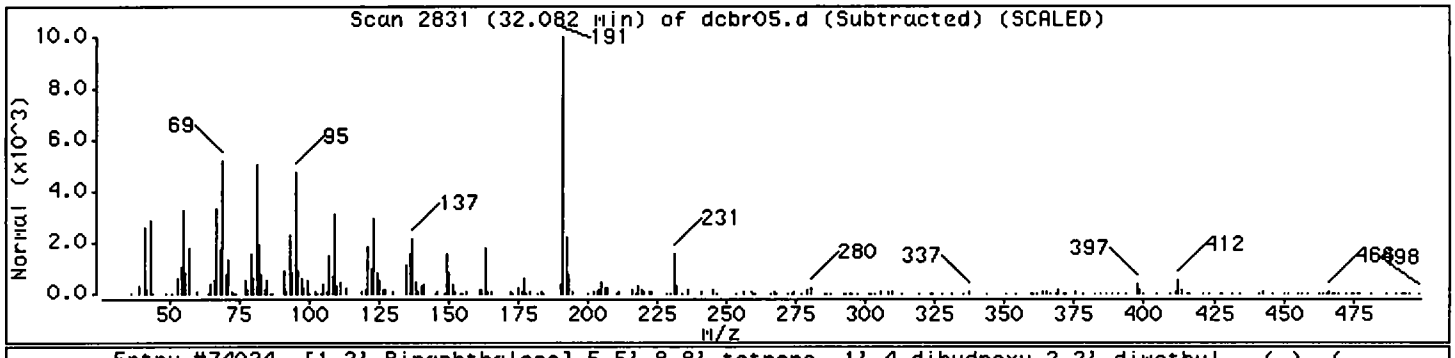
Client ID: WS-02 Instrument: gc14.i

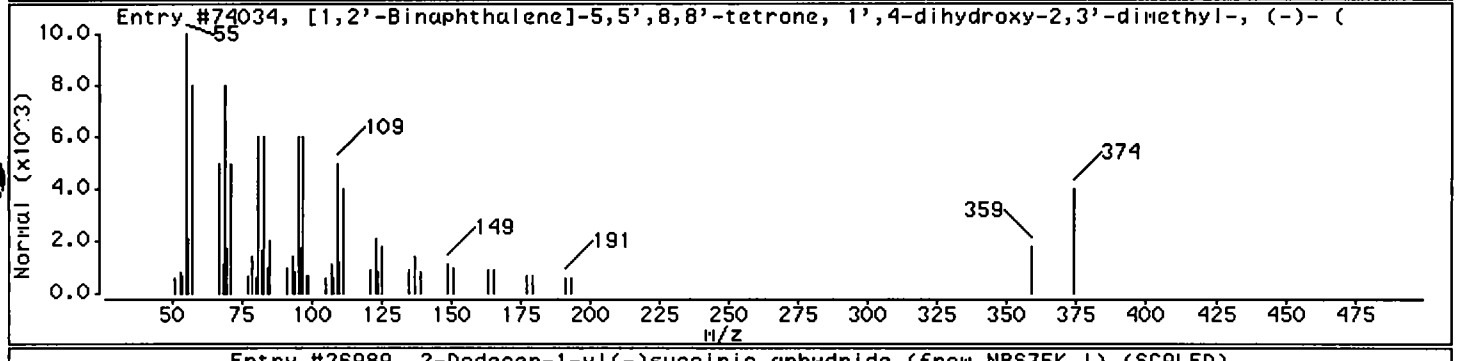
Sample Info: 9611G675-002 DFBC12,[AL=0625HS],[DC=00]

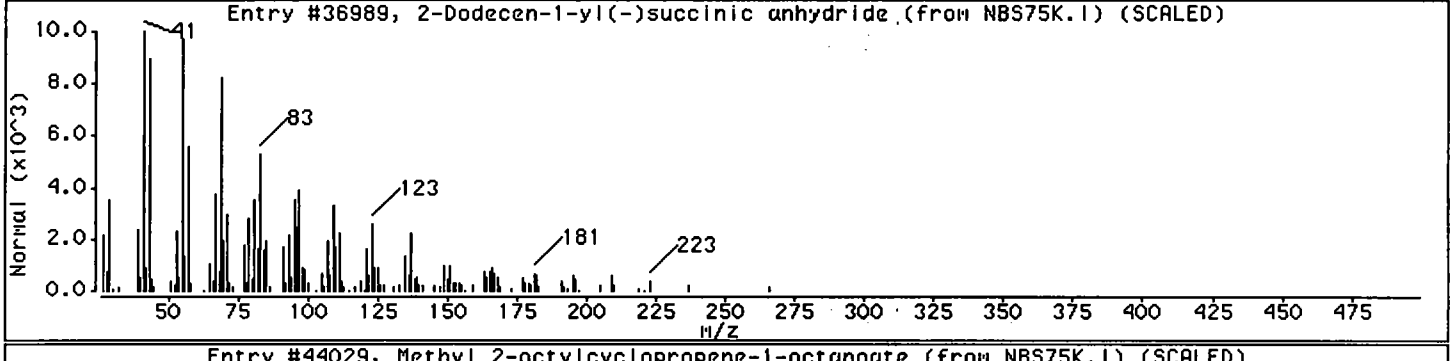
Volume Injected (uL): 2.0 Operator: GES

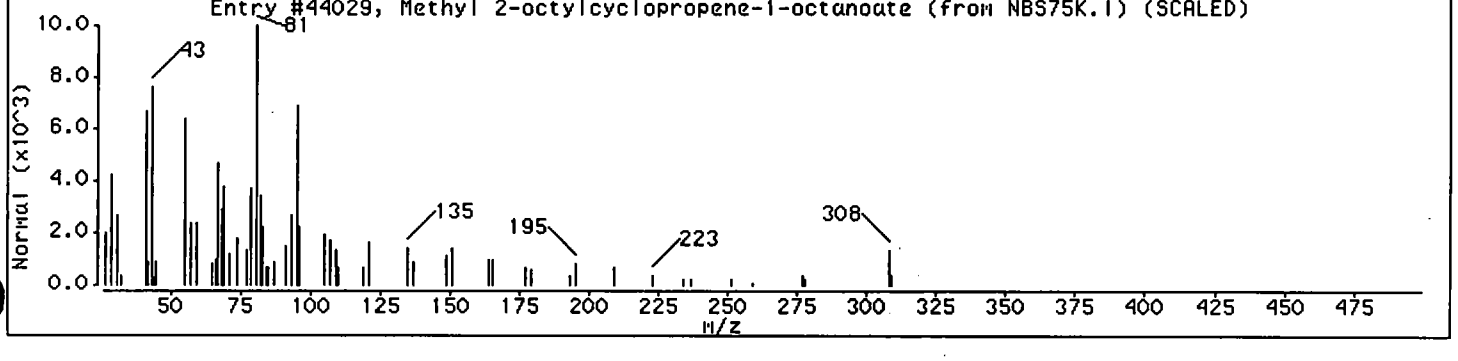
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	91	C22H1406	374
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	80	C16H2603	266
Methyl 2-octylcyclopropene-1-octanoate	3220-60-8	NBS75K.l	44029	60	C20H3602	308









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-03

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-003

Sample wt/vol: 5.3 (g/mL) G Lab File ID: DCBR06

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 4 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	49000	U
111-44-4	bis(2-Chloroethyl)ether	49000	U
95-57-8	2-Chlorophenol	49000	U
541-73-1	1,3-Dichlorobenzene	49000	U
106-46-7	1,4-Dichlorobenzene	49000	U
95-50-1	1,2-Dichlorobenzene	49000	U
95-48-7	2-Methylphenol	49000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	49000	U
106-44-5	4-Methylphenol	49000	U
621-64-7	N-Nitroso-di-n-propylamine	49000	U
67-72-1	Hexachloroethane	49000	U
98-95-3	Nitrobenzene	49000	U
78-59-1	Isophorone	49000	U
88-75-5	2-Nitrophenol	49000	U
105-67-9	2,4-Dimethylphenol	49000	U
111-91-1	bis(2-Chloroethoxy)methane	49000	U
120-83-2	2,4-Dichlorophenol	49000	U
120-82-1	1,2,4-Trichlorobenzene	49000	U
91-20-3	Naphthalene	49000	U
106-47-8	4-Chloroaniline	49000	U
87-68-3	Hexachlorobutadiene	49000	U
59-50-7	4-Chloro-3-methylphenol	49000	U
91-57-6	2-Methylnaphthalene	49000	U
77-47-4	Hexachlorocyclopentadiene	49000	U
88-06-2	2,4,6-Trichlorophenol	49000	U
95-95-4	2,4,5-Trichlorophenol	120000	U
91-58-7	2-Chloronaphthalene	49000	U
88-74-4	2-Nitroaniline	120000	U
131-11-3	Dimethylphthalate	49000	U
208-96-8	Acenaphthylene	49000	U
606-20-2	2,6-Dinitrotoluene	49000	U
99-09-2	3-Nitroaniline	120000	U
83-32-9	Acenaphthene	49000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-03

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-003

Sample wt/vol: 5.3 (g/mL) G Lab File ID: DCBR06

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 4 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	120000	U
100-02-7	4-Nitrophenol	120000	U
132-64-9	Dibenzofuran	49000	U
121-14-2	2,4-Dinitrotoluene	49000	U
84-66-2	Diethylphthalate	49000	U
7005-72-3	4-Chlorophenyl-phenylether	49000	U
86-73-7	Fluorene	49000	U
100-01-6	4-Nitroaniline	120000	U
534-52-1	4,6-Dinitro-2-methylphenol	120000	U
86-30-6	n-Nitrosodiphenylamine (1)	49000	U
101-55-3	4-Bromophenyl-phenylether	49000	U
118-74-1	Hexachlorobenzene	49000	U
87-86-5	Pentachlorophenol	120000	U
85-01-8	Phenanthrene	49000	U
120-12-7	Anthracene	49000	U
86-74-8	Carbazole	49000	U
84-74-2	Di-n-butylphthalate	49000	U
206-44-0	Fluoranthene	49000	U
129-00-0	Pyrene	54000	
85-68-7	Butylbenzylphthalate	49000	U
91-94-1	3,3'-Dichlorobenzidine	49000	U
56-55-3	Benzo(a)anthracene	49000	U
218-01-9	Chrysene	49000	U
117-81-7	bis(2-Ethylhexyl)phthalate	49000	U
117-84-0	Di-n-octylphthalate	49000	U
205-99-2	Benzo(b)fluoranthene	49000	U
207-08-9	Benzo(k)fluoranthene	49000	U
50-32-8	Benzo(a)pyrene	49000	U
193-39-5	Indeno(1,2,3-cd)pyrene	49000	U
53-70-3	Dibenzo(a,h)anthracene	49000	U
191-24-2	Benzo(g,h,i)perylene	49000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-03

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-003

Sample wt/vol: 5.3 (g/mL) G Lab File ID: DCBR06

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 4 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 18

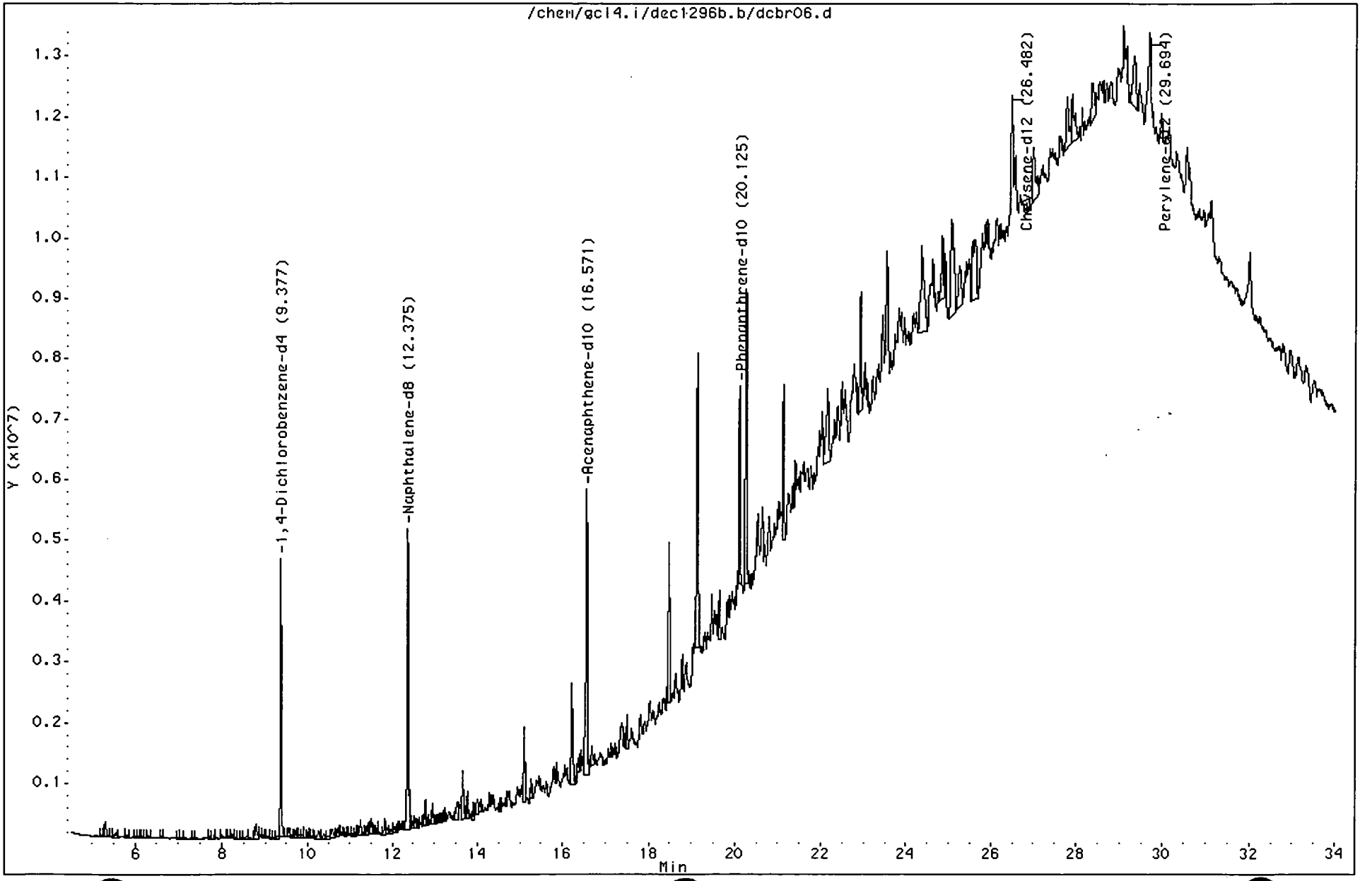
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN CYCLOALKANE	13.53	11000	J
2.		UNKNOWN ALKANE	13.66	16000	J
3.		UNKNOWN ALKANE	16.23	40000	J
4.		UNKNOWN ALKANE	19.14	170000	J
5.		UNKNOWN ALKANE	19.65	24000	J
6.		UNKNOWN ALKANE	20.27	180000	J
7.		UNKNOWN ALKANE	21.13	94000	J
8.		UNKNOWN	22.15	75000	J
9.		UNKNOWN	22.93	87000	J
10.		UNKNOWN ALKANE	24.37	130000	J
11.		UNKNOWN ALKANE	25.07	130000	J
12.		UNKNOWN	25.26	52000	J
13.		UNKNOWN	25.61	100000	J
14.		UNKNOWN HYDROCARBON	26.99	62000	J
15.		UNKNOWN HYDROCARBON	27.78	56000	J
16.		UNKNOWN	27.89	55000	J
17.		UNKNOWN HYDROCARBON	28.35	43000	J
18.		UNKNOWN HYDROCARBON	29.32	63000	J
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

147

Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d
Date : 12-DEC-1996 23:30
Client ID: WS-03
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr06.d
Lab Smp Id: 9611G675-003 Client Smp ID: WS-03
Inj Date : 12-DEC-1996 23:30
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-003 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.5.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 6
Dil Factor: 25.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.300	Weigth of sample extracted (g)
M	4.000	% Moisture

MB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.377	9.325	(1.000)	1512597	40.000	
* 26 Naphthalene-d8	136.00	12.375	12.323	(1.000)	4957533	40.000	
* 41 Acenaphthene-d10	164.00	16.571	16.500	(1.000)	2460999	40.000	
* 56 Phenanthrene-d10	188.00	20.125	20.014	(1.000)	3183256	40.000	
* 67 Chrysene-d12	240.00	26.482	26.303	(1.000)	1832305	40.000	
* 75 Perylene-d12	264.00	29.694	29.438	(1.000)	1657234	40.000	
63 Pyrene	202.00	23.551	23.392	(0.889)	1754032	22.122	54348

Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

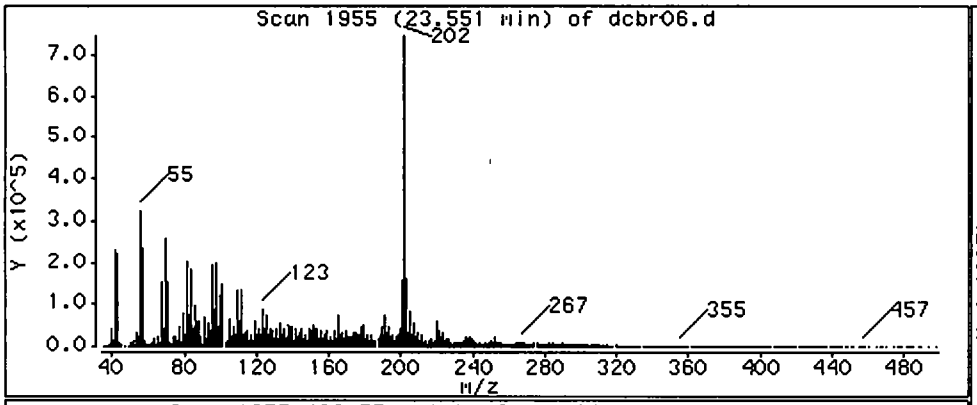
Client ID: WS-03 Instrument: gcl4.i

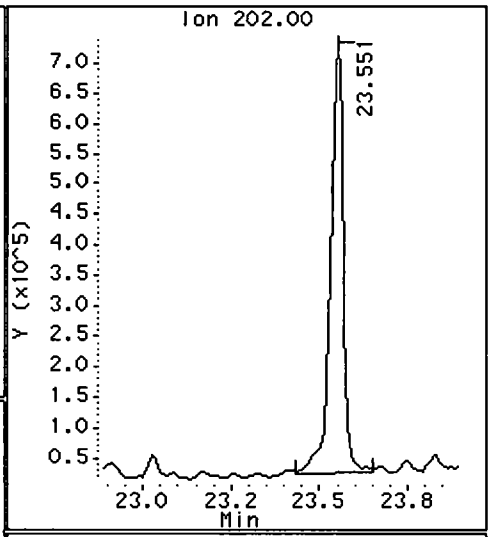
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

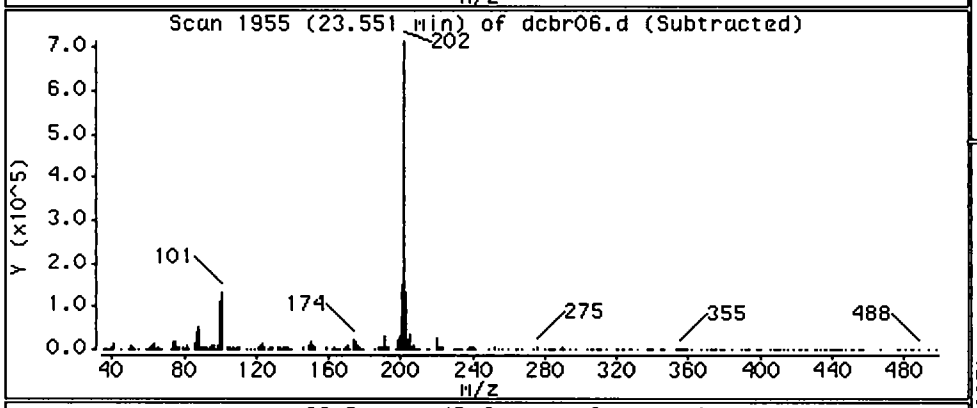
Volume Injected (uL): 2.0 Operator: GES

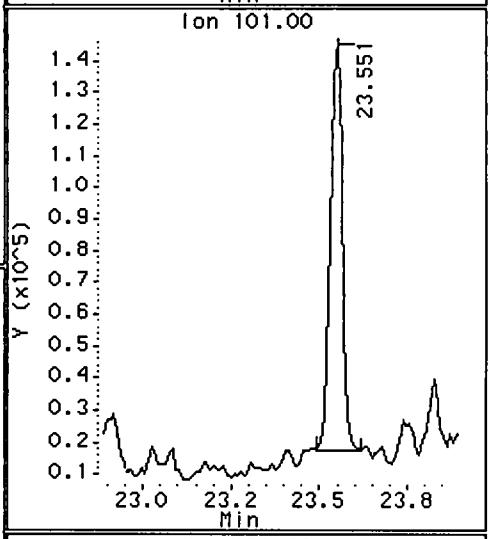
Column phase: Column diameter: 2.00

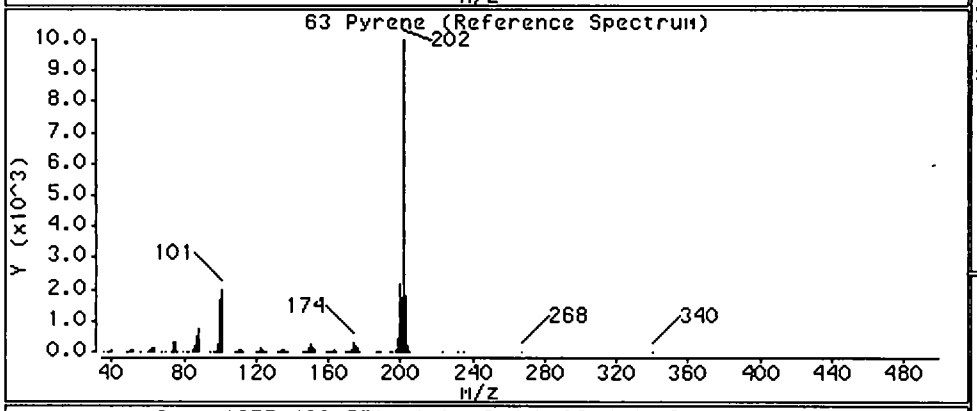
63 Pyrene

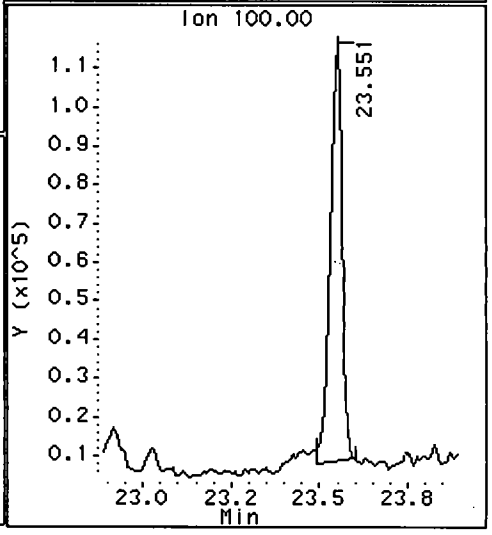


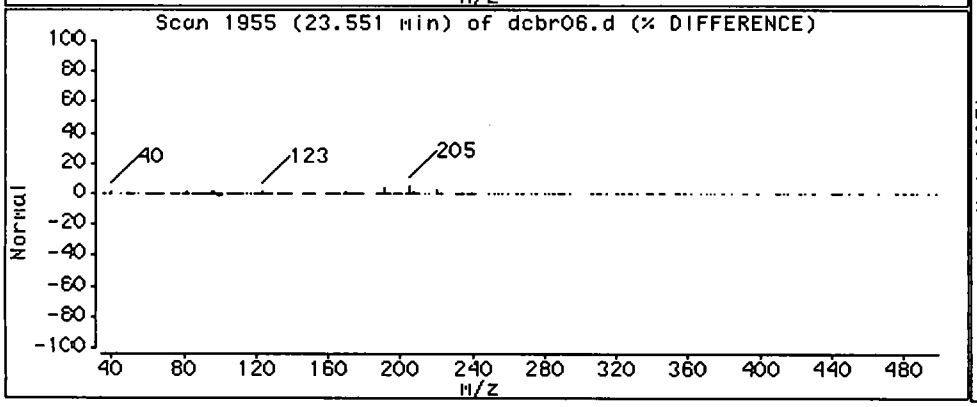












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296b.b/dcbr06.d
Lab Smp Id: 9611G675-003 Client Smp ID: WS-03
Inj Date : 12-DEC-1996 23:30
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-003 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.5.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 6
Dil Factor: 25.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.300	Weigth of sample extracted (g)
M	4.000	% Moisture

ISTD	RT	AREA	AMOUNT
* 26 Naphthalene-d8	12.375	11325464	40.000
* 41 Acenaphthene-d10	16.571	10761074	40.000
* 56 Phenanthrene-d10	20.125	6279500	40.000

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Cycloalkane					CAS #:		
13.534	1233440	4.356	10702	0		0	26
Unknown Alkane					CAS #:		
13.660	1882736	6.650	16336	0		0	26

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	QUANT LIB ENTRY	CPND #
Unknown Alkane					CAS #:		
16.230	4351457	16.175	39738	0		0	41
Unknown Alkane					CAS #:		
19.141	11068405	70.505	173210	0		0	56
Unknown Alkane					CAS #:		
19.648	1528692	9.738	23923	0		0	56
Unknown Alkane					CAS #:		
20.271	11740339	74.785	183730	0		0	56
Unknown Alkane					CAS #:		
21.127	5993343	38.177	93792	0		0	56
Unknown					CAS #:		
22.150	4768044	30.372	74617	0		0	56(ML)
Unknown					CAS #:		
22.928	5546822	35.333	86804	0		0	56(ML)
Unknown Alkane					CAS #:		
24.369	8102962	51.615	126810	0		0	56(ML)
Unknown Alkane					CAS #:		
25.070	8526138	54.311	133430	0		0	56(ML)
Unknown					CAS #:		
25.255	3319093	21.142	51942	0		0	56(ML)
Unknown					CAS #:		
25.606	6690949	42.621	104710	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
26.988	3980933	25.358	62299	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
27.777	3547561	22.598	55517	0		0	56(ML)
Unknown					CAS #:		
27.893	3508965	22.352	54913	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
28.351	2775113	17.677	43429	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
29.325	4057262	25.844	63494	0		0	56(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

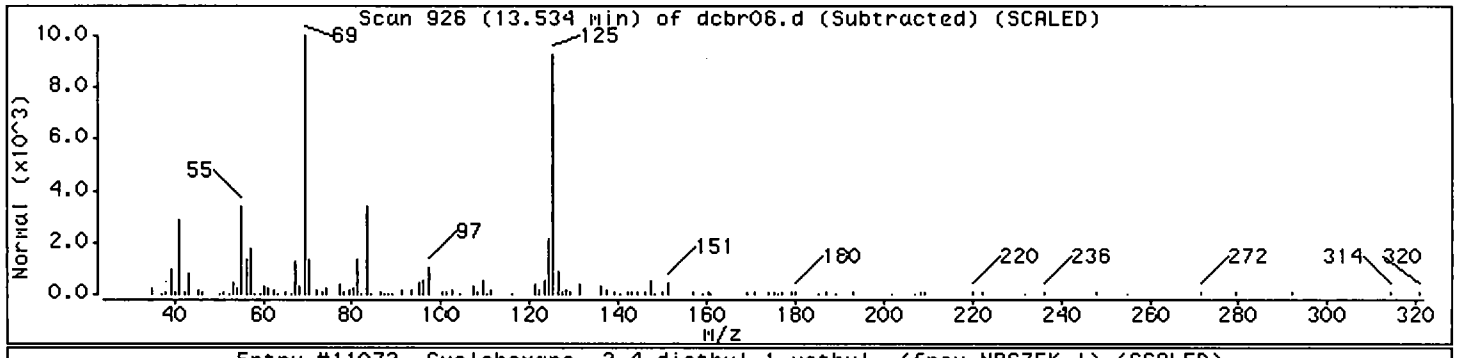
Client ID: WS-03 Instrument: gcl4.i

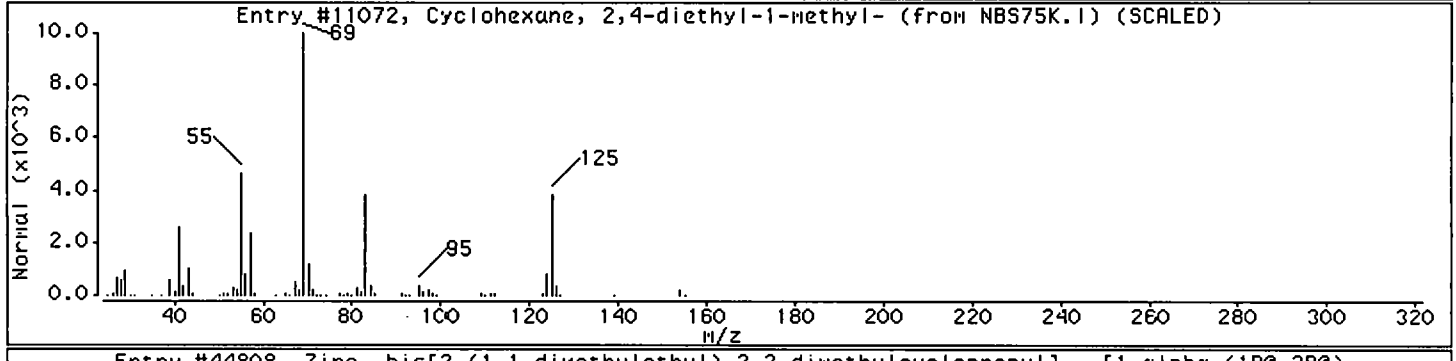
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

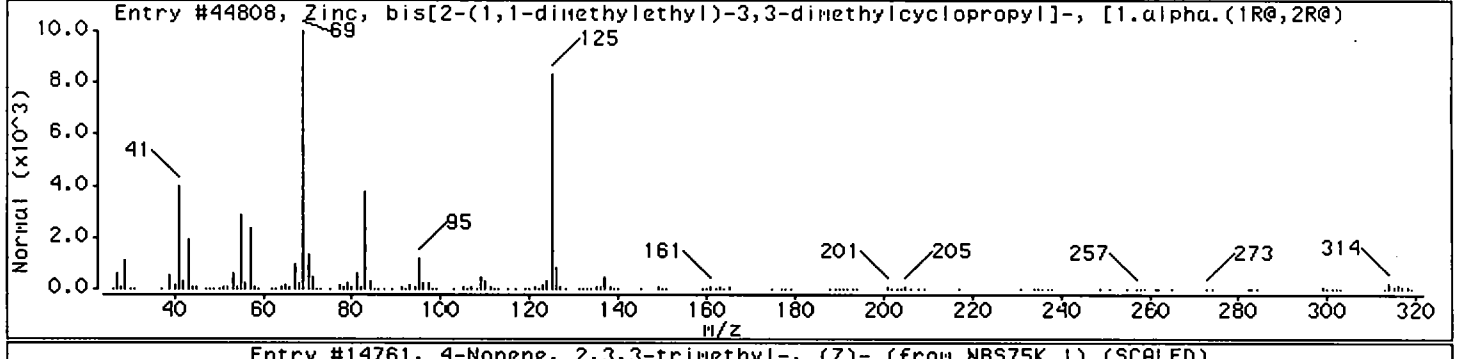
Volume Injected (uL): 2.0 Operator: GES

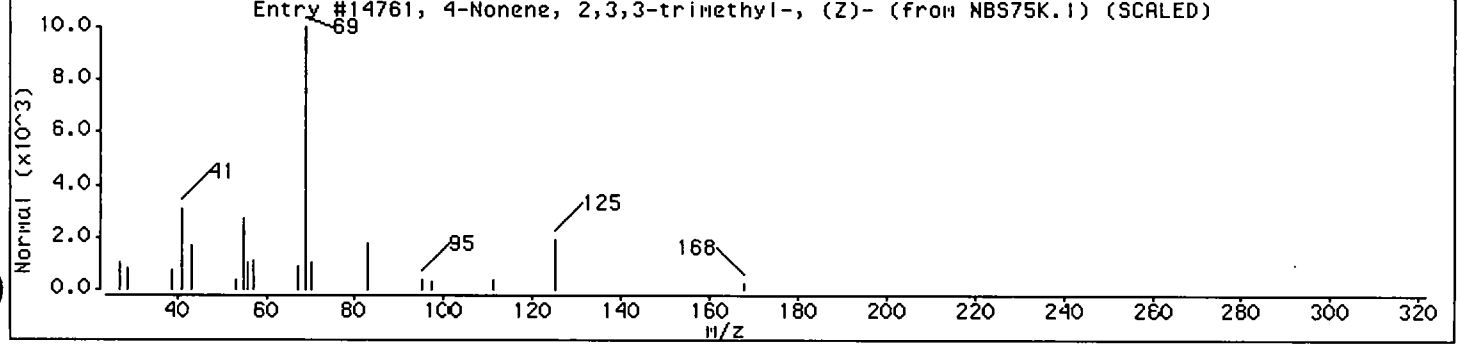
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Cycloalkane						
Cyclohexane, 2,4-diethyl-1-methyl-	61142-70-9	NBS75K.l	11072	72	C11H22	154
Zinc, bis[2-(1,1-dimethylethyl)-3,3-dime	74793-36-5	NBS75K.l	44808	50	C18H34Zn	314
4-Nonene, 2,3,3-trimethyl-, (Z)-	63830-68-2	NBS75K.l	14761	50	C12H24	168









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

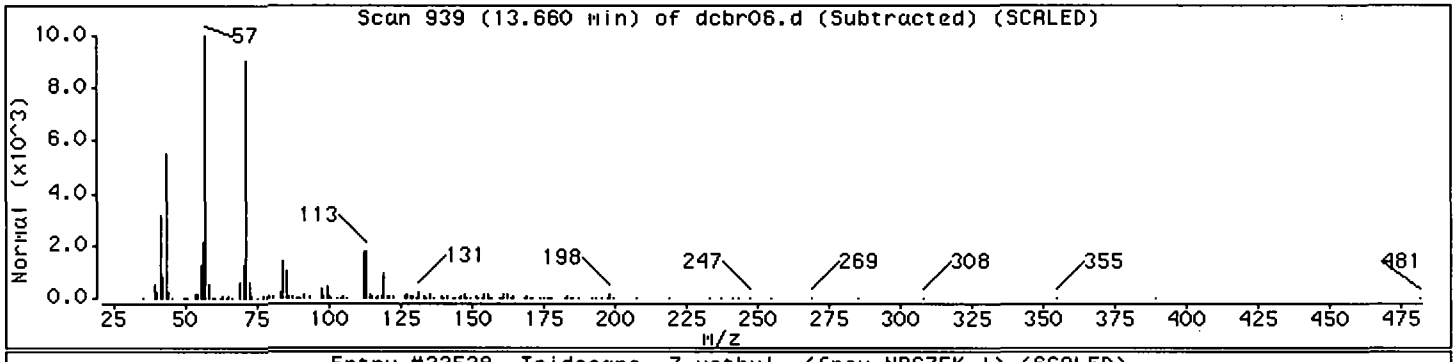
Client ID: WS-03 Instrument: gc14.i

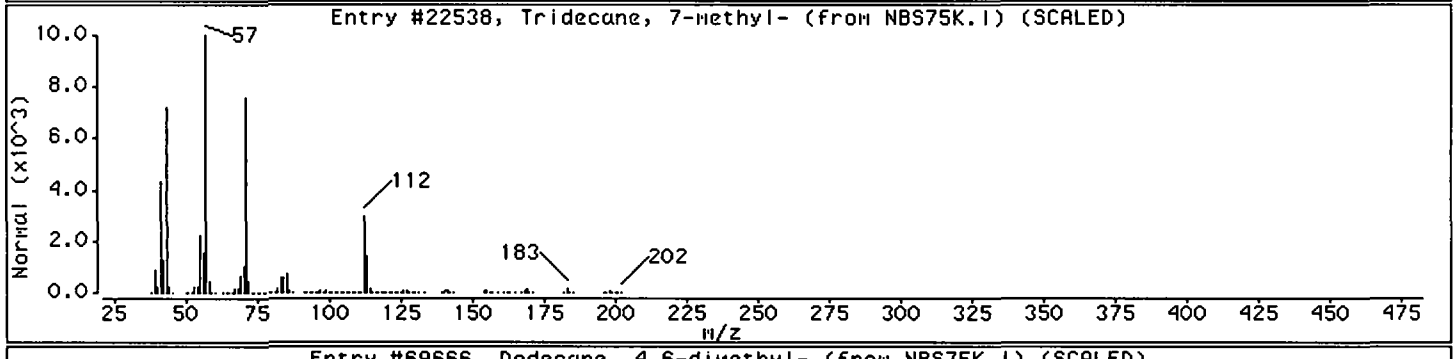
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

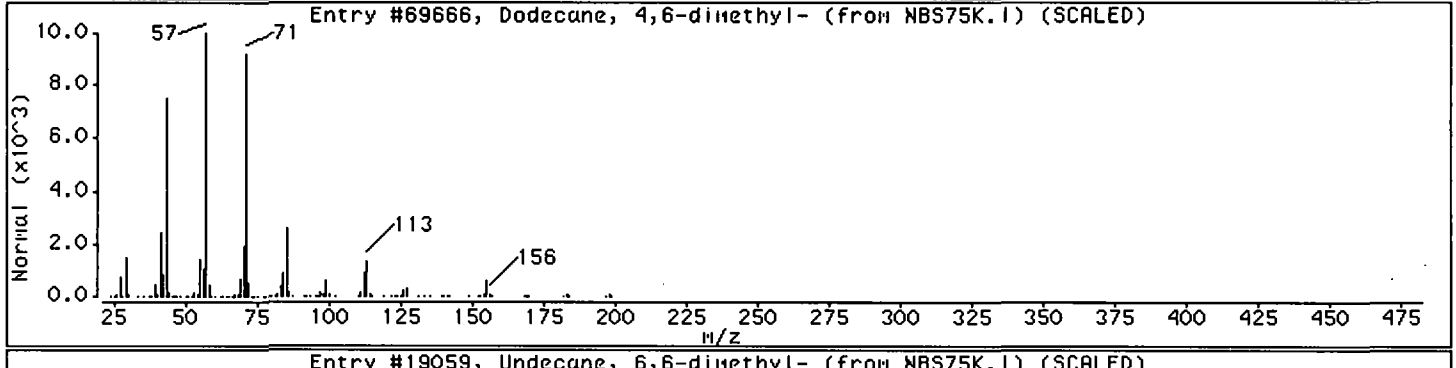
Volume Injected (uL): 2.0 Operator: GES

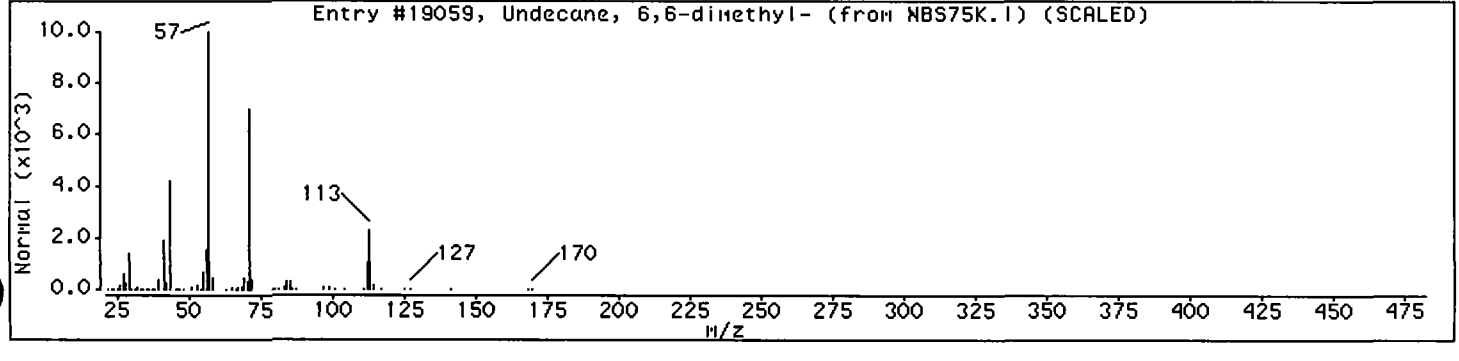
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tridecane, 7-methyl-	26730-14-3	NBS75K.l	22538	68	C14H30	198
Dodecane, 4,6-dimethyl-	61141-72-8	NBS75K.l	69666	64	C14H30	198
Undecane, 6,6-dimethyl-	17312-76-4	NBS75K.l	19059	59	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

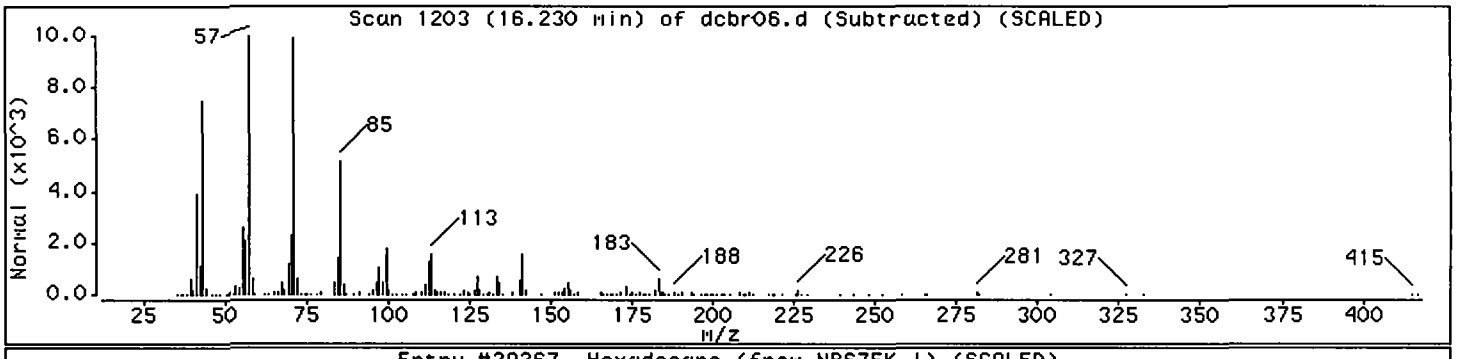
Client ID: WS-03 Instrument: gcl4.i

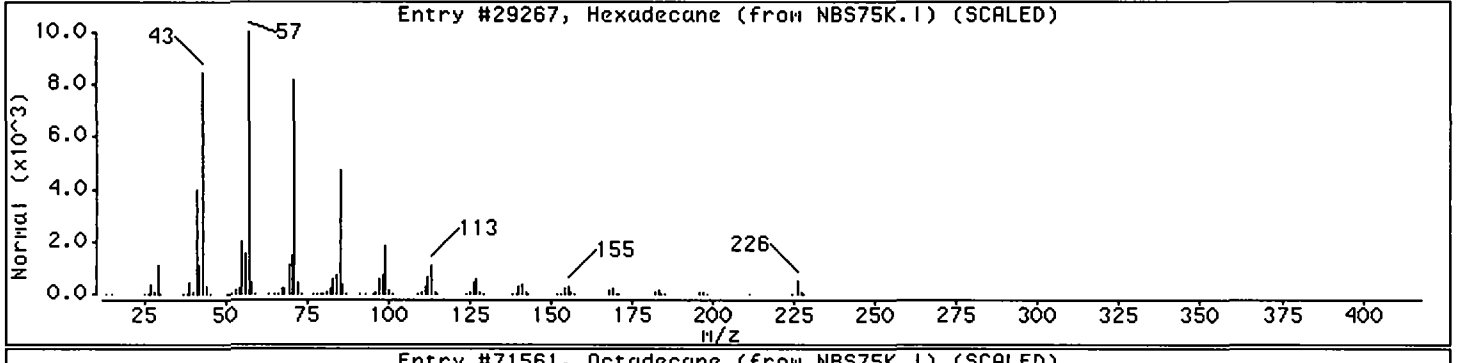
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

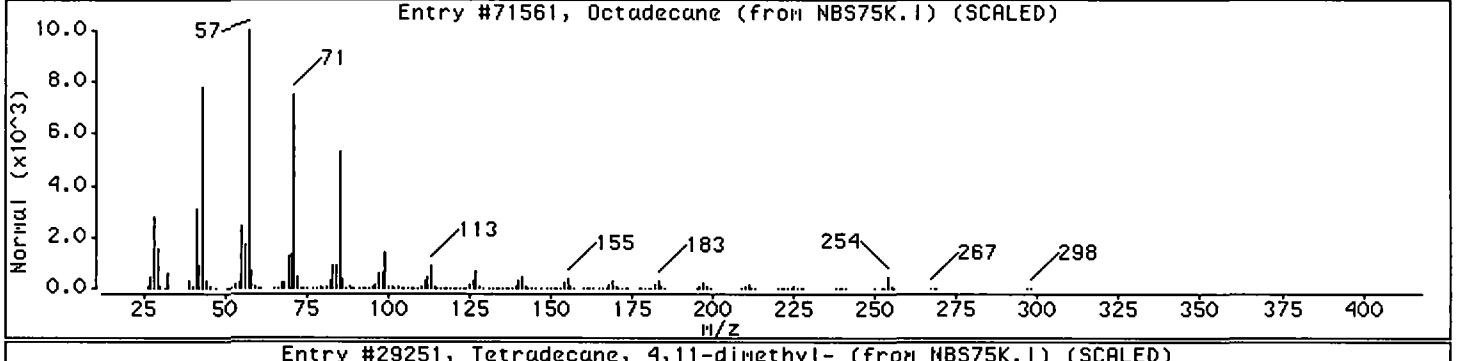
Volume Injected (uL): 2.0 Operator: GES

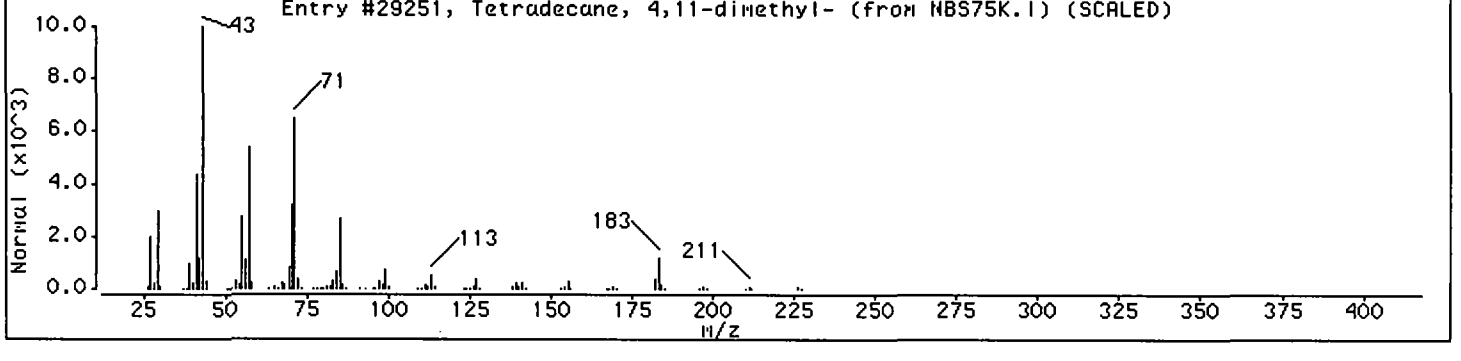
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane	544-76-3	NBS75K.l	29267	93	C16H34	226
Octadecane	593-45-3	NBS75K.l	71561	86	C18H38	254
Tetradecane, 4,11-dimethyl-	55045-12-0	NBS75K.l	29251	76	C16H34	226









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

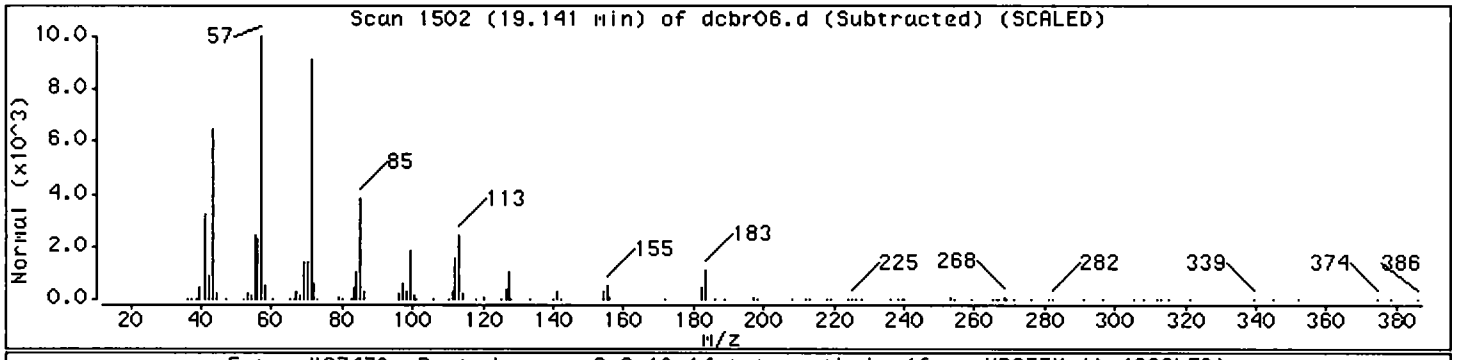
Client ID: WS-03 Instrument: gcl4.i

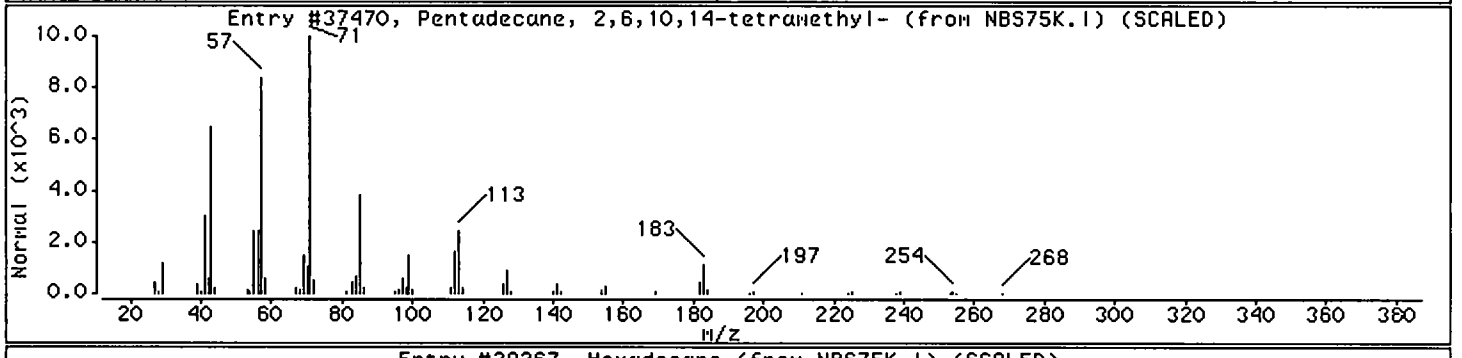
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

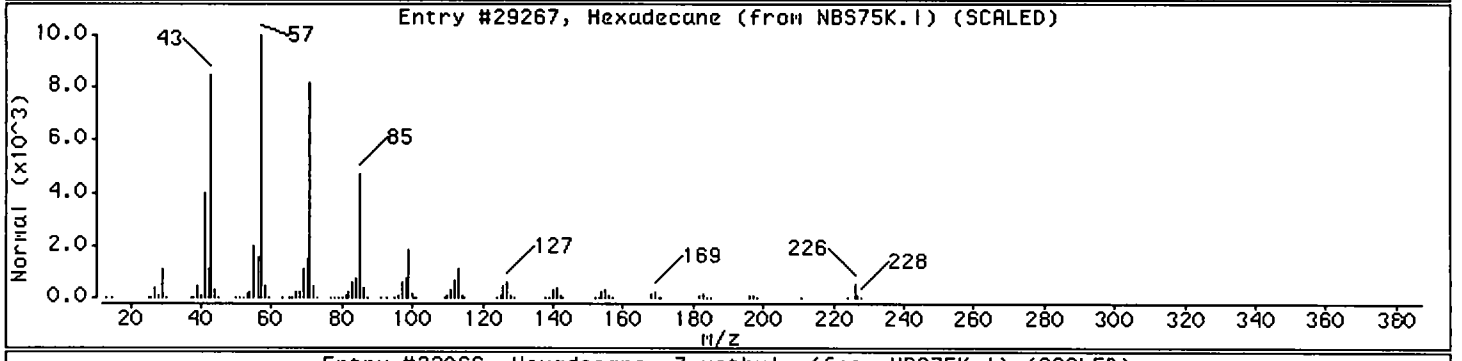
Volume Injected (uL): 2.0 Operator: GES

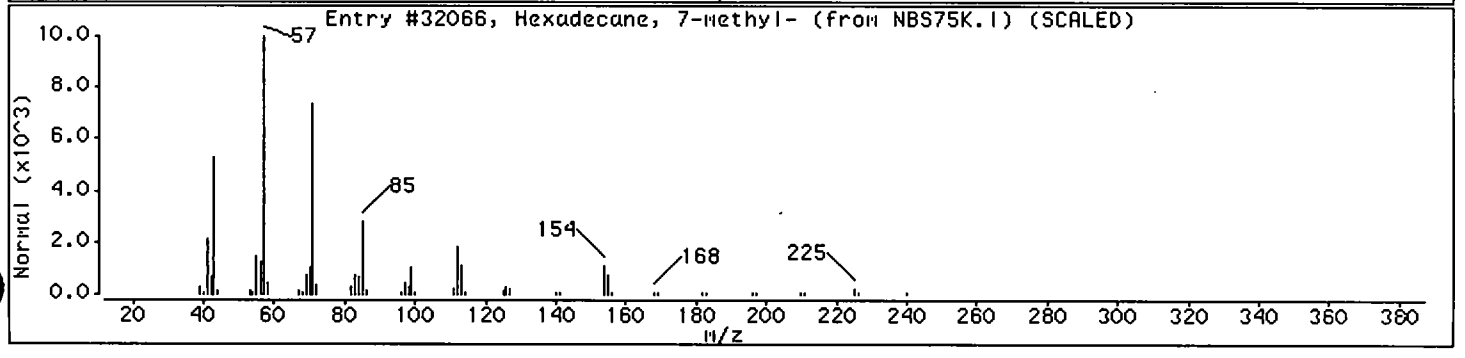
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	37470	99	C19H40	268
Hexadecane	544-76-3	NBS75K.l	29267	72	C16H34	226
Hexadecane, 7-methyl-	26730-20-1	NBS75K.l	32066	72	C17H36	240









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

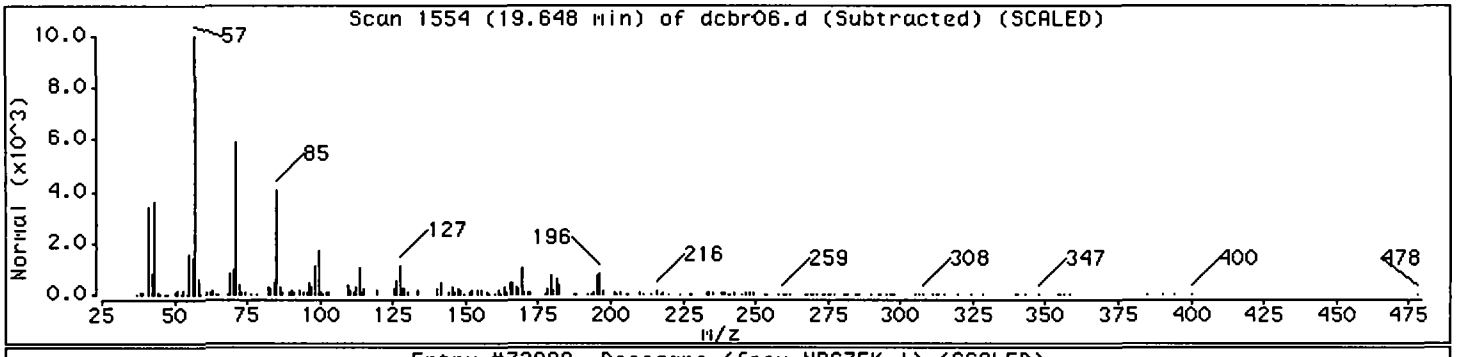
Client ID: WS-03 Instrument: gc14.i

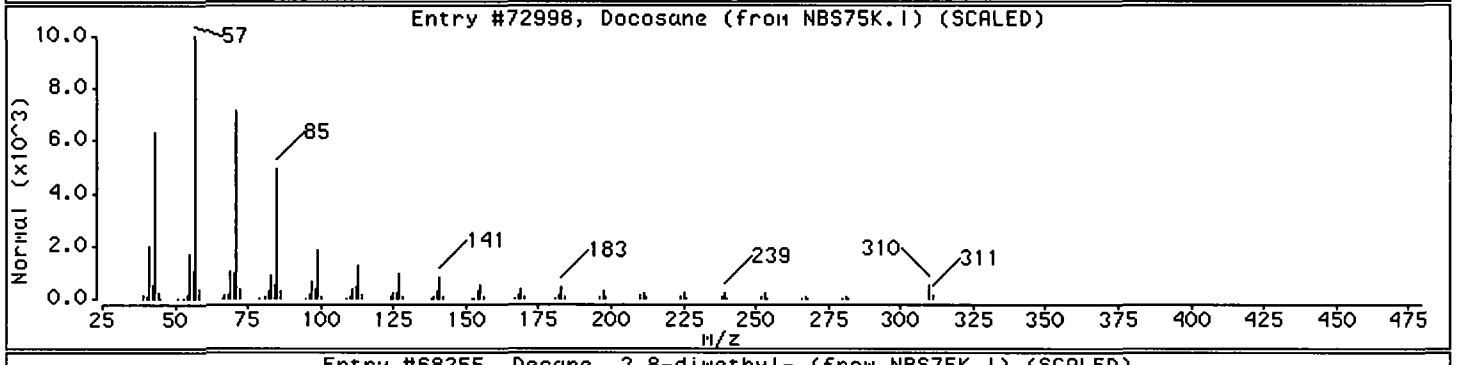
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

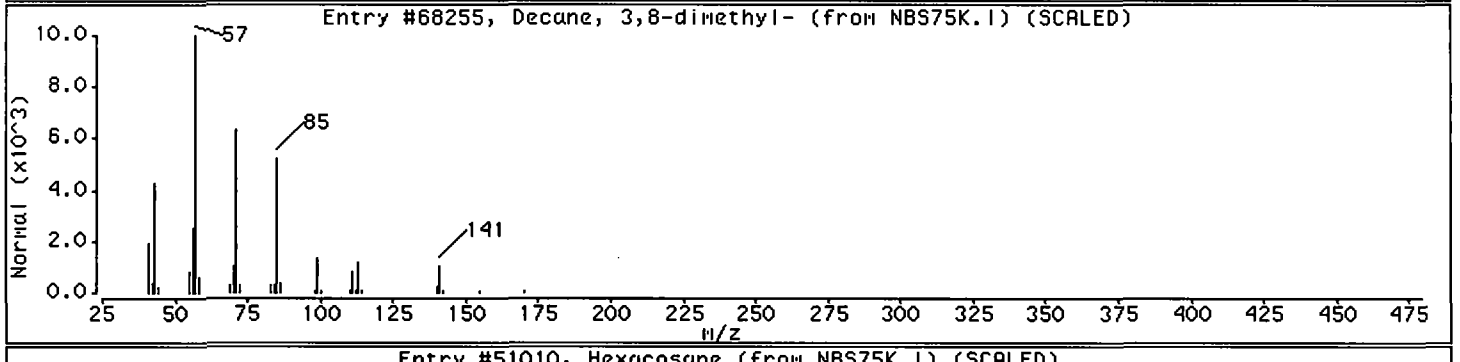
Volume Injected (uL): 2.0 Operator: GES

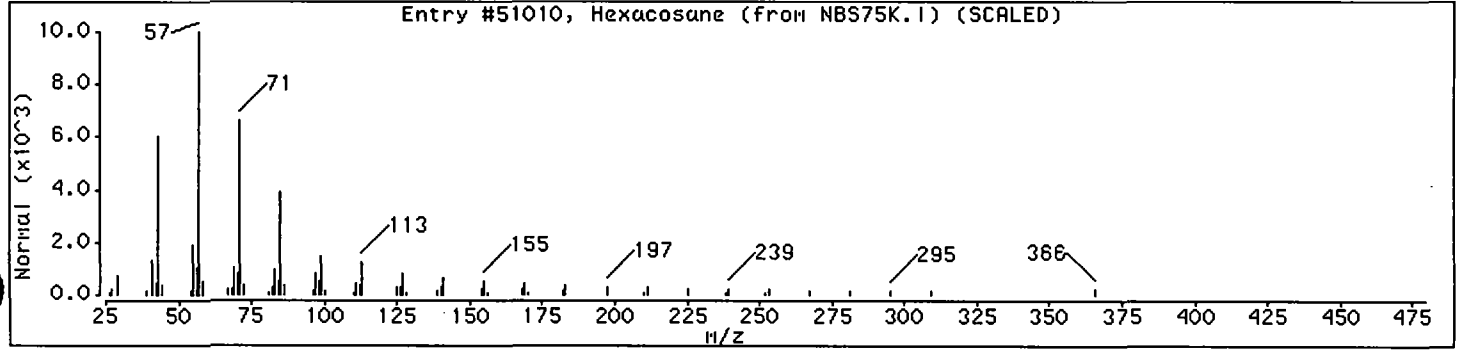
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Docosane	629-97-0	NBS75K.l	72998	80	C22H46	310
Decane, 3,8-dimethyl-	17312-55-9	NBS75K.l	68255	76	C12H26	170
Hexacosane	630-01-3	NBS75K.l	51010	72	C26H54	366









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

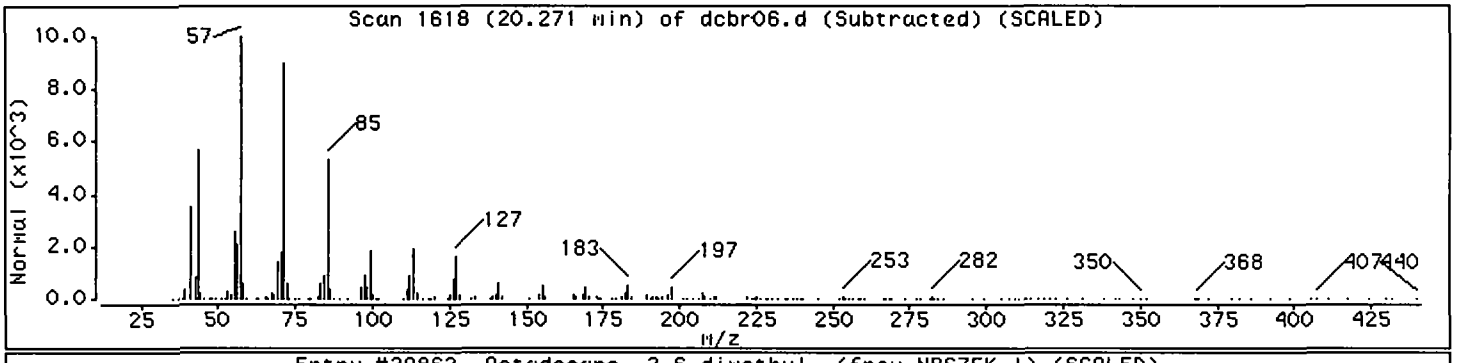
Client ID: WS-03 Instrument: gc14.i

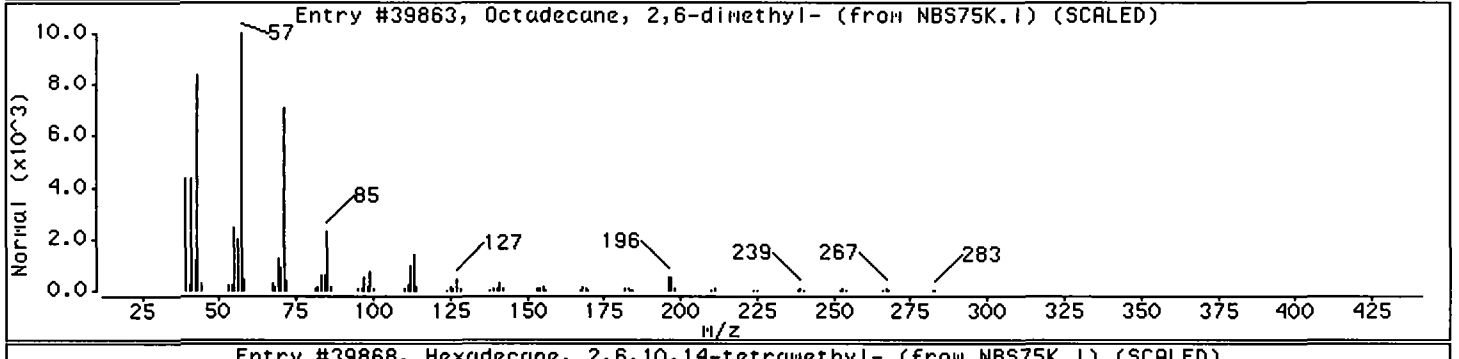
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

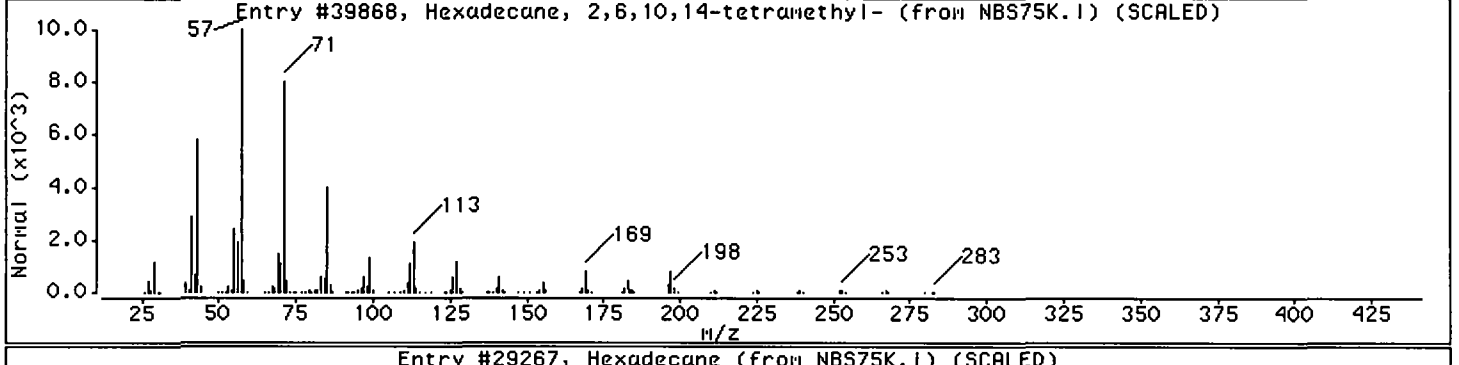
Volume Injected (uL): 2.0 Operator: GES

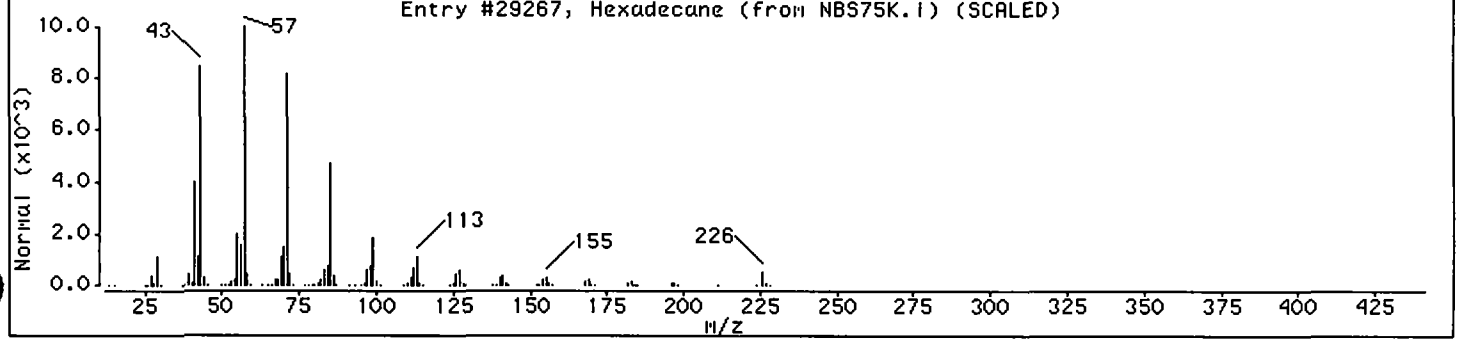
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Octadecane, 2,6-dimethyl-	75163-97-2	NBS75K.l	39863	91	C20H42	282
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	39868	91	C20H42	282
Hexadecane	544-76-3	NBS75K.l	29267	87	C16H34	226









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

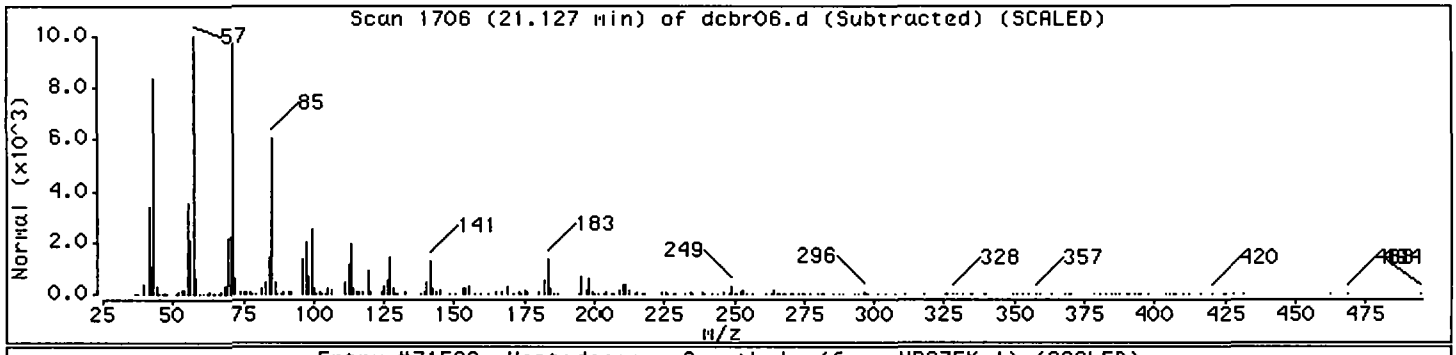
Client ID: WS-03 Instrument: gcl4.i

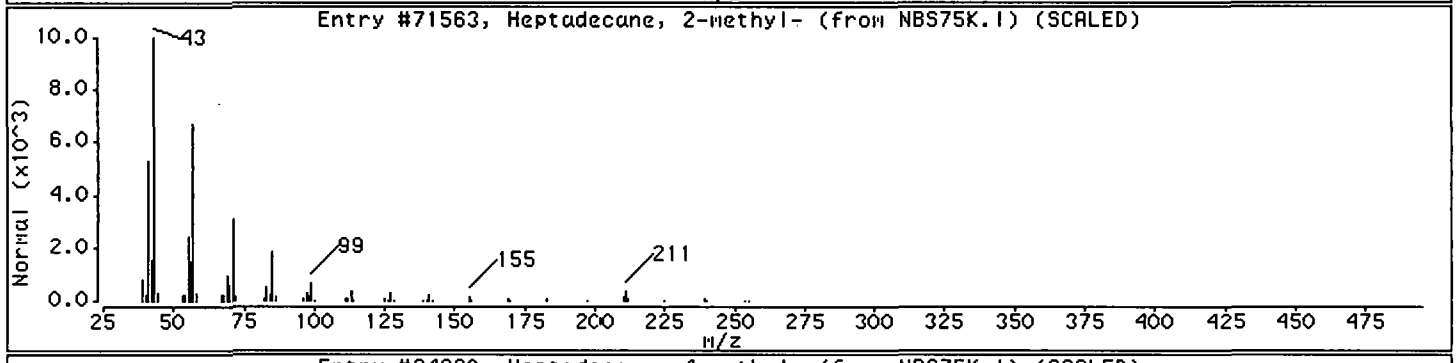
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

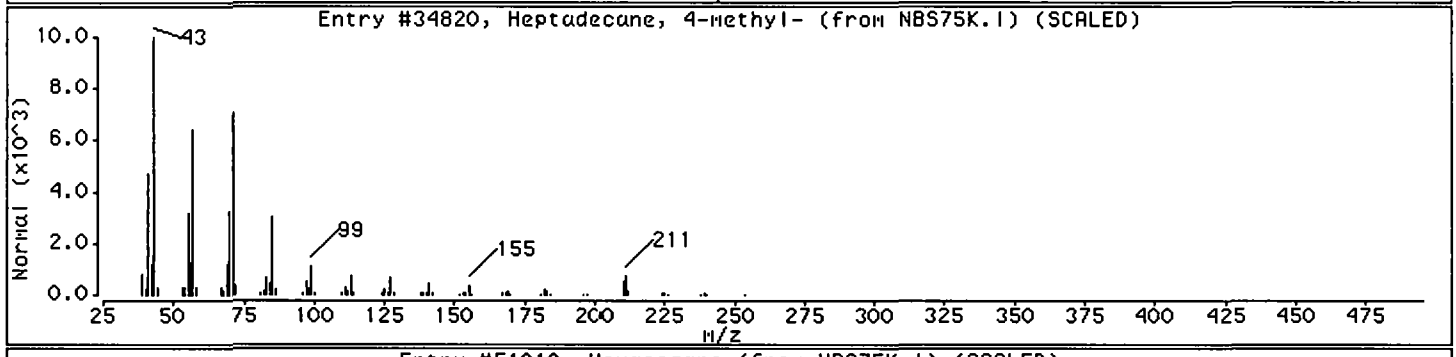
Volume Injected (uL): 2.0 Operator: GES

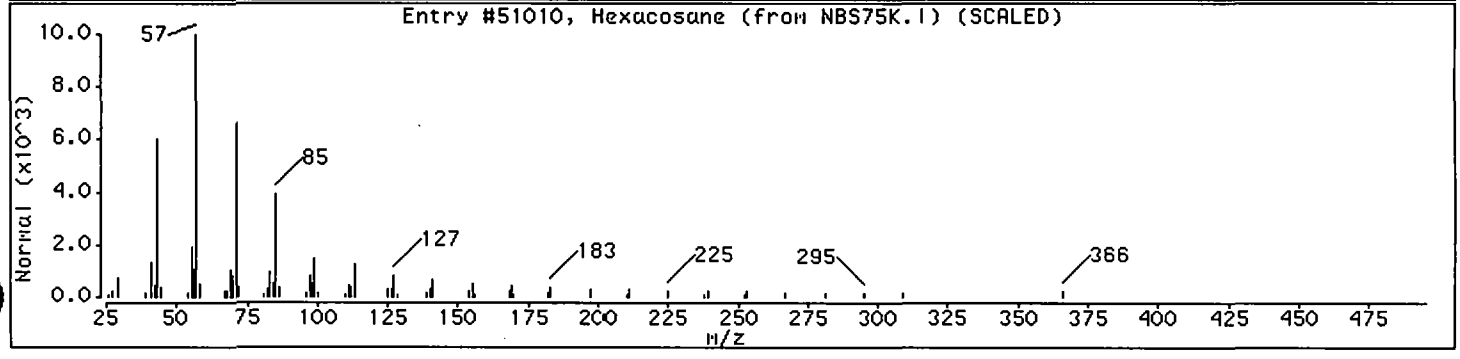
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptadecane, 2-methyl-	1560-89-0	NBS75K.l	71563	91	C18H38	254
Heptadecane, 4-methyl-	26429-11-8	NBS75K.l	34820	91	C18H38	254
Hexacosane	630-01-3	NBS75K.l	51010	80	C26H54	366









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

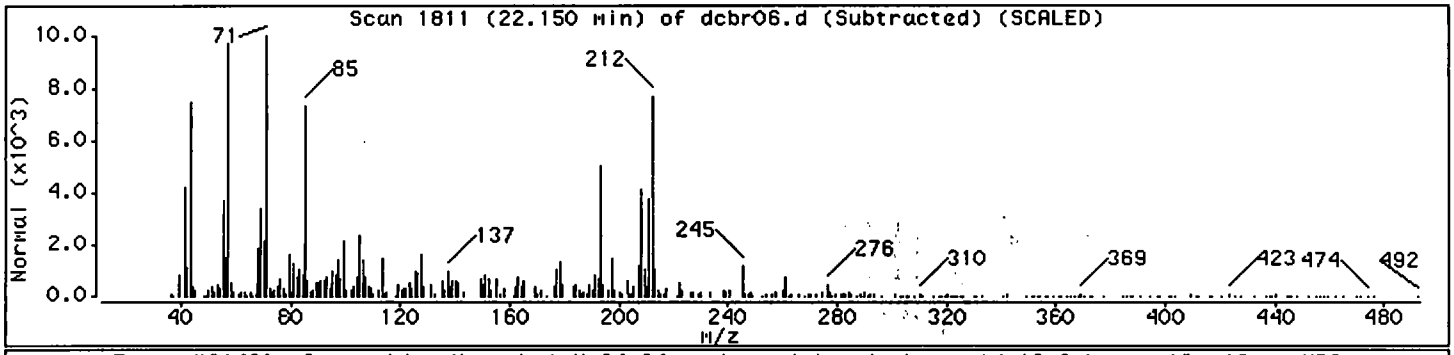
Client ID: WS-03 Instrument: gcl4.i

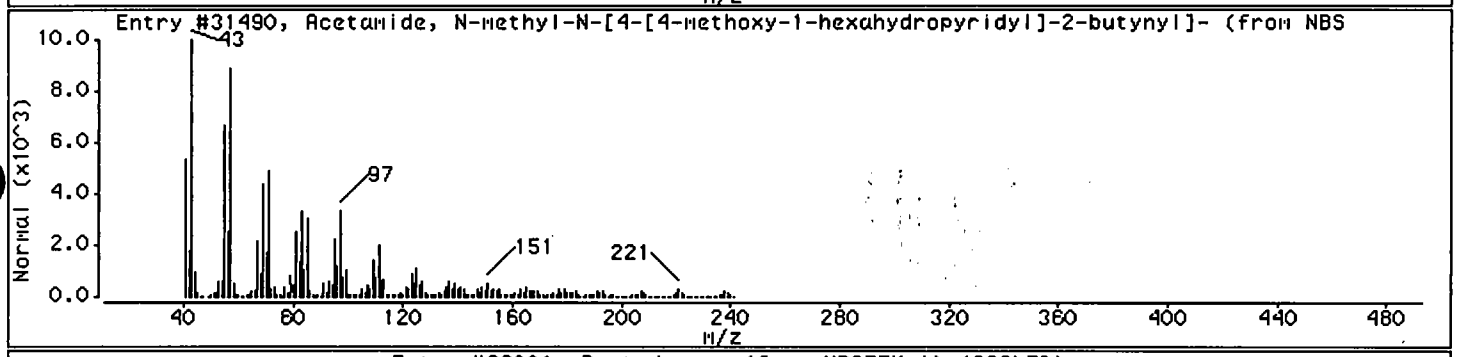
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

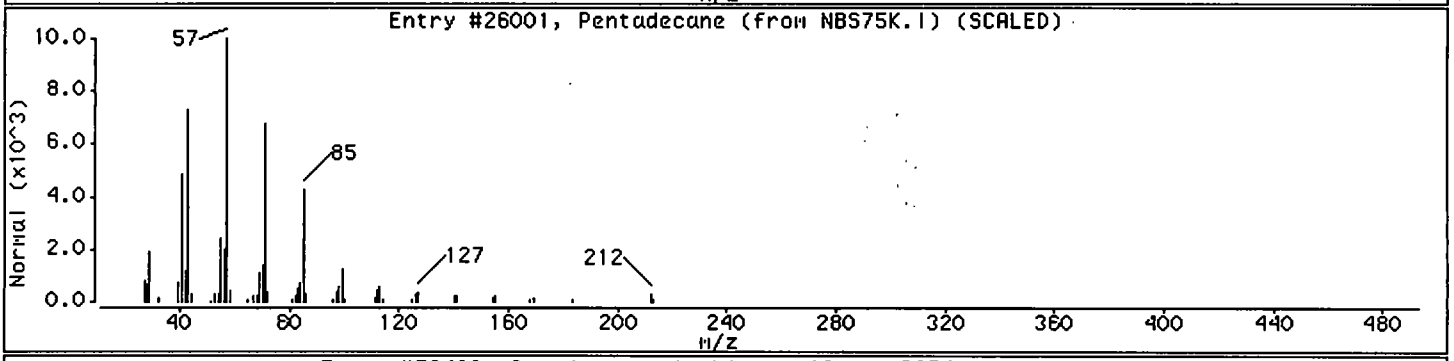
Volume Injected (uL): 2.0 Operator: GES

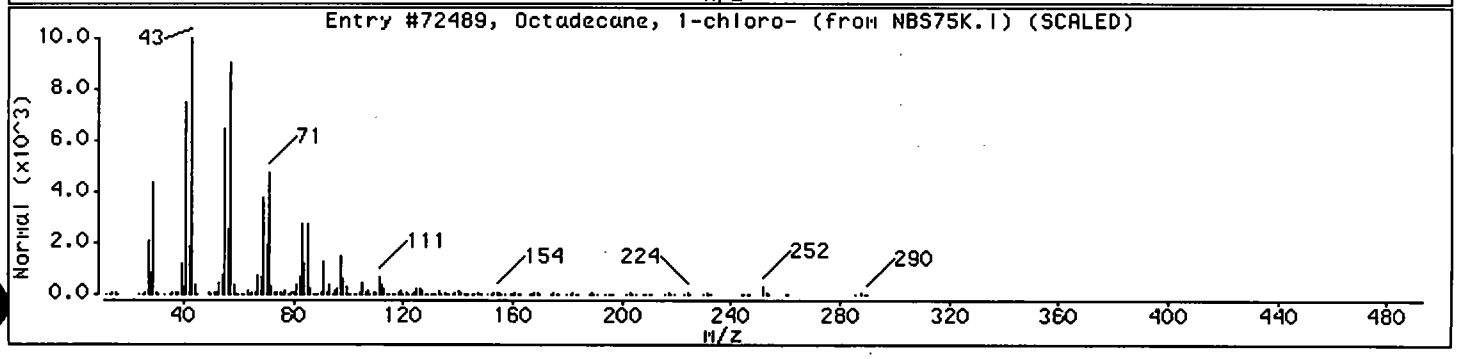
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, N-methyl-N-[4-[4-methoxy-1-he	0-00-0	NBS75K.I	31490	89	C13H22N2O2	238
Pentadecane	629-62-9	NBS75K.I	26001	86	C15H32	212
Octadecane, 1-chloro-	3386-33-2	NBS75K.I	72489	55	C18H37Cl	288









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

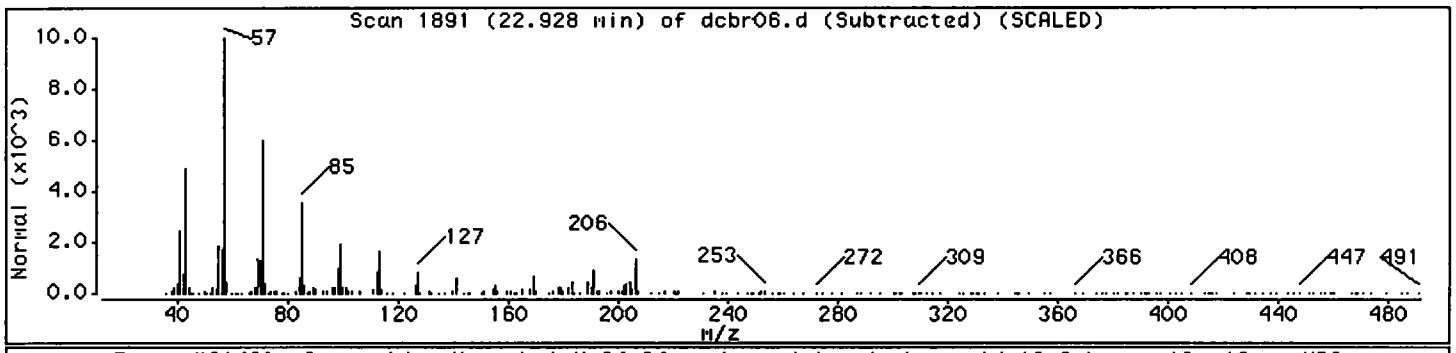
Client ID: WS-03 Instrument: gc14.i

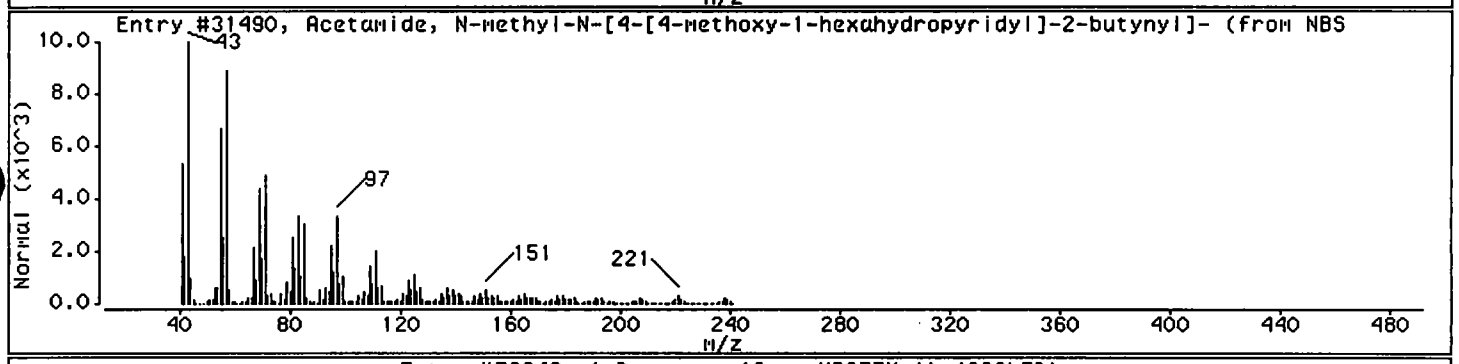
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

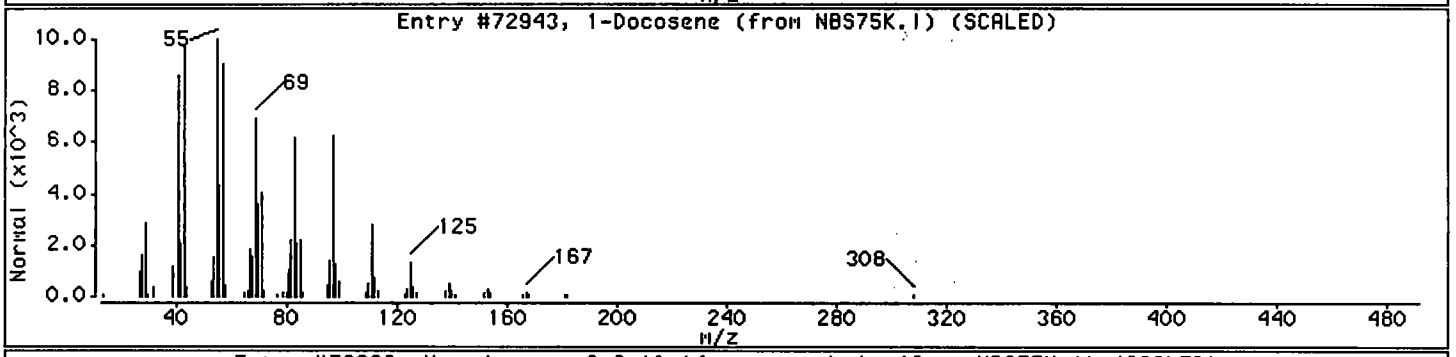
Volume Injected (uL): 2.0 Operator: GES

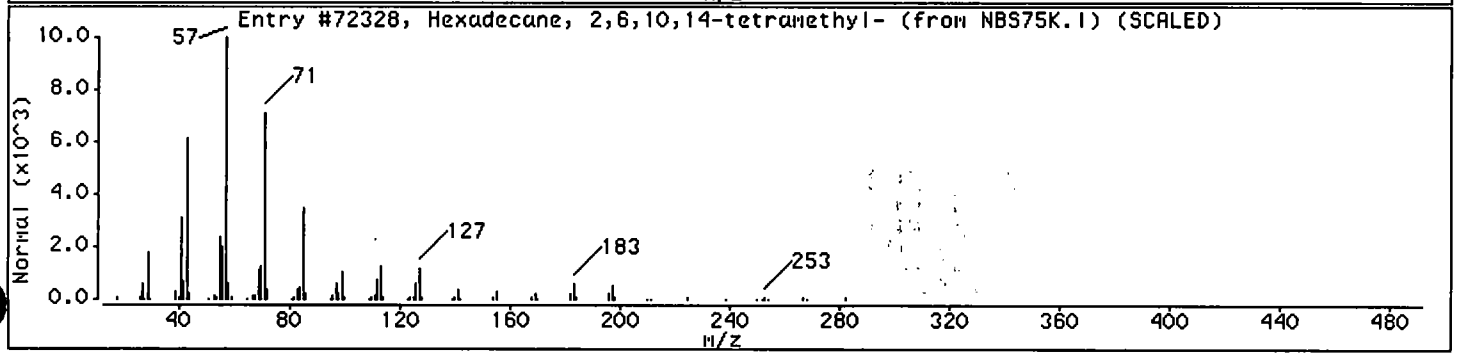
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Acetamide, N-methyl-N-[4-[4-methoxy-1-he	0-00-0	NBS75K.l	31490	95	C13H22N2O2	238
1-Docosene	1599-67-3	NBS75K.l	72943	93	C22H44	308
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	72328	86	C20H42	282









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

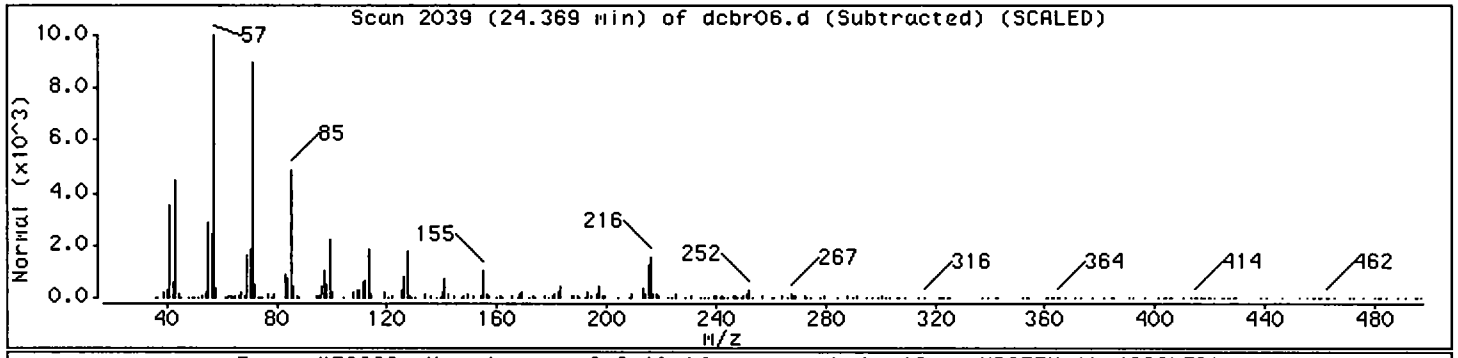
Client ID: WS-03 Instrument: gcl4.i

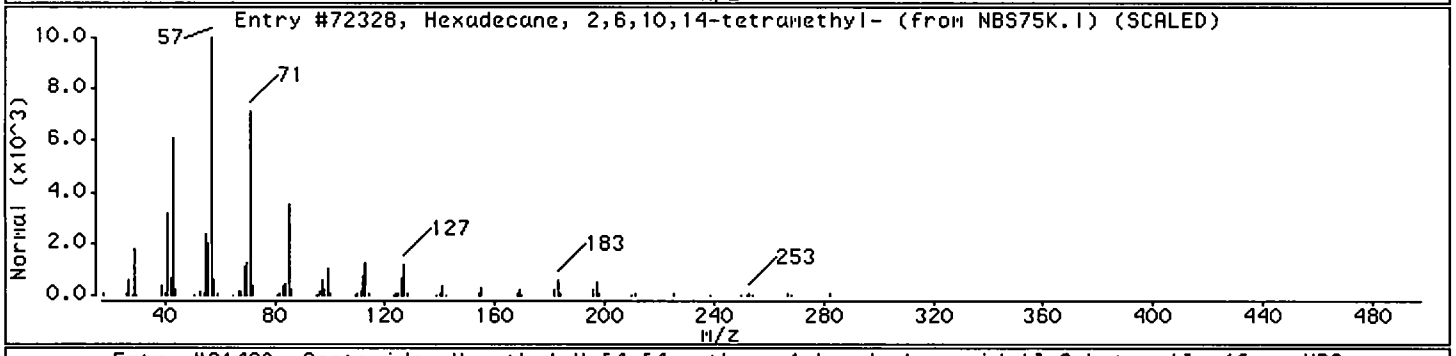
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

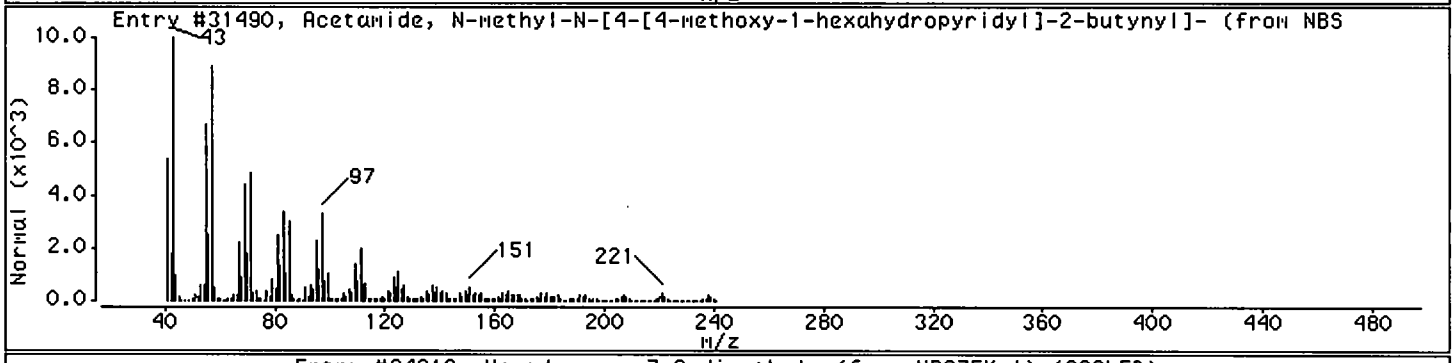
Volume Injected (uL): 2.0 Operator: GES

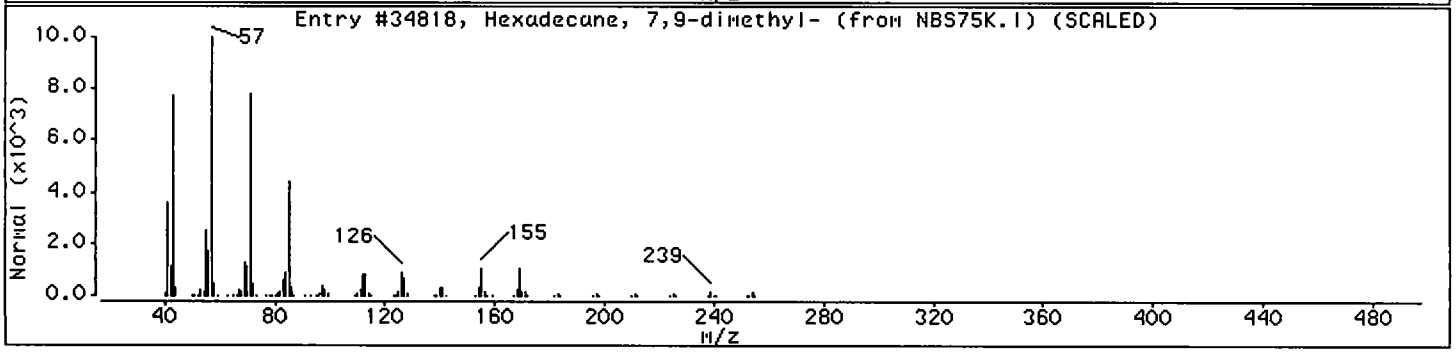
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	72328	86	C20H42	282
Acetamide, N-methyl-N-[4-[4-methoxy-1-he	0-00-0	NBS75K.l	31490	81	C13H22N2O2	238
Hexadecane, 7,9-dimethyl-	21164-95-4	NBS75K.l	34818	70	C18H38	254









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

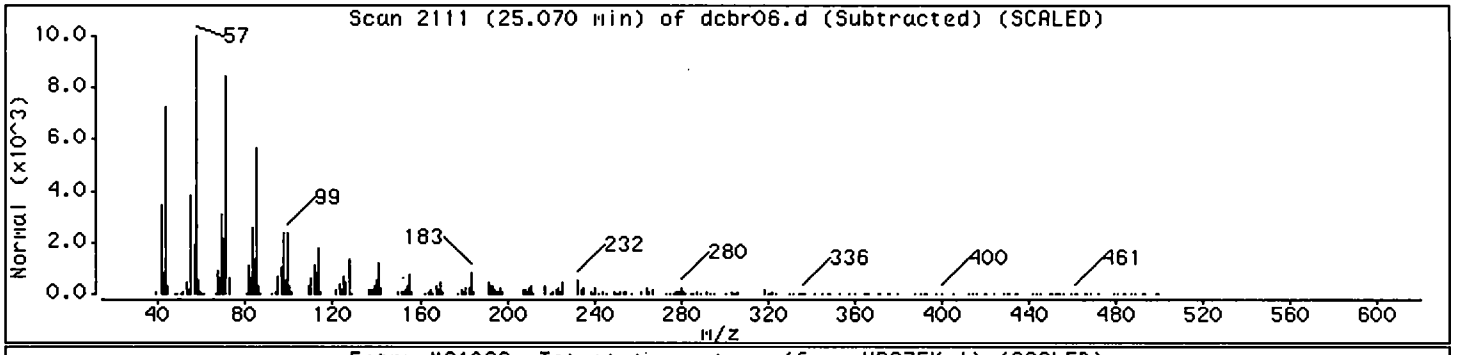
Client ID: WS-03 Instrument: gc14.i

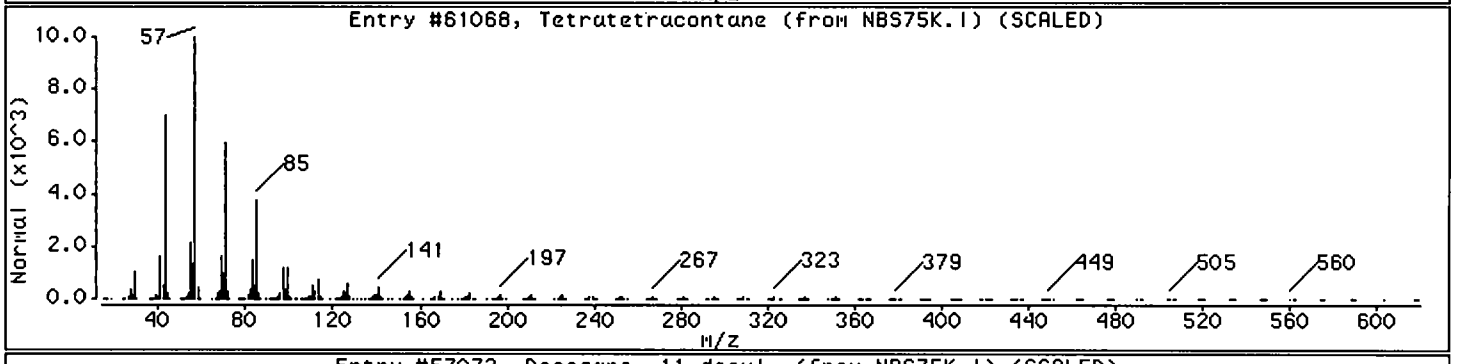
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

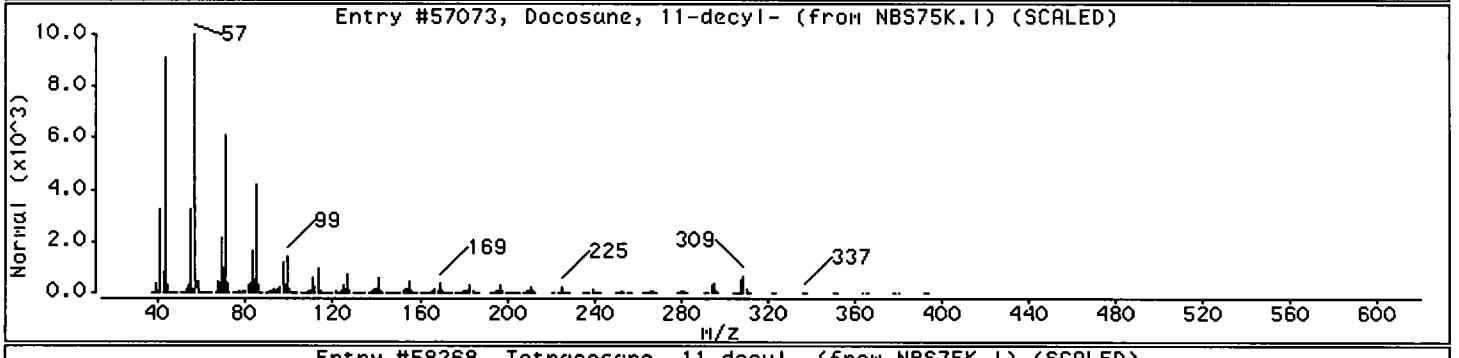
Volume Injected (uL): 2.0 Operator: GES

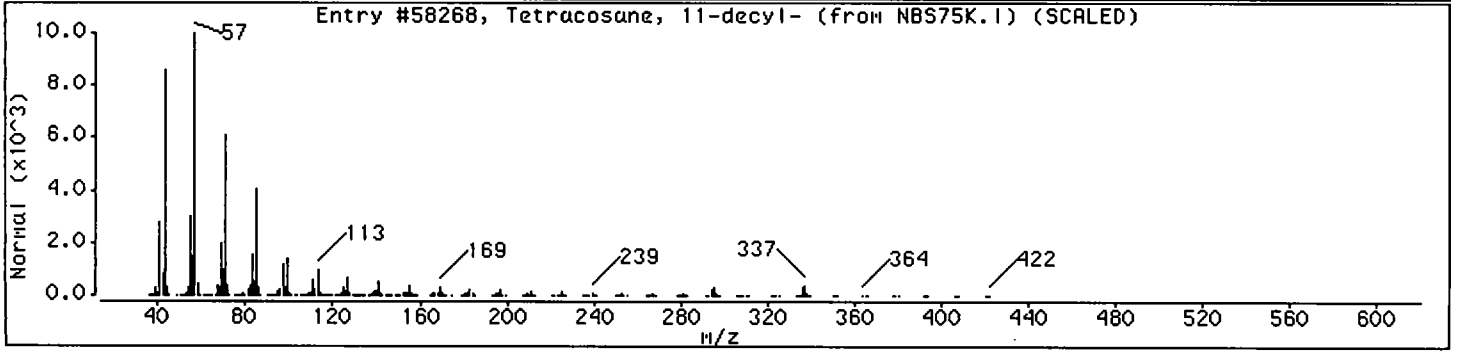
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetratetracontane	7098-22-8	NBS75K.l	61068	91	C44H90	619
Docosane, 11-decyl-	55401-55-3	NBS75K.l	57073	91	C32H66	451
Tetracosane, 11-decyl-	55429-84-0	NBS75K.l	58268	91	C34H70	479









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

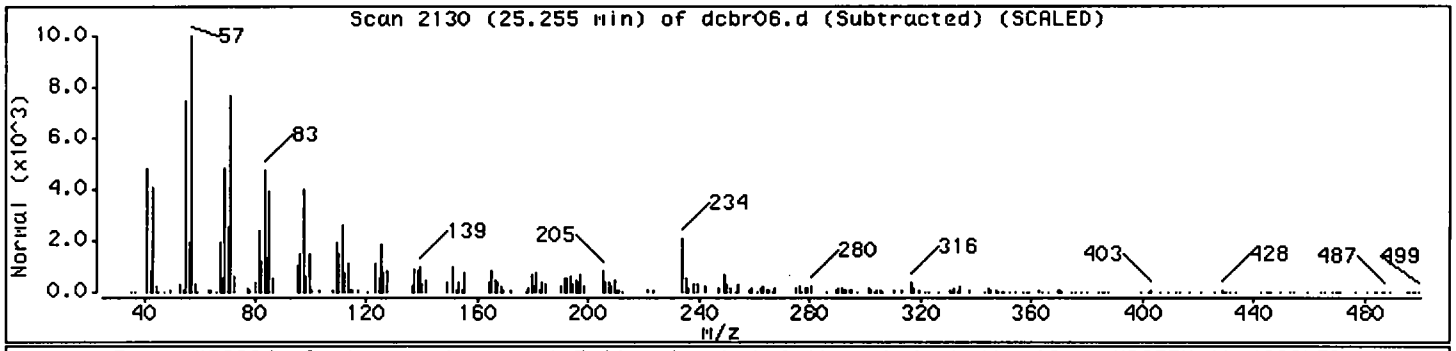
Client ID: WS-03 Instrument: gcl4.i

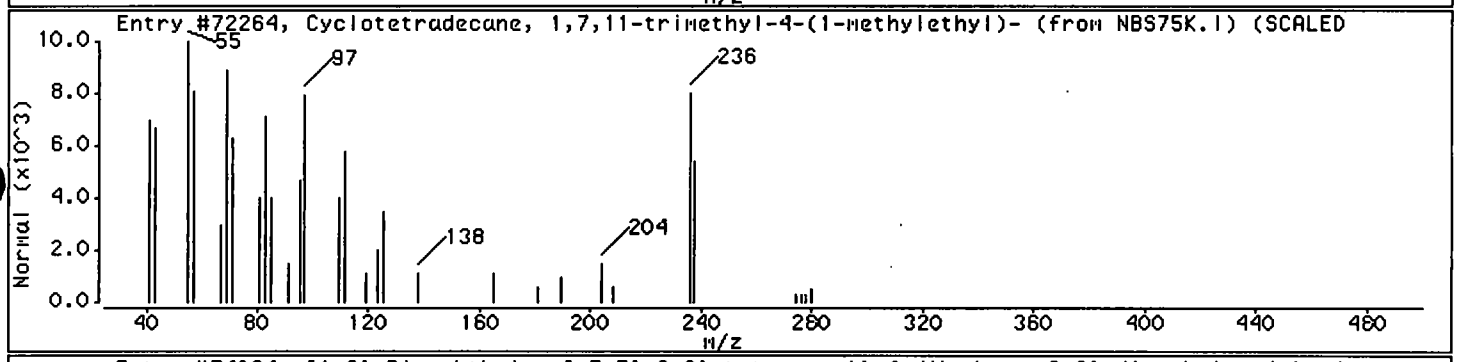
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

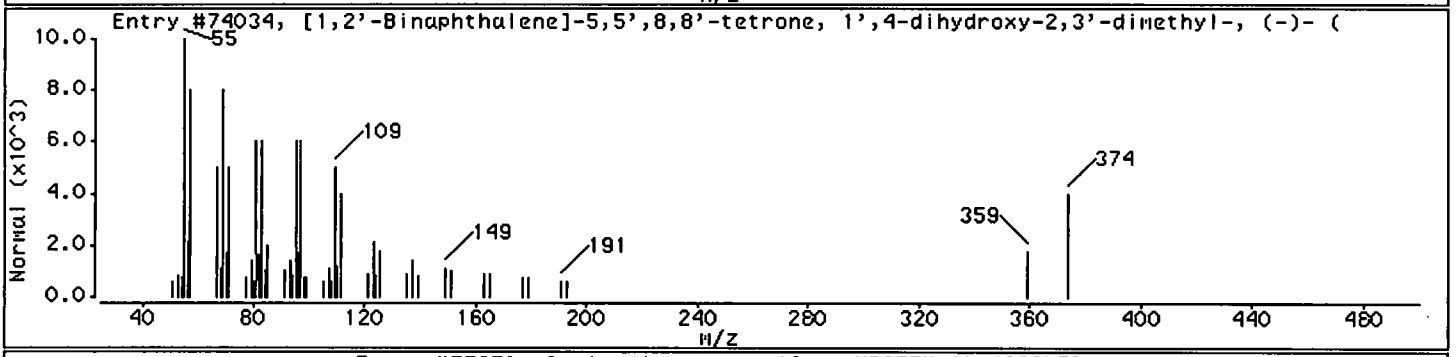
Volume Injected (uL): 2.0 Operator: GES

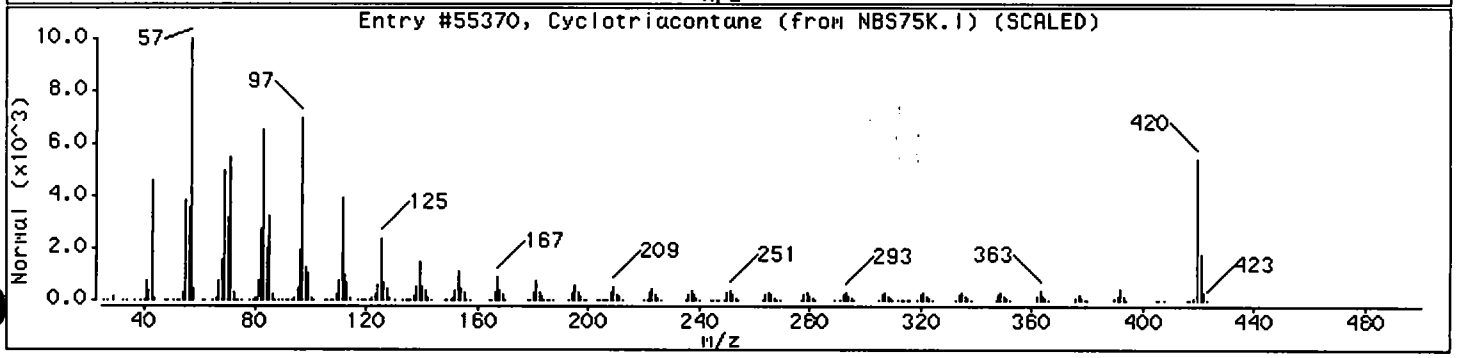
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	72264	93	C20H40	280
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	90	C22H1406	374
Cyclotriacontane	297-35-8	NBS75K.l	55370	66	C30H60	420









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

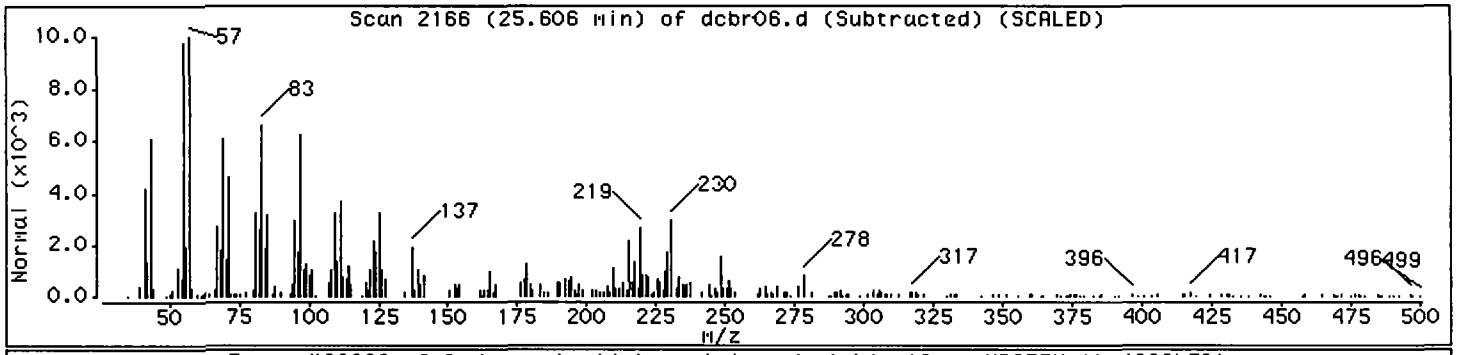
Client ID: WS-03 Instrument: gcl4.i

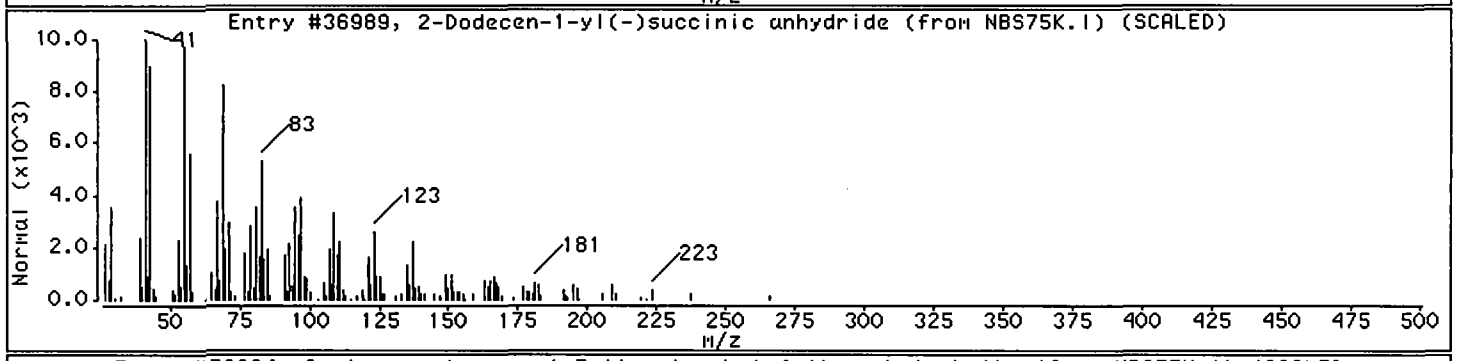
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

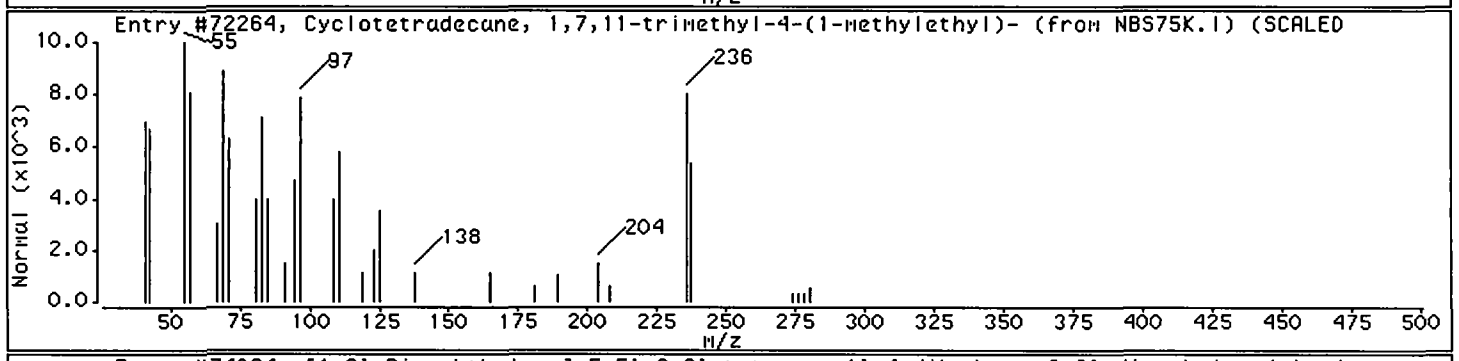
Volume Injected (uL): 2.0 Operator: GES

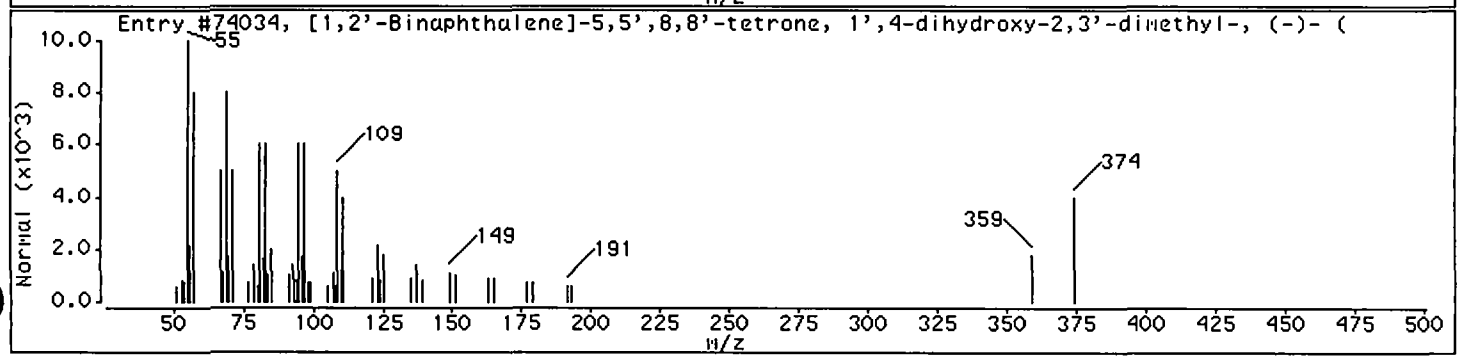
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	95	C16H2603	266
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	72264	92	C20H40	280
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	81	C22H1406	374









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

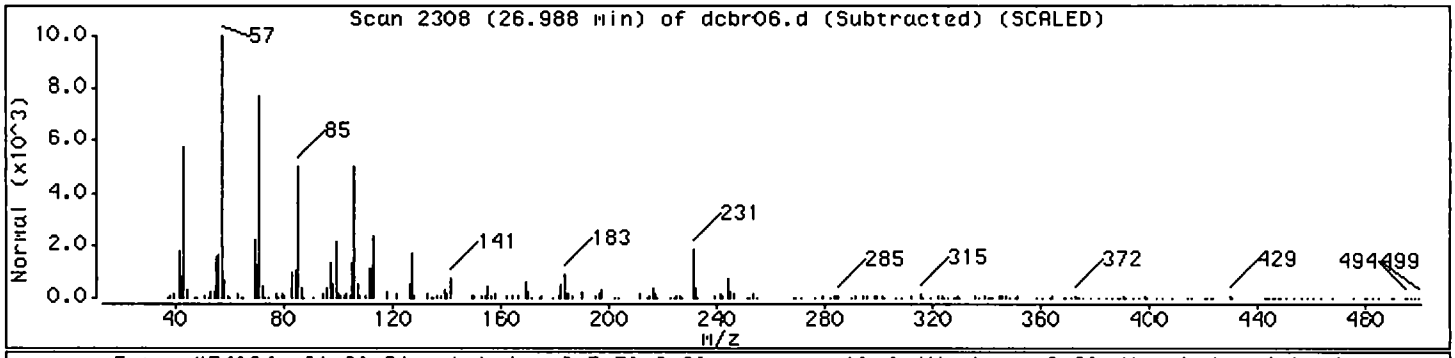
Client ID: WS-03 Instrument: gc14.i

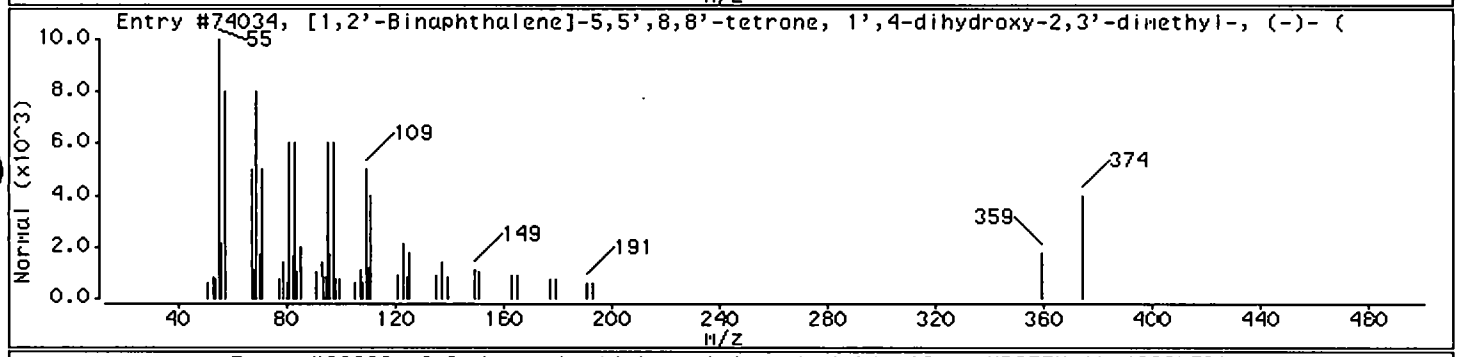
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

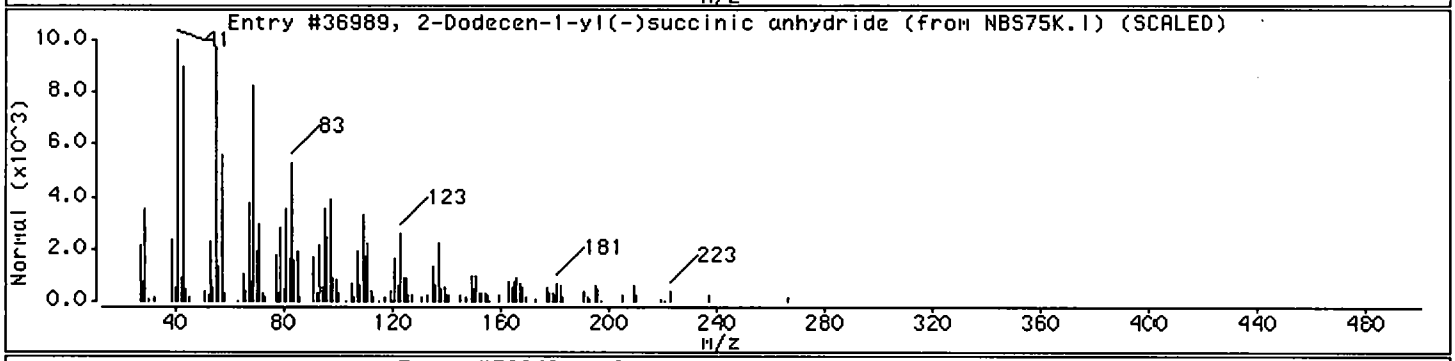
Volume Injected (uL): 2.0 Operator: GES

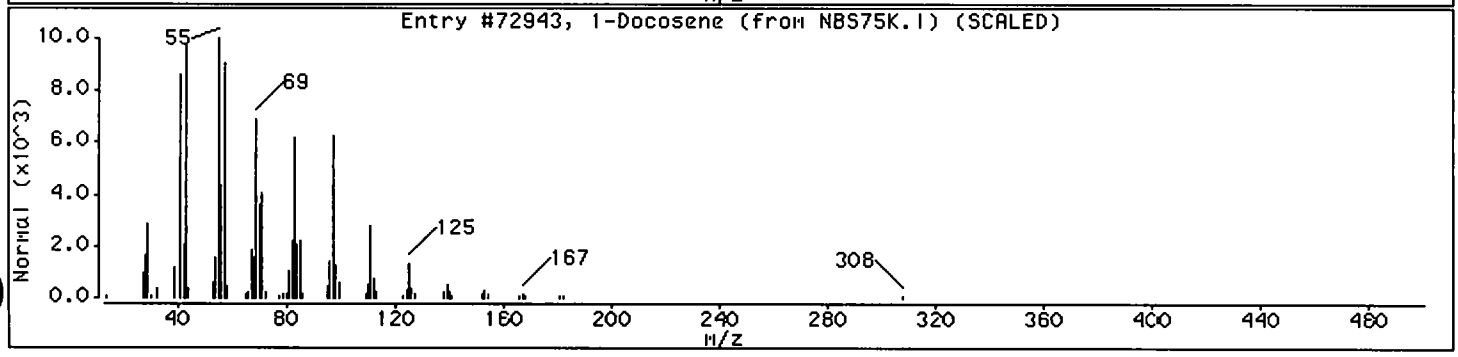
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	94	C22H1406	374
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	93	C16H2603	266
1-Docosene	1599-67-3	NBS75K.l	72943	47	C22H44	308









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

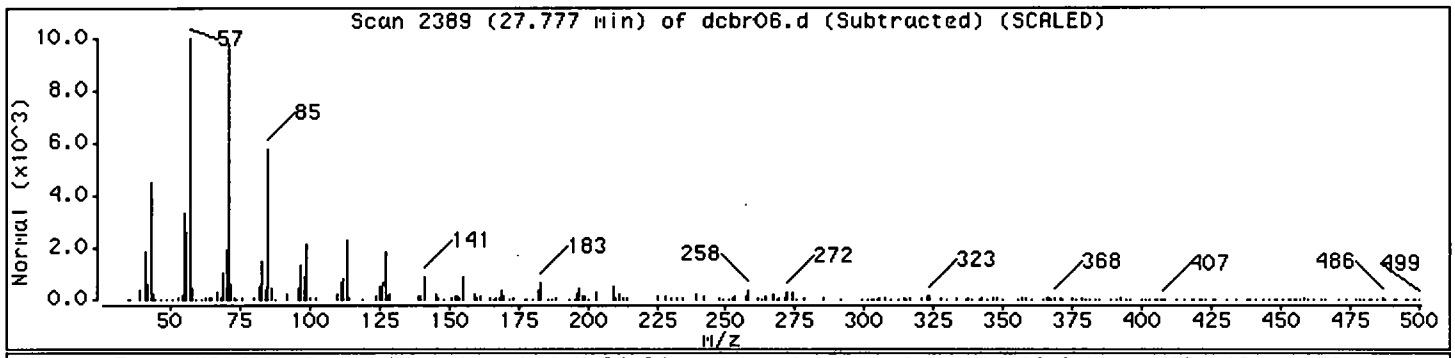
Client ID: WS-03 Instrument: gcl4.i

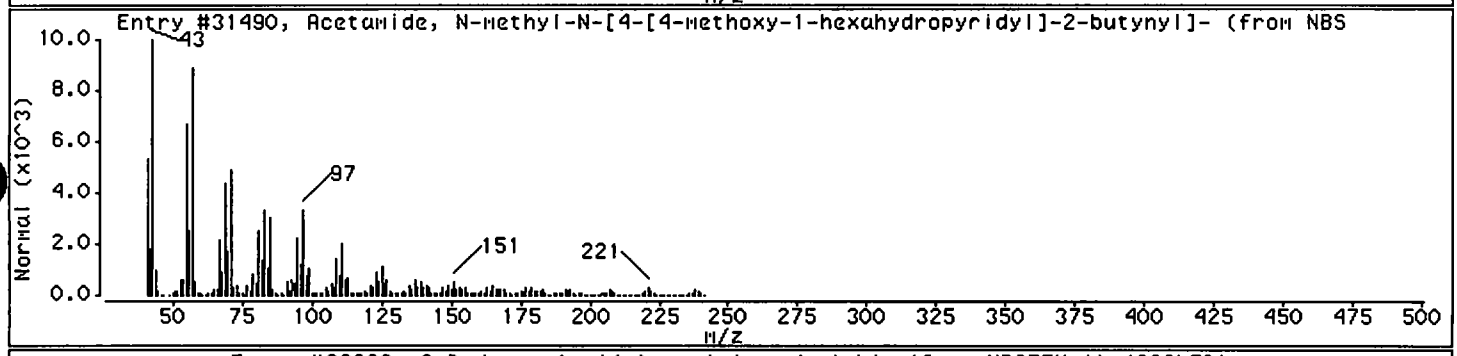
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

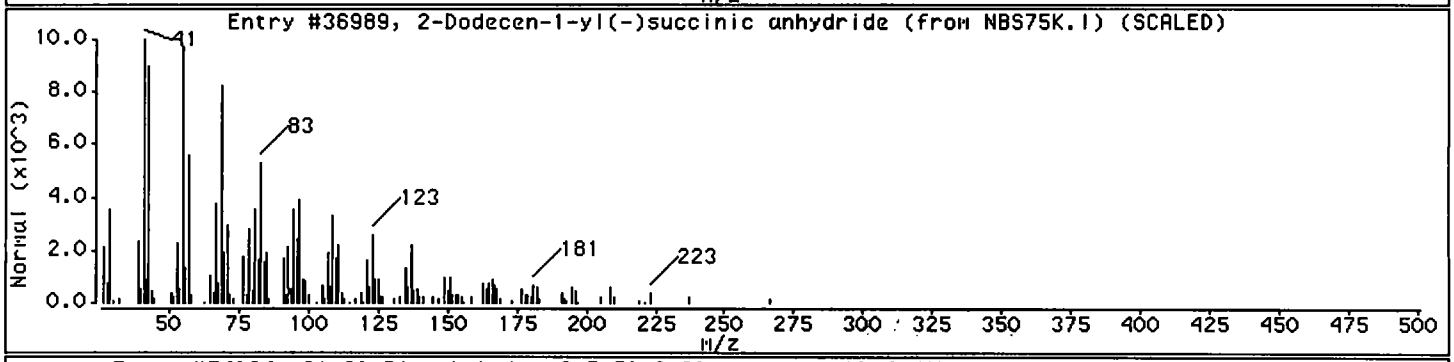
Volume Injected (uL): 2.0 Operator: GES

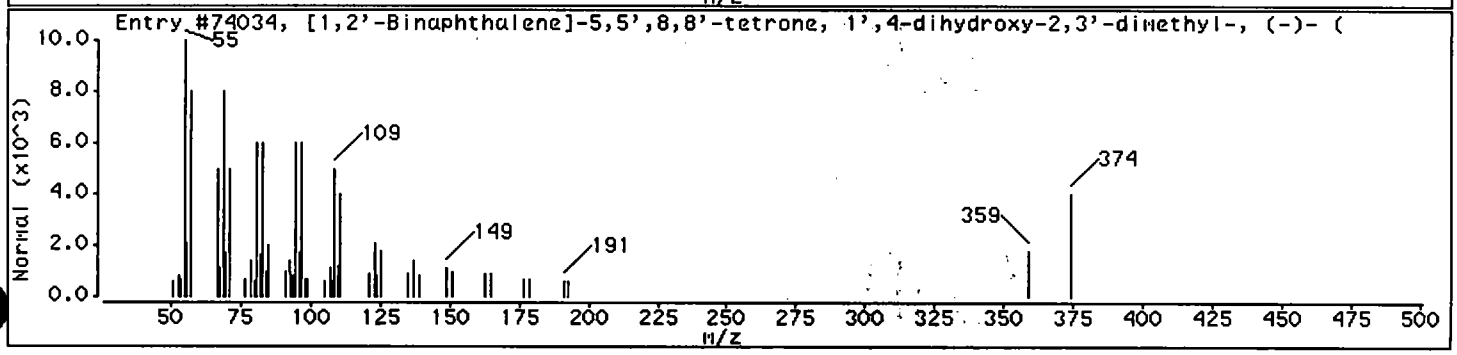
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Acetamide, N-methyl-N-[4-[4-methoxy-1-he	0-00-0	NBS75K.l	31490	94	C13H22N2O2	238
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	91	C16H26O3	266
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	81	C22H14O6	374









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

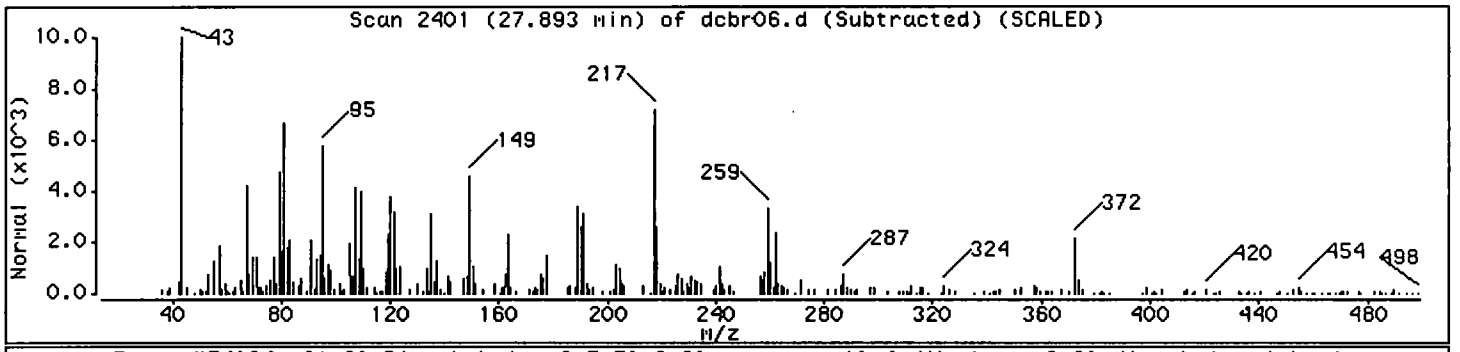
Client ID: WS-03 Instrument: gcl4.i

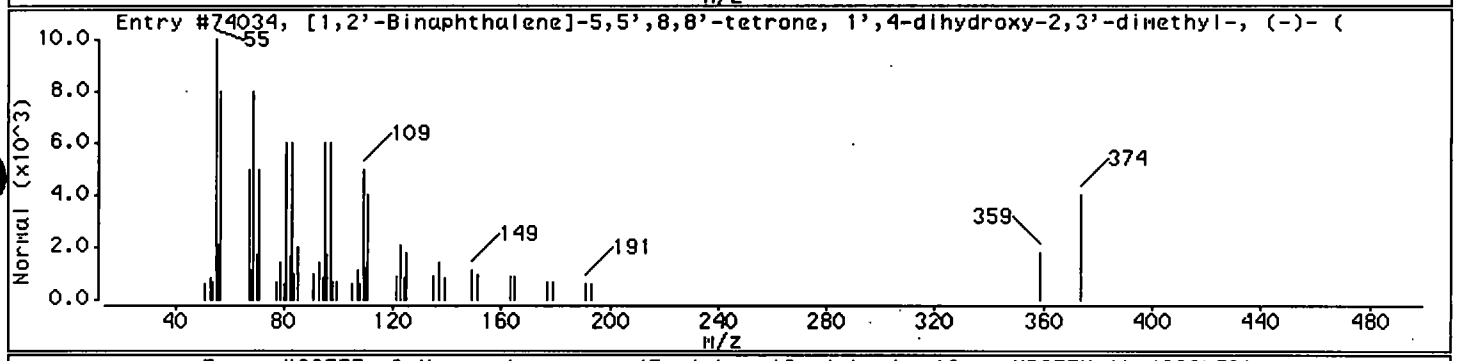
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

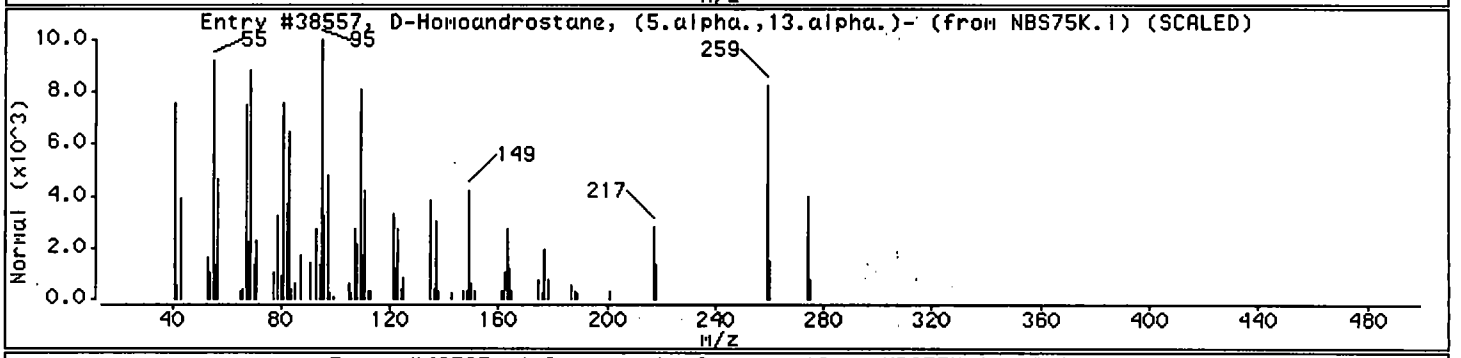
Volume Injected (uL): 2.0 Operator: GES

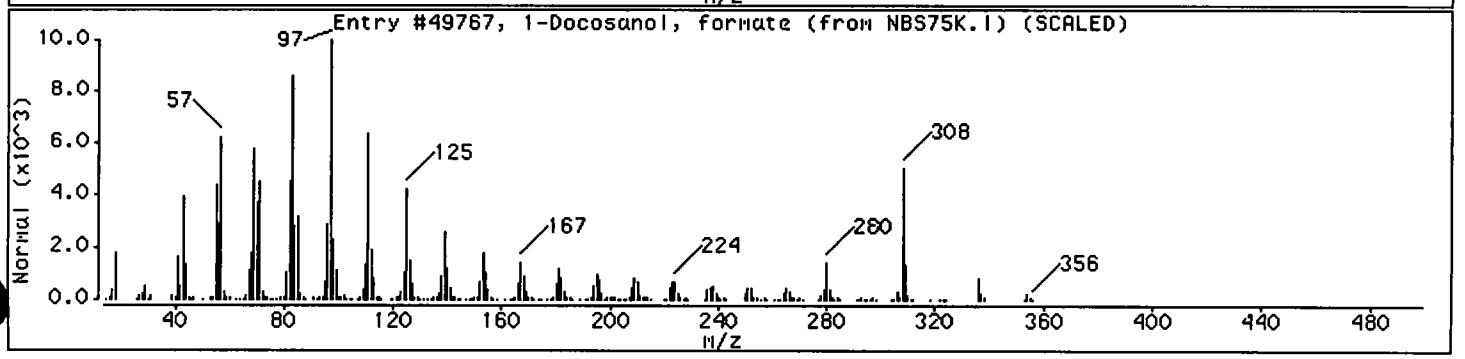
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	94	C22H1406	374
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	89	C20H34	274
1-Docosanol, formate	15155-62-1	NBS75K.l	49767	60	C23H4602	354









Data File: /chem/gc14.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

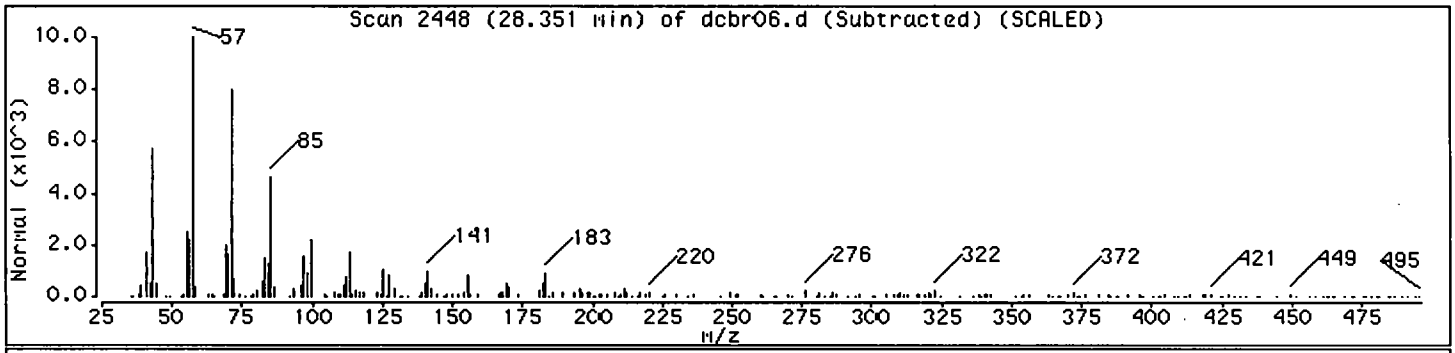
Client ID: WS-03 Instrument: gc14.i

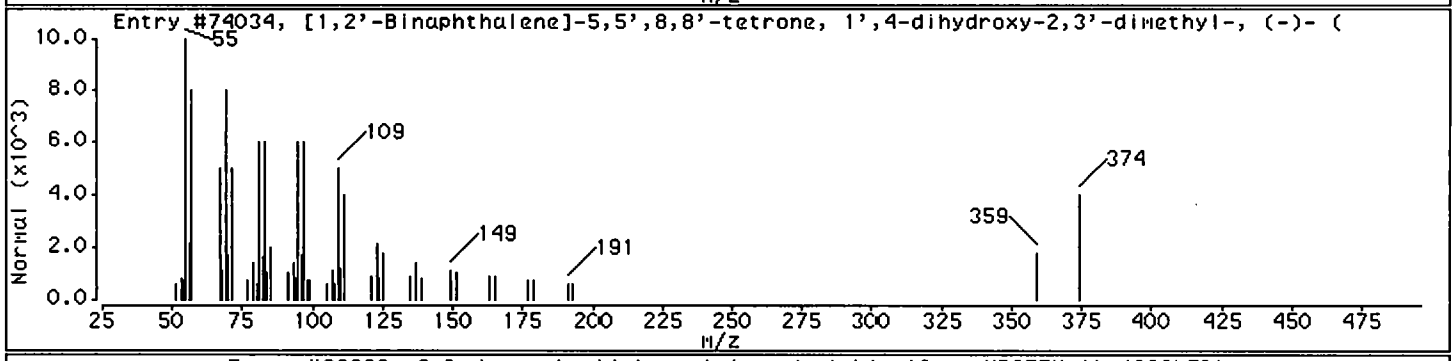
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

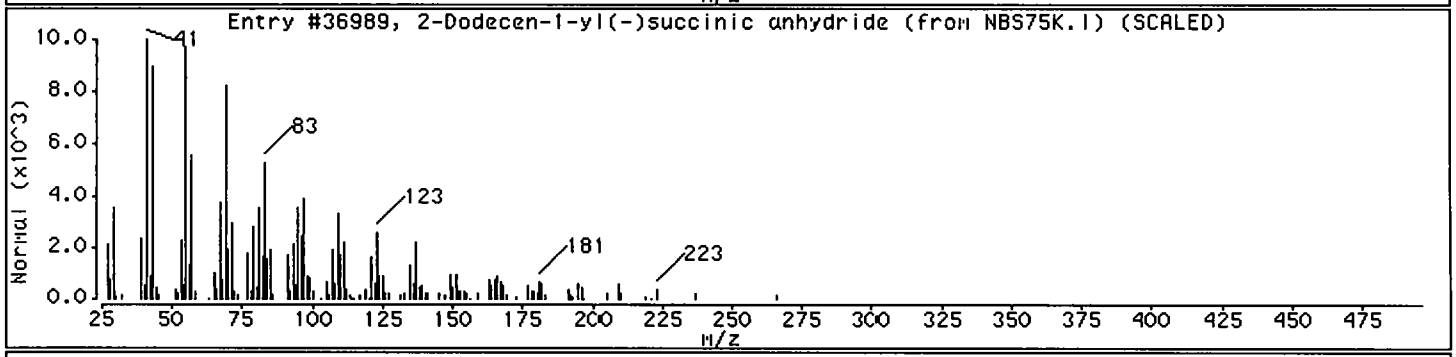
Volume Injected (uL): 2.0 Operator: GES

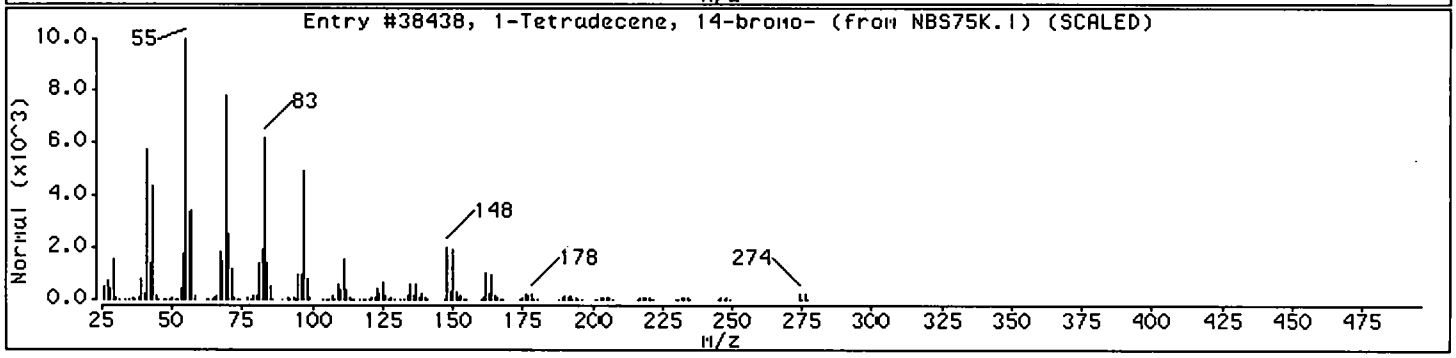
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	91	C22H1406	374
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	83	C16H2603	266
1-Tetradecene, 14-bromo-	74646-31-4	NBS75K.l	38438	70	C14H27Br	274









Data File: /chem/gcl4.i/dec1296b.b/dcbr06.d

Date : 12-DEC-1996 23:30

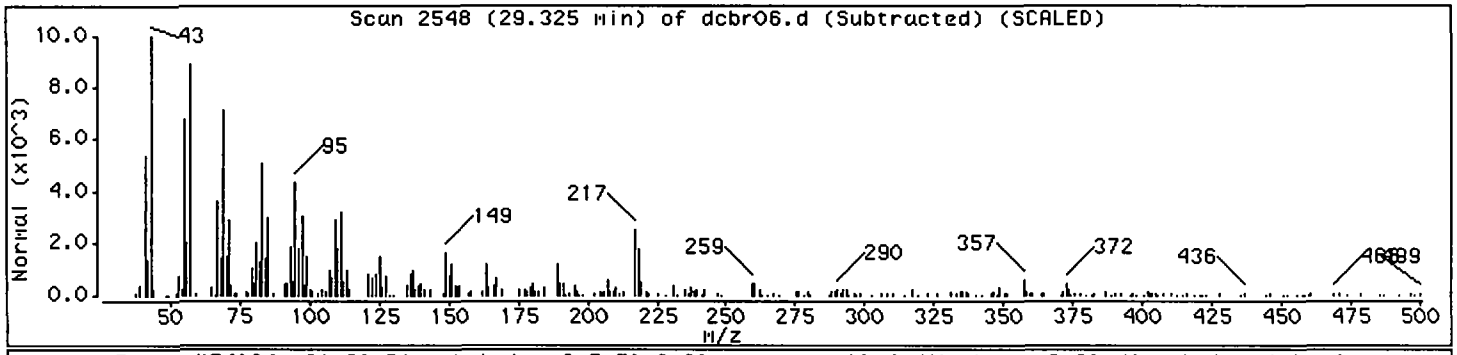
Client ID: WS-03 Instrument: gcl4.i

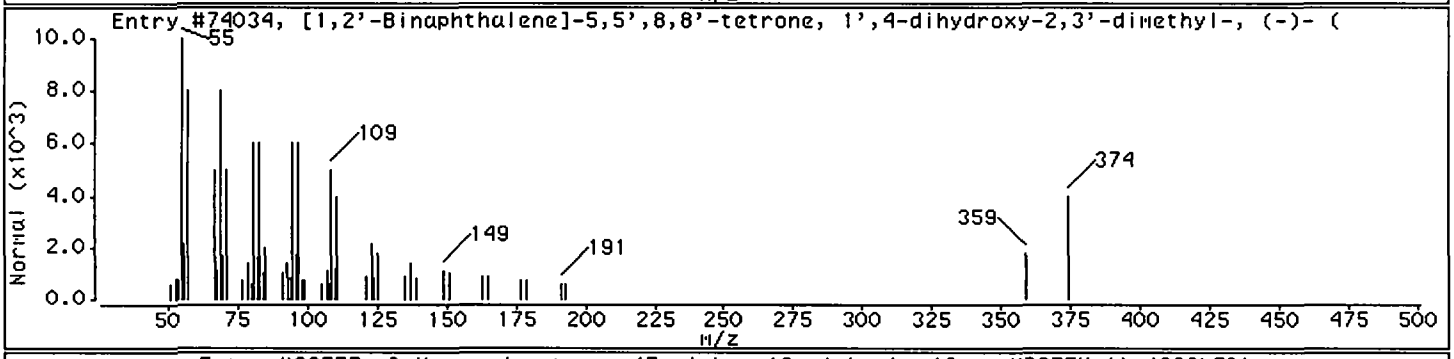
Sample Info: 9611G675-003 DFBC12,[AL=0625HS],[DC=00]

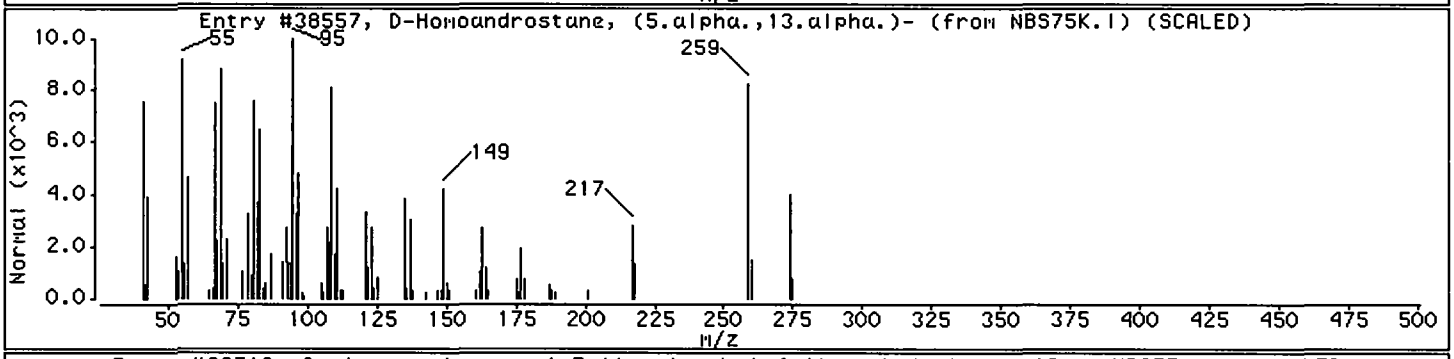
Volume Injected (uL): 2.0 Operator: GES

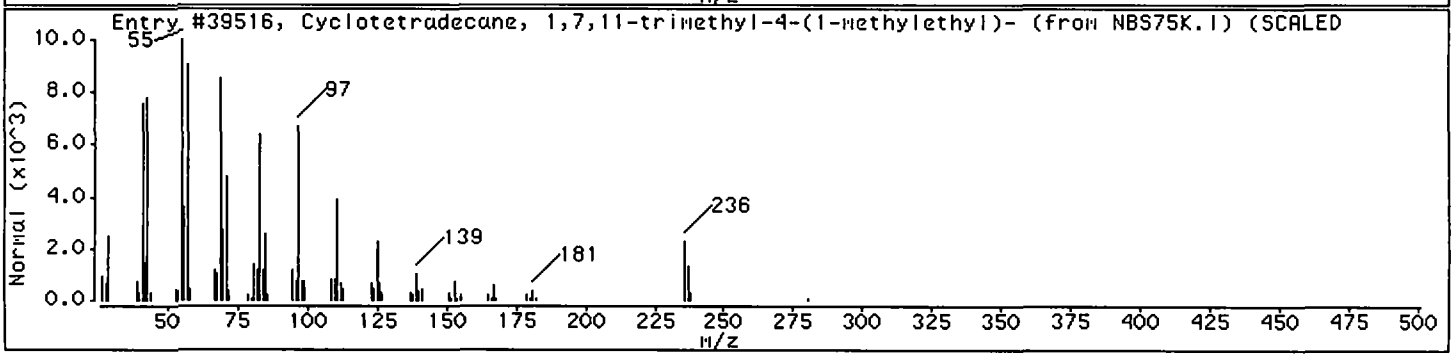
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	95	C22H1406	374
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	86	C20H34	274
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	39516	86	C20H40	280









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-04

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-004

Sample wt/vol: 5.2 (g/mL) G Lab File ID: DCBR01

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 46 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3600	U
111-44-4	bis(2-Chloroethyl)ether	3600	U
95-57-8	2-Chlorophenol	3600	U
541-73-1	1,3-Dichlorobenzene	3600	U
106-46-7	1,4-Dichlorobenzene	3600	U
95-50-1	1,2-Dichlorobenzene	3600	U
95-48-7	2-Methylphenol	3600	U
108-60-1	2,2'-oxybis(1-Chloropropane)	3600	U
106-44-5	4-Methylphenol	3600	U
621-64-7	N-Nitroso-di-n-propylamine	3600	U
67-72-1	Hexachloroethane	3600	U
98-95-3	Nitrobenzene	3600	U
78-59-1	Isophorone	3600	U
88-75-5	2-Nitrophenol	3600	U
105-67-9	2,4-Dimethylphenol	3600	U
111-91-1	bis(2-Chloroethoxy)methane	3600	U
120-83-2	2,4-Dichlorophenol	3600	U
120-82-1	1,2,4-Trichlorobenzene	3600	U
91-20-3	Naphthalene	3600	U
106-47-8	4-Chloroaniline	3600	U
87-68-3	Hexachlorobutadiene	3600	U
59-50-7	4-Chloro-3-methylphenol	3600	U
91-57-6	2-Methylnaphthalene	3600	U
77-47-4	Hexachlorocyclopentadiene	3600	U
88-06-2	2,4,6-Trichlorophenol	3600	U
95-95-4	2,4,5-Trichlorophenol	9000	U
91-58-7	2-Chloronaphthalene	3600	U
88-74-4	2-Nitroaniline	9000	U
131-11-3	Dimethylphthalate	3600	U
208-96-8	Acenaphthylene	3600	U
606-20-2	2,6-Dinitrotoluene	3600	U
99-09-2	3-Nitroaniline	9000	U
83-32-9	Acenaphthene	3600	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-04

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-004

Sample wt/vol: 5.2 (g/mL) G Lab File ID: DCBR01

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 46 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	9000	U
100-02-7	4-Nitrophenol	9000	U
132-64-9	Dibenzofuran	3600	U
121-14-2	2,4-Dinitrotoluene	3600	U
84-66-2	Diethylphthalate	3600	U
7005-72-3	4-Chlorophenyl-phenylether	3600	U
86-73-7	Fluorene	3600	U
100-01-6	4-Nitroaniline	9000	U
534-52-1	4,6-Dinitro-2-methylphenol	9000	U
86-30-6	n-Nitrosodiphenylamine (1)	3600	U
101-55-3	4-Bromophenyl-phenylether	3600	U
118-74-1	Hexachlorobenzene	3600	U
87-86-5	Pentachlorophenol	9000	U
85-01-8	Phenanthrene	3600	U
120-12-7	Anthracene	3600	U
86-74-8	Carbazole	3600	U
84-74-2	Di-n-butylphthalate	3600	U
206-44-0	Fluoranthene	3600	U
129-00-0	Pyrene	3600	U
85-68-7	Butylbenzylphthalate	3600	U
91-94-1	3,3'-Dichlorobenzidine	3600	U
56-55-3	Benzo(a)anthracene	3600	U
218-01-9	Chrysene	3600	U
117-81-7	bis(2-Ethylhexyl)phthalate	3600	U
117-84-0	Di-n-octylphthalate	3600	U
205-99-2	Benzo(b)fluoranthene	3600	U.
207-08-9	Benzo(k)fluoranthene	3600	U
50-32-8	Benzo(a)pyrene	3600	U
193-39-5	Indeno(1,2,3-cd)pyrene	3600	U
53-70-3	Dibenzo(a,h)anthracene	3600	U
191-24-2	Benzo(g,h,i)perylene	3600	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-04

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-004

Sample wt/vol: 5.2 (g/mL) G Lab File ID: DCBR01

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 46 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 16

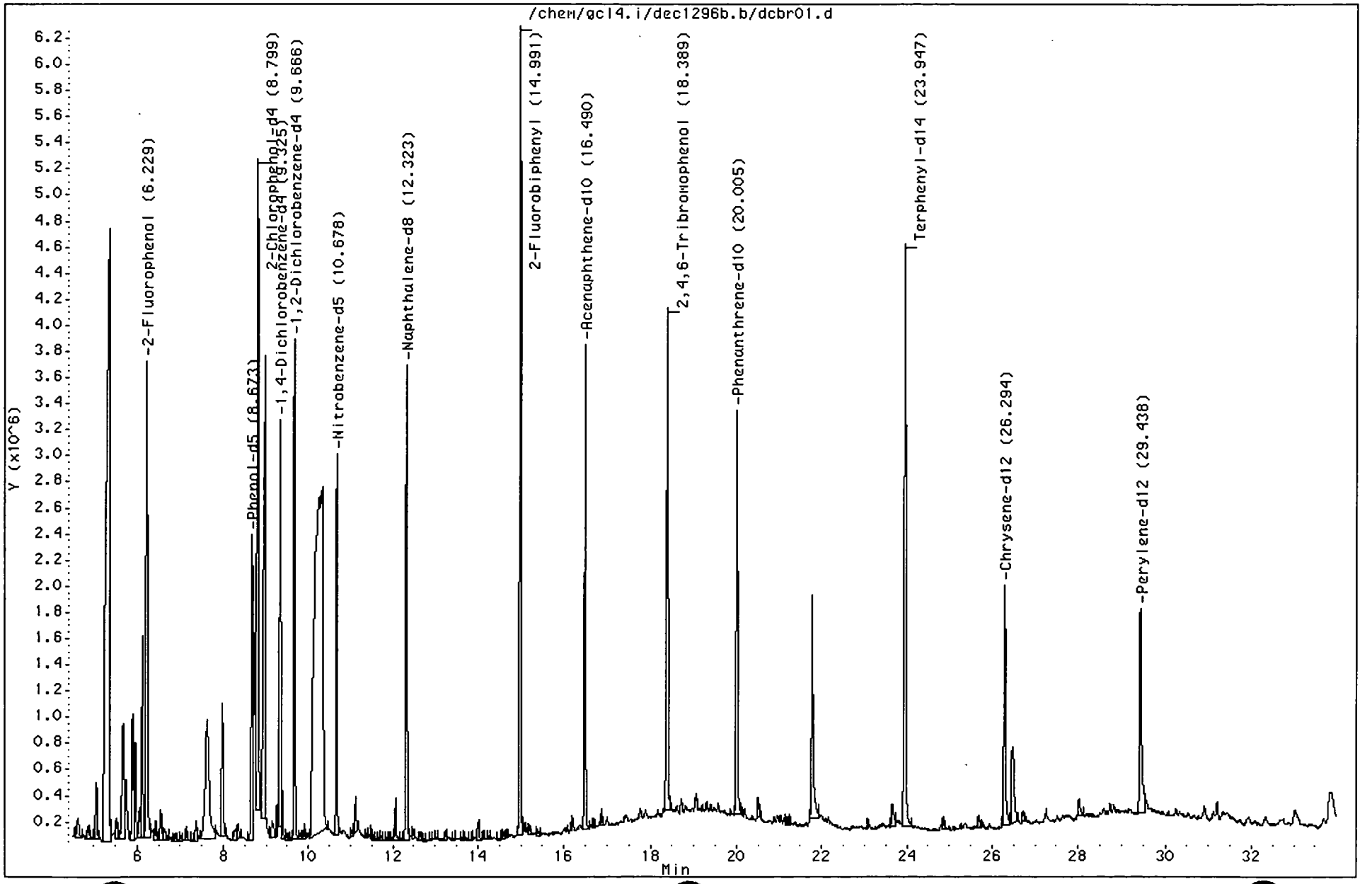
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN KETONE	5.37	32000	JBA
2.		UNKNOWN HYDROCARBON	5.68	3800	JB
3.		UNKNOWN HYDROCARBON	5.91	3100	JB
4.		UNKNOWN HYDROCARBON	5.97	2200	JB
5.		UNKNOWN	6.06	740	J
6.		UNKNOWN ALKANE	6.13	4200	JB
7.		UNKNOWN HYDROCARBON	6.56	760	JB
8.		UNKNOWN	7.62	7000	J
9.		UNKNOWN	7.98	3200	JB
10.		UNKNOWN	8.97	14000	JB
11.		UNKNOWN KETONE	9.37	1300	JB
12.		UNKNOWN	10.33	44000	J
13.		UNKNOWN	12.06	740	J
14.	57-10-3	HEXADECANOIC ACID	21.78	5300	NJB
15.		UNKNOWN ACID	23.65	880	J
16.		UNKNOWN	26.47	3800	JB
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

173

Data File: /chem/gc14.i/dec1296b.b/dcbr01.d
Date : 12-DEC-1996 20:00
Client ID: WS-04
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gc14.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr01.d
Lab Smp Id: 9611G675-004 Client Smp ID: WS-04
Inj Date : 12-DEC-1996 20:00
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-004 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.200	Weigth of sample extracted (g)
M	46.400	% Moisture

WMB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.325	9.325	(1.000)	954125	40.000	
* 26 Naphthalene-d8	136.00	12.323	12.323	(1.000)	3178104	40.000	
* 41 Acenaphthene-d10	164.00	16.490	16.500	(1.000)	1596965	40.000	
* 56 Phenanthrene-d10	188.00	20.005	20.014	(1.000)	2423231	40.000	
* 67 Chrysene-d12	240.00	26.294	26.303	(1.000)	1596706	40.000	
* 75 Perylene-d12	264.00	29.438	29.438	(1.000)	1516036	40.000	
$ 1 2-Fluorophenol	112.00	6.229	6.190	(0.668)	2657019	87.757	15743
$ 2 Phenol-d5	99.00	8.673	8.663	(0.930)	1790016	46.571	8354.4
$ 5 2-Chlorophenol-d4	132.00	8.799	8.789	(0.944)	2771200	87.557	15707
$ 10 1,2-Dichlorobenzene-d4	152.00	9.666	9.656	(1.037)	1078691	51.827	9297.4
$ 17 Nitrobenzene-d5	82.00	10.678	10.668	(0.866)	1851708	62.154	11150
$ 34 2-Fluorobiphenyl	172.00	14.991	14.991	(0.909)	3605290	76.568	13736
$ 52 2,4,6-Tribromophenol	330.00	18.389	18.388	(1.115)	958351	134.19	24072
$ 64 Terphenyl-d14	244.00	23.957	23.947	(0.911)	3195348	68.745	12332

Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296b.b/dcbr01.d
Lab Smp Id: 9611G675-004 Client Smp ID: WS-04
Inj Date : 12-DEC-1996 20:00
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-004 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 1
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.200	Weigth of sample extracted (g)
M	46.400	% Moisture

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	9.325	5791061	40.000
* 26 Naphthalene-d8	12.323	7008144	40.000
* 56 Phenanthrene-d10	20.005	6279449	40.000
* 67 Chrysene-d12	26.294	4570055	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Ketone				CAS #:			
5.372	25747766	177.84	31904	0		0	8

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
5.684	3096294	21.387	3836.6	0		0	8
Unknown Hydrocarbon					CAS #:		
5.908	2494801	17.232	3091.3	0		0	8
Unknown Hydrocarbon					CAS #:		
5.966	1787862	12.349	2215.3	0		0	8
Unknown					CAS #:		
6.064	595612	4.114	738.02	0		0	8
Unknown Alkane					CAS #:		
6.132	3427758	23.676	4247.3	0		0	8
Unknown Hydrocarbon					CAS #:		
6.560	611138	4.221	757.26	0		0	8
Unknown					CAS #:		
7.621	5615288	38.786	6957.9	0		0	8
Unknown					CAS #:		
7.981	2578129	17.808	3194.5	0		0	8
Unknown					CAS #:		
8.974	10931169	75.504	13545	0		0	8
Unknown Ketone					CAS #:		
9.374	1032038	7.128	1278.8	0		0	8
Unknown					CAS #:		
10.328	35795342	247.24	44354	0		0	8(M)
Unknown					CAS #:		
12.061	724471	4.135	741.79	0		0	26
Hexadecanoic acid					CAS #: 57-10-3		
21.776	4677297	29.794	5344.8	98	NBS75K.1	71608	56
Unknown acid					CAS #:		
23.646	561033	4.910	880.90	0		0	67
Unknown					CAS #:		
26.469	2448233	21.428	3844.1	0		0	67

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

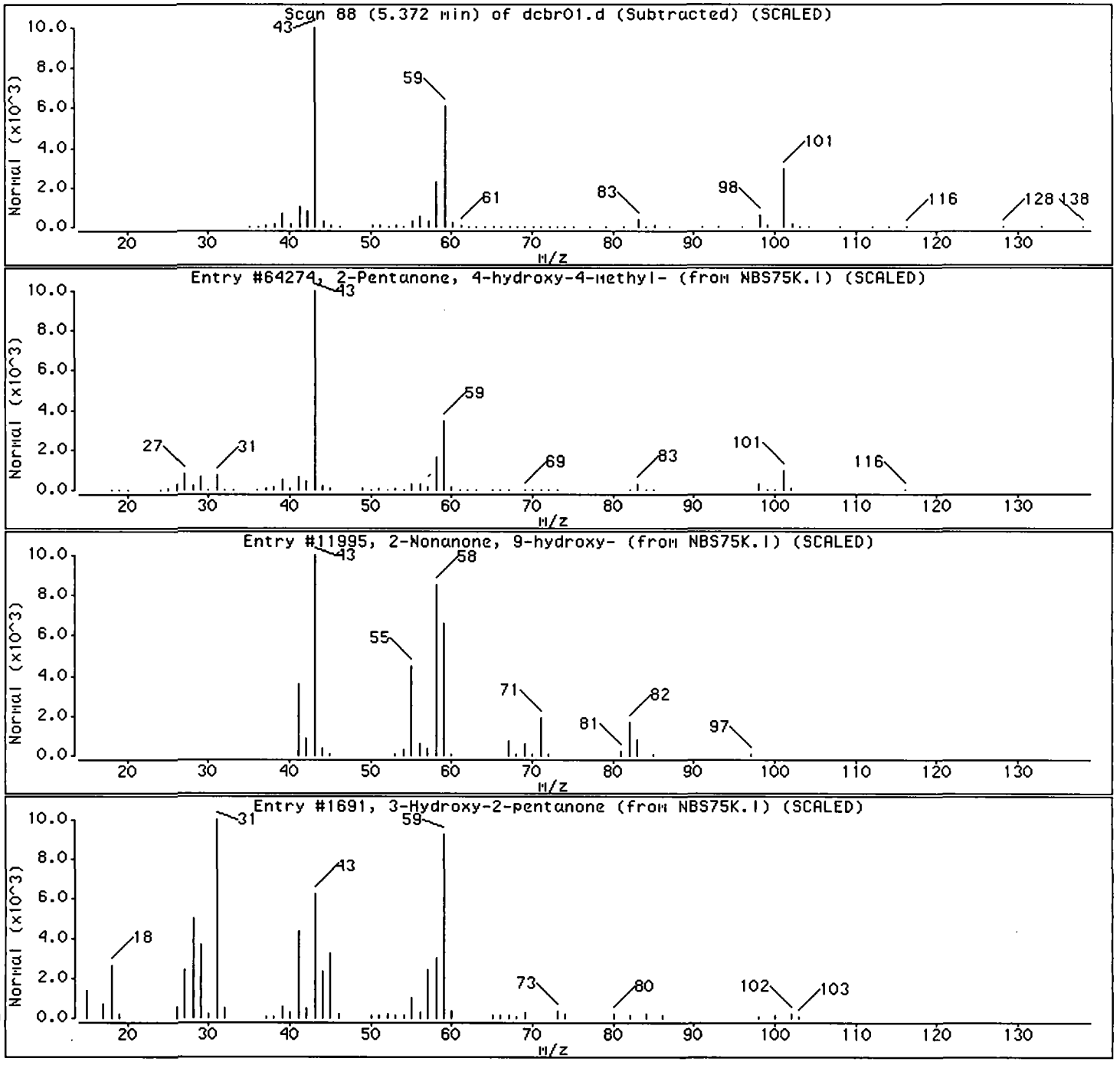
Client ID: WS-04 Instrument: gcl4.i

Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

Volume Injected (uL): 2.0 Operator: GES

Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	59	C6H12O2	116
2-Nonanone, 9-hydroxy-	25368-56-3	NBS75K.l	11995	25	C9H18O2	158
3-Hydroxy-2-pentanone	3142-66-3	NBS75K.l	1691	23	C5H10O2	102



Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

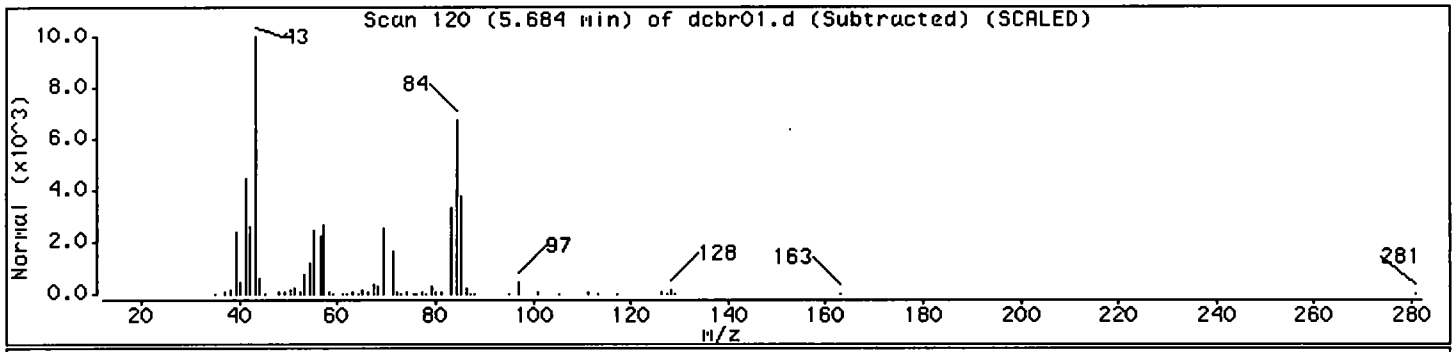
Client ID: WS-04 Instrument: gcl4.i

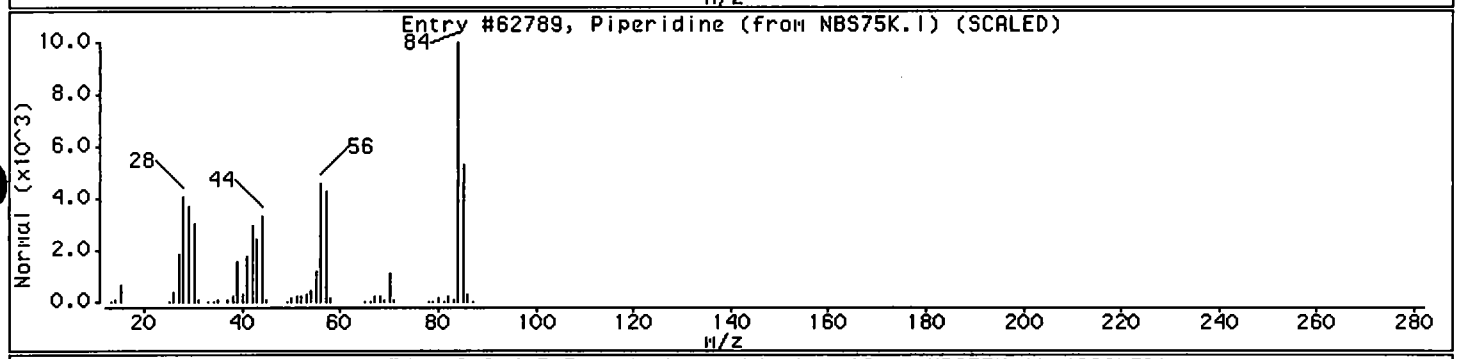
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

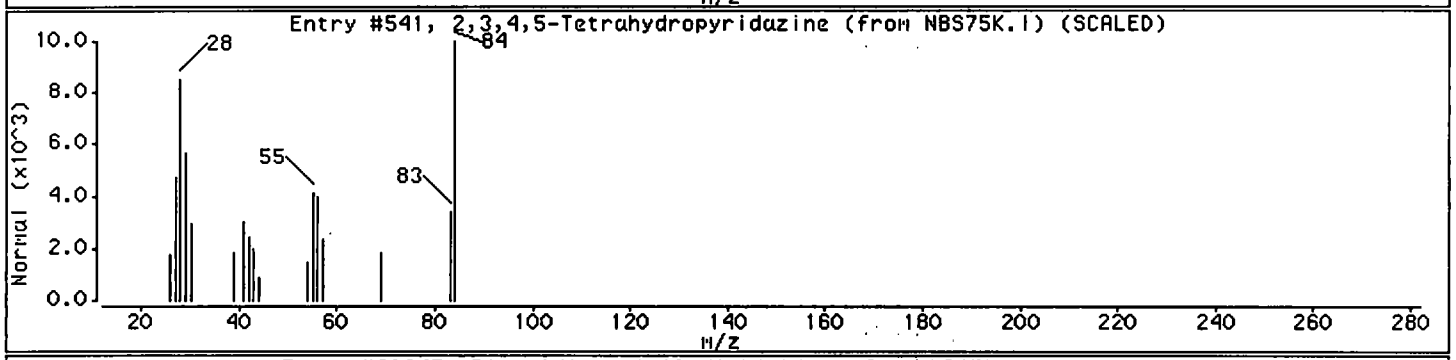
Volume Injected (uL): 2.0 Operator: GES

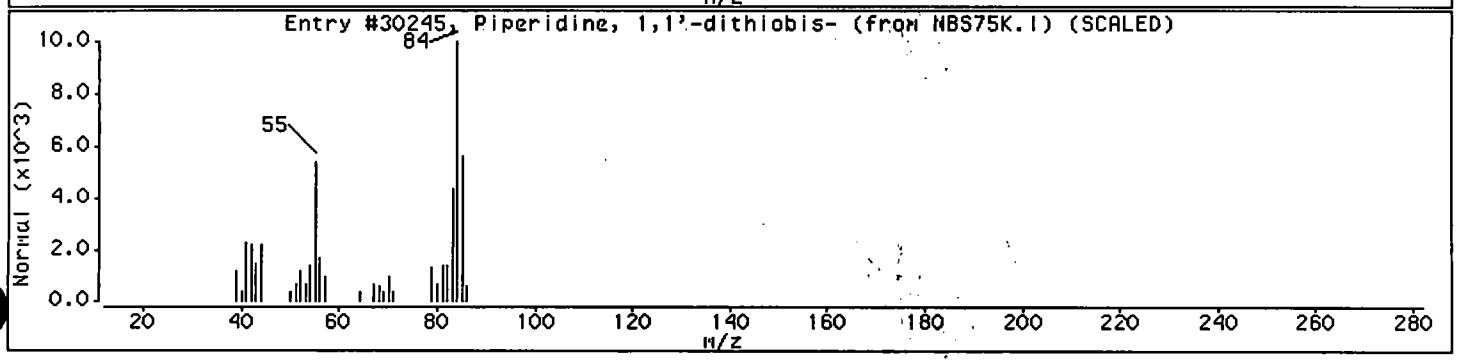
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Piperidine	110-89-4	NBS75K.l	62789	43	C5H11N	85
2,3,4,5-Tetrahydropyridazine	694-06-4	NBS75K.l	541	43	C4H8N2	84
Piperidine, 1,1'-dithiobis-	10220-20-9	NBS75K.l	30245	40	C10H20N2S2	232









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

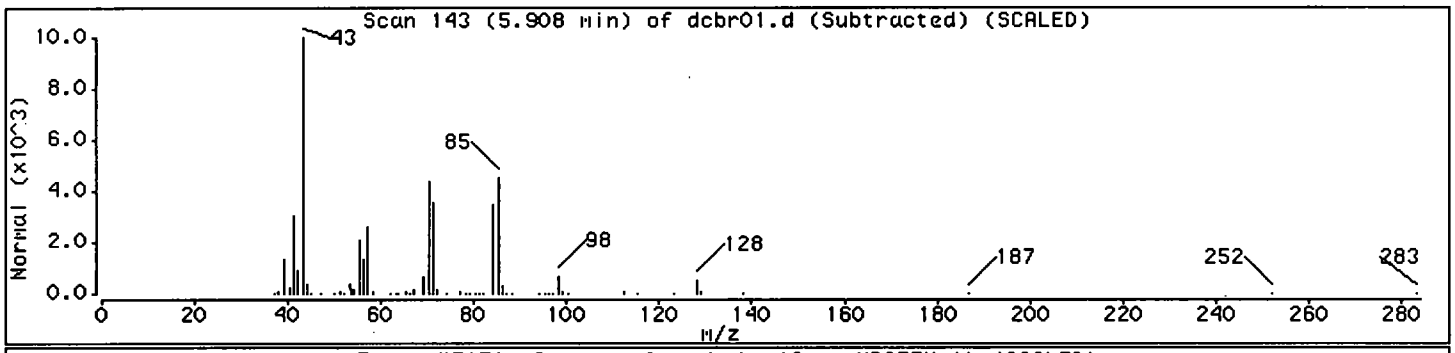
Client ID: WS-04 Instrument: gc14.i

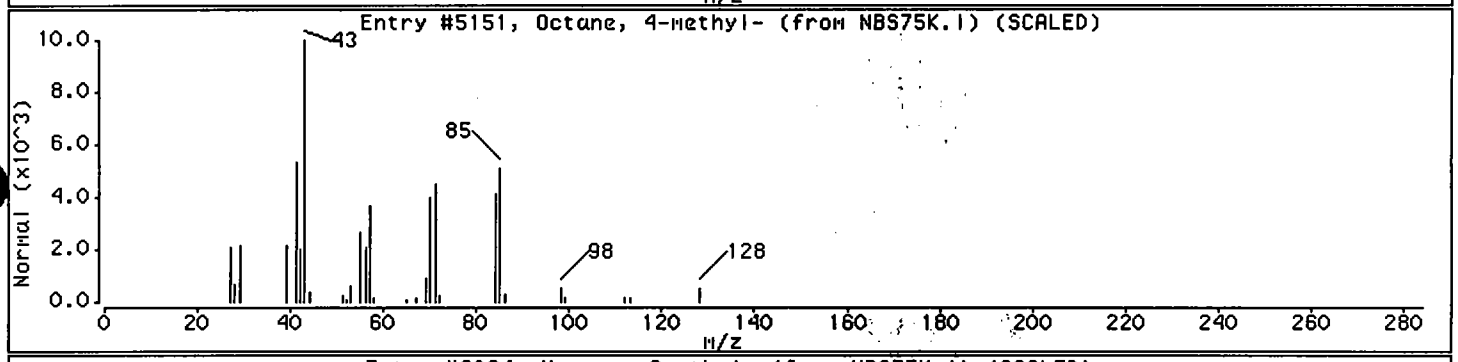
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

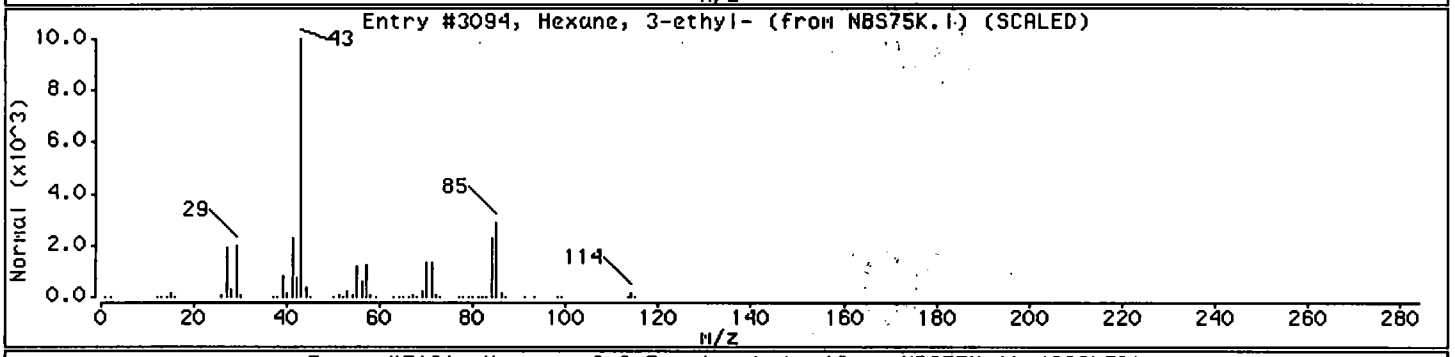
Volume Injected (uL): 2.0 Operator: GES

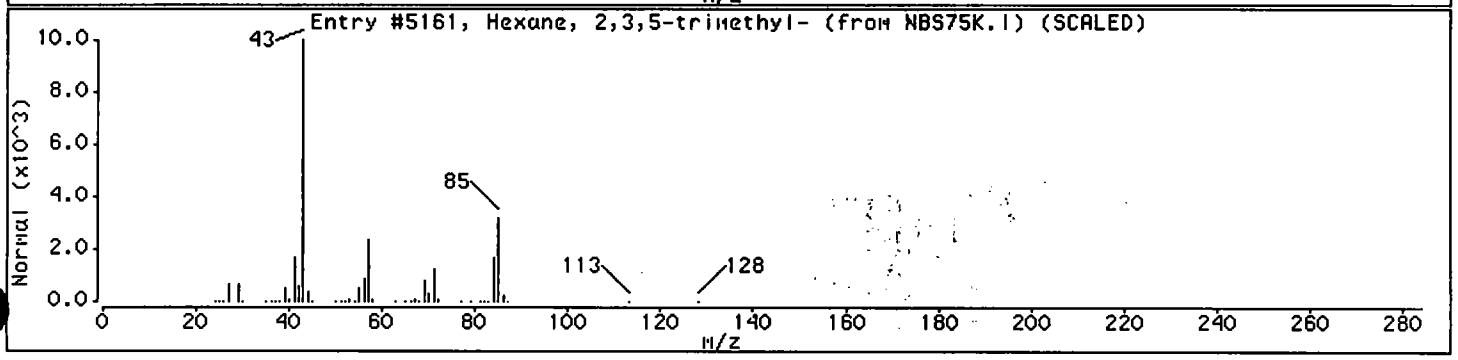
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Octane, 4-methyl-	2216-34-4	NBS75K.l	5151	78	C9H20	128
Hexane, 3-ethyl-	619-99-8	NBS75K.l	3094	64	C8H18	114
Hexane, 2,3,5-trimethyl-	1069-53-0	NBS75K.l	5161	53	C9H20	128









Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

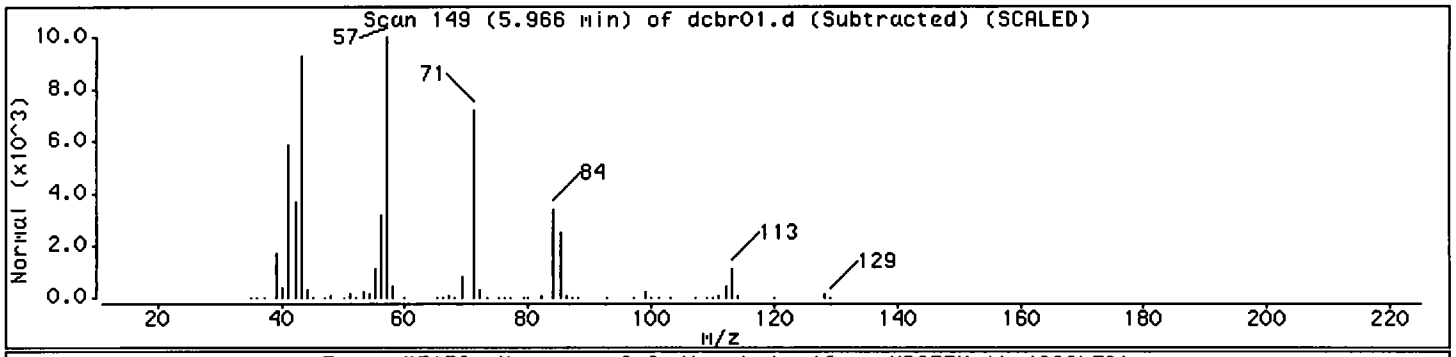
Client ID: WS-04 Instrument: gcl4.i

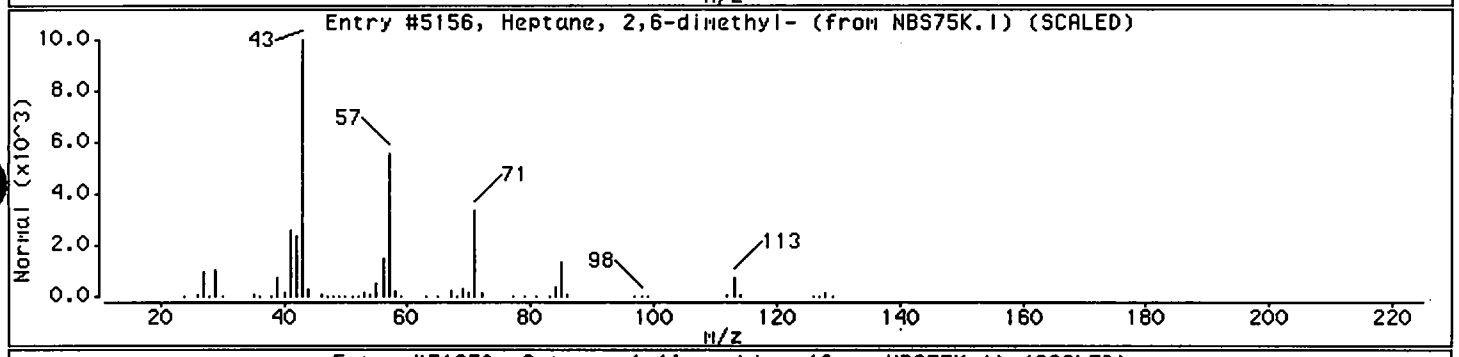
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

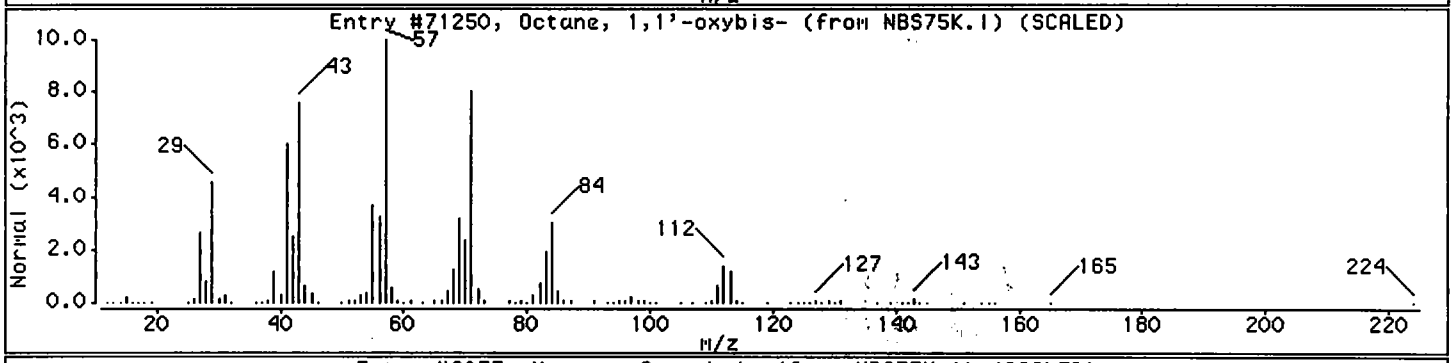
Volume Injected (uL): 2.0 Operator: GES

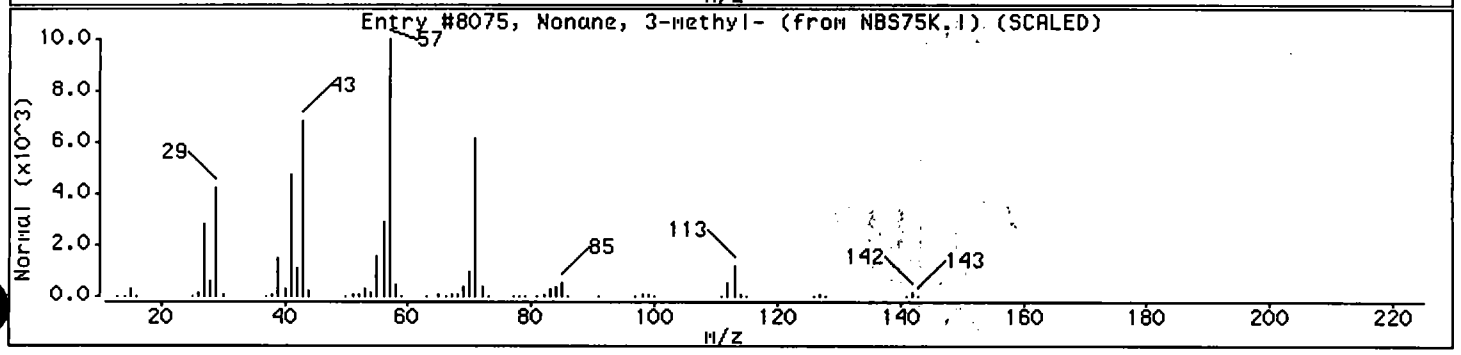
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.I	5156	64	C9H20	128
Octane, 1,1'-oxybis-	629-82-3	NBS75K.I	71250	56	C16H34O	242
Nonane, 3-methyl-	5911-04-6	NBS75K.I	8075	50	C10H22	142









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

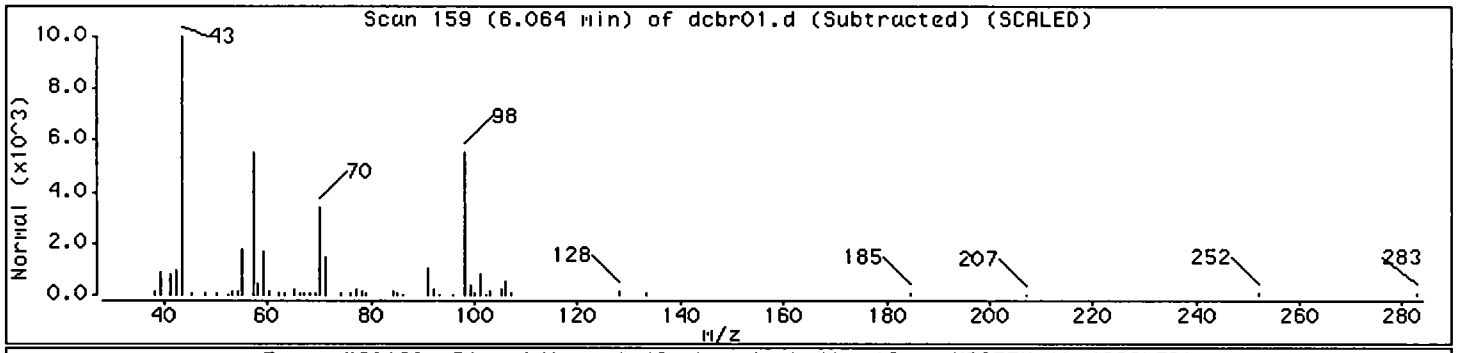
Client ID: WS-04 Instrument: gc14.i

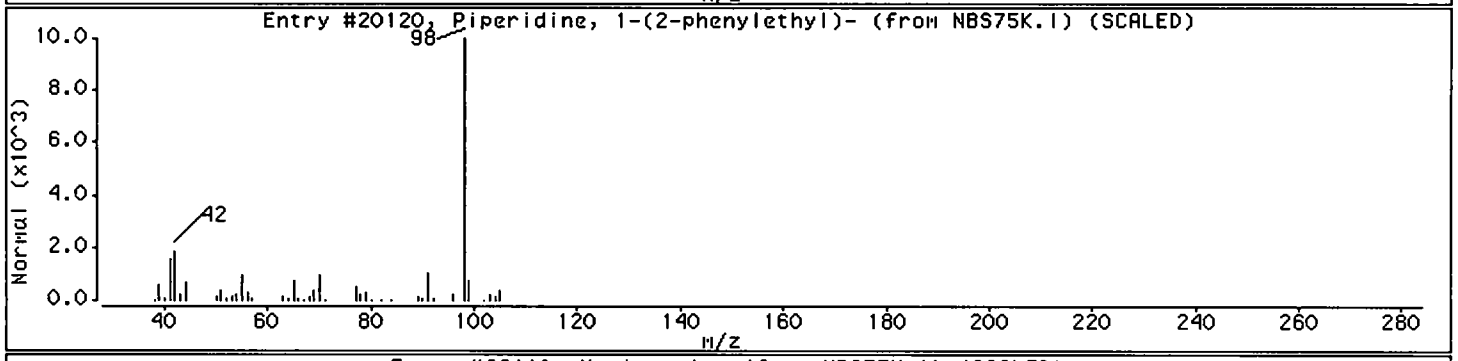
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

