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MEMORANDUM

DATE: March 4, 1998

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

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

SUBJECT: CLP Data Review

REF: TDF # 6-8169A, ESAT File # O-1886
ESAT Contract No. 68-D6-0005

Attached is the data review summary for Case # 25969
SDG # FFR76
Site DOYLE F J TRANSFORMERS

COMMENTS:

I. CONTRACTUAL ASSESSMENT OF THE DATA PACKAGE

A. The reviewer could not confirm two of three contractually non-compliant items mentioned in the CCS report but did confirm the following item.

> The laboratory extracted all Pest/PCB samples 15 days past the contractual holding time limit (OLM03.2, D-20/PEST, 8.4.1). The DDE result for sample FF-R87 and the AR1260 results for samples FF-R76DL, FF-R81, FF-R82, FF-R83DL, FF-R85, FF-R86, and FF-R87 were qualified.

B. The data package was 4 days late for the 35-day turnaround time requirement.

II. TECHNICAL USABILITY ASSESSMENT OF THE DATA PACKAGE

The total number of results reviewed was 1125 for this data package. Some results were qualified because of the following significant problems.

A. The technical holding time for extraction of Pest/PCB samples was excessive (27 days).

B. Coeluting aroclor peaks interfered with the detection and quantitation of several pesticides.

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

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. 25969 SITE DOYLE F J TRANSFORMERS
LABORATORY CLAYTN NO. OF SAMPLES 9
CONTRACT# 68-D5-0005 MATRIX soil
SDG# FFR76 REVIEWER (IF NOT ESD) ESAT
SOW# RAS OLM03.2 REVIEWER'S NAME Mike Fertitta and Yue-Mei Liu
ACCT# 8FAXJN27 SF# FAXU1D COMPLETION DATE March 4, 1998

SAMPLE NO.'s: FF-R76, FF-R85, FF-R92, FF-R81, FF-R86, FF-R82, FF-R87, FF-R83, FF-R91

DATA ASSESSMENT SUMMARY

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

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

ACTION ITEMS: The extraction of the Pest/PCB samples exceeded the contractual holding time limit. The data package arrived four days late.

AREA OF CONCERN: Technical holding time was excessive for the extraction of Pest/PCB samples. Acetone failed the technical %RSD and %D calibration criteria. Aroclor peak interferences obscured the detection or interfered with the quantitation of pesticides in five samples.

NOTABLE PERFORMANCE:

COMMENTS/CLARIFICATIONS
REGION VI CLP QA REVIEW

CASE 25969 **SDG** FFR76 **SITE** DOYLE F J TRANSFORMERS **LAB** CLAYTN

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

No.	Acceptable	Provisional	Unacceptable
VOA	6	3	
BNA	9		
PEST	2	7	

COMMENTS: The case consisted of 9 soil samples for complete RAS organics analysis. The OTR/COC Record designated sample FF-R83 as the laboratory QC sample and samples FF-R81 and FF-R82 as field duplicates. The data package had the following contractually non-compliant items.

- Pest/PCB samples were extracted 15 days past the contractual holding time limit.
- The data package arrived 4 days late for the 35-day turnaround time.

VOA/BNA: The laboratory analyzed the samples following the low level methods. TCL analytes reported above the CRQL's included acetone, bis(2-ethylhexyl)phthalate, and several polyaromatic hydrocarbons (PAH's) in five samples. However, except for sample FF-R83, the acetone and bis(2-ethylhexyl)phthalate concentrations were due to laboratory contamination.

Pest/PCB: High concentrations of AR1260 (up to 85,000 μg/Kg) required 8X to 100X dilution for samples FF-R76, FF-R81, FF-R82, and FF-R83. AR1260 was also reported above the quantitation limits in samples FF-R85, FF-R86, and FF-R87, and DDE was reported above the CRQL in sample FF-R87. The laboratory analyzed samples FF-R85 and FF-R86 at 8X dilution, but the dilution appeared to be for no obvious reasons.

Some results are provisional for three VOA and seven Pest/PCB samples because of problems with holding time, calibrations, compound identification, and compound quantitation. The technical usability of all reported sample results is indicated by ESAT's final data qualifiers in the Data Summary Table. An Evidence Audit was conducted for the Complete Sample Delivery Group File (CSF), and the results were recorded in the Evidence Inventory Checklist.

NOTE: THE FOLLOWING REVIEW NARRATIVE ADDRESSES BOTH CONTRACTUAL ISSUES (BASED ON THE STATEMENT OF WORK) AND TECHNICAL ISSUES (BASED ON THE NATIONAL FUNCTIONAL GUIDELINES). THE ASSESSMENT MADE FOR EACH QC PARAMETER IS SOLELY BASED ON THE TECHNICAL DATA USABILITY, WHICH MAY NOT NECESSARILY BE AFFECTED BY CONTRACTUAL PROBLEMS. THE ASSESSMENTS ARE DEFINED BELOW.

CASE 25969 SDG FFR76 SITE DOYLE F J TRANSFORMERS LAB CLAYTN

Acceptable = No results were qualified for any problem associated with this QC parameter.
Provisional = Some results were qualified because of problems associated with this QC parameter.
Unusable = All results are unusable because of major problems associated with this QC parameter.

1. Holding Times: Provisional. The laboratory met contractual holding time criteria for all VOA and BNA samples but extracted all of the Pest/PCB samples 15 days past the contractual holding time limit. Technical holding times have not yet been established for soil samples. However, per Region 6 guidelines, the reviewer qualified as estimated the DDE result for Pest/PCB sample FF-R87 and the AR1260 results for Pest/PCB samples FF-R76DL, FF-R81, FF-R82, FF-R83DL, FF-R85, FF-R86, and FF-R87 because the technical holding time of the samples was 27 days. The other Pest/PCB sample results did not have analyte concentrations above the quantitation limits or were flagged "U" because of interferences, so qualification of those results was not required.

The laboratory received all samples at slightly elevated cooler temperatures (6.8°C and 7.2°C). In the reviewer's opinion, the cooler temperatures had no effect on the sample results.

2. Tuning/Performance: Acceptable. The BFB and DFTPP analyses met GC/MS tuning criteria for the VOA and BNA fractions. Endosulfan I and α-chlordane coeluted on column DB-5MS while their retention time windows overlapped on column DB-608. The reviewer verified that these problems did not affect the identification of Pest/PCB target analytes above CRQL levels in the samples.

3. Calibrations: Provisional. Target analytes generally met contractual calibration criteria. The reviewer qualified the acetone concentrations as estimated in the following VOA samples because of the technical %RSD and %D deficiencies: FF-R76, FF-R81, and FF-R82. Methoxychlor and γ-BHC failed technical %RSD calibration criteria on one column, but the analytes were not detected above the quantitation limits in the Pest/PCB samples.

4. Blanks: Acceptable. All method, storage, and instrument blanks met contractual QC guidelines. The Pest/PCB blanks were free of contamination. The method and storage blanks for VOA and BNA analyses contained bromomethane, methylene chloride, acetone, carbon disulfide, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, 1,1,2,2-tetrachloroethane, and bis(2-ethylhexyl)phthalate below the contractual upper limits. Bromomethane, 4-methyl-2-pentanone, 2-hexanone, and 1,1,2,2-tetrachloroethane were not

4. Blanks (continued): detected in any samples. The storage blank contamination was most likely introduced during the analysis rather than storage.

The reviewer qualified the bis(2-ethylhexyl)phthalate concentration in sample FF-R83 with a "B" flag to indicate a high bias resulting from laboratory contamination. All other sample results "B"-flagged by the laboratory should be considered as undetected (U) because the sample concentrations were less than 5X/10X the associated blank concentrations.

5. System Monitoring Compounds (SMC's)/Surrogates: Acceptable. All SMC and most surrogate recoveries were within the QC limits. Matrix interferences and/or dilution caused outlying surrogate recoveries for several Pest/PCB samples. Result qualification is unnecessary. The reviewer verified that target analyte results were not affected by matrix interferences except for aroclor interferences which are discussed in Section 9 below.

6. Matrix Spike/Matrix Spike Duplicate: Acceptable. MS/MSD results met QC criteria for percent recovery and precision with a few exceptions for the BNA and Pest/PCB fractions. MS/MSD recoveries were high for 2,4-dinitrotoluene and dieldrin. Since these analytes were not detected in the unspiked BNA or Pest/PCB samples, sample result qualification was not necessary.

Coeluting aroclor interferences caused outlying MS/MSD results for the Pest/PCB fraction. AR1260 peaks were reported as endrin at such high concentrations in the native and spiked Pest/PCB samples that spiked concentrations of endrin were masked, causing zero or negative MS/MSD recoveries for that analyte. Zero percent MS/MSD recoveries were reported for DDT because AR1260 peaks obscured its detection. The reviewer addresses the effect of coeluting aroclor interferences on the detection of endrin and DDT together with other pesticides facing similar interferences in Section 9 of this report.

7. Other QC:

Field Duplicates: Acceptable. Field duplicate results were generally consistent.

8. Internal Standards (IS): Acceptable. The internal standard areas and retention times were within the QC limits for all of the VOA and BNA analyses.

9. Compound Identity (ID)/Quantitation: Provisional.

VOA/BNA: The TCL analytes reported above the CRQL included acetone in samples FF-R76, FF-R81, and FF-R82, and several PAH's

9. **Compound ID/Quantitation (continued):** and/or bis(2-ethylhexyl)phthalate in samples FF-R81, FF-R83, and FF-R85. Except for BNA sample FF-R83, the acetone and bis(2-ethylhexyl)-phthalate concentrations reported were due to laboratory contamination. All reported results met the compound identification and quantitation criteria.

Pest/PCB: High concentrations of AR1260 (up to 85,000 µg/Kg) required 8X to 100X dilution for samples FF-R76, FF-R81, FF-R82, and FF-R83. Analyses of both the 10X and 100X dilution were submitted for samples FF-R76 and FF-R83. The reviewer recommends using quantitation limits from the less diluted analysis for both samples except for those analytes whose detection was obscured by significant aroclor interferences. The results recommended for use are designated in the Data Summary Table. AR1260 was also reported above the quantitation limits in samples FF-R85, FF-R86, and FF-R87, and DDE was reported above the CRQL in sample FF-R87. The laboratory analyzed samples FF-R85 and FF-R86 at 8X dilution, but the reason for the dilution was unclear.

The presence of AR1260 was confirmed by GC/MS analysis for samples FF-R76, FF-R81, FF-R82, and FF-R83. Two pesticide results, endosulfan I in sample FF-R76 and DDE in sample FF-R86, had concentrations exceeding the CRQL's specified in the SOW, but dilution caused the concentrations to fall below the elevated sample quantitation limits.

AR1260 peaks interfered with the detection and identification of some pesticides on one or both columns. These interferences resulted in the sample result qualifications addressed below.

- The following analyte concentrations reported by the laboratory should be considered as raised quantitation limits ("U"):

  endrin and endrin ketone in samples FF-R76DL, FF-R81, FF-R82, and FF-R87;

  γ-chlordane in sample FF-R76;

  endrin and γ-chlordane in sample FF-R83; and

  endrin ketone in sample FF-R83DL.

- The following concentrations reported below the quantitation limits (QL) were raised to the QL's and flagged "U":

  endosulfan II, methoxychlor, and γ-chlordane in sample FF-R81;

9. Compound ID/Quantitation (continued):

dieldrin, endosulfan II, and γ-chlordane in sample FF-R82;

endosulfan II in sample FF-R83DL;

dieldrin, endrin, endrin ketone, methoxychlor, and γ-chlordane in sample FF-R85;

endrin, endrin ketone, and γ-chlordane in sample FF-R86;

dieldrin in sample FF-R87; and

endrin in sample FF-R92.

- The quantitation limits reported by the laboratory for DDT were qualified as estimated and biased low for samples FF-R76DL, FF-R81, FF-R82, FF-R83DL, and FF-R87.

The reviewer qualified as estimated and biased low the raised endrin ketone quantitation limits for samples FF-R76DL and FF-R83DL because of improper peak integration.

10. Performance/Completeness: Acceptable. The data package was complete with minor deficiencies. The laboratory was contacted concerning minor problems (see the Telephone and FAX Record Logs). A FAX (pages 1040A and 1040B) submitted in response to the telephone request was placed at the beginning of the data package. The original pages 1040A and 1040B are expected with the response to the final resubmission request and will replace the FAX pages when the resubmission is received.

11. Overall Assessment: Data are acceptable for six VOA, all BNA, and two Pest/PCB samples.

VOA The acetone results for the following samples are provisional because of problems with calibrations: FF-R76, FF-R81, and FF-R82.

PEST Some results are provisional for samples FF-R76/DL, FF-R81, FF-R82, FF-R83/DL, FF-R85, FF-R86, and FF-R87 because of problems with holding time, compound identification, and/or compound quantitation.

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.: 25969 SDG: FFR76 Reviewer: Yue-Mei Liu

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

VOLATILES	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG
EPA SAMPLE NUMBER:	FF-R76	FF-R81	FF-R82	FF-R83	FF-R85	FF-R86	FF-R87
Chloromethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Bromomethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Vinyl chloride	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Chloroethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Methylene chloride	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Acetone	74 UJ	86 UJ	82 UJ	13 U	14 U	15 U	15 U
Carbon disulfide	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,1-Dichloroethene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,1-Dichloroethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,2-Dichloroethene (total)	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Chloroform	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,2-Dichloroethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
2-Butanone	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,1,1-Trichloroethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Carbon tetrachloride	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Bromodichloromethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,2-Dichloropropane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
cis-1,3-Dichloropropene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Trichloroethene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Dibromochloromethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,1,2-Trichloroethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Benzene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
trans-1,3-Dichloropropene	12 U	16 U	16 J	13 U	14 U	15 U	15 U
Bromoform	12 U	16 U	16 U	13 U	14 U	15 U	15 U
4-Methyl-2-pentanone	12 U	16 U	16 U	13 U	14 U	15 U	15 U
2-Hexanone	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Tetrachloroethene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
1,1,2,2-Tetrachloroethane	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Toluene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Chlorobenzene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Ethylbenzene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Styrene	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Xylenes (total)	12 U	16 U	16 U	13 U	14 U	15 U	15 U
Sample wt (g):	5.0	5.0	5.0	5.0	5.0	5.0	5.0
%Moisture:	17	37	38	25	30	33	32
Dilution Factor:	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Level:	Low	Low	Low	Low	Low	Low	Low
Number of TIC's:	5	4	4	3	4	4	2

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.: 25969 SDG: FFR76 Reviewer: Yue-Mei Liu

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

VOLATILES	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG
EPA SAMPLE NUMBER:	FF-R91	FF-R92					
Chloromethane	14 U	15 U					
Bromomethane	14 U	15 U					
Vinyl chloride	14 U	15 U					
Chloroethane	14 U	15 U					
Methylene chloride	14 U	15 U					
Acetone	14 U	15 U					
Carbon disulfide	14 U	15 U					
1,1-Dichloroethene	14 U	15 U					
1,1-Dichloroethane	14 U	15 U					
1,2-Dichloroethene (total)	14 U	15 U					
Chloroform	14 U	15 U					
1,2-Dichloroethane	14 U	15 U					
2-Butanone	14 U	15 U					
1,1,1-Trichloroethane	14 U	15 U					
Carbon tetrachloride	14 U	15 U					
Bromodichloromethane	14 U	15 U					
1,2-Dichloropropane	14 U	15 U					
cis-1,3-Dichloropropene	14 U	15 U					
Trichloroethene	14 U	15 U					
Dibromochloromethane	14 U	15 U					
1,1,2-Trichloroethane	14 U	15 U					
Benzene	14 U	15 U					
trans-1,3-Dichloropropene	14 U	15 U					
Bromoform	14 U	15 U					
4-Methyl-2-pentanone	14 U	15 U					
2-Hexanone	14 U	15 U					
Tetrachloroethene	14 U	15 U					
1,1,2,2-Tetrachloroethane	14 U	15 U					
Toluene	14 U	15 U					
Chlorobenzene	14 U	15 U					
Ethylbenzene	14 U	15 U					
Styrene	14 U	15 U					
Xylenes (total)	14 U	15 U					
Sample wt (g):	5.0	5.0					
%Moisture:	26	34					
Dilution Factor:	1.0	1.0					
Level:	Low	Low					
Number of TIC's:	4	3					

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.: 25969 SDG: FFR76 Reviewer: Yue-Mei Liu

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

SEMIVOLATILES	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG
EPA SAMPLE NUMBER:	FF-R76	FF-R81	FF-R82	FF-R83	FF-R85	FF-R86	FF-R87
Phenol	390 U	31 J	49 J	46 J	27 J	78 J	500 U
bis(2-Chloroethyl)ether	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2-Chlorophenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
1,3-Dichlorobenzene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
1,4-Dichlorobenzene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
1,2-Dichlorobenzene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2-Methylphenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2,2'-Oxybis(1-chloropropane)	390 U	520 U	510 U	520 U	490 U	550 U	500 U
4-Methylphenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
N-Nitroso-di-n-propylamine	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Hexachloroethane	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Nitrobenzene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Isophorone	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2-Nitrophenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2,4-Dimethylphenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
bis(2-Chloroethoxy)methane	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2,4-Dichlorophenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
1,2,4-Trichlorobenzene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Naphthalene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
4-Chloroaniline	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Hexachlorobutadiene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
4-Chloro-3-methylphenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2-Methylnaphthalene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Hexachlorocyclopentadiene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2,4,6-Trichlorophenol	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2,4,5-Trichlorophenol	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
2-Chloronaphthalene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2-Nitroaniline	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
Dimethylphthalate	390 U	520 U	510 U	520 U	490 U	60 J	500 U
Acenaphthylene	390 U	520 U	510 U	27 J	490 U	550 U	500 U
2,6-Dinitrotoluene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
3-Nitroaniline	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
Acenaphthene	390 U	520 U	510 U	520 U	44 J	550 U	500 U
2,4-Dinitrophenol	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
4-Nitrophenol	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
Dibenzofuran	390 U	520 U	510 U	520 U	490 U	550 U	500 U
2,4-Dinitrotoluene	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Diethylphthalate	21 J	33 J	27 J	32 J	40 J	550 U	500 U
4-Chlorophenyl-phenylether	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Fluorene	390 U	520 U	510 U	520 U	36 J	550 U	500 U
4-Nitroaniline	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
4,6-Dinitro-2-methylphenol	980 U	1300 U	1300 U	1300 U	1200 U	1400 U	1200 U
N-Nitrosodiphenylamine	390 U	520 U	510 U	520 U	490 U	550 U	500 U
4-Bromophenyl-phenylether	390 U	520 U	510 U	520 U	490 U	550 U	500 U
Hexachlorobenzene	390 U	520 U	510 U	520 U	490 U	550 U	500 U

ORGANIC DATA SUMMARY

Case No.: 25969 SDG: FFR76 Reviewer: Yue-Mei Liu

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

SEMIVOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	FF-R76		FF-R81		FF-R82		FF-R83		FF-R85		FF-R86		FF-R87	
Pentachlorophenol	980	U	1300	U	1300	U	1300	U	1200	U	1400	U	1200	U
Phenanthrene	27	J	290	J	170	J	420	J	640		100	J	500	U
Anthracene	390	U	44	J	34	J	77	J	80	J	550	U	500	U
Carbazole	390	U	50	J	37	J	93	J	98	J	550	U	500	U
Di-n-butylphthalate	20	J	41	J	30	J	150	J	28	J	33	J	500	U
Fluoranthene	390	U	620		470	J	1200		1500		220	J	500	U
Pyrene	390	U	510	J	410	J	1000		1600		210	J	500	U
Butylbenzylphthalate	390	U	29	J	510	U	67	J	490	U	550	U	500	U
3,3'-Dichlorobenzidine	390	U	520	U	510	U	520	U	490	U	550	U	500	U
Benzo(a)anthracene	390	U	220	J	190	J	580		640		110	J	500	U
Chrysene	390	U	470	J	410	J	1100		1000		170	J	500	U
bis(2-Ethylhexyl)phthalate	390	U	600	U	510	U	710	B	490	U	550	U	500	U
Di-n-octylphthalate	390	U	520	U	510	U	520	U	26	J	36	J	500	U
Benzo(b)fluoranthene	390	U	380	J	340	J	1400		810		140	J	500	U
Benzo(k)fluoranthene	20	J	300	J	250	J	1000		1100		120	J	500	U
Benzo(a)pyrene	390	U	310	J	250	J	840		840		130	J	500	U
Indeno(1,2,3-cd)pyrene	390	U	360	J	320	J	1400		1100		130	J	500	U
Dibenz(a,h)anthracene	390	U	520	U	84	J	520	U	310	J	41	J	500	U
Benzo(g,h,i)perylene	390	U	420	J	320	J	1500		1500		180	J	500	U
Sample wt (g):	30.0		30.0		30.0		30.0		30.0		30.0		30.0	
%Moisture:	15		36		35		36		33		40		34	
Dilution Factor:	1.0		1.0		1.0		1.0		1.0		1.0		1.0	
Level:	Low		Low		Low		Low		Low		Low		Low	
Number of TIC's:	30		30		30		30		30		30		30	

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.: 25969 SDG: FFR76 Reviewer: Yue-Mei Liu

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

SEMIVOLATILES	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG
EPA SAMPLE NUMBER:	FF-R91	FF-R92					
Phenol	460 U	500 U					
bis(2-Chloroethyl)ether	460 U	500 U					
2-Chlorophenol	460 U	500 U					
1,3-Dichlorobenzene	460 U	500 U					
1,4-Dichlorobenzene	460 U	500 U					
1,2-Dichlorobenzene	460 U	500 U					
2-Methylphenol	460 U	500 U					
2,2'-Oxybis(1-chloropropane)	460 U	500 U					
4-Methylphenol	460 U	500 U					
N-Nitroso-di-n-propylamine	460 U	500 U					
Hexachloroethane	460 U	500 U					
Nitrobenzene	460 U	500 U					
Isophorone	460 U	500 U					
2-Nitrophenol	460 U	500 U					
2,4-Dimethylphenol	460 U	500 U					
bis(2-Chloroethoxy)methane	460 U	500 U					
2,4-Dichlorophenol	460 U	500 U					
1,2,4-Trichlorobenzene	460 U	500 U					
Naphthalene	460 U	500 U					
4-Chloroaniline	460 U	500 U					
Hexachlorobutadiene	460 U	500 U					
4-Chloro-3-methylphenol	460 U	500 U					
2-Methylnaphthalene	460 U	500 U					
Hexachlorocyclopentadiene	460 U	500 U					
2,4,6-Trichlorophenol	460 U	500 U					
2,4,5-Trichlorophenol	1200 U	1200 U					
2-Chloronaphthalene	460 U	500 U					
2-Nitroaniline	1200 U	1200 U					
Dimethylphthalate	460 U	500 U					
Acenaphthylene	460 U	500 U					
2,6-Dinitrotoluene	460 U	500 U					
3-Nitroaniline	1200 U	1200 U					
Acenaphthene	460 U	500 U					
2,4-Dinitrophenol	1200 U	1200 U					
4-Nitrophenol	1200 U	1200 U					
Dibenzofuran	460 U	500 U					
2,4-Dinitrotoluene	460 U	500 U					
Diethylphthalate	460 U	41 J					
4-Chlorophenyl-phenylether	460 U	500 U					
Fluorene	460 U	500 U					
4-Nitroaniline	1200 U	1200 U					
4,6-Dinitro-2-methylphenol	1200 U	1200 U					
N-Nitrosodiphenylamine	460 U	500 U					
4-Bromophenyl-phenylether	460 U	500 U					
Hexachlorobenzene	460 U	500 U					

ORGANIC DATA SUMMARY

Case No.: 25969 SDG: FFR76 Reviewer: Yue-Mei Liu

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

SEMIVOLATILES		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	FF-R91		FF-R92											
Pentachlorophenol	1200	U	1200	U										
Phenanthrene	460	U	200	J										
Anthracene	460	U	37	J										
Carbazole	460	U	500	U										
Di-n-butylphthalate	460	U	73	J										
Fluoranthene	460	U	120	J										
Pyrene	460	U	170	J										
Butylbenzylphthalate	460	U	500	U										
3,3'-Dichlorobenzidine	460	U	500	U										
Benzo(a)anthracene	460	U	59	J										
Chrysene	460	U	69	J										
bis(2-Ethylhexyl)phthalate	460	U	500	U										
Di-n-octylphthalate	460	U	29	J										
Benzo(b)fluoranthene	460	U	38	J										
Benzo(k)fluoranthene	460	U	47	J										
Benzo(a)pyrene	460	U	51	J										
Indeno(1,2,3-cd)pyrene	460	U	30	J										
Dibenz(a,h)anthracene	460	U	500	U										
Benzo(g,h,i)perylene	460	U	42	J										
Sample wt (g):	30.0		30.0											
%Moisture:	29		34											
Dilution Factor:	1.0		1.0											
Level:	Low		Low											
Number of TIC's:	30		30											

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.: 25969 SDG: FFR76 Reviewer: Mike Fertitta

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

PESTICIDES/PCBs		FLAG		FLAG		FLAG		FLAG		FLAG		FLAG
EPA SAMPLE NUMBER:	FF-R76		FF-R76DL		FF-R81		FF-R82		FF-R83		FF-R83DL		FF-R85	
alpha-BHC	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
beta-BHC	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
delta-BHC	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
gamma-BHC (lindane)	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
Heptachlor	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
Aldrin	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
Heptachlor epoxide	20	U	200	U*	21	U	21	U	26	U	260	U*	20	U
Endosulfan I	9.4	J	200	U*	21	U	21	U	26	U	260	U*	20	U
Dieldrin	39	U	390	U*	41	U	41	U	52	U	520	U*	39	U
4,4'-DDE	39	U	390	U*	41	U	41	U	52	U	520	U*	39	U
Endrin	1200	*	4500	U	200	U	190	U	1200	U	2300	*	39	U
Endosulfan II	130	*	390	U	41	U	41	U	52	U*	520	U	39	U
4,4'-DDD	39	U*	390	U	41	U	41	U	2.4	J	520	U*	39	U
Endosulfan sulfate	39	U*	390	U	41	U	41	U	52	U*	520	U	39	U
4,4'-DDT	39	U*	390	UJv	41	UJv	41	UJv	52	U*	520	UJv	39	U
Methoxychlor	200	U*	2000	U	210	U	210	U	260	U*	2600	U	200	U
Endrin ketone	280	*	1700	UJv	68	U	69	U	560	*	800	UJv	39	U
Endrin aldehyde	39	U*	390	U	41	U	41	U	52	U*	520	U	39	U
alpha-Chlordane	20	U	3.6	*	21	U	21	U	26	U	260	U*	20	U
gamma-Chlordane	100	U	130	*	21	U	21	U	47	U	59	*	20	U
Toxaphene	2000	U	20000	U*	2100	U	2100	U	2600	U	26000	U*	2000	U
Aroclor-1016	390	U	3900	U*	410	U	410	U	520	U	5200	U*	390	U
Aroclor-1221	790	U	7900	U*	840	U	820	U	1000	U	10000	U*	800	U
Aroclor-1232	390	U	3900	U*	410	U	410	U	520	U	5200	U*	390	U
Aroclor-1242	390	U	3900	U*	410	U	410	U	520	U	5200	U*	390	U
Aroclor-1248	390	U	3900	U*	410	U	410	U	520	U	5200	U*	390	U
Aroclor-1254	390	U	3900	U*	410	U	410	U	520	U	5200	U*	390	U
Aroclor-1260	18000	*	85000	J	2800	J	3000	J	21000	*	35000	J	420	J
Sample wt (g):	30.0		30.0		30.0		30.0		30.0		30.0		30.0	
%Moisture:	15		15		36		35		36		36		33	
Dilution Factor:	10.0		100.0		8.0		8.0		10.0		100.0		8.0	

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.: 25969 SDG: FFR76 Reviewer: Mike Fertitta

Laboratory: CLAYTN Matrix: SOIL Units: ug/Kg

PESTICIDES/PCBs	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG	FLAG
EPA SAMPLE NUMBER:	FF-R86 (50-08)	FF-R87	FF-R91	FF-R92			
alpha-BHC	23 U	2.6 U	2.4 U	2.6 U			
beta-BHC	23 U	2.6 U	2.4 U	2.6 U			
delta-BHC	23 U	2.6 U	2.4 U	2.6 U			
gamma-BHC (lindane)	23 U	2.6 U	2.4 U	2.6 U			
Heptachlor	23 U	2.6 U	2.4 U	2.6 U			
Aldrin	23 U	2.6 U	2.4 U	2.6 U			
Heptachlor epoxide	23 U	2.6 U	2.4 U	2.6 U			
Endosulfan I	23 U	2.6 U	2.4 U	2.6 U			
Dieldrin	44 U	5.0 U	4.6 U	5.0 U			
4,4'-DDE	12 J	18 J	4.6 U	1.6 J			
Endrin	44 U	20 U	4.6 U	5.0 U			
Endosulfan II	44 U	5.0 U	4.6 U	5.0 U			
4,4'-DDD	44 U	5.0 U	4.6 U	5.0 U			
Endosulfan sulfate	44 U	5.0 U	4.6 U	5.0 U			
4,4'-DDT	44 U	5.0 UJv	4.6 U	5.0 U			
Methoxychlor	230 U	26 U	24 U	26 U			
Endrin ketone	44 U	6.9 U	4.6 U	5.0 U			
Endrin aldehyde	44 U	5.0 U	4.6 U	5.0 U			
alpha-Chlordane	23 U	2.6 U	2.4 U	2.6 U			
gamma-Chlordane	23 U	2.6 U	2.4 U	2.6 U			
Toxaphene	2300 U	260 U	240 U	260 U			
Aroclor-1016	440 U	50 U	46 U	50 U			
Aroclor-1221	890 U	100 U	94 U	100 U			
Aroclor-1232	440 U	50 U	46 U	50 U			
Aroclor-1242	440 U	50 U	46 U	50 U			
Aroclor-1248	440 U	50 U	46 U	50 U			
Aroclor-1254	440 U	50 U	46 U	50 U			
Aroclor-1260	730 J	340 J	46 U	33 J			
Sample wt (g):	30.0	30.0	30.0	30.0			
%Moisture:	40	34	29	34			
Dilution Factor:	8.0	1.0	1.0	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.

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No. 25969 SDG No. FFR76 SDG Nos. To Follow _____ SAS No. _____ Date Rec 02-23-98

EPA Lab ID: CLAYTN

Lab Location: 22345 Roethal Drive, Nori. MI 48375

Region: 6 Audit No.: 25969/FFR76

Re_Submitted CSF? Yes _____ No X

Box No(s): 1

COMMENTS:

3 Page number 341 was used twice and page number 342 was missing. The reviewer changed the second page 341 to 342..

8,13 The airbill number listed in the SDG Narrative did not agree with the number recorded on the Form DC-1 or the original airbill submitted. The laboratory was contacted for resolution.

Over for additional comments.

ORIGINALS	YES	NO	N/A
CUSTODY SEALS			
1. Present on package?	X		
2. Intact upon receipt?	X		
FORM DC-2			
3. Numbering scheme accurate?	X		
4. Are enclosed documents listed?	X		
5. Are listed documents enclosed?	X		
FORM DC-1			
6. Present?	X		
7. Complete?	X		
8. Accurate?	X		
CHAIN-OF-CUSTODY RECORD(s)			
9. Signed?	X		
10. Dated?	X		
TRAFFIC REPORT(s) PACKING LIST(s)			
11. Signed?	X		
12. Dated?	X		
AIRBILLS/AIRBILL STICKER			
13. Present?	X		
14. Signed?	X		
15. Dated?	X		
SAMPLE TAGS			
16. Does DC-1 list tags as being included?	X		
17. Present?	X		
OTHER DOCUMENTS			
18. Complete?	X		
19. Legible?	X		
20. Original?		X	
20a.If "NO", does the copy indicate where original documents are located?		X	

Audited by: _____ Yue-Mei Liu/ESAT Data Reviewer Date 03-04-98

Audited by: _____ Date _____

Audited by: _____ Date _____

Signature Printed Name/Title

TO BE COMPLETED BY CEAT

Date Recvd by CEAT: _____ Date Entered: _____ Date Reviewed: _____

Entered by: _____ _____

Reviewed by: _____ _____

Signature Printed Name/Title

In Reference To
Case 25969 SDG FFR76
ESAT File No. O-1886

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call:	March 2, 1998
Laboratory Name:	CLAYTN
Lab Contact:	Kelly Kolb
Region:	6
Regional Contact:	Michael J. Fertitta - ESAT
Call initiated by:	Laboratory X Region

In reference to data for the Pest/PCB fraction:

Summary of Questions/Issues:

The laboratory did not submit GC/MS confirmation documents for AR1260 in sample FF-R81, although the reviewer calculated sufficient concentration.

Resolution:

Ms. Kolb will ask the Pest/PCB analyst to verify whether confirmation was performed and will call back.

Michael J. Fertitta — Signature

03/02/98 — Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) ESAT Copy

In Reference To
Case 25969 SDG FFR76
ESAT File No. O-1886
Page 1 of 2 Pages

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

FAX Record Log

Date of FAX:	March 5, 1998
Laboratory Name:	CLAYTN
Lab Contact:	Kelly Kolb
Region:	6
Regional Contact:	Mahmoud El-Feky - EPA
ESAT Reviewer:	Michael J. Fertitta - ESAT
FAX initiated by:	Laboratory X Region

In reference to data for the following fractions:

CSF Deliverables Pest/PCB

Summary of Questions/Issues:

A. CSF Deliverables

The airbill number mentioned in the SDG narrative (#2423938635, page 1a) does not agree with the number listed on the original airbill (#2423938436, page 1735) or the number on Forms DC-1 (pages 1749-1750). Please clarify.

B. Pest/PCB

1. As discussed by phone, GC/MS confirmation documents were not submitted for AR1260 in sample FF-R81, although the reviewer calculated sufficient concentration. Thank you for your prompt FAX containing the documents in question. At this time, please submit these original pages 1040A and 1040B, but please also resubmit the Form 1 for sample FF-R81 (page 1029) with a "C" flag added to the AR1260 result.

2. Dilutions did not seem to be necessary for samples FF-R85 and FF-R86 based on the quantitation reports. Please explain why these two samples were diluted.

NOTE: Any laboratory resubmission should be submitted either as an addendum to the original CSF with a revised Form DC-2 or submitted as a new CSF with a new Form DC-2 (OLM03.0, p. B-22), except those containing only replacement pages. Custody seals are required for all CSF resubmission shipments.

Please respond to the above items. Region 6 resubmissions may be included with CCS response or sent separately within 7 days to:

Mr. Mahmoud El-Feky
U.S. EPA Region 6 Laboratory
10625 Fallstone Road
Houston, TX 77099

If you have any questions, please contact me at (281) 983-2128.

M. Elfeky
Signature

03/05/98
Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) ESAT Copy

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-001

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9053

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 17 Date Analyzed: 1/19/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

(7)

EPA United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record
(For Organic CLP Analysis)

SAS No. (if applicable):

Case No.: 25969

1. Project Code	Account Code	2. Region No.	Sampling Co.	4. Date Shipped	Carrier
		6	TNRCC	01/14/98	Airborne Express

Regional Information:

Sampler (Name): Ray Newby

Airbill Number: 2423938635

Non-Superfund Program:

Sampler Signature: [signature]

5. Ship To: Clayton Environmental Cons, 22345 Roethal Drive, Novi, MI 48375

ATTN: Kelly Kolb 810-344-1770

Site Name: Frank J. Doyle Transformer

City, State: Leonard, TX

Site Spill ID:

3. Purpose*: Lead: [X] SF [ ] PRP [ ] ST [ ] FED; Early Action: [ ] CLEM [ ] PA [ ] REM [ ] RI [X] SI [ ] ESI; Long-Term Action: [ ] FS [ ] RD [ ] RA [ ] O&M [ ] NPLD

6. Matrix (Enter in Column A): 1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)

7. Preservative (Enter in Column D): 1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D) N. Not preserved

CLP Sample Numbers (from labels)	A Matrix (from Box 6) Other:	B Conc.: Low Med High	C Sample Type: Comp./Grab	D Preservative (from Box 7) Other:	E RAS Analysis: VOA	BNA	Pest/PCB	High only ARO/TOX	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/Year/Time Sample Collection	I Corresponding CLP Inorganic Sample No.	J Sampler Initials	K Field QC Qualifier (B = Blank, S = Spike, D = Duplicate, R = Rinsate, PE = Perform. Eval., — = Not a QC Sample)
FFR91	5	low	grab	5	X	X	X		6-164745-748	SO-01	01/13/98 13:30	MFHM13	RN	
FFR92	5	low	grab	5	X	X	X		6-164751-754	SO-02	01/13/98 13:45	MFHM14	RN	
FFR87	5	low	grab	5	X	X	X		6-164757-760	SO-03	01/13/98 14:15	MFHM09	RN	
FFR85	5	low	grab	5	X	X	X		6-164781-784	SO-07	01/13/98 15:00	MFHM07	RN	
FFR86	5	low	grab	5	X	X	X		6-164787-790	SO-08	01/13/98 15:15	MFHM08	RN	
FFR81	5	low	grab	5	X	X	X		6-164793-796	SO-09	01/13/98 15:30	MFHM03	RN	
FFR82	5	low	grab	5	X	X	X		6-162800-803	SO-10	01/13/98 15:35	MFHM04	RN	D
FFR83	5	low	grab	5	X	X	X		6-162806-809	SO-11	01/13/98 16:10	MFHM05	RN	
FFR76	5	low	grab	5	X	X	X		6-162836-839	SO-16	01/13/98 16:30	MFHL98	RN	

Shipment for Case Complete? (Y/N)	Page	Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)
No	1 of 1	FFR83		

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Abigail Power	01/14/97 19:30	Airborne # 2423938436 AP 01/14/98			
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 Is custody seal intact? Y/N/none	

A21-012-3 REV. 3/93

DISTRIBUTION: Blue - Region Copy; White - Lab Copy for Return to Region; Pink - SMO Copy; Yellow - Lab Copy for Return to SMO

EPA Form 9110-2

SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

361684

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR81

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-002

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9054

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 37 Date Analyzed: 1/19/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16.	U
74-83-9	Bromomethane	16.	U
75-01-4	Vinyl Chloride	16.	U
75-00-3	Chloroethane	16.	U
75-09-2	Methylene Chloride	3.	JB
67-64-1	Acetone	86.	B
75-15-0	Carbon Disulfide	16.	U
75-35-4	1,1-Dichloroethene	16.	U
75-34-3	1,1-Dichloroethane	16.	U
540-59-0	1,2-Dichloroethene (total)	16.	U
67-66-3	Chloroform	16.	U
107-06-2	1,2-Dichloroethane	16.	U
78-93-3	2-Butanone	7.	JB
71-55-6	1,1,1-Trichloroethane	16.	U
56-23-5	Carbon Tetrachloride	16.	U
75-27-4	Bromodichloromethane	16.	U
78-87-5	1,2-Dichloropropane	16.	U
10061-01-5	cis-1,3-Dichloropropene	16.	U
79-01-6	Trichloroethene	16.	U
124-48-1	Dibromochloromethane	16.	U
79-00-5	1,1,2-Trichloroethane	16.	U
71-43-2	Benzene	16.	U
10061-02-6	trans-1,3-Dichloropropene	16.	U
75-25-2	Bromoform	16.	U
108-10-1	4-Methyl-2-Pentanone	16.	U
591-78-6	2-Hexanone	16.	U
127-18-4	Tetrachloroethene	16.	U
79-34-5	1,1,2,2-Tetrachloroethane	16.	U
108-88-3	Toluene	16.	U
108-90-7	Chlorobenzene	16.	U
100-41-4	Ethylbenzene	16.	U
100-42-5	Styrene	16.	U
1330-20-7	Xylene (total)	16.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR82

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-003

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9055

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 38 Date Analyzed: 1/19/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	16.	U
74-83-9	Bromomethane	16.	U
75-01-4	Vinyl Chloride	16.	U
75-00-3	Chloroethane	16.	U
75-09-2	Methylene Chloride	4.	JB
67-64-1	Acetone	82.	B
75-15-0	Carbon Disulfide	16.	U
75-35-4	1,1-Dichloroethene	16.	U
75-34-3	1,1-Dichloroethane	16.	U
540-59-0	1,2-Dichloroethene (total)	16.	U
67-66-3	Chloroform	16.	U
107-06-2	1,2-Dichloroethane	16.	U
78-93-3	2-Butanone	9.	JB
71-55-6	1,1,1-Trichloroethane	16.	U
56-23-5	Carbon Tetrachloride	16.	U
75-27-4	Bromodichloromethane	16.	U
78-87-5	1,2-Dichloropropane	16.	U
10061-01-5	cis-1,3-Dichloropropene	16.	U
79-01-6	Trichloroethene	16.	U
124-48-1	Dibromochloromethane	16.	U
79-00-5	1,1,2-Trichloroethane	16.	U
71-43-2	Benzene	16.	U
10061-02-6	trans-1,3-Dichloropropene	16.	U
75-25-2	Bromoform	16.	U
108-10-1	4-Methyl-2-Pentanone	16.	U
591-78-6	2-Hexanone	16.	U
127-18-4	Tetrachloroethene	16.	U
79-34-5	1,1,2,2-Tetrachloroethane	16.	U
108-88-3	Toluene	16.	U
108-90-7	Chlorobenzene	16.	U
100-41-4	Ethylbenzene	16.	U
100-42-5	Styrene	16.	U
1330-20-7	Xylene (total)	16.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9144

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 25 Date Analyzed: 1/22/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	7.	JB
67-64-1	Acetone	7.	JB
75-15-0	Carbon Disulfide	13.	U
75-35-4	1,1-Dichloroethene	13.	U
75-34-3	1,1-Dichloroethane	13.	U
540-59-0	1,2-Dichloroethene (total)	13.	U
67-66-3	Chloroform	13.	U
107-06-2	1,2-Dichloroethane	13.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	13.	U
56-23-5	Carbon Tetrachloride	13.	U
75-27-4	Bromodichloromethane	13.	U
78-87-5	1,2-Dichloropropane	13.	U
10061-01-5	cis-1,3-Dichloropropene	13.	U
79-01-6	Trichloroethene	13.	U
124-48-1	Dibromochloromethane	13.	U
79-00-5	1,1,2-Trichloroethane	13.	U
71-43-2	Benzene	13.	U
10061-02-6	trans-1,3-Dichloropropene	13.	U
75-25-2	Bromoform	13.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	13.	U
79-34-5	1,1,2,2-Tetrachloroethane	13.	U
108-88-3	Toluene	13.	U
108-90-7	Chlorobenzene	13.	U
100-41-4	Ethylbenzene	13.	U
100-42-5	Styrene	13.	U
1330-20-7	Xylene (total)	13.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR85

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-005

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9042

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 30 Date Analyzed: 1/16/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	4.	JB
67-64-1	Acetone	✓ 4.	JB
75-15-0	Carbon Disulfide	14.	U
75-35-4	1,1-Dichloroethene	14.	U
75-34-3	1,1-Dichloroethane	14.	U
540-59-0	1,2-Dichloroethene (total)	14.	U
67-66-3	Chloroform	14.	U
107-06-2	1,2-Dichloroethane	14.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	14.	U
56-23-5	Carbon Tetrachloride	14.	U
75-27-4	Bromodichloromethane	14.	U
78-87-5	1,2-Dichloropropane	14.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U
79-01-6	Trichloroethene	14.	U
124-48-1	Dibromochloromethane	14.	U
79-00-5	1,1,2-Trichloroethane	14.	U
71-43-2	Benzene	14.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U
75-25-2	Bromoform	14.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U
108-88-3	Toluene	14.	U
108-90-7	Chlorobenzene	14.	U
100-41-4	Ethylbenzene	14.	U
100-42-5	Styrene	14.	U
1330-20-7	Xylene (total)	14.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR86

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-006

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9043

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 33 Date Analyzed: 1/16/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR87

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-007

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9044

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 32 Date Analyzed: 1/16/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR91

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-008

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9045

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 26 Date Analyzed: 1/17/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	14.	U
74-83-9	Bromomethane	14.	U
75-01-4	Vinyl Chloride	14.	U
75-00-3	Chloroethane	14.	U
75-09-2	Methylene Chloride	2.	JB
67-64-1	Acetone	6.	JB
75-15-0	Carbon Disulfide	14.	U
75-35-4	1,1-Dichloroethene	14.	U
75-34-3	1,1-Dichloroethane	14.	U
540-59-0	1,2-Dichloroethene (total)	14.	U
67-66-3	Chloroform	14.	U
107-06-2	1,2-Dichloroethane	14.	U
78-93-3	2-Butanone	14.	U
71-55-6	1,1,1-Trichloroethane	14.	U
56-23-5	Carbon Tetrachloride	14.	U
75-27-4	Bromodichloromethane	14.	U
78-87-5	1,2-Dichloropropane	14.	U
10061-01-5	cis-1,3-Dichloropropene	14.	U
79-01-6	Trichloroethene	14.	U
124-48-1	Dibromochloromethane	14.	U
79-00-5	1,1,2-Trichloroethane	14.	U
71-43-2	Benzene	14.	U
10061-02-6	trans-1,3-Dichloropropene	14.	U
75-25-2	Bromoform	14.	U
108-10-1	4-Methyl-2-Pentanone	14.	U
591-78-6	2-Hexanone	14.	U
127-18-4	Tetrachloroethene	14.	U
79-34-5	1,1,2,2-Tetrachloroethane	14.	U
108-88-3	Toluene	14.	U
108-90-7	Chlorobenzene	14.	U
100-41-4	Ethylbenzene	14.	U
100-42-5	Styrene	14.	U
1330-20-7	Xylene (total)	14.	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR92

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-009

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9046

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 34 Date Analyzed: 1/17/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-001

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1951

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 15 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390.	U
111-44-4	bis(2-Chloroethyl)ether	390.	U
95-57-8	2-Chlorophenol	390.	U
541-73-1	1,3-Dichlorobenzene	390.	U
106-46-7	1,4-Dichlorobenzene	390.	U
95-50-1	1,2-Dichlorobenzene	390.	U
95-48-7	2-Methylphenol	390.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	390.	U
106-44-5	4-Methylphenol	390.	U
621-64-7	N-Nitroso-di-n-propylamine	390.	U
67-72-1	Hexachloroethane	390.	U
98-95-3	Nitrobenzene	390.	U
78-59-1	Isophorone	390.	U
88-75-5	2-Nitrophenol	390.	U
105-67-9	2,4-Dimethylphenol	390.	U
111-91-1	bis(2-Chloroethoxy)methane	390.	U
120-83-2	2,4-Dichlorophenol	390.	U
120-82-1	1,2,4-Trichlorobenzene	390.	U
91-20-3	Naphthalene	390.	U
106-47-8	4-Chloroaniline	390.	U
87-68-3	Hexachlorobutadiene	390.	U
59-50-7	4-Chloro-3-methylphenol	390.	U
91-57-6	2-Methylnaphthalene	390.	U
77-47-4	Hexachlorocyclopentadiene	390.	U
88-06-2	2,4,6-Trichlorophenol	390.	U
95-95-4	2,4,5-Trichlorophenol	980.	U
91-58-7	2-Chloronaphthalene	390.	U
88-74-4	2-Nitroaniline	980.	U
131-11-3	Dimethylphthalate	390.	U
208-96-8	Acenaphthylene	390.	U
606-20-2	2,6-Dinitrotoluene	390.	U
99-09-2	3-Nitroaniline	980.	U
83-32-9	Acenaphthene	390.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-001

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1951

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 15 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	980.	U
100-02-7	4-Nitrophenol	980.	U
132-64-9	Dibenzofuran	390.	U
121-14-2	2,4-Dinitrotoluene	390.	U
84-66-2	Diethylphthalate	21.	J
7005-72-3	4-Chlorophenyl-phenylether	390.	U
86-73-7	Fluorene	390.	U
100-01-6	4-Nitroaniline	980.	U
534-52-1	4,6-Dinitro-2-methylphenol	980.	U
86-30-6	N-Nitrosodiphenylamine (1)	390.	U
101-55-3	4-Bromophenyl-phenylether	390.	U
118-74-1	Hexachlorobenzene	390.	U
87-86-5	Pentachlorophenol	980.	U
85-01-8	Phenanthrene	27.	J
120-12-7	Anthracene	390.	U
86-74-8	Carbazole	390.	U
84-74-2	Di-n-butylphthalate	20.	J
206-44-0	Fluoranthene	390.	U
129-00-0	Pyrene	390.	U
85-68-7	Butylbenzylphthalate	390.	U
91-94-1	3,3'-Dichlorobenzidine	390.	U
56-55-3	Benzo(a)anthracene	390.	U
218-01-9	Chrysene	390.	U
117-81-7	bis(2-Ethylhexyl)phthalate	√ 53.	JB
117-84-0	Di-n-octylphthalate	390.	U
205-99-2	Benzo(b)fluoranthene	390.	U
207-08-9	Benzo(k)fluoranthene	20.	J
50-32-8	Benzo(a)pyrene	390.	U
193-39-5	Indeno(1,2,3-cd)pyrene	390.	U
53-70-3	Dibenz(a,h)anthracene	390.	U
191-24-2	Benzo(g,h,i)perylene	390.	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR81

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-002

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1952

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	31.	J
111-44-4	bis(2-Chloroethyl)ether	520.	U
95-57-8	2-Chlorophenol	520.	U
541-73-1	1,3-Dichlorobenzene	520.	U
106-46-7	1,4-Dichlorobenzene	520.	U
95-50-1	1,2-Dichlorobenzene	520.	U
95-48-7	2-Methylphenol	520.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520.	U
106-44-5	4-Methylphenol	520.	U
621-64-7	N-Nitroso-di-n-propylamine	520.	U
67-72-1	Hexachloroethane	520.	U
98-95-3	Nitrobenzene	520.	U
78-59-1	Isophorone	520.	U
88-75-5	2-Nitrophenol	520.	U
105-67-9	2,4-Dimethylphenol	520.	U
111-91-1	bis(2-Chloroethoxy)methane	520.	U
120-83-2	2,4-Dichlorophenol	520.	U
120-82-1	1,2,4-Trichlorobenzene	520.	U
91-20-3	Naphthalene	520.	U
106-47-8	4-Chloroaniline	520.	U
87-68-3	Hexachlorobutadiene	520.	U
59-50-7	4-Chloro-3-methylphenol	520.	U
91-57-6	2-Methylnaphthalene	520.	U
77-47-4	Hexachlorocyclopentadiene	520.	U
88-06-2	2,4,6-Trichlorophenol	520.	U
95-95-4	2,4,5-Trichlorophenol	1300.	U
91-58-7	2-Chloronaphthalene	520.	U
88-74-4	2-Nitroaniline	1300.	U
131-11-3	Dimethylphthalate	520.	U
208-96-8	Acenaphthylene	520.	U
606-20-2	2,6-Dinitrotoluene	520.	U
99-09-2	3-Nitroaniline	1300.	U
83-32-9	Acenaphthene	520.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR81

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-002

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1952

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300.	U
100-02-7	4-Nitrophenol	1300.	U
132-64-9	Dibenzofuran	520.	U
121-14-2	2,4-Dinitrotoluene	520.	U
84-66-2	Diethylphthalate	33.	J
7005-72-3	4-Chlorophenyl-phenylether	520.	U
86-73-7	Fluorene	520.	U
100-01-6	4-Nitroaniline	1300.	U
534-52-1	4,6-Dinitro-2-methylphenol	1300.	U
86-30-6	N-Nitrosodiphenylamine (1)	520.	U
101-55-3	4-Bromophenyl-phenylether	520.	U
118-74-1	Hexachlorobenzene	520.	U
87-86-5	Pentachlorophenol	1300.	U
85-01-8	Phenanthrene	290.	J
120-12-7	Anthracene	44.	J
86-74-8	Carbazole	50.	J
84-74-2	Di-n-butylphthalate	41.	J
206-44-0	Fluoranthene	620.	
129-00-0	Pyrene	510.	J
85-68-7	Butylbenzylphthalate	29.	J
91-94-1	3,3'-Dichlorobenzidine	520.	U
56-55-3	Benzo(a)anthracene	220.	J
218-01-9	Chrysene	470.	J
117-81-7	bis(2-Ethylhexyl)phthalate	600.	B
117-84-0	Di-n-octylphthalate	520.	U
205-99-2	Benzo(b)fluoranthene	380.	J
207-08-9	Benzo(k)fluoranthene	300.	J
50-32-8	Benzo(a)pyrene	310.	J
193-39-5	Indeno(1,2,3-cd)pyrene	360.	J
53-70-3	Dibenz(a,h)anthracene	520.	U
191-24-2	Benzo(g,h,i)perylene	420.	J

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR82

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-003

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1953

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 35 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	49.	J
111-44-4	bis(2-Chloroethyl)ether	510.	U
95-57-8	2-Chlorophenol	510.	U
541-73-1	1,3-Dichlorobenzene	510.	U
106-46-7	1,4-Dichlorobenzene	510.	U
95-50-1	1,2-Dichlorobenzene	510.	U
95-48-7	2-Methylphenol	510.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	510.	U
106-44-5	4-Methylphenol	510.	U
621-64-7	N-Nitroso-di-n-propylamine	510.	U
67-72-1	Hexachloroethane	510.	U
98-95-3	Nitrobenzene	510.	U
78-59-1	Isophorone	510.	U
88-75-5	2-Nitrophenol	510.	U
105-67-9	2,4-Dimethylphenol	510.	U
111-91-1	bis(2-Chloroethoxy)methane	510.	U
120-83-2	2,4-Dichlorophenol	510.	U
120-82-1	1,2,4-Trichlorobenzene	510.	U
91-20-3	Naphthalene	510.	U
106-47-8	4-Chloroaniline	510.	U
87-68-3	Hexachlorobutadiene	510.	U
59-50-7	4-Chloro-3-methylphenol	510.	U
91-57-6	2-Methylnaphthalene	510.	U
77-47-4	Hexachlorocyclopentadiene	510.	U
88-06-2	2,4,6-Trichlorophenol	510.	U
95-95-4	2,4,5-Trichlorophenol	1300.	U
91-58-7	2-Chloronaphthalene	510.	U
88-74-4	2-Nitroaniline	1300.	U
131-11-3	Dimethylphthalate	510.	U
208-96-8	Acenaphthylene	510.	U
606-20-2	2,6-Dinitrotoluene	510.	U
99-09-2	3-Nitroaniline	1300.	U
83-32-9	Acenaphthene	510.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR82

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-003

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1953

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 35 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.7

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300.	U
100-02-7	4-Nitrophenol	1300.	U
132-64-9	Dibenzofuran	510.	U
121-14-2	2,4-Dinitrotoluene	510.	U
84-66-2	Diethylphthalate	27.	J
7005-72-3	4-Chlorophenyl-phenylether	510.	U
86-73-7	Fluorene	510.	U
100-01-6	4-Nitroaniline	1300.	U
534-52-1	4,6-Dinitro-2-methylphenol	1300.	U
86-30-6	N-Nitrosodiphenylamine (1)	510.	U
101-55-3	4-Bromophenyl-phenylether	510.	U
118-74-1	Hexachlorobenzene	510.	U
87-86-5	Pentachlorophenol	1300.	U
85-01-8	Phenanthrene	170.	J
120-12-7	Anthracene	34.	J
86-74-8	Carbazole	37.	J
84-74-2	Di-n-butylphthalate	30.	J
206-44-0	Fluoranthene	√470.	J
129-00-0	Pyrene	√410.	J
85-68-7	Butylbenzylphthalate	510.	U
91-94-1	3,3'-Dichlorobenzidine	510.	U
56-55-3	Benzo(a)anthracene	190.	J
218-01-9	Chrysene	410.	J
117-81-7	bis(2-Ethylhexyl)phthalate	410.	JB
117-84-0	Di-n-octylphthalate	510.	U
205-99-2	Benzo(b)fluoranthene	340.	J
207-08-9	Benzo(k)fluoranthene	250.	J
50-32-8	Benzo(a)pyrene	250.	J
193-39-5	Indeno(1,2,3-cd)pyrene	320.	J
53-70-3	Dibenz(a,h)anthracene	84.	J
191-24-2	Benzo(g,h,i)perylene	√320.	J

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1954

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	46.	J
111-44-4	bis(2-Chloroethyl)ether	520.	U
95-57-8	2-Chlorophenol	520.	U
541-73-1	1,3-Dichlorobenzene	520.	U
106-46-7	1,4-Dichlorobenzene	520.	U
95-50-1	1,2-Dichlorobenzene	520.	U
95-48-7	2-Methylphenol	520.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520.	U
106-44-5	4-Methylphenol	520.	U
621-64-7	N-Nitroso-di-n-propylamine	520.	U
67-72-1	Hexachloroethane	520.	U
98-95-3	Nitrobenzene	520.	U
78-59-1	Isophorone	520.	U
88-75-5	2-Nitrophenol	520.	U
105-67-9	2,4-Dimethylphenol	520.	U
111-91-1	bis(2-Chloroethoxy)methane	520.	U
120-83-2	2,4-Dichlorophenol	520.	U
120-82-1	1,2,4-Trichlorobenzene	520.	U
91-20-3	Naphthalene	520.	U
106-47-8	4-Chloroaniline	520.	U
87-68-3	Hexachlorobutadiene	520.	U
59-50-7	4-Chloro-3-methylphenol	520.	U
91-57-6	2-Methylnaphthalene	520.	U
77-47-4	Hexachlorocyclopentadiene	520.	U
88-06-2	2,4,6-Trichlorophenol	520.	U
95-95-4	2,4,5-Trichlorophenol	1300.	U
91-58-7	2-Chloronaphthalene	520.	U
88-74-4	2-Nitroaniline	1300.	U
131-11-3	Dimethylphthalate	520.	U
208-96-8	Acenaphthylene	27.	J
606-20-2	2,6-Dinitrotoluene	520.	U
99-09-2	3-Nitroaniline	1300.	U
83-32-9	Acenaphthene	520.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1954

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300.	U
100-02-7	4-Nitrophenol	1300.	U
132-64-9	Dibenzofuran	520.	U
121-14-2	2,4-Dinitrotoluene	520.	U
84-66-2	Diethylphthalate	32.	J
7005-72-3	4-Chlorophenyl-phenylether	520.	U
86-73-7	Fluorene	520.	U
100-01-6	4-Nitroaniline	1300.	U
534-52-1	4,6-Dinitro-2-methylphenol	1300.	U
86-30-6	N-Nitrosodiphenylamine (1)	520.	U
101-55-3	4-Bromophenyl-phenylether	520.	U
118-74-1	Hexachlorobenzene	520.	U
87-86-5	Pentachlorophenol	1300.	U
85-01-8	Phenanthrene	420.	J
120-12-7	Anthracene	77.	J
86-74-8	Carbazole	93.	J
84-74-2	Di-n-butylphthalate	150.	J
206-44-0	Fluoranthene	1200.	
129-00-0	Pyrene	1000.	
85-68-7	Butylbenzylphthalate	67.	J
91-94-1	3,3'-Dichlorobenzidine	520.	U
56-55-3	Benzo(a)anthracene	580.	
218-01-9	Chrysene	1100.	
117-81-7	bis(2-Ethylhexyl)phthalate	710.	B
117-84-0	Di-n-octylphthalate	520.	U
205-99-2	Benzo(b)fluoranthene	1400.	
207-08-9	Benzo(k)fluoranthene	1000.	
50-32-8	Benzo(a)pyrene	840.	
193-39-5	Indeno(1,2,3-cd)pyrene	1400.	
53-70-3	Dibenz(a,h)anthracene	520.	U
191-24-2	Benzo(g,h,i)perylene	1500.	

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR85

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-005

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1957

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 33 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	27.	J
111-44-4	bis(2-Chloroethyl)ether	490.	U
95-57-8	2-Chlorophenol	490.	U
541-73-1	1,3-Dichlorobenzene	490.	U
106-46-7	1,4-Dichlorobenzene	490.	U
95-50-1	1,2-Dichlorobenzene	490.	U
95-48-7	2-Methylphenol	490.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	490.	U
106-44-5	4-Methylphenol	490.	U
621-64-7	N-Nitroso-di-n-propylamine	490.	U
67-72-1	Hexachloroethane	490.	U
98-95-3	Nitrobenzene	490.	U
78-59-1	Isophorone	490.	U
88-75-5	2-Nitrophenol	490.	U
105-67-9	2,4-Dimethylphenol	490.	U
111-91-1	bis(2-Chloroethoxy)methane	490.	U
120-83-2	2,4-Dichlorophenol	490.	U
120-82-1	1,2,4-Trichlorobenzene	490.	U
91-20-3	Naphthalene	490.	U
106-47-8	4-Chloroaniline	490.	U
87-68-3	Hexachlorobutadiene	490.	U
59-50-7	4-Chloro-3-methylphenol	490.	U
91-57-6	2-Methylnaphthalene	490.	U
77-47-4	Hexachlorocyclopentadiene	490.	U
88-06-2	2,4,6-Trichlorophenol	490.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U
91-58-7	2-Chloronaphthalene	490.	U
88-74-4	2-Nitroaniline	1200.	U
131-11-3	Dimethylphthalate	490.	U
208-96-8	Acenaphthylene	490.	U
606-20-2	2,6-Dinitrotoluene	490.	U
99-09-2	3-Nitroaniline	1200.	U
83-32-9	Acenaphthene	44.	J

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR85

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-005

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1957

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 33 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200.	U
100-02-7	4-Nitrophenol	1200.	U
132-64-9	Dibenzofuran	490.	U
121-14-2	2,4-Dinitrotoluene	490.	U
84-66-2	Diethylphthalate	40.	J
7005-72-3	4-Chlorophenyl-phenylether	490.	U
86-73-7	Fluorene	36.	J
100-01-6	4-Nitroaniline	1200.	U
534-52-1	4,6-Dinitro-2-methylphenol	1200.	U
86-30-6	N-Nitrosodiphenylamine (1)	490.	U
101-55-3	4-Bromophenyl-phenylether	490.	U
118-74-1	Hexachlorobenzene	490.	U
87-86-5	Pentachlorophenol	1200.	U
85-01-8	Phenanthrene	√640.	
120-12-7	Anthracene	80.	J
86-74-8	Carbazole	98.	J
84-74-2	Di-n-butylphthalate	28.	J
206-44-0	Fluoranthene	1500.	
129-00-0	Pyrene	√1600.	
85-68-7	Butylbenzylphthalate	490.	U
91-94-1	3,3'-Dichlorobenzidine	490.	U
56-55-3	Benzo(a)anthracene	640.	
218-01-9	Chrysene	1000.	
117-81-7	bis(2-Ethylhexyl)phthalate	180.	JB
117-84-0	Di-n-octylphthalate	26.	J
205-99-2	Benzo(b)fluoranthene	√810.	
207-08-9	Benzo(k)fluoranthene	√1100.	
50-32-8	Benzo(a)pyrene	840.	
193-39-5	Indeno(1,2,3-cd)pyrene	1100.	
53-70-3	Dibenz(a,h)anthracene	310.	J
191-24-2	Benzo(g,h,i)perylene	1500.	

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR86

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-006

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1958

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 40 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	78.	J
111-44-4	bis(2-Chloroethyl)ether	550.	U
95-57-8	2-Chlorophenol	550.	U
541-73-1	1,3-Dichlorobenzene	550.	U
106-46-7	1,4-Dichlorobenzene	550.	U
95-50-1	1,2-Dichlorobenzene	550.	U
95-48-7	2-Methylphenol	550.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	550.	U
106-44-5	4-Methylphenol	550.	U
621-64-7	N-Nitroso-di-n-propylamine	550.	U
67-72-1	Hexachloroethane	550.	U
98-95-3	Nitrobenzene	550.	U
78-59-1	Isophorone	550.	U
88-75-5	2-Nitrophenol	550.	U
105-67-9	2,4-Dimethylphenol	550.	U
111-91-1	bis(2-Chloroethoxy)methane	550.	U
120-83-2	2,4-Dichlorophenol	550.	U
120-82-1	1,2,4-Trichlorobenzene	550.	U
91-20-3	Naphthalene	550.	U
106-47-8	4-Chloroaniline	550.	U
87-68-3	Hexachlorobutadiene	550.	U
59-50-7	4-Chloro-3-methylphenol	550.	U
91-57-6	2-Methylnaphthalene	550.	U
77-47-4	Hexachlorocyclopentadiene	550.	U
88-06-2	2,4,6-Trichlorophenol	550.	U
95-95-4	2,4,5-Trichlorophenol	1400.	U
91-58-7	2-Chloronaphthalene	550.	U
88-74-4	2-Nitroaniline	1400.	U
131-11-3	Dimethylphthalate	60.	J
208-96-8	Acenaphthylene	550.	U
606-20-2	2,6-Dinitrotoluene	550.	U
99-09-2	3-Nitroaniline	1400.	U
83-32-9	Acenaphthene	550.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR86

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-006

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1958

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 40 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1400.	U
100-02-7	4-Nitrophenol	1400.	U
132-64-9	Dibenzofuran	550.	U
121-14-2	2,4-Dinitrotoluene	550.	U
84-66-2	Diethylphthalate	550.	U
7005-72-3	4-Chlorophenyl-phenylether	550.	U
86-73-7	Fluorene	550.	U
100-01-6	4-Nitroaniline	1400.	U
534-52-1	4,6-Dinitro-2-methylphenol	1400.	U
86-30-6	N-Nitrosodiphenylamine (1)	550.	U
101-55-3	4-Bromophenyl-phenylether	550.	U
118-74-1	Hexachlorobenzene	550.	U
87-86-5	Pentachlorophenol	1400.	U
85-01-8	Phenanthrene	100.	J
120-12-7	Anthracene	550.	U
86-74-8	Carbazole	550.	U
84-74-2	Di-n-butylphthalate	33.	J
206-44-0	Fluoranthene	220.	J
129-00-0	Pyrene	210.	J
85-68-7	Butylbenzylphthalate	550.	U
91-94-1	3,3'-Dichlorobenzidine	550.	U
56-55-3	Benzo(a)anthracene	110.	J
218-01-9	Chrysene	170.	J
117-81-7	bis(2-Ethylhexyl)phthalate	280.	JB
117-84-0	Di-n-octylphthalate	36.	J
205-99-2	Benzo(b)fluoranthene	140.	J
207-08-9	Benzo(k)fluoranthene	120.	J
50-32-8	Benzo(a)pyrene	130.	J
193-39-5	Indeno(1,2,3-cd)pyrene	130.	J
53-70-3	Dibenz(a,h)anthracene	41.	J
191-24-2	Benzo(g,h,i)perylene	180.	J

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR87

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-007

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1959

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 34 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500.	U
111-44-4	bis(2-Chloroethyl)ether	500.	U
95-57-8	2-Chlorophenol	500.	U
541-73-1	1,3-Dichlorobenzene	500.	U
106-46-7	1,4-Dichlorobenzene	500.	U
95-50-1	1,2-Dichlorobenzene	500.	U
95-48-7	2-Methylphenol	500.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500.	U
106-44-5	4-Methylphenol	500.	U
621-64-7	N-Nitroso-di-n-propylamine	500.	U
67-72-1	Hexachloroethane	500.	U
98-95-3	Nitrobenzene	500.	U
78-59-1	Isophorone	500.	U
88-75-5	2-Nitrophenol	500.	U
105-67-9	2,4-Dimethylphenol	500.	U
111-91-1	bis(2-Chloroethoxy)methane	500.	U
120-83-2	2,4-Dichlorophenol	500.	U
120-82-1	1,2,4-Trichlorobenzene	500.	U
91-20-3	Naphthalene	500.	U
106-47-8	4-Chloroaniline	500.	U
87-68-3	Hexachlorobutadiene	500.	U
59-50-7	4-Chloro-3-methylphenol	500.	U
91-57-6	2-Methylnaphthalene	500.	U
77-47-4	Hexachlorocyclopentadiene	500.	U
88-06-2	2,4,6-Trichlorophenol	500.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U
91-58-7	2-Chloronaphthalene	500.	U
88-74-4	2-Nitroaniline	1200.	U
131-11-3	Dimethylphthalate	500.	U
208-96-8	Acenaphthylene	500 ~~30.~~	~~J~~ U
606-20-2	2,6-Dinitrotoluene	500.	U
99-09-2	3-Nitroaniline	1200.	U
83-32-9	Acenaphthene	500.	U

mn 1/31/98

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR87

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-007

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1959

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 34 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200.	U
100-02-7	4-Nitrophenol	1200.	U
132-64-9	Dibenzofuran	500.	U
121-14-2	2,4-Dinitrotoluene	500.	U
84-66-2	Diethylphthalate	500.	U
7005-72-3	4-Chlorophenyl-phenylether	500.	U
86-73-7	Fluorene	500.	U
100-01-6	4-Nitroaniline	1200.	U
534-52-1	4,6-Dinitro-2-methylphenol	1200.	U
86-30-6	N-Nitrosodiphenylamine (1)	500.	U
101-55-3	4-Bromophenyl-phenylether	500.	U
118-74-1	Hexachlorobenzene	500.	U
87-86-5	Pentachlorophenol	1200.	U
85-01-8	Phenanthrene	500.	U
120-12-7	Anthracene	500.	U
86-74-8	Carbazole	500.	U
84-74-2	Di-n-butylphthalate	500.	U
206-44-0	Fluoranthene	500.	U
129-00-0	Pyrene	500.	U
85-68-7	Butylbenzylphthalate	500.	U
91-94-1	3,3'-Dichlorobenzidine	500.	U
56-55-3	Benzo(a)anthracene	500.	U
218-01-9	Chrysene	500.	U
117-81-7	bis(2-Ethylhexyl)phthalate	110.	JB
117-84-0	Di-n-octylphthalate	500.	U
205-99-2	Benzo(b)fluoranthene	500.	U
207-08-9	Benzo(k)fluoranthene	500.	U
50-32-8	Benzo(a)pyrene	500.	U
193-39-5	Indeno(1,2,3-cd)pyrene	500.	U
53-70-3	Dibenz(a,h)anthracene	500.	U
191-24-2	Benzo(g,h,i)perylene	500.	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR91

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-008

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1960

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 29 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	460.	U
111-44-4	bis(2-Chloroethyl)ether	460.	U
95-57-8	2-Chlorophenol	460.	U
541-73-1	1,3-Dichlorobenzene	460.	U
106-46-7	1,4-Dichlorobenzene	460.	U
95-50-1	1,2-Dichlorobenzene	460.	U
95-48-7	2-Methylphenol	460.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	460.	U
106-44-5	4-Methylphenol	460.	U
621-64-7	N-Nitroso-di-n-propylamine	460.	U
67-72-1	Hexachloroethane	460.	U
98-95-3	Nitrobenzene	460.	U
78-59-1	Isophorone	460.	U
88-75-5	2-Nitrophenol	460.	U
105-67-9	2,4-Dimethylphenol	460.	U
111-91-1	bis(2-Chloroethoxy)methane	460.	U
120-83-2	2,4-Dichlorophenol	460.	U
120-82-1	1,2,4-Trichlorobenzene	460.	U
91-20-3	Naphthalene	460.	U
106-47-8	4-Chloroaniline	460.	U
87-68-3	Hexachlorobutadiene	460.	U
59-50-7	4-Chloro-3-methylphenol	460.	U
91-57-6	2-Methylnaphthalene	460.	U
77-47-4	Hexachlorocyclopentadiene	460.	U
88-06-2	2,4,6-Trichlorophenol	460.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U
91-58-7	2-Chloronaphthalene	460.	U
88-74-4	2-Nitroaniline	1200.	U
131-11-3	Dimethylphthalate	460.	U
208-96-8	Acenaphthylene	460.	U
606-20-2	2,6-Dinitrotoluene	460.	U
99-09-2	3-Nitroaniline	1200.	U
83-32-9	Acenaphthene	460.	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR91

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-008

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1960

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 29 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200.	U
100-02-7	4-Nitrophenol	1200.	U
132-64-9	Dibenzofuran	460.	U
121-14-2	2,4-Dinitrotoluene	460.	U
84-66-2	Diethylphthalate	460.	U
7005-72-3	4-Chlorophenyl-phenylether	460.	U
86-73-7	Fluorene	460.	U
100-01-6	4-Nitroaniline	1200.	U
534-52-1	4,6-Dinitro-2-methylphenol	1200.	U
86-30-6	N-Nitrosodiphenylamine (1)	460.	U
101-55-3	4-Bromophenyl-phenylether	460.	U
118-74-1	Hexachlorobenzene	460.	U
87-86-5	Pentachlorophenol	1200.	U
85-01-8	Phenanthrene	460.	U
120-12-7	Anthracene	460.	U
86-74-8	Carbazole	460.	U
84-74-2	Di-n-butylphthalate	460.	U
206-44-0	Fluoranthene	460.	U
129-00-0	Pyrene	460.	U
85-68-7	Butylbenzylphthalate	460.	U
91-94-1	3,3'-Dichlorobenzidine	460.	U
56-55-3	Benzo(a)anthracene	460.	U
218-01-9	Chrysene	460.	U
117-81-7	bis(2-Ethylhexyl)phthalate	63.	JB
117-84-0	Di-n-octylphthalate	460.	U
205-99-2	Benzo(b)fluoranthene	460.	U
207-08-9	Benzo(k)fluoranthene	460.	U
50-32-8	Benzo(a)pyrene	460.	U
193-39-5	Indeno(1,2,3-cd)pyrene	460.	U
53-70-3	Dibenz(a,h)anthracene	460.	U
191-24-2	Benzo(g,h,i)perylene	460.	U

(1) - Cannot be separated from Diphenylamine

CASE 25969
SDG# FFR76

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. FFR92

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-009

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1967

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 34 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	500.	U
111-44-4	bis(2-Chloroethyl)ether	500.	U
95-57-8	2-Chlorophenol	500.	U
541-73-1	1,3-Dichlorobenzene	500.	U
106-46-7	1,4-Dichlorobenzene	500.	U
95-50-1	1,2-Dichlorobenzene	500.	U
95-48-7	2-Methylphenol	500.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	500.	U
106-44-5	4-Methylphenol	500.	U
621-64-7	N-Nitroso-di-n-propylamine	500.	U
67-72-1	Hexachloroethane	500.	U
98-95-3	Nitrobenzene	500.	U
78-59-1	Isophorone	500.	U
88-75-5	2-Nitrophenol	500.	U
105-67-9	2,4-Dimethylphenol	500.	U
111-91-1	bis(2-Chloroethoxy)methane	500.	U
120-83-2	2,4-Dichlorophenol	500.	U
120-82-1	1,2,4-Trichlorobenzene	500.	U
91-20-3	Naphthalene	500.	U
106-47-8	4-Chloroaniline	500.	U
87-68-3	Hexachlorobutadiene	500.	U
59-50-7	4-Chloro-3-methylphenol	500.	U
91-57-6	2-Methylnaphthalene	500.	U
77-47-4	Hexachlorocyclopentadiene	500.	U
88-06-2	2,4,6-Trichlorophenol	500.	U
95-95-4	2,4,5-Trichlorophenol	1200.	U
91-58-7	2-Chloronaphthalene	500.	U
88-74-4	2-Nitroaniline	1200.	U
131-11-3	Dimethylphthalate	500.	U
208-96-8	Acenaphthylene	500.	U
606-20-2	2,6-Dinitrotoluene	500.	U
99-09-2	3-Nitroaniline	1200.	U
83-32-9	Acenaphthene	500.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR92

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-009

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1967

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 34 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1200.	U
100-02-7	4-Nitrophenol	1200.	U
132-64-9	Dibenzofuran	500.	U
121-14-2	2,4-Dinitrotoluene	500.	U
84-66-2	Diethylphthalate	41.	J
7005-72-3	4-Chlorophenyl-phenylether	500.	U
86-73-7	Fluorene	500.	U
100-01-6	4-Nitroaniline	1200.	U
534-52-1	4,6-Dinitro-2-methylphenol	1200.	U
86-30-6	N-Nitrosodiphenylamine (1)	500.	U
101-55-3	4-Bromophenyl-phenylether	500.	U
118-74-1	Hexachlorobenzene	500.	U
87-86-5	Pentachlorophenol	1200.	U
85-01-8	Phenanthrene	✓ 200.	J
120-12-7	Anthracene	37.	J
86-74-8	Carbazole	500.	U
84-74-2	Di-n-butylphthalate	73.	J
206-44-0	Fluoranthene	120.	J
129-00-0	Pyrene	170.	J
85-68-7	Butylbenzylphthalate	500.	U
91-94-1	3,3'-Dichlorobenzidine	500.	U
56-55-3	Benzo(a)anthracene	59.	J
218-01-9	Chrysene	69.	J
117-81-7	bis(2-Ethylhexyl)phthalate	91.	JB
117-84-0	Di-n-octylphthalate	29.	J
205-99-2	Benzo(b)fluoranthene	38.	J
207-08-9	Benzo(k)fluoranthene	47.	J
50-32-8	Benzo(a)pyrene	51.	J
193-39-5	Indeno(1,2,3-cd)pyrene	30.	J
53-70-3	Dibenz(a,h)anthracene	500.	U
191-24-2	Benzo(g,h,i)perylene	42.	J

(1) - Cannot be separated from Diphenylamine

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR76

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.: 25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-1

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 15 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/18/98

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20.	U
319-85-7	beta-BHC	20.	U
319-86-8	delta-BHC	20.	U
58-89-9	gamma-BHC(Lindane)	20.	U
76-44-8	Heptachlor	20.	U
309-00-2	Aldrin	20.	U
1024-57-3	Heptachlor epoxide	20.	U
959-98-8	Endosulfan I	9.4	JP
60-57-1	Dieldrin	39.	U
72-55-9	4,4'-DDE	39.	U
72-20-8	Endrin	1200.	PE
33213-65-9	Endosulfan II	130.	P
72-54-8	4,4'-DDD	39.	U
1031-07-8	Endosulfan sulfate	39.	U
50-29-3	4,4'-DDT	39.	U
72-43-5	Methoxychlor	200.	U
53494-70-5	Endrin ketone	280.	P
7421-93-4	Endrin aldehyde	39.	U
5103-71-9	alpha-Chlordane	20.	U
5103-74-2	gamma-Chlordane	100.	P
8001-35-2	Toxaphene	2000.	U
12674-11-2	Aroclor-1016	390.	U
11104-28-2	Aroclor-1221	790.	U
11141-16-5	Aroclor-1232	390.	U
53469-21-9	Aroclor-1242	390.	U
12672-29-6	Aroclor-1248	390.	U
11097-69-1	Aroclor-1254	390.	U
11096-82-5	Aroclor-1260	18000.	PEC

RH 02-19-98

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR81

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water)SOIL Lab Sample ID: 58073-2

Sample wt/vol: 30.0 (g/ml)G Lab File ID:

% Moisture: 36 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc)SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/13/98

Injection Volume: 1.0 (uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N)Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg)UG/KG	Q
319-84-6	alpha-BHC	21.	U
319-85-7	beta-BHC	21.	U
319-86-8	delta-BHC	21.	U
58-89-9	gamma-BHC(Lindane)	21.	U
76-44-8	Heptachlor	21.	U
309-00-2	Aldrin	21.	U
1024-57-3	Heptachlor epoxide	21.	U
959-98-8	Endosulfan I	21.	U
60-57-1	Dieldrin	41.	U
72-55-9	4,4'-DDE	41.	U
72-20-8	Endrin	200.	P
33213-65-9	Endosulfan II	7.3	JP
72-54-8	4,4'-DDD	41.	U
1031-07-8	Endosulfan sulfate	41.	U
50-29-3	4,4'-DDT	41.	U
72-43-5	Methoxychlor	9.2	JP
53494-70-5	Endrin ketone	68.	P
7421-93-4	Endrin aldehyde	41.	U
5103-71-9	alpha-Chlordane	21.	U
5103-74-2	gamma-Chlordane	15.	JP
8001-35-2	Toxaphene	2100.	U
12674-11-2	Aroclor-1016	410.	U
11104-28-2	Aroclor-1221	840.	U
11141-16-5	Aroclor-1232	410.	U
53469-21-9	Aroclor-1242	410.	U
12672-29-6	Aroclor-1248	410.	U
11097-69-1	Aroclor-1254	410.	U
11096-82-5	Aroclor-1260	2800.	

RH02-19-98

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CASE 25969
SDG# FFR76

EPA SAMPLE NO.
FFR82

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-3

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 35 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/13/98

Injection Volume: 1.0 (uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 8.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	21.	U
319-85-7	beta-BHC	21.	U
319-86-8	delta-BHC	21.	U
58-89-9	gamma-BHC(Lindane)	21.	U
76-44-8	Heptachlor	21.	U
309-00-2	Aldrin	21.	U
1024-57-3	Heptachlor epoxide	21.	U
959-98-8	Endosulfan I	21.	U
60-57-1	Dieldrin	17.	J
72-55-9	4,4'-DDE	41.	U
72-20-8	Endrin	190.	P
33213-65-9	Endosulfan II	6.2	JP
72-54-8	4,4'-DDD	41.	U
1031-07-8	Endosulfan sulfate	41.	U
50-29-3	4,4'-DDT	41.	U
72-43-5	Methoxychlor	210.	U
53494-70-5	Endrin ketone	69.	P
7421-93-4	Endrin aldehyde	41.	U
5103-71-9	alpha-Chlordane	21.	U
5103-74-2	gamma-Chlordane	11.	JP
8001-35-2	Toxaphene	2100.	U
12674-11-2	Aroclor-1016	410.	U
11104-28-2	Aroclor-1221	820.	U
11141-16-5	Aroclor-1232	410.	U
53469-21-9	Aroclor-1242	410.	U
12672-29-6	Aroclor-1248	410.	U
11097-69-1	Aroclor-1254	410.	U
11096-82-5	Aroclor-1260	3000.	C

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.: 25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-4

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 36 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/14/98

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 9.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	26.	U
319-85-7	beta-BHC	26.	U
319-86-8	delta-BHC	26.	U
58-89-9	gamma-BHC(Lindane)	26.	U
76-44-8	Heptachlor	26.	U
309-00-2	Aldrin	26.	U
1024-57-3	Heptachlor epoxide	26.	U
959-98-8	Endosulfan I	26.	U
60-57-1	Dieldrin	52.	U
72-55-9	4,4'-DDE	52.	U
72-20-8	Endrin	1200.	P
33213-65-9	Endosulfan II	52.	U
72-54-8	4,4'-DDD	2.4	JP
1031-07-8	Endosulfan sulfate	52.	U
50-29-3	4,4'-DDT	52.	U
72-43-5	Methoxychlor	260.	U
53494-70-5	Endrin ketone	560.	P
7421-93-4	Endrin aldehyde	52.	U
5103-71-9	alpha-Chlordane	26.	U
5103-74-2	gamma-Chlordane	47.	P
8001-35-2	Toxaphene	2600.	U
12674-11-2	Aroclor-1016	520.	U
11104-28-2	Aroclor-1221	1000.	U
11141-16-5	Aroclor-1232	520.	U
53469-21-9	Aroclor-1242	520.	U
12672-29-6	Aroclor-1248	520.	U
11097-69-1	Aroclor-1254	520.	U
11096-82-5	Aroclor-1260	21000.	PEC

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83DL

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No. 25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-4DL

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 36 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/13/98

Injection Volume: 1.0 (uL) Dilution Factor: 100.0

GPC Cleanup: (Y/N) Y pH: 9.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	260.	U
319-85-7	beta-BHC	260.	U
319-86-8	delta-BHC	260.	U
58-89-9	gamma-BHC(Lindane)	260.	U
76-44-8	Heptachlor	260.	U
309-00-2	Aldrin	260.	U
1024-57-3	Heptachlor epoxide	260.	U
959-98-8	Endosulfan I	260.	U
60-57-1	Dieldrin	520.	U
72-55-9	4,4'-DDE	520.	U
72-20-8	Endrin	2300.	DP
33213-65-9	Endosulfan II	76.	DJP
72-54-8	4,4'-DDD	520.	U
1031-07-8	Endosulfan sulfate	520.	U
50-29-3	4,4'-DDT	520.	U
72-43-5	Methoxychlor	2600.	U
53494-70-5	Endrin ketone	800.	DP
7421-93-4	Endrin aldehyde	520.	U
5103-71-9	alpha-Chlordane	260.	U
5103-74-2	gamma-Chlordane	59.	DJP
8001-35-2	Toxaphene	26000.	U
12674-11-2	Aroclor-1016	5200.	U
11104-28-2	Aroclor-1221	10000.	U
11141-16-5	Aroclor-1232	5200.	U
53469-21-9	Aroclor-1242	5200.	U
12672-29-6	Aroclor-1248	5200.	U
11097-69-1	Aroclor-1254	5200.	U
\1096-82-5	Aroclor-1260	35000.	DC

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. CASE 25969 SDG# FFR76

FFR85

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-5

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 33 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/13/98

Injection Volume: 1.0 (uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 9.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	20.	U
319-85-7	beta-BHC	20.	U
319-86-8	delta-BHC	20.	U
58-89-9	gamma-BHC(Lindane)	20.	U
76-44-8	Heptachlor	20.	U
309-00-2	Aldrin	20.	U
1024-57-3	Heptachlor epoxide	20.	U
959-98-8	Endosulfan I	20.	U
60-57-1	Dieldrin	2.2	JP
72-55-9	4,4'-DDE	39.	U
72-20-8	Endrin	30.	JP
33213-65-9	Endosulfan II	39.	U
72-54-8	4,4'-DDD	39.	U
1031-07-8	Endosulfan sulfate	39.	U
50-29-3	4,4'-DDT	39.	U
72-43-5	Methoxychlor	5.1	JP
53494-70-5	Endrin ketone	11.	JP
7421-93-4	Endrin aldehyde	39.	U
5103-71-9	alpha-Chlordane	20.	U
5103-74-2	gamma-Chlordane	1.5	JP
8001-35-2	Toxaphene	2000.	U
12674-11-2	Aroclor-1016	390.	U
11104-28-2	Aroclor-1221	800.	U
11141-16-5	Aroclor-1232	390.	U
53469-21-9	Aroclor-1242	390.	U
12672-29-6	Aroclor-1248	390.	U
11097-69-1	Aroclor-1254	390.	U
11096-82-5	Aroclor-1260	420.	

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR86

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-6

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 40 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/13/98

Injection Volume: 1.0 (uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 8.7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	23.	U
319-85-7	beta-BHC	23.	U
319-86-8	delta-BHC	23.	U
58-89-9	gamma-BHC (Lindane)	23.	U
76-44-8	Heptachlor	23.	U
309-00-2	Aldrin	23.	U
1024-57-3	Heptachlor epoxide	23.	U
959-98-8	Endosulfan I	23.	U
60-57-1	Dieldrin	44.	U
72-55-9	4,4'-DDE	12.	J
72-20-8	Endrin	40.	JP
33213-65-9	Endosulfan II	44.	U
72-54-8	4,4'-DDD	44.	U
1031-07-8	Endosulfan sulfate	44.	U
50-29-3	4,4'-DDT	44.	U
72-43-5	Methoxychlor	230.	U
53494-70-5	Endrin ketone	16.	JP
7421-93-4	Endrin aldehyde	44.	U
5103-71-9	alpha-Chlordane	23.	U
5103-74-2	gamma-Chlordane	1.1	JP
8001-35-2	Toxaphene	2300.	U
12674-11-2	Aroclor-1016	440.	U
11104-28-2	Aroclor-1221	890.	U
11141-16-5	Aroclor-1232	440.	U
53469-21-9	Aroclor-1242	440.	U
12672-29-6	Aroclor-1248	440.	U
11097-69-1	Aroclor-1254	440.	U
11096-82-5	Aroclor-1260	730.	

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
CASE 25969
SDG# FFR76
FFR87

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.: 25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-7

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 34 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/13/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC(Lindane)	2.6	U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	1.4	JP
72-55-9	4,4'-DDE	18.	
72-20-8	Endrin	20.	P
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	26.	U
53494-70-5	Endrin ketone	6.9	P
7421-93-4	Endrin aldehyde	5.0	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6	U
8001-35-2	Toxaphene	260.	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	100.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	50.	U
11096-82-5	Aroclor-1260	340.	

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR91

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No.: 25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-8

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 29 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/16/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.4	U
319-85-7	beta-BHC	2.4	U
319-86-8	delta-BHC	2.4	U
58-89-9	gamma-BHC(Lindane)	2.4	U
76-44-8	Heptachlor	2.4	U
309-00-2	Aldrin	2.4	U
1024-57-3	Heptachlor epoxide	2.4	U
959-98-8	Endosulfan I	2.4	U
60-57-1	Dieldrin	4.6	U
72-55-9	4,4'-DDE	4.6	U
72-20-8	Endrin	4.6	U
33213-65-9	Endosulfan II	4.6	U
72-54-8	4,4'-DDD	4.6	U
1031-07-8	Endosulfan sulfate	4.6	U
50-29-3	4,4'-DDT	4.6	U
72-43-5	Methoxychlor	24.	U
53494-70-5	Endrin ketone	4.6	U
7421-93-4	Endrin aldehyde	4.6	U
5103-71-9	alpha-Chlordane	2.4	U
5103-74-2	gamma-Chlordane	2.4	U
8001-35-2	Toxaphene	240.	U
12674-11-2	Aroclor-1016	46.	U
11104-28-2	Aroclor-1221	94.	U
11141-16-5	Aroclor-1232	46.	U
53469-21-9	Aroclor-1242	46.	U
12672-29-6	Aroclor-1248	46.	U
11097-69-1	Aroclor-1254	46.	U
11096-82-5	Aroclor-1260	46.	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR92

Lab Name: CLAYTON LABORATORY Contract: 68-D5-0005

Lab Code: CLAYTN Case No. 25969 SAS No.: SDG No.: FFR76

Matrix: (soil/water) SOIL Lab Sample ID: 58073-9

Sample wt/vol: 30.0 (g/ml) G Lab File ID:

% Moisture: 34 decanted: (Y/N) N Date Received: 1/15/98

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 2/09/98

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 2/16/98

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.6	U
319-85-7	beta-BHC	2.6	U
319-86-8	delta-BHC	2.6	U
58-89-9	gamma-BHC(Lindane)	2.6	U
76-44-8	Heptachlor	2.6	U
309-00-2	Aldrin	2.6	U
1024-57-3	Heptachlor epoxide	2.6	U
959-98-8	Endosulfan I	2.6	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	1.6	JP
72-20-8	Endrin	2.3	JP
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	26.	U
53494-70-5	Endrin ketone	5.0	U
7421-93-4	Endrin aldehyde	5.0	U
5103-71-9	alpha-Chlordane	2.6	U
5103-74-2	gamma-Chlordane	2.6	U
8001-35-2	Toxaphene	260.	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	100.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	50.	U
11096-82-5	Aroclor-1260	33.	J

RH 02-18-98

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-001

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1951

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 15 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 30 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

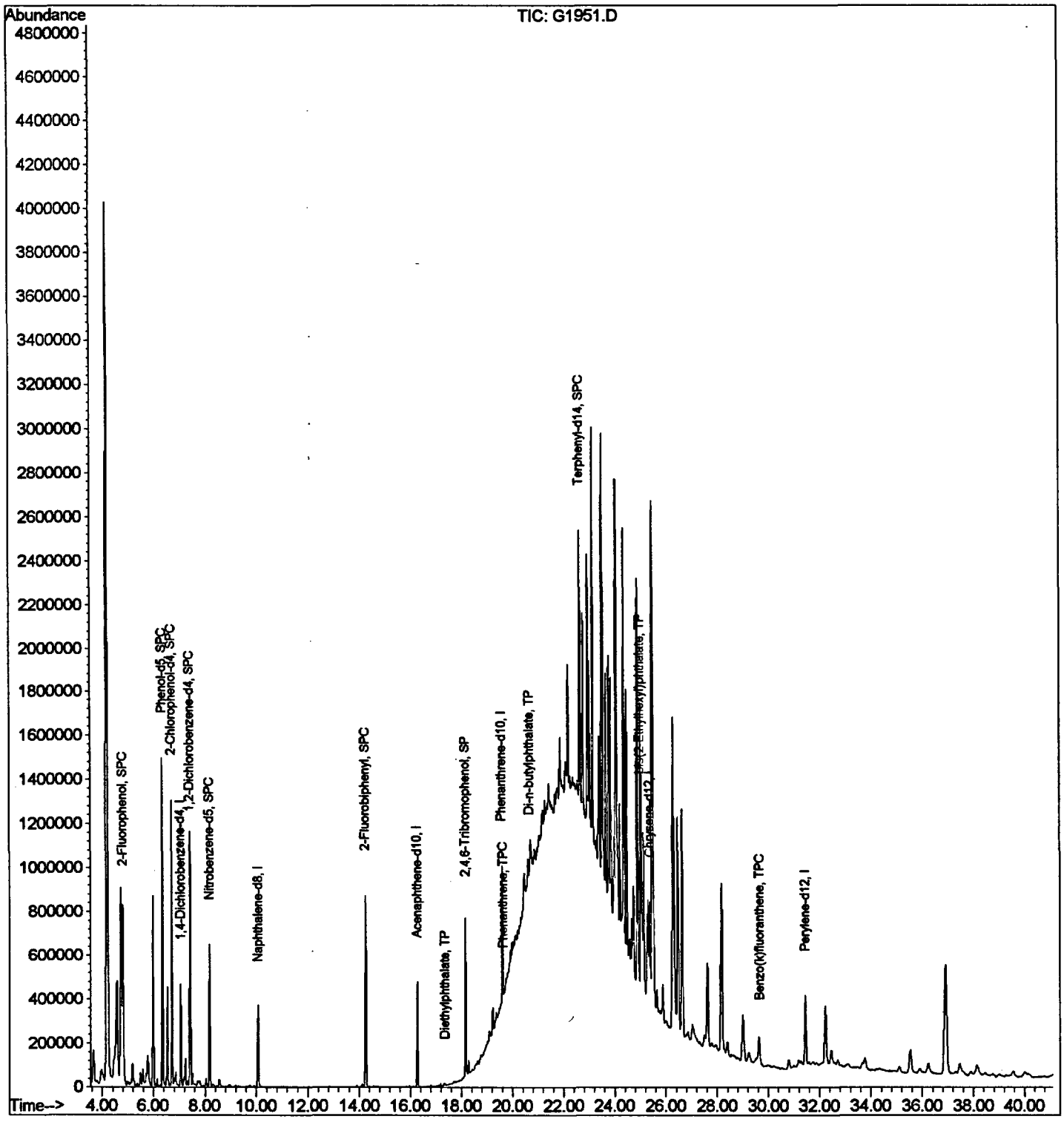
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.20	14000.	JNAB
2.		Unknown	4.73	2900.	J
3.		Unknown	5.77	560.	J
4.		trans-3-Hexene-2,5-dione	5.98	1400.	JB
5.		Unknown	6.54	680.	J
6.	69782-90-7	1,1'-Biphenyl, 2,3,3',4,4',5	22.77	1700.	JN
7.	35065-27-1	1,1'-Biphenyl, 2,2',4,4',5,5	22.96	2000.	JN
8.	35065-27-1	1,1'-Biphenyl, 2,2',4,4',5,5	23.03	1400.	JN
9.	35065-27-1	1,1'-Biphenyl, 2,2',4,4',5,5	23.16	3900.	JN
10.	56030-56-9	1,1'-Biphenyl, 2,2',3,4,4',6	23.41	1200.	JN
11.	41411-62-5	1,1'-Biphenyl, 2,3,3',4,5,6-	23.53	4800.	JN
12.	52663-72-6	1,1'-Biphenyl, 2,3',4,4',5,5	23.66	1700.	JN
13.	52712-04-6	1,1'-Biphenyl, 2,2',3,4,5,5'	23.77	1900.	JN
14.	41411-64-7	1,1'-Biphenyl, 2,3,3',4,4',5	23.87	2000.	JN
15.	39635-31-9	1,1'-Biphenyl, 2,3,3',4,4',5	23.99	730.	JN
16.	41411-62-5	1,1'-Biphenyl, 2,3,3',4,5,6-	24.07	5200.	JN
17.	52663-71-5	1,1'-Biphenyl, 2,2',3,3',4,4	24.20	880.	JN
18.	39635-31-9	1,1'-Biphenyl, 2,3,3',4,4',5	24.38	4500.	JN
19.	52663-65-7	1,1'-Biphenyl, 2,2',3,3',4,6	24.47	2400.	JN
20.	39635-31-9	1,1'-Biphenyl, 2,3,3',4,4',5	24.74	910.	JN
21.	39635-31-9	1,1'-Biphenyl, 2,3,3',4,4',5	24.90	4200.	JN
22.	52663-65-7	1,1'-Biphenyl, 2,2',3,3',4,6	25.14	1600.	JN
23.	52663-65-7	1,1'-Biphenyl, 2,2',3,3',4,6	25.30	1200.	JN
24.	52663-65-7	1,1'-Biphenyl, 2,2',3,3',4,6	25.48	7700.	JN
25.	52663-65-7	1,1'-Biphenyl, 2,2',3,3',4,6	26.29	5200.	JN
26.	42740-50-1	1,1'-Biphenyl, 2,2',3,3',4,4	26.48	2500.	JN
27.	52663-78-2	1,1'-Biphenyl, 2,2',3,3',4,4	26.64	2800.	JN
28.	35694-08-7	1,1'-Biphenyl, 2,2',3,3',4,4	27.62	1100.	JN
29.	42740-50-1	1,1'-Biphenyl, 2,2',3,3',4,4	28.18	2500.	JN
30.		Unknown	36.92	2300.	J

Quantitation Report

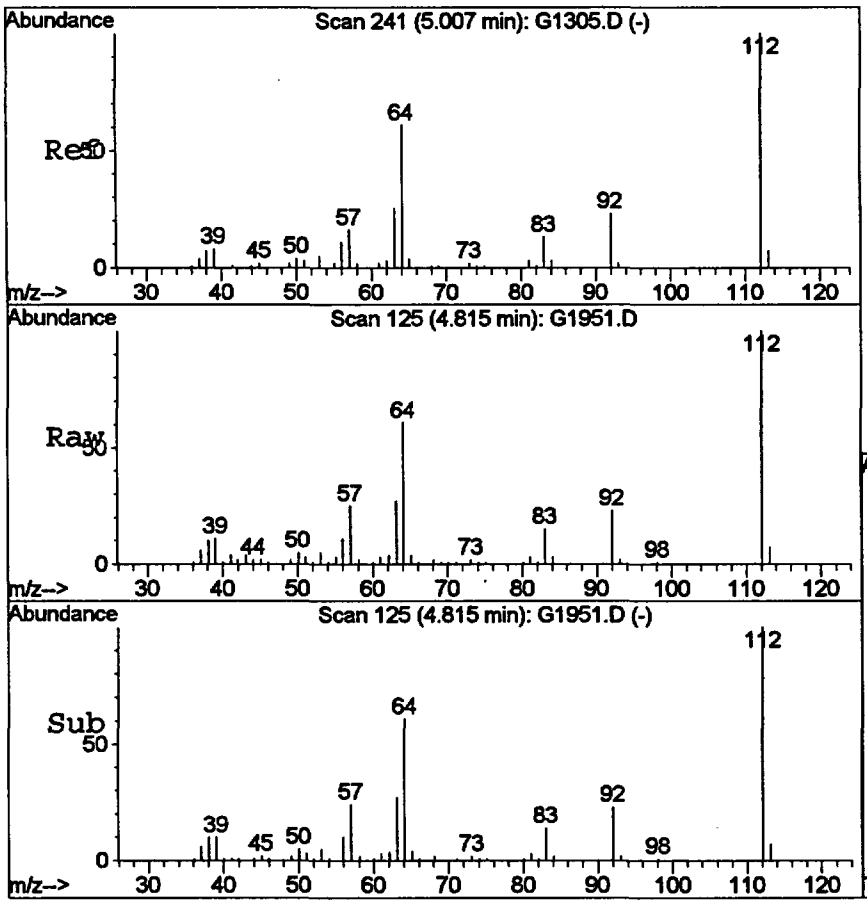
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:15 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

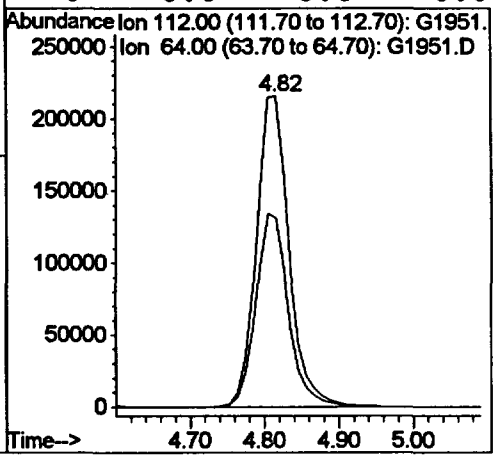


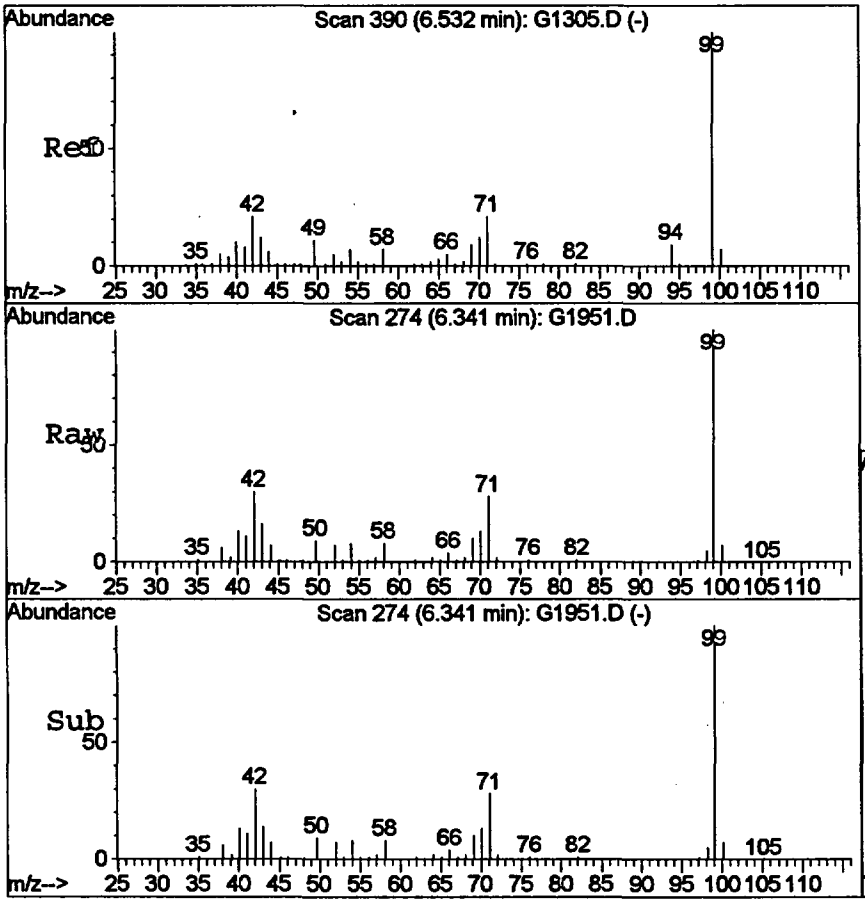
CASE 25969
SDG# FFR76



#2
2-Fluorophenol
Concen: 129.52 ng
RT: 4.82 min Scan# 125
Delta R.T. 0.00 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

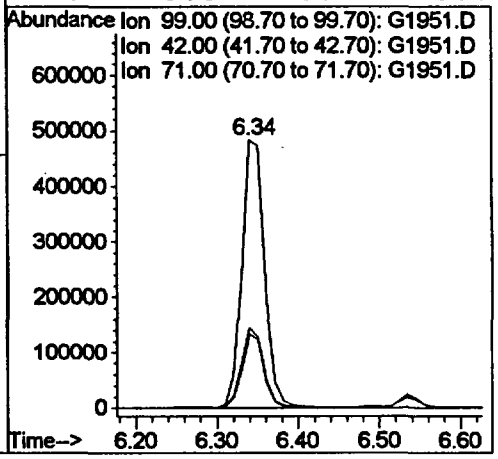
Tgt Ion:112	Resp:	654156	
Ion	Ratio	Lower	Upper
112	100		
64	62.0	40.2	80.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

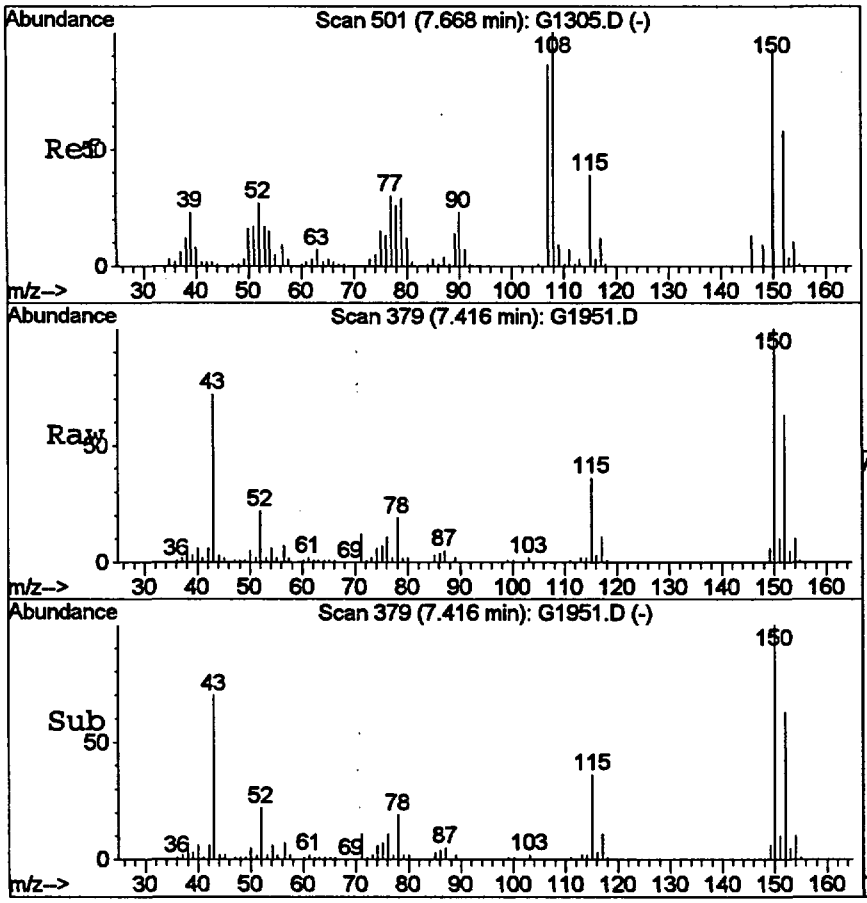




#3
Phenol-d5
Concen: 141.48 ng
RT: 6.34 min Scan# 274
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

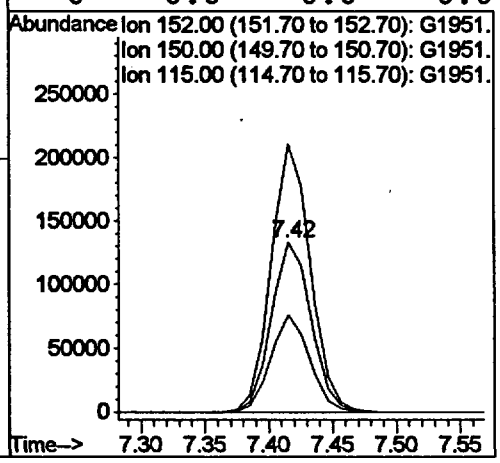
Tgt Ion:99	Resp:	943919	
Ion	Ratio	Lower	Upper
99	100		
42	29.4	9.1	49.1
71	26.9	6.1	46.1
0	0.0	0.0	0.0

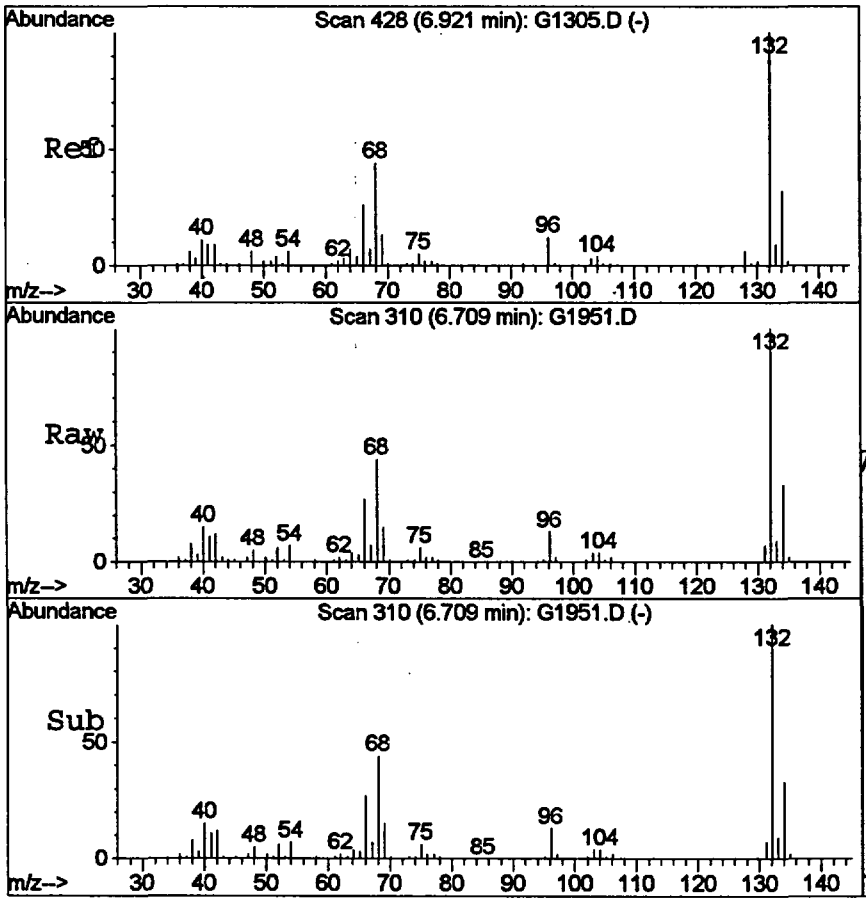




#7
1,2-Dichlorobenzene-d4
Concen: 86.24 ng
RT: 7.42 min Scan# 379
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

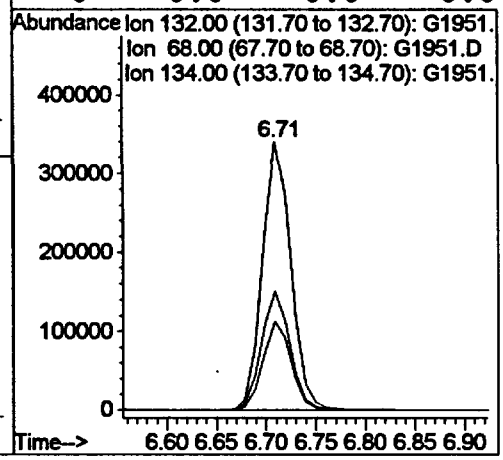
Tgt Ion:152	Resp:	288239	
Ion	Ratio	Lower	Upper
152	100		
150	155.5	153.4	193.4
115	55.8	34.2	74.2
0	0.0	0.0	0.0

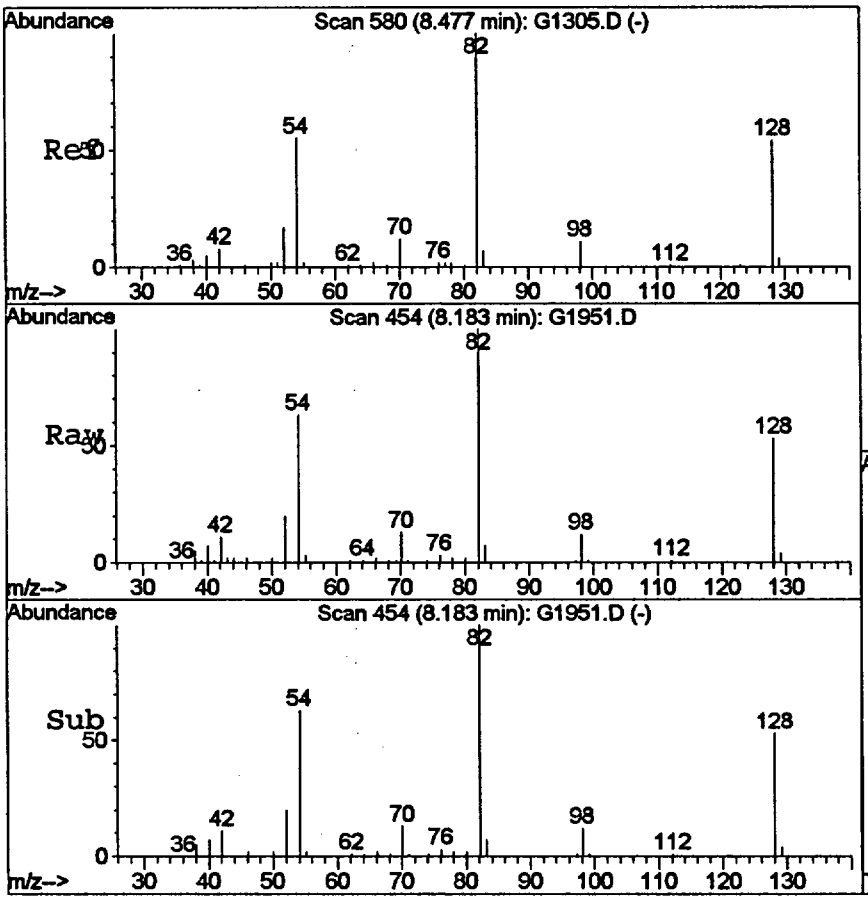




#8
2-Chlorophenol-d4
Concen: 132.32 ng
RT: 6.71 min Scan# 310
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:132	Resp:	678275	
Ion	Ratio	Lower	Upper
132	100		
68	44.7	23.4	63.4
134	33.0	12.7	52.7
0	0.0	0.0	0.0

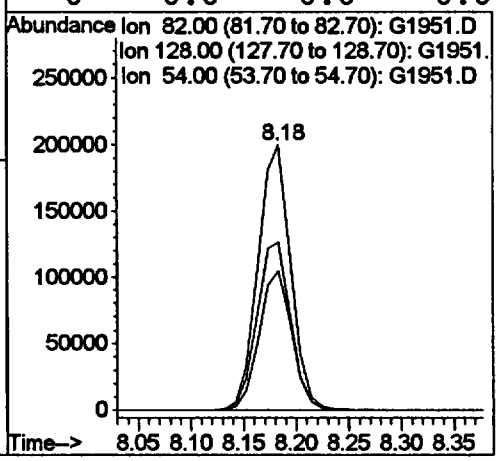


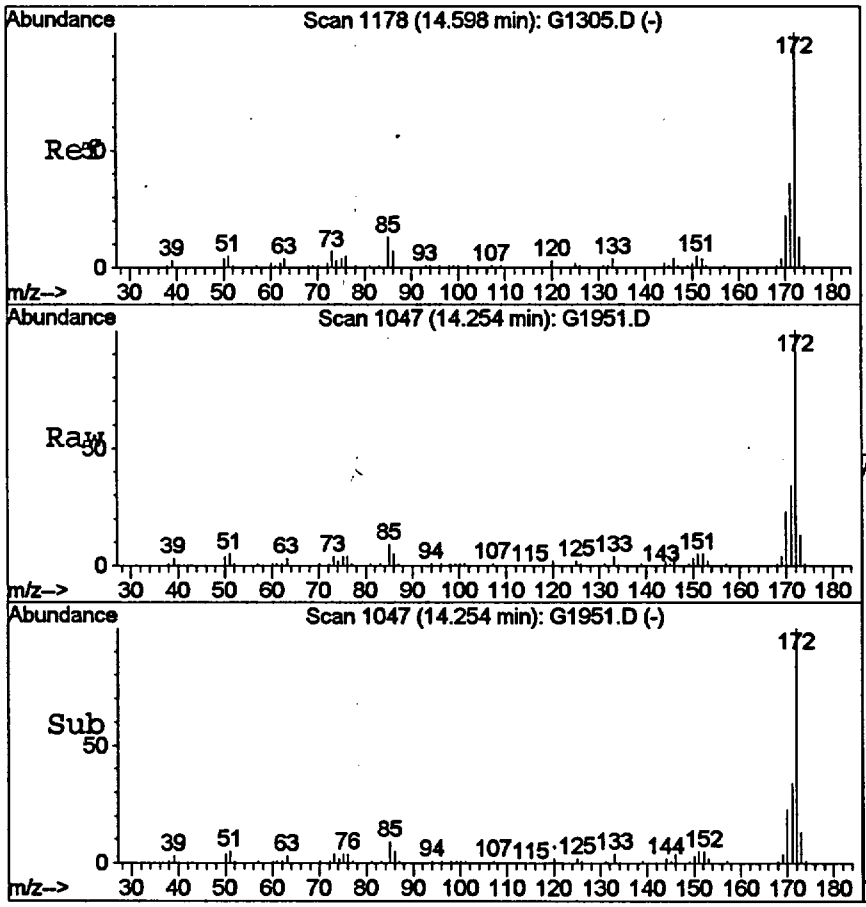


#18
Nitrobenzene-d5
Concen: 97.06 ng
RT: 8.18 min Scan# 454
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:82 Resp: 430954

Ion	Ratio	Lower	Upper
82	100		
128	52.1	33.9	73.9
54	64.9	43.9	83.9
0	0.0	0.0	0.0

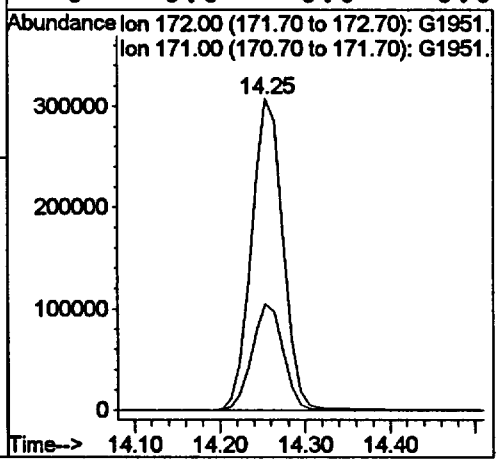


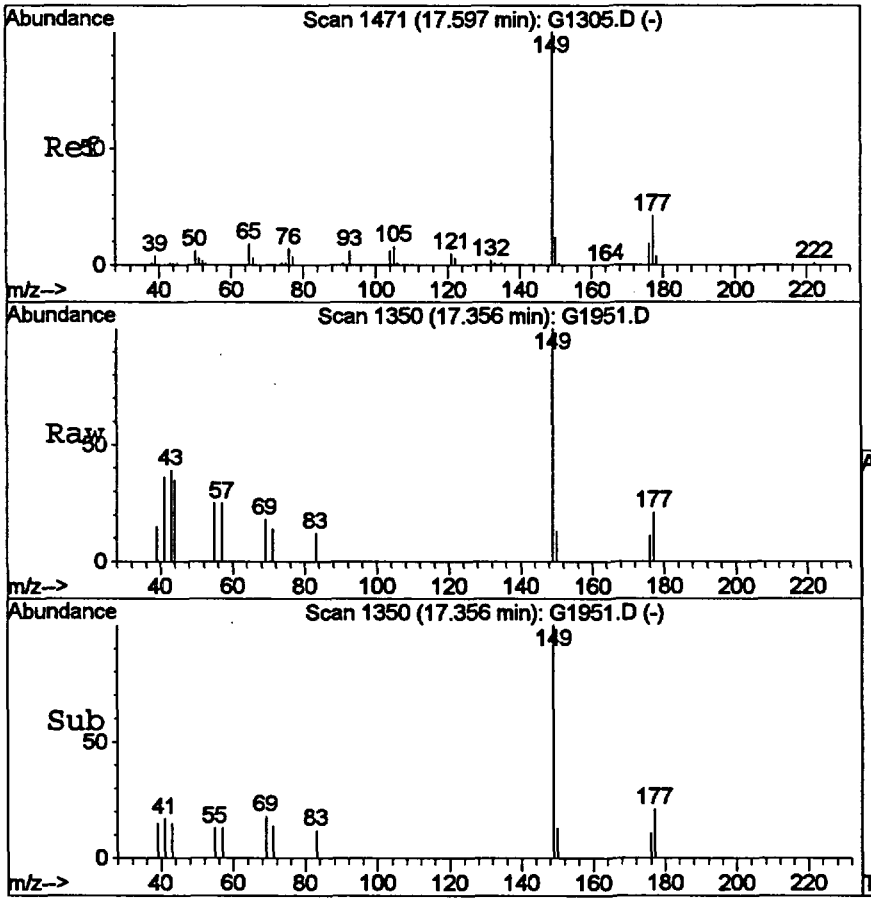


#35
2-Fluorobiphenyl
Concen: 108.97 ng
RT: 14.25 min Scan# 1047
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:172 Resp: 795060

Ion	Ratio	Lower	Upper
172	100		
171	33.9	14.1	54.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

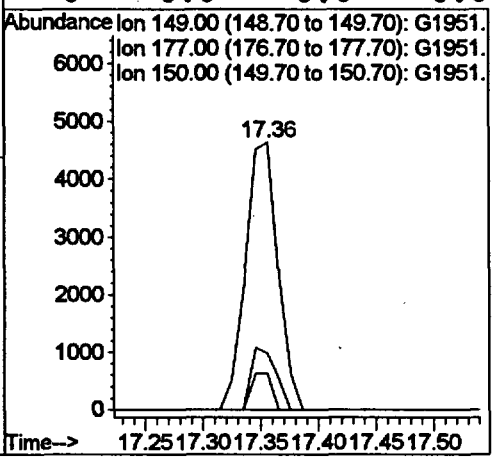


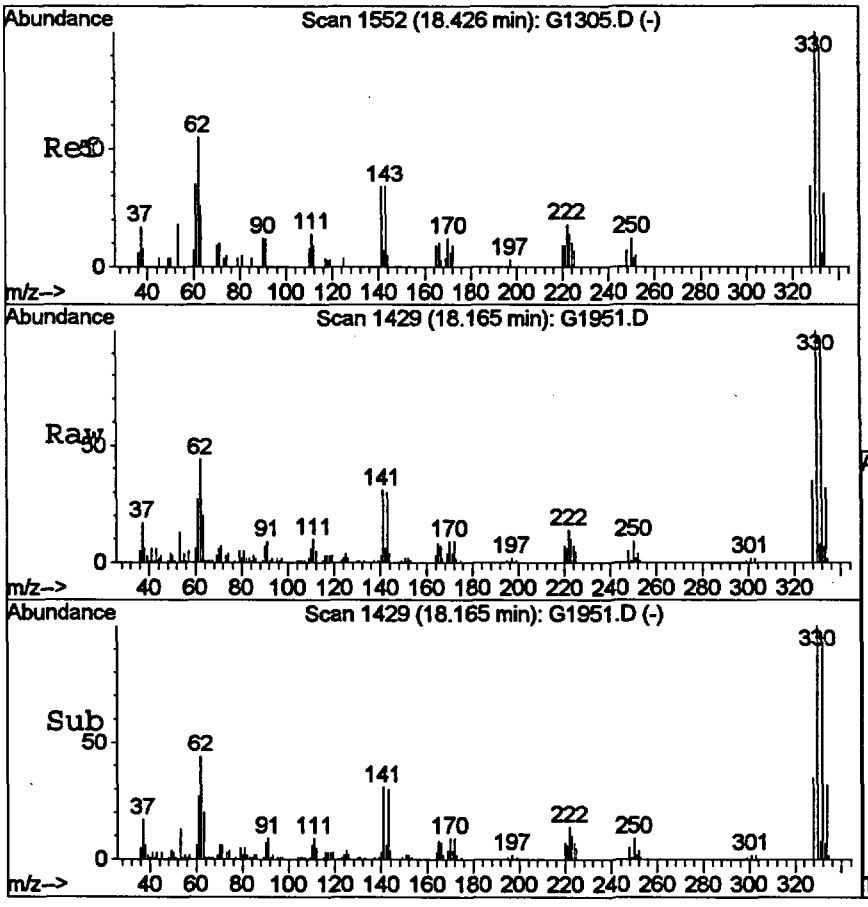


#47
Diethylphthalate
Concen: 1.09 ng m
RT: 17.36 min / Scan# 1350
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:149 Resp: 9006

Ion	Ratio	Lower	Upper
149	100		
177	21.1	0.9	40.9
150	13.5	0.0	31.7
0	0.0	0.0	0.0

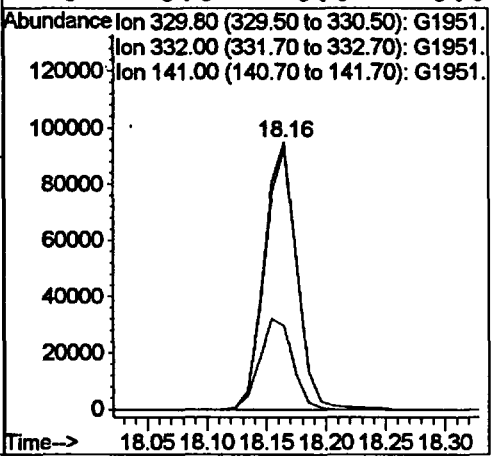


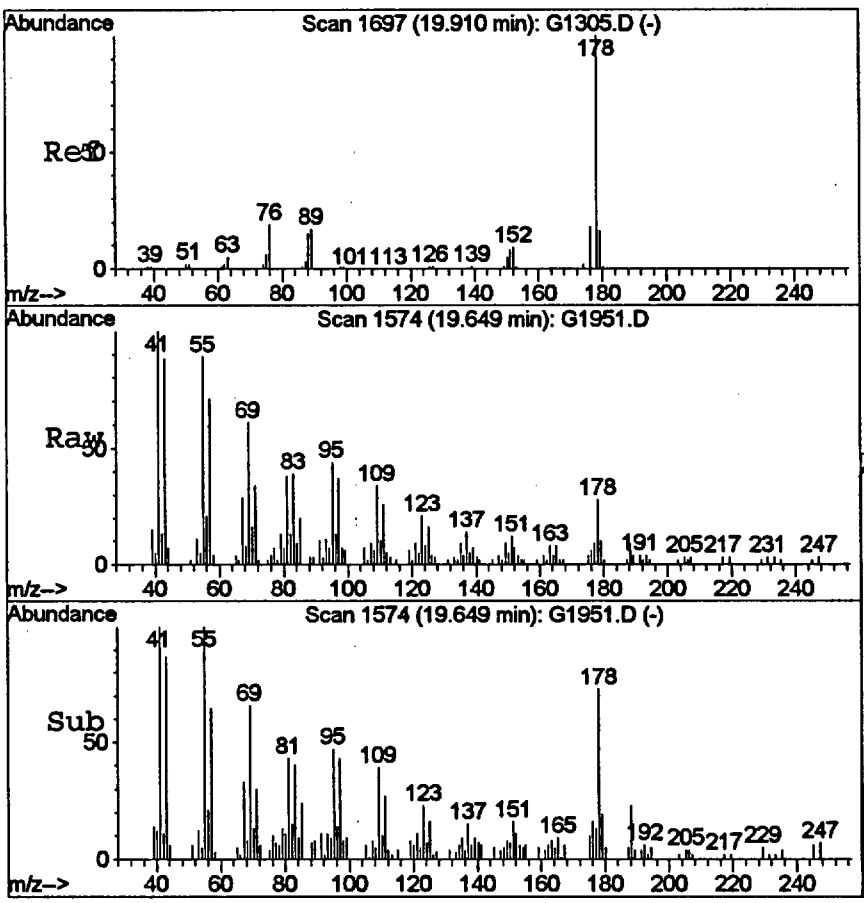


#52
2,4,6-Tribromophenol
Concen: 157.09 ng
RT: 18.16 min Scan# 1429
Delta R.T. 0.00 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:329.8 Resp: 180242

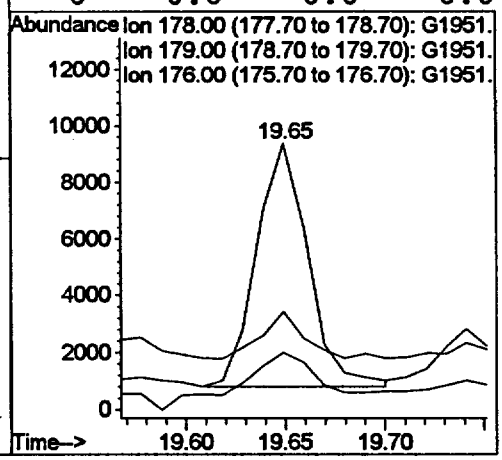
Ion	Ratio	Lower	Upper
330	100		
332	97.6	75.8	115.8
141	34.4	14.4	54.4
0	0.0	0.0	0.0

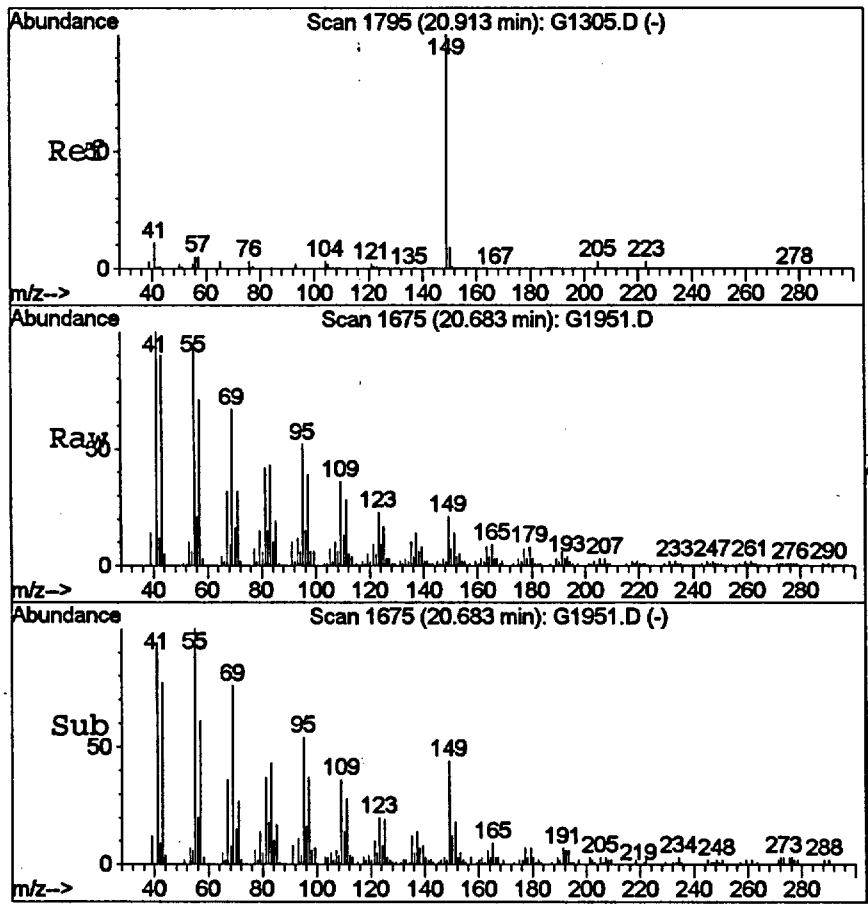




#58
Phenanthrene
Concen: 1.36 ng
RT: 19.65 min / Scan# 1574
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

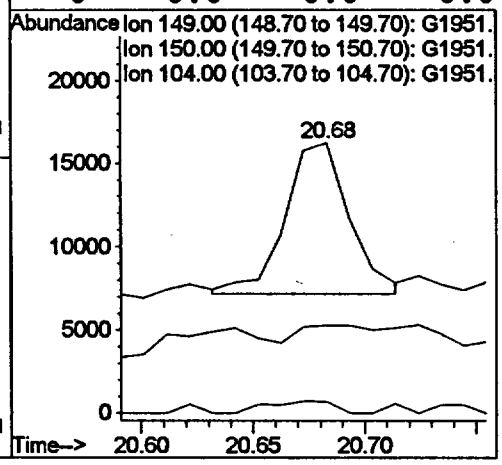
Tgt Ion:178	Resp:	15455	
Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.5
176	0.0	0.0	38.8
0	0.0	0.0	0.0

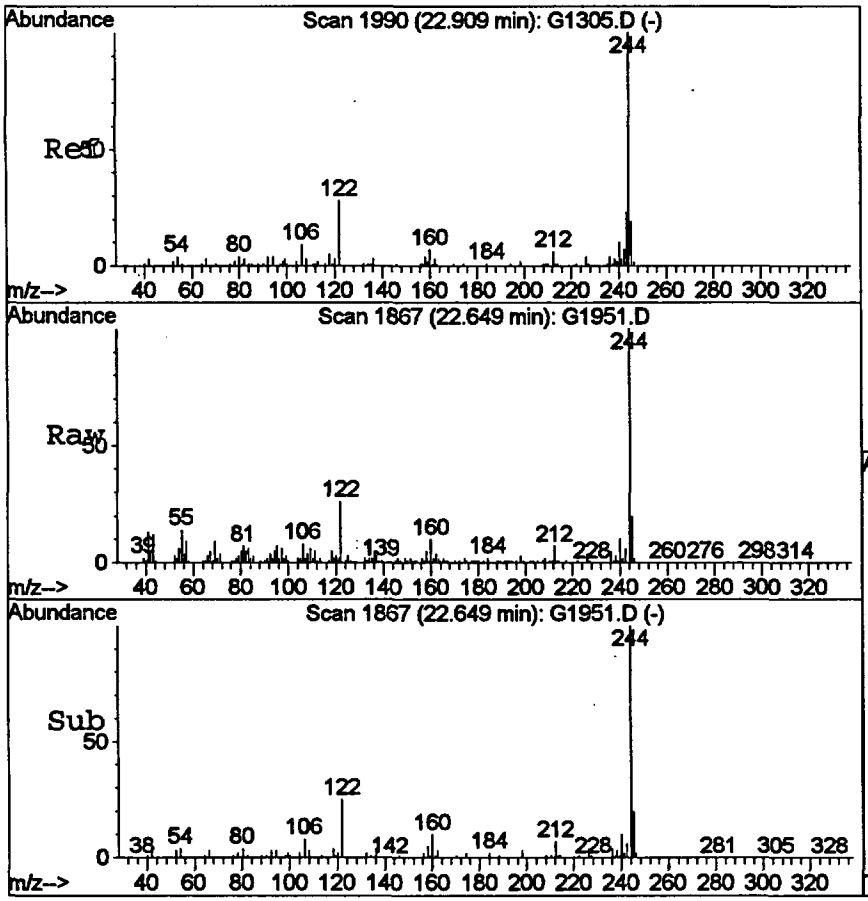




#61
Di-n-butylphthalate
Concen: 1.02 ng m
RT: 20.68 min / Scan# 1675
Delta R.T. -0.01 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:149	Resp:	18062	
Ion	Ratio	Lower	Upper
149	100		
150	32.5	0.0	29.2#
104	4.3	0.0	23.2
0	0.0	0.0	0.0

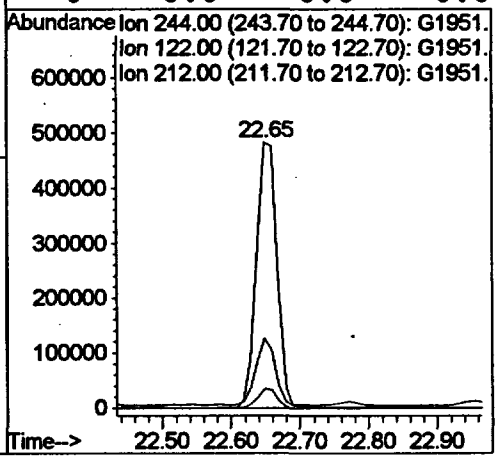


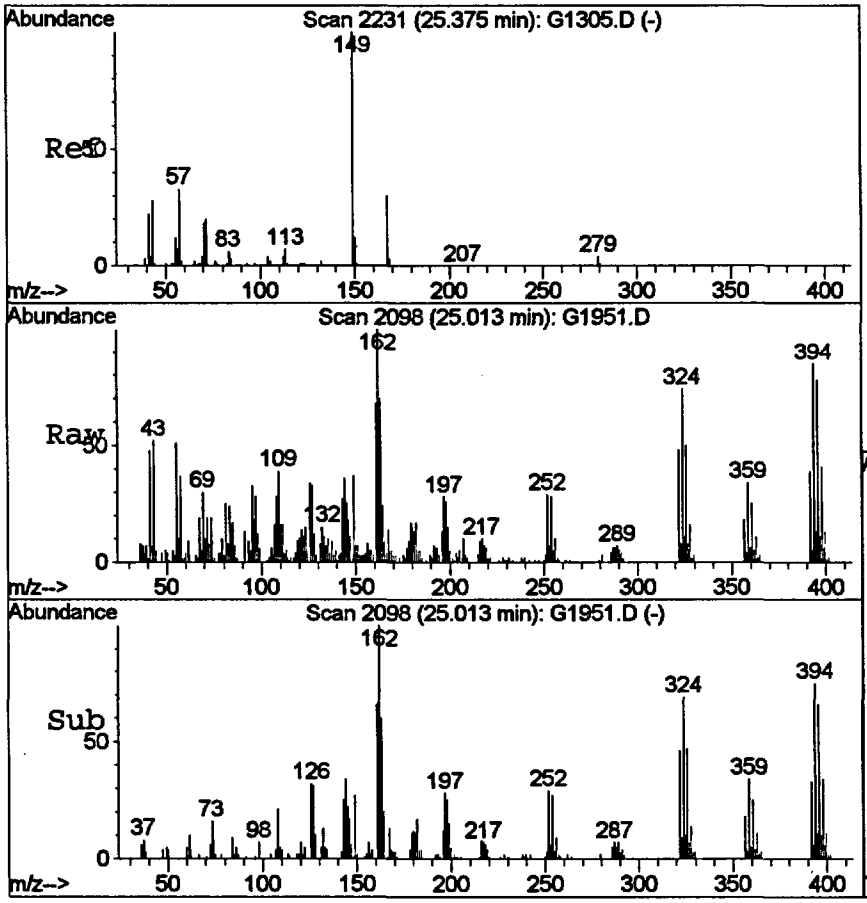


#65
Terphenyl-d14
Concen: 120.00 ng
RT: 22.65 min Scan# 1867
Delta R.T. 0.00 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:244 Resp: 1005055

Ion	Ratio	Lower	Upper
244	100		
122	23.2	3.7	43.7
212	6.7	0.0	27.0
0	0.0	0.0	0.0

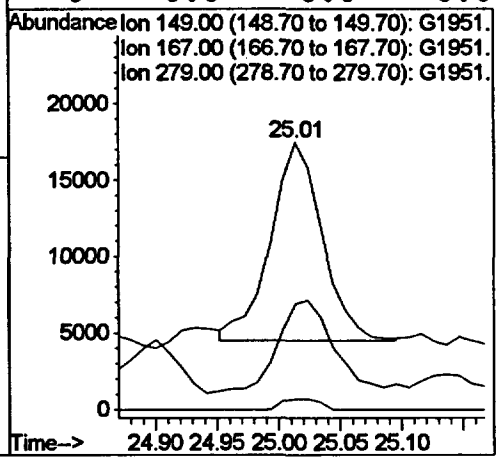


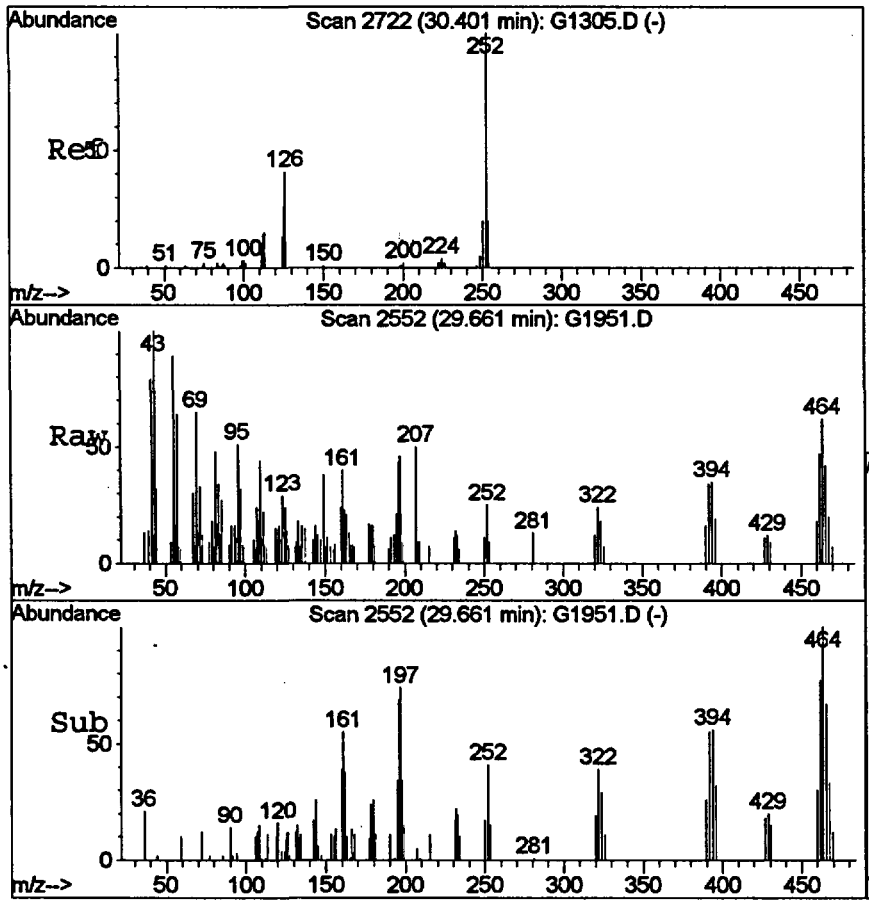


#70
bis(2-Ethylhexyl)phthalate
Concen: 2.70 ng m
RT: 25.01 min / Scan# 2098
Delta R.T. 0.00 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:149 Resp: 37750

Ion	Ratio	Lower	Upper
149	100		
167	39.2	10.6	50.6
279	4.0	0.0	23.8
0	0.0	0.0	0.0

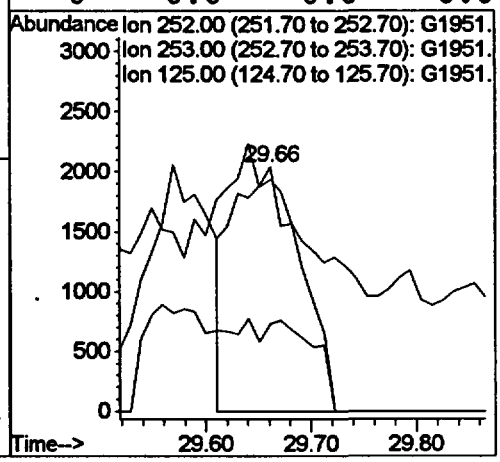




#74
Benzo(k)fluoranthene
Concen: 1.03 ng m
RT: 29.66 min / Scan# 2552
Delta R.T. -0.03 min
Lab File: G1951.D
Acq: 22 Jan 98 18:36

Tgt Ion:252 Resp: 9171

Ion	Ratio	Lower	Upper
252	100		
253	36.0	2.3	42.3
125	94.8	5.0	45.0#
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial:
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:15 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.06	152	169328	40.00	ng	0.00
17) Naphthalene-d8	10.07	136	499865	40.00	ng	0.00
31) Acenaphthene-d10	16.28	164	245968	40.00	ng	0.00
51) Phenanthrene-d10	19.60	188	461359	40.00	ng	0.00
63) Chrysene-d12	25.37	240	405390	40.00	ng	0.01
71) Perylene-d12	31.45	264	338962	40.00	ng	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.82	112	654156	129.52	ng	0.00
Surrogate Spike 150.000	Range 25 - 121		Recovery = 86.35%			
3) Phenol-d5	6.34	99	943919	141.48	ng	0.00
Surrogate Spike 150.000	Range 24 - 113		Recovery = 94.32%			
7) 1,2-Dichlorobenzene-d4	7.42	152	288239	86.24	ng	0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 86.24%			
8) 2-Chlorophenol-d4	6.71	132	678275	132.32	ng	0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 88.21%			
18) Nitrobenzene-d5	8.18	82	430954	97.06	ng	0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 97.06%			
35) 2-Fluorobiphenyl	14.25	172	795060	108.97	ng	0.00
Surrogate Spike 100.000	Range 30 - 115		Recovery = 108.97%			
52) 2,4,6-Tribromophenol	18.16	330	180242	157.09	ng	0.00
Surrogate Spike 150.000	Range 19 - 122		Recovery = 104.73%			
65) Terphenyl-d14	22.65	244	1005055	120.00	ng	0.00
Surrogate Spike 100.000	Range 18 - 137		Recovery = 120.00%			
Target Compounds						Qvalue
47) Diethylphthalate	17.36	149	9006m	1.09	ng	0
58) Phenanthrene	19.65	178	15455	1.36	ng	# 60
61) Di-n-butylphthalate	20.68	149	18062m	1.02	ng	79
70) bis(2-Ethylhexyl)phthalate	25.01	149	37750m	2.70	ng	85
74) Benzo(k)fluoranthene	29.66	252	9171m	1.03	ng	0

(#) = qualifier out of range (m) = manual integration
G1951.D CLPME7.M Mon Jan 26 11:16:06 1998 Page 1

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

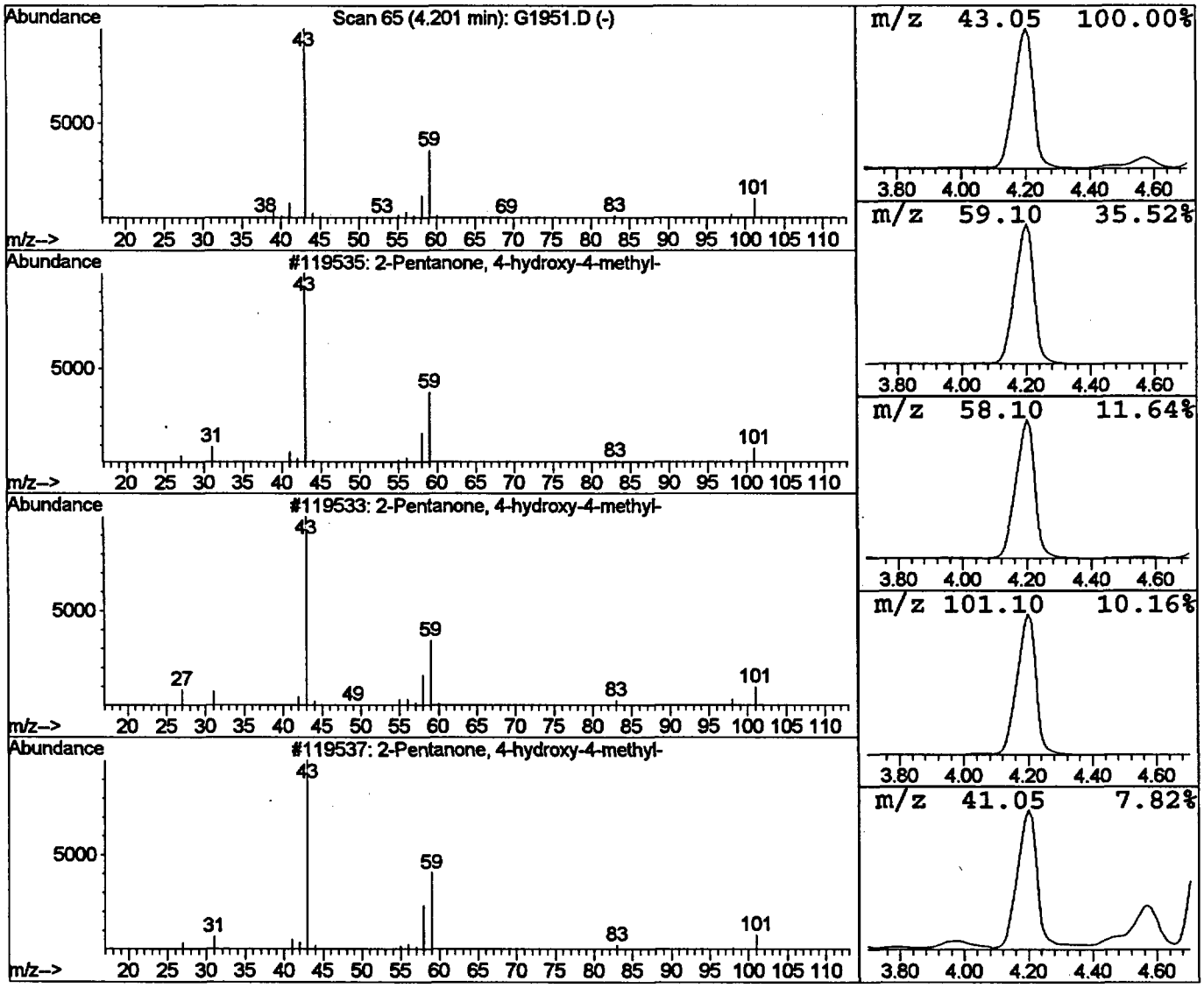
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.20	689.99 ng	16853400	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (F)	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	53



0281

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

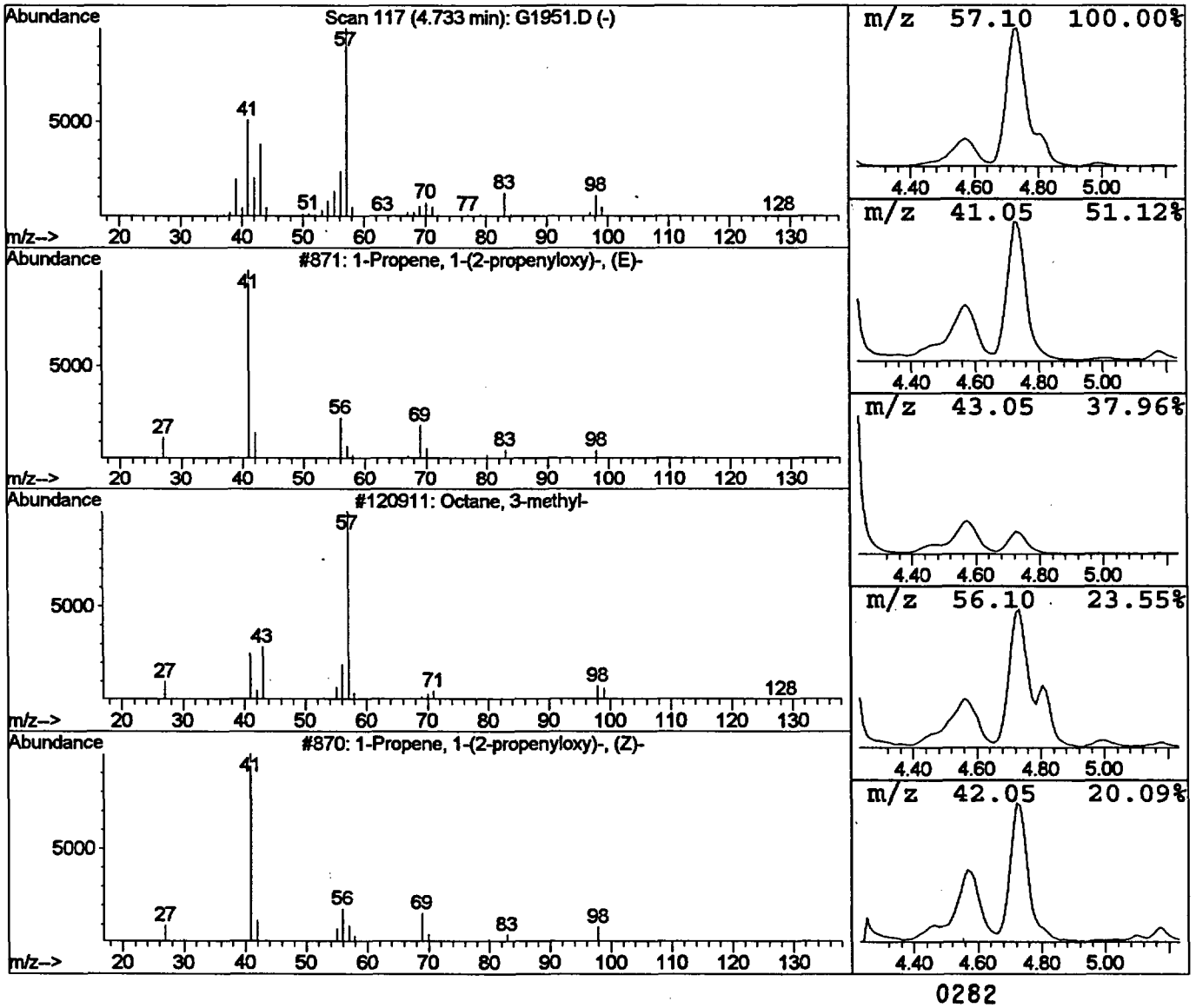
****

Peak Number 2 1-Propene, 1-(2-propenyloxy)-, Concentration Rank 9

UNKNOWN COMPOUND w1 - 27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.73	146.28 ng	3572970	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 1-(2-propenyloxy)-, (E)-	98	C6H10O	061142-13-0	53
2	Octane, 3-methyl-	128	C9H20	002216-33-3	50
3	1-Propene, 1-(2-propenyloxy)-, (Z)-	98	C6H10O	061142-12-9	47



0282

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

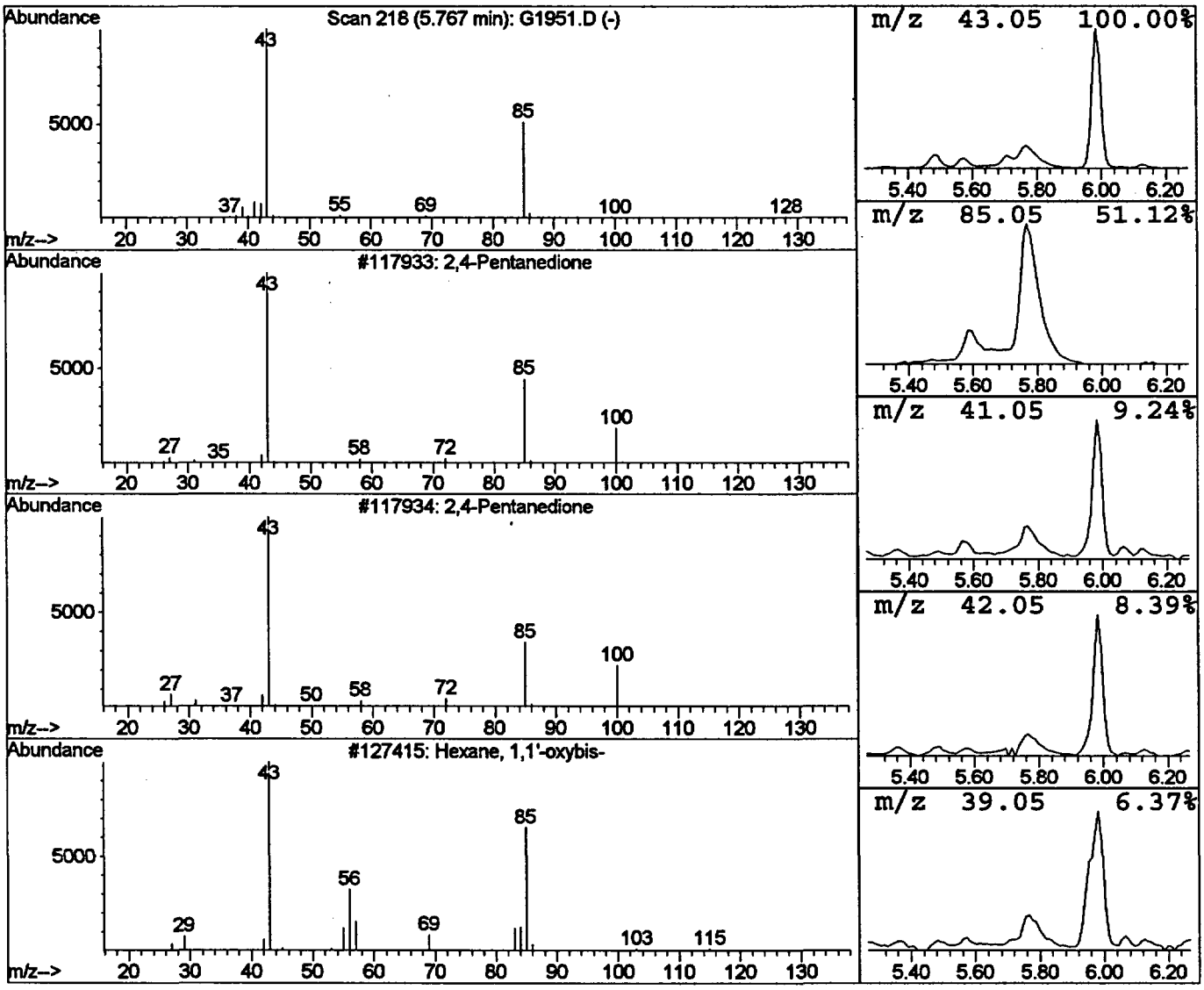
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 2,4-Pentanedione UNKNOWN COMPOUND Concentration Rank 33 cw 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.77	28.84 ng	704404	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	56
2	2,4-Pentanedione	100	C5H8O2	000123-54-6	56
3	Hexane, 1,1'-oxybis-	186	C12H26O	000112-58-3	40



0283

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D
Acq On : 22 Jan 98 18:36
Sample : S HP-7G 58073-001 FFR76
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vials:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

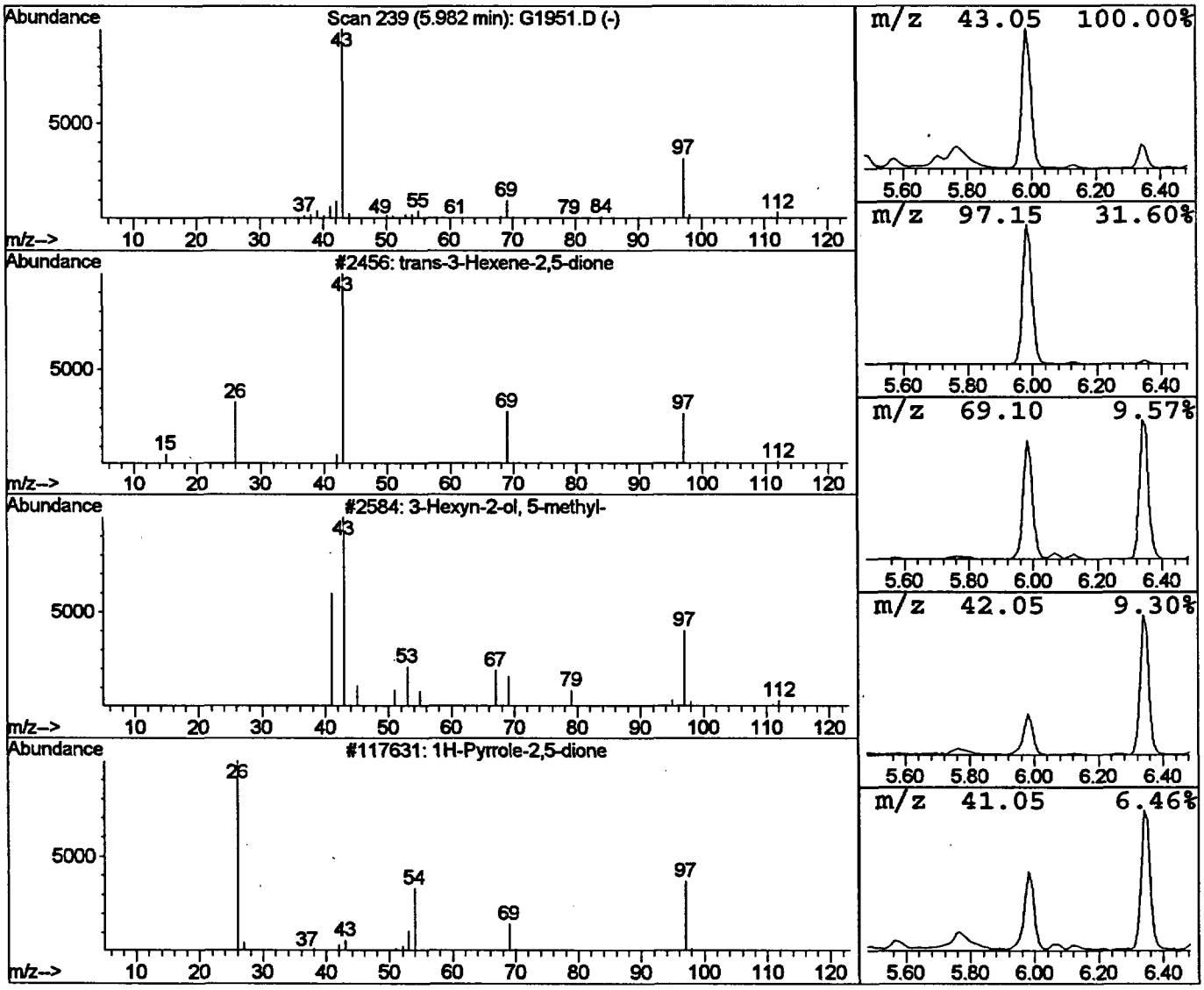
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 4 trans-3-Hexene-2,5-dione Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.98	74.32 ng	1815320	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
2	3-Hexyn-2-ol, 5-methyl-	112	C7H12O	023293-50-7	9
3	1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	9



0284

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D
Acq On : 22 Jan 98 18:36
Sample : S HP-7G 58073-001 FFR76
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Via
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