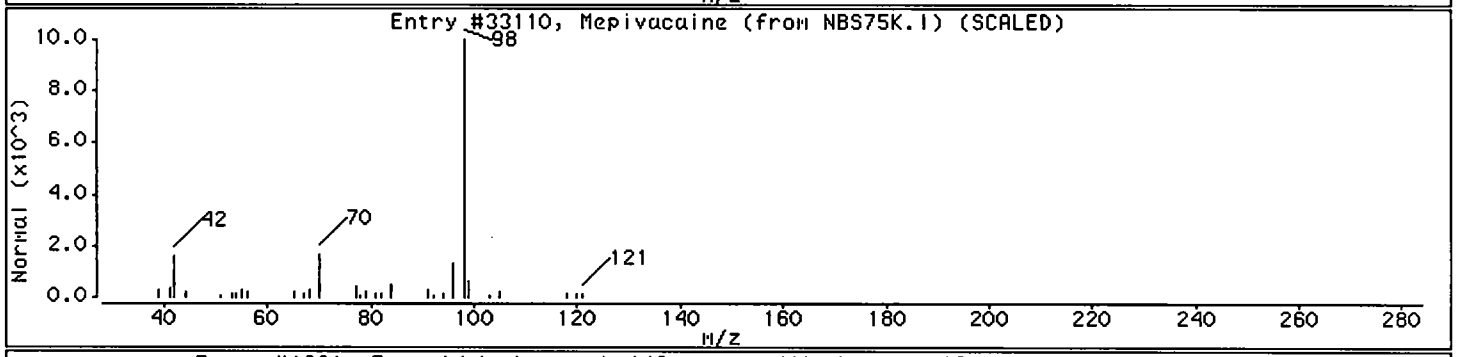
Volume Injected (uL): 2.0 Operator: GES

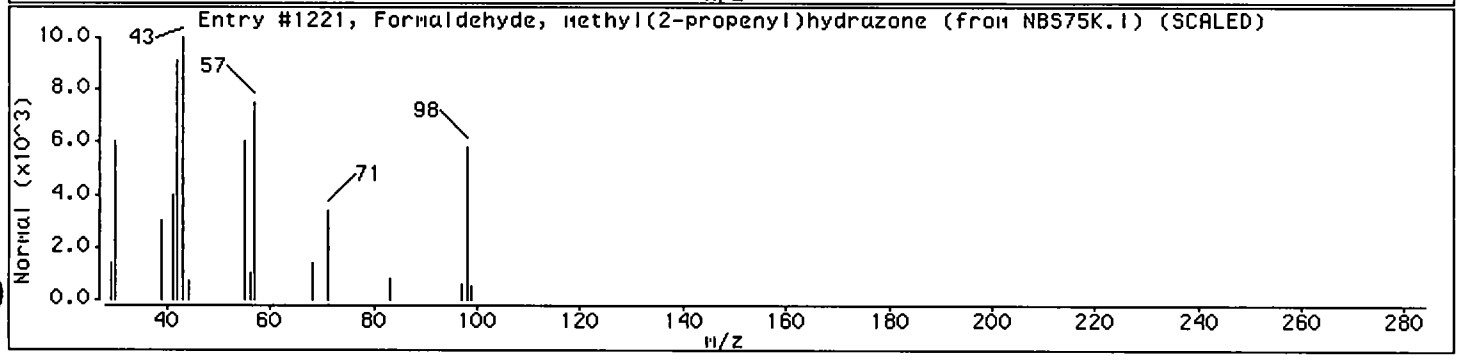
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Piperidine, 1-(2-phenylethyl)-	332-14-9	NBS75K.l	20120	23	C13H19N	189
Mepivacaine	96-88-8	NBS75K.l	33110	17	C15H22N2O	246
Formaldehyde, methyl(2-propenyl)hydrazon	0-00-0	NBS75K.l	1221	17	C5H10N2	98









Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

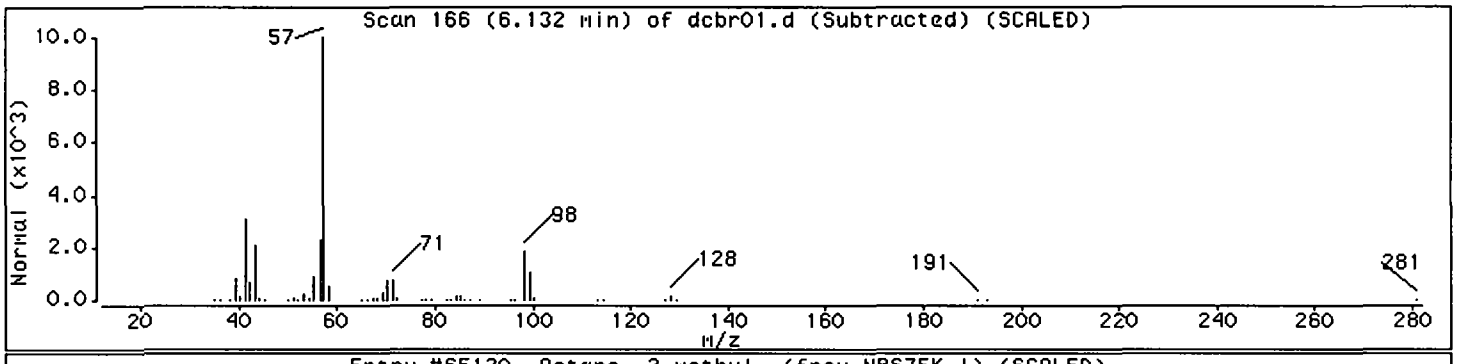
Client ID: WS-04 Instrument: gcl4.i

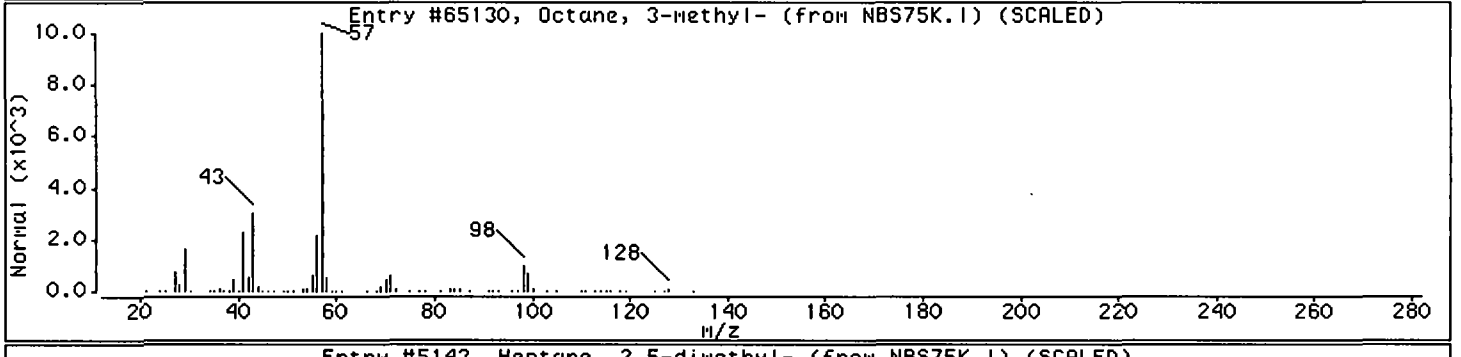
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

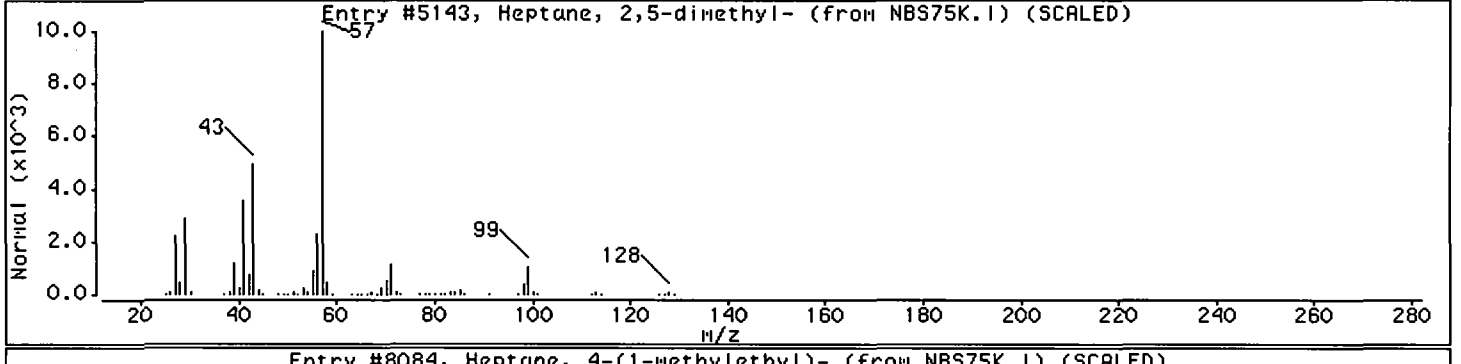
Volume Injected (uL): 2.0 Operator: GES

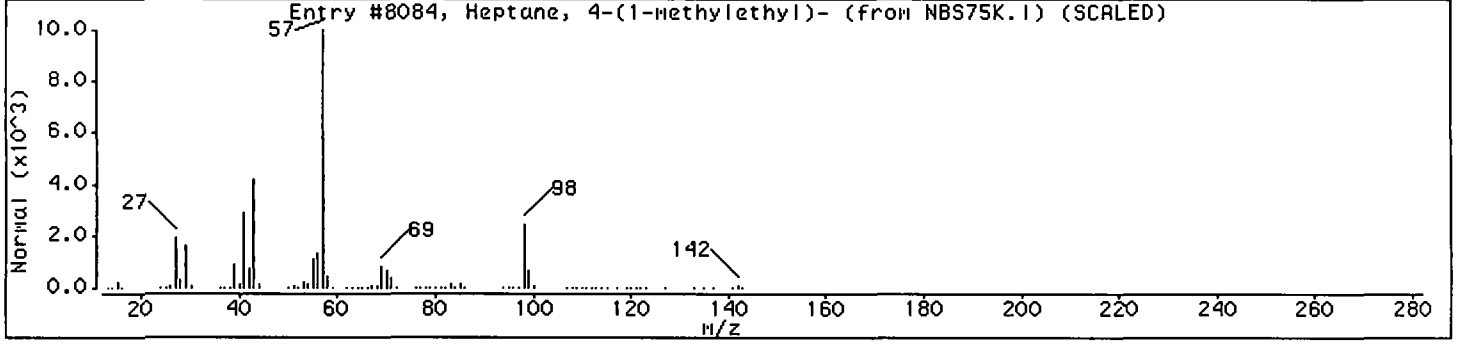
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Octane, 3-methyl-	2216-33-3	NBS75K.l	65130	91	C9H20	128
Heptane, 2,5-dimethyl-	2216-30-0	NBS75K.l	5143	83	C9H20	128
Heptane, 4-(1-methylethyl)-	52896-87-4	NBS75K.l	8084	59	C10H22	142









Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

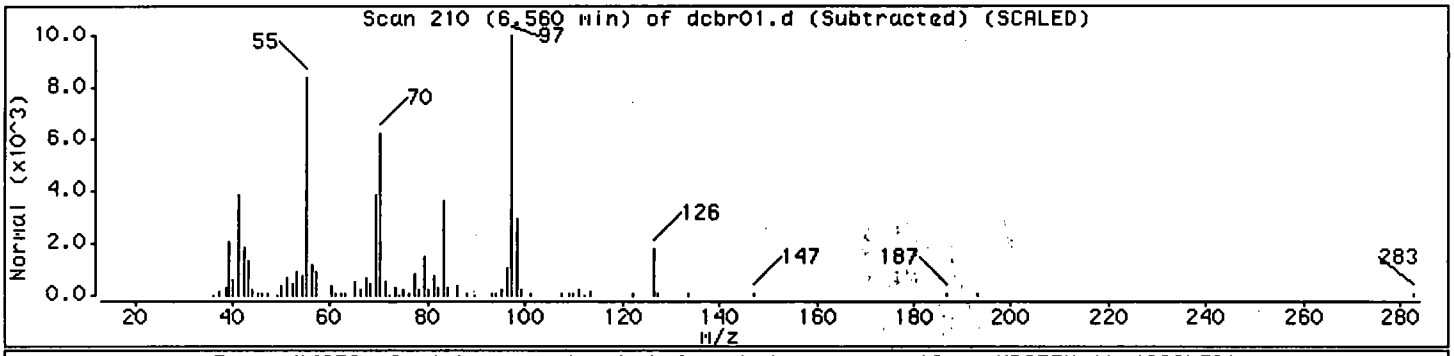
Client ID: WS-04 Instrument: gcl4.i

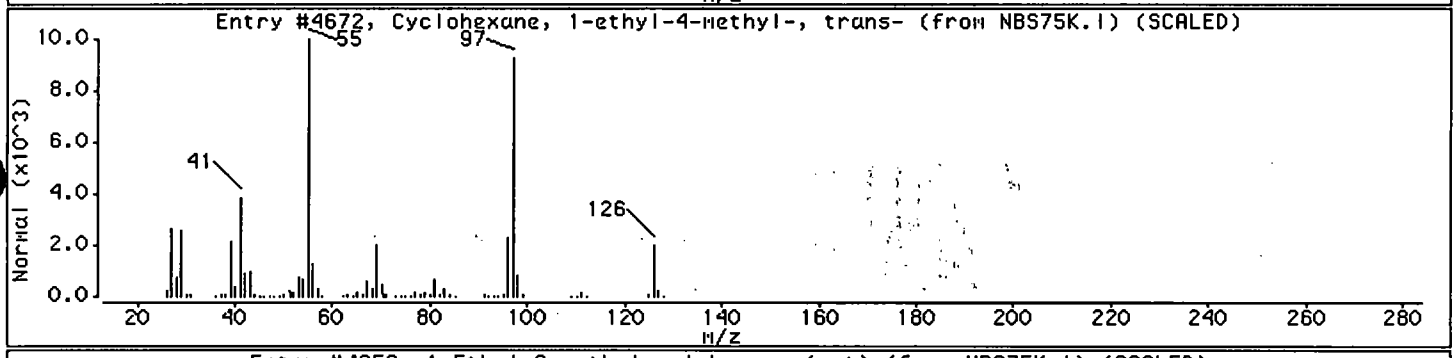
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

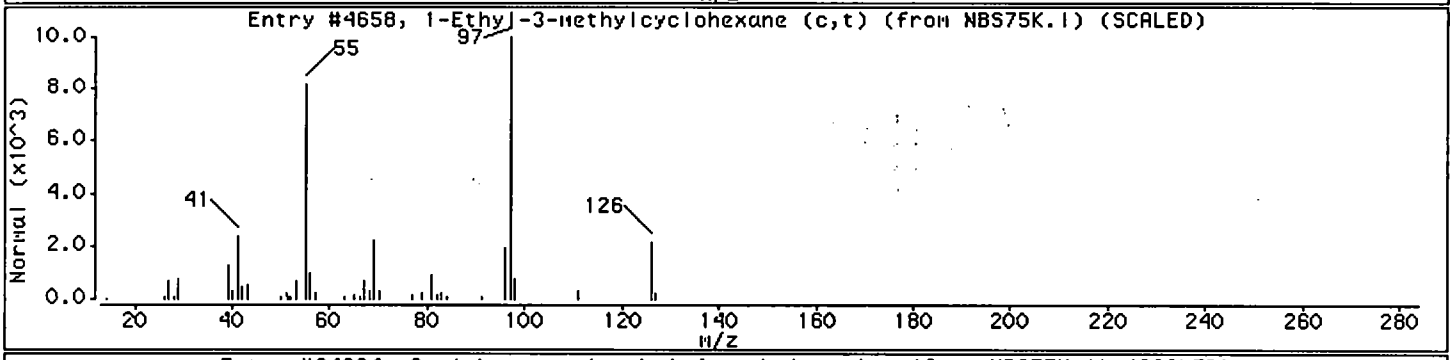
Volume Injected (uL): 2.0 Operator: GES

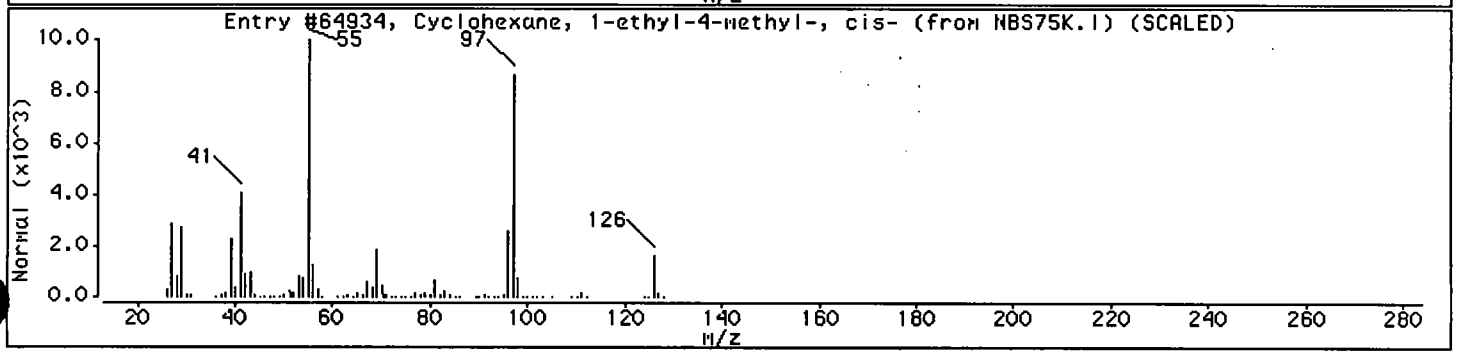
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	NBS75K.l	4672	49	C9H18	126
1-Ethyl-3-methylcyclohexane (c,t)	3728-55-0	NBS75K.l	4658	46	C9H18	126
Cyclohexane, 1-ethyl-4-methyl-, cis-	4926-78-7	NBS75K.l	64934	46	C9H18	126









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

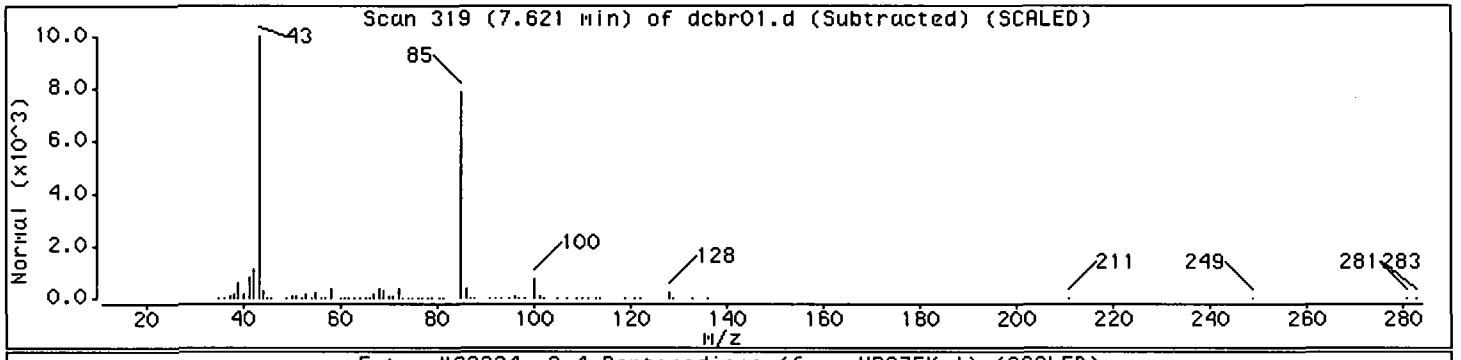
Client ID: WS-04 Instrument: gc14.i

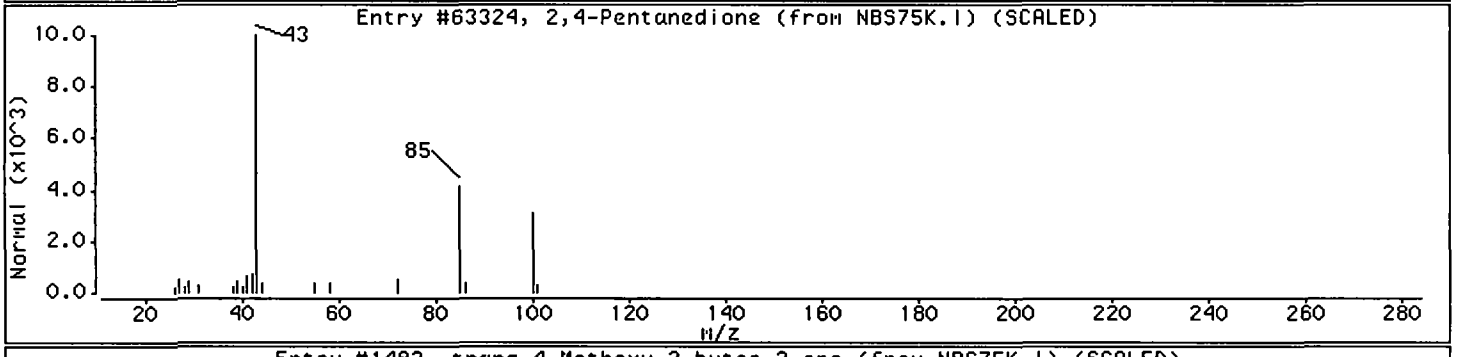
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

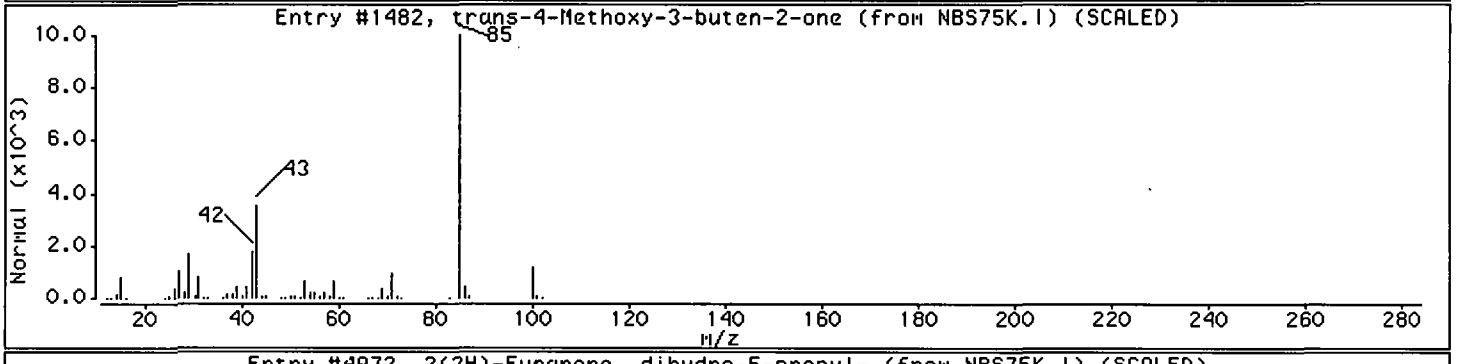
Volume Injected (uL): 2.0 Operator: GES

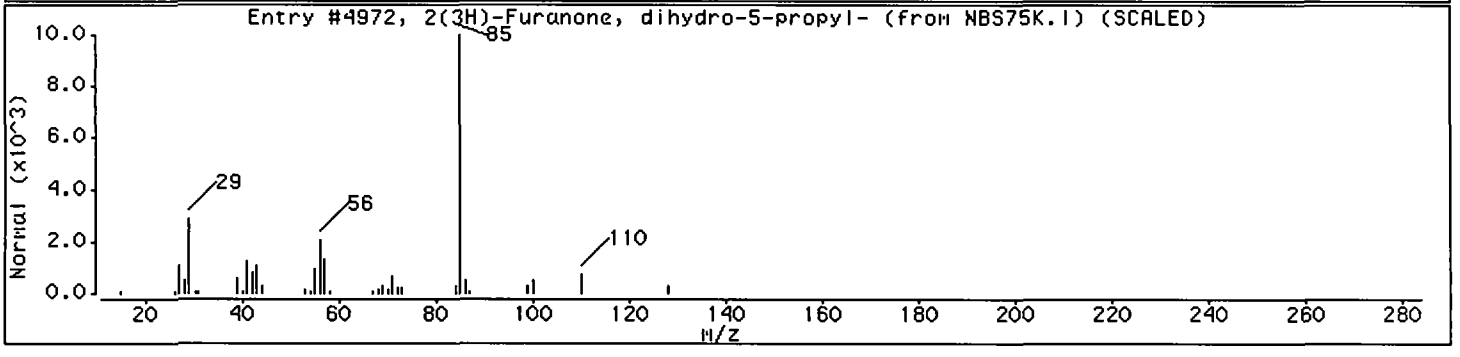
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,4-Pentanedione	123-54-6	NBS75K.l	63324	64	C5H8O2	100
trans-4-Methoxy-3-buten-2-one	51731-17-0	NBS75K.l	1482	53	C5H8O2	100
2(3H)-Furanone, dihydro-5-propyl-	105-21-5	NBS75K.l	4972	45	C7H12O2	128









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

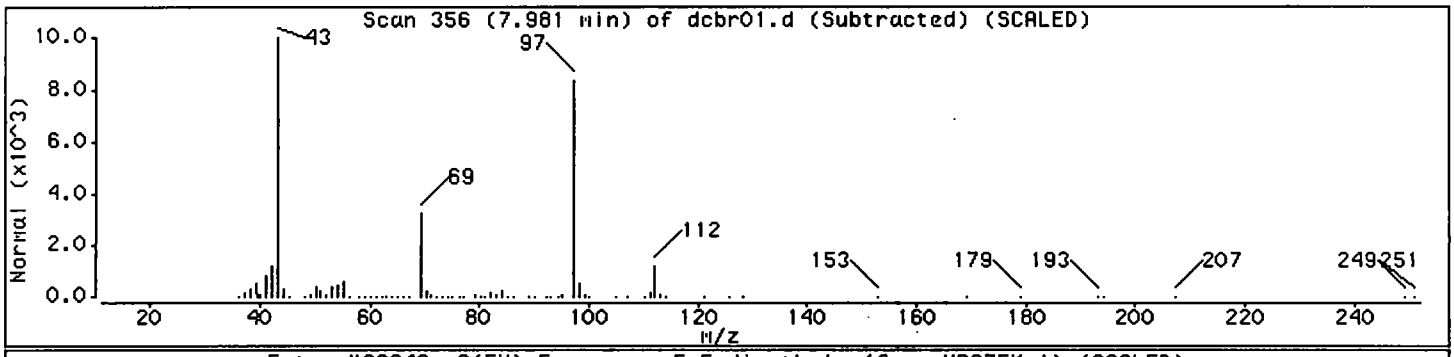
Client ID: WS-04 Instrument: gc14.i

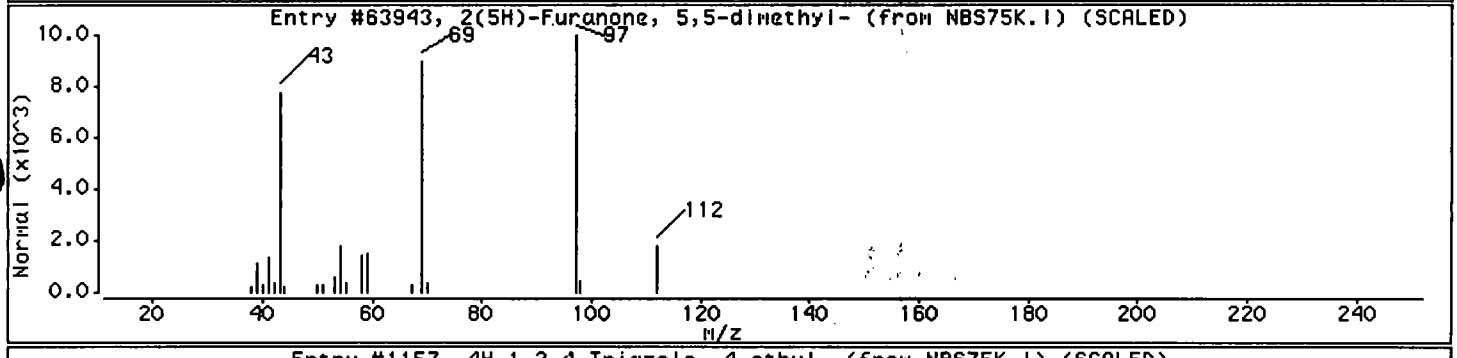
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

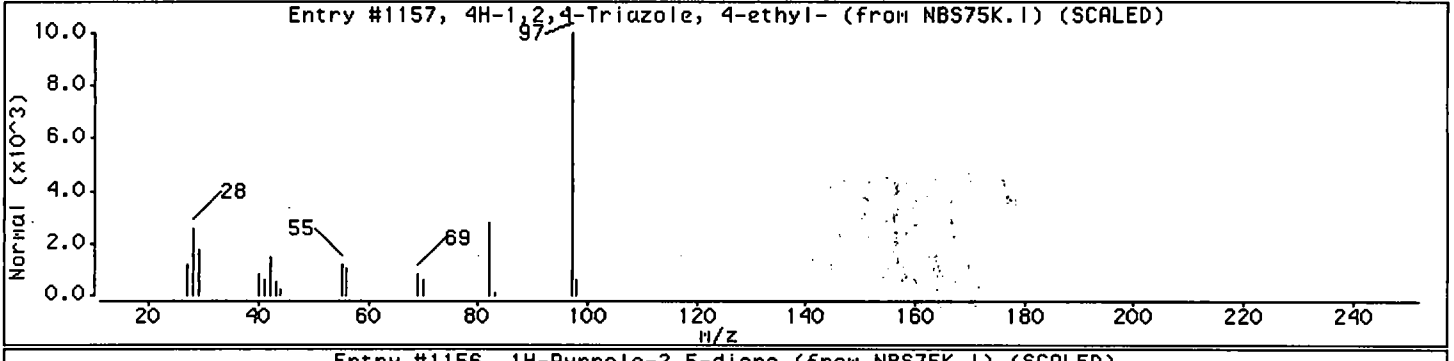
Volume Injected (uL): 2.0 Operator: GES

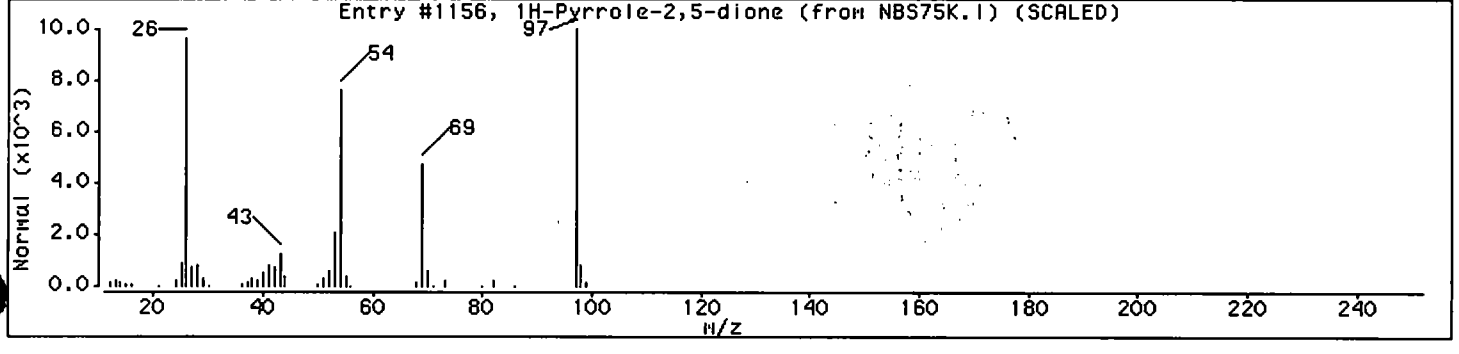
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(5H)-Furanone, 5,5-dimethyl-	20019-64-1	NBS75K.l	63943	50	C6H8O2	112
4H-1,2,4-Triazole, 4-ethyl-	43183-55-7	NBS75K.l	1157	42	C4H7N3	97
1H-Pyrrole-2,5-dione	541-59-3	NBS75K.l	1156	33	C4H3NO2	97









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

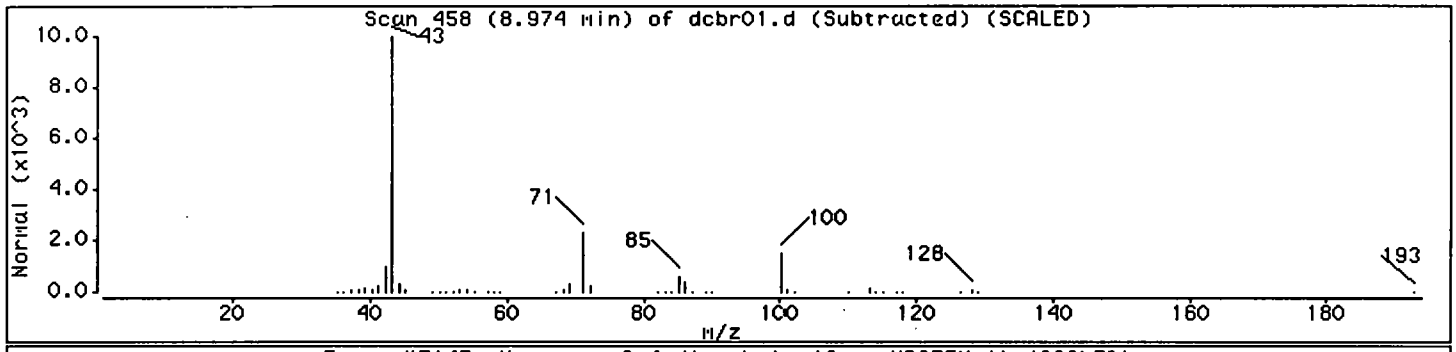
Client ID: WS-04 Instrument: gc14.i

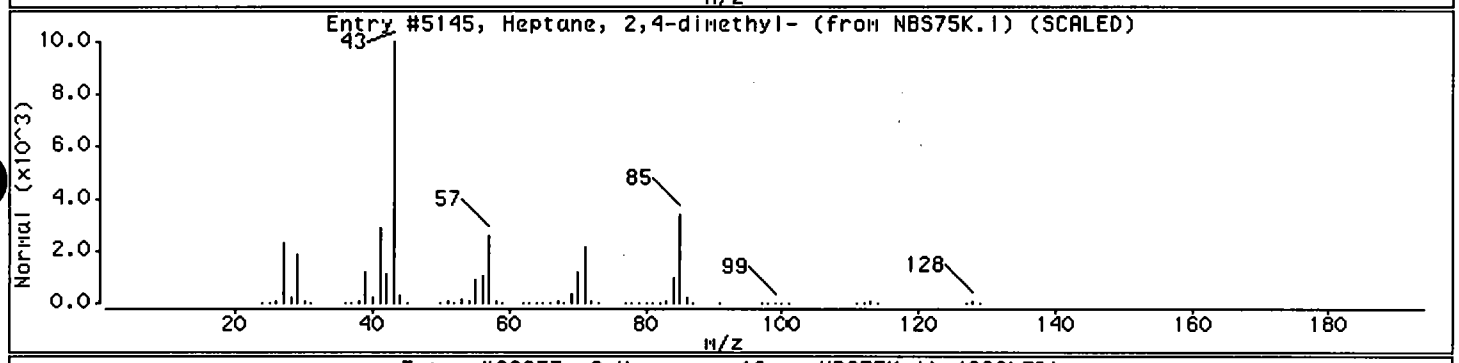
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

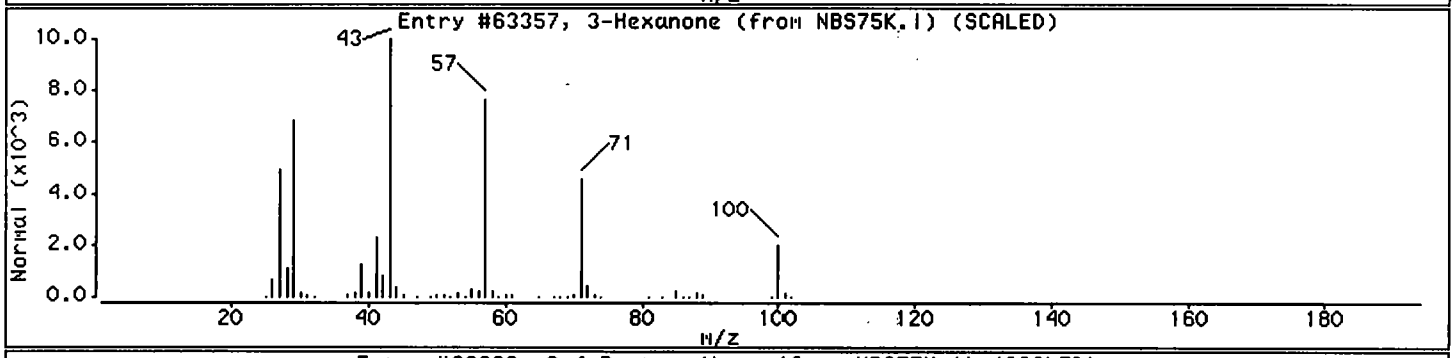
Volume Injected (uL): 2.0 Operator: GES

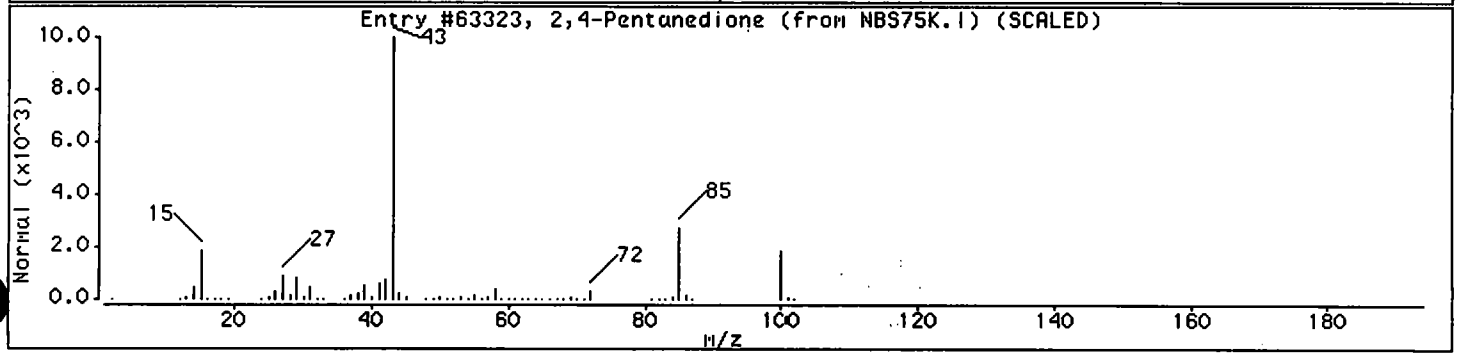
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.l	5145	42	C9H20	128
3-Hexanone	589-38-8	NBS75K.l	63357	40	C6H12O	100
2,4-Pentanedione	123-54-6	NBS75K.l	63323	37	C5H8O2	100









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

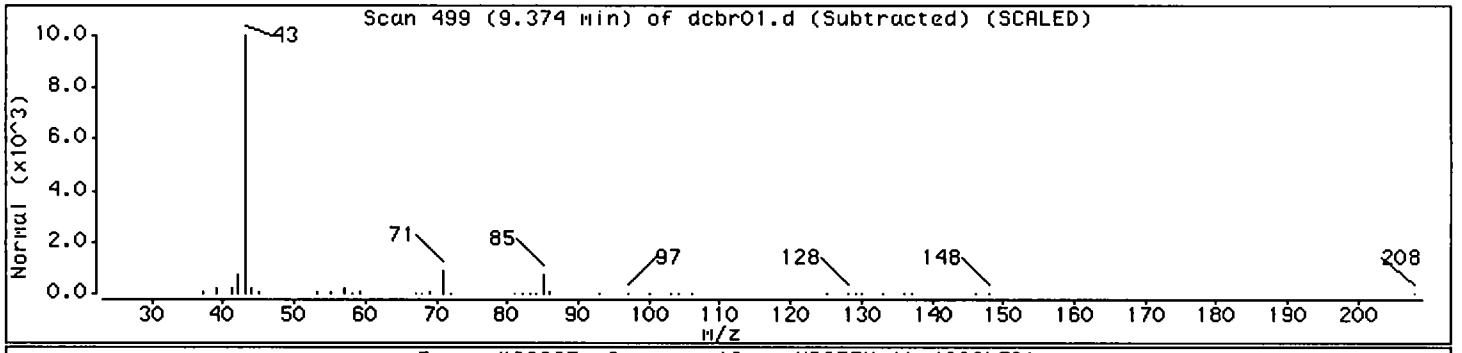
Client ID: WS-04 Instrument: gc14.i

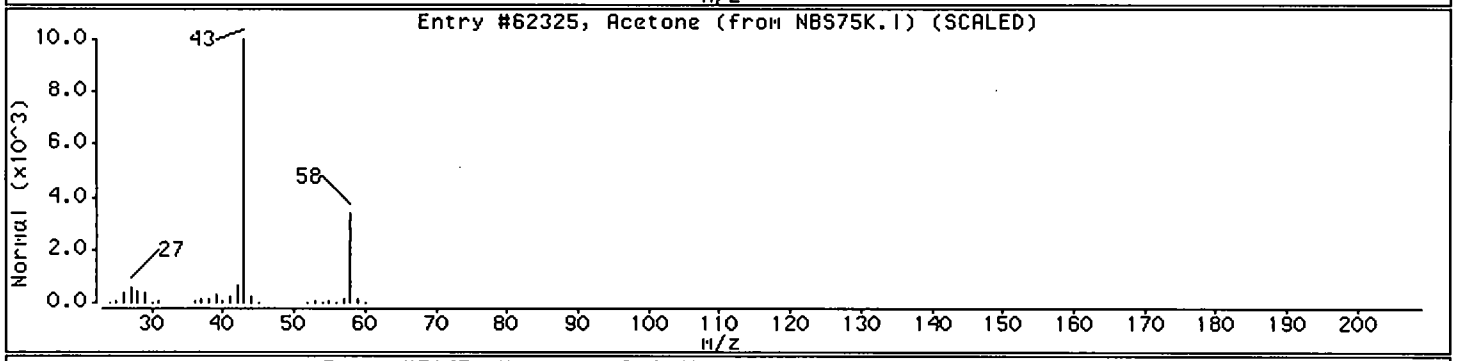
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

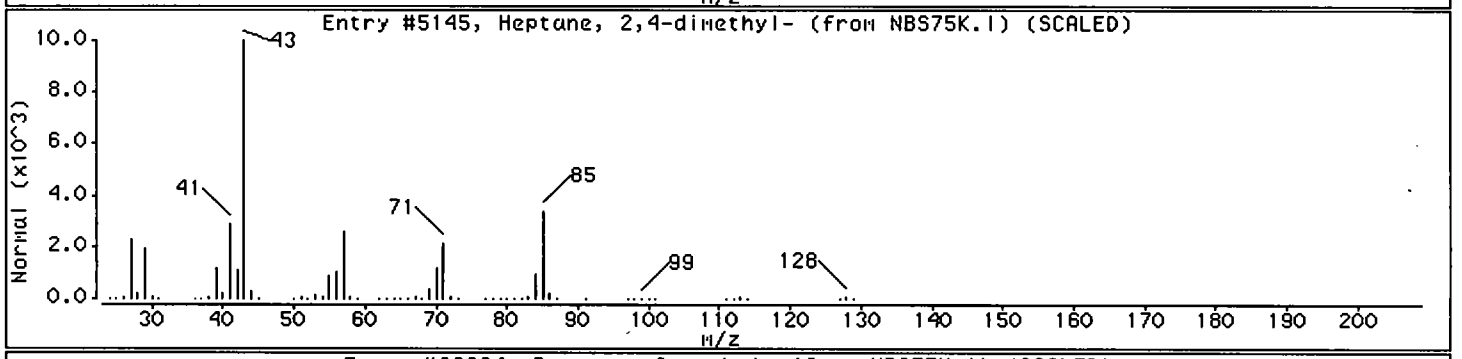
Volume Injected (uL): 2.0 Operator: GES

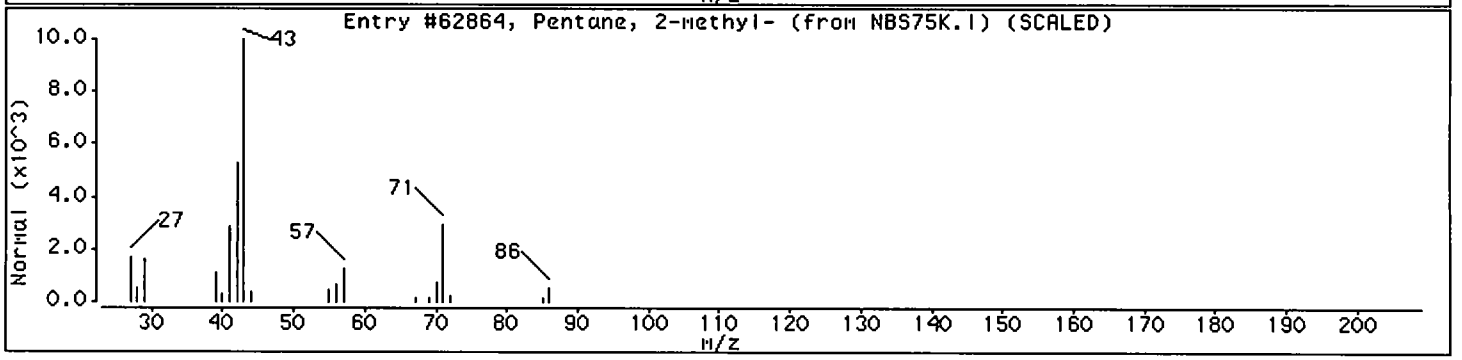
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
Acetone	67-64-1	NBS75K.l	62325	9	C3H6O	58
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.l	5145	4	C9H20	128
Pentane, 2-methyl-	107-83-5	NBS75K.l	62864	4	C6H14	86









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

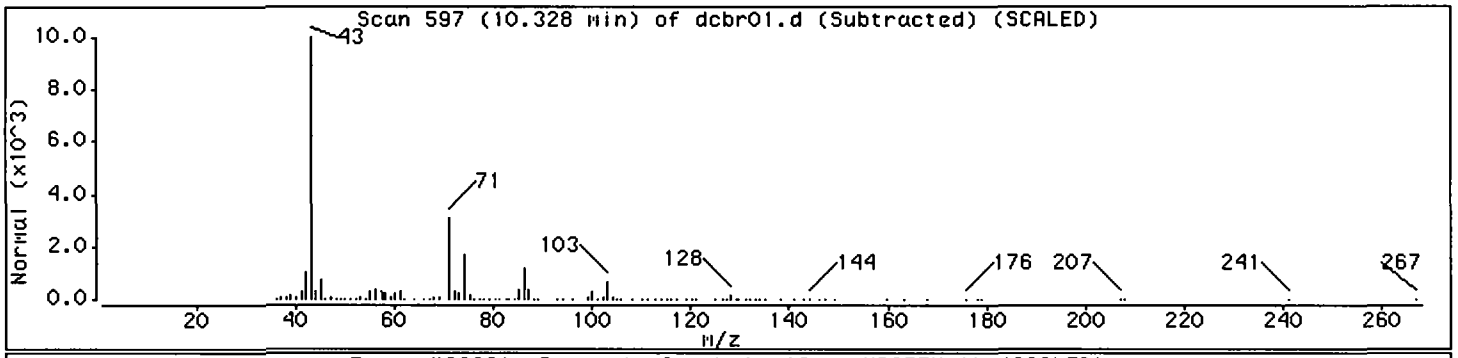
Client ID: WS-04 Instrument: gc14.i

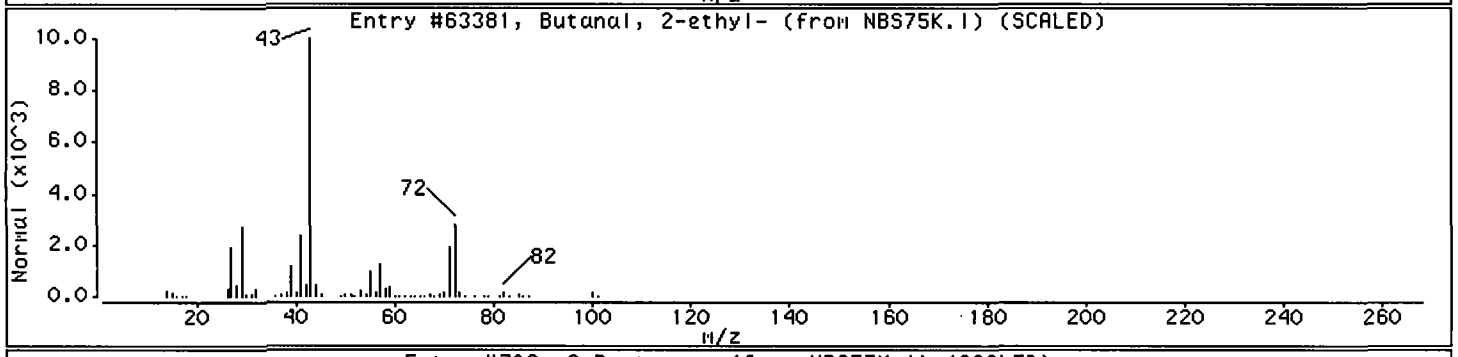
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

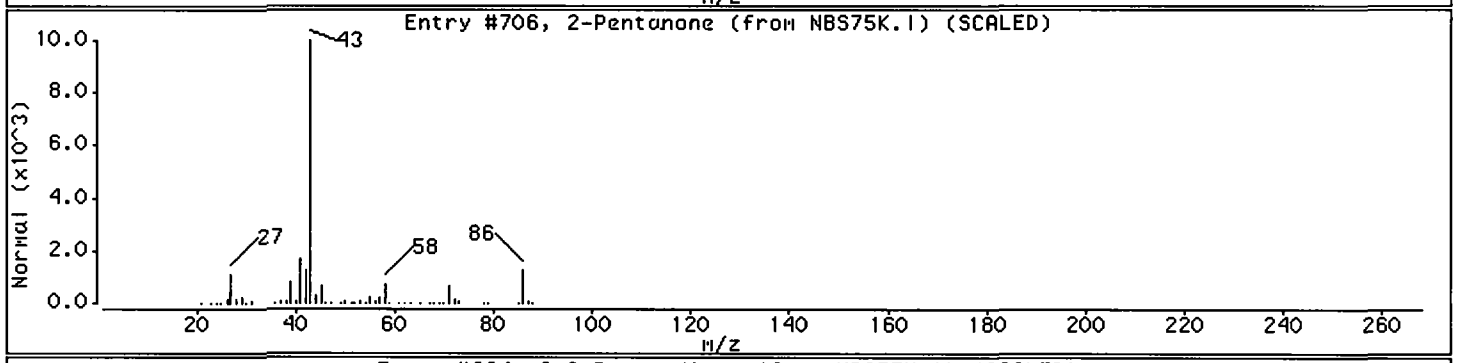
Volume Injected (uL): 2.0 Operator: GES

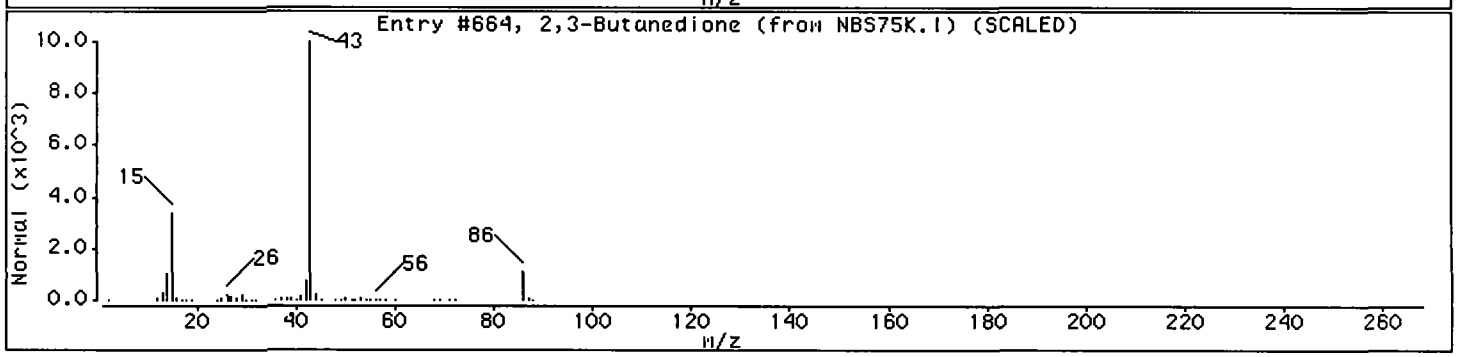
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Butanal, 2-ethyl-	97-96-1	NBS75K.l	63381	37	C6H12O	100
2-Pentanone	107-87-9	NBS75K.l	706	25	C5H10O	86
2,3-Butanedione	431-03-8	NBS75K.l	664	25	C4H6O2	86









Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

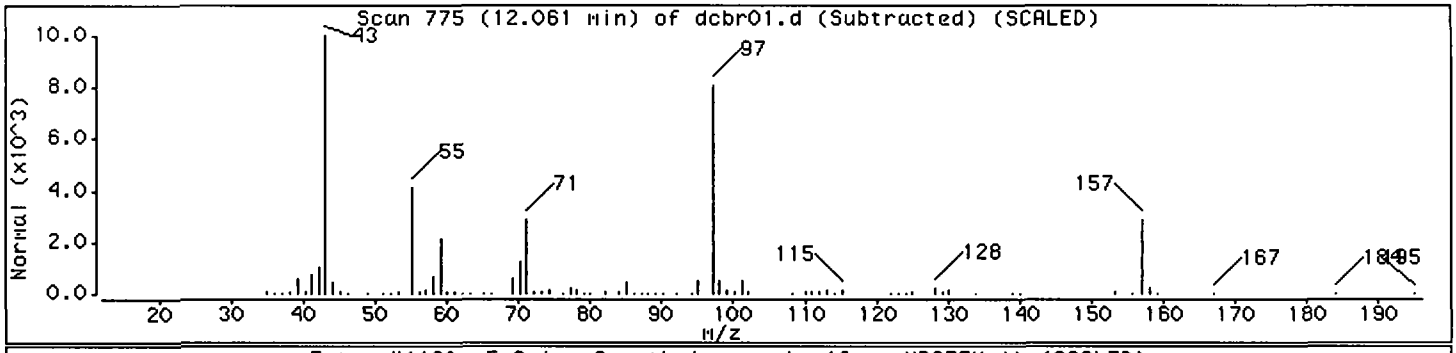
Client ID: WS-04 Instrument: gcl4.i

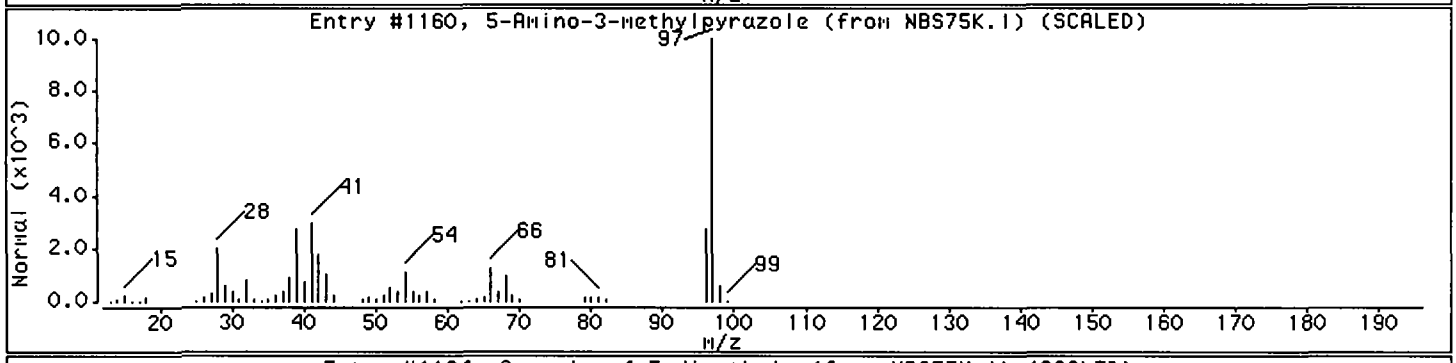
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

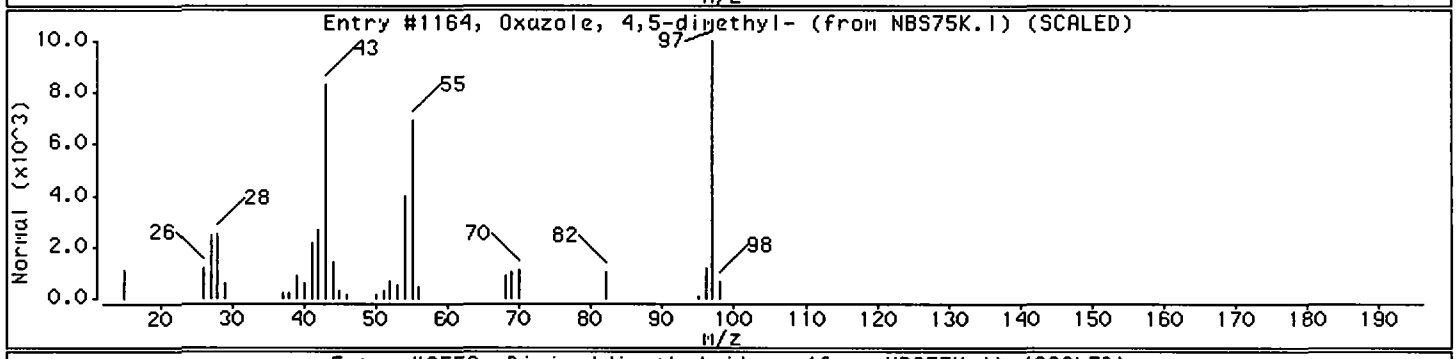
Volume Injected (uL): 2.0 Operator: GES

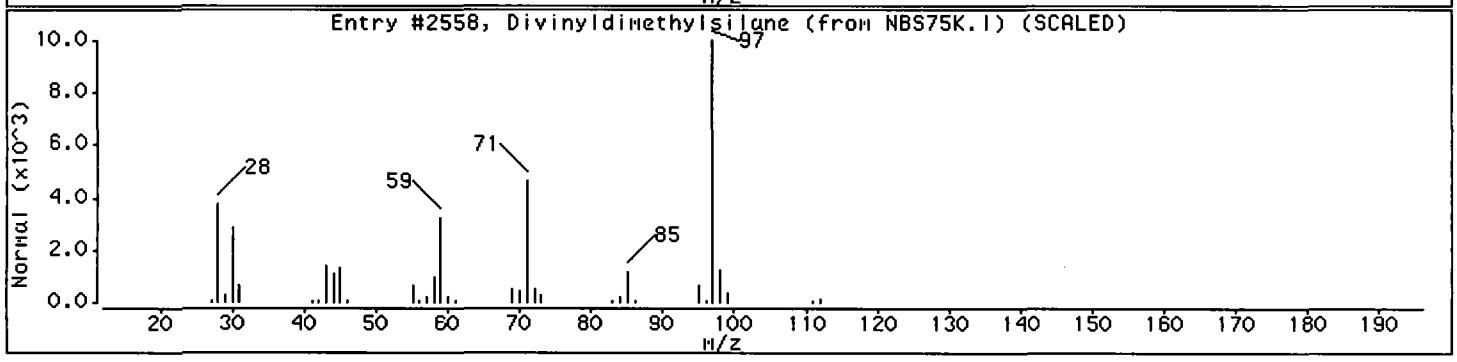
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Amino-3-methylpyrazole	31230-17-8	NBS75K.l	1160	38	C4H7N3	97
Oxazole, 4,5-dimethyl-	20662-83-3	NBS75K.l	1164	37	C5H7NO	97
Divinyldimethylsilane	10519-87-6	NBS75K.l	2558	36	C6H12Si	112









Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

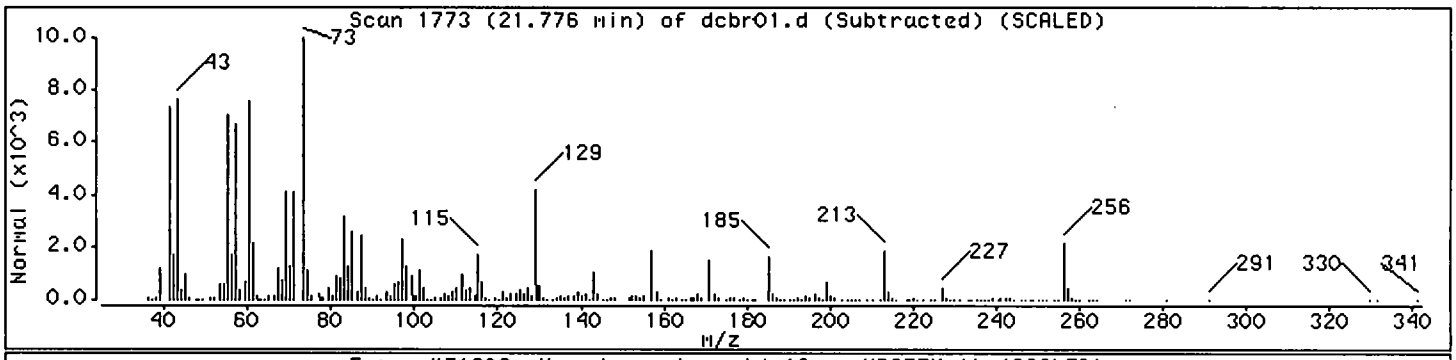
Client ID: WS-04 Instrument: gcl4.i

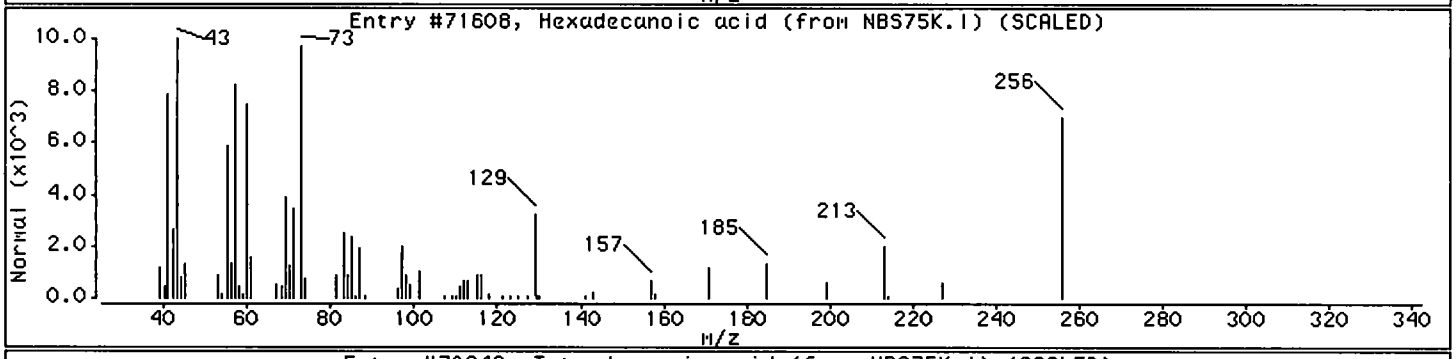
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

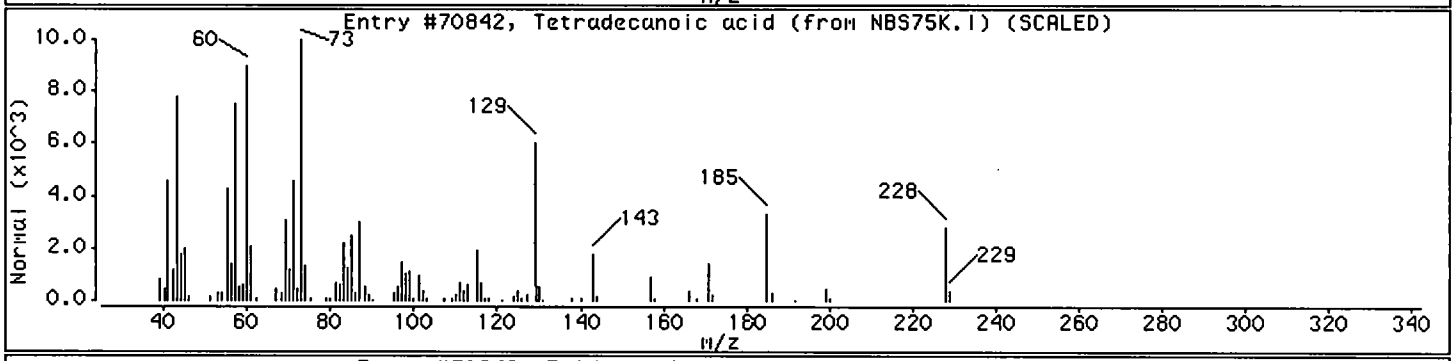
Volume Injected (uL): 2.0 Operator: GES

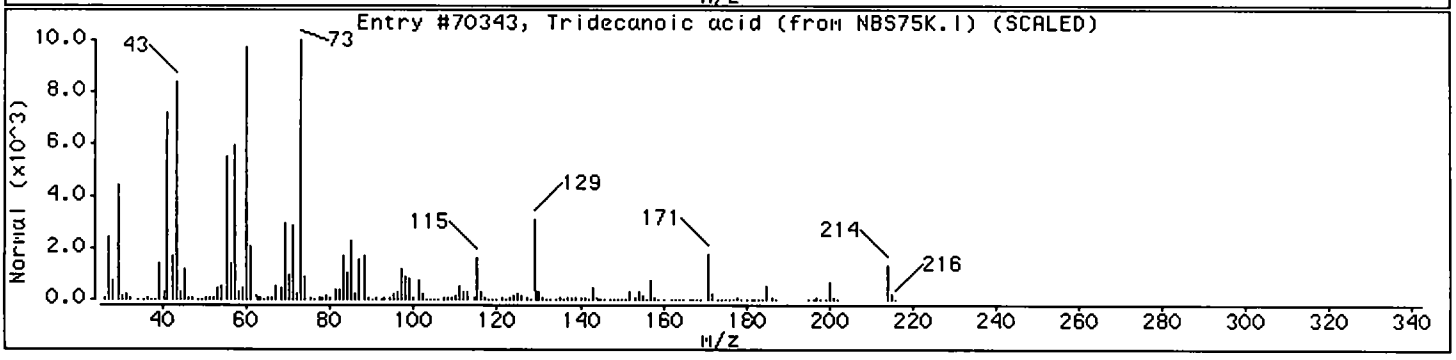
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecanoic acid	57-10-3	NBS75K.l	71608	98	C16H3202	256
Tetradecanoic acid	544-63-8	NBS75K.l	70842	98	C14H2802	228
Tridecanoic acid	638-53-9	NBS75K.l	70343	90	C13H2602	214









Data File: /chem/gc14.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

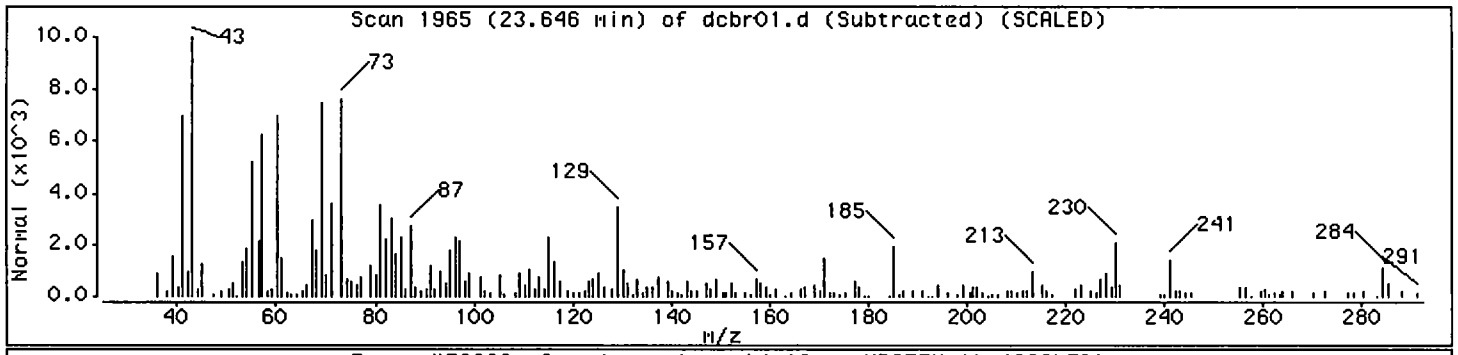
Client ID: WS-04 Instrument: gc14.i

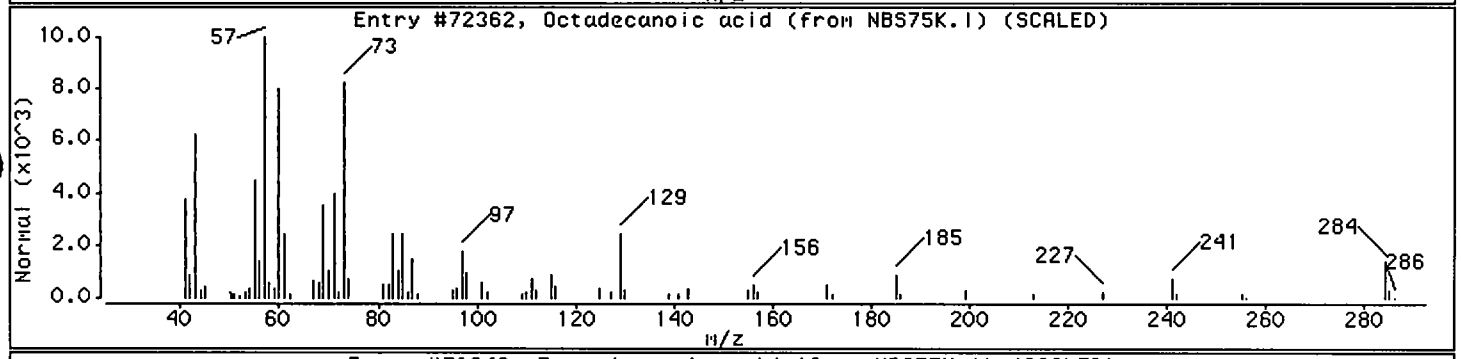
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

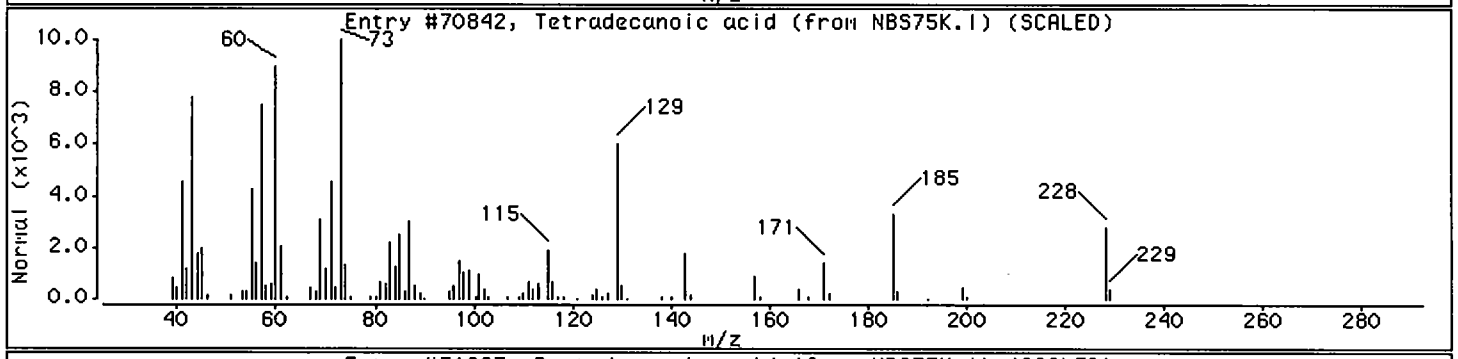
Volume Injected (uL): 2.0 Operator: GES

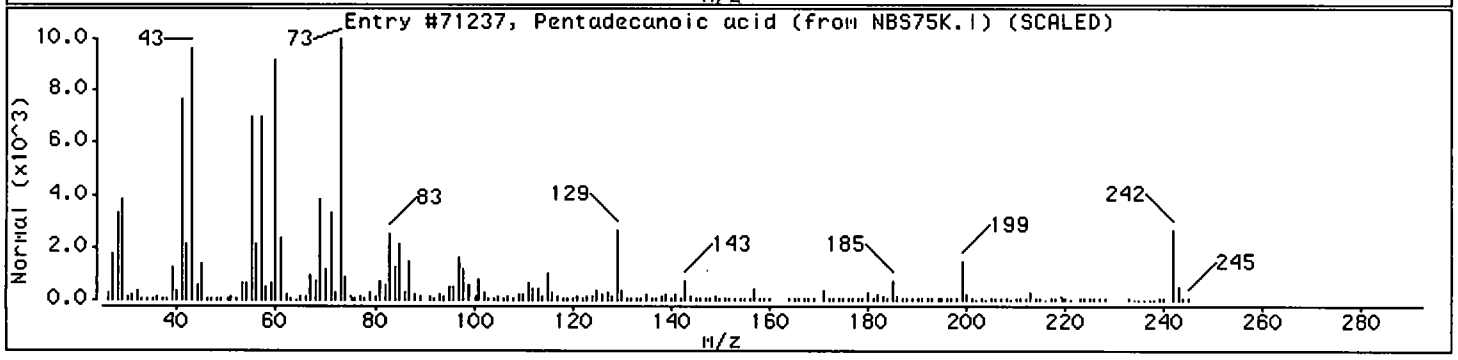
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown acid						
Octadecanoic acid	57-11-4	NBS75K.l	72362	86	C18H36O2	284
Tetradecanoic acid	544-63-8	NBS75K.l	70842	66	C14H28O2	228
Pentadecanoic acid	1002-84-2	NBS75K.l	71237	41	C15H30O2	242









Data File: /chem/gcl4.i/dec1296b.b/dcbr01.d

Date : 12-DEC-1996 20:00

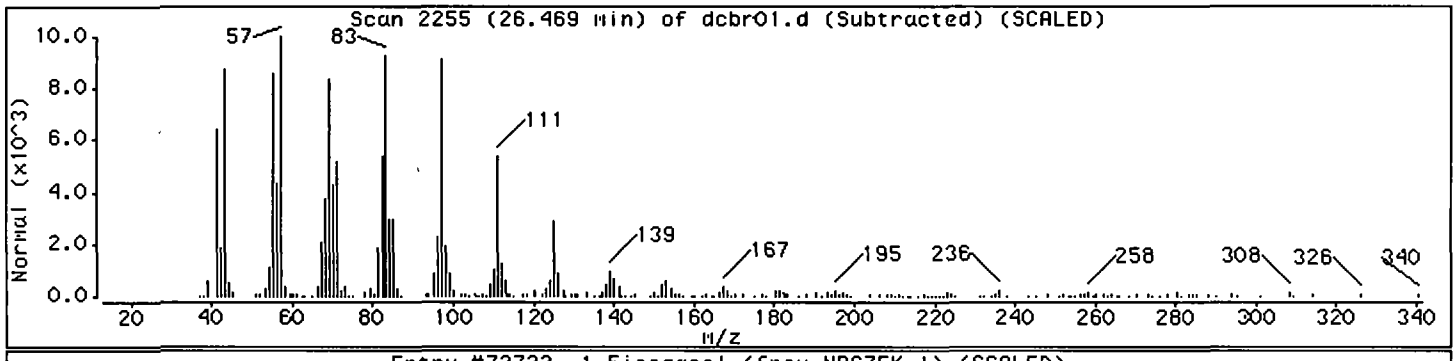
Client ID: WS-04 Instrument: gcl4.i

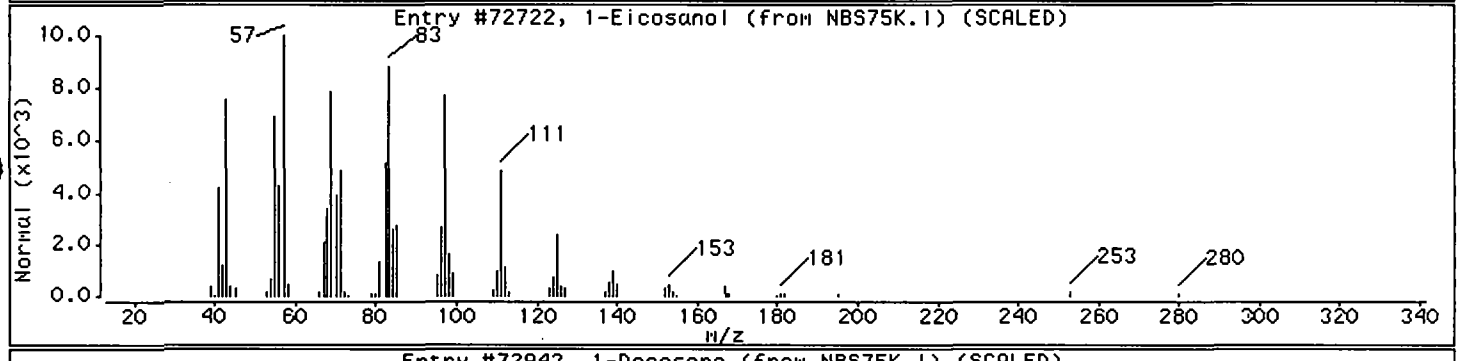
Sample Info: 9611G675-004 DFBC12,[AL=0625HS],[DC=00]

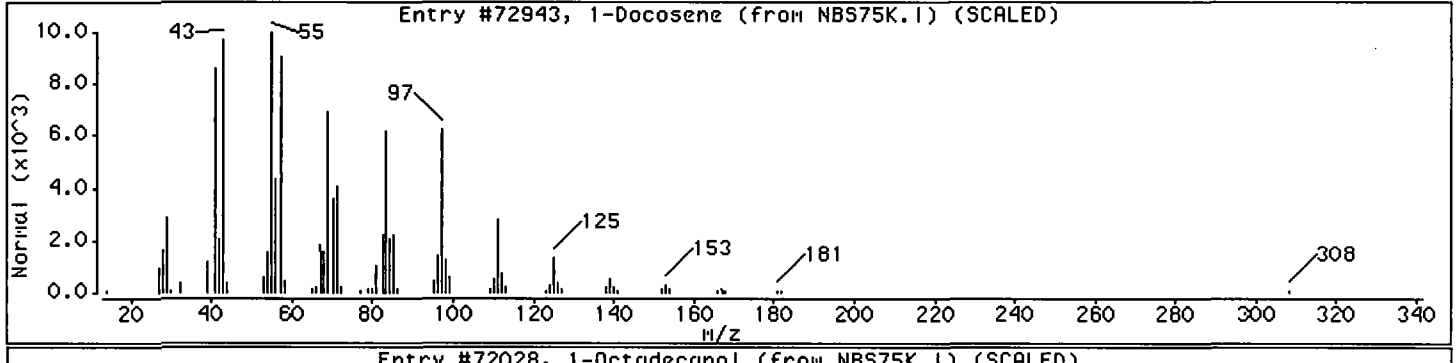
Volume Injected (uL): 2.0 Operator: GES

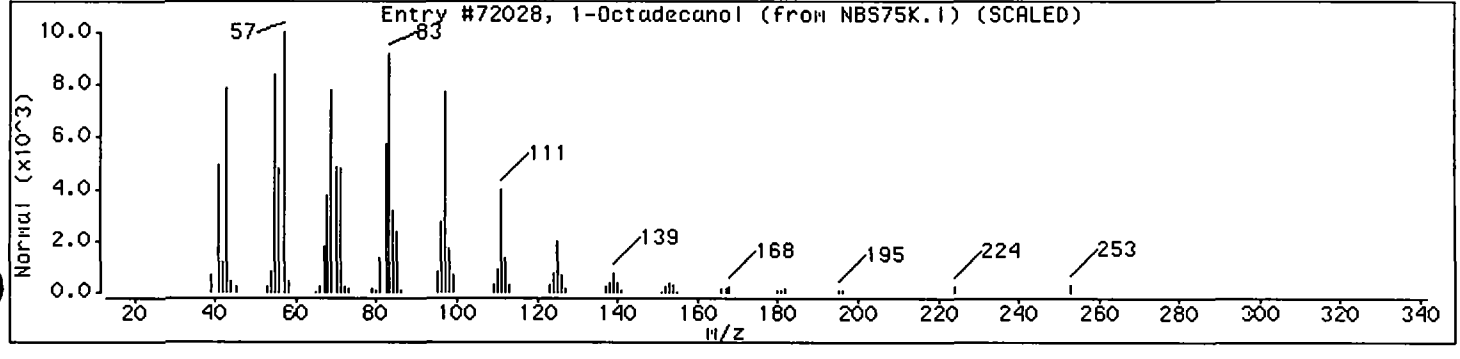
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Eicosanol	629-96-9	NBS75K.l	72722	95	C20H42O	298
1-Docosene	1599-67-3	NBS75K.l	72943	93	C22H44	308
1-Octadecanol	112-92-5	NBS75K.l	72028	93	C18H38O	270









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-05

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-005

Sample wt/vol: 5.1 (g/mL) G Lab File ID: DCBR07

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 28 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 125.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340000	U
111-44-4	bis(2-Chloroethyl)ether	340000	U
95-57-8	2-Chlorophenol	340000	U
541-73-1	1,3-Dichlorobenzene	340000	U
106-46-7	1,4-Dichlorobenzene	340000	U
95-50-1	1,2-Dichlorobenzene	340000	U
95-48-7	2-Methylphenol	340000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	340000	U
106-44-5	4-Methylphenol	340000	U
621-64-7	N-Nitroso-di-n-propylamine	340000	U
67-72-1	Hexachloroethane	340000	U
98-95-3	Nitrobenzene	340000	U
78-59-1	Isophorone	340000	U
88-75-5	2-Nitrophenol	340000	U
105-67-9	2,4-Dimethylphenol	340000	U
111-91-1	bis(2-Chloroethoxy)methane	340000	U
120-83-2	2,4-Dichlorophenol	340000	U
120-82-1	1,2,4-Trichlorobenzene	340000	U
91-20-3	Naphthalene	300000	J
106-47-8	4-Chloroaniline	340000	U
87-68-3	Hexachlorobutadiene	340000	U
59-50-7	4-Chloro-3-methylphenol	340000	U
91-57-6	2-Methylnaphthalene	1400000	
77-47-4	Hexachlorocyclopentadiene	340000	U
88-06-2	2,4,6-Trichlorophenol	340000	U
95-95-4	2,4,5-Trichlorophenol	860000	U
91-58-7	2-Chloronaphthalene	340000	U
88-74-4	2-Nitroaniline	860000	U
131-11-3	Dimethylphthalate	340000	U
208-96-8	Acenaphthylene	340000	U
606-20-2	2,6-Dinitrotoluene	340000	U
99-09-2	3-Nitroaniline	860000	U
83-32-9	Acenaphthene	66000	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-05

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-005

Sample wt/vol: 5.1 (g/mL) G Lab File ID: DCBR07

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 28 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 125.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	860000	U
100-02-7	4-Nitrophenol	860000	U
132-64-9	Dibenzofuran	340000	U
121-14-2	2,4-Dinitrotoluene	340000	U
84-66-2	Diethylphthalate	340000	U
7005-72-3	4-Chlorophenyl-phenylether	340000	U
86-73-7	Fluorene	140000	J
100-01-6	4-Nitroaniline	860000	U
534-52-1	4,6-Dinitro-2-methylphenol	860000	U
86-30-6	n-Nitrosodiphenylamine (1)	340000	U
101-55-3	4-Bromophenyl-phenylether	340000	U
118-74-1	Hexachlorobenzene	340000	U
87-86-5	Pentachlorophenol	860000	U
85-01-8	Phenanthrene	520000	
120-12-7	Anthracene	70000	J
86-74-8	Carbazole	340000	U
84-74-2	Di-n-butylphthalate	340000	U
206-44-0	Fluoranthene	340000	U
129-00-0	Pyrene	230000	J
85-68-7	Butylbenzylphthalate	340000	U
91-94-1	3,3'-Dichlorobenzidine	340000	U
56-55-3	Benzo(a)anthracene	340000	U
218-01-9	Chrysene	340000	U
117-81-7	bis(2-Ethylhexyl)phthalate	340000	U
117-84-0	Di-n-octylphthalate	340000	U
205-99-2	Benzo(b)fluoranthene	340000	U
207-08-9	Benzo(k)fluoranthene	340000	U
50-32-8	Benzo(a)pyrene	340000	U
193-39-5	Indeno(1,2,3-cd)pyrene	340000	U
53-70-3	Dibenzo(a,h)anthracene	340000	U
191-24-2	Benzo(g,h,i)perylene	340000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-05

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-005

Sample wt/vol: 5.1 (g/mL) G Lab File ID: DCBR07

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 28 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 125.0

GPC Cleanup: (Y/N) Y pH: 6.0

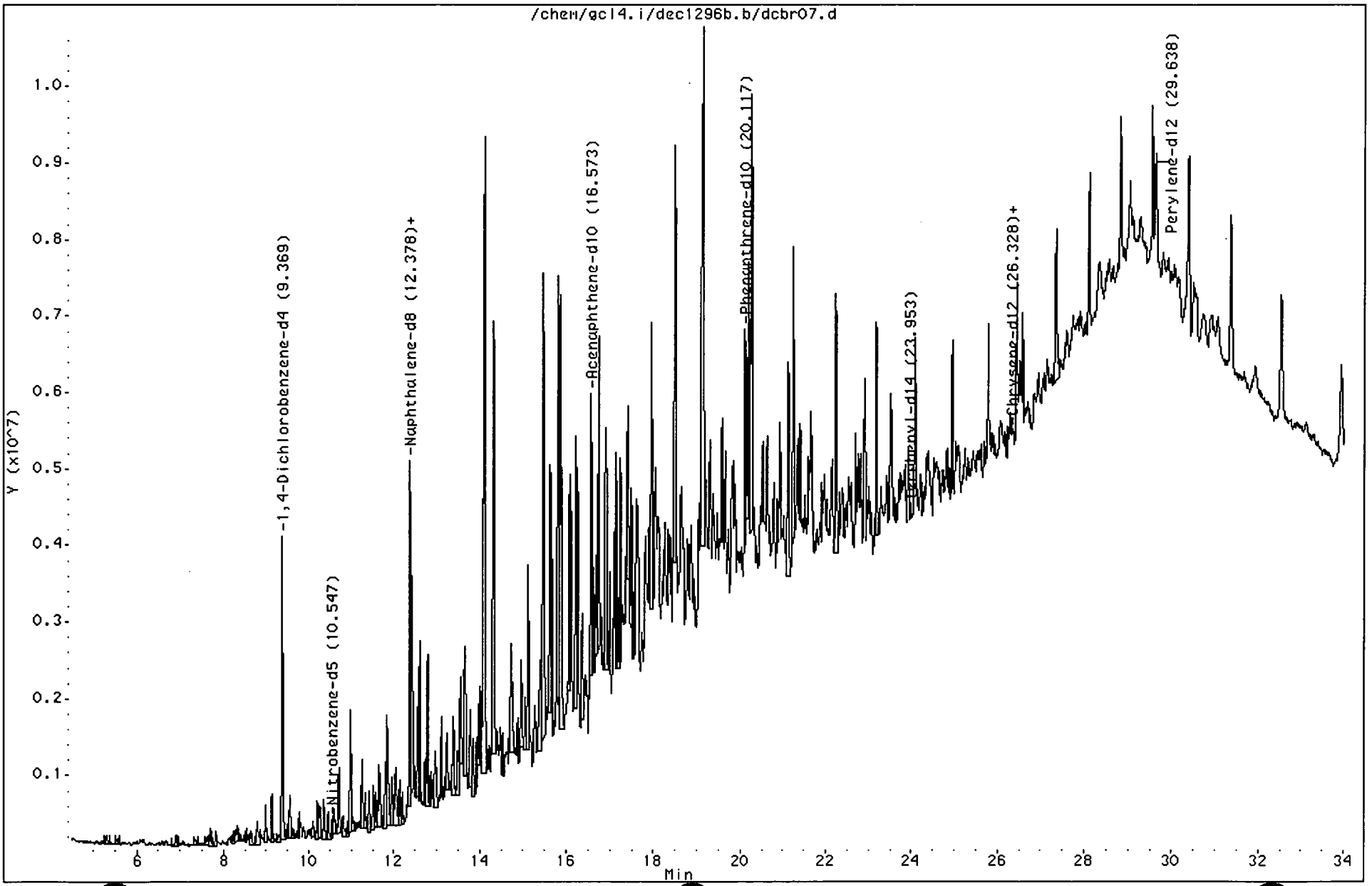
Number TICs found: 20

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN ALKANE	12.60	250000	J
2.		UNKNOWN ALKANE	12.80	250000	J
3.		UNKNOWN ALKANE	13.66	310000	J
4.		SUBST. NAPHTHALENE	14.12	1500000	J
5.		SUBST. NAPHTHALENE	14.33	930000	J
6.		UNKNOWN	14.73	420000	J
7.		UNKNOWN ALKANE	15.12	470000	J
8.		SUBST BENZENE	15.40	400000	J
9.		SUBST NAPHTHALENE	15.81	1500000	J
10.		SUBST NAPHTHALENE	15.87	1400000	J
11.		UNKNOWN ALKANE	16.23	960000	J
12.		SUBST NAPHTHALENE	16.91	1200000	J
13.		SUBST NAPHTHALENE	17.41	480000	J
14.		SUBST NAPHTHALENE	17.47	360000	J
15.		UNKNOWN ALKANE	17.52	360000	J
16.		UNKNOWN ALKANE	20.27	1500000	J
17.		UNKNOWN ALKANE	21.12	910000	J
18.		UNKNOWN ALKANE	21.25	880000	J
19.		UNKNOWN ALKANE	22.23	850000	J
20.		UNKNOWN HYDROCARBON	27.36	680000	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d
Date : 13-DEC-1996 00:12
Client ID: WS-05
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr07.d
Lab Smp Id: 9611G675-005 Client Smp ID: WS-05
Inj Date : 13-DEC-1996 00:12
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-005 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.25.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 7
Dil Factor: 125.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.100	Weigth of sample extracted (g)
M	28.400	% Moisture

12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.369	9.325	(1.000)	1285947	40.000	
* 26 Naphthalene-d8	136.00	12.378	12.323	(1.000)	3949731	40.000	(H)
* 41 Acenaphthene-d10	164.00	16.573	16.500	(1.000)	1879287	40.000	
* 56 Phenanthrene-d10	188.00	20.117	20.014	(1.000)	2483183	40.000	
* 67 Chrysene-d12	240.00	26.445	26.303	(1.000)	1534045	40.000	(H)
* 75 Perylene-d12	264.00	29.638	29.438	(1.000)	1485687	40.000	
42 Acenaphthene	154.00	16.642	16.577	(1.004)	187918	3.878	66378(a)
63 Pyrene	202.00	23.524	23.392	(0.893)	877169	13.214	226160(a)
27 Naphthalene	128.00	12.426	12.372	(1.011)	1566574	17.332	296650(a)
30 2-Methylnaphthalene	142.00	14.120	14.046	(1.149)	4983869	83.090	1422200
47 Fluorene	166.00	17.897	17.814	(1.080)	475948	8.442	144490(a)
57 Phenanthrene	178.00	20.176	20.072	(1.003)	1772597	30.260	517920
58 Anthracene	178.00	20.292	20.189	(1.009)	249462	4.070	69660(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

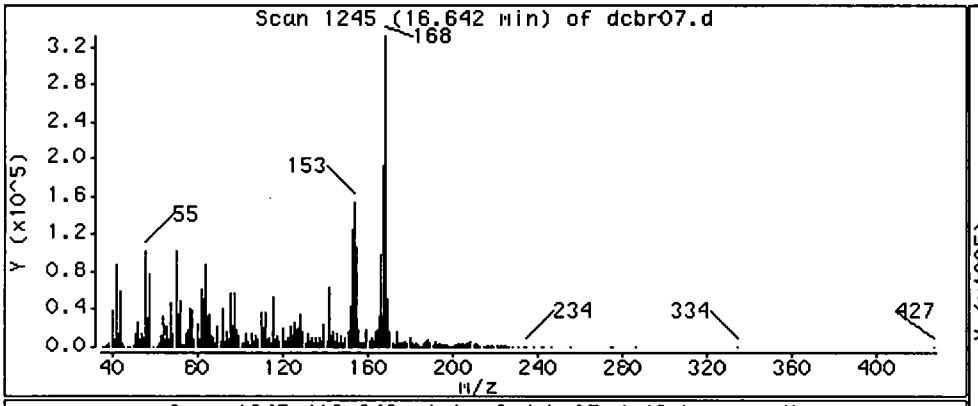
Client ID: WS-05 Instrument: gcl4.i

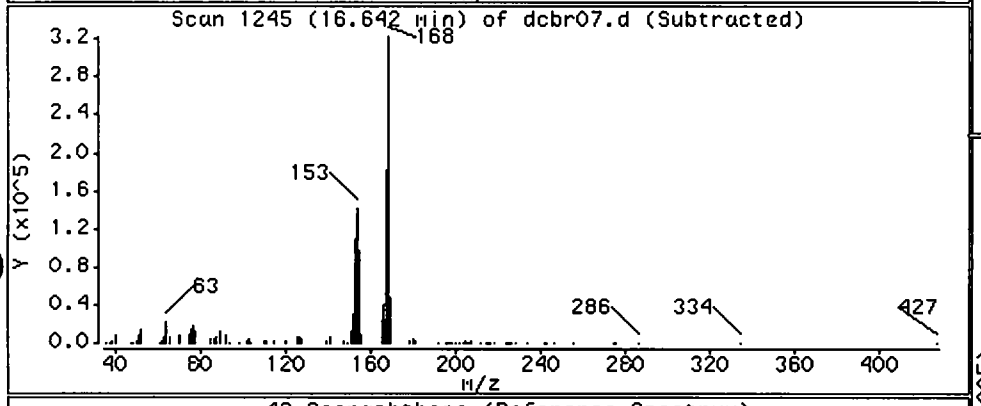
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

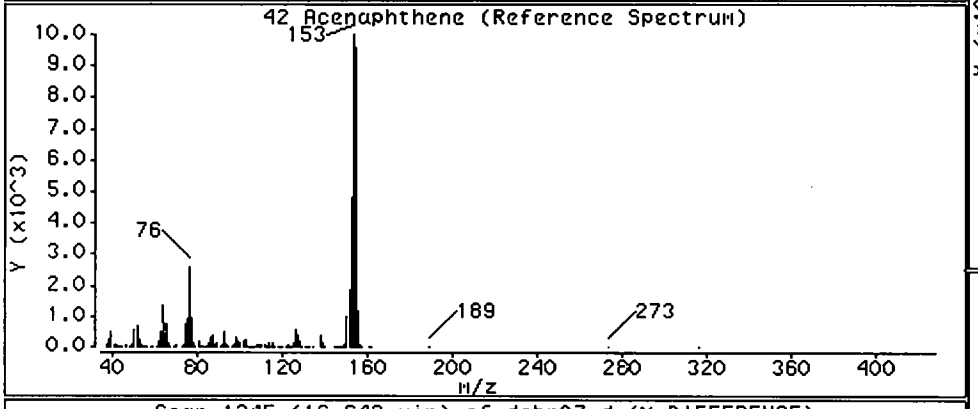
Volume Injected (uL): 2.0 Operator: GES

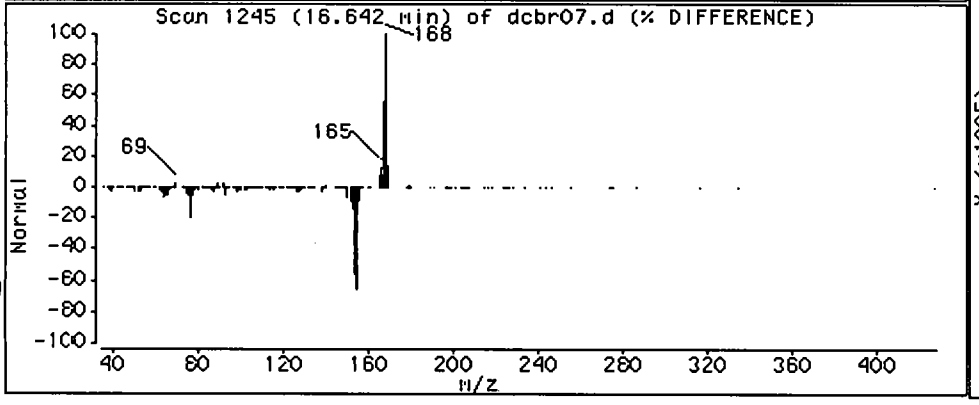
Column phase: Column diameter: 2.00

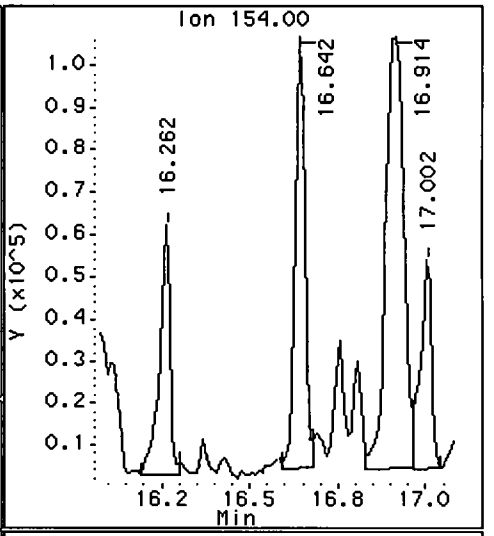
42 Acenaphthene

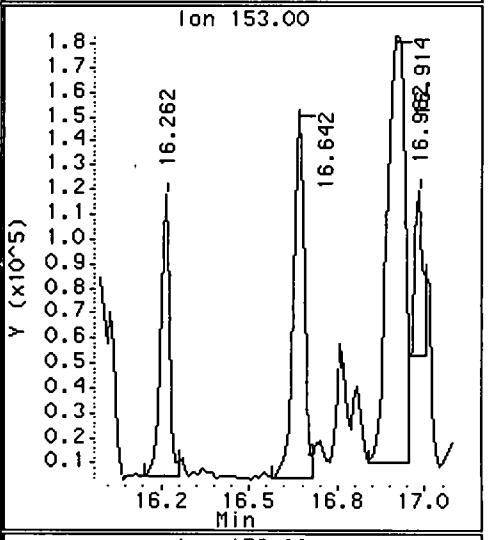


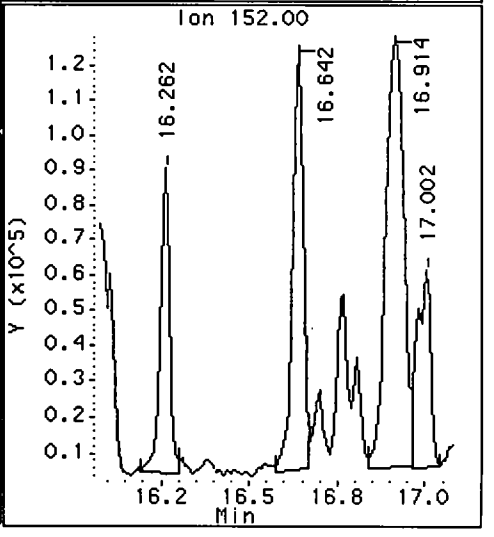












Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

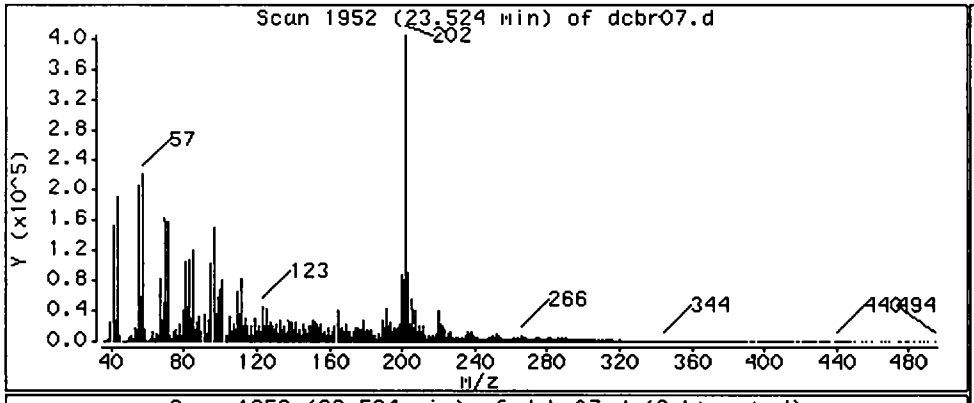
Client ID: WS-05 Instrument: gcl4.i

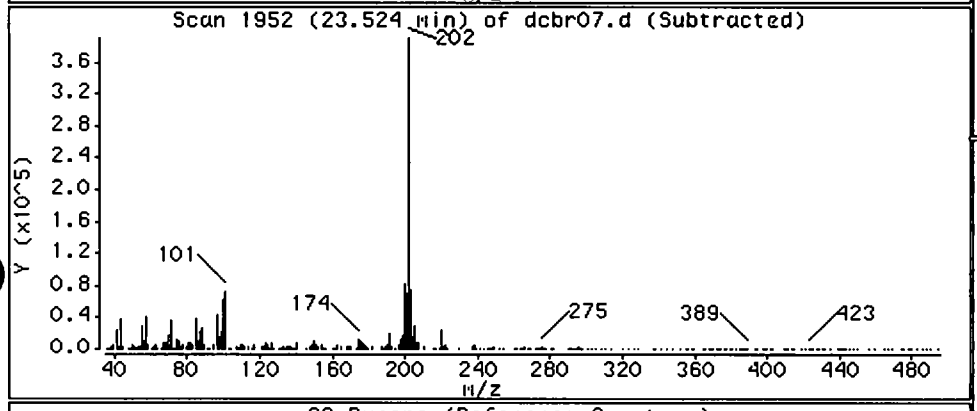
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

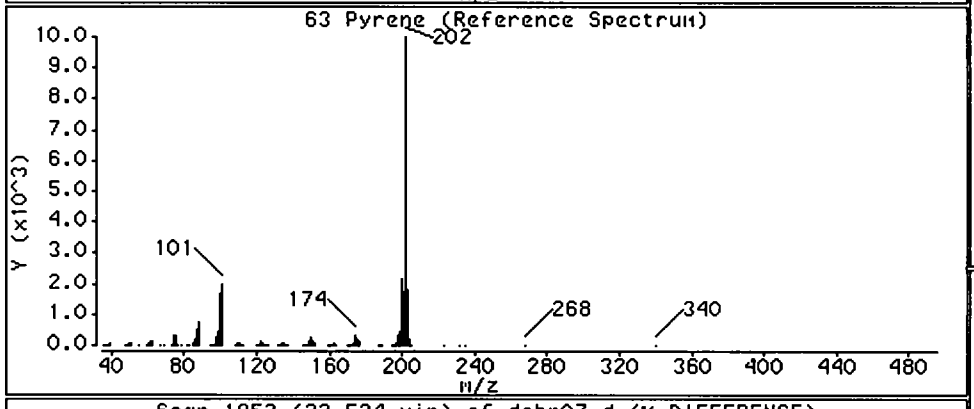
Volume Injected (uL): 2.0 Operator: GES

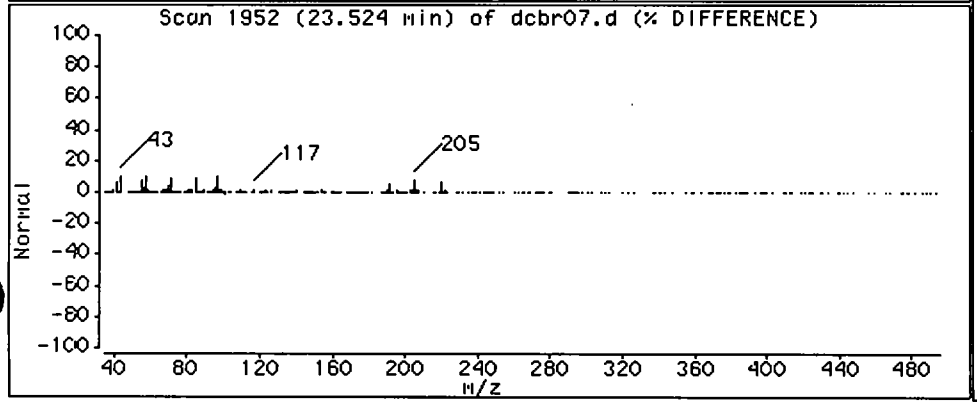
Column phase: Column diameter: 2.00

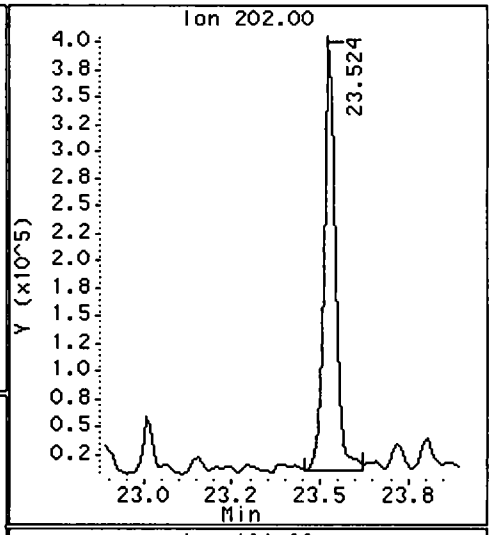
63 Pyrene

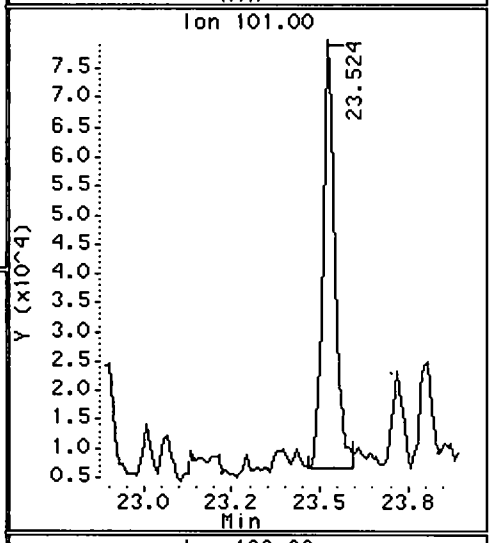


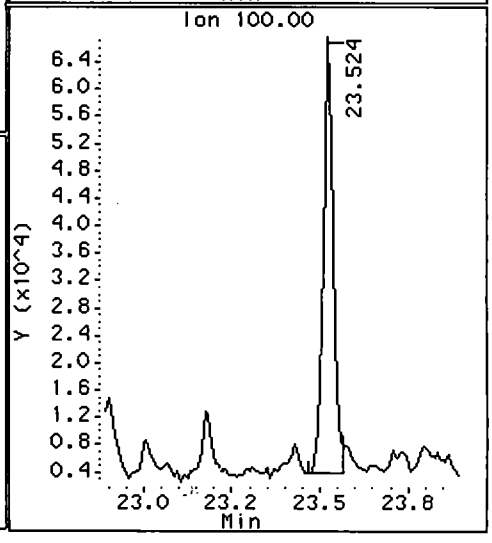












Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

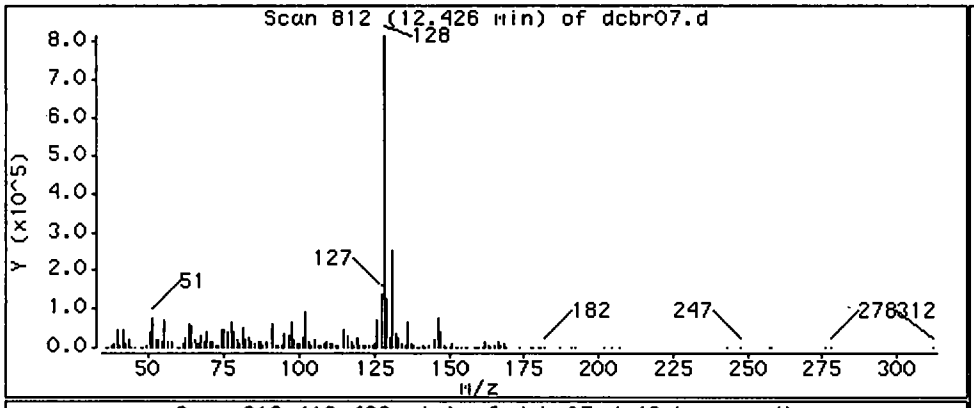
Client ID: WS-05 Instrument: gcl4.i

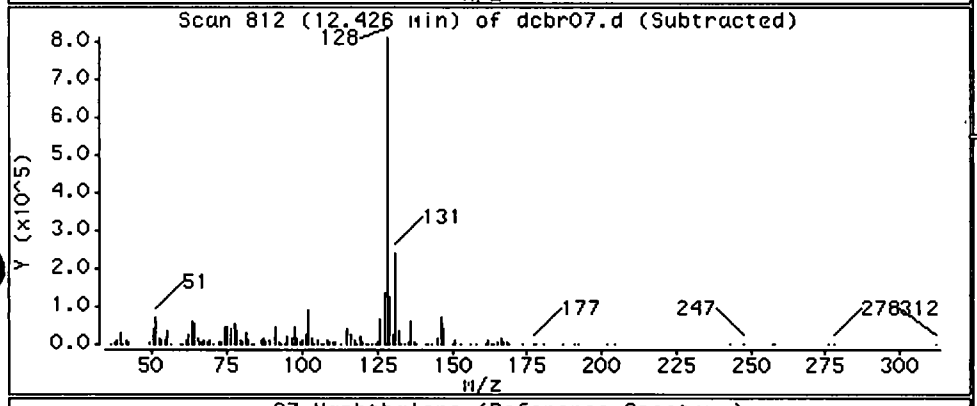
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

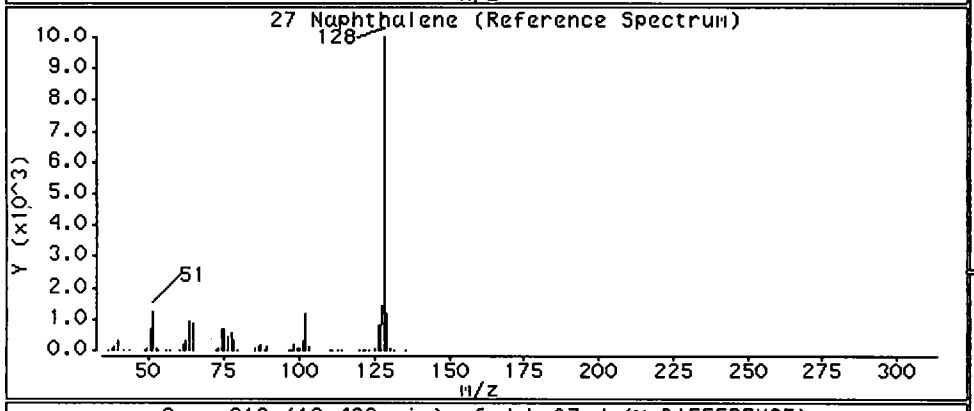
Volume Injected (uL): 2.0 Operator: GES

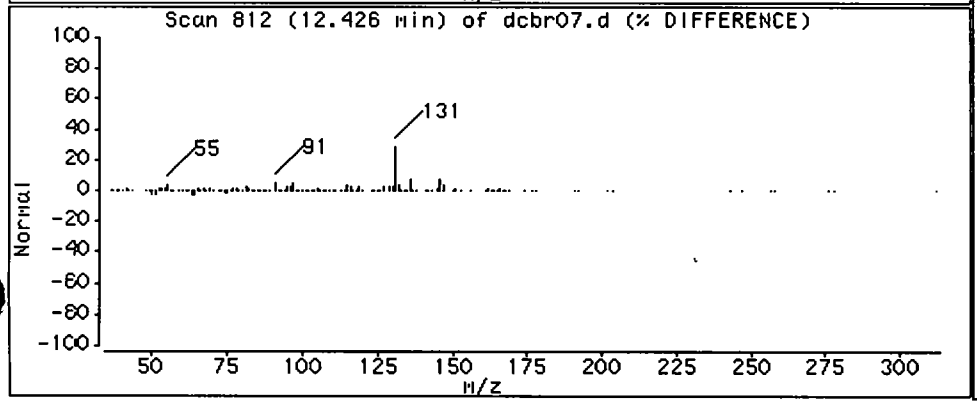
Column phase: Column diameter: 2.00

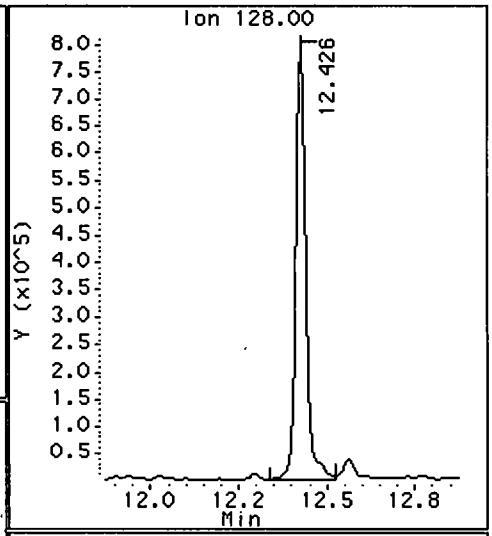
27 Naphthalene

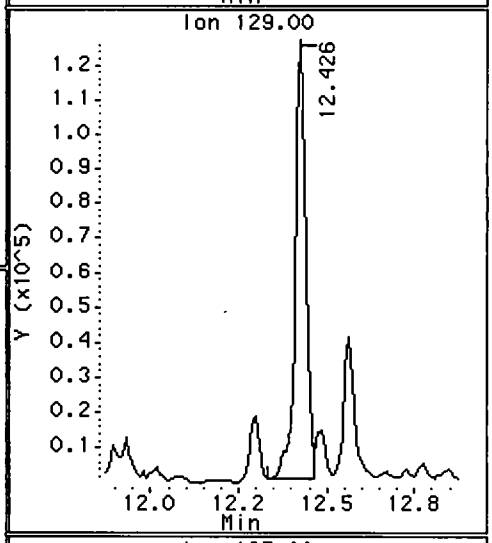


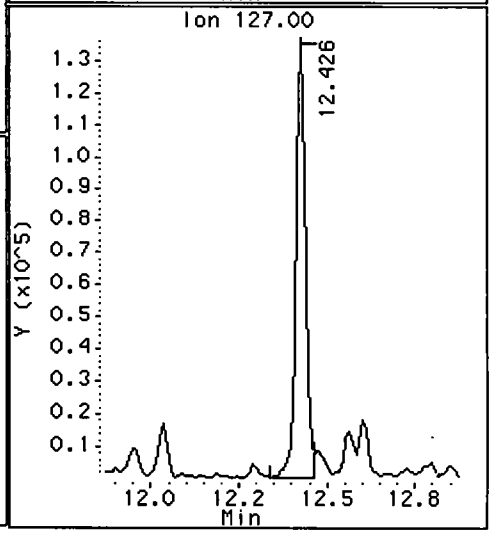












Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

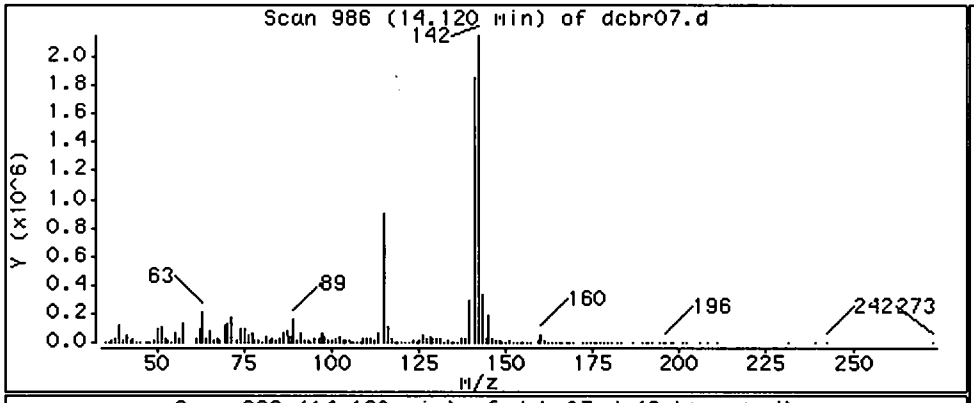
Client ID: WS-05 Instrument: gcl4.i

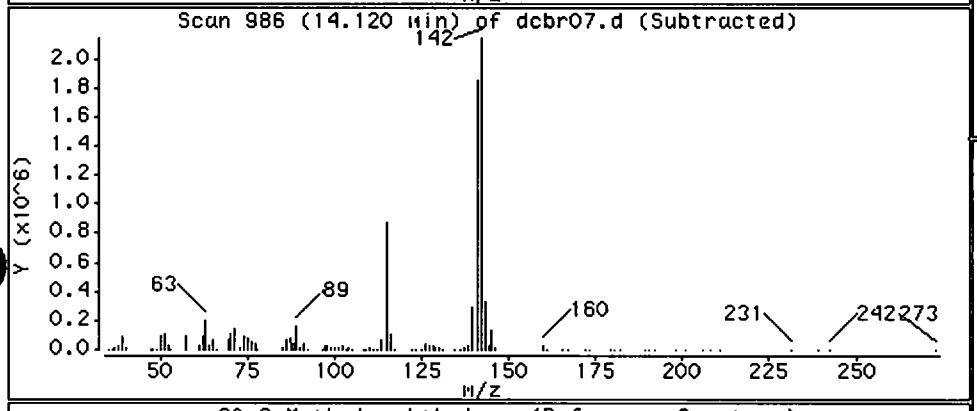
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

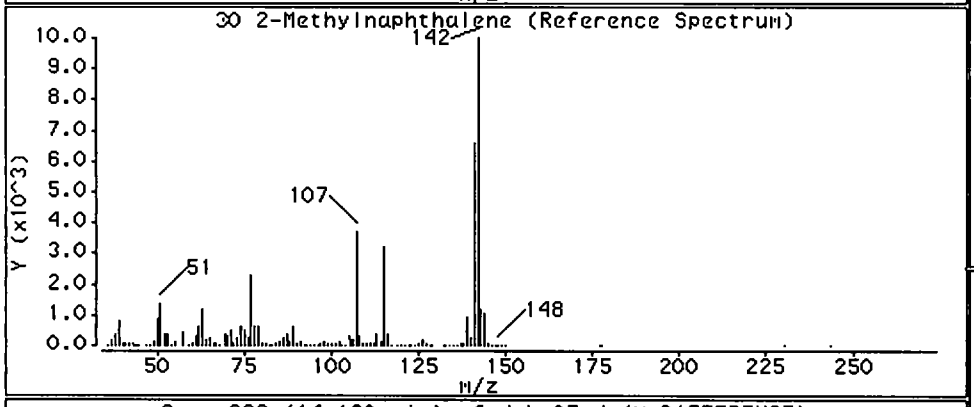
Volume Injected (uL): 2.0 Operator: GES

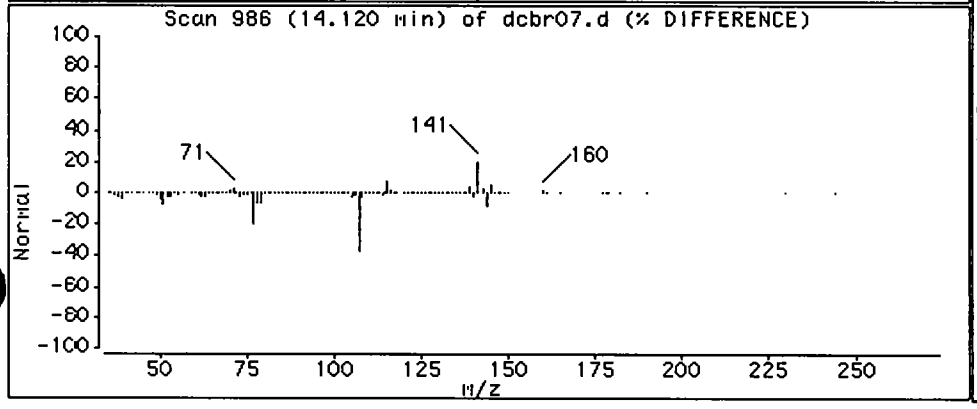
Column phase: Column diameter: 2.00

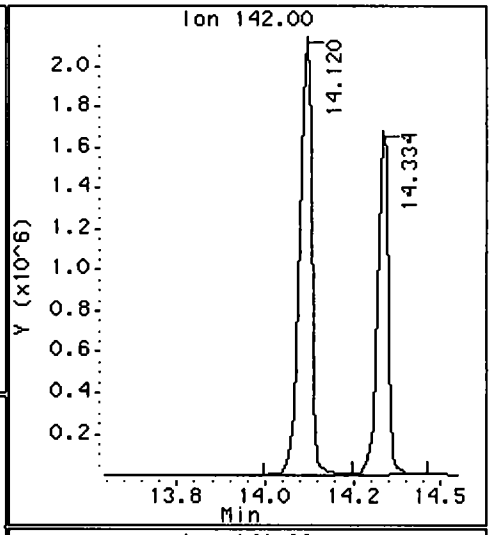
30 2-Methylnaphthalene

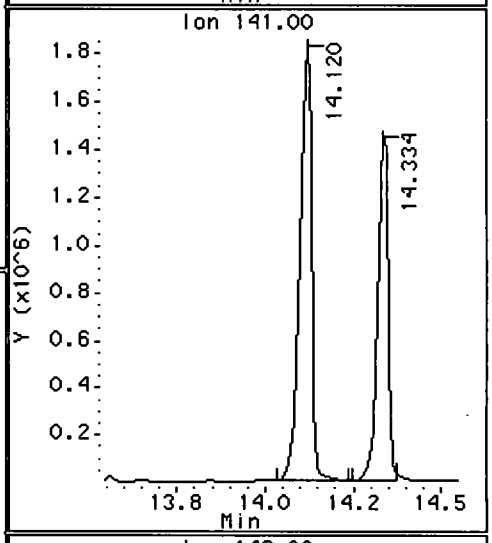


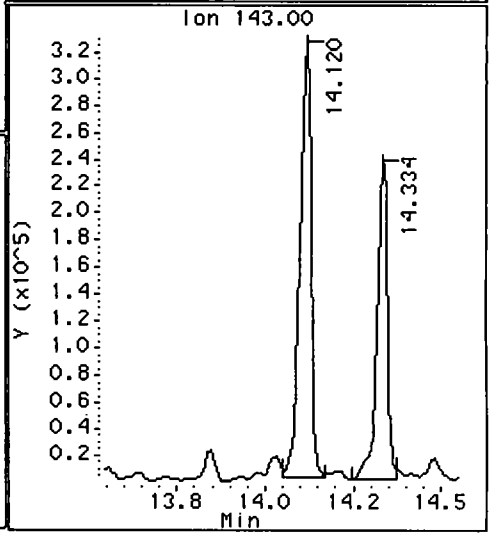












Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

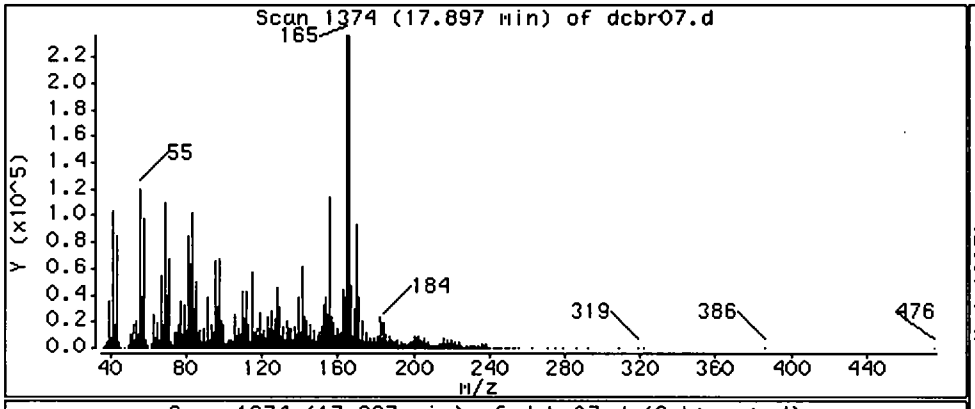
Client ID: WS-05 Instrument: gc14.i

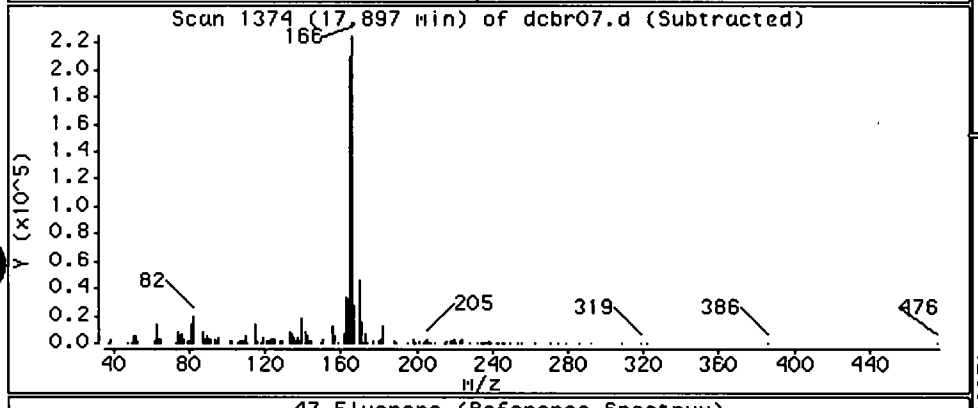
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

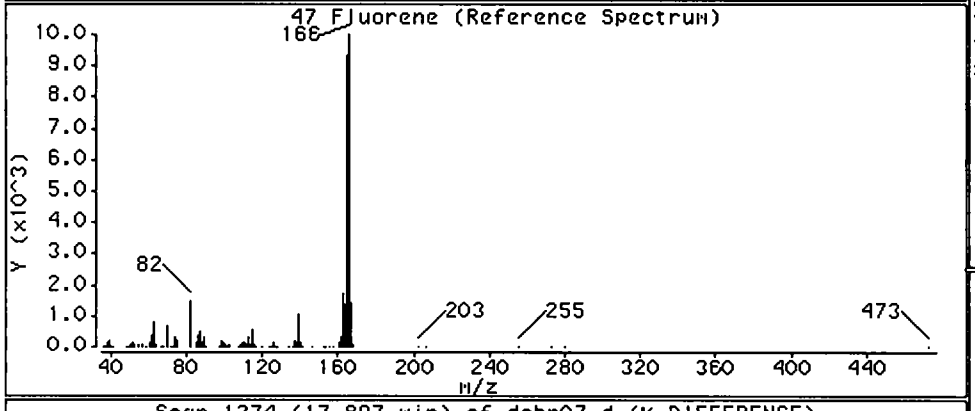
Volume Injected (uL): 2.0 Operator: GES

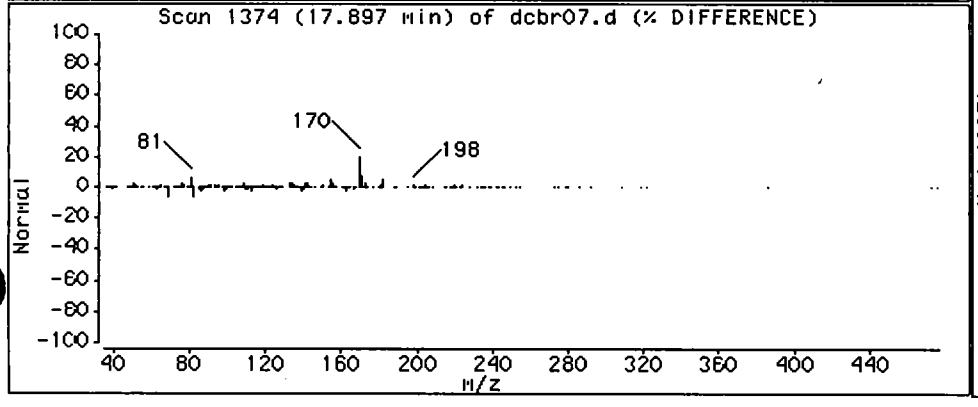
Column phase: Column diameter: 2.00

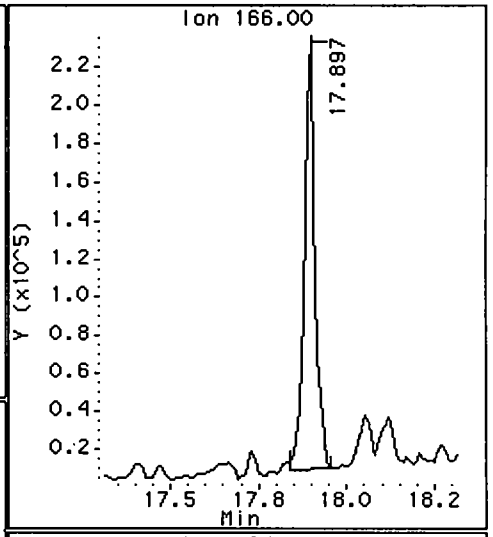
47 Fluorene

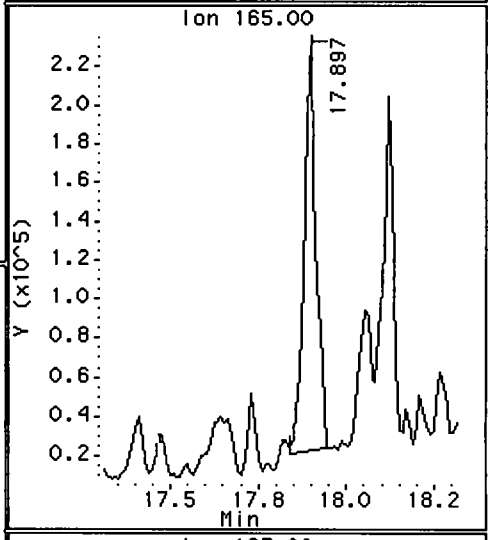


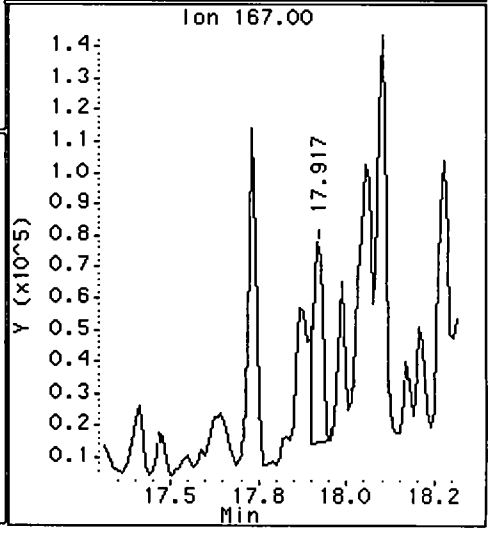












Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

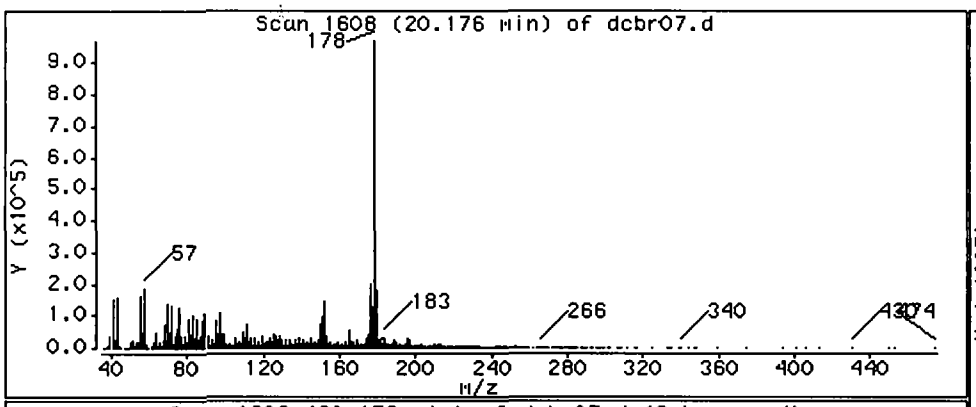
Client ID: WS-05 Instrument: gc14.i

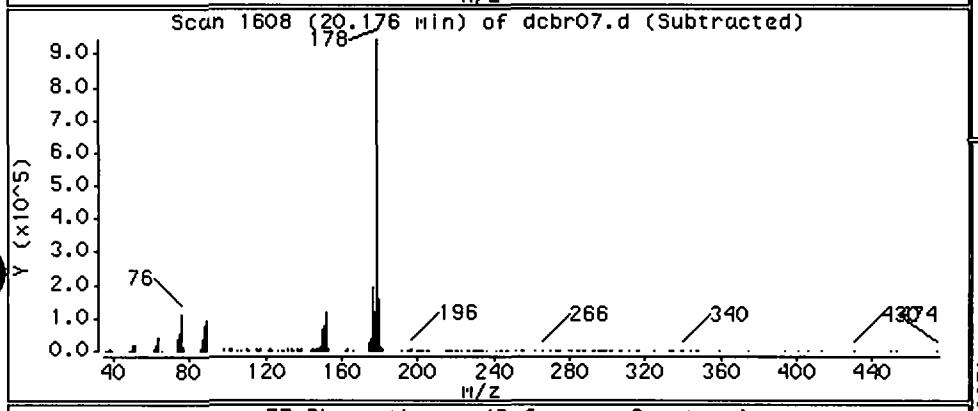
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

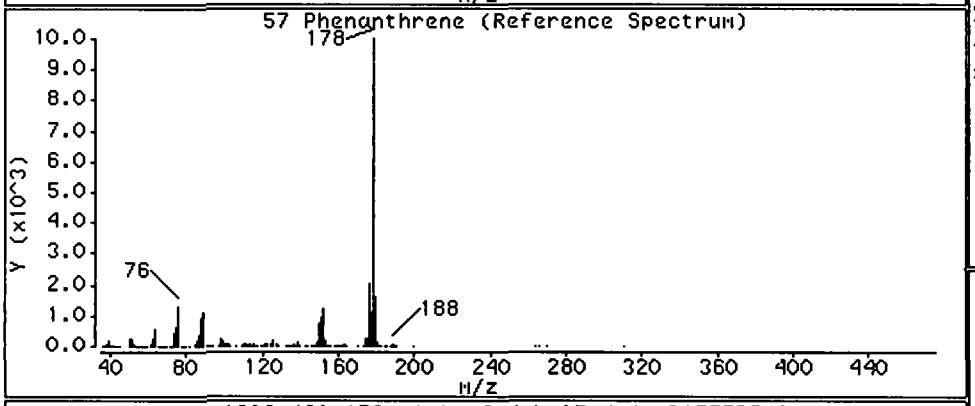
Volume Injected (uL): 2.0 Operator: GES

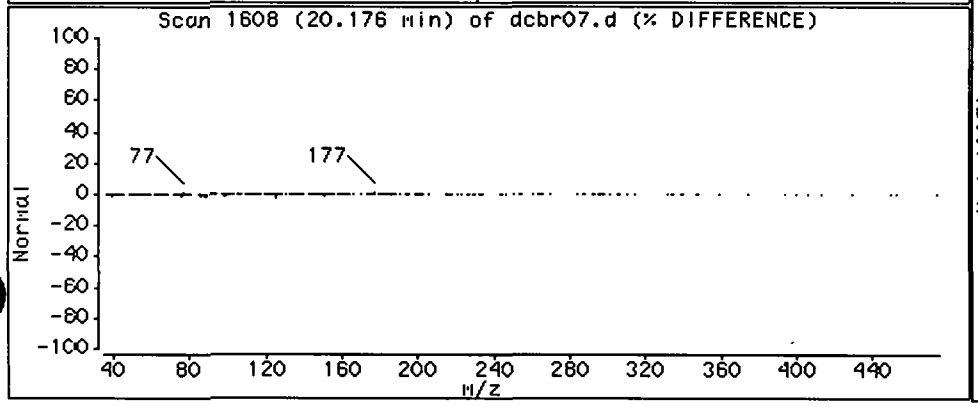
Column phase: Column diameter: 2.00

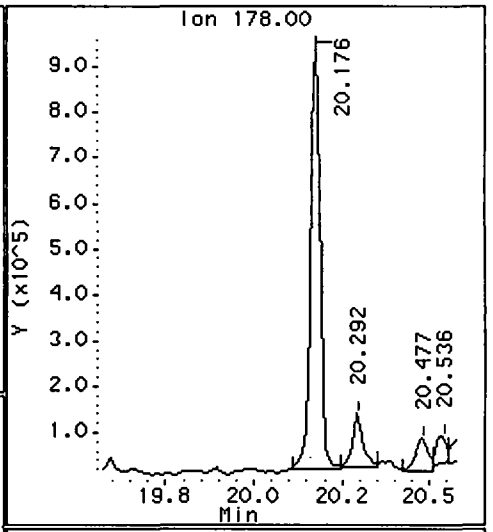
57 Phenanthrene

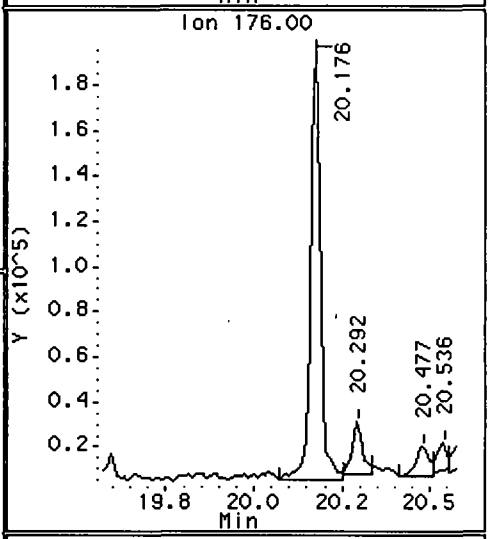


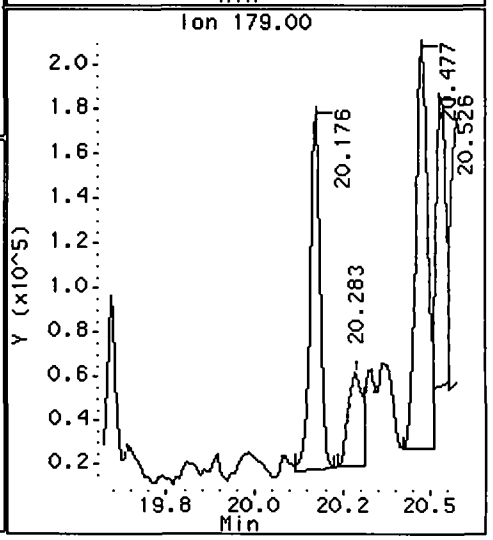












Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

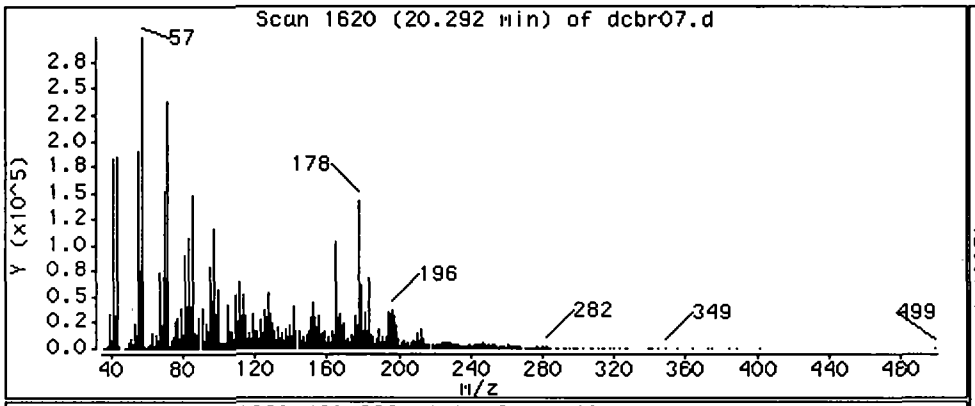
Client ID: WS-05 Instrument: gc14.i

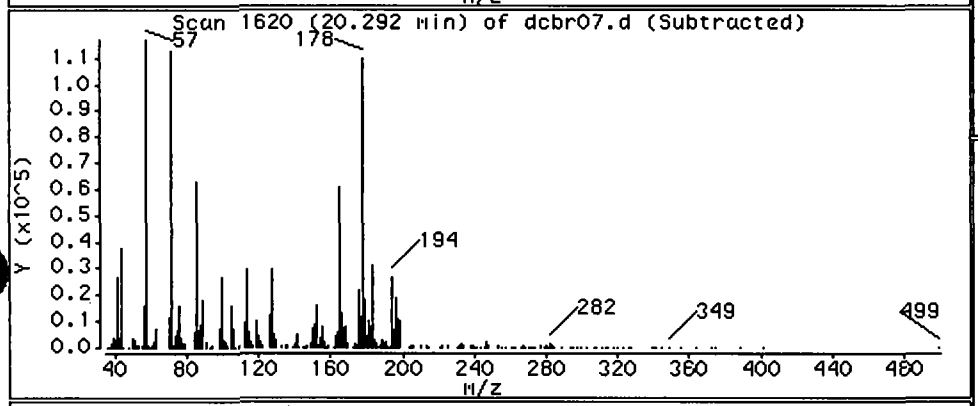
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

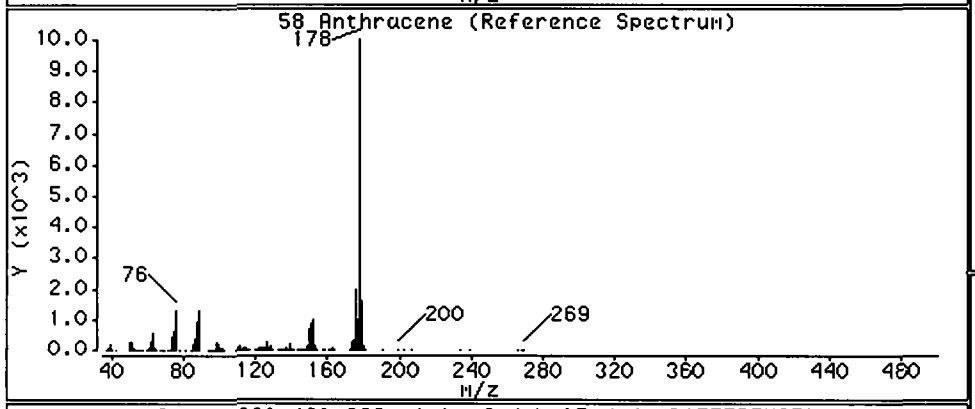
Volume Injected (uL): 2.0 Operator: GES

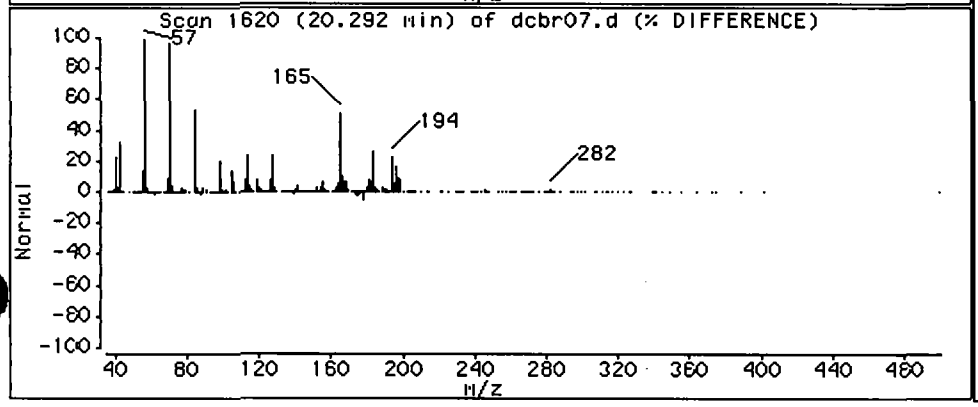
Column phase: Column diameter: 2.00

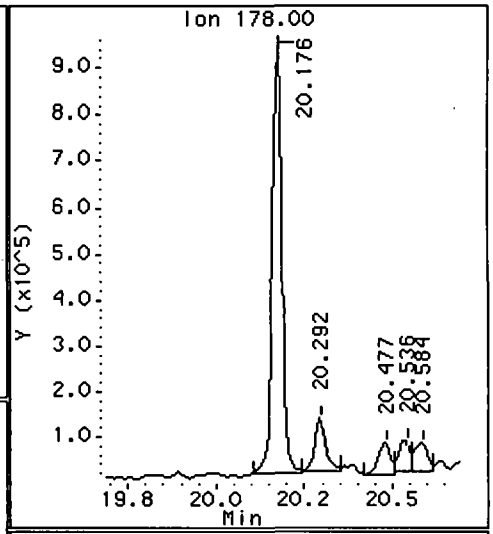
58 Anthracene

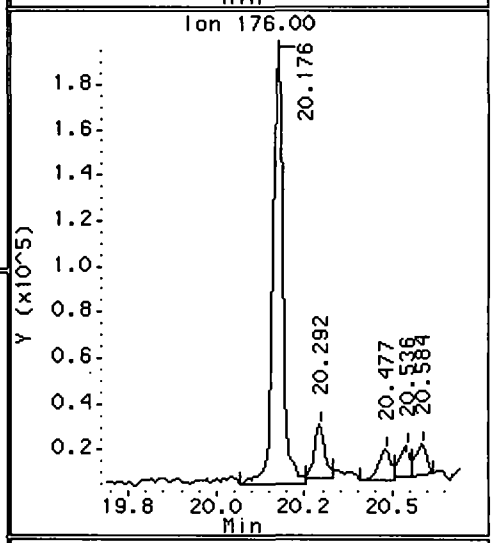


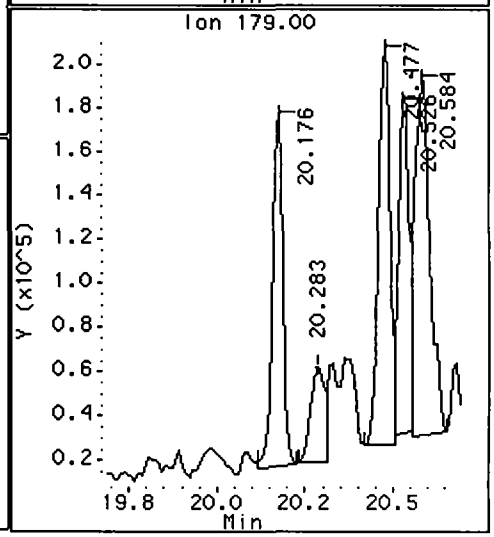












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/decl296b.b/dcbr07.d
Lab Smp Id: 9611G675-005 Client Smp ID: WS-05
Inj Date : 13-DEC-1996 00:12
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-005 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.25.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/decl296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbcl2.d
Als bottle: 7
Dil Factor: 125.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.100	Weigth of sample extracted (g)
M	28.400	% Moisture

ISTD	RT	AREA	AMOUNT
* 26 Naphthalene-d8	12.378	9759976	40.000
* 41 Acenaphthene-d10	16.573	6112236	40.000
* 56 Phenanthrene-d10	20.117	5213333	40.000

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Alkane					CAS #:		
12.601	3539683	14.507	248300	0		0	26
Unknown Alkane					CAS #:		
12.796	3554317	14.567	249320	0		0	26

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Alkane					CAS #:		
13.663	4411233	18.079	309430	0		0	26
Subst. Naphthalene					CAS #:		
14.120	21877267	89.661	1534600	0		0	26
Subst. Naphthalene					CAS #:		
14.334	13293400	54.481	932490	0		0	26
Unknown					CAS #:		
14.733	3730710	24.415	417880	0		0	41
Unknown Alkane					CAS #:		
15.123	4202487	27.502	470720	0		0	41
Subst Benzene					CAS #:		
15.396	3565334	23.332	399350	0		0	41
Subst Naphthalene					CAS #:		
15.814	13549317	88.670	1517600	0		0	41
Subst Naphthalene					CAS #:		
15.873	12177292	79.691	1364000	0		0	41
Unknown Alkane					CAS #:		
16.233	8556175	55.994	958380	0		0	41
Subst Naphthalene					CAS #:		
16.914	10449821	68.386	1170500	0		0	41
Subst Naphthalene					CAS #:		
17.411	4282356	28.025	479670	0		0	41
Subst Naphthalene					CAS #:		
17.469	3175687	20.782	355710	0		0	41
Unknown Alkane					CAS #:		
17.518	3240138	21.204	362930	0		0	41
Unknown Alkane					CAS #:		
20.273	11646837	89.362	1529500	0		0	56
Unknown Alkane					CAS #:		
21.120	6936569	53.222	910930	0		0	56
Unknown Alkane					CAS #:		
21.246	6692720	51.351	878910	0		0	56

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Alkane				CAS #:			
22.230	6464458	49.599	848930	0		0	56
Unknown Hydrocarbon				CAS #:			
27.360	5207854	39.958	683910	95	NBS75K.l	73944	56(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

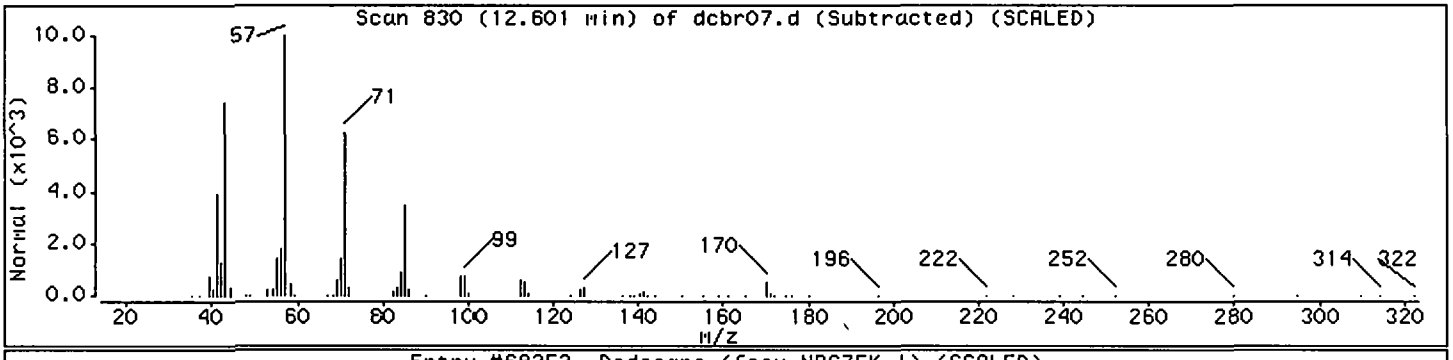
Client ID: WS-05 Instrument: gcl4.i

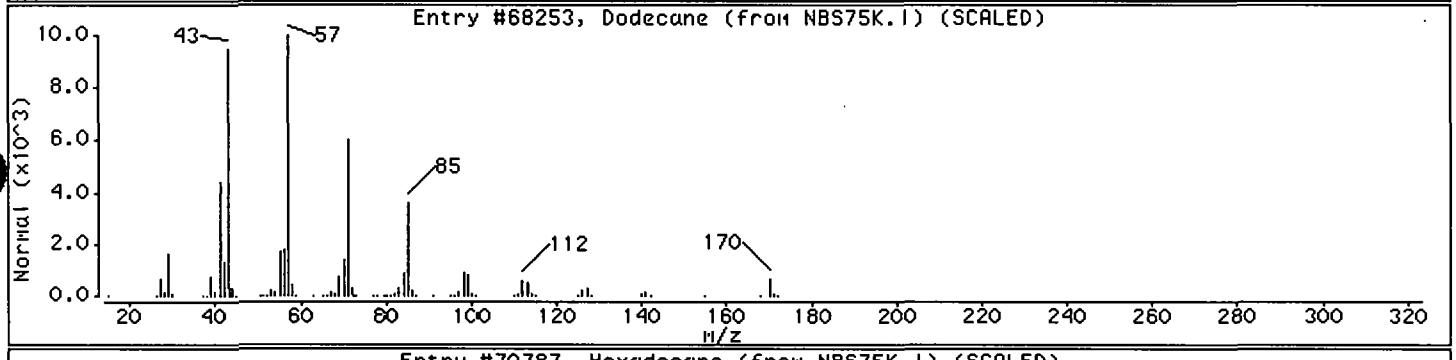
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

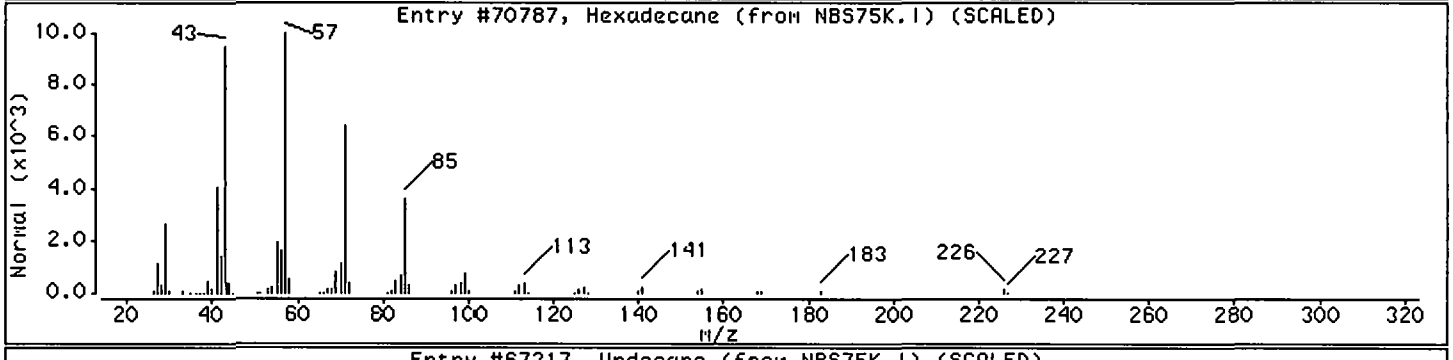
Volume Injected (uL): 2.0 Operator: GES

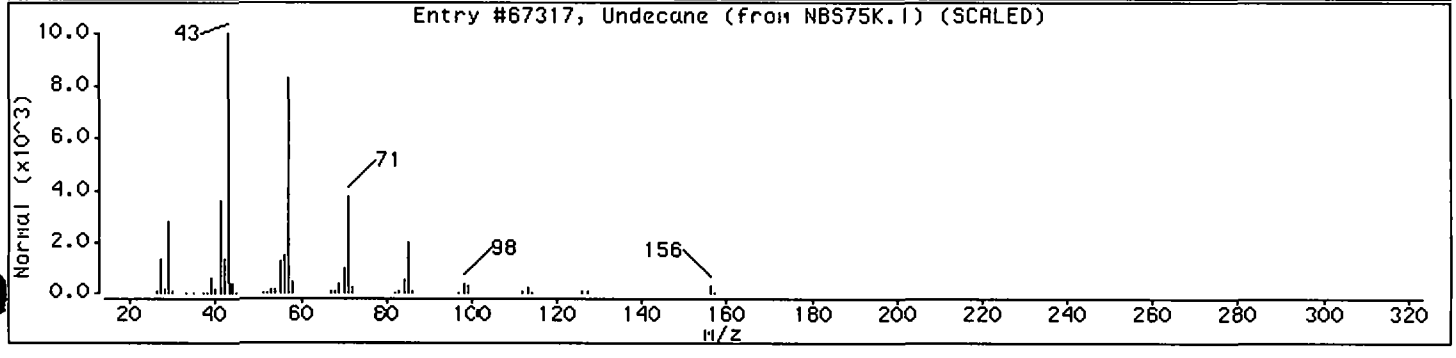
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Dodecane	112-40-3	NBS75K.l	68253	96	C12H26	170
Hexadecane	544-76-3	NBS75K.l	70787	86	C16H34	226
Undecane	1120-21-4	NBS75K.l	67317	78	C11H24	156









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

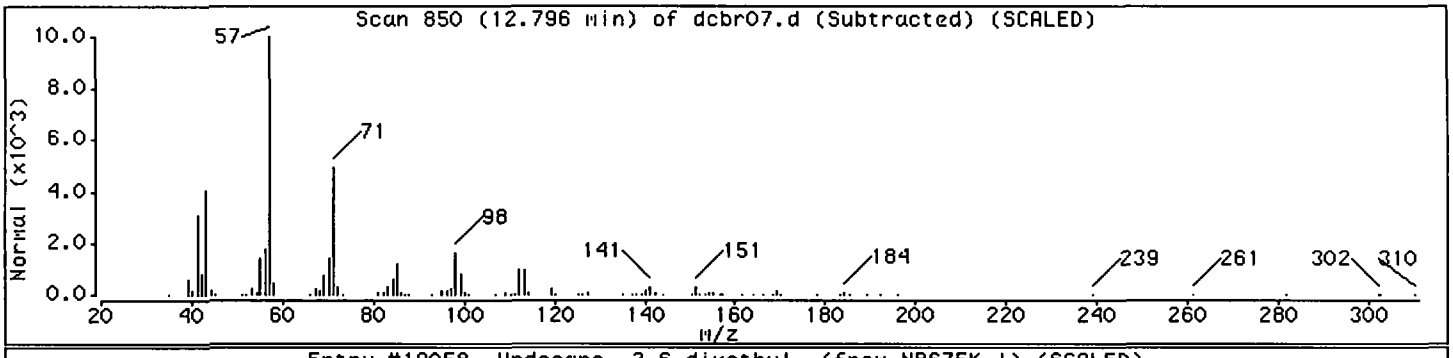
Client ID: WS-05 Instrument: gc14.i

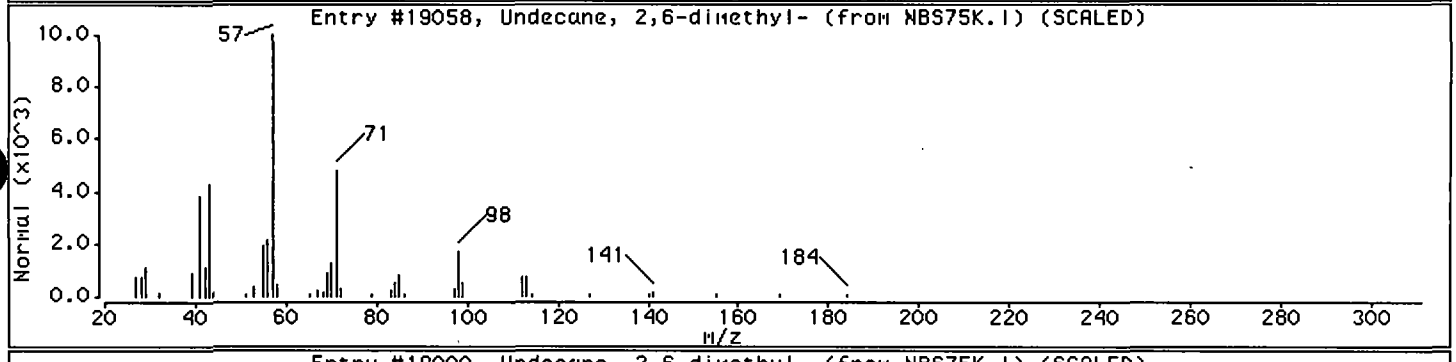
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

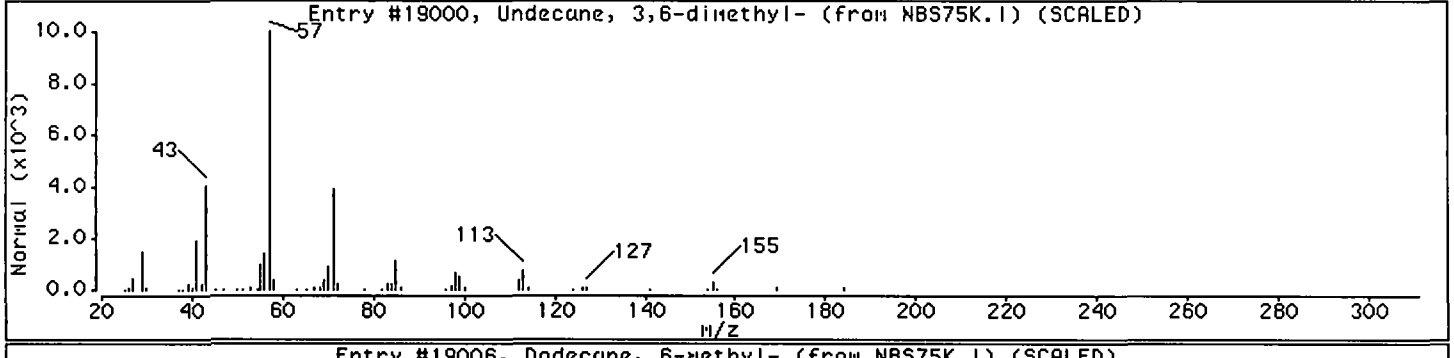
Volume Injected (uL): 2.0 Operator: GES

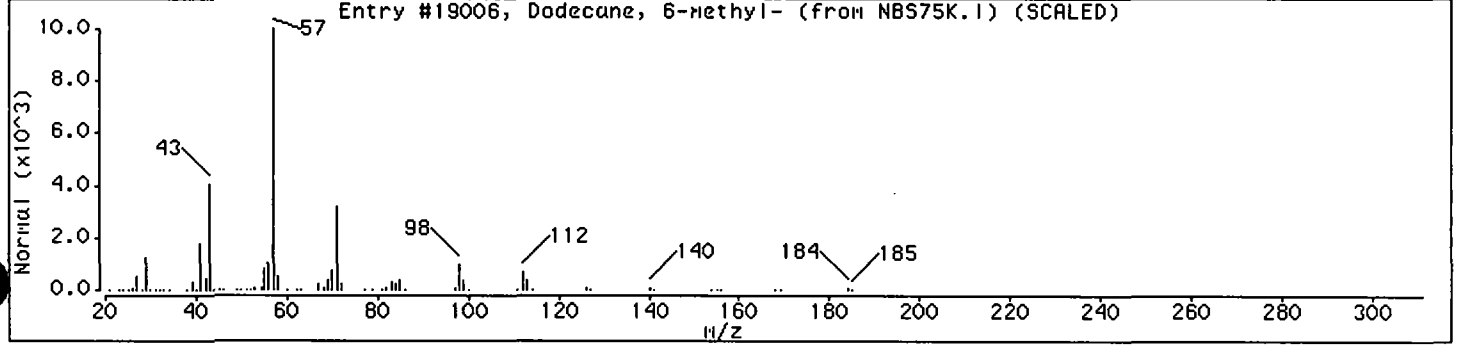
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Undecane, 2,6-dimethyl-	17301-23-4	NBS75K.l	19058	96	C13H28	184
Undecane, 3,6-dimethyl-	17301-28-9	NBS75K.l	19000	90	C13H28	184
Dodecane, 6-methyl-	6044-71-9	NBS75K.l	19006	90	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

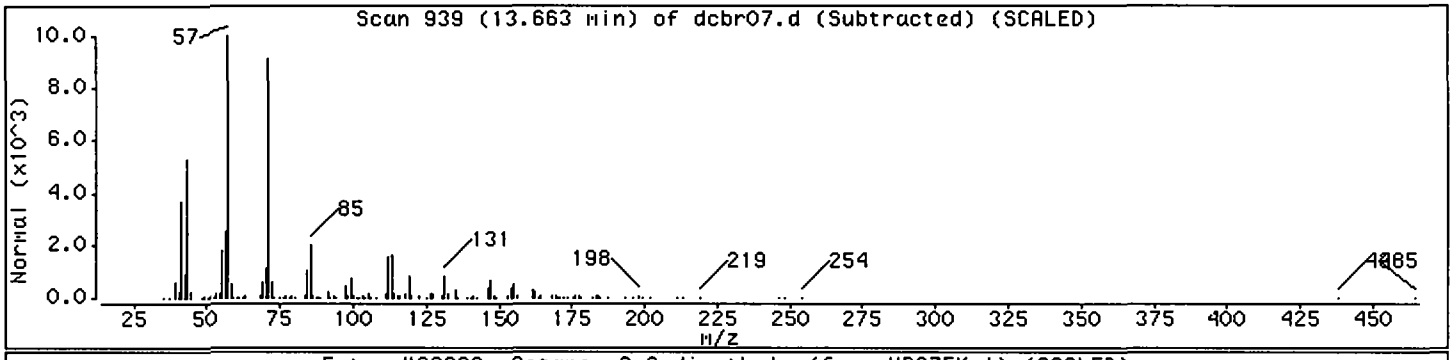
Client ID: WS-05 Instrument: gcl4.i

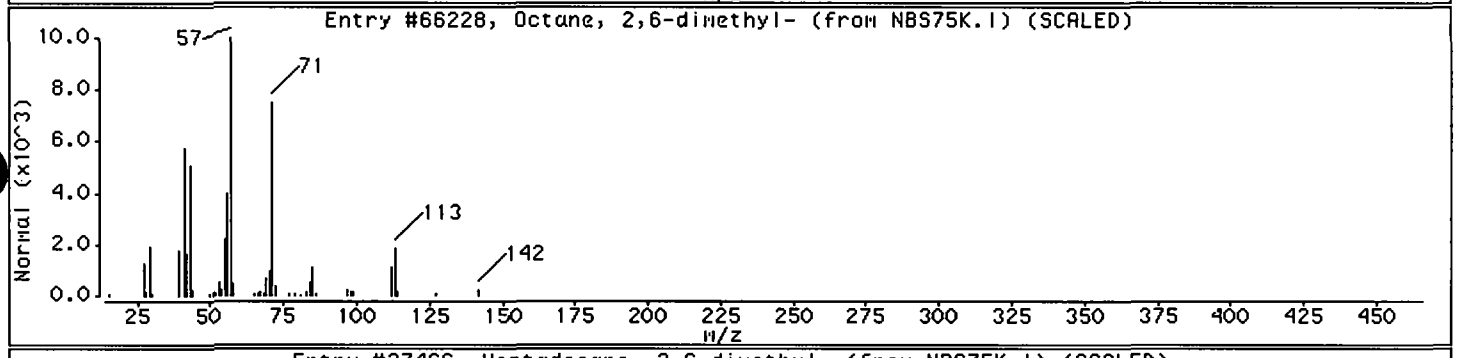
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

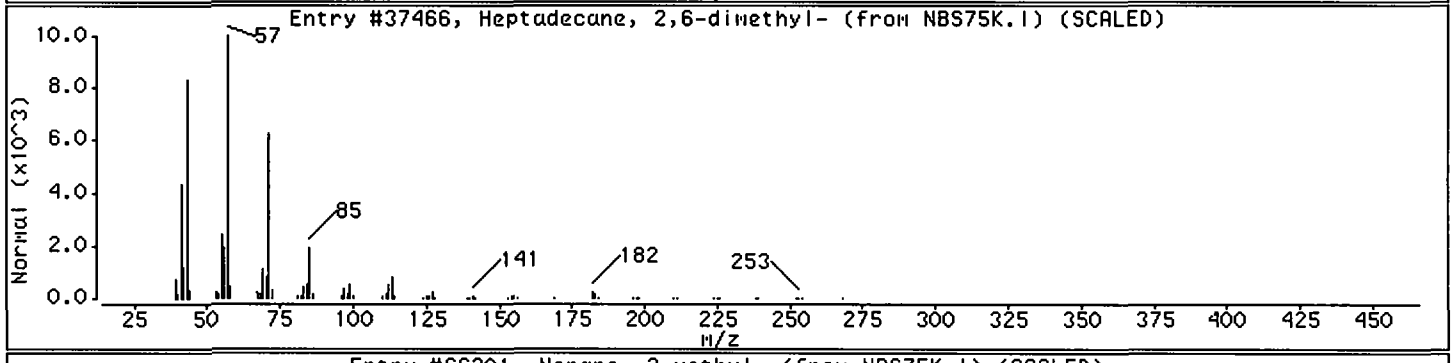
Volume Injected (uL): 2.0 Operator: GES

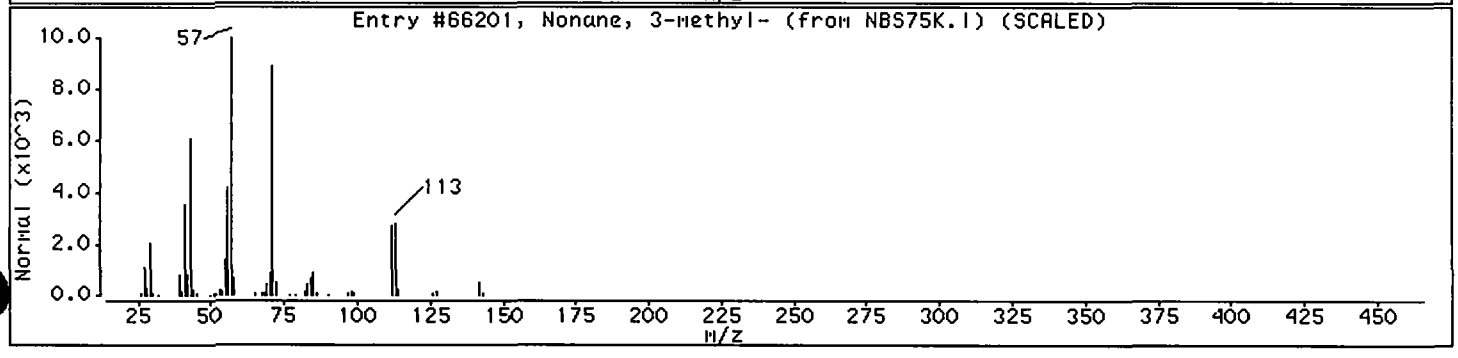
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Octane, 2,6-dimethyl-	2051-30-1	NBS75K.l	66228	72	C10H22	142
Heptadecane, 2,6-dimethyl-	54105-67-8	NBS75K.l	37466	64	C19H40	268
Nonane, 3-methyl-	5911-04-6	NBS75K.l	66201	64	C10H22	142









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

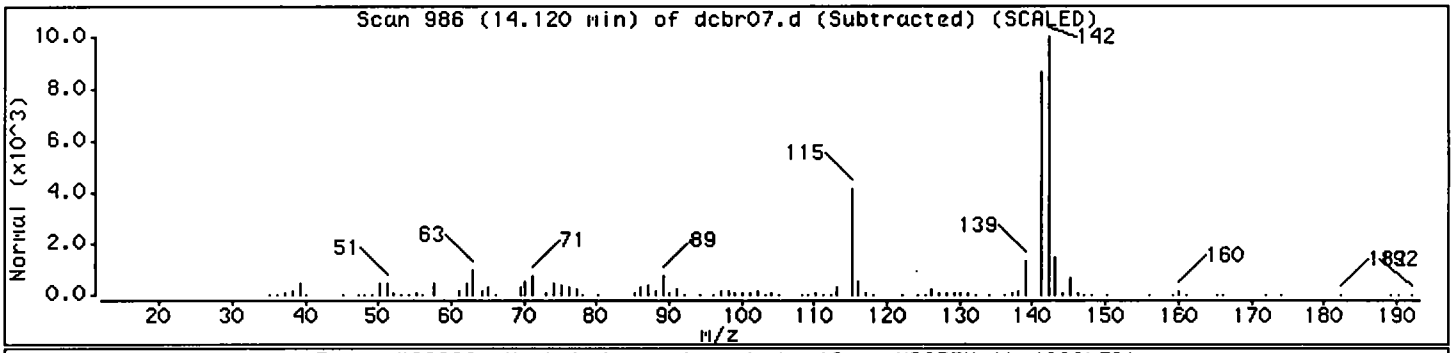
Client ID: WS-05 Instrument: gc14.i

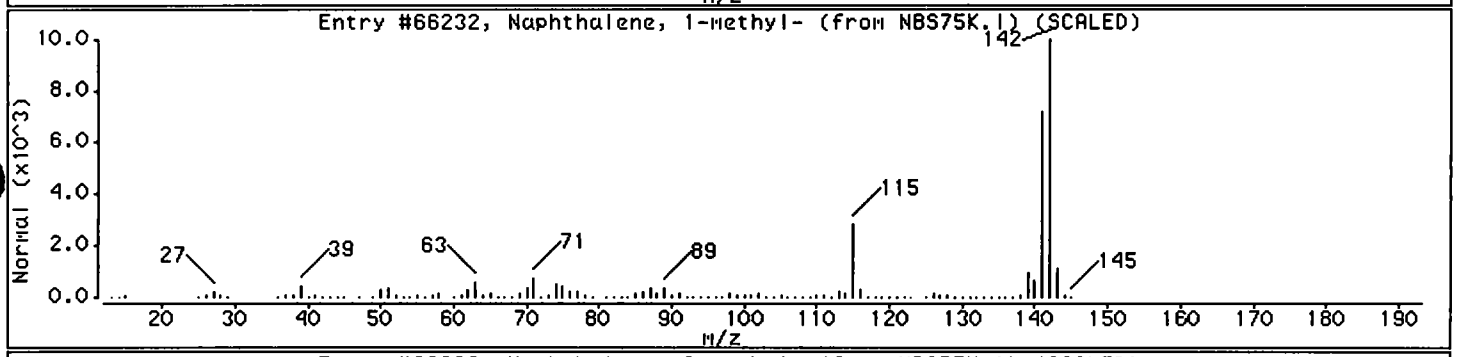
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

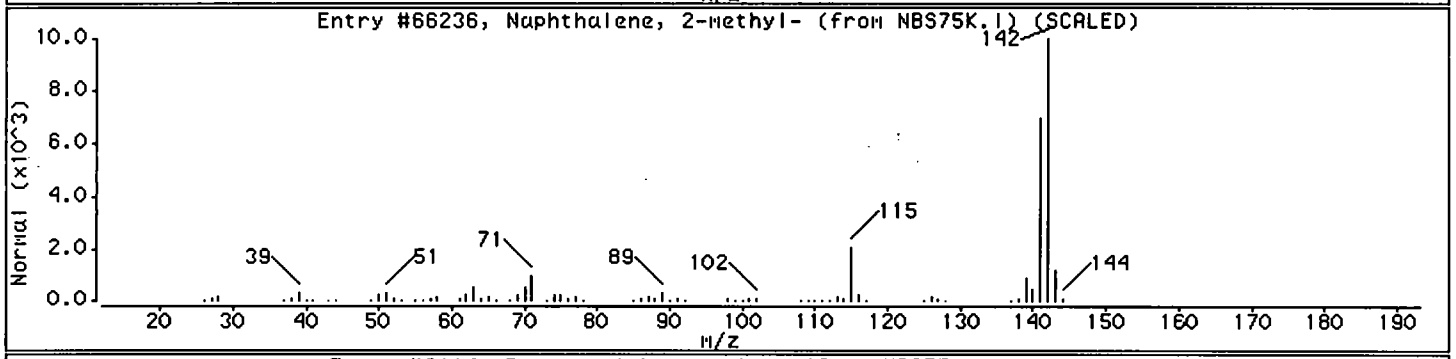
Volume Injected (uL): 2.0 Operator: GES

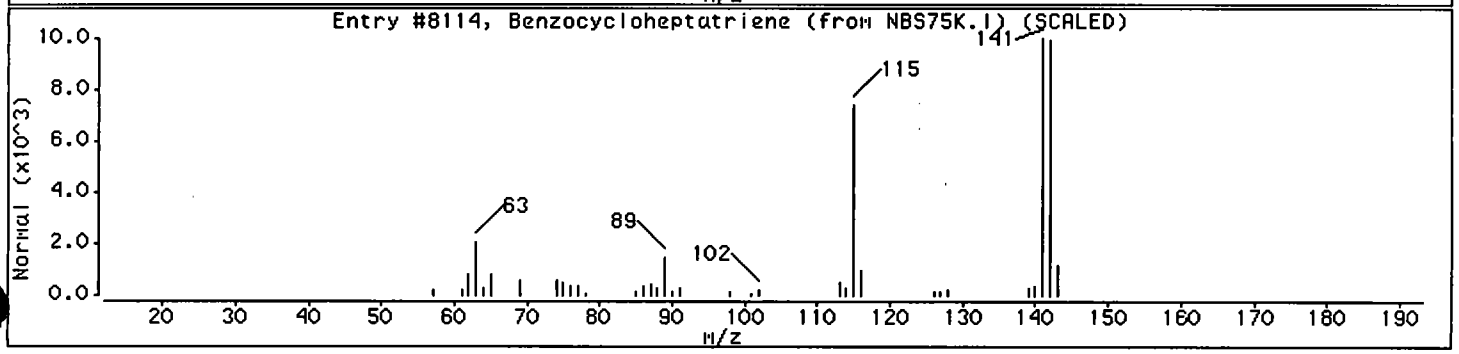
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst. Naphthalene						
Naphthalene, 1-methyl-	90-12-0	NBS75K.I	66232	94	C11H10	142
Naphthalene, 2-methyl-	91-57-6	NBS75K.I	66236	94	C11H10	142
Benzocycloheptatriene	264-09-5	NBS75K.I	8114	91	C11H10	142









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

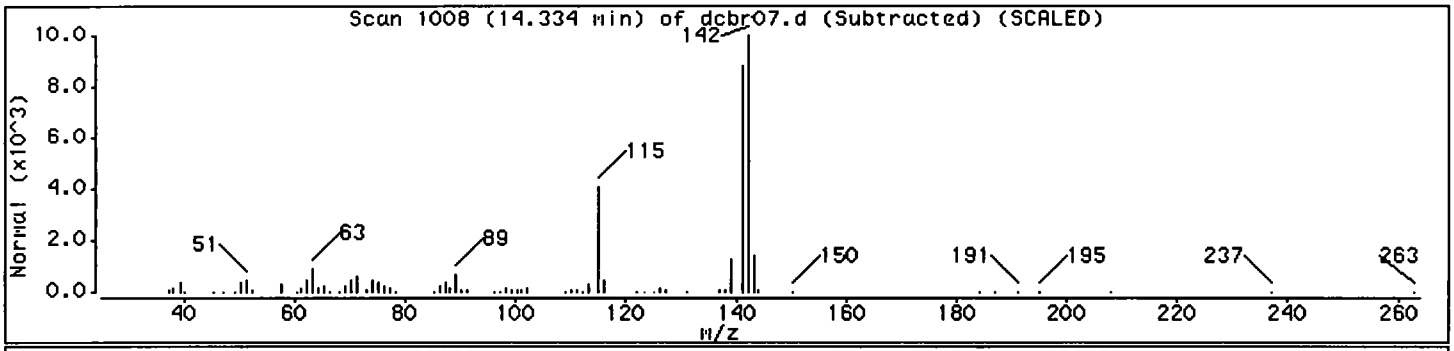
Client ID: WS-05 Instrument: gc14.i

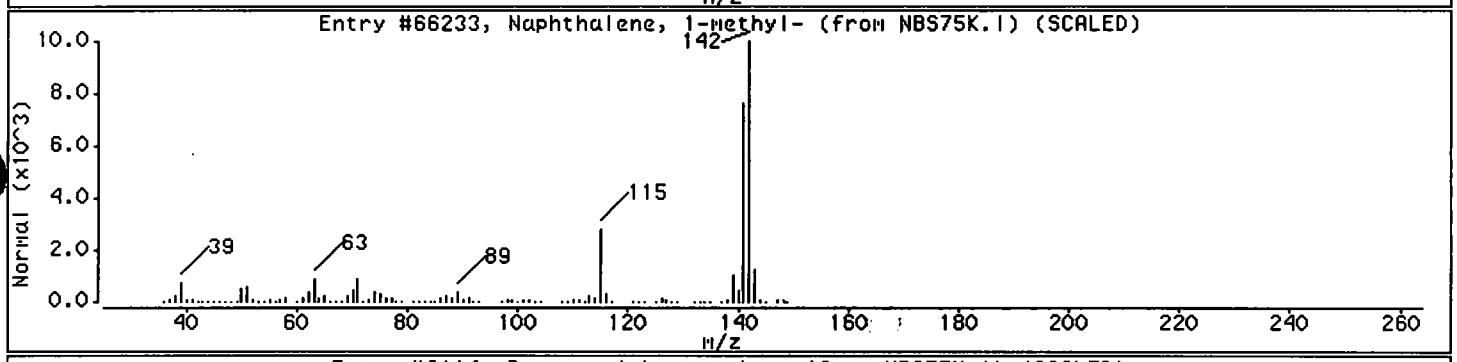
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

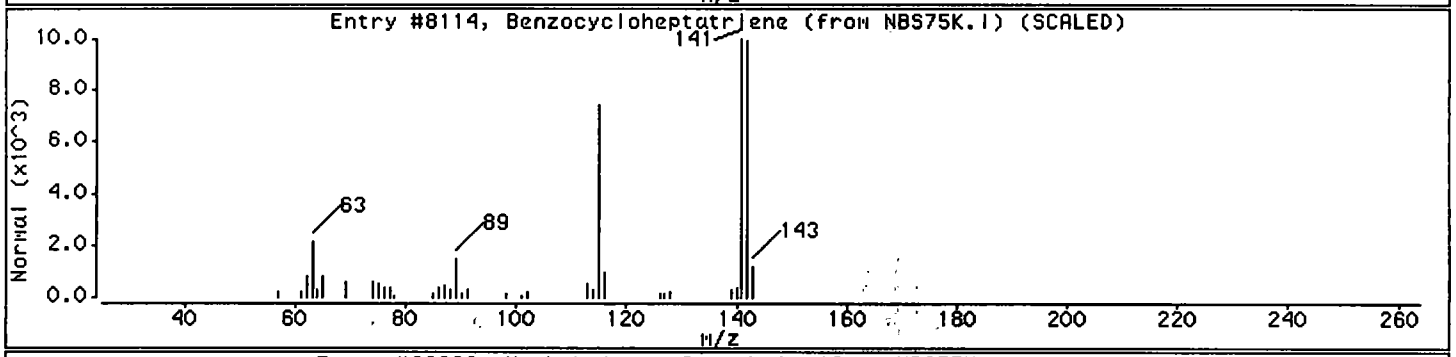
Volume Injected (uL): 2.0 Operator: GES

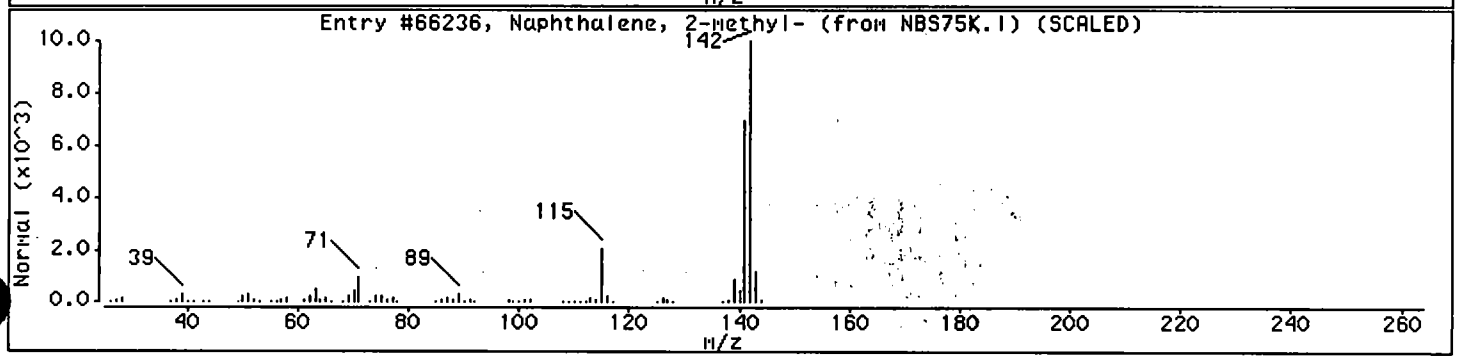
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst. Naphthalene						
Naphthalene, 1-methyl-	90-12-0	NBS75K.l	66233	94	C11H10	142
Benzocycloheptatriene	264-09-5	NBS75K.l	8114	91	C11H10	142
Naphthalene, 2-methyl-	91-57-6	NBS75K.l	66236	91	C11H10	142









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

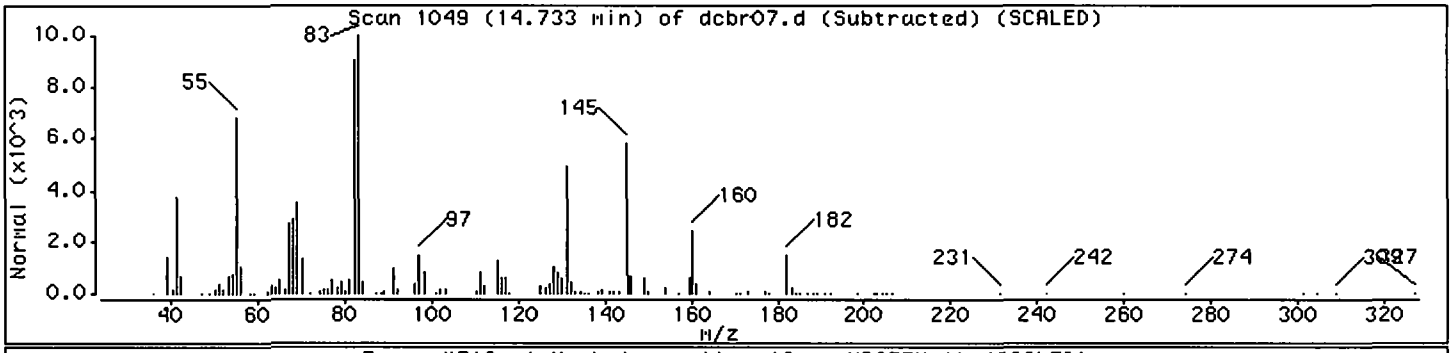
Client ID: WS-05 Instrument: gc14.i

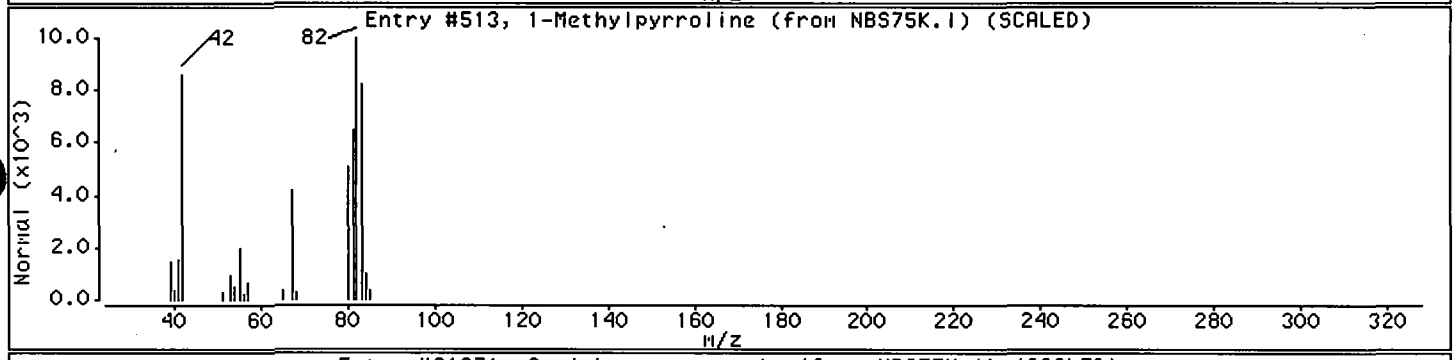
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

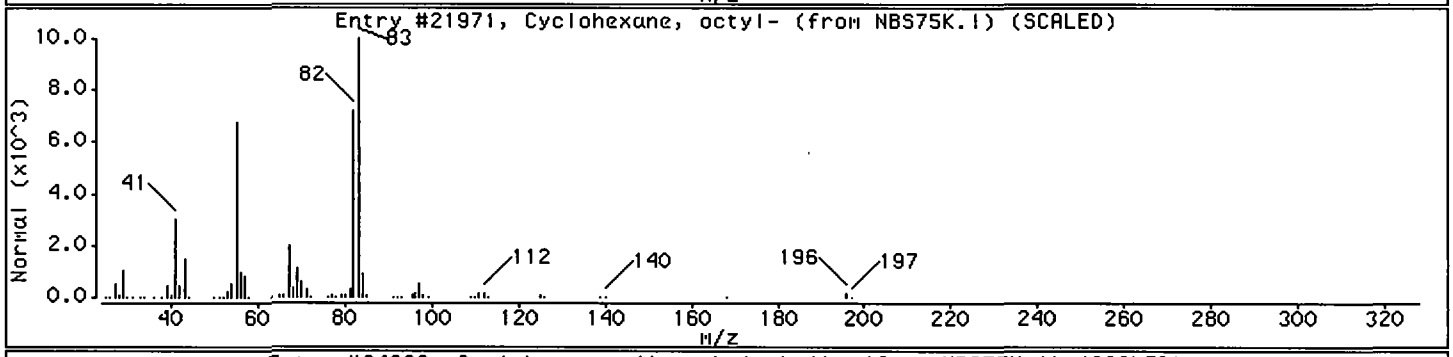
Volume Injected (uL): 2.0 Operator: GES

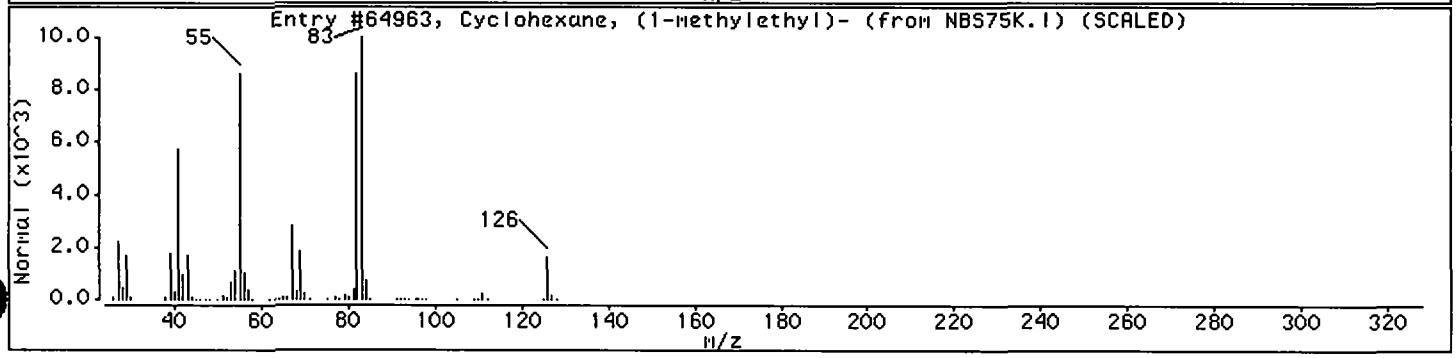
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1-Methylpyrroline	0-00-0	NBS75K.l	513	38	C5H9N	83
Cyclohexane, octyl-	1795-15-9	NBS75K.l	21971	37	C14H28	196
Cyclohexane, (1-methylethyl)-	696-29-7	NBS75K.l	64963	37	C9H18	126









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

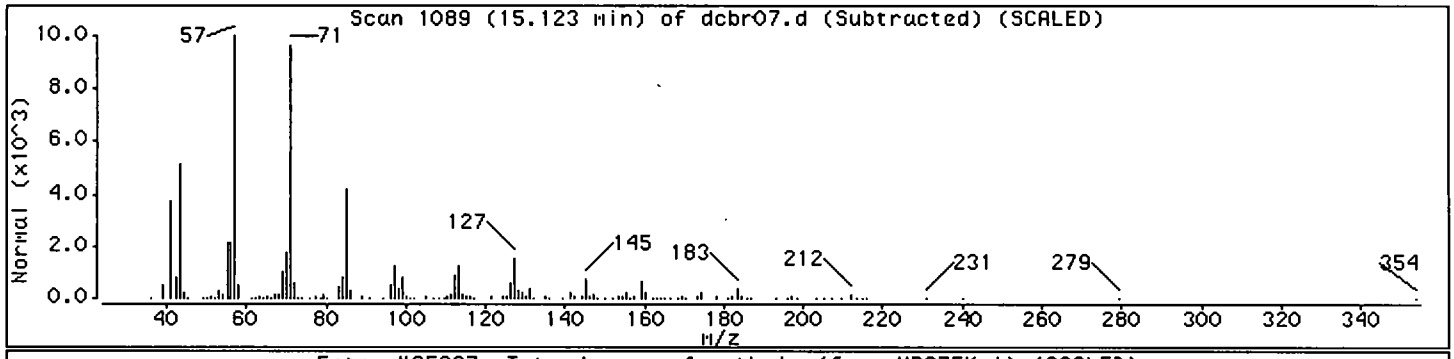
Client ID: WS-05 Instrument: gcl4.i

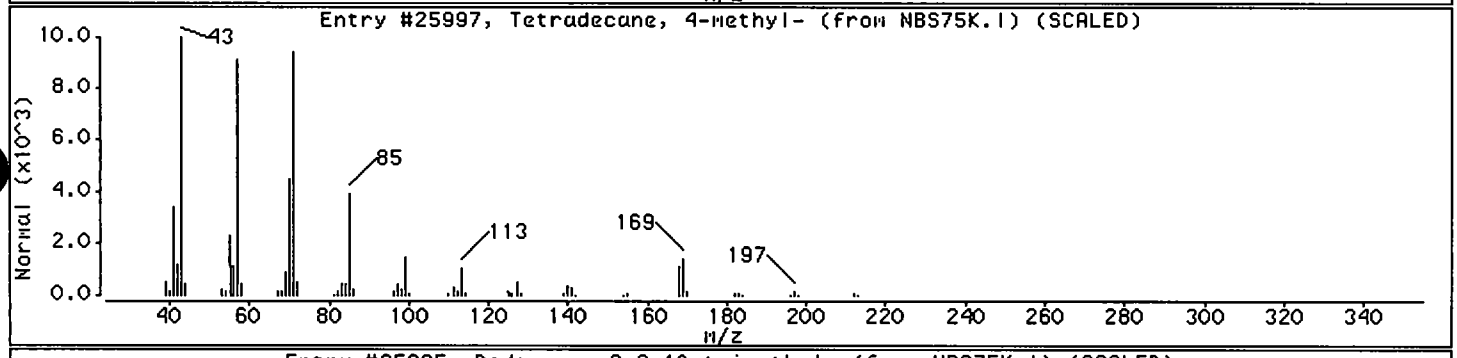
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

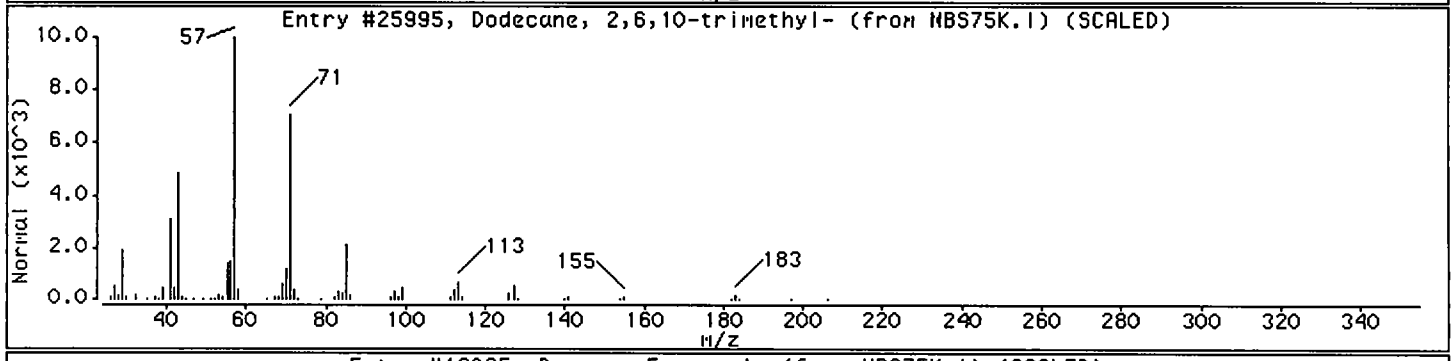
Volume Injected (uL): 2.0 Operator: GES

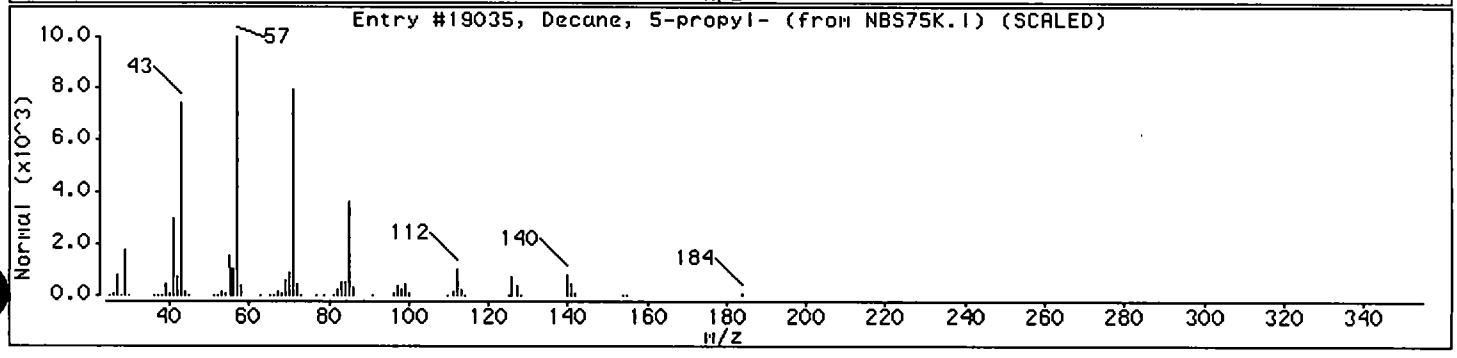
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetradecane, 4-methyl-	25117-24-2	NBS75K.l	25997	72	C15H32	212
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	25995	72	C15H32	212
Decane, 5-propyl-	17312-62-8	NBS75K.l	19035	64	C13H28	184









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

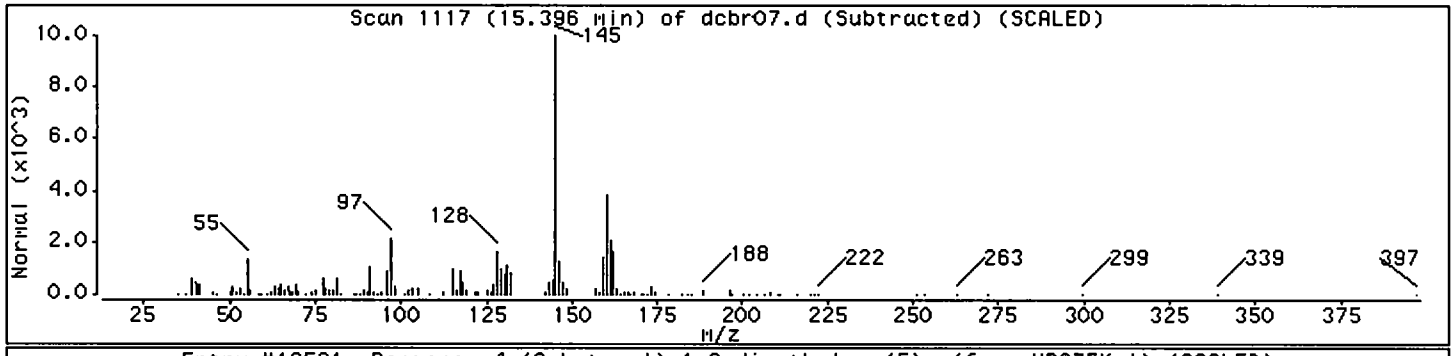
Client ID: WS-05 Instrument: gc14.i

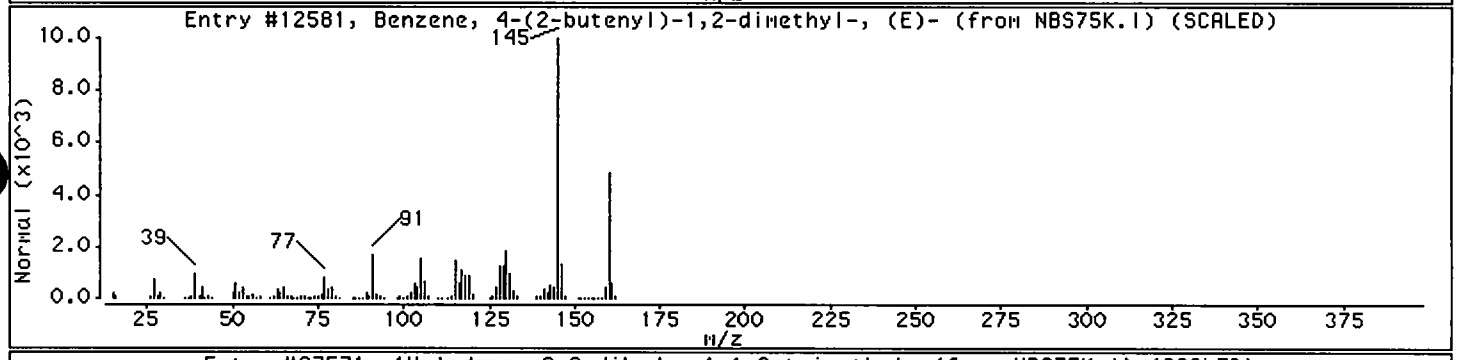
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

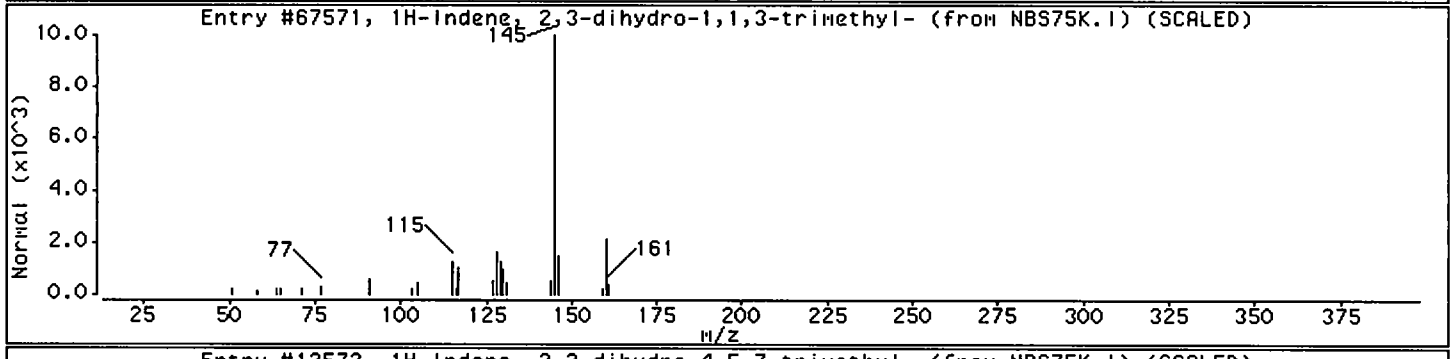
Volume Injected (uL): 2.0 Operator: GES

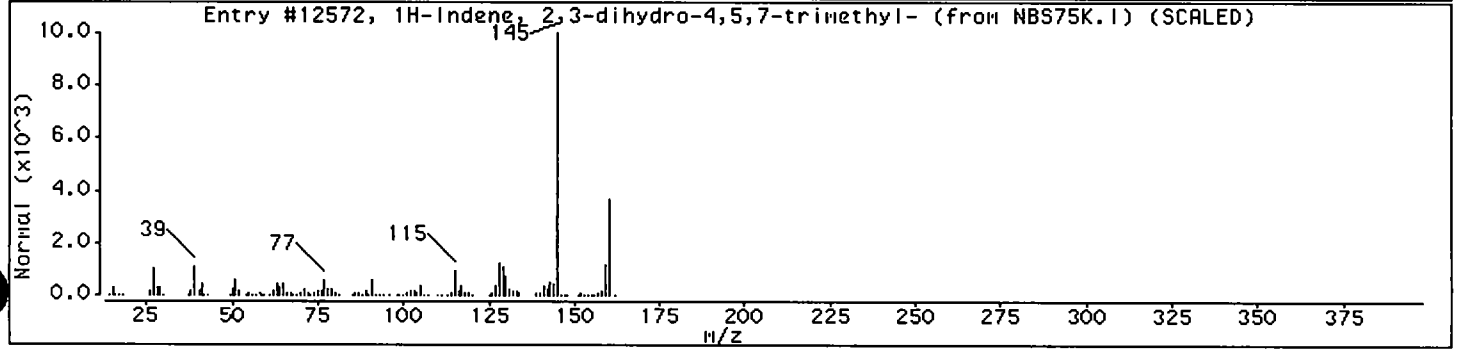
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Benzene						
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E	54340-86-2	NBS75K.l	12581	86	C12H16	160
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	2613-76-5	NBS75K.l	67571	70	C12H16	160
1H-Indene, 2,3-dihydro-4,5,7-trimethyl-	6682-06-0	NBS75K.l	12572	64	C12H16	160









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

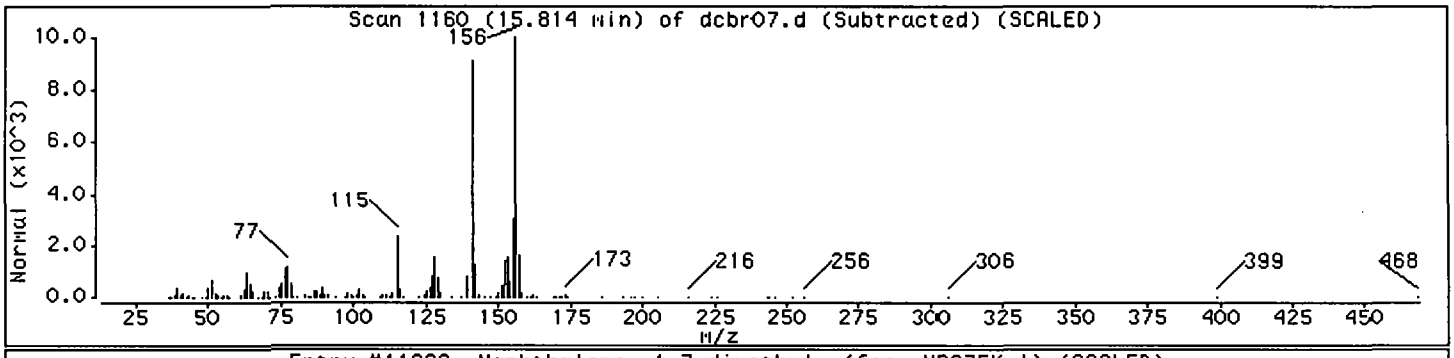
Client ID: WS-05 Instrument: gcl4.i

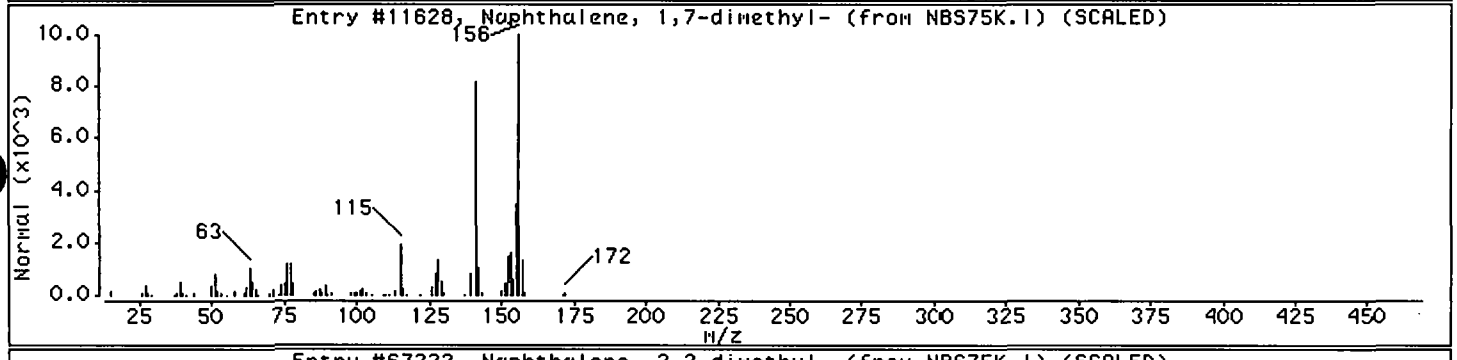
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

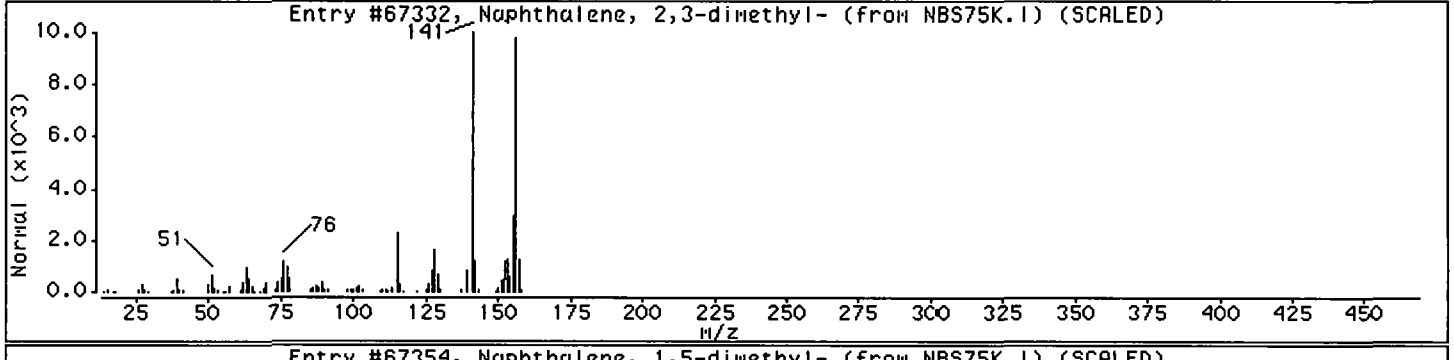
Volume Injected (uL): 2.0 Operator: GES

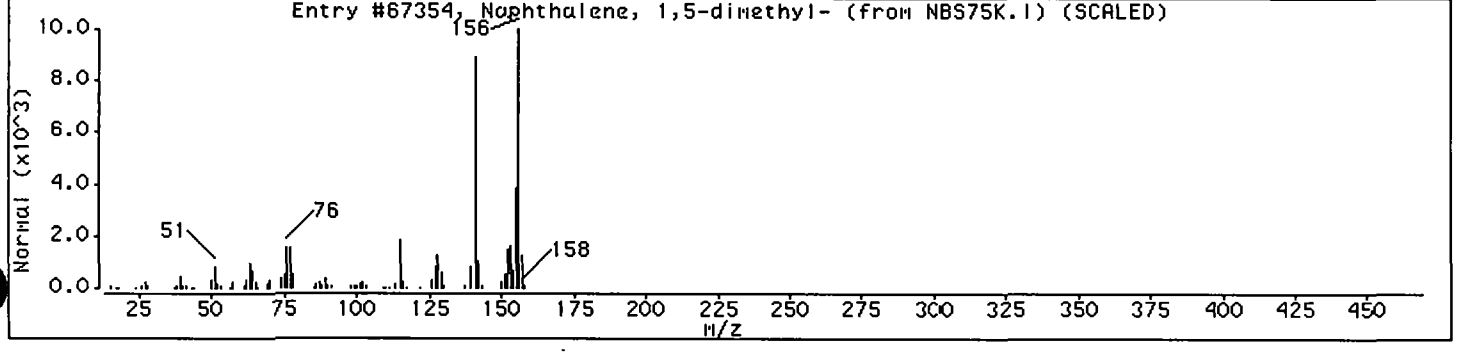
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,7-dimethyl-	575-37-1	NBS75K.l	11628	98	C12H12	156
Naphthalene, 2,3-dimethyl-	581-40-8	NBS75K.l	67332	98	C12H12	156
Naphthalene, 1,5-dimethyl-	571-61-9	NBS75K.l	67354	97	C12H12	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

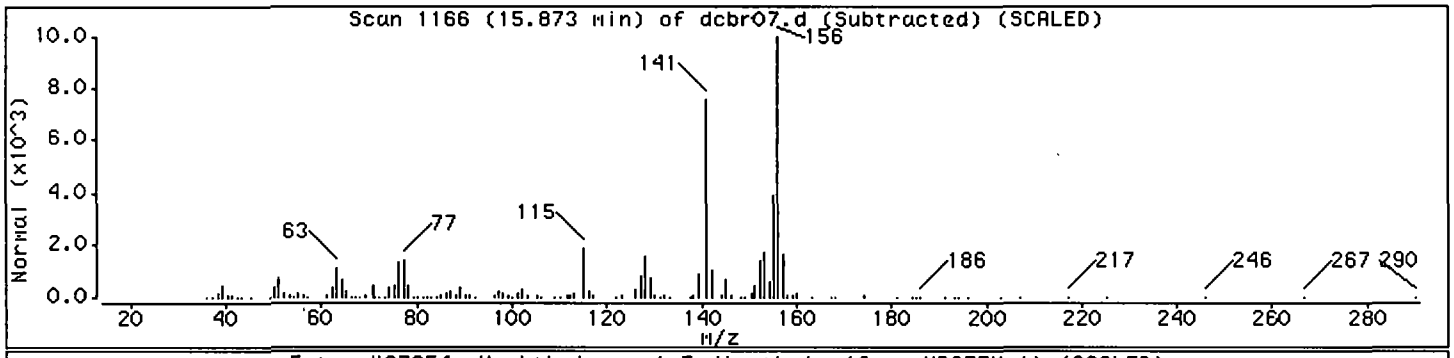
Client ID: WS-05 Instrument: gcl4.i

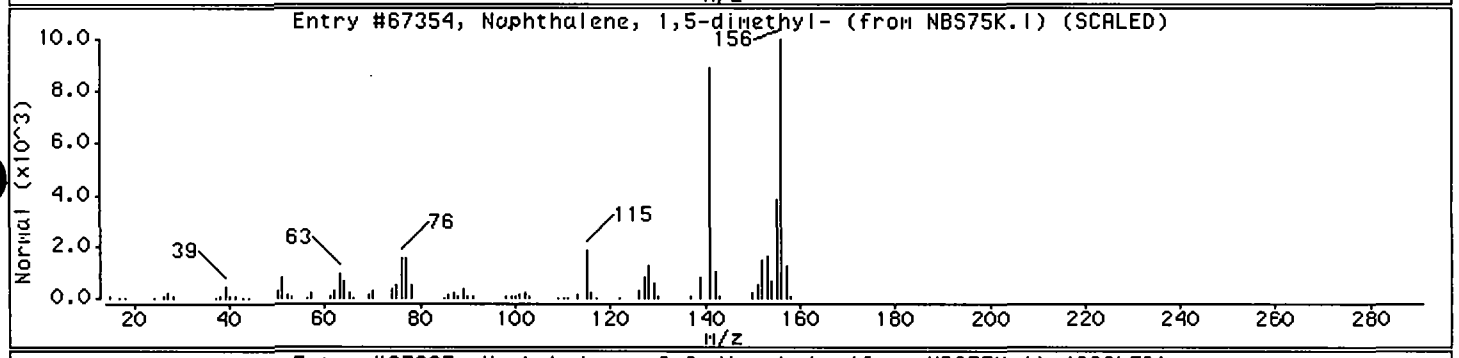
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

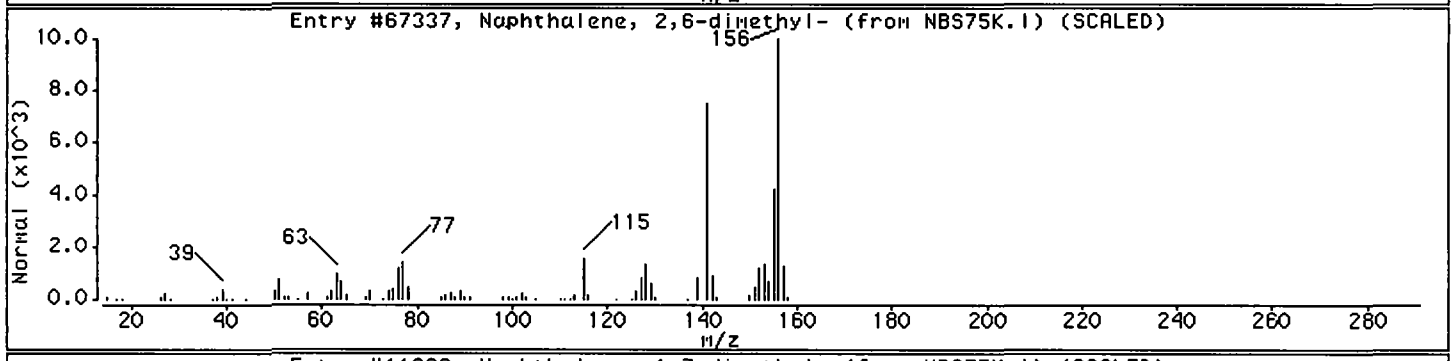
Volume Injected (uL): 2.0 Operator: GES

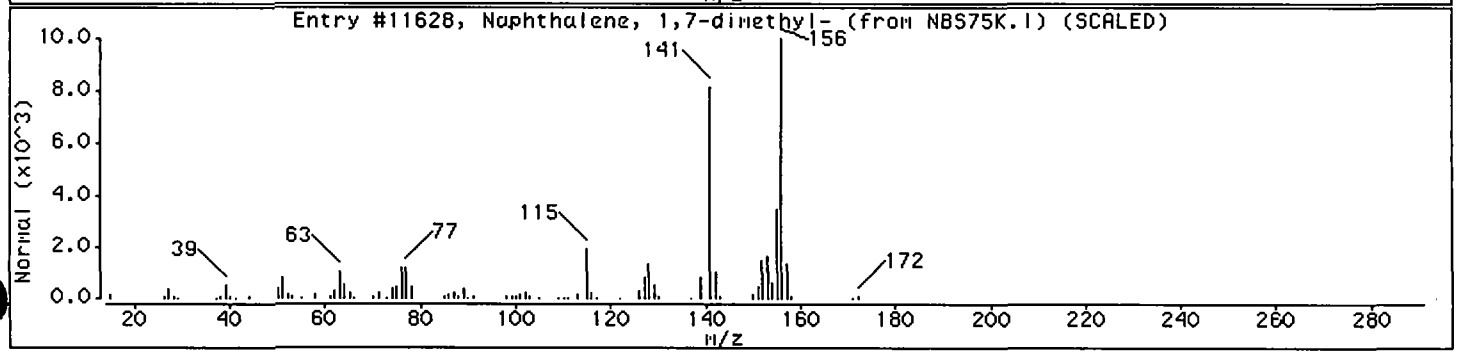
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,5-dimethyl-	571-61-9	NBS75K.l	67354	98	C12H12	156
Naphthalene, 2,6-dimethyl-	581-42-0	NBS75K.l	67337	98	C12H12	156
Naphthalene, 1,7-dimethyl-	575-37-1	NBS75K.l	11628	98	C12H12	156









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

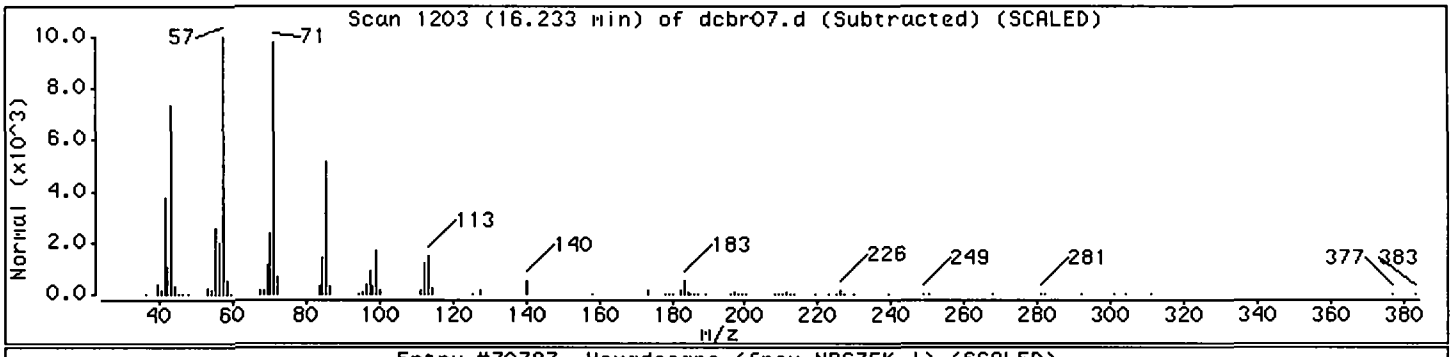
Client ID: WS-05 Instrument: gc14.i

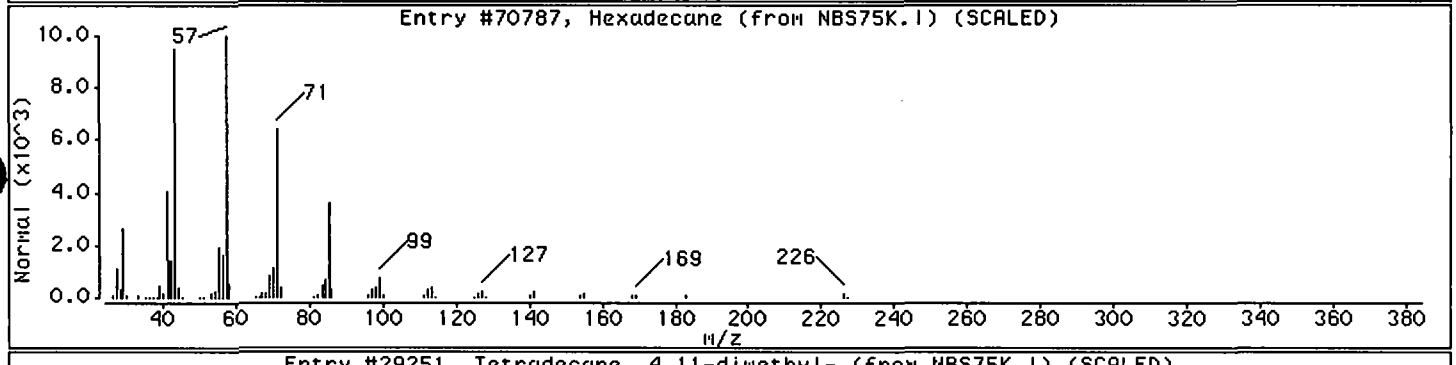
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

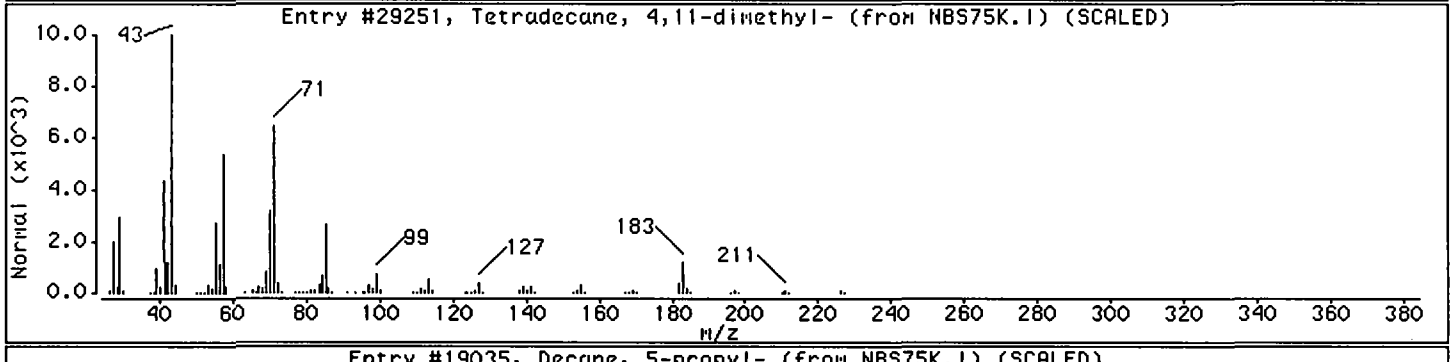
Volume Injected (uL): 2.0 Operator: GES

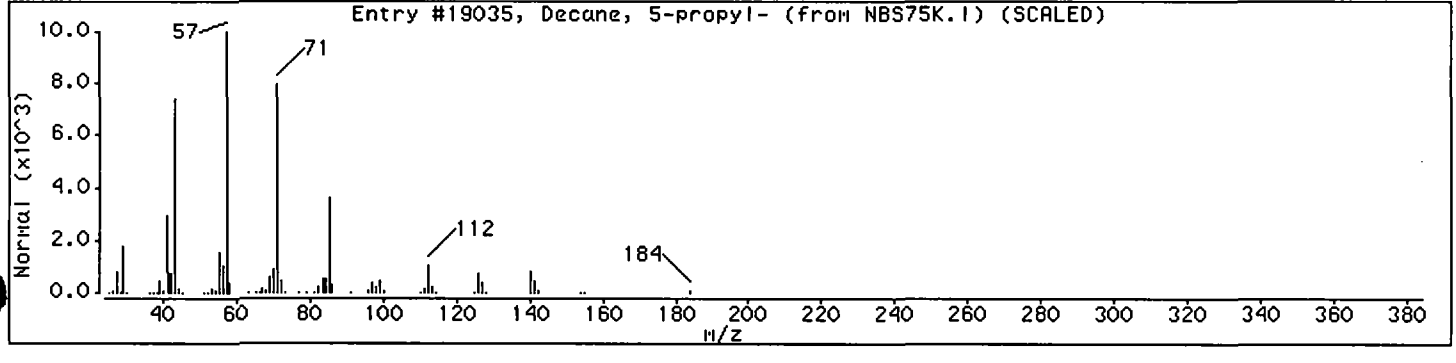
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane	544-76-3	NBS75K.l	70787	83	C16H34	226
Tetradecane, 4,11-dimethyl-	55045-12-0	NBS75K.l	29251	80	C16H34	226
Decane, 5-propyl-	17312-62-8	NBS75K.l	19035	64	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

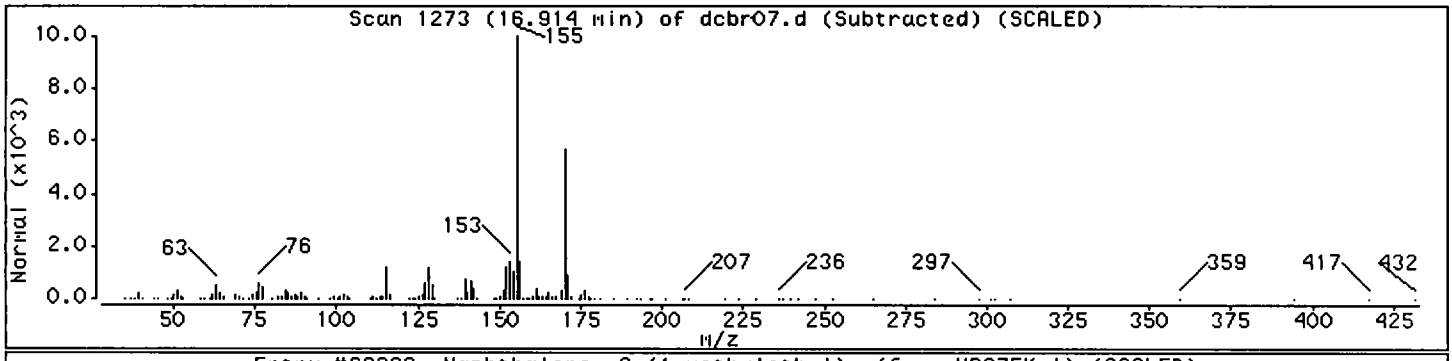
Client ID: WS-05 Instrument: gcl4.i

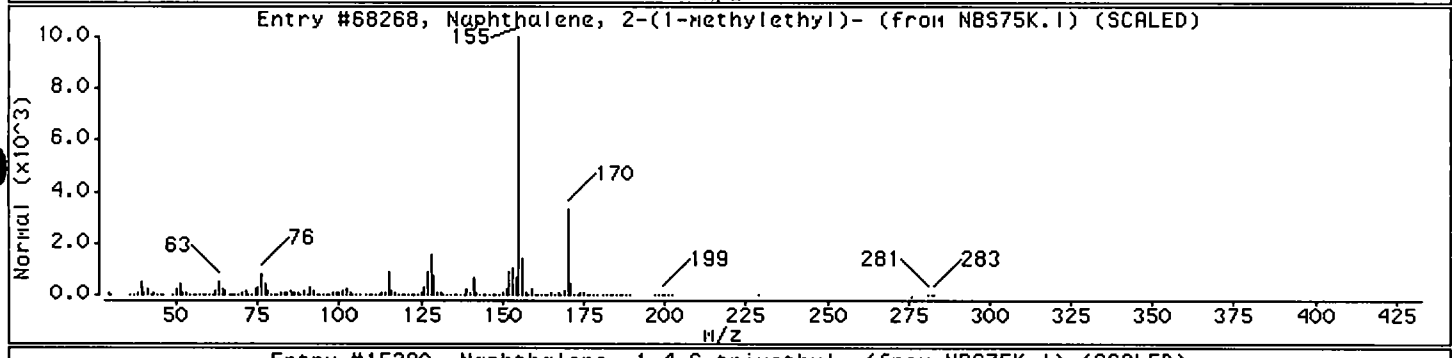
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

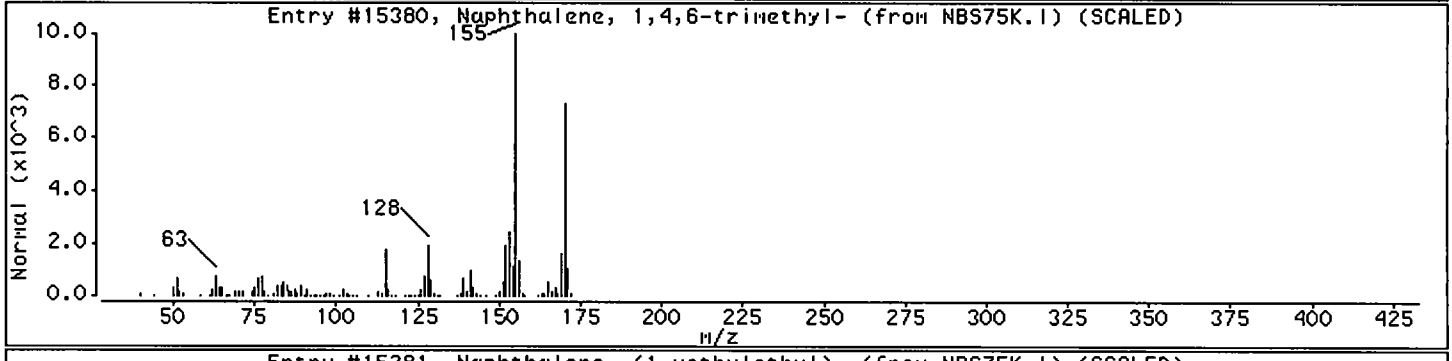
Volume Injected (uL): 2.0 Operator: GES

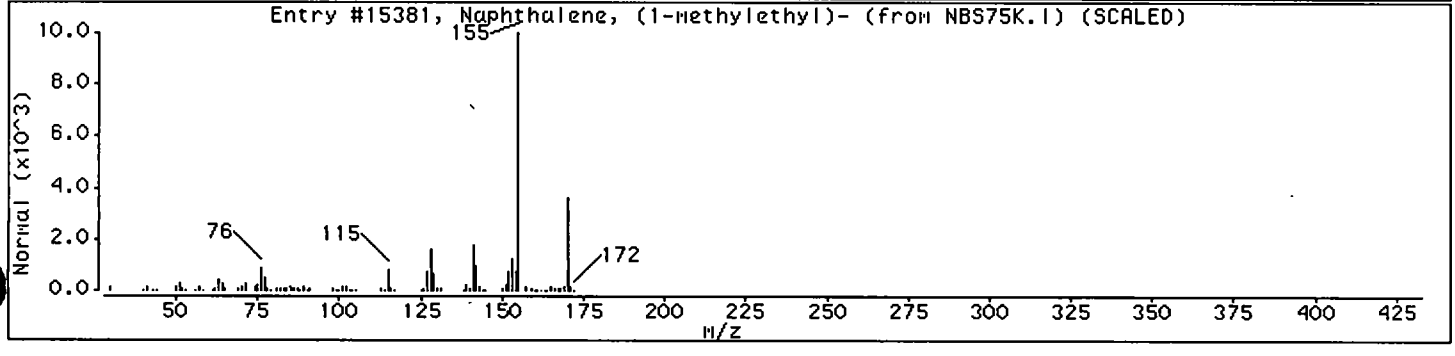
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 2-(1-methylethyl)-	2027-17-0	NBS75K.l	68268	94	C13H14	170
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	92	C13H14	170
Naphthalene, (1-methylethyl)-	29253-36-9	NBS75K.l	15381	83	C13H14	170









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

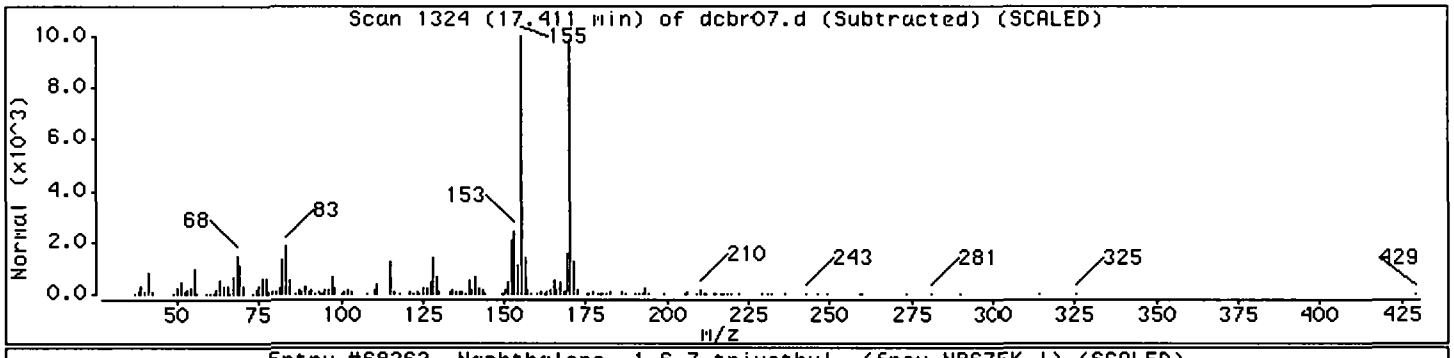
Client ID: WS-05 Instrument: gcl4.i

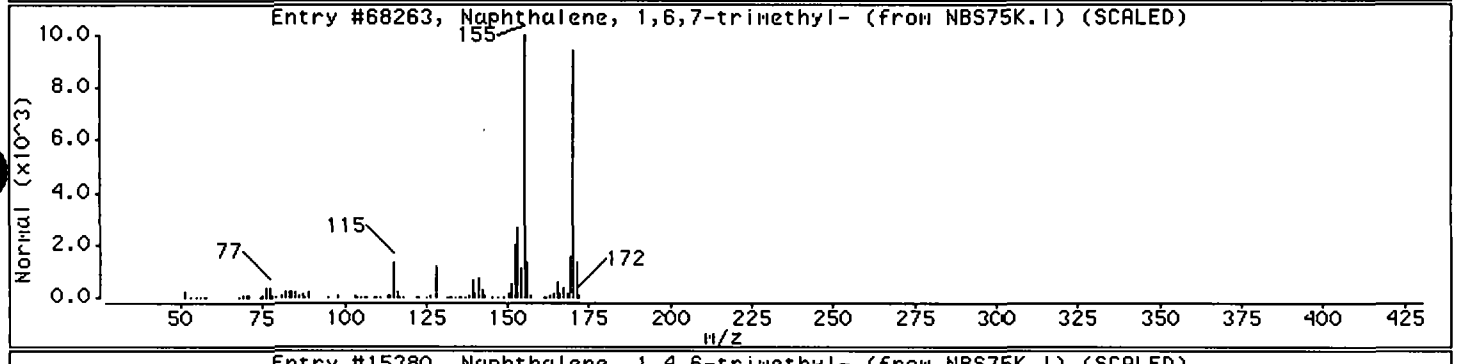
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

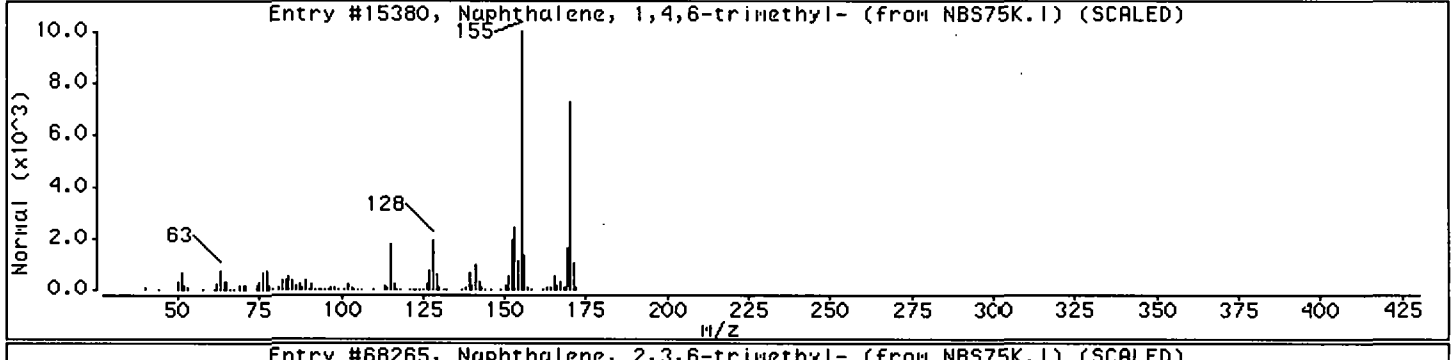
Volume Injected (uL): 2.0 Operator: GES

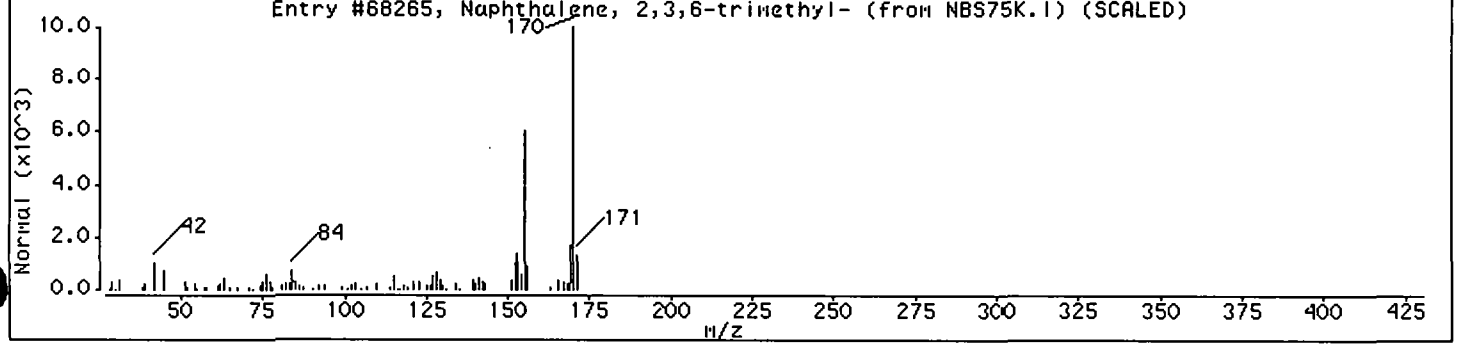
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,6,7-trimethyl-	2245-38-7	NBS75K.l	68263	95	C13H14	170
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	95	C13H14	170
Naphthalene, 2,3,6-trimethyl-	829-26-5	NBS75K.l	68265	94	C13H14	170









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

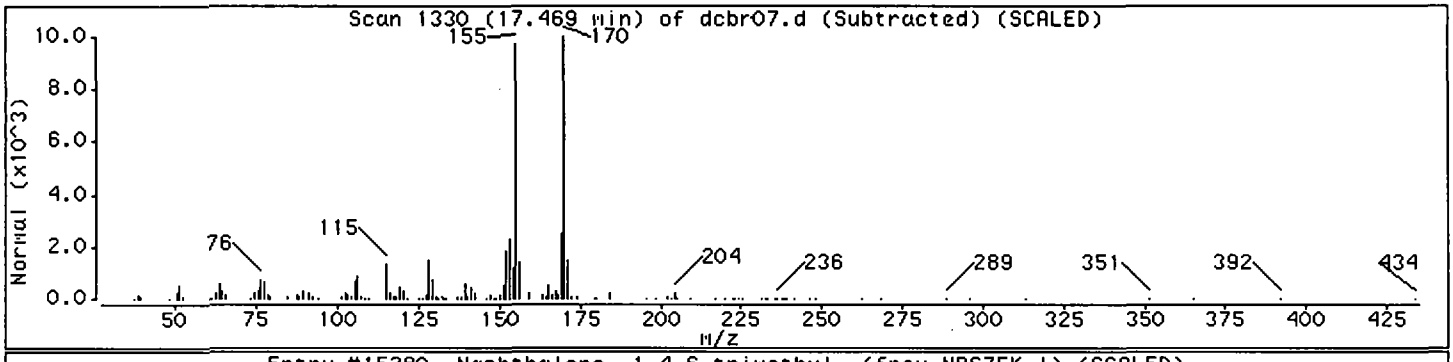
Client ID: WS-05 Instrument: gcl4.i

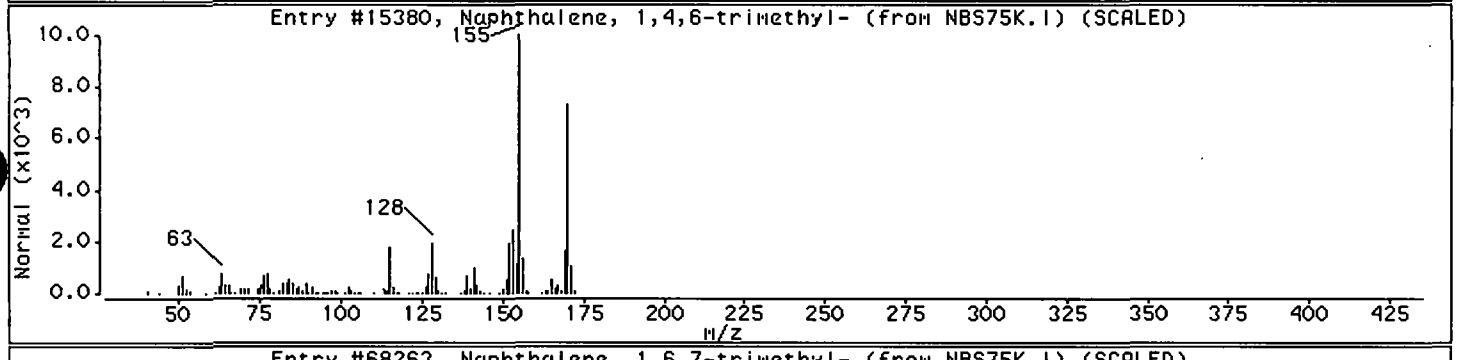
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

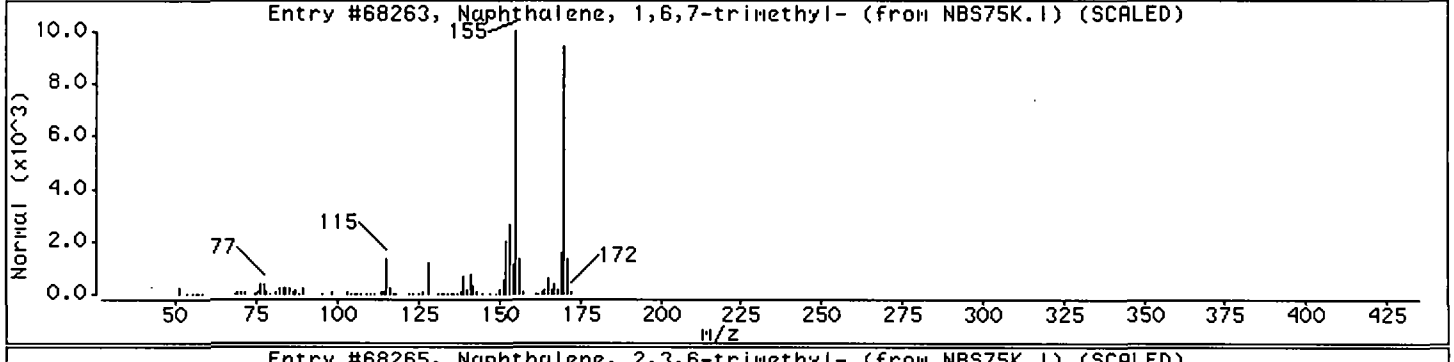
Volume Injected (uL): 2.0 Operator: GES

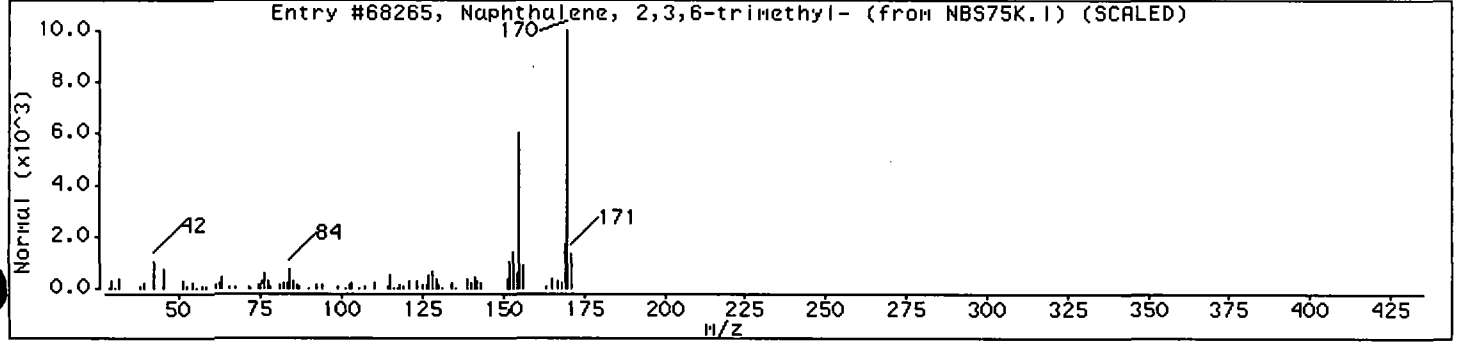
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	94	C13H14	170
Naphthalene, 1,6,7-trimethyl-	2245-38-7	NBS75K.l	68263	94	C13H14	170
Naphthalene, 2,3,6-trimethyl-	829-26-5	NBS75K.l	68265	94	C13H14	170









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

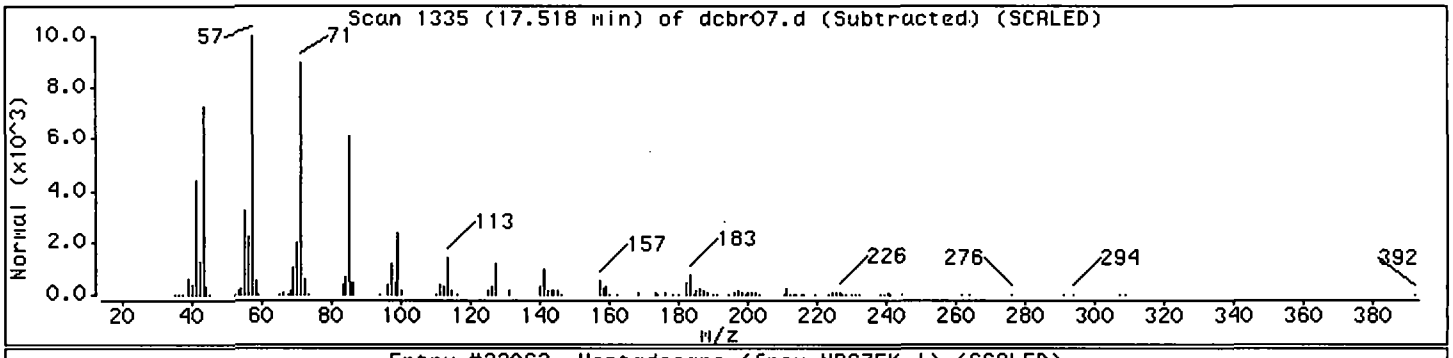
Client ID: WS-05 Instrument: gc14.i

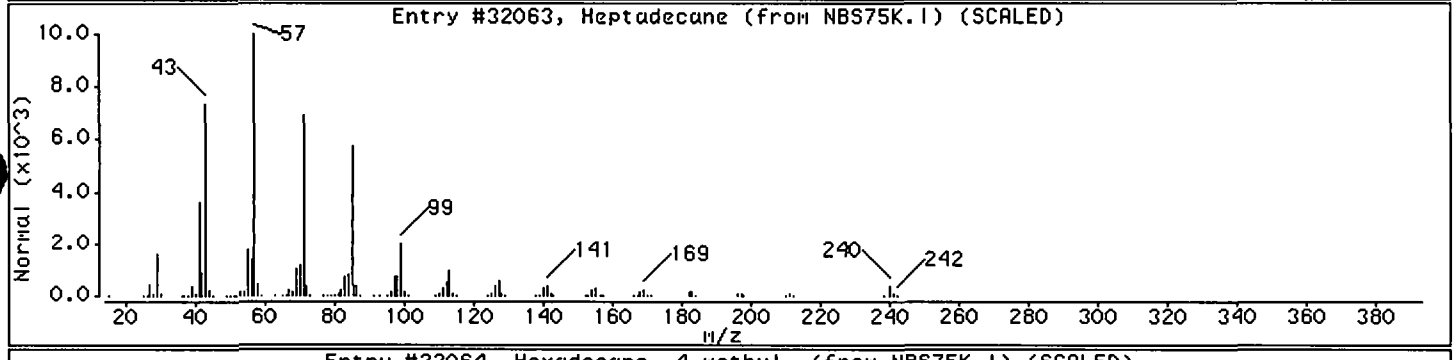
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

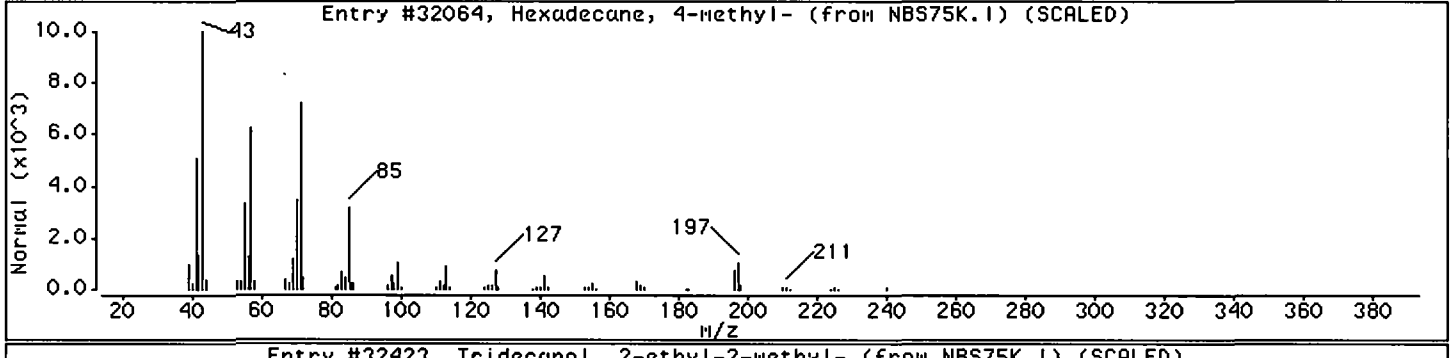
Volume Injected (uL): 2.0 Operator: GES

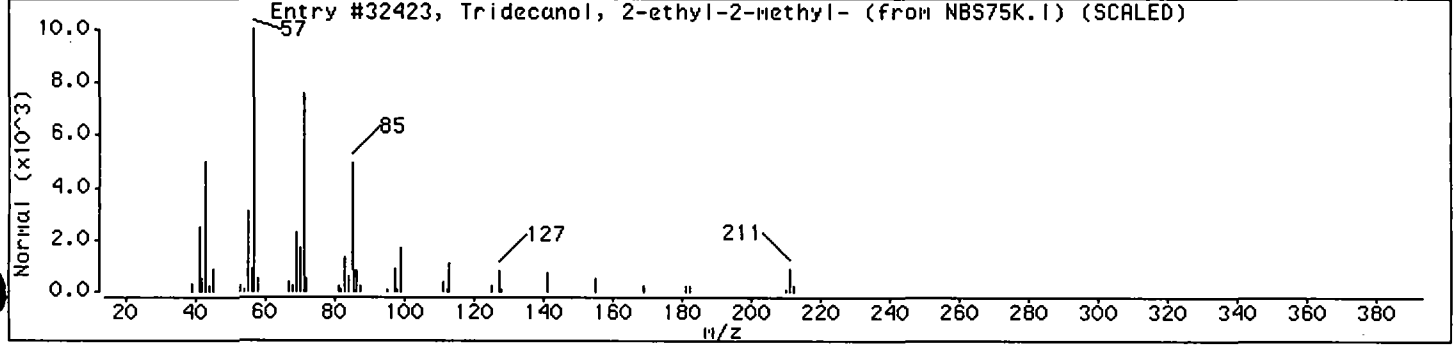
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptadecane	629-78-7	NBS75K.l	32063	90	C17H36	240
Hexadecane, 4-methyl-	25117-26-4	NBS75K.l	32064	83	C17H36	240
Tridecanol, 2-ethyl-2-methyl-	0-00-0	NBS75K.l	32423	72	C16H34O	242









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

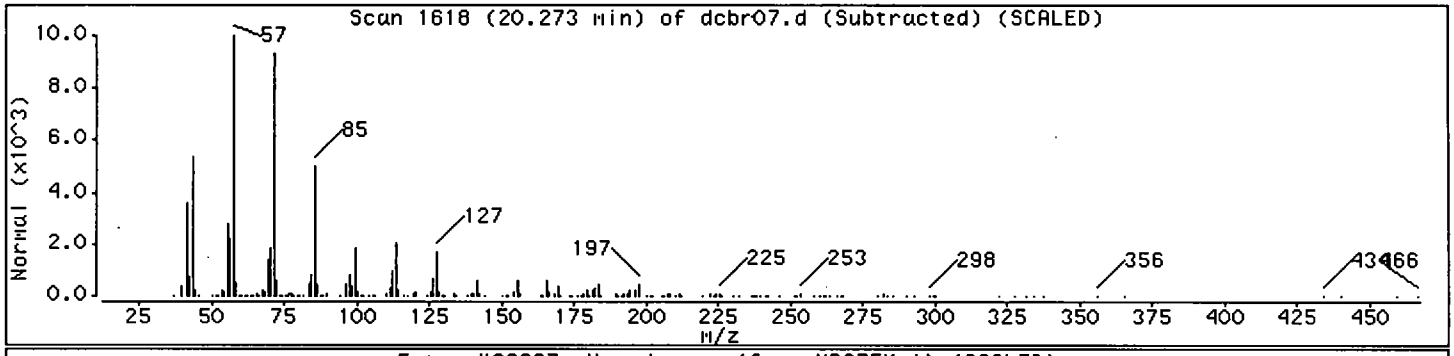
Client ID: WS-05 Instrument: gcl4.i

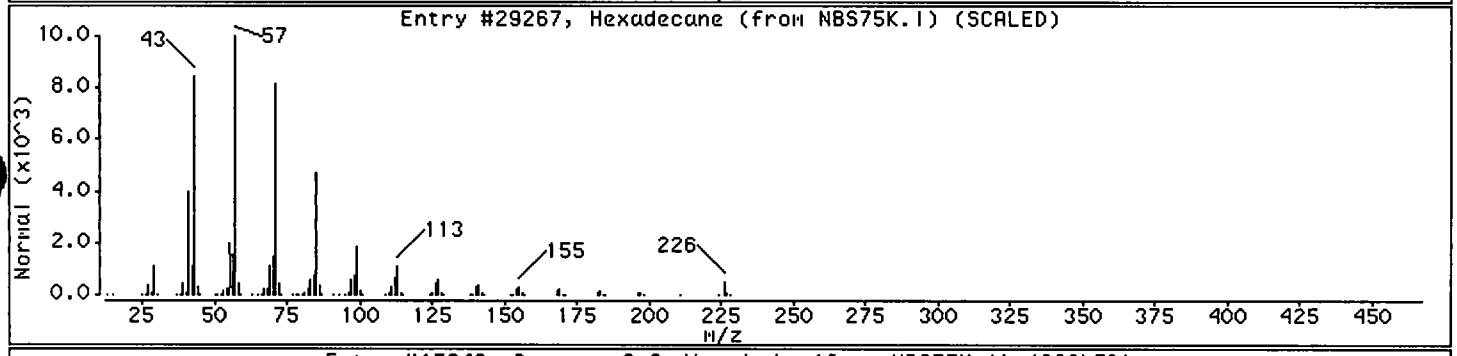
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

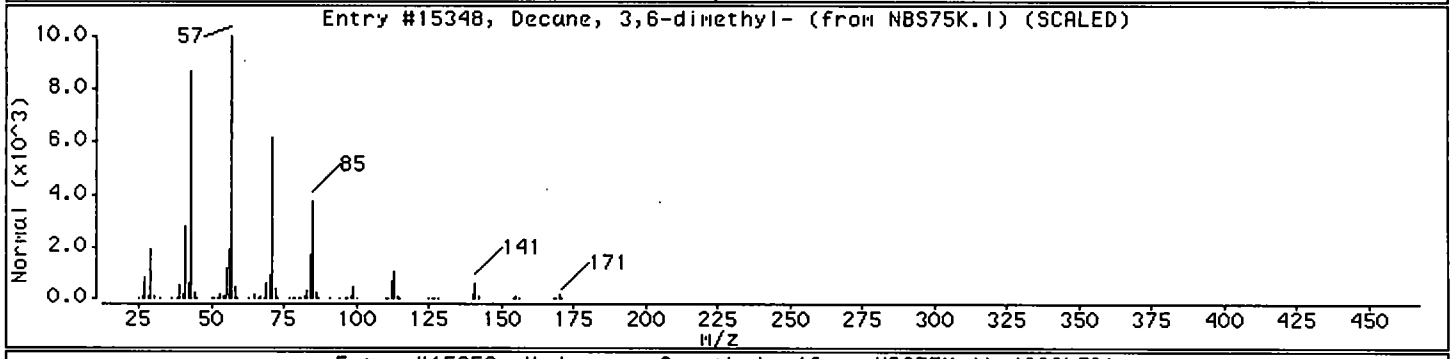
Volume Injected (uL): 2.0 Operator: GES

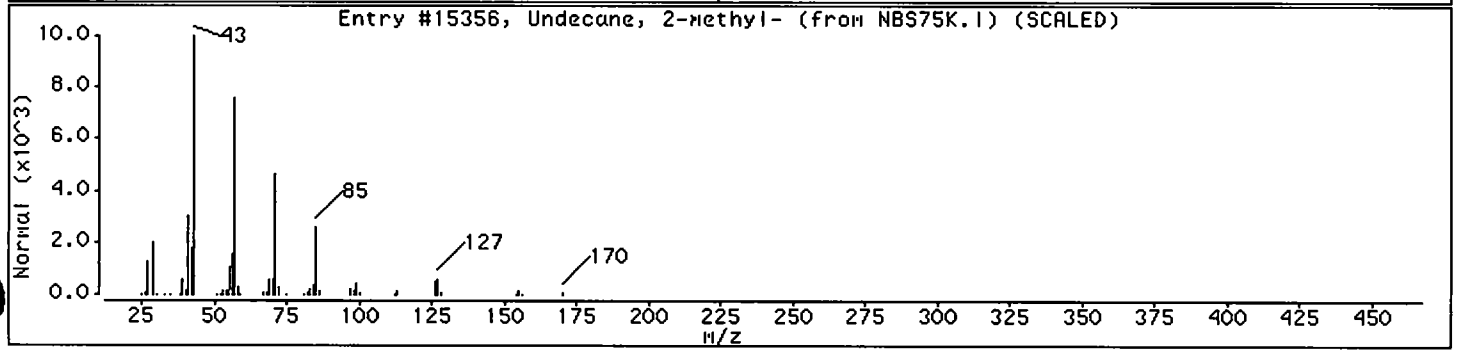
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane	544-76-3	NBS75K.l	29267	87	C16H34	226
Decane, 3,6-dimethyl-	17312-53-7	NBS75K.l	15348	87	C12H26	170
Undecane, 2-methyl-	7045-71-8	NBS75K.l	15356	83	C12H26	170









Data File: /chem/gc14.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

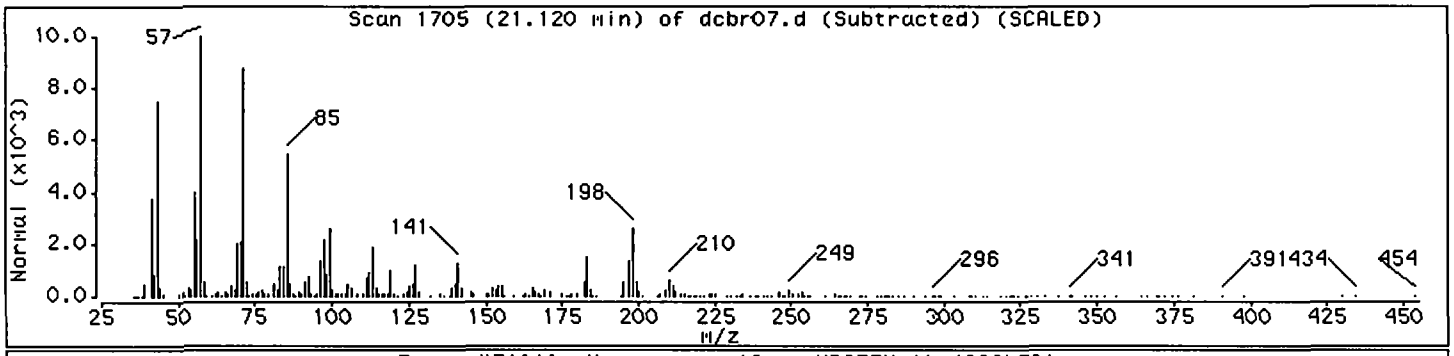
Client ID: WS-05 Instrument: gc14.i

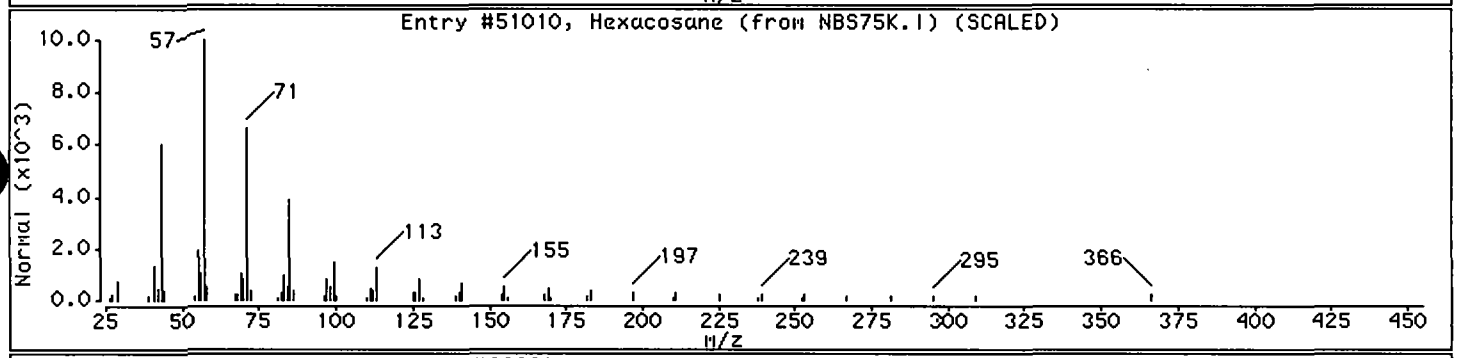
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

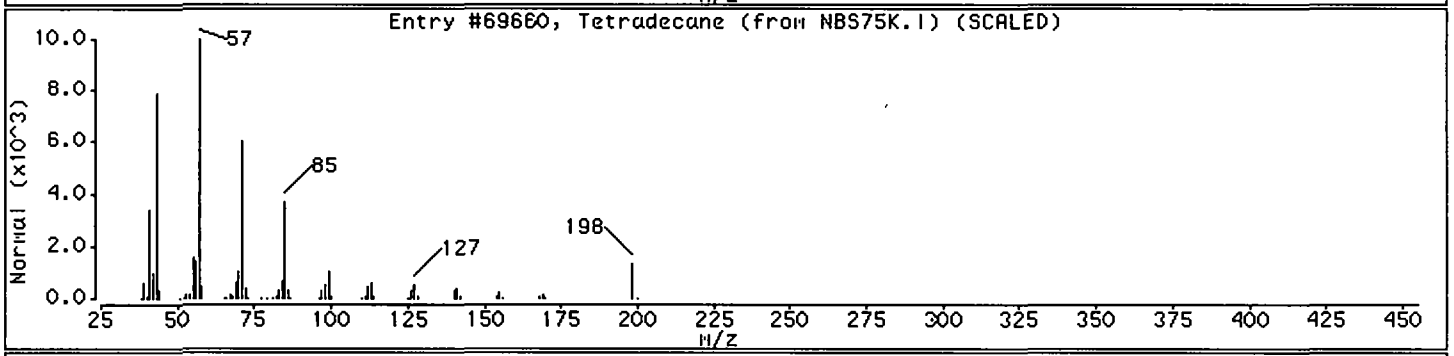
Volume Injected (uL): 2.0 Operator: GES

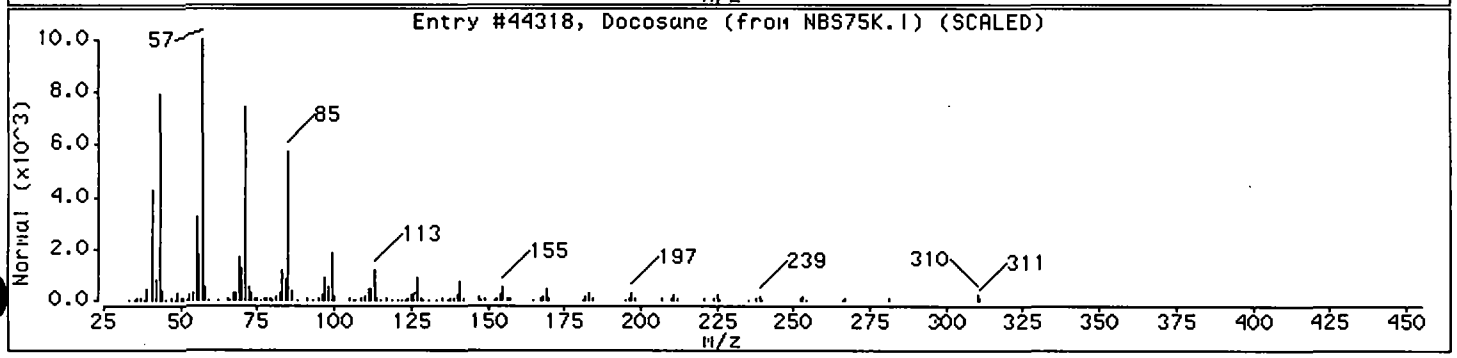
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexacosane	630-01-3	NBS75K.l	51010	94	C26H54	366
Tetradecane	629-59-4	NBS75K.l	69660	76	C14H30	198
Docosane	629-97-0	NBS75K.l	44318	70	C22H46	310









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

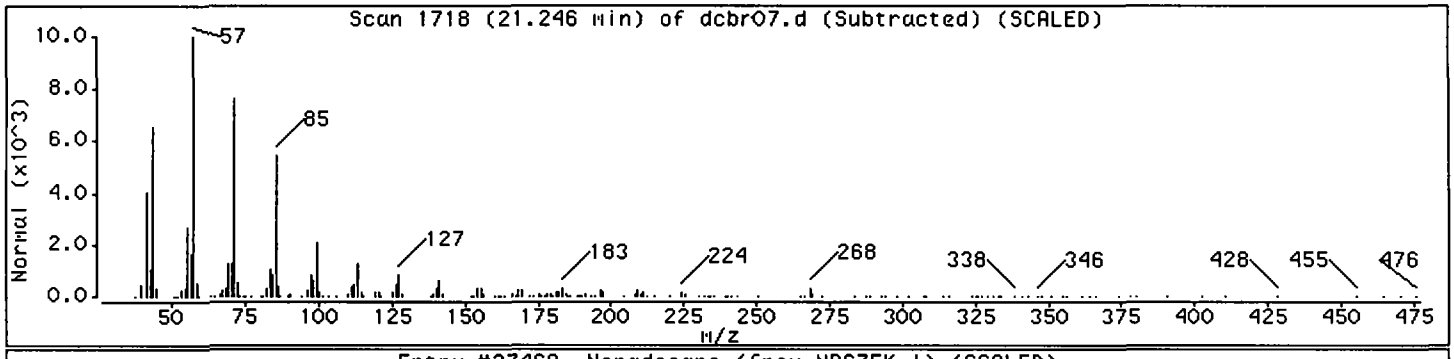
Client ID: WS-05 Instrument: gcl4.i

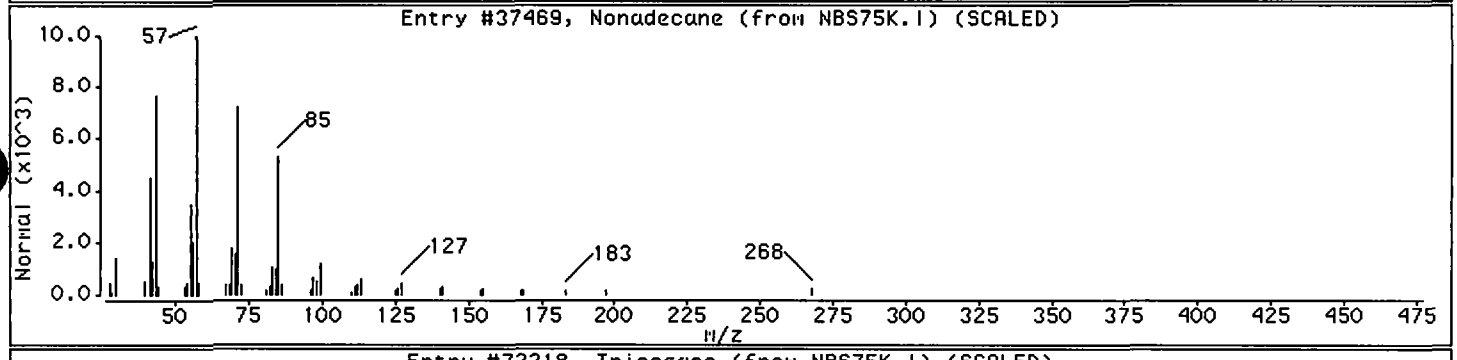
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

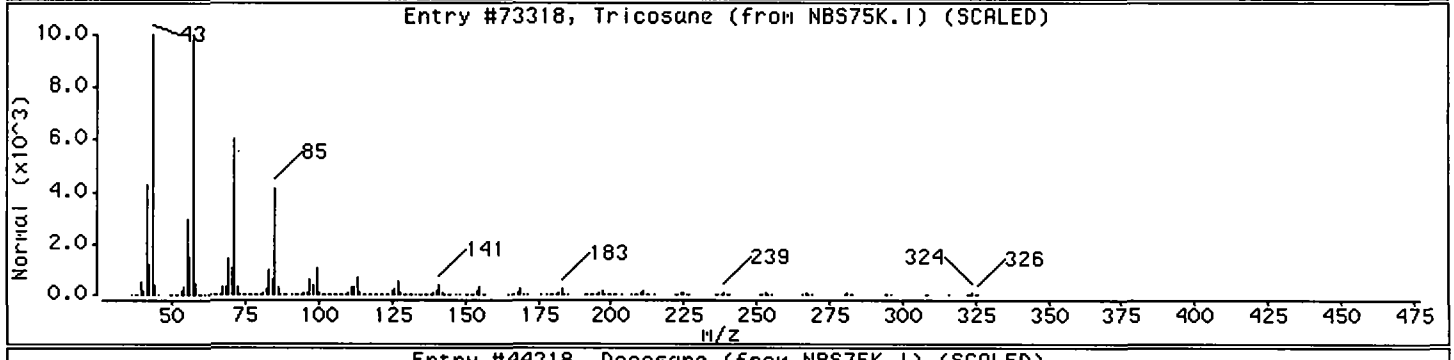
Volume Injected (uL): 2.0 Operator: GES

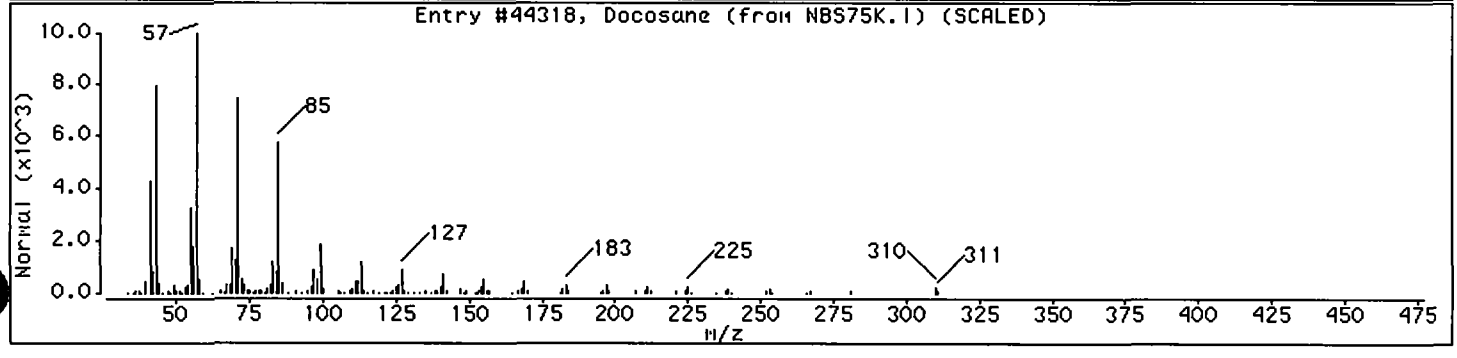
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Nonadecane	629-92-5	NBS75K.l	37469	98	C19H40	268
Tricosane	638-67-5	NBS75K.l	73318	97	C23H48	324
Docosane	629-97-0	NBS75K.l	44318	91	C22H46	310









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

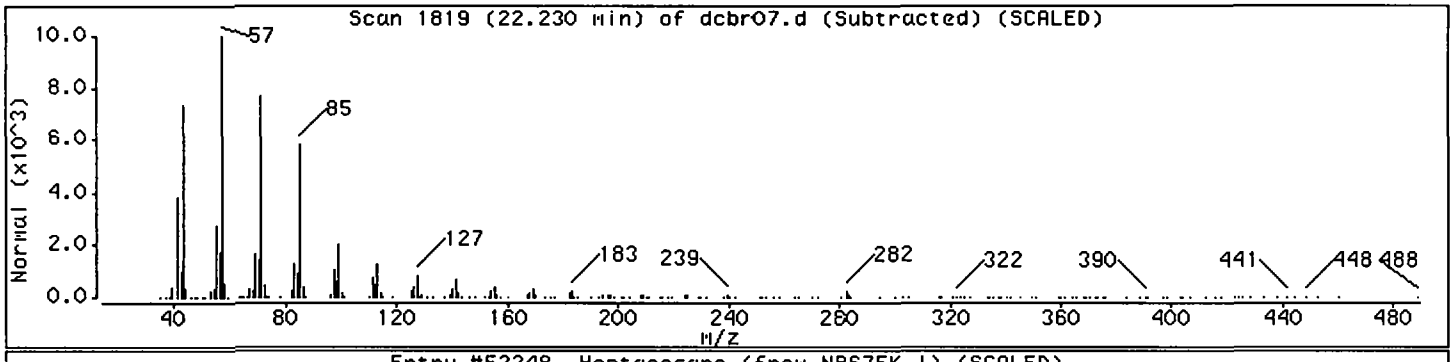
Client ID: WS-05 Instrument: gcl4.i

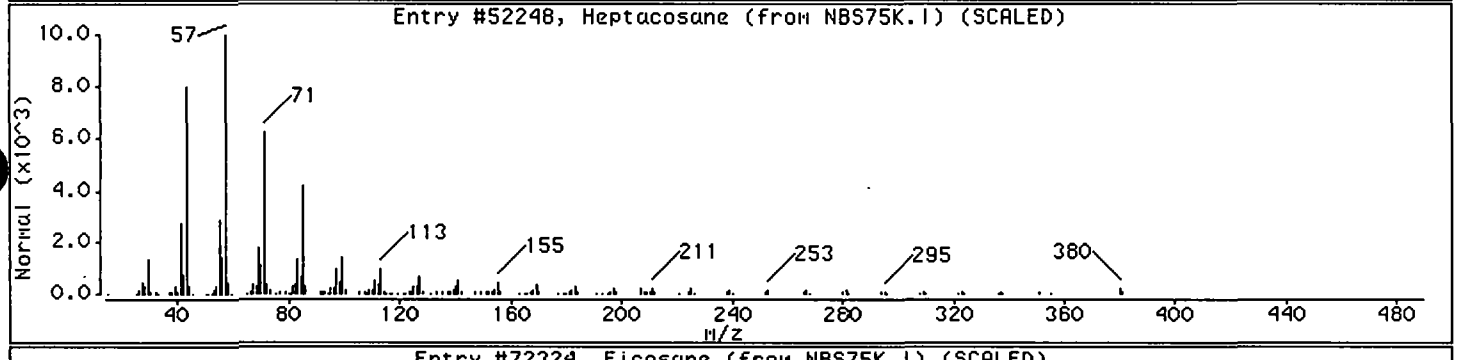
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

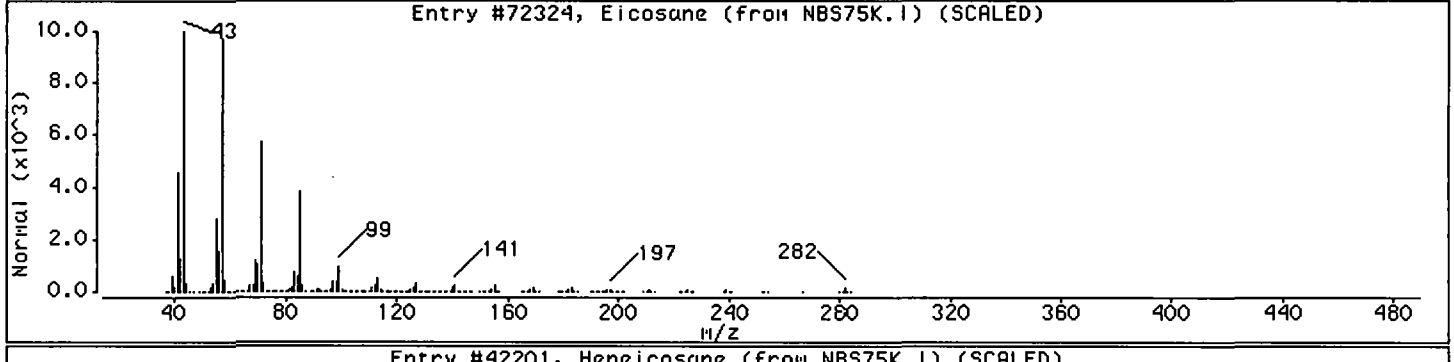
Volume Injected (uL): 2.0 Operator: GES

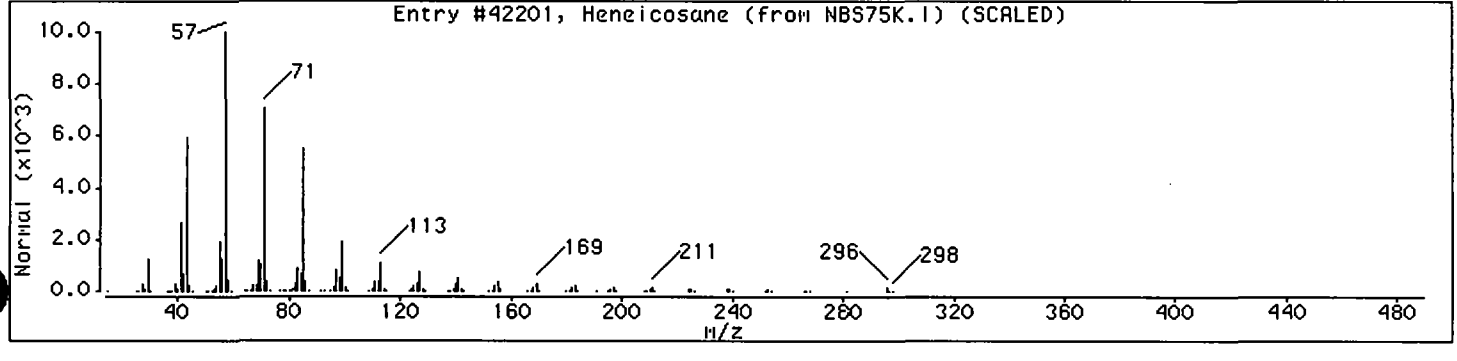
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptacosane	593-49-7	NBS75K.l	52248	94	C27H56	380
Eicosane	112-95-8	NBS75K.l	72324	91	C20H42	282
Heneicosane	629-94-7	NBS75K.l	42201	91	C21H44	296









Data File: /chem/gcl4.i/dec1296b.b/dcbr07.d

Date : 13-DEC-1996 00:12

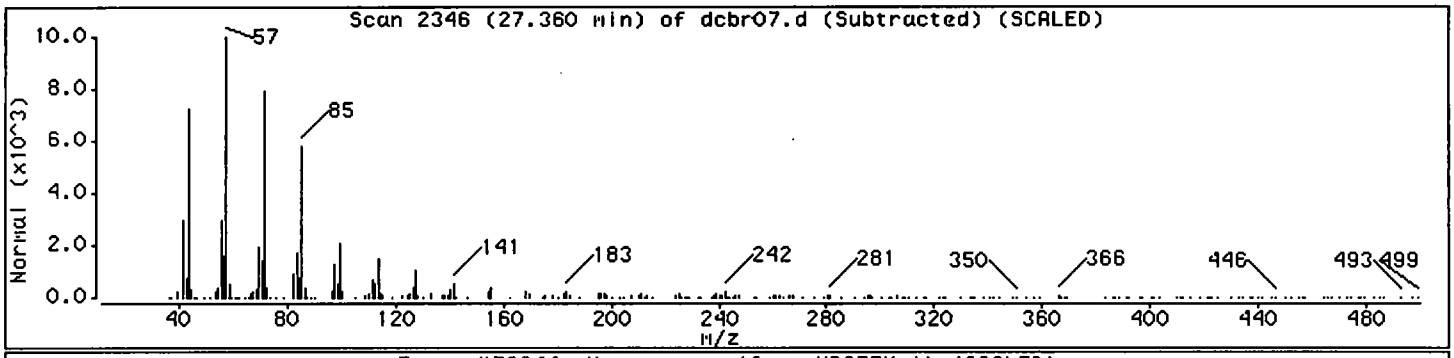
Client ID: WS-05 Instrument: gcl4.i

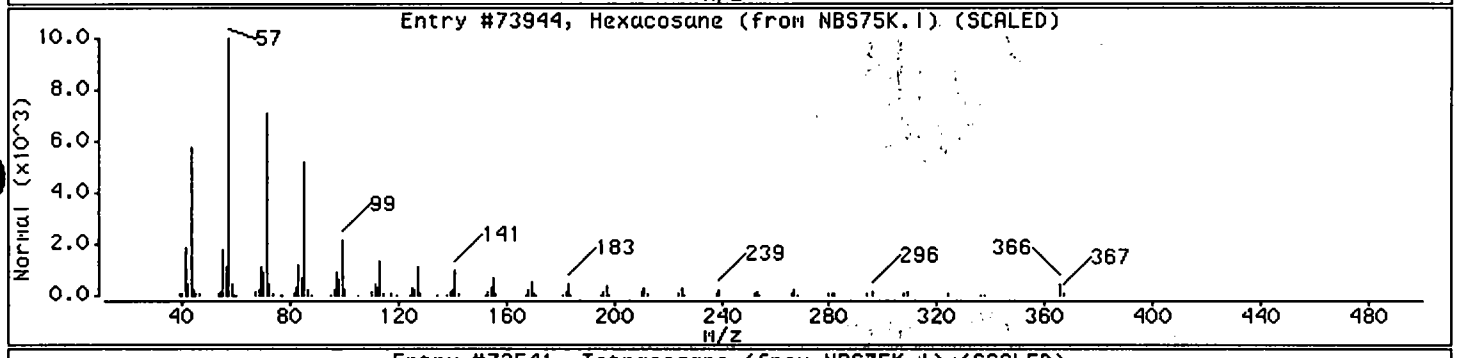
Sample Info: 9611G675-005 DFBC12,[AL=0625HS],[DC=00]

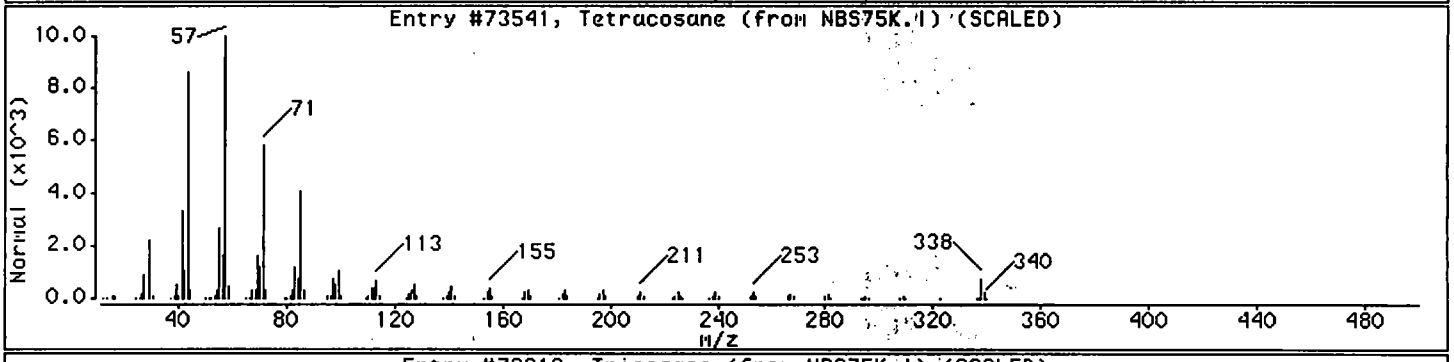
Volume Injected (uL): 2.0 Operator: GES

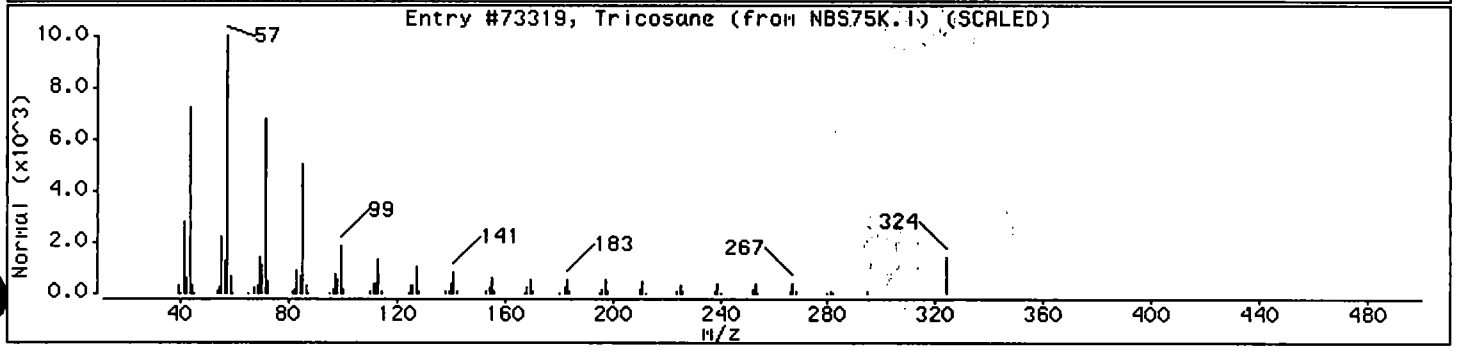
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon		NBS75K.l	73944	95	C26H54	366
Tetracosane	646-31-1	NBS75K.l	73541	95	C24H50	338
Tricosane	638-67-5	NBS75K.l	73319	89	C23H48	324









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-06

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-006

Sample wt/vol: 5.2 (g/mL) G Lab File ID: DCBR08

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 24 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 125.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	320000	U
111-44-4	bis(2-Chloroethyl)ether	320000	U
95-57-8	2-Chlorophenol	320000	U
541-73-1	1,3-Dichlorobenzene	320000	U
106-46-7	1,4-Dichlorobenzene	320000	U
95-50-1	1,2-Dichlorobenzene	320000	U
95-48-7	2-Methylphenol	320000	U
108-60-1	2,2'-oxybis(1-Chloropropane)	320000	U
106-44-5	4-Methylphenol	320000	U
621-64-7	N-Nitroso-di-n-propylamine	320000	U
67-72-1	Hexachloroethane	320000	U
98-95-3	Nitrobenzene	320000	U
78-59-1	Isophorone	320000	U
88-75-5	2-Nitrophenol	320000	U
105-67-9	2,4-Dimethylphenol	320000	U
111-91-1	bis(2-Chloroethoxy)methane	320000	U
120-83-2	2,4-Dichlorophenol	320000	U
120-82-1	1,2,4-Trichlorobenzene	320000	U
91-20-3	Naphthalene	150000	J
106-47-8	4-Chloroaniline	320000	U
87-68-3	Hexachlorobutadiene	320000	U
59-50-7	4-Chloro-3-methylphenol	320000	U
91-57-6	2-Methylnaphthalene	760000	
77-47-4	Hexachlorocyclopentadiene	320000	U
88-06-2	2,4,6-Trichlorophenol	320000	U
95-95-4	2,4,5-Trichlorophenol	790000	U
91-58-7	2-Chloronaphthalene	320000	U
88-74-4	2-Nitroaniline	790000	U
131-11-3	Dimethylphthalate	320000	U
208-96-8	Acenaphthylene	320000	U
606-20-2	2,6-Dinitrotoluene	320000	U
99-09-2	3-Nitroaniline	790000	U
83-32-9	Acenaphthene	33000	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-06

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-006

Sample wt/vol: 5.2 (g/mL) G Lab File ID: DCBR08

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 24 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 125.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	790000	U
100-02-7	4-Nitrophenol	790000	U
132-64-9	Dibenzofuran	320000	U
121-14-2	2,4-Dinitrotoluene	320000	U
84-66-2	Diethylphthalate	320000	U
7005-72-3	4-Chlorophenyl-phenylether	320000	U
86-73-7	Fluorene	80000	J
100-01-6	4-Nitroaniline	790000	U
534-52-1	4,6-Dinitro-2-methylphenol	790000	U
86-30-6	n-Nitrosodiphenylamine (1)	320000	U
101-55-3	4-Bromophenyl-phenylether	320000	U
118-74-1	Hexachlorobenzene	320000	U
87-86-5	Pentachlorophenol	790000	U
85-01-8	Phenanthrene	370000	
120-12-7	Anthracene	320000	U
86-74-8	Carbazole	320000	U
84-74-2	Di-n-butylphthalate	320000	U
206-44-0	Fluoranthene	32000	J
129-00-0	Pyrene	260000	J
85-68-7	Butylbenzylphthalate	320000	U
91-94-1	3,3'-Dichlorobenzidine	320000	U
56-55-3	Benzo(a)anthracene	320000	U
218-01-9	Chrysene	66000	J
117-81-7	bis(2-Ethylhexyl)phthalate	320000	U
117-84-0	Di-n-octylphthalate	320000	U
205-99-2	Benzo(b)fluoranthene	320000	U
207-08-9	Benzo(k)fluoranthene	320000	U
50-32-8	Benzo(a)pyrene	320000	U
193-39-5	Indeno(1,2,3-cd)pyrene	320000	U
53-70-3	Dibenzo(a,h)anthracene	320000	U
191-24-2	Benzo(g,h,i)perylene	320000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-06

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-006

Sample wt/vol: 5.2 (g/mL) G Lab File ID: DCBR08

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 24 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 125.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 20

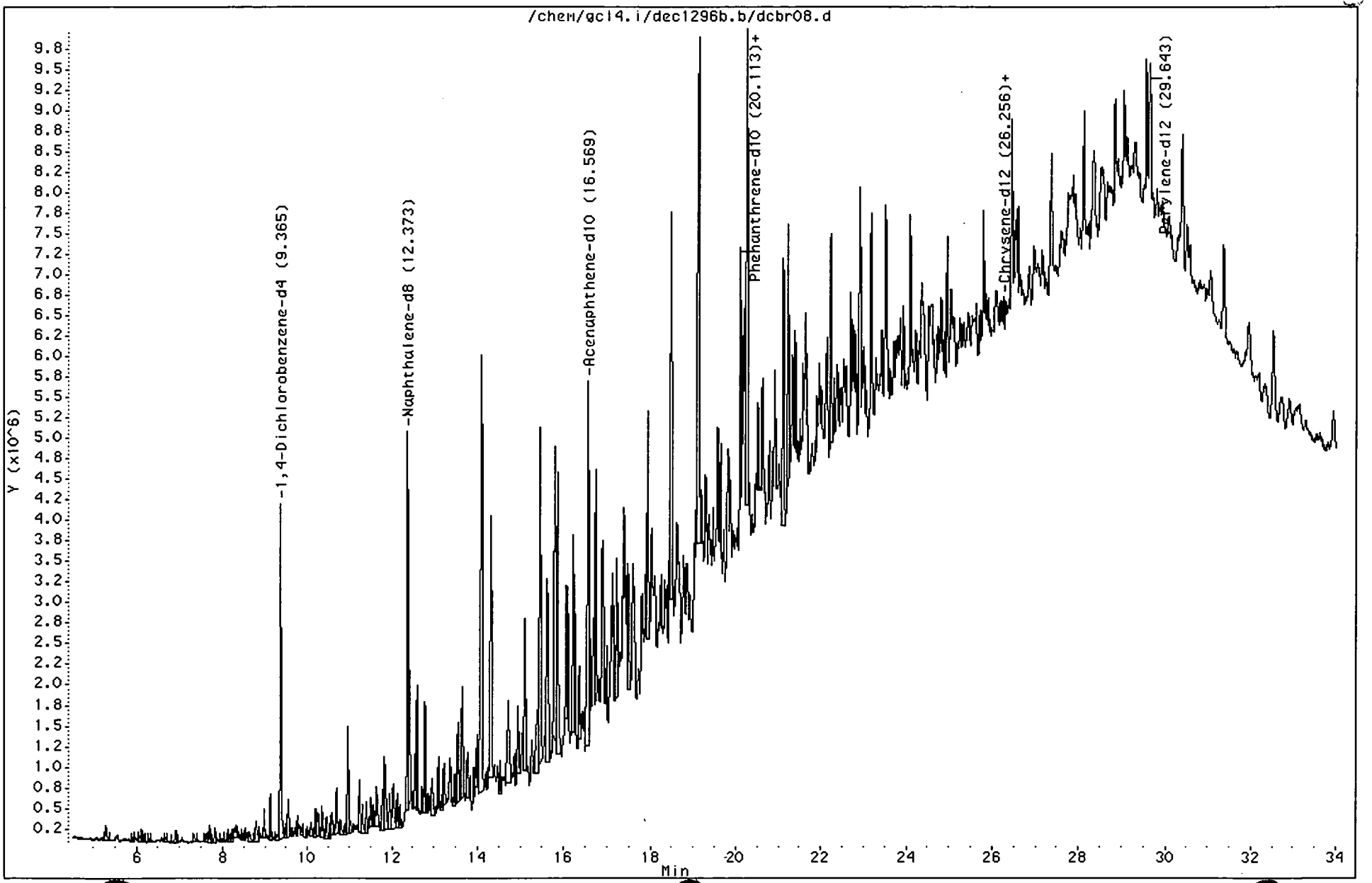
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		SUBST BENZENE	11.83	190000	J
2.		UNKNOWN ALKANE	12.03	110000	J
3.		UNKNOWN ALKANE	12.60	180000	J
4.		UNKNOWN ALKANE	12.78	160000	J
5.		UNKNOWN ALKANE	13.66	220000	J
6.		SUBST. NAPHTHALENE	14.33	500000	J
7.		UNKNOWN	14.73	200000	J
8.		UNKNOWN ALKANE	15.11	180000	J
9.		SUBST NAPHTHALENE	15.46	690000	J
10.		SUBST NAPHTHALENE	15.86	470000	J
11.		SUBST NAPHTHALENE	16.06	250000	J
12.		UNKNOWN ALKANE	16.23	350000	J
13.		UNKNOWN ALKANE	16.73	350000	J
14.		SUBST NAPHTHALENE	17.23	190000	J
15.		UNKNOWN ALKANE	18.49	1300000	J
16.		UNKNOWN ALKANE	19.14	2200000	J
17.		UNKNOWN ALKANE	20.27	1600000	J
18.		UNKNOWN ALKANE	21.12	1000000	J
19.		UNKNOWN ALKANE	21.23	710000	J
20.		UNKNOWN ALKANE	22.23	610000	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

233

Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d
Date : 13-DEC-1996 00:54
Client ID: WS-06
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr08.d
Lab Smp Id: 9611G675-006 Client Smp ID: WS-06
Inj Date : 13-DEC-1996 00:54
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-006 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.25.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 8
Dil Factor: 125.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.200	Weigth of sample extracted (g)
M	24.100	% Moisture

MB 12/17/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.365	9.325	(1.000)	1337142	40.000	
* 26 Naphthalene-d8	136.00	12.373	12.323	(1.000)	4162549	40.000	
* 41 Acenaphthene-d10	164.00	16.569	16.500	(1.000)	2154834	40.000	
* 56 Phenanthrene-d10	188.00	20.113	20.014	(1.000)	2858313	40.000	
* 67 Chrysene-d12	240.00	26.450	26.303	(1.000)	1810536	40.000	(H)
* 75 Perylene-d12	264.00	29.643	29.438	(1.000)	1536088	40.000	
42 Acenaphthene	154.00	16.637	16.577	(1.004)	116700	2.100	33262(a)
63 Pyrene	202.00	23.530	23.392	(0.896)	1305504	16.663	263870(aH)
27 Naphthalene	128.00	12.422	12.372	(1.004)	891281	9.356	148170(a)
30 2-Methylnaphthalene	142.00	14.106	14.046	(1.140)	3049704	48.244	763980
47 Fluorene	166.00	17.883	17.814	(1.079)	328193	5.077	80393(a)
57 Phenanthrene	178.00	20.161	20.072	(1.002)	1571150	23.301	368980
61 Fluoranthene	202.00	23.014	22.886	(1.144)	138335	2.013	31882(a)
69 Chrysene	228.00	26.499	26.361	(1.002)	231404	4.149	65696(aM)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

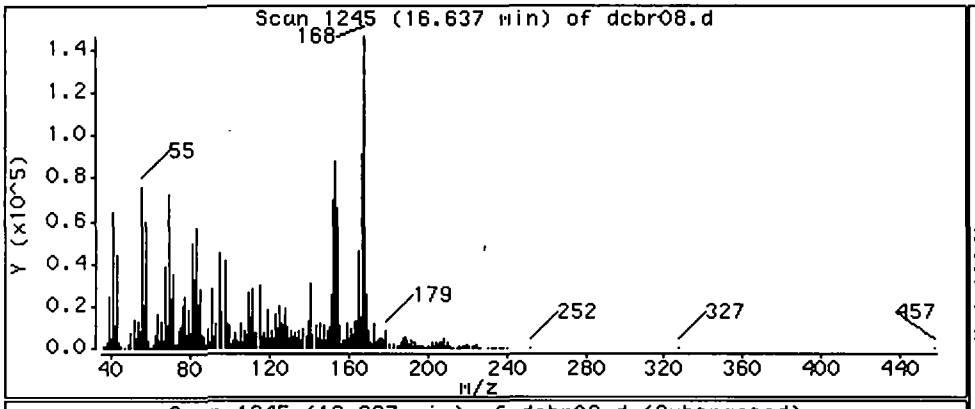
Client ID: WS-06 Instrument: gcl4.i

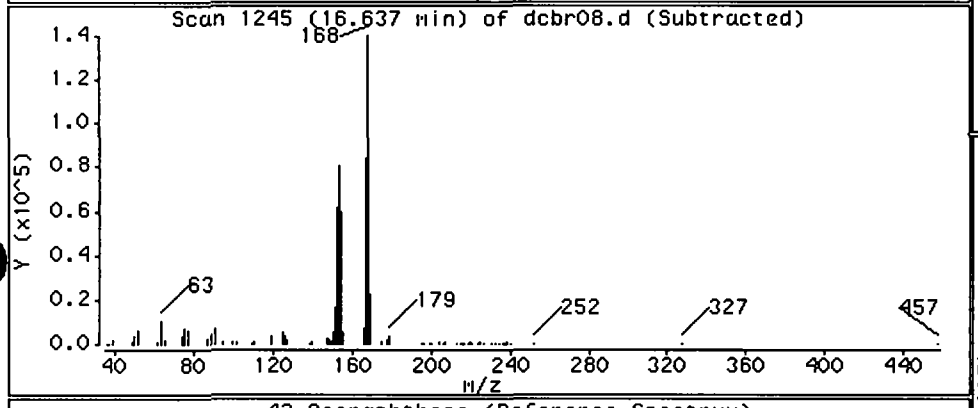
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

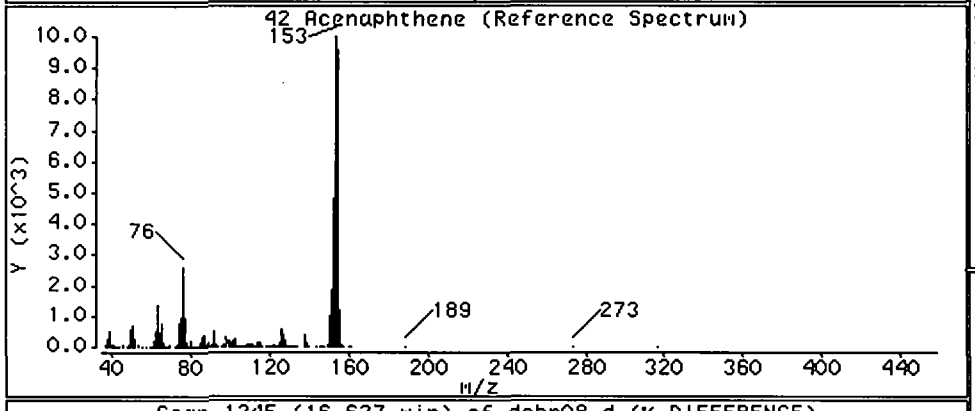
Volume Injected (uL): 2.0 Operator: GES

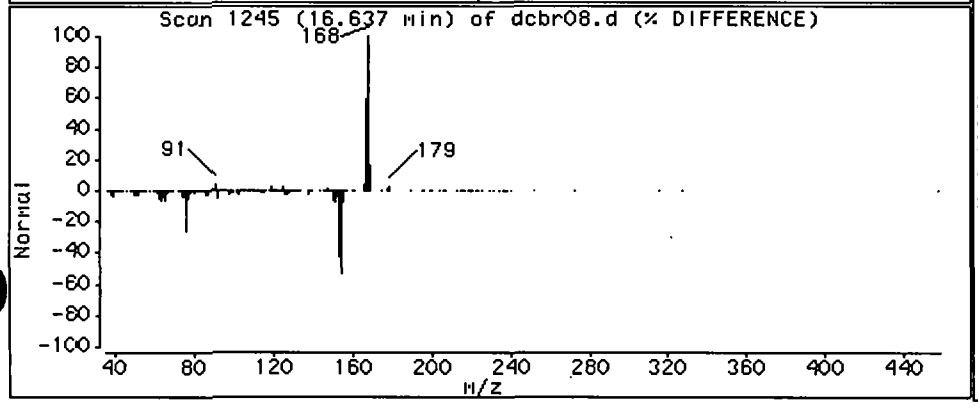
Column phase: Column diameter: 2.00

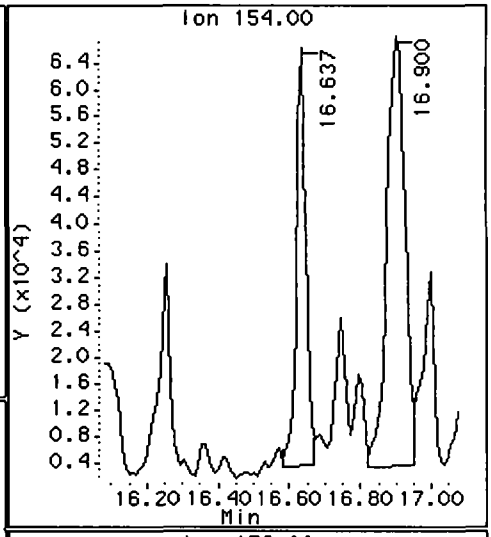
42 Acenaphthene

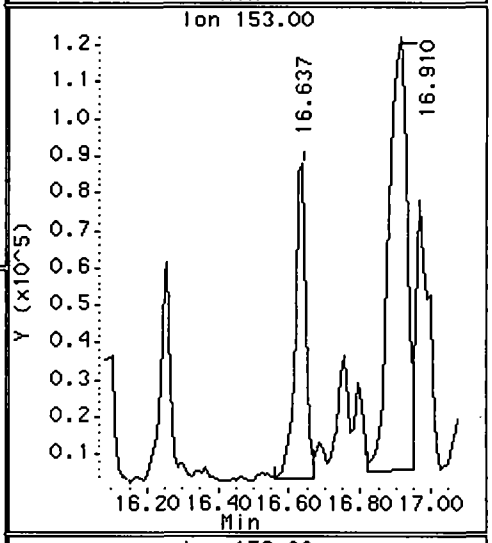


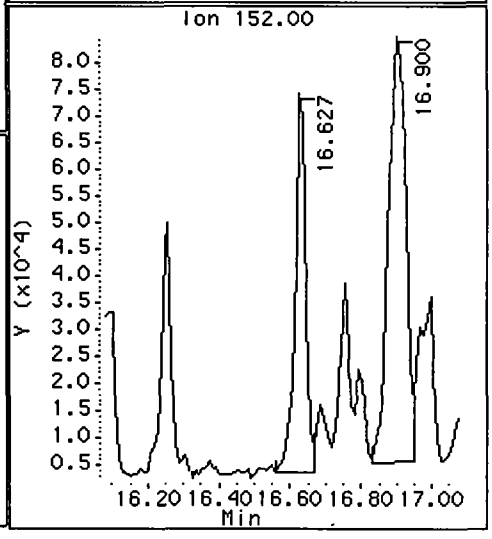












Data File: /chem/gc14.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

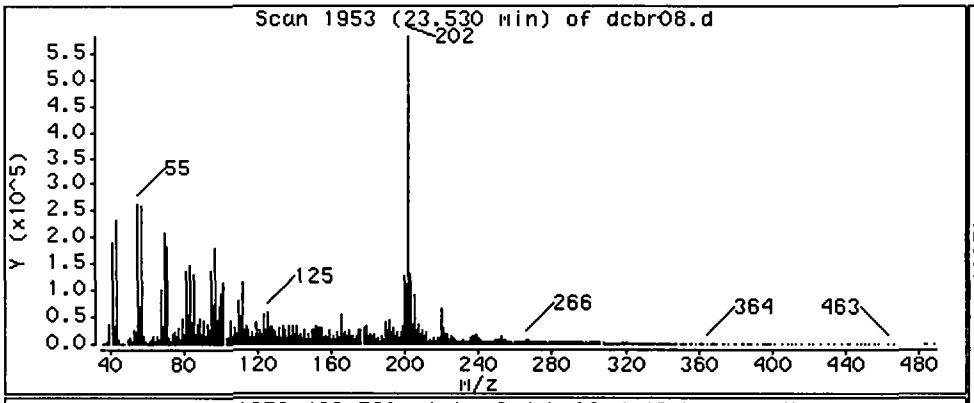
Client ID: WS-06 Instrument: gc14.i

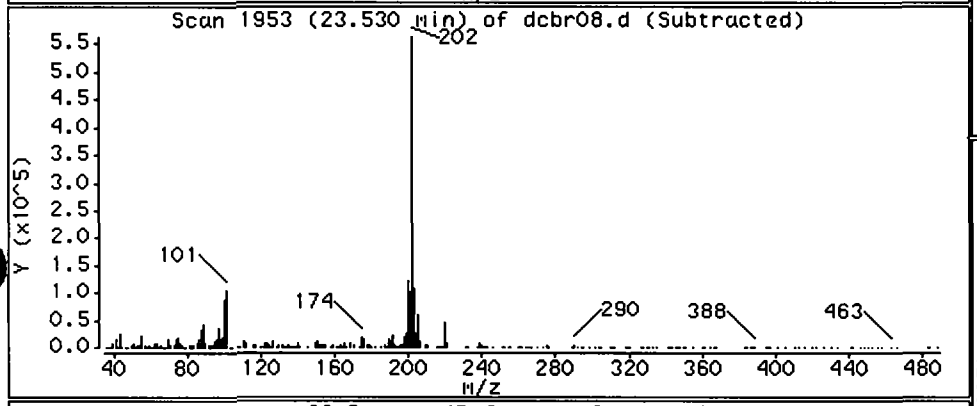
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

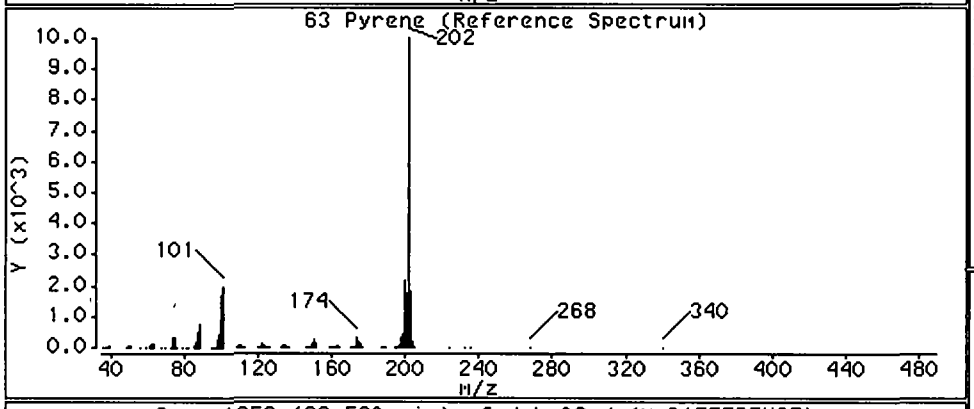
Volume Injected (uL): 2.0 Operator: GES

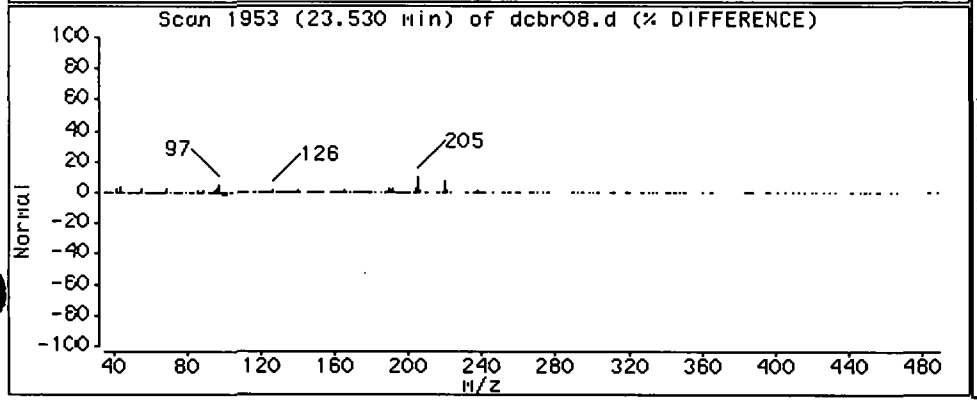
Column phase: Column diameter: 2.00

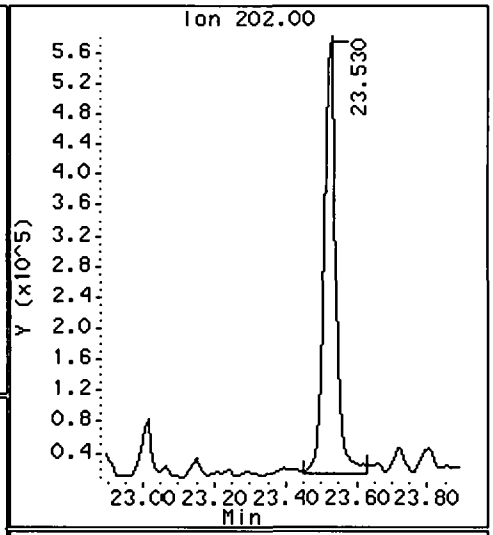
63 Pyrene

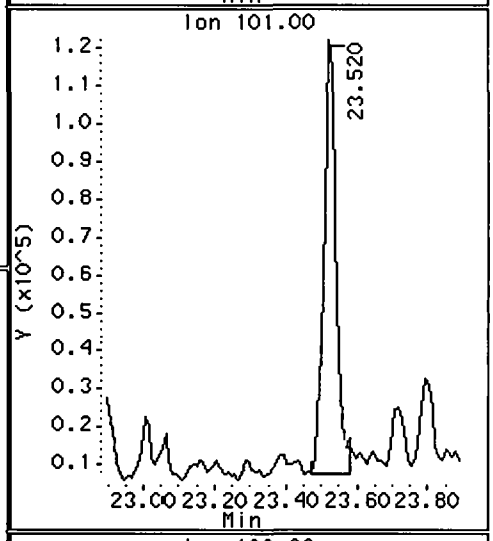


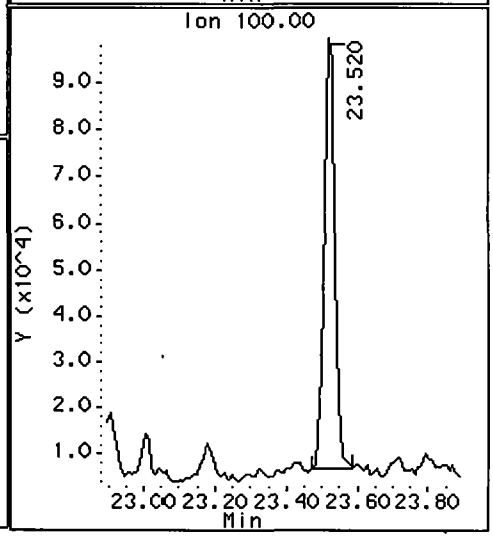












Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

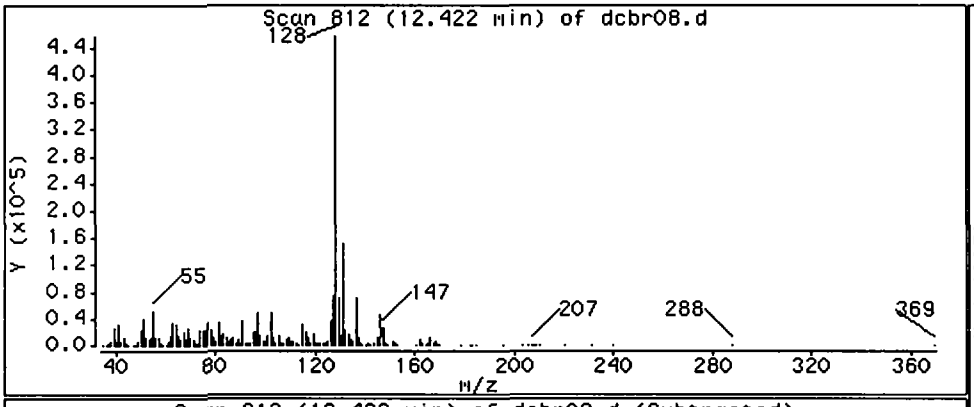
Client ID: WS-06 Instrument: gcl4.i

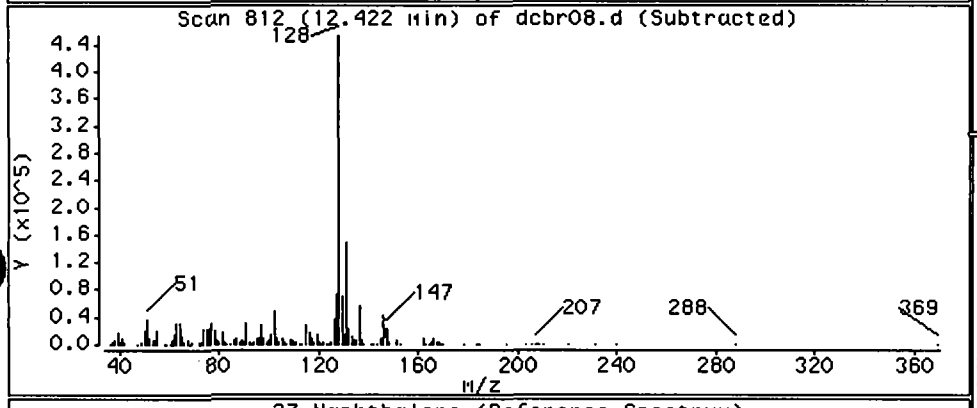
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

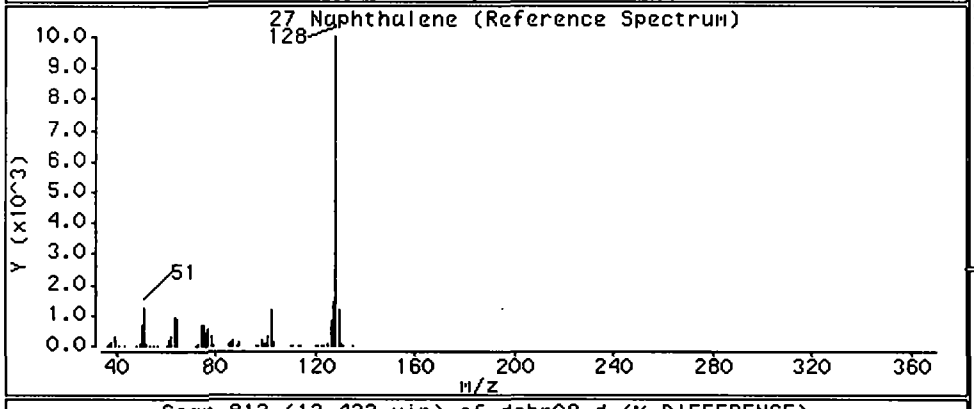
Volume Injected (uL): 2.0 Operator: GES

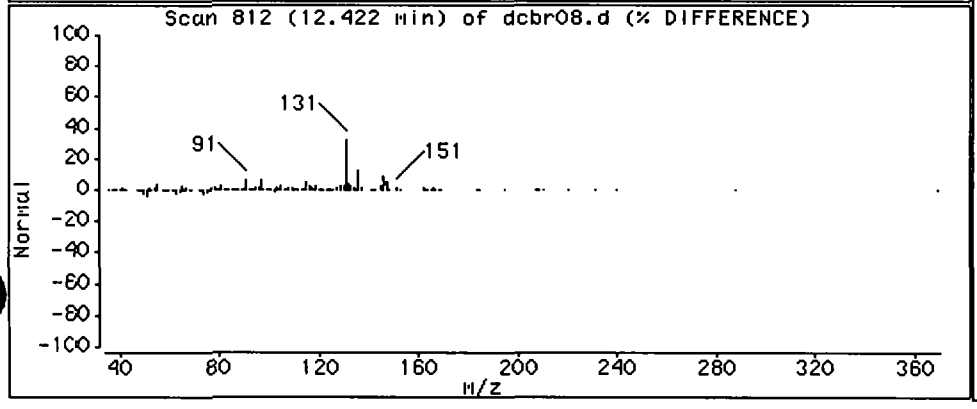
Column phase: Column diameter: 2.00

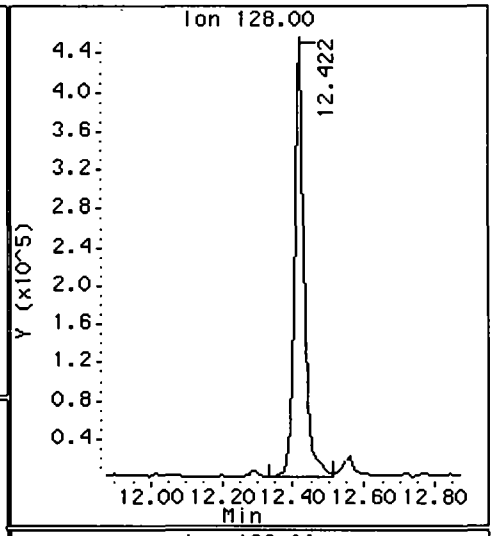
27 Naphthalene

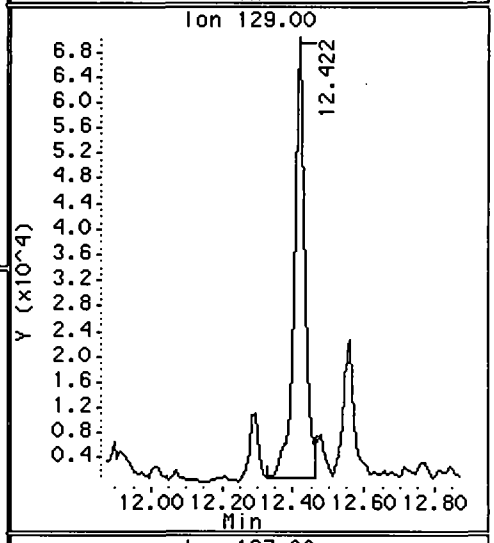


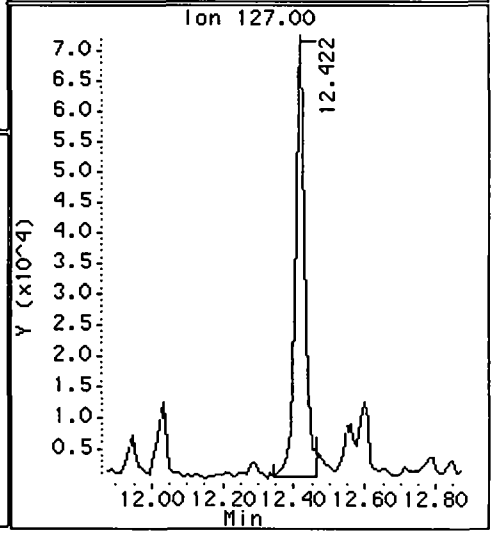












Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

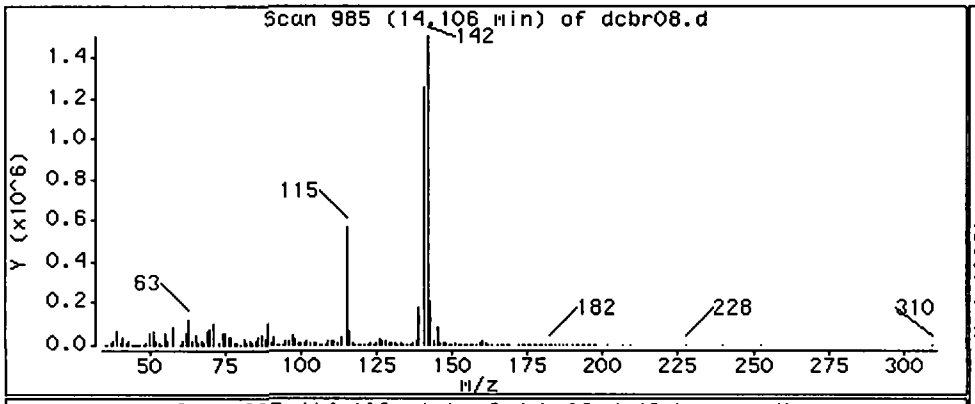
Client ID: WS-06 Instrument: gcl4.i

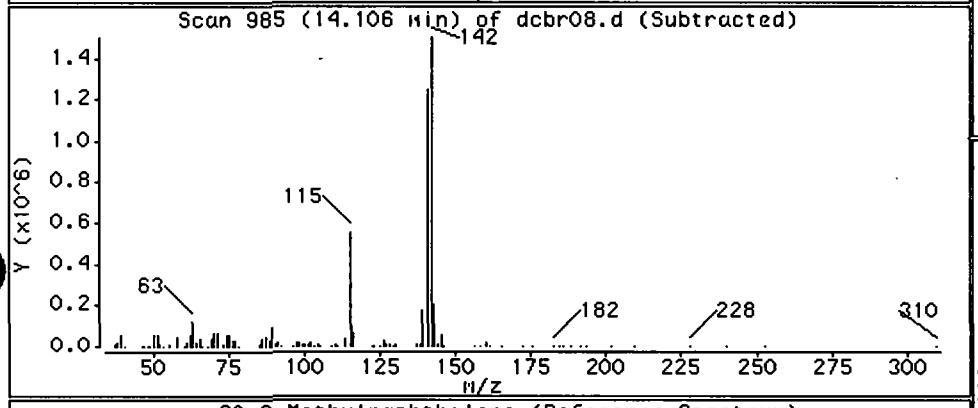
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

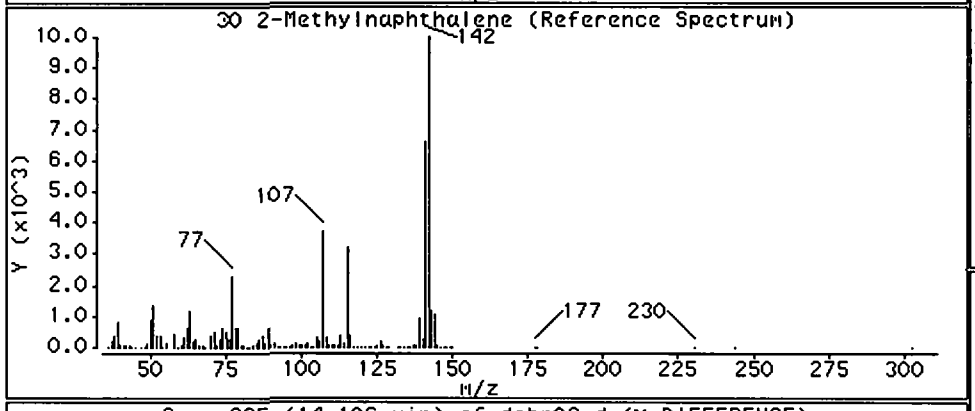
Volume Injected (uL): 2.0 Operator: GES

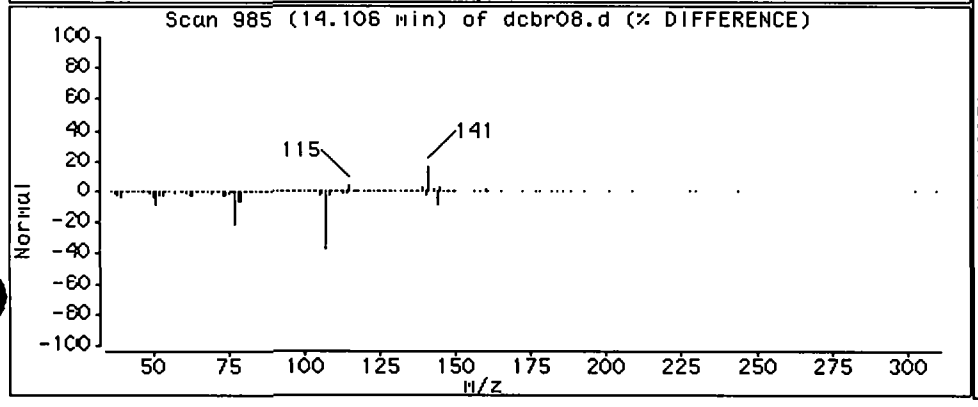
Column phase: Column diameter: 2.00

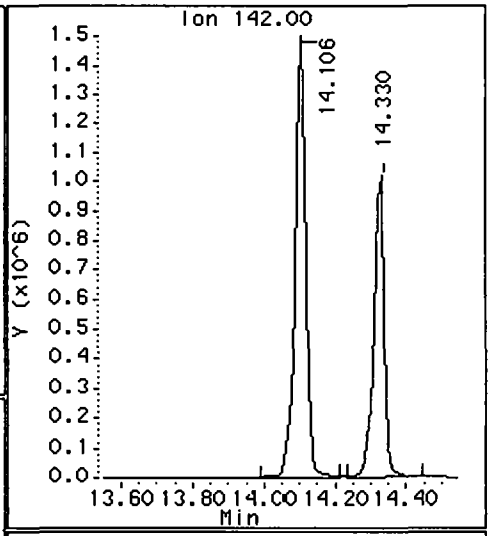
30 2-Methylnaphthalene

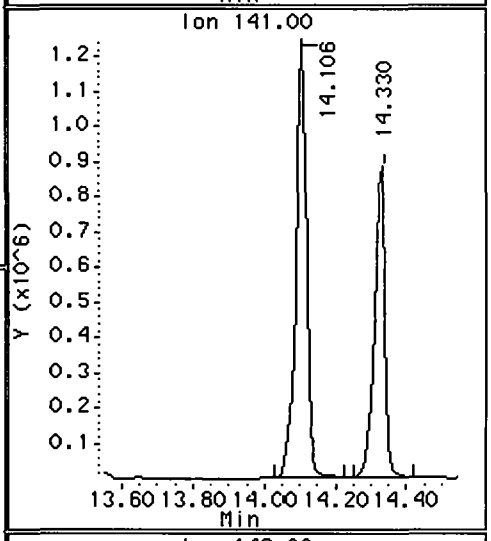


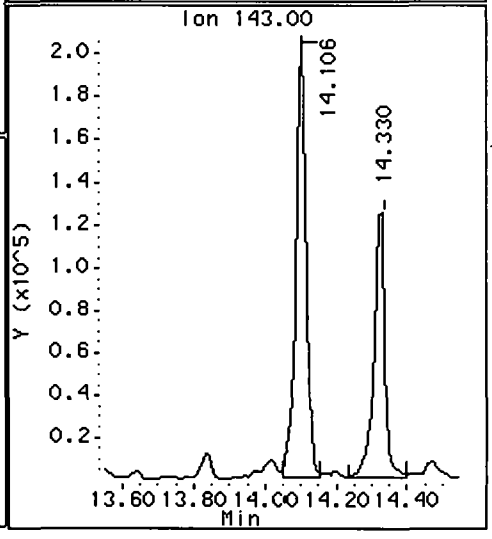












Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

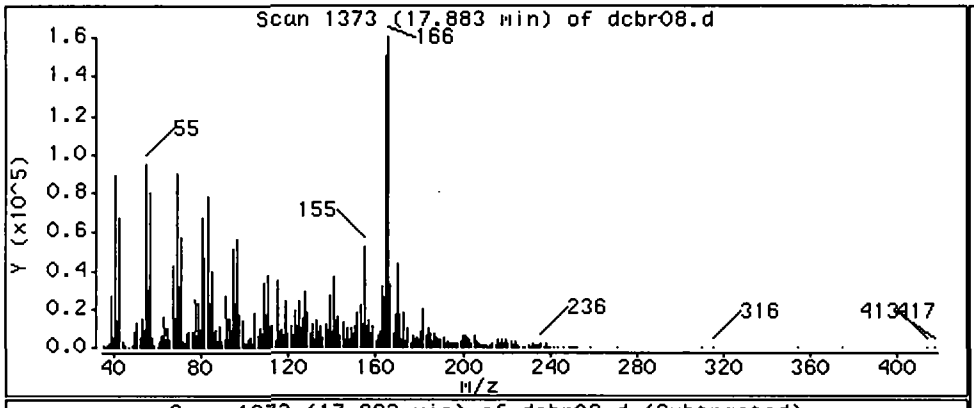
Client ID: WS-06 Instrument: gcl4.i

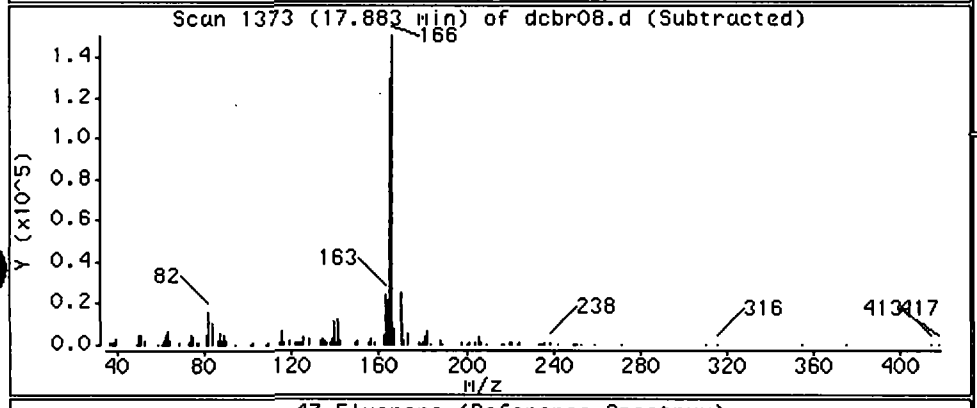
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

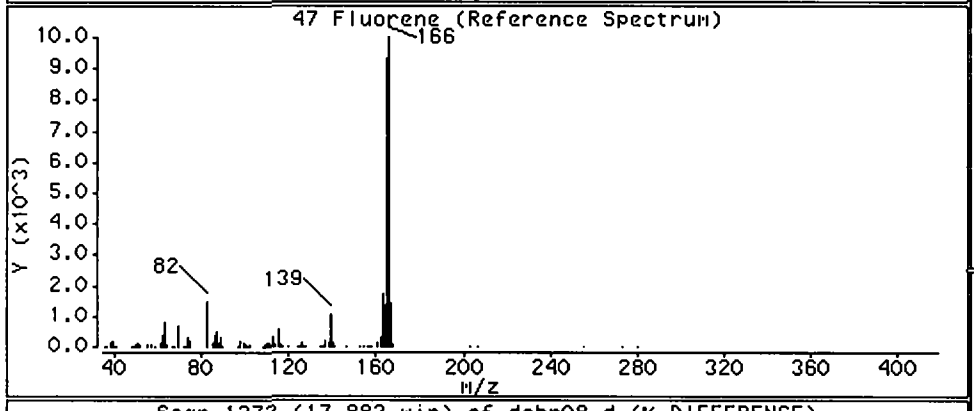
Volume Injected (uL): 2.0 Operator: GES

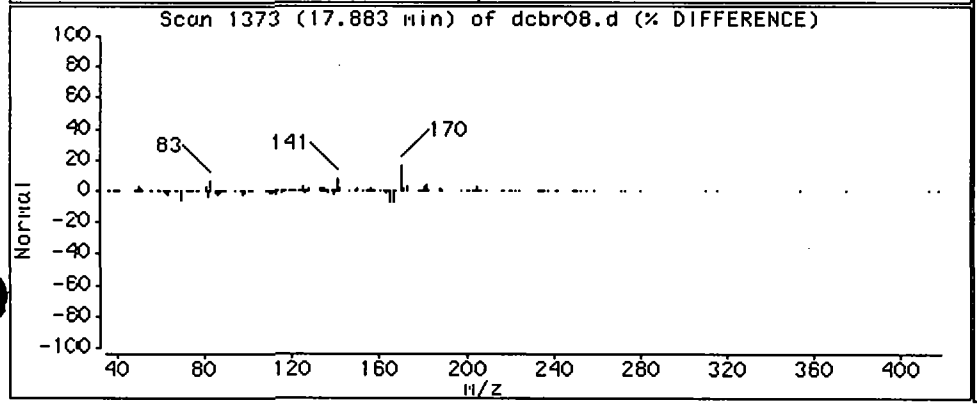
Column phase: Column diameter: 2.00

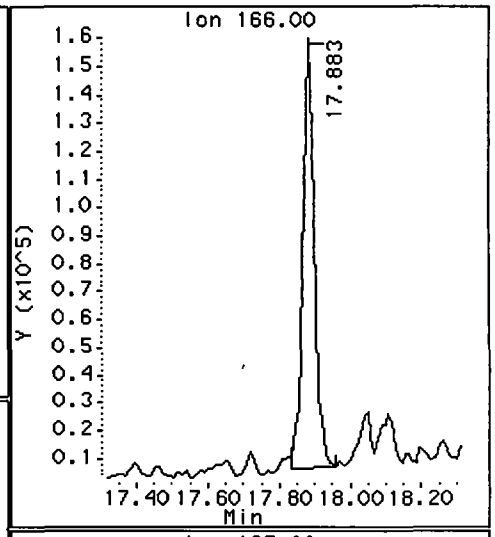
47 Fluorene

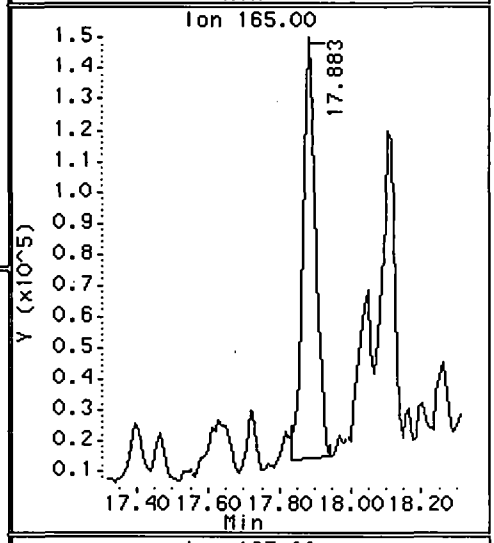


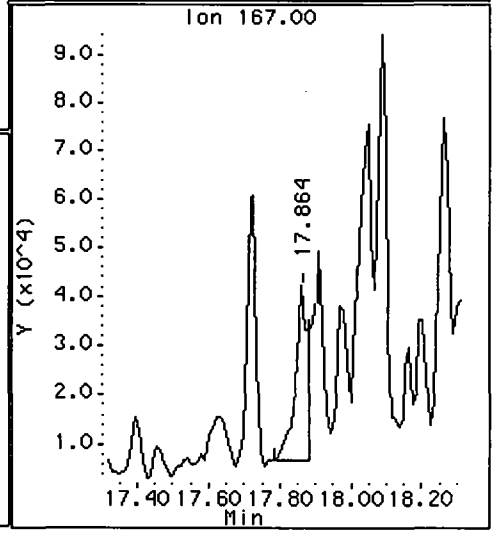












Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

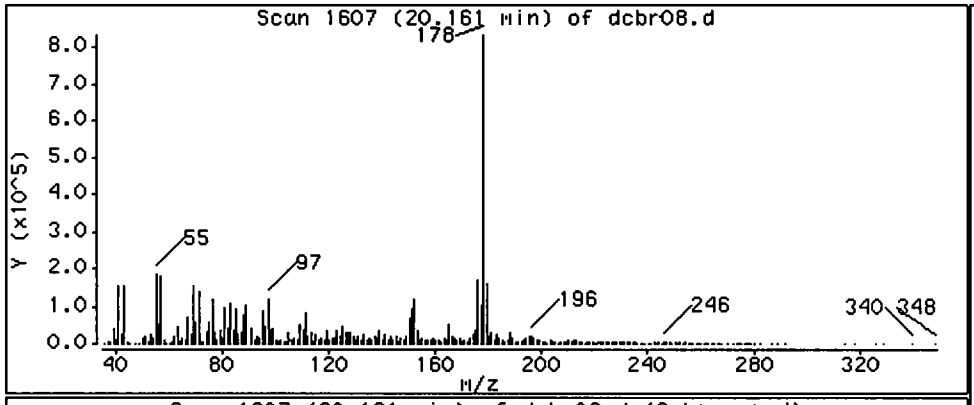
Client ID: WS-06 Instrument: gcl4.i

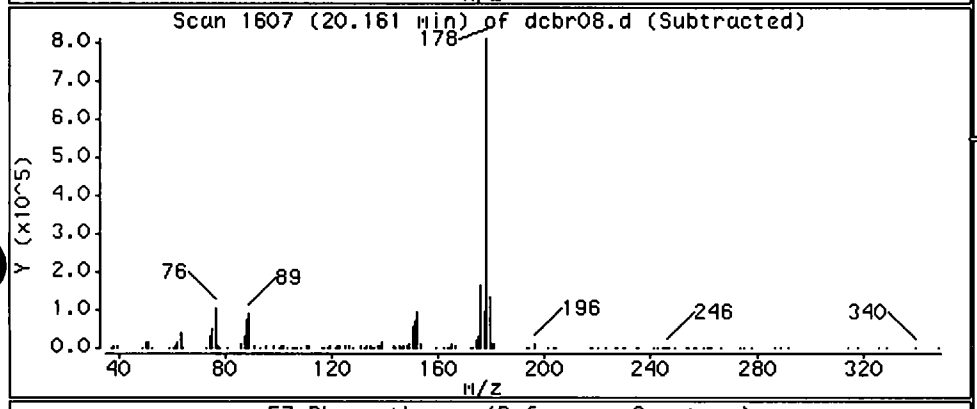
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

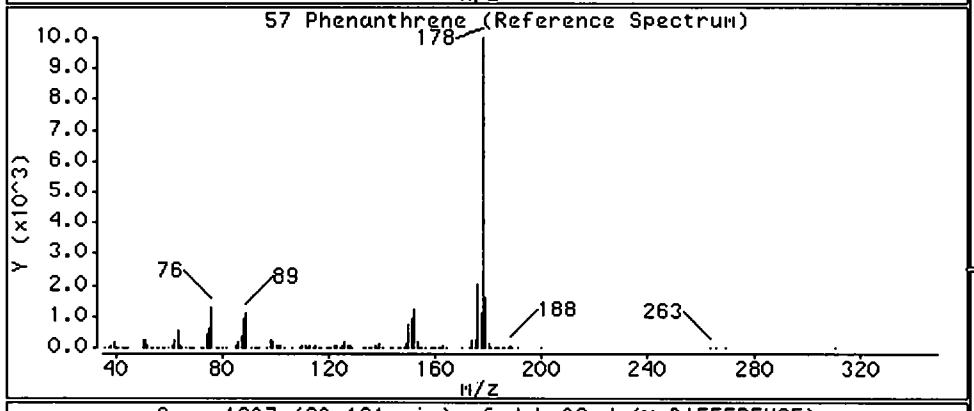
Volume Injected (uL): 2.0 Operator: GES

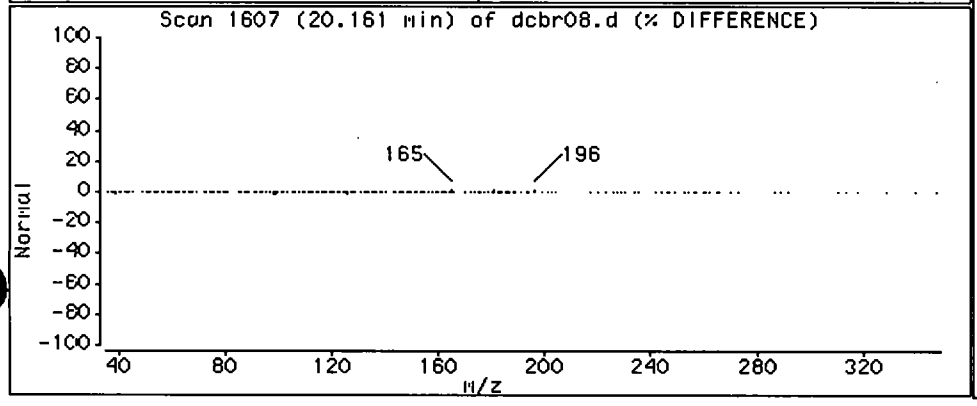
Column phase: Column diameter: 2.00

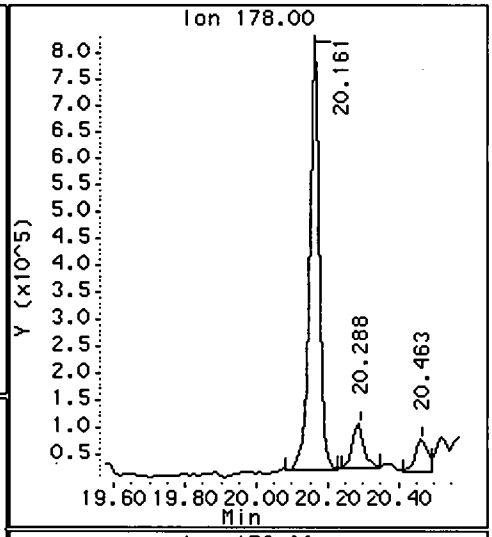
57 Phenanthrene

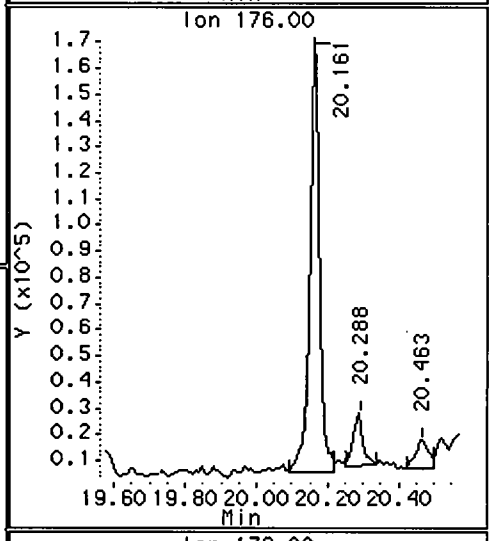


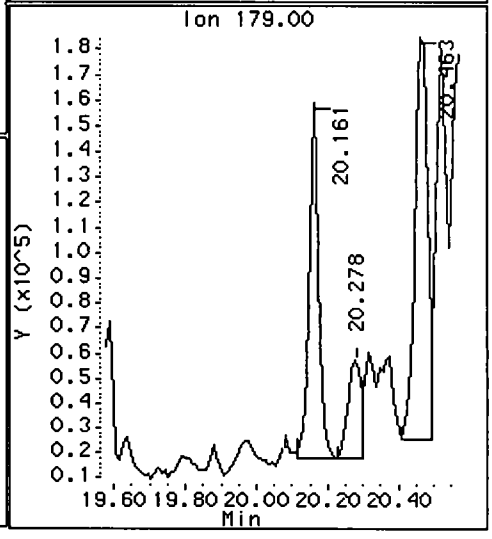












Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

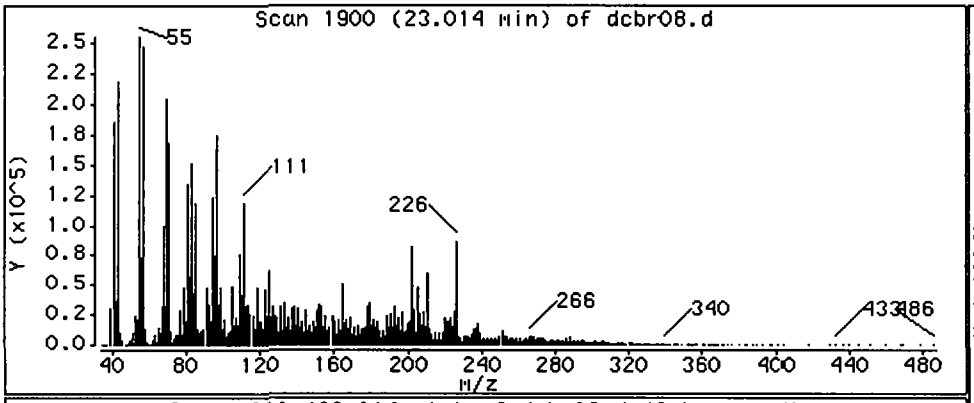
Client ID: WS-06 Instrument: gcl4.i

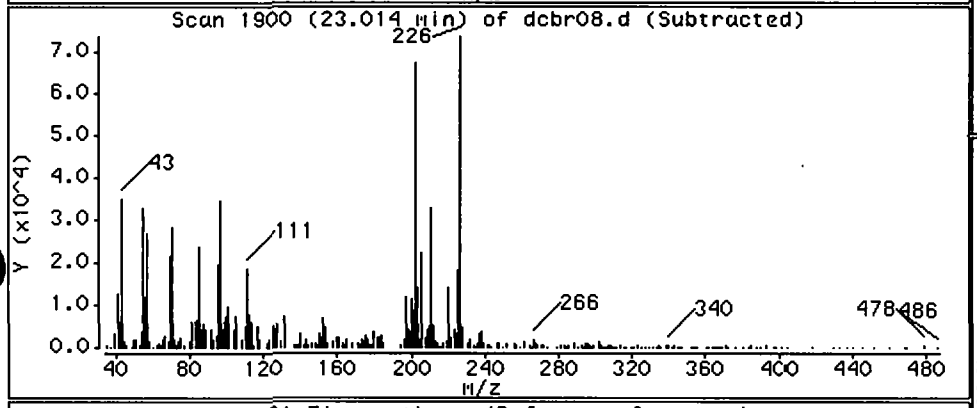
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

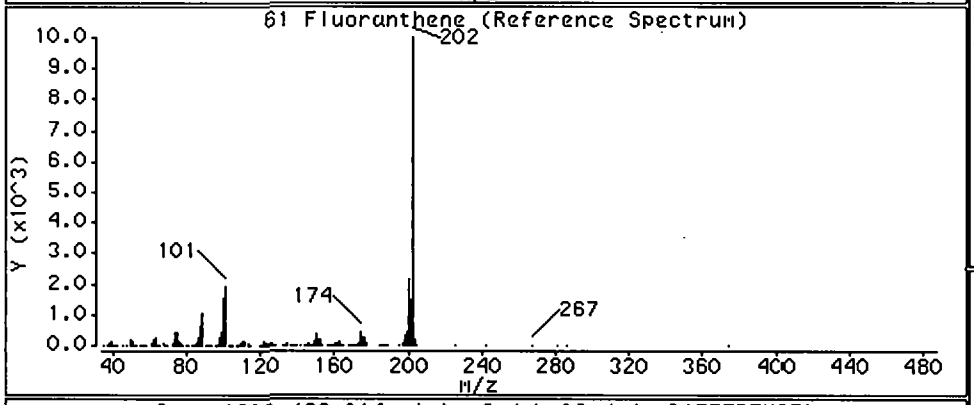
Volume Injected (uL): 2.0 Operator: GES

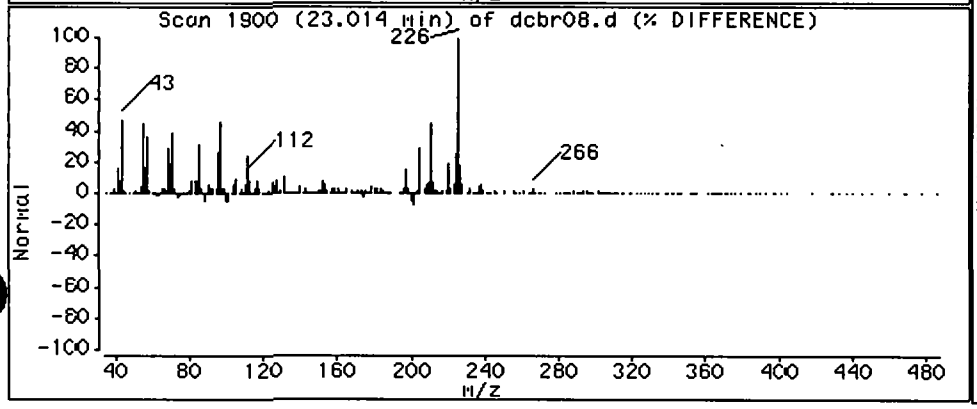
Column phase: Column diameter: 2.00

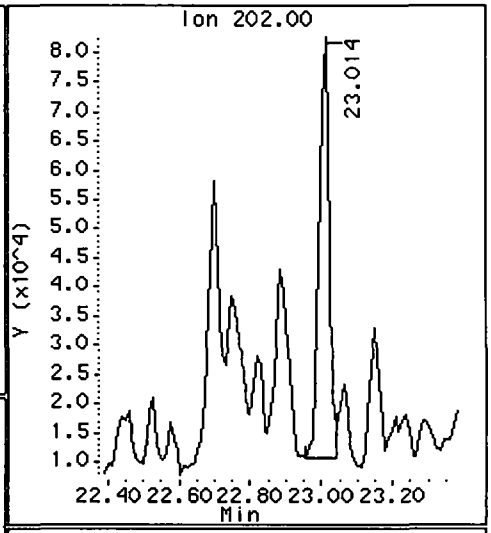
61 Fluoranthene

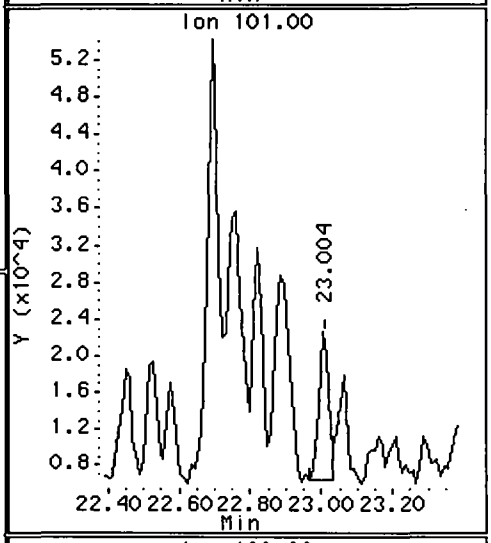


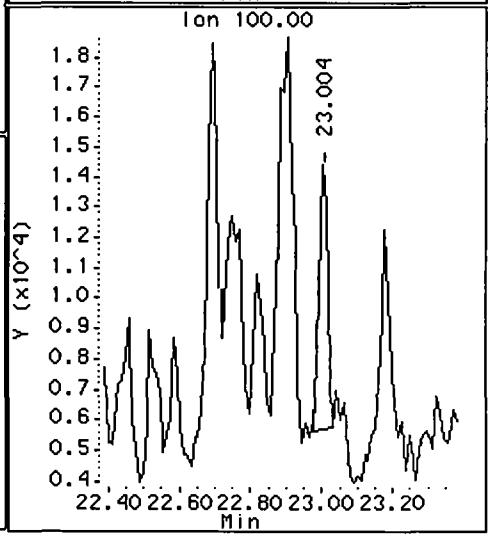












Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

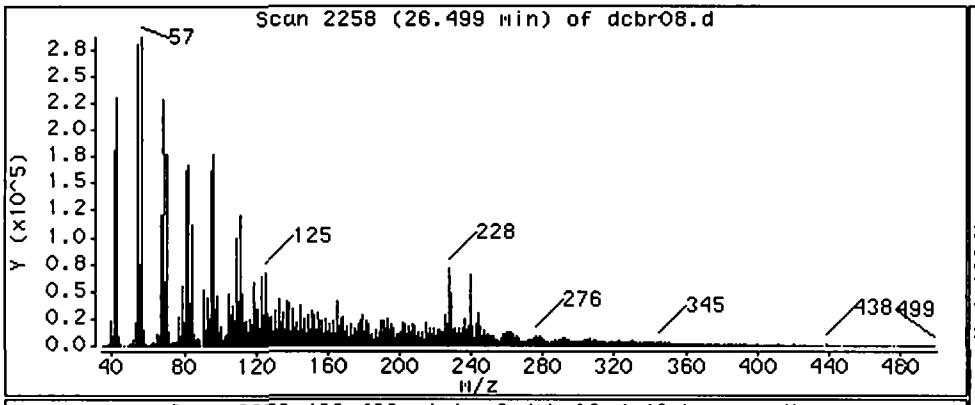
Client ID: WS-06 Instrument: gcl4.i

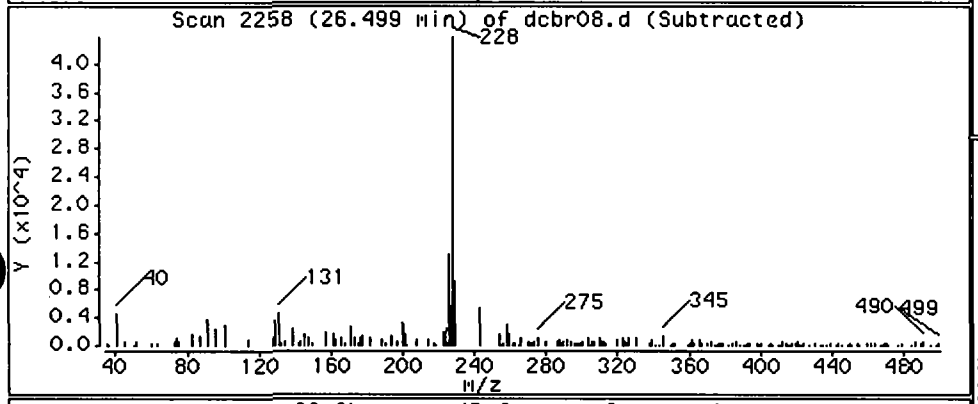
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

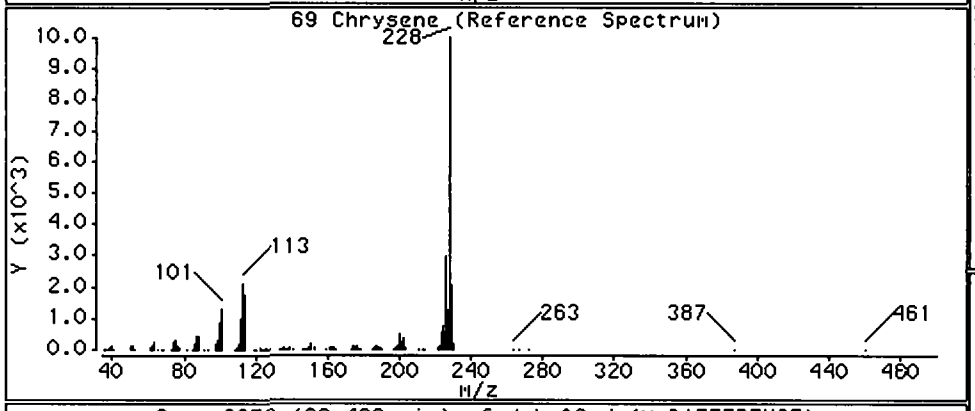
Volume Injected (uL): 2.0 Operator: GES

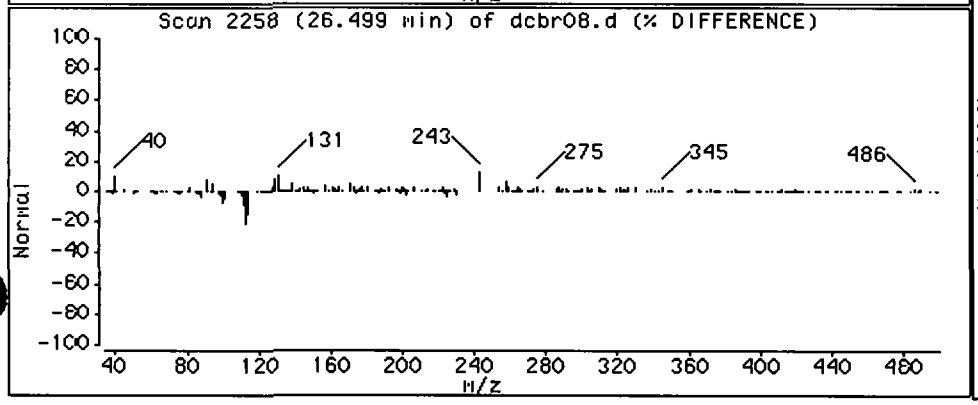
Column phase: Column diameter: 2.00

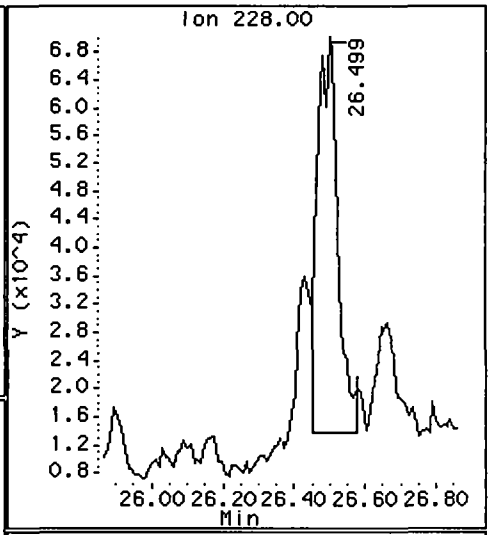
69 Chrysene

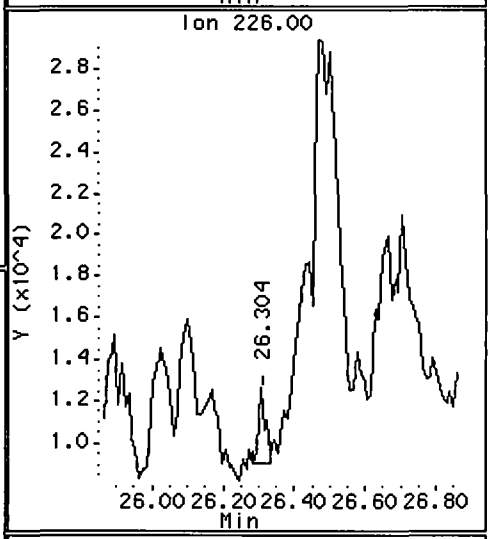


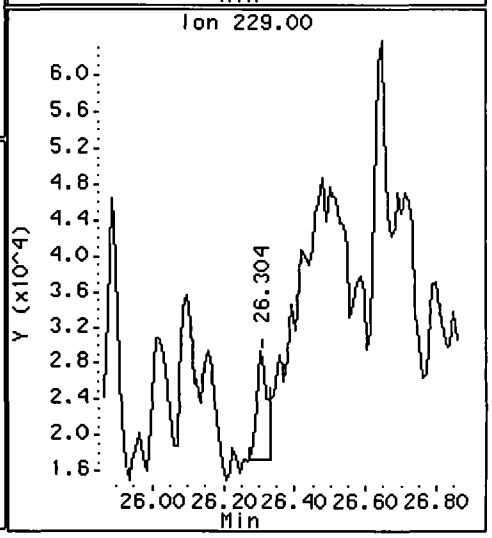












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296b.b/dcbr08.d
Lab Smp Id: 9611G675-006 Client Smp ID: WS-06
Inj Date : 13-DEC-1996 00:54
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-006 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4.25.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 8
Dil Factor: 125.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	5.200	Weigth of sample extracted (g)
M	24.100	% Moisture

ISTD	RT	AREA	AMOUNT
* 26 Naphthalene-d8	12.373	9624703	40.000
* 41 Acenaphthene-d10	16.569	9968668	40.000
* 56 Phenanthrene-d10	20.113	5051545	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Subst Benzene					CAS #:		
11.828	2960922	12.306	194860	0		0	26
Unknown Alkane					CAS #:		
12.032	1707666	7.097	112380	0		0	26

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Alkane					CAS #:		
12.597	2815681	11.702	185310	0		0	26
Unknown Alkane					CAS #:		
12.782	2454910	10.202	161560	0		0	26
Unknown Alkane					CAS #:		
13.658	3395132	14.110	223440	0		0	26
Subst. Naphthalene					CAS #:		
14.330	7604308	31.603	500460	0		0	26
Unknown					CAS #:		
14.729	3219067	12.917	204540	0		0	41
Unknown Alkane					CAS #:		
15.109	2914192	11.693	185170	0		0	41
Subst Naphthalene					CAS #:		
15.459	10913811	43.792	693480	0		0	41
Subst Naphthalene					CAS #:		
15.858	7463609	29.948	474250	0		0	41
Subst Naphthalene					CAS #:		
16.063	3920834	15.733	249140	0		0	41
Unknown Alkane					CAS #:		
16.228	5546294	22.255	352420	0		0	41
Unknown Alkane					CAS #:		
16.734	5521089	22.154	350820	0		0	41
Subst Naphthalene					CAS #:		
17.231	2938358	11.790	186710	0		0	41
Unknown Alkane					CAS #:		
18.487	10481618	82.997	1314300	0		0	56
Unknown Alkane					CAS #:		
19.139	17406791	137.83	2182700	0		0	56
Unknown Alkane					CAS #:		
20.268	13010715	103.02	1631400	0		0	56
Unknown Alkane					CAS #:		
21.115	8011462	63.438	1004600	0		0	56

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Alkane					CAS #:		
21.232	5700562	45.139	714810	0		0	56
Unknown Alkane					CAS #:		
22.235	4863773	38.513	609880	0		0	56

Data File: /chem/gc14.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

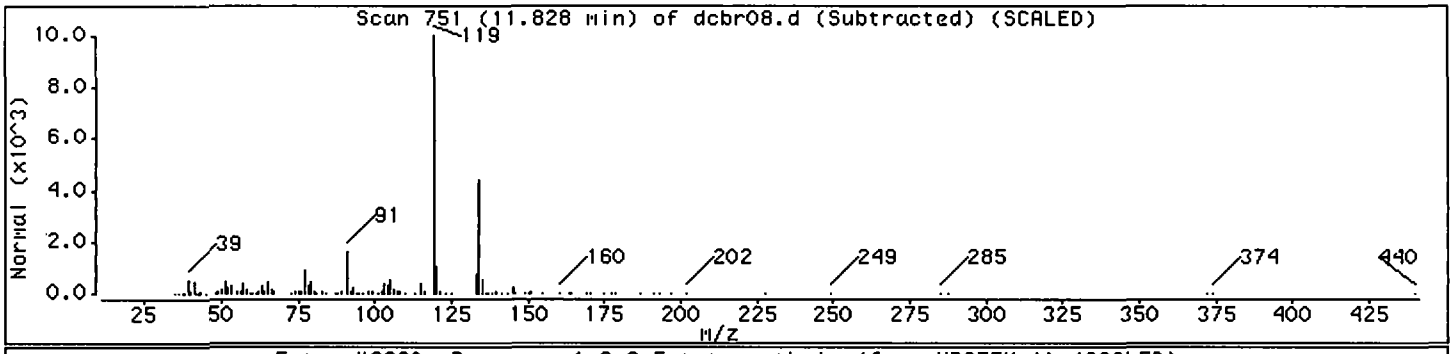
Client ID: WS-06 Instrument: gc14.i

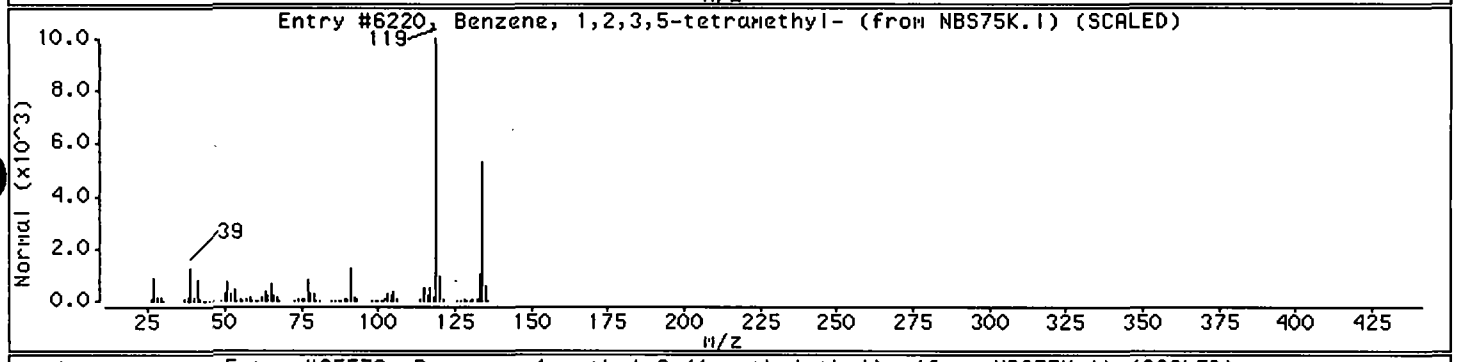
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

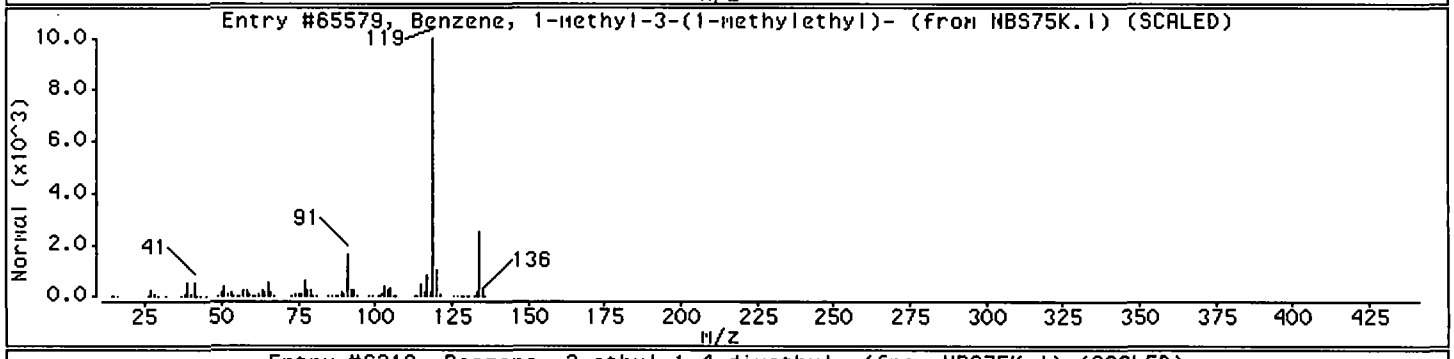
Volume Injected (uL): 2.0 Operator: GES

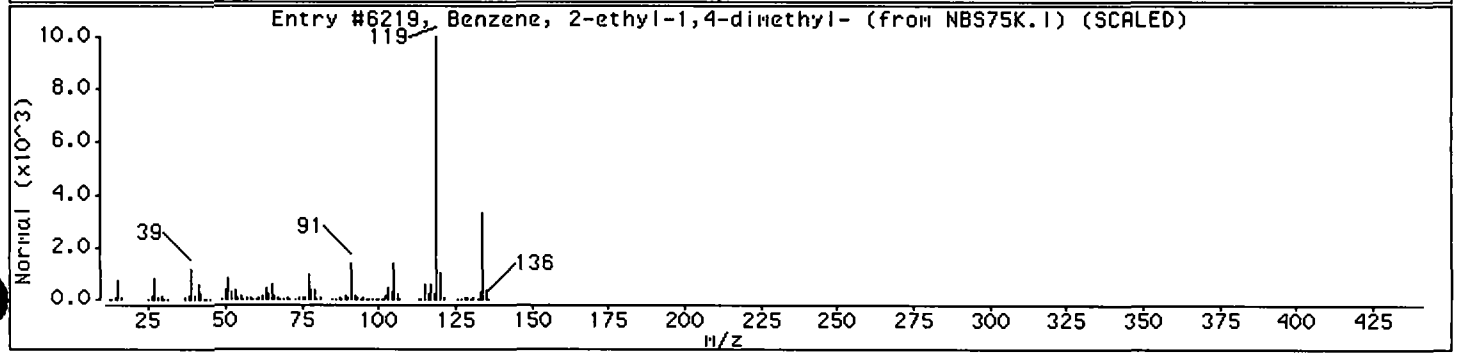
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Benzene						
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NBS75K.l	6220	91	C10H14	134
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.l	65579	91	C10H14	134
Benzene, 2-ethyl-1,4-dimethyl-	1758-88-9	NBS75K.l	6219	91	C10H14	134









Data File: /chem/gc14.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

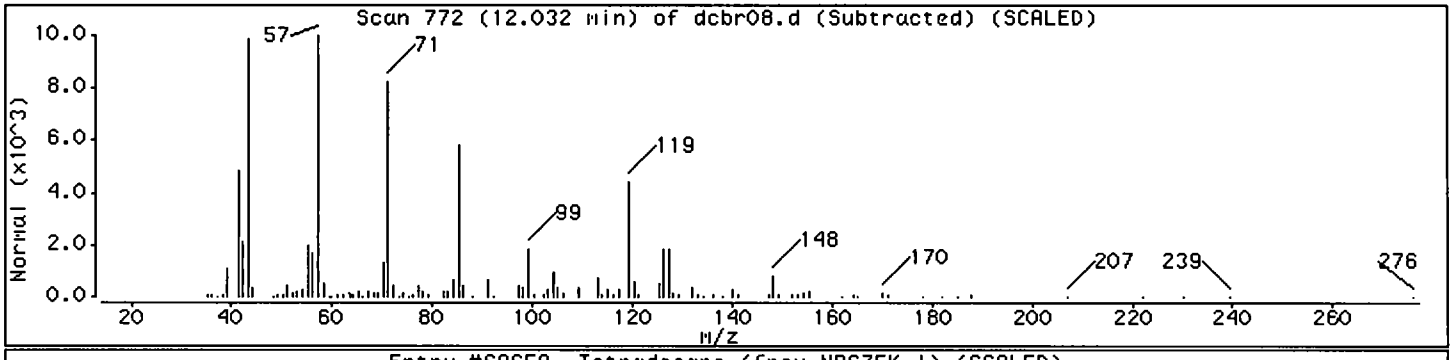
Client ID: WS-06 Instrument: gc14.i

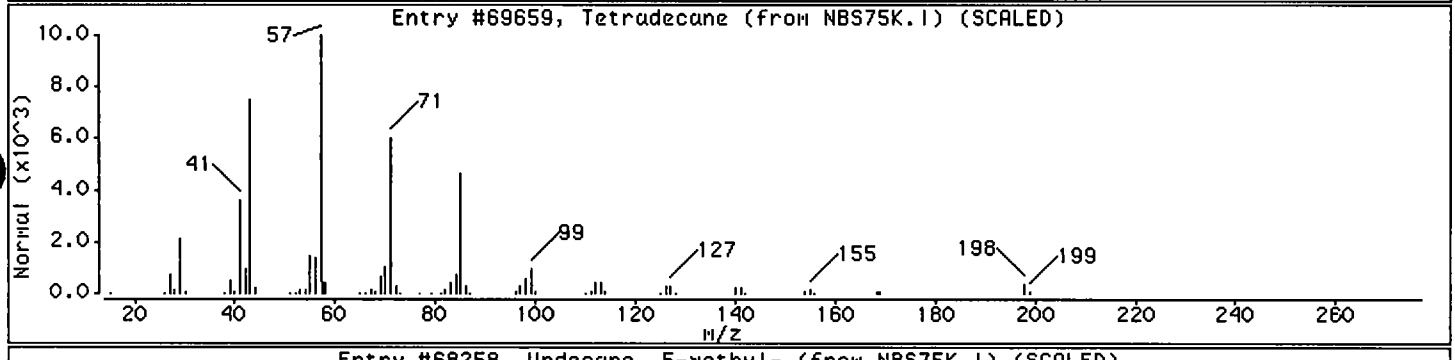
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

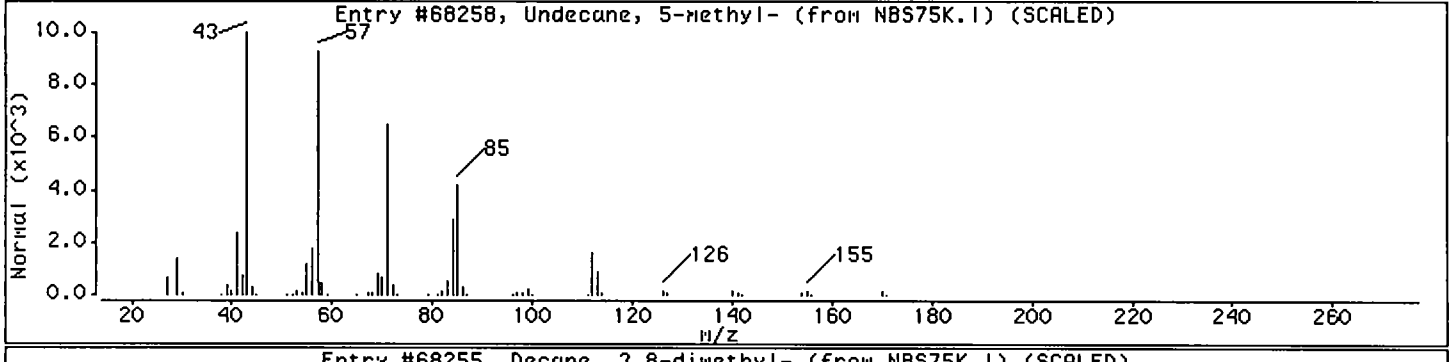
Volume Injected (uL): 2.0 Operator: GES

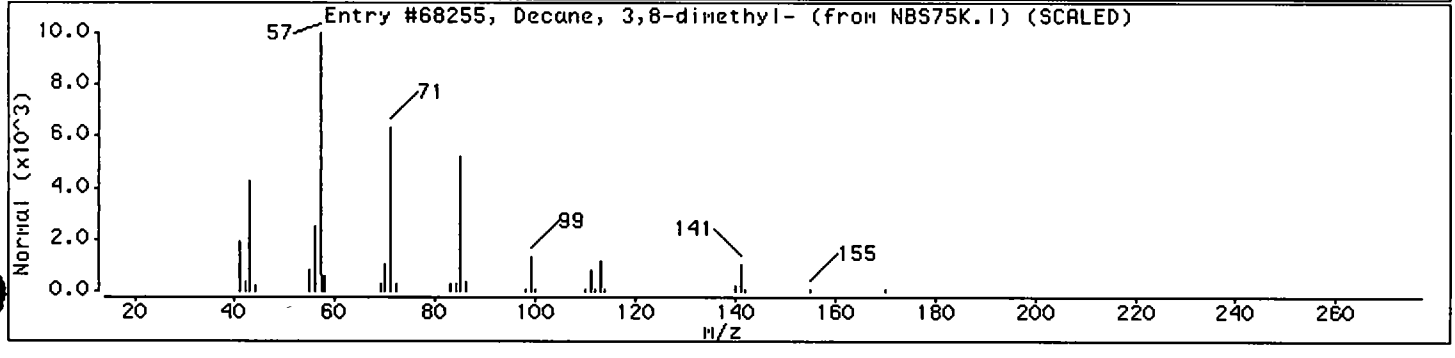
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetradecane	629-59-4	NBS75K.l	69659	50	C14H30	198
Undecane, 5-methyl-	1632-70-8	NBS75K.l	68258	49	C12H26	170
Decane, 3,8-dimethyl-	17312-55-9	NBS75K.l	68255	49	C12H26	170









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

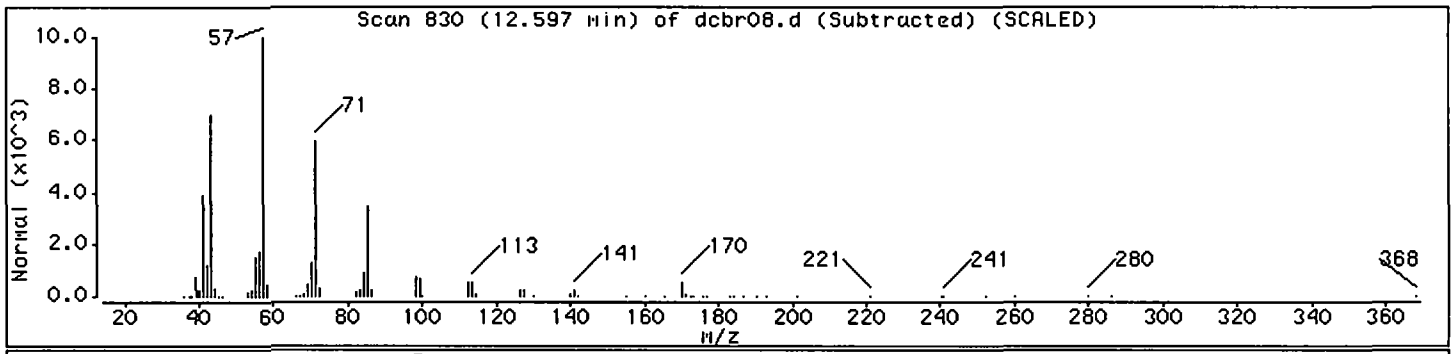
Client ID: WS-06 Instrument: gcl4.i

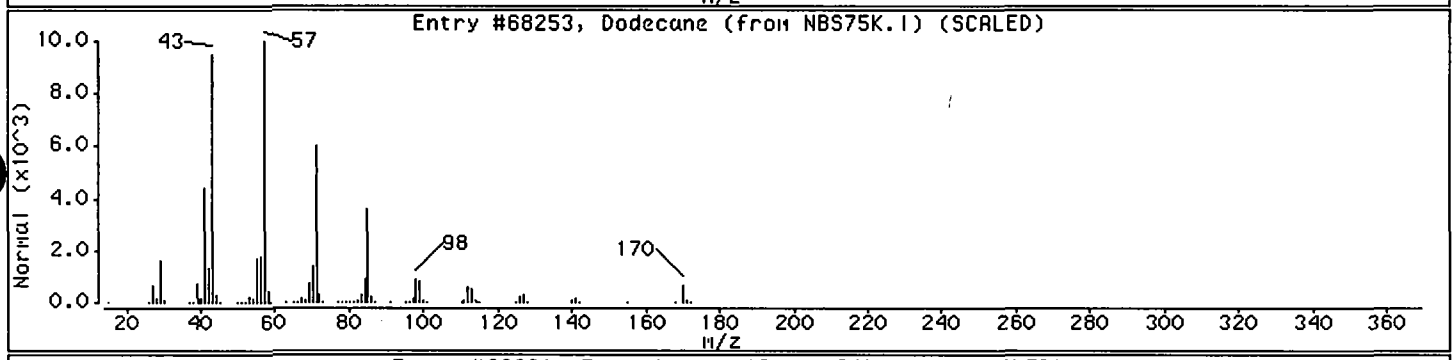
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

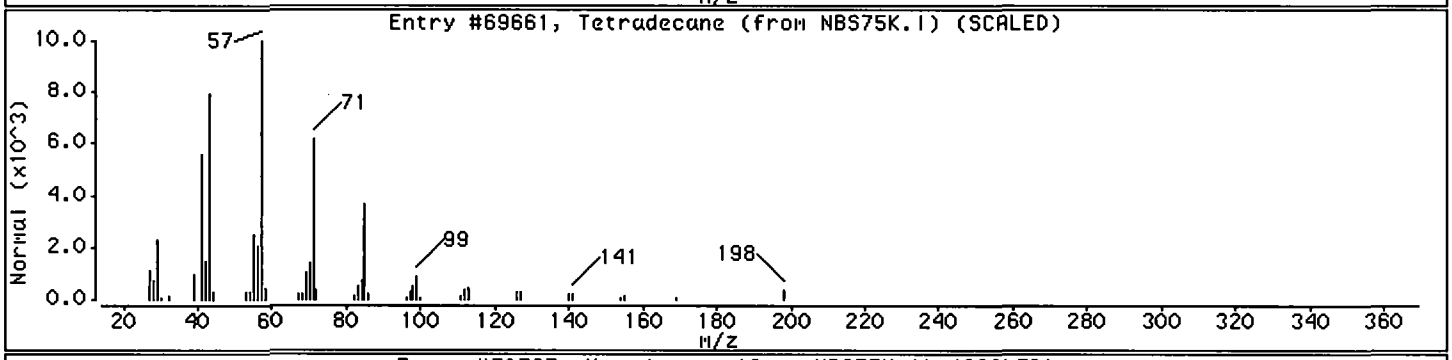
Volume Injected (uL): 2.0 Operator: GES

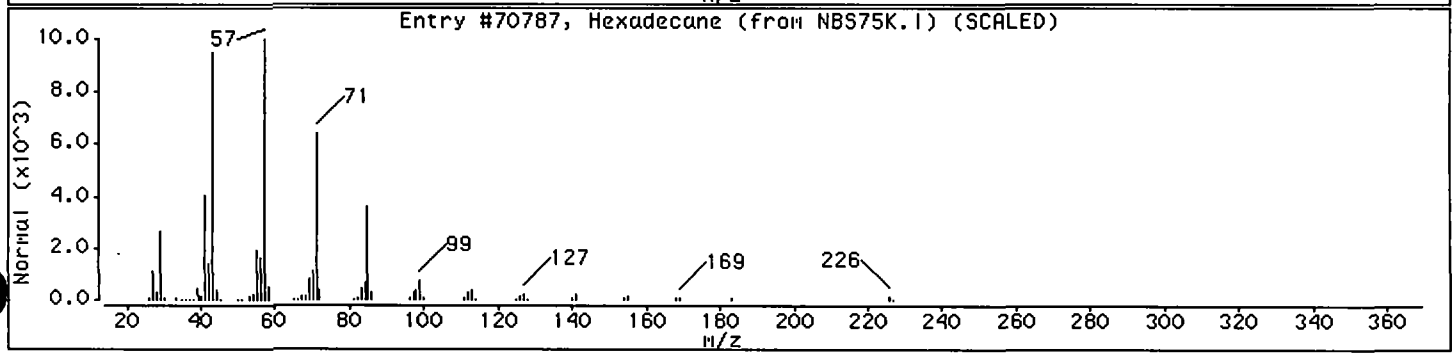
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Dodecane	112-40-3	NBS75K.l	68253	96	C12H26	170
Tetradecane	629-59-4	NBS75K.l	69661	90	C14H30	198
Hexadecane	544-76-3	NBS75K.l	70787	86	C16H34	226