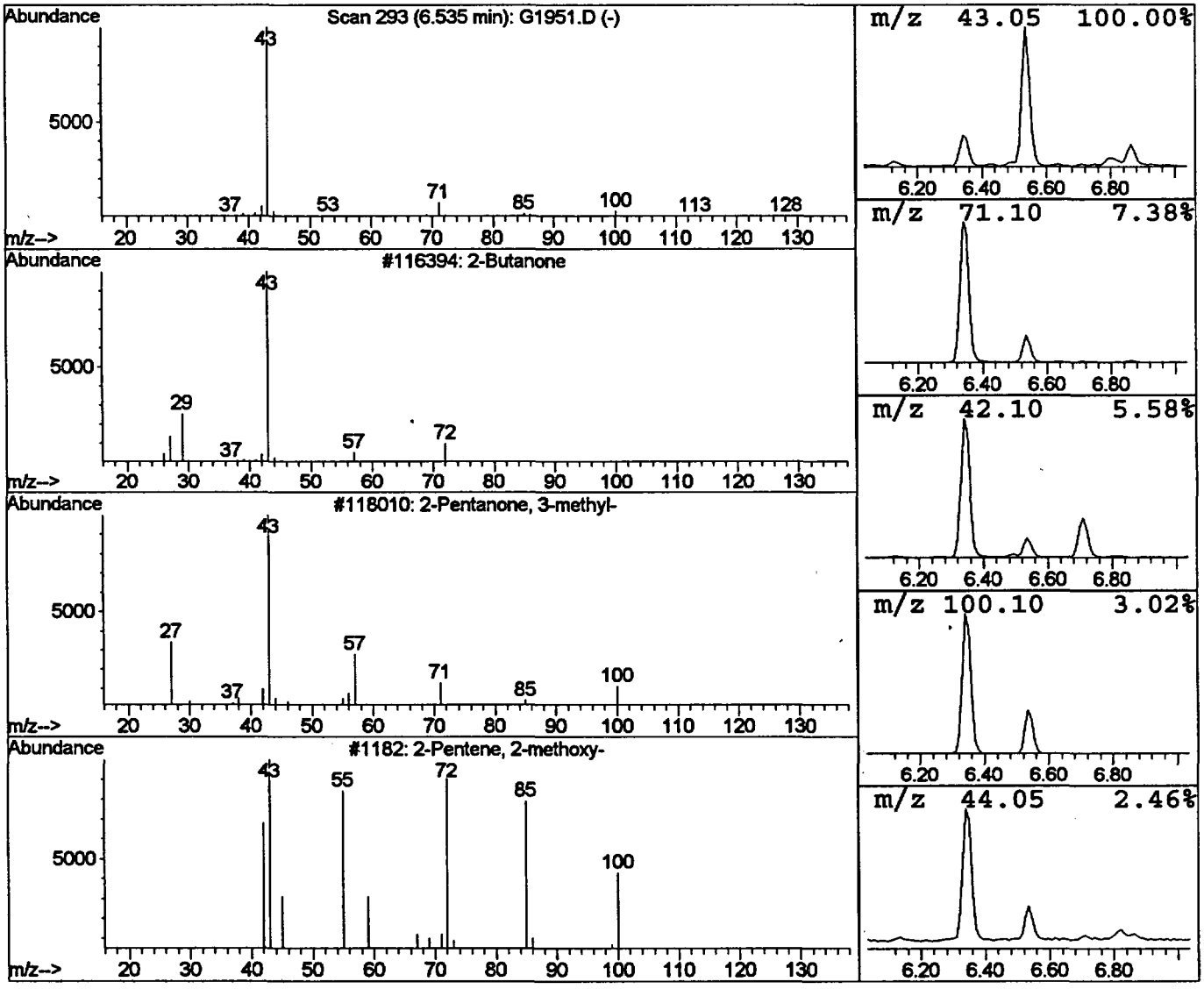
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 2-Butanone UNKNOWN COMPOUND mol - 27-98 Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.54	34.79 ng	849781	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Butanone	72	C4H8O	000078-93-3	9
2	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	7
3	2-Pentene, 2-methoxy-	100	C6H12O	061142-47-0	7



0285

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

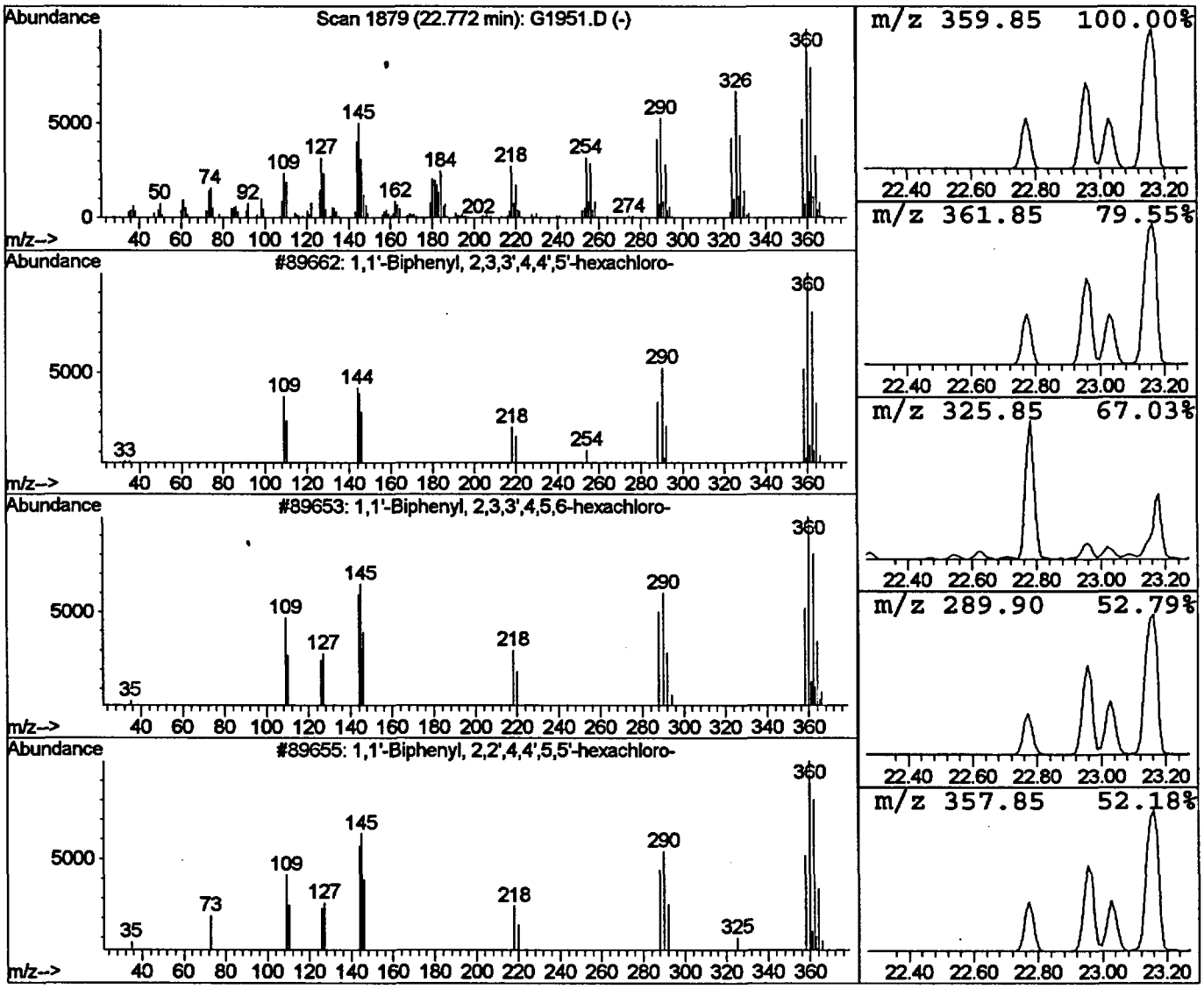
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 6 1,1'-Biphenyl, 2,3,3',4,4',5'- Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.77	85.44 ng	2290740	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4',5'-hexac	358	C12H4Cl6	069782-90-7	99
2	1,1'-Biphenyl, 2,3,3',4,5,6-hexachl	358	C12H4Cl6	041411-62-5	99
3	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

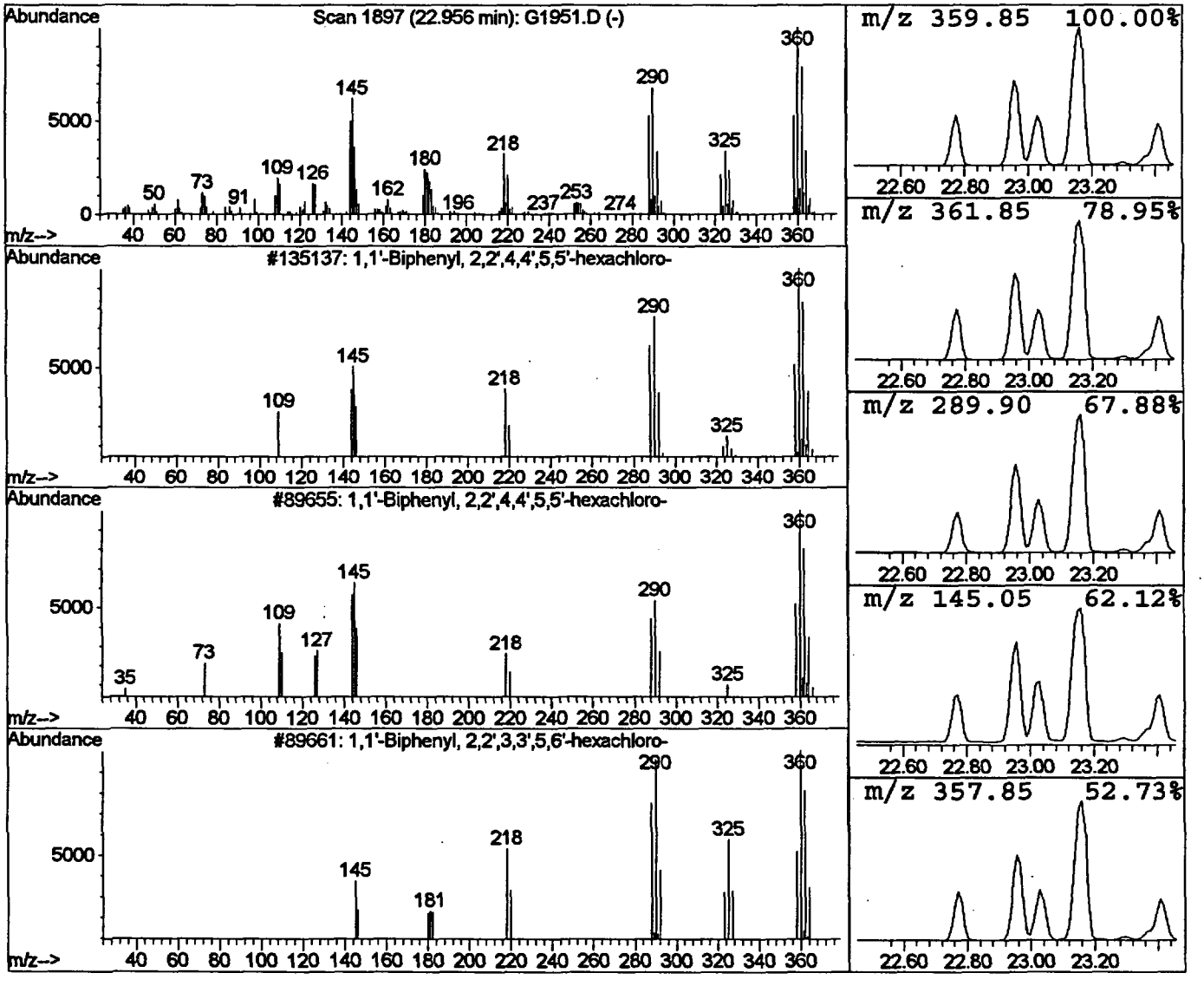
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 7 1,1'-Biphenyl, 2,2',4,4',5,5'- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.96	102.63 ng	2751850	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
2	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
3	1,1'-Biphenyl, 2,2',3,3',5,6'-hexac	358	C12H4Cl6	052744-13-5	99



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

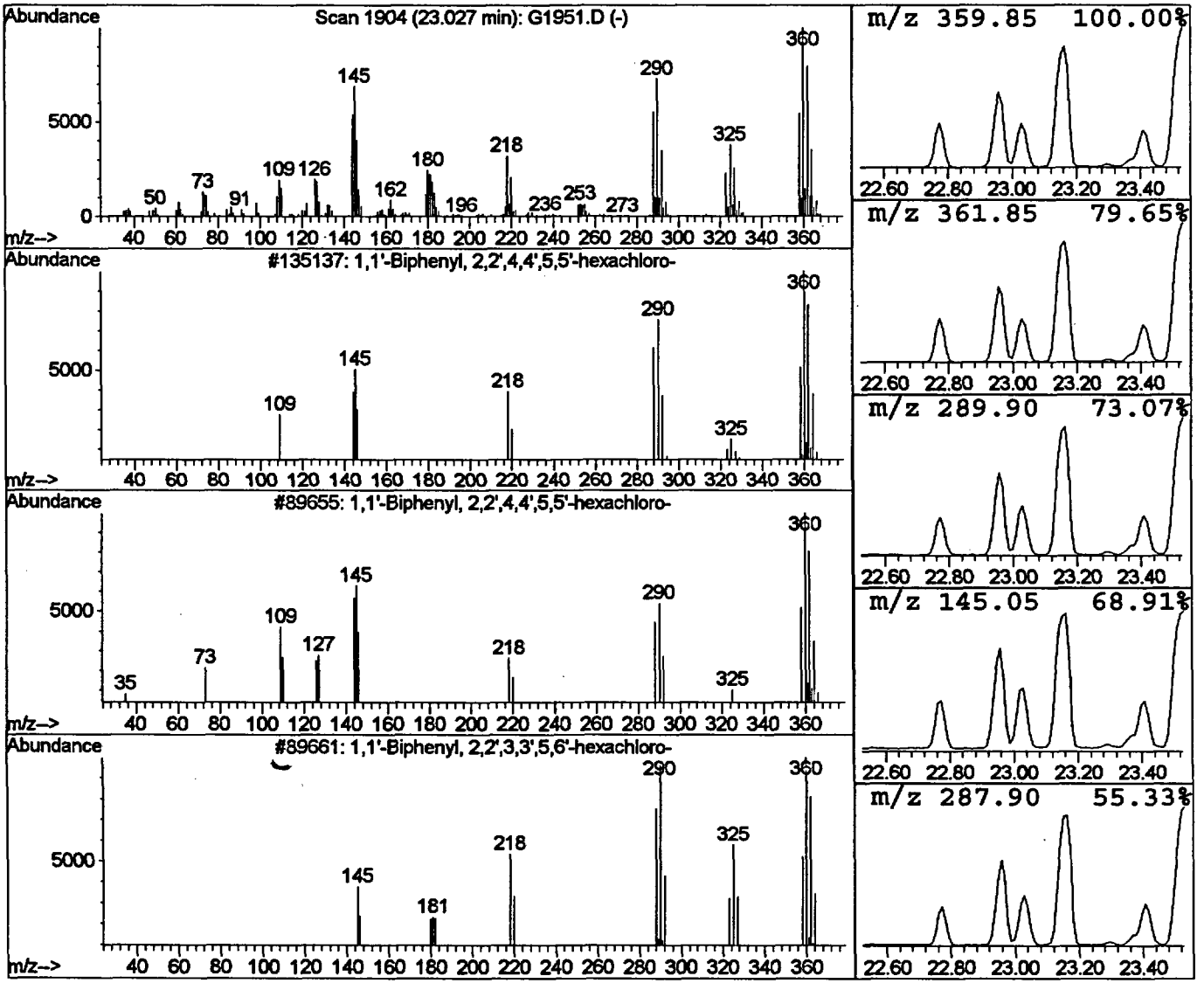
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 8 1,1'-Biphenyl, 2,2',4,4',5,5'- Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.03	71.59 ng	1919390	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
2	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
3	1,1'-Biphenyl, 2,2',3,3',5,6'-hexac	358	C12H4Cl6	052744-13-5	99



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

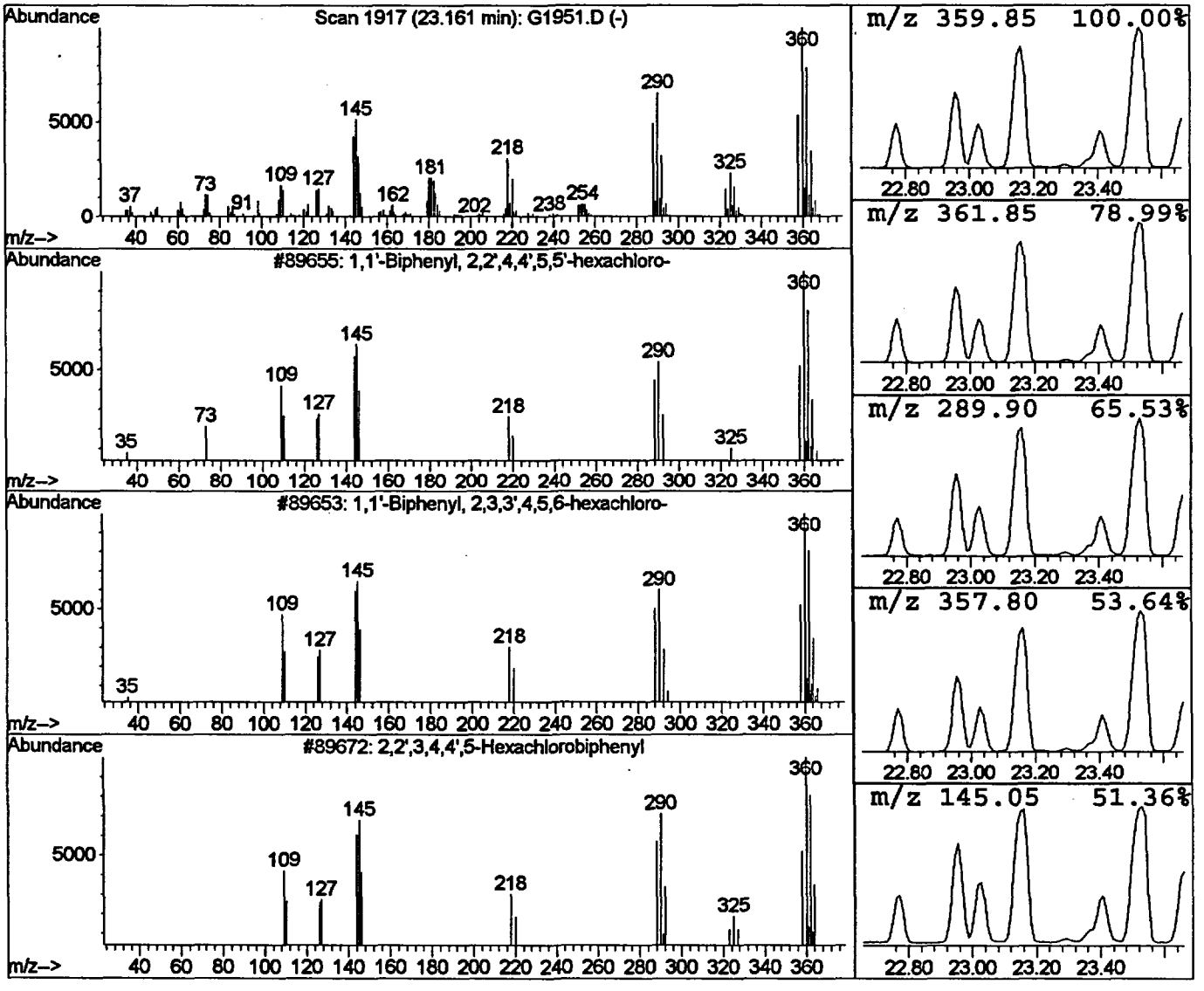
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 9 1,1'-Biphenyl, 2,2',4,4',5,5'- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.16	199.01 ng	5336040	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
2	1,1'-Biphenyl, 2,3,3',4,5,6-hexachl	358	C12H4Cl6	041411-62-5	99
3	2,2',3,4,4',5-Hexachlorobiphenyl	358	C12H4Cl6	035694-06-5	99



0289

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

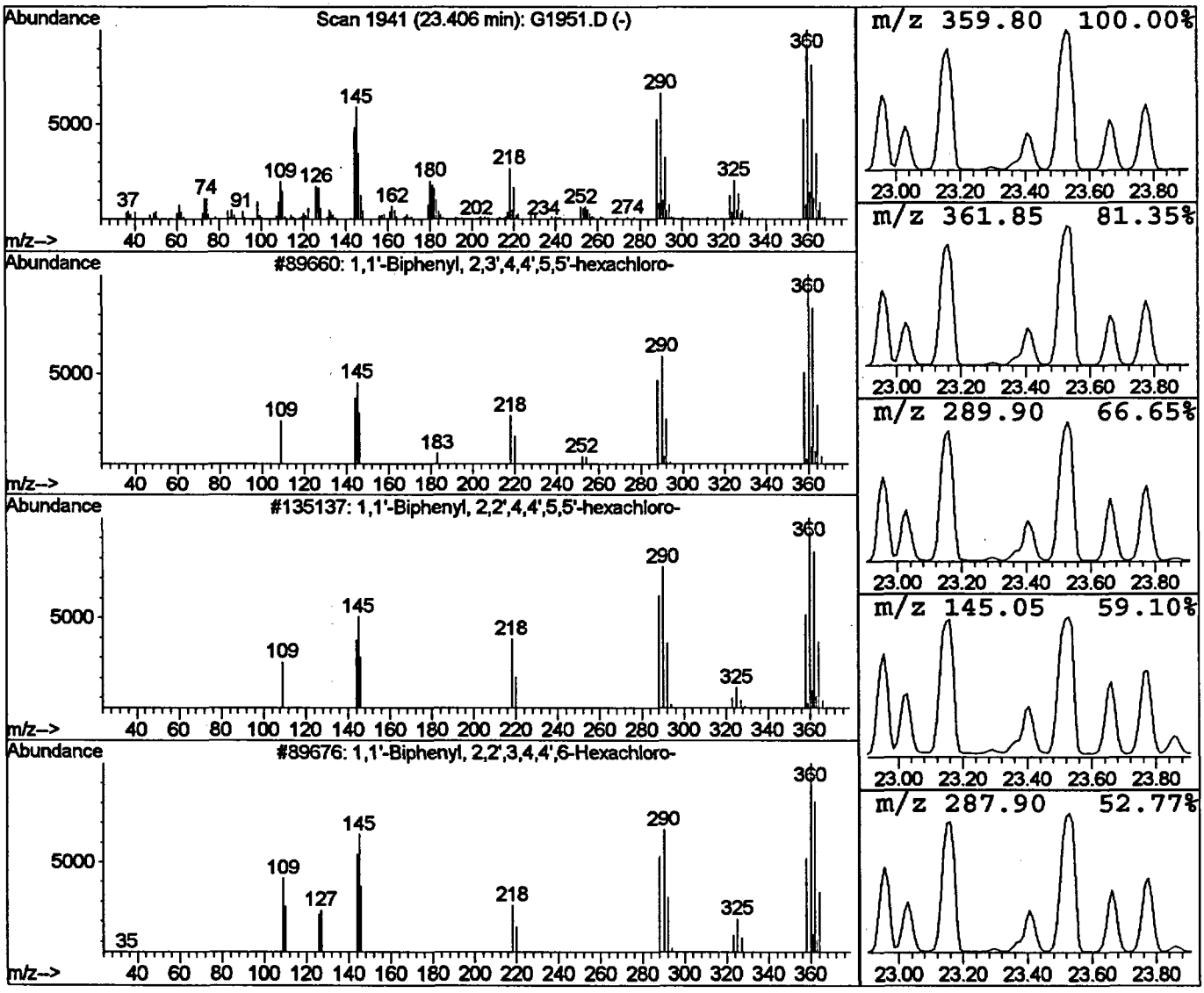
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 10 1,1'-Biphenyl, 2,3',4,4',5,5'- Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.41	61.74 ng	1655380	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3',4,4',5,5'-hexac	358	C12H4Cl6	052663-72-6	99
2	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
3	1,1'-Biphenyl, 2,2',3,4,4',6-Hexach	358	C12H4Cl6	056030-56-9	99



0290

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

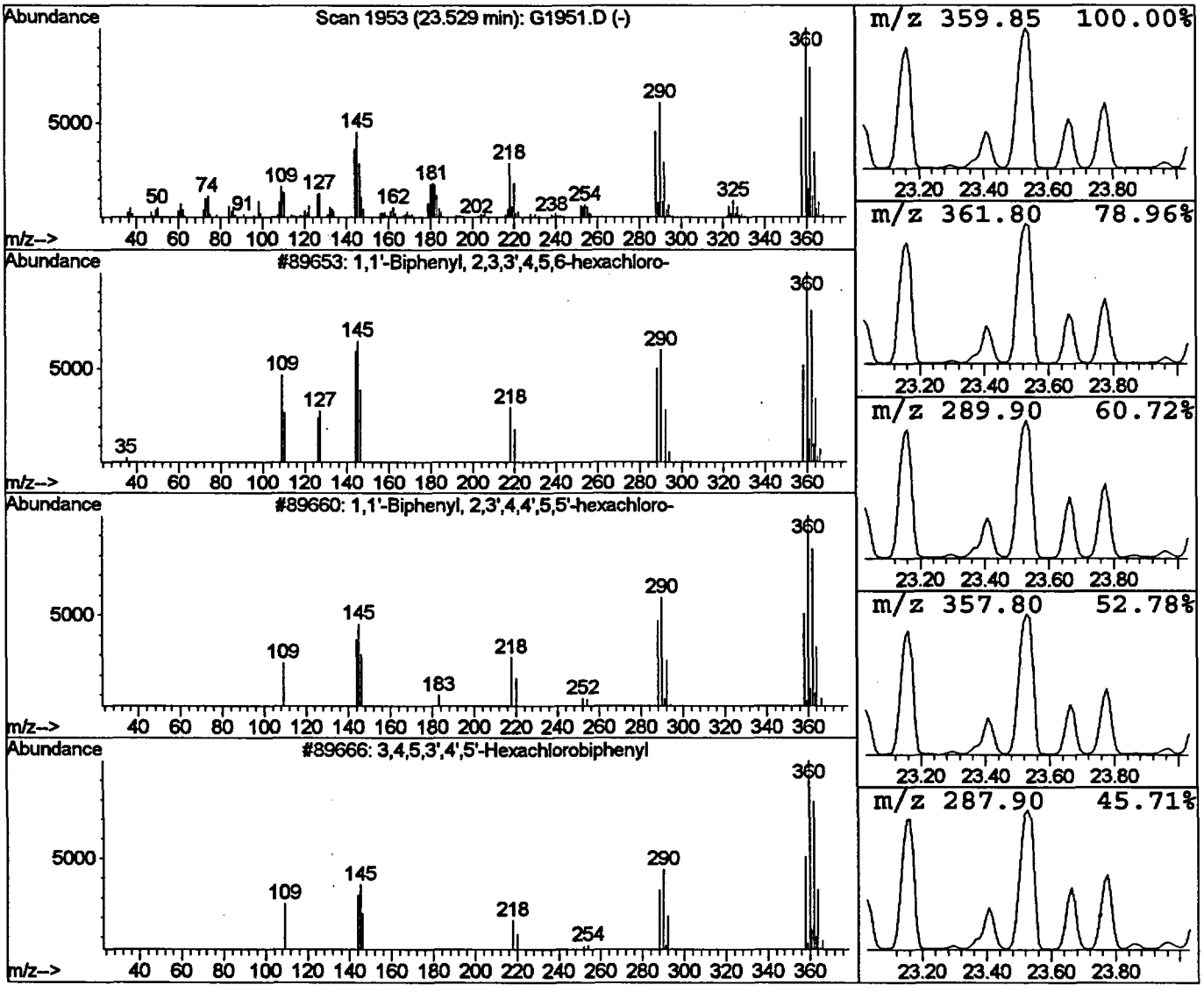
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 11 1,1'-Biphenyl, 2,3,3',4,5,6-he Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.53	246.13 ng	6599330	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,5,6-hexachl	358	C12H4Cl6	041411-62-5	99
2	1,1'-Biphenyl, 2,3',4,4',5,5'-hexac	358	C12H4Cl6	052663-72-6	99
3	3,4,5,3',4',5'-Hexachlorobiphenyl	358	C12H4Cl6	032774-16-6	99



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

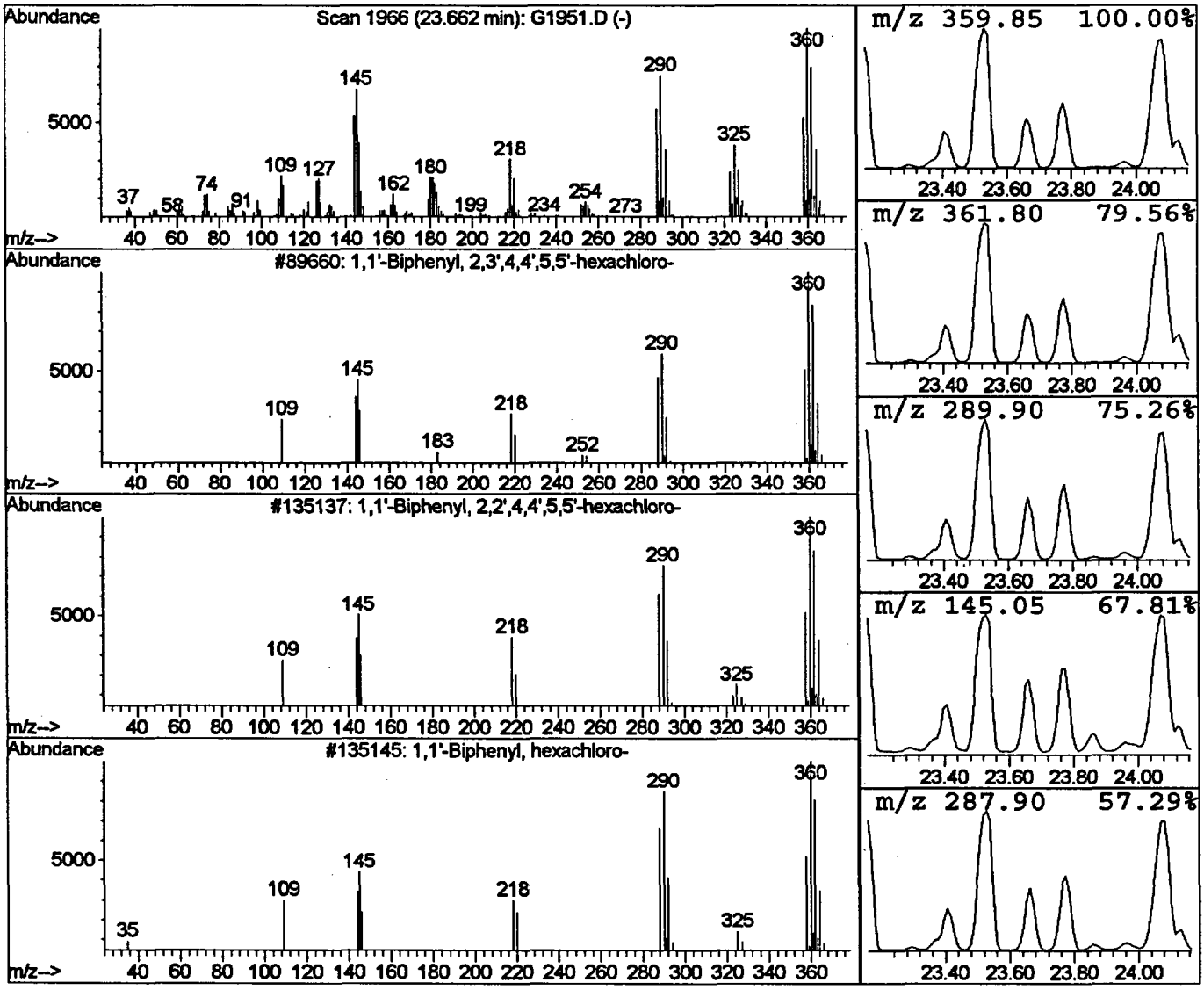
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 12 1,1'-Biphenyl, 2,3',4,4',5,5'- Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.66	84.68 ng	2270380	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3',4,4',5,5'-hexac	358	C12H4Cl6	052663-72-6	99
2	1,1'-Biphenyl, 2,2',4,4',5,5'-hexac	358	C12H4Cl6	035065-27-1	99
3	1,1'-Biphenyl, hexachloro-	358	C12H4Cl6	026601-64-9	99



0292

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

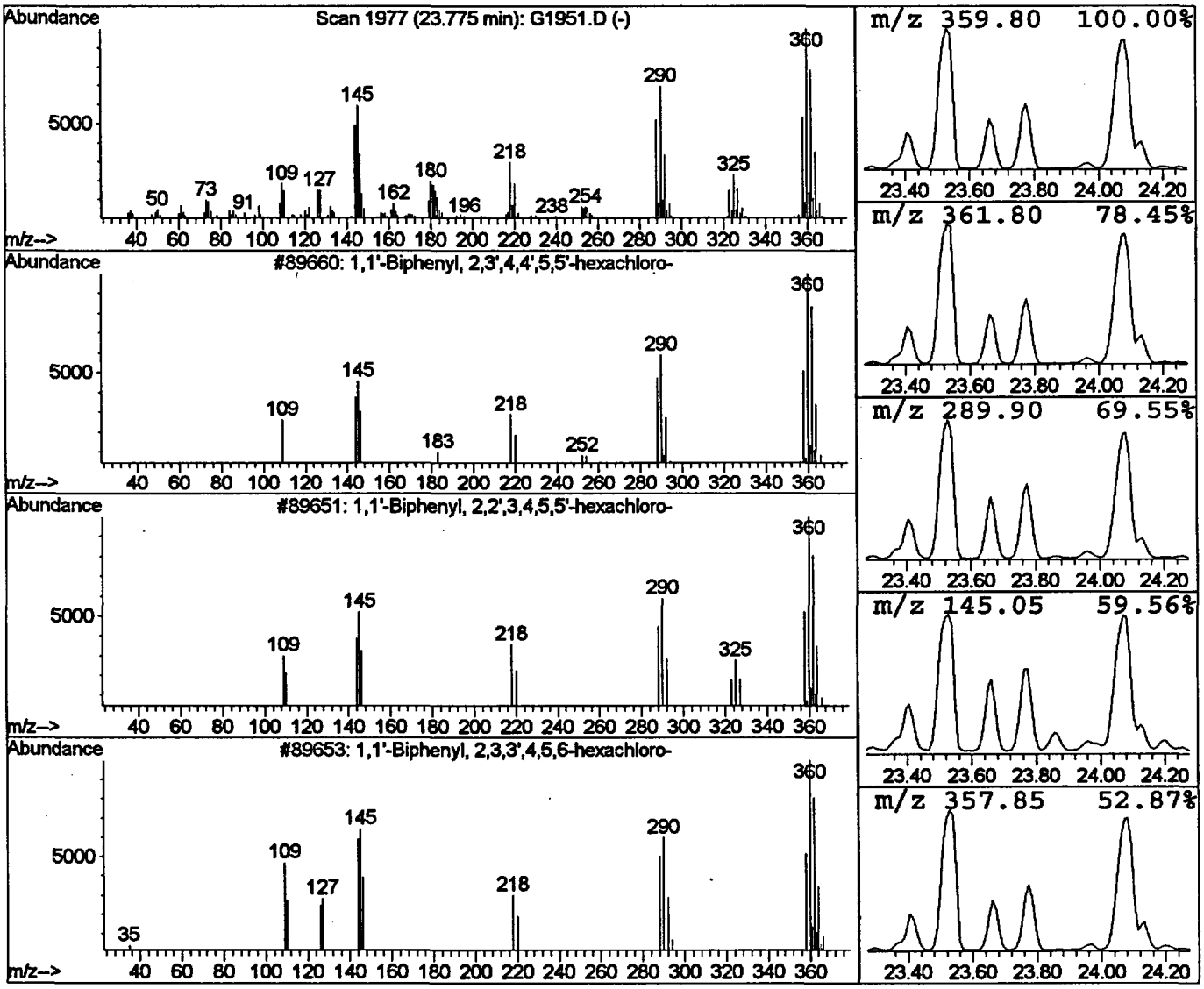
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 13 1,1'-Biphenyl, 2,3',4,4',5,5'- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.77	98.93 ng	2652490	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3',4,4',5,5'-hexac	358	C12H4Cl6	052663-72-6	99
(2)	1,1'-Biphenyl, 2,2',3,4,5,5'-hexach	358	C12H4Cl6	052712-04-6	99
3	1,1'-Biphenyl, 2,3,3',4,5,6-hexachl	358	C12H4Cl6	041411-62-5	99



0293

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

CASE 25969
SDG# FFR76

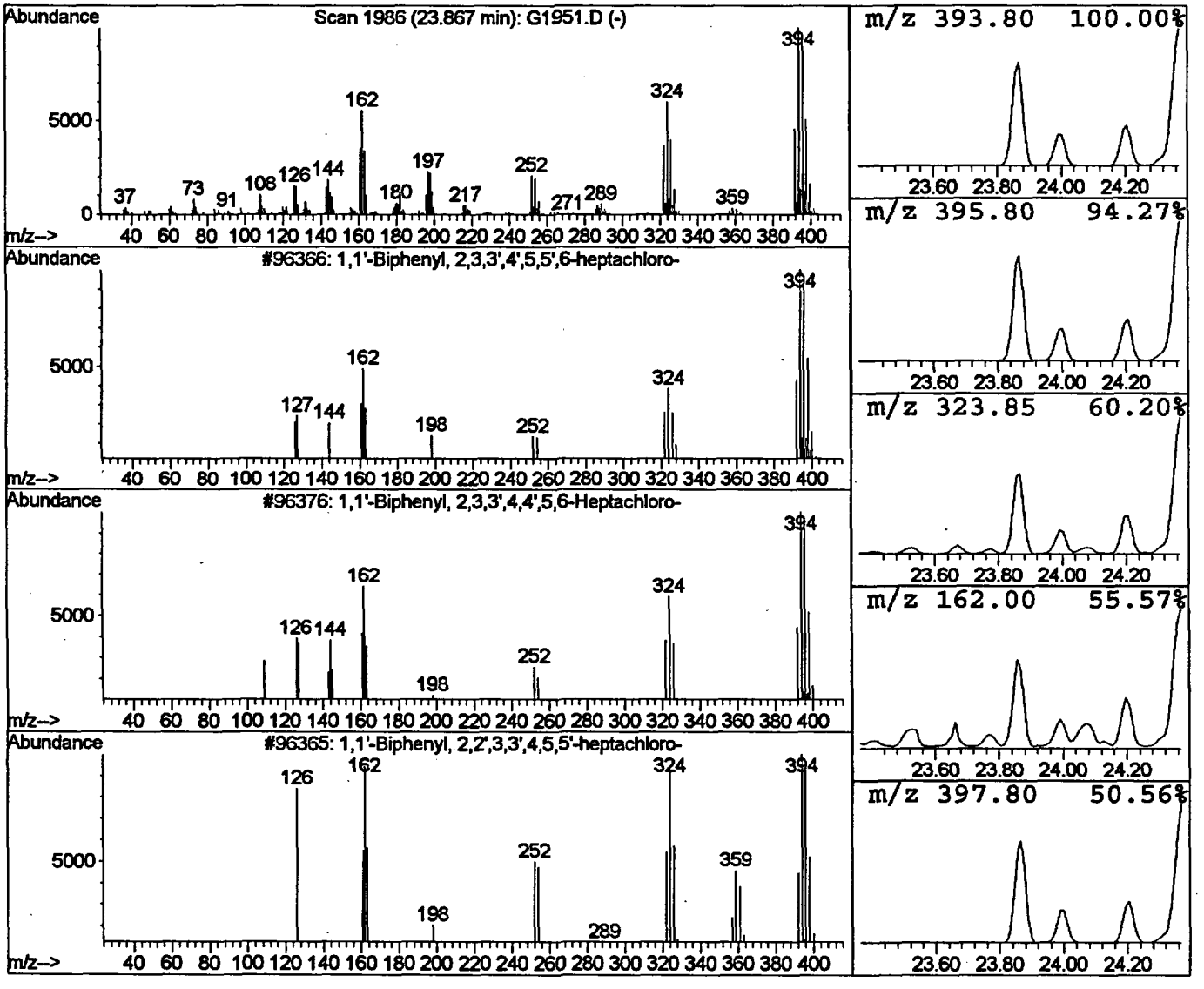
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 14 1,1'-Biphenyl, 2,3,3',4',5,5', Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.87	101.92 ng	2732600	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4',5,5',6-hep	392	C12H3Cl7	069782-91-8	99
2	1,1'-Biphenyl, 2,3,3',4,4',5,6-Hept	392	C12H3Cl7	041411-64-7	96
3	1,1'-Biphenyl, 2,2',3,3',4,5,5'-hep	392	C12H3Cl7	052663-74-8	95



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

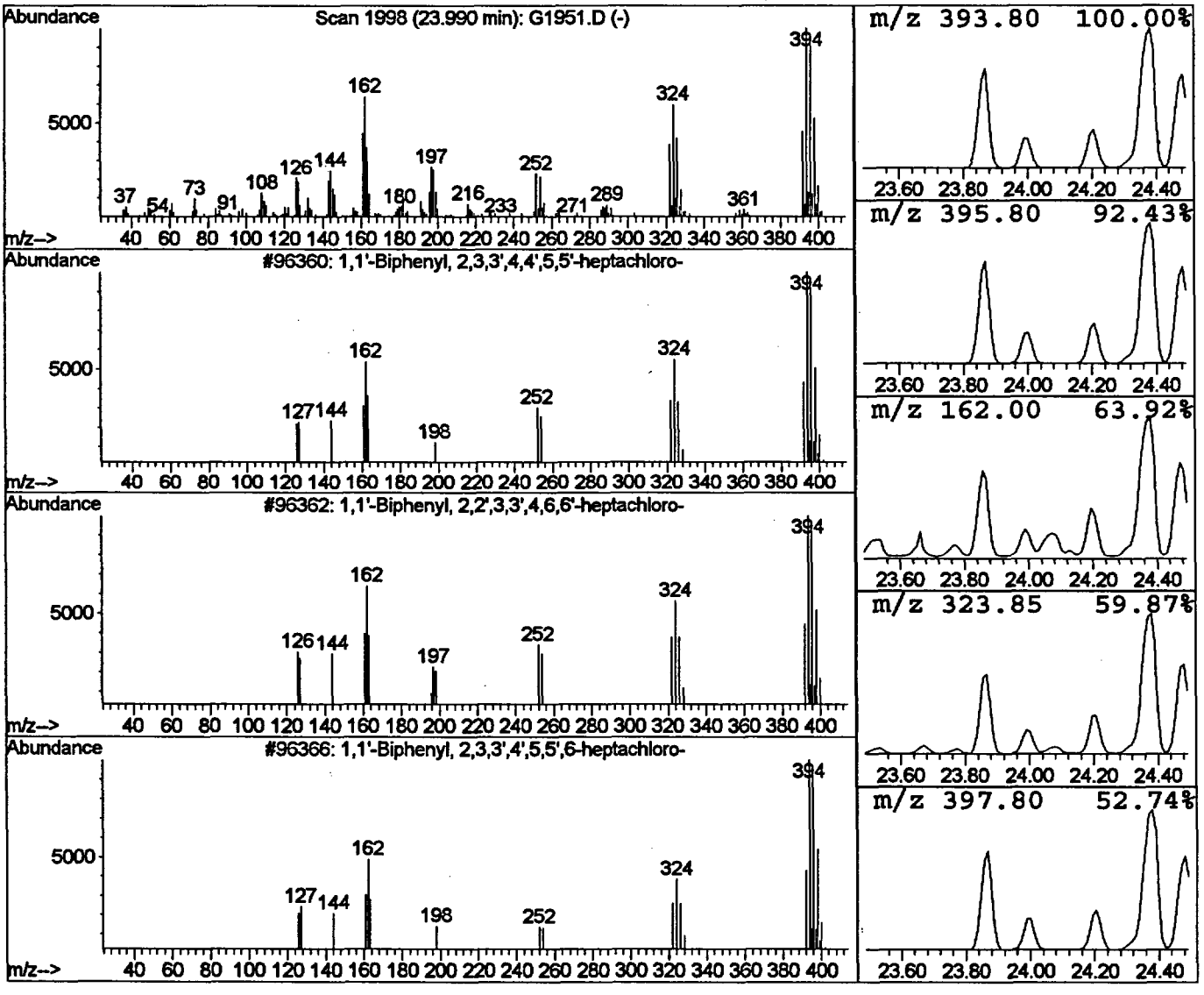
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 15 1,1'-Biphenyl, 2,3,3',4,4',5,5 Concentration Rank 31

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.99	37.27 ng	999367	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
2	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99
3	1,1'-Biphenyl, 2,3,3',4',5,5',6-hep	392	C12H3Cl7	069782-91-8	99



0295

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

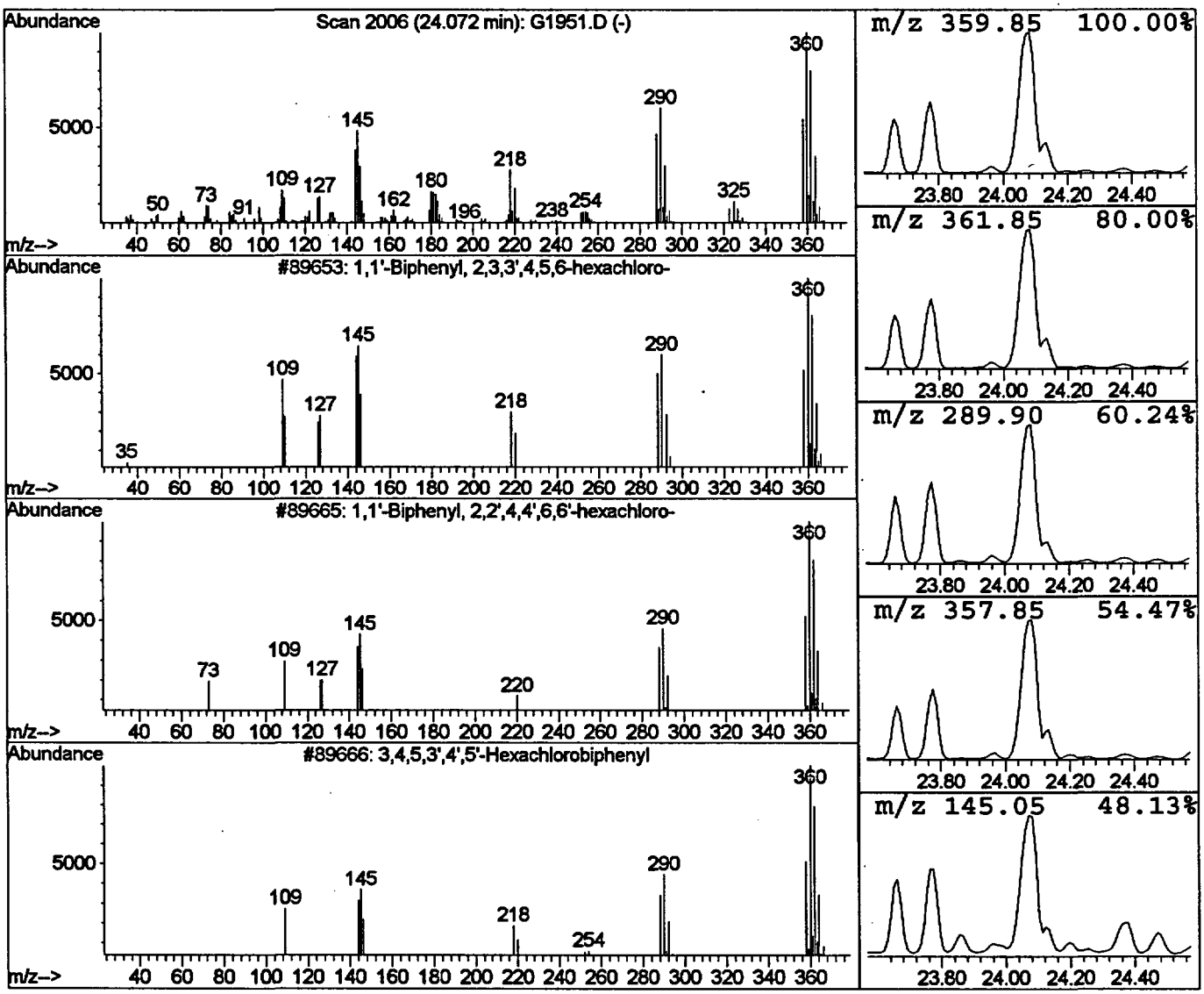
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 16 1,1'-Biphenyl, 2,3,3',4,5,6-he Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.07	266.91 ng	7156380	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,5,6-hexachl	358	C12H4Cl6	041411-62-5	99
2	1,1'-Biphenyl, 2,2',4,4',6,6'-hexac	358	C12H4Cl6	033979-03-2	99
3	3,4,5,3',4',5'-Hexachlorobiphenyl	358	C12H4Cl6	032774-16-6	98



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D
Acq On : 22 Jan 98 18:36
Sample : S HP-7G 58073-001 FFR76
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

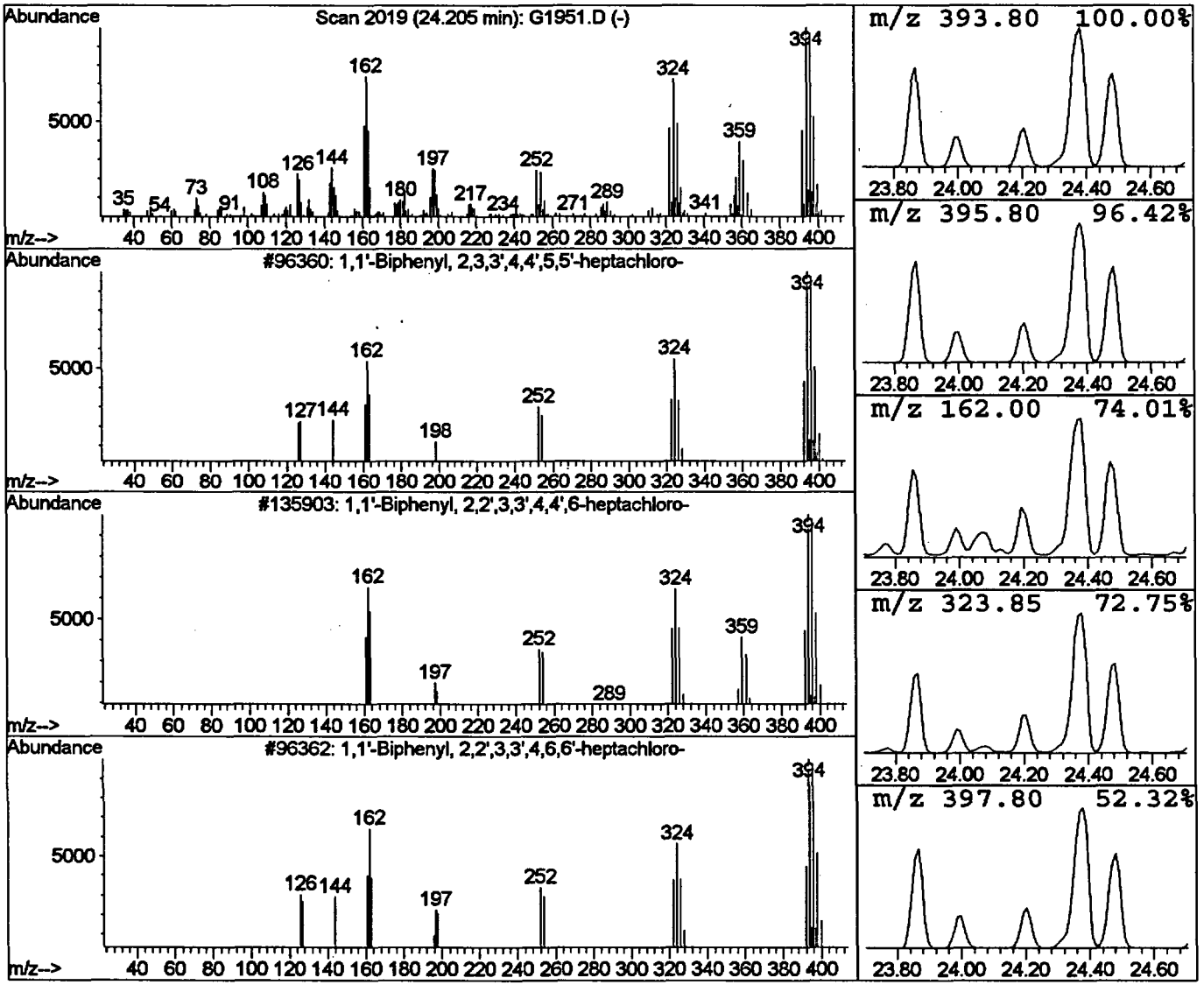
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 17 1,1'-Biphenyl, 2,3,3',4,4',5,5 Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.20	44.77 ng	1200420	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
2	1,1'-Biphenyl, 2,2',3,3',4,4',6-hep	392	C12H3Cl7	052663-71-5	99
3	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99



0297

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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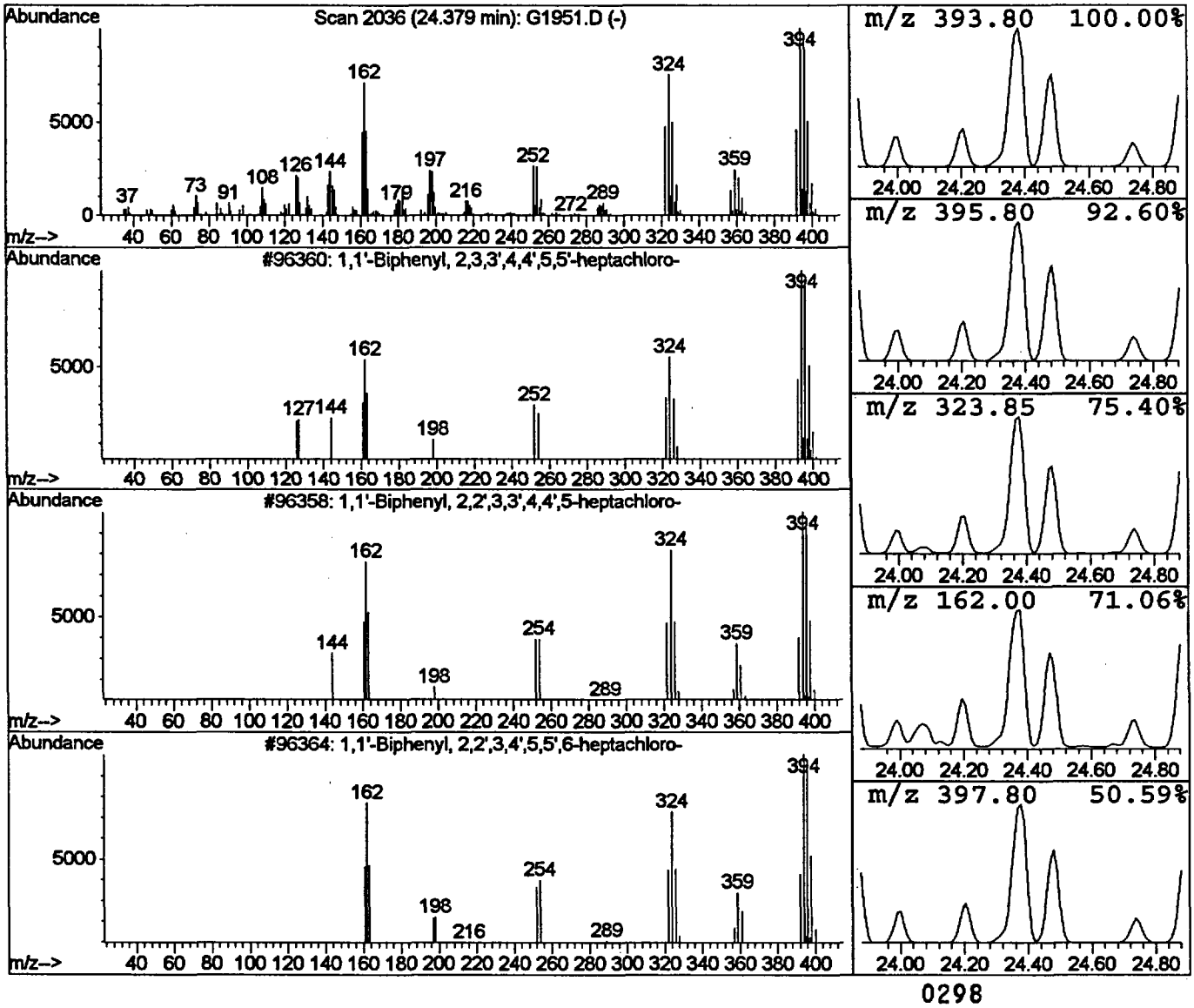
Peak Number 18 1,1'-Biphenyl, 2,3,3',4,4',5,5 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.38	229.52 ng	6153880	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
2	1,1'-Biphenyl, 2,2',3,3',4,4',5-hep	392	C12H3Cl7	035065-30-6	99
3	1,1'-Biphenyl, 2,2',3,4',5,5',6-hep	392	C12H3Cl7	052663-68-0	99



0298

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

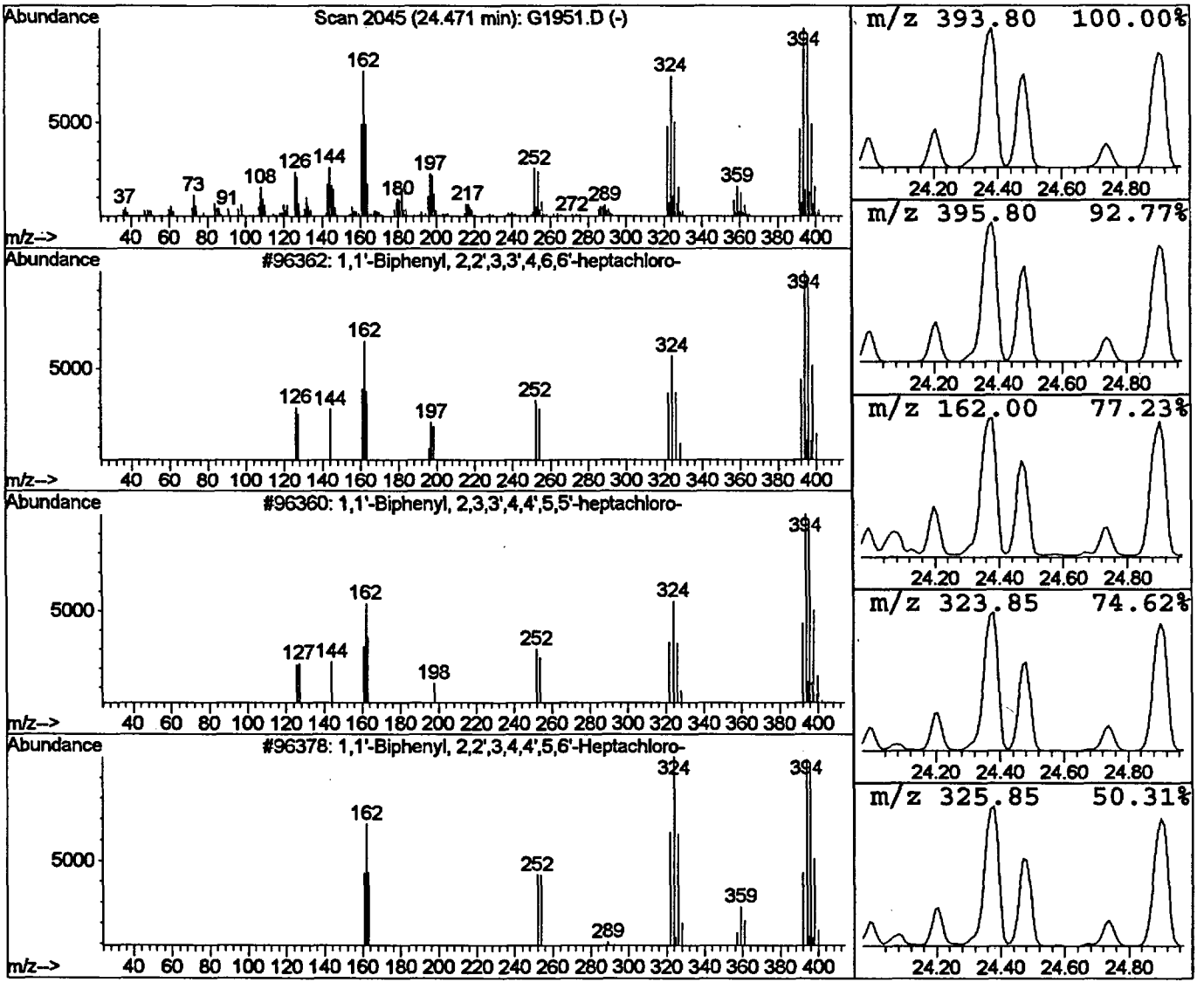
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 19 1,1'-Biphenyl, 2,2',3,3',4,6,6 Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.47	119.89 ng	3214620	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99
2	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
3	1,1'-Biphenyl, 2,2',3,4,4',5,6'-Hep	392	C12H3Cl7	060145-23-5	99



Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

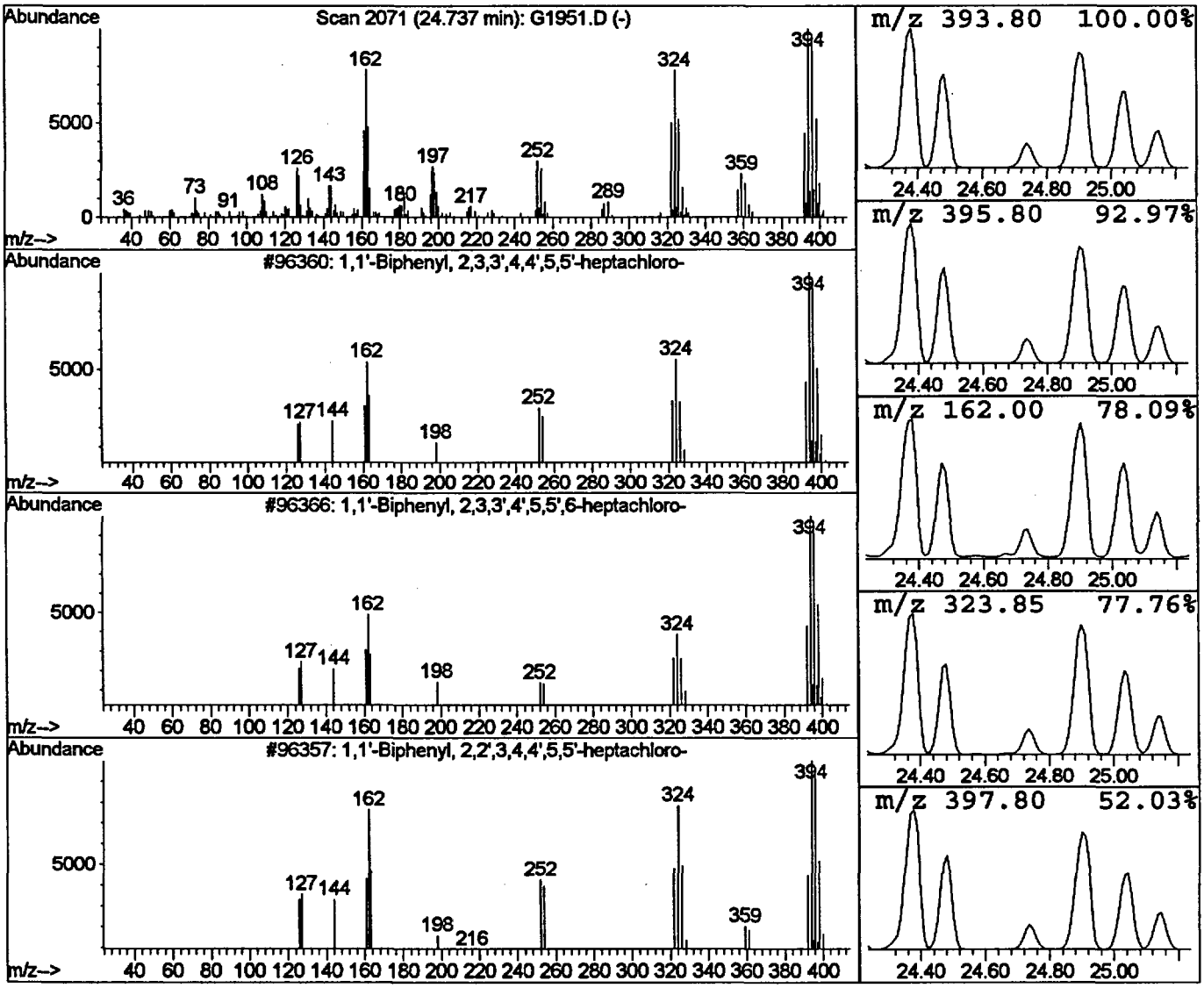
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 20 1,1'-Biphenyl, 2,3,3',4,4',5,5 Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.74	46.51 ng	1246920	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	98
2	1,1'-Biphenyl, 2,3,3',4',5,5',6-hep	392	C12H3Cl7	069782-91-8	98
3	1,1'-Biphenyl, 2,2',3,4,4',5,5'-hep	392	C12H3Cl7	035065-29-3	97



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

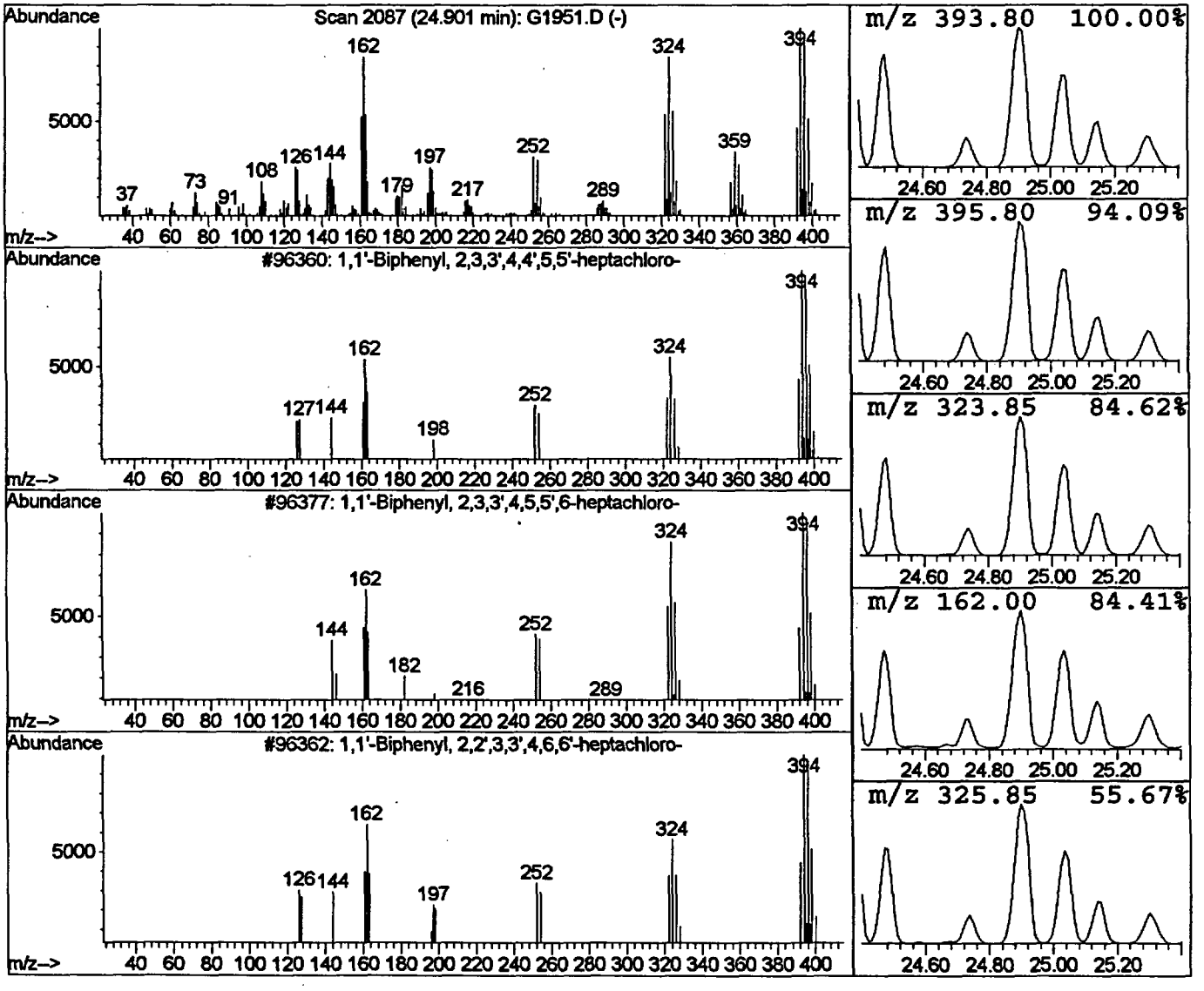
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 21 1,1'-Biphenyl, 2,3,3',4,4',5,5 Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.90	214.70 ng	5756550	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
2	1,1'-Biphenyl, 2,3,3',4,5,5',6-hept	392	C12H3Cl7	074472-51-8	99
3	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

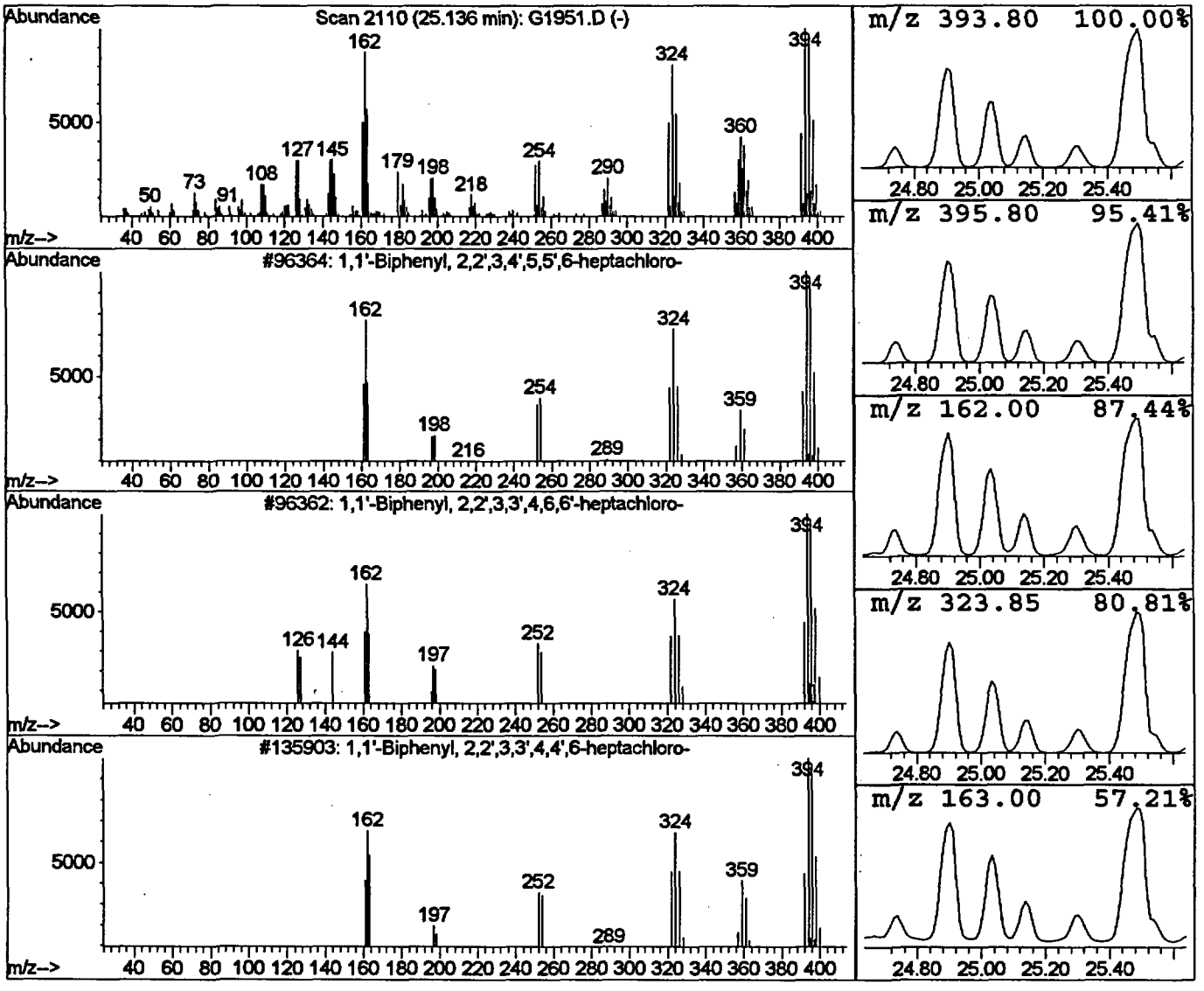
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 22 1,1'-Biphenyl, 2,2',3,4',5,5', Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.14	80.79 ng	2166120	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,4',5,5',6-hep	392	C12H3Cl7	052663-68-0	99
(2)	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99
3	1,1'-Biphenyl, 2,2',3,3',4,4',6-hep	392	C12H3Cl7	052663-71-5	99



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

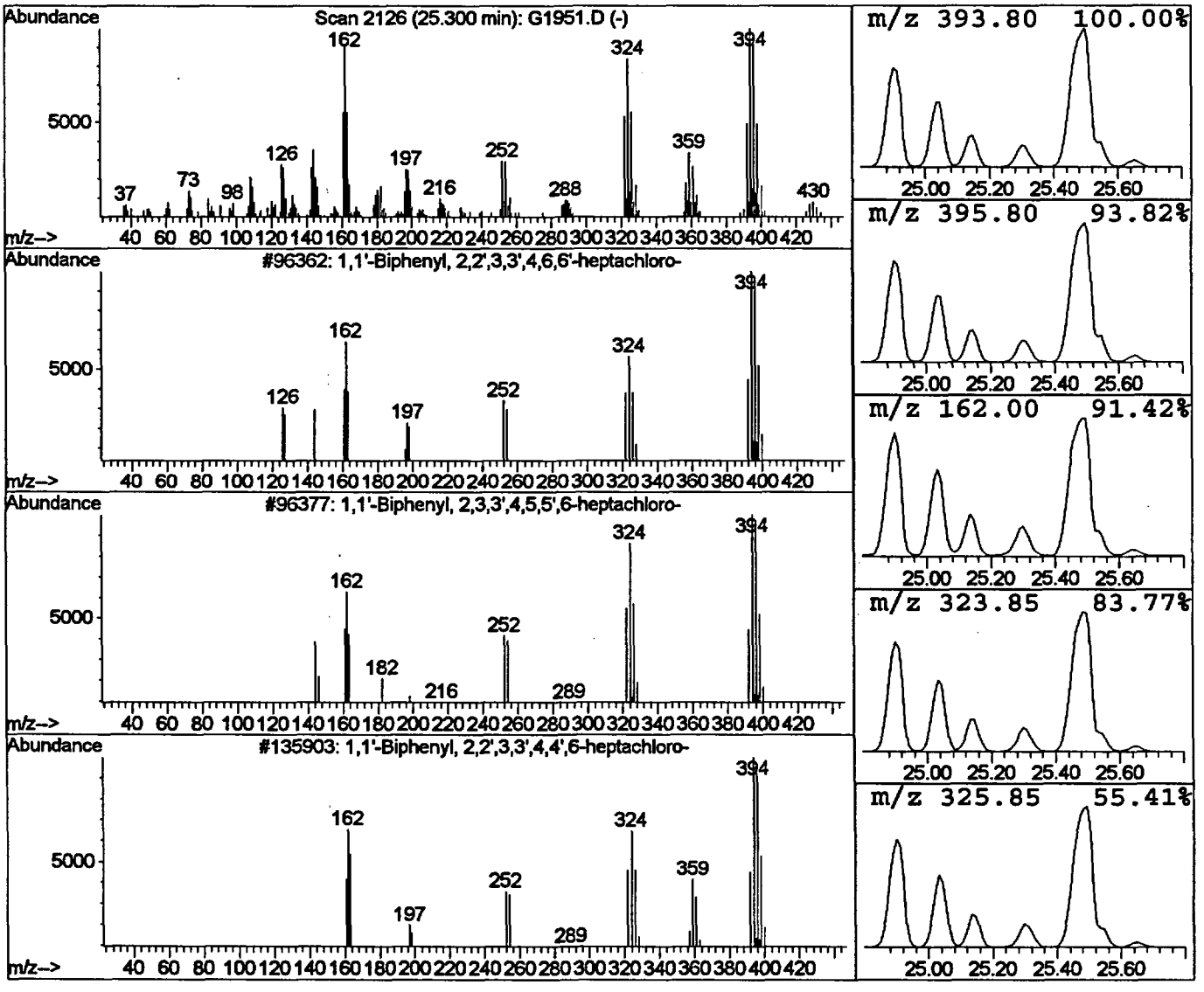
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 23 1,1'-Biphenyl, 2,2',3,3',4,6,6 Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.30	62.66 ng	1679960	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99
2	1,1'-Biphenyl, 2,3,3',4,5,5',6-hept	392	C12H3Cl7	074472-51-8	99
3	1,1'-Biphenyl, 2,2',3,3',4,4',6-hep	392	C12H3Cl7	052663-71-5	99



0303

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

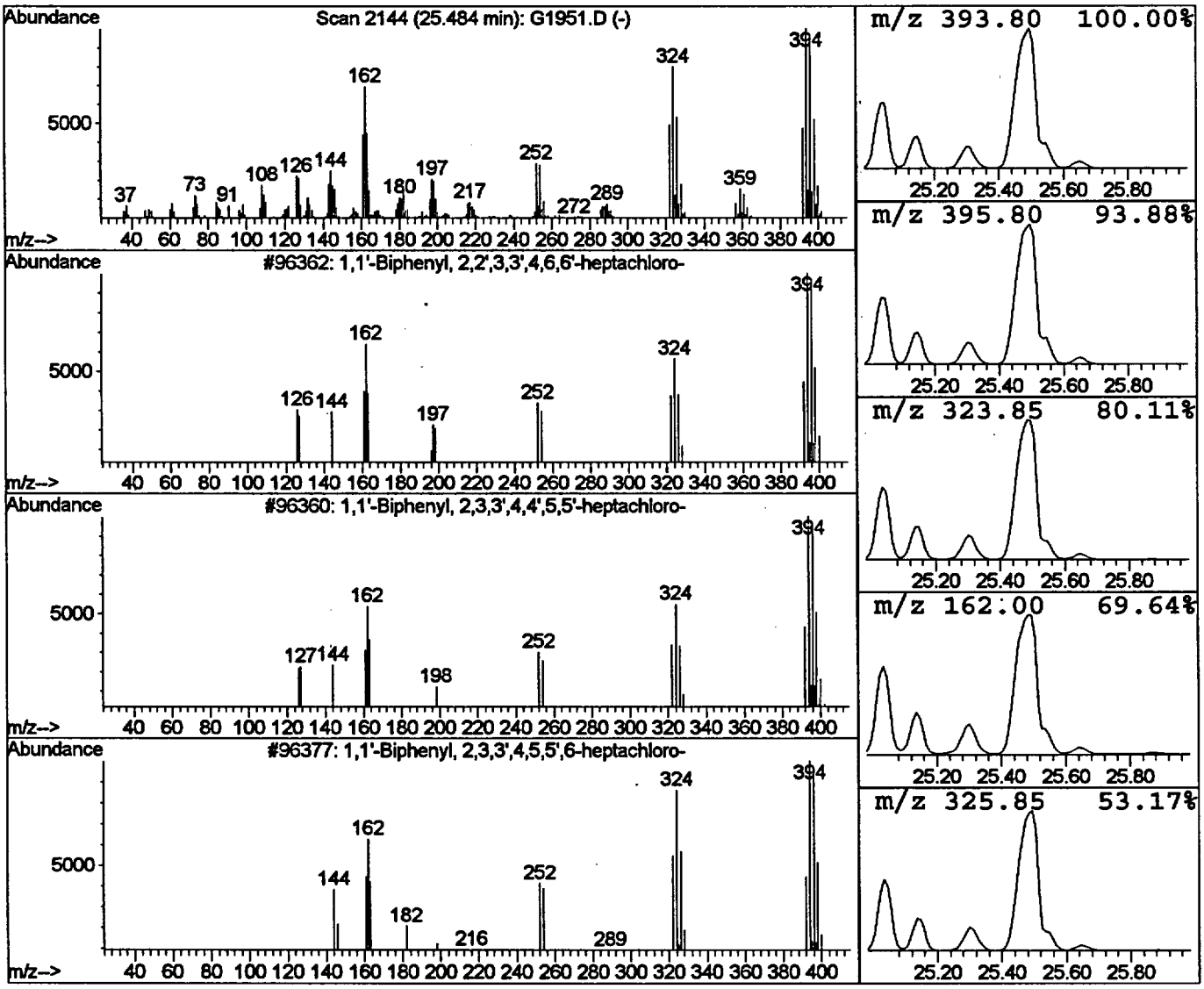
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 24 1,1'-Biphenyl, 2,2',3,3',4,6,6 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.48	393.85 ng	10560000	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99
2	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
3	1,1'-Biphenyl, 2,3,3',4,5,5',6-hept	392	C12H3Cl7	074472-51-8	99



0304

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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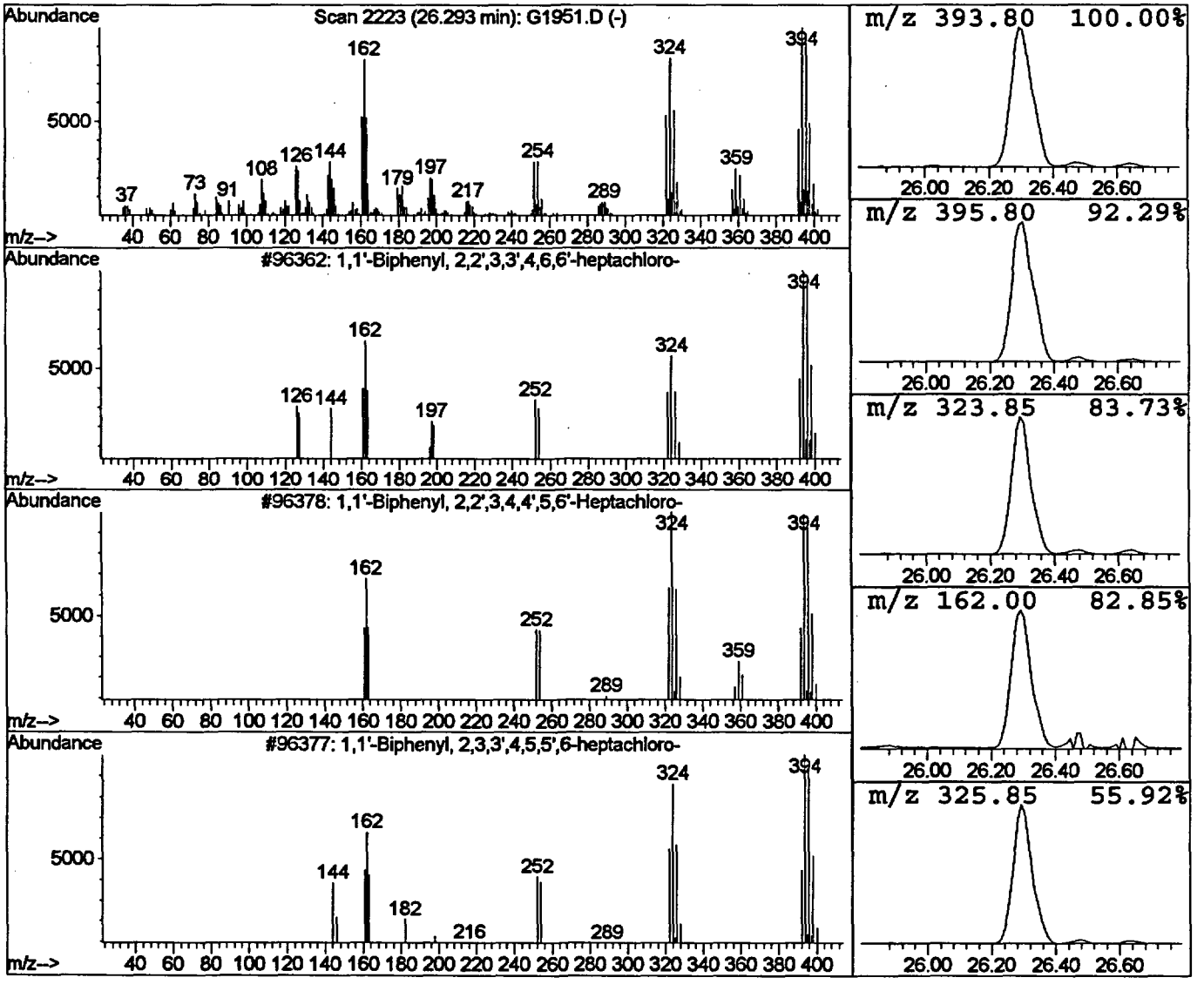
Peak Number 25 1,1'-Biphenyl, 2,2',3,3',4,6,6 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.29	263.09 ng	7054050	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,6,6'-hep	392	C12H3Cl7	052663-65-7	99
2	1,1'-Biphenyl, 2,2',3,4,4',5,6'-Hep	392	C12H3Cl7	060145-23-5	99
3	1,1'-Biphenyl, 2,3,3',4,5,5',6-hept	392	C12H3Cl7	074472-51-8	99



0305

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

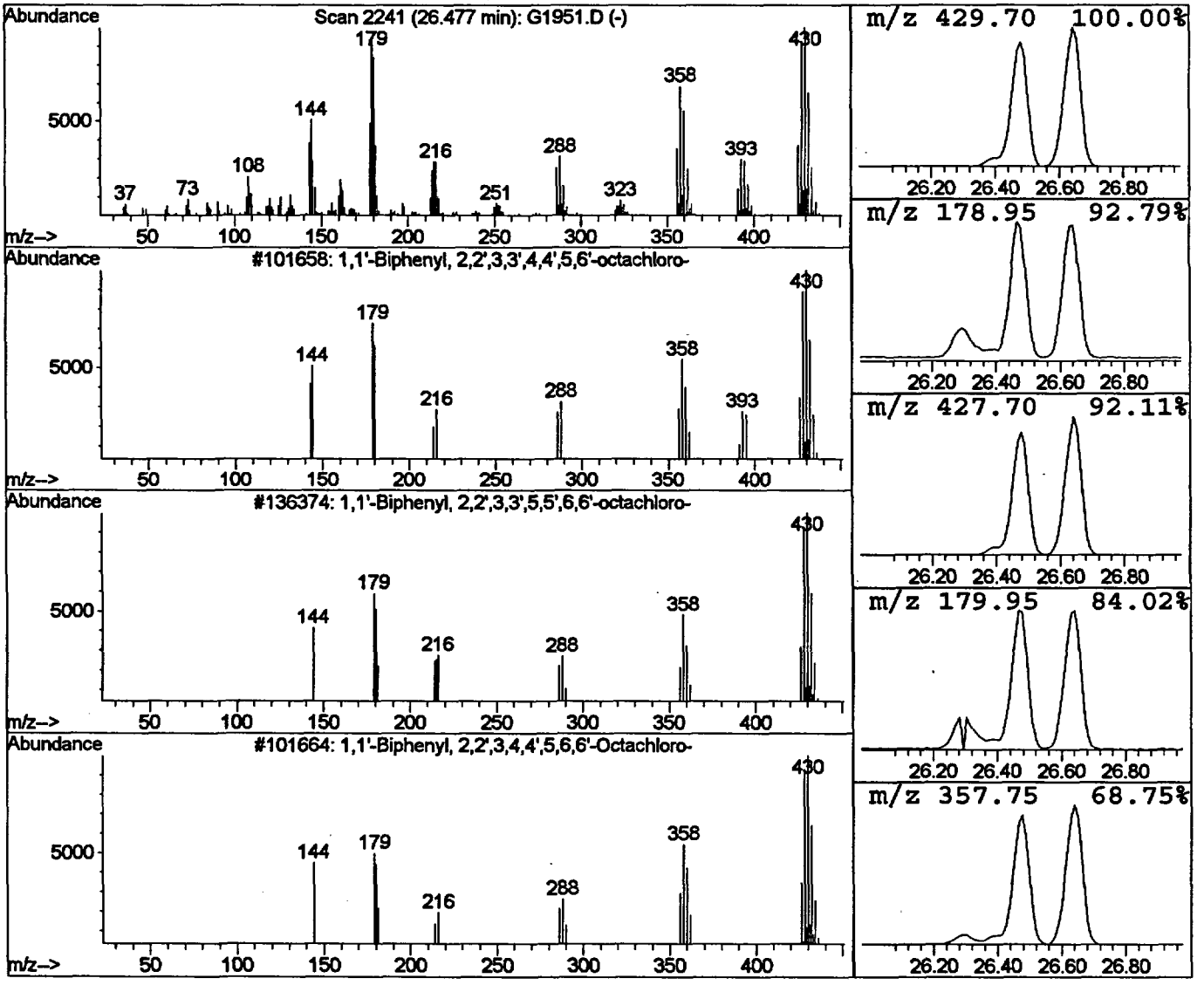
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 26 1,1'-Biphenyl, 2,2',3,3',4,4', Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.48	129.43 ng	3470400	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,4',5,6'-	426	C12H2Cl8	042740-50-1	99
2	1,1'-Biphenyl, 2,2',3,3',5,5',6,6'-	426	C12H2Cl8	002136-99-4	99
3	1,1'-Biphenyl, 2,2',3,4,4',5,6,6'-O	426	C12H2Cl8	074472-52-9	99



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Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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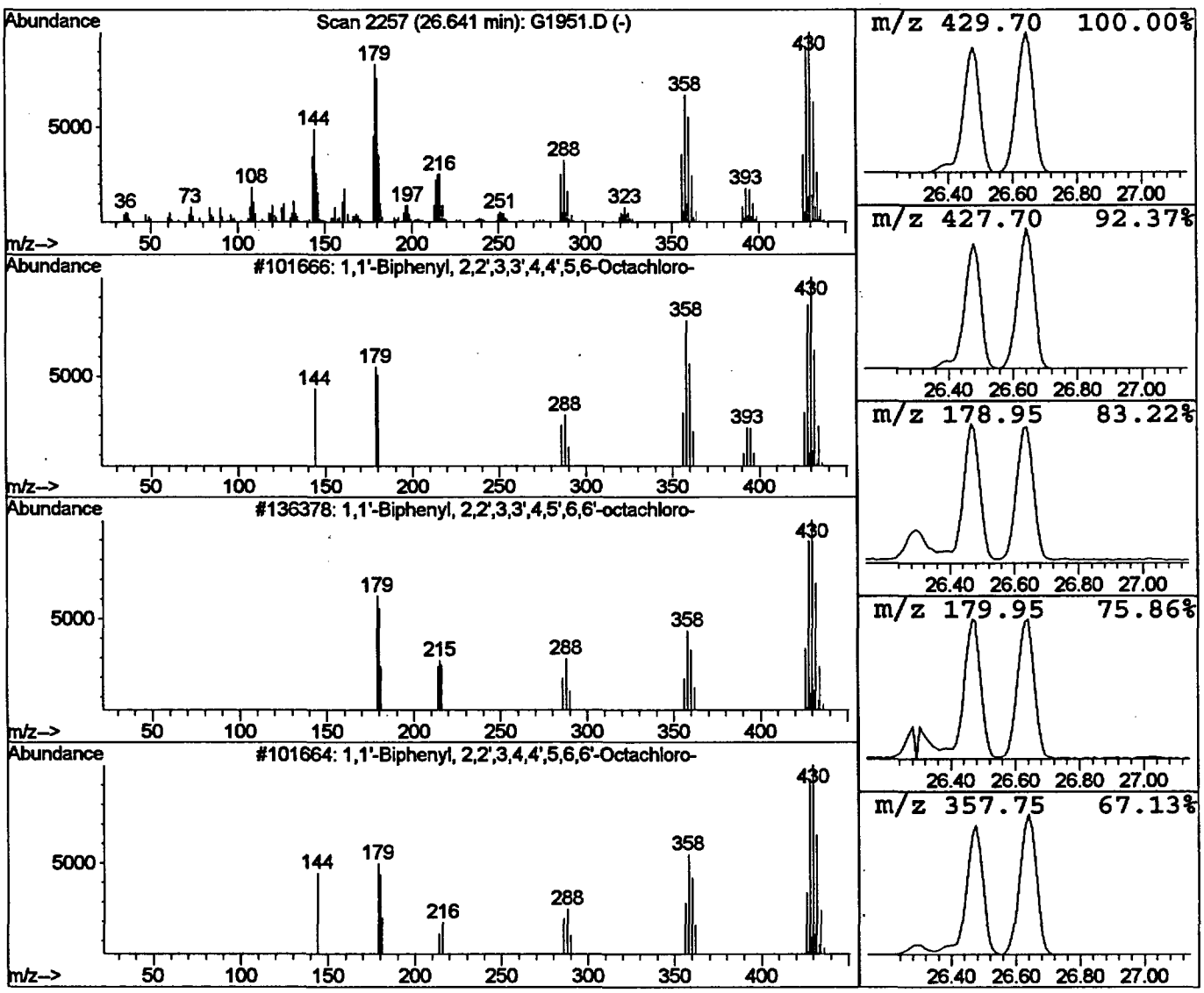
Peak Number 27 1,1'-Biphenyl, 2,2',3,3',4,4', Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.64	142.23 ng	3813590	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,4',5,6-O	426	C12H2Cl8	052663-78-2	99
2	1,1'-Biphenyl, 2,2',3,3',4,5',6,6'-	426	C12H2Cl8	040186-71-8	99
3	1,1'-Biphenyl, 2,2',3,4,4',5,6,6'-O	426	C12H2Cl8	074472-52-9	99



0307

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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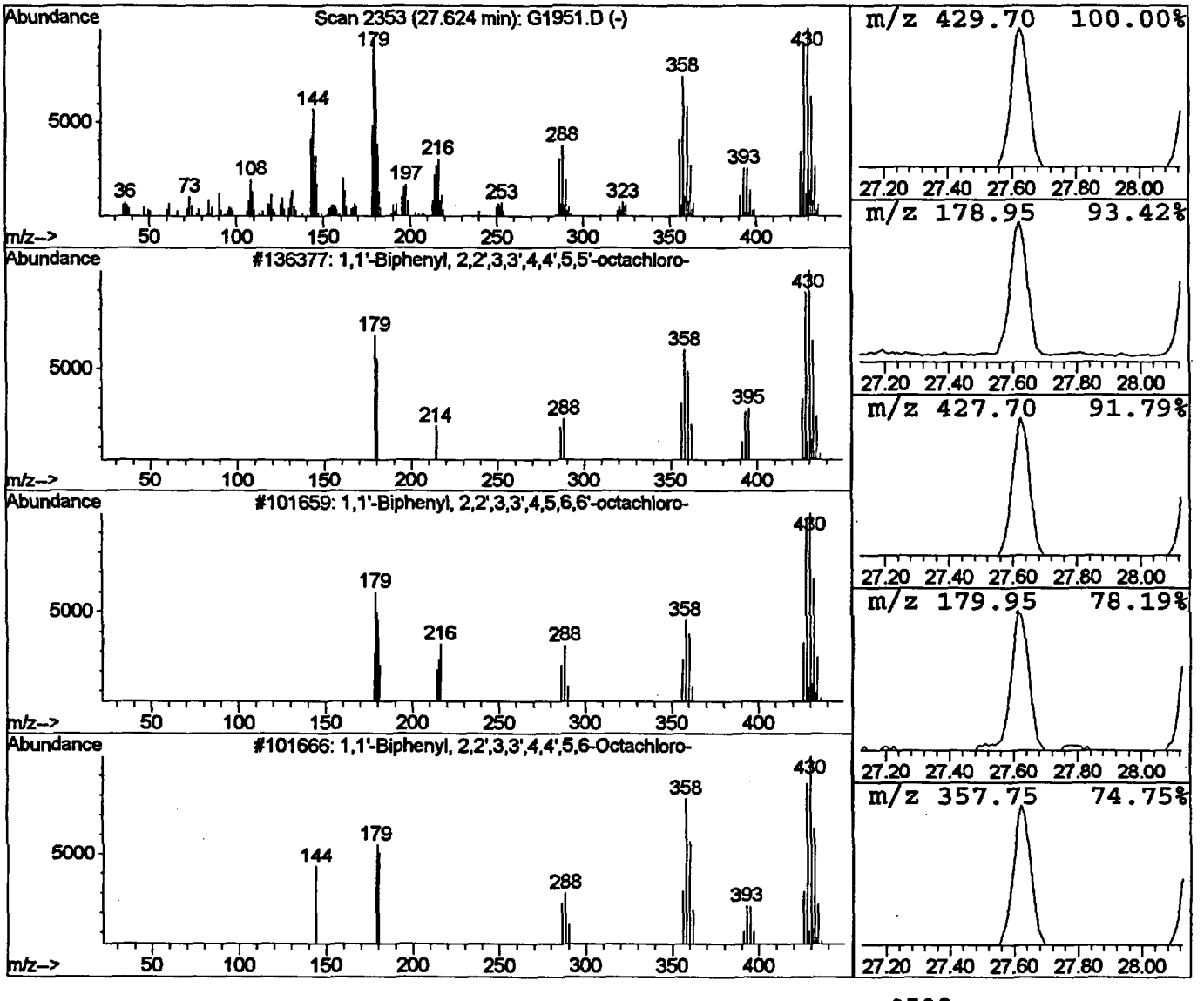
Peak Number 28 1,1'-Biphenyl, 2,2',3,3',4,4', Concentration Rank 26

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.62	54.73 ng	1467310	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,4',5,5'-	426	C12H2Cl8	035694-08-7	99
2	1,1'-Biphenyl, 2,2',3,3',4,5,6,6'-o	426	C12H2Cl8	052663-73-7	99
3	1,1'-Biphenyl, 2,2',3,3',4,4',5,6-O	426	C12H2Cl8	052663-78-2	99



0308

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D
Acq On : 22 Jan 98 18:36
Sample : S HP-7G 58073-001 FFR76
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial: 2
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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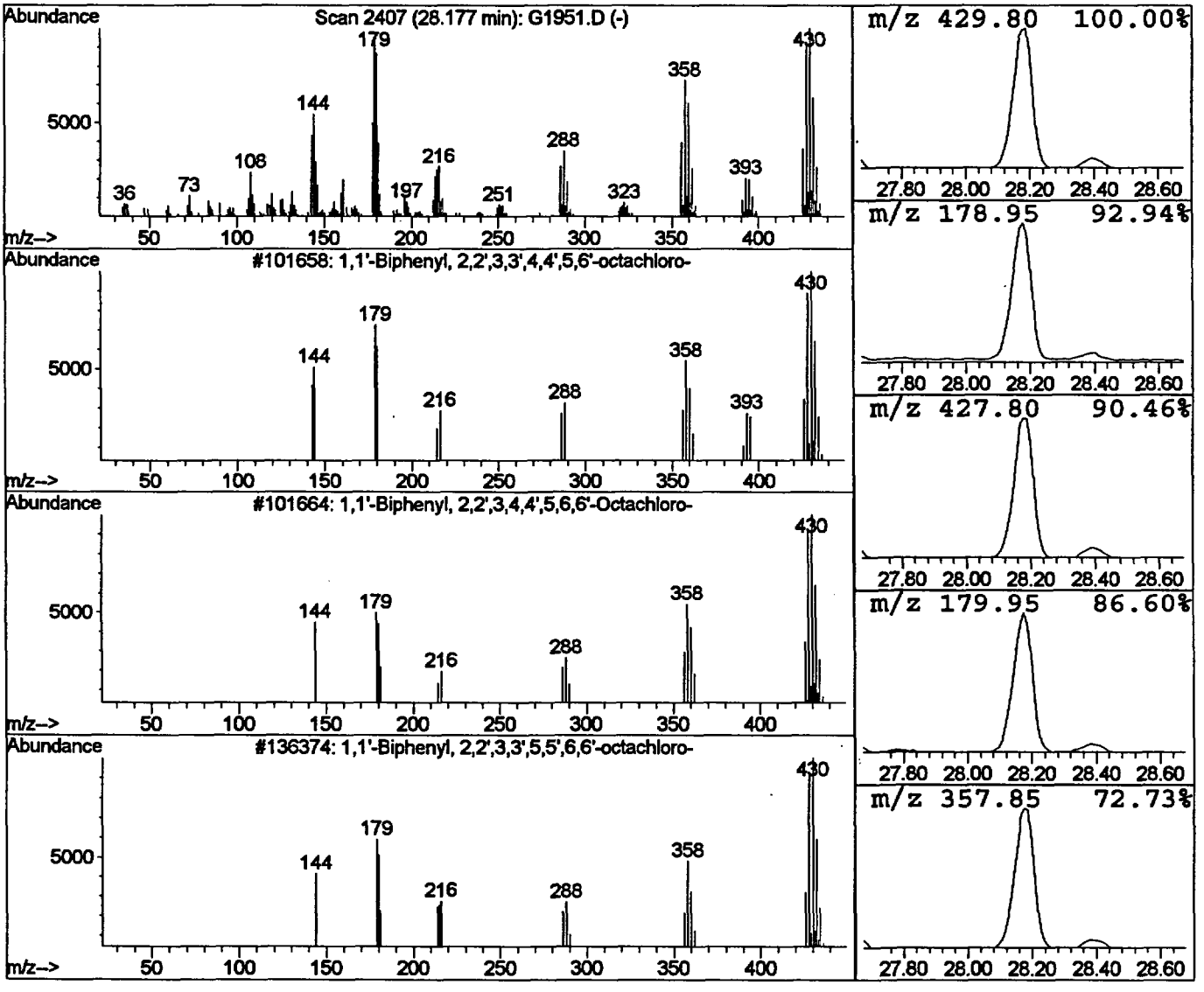
Peak Number 29 1,1'-Biphenyl, 2,2',3,3',4,4', Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.18	128.92 ng	3456660	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,2',3,3',4,4',5,6'-	426	C12H2Cl8	042740-50-1	99
2	1,1'-Biphenyl, 2,2',3,4,4',5,6,6'-O	426	C12H2Cl8	074472-52-9	99
3	1,1'-Biphenyl, 2,2',3,3',5,5',6,6'-	426	C12H2Cl8	002136-99-4	99



0309

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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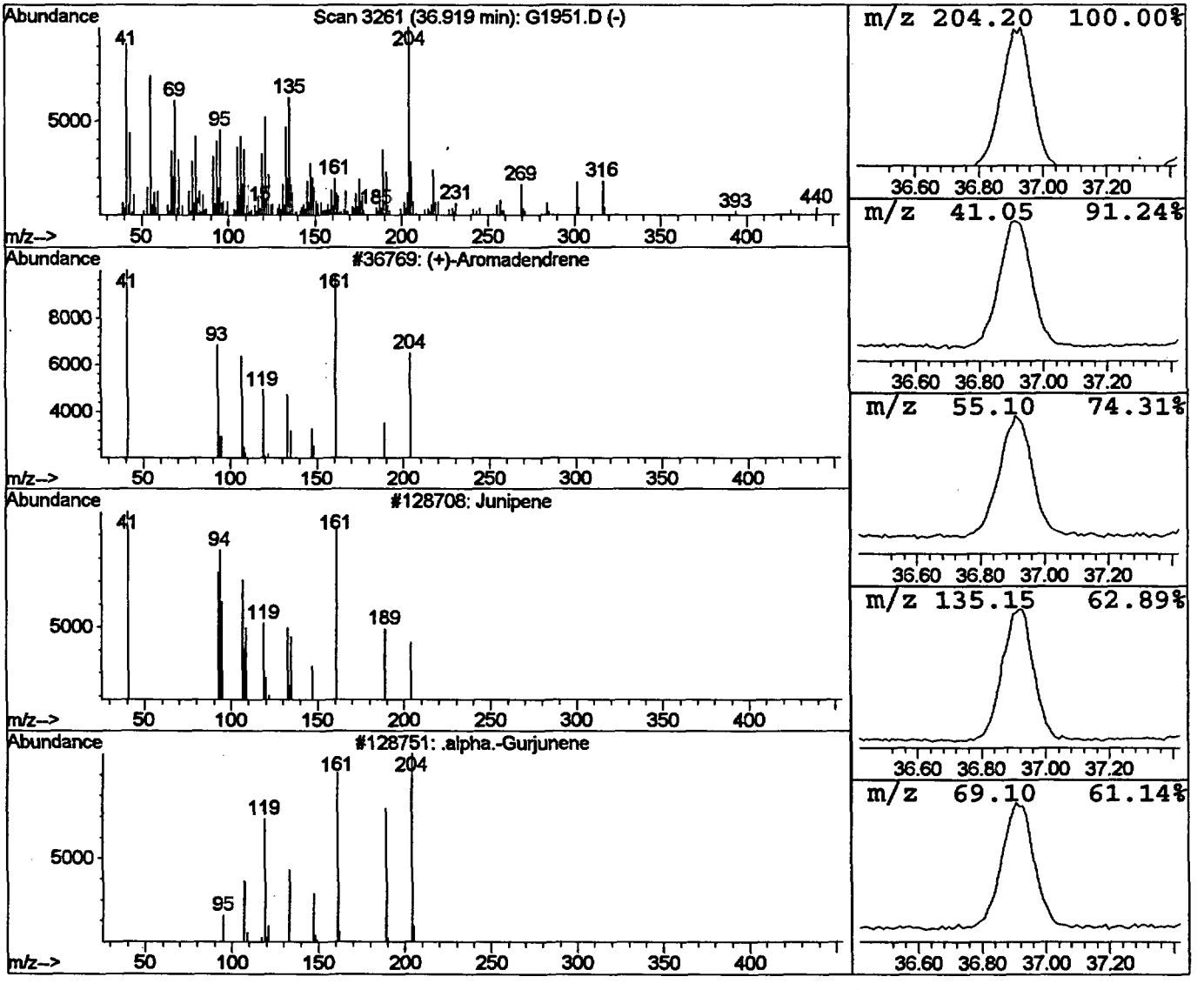
Peak Number 30 (+)-Aromadendrene Concentration Rank 15

UNKNOWN COMPOUND 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.92	116.11 ng	3404160	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	(+)-Aromadendrene	204	C15H24	000489-39-4	64
2	Junipene	204	C15H24	000475-20-7	62
3	.alpha.-Gurjunene	204	C15H24	000489-40-7	60



0310

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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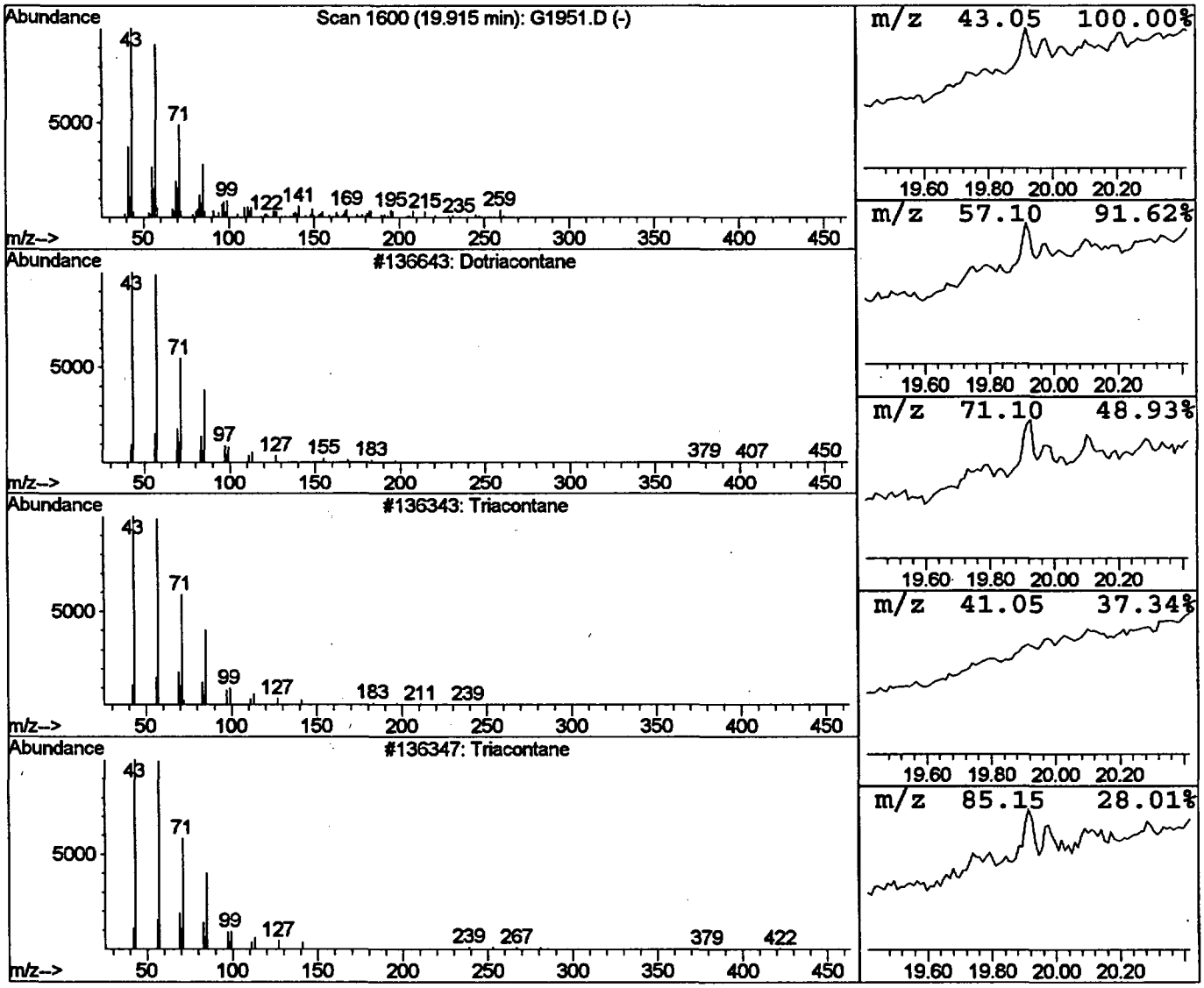
Peak Number 41 Dotriacontane Concentration Rank 60

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.92	6.79 ng	304512	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dotriacontane	451	C32H66	000544-85-4	81
2	Triacontane	422	C30H62	000638-68-6	76
3	Triacontane	422	C30H62	000638-68-6	76



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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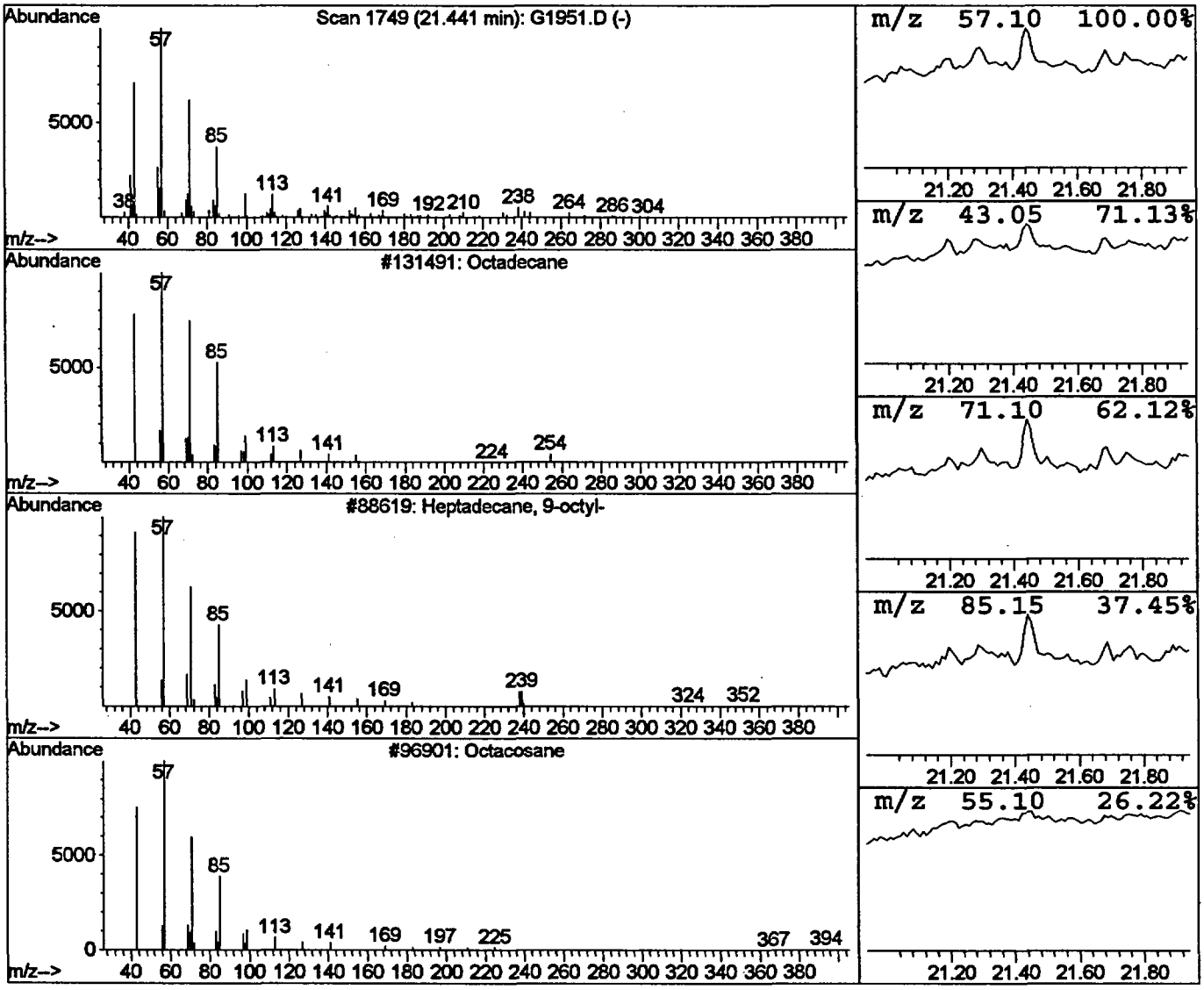
Peak Number 42 Octadecane Concentration Rank 71

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.44	4.59 ng	205900	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	87
2	Heptadecane, 9-octyl-	352	C25H52	007225-64-1	86
3	Octacosane	394	C28H58	000630-02-4	83



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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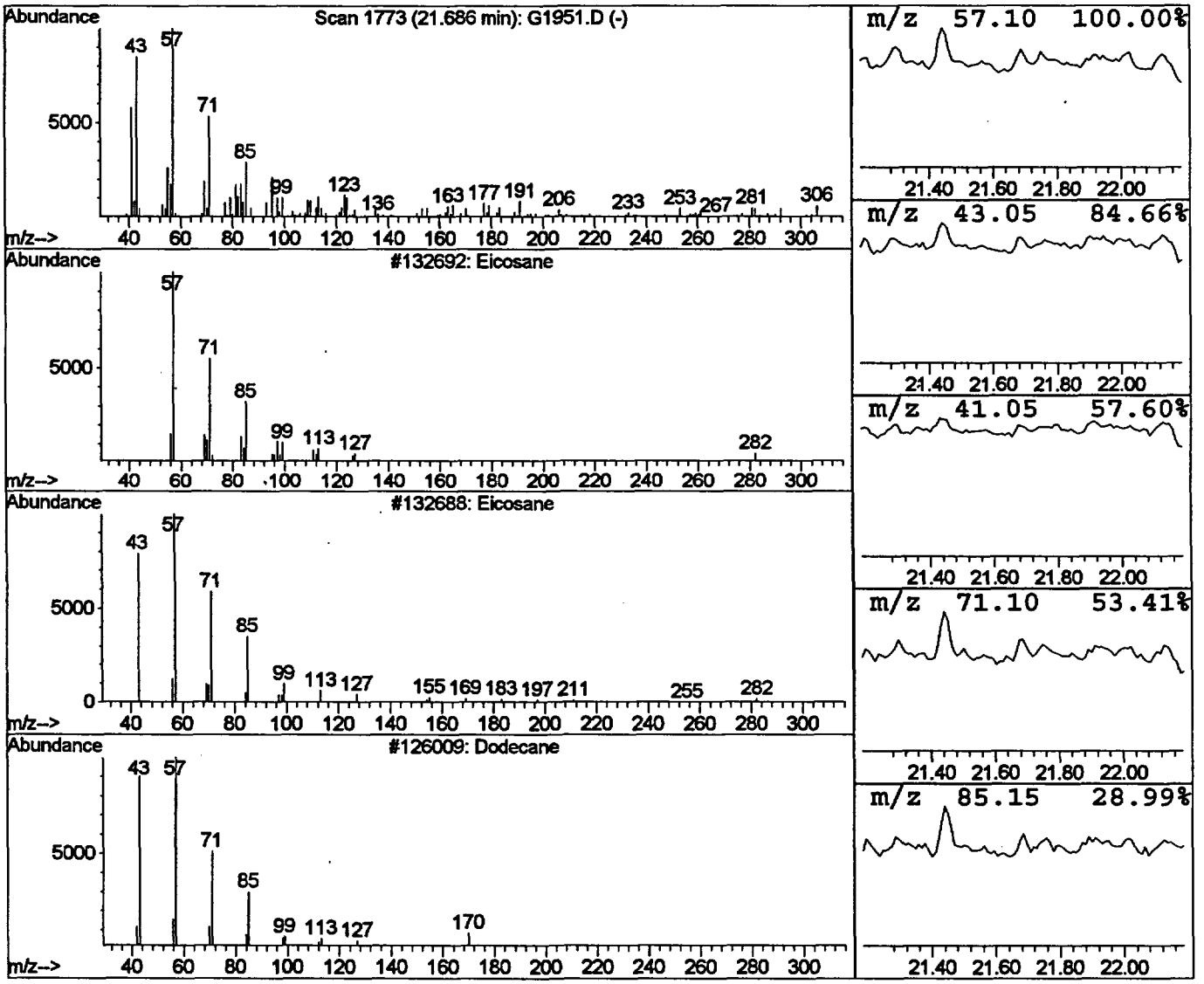
Peak Number 43 Eicosane Concentration Rank 66

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.69	4.81 ng	215691	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	70
2	Eicosane	282	C20H42	000112-95-8	55
3	Dodecane	170	C12H26	000112-40-3	55



0313

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

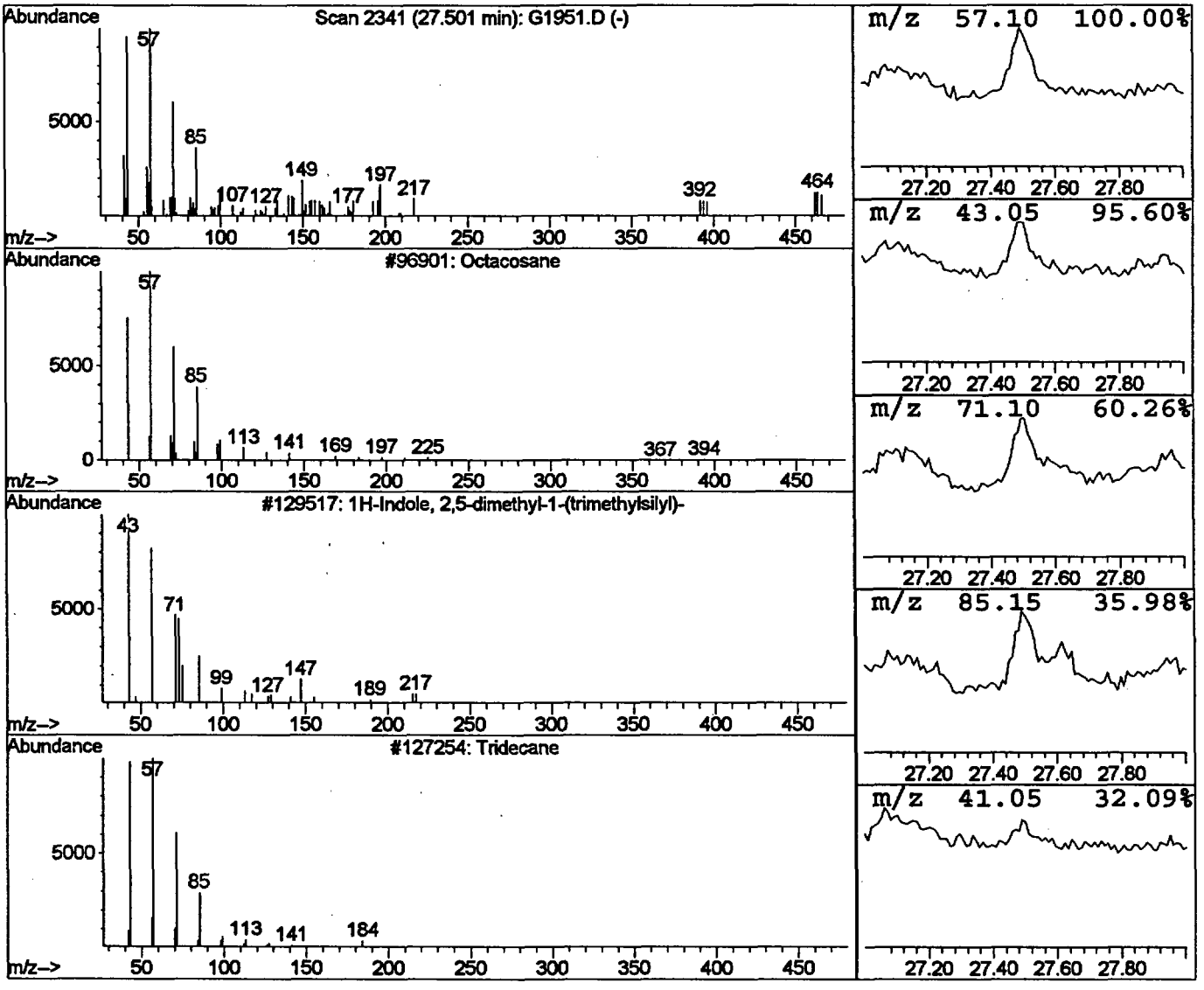
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 44 Octacosane Concentration Rank 56

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.50	8.23 ng	220711	Chrysene-d12	25.37

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	50
2	1H-Indole, 2,5-dimethyl-1-(trimethy	217	C13H19NSi	074367-48-9	46
3	Tridecane	184	C13H28	000629-50-5	38



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

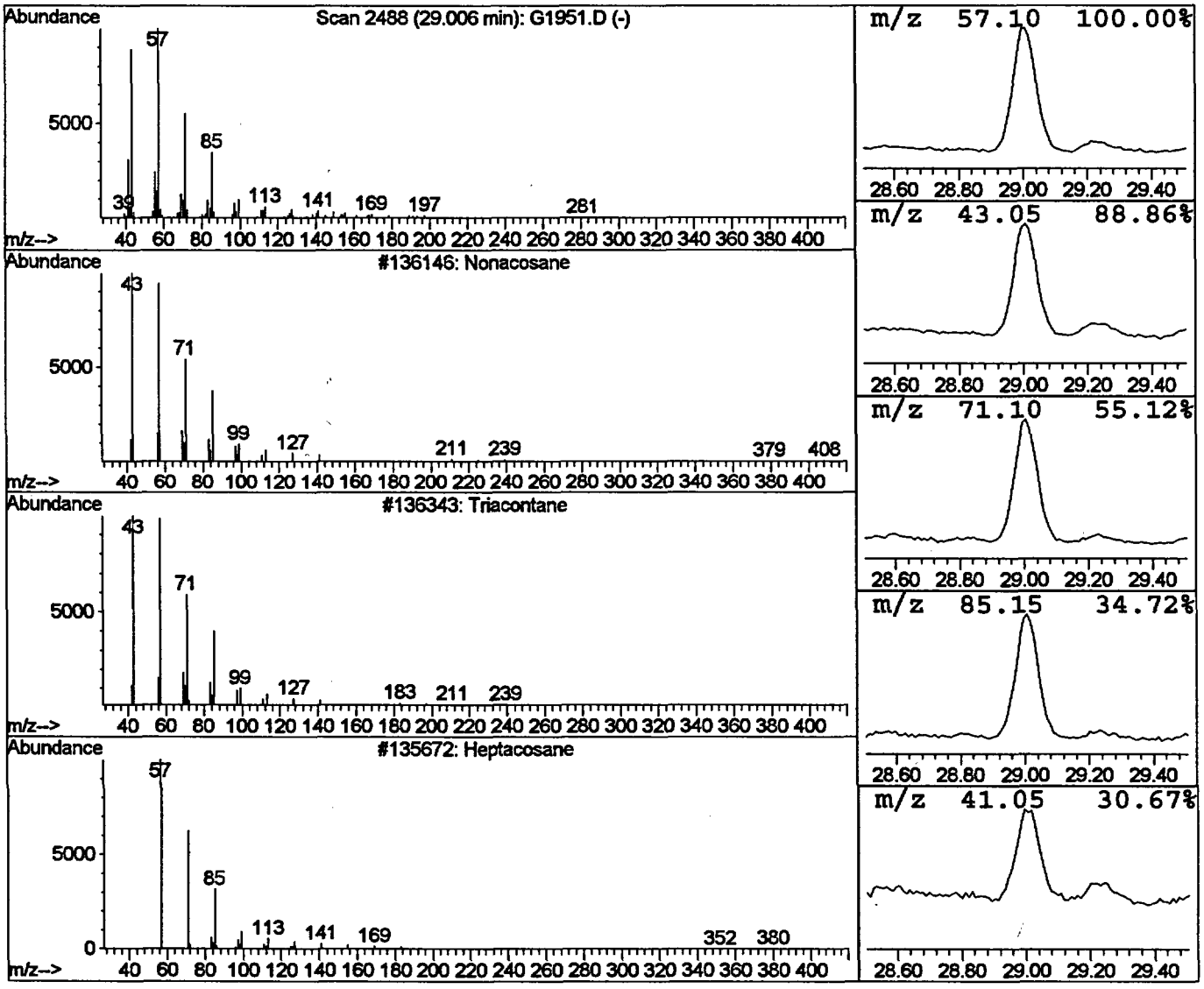
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 45 Nonacosane Concentration Rank 30

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.01	38.06 ng	1115890	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	91
2	Triacontane	422	C30H62	000638-68-6	91
3	Heptacosane	380	C27H56	000593-49-7	91



0315

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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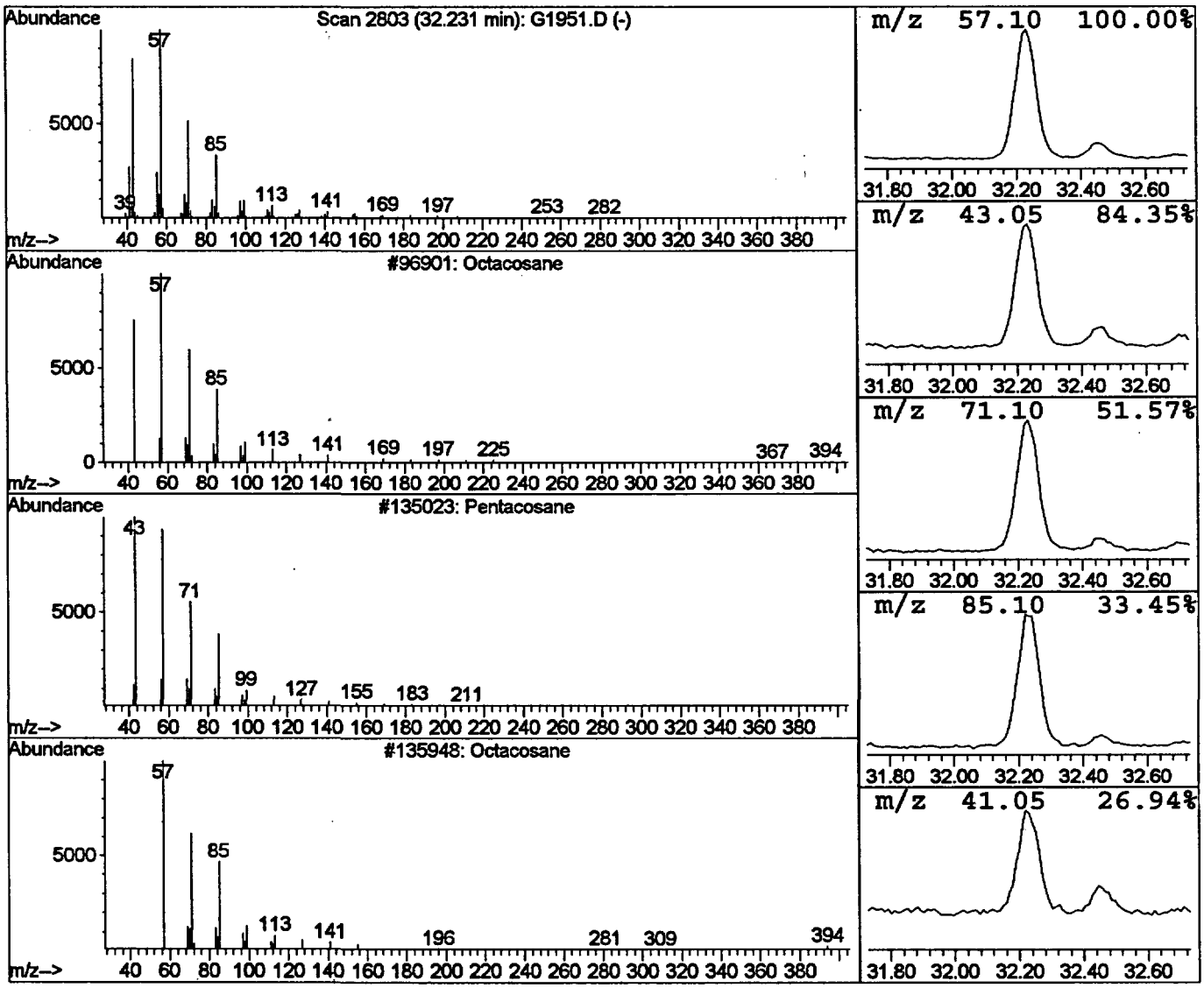
Peak Number 46 Octacosane Concentration Rank 29

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.23	41.23 ng	1208670	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	91
2	Pentacosane	352	C25H52	000629-99-2	91
3	Octacosane	394	C28H58	000630-02-4	91



0316

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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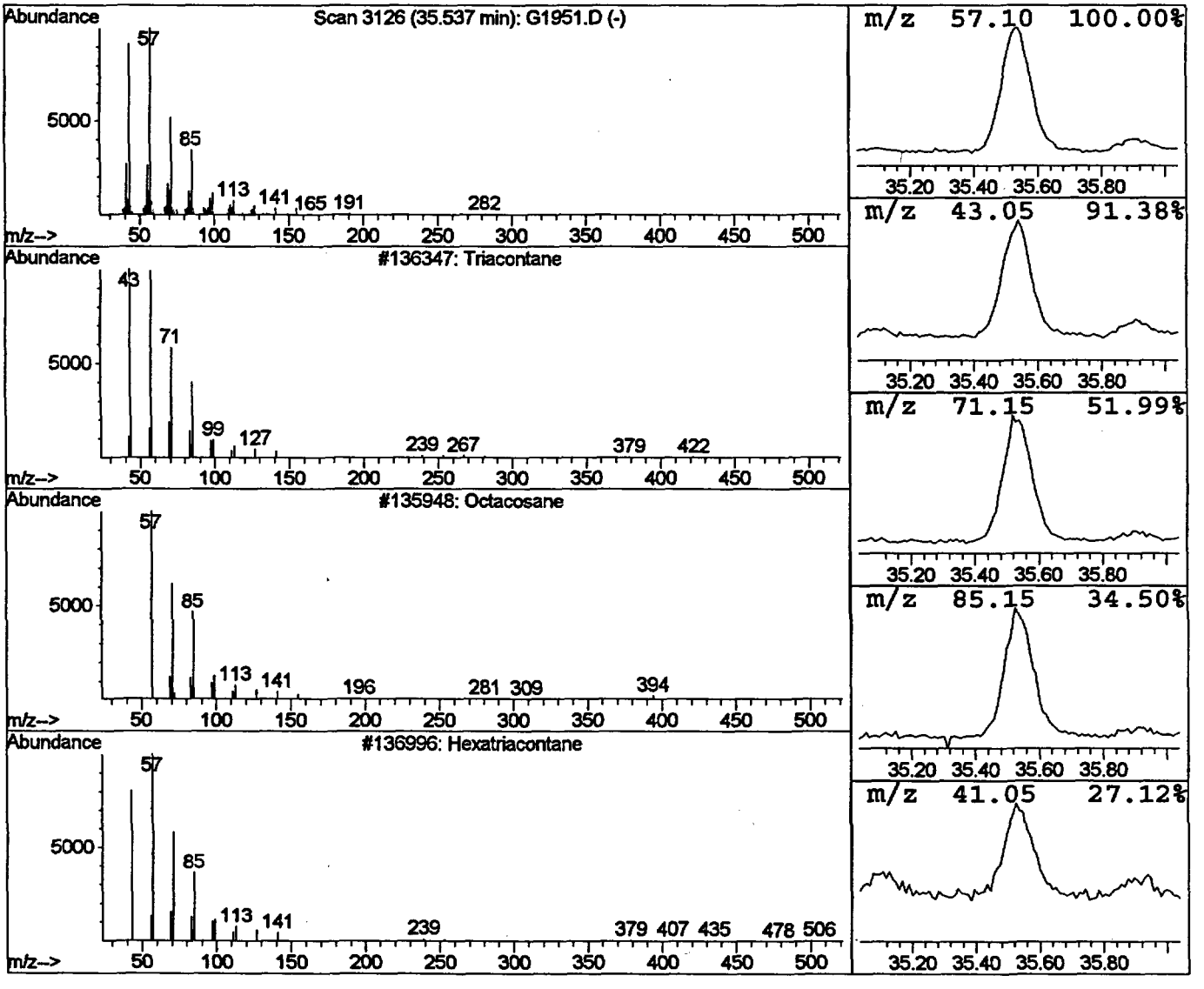
Peak Number 47 Triacontane Concentration Rank 36

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.54	22.16 ng	649729	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Triacontane	422	C30H62	000638-68-6	91
2	Octacosane	394	C28H58	000630-02-4	91
3	Hexatriacontane	507	C36H74	000630-06-8	91



0317

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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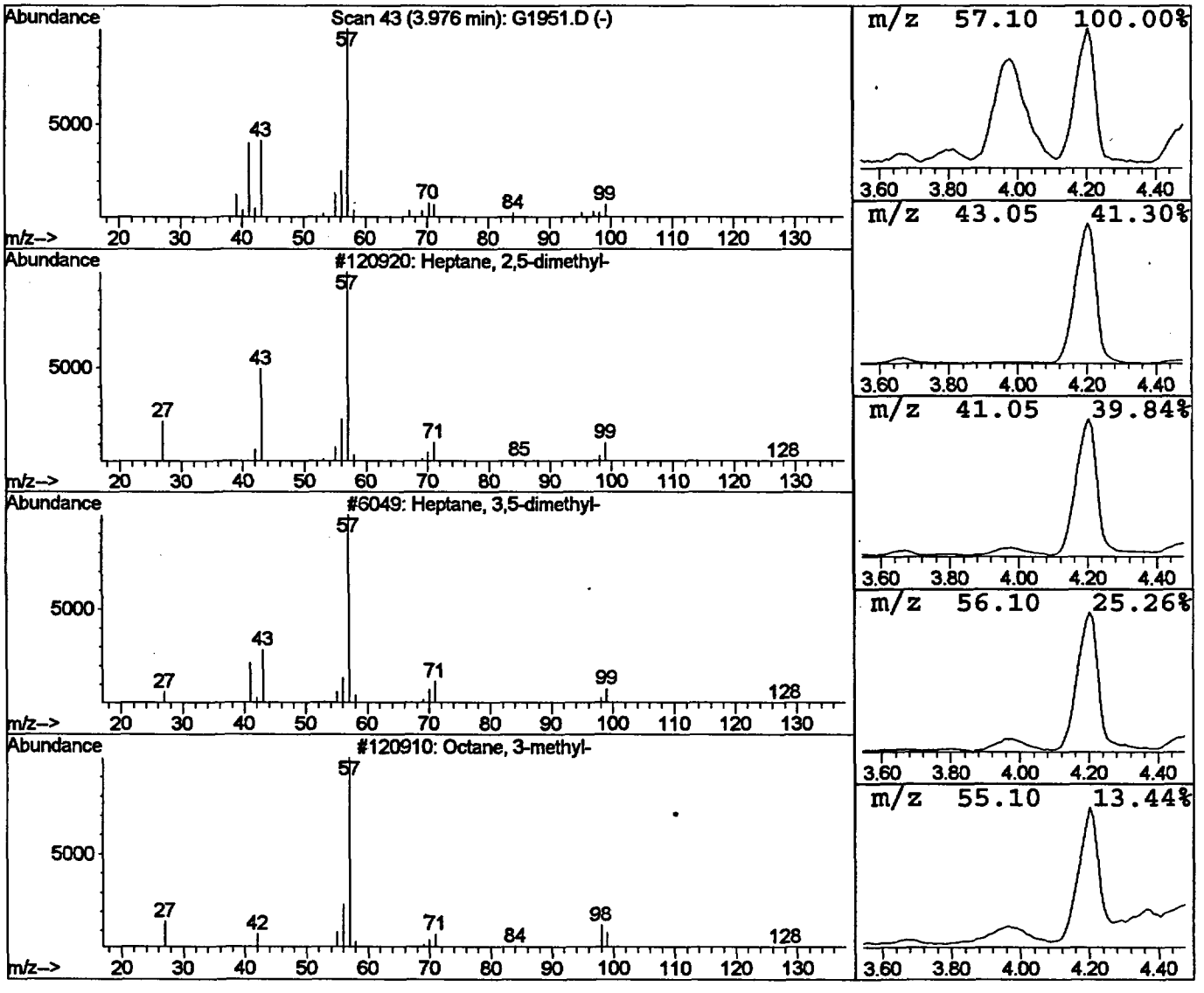
Peak Number 48 Heptane, 2,5-dimethyl- Concentration Rank 40

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	19.69 ng	480852	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	53
2	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	53
3	Octane, 3-methyl-	128	C9H20	002216-33-3	50



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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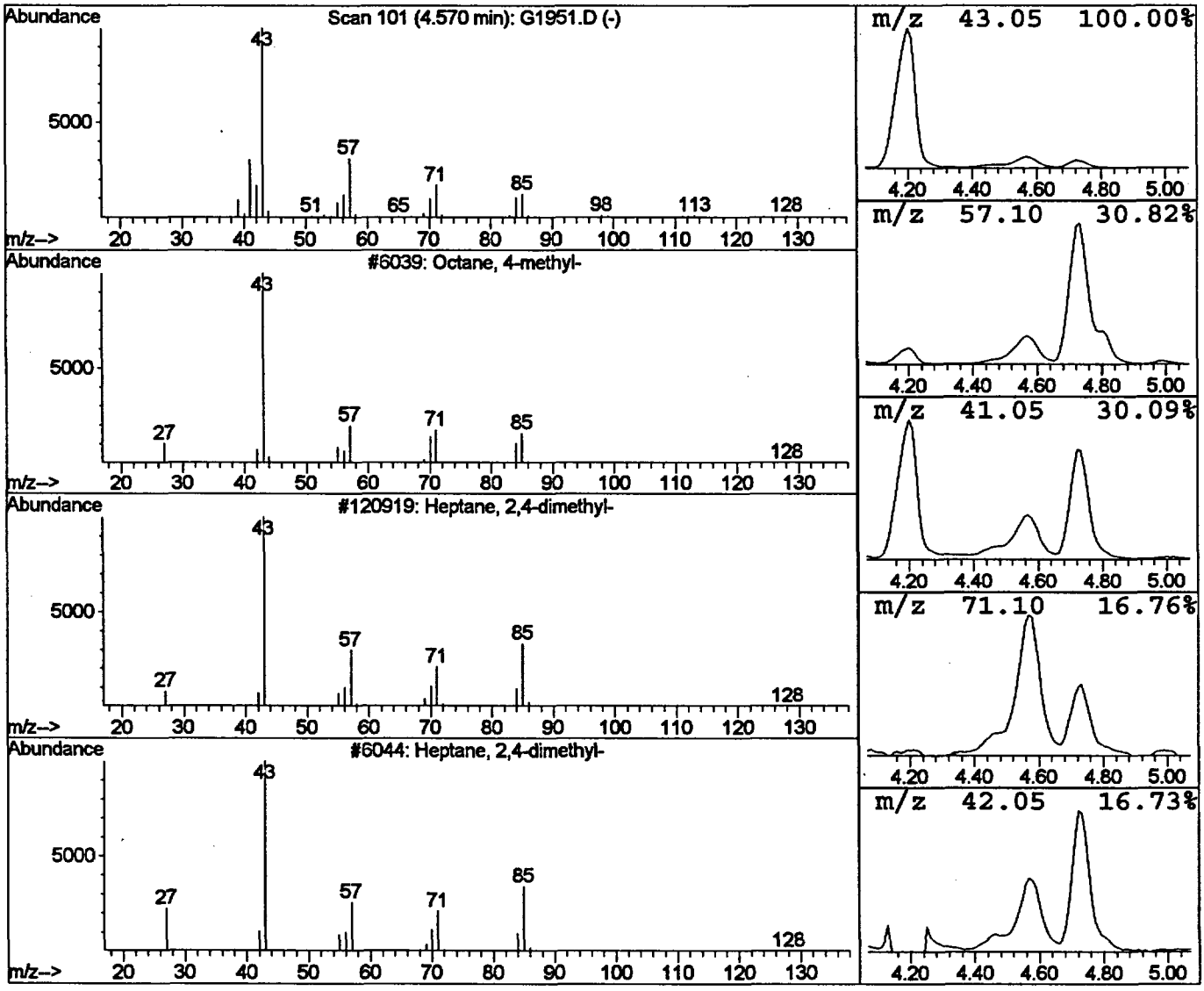
Peak Number 49 Octane, 4-methyl- Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.57	123.70 ng	3021370	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64
3	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64



0319

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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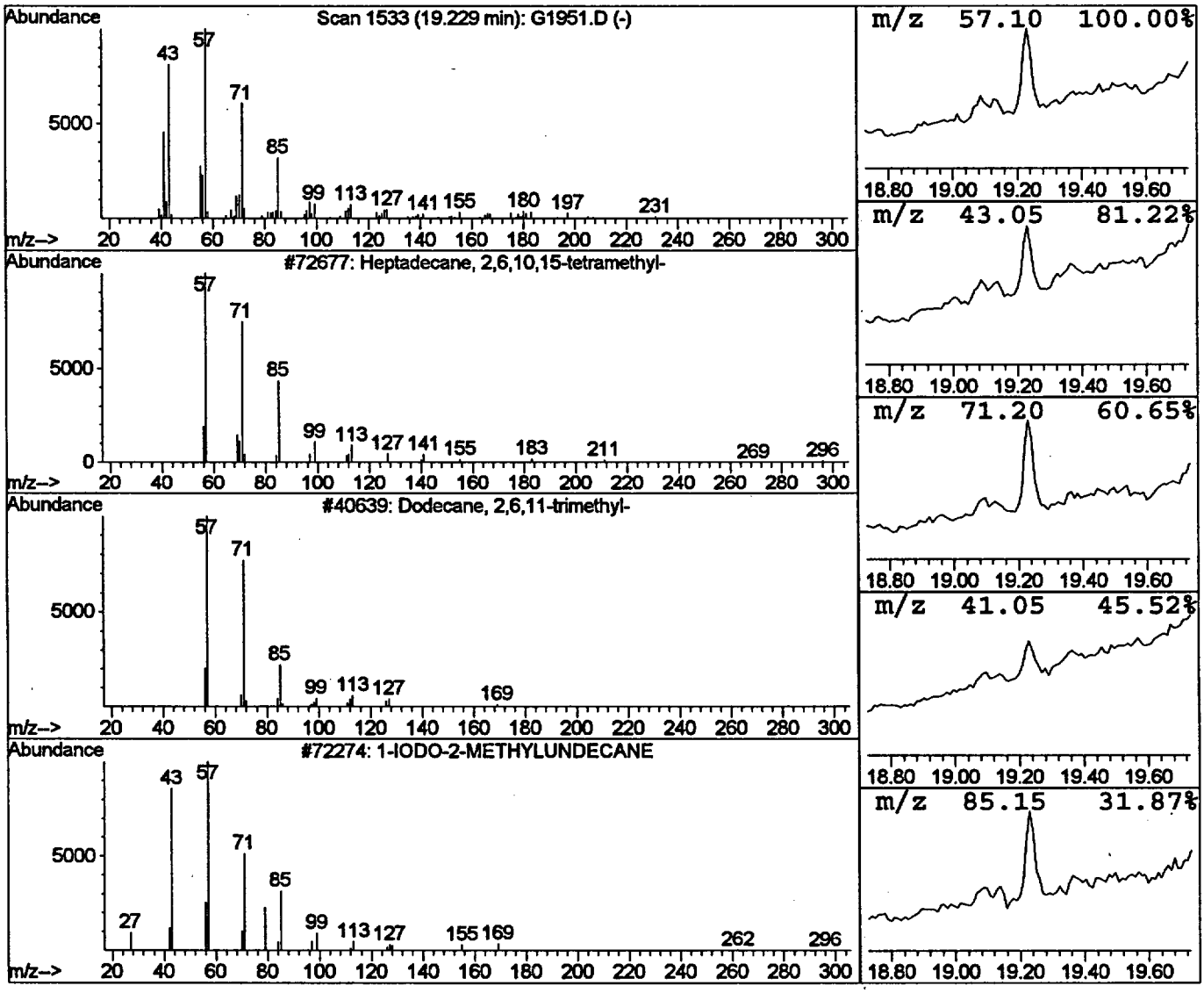
Peak Number 50 Heptadecane, 2,6,10,15-tetrame Concentration Rank 58

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.23	7.42 ng	332341	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	80
2	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	72
3	1-IODO-2-METHYLUNDECANE	296	C12H25I	073105-67-6	72



0320

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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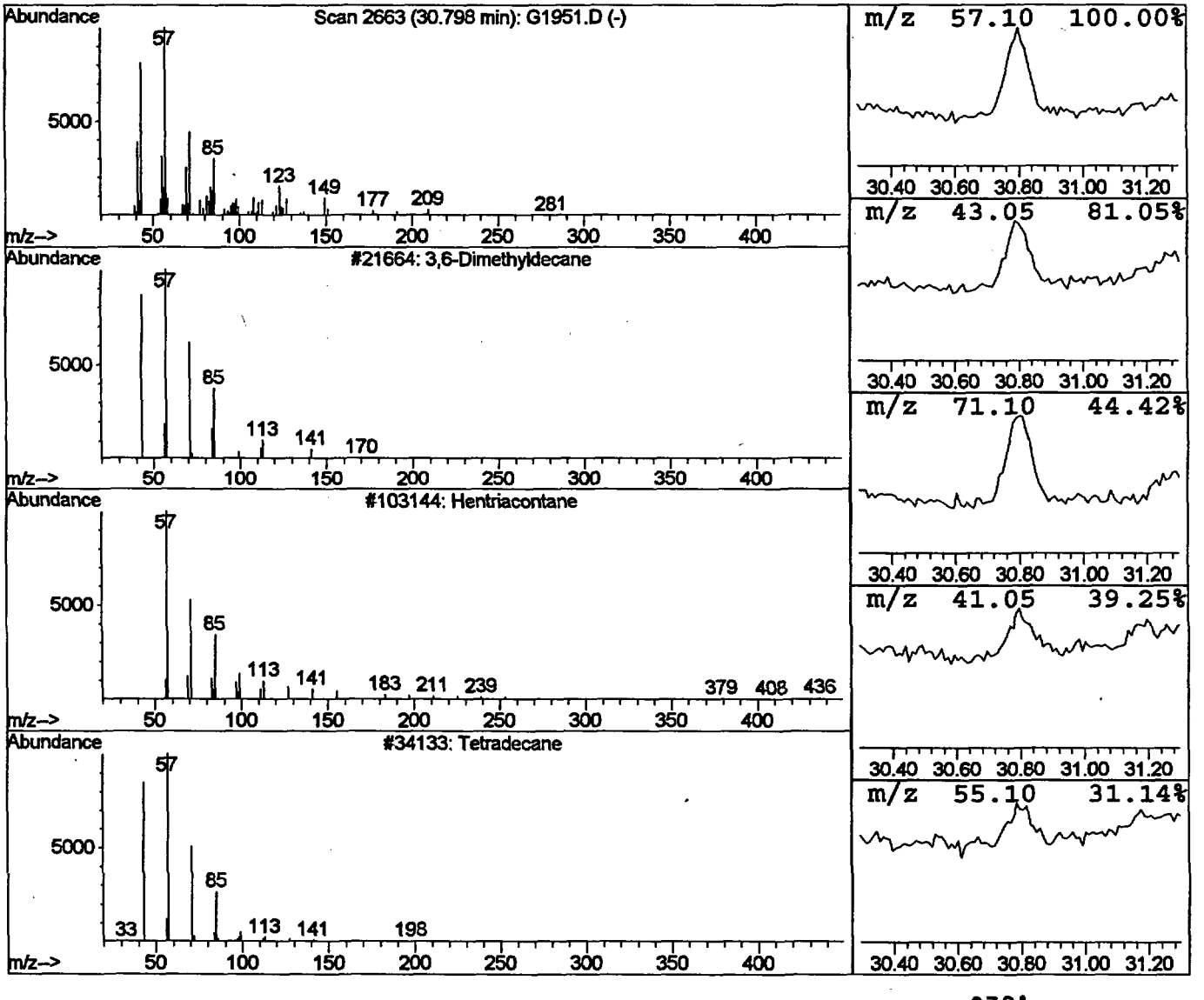
Peak Number 51 3,6-Dimethyldecane Concentration Rank 57

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.80	7.80 ng	228693	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3,6-Dimethyldecane	170	C12H26	017312-53-7	50
2	Hentriacontane	436	C31H64	000630-04-6	50
3	Tetradecane	198	C14H30	000629-59-4	50



0321

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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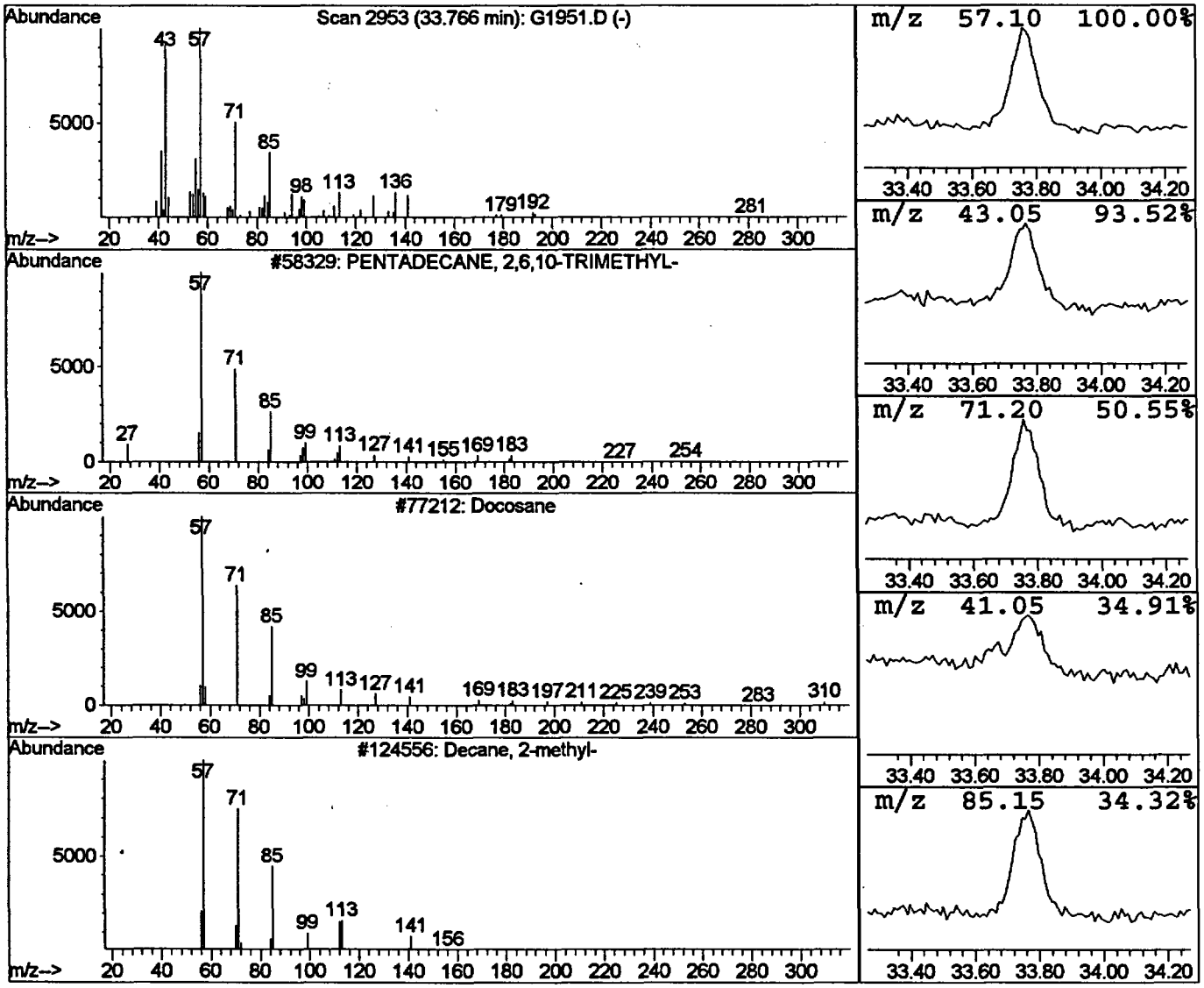
Peak Number 52 PENTADECANE, 2,6,10-TRIMETHYL- Concentration Rank 45

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.77	12.98 ng	380665	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	PENTADECANE, 2,6,10-TRIMETHYL-	254	C18H38	000000-00-0	53
2	Docosane	310	C22H46	000629-97-0	50
3	Decane, 2-methyl-	156	C11H24	006975-98-0	50



0322

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial:
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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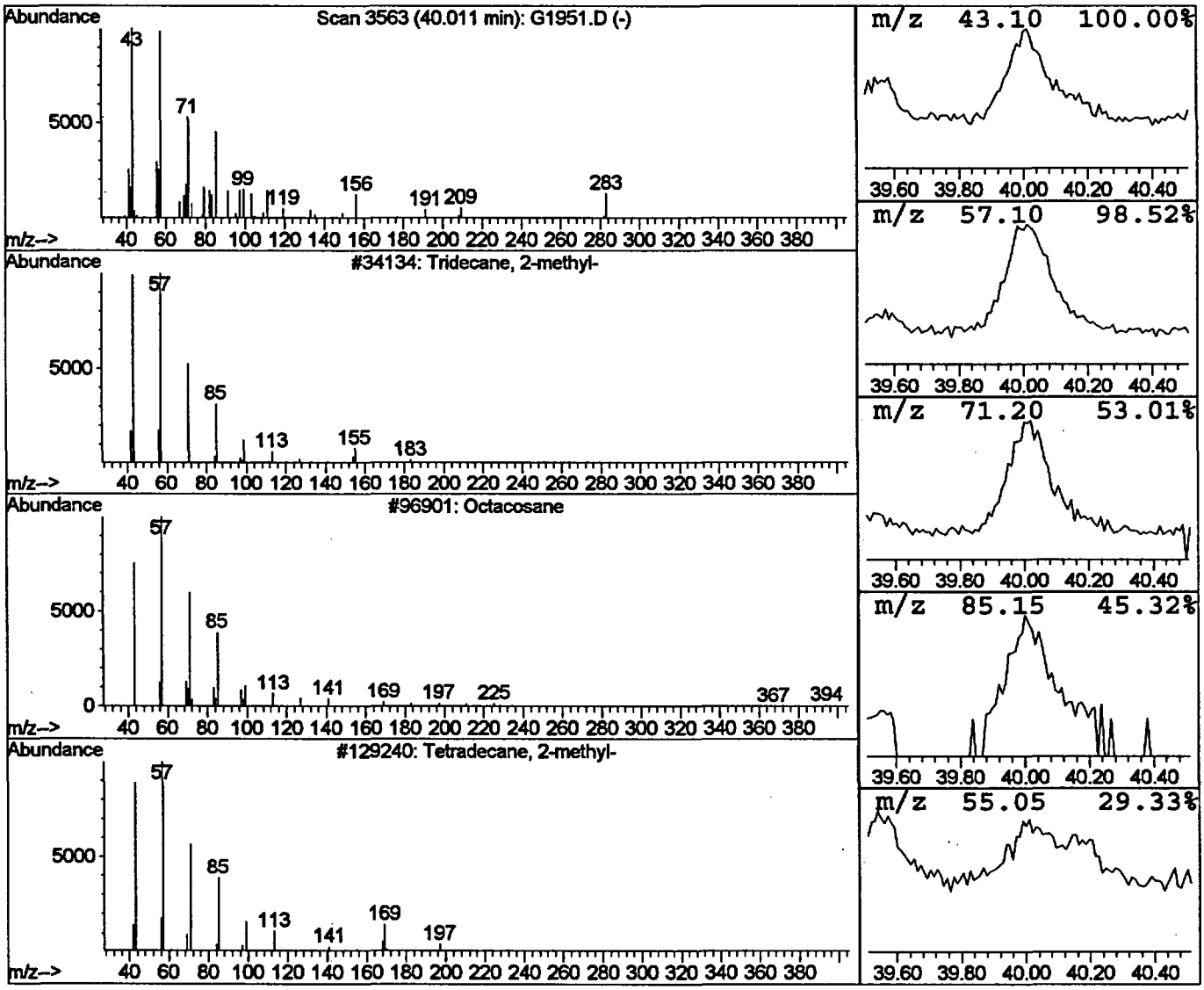
Peak Number 53 Tridecane, 2-methyl- Concentration Rank 61

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.01	6.40 ng	187585	Perylene-d12	31.45

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane, 2-methyl-	198	C14H30	001560-96-9	53
2	Octacosane	394	C28H58	000630-02-4	53
3	Tetradecane, 2-methyl-	212	C15H32	001560-95-8	53



Data File : Q:\HPCHEM\G\G19XX\G1951.D Vial: 2
Acq On : 22 Jan 98 18:36 Operator:
Sample : S HP-7G 58073-001 FFR76 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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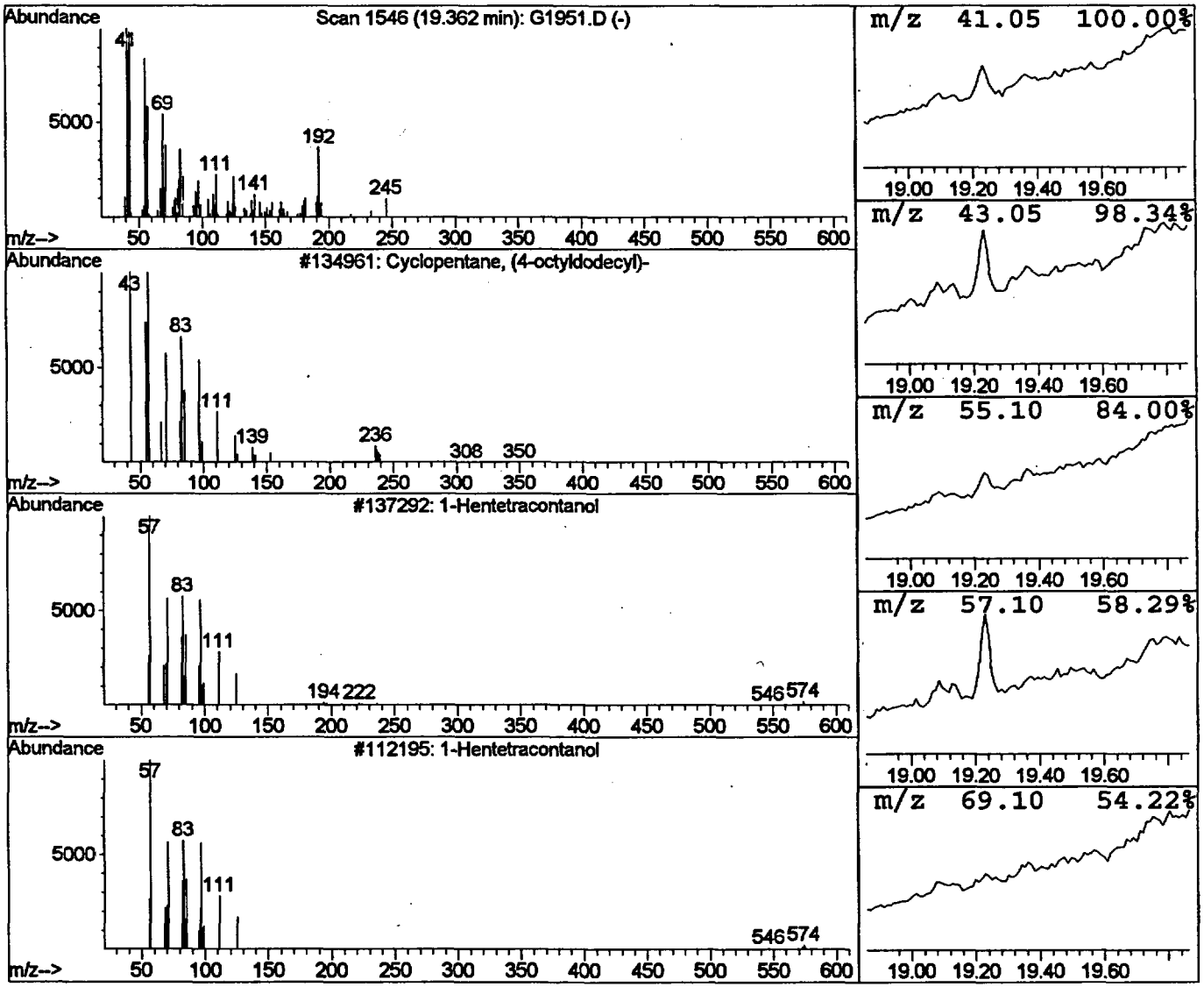
Peak Number 54 Cyclopentane, (4-octyldodecyl) Concentration Rank 62

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.36	6.26 ng	280390	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, (4-octyldodecyl)-	350	C25H50	005638-09-5	22
2	1-Hentetracontanol	593	C41H84O	040710-42-7	14
3	1-Hentetracontanol	593	C41H84O	040710-42-7	14



0324

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 22 Jan 98 18:36
Data File: Q:\HPCHEM\G\G19XX\G1951.D
Name: S HP-7G 58073-001 FFR76
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
2-Pentanone, 4-hydro	4.20	690.0	ng	16853400	ISTD01	7.06	977030	40.0
1-Propene, 1-(2-prop	4.73	146.3	ng	3572970	ISTD01	7.06	977030	40.0
2,4-Pentanedione	5.77	28.8	ng	704404	ISTD01	7.06	977030	40.0
trans-3-Hexene-2,5-d	5.98	74.3	ng	1815320	ISTD01	7.06	977030	40.0
2-Butanone	6.54	34.8	ng	849781	ISTD01	7.06	977030	40.0
1,1'-Biphenyl, 2,3,3	22.77	85.4	ng	2290740	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	22.96	102.6	ng	2751850	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	23.03	71.6	ng	1919390	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	23.16	199.0	ng	5336040	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3',	23.41	61.7	ng	1655380	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	23.53	246.1	ng	6599330	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3',	23.66	84.7	ng	2270380	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3',	23.77	98.9	ng	2652490	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	23.87	101.9	ng	2732600	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	23.99	37.3	ng	999367	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	24.07	266.9	ng	7156380	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	24.20	44.8	ng	1200420	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	24.38	229.5	ng	6153880	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	24.47	119.9	ng	3214620	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	24.74	46.5	ng	1246920	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3,3	24.90	214.7	ng	5756550	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	25.14	80.8	ng	2166120	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	25.30	62.7	ng	1679960	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	25.48	393.8	ng	10560000	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	26.29	263.1	ng	7054050	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	26.48	129.4	ng	3470400	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	26.64	142.2	ng	3813590	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	27.62	54.7	ng	1467310	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,2',	28.18	128.9	ng	3456660	ISTD05	25.37	1072500	40.0
(+)-Aromadendrene	36.92	116.1	ng	3404160	ISTD06	31.45	1172690	40.0
Additional Tentatively Identified Compounds								
1,1'-Biphenyl, 2,3,3	27.03	25.8	ng	693000	ISTD05	25.37	1072500	40.0
Propanoic acid, 2-ox	3.66	22.4	ng	547458	ISTD01	7.06	977030	40.0
1,1'-Biphenyl, 2,2',	25.87	21.7	ng	582225	ISTD05	25.37	1072500	40.0
1,1'-Biphenyl, 2,3',	22.19	21.4	ng	959116	ISTD04	19.60	1792690	40.0
1,1'-Biphenyl, penta	21.88	20.8	ng	934130	ISTD04	19.60	1792690	40.0
.alpha.-Gurjunene	37.47	18.5	ng	541768	ISTD06	31.45	1172690	40.0
1,1'-Biphenyl, 2,3',	24.67	16.1	ng	431845	ISTD05	25.37	1072500	40.0
2-Cyclohexen-1-ol	5.17	14.9	ng	363416	ISTD01	7.06	977030	40.0
1-Hexadecanol, 3,7,1	20.46	14.8	ng	663263	ISTD04	19.60	1792690	40.0
PENTACHLOROPREDIOXIN	28.40	12.5	ng	335177	ISTD05	25.37	1072500	40.0

HP-76 58073-001 FFR76 01/27/98 18:36

CASE 25969
SDG# FFR76

Hydrocarbons: n-Alkanes							
Dotriacontane	19.92	6.8 ng	304512	ISTD04	19.60	1792690	40.0
Octadecane	21.44	4.6 ng	205900	ISTD04	19.60	1792690	40.0
Eicosane	21.69	4.8 ng	215691	ISTD04	19.60	1792690	40.0
Octacosane	27.50	8.2 ng	220711	ISTD05	25.37	1072500	40.0
Nonacosane	29.01	38.1 ng	1115890	ISTD06	31.45	1172690	40.0
Octacosane	32.23	41.2 ng	1208670	ISTD06	31.45	1172690	40.0
Triacontane	35.54	22.2 ng	649729	ISTD06	31.45	1172690	40.0
Subtotal:		125.9 ng ✓					
Hydrocarbons: Branched Alkanes							
Heptane, 2,5-dimethy	3.98	19.7 ng	480852	ISTD01	7.06	977030	40.0
Octane, 4-methyl-	4.57	123.7 ng	3021370	ISTD01	7.06	977030	40.0
Heptadecane, 2,6,10,	19.23	7.4 ng	332341	ISTD04	19.60	1792690	40.0
3,6-Dimethyldecane	30.80	7.8 ng	228693	ISTD06	31.45	1172690	40.0
PENTADECANE, 2,6,10-	33.77	13.0 ng	380665	ISTD06	31.45	1172690	40.0
Tridecane, 2-methyl-	40.01	6.4 ng	187585	ISTD06	31.45	1172690	40.0
Subtotal:		178.0 ng ✓					
Hydrocarbons: Cyclic Alkanes							
Cyclopentane, (4-oct	19.36	6.3 ng	280390	ISTD04	19.60	1792690	40.0
Subtotal:		6.3 ng ✓					
Total Alkane Conc:		✓ 310.1 ng x D.F. = 6100 ng/kg ✓					

G1951.D LIN.M Mon Jan 26 16:33:47 1998

FFR76 58073-001 LL01-27-98

TIC: G1951.D

S HP-7G 58073-001 FFR76 0/11/98 18:36

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.658	rBV	0.164	547458	3.587	3.751
2	3.976	rBV	0.225	480852	3.863	4.088
3	4.201	rVV	0.297	16853420	4.088	4.385
4	4.570	rVV	0.266	3021368	4.385	4.651
5	4.733	rVV	0.123	3572972	4.651	4.774
6	4.805	rVB	0.164	2455451	4.774	4.938
7	5.174	rVB	0.174	363416	5.122	5.296
8	5.481	rBV	0.113	151928	5.419	5.532
9	5.573	rVV	0.113	244731	5.532	5.644
10	5.767	rVB	0.256	704404	5.655	5.911
11	5.982	rBV	0.133	1815316	5.911	6.044
12	6.341	rVB	0.164	2893431	6.289	6.453
13	6.535	rBV	0.143	849781	6.453	6.597
14	6.709	rBV	0.113	2590992	6.658	6.771
15	6.863	rVB	0.113	110967	6.842	6.955
16	7.057	rBV	0.113	977030	7.006	7.119
17	7.231	rVB	0.082	240017	7.201	7.282
18	7.426	rBV	0.143	2805595	7.344	7.487
19	8.183	rBV	0.143	1467154	8.112	8.255
20	8.552	rVB	0.174	112783	8.501	8.675
21	10.057	rVB	0.297	1055940	9.985	10.282
22	14.254	rBV	0.184	2187098	14.172	14.356
23	16.281	rBV	0.143	1005945	16.220	16.363
24	18.154	rBV	0.256	1709585	17.980	18.236
25	18.277	rVV	0.092	140614	18.236	18.329
26	18.564	rBV	0.113	138006	18.482	18.595
27	18.769	rBV	0.123	196137	18.677	18.799
28	18.963	rBV	0.123	209549	18.861	18.984
29	19.086	rBV	0.082	159977	19.035	19.117
30	19.229	rBV	0.102	332341	19.178	19.281
31	19.362	rBV	0.113	280390	19.291	19.403
32	19.598	rBV	0.225	1792692	19.434	19.659
33	19.752	rBV	0.072	170816	19.700	19.772
34	19.915	rBV	0.092	304512	19.854	19.946
35	19.977	rBV	0.051	160247	19.946	19.997
36	20.458	rBV	0.113	663263	20.417	20.530
37	20.622	rVV	0.082	405853	20.570	20.652
38	20.724	rVV	0.143	898686	20.652	20.796
39	21.287	rBV	0.061	192194	21.256	21.318
40	21.441	rBV	0.082	205900	21.410	21.492
41	21.686	rBV	0.061	215691	21.656	21.717
42	21.881	rBV	0.174	934130	21.840	22.014
43	22.096	rBV	0.051	220322	22.075	22.127
44	22.188	rVB	0.082	959116	22.157	22.239
45	22.649	rVV	0.123	2687809	22.608	22.731
46	22.772	rVV	0.164	2290740	22.731	22.894
47	22.956	rVV	0.082	2751852	22.905	22.986
48	23.027	rVV	0.113	1919393	22.986	23.099
49	23.161	rVB	0.133	5336039	23.099	23.232
50	23.406	rVB	0.133	1655378	23.335	23.468
51	23.529	rVV	0.143	6599334	23.468	23.611
52	23.662	rVB	0.102	2270377	23.611	23.713
53	23.775	rBV	0.102	2652485	23.713	23.816
54	23.867	rVB	0.102	2732596	23.816	23.918
55	23.990	rBV	0.092	999367	23.928	24.020
56	24.072	rVB	0.143	7156380	24.020	24.164

57	24.205	rVV	0.082	1200421	24.164	24.246
58	24.379	rVB	0.143	6153880	24.287	24.439
59	24.471	rVB	0.102	3214617	24.430	24.532
60	24.584	rVB	0.082	222335	24.543	24.624
61	24.665	rBV	0.072	431845	24.624	24.696
62	24.737	rVB	0.123	1246922	24.696	24.819
63	24.901	rVB	0.154	5756546	24.819	24.973
64	25.034	rBV	0.123	3998099	24.973	25.095
65	25.136	rVB	0.113	2166123	25.095	25.208
66	25.300	rBV	0.123	1679963	25.208	25.331
67	25.372	rVV	0.072	1072497	25.331	25.402
68	25.484	rVB	0.195	10560008	25.402	25.597
69	25.648	rVB	0.113	304463	25.597	25.710
70	25.873	rVB	0.123	582225	25.822	25.945
71	26.293	rBV	0.235	7054045	26.170	26.406
72	26.477	rVV	0.143	3470401	26.406	26.549
73	26.641	rVB	0.184	3813586	26.549	26.733
74	27.030	rVB	0.307	693000	26.969	27.276
75	27.501	rBV	0.113	220711	27.429	27.542
76	27.624	rVB	0.164	1467311	27.552	27.716
77	27.941	rVB	0.133	128510	27.911	28.044
78	28.177	rVV	0.256	3456658	28.064	28.320
79	28.402	rVB	0.184	335177	28.330	28.515
80	29.006	rVV	0.235	1115891	28.904	29.139
81	29.231	rVB	0.235	305937	29.149	29.385
82	29.631	rVB	0.369	905882	29.467	29.835
83	30.798	rBV	0.174	228693	30.705	30.879
84	31.187	rBV	0.113	128175	31.125	31.238
85	31.453	rBV	0.184	1172691	31.361	31.545
86	32.231	rVB	0.225	1208672	32.128	32.354
87	32.456	rBV	0.184	292232	32.374	32.558
88	32.702	rVB	0.174	129410	32.651	32.825
89	33.674	rBV	0.123	137674	33.582	33.705
90	33.766	rVB	0.266	380665	33.705	33.971
91	35.107	rVB	0.215	169546	35.005	35.220
92	35.537	rBV	0.276	649729	35.404	35.681
93	35.906	rBV	0.184	130564	35.804	35.988
94	36.244	rVB	0.235	272873	36.131	36.367
95	36.919	rBV	0.369	3404159	36.756	37.124
96	37.472	rVB	0.399	541768	37.370	37.769
97	37.882	rBV	0.174	122320	37.800	37.974
98	38.138	rVB	0.297	335586	38.025	38.322
99	39.540	rVB	0.256	202711	39.438	39.694
100	40.011	rBV	0.215	187585	39.868	40.083

CASE 25969
SDG# FFR76

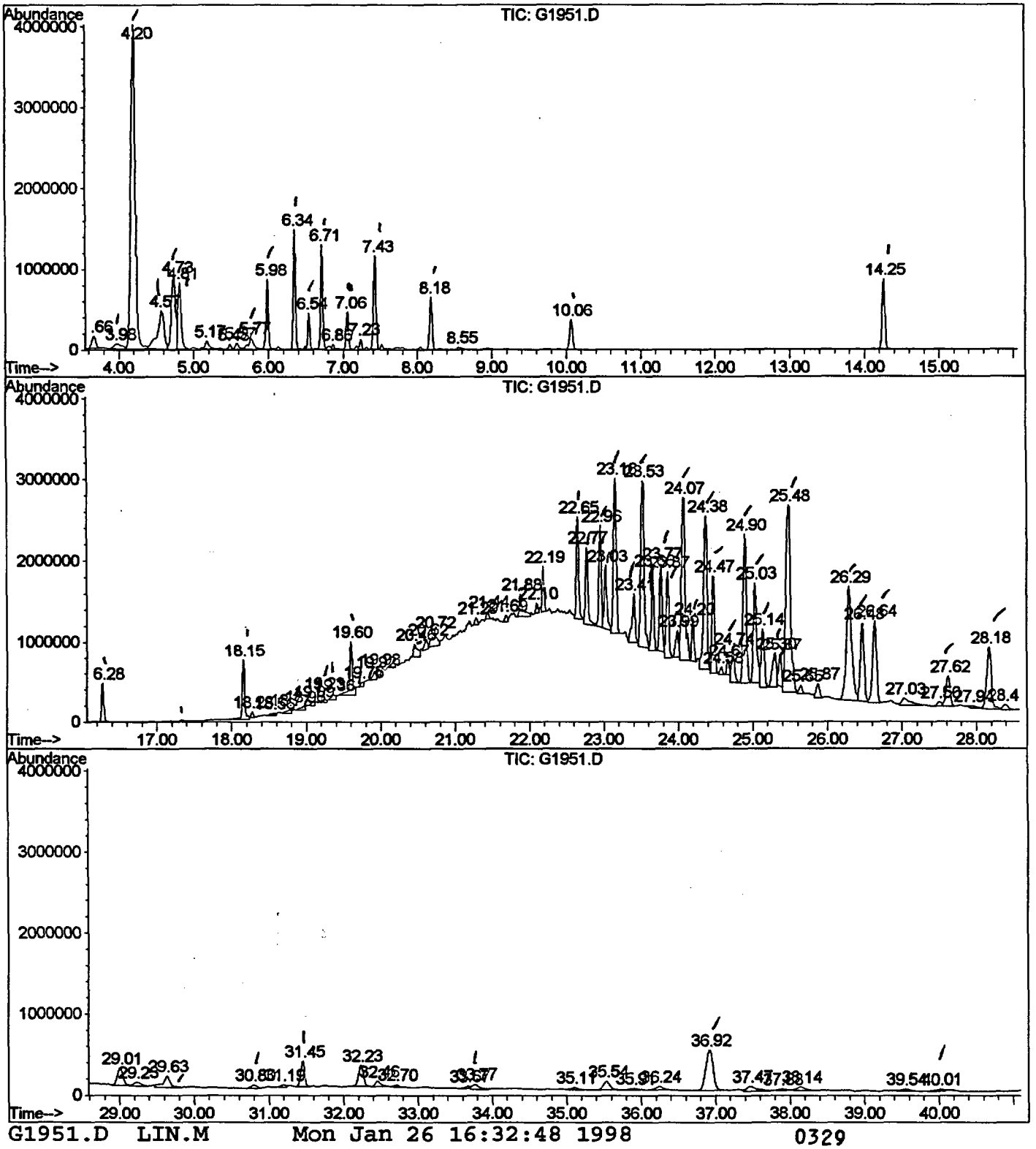
HP-76 FFR 76 580 73-001 cc01-27-98

01/22/98 18:36

CASE 25969
SDG# FFR76

LSC Report - Integrated Chromatogram

File : Q:\HPCHEM\G\G19XX\G1951.D
Operator :
Acquired : 22 Jan 98 18:36 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-001 FFR76
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 2
Quant File :CLPME7.RES



G1951.D LIN.M Mon Jan 26 16:32:48 1998 0329

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR81

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-002

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1952

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

Number TICs Found: 30

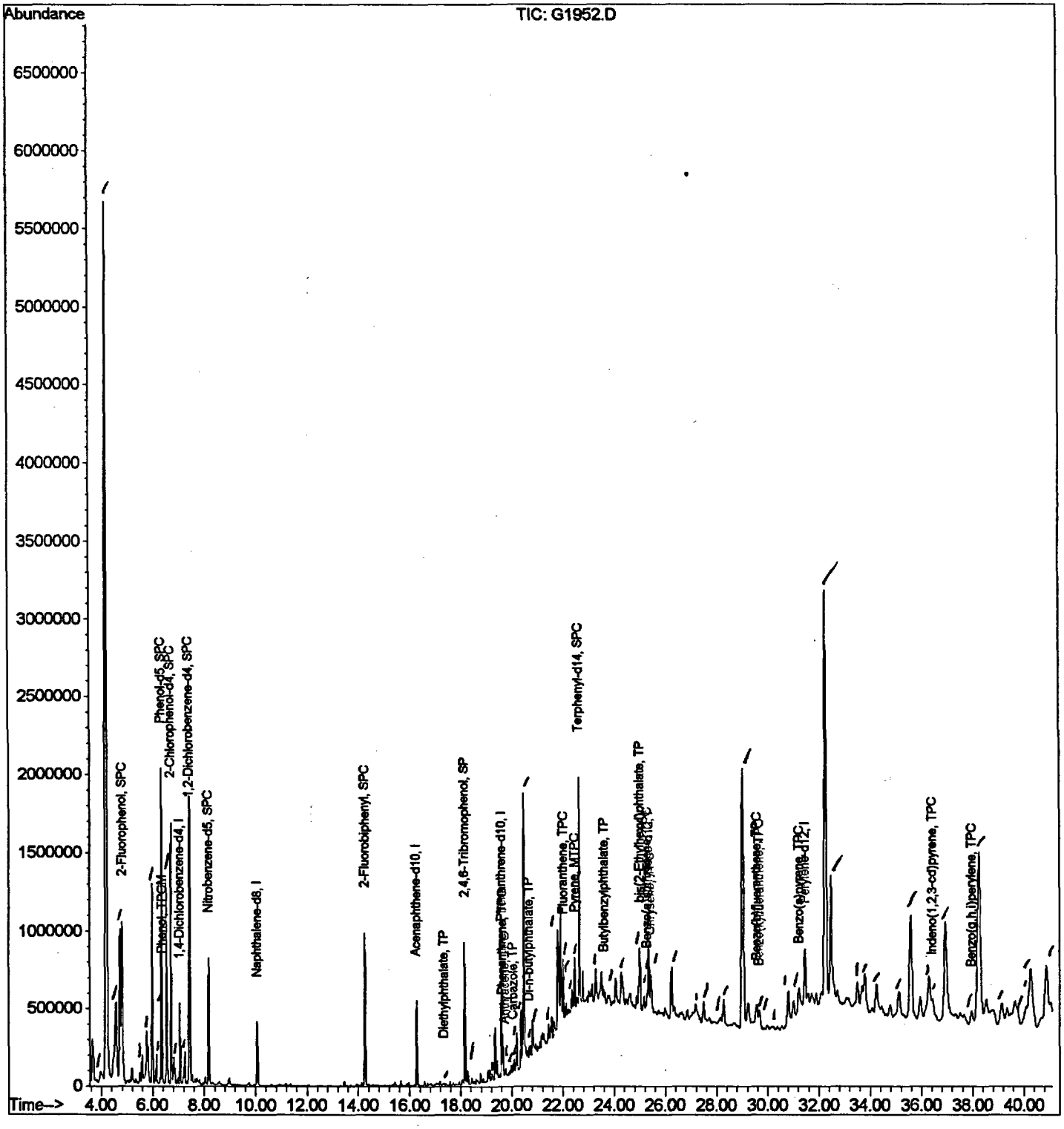
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

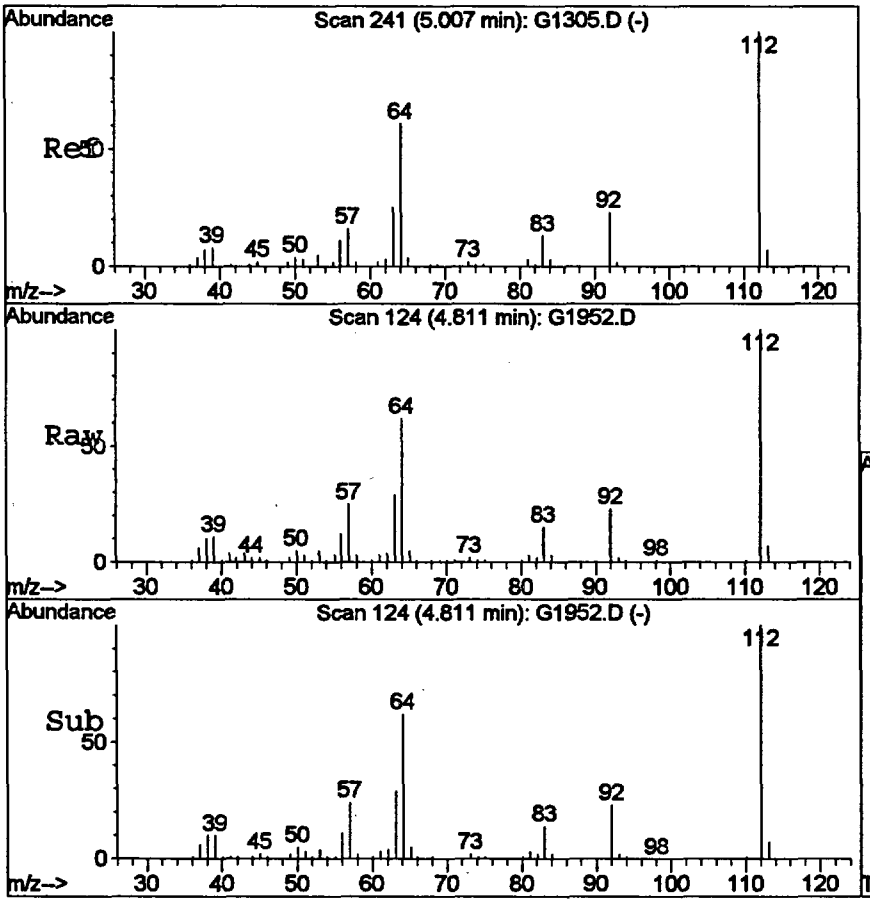
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.66	1000.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.22	25000.	JNAB
3.		Unknown	4.73	3700.	J
4.		Unknown	5.58	530.	J
5.		Unknown	5.76	1600.	J
6.		trans-3-Hexene-2,5-dione	5.99	2700.	JB
7.		Unknown acid type	6.13	410.	J
8.		Unknown	6.54	2600.	J
9.		Unknown	6.82	480.	J
10.	565-80-0	3-Pentanone, 2,4-dimethyl-	7.24	390.	JN
11.		Unknown acid type	19.35	500.	J
12.	112-39-0	Hexadecanoic acid, methyl es	20.20	410.	JN
13.		Unknown	20.36	660.	J
14.	57-10-3	Hexadecanoic acid	20.47	2900.	JN
15.		Unknown hydrocarbon	20.82	600.	J
16.	5876-87-9	1,11-Dodecadiene	21.79	2000.	JN
17.	57-11-4	Octadecanoic acid	21.92	1200.	JN
18.	506-30-9	Eicosanoic acid	23.28	410.	JN
19.		Unknown	27.18	610.	J
20.		2,6,10,15,19,23-HEXAMETHYL-2	28.28	520.	J
21.		Unknown	33.68	410.	J
22.	57-88-5	Cholest-5-en-3-ol (3.beta.)-	34.25	640.	JN
23.		Unknown	35.13	540.	J
24.	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	36.30	1100.	JN
25.		Unknown	36.94	2700.	J
26.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.27	4900.	JN
27.		Unknown	39.14	470.	J
28.		Unknown	39.67	830.	J
29.		Unknown	40.26	2200.	J
30.		Unknown	40.89	1500.	J

Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:44 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

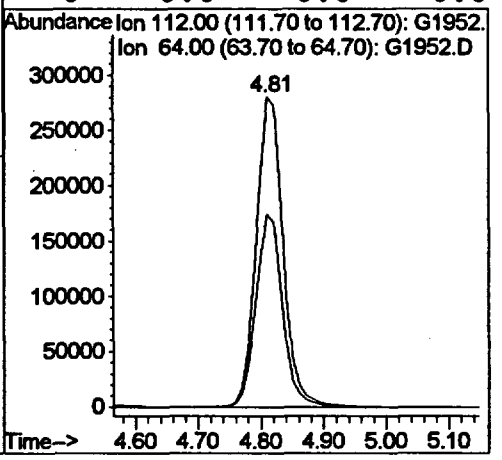


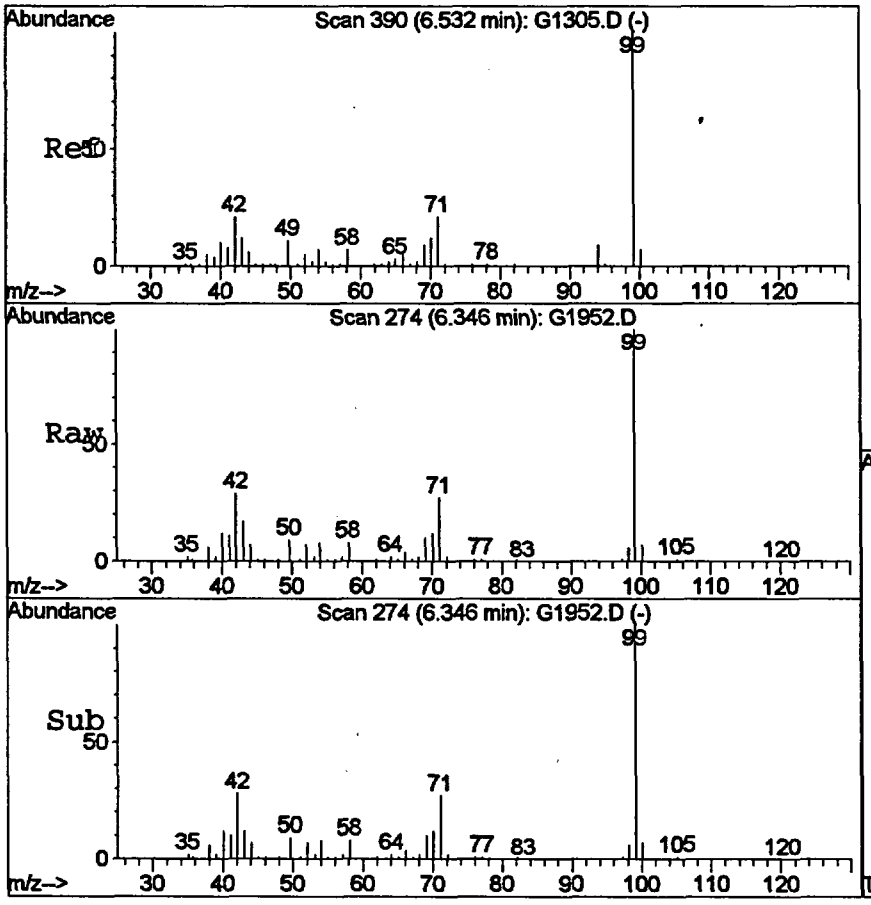


#2
2-Fluorophenol
Concen: 151.52 ng
RT: 4.81 min Scan# 124
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:112 Resp: 833606

Ion	Ratio	Lower	Upper
112	100		
64	61.9	40.2	80.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

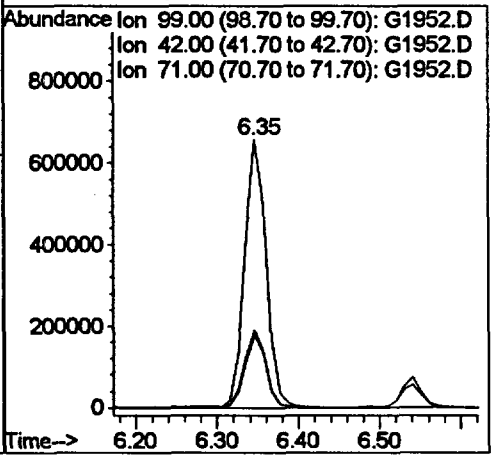


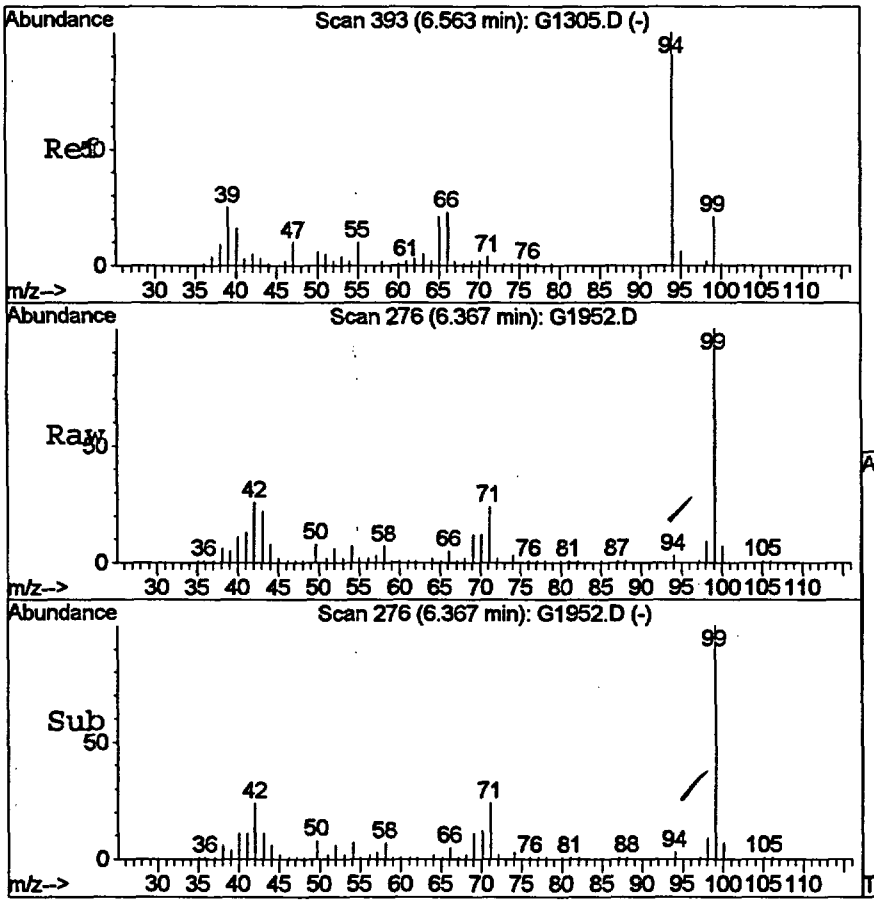


#3
Phenol-d5
Concen: 167.11 ng
RT: 6.35 min Scan# 274
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:99 Resp: 1214462

Ion	Ratio	Lower	Upper
99	100		
42	29.4	9.1	49.1
71	27.3	6.1	46.1
0	0.0	0.0	0.0



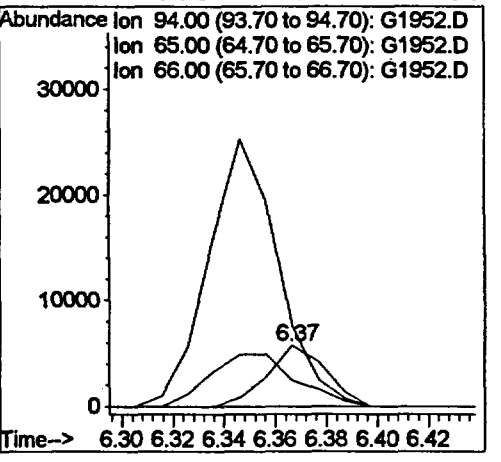


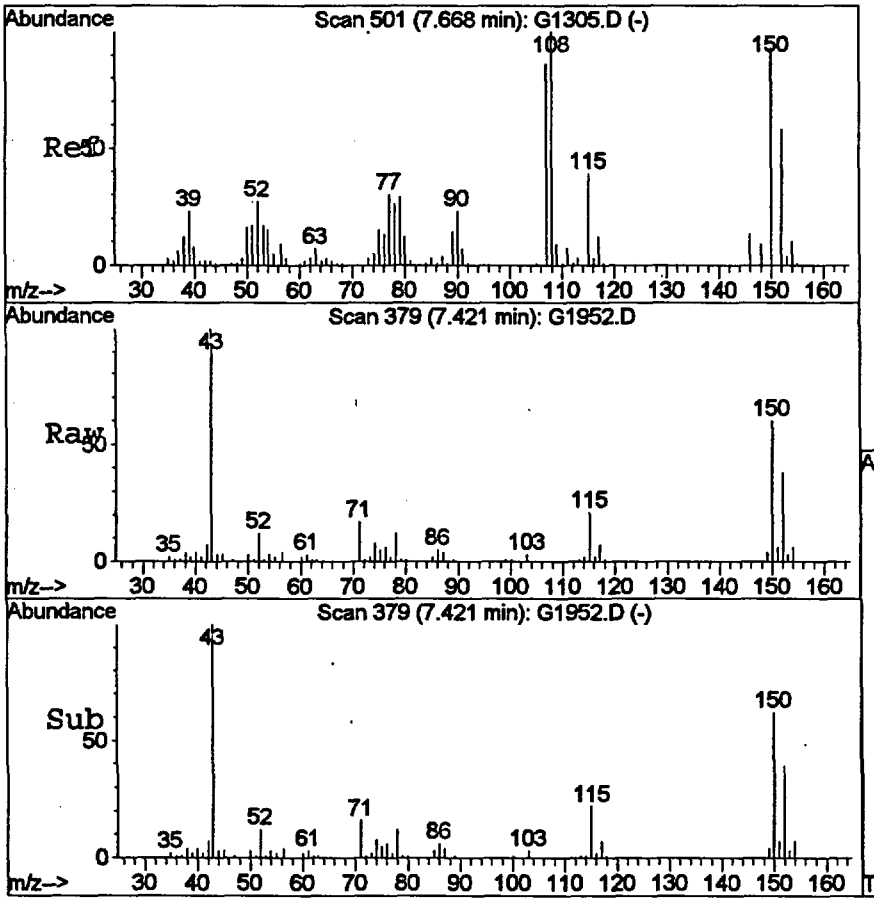
#4
Phenol
Concen: 1.18 ng m
RT: 6.37 min Scan# 276
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

CASE 25969
SDG# FFR76

Tgt Ion:94 Resp: 9180

Ion	Ratio	Lower	Upper
94	100		
65	42.2	5.6	45.6
66	132.3	14.2	54.2#
0	0.0	0.0	0.0

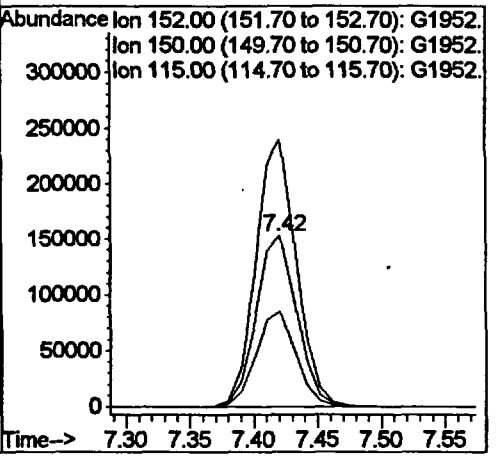




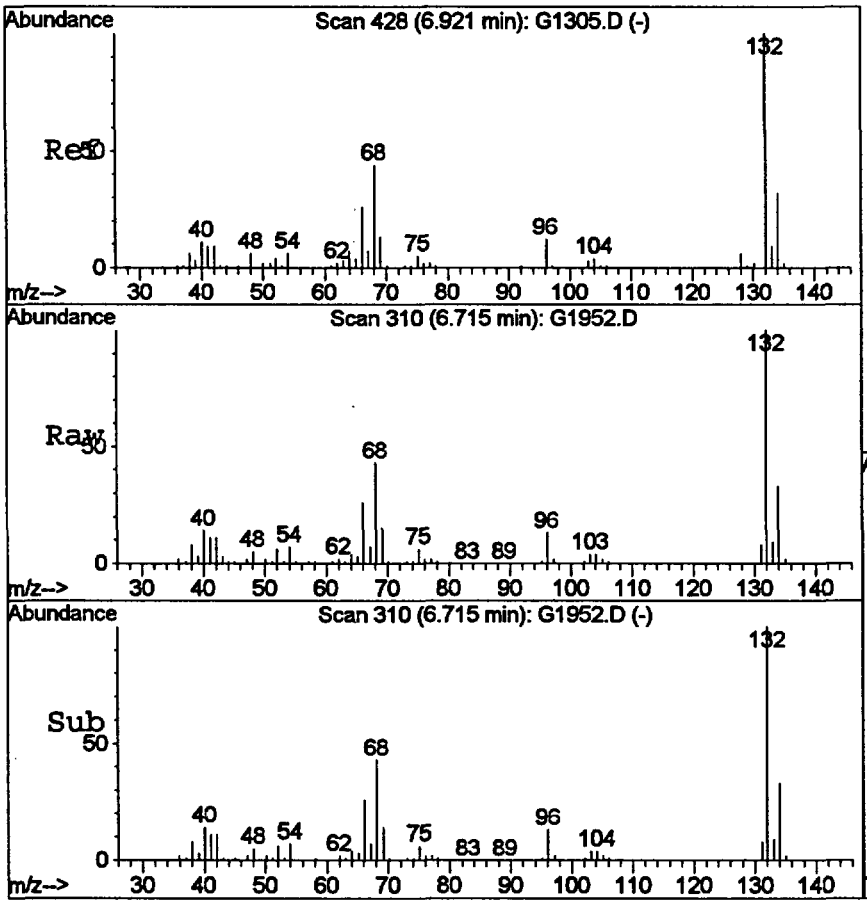
#7
1,2-Dichlorobenzene-d4
Concen: 92.71 ng
RT: 7.42 min Scan# 379
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:152 Resp: 337530

Ion	Ratio	Lower	Upper
152	100		
150	155.7	153.4	193.4
115	54.8	34.2	74.2
0	0.0	0.0	0.0



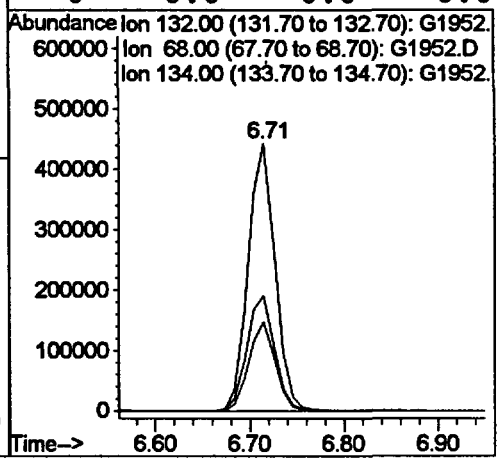
0335

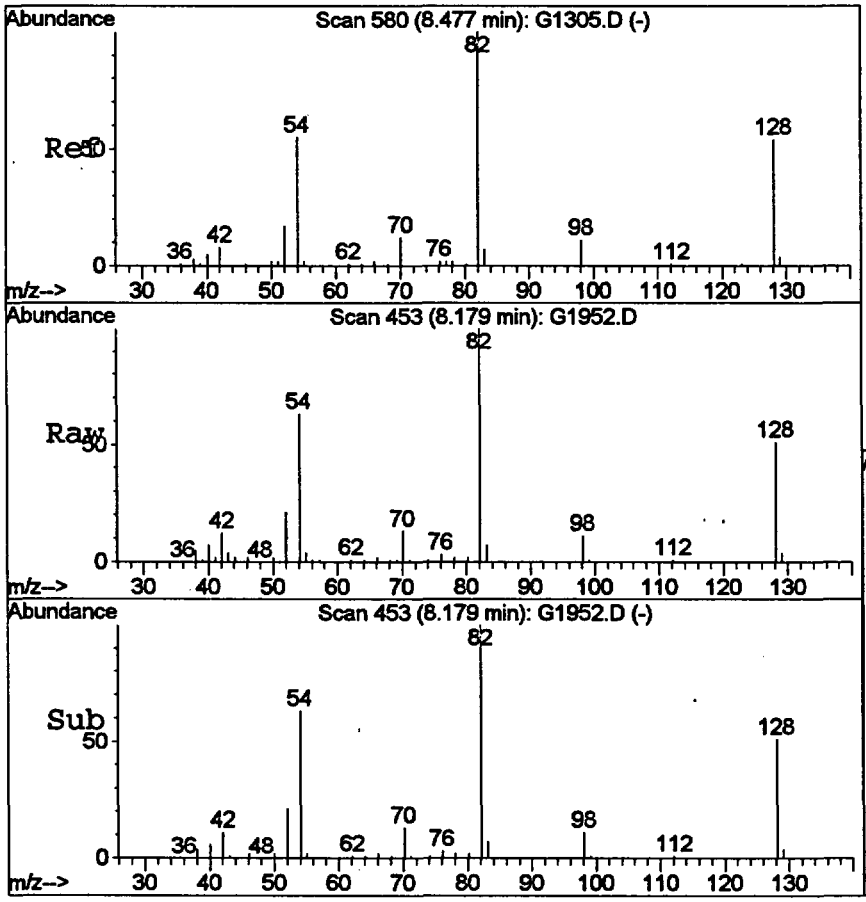


#8
2-Chlorophenol-d4
Concen: 156.11 ng
RT: 6.71 min Scan# 310
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:132 Resp: 871660

Ion	Ratio	Lower	Upper
132	100		
68	44.8	23.4	63.4
134	32.8	12.7	52.7
0	0.0	0.0	0.0

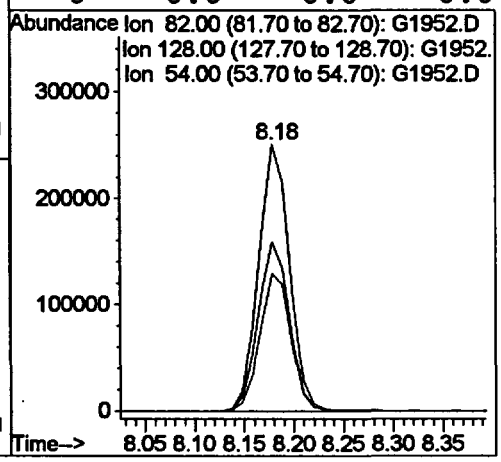


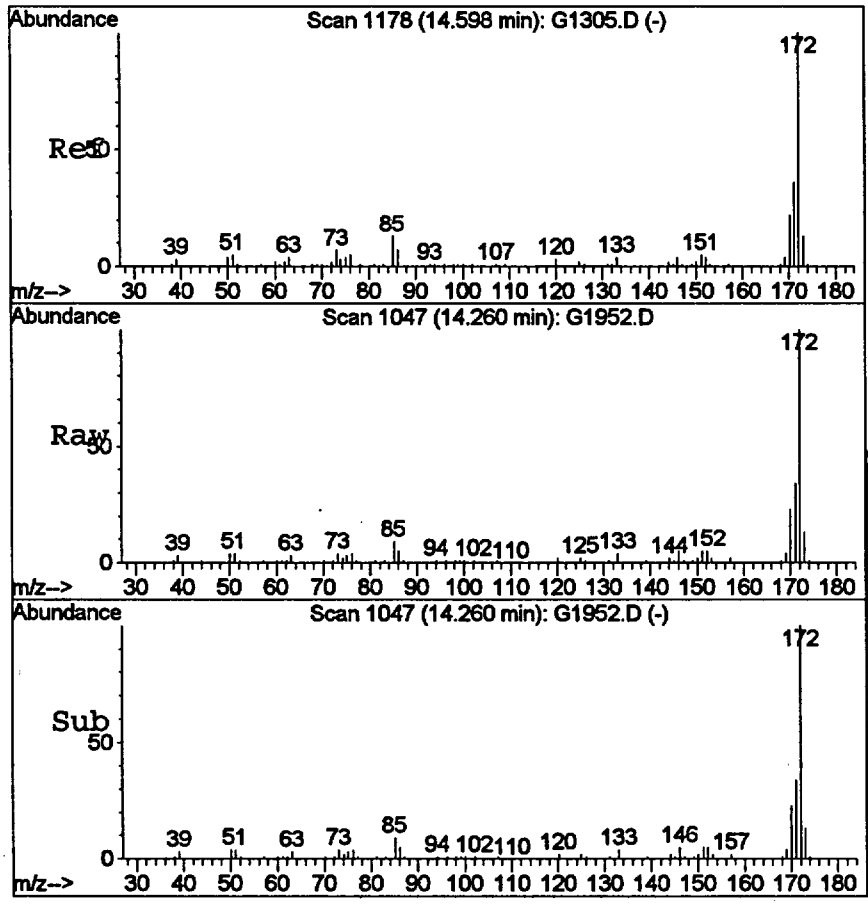


#18
Nitrobenzene-d5
Concen: 112.87 ng
RT: 8.18 min Scan# 453
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:82 Resp: 542554

Ion	Ratio	Lower	Upper
82	100		
128	51.8	33.9	73.9
54	64.1	43.9	83.9
0	0.0	0.0	0.0

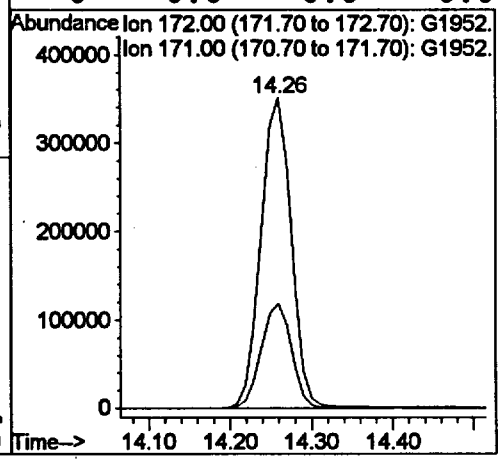


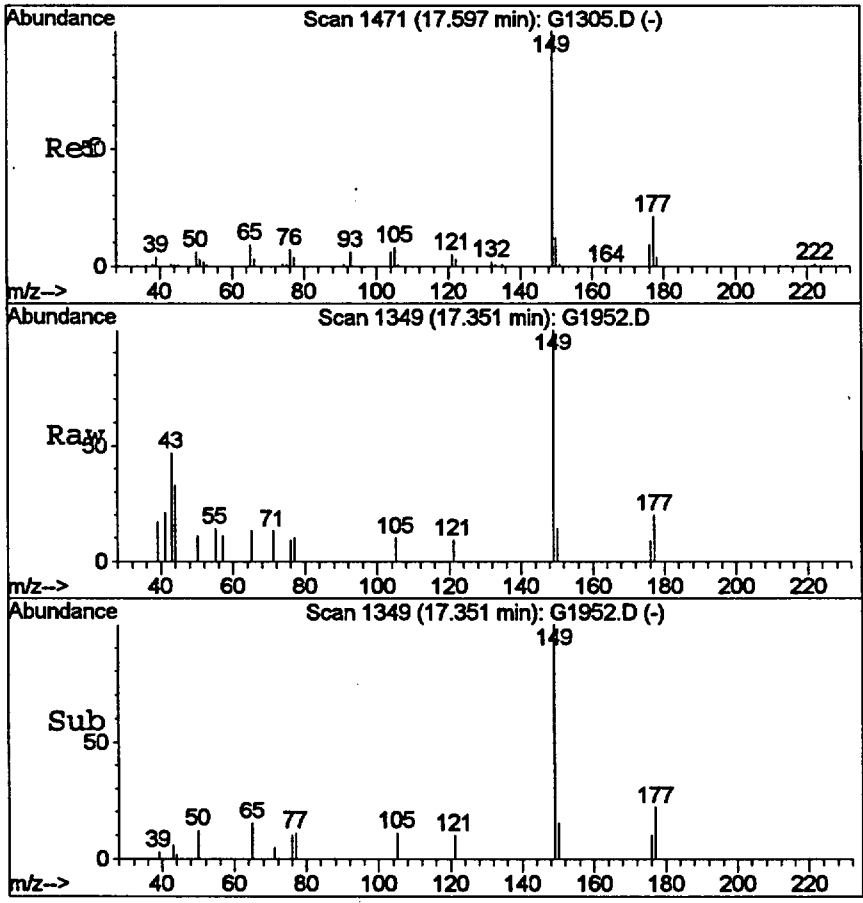


#35
2-Fluorobiphenyl
Concen: 116.64 ng
RT: 14.26 min Scan# 1047
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:172 Resp: 912760

Ion	Ratio	Lower	Upper
172	100		
171	33.8	14.1	54.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

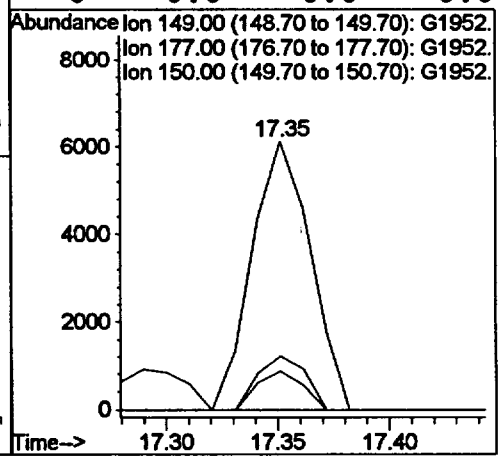


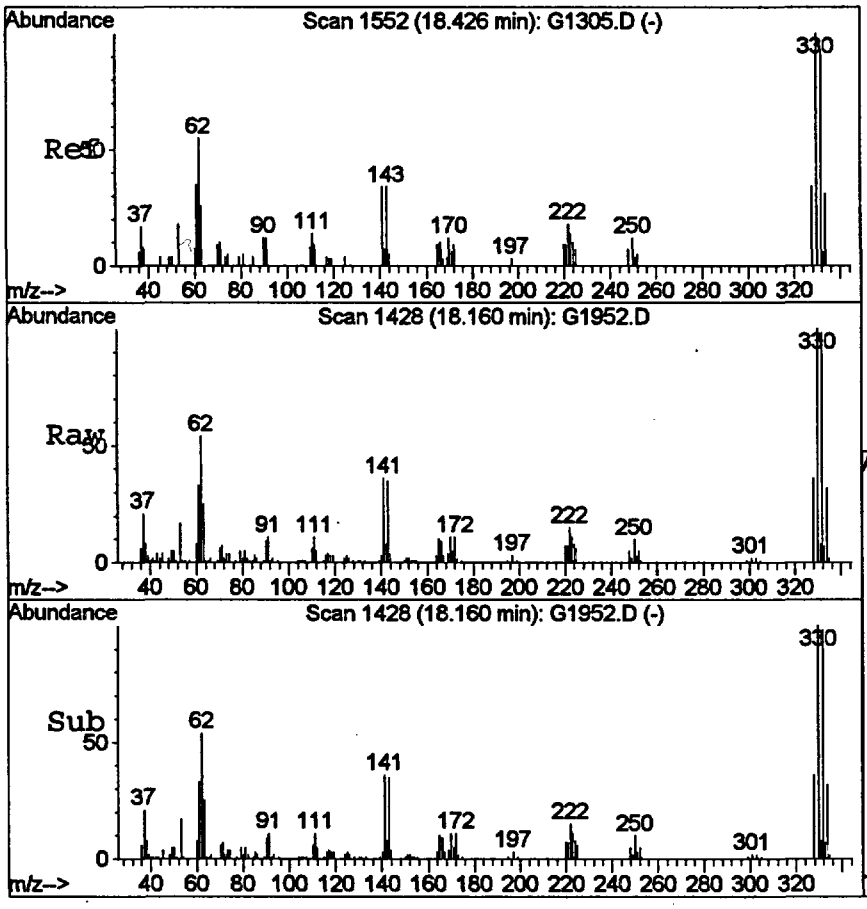


#47
Diethylphthalate
Concen: 1.27 ng m
RT: 17.35 min Scan# 1349
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:149 Resp: 11161

Ion	Ratio	Lower	Upper
149	100		
177	20.0	0.9	40.9
150	13.9	0.0	31.7
0	0.0	0.0	0.0



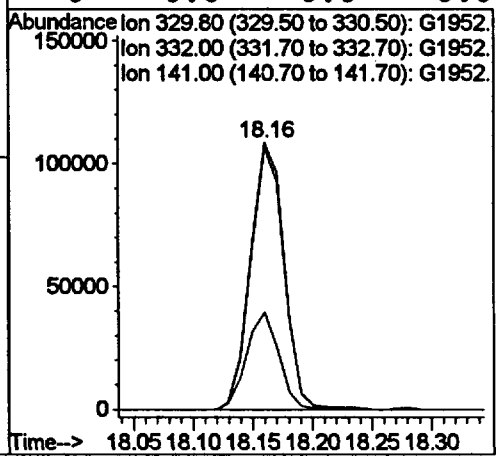


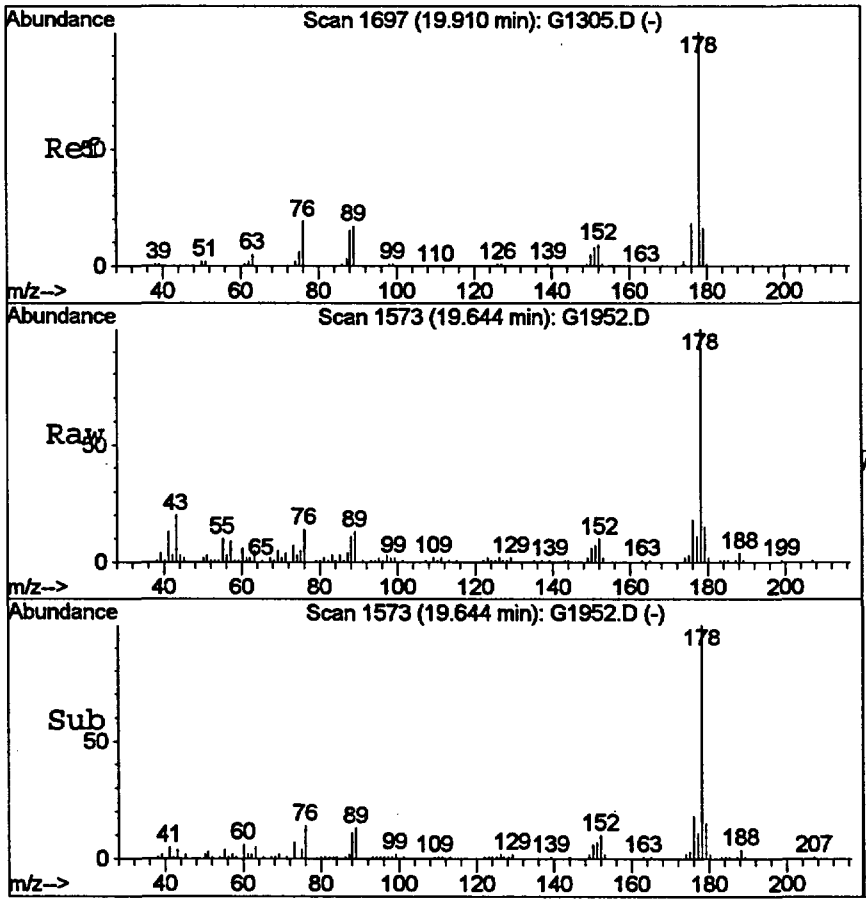
#52
2,4,6-Tribromophenol
Concen: 175.32 ng
RT: 18.16 min Scan# 1428
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

CASE 25969
SDG# FFR76

Tgt Ion:329.8 Resp: 211893

Ion	Ratio	Lower	Upper
330	100		
332	97.2	75.8	115.8
141	35.4	14.4	54.4
0	0.0	0.0	0.0

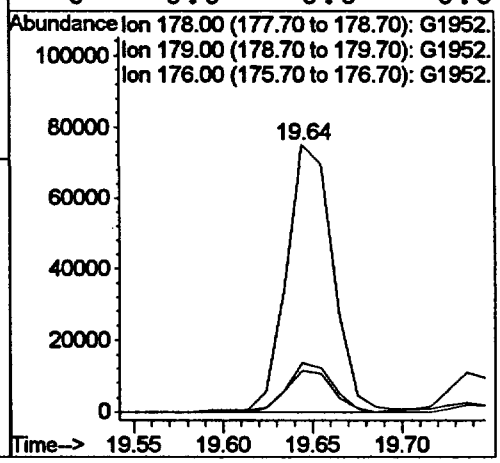


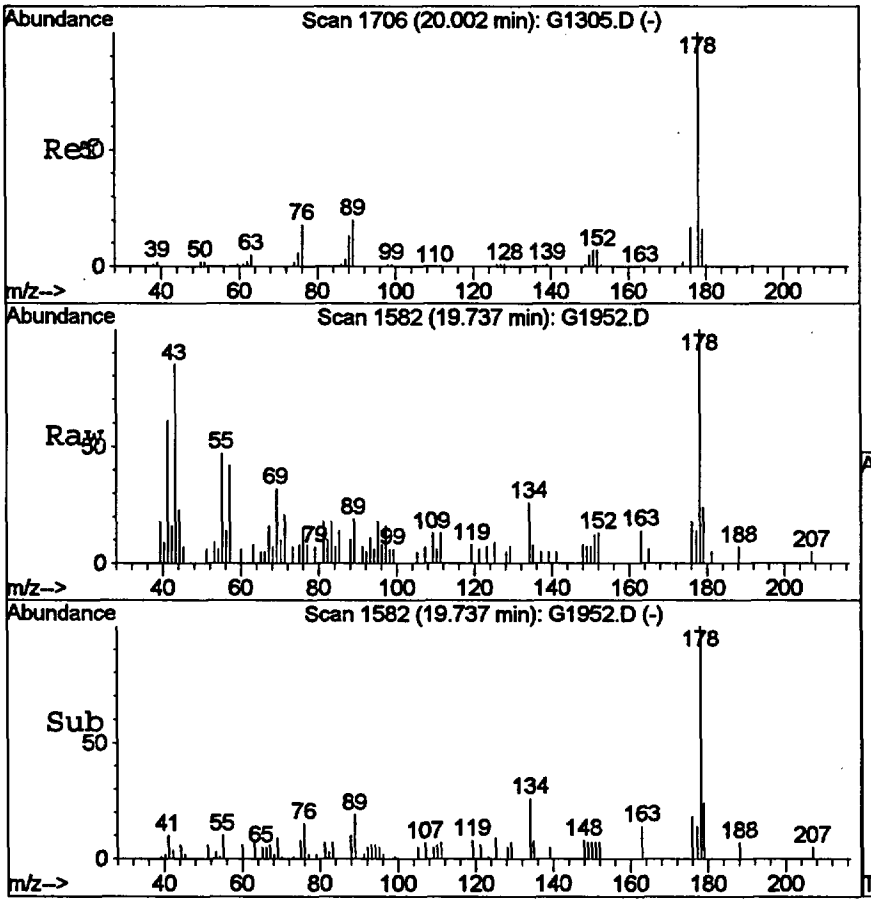


#58
Phenanthrene
Concen: 11.27 ng
RT: 19.64 min Scan# 1573
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:178 Resp: 134757

Ion	Ratio	Lower	Upper
178	100		
179	16.4	0.0	35.5
176	17.7	0.0	38.8
0	0.0	0.0	0.0



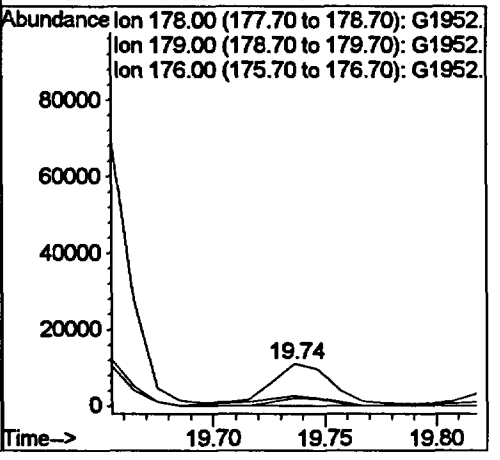


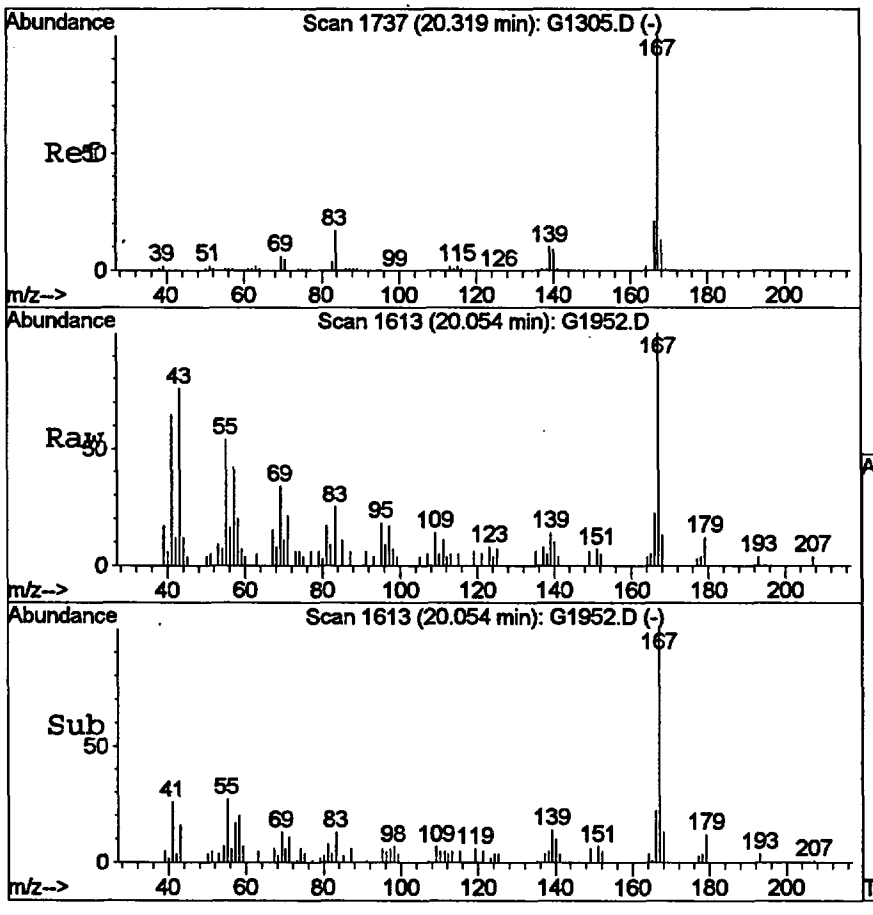
#59
Anthracene
Concen: 1.68 ng
RT: 19.74 min, Scan# 1582
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

CASE 25969
SDG# FFR76

Tgt Ion:178 Resp: 21415

Ion	Ratio	Lower	Upper
178	100		
179	24.4	0.0	34.8
176	17.6	0.0	38.4
0	0.0	0.0	0.0

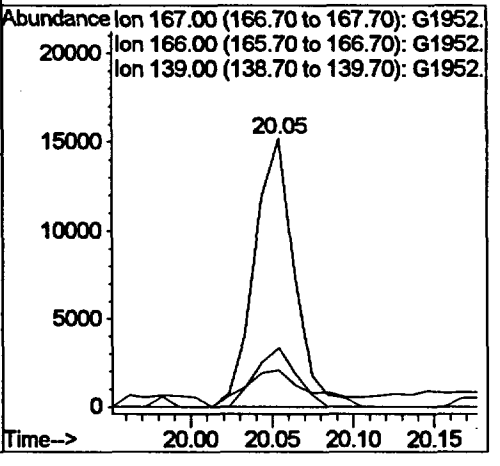


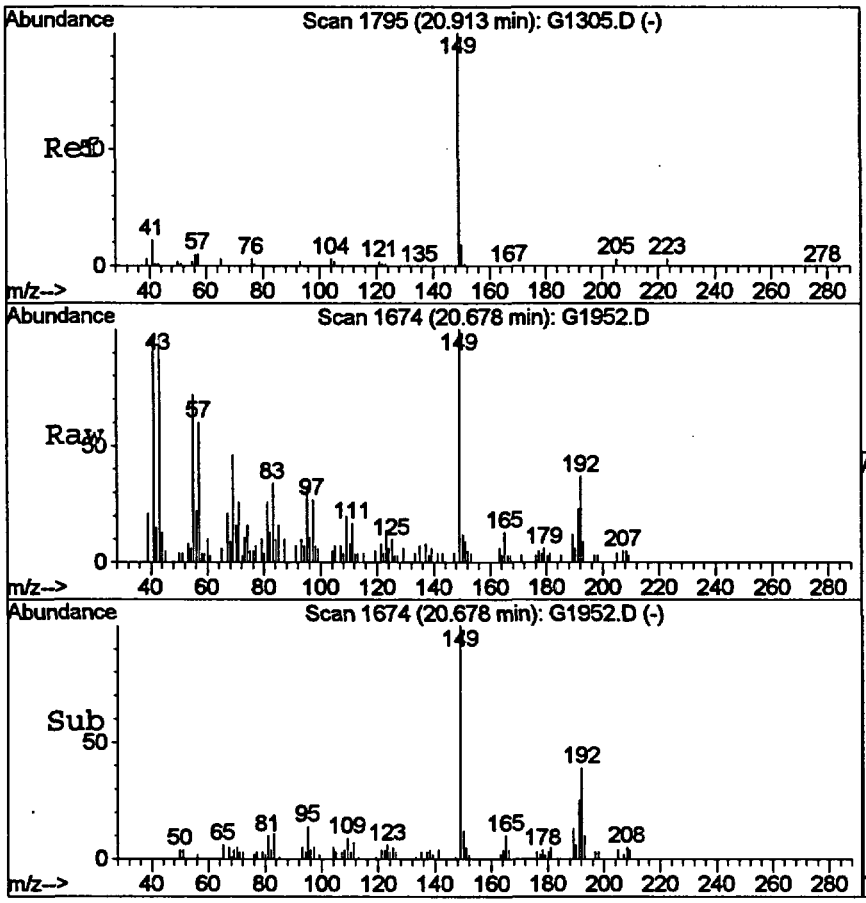


#60
Carbazole
Concen: 1.94 ng
RT: 20.05 min, Scan# 1613
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:167 Resp: 25953

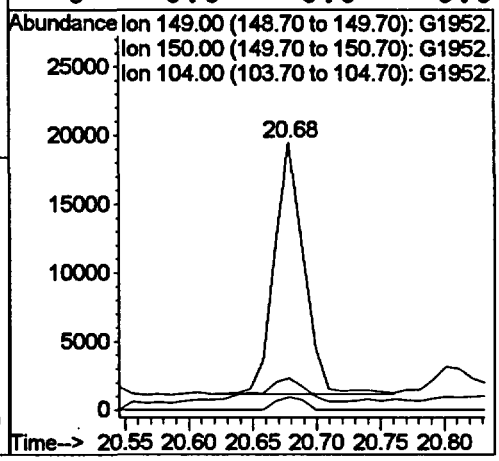
Ion	Ratio	Lower	Upper
167	100		
166	0.0	0.1	40.1#
139	0.0	0.0	31.4
0	0.0	0.0	0.0

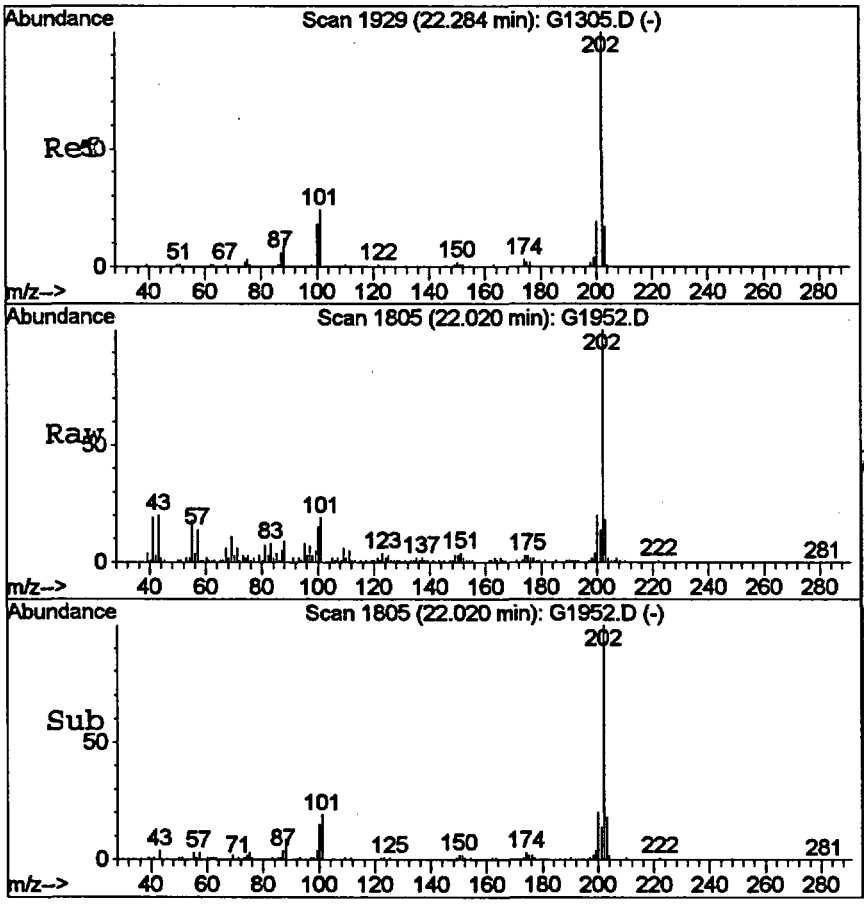




#61
Di-n-butylphthalate
Concen: 1.57 ng
RT: 20.68 min / Scan# 1674
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

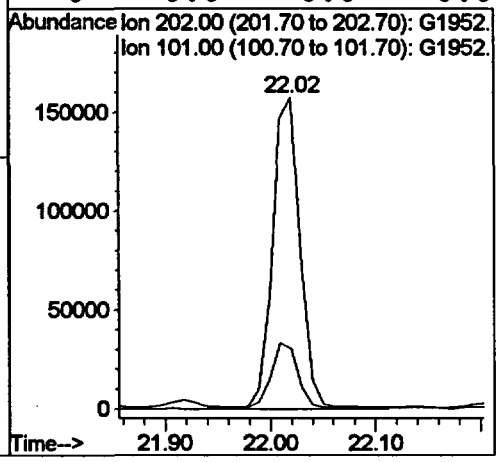
Tgt Ion:149	Resp:	29463	
Ion	Ratio	Lower	Upper
149	100		
150	0.0	0.0	29.2
104	0.0	0.0	23.2
0	0.0	0.0	0.0

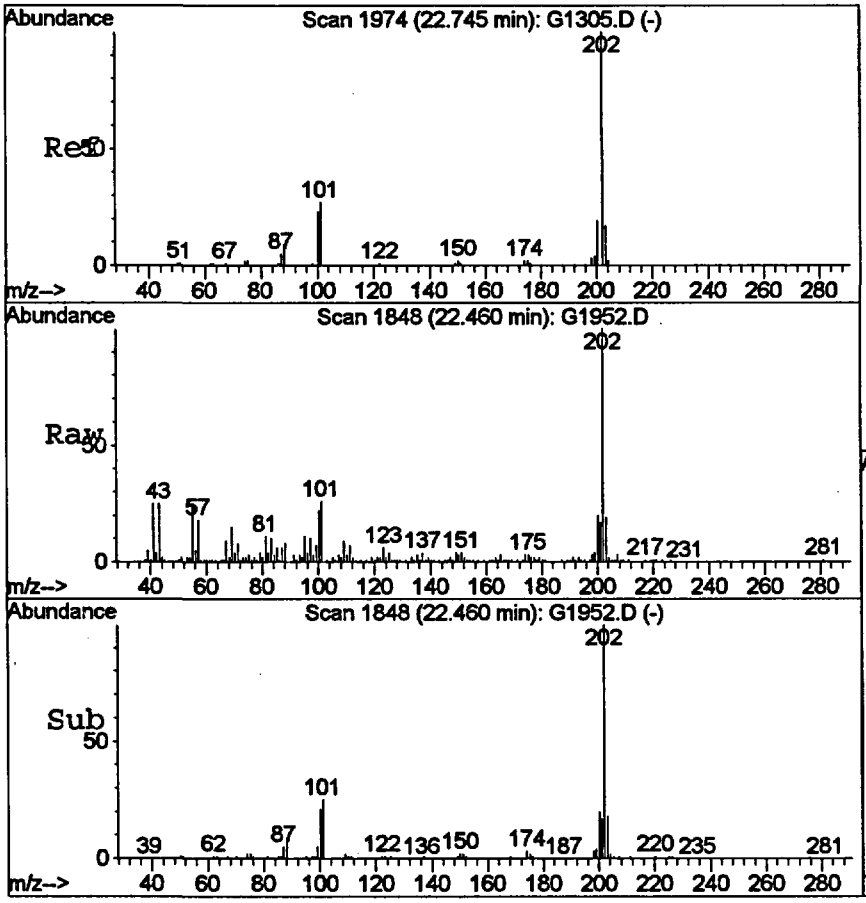




#62
Fluoranthene
Concen: 23.88 ng
RT: 22.02 min / Scan# 1805
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

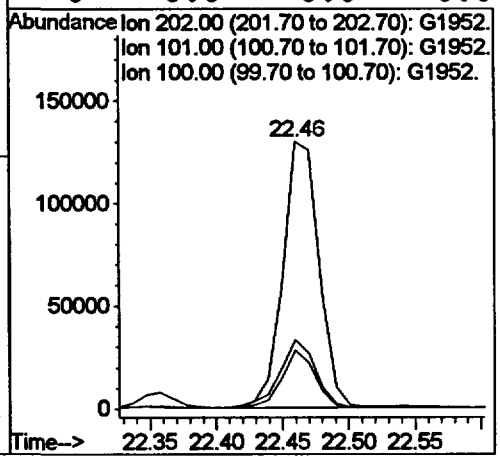
Tgt Ion:202	Resp:	288885	
Ion	Ratio	Lower	Upper
202	100		
101	19.6	0.6	40.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

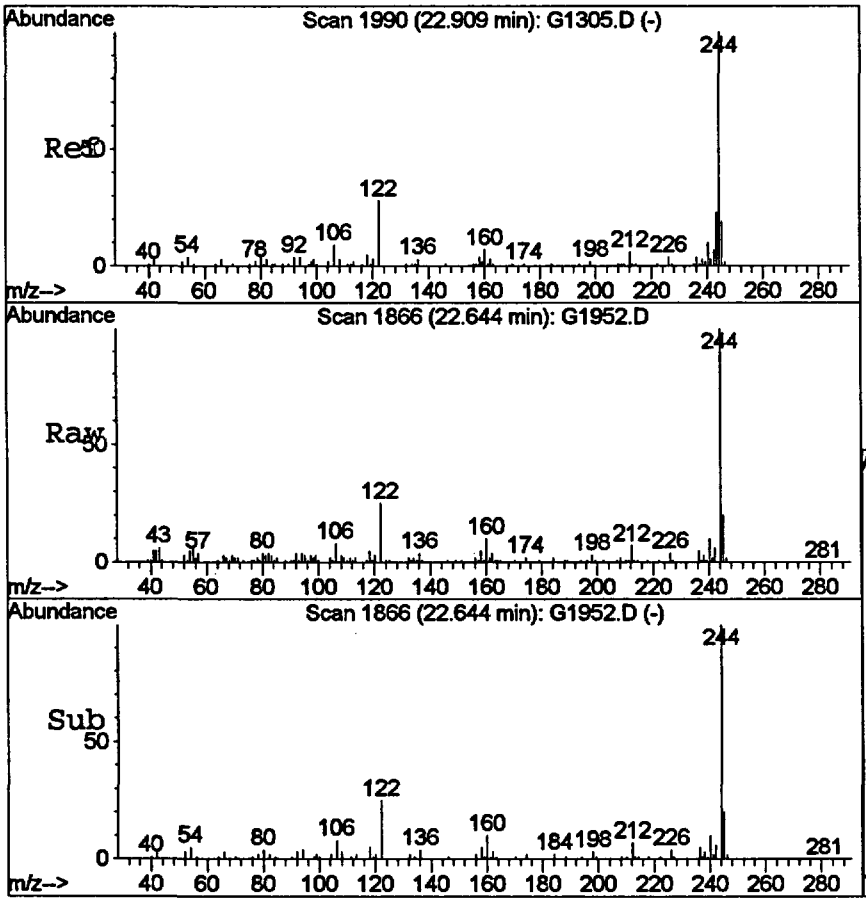




#64 CASE 25969
Pyrene SDG# FFR76
Concen: 19.74 ng
RT: 22.46 min Scan# 1848
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

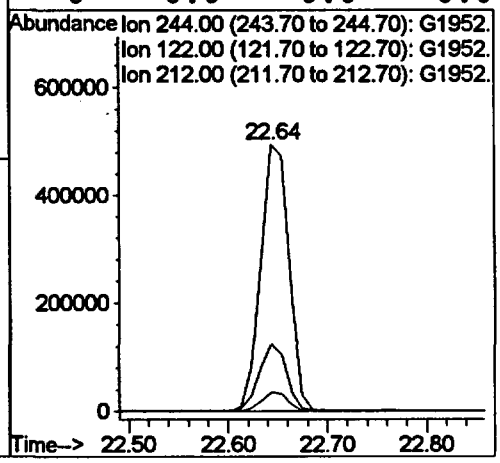
Tgt Ion:202	Resp:	245756	
Ion	Ratio	Lower	Upper
202	100		
101	25.5	5.7	45.7
100	20.8	0.8	40.8
0	0.0	0.0	0.0



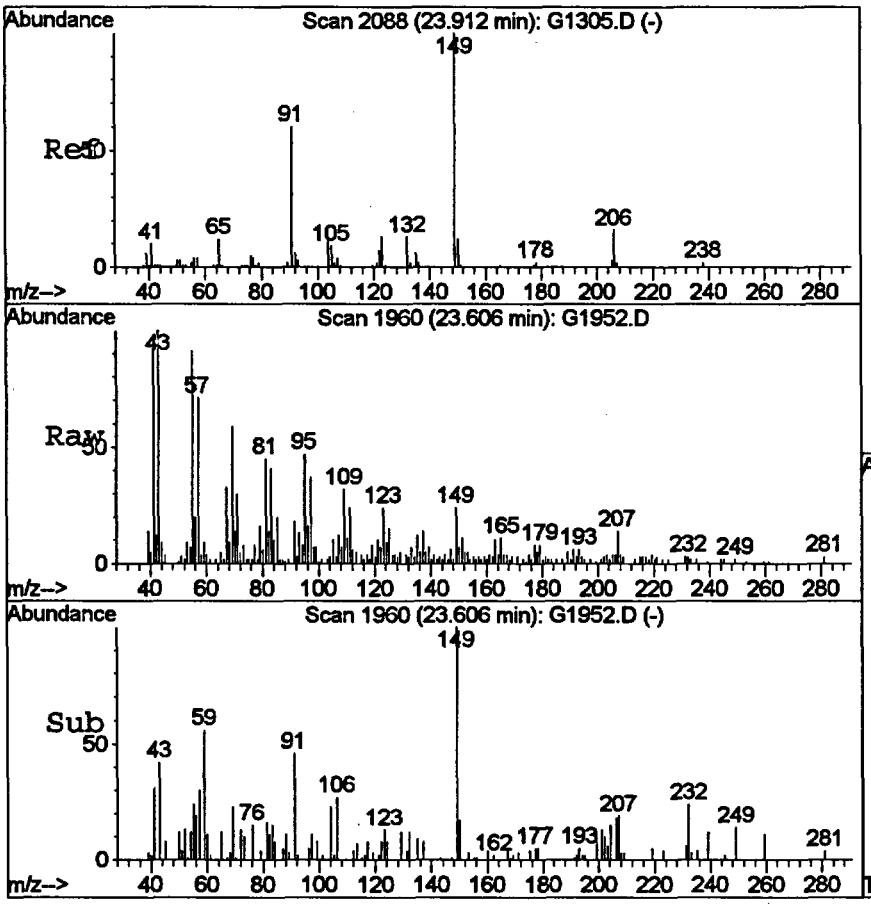


#65
Terphenyl-d14
Concen: 122.08 ng
RT: 22.64 min Scan# 1866
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:244	Resp:	982904	
Ion	Ratio	Lower	Upper
244	100		
122	23.7	3.7	43.7
212	6.9	0.0	27.0
0	0.0	0.0	0.0



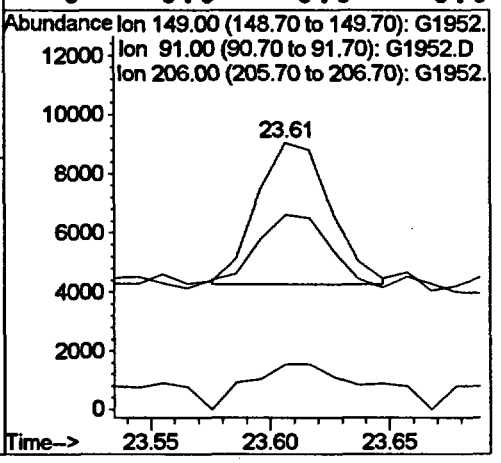
CASE 25969
SDG# FFR76

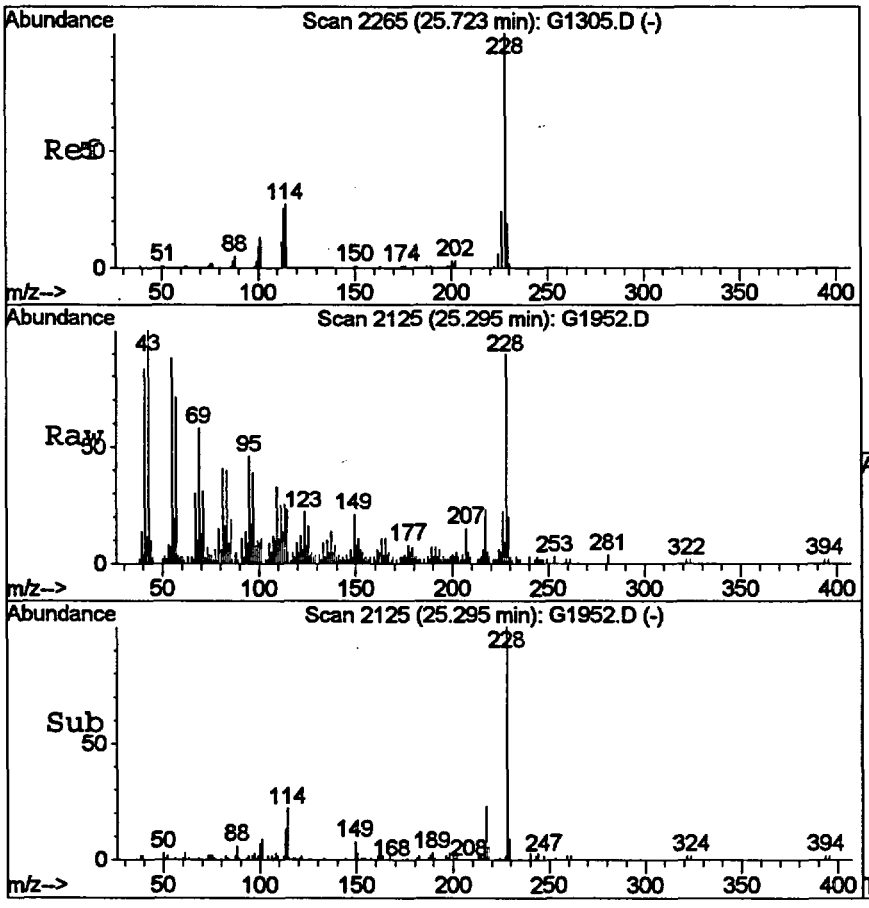


#66
Butylbenzylphthalate
Concen: 1.13 ng m
RT: 23.61 min Scan# 1960
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:149 Resp: 10225

Ion	Ratio	Lower	Upper
149	100		
91	73.1	34.2	74.2
206	17.3	0.0	36.1
0	0.0	0.0	0.0

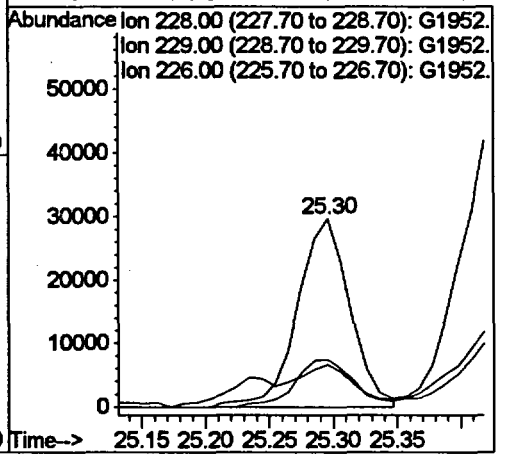


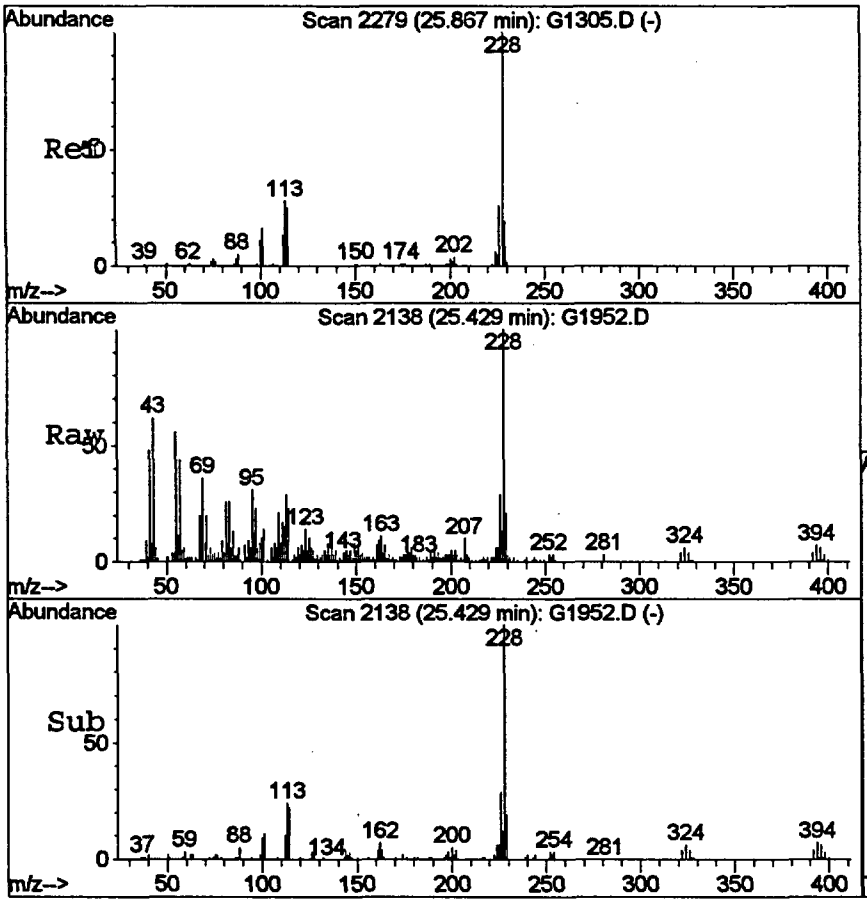


#67
Benzo(a)anthracene
Concen: 8.49 ng m
RT: 25.30 min Scan# 2125
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:228 Resp: 84524

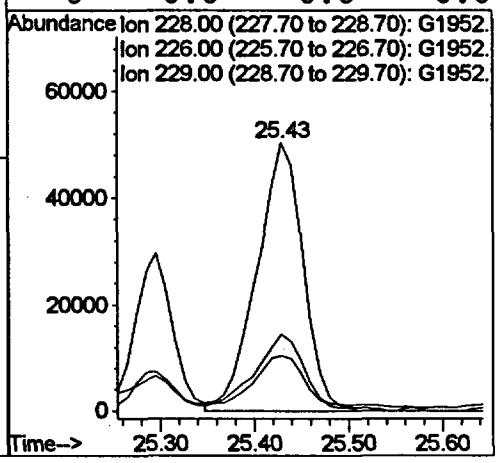
Ion	Ratio	Lower	Upper
228	100		
229	22.2	9.8	29.8
226	24.9	16.2	36.2
0	0.0	0.0	0.0

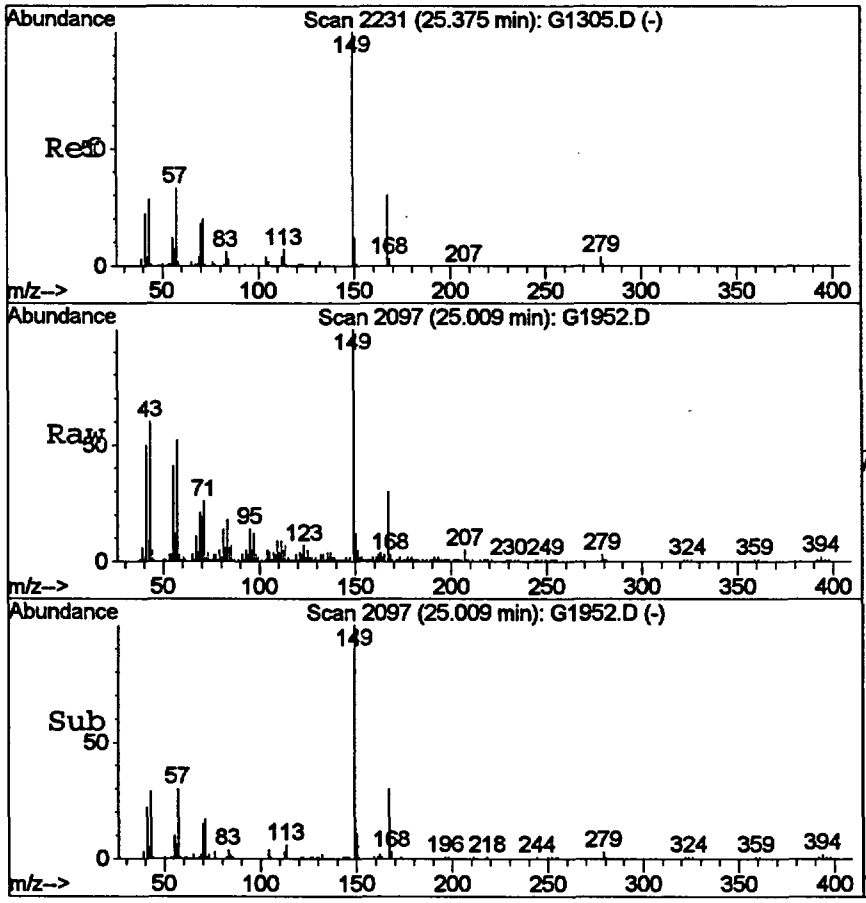




#69 CASE 25969
Chrysene SDG# FFR76
Concen: 18.12 ng
RT: 25.43 min / Scan# 2138
Delta R.T. -0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

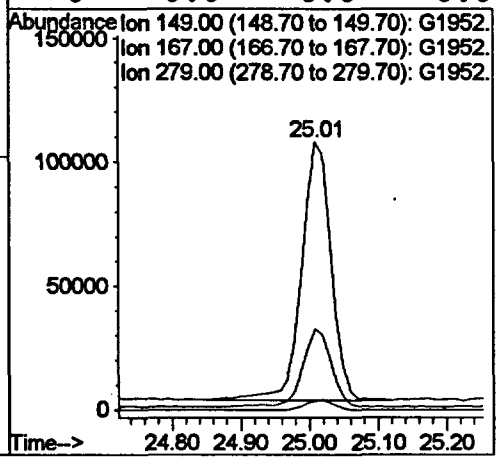
Tgt Ion:228	Resp:	172007	
Ion	Ratio	Lower	Upper
228	100		
226	31.0	19.0	39.0
229	18.8	9.9	29.9
0	0.0	0.0	0.0



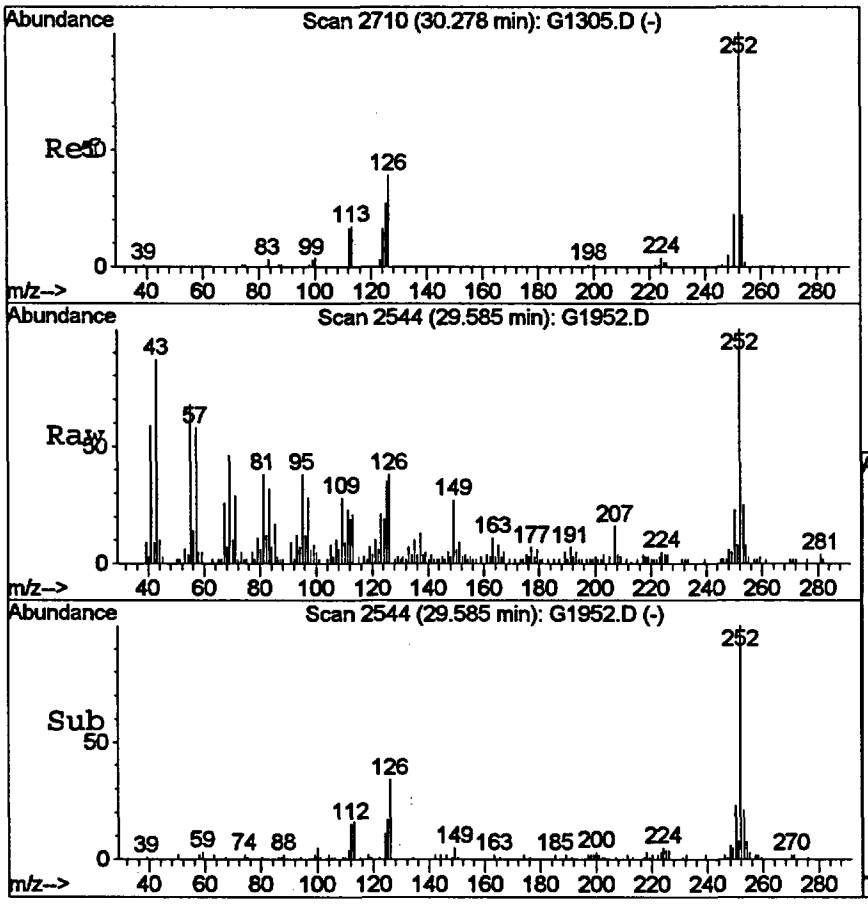


#70
bis(2-Ethylhexyl)phthalate
Concen: 23.06 ng
RT: 25.01 min / Scan# 2097
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:149	Resp:	310289	
Ion	Ratio	Lower	Upper
149	100		
167	29.4	10.6	50.6
279	0.0	0.0	23.8
0	0.0	0.0	0.0

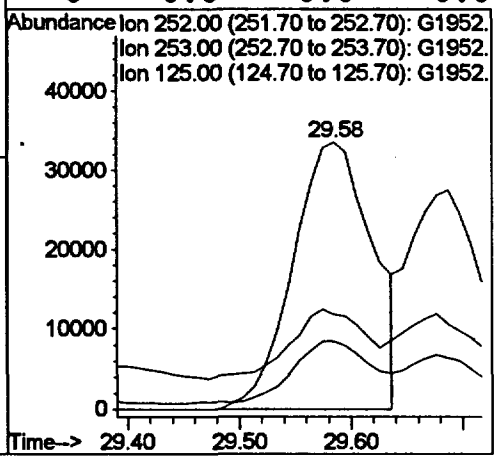


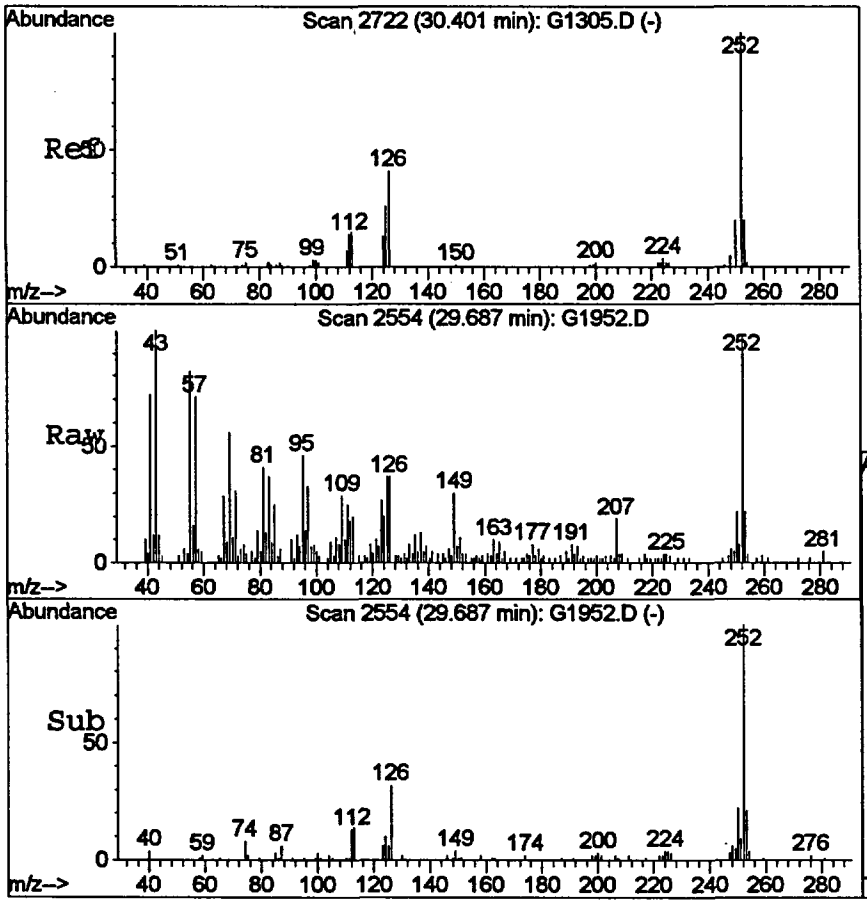
0343



#73
Benzo(b)fluoranthene
Concen: 14.58 ng
RT: 29.58 min/ Scan# 2544
Delta R.T. 0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

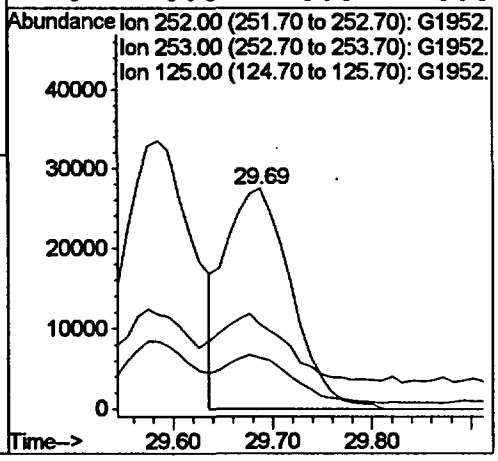
Tgt Ion:252	Resp:	165096	
Ion	Ratio	Lower	Upper
252	100		
253	23.2	2.4	42.4
125	24.2	5.5	45.5
0	0.0	0.0	0.0

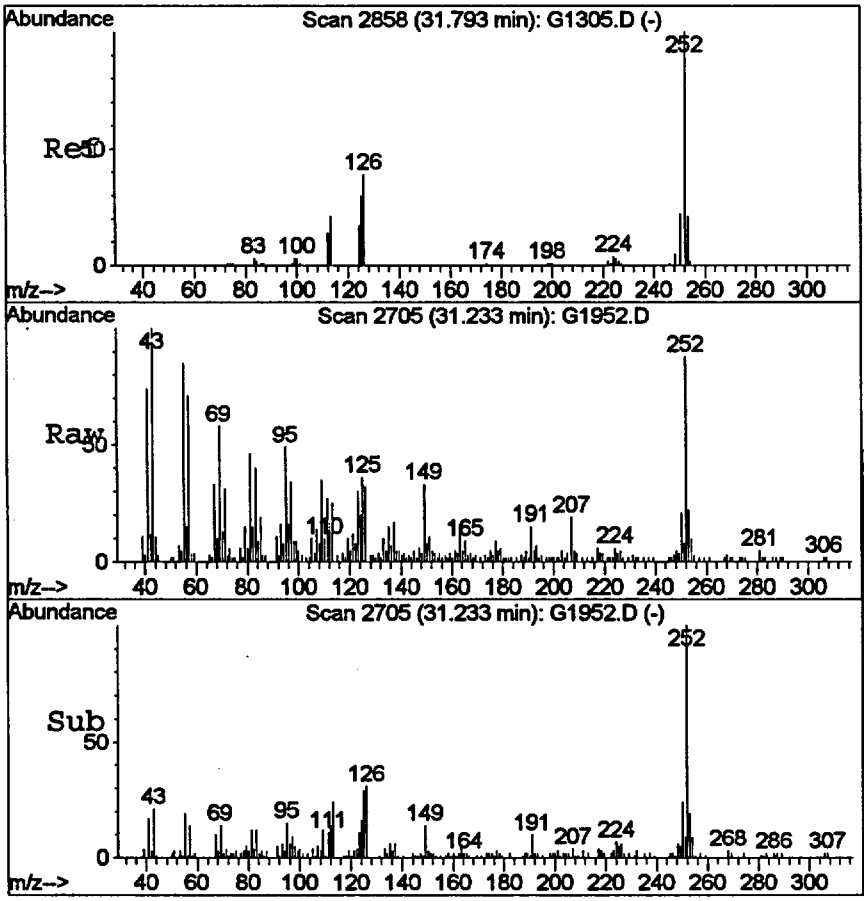




#74
Benzo(k)fluoranthene
Concen: 11.72 ng
RT: 29.69 min/ Scan# 2554
Delta R.T. -0.00 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

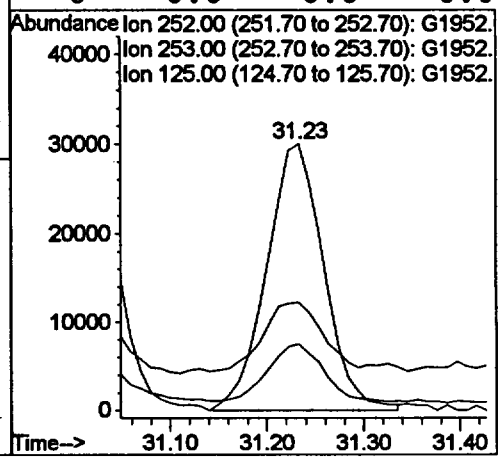
Tgt Ion:252	Resp:	126393	
Ion	Ratio	Lower	Upper
252	100		
253	22.5	2.3	42.3
125	30.2	5.0	45.0
0	0.0	0.0	0.0

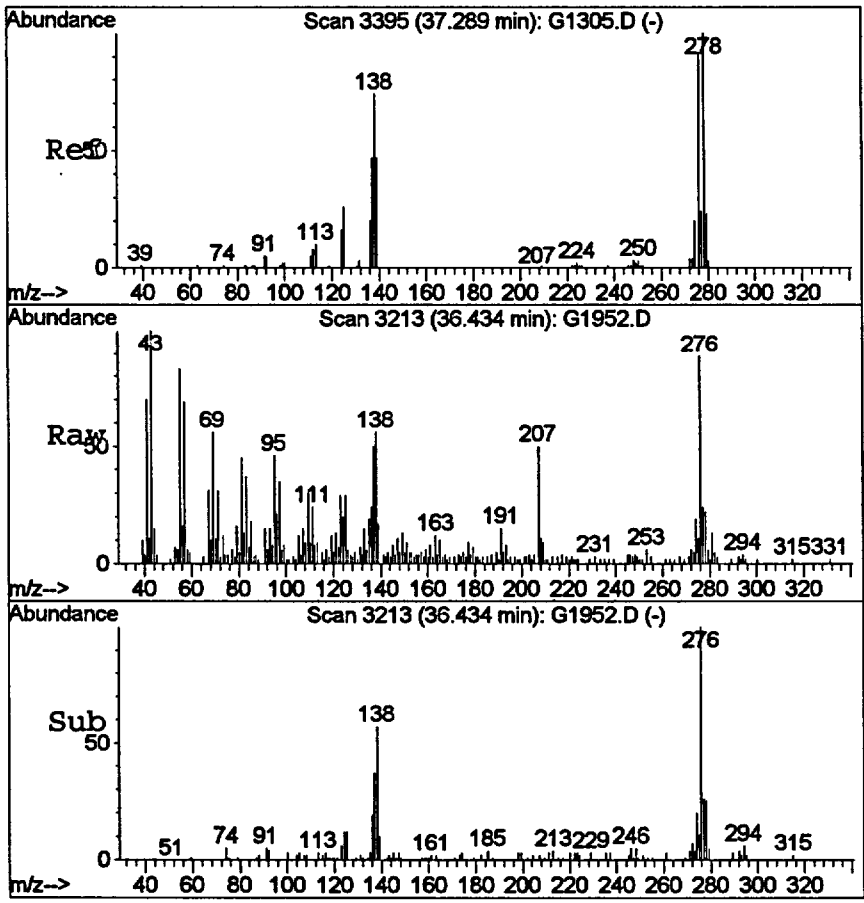




#75
Benzo(a)pyrene
Concen: 11.93 ng
RT: 31.23 min ✓ Scan# 2705
Delta R.T. 0.01 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

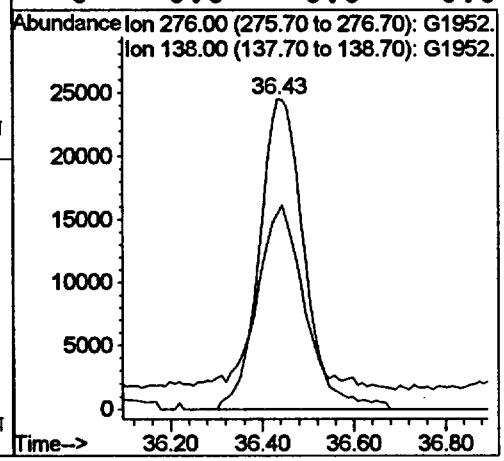
Tgt Ion:252	Resp:	123463	
Ion	Ratio	Lower	Upper
252	100		
253	21.1	12.0	32.0
125	27.1	19.7	35.7
0	0.0	0.0	0.0

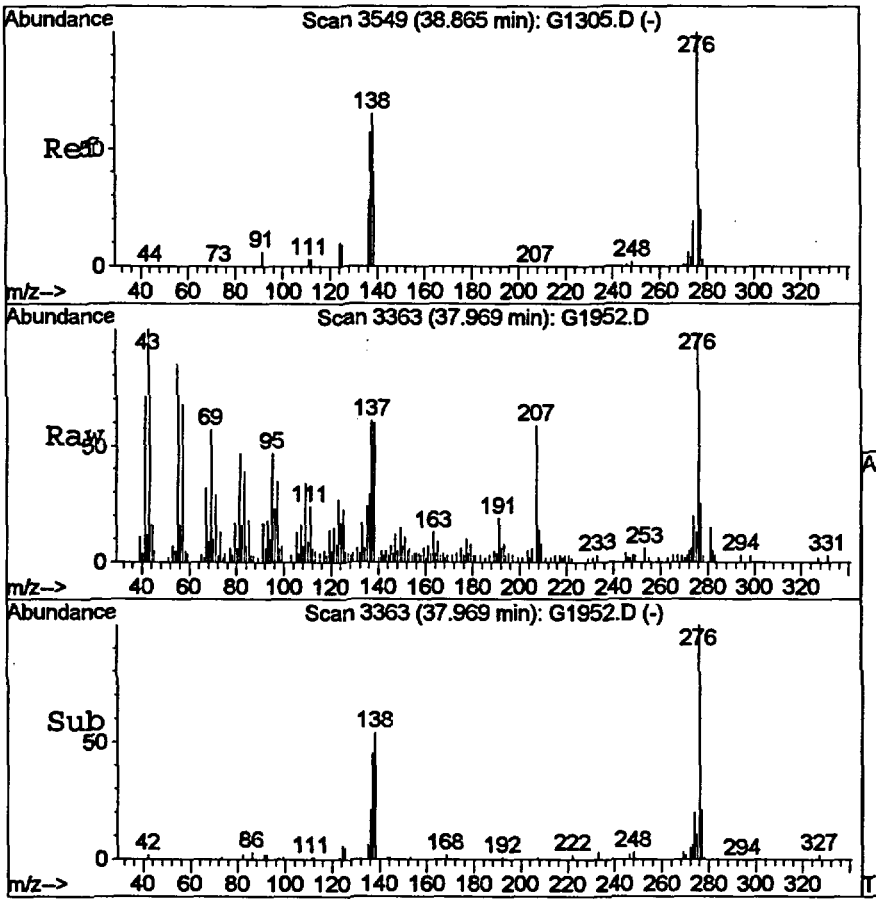




#76
Indeno(1,2,3-cd)pyrene
Concen: 13.88 ng
RT: 36.43 min / Scan# 3213
Delta R.T. 0.02 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

Tgt Ion:276	Resp:	165588	
Ion	Ratio	Lower	Upper
276	100		
138	55.6	47.5	87.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0



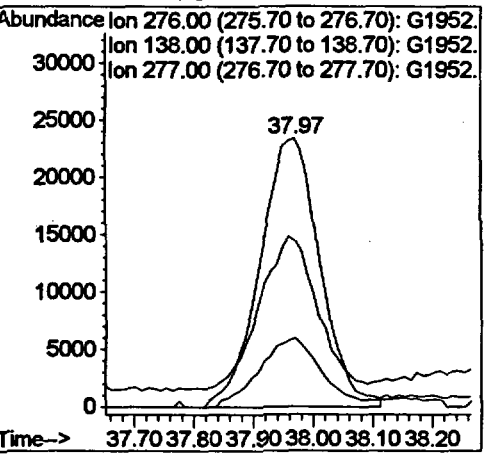


#78
Benzo(g,h,i)perylene
Concen: 16.33 ng
RT: 37.97 min / Scan# 3363
Delta R.T. 0.06 min
Lab File: G1952.D
Acq: 22 Jan 98 19:22

CASE 25969
SDG# FFR76

Tgt Ion:276 Resp: 162527

Ion	Ratio	Lower	Upper
276	100		
138	54.1	37.7	77.7
277	26.5	3.9	43.9
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:44 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.05	152	184448	40.00	ng		-0.01
17) Naphthalene-d8	10.06	136	541154	40.00	ng		-0.01
31) Acenaphthene-d10	16.28	164	263817	40.00	ng		-0.01
51) Phenanthrene-d10	19.60	188	485962	40.00	ng		0.00
63) Chrysene-d12	25.36	240	389707	40.00	ng		0.00
71) Perylene-d12	31.47	264	412087	40.00	ng		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.81	112	833606	151.52	ng		0.00
Surrogate Spike 150.000	Range 25 - 121		Recovery = 101.01%				
3) Phenol-d5	6.35	99	1214462	167.11	ng		0.00
Surrogate Spike 150.000	Range 24 - 113		Recovery = 111.41%				
7) 1,2-Dichlorobenzene-d4	7.42	152	337530	92.71	ng		0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 92.71%				
8) 2-Chlorophenol-d4	6.71	132	871660	156.11	ng		0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 104.07%				
18) Nitrobenzene-d5	8.18	82	542554	112.87	ng		-0.01
Surrogate Spike 100.000	Range 23 - 120		Recovery = 112.87%				
35) 2-Fluorobiphenyl	14.26	172	912760	116.64	ng		0.00
Surrogate Spike 100.000	Range 30 - 115		Recovery = 116.64%#				
52) 2,4,6-Tribromophenol	18.16	330	211893	175.32	ng		0.00
Surrogate Spike 150.000	Range 19 - 122		Recovery = 116.88%				
65) Terphenyl-d14	22.64	244	982904	122.08	ng		0.00
Surrogate Spike 100.000	Range 18 - 137		Recovery = 122.08%				
Target Compounds							Qvalue
4) Phenol	6.37	94	9180m	1.18	ng		0
47) Diethylphthalate	17.35	149	11161m	1.27	ng		0
58) Phenanthrene	19.64	178	134757	11.27	ng		98
59) Anthracene	19.74	178	21415m	1.68	ng		97
60) Carbazole	20.05	167	25953	1.94	ng	#	61
61) Di-n-butylphthalate	20.68	149	29463	1.57	ng	#	79
62) Fluoranthene	22.02	202	288885	23.88	ng		98
64) Pyrene	22.46	202	245756	19.74	ng		100
66) Butylbenzylphthalate	23.61	149	10225m	1.13	ng		0
67) Benzo(a)anthracene	25.30	228	84524m	8.49	ng		94
69) Chrysene	25.43	228	172007	18.12	ng		97
70) bis(2-Ethylhexyl)phthalate	25.01	149	310289	23.06	ng	#	97
73) Benzo(b)fluoranthene	29.58	252	165096	14.58	ng		98
74) Benzo(k)fluoranthene	29.69	252	126393	11.72	ng		94
75) Benzo(a)pyrene	31.23	252	123463	11.93	ng		98
76) Indeno(1,2,3-cd)pyrene	36.43	276	165588	13.88	ng		85
78) Benzo(g,h,i)perylene	37.97	276	162527	16.33	ng		95

(#) = qualifier out of range (m) = manual integration 0347

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

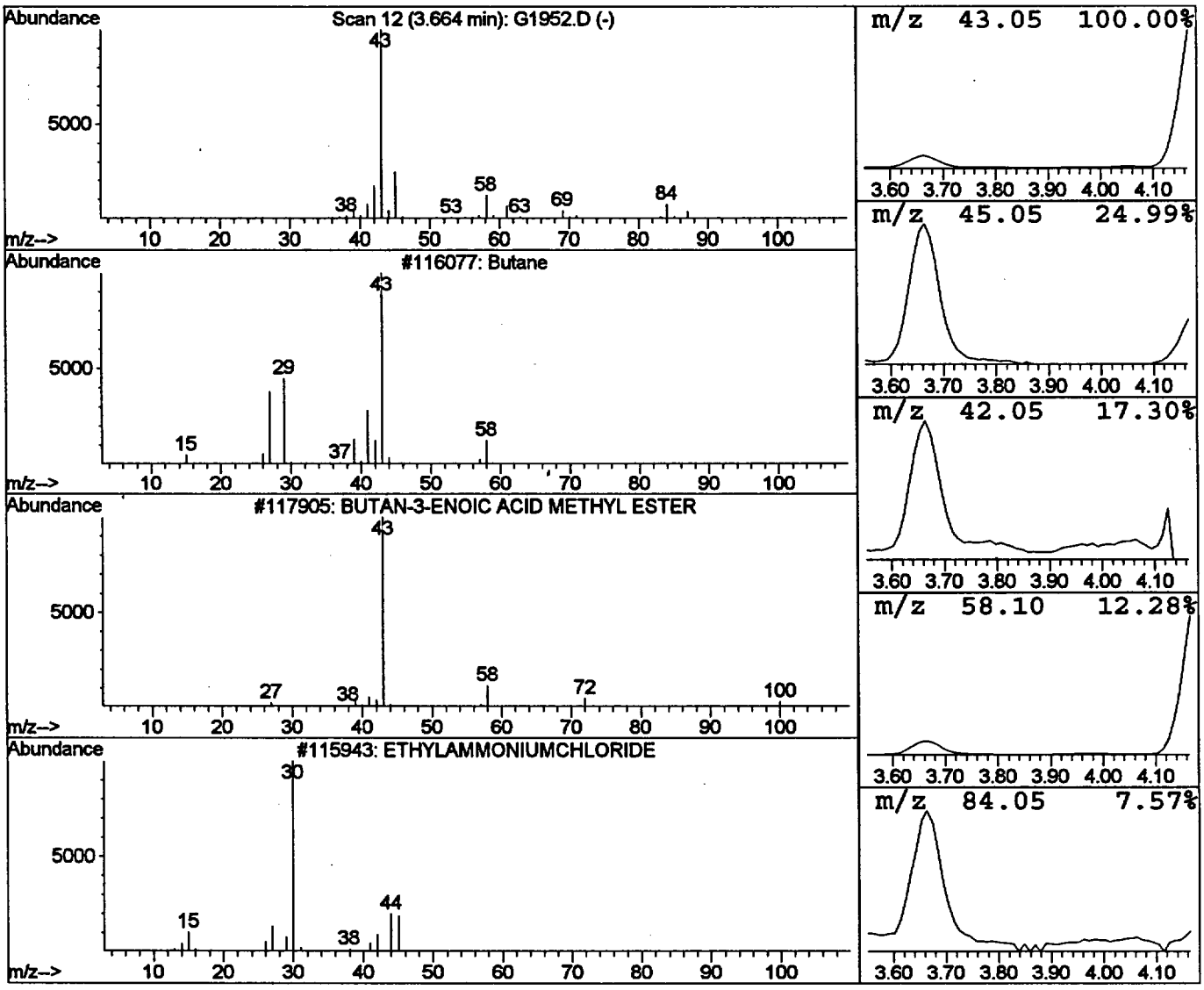
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 41 Butane UNKNOWN COMPOUND vol-27-98 Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.66	39.11 ng	1016240	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	25
2	BUTAN-3-ENOIC ACID METHYL ESTER	100	C5H8O2	000000-00-0	12
3	ETHYLAMMONIUMCHLORIDE	45	C2H7N	000075-04-7	9



0348

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

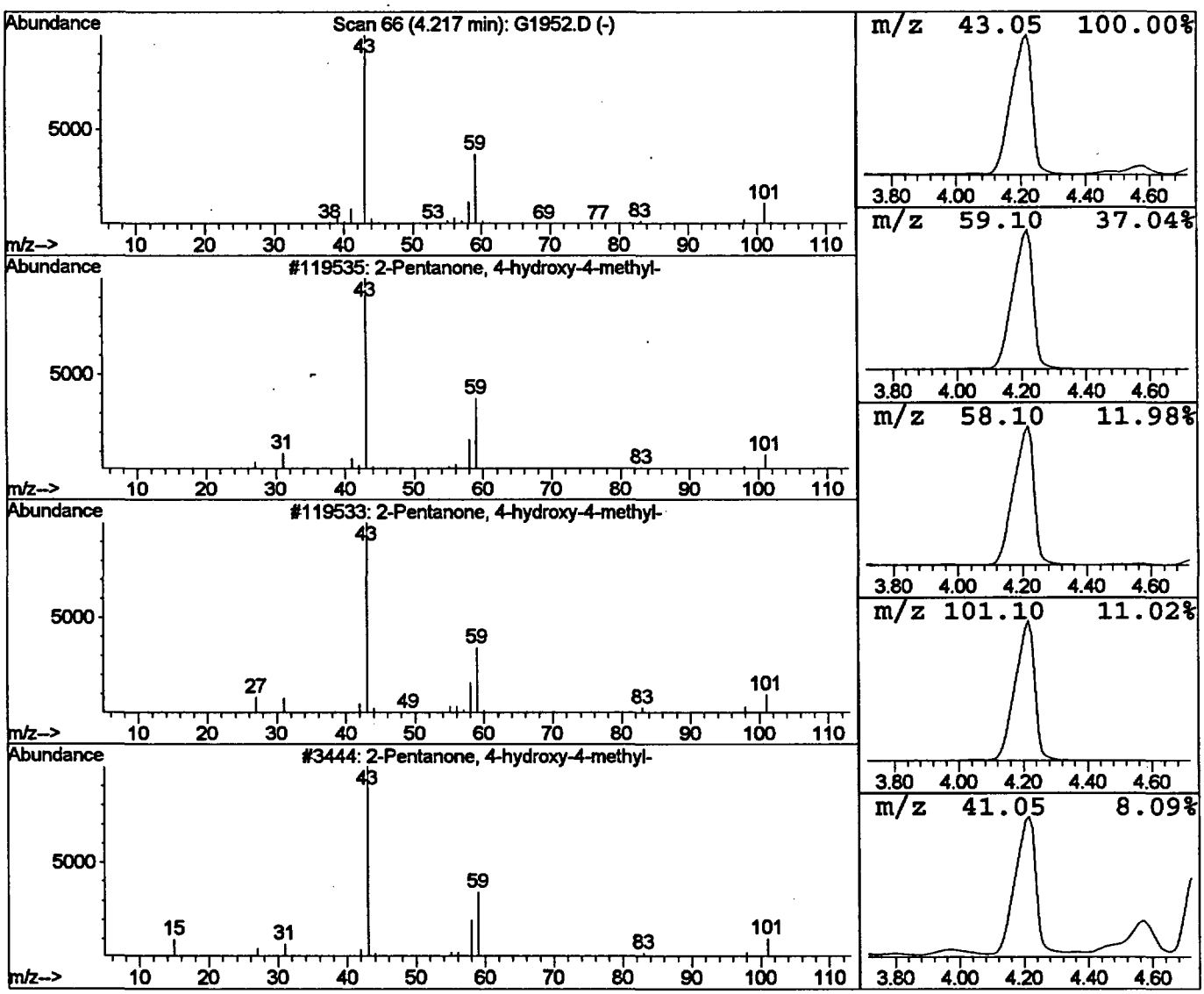
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.22	968.60 ng	25171200	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-(A)	116	C6H12O2	000123-42-2	78
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45



0349

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

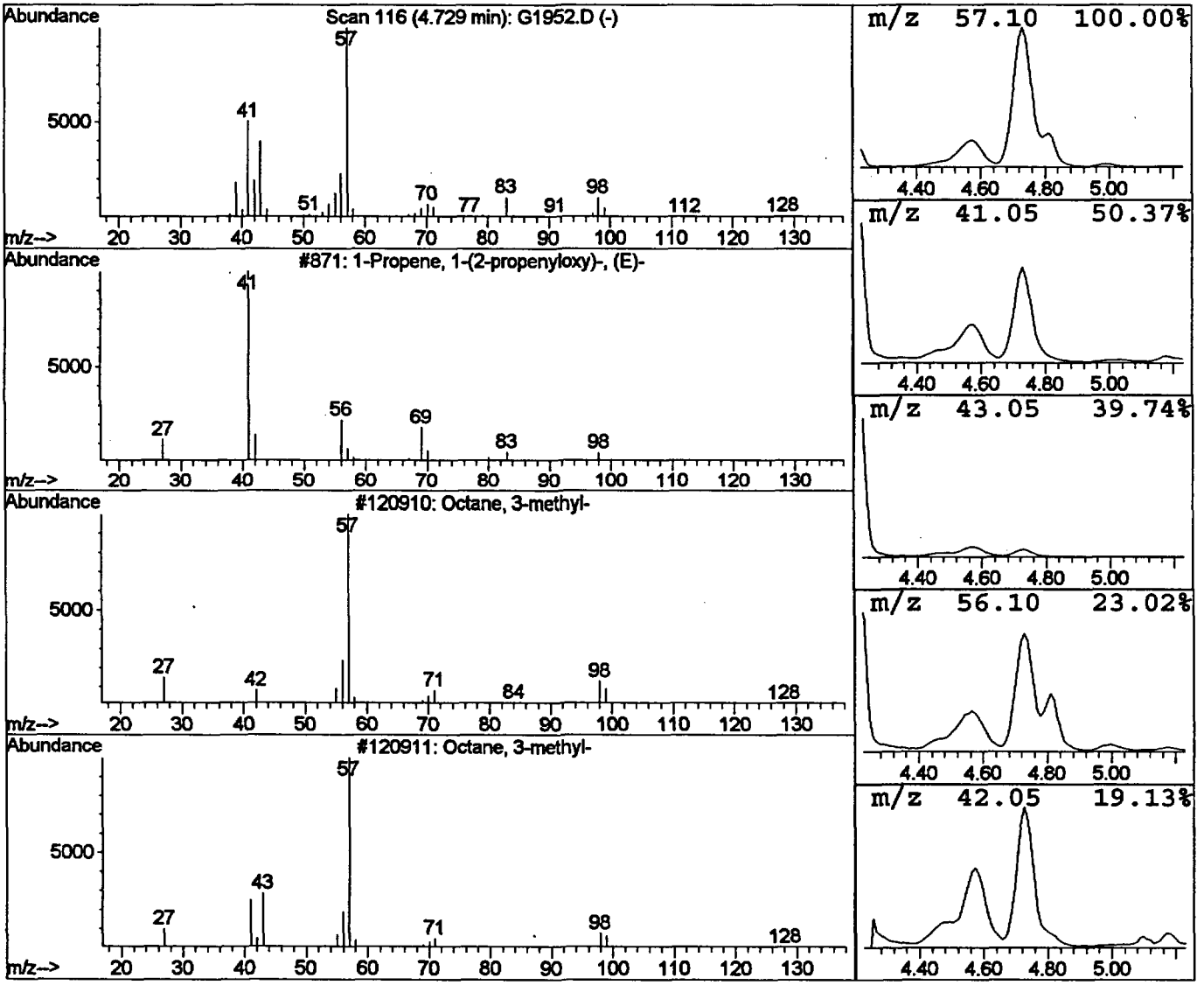
****

Peak Number 2 1-Propene, 1-(2-propenyloxy)-, Concentration Rank 5

UNKNOWN COMPOUND mgl-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.73	143.03 ng	3716890	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 1-(2-propenyloxy)-, (E)-	98	C6H10O	061142-13-0	53
2	Octane, 3-methyl-	128	C9H20	002216-33-3	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	50



0350

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

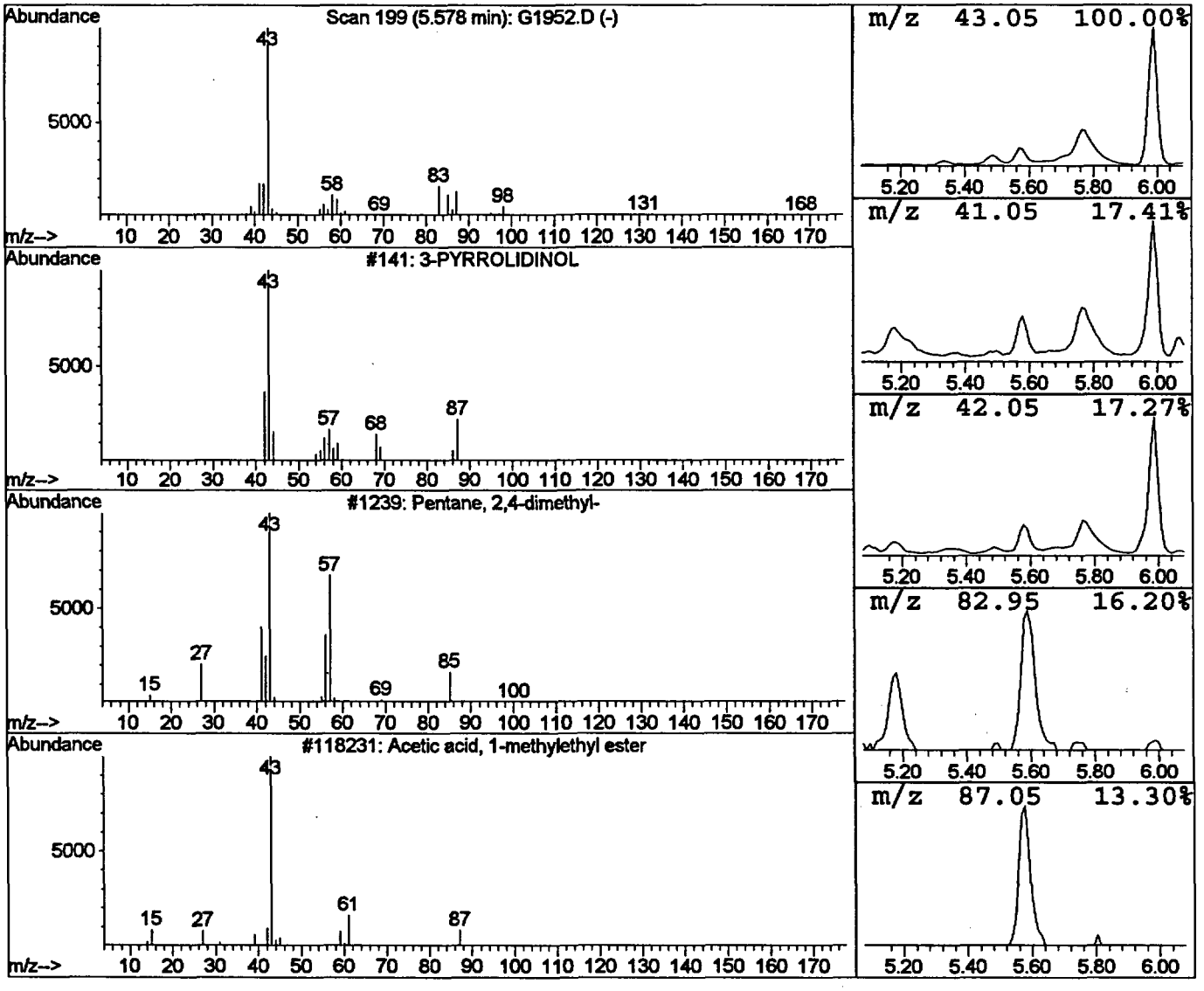
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 3-PYRROLIDINOL UNKNOWN COMPOUND 01-27-98 Concentration Rank 30

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.58	20.40 ng	530208	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-PYRROLIDINOL	87	C4H9NO	040499-83-0	37
2	Pentane, 2,4-dimethyl-	100	C7H16	000108-08-7	17
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	17



0351

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

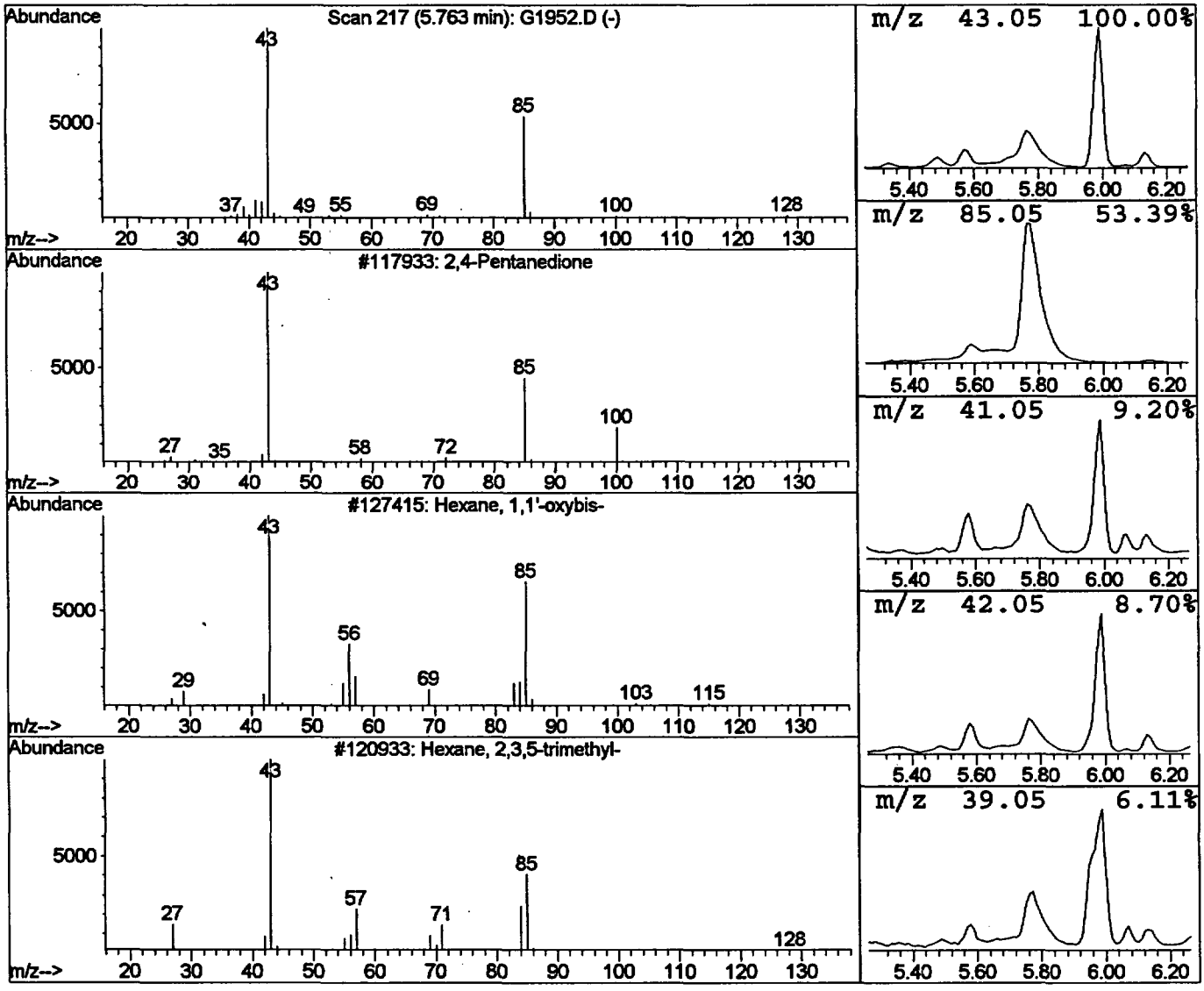
****

Peak Number 4 2,4-Pentanedione Concentration Rank 15

UNKNOWN COMPOUND mi-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.76	63.01 ng	1637540	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	39
2	Hexane, 1,1'-oxybis-	186	C12H26O	000112-58-3	39
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	28



0352

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D
Acq On : 22 Jan 98 19:22
Sample : S HP-7G 58073-002 FFR81
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial: 5
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

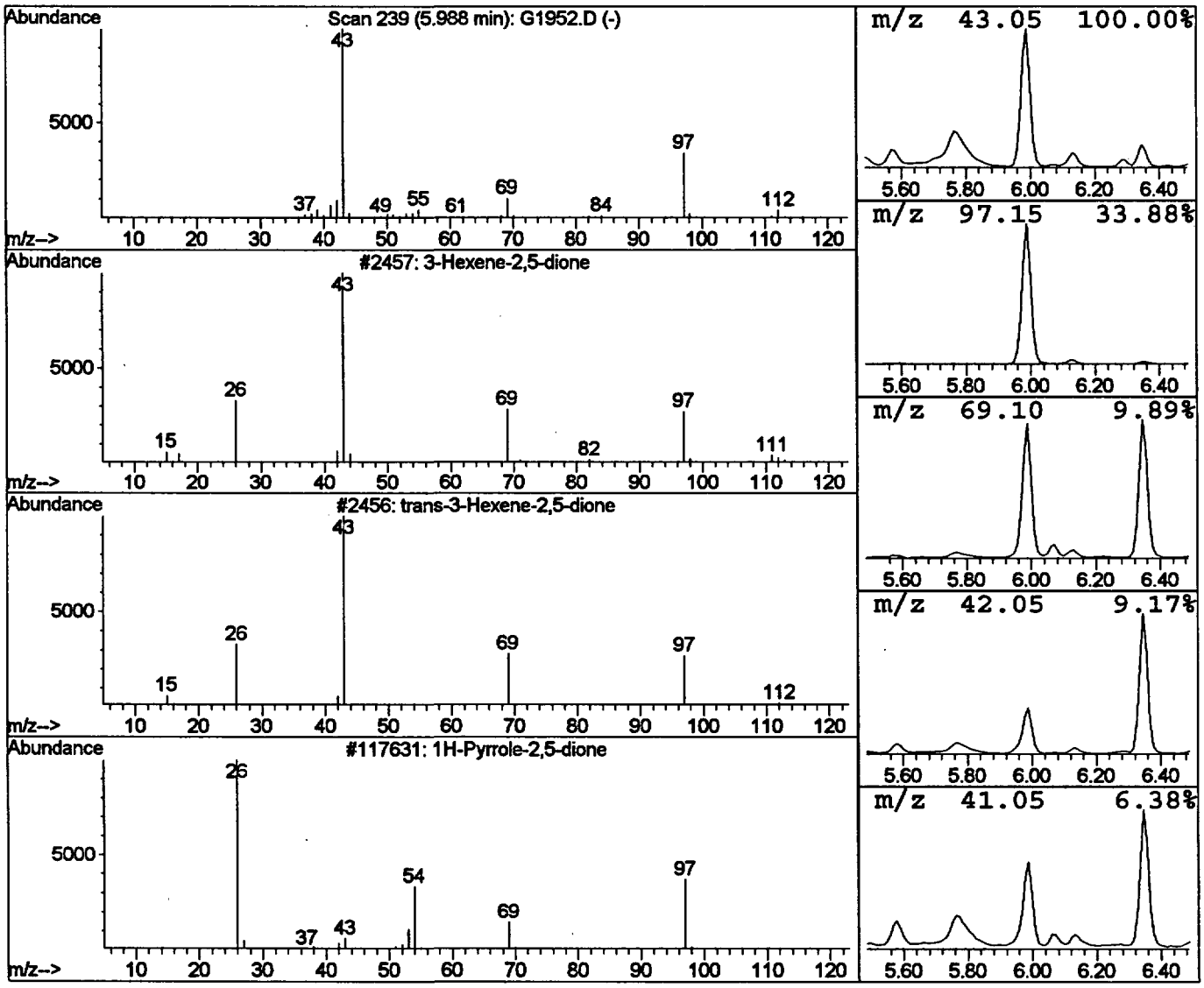
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 3-Hexene-2,5-dione Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.99	103.49 ng	2689380	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	42
(2)	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
3	1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	9



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

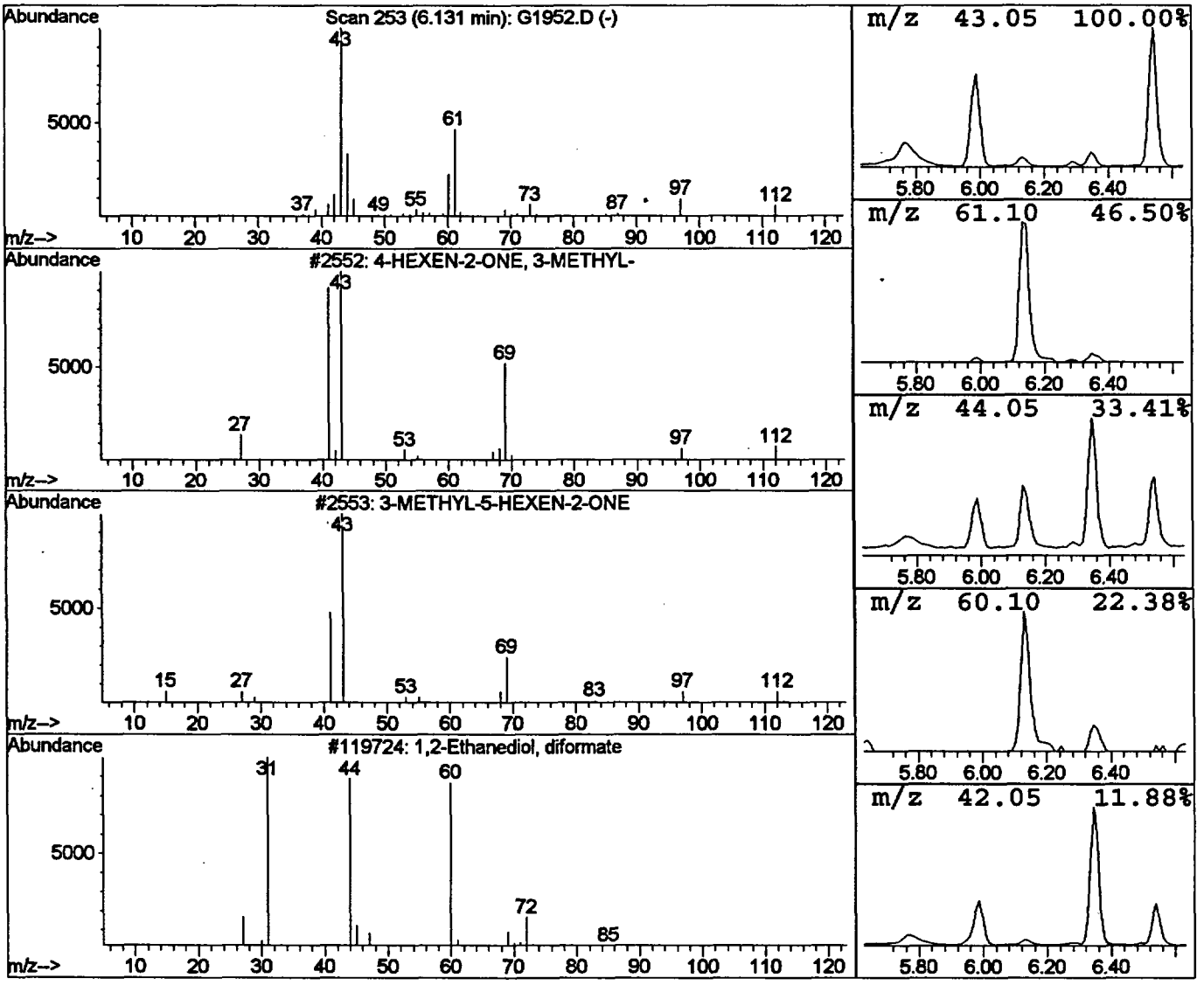
****

Peak Number 6 4-HEXEN-2-ONE, 3-METHYL- Concentration Rank 38

Unknown Acid Type 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.13	15.75 ng	409359	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	4-HEXEN-2-ONE, 3-METHYL-	112	C7H12O	000000-00-0	9
2	3-METHYL-5-HEXEN-2-ONE	112	C7H12O	000000-00-0	9
3	1,2-Ethanediol, diformate	118	C4H6O4	000629-15-2	9



0354

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial:
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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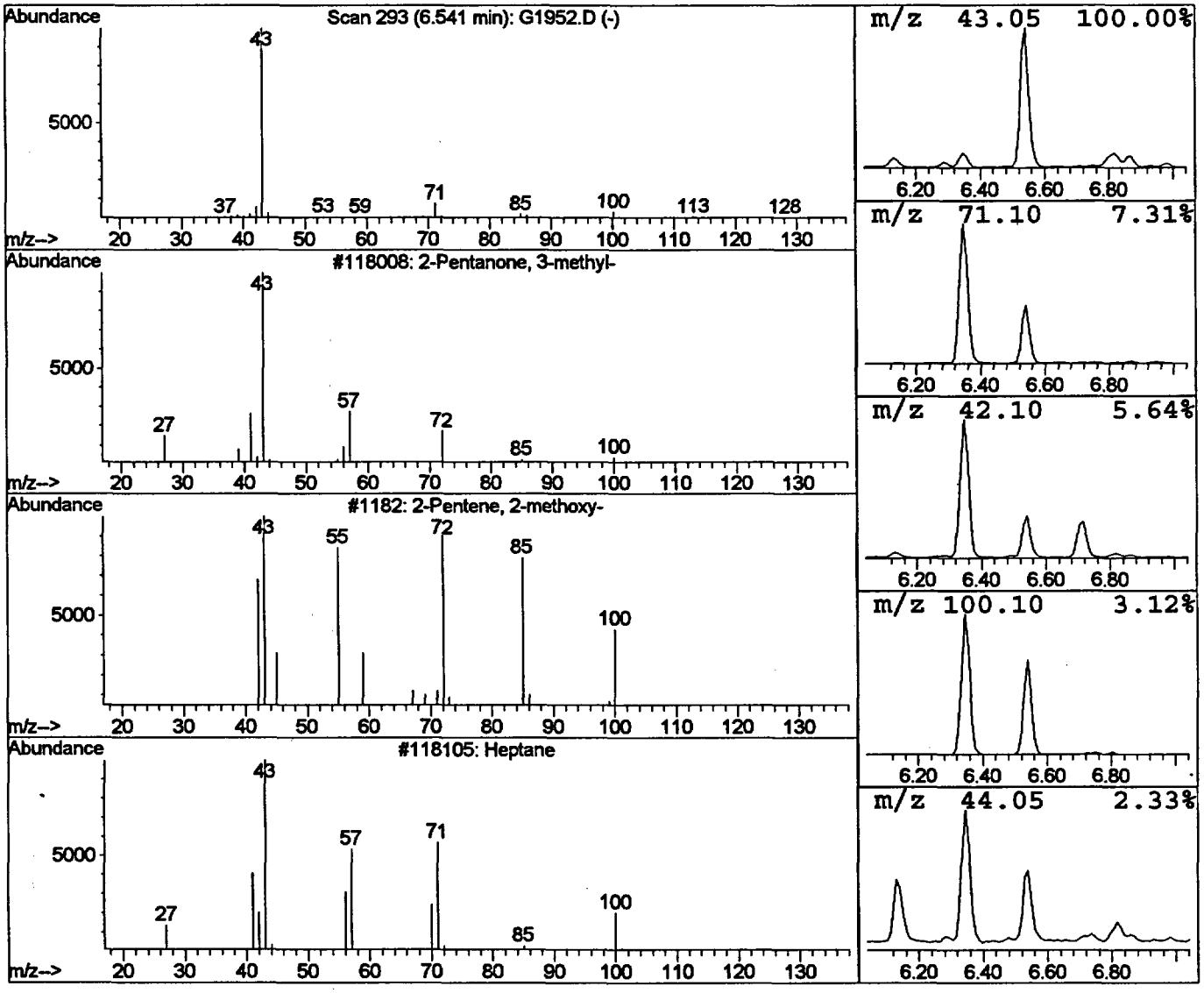
Peak Number 7 2-Pentanone, 3-methyl- Concentration Rank 10

UNKNOWN COMPOUND vol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.54	99.57 ng	2587480	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	2-Pentene, 2-methoxy-	100	C6H12O	061142-47-0	7
3	Heptane	100	C7H16	000142-82-5	7



0355

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

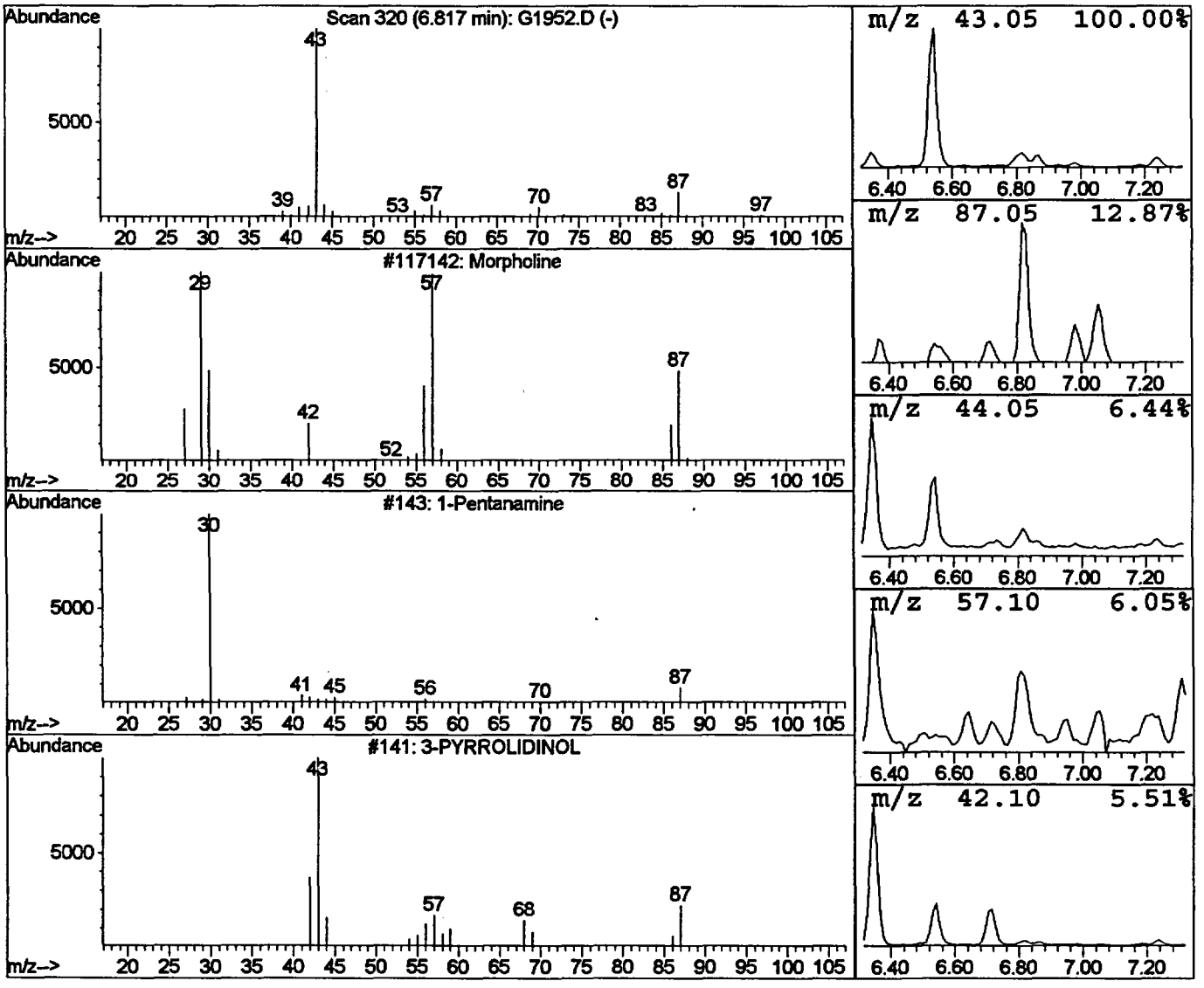
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 8 Morpholine UNKNOWN COMPOUND Concentration Rank 33

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.82	18.33 ng	476431	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Morpholine	87	C4H9NO	000110-91-8	9
2	1-Pentanamine	87	C5H13N	000110-58-7	9
3	3-PYRROLIDINOL	87	C4H9NO	040499-83-0	9



0356

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

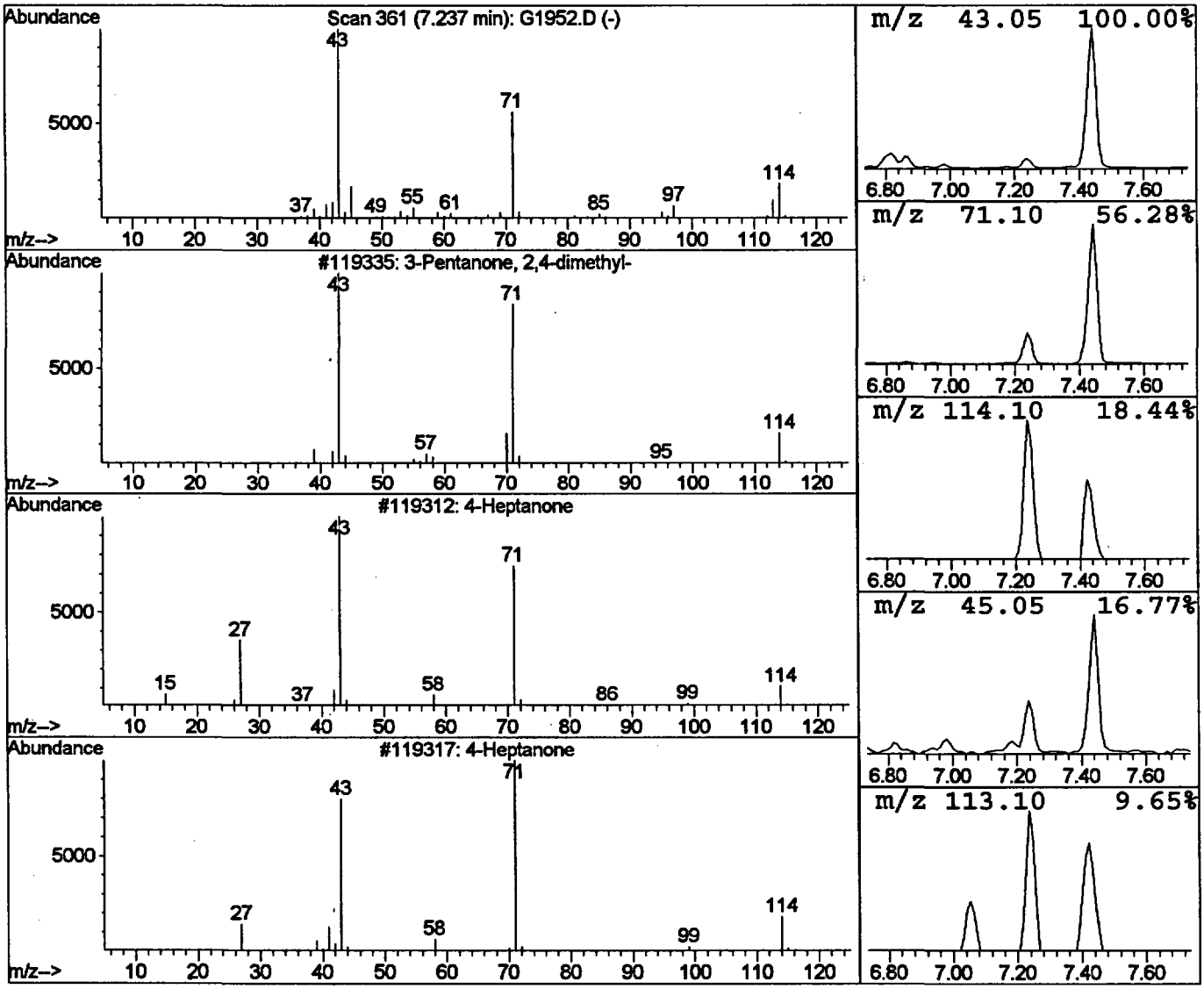
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 9 3-Pentanone, 2,4-dimethyl- Concentration Rank 41

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.24	14.90 ng	387194	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Pentanone, 2,4-dimethyl-	114	C7H14O	000565-80-0	53
2	4-Heptanone	114	C7H14O	000123-19-3	50
3	4-Heptanone	114	C7H14O	000123-19-3	50



0357

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

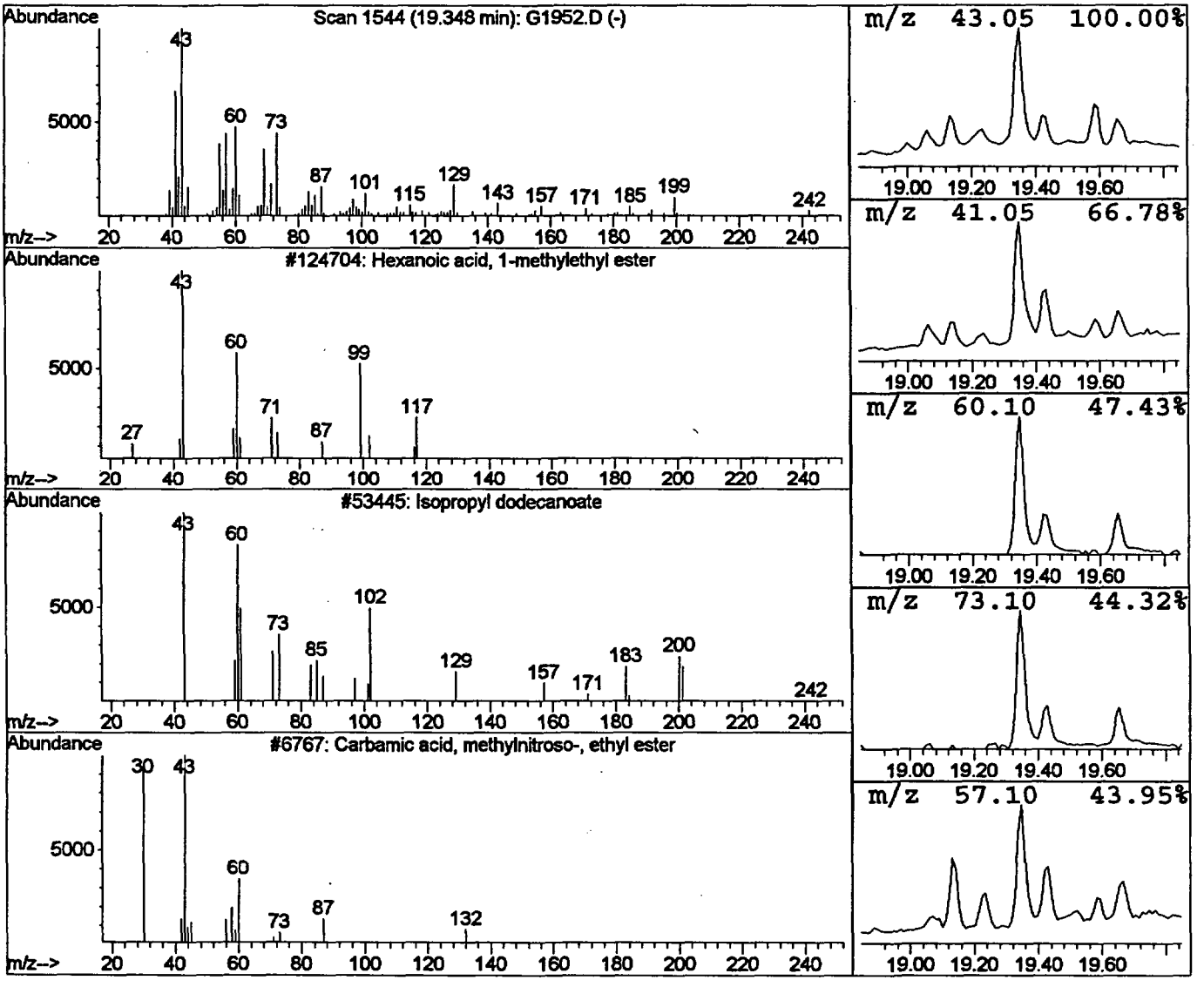
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 10 ~~Hexanoic acid, 1-methylethyl e~~ Unknown Acid Type wo1-27-98 Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.35	19.35 ng	706248	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanoic acid, 1-methylethyl ester	158	C9H18O2	002311-46-8	47
2	Isopropyl dodecanoate	242	C15H30O2	000000-00-0	40
3	Carbamic acid, methylnitroso-, ethy	132	C4H8N2O3	000615-53-2	38



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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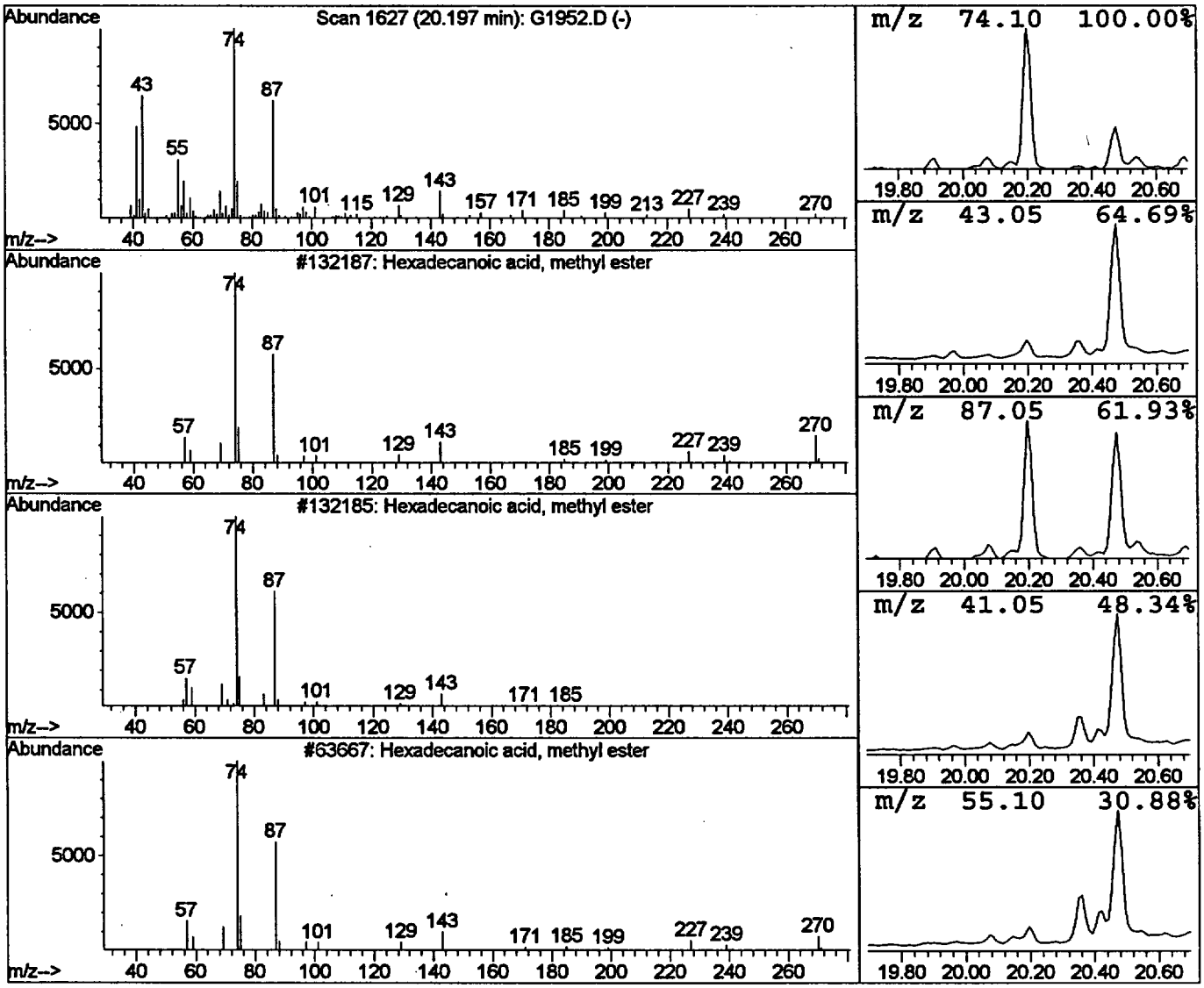
Peak Number 11 Hexadecanoic acid, methyl este Concentration Rank 36

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.20	15.90 ng	580190	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	94
2	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	91
3	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	91



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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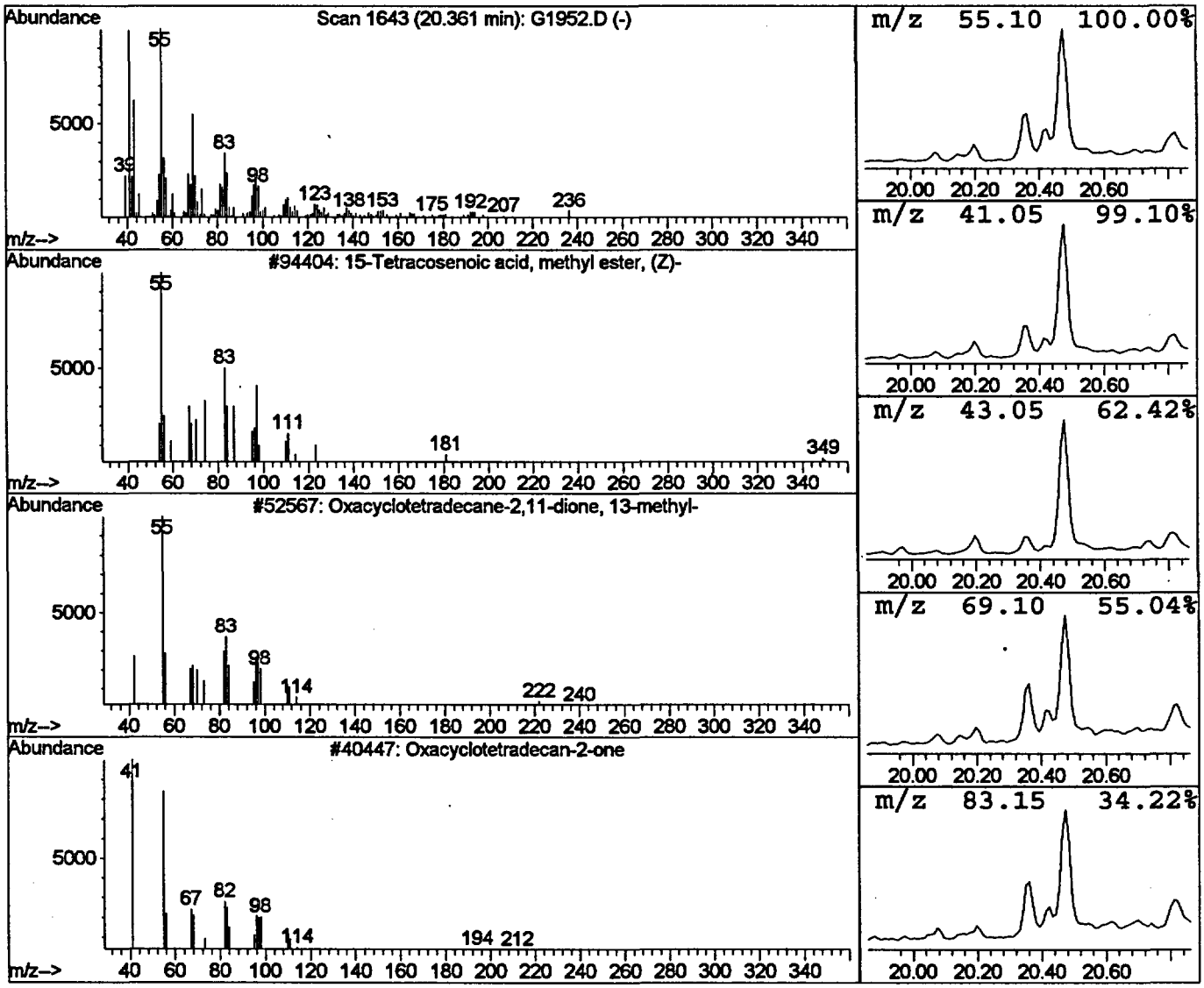
Peak Number 12 15-Tetracosenoic acid, methyl Concentration Rank 23