Data File: /chem/gc14.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

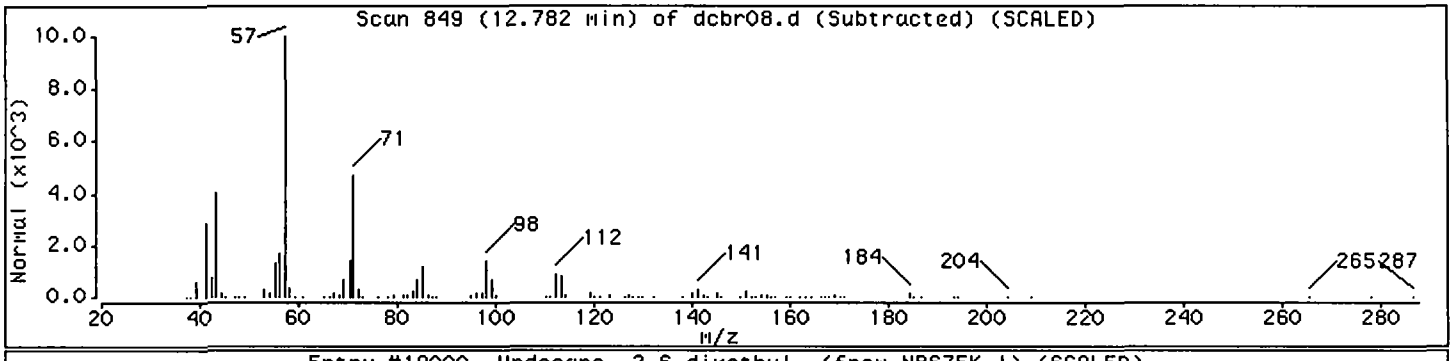
Client ID: WS-06 Instrument: gc14.i

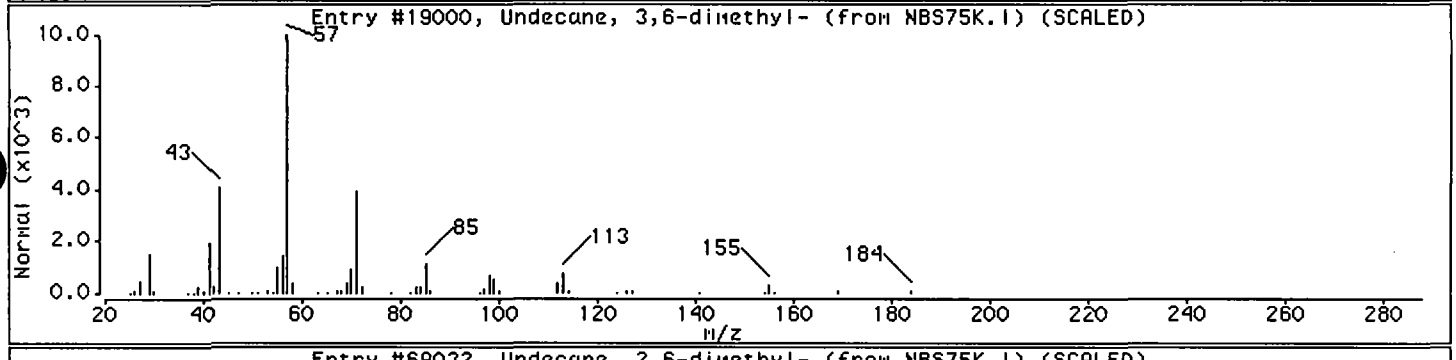
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

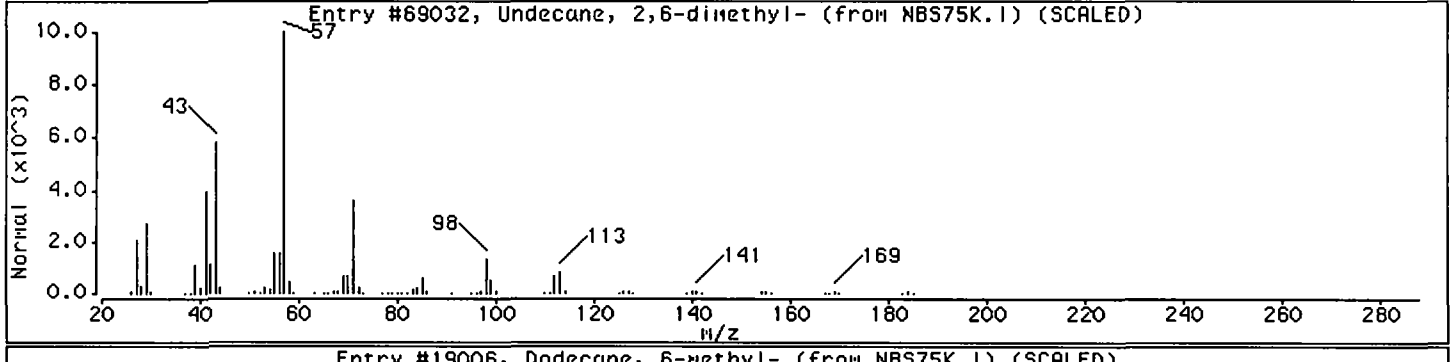
Volume Injected (uL): 2.0 Operator: GES

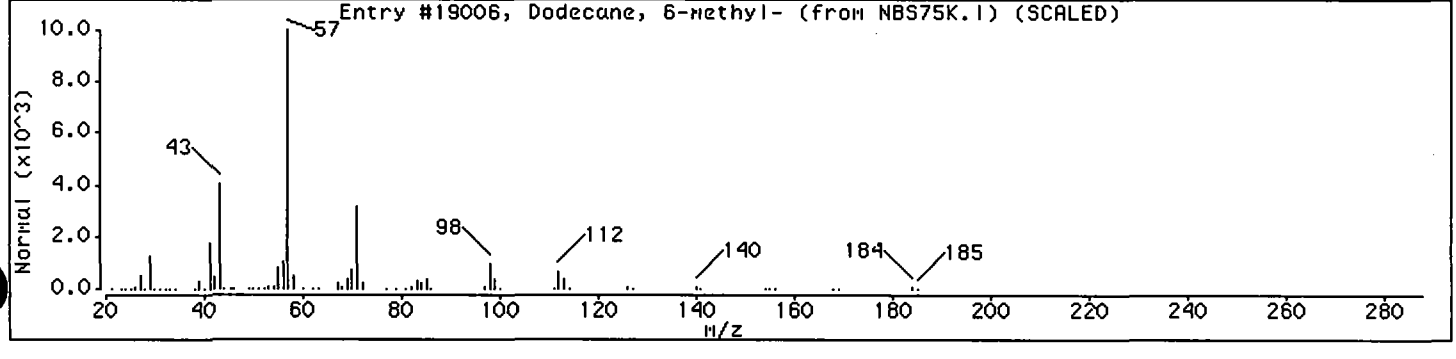
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Undecane, 3,6-dimethyl-	17301-28-9	NBS75K.l	19000	90	C13H28	184
Undecane, 2,6-dimethyl-	17301-23-4	NBS75K.l	69032	87	C13H28	184
Dodecane, 6-methyl-	6044-71-9	NBS75K.l	19006	76	C13H28	184









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Date : 13-DEC-1996 00:54

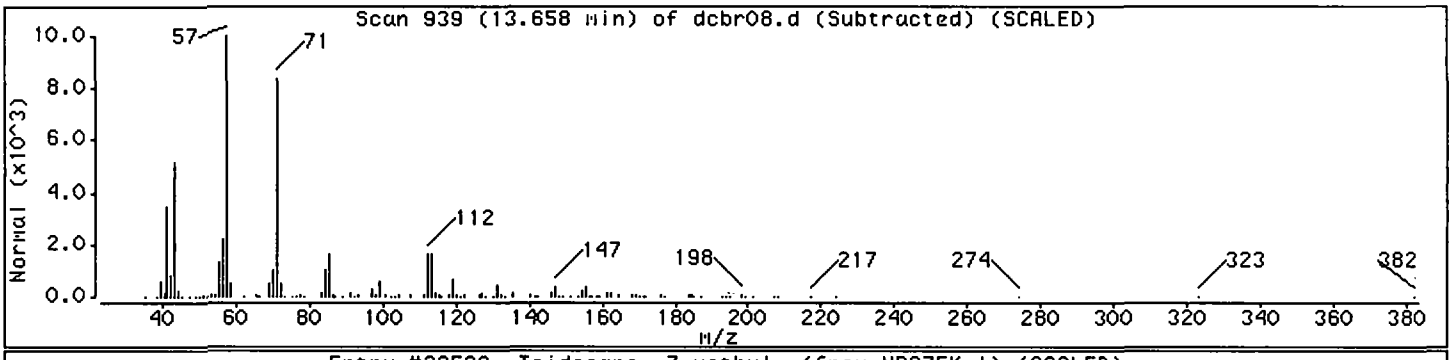
Client ID: WS-06 Instrument: gcl4.i

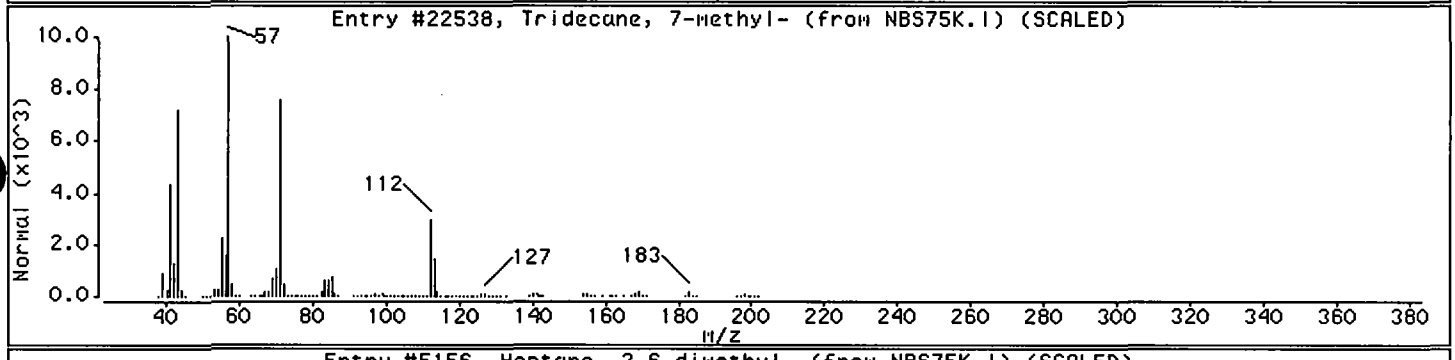
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

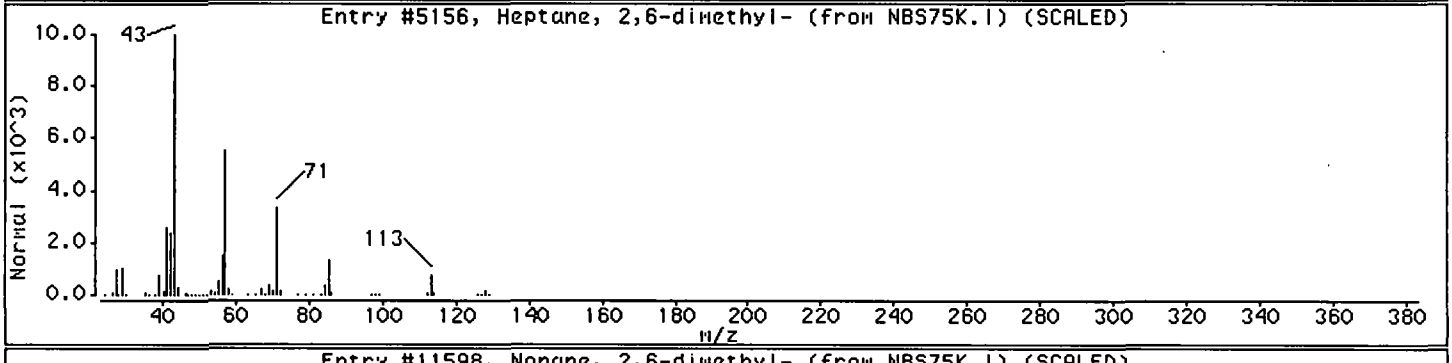
Volume Injected (uL): 2.0 Operator: GES

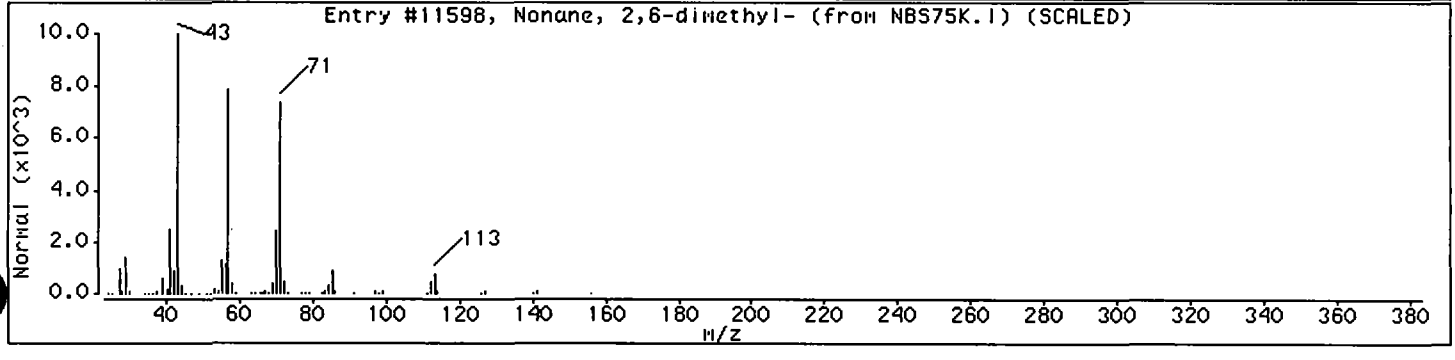
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tridecane, 7-methyl-	26730-14-3	NBS75K.l	22538	80	C14H30	198
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.l	5156	74	C9H20	128
Nonane, 2,6-dimethyl-	17302-28-2	NBS75K.l	11598	59	C11H24	156









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Date : 13-DEC-1996 00:54

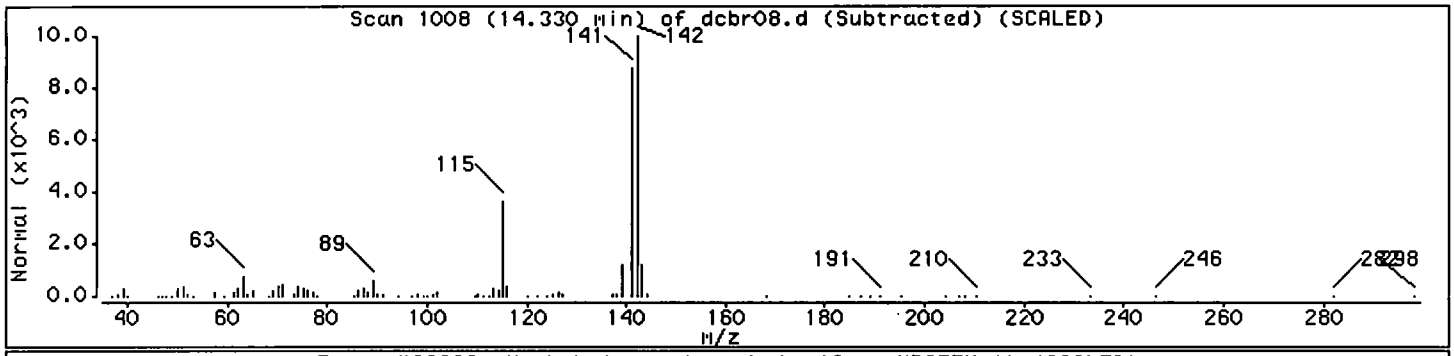
Client ID: WS-06 Instrument: gcl4.i

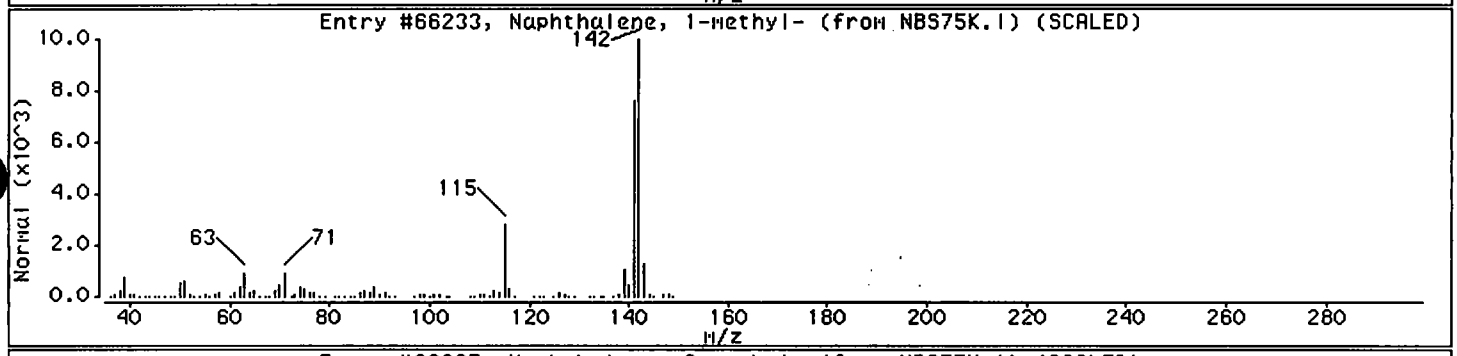
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

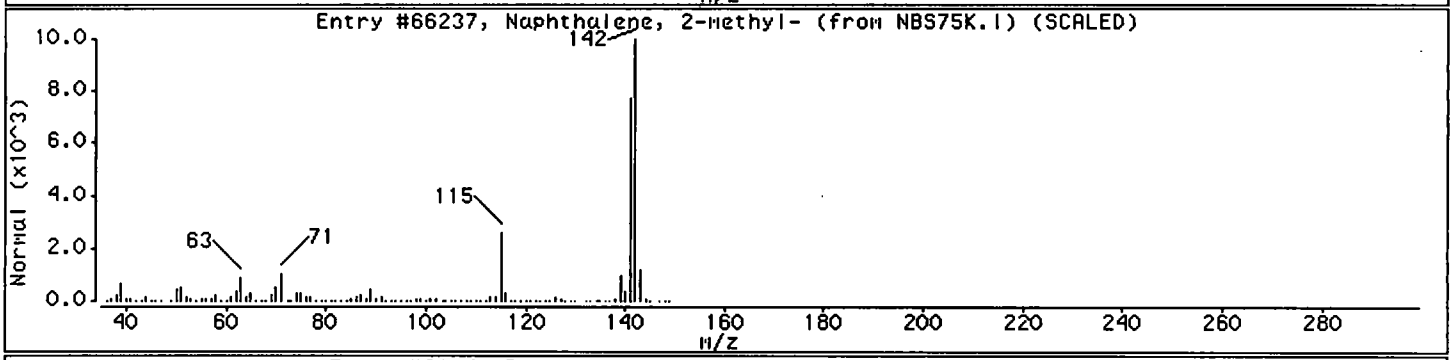
Volume Injected (uL): 2.0 Operator: GES

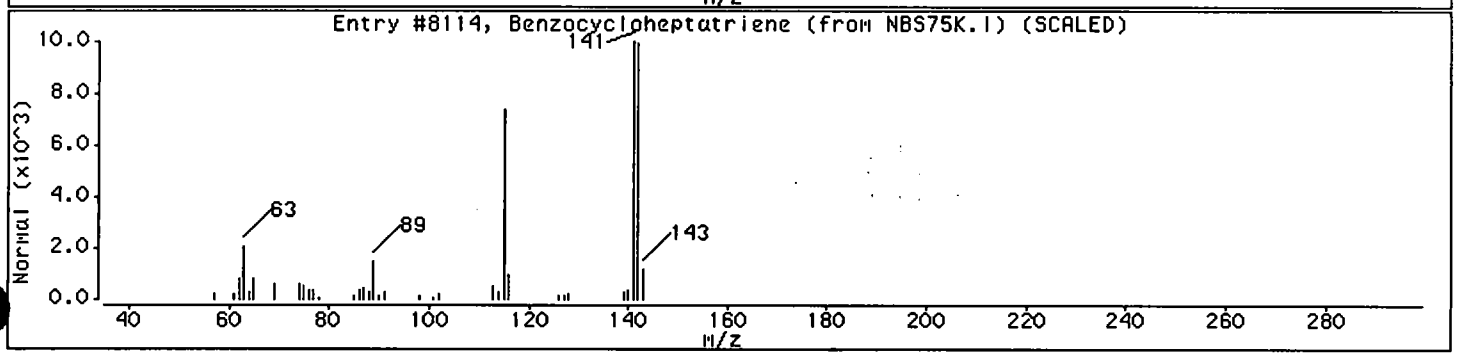
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst. Naphthalene						
Naphthalene, 1-methyl-	90-12-0	NBS75K.l	66233	94	C11H10	142
Naphthalene, 2-methyl-	91-57-6	NBS75K.l	66237	94	C11H10	142
Benzocycloheptatriene	264-09-5	NBS75K.l	8114	91	C11H10	142









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Date : 13-DEC-1996 00:54

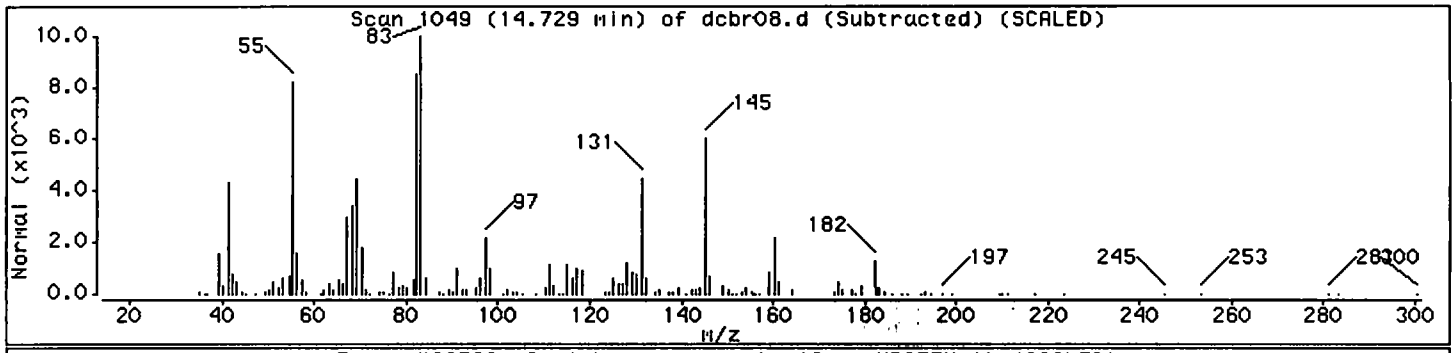
Client ID: WS-06 Instrument: gcl4.i

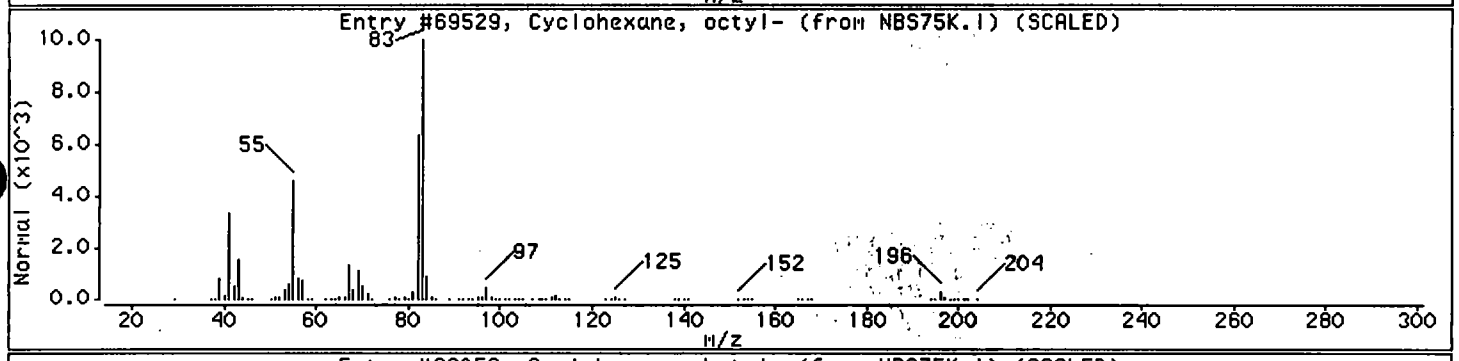
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

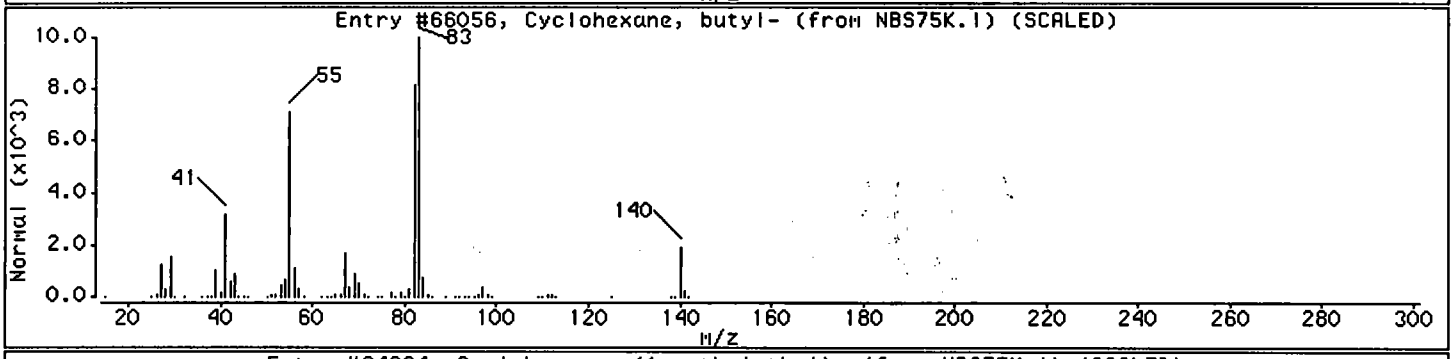
Volume Injected (uL): 2.0 Operator: GES

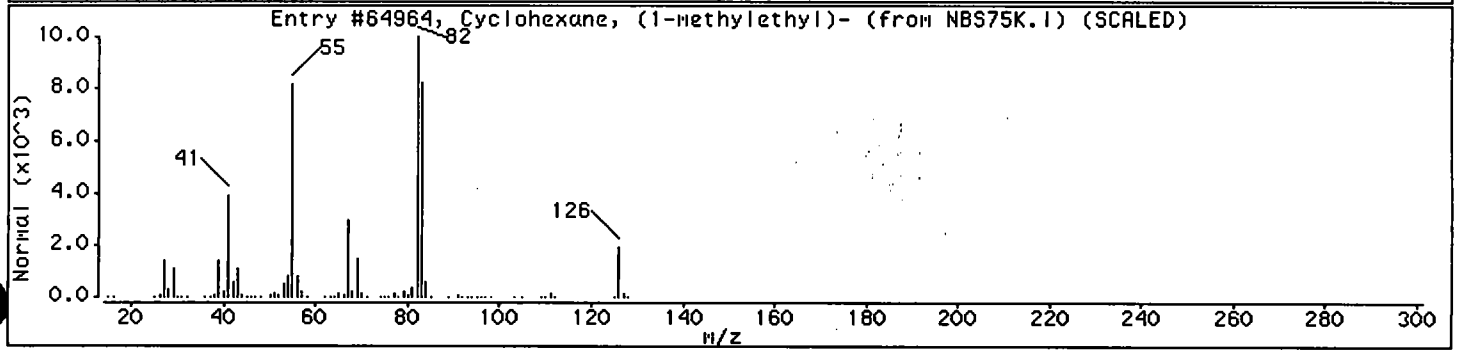
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexane, octyl-	1795-15-9	NBS75K.l	69529	38	C14H28	196
Cyclohexane, butyl-	1678-93-9	NBS75K.l	66056	38	C10H20	140
Cyclohexane, (1-methylethyl)-	696-29-7	NBS75K.l	64964	38	C9H18	126









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Date : 13-DEC-1996 00:54

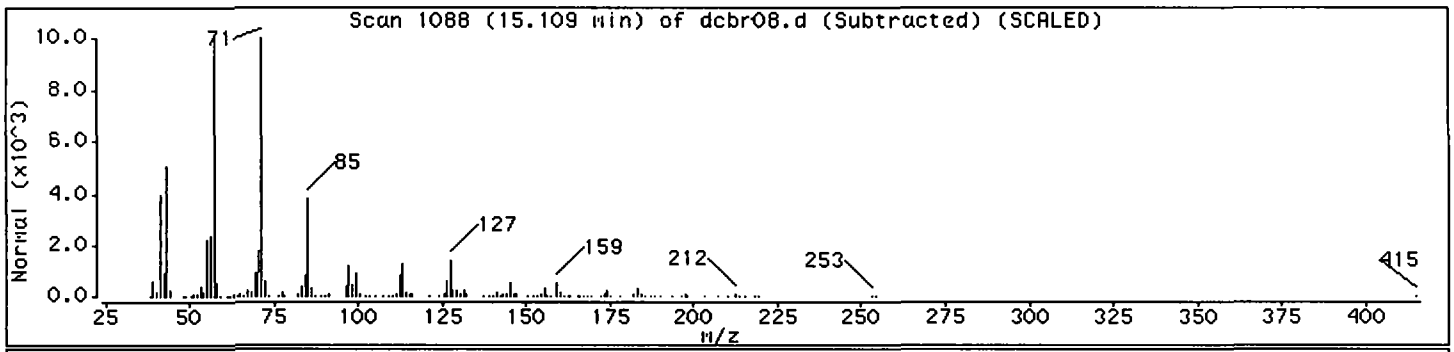
Client ID: WS-06 Instrument: gcl4.i

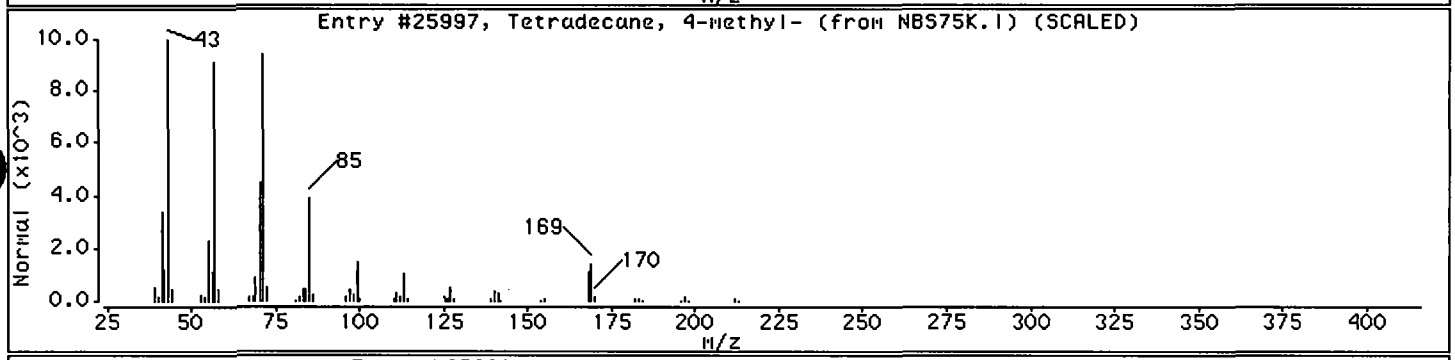
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

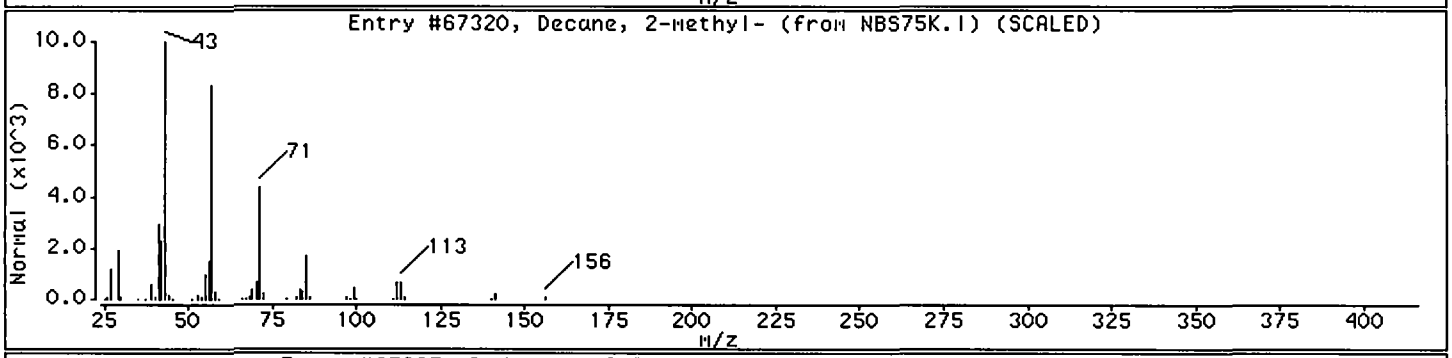
Volume Injected (uL): 2.0 Operator: GES

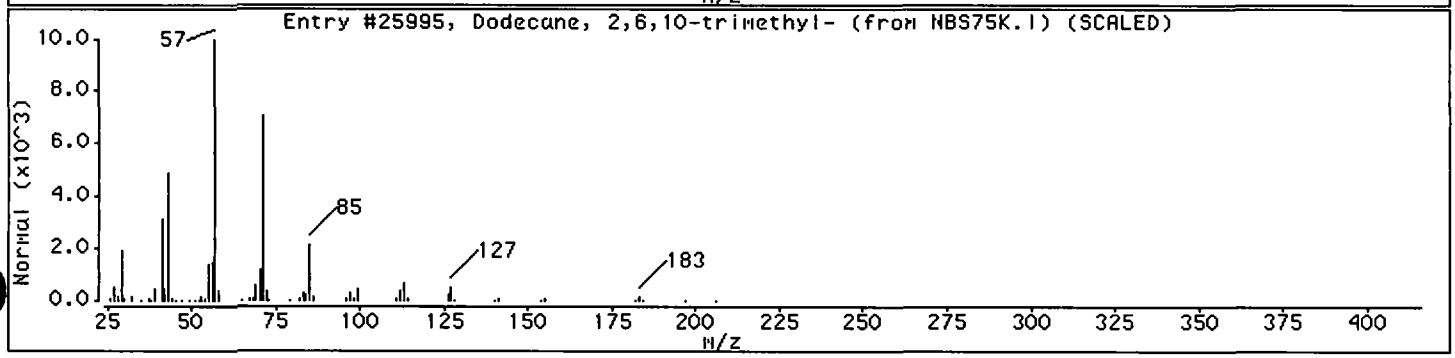
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetradecane, 4-methyl-	25117-24-2	NBS75K.l	25997	80	C15H32	212
Decane, 2-methyl-	6975-98-0	NBS75K.l	67320	72	C11H24	156
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	25995	72	C15H32	212









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Date : 13-DEC-1996 00:54

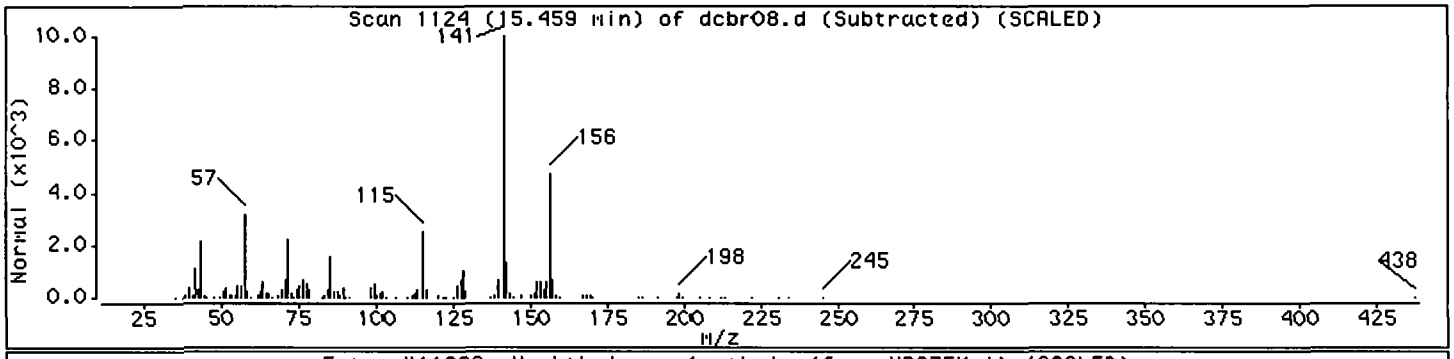
Client ID: WS-06 Instrument: gcl4.i

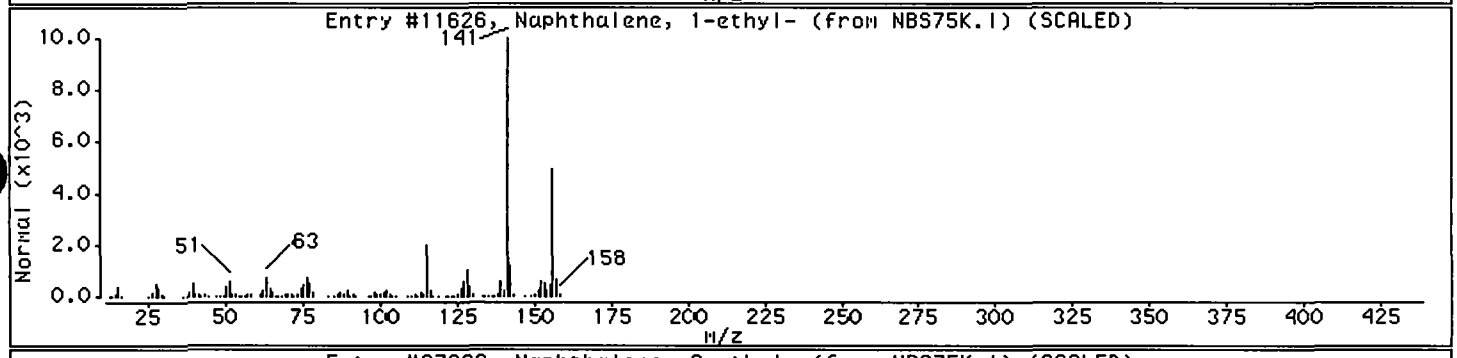
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

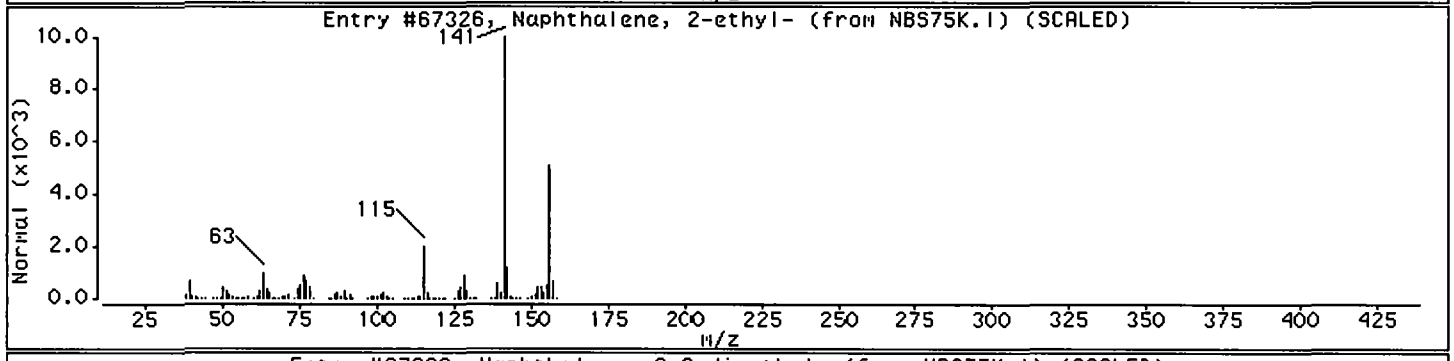
Volume Injected (uL): 2.0 Operator: GES

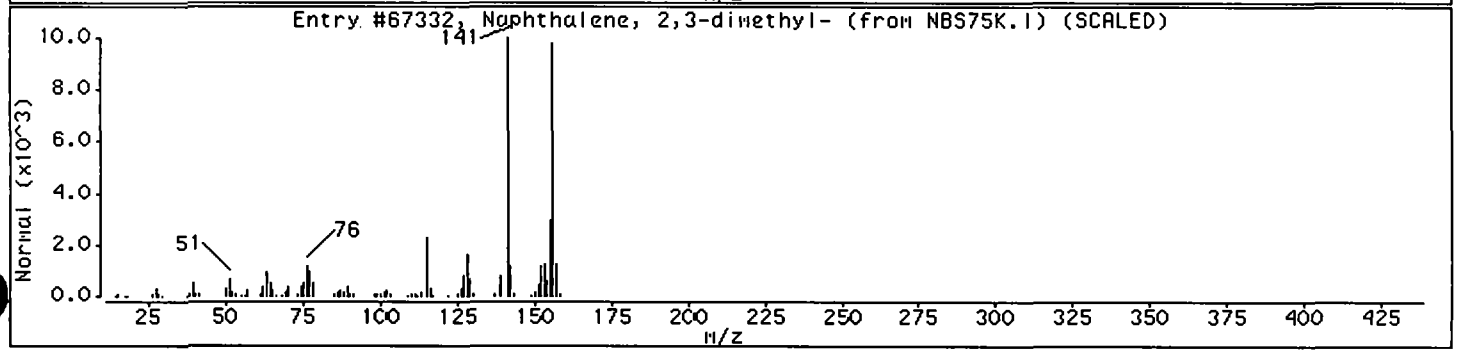
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1-ethyl-	1127-76-0	NBS75K.l	11626	95	C12H12	156
Naphthalene, 2-ethyl-	939-27-5	NBS75K.l	67326	93	C12H12	156
Naphthalene, 2,3-dimethyl-	581-40-8	NBS75K.l	67332	64	C12H12	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

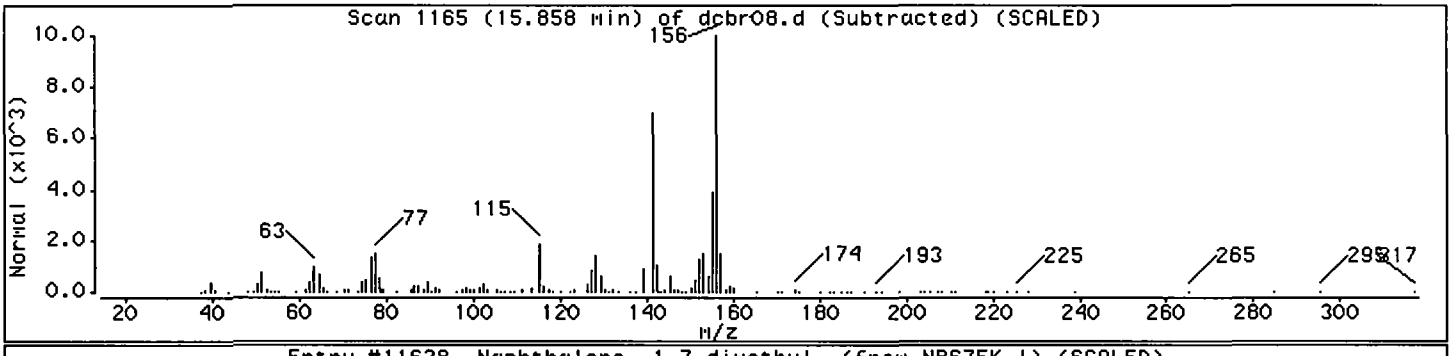
Client ID: WS-06 Instrument: gcl4.i

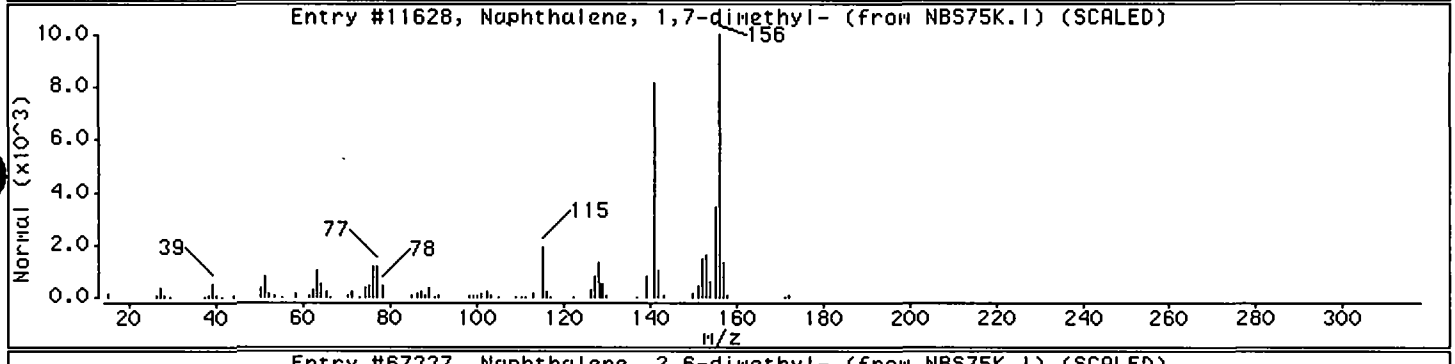
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

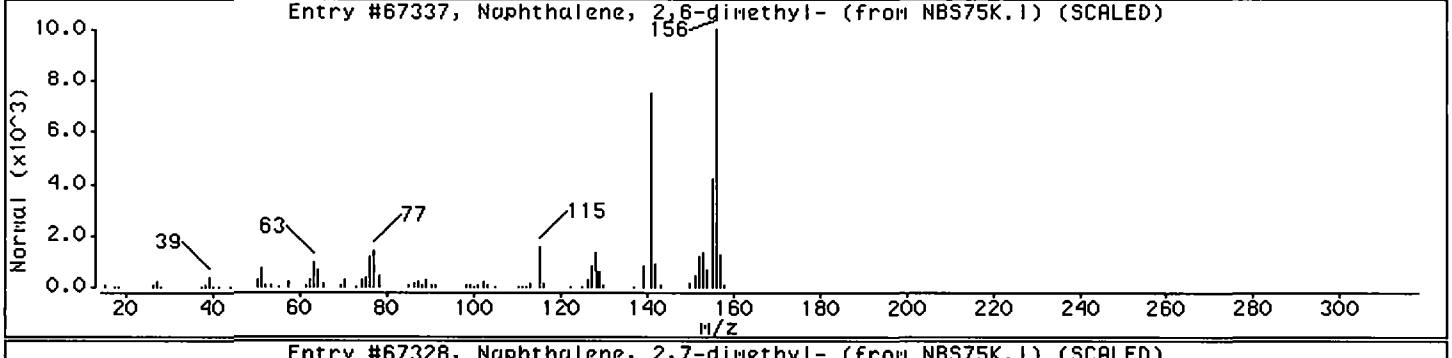
Volume Injected (uL): 2.0 Operator: GES

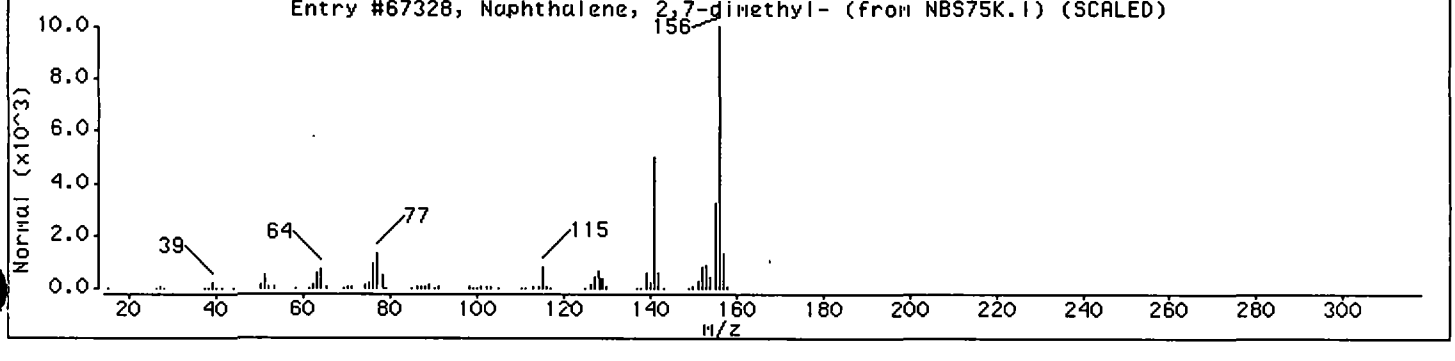
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,7-dimethyl-	575-37-1	NBS75K.l	11628	98	C12H12	156
Naphthalene, 2,6-dimethyl-	581-42-0	NBS75K.l	67337	98	C12H12	156
Naphthalene, 2,7-dimethyl-	582-16-1	NBS75K.l	67328	97	C12H12	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

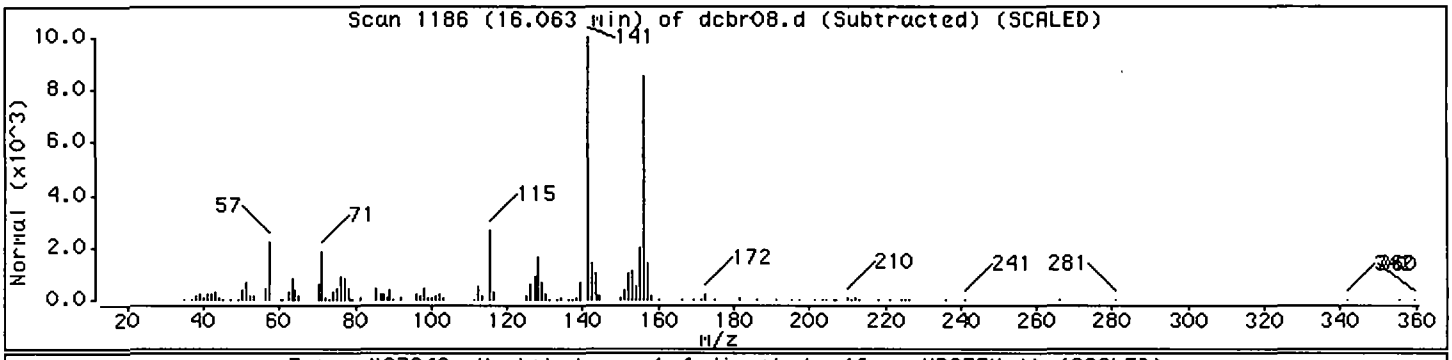
Client ID: WS-06 Instrument: gcl4.i

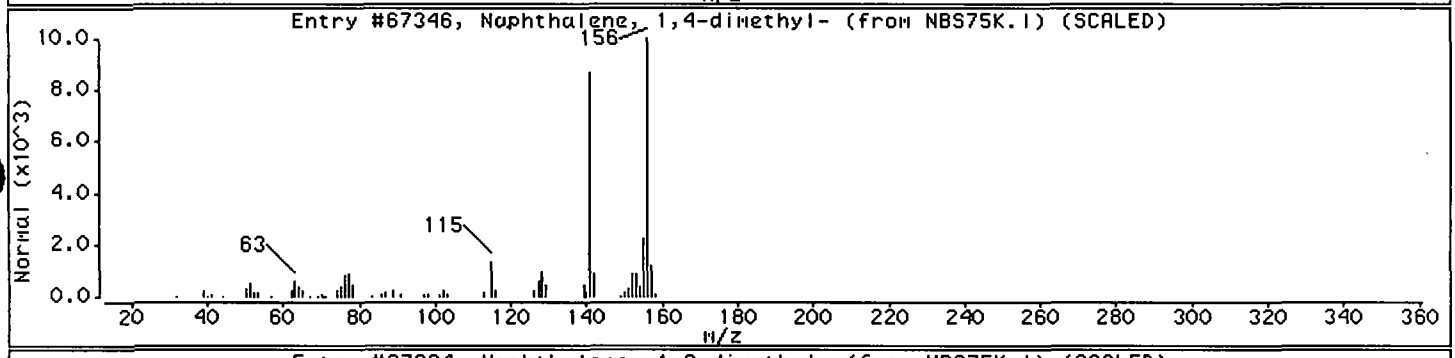
Sample Info: 9611G675-006 DFBC12,[AL=D625HS],[DC=00]

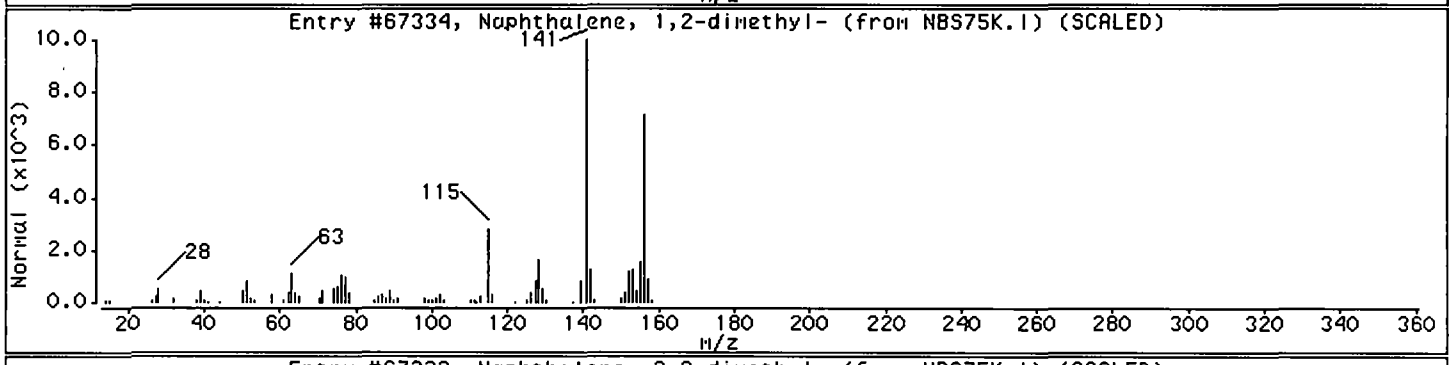
Volume Injected (uL): 2.0 Operator: GES

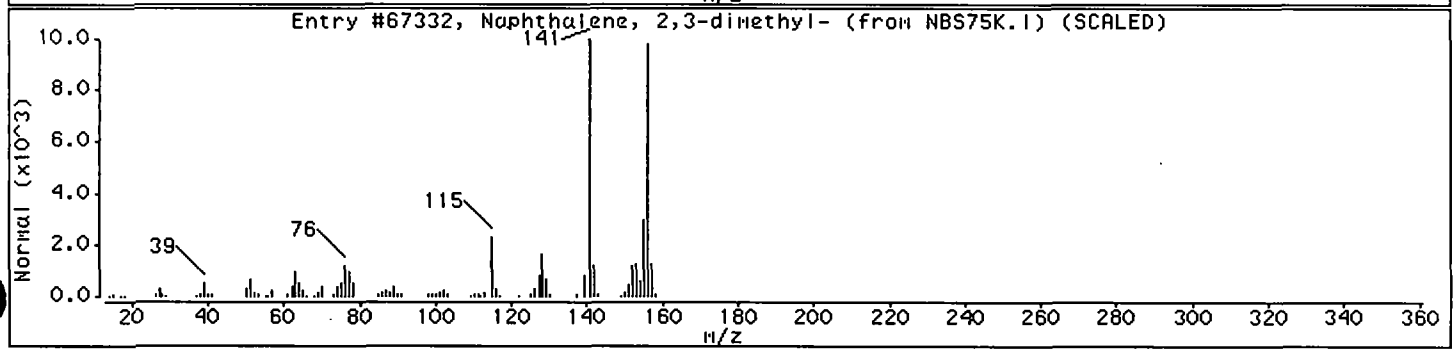
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,4-dimethyl-	571-58-4	NBS75K.l	67346	96	C12H12	156
Naphthalene, 1,2-dimethyl-	573-98-8	NBS75K.l	67334	96	C12H12	156
Naphthalene, 2,3-dimethyl-	581-40-8	NBS75K.l	67332	96	C12H12	156









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

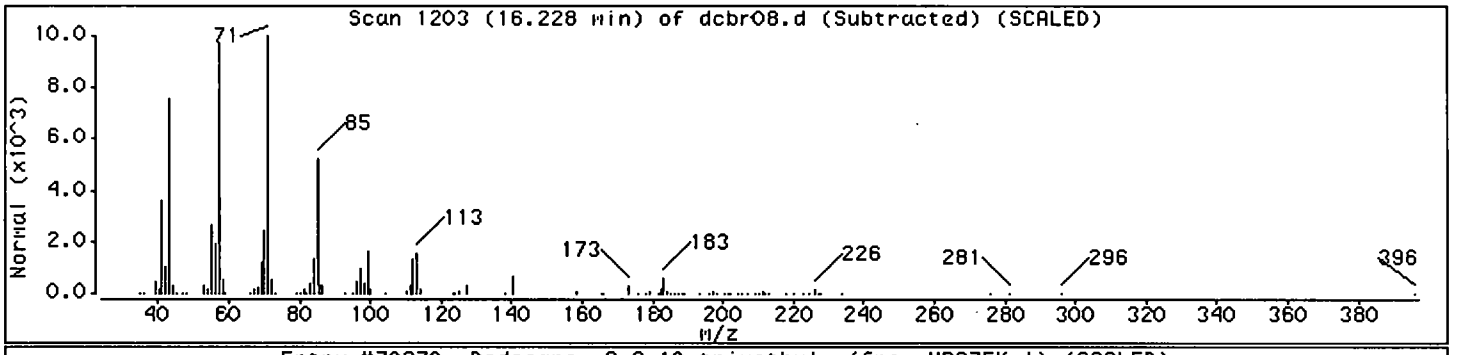
Client ID: WS-06 Instrument: gcl4.i

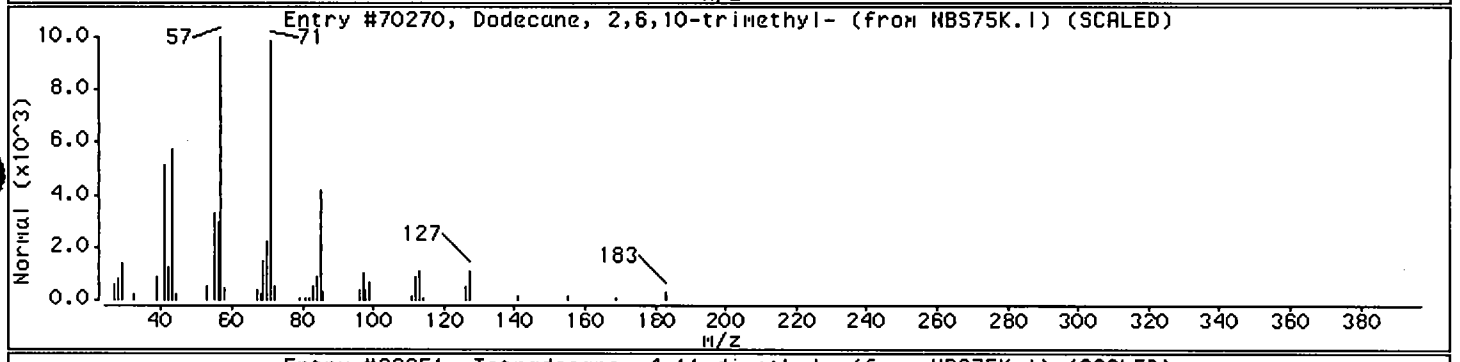
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

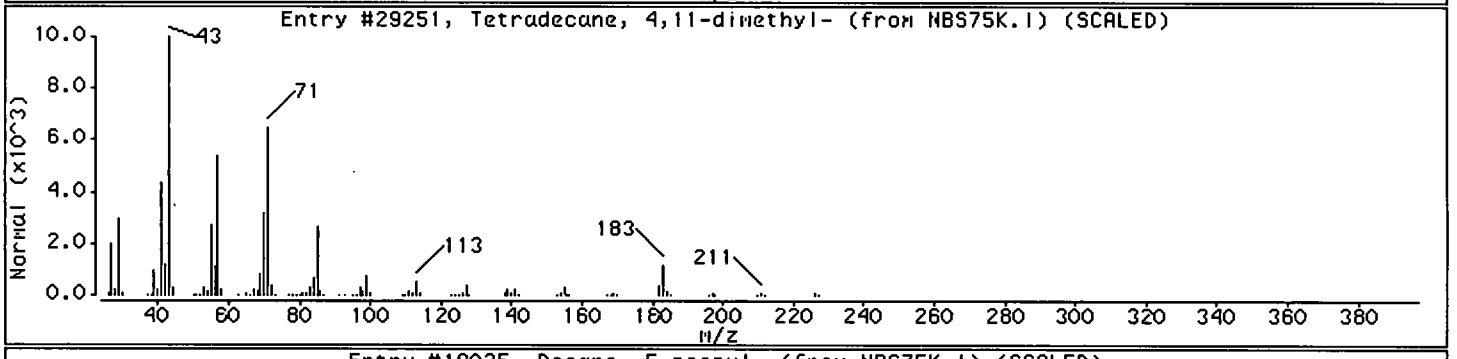
Volume Injected (uL): 2.0 Operator: GES

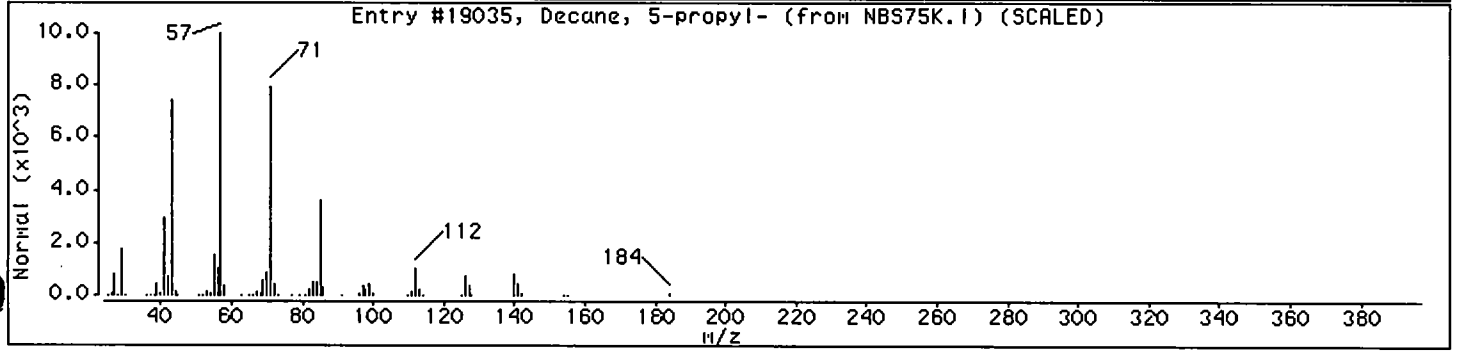
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	70270	86	C15H32	212
Tetradecane, 4,11-dimethyl-	55045-12-0	NBS75K.l	29251	74	C16H34	226
Decane, 5-propyl-	17312-62-8	NBS75K.l	19035	72	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

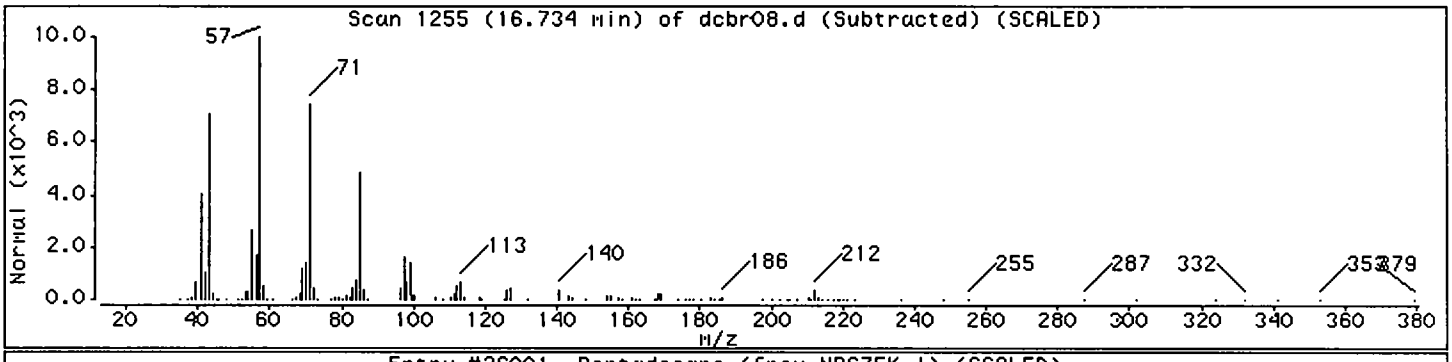
Client ID: WS-06 Instrument: gcl4.i

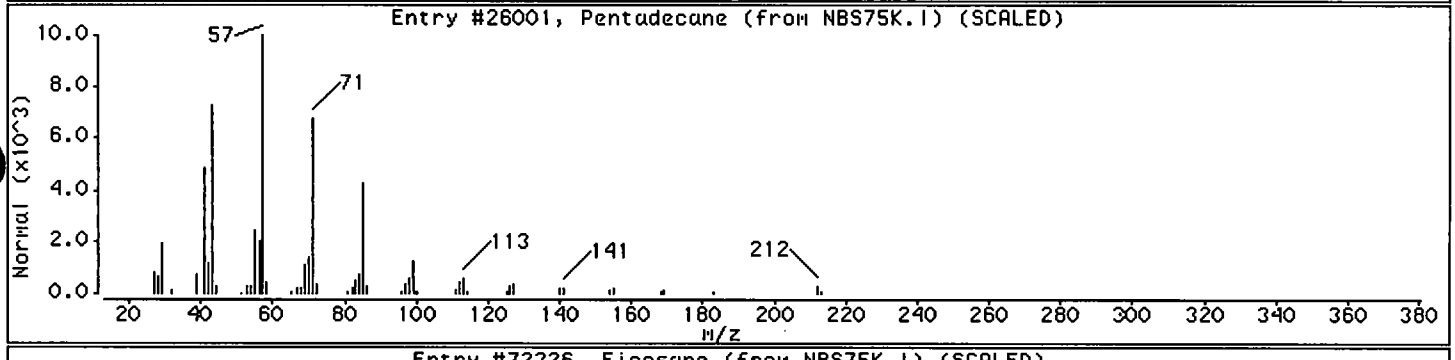
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

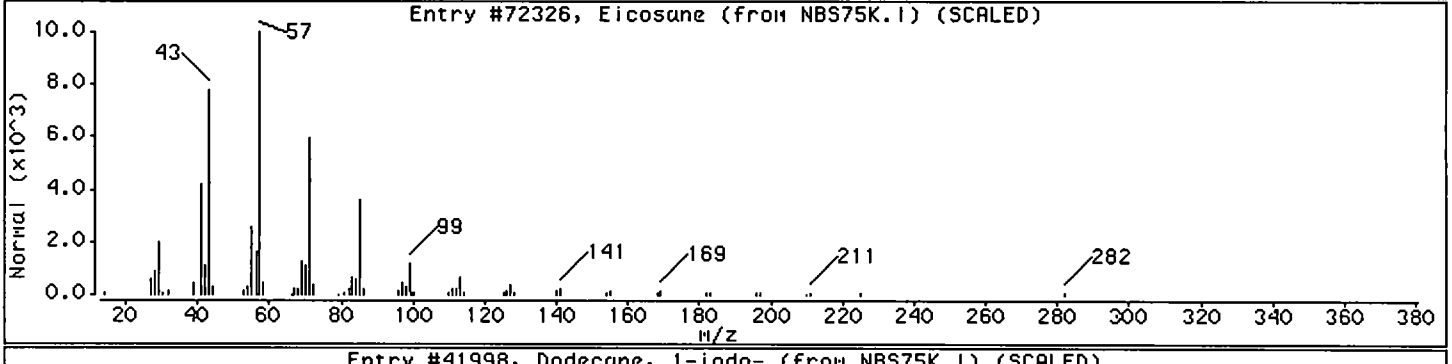
Volume Injected (uL): 2.0 Operator: GES

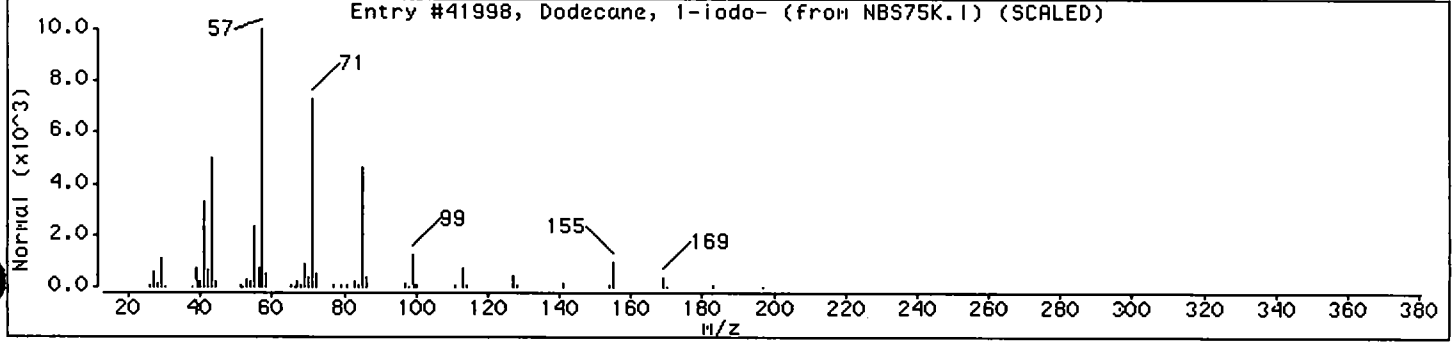
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Pentadecane	629-62-9	NBS75K.l	26001	98	C15H32	212
Eicosane	112-95-8	NBS75K.l	72326	87	C20H42	282
Dodecane, 1-iodo-	4292-19-7	NBS75K.l	41998	86	C12H25I	296









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

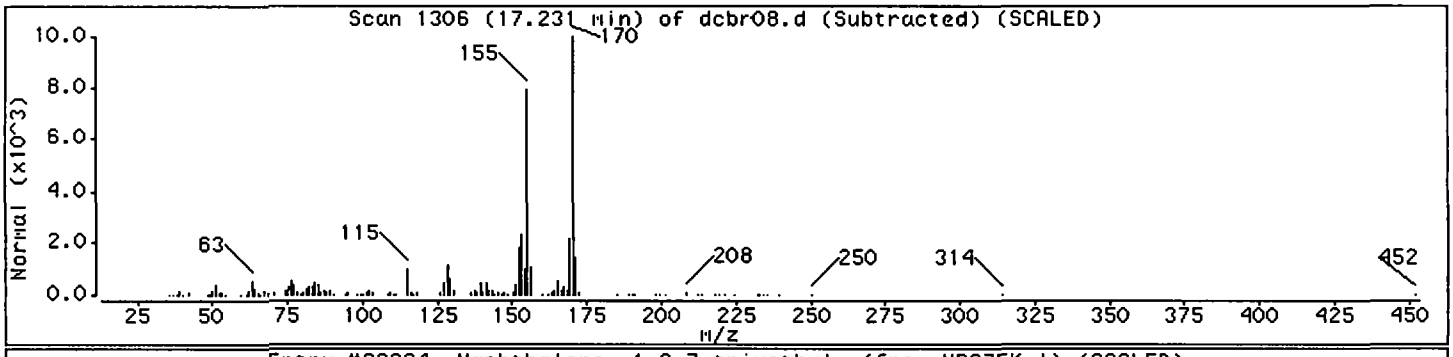
Client ID: WS-06 Instrument: gcl4.i

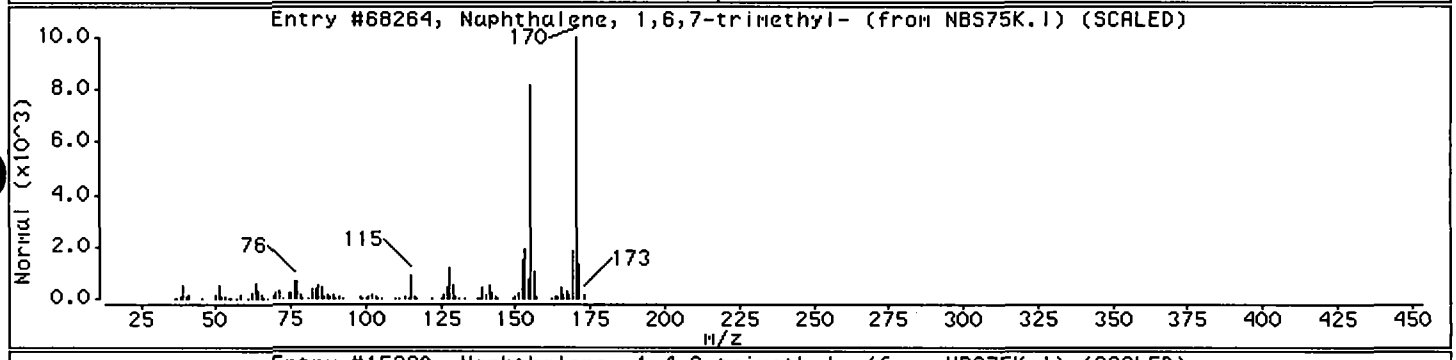
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

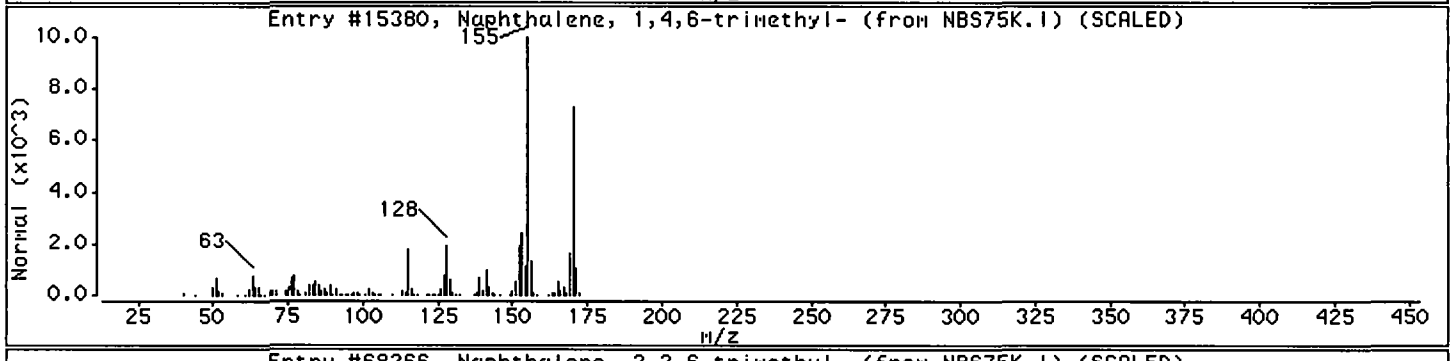
Volume Injected (uL): 2.0 Operator: GES

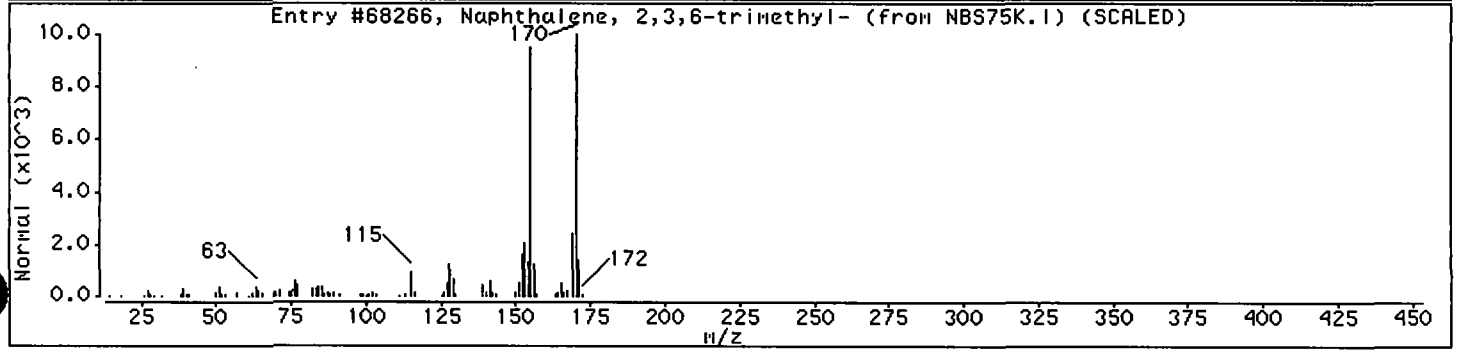
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Subst Naphthalene						
Naphthalene, 1,6,7-trimethyl-	2245-38-7	NBS75K.l	68264	97	C13H14	170
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.l	15380	97	C13H14	170
Naphthalene, 2,3,6-trimethyl-	829-26-5	NBS75K.l	68266	96	C13H14	170









Data File: /chem/gc14.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

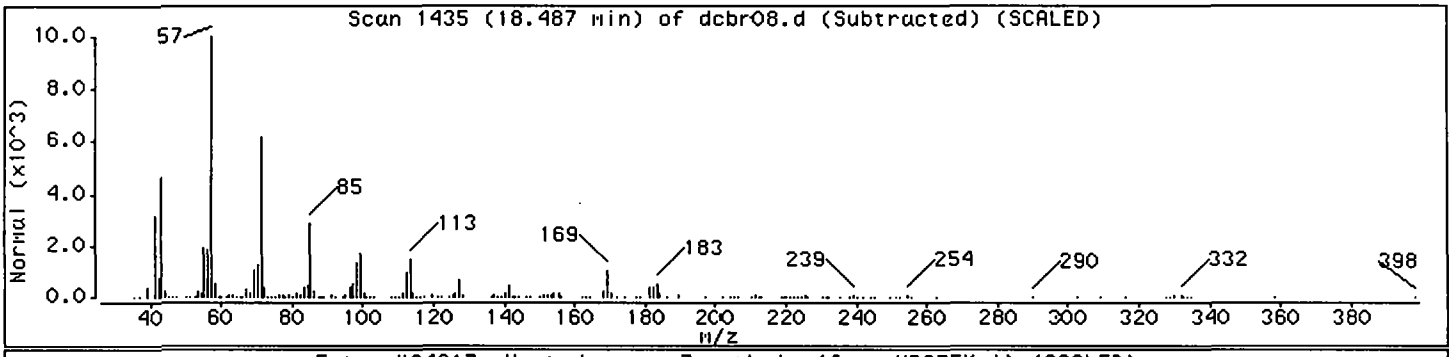
Client ID: WS-06 Instrument: gc14.i

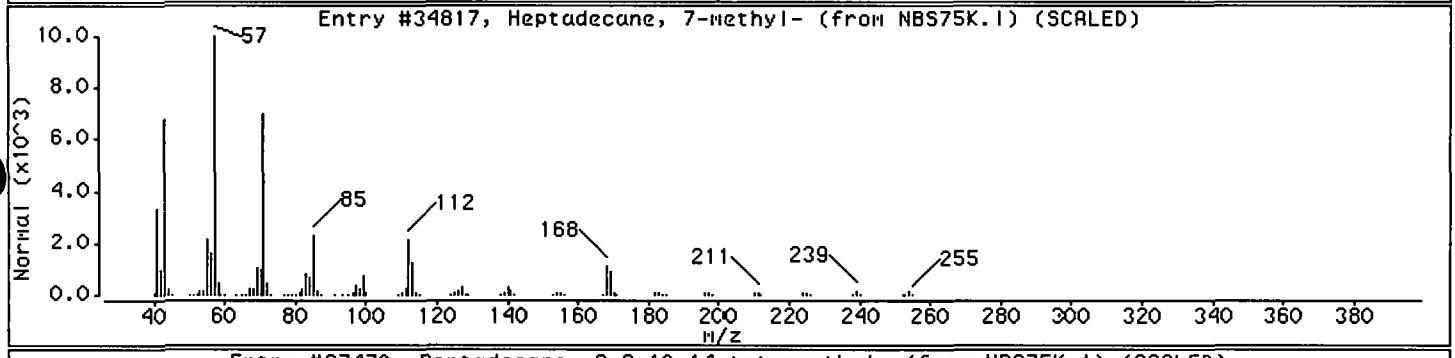
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

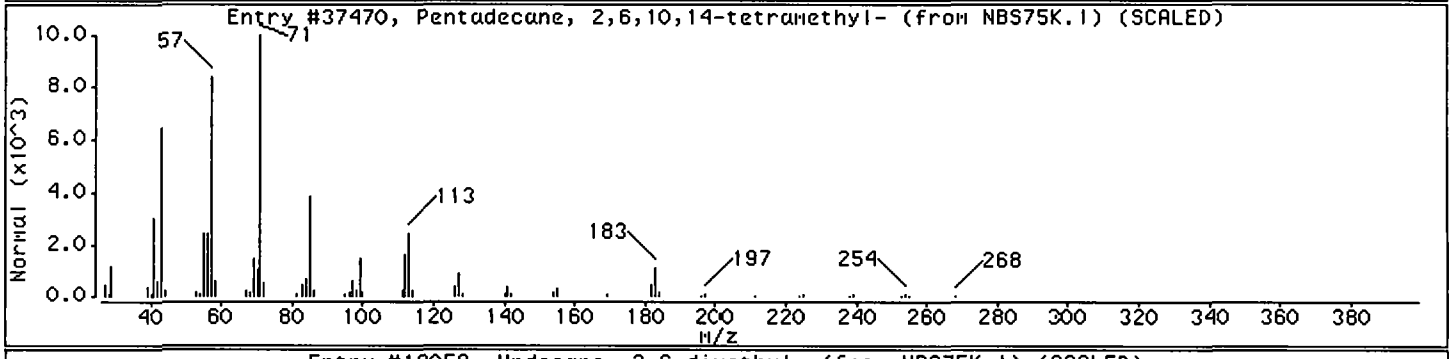
Volume Injected (uL): 2.0 Operator: GES

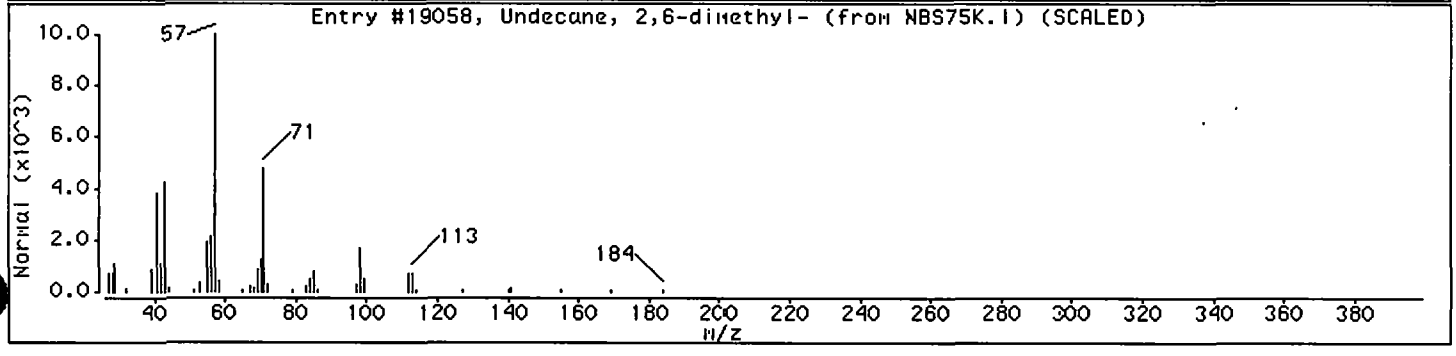
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptadecane, 7-methyl-	20959-33-5	NBS75K.l	34817	76	C18H38	254
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	37470	64	C19H40	268
Undecane, 2,6-dimethyl-	17301-23-4	NBS75K.l	19058	58	C13H28	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

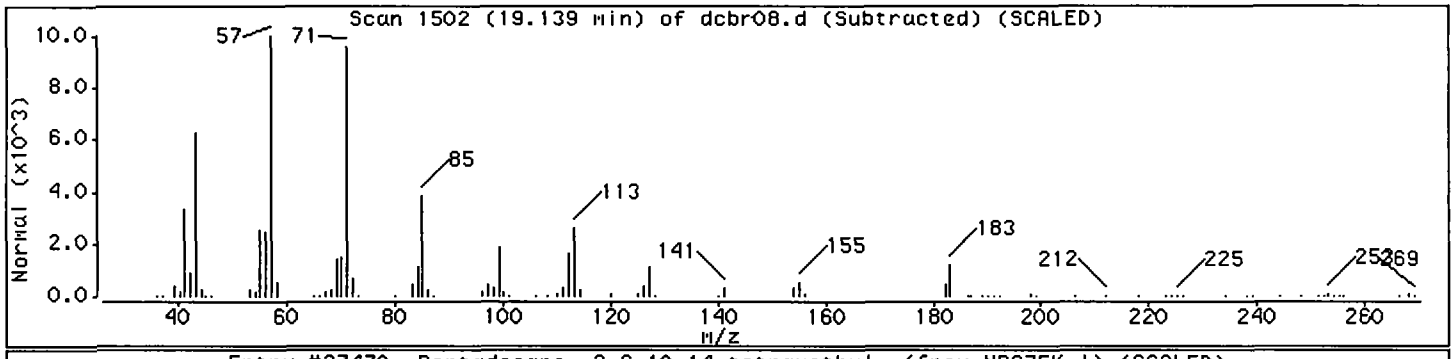
Client ID: WS-06 Instrument: gcl4.i

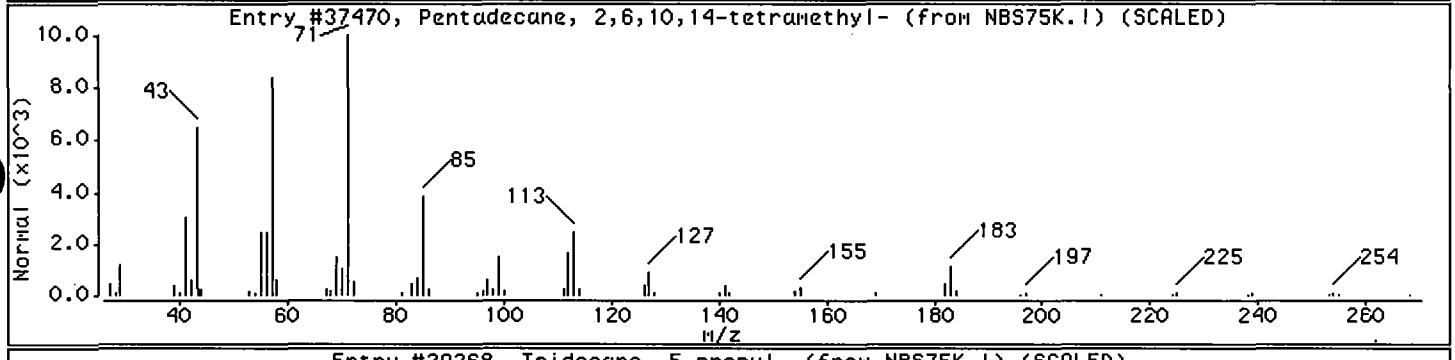
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

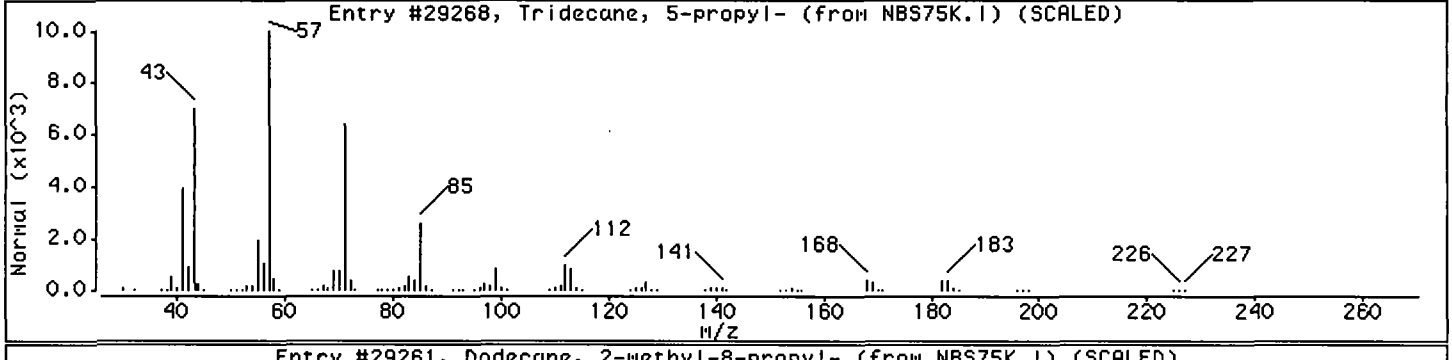
Volume Injected (uL): 2.0 Operator: GES

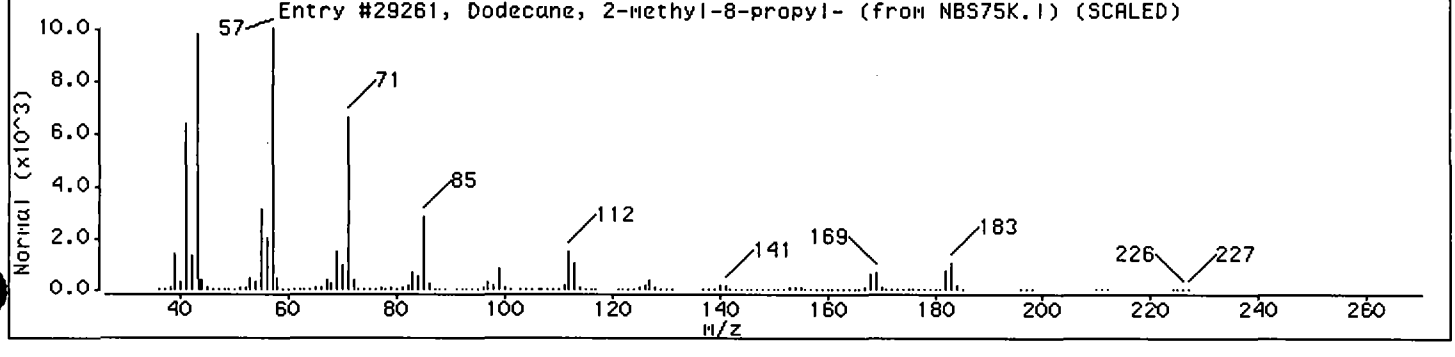
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Pentadecane, 2,6,10,14-tetramethyl-	1921-70-6	NBS75K.l	37470	97	C19H40	268
Tridecane, 5-propyl-	55045-11-9	NBS75K.l	29268	91	C16H34	226
Dodecane, 2-methyl-8-propyl-	55045-07-3	NBS75K.l	29261	87	C16H34	226









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

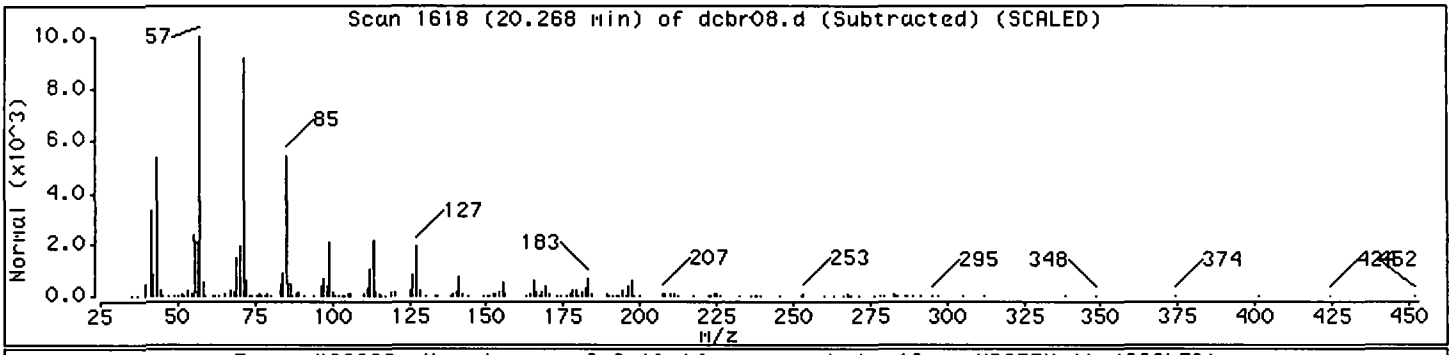
Client ID: WS-06 Instrument: gcl4.i

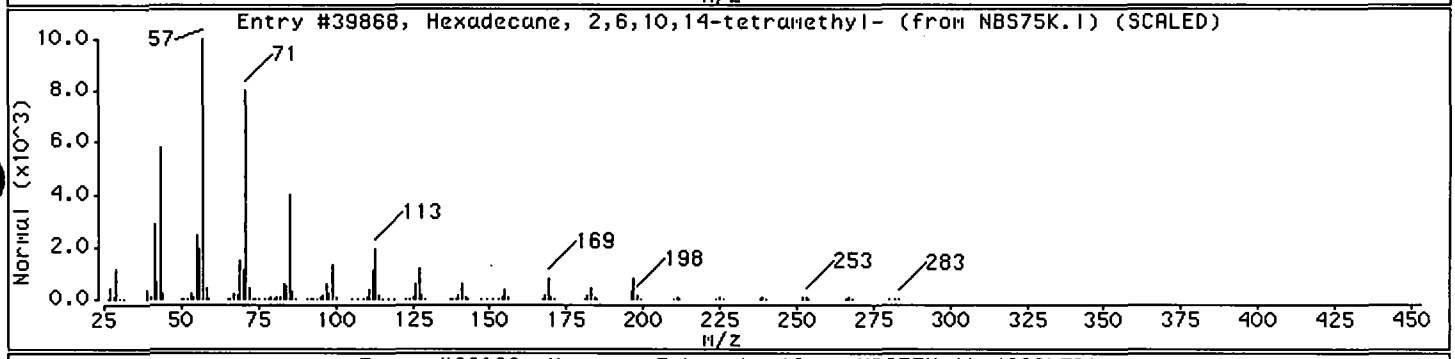
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

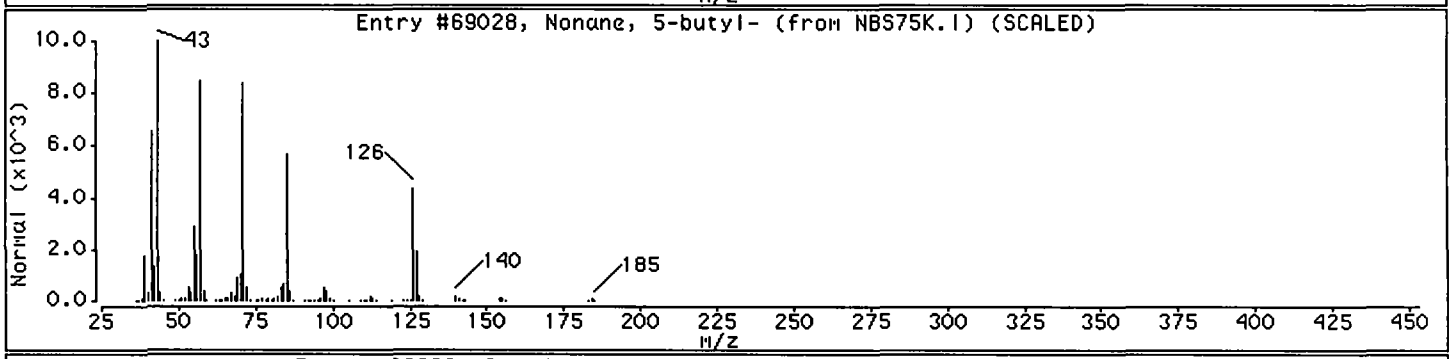
Volume Injected (uL): 2.0 Operator: GES

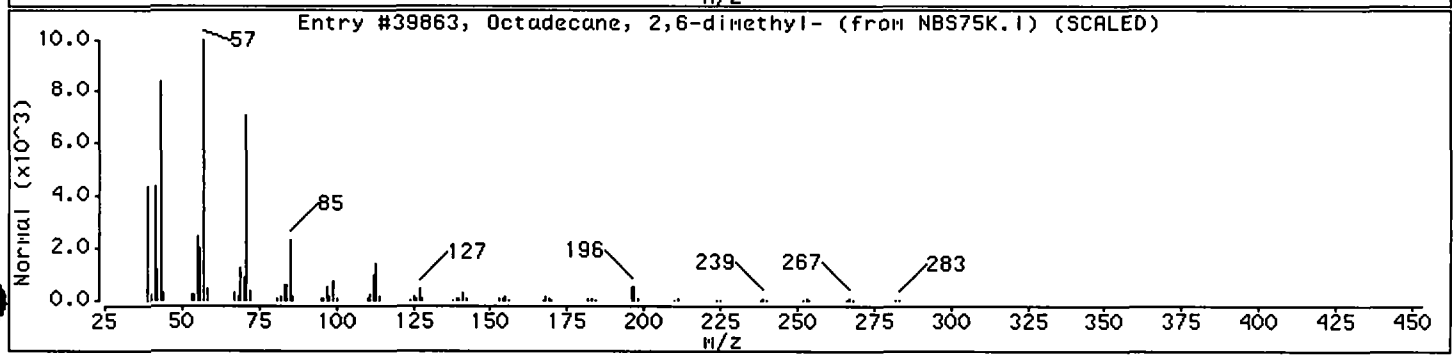
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NBS75K.l	39868	91	C20H42	282
Nonane, 5-butyl-	17312-63-9	NBS75K.l	69028	89	C13H28	184
Octadecane, 2,6-dimethyl-	75163-97-2	NBS75K.l	39863	89	C20H42	282









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

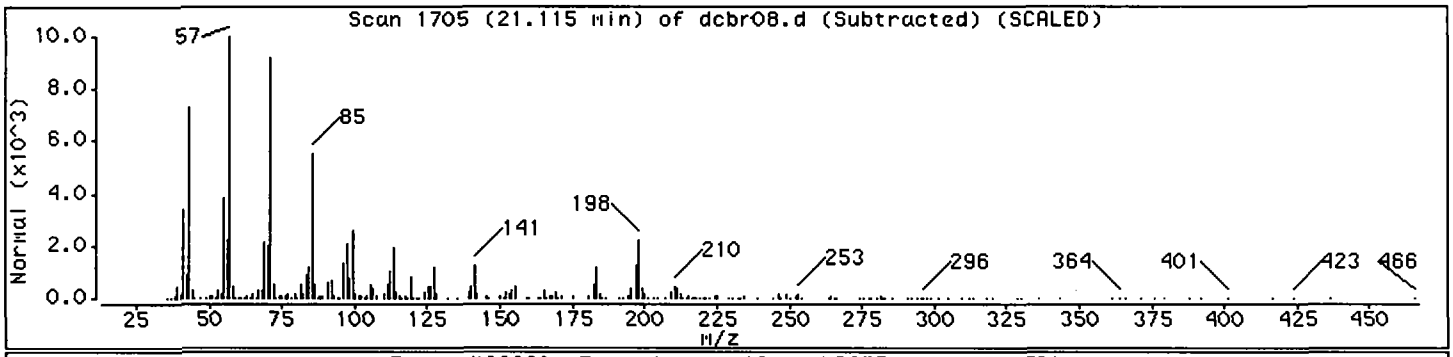
Client ID: WS-06 Instrument: gcl4.i

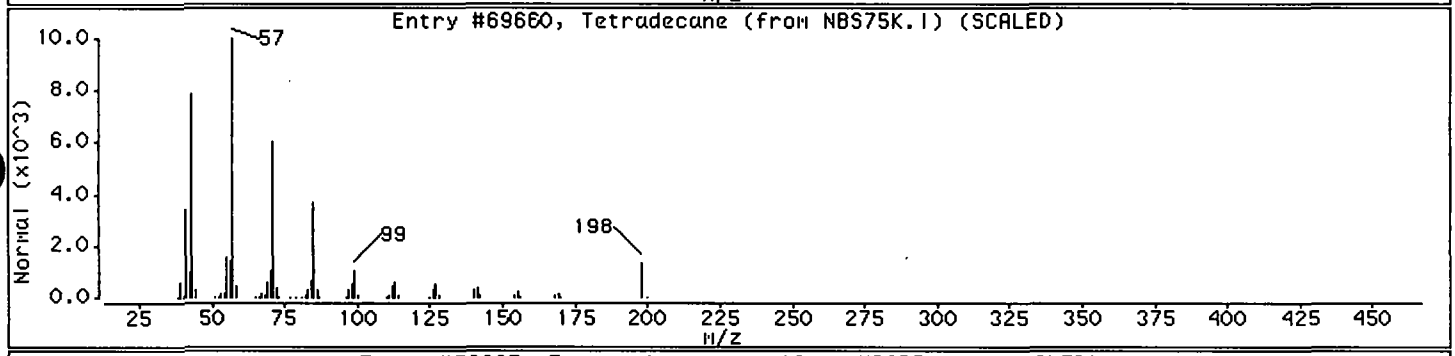
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

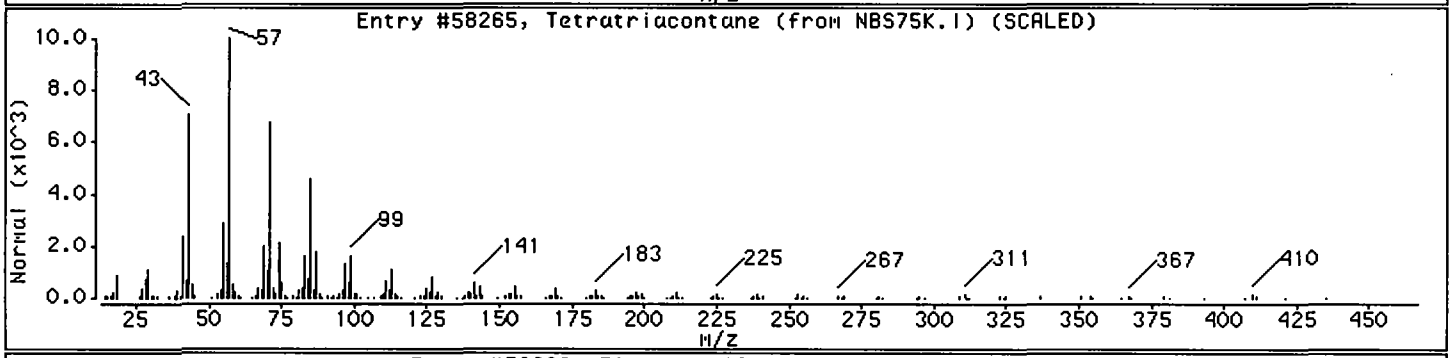
Volume Injected (uL): 2.0 Operator: GES

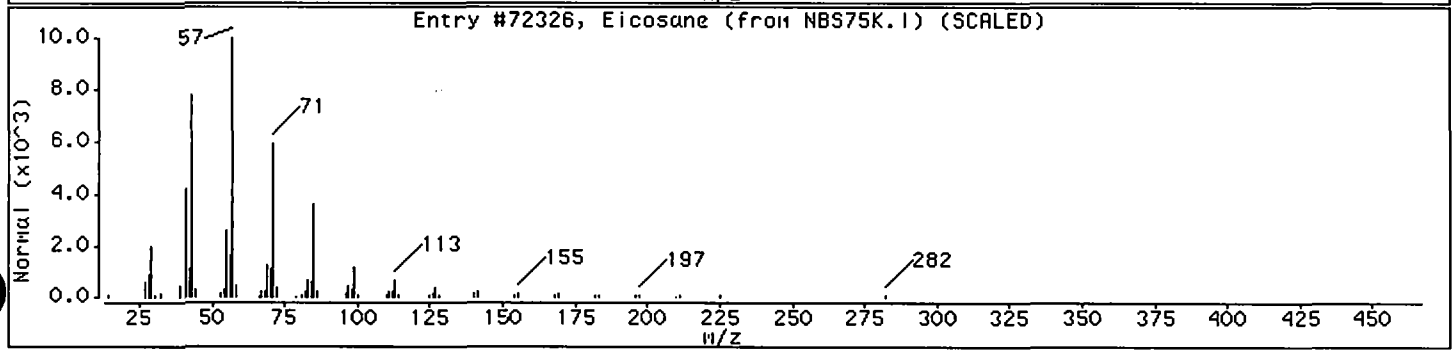
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Tetradecane	629-59-4	NBS75K.l	69660	89	C14H30	198
Tetratriacontane	14167-59-0	NBS75K.l	58265	72	C34H70	479
Eicosane	112-95-8	NBS75K.l	72326	70	C20H42	282









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

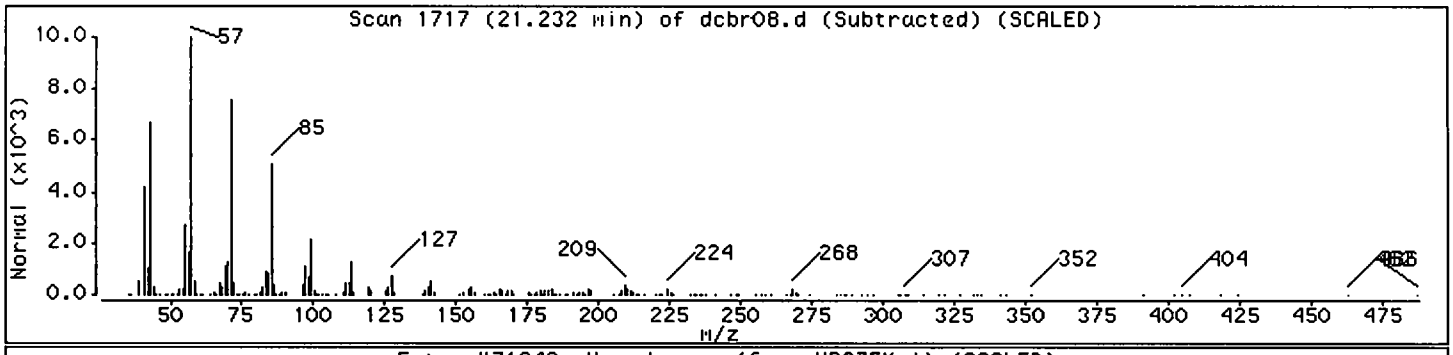
Client ID: WS-06 Instrument: gcl4.i

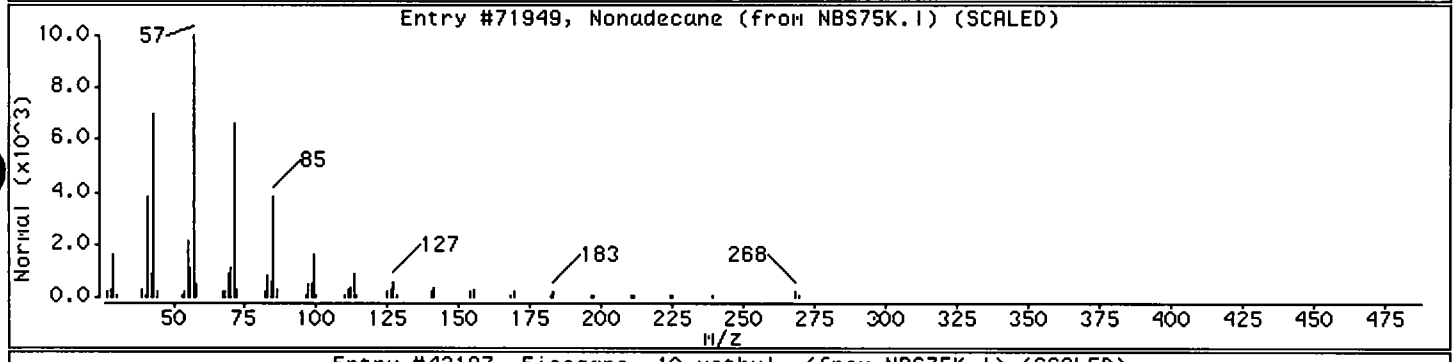
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

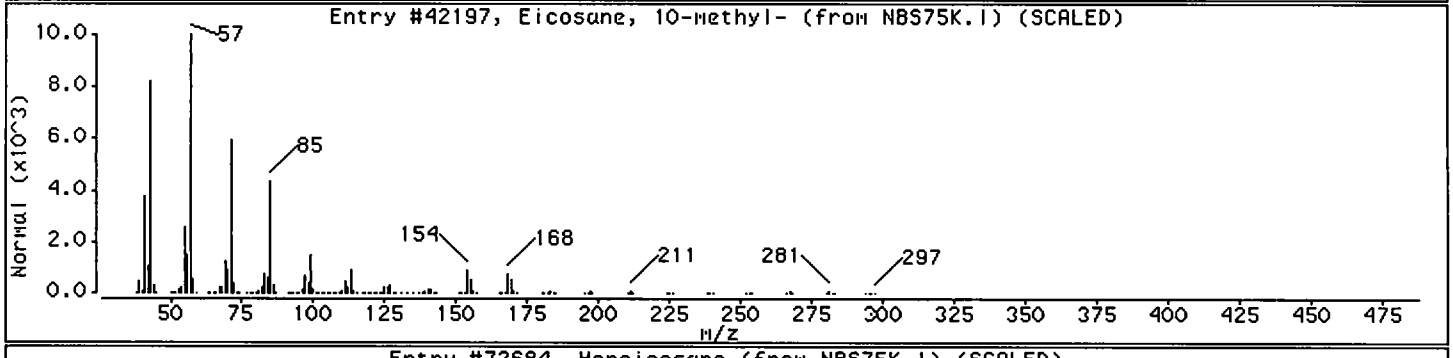
Volume Injected (uL): 2.0 Operator: GES

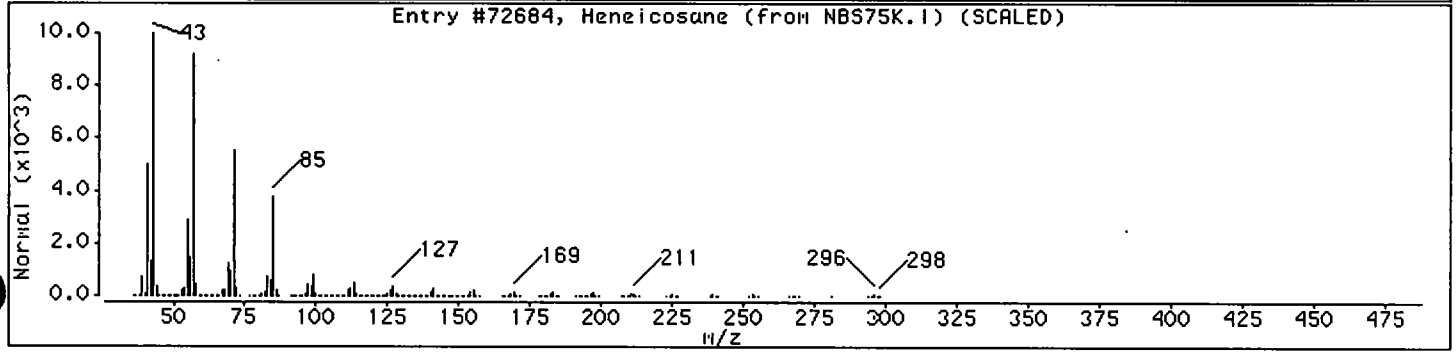
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Nonadecane	629-92-5	NBS75K.l	71949	96	C19H40	268
Eicosane, 10-methyl-	54833-23-7	NBS75K.l	42197	93	C21H44	296
Heneicosane	629-94-7	NBS75K.l	72684	91	C21H44	296









Data File: /chem/gcl4.i/dec1296b.b/dcbr08.d

Date : 13-DEC-1996 00:54

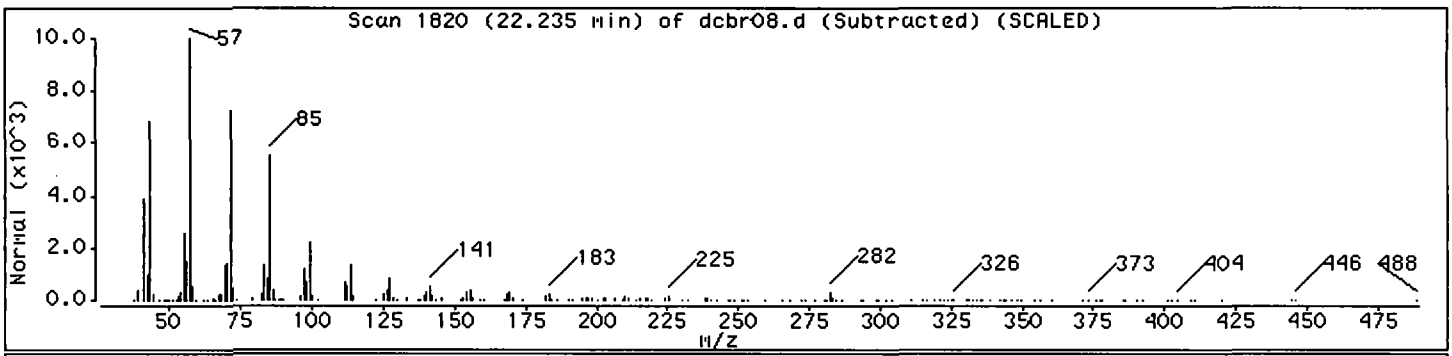
Client ID: WS-06 Instrument: gcl4.i

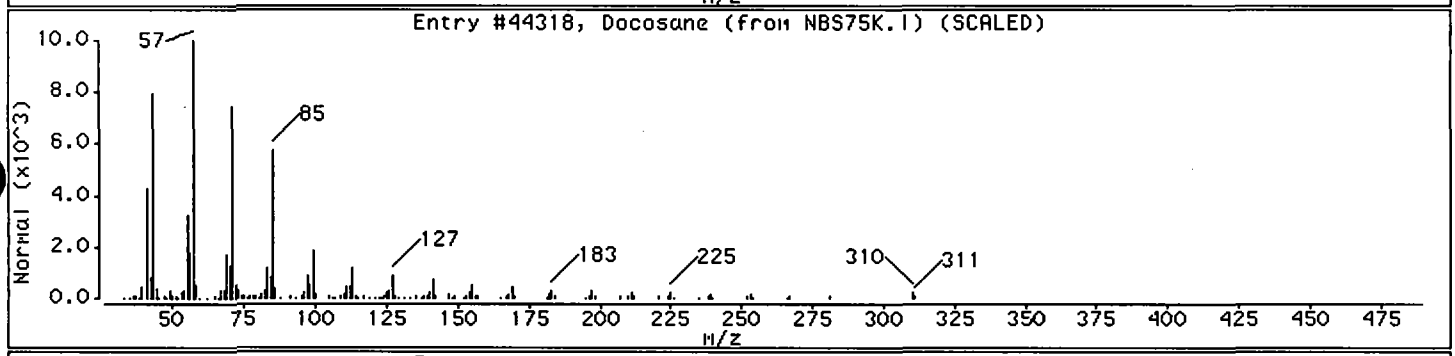
Sample Info: 9611G675-006 DFBC12,[AL=0625HS],[DC=00]

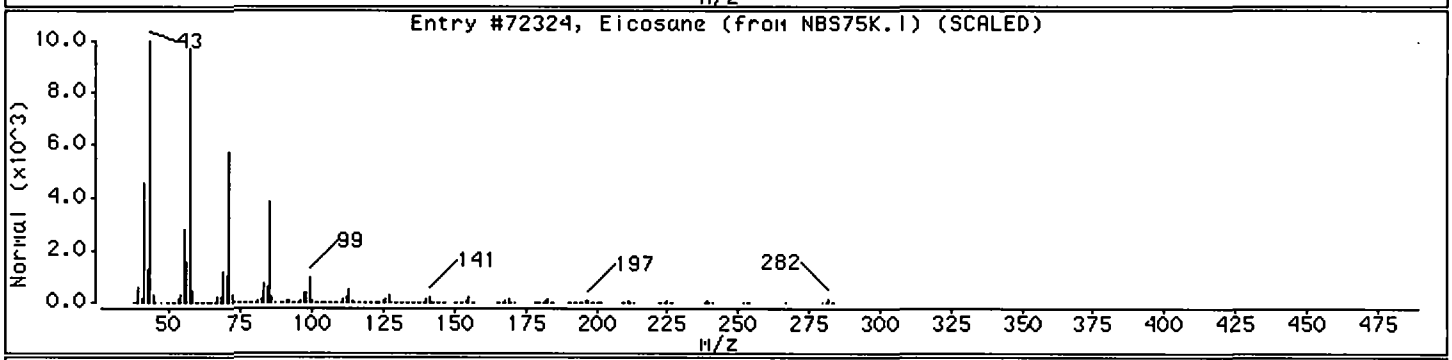
Volume Injected (uL): 2.0 Operator: GES

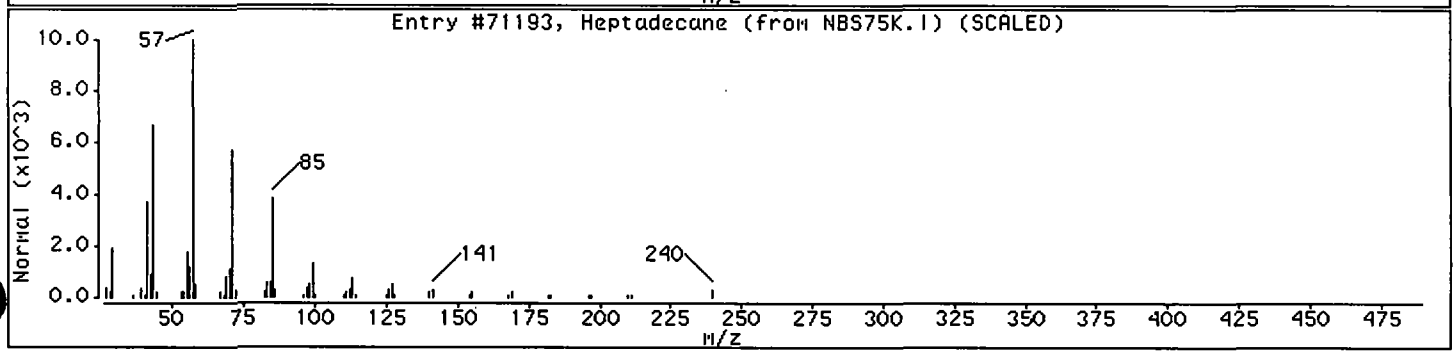
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Docosane	629-97-0	NBS75K.l	44318	97	C22H46	310
Eicosane	112-95-8	NBS75K.l	72324	95	C20H42	282
Heptadecane	629-78-7	NBS75K.l	71193	94	C17H36	240









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-07

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 30.6 (g/mL) G Lab File ID: DCBW12

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 8 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/16/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	8800	U
111-44-4	bis(2-Chloroethyl)ether	8800	U
95-57-8	2-Chlorophenol	8800	U
541-73-1	1,3-Dichlorobenzene	8800	U
106-46-7	1,4-Dichlorobenzene	8800	U
95-50-1	1,2-Dichlorobenzene	8800	U
95-48-7	2-Methylphenol	8800	U
108-60-1	2,2'-oxybis(1-Chloropropane)	8800	U
106-44-5	4-Methylphenol	8800	U
621-64-7	N-Nitroso-di-n-propylamine	8800	U
67-72-1	Hexachloroethane	8800	U
98-95-3	Nitrobenzene	8800	U
78-59-1	Isophorone	8800	U
88-75-5	2-Nitrophenol	8800	U
105-67-9	2,4-Dimethylphenol	8800	U
111-91-1	bis(2-Chloroethoxy)methane	8800	U
120-83-2	2,4-Dichlorophenol	8800	U
120-82-1	1,2,4-Trichlorobenzene	8800	U
91-20-3	Naphthalene	8800	U
106-47-8	4-Chloroaniline	8800	U
87-68-3	Hexachlorobutadiene	8800	U
59-50-7	4-Chloro-3-methylphenol	8800	U
91-57-6	2-Methylnaphthalene	8800	U
77-47-4	Hexachlorocyclopentadiene	8800	U
88-06-2	2,4,6-Trichlorophenol	8800	U
95-95-4	2,4,5-Trichlorophenol	22000	U
91-58-7	2-Chloronaphthalene	8800	U
88-74-4	2-Nitroaniline	22000	U
131-11-3	Dimethylphthalate	8800	U
208-96-8	Acenaphthylene	8800	U
606-20-2	2,6-Dinitrotoluene	8800	U
99-09-2	3-Nitroaniline	22000	U
83-32-9	Acenaphthene	8800	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-07

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 30.6 (g/mL) G Lab File ID: DCBW12

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 8 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/16/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	22000	U
100-02-7	4-Nitrophenol	22000	U
132-64-9	Dibenzofuran	8800	U
121-14-2	2,4-Dinitrotoluene	8800	U
84-66-2	Diethylphthalate	8800	U
7005-72-3	4-Chlorophenyl-phenylether	8800	U
86-73-7	Fluorene	8800	U
100-01-6	4-Nitroaniline	22000	U
534-52-1	4,6-Dinitro-2-methylphenol	22000	U
86-30-6	n-Nitrosodiphenylamine (1)	8800	U
101-55-3	4-Bromophenyl-phenylether	8800	U
118-74-1	Hexachlorobenzene	8800	U
87-86-5	Pentachlorophenol	22000	U
85-01-8	Phenanthrene	8800	U
120-12-7	Anthracene	8800	U
86-74-8	Carbazole	8800	U
84-74-2	Di-n-butylphthalate	8800	U
206-44-0	Fluoranthene	8800	U
129-00-0	Pyrene	8800	U
85-68-7	Butylbenzylphthalate	8800	U
91-94-1	3,3'-Dichlorobenzidine	8800	U
56-55-3	Benzo(a)anthracene	8800	U
218-01-9	Chrysene	1900	J
117-81-7	bis(2-Ethylhexyl)phthalate	8800	U
117-84-0	Di-n-octylphthalate	8800	U
205-99-2	Benzo(b)fluoranthene	8800	U
207-08-9	Benzo(k)fluoranthene	8800	U
50-32-8	Benzo(a)pyrene	8800	U
193-39-5	Indeno(1,2,3-cd)pyrene	8800	U
53-70-3	Dibenzo(a,h)anthracene	8800	U
191-24-2	Benzo(g,h,i)perylene	8800	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-07

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-007

Sample wt/vol: 30.6 (g/mL) G Lab File ID: DCBW12

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 8 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/16/96

Injection Volume: 2.0(uL) Dilution Factor: 25.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 20

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

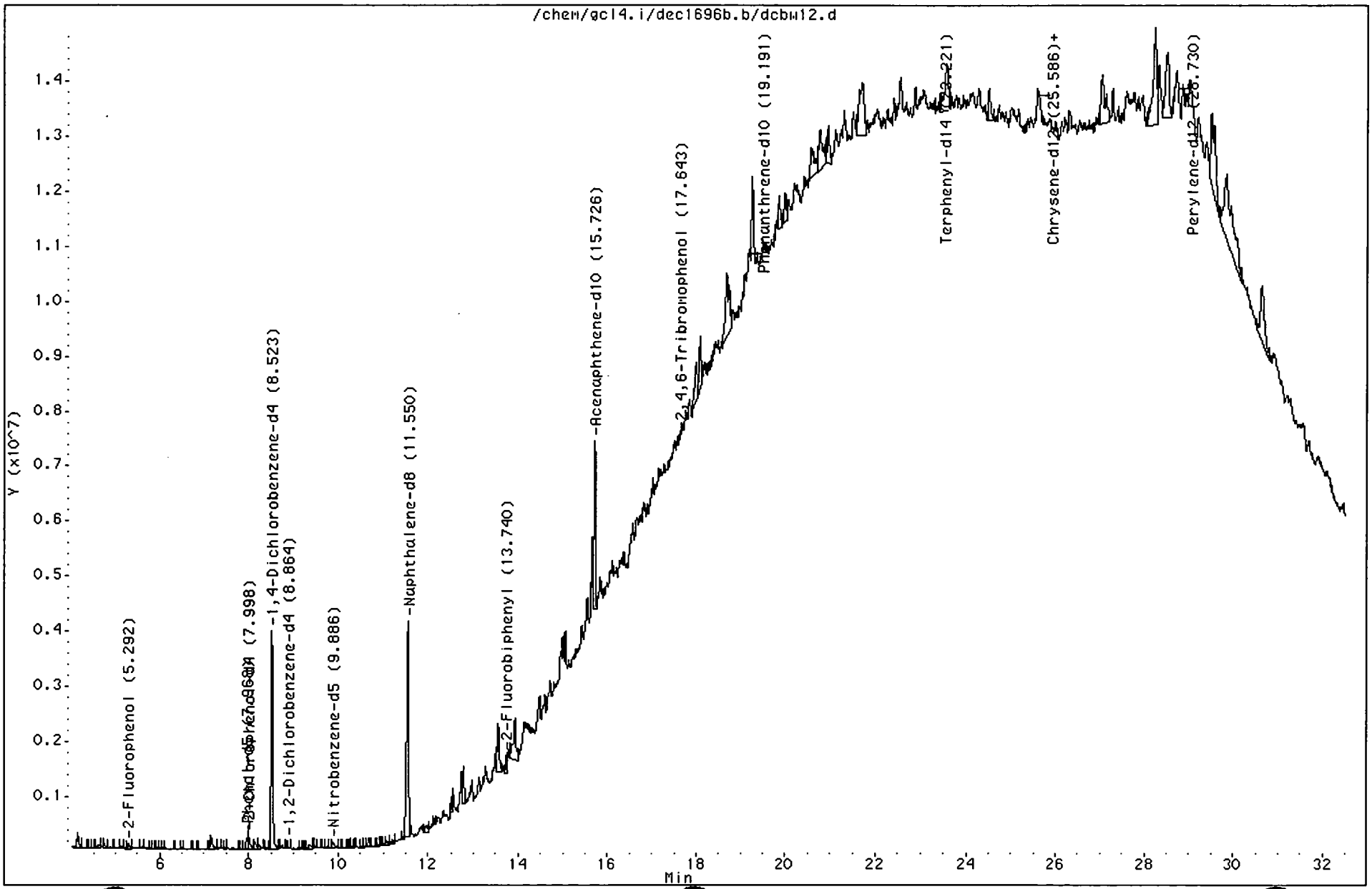
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	12.79	2600	J
2.		UNKNOWN	13.56	3700	J
3.		UNKNOWN	13.93	8500	J
4.		UNKNOWN	18.00	7600	J
5.		UNKNOWN	18.09	6800	J
6.		UNKNOWN	18.68	18000	J
7.		UNKNOWN	19.86	4600	J
8.		UNKNOWN	20.00	4100	J
9.		UNKNOWN	20.57	7900	J
10.		UNKNOWN	20.77	12000	J
11.		UNKNOWN	20.95	5600	J
12.		UNKNOWN	21.70	20000	J
13.		UNKNOWN	23.56	14000	J
14.		UNKNOWN	24.50	5200	J
15.		UNKNOWN	27.03	14000	J
16.		UNKNOWN	28.22	27000	J
17.		UNKNOWN	28.49	18000	J
18.		UNKNOWN	29.50	23000	J
19.		UNKNOWN	29.83	40000	J
20.		UNKNOWN	30.63	15000	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

270

Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d
Date : 16-DEC-1996 22:07
Client ID: WS-07
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: GLR
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1696b.b/dcbw12.d
Lab Smp Id: 9611G675-007 Client Smp ID: WS-07
Inj Date : 16-DEC-1996 22:07
Operator : GLR Inst ID: gcl4.i
Smp Info : 9611G675-007 DFAC16,[AL=0625HS],[DC=00]
Misc Info : GCL#4.5.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1696b.b/390.m
Meth Date : 18-Dec-1996 23:46 squiresb Quant Type: ISTD
Cal Date : 16-DEC-1996 13:23 Cal File: dgac16.d
Als bottle: 12
Dil Factor: 25.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.600	Weigth of sample extracted (g)
M	7.600	% Moisture

WB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	8.523	8.520	(1.000)	1444166	40.000	
* 26 Naphthalene-d8	136.00	11.550	11.537	(1.000)	4879894	40.000	
* 41 Acenaphthene-d10	164.00	15.726	15.684	(1.000)	1611009	40.000	(H)
* 56 Phenanthrene-d10	188.00	19.259	19.178	(1.000)	2276342	40.000	(H)
* 67 Chrysene-d12	240.00	25.586	25.427	(1.000)	1102932	40.000	
* 75 Perylene-d12	264.00	28.730	28.522	(1.000)	983731	40.000	
69 Chrysene	228.00	25.605	25.485	(1.001)	142299	4.379	1935.8(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

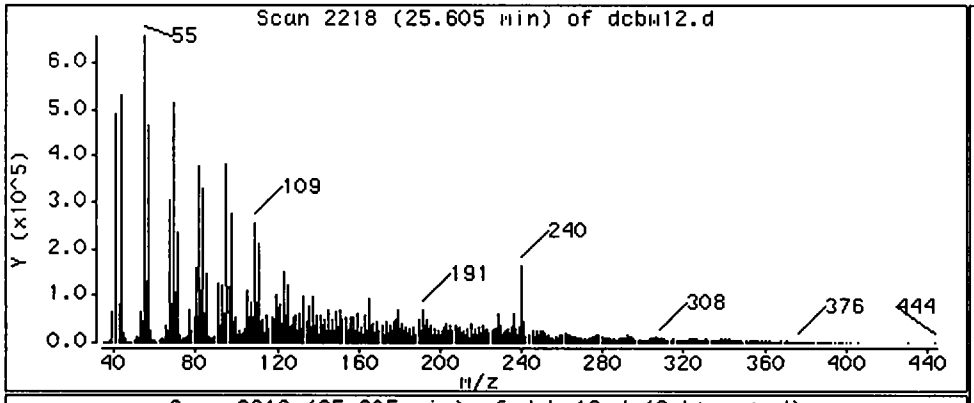
Client ID: WS-07 Instrument: gcl4.i

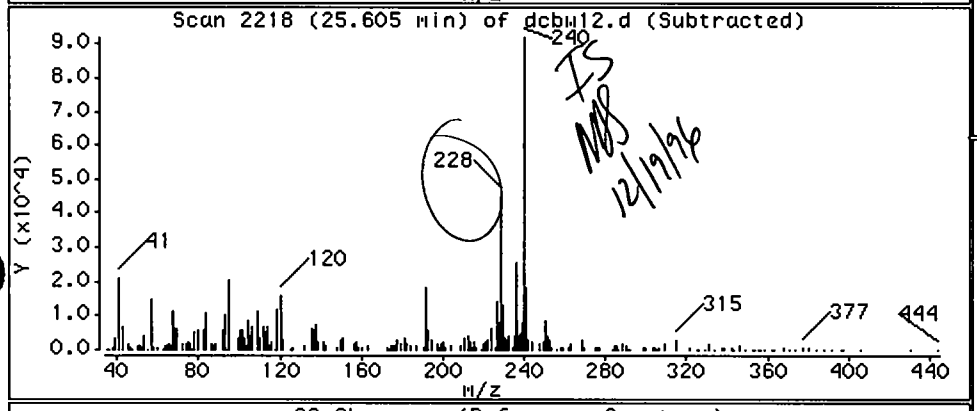
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

Volume Injected (uL): 2.0 Operator: GLR

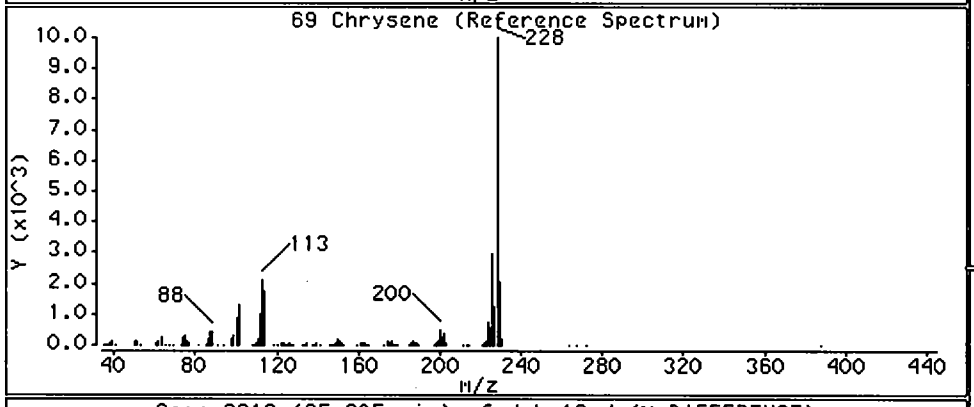
Column phase: Column diameter: 2.00

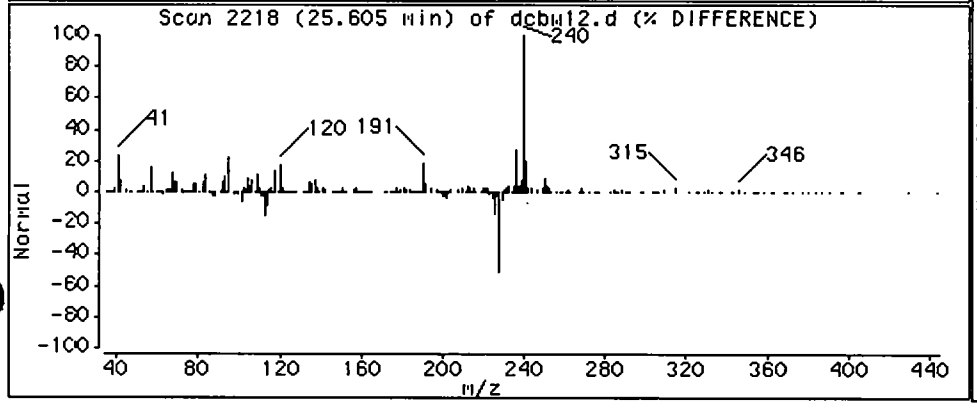
69 Chrysene

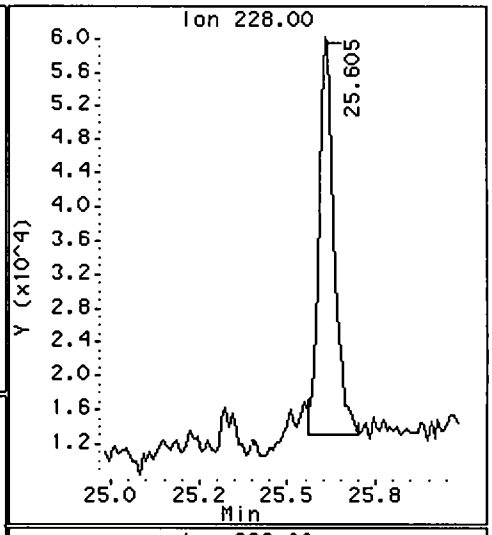


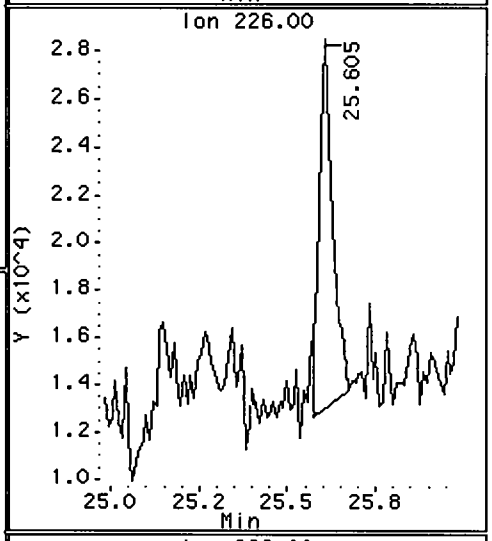


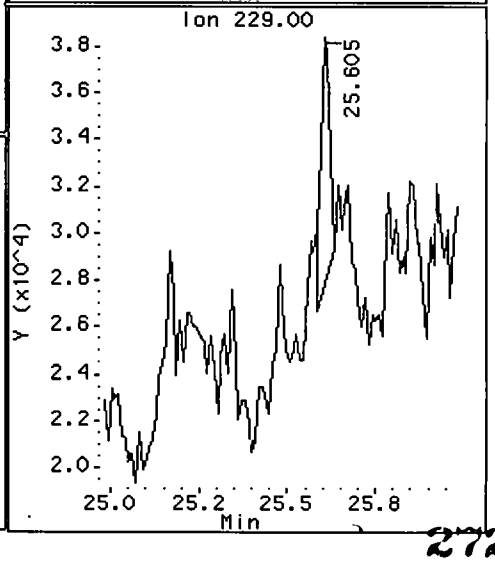
IS
MB
12/19/96











Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1696b.b/dcbw12.d
Lab Smp Id: 9611G675-007 Client Smp ID: WS-07
Inj Date : 16-DEC-1996 22:07
Operator : GLR Inst ID: gcl4.i
Smp Info : 9611G675-007 DFAC16,[AL=0625HS],[DC=00]
Misc Info : GCL#4.5.1
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1696b.b/390.m
Meth Date : 18-Dec-1996 23:46 squiresb
Cal Date : 16-DEC-1996 13:23 Cal File: dgac16.d
Als bottle: 12
Dil Factor: 25.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.600	Weigth of sample extracted (g)
M	7.600	% Moisture

ISTD	RT	AREA	AMOUNT
* 26 Naphthalene-d8	11.550	11594672	40.000
* 41 Acenaphthene-d10	15.726	6814189	40.000

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
12.786	1678357	5.790	2559.8	0		0	26
Unknown				CAS #:			
13.555	2434917	8.400	3713.7	0		0	26
Unknown				CAS #:			
13.935	3266241	19.173	8476.4	0		0	41(ML)

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown					CAS #:		
18.004	2922496	17.155	7584.3	0		0	41(ML)
Unknown					CAS #:		
18.091	2611926	15.332	6778.3	0		0	41(ML)
Unknown					CAS #:		
18.685	6946649	40.778	18028	0		0	41(ML)
Unknown					CAS #:		
19.863	1777256	10.433	4612.2	0		0	41(ML)
Unknown					CAS #:		
19.999	1577503	9.260	4093.8	0		0	41(ML)
Unknown					CAS #:		
20.573	3059054	17.957	7938.7	0		0	41(ML)
Unknown					CAS #:		
20.768	4563896	26.790	11844	0		0	41(ML)
Unknown					CAS #:		
20.953	2167119	12.721	5624.0	0		0	41(ML)
Unknown					CAS #:		
21.702	7774165	45.635	20175	0		0	41(ML)
Unknown					CAS #:		
23.561	5349758	31.404	13883	0		0	41(ML)
Unknown					CAS #:		
24.496	1987830	11.669	5158.7	0		0	41(ML)
Unknown					CAS #:		
27.026	5483531	32.189	14230	0		0	41(ML)
Unknown					CAS #:		
28.224	10329959	60.638	26808	0		0	41(ML)
Unknown					CAS #:		
28.486	6870317	40.329	17830	0		0	41(ML)
Unknown					CAS #:		
29.499	8996475	52.810	23347	0		0	41(ML)
Unknown					CAS #:		
29.830	15475544	90.843	40161	0		0	41(ML)

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
30.628	5971786	35.055	15498	0		0	41(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

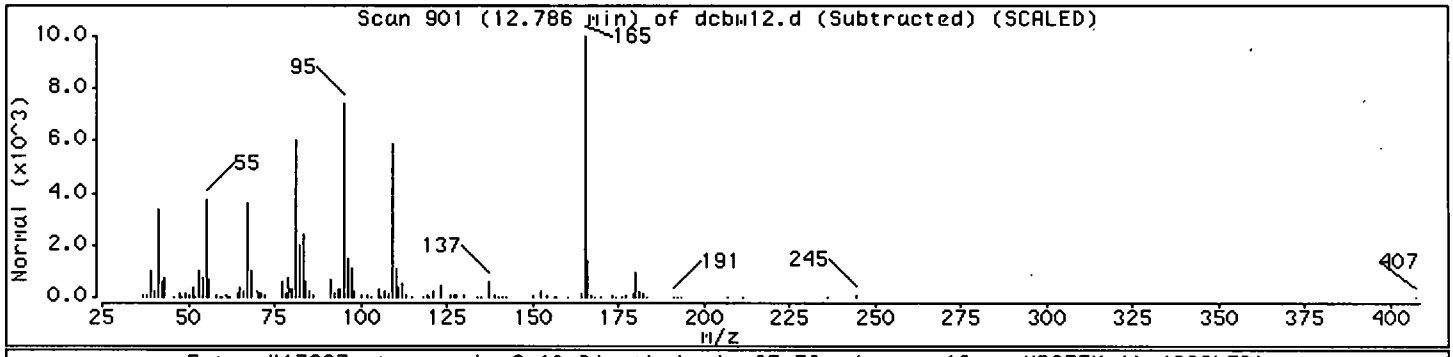
Client ID: WS-07 Instrument: gcl4.i

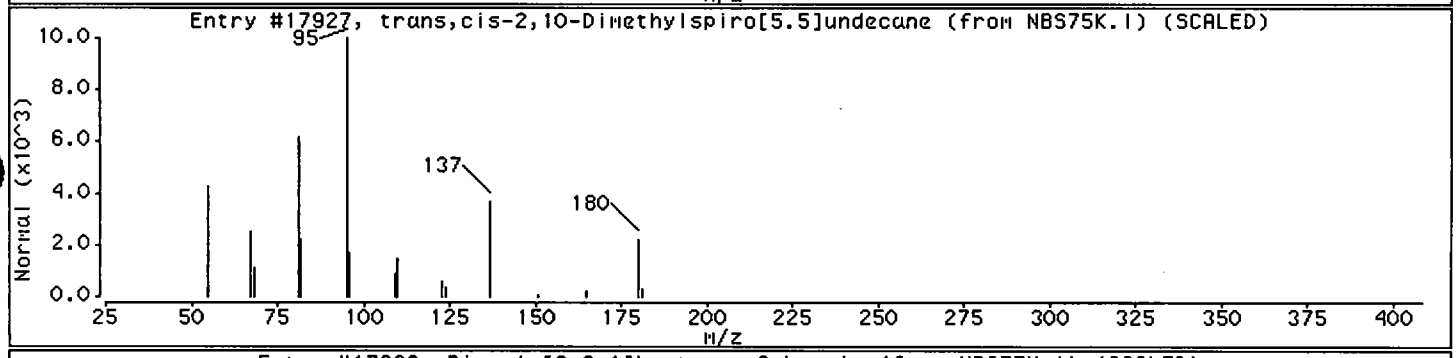
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

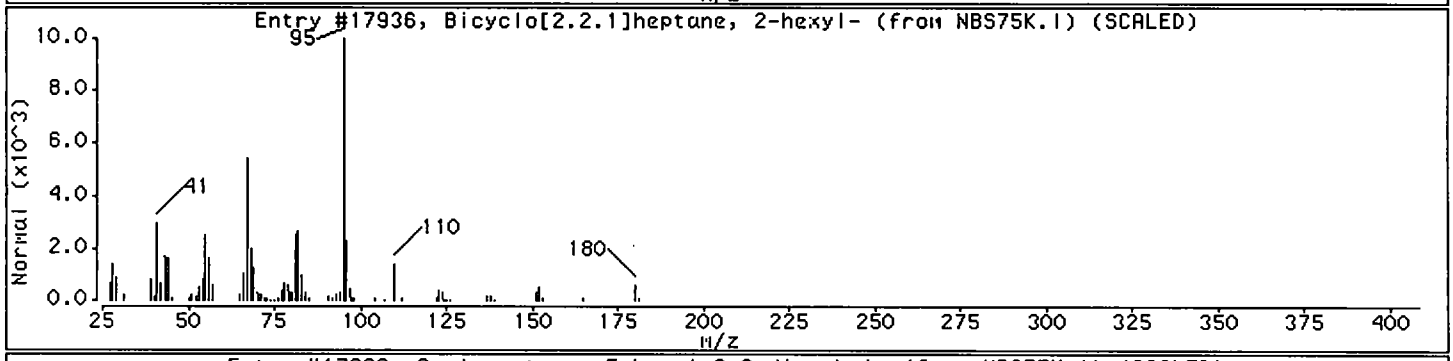
Volume Injected (uL): 2.0 Operator: GLR

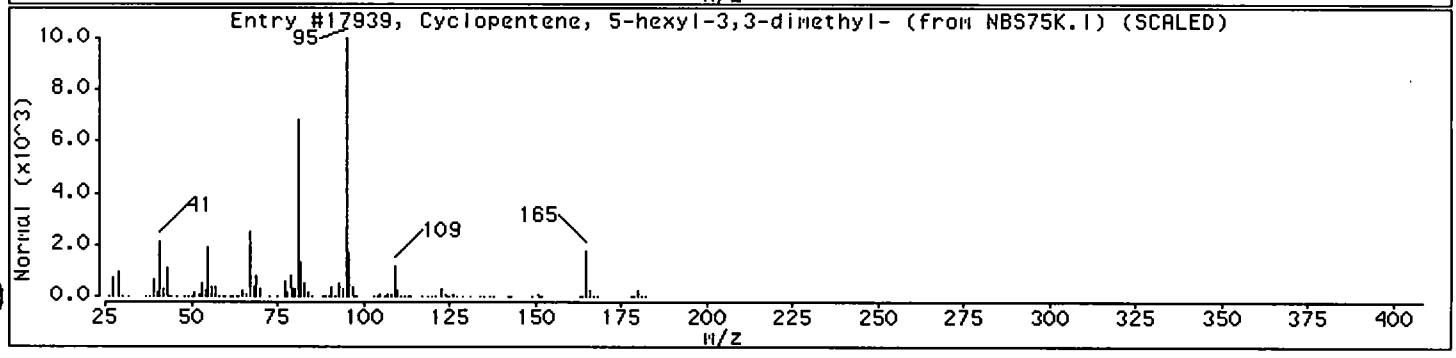
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
trans,cis-2,10-Dimethylspiro[5.5]undecan	0-00-0	NBS75K.l	17927	46	C13H24	180
Bicyclo[2.2.1]heptane, 2-hexyl-	61141-60-4	NBS75K.l	17936	38	C13H24	180
Cyclopentene, 5-hexyl-3,3-dimethyl-	61142-66-3	NBS75K.l	17939	30	C13H24	180









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

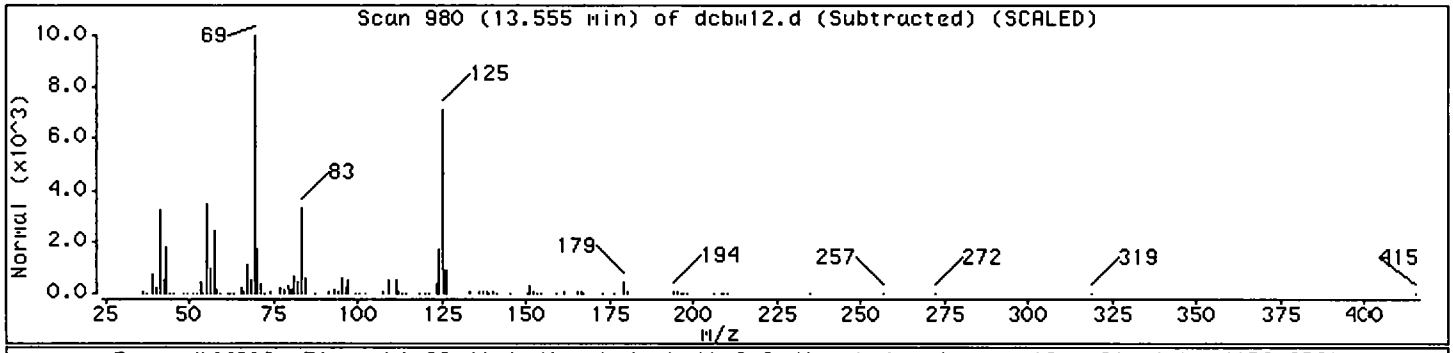
Client ID: WS-07 Instrument: gcl4.i

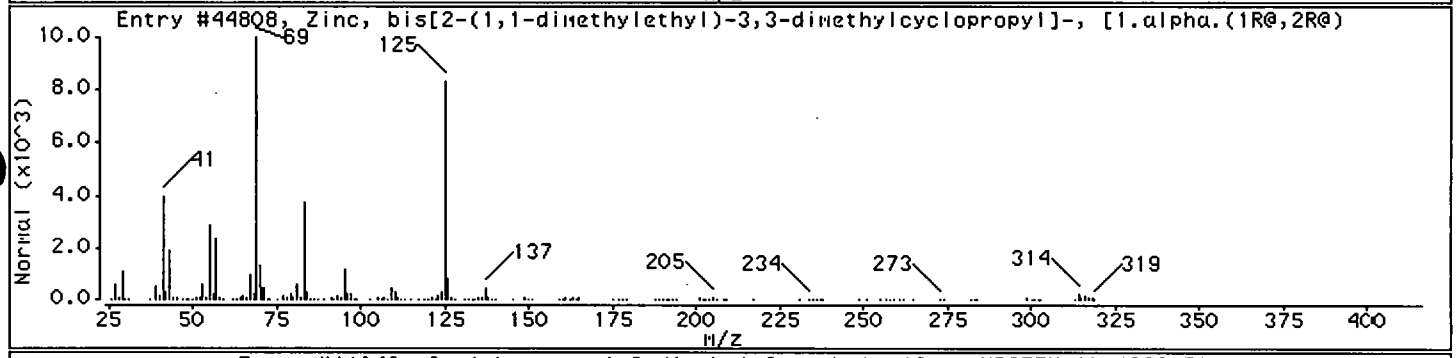
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

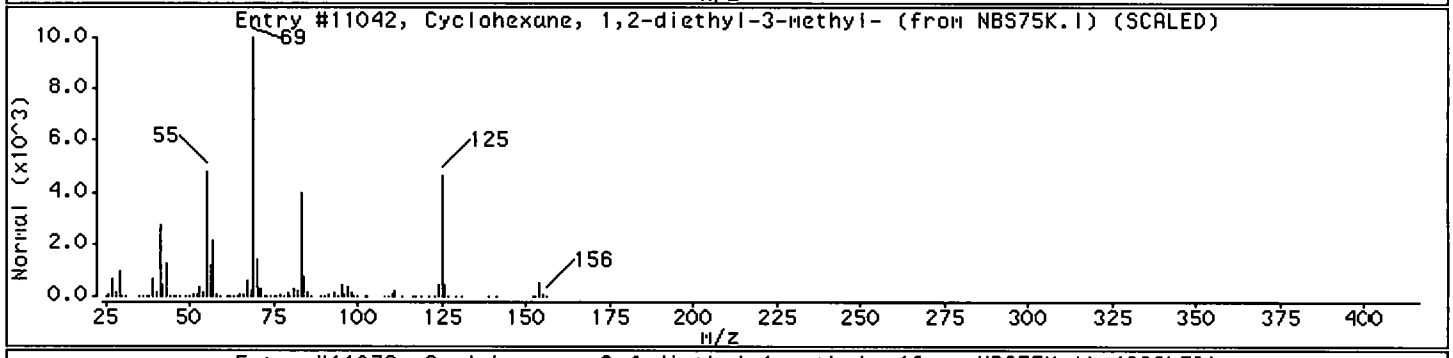
Volume Injected (uL): 2.0 Operator: GLR

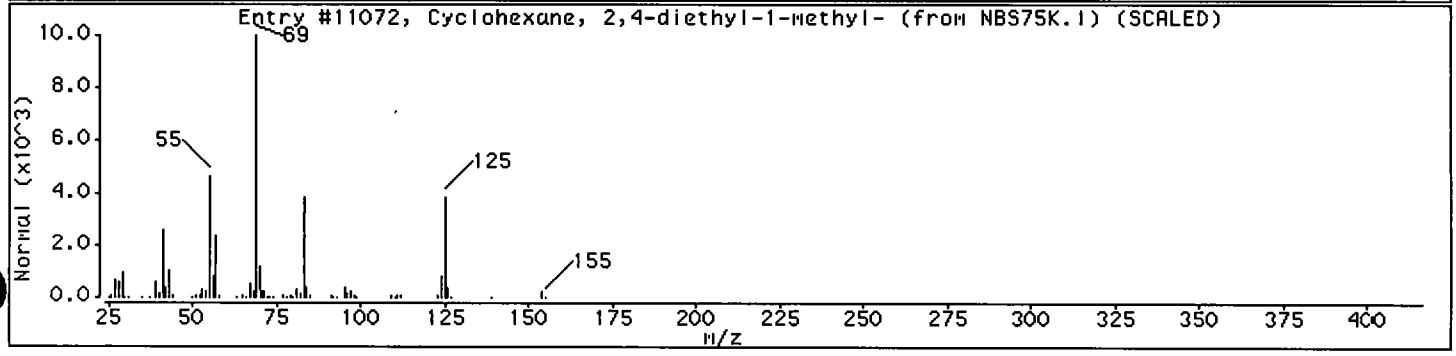
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Zinc, bis[2-(1,1-dimethylethyl)-3,3-dime	74793-36-5	NBS75K.l	44808	72	C18H34Zn	314
Cyclohexane, 1,2-diethyl-3-methyl-	61141-80-8	NBS75K.l	11042	59	C11H22	154
Cyclohexane, 2,4-diethyl-1-methyl-	61142-70-9	NBS75K.l	11072	53	C11H22	154









Data File: /chem/gc14.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

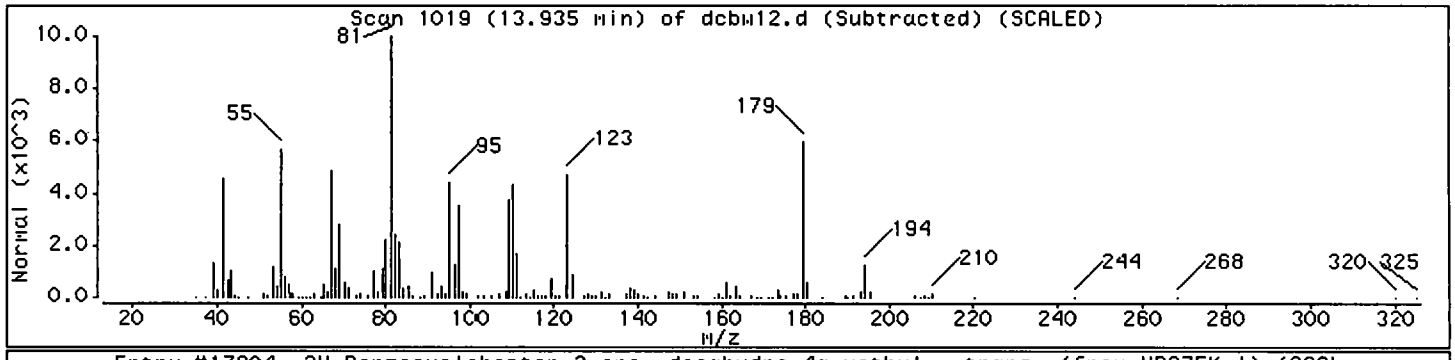
Client ID: WS-07 Instrument: gc14.i

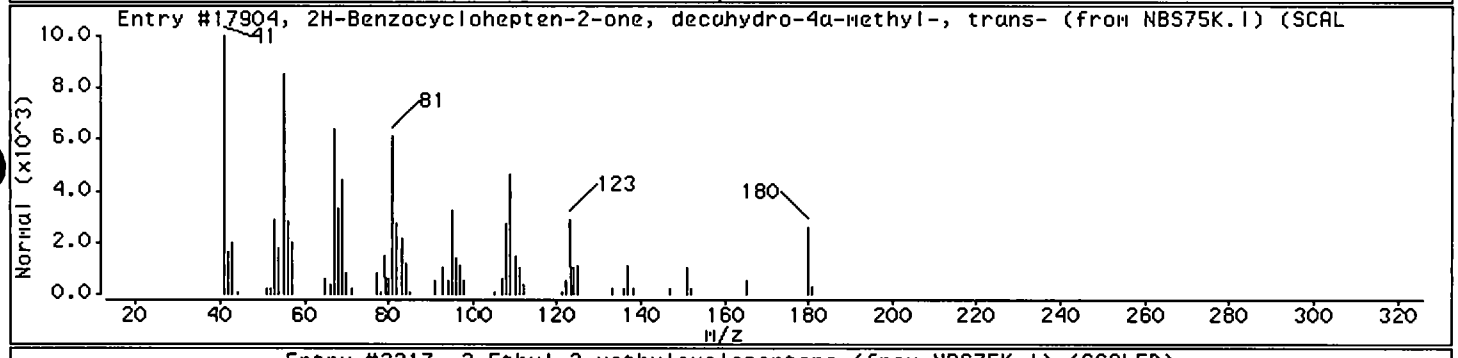
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

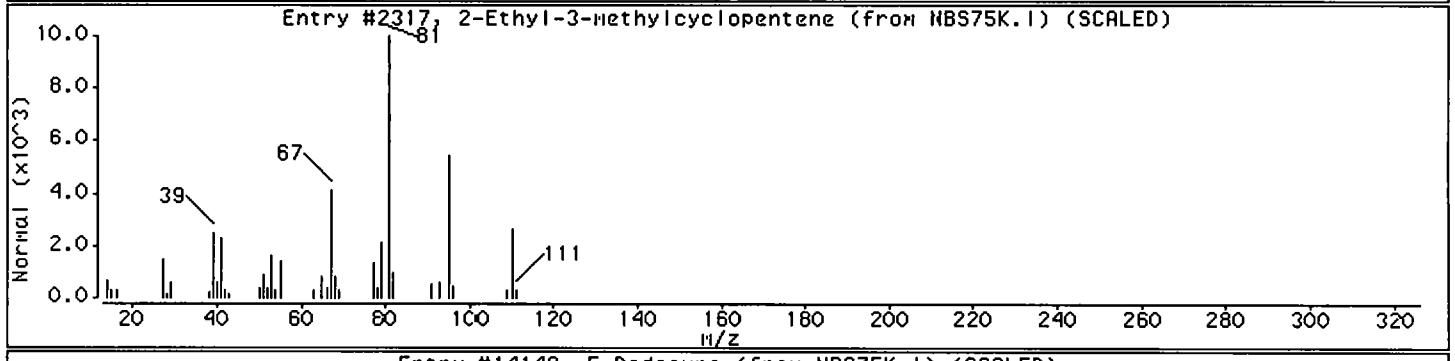
Volume Injected (uL): 2.0 Operator: GLR

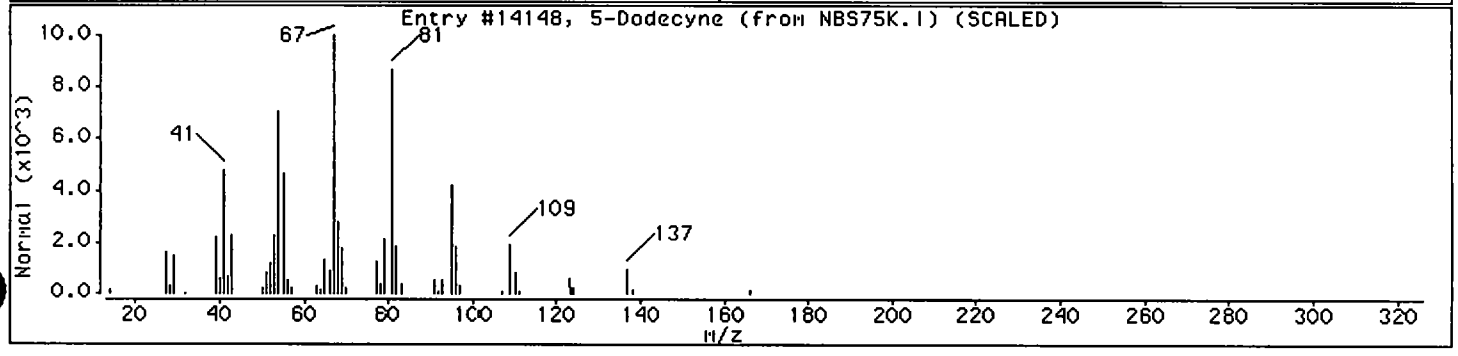
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-Benzocyclohepten-2-one, decahydro-4a-	55103-64-5	NBS75K.l	17904	35	C12H20O	180
2-Ethyl-3-methylcyclopentene	0-00-0	NBS75K.l	2317	30	C8H14	110
5-Dodecyne	19780-12-2	NBS75K.l	14148	25	C12H22	166









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

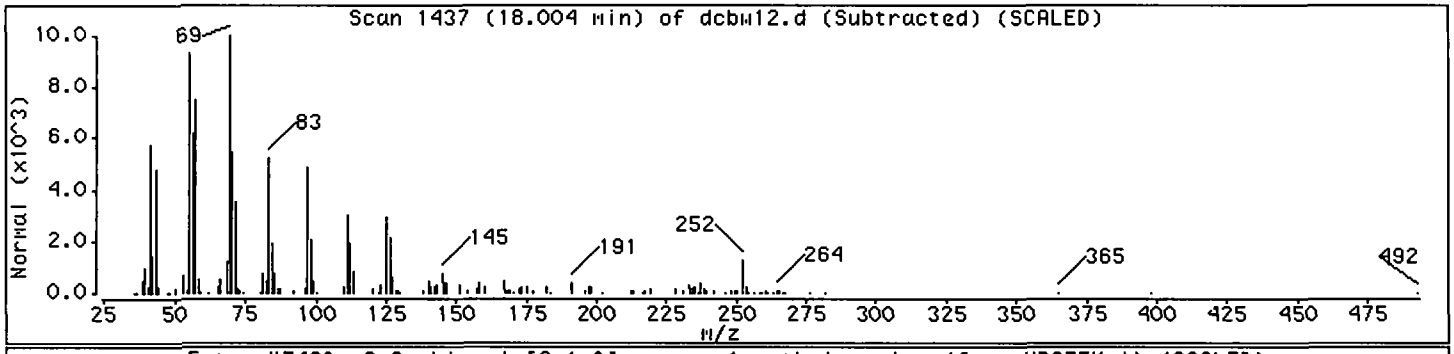
Client ID: WS-07 Instrument: gcl4.i

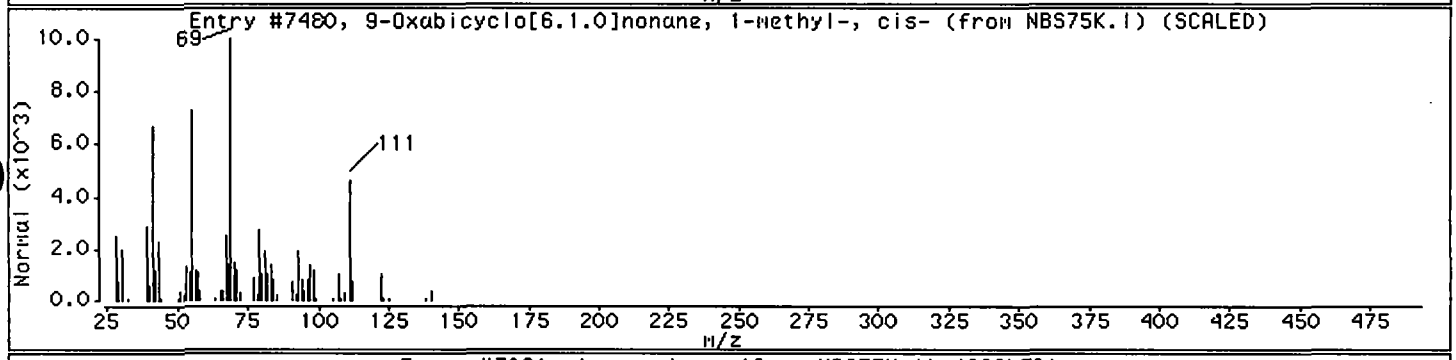
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

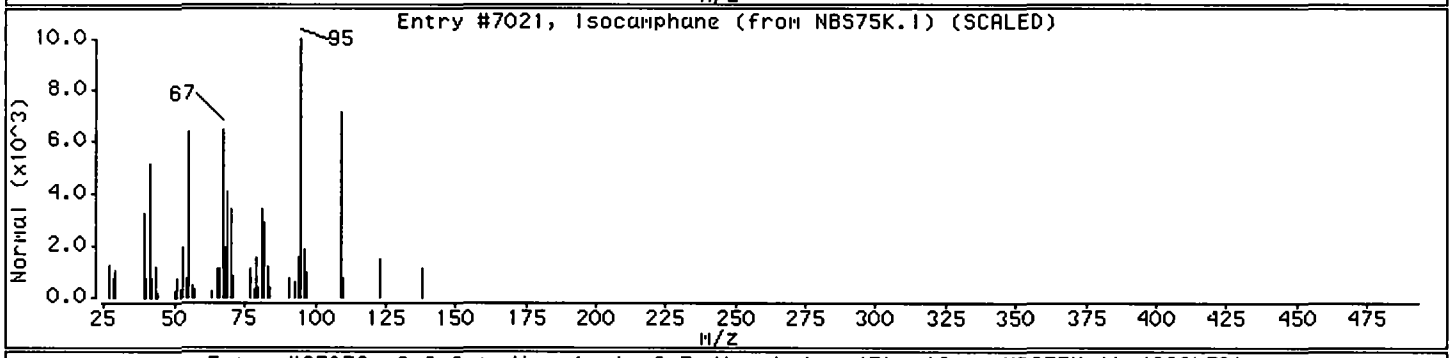
Volume Injected (uL): 2.0 Operator: GLR

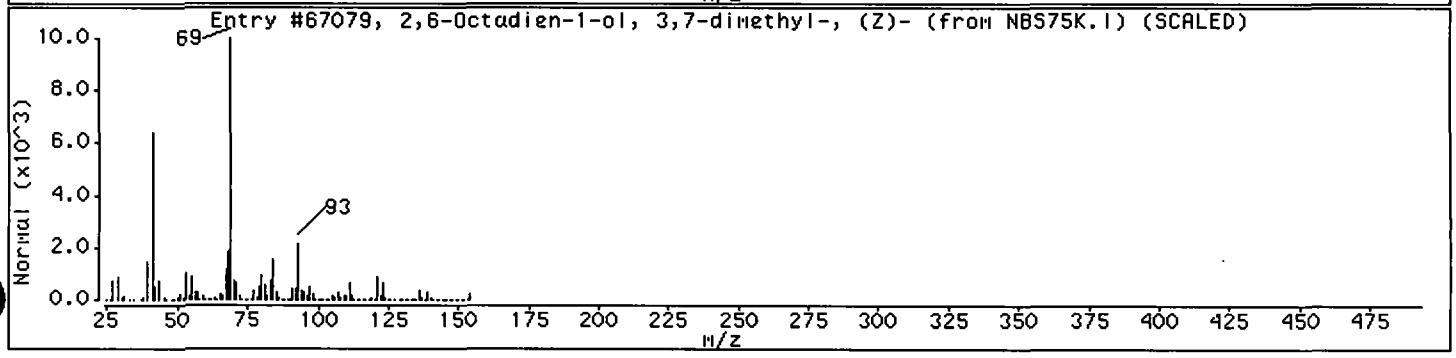
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Oxabicyclo[6.1.0]nonane, 1-methyl-, ci	52954-47-9	NBS75K.l	7480	38	C9H16O	140
Isocamphane	0-00-0	NBS75K.l	7021	38	C10H18	138
2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-	106-25-2	NBS75K.l	67079	35	C10H18O	154









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

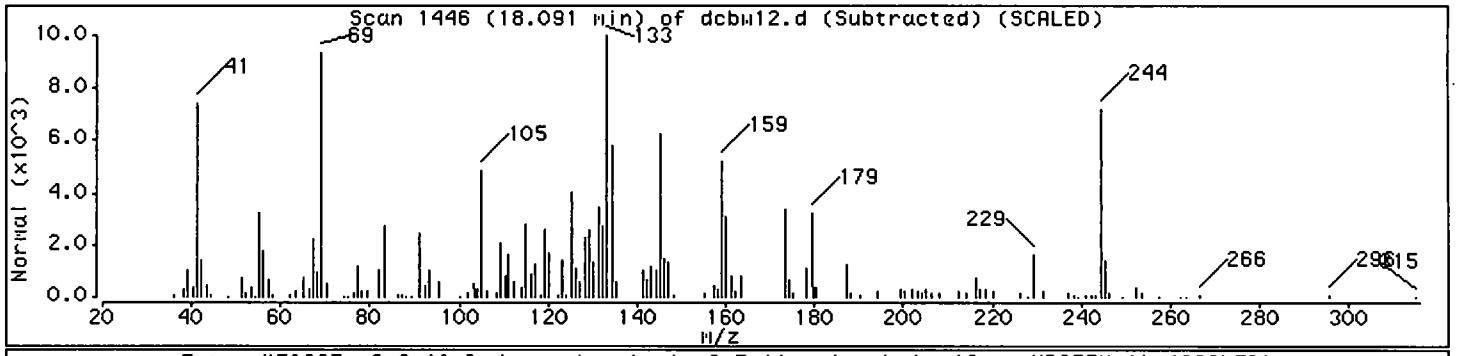
Client ID: WS-07 Instrument: gcl4.i

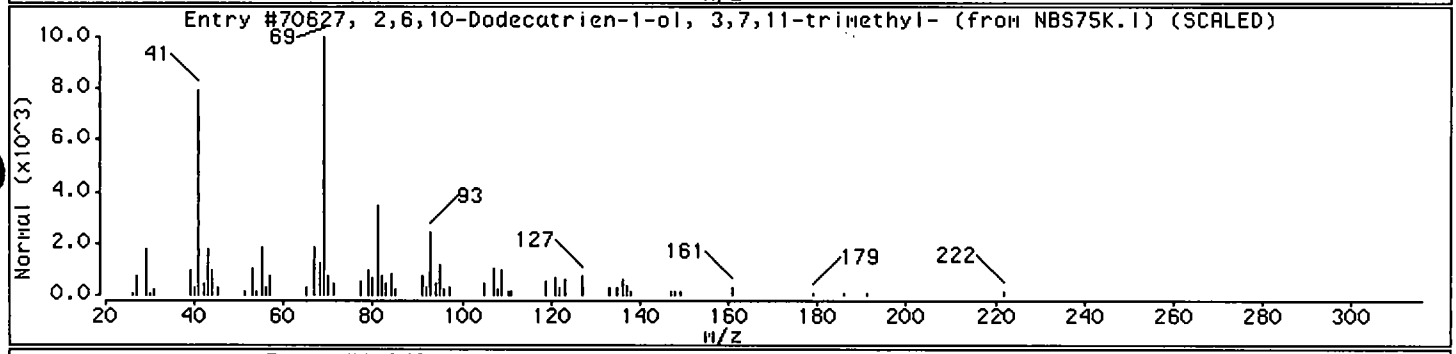
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

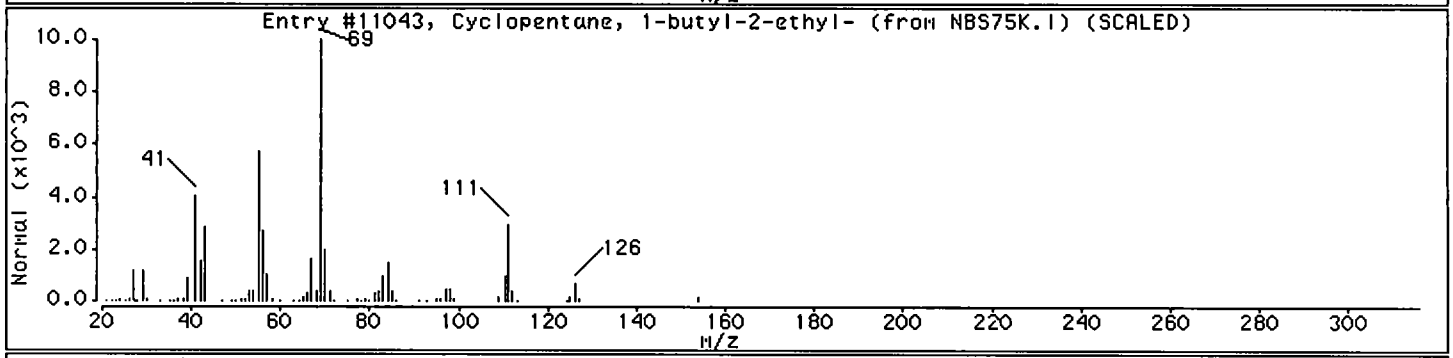
Volume Injected (uL): 2.0 Operator: GLR

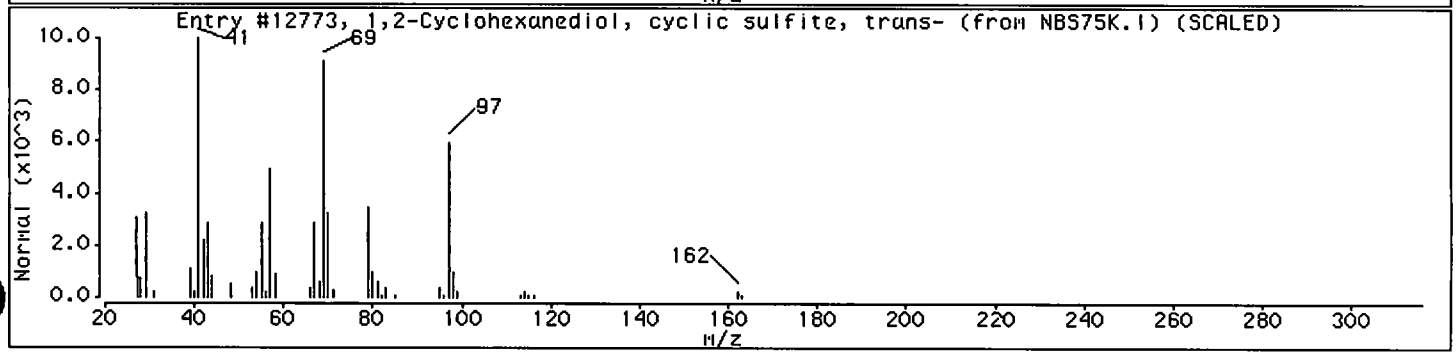
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,6,10-Dodecatrien-1-ol, 3,7,11-trimethy	4602-84-0	NBS75K.l	70627	35	C15H260	222
Cyclopentane, 1-butyl-2-ethyl-	72993-32-9	NBS75K.l	11043	35	C11H22	154
1,2-Cyclohexanediol, cyclic sulfite, tra	19456-19-0	NBS75K.l	12773	30	C6H1003S	162









Data File: /chem/gc14.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

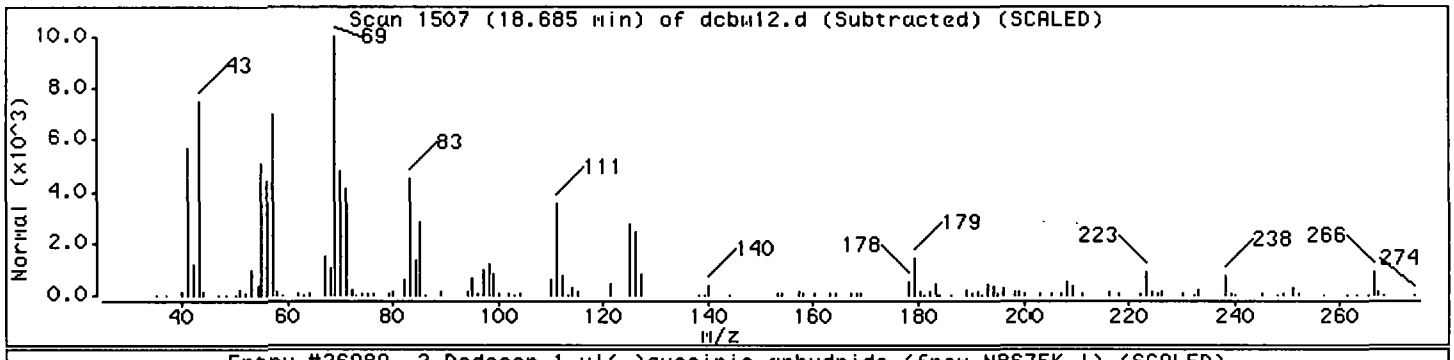
Client ID: WS-07 Instrument: gc14.i

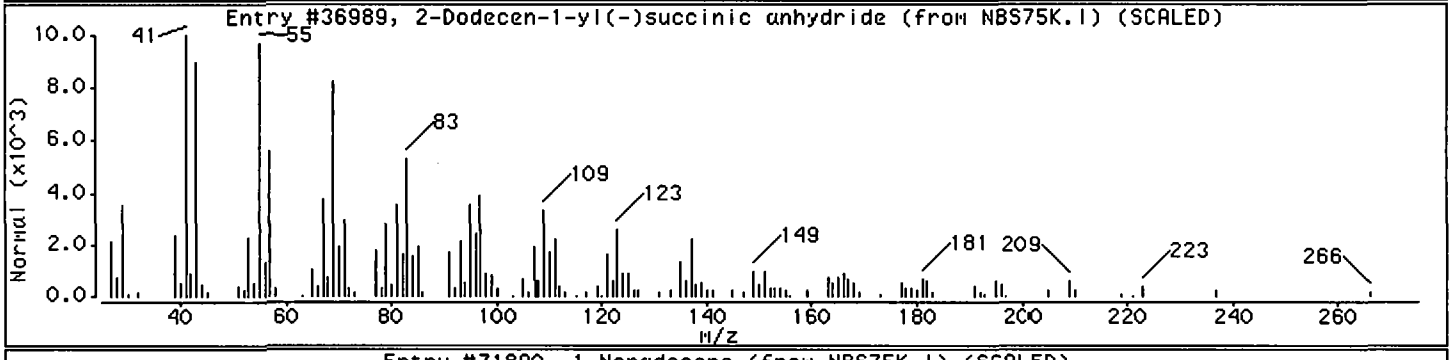
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

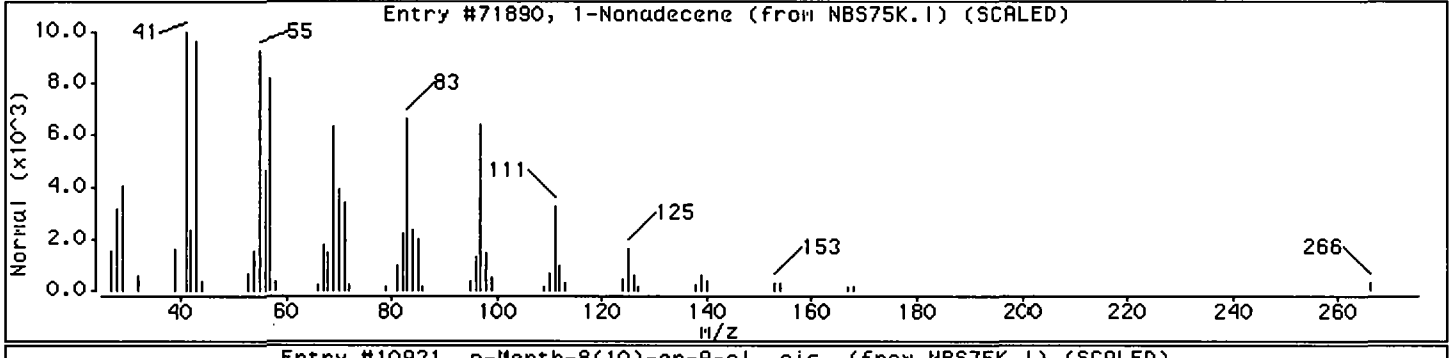
Volume Injected (uL): 2.0 Operator: GLR

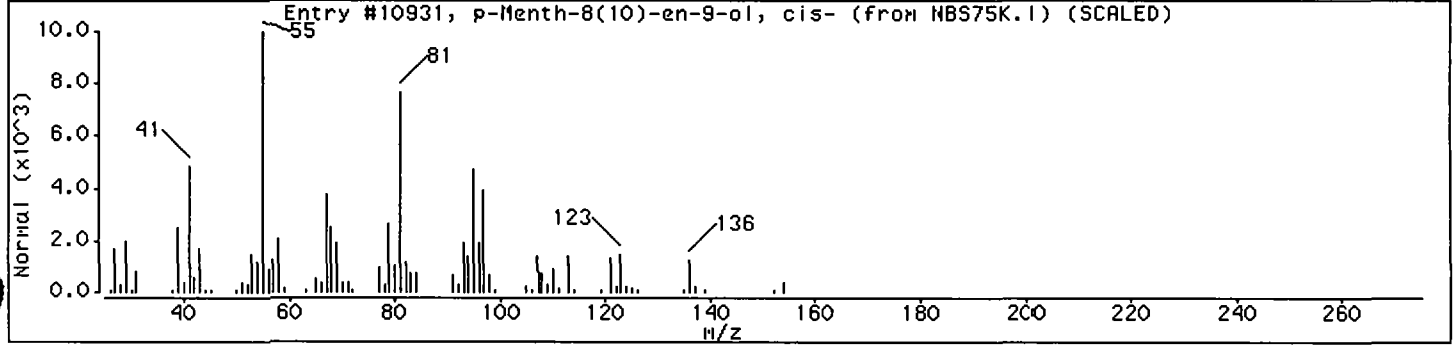
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	81	C16H26O3	266
1-Nonadecene	18435-45-5	NBS75K.l	71890	56	C19H38	266
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	NBS75K.l	10931	44	C10H18O	154









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

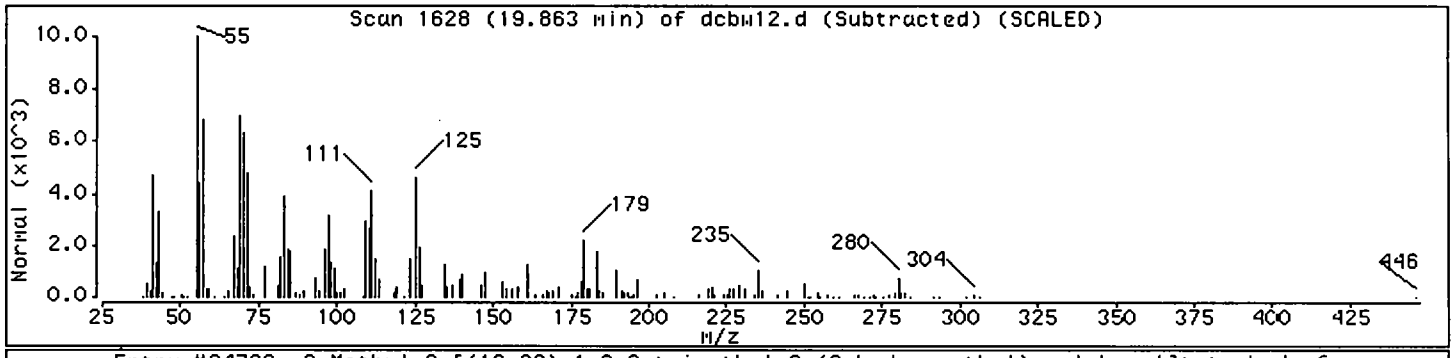
Client ID: WS-07 Instrument: gcl4.i

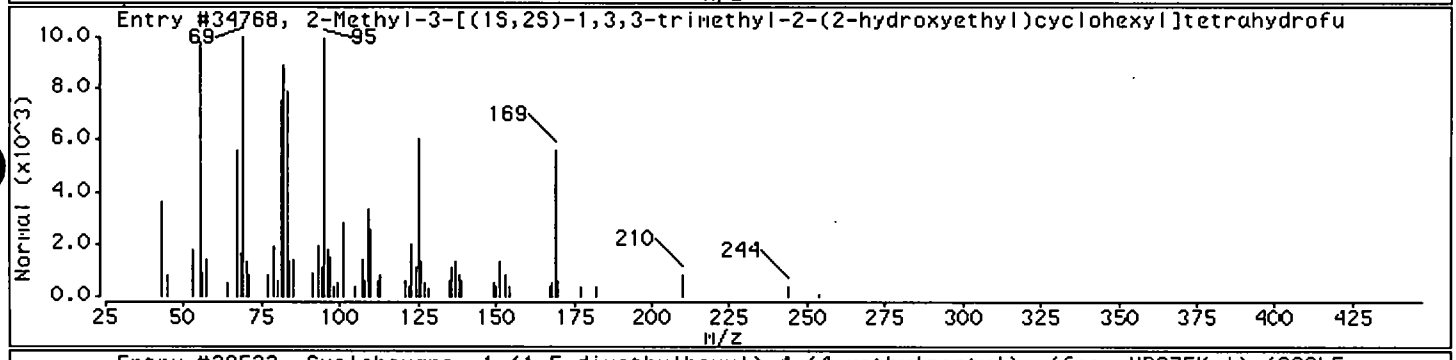
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

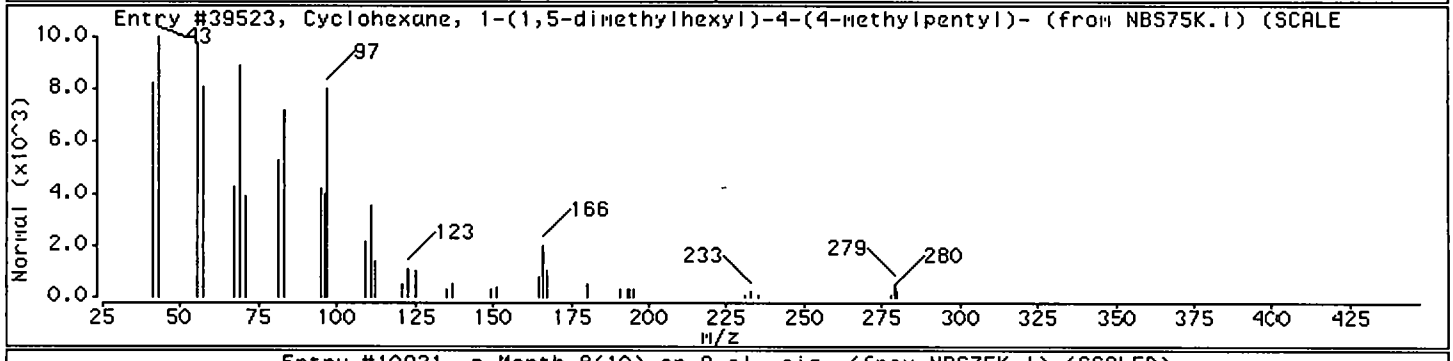
Volume Injected (uL): 2.0 Operator: GLR

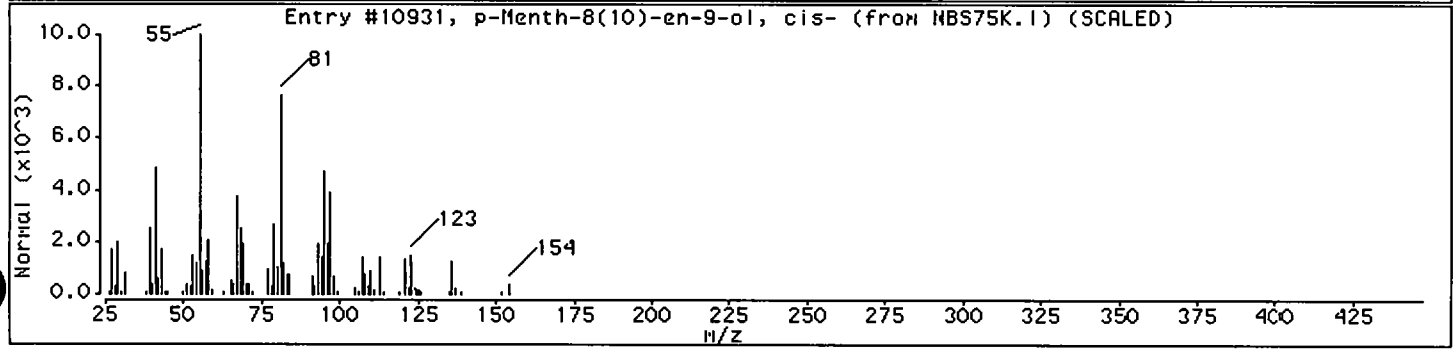
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Methyl-3-[(1S,2S)-1,3,3-trimethyl-2-(2	0-00-0	NBS75K.l	34768	53	C16H3002	254
Cyclohexane, 1-(1,5-dimethylhexyl)-4-(4-	56009-20-2	NBS75K.l	39523	45	C20H40	280
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	NBS75K.l	10931	44	C10H180	154









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Date : 16-DEC-1996 22:07

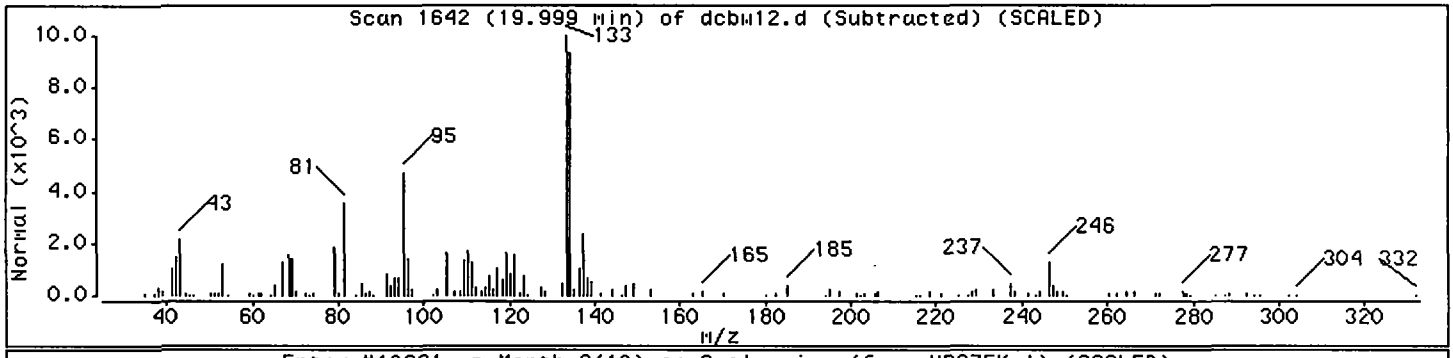
Client ID: WS-07 Instrument: gc14.i

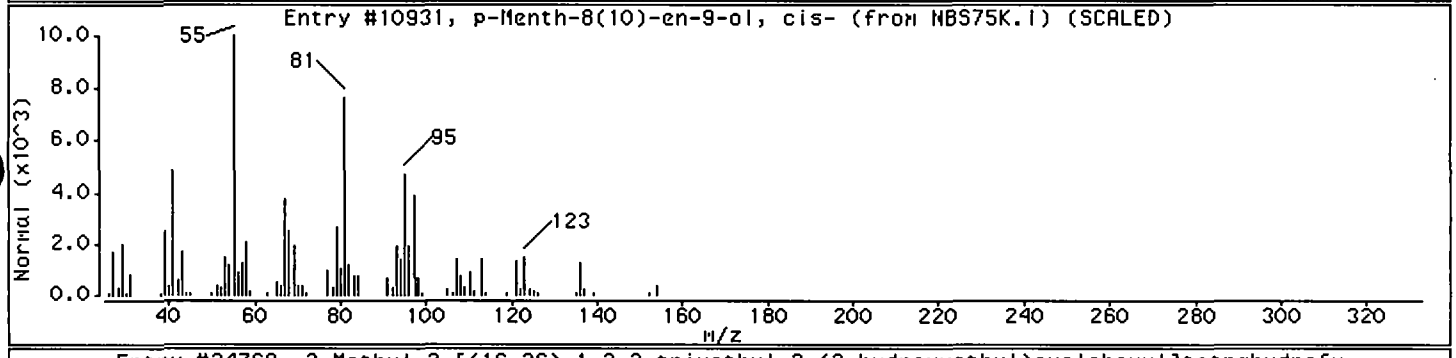
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