UNKNOWN COMPOUND no1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.36	25.26 ng	921717	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	86
2	Oxacyclotetradecane-2,11-dione, 13-	240	C14H24O3	074685-36-2	72
3	Oxacyclotetradecan-2-one	212	C13H24O2	001725-04-8	50



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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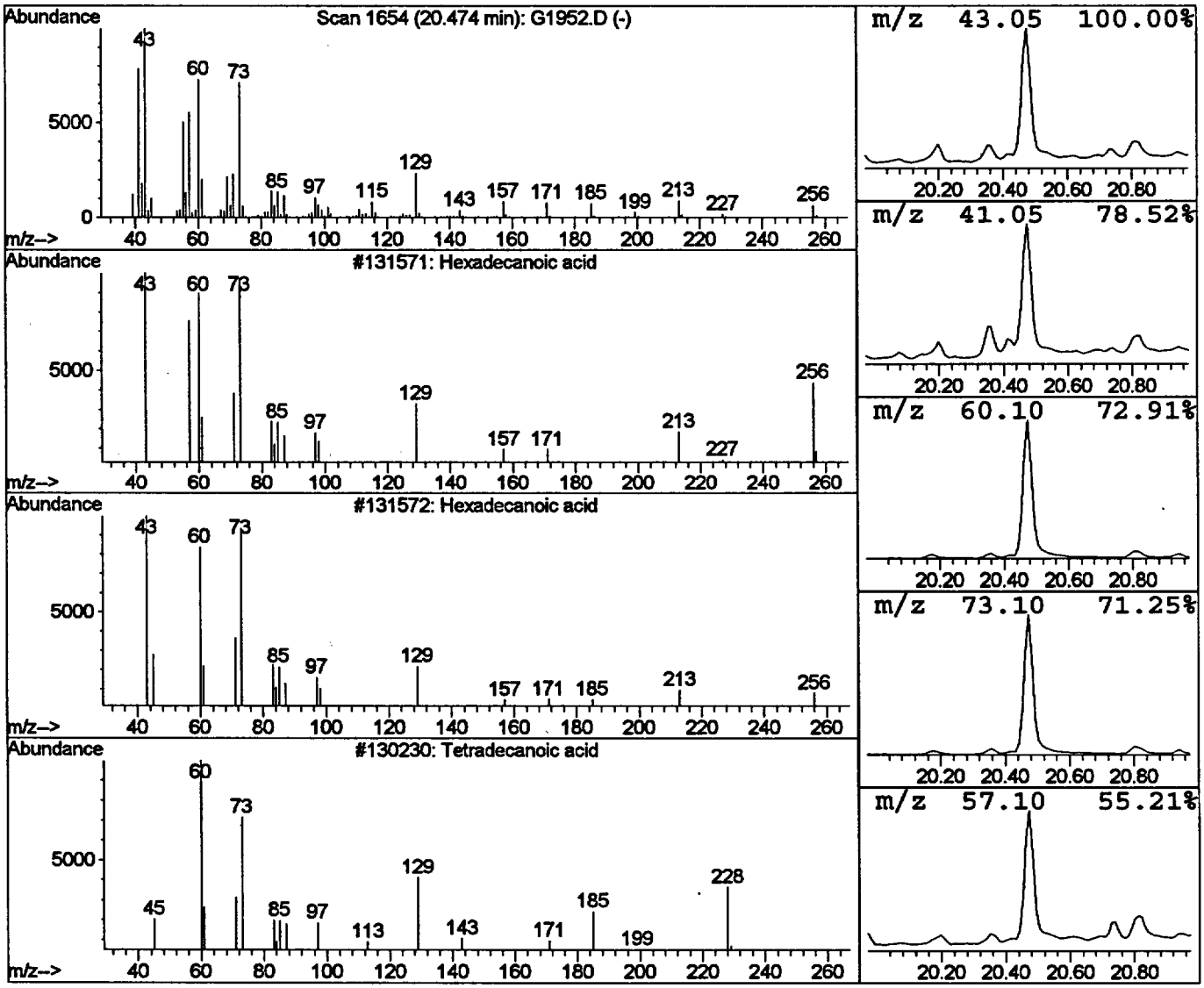
Peak Number 13 Hexadecanoic acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.47	110.23 ng	4022880	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid	256	C16H32O2	000057-10-3	98
2	Hexadecanoic acid	256	C16H32O2	000057-10-3	91
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	90



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

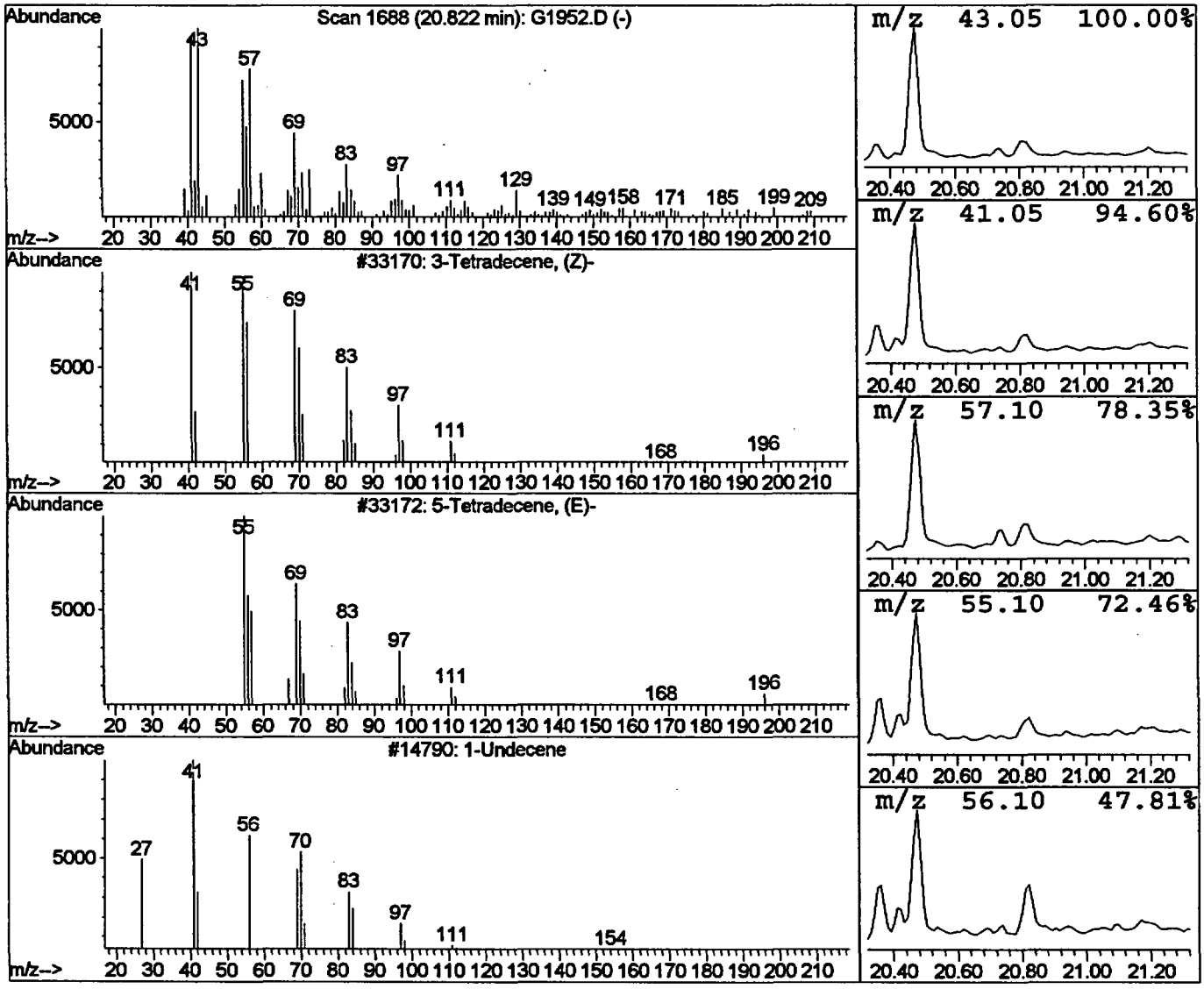
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 14 3-Tetradecene, (E)- UNKNOWN HYDROCARBON Jul-27-98 Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.82	23.01 ng	839573	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Tetradecene, (Z)-	196	C14H28	041446-67-7	49
2	5-Tetradecene, (E)-	196	C14H28	041446-66-6	46
3	1-Undecene	154	C11H22	000821-95-4	43



0362

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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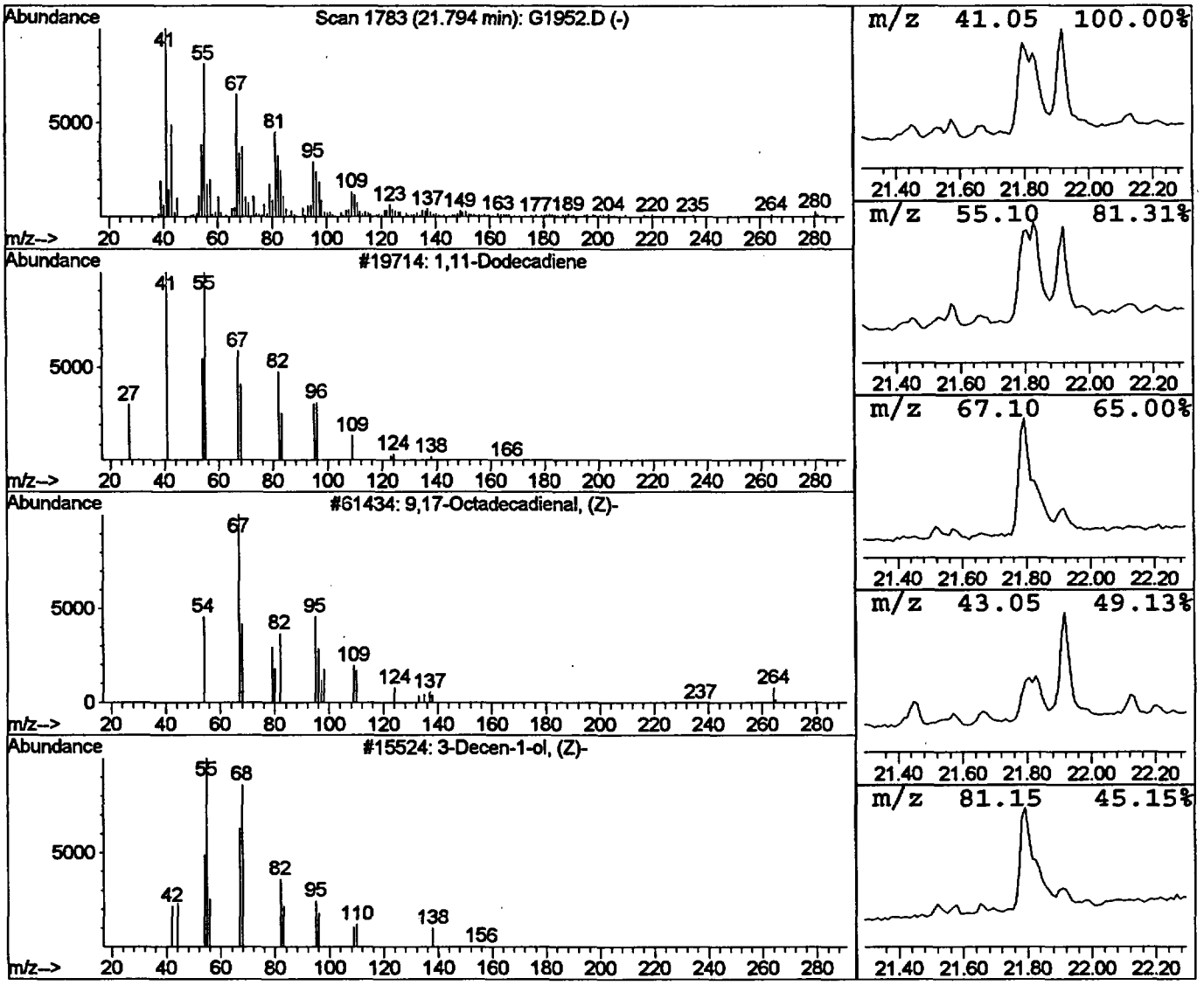
Peak Number 15 1,11-Dodecadiene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.79	76.49 ng	2791580	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,11-Dodecadiene	166	C12H22	005876-87-9	95
2	9,17-Octadecadienal, (Z)-	264	C18H32O	056554-35-9	92
3	3-Decen-1-ol, (Z)-	156	C10H20O	010340-22-4	76



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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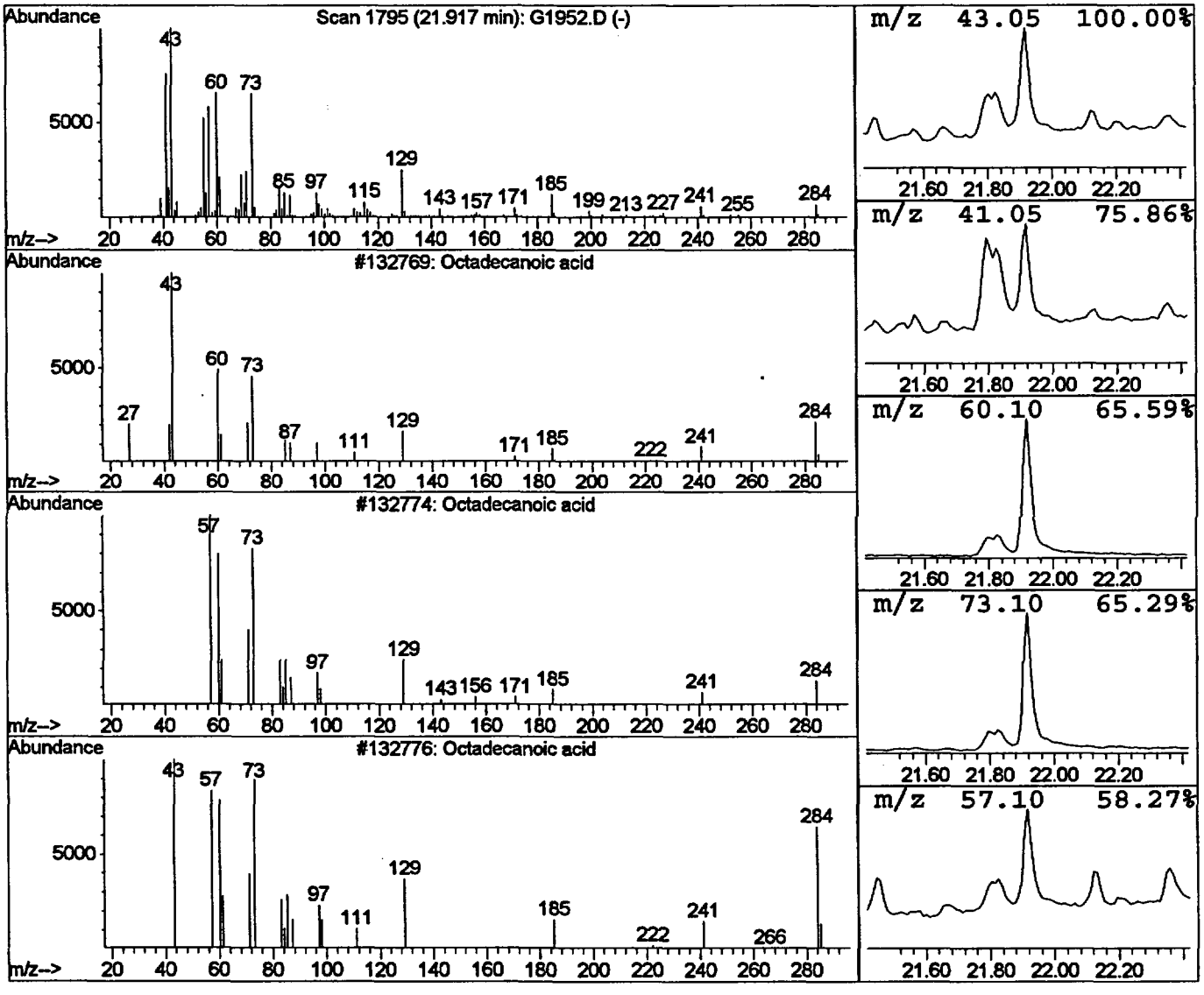
Peak Number 16 Octadecanoic acid Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.92	47.91 ng	1748550	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	90
2	Octadecanoic acid	284	C18H36O2	000057-11-4	89
3	Octadecanoic acid	284	C18H36O2	000057-11-4	87



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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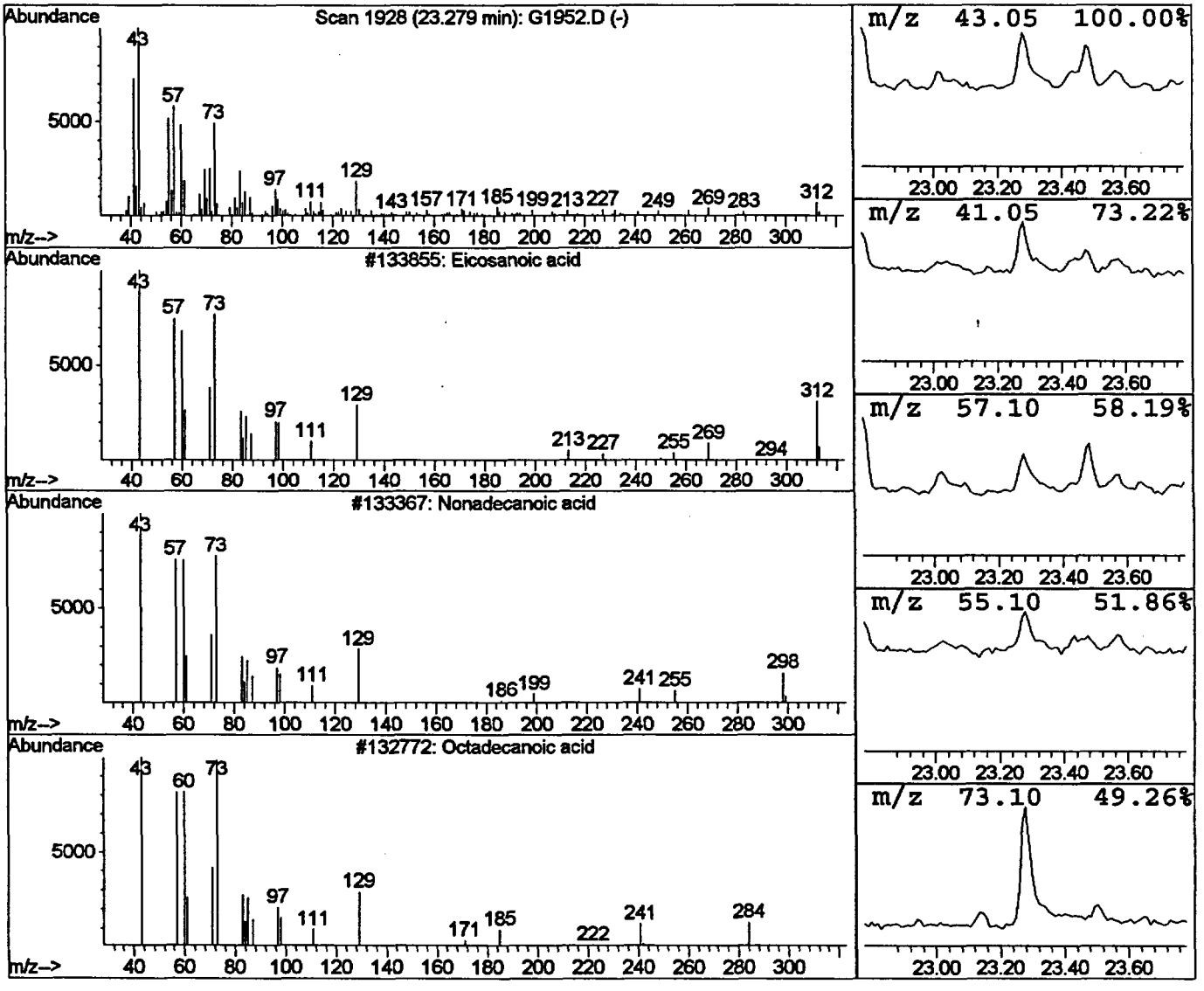
Peak Number 17 Eicosanoic acid Concentration Rank 37

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.28	15.81 ng	646763	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosanoic acid	312	C20H40O2	000506-30-9	94
2	Nonadecanoic acid	298	C19H38O2	000646-30-0	87
3	Octadecanoic acid	284	C18H36O2	000057-11-4	87



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

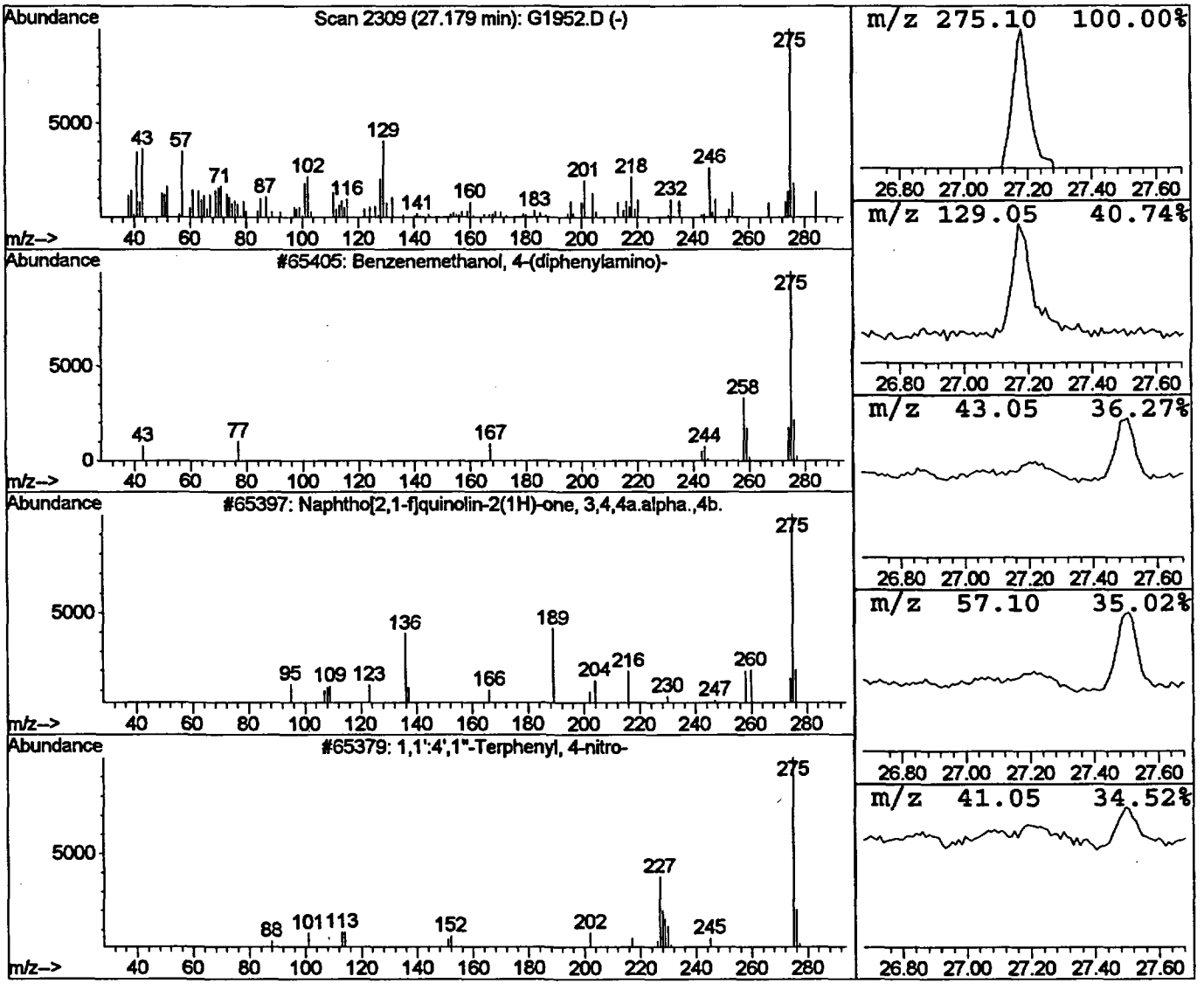
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 18 Benzenemethanol, 4-(diphenylam Concentration Rank 26

R.T.	EstConc	UNKNOWN COMPOUND Area	Relative to ISTD	R.T.
27.18	23.36 ng	955482	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzenemethanol, 4-(diphenylamino)-	275	C19H17NO	025069-40-3	35
2	Naphtho[2,1-f]quinolin-2(1H)-one, 3	275	C18H29NO	021171-75-5	35
3	1,1':4',1''-Terphenyl, 4-nitro-	275	C18H13NO2	010355-53-0	35



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

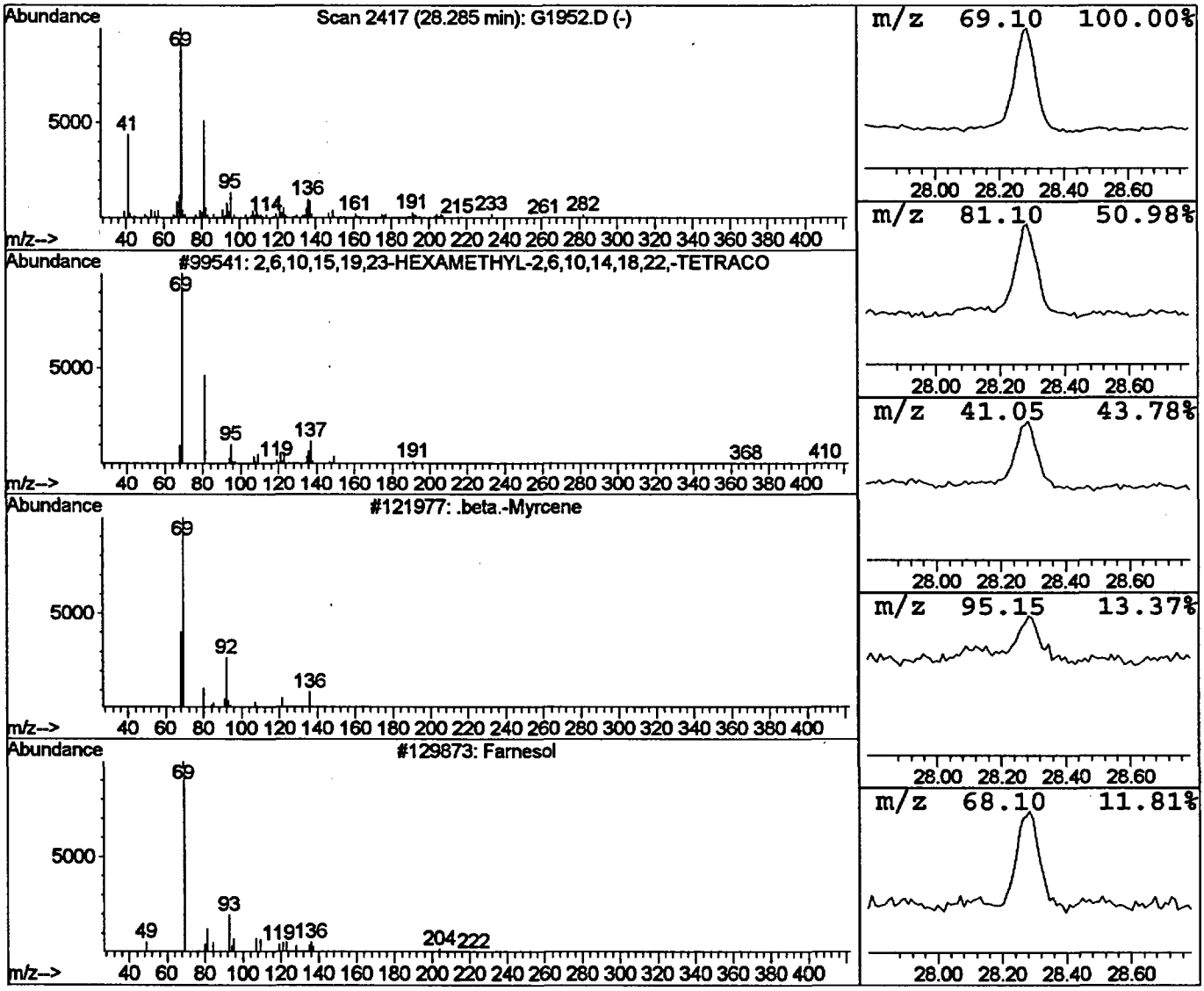
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 19 2,6,10,15,19,23-HEXAMETHYL-2,6 Concentration Rank 31

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.28	20.18 ng	825724	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6,10,15,19,23-HEXAMETHYL-2,6,10,1	410	C30H50	000000-00-0	80
2	.beta.-Myrcene	136	C10H16	000123-35-3	64
3	Farnesol	222	C15H26O	004602-84-0	56



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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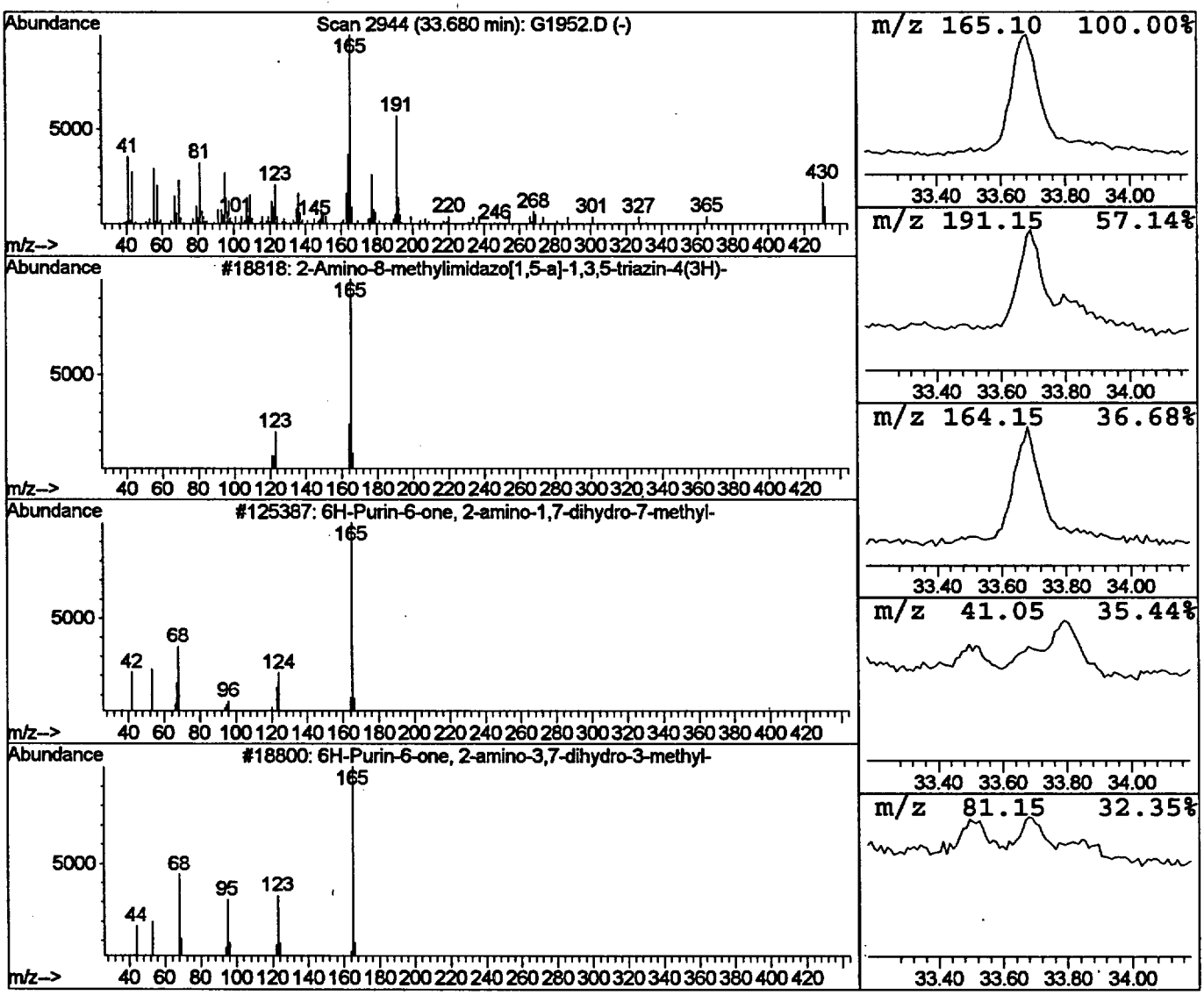
Peak Number 21 2-Amino-8-methylimidazo[1,5-a] Concentration Rank 39

UNKNOWN COMPOUND 001-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.68	15.59 ng	750809	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Amino-8-methylimidazo[1,5-a]-1,3,	165	C6H7N5O	070187-88-1	38
2	6H-Purin-6-one, 2-amino-1,7-dihydro	165	C6H7N5O	000578-76-7	27
3	6H-Purin-6-one, 2-amino-3,7-dihydro	165	C6H7N5O	002958-98-7	27



Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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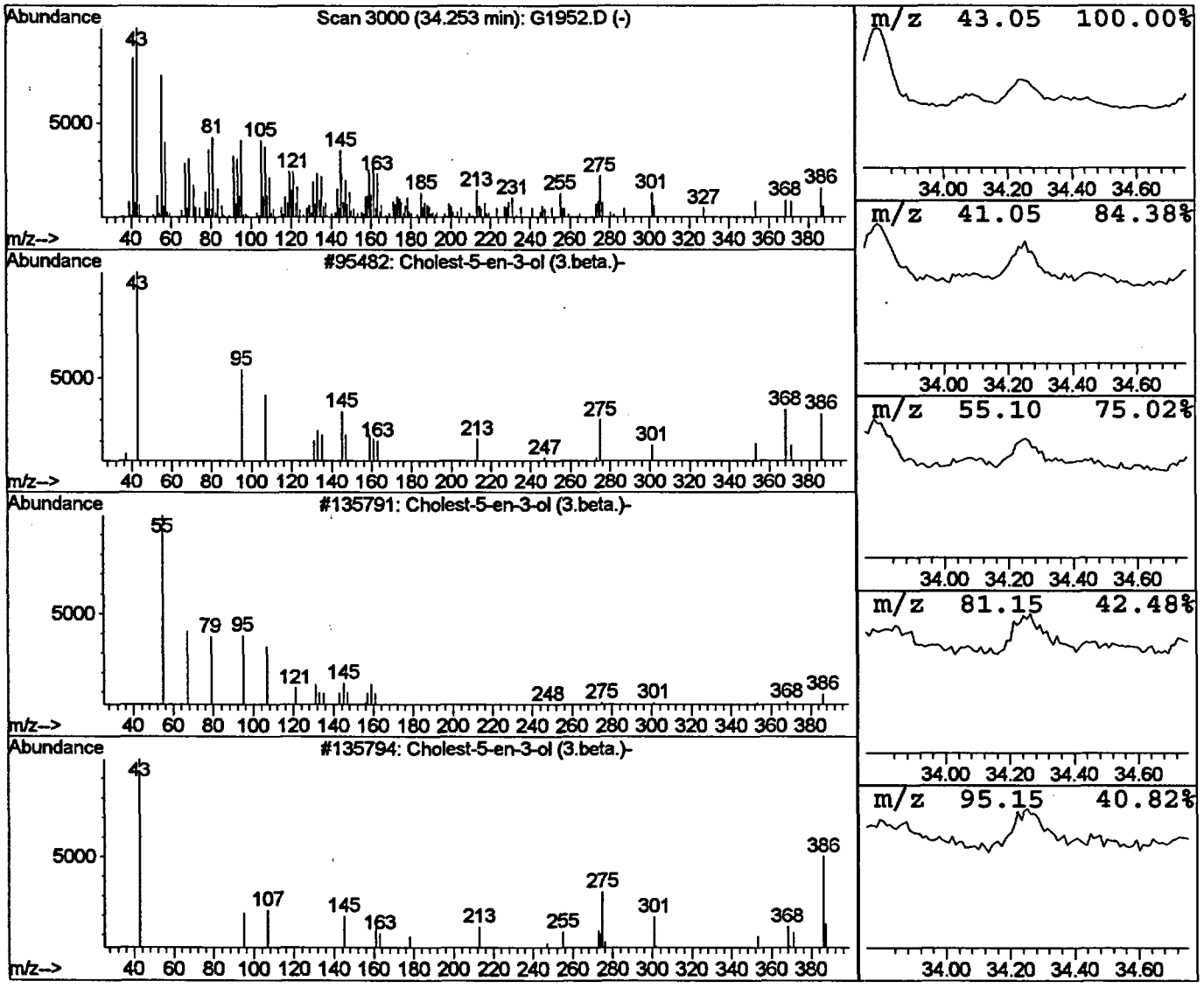
Peak Number 22 Cholest-5-en-3-ol (3.beta.)- Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
34.25	24.47 ng	1178320	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	91
2	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	70
3	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	70



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

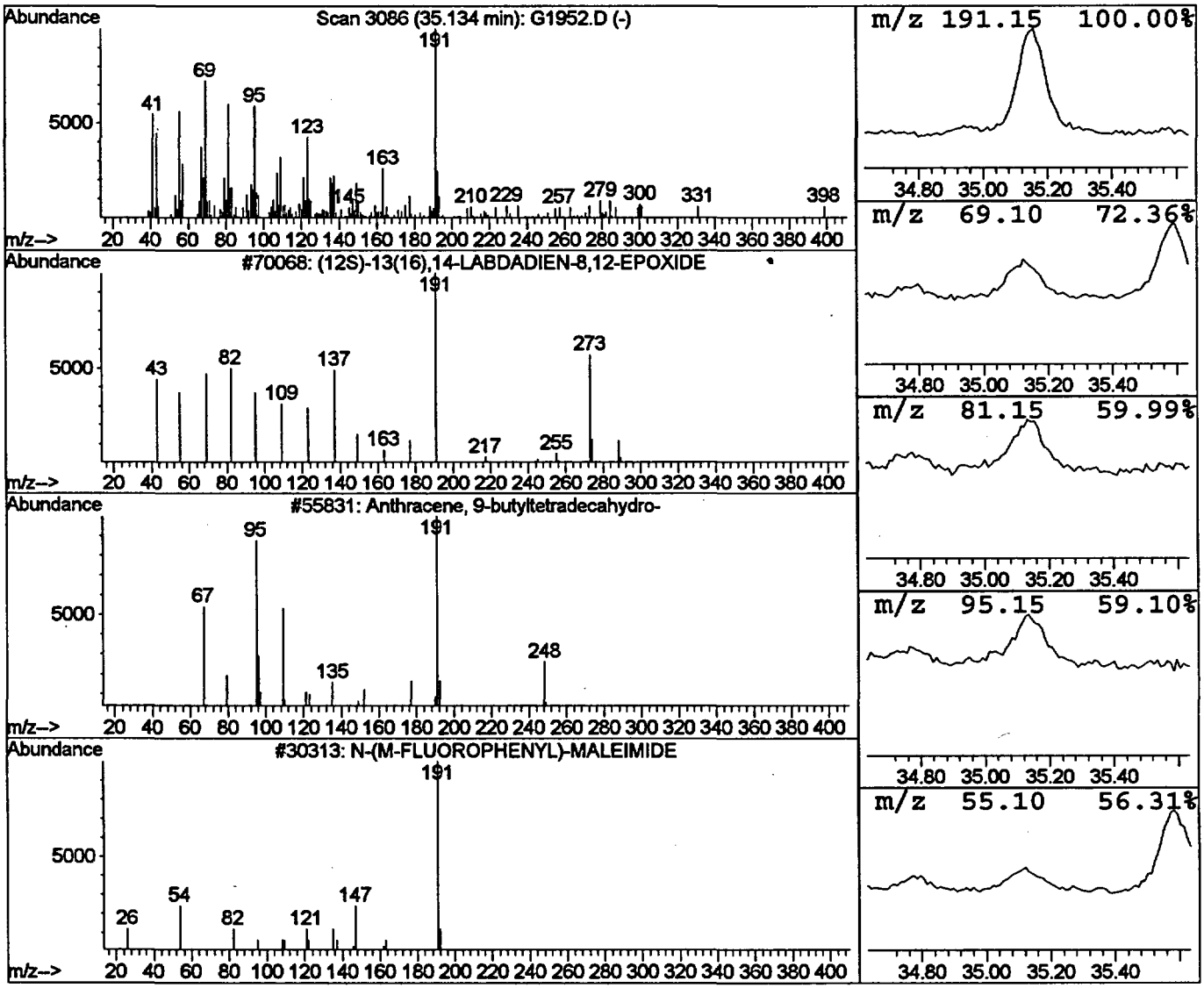
****

Peak Number 23 (12S)-13(16),14-LABDADIEN-8,12 Concentration Rank 29

UNKNOWN COMPOUND no-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.13	20.56 ng	989935	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	(12S)-13(16),14-LABDADIEN-8,12-EPOX	288	C20H32O	066966-01-6	40
2	Anthracene, 9-butyltetradecahydro-	248	C18H32	055133-89-6	35
3	N-(M-FLUOROPHENYL)-MALEIMIDE	191	C10H6FNO2	000000-00-0	25



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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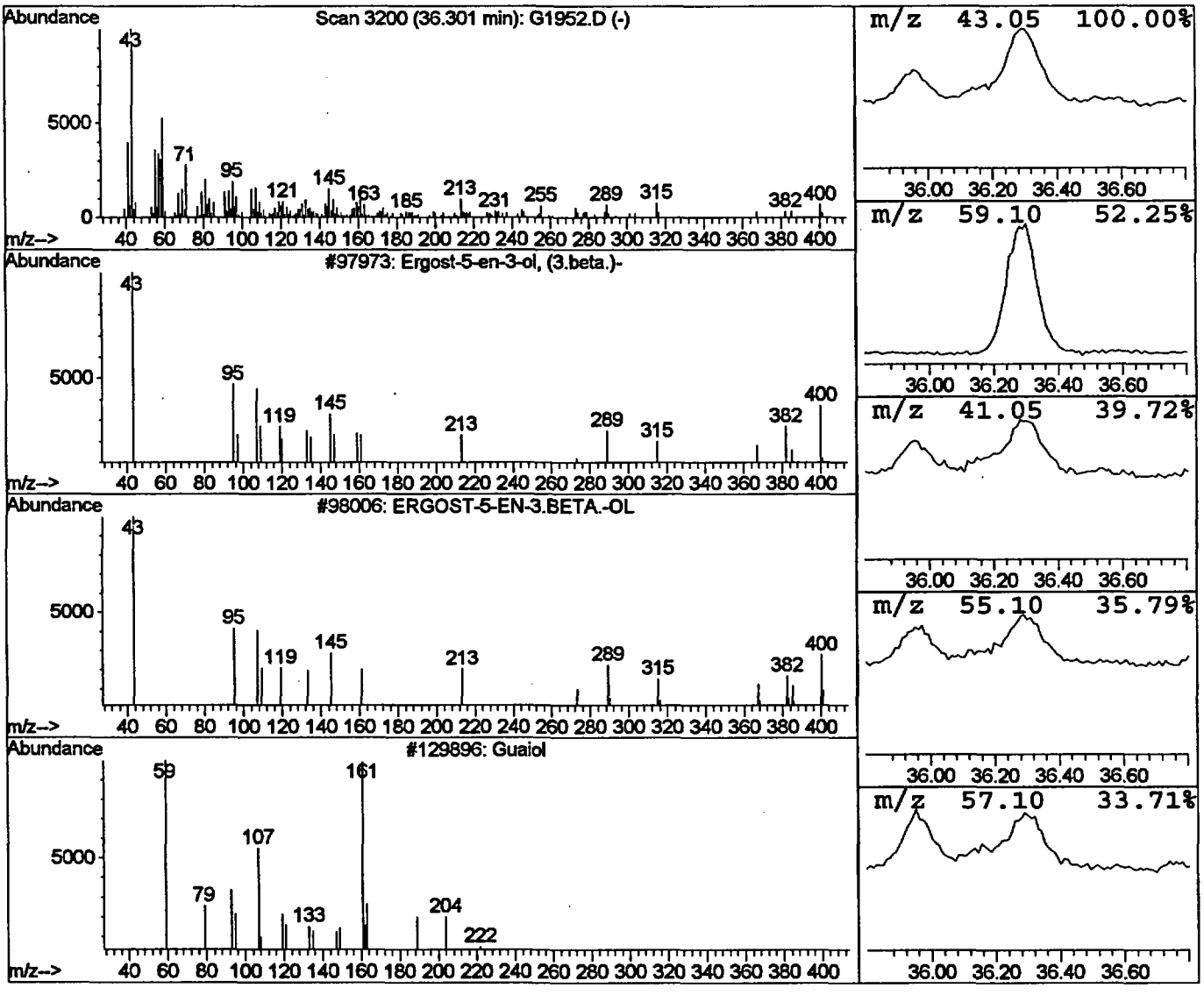
Peak Number 24 Ergost-5-en-3-ol, (3.beta.)- Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.30	43.67 ng	2102810	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	90
2	ERGOST-5-EN-3.BETA.-OL	400	C28H48O	000000-00-0	86
3	Guaiol	222	C15H26O	000489-86-1	38



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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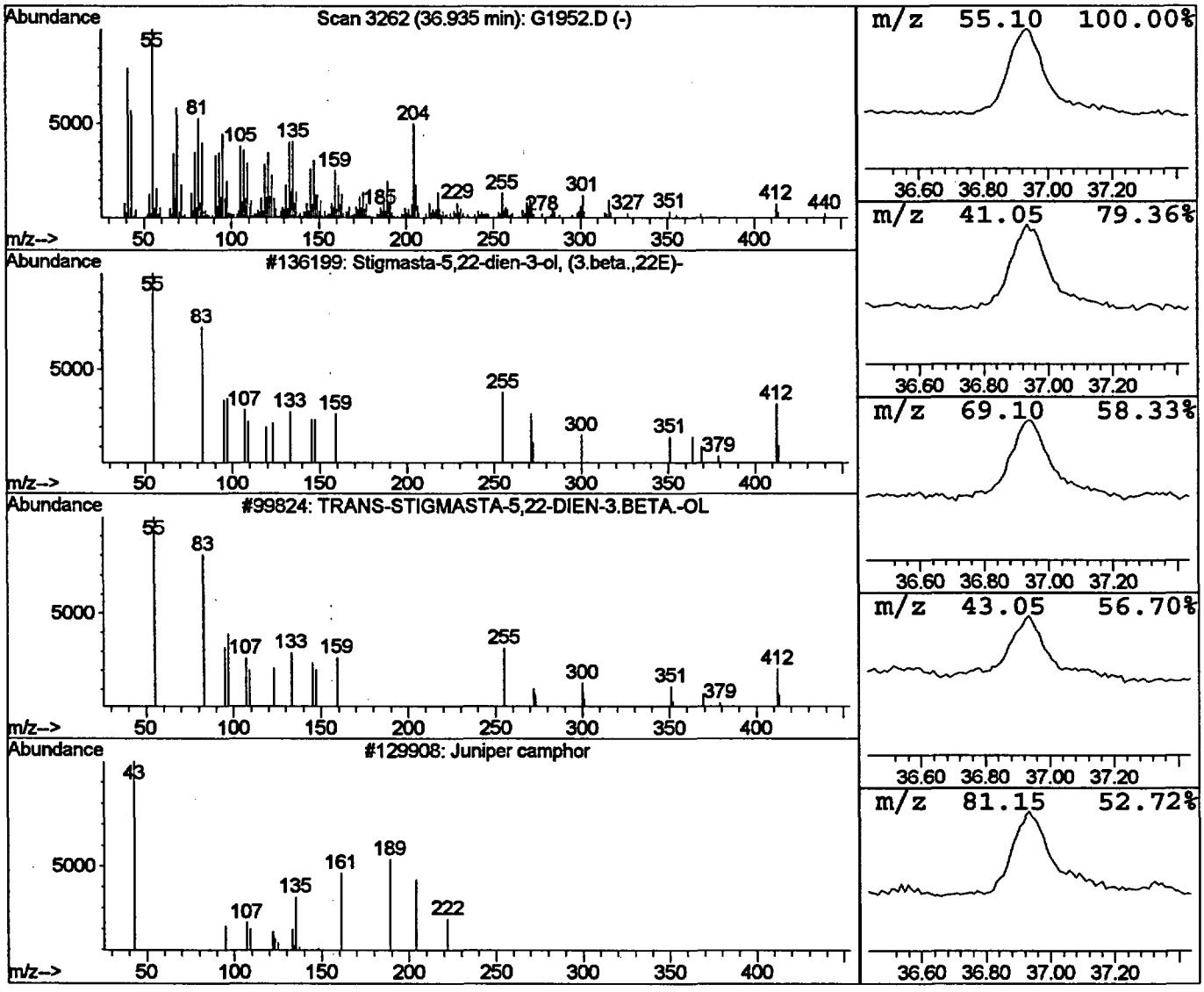
Peak Number 25 Stigmasta-5,22-dien-3-ol, (3.b Concentration Rank 8

UNKNOWN COMPOUND 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.94	105.05 ng	5059090	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmasta-5,22-dien-3-ol, (3.beta.,	412	C29H48O	000083-48-7	64
2	TRANS-STIGMASTA-5,22-DIEN-3.BETA.-O	412	C29H48O	000000-00-0	50
3	Juniper camphor	222	C15H26O	000473-04-1	38



0372

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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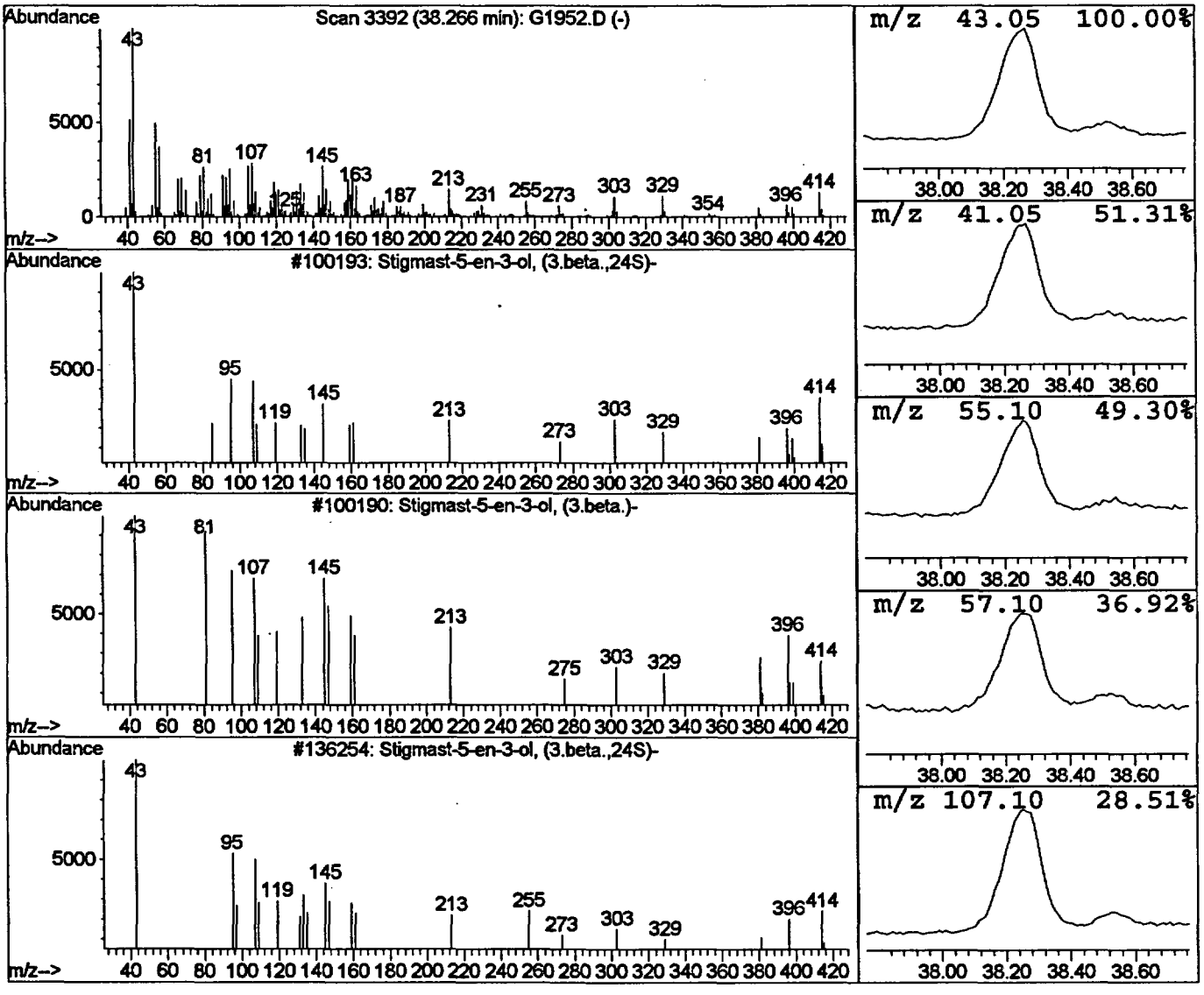
Peak Number 26 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.27	188.91 ng	9097130	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	95
2	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	91
3	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	46



0373

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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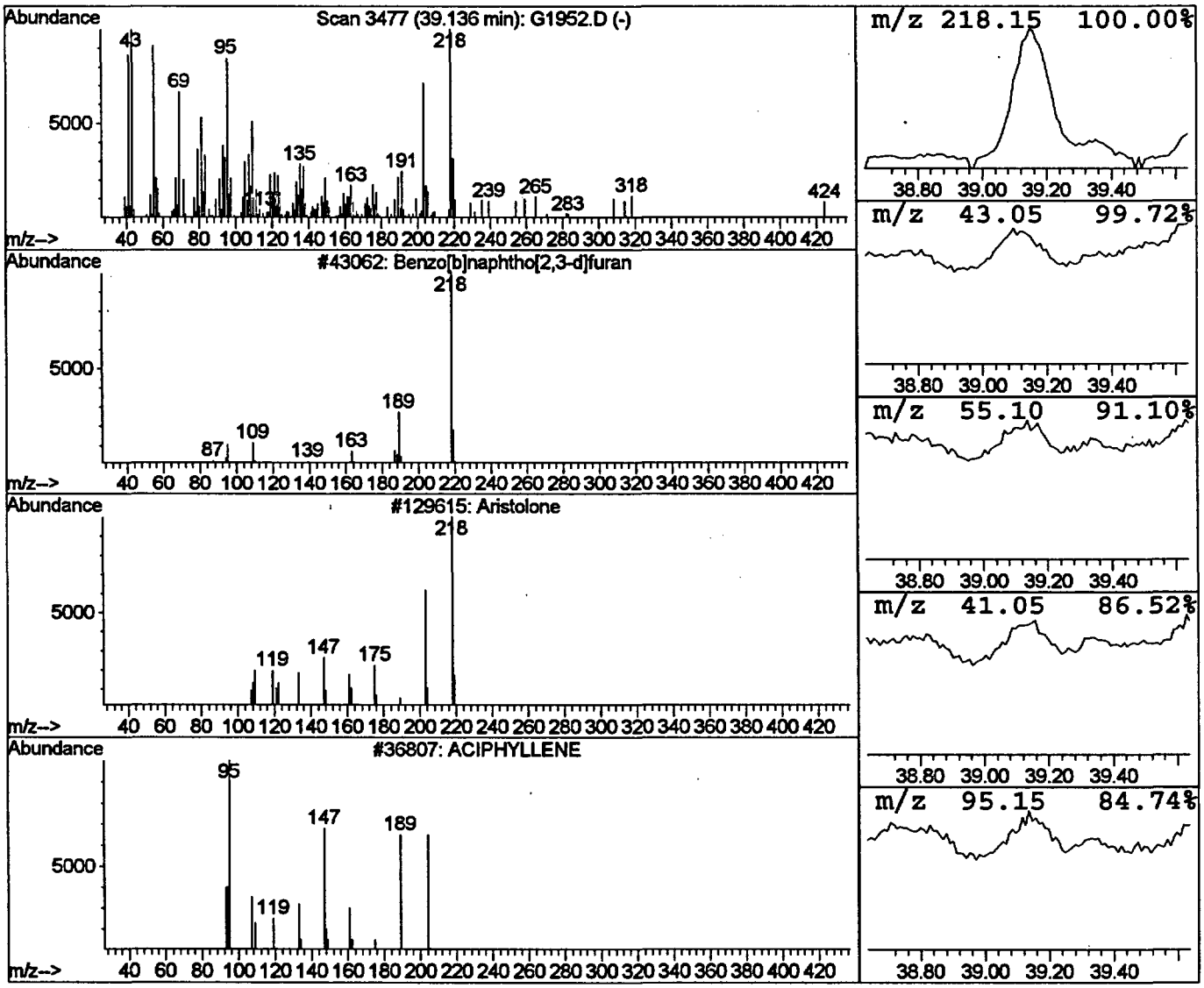
Peak Number 27 Benzo[b]naphtho[2,3-d]furan Concentration Rank 34

UNKNOWN COMPOUND m01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.14	18.20 ng	876323	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]naphtho[2,3-d]furan	218	C16H10O	000243-42-5	64
2	Aristolone	218	C15H22O	006831-17-0	53
3	ACIPHYLLENE	204	C15H24	087745-31-1	43



0374

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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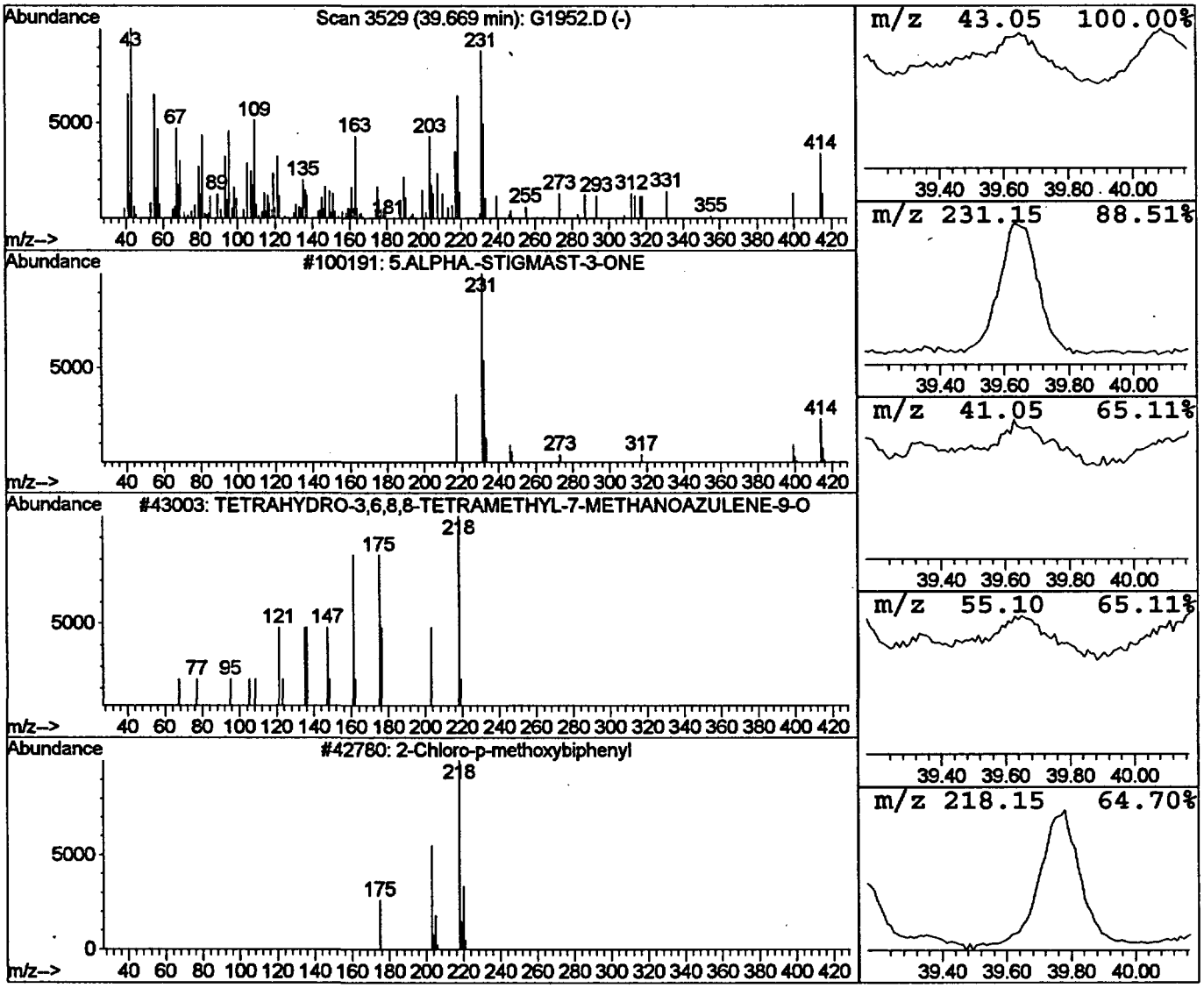
Peak Number 28 5.ALPHA.-STIGMAST-3-ONE Concentration Rank 22

UNKNOWN COMPOUND mol-21-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.67	31.96 ng	1539230	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5.ALPHA.-STIGMAST-3-ONE	414	C29H50O	000083-46-5	81
2	TETRAHYDRO-3,6,8,8-TETRAMETHYL-7-ME	218	C15H22O	000000-00-0	25
3	2-Chloro-p-methoxybiphenyl	218	C13H11ClO	074428-82-3	18



0375

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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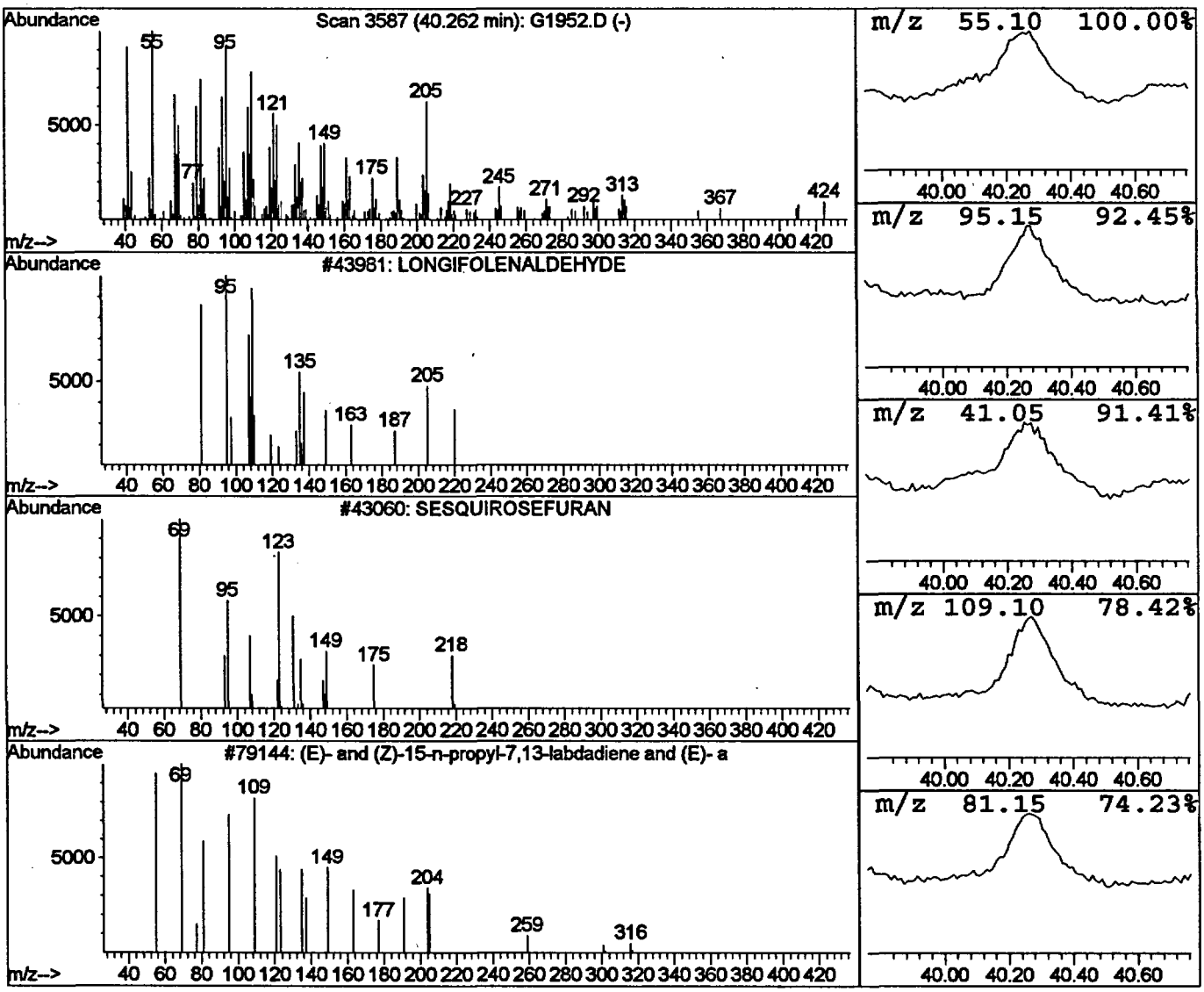
Peak Number 29 LONGIFOLENALDEHYDE UNKNOWN COMPOUND 1-27-98 Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.26	82.73 ng	3983900	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	LONGIFOLENALDEHYDE	220	C15H24O	019890-84-7	58
2	SESQUIROSEFURAN	218	C15H22O	039007-93-7	46
3	(E)- and (Z)-15-n-propyl-7,13-labda	316	C23H40	087953-43-3	40



0376

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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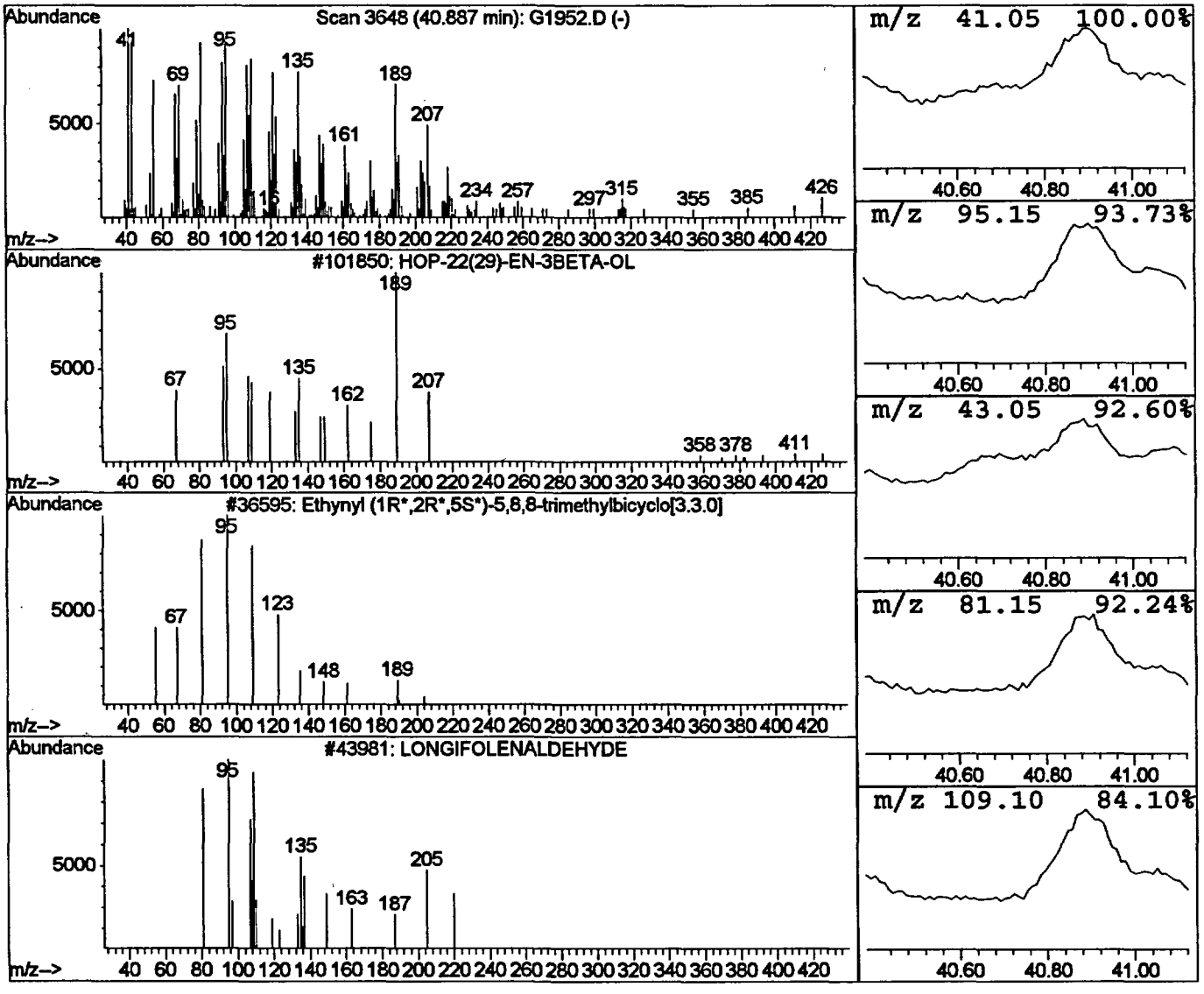
Peak Number 30 HOP-22(29)-EN-3BETA-OL Concentration Rank 16

UNKNOWN COMPOUND nol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.89	58.54 ng	2818990	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	HOP-22(29)-EN-3BETA-OL	426	C30H50O	058801-23-3	91
2	Ethynyl (1R*,2R*,5S*)-5,8,8-trimeth	204	C14H20O	085544-99-6	84
3	LONGIFOLENALDEHYDE	220	C15H24O	019890-84-7	70



0377

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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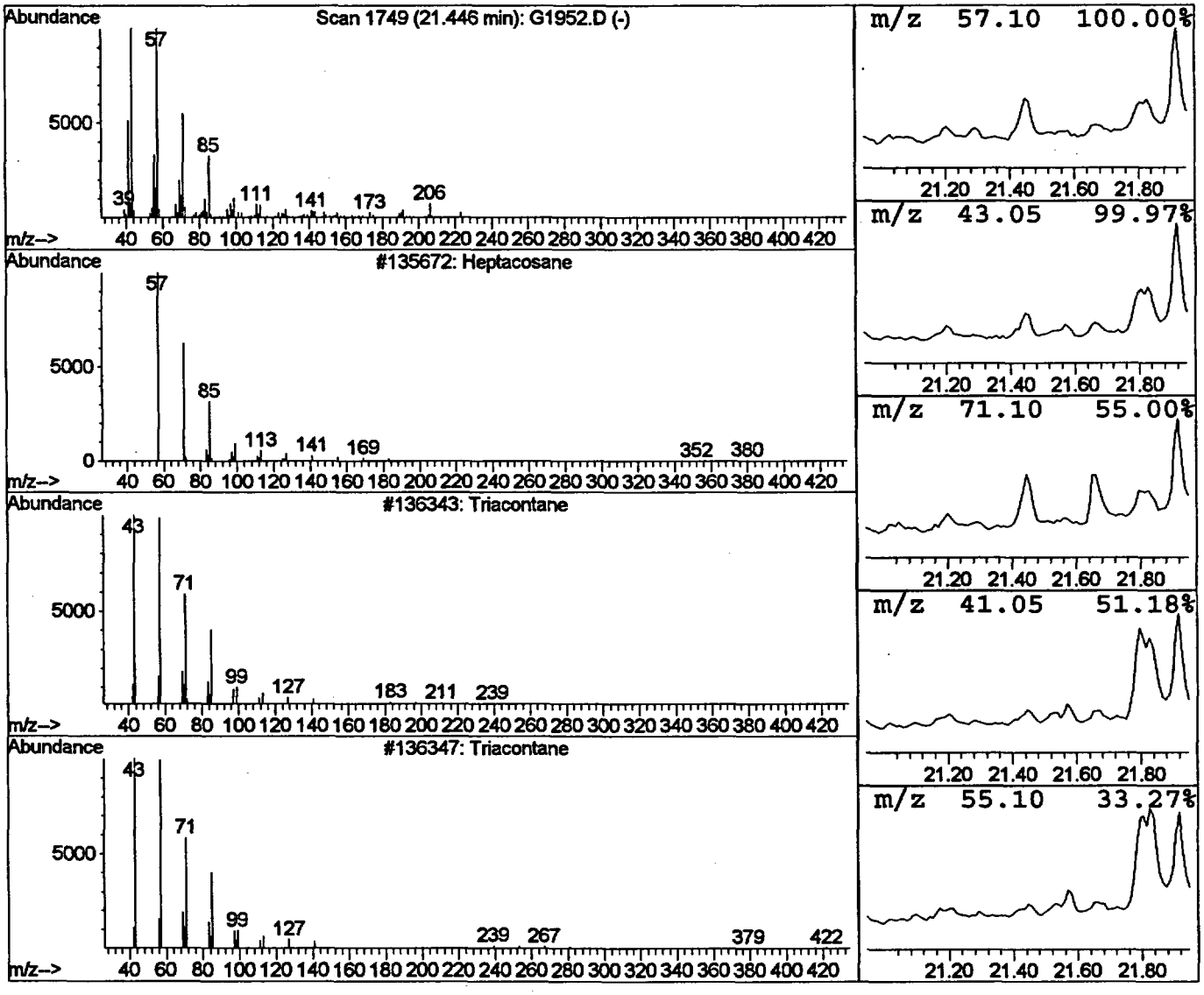
Peak Number 42 Heptacosane Concentration Rank 55

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.45	9.82 ng	358197	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptacosane	380	C27H56	000593-49-7	87
2	Triacontane	422	C30H62	000638-68-6	87
3	Triacontane	422	C30H62	000638-68-6	87



0378

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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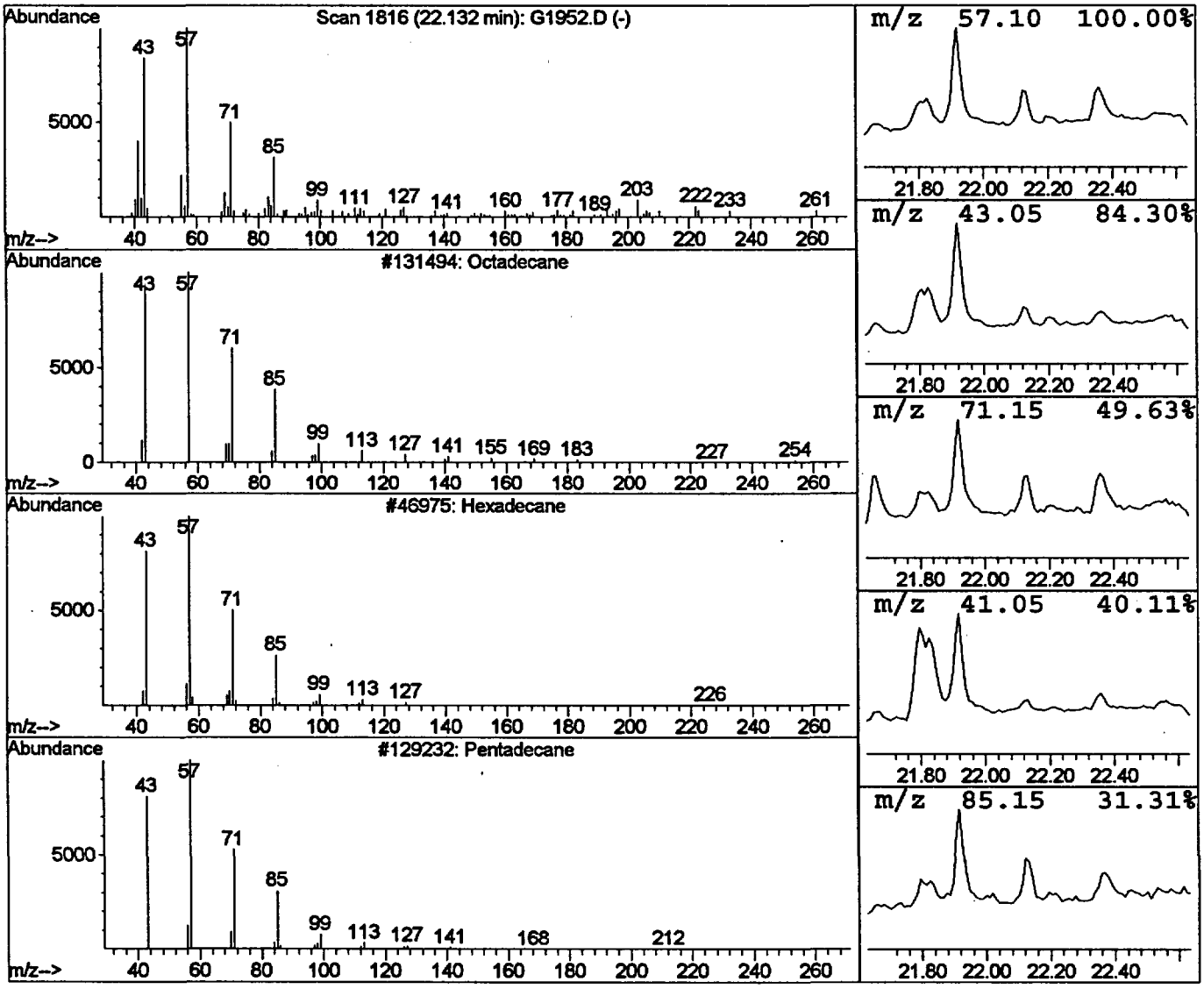
Peak Number 43 Octadecane Concentration Rank 61

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.13	7.19 ng	262397	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	68
2	Hexadecane	226	C16H34	000544-76-3	64
3	Pentadecane	212	C15H32	000629-62-9	59



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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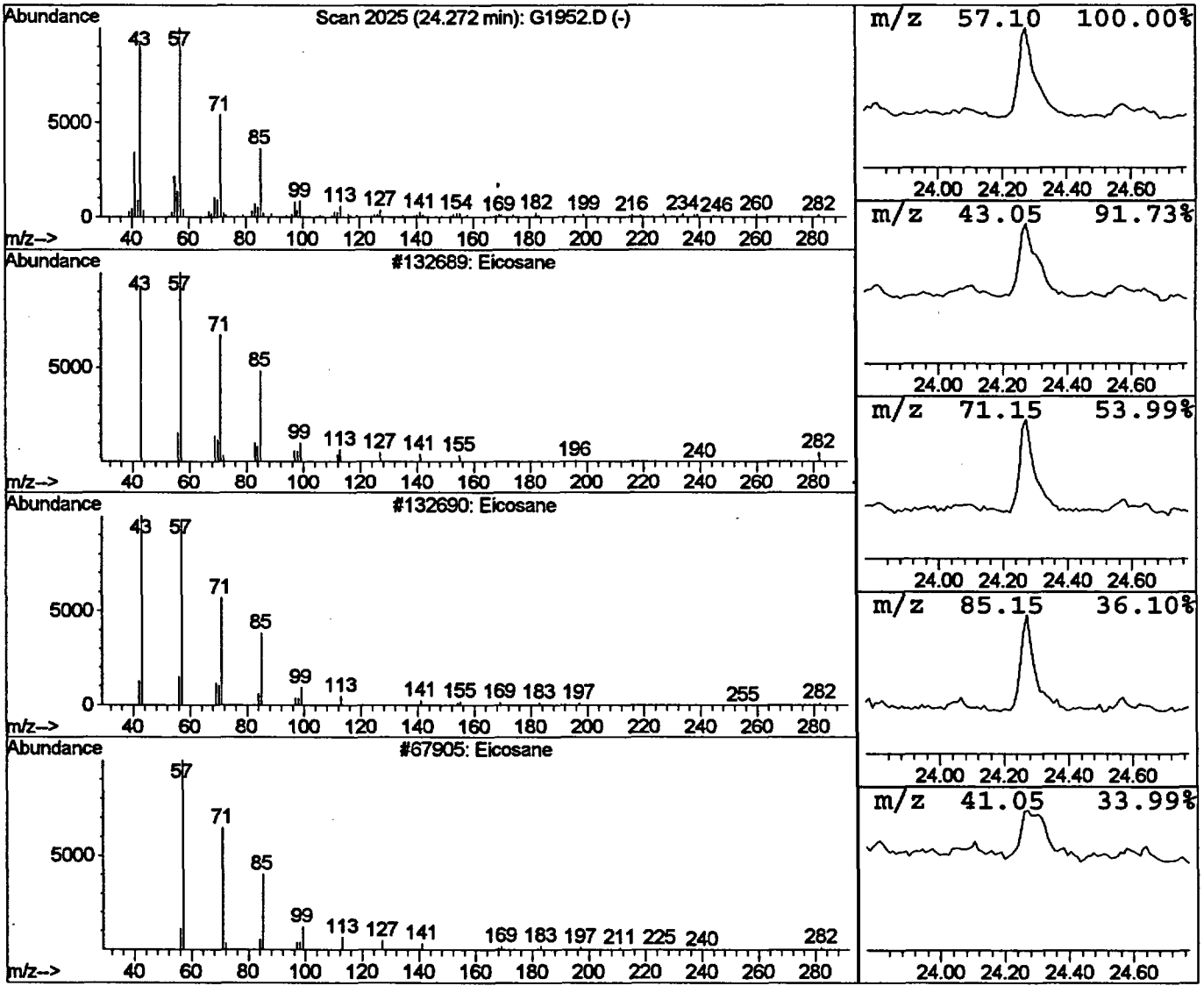
Peak Number 44 Eicosane Concentration Rank 47

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.27	13.66 ng	558842	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	95
2	Eicosane	282	C20H42	000112-95-8	93
3	Eicosane	282	C20H42	000112-95-8	89



0380

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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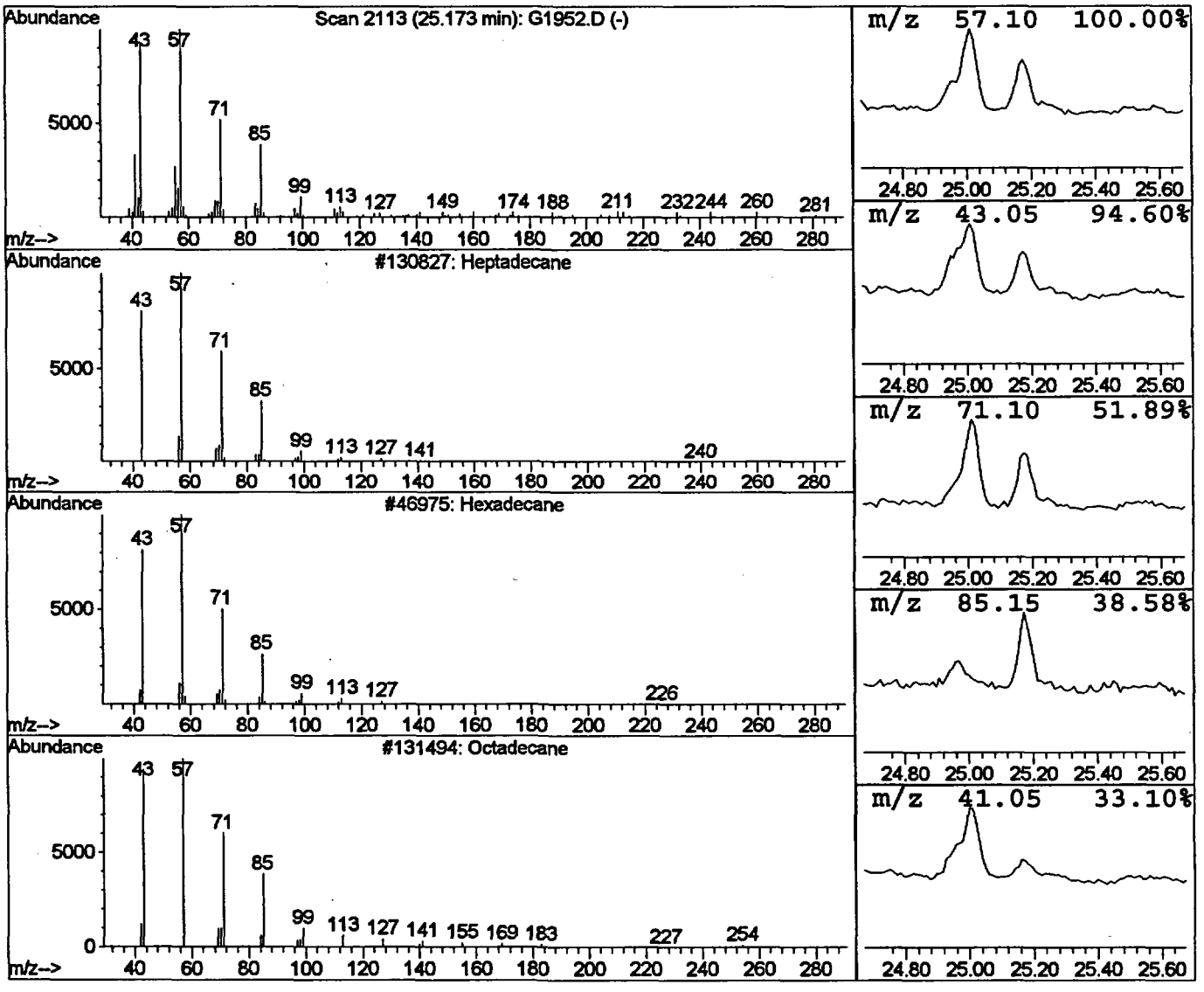
Peak Number 45 Heptadecane Concentration Rank 60

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.17	7.23 ng	295947	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	83
2	Hexadecane	226	C16H34	000544-76-3	83
3	Octadecane	254	C18H38	000593-45-3	80



0381

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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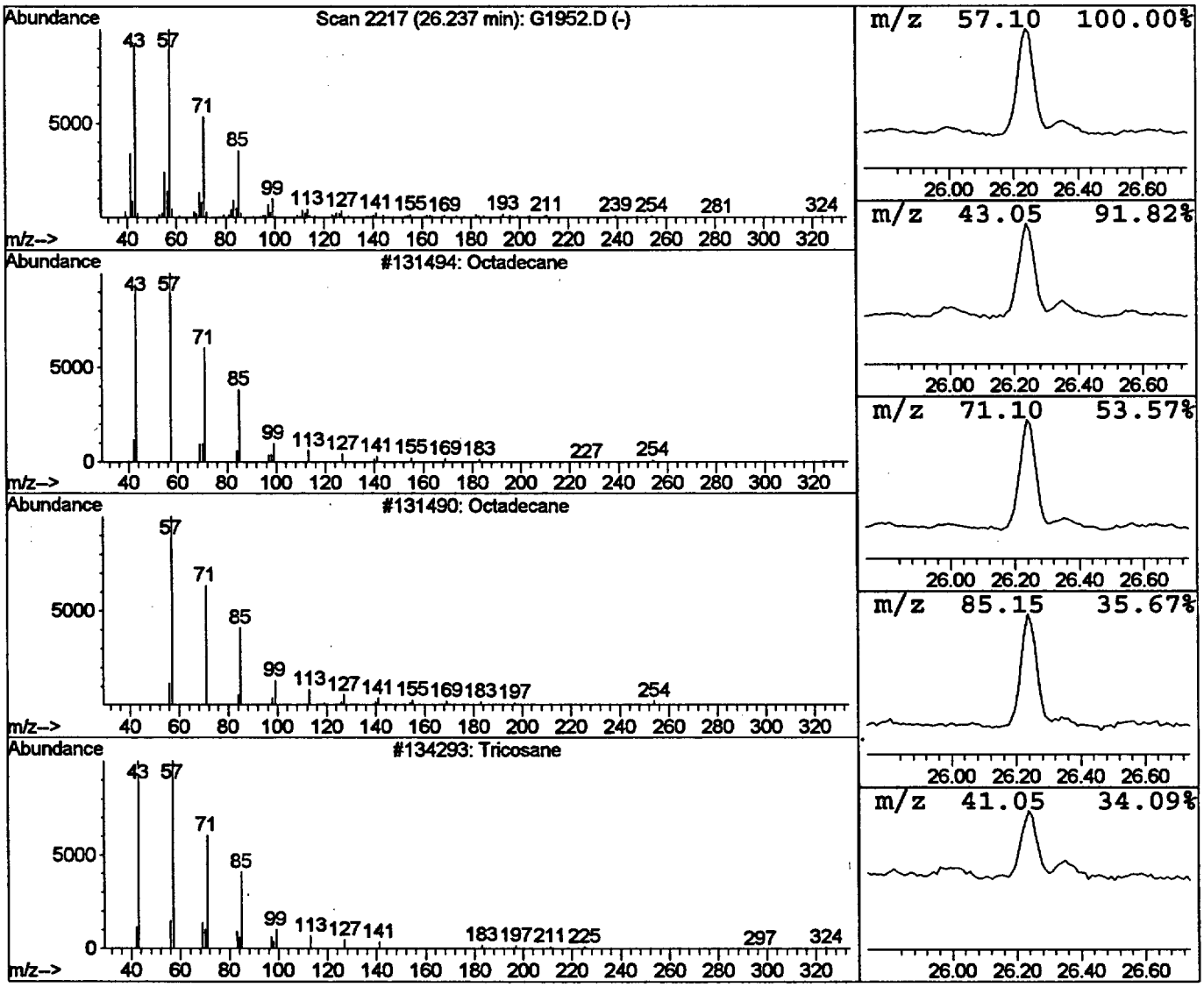
Peak Number 46 Octadecane Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.24	32.18 ng	1316500	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	95
2	Octadecane	254	C18H38	000593-45-3	94
3	Tricosane	324	C23H48	000638-67-5	94



Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

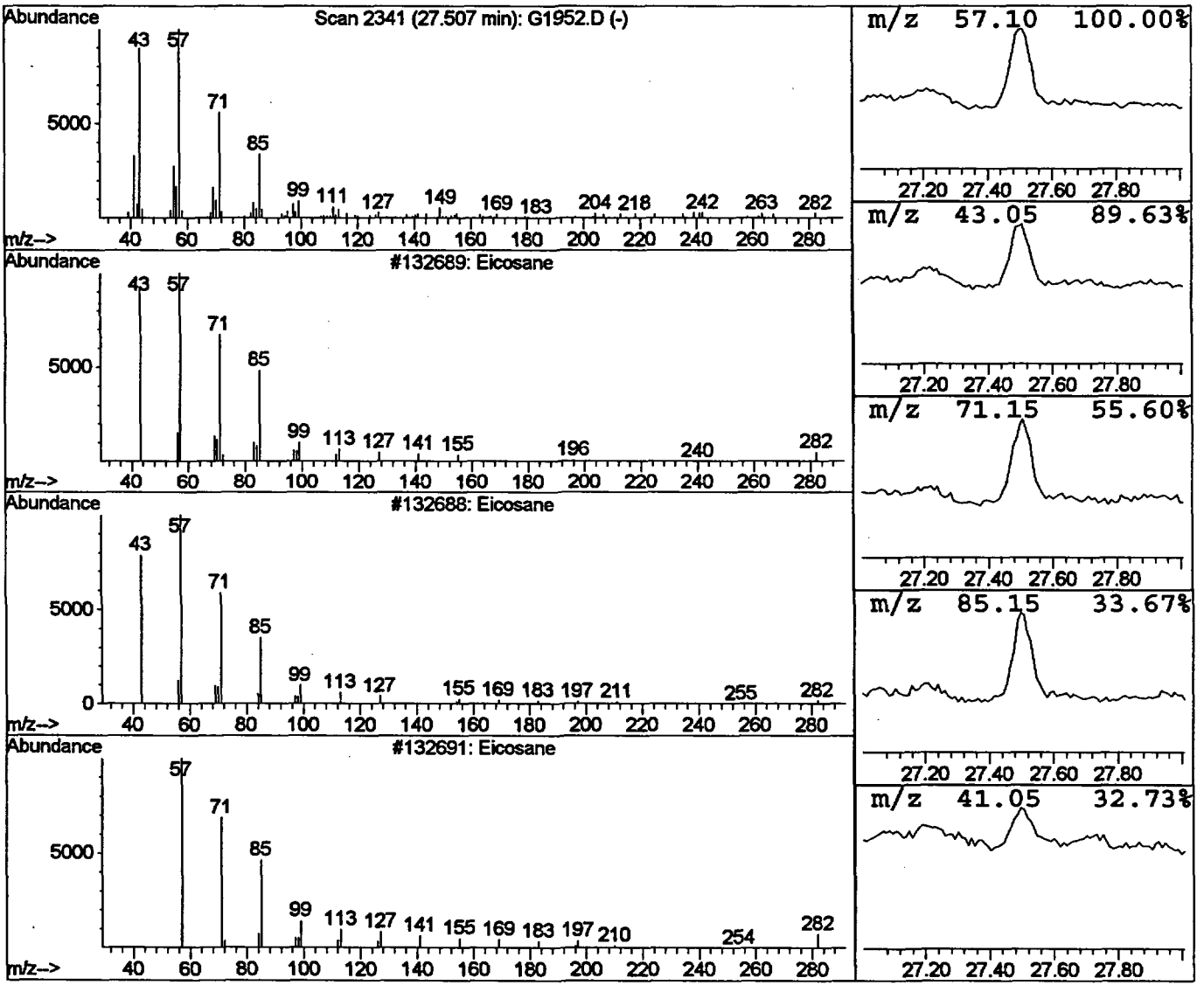
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 47 Eicosane Concentration Rank 40

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.51	15.04 ng	615448	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	95
2	Eicosane	282	C20H42	000112-95-8	93
3	Eicosane	282	C20H42	000112-95-8	87



CASE 25969
SDG# FFR76

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

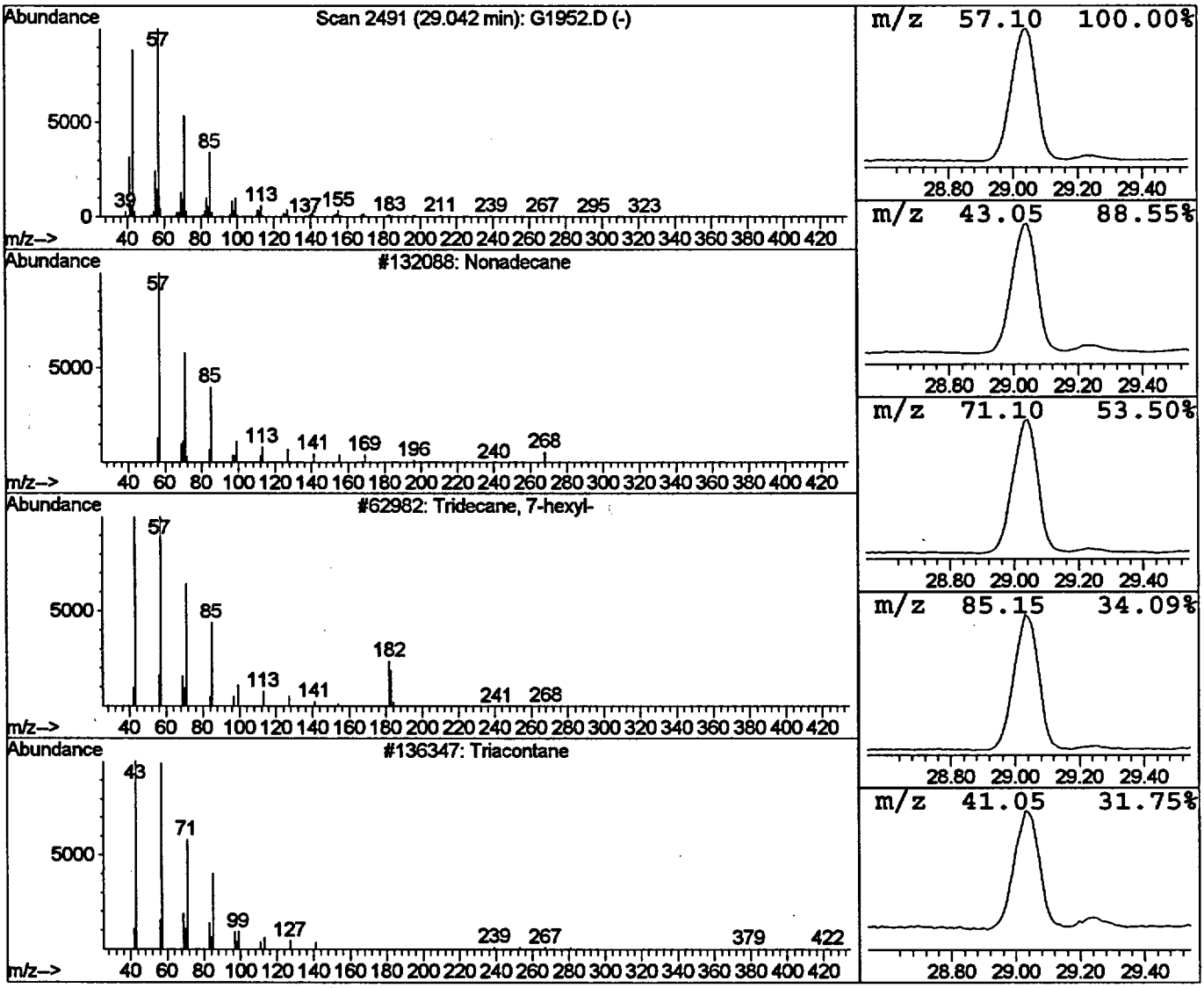
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 48 Nonadecane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.04	189.09 ng	9106020	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonadecane	268	C19H40	000629-92-5	95
2	Tridecane, 7-hexyl-	268	C19H40	007225-66-3	93
3	Triacontane	422	C30H62	000638-68-6	91



0384

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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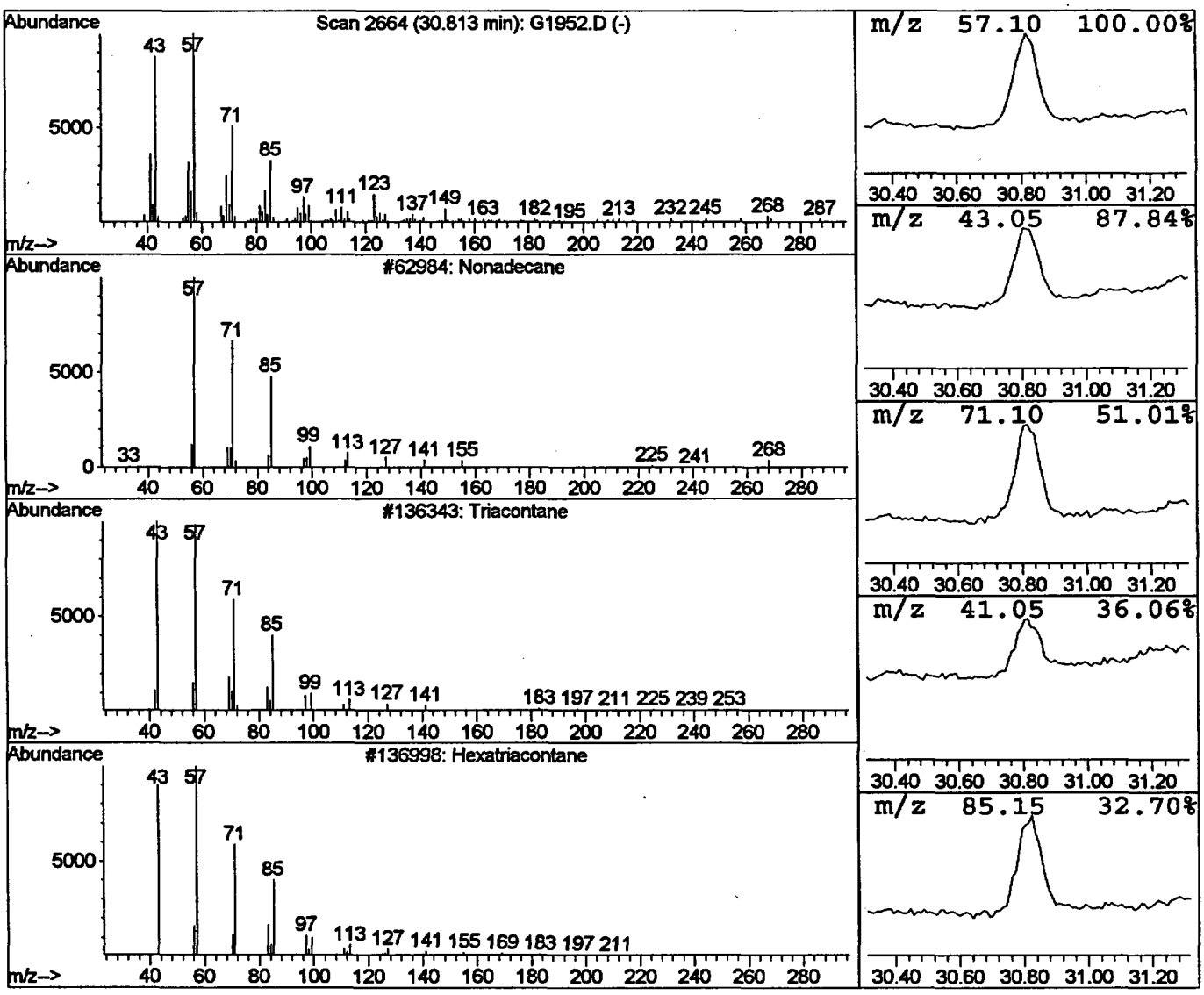
Peak Number 49 Nonadecane Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.81	24.33 ng	1171510	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonadecane	268	C19H40	000629-92-5	76
2	Triacontane	422	C30H62	000638-68-6	74
3	Hexatriacontane	507	C36H74	000630-06-8	72



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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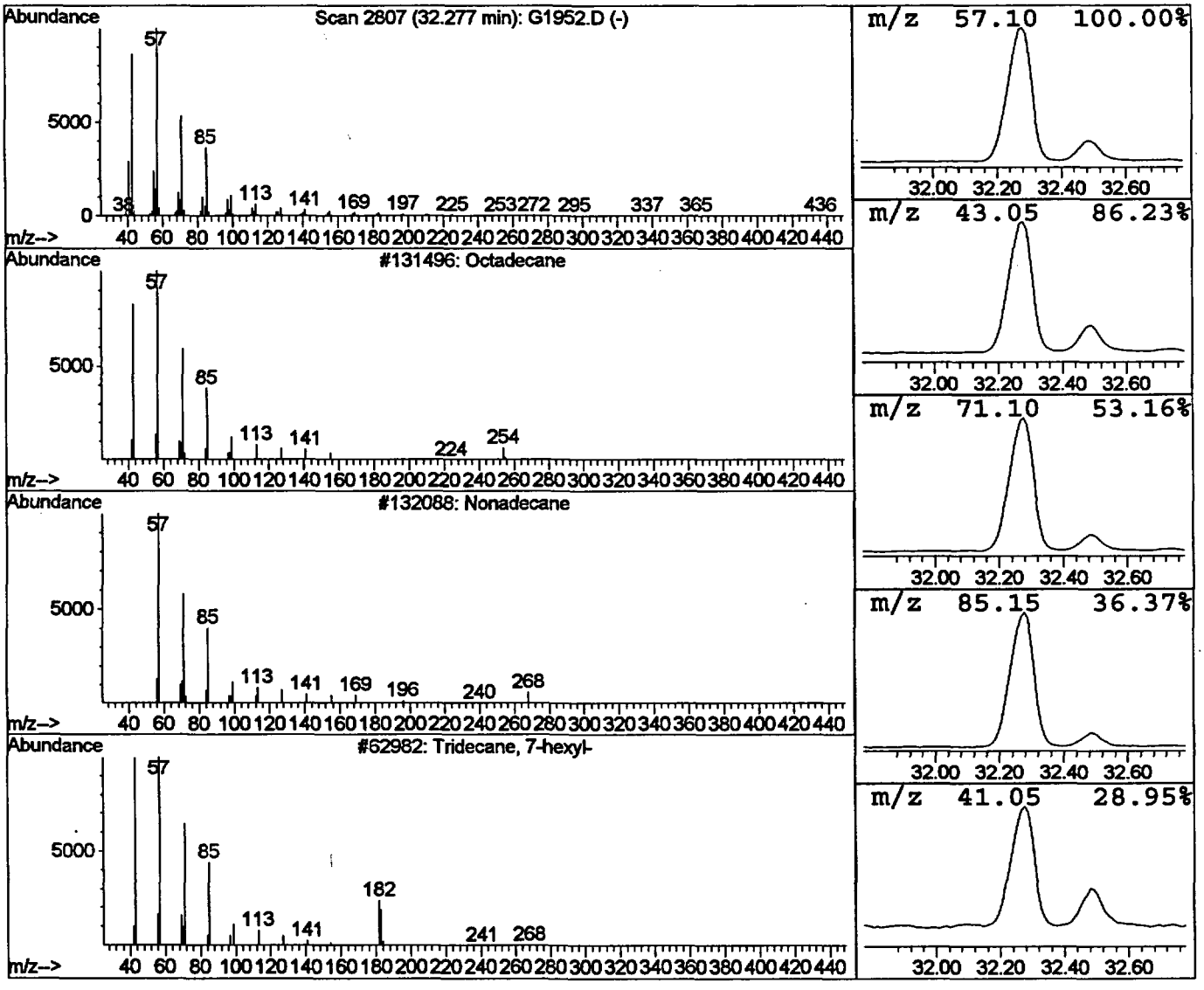
Peak Number 50 Octadecane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.28	274.57 ng	13222400	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	96
2	Nonadecane	268	C19H40	000629-92-5	96
3	Tridecane, 7-hexyl-	268	C19H40	007225-66-3	93



0386

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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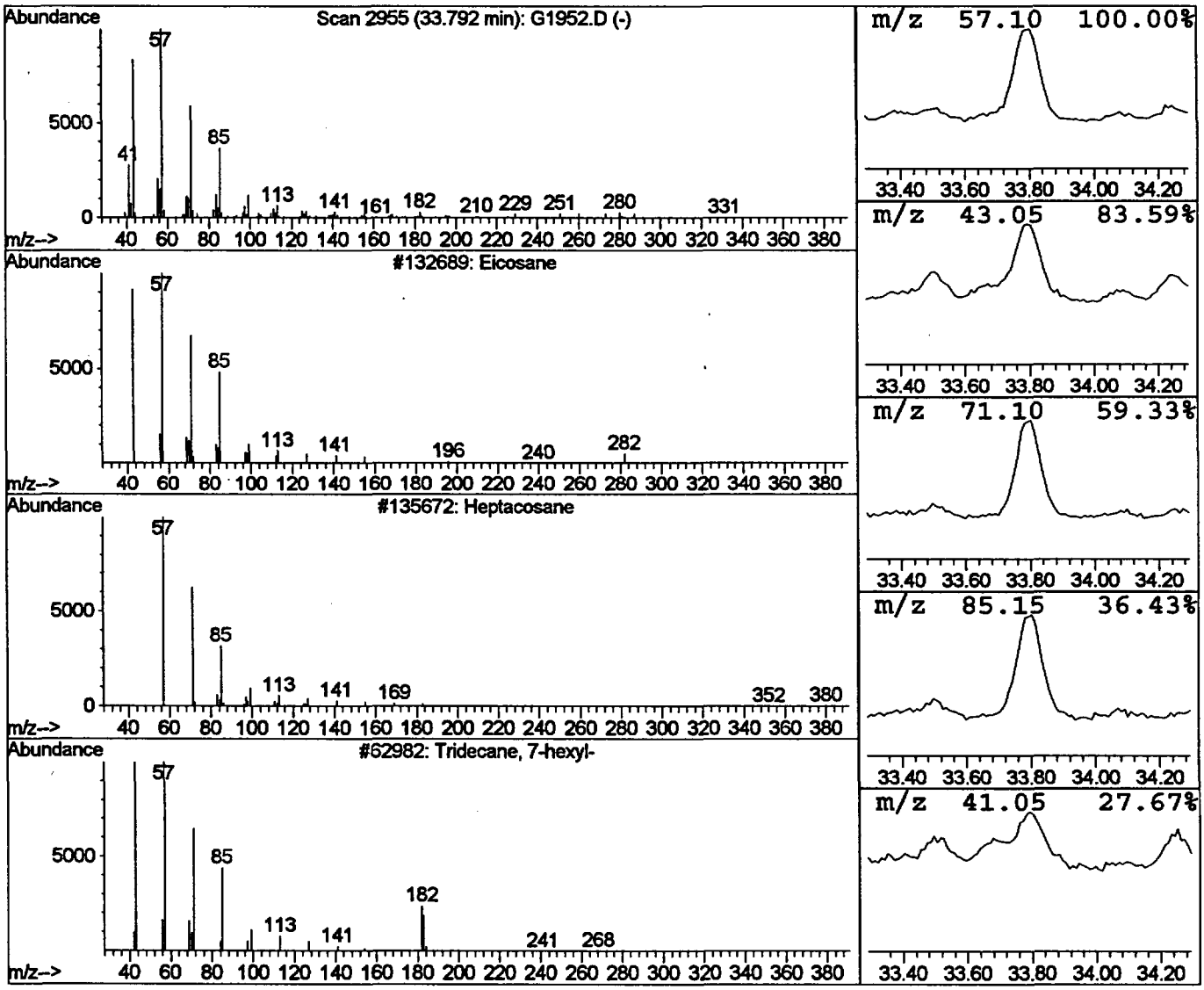
Peak Number 51 Eicosane Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.79	32.93 ng	1585720	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	83
2	Heptacosane	380	C27H56	000593-49-7	83
3	Tridecane, 7-hexyl-	268	C19H40	007225-66-3	83



0387

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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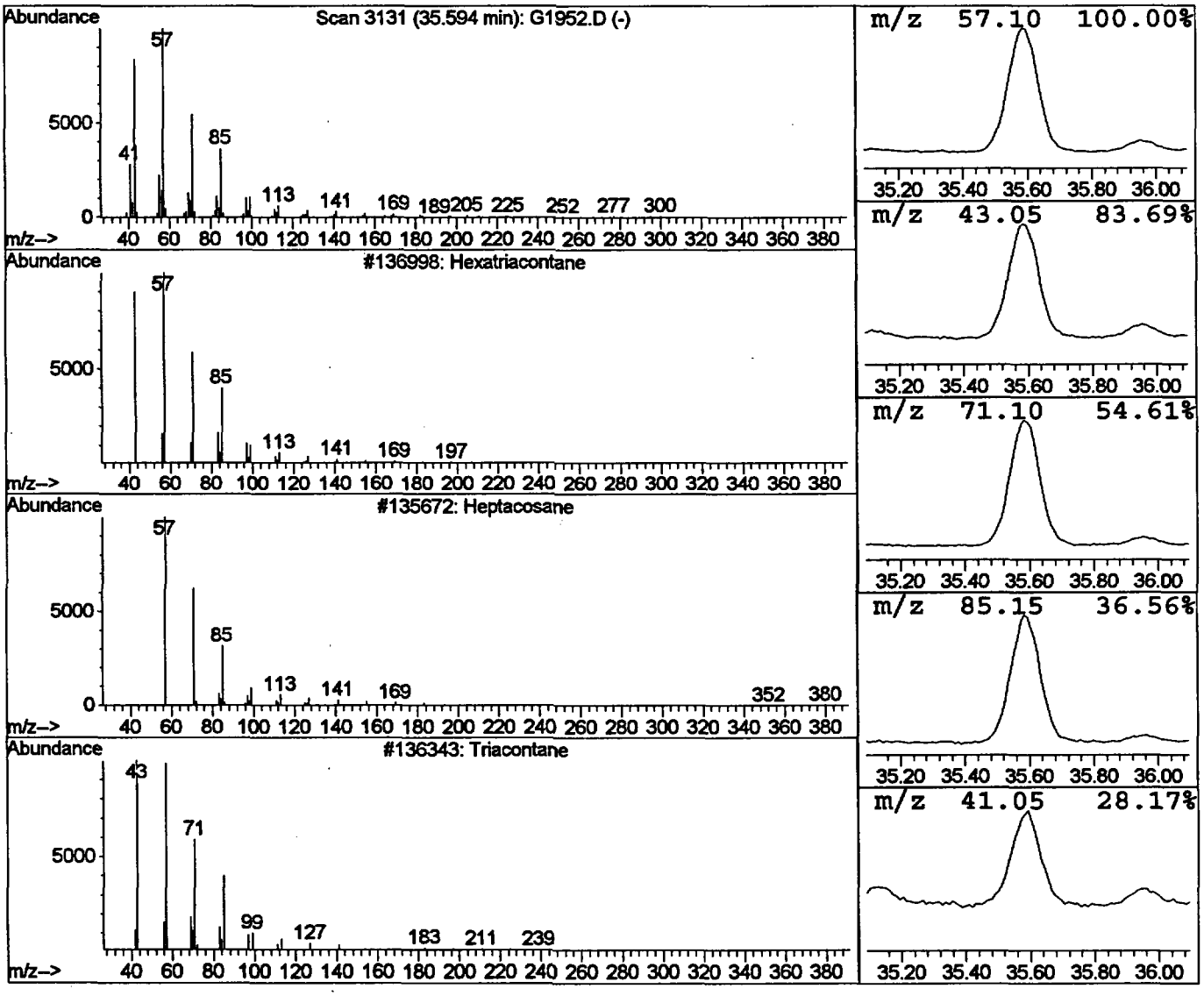
Peak Number 52 Hexatriacontane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.59	92.02 ng	4431590	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	94
2	Heptacosane	380	C27H56	000593-49-7	91
3	Triacontane	422	C30H62	000638-68-6	91



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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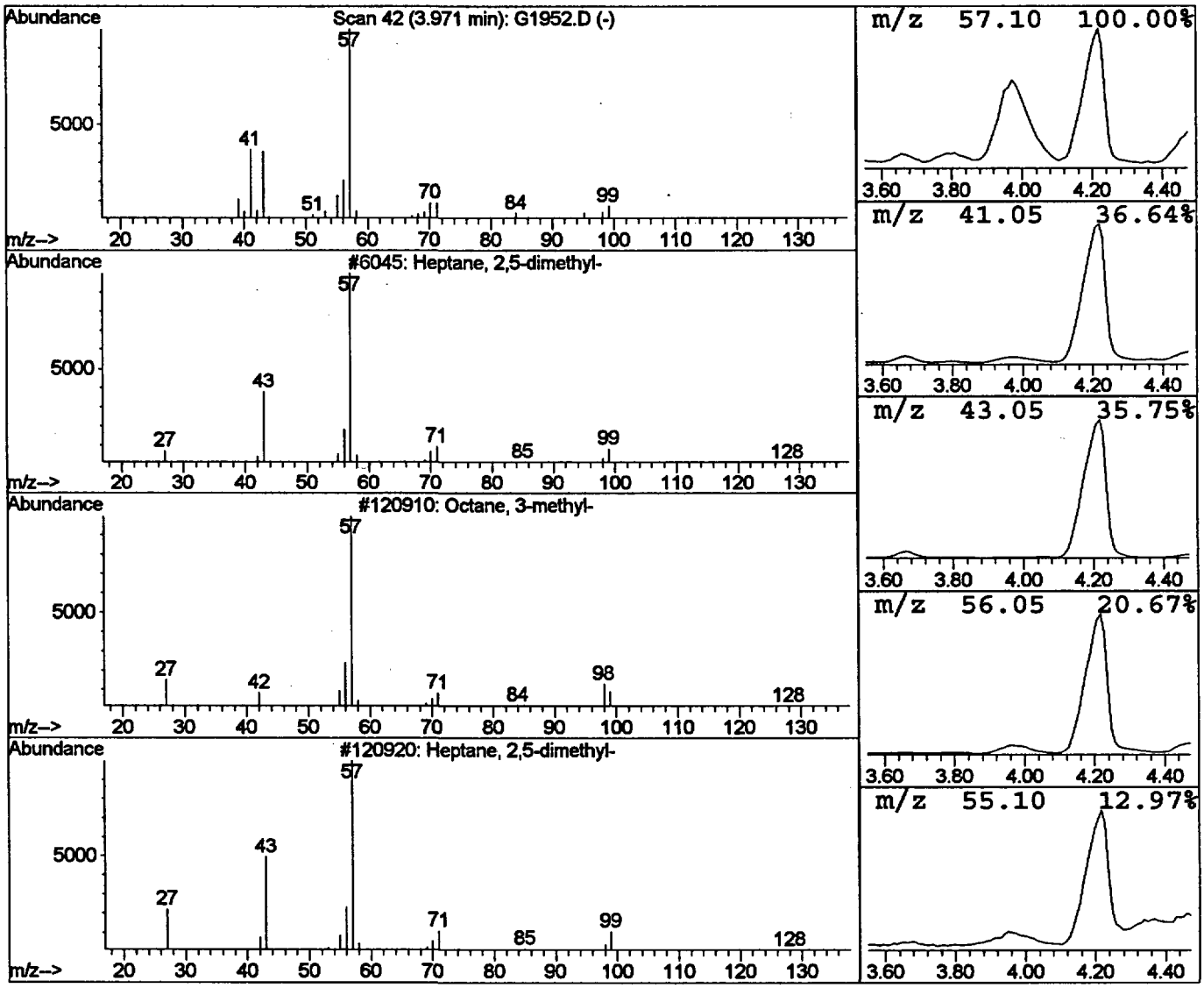
Peak Number 53 Heptane, 2,5-dimethyl- Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.97	21.37 ng	555367	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	72
2	Octane, 3-methyl-	128	C9H20	002216-33-3	72
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	50



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 5
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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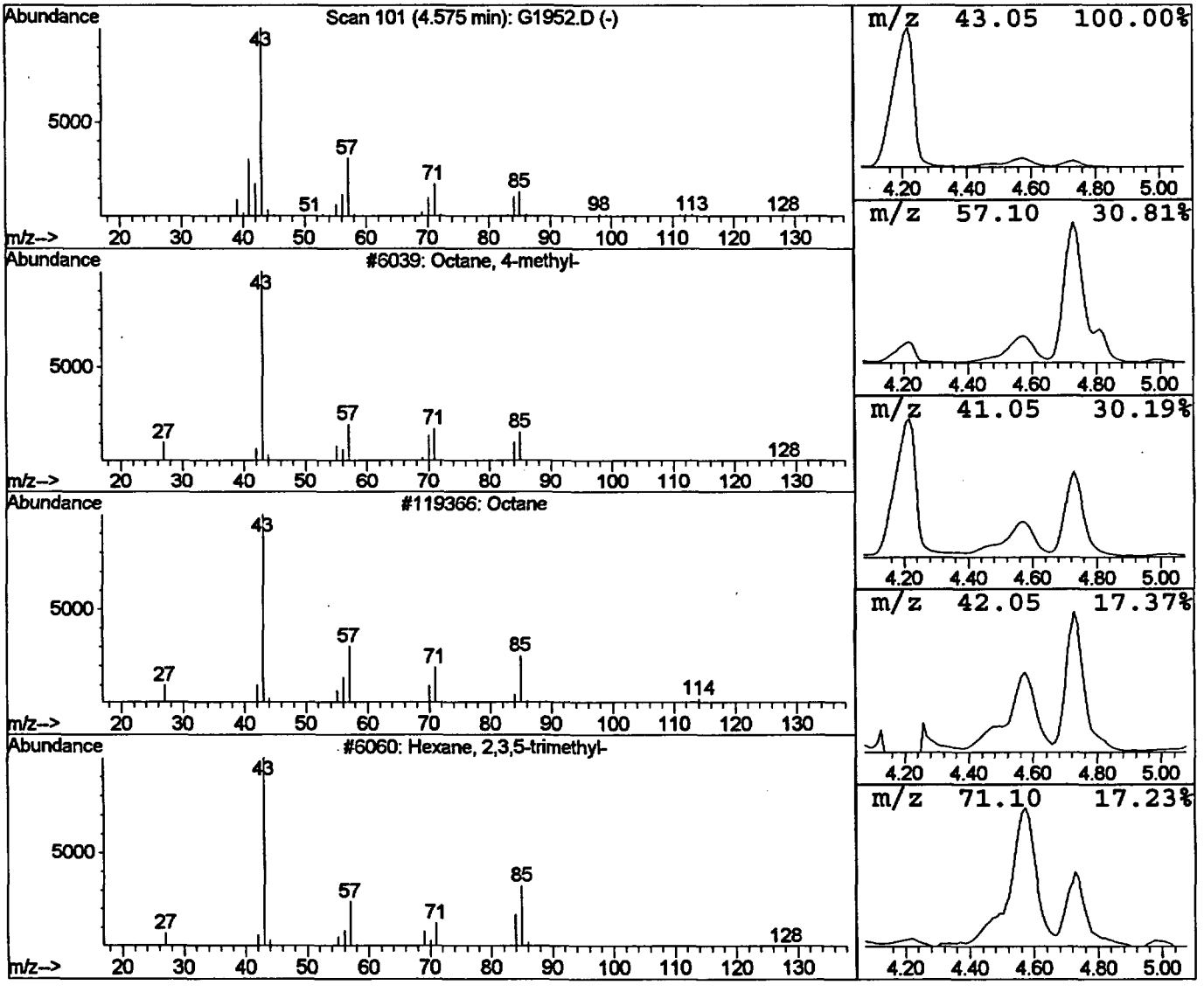
Peak Number 54 Octane, 4-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.58	137.64 ng	3576780	1,4-Dichlorobenzene-d4	7.05

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Octane	114	C8H18	000111-65-9	64
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	64



Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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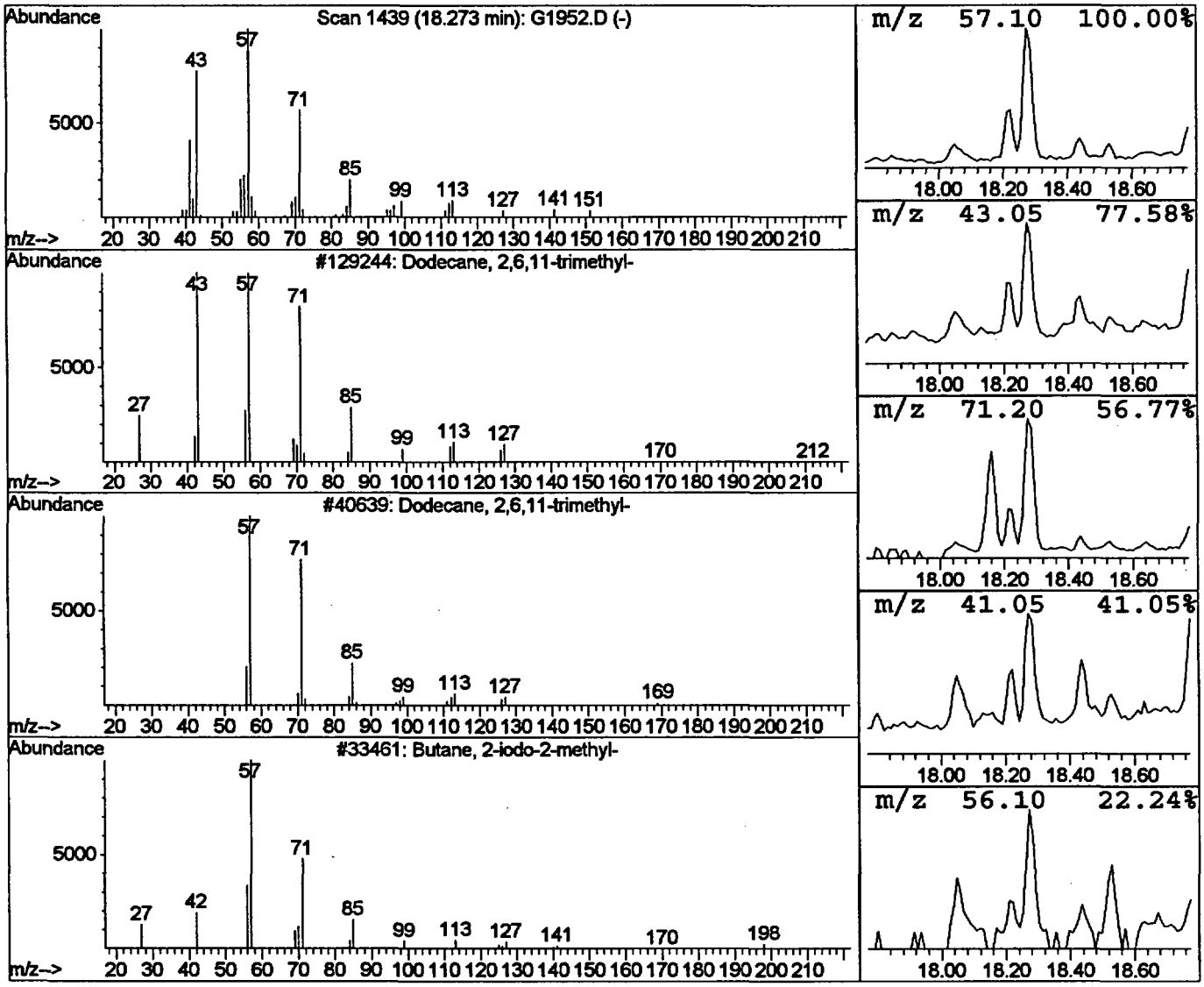
Peak Number 55 Dodecane, 2,6,11-trimethyl- Concentration Rank 75

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.27	4.72 ng	172077	Phenanthrene-d10	19.60

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	80
2	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	72
3	Butane, 2-iodo-2-methyl-	198	C5H11I	000594-38-7	72



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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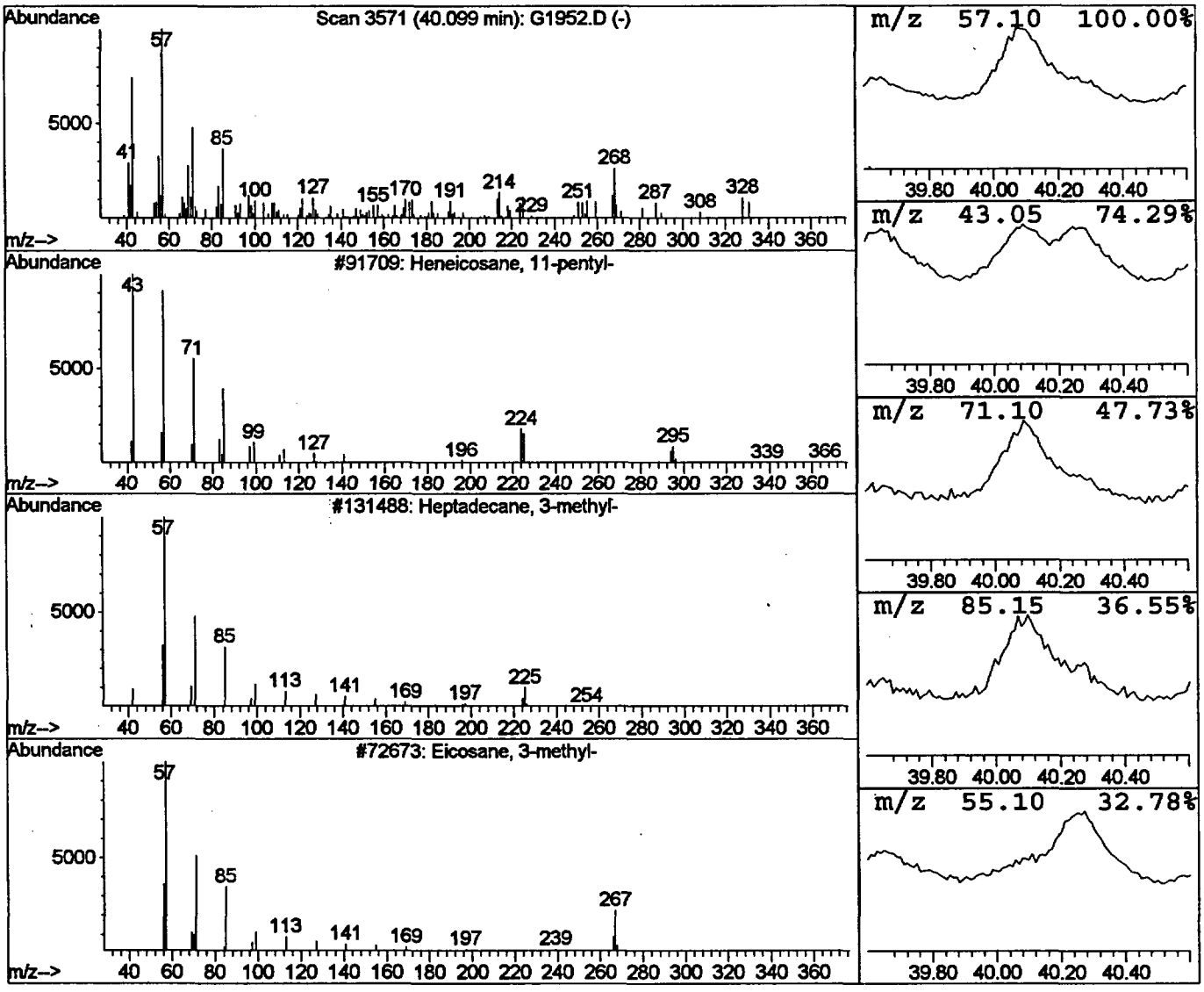
Peak Number 56 Heneicosane, 11-pentyl- Concentration Rank 74

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.10	4.74 ng	228085	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane, 11-pentyl-	366	C26H54	014739-72-1	35
2	Heptadecane, 3-methyl-	254	C18H38	006418-44-6	35
3	Eicosane, 3-methyl-	296	C21H44	006418-46-8	35



Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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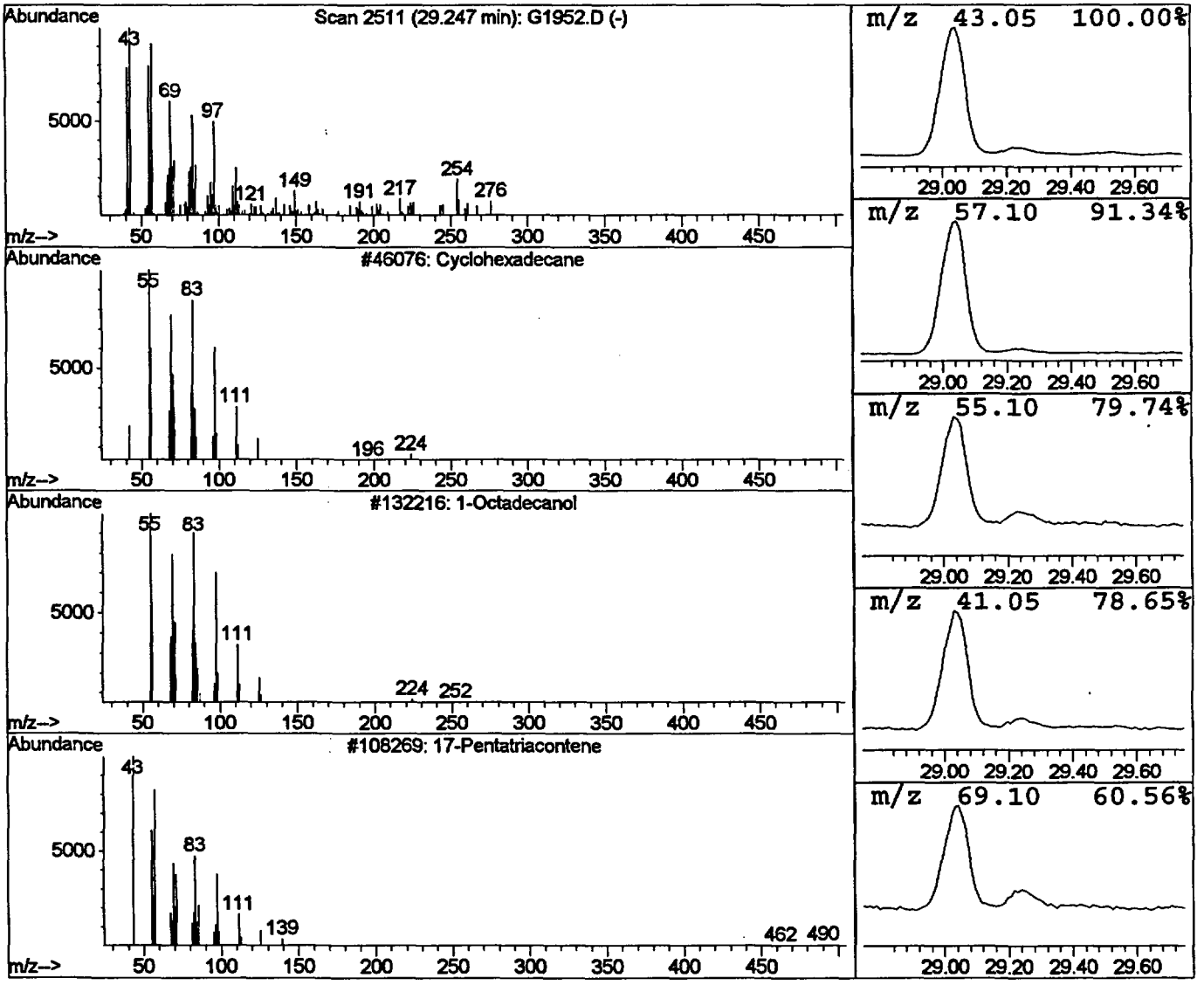
Peak Number 57 Cyclohexadecane Concentration Rank 35

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.25	16.23 ng	781364	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexadecane	224	C16H32	000295-65-8	60
2	1-Octadecanol	270	C18H38O	000112-92-5	58
3	17-Pentatriacontene	491	C35H70	006971-40-0	58



0393

Data File : Q:\HPCHEM\G\G19XX\G1952.D Vial: 3
Acq On : 22 Jan 98 19:22 Operator:
Sample : S HP-7G 58073-002 FFR81 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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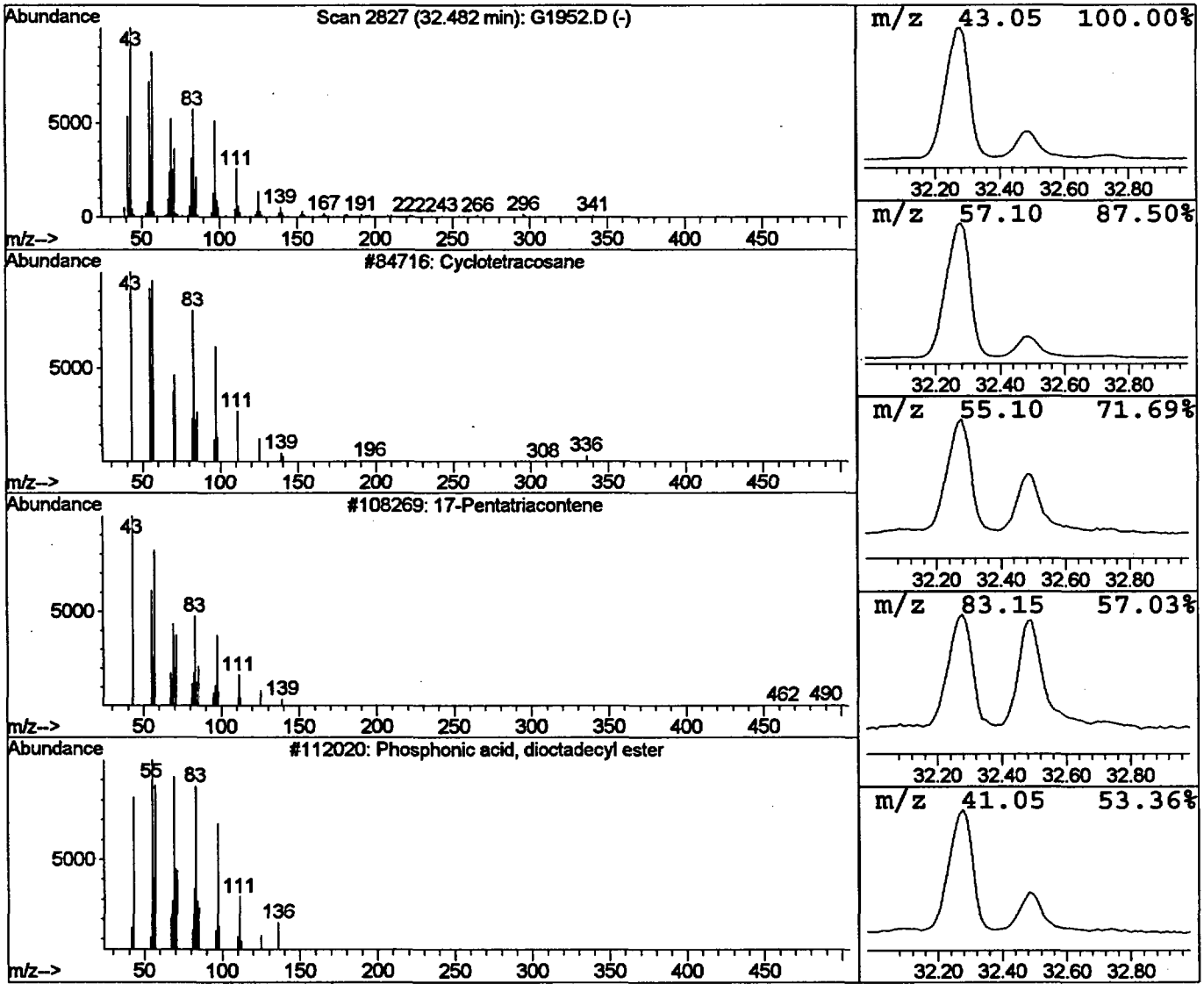
Peak Number 58 Cyclotetracosane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.48	83.71 ng	4031120	Perylene-d12	31.47

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetracosane	336	C24H48	000297-03-0	90
2	17-Pentatriacontene	491	C35H70	006971-40-0	90
3	Phosphonic acid, dioctadecyl ester	587	C36H75O3P	019047-85-9	90



0394

CASE 25969
SDG# FFR76

Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 22 Jan 98 19:22
Data File: Q:\HPCHEM\G\G19XX\G1952.D
Name: S HP-7G 58073-002 FFR81
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
2-Pentanone, 4-hydro	4.22	968.6	ng	25171200	ISTD01	7.05	1039490	40.0
1-Propene, 1-(2-prop	4.73	143.0	ng	3716890	ISTD01	7.05	1039490	40.0
3-PYRROLIDINOL	5.58	20.4	ng	530208	ISTD01	7.05	1039490	40.0
2,4-Pentanedione	5.76	63.0	ng	1637540	ISTD01	7.05	1039490	40.0
3-Hexene-2,5-dione	5.99	103.5	ng	2689380	ISTD01	7.05	1039490	40.0
4-HEXEN-2-ONE, 3-MET	6.13	15.8	ng	409359	ISTD01	7.05	1039490	40.0
2-Pentanone, 3-methy	6.54	99.6	ng	2587480	ISTD01	7.05	1039490	40.0
Morpholine	6.82	18.3	ng	476431	ISTD01	7.05	1039490	40.0
3-Pentanone, 2,4-dim	7.24	14.9	ng	387194	ISTD01	7.05	1039490	40.0
Hexanoic acid, 1-met	19.35	19.4	ng	706248	ISTD04	19.60	1459790	40.0
Hexadecanoic acid, m	20.20	15.9	ng	580190	ISTD04	19.60	1459790	40.0
15-Tetracosenoic aci	20.36	25.3	ng	921717	ISTD04	19.60	1459790	40.0
Hexadecanoic acid	20.47	110.2	ng	4022880	ISTD04	19.60	1459790	40.0
3-Tetradecene, (Z)-	20.82	23.0	ng	839573	ISTD04	19.60	1459790	40.0
1,11-Dodecadiene	21.79	76.5	ng	2791580	ISTD04	19.60	1459790	40.0
Octadecanoic acid	21.92	47.9	ng	1748550	ISTD04	19.60	1459790	40.0
Eicosanoic acid	23.28	15.8	ng	646763	ISTD05	25.36	1636360	40.0
Benzenemethanol, 4-(	27.18	23.4	ng	955482	ISTD05	25.36	1636360	40.0
2,6,10,15,19,23-HEXA	28.28	20.2	ng	825724	ISTD05	25.36	1636360	40.0
Tricyclo[3.3.1.1(3,7	31.73	14.6	ng	704030	ISTD06	31.47	1926280	40.0
2-Amino-8-methylimid	33.68	15.6	ng	750809	ISTD06	31.47	1926280	40.0
Cholest-5-en-3-ol (3	34.25	24.5	ng	1178320	ISTD06	31.47	1926280	40.0
(12S)-13(16),14-LABD	35.13	20.6	ng	989935	ISTD06	31.47	1926280	40.0
Ergost-5-en-3-ol, (3	36.30	43.7	ng	2102810	ISTD06	31.47	1926280	40.0
Stigmasta-5,22-dien-	36.94	105.1	ng	5059090	ISTD06	31.47	1926280	40.0
Stigmast-5-en-3-ol,	38.27	188.9	ng	9097130	ISTD06	31.47	1926280	40.0
Benzo[b]naphtho[2,3-	39.14	18.2	ng	876323	ISTD06	31.47	1926280	40.0
5.ALPHA.-STIGMAST-3-	39.67	32.0	ng	1539230	ISTD06	31.47	1926280	40.0
LONGIFOLENALDEHYDE	40.26	82.7	ng	3983900	ISTD06	31.47	1926280	40.0
HOP-22(29)-EN-3BETA-	40.89	58.5	ng	2818990	ISTD06	31.47	1926280	40.0
Additional Tentatively Identified Compounds								
17-Pentatriacontene	35.95	14.3	ng	688515	ISTD06	31.47	1926280	40.0
Benzo[a]pyrene	31.02	14.3	ng	688335	ISTD06	31.47	1926280	40.0
Glutamic acid, N-[N-	33.50	13.7	ng	659946	ISTD06	31.47	1926280	40.0
1,1'-Biphenyl, 2,3',	24.06	13.7	ng	560590	ISTD05	25.36	1636360	40.0
2-Cyclohexen-1-ol	5.18	13.0	ng	336738	ISTD01	7.05	1039490	40.0
Benzo[e]pyrene	31.56	12.4	ng	598895	ISTD06	31.47	1926280	40.0
Quinoline, 2,3,4,4a,	38.53	11.7	ng	564854	ISTD06	31.47	1926280	40.0
1,1'-Biphenyl, 2,2',	23.50	11.6	ng	476400	ISTD05	25.36	1636360	40.0
1,3-DIACETYL-CYCLOPE	21.66	10.8	ng	393621	ISTD04	19.60	1459790	40.0
Heneicosanoic acid	22.78	10.5	ng	428936	ISTD05	25.36	1636360	40.0

AP-76 58073-002 FFR81 01/22/98 19:22

CASE 25969
SDG# FFR76

Hydrocarbons: n-Alkanes

~~Butane~~	3.66	39.1 ng	1016240	ISTD01	7.05	1039490	40.0
Heptacosane	21.45	9.8 ng	358197	ISTD04	19.60	1459790	40.0
Octadecane	22.13	7.2 ng	262397	ISTD04	19.60	1459790	40.0
Eicosane	24.27	13.7 ng	558842	ISTD05	25.36	1636360	40.0
Heptadecane	25.17	7.2 ng	295947	ISTD05	25.36	1636360	40.0
Octadecane	26.24	32.2 ng	1316500	ISTD05	25.36	1636360	40.0
Eicosane	27.51	15.0 ng	615448	ISTD05	25.36	1636360	40.0
Nonadecane	29.04	189.1 ng	9106020	ISTD06	31.47	1926280	40.0
Nonadecane	30.81	24.3 ng	1171510	ISTD06	31.47	1926280	40.0
Octadecane	32.28	274.6 ng	13222400	ISTD06	31.47	1926280	40.0
Eicosane	33.79	32.9 ng	1585720	ISTD06	31.47	1926280	40.0
Hexatriacontane	35.59	92.0 ng	4431590	ISTD06	31.47	1926280	40.0
Subtotal:		737.2 ng					

Hydrocarbons: Branched Alkanes

Heptane, 2,5-dimethy	3.97	21.4 ng	555367	ISTD01	7.05	1039490	40.0
Octane, 4-methyl-	4.58	137.6 ng	3576780	ISTD01	7.05	1039490	40.0
Dodecane, 2,6,11-tri	18.27	4.7 ng	172077	ISTD04	19.60	1459790	40.0
Heneicosane, 11-pent	40.10	4.7 ng	228085	ISTD06	31.47	1926280	40.0
Subtotal:		168.5 ng					

Hydrocarbons: Cyclic Alkanes

Cyclohexadecane	29.25	16.2 ng	781364	ISTD06	31.47	1926280	40.0
Cyclotetracosane	32.48	83.7 ng	4031120	ISTD06	31.47	1926280	40.0
Subtotal:		99.9 ng					

Total Alkane Conc: (1005.6 ng − 39.1) x DF = 25,000 ug/kg

G1952.D LIN.M Mon Jan 26 12:20:22 1998

FFR81 58073-002 LL01-27-98

TIC: G1952.D

S HP-7G 58073-002 FFR81 8/11/98 19:12

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.664	rBV	0.174	1016236	3.582	3.756
2	3.971	rBV	0.215	555367	3.879	4.094
3	4.217	rVV	0.287	25171174	4.094	4.381
4	4.575	rVV	0.276	3576777	4.381	4.657
5	4.729	rVV	0.113	3716890	4.657	4.770
6	4.811	rVB	0.174	3258429	4.770	4.944
7	5.179	rVB	0.164	336738	5.128	5.292
8	5.486	rBV	0.113	185090	5.415	5.527
9	5.578	rVV	0.102	530208	5.527	5.630
10	5.763	rVV	0.266	1637535	5.640	5.906
11	5.988	rVB	0.133	2689381	5.906	6.039
12	6.131	rVB	0.133	409359	6.090	6.223
13	6.346	rVB	0.235	3901722	6.223	6.459
14	6.541	rBV	0.154	2587475	6.459	6.612
15	6.715	rBV	0.102	3379735	6.664	6.766
16	6.817	rVV	0.082	476431	6.766	6.848
17	7.053	rBV	0.102	1039487	7.012	7.114
18	7.237	rVB	0.082	387194	7.206	7.288
19	7.431	rBV	0.154	5258293	7.339	7.493
20	8.179	rBV	0.133	1918082	8.117	8.250
21	10.062	rVB	0.225	1149270	9.980	10.206
22	14.260	rBV	0.174	2520339	14.167	14.342
23	16.276	rBV	0.102	1082194	16.225	16.328
24	18.160	rBV	0.092	1704214	18.109	18.201
25	18.273	rVB	0.102	172077	18.242	18.344
26	19.348	rBV	0.102	706248	19.296	19.399
27	19.429	rVB	0.072	211687	19.399	19.470
28	19.603	rBV	0.092	1459788	19.542	19.634
29	19.644	rVV	0.061	402823	19.634	19.696
30	20.074	rBV	0.102	237834	20.013	20.115
31	20.197	rBV	0.123	580190	20.115	20.238
32	20.361	rBV	0.123	921717	20.269	20.392
33	20.474	rVV	0.184	4022882	20.392	20.576
34	20.678	rVV	0.061	179421	20.648	20.709
35	20.822	rBV	0.143	839573	20.771	20.914
36	21.201	rBV	0.102	377896	21.129	21.231
37	21.252	rVB	0.113	177049	21.231	21.344
38	21.446	rBV	0.102	358197	21.385	21.487
39	21.528	rBV	0.061	175867	21.487	21.549
40	21.569	rVB	0.061	252601	21.549	21.610
41	21.661	rBV	0.102	393621	21.620	21.723
42	21.794	rBV	0.143	2791584	21.733	21.876
43	21.917	rVV	0.102	1748551	21.876	21.979
44	22.020	rVV	0.082	801180	21.979	22.060
45	22.132	rVV	0.092	262397	22.071	22.163
46	22.357	rBV	0.082	302408	22.306	22.388
47	22.460	rVV	0.082	660354	22.419	22.501
48	22.562	rVV	0.092	244948	22.511	22.603
49	22.644	rVV	0.123	2984166	22.603	22.726
50	22.777	rVB	0.092	428936	22.736	22.828
51	23.013	rBV	0.102	235077	22.982	23.084
52	23.146	rVB	0.092	279663	23.105	23.197
53	23.279	rBV	0.164	646763	23.217	23.381
54	23.504	rVV	0.082	476400	23.453	23.535
55	24.057	rBV	0.154	560590	24.016	24.169
56	24.272	rBV	0.072	558842	24.221	24.292

57	24.620	rVB	0.143	328122	24.548	24.691
58	24.876	rBV	0.082	242203	24.835	24.917
59	25.009	rVB	0.174	1658563	24.917	25.091
60	25.173	rVV	0.113	295947	25.111	25.224
61	25.357	rVV	0.154	1636360	25.244	25.398
62	25.439	rVB	0.174	904807	25.398	25.572
63	26.237	rBV	0.143	1316503	26.166	26.309
64	26.350	rVB	0.123	244605	26.319	26.442
65	26.862	rVB	0.133	253182	26.800	26.933
66	27.179	rVB	0.276	955482	27.138	27.415
67	27.507	rBV	0.205	615448	27.425	27.630
68	28.285	rVB	0.235	825724	28.213	28.449
69	29.042	rBV	0.246	9106020	28.909	29.155
70	29.247	rVB	0.174	781364	29.175	29.349
71	29.575	rBV	0.143	634038	29.493	29.636
72	29.677	rVB	0.164	623367	29.636	29.800
73	30.813	rBV	0.184	1171507	30.721	30.905
74	31.018	rVV	0.164	688335	30.936	31.100
75	31.233	rVV	0.215	1415802	31.141	31.356
76	31.469	rVV	0.143	1926282	31.387	31.530
77	31.561	rVV	0.102	598895	31.540	31.643
78	31.735	rVV	0.164	704030	31.673	31.837
79	31.899	rVB	0.133	340252	31.858	31.991
80	32.277	rBV	0.225	13222448	32.154	32.380
81	32.482	rVB	0.276	4031122	32.390	32.666
82	33.496	rVV	0.154	659946	33.444	33.598
83	33.680	rVV	0.123	750809	33.608	33.731
84	33.792	rVB	0.235	1585720	33.731	33.966
85	34.253	rBV	0.246	1178321	34.161	34.407
86	34.775	rVB	0.164	415087	34.724	34.888
87	35.134	rVB	0.235	989935	35.041	35.277
88	35.594	rVB	0.328	4431586	35.451	35.778
89	35.952	rVB	0.205	688515	35.871	36.075
90	36.301	rBV	0.287	2102806	36.106	36.393
91	36.935	rBV	0.389	5059086	36.802	37.191
92	37.959	rBV	0.174	378455	37.887	38.061
93	38.266	rBV	0.358	9097127	38.072	38.430
94	38.532	rVB	0.184	564854	38.450	38.635
95	39.136	rBV	0.225	876323	39.024	39.249
96	39.351	rBV	0.164	369272	39.269	39.433
97	39.669	rVB	0.287	1539233	39.566	39.853
98	40.099	rBV	0.092	228085	40.027	40.119
99	40.262	rVB	0.358	3983901	40.150	40.508
100	40.887	rBV	0.256	2818991	40.754	41.010

CASE 25969
SDG# FFR76

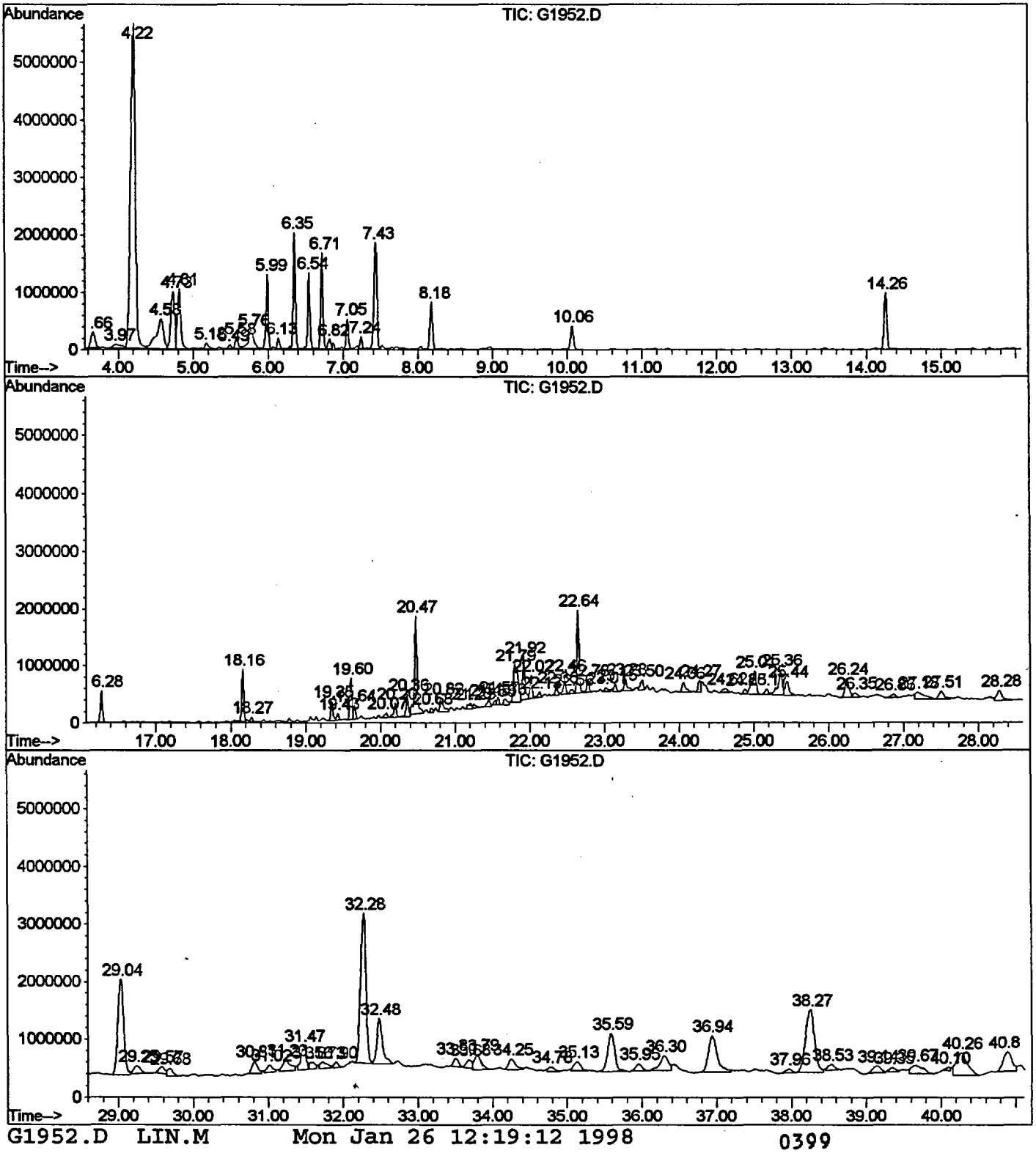
FFR81 58073-002 01-27-98

HD76 01/22/98 19:22

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1952.D
Operator :
Acquired : 22 Jan 98 19:22 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-002 FFR81
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 3
Quant File :CLPME7.RES



G1952.D LIN.M Mon Jan 26 12:19:12 1998

0399

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FFR82

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-003

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1953

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 35 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.7

Number TICs Found: 30

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

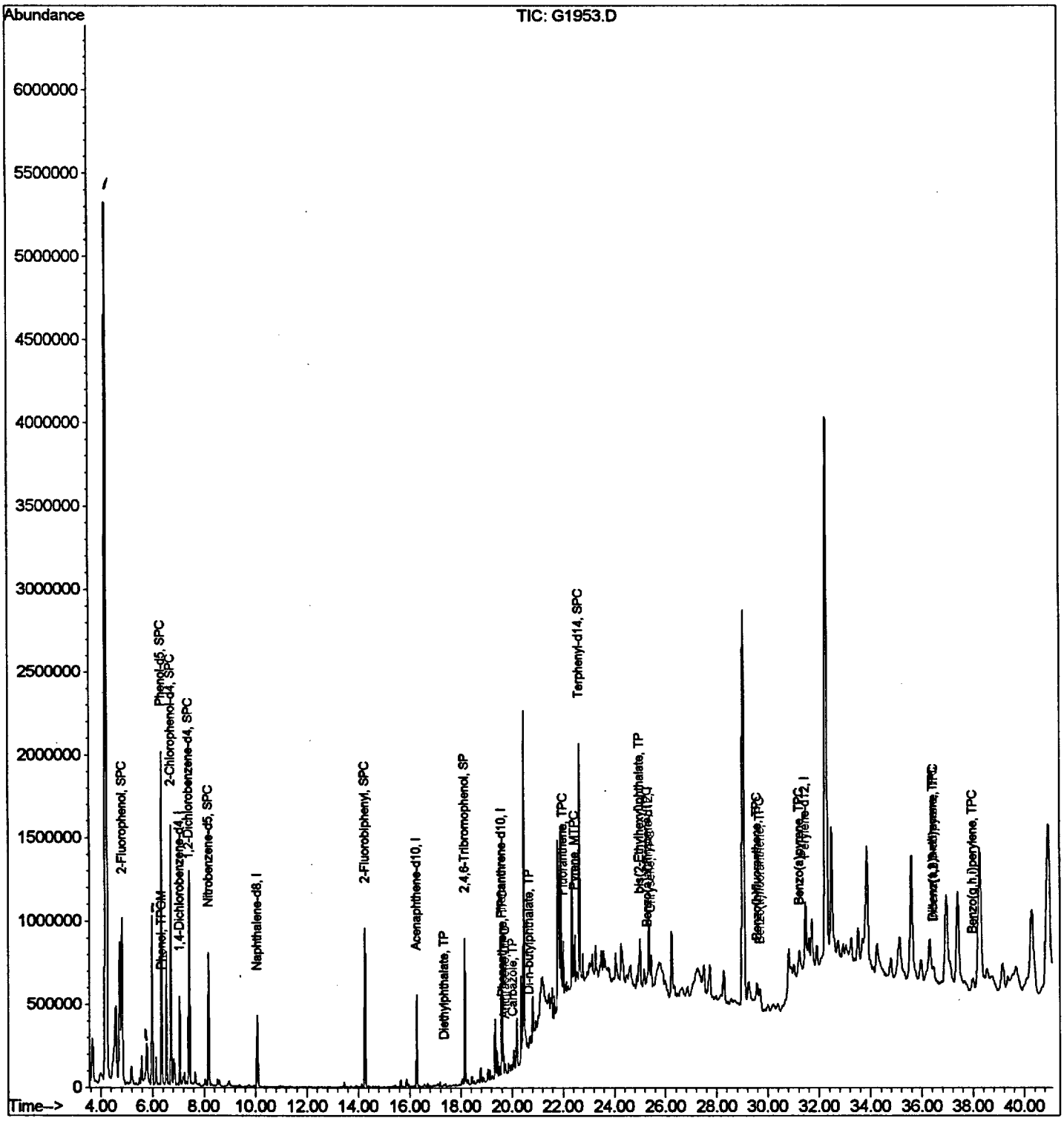
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.67	980.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.21	23000.	JNAB
3.		Unknown	5.78	1200.	J
4.		trans-3-Hexene-2,5-dione	5.99	2200.	JB
5.		Unknown	6.54	1400.	J
6.		Unknown acid type	19.35	540.	J
7.	112-39-0	Hexadecanoic acid, methyl es	20.21	540.	JN
8.		Unknown	20.36	770.	J
9.	57-10-3	Hexadecanoic acid	20.48	3300.	JN
10.		Unknown hydrocarbon	20.82	590.	J
11.	1058-61-3	Stigmast-4-en-3-one	21.17	820.	JN
12.		Unknown	21.80	3000.	J
13.	57-11-4	Octadecanoic acid	21.93	1500.	JN
14.		Unknown	22.35	1000.	J
15.		Unknown	24.64	600.	J
16.		Unknown	27.26	780.	J
17.		Unknown	27.74	780.	J
18.	7683-64-9	2,6,10,14,18,22-Tetracosahex	28.28	710.	JN
19.		Unknown	31.72	740.	J
20.	6971-40-0	17-Pentatriacontene	32.50	2200.	JN
21.		Unknown	33.87	2800.	J
22.	57-88-5	Cholest-5-en-3-ol (3.beta.)-	34.27	980.	JN
23.		Unknown	35.14	1300.	J
24.	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	36.32	540.	JN
25.		Unknown	36.96	2500.	J
26.		Unknown	37.40	2100.	J
27.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.26	3800.	JN
28.		Unknown	39.15	560.	J
29.		Unknown	40.30	2900.	J
30.		Unknown	40.95	5100.	J