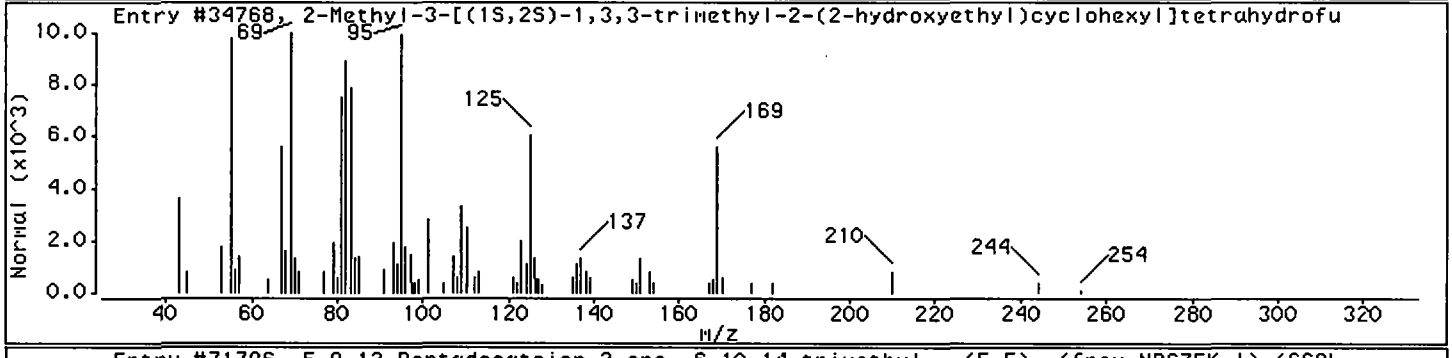
Volume Injected (uL): 2.0 Operator: GLR

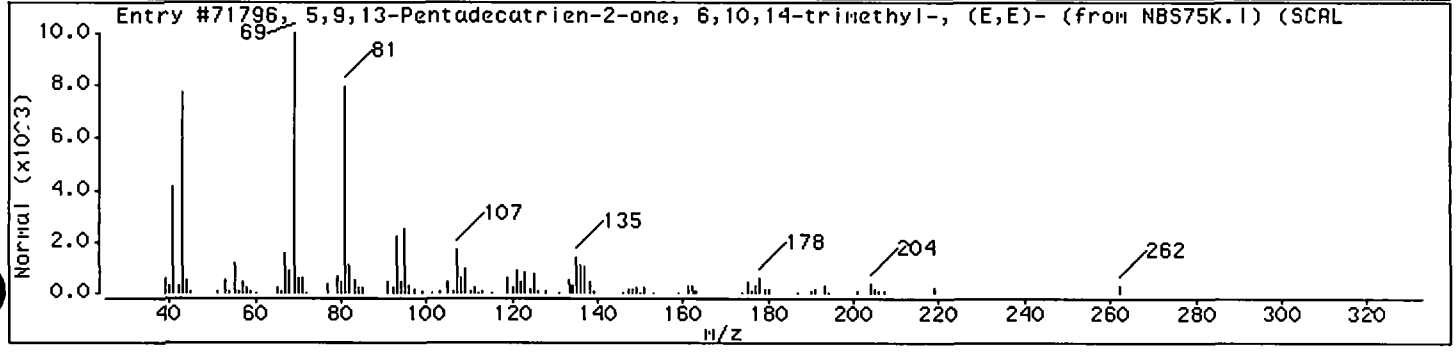
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	NBS75K.l	10931	59	C10H180	154
2-Methyl-3-[(1S,2S)-1,3,3-trimethyl-2-(2	0-00-0	NBS75K.l	34768	46	C16H3002	254
5,9,13-Pentadecatrien-2-one, 6,10,14-tri	1117-52-8	NBS75K.l	71796	46	C18H300	262









Data File: /chem/gc14.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

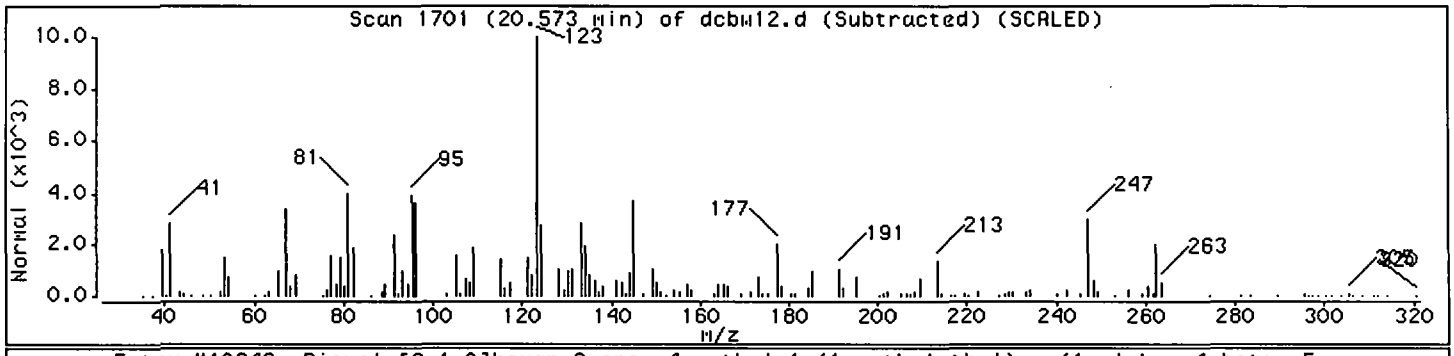
Client ID: WS-07 Instrument: gc14.i

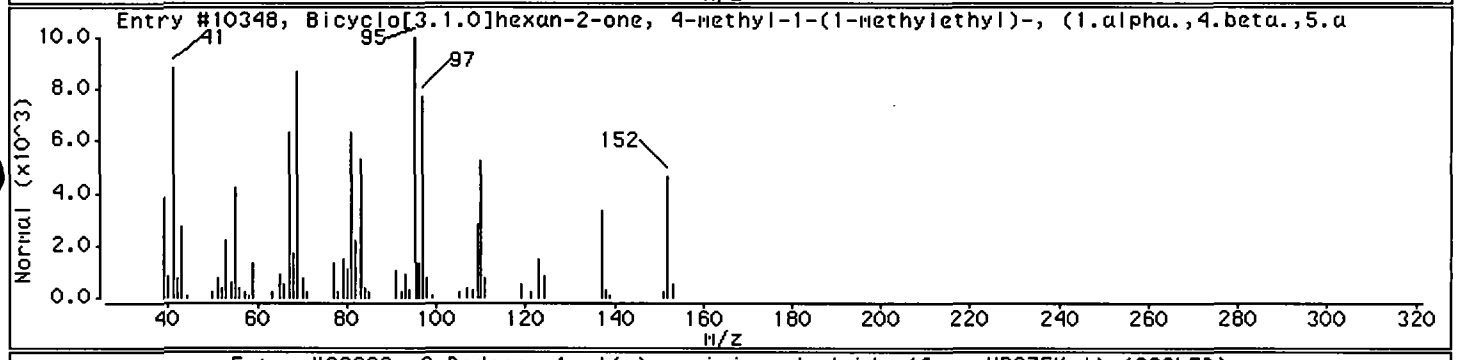
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

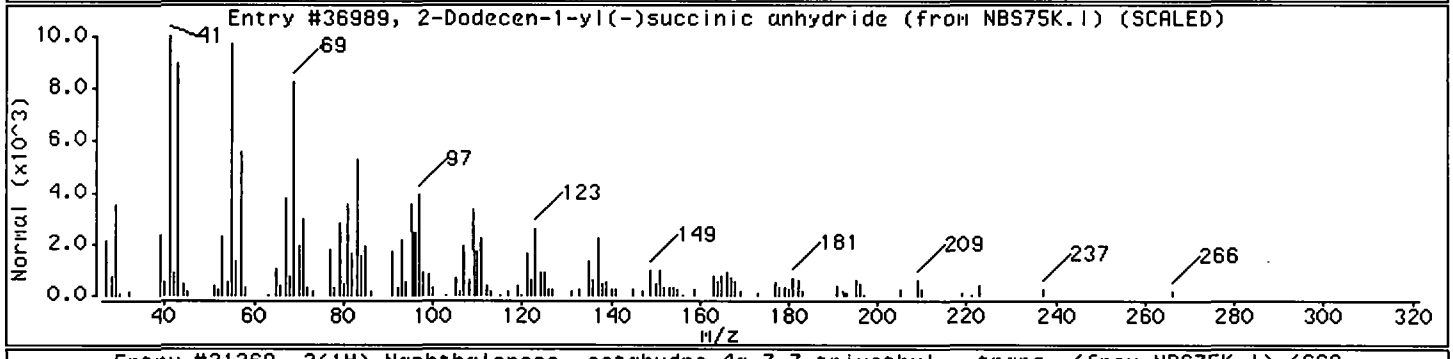
Volume Injected (uL): 2.0 Operator: GLR

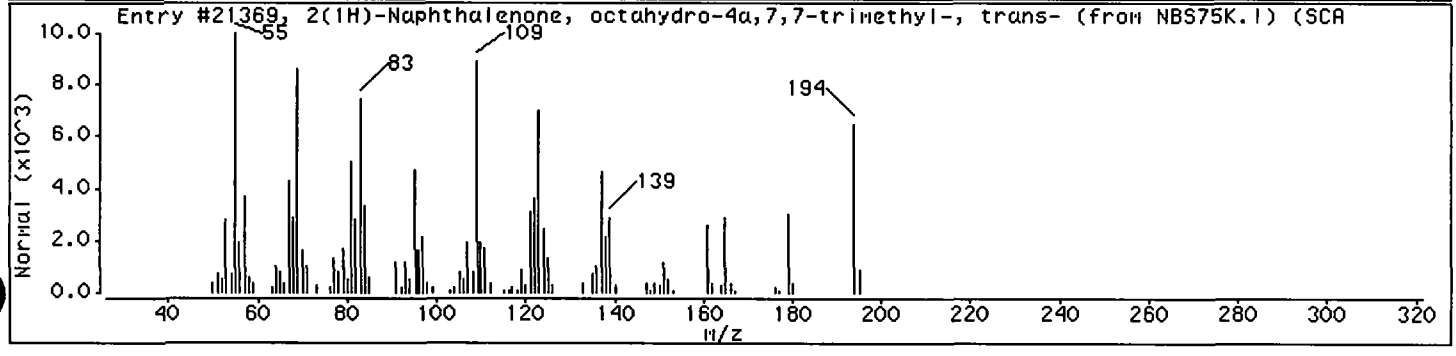
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.1.0]hexan-2-one, 4-methyl-1-(1	2506-61-8	NBS75K.l	10348	58	C10H16O	152
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	53	C16H26O3	266
2(1H)-Naphthalenone, octahydro-4a,7,7-tr	54699-31-9	NBS75K.l	21369	49	C13H22O	194









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

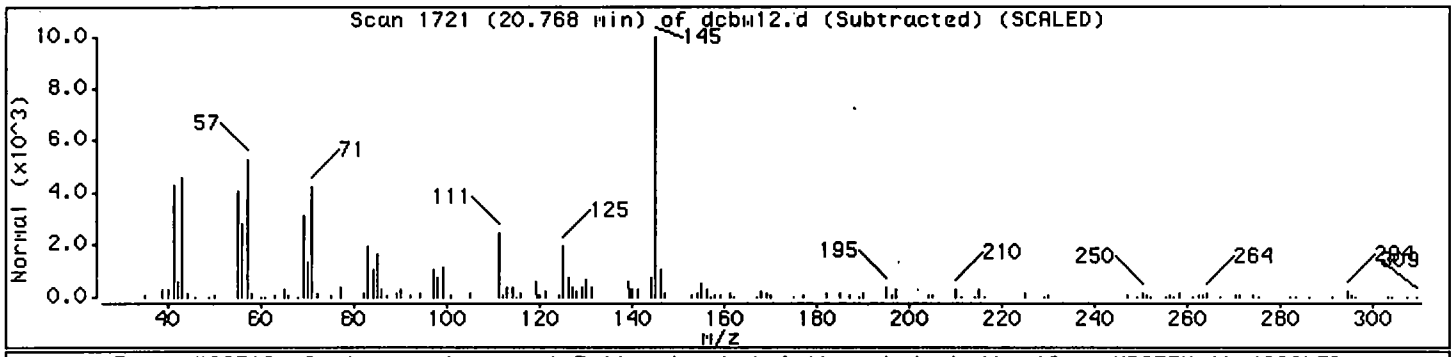
Client ID: WS-07 Instrument: gcl4.i

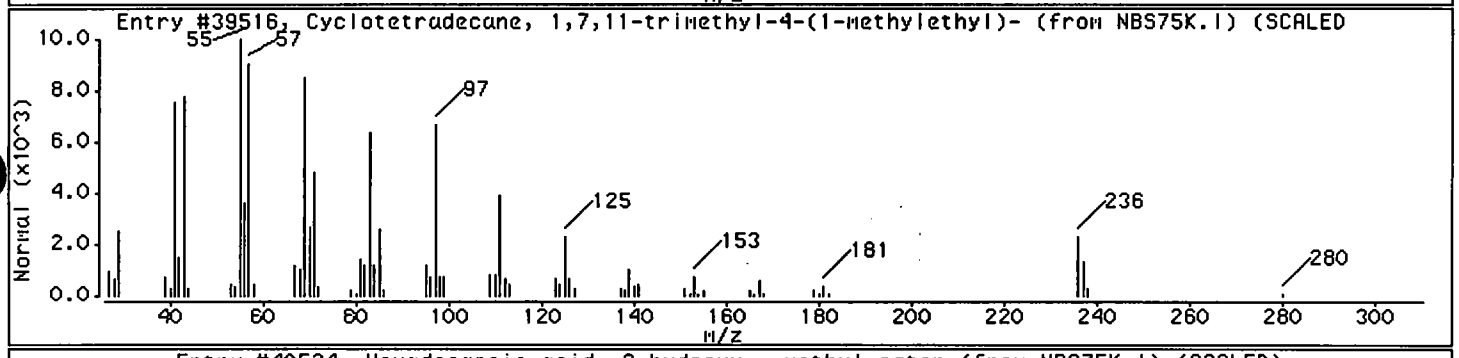
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

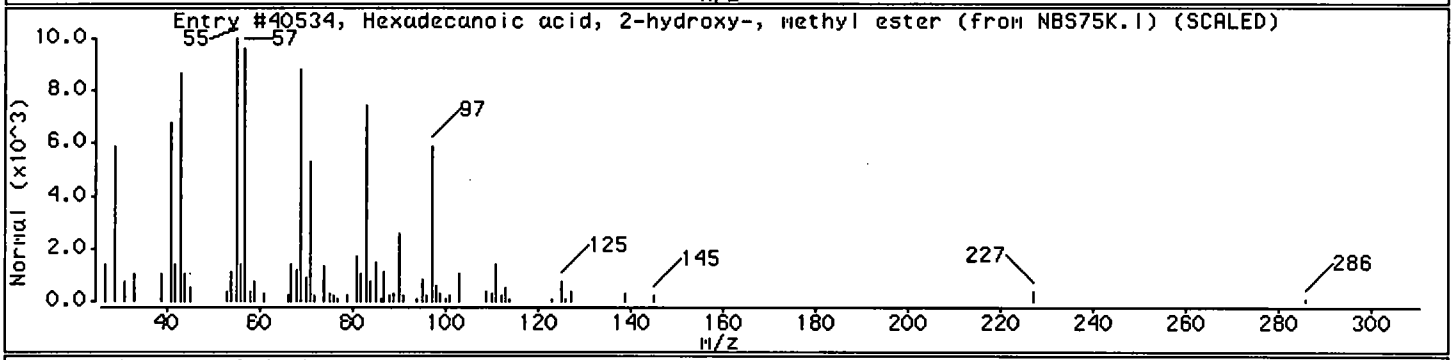
Volume Injected (uL): 2.0 Operator: GLR

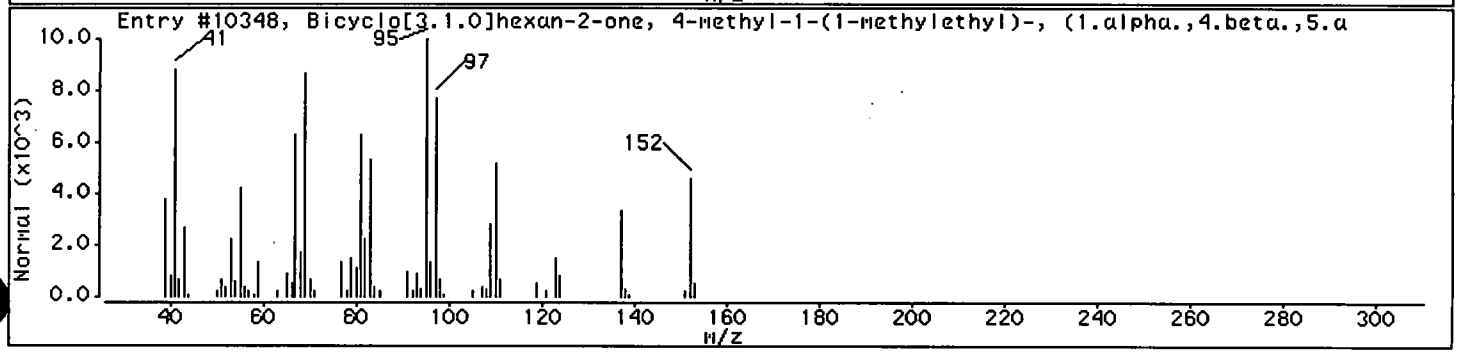
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	39516	64	C20H40	280
Hexadecanoic acid, 2-hydroxy-, methyl es	16742-51-1	NBS75K.l	40534	55	C17H3403	286
Bicyclo[3.1.0]hexan-2-one, 4-methyl-1-(1	2506-61-8	NBS75K.l	10348	53	C10H160	152









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

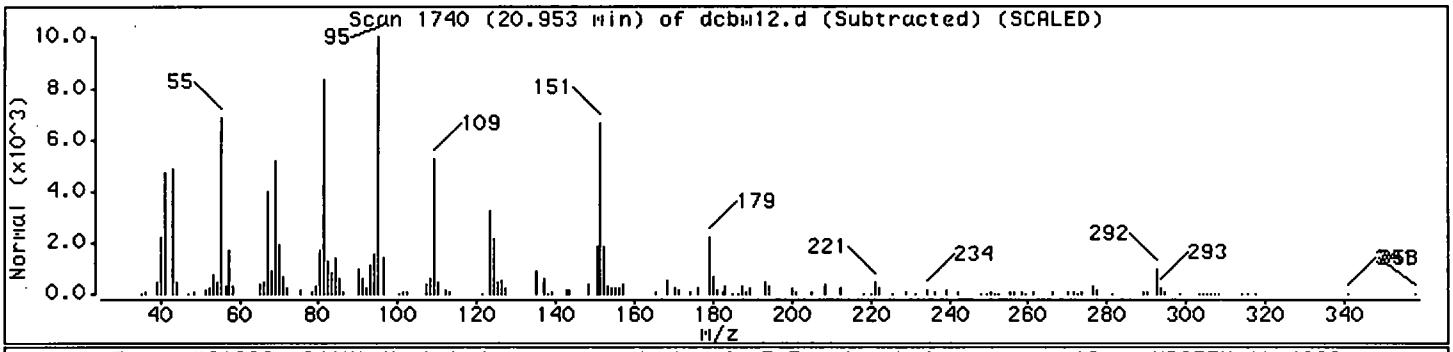
Client ID: WS-07 Instrument: gcl4.i

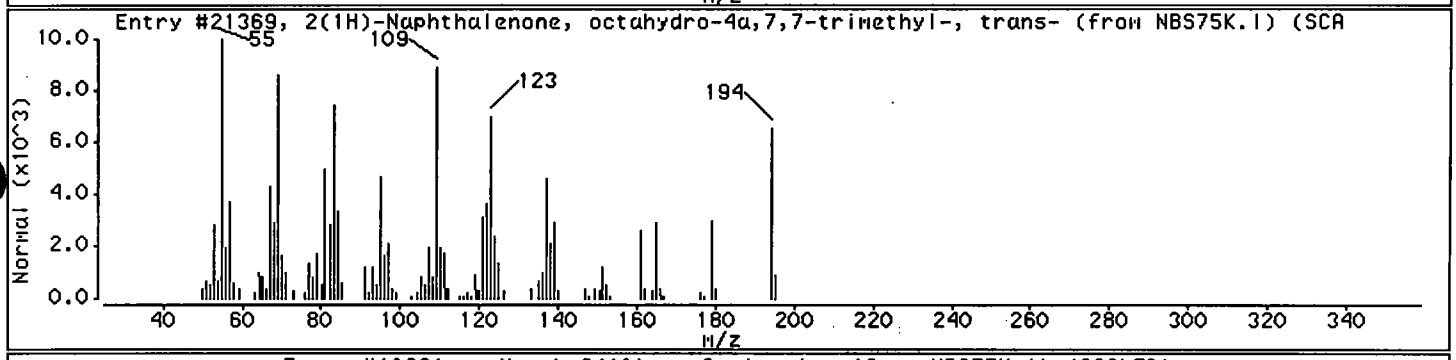
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

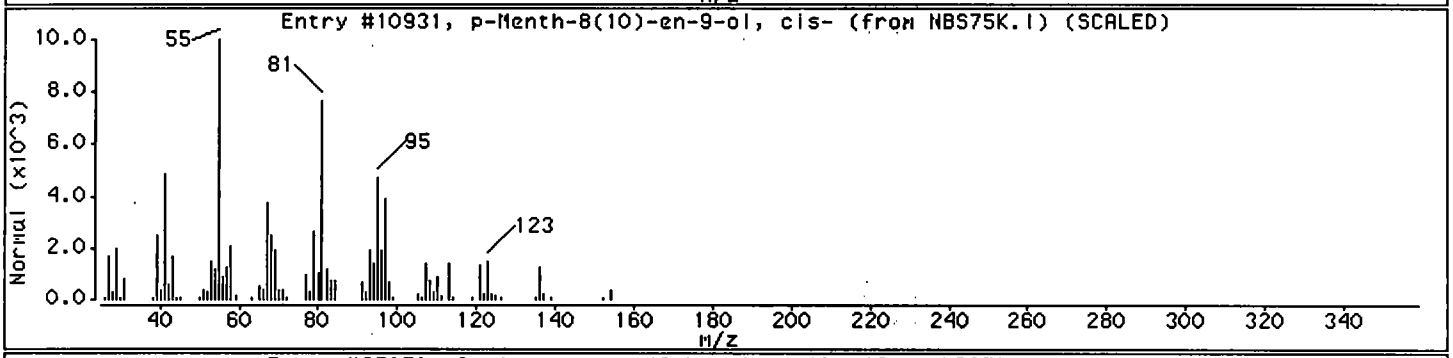
Volume Injected (uL): 2.0 Operator: GLR

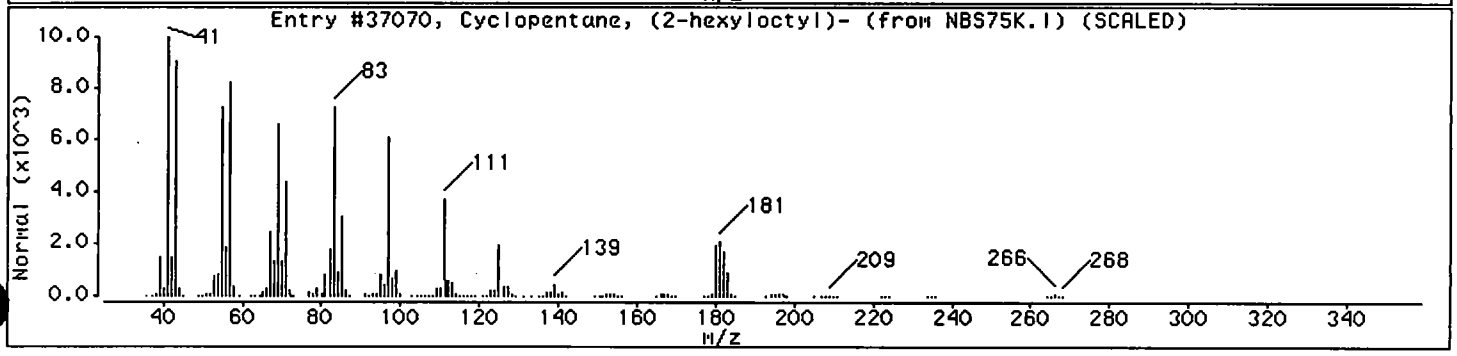
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(1H)-Naphthalenone, octahydro-4a,7,7-tr	54699-31-9	NBS75K.l	21369	49	C13H22O	194
p-Menth-8(10)-en-9-ol, cis-	15714-13-3	NBS75K.l	10931	46	C10H18O	154
Cyclopentane, (2-hexyloctyl)-	55044-77-4	NBS75K.l	37070	45	C19H38	266









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

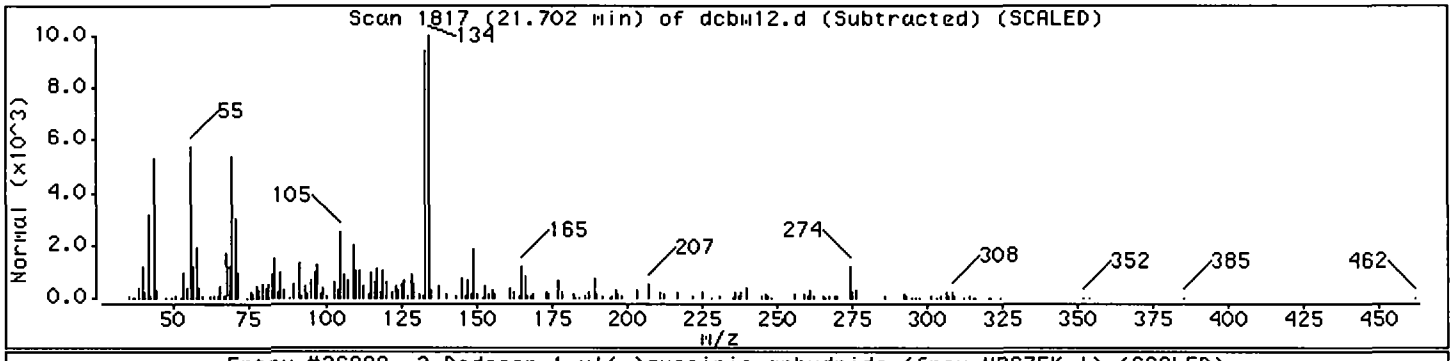
Client ID: WS-07 Instrument: gcl4.i

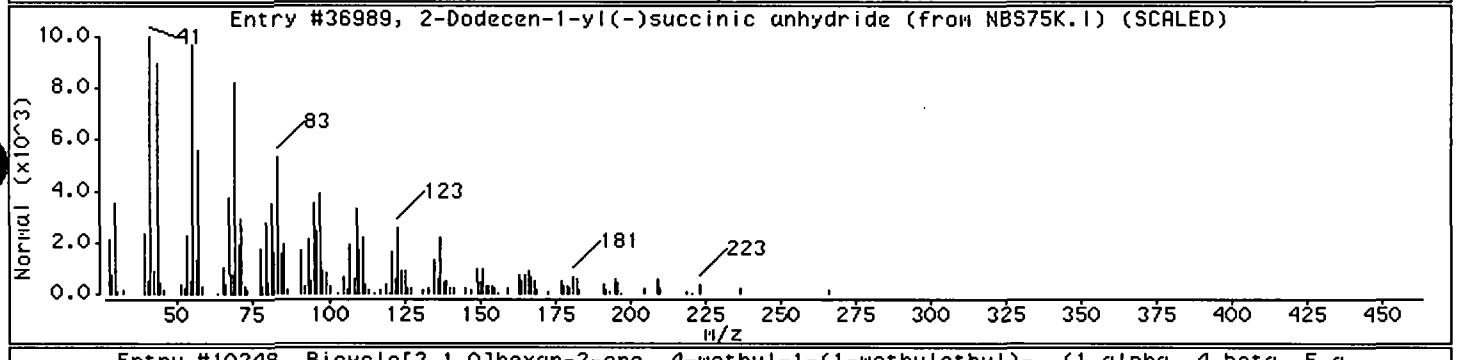
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

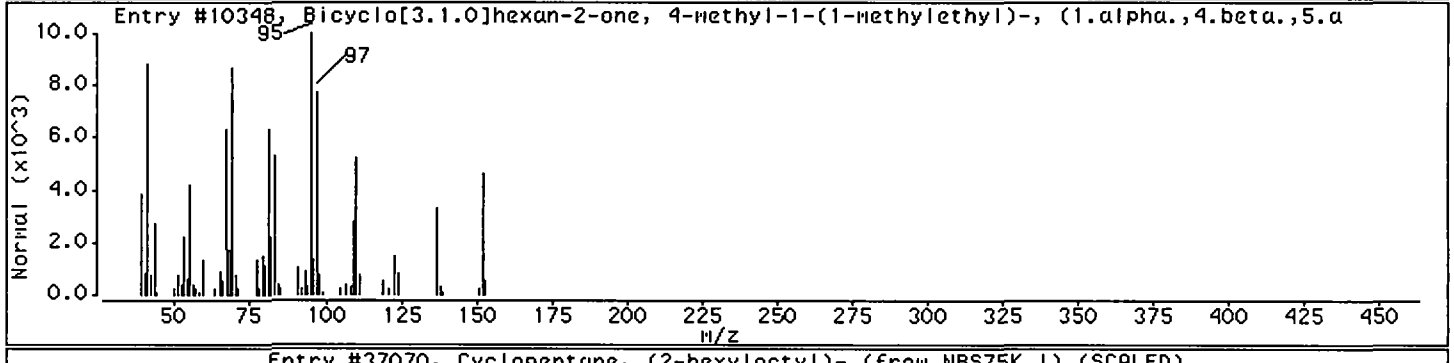
Volume Injected (uL): 2.0 Operator: GLR

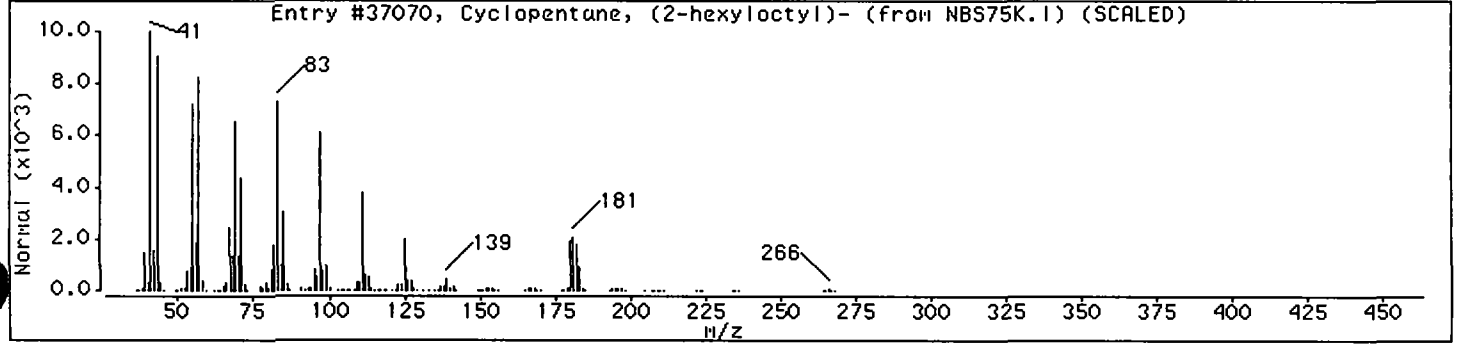
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	74	C16H2603	266
Bicyclo[3.1.0]hexan-2-one, 4-methyl-1-(1	2506-61-8	NBS75K.l	10348	49	C10H160	152
Cyclopentane, (2-hexyloctyl)-	55044-77-4	NBS75K.l	37070	45	C19H38	266









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

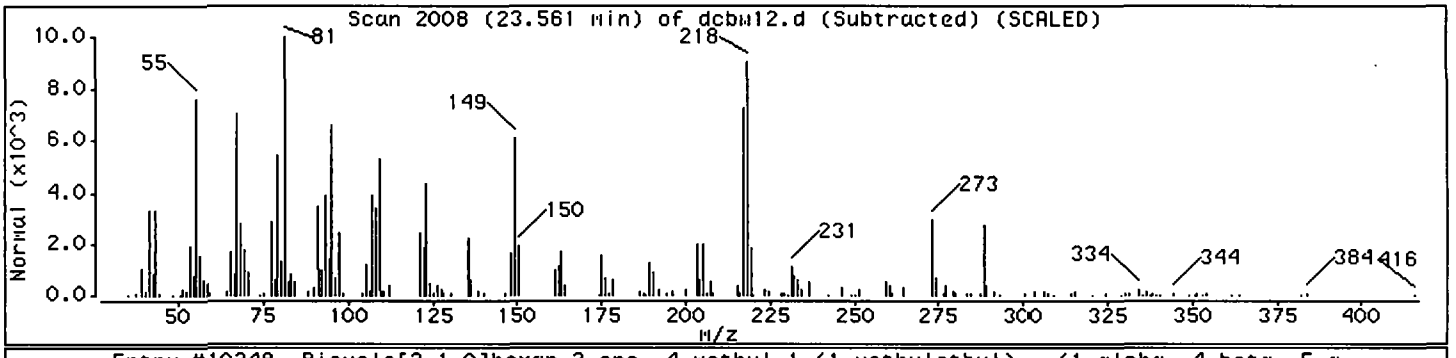
Client ID: WS-07 Instrument: gcl4.i

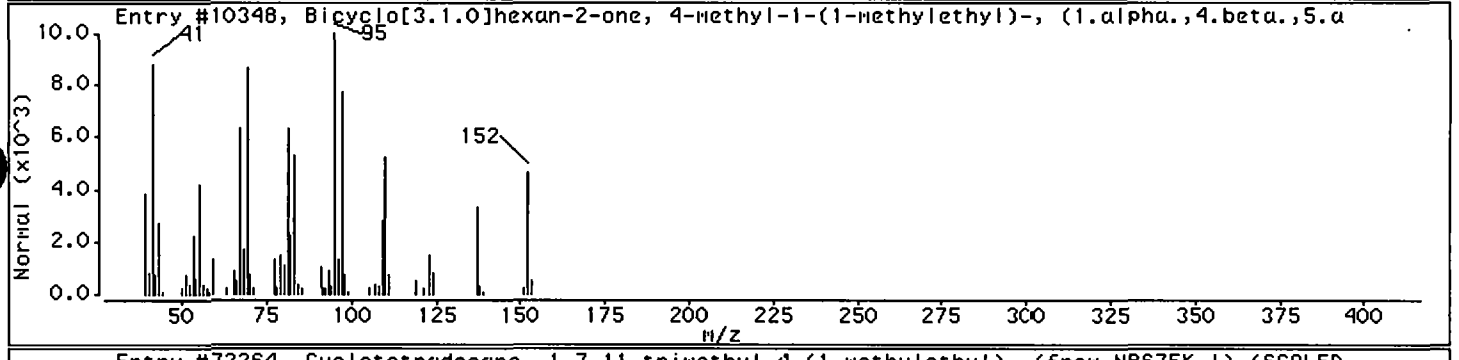
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

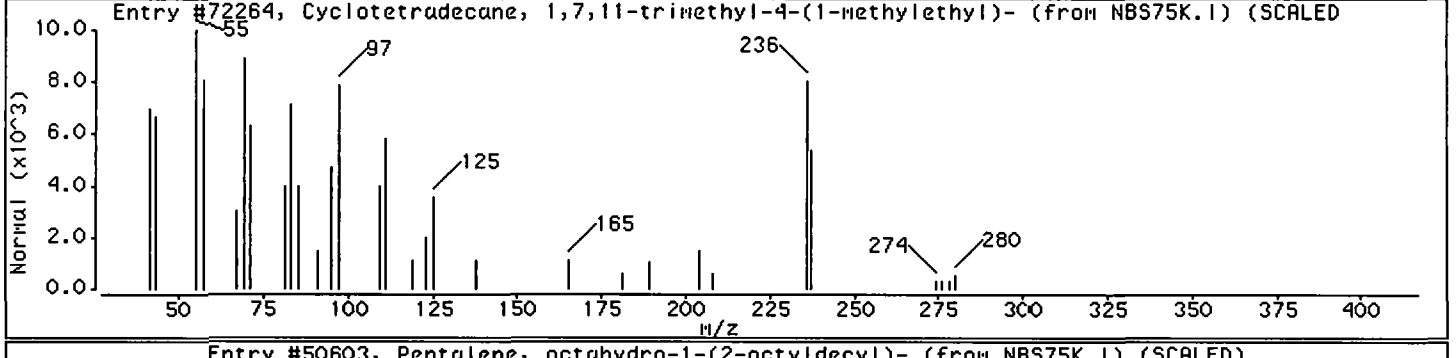
Volume Injected (uL): 2.0 Operator: GLR

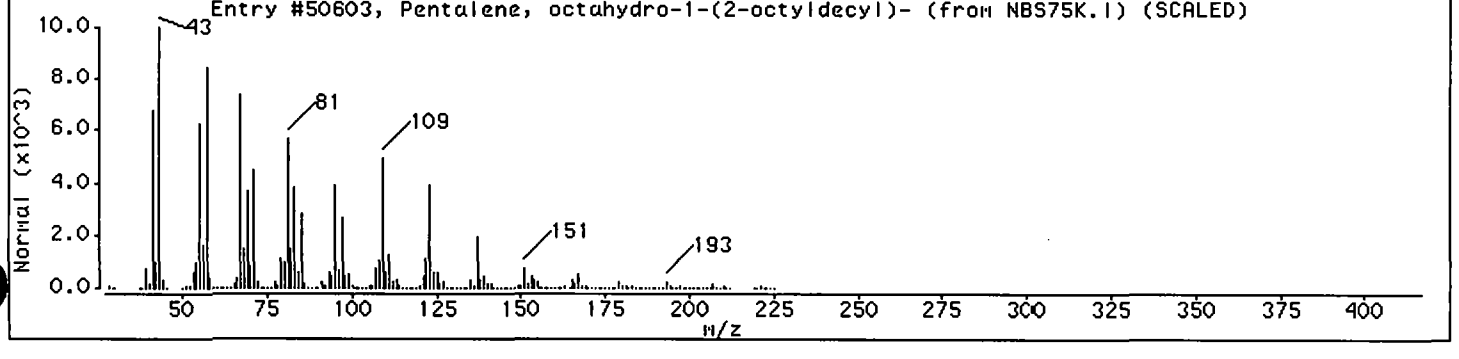
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Bicyclo[3.1.0]hexan-2-one, 4-methyl-1-(1	2506-61-8	NBS75K.l	10348	58	C10H16O	152
Cyclotetradecane, 1,7,11-trimethyl-4-(1-	1786-12-5	NBS75K.l	72264	55	C20H40	280
Pentalene, octahydro-1-(2-octyldecyl)-	55401-65-5	NBS75K.l	50603	53	C26H50	362









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

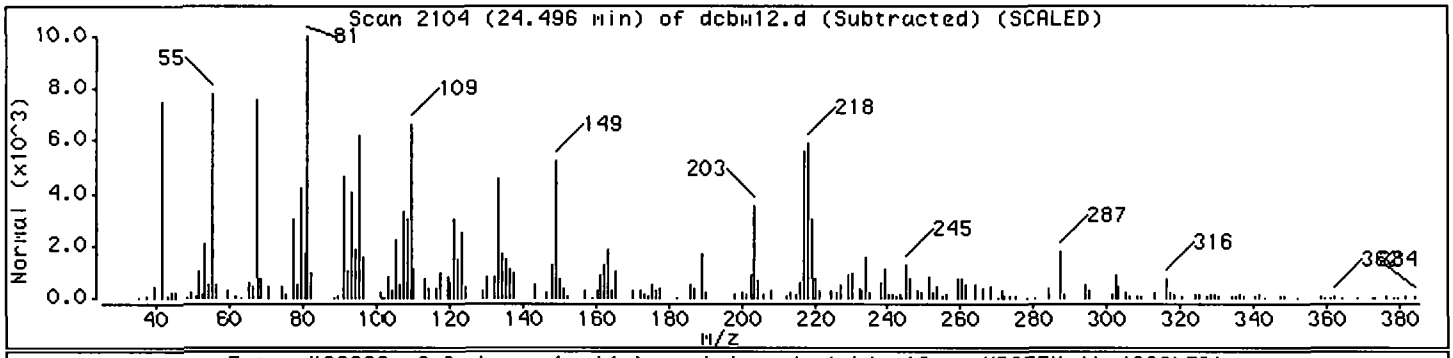
Client ID: WS-07 Instrument: gcl4.i

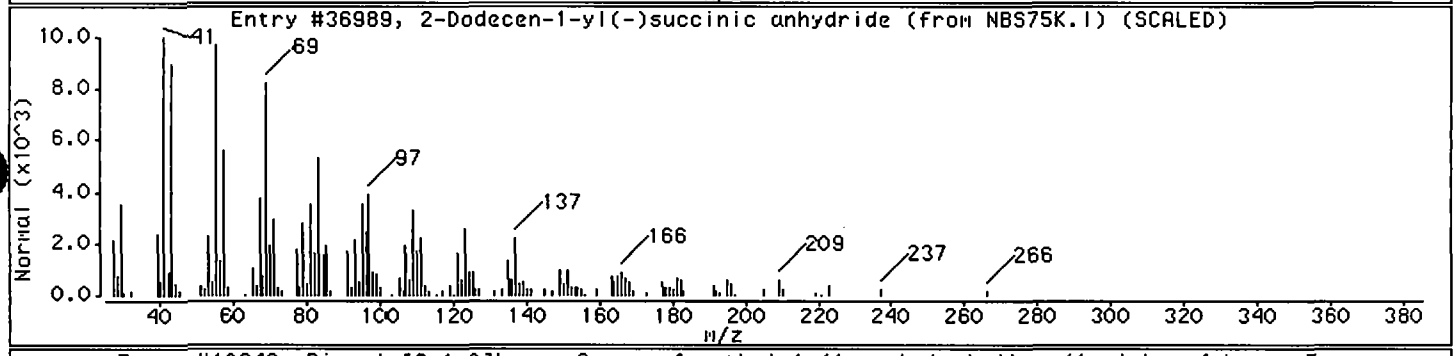
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

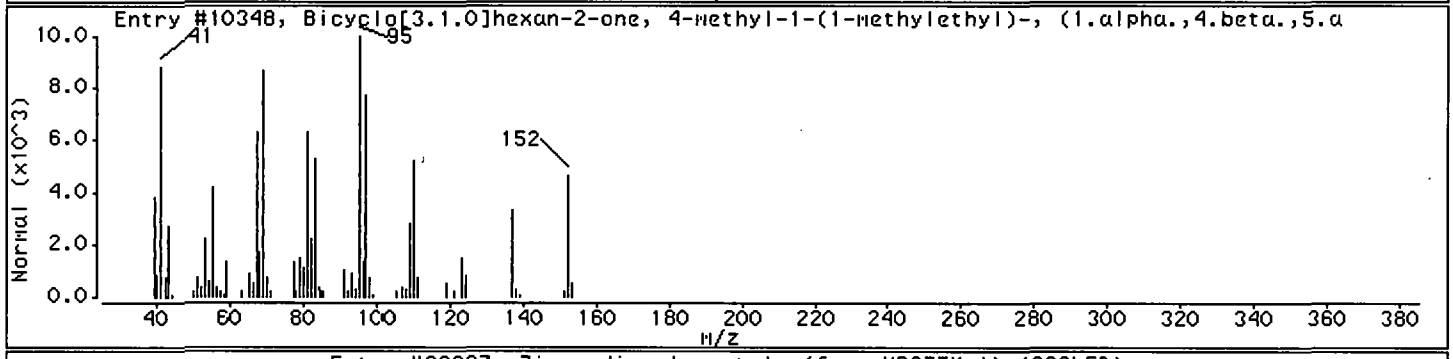
Volume Injected (uL): 2.0 Operator: GLR

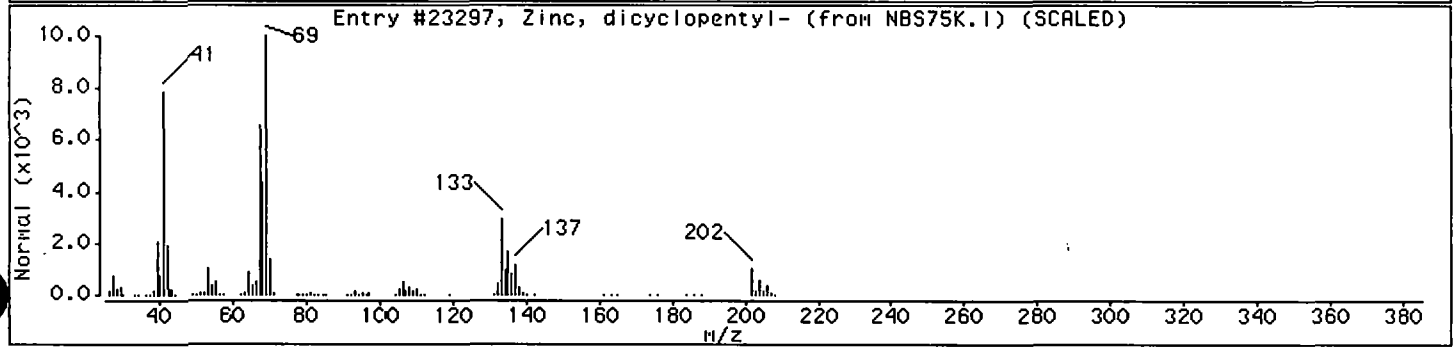
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	70	C16H2603	266
Bicyclo[3.1.0]hexan-2-one, 4-methyl-1-(1	2506-61-8	NBS75K.l	10348	62	C10H160	152
Zinc, dicyclopentyl-	20525-74-0	NBS75K.l	23297	52	C10H18Zn	202









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

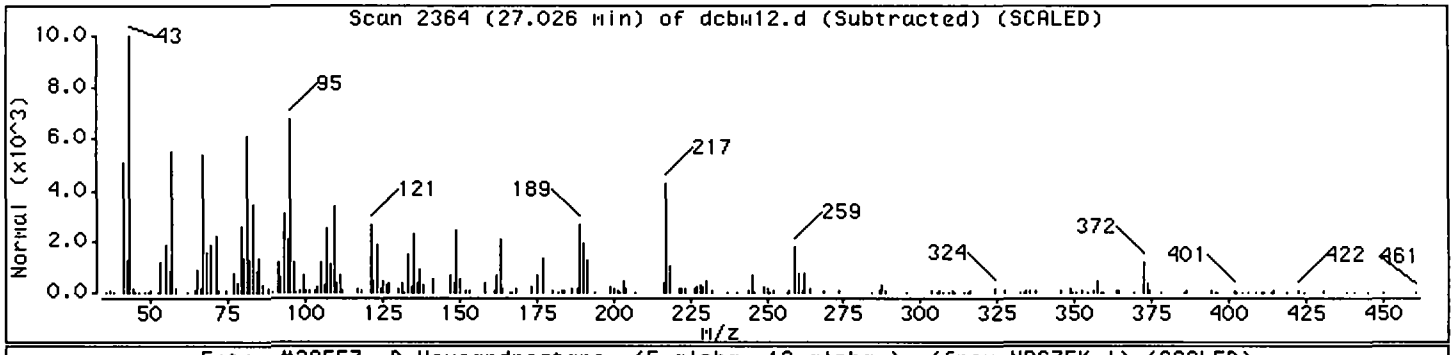
Client ID: WS-07 Instrument: gcl4.i

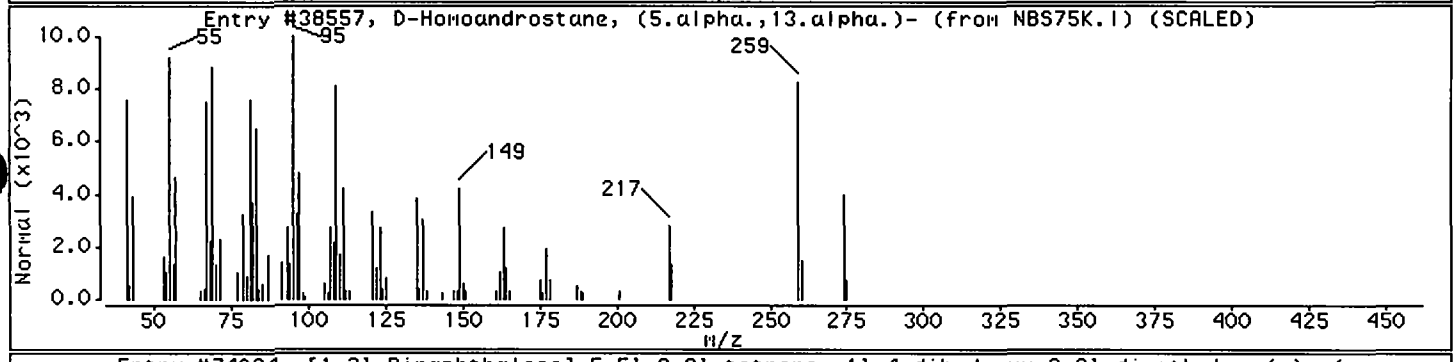
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

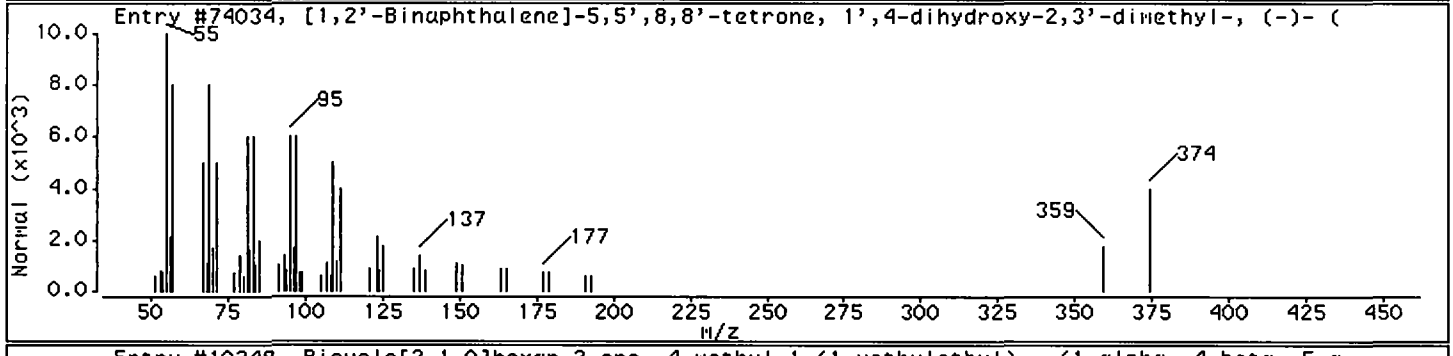
Volume Injected (uL): 2.0 Operator: GLR

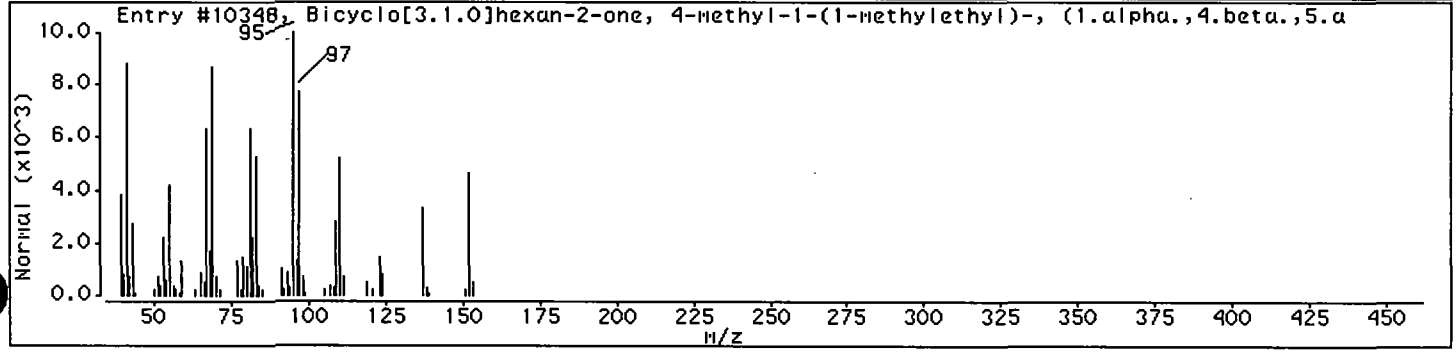
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	97	C20H34	274
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	93	C22H1406	374
Bicyclo[3.1.0]hexan-2-one, 4-methyl-1-(1	2506-61-8	NBS75K.l	10348	86	C10H160	152









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

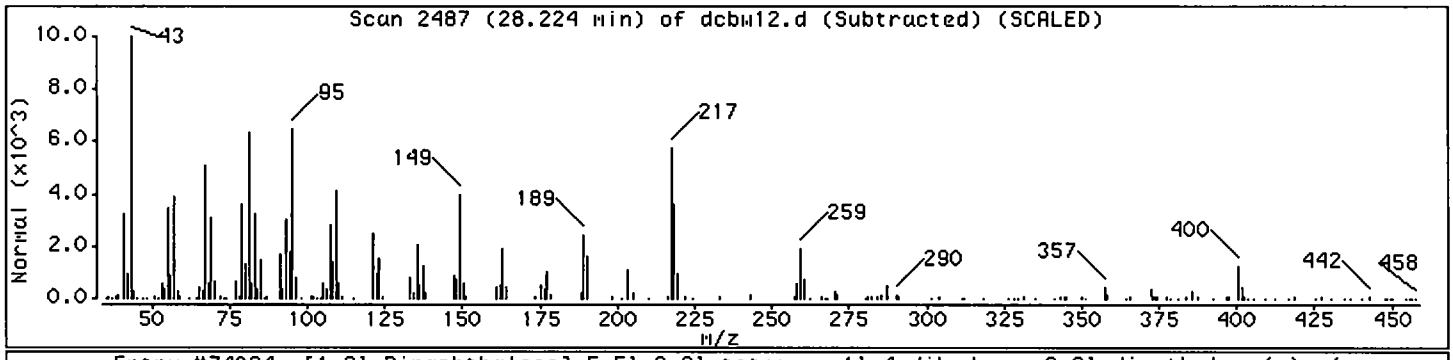
Client ID: WS-07 Instrument: gcl4.i

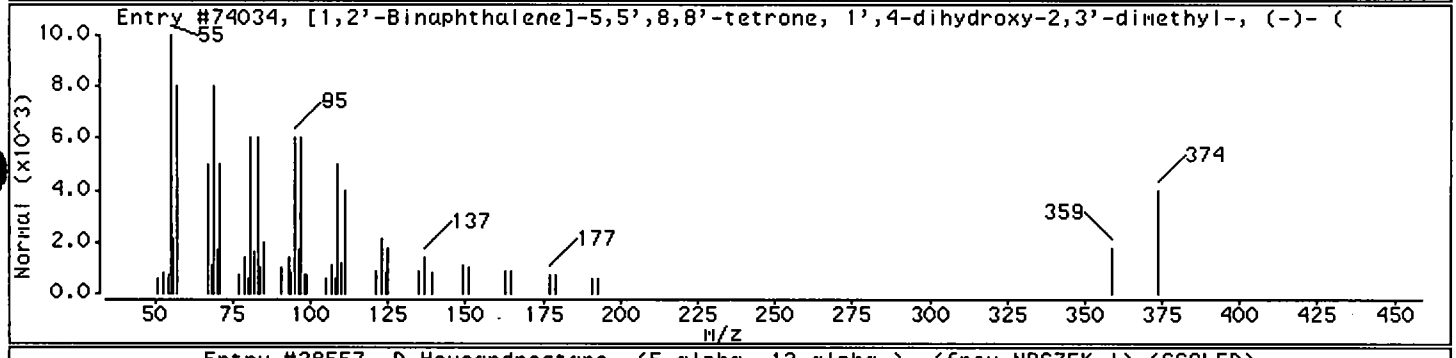
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

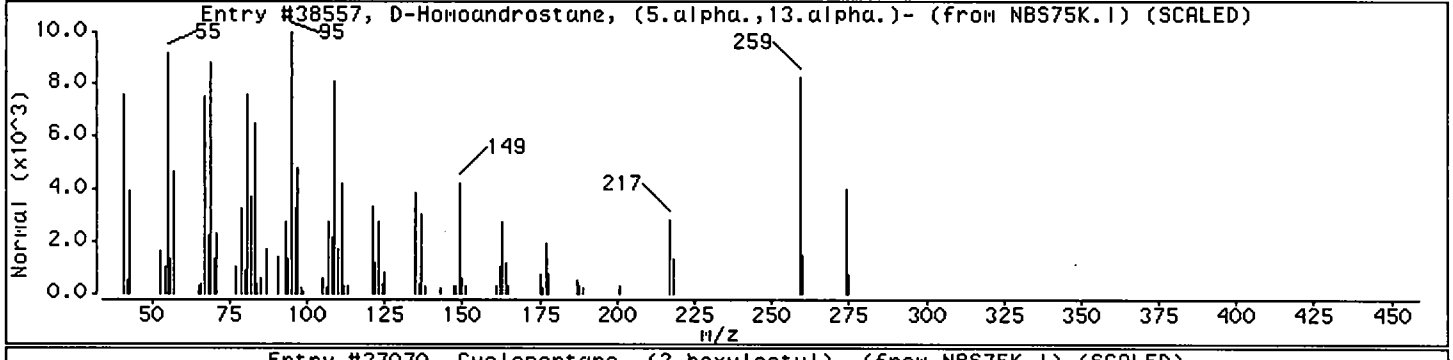
Volume Injected (uL): 2.0 Operator: GLR

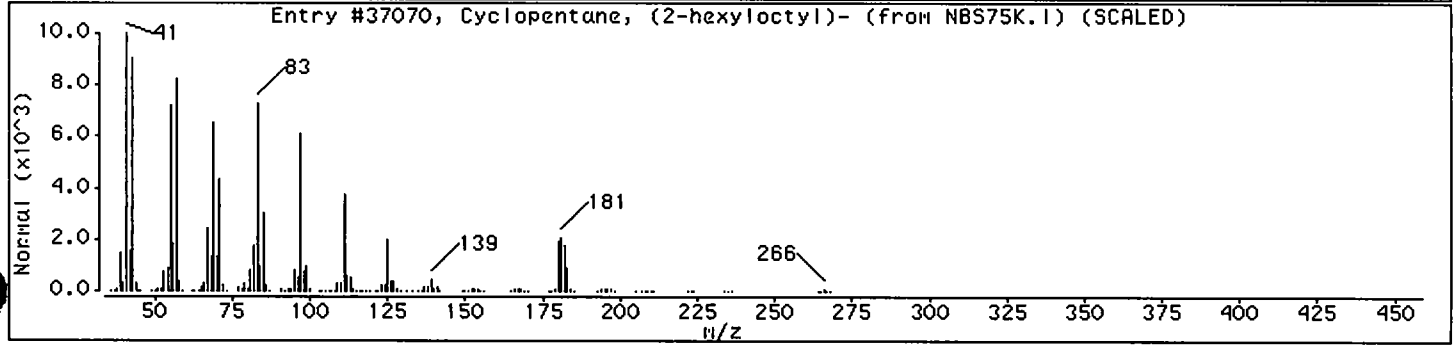
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	94	C22H1406	374
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	72	C20H34	274
Cyclopentane, (2-hexyloctyl)-	55044-77-4	NBS75K.l	37070	70	C19H38	266









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

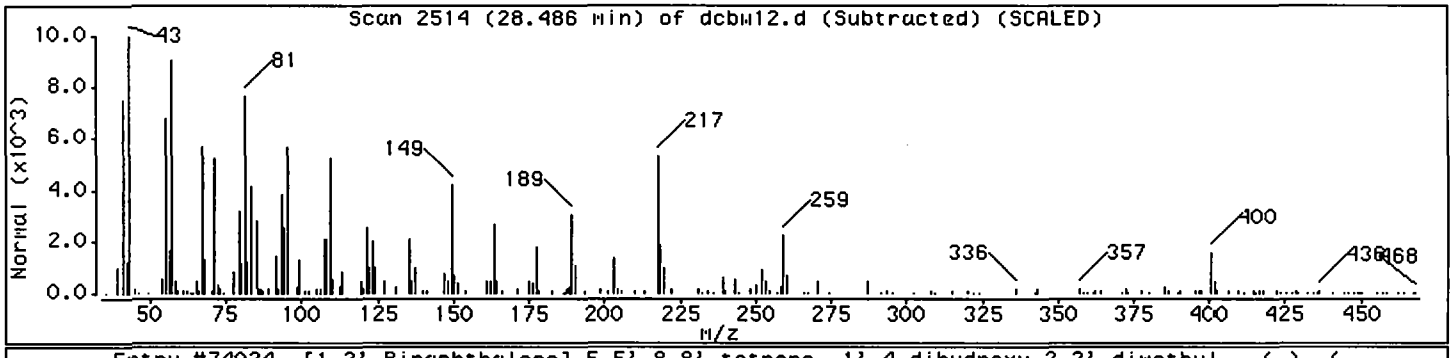
Client ID: WS-07 Instrument: gcl4.i

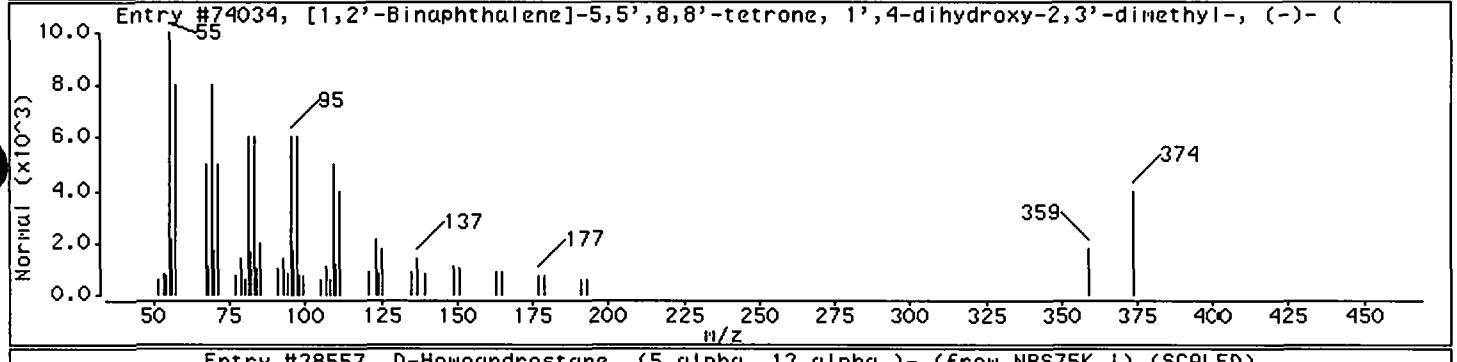
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

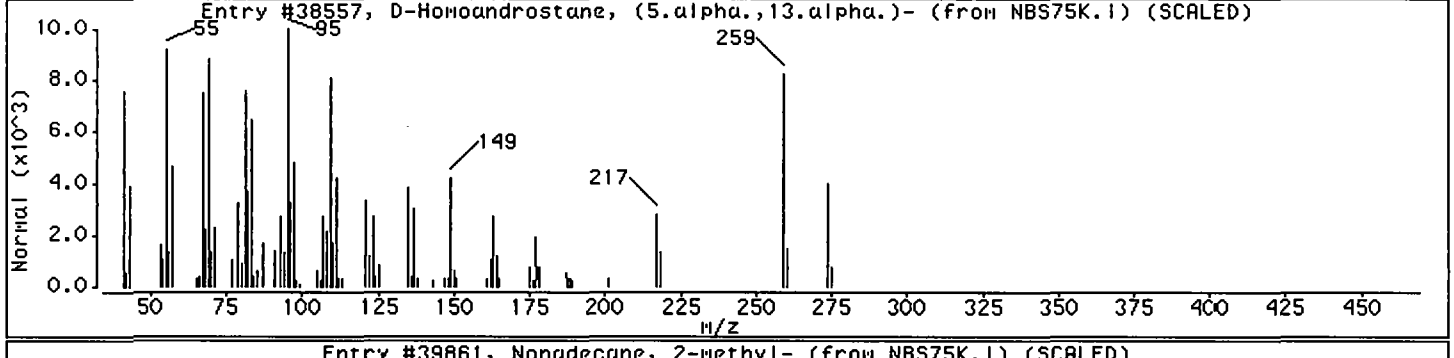
Volume Injected (uL): 2.0 Operator: GLR

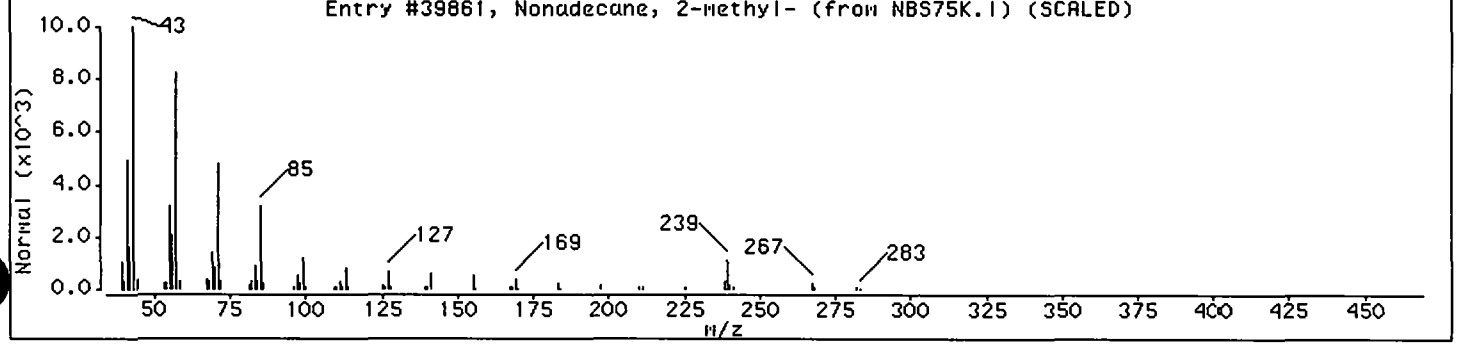
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	96	C22H1406	374
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	95	C20H34	274
Nonadecane, 2-methyl-	1560-86-7	NBS75K.l	39861	55	C20H42	282









Data File: /chem/gcl4.i/dec1696b.b/dcbw12.d

Date : 16-DEC-1996 22:07

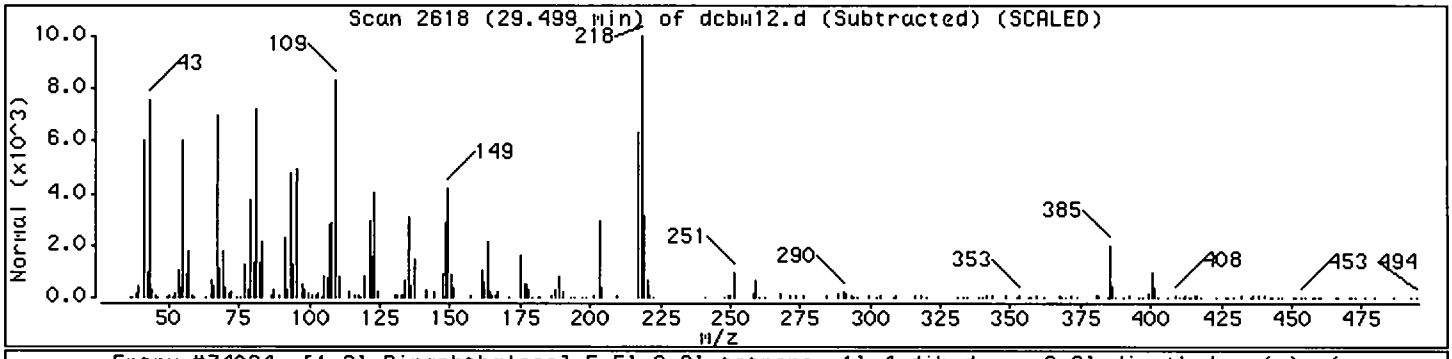
Client ID: WS-07 Instrument: gcl4.i

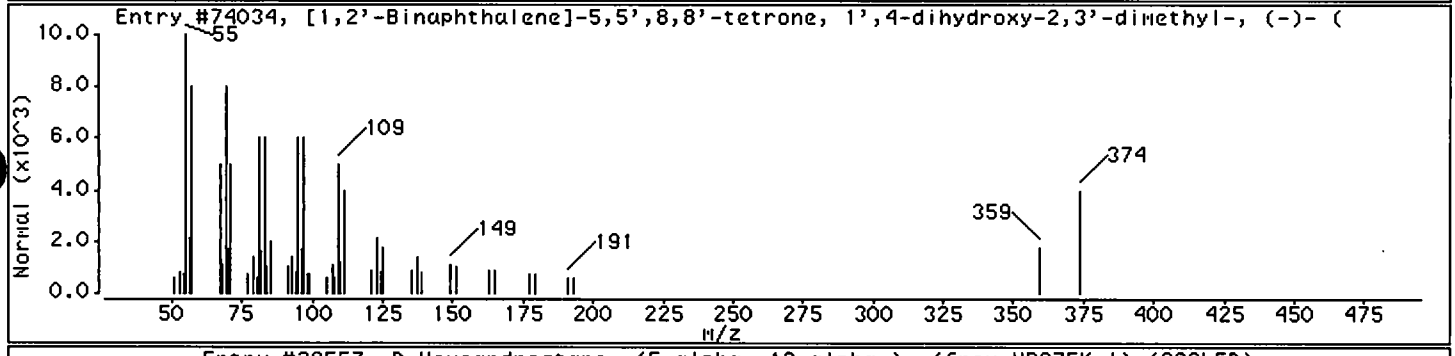
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

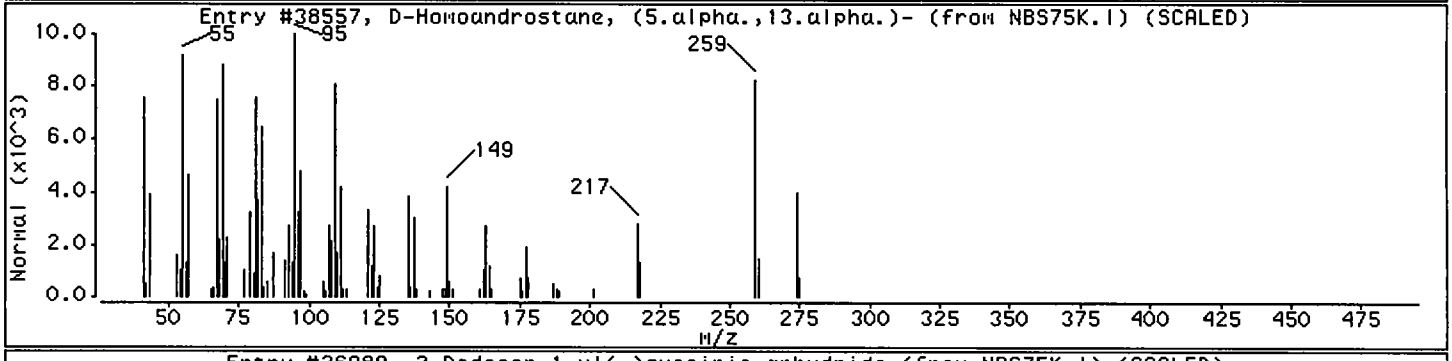
Volume Injected (uL): 2.0 Operator: GLR

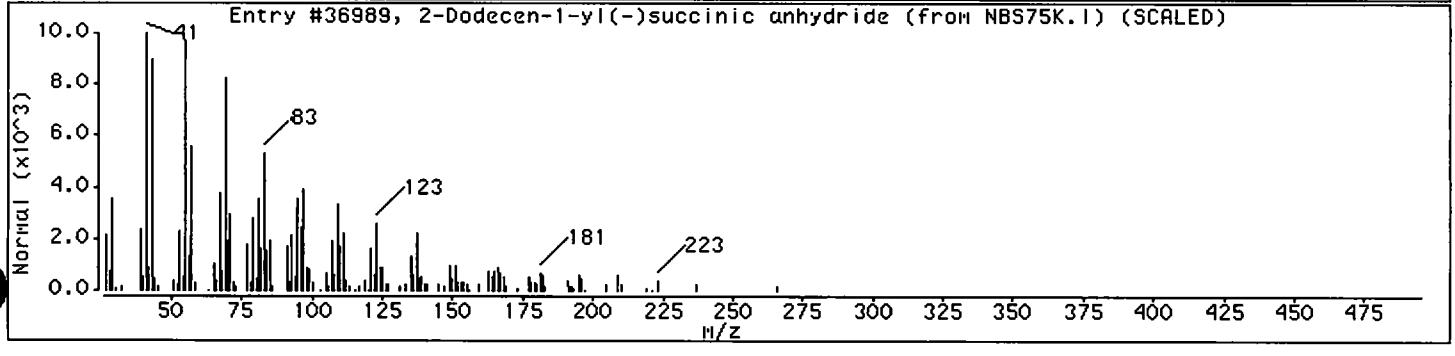
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	95	C22H1406	374
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	86	C20H34	274
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	64	C16H2603	266









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Date : 16-DEC-1996 22:07

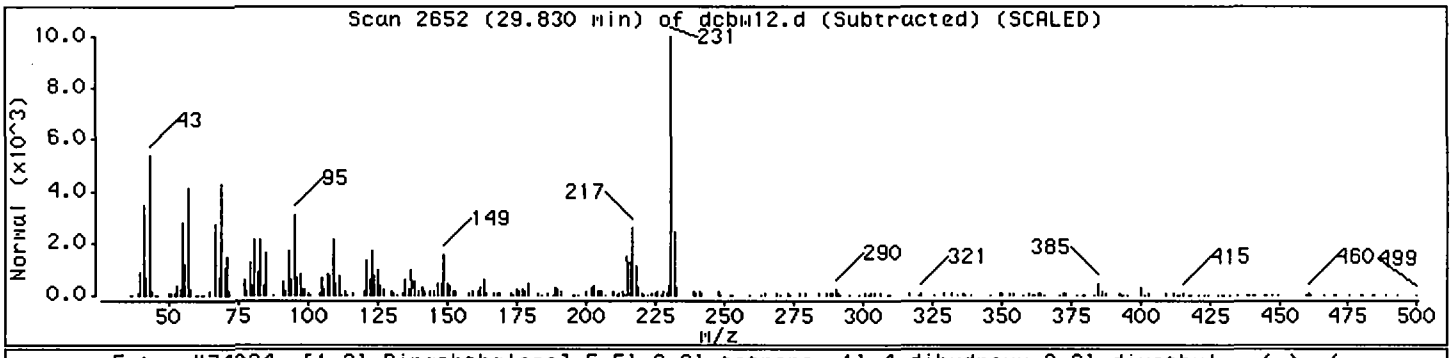
Client ID: WS-07 Instrument: gc14.i

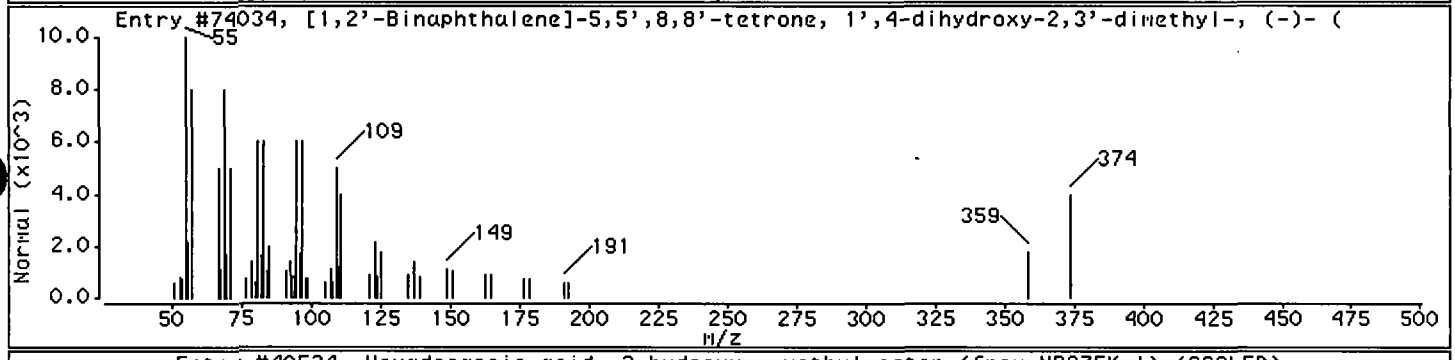
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

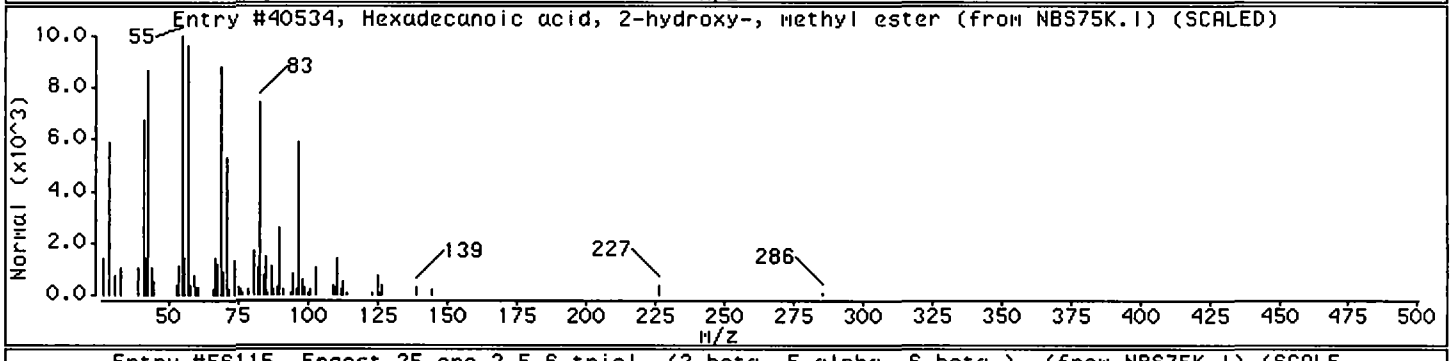
Volume Injected (uL): 2.0 Operator: GLR

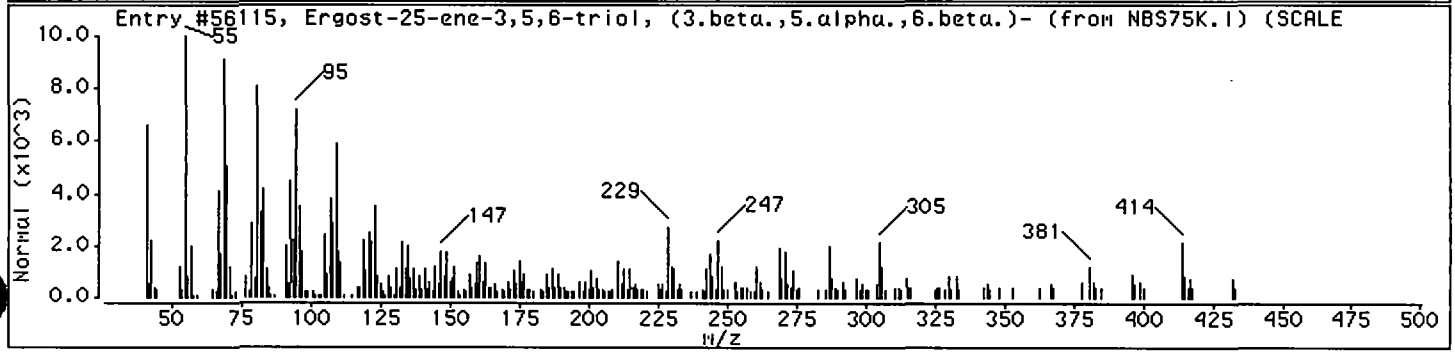
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	95	C22H1406	374
Hexadecanoic acid, 2-hydroxy-, methyl es	16742-51-1	NBS75K.l	40534	64	C17H3403	286
Ergost-25-ene-3,5,6-triol, (3.beta.,5.al	56143-28-3	NBS75K.l	56115	64	C28H4803	432









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Date : 16-DEC-1996 22:07

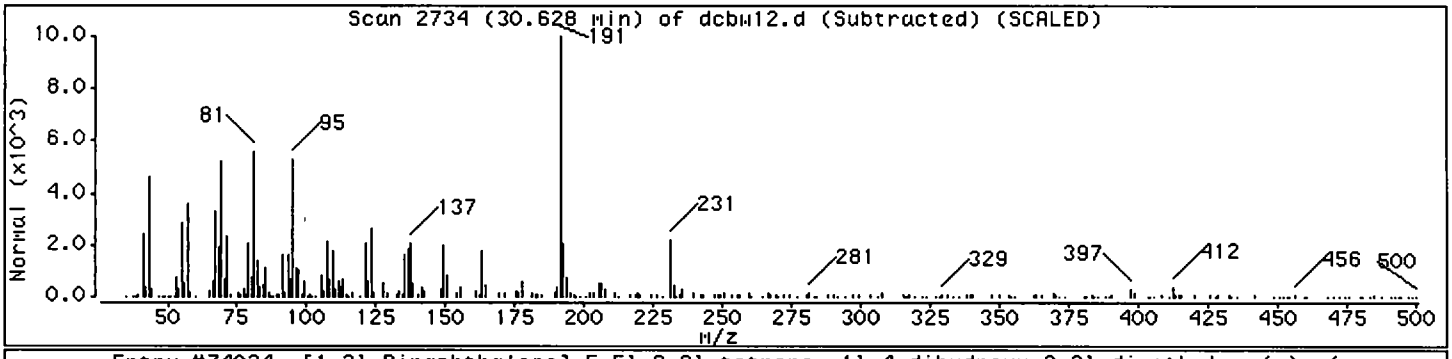
Client ID: WS-07 Instrument: gcl4.i

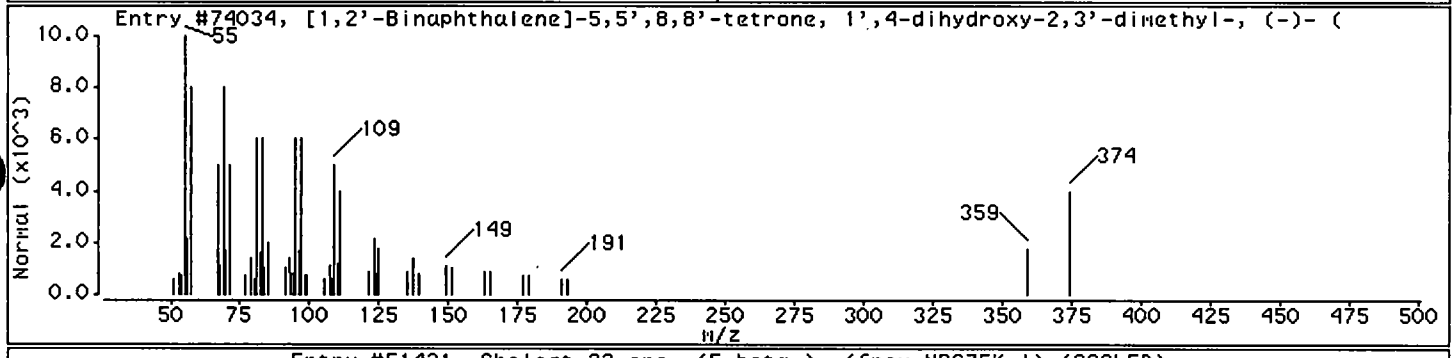
Sample Info: 9611G675-007 DFAC16,[AL=0625HS],[DC=00]

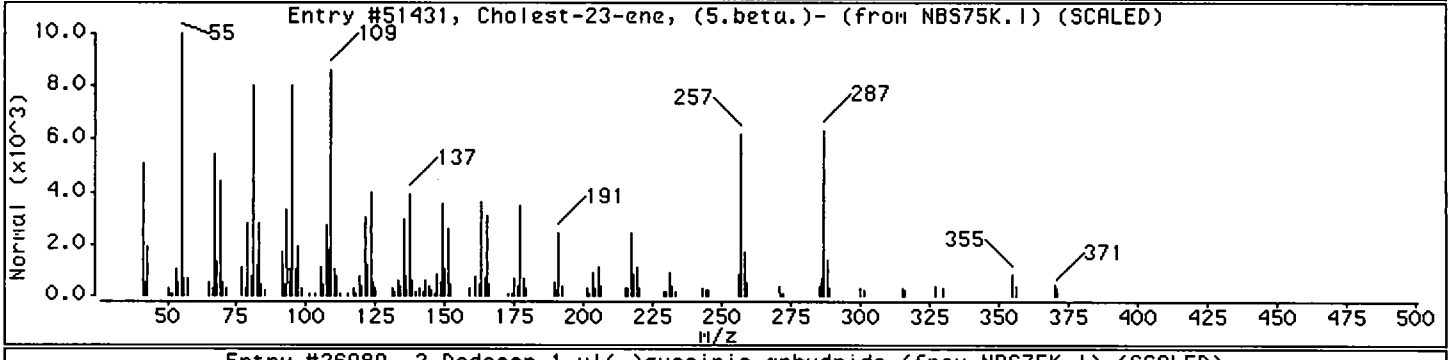
Volume Injected (uL): 2.0 Operator: GLR

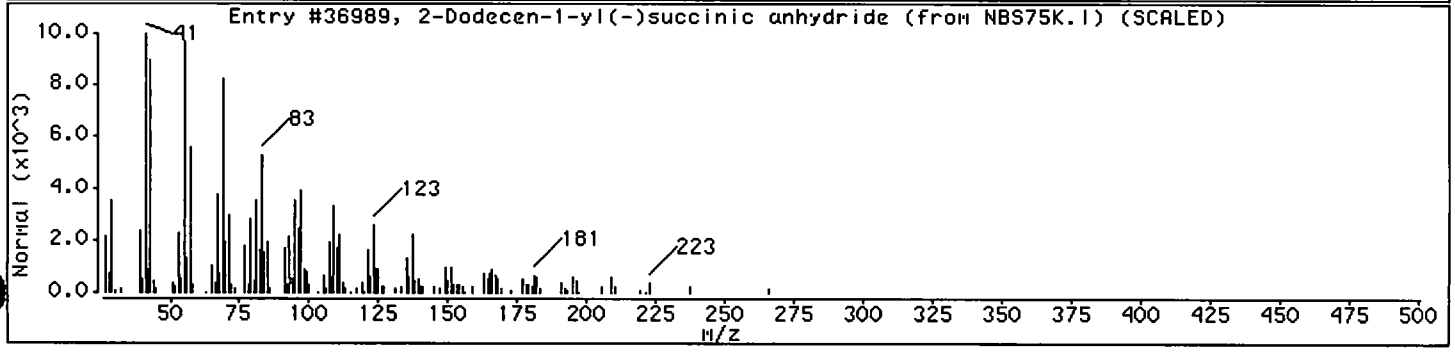
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
[1,2'-Binaphthalene]-5,5',8,8'-tetrone,	20175-84-2	NBS75K.l	74034	95	C22H1406	374
Cholest-23-ene, (5.beta.)-	30658-62-9	NBS75K.l	51431	91	C27H46	370
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	89	C16H2603	266









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DCBR10

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 47 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.0

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	3100	U
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	3100	U
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	520	J
77-47-4	Hexachlorocyclopentadiene	3100	U
88-06-2	2,4,6-Trichlorophenol	3100	U
95-95-4	2,4,5-Trichlorophenol	7800	U
91-58-7	2-Chloronaphthalene	3100	U
88-74-4	2-Nitroaniline	7800	U
131-11-3	Dimethylphthalate	3100	U
208-96-8	Acenaphthylene	3100	U
606-20-2	2,6-Dinitrotoluene	3100	U
99-09-2	3-Nitroaniline	7800	U
83-32-9	Acenaphthene	3100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DCBR10

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 47 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	7800	U
100-02-7	4-Nitrophenol	7800	U
132-64-9	Dibenzofuran	3100	U
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	3100	U
100-01-6	4-Nitroaniline	7800	U
534-52-1	4,6-Dinitro-2-methylphenol	7800	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	7800	U
85-01-8	Phenanthrene	3100	U
120-12-7	Anthracene	3100	U
86-74-8	Carbazole	3100	U
84-74-2	Di-n-butylphthalate	3100	U
206-44-0	Fluoranthene	3100	U
129-00-0	Pyrene	3100	U
85-68-7	Butylbenzylphthalate	3100	U
91-94-1	3,3'-Dichlorobenzidine	3100	U
56-55-3	Benzo(a)anthracene	3100	U
218-01-9	Chrysene	1100	J
117-81-7	bis(2-Ethylhexyl)phthalate	3100	U
117-84-0	Di-n-octylphthalate	3100	U
205-99-2	Benzo(b)fluoranthene	3100	U
207-08-9	Benzo(k)fluoranthene	3100	U
50-32-8	Benzo(a)pyrene	3100	U
193-39-5	Indeno(1,2,3-cd)pyrene	3100	U
53-70-3	Dibenzo(a,h)anthracene	3100	U
191-24-2	Benzo(g,h,i)perylene	3100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-08

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DCBR10

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 47 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/13/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 20

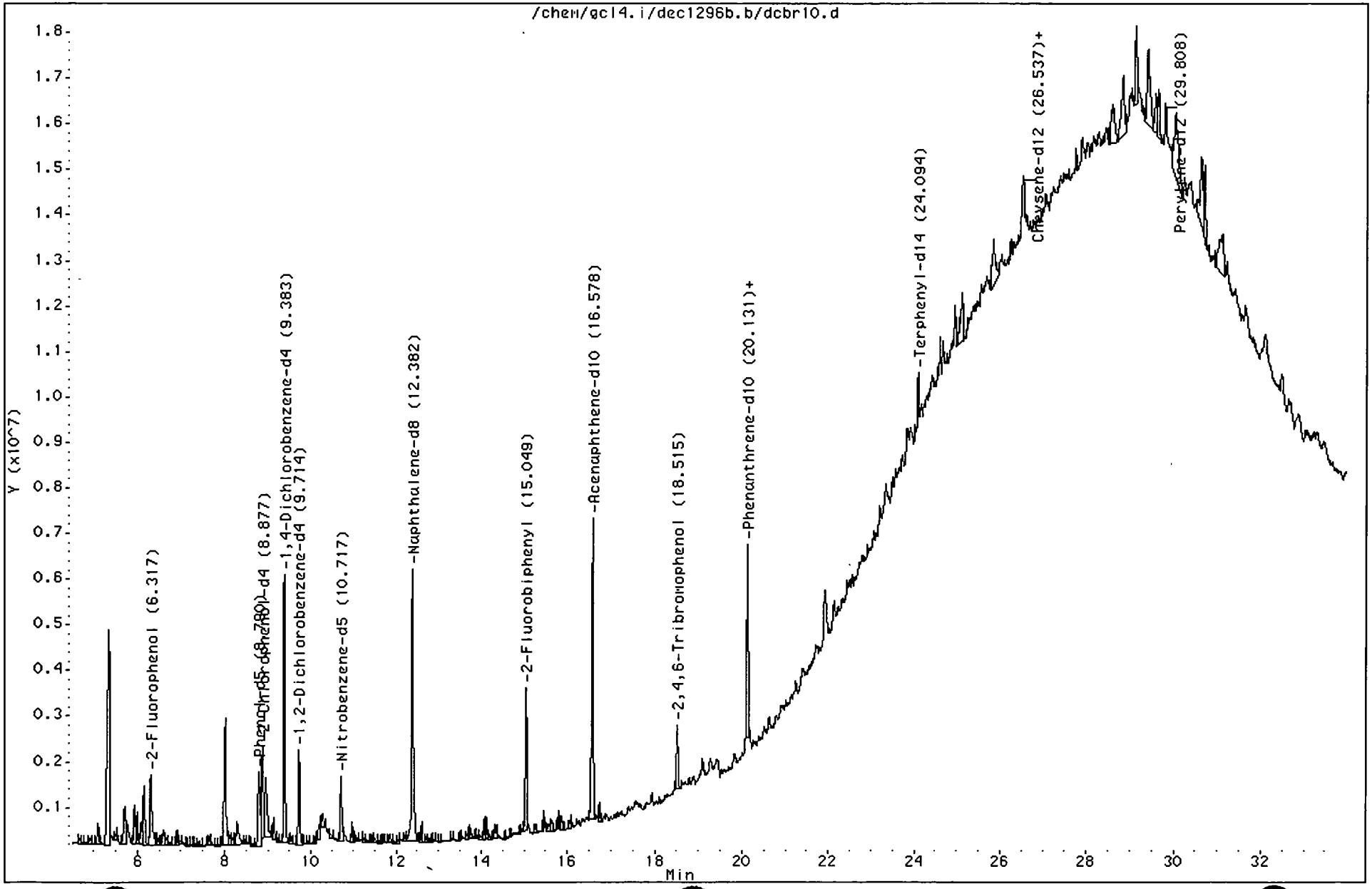
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN KETONE	5.35	7700	JBA
2.		UNKNOWN HYDROCARBON	5.71	1300	JB
3.		UNKNOWN HYDROCARBON	5.94	1000	JB
4.		UNKNOWN HYDROCARBON	6.00	830	JB
5.		UNKNOWN HYDROCARBON	6.16	1600	JB
6.		UNKNOWN HYDROCARBON	8.02	3900	JB
7.		UNKNOWN	8.29	1000	J
8.		UNKNOWN	8.95	2400	JB
9.		UNKNOWN	25.12	3100	J
10.		UNKNOWN	25.85	3600	J
11.		UNKNOWN	28.60	3700	J
12.		UNKNOWN	28.83	5000	J
13.		UNKNOWN	29.13	3300	J
14.		UNKNOWN	29.40	6000	J
15.		UNKNOWN	29.58	2000	J
16.		UNKNOWN	29.64	2500	J
17.		UNKNOWN	30.03	7100	J
18.		UNKNOWN	30.63	5200	J
19.		UNKNOWN	30.69	3800	J
20.		UNKNOWN	31.11	5300	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

299

Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d
Date : 13-DEC-1996 02:17
Client ID: WS-08
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dcbr10.d
Lab Smp Id: 9611G675-008 Client Smp ID: WS-08
Inj Date : 13-DEC-1996 02:17
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-008 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 10
Dil Factor: 5.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.200	Weigth of sample extracted (g)
M	46.600	% Moisture

WBS 12/19/96

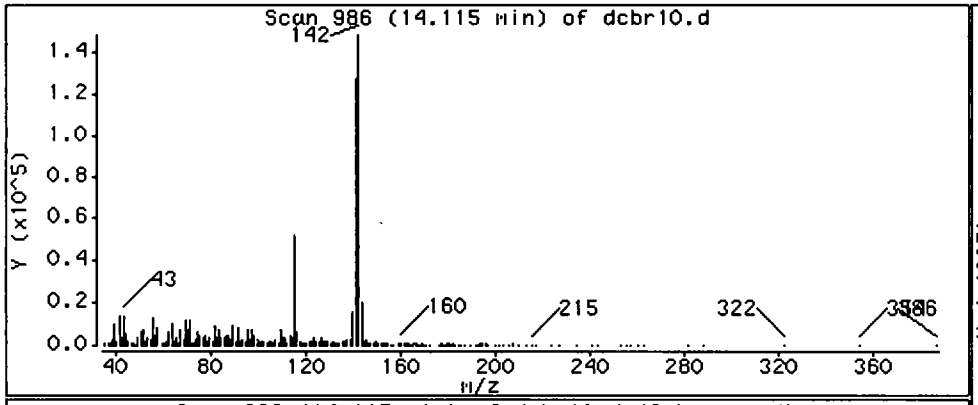
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.383	9.325	(1.000)	2044070	40.000	
* 26 Naphthalene-d8	136.00	12.382	12.323	(1.000)	6692333	40.000	
* 41 Acenaphthene-d10	164.00	16.578	16.500	(1.000)	3607060	40.000	
* 56 Phenanthrene-d10	188.00	20.131	20.014	(1.000)	4103532	40.000	(H)
* 67 Chrysene-d12	240.00	26.537	26.303	(1.000)	1631687	40.000	
* 75 Perylene-d12	264.00	29.808	29.438	(1.000)	836785	40.000	
$ 1 2-Fluorophenol	112.00	6.317	6.190	(0.673)	1523352	23.485	3640.7
$ 2 Phenol-d5	99.00	8.799	8.663	(0.938)	1801184	21.874	3390.9
$ 5 2-Chlorophenol-d4	132.00	8.877	8.789	(0.946)	1657637	24.447	3789.8
$ 10 1,2-Dichlorobenzene-d4	152.00	9.714	9.656	(1.035)	700516	15.710	2435.5(a)
$ 17 Nitrobenzene-d5	82.00	10.717	10.668	(0.866)	1206354	19.229	2980.9(a)
$ 34 2-Fluorobiphenyl	172.00	15.049	14.991	(0.908)	2169460	20.398	3162.2
$ 52 2,4,6-Tribromophenol	330.00	18.525	18.388	(1.117)	447361	27.732	4299.1
$ 64 Terphenyl-d14	244.00	24.094	23.947	(0.908)	934805	19.680	3050.9(a)
30 2-Methylnaphthalene	142.00	14.115	14.046	(1.140)	343811	3.383	524.42(a)
69 Chrysene	228.00	26.566	26.361	(1.001)	363889	7.239	1122.2(a)

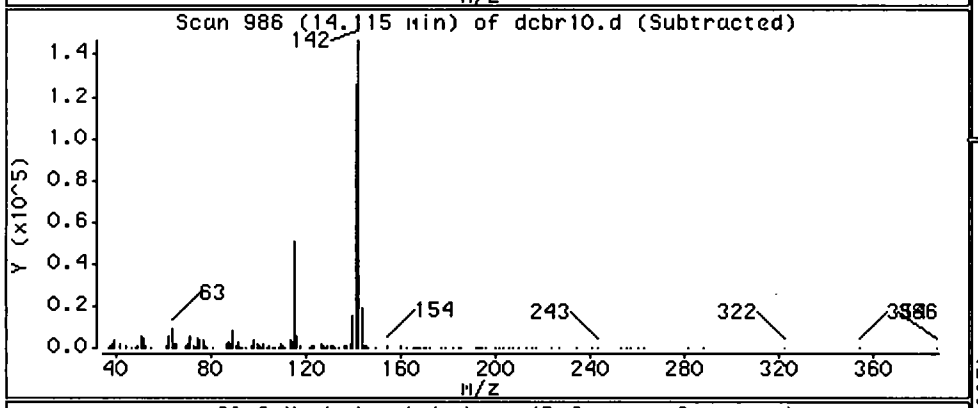
QC Flag Legend

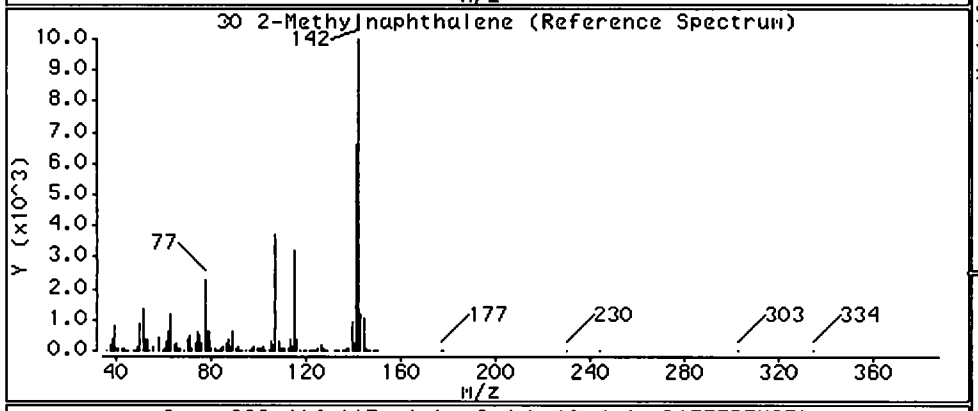
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

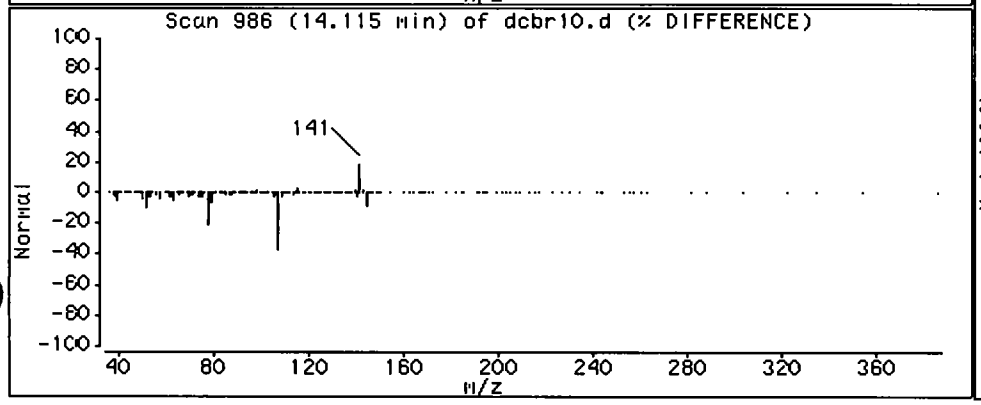
Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d
Date : 13-DEC-1996 02:17
Client ID: WS-08 Instrument: gcl4.i
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0 Operator: GES
Column phase: Column diameter: 2.00

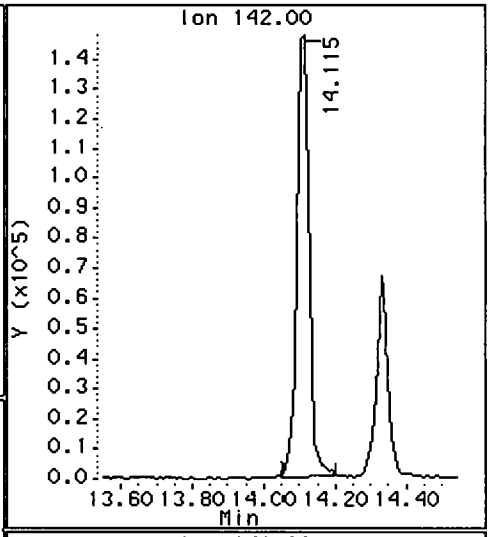
30 2-Methylnaphthalene

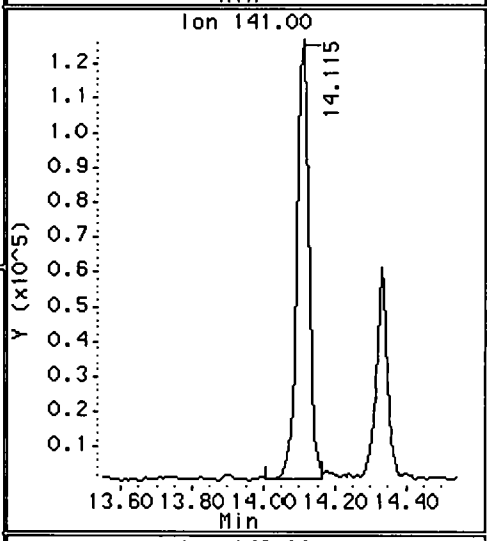


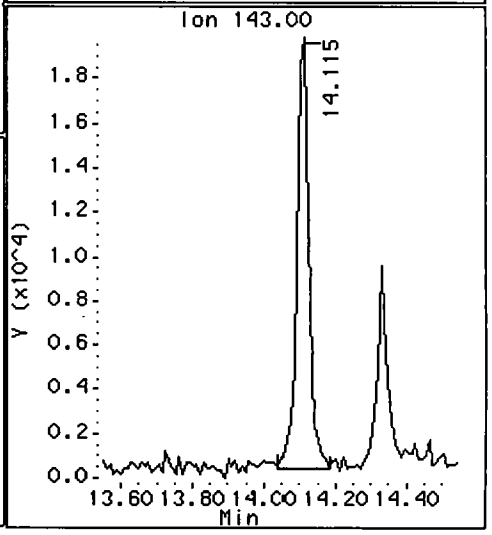












Data File: /chem/gc14.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

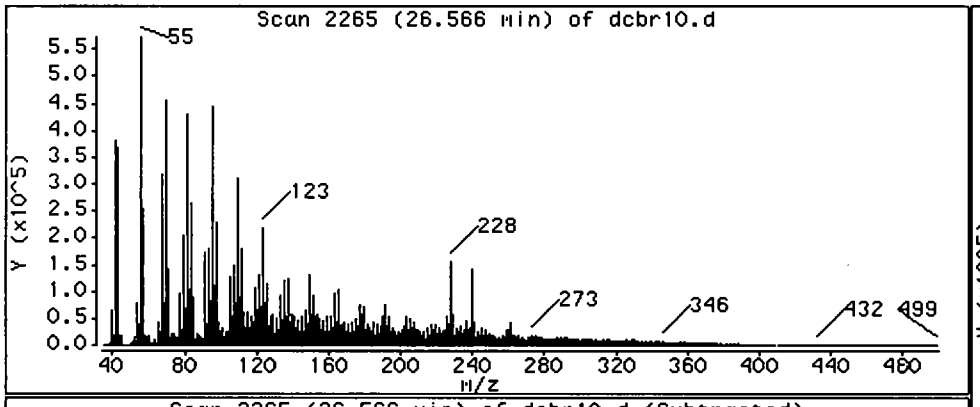
Client ID: WS-08 Instrument: gc14.i

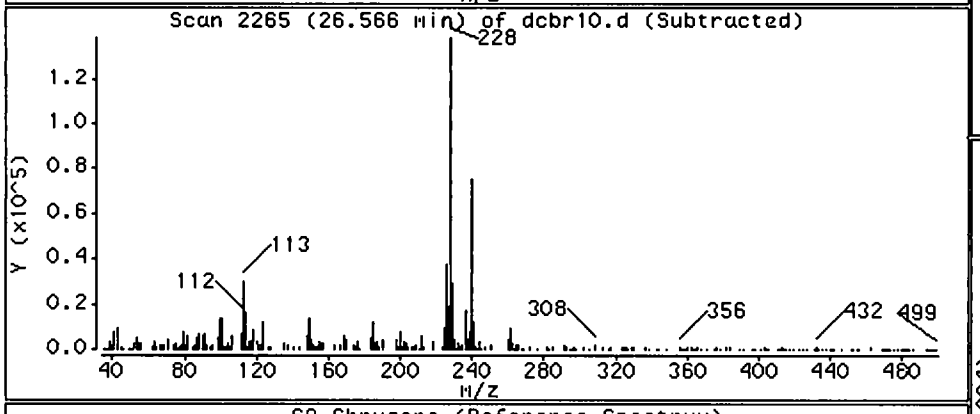
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

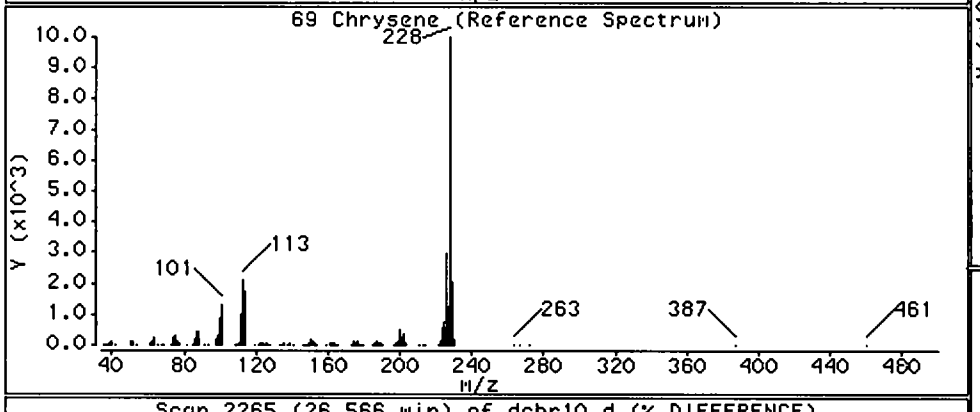
Volume Injected (uL): 2.0 Operator: GES

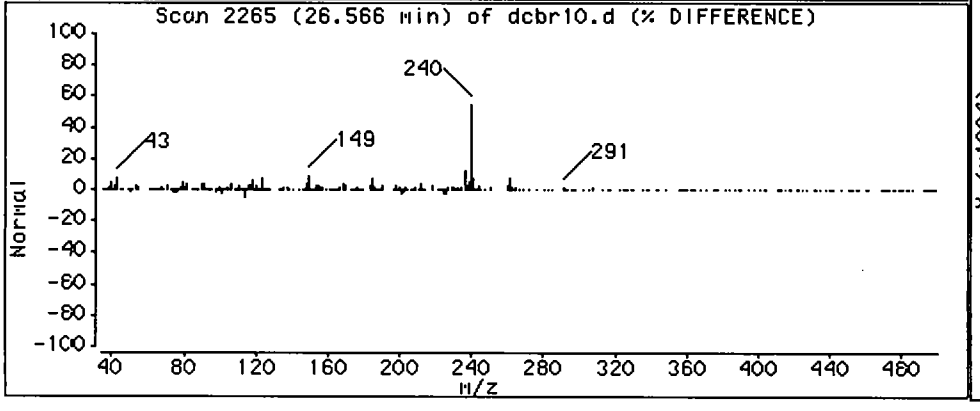
Column phase: Column diameter: 2.00

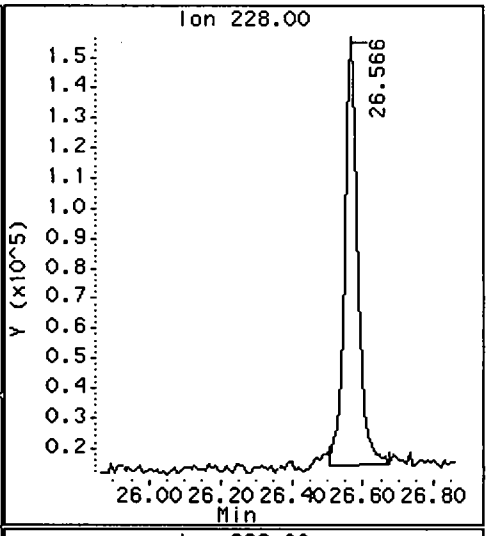
69 Chrysene

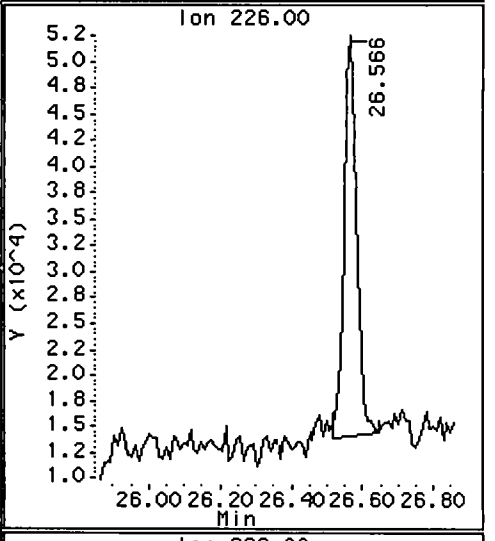


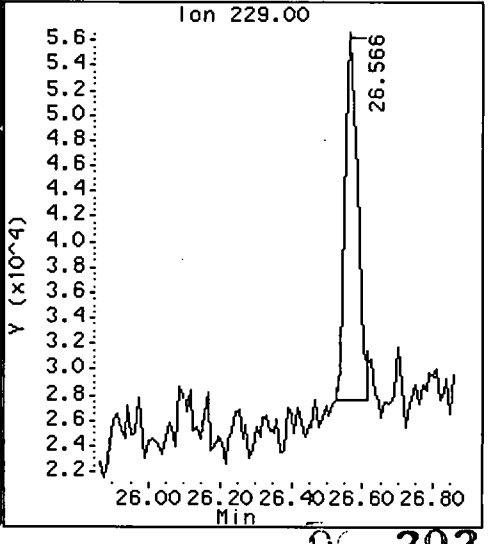












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296b.b/dcbr10.d
Lab Smp Id: 9611G675-008 Client Smp ID: WS-08
Inj Date : 13-DEC-1996 02:17
Operator : GES Inst ID: gcl4.i
Smp Info : 9611G675-008 DFBC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 20:43 swaneyg
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 10
Dil Factor: 5.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.200	Weigth of sample extracted (g)
M	46.600	% Moisture

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	9.383	12892804	40.000
* 56 Phenanthrene-d10	20.131	8335234	40.000

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Ketone					CAS #:		
5.353	15980650	49.580	7686.0	0		0	8
Unknown Hydrocarbon					CAS #:		
5.713	2721655	8.444	1309.0	0		0	8
Unknown Hydrocarbon					CAS #:		
5.937	2090299	6.485	1005.3	0		0	8

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
5.996	1733875	5.379	833.92	0		0	8
Unknown Hydrocarbon					CAS #:		
6.161	3397183	10.540	1633.9	0		0	8
Unknown Hydrocarbon					CAS #:		
8.021	8099826	25.130	3895.6	0		0	8
Unknown					CAS #:		
8.293	2174651	6.747	1045.9	0		0	8
Unknown					CAS #:		
8.945	5104550	15.837	2455.0	0		0	8
Unknown					CAS #:		
25.116	4192347	20.119	3118.8	0		0	56(ML)
Unknown					CAS #:		
25.846	4819011	23.126	3585.0	0		0	56(ML)
Unknown					CAS #:		
28.601	4950146	23.755	3682.6	0		0	56(ML)
Unknown					CAS #:		
28.835	6697616	32.141	4982.6	0		0	56(ML)
Unknown					CAS #:		
29.127	4468311	21.443	3324.1	0		0	56(ML)
Unknown					CAS #:		
29.399	8144564	39.085	6059.0	0		0	56(ML)
Unknown					CAS #:		
29.584	2682752	12.874	1995.8	0		0	56(ML)
Unknown					CAS #:		
29.643	3417590	16.401	2542.4	0		0	56(ML)
Unknown					CAS #:		
30.032	9585839	46.002	7131.2	0		0	56(ML)
Unknown					CAS #:		
30.626	7045884	33.812	5241.7	0		0	56(ML)
Unknown					CAS #:		
30.694	5107272	24.509	3799.5	0		0	56(ML)

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
31.113	7181384	34.463	5342.5	0		0	56(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gc14.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

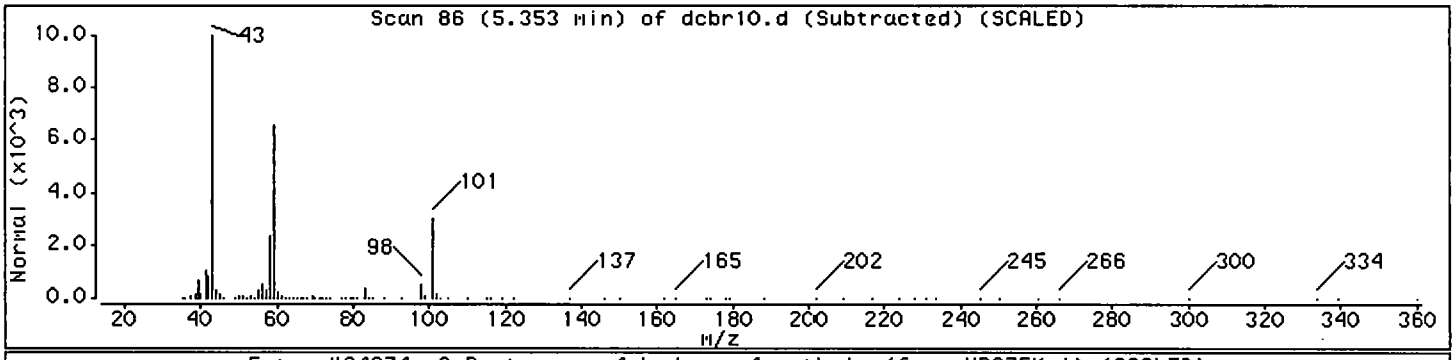
Client ID: WS-08 Instrument: gc14.i

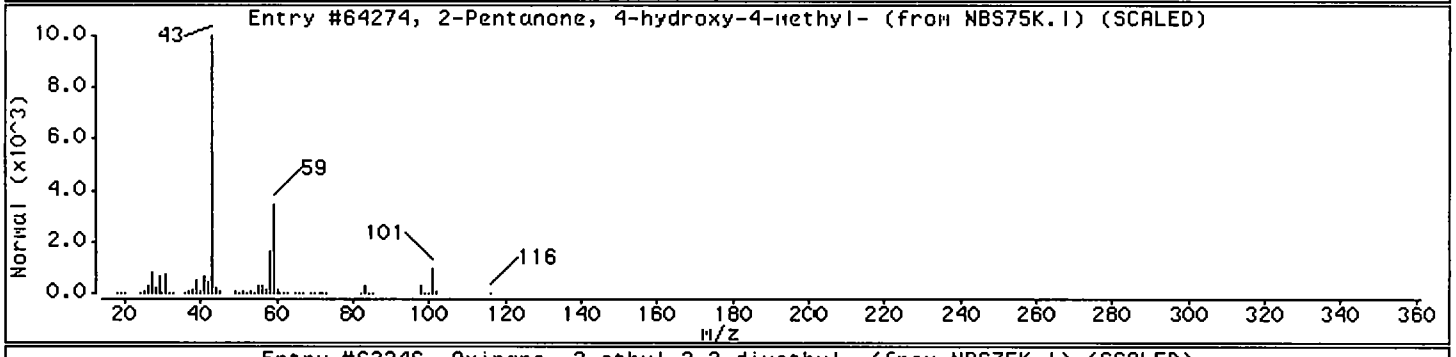
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

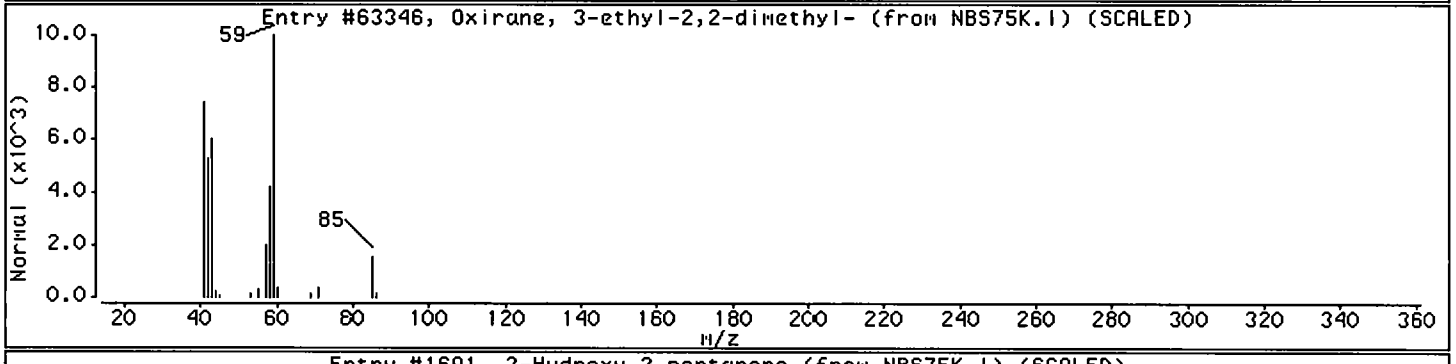
Volume Injected (uL): 2.0 Operator: GES

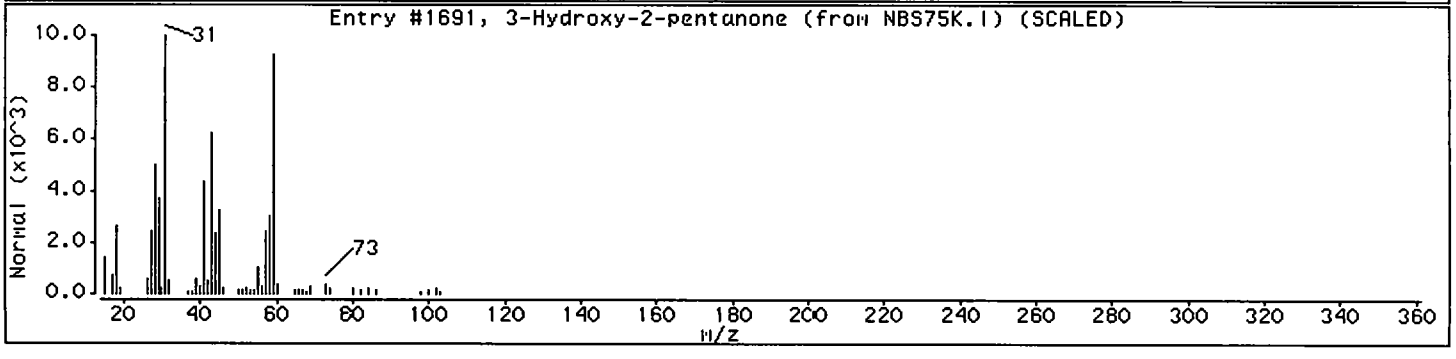
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	53	C6H12O2	116
Oxirane, 3-ethyl-2,2-dimethyl-	1192-22-9	NBS75K.l	63346	23	C6H12O	100
3-Hydroxy-2-pentanone	3142-66-3	NBS75K.l	1691	23	C5H10O2	102









Data File: /chem/gc14.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

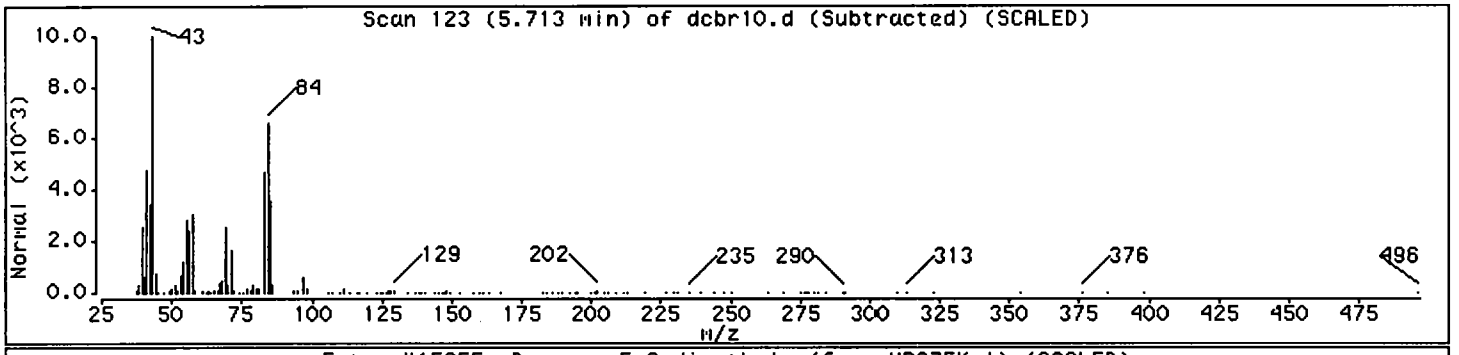
Client ID: WS-08 Instrument: gc14.i

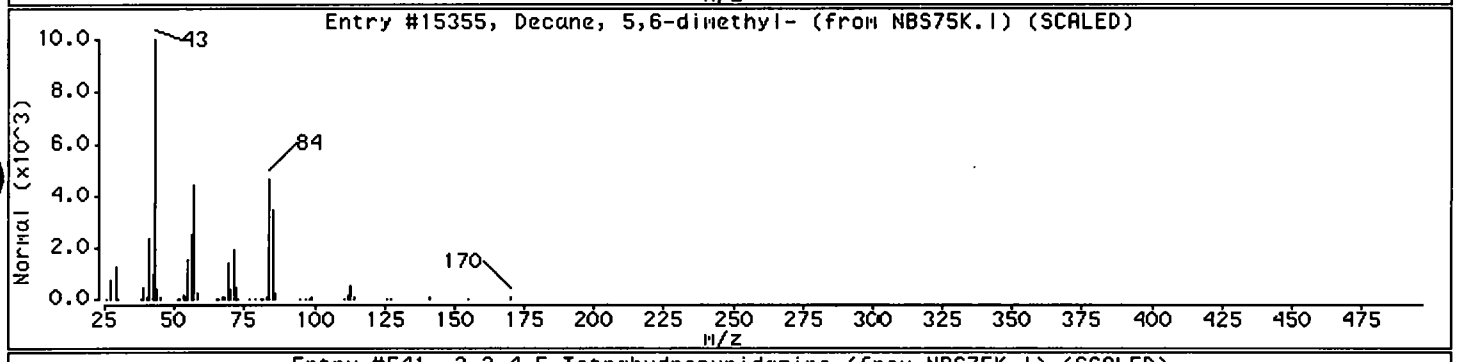
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

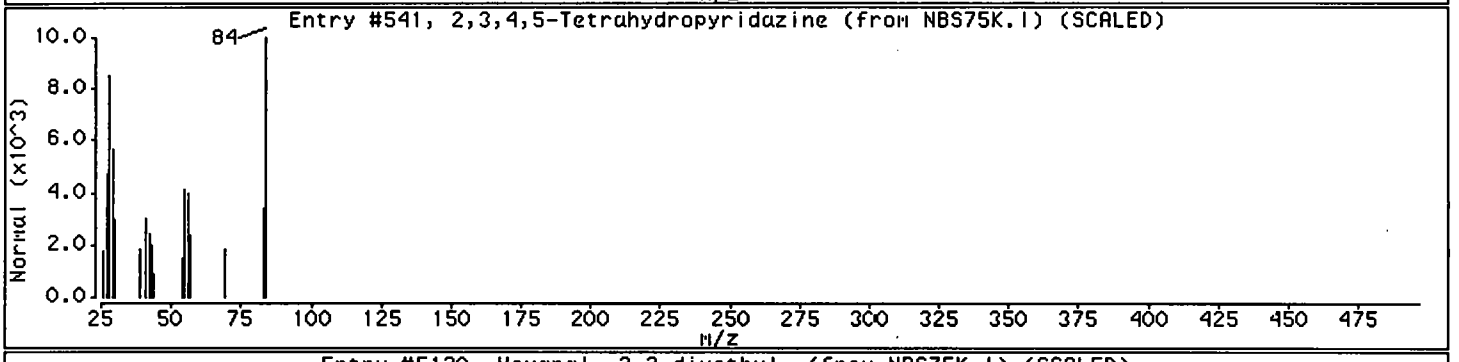
Volume Injected (uL): 2.0 Operator: GES

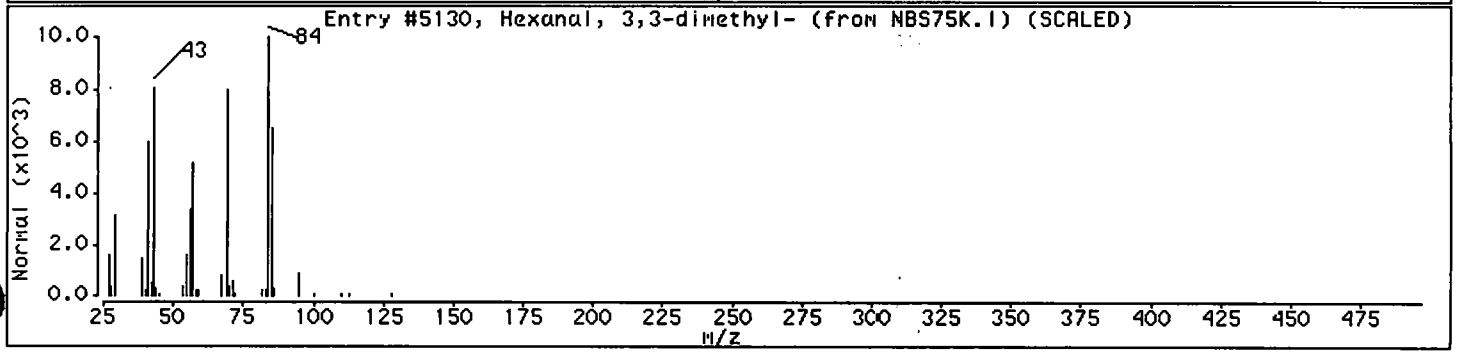
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Decane, 5,6-dimethyl-	1636-43-7	NBS75K.l	15355	47	C12H26	170
2,3,4,5-Tetrahydropyridazine	694-06-4	NBS75K.l	541	43	C4H8N2	84
Hexanal, 3,3-dimethyl-	55320-57-5	NBS75K.l	5130	43	C8H16O	128









Data File: /chem/gc14.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

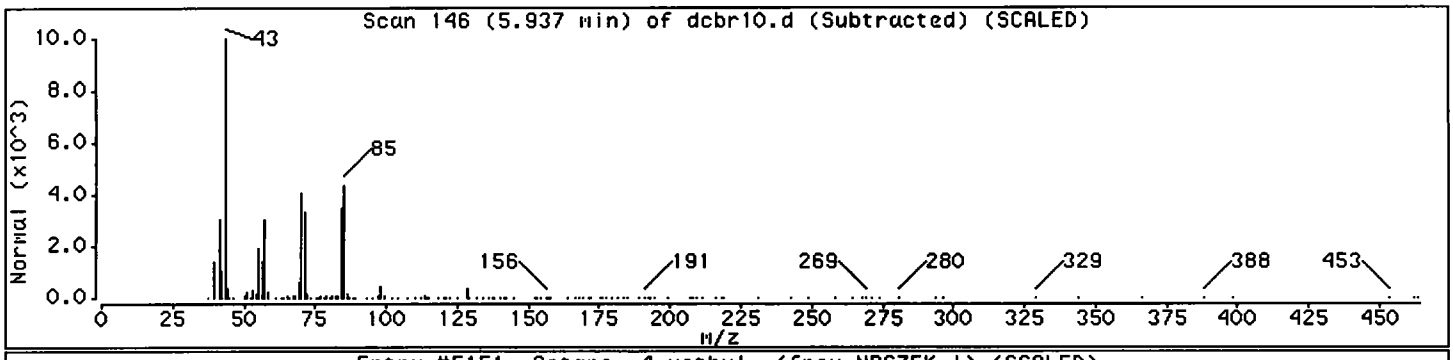
Client ID: WS-08 Instrument: gc14.i

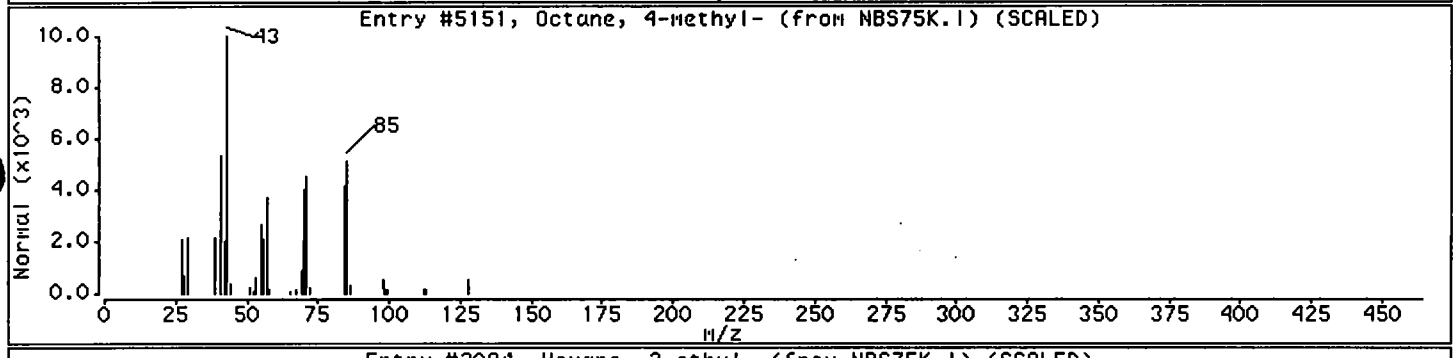
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

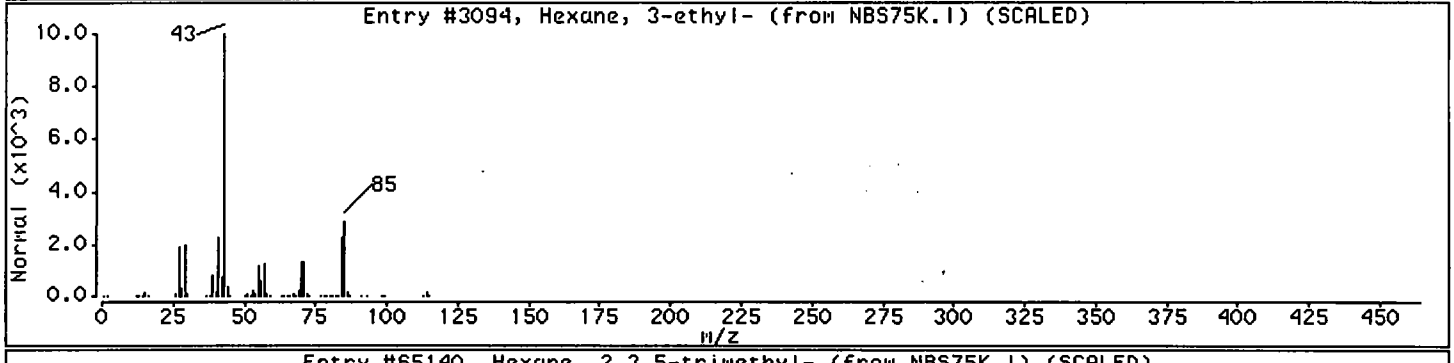
Volume Injected (uL): 2.0 Operator: GES

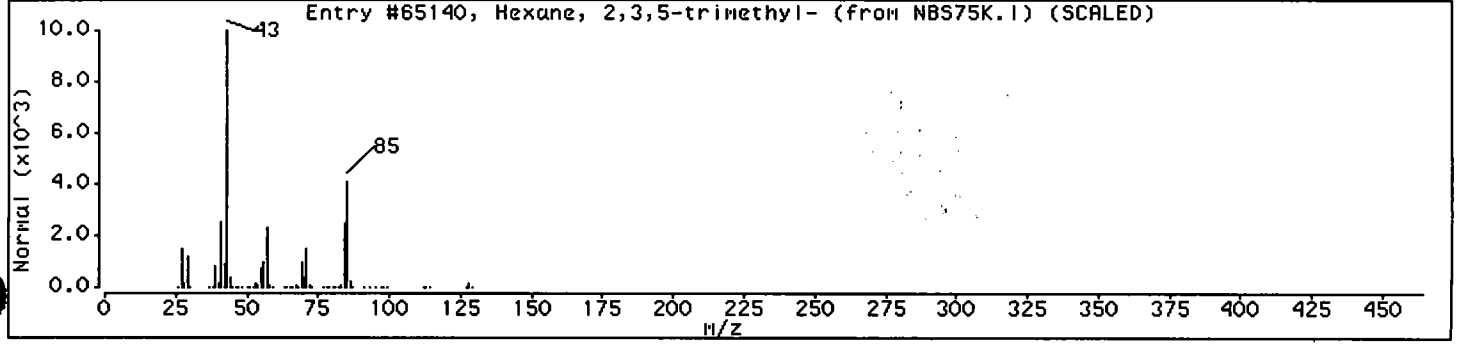
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Octane, 4-methyl-	2216-34-4	NBS75K.l	5151	72	C9H20	128
Hexane, 3-ethyl-	619-99-8	NBS75K.l	3094	64	C8H18	114
Hexane, 2,3,5-trimethyl-	1069-53-0	NBS75K.l	65140	53	C9H20	128









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

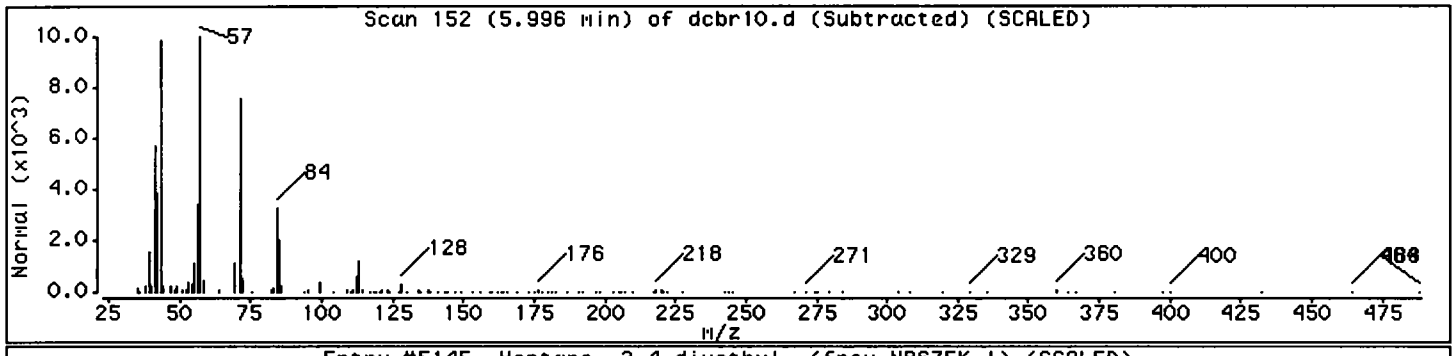
Client ID: WS-08 Instrument: gcl4.i

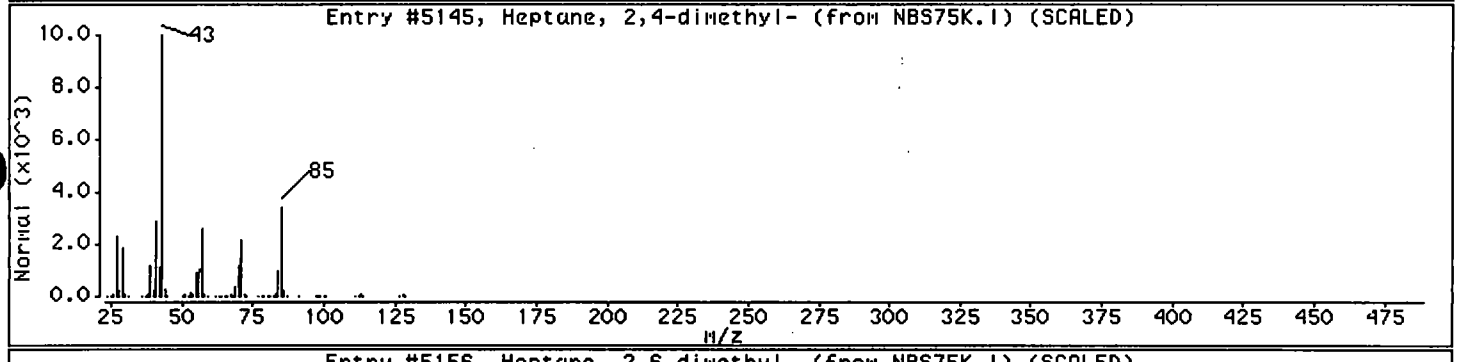
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

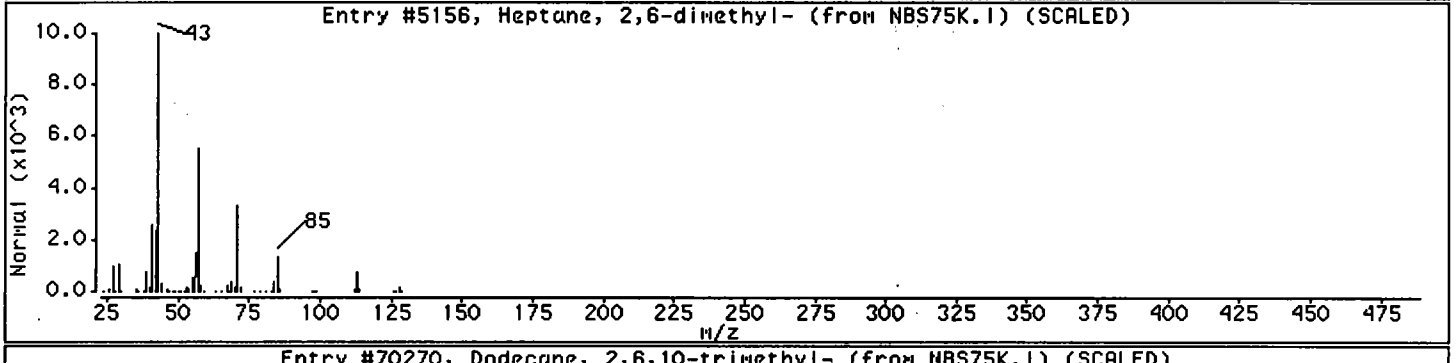
Volume Injected (uL): 2.0 Operator: GES

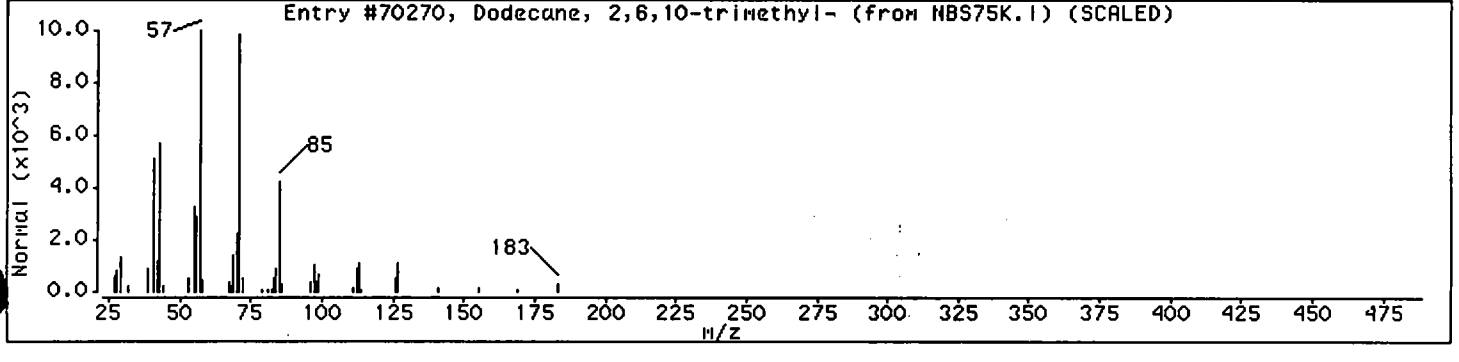
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.l	5145	72	C9H20	128
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.l	5156	62	C9H20	128
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.l	70270	59	C15H32	212









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

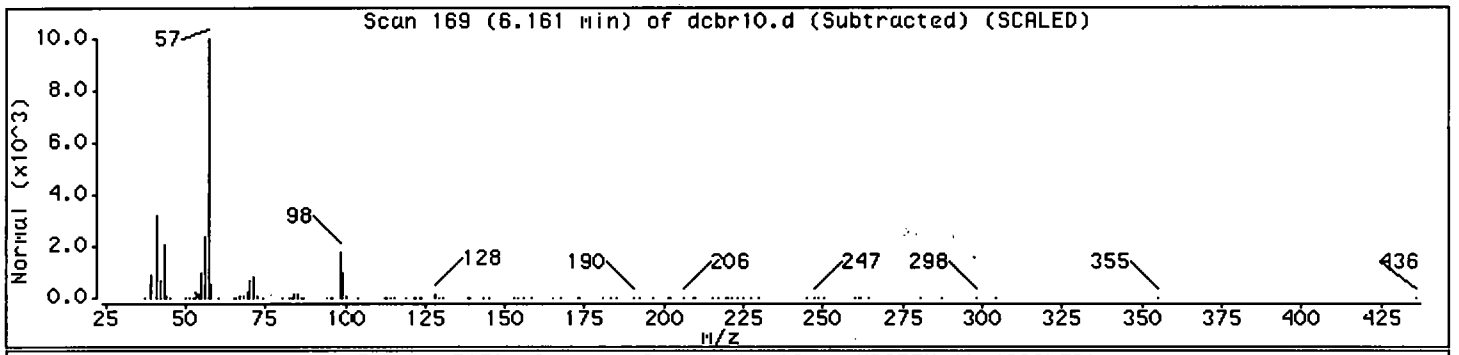
Client ID: WS-08 Instrument: gcl4.i

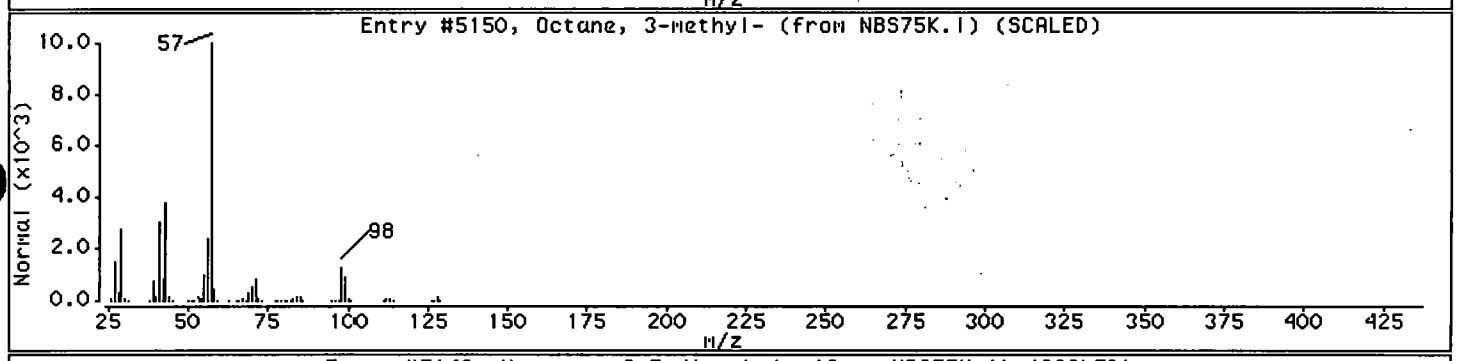
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

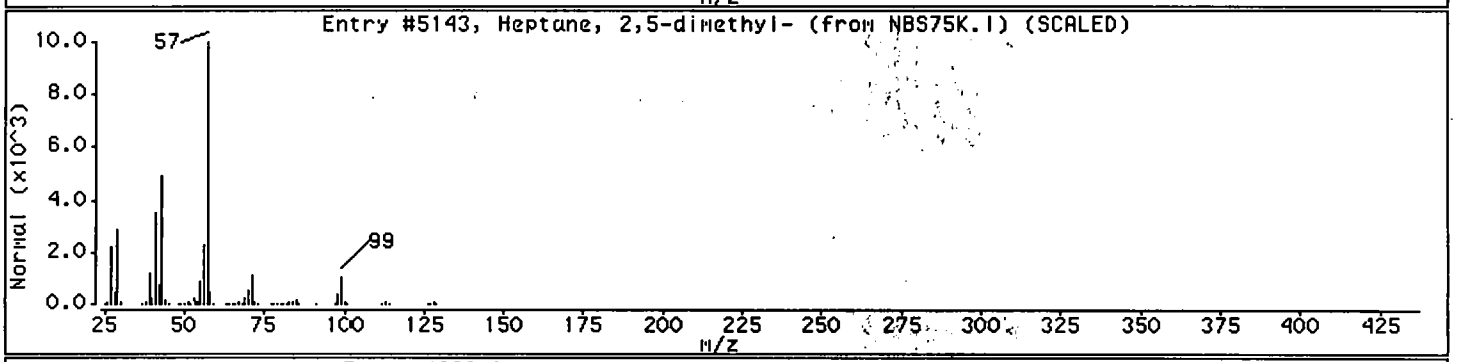
Volume Injected (uL): 2.0 Operator: GES

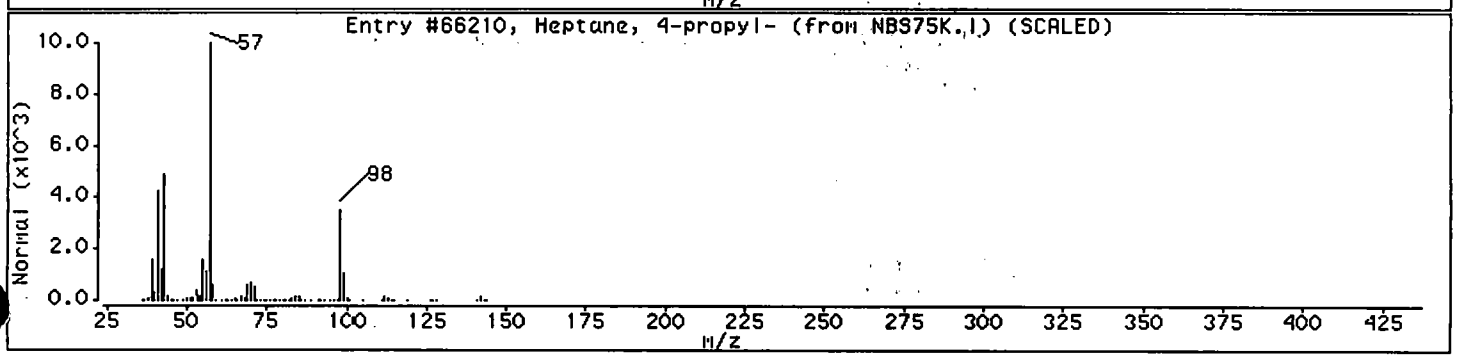
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Octane, 3-methyl-	2216-33-3	NBS75K.l	5150	91	C9H20	128
Heptane, 2,5-dimethyl-	2216-30-0	NBS75K.l	5143	87	C9H20	128
Heptane, 4-propyl-	3178-29-8	NBS75K.l	66210	59	C10H22	142









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

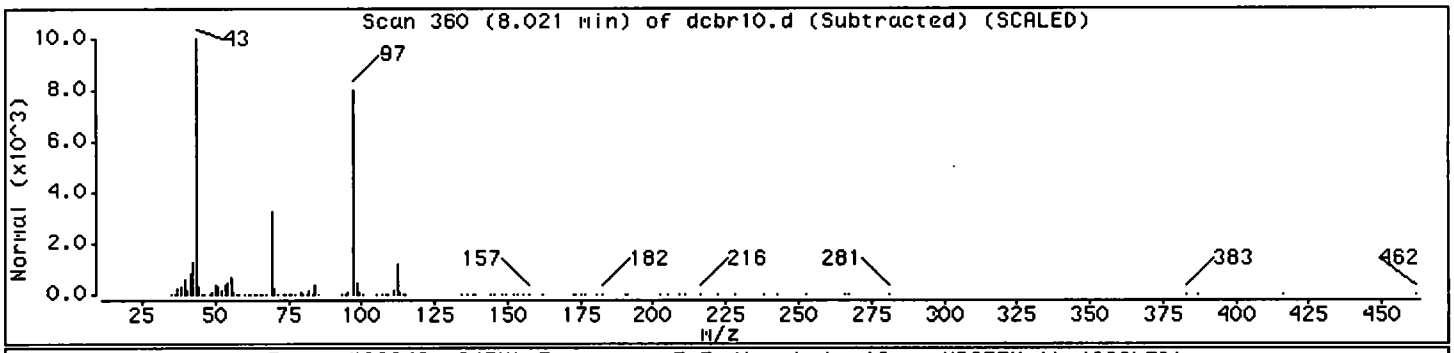
Client ID: WS-08 Instrument: gcl4.i

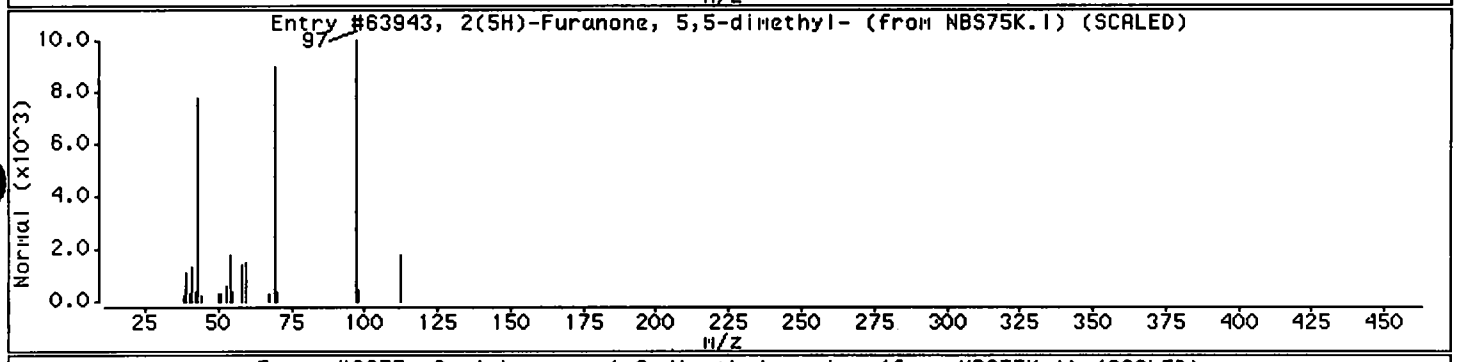
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

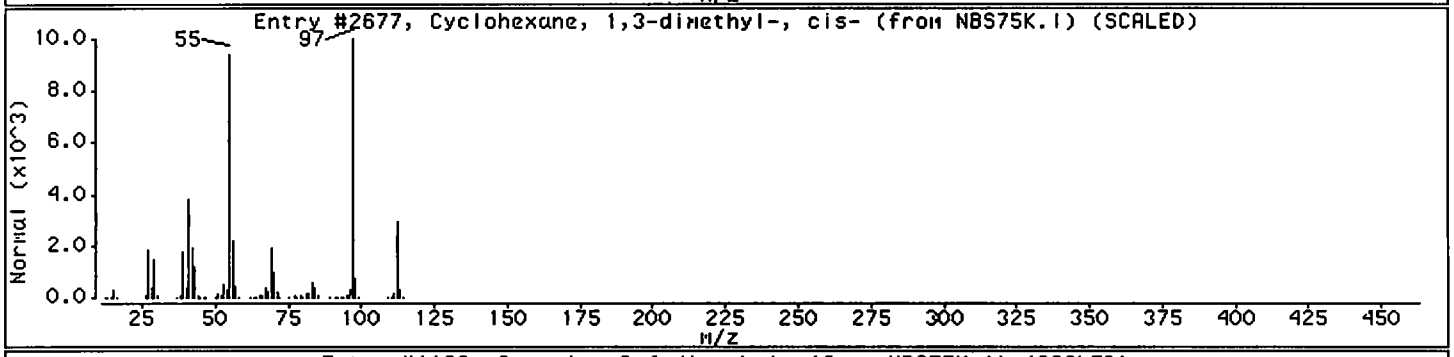
Volume Injected (uL): 2.0 Operator: GES

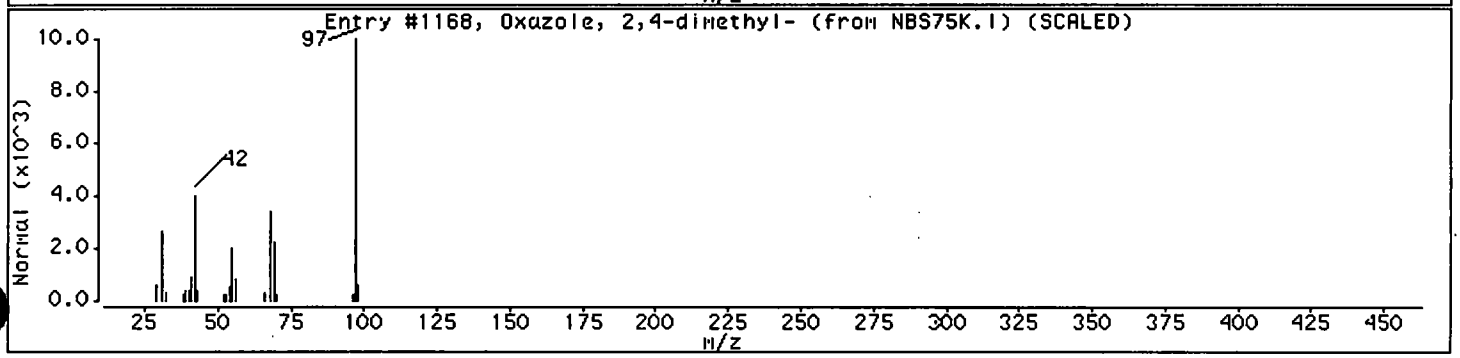
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
2(5H)-Furanone, 5,5-dimethyl-	20019-64-1	NBS75K.l	63943	50	C6H8O2	112
Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	NBS75K.l	2677	38	C8H16	112
Oxazole, 2,4-dimethyl-	7208-05-1	NBS75K.l	1168	36	C5H7NO	97









Data File: /chem/gc14.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

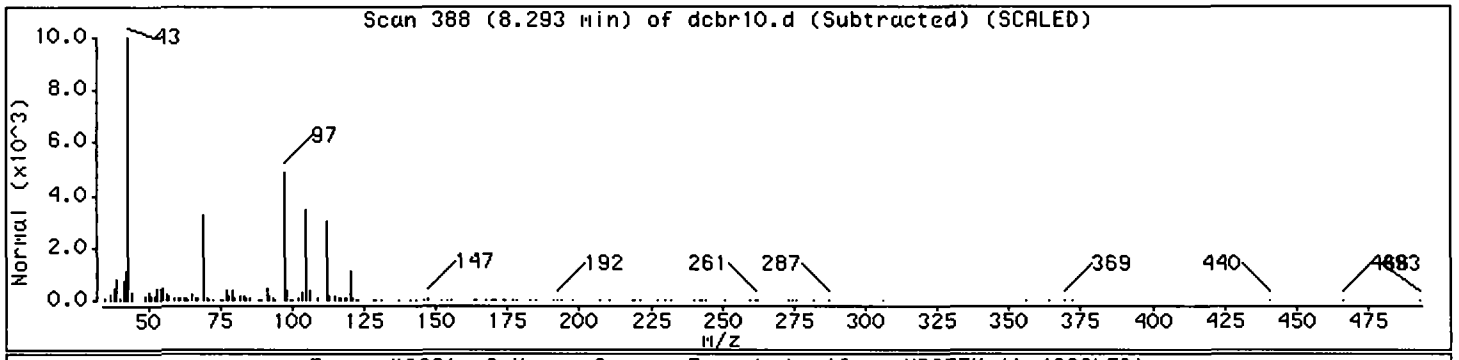
Client ID: WS-08 Instrument: gc14.i

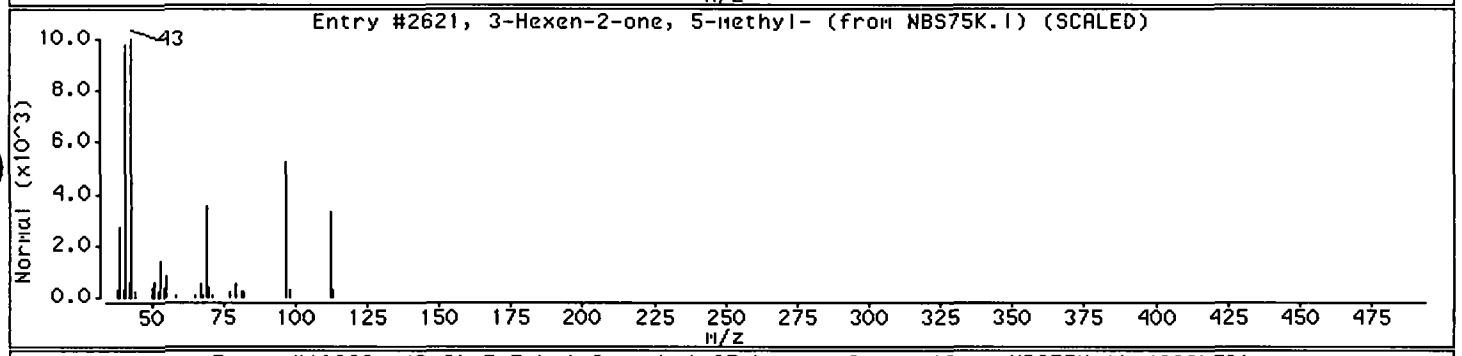
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

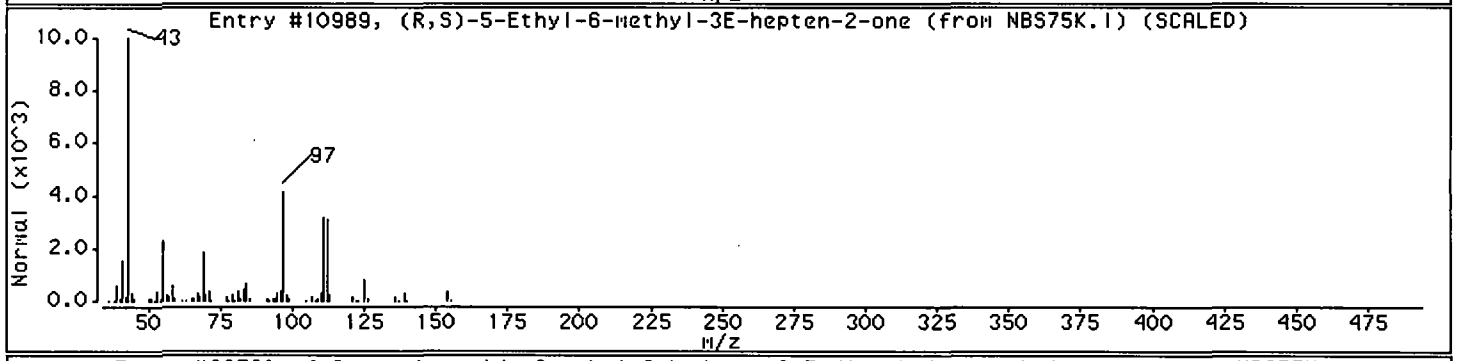
Volume Injected (uL): 2.0 Operator: GES

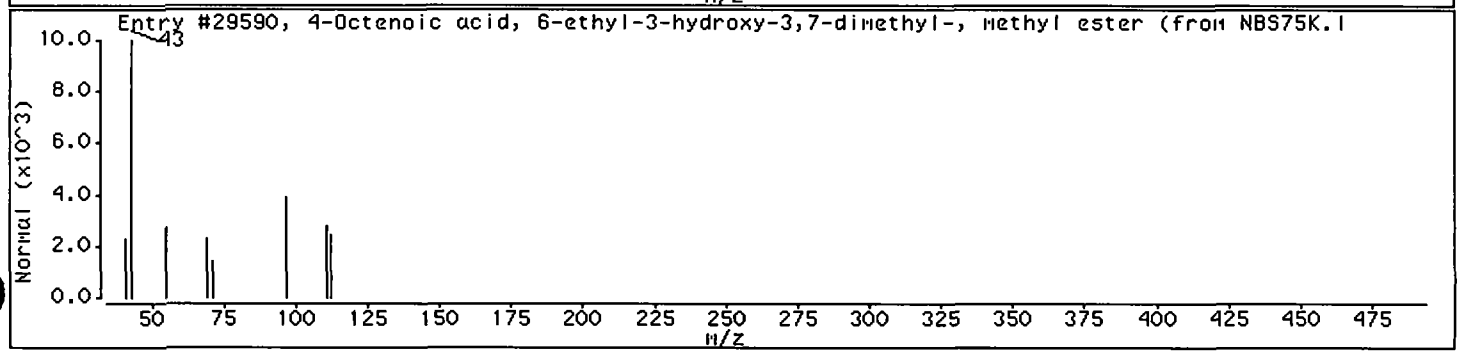
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Hexen-2-one, 5-methyl-	5166-53-0	NBS75K.l	2621	52	C7H12O	112
(R,S)-5-Ethyl-6-methyl-3E-hepten-2-one	57283-79-1	NBS75K.l	10989	33	C10H18O	154
4-Octenoic acid, 6-ethyl-3-hydroxy-3,7-d	41654-25-5	NBS75K.l	29590	9	C13H24O3	228









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

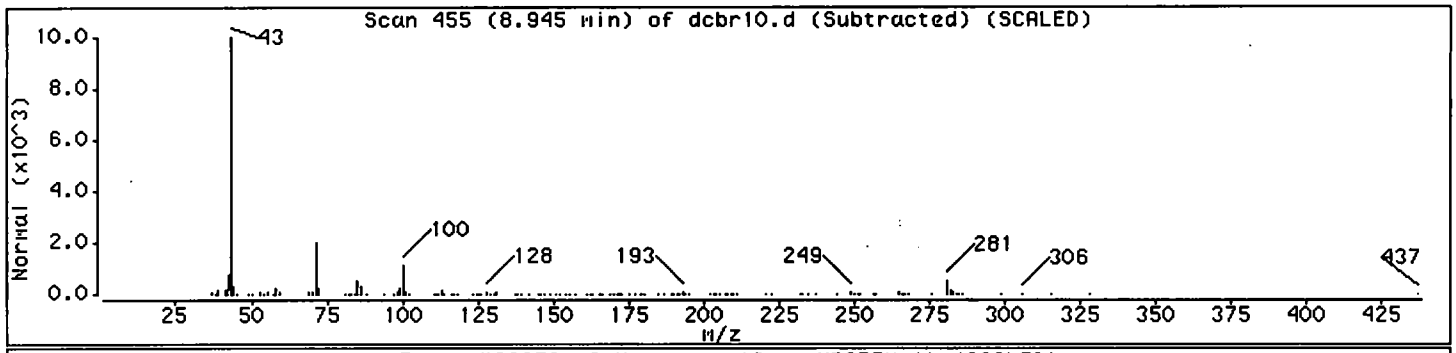
Client ID: WS-08 Instrument: gcl4.i

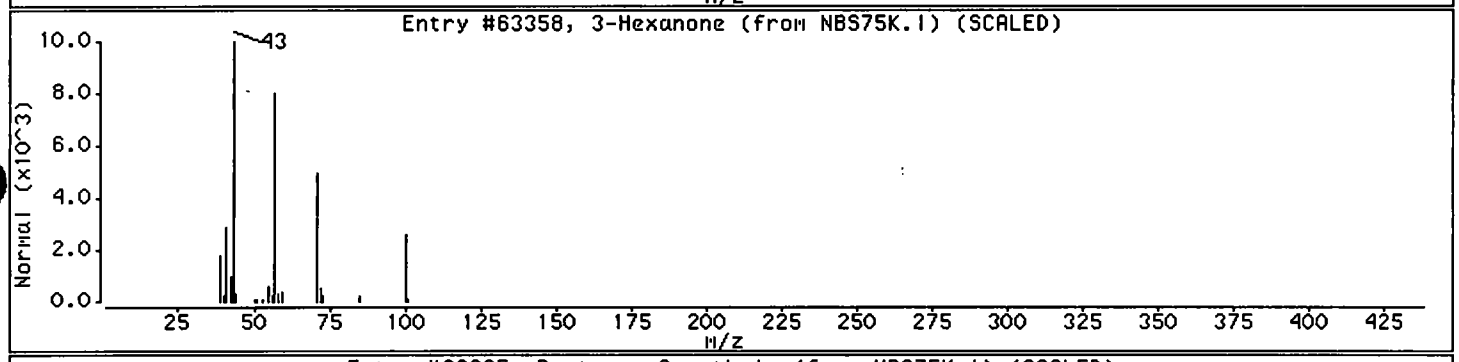
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

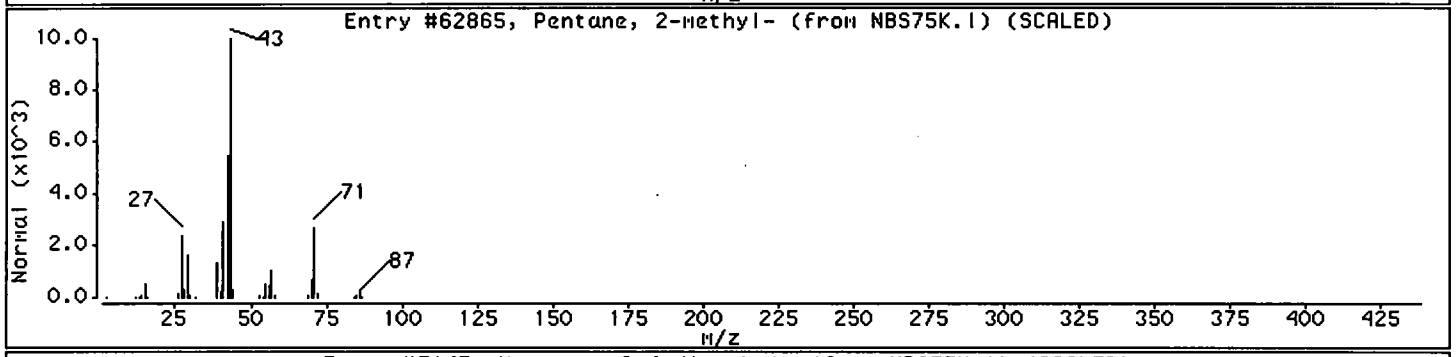
Volume Injected (uL): 2.0 Operator: GES

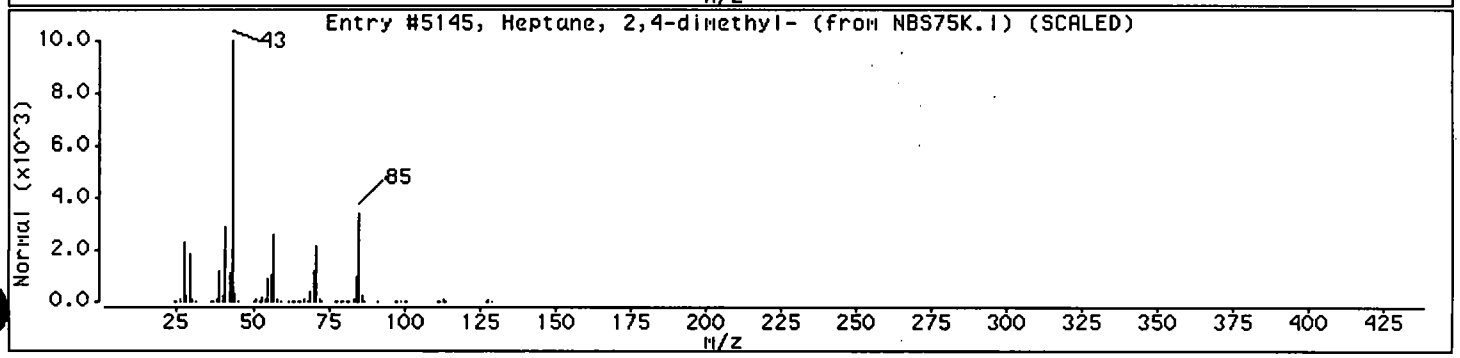
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Hexanone	589-38-8	NBS75K.l	63358	25	C6H12O	100
Pentane, 2-methyl-	107-83-5	NBS75K.l	62865	25	C6H14	86
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.l	5145	25	C9H20	128









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

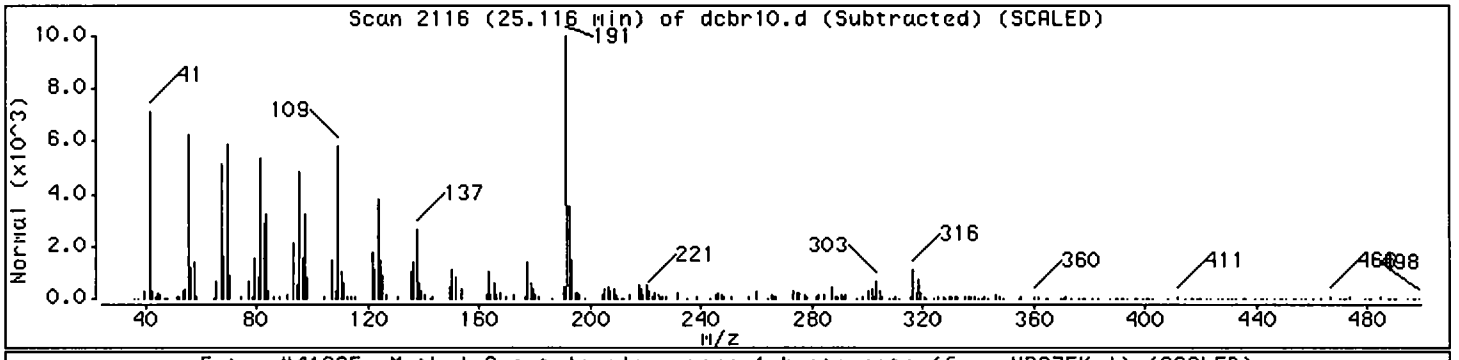
Client ID: WS-08 Instrument: gcl4.i

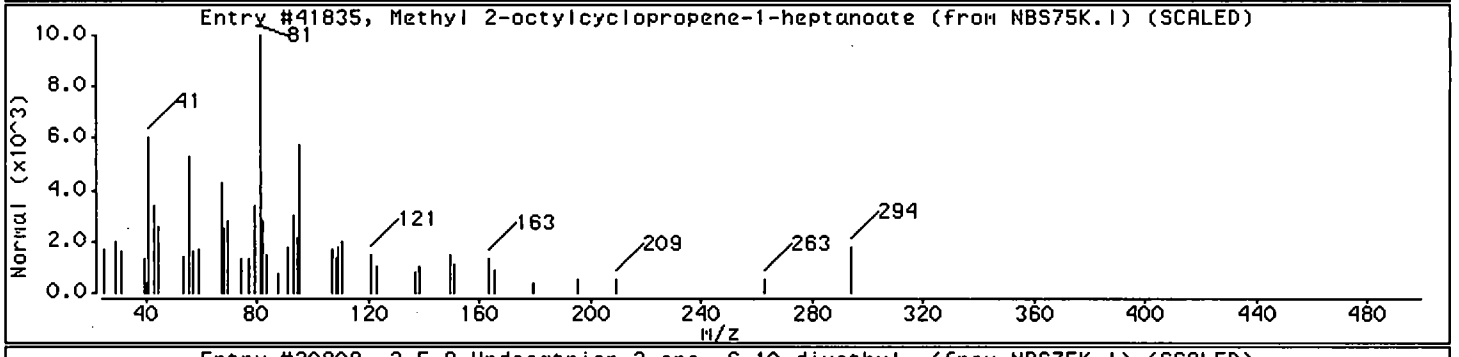
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

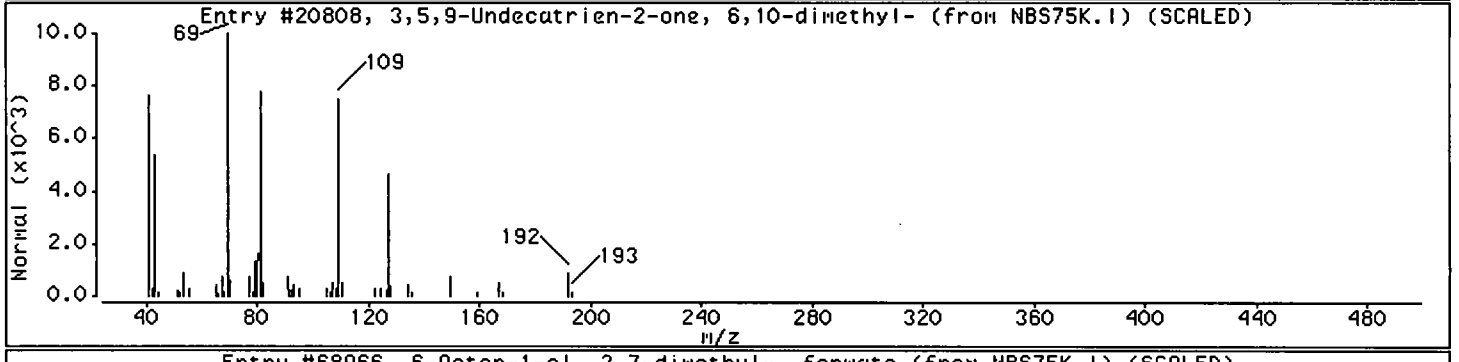
Volume Injected (uL): 2.0 Operator: GES

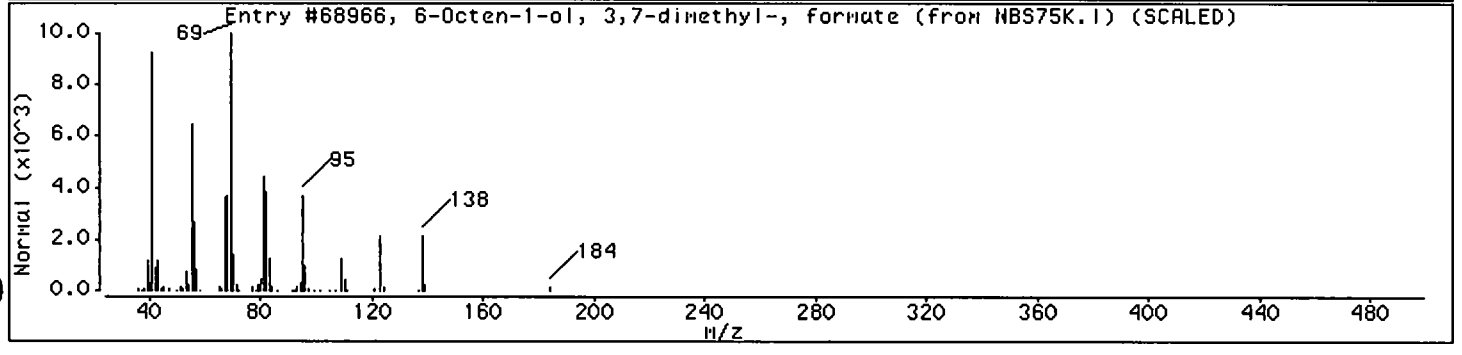
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Methyl 2-octylcyclopropene-1-heptanoate	5026-66-4	NBS75K.l	41835	46	C19H3402	294
3,5,9-Undecatrien-2-one, 6,10-dimethyl-	141-10-6	NBS75K.l	20808	45	C13H200	192
6-Octen-1-ol, 3,7-dimethyl-, formate	105-85-1	NBS75K.l	68966	45	C11H2002	184









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

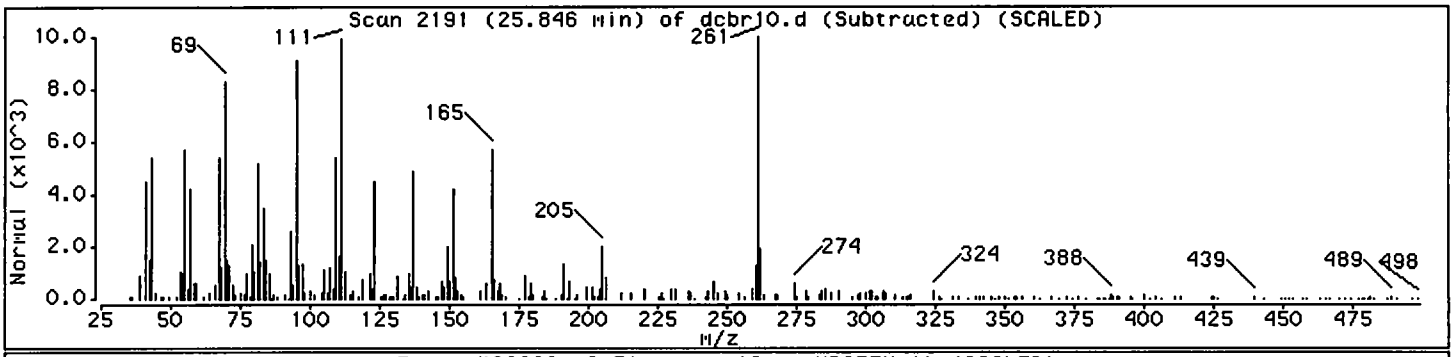
Client ID: WS-08 Instrument: gcl4.i

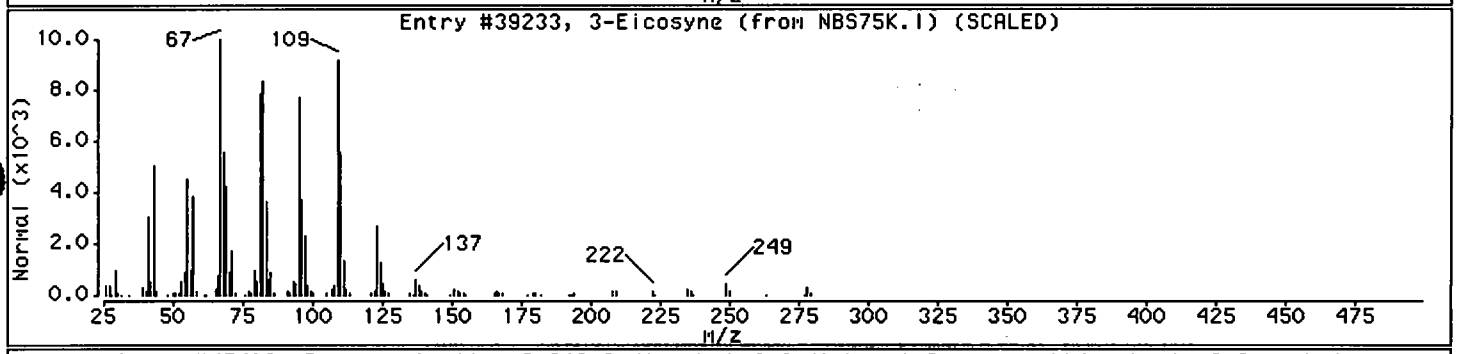
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

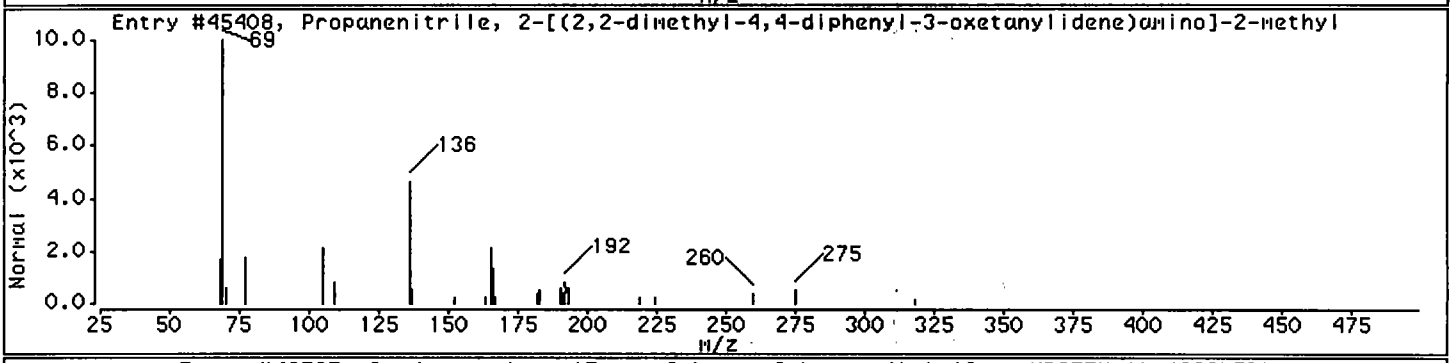
Volume Injected (uL): 2.0 Operator: GES

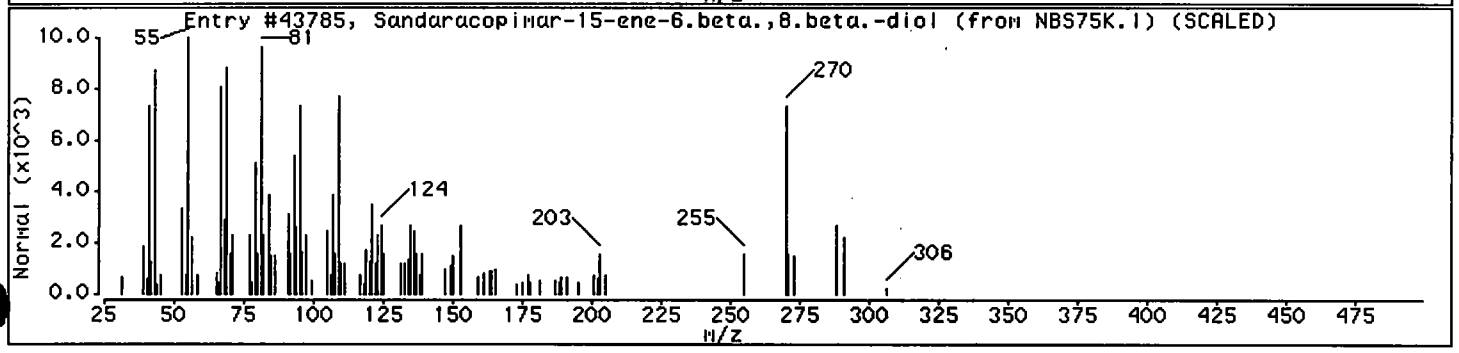
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Eicosyne	61886-66-6	NBS75K.l	39233	43	C20H38	278
Propanenitrile, 2-[(2,2-dimethyl-4,4-dip	55044-21-8	NBS75K.l	45408	42	C21H22N20	318
Sandaracopimar-15-ene-6.beta.,8.beta.-di	41756-27-8	NBS75K.l	43785	42	C20H3402	306









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

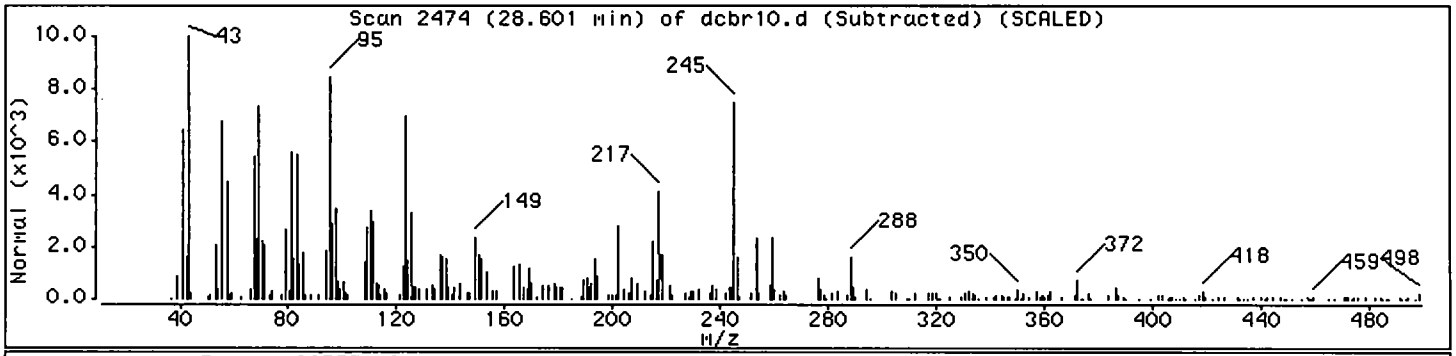
Client ID: WS-08 Instrument: gcl4.i

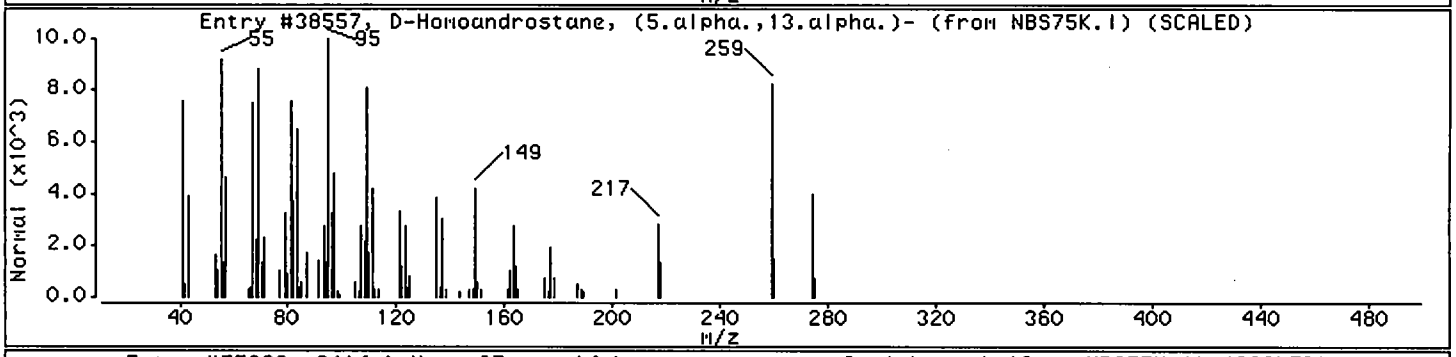
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

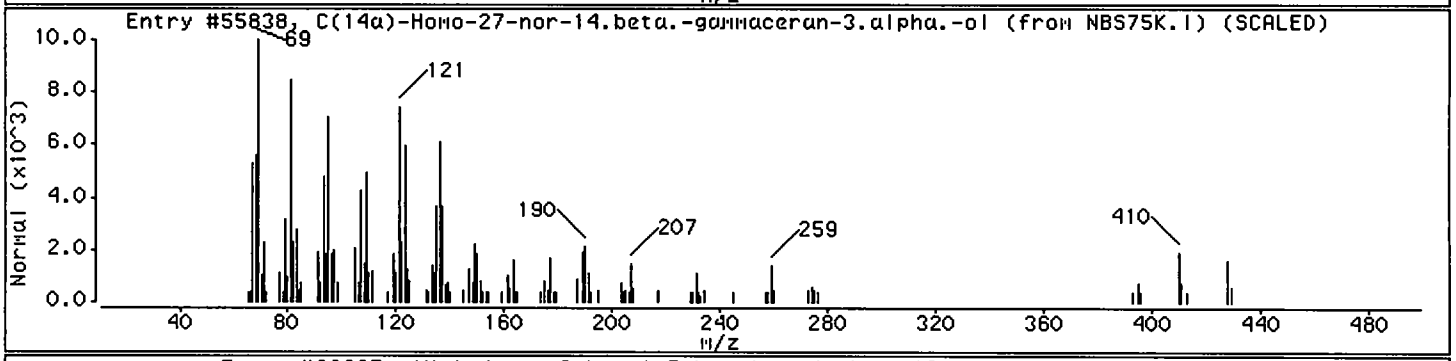
Volume Injected (uL): 2.0 Operator: GES

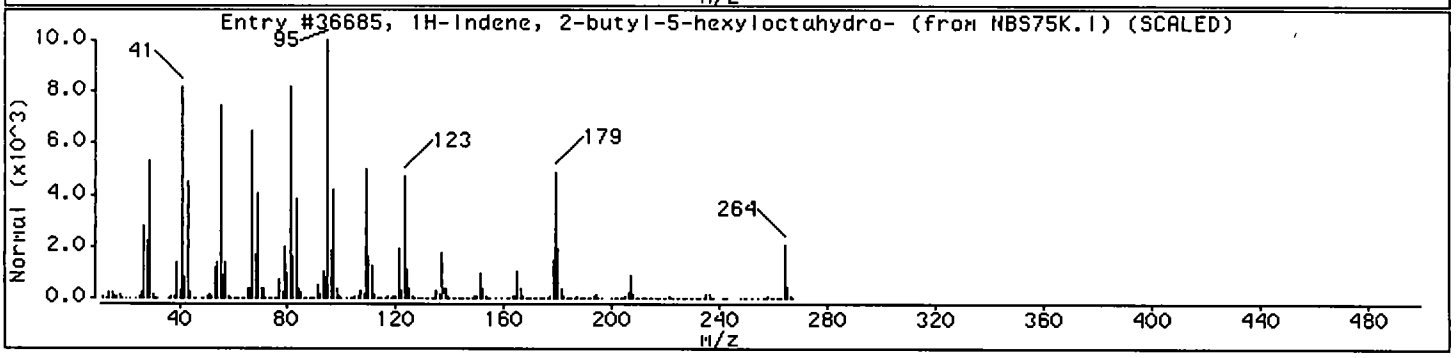
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	98	C20H34	274
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	83	C30H520	428
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	52	C19H36	264