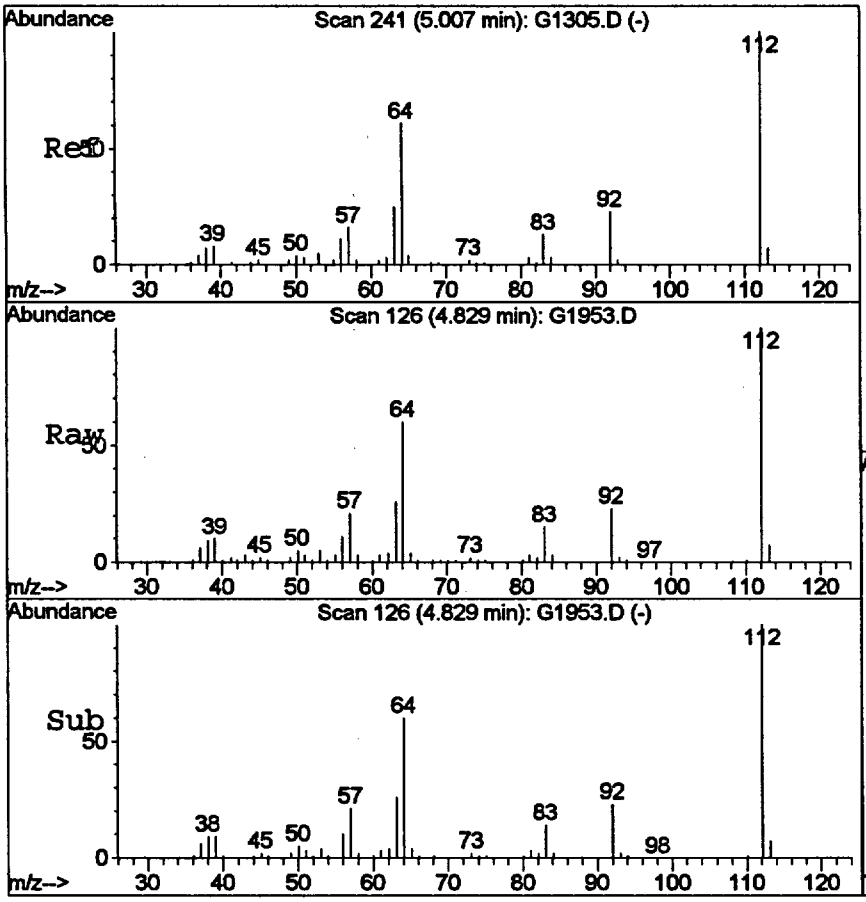
Quantitation Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial:
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:38 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

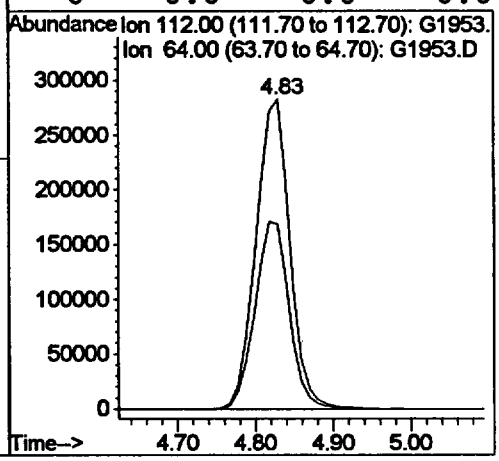


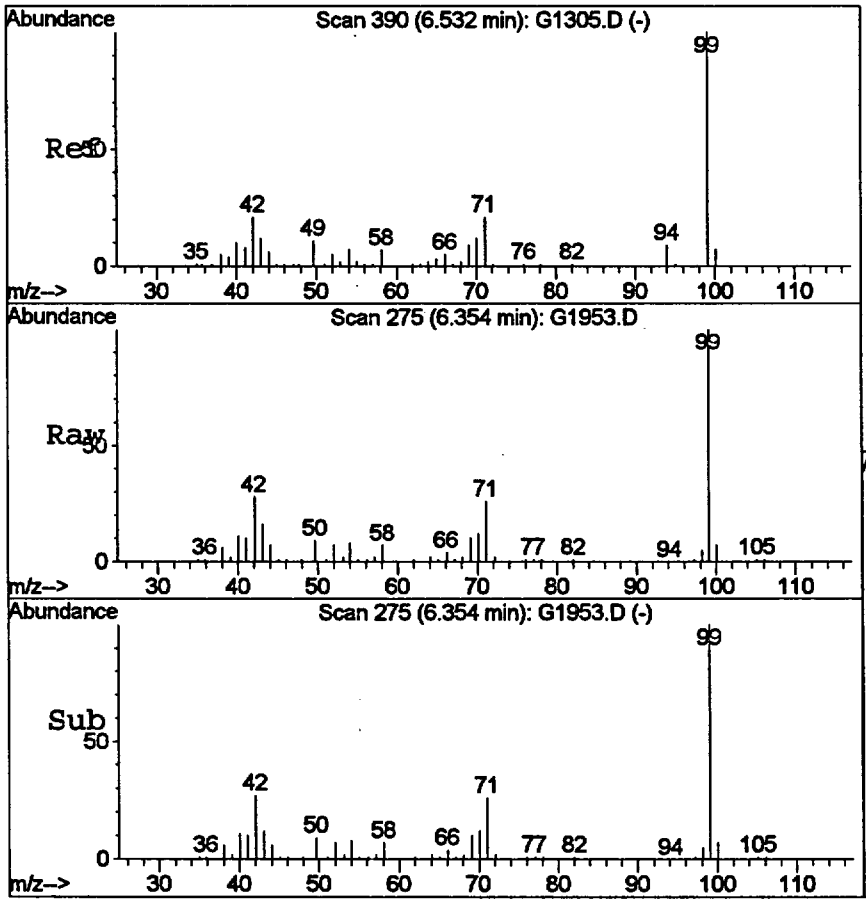


#2
2-Fluorophenol
Concen: 147.53 ng
RT: 4.83 min Scan# 126
Delta R.T. 0.02 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:112 Resp: 852547

Ion	Ratio	Lower	Upper
112	100		
64	61.2	40.2	80.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

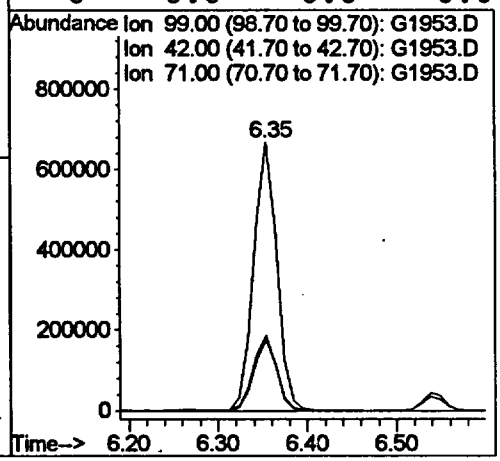




#3
Phenol-d5
Concen: 159.62 ng
RT: 6.35 min Scan# 275
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

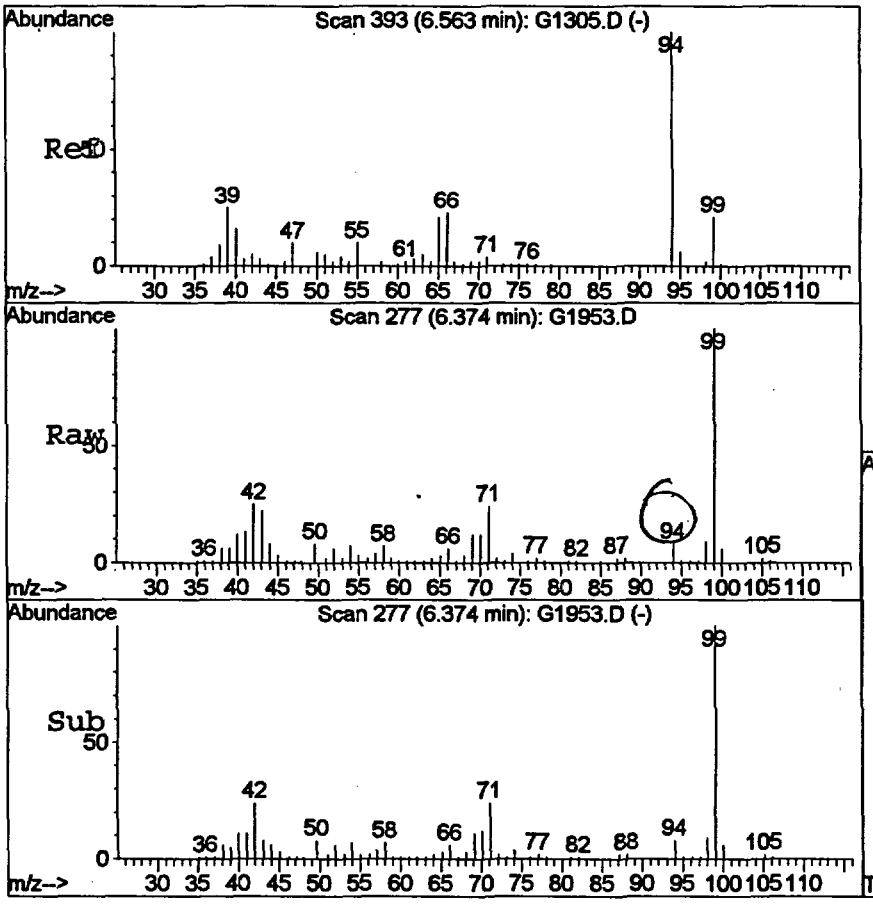
Tgt Ion:99 Resp: 1218464

Ion	Ratio	Lower	Upper
99	100		
42	27.8	9.1	49.1
71	26.8	6.1	46.1
0	0.0	0.0	0.0



0404

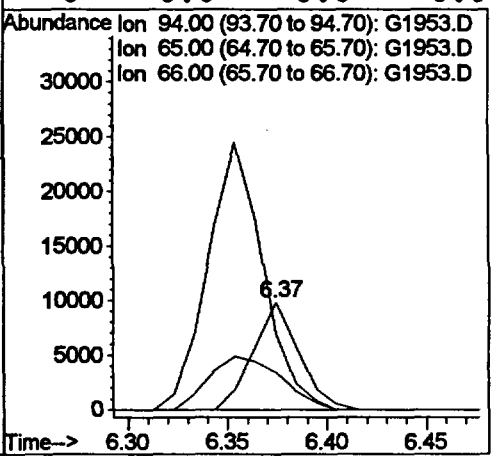
CASE 25969
SDG# FFR76

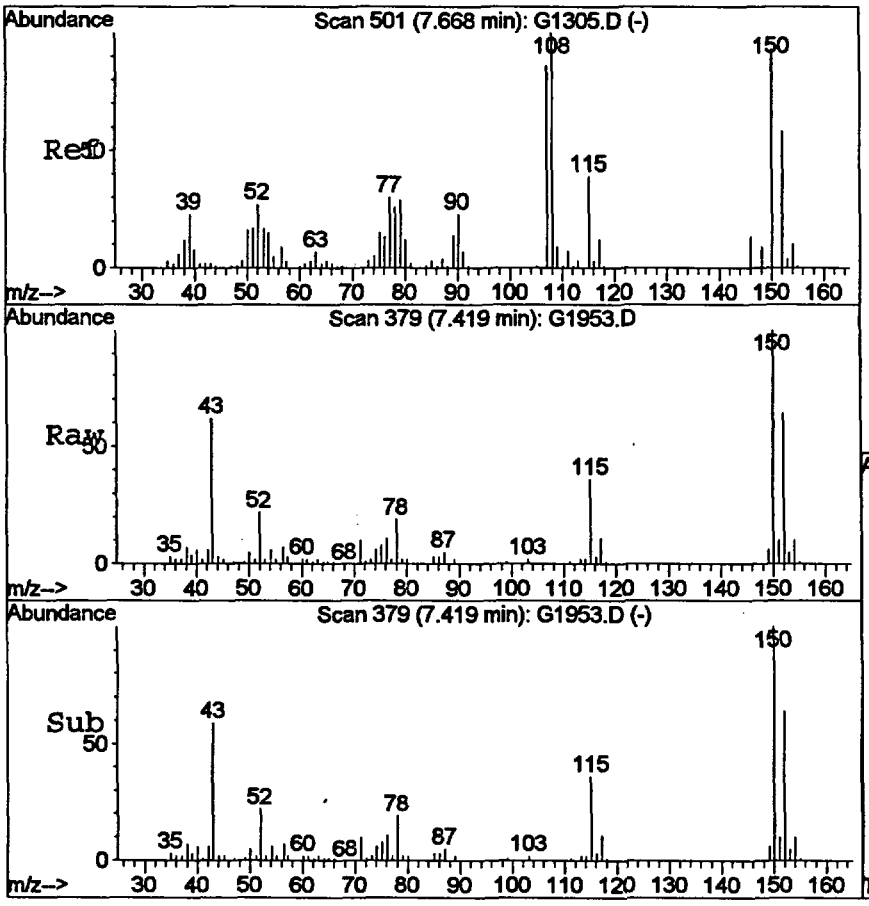


#4
Phenol
Concen: 1.93 ng
RT: 6.37 min / Scan# 277
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:94 Resp: 15792

Ion	Ratio	Lower	Upper
94	100		
65	0.0	5.6	45.6#
66	300.6	14.2	54.2#
0	0.0	0.0	0.0

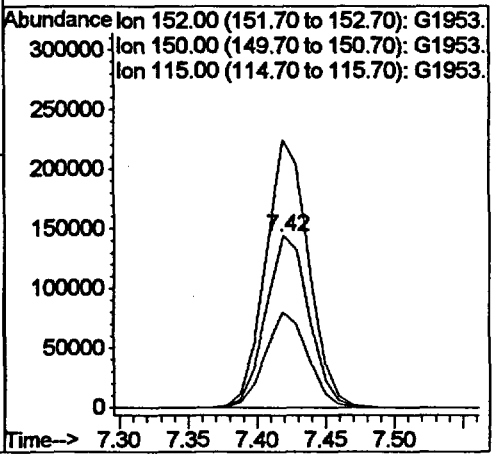




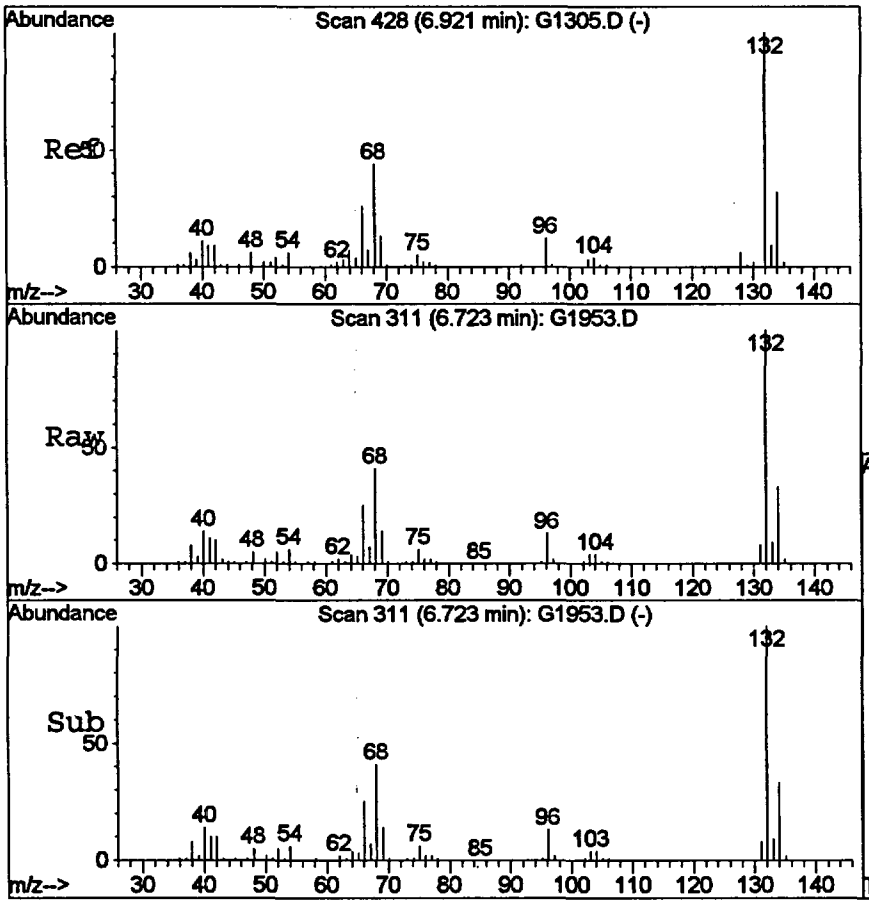
#7
1,2-Dichlorobenzene-d4
Concen: 82.24 ng
RT: 7.42 min Scan# 379
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:152 Resp: 314495

Ion	Ratio	Lower	Upper
152	100		
150	155.3	153.4	193.4
115	54.9	34.2	74.2
0	0.0	0.0	0.0



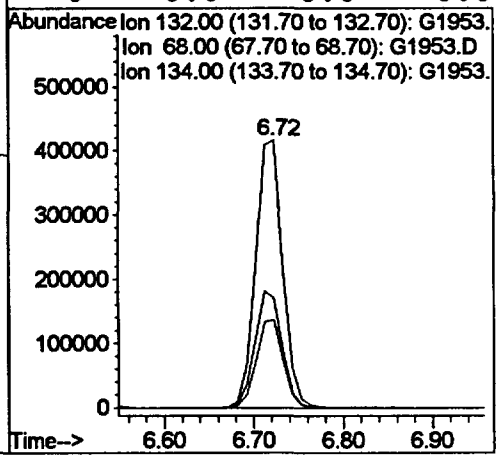
CASE 25969
SDG# FFR76

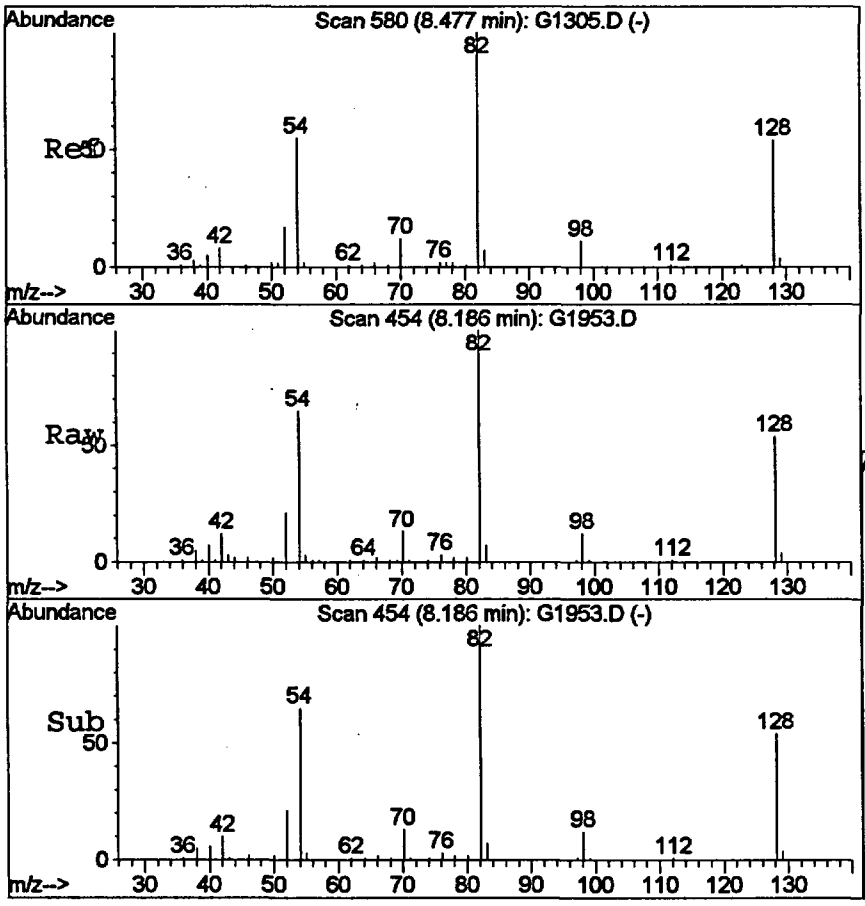


#8
2-Chlorophenol-d4
Concen: 149.42 ng
RT: 6.72 min Scan# 311
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:132 Resp: 876353

Ion	Ratio	Lower	Upper
132	100		
68	43.8	23.4	63.4
134	32.8	12.7	52.7
0	0.0	0.0	0.0

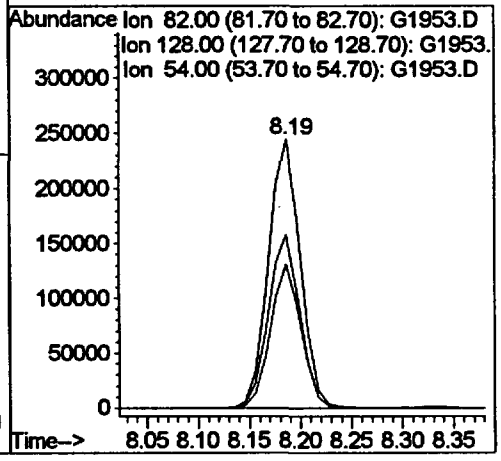




#18
Nitrobenzene-d5
Concen: 105.36 ng
RT: 8.19 min Scan# 454
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

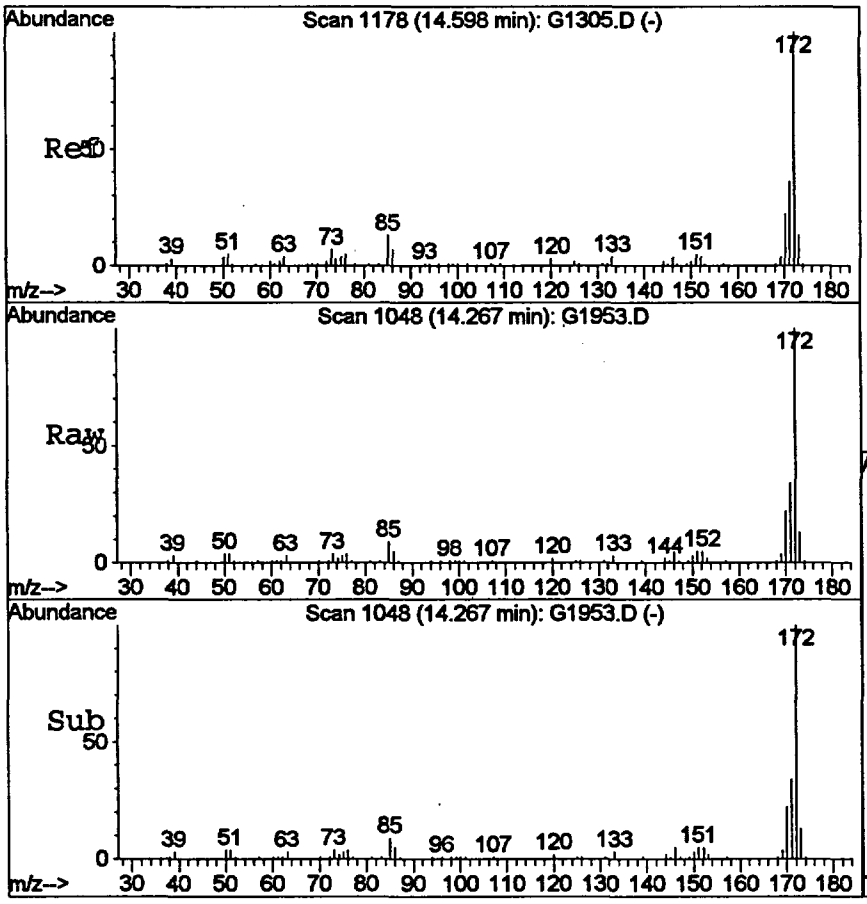
Tgt Ion:82 Resp: 527674

Ion	Ratio	Lower	Upper
82	100		
128	51.8	33.9	73.9
54	64.1	43.9	83.9
0	0.0	0.0	0.0



0406

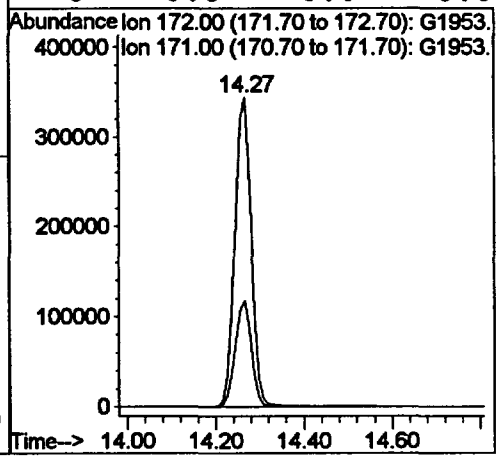
CASE 25969
SDG# FFR76

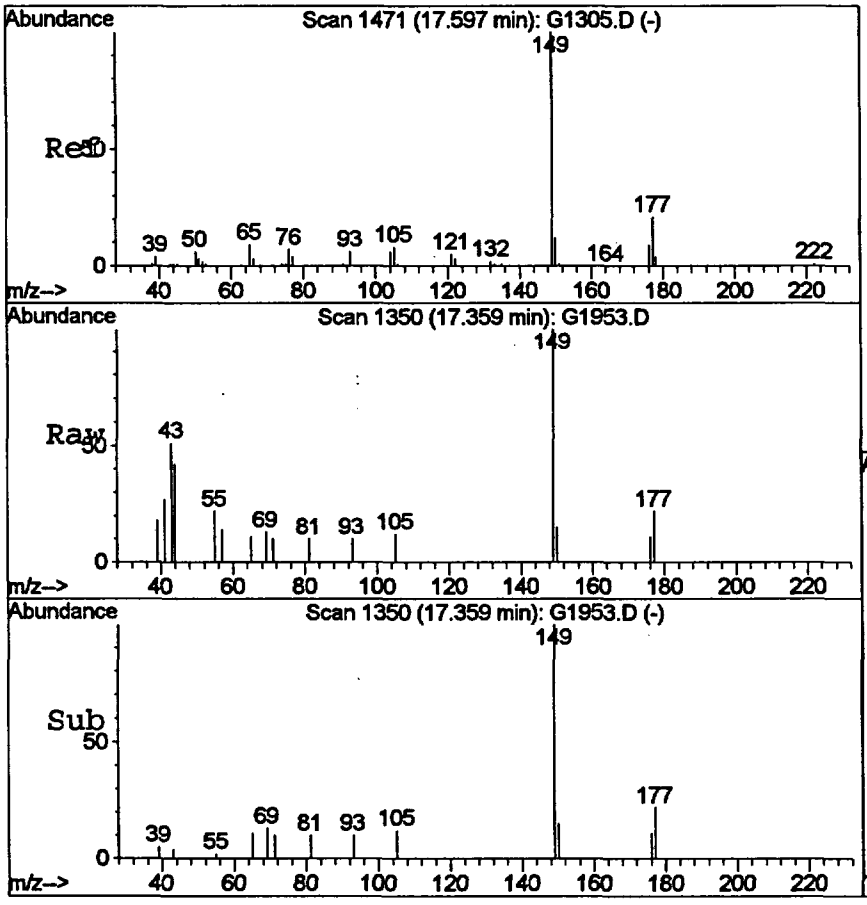


#35
2-Fluorobiphenyl
Concen: 109.69 ng
RT: 14.27 min Scan# 1048
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:172 Resp: 896005

Ion	Ratio	Lower	Upper
172	100		
171	33.7	14.1	54.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

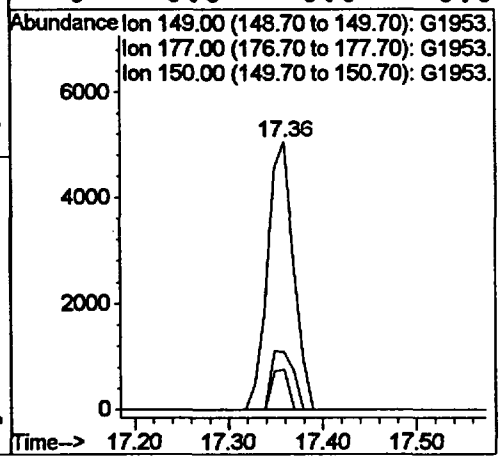




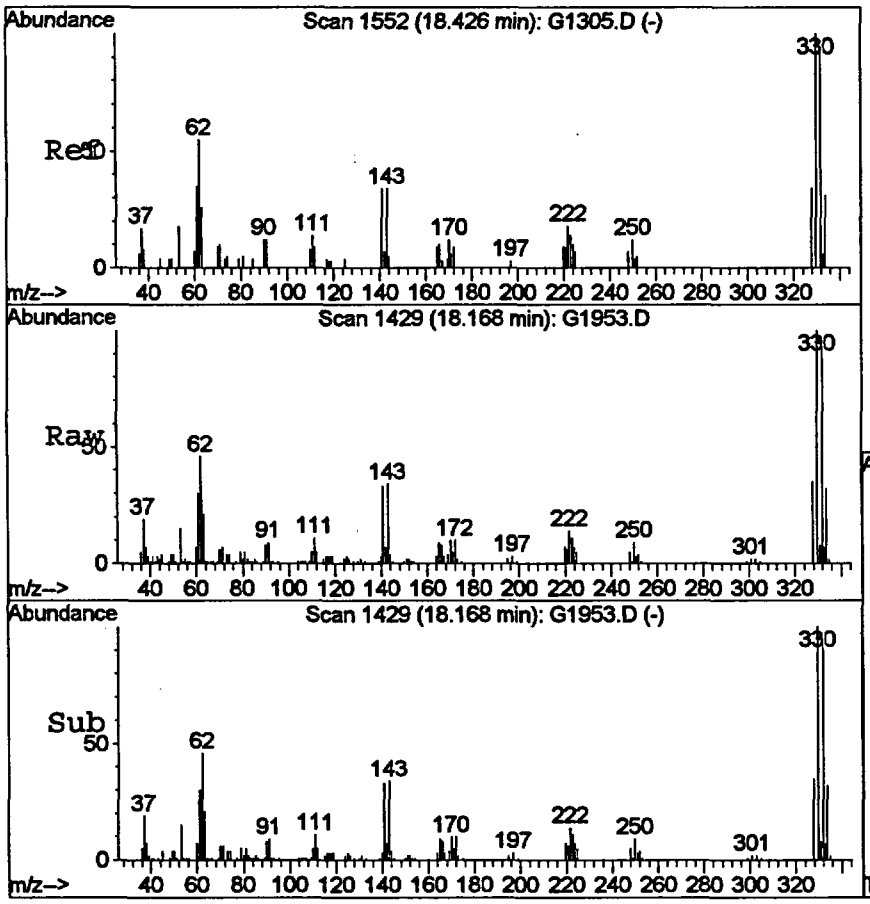
#47
Diethylphthalate
Concen: 1.04 ng m
RT: 17.36 min /Scan# 1350
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:149 Resp: 9621

Ion	Ratio	Lower	Upper
149	100		
177	21.7	0.9	40.9
150	15.0	0.0	31.7
0	0.0	0.0	0.0



0407

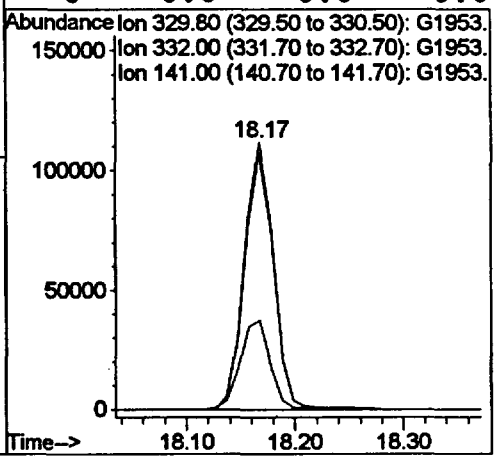


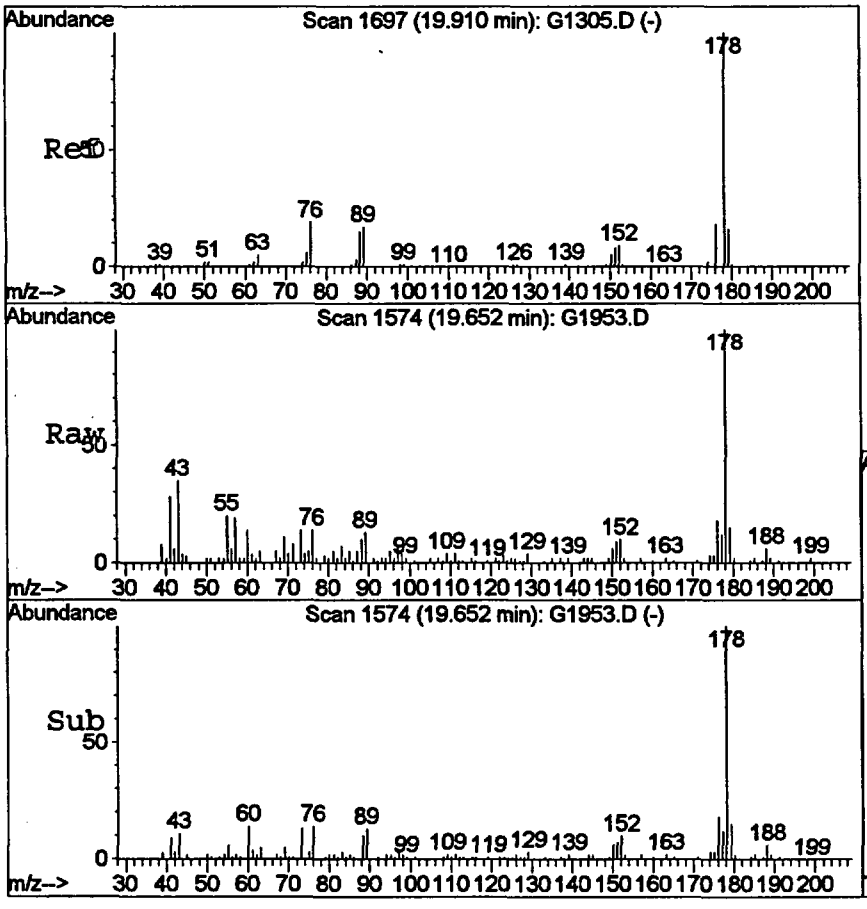
CASE 25969
SDG# FFR76

#52
2,4,6-Tribromophenol
Concen: 164.15 ng
RT: 18.17 min Scan# 1429
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:329.8 Resp: 205999

Ion	Ratio	Lower	Upper
330	100		
332	96.9	75.8	115.8
141	34.5	14.4	54.4
0	0.0	0.0	0.0

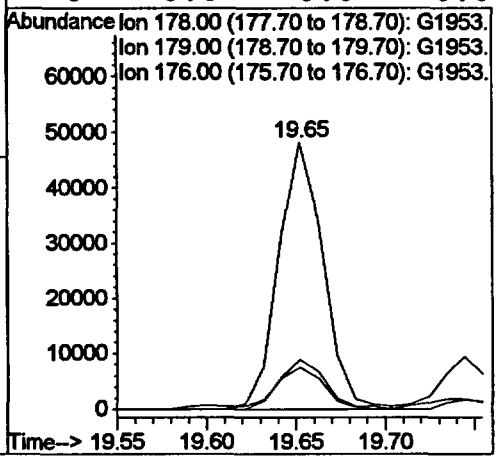




#58
Phenanthrene
Concen: 6.70 ng
RT: 19.65 min / Scan# 1574
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

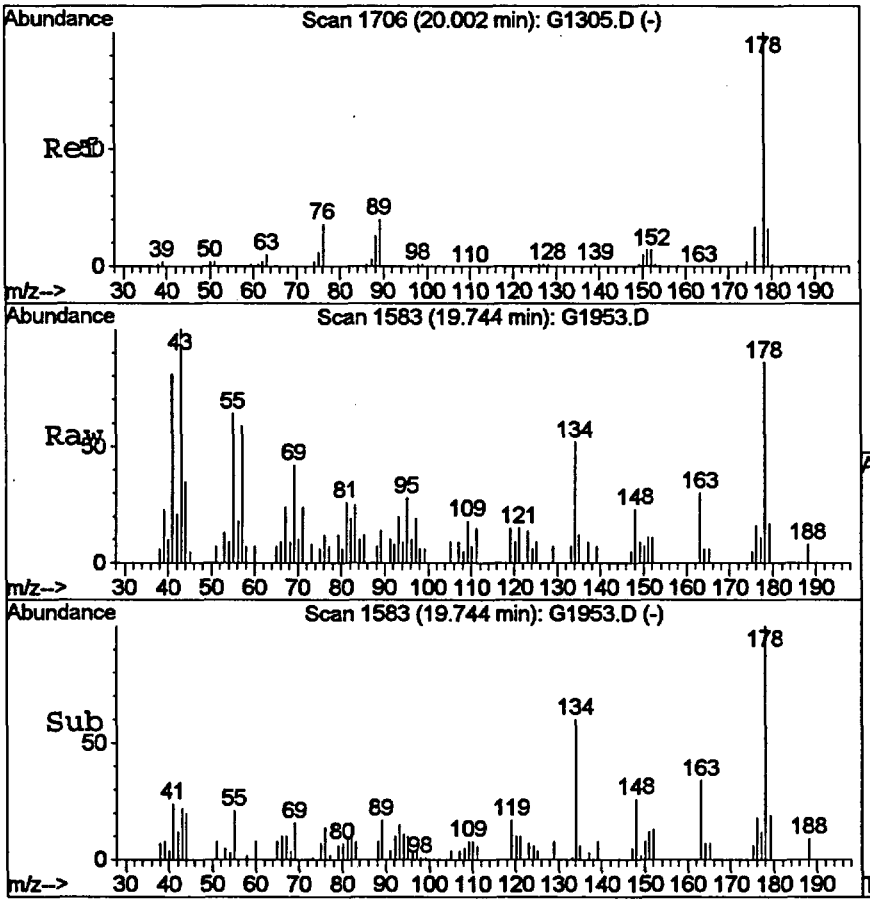
Tgt Ion:178 Resp: 83212

Ion	Ratio	Lower	Upper
178	100		
179	18.6	0.0	35.5
176	18.7	0.0	38.8
0	0.0	0.0	0.0



0408

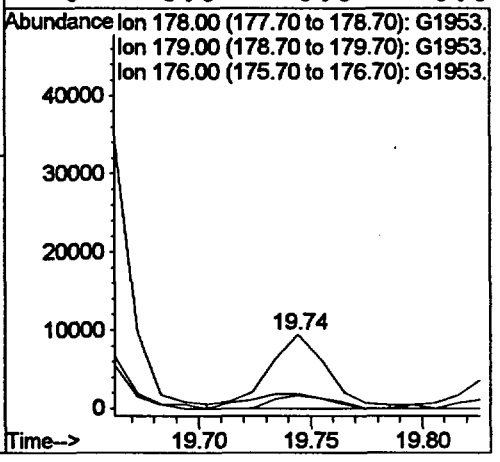
CASE 25969
SDG# FFR76

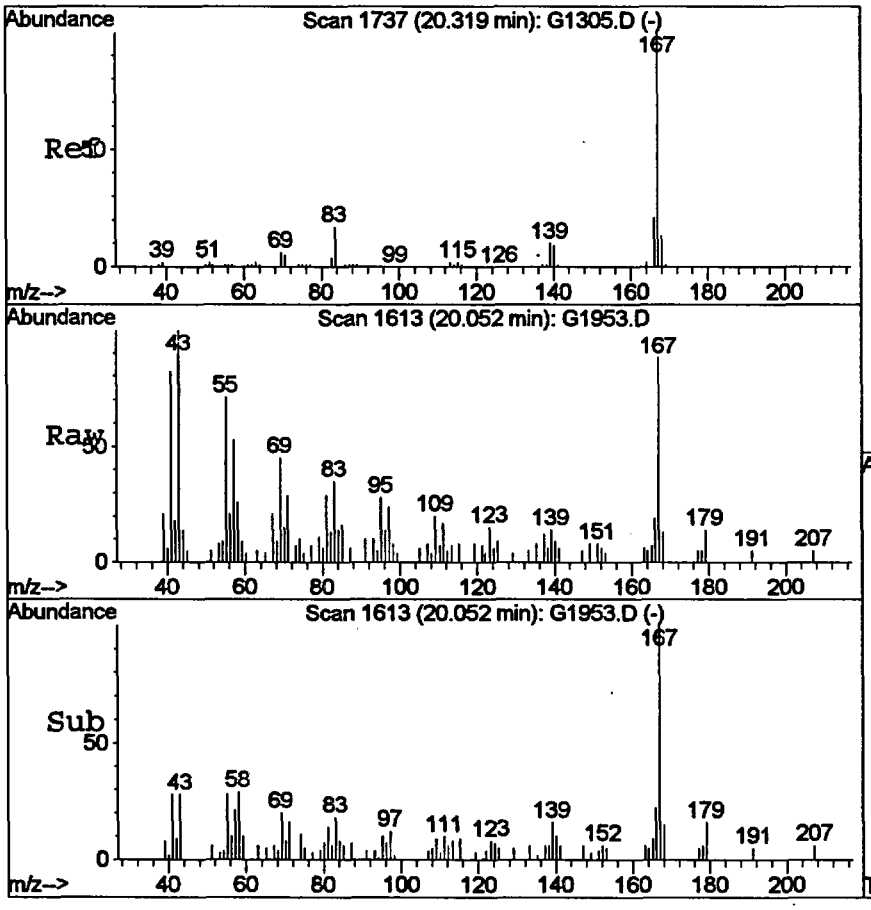


#59
Anthracene
Concen: 1.32 ng m
RT: 19.74 min / Scan# 1583
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:178 Resp: 17377

Ion	Ratio	Lower	Upper
178	100		
179	19.4	0.0	34.8
176	18.2	0.0	38.4
0	0.0	0.0	0.0

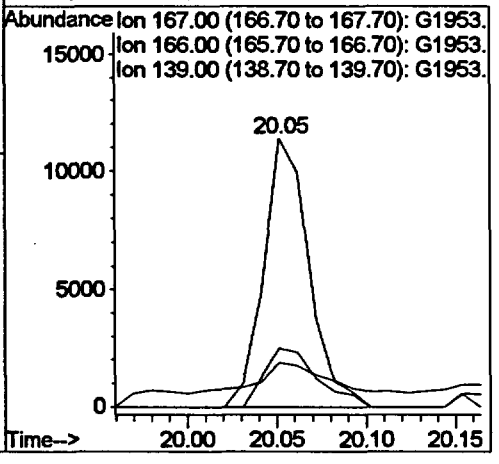


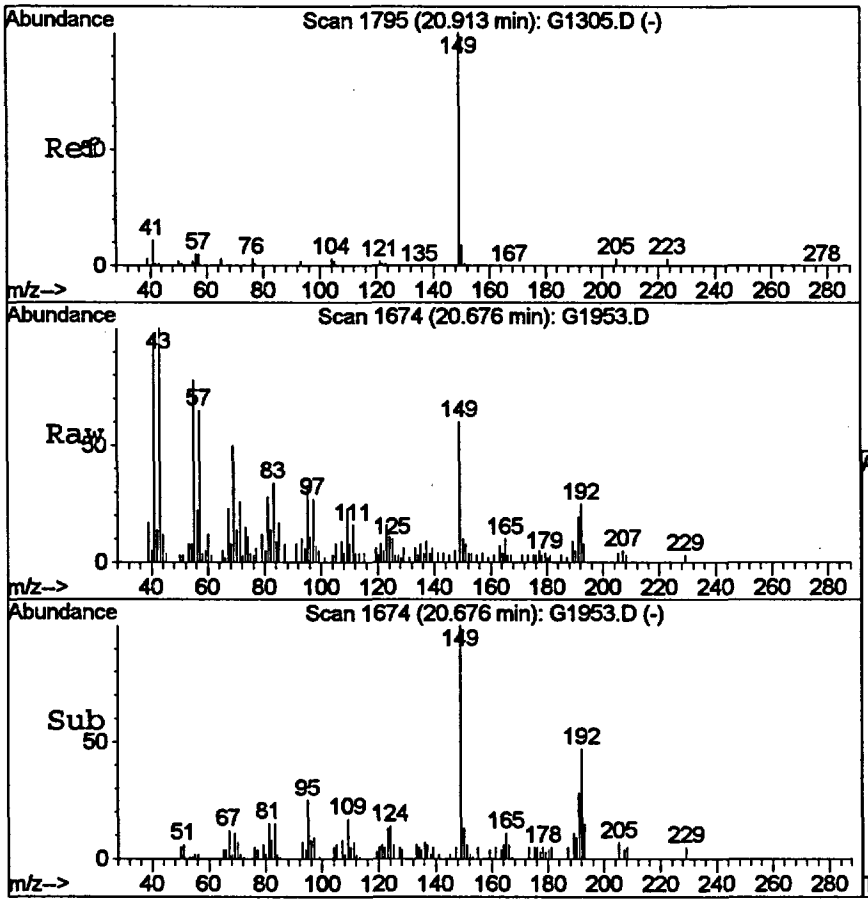


#60
Carbazole
Concen: 1.44 ng
RT: 20.05 min / Scan# 1613
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:167 Resp: 20044

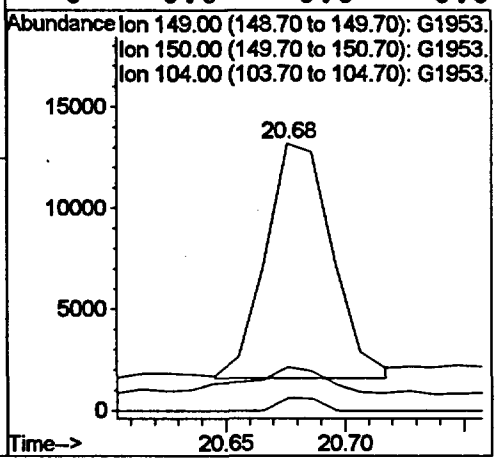
Ion	Ratio	Lower	Upper
167	100		
166	0.0	0.1	40.1#
139	0.0	0.0	31.4
0	0.0	0.0	0.0

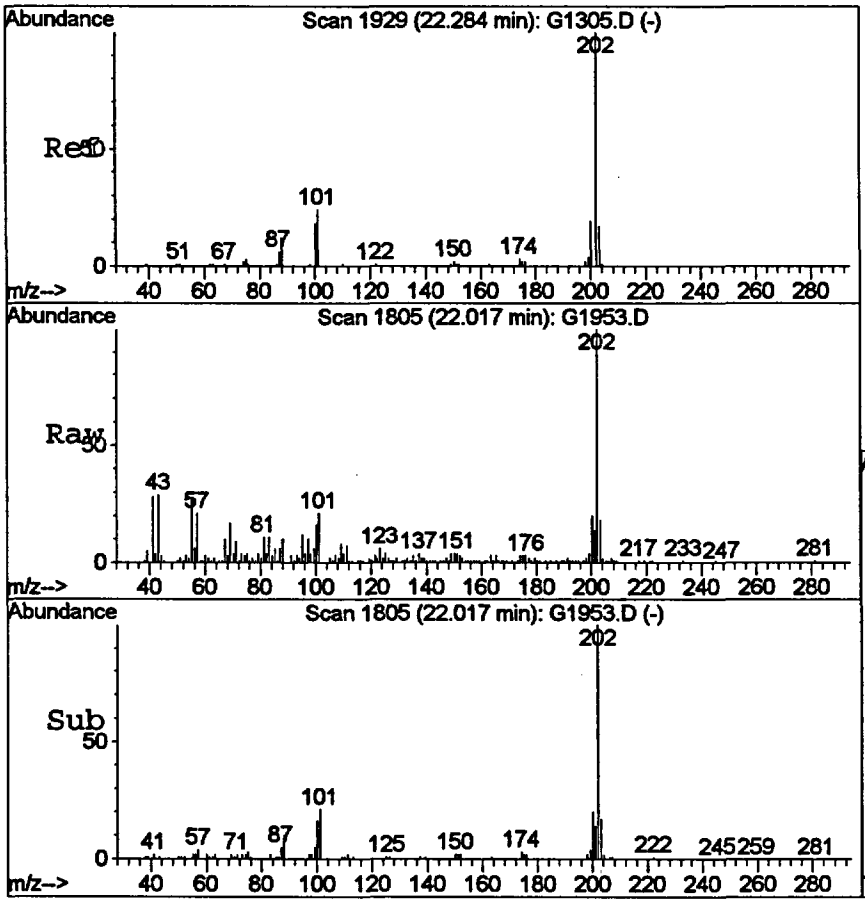




#61
Di-n-butylphthalate
Concen: 1.16 ng m
RT: 20.68 min / Scan# 1674
Delta R.T. -0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

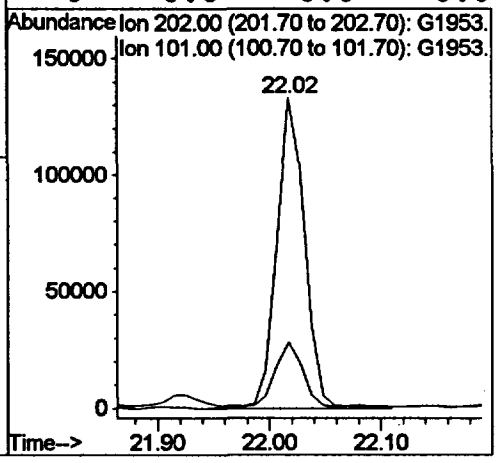
Tgt Ion:149	Resp:	22470	
Ion	Ratio	Lower	Upper
149	100		
150	16.2	0.0	29.2
104	4.8	0.0	23.2
0	0.0	0.0	0.0

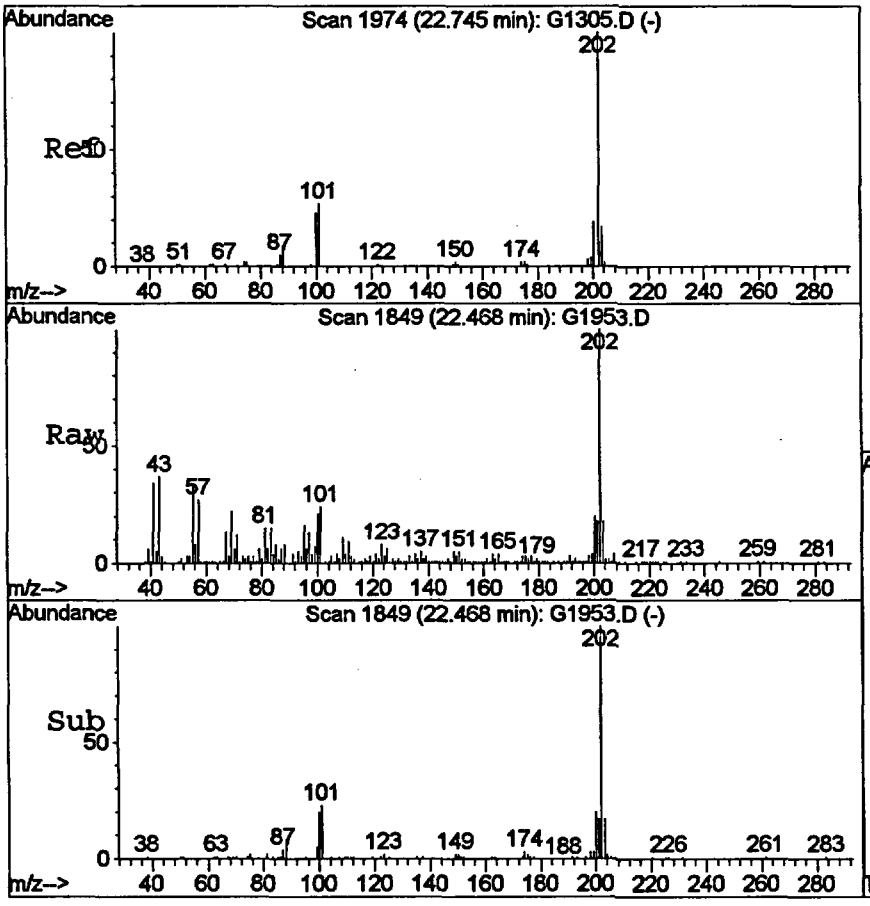




#62
Fluoranthene
Concen: 18.45 ng
RT: 22.02 min / Scan# 1805
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:202	Resp:	231738	
Ion	Ratio	Lower	Upper
202	100		
101	20.1	0.6	40.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0





#64
Pyrene
Concen: 15.98 ng
RT: 22.47 min / Scan# 1849
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

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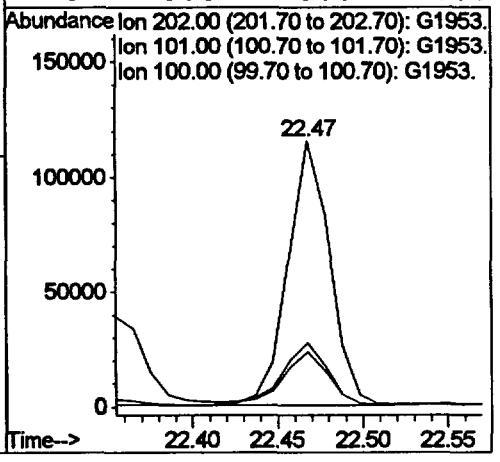
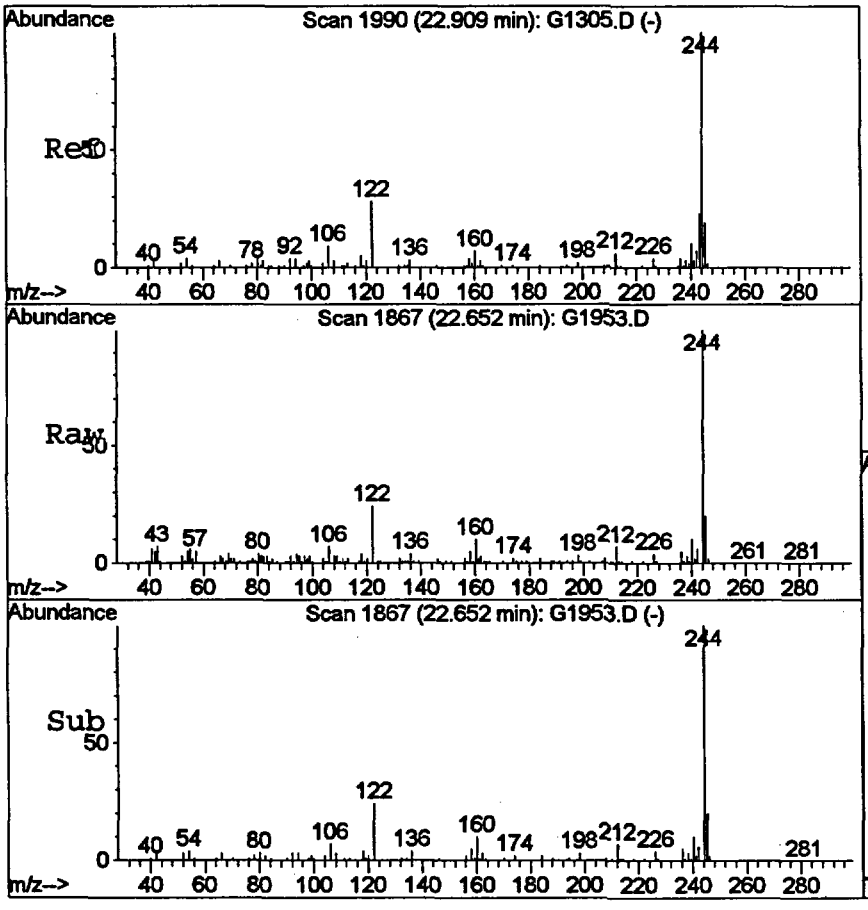
Tgt Ion:202 Resp: 197677

Ion	Ratio	Lower	Upper
202	100		
101	25.7	5.7	45.7
100	21.2	0.8	40.8
0	0.0	0.0	0.0

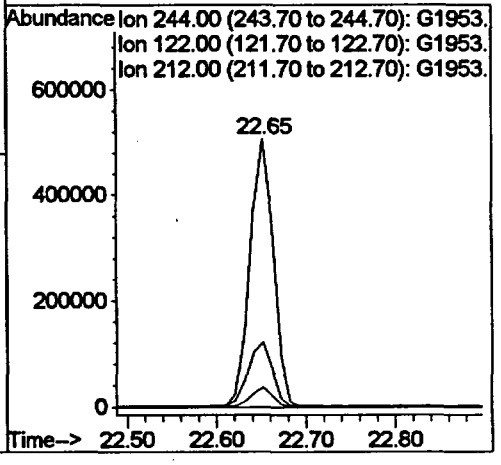




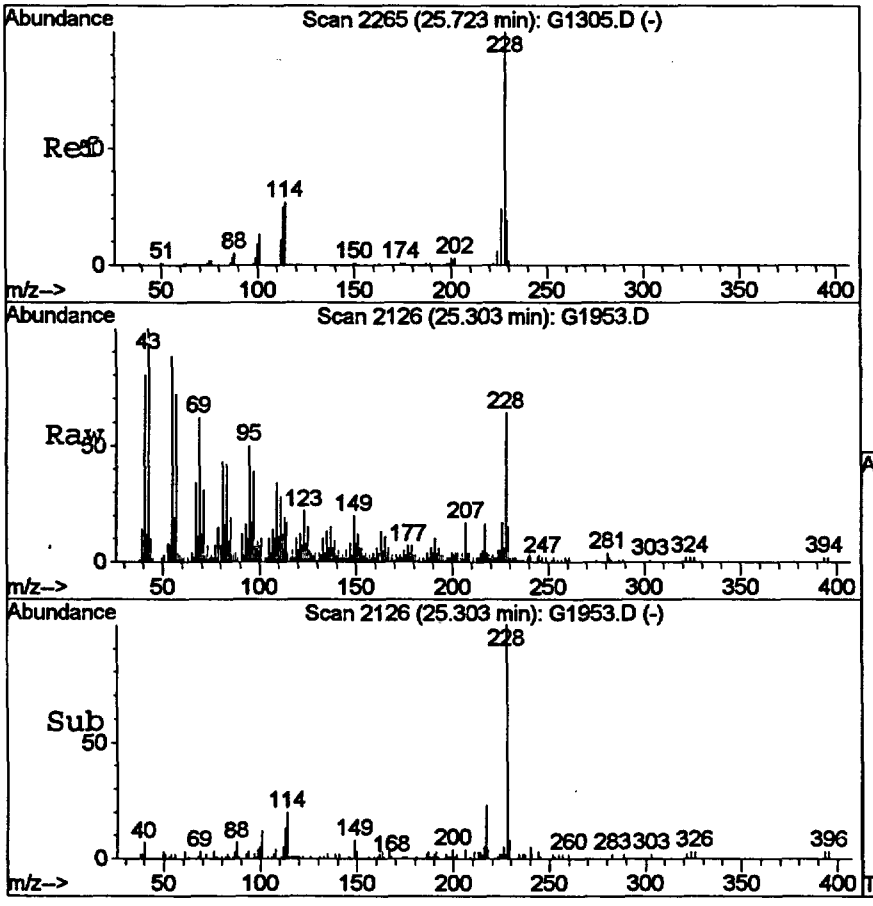
#65
Terphenyl-d14
Concen: 116.44 ng
RT: 22.65 min Scan# 1867
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:244 Resp: 932651

Ion	Ratio	Lower	Upper
244	100		
122	24.1	3.7	43.7
212	6.8	0.0	27.0
0	0.0	0.0	0.0



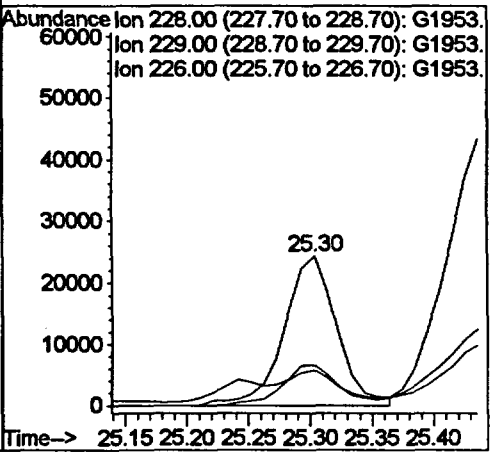
0411

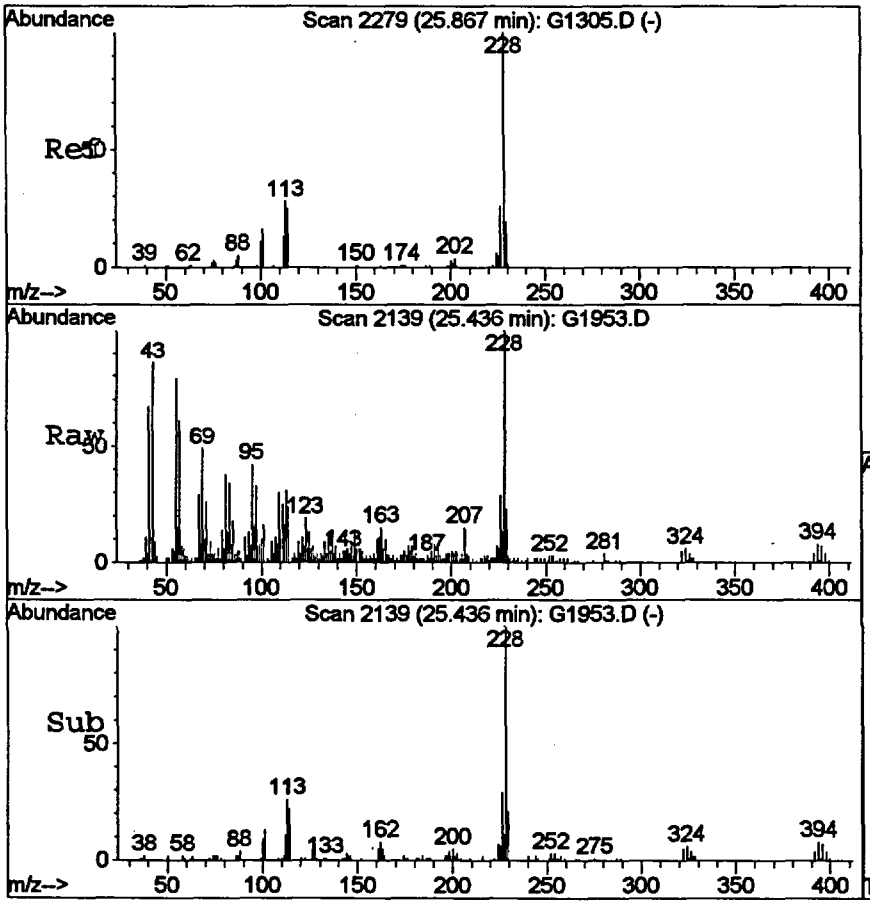


#67
Benzo(a)anthracene
Concen: 7.26 ng m
RT: 25.30 min / Scan# 2126
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:228 Resp: 71904

Ion	Ratio	Lower	Upper
228	100		
229	23.6	9.8	29.8
226	26.9	16.2	36.2
0	0.0	0.0	0.0

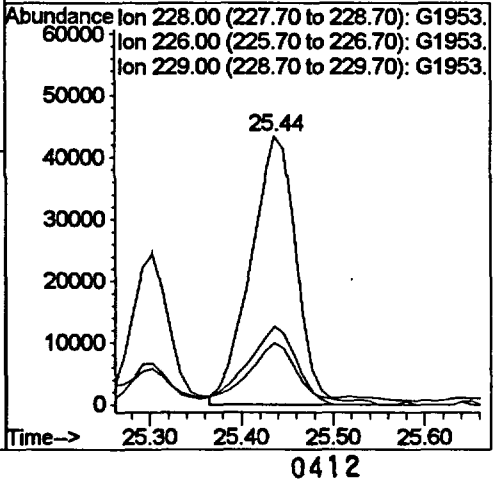




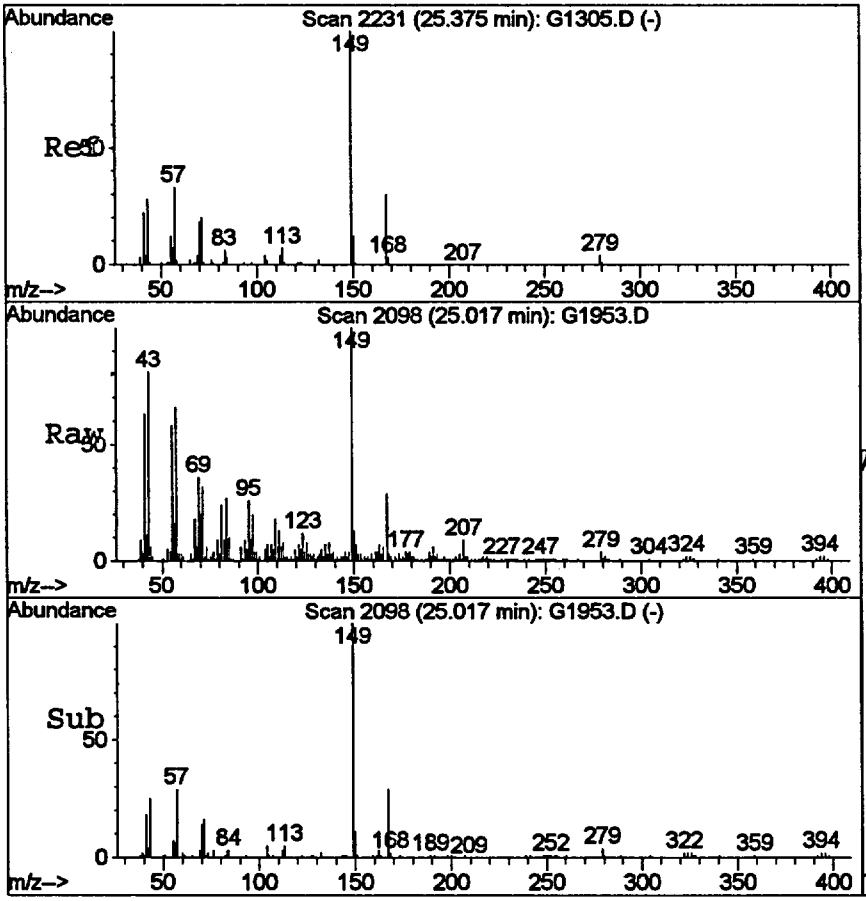
#69
Chrysene
Concen: 15.93 ng
RT: 25.44 min / Scan# 2139
Delta R.T. -0.00 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:228 Resp: 150423

Ion	Ratio	Lower	Upper
228	100		
226	31.4	19.0	39.0
229	19.2	9.9	29.9
0	0.0	0.0	0.0

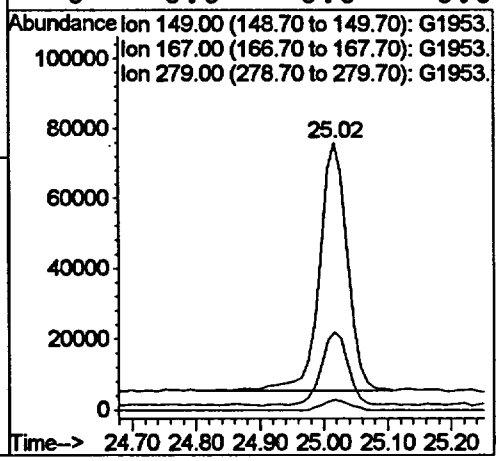


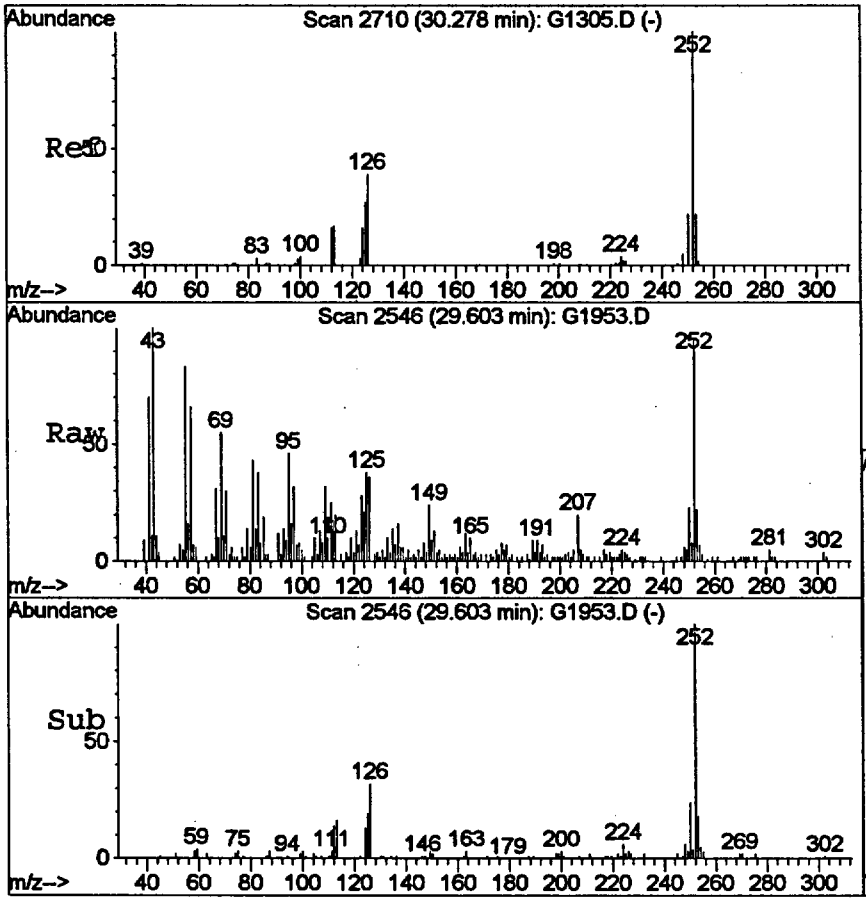
0412



#70
bis(2-Ethylhexyl)phthalate
Concen: 16.04 ng
RT: 25.02 min / Scan# 2098
Delta R.T. 0.01 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

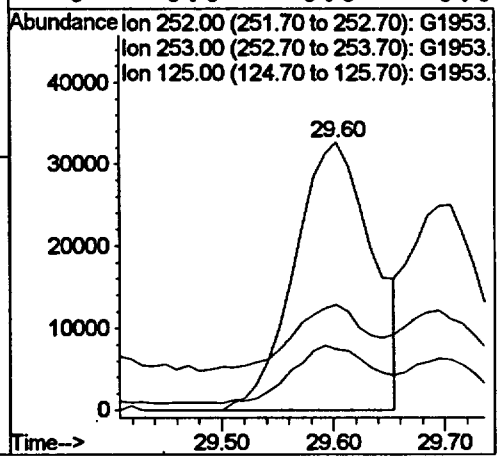
Tgt Ion:149	Resp:	214744	
Ion	Ratio	Lower	Upper
149	100		
167	28.6	10.6	50.6
279	0.0	0.0	23.8
0	0.0	0.0	0.0

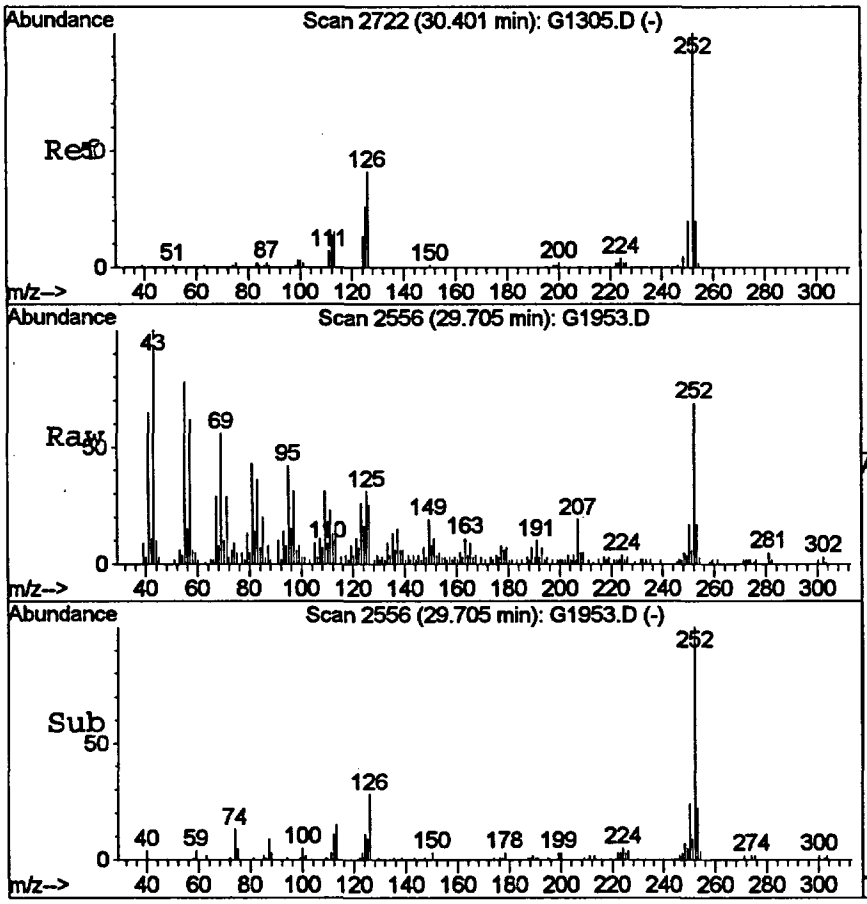




#73
Benzo(b)fluoranthene
Concen: 13.11 ng
RT: 29.60 min / Scan# 2546
Delta R.T. 0.03 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

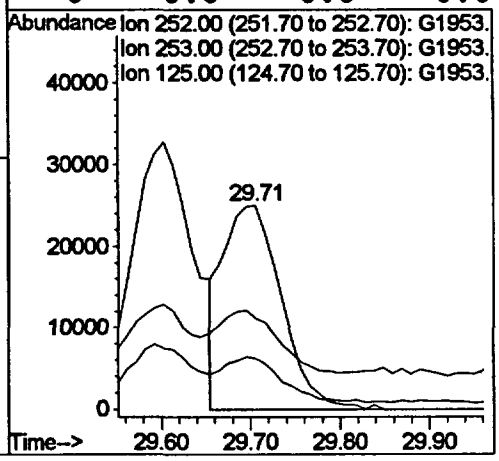
Tgt Ion:252	Resp:	159281	
Ion	Ratio	Lower	Upper
252	100		
253	21.7	2.4	42.4
125	23.0	5.5	45.5
0	0.0	0.0	0.0

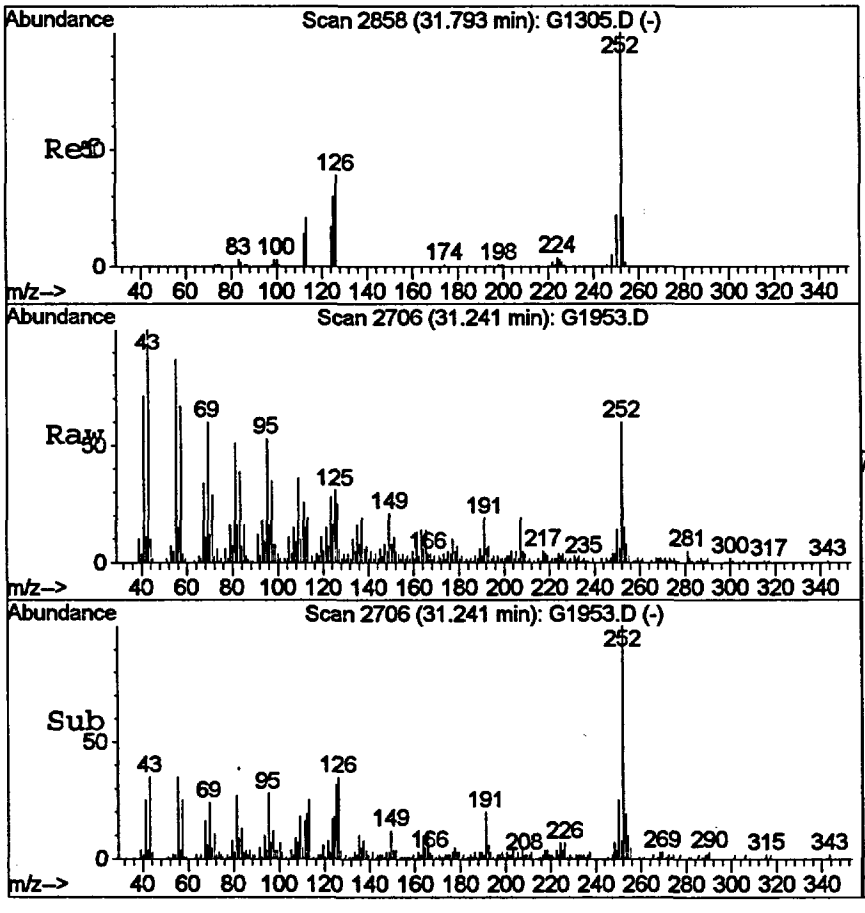




#74
Benzo(k)fluoranthene
Concen: 9.87 ng
RT: 29.71 min /Scan# 2556
Delta R.T. 0.02 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

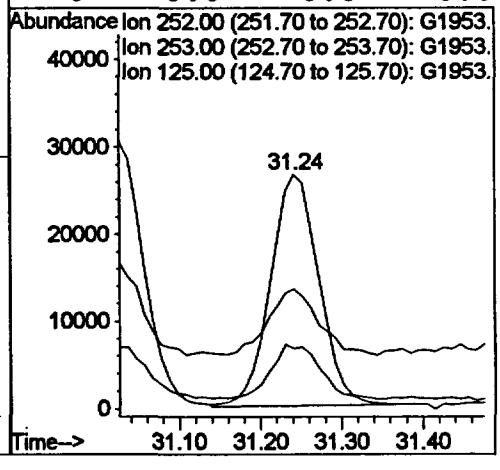
Tgt Ion:252	Resp:	114186	
Ion	Ratio	Lower	Upper
252	100		
253	21.5	2.3	42.3
125	31.8	5.0	45.0
0	0.0	0.0	0.0





#75
Benzo(a)pyrene
Concen: 9.81 ng
RT: 31.24 min/ Scan# 2706
Delta R.T. 0.02 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:252	Resp:	108954	
Ion	Ratio	Lower	Upper
252	100		
253	23.5	12.0	32.0
125	31.2	19.7	35.7
0	0.0	0.0	0.0



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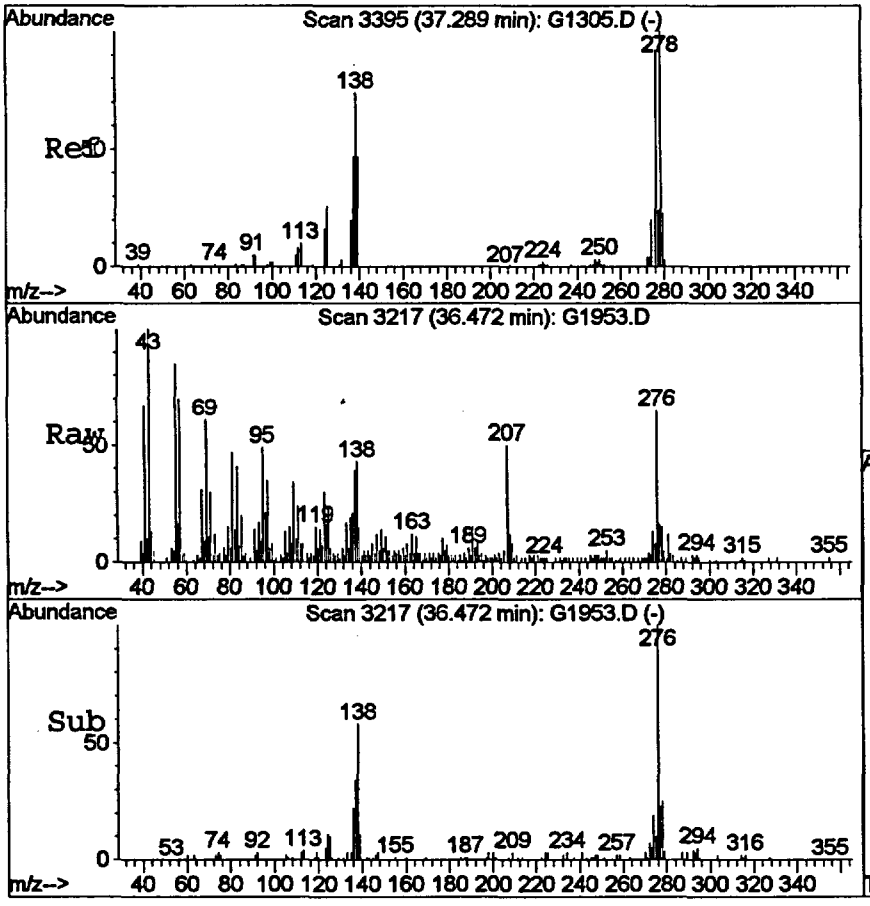
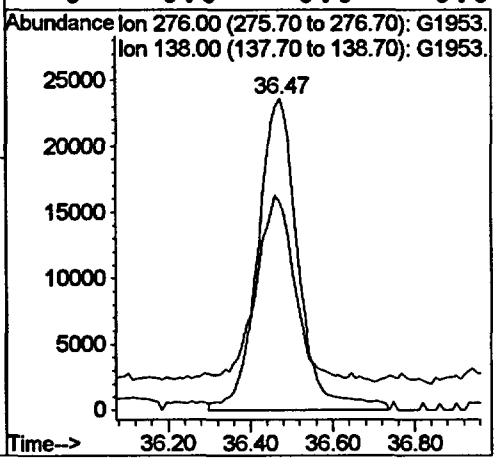
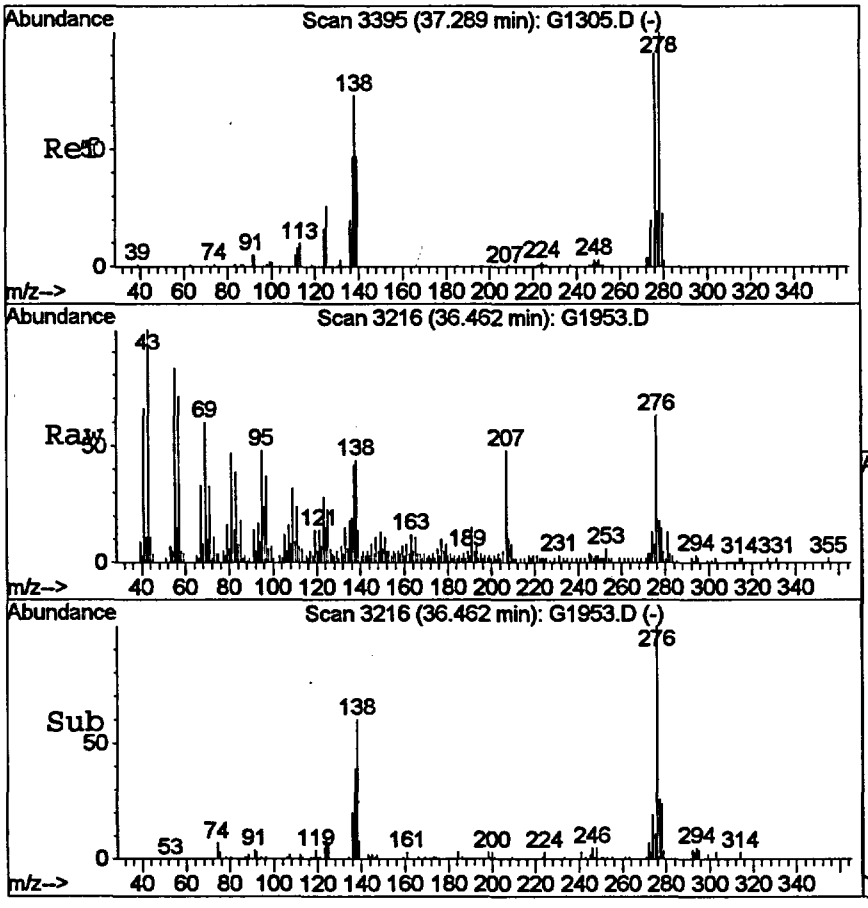
SDG# FFR76



#76
Indeno(1,2,3-cd)pyrene
Concen: 12.61 ng
RT: 36.47 min / Scan# 3217
Delta R.T. 0.06 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

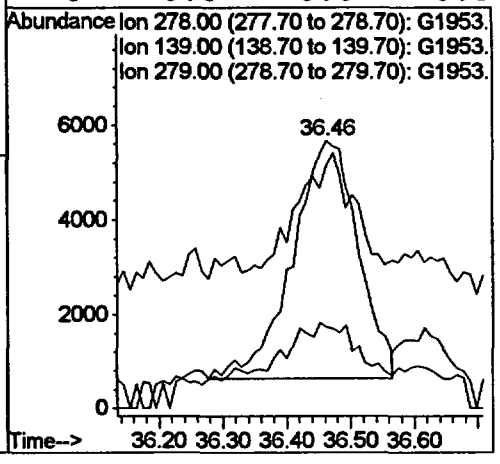
Tgt Ion:276	Resp:	161313	
Ion	Ratio	Lower	Upper
276	100		
138	53.9	47.5	87.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

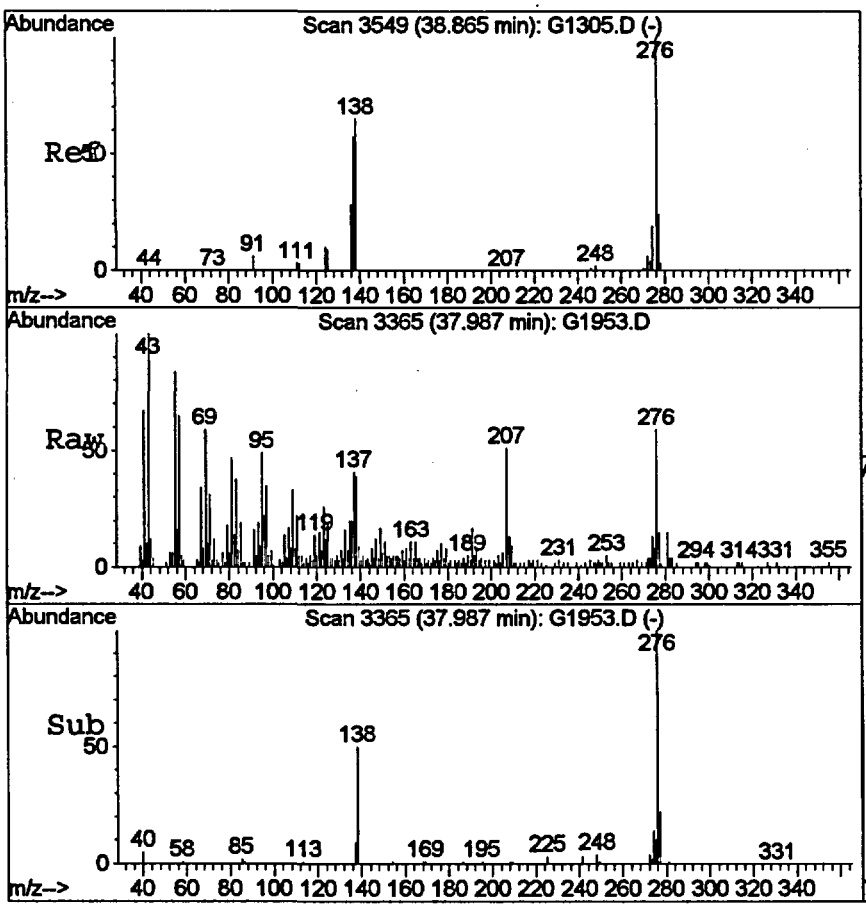




#77
Dibenz(a,h)anthracene
Concen: 3.27 ng
RT: 36.46 min / Scan# 3216
Delta R.T. 0.04 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:278	Resp:	36146	
Ion	Ratio	Lower	Upper
278	100		
139	0.0	21.5	61.5#
279	0.0	3.9	43.9#
0	0.0	0.0	0.0

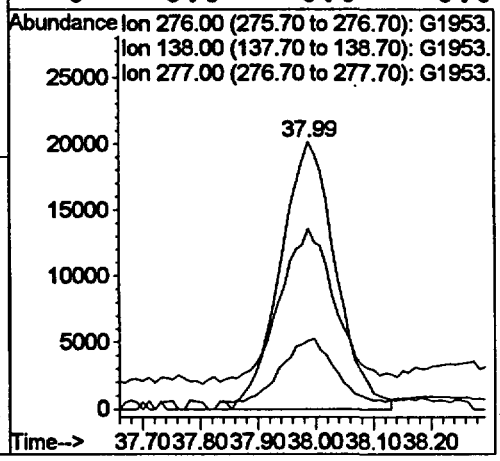




#78
Benzo(g,h,i)perylene
Concen: 12.60 ng
RT: 37.99 min / Scan# 3365
Delta R.T. 0.08 min
Lab File: G1953.D
Acq: 22 Jan 98 20:08

Tgt Ion:276 Resp: 134598

Ion	Ratio	Lower	Upper
276	100		
138	56.8	37.7	77.7
277	27.9	3.9	43.9
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:38 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.06	152	193741	40.00	ng	0.00
17) Naphthalene-d8	10.07	136	563827	40.00	ng	0.00
31) Acenaphthene-d10	16.28	164	275378	40.00	ng	0.00
51) Phenanthrene-d10	19.61	188	504588	40.00	ng	0.00
63) Chrysene-d12	25.36	240	387700	40.00	ng	0.00
71) Perylene-d12	31.48	264	442129	40.00	ng	0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.83	112	852547	147.53	ng	0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery = 98.35%			
3) Phenol-d5	6.35	99	1218464	159.62	ng	0.00
Surrogate Spike 150.000	Range 24 - 113		Recovery = 106.41%			
7) 1,2-Dichlorobenzene-d4	7.42	152	314495	82.24	ng	0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 82.24%			
8) 2-Chlorophenol-d4	6.72	132	876353	149.42	ng	0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 99.61%			
18) Nitrobenzene-d5	8.19	82	527674	105.36	ng	0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 105.36%			
35) 2-Fluorobiphenyl	14.27	172	896005	109.69	ng	0.00
Surrogate Spike 100.000	Range 30 - 115		Recovery = 109.69%			
52) 2,4,6-Tribromophenol	18.17	330	205999	164.15	ng	0.00
Surrogate Spike 150.000	Range 19 - 122		Recovery = 109.43%			
65) Terphenyl-d14	22.65	244	932651	116.44	ng	0.00
Surrogate Spike 100.000	Range 18 - 137		Recovery = 116.44%			
Target Compounds						Qvalue
4) Phenol	6.37	94	15792	1.93	ng	# 1
47) Diethylphthalate	17.36	149	9621m	1.04	ng	0
58) Phenanthrene	19.65	178	83212	6.70	ng	97
59) Anthracene	19.74	178	17377m	1.32	ng	95
60) Carbazole	20.05	167	20044	1.44	ng	# 61
61) Di-n-butylphthalate	20.68	149	22470m	1.16	ng	79
62) Fluoranthene	22.02	202	231738	18.45	ng	99
64) Pyrene	22.47	202	197677	15.96	ng	100
67) Benzo(a)anthracene	25.30	228	71904m	7.26	ng	94
69) Chrysene	25.44	228	150423	15.93	ng	97
70) bis(2-Ethylhexyl)phthalate	25.02	149	214744	16.04	ng	# 95
73) Benzo(b)fluoranthene	29.60	252	159281	13.11	ng	97
74) Benzo(k)fluoranthene	29.71	252	114186	9.87	ng	92
75) Benzo(a)pyrene	31.24	252	108954	9.81	ng	95
76) Indeno(1,2,3-cd)pyrene	36.47	276	161313	12.61	ng	83
77) Dibenz(a,h)anthracene	36.46	278	36146	3.27	ng	# 40
78) Benzo(g,h,i)perylene	37.99	276	134598	12.60	ng	97

0417

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

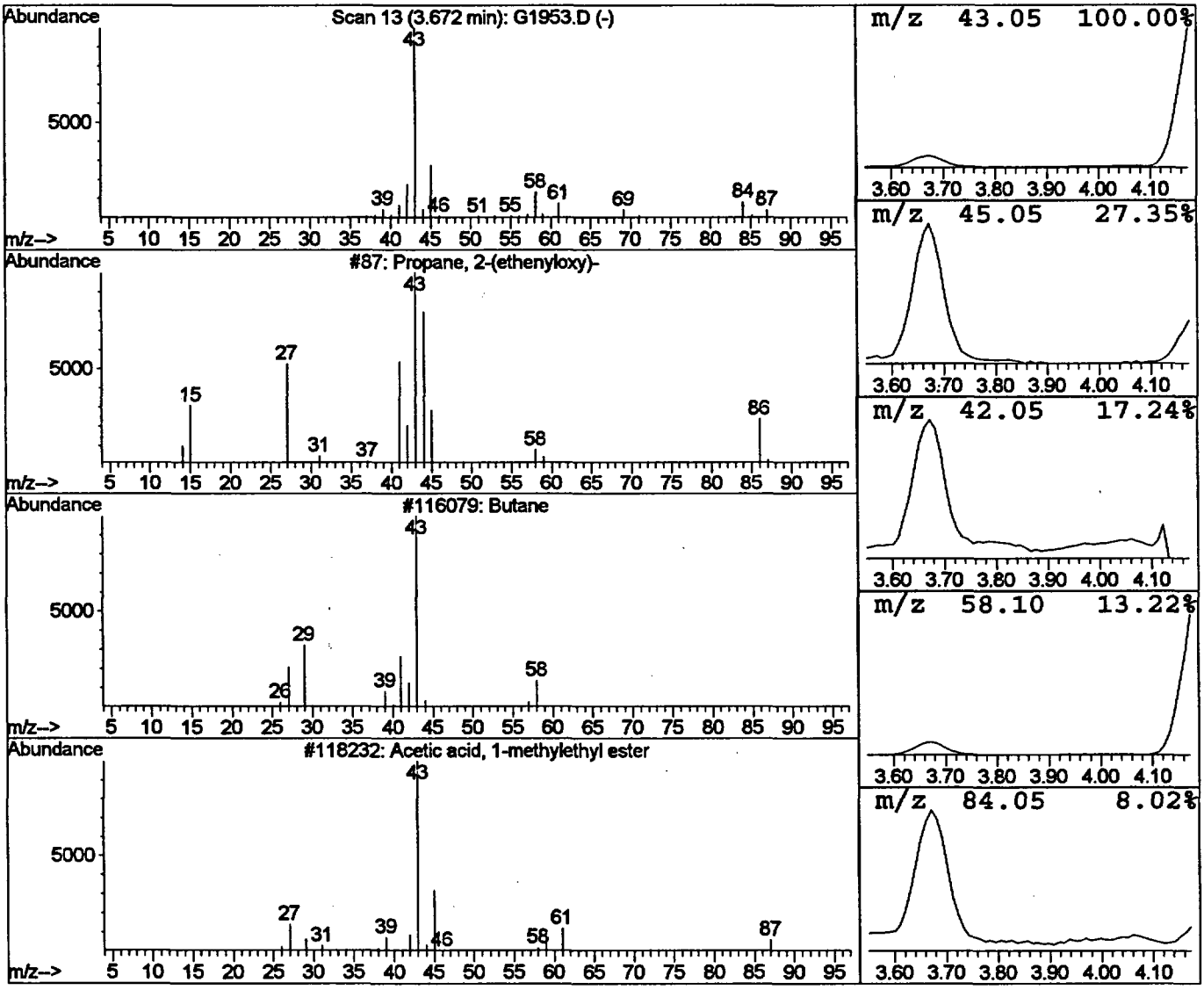
****

Peak Number 1 Propane, 2-(ethenyloxy)- Concentration Rank 23

UNKNOWN COMPOUND 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.67	38.41 ng	1064900	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 2-(ethenyloxy)-	86	C5H10O	000926-65-8	39
2	Butane	58	C4H10	000106-97-8	25
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	25



0418

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

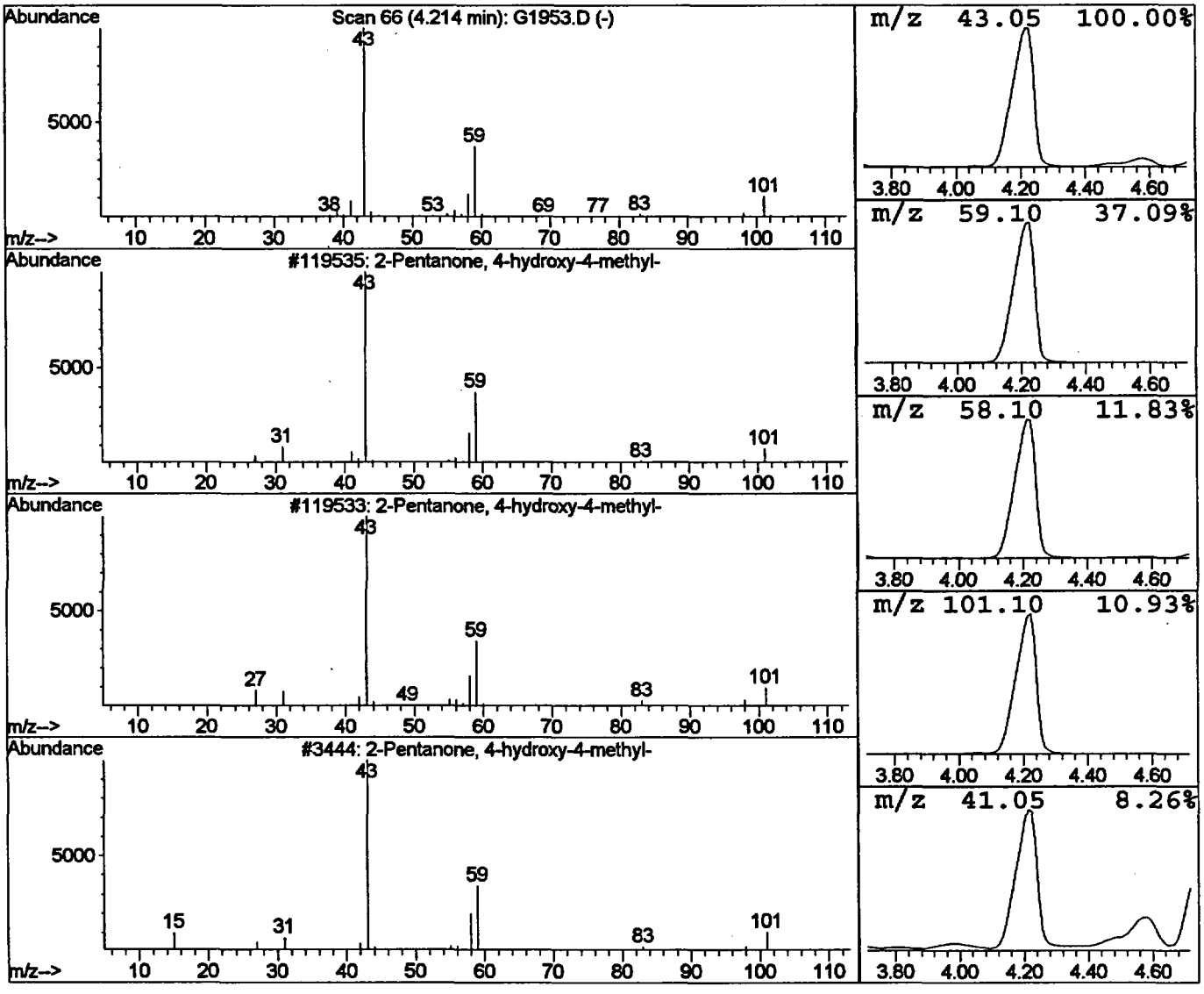
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.21	882.10 ng	24457100	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (A)	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45



0419

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

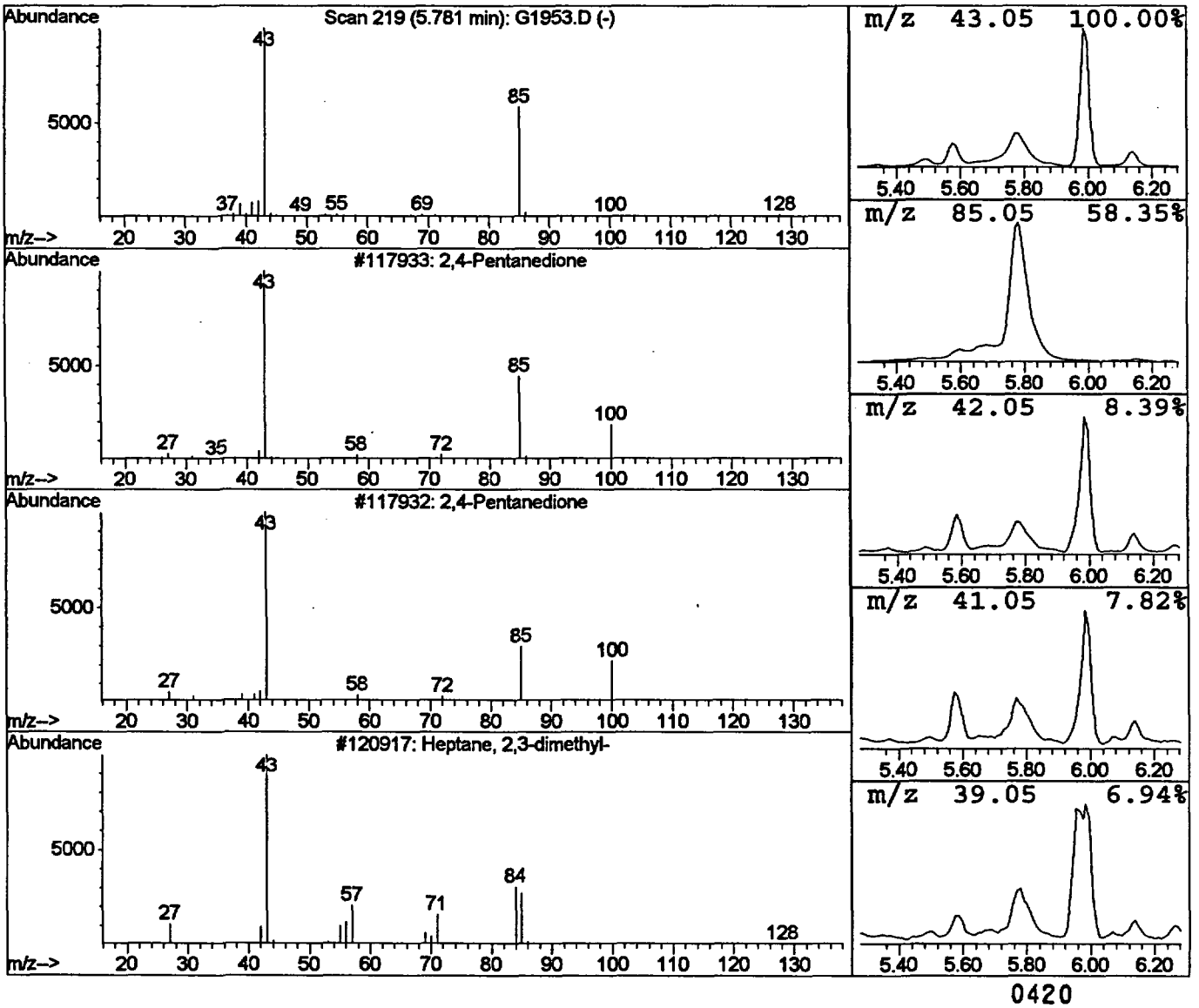
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 2,4-Pentanedione UNKNOWN COMPOUND Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.78	46.32 ng	1284260	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	40
2	2,4-Pentanedione	100	C5H8O2	000123-54-6	28
3	Heptane, 2,3-dimethyl-	128	C9H20	003074-71-3	9



0420

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

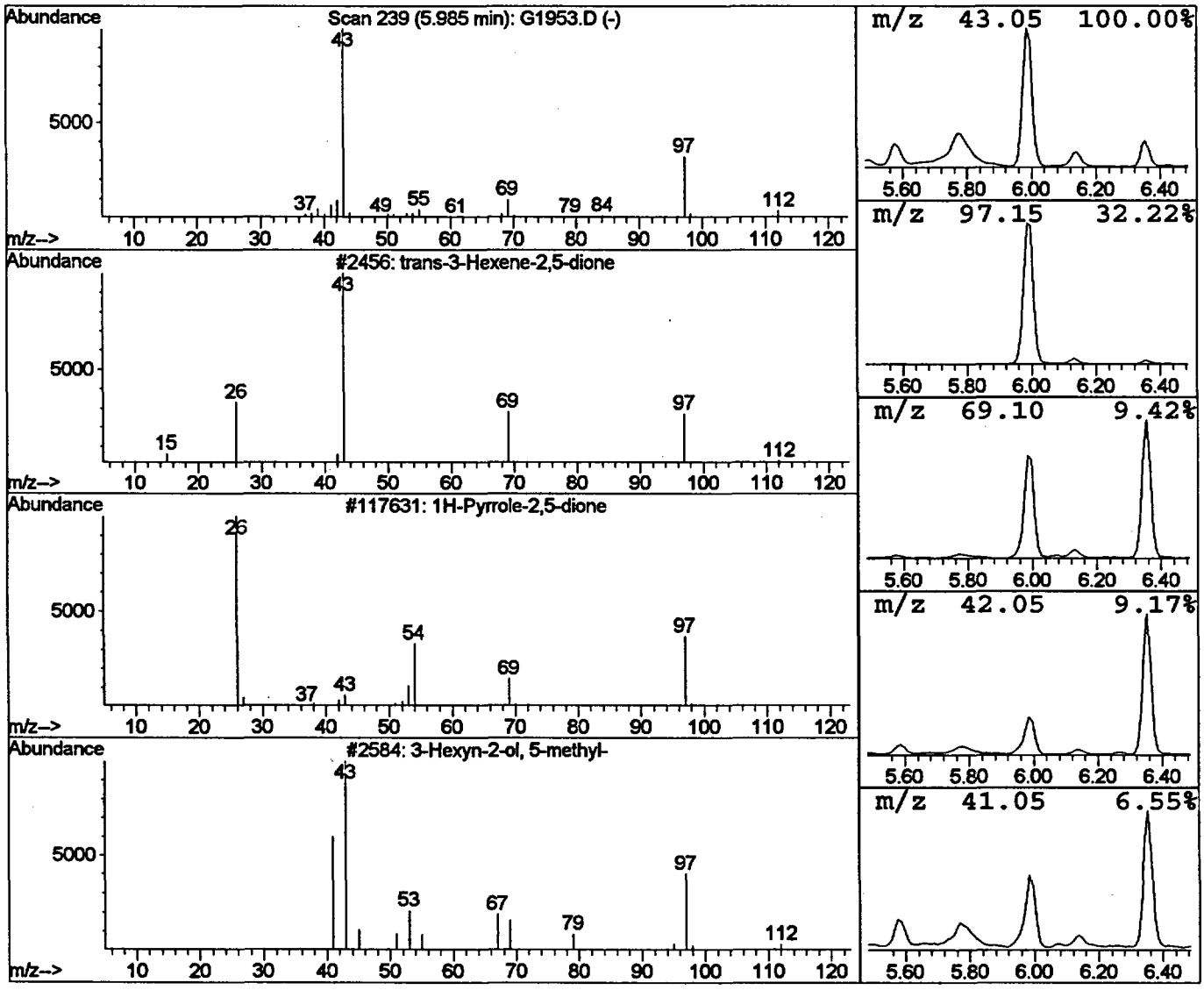
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 4 trans-3-Hexene-2,5-dione Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.99	84.12 ng	2332280	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
2	1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	9
3	3-Hexyn-2-ol, 5-methyl-	112	C7H12O	023293-50-7	9



0421

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

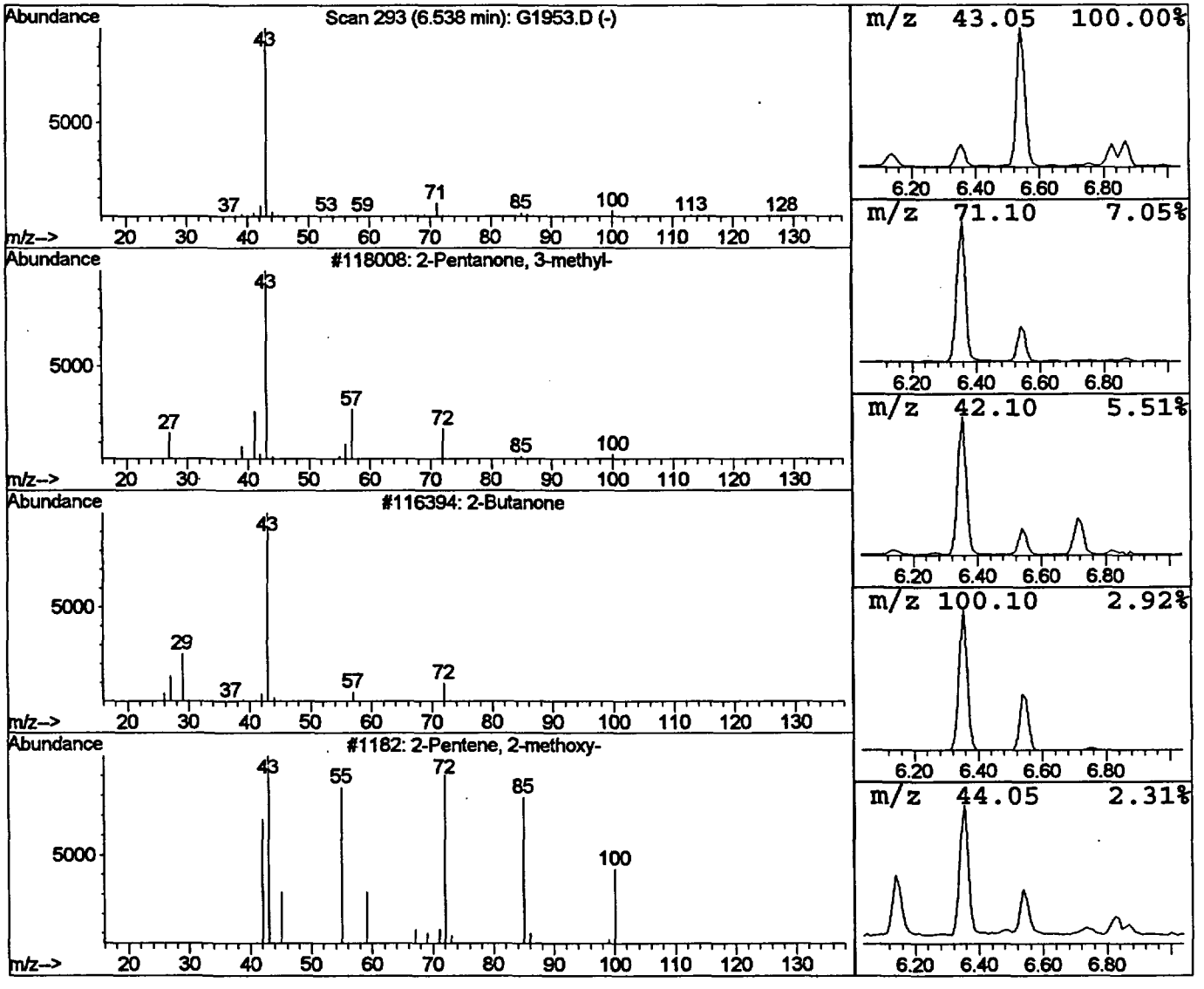
****

Peak Number 5 2-Pentanone, 3-methyl- Concentration Rank 18

UNKNOWN COMPOUND no1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.54	55.62 ng	1542230	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	2-Butanone	72	C4H8O	000078-93-3	9
3	2-Pentene, 2-methoxy-	100	C6H12O	061142-47-0	7



0422

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

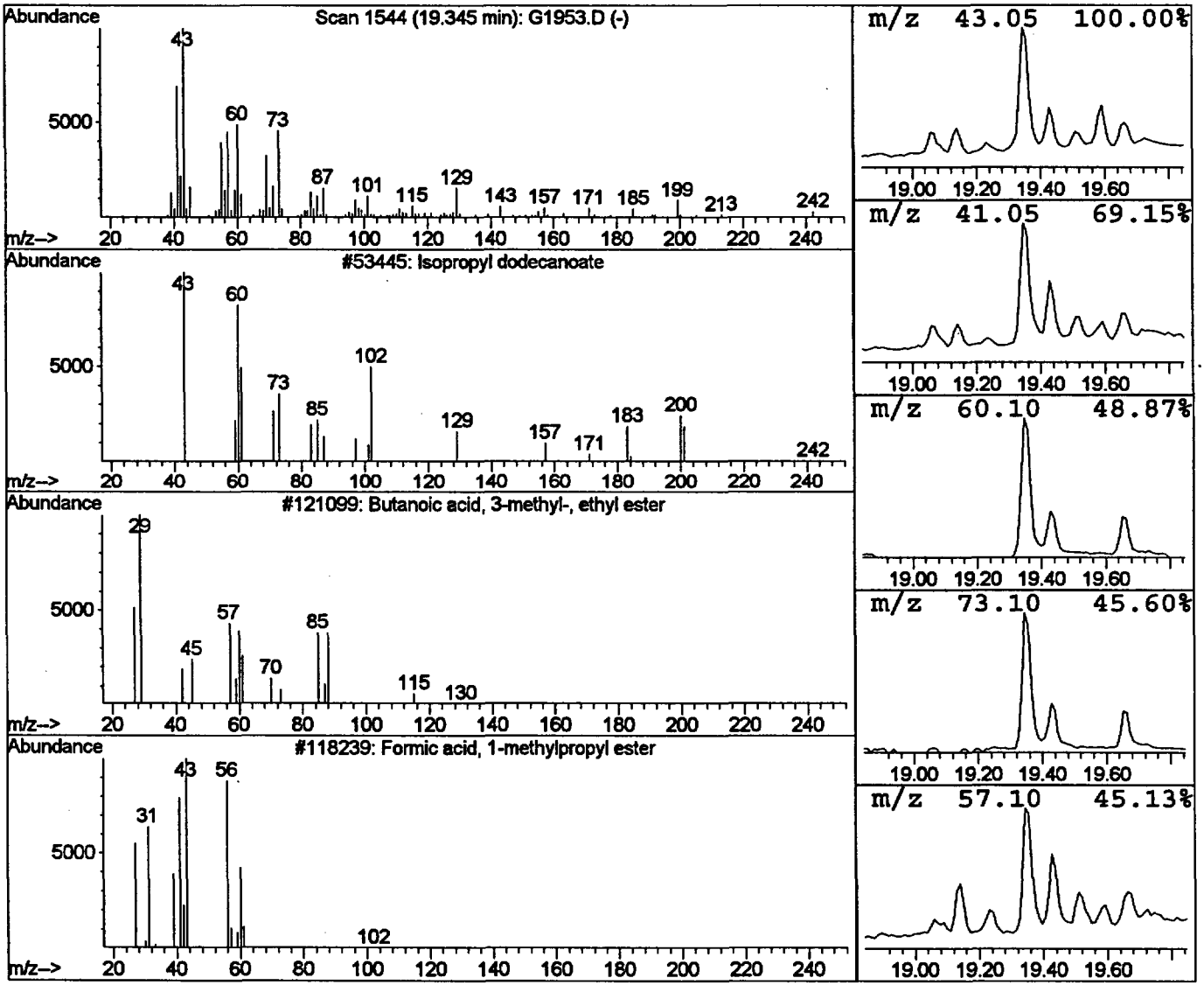
****

Peak Number 6 Isopropyl dodecanoate Concentration Rank 37

Unknown Base Type mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.35	21.09 ng	796230	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Isopropyl dodecanoate	242	C15H30O2	000000-00-0	40
2	Butanoic acid, 3-methyl-, ethyl est	130	C7H14O2	000108-64-5	38
3	Formic acid, 1-methylpropyl ester	102	C5H10O2	000589-40-2	38



0423

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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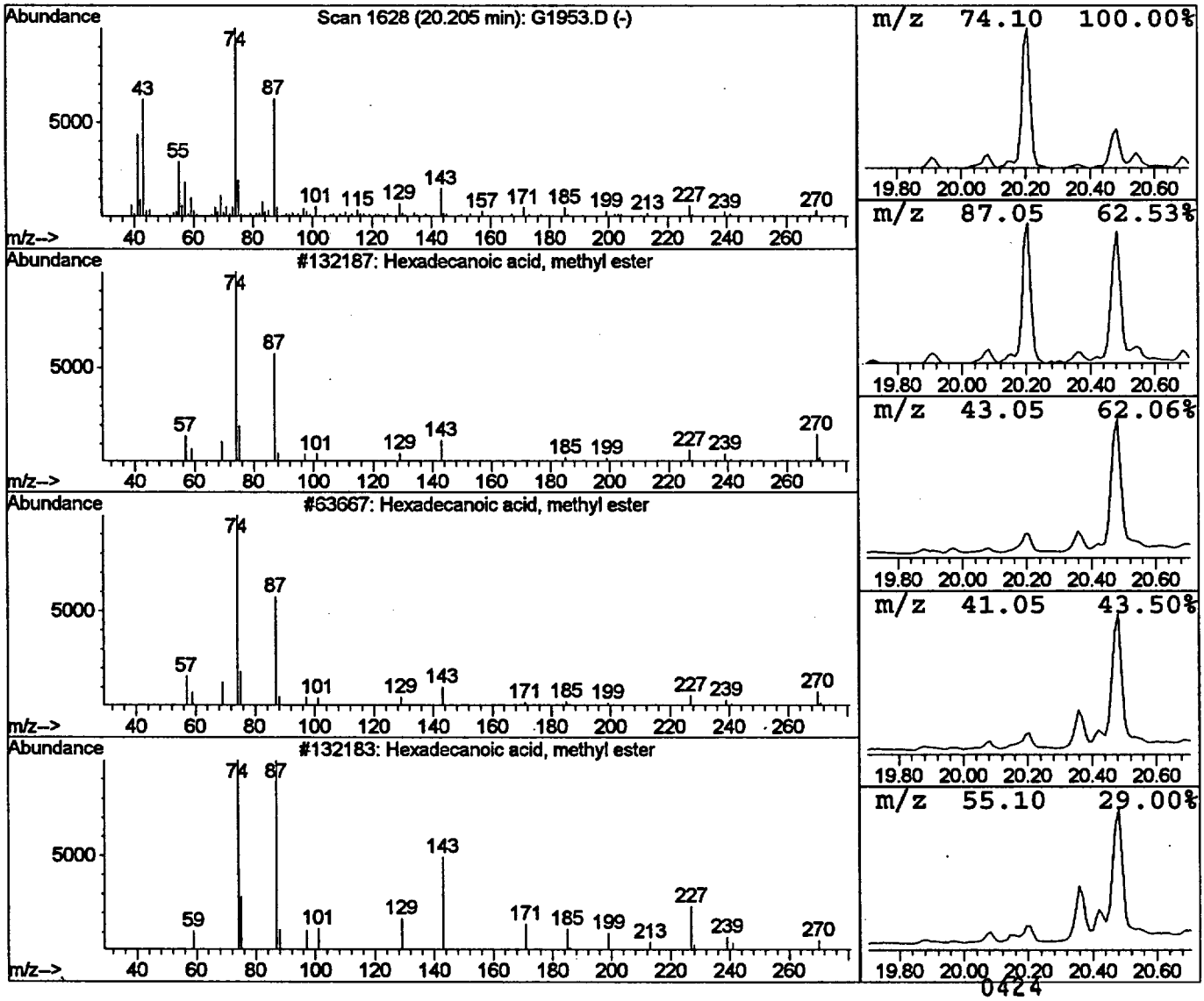
Peak Number 7 Hexadecanoic acid, methyl este Concentration Rank 39

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.21	20.92 ng	789733	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	97
2	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	97
3	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	94



0424

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

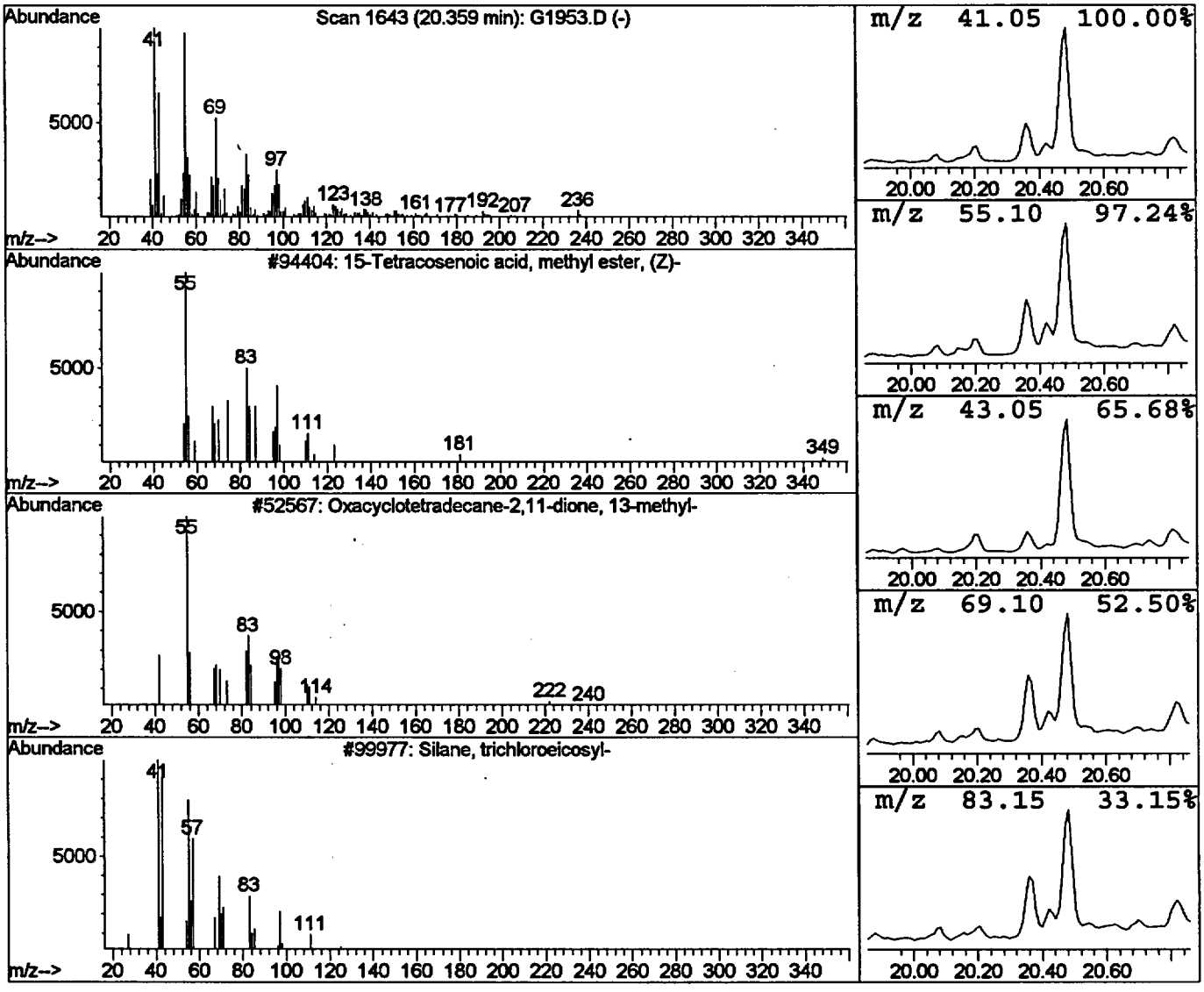
****

Peak Number 8 15-Tetracosenoic acid, methyl Concentration Rank 30

UNKNOWN COMPOUND 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.36	30.03 ng	1133850	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	74
2	Oxacyclotetradecane-2,11-dione, 13-	240	C14H24O3	074685-36-2	50
3	Silane, trichloroeicosyl-	414	C20H41Cl3Si	018733-57-8	49



0425

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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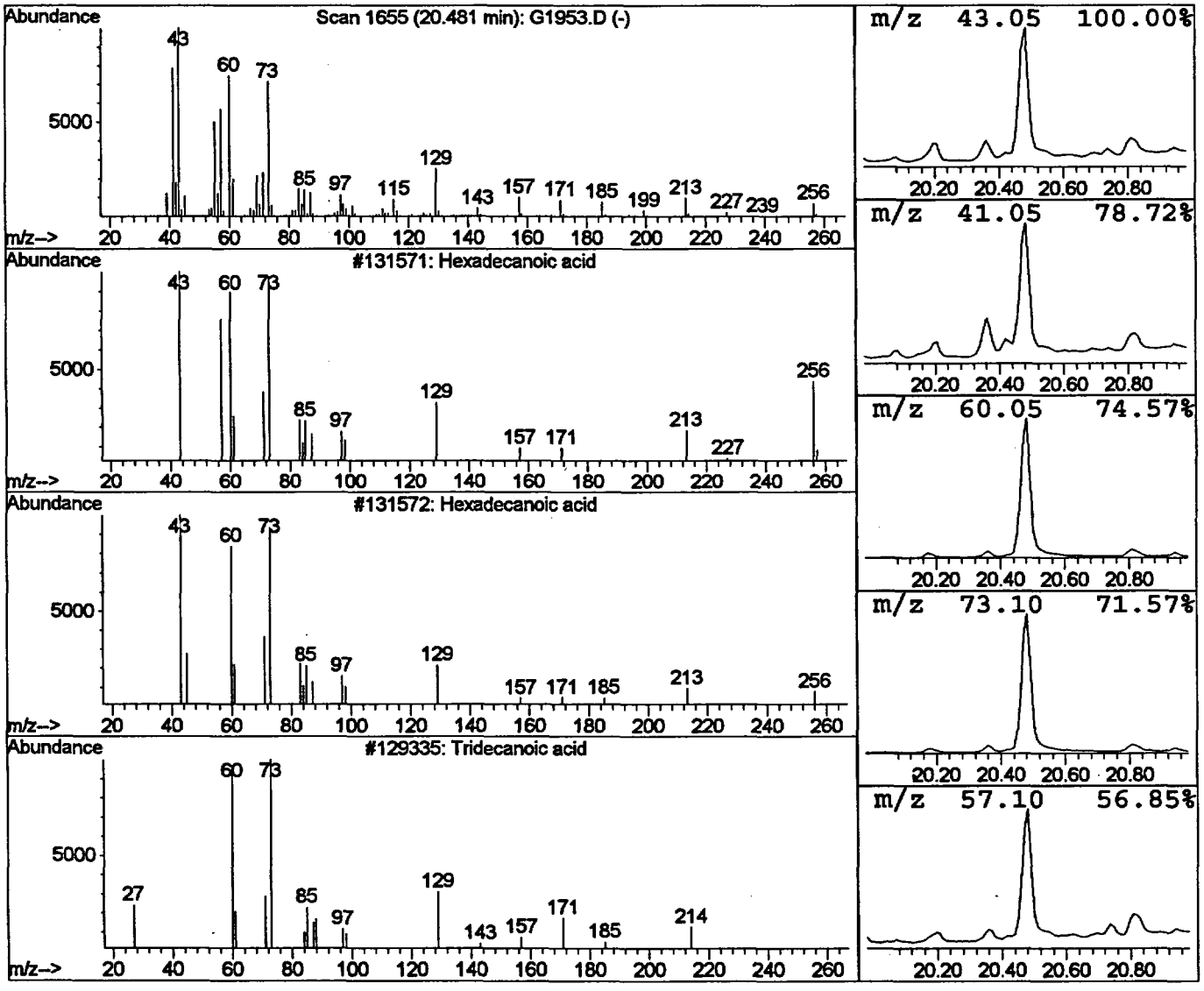
Peak Number 9 Hexadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.48	127.15 ng	4800560	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid	256	C16H32O2	000057-10-3	95
2	Hexadecanoic acid	256	C16H32O2	000057-10-3	91
3	Tridecanoic acid	214	C13H26O2	000638-53-9	91



0426

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

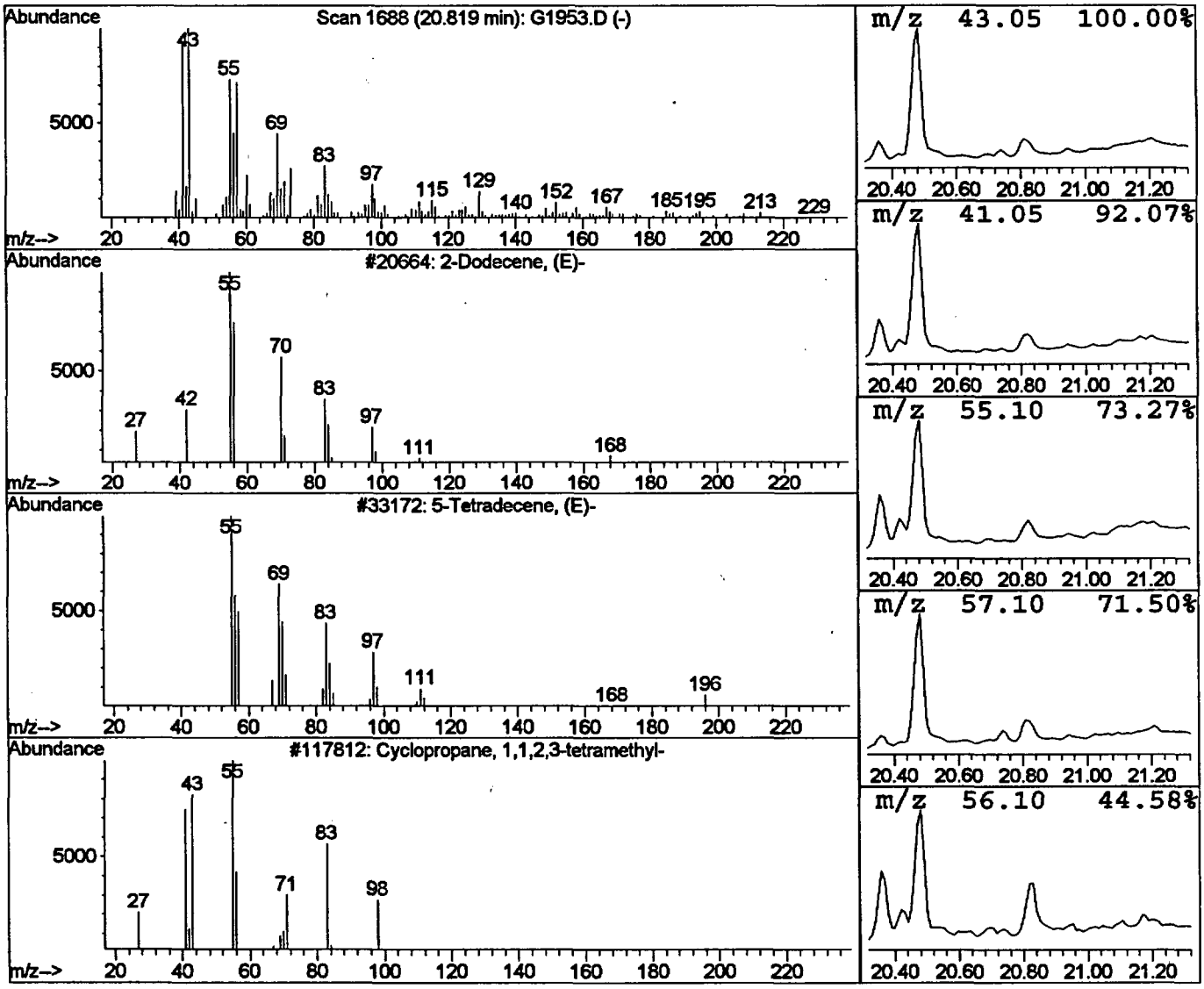
****

Peak Number 10 2-Dodecene, (E)- Concentration Rank 34

UNKNOWN HYDROCARBON 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.82	23.12 ng	872878	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Dodecene, (E)-	168	C12H24	007206-13-5	58
2	5-Tetradecene, (E)-	196	C14H28	041446-66-6	52
3	Cyclopropane, 1,1;2,3-tetramethyl-	98	C7H14	074752-93-5	49



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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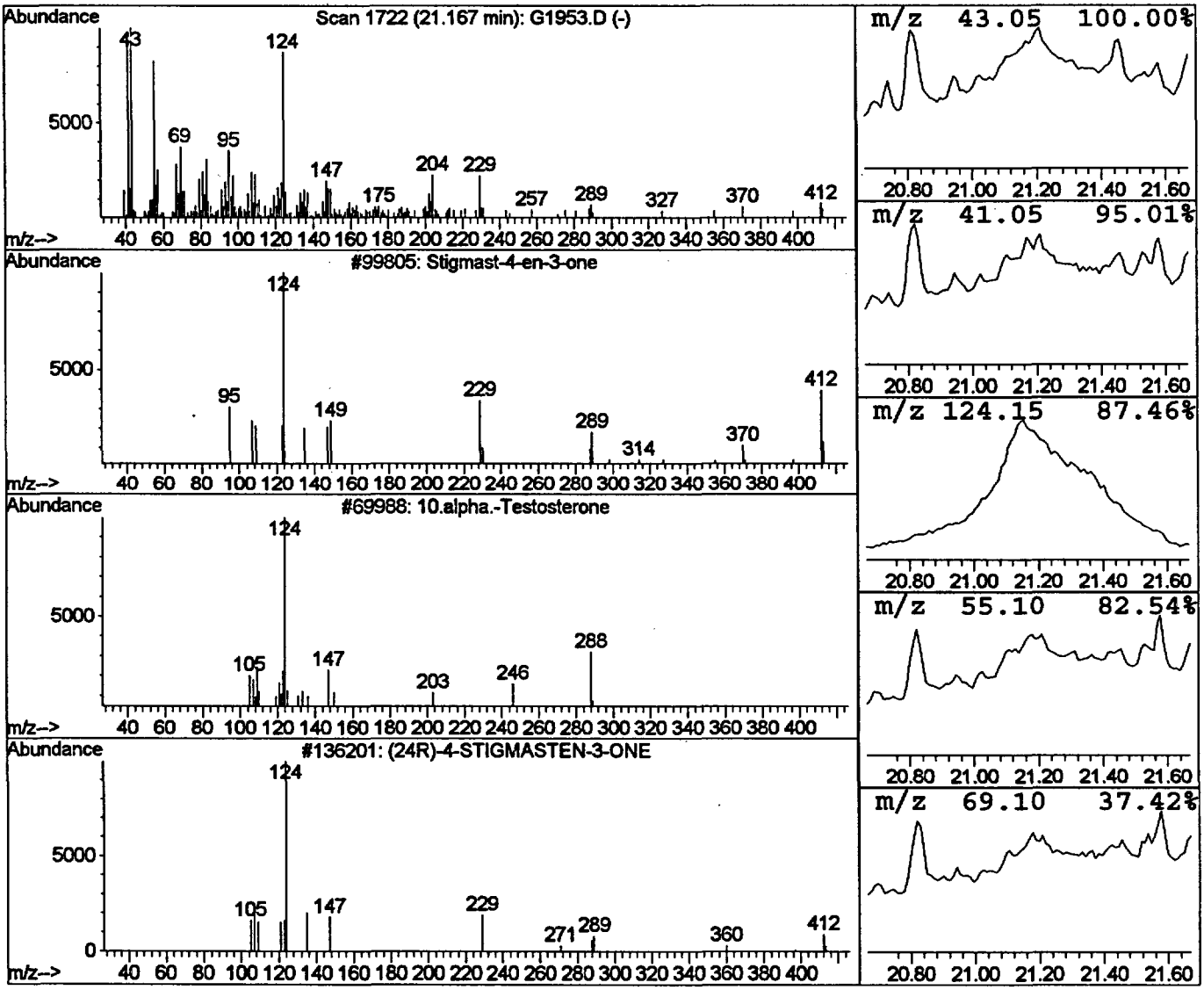
Peak Number 11 Stigmast-4-en-3-one Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.17	32.11 ng	1212510	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	97
2	10.alpha.-Testosterone	288	C19H28O2	000604-39-7	86
3	(24R)-4-STIGMASTEN-3-ONE	412	C29H48O	001058-61-3	58



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

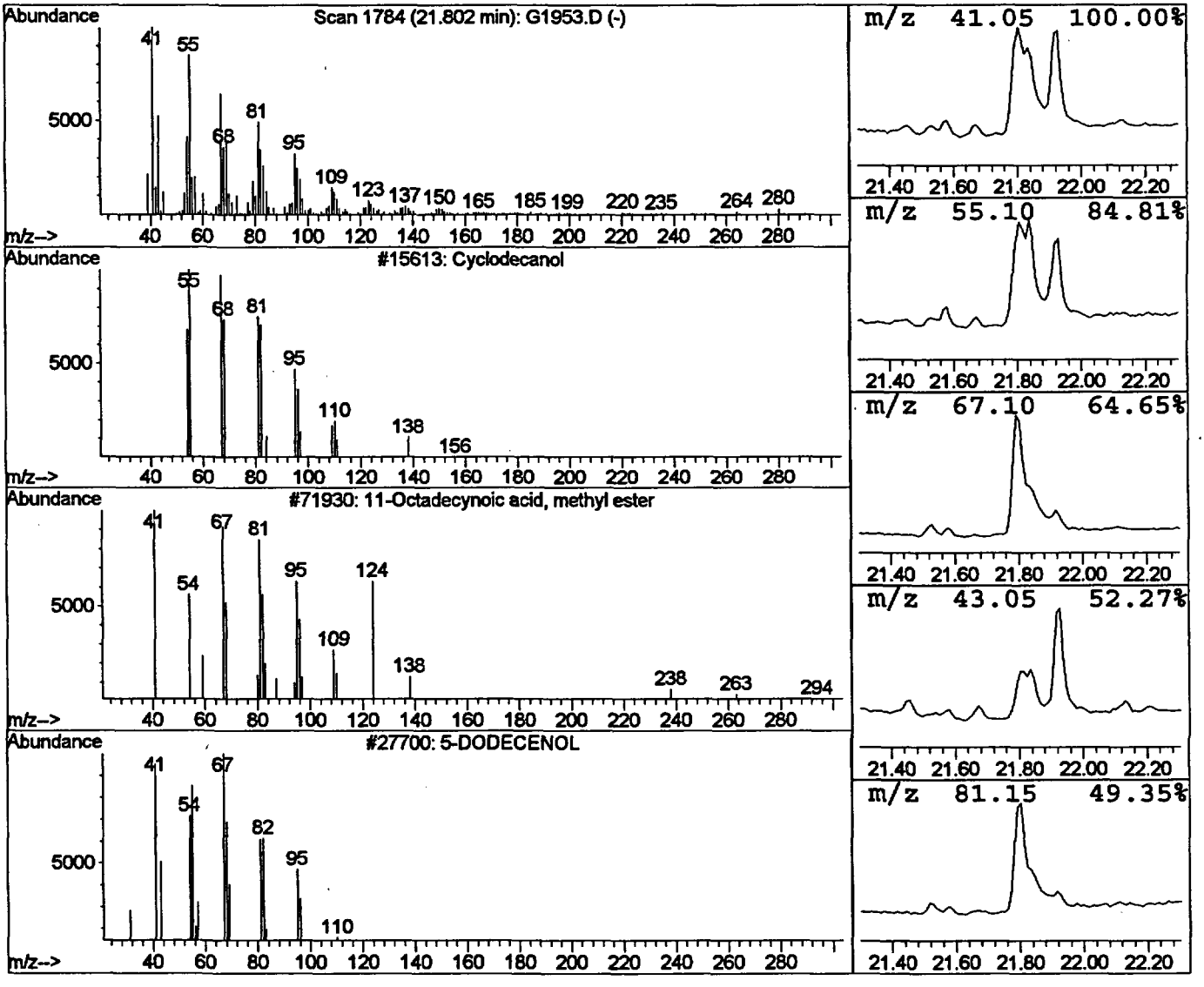
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 12 Cyclodecanol UNKNOWN COMPOUND 01-27-98 Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.80	115.92 ng	4376790	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclodecanol	156	C10H20O	001502-05-2	91
2	11-Octadecynoic acid, methyl ester	294	C19H34O2	026543-37-3	80
3	5-DODECENOL	184	C12H24O	062936-12-3	80



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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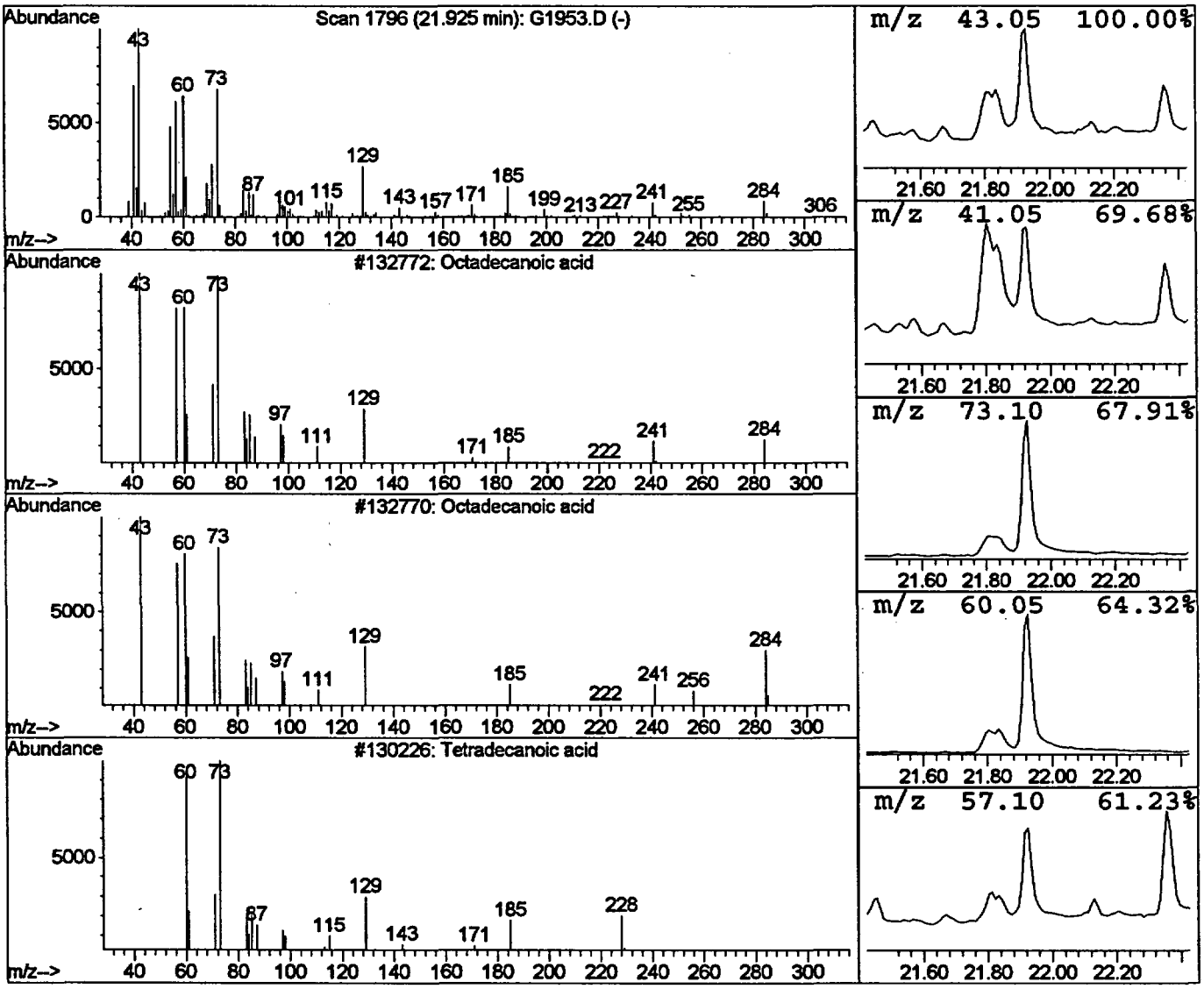
Peak Number 13 Octadecanoic acid Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.93	60.44 ng	2282090	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	93
2	Octadecanoic acid	284	C18H36O2	000057-11-4	93
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	91



0430

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

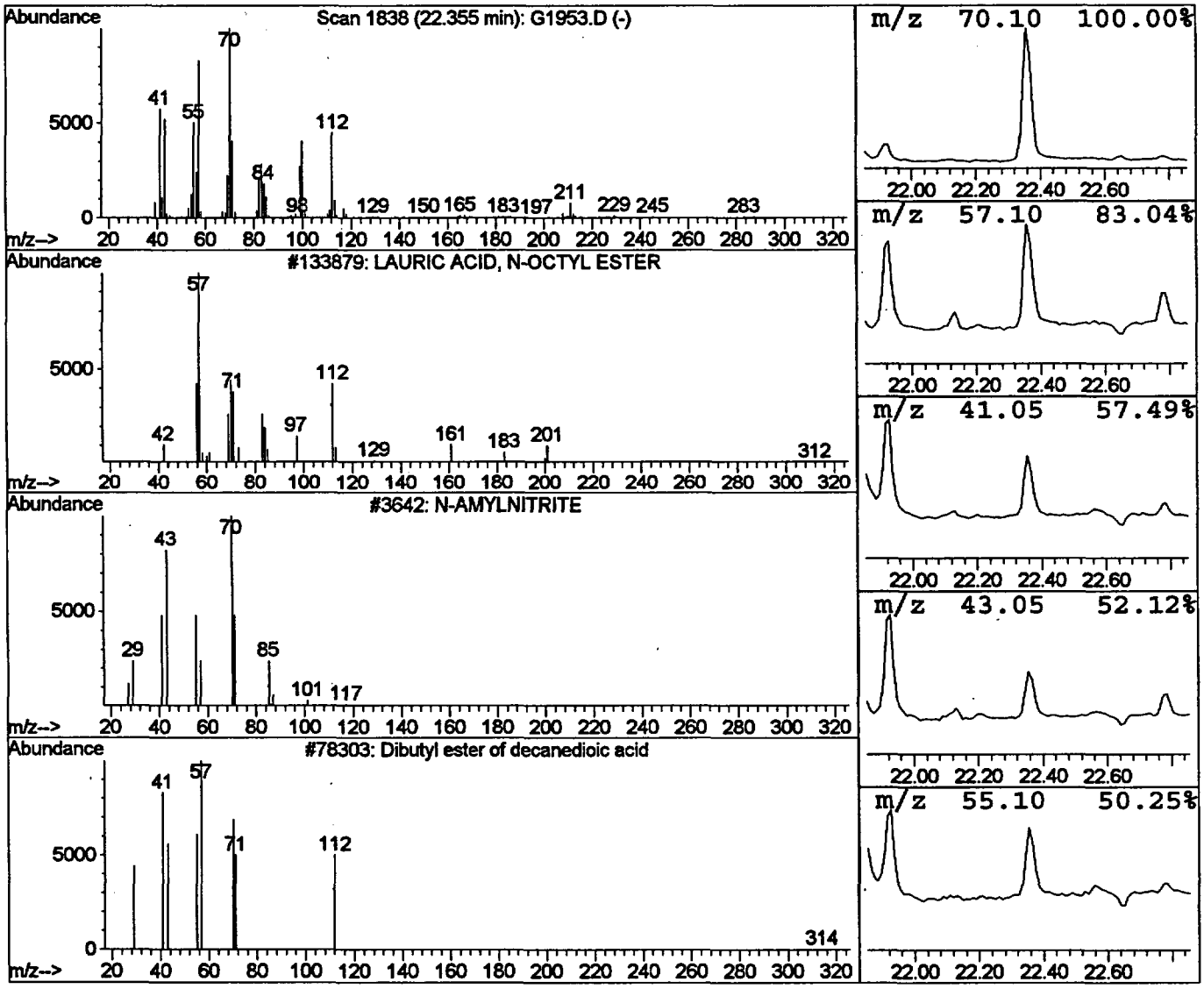
****

Peak Number 14 LAURIC ACID, N-OCTYL ESTER Concentration Rank 22

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.35	38.90 ng	1468880	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	LAURIC ACID, N-OCTYL ESTER	312	C20H40O2	000000-00-0	35
2	N-AMYLNITRITE	117	C5H11NO2	000000-00-0	35
3	Dibutyl ester of decanedioic acid	314	C18H34O4	000000-00-0	27



Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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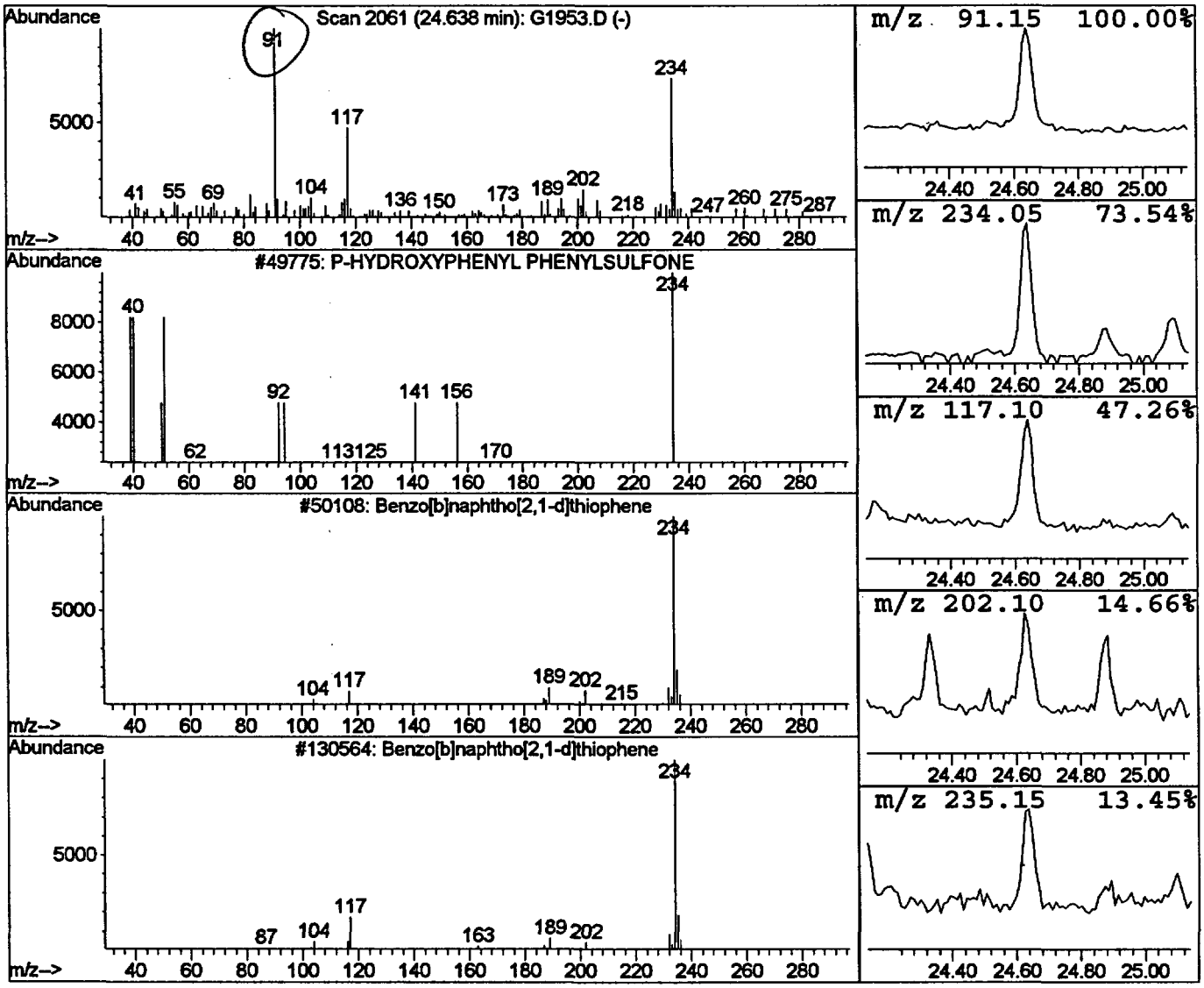
Peak Number 15 P-HYDROXYPHENYL PHENYLSULFONE Concentration Rank 33

UNKNOWN COMPOUND mo 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.64	23.53 ng	806965	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	P-HYDROXYPHENYL PHENYLSULFONE	234	C12H10O3S	000000-00-0	98
2	Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	72
3	Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	64



0432

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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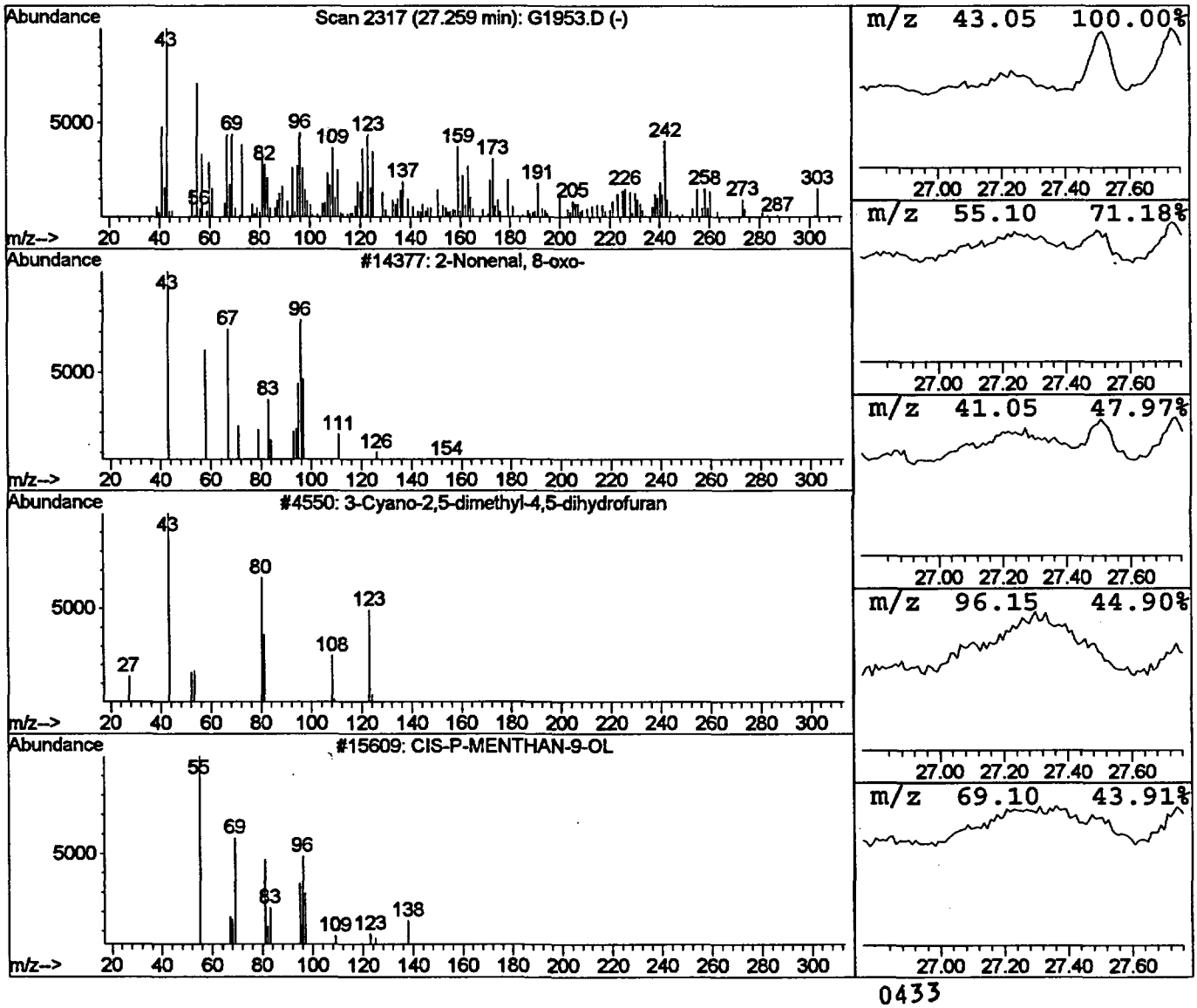
Peak Number 16 2-Nonenal, 8-oxo- UNKNOWN COMPOUND mo-27-98 Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.26	30.61 ng	1049760	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Nonenal, 8-oxo-	154	C9H14O2	077611-52-0	11
2	3-Cyano-2,5-dimethyl-4,5-dihydrofur	123	C7H9NO	000000-00-0	10
3	CIS-P-MENTHAN-9-OL	156	C10H20O	005113-95-1	10



0433

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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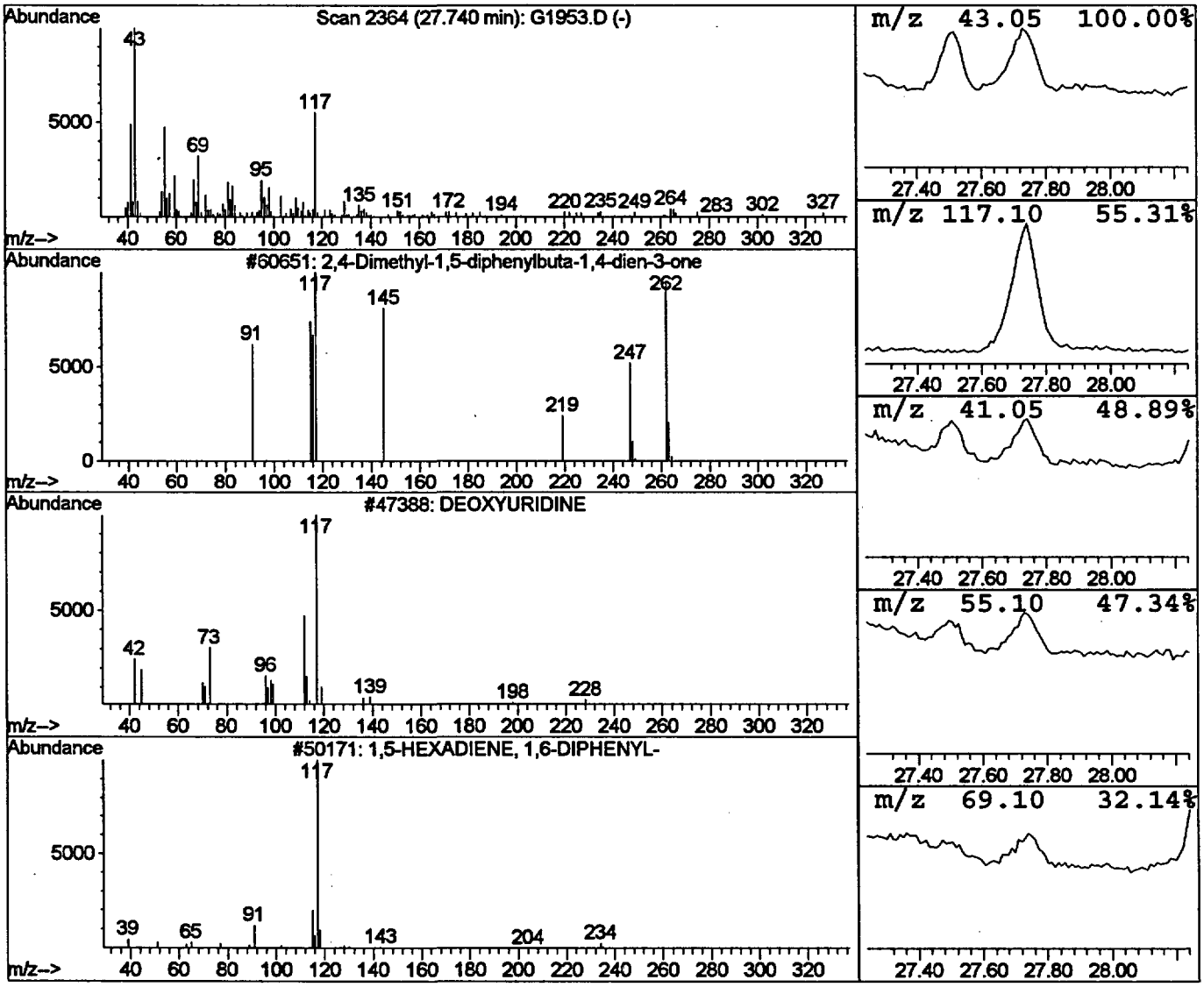
Peak Number 17 2,4-Dimethyl-1,5-diphenylbuta-... Concentration Rank 29

UNKNOWN COMPOUND 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.74	30.50 ng	1046020	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Dimethyl-1,5-diphenylbuta-1,4-d	262	C19H18O	000000-00-0	22
2	DEOXYURIDINE	228	C9H12N2O5	000951-78-0	17
3	1,5-HEXADIENE, 1,6-DIPHENYL-	234	C18H18	000000-00-0	10



0434

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

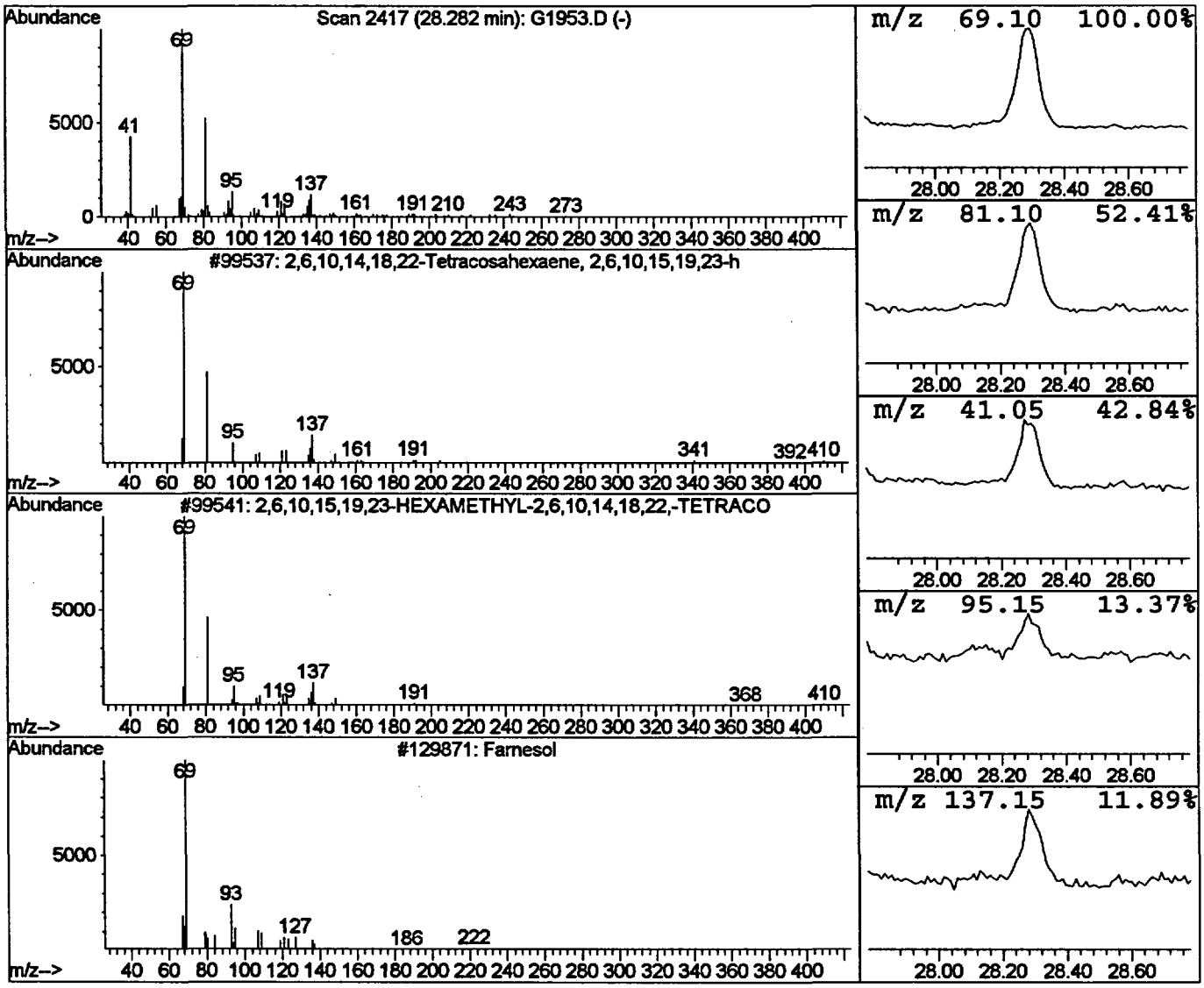
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 18 2,6,10,14,18,22-Tetracosahexae Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.28	27.77 ng	952327	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,6,10,14,18,22-Tetracosahexaene, 2	410	C30H50	007683-64-9	83
2	2,6,10,15,19,23-HEXAMETHYL-2,6,10,1	410	C30H50	000000-00-0	83
3	Farnesol	222	C15H26O	004602-84-0	72