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

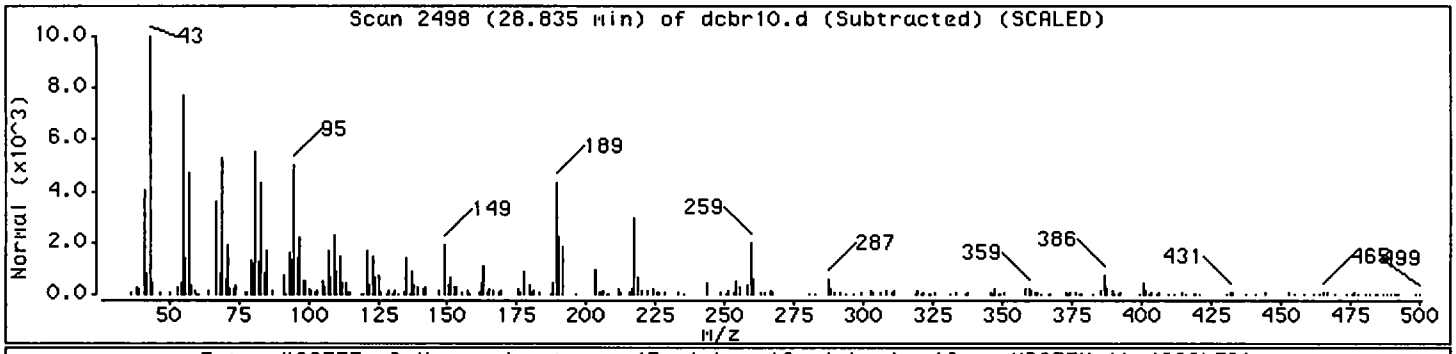
Client ID: WS-08 Instrument: gcl4.i

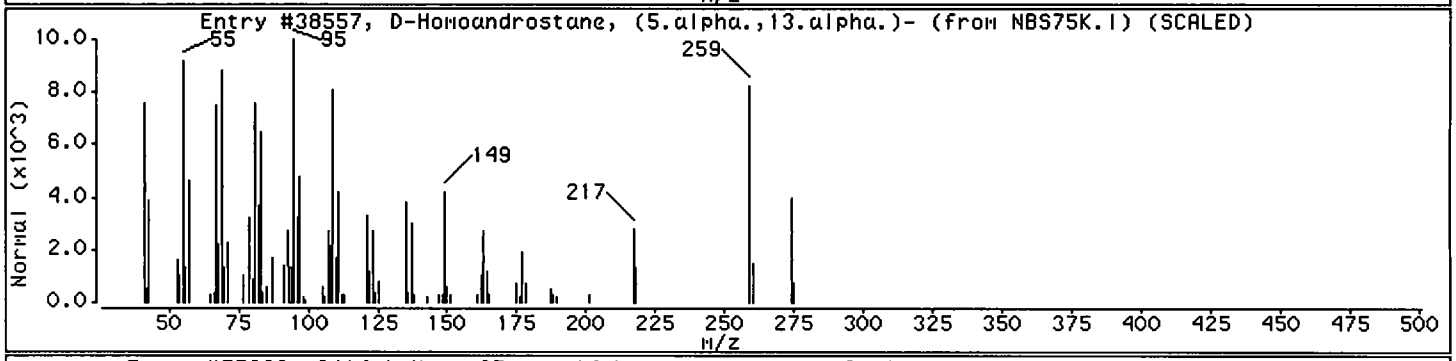
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

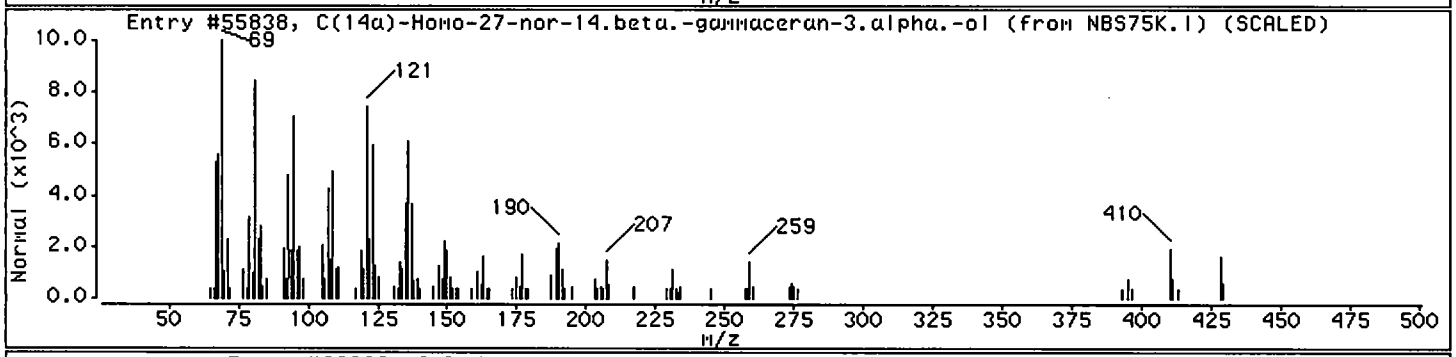
Volume Injected (uL): 2.0 Operator: GES

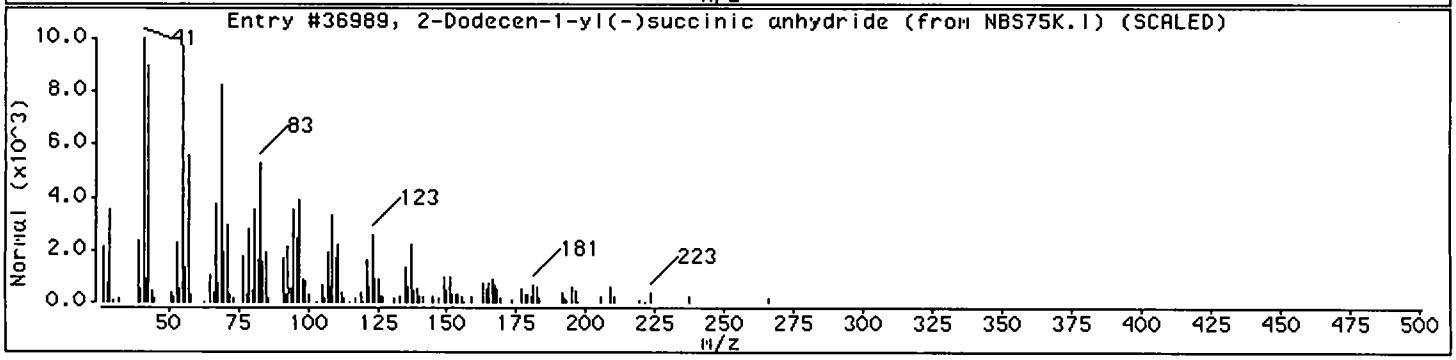
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	99	C20H34	274
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	86	C30H520	428
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	70	C16H2603	266









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

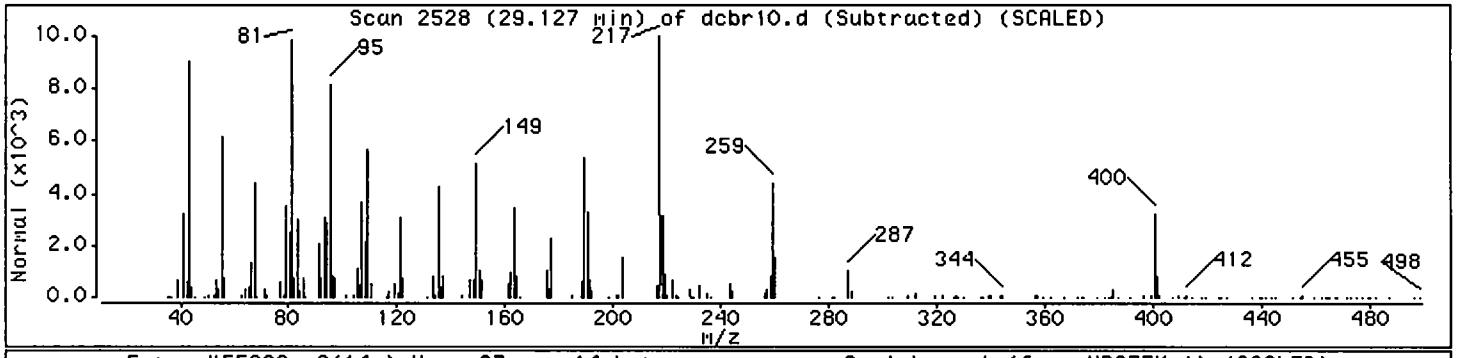
Client ID: WS-08 Instrument: gcl4.i

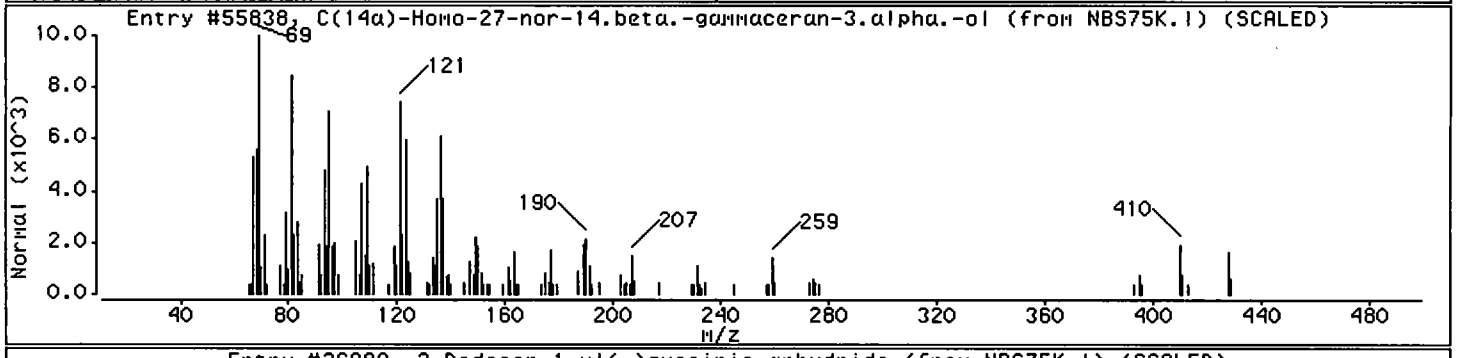
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

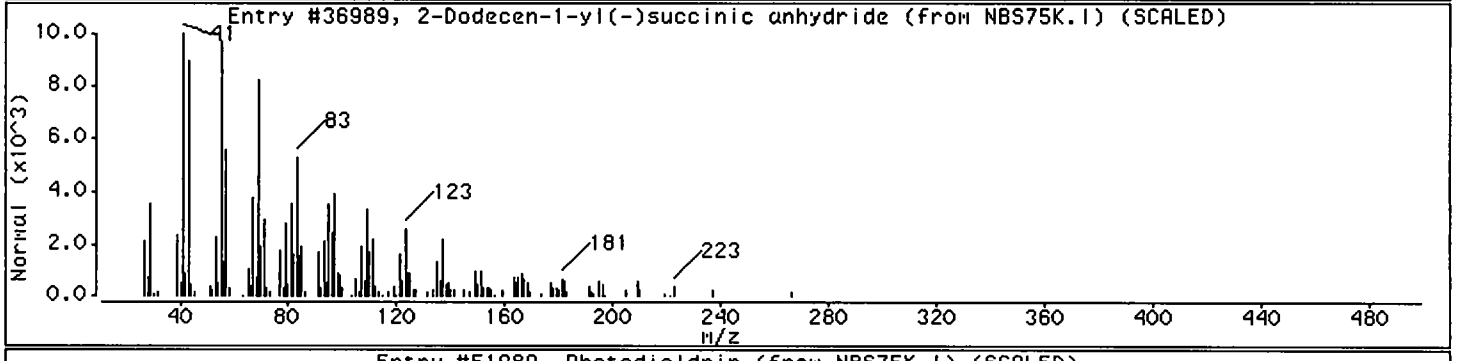
Volume Injected (uL): 2.0 Operator: GES

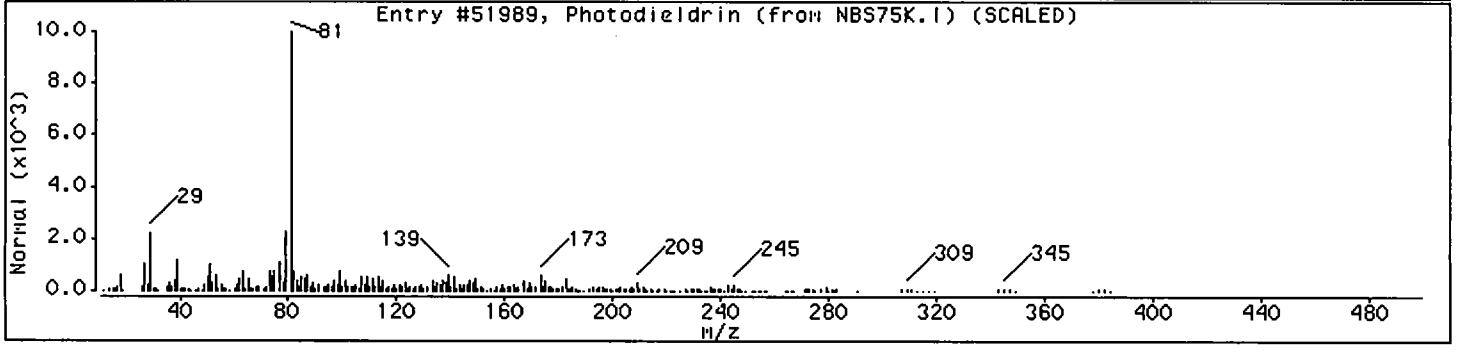
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	83	C30H52O	428
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	59	C16H26O3	266
Photodieldrin	13366-73-9	NBS75K.l	51989	56	C12H8Cl6O	378









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

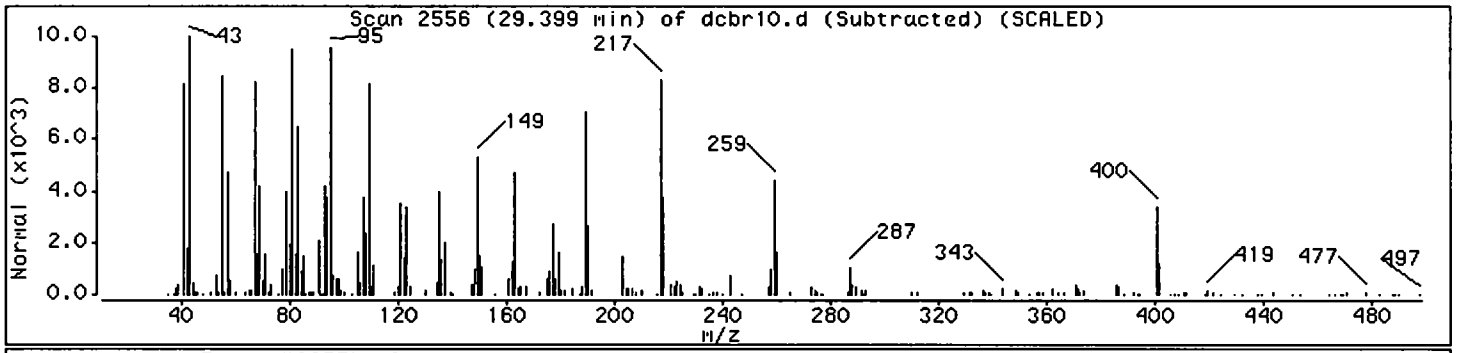
Client ID: WS-08 Instrument: gcl4.i

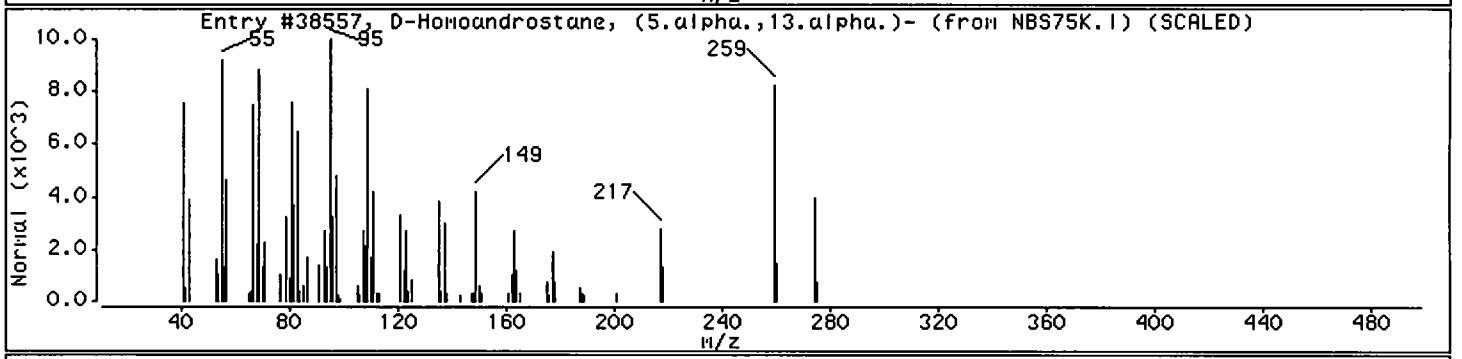
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

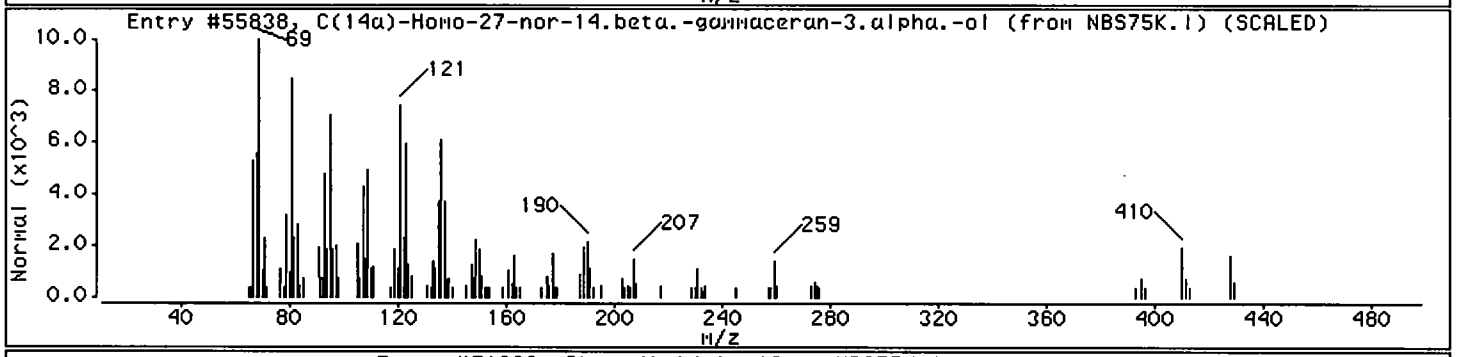
Volume Injected (uL): 2.0 Operator: GES

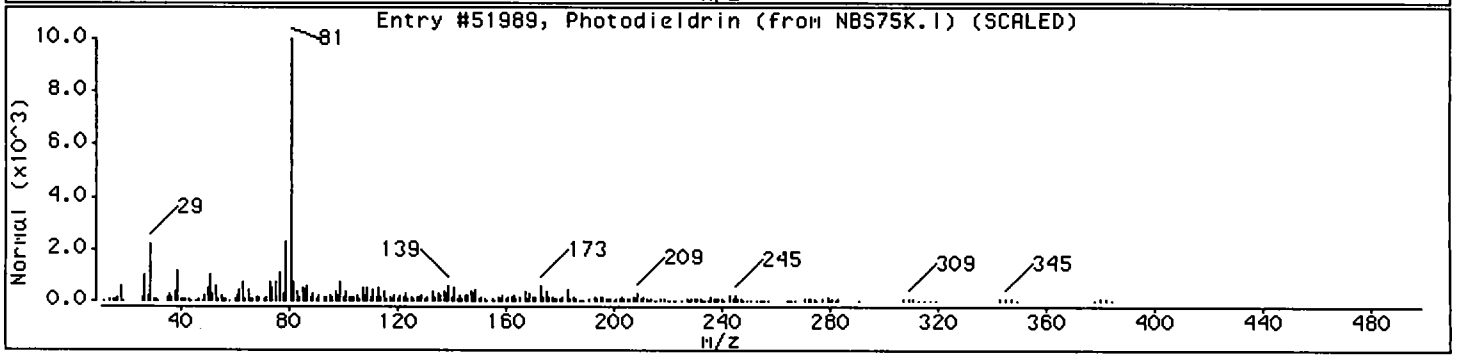
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	95	C20H34	274
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	86	C30H520	428
Photodieldrin	13366-73-9	NBS75K.l	51989	56	C12H8Cl6O	378









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

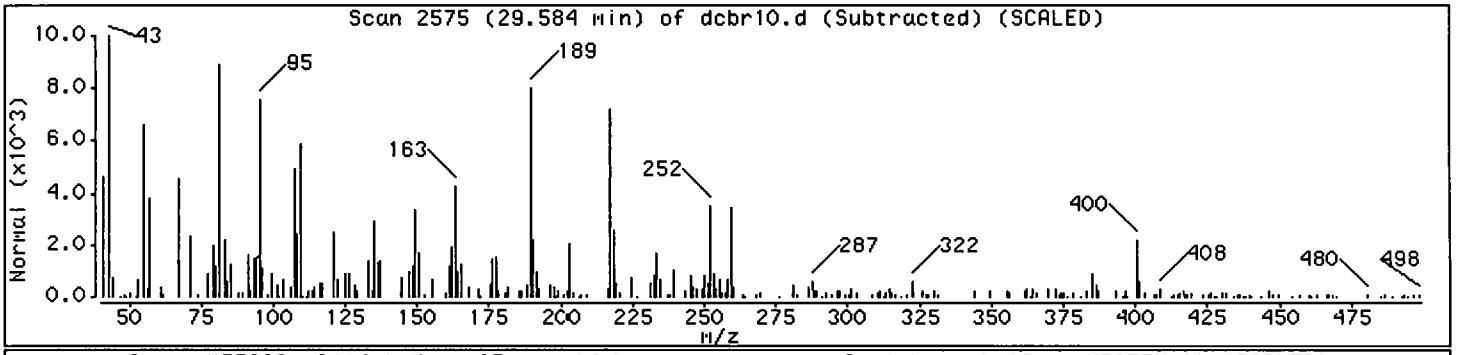
Client ID: WS-08 Instrument: gcl4.i

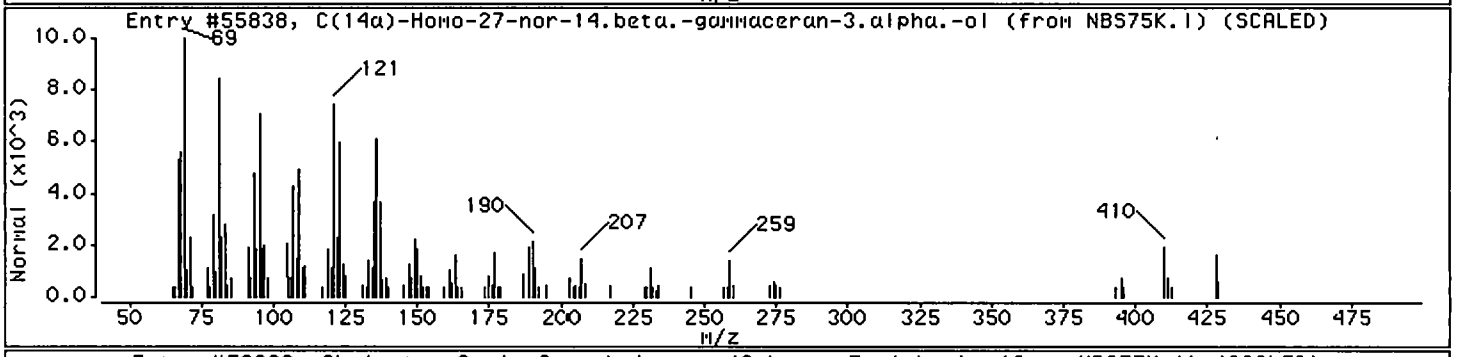
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

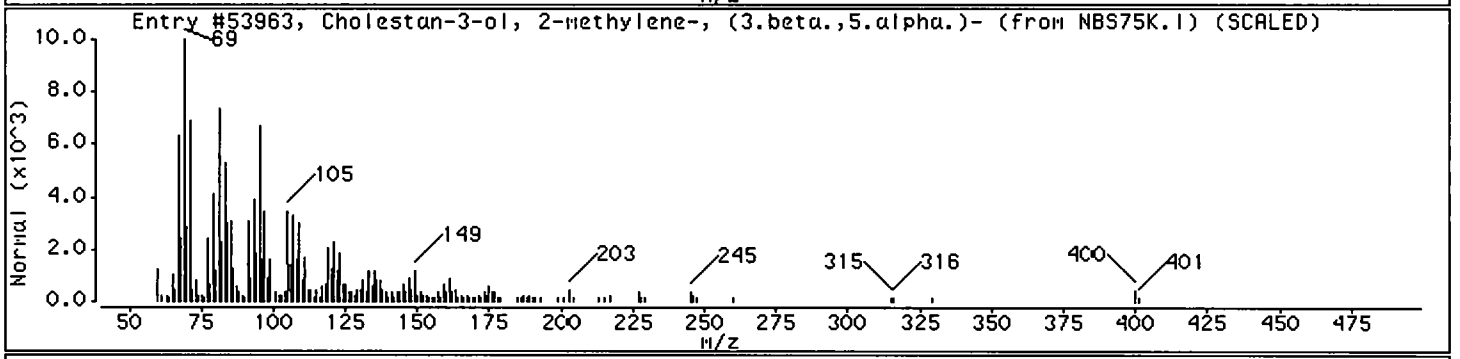
Volume Injected (uL): 2.0 Operator: GES

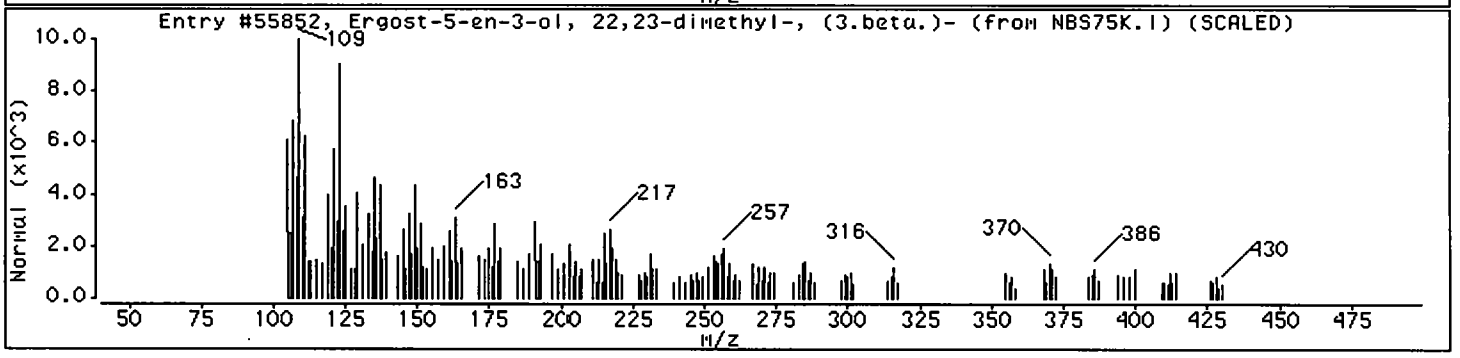
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	86	C30H520	428
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	78	C28H480	400
Ergost-5-en-3-ol, 22,23-dimethyl-, (3.be	55724-23-7	NBS75K.l	55852	58	C30H520	428









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Date : 13-DEC-1996 02:17

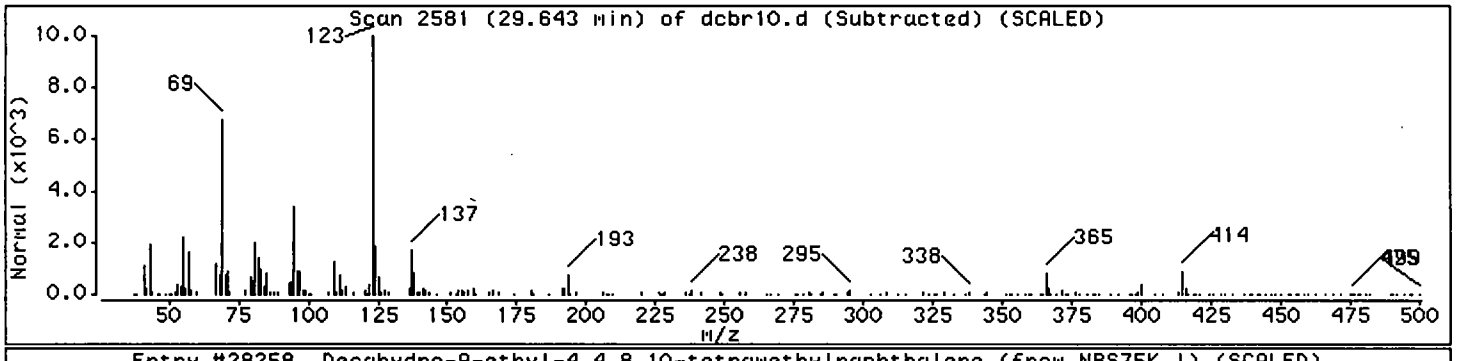
Client ID: WS-08 Instrument: gcl4.i

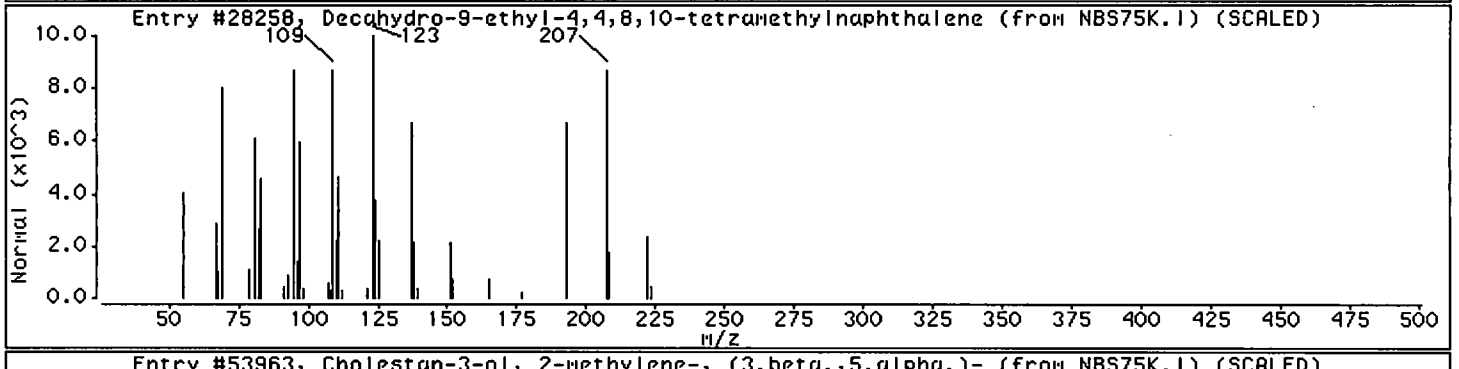
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

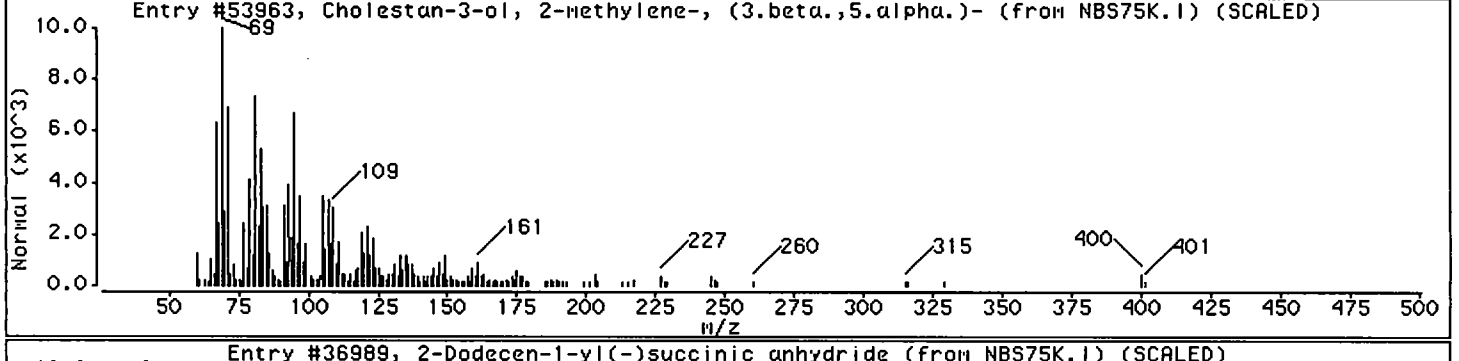
Volume Injected (uL): 2.0 Operator: GES

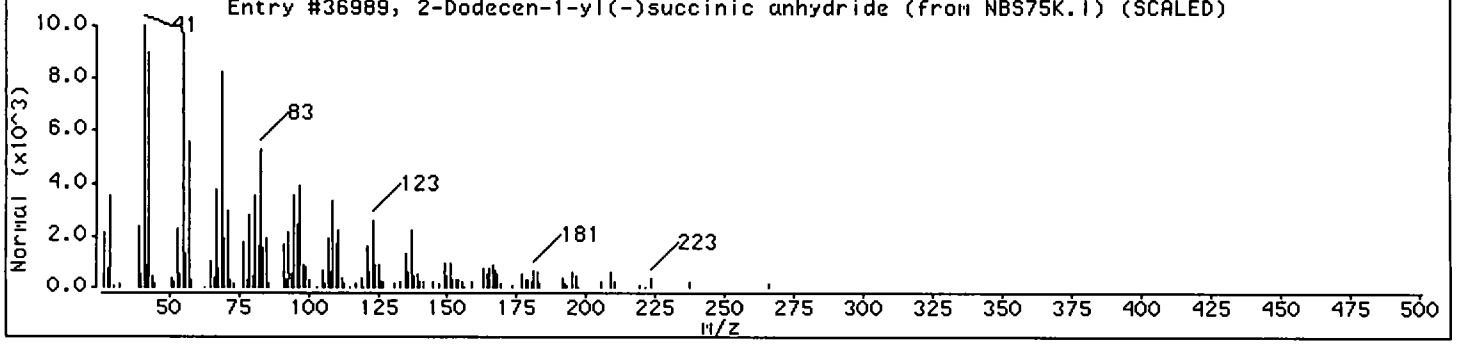
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Decahydro-9-ethyl-4,4,8,10-tetramethylna	0-00-0	NBS75K.l	28258	98	C16H30	222
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	81	C28H480	400
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	64	C16H2603	266









Data File: /chem/gc14.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

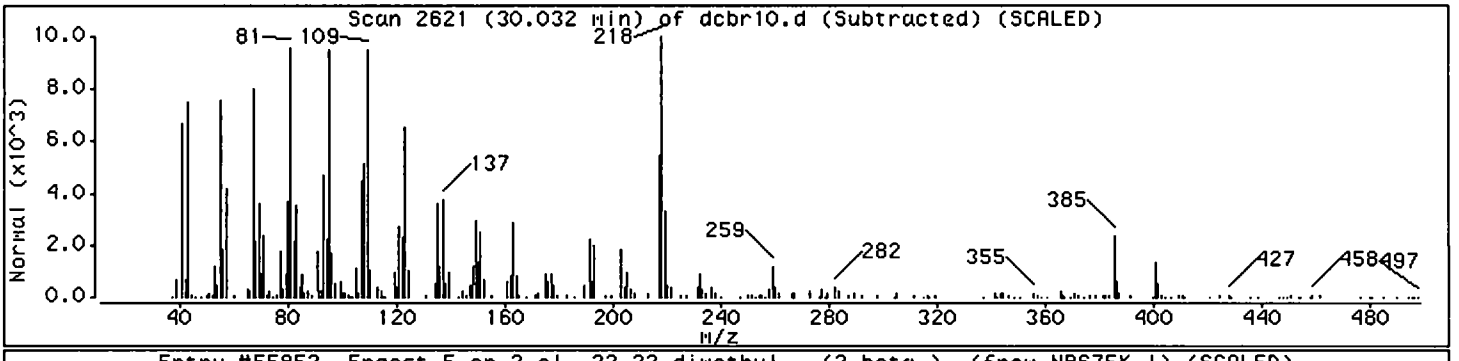
Client ID: WS-08 Instrument: gc14.i

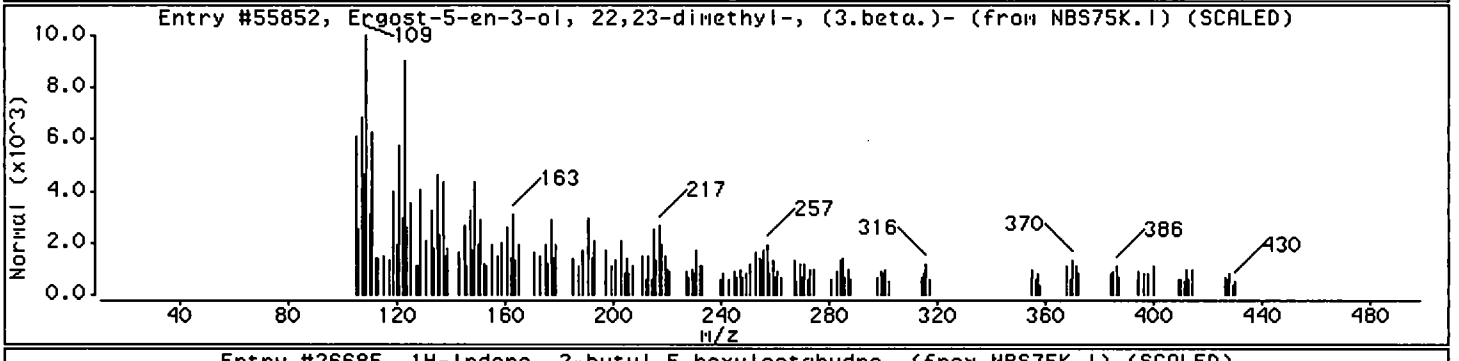
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

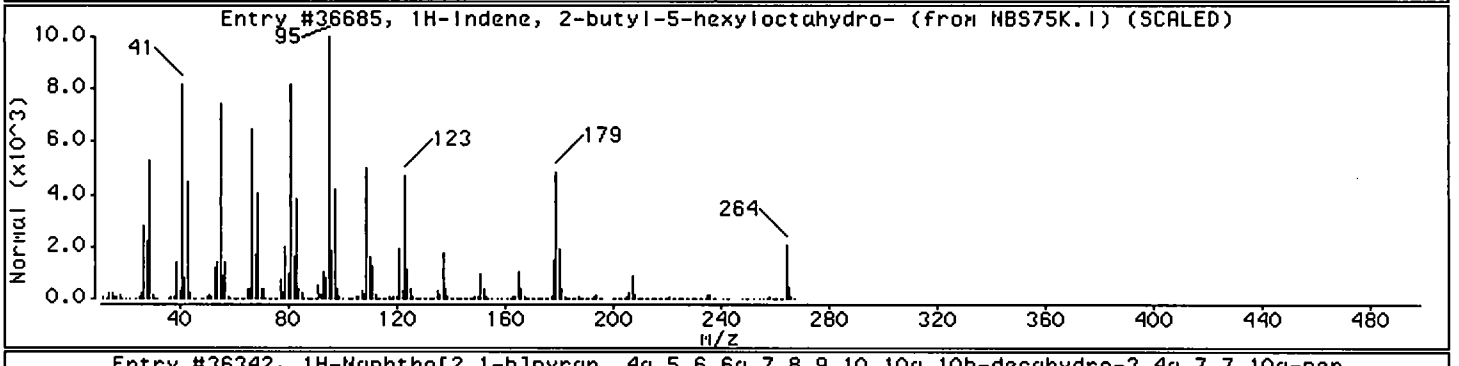
Volume Injected (uL): 2.0 Operator: GES

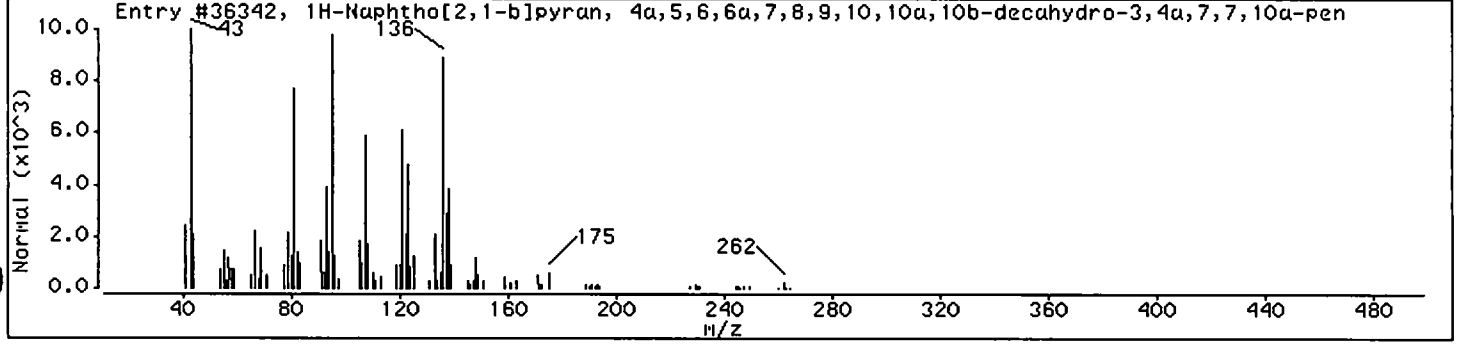
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Ergost-5-en-3-ol, 22,23-dimethyl-, (3.be	55724-23-7	NBS75K.l	55852	91	C30H52O	428
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	52	C19H36	264
1H-Naphtho[2,1-b]pyran, 4a,5,6,6a,7,8,9,	56245-50-2	NBS75K.l	36342	50	C18H30O	262









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Date : 13-DEC-1996 02:17

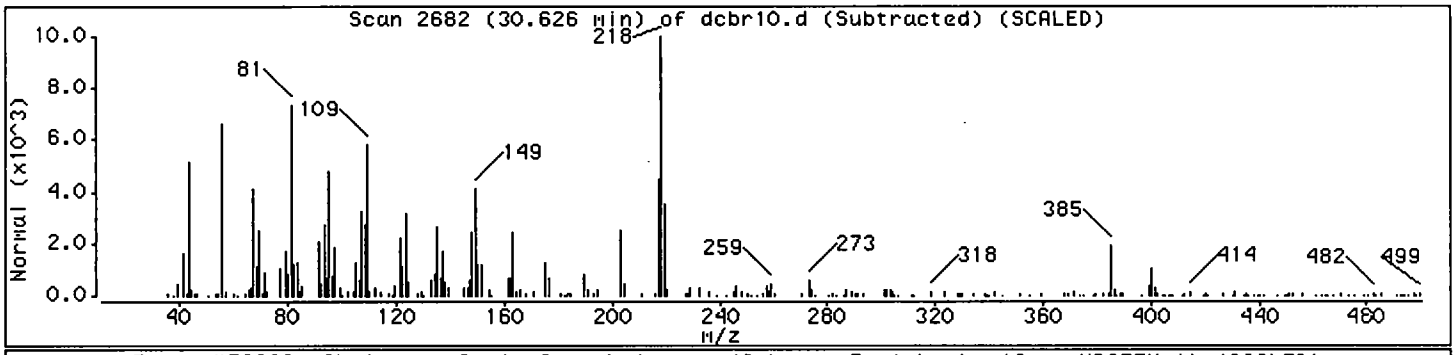
Client ID: WS-08 Instrument: gcl4.i

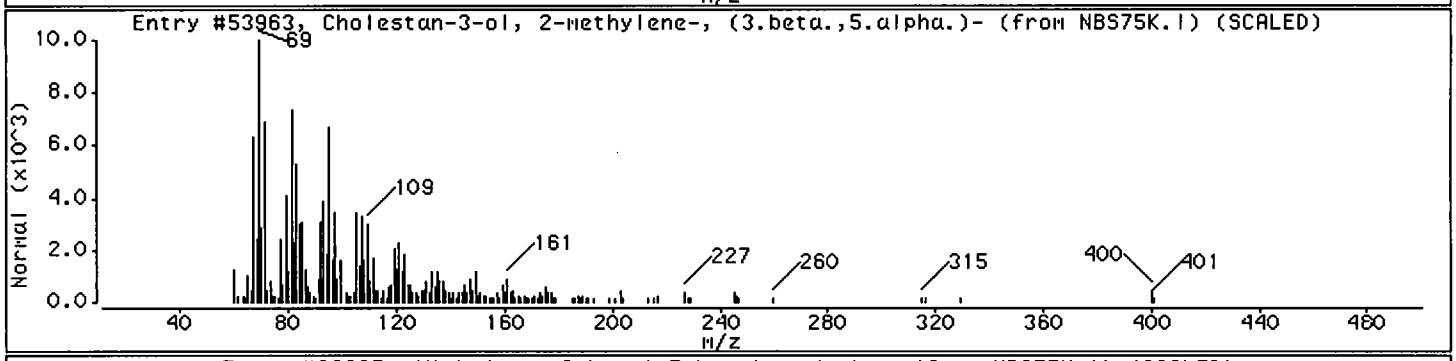
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

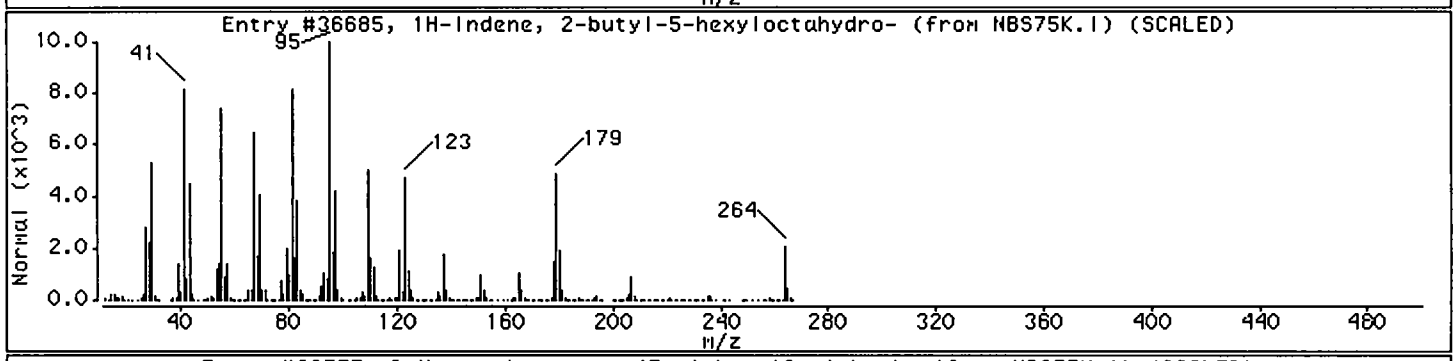
Volume Injected (uL): 2.0 Operator: GES

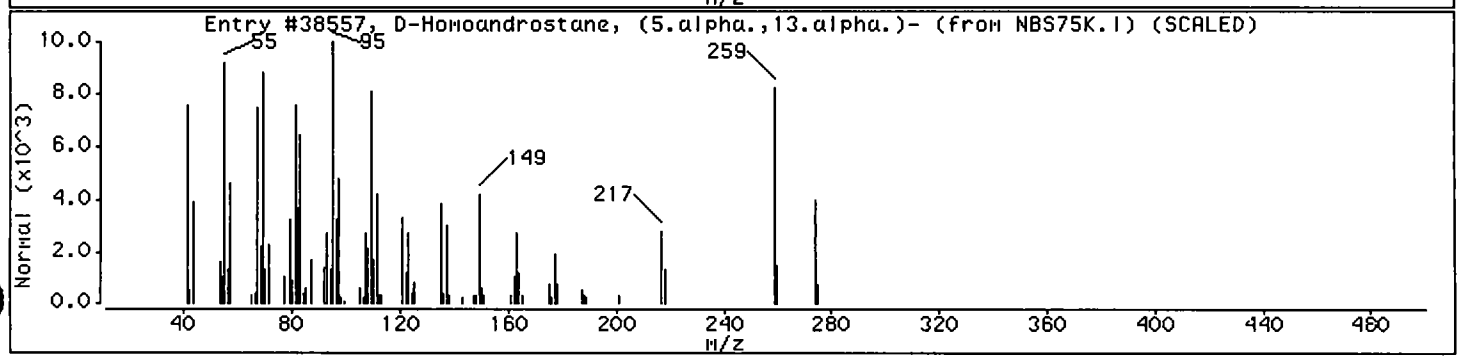
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	70	C28H480	400
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	52	C19H36	264
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	50	C20H34	274









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

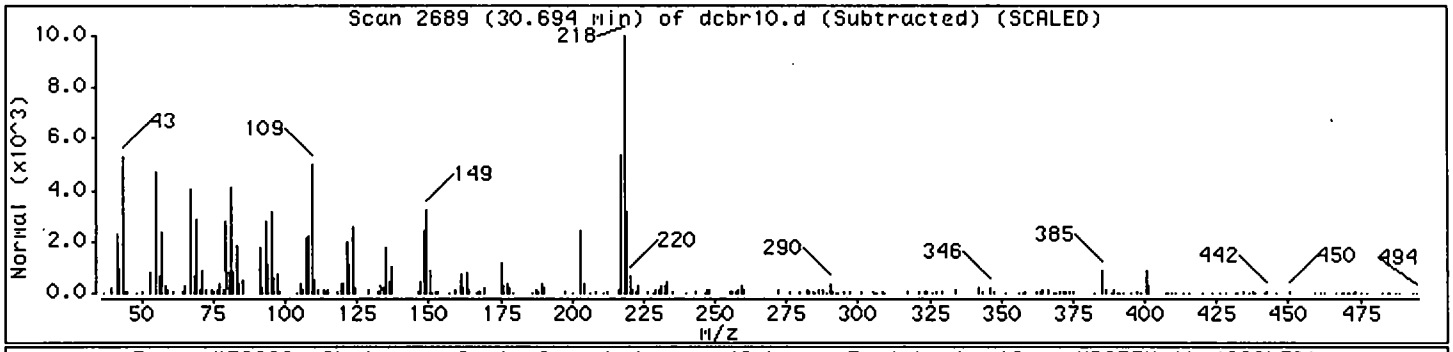
Client ID: WS-08 Instrument: gcl4.i

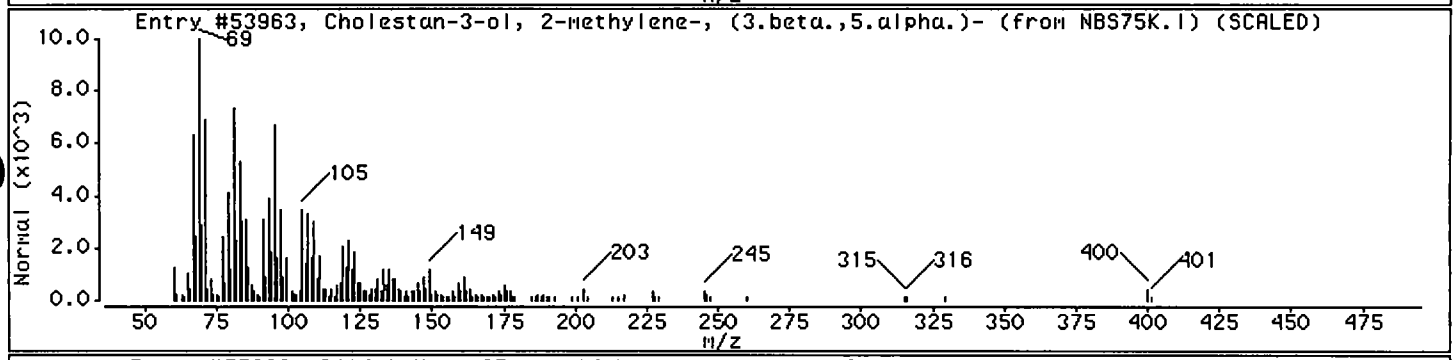
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

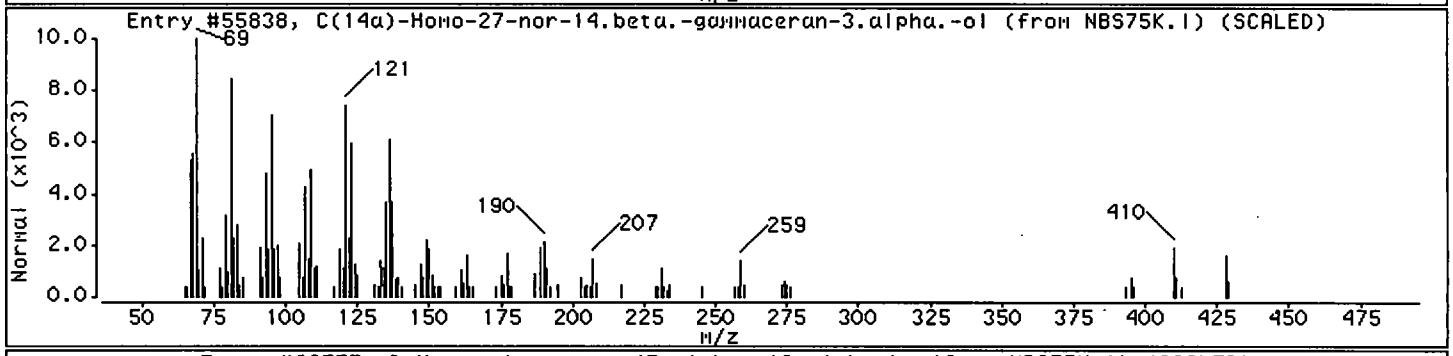
Volume Injected (uL): 2.0 Operator: GES

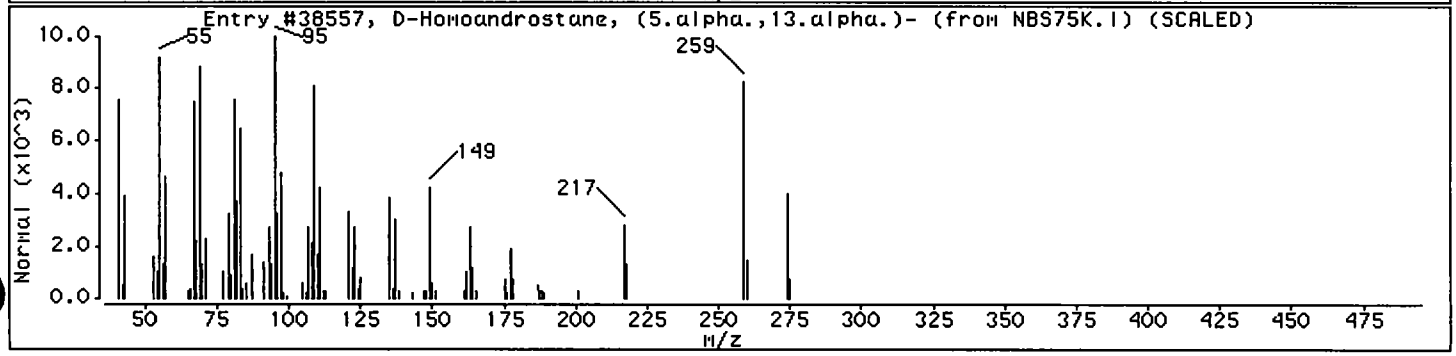
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	83	C28H480	400
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	78	C30H520	428
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	50	C20H34	274









Data File: /chem/gcl4.i/dec1296b.b/dcbr10.d

Date : 13-DEC-1996 02:17

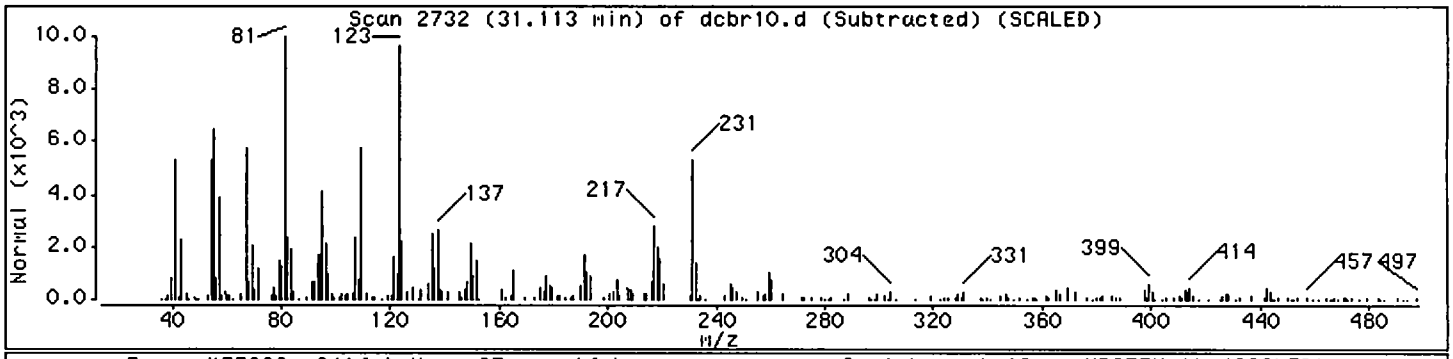
Client ID: WS-08 Instrument: gcl4.i

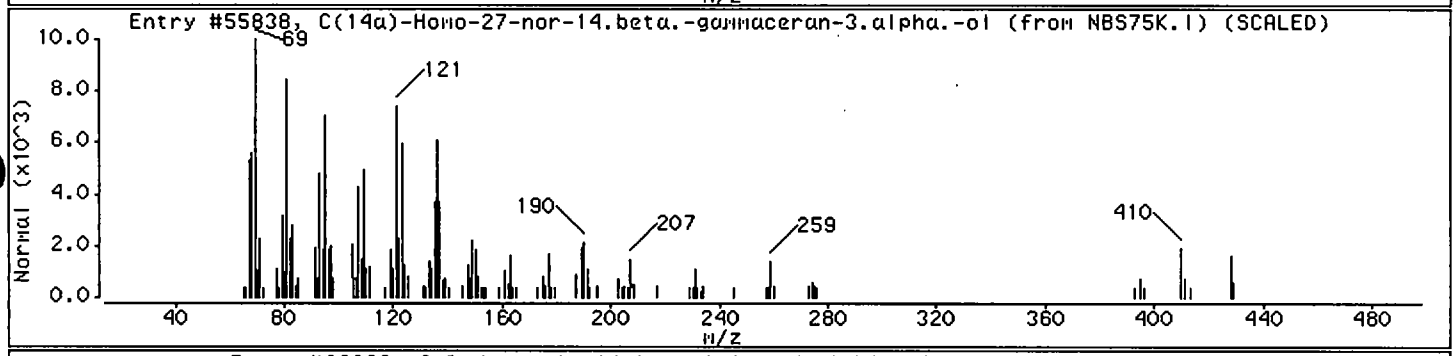
Sample Info: 9611G675-008 DFBC12,[AL=0625HS],[DC=00]

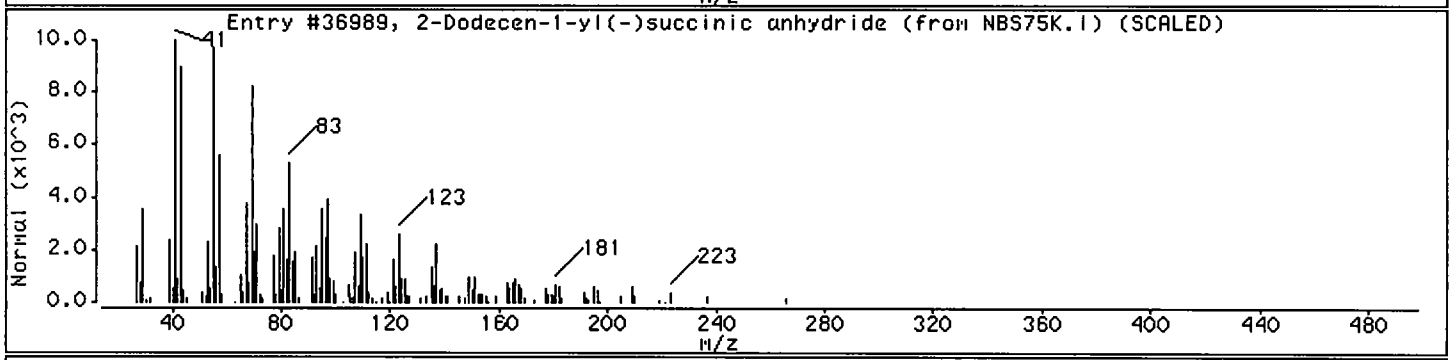
Volume Injected (uL): 2.0 Operator: GES

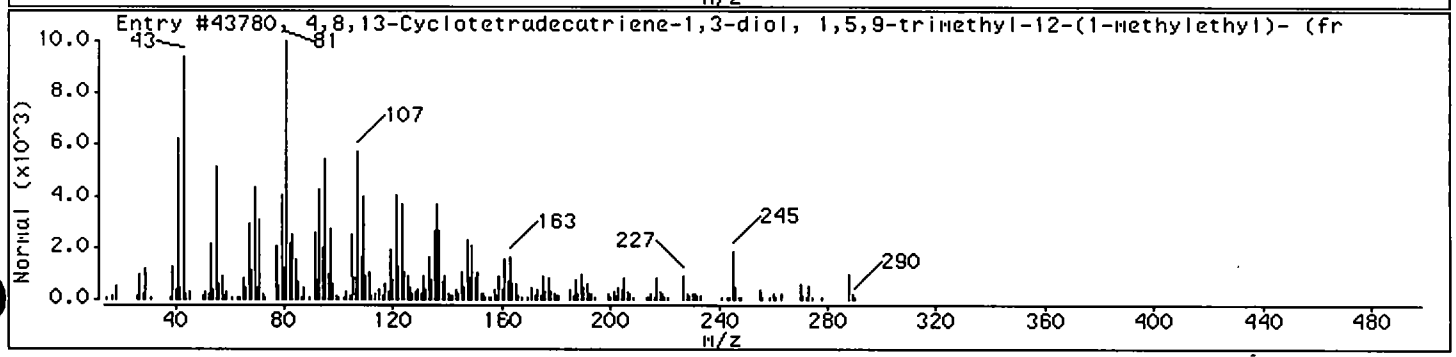
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	83	C30H520	428
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	50	C16H2603	266
4,8,13-Cyclotetradecatriene-1,3-diol, 1,	7220-78-2	NBS75K.l	43780	49	C20H3402	306









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08RE

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DCBW13

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 47 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/16/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.0

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	3100	U
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	3100	U
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	510	J
77-47-4	Hexachlorocyclopentadiene	3100	U
88-06-2	2,4,6-Trichlorophenol	3100	U
95-95-4	2,4,5-Trichlorophenol	7800	U
91-58-7	2-Chloronaphthalene	3100	U
88-74-4	2-Nitroaniline	7800	U
131-11-3	Dimethylphthalate	3100	U
208-96-8	Acenaphthylene	3100	U
606-20-2	2,6-Dinitrotoluene	3100	U
99-09-2	3-Nitroaniline	7800	U
83-32-9	Acenaphthene	3100	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WS-08RE

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DCBW13

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 47 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/16/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	7800	U
100-02-7	4-Nitrophenol	7800	U
132-64-9	Dibenzofuran	3100	U
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	3100	U
100-01-6	4-Nitroaniline	7800	U
534-52-1	4,6-Dinitro-2-methylphenol	7800	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	7800	U
85-01-8	Phenanthrene	3100	U
120-12-7	Anthracene	3100	U
86-74-8	Carbazole	3100	U
84-74-2	Di-n-butylphthalate	3100	U
206-44-0	Fluoranthene	3100	U
129-00-0	Pyrene	3100	U
85-68-7	Butylbenzylphthalate	3100	U
91-94-1	3,3'-Dichlorobenzidine	3100	U
56-55-3	Benzo(a)anthracene	3100	U
218-01-9	Chrysene	1200	J
117-81-7	bis(2-Ethylhexyl)phthalate	3100	U
117-84-0	Di-n-octylphthalate	3100	U
205-99-2	Benzo(b)fluoranthene	3100	U
207-08-9	Benzo(k)fluoranthene	3100	U
50-32-8	Benzo(a)pyrene	3100	U
193-39-5	Indeno(1,2,3-cd)pyrene	3100	U
53-70-3	Dibenzo(a,h)anthracene	3100	U
191-24-2	Benzo(g,h,i)perylene	3100	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WS-08RE

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 9611G675-008

Sample wt/vol: 30.2 (g/mL) G Lab File ID: DCBW13

Level: (low/med) LOW Date Received: 11/21/96

% Moisture: 47 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/16/96

Injection Volume: 2.0(uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 6.0

Number TICs found: 20

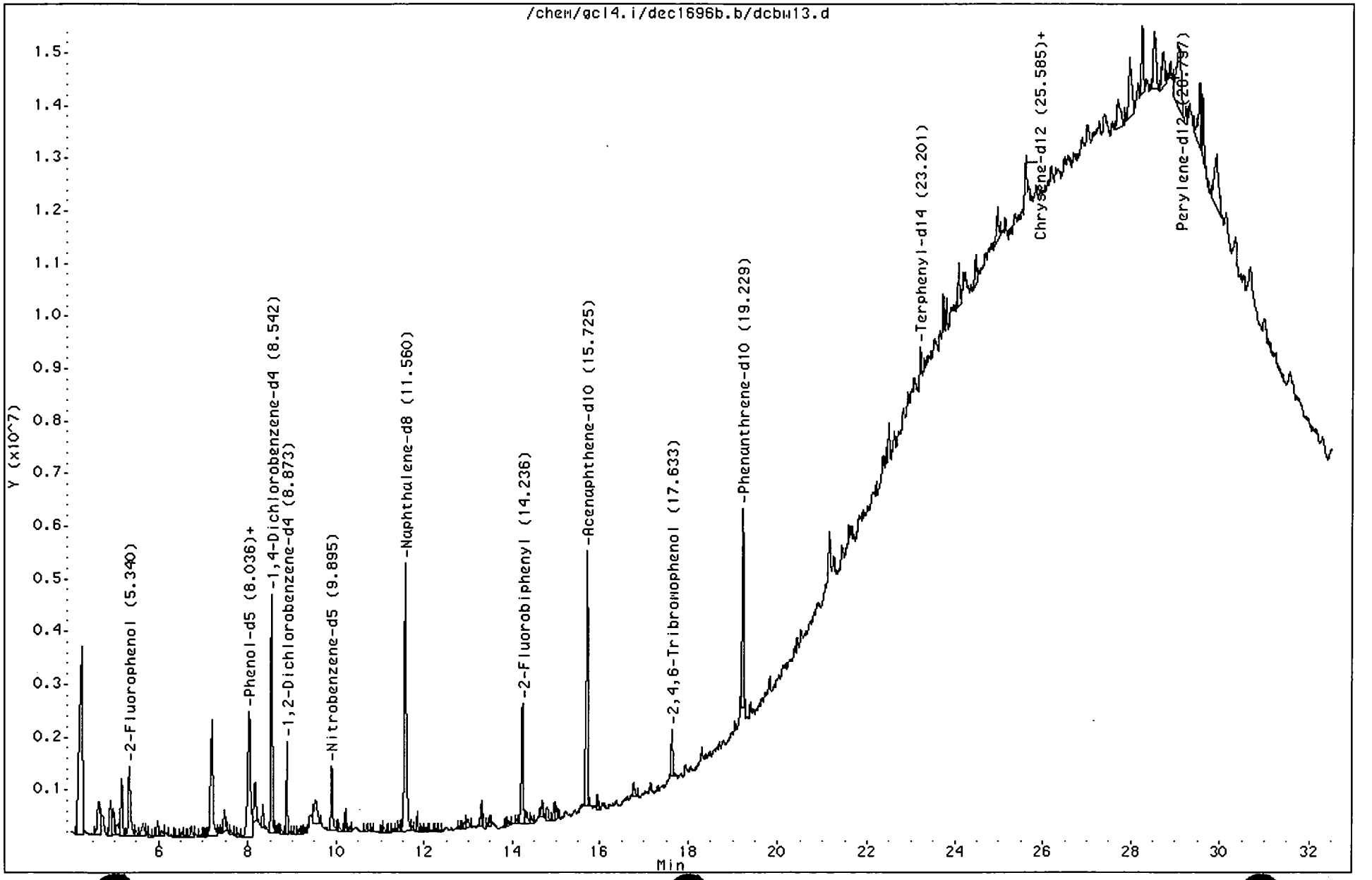
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN KETONE	4.27	10000	JBA
2.	UNKNOWN HYDROCARBON	4.66	1900	JB
3.	UNKNOWN HYDROCARBON	4.91	1300	JB
4.	UNKNOWN HYDROCARBON	4.98	840	JB
5.	UNKNOWN HYDROCARBON	5.16	1800	JB
6.	UNKNOWN	7.20	4800	J
7.	UNKNOWN	7.47	670	JB
8.	UNKNOWN	8.16	1300	J
9.	UNKNOWN	9.53	1600	J
10.	UNKNOWN	24.08	1500	J
11.	UNKNOWN	24.46	1400	J
12.	UNKNOWN	27.68	2700	J
13.	UNKNOWN	27.95	4000	J
14.	UNKNOWN	28.23	3000	J
15.	UNKNOWN	28.50	3900	J
16.	UNKNOWN	28.70	2500	J
17.	UNKNOWN	29.06	7300	J
18.	UNKNOWN HYDROCARBON	29.53	3900	J
19.	UNKNOWN	29.58	2600	J
20.	UNKNOWN	29.90	5700	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

330

Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d
Date : 16-DEC-1996 22:47
Client ID: WS-08RE
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GLR
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1696b.b/dcbw13.d
Lab Smp Id: 9611G675-008 Client Smp ID: WS-08RE
Inj Date : 16-DEC-1996 22:47
Operator : GLR Inst ID: gcl4.i
Smp Info : 9611G675-008 DFAC16,[AL=0625HS],[DC=AI]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1696b.b/390.m
Meth Date : 17-Dec-1996 01:42 swaneyg Quant Type: ISTD
Cal Date : 16-DEC-1996 13:23 Cal File: dgac16.d
Als bottle: 13
Dil Factor: 5.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.200	Weigth of sample extracted (g)
M	46.600	% Moisture

WAS 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	8.542	8.520	(1.000)	1573469	40.000	
* 26 Naphthalene-d8	136.00	11.560	11.537	(1.000)	5549584	40.000	
* 41 Acenaphthene-d10	164.00	15.725	15.684	(1.000)	2901432	40.000	
* 56 Phenanthrene-d10	188.00	19.229	19.178	(1.000)	4086266	40.000	
* 67 Chrysene-d12	240.00	25.585	25.427	(1.000)	1327099	40.000	
* 75 Perylene-d12	264.00	28.797	28.522	(1.000)	760510	40.000	
$ 1 2-Fluorophenol	112.00	5.340	5.269	(0.625)	1222598	24.587	3811.5
$ 2 Phenol-d5	99.00	8.017	7.917	(0.938)	1491465	24.608	3814.7
$ 5 2-Chlorophenol-d4	132.00	8.036	7.975	(0.941)	1323786	26.810	4156.1
$ 10 1,2-Dichlorobenzene-d4	152.00	8.873	8.851	(1.039)	544175	16.383	2539.8(a)
$ 17 Nitrobenzene-d5	82.00	9.895	9.883	(0.856)	964328	16.909	2621.3(a)
$ 34 2-Fluorobiphenyl	172.00	14.236	14.214	(0.905)	1737783	20.580	3190.3
$ 52 2,4,6-Tribromophenol	330.00	17.633	17.572	(1.121)	338703	28.366	4397.3
$ 64 Terphenyl-d14	244.00	23.201	23.101	(0.907)	781930	24.759	3838.2
30 2-Methylnaphthalene	142.00	13.282	13.251	(1.149)	276257	3.320	514.67(a)
69 Chrysene	228.00	25.615	25.485	(1.001)	308243	7.883	1222.0(aH)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

Client ID: WS-08RE

Instrument: gcl4.i

Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

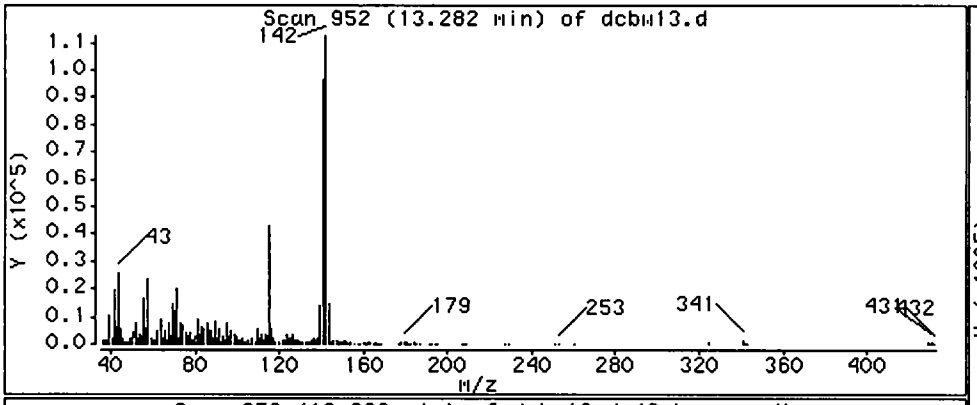
Volume Injected (uL): 2.0

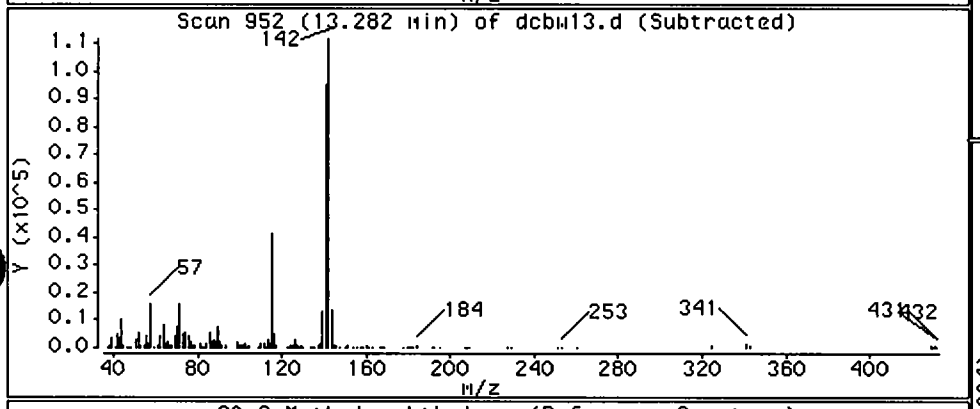
Operator: GLR

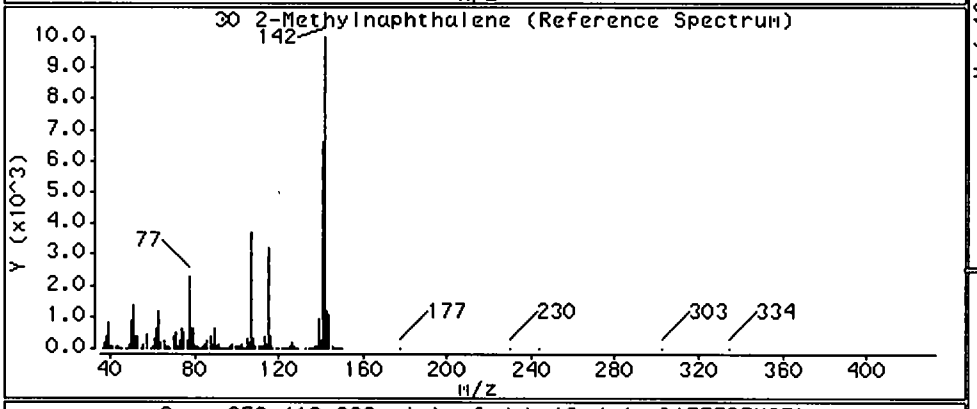
Column phase:

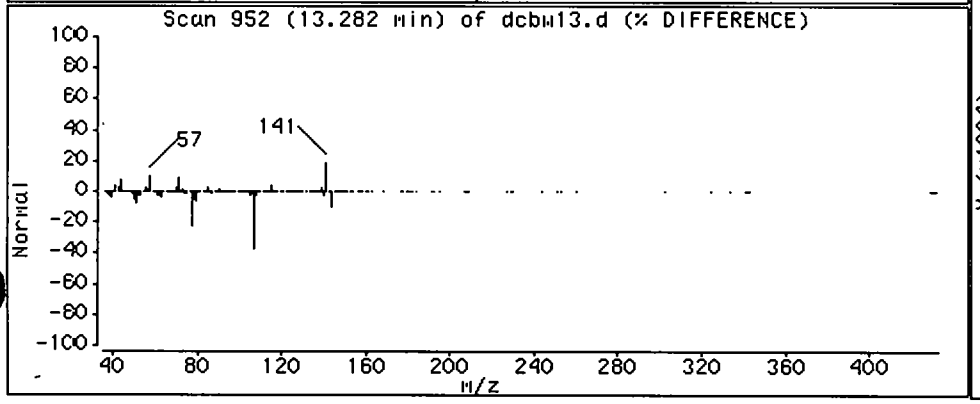
Column diameter: 2.00

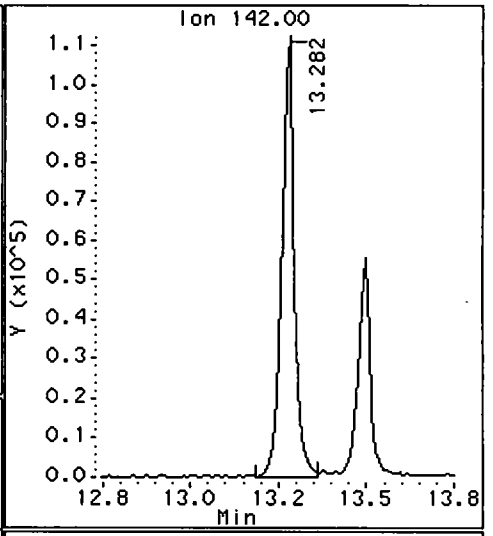
30 2-Methylnaphthalene

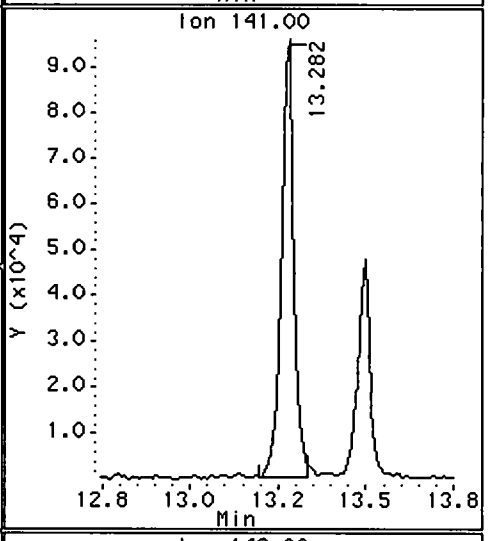


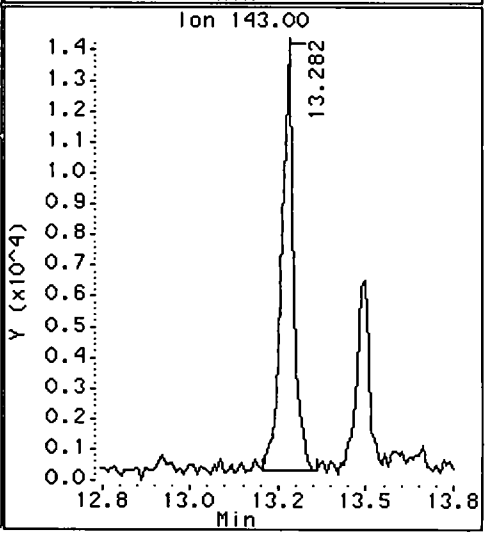












Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

Client ID: WS-08RE

Instrument: gcl4.i

Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

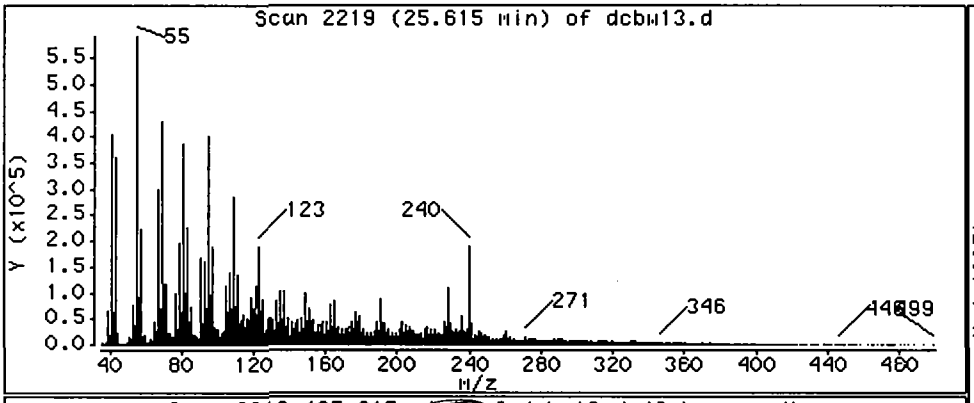
Volume Injected (uL): 2.0

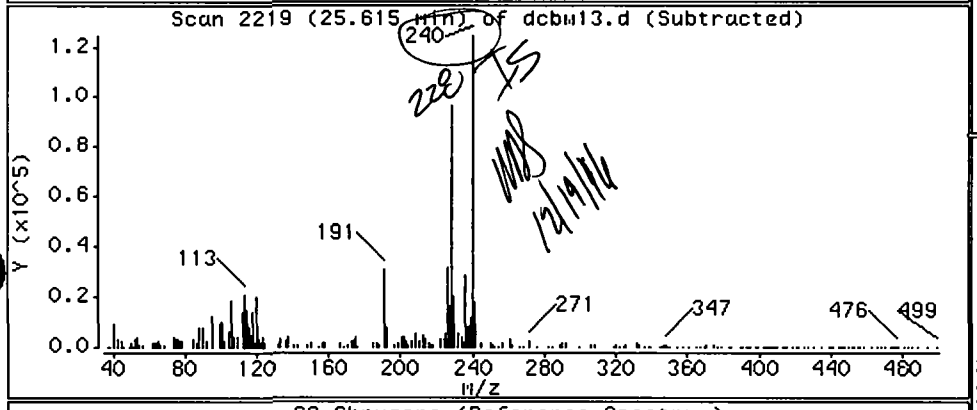
Operator: GLR

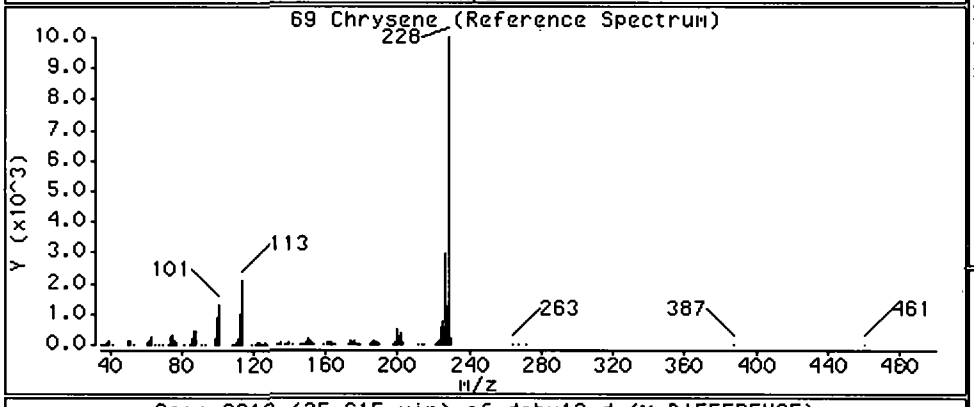
Column phase:

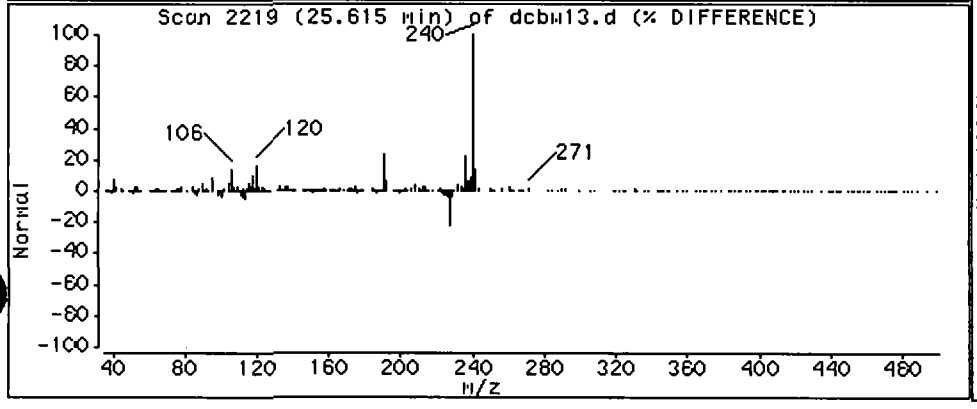
Column diameter: 2.00

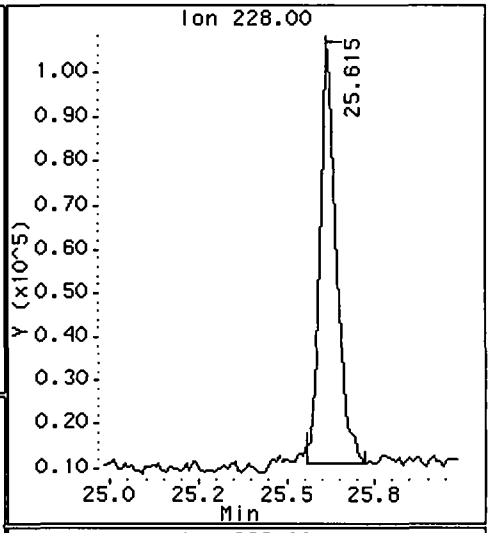
69 Chrysene

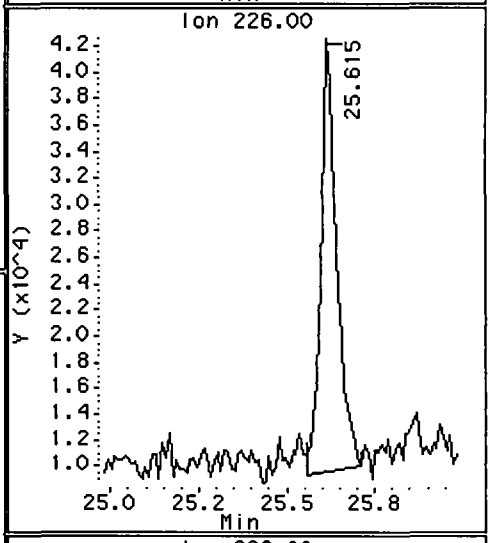


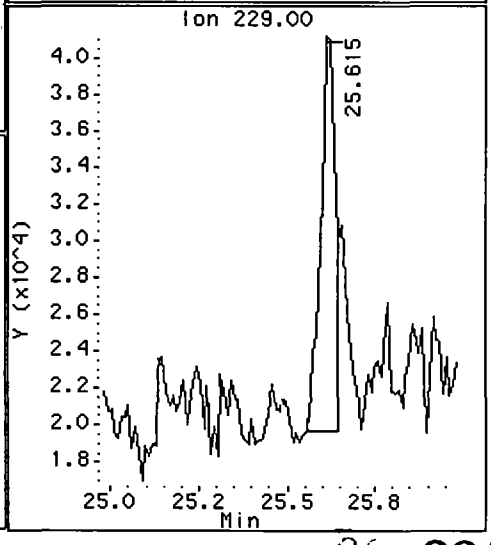












Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1696b.b/dcbw13.d
Lab Smp Id: 9611G675-008 Client Smp ID: WS-08RE
Inj Date : 16-DEC-1996 22:47
Operator : GLR Inst ID: gcl4.i
Smp Info : 9611G675-008 DFAC16,[AL=0625HS],[DC=AI]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1696b.b/390.m
Meth Date : 18-Dec-1996 23:46 squiresb
Cal Date : 16-DEC-1996 13:23 Cal File: dgac16.d
Als bottle: 13
Dil Factor: 5.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.200	Weigth of sample extracted (g)
M	46.600	% Moisture

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	8.542	10171195	40.000
* 56 Phenanthrene-d10	19.229	7666918	40.000

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Ketone					CAS #:		
4.269	16638597	65.434	10144	0		0	8
Unknown Hydrocarbon					CAS #:		
4.659	3151200	12.393	1921.1	0		0	8
Unknown Hydrocarbon					CAS #:		
4.912	2155959	8.479	1314.4	0		0	8

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
4.980	1375515	5.409	838.58	0		0	8
Unknown Hydrocarbon					CAS #:		
5.165	2929797	11.522	1786.1	0		0	8
Unknown					CAS #:		
7.199	7964701	31.322	4855.7	0		0	8
Unknown					CAS #:		
7.472	1096391	4.312	668.41	0		0	8
Unknown					CAS #:		
8.163	2198292	8.645	1340.2	0		0	8
Unknown					CAS #:		
9.525	2591678	10.192	1580.0	0		0	8
Unknown					CAS #:		
24.077	1908978	9.960	1543.9	0		0	56(ML)
Unknown					CAS #:		
24.456	1766601	9.217	1428.8	0		0	56(ML)
Unknown					CAS #:		
27.678	3313157	17.285	2679.6	0		0	56(ML)
Unknown					CAS #:		
27.951	4979671	25.980	4027.5	0		0	56(ML)
Unknown					CAS #:		
28.233	3766336	19.650	3046.1	0		0	56(ML)
Unknown					CAS #:		
28.496	4870751	25.412	3939.4	0		0	56(ML)
Unknown					CAS #:		
28.700	3083828	16.089	2494.1	0		0	56(ML)
Unknown					CAS #:		
29.060	8988989	46.898	7270.1	0		0	56(ML)
Unknown Hydrocarbon					CAS #:		
29.527	4864992	25.382	3934.7	0		0	56(ML)
Unknown					CAS #:		
29.576	3215372	16.775	2600.5	0		0	56(ML)

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown				CAS #:			
29.897	7093546	37.008	5737.1	0		0	56(ML)

QC Flag Legend

M - Compound response manually integrated.
L - Operator selected an alternate library search match.

Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

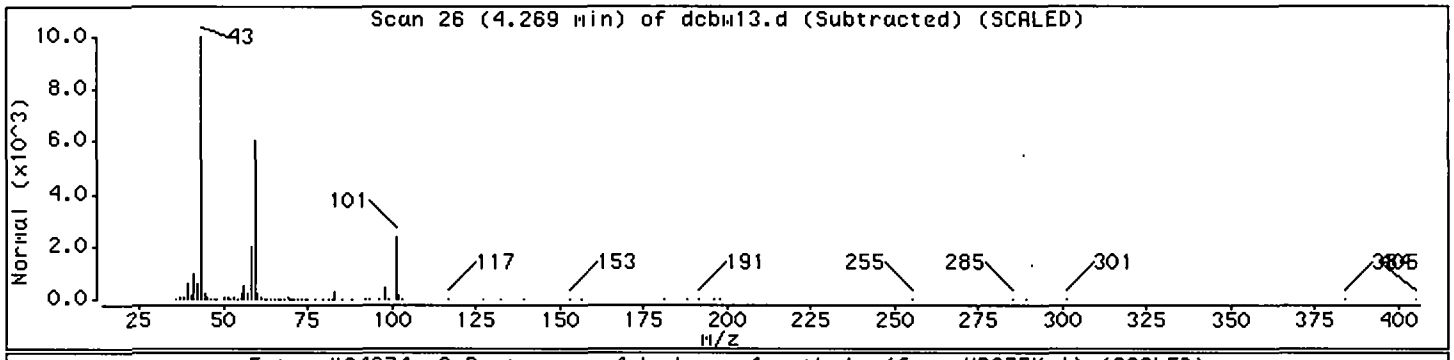
Client ID: WS-08RE Instrument: gcl4.i

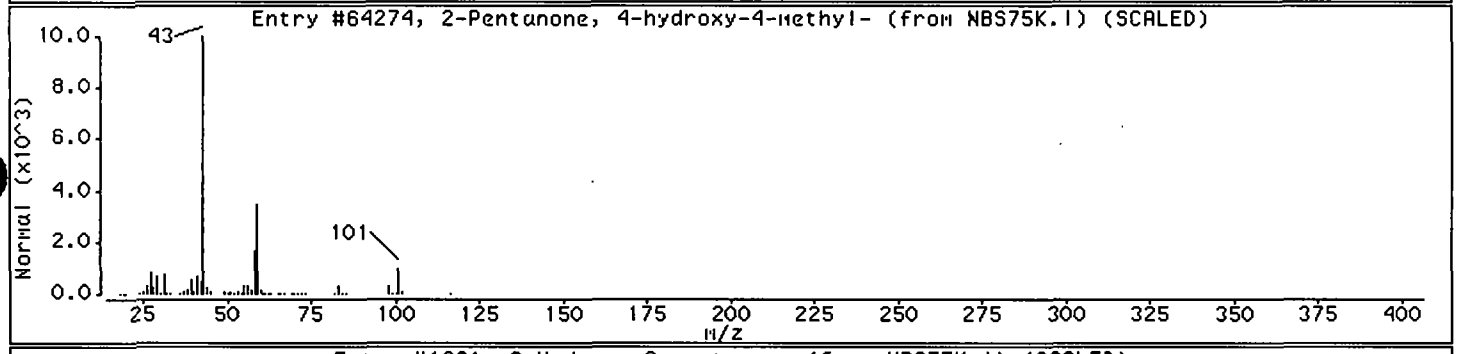
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

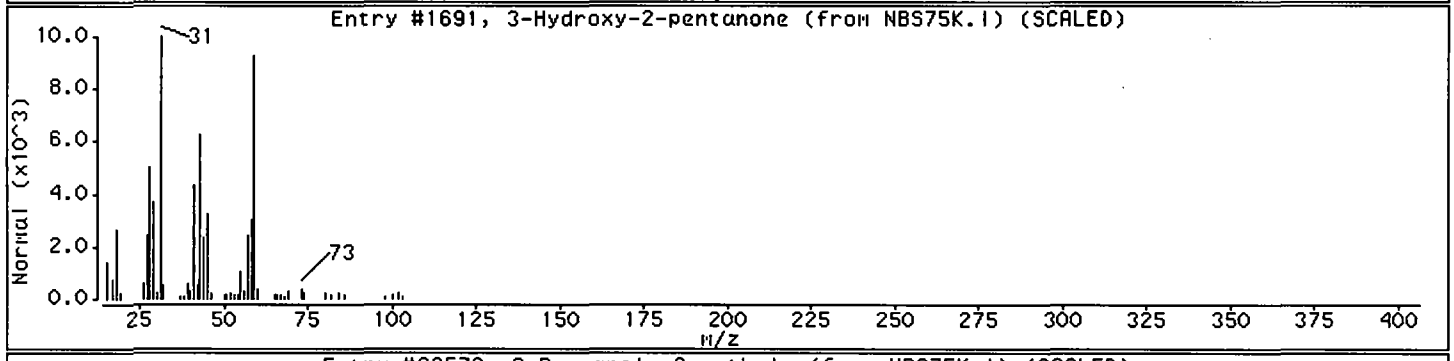
Volume Injected (uL): 2.0 Operator: GLR

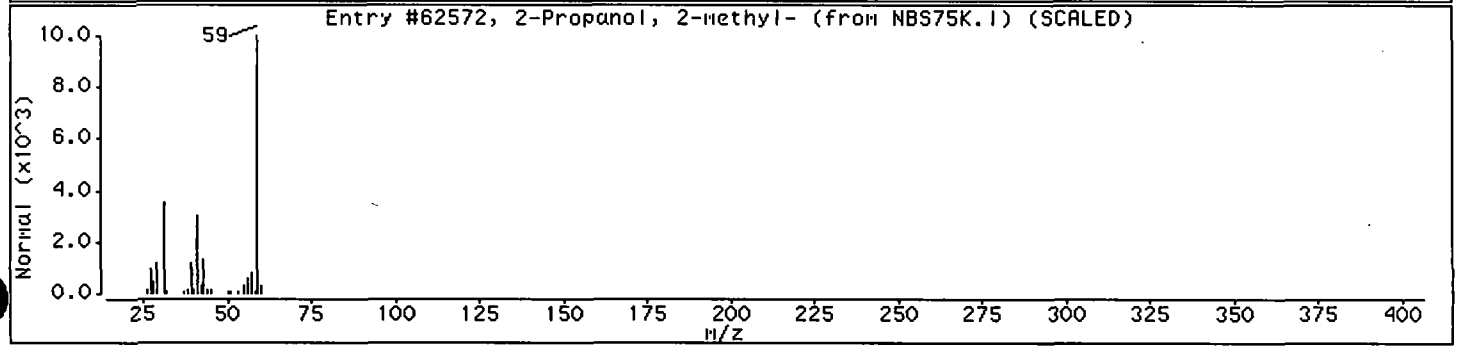
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64274	59	C6H12O2	116
3-Hydroxy-2-pentanone	3142-66-3	NBS75K.l	1691	23	C5H10O2	102
2-Propanol, 2-methyl-	75-65-0	NBS75K.l	62572	17	C4H10O	74









Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

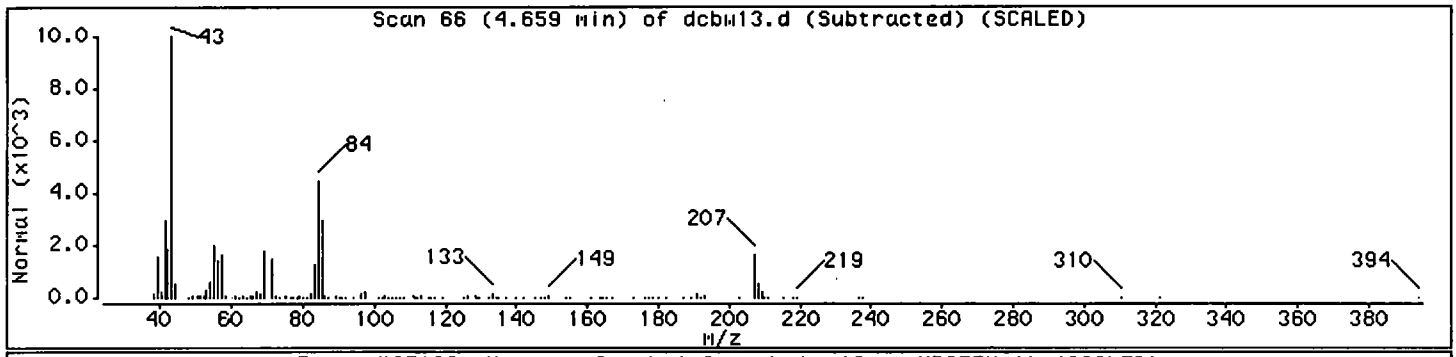
Client ID: WS-08RE Instrument: gcl4.i

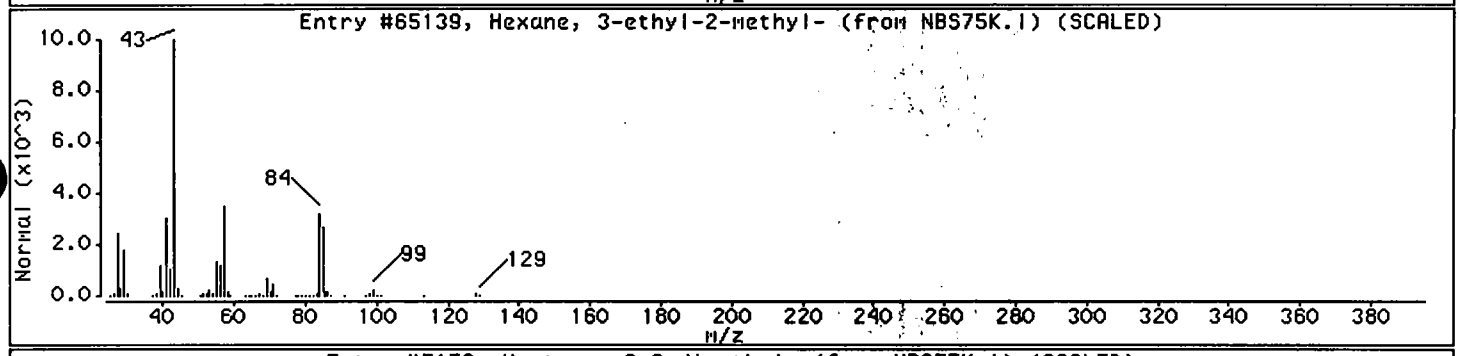
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

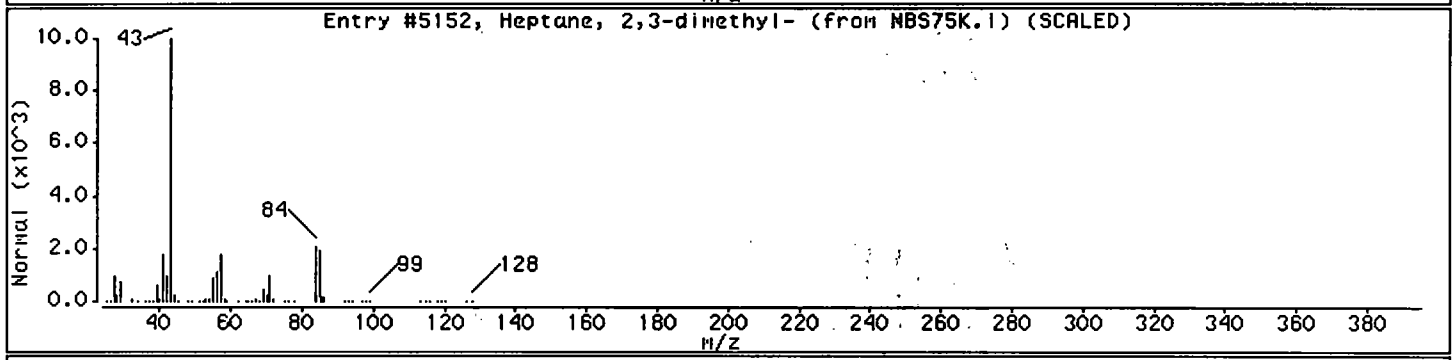
Volume Injected (uL): 2.0 Operator: GLR

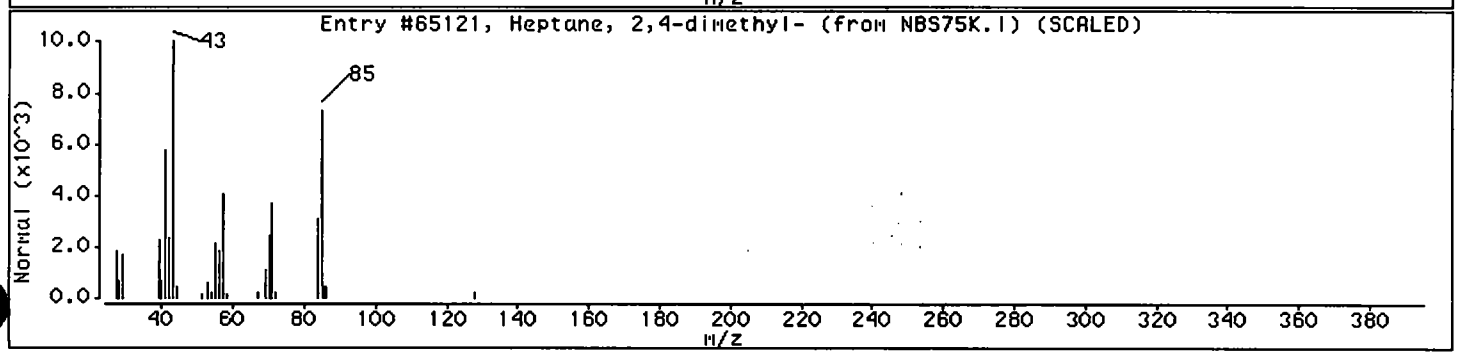
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane, 3-ethyl-2-methyl-	16789-46-1	NBS75K.l	65139	47	C9H20	128
Heptane, 2,3-dimethyl-	3074-71-3	NBS75K.l	5152	43	C9H20	128
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.l	65121	35	C9H20	128









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

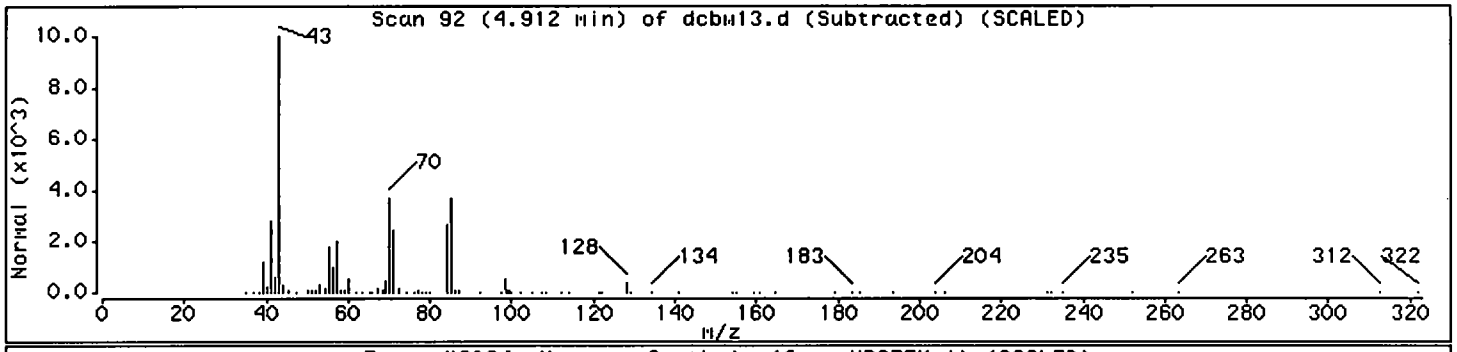
Client ID: WS-08RE Instrument: gc14.i

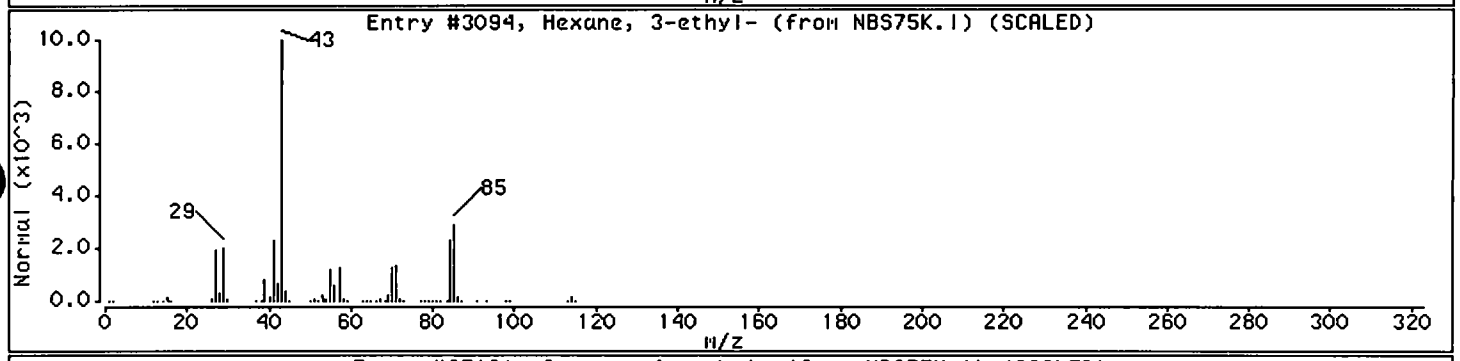
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

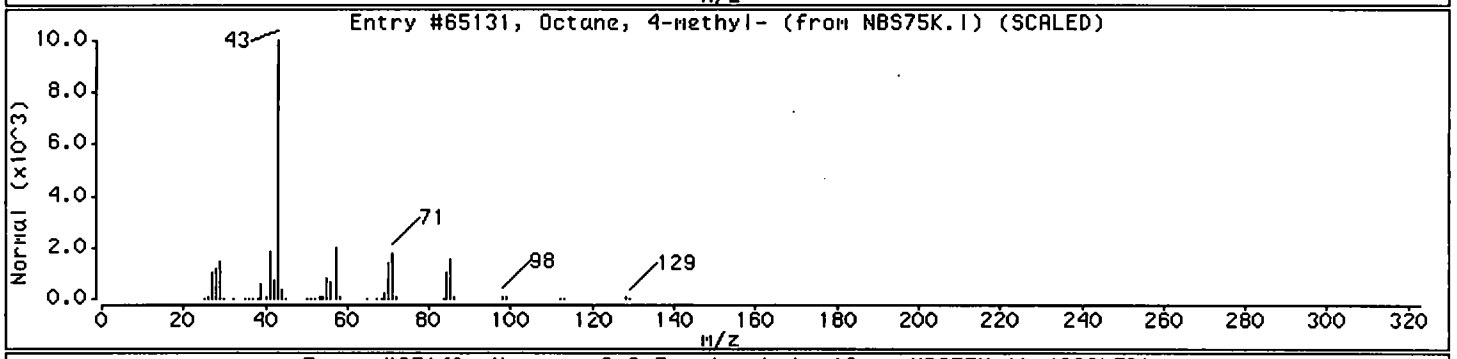
Volume Injected (uL): 2.0 Operator: GLR

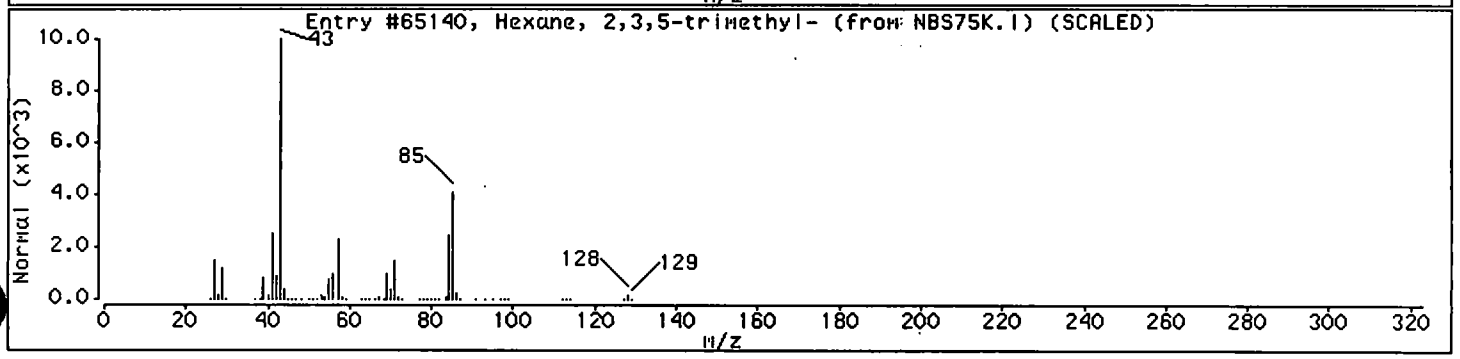
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane, 3-ethyl-	619-99-8	NBS75K.l	3094	64	C8H18	114
Octane, 4-methyl-	2216-34-4	NBS75K.l	65131	59	C9H20	128
Hexane, 2,3,5-trimethyl-	1069-53-0	NBS75K.l	65140	50	C9H20	128









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

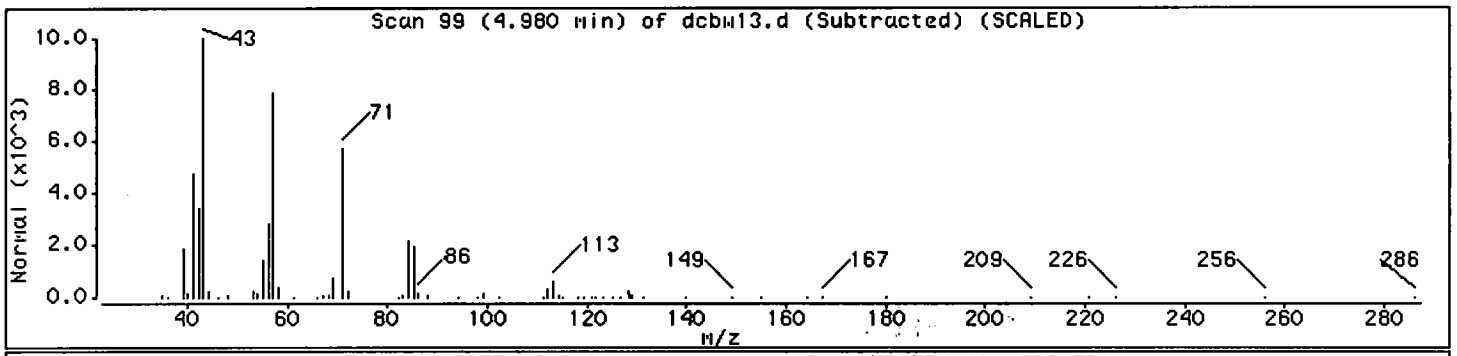
Client ID: WS-08RE Instrument: gc14.i

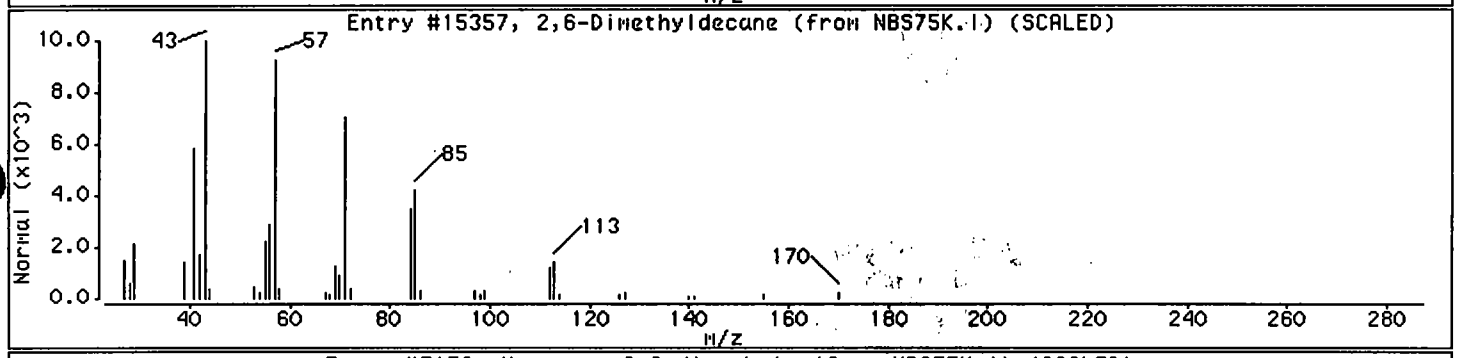
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

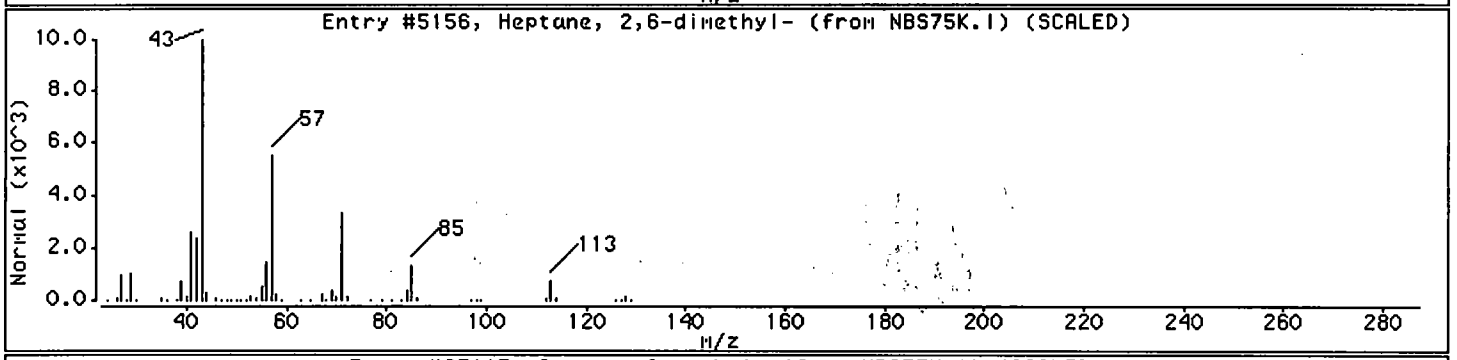
Volume Injected (uL): 2.0 Operator: GLR

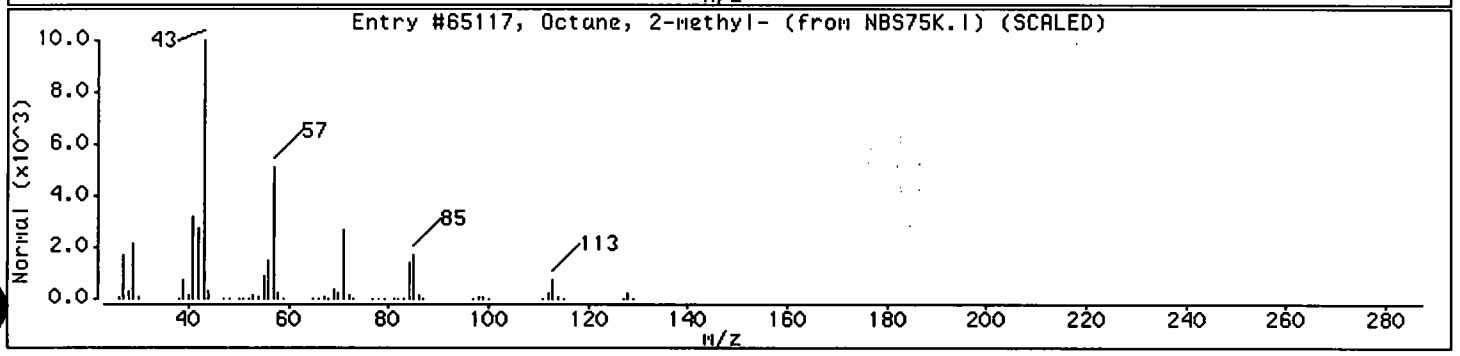
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
2,6-Dimethyldecane	13150-81-7	NBS75K.I	15357	59	C12H26	170
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.I	5156	58	C9H20	128
Octane, 2-methyl-	3221-61-2	NBS75K.I	65117	52	C9H20	128









Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

Client ID: WS-08RE

Instrument: gcl4.i

Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

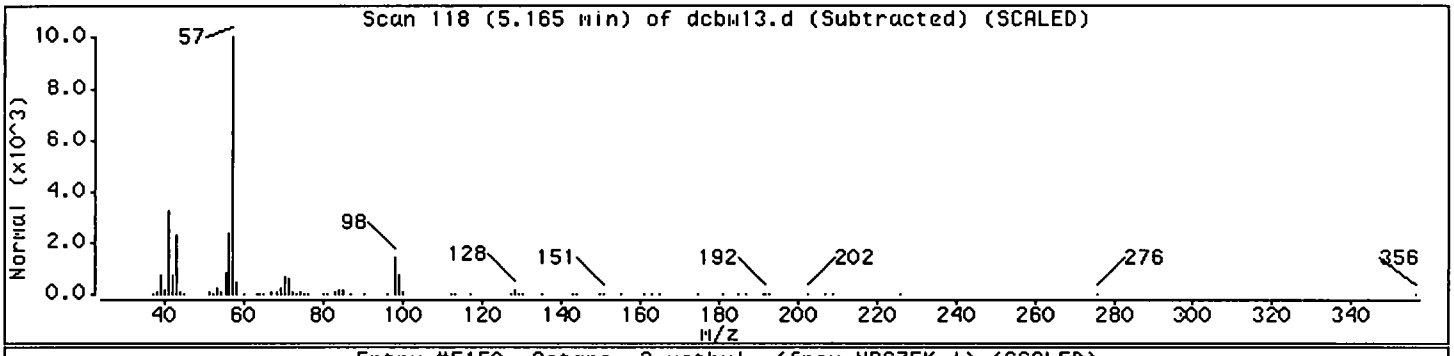
Volume Injected (uL): 2.0

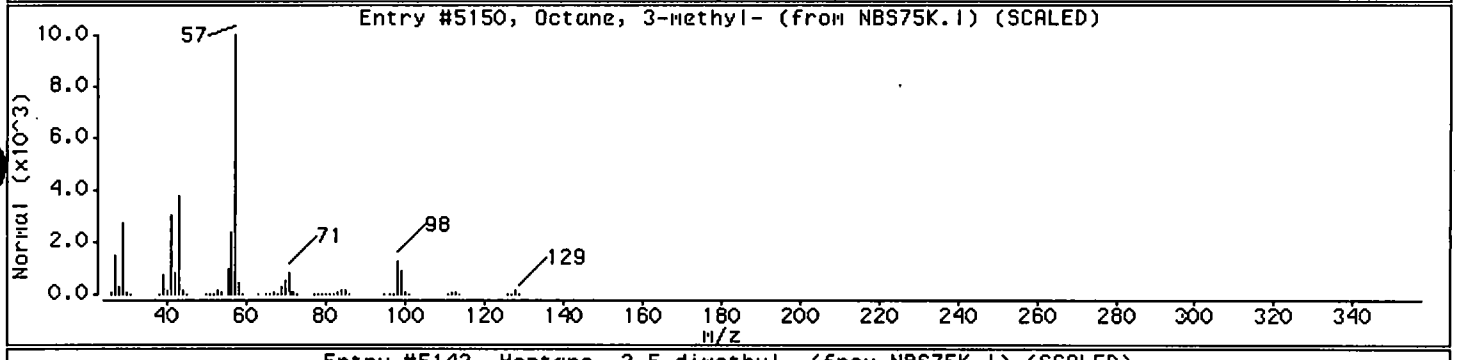
Operator: GLR

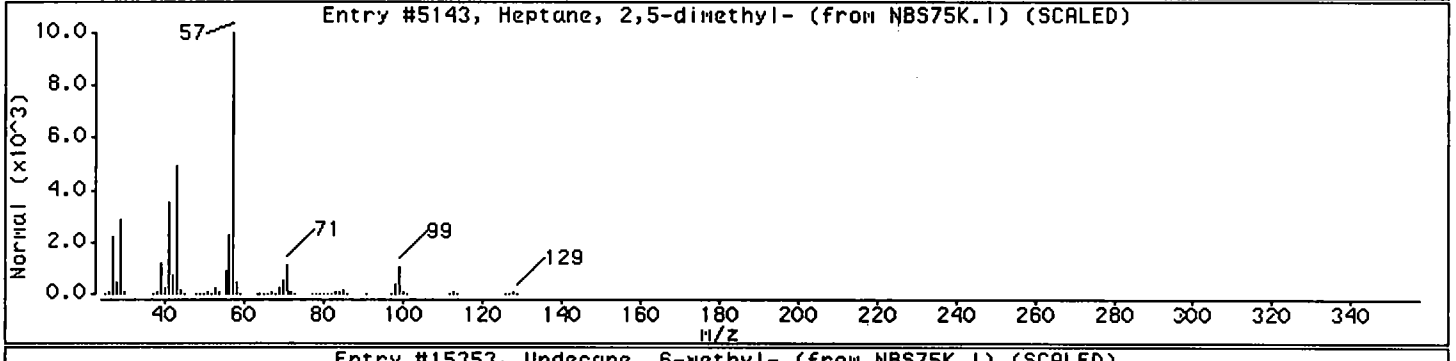
Column phase:

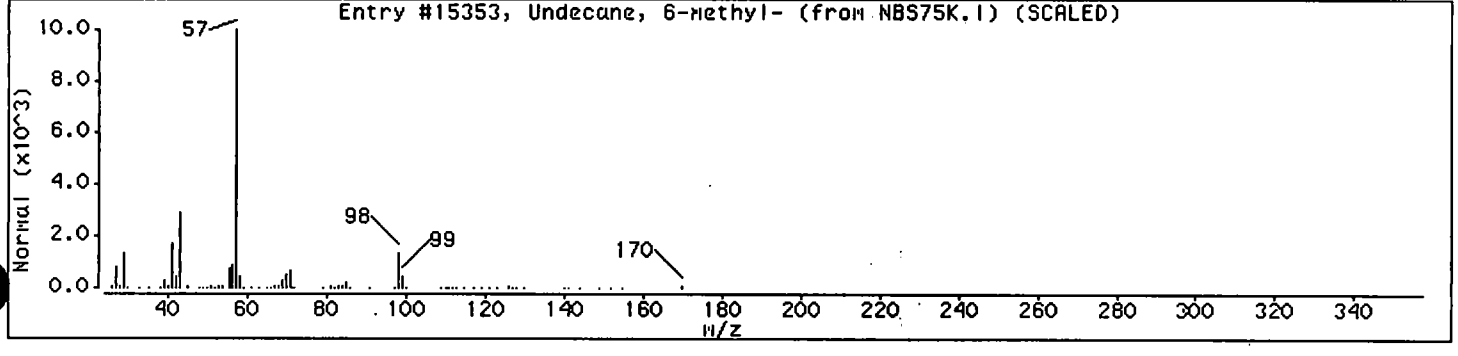
Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Octane, 3-methyl-	2216-33-3	NBS75K.l	5150	91	C9H20	128
Heptane, 2,5-dimethyl-	2216-30-0	NBS75K.l	5143	74	C9H20	128
Undecane, 6-methyl-	17302-33-9	NBS75K.l	15353	53	C12H26	170









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

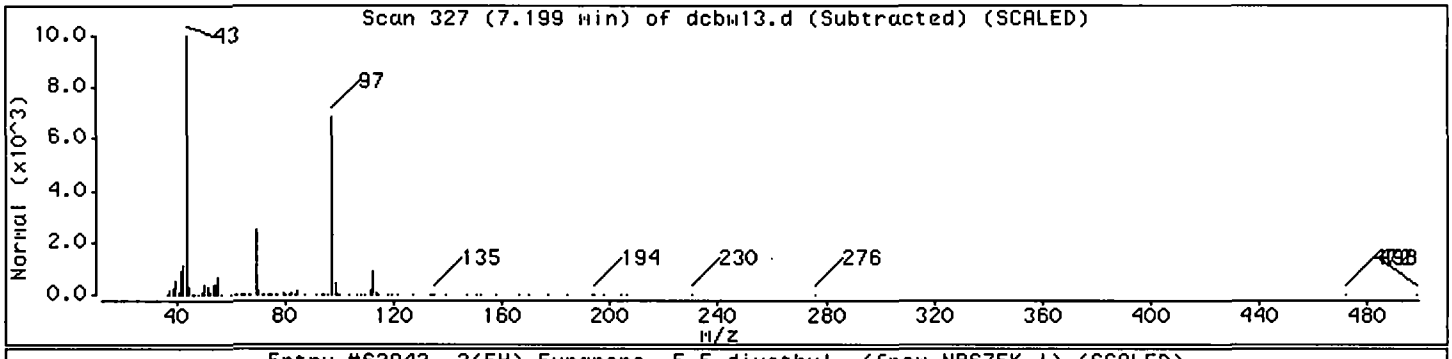
Client ID: WS-08RE Instrument: gc14.i

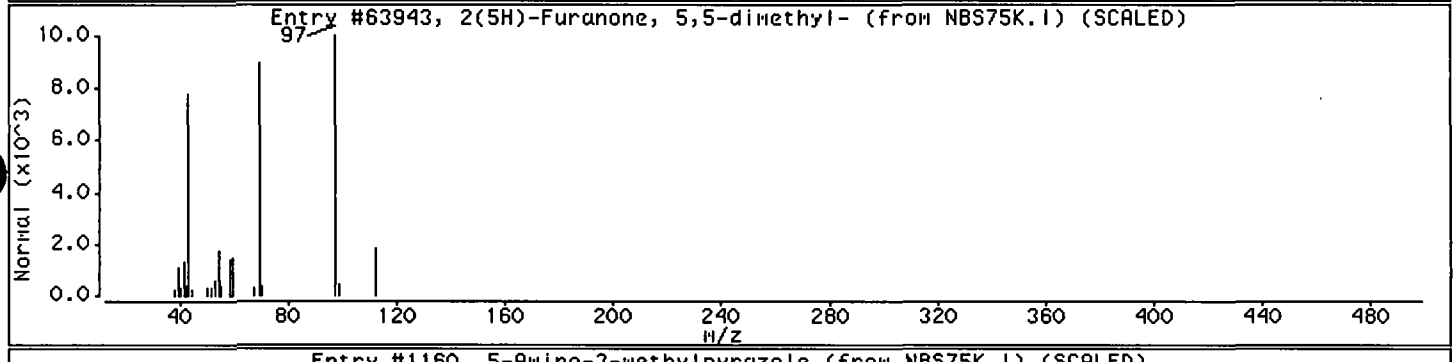
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

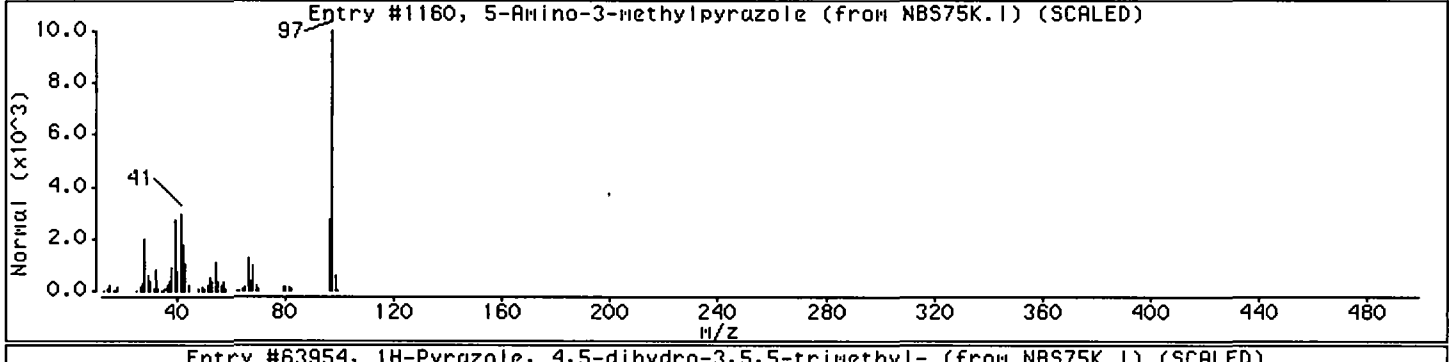
Volume Injected (uL): 2.0 Operator: GLR

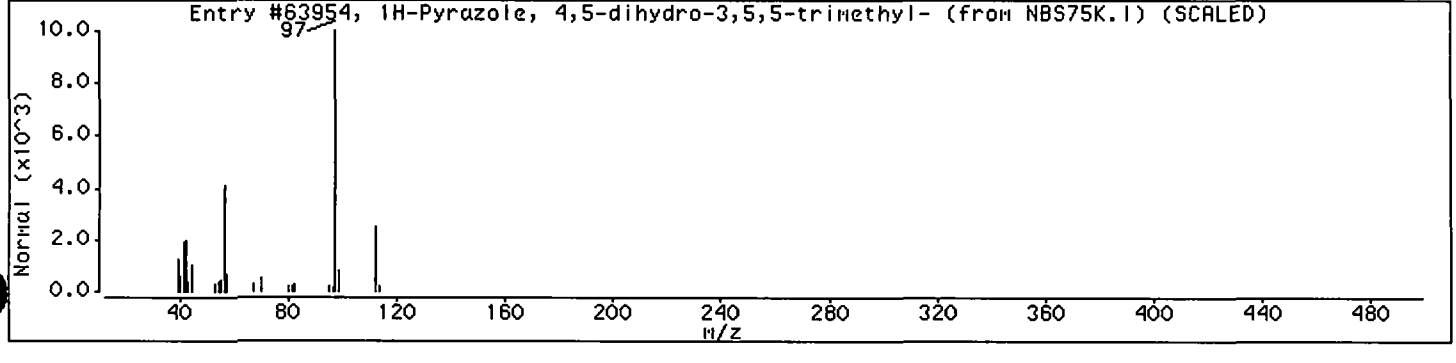
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(5H)-Furanone, 5,5-dimethyl-	20019-64-1	NBS75K.l	63943	40	C6H8O2	112
5-Amino-3-methylpyrazole	31230-17-8	NBS75K.l	1160	37	C4H7N3	97
1H-Pyrazole, 4,5-dihydro-3,5,5-trimethyl	3975-85-7	NBS75K.l	63954	25	C6H12N2	112









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

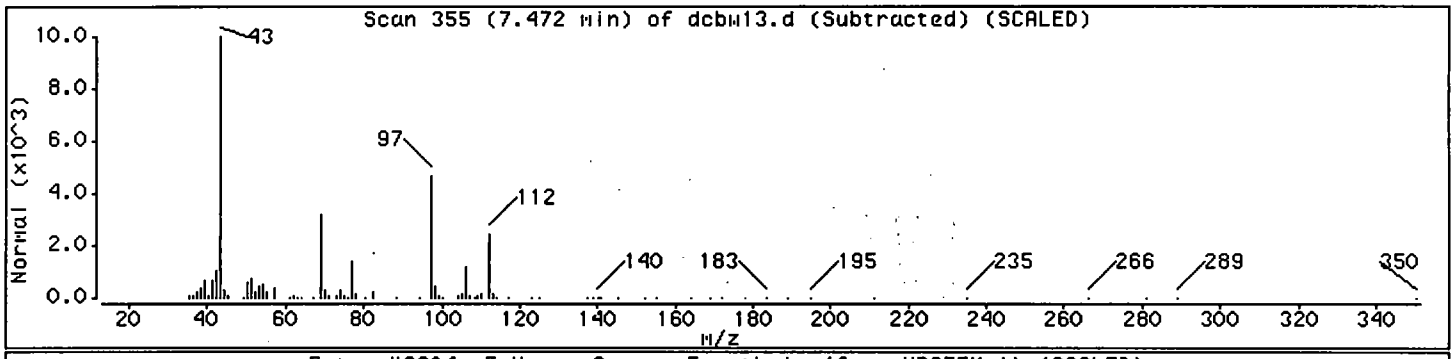
Client ID: WS-08RE Instrument: gc14.i

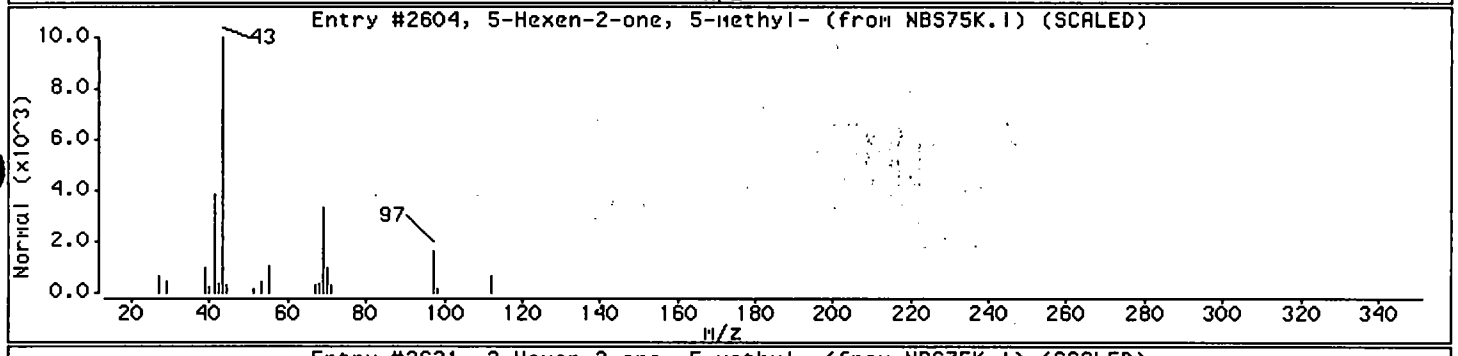
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

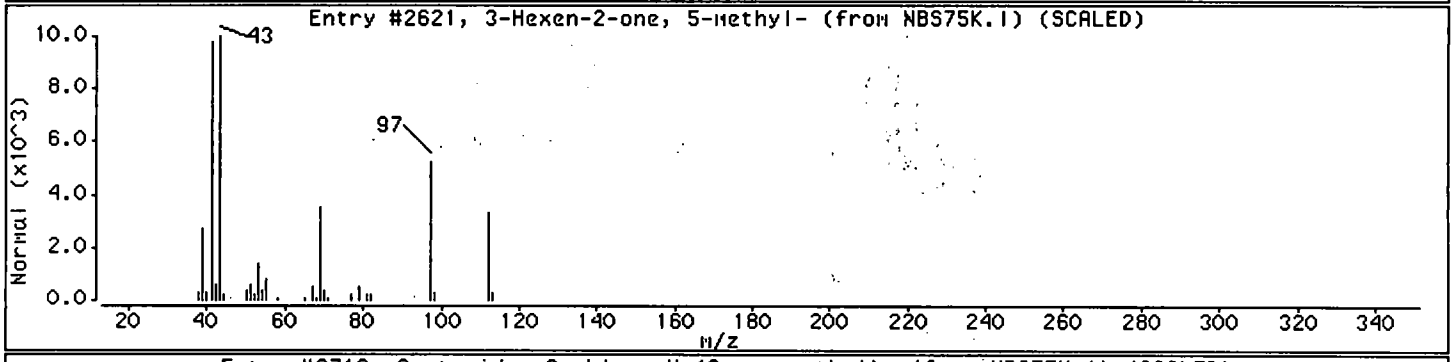
Volume Injected (uL): 2.0 Operator: GLR

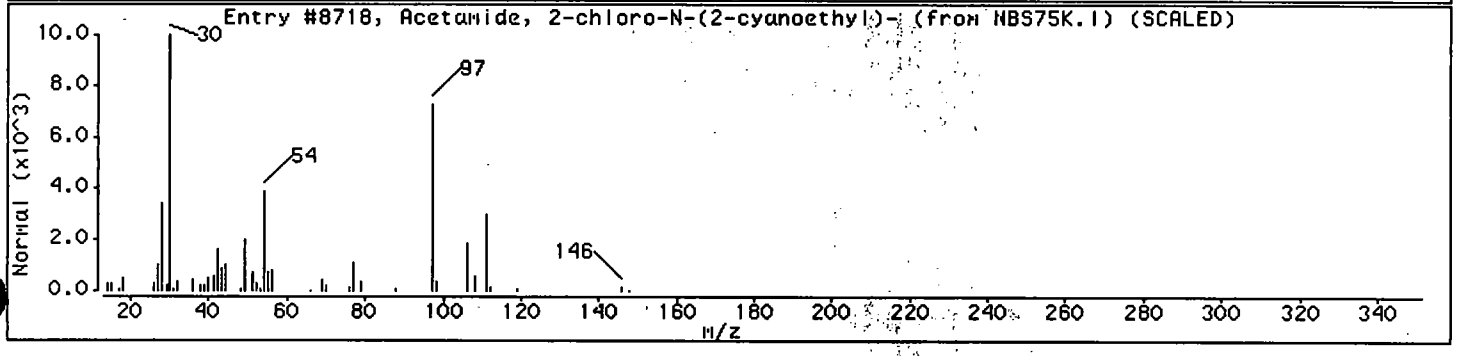
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5-Hexen-2-one, 5-methyl-	3240-09-3	NBS75K.l	2604	42	C7H12O	112
3-Hexen-2-one, 5-methyl-	5166-53-0	NBS75K.l	2621	37	C7H12O	112
Acetamide, 2-chloro-N-(2-cyanoethyl)-	17756-81-9	NBS75K.l	8718	28	C5H7ClN2O	146









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Date : 16-DEC-1996 22:47

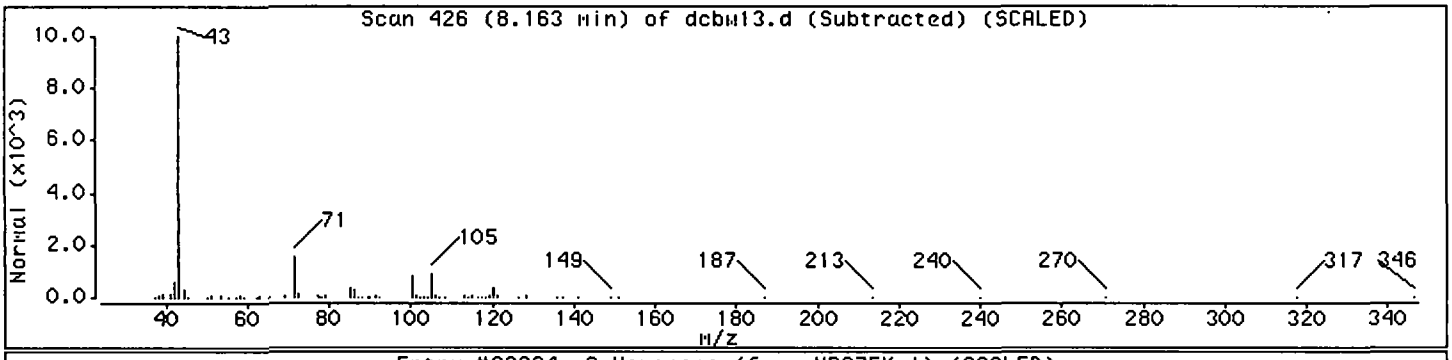
Client ID: WS-08RE Instrument: gcl4.i

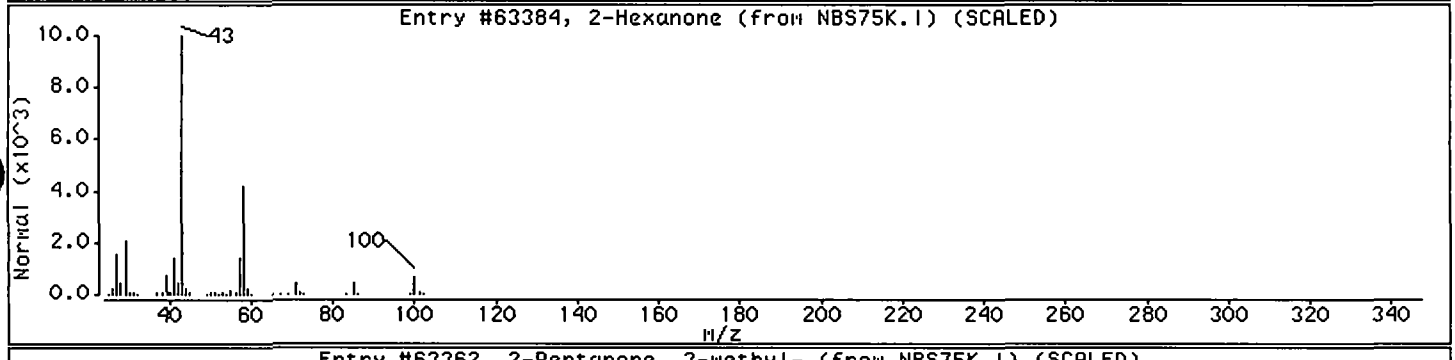
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

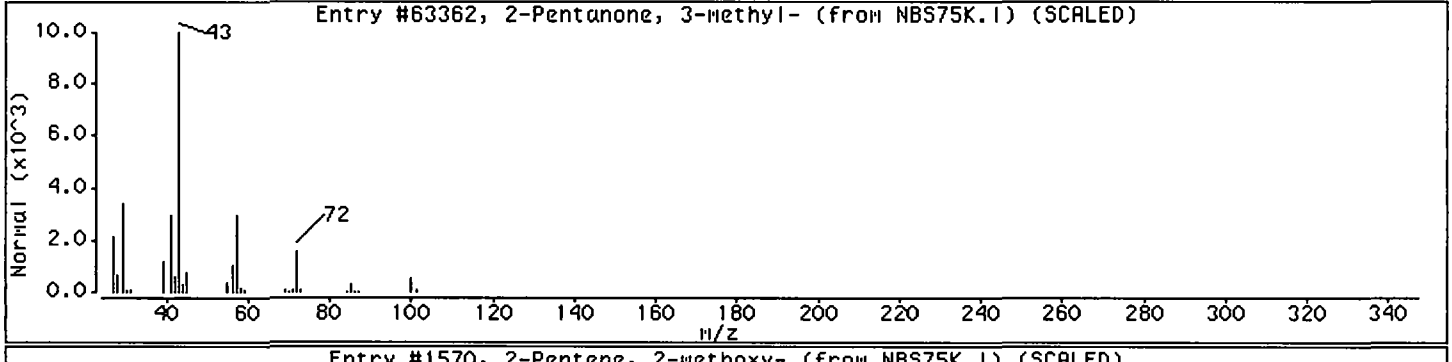
Volume Injected (uL): 2.0 Operator: GLR

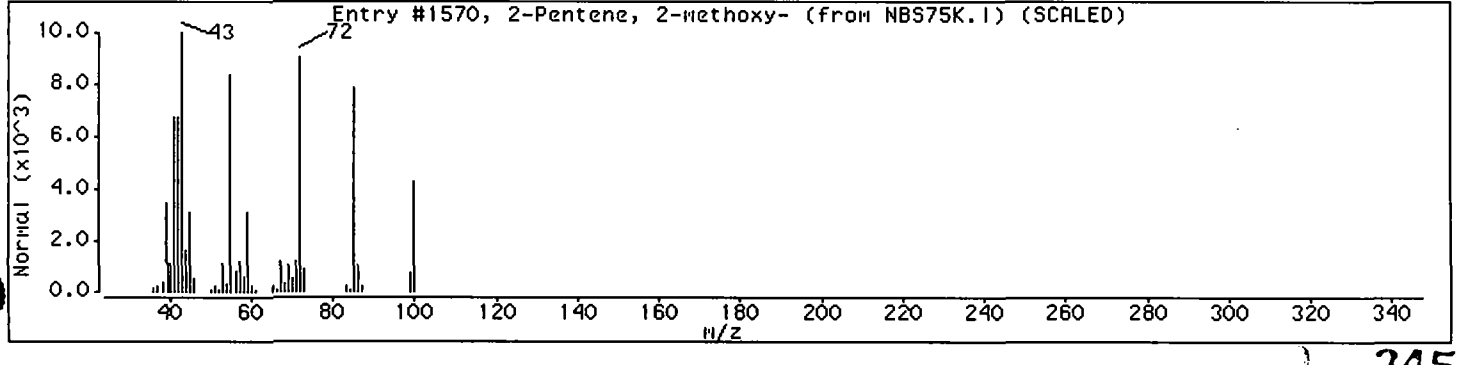
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Hexanone	591-78-6	NBS75K.l	63384	38	C6H12O	100
2-Pentanone, 3-methyl-	565-61-7	NBS75K.l	63362	37	C6H12O	100
2-Pentene, 2-methoxy-	61142-47-0	NBS75K.l	1570	27	C6H12O	100









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Date : 16-DEC-1996 22:47

Client ID: WS-08RE

Instrument: gcl4.i

Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

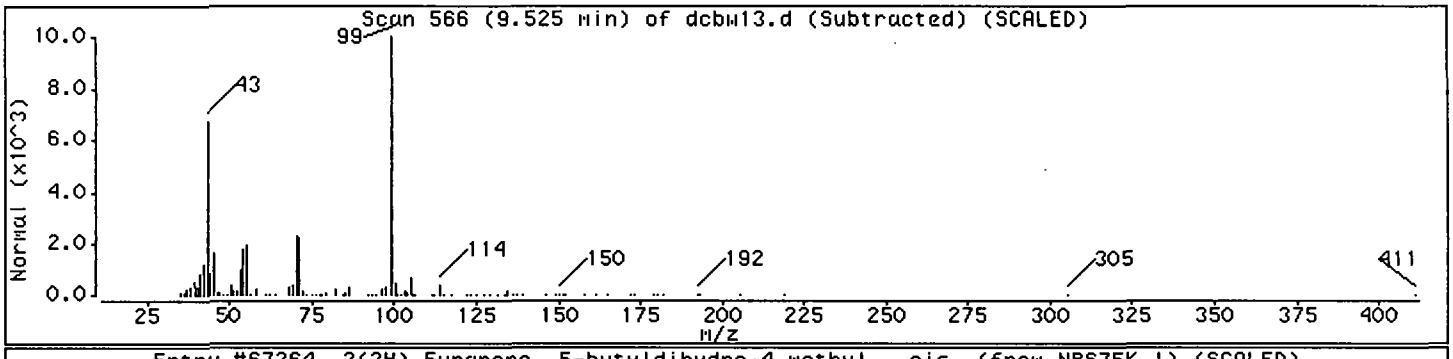
Volume Injected (uL): 2.0

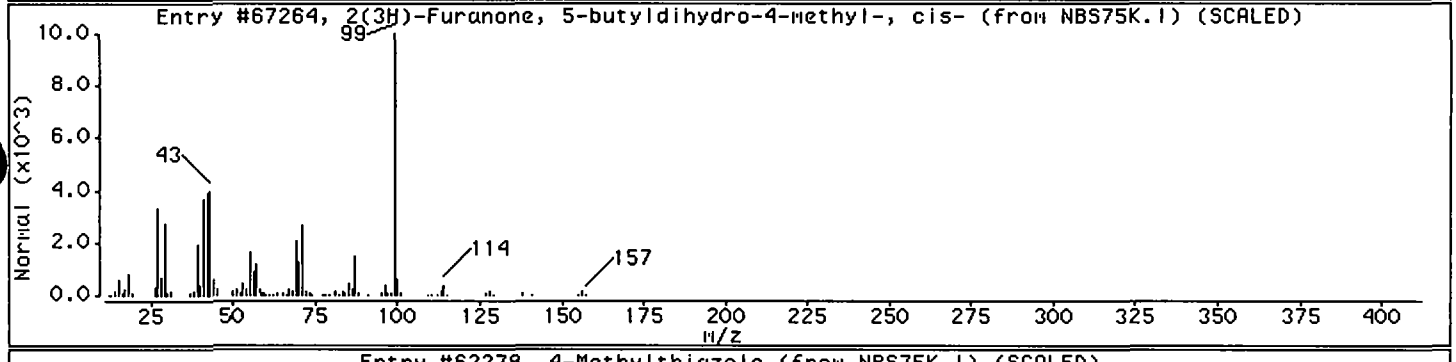
Operator: GLR

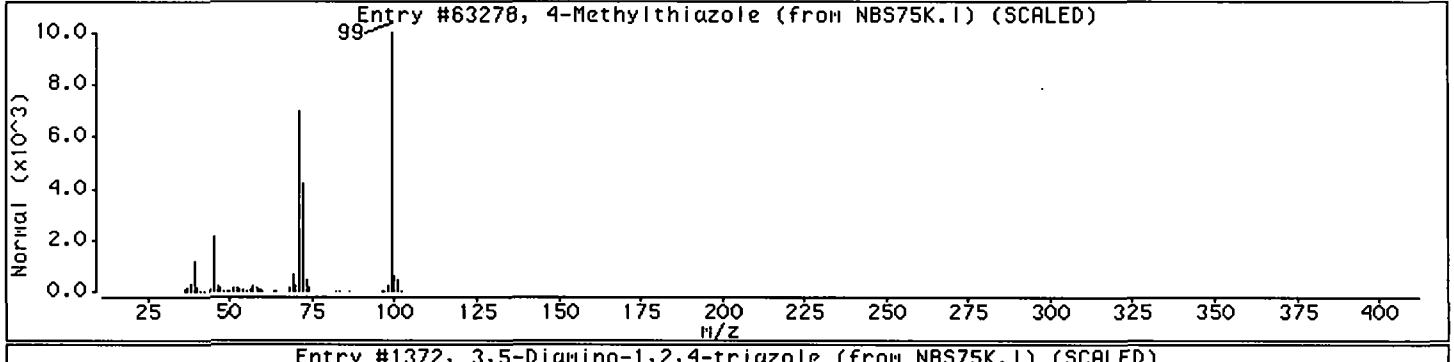
Column phase:

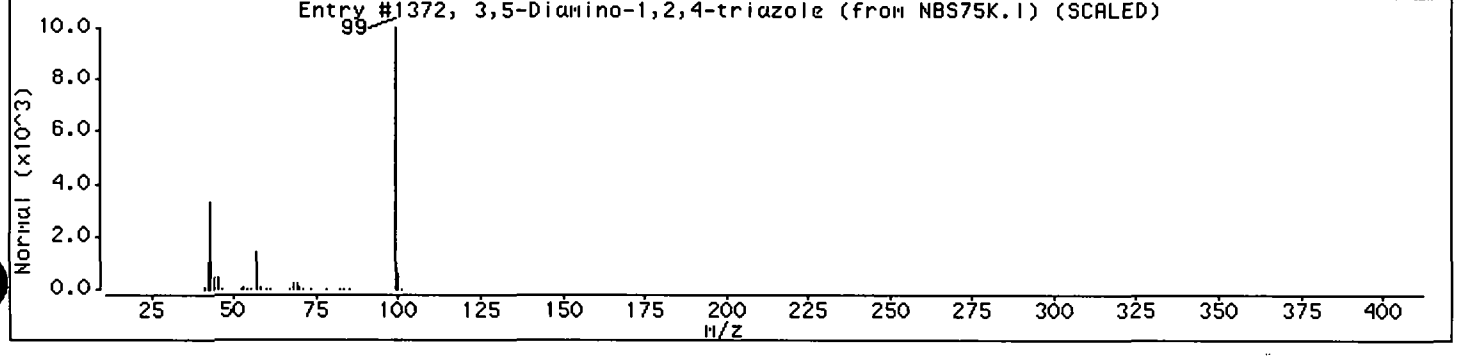
Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(3H)-Furanone, 5-butyldihydro-4-methyl-	55013-32-6	NBS75K.l	67264	42	C9H16O2	156
4-Methylthiazole	693-95-8	NBS75K.l	63278	38	C4H5NS	99
3,5-Diamino-1,2,4-triazole	1455-77-2	NBS75K.l	1372	25	C2H5N5	99









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Date : 16-DEC-1996 22:47

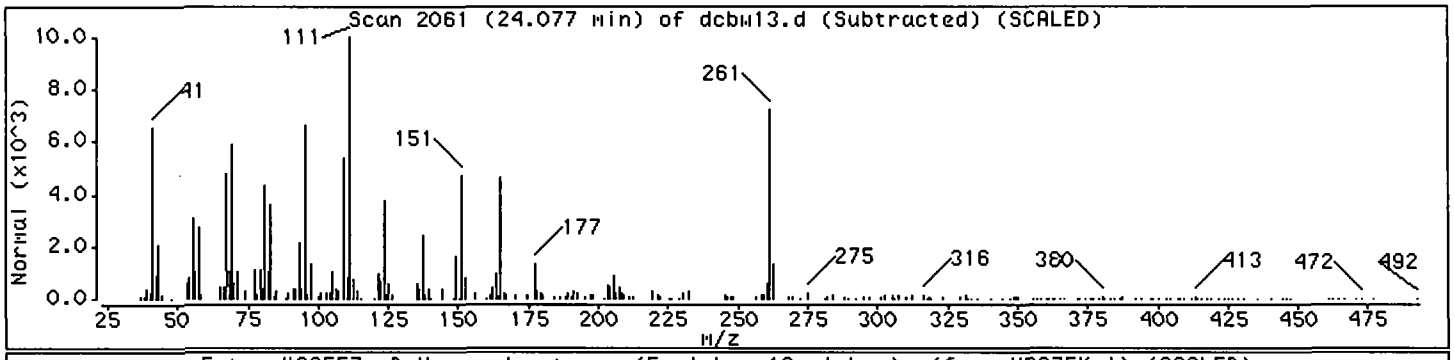
Client ID: WS-08RE Instrument: gc14.i

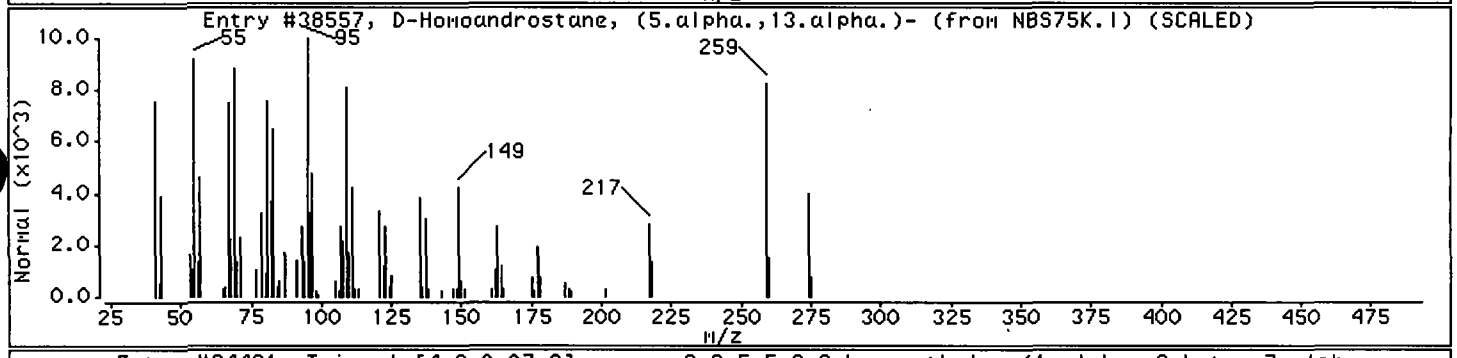
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

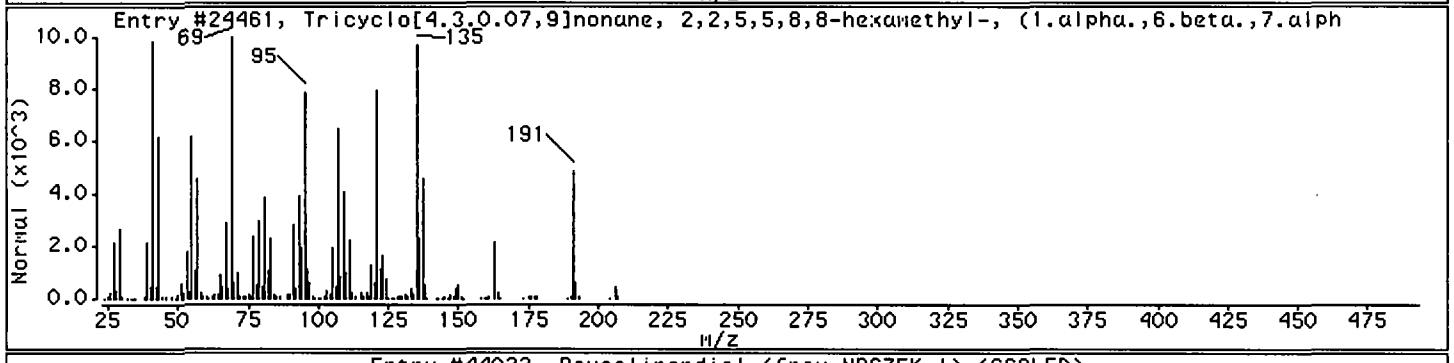
Volume Injected (uL): 2.0 Operator: GLR

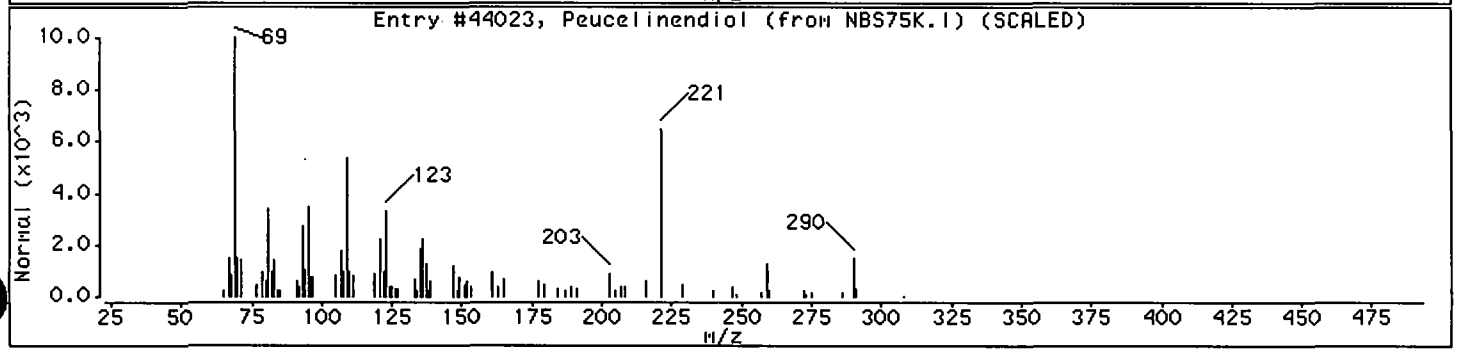
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	68	C20H34	274
Tricyclo[4.3.0.07,9]nonane, 2,2,5,5,8,8-	54832-82-5	NBS75K.l	24461	49	C15H26	206
Peucelinendiol	72776-48-8	NBS75K.l	44023	46	C20H3602	308









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Date : 16-DEC-1996 22:47

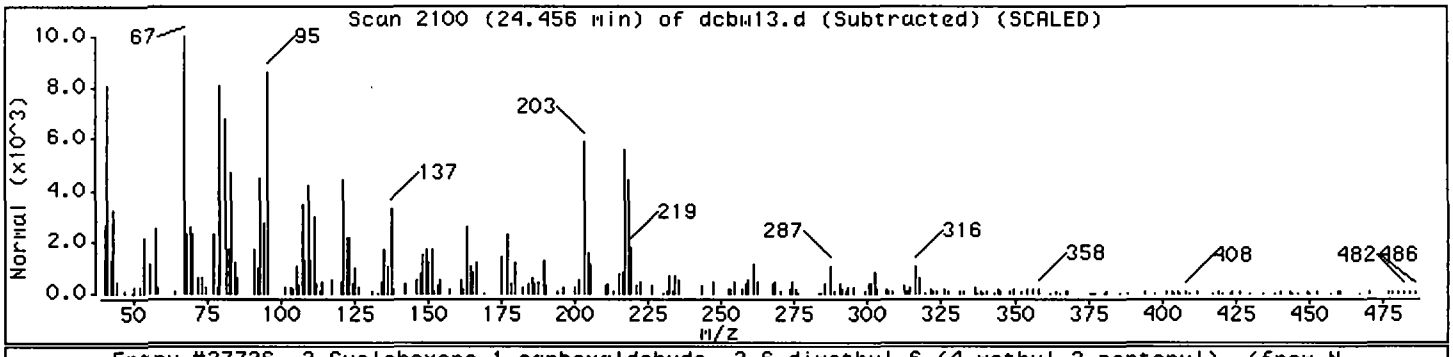
Client ID: WS-08RE Instrument: gc14.i

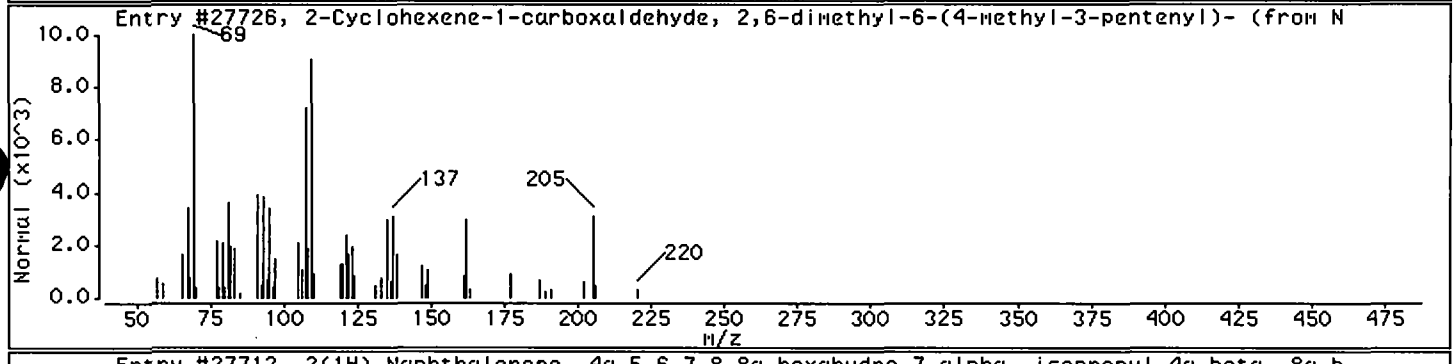
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

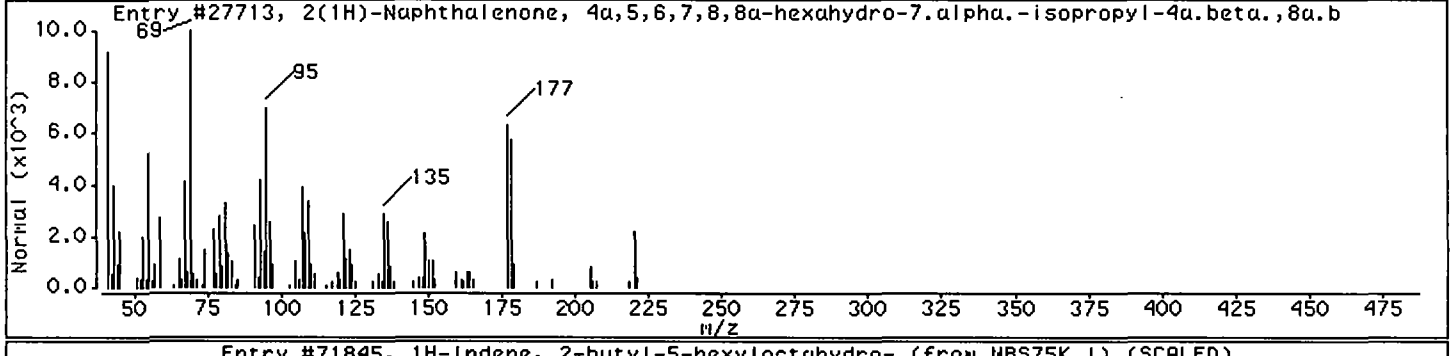
Volume Injected (uL): 2.0 Operator: GLR

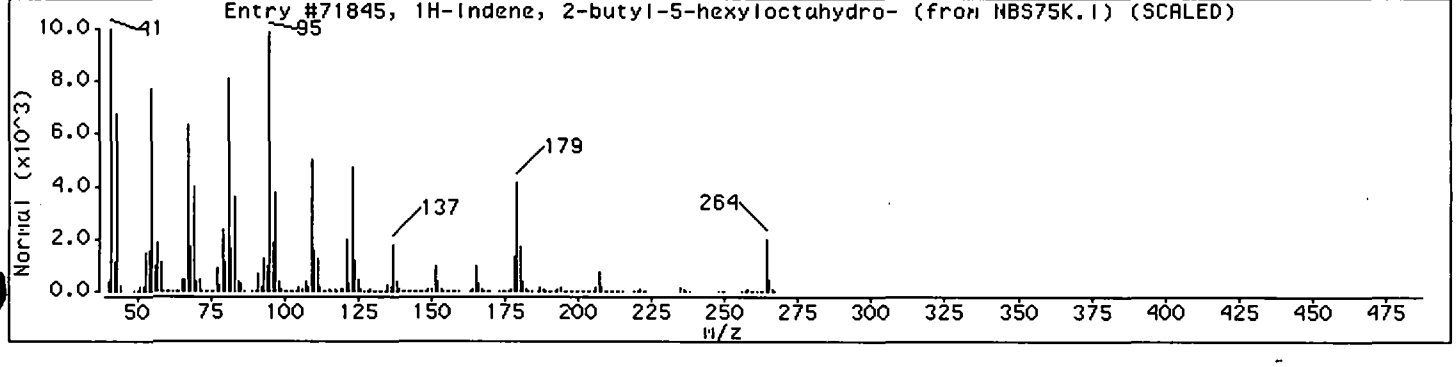
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Cyclohexene-1-carboxaldehyde, 2,6-dime	56772-07-7	NBS75K.l	27726	64	C15H24O	220
2(1H)-Naphthalenone, 4a,5,6,7,8,8a-hexah	17408-66-1	NBS75K.l	27713	58	C15H24O	220
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	71845	38	C19H36	264









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

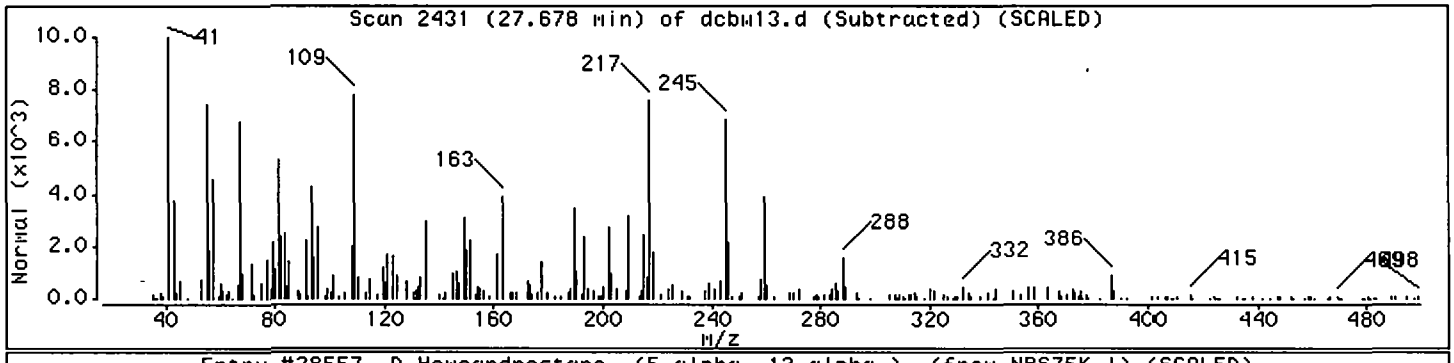
Client ID: WS-08RE Instrument: gc14.i

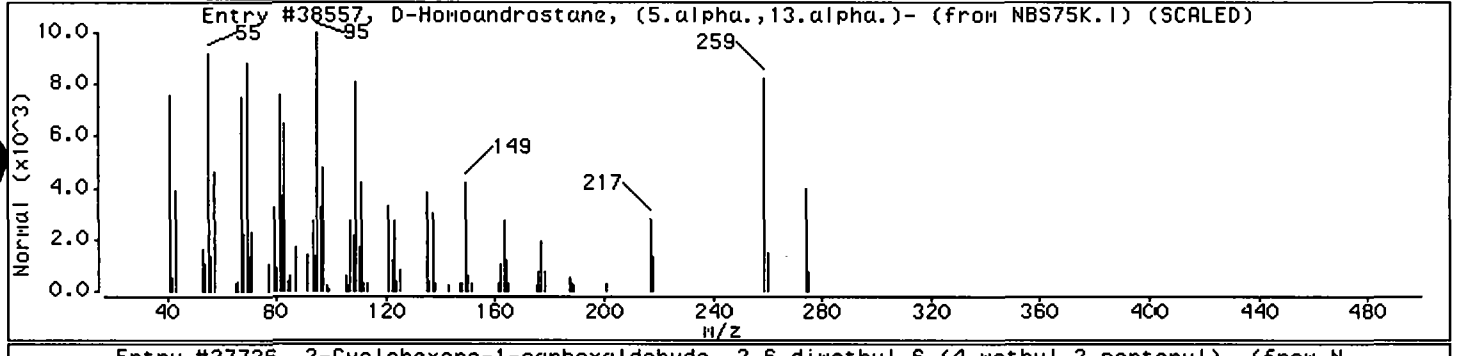
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

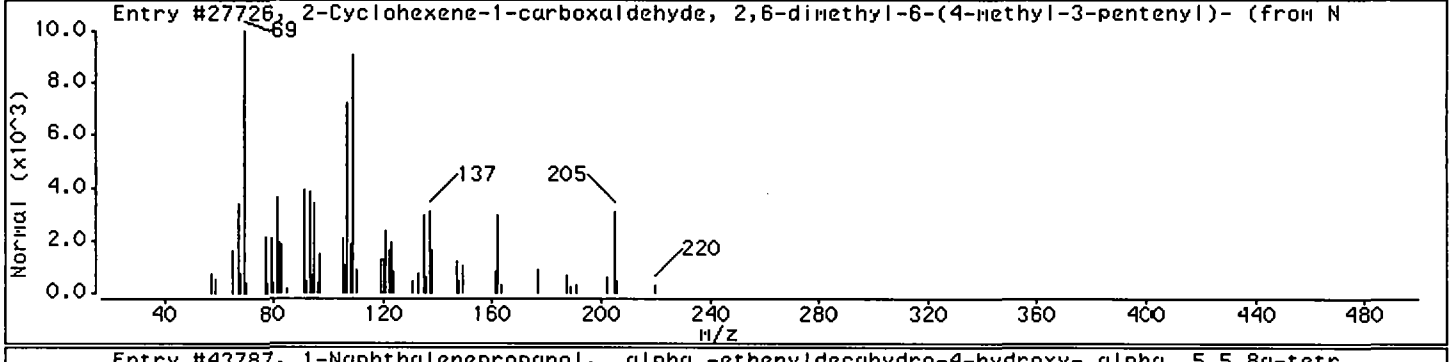
Volume Injected (uL): 2.0 Operator: GLR

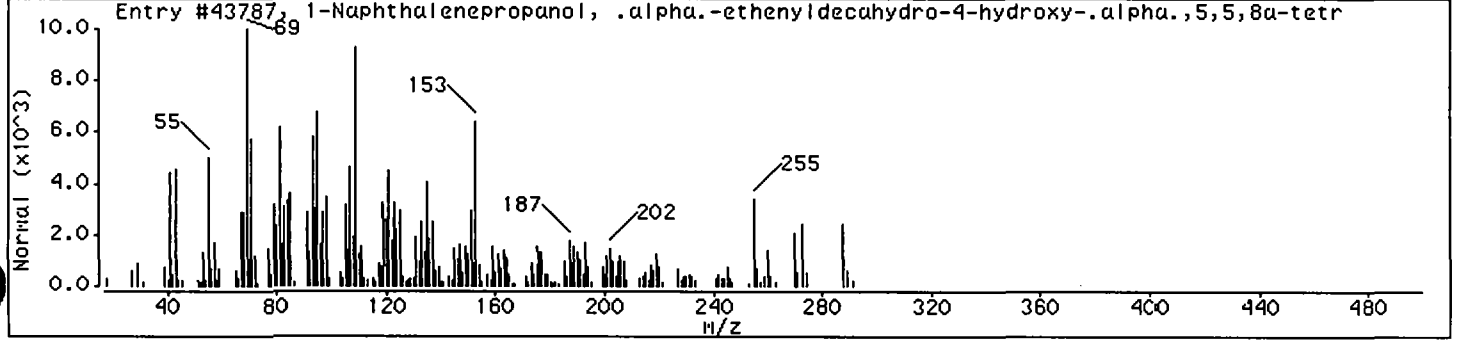
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	95	C20H34	274
2-Cyclohexene-1-carboxaldehyde, 2,6-dime	56772-07-7	NBS75K.l	27726	64	C15H240	220
1-Naphthalenepropanol, .alpha.-ethenylde	1438-66-0	NBS75K.l	43787	52	C20H34O2	306









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

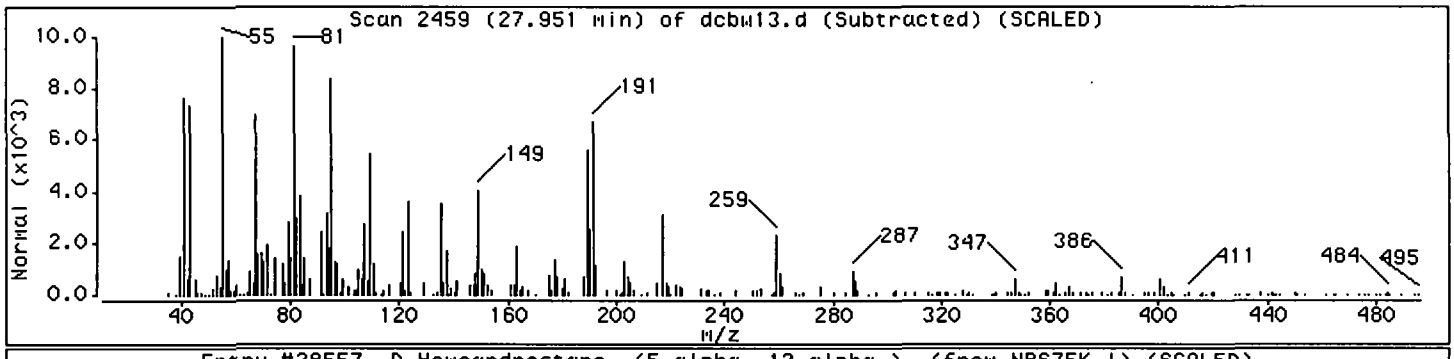
Client ID: WS-08RE Instrument: gc14.i

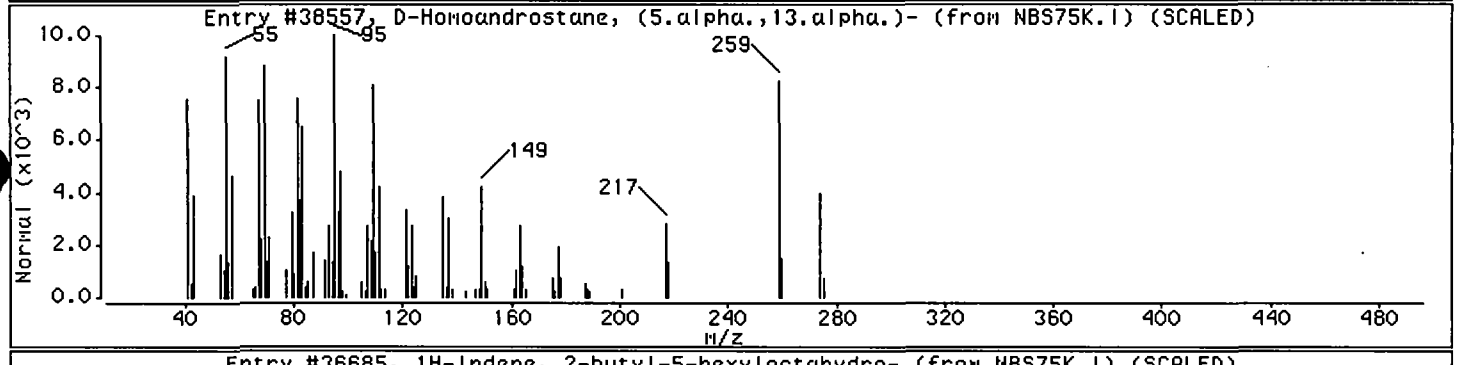
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

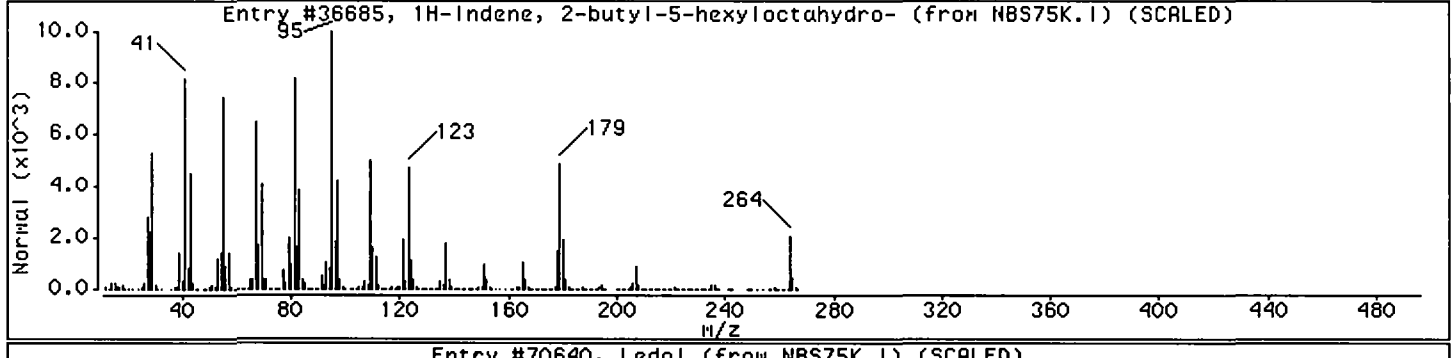
Volume Injected (uL): 2.0 Operator: GLR

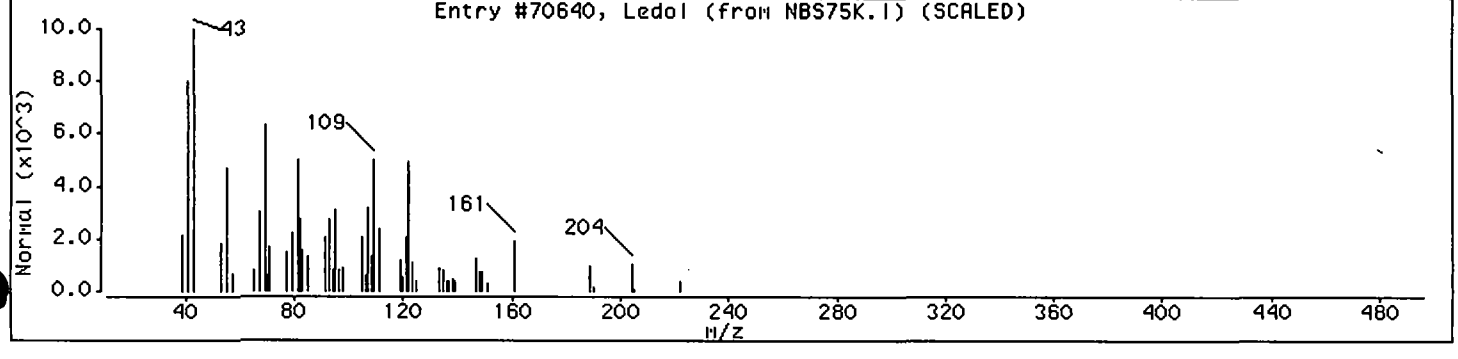
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	99	C20H34	274
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	62	C19H36	264
Ledol	577-27-5	NBS75K.l	70640	46	C15H26O	222









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Date : 16-DEC-1996 22:47

Client ID: WS-08RE

Instrument: gcl4.i

Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

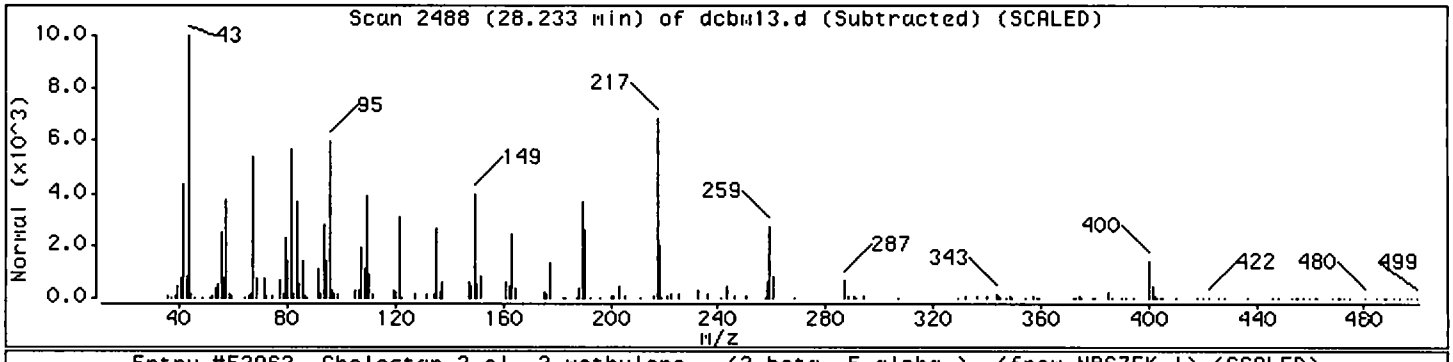
Volume Injected (uL): 2.0

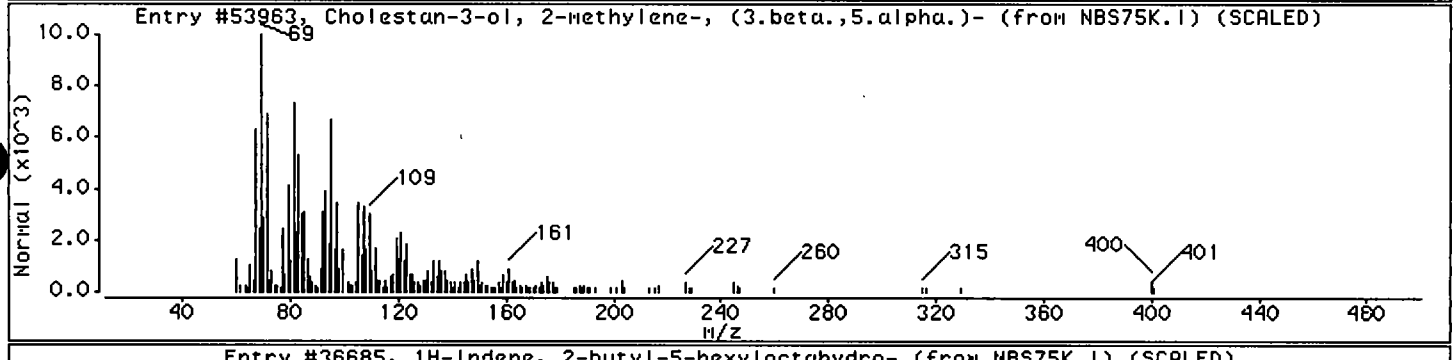
Operator: GLR

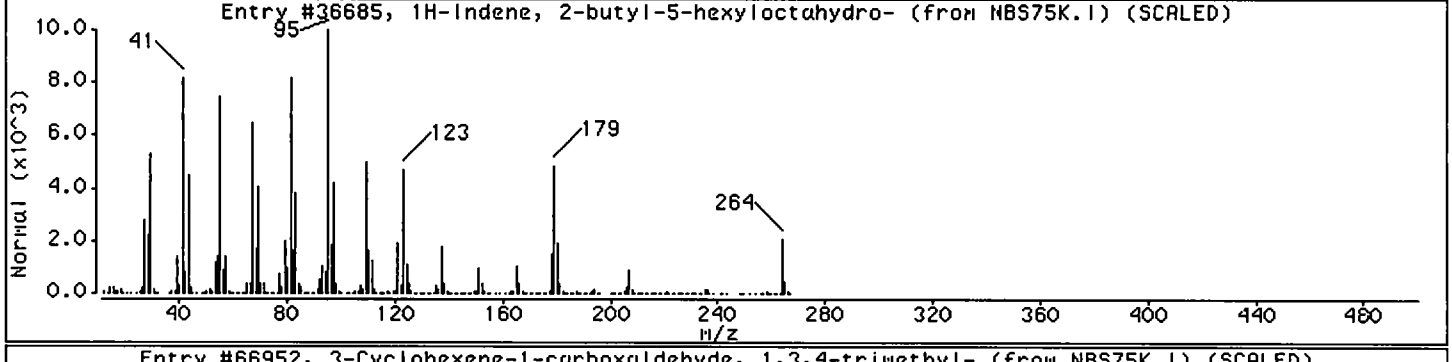
Column phase:

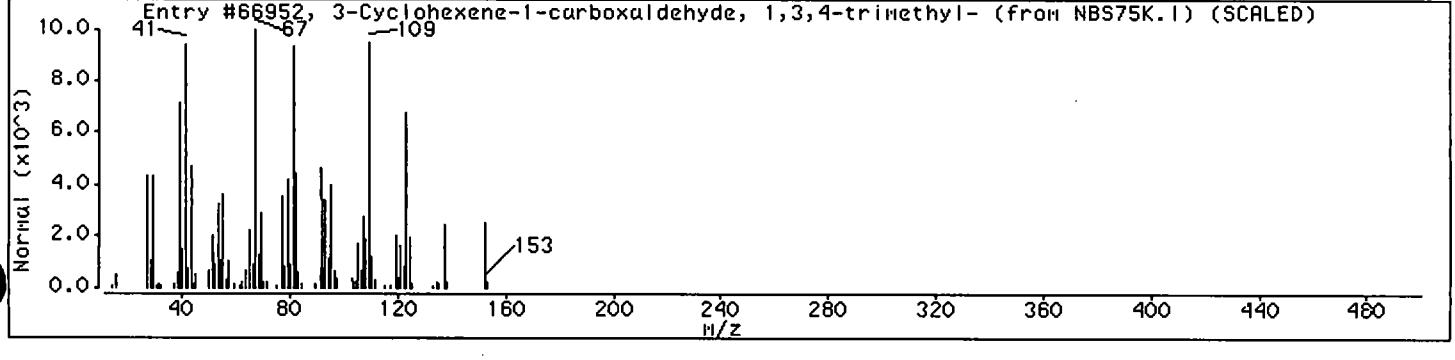
Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	74	C28H480	400
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	62	C19H36	264
3-Cyclohexene-1-carboxaldehyde, 1,3,4-tr	40702-26-9	NBS75K.l	66952	50	C10H160	152









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Date : 16-DEC-1996 22:47

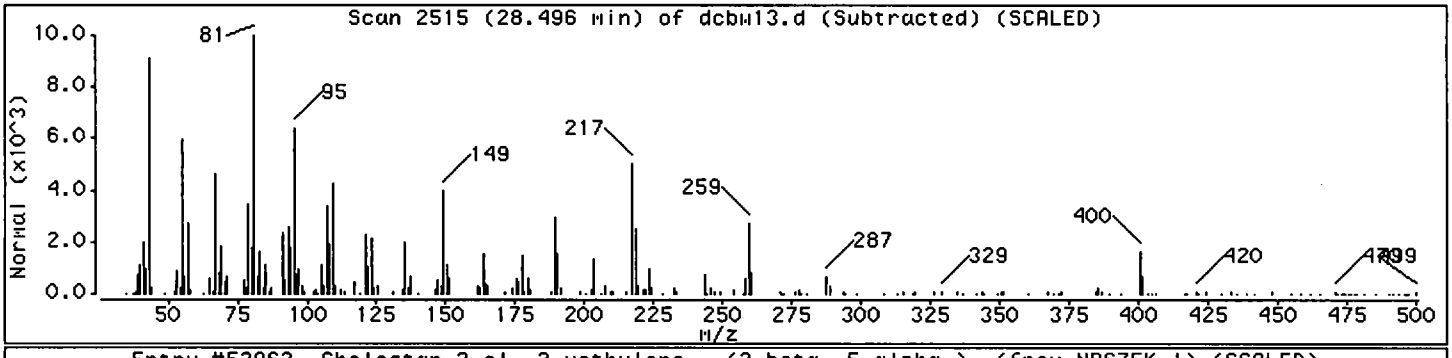
Client ID: WS-08RE Instrument: gcl4.i

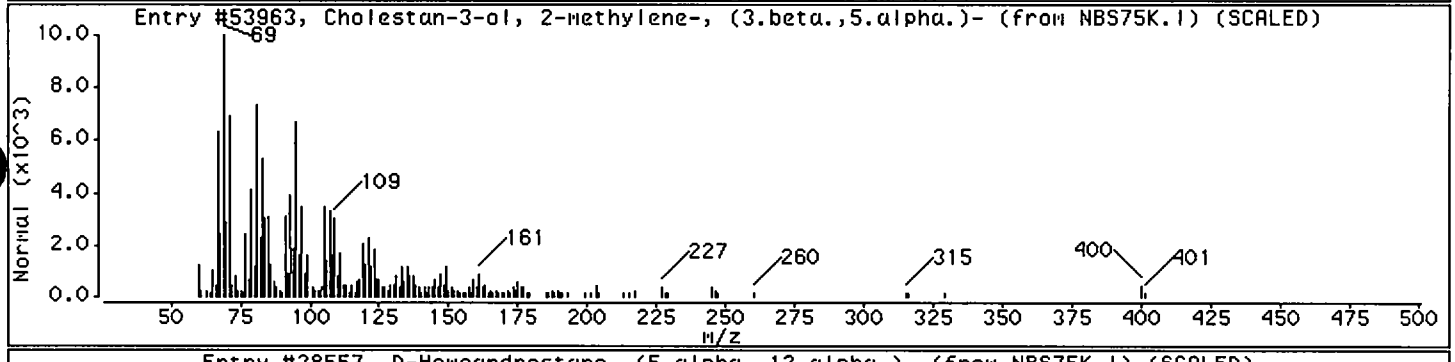
Sample Info: 9611G675-008 DFRC16,[AL=0625HS],[DC=A1]