0435

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

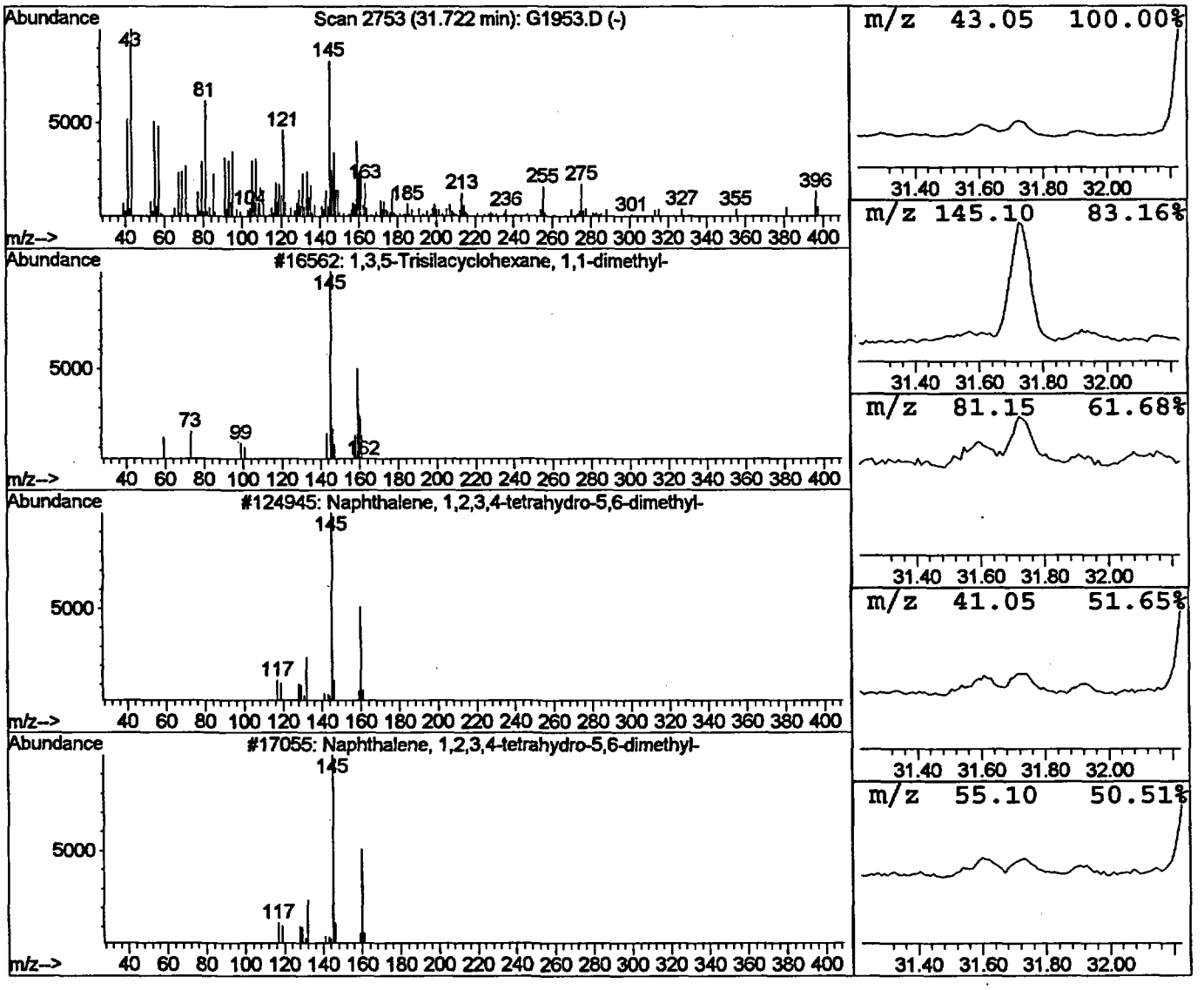
****

Peak Number 19 1,3,5-Trisilacyclohexane, 1,1- Concentration Rank 31

UNKNOWN COMPOUND 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
31.72	28.97 ng	1373250	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3,5-Trisilacyclohexane, 1,1-dimet	160	C5H16Si3	054424-15-6	50
2	Naphthalene, 1,2,3,4-tetrahydro-5,6	160	C12H16	020027-77-4	35
3	Naphthalene, 1,2,3,4-tetrahydro-5,6	160	C12H16	020027-77-4	35



Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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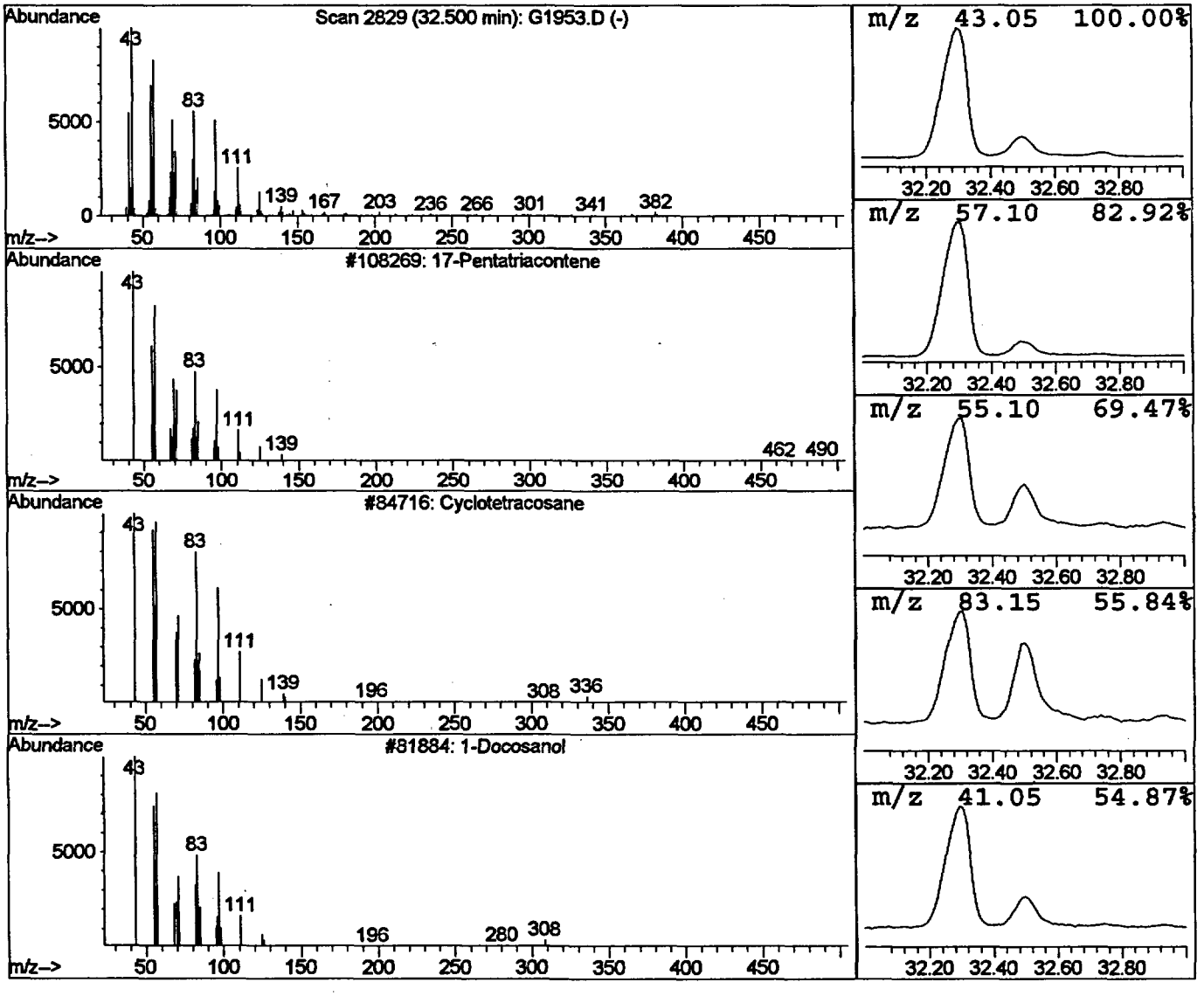
Peak Number 20 17-Pentatriacontene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.50	84.45 ng	4002560	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	17-Pentatriacontene	491	C35H70	006971-40-0	87
2	Cyclotetracosane	336	C24H48	000297-03-0	87
3	1-Docosanol	326	C22H46O	000661-19-8	86



0437

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

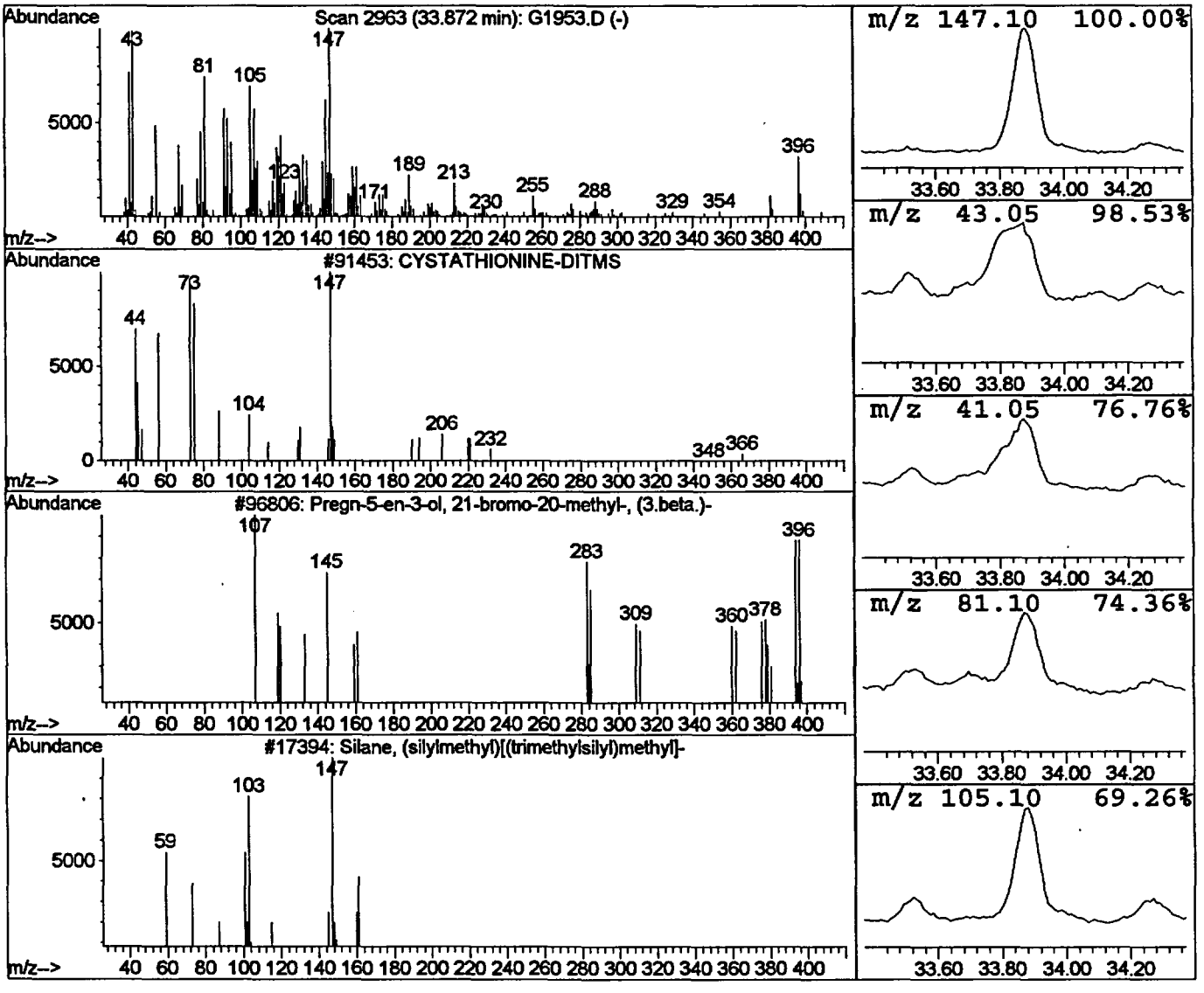
****

Peak Number 21 CYSTATHIONINE-DITMS Concentration Rank 12

UNKNOWN COMPOUND 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.87	108.08 ng	5122720	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	CYSTATHIONINE-DITMS	366	C13H30N2O4SSi2	000000-00-0	25
2	Pregn-5-en-3-ol, 21-bromo-20-methyl	394	C22H35BrO	055103-80-5	25
3	Silane, (silylmethyl)[(trimethylsil	162	C5H18Si3	055836-80-1	22



0438

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

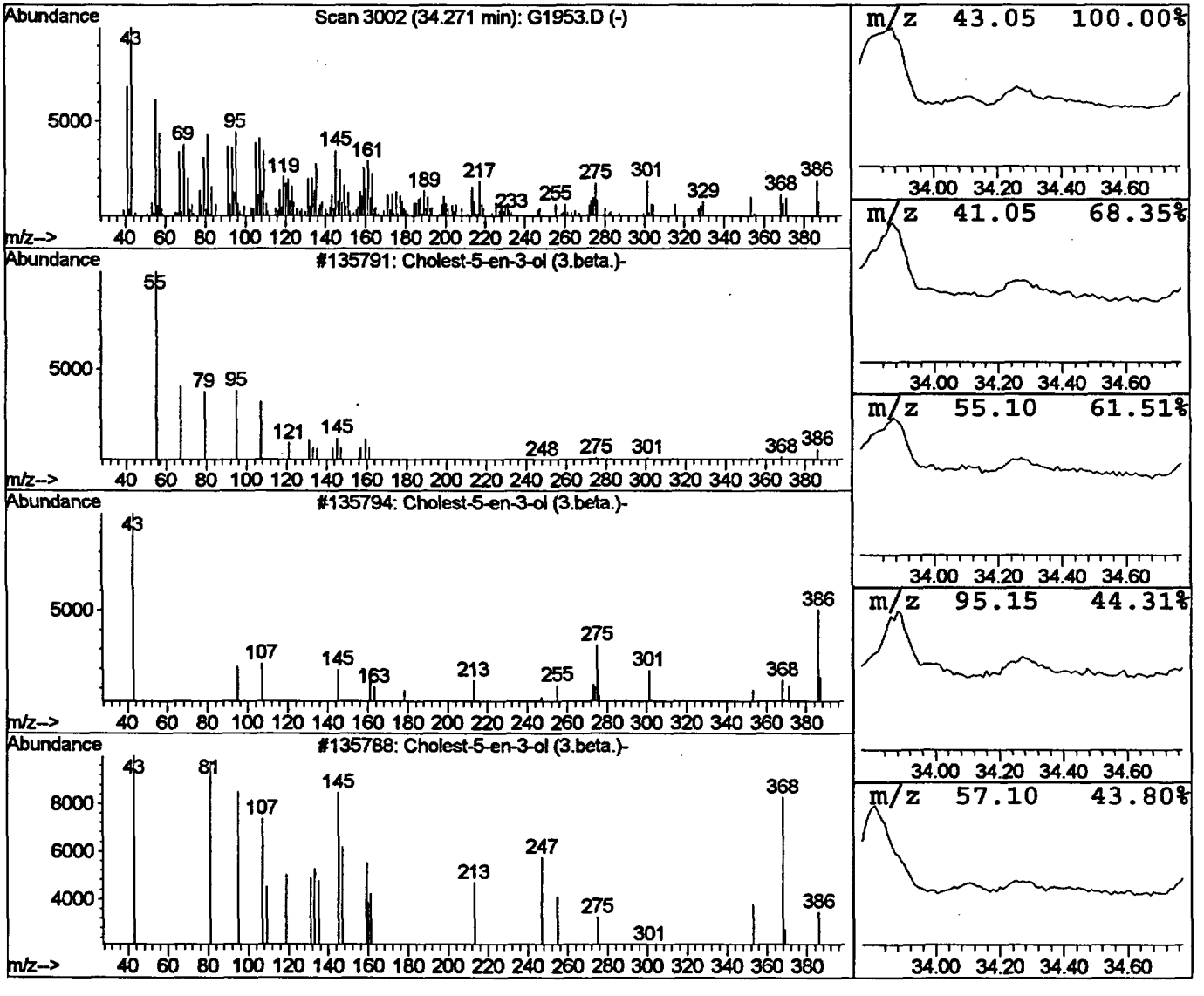
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 22 Cholest-5-en-3-ol (3.beta.)- Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
34.27	38.17 ng	1809340	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	90
2	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	81
3	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	60



0439

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

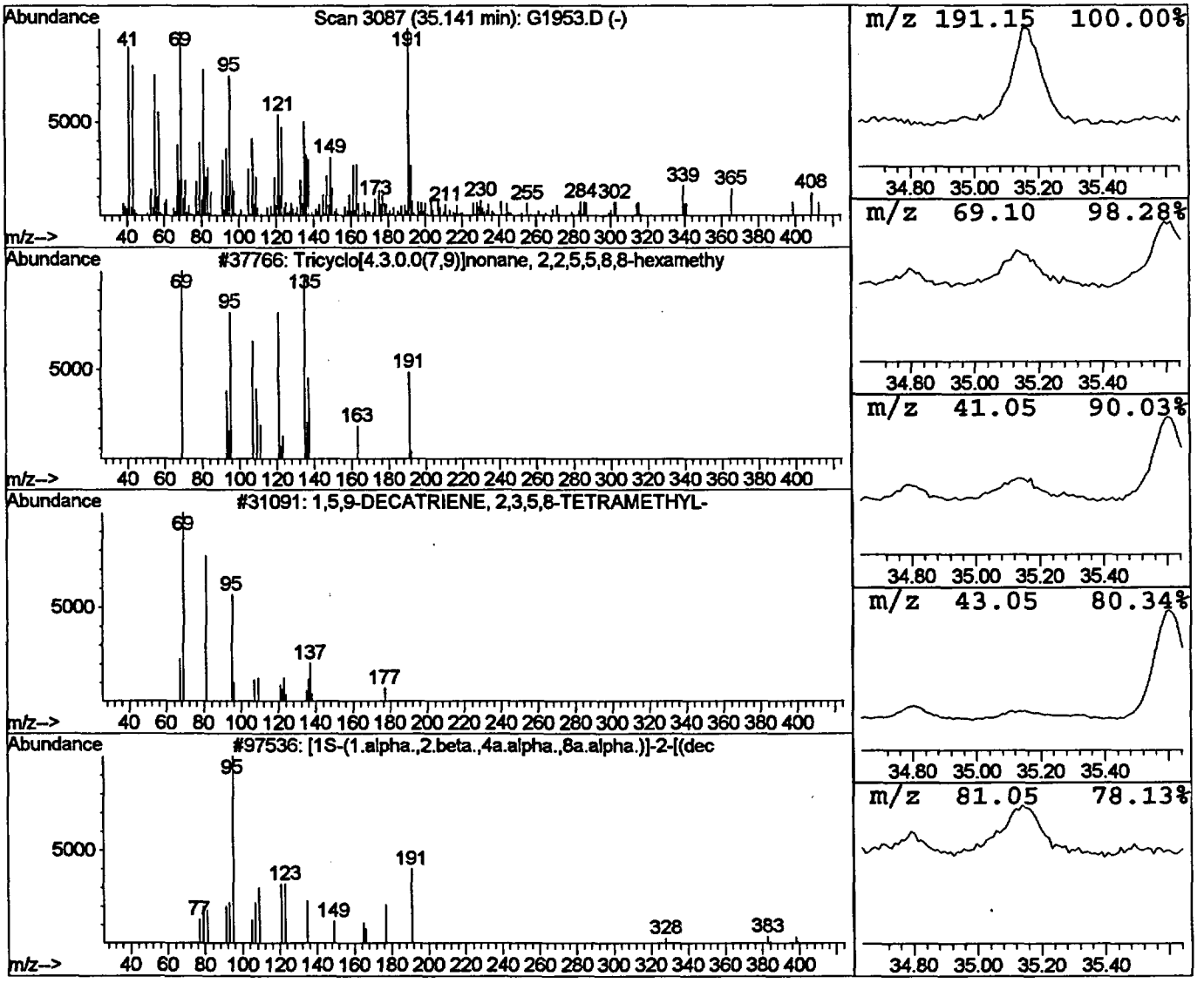
****

Peak Number 23 Tricyclo[4.3.0.0(7,9)]nonane Concentration Rank 19

UNKNOWN COMPOUND 11-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.14	49.82 ng	2361470	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricyclo[4.3.0.0(7,9)]nonane, 2,2,5	206	C15H26	054832-82-5	47
2	1,5,9-DECATRIENE, 2,3,5,8-TETRAMETH	192	C14H24	000000-00-0	43
3	[1S-(1.alpha.,2.beta.,4a.alpha.,8a.	398	C25H34O4	087764-14-5	38



0440

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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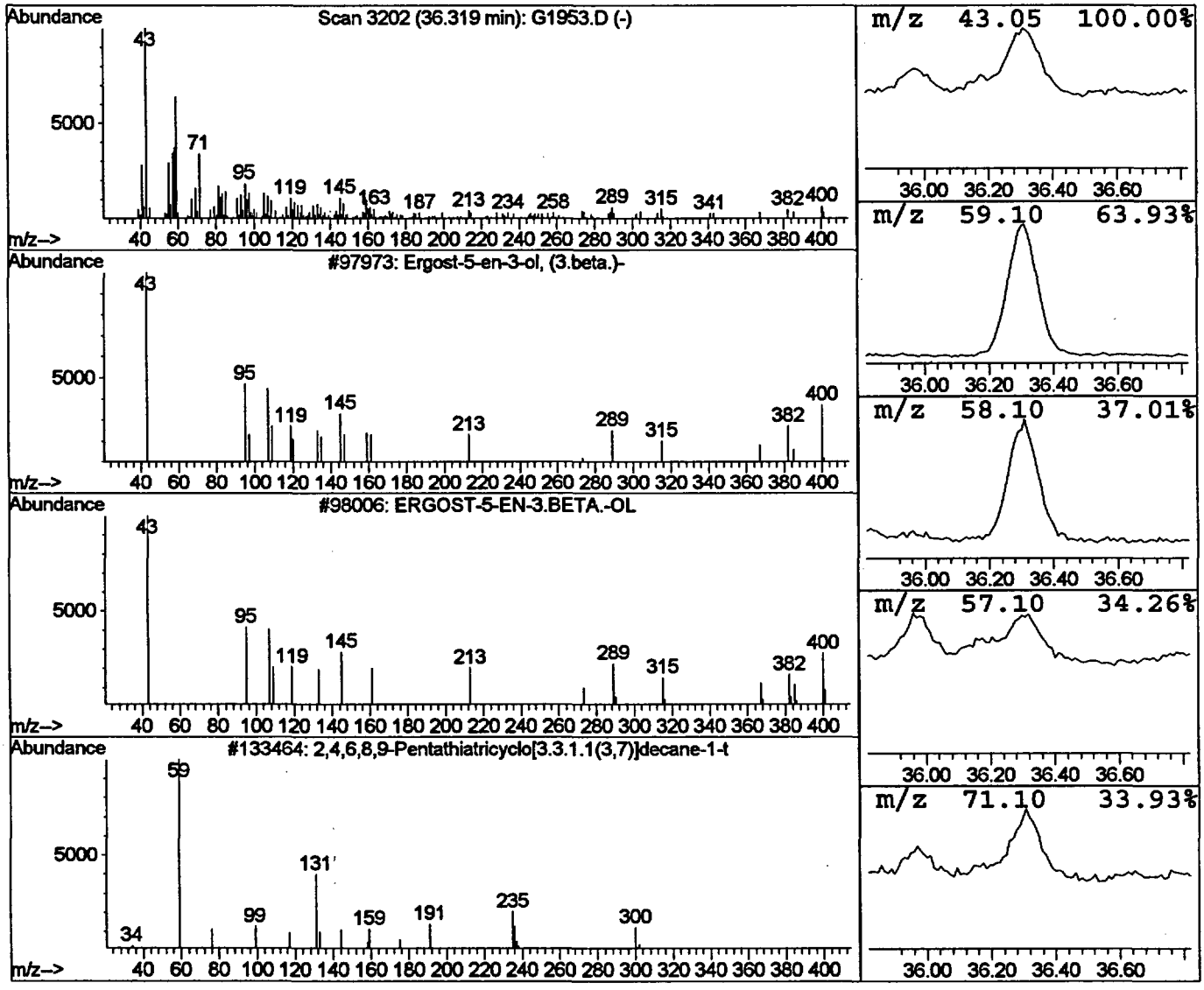
Peak Number 24 Ergost-5-en-3-ol, (3.beta.)- Concentration Rank 38

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.32	21.07 ng	998813	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	95
2	ERGOST-5-EN-3.BETA.-OL	400	C28H48O	000000-00-0	83
3	2,4,6,8,9-Pentathiatricyclo[3.3.1.1	300	C8H12S6	057274-31-4	37



0441

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

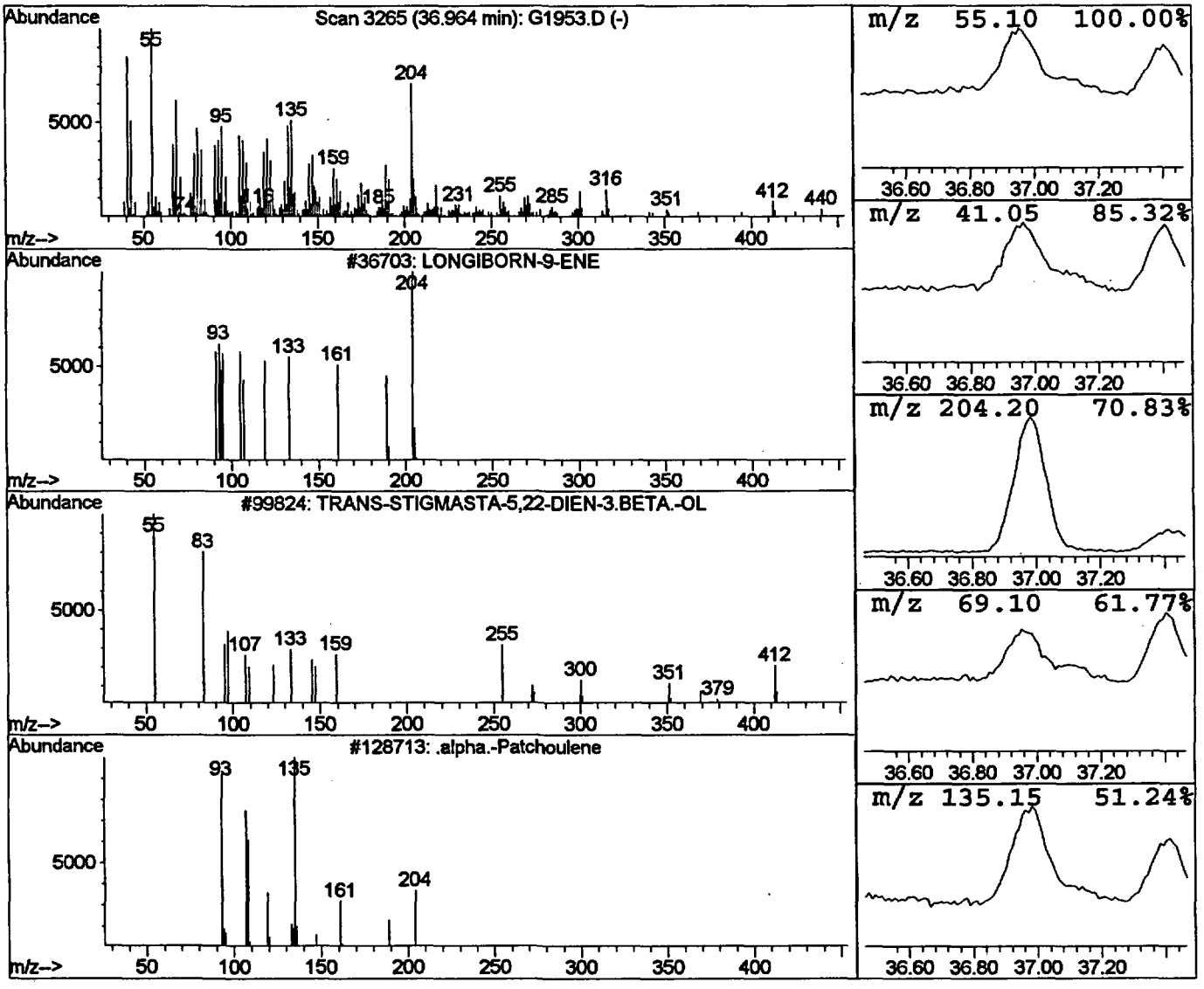
****

Peak Number 25 LONGIBORN-9-ENE Concentration Rank 13

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.96	98.52 ng	4669590	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	LONGIBORN-9-ENE	204	C15H24	061262-67-7	.55
2	TRANS-STIGMASTA-5,22-DIEN-3.BETA.-O	412	C29H48O	000000-00-0	43
3	.alpha.-Patchoulene	204	C15H24	000560-32-7	43



. 0442

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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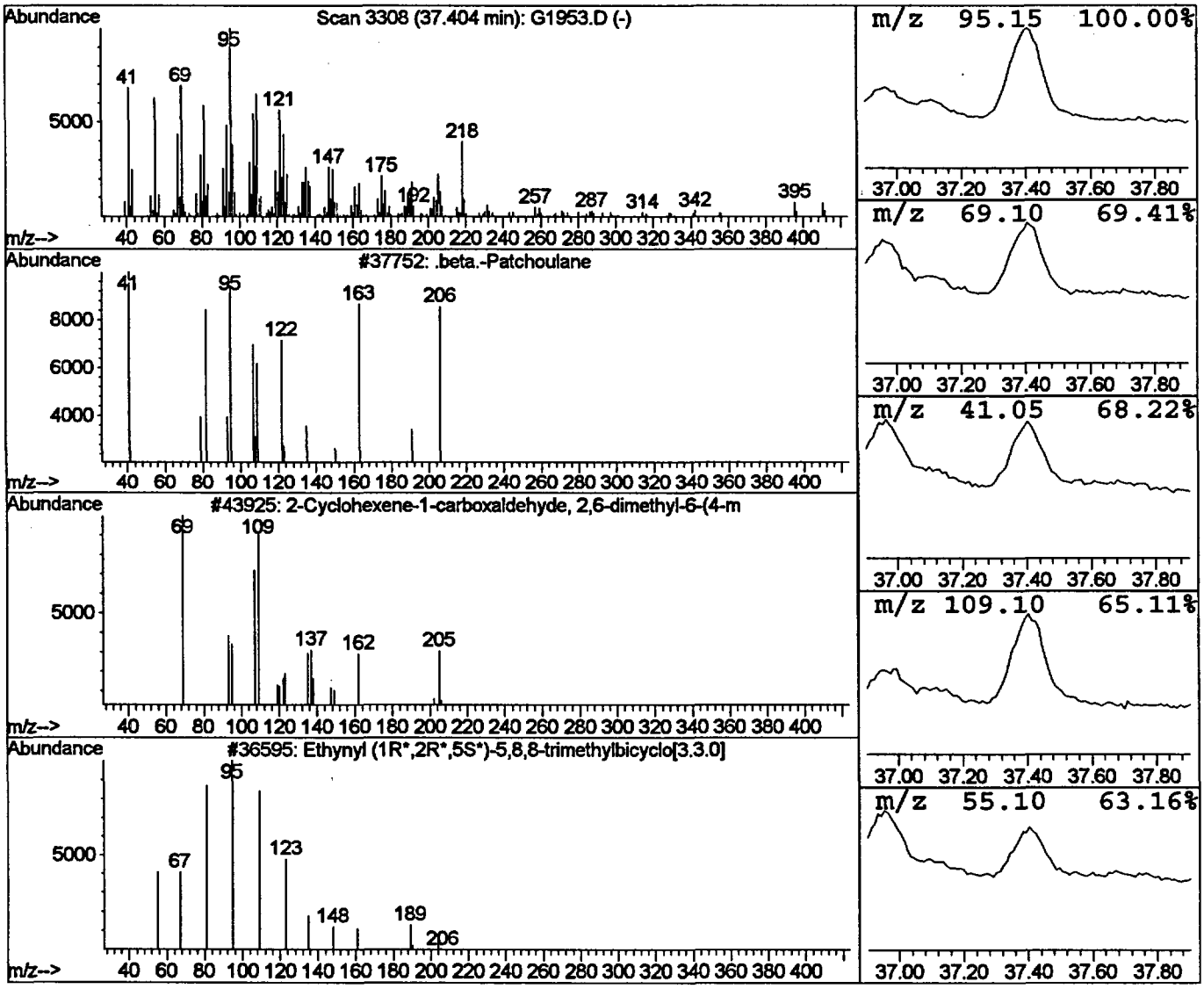
Peak Number 26 .beta.-Patchoulane Concentration Rank 16

UNKNOWN COMPOUND cw 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
37.40	81.80 ng	3876820	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	.beta.-Patchoulane	206	C15H26	020478-88-0	46
2	2-Cyclohexene-1-carboxaldehyde, 2,6	220	C15H24O	056772-07-7	42
3	Ethynyl (1R*,2R*,5S*)-5,8,8-trimeth	204	C14H20O	085544-99-6	38



0443

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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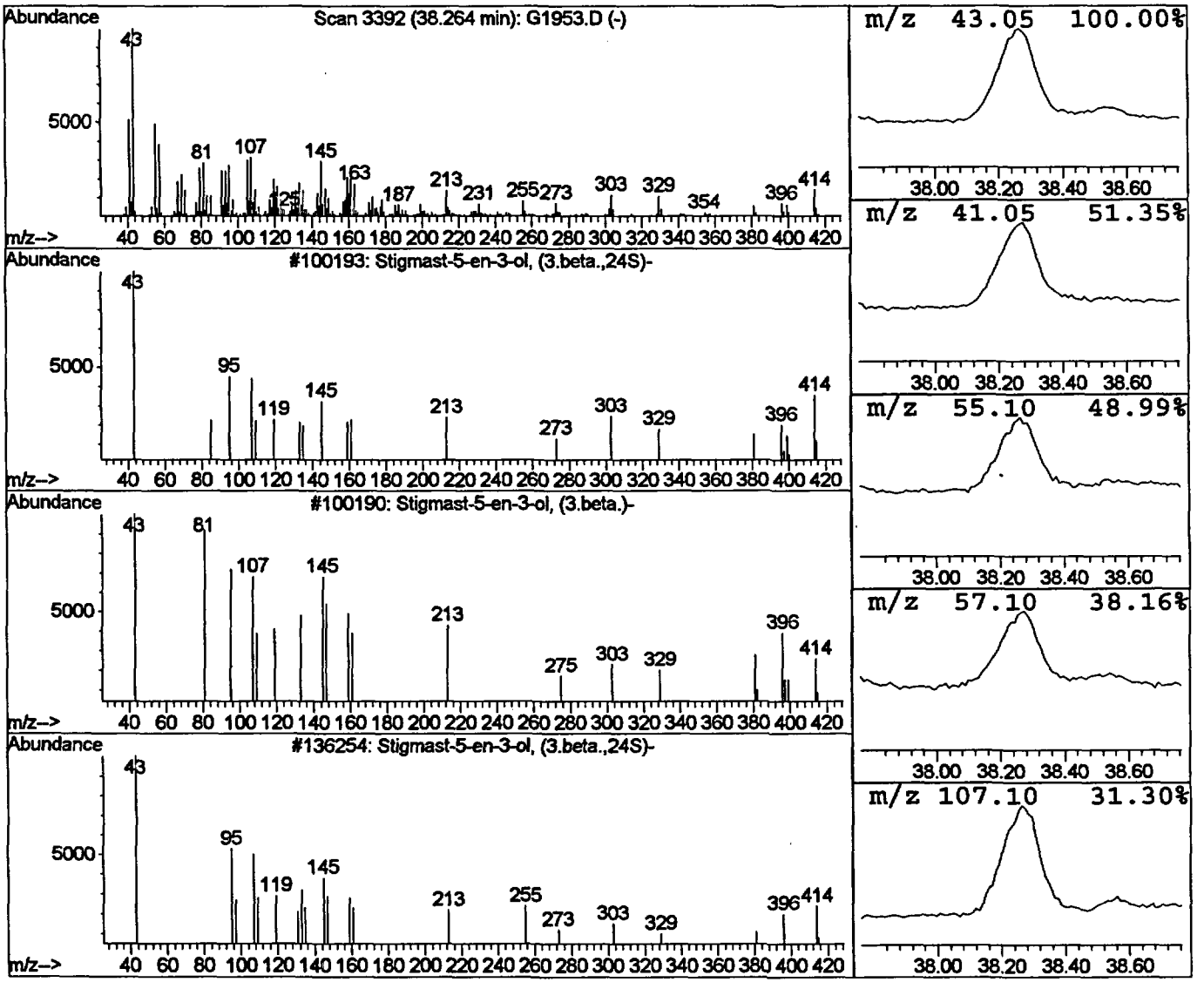
Peak Number 27 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.26	146.38 ng	6938040	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	95
2	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	87
3	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	86



Library Search Compound Report

CASE 25969
SDG#FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

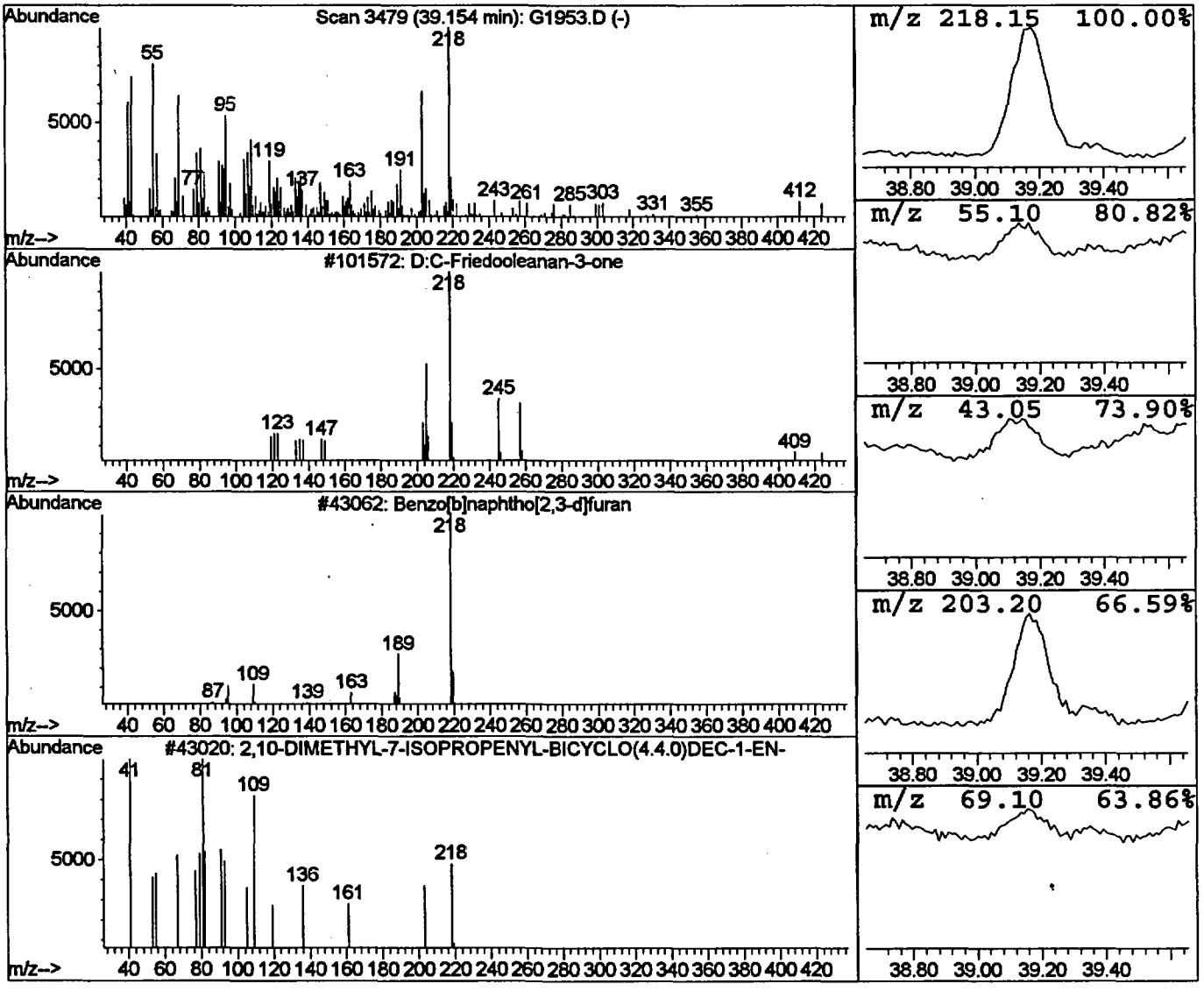
****

Peak Number 28 D:C-Friedooleanan-3-one Concentration Rank 36

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.15	21.83 ng	1034630	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	D:C-Friedooleanan-3-one	424	C30H48O	005945-53-9	83
2	Benzo[b]naphtho[2,3-d]furan	218	C16H10O	000243-42-5	64
3	2,10-DIMETHYL-7-ISOPROPENYL-BICYCLO	218	C15H22O	061187-89-1	58



0445

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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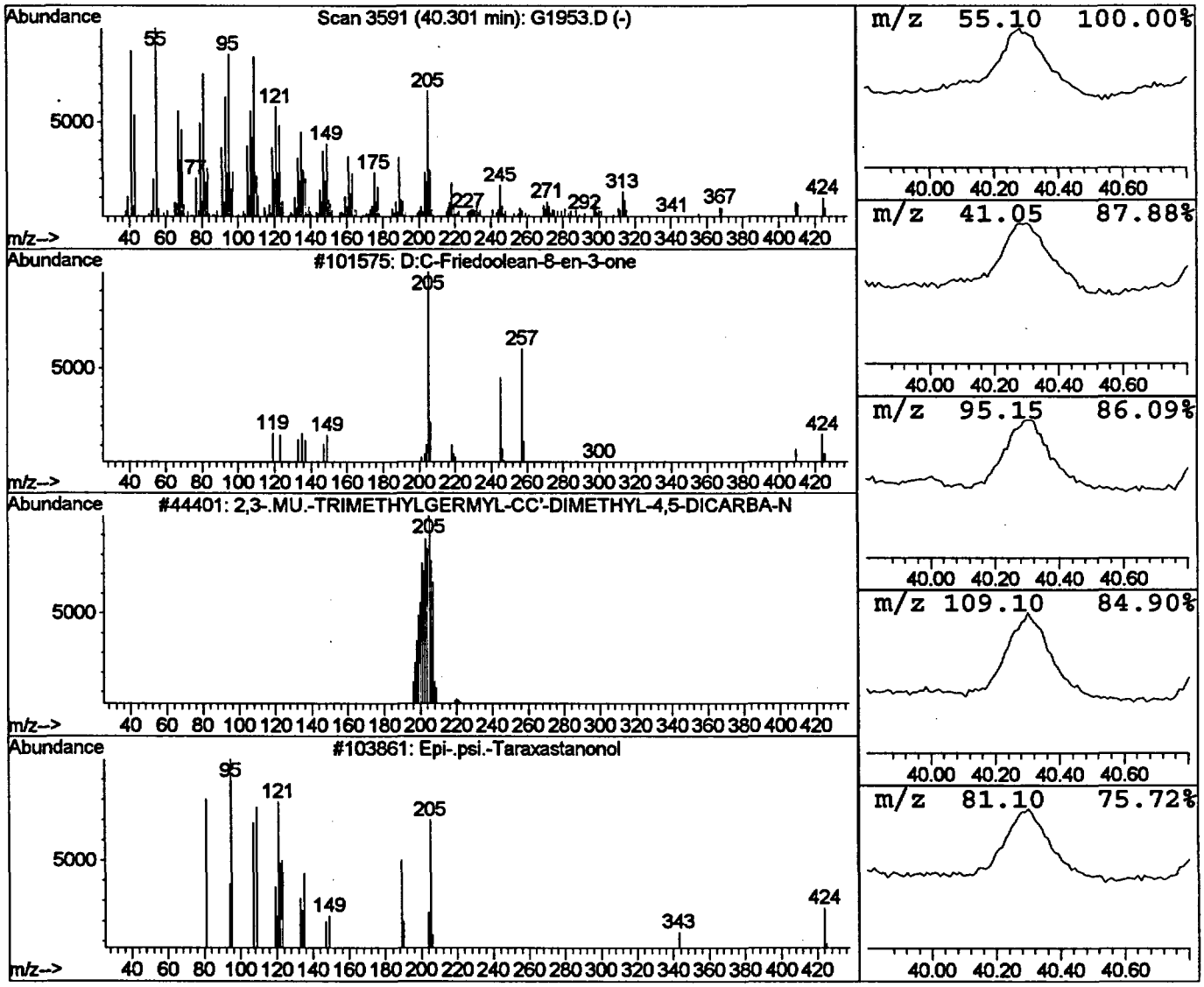
Peak Number 29 D:C-Friedoolean-8-en-3-one Concentration Rank 11

UNKNOWN COMPOUND 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.30	111.55 ng	5287100	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	D:C-Friedoolean-8-en-3-one	424	C30H48O	022611-26-3	87
2	2,3-.MU.-TRIMETHYLGERMYL-CC'-DIMETH	222	C7H20B4Ge	036672-03-4	72
3	Epi-.psi.-Taraxastanonol	442	C30H50O2	000000-00-0	64



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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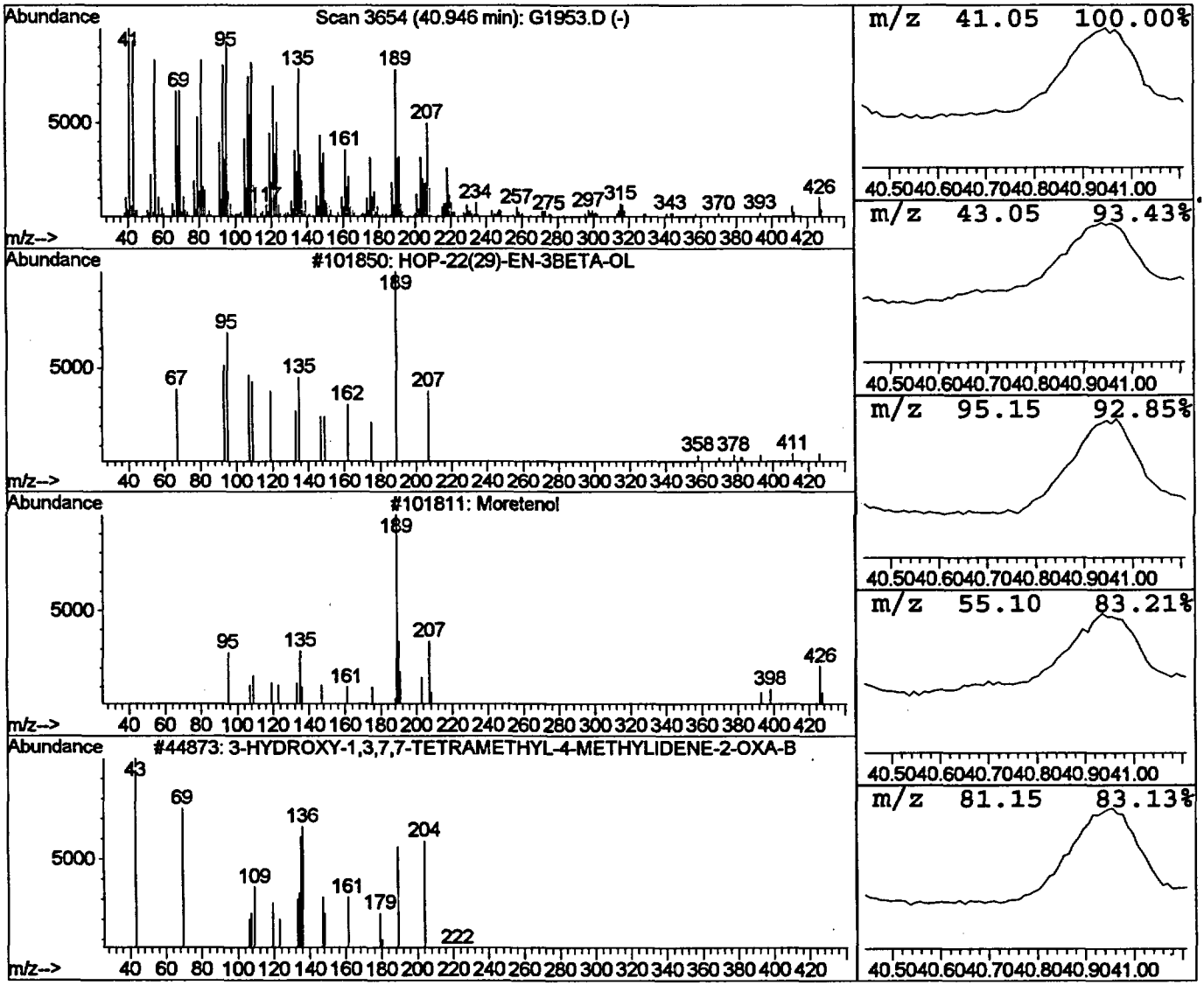
Peak Number 30 HOP-22(29)-EN-3BETA-OL Concentration Rank 4

UNKNOWN COMPOUND wo1->7-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.95	198.50 ng	9408230	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	HOP-22(29)-EN-3BETA-OL	426	C30H50O	058801-23-3	86
2	Moretenol	426	C30H50O	001678-31-5	70
3	3-HYDROXY-1,3,7,7-TETRAMETHYL-4-MET	222	C14H22O2	060779-90-0	43



0447

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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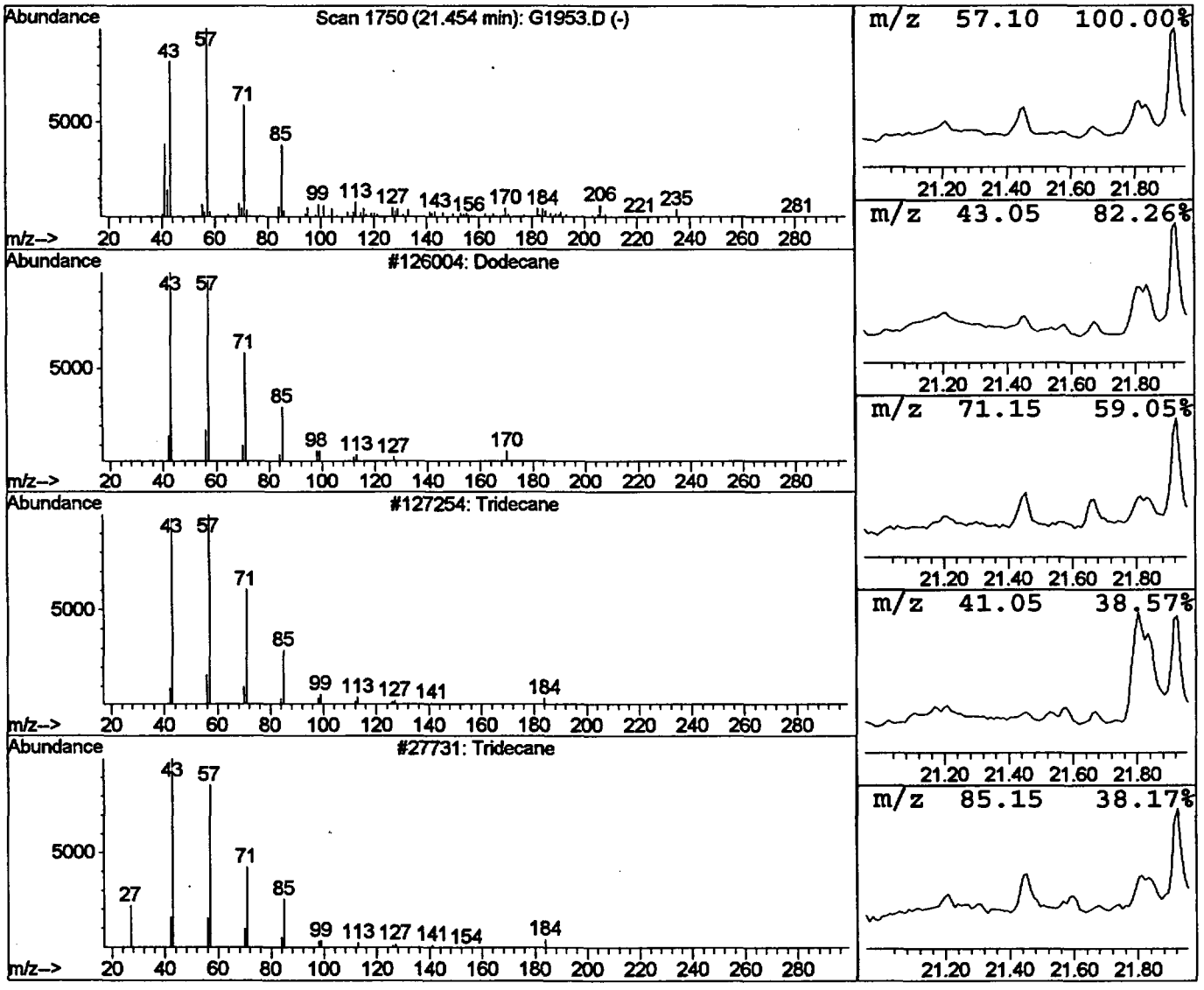
Peak Number 41 Dodecane Concentration Rank 71

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.45	5.25 ng	198368	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane	170	C12H26	000112-40-3	74
2	Tridecane	184	C13H28	000629-50-5	74
3	Tridecane	184	C13H28	000629-50-5	72



0448

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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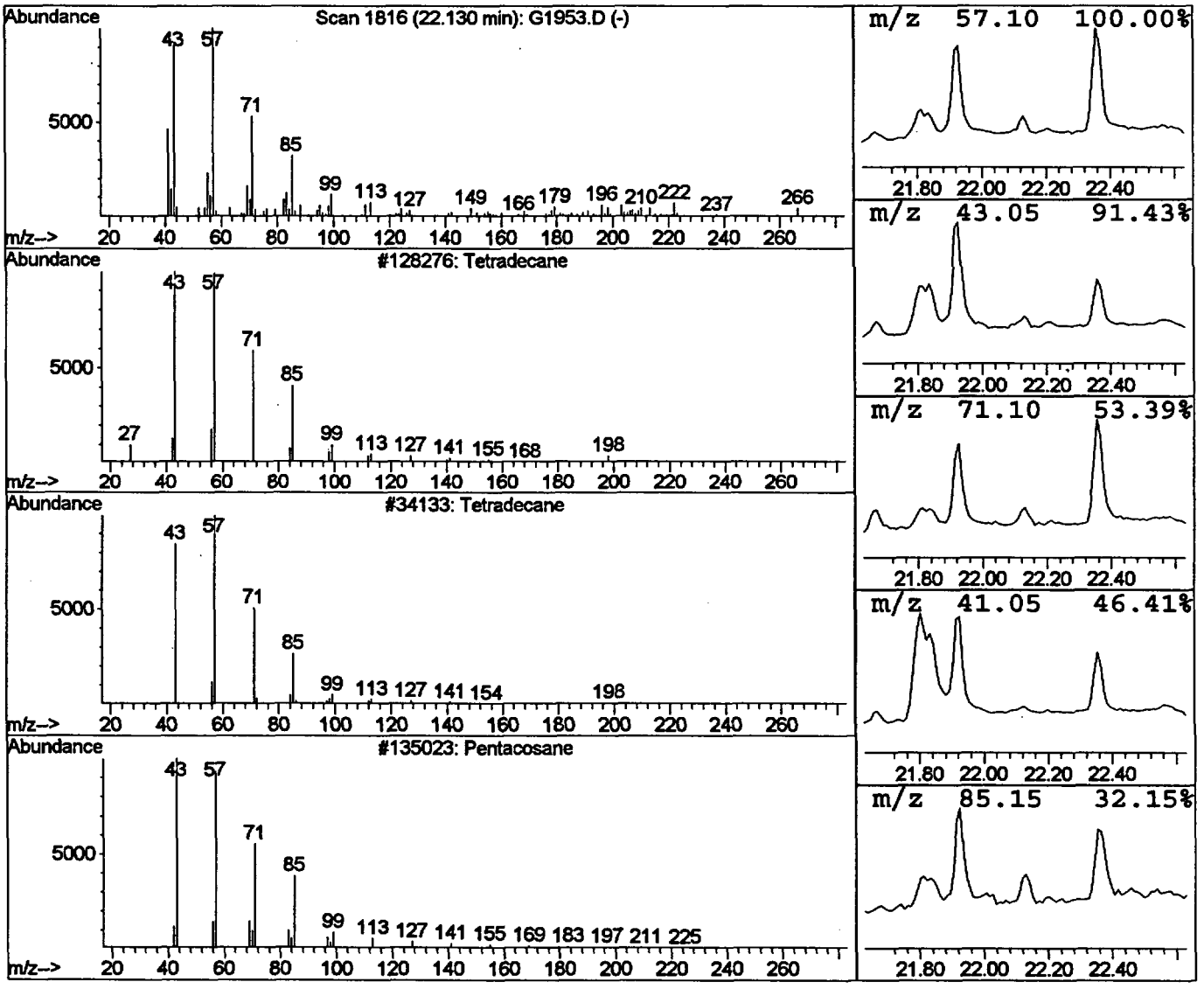
Peak Number 42 Tetradecane Concentration Rank 68

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.13	5.59 ng	210899	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	81
2	Tetradecane	198	C14H30	000629-59-4	81
3	Pentacosane	352	C25H52	000629-99-2	68



CASE 25969
SDG#FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D
Acq On : 22 Jan 98 20:08
Sample : S HP-7G 58073-003 FFR82
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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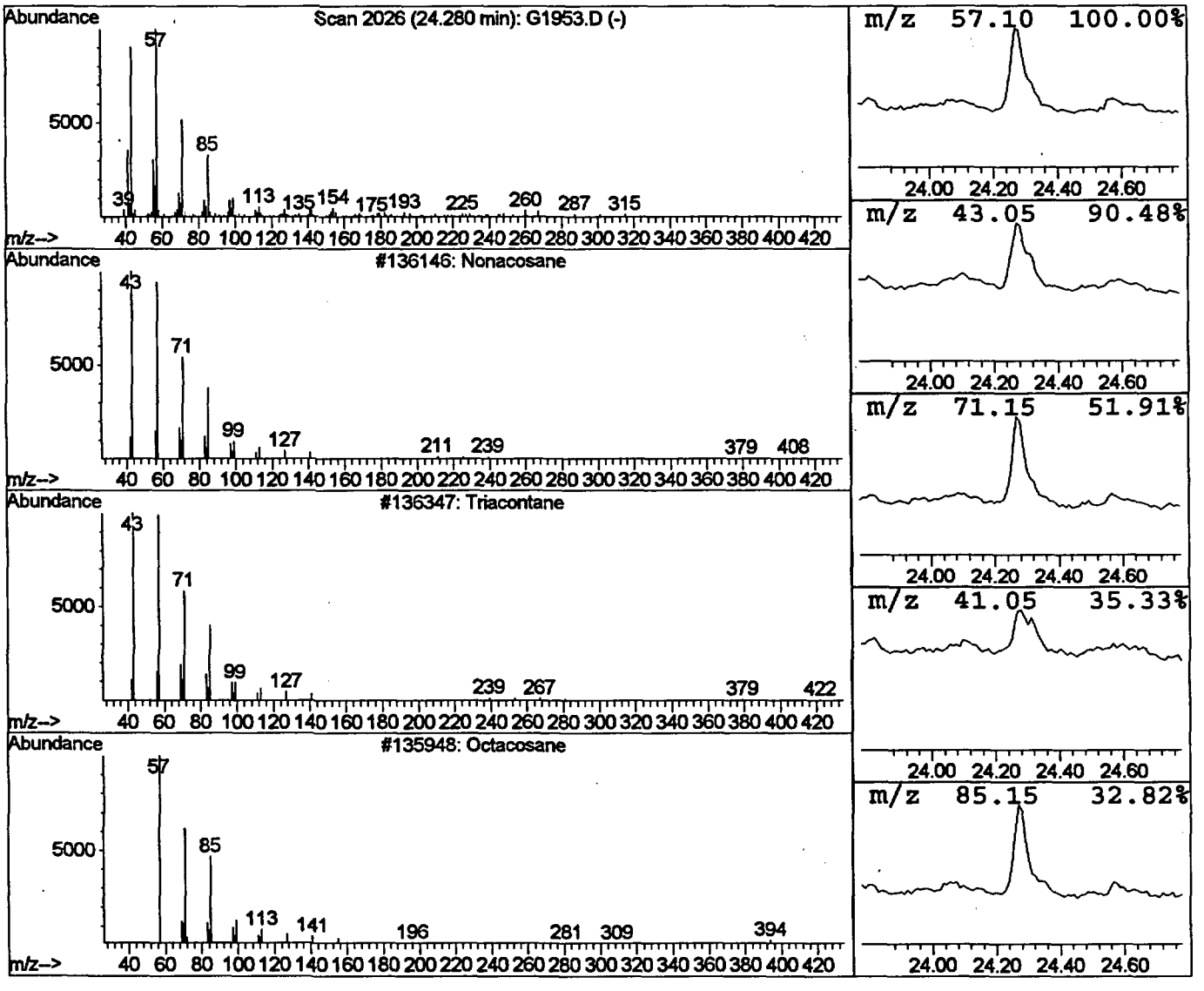
Peak Number 43 Nonacosane Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.28	38.19 ng	1309420	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	81
2	Triacontane	422	C30H62	000638-68-6	76
3	Octacosane	394	C28H58	000630-02-4	76



0450

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D
Acq On : 22 Jan 98 20:08
Sample : S HP-7G 58073-003 FFR82
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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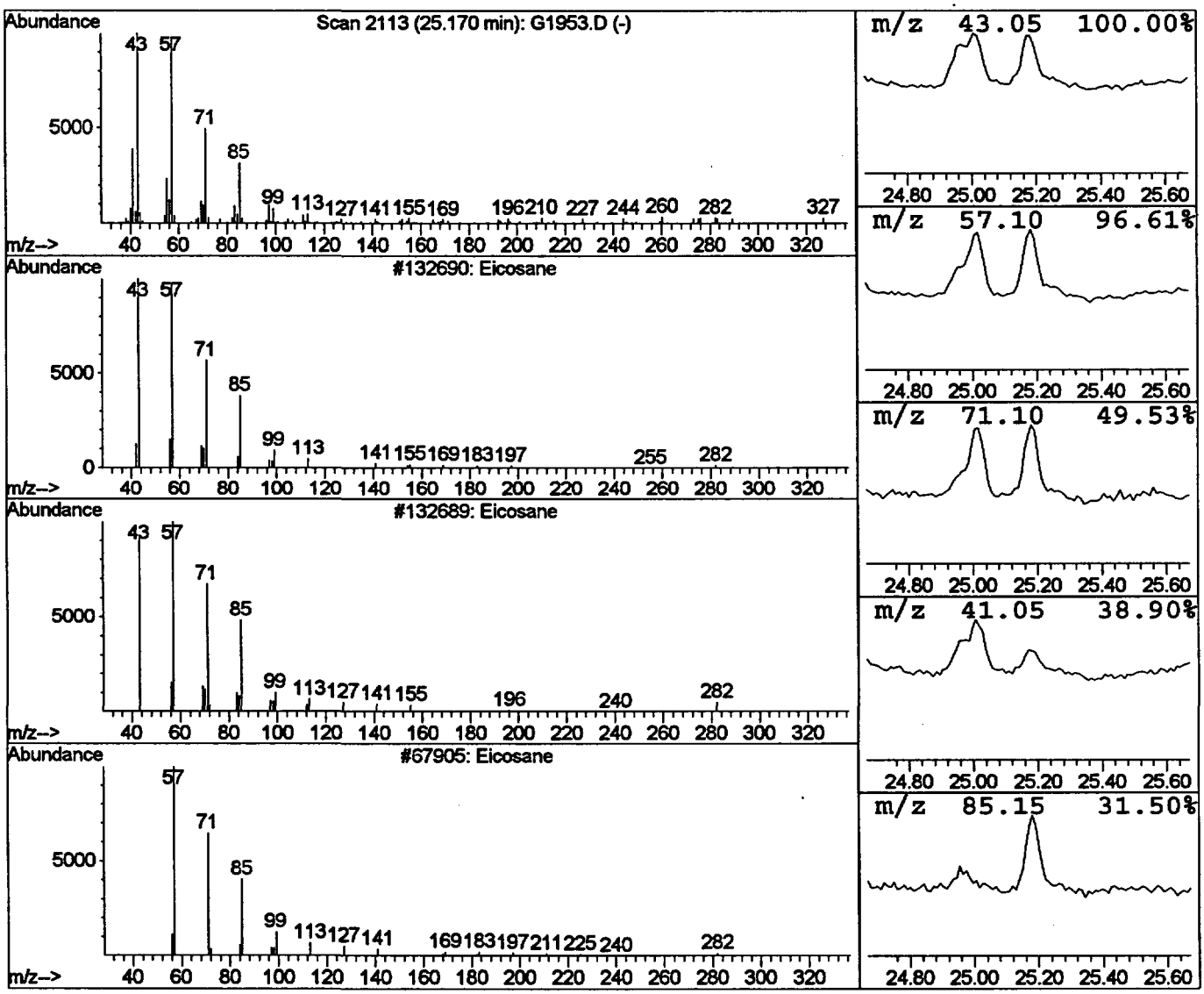
Peak Number 44 Eicosane — Concentration Rank 56

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.17	10.88 ng	373116	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	90
2	Eicosane	282	C20H42	000112-95-8	86
3	Eicosane	282	C20H42	000112-95-8	81



0451

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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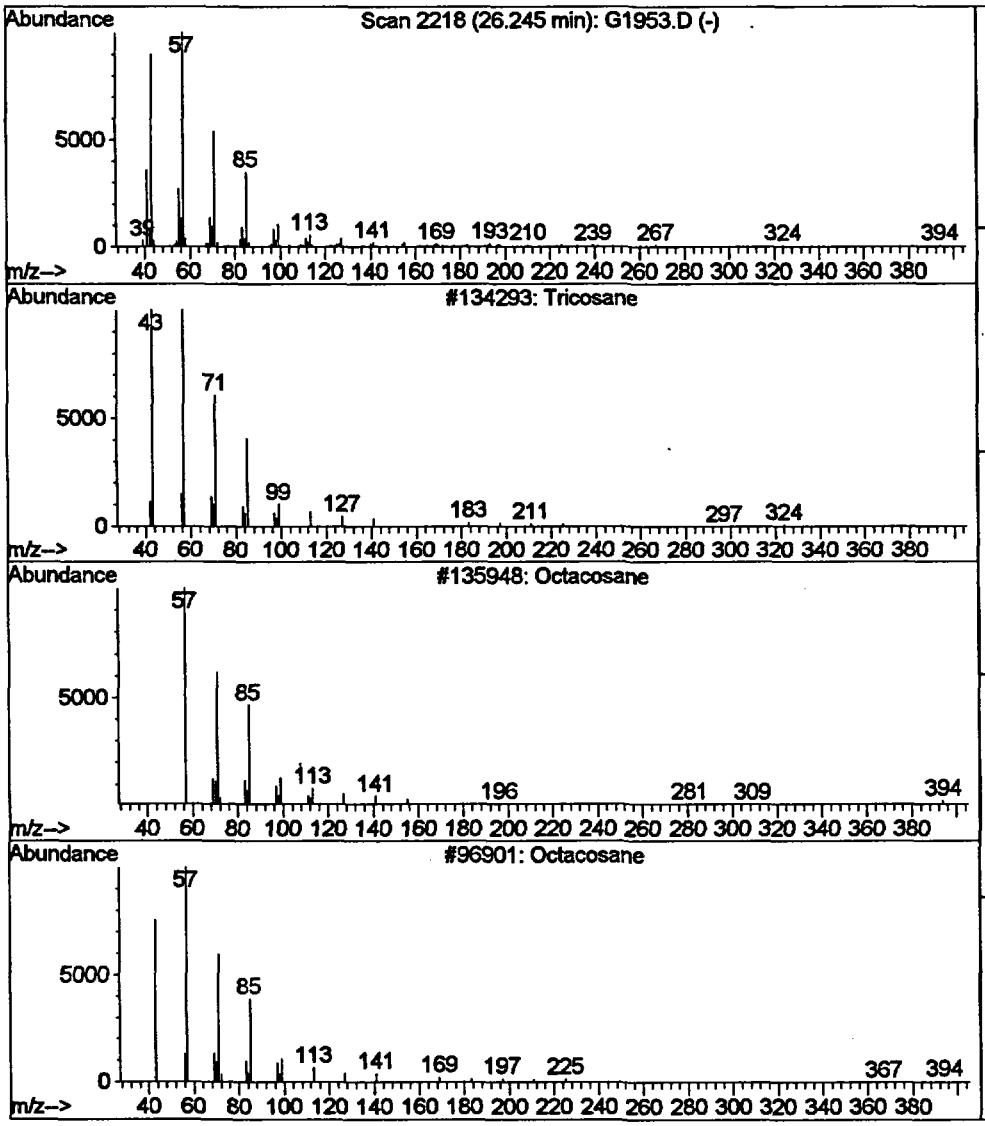
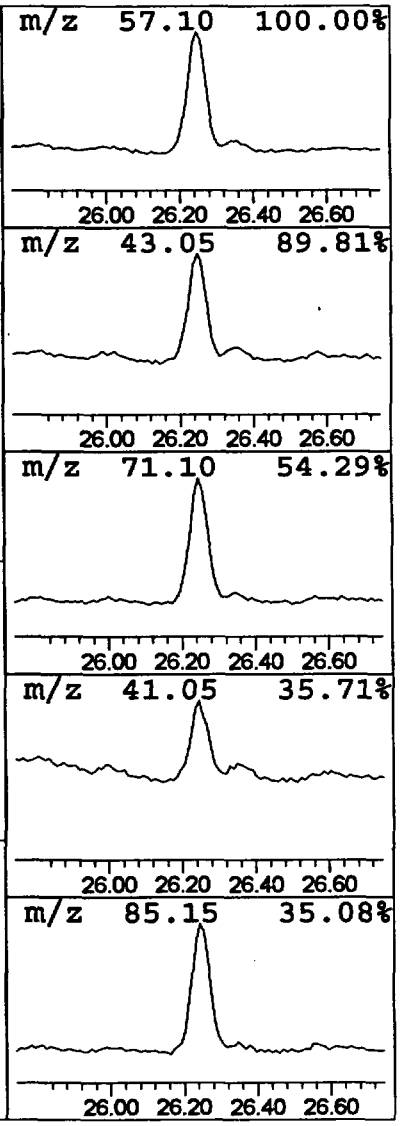
Peak Number 45 Tricosane Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.25	44.25 ng	1517220	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricosane	324	C23H48	000638-67-5	93
2	Octacosane	394	C28H58	000630-02-4	93
3	Octacosane	394	C28H58	000630-02-4	93





CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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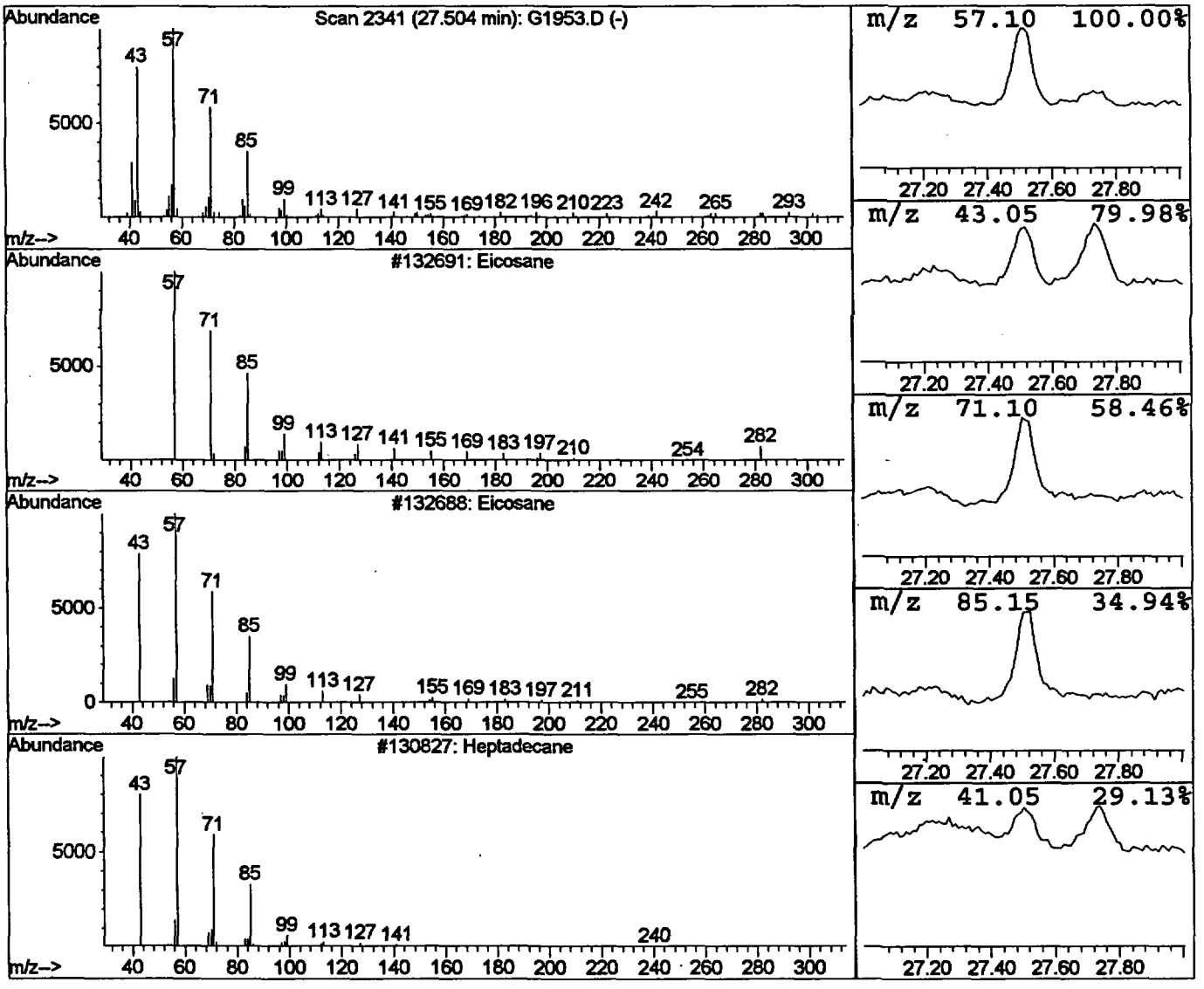
Peak Number 46 Eicosane Concentration Rank 35

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.50	22.85 ng	783514	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	93
2	Eicosane	282	C20H42	000112-95-8	87
3	Heptadecane	240	C17H36	000629-78-7	83



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D
Acq On : 22 Jan 98 20:08
Sample : S HP-7G 58073-003 FFR82
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial: 4
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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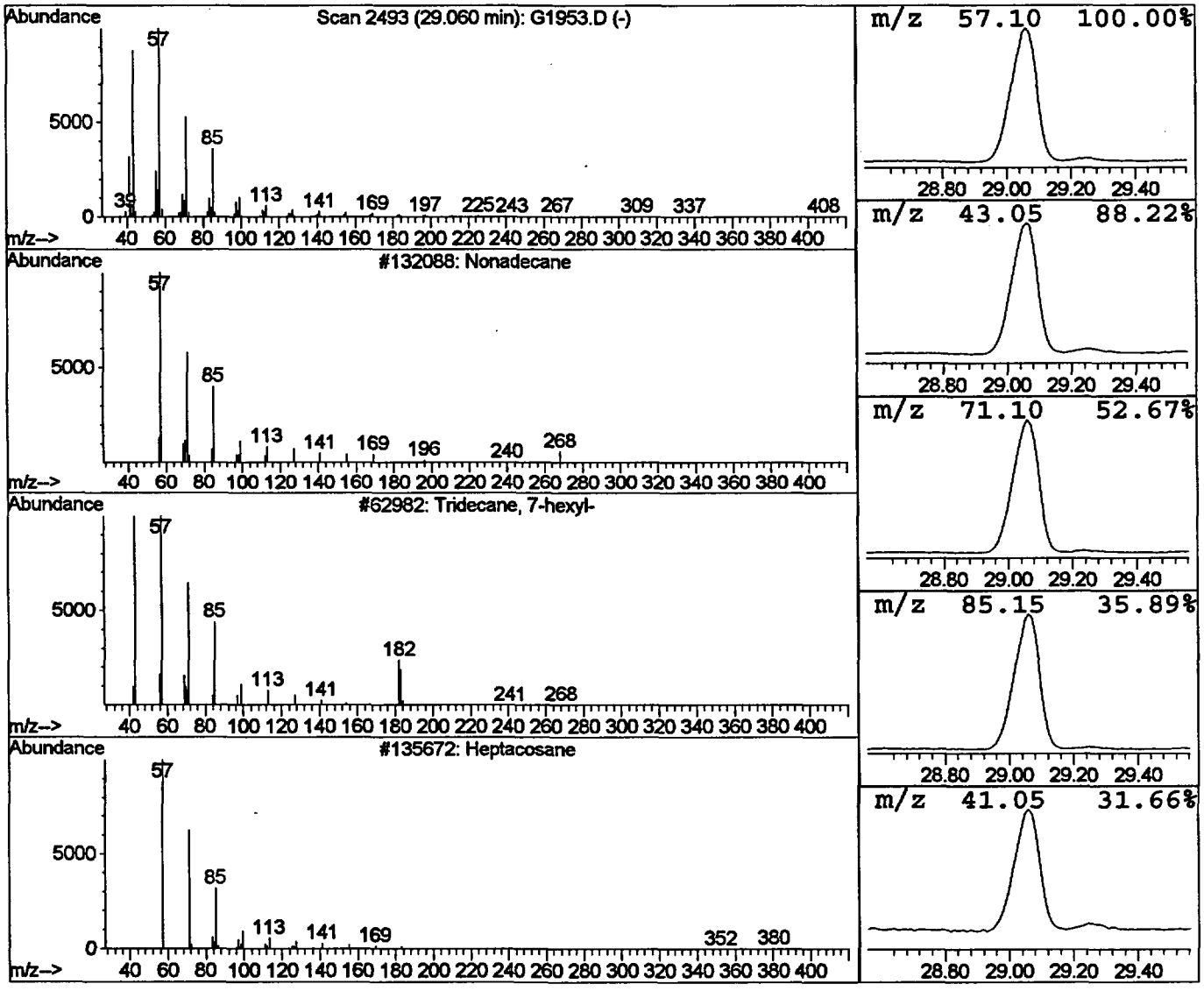
Peak Number 47 Nonadecane — Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.06	276.73 ng	13115700	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonadecane	268	C19H40	000629-92-5	95
2	Tridecane, 7-hexyl-	268	C19H40	007225-66-3	93
3	Heptacosane	380	C27H56	000593-49-7	91



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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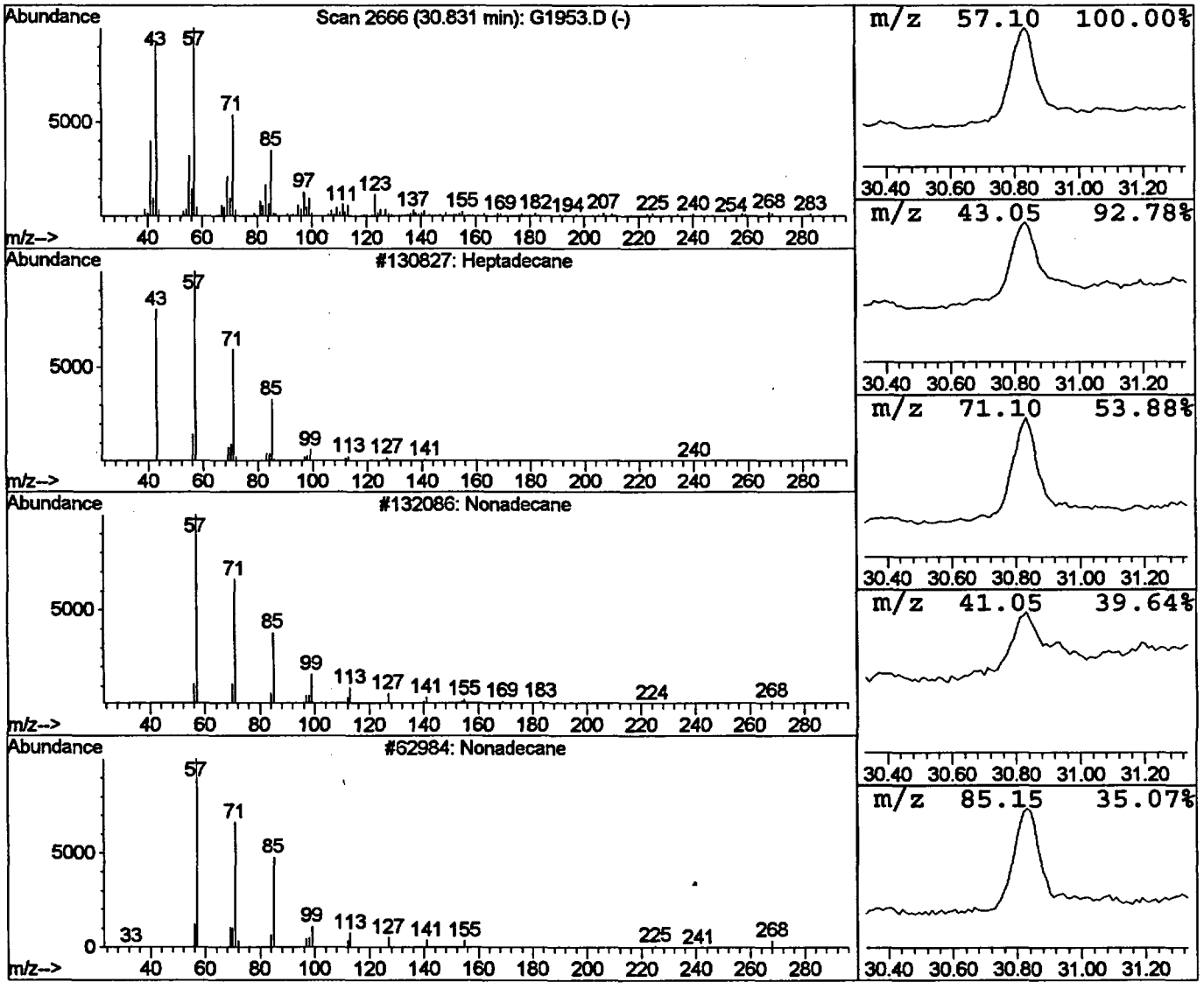
Peak Number 48 Heptadecane Concentration Rank 26

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.83	35.58 ng	1686370	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	96
2	Nonadecane	268	C19H40	000629-92-5	95
3	Nonadecane	268	C19H40	000629-92-5	95



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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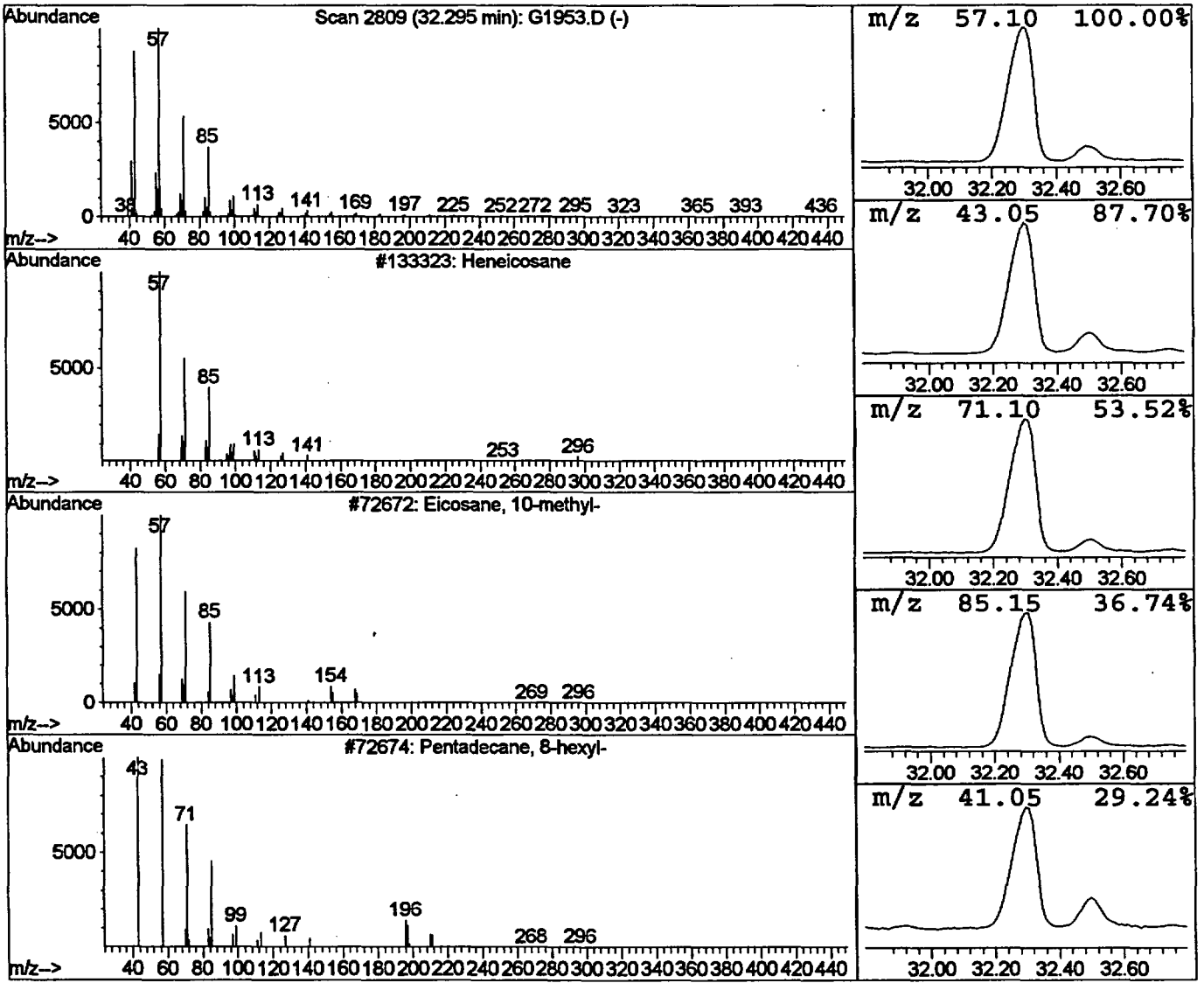
Peak Number 49 Heneicosane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.30	369.17 ng	17497300	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heneicosane	296	C21H44	000629-94-7	96
2	Eicosane, 10-methyl-	296	C21H44	054833-23-7	95
3	Pentadecane, 8-hexyl-	296	C21H44	013475-75-7	94



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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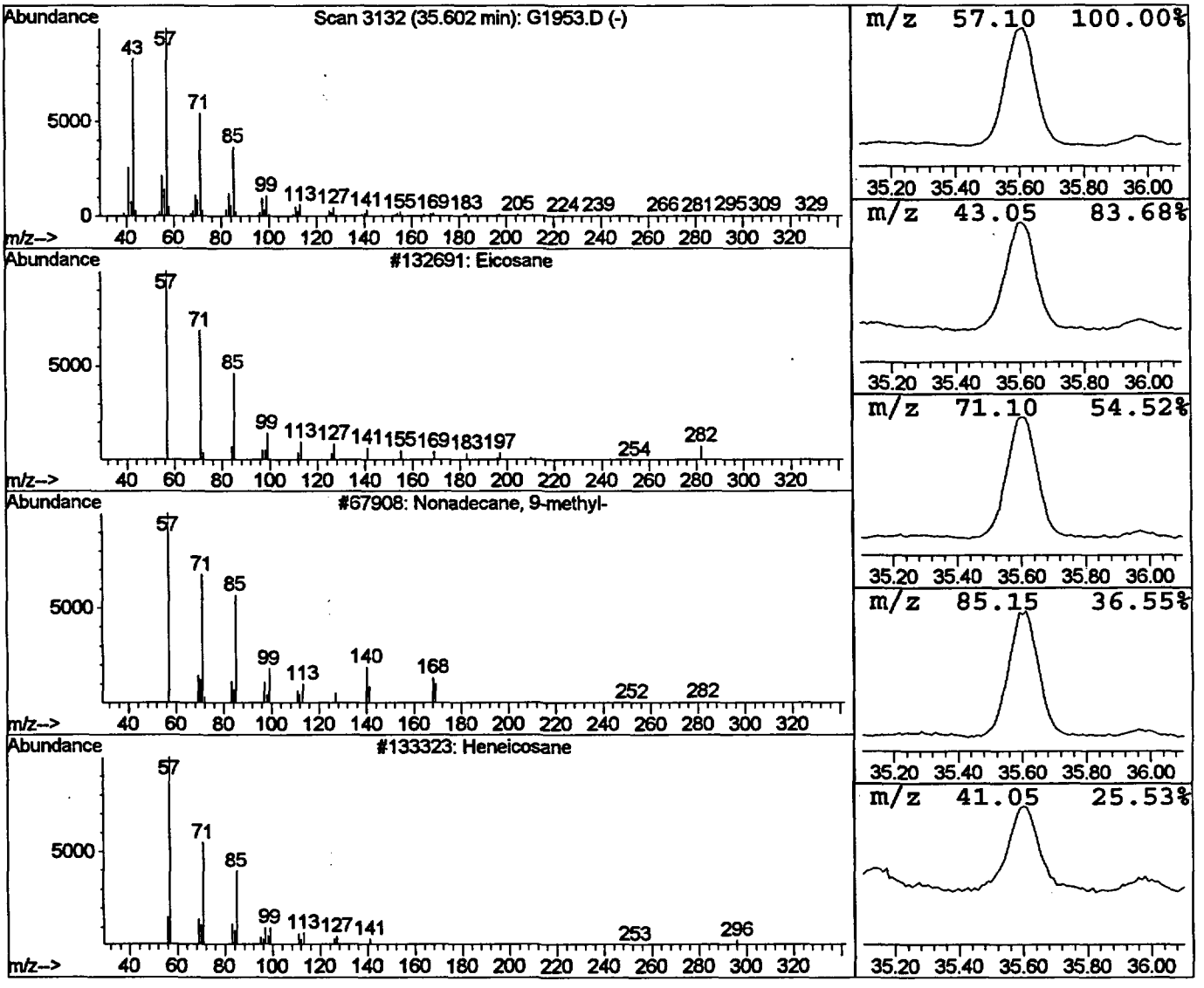
Peak Number 50 Eicosane Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.60	112.20 ng	5317820	Perylene-d12	31.48

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	95
2	Nonadecane, 9-methyl-	282	C20H42	013287-24-6	94
3	Heneicosane	296	C21H44	000629-94-7	94



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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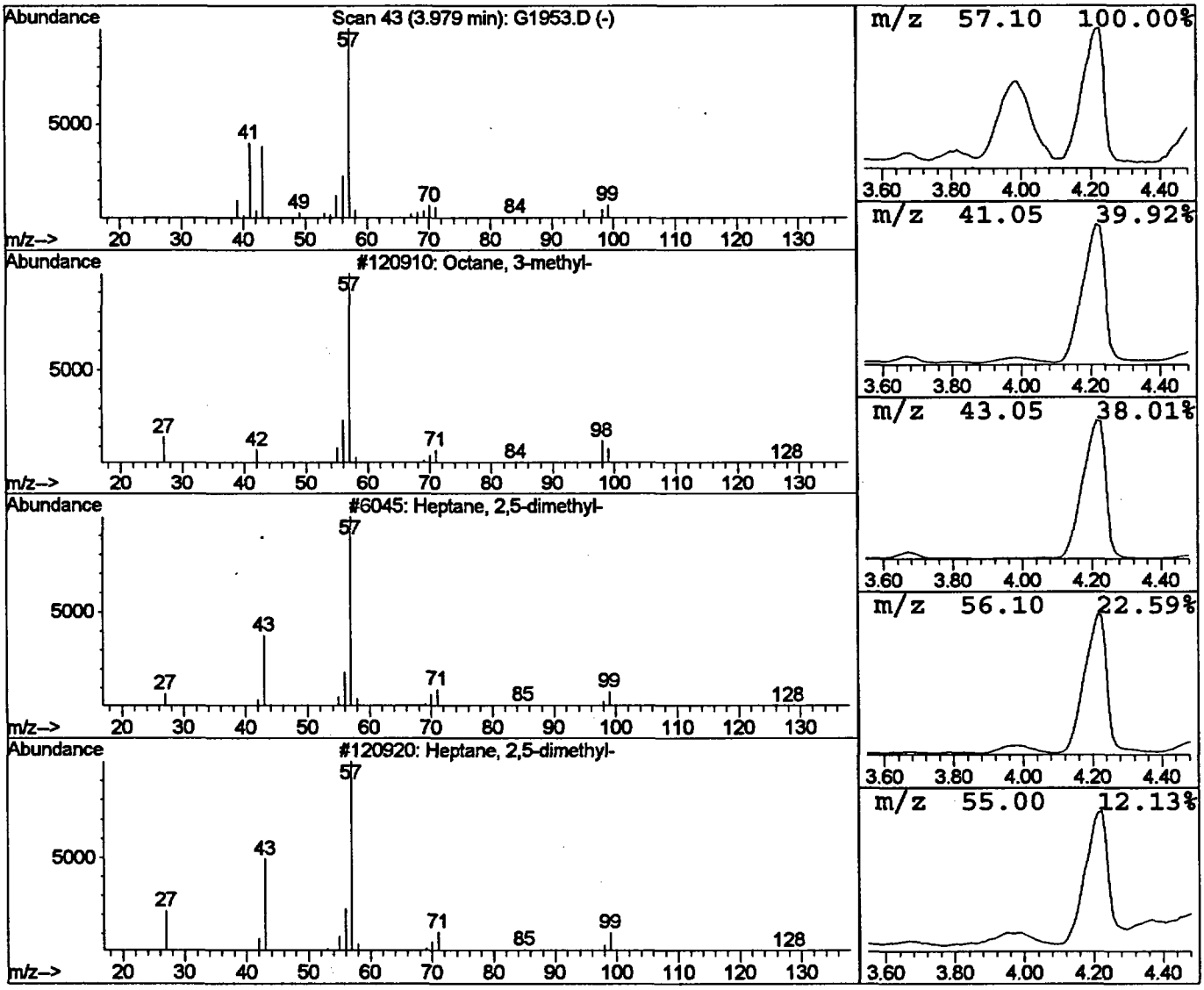
Peak Number 51 Octane, 3-methyl- Concentration Rank 41

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	18.55 ng	514206	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	72
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	64
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	50



Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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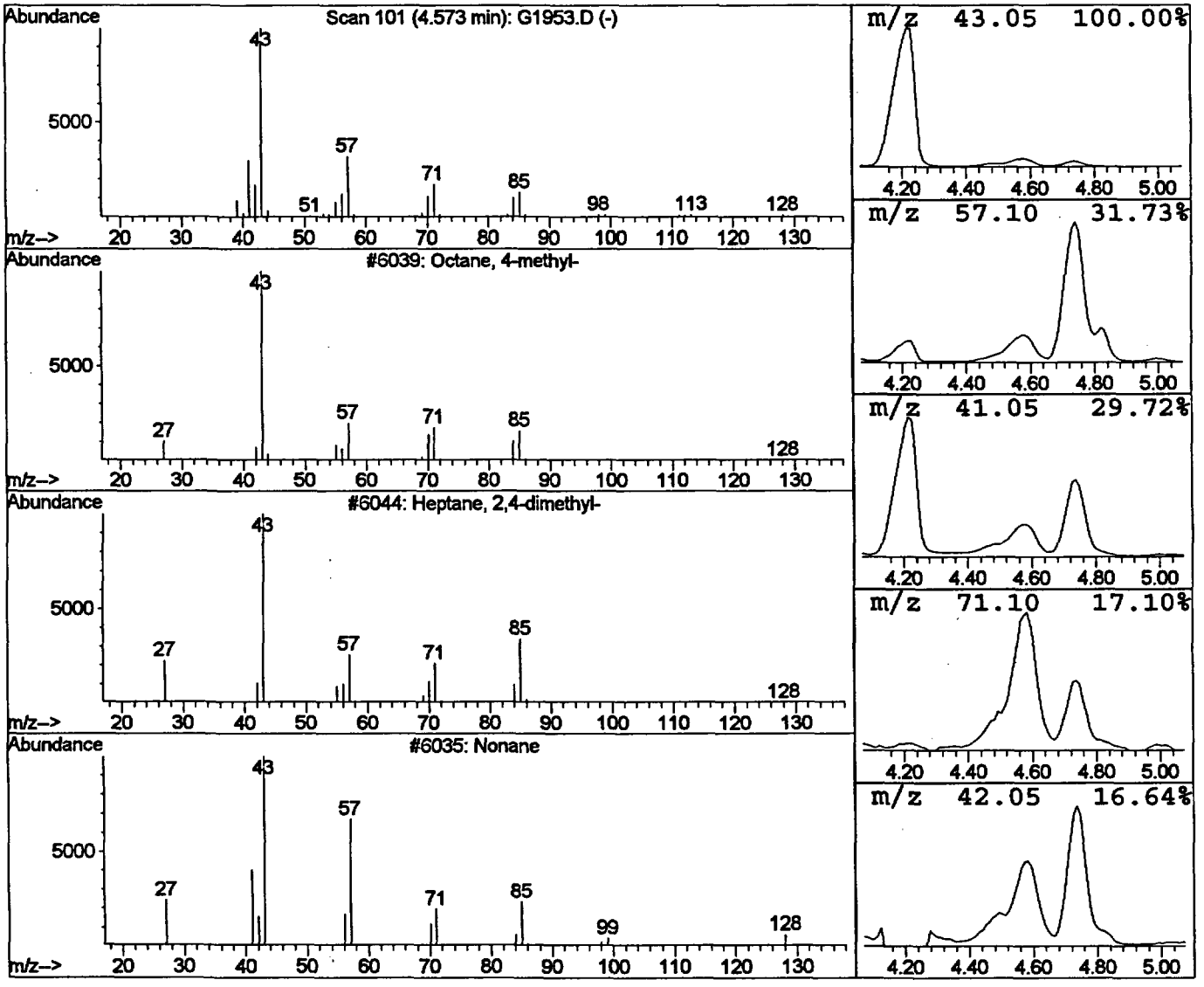
Peak Number 52 Octane, 4-methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.57	122.30 ng	3390790	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	87
2	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	72
3	Nonane	128	C9H20	000111-84-2	72



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1953.D Vial: 4
Acq On : 22 Jan 98 20:08 Operator:
Sample : S HP-7G 58073-003 FFR82 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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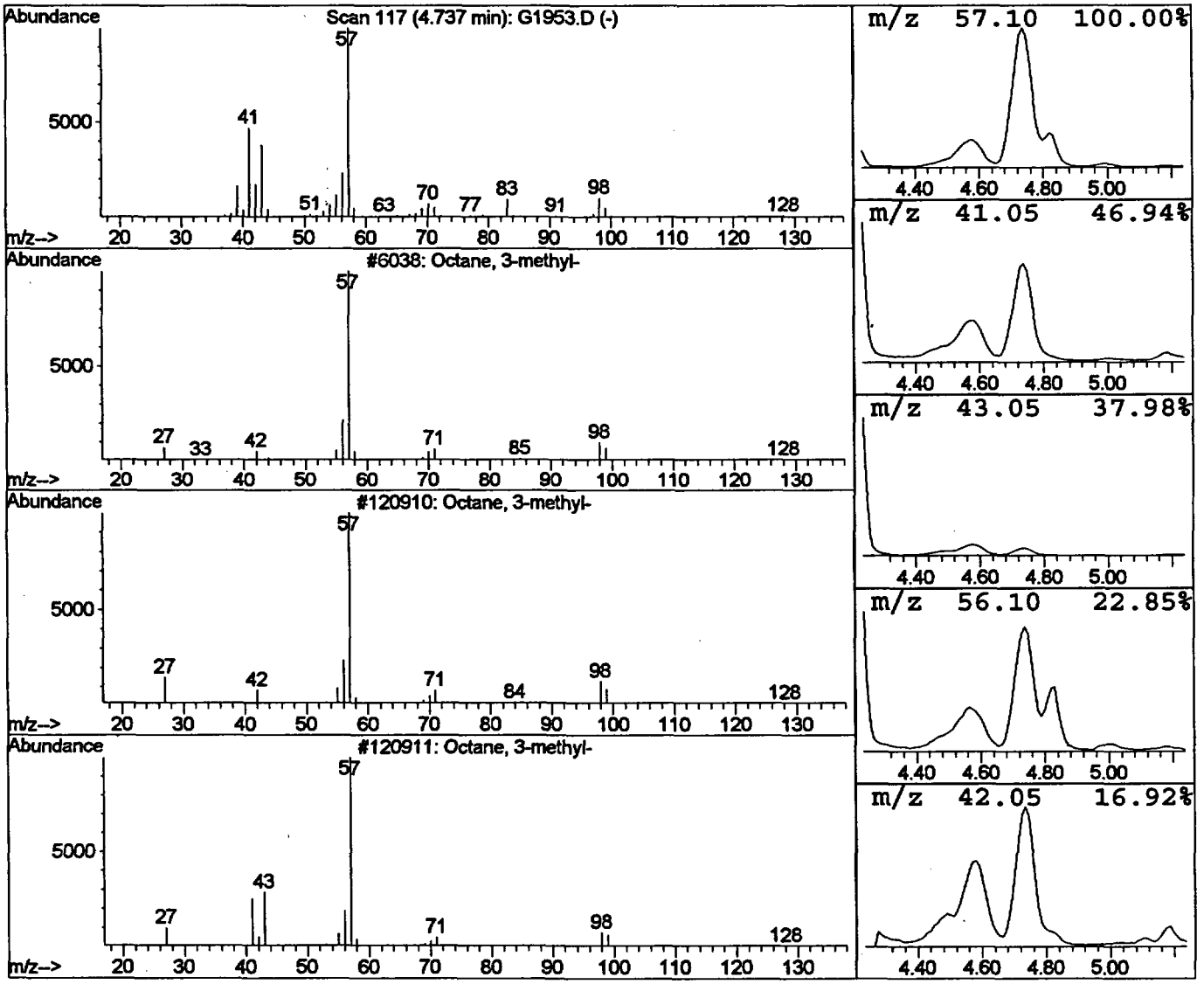
Peak Number 53 Octane, .3-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.74	126.64 ng	3511320	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	64
2	Octane, 3-methyl-	128	C9H20	002216-33-3	59
3	Octane, 3-methyl-	128	C9H20	002216-33-3	53



0460

Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 22 Jan 98 20:08
Data File: Q:\HPCHEM\G\G19XX\G1953.D
Name: S HP-7G 58073-003 FFR82
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

CASE 25969
SDG# FFR76

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
Propane, 2-(ethenylo	3.67	38.4	ng	1064900	ISTD01	7.06	1109040	40.0
2-Pentanone, 4-hydro	4.21	882.1	ng	24457100	ISTD01	7.06	1109040	40.0
2,4-Pentanedione	5.78	46.3	ng	1284260	ISTD01	7.06	1109040	40.0
trans-3-Hexene-2,5-d	5.99	84.1	ng	2332280	ISTD01	7.06	1109040	40.0
2-Pentanone, 3-methy	6.54	55.6	ng	1542230	ISTD01	7.06	1109040	40.0
Isopropyl dodecanoat	19.35	21.1	ng	796230	ISTD04	19.61	1510260	40.0
Hexadecanoic acid, m	20.21	20.9	ng	789733	ISTD04	19.61	1510260	40.0
15-Tetracosenoic aci	20.36	30.0	ng	1133850	ISTD04	19.61	1510260	40.0
Hexadecanoic acid	20.48	127.1	ng	4800560	ISTD04	19.61	1510260	40.0
2-Dodecene, (E)-	20.82	23.1	ng	872878	ISTD04	19.61	1510260	40.0
Stigmast-4-en-3-one	21.17	32.1	ng	1212510	ISTD04	19.61	1510260	40.0
Cyclodecanol	21.80	115.9	ng	4376790	ISTD04	19.61	1510260	40.0
Octadecanoic acid	21.93	60.4	ng	2282090	ISTD04	19.61	1510260	40.0
LAURIC ACID, N-OCTYL	22.35	38.9	ng	1468880	ISTD04	19.61	1510260	40.0
P-HYDROXYPHENYL PHEN	24.64	23.5	ng	806965	ISTD05	25.36	1371650	40.0
2-Nonenal, 8-oxo-	27.26	30.6	ng	1049760	ISTD05	25.36	1371650	40.0
2,4-Dimethyl-1,5-dip	27.74	30.5	ng	1046020	ISTD05	25.36	1371650	40.0
2,6,10,14,18,22-Tetr	28.28	27.8	ng	952327	ISTD05	25.36	1371650	40.0
1,3,5-Trisilacyclohe	31.72	29.0	ng	1373250	ISTD06	31.48	1895840	40.0
17-Pentatriacontene	32.50	84.4	ng	4002560	ISTD06	31.48	1895840	40.0
CYSTATHIONINE-DITMS	33.87	108.1	ng	5122720	ISTD06	31.48	1895840	40.0
Cholest-5-en-3-ol (3	34.27	38.2	ng	1809340	ISTD06	31.48	1895840	40.0
Tricyclo[4.3.0.0(7,9	35.14	49.8	ng	2361470	ISTD06	31.48	1895840	40.0
Ergost-5-en-3-ol, (3	36.32	21.1	ng	998813	ISTD06	31.48	1895840	40.0
LONGIBORN-9-ENE	36.96	98.5	ng	4669590	ISTD06	31.48	1895840	40.0
.beta.-Patchoulane	37.40	81.8	ng	3876820	ISTD06	31.48	1895840	40.0
Stigmast-5-en-3-ol,	38.26	146.4	ng	6938040	ISTD06	31.48	1895840	40.0
D:C-Friedooleanan-3-	39.15	21.8	ng	1034630	ISTD06	31.48	1895840	40.0
D:C-Friedoolean-8-en	40.30	111.6	ng	5287100	ISTD06	31.48	1895840	40.0
HOP-22(29)-EN-3BETA-	40.95	198.5	ng	9408230	ISTD06	31.48	1895840	40.0
Additional Tentatively Identified Compounds								
3-Heptyne, 7-chloro-	33.52	18.9	ng	896402	ISTD06	31.48	1895840	40.0
Purine-6(1H)-thione,	25.75	18.3	ng	626818	ISTD05	25.36	1371650	40.0
9-Azabicyclo[6.1.0]n	31.61	17.5	ng	827861	ISTD06	31.48	1895840	40.0
Eicosanoic acid	23.28	17.5	ng	598859	ISTD05	25.36	1371650	40.0
Acetic acid, 1-methy	5.58	17.2	ng	475561	ISTD01	7.06	1109040	40.0
1,1'-Biphenyl, 2,2',	24.06	17.0	ng	582281	ISTD05	25.36	1371650	40.0
1-Hexadecene	29.25	16.3	ng	771865	ISTD06	31.48	1895840	40.0
1-Octadecene	35.98	16.1	ng	760891	ISTD06	31.48	1895840	40.0
Vitamin E	33.70	14.8	ng	701929	ISTD06	31.48	1895840	40.0
Glycine, N-acetyl-N-	6.14	14.6	ng	404077	ISTD01	7.06	1109040	40.0

HP76 58073003 FFR82 01/22/98 20:05 CASE 25969 SDG# FFR76

Hydrocarbons: n-Alkanes							
Dodecane	21.45	5.3 ng	198368	ISTD04	19.61	1510260	40.0
Tetradecane	22.13	5.6 ng	210899	ISTD04	19.61	1510260	40.0
Nonacosane	24.28	38.2 ng	1309420	ISTD05	25.36	1371650	40.0
Eicosane	25.17	10.9 ng	373116	ISTD05	25.36	1371650	40.0
Tricosane	26.25	44.2 ng	1517220	ISTD05	25.36	1371650	40.0
Eicosane	27.50	22.8 ng	783514	ISTD05	25.36	1371650	40.0
Nonadecane	29.06	276.7 ng	13115700	ISTD06	31.48	1895840	40.0
Heptadecane	30.83	35.6 ng	1686370	ISTD06	31.48	1895840	40.0
Heneicosane	32.30	369.2 ng	17497300	ISTD06	31.48	1895840	40.0
Eicosane	35.60	112.2 ng	5317820	ISTD06	31.48	1895840	40.0
Subtotal:		920.7 ng					

Hydrocarbons: Branched Alkanes							
Octane, 3-methyl-	3.98	18.5 ng	514206	ISTD01	7.06	1109040	40.0
Octane, 4-methyl-	4.57	122.3 ng	3390790	ISTD01	7.06	1109040	40.0
Octane, 3-methyl-	4.74	126.6 ng	3511320	ISTD01	7.06	1109040	40.0
~~Hexane, 3 methyl-~~	~~6.87~~	~~8.5 ng~~	235128	ISTD01	7.06	1109040	40.0
Subtotal:		276.0 ng					

Total Alkane Conc: (1196.6 ng - 8.5) XRF. = 30,000 ng/kg

G1953.D LIN.M Mon Jan 26 13:09:46 1998

FFR82 58073-003 cw01-27-98

TIC: G1953.D

S HP-7G 58073-003 FFR82

11/22/98 20:08

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.672	rVB	0.184	1064904	3.580	3.764
2	3.979	rBV	0.215	514206	3.877	4.092
3	4.214	rVV	0.287	24457100	4.092	4.378
4	4.573	rVV	0.266	3390787	4.388	4.655
5	4.737	rVV	0.123	3511320	4.655	4.777
6	4.818	rVB	0.174	3171869	4.777	4.951
7	5.187	rVB	0.184	391602	5.126	5.310
8	5.576	rVV	0.092	475561	5.535	5.627
9	5.781	rVV	0.276	1284262	5.637	5.914
10	5.985	rVB	0.133	2332281	5.914	6.047
11	6.139	rBV	0.174	404077	6.047	6.221
12	6.354	rVB	0.154	3779200	6.303	6.456
13	6.538	rBV	0.154	1542226	6.456	6.610
14	6.712	rBV	0.113	3345816	6.671	6.784
15	6.825	rVV	0.061	309016	6.784	6.845
16	6.866	rVB	0.072	235128	6.845	6.917
17	7.060	rBV	0.102	1109042	7.009	7.112
18	7.429	rBV	0.154	3354770	7.347	7.501
19	8.186	rVB	0.143	1891330	8.115	8.258
20	10.070	rBV	0.154	1160960	9.998	10.152
21	14.267	rBV	0.184	2449756	14.175	14.360
22	16.284	rBV	0.123	1135512	16.223	16.346
23	18.168	rBV	0.102	1705753	18.106	18.209
24	18.782	rVV	0.102	178826	18.741	18.844
25	19.059	rBV	0.154	233925	18.956	19.110
26	19.345	rBV	0.102	796230	19.294	19.396
27	19.427	rVV	0.082	312486	19.396	19.478
28	19.601	rVV	0.092	1510255	19.550	19.642
29	19.652	rVV	0.051	287073	19.642	19.693
30	19.744	rVB	0.113	182247	19.693	19.806
31	19.877	rBV	0.092	181164	19.847	19.939
32	20.082	rBV	0.113	319324	20.000	20.113
33	20.205	rBV	0.143	789733	20.113	20.256
34	20.359	rBV	0.092	1133854	20.297	20.389
35	20.481	rVV	0.195	4800564	20.389	20.584
36	20.686	rBV	0.061	170485	20.656	20.717
37	20.819	rBV	0.102	872878	20.768	20.871
38	21.167	rBV	0.143	1212512	21.045	21.188
39	21.454	rVB	0.072	198368	21.423	21.495
40	21.536	rBV	0.061	164494	21.495	21.556
41	21.577	rVB	0.072	324468	21.556	21.628
42	21.669	rBV	0.082	319605	21.628	21.710
43	21.802	rBV	0.143	4376793	21.741	21.884
44	21.925	rVV	0.102	2282085	21.884	21.986
45	22.017	rVV	0.072	583997	21.986	22.058
46	22.130	rVV	0.092	210899	22.068	22.160
47	22.355	rBV	0.102	1468876	22.304	22.406
48	22.468	rVB	0.082	489122	22.427	22.508
49	22.652	rBV	0.143	2749346	22.601	22.744
50	22.775	rVB	0.102	362660	22.744	22.846
51	23.031	rBV	0.061	185427	22.990	23.051
52	23.143	rVB	0.092	251829	23.123	23.215
53	23.276	rVB	0.143	598859	23.235	23.379
54	23.512	rVV	0.082	321955	23.461	23.542
55	23.573	rVV	0.082	316048	23.542	23.624
56	24.065	rBV	0.164	582281	24.013	24.177

57	24.280	rVB	0.205	1309417	24.228	24.433
58	24.638	rVB	0.205	806965	24.556	24.761
59	24.884	rBV	0.072	197605	24.843	24.914
60	25.017	rVV	0.184	1350123	24.914	25.099
61	25.170	rVV	0.113	373116	25.119	25.232
62	25.365	rVV	0.133	1371645	25.273	25.406
63	25.447	rVB	0.113	564910	25.406	25.518
64	25.754	rBV	0.154	626818	25.621	25.774
65	26.245	rBV	0.143	1517221	26.173	26.317
66	27.259	rVV	0.266	1049763	27.156	27.422
67	27.504	rVB	0.154	783514	27.453	27.607
68	27.740	rVB	0.174	1046019	27.648	27.822
69	28.282	rVB	0.164	952327	28.221	28.385
70	29.060	rBV	0.246	13115683	28.927	29.173
71	29.255	rVB	0.225	771865	29.183	29.408
72	29.582	rBV	0.133	568201	29.511	29.644
73	29.705	rVB	0.154	615225	29.664	29.818
74	30.831	rBV	0.164	1686373	30.729	30.893
75	31.036	rVB	0.133	276701	30.995	31.128
76	31.241	rBV	0.205	849453	31.149	31.354
77	31.487	rVV	0.143	1895843	31.405	31.548
78	31.609	rVV	0.102	827861	31.569	31.671
79	31.722	rVV	0.174	1373248	31.671	31.845
80	31.917	rVB	0.143	521489	31.855	31.998
81	32.295	rBV	0.235	17497275	32.162	32.398
82	32.500	rVB	0.266	4002562	32.408	32.674
83	32.940	rBV	0.102	256826	32.889	32.991
84	33.258	rVB	0.123	540667	33.227	33.350
85	33.524	rVV	0.154	896402	33.452	33.606
86	33.698	rVV	0.102	701929	33.636	33.739
87	33.872	rVB	0.307	5122721	33.759	34.066
88	34.271	rVB	0.389	1809335	34.179	34.568
89	34.793	rVB	0.164	602185	34.742	34.906
90	35.141	rVB	0.369	2361465	35.039	35.408
91	35.602	rVB	0.369	5317821	35.469	35.837
92	35.981	rVB	0.184	760891	35.899	36.083
93	36.319	rBV	0.195	998813	36.226	36.421
94	36.964	rVV	0.410	4669591	36.841	37.250
95	37.404	rVB	0.348	3876815	37.281	37.629
96	38.264	rBV	0.338	6938043	38.110	38.448
97	39.154	rVB	0.215	1034631	39.052	39.267
98	39.359	rBV	0.123	214246	39.308	39.431
99	40.301	rVB	0.389	5287100	40.168	40.557
100	40.946	rBV	0.317	9408228	40.751	41.069

CASE 25969
SOG# FFR76

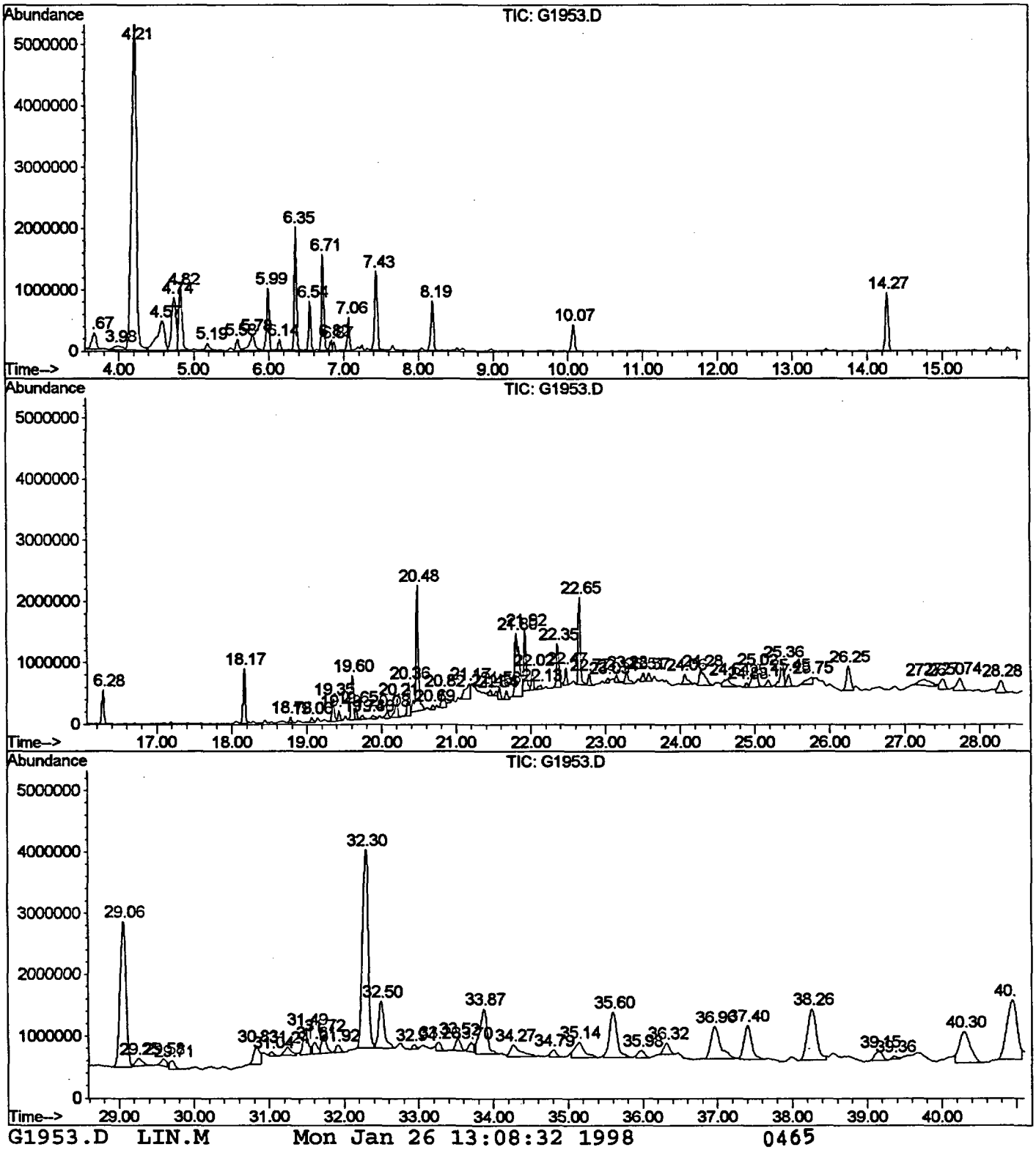
FFR82 58073-003 w01-27-98

APH 01/22/98 20:08

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1953.D
Operator :
Acquired : 22 Jan 98 20:08 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-003 FFR82
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 4
Quant File :CLPME7.RES



G1953.D LIN.M Mon Jan 26 13:08:32 1998 0465

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FFR83

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1954

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

Number TICs Found: 30

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

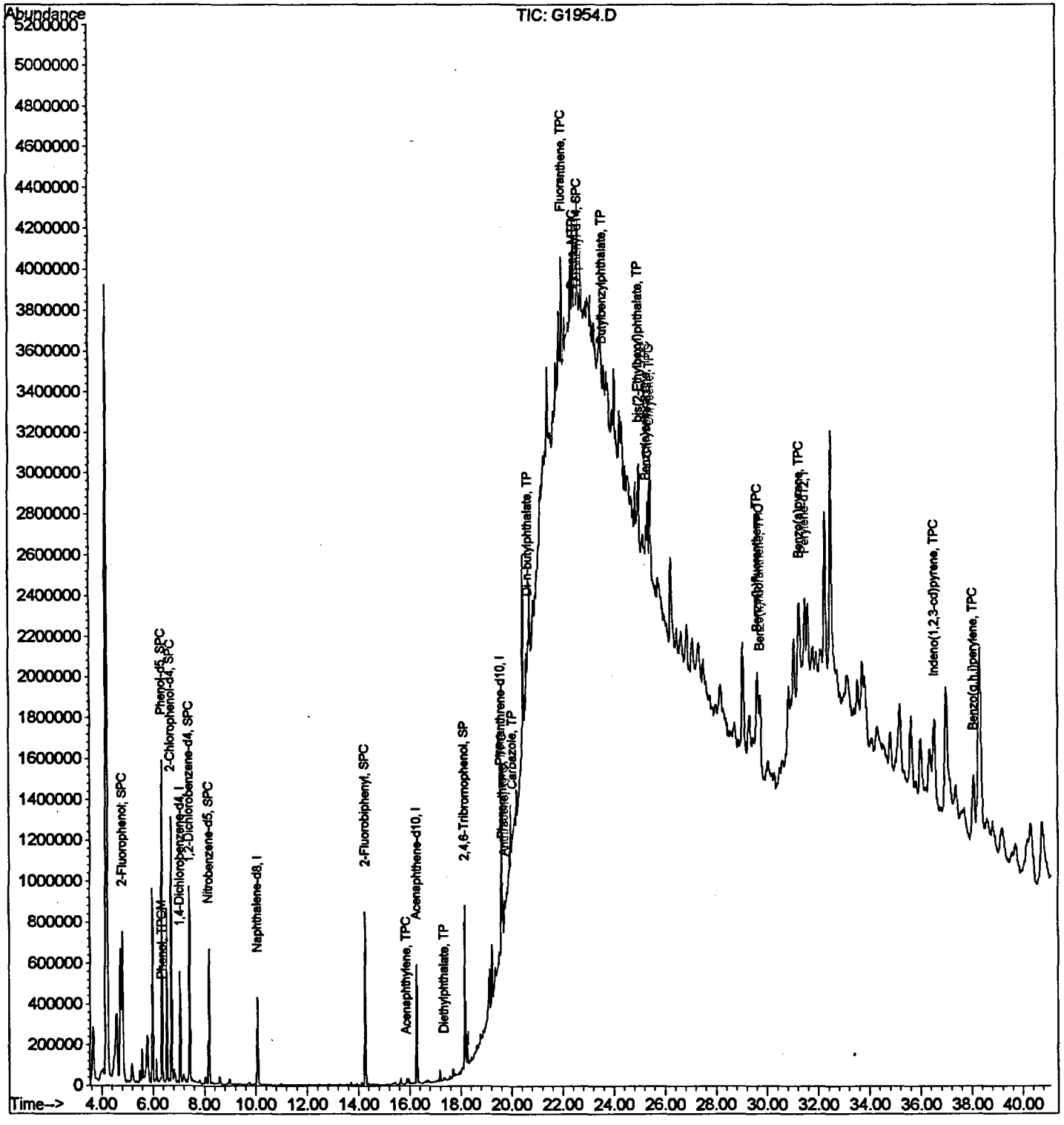
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.67	1000.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.21	16000.	JNAB
3.	822-67-3	2-Cyclohexen-1-ol	5.19	310.	JNB
4.		Unknown	5.50	160.	J
5.		Unknown	5.58	410.	J
6.		Unknown	5.78	1100.	J
7.		trans-3-Hexene-2,5-dione	5.99	2000.	JB
8.		Unknown acid type	6.14	230.	J
9.		Unknown	6.54	1400.	J
10.		Unknown	19.14	1200.	J
11.		Unknown	19.37	500.	J
12.		Unknown	19.52	330.	J
13.	112-39-0	Hexadecanoic acid, methyl es	20.21	280.	JN
14.	57-10-3	Hexadecanoic acid	20.48	2400.	JN
15.		Unknown	20.89	280.	J
16.	57-11-4	Octadecanoic acid	21.93	600.	JN
17.	35694-04-3	1,1'-Biphenyl, 2,2',3,3',5,5	24.09	1900.	JN
18.		Unknown	24.30	1000.	J
19.	69782-91-8	1,1'-Biphenyl, 2,3,3',4',5,5	24.92	910.	JN
20.		Unknown	26.29	5200.	J
21.		Unknown	30.88	1800.	J
22.		Unknown PAH	31.09	1200.	J
23.		Unknown	31.65	1400.	J
24.		Unknown hydrocarbon	32.54	6300.	J
25.		Unknown	33.75	470.	J
26.		Unknown	35.22	1700.	J
27.		Unknown PAH	36.02	1500.	J
28.		TRANS-STIGMASTA-5,22-DIEN-3.	37.01	4400.	J
29.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.34	7000.	JN
30.	6971-40-0	17-Pentatriacontene	40.76	2800.	JN

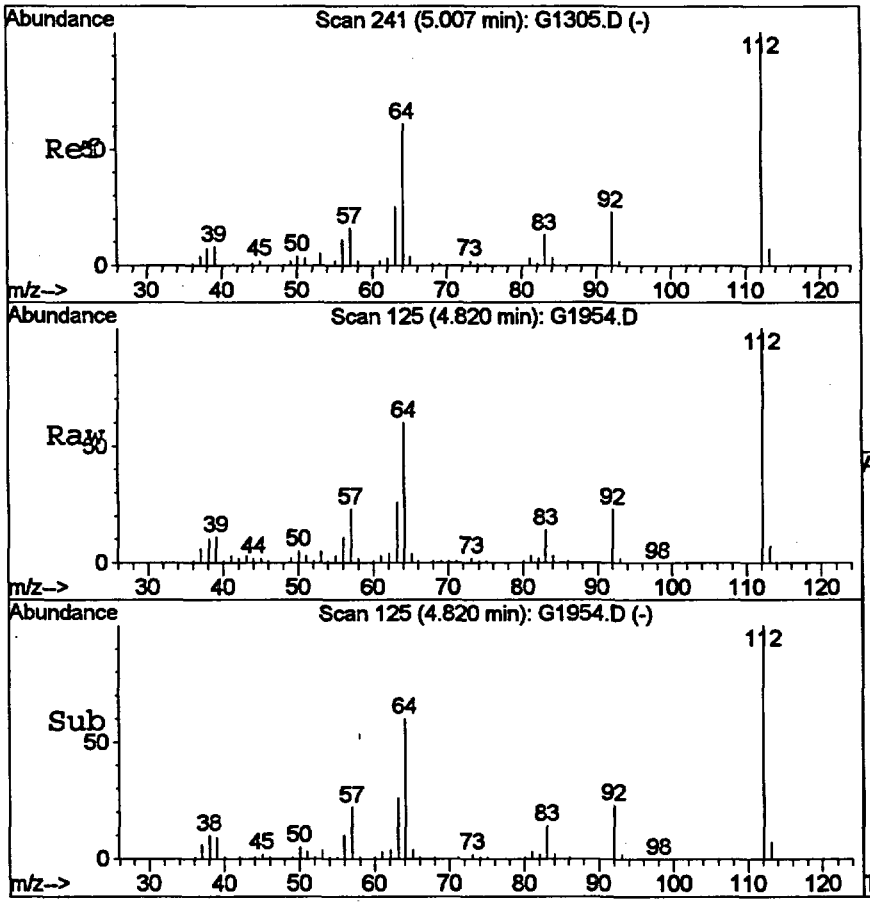
Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:14 1998 Quant Results File: CLPME7.RES

CASE 25969
SDG# FFR76

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

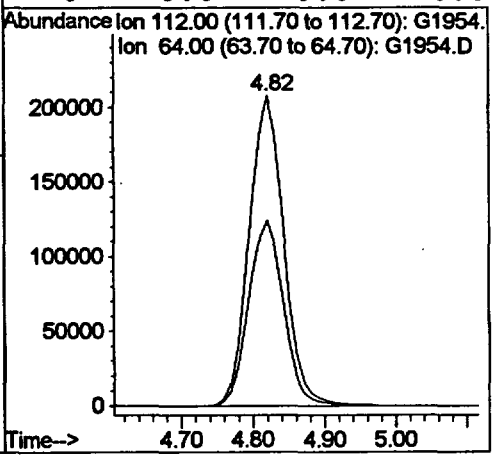


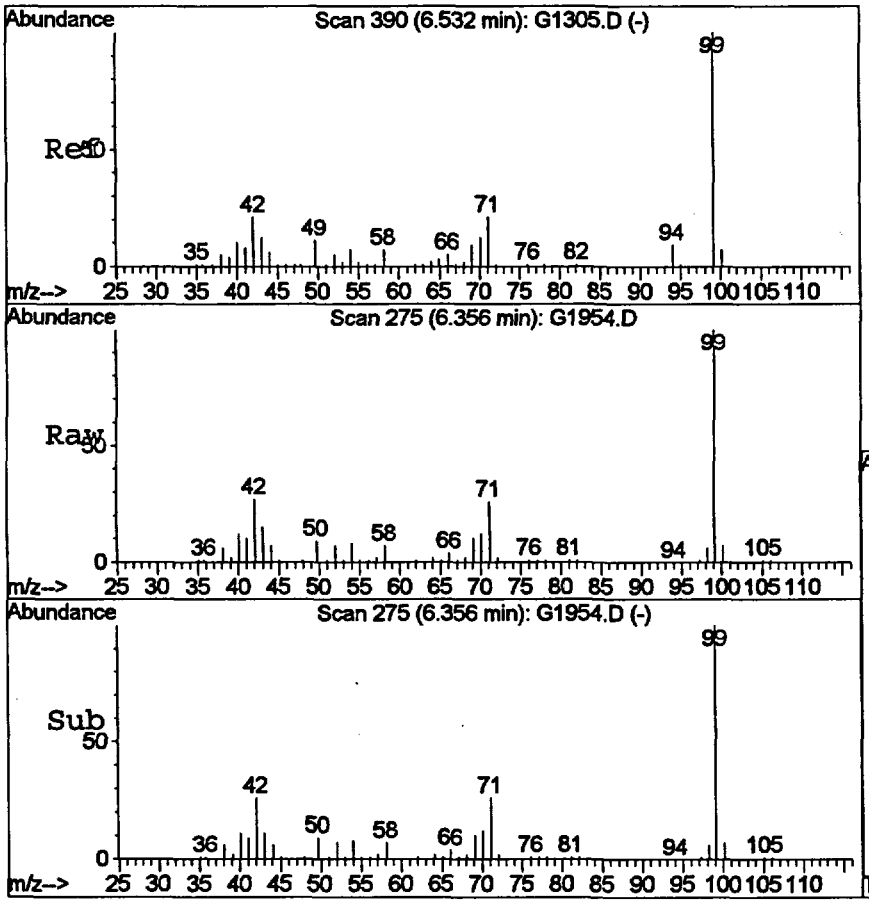


#2
2-Fluorophenol
Concen: 116.19 ng
RT: 4.82 min Scan# 125
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:112 Resp: 696443

Ion	Ratio	Lower	Upper
112	100		
64	60.6	40.2	80.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

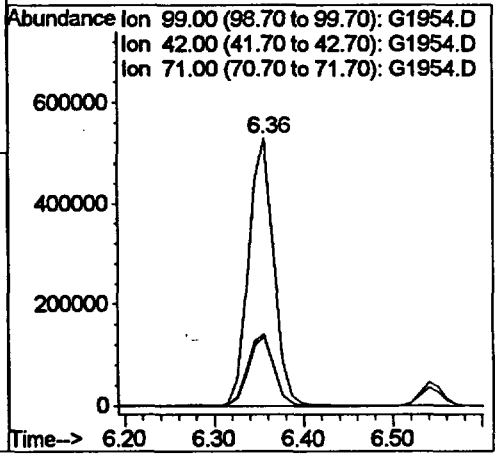


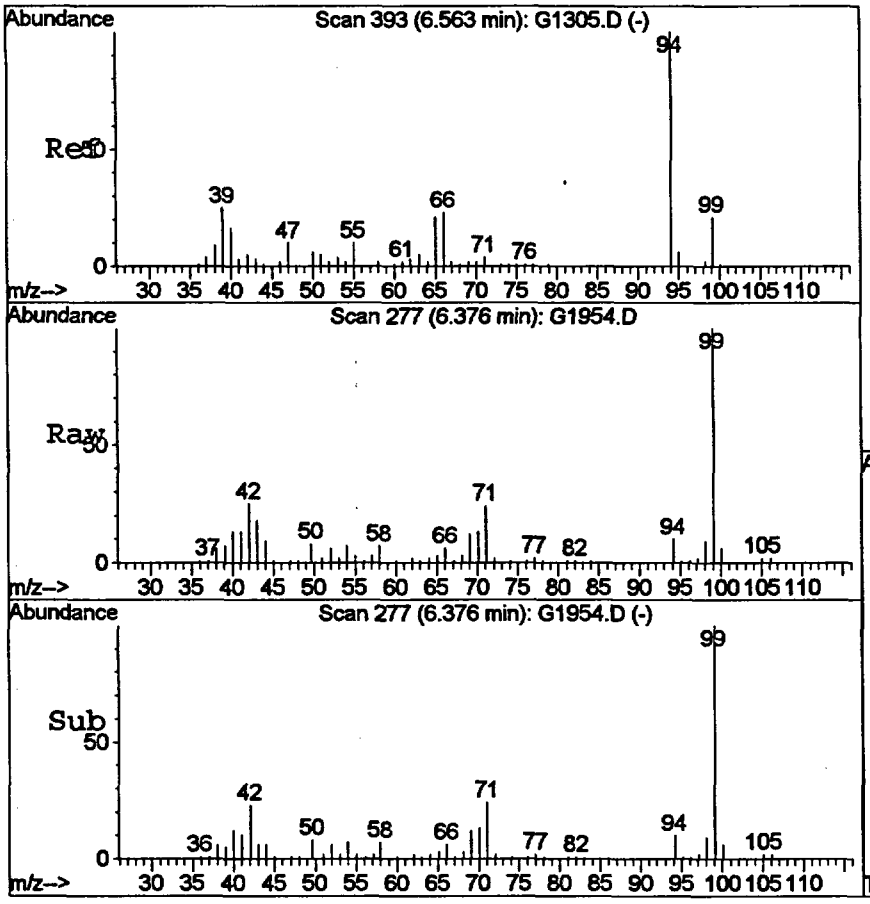


#3
Phenol-d5
Concen: 131.55 ng
RT: 6.36 min Scan# 275
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:99 Resp: 1041523

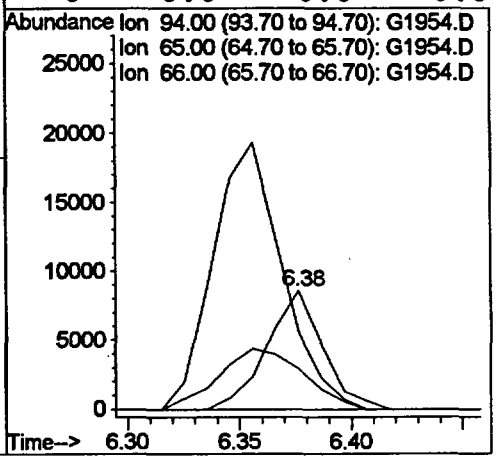
Ion	Ratio	Lower	Upper
99	100		
42	27.3	9.1	49.1
71	26.7	6.1	46.1
0	0.0	0.0	0.0

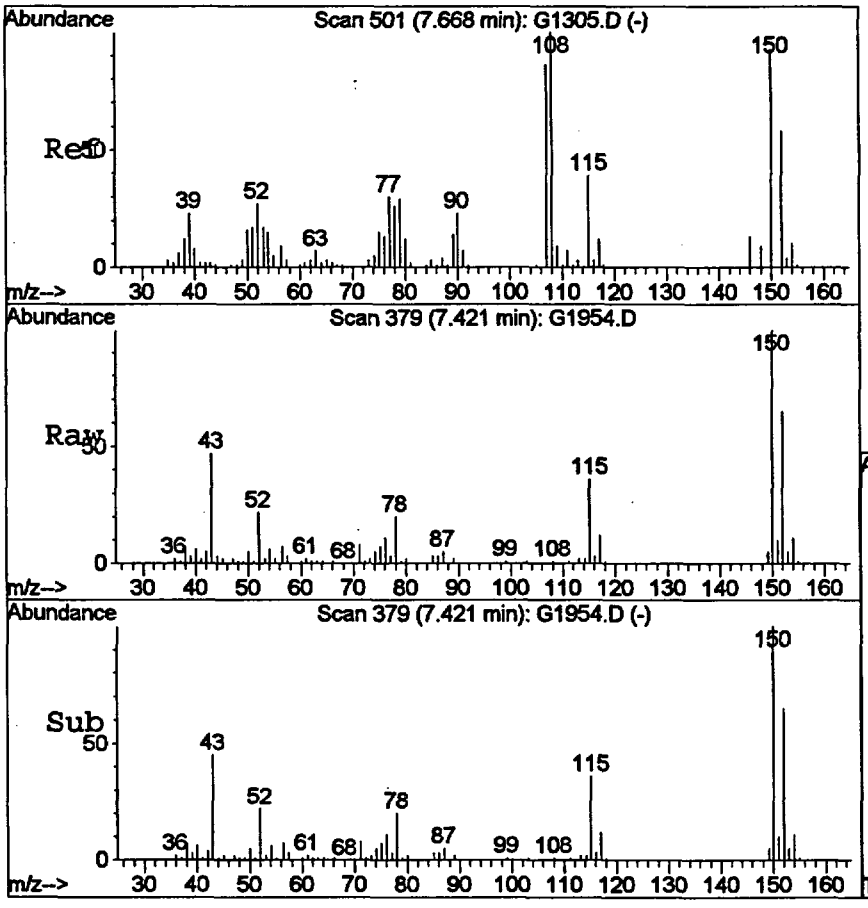




#4
Phenol
Concen: 1.75 ng m
RT: 6.38 min / Scan# 277
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

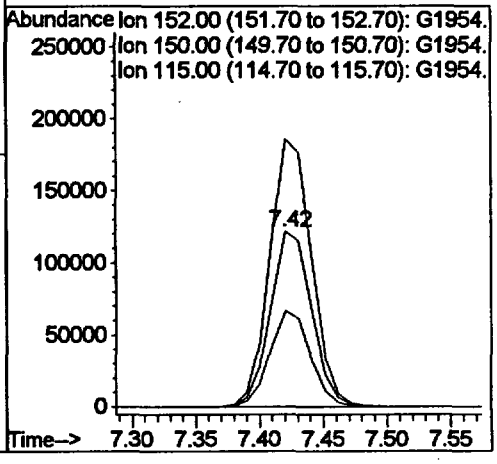
Tgt Ion:94	Resp:	14885	
Ion	Ratio	Lower	Upper
94	100		
65	34.5	5.6	45.6
66	64.7	14.2	54.2#
0	0.0	0.0	0.0

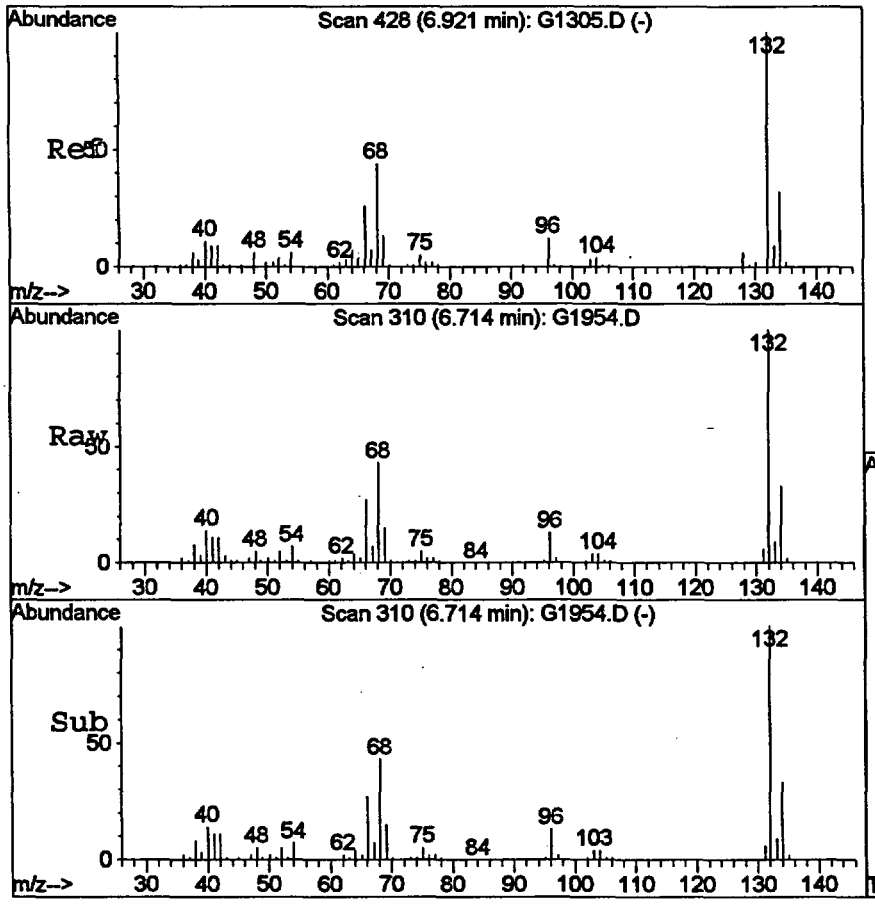




#7
1,2-Dichlorobenzene-d4
Concen: 68.92 ng
RT: 7.42 min Scan# 379
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:152	Resp:	273395	
Ion	Ratio	Lower	Upper
152	100		
150	154.5	153.4	193.4
115	54.0	34.2	74.2
0	0.0	0.0	0.0

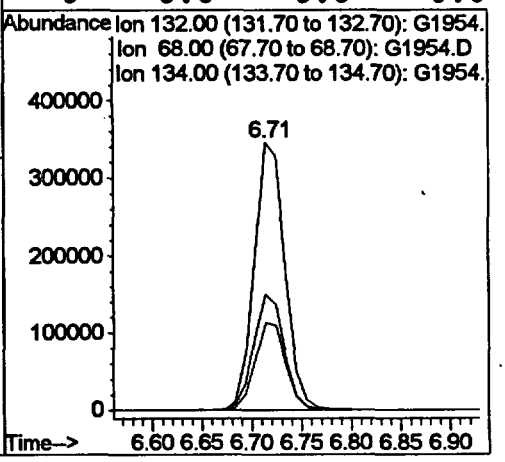


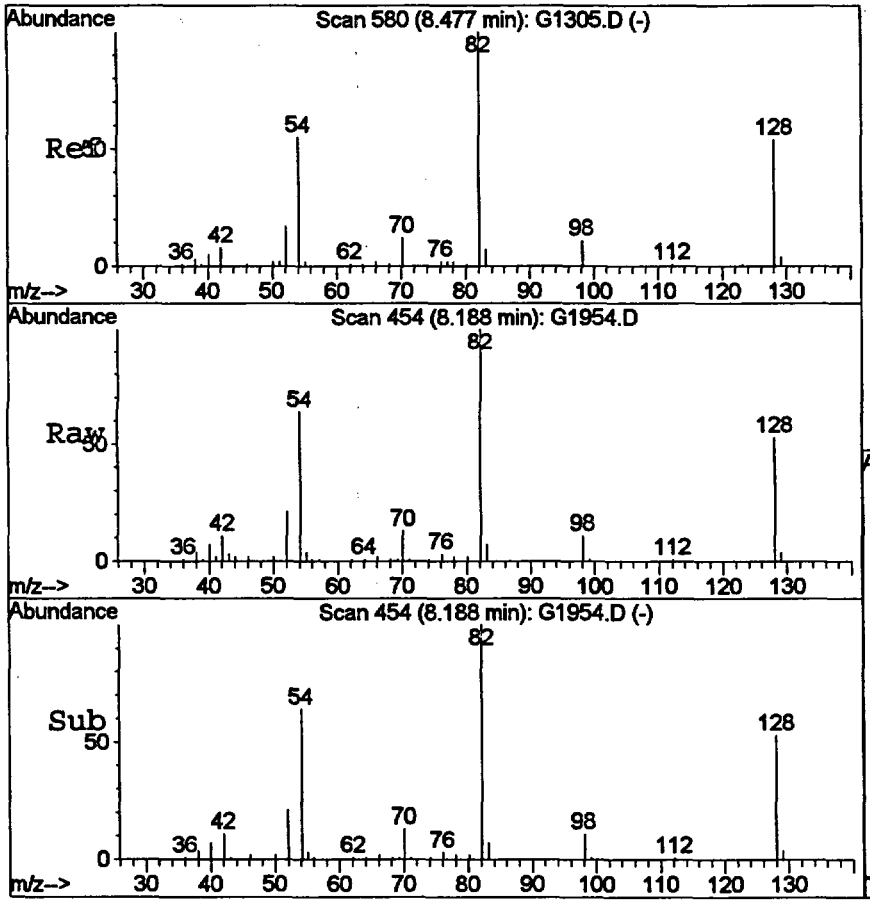


#8
2-Chlorophenol-d4
Concen: 122.24 ng
RT: 6.71 min Scan# 310
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:132 Resp: 743631

Ion	Ratio	Lower	Upper
132	100		
68	43.4	23.4	63.4
134	32.9	12.7	52.7
0	0.0	0.0	0.0

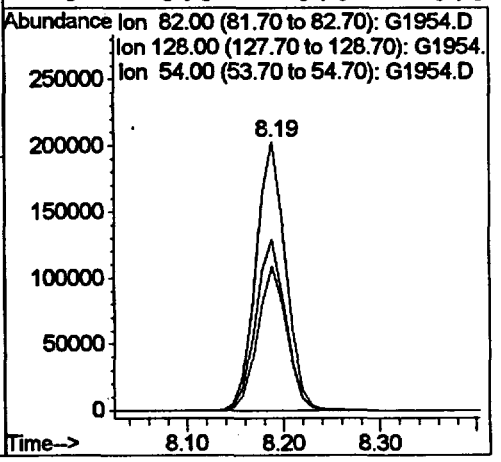


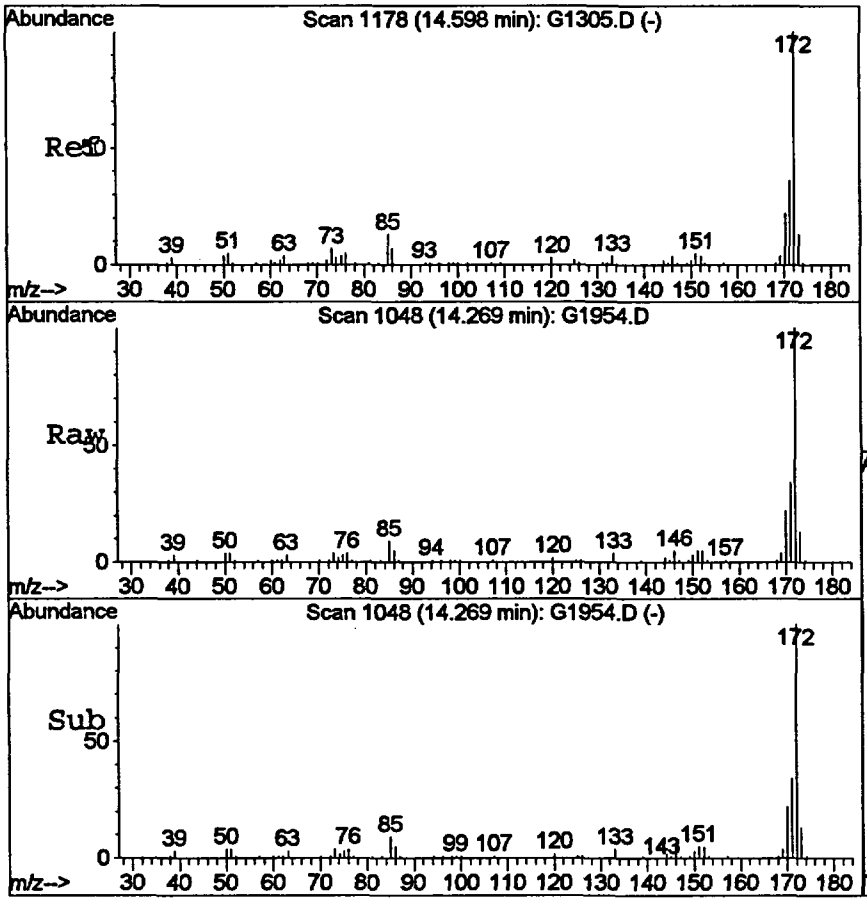


#18
Nitrobenzene-d5
Concen: 83.84 ng
RT: 8.19 min Scan# 454
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:82 Resp: 434782

Ion	Ratio	Lower	Upper
82	100		
128	52.7	33.9	73.9
54	63.7	43.9	83.9
0	0.0	0.0	0.0

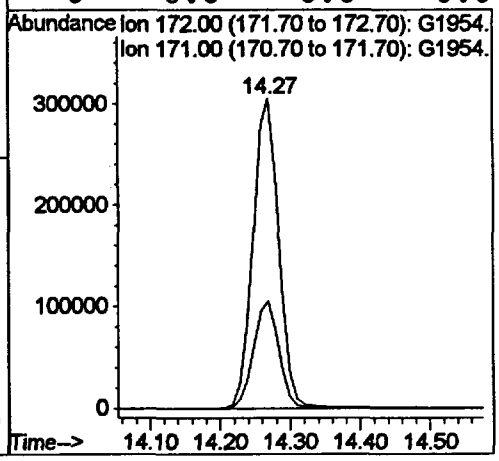


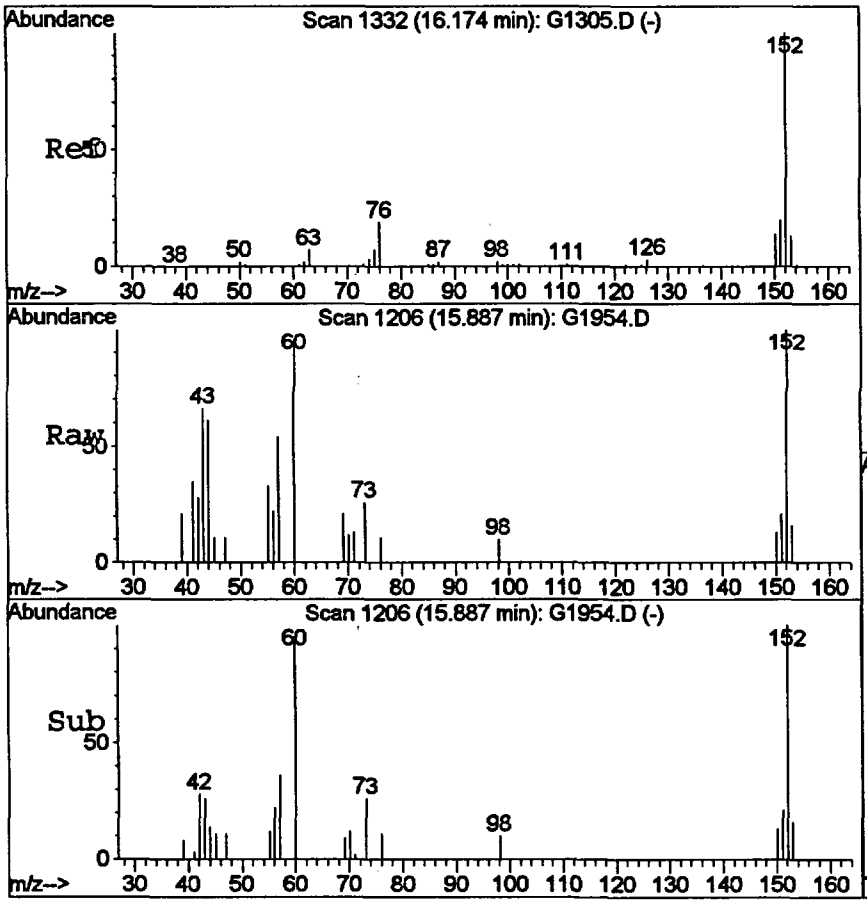


#35
2-Fluorobiphenyl
Concen: 93.71 ng
RT: 14.27 min Scan# 1048
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:172 Resp: 782202

Ion	Ratio	Lower	Upper
172	100		
171	34.0	14.1	54.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

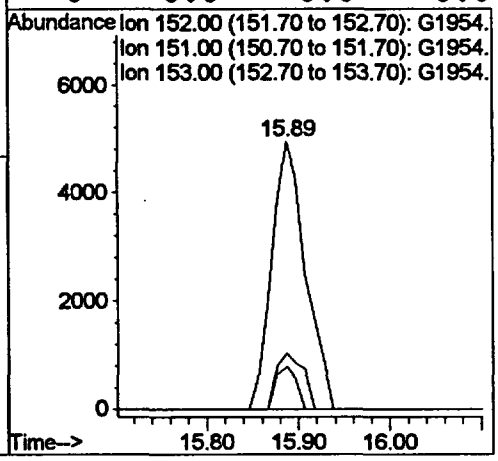


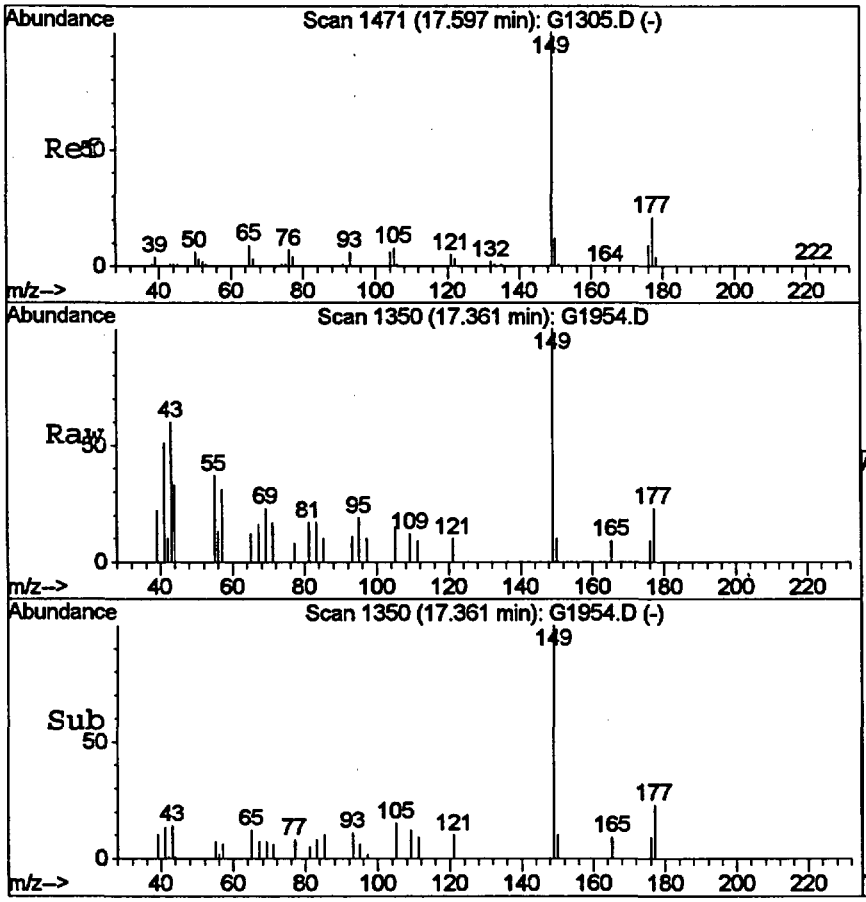


#39
Acenaphthylene
Concen: 1.03 ng m
RT: 15.89 min / Scan# 1206
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:152 Resp: 12666

Ion	Ratio	Lower	Upper
152	100		
151	20.8	0.0	39.3
153	15.8	0.0	33.0
0	0.0	0.0	0.0

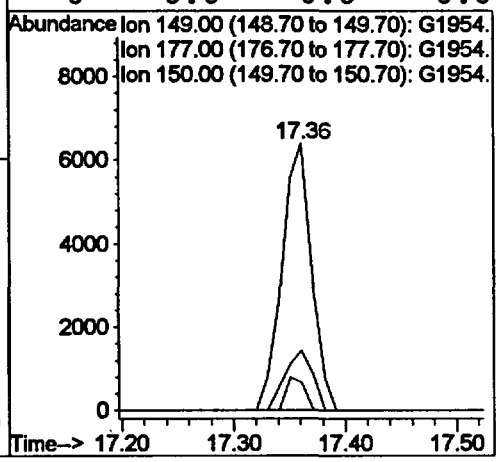


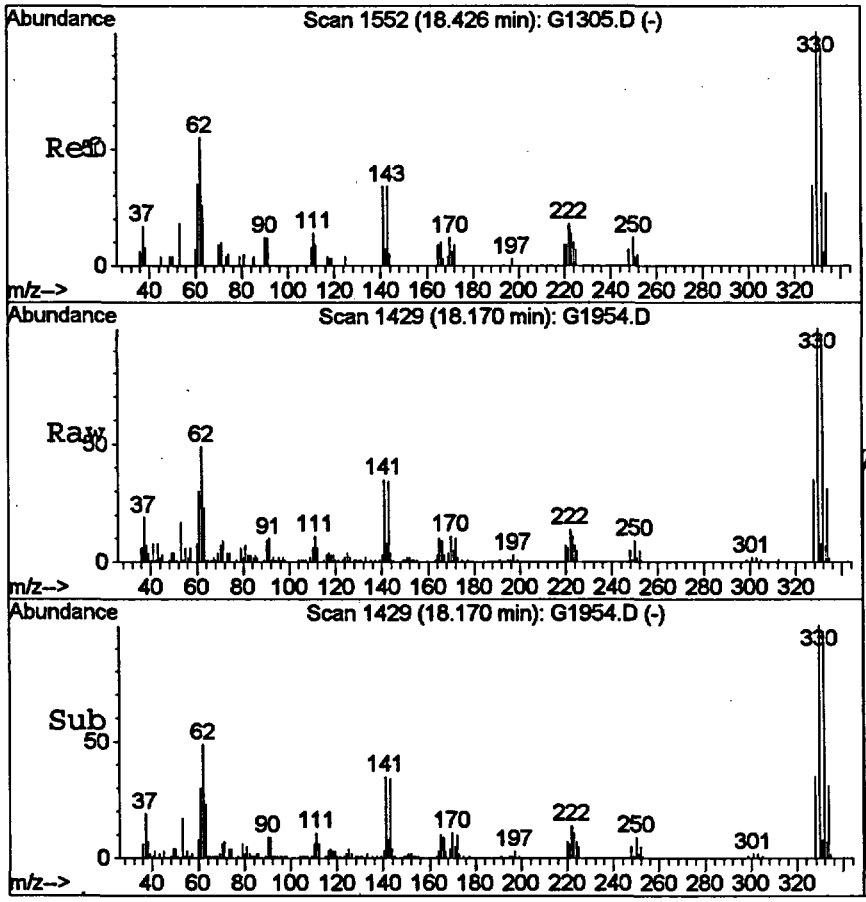


#47
Diethylphthalate
Concen: 1.25 ng m
RT: 17.36 min / Scan# 1350
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:149 Resp: 11717

Ion	Ratio	Lower	Upper
149	100		
177	22.6	0.9	40.9
150	10.4	0.0	31.7
0	0.0	0.0	0.0