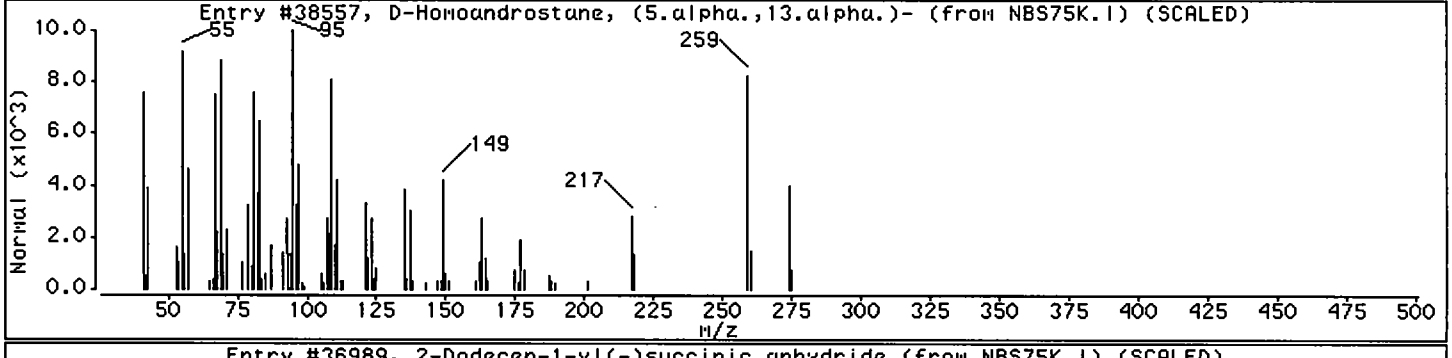
Volume Injected (uL): 2.0 Operator: GLR

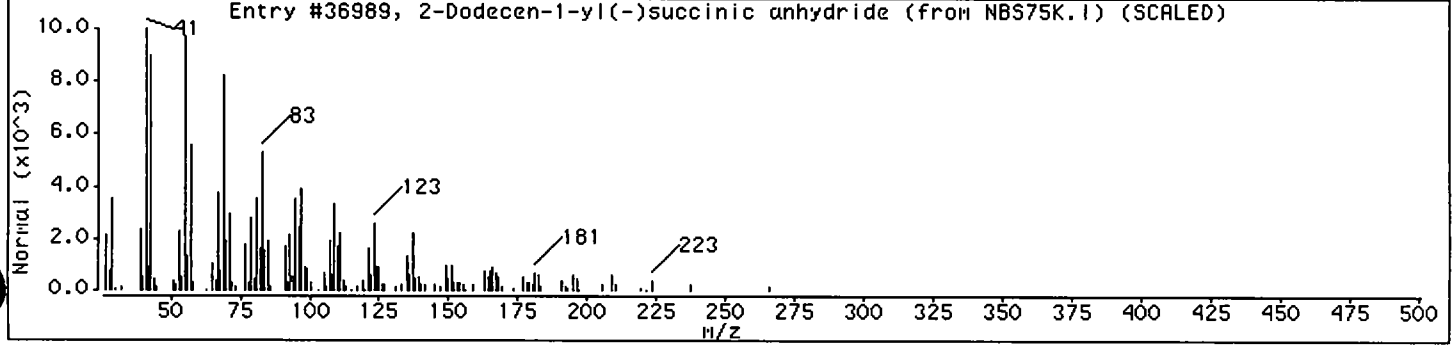
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	90	C28H480	400
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	87	C20H34	274
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	86	C16H2603	266









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Date : 16-DEC-1996 22:47

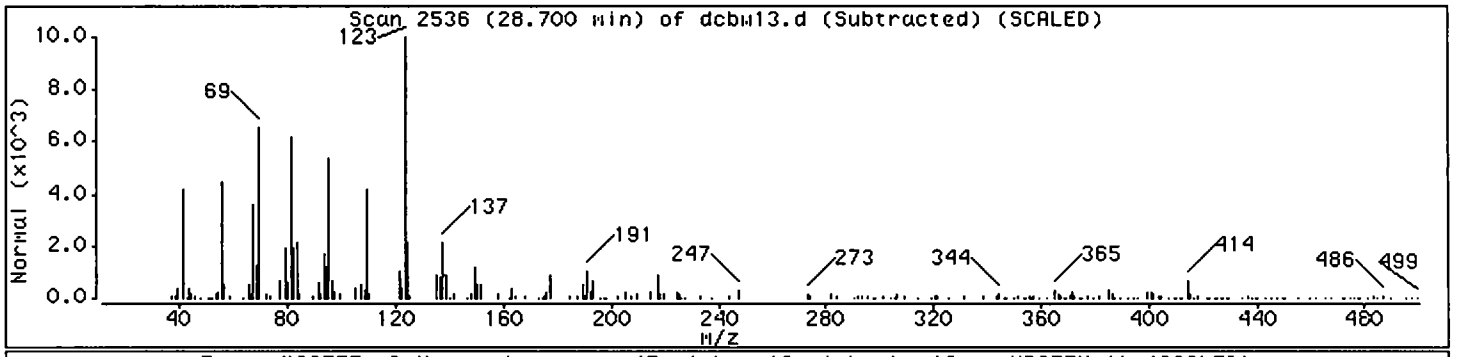
Client ID: WS-08RE Instrument: gcl4.i

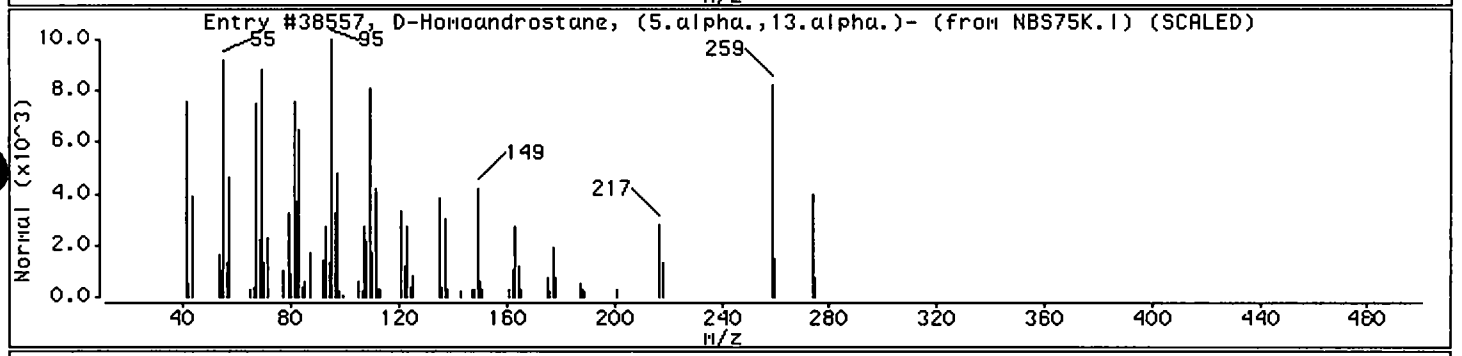
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

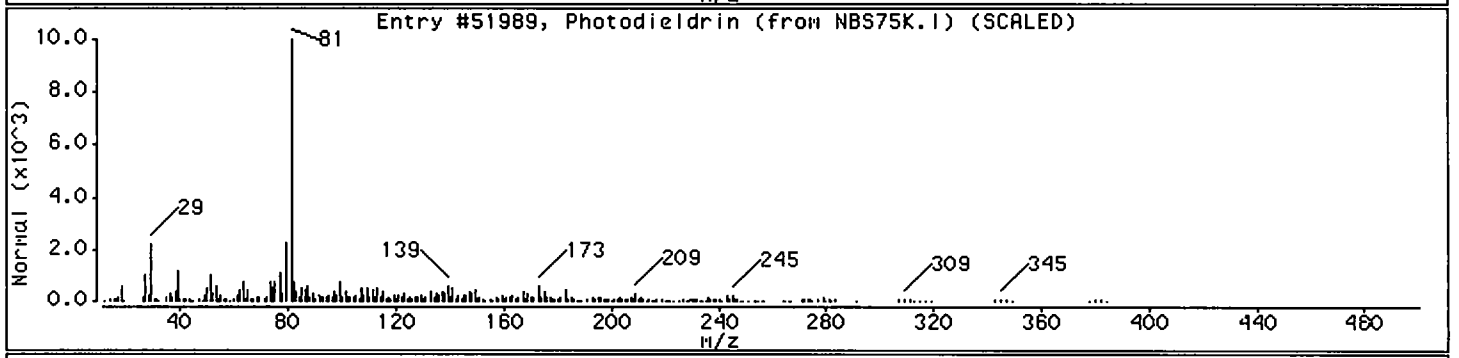
Volume Injected (uL): 2.0 Operator: GLR

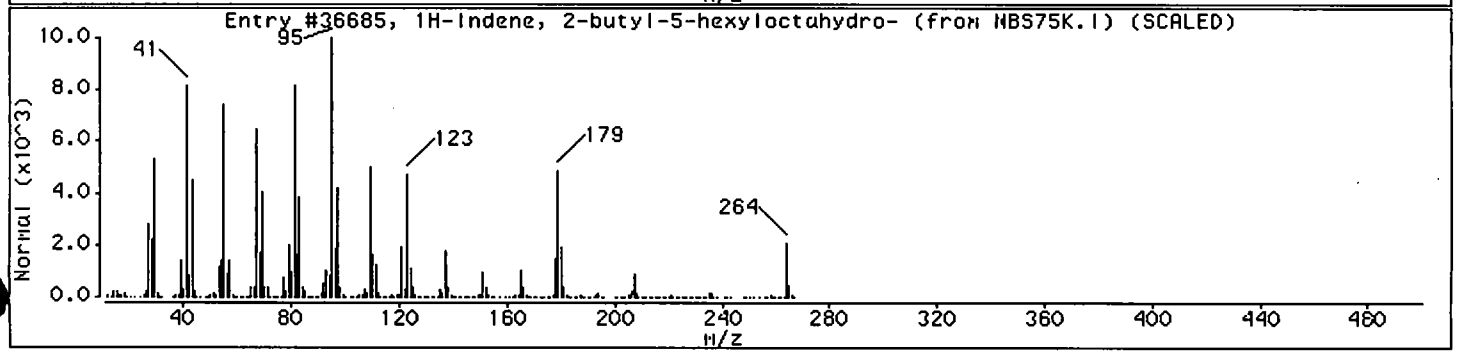
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
D-Homoandrostane, (5.alpha.,13.alpha.)-	54482-31-4	NBS75K.l	38557	90	C20H34	274
Photodieldrin	13366-73-9	NBS75K.l	51989	53	C12H8Cl6O	378
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	53	C19H36	264









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Date : 16-DEC-1996 22:47

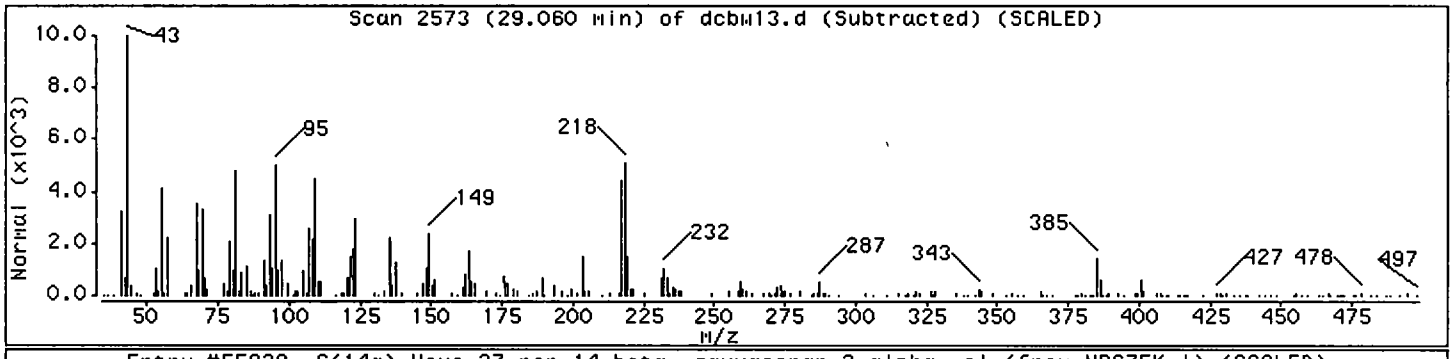
Client ID: WS-08RE Instrument: gcl4.i

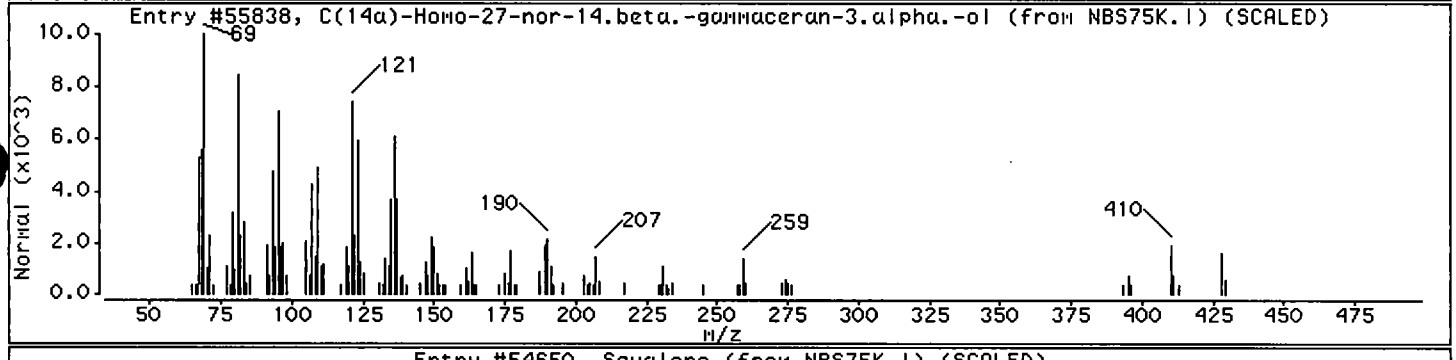
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

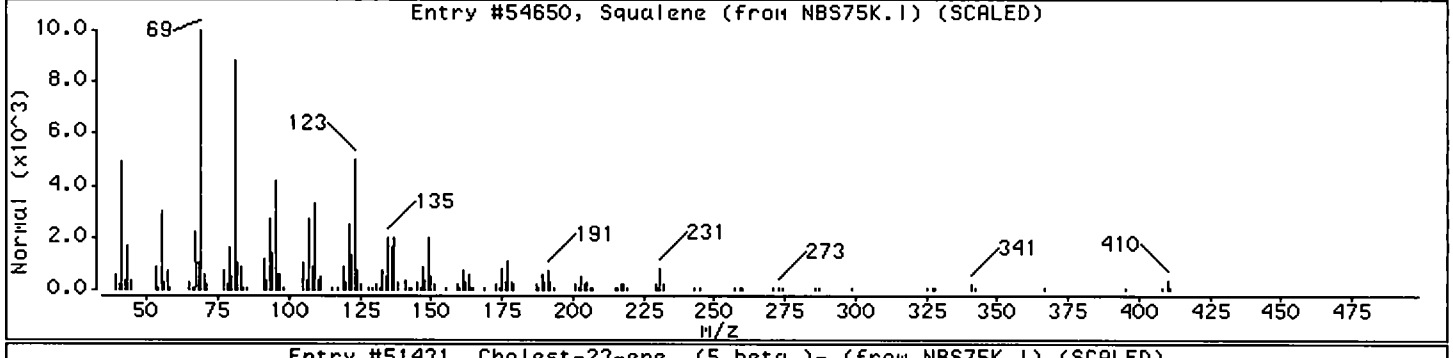
Volume Injected (uL): 2.0 Operator: GLR

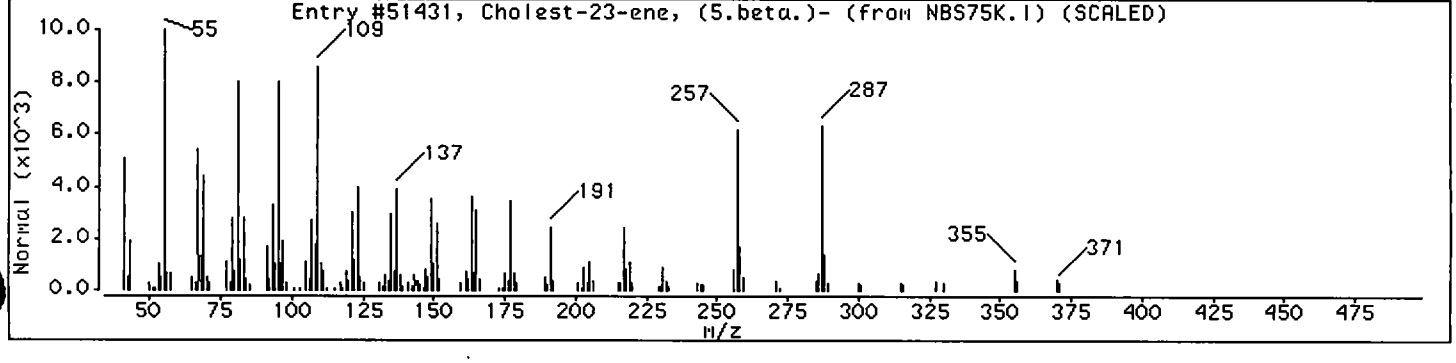
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	91	C30H52O	428
Squalene	7683-64-9	NBS75K.l	54650	74	C30H50	410
Cholest-23-ene, (5.beta.)-	30658-62-9	NBS75K.l	51431	58	C27H46	370









Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

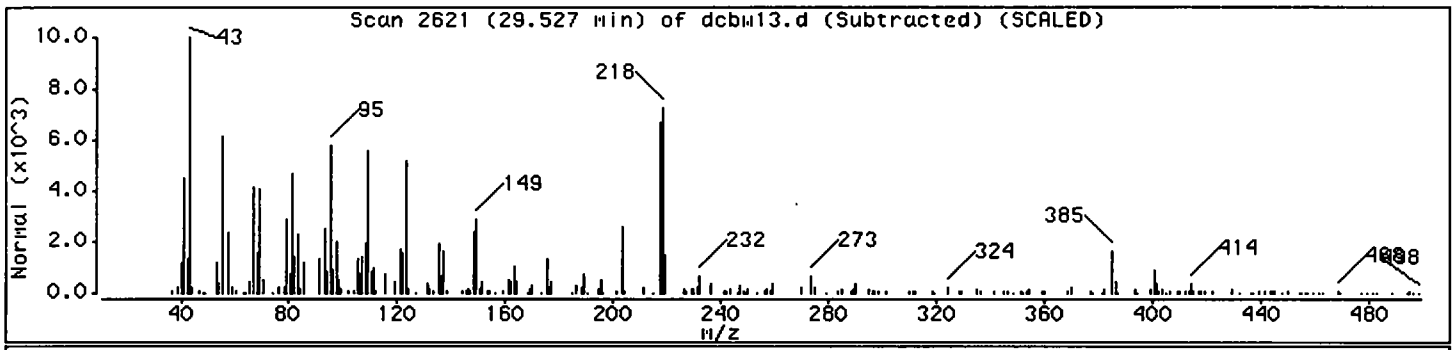
Client ID: WS-08RE Instrument: gcl4.i

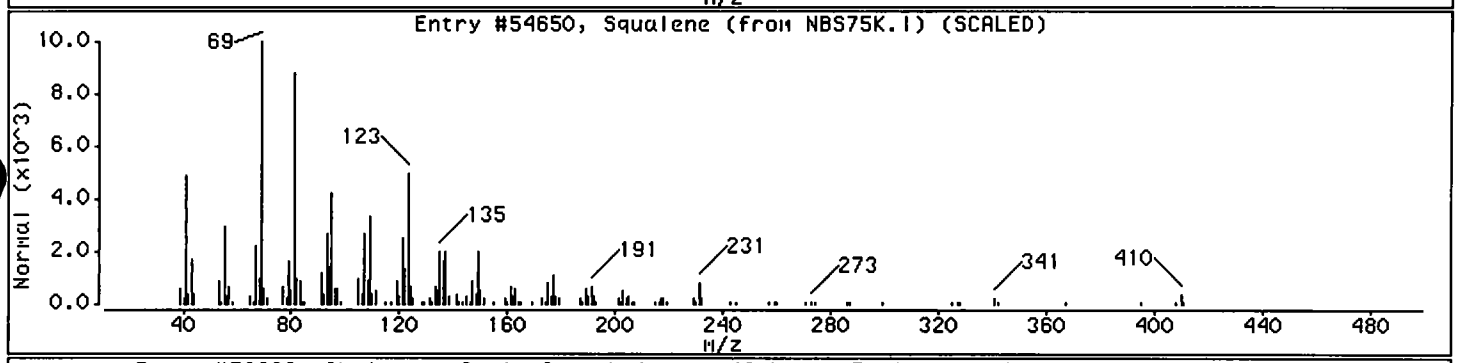
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

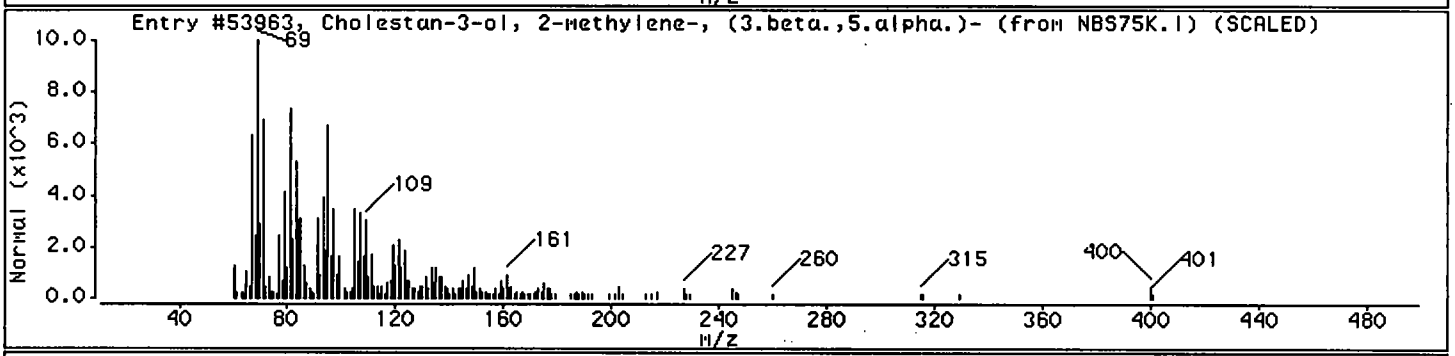
Volume Injected (uL): 2.0 Operator: GLR

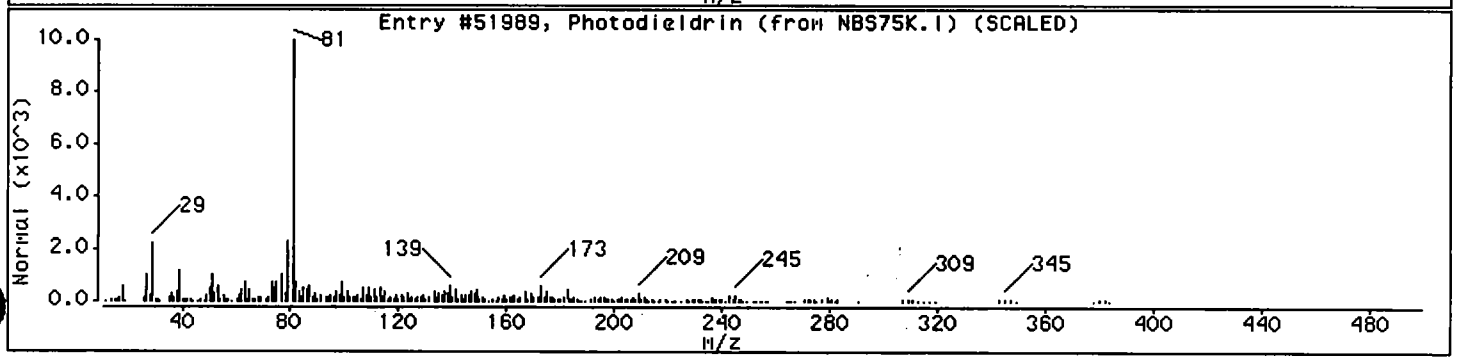
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Squalene	7683-64-9	NBS75K.l	54650	80	C30H50	410
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	58	C28H48O	400
Photodieldrin	13366-73-9	NBS75K.l	51989	53	C12H8Cl6O	378









Data File: /chem/gc14.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

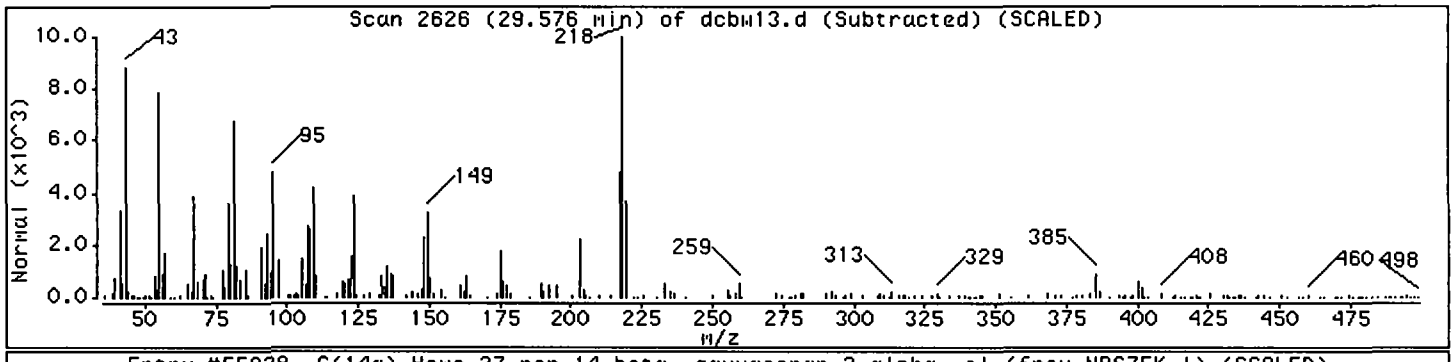
Client ID: WS-08RE Instrument: gc14.i

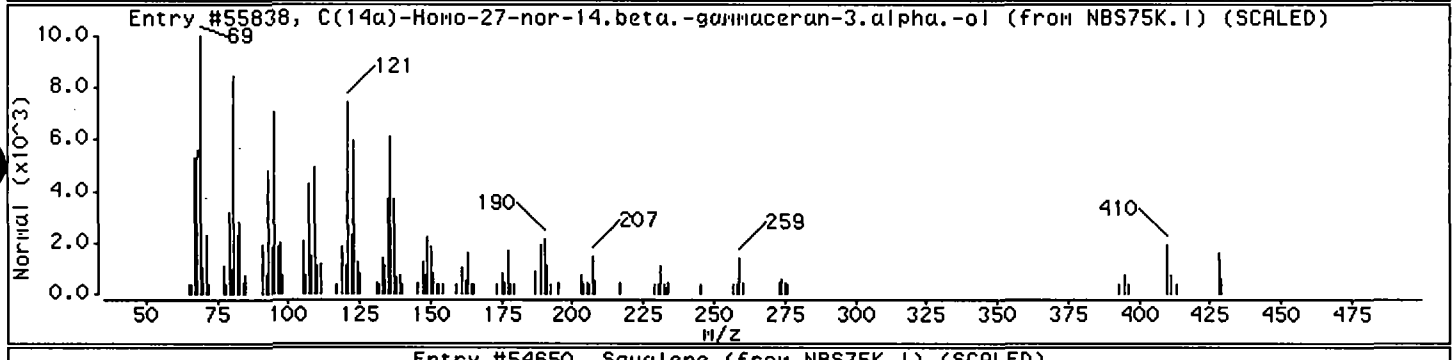
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

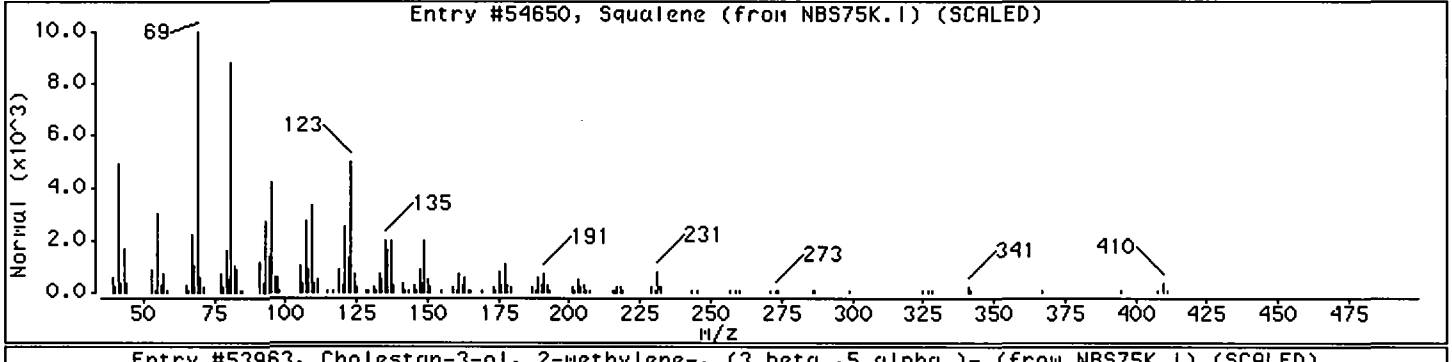
Volume Injected (uL): 2.0 Operator: GLR

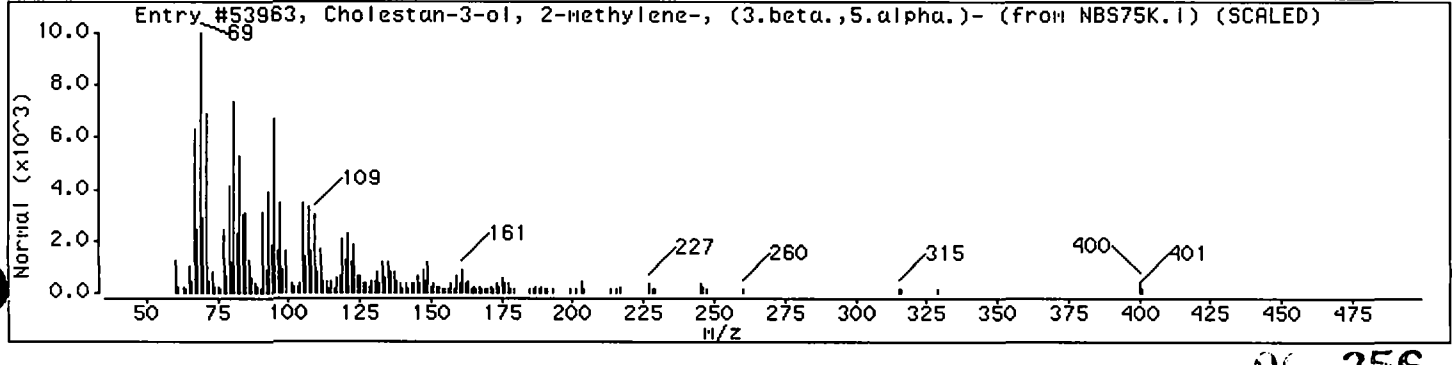
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	86	C30H52O	428
Squalene	7683-64-9	NBS75K.l	54650	58	C30H50	410
Cholestan-3-ol, 2-methylene-, (3.beta.,5	22599-96-8	NBS75K.l	53963	58	C28H48O	400









Data File: /chem/gcl4.i/dec1696b.b/dcbw13.d

Date : 16-DEC-1996 22:47

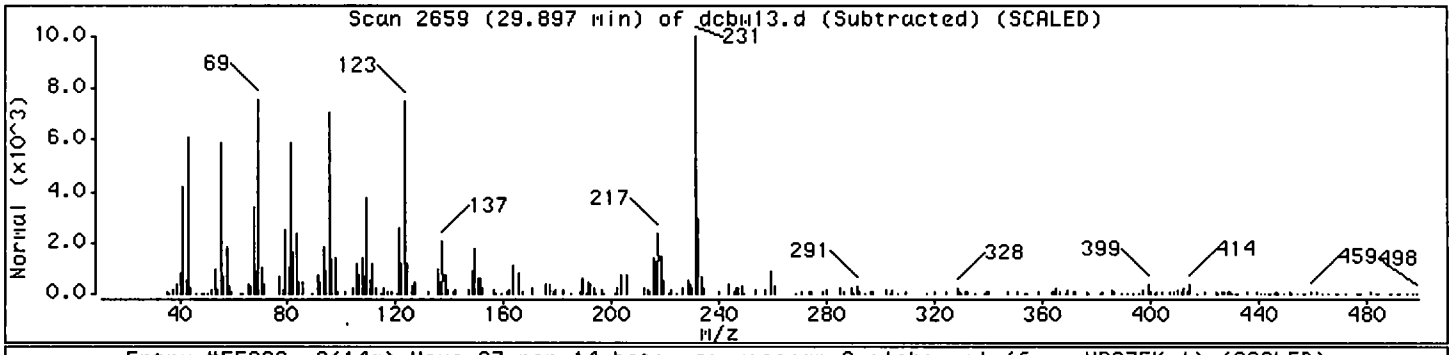
Client ID: WS-08RE Instrument: gcl4.i

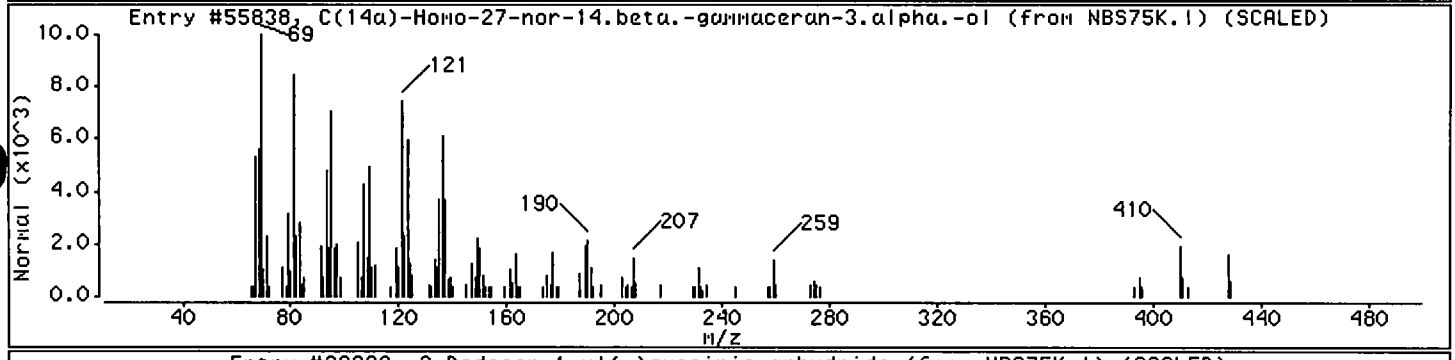
Sample Info: 9611G675-008 DFAC16,[AL=0625HS],[DC=A1]

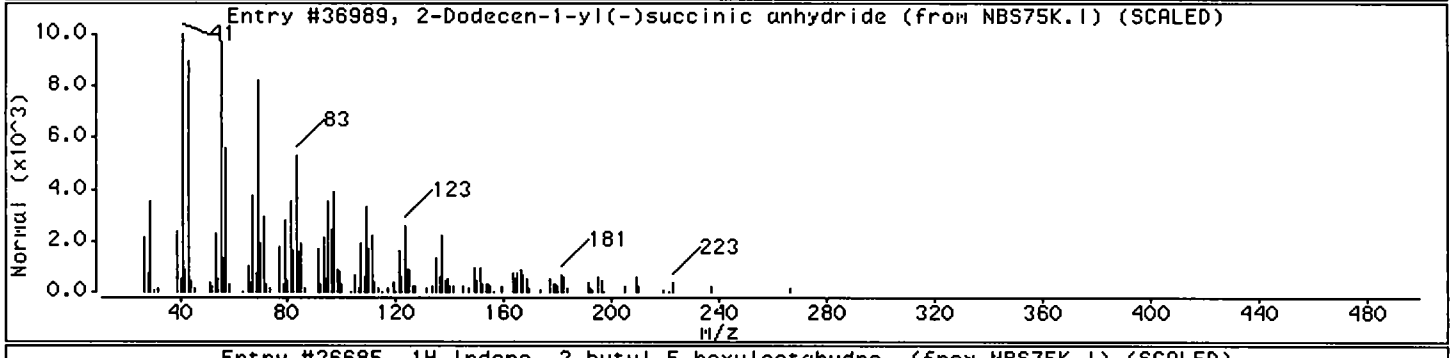
Volume Injected (uL): 2.0 Operator: GLR

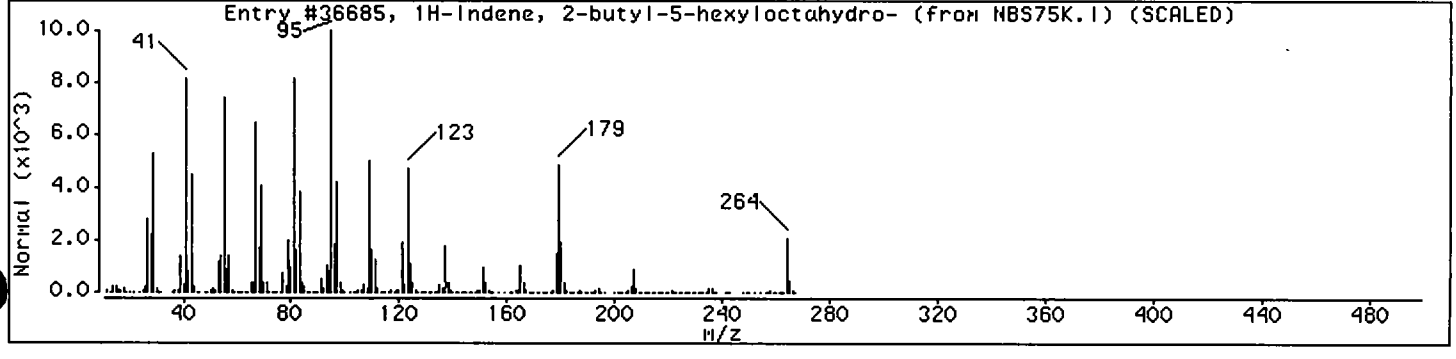
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
C(14a)-Homo-27-nor-14.beta.-gammaceran-3	24739-08-0	NBS75K.l	55838	70	C30H52O	428
2-Dodecen-1-yl(-)succinic anhydride	19780-11-1	NBS75K.l	36989	52	C16H26O3	266
1H-Indene, 2-butyl-5-hexyloctahydro-	55044-33-2	NBS75K.l	36685	49	C19H36	264









VI. STANDARDS DATA

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date(s): 12/06/96 12/06/96

Calibration Time(s): 0755 1053

LAB FILE ID: RRF20 =DGEC06 RRF50 =DGDC06
RRF80 =DGCC06 RRF120=DGBC06 RRF160=DGAC06

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Phenol *	2.279	1.939	1.892	1.775	1.685	1.914	11.9*
bis(2-Chloroethyl)ether *	1.732	1.460	1.430	1.288	1.208	1.424	14.1*
2-Chlorophenol *	1.696	1.457	1.421	1.306	1.283	1.433	11.5*
1,3-Dichlorobenzene *	1.815	1.548	1.522	1.391	1.385	1.532	11.4*
1,4-Dichlorobenzene *	1.852	1.614	1.553	1.400	1.362	1.556	12.6*
1,2-Dichlorobenzene *	1.688	1.446	1.358	1.233	1.185	1.382	14.4*
2-Methylphenol *	1.500	1.317	1.297	1.233	1.205	1.310	8.8*
2,2'-oxybis(1-Chloropropane)	1.724	1.551	1.529	1.462	1.447	1.543	7.2
4-Methylphenol *	1.510	1.318	1.298	1.171	1.136	1.287	11.5*
N-Nitroso-di-n-propylamine *	1.296	1.163	1.165	1.083	0.977	1.137	10.4*
Hexachloroethane *	0.737	0.665	0.660	0.620	0.611	0.659	7.6*
Nitrobenzene *	0.485	0.434	0.435	0.404	0.397	0.431	8.1*
Isophorone *	0.950	0.837	0.814	0.764	0.753	0.824	9.5*
2-Nitrophenol *	0.241	0.219	0.232	0.223	0.219	0.227	4.2*
2,4-Dimethylphenol *	0.524	0.454	0.435	0.406	0.404	0.445	11.0*
bis(2-Chloroethoxy)methane *	0.565	0.493	0.480	0.443	0.438	0.484	10.6*
2,4-Dichlorophenol *	0.340	0.297	0.299	0.279	0.276	0.298	8.6*
1,2,4-Trichlorobenzene *	0.366	0.321	0.311	0.283	0.280	0.312	11.2*
Naphthalene *	1.206	1.022	0.959	0.859	0.841	0.977	15.1*
4-Chloroaniline	0.502	0.446	0.445	0.422	0.402	0.443	8.5
Hexachlorobutadiene	0.208	0.179	0.174	0.155	0.154	0.174	12.6
4-Chloro-3-methylphenol *	0.441	0.403	0.402	0.365	0.368	0.396	7.8*
2-Methylnaphthalene *	0.765	0.670	0.645	0.566	0.563	0.642	13.0*
Hexachlorocyclopentadiene	0.235	0.243	0.271	0.226	0.175	0.230	15.3
2,4,6-Trichlorophenol *	0.452	0.407	0.424	0.417	0.434	0.427	4.0*
2,4,5-Trichlorophenol *		0.425	0.427	0.376	0.366	0.398	8.0*
2-Chloronaphthalene *	1.351	1.214	1.168	1.088	1.077	1.180	9.4*
2-Nitroaniline		0.480	0.515	0.496	0.499	0.498	2.9
Dimethylphthalate	1.638	1.433	1.444	1.288	1.265	1.414	10.6
Acenaphthylene *	2.198	1.888	1.840	1.641	1.644	1.842	12.4*
2,6-Dinitrotoluene *	0.327	0.328	0.348	0.333	0.332	0.334	2.5*
3-Nitroaniline		0.344	0.386	0.371	0.376	0.369	4.7
Acenaphthene *	1.295	1.145	1.114	1.022	1.032	1.122	9.8*
2,4-Dinitrophenol *		0.112	0.171	0.186	0.205	0.168	23.7*
4-Nitrophenol *		0.193	0.214	0.210	0.218	0.209	5.2*
Dibenzofuran *	1.872	1.596	1.546	1.408	1.385	1.561	12.5*
2,4-Dinitrotoluene *	0.449	0.428	0.452	0.417	0.436	0.436	3.3*

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date(s): 12/06/96 12/06/96

Calibration Time(s): 0755 1053

LAB FILE ID: RRF20 =DGEC06 RRF50 =DGDC06
RRF80 =DGCC06 RRF120=DGBC06 RRF160=DGAC06

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Diethylphthalate	1.704	1.463	1.436	1.296	1.284	1.437	11.8
4-Chlorophenyl-phenylether *	0.696	0.595	0.587	0.536	0.539	0.591	10.9*
Fluorene *	1.520	1.334	1.296	1.165	1.159	1.295	11.4*
4-Nitroaniline		0.280	0.334	0.316	0.319	0.312	7.3
4,6-Dinitro-2-methylphenol		0.120	0.152	0.150	0.157	0.145	11.5
n-Nitrosodiphenylamine (1)	0.621	0.543	0.546	0.506	0.510	0.545	8.5
4-Bromophenyl-phenylether *	0.208	0.184	0.182	0.170	0.173	0.183	8.2*
Hexachlorobenzene *	0.256	0.222	0.210	0.194	0.196	0.216	11.8*
Pentachlorophenol *		0.134	0.142	0.140	0.143	0.140	2.7*
Phenanthrene *	1.215	1.049	0.982	0.895	0.902	1.009	13.0*
Anthracene *	1.200	1.022	0.970	0.871	0.876	0.988	13.6*
Carbazole	0.984	0.921	0.898	0.852	0.846	0.900	6.3
Di-n-butylphthalate	1.612	1.370	1.289	1.109	1.098	1.296	16.4
Fluoranthene *	1.169	1.008	0.969	0.875	0.869	0.978	12.5*
Pyrene *	2.073	1.852	1.697	1.660	1.660	1.788	9.9*
Butylbenzylphthalate	1.154	1.090	1.084	1.064	1.093	1.097	3.1
3,3'-Dichlorobenzidine	0.406	0.409	0.451	0.444	0.458	0.434	5.6
Benzo(a)anthracene *	1.446	1.321	1.336	1.301	1.304	1.342	4.5*
Chrysene *	1.464	1.305	1.296	1.259	1.274	1.320	6.3*
bis(2-Ethylhexyl)phthalate	1.417	1.373	1.332	1.309	1.311	1.348	3.4
Di-n-octylphthalate	2.501	2.417	2.296	2.079	2.102	2.279	8.2
Benzo(b)fluoranthene *	1.418	1.227	1.213	1.193	1.179	1.246	7.8*
Benzo(k)fluoranthene *	1.572	1.369	1.252	1.121	1.154	1.294	14.2*
Benzo(a)pyrene *	1.276	1.134	1.127	1.074	1.057	1.134	7.6*
Indeno(1,2,3-cd)pyrene *	1.074	1.009	1.017	1.009	0.997	1.021	3.0*
Dibenzo(a,h)anthracene *	1.021	0.977	0.973	0.934	0.941	0.969	3.6*
Benzo(g,h,i)perylene *	1.186	1.083	1.087	1.042	1.058	1.091	5.1*
Nitrobenzene-d5	0.473	0.420	0.432	0.417	0.408	0.430	5.9*
2-Fluorobiphenyl *	1.525	1.310	1.280	1.168	1.171	1.291	11.3*
Terphenyl-d14 *	1.235	1.126	1.081	1.049	1.059	1.110	6.8*
Phenol-d5 *	2.031	1.795	1.719	1.595	1.583	1.745	10.5*
2-Fluorophenol	1.696	1.462	1.445	1.362	1.348	1.463	9.5
2,4,6-Tribromophenol	0.180	0.170	0.173	0.160	0.165	0.170	4.6
2-Chlorophenol-d4 *	1.653	1.434	1.396	1.298	1.266	1.409	10.8*
1,2-Dichlorobenzene-d4 *	1.078	0.909	0.899	0.842	0.823	0.910	11.1*

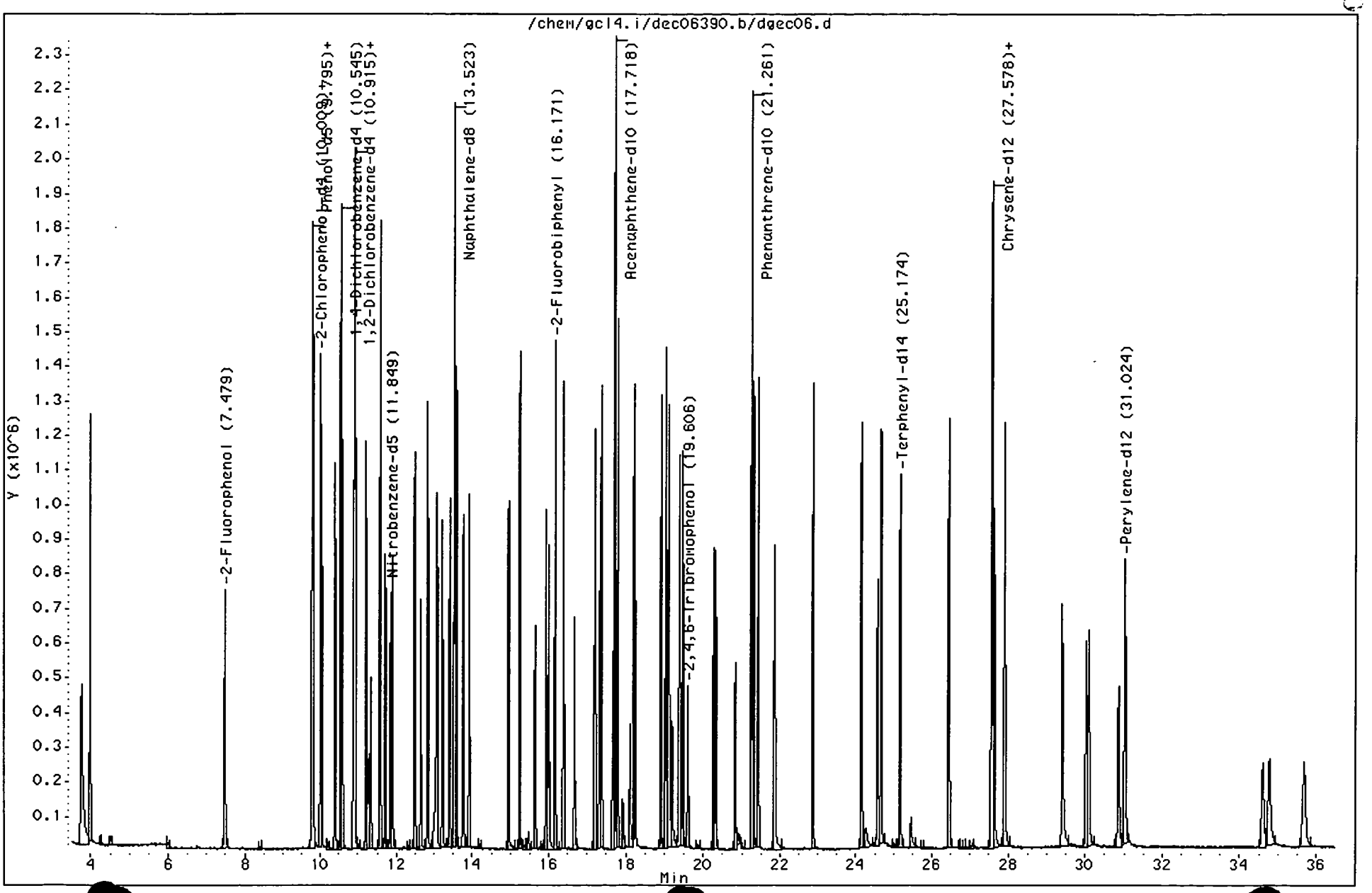
(1) Cannot be seperated from Diphenylamine
* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

Data File: /chem/gcl4.i/dec06390.b/dgec06.d
Date : 06-DEC-1996 10:53
Client ID: SSTD020
Sample Info: SSTD020 DFAC06
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: RJM
Column diameter: 2.00

361



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec06390.b/dgec06.d
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 06-DEC-1996 10:53
Operator : RJM Inst ID: gcl4.i
Smp Info : SSTD020 DFAC06
Misc Info : GCL#4 B1910E
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec06390.b/390.m
Meth Date : 18-Dec-1996 23:35 squiresb Quant Type: ISTD
Cal Date : 06-DEC-1996 10:08 Cal File: dgdc06.d
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

WMS 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	10.545	10.545	(1.000)	490220	40.000	
* 26 Naphthalene-d8	136.00	13.523	13.523	(1.000)	1722224	40.000	
* 41 Acenaphthene-d10	164.00	17.718	17.718	(1.000)	879727	40.000	
* 56 Phenanthrene-d10	188.00	21.261	21.261	(1.000)	1415861	40.000	
* 67 Chrysene-d12	240.00	27.578	27.578	(1.000)	805557	40.000	
* 75 Perylene-d12	264.00	31.024	31.024	(1.000)	684053	40.000	
$ 1 2-Fluorophenol	112.00	7.479	7.479	(0.709)	415715	20.000	23.191
$ 2 Phenol-d5	99.00	9.766	9.766	(0.926)	497909	20.000	23.286
$ 5 2-Chlorophenol-d4	132.00	10.000	10.000	(0.948)	405135	20.000	23.455
$ 10 1,2-Dichlorobenzene-d4	152.00	10.885	10.885	(1.032)	264145	20.000	23.683
$ 17 Nitrobenzene-d5	82.00	11.849	11.849	(0.876)	407091	20.000	21.992
$ 34 2-Fluorobiphenyl	172.00	16.171	16.171	(0.913)	670996	20.000	23.634
$ 52 2,4,6-Tribromophenol	330.00	19.606	19.606	(1.107)	79276	20.000	21.246
$ 64 Terphenyl-d14	244.00	25.174	25.174	(0.913)	497325	20.000	22.249
3 Phenol	94.00	9.795	9.795	(0.929)	558675	20.000	23.818
6 2-Chlorophenol	128.00	10.039	10.039	(0.952)	415683	20.000	23.678
9 1,4-Dichlorobenzene	146.00	10.584	10.584	(1.004)	453876	20.000	23.800
14 N-Nitroso-di-n-propylamine	70.00	11.567	11.567	(1.097)	317744	20.000	22.805
25 1,2,4-Trichlorobenzene	180.00	13.416	13.416	(0.992)	315246	20.000	23.437
29 4-Chloro-3-methylphenol	107.00	14.964	14.964	(1.107)	379796	20.000	22.281

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	17.796	17.796	(1.004)	569720	20.000	23.090
43 4-Nitrophenol	109.00	18.117	18.117	(1.023)	80551	20.000	17.524(a)
45 2,4-Dinitrotoluene	165.00	18.244	18.244	(1.030)	197671	20.000	20.586
55 Pentachlorophenol	266.00	20.823	20.823	(0.979)	94589	20.000	19.119(a)
63 Pyrene	202.00	24.677	24.677	(0.895)	835140	20.000	23.185
4 bis(2-Chloroethyl)ether	93.00	10.009	10.009	(0.949)	424421	20.000	24.331
7 1,3-Dichlorobenzene	146.00	10.399	10.399	(0.986)	444840	20.000	23.689
11 1,2-Dichlorobenzene	146.00	10.915	10.915	(1.035)	413738	20.000	24.424
12 2-Methylphenol	108.00	11.207	11.207	(1.063)	367619	20.000	22.890
15 4-Methylphenol	108.00	11.576	11.576	(1.098)	370258	20.000	23.477
13 2,2'-oxybis(1-Chloropropane)	45.00	11.333	11.333	(1.075)	422457	20.000	22.348(M)
16 Hexachloroethane	117.00	11.703	11.703	(1.110)	180699	20.000	22.388
18 Nitrobenzene	77.00	11.898	11.898	(0.880)	417378	20.000	22.502
19 Isophorone	82.00	12.491	12.491	(0.924)	817939	20.000	23.061
20 4-Chloroaniline	127.00	13.757	13.757	(1.017)	432571	20.000	22.649
21 2-Nitrophenol	139.00	12.647	12.647	(0.935)	207326	20.000	21.246
22 2,4-Dimethylphenol	107.00	12.832	12.832	(0.949)	450804	20.000	23.552
23 bis(2-Chloroethoxy)methane	93.00	13.075	13.075	(0.967)	486294	20.000	23.357
24 2,4-Dichlorophenol	162.00	13.221	13.221	(0.978)	293134	20.000	22.823
27 Naphthalene	128.00	13.572	13.572	(1.004)	1038082	20.000	24.666
28 Hexachlorobutadiene	225.00	13.922	13.922	(1.030)	178886	20.000	23.863
30 2-Methylnaphthalene	142.00	15.246	15.246	(1.127)	659073	20.000	23.842
31 Hexachlorocyclopentadiene	237.00	15.635	15.635	(0.882)	103195	20.000	20.396
32 2,4,6-Trichlorophenol	196.00	15.937	15.937	(0.899)	198617	20.000	21.160
33 2,4,5-Trichlorophenol	196.00	16.005	16.005	(0.903)	206020	20.000	23.482(a)
35 2-Chloronaphthalene	162.00	16.394	16.394	(0.925)	594392	20.000	22.907
36 2-Nitroaniline	65.00	16.677	16.677	(0.941)	209896	20.000	19.180(a)
40 3-Nitroaniline	138.00	17.669	17.669	(0.997)	158077	20.000	19.468(a)
49 4-Nitroaniline	138.00	19.120	19.120	(1.079)	126817	20.000	18.470(a)
62 2,4-Dinitrophenol	184.00	17.922	17.922	(1.012)	34110	20.000	9.196(a)
37 Dimethylphthalate	163.00	17.202	17.202	(0.971)	720740	20.000	23.178
38 2,6-Dinitrotoluene	165.00	17.309	17.309	(0.977)	143706	20.000	19.583
39 Acenaphthylene	152.00	17.368	17.368	(0.980)	966869	20.000	23.863
44 Dibenzofuran	168.00	18.215	18.215	(1.028)	823581	20.000	23.982
46 Diethylphthalate	149.00	18.915	18.915	(1.068)	749673	20.000	23.724
47 Fluorene	166.00	19.032	19.032	(1.074)	668598	20.000	23.480
48 4-Chlorophenyl-phenylether	204.00	19.110	19.110	(1.079)	306004	20.000	23.557
50 4,6-Dinitro-2-methylphenol	198.00	19.207	19.207	(0.903)	77664	20.000	15.146(a)
51 n-Nitrosodiphenylamine	169.00	19.392	19.392	(0.912)	439928	20.000	22.795
53 4-Bromophenyl-phenylether	248.00	20.268	20.268	(0.953)	147551	20.000	22.686
54 Hexachlorobenzene	284.00	20.327	20.327	(0.956)	181292	20.000	23.745
57 Phenanthrene	178.00	21.319	21.319	(1.003)	860082	20.000	24.092
58 Anthracene	178.00	21.436	21.436	(1.008)	849366	20.000	24.292
59 Carbazole	167.00	21.864	21.864	(1.028)	696621	20.000	21.860
60 Di-n-butylphthalate	149.00	22.877	22.877	(1.076)	1141333	20.000	24.891
61 Fluoranthene	202.00	24.152	24.152	(1.136)	827793	20.000	23.908
65 Butylbenzylphthalate	149.00	26.449	26.449	(0.959)	464616	20.000	21.032
66 Benzo(a)anthracene	228.00	27.558	27.558	(0.999)	582625	20.000	21.563
69 Chrysene	228.00	27.636	27.636	(1.002)	589475	20.000	22.184

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	27.578	27.578	(1.000)	163542	20.000	18.727
70 bis(2-Ethylhexyl)phthalate	149.00	27.909	27.909	(1.012)	570873	20.000	21.025
71 Di-n-octylphthalate	149.00	29.408	29.408	(0.948)	855369	20.000	21.946
72 Benzo(b)fluoranthene	252.00	30.031	30.031	(0.968)	484825	20.000	22.753
73 Benzo(k)fluoranthene	252.00	30.099	30.099	(0.970)	537825	20.000	24.309
74 Benzo(a)pyrene	252.00	30.868	30.868	(0.995)	436338	20.000	22.507
76 Indeno(1,2,3-cd)pyrene	276.00	34.605	34.605	(1.115)	367371	20.000	21.034
77 Dibenzo(a,h)anthracene	278.00	34.781	34.781	(1.121)	349273	20.000	21.068
78 Benzo(g,h,i)perylene	276.00	35.686	35.686	(1.150)	405660	20.000	21.737

QC Flag Legend

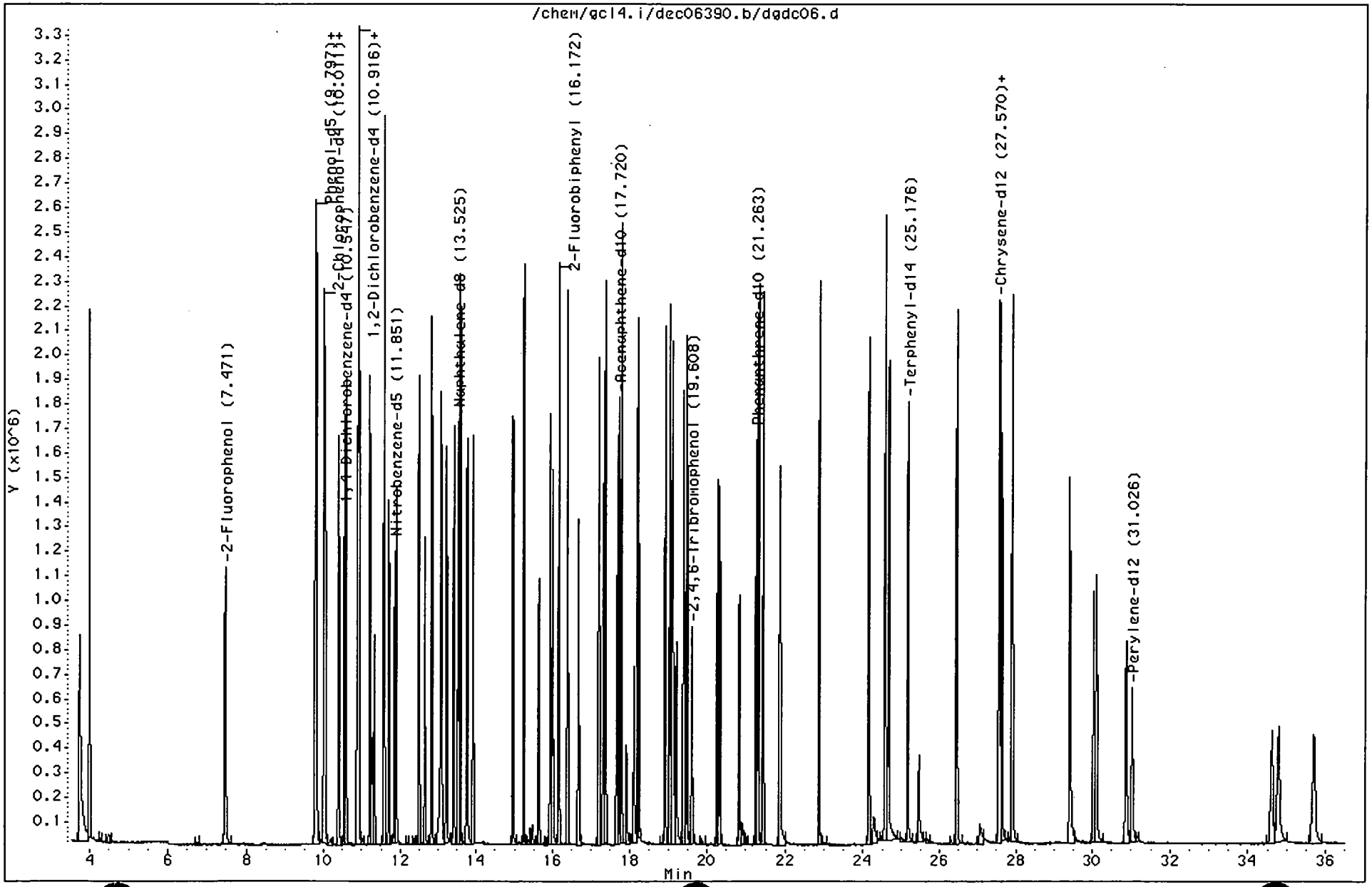
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: /chem/gcl4.i/dec06390.b/dgdc06.d
Date : 06-DEC-1996 10:08
Client ID: SSTD050
Sample Info: SSTD050 DFAC06
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: RJM
Column diameter: 2.00

365



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec06390.b/dgdc06.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 06-DEC-1996 10:08
Operator : RJM Inst ID: gcl4.i
Smp Info : SSTD050 DFAC06
Misc Info : GCL#4 B1910D
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec06390.b/390.m
Meth Date : 18-Dec-1996 23:35 squiresb Quant Type: ISTD
Cal Date : 06-DEC-1996 10:08 Cal File: dgdc06.d
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

WB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	10.547	10.547	(1.000)	378671	40.000	
* 26 Naphthalene-d8	136.00	13.525	13.525	(1.000)	1329838	40.000	
* 41 Acenaphthene-d10	164.00	17.720	17.720	(1.000)	686761	40.000	
* 56 Phenanthrene-d10	188.00	21.263	21.263	(1.000)	1122878	40.000	
* 67 Chrysene-d12	240.00	27.580	27.580	(1.000)	605087	40.000	
* 75 Perylene-d12	264.00	31.026	31.026	(1.000)	542443	40.000	
$ 1 2-Fluorophenol	112.00	7.471	7.471	(0.708)	692068	50.000	49.980
$ 2 Phenol-d5	99.00	9.778	9.778	(0.927)	849737	50.000	51.447
$ 5 2-Chlorophenol-d4	132.00	10.002	10.002	(0.948)	678534	50.000	50.856
$ 10 1,2-Dichlorobenzene-d4	152.00	10.887	10.887	(1.032)	430207	50.000	49.935
$ 17 Nitrobenzene-d5	82.00	11.851	11.851	(0.876)	697590	50.000	48.804
$ 34 2-Fluorobiphenyl	172.00	16.172	16.172	(0.913)	1124979	50.000	50.757
$ 52 2,4,6-Tribromophenol	330.00	19.608	19.608	(1.107)	146148	50.000	50.174
$ 64 Terphenyl-d14	244.00	25.176	25.176	(0.913)	851753	50.000	50.729
3 Phenol	94.00	9.807	9.807	(0.930)	917925	50.000	50.661
6 2-Chlorophenol	128.00	10.040	10.040	(0.952)	689603	50.000	50.852
9 1,4-Dichlorobenzene	146.00	10.585	10.585	(1.004)	763746	50.000	51.847
14 N-Nitroso-di-n-propylamine	70.00	11.578	11.578	(1.098)	550658	50.000	51.164
25 1,2,4-Trichlorobenzene	180.00	13.408	13.408	(0.991)	534371	50.000	51.449
29 4-Chloro-3-methylphenol	107.00	14.956	14.956	(1.106)	670297	50.000	50.926

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	17.798	17.798	(1.004)	983165	50.000	51.042
43 4-Nitrophenol	109.00	18.119	18.119	(1.023)	166083	50.000	46.285
45 2,4-Dinitrotoluene	165.00	18.255	18.255	(1.030)	367598	50.000	49.040
55 Pentachlorophenol	266.00	20.825	20.825	(0.979)	188832	50.000	48.126
63 Pyrene	202.00	24.679	24.679	(0.895)	1401222	50.000	51.788
4 bis(2-Chloroethyl)ether	93.00	10.011	10.011	(0.949)	690902	50.000	51.275
7 1,3-Dichlorobenzene	146.00	10.401	10.401	(0.986)	732630	50.000	50.507
11 1,2-Dichlorobenzene	146.00	10.916	10.916	(1.035)	684496	50.000	52.311
12 2-Methylphenol	108.00	11.208	11.208	(1.063)	623610	50.000	50.267
15 4-Methylphenol	108.00	11.588	11.588	(1.099)	624076	50.000	51.227
13 2,2'-oxybis(1-Chloropropane)	45.00	11.335	11.335	(1.075)	734135	50.000	50.277(M)
16 Hexachloroethane	117.00	11.705	11.705	(1.110)	314755	50.000	50.485
18 Nitrobenzene	77.00	11.900	11.900	(0.880)	721474	50.000	50.375
19 Isophorone	82.00	12.493	12.493	(0.924)	1392043	50.000	50.827
20 4-Chloroaniline	127.00	13.759	13.759	(1.017)	741288	50.000	50.266
21 2-Nitrophenol	139.00	12.649	12.649	(0.935)	363875	50.000	48.290
22 2,4-Dimethylphenol	107.00	12.834	12.834	(0.949)	754900	50.000	51.076
23 bis(2-Chloroethoxy)methane	93.00	13.077	13.077	(0.967)	819563	50.000	50.979
24 2,4-Dichlorophenol	162.00	13.223	13.223	(0.978)	493053	50.000	49.716
27 Naphthalene	128.00	13.574	13.574	(1.004)	1699748	50.000	52.304
28 Hexachlorobutadiene	225.00	13.924	13.924	(1.030)	298355	50.000	51.543
30 2-Methylnaphthalene	142.00	15.248	15.248	(1.127)	1114064	50.000	52.194
31 Hexachlorocyclopentadiene	237.00	15.637	15.637	(0.882)	208990	50.000	52.911
32 2,4,6-Trichlorophenol	196.00	15.939	15.939	(0.899)	349136	50.000	47.646
33 2,4,5-Trichlorophenol	196.00	16.007	16.007	(0.903)	365140	50.000	53.312
35 2-Chloronaphthalene	162.00	16.396	16.396	(0.925)	1042609	50.000	51.470
36 2-Nitroaniline	65.00	16.679	16.679	(0.941)	412113	50.000	48.241
40 3-Nitroaniline	138.00	17.671	17.671	(0.997)	295798	50.000	46.665
49 4-Nitroaniline	138.00	19.131	19.131	(1.080)	240467	50.000	44.862
62 2,4-Dinitrophenol	184.00	17.924	17.924	(1.012)	96578	50.000	33.354
37 Dimethylphthalate	163.00	17.204	17.204	(0.971)	1230360	50.000	50.683
38 2,6-Dinitrotoluene	165.00	17.311	17.311	(0.977)	281882	50.000	49.206
39 Acenaphthylene	152.00	17.370	17.370	(0.980)	1620703	50.000	51.238
44 Dibenzofuran	168.00	18.216	18.216	(1.028)	1370435	50.000	51.118
46 Diethylphthalate	149.00	18.927	18.927	(1.068)	1255769	50.000	50.906
47 Fluorene	166.00	19.034	19.034	(1.074)	1145524	50.000	51.534
48 4-Chlorophenyl-phenylether	204.00	19.112	19.112	(1.079)	511042	50.000	50.395
50 4,6-Dinitro-2-methylphenol	198.00	19.209	19.209	(0.903)	168940	50.000	41.544
51 n-Nitrosodiphenylamine	169.00	19.394	19.394	(0.912)	762152	50.000	49.796
53 4-Bromophenyl-phenylether	248.00	20.270	20.270	(0.953)	258812	50.000	50.174
54 Hexachlorobenzene	284.00	20.329	20.329	(0.956)	312179	50.000	51.557
57 Phenanthrene	178.00	21.321	21.321	(1.003)	1471914	50.000	51.988
58 Anthracene	178.00	21.438	21.438	(1.008)	1434562	50.000	51.735
59 Carbazole	167.00	21.866	21.866	(1.028)	1292963	50.000	51.159
60 Di-n-butylphthalate	149.00	22.879	22.879	(1.076)	1922620	50.000	52.870
61 Fluoranthene	202.00	24.154	24.154	(1.136)	1414847	50.000	51.525
65 Butylbenzylphthalate	149.00	26.451	26.451	(0.959)	824810	50.000	49.707
66 Benzo(a)anthracene	228.00	27.560	27.560	(0.999)	999242	50.000	49.234
69 Chrysene	228.00	27.638	27.638	(1.002)	987379	50.000	49.469

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	27.580	27.580	(1.000)	309489	50.000	47.181
70 bis(2-Ethylhexyl)phthalate	149.00	27.911	27.911	(1.012)	1038319	50.000	50.910
71 Di-n-octylphthalate	149.00	29.410	29.410	(0.948)	1638768	50.000	53.023
72 Benzo(b)fluoranthene	252.00	30.033	30.033	(0.968)	832080	50.000	49.244
73 Benzo(k)fluoranthene	252.00	30.101	30.101	(0.970)	927985	50.000	52.893
74 Benzo(a)pyrene	252.00	30.870	30.870	(0.995)	768866	50.000	50.012
76 Indeno(1,2,3-cd)pyrene	276.00	34.627	34.627	(1.116)	684446	50.000	49.419
77 Dibenzo(a,h)anthracene	278.00	34.792	34.792	(1.121)	662742	50.000	50.413
78 Benzo(g,h,i)perylene	276.00	35.698	35.698	(1.151)	734375	50.000	49.624

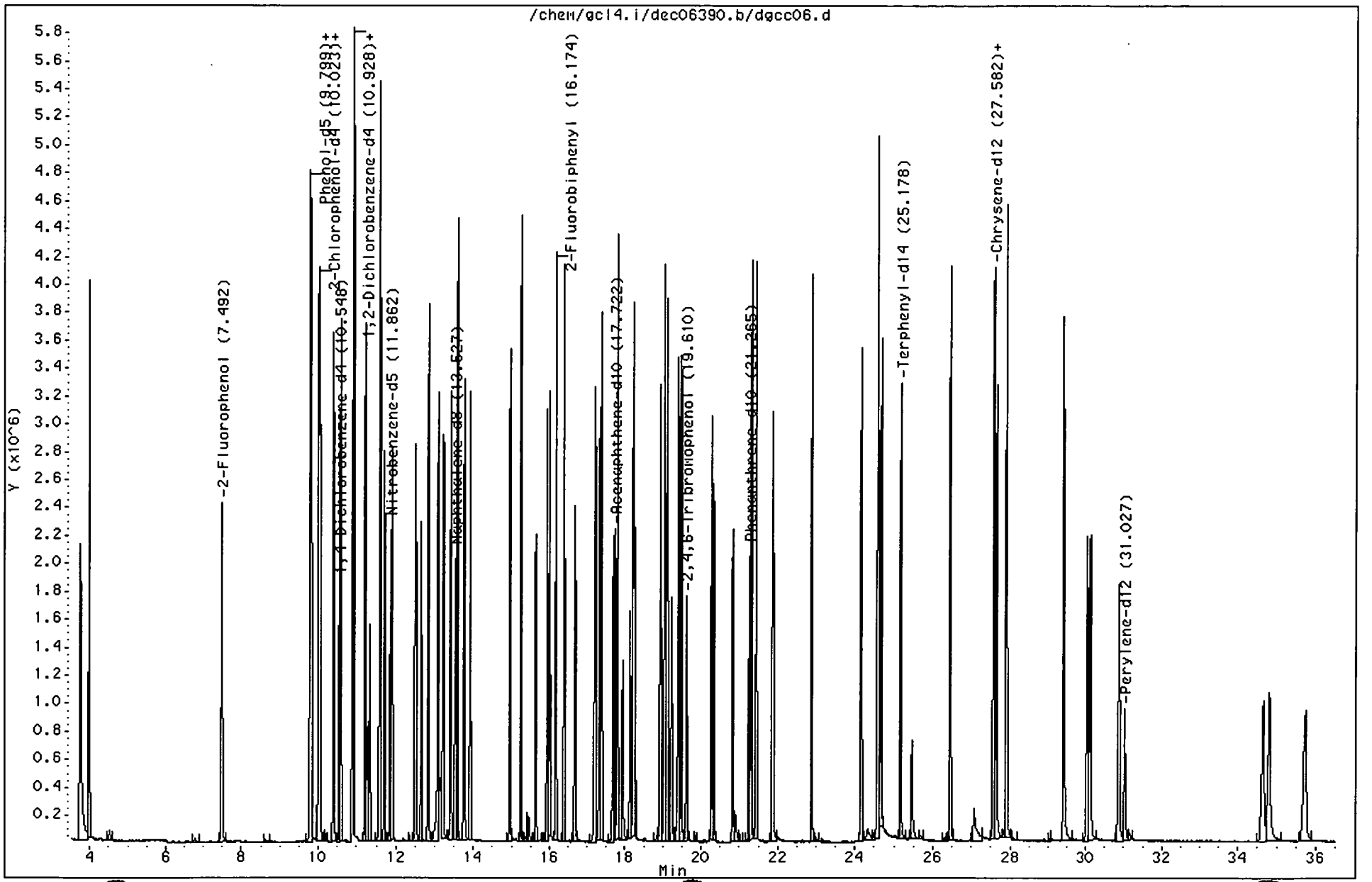
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gcl4.i/dec06390.b/dgcc06.d
Date : 06-DEC-1996 09:24
Client ID: SSTD080
Sample Info: SSTD080 DFAC06
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: RJM
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec06390.b/dgcc06.d
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 06-DEC-1996 09:24
Operator : RJM Inst ID: gcl4.i
Smp Info : SSTD080 DFAC06
Misc Info : GCL#4 B1910C
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec06390.b/390.m
Meth Date : 18-Dec-1996 23:35 squiresb Quant Type: ISTD
Cal Date : 06-DEC-1996 10:08 Cal File: dgdc06.d
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

MB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	10.548	10.548	(1.000)	476385	40.000	
* 26 Naphthalene-d8	136.00	13.527	13.527	(1.000)	1683292	40.000	
* 41 Acenaphthene-d10	164.00	17.722	17.722	(1.000)	855864	40.000	
* 56 Phenanthrene-d10	188.00	21.265	21.265	(1.000)	1392501	40.000	
* 67 Chrysene-d12	240.00	27.582	27.582	(1.000)	779381	40.000	
* 75 Perylene-d12	264.00	31.027	31.027	(1.000)	771717	40.000	
$ 1 2-Fluorophenol	112.00	7.492	7.492	(0.710)	1376648	80.000	79.028
$ 2 Phenol-d5	99.00	9.789	9.789	(0.928)	1637993	80.000	78.830
$ 5 2-Chlorophenol-d4	132.00	10.013	10.013	(0.949)	1329890	80.000	79.230
$ 10 1,2-Dichlorobenzene-d4	152.00	10.889	10.889	(1.032)	856495	80.000	79.024
$ 17 Nitrobenzene-d5	82.00	11.862	11.862	(0.877)	1454107	80.000	80.370
$ 34 2-Fluorobiphenyl	172.00	16.174	16.174	(0.913)	2191072	80.000	79.325
$ 52 2,4,6-Tribromophenol	330.00	19.620	19.620	(1.107)	295820	80.000	81.492
$ 64 Terphenyl-d14	244.00	25.178	25.178	(0.913)	1684608	80.000	77.895
3 Phenol	94.00	9.828	9.828	(0.932)	1802297	80.000	79.068
6 2-Chlorophenol	128.00	10.052	10.052	(0.953)	1353638	80.000	79.345
9 1,4-Dichlorobenzene	146.00	10.587	10.587	(1.004)	1479435	80.000	79.832
14 N-Nitroso-di-n-propylamine	70.00	11.590	11.590	(1.099)	1109896	80.000	81.972
25 1,2,4-Trichlorobenzene	180.00	13.420	13.420	(0.992)	1048630	80.000	79.762
29 4-Chloro-3-methylphenol	107.00	14.967	14.967	(1.106)	1353142	80.000	81.218

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	17.800	17.800	(1.004)	1907175	80.000	79.449
43 4-Nitrophenol	109.00	18.140	18.140	(1.024)	365718	80.000	81.782
45 2,4-Dinitrotoluene	165.00	18.267	18.267	(1.031)	773631	80.000	82.815
55 Pentachlorophenol	266.00	20.827	20.827	(0.979)	394390	80.000	81.053
63 Pyrene	202.00	24.681	24.681	(0.895)	2645025	80.000	75.896
4 bis(2-Chloroethyl)ether	93.00	10.023	10.023	(0.950)	1362425	80.000	80.372
7 1,3-Dichlorobenzene	146.00	10.402	10.402	(0.986)	1450555	80.000	79.488
11 1,2-Dichlorobenzene	146.00	10.928	10.928	(1.036)	1293940	80.000	78.604
12 2-Methylphenol	108.00	11.220	11.220	(1.064)	1235841	80.000	79.185
15 4-Methylphenol	108.00	11.600	11.600	(1.100)	1236564	80.000	80.683
13 2,2'-oxybis(1-Chloropropane)	45.00	11.337	11.337	(1.075)	1456488	80.000	79.287(M)
16 Hexachloroethane	117.00	11.707	11.707	(1.110)	628768	80.000	80.165
18 Nitrobenzene	77.00	11.911	11.911	(0.881)	1463833	80.000	80.746
19 Isophorone	82.00	12.505	12.505	(0.924)	2741274	80.000	79.074
20 4-Chloroaniline	127.00	13.760	13.760	(1.017)	1498450	80.000	80.273
21 2-Nitrophenol	139.00	12.661	12.661	(0.936)	781480	80.000	81.934
22 2,4-Dimethylphenol	107.00	12.846	12.846	(0.950)	1464296	80.000	78.270
23 bis(2-Chloroethoxy)methane	93.00	13.089	13.089	(0.968)	1615439	80.000	79.385
24 2,4-Dichlorophenol	162.00	13.235	13.235	(0.978)	1007488	80.000	80.256
27 Naphthalene	128.00	13.585	13.585	(1.004)	3229237	80.000	78.504
28 Hexachlorobutadiene	225.00	13.926	13.926	(1.030)	585465	80.000	79.906
30 2-Methylnaphthalene	142.00	15.250	15.250	(1.127)	2172301	80.000	80.402
31 Hexachlorocyclopentadiene	237.00	15.639	15.639	(0.882)	464230	80.000	94.309
32 2,4,6-Trichlorophenol	196.00	15.950	15.950	(0.900)	726667	80.000	79.574
33 2,4,5-Trichlorophenol	196.00	16.009	16.009	(0.903)	731697	80.000	85.723
35 2-Chloronaphthalene	162.00	16.398	16.398	(0.925)	1999108	80.000	79.190
36 2-Nitroaniline	65.00	16.690	16.690	(0.942)	881211	80.000	82.771
40 3-Nitroaniline	138.00	17.683	17.683	(0.998)	659929	80.000	83.540
49 4-Nitroaniline	138.00	19.153	19.153	(1.081)	571106	80.000	85.494
62 2,4-Dinitrophenol	184.00	17.936	17.936	(1.012)	292512	80.000	81.060
37 Dimethylphthalate	163.00	17.216	17.216	(0.971)	2472558	80.000	81.730
38 2,6-Dinitrotoluene	165.00	17.323	17.323	(0.977)	595376	80.000	83.396
39 Acenaphthylene	152.00	17.381	17.381	(0.981)	3149491	80.000	79.898
44 Dibenzofuran	168.00	18.228	18.228	(1.029)	2646539	80.000	79.212
46 Diethylphthalate	149.00	18.939	18.939	(1.069)	2458615	80.000	79.975
47 Fluorene	166.00	19.046	19.046	(1.075)	2217669	80.000	80.054
48 4-Chlorophenyl-phenylether	204.00	19.114	19.114	(1.079)	1004727	80.000	79.502
50 4,6-Dinitro-2-methylphenol	198.00	19.231	19.231	(0.904)	423805	80.000	84.039
51 n-Nitrosodiphenylamine	169.00	19.406	19.406	(0.913)	1519473	80.000	80.054
53 4-Bromophenyl-phenylether	248.00	20.272	20.272	(0.953)	508477	80.000	79.489
54 Hexachlorobenzene	284.00	20.330	20.330	(0.956)	586283	80.000	78.078
57 Phenanthrene	178.00	21.323	21.323	(1.003)	2734298	80.000	77.876
58 Anthracene	178.00	21.450	21.450	(1.009)	2701373	80.000	78.557
59 Carbazole	167.00	21.878	21.878	(1.029)	2500751	80.000	79.789
60 Di-n-butylphthalate	149.00	22.890	22.890	(1.076)	3589134	80.000	79.587
61 Fluoranthene	202.00	24.165	24.165	(1.136)	2698792	80.000	79.252
65 Butylbenzylphthalate	149.00	26.453	26.453	(0.959)	1689885	80.000	79.066
66 Benzo(a)anthracene	228.00	27.562	27.562	(0.999)	2082581	80.000	79.665
69 Chrysene	228.00	27.650	27.650	(1.002)	2019971	80.000	78.571

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	27.592	27.592	(1.000)	702630	80.000	83.161
70 bis(2-Ethylhexyl)phthalate	149.00	27.913	27.913	(1.012)	2075571	80.000	79.010
71 Di-n-octylphthalate	149.00	29.412	29.412	(0.948)	3544571	80.000	80.614
72 Benzo(b)fluoranthene	252.00	30.044	30.044	(0.968)	1872663	80.000	77.902
73 Benzo(k)fluoranthene	252.00	30.122	30.122	(0.971)	1933275	80.000	77.454
74 Benzo(a)pyrene	252.00	30.881	30.881	(0.995)	1739453	80.000	79.531
76 Indeno(1,2,3-cd)pyrene	276.00	34.658	34.658	(1.117)	1569464	80.000	79.652
77 Dibenzo(a,h)anthracene	278.00	34.814	34.814	(1.122)	1502271	80.000	80.324
78 Benzo(g,h,i)perylene	276.00	35.738	35.738	(1.152)	1677552	80.000	79.680

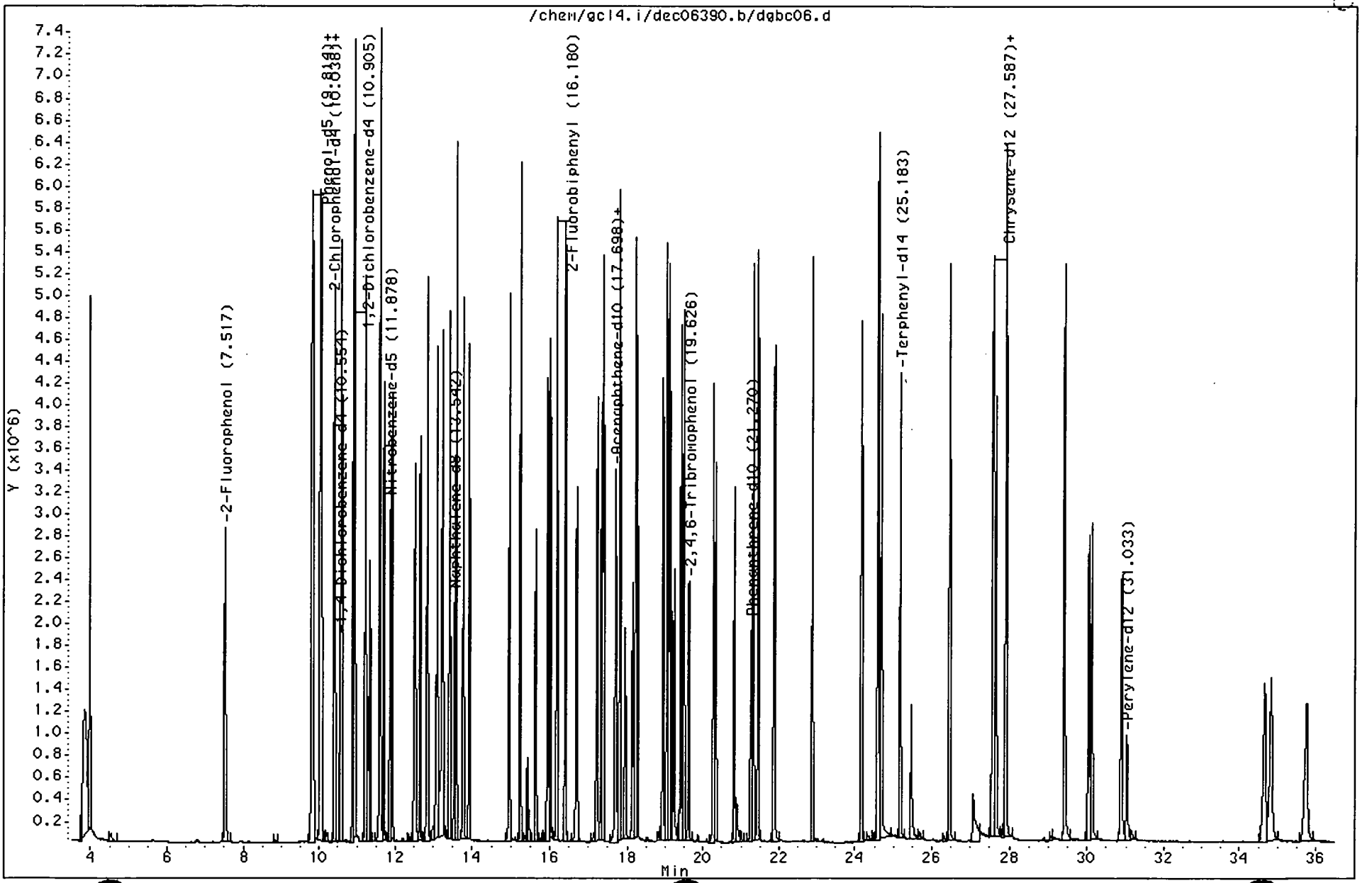
QC Flag Legend

M - Compound response manually integrated.

373

Data File: /chem/gc14.i/dec06390.b/dgbc06.d
Date : 06-DEC-1996 08:39
Client ID: SSTD120
Sample Info: SSTD120 DFAC06
Volume Injected (uL): 2.0
Column phase:

Instrument: gc14.i
Operator: RJM
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec06390.b/dgbc06.d
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 06-DEC-1996 08:39
Operator : RJM Inst ID: gcl4.i
Smp Info : SSTD120 DFAC06
Misc Info : GCL#4 B1910B
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec06390.b/390.m
Meth Date : 18-Dec-1996 23:35 squiresb Quant Type: ISTD
Cal Date : 06-DEC-1996 10:08 Cal File: dgdc06.d
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

WAS 12/17/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	10.554	10.554	(1.000)	526363	40.000	
* 26 Naphthalene-d8	136.00	13.542	13.542	(1.000)	1873192	40.000	
* 41 Acenaphthene-d10	164.00	17.728	17.728	(1.000)	910274	40.000	
* 56 Phenanthrene-d10	188.00	21.270	21.270	(1.000)	1453187	40.000	
* 67 Chrysene-d12	240.00	27.597	27.597	(1.000)	746479	40.000	
* 75 Perylene-d12	264.00	31.033	31.033	(1.000)	792844	40.000	
$ 1 2-Fluorophenol	112.00	7.517	7.517	(0.712)	2150351	120.00	111.72
$ 2 Phenol-d5	99.00	9.814	9.814	(0.930)	2518758	120.00	109.71
$ 5 2-Chlorophenol-d4	132.00	10.028	10.028	(0.950)	2049934	120.00	110.53
$ 10 1,2-Dichlorobenzene-d4	152.00	10.905	10.905	(1.033)	1329335	120.00	111.00
$ 17 Nitrobenzene-d5	82.00	11.878	11.878	(0.877)	2345942	120.00	116.52
$ 34 2-Fluorobiphenyl	172.00	16.180	16.180	(0.913)	3188883	120.00	108.55
$ 52 2,4,6-Tribromophenol	330.00	19.626	19.626	(1.107)	436275	120.00	113.00
$ 64 Terphenyl-d14	244.00	25.183	25.183	(0.913)	2349395	120.00	113.42
3 Phenol	94.00	9.853	9.853	(0.934)	2802486	120.00	111.27
6 2-Chlorophenol	128.00	10.067	10.067	(0.954)	2062414	120.00	109.41
9 1,4-Dichlorobenzene	146.00	10.603	10.603	(1.005)	2210305	120.00	107.94
14 N-Nitroso-di-n-propylamine	70.00	11.615	11.615	(1.101)	1710402	120.00	114.33
25 1,2,4-Trichlorobenzene	180.00	13.425	13.425	(0.991)	1589481	120.00	108.64
29 4-Chloro-3-methylphenol	107.00	14.973	14.973	(1.106)	2052412	120.00	110.70

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	17.815	17.815	(1.005)	2791771	120.00	109.35
43 4-Nitrophenol	109.00	18.156	18.156	(1.024)	574911	120.00	120.88
45 2,4-Dinitrotoluene	165.00	18.273	18.273	(1.031)	1140109	120.00	114.75
55 Pentachlorophenol	266.00	20.832	20.832	(0.979)	608944	120.00	119.92
63 Pyrene	202.00	24.697	24.697	(0.895)	3718357	120.00	111.40
4 bis(2-Chloroethyl)ether	93.00	10.048	10.048	(0.952)	2033569	120.00	108.57
7 1,3-Dichlorobenzene	146.00	10.418	10.418	(0.987)	2196666	120.00	108.94
11 1,2-Dichlorobenzene	146.00	10.934	10.934	(1.036)	1947627	120.00	107.08
12 2-Methylphenol	108.00	11.235	11.235	(1.065)	1947373	120.00	112.93
15 4-Methylphenol	108.00	11.615	11.615	(1.101)	1849681	120.00	109.23
13 2,2'-oxybis(1-Chloropropane)	45.00	11.352	11.352	(1.076)	2309206	120.00	113.77(M)
16 Hexachloroethane	117.00	11.712	11.712	(1.110)	978355	120.00	112.89
18 Nitrobenzene	77.00	11.927	11.927	(0.881)	2269009	120.00	112.47
19 Isophorone	82.00	12.530	12.530	(0.925)	4293221	120.00	111.29
20 4-Chloroaniline	127.00	13.776	13.776	(1.017)	2373922	120.00	114.28
21 2-Nitrophenol	139.00	12.666	12.666	(0.935)	1251694	120.00	117.93
22 2,4-Dimethylphenol	107.00	12.861	12.861	(0.950)	2283880	120.00	109.70
23 bis(2-Chloroethoxy)methane	93.00	13.104	13.104	(0.968)	2487243	120.00	109.84
24 2,4-Dichlorophenol	162.00	13.241	13.241	(0.978)	1570047	120.00	112.39
27 Naphthalene	128.00	13.591	13.591	(1.004)	4827075	120.00	105.45
28 Hexachlorobutadiene	225.00	13.932	13.932	(1.029)	872422	120.00	107.00
30 2-Methylnaphthalene	142.00	15.255	15.255	(1.126)	3181163	120.00	105.80
31 Hexachlorocyclopentadiene	237.00	15.635	15.635	(0.882)	618048	120.00	118.05
32 2,4,6-Trichlorophenol	196.00	15.956	15.956	(0.900)	1137857	120.00	117.15
33 2,4,5-Trichlorophenol	196.00	16.015	16.015	(0.903)	1028085	120.00	113.25
35 2-Chloronaphthalene	162.00	16.404	16.404	(0.925)	2971449	120.00	110.67
36 2-Nitroaniline	65.00	16.696	16.696	(0.942)	1354631	120.00	119.63
40 3-Nitroaniline	138.00	17.698	17.698	(0.998)	1012418	120.00	120.50
49 4-Nitroaniline	138.00	19.178	19.178	(1.082)	862094	120.00	121.34
62 2,4-Dinitrophenol	184.00	17.951	17.951	(1.013)	508450	120.00	132.48
37 Dimethylphthalate	163.00	17.231	17.231	(0.972)	3517935	120.00	109.33
38 2,6-Dinitrotoluene	165.00	17.338	17.338	(0.978)	909236	120.00	119.75
39 Acenaphthylene	152.00	17.387	17.387	(0.981)	4482294	120.00	106.91
44 Dibenzofuran	168.00	18.234	18.234	(1.029)	3844039	120.00	108.18
46 Diethylphthalate	149.00	18.944	18.944	(1.069)	3539277	120.00	108.24
47 Fluorene	166.00	19.051	19.051	(1.075)	3180716	120.00	107.96
48 4-Chlorophenyl-phenylether	204.00	19.119	19.119	(1.079)	1464954	120.00	108.99
50 4,6-Dinitro-2-methylphenol	198.00	19.246	19.246	(0.905)	651833	120.00	123.86
51 n-Nitrosodiphenylamine	169.00	19.421	19.421	(0.913)	2205123	120.00	111.33
53 4-Bromophenyl-phenylether	248.00	20.278	20.278	(0.953)	742013	120.00	111.15
54 Hexachlorobenzene	284.00	20.346	20.346	(0.957)	844751	120.00	107.80
57 Phenanthrene	178.00	21.329	21.329	(1.003)	3903450	120.00	106.53
58 Anthracene	178.00	21.455	21.455	(1.009)	3796247	120.00	105.79
59 Carbazole	167.00	21.884	21.884	(1.029)	3713796	120.00	113.54
60 Di-n-butylphthalate	149.00	22.896	22.896	(1.076)	4833022	120.00	102.69
61 Fluoranthene	202.00	24.171	24.171	(1.136)	3815488	120.00	107.37
65 Butylbenzylphthalate	149.00	26.468	26.468	(0.959)	2382362	120.00	116.38
66 Benzo(a)anthracene	228.00	27.568	27.568	(0.999)	2912718	120.00	116.33
69 Chrysene	228.00	27.665	27.665	(1.002)	2819099	120.00	114.49

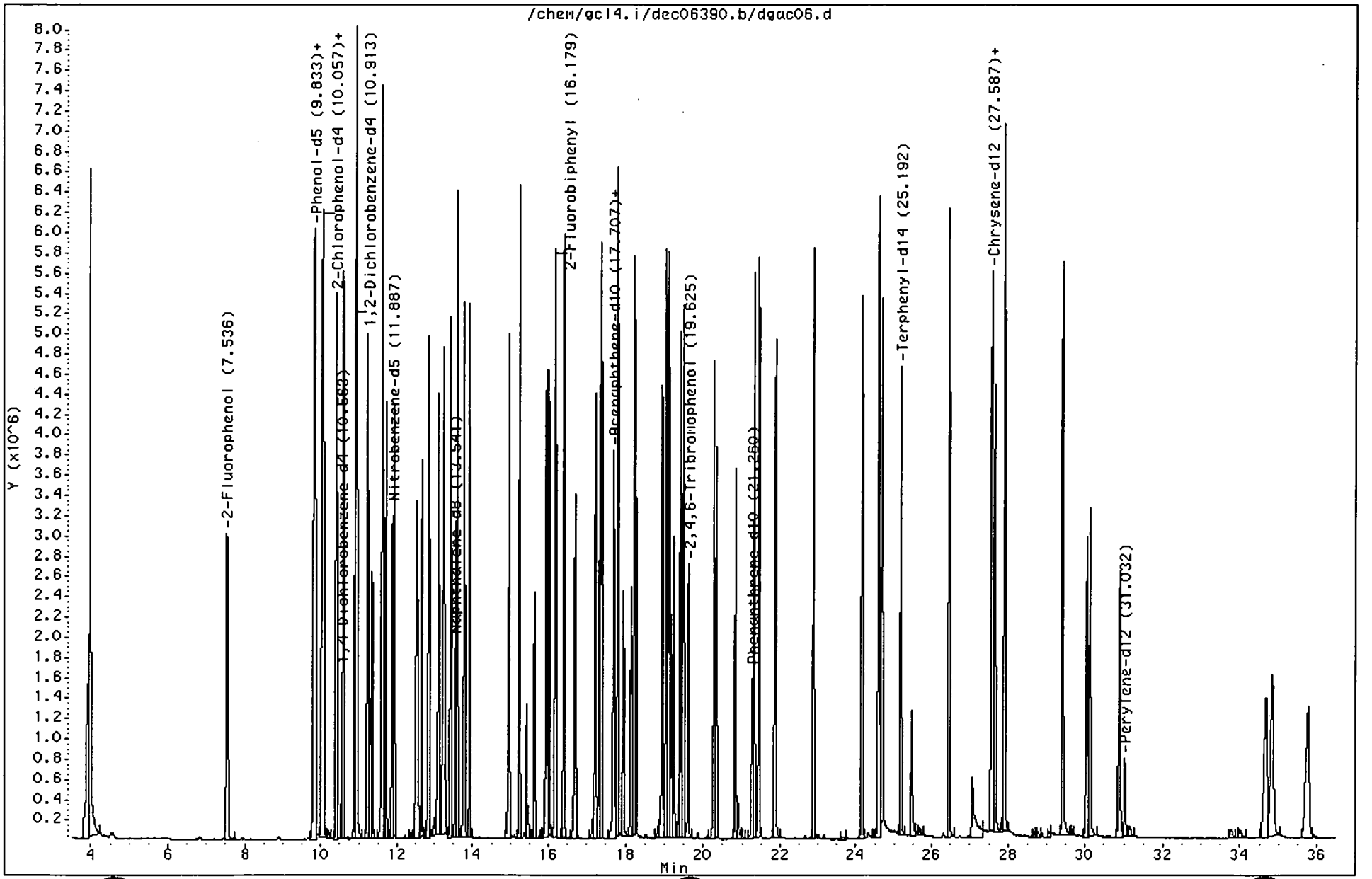
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	27.597	27.597	(1.000)	994732	120.00	122.92
70 bis(2-Ethylhexyl)phthalate	149.00	27.918	27.918	(1.012)	2931131	120.00	116.50
71 Di-n-octylphthalate	149.00	29.417	29.417	(0.948)	4945414	120.00	109.48
72 Benzo(b)fluoranthene	252.00	30.050	30.050	(0.968)	2837671	120.00	114.90
73 Benzo(k)fluoranthene	252.00	30.138	30.138	(0.971)	2666380	120.00	103.98
74 Benzo(a)pyrene	252.00	30.897	30.897	(0.996)	2554757	120.00	113.70
76 Indeno(1,2,3-cd)pyrene	276.00	34.673	34.673	(1.117)	2401088	120.00	118.61
77 Dibenzo(a,h)anthracene	278.00	34.839	34.839	(1.123)	2221477	120.00	115.61
78 Benzo(g,h,i)perylene	276.00	35.763	35.763	(1.152)	2478933	120.00	114.60

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/gc14.i/dec06390.b/dgac06.d
Date : 06-DEC-1996 07:55
Client ID: SSTD160
Sample Info: SSTD160 DFAC06
Volume Injected (uL): 2.0
Column phase:

Instrument: gc14.i
Operator: RJM
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec06390.b/dgac06.d
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 06-DEC-1996 07:55
Operator : RJM Inst ID: gcl4.i
Smp Info : SSTD160 DFAC06
Misc Info : GCL#4 B1910A
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec06390.b/390.m
Meth Date : 18-Dec-1996 23:35 squiresb Quant Type: ISTD
Cal Date : 06-DEC-1996 10:08 Cal File: dgdc06.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

MB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	10.563	10.563	(1.000)	435597	40.000	
* 26 Naphthalene-d8	136.00	13.541	13.541	(1.000)	1552290	40.000	
* 41 Acenaphthene-d10	164.00	17.727	17.727	(1.000)	760820	40.000	
* 56 Phenanthrene-d10	188.00	21.260	21.260	(1.000)	1207193	40.000	
* 67 Chrysene-d12	240.00	27.596	27.596	(1.000)	614550	40.000	
* 75 Perylene-d12	264.00	31.032	31.032	(1.000)	649876	40.000	
$ 1 2-Fluorophenol	112.00	7.546	7.546	(0.714)	2349713	160.00	147.52
$ 2 Phenol-d5	99.00	9.823	9.823	(0.930)	2757574	160.00	145.14
$ 5 2-Chlorophenol-d4	132.00	10.037	10.037	(0.950)	2206742	160.00	143.78
$ 10 1,2-Dichlorobenzene-d4	152.00	10.904	10.904	(1.032)	1433915	160.00	144.69
$ 17 Nitrobenzene-d5	82.00	11.887	11.887	(0.878)	2532657	160.00	151.80
$ 34 2-Fluorobiphenyl	172.00	16.189	16.189	(0.913)	3563464	160.00	145.13
$ 52 2,4,6-Tribromophenol	330.00	19.625	19.625	(1.107)	502813	160.00	155.82
$ 64 Terphenyl-d14	244.00	25.192	25.192	(0.913)	2603272	160.00	152.66
3 Phenol	94.00	9.862	9.862	(0.934)	2935581	160.00	140.84
6 2-Chlorophenol	128.00	10.076	10.076	(0.954)	2234982	160.00	143.27
9 1,4-Dichlorobenzene	146.00	10.602	10.602	(1.004)	2373982	160.00	140.10
14 N-Nitroso-di-n-propylamine	70.00	11.624	11.624	(1.100)	1701753	160.00	137.45
25 1,2,4-Trichlorobenzene	180.00	13.425	13.425	(0.991)	1739574	160.00	143.48
29 4-Chloro-3-methylphenol	107.00	14.972	14.972	(1.106)	2285509	160.00	148.76

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	17.814	17.814	(1.005)	3142263	160.00	147.25
43 4-Nitrophenol	109.00	18.155	18.155	(1.024)	664477	160.00	167.15(A)
45 2,4-Dinitrotoluene	165.00	18.281	18.281	(1.031)	1326624	160.00	159.75
55 Pentachlorophenol	266.00	20.832	20.832	(0.980)	691794	160.00	164.00(A)
63 Pyrene	202.00	24.696	24.696	(0.895)	4080352	160.00	148.48
4 bis(2-Chloroethyl)ether	93.00	10.057	10.057	(0.952)	2104361	160.00	135.76
7 1,3-Dichlorobenzene	146.00	10.417	10.417	(0.986)	2413375	160.00	144.63
11 1,2-Dichlorobenzene	146.00	10.943	10.943	(1.036)	2065594	160.00	137.23
12 2-Methylphenol	108.00	11.244	11.244	(1.065)	2099034	160.00	147.08
15 4-Methylphenol	108.00	11.624	11.624	(1.100)	1979557	160.00	141.26
13 2,2'-oxybis(1-Chloropropane)	45.00	11.351	11.351	(1.075)	2520543	160.00	150.06(M)
16 Hexachloroethane	117.00	11.721	11.721	(1.110)	1064945	160.00	148.49
18 Nitrobenzene	77.00	11.935	11.935	(0.881)	2462982	160.00	147.32
19 Isophorone	82.00	12.539	12.539	(0.926)	4678341	160.00	146.34
20 4-Chloroaniline	127.00	13.775	13.775	(1.017)	2496600	160.00	145.03
21 2-Nitrophenol	139.00	12.675	12.675	(0.936)	1358054	160.00	154.40
22 2,4-Dimethylphenol	107.00	12.860	12.860	(0.950)	2507236	160.00	145.33
23 bis(2-Chloroethoxy)methane	93.00	13.103	13.103	(0.968)	2717231	160.00	144.80
24 2,4-Dichlorophenol	162.00	13.249	13.249	(0.978)	1712848	160.00	147.96
27 Naphthalene	128.00	13.600	13.600	(1.004)	5223029	160.00	137.69
28 Hexachlorobutadiene	225.00	13.931	13.931	(1.029)	957318	160.00	141.68
30 2-Methylnaphthalene	142.00	15.254	15.254	(1.127)	3497208	160.00	140.36
31 Hexachlorocyclopentadiene	237.00	15.634	15.634	(0.882)	531641	160.00	121.50
32 2,4,6-Trichlorophenol	196.00	15.955	15.955	(0.900)	1322388	160.00	162.90(A)
33 2,4,5-Trichlorophenol	196.00	16.014	16.014	(0.903)	1115088	160.00	146.96
35 2-Chloronaphthalene	162.00	16.413	16.413	(0.926)	3278735	160.00	146.10
36 2-Nitroaniline	65.00	16.705	16.705	(0.942)	1519680	160.00	160.57(A)
40 3-Nitroaniline	138.00	17.707	17.707	(0.999)	1144113	160.00	162.92(A)
49 4-Nitroaniline	138.00	19.187	19.187	(1.082)	971874	160.00	163.66(A)
62 2,4-Dinitrophenol	184.00	17.951	17.951	(1.013)	623950	160.00	194.51(A)
37 Dimethylphthalate	163.00	17.230	17.230	(0.972)	3849824	160.00	143.15
38 2,6-Dinitrotoluene	165.00	17.337	17.337	(0.978)	1011715	160.00	159.42
39 Acenaphthylene	152.00	17.386	17.386	(0.981)	5003651	160.00	142.79
44 Dibenzofuran	168.00	18.233	18.233	(1.029)	4214751	160.00	141.91
46 Diethylphthalate	149.00	18.943	18.943	(1.069)	3908762	160.00	143.03
47 Fluorene	166.00	19.050	19.050	(1.075)	3526385	160.00	143.20
48 4-Chlorophenyl-phenylether	204.00	19.119	19.119	(1.079)	1639696	160.00	145.96
50 4,6-Dinitro-2-methylphenol	198.00	19.245	19.245	(0.905)	759977	160.00	173.83(A)
51 n-Nitrosodiphenylamine	169.00	19.420	19.420	(0.913)	2464043	160.00	149.75
53 4-Bromophenyl-phenylether	248.00	20.277	20.277	(0.954)	836129	160.00	150.77
54 Hexachlorobenzene	284.00	20.345	20.345	(0.957)	944976	160.00	145.16
57 Phenanthrene	178.00	21.338	21.338	(1.004)	4355989	160.00	143.11
58 Anthracene	178.00	21.454	21.454	(1.009)	4231652	160.00	141.95
59 Carbazole	167.00	21.883	21.883	(1.029)	4087782	160.00	150.44
60 Di-n-butylphthalate	149.00	22.895	22.895	(1.077)	5300998	160.00	135.59
61 Fluoranthene	202.00	24.170	24.170	(1.137)	4197908	160.00	142.20
65 Butylbenzylphthalate	149.00	26.467	26.467	(0.959)	2686052	160.00	159.38
66 Benzo(a)anthracene	228.00	27.577	27.577	(0.999)	3205419	160.00	155.50
69 Chrysene	228.00	27.664	27.664	(1.002)	3130612	160.00	154.43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	27.596	27.596	(1.000)	1125769	160.00	168.98(A)
70 bis(2-Ethylhexyl)phthalate	149.00	27.917	27.917	(1.012)	3221761	160.00	155.54
71 Di-n-octylphthalate	149.00	29.416	29.416	(0.948)	5463732	160.00	147.56
72 Benzo(b)fluoranthene	252.00	30.059	30.059	(0.969)	3064597	160.00	151.39
73 Benzo(k)fluoranthene	252.00	30.137	30.137	(0.971)	3000020	160.00	142.73
74 Benzo(a)pyrene	252.00	30.896	30.896	(0.996)	2748966	160.00	149.25
76 Indeno(1,2,3-cd)pyrene	276.00	34.672	34.672	(1.117)	2590733	160.00	156.13
77 Dibenzo(a,h)anthracene	278.00	34.848	34.848	(1.123)	2446422	160.00	155.33
78 Benzo(g,h,i)perylene	276.00	35.772	35.772	(1.153)	2750575	160.00	155.14

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date: 12/12/96 Time: 0916

Lab File ID: DGAC12 Init. Calib. Date(s): 12/06/96 12/06/96

Init. Calib. Times: 0755 1053

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.914	1.646	0.800	14.0	25.0
bis(2-Chloroethyl)ether	1.424	1.210	0.700	15.0	25.0
2-Chlorophenol	1.433	1.281	0.800	10.6	25.0
1,3-Dichlorobenzene	1.532	1.377	0.600	10.1	25.0
1,4-Dichlorobenzene	1.556	1.368	0.500	12.1	25.0
1,2-Dichlorobenzene	1.382	1.268	0.400	8.2	25.0
2-Methylphenol	1.310	1.232	0.700	6.0	25.0
2,2'-oxybis(1-Chloropropane)	1.543	1.166		24.4	
4-Methylphenol	1.287	1.209	0.600	6.1	25.0
N-Nitroso-di-n-propylamine	1.137	0.989	0.500	13.0	25.0
Hexachloroethane	0.659	0.580	0.300	12.0	25.0
Nitrobenzene	0.431	0.384	0.200	10.9	25.0
Isophorone	0.824	0.768	0.400	6.8	25.0
2-Nitrophenol	0.227	0.220	0.100	3.1	25.0
2,4-Dimethylphenol	0.445	0.412	0.200	7.4	25.0
bis(2-Chloroethoxy)methane	0.484	0.457	0.300	5.6	25.0
2,4-Dichlorophenol	0.298	0.306	0.200	2.7	25.0
1,2,4-Trichlorobenzene	0.312	0.305	0.200	2.2	25.0
Naphthalene	0.977	0.879	0.700	10.0	25.0
4-Chloroaniline	0.443	0.440		0.7	
Hexachlorobutadiene	0.174	0.173		0.6	
4-Chloro-3-methylphenol	0.396	0.366	0.200	7.6	25.0
2-Methylnaphthalene	0.642	0.582	0.400	9.3	25.0
Hexachlorocyclopentadiene	0.230	0.242		5.2	
2,4,6-Trichlorophenol	0.427	0.438	0.200	2.6	25.0
2,4,5-Trichlorophenol	0.398	0.442	0.200	11.0	25.0
2-Chloronaphthalene	1.180	1.091	0.800	7.5	25.0
2-Nitroaniline	0.498	0.392		21.3	
Dimethylphthalate	1.414	1.290		8.8	
Acenaphthylene	1.842	1.602	1.300	13.0	25.0
2,6-Dinitrotoluene	0.334	0.282	0.200	15.6	25.0
3-Nitroaniline	0.369	0.326		11.6	
Acenaphthene	1.122	1.005	0.800	10.4	25.0
2,4-Dinitrophenol	0.168	0.090	0.050	46.4	
4-Nitrophenol	0.209	0.157	0.050	24.9	
Dibenzofuran	1.561	1.471	0.800	5.8	25.0
2,4-Dinitrotoluene	0.436	0.418	0.200	4.1	25.0

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date: 12/12/96 Time: 0916

Lab File ID: DGAC12 Init. Calib. Date(s): 12/06/96 12/06/96

Init. Calib. Times: 0755 1053

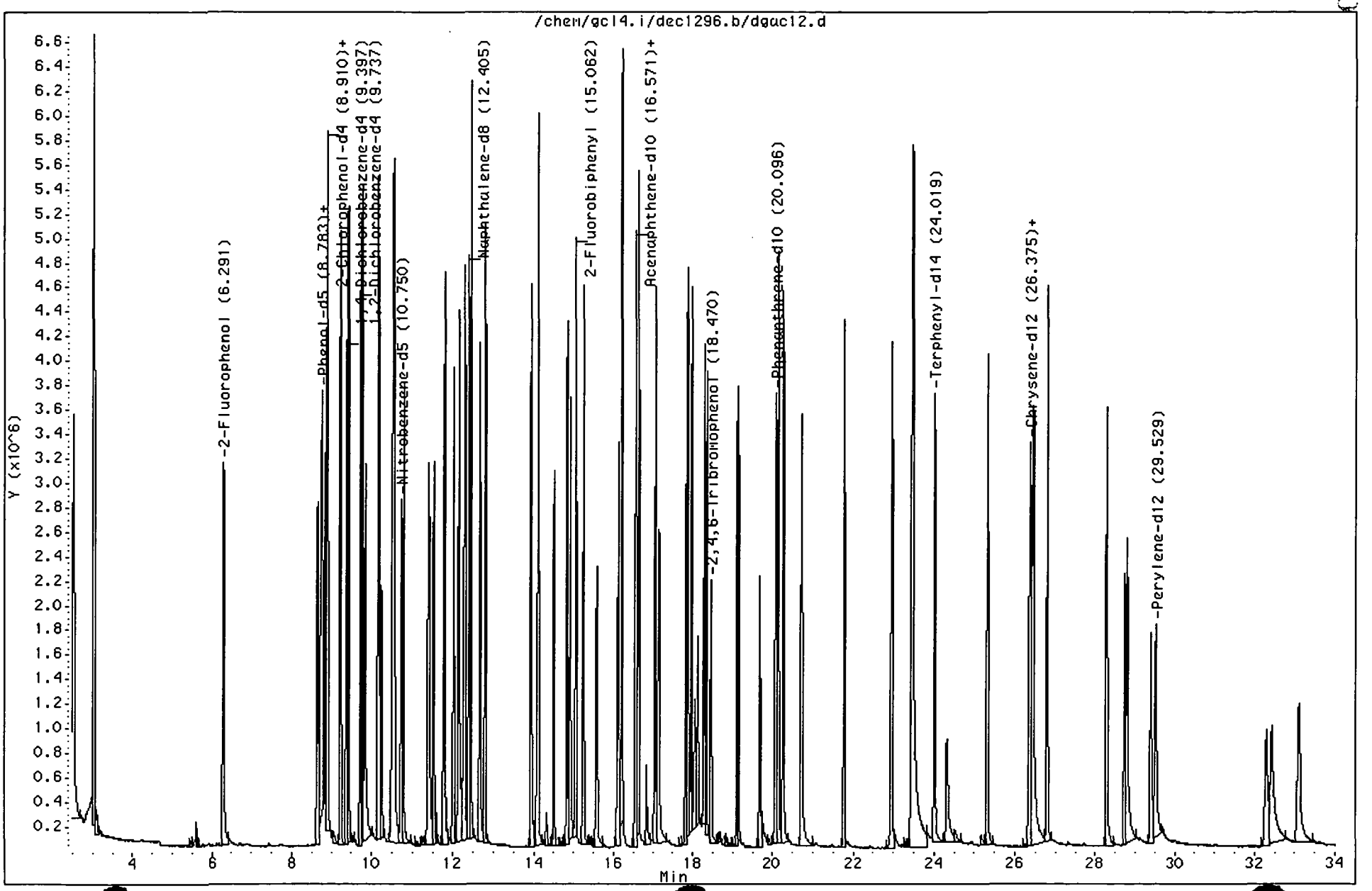
COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D	
Diethylphthalate	1.437	1.219		15.2		
4-Chlorophenyl-phenylether	0.591	0.550	0.400	6.9	25.0	
Fluorene	1.295	1.124	0.900	13.2	25.0	
4-Nitroaniline	0.312	0.294		5.8		
4,6-Dinitro-2-methylphenol	0.145	0.130		10.3		
n-Nitrosodiphenylamine(1)	0.545	0.517		5.1		
4-Bromophenyl-phenylether	0.183	0.185	0.100	1.1	25.0	
Hexachlorobenzene	0.216	0.212	0.100	1.8	25.0	
Pentachlorophenol	0.140	0.136	0.050	2.8	25.0	
Phenanthrene	1.009	0.896	0.700	11.2	25.0	
Anthracene	0.988	0.912	0.700	7.7	25.0	
Carbazole	0.900	0.857		4.8		
Di-n-butylphthalate	1.296	1.078		16.8		
Fluoranthene	0.978	0.879	0.600	10.1	25.0	
Pyrene	1.788	1.479	0.600	17.3	25.0	
Butylbenzylphthalate	1.097	0.862		21.4		
3,3'-Dichlorobenzidine	0.434	0.384		11.5		
Benzo(a)anthracene	1.342	1.078	0.800	19.7	25.0	
Chrysene	1.320	1.200	0.700	9.1	25.0	
bis(2-Ethylhexyl)phthalate	1.348	1.037		23.1		
Di-n-octylphthalate	2.279	1.802		20.9		
Benzo(b)fluoranthene	1.246	0.942	0.700	24.4	25.0	
Benzo(k)fluoranthene	1.294	1.245	0.700	3.8	25.0	
Benzo(a)pyrene	1.134	0.844	0.700	25.6	25.0	<-
Indeno(1,2,3-cd)pyrene	1.021	0.770	0.500	24.6	25.0	
Dibenzo(a,h)anthracene	0.969	0.691	0.400	28.7	25.0	<-
Benzo(g,h,i)perylene	1.091	0.940	0.500	13.8	25.0	
Nitrobenzene-d5	0.430	0.407	0.200	5.3	25.0	
2-Fluorobiphenyl	1.291	1.180	0.700	8.6	25.0	
Terphenyl-d14	1.110	1.037	0.500	6.6	25.0	
Phenol-d5	1.745	1.643	0.800	5.8	25.0	
2-Fluorophenol	1.463	1.346		8.0	25.0	
2,4,6-Tribromophenol	0.170	0.180		5.9		
2-Chlorophenol-d4	1.409	1.343	0.800	4.7	25.0	
1,2-Dichlorobenzene-d4	0.910	0.855	0.400	6.0	25.0	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/gcl4.i/dec1296.b/dgac12.d
Date : 12-DEC-1996 09:16
Client ID: SSTD050
Sample Info: SSTD050 DFAC12
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: GLR
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296.b/dgac12.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 12-DEC-1996 09:16
Operator : GLR Inst ID: gcl4.i
Smp Info : SSTD050 DFAC12
Misc Info : GCL#4 B1969
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296.b/390.m
Meth Date : 18-Dec-1996 23:33 squiresb Quant Type: ISTD
Cal Date : 12-DEC-1996 09:16 Cal File: dgac12.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

WB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	9.397	9.397	(1.000)	1356933	40.000	
* 26 Naphthalene-d8	136.00	12.405	12.405	(1.000)	4562233	40.000	
* 41 Acenaphthene-d10	164.00	16.571	16.571	(1.000)	2044374	40.000	
* 56 Phenanthrene-d10	188.00	20.096	20.096	(1.000)	3200466	40.000	
* 67 Chrysene-d12	240.00	26.394	26.394	(1.000)	1782259	40.000	
* 75 Perylene-d12	264.00	29.529	29.529	(1.000)	1742060	40.000	
$ 1 2-Fluorophenol	112.00	6.291	6.291	(0.669)	2282542	50.000	46.002
$ 2 Phenol-d5	99.00	8.754	8.754	(0.932)	2786694	50.000	47.084
$ 5 2-Chlorophenol-d4	132.00	8.871	8.871	(0.944)	2277746	50.000	47.641
$ 10 1,2-Dichlorobenzene-d4	152.00	9.737	9.737	(1.036)	1450335	50.000	46.979
$ 17 Nitrobenzene-d5	82.00	10.750	10.750	(0.867)	2321647	50.000	47.345
$ 34 2-Fluorobiphenyl	172.00	15.062	15.062	(0.909)	3016810	50.000	45.724
$ 52 2,4,6-Tribromophenol	330.00	18.470	18.470	(1.115)	460716	50.000	53.133
$ 64 Terphenyl-d14	244.00	24.019	24.019	(0.910)	2309602	50.000	46.701
3 Phenol	94.00	8.793	8.793	(0.936)	2792903	50.000	43.016
6 2-Chlorophenol	128.00	8.910	8.910	(0.948)	2172282	50.000	44.703
9 1,4-Dichlorobenzene	146.00	9.445	9.445	(1.005)	2319976	50.000	43.950
14 N-Nitroso-di-n-propylamine	70.00	10.516	10.516	(1.119)	1677295	50.000	43.490
25 1,2,4-Trichlorobenzene	180.00	12.298	12.298	(0.991)	1740275	50.000	48.840
29 4-Chloro-3-methylphenol	107.00	13.933	13.933	(1.123)	2087870	50.000	46.237

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	16.659	16.659	(1.005)	2567517	50.000	44.777
43 4-Nitrophenol	109.00	17.136	17.136	(1.034)	400362	50.000	37.481
45 2,4-Dinitrotoluene	165.00	17.175	17.175	(1.036)	1067100	50.000	47.822
55 Pentachlorophenol	266.00	19.687	19.687	(0.980)	545266	50.000	48.756
63 Pyrene	202.00	23.484	23.484	(0.890)	3295819	50.000	41.355
4 bis(2-Chloroethyl)ether	93.00	8.919	8.919	(0.949)	2052866	50.000	42.516
7 1,3-Dichlorobenzene	146.00	9.241	9.241	(0.983)	2336034	50.000	44.942
11 1,2-Dichlorobenzene	146.00	9.776	9.776	(1.040)	2151590	50.000	45.887
12 2-Methylphenol	108.00	10.175	10.175	(1.083)	2090637	50.000	47.028
15 4-Methylphenol	108.00	10.574	10.574	(1.125)	2051099	50.000	46.984
13 2,2'-oxybis(1-Chloropropane)	45.00	10.243	10.243	(1.090)	1978703	50.000	37.816(M)
16 Hexachloroethane	117.00	10.545	10.545	(1.122)	984083	50.000	44.048
18 Nitrobenzene	77.00	10.798	10.798	(0.871)	2190826	50.000	44.588
19 Isophorone	82.00	11.421	11.421	(0.921)	4377207	50.000	46.586
20 4-Chloroaniline	127.00	12.677	12.677	(1.022)	2511551	50.000	49.642
21 2-Nitrophenol	139.00	11.548	11.548	(0.931)	1255559	50.000	48.570
22 2,4-Dimethylphenol	107.00	11.801	11.801	(0.951)	2347630	50.000	46.300
23 bis(2-Chloroethoxy)methane	93.00	12.025	12.025	(0.969)	2608278	50.000	47.291
24 2,4-Dichlorophenol	162.00	12.152	12.152	(0.980)	1743290	50.000	51.238
27 Naphthalene	128.00	12.453	12.453	(1.004)	5012424	50.000	44.960
28 Hexachlorobutadiene	225.00	12.804	12.804	(1.032)	987579	50.000	49.731
30 2-Methylnaphthalene	142.00	14.118	14.118	(1.138)	3320884	50.000	45.350
31 Hexachlorocyclopentadiene	237.00	14.508	14.508	(0.875)	619637	50.000	52.699
32 2,4,6-Trichlorophenol	196.00	14.848	14.848	(0.896)	1118541	50.000	51.278
33 2,4,5-Trichlorophenol	196.00	14.916	14.916	(0.900)	1129697	50.000	55.408
35 2-Chloronaphthalene	162.00	15.267	15.267	(0.921)	2787096	50.000	46.220
36 2-Nitroaniline	65.00	15.588	15.588	(0.941)	1003158	50.000	39.447
40 3-Nitroaniline	138.00	16.601	16.601	(1.002)	832257	50.000	44.106
49 4-Nitroaniline	138.00	18.071	18.071	(1.090)	751028	50.000	47.068
62 2,4-Dinitrophenol	184.00	16.854	16.854	(1.017)	231170	50.000	26.819
37 Dimethylphthalate	163.00	16.143	16.143	(0.974)	3296210	50.000	45.614
38 2,6-Dinitrotoluene	165.00	16.240	16.240	(0.980)	720170	50.000	42.231
39 Acenaphthylene	152.00	16.221	16.221	(0.979)	4093392	50.000	43.473
44 Dibenzofuran	168.00	17.078	17.078	(1.031)	3758282	50.000	47.092
46 Diethylphthalate	149.00	17.857	17.857	(1.078)	3114360	50.000	42.411
47 Fluorene	166.00	17.895	17.895	(1.080)	2872017	50.000	43.403
48 4-Chlorophenyl-phenylether	204.00	17.983	17.983	(1.085)	1405934	50.000	46.574
50 4,6-Dinitro-2-methylphenol	198.00	18.129	18.129	(0.902)	521783	50.000	45.018
51 n-Nitrosodiphenylamine	169.00	18.295	18.295	(0.910)	2067942	50.000	47.404
53 4-Bromophenyl-phenylether	248.00	19.132	19.132	(0.952)	739909	50.000	50.326
54 Hexachlorobenzene	284.00	19.171	19.171	(0.954)	847901	50.000	49.130
57 Phenanthrene	178.00	20.154	20.154	(1.003)	3586891	50.000	44.449
58 Anthracene	178.00	20.271	20.271	(1.009)	3647010	50.000	46.144
59 Carbazole	167.00	20.728	20.728	(1.031)	3429419	50.000	47.607
60 Di-n-butylphthalate	149.00	21.790	21.790	(1.084)	4312036	50.000	41.602
61 Fluoranthene	202.00	22.968	22.968	(1.143)	3515352	50.000	44.915
65 Butylbenzylphthalate	149.00	25.324	25.324	(0.959)	1921577	50.000	39.316
66 Benzo(a)anthracene	228.00	26.365	26.365	(0.999)	2402298	50.000	40.186
69 Chrysene	228.00	26.453	26.453	(1.002)	2673601	50.000	45.477

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	26.433	26.433	(1.001)	855065	50.000	44.256
70 bis(2-Ethylhexyl)phthalate	149.00	26.803	26.803	(1.015)	2310287	50.000	38.458
71 Di-n-octylphthalate	149.00	28.293	28.293	(0.958)	3924524	50.000	39.539
72 Benzo(b)fluoranthene	252.00	28.741	28.741	(0.973)	2051731	50.000	37.810
73 Benzo(k)fluoranthene	252.00	28.809	28.809	(0.976)	2710708	50.000	48.109
74 Benzo(a)pyrene	252.00	29.412	29.412	(0.996)	1838395	50.000	37.235
76 Indeno(1,2,3-cd)pyrene	276.00	32.304	32.304	(1.094)	1677507	50.000	37.714
77 Dibenzo(a,h)anthracene	278.00	32.440	32.440	(1.099)	1505164	50.000	35.651
78 Benzo(g,h,i)perylene	276.00	33.112	33.112	(1.121)	2046632	50.000	43.063

QC Flag Legend

M - Compound response manually integrated.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date: 12/12/96 Time: 1918

Lab File ID: DGBC12 Init. Calib. Date(s): 12/06/96 12/06/96

Init. Calib. Times: 0755 1053

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.914	1.611	0.800	15.8	25.0
bis(2-Chloroethyl)ether	1.424	1.285	0.700	9.8	25.0
2-Chlorophenol	1.433	1.299	0.800	9.4	25.0
1,3-Dichlorobenzene	1.532	1.417	0.600	7.5	25.0
1,4-Dichlorobenzene	1.556	1.460	0.500	6.2	25.0
1,2-Dichlorobenzene	1.382	1.344	0.400	2.7	25.0
2-Methylphenol	1.310	1.248	0.700	4.7	25.0
2,2'-oxybis(1-Chloropropane)	1.543	1.236		19.9	
4-Methylphenol	1.287	1.229	0.600	4.5	25.0
N-Nitroso-di-n-propylamine	1.137	1.021	0.500	10.2	25.0
Hexachloroethane	0.659	0.588	0.300	10.8	25.0
Nitrobenzene	0.431	0.370	0.200	14.2	25.0
Isophorone	0.824	0.720	0.400	12.6	25.0
2-Nitrophenol	0.227	0.207	0.100	8.8	25.0
2,4-Dimethylphenol	0.445	0.392	0.200	11.9	25.0
bis(2-Chloroethoxy)methane	0.484	0.439	0.300	9.3	25.0
2,4-Dichlorophenol	0.298	0.301	0.200	1.0	25.0
1,2,4-Trichlorobenzene	0.312	0.306	0.200	1.9	25.0
Naphthalene	0.977	0.915	0.700	6.3	25.0
4-Chloroaniline	0.443	0.405		8.6	
Hexachlorobutadiene	0.174	0.173		0.6	
4-Chloro-3-methylphenol	0.396	0.362	0.200	8.6	25.0
2-Methylnaphthalene	0.642	0.607	0.400	5.4	25.0
Hexachlorocyclopentadiene	0.230	0.179		22.2	
2,4,6-Trichlorophenol	0.427	0.373	0.200	12.6	25.0
2,4,5-Trichlorophenol	0.398	0.419	0.200	5.3	25.0
2-Chloronaphthalene	1.180	1.082	0.800	8.3	25.0
2-Nitroaniline	0.498	0.371		25.5	
Dimethylphthalate	1.414	1.290		8.8	
Acenaphthylene	1.842	1.647	1.300	10.6	25.0
2,6-Dinitrotoluene	0.334	0.288	0.200	13.8	25.0
3-Nitroaniline	0.369	0.282		23.6	
Acenaphthene	1.122	1.031	0.800	8.1	25.0
2,4-Dinitrophenol	0.168	0.068	0.050	59.5	
4-Nitrophenol	0.209	0.144	0.050	31.1	
Dibenzofuran	1.561	1.473	0.800	5.6	25.0
2,4-Dinitrotoluene	0.436	0.413	0.200	5.3	25.0

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date: 12/12/96 Time: 1918

Lab File ID: DGBC12 Init. Calib. Date(s): 12/06/96 12/06/96

Init. Calib. Times: 0755 1053

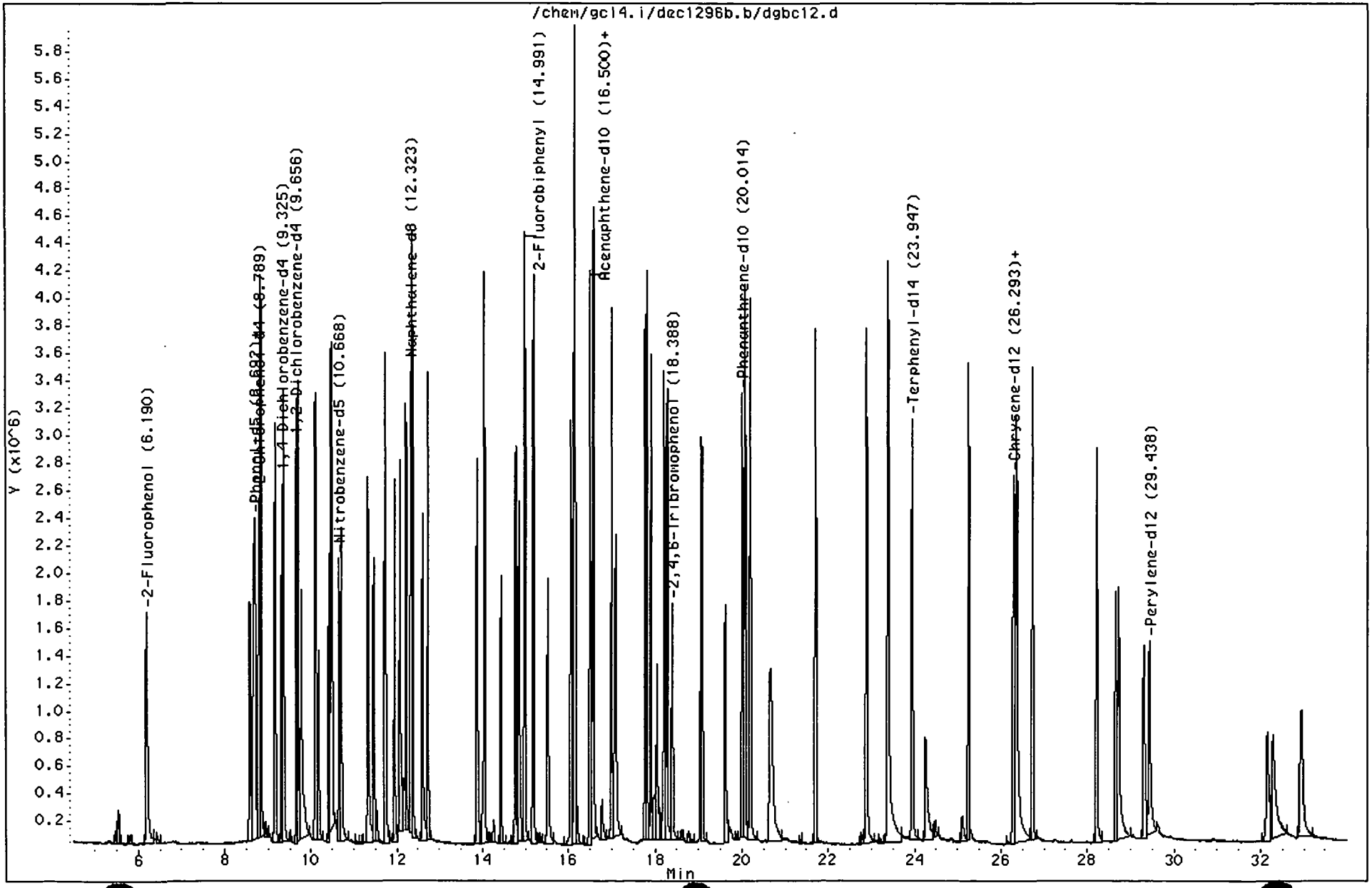
COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D	
Diethylphthalate	1.437	1.235		14.0		
4-Chlorophenyl-phenylether	0.591	0.569	0.400	3.7	25.0	
Fluorene	1.295	1.200	0.900	7.3	25.0	
4-Nitroaniline	0.312	0.287		8.0		
4,6-Dinitro-2-methylphenol	0.145	0.114		21.4		
n-Nitrosodiphenylamine(1)	0.545	0.516		5.3		
4-Bromophenyl-phenylether	0.183	0.190	0.100	3.8	25.0	
Hexachlorobenzene	0.216	0.228	0.100	5.6	25.0	
Pentachlorophenol	0.140	0.141	0.050	0.7	25.0	
Phenanthrene	1.009	0.944	0.700	6.4	25.0	
Anthracene	0.988	0.987	0.700	0.1	25.0	
Carbazole	0.900	0.905		0.6		
Di-n-butylphthalate	1.296	1.160		10.5		
Fluoranthene	0.978	0.962	0.600	1.6	25.0	
Pyrene	1.788	1.731	0.600	3.2	25.0	
Butylbenzylphthalate	1.097	0.907		17.3		
3,3'-Dichlorobenzidine	0.434	0.336		22.6		
Benzo(a)anthracene	1.342	1.075	0.800	19.9	25.0	
Chrysene	1.320	1.232	0.700	6.7	25.0	
bis(2-Ethylhexyl)phthalate	1.348	1.002		25.7		
Di-n-octylphthalate	2.279	1.731		24.0		
Benzo(b)fluoranthene	1.246	0.920	0.700	26.2	25.0	<-
Benzo(k)fluoranthene	1.294	1.379	0.700	6.6	25.0	
Benzo(a)pyrene	1.134	0.886	0.700	21.9	25.0	
Indeno(1,2,3-cd)pyrene	1.021	0.736	0.500	27.9	25.0	<-
Dibenzo(a,h)anthracene	0.969	0.839	0.400	13.4	25.0	
Benzo(g,h,i)perylene	1.091	1.072	0.500	1.7	25.0	
Nitrobenzene-d5	0.430	0.375	0.200	12.8	25.0	
2-Fluorobiphenyl	1.291	1.179	0.700	8.7	25.0	
Terphenyl-d14	1.110	1.164	0.500	4.9	25.0	
Phenol-d5	1.745	1.611	0.800	7.7	25.0	
2-Fluorophenol	1.463	1.269		13.3	25.0	
2,4,6-Tribromophenol	0.170	0.179		5.3		
2-Chlorophenol-d4	1.409	1.327	0.800	5.8	25.0	
1,2-Dichlorobenzene-d4	0.910	0.872	0.400	4.2	25.0	

(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/gcl4.i/dec1296b.b/dgbc12.d
Date : 12-DEC-96 19:18
Client ID: SSTD050
Sample Info: SSTD050 DFBC12
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GES
Column diameter: 2.00

389



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296b.b/dgbc12.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 12-DEC-96 19:18
Operator : GES Inst ID: gcl4.i
Smp Info : SSTD050 DFBC12
Misc Info : GCL#4 B1969
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296b.b/390.m
Meth Date : 12-Dec-1996 19:51 Quant Type: ISTD
Cal Date : 12-DEC-96 19:18 Cal File: dgbc12.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

Name	Value	Description
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

CES
12/12/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	
* 8 1,4-Dichlorobenzene-d4	152.00	9.325	9.325	(1.000)	822525	40.000		
* 26 Naphthalene-d8	136.00	12.323	12.323	(1.000)	2932490	40.000		
* 41 Acenaphthene-d10	164.00	16.500	16.500	(1.000)	1565016	40.000		
* 56 Phenanthrene-d10	188.00	20.014	20.014	(1.000)	2456197	40.000		(H)
* 67 Chrysene-d12	240.00	26.303	26.303	(1.000)	1329718	40.000		
* 75 Perylene-d12	264.00	29.438	29.438	(1.000)	1280781	40.000		
$ 1 2-Fluorophenol	112.00	6.190	6.190	(0.664)	1305043	50.000	43.390	
$ 2 Phenol-d5	99.00	8.663	8.663	(0.929)	1656742	50.000	46.179	
$ 5 2-Chlorophenol-d4	132.00	8.789	8.789	(0.943)	1364235	50.000	47.073	
$ 10 1,2-Dichlorobenzene-d4	152.00	9.656	9.656	(1.035)	897123	50.000	47.940	
$ 17 Nitrobenzene-d5	82.00	10.668	10.668	(0.866)	1374492	50.000	43.608	
$ 34 2-Fluorobiphenyl	172.00	14.991	14.991	(0.909)	2307218	50.000	45.680	
$ 52 2,4,6-Tribromophenol	330.00	18.388	18.388	(1.114)	349948	50.000	52.720	
$ 64 Terphenyl-d14	244.00	23.947	23.947	(0.910)	1935455	50.000	52.454	
3 Phenol	94.00	8.702	8.702	(0.933)	1656788	50.000	42.097	
6 2-Chlorophenol	128.00	8.828	8.828	(0.947)	1335513	50.000	45.339	
9 1,4-Dichlorobenzene	146.00	9.364	9.364	(1.004)	1501559	50.000	46.928	
14 N-Nitroso-di-n-propylamine	70.00	10.434	10.434	(1.119)	1049994	50.000	44.914	
25 1,2,4-Trichlorobenzene	180.00	12.216	12.216	(0.991)	1121417	50.000	48.963	
29 4-Chloro-3-methylphenol	107.00	13.861	13.861	(1.125)	1325539	50.000	45.669	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	16.577	16.577	(1.005)	2017607	50.000	45.964
43 4-Nitrophenol	109.00	17.064	17.064	(1.034)	282750	50.000	34.578(a)
45 2,4-Dinitrotoluene	165.00	17.093	17.093	(1.036)	808321	50.000	47.320
55 Pentachlorophenol	266.00	19.615	19.615	(0.972)	433180	50.000	50.471
63 Pyrene	202.00	23.392	23.392	(0.889)	2877044	50.000	48.386
4 bis(2-Chloroethyl)ether	93.00	8.838	8.838	(0.948)	1320809	50.000	45.128
7 1,3-Dichlorobenzene	146.00	9.159	9.159	(0.982)	1456502	50.000	46.226
11 1,2-Dichlorobenzene	146.00	9.695	9.695	(1.040)	1382311	50.000	48.634
12 2-Methylphenol	108.00	10.103	10.103	(1.084)	1282915	50.000	47.608
15 4-Methylphenol	108.00	10.493	10.493	(1.125)	1263364	50.000	47.742
13 2,2'-oxybis(1-Chloropropane)	45.00	10.172	10.172	(1.091)	1270559	50.000	40.059(M)
16 Hexachloroethane	117.00	10.473	10.473	(1.123)	604061	50.000	44.605
18 Nitrobenzene	77.00	10.717	10.717	(0.870)	1356709	50.000	42.958
19 Isophorone	82.00	11.330	11.330	(0.919)	2639062	50.000	43.697
20 4-Chloroaniline	127.00	12.596	12.596	(1.022)	1484015	50.000	45.634
21 2-Nitrophenol	139.00	11.466	11.466	(0.930)	757527	50.000	45.590
22 2,4-Dimethylphenol	107.00	11.729	11.729	(0.952)	1437287	50.000	44.100
23 bis(2-Chloroethoxy)methane	93.00	11.943	11.943	(0.969)	1608879	50.000	45.383
24 2,4-Dichlorophenol	162.00	12.070	12.070	(0.979)	1102469	50.000	50.411
27 Naphthalene	128.00	12.372	12.372	(1.004)	3355429	50.000	46.823
28 Hexachlorobutadiene	225.00	12.732	12.732	(1.033)	633709	50.000	49.646
30 2-Methylnaphthalene	142.00	14.046	14.046	(1.140)	2226676	50.000	47.307
31 Hexachlorocyclopentadiene	237.00	14.436	14.436	(0.875)	350281	50.000	38.916
32 2,4,6-Trichlorophenol	196.00	14.776	14.776	(0.896)	728923	50.000	43.652
33 2,4,5-Trichlorophenol	196.00	14.845	14.845	(0.900)	819669	50.000	52.516
35 2-Chloronaphthalene	162.00	15.185	15.185	(0.920)	2116950	50.000	45.859
36 2-Nitroaniline	65.00	15.516	15.516	(0.940)	725155	50.000	37.249(a)
40 3-Nitroaniline	138.00	16.519	16.519	(1.001)	550981	50.000	38.143(a)
49 4-Nitroaniline	138.00	17.989	17.989	(1.090)	561271	50.000	45.950(aM)
62 2,4-Dinitrophenol	184.00	16.772	16.772	(1.017)	132272	50.000	20.046(a)
37 Dimethylphthalate	163.00	16.062	16.062	(0.973)	2523494	50.000	45.617
38 2,6-Dinitrotoluene	165.00	16.159	16.159	(0.979)	564294	50.000	43.226
39 Acenaphthylene	152.00	16.149	16.149	(0.979)	3221950	50.000	44.699
44 Dibenzofuran	168.00	16.996	16.996	(1.030)	2881105	50.000	47.158
46 Diethylphthalate	149.00	17.775	17.775	(1.077)	2415862	50.000	42.975
47 Fluorene	166.00	17.814	17.814	(1.080)	2347570	50.000	46.344
48 4-Chlorophenyl-phenylether	204.00	17.911	17.911	(1.086)	1113852	50.000	48.200
50 4,6-Dinitro-2-methylphenol	198.00	18.038	18.038	(0.894)	351780	50.000	39.548(a)
51 n-Nitrosodiphenylamine	169.00	18.213	18.213	(0.903)	1585283	50.000	47.351(H)
53 4-Bromophenyl-phenylether	248.00	19.050	19.050	(0.944)	584708	50.000	51.821
54 Hexachlorobenzene	284.00	19.089	19.089	(0.946)	700874	50.000	52.917
57 Phenanthrene	178.00	20.072	20.072	(0.995)	2897134	50.000	46.780(H)
58 Anthracene	178.00	20.189	20.189	(1.001)	3031370	50.000	49.977(H)
59 Carbazole	167.00	20.657	20.657	(1.024)	2777433	50.000	50.240
60 Di-n-butylphthalate	149.00	21.718	21.718	(1.077)	3560098	50.000	44.756
61 Fluoranthene	202.00	22.886	22.886	(1.135)	2952207	50.000	49.150
65 Butylbenzylphthalate	149.00	25.252	25.252	(0.960)	1507198	50.000	41.332
66 Benzo(a)anthracene	228.00	26.284	26.284	(0.999)	1787192	50.000	40.071
69 Chrysene	228.00	26.361	26.361	(1.002)	2048267	50.000	46.698

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	26.352	26.352	(1.002)	557827	50.000	38.698
70 bis(2-Ethylhexyl)phthalate	149.00	26.731	26.731	(1.016)	1665197	50.000	37.154
71 Di-n-octylphthalate	149.00	28.211	28.211	(0.958)	2771888	50.000	37.984
72 Benzo(b)fluoranthene	252.00	28.659	28.659	(0.974)	1473295	50.000	36.928
73 Benzo(k)fluoranthene	252.00	28.727	28.727	(0.976)	2207990	50.000	53.301
74 Benzo(a)pyrene	252.00	29.311	29.311	(0.996)	1418923	50.000	39.090
76 Indeno(1,2,3-cd)pyrene	276.00	32.154	32.154	(1.092)	1179061	50.000	36.055
77 Dibenzo(a,h)anthracene	278.00	32.290	32.290	(1.097)	1342829	50.000	43.261
78 Benzo(g,h,i)perylene	276.00	32.943	32.943	(1.119)	1717169	50.000	49.144

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date: 12/16/96 Time: 1323

Lab File ID: DGAC16 Init. Calib. Date(s): 12/06/96 12/06/96

Init. Calib. Times: 0755 1053

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.914	1.491	0.800	22.1	25.0
bis(2-Chloroethyl)ether	1.424	1.307	0.700	8.2	25.0
2-Chlorophenol	1.433	1.255	0.800	12.4	25.0
1,3-Dichlorobenzene	1.532	1.381	0.600	9.8	25.0
1,4-Dichlorobenzene	1.556	1.392	0.500	10.5	25.0
1,2-Dichlorobenzene	1.382	1.252	0.400	9.4	25.0
2-Methylphenol	1.310	1.036	0.700	20.9	25.0
2,2'-oxybis(1-Chloropropane)	1.543	0.920		40.4	
4-Methylphenol	1.287	1.176	0.600	8.6	25.0
N-Nitroso-di-n-propylamine	1.137	0.854	0.500	24.9	25.0
Hexachloroethane	0.659	0.578	0.300	12.3	25.0
Nitrobenzene	0.431	0.412	0.200	4.4	25.0
Isophorone	0.824	0.710	0.400	13.8	25.0
2-Nitrophenol	0.227	0.217	0.100	4.4	25.0
2,4-Dimethylphenol	0.445	0.409	0.200	8.1	25.0
bis(2-Chloroethoxy)methane	0.484	0.462	0.300	4.5	25.0
2,4-Dichlorophenol	0.298	0.310	0.200	4.0	25.0
1,2,4-Trichlorobenzene	0.312	0.300	0.200	3.8	25.0
Naphthalene	0.977	0.862	0.700	11.8	25.0
4-Chloroaniline	0.443	0.428		3.4	
Hexachlorobutadiene	0.174	0.170		2.3	
4-Chloro-3-methylphenol	0.396	0.336	0.200	15.2	25.0
2-Methylnaphthalene	0.642	0.600	0.400	6.5	25.0
Hexachlorocyclopentadiene	0.230	0.251		9.1	
2,4,6-Trichlorophenol	0.427	0.369	0.200	13.6	25.0
2,4,5-Trichlorophenol	0.398	0.412	0.200	3.5	25.0
2-Chloronaphthalene	1.180	1.106	0.800	6.3	25.0
2-Nitroaniline	0.498	0.454		8.8	
Dimethylphthalate	1.414	1.271		10.1	
Acenaphthylene	1.842	1.656	1.300	10.1	25.0
2,6-Dinitrotoluene	0.334	0.320	0.200	4.2	25.0
3-Nitroaniline	0.369	0.310		16.0	
Acenaphthene	1.122	0.974	0.800	13.2	25.0
2,4-Dinitrophenol	0.168	0.103	0.050	38.7	
4-Nitrophenol	0.209	0.131	0.050	37.3	
Dibenzofuran	1.561	1.427	0.800	8.6	25.0
2,4-Dinitrotoluene	0.436	0.415	0.200	4.8	25.0

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Instrument ID: GCL4 Calibration Date: 12/16/96 Time: 1323

Lab File ID: DGAC16 Init. Calib. Date(s): 12/06/96 12/06/96

Init. Calib. Times: 0755 1053

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.437	1.089		24.2	
4-Chlorophenyl-phenylether	0.591	0.524	0.400	11.3	25.0
Fluorene	1.295	1.074	0.900	17.1	25.0
4-Nitroaniline	0.312	0.286		8.3	
4,6-Dinitro-2-methylphenol	0.145	0.161		11.0	
n-Nitrosodiphenylamine(1)	0.545	0.606		11.2	
4-Bromophenyl-phenylether	0.183	0.197	0.100	7.6	25.0
Hexachlorobenzene	0.216	0.233	0.100	7.9	25.0
Pentachlorophenol	0.140	0.137	0.050	2.1	25.0
Phenanthrene	1.009	0.917	0.700	9.1	25.0
Anthracene	0.988	0.958	0.700	3.0	25.0
Carbazole	0.900	0.933		3.7	
Di-n-butylphthalate	1.296	1.163		10.3	
Fluoranthene	0.978	0.928	0.600	5.1	25.0
Pyrene	1.788	1.516	0.600	15.2	25.0
Butylbenzylphthalate	1.097	0.894		18.5	
3,3'-Dichlorobenzidine	0.434	0.381		12.2	
Benzo(a)anthracene	1.342	1.097	0.800	18.2	25.0
Chrysene	1.320	1.178	0.700	10.8	25.0
bis(2-Ethylhexyl)phthalate	1.348	1.158		14.1	
Di-n-octylphthalate	2.279	1.775		22.1	
Benzo(b)fluoranthene	1.246	0.945	0.700	24.2	25.0
Benzo(k)fluoranthene	1.294	1.173	0.700	9.4	25.0
Benzo(a)pyrene	1.134	0.952	0.700	16.0	25.0
Indeno(1,2,3-cd)pyrene	1.021	0.872	0.500	14.6	25.0
Dibenzo(a,h)anthracene	0.969	0.814	0.400	16.0	25.0
Benzo(g,h,i)perylene	1.091	1.028	0.500	5.8	25.0
Nitrobenzene-d5	0.430	0.411	0.200	4.4	25.0
2-Fluorobiphenyl	1.291	1.164	0.700	9.8	25.0
Terphenyl-d14	1.110	0.952	0.500	14.2	25.0
Phenol-d5	1.745	1.541	0.800	11.7	25.0
2-Fluorophenol	1.463	1.264		13.6	25.0
2,4,6-Tribromophenol	0.170	0.165		2.9	
2-Chlorophenol-d4	1.409	1.255	0.800	10.9	25.0
1,2-Dichlorobenzene-d4	0.910	0.844	0.400	7.2	25.0

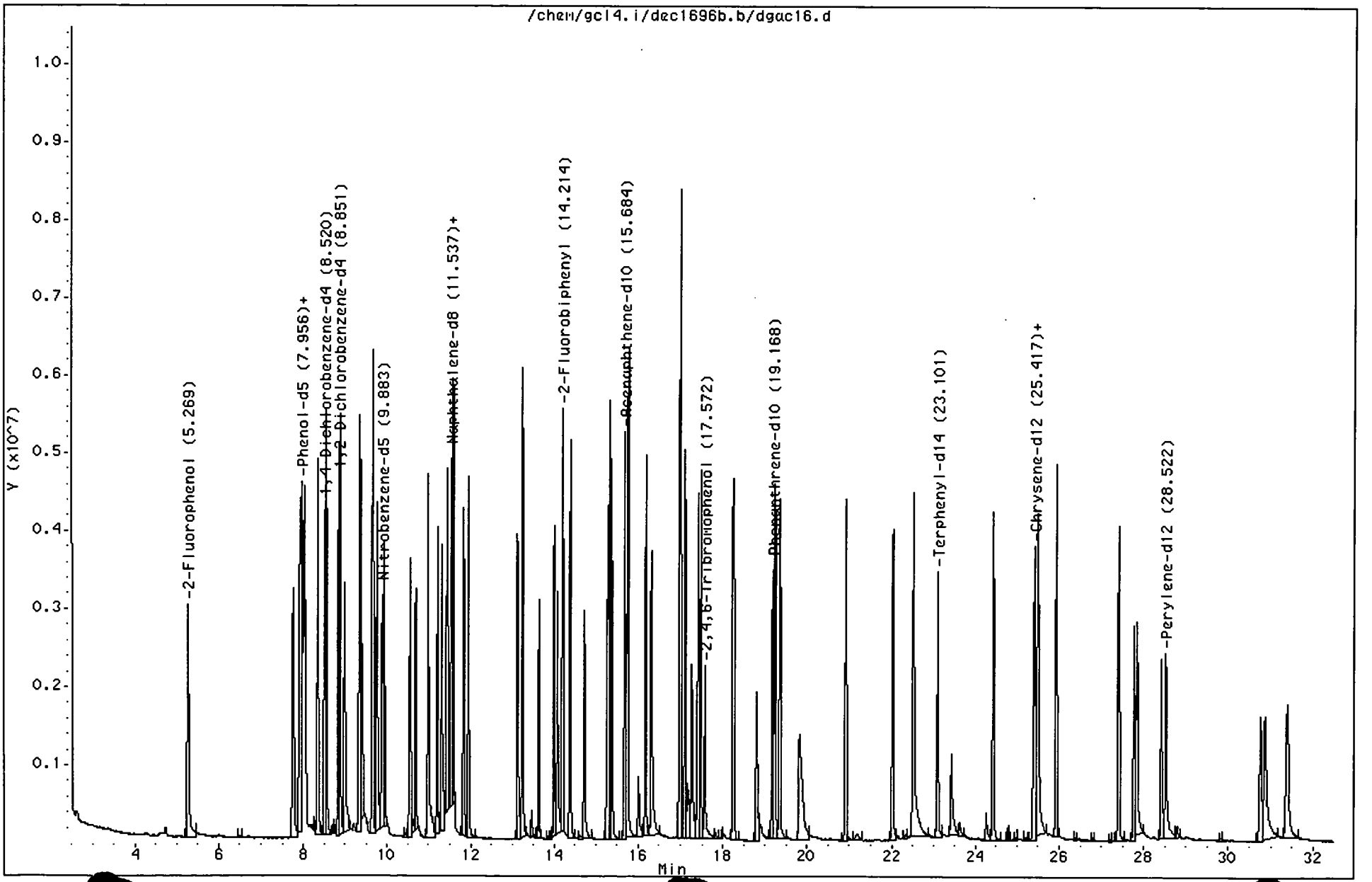
(1) Cannot be separated from Diphenylamine
All other compounds must meet a minimum RRF of 0.010.

Data File: /chem/gcl4.i/dec1696b.b/dgac16.d
Date : 16-DEC-1996 13:23
Client ID: SSTD050
Sample Info: SSTD050 DFAC16
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: GLR
Column diameter: 2.00

395



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1696b.b/dgac16.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 16-DEC-1996 13:23
Operator : GLR Inst ID: gcl4.i
Smp Info : SSTD050 DFAC16
Misc Info : GCL#4 B1969
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1696b.b/390.m
Meth Date : 16-Dec-1996 14:06 rynkarg Quant Type: ISTD
Cal Date : 16-DEC-1996 13:23 Cal File: dgac16.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vo * Vi)

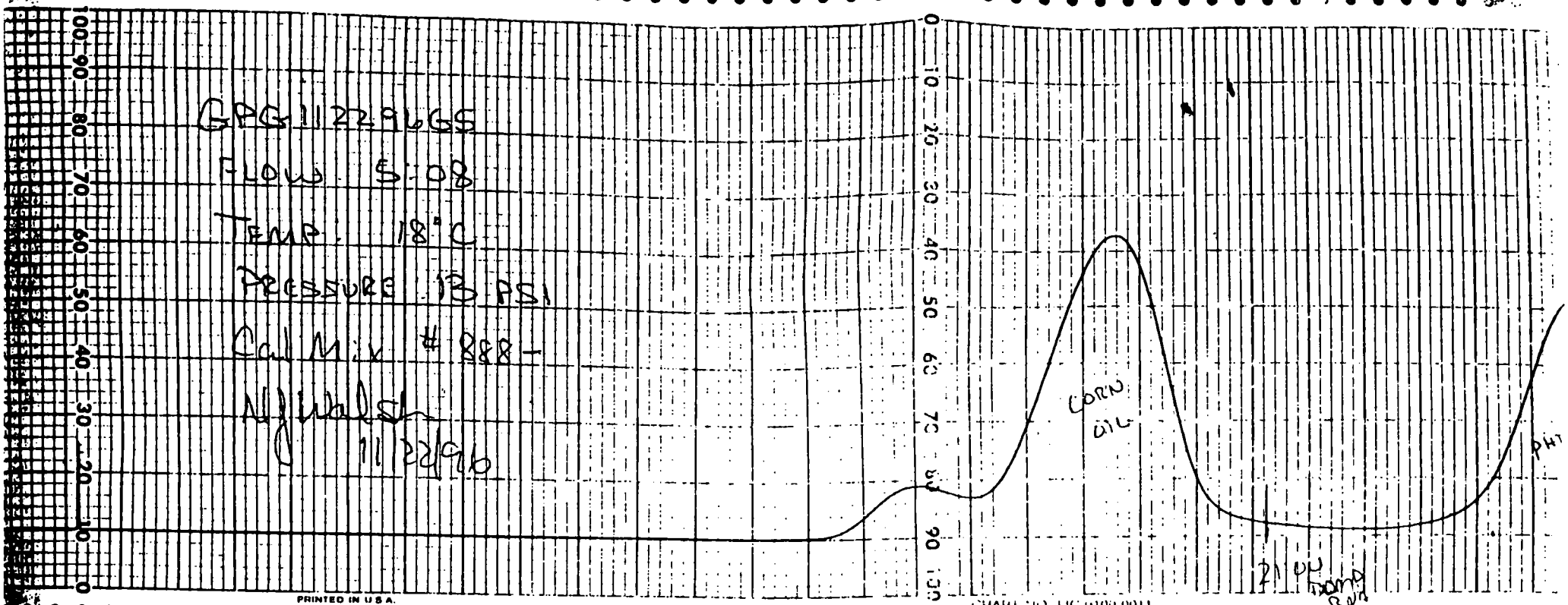
Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	2.000	ul

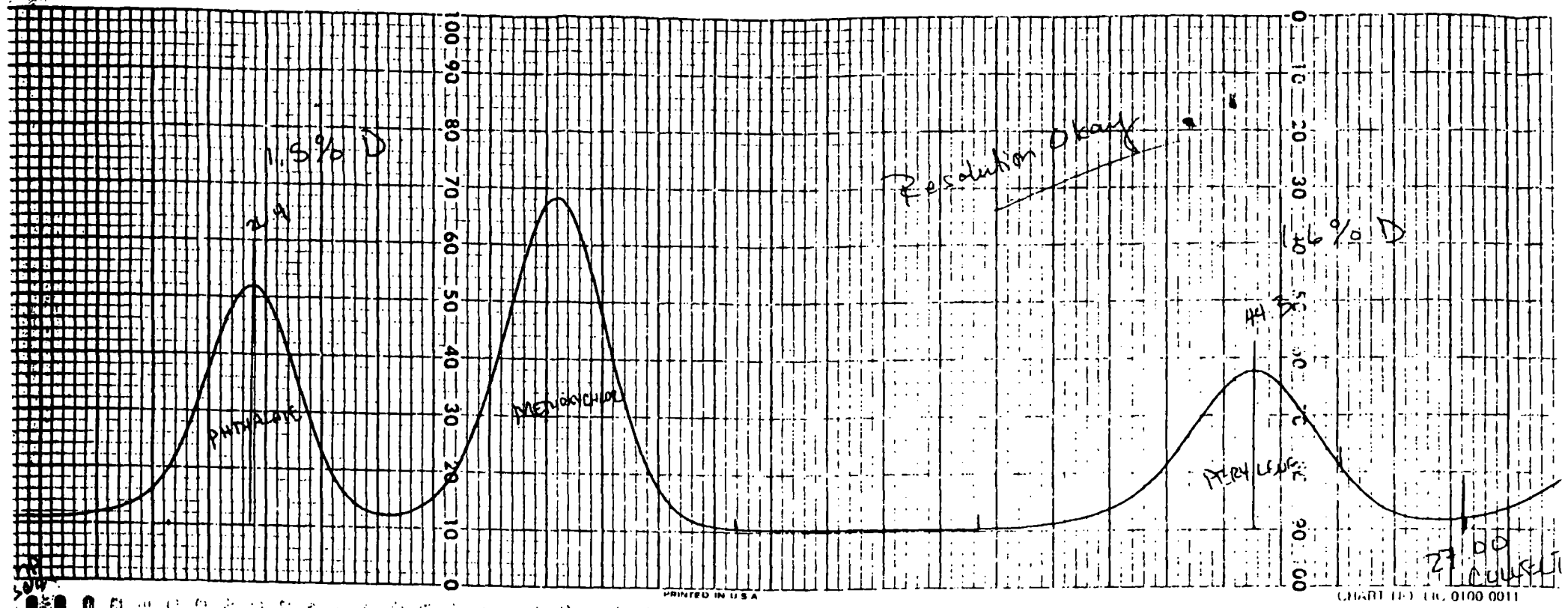
GLR 12/16/96

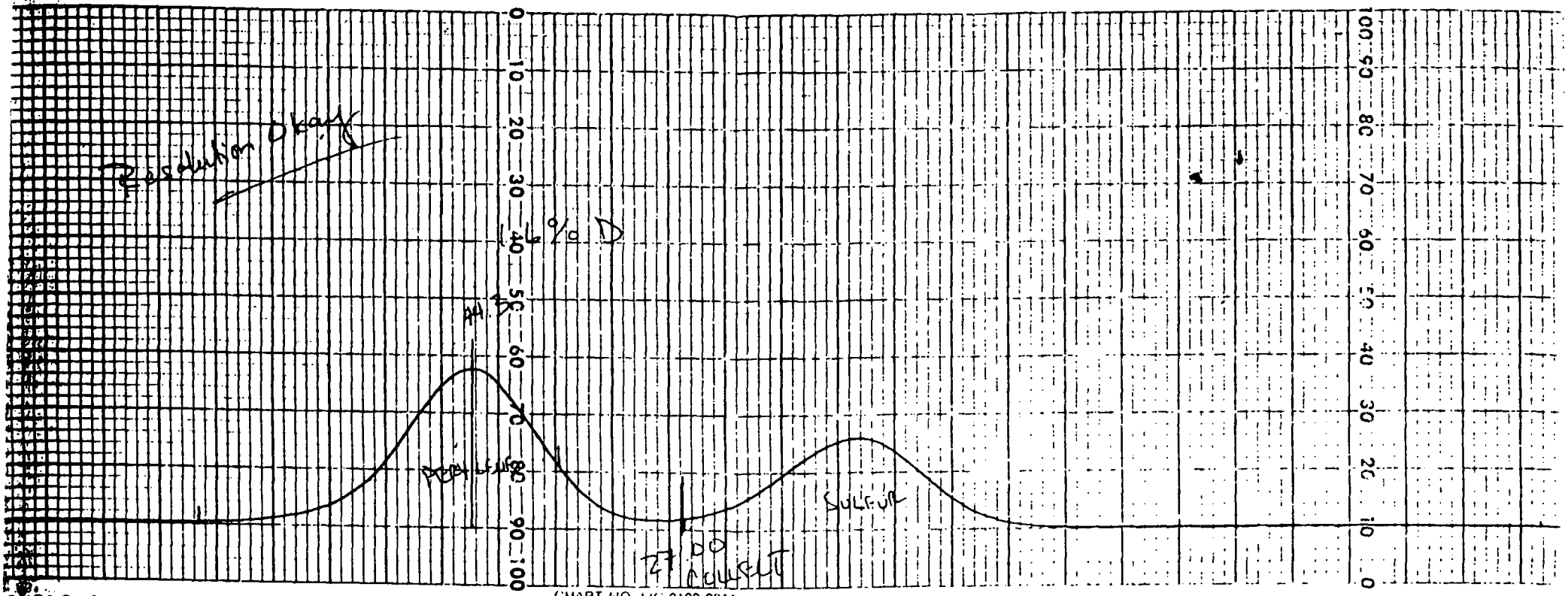
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 8 1,4-Dichlorobenzene-d4	152.00	8.520	8.520	(1.000)	1410970	40.000	
* 26 Naphthalene-d8	136.00	11.537	11.537	(1.000)	4405209	40.000	
* 41 Acenaphthene-d10	164.00	15.684	15.684	(1.000)	2175022	40.000	
* 56 Phenanthrene-d10	188.00	19.178	19.178	(1.000)	2845875	40.000	
* 67 Chrysene-d12	240.00	25.427	25.427	(1.000)	1723078	40.000	
* 75 Perylene-d12	264.00	28.522	28.522	(1.000)	1895816	40.000	
$ 1 2-Fluorophenol	112.00	5.269	5.269	(0.618)	2229522	50.000	43.212
$ 2 Phenol-d5	99.00	7.917	7.917	(0.929)	2717535	50.000	44.157
$ 5 2-Chlorophenol-d4	132.00	7.975	7.975	(0.936)	2213894	50.000	44.532
$ 10 1,2-Dichlorobenzene-d4	152.00	8.851	8.851	(1.039)	1489250	50.000	46.392
$ 17 Nitrobenzene-d5	82.00	9.883	9.883	(0.857)	2263503	50.000	47.805
$ 34 2-Fluorobiphenyl	172.00	14.214	14.214	(0.906)	3164993	50.000	45.089
$ 52 2,4,6-Tribromophenol	330.00	17.572	17.572	(1.120)	447558	50.000	48.515
$ 64 Terphenyl-d14	244.00	23.101	23.101	(0.908)	2050225	50.000	42.880
3 Phenol	94.00	7.956	7.956	(0.934)	2630211	50.000	38.958
6 2-Chlorophenol	128.00	8.014	8.014	(0.941)	2212891	50.000	43.794
9 1,4-Dichlorobenzene	146.00	8.559	8.559	(1.005)	2454645	50.000	44.720
14 N-Nitroso-di-n-propylamine	70.00	9.678	9.678	(1.136)	1505959	50.000	37.552
25 1,2,4-Trichlorobenzene	180.00	11.440	11.440	(0.992)	1652394	50.000	48.027
29 4-Chloro-3-methylphenol	107.00	13.124	13.124	(1.137)	1849606	50.000	42.421

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
42 Acenaphthene	154.00	15.762	15.762	(1.005)	2649561	50.000	43.432
43 4-Nitrophenol	109.00	16.317	16.317	(1.040)	355503	50.000	31.282
45 2,4-Dinitrotoluene	165.00	16.317	16.317	(1.040)	1128690	50.000	47.544
55 Pentachlorophenol	266.00	18.799	18.799	(0.980)	486996	50.000	48.972
63 Pyrene	202.00	22.526	22.526	(0.886)	3265627	50.000	42.384
4 bis(2-Chloroethyl)ether	93.00	8.053	8.053	(0.945)	2304810	50.000	45.906
7 1,3-Dichlorobenzene	146.00	8.355	8.355	(0.981)	2435425	50.000	45.059
11 1,2-Dichlorobenzene	146.00	8.890	8.890	(1.043)	2208295	50.000	45.292
12 2-Methylphenol	108.00	9.357	9.357	(1.098)	1827323	50.000	39.531
15 4-Methylphenol	108.00	9.766	9.766	(1.146)	2074806	50.000	45.707
13 2,2'-oxybis(1-Chloropropane)	45.00	9.338	9.338	(1.096)	1623333	50.000	29.836
16 Hexachloroethane	117.00	9.659	9.659	(1.134)	1020312	50.000	43.920
18 Nitrobenzene	77.00	9.931	9.931	(0.861)	2267400	50.000	47.792
19 Isophorone	82.00	10.564	10.564	(0.916)	3912698	50.000	43.127
20 4-Chloroaniline	127.00	11.829	11.829	(1.025)	2355731	50.000	48.222
21 2-Nitrophenol	139.00	10.691	10.691	(0.927)	1194563	50.000	47.857
22 2,4-Dimethylphenol	107.00	10.992	10.992	(0.953)	2254230	50.000	46.043
23 bis(2-Chloroethoxy)methane	93.00	11.207	11.207	(0.971)	2544457	50.000	47.779
24 2,4-Dichlorophenol	162.00	11.304	11.304	(0.980)	1710074	50.000	52.053
27 Naphthalene	128.00	11.586	11.586	(1.004)	4745931	50.000	44.087
28 Hexachlorobutadiene	225.00	11.956	11.956	(1.036)	937204	50.000	48.877
30 2-Methylnaphthalene	142.00	13.251	13.251	(1.148)	3302598	50.000	46.708
31 Hexachlorocyclopentadiene	237.00	13.640	13.640	(0.870)	682124	50.000	54.529
32 2,4,6-Trichlorophenol	196.00	14.000	14.000	(0.893)	1003744	50.000	43.252
33 2,4,5-Trichlorophenol	196.00	14.078	14.078	(0.898)	1121351	50.000	51.695
35 2-Chloronaphthalene	162.00	14.389	14.389	(0.917)	3007056	50.000	46.872
36 2-Nitroaniline	65.00	14.730	14.730	(0.939)	1234969	50.000	45.645
40 3-Nitroaniline	138.00	15.733	15.733	(1.003)	844172	50.000	42.050
49 4-Nitroaniline	138.00	17.173	17.173	(1.095)	777507	50.000	45.800
62 2,4-Dinitrophenol	184.00	16.015	16.015	(1.021)	280128	50.000	30.547
37 Dimethylphthalate	163.00	15.295	15.295	(0.975)	3456576	50.000	44.960
38 2,6-Dinitrotoluene	165.00	15.382	15.382	(0.981)	870274	50.000	47.968
39 Acenaphthylene	152.00	15.333	15.333	(0.978)	4502690	50.000	44.948
44 Dibenzofuran	168.00	16.190	16.190	(1.032)	3880114	50.000	45.698
46 Diethylphthalate	149.00	17.008	17.008	(1.084)	2962072	50.000	37.914
47 Fluorene	166.00	16.998	16.998	(1.084)	2919750	50.000	41.474
48 4-Chlorophenyl-phenylether	204.00	17.105	17.105	(1.091)	1424683	50.000	44.360
50 4,6-Dinitro-2-methylphenol	198.00	17.270	17.270	(0.901)	571560	50.000	55.457
51 n-Nitrosodiphenylamine	169.00	17.426	17.426	(0.909)	2154793	50.000	55.549
53 4-Bromophenyl-phenylether	248.00	18.244	18.244	(0.951)	700557	50.000	53.587
54 Hexachlorobenzene	284.00	18.263	18.263	(0.952)	830499	50.000	54.118
57 Phenanthrene	178.00	19.227	19.227	(1.003)	3260797	50.000	45.442
58 Anthracene	178.00	19.353	19.353	(1.009)	3406900	50.000	48.477
59 Carbazole	167.00	19.821	19.821	(1.033)	3317859	50.000	51.798
60 Di-n-butylphthalate	149.00	20.920	20.920	(1.091)	4136352	50.000	44.880
61 Fluoranthene	202.00	22.030	22.030	(1.149)	3300891	50.000	47.430
65 Butylbenzylphthalate	149.00	24.434	24.434	(0.961)	1925846	50.000	40.756
66 Benzo(a)anthracene	228.00	25.407	25.407	(0.999)	2363125	50.000	40.888
69 Chrysene	228.00	25.485	25.485	(1.002)	2538491	50.000	44.662

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
68 3,3'-Dichlorobenzidine	252.00	25.495	25.495	(1.003)	821313	50.000	43.969
70 bis(2-Ethylhexyl)phthalate	149.00	25.933	25.933	(1.020)	2494146	50.000	42.945
71 Di-n-octylphthalate	149.00	27.413	27.413	(0.961)	4207013	50.000	38.948
72 Benzo(b)fluoranthene	252.00	27.773	27.773	(0.974)	2239126	50.000	37.917
73 Benzo(k)fluoranthene	252.00	27.841	27.841	(0.976)	2780418	50.000	45.344
74 Benzo(a)pyrene	252.00	28.415	28.415	(0.996)	2256624	50.000	41.999
76 Indeno(1,2,3-cd)pyrene	276.00	30.761	30.761	(1.078)	2066498	50.000	42.692
77 Dibenzo(a,h)anthracene	278.00	30.878	30.878	(1.083)	1929208	50.000	41.989
78 Benzo(g,h,i)perylene	276.00	31.403	31.403	(1.101)	2437532	50.000	47.128


GPG 112296GS
FLOW 5:08
TEMP 18°C
PRESSURE 13 PSI
Cal Mix # 888-
NJ Walsh
11/22/96
CORN OIL
PHT
21 UV DOMA BOX
PRINTED IN U.S.A.
CHART NO. LIC 0100 0011


1.5% D
PHTHALATE
METHOXYCHLOR
Resolution Okay
1.6% D
PERYLENE
27.00
PRINTED IN U.S.A.
CHART NO. LIC. 0100 0011

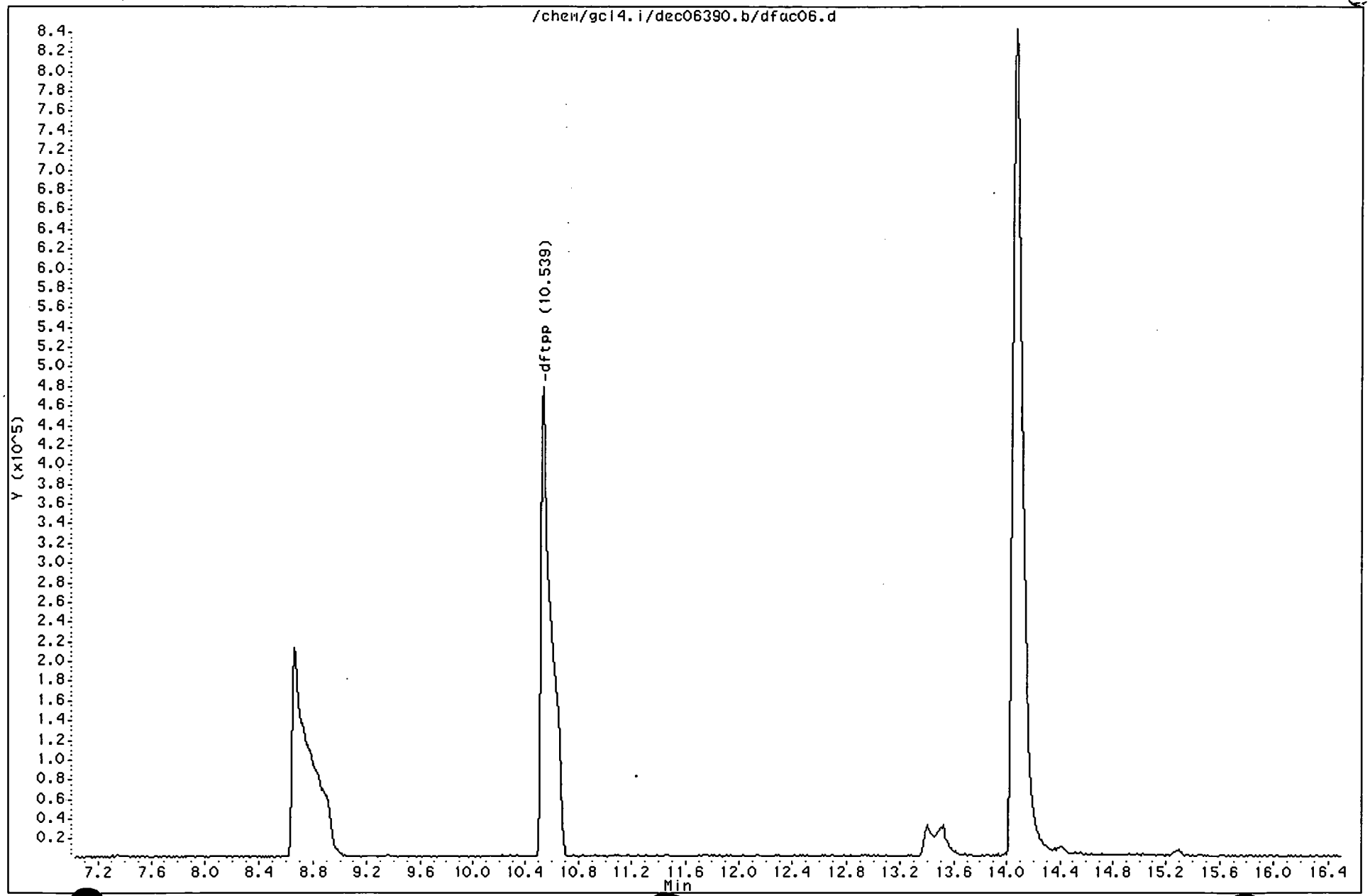

Resolution Okay
16% D
44.3
PERILENE
27.00
COLLECT
SULFUR
CHART NO LIC 0100 0011

VII. QUALITY CONTROL DATA

403

Data File: /chem/gcl4.i/dec06390.b/dfac06.d
Date : 06-DEC-1996 07:32
Client ID: DFTPP
Sample Info: DFTPP DFAC06
Volume Injected (uL): 2.0
Column phase: DB5MS

Instrument: gcl4.i
Operator: RJM
Column diameter: 0.25



Data File: /chem/gcl4.i/dec06390.b/dfac06.d

Date : 06-DEC-1996 07:32

Client ID: DFTPP

Instrument: gcl4.i

Sample Info: DFTPP DFAC06

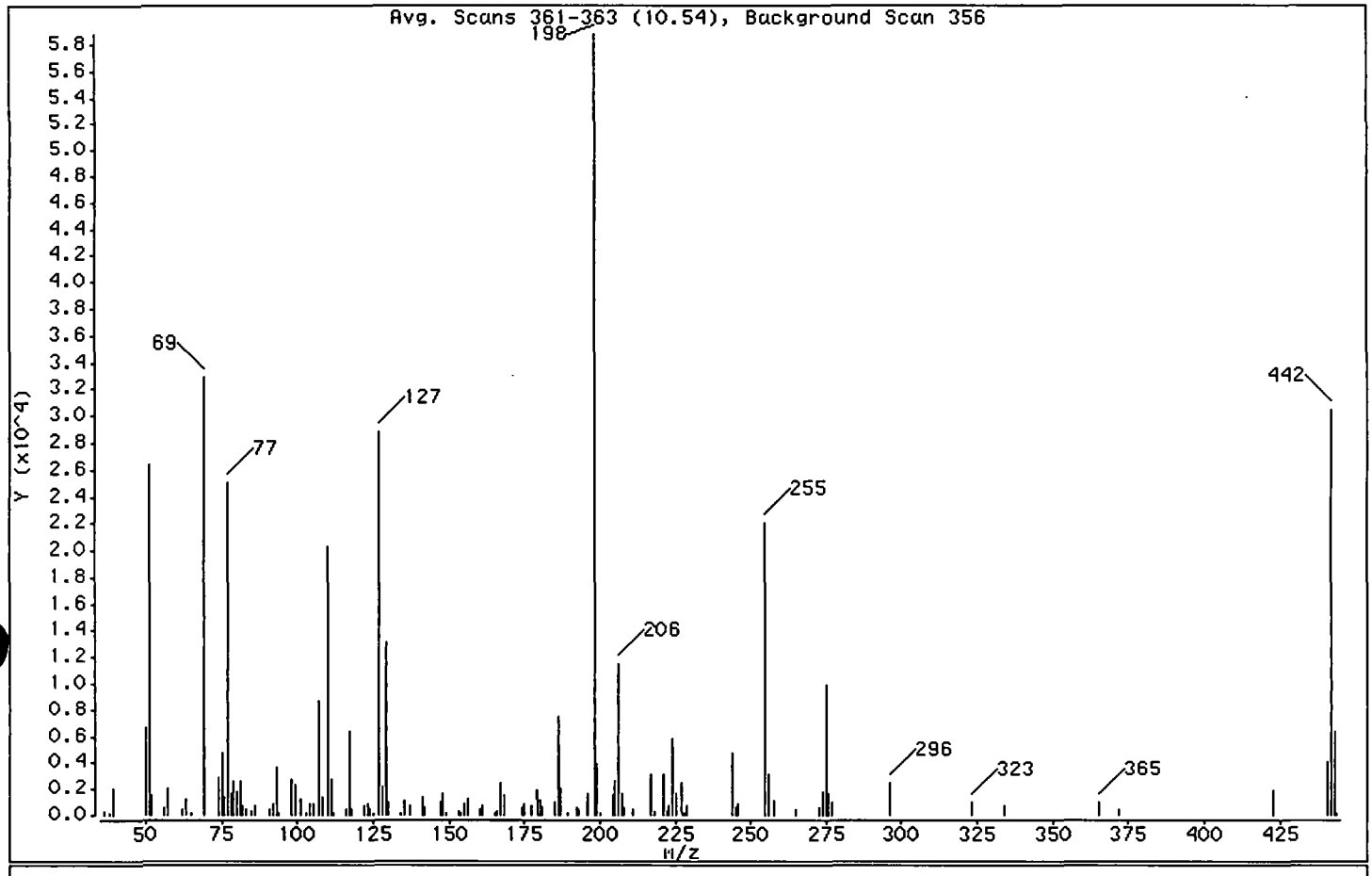
Volume Injected (uL): 2.0

Operator: RJM

Column phase: DB5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	44.83
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	55.89
70	Less than 2.00% of mass 69	0.00 (0.00)
127	25.00 - 75.00% of mass 198	48.85
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	16.88
365	Greater than 0.75% of mass 198	1.65
441	Present, but less than mass 443	6.87
442	40.00 - 110.00% of mass 198	51.62
443	15.00 - 24.00% of mass 442	10.79 (20.90)

Data File: /chem/gcl4.i/dec06390.b/dfac06.d
Date : 06-DEC-1996 07:32
Client ID: DFTPP
Instrument: gcl4.i
Sample Info: DFTPP DFAC06
Volume Injected (uL): 2.0
Operator: RJM
Column phase: DB5MS
Column diameter: 0.25

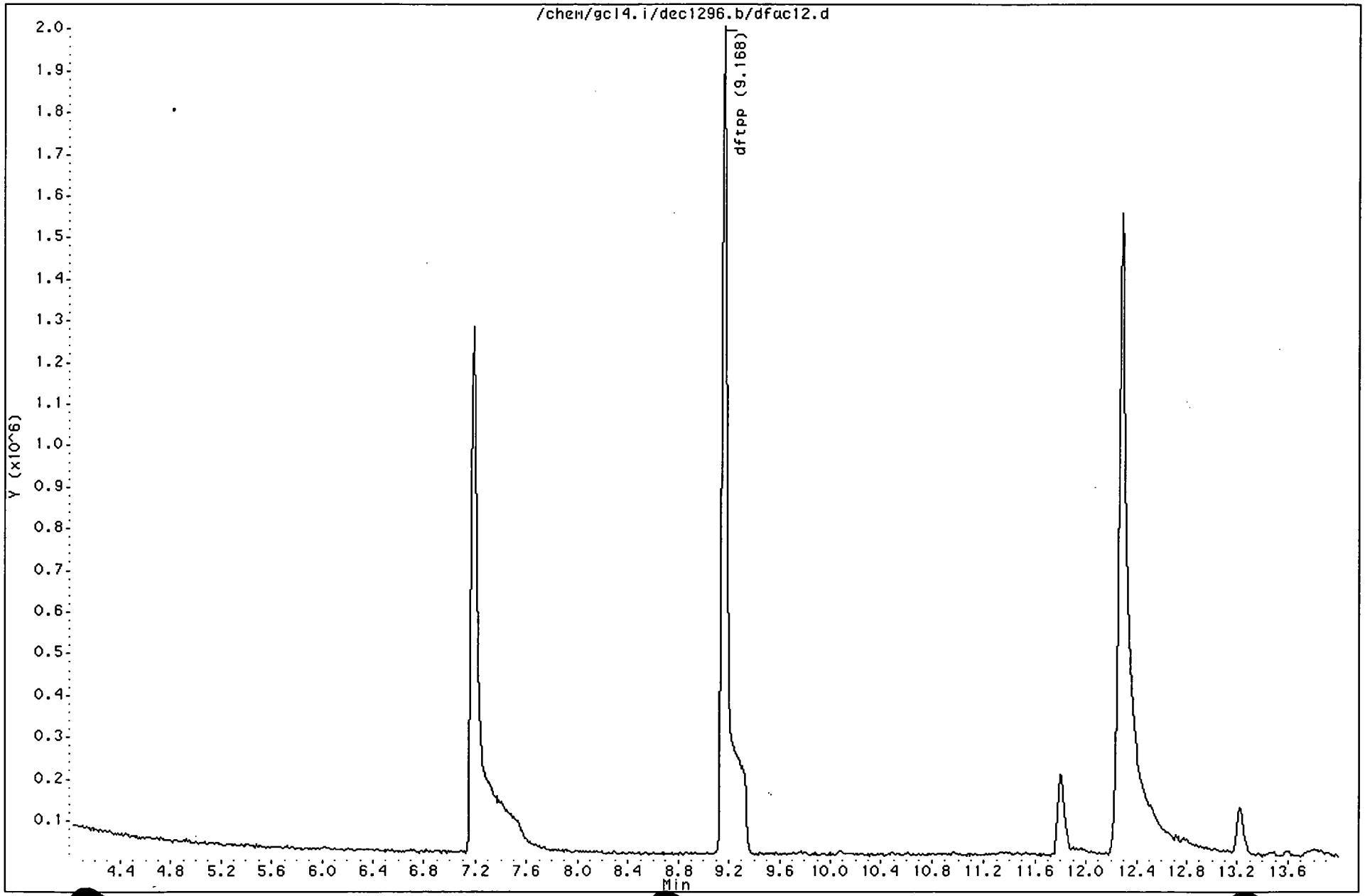
Data File: dfac06.d
Spectrum : Avg. Scans 361-363 (10.54), Background Scan 356
Largest m/z: 198.00
Number of peaks: 122

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	244	103.00	169	160.00	426	222.00	206
38.00	176	104.00	804	161.00	681	223.00	609
39.00	1982	105.00	785	165.00	170	224.00	5849
50.00	6635	107.00	8589	166.00	208	225.00	1591
51.00	26368	108.00	1333	167.00	2384	227.00	2374
52.00	1481	110.00	20264	168.00	1524	228.00	179
56.00	497	111.00	2705	174.00	595	229.00	622
57.00	2019	112.00	167	175.00	863	244.00	4757
62.00	361	116.00	447	177.00	687	245.00	596
63.00	1198	117.00	6334	179.00	1842	246.00	848
65.00	189	118.00	381	180.00	1125	255.00	22032
69.00	32872	122.00	619	181.00	480	256.00	3111
74.00	2891	123.00	861	185.00	1002	258.00	1136
75.00	4775	124.00	359	186.00	7420	265.00	387
76.00	1362	125.00	170	187.00	2031	273.00	600
77.00	25080	127.00	28736	189.00	191	274.00	1724
78.00	1583	128.00	2112	192.00	539	275.00	9932
79.00	2510	129.00	13079	193.00	455	276.00	1563
80.00	1703	130.00	919	196.00	1635	277.00	898
81.00	2532	134.00	181	198.00	58824	296.00	2378
82.00	730	135.00	1070	199.00	3929	323.00	999
83.00	443	137.00	660	200.00	174	334.00	696
85.00	212	141.00	1326	204.00	1471	365.00	968
86.00	644	142.00	482	205.00	2552	372.00	396
91.00	368	147.00	942	206.00	11461	423.00	1898
92.00	858	148.00	1609	207.00	1685	441.00	4043
93.00	3606	149.00	190	208.00	550	442.00	30360
94.00	194	153.00	225	211.00	392	443.00	6345
98.00	2721	154.00	173	217.00	3044	444.00	180
99.00	2264	155.00	824	218.00	230		
101.00	1241	156.00	1266	221.00	3162		

406

Data File: /chem/gc14.i/dec1296.b/dfac12.d
Date : 12-DEC-1996 08:56
Client ID: DFTPP
Sample Info: DFTPP DFAC12
Volume Injected (uL): 2.0
Column phase: DB5MS

Instrument: gc14.i
Operator: GLR
Column diameter: 0.25



Data File: /chem/gcl4.i/dec1296.b/dfac12.d

Date : 12-DEC-1996 08:56

Client ID: DFTPP

Instrument: gcl4.i

Sample Info: DFTPP DFAC12

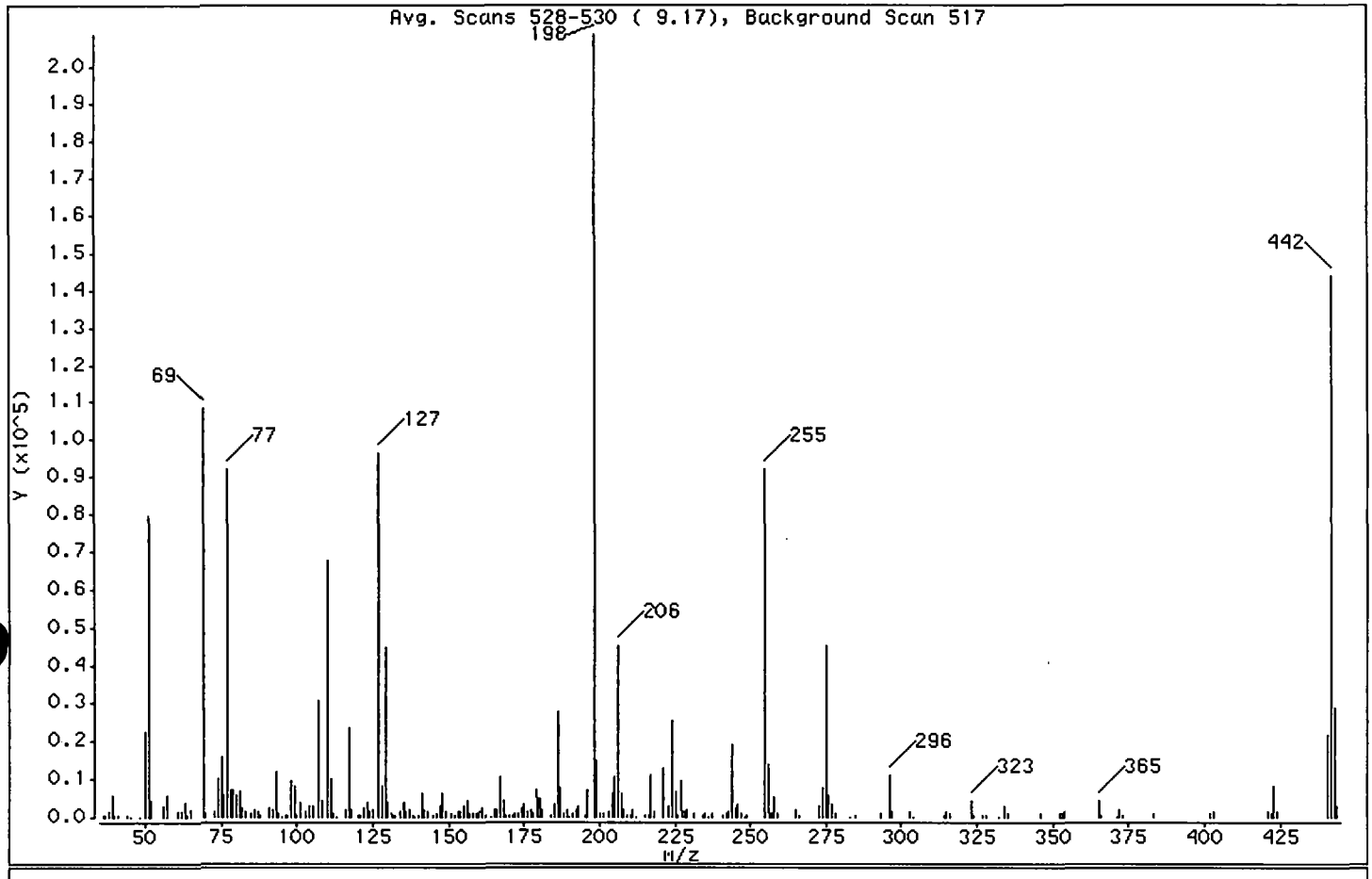
Volume Injected (uL): 2.0

Operator: GLR

Column phase: DB5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	38.26
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	51.96
70	Less than 2.00% of mass 69	0.43 (0.82)
127	25.00 - 75.00% of mass 198	46.19
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.11
275	10.00 - 30.00% of mass 198	21.67
365	Greater than 0.75% of mass 198	2.13
441	Present, but less than mass 443	10.35
442	40.00 - 110.00% of mass 198	69.02
443	15.00 - 24.00% of mass 442	13.88 (20.11)

Data File: /chem/gcl4.i/dec1296.b/dfac12.d
Date : 12-DEC-1996 08:56
Client ID: DFTPP
Instrument: gcl4.i
Sample Info: DFTPP DFAC12
Volume Injected (uL): 2.0
Operator: GLR
Column phase: DB5MS
Column diameter: 0.25

Data File: dfac12.d
Spectrum : Avg. Scans 528-530 (9.17), Background Scan 517
Largest m/z: 198.00
Number of peaks: 218

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	279	113.00	207	176.00	1317	247.00	910
37.00	528	116.00	2118	177.00	2155	248.00	198
38.00	1460	117.00	23408	178.00	816	249.00	581
39.00	5683	118.00	1862	179.00	7098	255.00	91880
40.00	441	120.00	634	180.00	4619	256.00	14026
41.00	440	121.00	471	181.00	2084	257.00	1177
44.00	539	122.00	2181	184.00	466	258.00	5125
45.00	193	123.00	3607	185.00	3569	259.00	848
48.00	239	124.00	1568	186.00	27640	265.00	1786
50.00	22696	125.00	1904	187.00	7783	266.00	284
51.00	79744	127.00	96264	188.00	893	273.00	2934
52.00	4545	128.00	8301	189.00	1868	274.00	7602
56.00	3095	129.00	44608	190.00	204	275.00	45160
57.00	5975	130.00	4008	191.00	1168	276.00	5933
61.00	1351	131.00	1023	192.00	2067	277.00	3434
62.00	1286	132.00	393	193.00	2658	278.00	755
63.00	3711	134.00	1338	195.00	433	283.00	232
64.00	434	135.00	3776	196.00	7074	285.00	454
65.00	1881	136.00	1452	198.00	208384	293.00	833
69.00	108296	137.00	1702	199.00	14816	296.00	10799
70.00	891	138.00	484	200.00	1076	297.00	1430
73.00	1283	139.00	176	201.00	991	303.00	1353
74.00	10156	140.00	457	203.00	1496	304.00	199
75.00	15867	141.00	6106	204.00	6347	314.00	490
76.00	5703	142.00	1939	205.00	10376	315.00	1303
77.00	91992	143.00	1201	206.00	45208	316.00	747
78.00	7227	145.00	360	207.00	6172	323.00	4392
79.00	7197	146.00	910	208.00	1702	324.00	715
80.00	5747	147.00	2920	209.00	427	327.00	412
81.00	6484	148.00	6139	210.00	623	328.00	341
82.00	2389	149.00	1571	211.00	1989	332.00	177
83.00	1265	151.00	905	212.00	167	334.00	3014
85.00	961	152.00	472	215.00	254	335.00	765
86.00	1929	153.00	1621	216.00	606	346.00	720
87.00	1266	154.00	1398	217.00	10839	352.00	1092

Data File: /chem/gc14.i/dec1296.b/dfac12.d

Date : 12-DEC-1996 08:56

Client ID: DFTPP | Instrument: gc14.i

Sample Info: DFTPP DFAC12

Volume Injected (uL): 2.0 | Operator: GLR

Column phase: DB5MS | Column diameter: 0.25

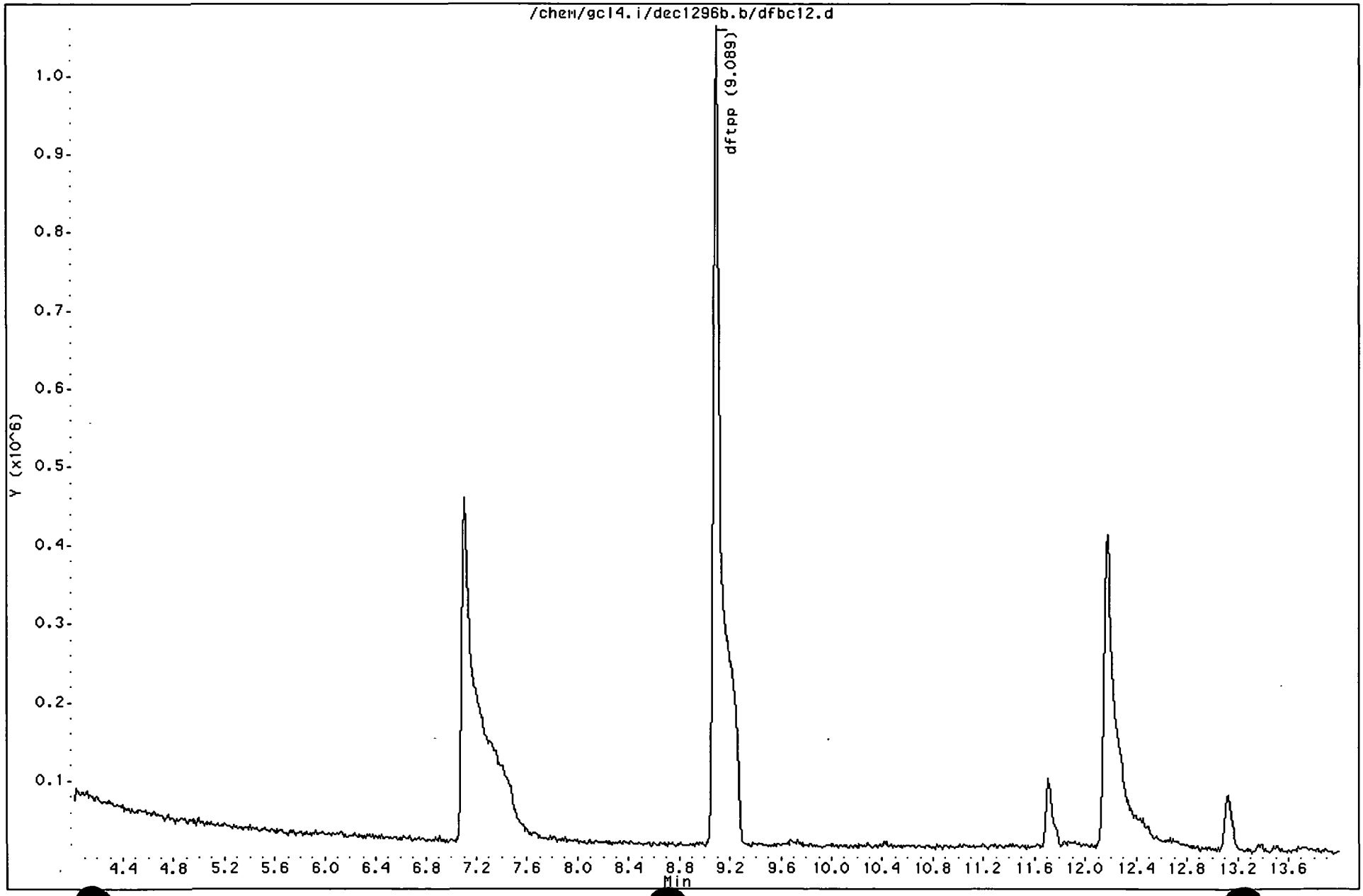
Data File: dfac12.d
Spectrum : Avg. Scans 528-530 (9.17), Background Scan 517
Largest m/z: 198.00
Number of peaks: 218

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	457	155.00	2941	218.00	1570	353.00	750
91.00	2277	156.00	4178	221.00	13093	354.00	1462
92.00	1970	157.00	1063	223.00	2916	365.00	4444
93.00	12036	158.00	969	224.00	25288	366.00	602
94.00	1153	159.00	898	225.00	6639	371.00	171
95.00	28	160.00	1565	226.00	410	372.00	2147
96.00	674	161.00	2577	227.00	9760	373.00	370
97.00	353	162.00	589	228.00	1367	383.00	818
98.00	9724	164.00	169	229.00	1890	402.00	745
99.00	8191	165.00	2152	231.00	1001	403.00	1297
100.00	416	166.00	1846	234.00	503	421.00	1401
101.00	4017	167.00	10478	235.00	874	422.00	1163
103.00	1664	168.00	4477	236.00	212	423.00	7966
104.00	2773	169.00	656	237.00	911	424.00	1623
105.00	2736	170.00	541	241.00	570	441.00	21560
107.00	30864	171.00	569	242.00	1113	442.00	143808
108.00	4302	172.00	970	243.00	1265	443.00	28936
110.00	67616	173.00	1163	244.00	19216	444.00	3000
111.00	10011	174.00	2174	245.00	2411		
112.00	1127	175.00	3448	246.00	3519		

410

Data File: /chem/gcl4.i/dec1296b.b/dfbc12.d
Date : 12-DEC-96 18:57
Client ID: DFTPP
Sample Info: DFTPP DFBC12
Volume Injected (uL): 2.0
Column phase: DB5MS

Instrument: gcl4.i
Operator: GES
Column diameter: 0.25



Data File: /chem/gcl4.i/dec1296b.b/dfbc12.d

Date : 12-DEC-96 18:57

Client ID: DFTPP

Instrument: gcl4.i

Sample Info: DFTPP DFBC12

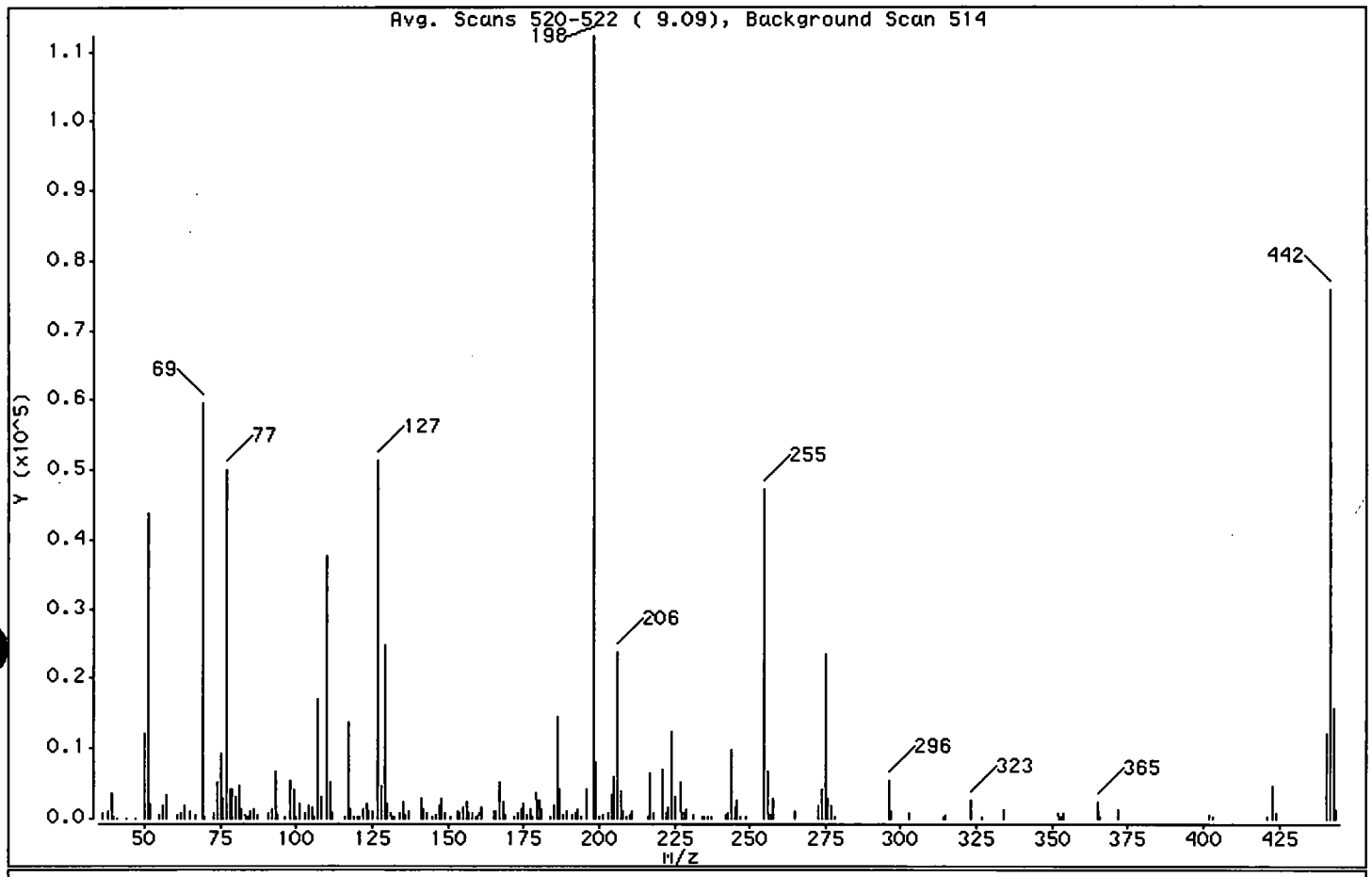
Volume Injected (uL): 2.0

Operator: GES

Column phase: DB5MS

Column diameter: 0.25

1 dftpp



M/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	39.04
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	53.11
70	Less than 2.00% of mass 69	0.32 (0.60)
127	25.00 - 75.00% of mass 198	45.86
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.18
275	10.00 - 30.00% of mass 198	21.03
365	Greater than 0.75% of mass 198	2.11
441	Present, but less than mass 443	10.87
442	40.00 - 110.00% of mass 198	67.66
443	15.00 - 24.00% of mass 442	14.08 (20.81)

Data File: /chem/gc14.i/dec1296b.b/dfbc12.d

Date : 12-DEC-96 18:57

Client ID: DFTPP | Instrument: gc14.i

Sample Info: DFTPP DFBC12

Volume Injected (uL): 2.0 | Operator: GES

Column phase: DB5MS | Column diameter: 0.25

Data File: dfbc12.d
Spectrum : Avg. Scans 520-522 (9.09), Background Scan 514
Largest m/z: 198.00
Number of peaks: 187

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	664	106.00	177	168.00	2202	231.00	468
38.00	934	107.00	17152	169.00	396	234.00	202
39.00	3601	108.00	3103	172.00	359	235.00	193
40.00	201	110.00	37672	173.00	763	236.00	201
41.00	105	111.00	5120	174.00	1179	237.00	250
44.00	52	112.00	749	175.00	2036	242.00	412
47.00	23	116.00	218	176.00	450	243.00	801
50.00	12238	117.00	13664	177.00	1176	244.00	9782
51.00	43816	118.00	1334	178.00	183	245.00	1511
52.00	1976	119.00	180	179.00	3524	246.00	2484
55.00	470	120.00	186	180.00	2475	247.00	209
56.00	1803	121.00	196	181.00	1363	249.00	204
57.00	3276	122.00	1182	184.00	201	255.00	47216
61.00	414	123.00	2091	185.00	1896	256.00	6808
62.00	874	124.00	1069	186.00	14422	257.00	464
63.00	1926	125.00	1078	187.00	4141	258.00	2734
65.00	1023	127.00	51480	188.00	400	265.00	1040
67.00	439	128.00	4527	189.00	950	273.00	1706
69.00	59616	129.00	24856	191.00	453	274.00	4223
70.00	358	130.00	2077	192.00	888	275.00	23608
73.00	780	131.00	775	193.00	1318	276.00	2920
74.00	5236	132.00	198	194.00	372	277.00	1921
75.00	9185	134.00	782	196.00	4199	278.00	182
76.00	2967	135.00	2243	198.00	112256	296.00	5295
77.00	50160	136.00	579	199.00	8058	297.00	986
78.00	4047	137.00	974	200.00	284	303.00	806
79.00	4040	141.00	2881	201.00	613	314.00	198
80.00	3117	142.00	1331	203.00	761	315.00	644
81.00	4747	143.00	737	204.00	3361	323.00	2497
82.00	1319	145.00	367	205.00	6052	327.00	243
83.00	576	146.00	407	206.00	23816	334.00	1252
84.00	223	147.00	1784	207.00	3993	352.00	701
85.00	926	148.00	2777	208.00	997	353.00	259
86.00	1230	149.00	729	209.00	186	354.00	782
87.00	428	151.00	337	210.00	457	365.00	2374

Data File: /chem/gcl4.i/dec1296b.b/dfbc12.d

Date : 12-DEC-96 18:57

Client ID: DFTPP | Instrument: gcl4.i

Sample Info: DFTPP DFBC12

Volume Injected (uL): 2.0 | Operator: GES

Column phase: DB5MS | Column diameter: 0.25

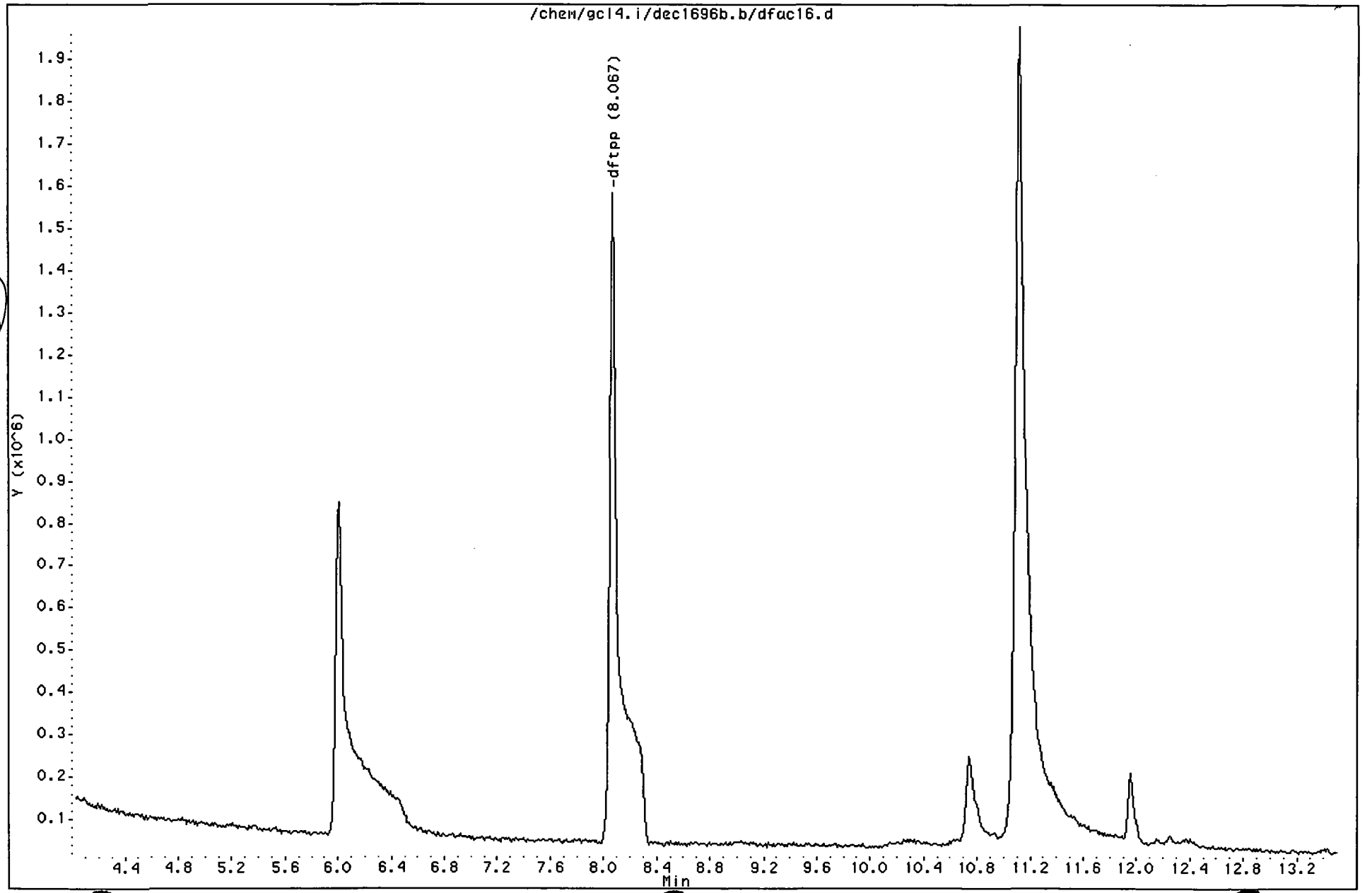
Data File: dfbc12.d
Spectrum : Avg. Scans 520-522 (9.09), Background Scan 514
Largest M/z: 198.00
Number of peaks: 187

M/z	Y	M/z	Y	M/z	Y	M/z	Y
91.00	657	153.00	993	211.00	1023	366.00	189
92.00	1166	154.00	880	216.00	236	372.00	1198
93.00	6649	155.00	1544	217.00	6447	402.00	413
94.00	471	156.00	2332	218.00	762	403.00	340
96.00	168	157.00	685	221.00	6878	421.00	369
98.00	5365	158.00	658	222.00	872	423.00	4600
99.00	4246	159.00	188	223.00	1483	424.00	712
100.00	192	160.00	723	224.00	12437	441.00	12203
101.00	2143	161.00	1558	225.00	3202	442.00	75944
103.00	862	165.00	916	227.00	5065	443.00	15806
104.00	1822	166.00	978	228.00	880	444.00	1339
105.00	1593	167.00	5133	229.00	1272		

414

Data File: /chem/gcl4.i/dec1696b.b/dfac16.d
Date : 16-DEC-1996 13:04
Client ID: DFTPP
Sample Info: DFTPP DFAC16
Volume Injected (uL): 2.0
Column phase: DB5MS

Instrument: gcl4.i
Operator: GLR
Column diameter: 0.25



399

Data File: /chem/gcl4.i/dec1696b.b/dfac16.d

Date : 16-DEC-1996 13:04

Client ID: DFTPP

Instrument: gcl4.i

Sample Info: DFTPP DFAC16

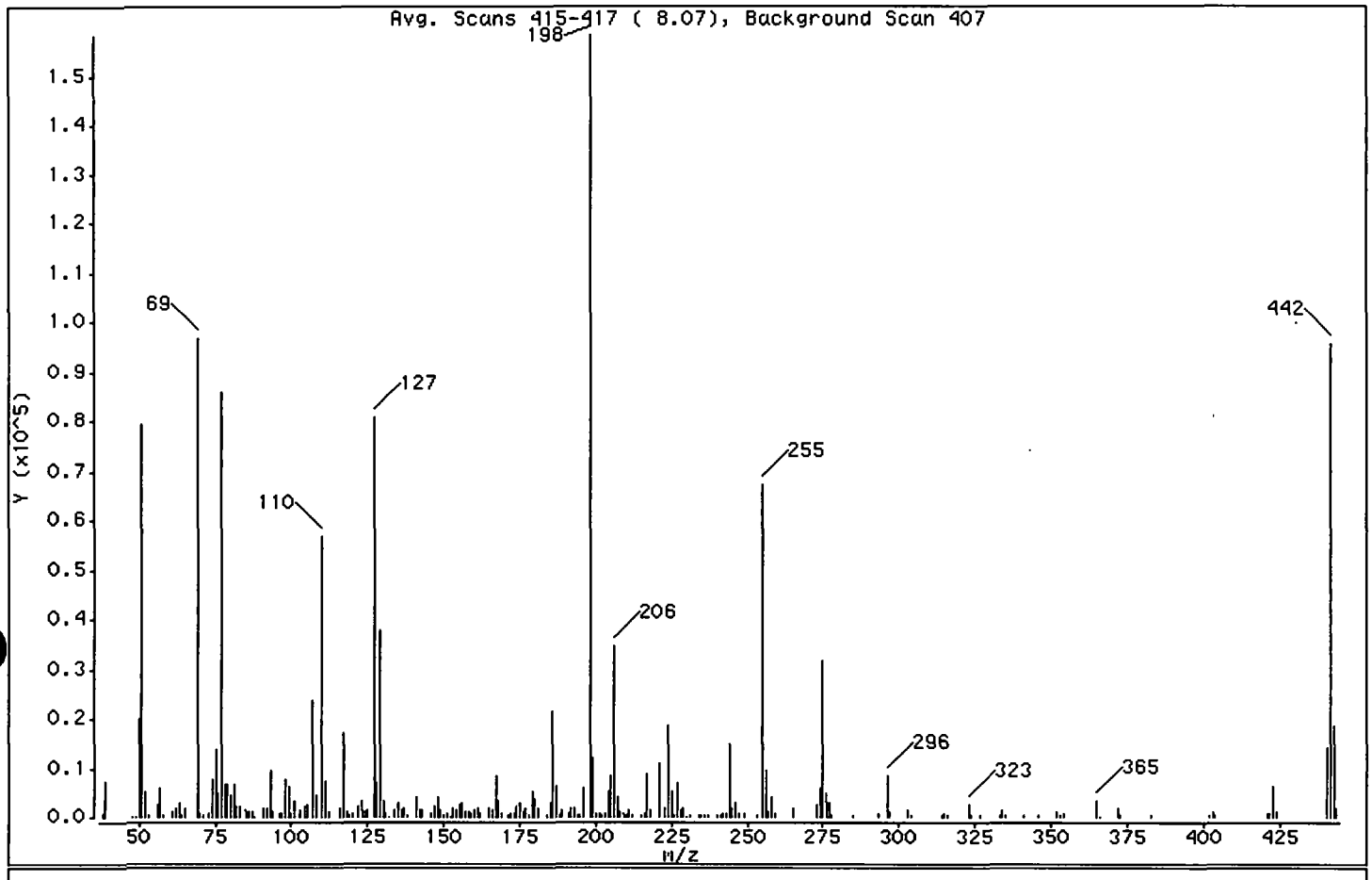
Volume Injected (uL): 2.0

Operator: GLR

Column phase: DB5MS

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	50.04
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	61.18
70	Less than 2.00% of mass 69	0.49 (0.81)
127	25.00 - 75.00% of mass 198	50.94
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.64
275	10.00 - 30.00% of mass 198	19.96
365	Greater than 0.75% of mass 198	2.11
441	Present, but less than mass 443	8.89
442	40.00 - 110.00% of mass 198	60.38
443	15.00 - 24.00% of mass 442	11.73 (19.43)

Data File: /chem/gcl4.i/dec1696b.b/dfac16.d

Date : 16-DEC-1996 13:04

Client ID: DFTPP | Instrument: gcl4.i

Sample Info: DFTPP DFAC16

Volume Injected (uL): 2.0 | Operator: GLR

Column phase: DB5MS | Column diameter: 0.25

Data File: dfac16.d
Spectrum : Avg. Scans 415-417 (8.07), Background Scan 407
Largest m/z: 198.00
Number of peaks: 211

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	873	117.00	16976	180.00	3490	246.00	2734
39.00	7229	118.00	1270	181.00	1887	247.00	599
48.00	33	119.00	385	184.00	512	249.00	738
49.00	172	120.00	587	185.00	2927	253.00	209
50.00	19840	122.00	2053	186.00	21504	255.00	67336
51.00	79168	123.00	3233	187.00	6151	256.00	9622
52.00	4915	124.00	1217	188.00	469	257.00	913
53.00	183	125.00	1451	189.00	1397	258.00	4161
56.00	2639	127.00	80600	191.00	580	259.00	779
57.00	5919	128.00	7067	192.00	1892	265.00	1664
58.00	243	129.00	37880	193.00	1955	273.00	2448
61.00	1247	130.00	3227	194.00	374	274.00	5679
62.00	1661	131.00	821	195.00	195	275.00	31584
63.00	3022	132.00	175	196.00	5860	276.00	4755
64.00	373	134.00	1321	198.00	158208	277.00	2739
65.00	1779	135.00	2934	199.00	12095	278.00	377
69.00	96792	136.00	1345	200.00	831	285.00	486
70.00	782	137.00	1789	201.00	672	293.00	662
71.00	257	138.00	203	202.00	532	296.00	8510
73.00	641	141.00	3953	203.00	890	297.00	1087
74.00	7734	142.00	1617	204.00	5005	303.00	1485
75.00	13947	143.00	1299	205.00	8530	304.00	187
76.00	4803	146.00	892	206.00	34560	314.00	472
77.00	85784	147.00	2209	207.00	3966	315.00	896
78.00	6400	148.00	3944	208.00	1268	316.00	413
79.00	6659	149.00	1420	209.00	579	323.00	2630
80.00	4530	150.00	276	210.00	488	324.00	472
81.00	6633	151.00	669	211.00	1536	327.00	396
82.00	2027	152.00	169	212.00	193	333.00	233
83.00	2286	153.00	1718	215.00	189	334.00	1407
85.00	1501	154.00	1280	216.00	693	335.00	388
86.00	1128	155.00	2401	217.00	8797	341.00	184
87.00	956	156.00	3085	218.00	1346	346.00	502
88.00	143	157.00	1131	221.00	10963	352.00	1009
91.00	1975	158.00	1019	223.00	1795	353.00	264

Data File: /chem/gcl4.i/dec1696b.b/dfac16.d
Date : 16-DEC-1996 13:04
Client ID: DFTPP
Instrument: gcl4.i
Sample Info: DFTPP DFAC16
Volume Injected (uL): 2.0
Operator: GLR
Column phase: DB5MS
Column diameter: 0.25

Data File: dfac16.d
Spectrum : Avg. Scans 415-417 (8.07), Background Scan 407
Largest m/z: 198.00
Number of peaks: 211

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	1986	159.00	565	224.00	18496	354.00	802
93.00	9598	160.00	1474	225.00	5219	365.00	3331
94.00	1062	161.00	1721	226.00	191	366.00	174
96.00	548	162.00	640	227.00	7083	372.00	1938
97.00	773	165.00	1725	228.00	1313	373.00	402
98.00	7641	166.00	1439	229.00	1662	383.00	409
99.00	6208	167.00	8306	230.00	167	402.00	531
100.00	724	168.00	3402	231.00	507	403.00	1083
101.00	3119	169.00	692	234.00	192	404.00	199
103.00	1273	171.00	218	235.00	519	421.00	598
104.00	2142	172.00	717	236.00	339	422.00	757
105.00	2502	173.00	750	237.00	386	423.00	6062
107.00	23488	174.00	2248	240.00	410	424.00	1171
108.00	4480	175.00	2769	241.00	459	441.00	14072
110.00	56744	176.00	1099	242.00	892	442.00	95536
111.00	7152	177.00	1832	243.00	651	443.00	18560
112.00	966	178.00	517	244.00	15069	444.00	1774
116.00	1896	179.00	5085	245.00	1691		

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKBS

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP04

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKBS

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP04

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: 0 decanted: (Y/N) N Date Extracted:11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	830	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	n-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	830	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKBS

Lab Name: WESTON/ENV. METRICS, INC. Contract: 1104-09-001

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP04

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Number TICs found: 17

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

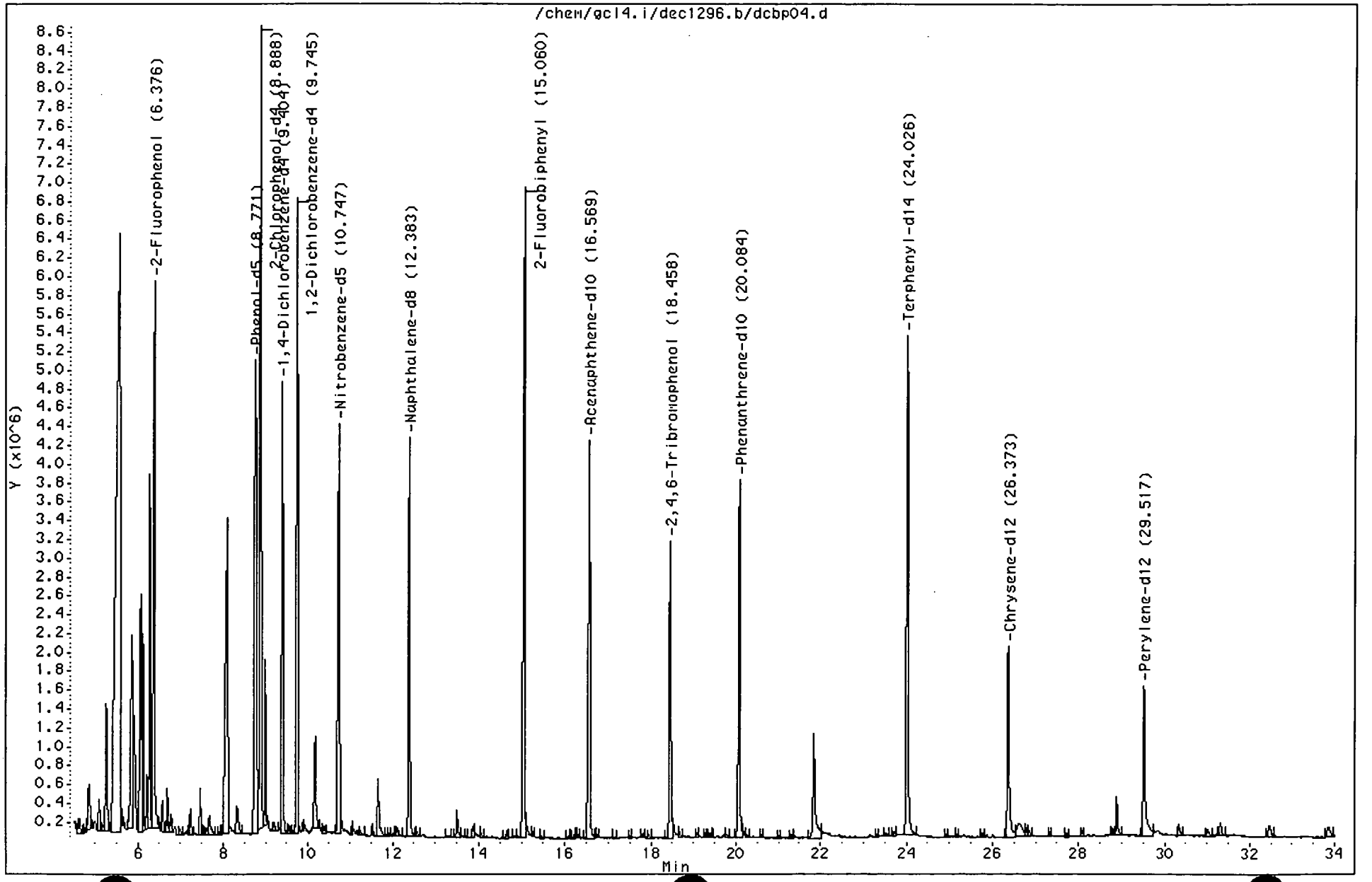
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN KETONE	5.58	2900	JA
2.		UNKNOWN HYDROCARBON	5.86	460	J
3.		UNKNOWN HYDROCARBON	6.06	440	J
4.		UNKNOWN	6.11	310	J
5.		UNKNOWN ALKANE	6.21	98	J
6.		UNKNOWN ALKANE	6.28	550	J
7.		UNKNOWN HYDROCARBON	6.69	68	J
8.		UNKNOWN	8.10	910	J
9.		UNKNOWN	8.32	70	J
10.		UNKNOWN	9.00	210	J
11.		UNKNOWN KETONE	10.17	200	J
12.		UNKNOWN	11.66	120	J
13.	57-10-3	HEXADECANOIC ACID	21.85	280	NJ
14.		UNKNOWN	26.64	150	J
15.		UNKNOWN	28.89	120	J
16.		UNKNOWN HYDROCARBON	32.47	74	J
17.		UNKNOWN HYDROCARBON	33.86	71	J
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

421

Data File: /chem/gcl4.i/dec1296.b/dcbp04.d
Date : 12-DEC-1996 12:04
Client ID: SBLKBS
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i

Operator: GLR
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296.b/dcbp04.d
Lab Smp Id: 96GB0654-MB1 Client Smp ID: SBLKBS
Inj Date : 12-DEC-1996 12:04
Operator : GLR Inst ID: gcl4.i
Smp Info : 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296.b/390.m
Meth Date : 13-Dec-1996 20:11 squiresb Quant Type: ISTD
Cal Date : 12-DEC-1996 09:16 Cal File: dgac12.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.000	Weigth of sample extracted (g)
M	0.000	% Moisture

WBS 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.404	9.397	(1.000)	1464256	40.000	
* 26 Naphthalene-d8	136.00	12.383	12.405	(1.000)	4323838	40.000	
* 41 Acenaphthene-d10	164.00	16.569	16.571	(1.000)	2194006	40.000	
* 56 Phenanthrene-d10	188.00	20.084	20.096	(1.000)	3286972	40.000	
* 67 Chrysene-d12	240.00	26.373	26.394	(1.000)	1858919	40.000	
* 75 Perylene-d12	264.00	29.527	29.529	(1.000)	1647677	40.000	
$ 1 2-Fluorophenol	112.00	6.376	6.291	(0.678)	4108419	83.400	1390.0
$ 2 Phenol-d5	99.00	8.771	8.754	(0.933)	6052455	100.64	1677.3
$ 5 2-Chlorophenol-d4	132.00	8.888	8.871	(0.945)	4414548	89.803	1496.7
$ 10 1,2-Dichlorobenzene-d4	152.00	9.745	9.737	(1.036)	2107916	67.344	1122.4
$ 17 Nitrobenzene-d5	82.00	10.747	10.750	(0.868)	3545448	80.566	1342.8
$ 34 2-Fluorobiphenyl	172.00	15.060	15.062	(0.909)	4836387	74.690	1244.8
$ 52 2,4,6-Tribromophenol	330.00	18.458	18.470	(1.114)	847210	85.674	1427.9
$ 64 Terphenyl-d14	244.00	24.026	24.019	(0.911)	3925726	81.482	1358.0

Unknown Compounds Quantitation Report

Data file : /chem/gcl4.i/dec1296.b/dcbp04.d
Lab Smp Id: 96GB0654-MB1 Client Smp ID: SBLKBS
Inj Date : 12-DEC-1996 12:04
Operator : GLR Inst ID: gcl4.i
Smp Info : 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296.b/390.m
Meth Date : 18-Dec-1996 23:45 squiresb
Cal Date : 12-DEC-1996 09:16 Cal File: dgac12.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.000 Target Version: 3.12
Integrator: HP RTE Compound Sublist: 0625HS.sub
Sample Matrix: SOIL
Quantitative Mode : Use RF of Nearest Std
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.000	Weigth of sample extracted (g)
M	0.000	% Moisture

ISTD	RT	AREA	AMOUNT
* 8 1,4-Dichlorobenzene-d4	9.404	9685432	40.000
* 26 Naphthalene-d8	12.383	9489771	40.000
* 56 Phenanthrene-d10	20.084	8817806	40.000
* 67 Chrysene-d12	26.373	5485208	40.000
* 75 Perylene-d12	29.527	5300365	40.000

		CONCENTRATIONS			QUANT		
RT	AREA	ON-COL(ng)	FINAL(ug/Kg)	QUAL	LIBRARY	LIB ENTRY	CPND #
Unknown Ketone					CAS #:		
5.578	42096241	173.85	2897.6	0		0	8

RT	AREA	CONCENTRATIONS ON-COL(ng)	FINAL(ug/Kg)	QUAL	QUANT LIBRARY	LIB ENTRY	CPND #
Unknown Hydrocarbon					CAS #:		
5.860	6769887	27.959	465.98	0		0	8
Unknown Hydrocarbon					CAS #:		
6.065	6405145	26.453	440.88	0		0	8
Unknown					CAS #:		
6.113	4510197	18.627	310.44	0		0	8
Unknown Alkane					CAS #:		
6.211	1426070	5.890	98.159	0		0	8
Unknown Alkane					CAS #:		
6.279	8012570	33.091	551.52	0		0	8
Unknown Hydrocarbon					CAS #:		
6.688	992046	4.097	68.284	0		0	8
Unknown					CAS #:		
8.099	13241955	54.688	911.47	0		0	8
Unknown					CAS #:		
8.323	1018347	4.206	70.095	0		0	8
Unknown					CAS #:		
8.995	3024598	12.491	208.19	0		0	8
Unknown Ketone					CAS #:		
10.173	2905966	12.001	200.02	0		0	8
Unknown					CAS #:		
11.662	1687079	7.111	118.52	0		0	26
Hexadecanoic acid					CAS #: 57-10-3		
21.846	3725938	16.902	281.70	98	NBS75K.l	71608	56
Unknown					CAS #:		
26.635	1216720	8.873	147.88	0		0	67
Unknown					CAS #:		
28.894	980755	7.401	123.36	0		0	75
Unknown Hydrocarbon					CAS #:		
32.467	584496	4.411	73.516	0		0	75
Unknown Hydrocarbon					CAS #:		
33.859	567732	4.284	71.408	0		0	75

Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

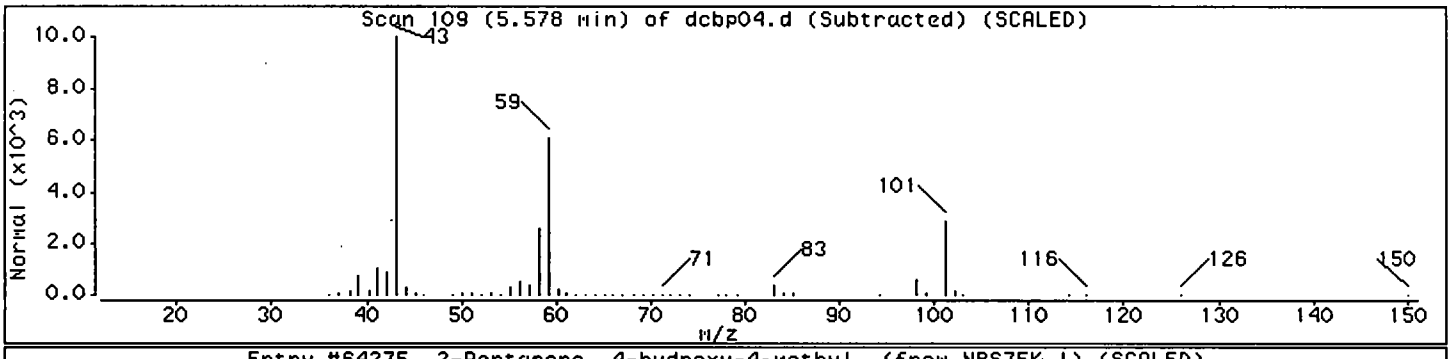
Client ID: SBLKBS Instrument: gc14.i

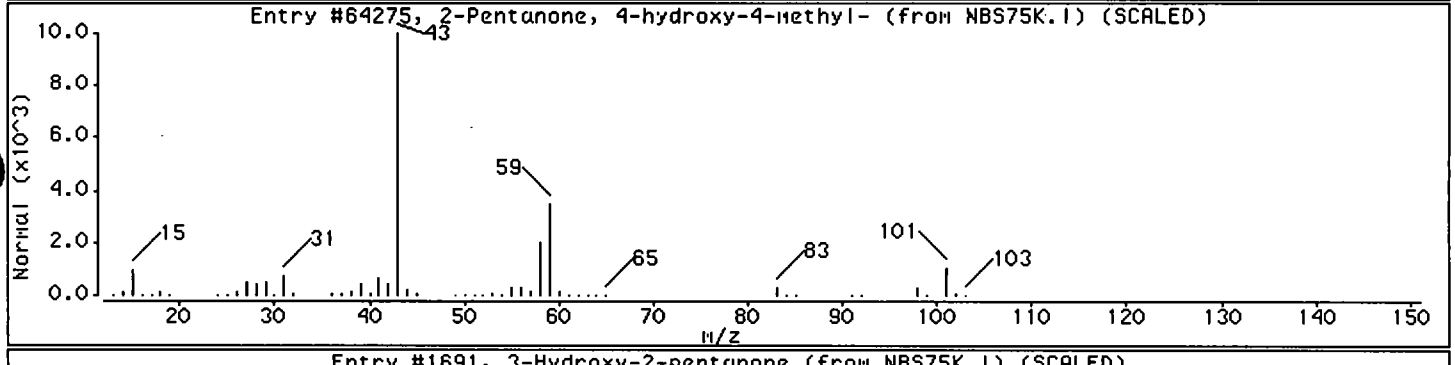
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

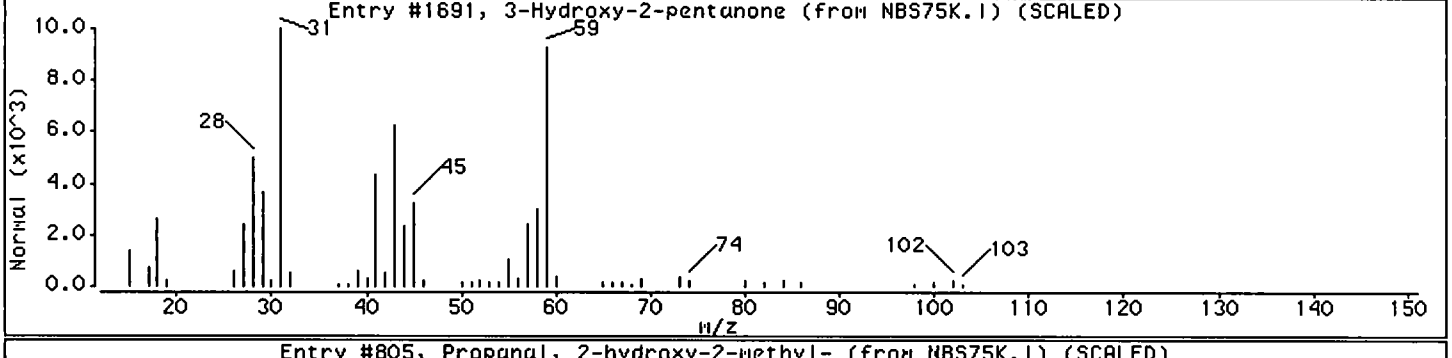
Volume Injected (uL): 2.0 Operator: GLR

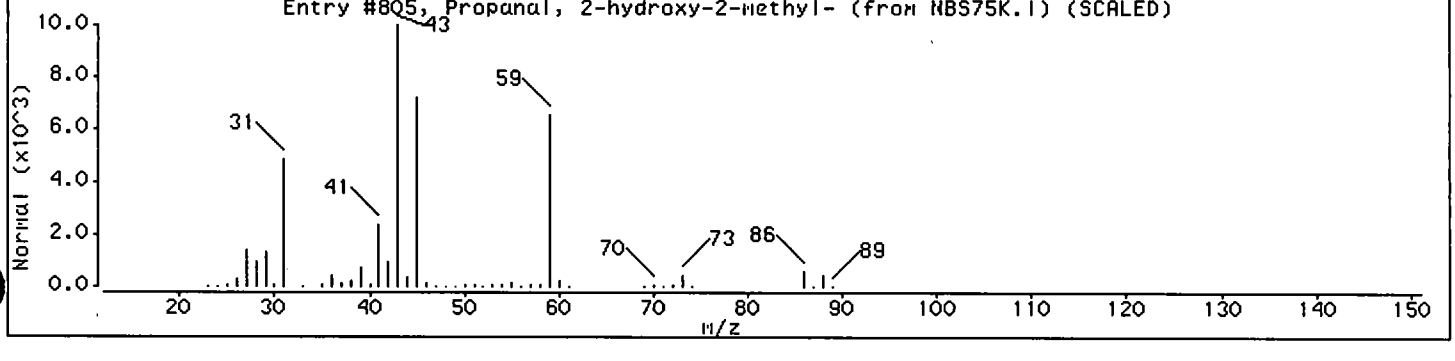
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NBS75K.l	64275	53	C6H12O2	116
3-Hydroxy-2-pentanone	3142-66-3	NBS75K.l	1691	32	C5H10O2	102
Propanal, 2-hydroxy-2-methyl-	20818-81-9	NBS75K.l	805	32	C4H8O2	88









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

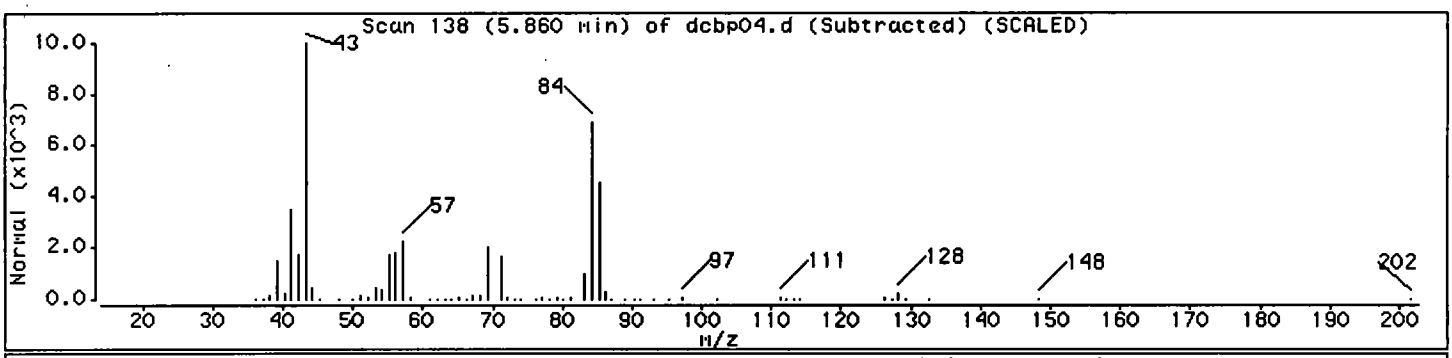
Client ID: SBLKBS Instrument: gc14.i

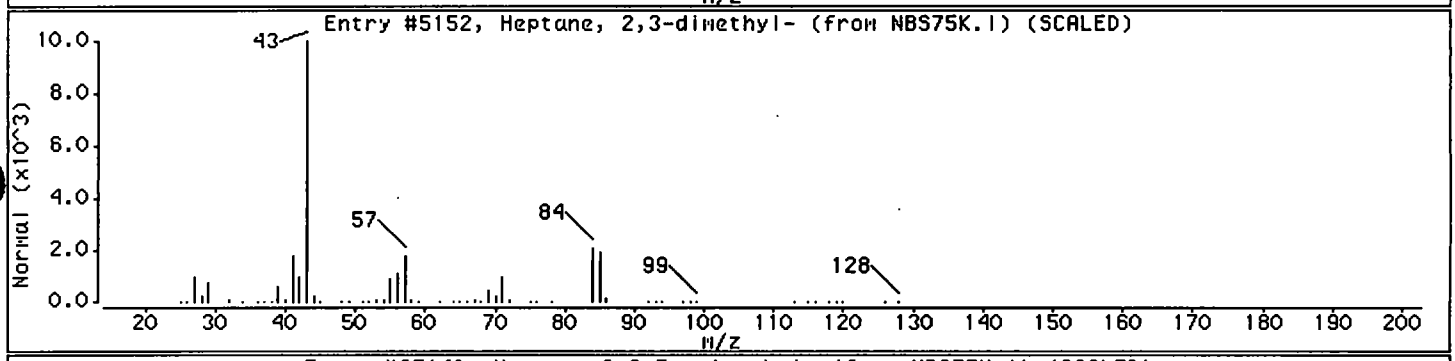
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

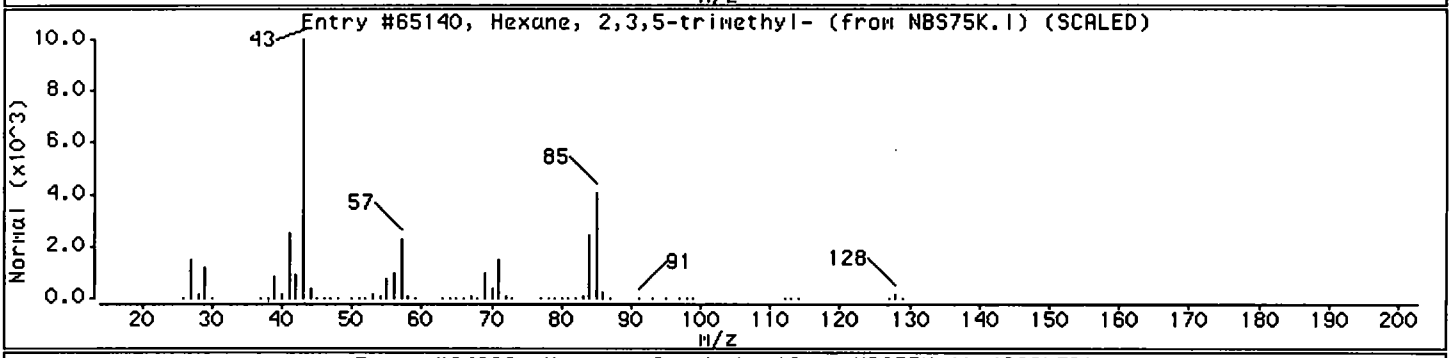
Volume Injected (uL): 2.0 Operator: GLR

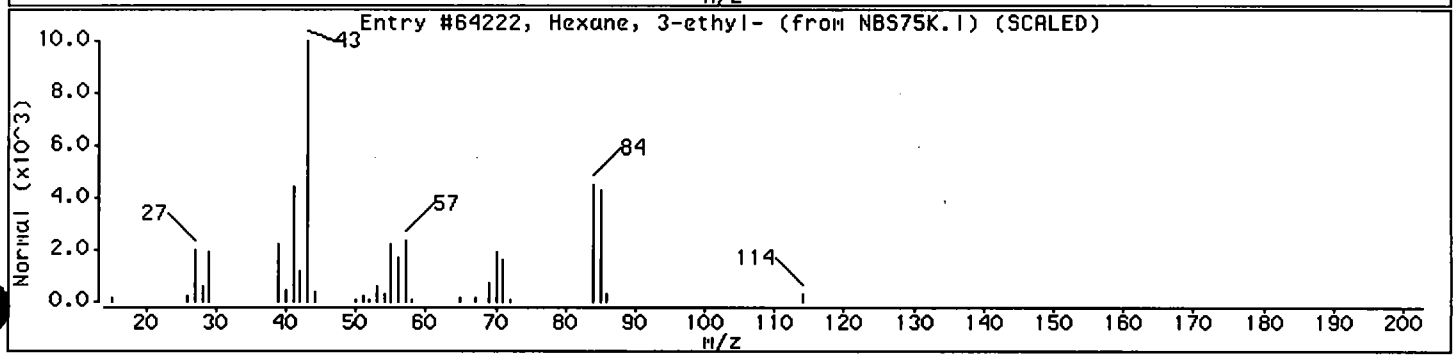
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Heptane, 2,3-dimethyl-	3074-71-3	NBS75K.l	5152	72	C9H20	128
Hexane, 2,3,5-trimethyl-	1069-53-0	NBS75K.l	65140	64	C9H20	128
Hexane, 3-ethyl-	619-99-8	NBS75K.l	64222	59	C8H18	114









Data File: /chem/gcl4.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

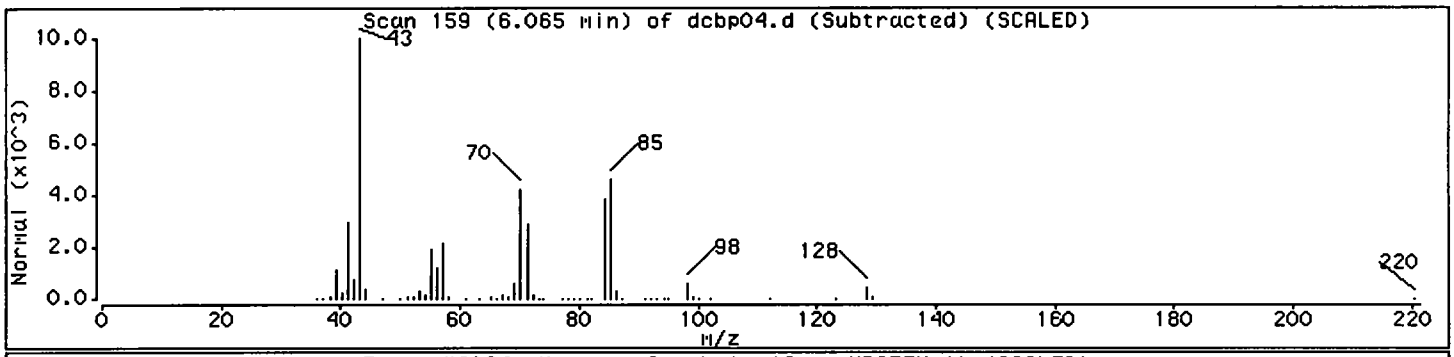
Client ID: SBLKBS Instrument: gcl4.i

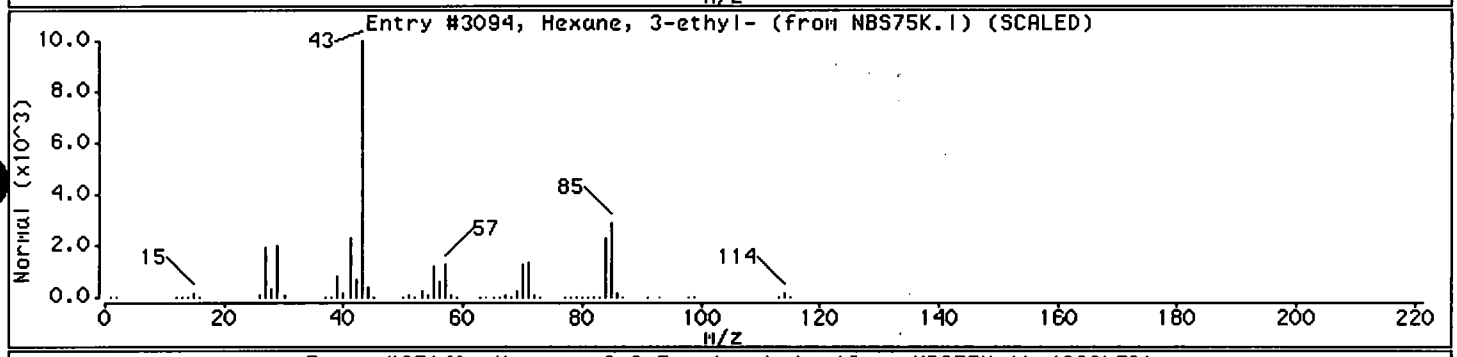
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

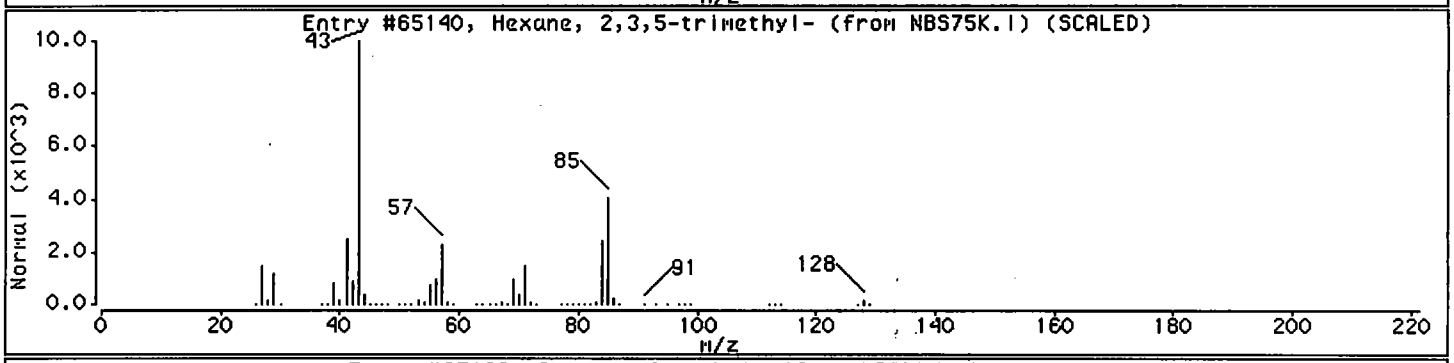
Volume Injected (uL): 2.0 Operator: GLR

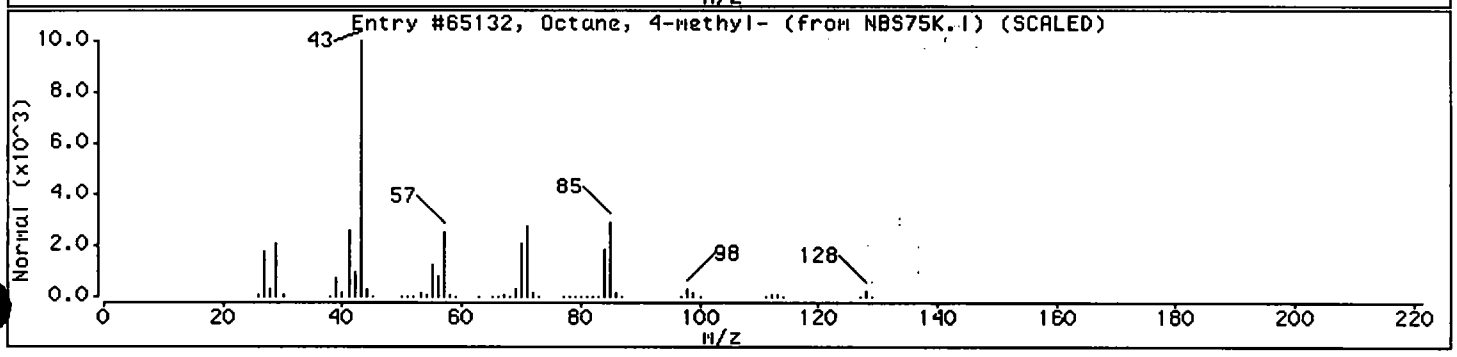
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexane, 3-ethyl-	619-99-8	NBS75K.l	3094	64	C8H18	114
Hexane, 2,3,5-trimethyl-	1069-53-0	NBS75K.l	65140	59	C9H20	128
Octane, 4-methyl-	2216-34-4	NBS75K.l	65132	59	C9H20	128









Data File: /chem/gcl4.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

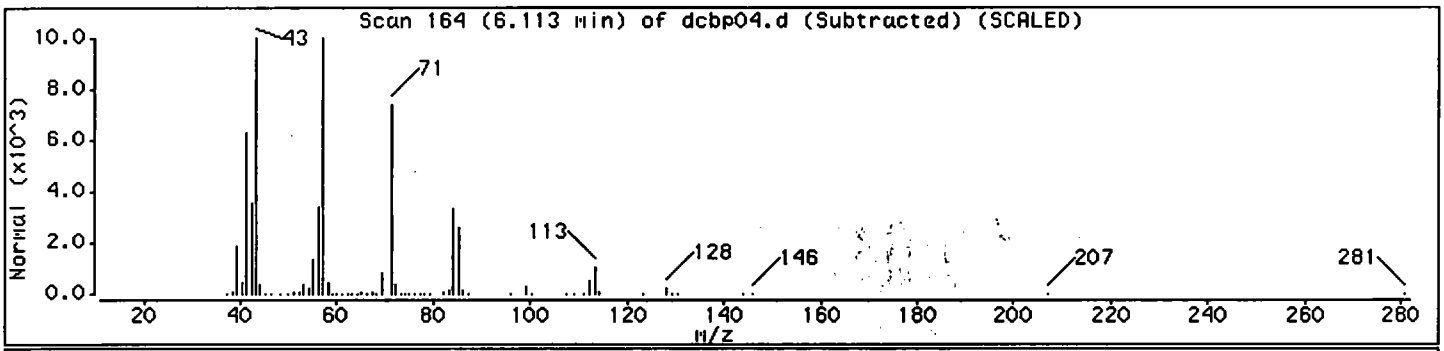
Client ID: SBLKBS Instrument: gcl4.i

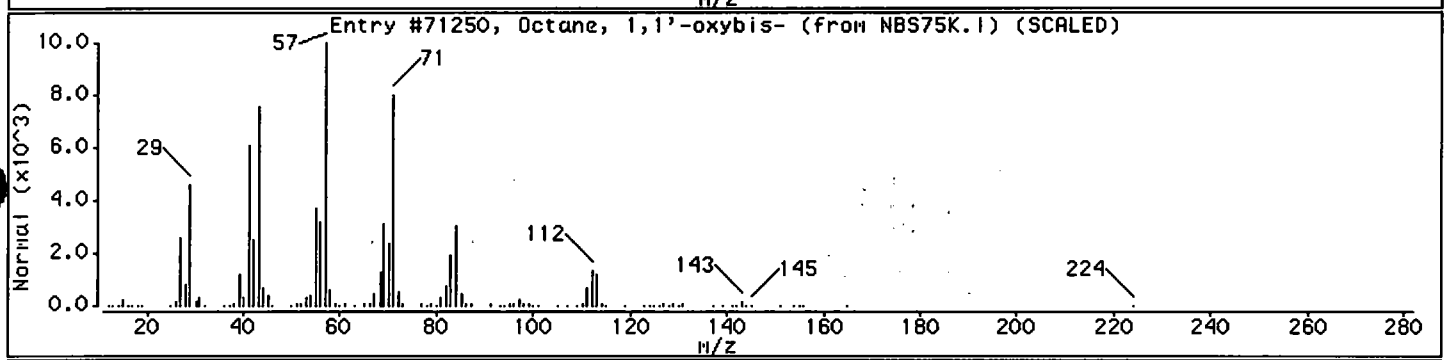
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

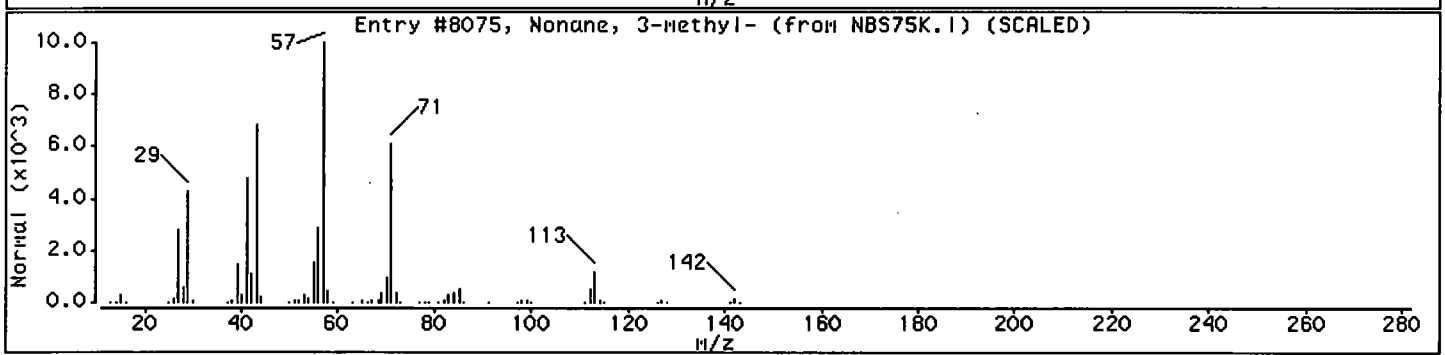
Volume Injected (uL): 2.0 Operator: GLR

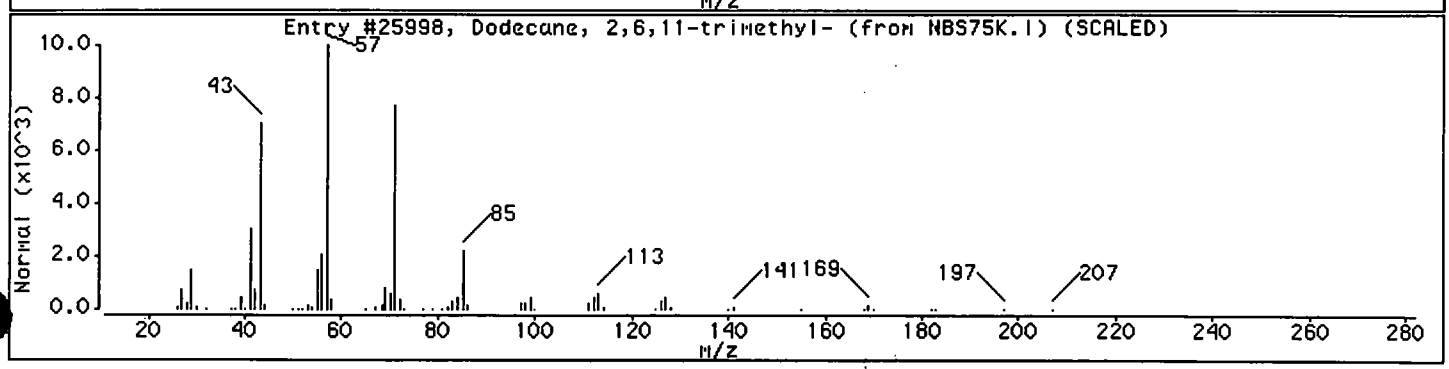
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Octane, 1,1'-oxybis-	629-82-3	NBS75K.l	71250	72	C16H34O	242
Nonane, 3-methyl-	5911-04-6	NBS75K.l	8075	59	C10H22	142
Dodecane, 2,6,11-trimethyl-	31295-56-4	NBS75K.l	25998	59	C15H32	212









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

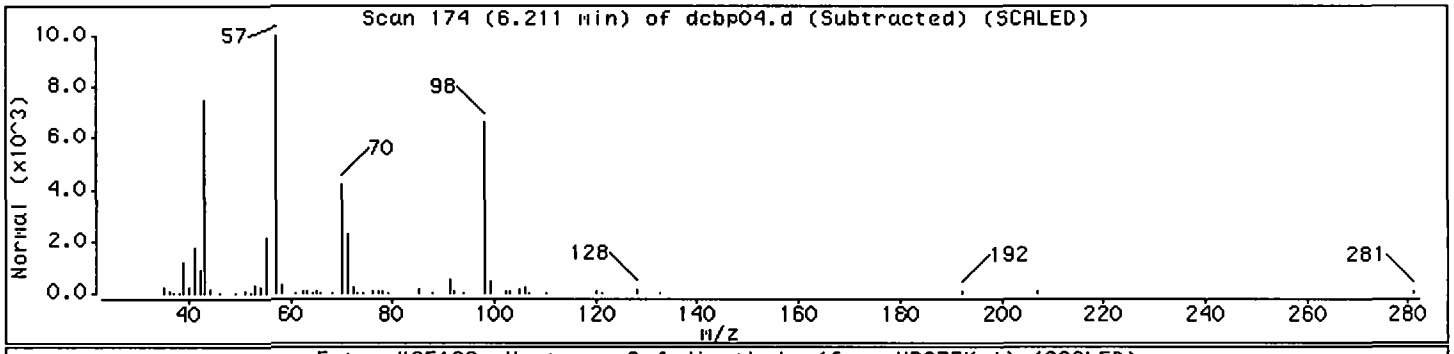
Client ID: SBLKBS Instrument: gc14.i

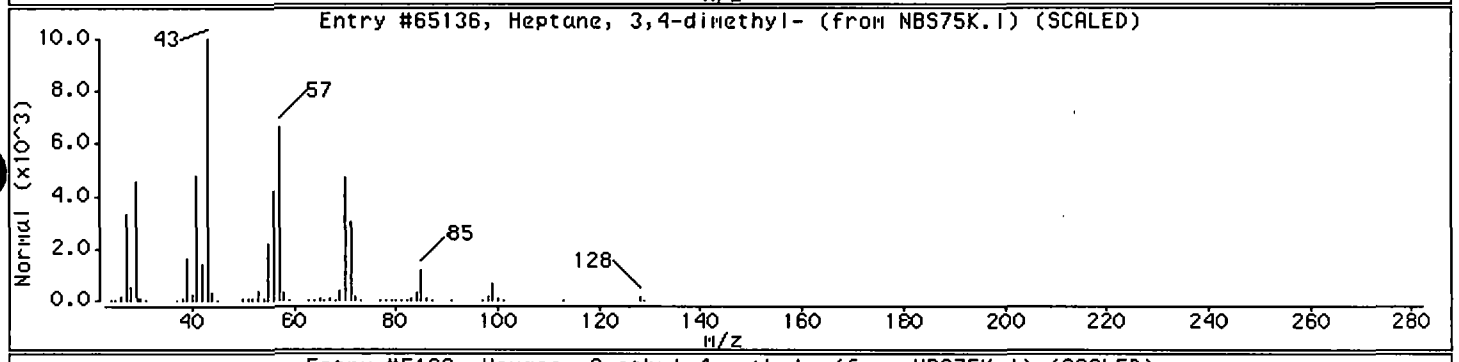
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

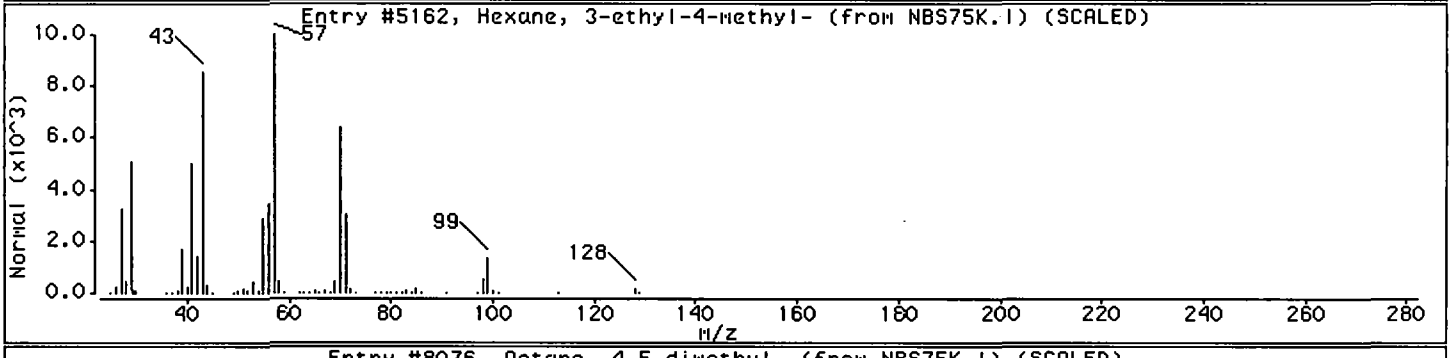
Volume Injected (uL): 2.0 Operator: GLR

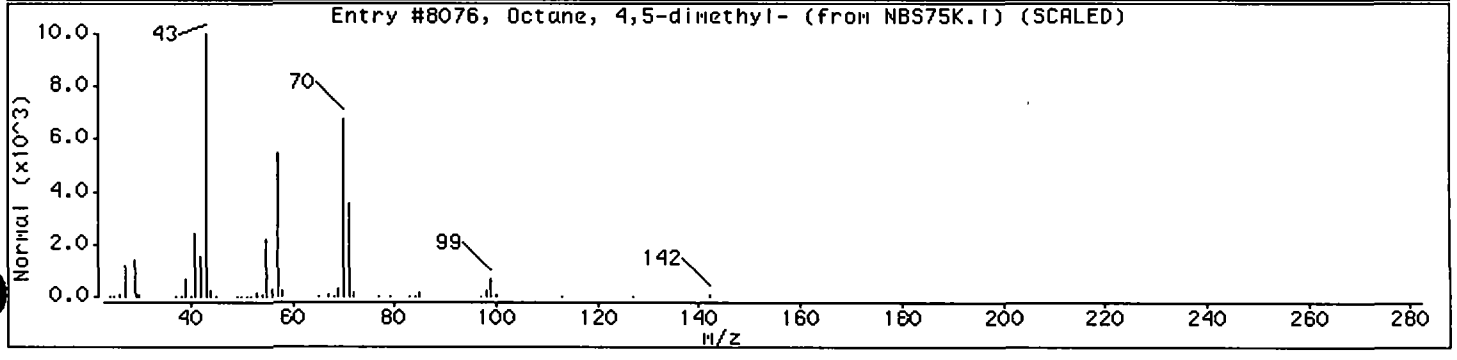
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptane, 3,4-dimethyl-	922-28-1	NBS75K.l	65136	52	C9H20	128
Hexane, 3-ethyl-4-methyl-	3074-77-9	NBS75K.l	5162	49	C9H20	128
Octane, 4,5-dimethyl-	15869-96-2	NBS75K.l	8076	47	C10H22	142









Data File: /chem/gcl4.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

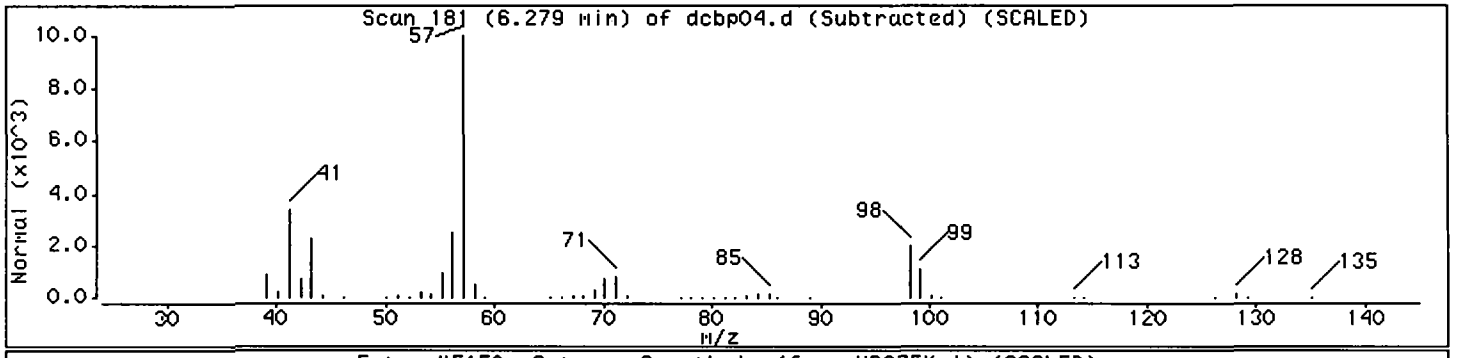
Client ID: SBLKBS Instrument: gcl4.i

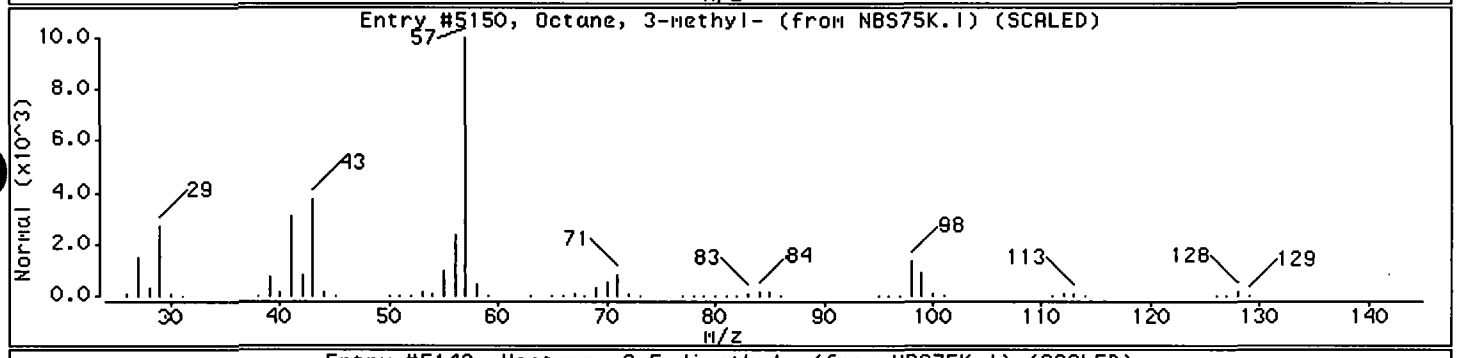
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

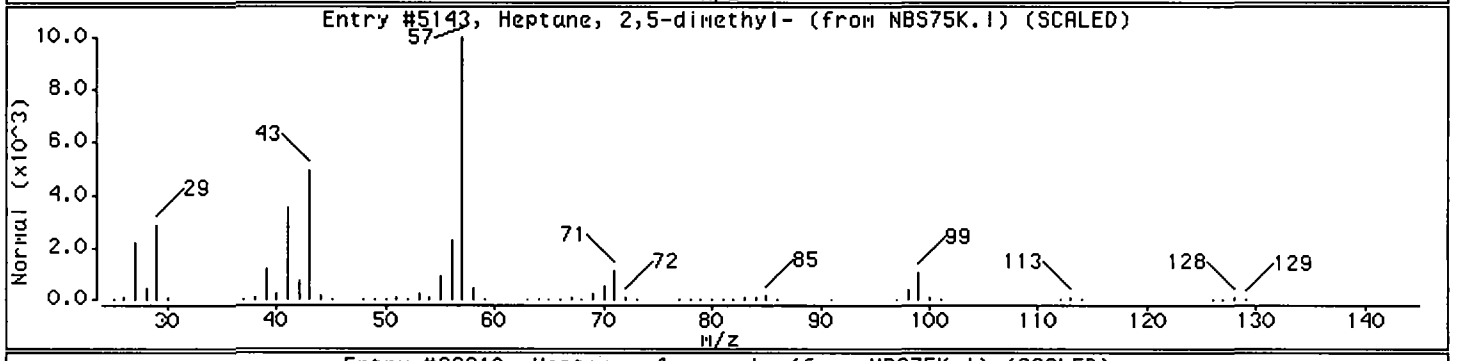
Volume Injected (uL): 2.0 Operator: GLR

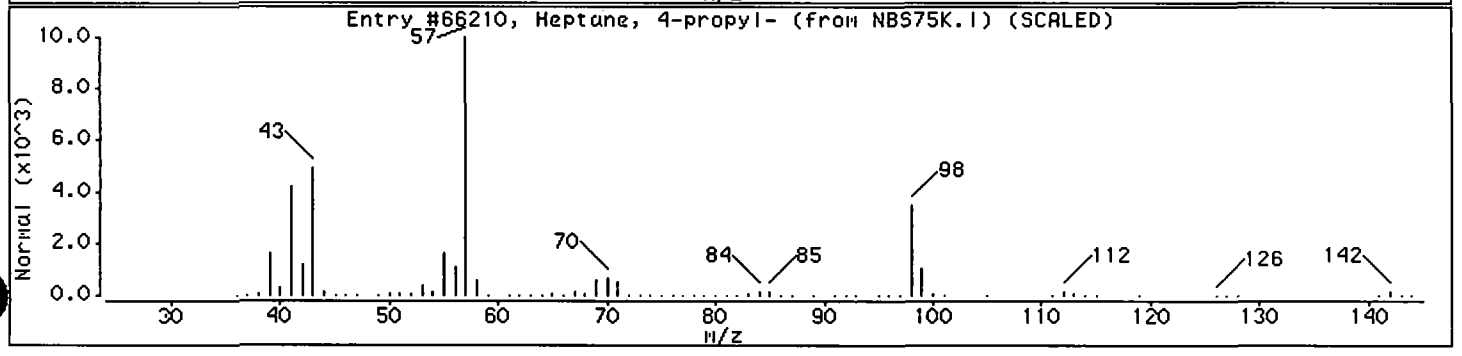
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Octane, 3-methyl-	2216-33-3	NBS75K.l	5150	90	C9H20	128
Heptane, 2,5-dimethyl-	2216-30-0	NBS75K.l	5143	68	C9H20	128
Heptane, 4-propyl-	3178-29-8	NBS75K.l	66210	64	C10H22	142









Data File: /chem/gcl4.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

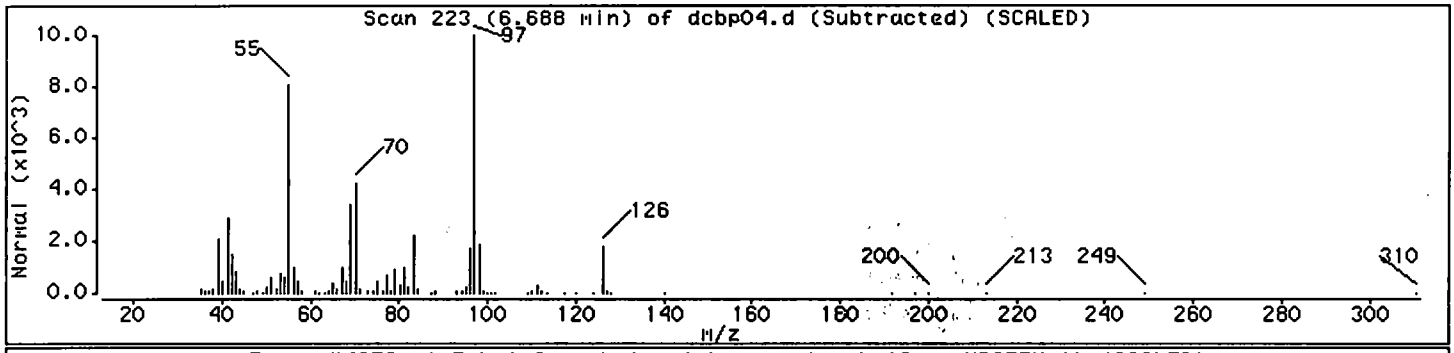
Client ID: SBLKBS Instrument: gcl4.i

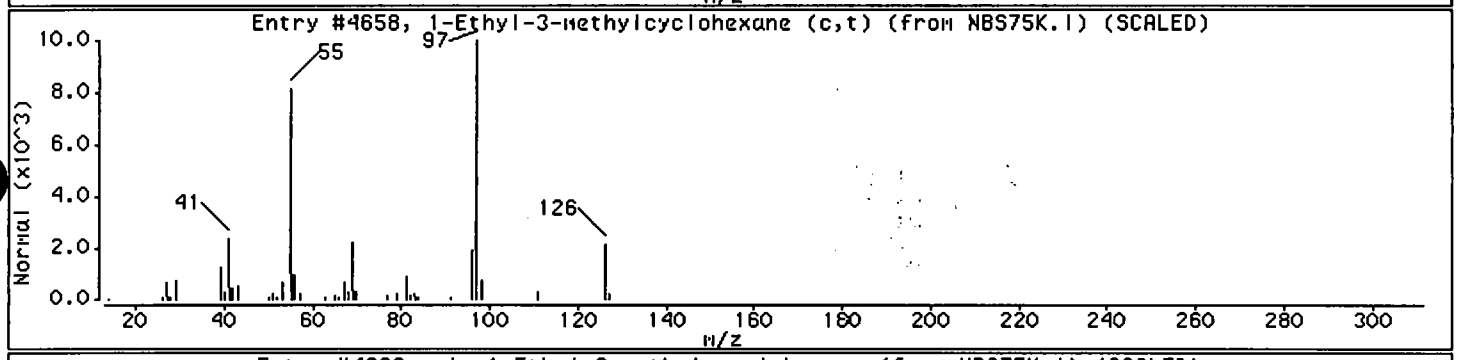
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

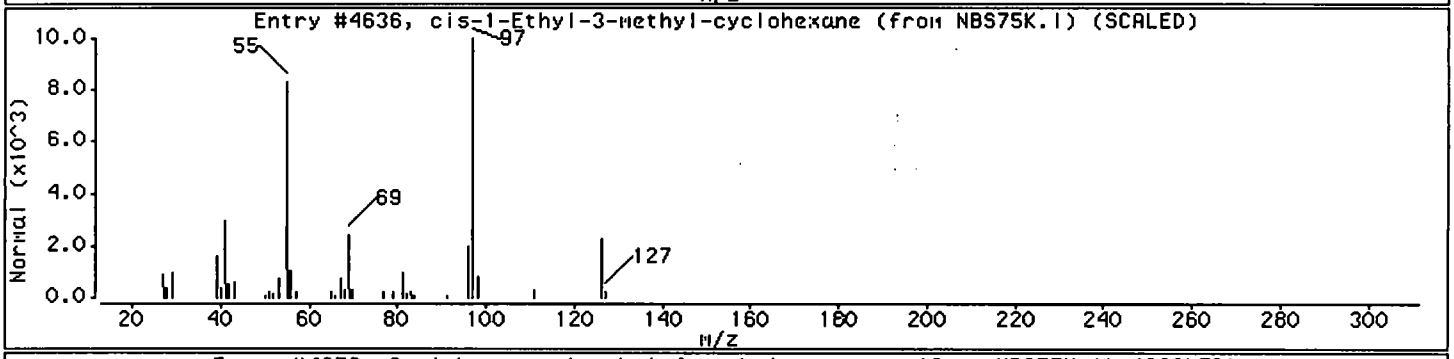
Volume Injected (uL): 2.0 Operator: GLR

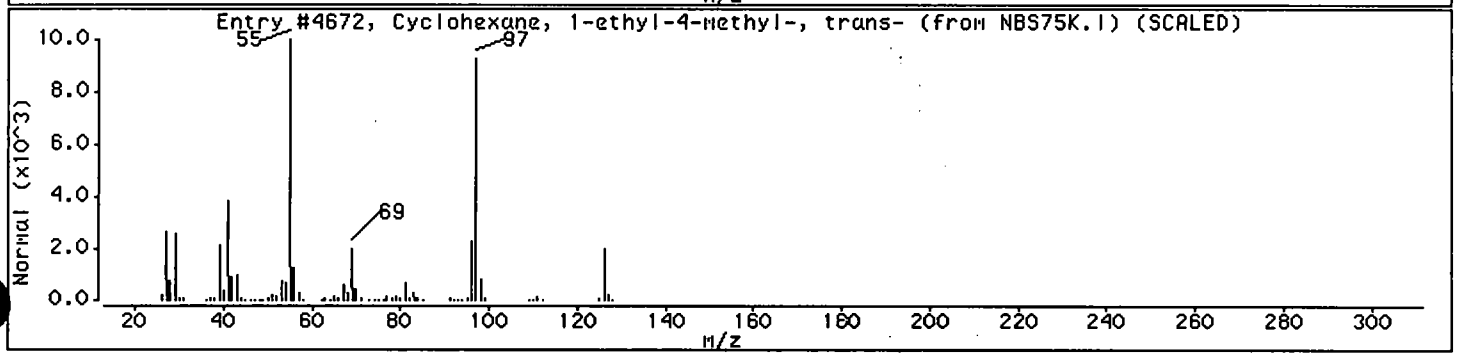
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
1-Ethyl-3-methylcyclohexane (c,t)	3728-55-0	NBS75K.l	4658	58	C9H18	126
cis-1-Ethyl-3-methyl-cyclohexane	19489-10-2	NBS75K.l	4636	58	C9H18	126
Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	NBS75K.l	4672	52	C9H18	126









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

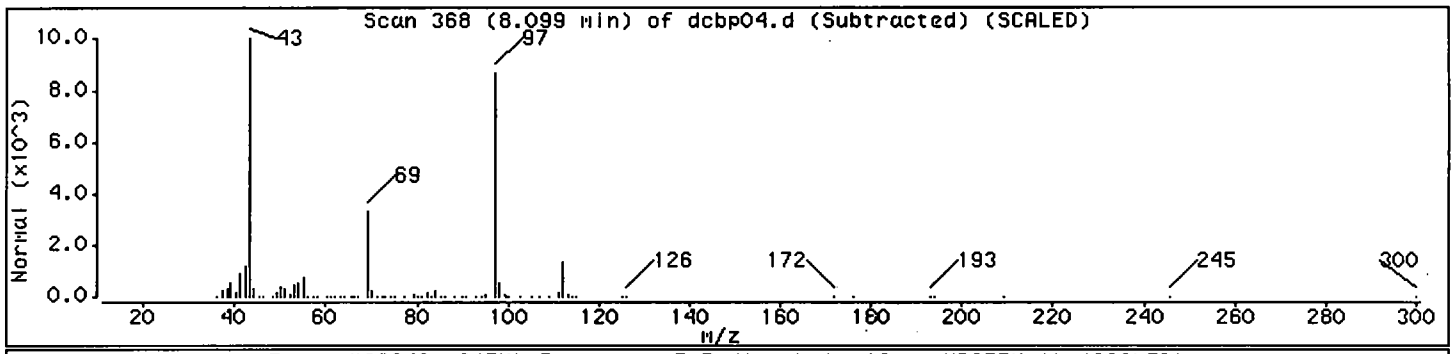
Client ID: SBLKBS Instrument: gc14.i

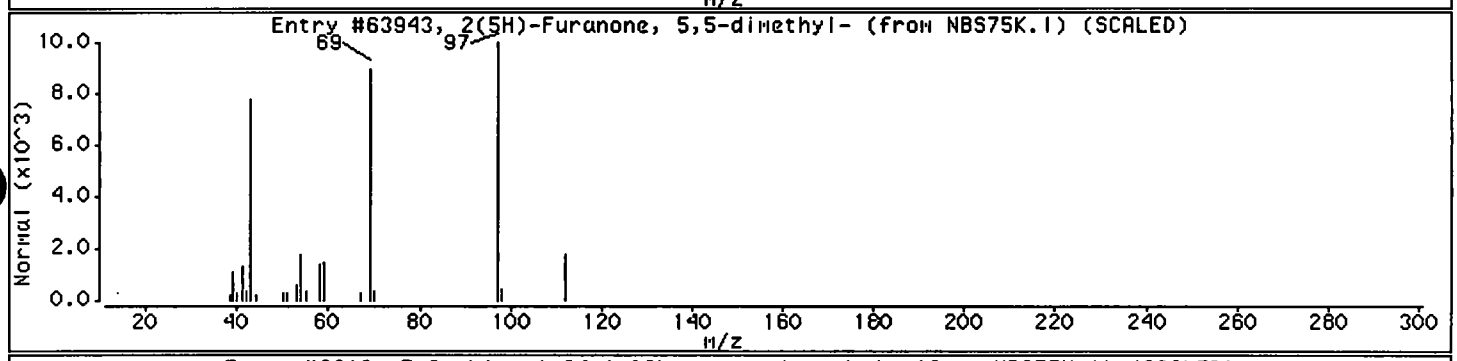
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

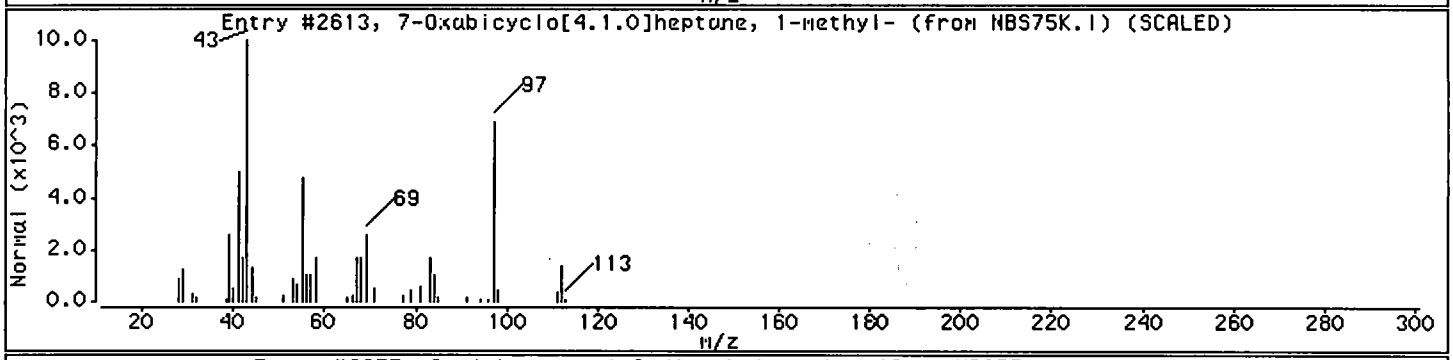
Volume Injected (uL): 2.0 Operator: GLR

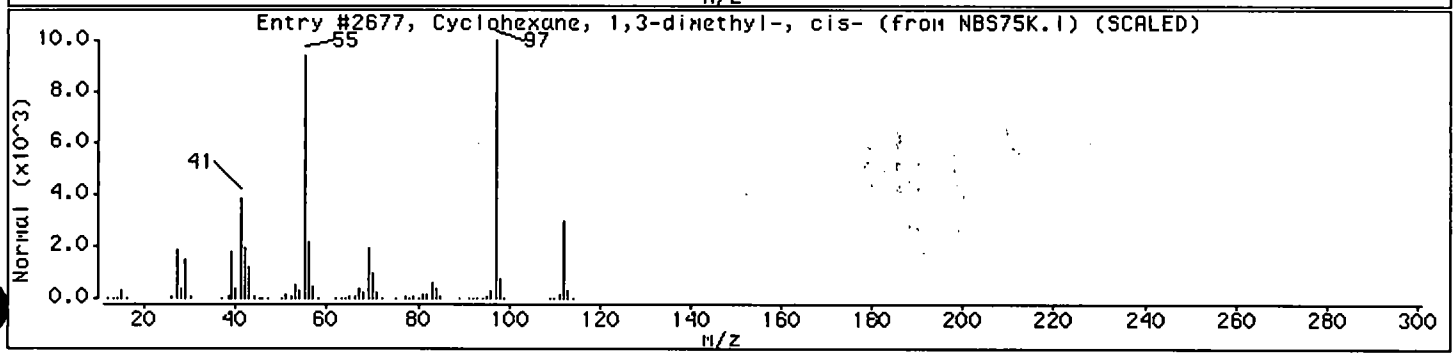
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2(5H)-Furanone, 5,5-dimethyl-	20019-64-1	NBS75K.l	63943	64	C6H8O2	112
7-Oxabicyclo[4.1.0]heptane, 1-methyl-	1713-33-3	NBS75K.l	2613	39	C7H12O	112
Cyclohexane, 1,3-dimethyl-, cis-	638-04-0	NBS75K.l	2677	38	C8H16	112









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

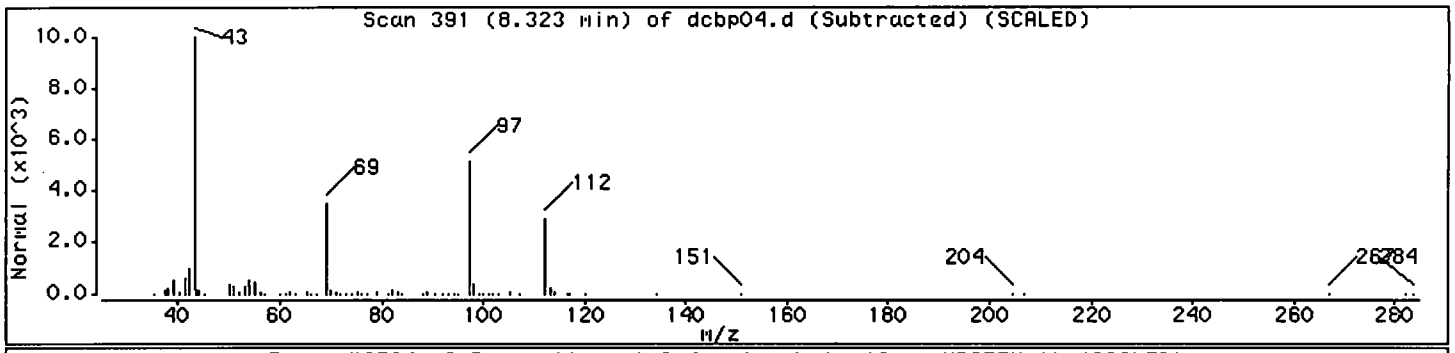
Client ID: SBLKBS Instrument: gc14.i

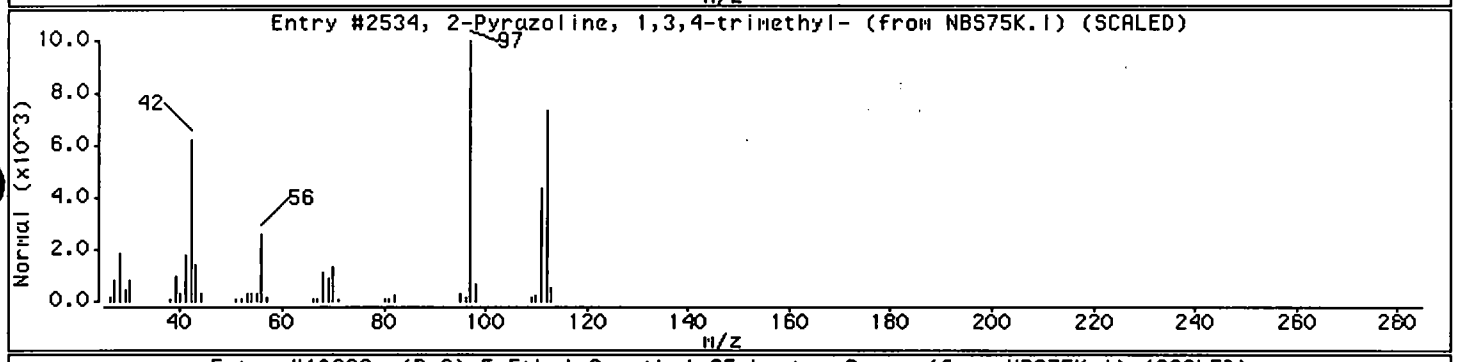
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

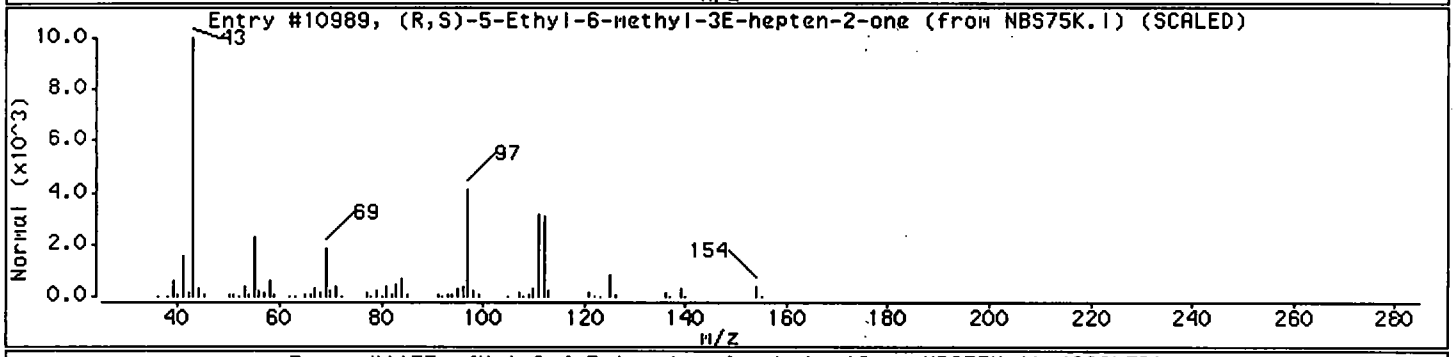
Volume Injected (uL): 2.0 Operator: GLR

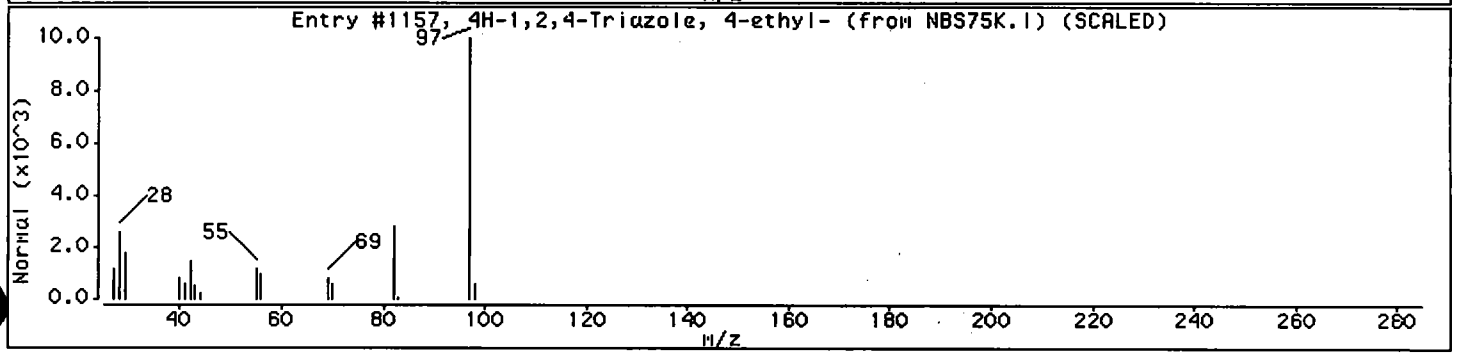
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pyrazoline, 1,3,4-trimethyl-	14044-41-8	NBS75K.l	2534	53	C6H12N2	112
(R,S)-5-Ethyl-6-methyl-3E-hepten-2-one	57283-79-1	NBS75K.l	10989	40	C10H18O	154
4H-1,2,4-Triazole, 4-ethyl-	43183-55-7	NBS75K.l	1157	32	C4H7N3	97









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

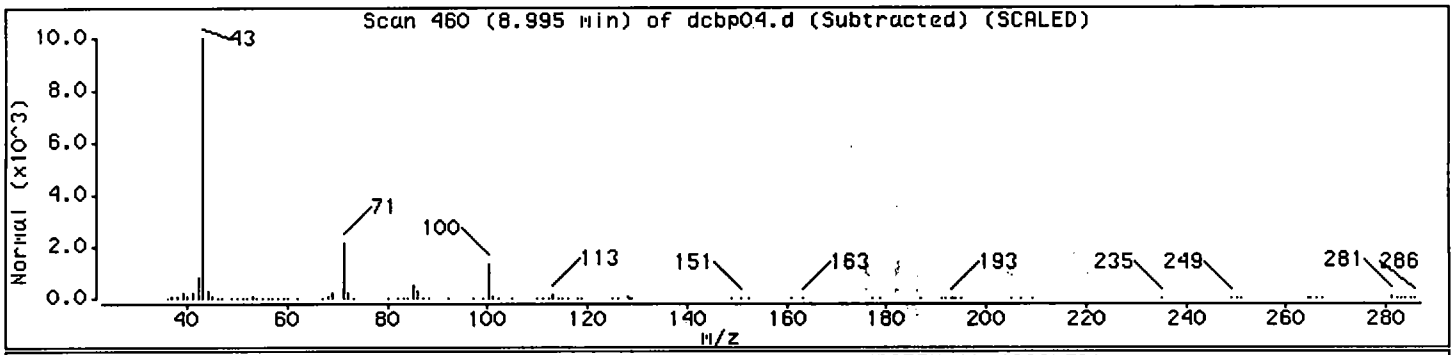
Client ID: SBLKBS Instrument: gc14.i

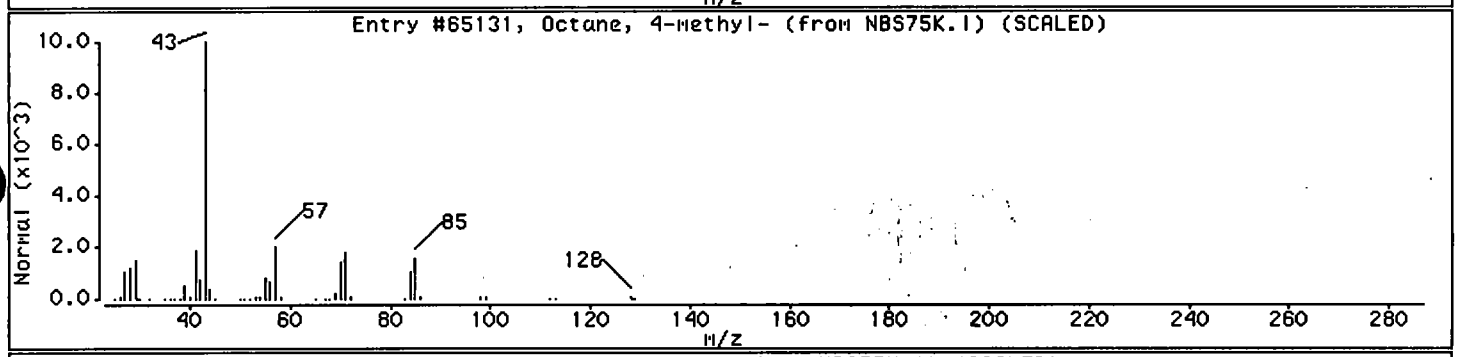
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

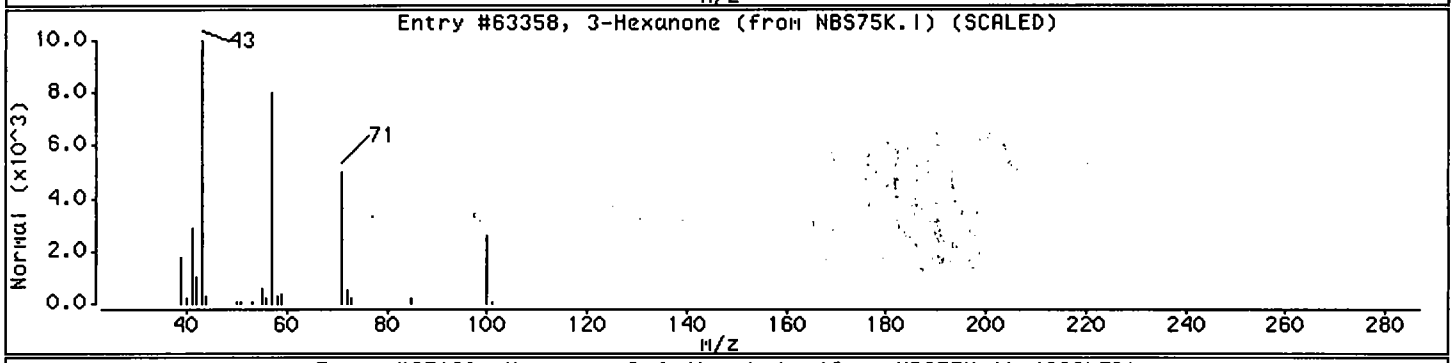
Volume Injected (uL): 2.0 Operator: GLR

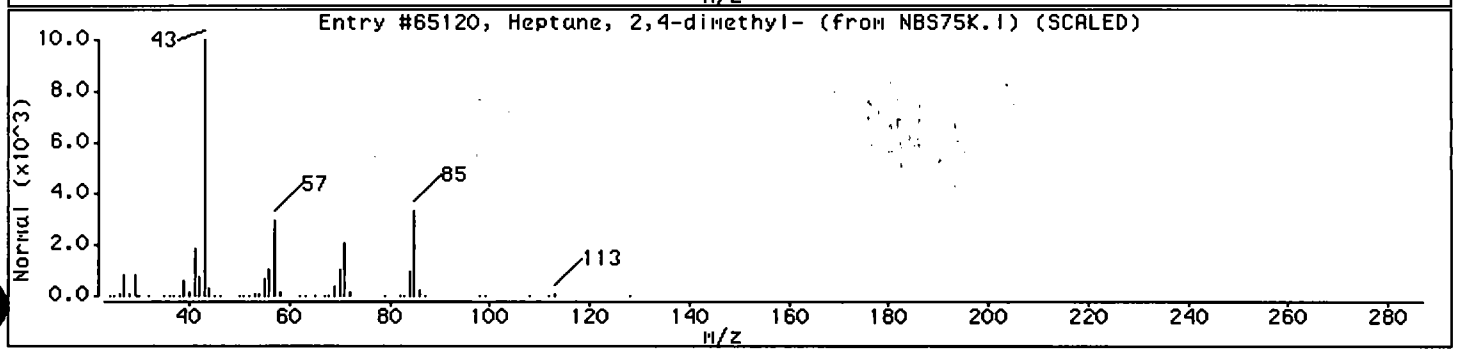
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Octane, 4-methyl-	2216-34-4	NBS75K.l	65131	40	C9H20	128
3-Hexanone	589-38-8	NBS75K.l	63358	40	C6H12O	100
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.l	65120	40	C9H20	128









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

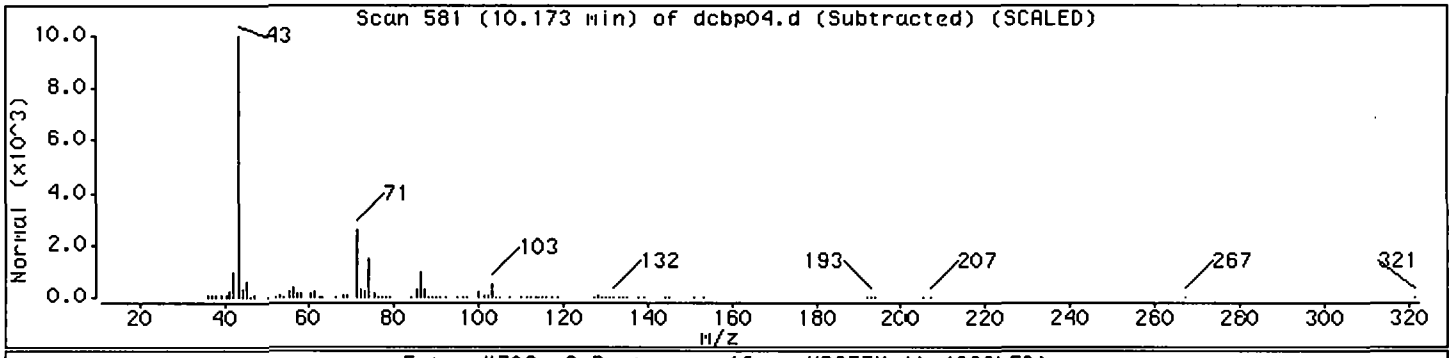
Client ID: SBLKBS Instrument: gc14.i

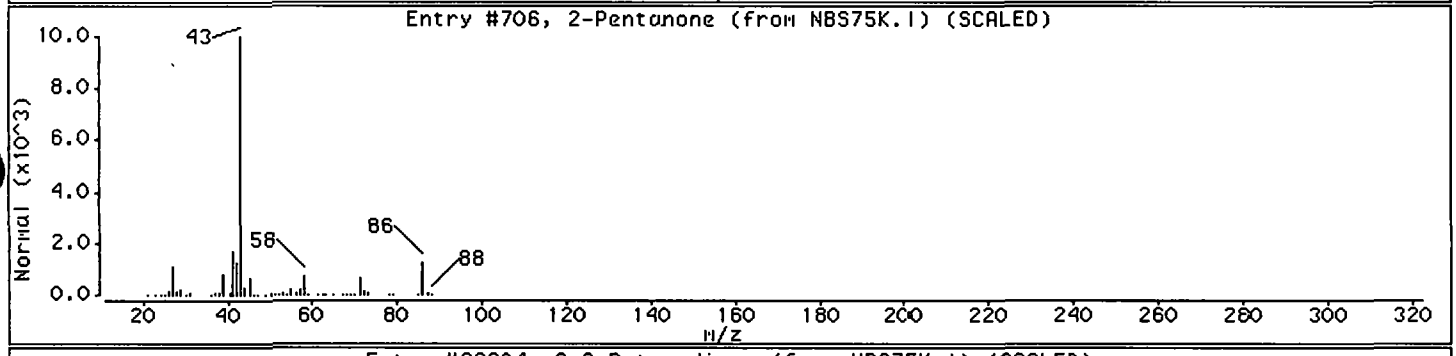
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

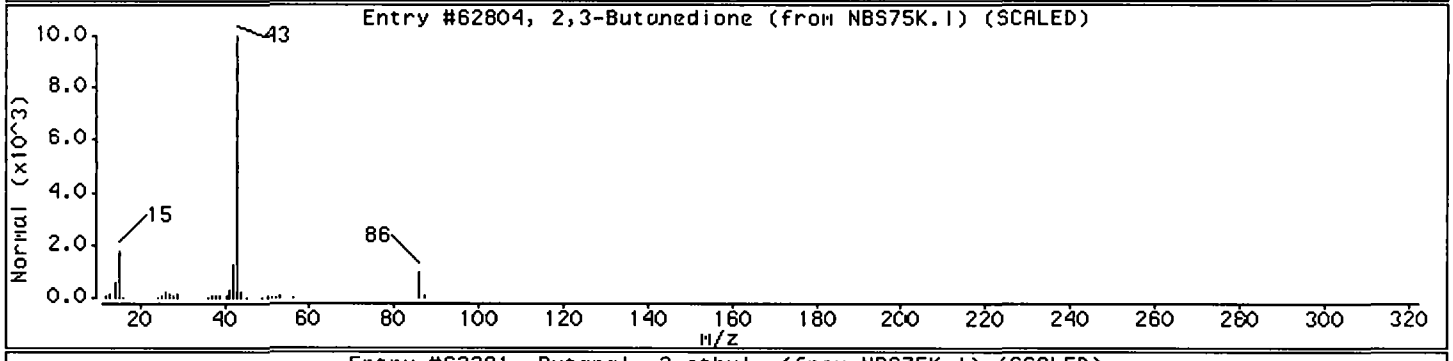
Volume Injected (uL): 2.0 Operator: GLR

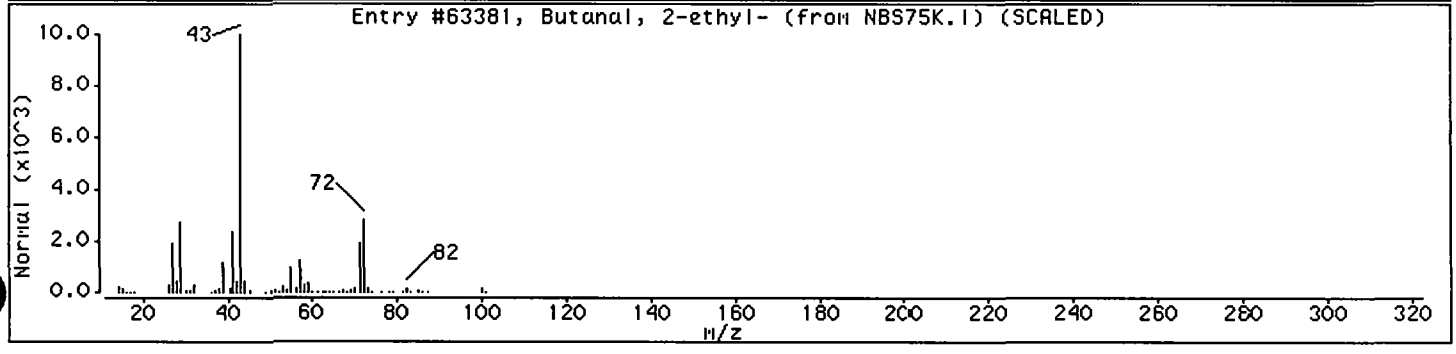
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
2-Pentanone	107-87-9	NBS75K.l	706	38	C5H10O	86
2,3-Butanedione	431-03-8	NBS75K.l	62804	35	C4H6O2	86
Butanal, 2-ethyl-	97-96-1	NBS75K.l	63381	33	C6H12O	100









Data File: /chem/gcl4.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

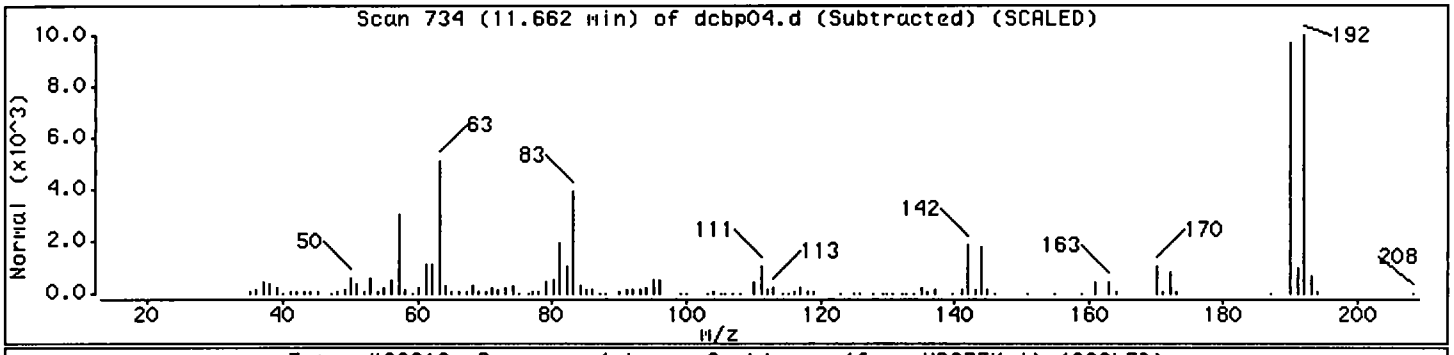
Client ID: SBLKBS Instrument: gcl4.i

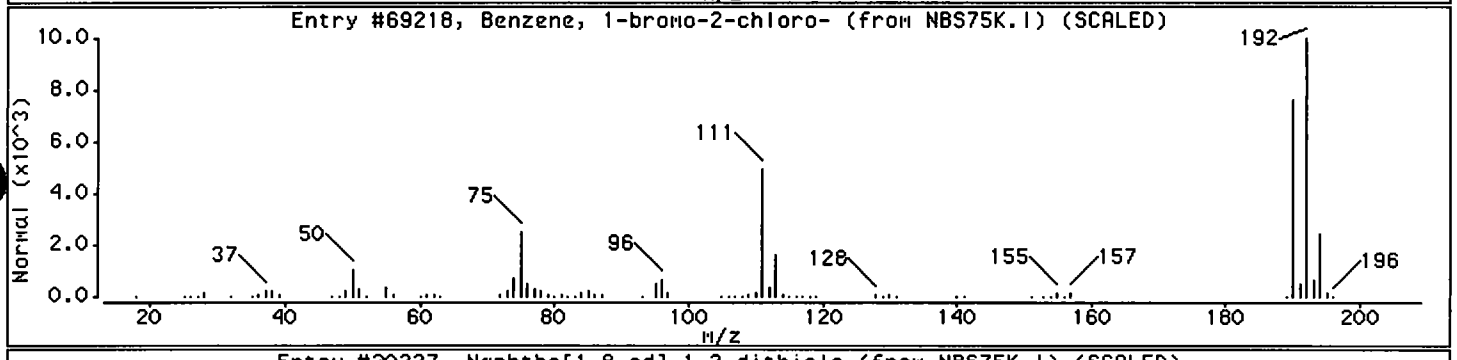
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

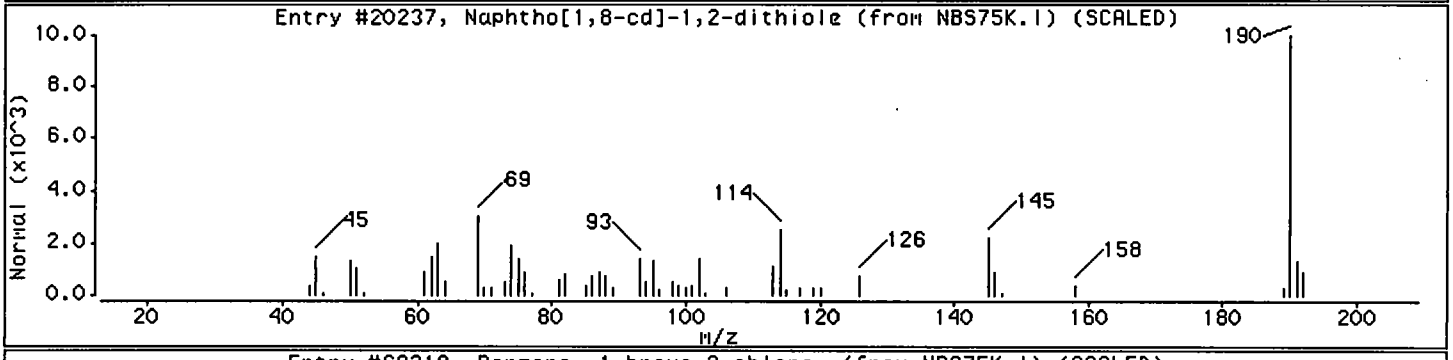
Volume Injected (uL): 2.0 Operator: GLR

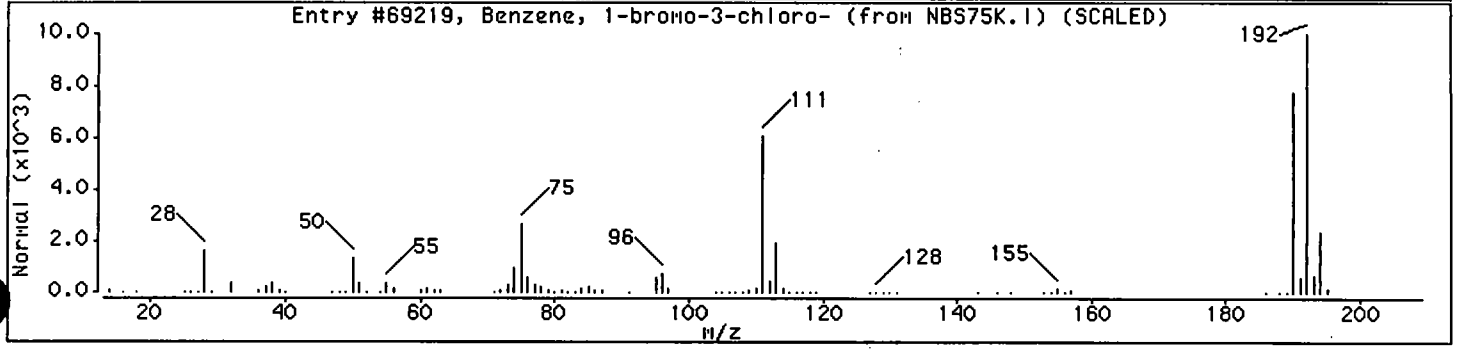
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzene, 1-bromo-2-chloro-	694-80-4	NBS75K.l	69218	22	C6H4BrCl	190
Naphtho[1,8-cd]-1,2-dithiole	209-22-3	NBS75K.l	20237	14	C10H6S2	190
Benzene, 1-bromo-3-chloro-	108-37-2	NBS75K.l	69219	12	C6H4BrCl	190









Data File: /chem/gcl4.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

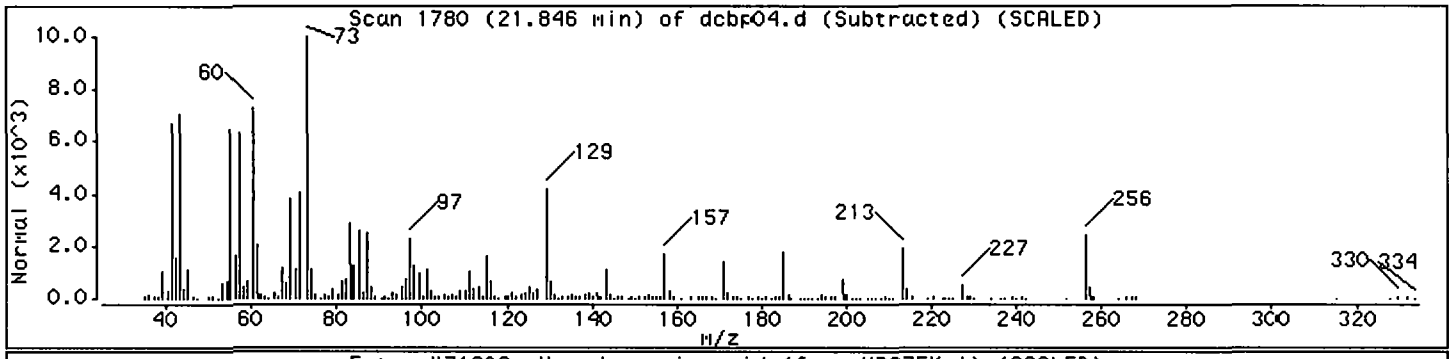
Client ID: SBLKBS Instrument: gcl4.i

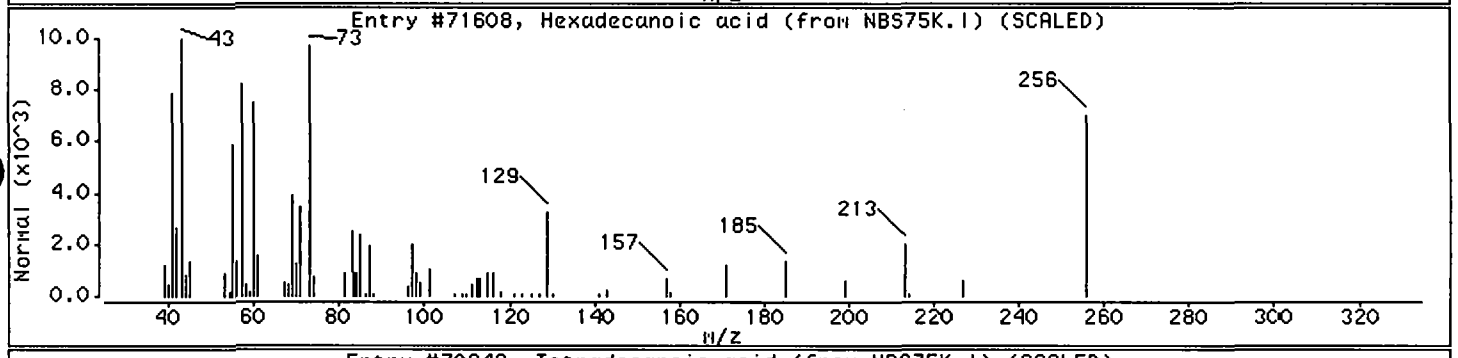
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

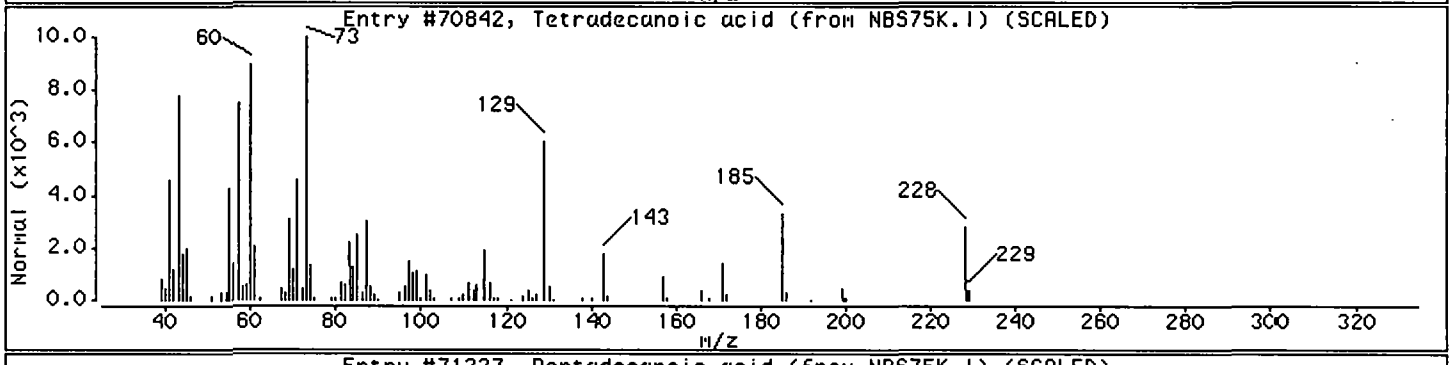
Volume Injected (uL): 2.0 Operator: GLR

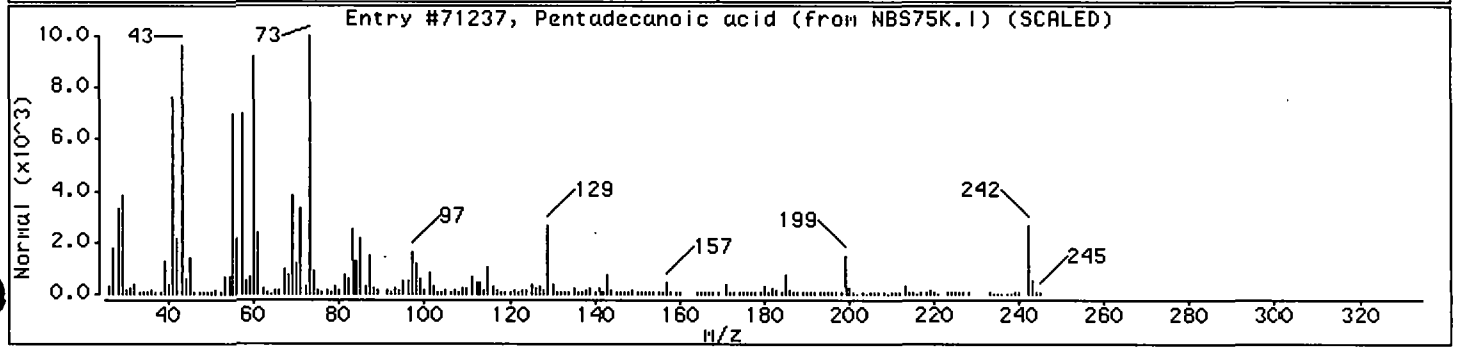
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Hexadecanoic acid	57-10-3	NBS75K.l	71608	98	C16H32O2	256
Tetradecanoic acid	544-63-8	NBS75K.l	70842	98	C14H28O2	228
Pentadecanoic acid	1002-84-2	NBS75K.l	71237	90	C15H30O2	242









Data File: /chem/gc14.i/dec1296.b/dcbf04.d

Date : 12-DEC-1996 12:04

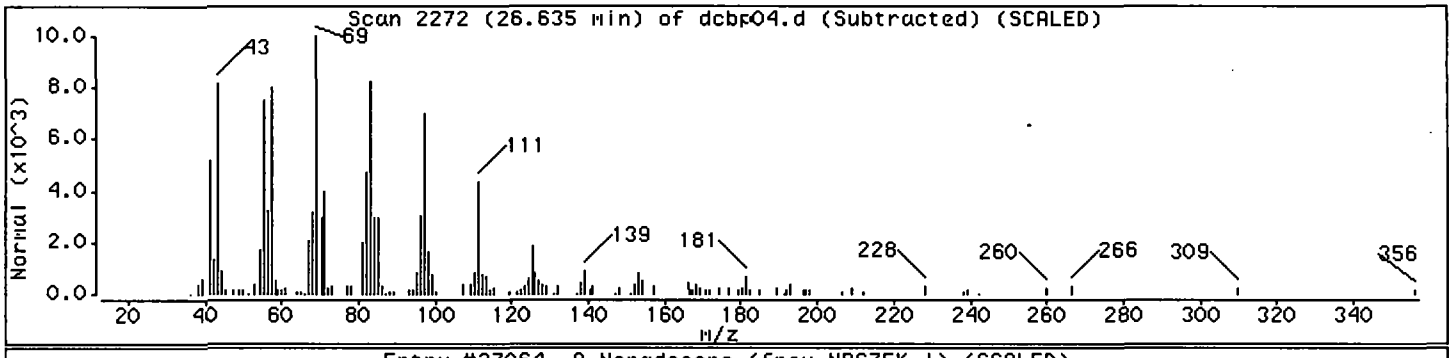
Client ID: SBLKBS Instrument: gc14.i

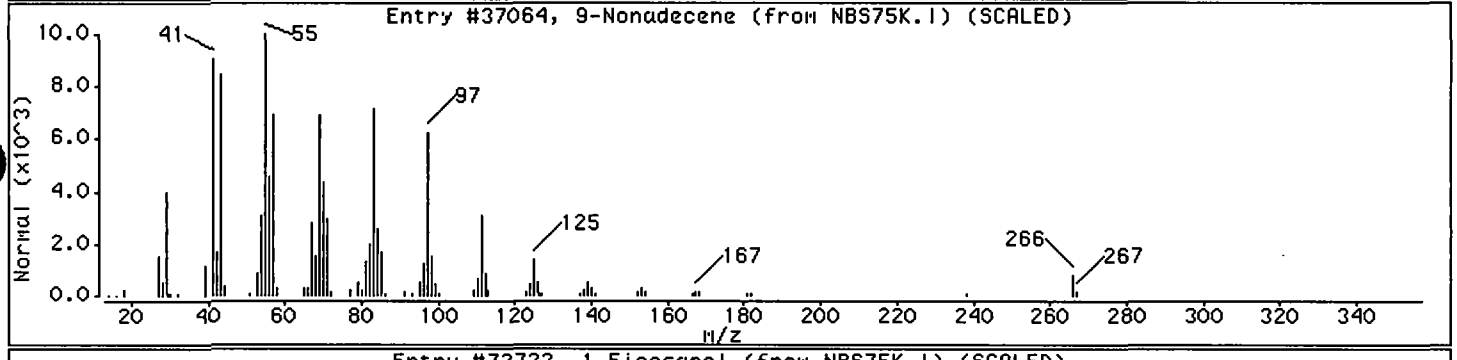
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

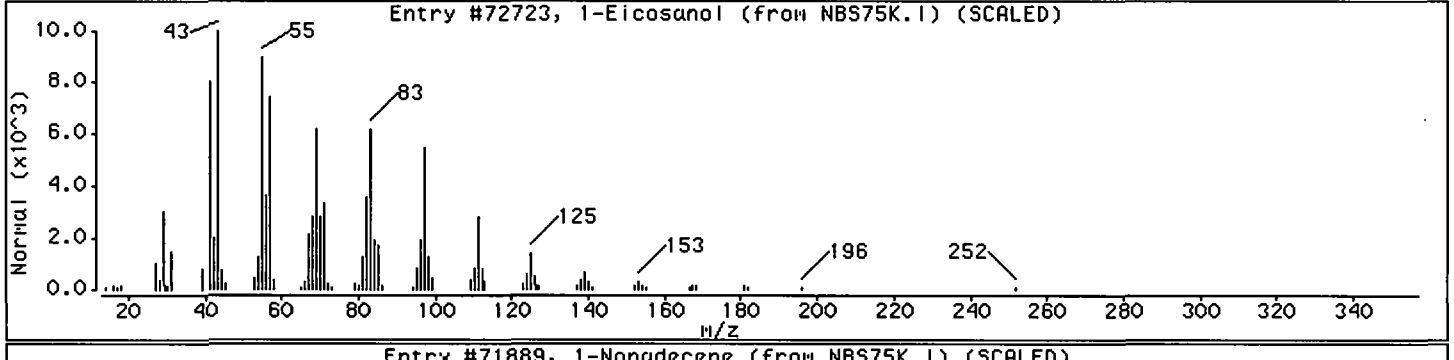
Volume Injected (uL): 2.0 Operator: GLR

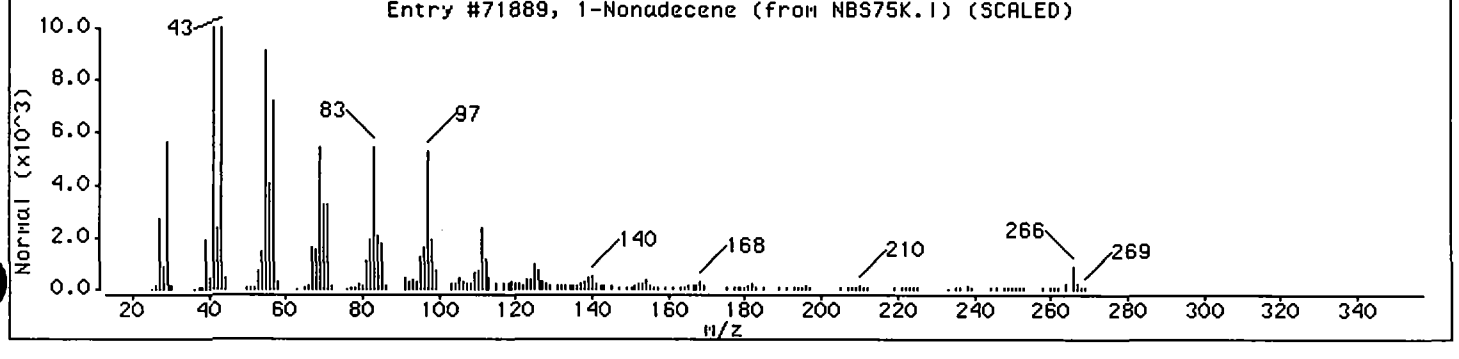
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
9-Nonadecene	0-00-0	NBS75K.l	37064	96	C19H38	266
1-Eicosanol	629-96-9	NBS75K.l	72723	81	C20H420	298
1-Nonadecene	18435-45-5	NBS75K.l	71889	78	C19H38	266









Data File: /chem/gc14.i/dec1296.b/dcbp04.d

Date : 12-DEC-1996 12:04

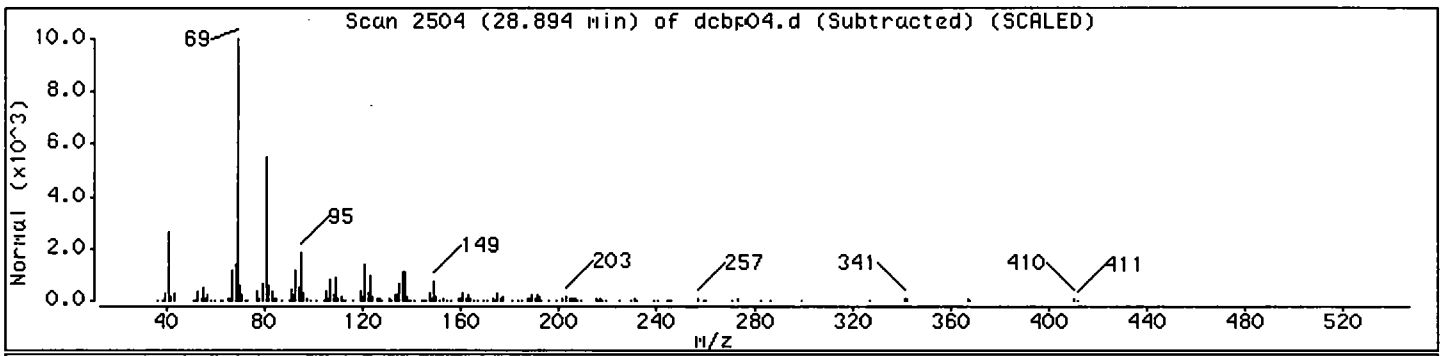
Client ID: SBLKBS Instrument: gc14.i

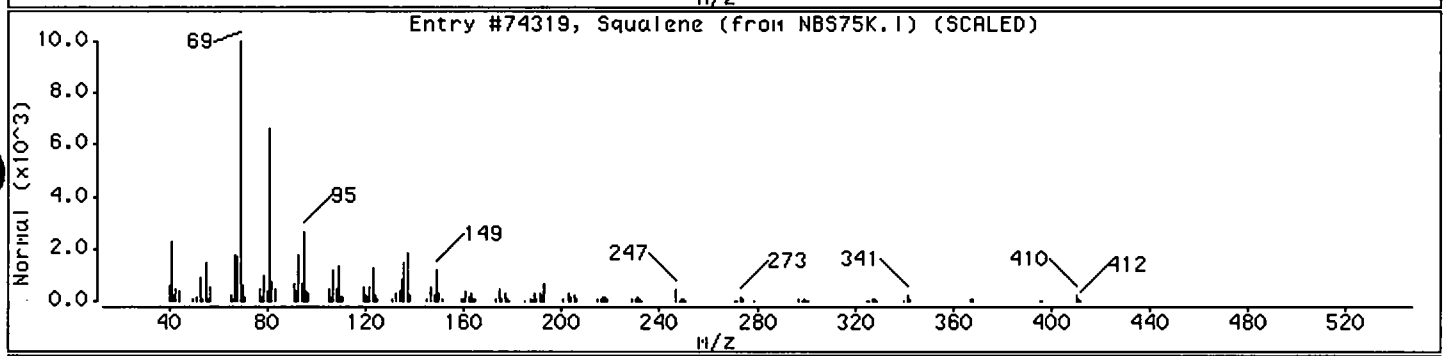
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

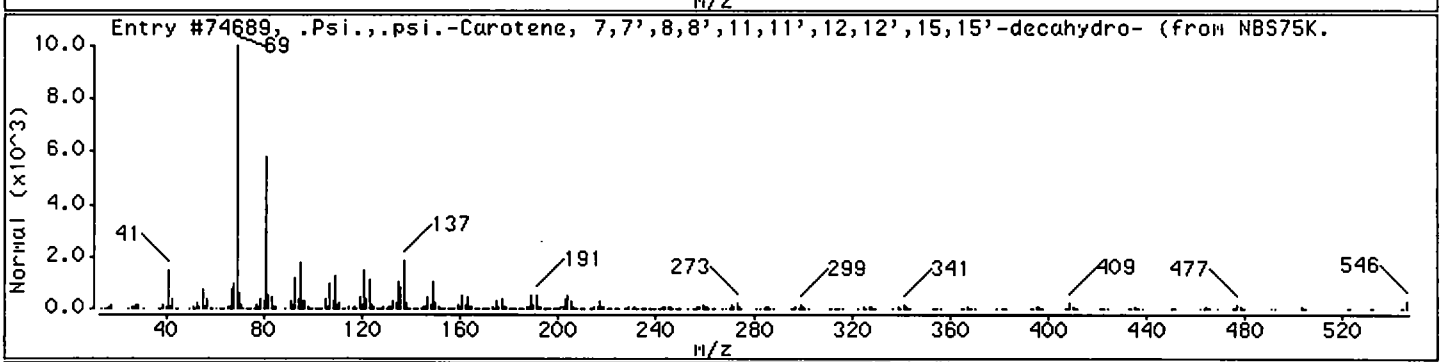
Volume Injected (uL): 2.0 Operator: GLR

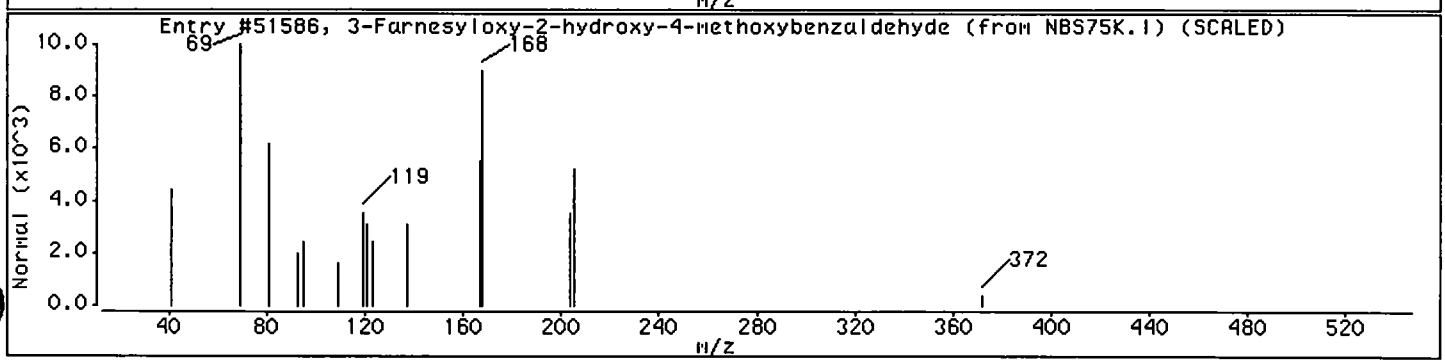
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Squalene	7683-64-9	NBS75K.l	74319	96	C30H50	410
.Psi.,.psi.-Carotene, 7,7',8,8',11,11',1	502-62-5	NBS75K.l	74689	78	C40H66	547
3-Farnesyloxy-2-hydroxy-4-methoxybenzald	0-00-0	NBS75K.l	51586	72	C23H3204	372









Data File: /chem/gc14.i/dec1296.b/dcbf04.d

Date : 12-DEC-1996 12:04

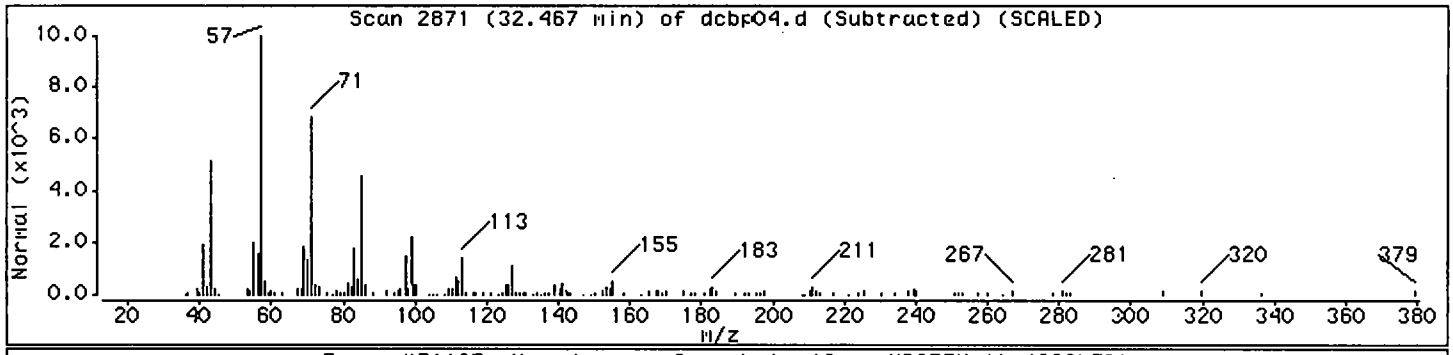
Client ID: SBLKBS Instrument: gc14.i

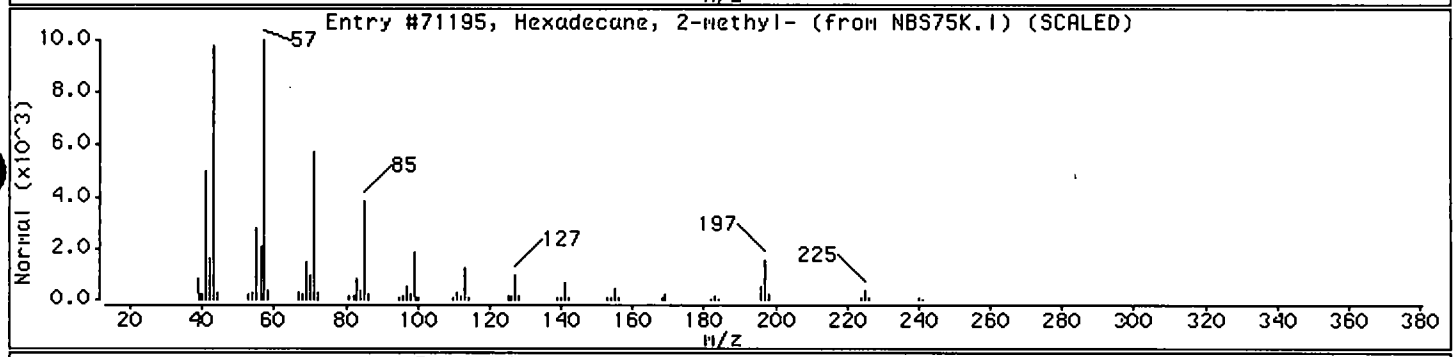
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

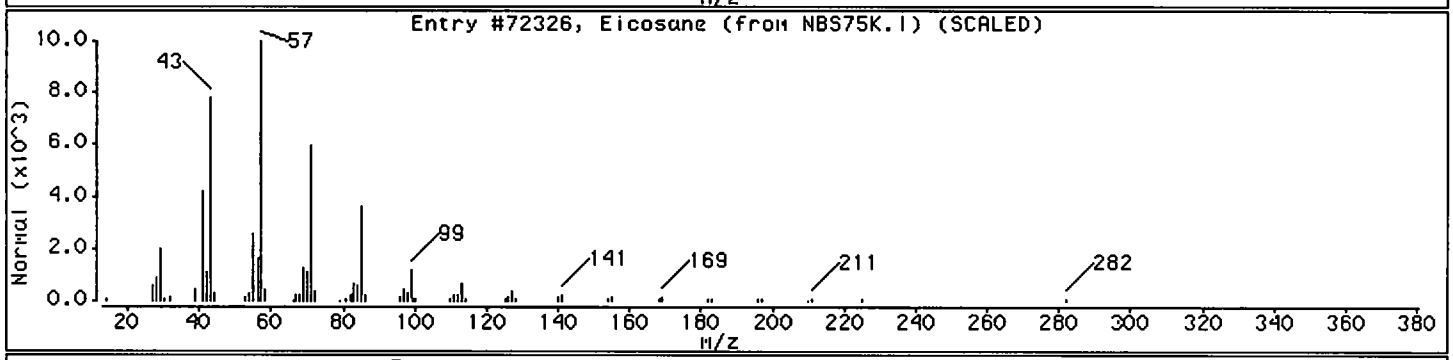
Volume Injected (uL): 2.0 Operator: GLR

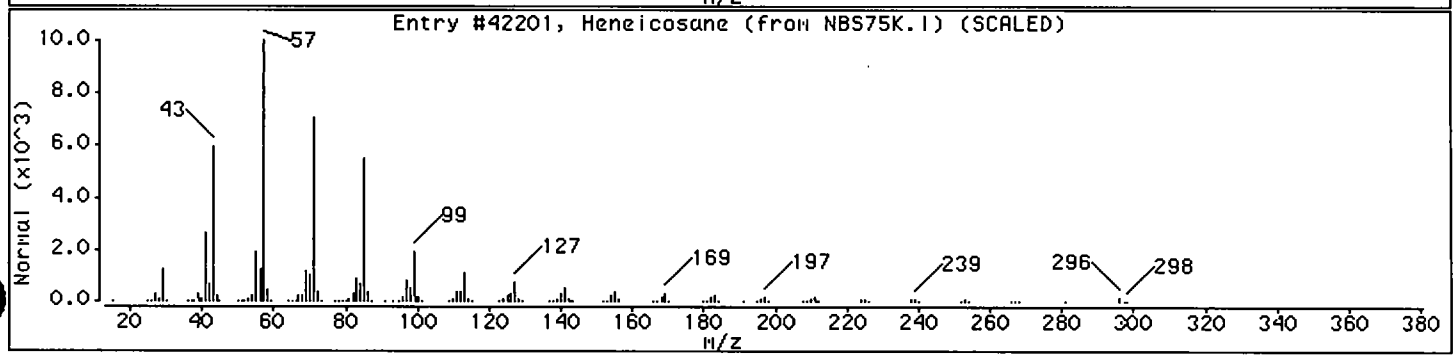
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexadecane, 2-methyl-	1560-92-5	NBS75K.l	71195	93	C17H36	240
Eicosane	112-95-8	NBS75K.l	72326	91	C20H42	282
Heneicosane	629-94-7	NBS75K.l	42201	87	C21H44	296









Data File: /chem/gcl4.i/dec1296.b/dcbf04.d

Date : 12-DEC-1996 12:04

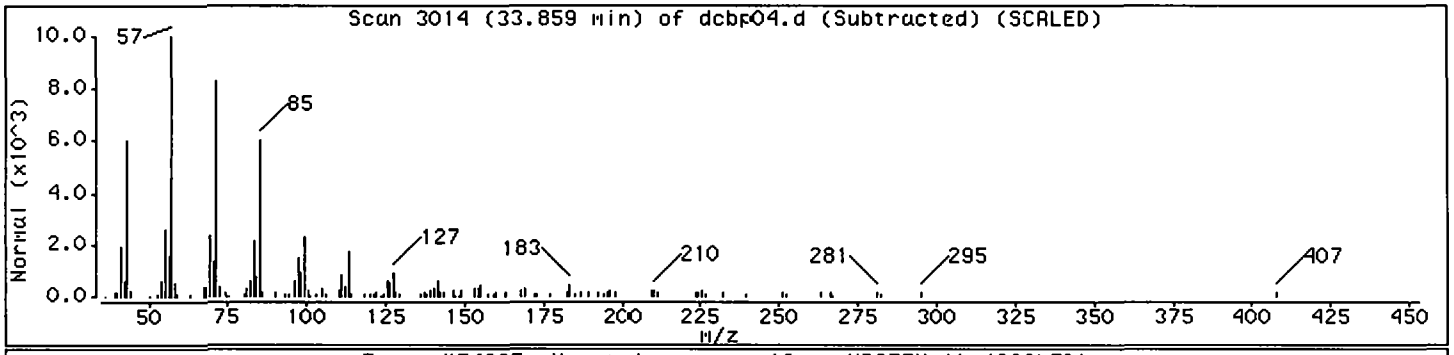
Client ID: SBLKBS Instrument: gcl4.i

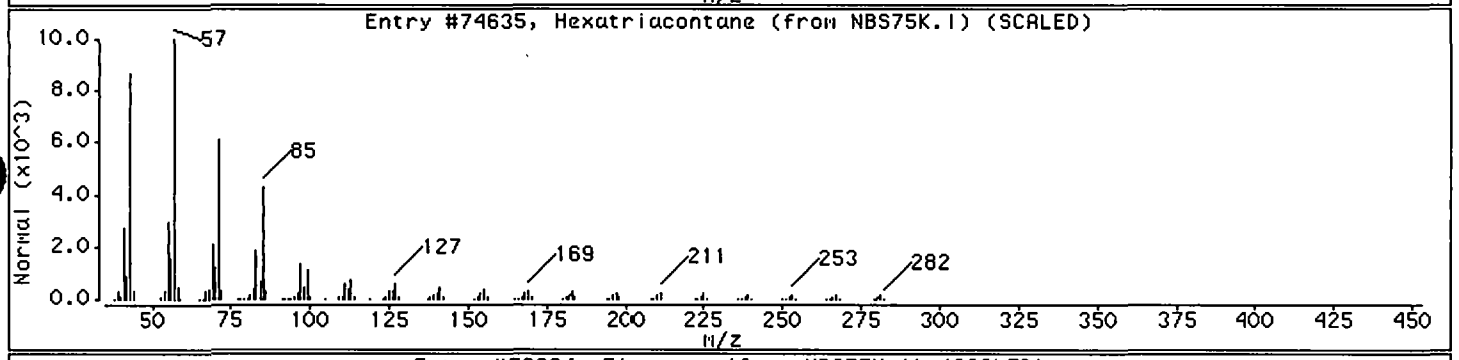
Sample Info: 96GB0654-MB1 DFAC12,[AL=0625HS],[DC=00]

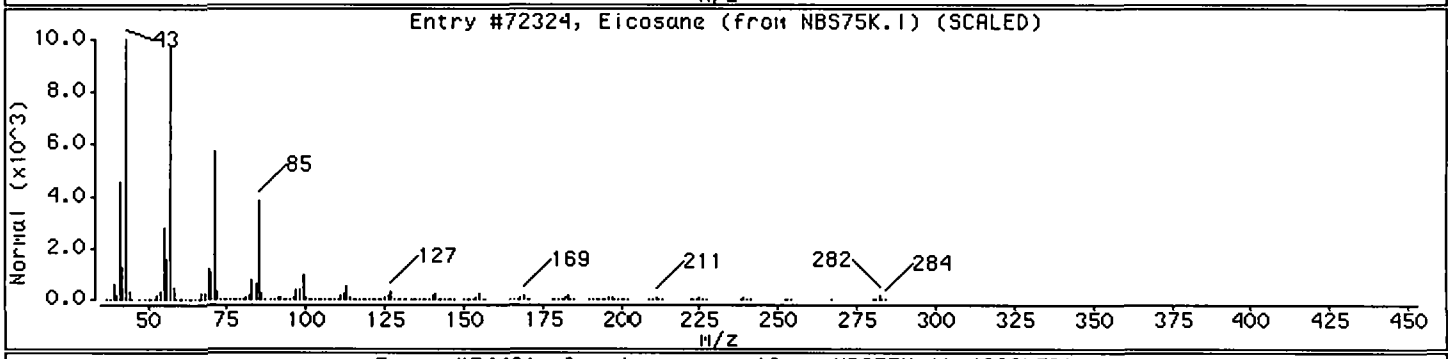
Volume Injected (uL): 2.0 Operator: GLR

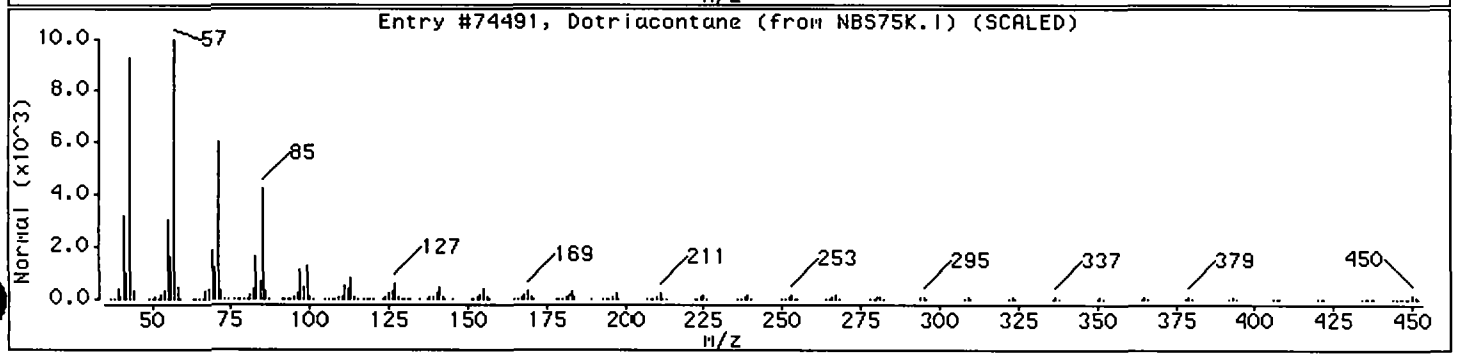
Column phase: Column diameter: 2.00

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Hexatriacontane	630-06-8	NBS75K.l	74635	90	C36H74	507
Eicosane	112-95-8	NBS75K.l	72324	90	C20H42	282
Dotriacontane	544-85-4	NBS75K.l	74491	87	C32H66	451









1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKBSBS

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1S

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP05

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1600	
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	1400	
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	980	
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	1000	
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	1200	
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	1600	
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	1200	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKBSBS

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1S

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP05

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

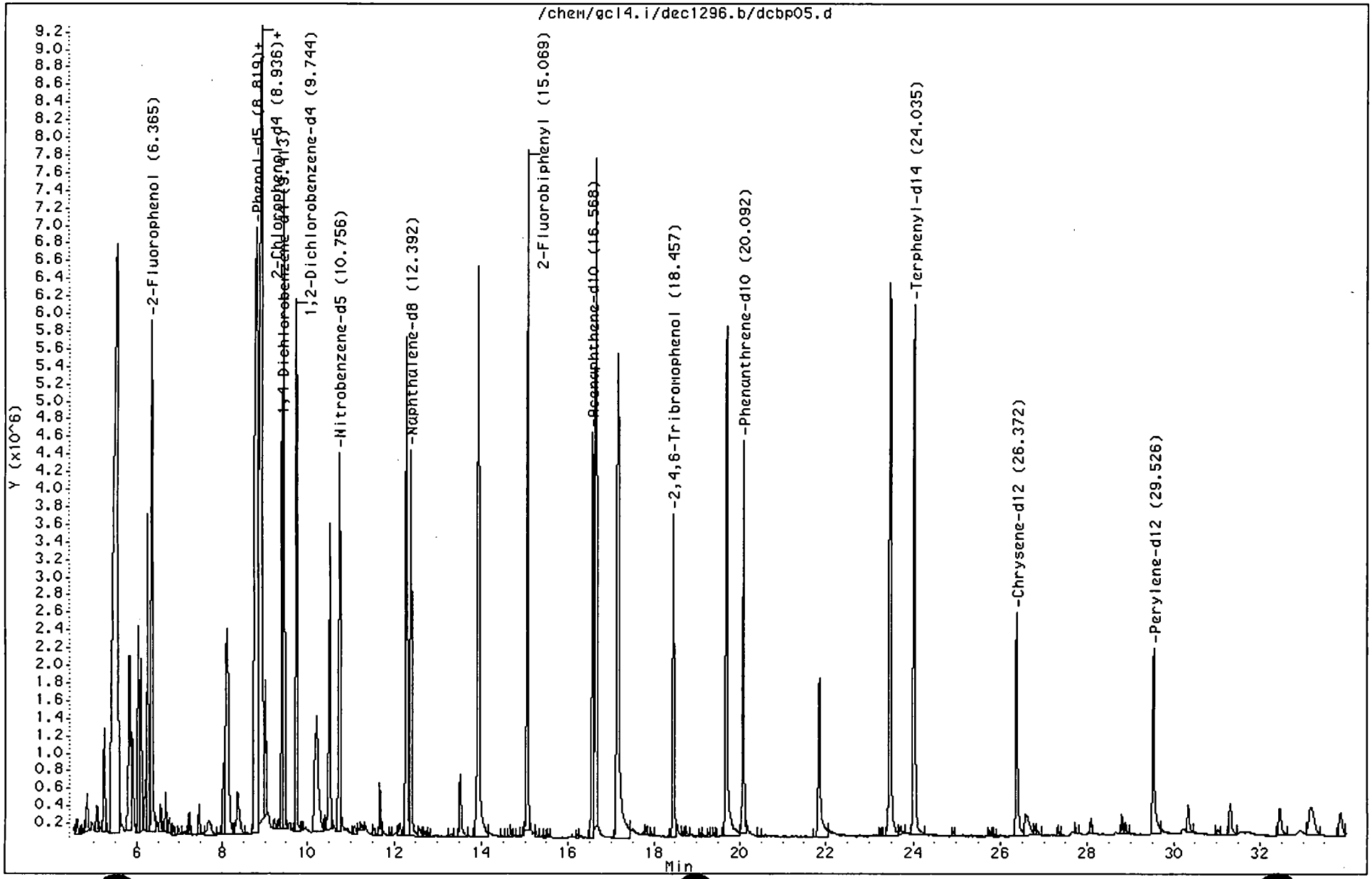
GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	2400	
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	1300	
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	n-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	2400	
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	1400	
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

Data File: /chem/gcl4.i/dec1296.b/dcbp05.d
Date : 12-DEC-1996 12:46
Client ID: SBLKBSBS
Sample Info: 96GB0654-MB1S DFAC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GLR
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296.b/dcbp05.d
Lab Smp Id: 96GB0654-MB1S Client Smp ID: SBLKBSBS
Inj Date : 12-DEC-1996 12:46
Operator : GLR Inst ID: gcl4.i
Smp Info : 96GB0654-MB1S DFAC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296.b/390.m
Meth Date : 13-Dec-1996 20:11 squiresb Quant Type: ISTD
Cal Date : 12-DEC-1996 09:16 Cal File: dgac12.d
Als bottle: 5 QC Sample: BS
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.000	Weigth of sample extracted (g)
M	0.000	% Moisture

WB 12/19/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.413	9.397	(1.000)	1526047	40.000	
* 26 Naphthalene-d8	136.00	12.392	12.405	(1.000)	4222754	40.000	
* 41 Acenaphthene-d10	164.00	16.568	16.571	(1.000)	2490056	40.000	
* 56 Phenanthrene-d10	188.00	20.092	20.096	(1.000)	3570475	40.000	
* 67 Chrysene-d12	240.00	26.372	26.394	(1.000)	2224193	40.000	
* 75 Perylene-d12	264.00	29.526	29.529	(1.000)	2053659	40.000	
$ 1 2-Fluorophenol	112.00	6.365	6.291	(0.676)	3940459	76.752	1279.2
$ 2 Phenol-d5	99.00	8.799	8.754	(0.935)	6282583	100.23	1670.5
$ 5 2-Chlorophenol-d4	132.00	8.897	8.871	(0.945)	4475533	87.357	1456.0
$ 10 1,2-Dichlorobenzene-d4	152.00	9.744	9.737	(1.035)	1785065	54.720	912.00
$ 17 Nitrobenzene-d5	82.00	10.756	10.750	(0.868)	3350021	77.948	1299.1
$ 34 2-Fluorobiphenyl	172.00	15.069	15.062	(0.909)	5117023	69.629	1160.5
$ 52 2,4,6-Tribromophenol	330.00	18.466	18.470	(1.115)	948861	84.546	1409.1
$ 64 Terphenyl-d14	244.00	24.035	24.019	(0.911)	4446145	77.128	1285.5
3 Phenol	94.00	8.829	8.793	(0.938)	6054338	96.376	1606.3
6 2-Chlorophenol	128.00	8.936	8.910	(0.949)	4270478	87.402	1456.7
9 1,4-Dichlorobenzene	146.00	9.452	9.445	(1.004)	3079041	59.005	983.42
14 N-Nitroso-di-n-propylamine	70.00	10.522	10.516	(1.118)	2379951	63.084	1051.4
25 1,2,4-Trichlorobenzene	180.00	12.294	12.298	(0.992)	2422076	75.183	1253.0

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/Kg)
29 4-Chloro-3-methylphenol	107.00	13.949	13.933	(1.126)	3789696	98.051	1634.2
42 Acenaphthene	154.00	16.656	16.659	(1.005)	4524349	72.338	1205.6
43 4-Nitrophenol	109.00	17.162	17.136	(1.036)	1381683	141.67	2361.2
45 2.4-Dinitrotoluene	165.00	17.181	17.175	(1.037)	2079911	80.013	1333.6
55 Pentachlorophenol	266.00	19.703	19.687	(0.981)	1770861	145.56	2426.0
63 Pyrene	202.00	23.490	23.484	(0.891)	6830191	83.030	1383.8

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKBSBSD

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1T

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP06

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1400	
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	1300	
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	860	
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	890	
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	1000	
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	1500	
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	830	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	830	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	830	U
83-32-9	Acenaphthene	1100	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKBSBSD

Lab Name: WESTON/ENV. METRICS,INC. Contract:

Lab Code: WESTON Case No.: SAS No.: SDG No.: 11G675

Matrix: (soil/water) SOIL Lab Sample ID: 96GB0654-MB1T

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DCBP06

Level: (low/med) LOW Date Received: 11/27/96

% Moisture: 0 decanted: (Y/N) N Date Extracted: 11/27/96

Concentrated Extract Volume: 500(uL) Date Analyzed: 12/12/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

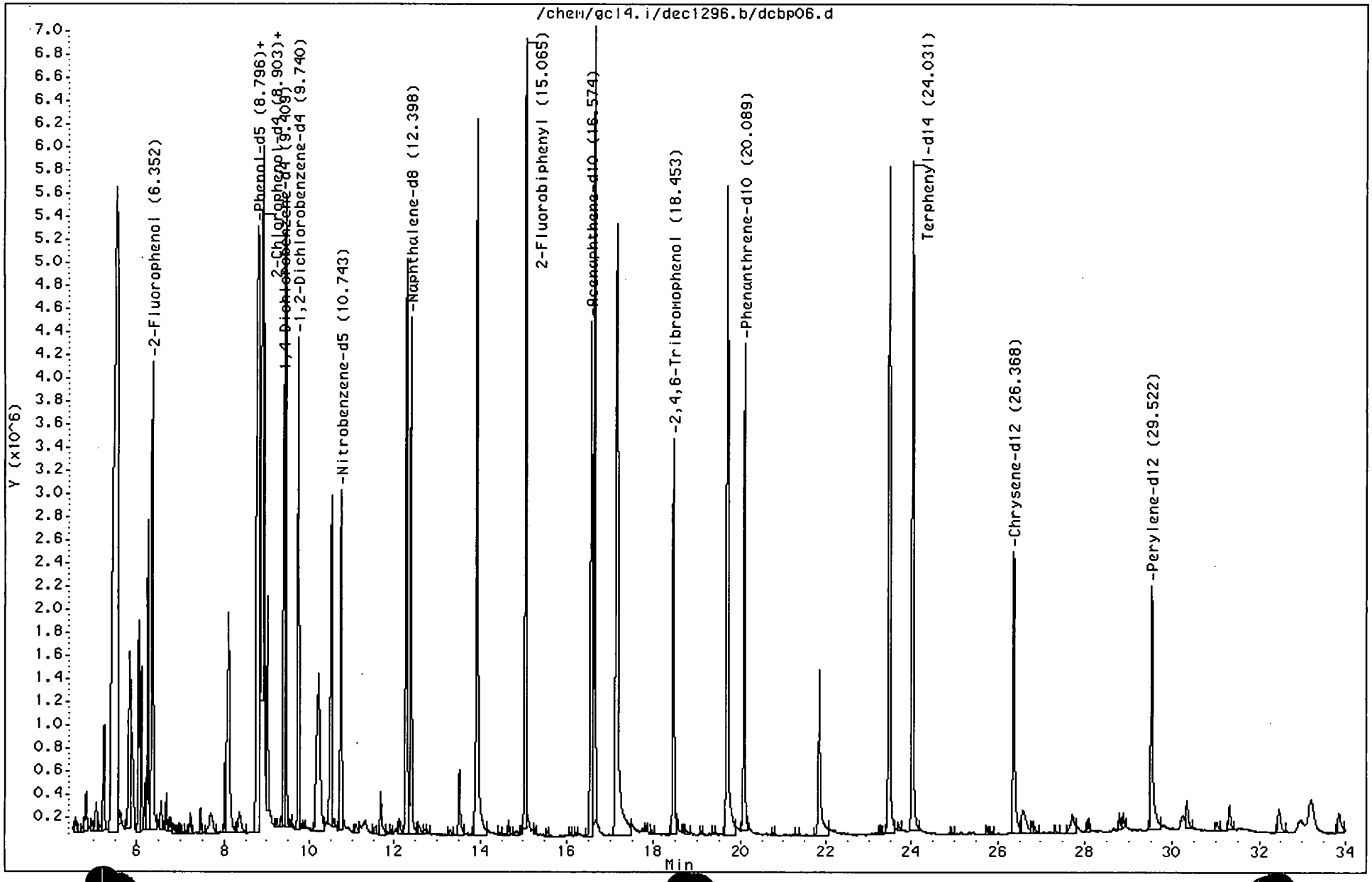
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	830	U
100-02-7	4-Nitrophenol	2300	
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	1200	
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	830	U
534-52-1	4,6-Dinitro-2-methylphenol	830	U
86-30-6	n-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	2300	
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	1300	
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

449

Data File: /chem/gcl4.i/dec1296.b/dcbp06.d
Date : 12-DEC-1996 13:28
Client ID: SBLKBSBSD
Sample Info: 96GB0654-MB1T DFAC12,[AL=0625HS],[DC=00]
Volume Injected (uL): 2.0
Column phase:

Instrument: gcl4.i
Operator: GLR
Column diameter: 2.00



Semivolatile REPORT USEPA CLP SOW OLM01.8

Data file : /chem/gcl4.i/dec1296.b/dcbp06.d
Lab Smp Id: 96GB0654-MB1T Client Smp ID: SBLKBSBSD
Inj Date : 12-DEC-1996 13:28
Operator : GLR Inst ID: gcl4.i
Smp Info : 96GB0654-MB1T DFAC12,[AL=0625HS],[DC=00]
Misc Info : GCL#4
Comment : HP 5890 SERIES II GC/HP 5970 MS
Method : /chem/gcl4.i/dec1296.b/390.m
Meth Date : 13-Dec-1996 20:11 squiresb Quant Type: ISTD
Cal Date : 12-DEC-1996 09:16 Cal File: dgac12.d
Als bottle: 6 QC Sample: BSD
Dil Factor: 1.000
Integrator: HP RTE Compound Sublist: 0625HS.sub
Target Version: 3.12
Concentration Formula: Uf * Vt/(Vi * Ws * (100 - M)/100)

Name	Value	Description
Uf	2.000	ng unit correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	ul
Ws	30.000	Weigth of sample extracted (g)
M	0.000	% Moisture

WB 12/17/96

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 8 1,4-Dichlorobenzene-d4	152.00	9.399	9.397	(1.000)	1338998	40.000	
* 26 Naphthalene-d8	136.00	12.398	12.405	(1.000)	4364976	40.000	
* 41 Acenaphthene-d10	164.00	16.574	16.571	(1.000)	2408962	40.000	
* 56 Phenanthrene-d10	188.00	20.089	20.096	(1.000)	3474984	40.000	
* 67 Chrysene-d12	240.00	26.378	26.394	(1.000)	2215760	40.000	
* 75 Perylene-d12	264.00	29.522	29.529	(1.000)	2090326	40.000	
$ 1 2-Fluorophenol	112.00	6.362	6.291	(0.677)	2896681	64.303	1071.7
$ 2 Phenol-d5	99.00	8.776	8.754	(0.934)	4682303	85.137	1419.0
$ 5 2-Chlorophenol-d4	132.00	8.883	8.871	(0.945)	3327190	74.015	1233.6
$ 10 1,2-Dichlorobenzene-d4	152.00	9.740	9.737	(1.036)	1290426	45.083	751.38
$ 17 Nitrobenzene-d5	82.00	10.743	10.750	(0.867)	2409184	54.230	903.83
$ 34 2-Fluorobiphenyl	172.00	15.065	15.062	(0.909)	4462135	62.762	1046.0
$ 52 2,4,6-Tribromophenol	330.00	18.463	18.470	(1.114)	897399	82.652	1377.5
$ 64 Terphenyl-d14	244.00	24.031	24.019	(0.911)	4106997	71.516	1191.9
3 Phenol	94.00	8.815	8.793	(0.938)	4604723	83.540	1392.3
6 2-Chlorophenol	128.00	8.932	8.910	(0.950)	3280884	76.528	1275.5
9 1,4-Dichlorobenzene	146.00	9.448	9.445	(1.005)	2361679	51.580	859.68
14 N-Nitroso-di-n-propylamine	70.00	10.519	10.516	(1.119)	1766424	53.362	889.37
25 1,2,4-Trichlorobenzene	180.00	12.291	12.298	(0.991)	2095130	62.916	1048.6

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
29 4-Chloro-3-methylphenol	107.00	13.946	13.933	(1.125)	3595876	90.005	1500.1
42 Acenaphthene	154.00	16.652	16.659	(1.005)	4023700	66.499	1108.3
43 4-Nitrophenol	109.00	17.158	17.136	(1.035)	1317446	139.63	2327.2
45 2,4-Dinitrotoluene	165.00	17.178	17.175	(1.036)	1898688	75.500	1258.3
55 Pentachlorophenol	266.00	19.699	19.687	(0.981)	1615050	136.40	2273.3
63 Pyrene	202.00	23.496	23.484	(0.891)	6440124	78.587	1309.8

OP No. 21-21G-1686
Rev. 00; Eff. Date 02/08/95

ORGPREP

Extraction Date: 11-27-96

WESTON Environmental Metrics, Inc.
Organic Extraction Record
GC/MS Semivolatiles

Page #: 26
Batch #: 96GB0654
Analyst Initials: GES

Test Code: 0625HCLP
Solvent: DCM: Acetone (1:1)

NDJ 12/9

Matrix:
a. Water (b.) Soil
c. Other _____

Extraction Method:
a. SW-846 3510 (Sep Funnel)
b. SW-846 3520 (Cont.Liq/Liq. Accl.One-Step)
c. SW-846 3550 (Sonication)
d. SW-846 3580 (Waste Dil.)
(e.) Other Sonic CLP

RFW #	Sample ID	pH	Initial Volume/Weight	Total Solids	Final Volume	Clean-Up Absorbent	Multipliers Surr.	Multipliers Spike	Multipliers Split
96GB0654-MB1			30.000g	100%	0.5ml	GPC	1		
-MB1S			30.000				1	1	
-MB1T			30.000				1	1	
9611G613-001	Baker	6	30.096	87.1			1		
-002		6	30.028	94.5			1		
-003		6	30.077	90.6			1		
9611G675-001	USEPA	6	30.5.129	69.7			1		5
-001S		6	30.5.367				1	1	5
-001T		6	30.5.165				1	1	5
-002		6	30.5.002	77.6			1		5
-003		6	30.5.290	96.0			1		5
-004		6	30.5.238	53.6			1		
-005		6	30.5.095	71.6			1		5
-006		6	30.5.216	75.9			1		5
-007		6	30.30.580	92.4			1		5
-008		6	30.30.183	53.4			1		5

Comments: * used 5g Samples due to Oily Composition
• samples contained 4 to 5 mls of oil & were brought up to 50.0 mls
GPC clean up by MCS on 12/3/96 (GPG112996G5)

Surrogate: BNA Surrogate Volume: 500ml Standard ID#: B1952
SB/MS Solution: BNA CLP Spike Volume: 500ml Standard ID#: B1932
SB/MS Solution: N/A Volume: — Standard ID#:

Analyst Signature: Gordon E. Stacy Date: 11-27-96

Reviewer Signature: Nancy J. Walsh Date: 12/9/96

Extraction Custody Record

Extracts Transferred	Relinquished By	Date	Time	Received By	Date	Time	Reason for Transfer
Complete Set	[illegible]	12.4.96	2205	[illegible]	12/4/96	2343	

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Weston Environmental Metrics, Inc.
GC/MS Semi-Volatile Analysis Logbook

Instrument ID# 4

RFW 21-21G-1624/B-11/96

453

Analysis Date/ Time 12/12/96	File Name	RFW Number YYMM G XXX	RFW Number XXX	Client/Sample ID	Sample Prep.	Prep. Inj. Vol. (uL)	Proc. Instr. Dil.	Int. Std. No.	Final Vol. (mL)	Comments	Need Reanal-ysis	Need Dil.	Anal. Init.
0521	CBN14	96116781	004	1DOT	500uL EXT 500uL DCM 10uL IS	2	1	B 1961	1.0		—	—	[illegible]
0604	CBN15	DCM	—	DCM	—	—	—	—	—	—	—	—	[illegible]
0647	CBN16	↓	↓	↓	↓	↓	↓	↓	↓	—	—	—	[illegible]
—	CBN17	↓	↓	↓	↓	↓	↓	↓	↓	Not Run	—	—	
0856	FAC12	—	—	Dftpp	B1957	2	—	—	—	OK	—	—	GLR
0916	GAC12	—	—	CCAL	B1969	↓	—	—	—	390+8270A	—	—	GLR
0959	CBP01	96GB0655	MB1	Blank	400uL ext + 4ul IS	↓	1.0	B 1961	W 1.0	OK	—	—	GLR
1040	CBP02	↓	MB1S	BS	↓	↓	↓	↓	↓	OK	—	—	GLR
1122	CBP03	↓	MB1T	BSD	↓	↓	↓	↓	↓	OK	—	—	GLR
1204	CBP04	96GB0654	MB1	Blank	↓	↓	↓	↓	S 0.5	OK	—	—	GLR
1246	CBP05	↓	MB1S	BS	↓	↓	↓	↓	↓	OK	—	—	GLR
1328	CBP06	↓	MB1T	BSD	↓	↓	↓	↓	↓	OK	—	—	GLR
1410	CBP07	96116612	002	Baker	↓	↓	↓	↓	W 1.0	OK	—	—	GLR
1452	CBP08	96116613	002	↓	↓	↓	↓	↓	S 0.5	OK	—	—	GLR
1534	CBP09	↓	003	↓	↓	↓	↓	↓	↓	ok	—	—	LBS

Analyst Signature/Date: [illegible] 12/12/96

Reviewer Signature/Date: [illegible] 12/13/96

Weston Environmental Metrics, Inc.
GC/MS Semi-Volatile Analysis Logbook

Instrument ID# 4

RFW 21-21G-1624/B-11/96

Analysis Date/ Time 12/12/96	File Name	RFW Number YYMM G XXX	RFW Number XXX	Client/Sample ID	Sample Prep.	Prep. Inj. Vol. (uL)	Proc. Instr. Dil.	Int. Std. No.	Final Vol. (mL)	Comments	Need Reanal-ysis	Need Dil.	Anal. Init.
1616	CBP10	96116613	001	Baker	400 µl ext + 4 µl IS	2	–	B 1961	5 0.5	OK	–	–	CES
5:49pm 1852	12 Rechecks FBC12	Rocky Nelson –	–	Technical Tune	B1957	2	–	–	–	passed 390	–	–	CES
1918	CBC12	–	–	CCAL	B1969	2	–	–	–	passed	–	–	CES
2000	CBR01	96116675	004	USEPA-Wilcox	400 uL EXT 4 uL IS	2	5	B 1961	0.5	OK	–	–	CES
20:42	CBR02		001		100 uL EXT 400 uL DCM 5 uL IS				12/13/96	~~2 ACID SS↓ 2 BN SS↓ 2 ADV↓~~			MDS
21:24	CBR03		001S				Not Needed			~~Pyrene OK all other spikes out 2,4,6 TBP OK all others SS out~~			MDS
22:06	CBR04		001T							~~Pyrene OK all others out 12/13/96 2,4,6 TBP OK all others SS out~~			MDS
22:48	CBR05		002							~~FLT OK all others OK 12/13/96~~			MDS
23:30	CBR06		003							12/13/96 ~~All SS out~~			MDS
12/13/96 0:12	CBR07		005		40 uL Ext → 1000 uL w/DCM 10 uL IS		25			OK			MDS
0054	CBR08		006										
0135	CBR09		007		100 uL EXT 400 uL DCM 5 uL IS		5			IS 1,2 ↑ Neals A1			
0217	CBR10		008		400 uL EXT 4 uL IS		1			IS 1,2,3 ↑ Neals A1			
0259	CBR11	–	–	DCM	–	2	–	–	–	~~Not Run~~ 12/13/96			
0406	CBR12												

Analyst Signature/Date: 12/13/96

Reviewer Signature/Date: 12/13/96

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Weston Environmental Metrics, Inc.
GC/MS Semi-Volatile Analysis Logbook

Instrument ID# 4

RFW 21-21G-1624/B-11/96

Analysis Date/ Time 12/16/96	File Name	RFW Number YYMM G XXX	RFW Number XXX	Client/Sample ID	Sample Prep.	Prep. Inj. Vol. (uL)	Proc. Instr. Dil.	Int. Std. No.	Final Vol. (mL)	Comments	Need Reanal-ysis	Need Dil.	Anal. Init.
0825	FAC16		—	dftpp	B1957	2	—	—	—	OK		—	GLR
0844	GAC16		—	CCAL	B1969	2	—	—	—	NO 8270A	✓	—	GLR
9:40am 1009	16 Dec 1996 GBC16	Kelly Nelson	—	Time Check CCAL	B1969	2	—	—	—	Peaks still bad NO 8270 A	✓	—	GLR
1132	GCC16		—	CCAL	B1969	2	—	—	—	Peaks OK	✓	—	GLR
1304	FAC16		—	dftpp	B1957	2	—	—	—	OK		—	GLR
1323	GAC16		—	HSL CCAL	B1969	2	—	—	—	8270A + OLM01.8		—	GLR
1402	GBC16		—	ADIX CCAL	B1939	2	—	—	—	OK		—	GLR
1443	CBW01	96GB0670	MB1	Blank	50ul ext + 0.5ul ISTD	2	—	B 1970 ~~1961~~	0.5	Rerun from INST #2 OK		—	GLR
1523	CBW02	96116722	001	Atochem	500ul ext + 500ul DCM + 10ul IS		1.0	B 1970	1.0	T14↓(>10%)		—	GLR
1603	CBW03		005							OK		—	GLR
1643	CBW04		006							TPH↓>10%		—	CES
7:02pm 1723	16 Dec 1996 CBW05	Kelly Nelson	008	time check						OK		—	CES
1804	CBW06		010							TPH↓>10%		—	CES
1844	CBW07		012							TPH↓>10%		—	CES
1925	CBW08		014							TPH↓>10%		—	CES

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Weston Environmental Metrics, Inc.
GC/MS Semi-Volatile Analysis Logbook

Instrument ID# 4

RFW 21-21G-1624/B-11/96

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Analysis Date/ Time	File Name	RFW Number YYMM G XXX	RFW Number XXX	Client/Sample ID	Sample Prep.	Prep. Inj. Vol. (uL)	Proc. Instr. Dil.	Int. Std. No.	Final Vol. (mL)	Comments	Need Reanal-ysis	Need Dil.	Anal. Init.
2009	CBW09	9611G722	016	Atochem	500ul ext + 500ul DCM +10ul IS	2	1.0	B 1970	W 1.0	OK	–	–	CES
2046	CBW10	↓	003	↓	20ul ext + 980ul DCM +10ul IS	↓	25	↓	W 2	IS1↓ NEED 0, x25 Phenol 14,000	✓	✓	CES
2126	CBW11	9611G708	003	↓	500ul ext + 500ul DCM +10ul IS	↓	1.0	↓	W 1.0	OK	–	–	CES
2207	CBW12	9611G675	007	4SepA	200ul ext + 800ul DCM +10ul IS	↓	5	↓	0.5	with split=25 OK x5 ~~Many sur~~ ↓ WDS 12/17/96	–	–	CES
2247	CBW13	↓	008	↓	400ul ext + 4ul IS	↓	1.0	↓	0.5	split = x5 ssok OK IS 6↓ ~~Many sur~~ ↓ WDS 12/17/96	–	–	CES
9:19am 0943	17 Dec 1996 FAC17	Kathy Nelson	–	Tome Ouch dftpp	B1957	2	–	–	–	OK	–		GLR
1003	GAC17		–	CCAL	B1969	2	–	–	–	8270A	–		GLR
1043	CBX01	966B0676	MB1	Blank	500ul ext + 500ul DCM +10ul ISTD	↓	1.0	B 1970	S 1.0	OK	–		GLR
1124	CBX02	↓	MB1S	BS	↓	↓	↓	↓	↓	0/11 2 spikes out	–		GLR
1204	CBX03	↓	MB1T	BSD	↓	↓	↓	↓	↓	0/11 4 spikes out	–		GLR
1243	CBX04	9611G722	003	Atochem	50ul of 250x dilution ~~to~~ QR 12/17/96 +950ul DCM + 10ul ISTD	↓	5000	↓	2.0 W	Overdiluted Redo x2500	–	x 2500	GLR
1324	CBX05	9612G899	005	American	500ul ext + 500ul DCM +10ul IS	↓	1.0	↓	1.0 S	OK	–		GLR
~~1424~~ 1444	CBX06	9612G923	002	Home Depot	↓	↓	↓	↓	↓	ok	–		CES
1525	CBX07	↓	001	↓	↓	↓	↓	↓	↓	ok	–		CES
1605	CBX08	↓	003	↓	↓	↓	↓	↓	↓	OK	–		CES

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Weston Environmental Metrics, Inc.
% Sol. / % Ash / % Vol. / % Mst.

od: Solids 2540 G, Std. Methods 17Ed. | Detection Limit: 0.10% | LIMS Batch: 96GTS652

Codes:
TARE = B
WET = C
DRY = A
MUFFLE = D

Calculations:
% Solids = (A - B) / (C - B) X 100
% Ash "A" = (D - B) / (C - B) X 100
% Ash "D" = (D - B) / (A - B) X 100
% Volatiles = (A - D) / (A - B) X 100
% Moisture = 100 - % Solids

INSTRUMENT CHECKS

Control Limits: 10 +/-0.0005 g | 103-105°C | 550 +/-50°C

Balance #	Gram Wt.	Reading	Oven #	Pre Temp\Post Temp	Furnace #	Furnace Temp
106	10.0	10.0001	225	105.0°C 103.0°C		

I have verified that the weights obtained by the balance interface software match the readings from the analytical balance listed above.

Analyst Signature: Della Tuyo Date: 12-5-96

Reviewer Signature: Lynn M. Biederman Date: 12/5/96

RFW	Dish	Tests	Result (%)	RPD	Weight Name	Weights (grams)	Date	Time	Analyst
96GTS652-MB1	23	I%SOL	0.0		TARE:	1.2546			
					WET:	11.6820	12/04/96	17:13:32	DJT
					DRY:	1.2569	12/05/96	10:45:07	DJT
9611G675-001	24	I%SOL	69.7		TARE:	1.2491			
					WET:	10.3126	12/04/96	17:15:56	DJT
					DRY:	7.5659	12/05/96	10:44:14	DJT
9611G675-002	25	I%SOL	77.6		TARE:	1.2526			
					WET:	11.6087	12/04/96	17:16:43	DJT
					DRY:	9.2864	12/05/96	10:43:41	DJT
9611G675-003	26	I%SOL	96.0		TARE:	1.2642			
					WET:	10.9664	12/04/96	17:18:03	DJT
					DRY:	10.5771	12/05/96	10:44:25	DJT
1G675-004	27	I%SOL	53.6		TARE:	1.2640			
					WET:	12.0169	12/04/96	17:20:29	DJT
					DRY:	7.0269	12/05/96	10:44:48	DJT

Weston Environmental Metrics, Inc.
% Sol. / % Ash / % Vol. / % Mst.

LIMS Batch: 96GTS652

RFW	Dish	Tests	Result (%)	RPD	Weight Name	Weights (grams)	Date	Time	Analyst
9611G675-005	28	I%SOL	71.6		TARE:	1.2622			
					WET:	10.6971	12/04/96	17:21:44	DJT
					DRY:	8.0161	12/05/96	10:43:23	DJT
9611G675-006	29	I%SOL	75.9		TARE:	1.2650			
					WET:	11.6024	12/04/96	17:22:36	DJT
					DRY:	9.1078	12/05/96	10:42:34	DJT
9611G675-007	30	I%SOL	92.4		TARE:	1.2629			
					WET:	10.5920	12/04/96	17:23:24	DJT
					DRY:	9.8786	12/05/96	10:42:24	DJT
9611G675-008	31	I%SOL	53.4		TARE:	1.2538			
					WET:	11.6039	12/04/96	17:24:31	DJT
					DRY:	6.7855	12/05/96	10:44:37	DJT
1G770-001	32	I%SOL	84.0		TARE:	1.2564			
					WET:	11.7927	12/04/96	17:25:35	DJT
					DRY:	10.1076	12/05/96	10:44:02	DJT
9611G789-001	33	I%SOL	55.6		TARE:	1.2560			
					WET:	10.7057	12/04/96	17:26:19	DJT
					DRY:	6.5086	12/05/96	10:43:52	DJT
9612G832-001	34	I%SOL	54.3		TARE:	1.2532			
					WET:	12.1494	12/04/96	17:27:13	DJT
					DRY:	7.1705	12/05/96	10:42:45	DJT
9612G833-001	35	I%SOL	55.9		TARE:	1.2549			
					WET:	11.5018	12/04/96	17:28:27	DJT
					DRY:	6.9827	12/05/96	10:42:57	DJT
9612G833-001R	36	I%SOLR	56.3	0.7	TARE:	1.2660			
					WET:	11.1208	12/04/96	17:29:24	DJT
					DRY:	6.8114	12/05/96	10:43:09	DJT

*** End of % Solids Report ***