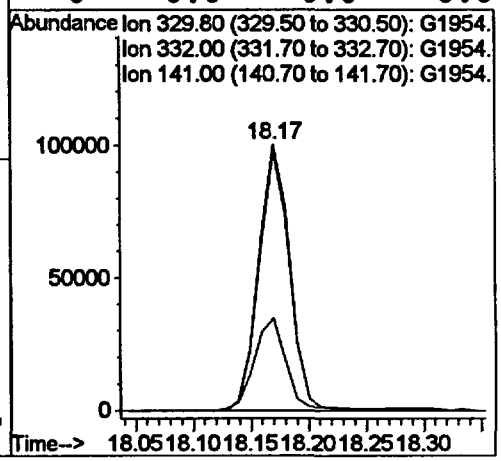




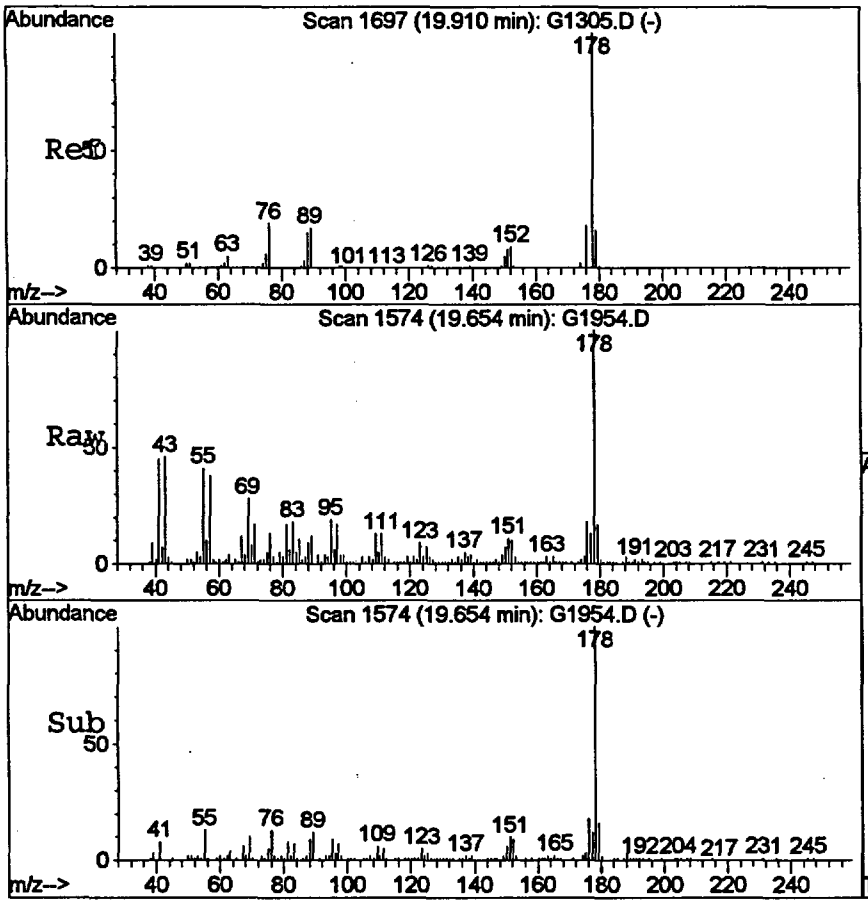
#52
2,4,6-Tribromophenol
Concen: 147.10 ng
RT: 18.17 min Scan# 1429
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:329.8 Resp: 188293

Ion	Ratio	Lower	Upper
330	100		
332	96.4	75.8	115.8
141	35.6	14.4	54.4
0	0.0	0.0	0.0



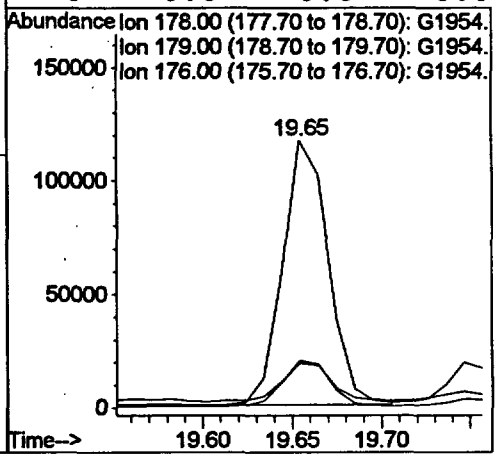
CASE 25969
SDG# FFR76

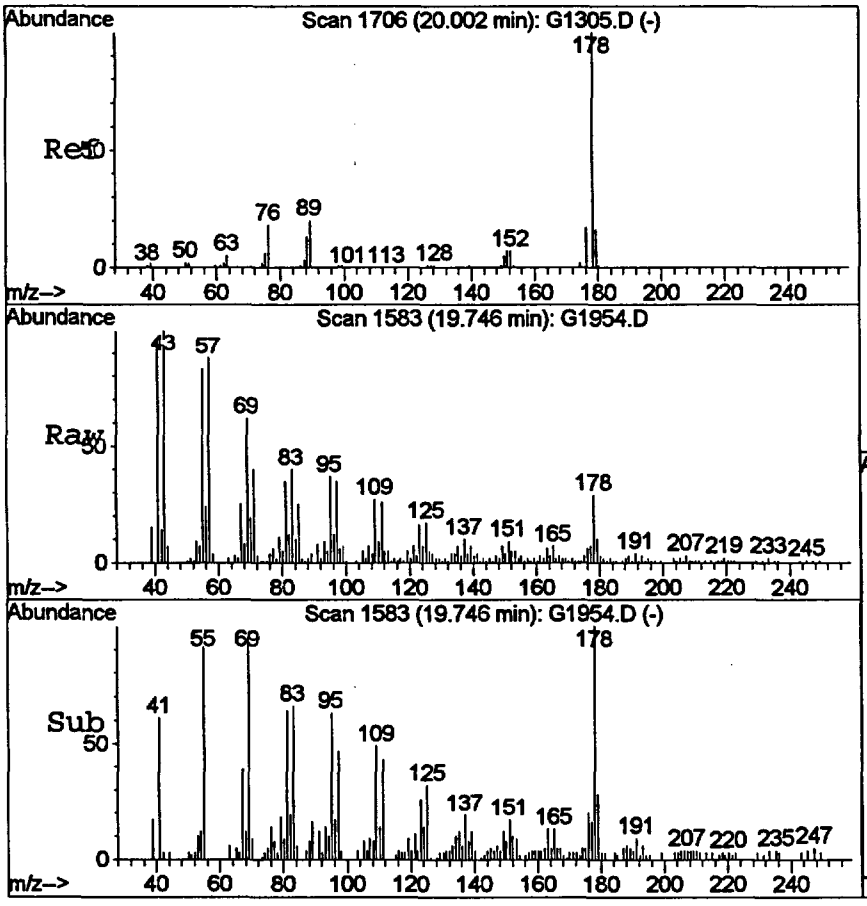


#58
Phenanthrene
Concen: 16.24 ng
RT: 19.65 min /Scan# 1574
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:178 Resp: 205558

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	35.5
176	18.3	0.0	38.8
0	0.0	0.0	0.0

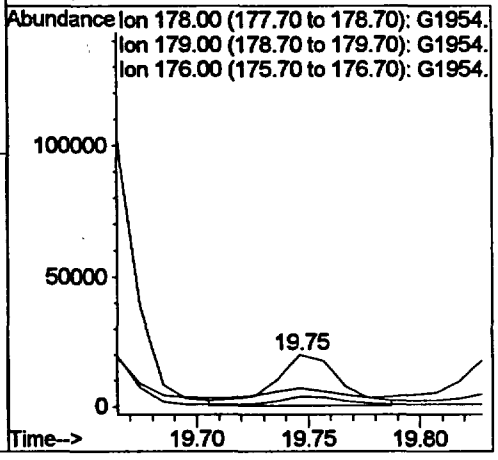


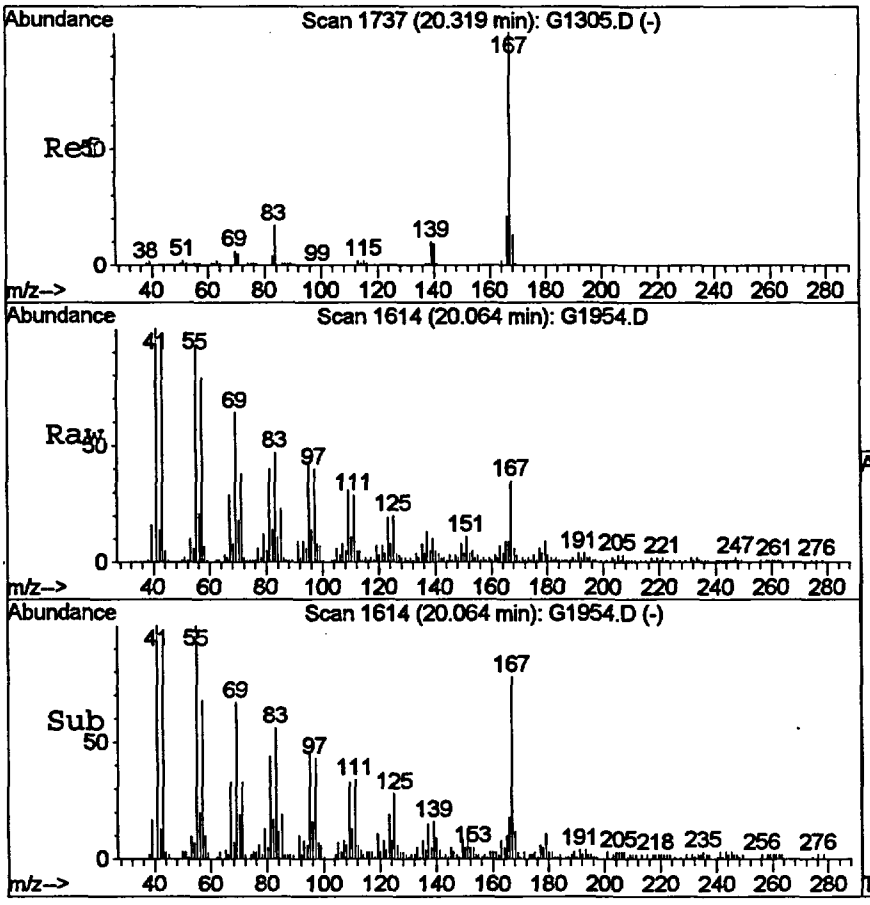


#59
Anthracene
Concen: 2.96 ng m
RT: 19.75 min /Scan# 1583
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:178 Resp: 39938

Ion	Ratio	Lower	Upper
178	100		
179	35.1	0.0	34.8#
176	19.5	0.0	38.4
0	0.0	0.0	0.0

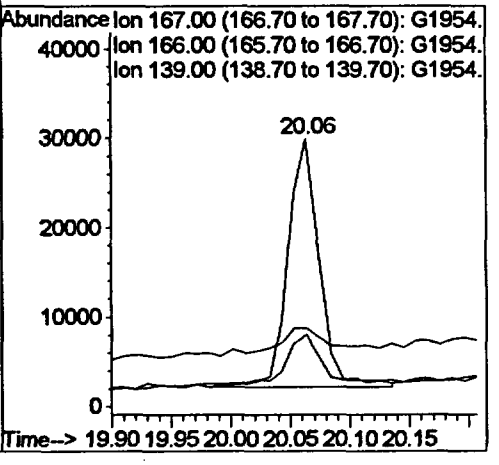


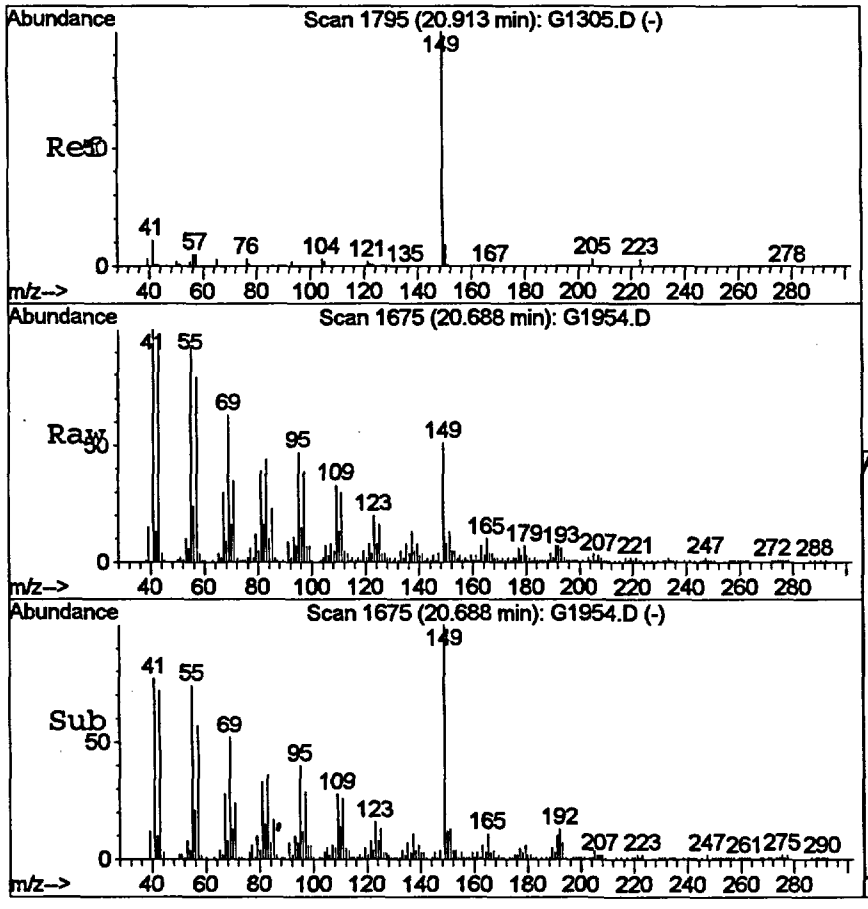


#60
Carbazole
Concen: 3.56 ng
RT: 20.06 min / Scan# 1614
Delta R.T. 0.01 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:167 Resp: 50485

Ion	Ratio	Lower	Upper
167	100		
166	0.0	0.1	40.1#
139	0.0	0.0	31.4
0	0.0	0.0	0.0

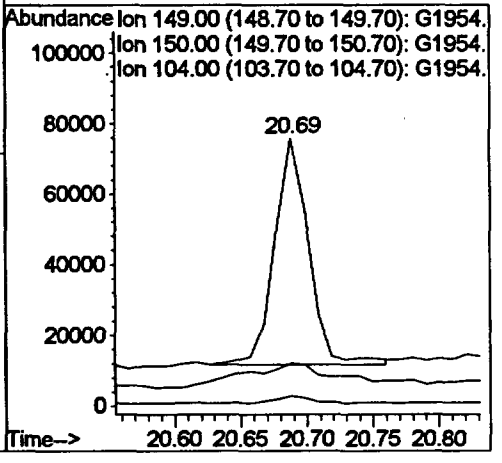


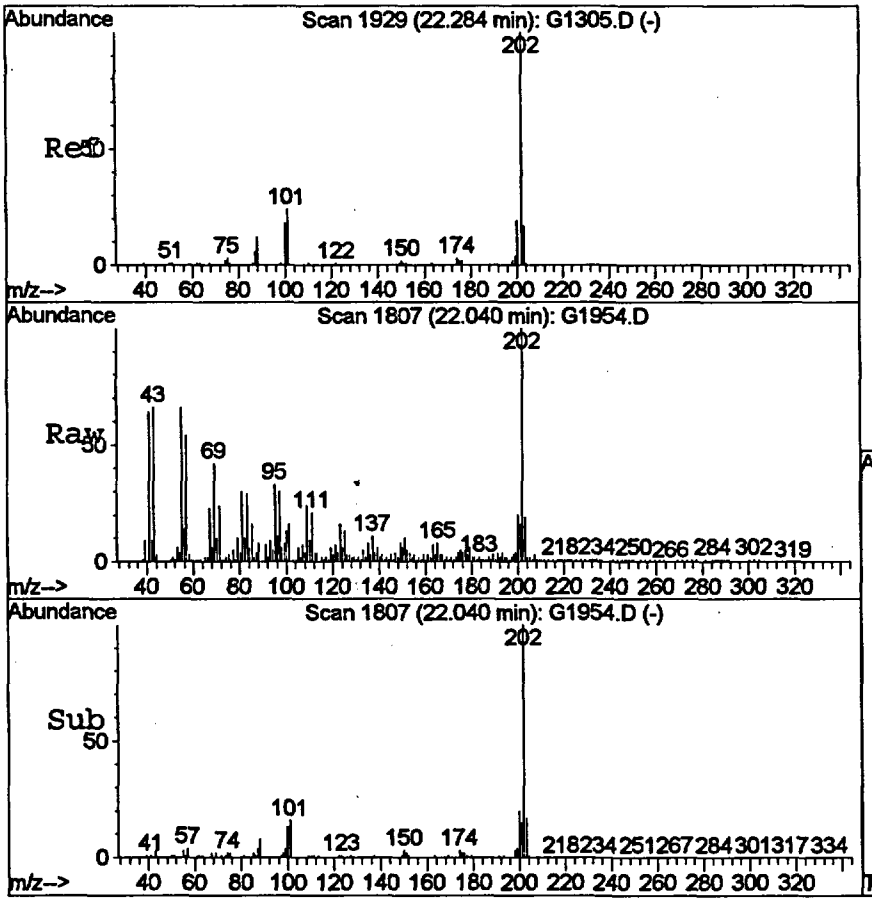


#61
Di-n-butylphthalate
Concen: 5.80 ng
RT: 20.69 min / Scan# 1675
Delta R.T. -0.00 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:149 Resp: 115012

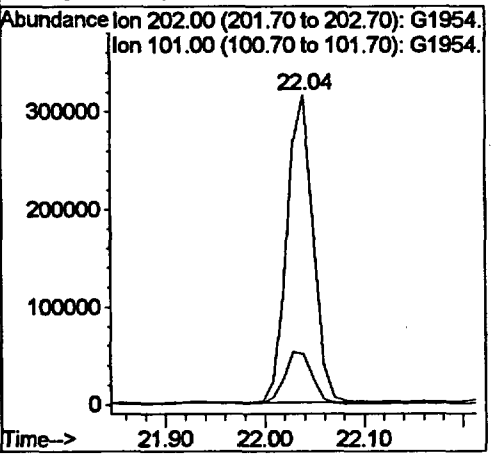
Ion	Ratio	Lower	Upper
149	100		
150	32.5	0.0	29.2#
104	0.0	0.0	23.2
0	0.0	0.0	0.0

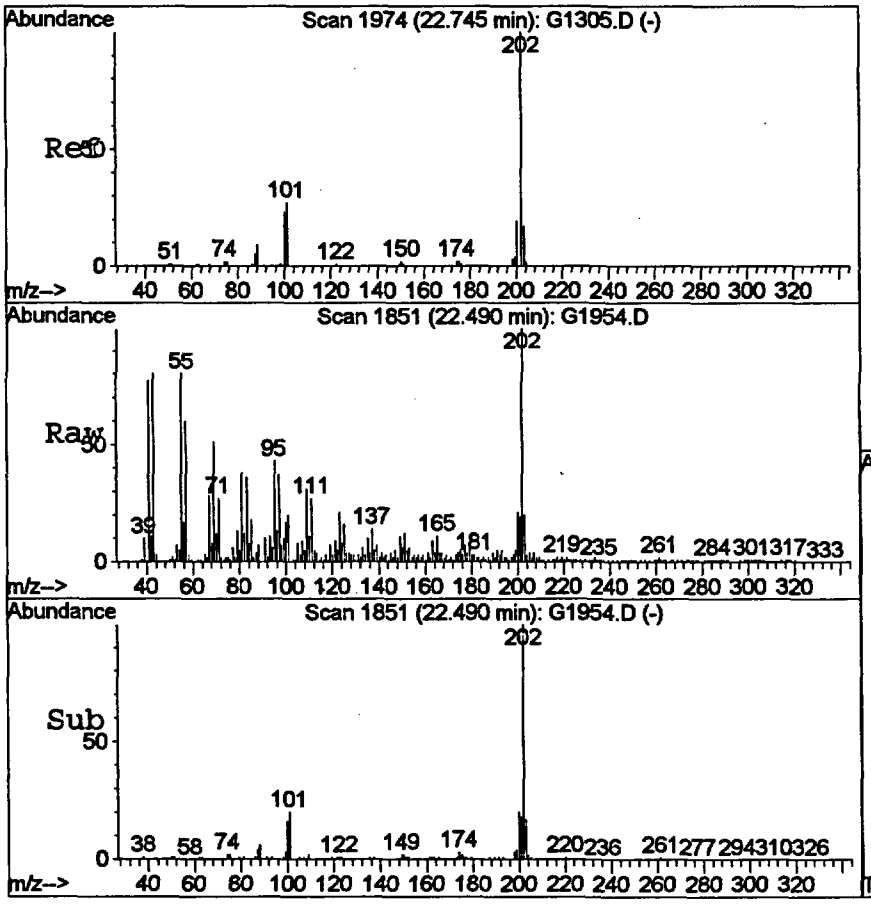




#62
Fluoranthene
Concen: 45.10 ng
RT: 22.04 min / Scan# 1807
Delta R.T. 0.02 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

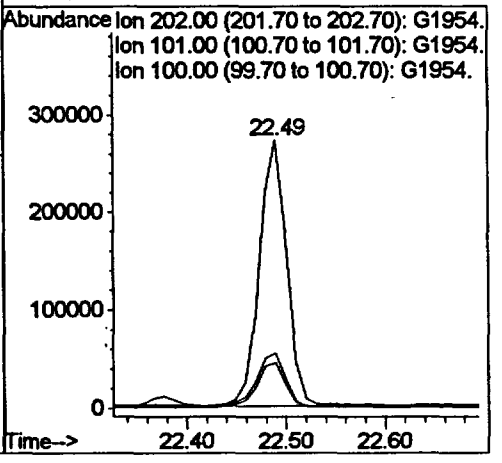
Tgt Ion:202	Resp:	577834	
Ion	Ratio	Lower	Upper
202	100		
101	17.7	0.6	40.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0



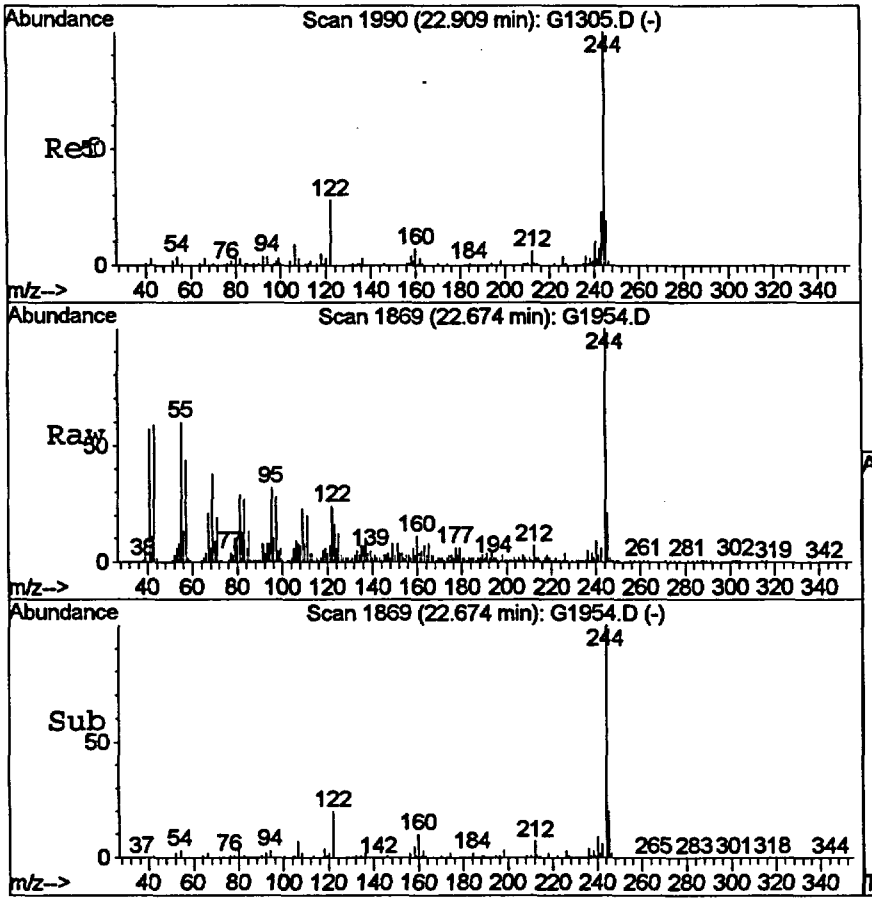


#64
Pyrene
Concen: 40.37 ng
RT: 22.49 min / Scan# 1851
Delta R.T. 0.02 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:202	Resp:	519681	
Ion	Ratio	Lower	Upper
202	100		
101	21.9	5.7	45.7
100	16.8	0.8	40.8
0	0.0	0.0	0.0



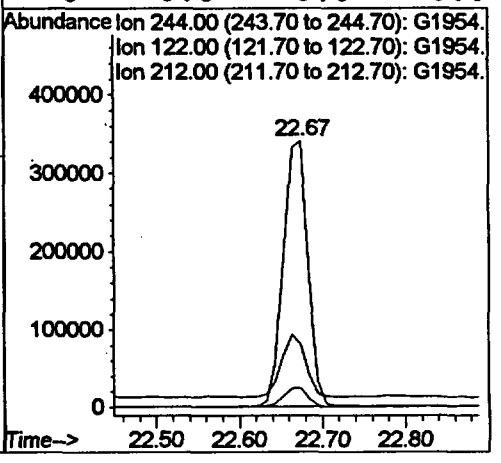
0477

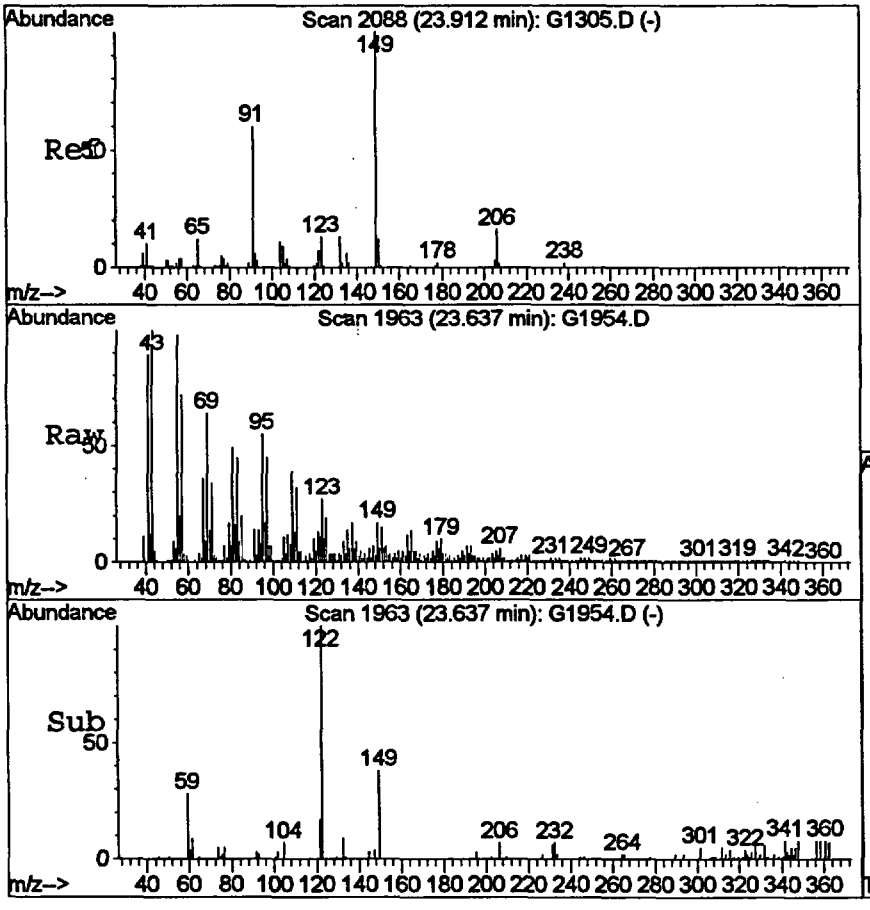


#65
Terphenyl-d14
Concen: 83.66 ng
RT: 22.67 min Scan# 1869
Delta R.T. 0.03 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:244 Resp: 696454

Ion	Ratio	Lower	Upper
244	100		
122	23.2	3.7	43.7
212	6.8	0.0	27.0
0	0.0	0.0	0.0

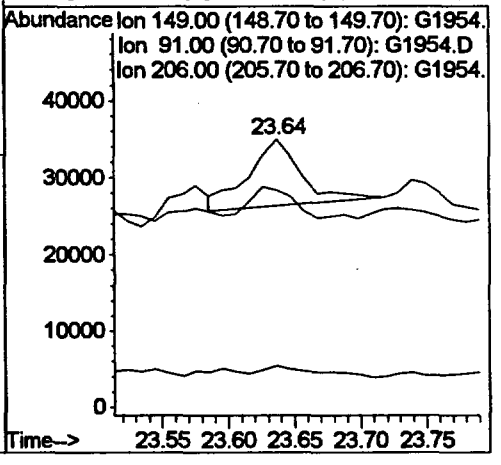


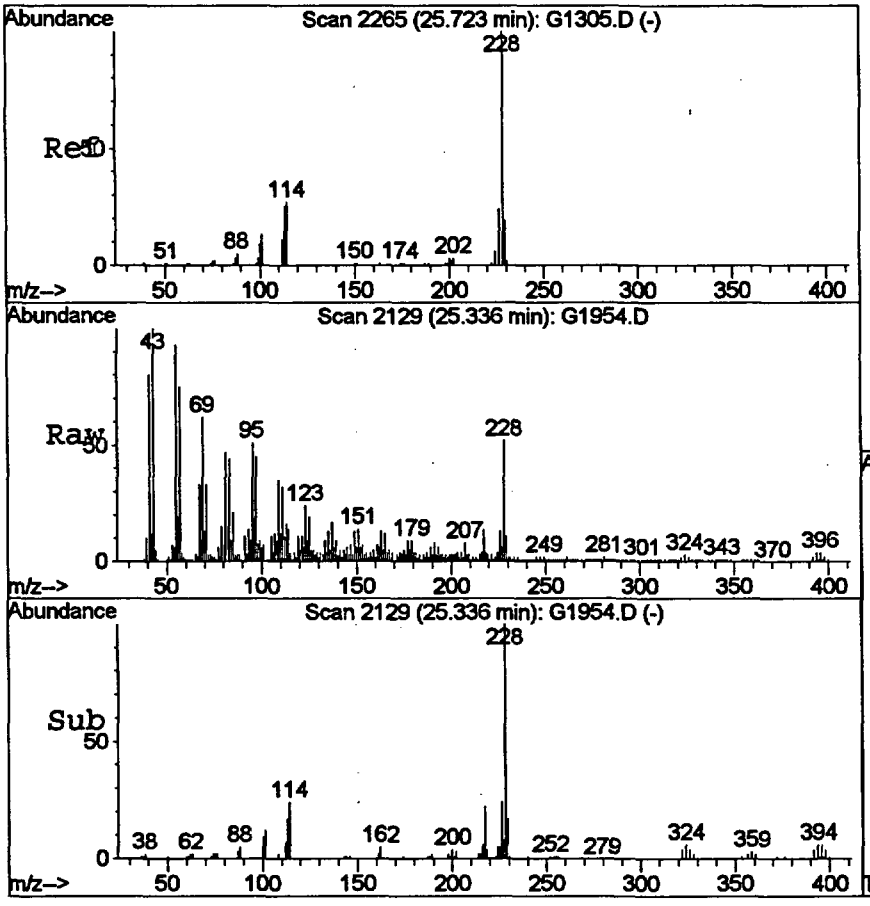


#66
Butylbenzylphthalate
Concen: 2.58 ng
RT: 23.64 min / Scan# 1963
Delta R.T. 0.02 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:149 Resp: 24161

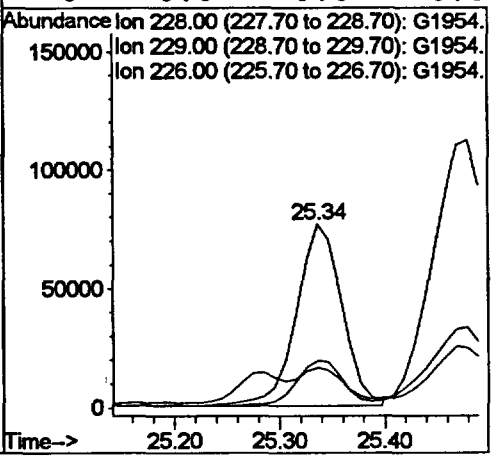
Ion	Ratio	Lower	Upper
149	100		
91	0.0	34.2	74.2#
206	0.0	0.0	36.1
0	0.0	0.0	0.0

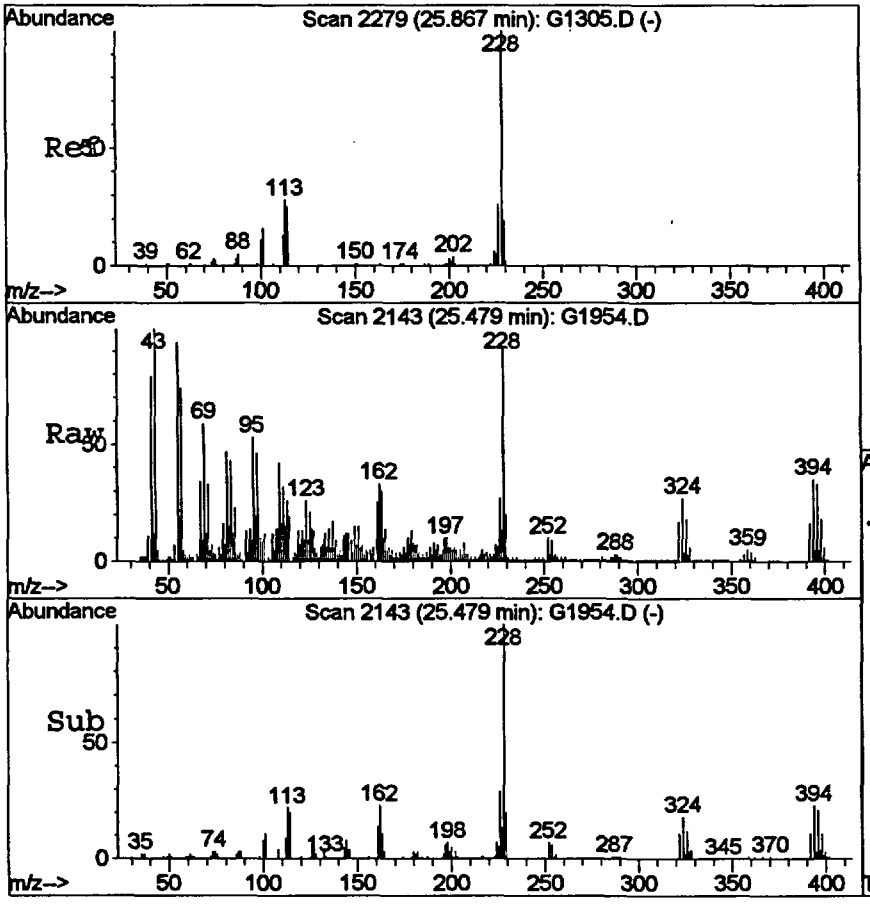




#67
Benzo(a)anthracene
Concen: 22.18 ng
RT: 25.34 min / Scan# 2129
Delta R.T. 0.04 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

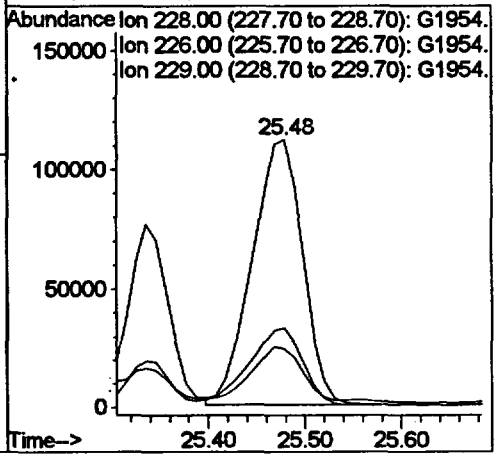
Tgt Ion:228	Resp:	228328	
Ion	Ratio	Lower	Upper
228	100		
229	18.3	9.8	29.8
226	25.9	16.2	36.2
0	0.0	0.0	0.0

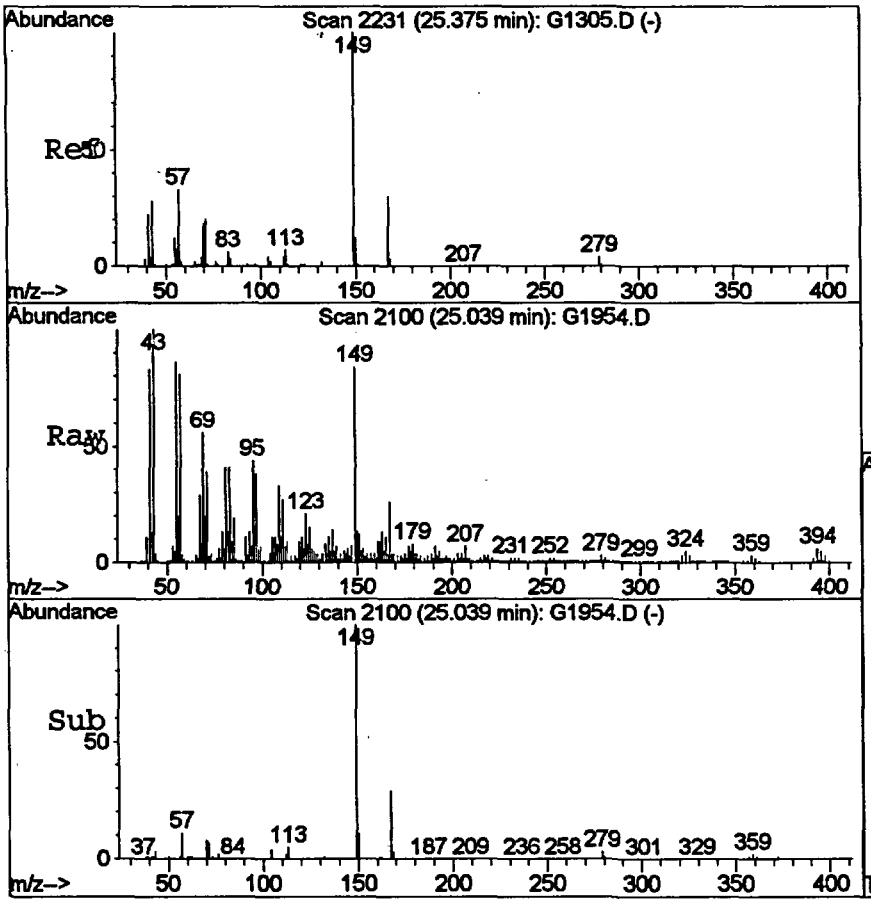




#69
Chrysene
Concen: 41.24 ng
RT: 25.48 min / Scan# 2143
Delta R.T. 0.04 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:228	Resp:	404686	
Ion	Ratio	Lower	Upper
228	100		
226	31.7	19.0	39.0
229	20.5	9.9	29.9
0	0.0	0.0	0.0



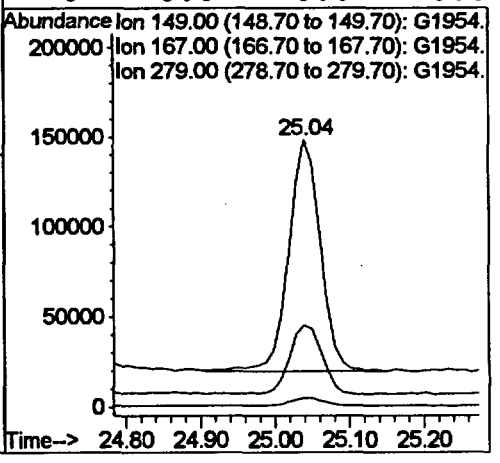


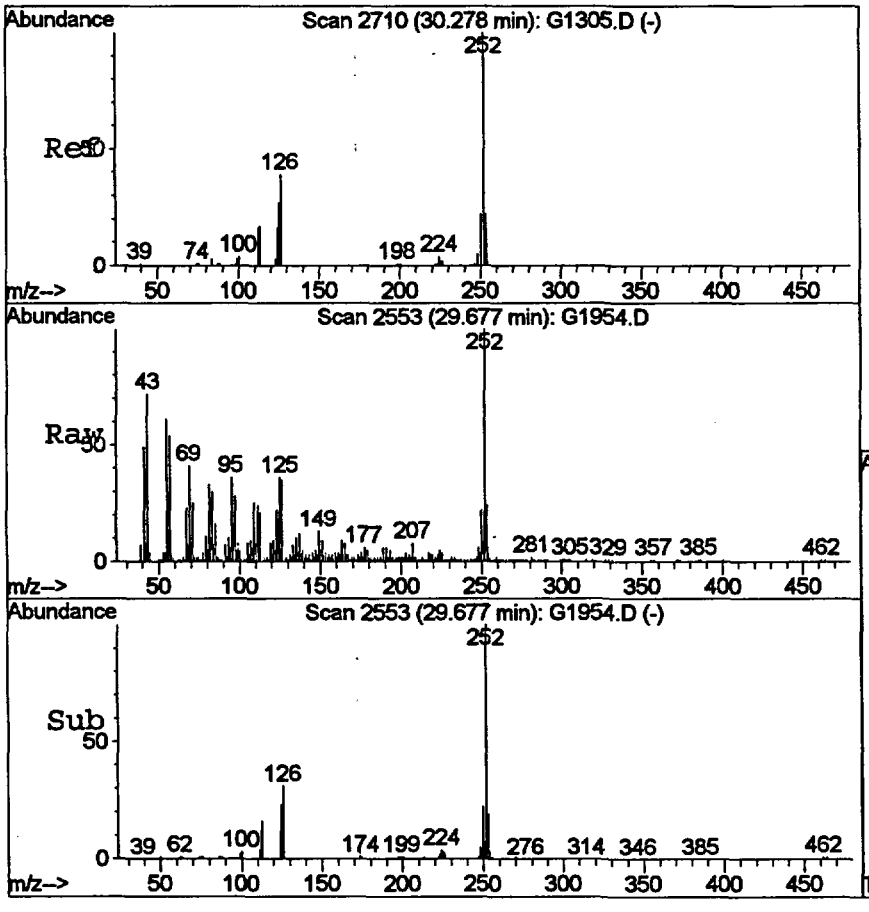
#70
bis(2-Ethylhexyl)phthalate
Concen: 27.32 ng
RT: 25.04 min Scan# 2100
Delta R.T. 0.03 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

CASE 25960
SDG# FFR76

Tgt Ion:149 Resp: 380034

Ion	Ratio	Lower	Upper
149	100		
167	30.8	10.6	50.6
279	0.0	0.0	23.8
0	0.0	0.0	0.0

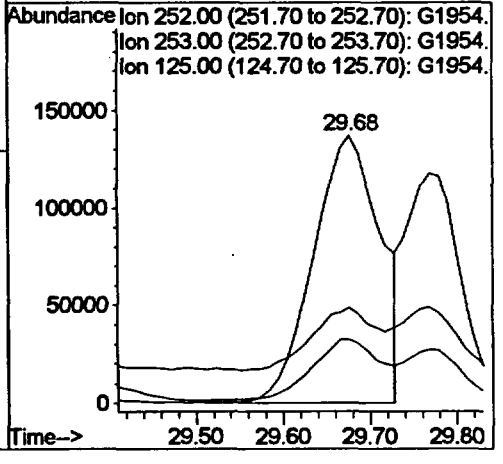


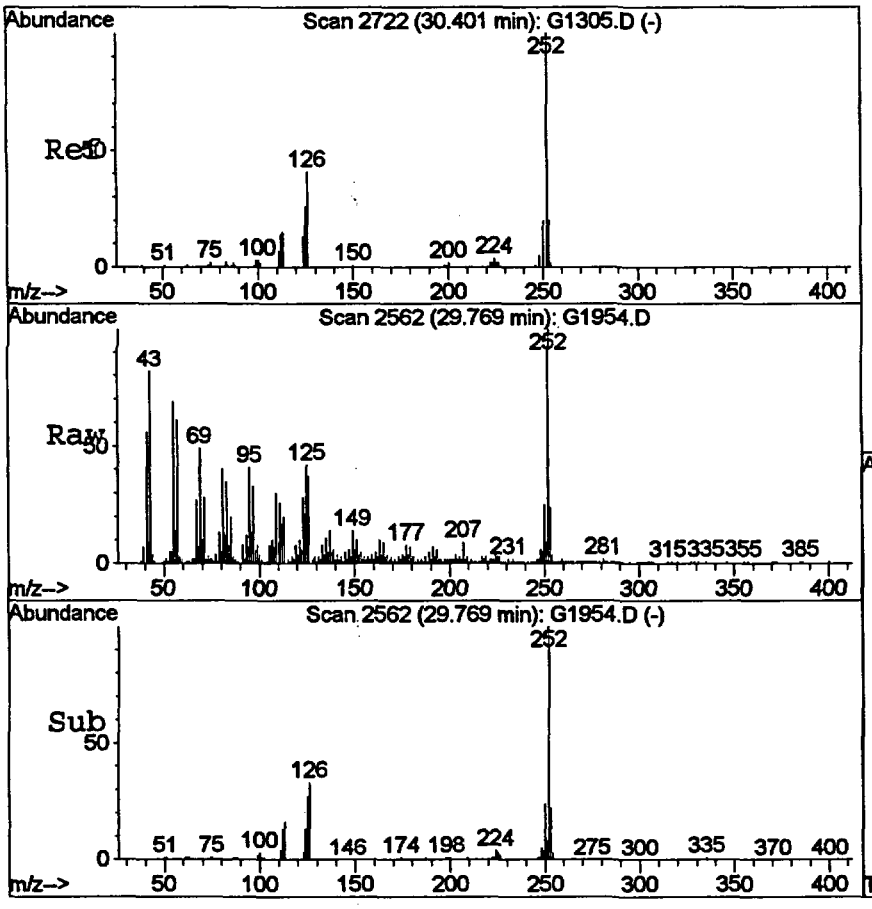


#73
Benzo(b)fluoranthene
Concen: 54.51 ng
RT: 29.68 min Scan# 2553
Delta R.T. 0.10 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:252 Resp: 724029

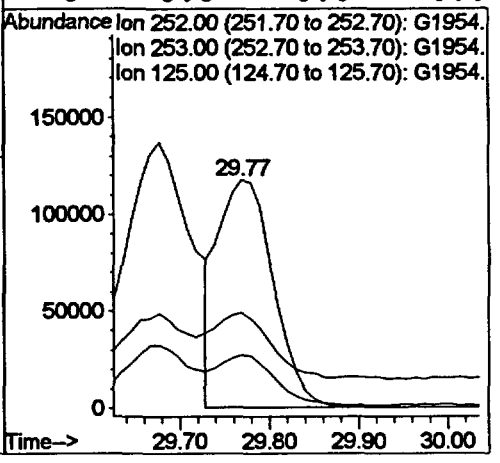
Ion	Ratio	Lower	Upper
252	100		
253	23.3	2.4	42.4
125	22.3	5.5	45.5
0	0.0	0.0	0.0

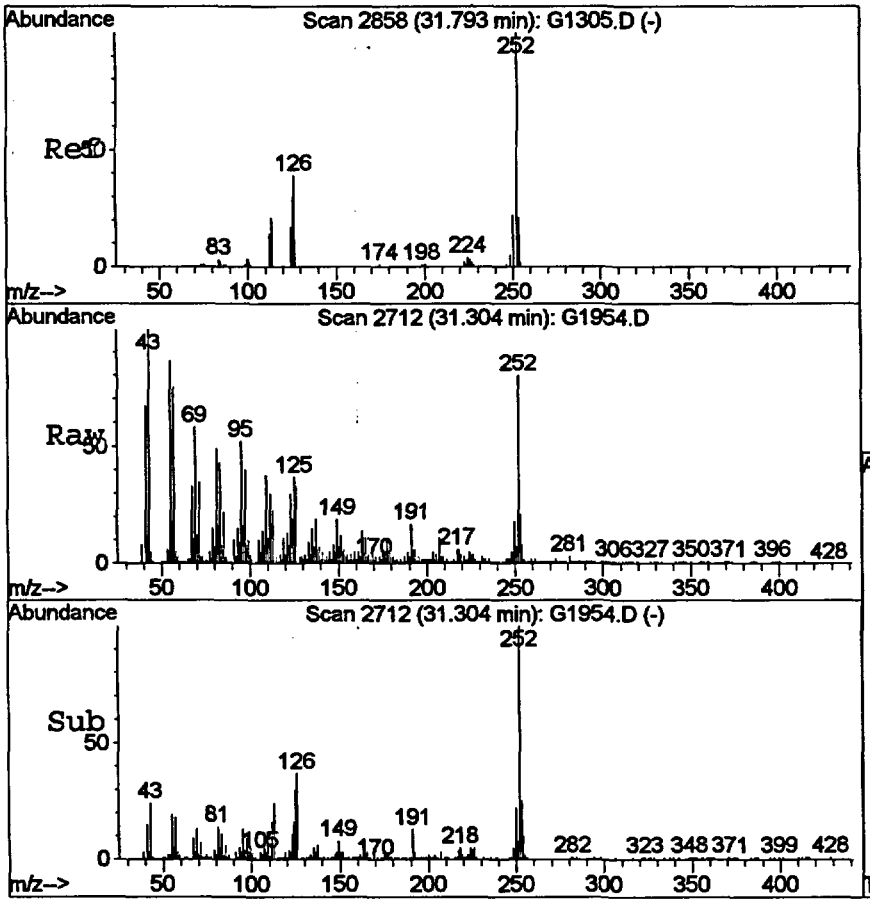




#74
Benzo(k)fluoranthene
Concen: 39.95 ng
RT: 29.77 min / Scan# 2562
Delta R.T. 0.08 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

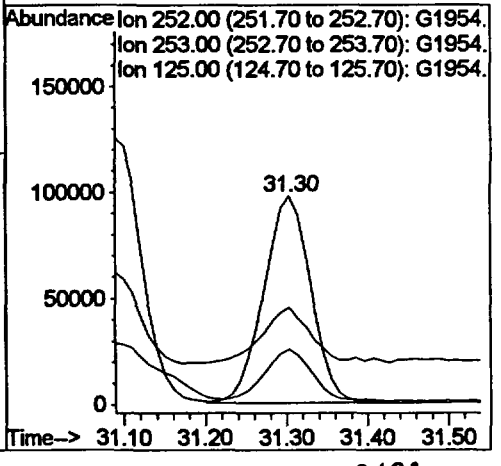
Tgt Ion:252	Resp:	505114	
Ion	Ratio	Lower	Upper
252	100		
253	22.7	2.3	42.3
125	30.2	5.0	45.0
0	0.0	0.0	0.0

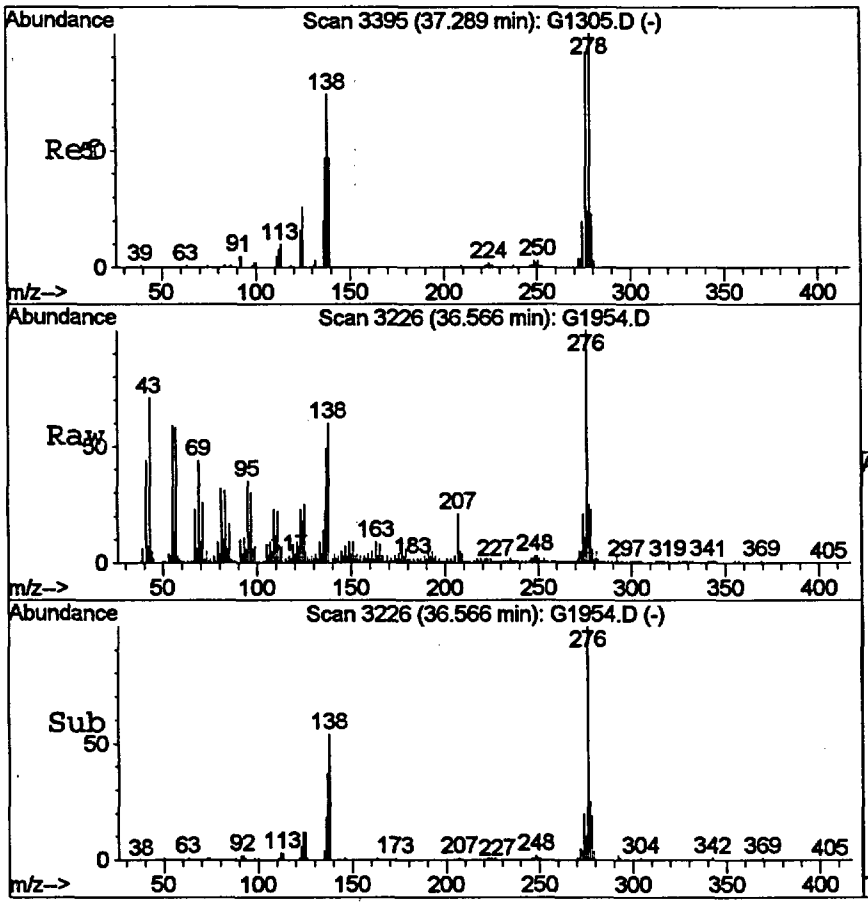




#75
Benzo(a)pyrene
Concen: 32.31 ng
RT: 31.30 min / Scan# 2712
Delta R.T. 0.08 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

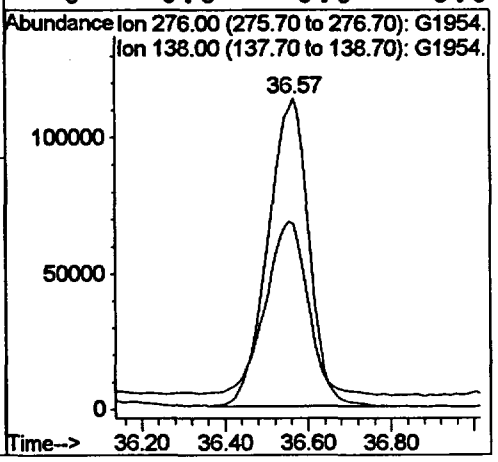
Tgt Ion:252	Resp:	392309	
Ion	Ratio	Lower	Upper
252	100		
253	25.1	12.0	32.0
125	26.9	19.7	35.7
0	0.0	0.0	0.0

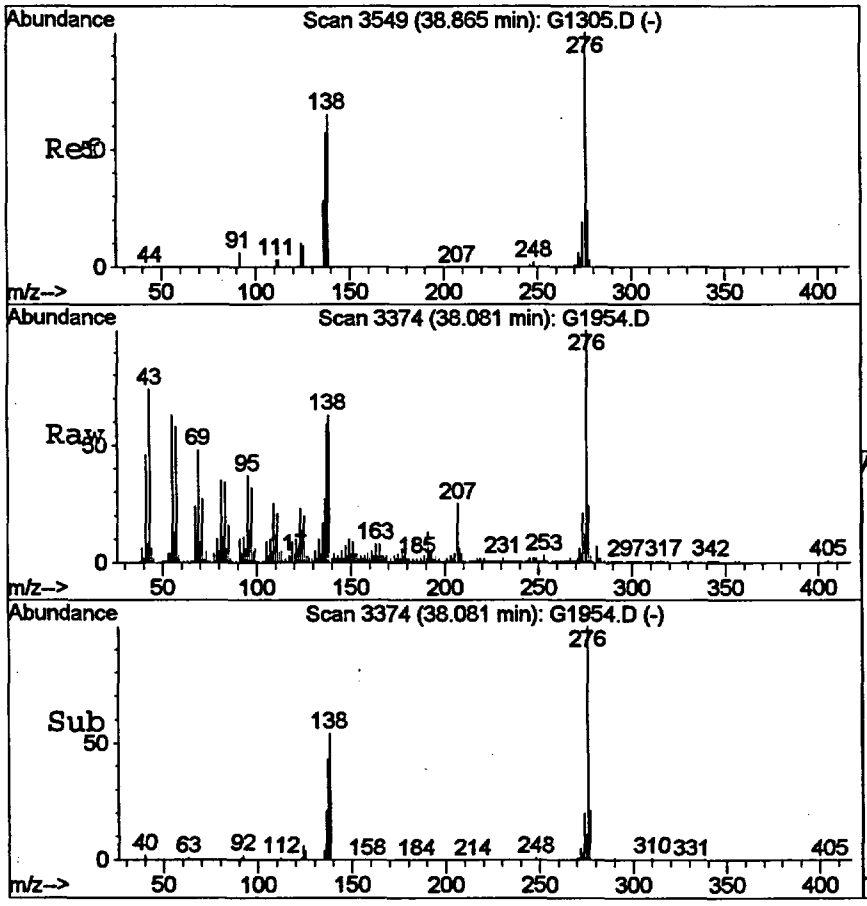




#76
Indeno(1,2,3-cd)pyrene
Concen: 55.56 ng
RT: 36.57 min/ Scan# 3226
Delta R.T. 0.15 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

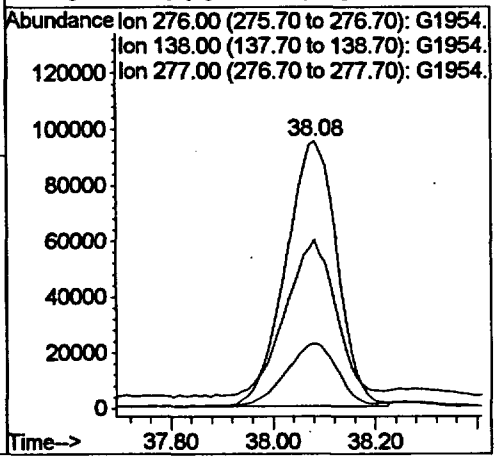
Tgt Ion:276	Resp:	777075	
Ion	Ratio	Lower	Upper
276	100		
138	58.7	47.5	87.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0





#78
Benzo(g,h,i)perylene
Concen: 57.06 ng
RT: 38.08 min /Scan# 3374
Delta R.T. 0.17 min
Lab File: G1954.D
Acq: 22 Jan 98 20:54

Tgt Ion:276	Resp:	665935	
Ion	Ratio	Lower	Upper
276	100		
138	58.4	37.7	77.7
277	23.2	3.9	43.9
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:14 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.06	152	200953	40.00	ng		0.00
17) Naphthalene-d8	10.07	136	583808	40.00	ng		0.00
31) Acenaphthene-d10	16.29	164	281395	40.00	ng		0.00
51) Phenanthrene-d10	19.61	188	514691	40.00	ng		0.00
63) Chrysene-d12	25.40	240	402968	40.00	ng		0.04
71) Perylene-d12	31.53	264	483267	40.00	ng		0.07
System Monitoring Compounds							
2) 2-Fluorophenol	4.82	112	696443	116.19	ng		0.00
Surrogate Spike 150.000	Range 25 - 121		Recovery = 77.46%				
3) Phenol-d5	6.36	99	1041523	131.55	ng		0.00
Surrogate Spike 150.000	Range 24 - 113		Recovery = 87.70%				
7) 1,2-Dichlorobenzene-d4	7.42	152	273395	68.92	ng		0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 68.92%				
8) 2-Chlorophenol-d4	6.71	132	743631	122.24	ng		0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 81.49%				
18) Nitrobenzene-d5	8.19	82	434782	83.84	ng		0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 83.84%				
35) 2-Fluorobiphenyl	14.27	172	782202	93.71	ng		0.00
Surrogate Spike 100.000	Range 30 - 115		Recovery = 93.71%				
52) 2,4,6-Tribromophenol	18.17	330	188293	147.10	ng		0.00
Surrogate Spike 150.000	Range 19 - 122		Recovery = 98.07%				
65) Terphenyl-d14	22.67	244	696454	83.66	ng		0.03
Surrogate Spike 100.000	Range 18 - 137		Recovery = 83.66%				
Target Compounds							Qvalue
4) Phenol	6.38	94	14885m	1.75	ng		0
39) Acenaphthylene	15.89	152	12666m	1.03	ng		0
47) Diethylphthalate	17.36	149	11717m	1.25	ng		0
58) Phenanthrene	19.65	178	205558	16.24	ng		99
59) Anthracene	19.75	178	39938m	2.96	ng		98
60) Carbazole	20.06	167	50485	3.56	ng	#	61
61) Di-n-butylphthalate	20.69	149	115012	5.80	ng	#	50
62) Fluoranthene	22.04	202	577834	45.10	ng		94
64) Pyrene	22.49	202	519681	40.37	ng		92
66) Butylbenzylphthalate	23.64	149	24161	2.58	ng	#	33
67) Benzo(a)anthracene	25.34	228	228328	22.18	ng		98
69) Chrysene	25.48	228	404686	41.24	ng		96
70) bis(2-Ethylhexyl)phthalate	25.04	149	380034	27.32	ng	#	98
73) Benzo(b)fluoranthene	29.68	252	724029	54.51	ng		96
74) Benzo(k)fluoranthene	29.77	252	505114	39.95	ng		94
75) Benzo(a)pyrene	31.30	252	392309	32.31	ng		96
76) Indeno(1,2,3-cd)pyrene	36.57	276	777075	55.56	ng		89

0483

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:14 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
78) Benzo(g,h,i)perylene	38.08	276	665935	57.06	ng	99

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

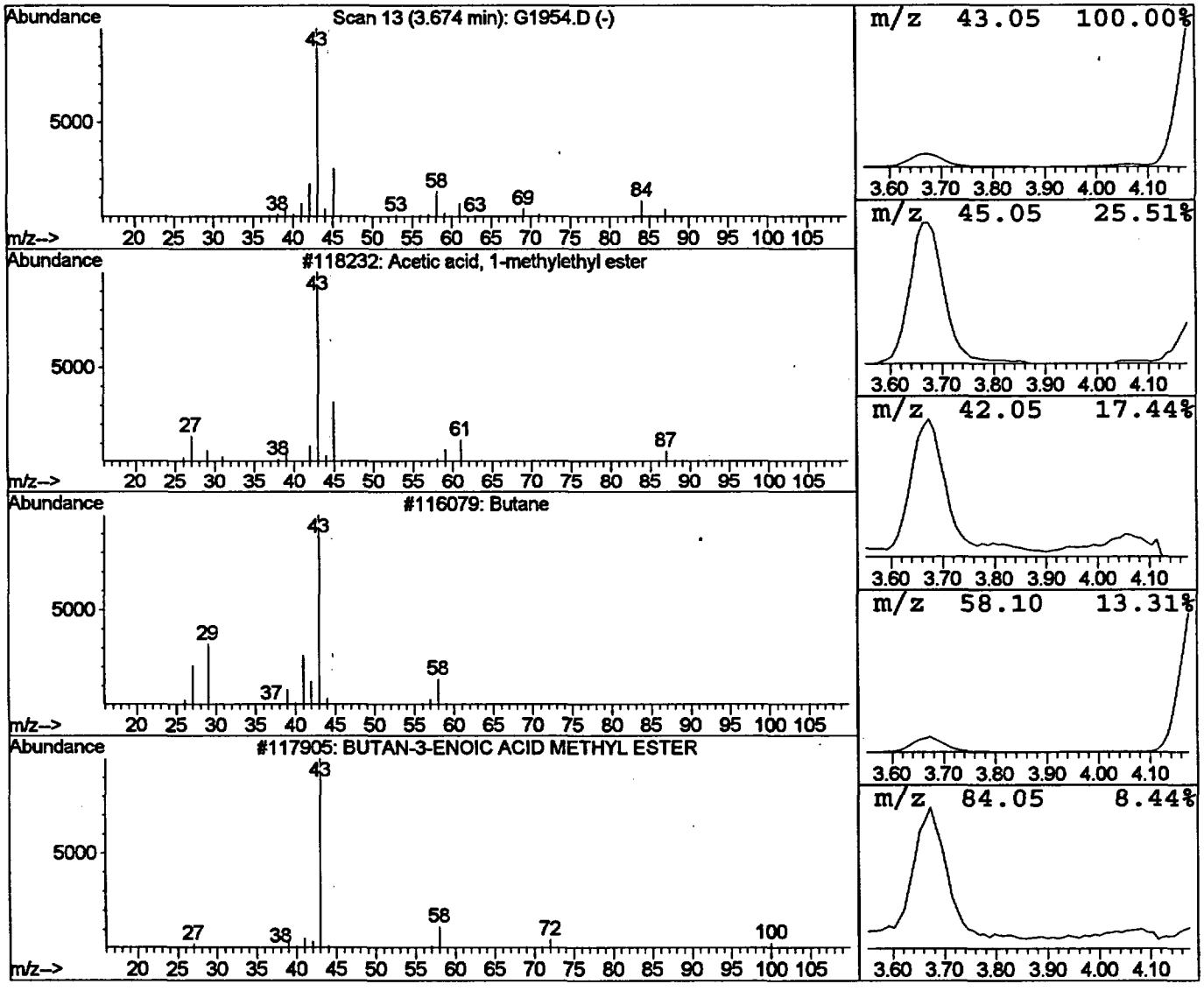
****

Peak Number 1 Acetic acid, 1-methylethyl est Concentration Rank 25

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.67	38.84 ng	1111710	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	25
2	Butane	58	C4H10	000106-97-8	25
3	BUTAN-3-ENOIC ACID METHYL ESTER	100	C5H8O2	000000-00-0	10



0485

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

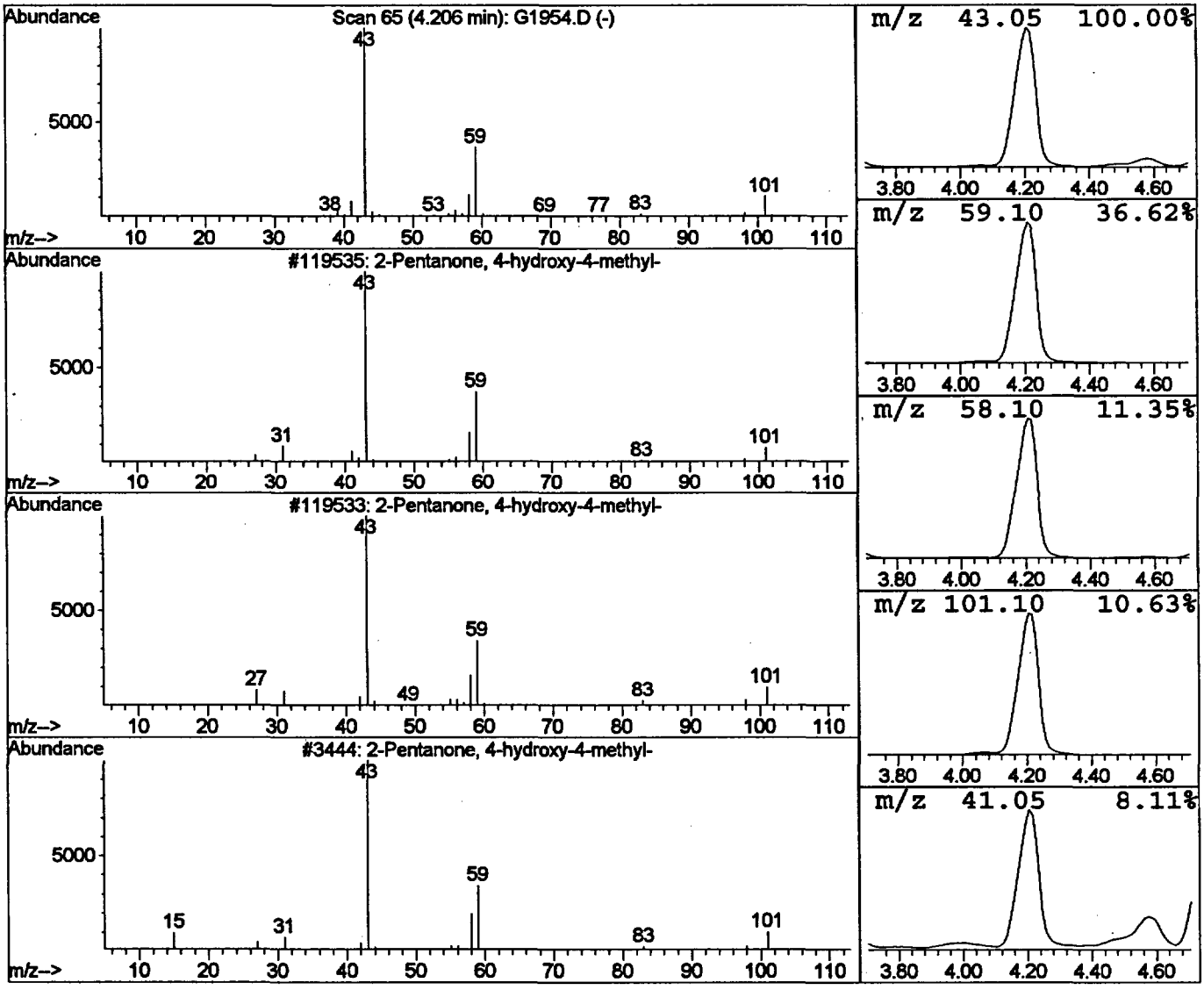
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.21	598.34 ng	17126300	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (R)	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	56
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45



0486

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

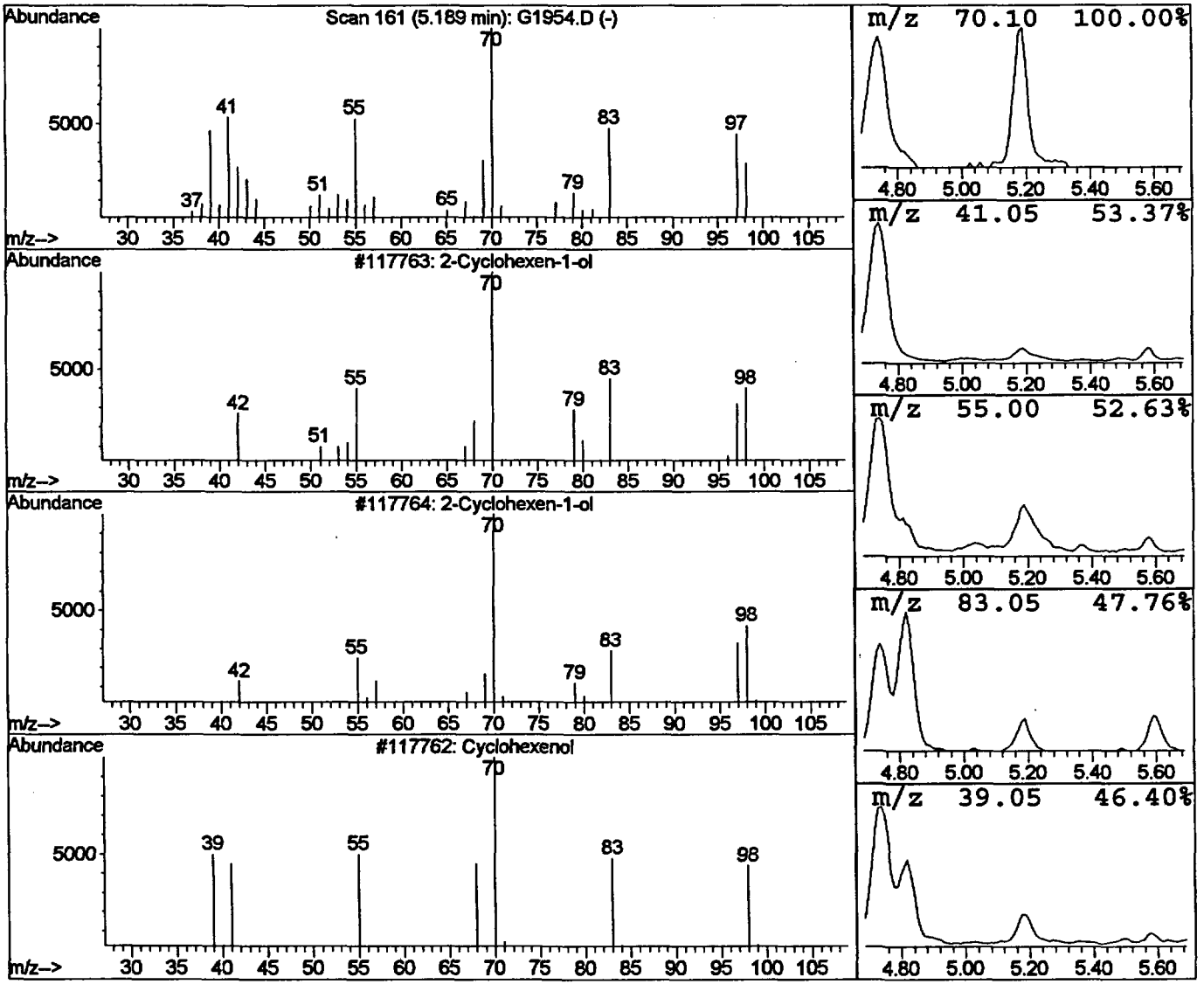
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 2-Cyclohexen-1-ol Concentration Rank 38

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.19	11.92 ng	341289	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1/	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	68
2	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	64
3	Cyclohexenol	98	C6H10O	000822-67-3	58



0487

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

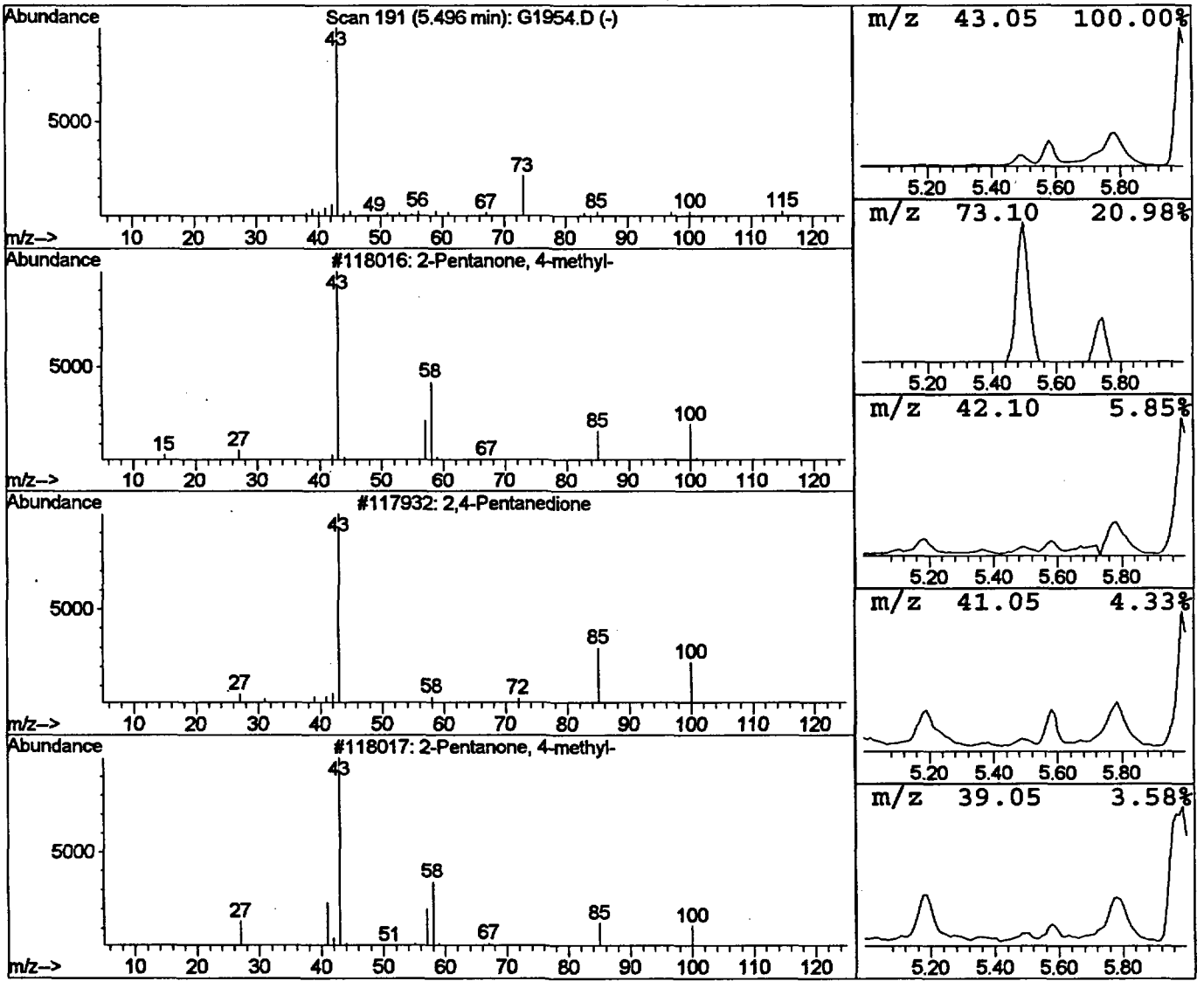
****

Peak Number 4 2-Pentanone, 4-methyl- Concentration Rank 45

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.50	6.04 ng	172849	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-methyl-	100	C6H12O	000108-10-1	9
2	2,4-Pentanedione	100	C5H8O2	000123-54-6	9
3	2-Pentanone, 4-methyl-	100	C6H12O	000108-10-1	9



0488

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

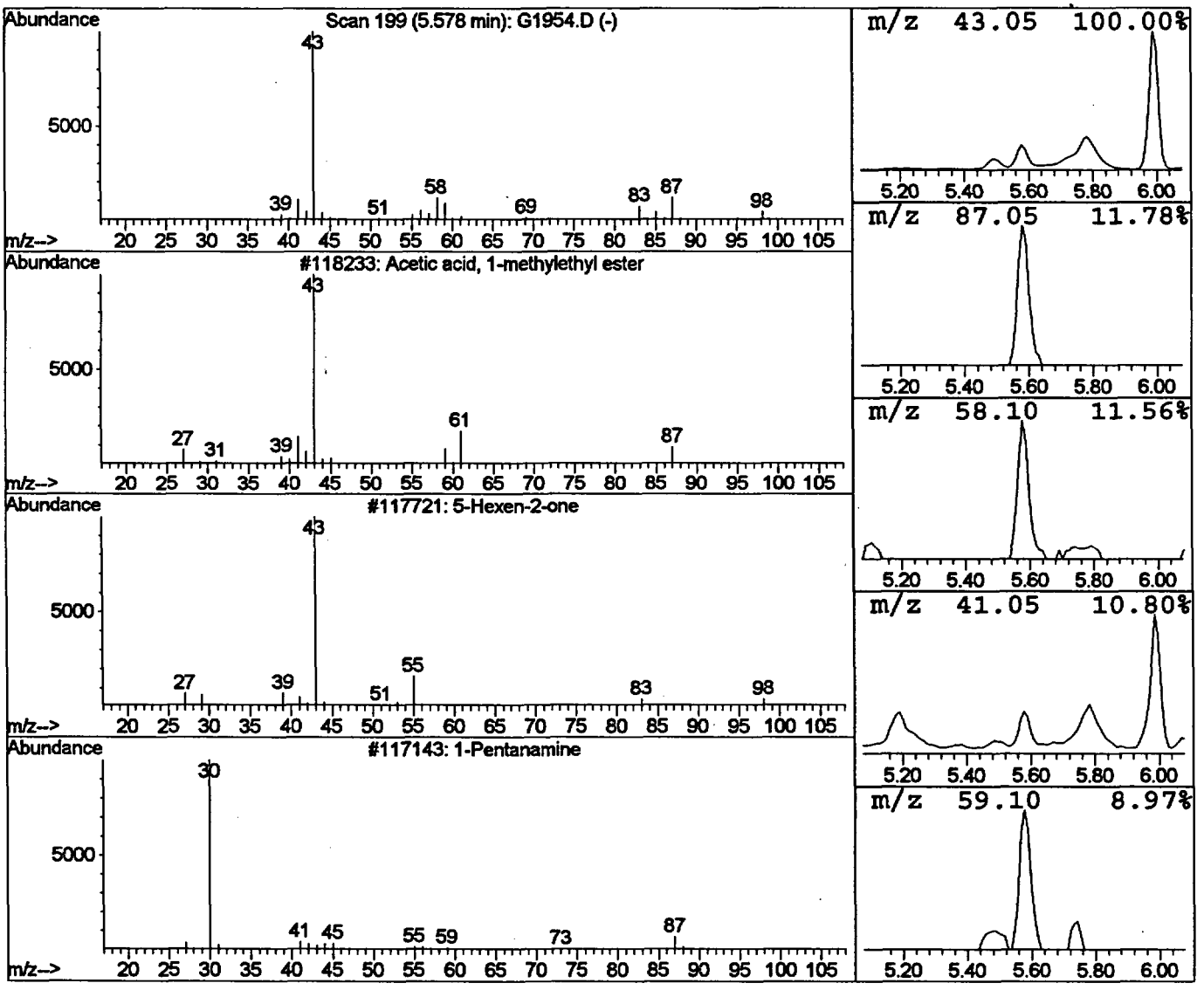
****

Peak Number 5 Acetic acid, 1-methylethyl est Concentration Rank 36

UNKNOWN COMPOUND mol 1/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.58	15.66 ng	448160	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	23
2	5-Hexen-2-one	98	C6H10O	000109-49-9	9
3	1-Pentanamine	87	C5H13N	000110-58-7	9



0489

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

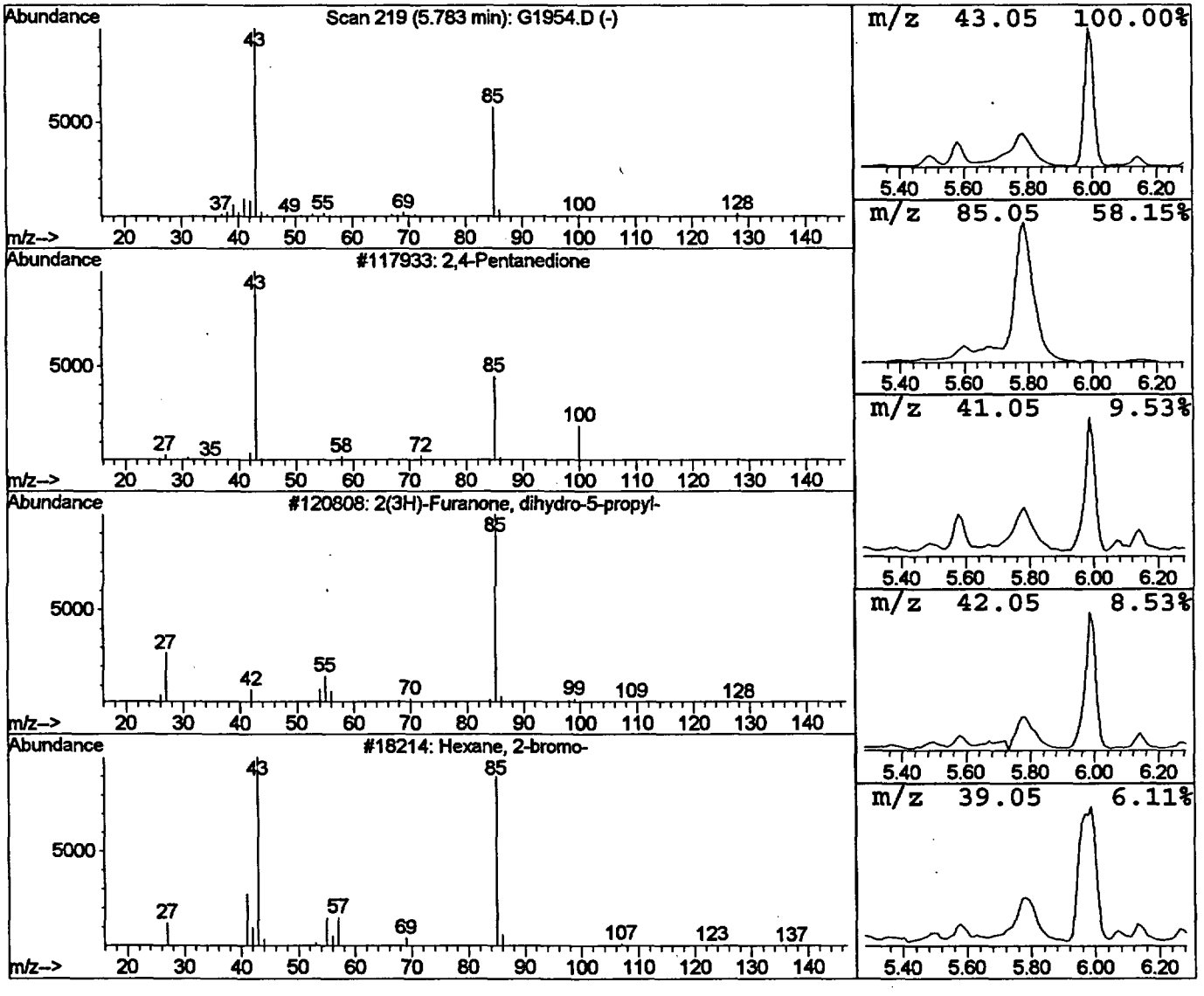
****

Peak Number 6 2,4-Pentanedione Concentration Rank 23

UNKNOWN COMPOUND 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.78	41.28 ng	1181680	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	40
2	2(3H)-Furanone, dihydro-5-propyl-	128	C7H12O2	000105-21-5	9
3	Hexane, 2-bromo-	164	C6H13Br	003377-86-4	9



0490

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

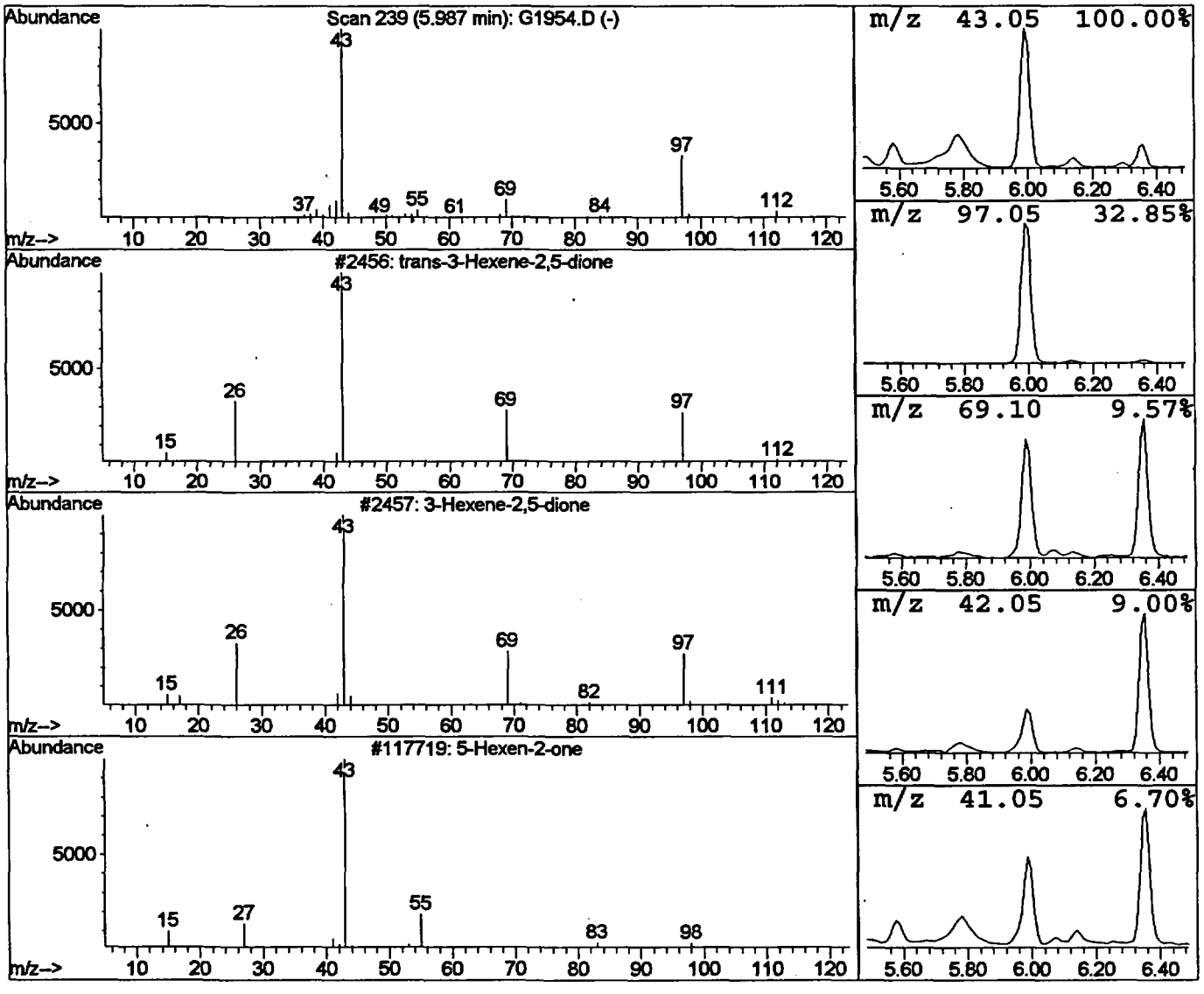
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 7 trans-3-Hexene-2,5-dione Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.99	75.82 ng	2170320	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	40
2	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	40
3	5-Hexen-2-one	98	C6H10O	000109-49-9	9



0491

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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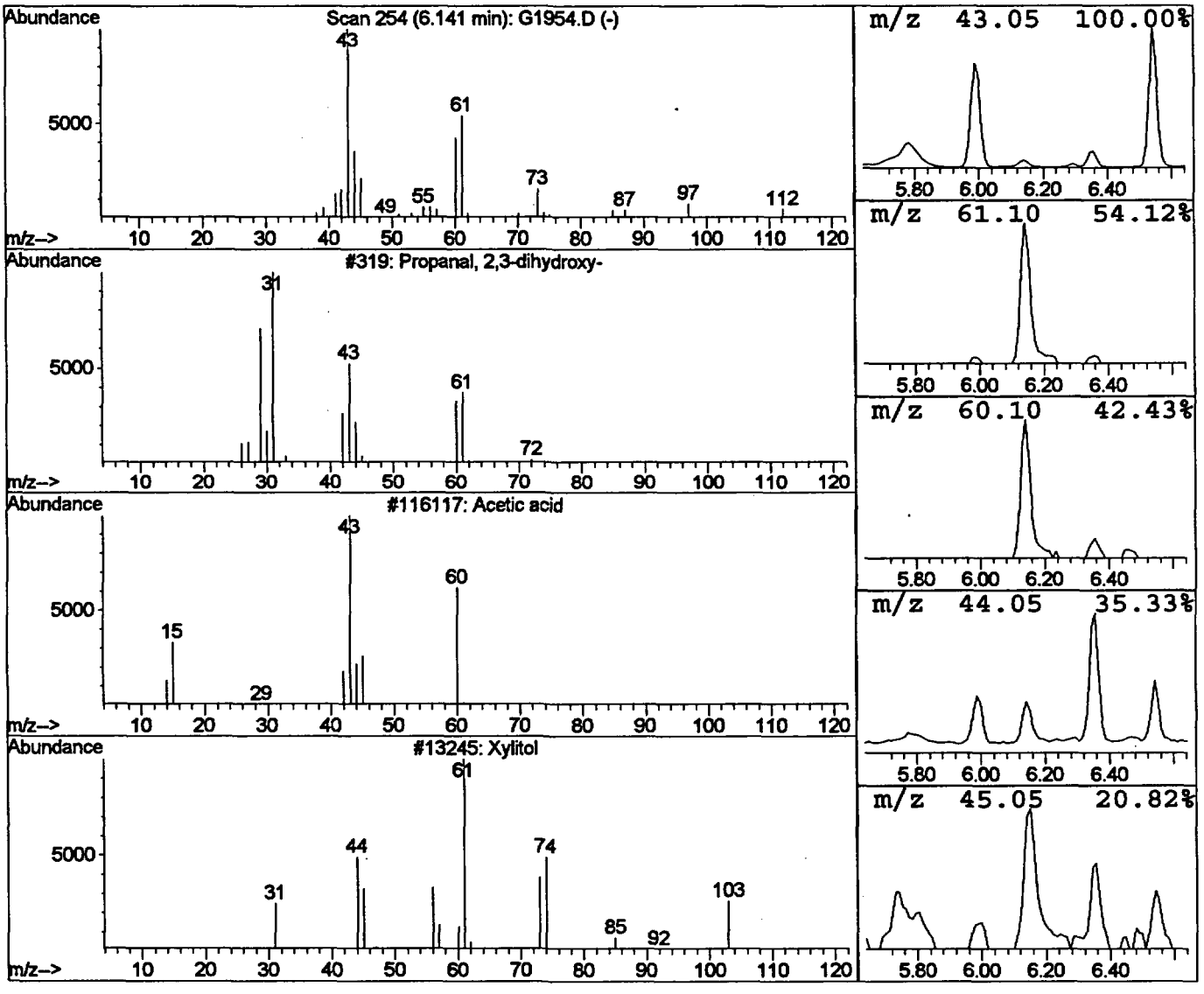
Peak Number 8 Propanal, 2,3-dihydroxy- Concentration Rank 42

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.14	8.98 ng	256977	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanal, 2,3-dihydroxy-	90	C3H6O3	000367-47-5	42
2	Acetic acid	60	C2H4O2	000064-19-7	37
3	Xylitol	152	C5H12O5	000087-99-0	37



0492

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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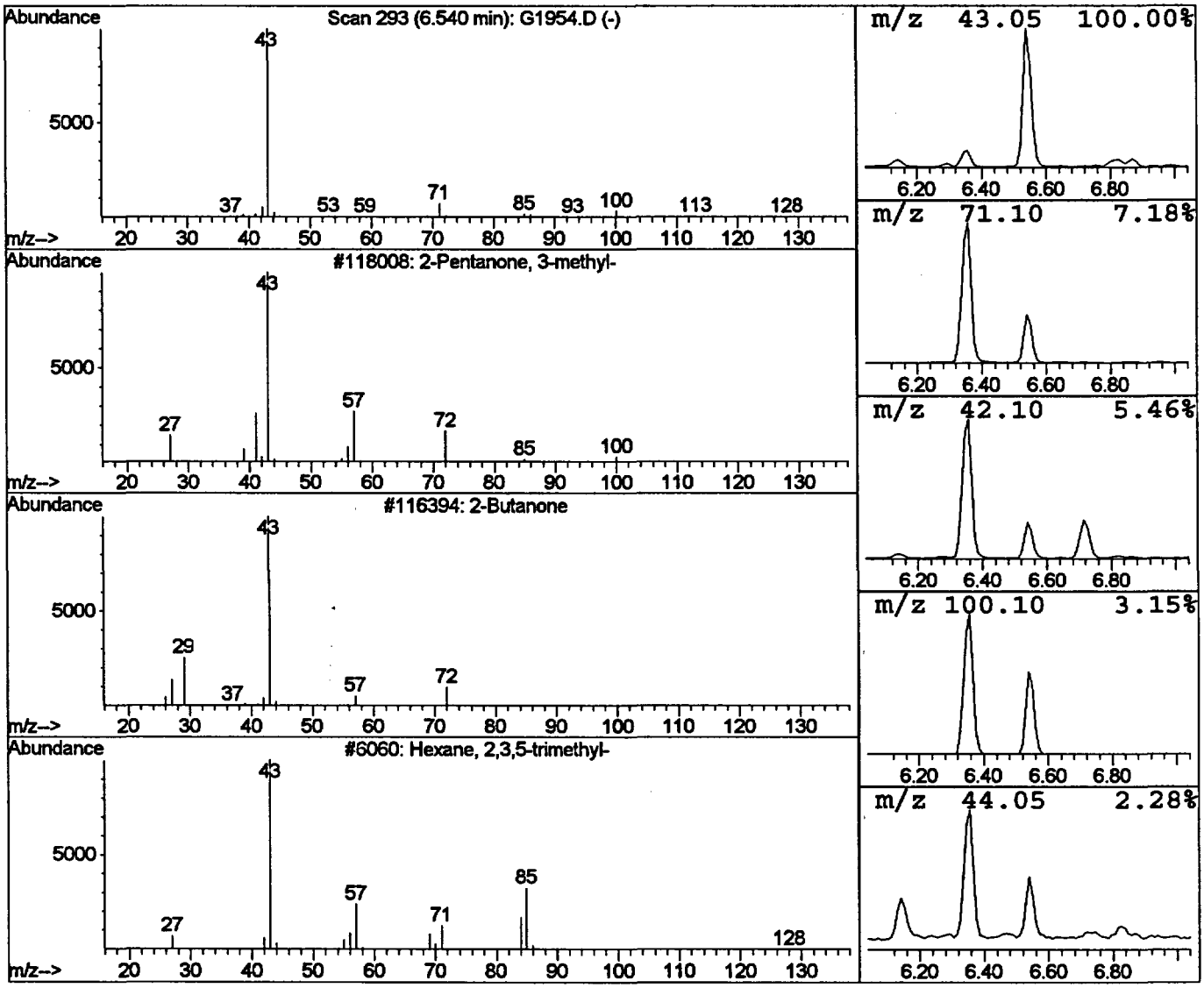
Peak Number 9 2-Pentanone, 3-methyl- Concentration Rank 19

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.54	55.06 ng	1575930	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	2-Butanone	72	C4H8O	000078-93-3	9
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	7



493

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

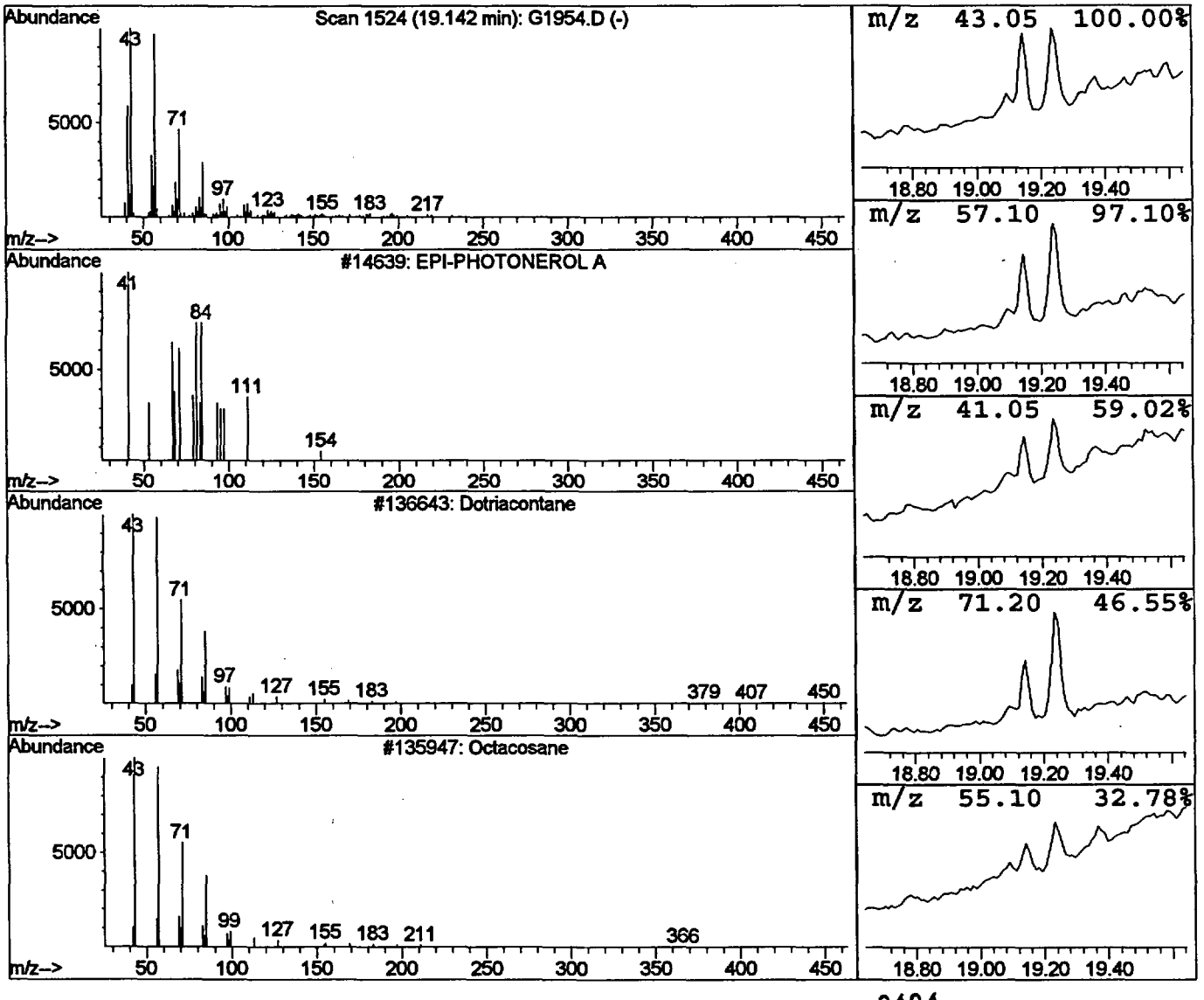
****

Peak Number 10 EPI-PHOTONEROL A Concentration Rank 22

UNKNOWN COMPOUND 1101-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.14	44.76 ng	1541110	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	EPI-PHOTONEROL A	154	C10H18O	060619-35-4	83
2	Dotriacontane	451	C32H66	000544-85-4	80
3	Octacosane	394	C28H58	000630-02-4	74



0494

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D
Acq On : 22 Jan 98 20:54
Sample : S HP-7G 58073-004 FFR83
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial: 5
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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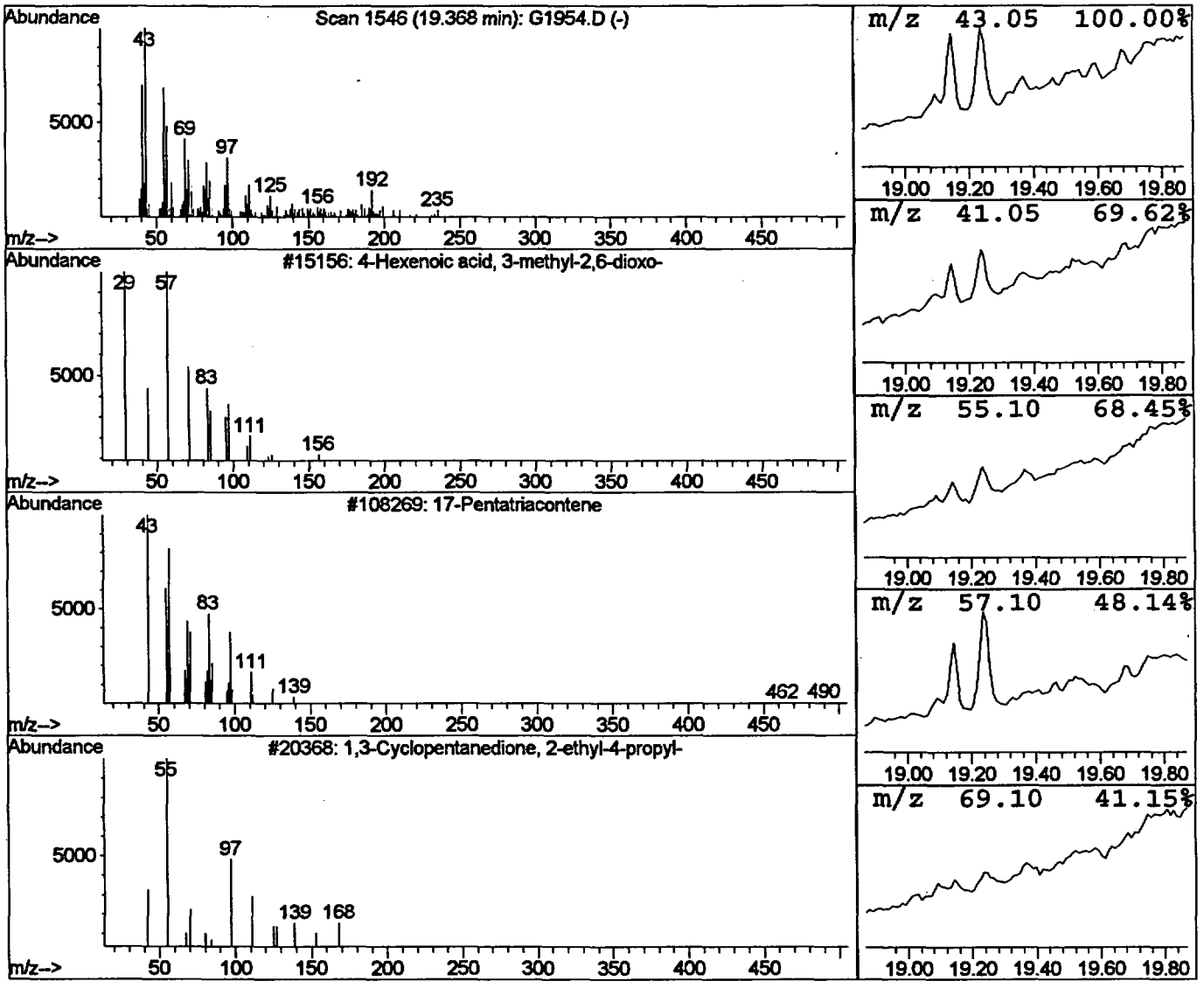
Peak Number 11 4-Hexenoic acid, 3-methyl-2,6- Concentration Rank 32

UNKNOWN COMPOUND no! -27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.37	19.11 ng	657821	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	4-Hexenoic acid, 3-methyl-2,6-dioxo	156	C7H8O4	056771-77-8	70
2	17-Pentatriacontene	491	C35H70	006971-40-0	38
3	1,3-Cyclopentanedione, 2-ethyl-4-pr	168	C10H16O2	057157-04-7	38



0495

Library Search Compound Report

CASE 25969
SDG# FFR76
Vial: 5

Data File : Q:\HPCHEM\G\G19XX\G1954.D
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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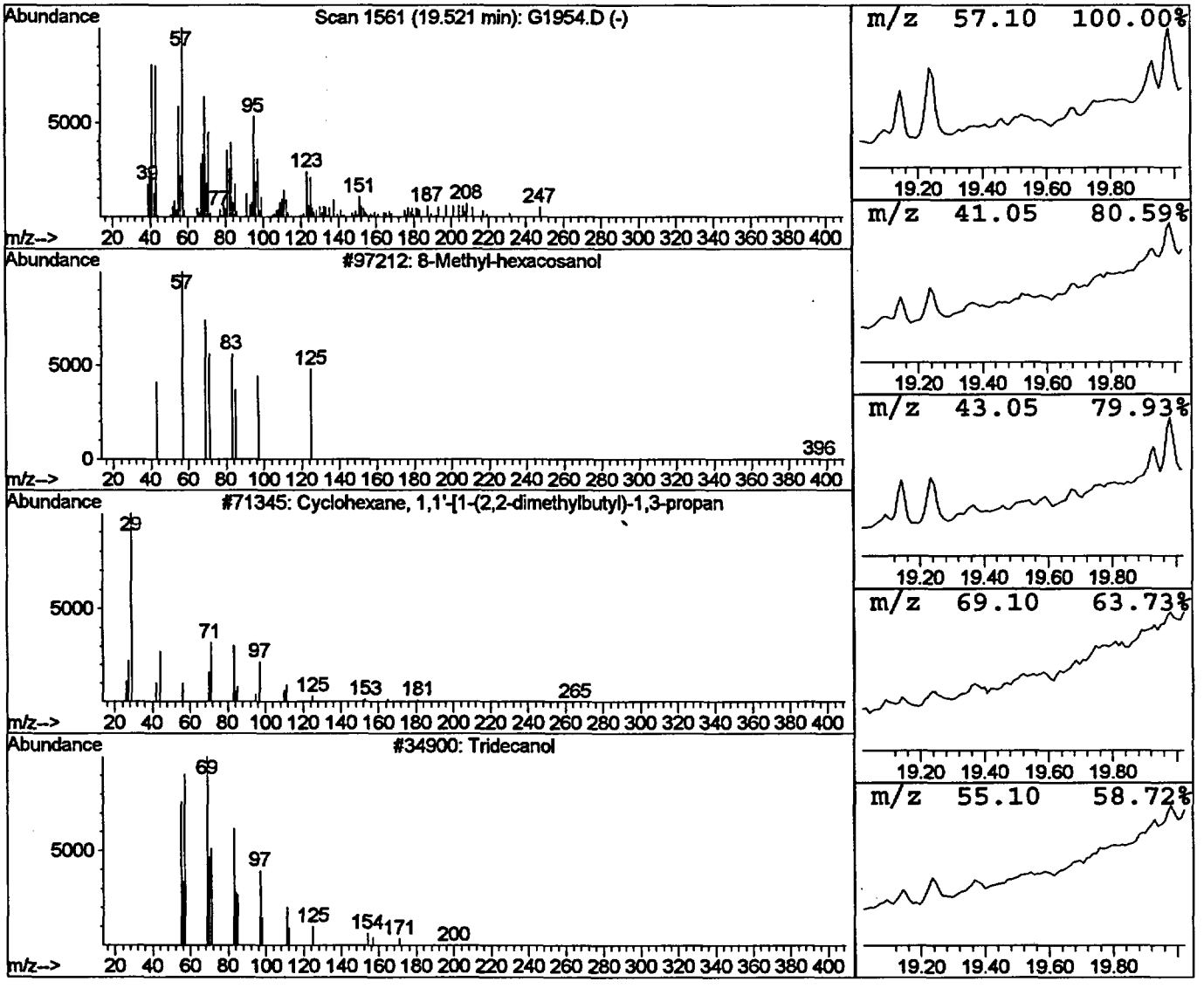
Peak Number 12 8-Methyl-hexacosanol Concentration Rank 37

UNKNOWN Compound 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.52	12.86 ng	442873	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	8-Methyl-hexacosanol	396	C27H56O	056599-05-4	38
2	Cyclohexane, 1,1'-[1-(2,2-dimethylb	292	C21H40	061142-63-0	38
3	Tridecanol	200	C13H28O	026248-42-0	38



0496

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D
Acq On : 22 Jan 98 20:54
Sample : S HP-7G 58073-004 FFR83
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

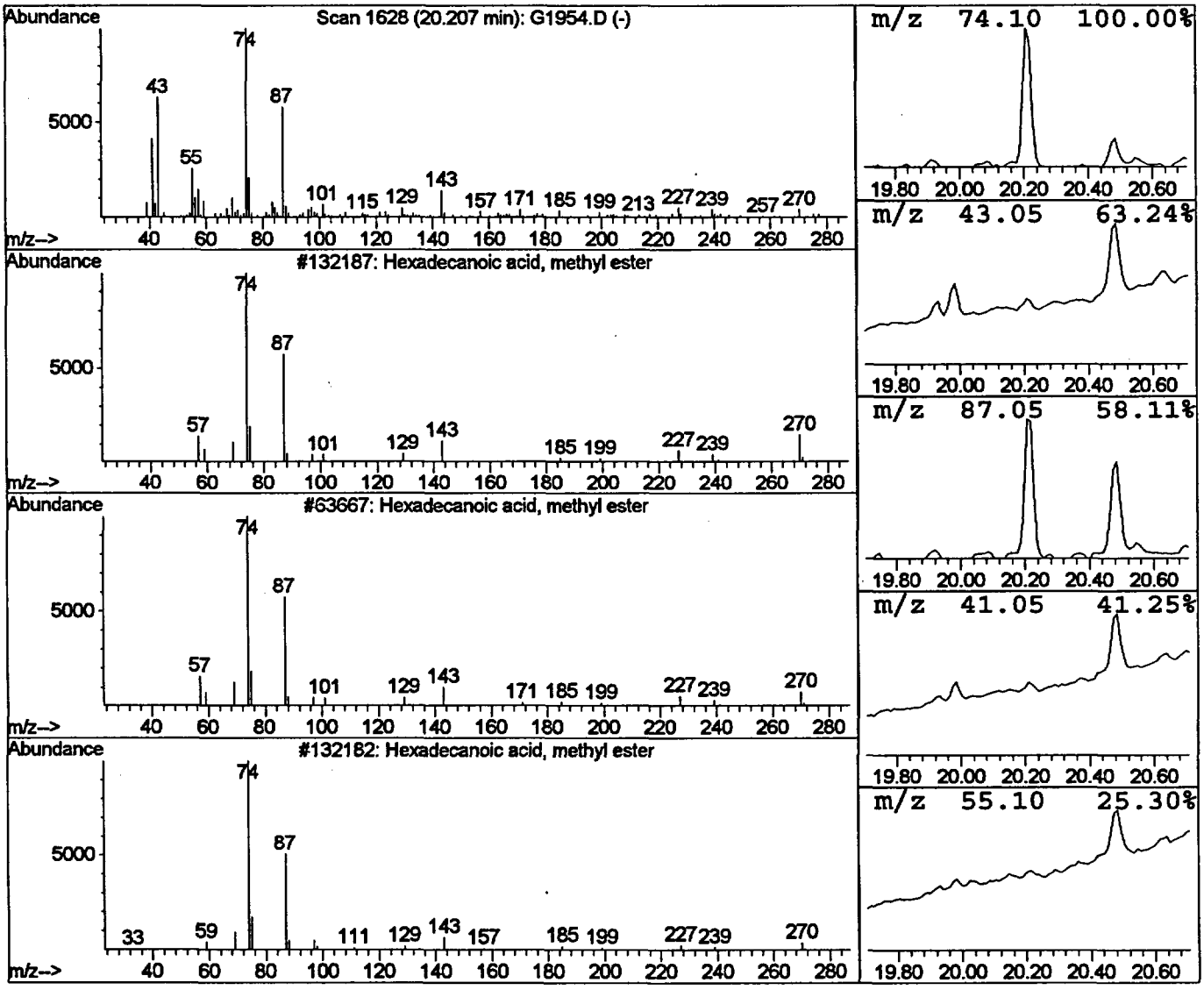
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 13 Hexadecanoic acid, methyl este Concentration Rank 40

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.21	10.74 ng	369870	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	97
2	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	96
3	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	94



0497

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D
Acq On : 22 Jan 98 20:54
Sample : S HP-7G 58073-004 FFR83
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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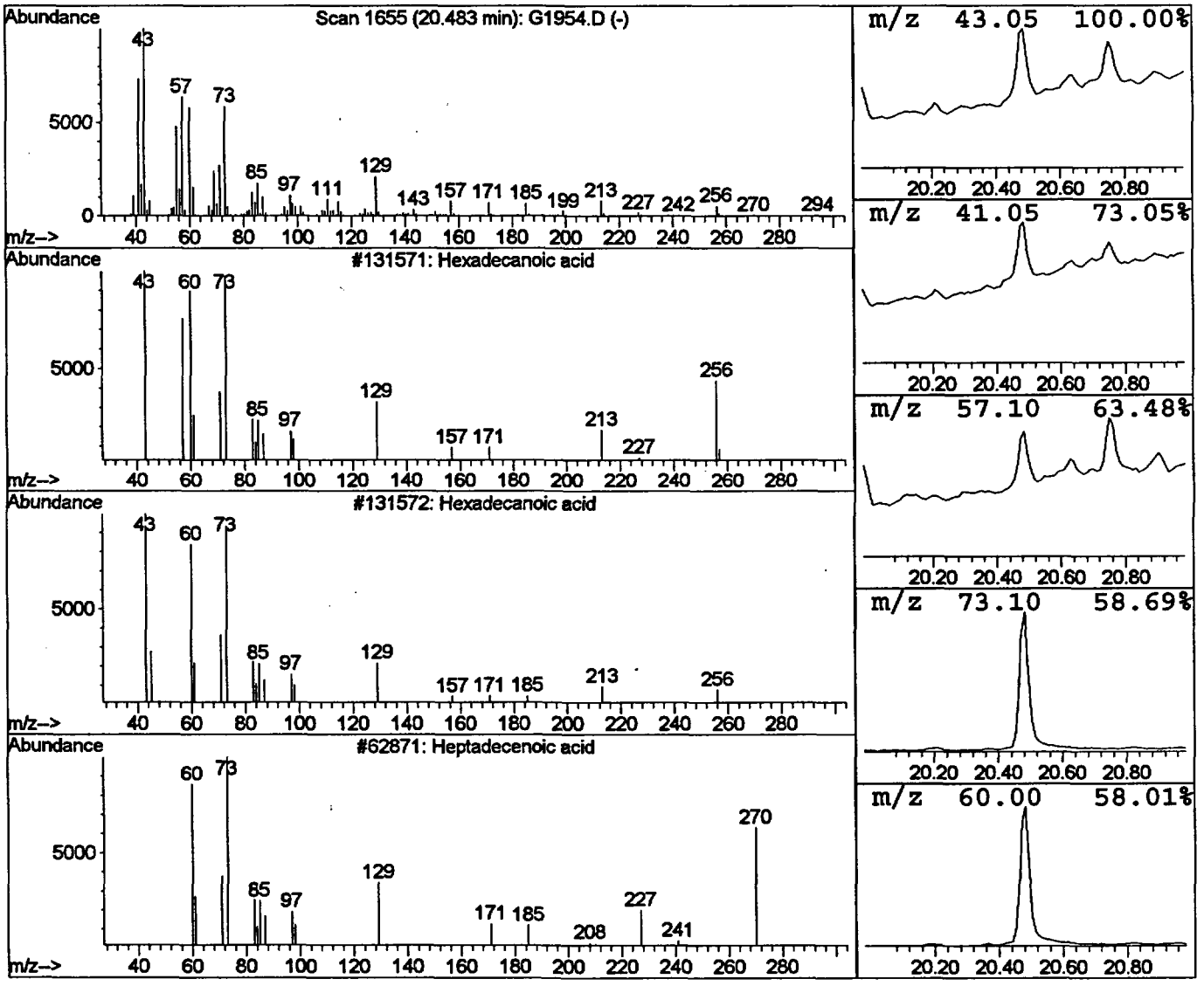
Peak Number 14 Hexadecanoic acid Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.48	91.27 ng	3142420	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	Hexadecanoic acid	256	C16H32O2	000057-10-3	93
3	Heptadecenoic acid	268	C17H32O2	026265-99-6	91



0498

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

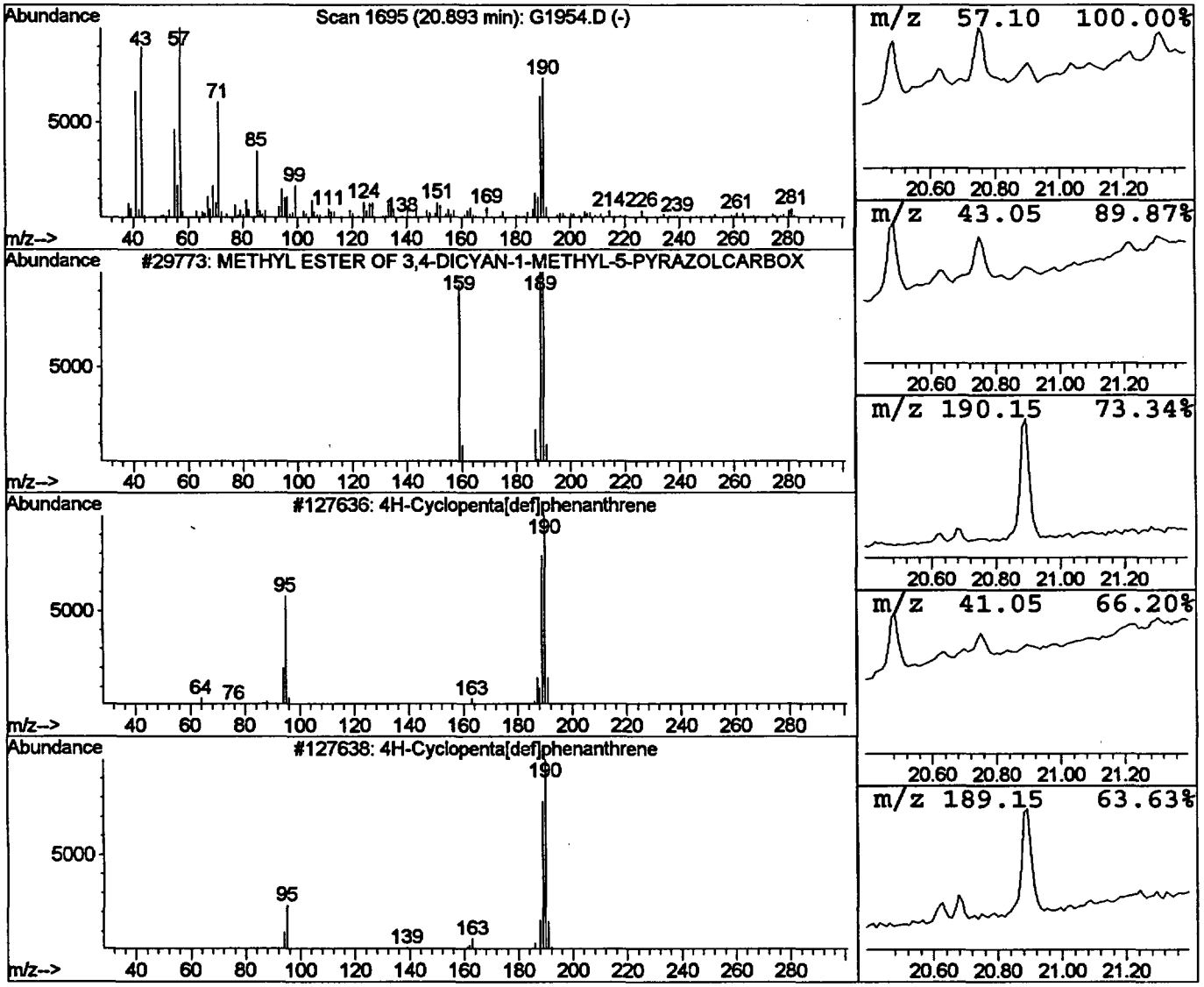
****

Peak Number 15 METHYL ESTER OF 3,4-DICYAN-1-M Concentration Rank 39

UNKNOWN COMPOUND no1->7-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.89	10.84 ng	373141	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	METHYL ESTER OF 3,4-DICYAN-1-METHYL	190	C8H6N4O2	070910-26-8	80
2	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	60
3	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	43



0499

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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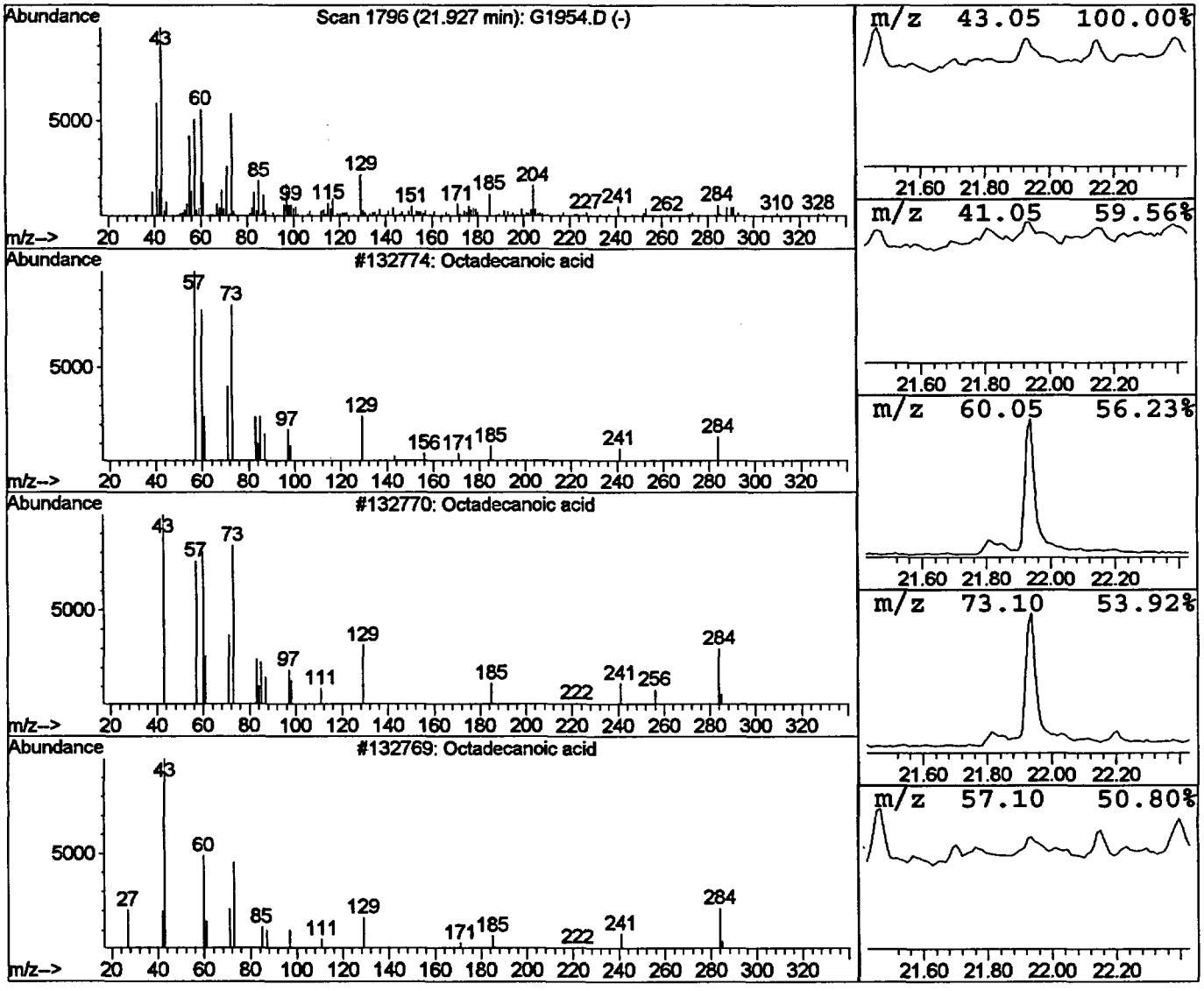
Peak Number 16 Octadecanoic acid Concentration Rank 30

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.93	23.08 ng	794533	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	90
2	Octadecanoic acid	284	C18H36O2	000057-11-4	81
3	Octadecanoic acid	284	C18H36O2	000057-11-4	70



0500

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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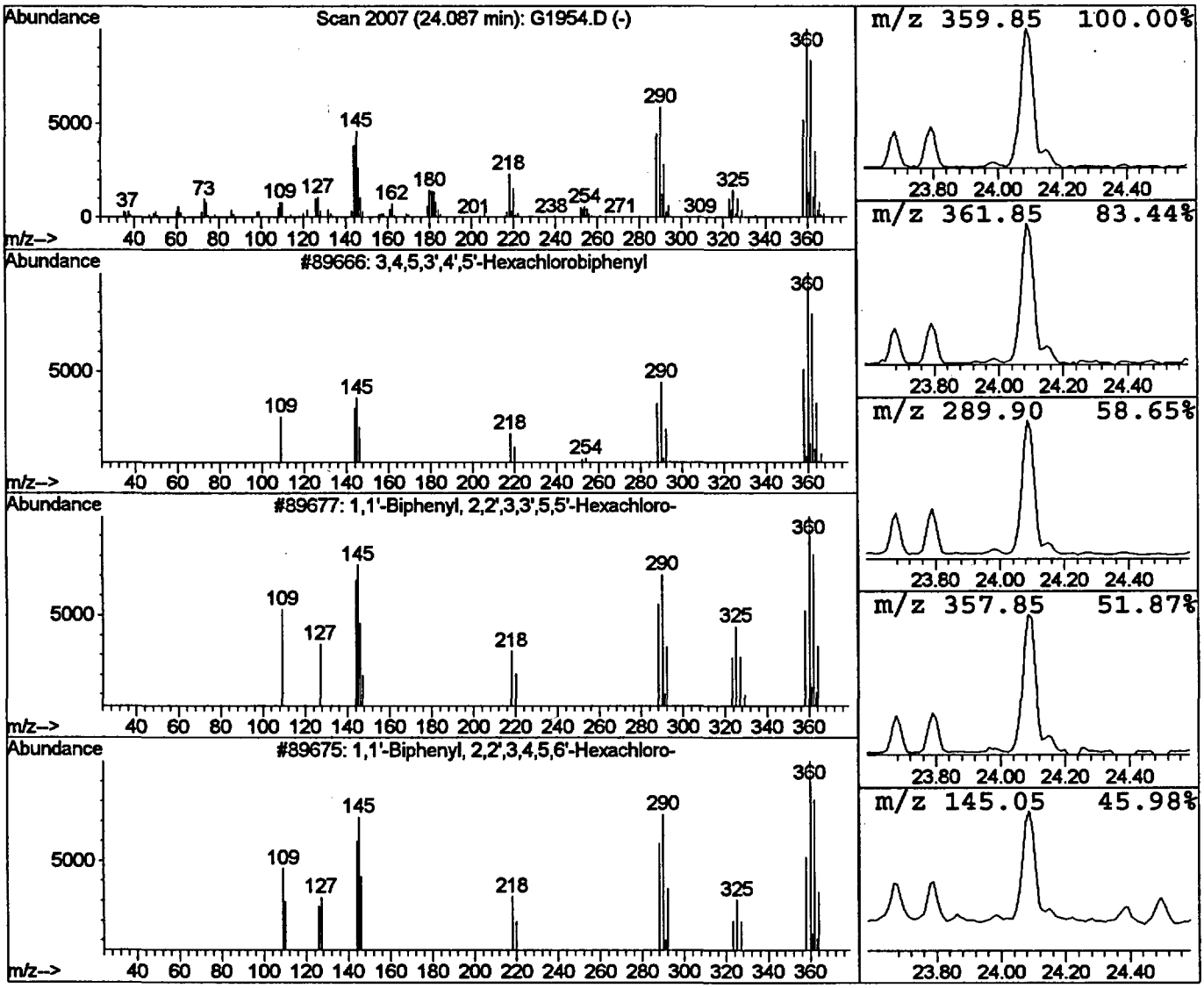
Peak Number 17 3,4,5,3',4',5'-Hexachlorobiphe Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.09	72.97 ng	908723	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3,4,5,3',4',5'-Hexachlorobiphenyl	358	C12H4Cl6	032774-16-6	97
(2)	1,1'-Biphenyl, 2,2',3,3',5,5'-Hexac	358	C12H4Cl6	035694-04-3	96
3	1,1'-Biphenyl, 2,2',3,4,5,6'-Hexach	358	C12H4Cl6	068194-15-0	96



0501

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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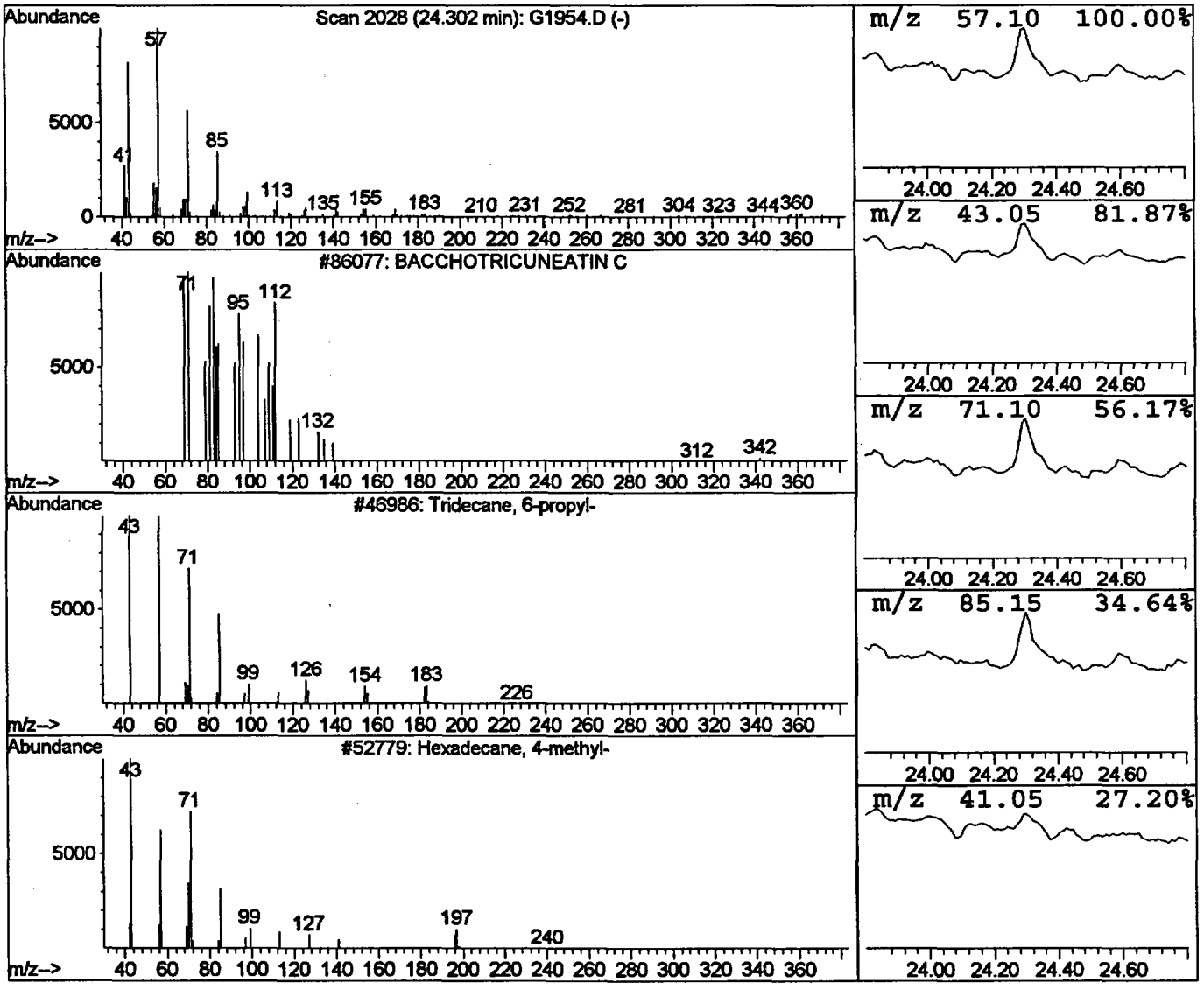
Peak Number 18 BACCHOTRICUNEATIN C Concentration Rank 24

UNKNOWN COMPOUND no1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.30	39.07 ng	486528	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	BACCHOTRICUNEATIN C	342	C20H22O5	066563-30-2	91
2	Tridecane, 6-propyl-	226	C16H34	055045-10-8	90
3	Hexadecane, 4-methyl-	240	C17H36	025117-26-4	89



0502

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

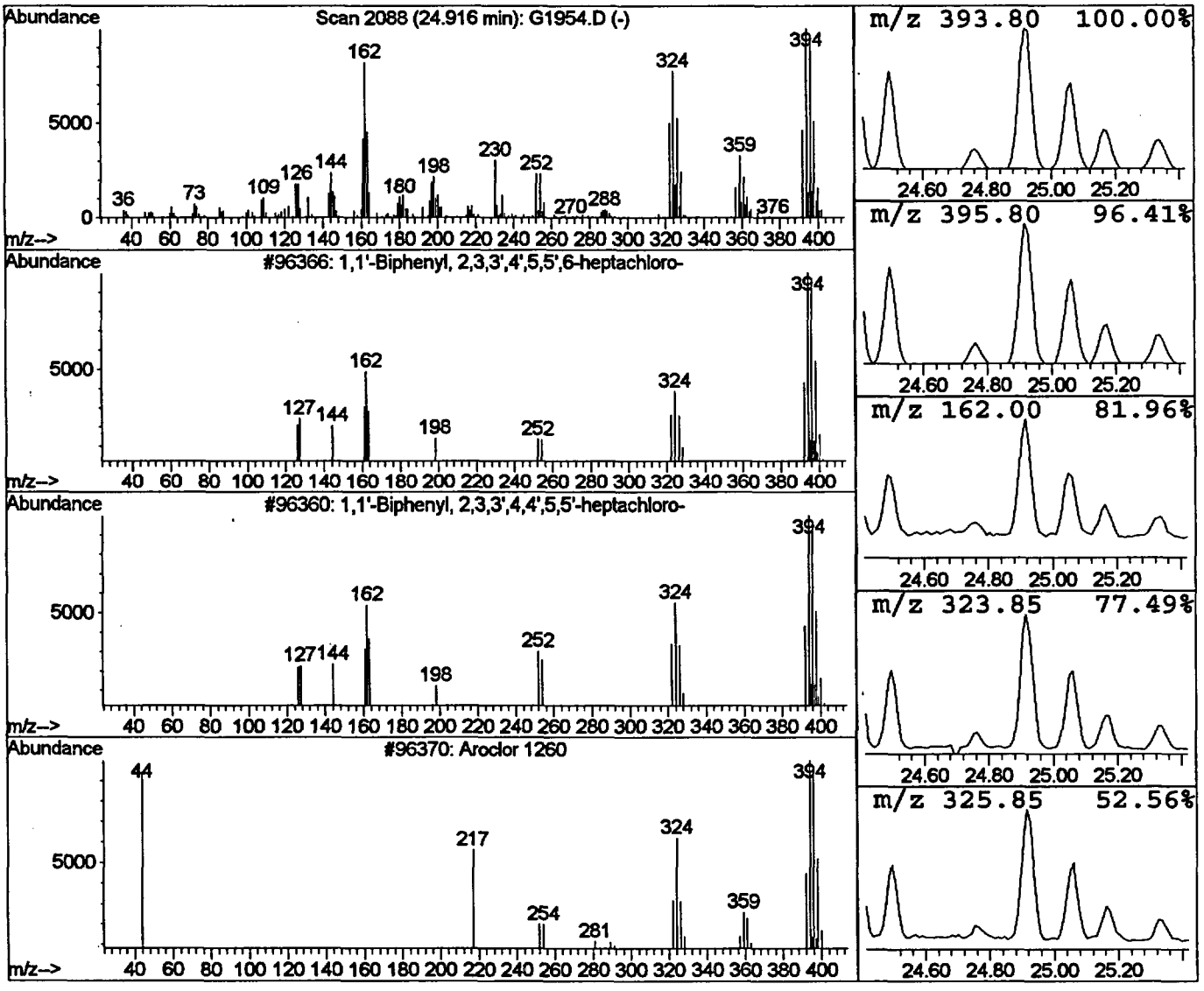
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 19 1,1'-Biphenyl, 2,3,3',4',5,5', Concentration Rank 26

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.92	35.07 ng	436825	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,1'-Biphenyl, 2,3,3',4',5,5',6-hep	392	C12H3Cl7	069782-91-8	99
2	1,1'-Biphenyl, 2,3,3',4,4',5,5'-hep	392	C12H3Cl7	039635-31-9	99
3	Aroclor 1260	392	C12H3Cl7	011096-82-5	95



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

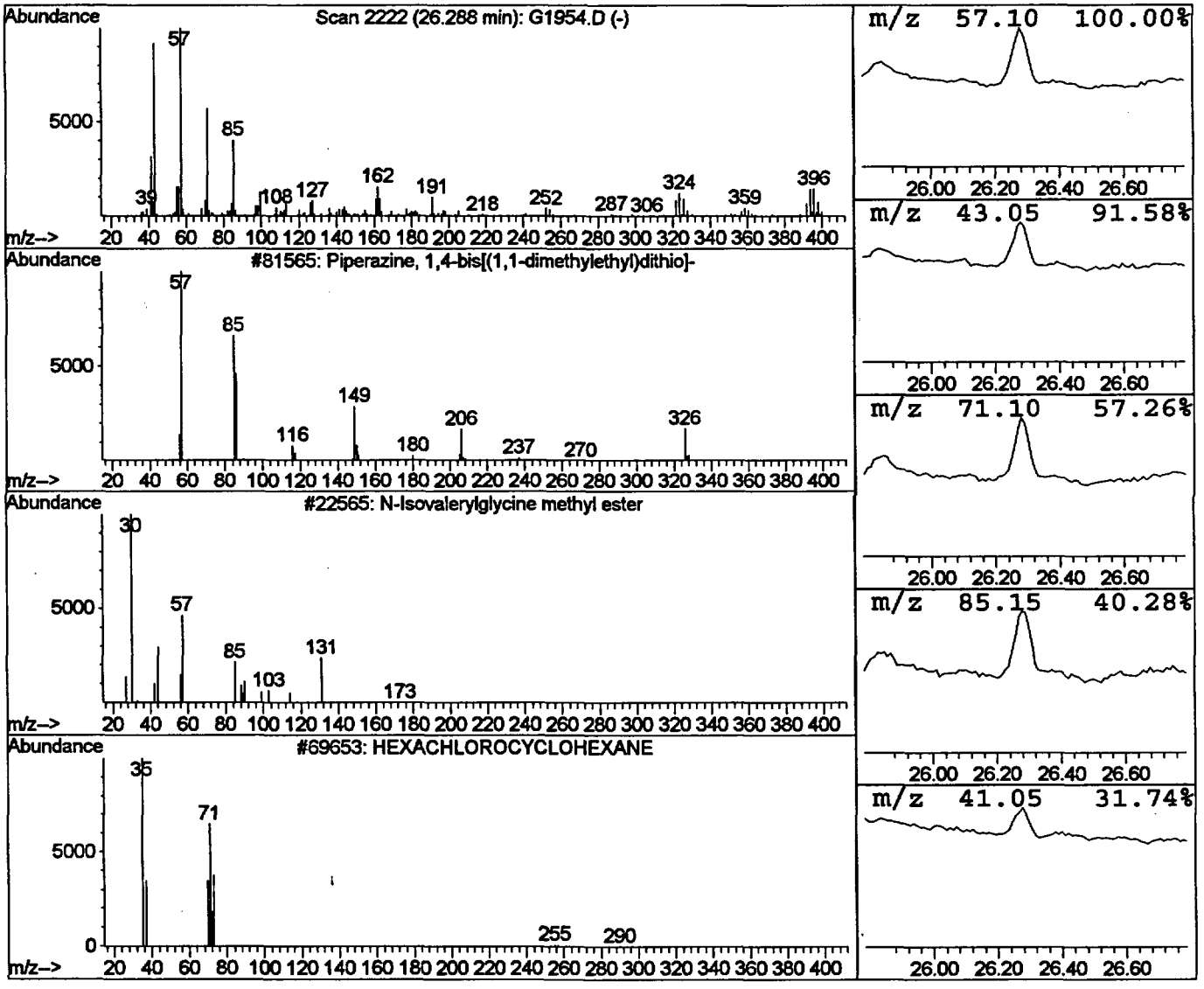
****

Peak Number 20 Piperazine, 1,4-bis[(1,1-dimet Concentration Rank 4

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.29	200.01 ng	2490870	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Piperazine, 1,4-bis[(1,1-dimethylet	326	C12H26N2S4	037004-94-7	12
2	N-Isovalerylglycine methyl ester	173	C8H15NO3	056009-37-1	9
3	HEXACHLOROCYCLOHEXANE	288	C6H6Cl6	000319-84-6	9



0504

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

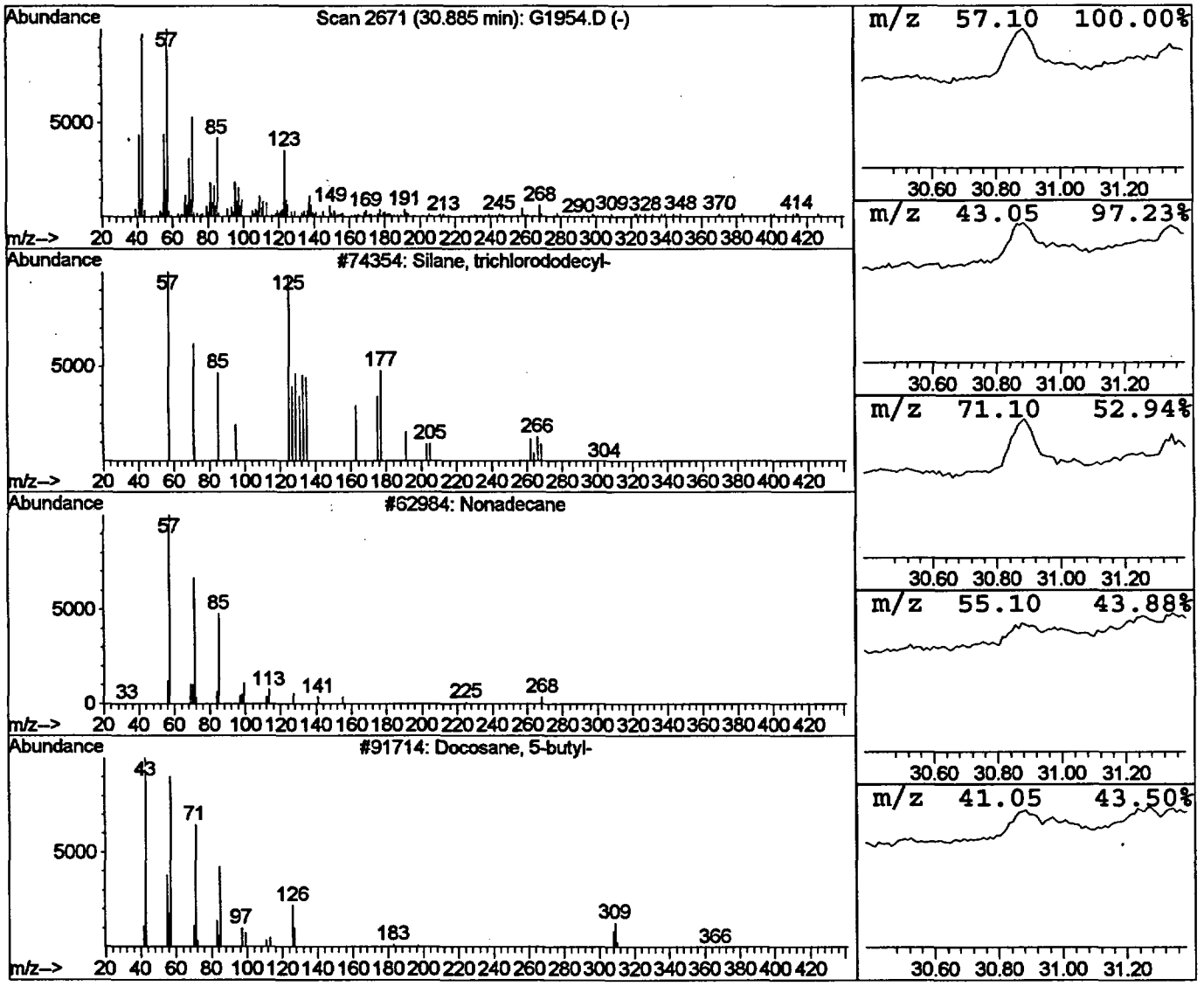
****

Peak Number 21 Silane, trichlorododecyl- Concentration Rank 15

UNKNOWN COMPOUND 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.88	67.27 ng	1849640	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Silane, trichlorododecyl-	302	C12H25Cl3Si	004484-72-4	64
2	Nonadecane	268	C19H40	000629-92-5	62
3	Docosane, 5-butyl-	366	C26H54	055282-16-1	58



0505

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

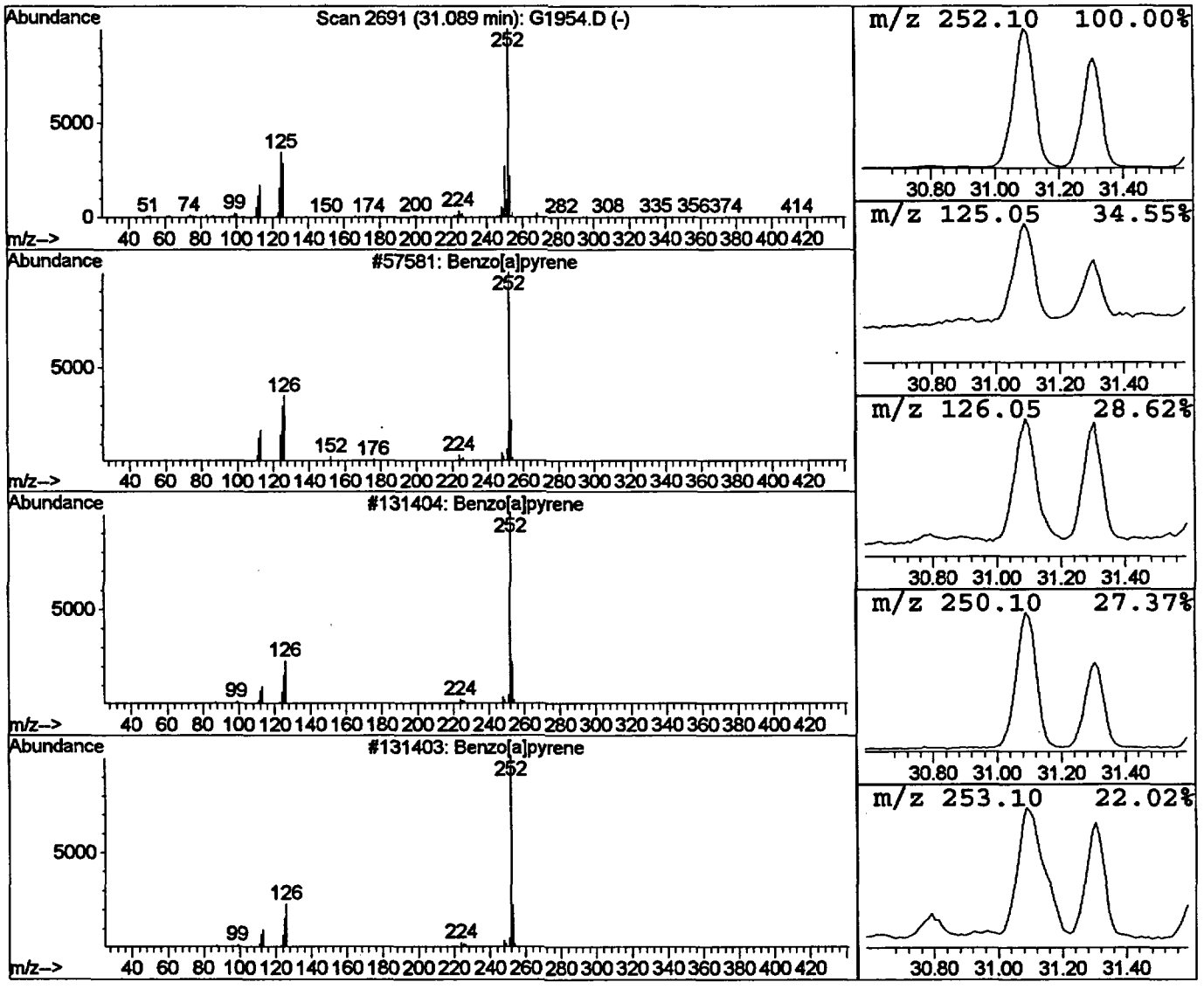
****

Peak Number 22 Benzo[a]pyrene Concentration Rank 21

Unknown PAH no 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
31.09	45.02 ng	1237830	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[a]pyrene	252	C20H12	000050-32-8	98
2	Benzo[a]pyrene	252	C20H12	000050-32-8	95
3	Benzo[a]pyrene	252	C20H12	000050-32-8	95



0506

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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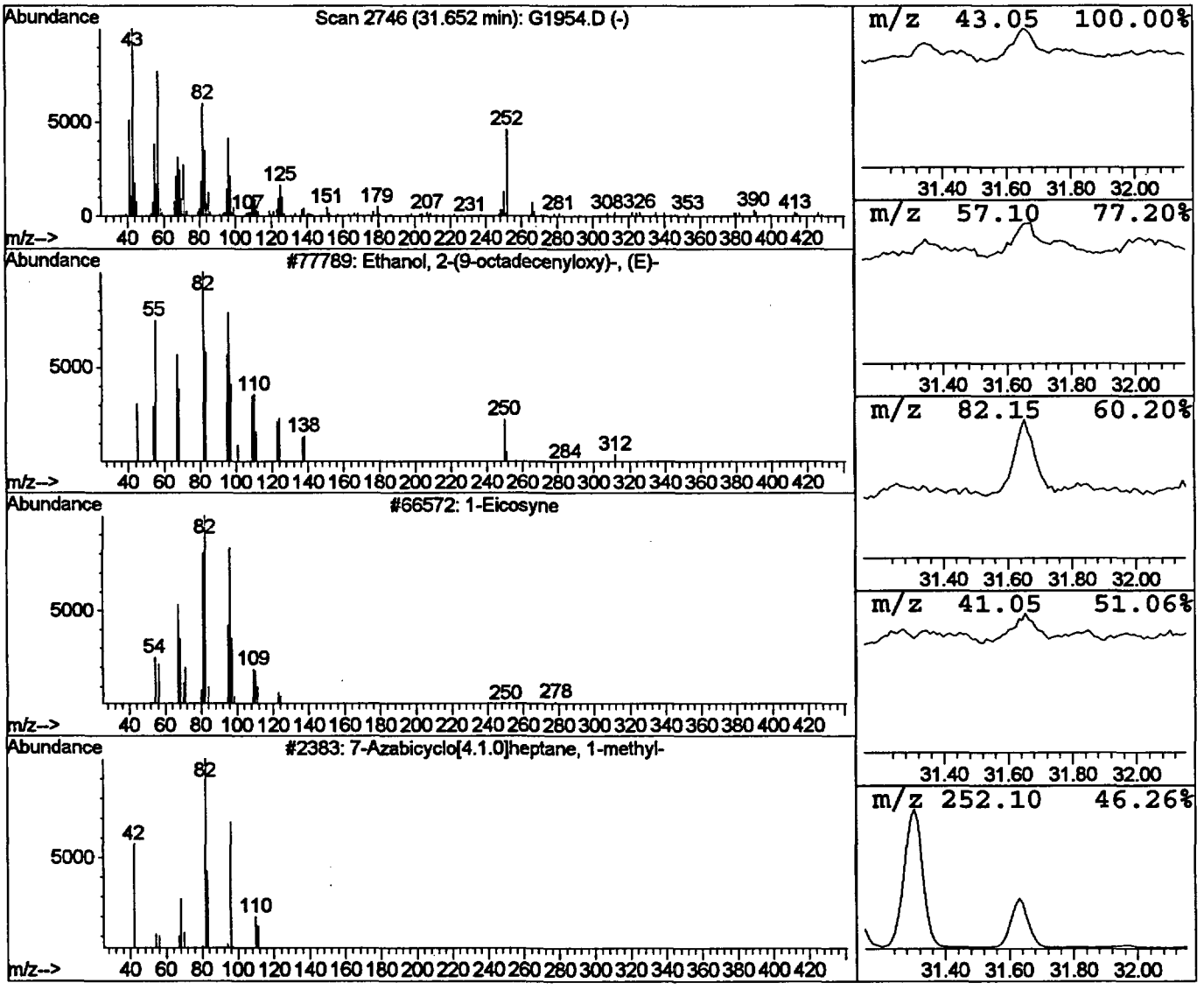
Peak Number 23 Ethanol, 2-(9-octadecenyloxy)- Concentration Rank 20

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
31.65	54.29 ng	1492560	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethanol, 2-(9-octadecenyloxy)-, (E)	312	C20H40O2	017367-07-6	50
2	1-Eicosyne	278	C20H38	000765-27-5	47
3	7-Azabicyclo[4.1.0]heptane, 1-methy	111	C7H13N	025022-25-7	45



0507

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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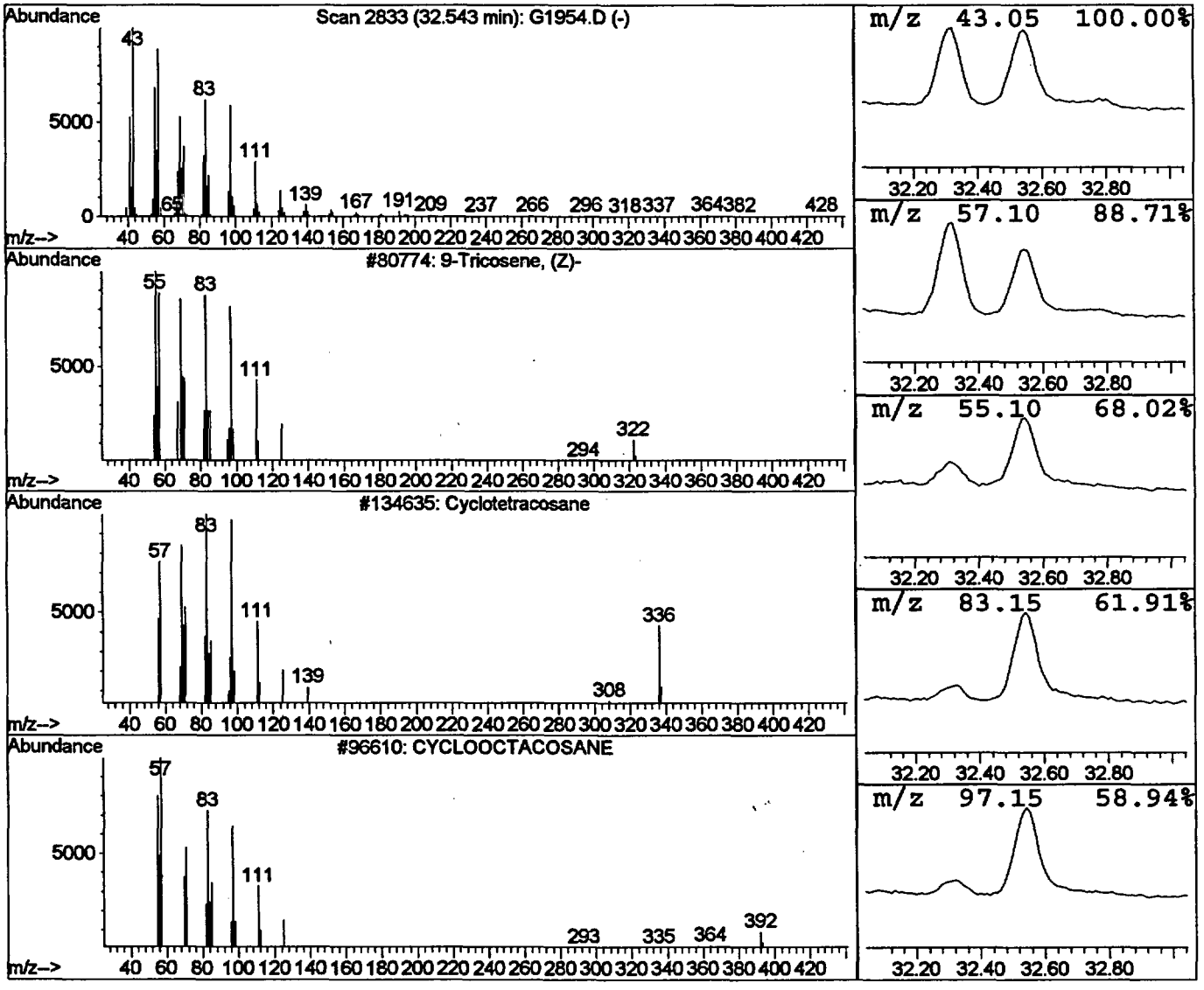
Peak Number 24 9-Tricosene, (Z)- Concentration Rank 3

UNKNOWN HYDROCARBON JS 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.54	242.16 ng	6657980	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Tricosene, (Z)-	322	C23H46	027519-02-4	91
2	Cyclotetracosane	336	C24H48	000297-03-0	91
3	CYCLOOCTACOSANE	392	C28H56	000297-24-5	91



0508

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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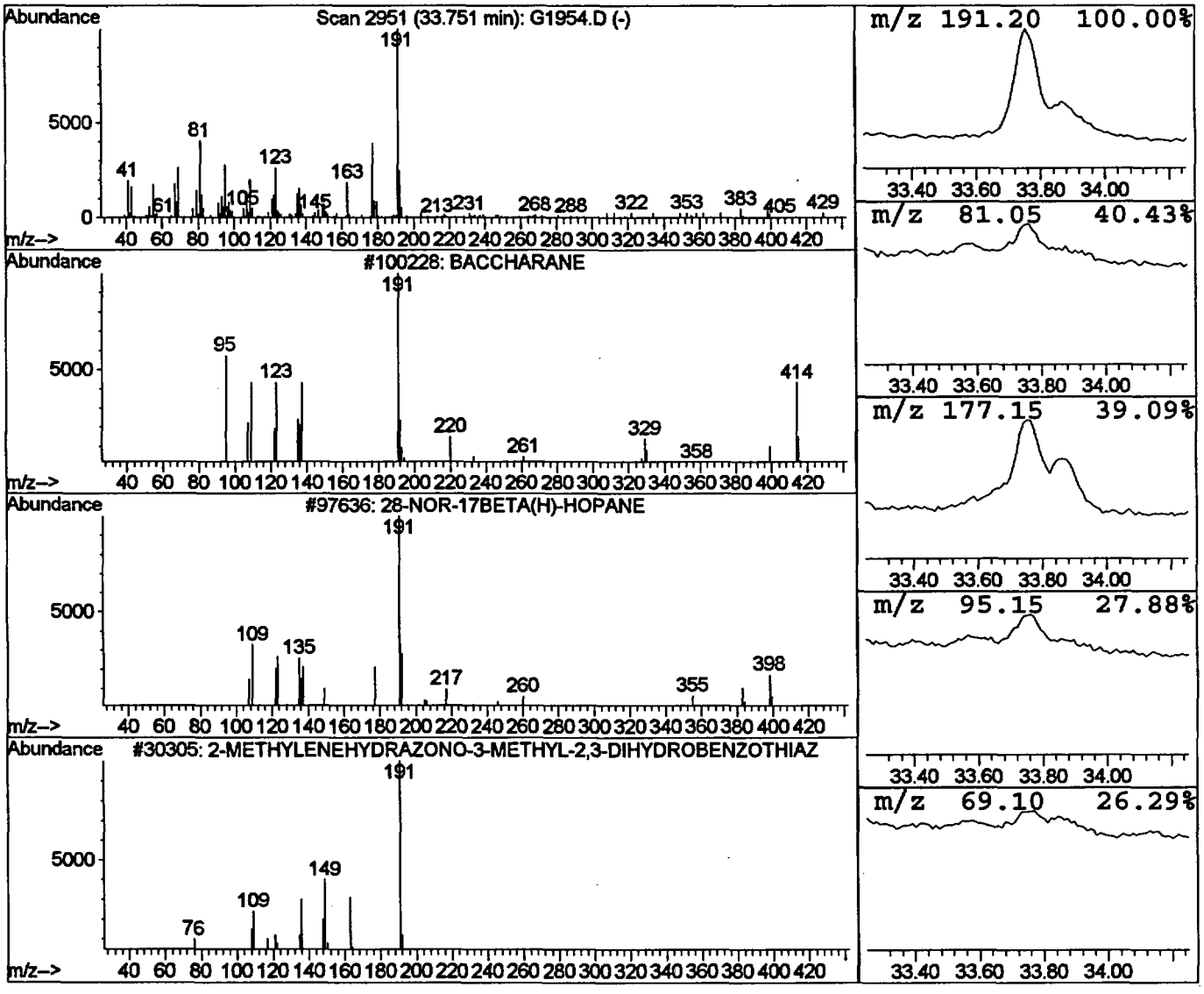
Peak Number 25 BACCHARANE UNKNOWN COMPOUND ve1-27-98 Concentration Rank 33

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.75	18.10 ng	497558	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	BACCHARANE	414	C30H54	036441-74-4	45
2	28-NOR-17BETA(H)-HOPANE	398	C29H50	036728-72-0	43
3	2-METHYLENEHYDRAZONO-3-METHYL-2,3-D	191	C9H9N3S	063149-32-6	38



0509

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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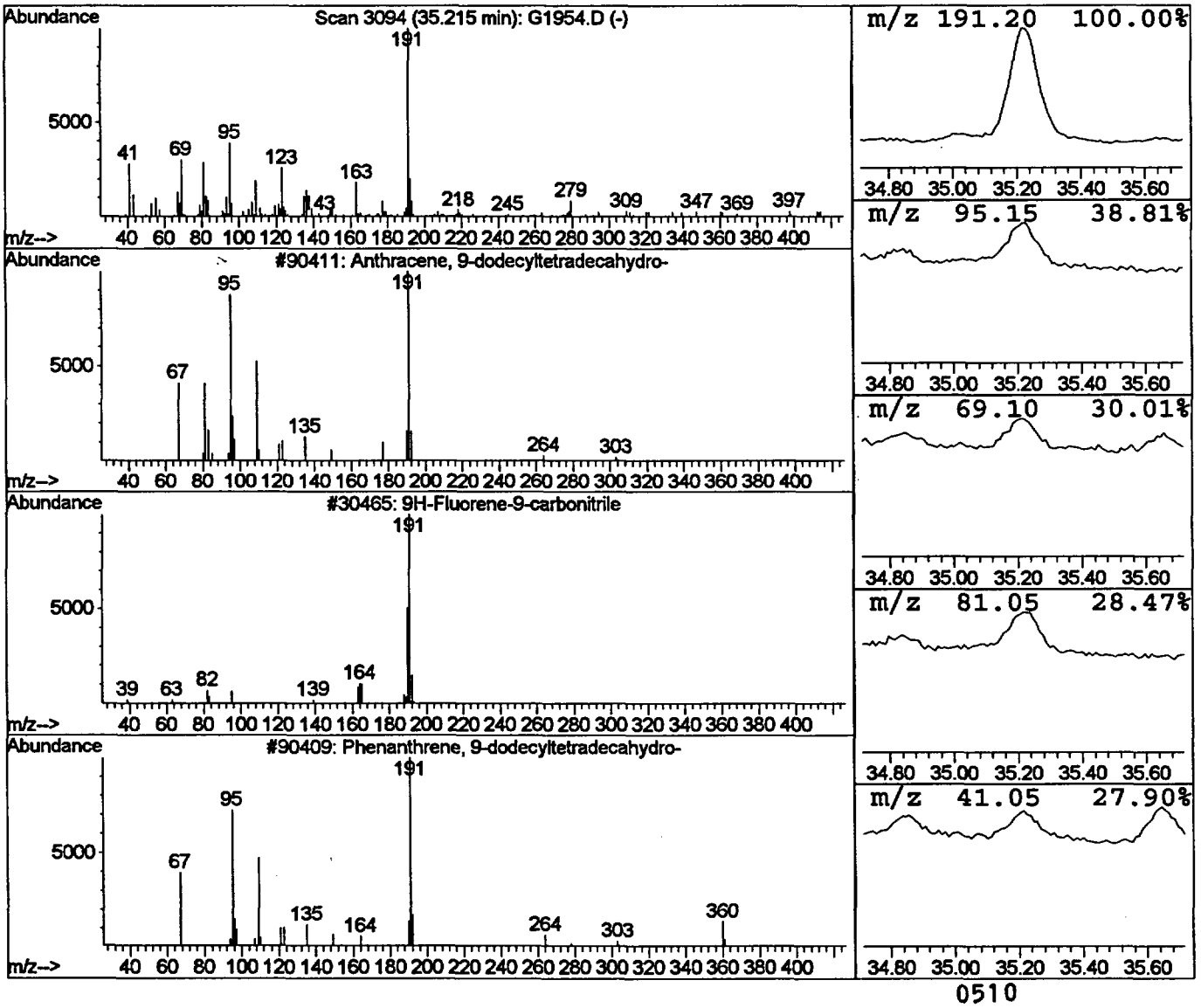
Peak Number 26 Anthracene, 9-dodecyltetradeca Concentration Rank 16

UNKNOWN COMPOUND ✓ 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.22	65.17 ng	1791710	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 9-dodecyltetradecahydro	360	C26H48	055401-75-7	59
2	9H-Fluorene-9-carbonitrile	191	C14H9N	001529-40-4	47
3	Phenanthrene, 9-dodecyltetradecahyd	360	C26H48	055334-01-5	45



0510

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

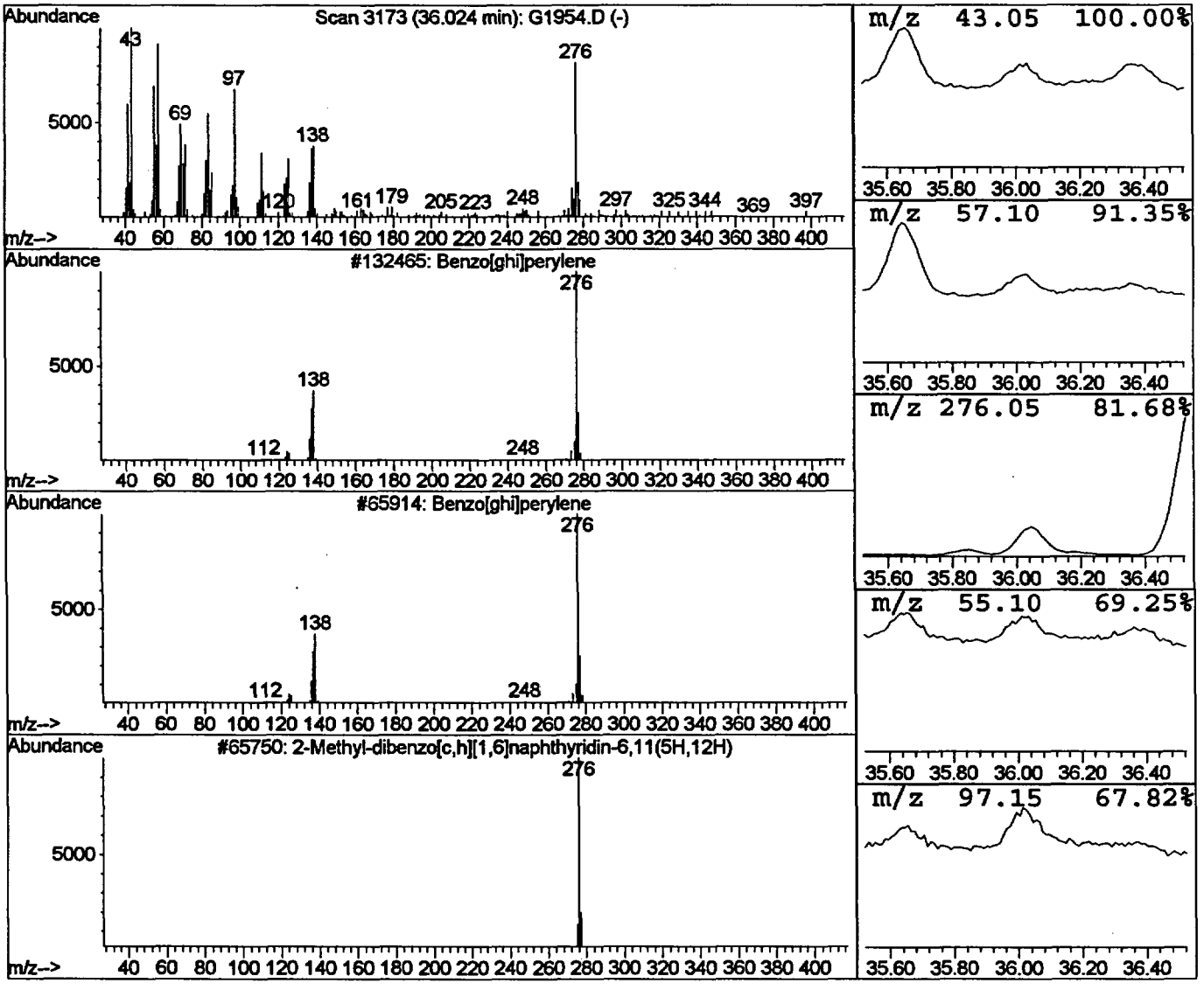
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 27 ~~Benzo[ghi]perylene~~ Unknown PAH 01-27-98 Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.02	58.13 ng	1598250	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[ghi]perylene	276	C22H12	000191-24-2	86
2	Benzo[ghi]perylene	276	C22H12	000191-24-2	86
3	2-Methyl-dibenzo[c,h][1,6]naphthyri	276	C17H12N2O2	091622-73-0	78



0511

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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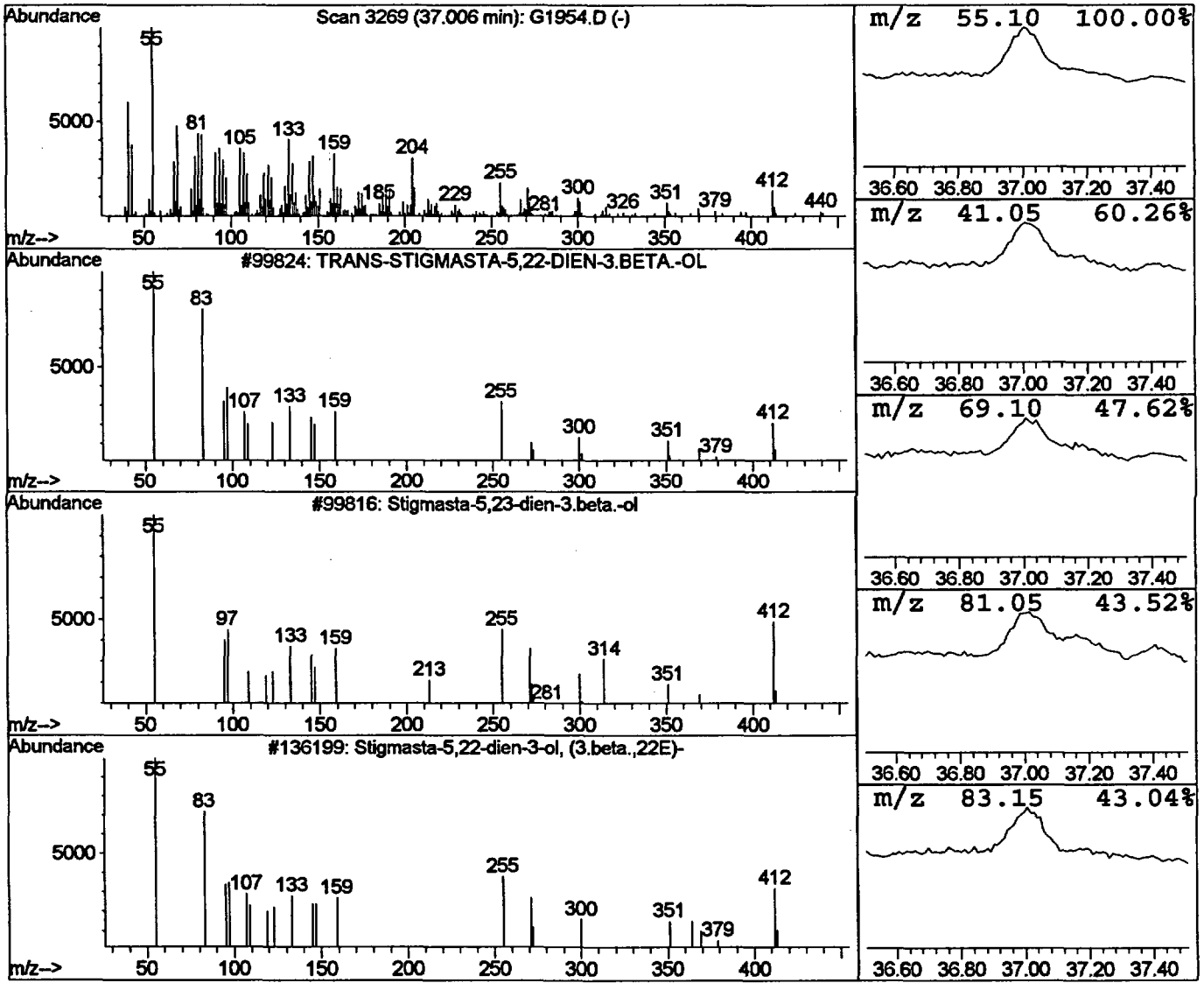
Peak Number 28 TRANS-STIGMASTA-5,22-DIEN-3.BE Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
37.01	171.23 ng	4707840	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	TRANS-STIGMASTA-5,22-DIEN-3.BETA.-O	412	C29H48O	000000-00-0	93
2	Stigmasta-5,23-dien-3.beta.-ol	412	C29H48O	038485-29-9	78
3	Stigmasta-5,22-dien-3-ol, (3.beta.,	412	C29H48O	000083-48-7	70



0512

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D
Acq On : 22 Jan 98 20:54
Sample : S HP-7G 58073-004 FFR83
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial: 5
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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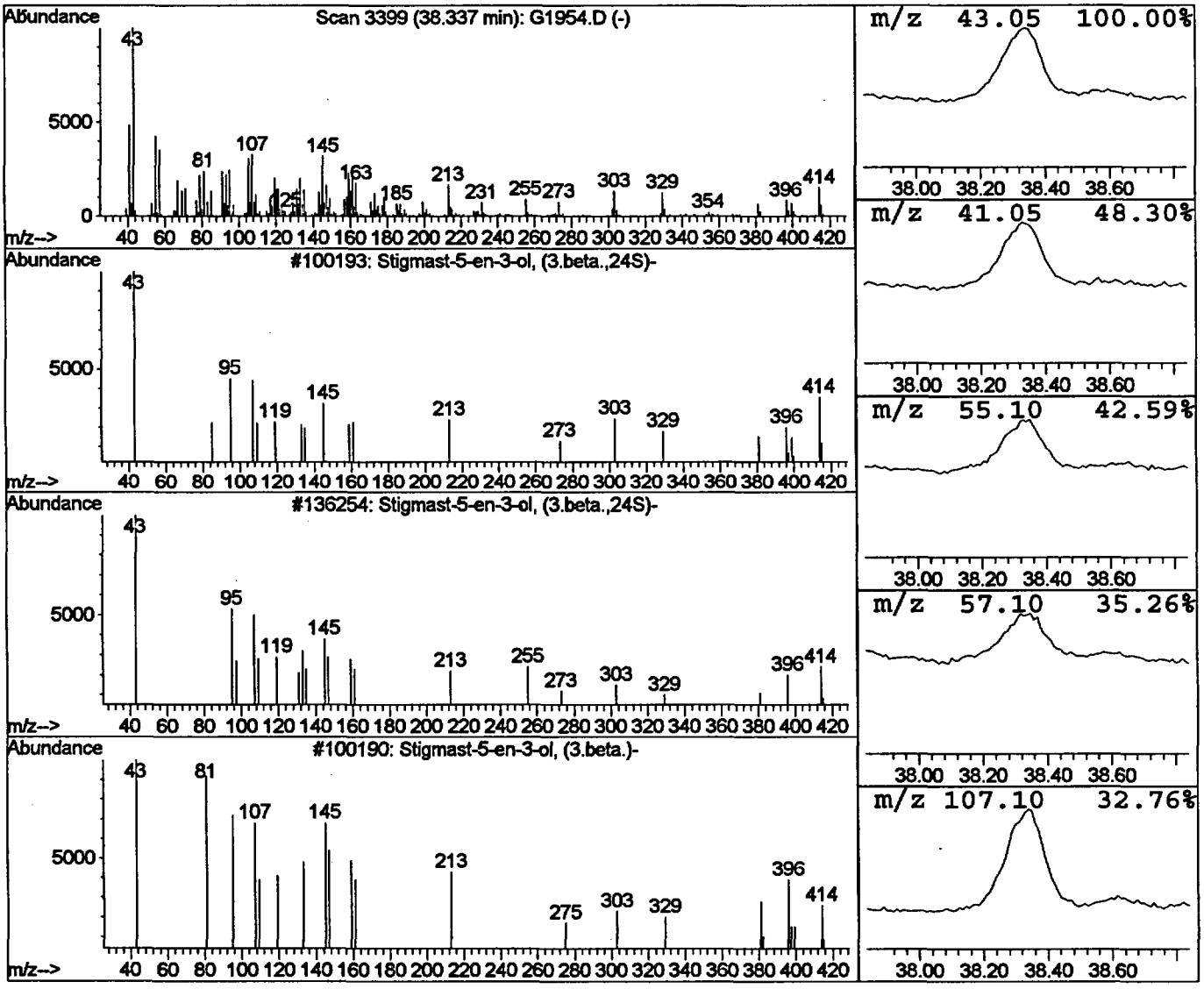
Peak Number 29 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.34	267.90 ng	7365640	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	96
2	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	87
3	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	83



0513

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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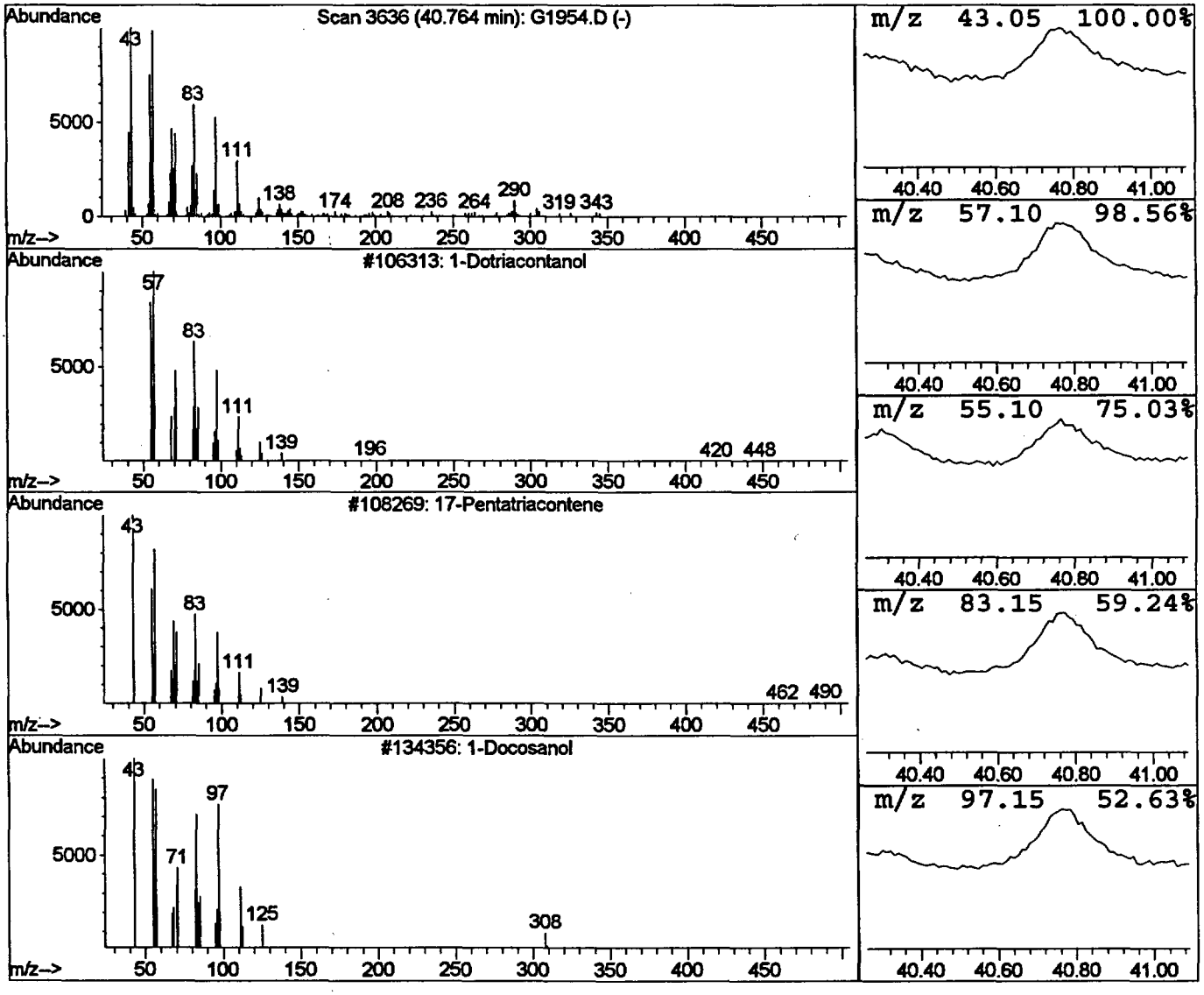
Peak Number 30 1-Dotriacontanol Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.76	105.74 ng	2907270	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Dotriacontanol	467	C32H66O	006624-79-9	90
(2)	17-Pentatriacontene	491	C35H70	006971-40-0	90
3	1-Docosanol	326	C22H46O	000661-19-8	80



0514

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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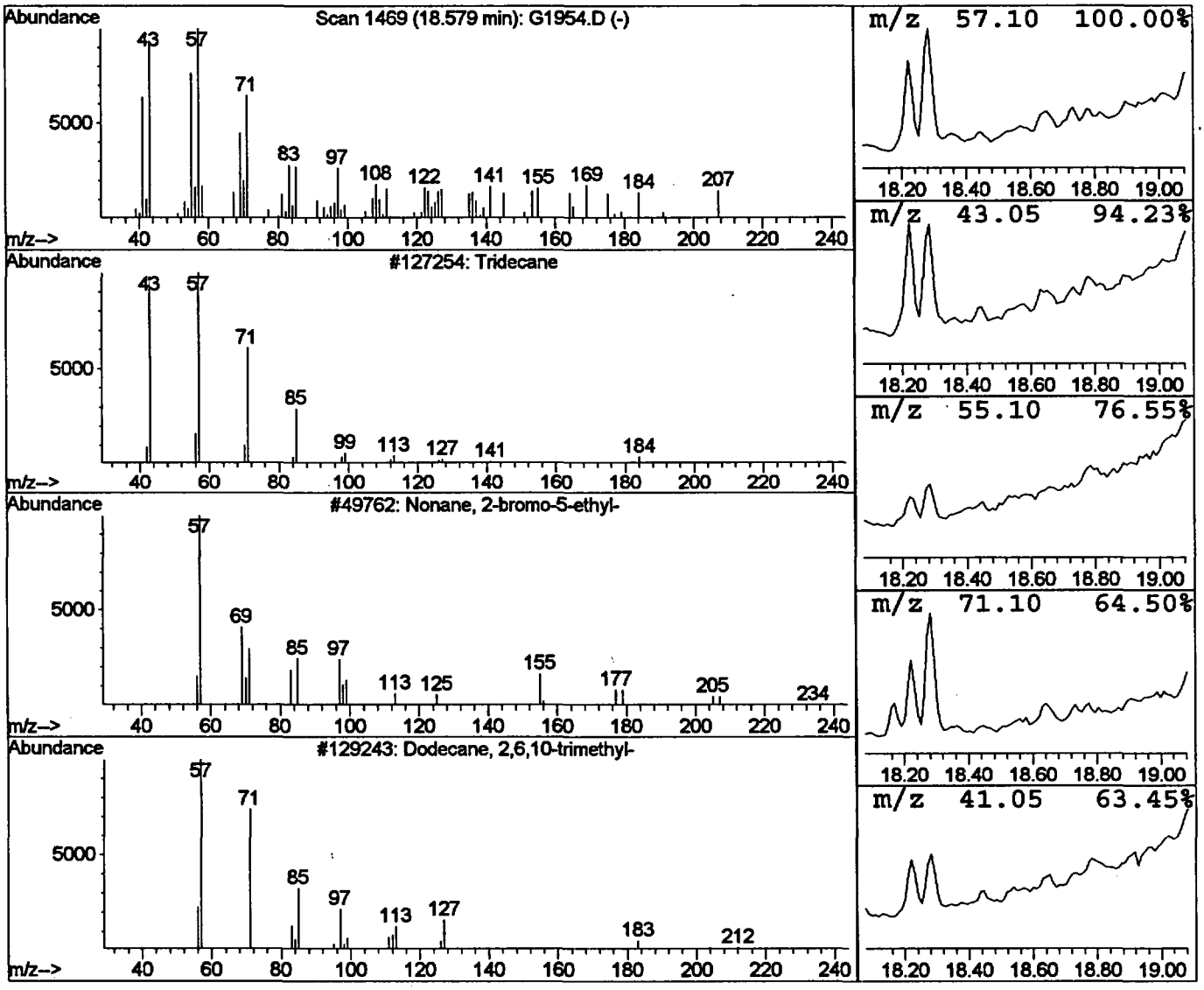
Peak Number 35 Tridecane Concentration Rank 47

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.58	5.07 ng	174601	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane	184	C13H28	000629-50-5	41
2	Nonane, 2-bromo-5-ethyl-	234	C11H23Br	055162-38-4	38
3	Dodecane, 2,6,10-trimethyl-	212	C15H32	003891-98-3	35



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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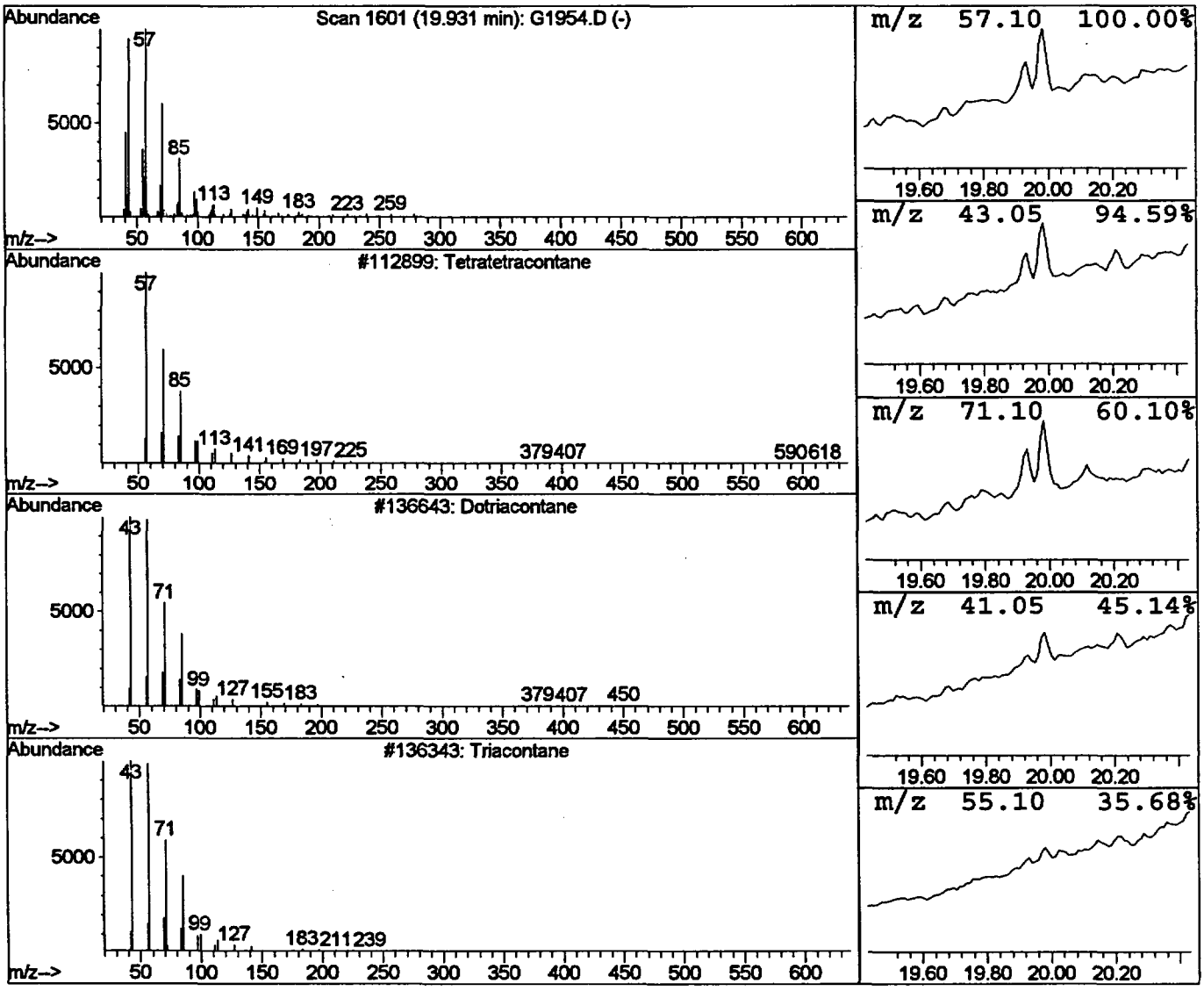
Peak Number 36 Tetratetracontane Concentration Rank 35

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.93	16.78 ng	577685	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetratetracontane	619	C44H90	007098-22-8	83
2	Dotriacontane	451	C32H66	000544-85-4	83
3	Triacontane	422	C30H62	000638-68-6	81



0516

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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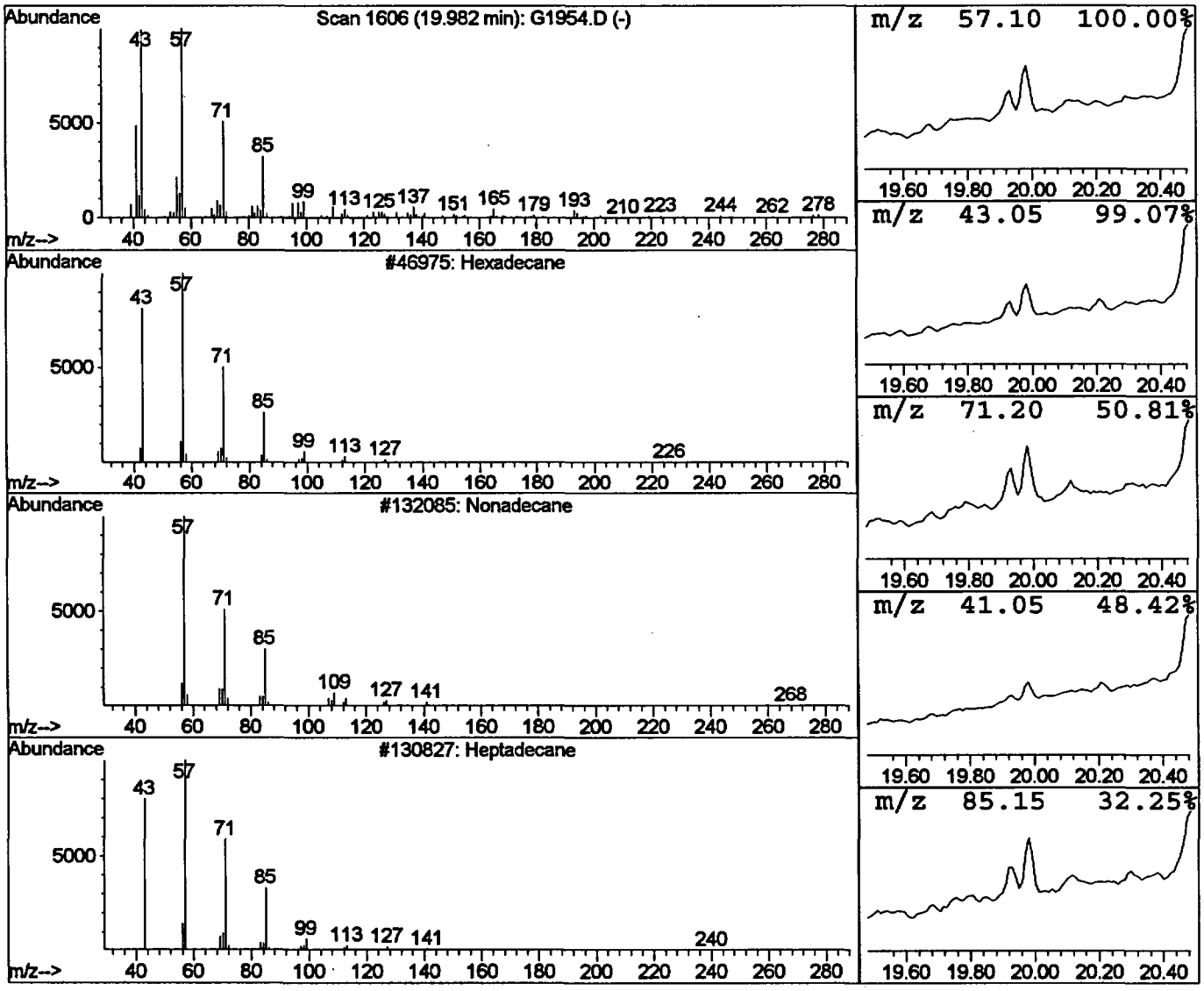
Peak Number 37 Hexadecane Concentration Rank 34

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.98	17.55 ng	604350	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	68
2	Nonadecane	268	C19H40	000629-92-5	68
3	Heptadecane	240	C17H36	000629-78-7	68



0517

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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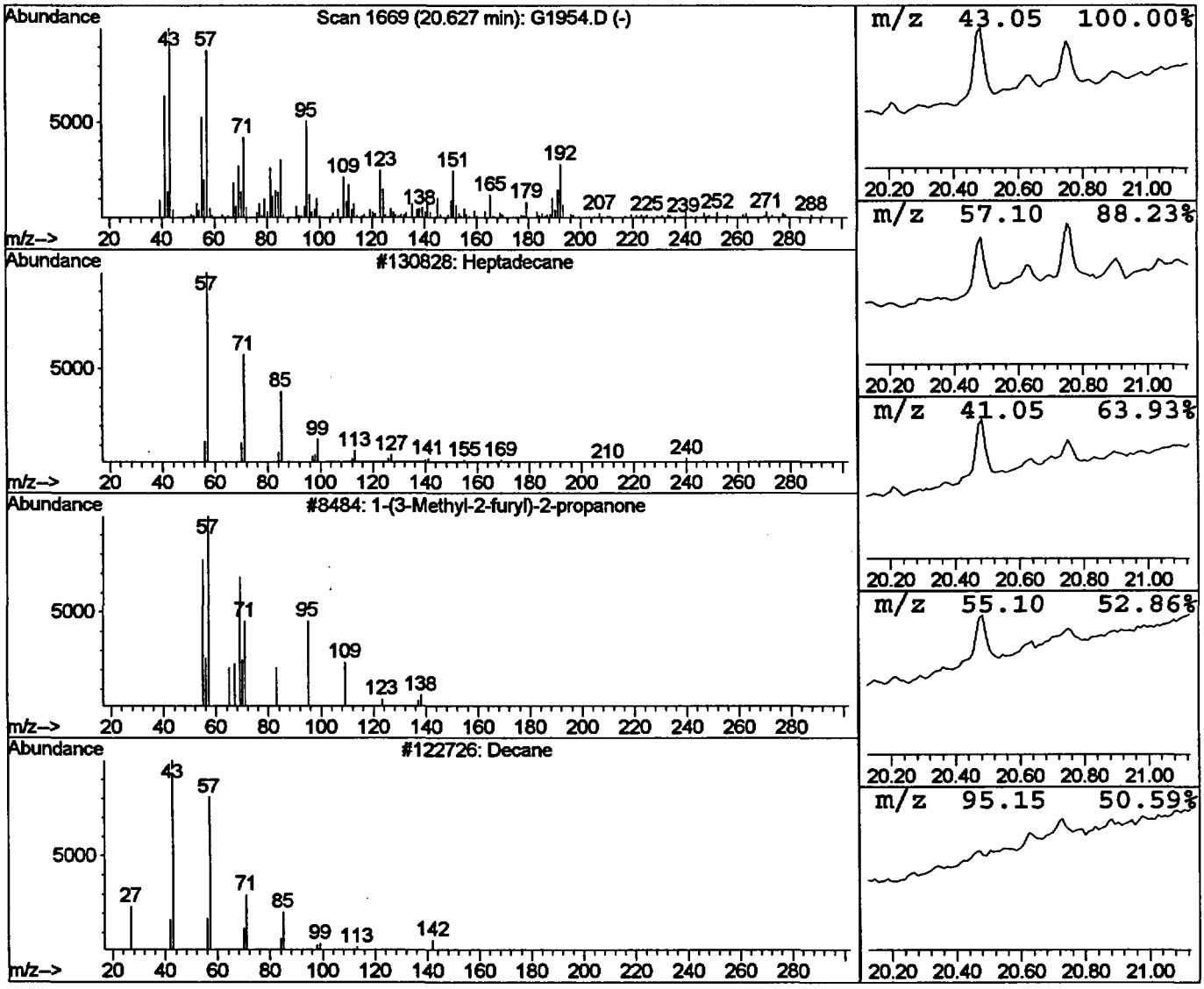
Peak Number 38 Heptadecane Concentration Rank 29

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.63	23.22 ng	799476	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane	240	C17H36	000629-78-7	56
2	1-(3-Methyl-2-furyl)-2-propanone	138	C8H10O2	087773-62-4	38
3	Decane	142	C10H22	000124-18-5	25



Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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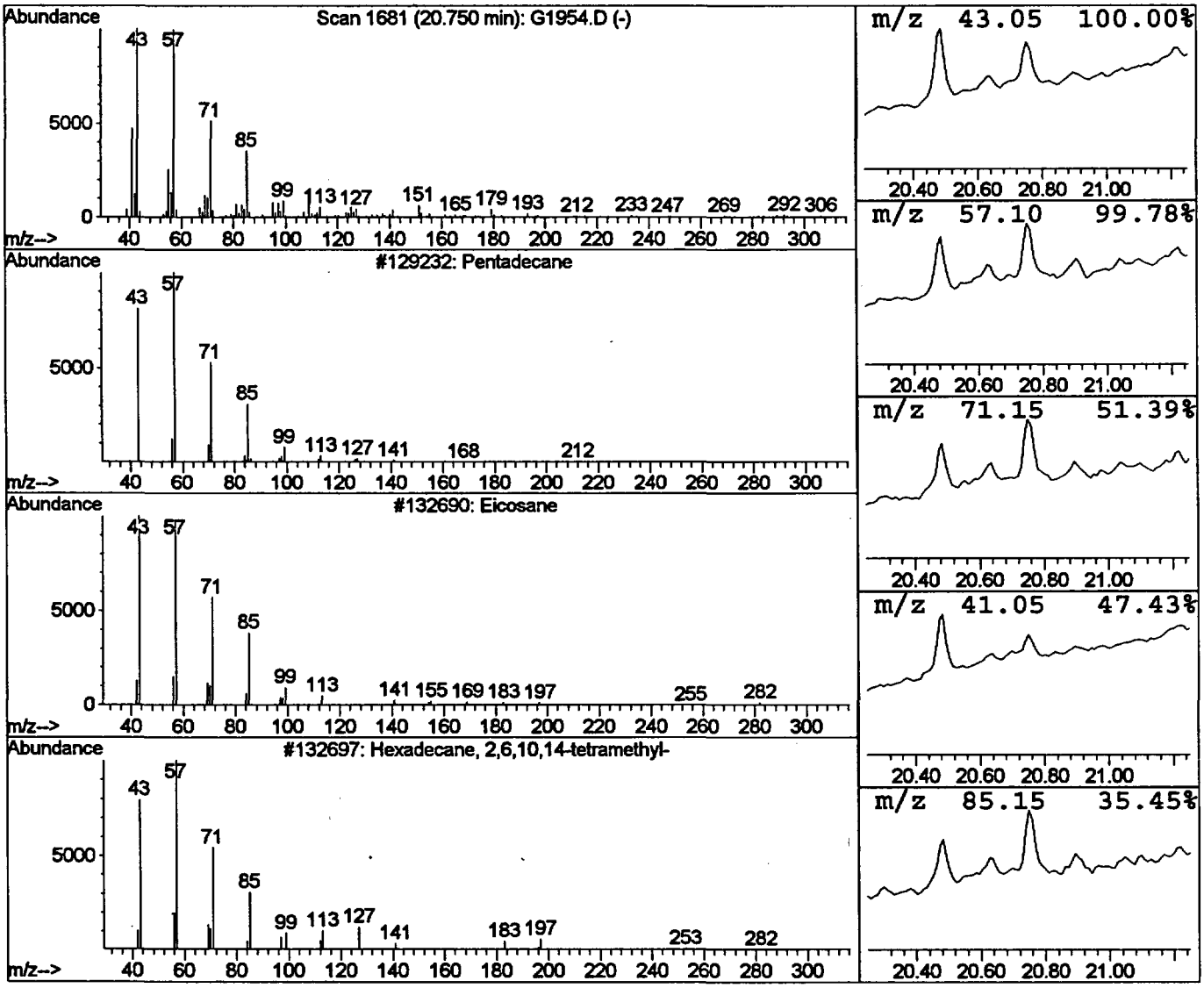
Peak Number 39 Pentadecane Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.75	57.11 ng	1966300	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	94
2	Eicosane	282	C20H42	000112-95-8	89
3	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	89



0519

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

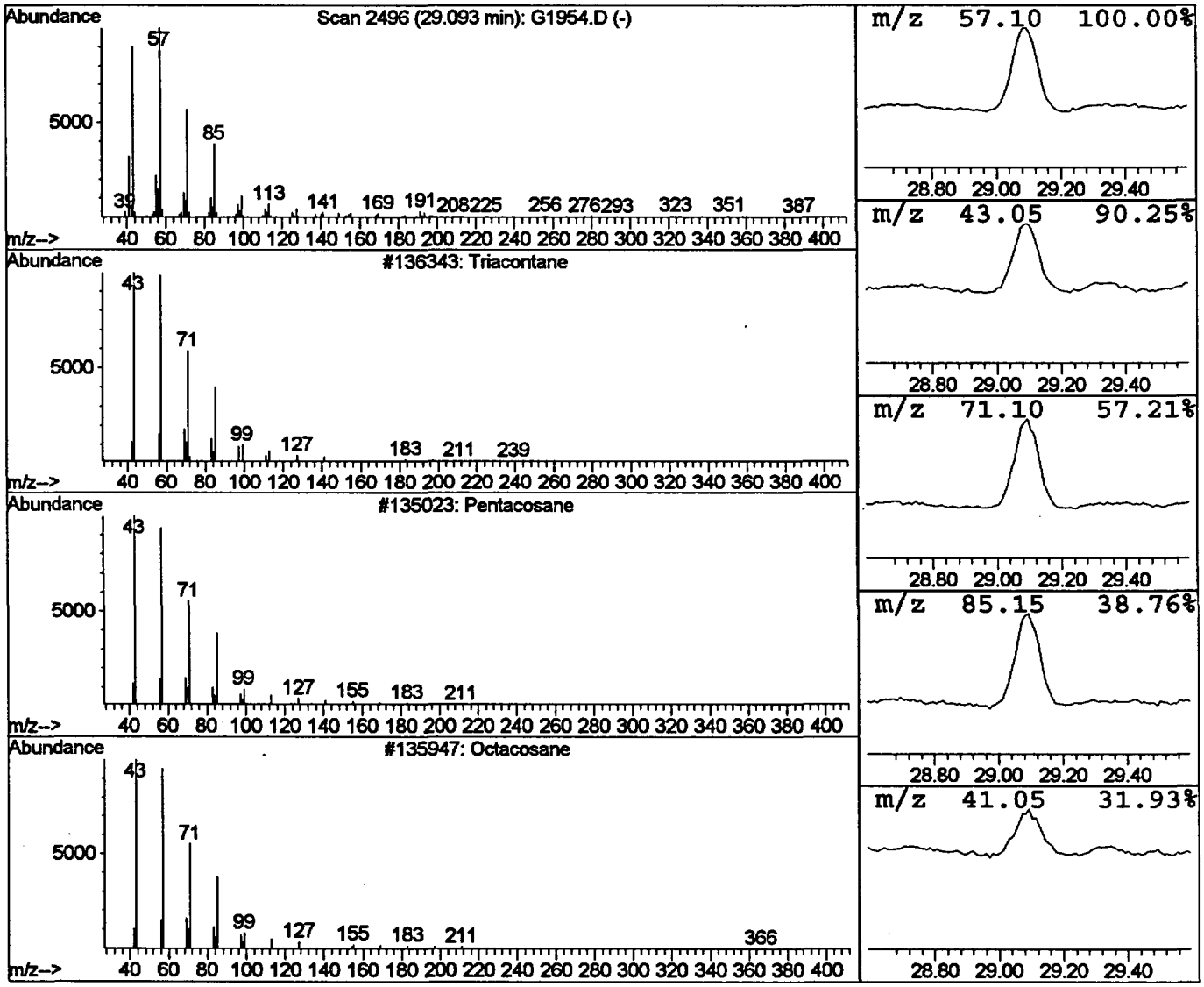
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 40 Triacontane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.09	114.53 ng	3148970	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Triacontane	422	C30H62	000638-68-6	91
2	Pentacosane	352	C25H52	000629-99-2	91
3	Octacosane	394	C28H58	000630-02-4	91



Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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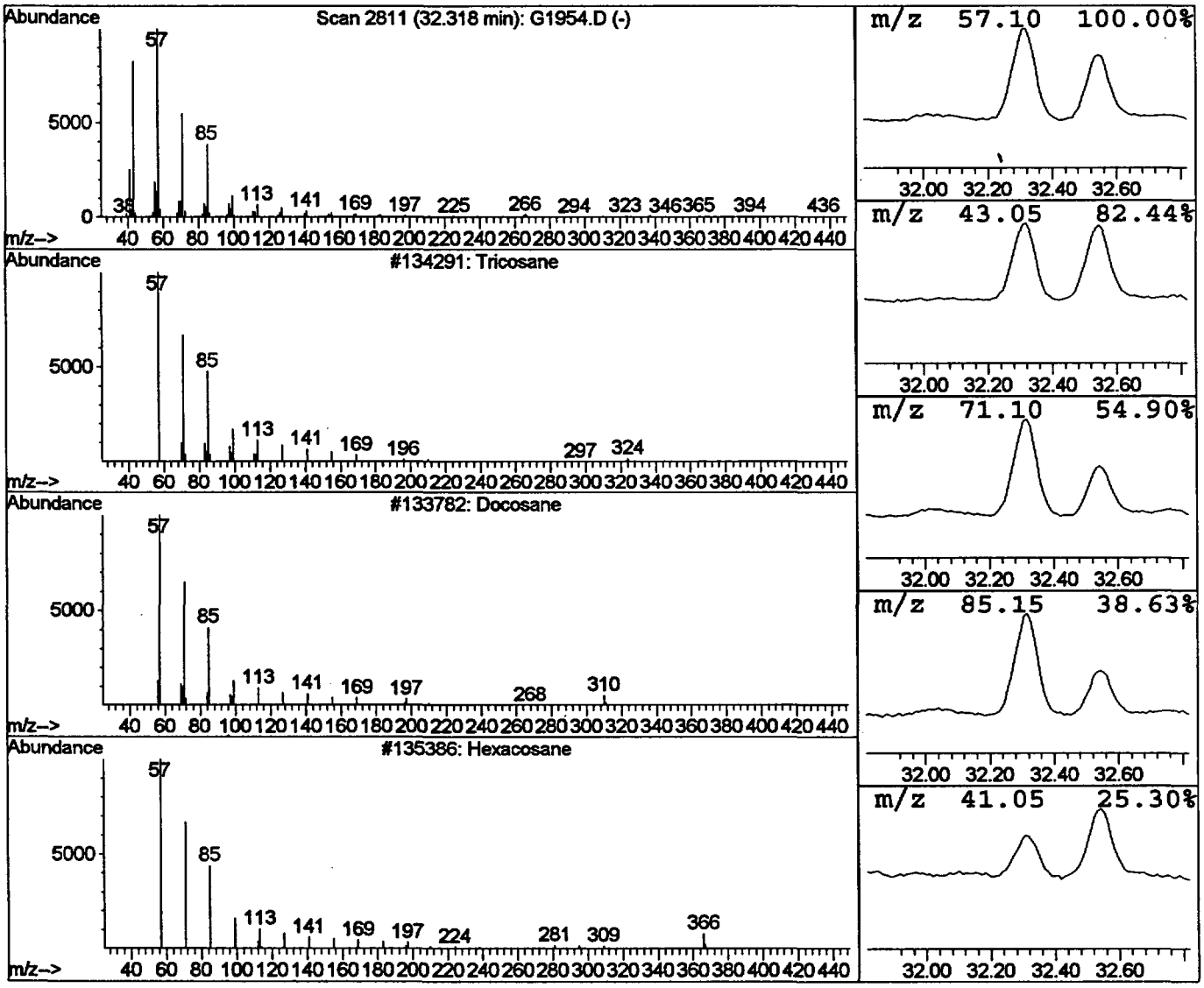
Peak Number 41 Tricosane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.32	141.05 ng	3877860	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricosane	324	C23H48	000638-67-5	97
2	Docosane	310	C22H46	000629-97-0	93
3	Hexacosane	366	C26H54	000630-01-3	92



0521

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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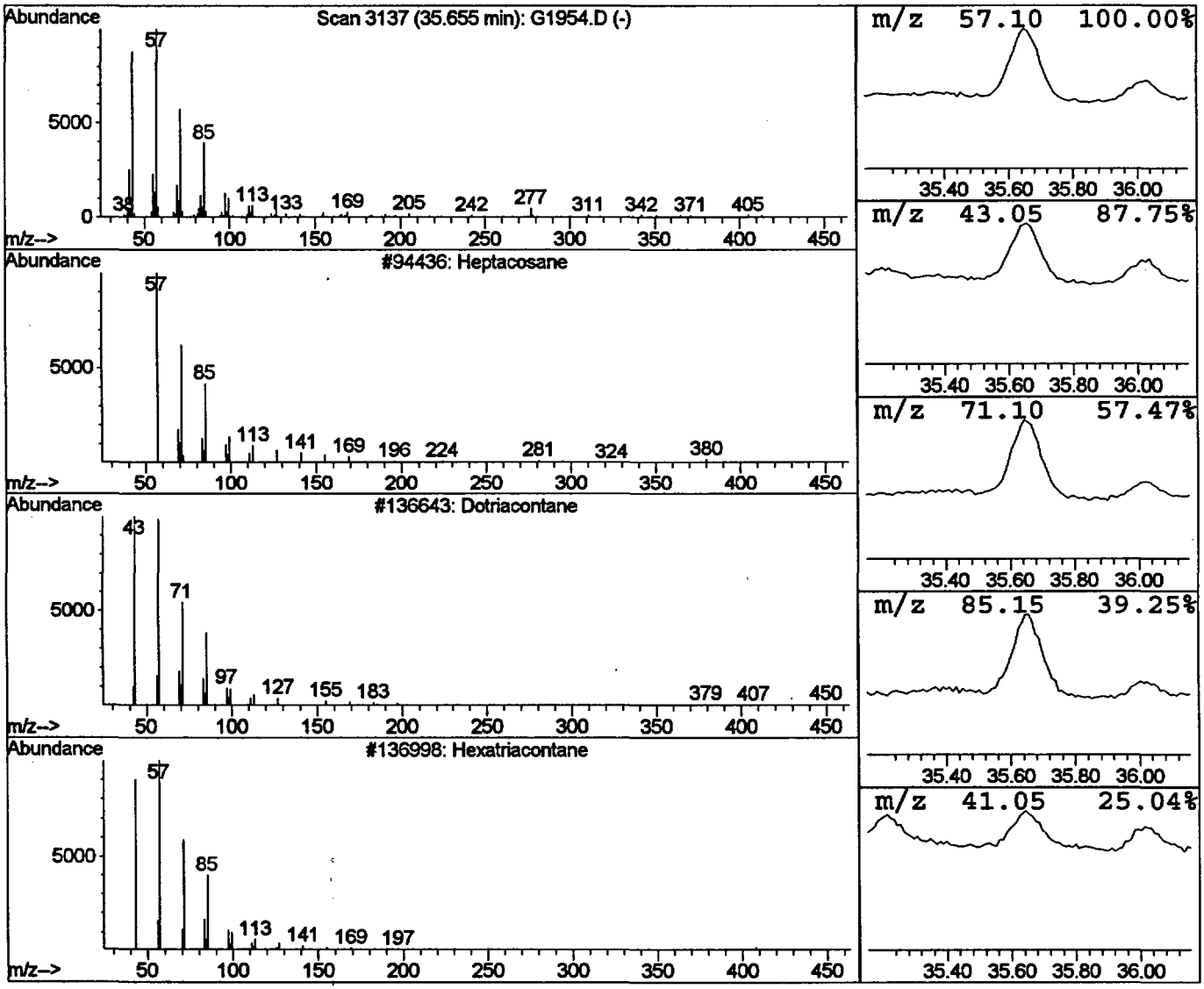
Peak Number 42 Heptacosane Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.66	75.58 ng	2077850	Perylene-d12	31.53

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptacosane	380	C27H56	000593-49-7	87
2	Dotriacontane	451	C32H66	000544-85-4	87
3	Hexatriacontane	507	C36H74	000630-06-8	87



0522

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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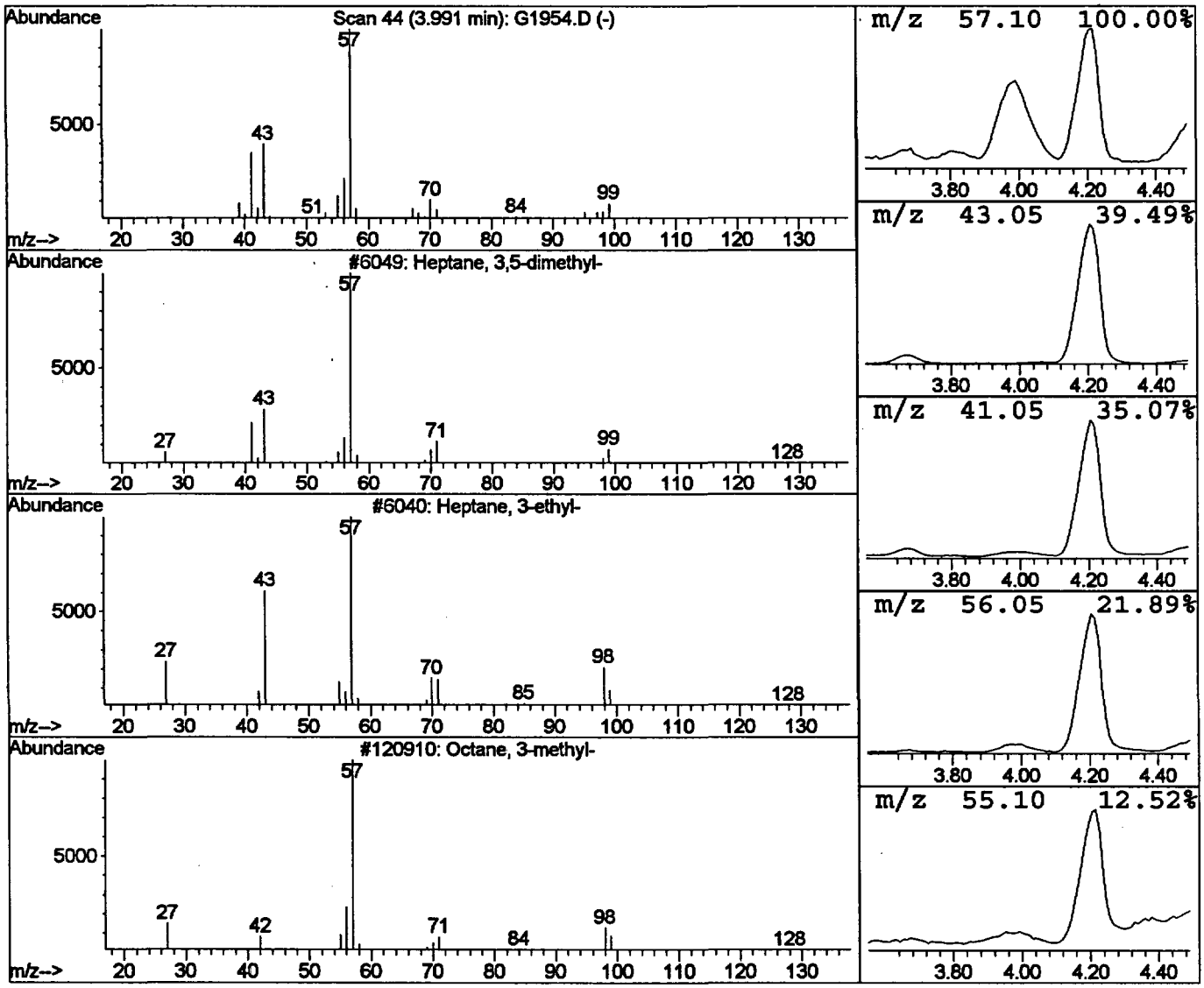
Peak Number 43 Heptane, 3,5-dimethyl- Concentration Rank 43

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.99	7.78 ng	222767	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	47
2	Heptane, 3-ethyl-	128	C9H20	015869-80-4	43
3	Octane, 3-methyl-	128	C9H20	002216-33-3	42



0523

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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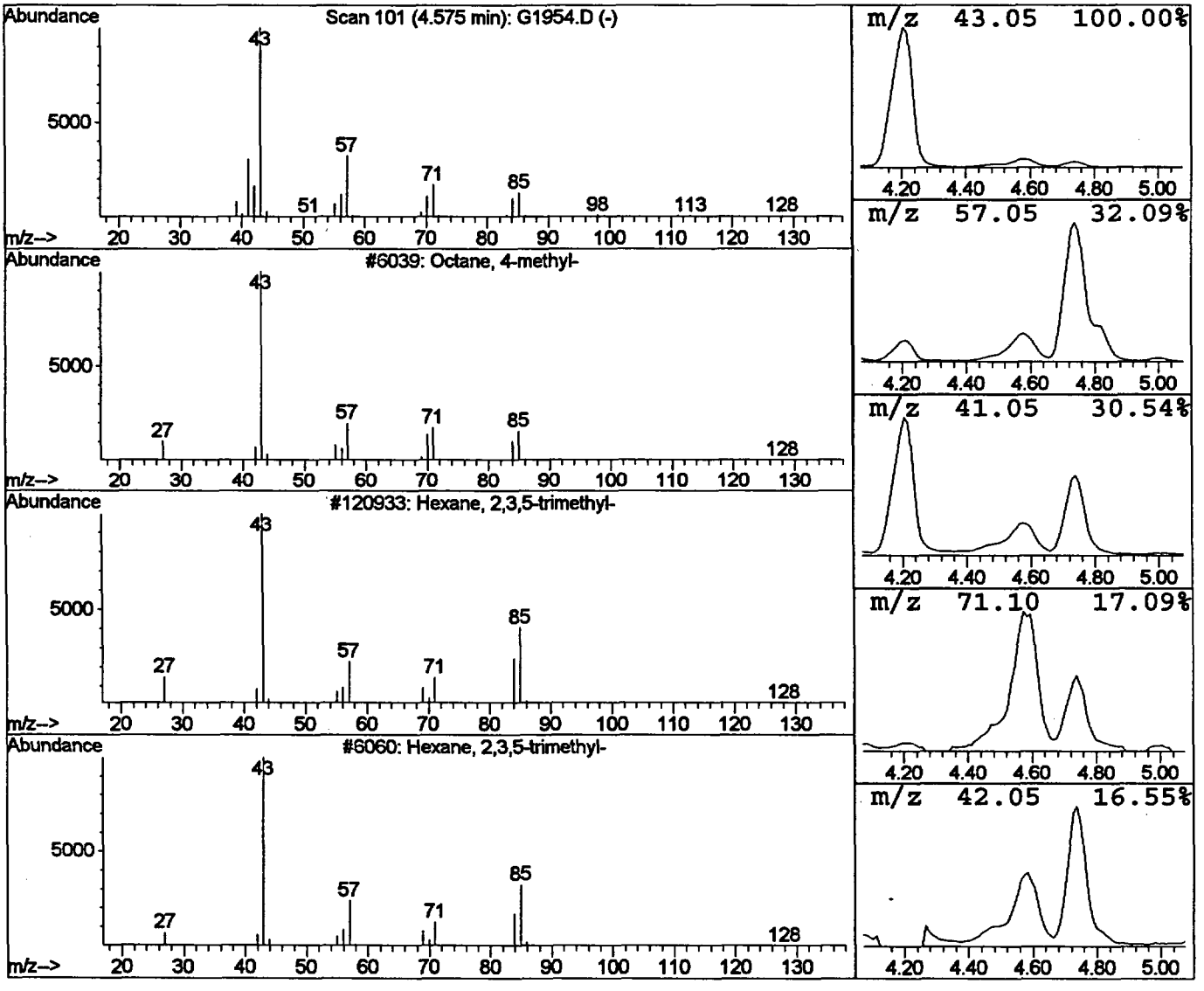
Peak Number 44 Octane, 4-methyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.57	76.29 ng	2183800	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	83
2	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	64
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	64



0524

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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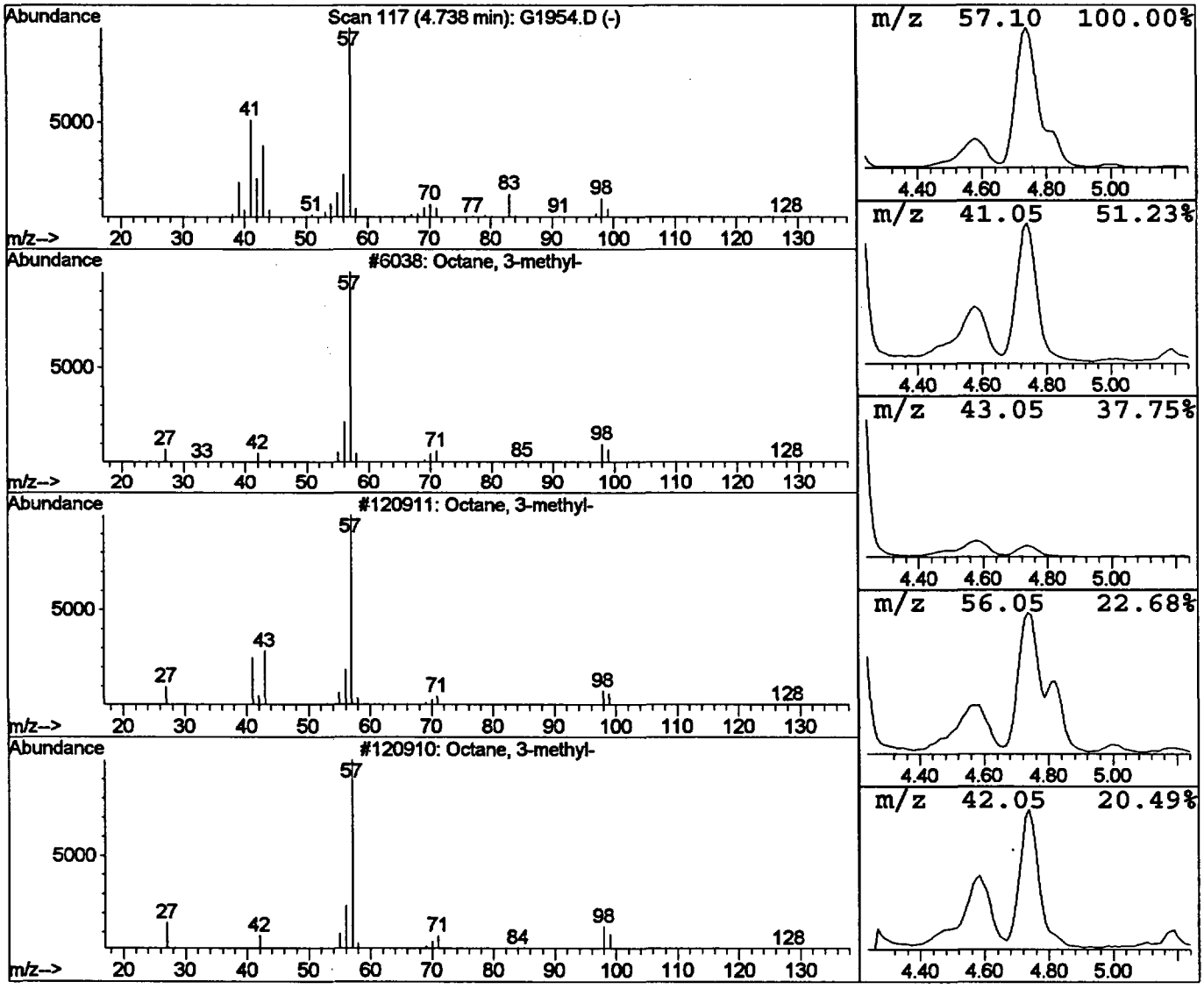
Peak Number 45 Octane, 3-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.74	95.63 ng	2737280	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	58
2	Octane, 3-methyl-	128	C9H20	002216-33-3	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	50



0525

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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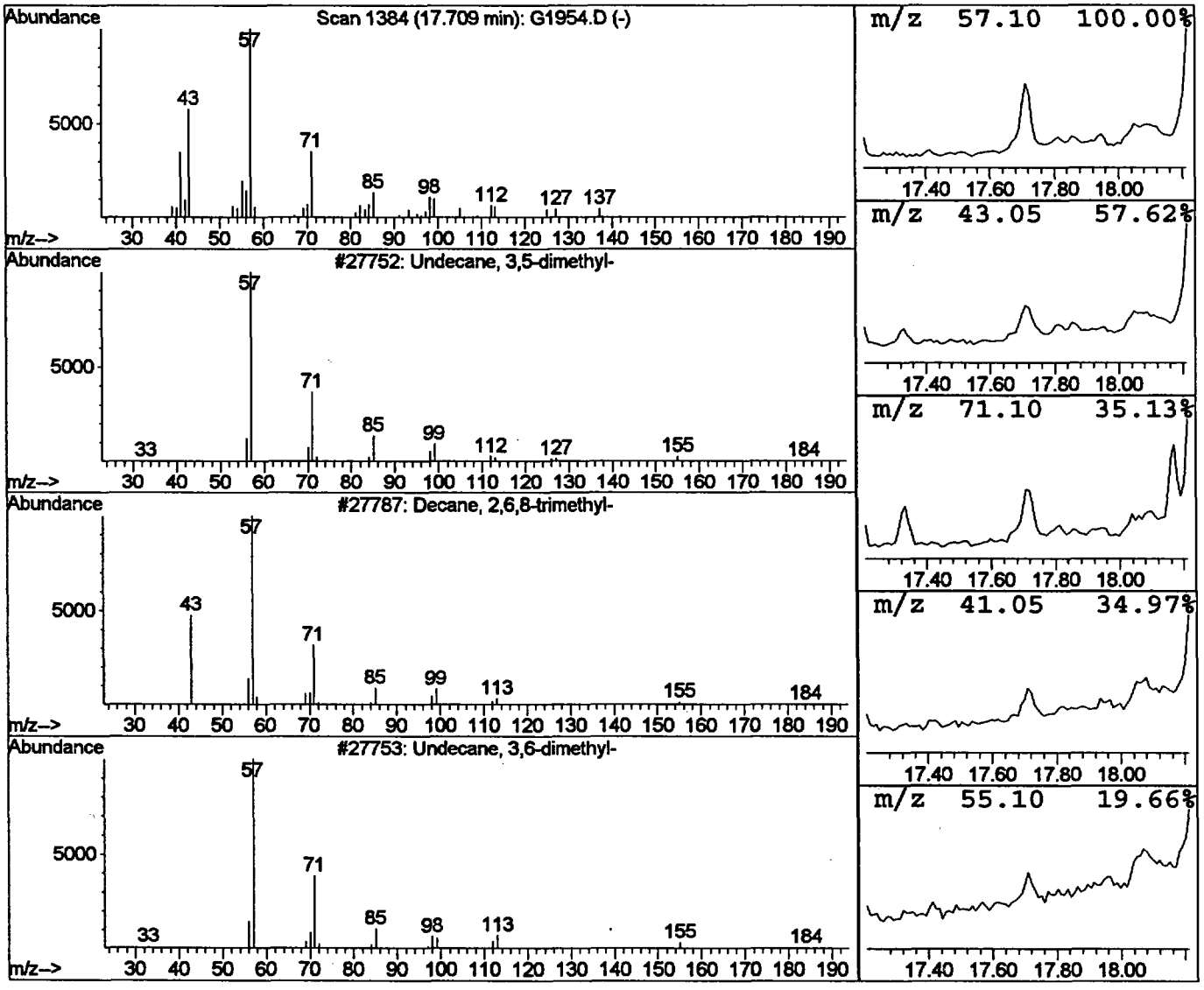
Peak Number 46 Undecane, 3,5-dimethyl- Concentration Rank 48

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.71	4.86 ng	141872	Acenaphthene-d10	16.29

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane, 3,5-dimethyl-	184	C13H28	017312-81-1	72
2	Decane, 2,6,8-trimethyl-	184	C13H28	062108-26-3	59
3	Undecane, 3,6-dimethyl-	184	C13H28	017301-28-9	59



0526

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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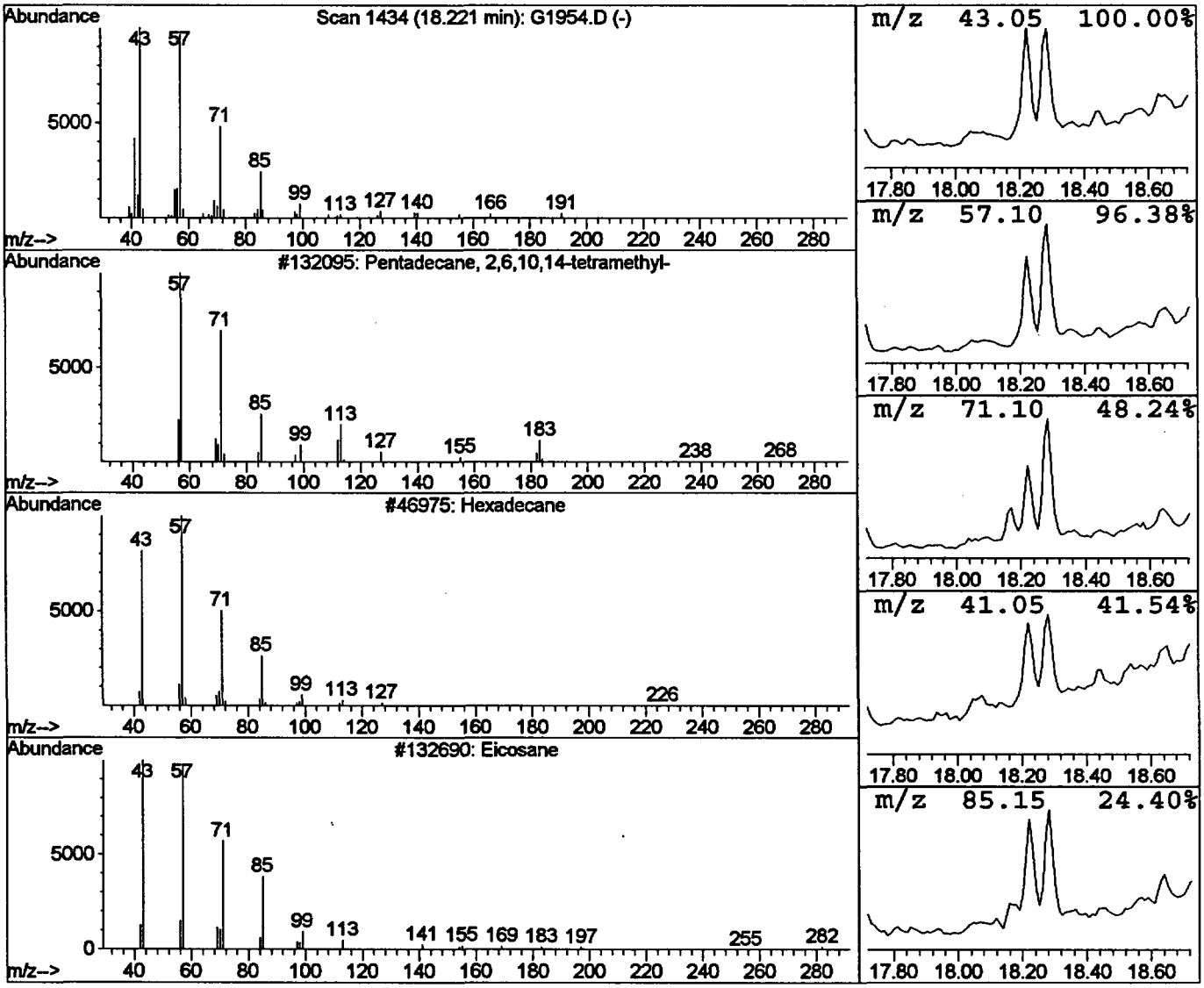
Peak Number 47 Pentadecane, 2,6,10,14-tetrame Concentration Rank 44

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.22	6.68 ng	230029	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	90
2	Hexadecane	226	C16H34	000544-76-3	83
3	Eicosane	282	C20H42	000112-95-8	80



0527

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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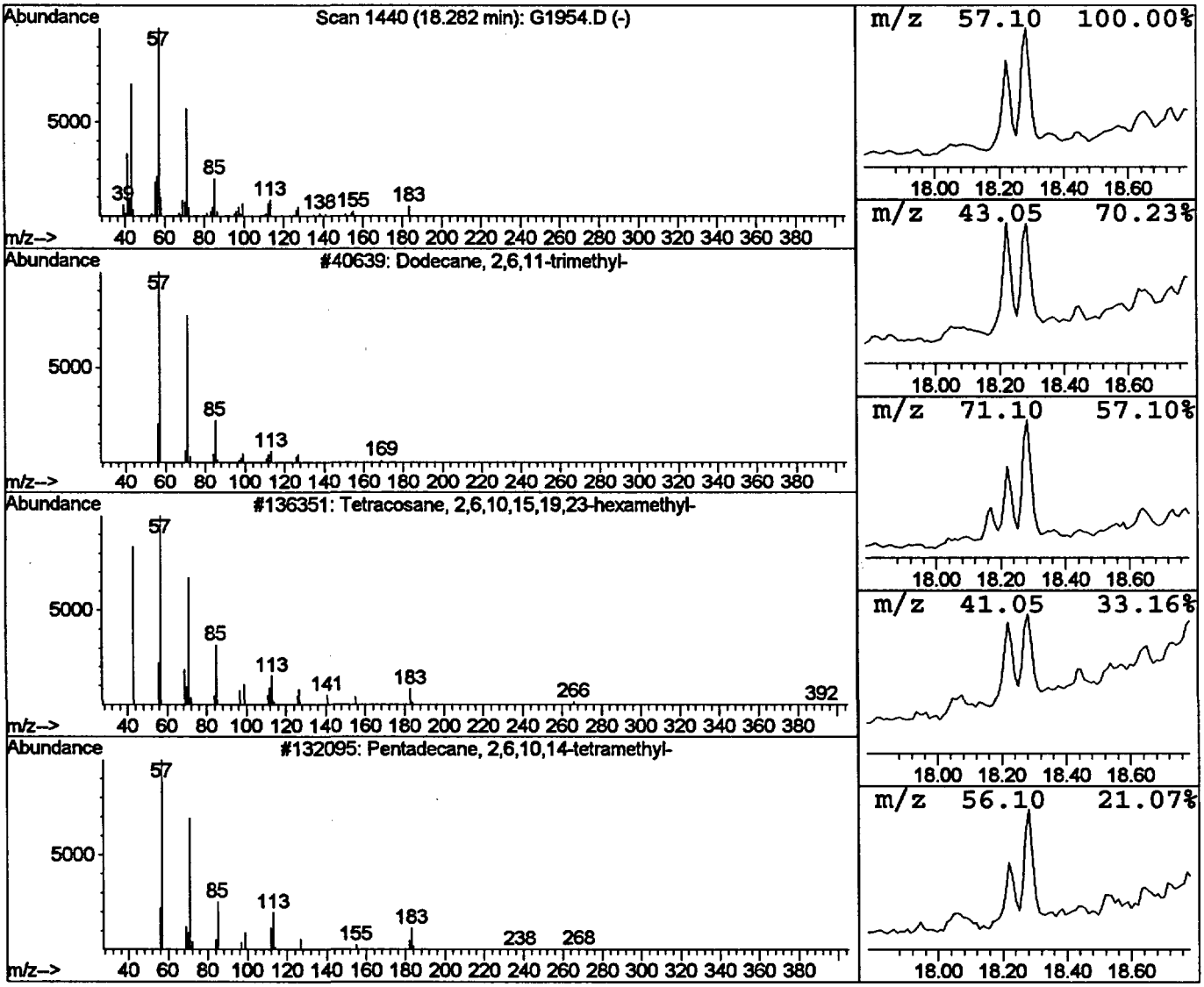
Peak Number 48 Dodecane, 2,6,11-trimethyl- Concentration Rank 41

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.28	9.39 ng	323420	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	90
2	Tetracosane, 2,6,10,15,19,23-hexame	422	C30H62	000111-01-3	90
3	Pentadecane, 2,6,10,14-tetramethyl-	268	C19H40	001921-70-6	83



0528

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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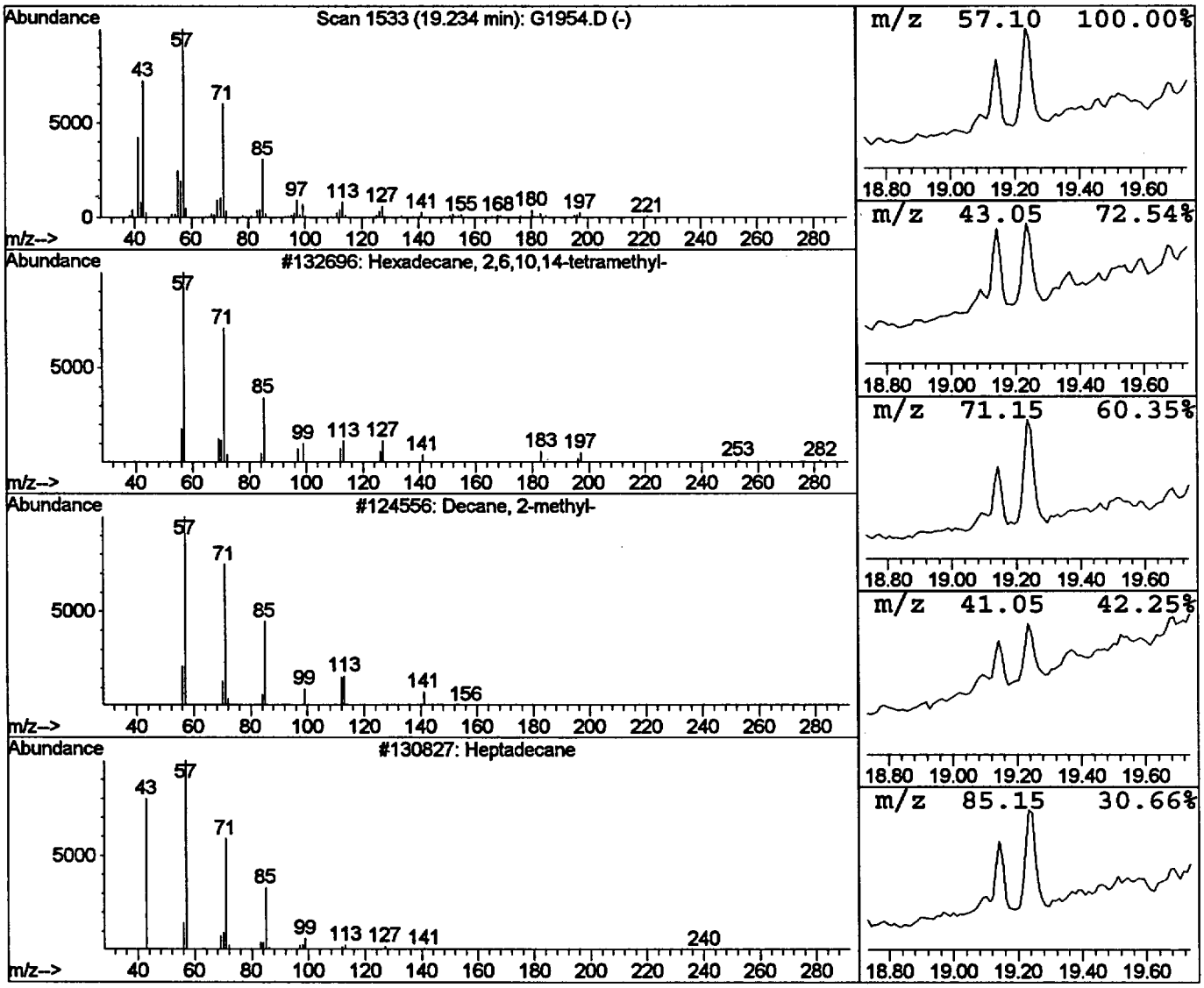
Peak Number 49 Hexadecane, 2,6,10,14-tetramet Concentration Rank 31

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.23	22.46 ng	773214	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	90
2	Decane, 2-methyl-	156	C11H24	006975-98-0	81
3	Heptadecane	240	C17H36	000629-78-7	72



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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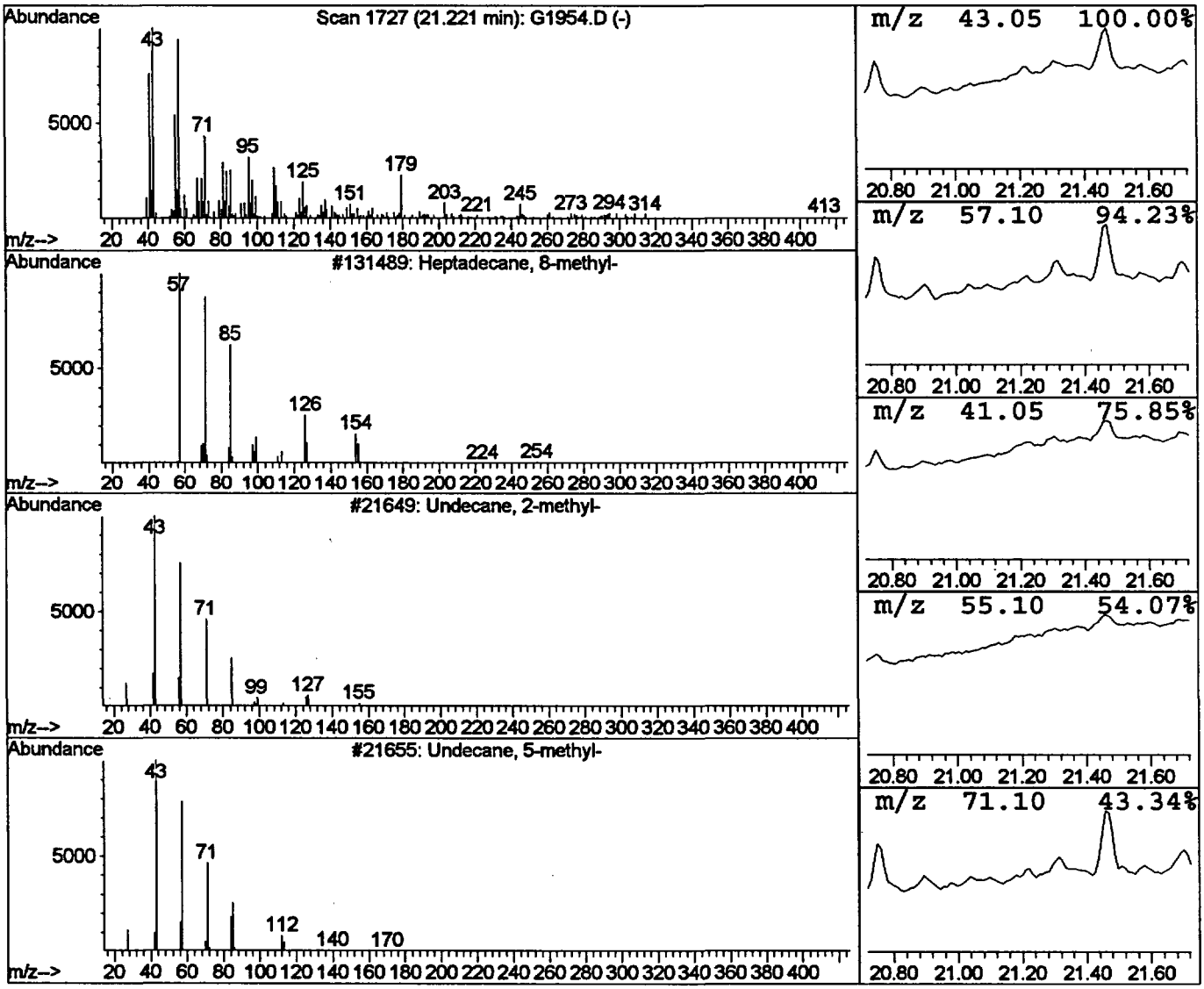
Peak Number 50 Heptadecane, 8-methyl- Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.22	29.07 ng	1000890	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane, 8-methyl-	254	C18H38	013287-23-5	38
2	Undecane, 2-methyl-	170	C12H26	007045-71-8	35
3	Undecane, 5-methyl-	170	C12H26	001632-70-8	35



0530

Data File : Q:\HPCHEM\G\G19XX\G1954.D Vial: 5
Acq On : 22 Jan 98 20:54 Operator:
Sample : S HP-7G 58073-004 FFR83 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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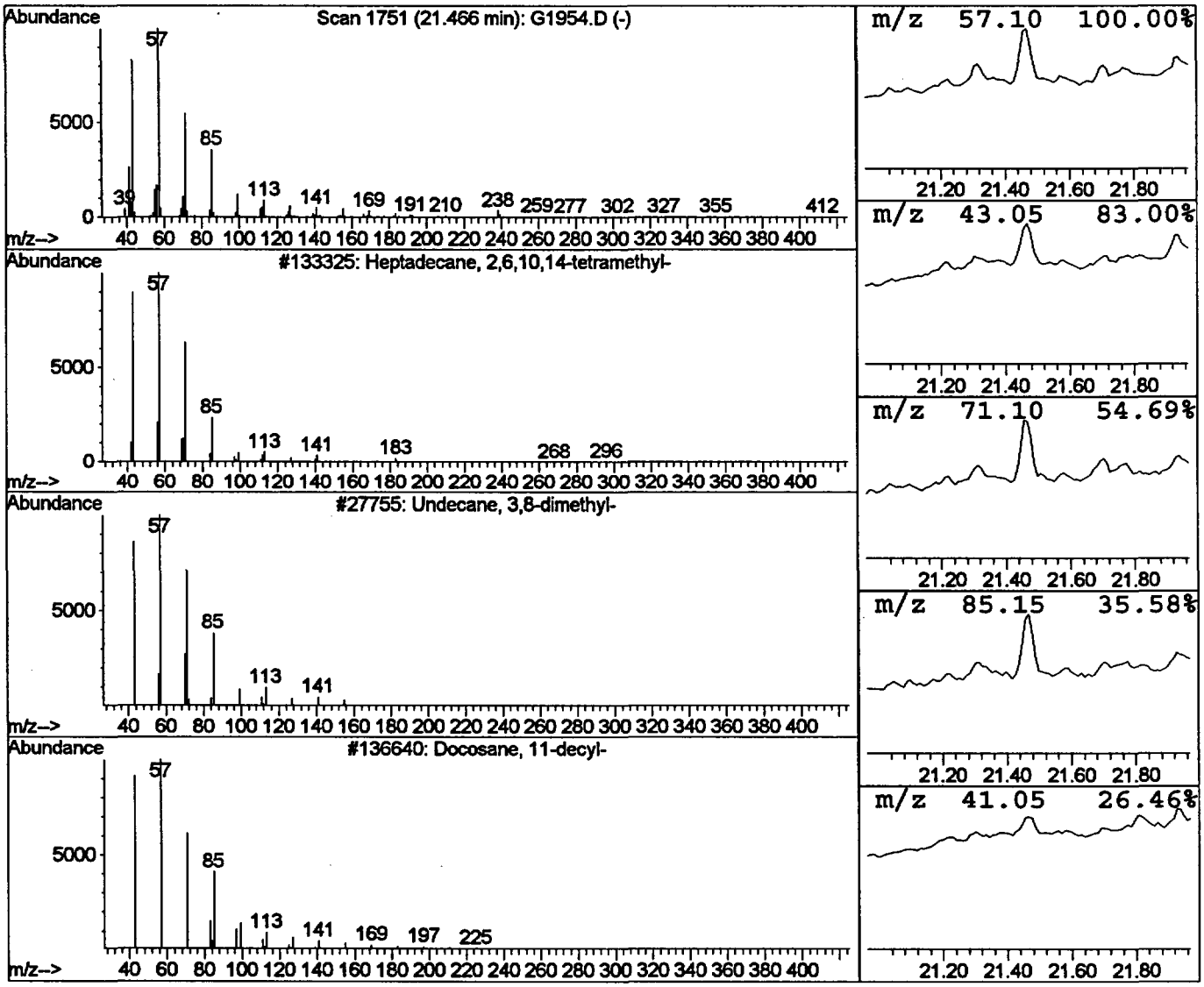
Peak Number 51 Heptadecane, 2,6,10,14-tetrame Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.47	27.93 ng	961757	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptadecane, 2,6,10,14-tetramethyl-	296	C21H44	018344-37-1	89
2	Undecane, 3,8-dimethyl-	184	C13H28	017301-30-3	87
3	Docosane, 11-decyl-	451	C32H66	055401-55-3	87



0531

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 22 Jan 98 20:54
Data File: Q:\HPCHEM\G\G19XX\G1954.D
Name: S HP-7G 58073-004 FFR83
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
Acetic acid, 1-methy	3.67	38.8	ng	1111710	ISTD01	7.06	1144930	40.0
2-Pentanone, 4-hydro	4.21	598.3	ng	17126300	ISTD01	7.06	1144930	40.0
2-Cyclohexen-1-ol	5.19	11.9	ng	341289	ISTD01	7.06	1144930	40.0
2-Pentanone, 4-methy	5.50	6.0	ng	172849	ISTD01	7.06	1144930	40.0
Acetic acid, 1-methy	5.58	15.7	ng	448160	ISTD01	7.06	1144930	40.0
2,4-Pentanedione	5.78	41.3	ng	1181680	ISTD01	7.06	1144930	40.0
trans-3-Hexene-2,5-d	5.99	75.8	ng	2170320	ISTD01	7.06	1144930	40.0
Propanal, 2,3-dihydr	6.14	9.0	ng	256977	ISTD01	7.06	1144930	40.0
2-Pentanone, 3-methy	6.54	55.1	ng	1575930	ISTD01	7.06	1144930	40.0
EPI-PHOTONEROL A	19.14	44.8	ng	1541110	ISTD04	19.61	1377220	40.0
4-Hexenoic acid, 3-m	19.37	19.1	ng	657821	ISTD04	19.61	1377220	40.0
8-Methyl-hexacosanol	19.52	12.9	ng	442873	ISTD04	19.61	1377220	40.0
Hexadecanoic acid, m	20.21	10.7	ng	369870	ISTD04	19.61	1377220	40.0
Hexadecanoic acid	20.48	91.3	ng	3142420	ISTD04	19.61	1377220	40.0
METHYL ESTER OF 3,4-	20.89	10.8	ng	373141	ISTD04	19.61	1377220	40.0
Octadecanoic acid	21.93	23.1	ng	794533	ISTD04	19.61	1377220	40.0
3,4,5,3',4',5'-Hexac	24.09	73.0	ng	908723	ISTD05	25.40	498163	40.0
BACCHOTRICUNEATIN C	24.30	39.1	ng	486528	ISTD05	25.40	498163	40.0
1,1'-Biphenyl, 2,3,3	24.92	35.1	ng	436825	ISTD05	25.40	498163	40.0
Piperazine, 1,4-bis[	26.29	200.0	ng	2490870	ISTD05	25.40	498163	40.0
Silane, trichlorodod	30.88	67.3	ng	1849640	ISTD06	31.53	1099750	40.0
Benzo[a]pyrene	31.09	45.0	ng	1237830	ISTD06	31.53	1099750	40.0
Ethanol, 2-(9-octade	31.65	54.3	ng	1492560	ISTD06	31.53	1099750	40.0
9-Tricosene, (Z)-	32.54	242.2	ng	6657980	ISTD06	31.53	1099750	40.0
BACCHARANE	33.75	18.1	ng	497558	ISTD06	31.53	1099750	40.0
Anthracene, 9-dodecy	35.22	65.2	ng	1791710	ISTD06	31.53	1099750	40.0
Benzo[ghi]perylene	36.02	58.1	ng	1598250	ISTD06	31.53	1099750	40.0
TRANS-STIGMASTA-5,22	37.01	171.2	ng	4707840	ISTD06	31.53	1099750	40.0
Stigmast-5-en-3-ol,	38.34	267.9	ng	7365640	ISTD06	31.53	1099750	40.0
1-Dotriacontanol	40.76	105.7	ng	2907270	ISTD06	31.53	1099750	40.0
Additional Tentatively Identified Compounds								
GLYCOCYANIDINE	7.20	5.7	ng	162003	ISTD01	7.06	1144930	40.0
Thiosulfuric acid (H	18.78	4.8	ng	166219	ISTD04	19.61	1377220	40.0
Hexadecane, 1-bromo-	18.06	4.4	ng	152631	ISTD04	19.61	1377220	40.0
Acetic acid, 1-methy	6.83	4.1	ng	116090	ISTD01	7.06	1144930	40.0
Hydrocarbons: n-Alkanes								
Tridecane	18.58	5.1	ng	174601	ISTD04	19.61	1377220	40.0
Tetratetracontane	19.93	16.8	ng	577685	ISTD04	19.61	1377220	40.0
Hexadecane	19.98	17.6	ng	604350	ISTD04	19.61	1377220	40.0

Heptadecane	20.63	23.2 ng	799476	ISTD04	19.61	1377220	40.0
Pentadecane	20.75	57.1 ng	1966300	ISTD04	19.61	1377220	40.0
Triacontane	29.09	114.5 ng	3148970	ISTD06	31.53	1099750	40.0
Tricosane	32.32	141.0 ng	3877860	ISTD06	31.53	1099750	40.0
Heptacosane	35.66	75.6 ng	2077850	ISTD06	31.53	1099750	40.0
Subtotal:		450.9 ng					

CASE 25969
SDG# FFR76

Hydrocarbons: Branched Alkanes

Heptane, 3,5-dimethy	3.99	7.8 ng	222767	ISTD01	7.06	1144930	40.0
Octane, 4-methyl-	4.57	76.3 ng	2183800	ISTD01	7.06	1144930	40.0
Octane, 3-methyl-	4.74	95.6 ng	2737280	ISTD01	7.06	1144930	40.0
Undecane, 3,5-dimeth	17.71	4.9 ng	141872	ISTD03	16.29	1168610	40.0
Pentadecane, 2,6,10,	18.22	6.7 ng	230029	ISTD04	19.61	1377220	40.0
Dodecane, 2,6,11-tri	18.28	9.4 ng	323420	ISTD04	19.61	1377220	40.0
Hexadecane, 2,6,10,1	19.23	22.5 ng	773214	ISTD04	19.61	1377220	40.0
Heptadecane, 8-methy	21.22	29.1 ng	1000890	ISTD04	19.61	1377220	40.0
Heptadecane, 2,6,10,	21.47	27.9 ng	961757	ISTD04	19.61	1377220	40.0
Subtotal:		280.1 ng					

Total Alkane Conc: 731.0 ng x D.F. = 19,000 ng/g

G1954.D LIN.M Mon Jan 26 13:30:00 1998

FFR83 58073-004 LW 1/27/98

HP-7G 58073-0004 FFR83 01/27/98 20:54

TIC: G1954.D

S HP-7G 58073-004 FFR83 01/14/98 1654

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.674	rVB	0.215	1111706	3.571	3.786
2	3.991	rBV	0.133	222767	3.879	4.012
3	4.206	rVV	0.276	17126303	4.094	4.370
4	4.575	rVV	0.266	2183796	4.390	4.657
5	4.738	rVV	0.123	2737277	4.657	4.779
6	4.820	rVB	0.174	2514688	4.779	4.953
7	5.189	rVB	0.184	341289	5.117	5.302
8	5.496	rBV	0.113	172849	5.424	5.537
9	5.578	rVV	0.102	448160	5.537	5.639
10	5.783	rVB	0.276	1181679	5.639	5.916
11	5.987	rBV	0.133	2170321	5.916	6.049
12	6.141	rVV	0.133	256977	6.090	6.223
13	6.356	rVB	0.235	3228287	6.223	6.458
14	6.540	rBV	0.154	1575931	6.458	6.612
15	6.714	rBV	0.102	2775010	6.673	6.776
16	6.827	rBV	0.072	116090	6.776	6.847
17	7.062	rBV	0.113	1144930	7.011	7.124
18	7.195	rVB	0.154	162003	7.124	7.277
19	7.431	rBV	0.164	2402985	7.339	7.503
20	8.045	rVB	0.143	108370	7.984	8.127
21	8.188	rBV	0.133	1501545	8.127	8.260
22	8.598	rVB	0.195	118432	8.496	8.690
23	8.977	rBV	0.235	105935	8.864	9.100
24	10.072	rVB	0.256	1215002	10.000	10.256
25	14.269	rBV	0.164	2142507	14.198	14.362
26	16.286	rBV	0.102	1168607	16.235	16.337
27	17.187	rBV	0.092	110693	17.156	17.248
28	17.709	rBV	0.113	141872	17.637	17.750
29	18.057	rBV	0.123	152631	17.996	18.119
30	18.170	rVV	0.082	1561035	18.119	18.201
31	18.221	rVV	0.051	230029	18.201	18.252
32	18.282	rVB	0.082	323420	18.252	18.334
33	18.579	rBV	0.113	174601	18.487	18.600
34	18.651	rVV	0.072	115371	18.610	18.682
35	18.784	rBV	0.092	166219	18.743	18.835
36	18.897	rBV	0.082	121712	18.845	18.927
37	19.142	rBV	0.246	1541106	18.927	19.173
38	19.234	rBV	0.113	773214	19.183	19.296
39	19.368	rBV	0.123	657821	19.296	19.419
40	19.521	rBV	0.113	442873	19.439	19.552
41	19.613	rBV	0.072	1377217	19.562	19.634
42	19.654	rVB	0.051	362434	19.644	19.695
43	19.757	rBV	0.072	438248	19.705	19.777
44	19.931	rBV	0.082	577685	19.869	19.951
45	19.982	rVV	0.061	604350	19.951	20.013
46	20.207	rBV	0.061	369870	20.176	20.238
47	20.483	rBV	0.133	3142421	20.402	20.535
48	20.627	rVV	0.072	799476	20.586	20.657
49	20.750	rVV	0.133	1966300	20.668	20.801
50	20.893	rBV	0.072	373141	20.862	20.934
51	21.221	rBV	0.092	1000888	21.149	21.241
52	21.466	rBV	0.082	961757	21.425	21.507
53	21.927	rBV	0.102	794533	21.896	21.999
54	22.040	rVB	0.082	957118	21.999	22.080
55	22.490	rVB	0.061	766137	22.459	22.521
56	22.674	rVB	0.102	1210852	22.633	22.736

57	24.087	rVB	0.082	908723	24.056	24.138
58	24.302	rBV	0.092	486528	24.271	24.363
59	24.916	rVB	0.072	436825	24.885	24.957
60	25.049	rVB	0.113	1385731	25.008	25.121
61	25.397	rVB	0.061	498163	25.377	25.438
62	25.490	rVB	0.276	3168503	25.438	25.715
63	26.288	rVB	0.205	2490872	26.227	26.431
64	29.093	rVB	0.215	3148970	29.011	29.226
65	29.666	rBV	0.154	1872448	29.574	29.728
66	30.885	rBV	0.133	1849637	30.803	30.936
67	31.089	rBV	0.143	1237827	31.028	31.171
68	31.304	rBV	0.195	3001826	31.202	31.396
69	31.530	rBV	0.102	1099754	31.478	31.581
70	31.652	rVB	0.143	1492555	31.591	31.734
71	32.318	rVB	0.195	3877862	32.226	32.420
72	32.543	rVB	0.297	6657977	32.451	32.748
73	33.751	rBV	0.102	497558	33.710	33.812
74	35.215	rVB	0.154	1791714	35.174	35.328
75	35.655	rVB	0.205	2077851	35.573	35.778
76	36.024	rVB	0.215	1598251	35.942	36.157
77	36.556	rVB	0.246	2904447	36.495	36.740
78	37.006	rVB	0.358	4707835	36.904	37.262
79	38.081	rBV	0.195	1613842	37.989	38.184
80	38.337	rVB	0.317	7365636	38.184	38.501
81	40.764	rVB	0.389	2907265	40.651	41.040

FFR83 58073-004 01-27-98

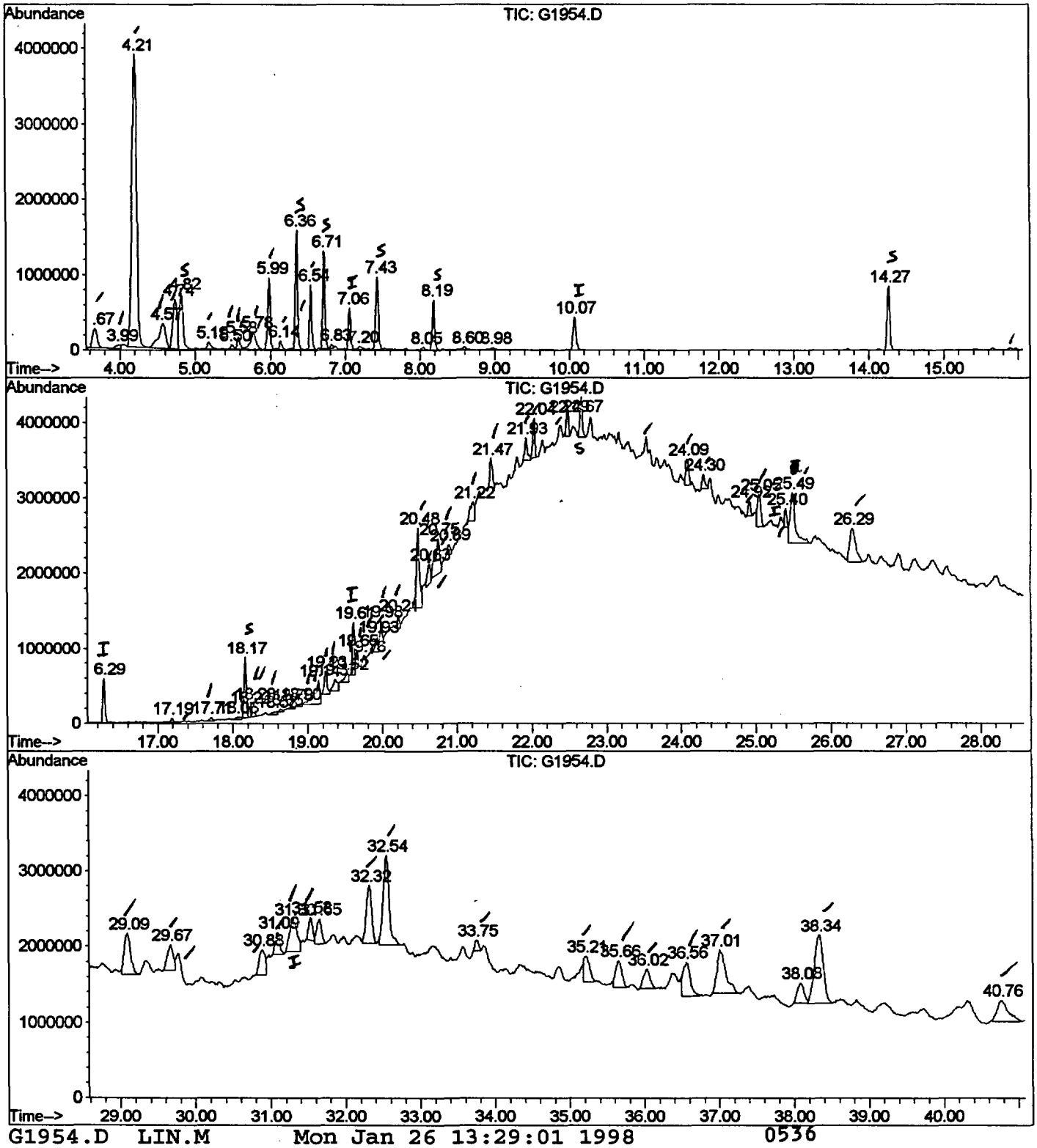
HR76 01/22/98 20:54

CASE 25969
SDG# FFR76

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1954.D
Operator :
Acquired : 22 Jan 98 20:54 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-004 FFR83
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 5
Quant File :CLPME7.RES



G1954.D LIN.M Mon Jan 26 13:29:01 1998 0536

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR85

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-005

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1957

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 33 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.2

Number TICs Found: 30

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

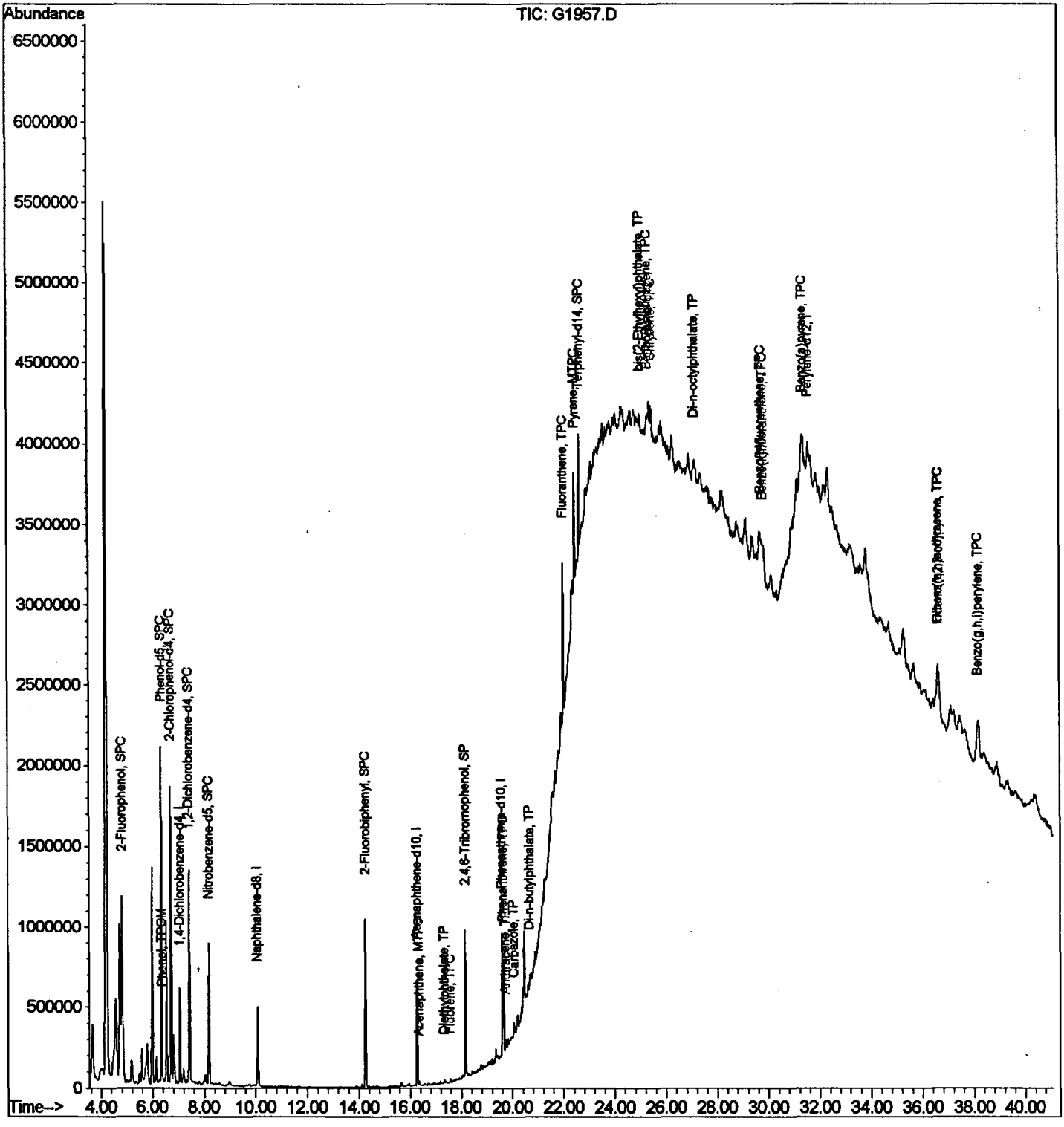
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.68	1200.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.23	18000.	JNAB
3.		Unknown	5.79	990.	J
4.		trans-3-Hexene-2,5-dione	6.00	2200.	JB
5.		Unknown	6.55	1400.	J
6.	57-10-3	Hexadecanoic acid	20.47	960.	JN
7.		Unknown	21.12	980.	J
8.	1058-61-3	Stigmast-4-en-3-one	21.60	3300.	JN
9.	57-11-4	Octadecanoic acid	21.94	610.	JN
10.		Unknown	22.80	1200.	J
11.		Unknown	23.09	940.	J
12.		Unknown	23.29	1700.	J
13.		Unknown	23.60	1100.	J
14.		Unknown	24.00	1300.	J
15.		Unknown	24.09	830.	J
16.		Unknown	25.89	2100.	J
17.		Unknown	26.14	860.	J
18.		Unknown	26.31	4100.	J
19.		Unknown	26.95	1900.	J
20.		Unknown	27.40	1000.	J
21.		Unknown	28.26	3400.	J
22.		Unknown	29.42	1000.	J
23.	205-82-3	Benzo[j]fluoranthene	29.73	1500.	JN
24.		Unknown	30.99	1600.	J
25.	192-97-2	Benzo[e]pyrene	31.19	3100.	JN
26.		Unknown	33.83	6200.	J
27.		Unknown	34.73	1200.	J
28.		Unknown	35.31	2500.	J
29.		Unknown	37.13	1300.	J
30.		Unknown	37.48	980.	J

Quantitation Report

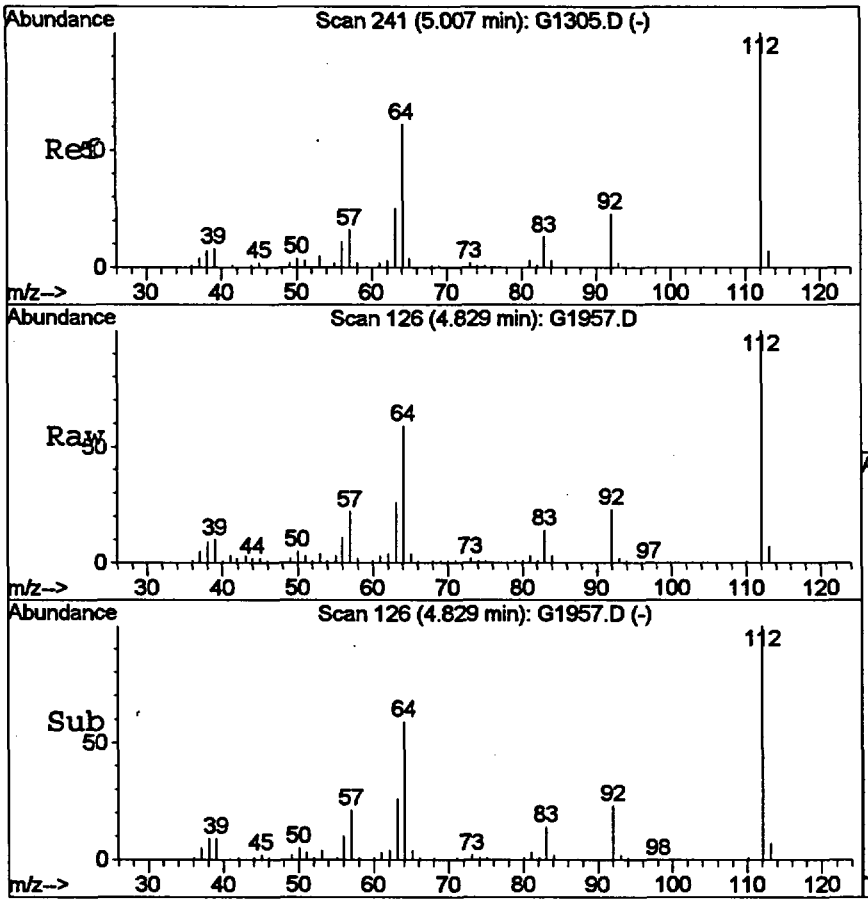
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial:
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:05 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



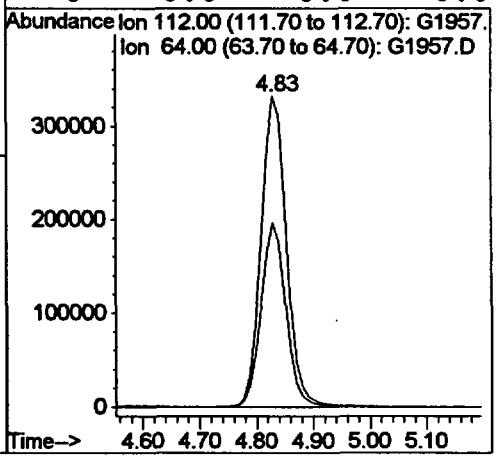
CASE 25969
SDG# FFR76

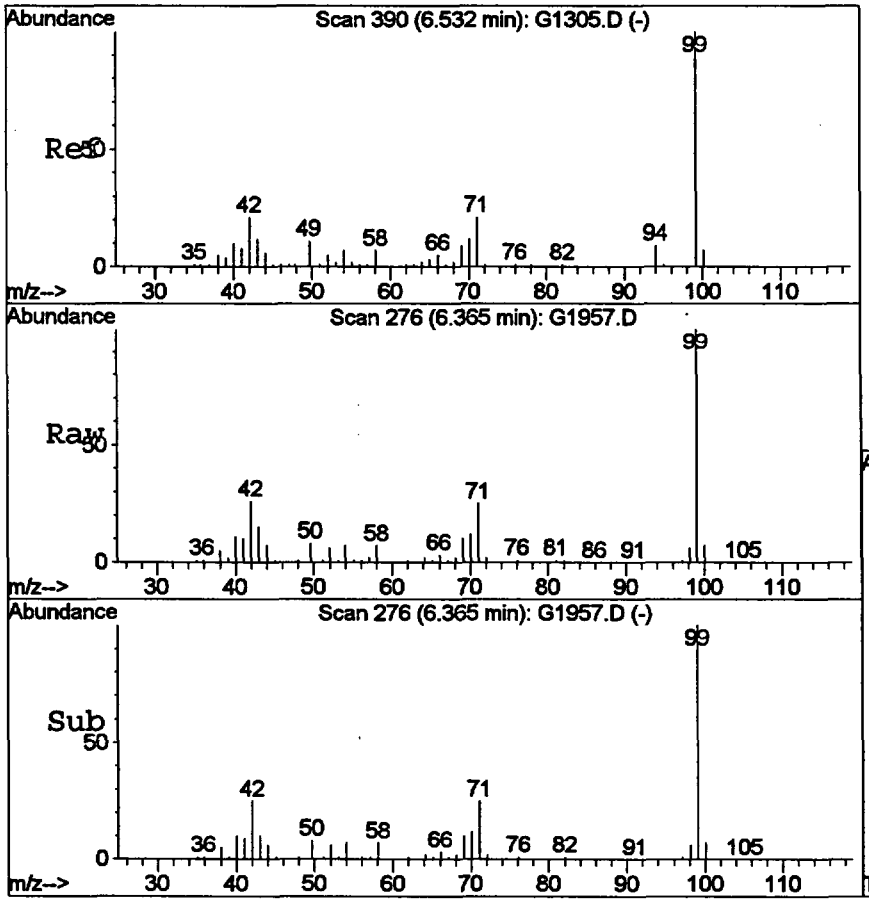


#2
2-Fluorophenol
Concen: 146.30 ng
RT: 4.83 min Scan# 126
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:112 Resp: 1021722

Ion	Ratio	Lower	Upper
112	100		
64	58.1	40.2	80.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

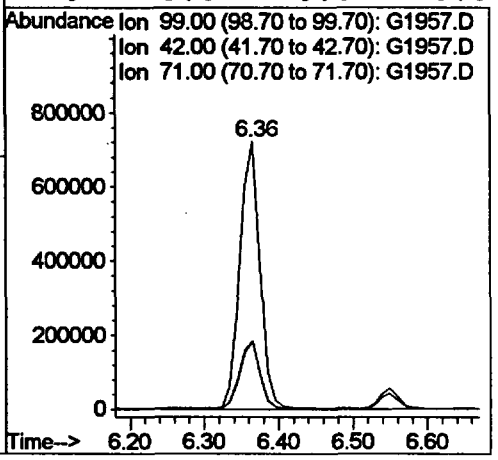




#3
Phenol-d5
Concen: 148.30 ng
RT: 6.36 min Scan# 276
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:99 Resp: 1368111

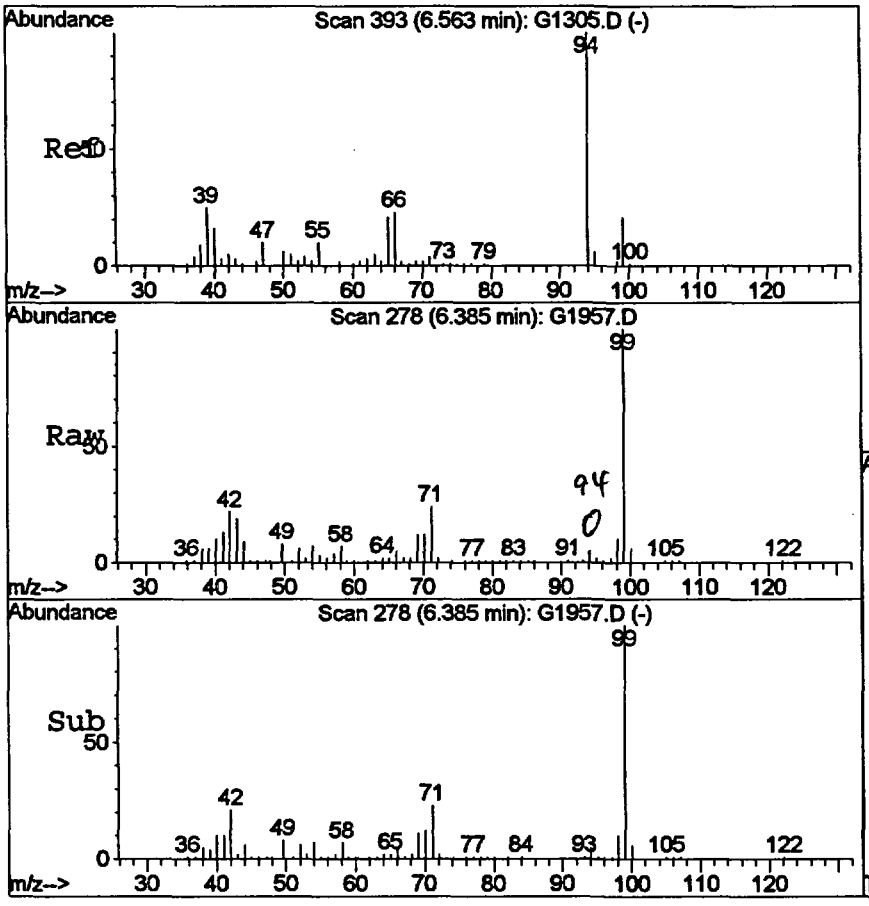
Ion	Ratio	Lower	Upper
99	100		
42	25.4	9.1	49.1
71	25.1	6.1	46.1
0	0.0	0.0	0.0



0541

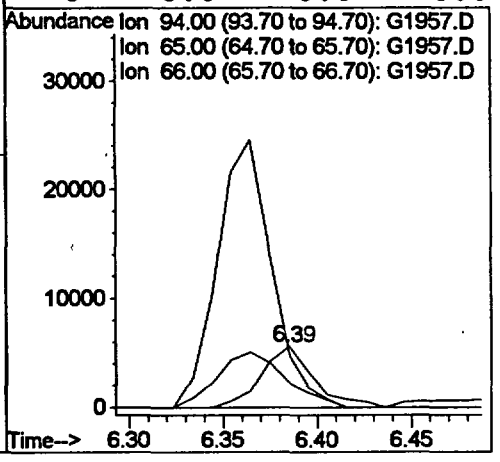
Sample Name: S HP-7G 58073-005 FFR85
G1957.D CLPME7.M Mon Jan 26 15:06:40 1998

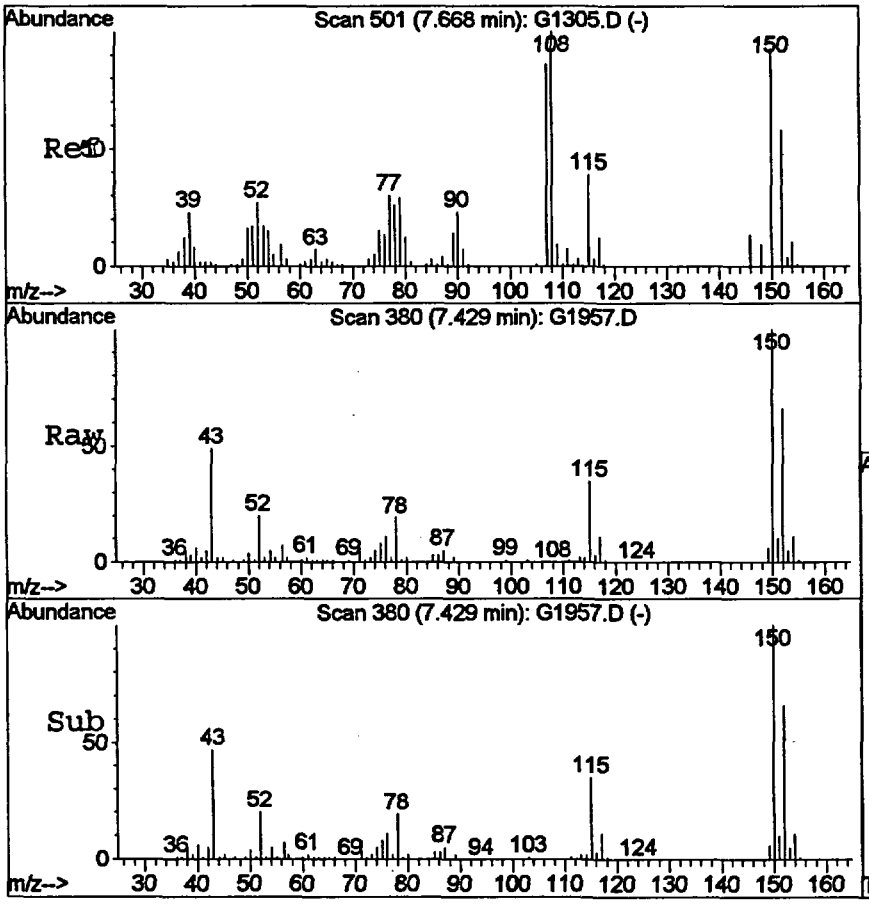
CASE 25969
SDG# FFR76



#4
Phenol
Concen: 1.09 ng m
RT: 6.39 min Scan# 278
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

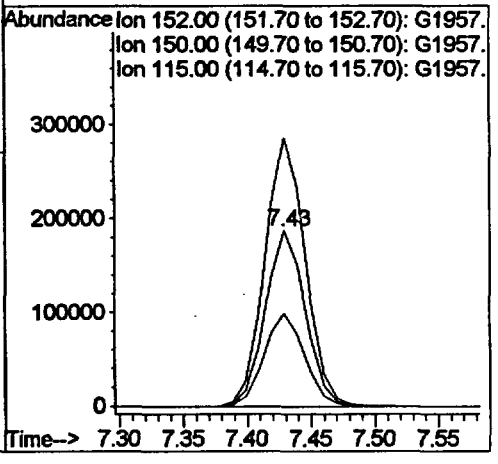
Tgt Ion:94	Resp:	10784	
Ion	Ratio	Lower	Upper
94	100		
65	39.4	5.6	45.6
66	85.9	14.2	54.2#
0	0.0	0.0	0.0



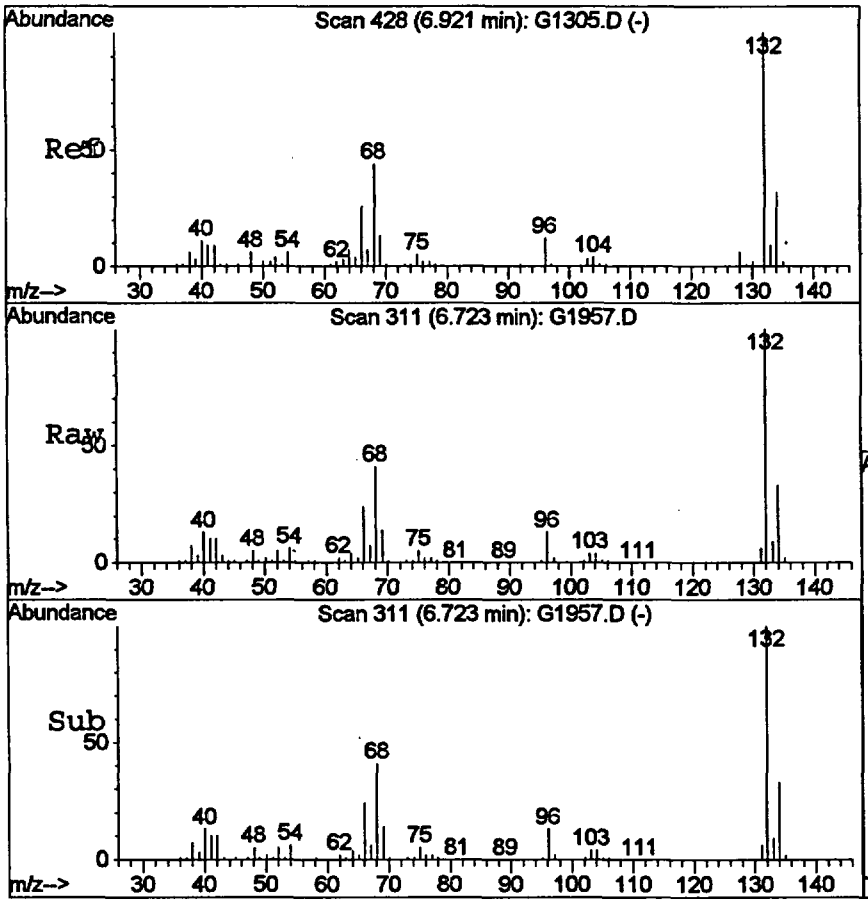


#7
1,2-Dichlorobenzene-d4
Concen: 87.59 ng
RT: 7.43 min Scan# 380
Delta R.T. 0.01 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:152	Resp:	404811	
Ion	Ratio	Lower	Upper
152	100		
150	154.6	153.4	193.4
115	53.4	34.2	74.2
0	0.0	0.0	0.0



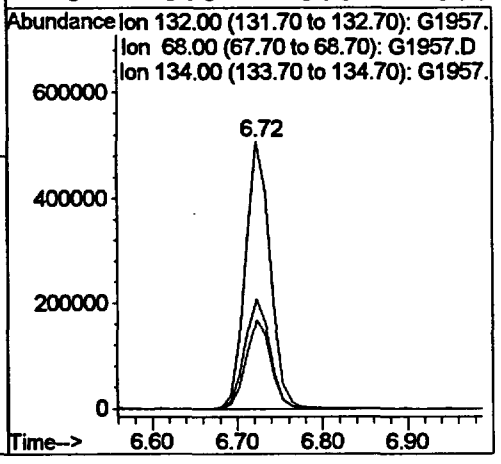
CASE 25969
SDG# FFR76

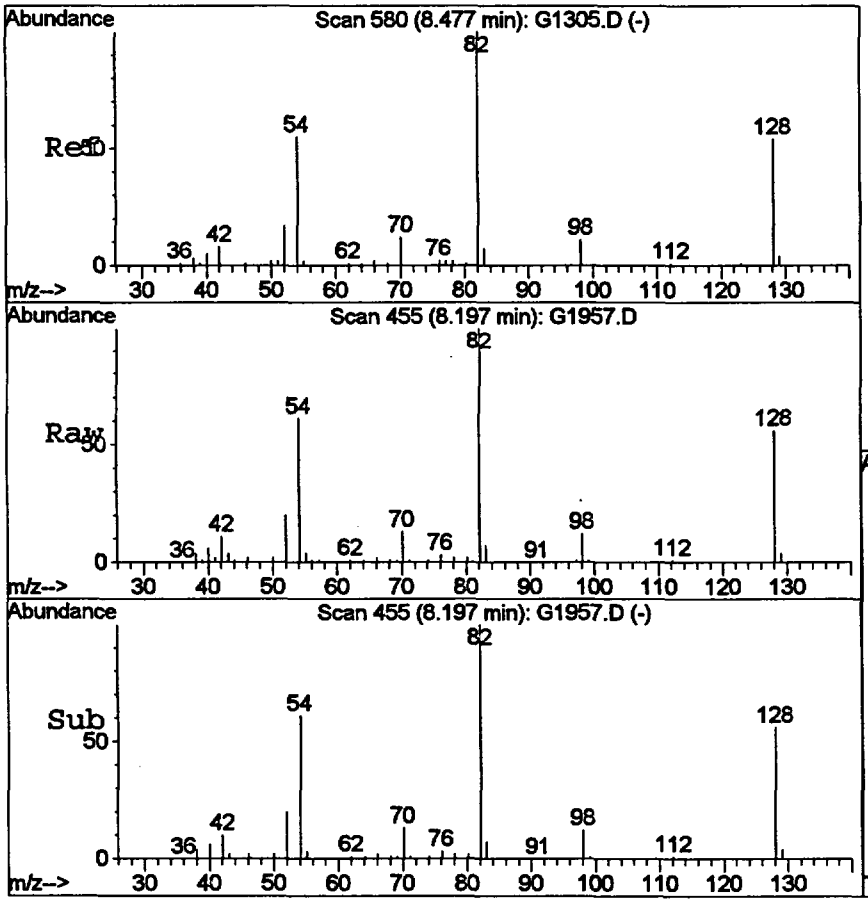


#8
2-Chlorophenol-d4
Concen: 144.56 ng
RT: 6.72 min Scan# 311
Delta R.T. 0.01 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:132 Resp: 1024606

Ion	Ratio	Lower	Upper
132	100		
68	41.6	23.4	63.4
134	33.2	12.7	52.7
0	0.0	0.0	0.0

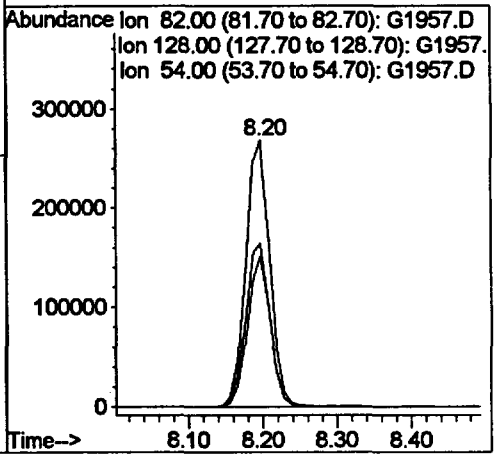


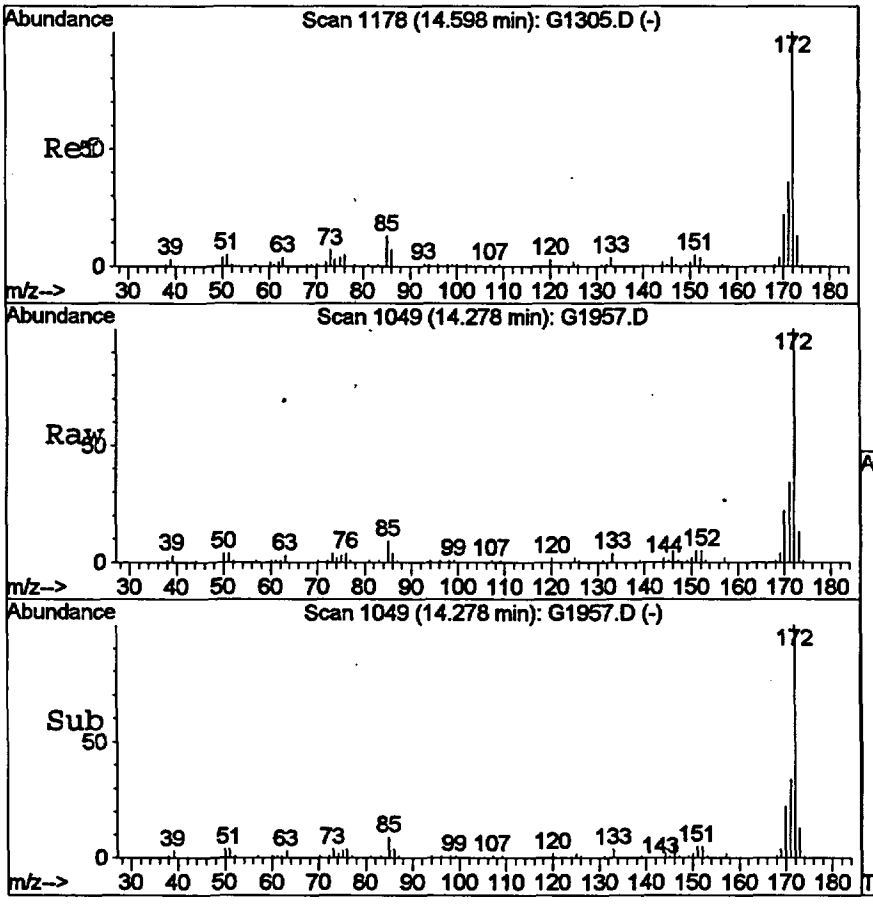


#18
Nitrobenzene-d5
Concen: 102.09 ng
RT: 8.20 min Scan# 455
Delta R.T. 0.01 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:82 Resp: 603063

Ion	Ratio	Lower	Upper
82	100		
128	53.8	33.9	73.9
54	61.9	43.9	83.9
0	0.0	0.0	0.0



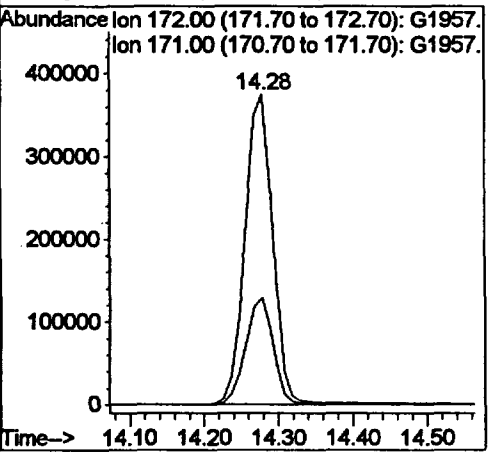


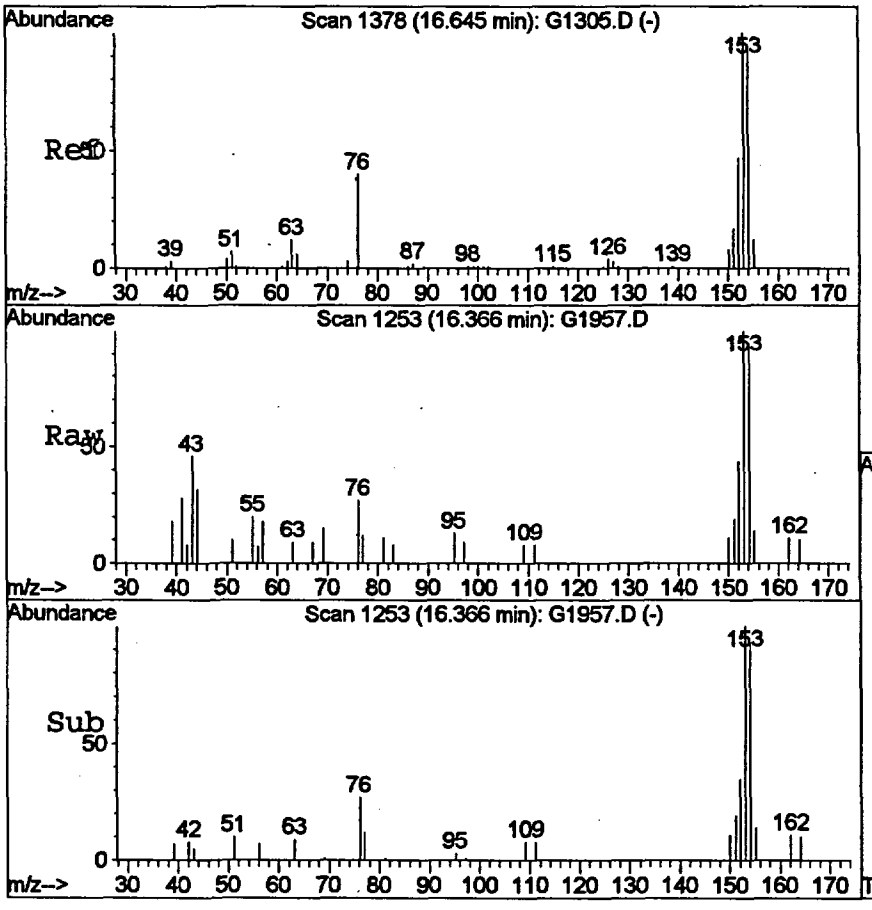
#35
2-Fluorobiphenyl
Concen: 103.70 ng
RT: 14.28 min Scan# 1049
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

CASE 25969
SDG# 15476

Tgt Ion:172 Resp: 970828

Ion	Ratio	Lower	Upper
172	100		
171	34.2	14.1	54.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

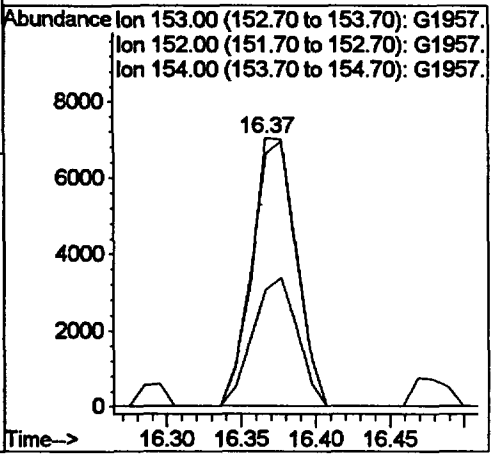


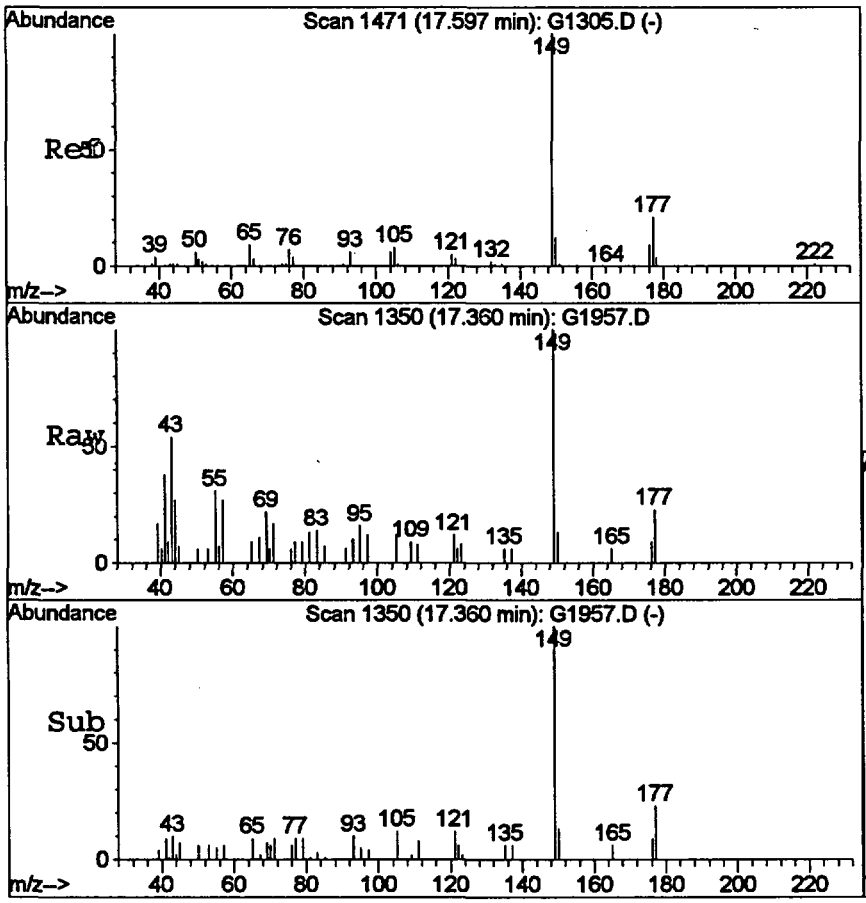


#42
Acenaphthene
Concen: 1.77 ng m
RT: 16.37 min Scan# 1253
Delta R.T. -0.00 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:153 Resp: 14529

Ion	Ratio	Lower	Upper
153	100		
152	43.5	27.1	67.1
154	94.3	74.3	114.3
0	0.0	0.0	0.0

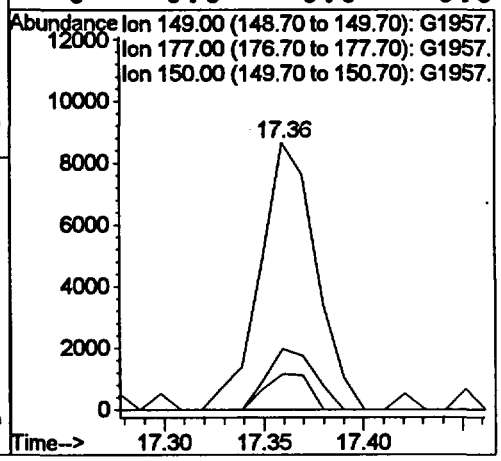


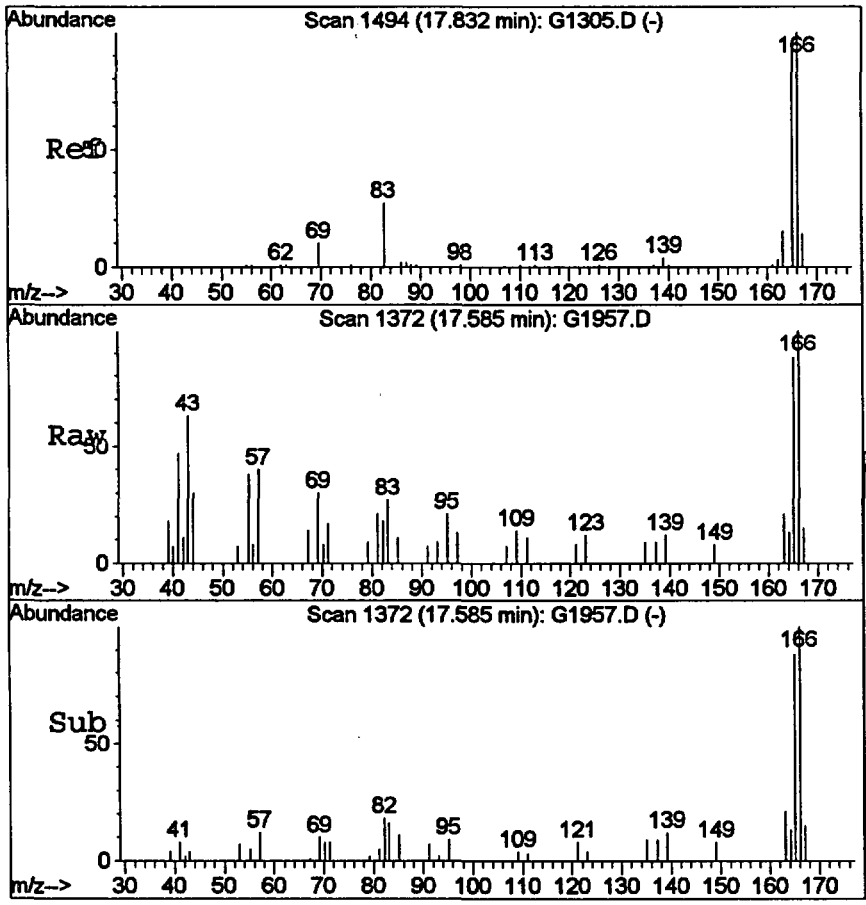


#47
Diethylphthalate
Concen: 1.61 ng
RT: 17.36 min / Scan# 1350
Delta R.T. -0.00 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:149 Resp: 16959

Ion	Ratio	Lower	Upper
149	100		
177	0.0	0.9	40.9#
150	0.0	0.0	31.7
0	0.0	0.0	0.0

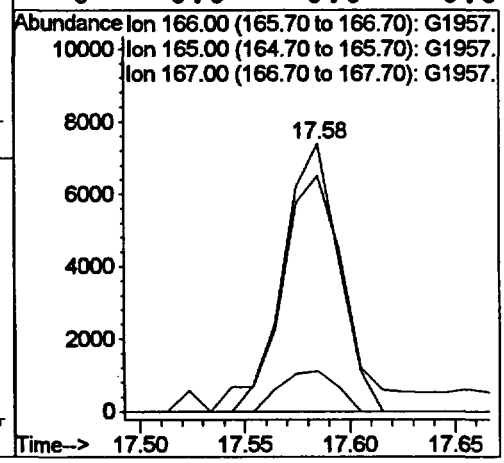


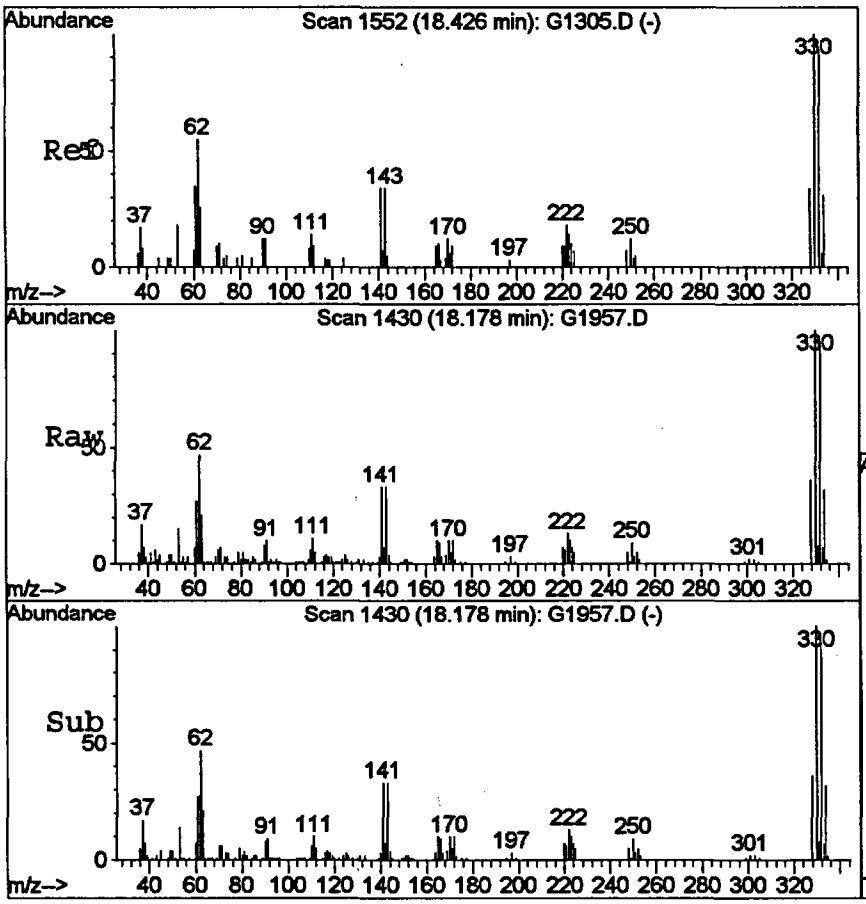


#48
Fluorene
Concen: 1.47 ng m
RT: 17.58 min / Scan# 1372
Delta R.T. 0.01 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:166 Resp: 13515

Ion	Ratio	Lower	Upper
166	100		
165	88.1	73.7	113.7
167	14.9	0.0	33.6
0	0.0	0.0	0.0

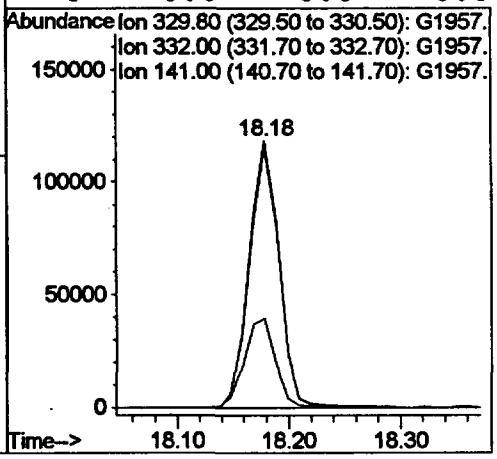


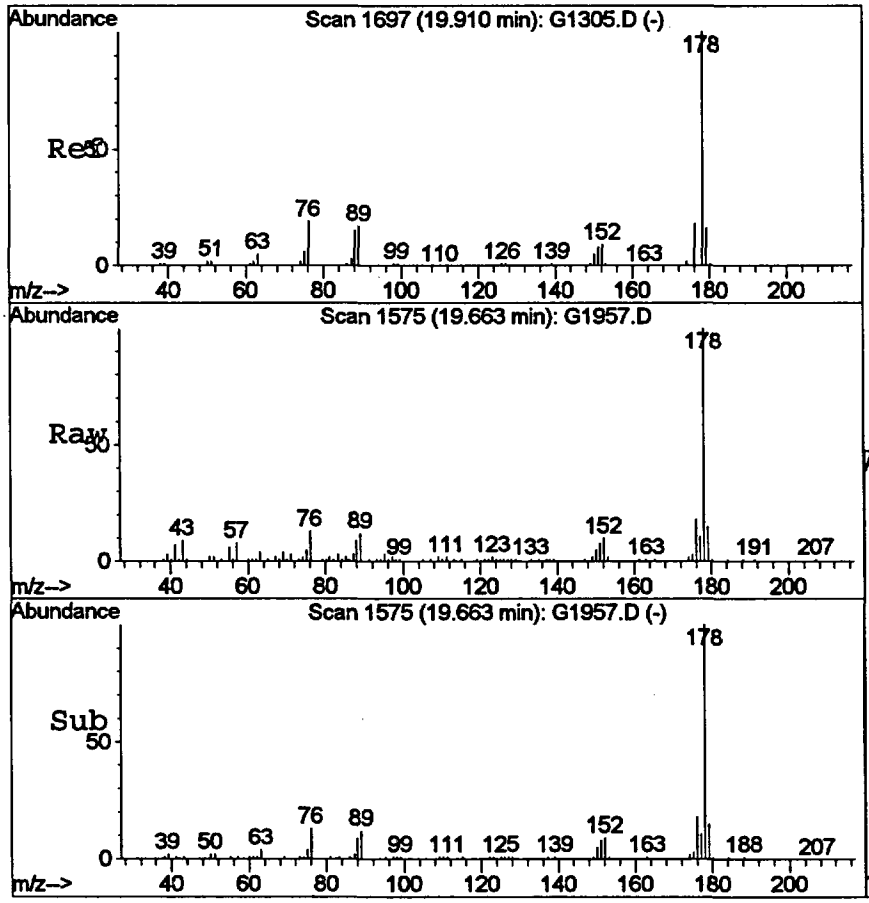


#52
2,4,6-Tribromophenol
Concen: 156.35 ng
RT: 18.18 min Scan# 1430
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:329.8 Resp: 220092

Ion	Ratio	Lower	Upper
330	100		
332	97.4	75.8	115.8
141	35.4	14.4	54.4
0	0.0	0.0	0.0

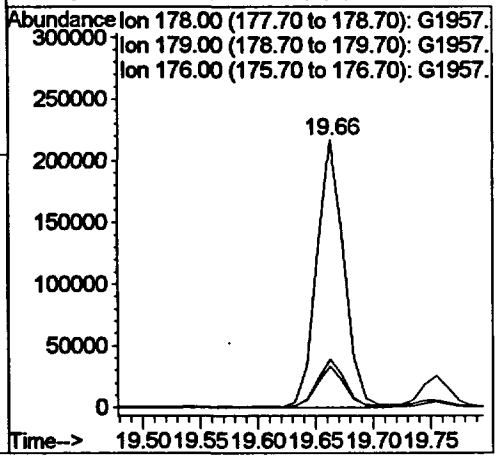


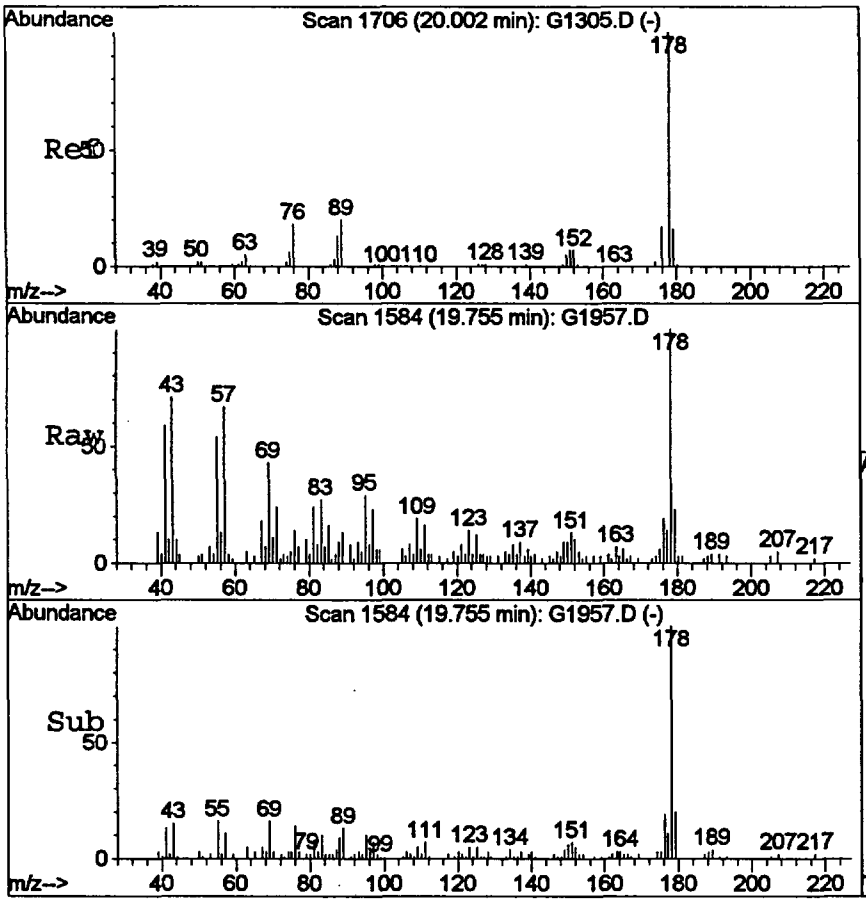


#58
Phenanthrene
Concen: 25.91 ng
RT: 19.66 min / Scan# 1575
Delta R.T. 0.01 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:178 Resp: 360661

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	35.5
176	18.6	0.0	38.8
0	0.0	0.0	0.0

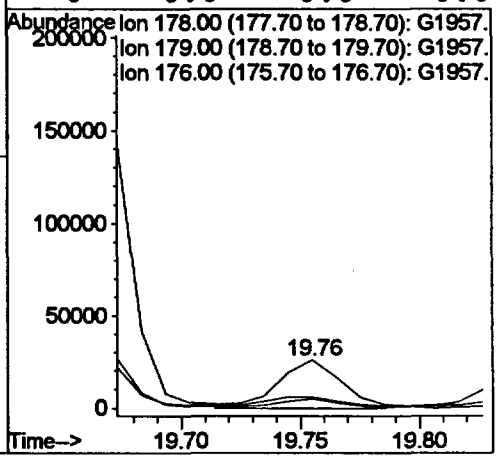


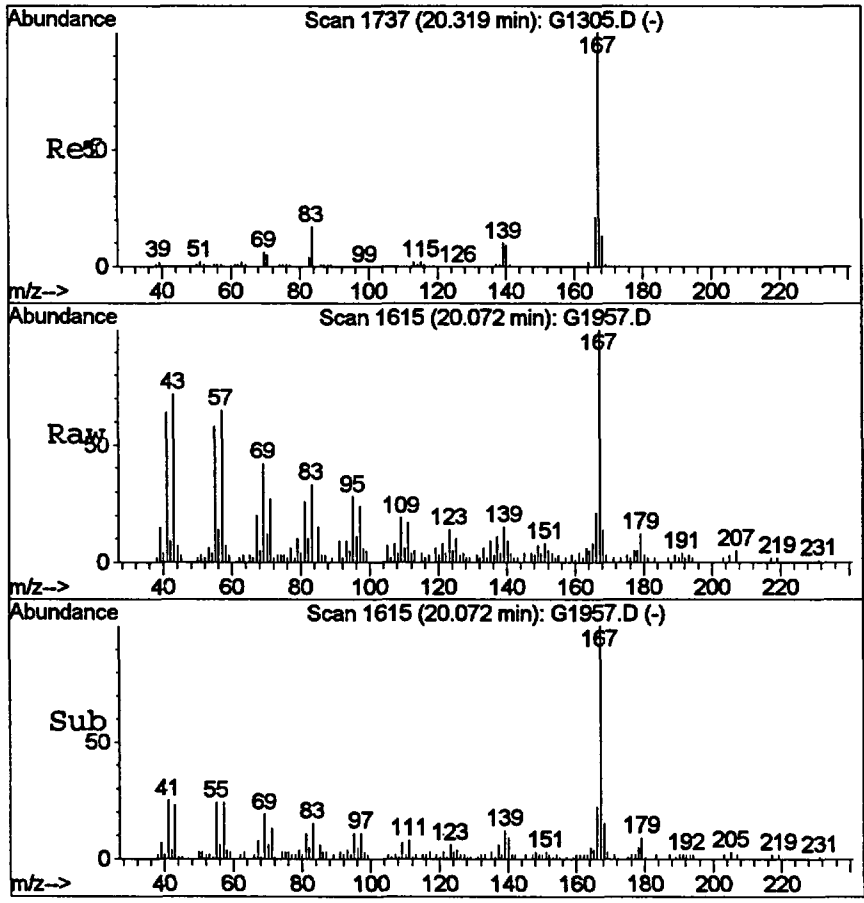


#59
Anthracene
Concen: 3.21 ng m
RT: 19.76 min / Scan# 1584
Delta R.T. 0.01 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:178 Resp: 47575

Ion	Ratio	Lower	Upper
178	100		
179	22.7	0.0	34.8
176	19.2	0.0	38.4
0	0.0	0.0	0.0

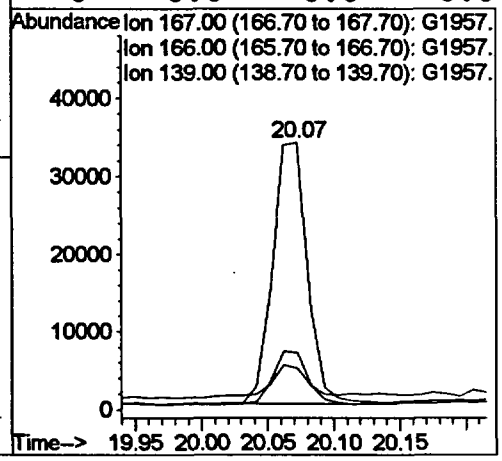


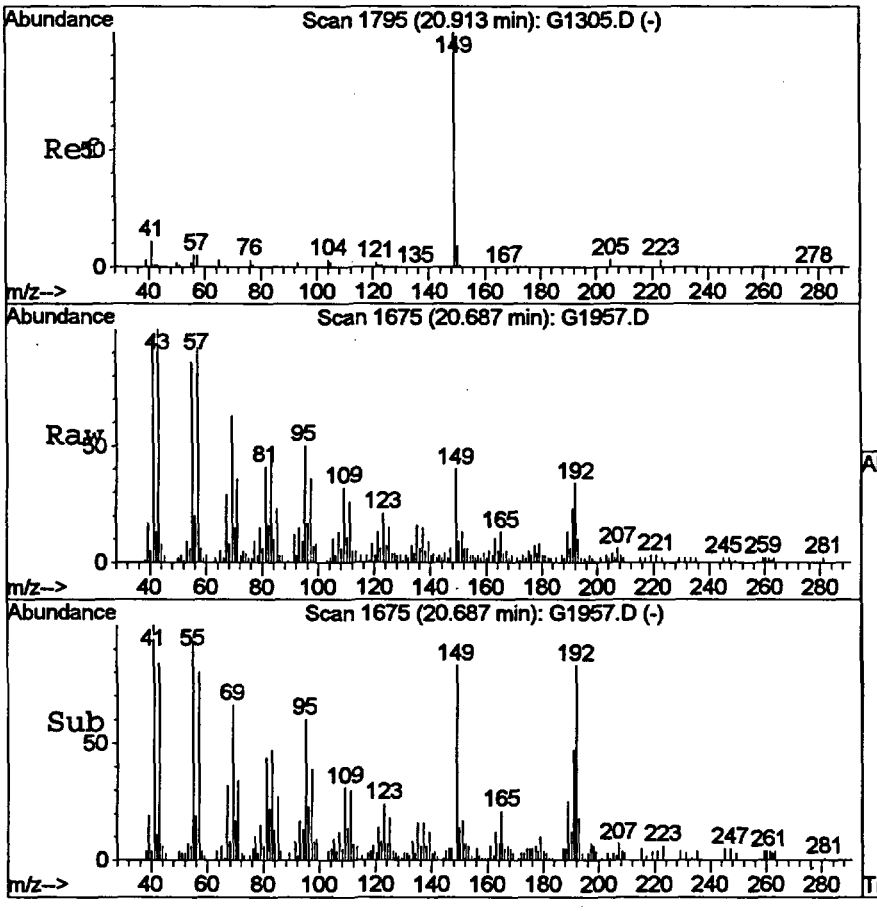


#60
Carbazole
Concen: 3.93 ng
RT: 20.07 min / Scan# 1615
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:167 Resp: 61437

Ion	Ratio	Lower	Upper
167	100		
166	0.0	0.1	40.1#
139	0.0	0.0	31.4
0	0.0	0.0	0.0

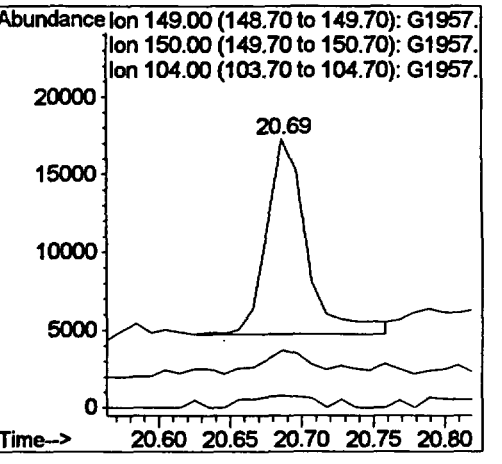


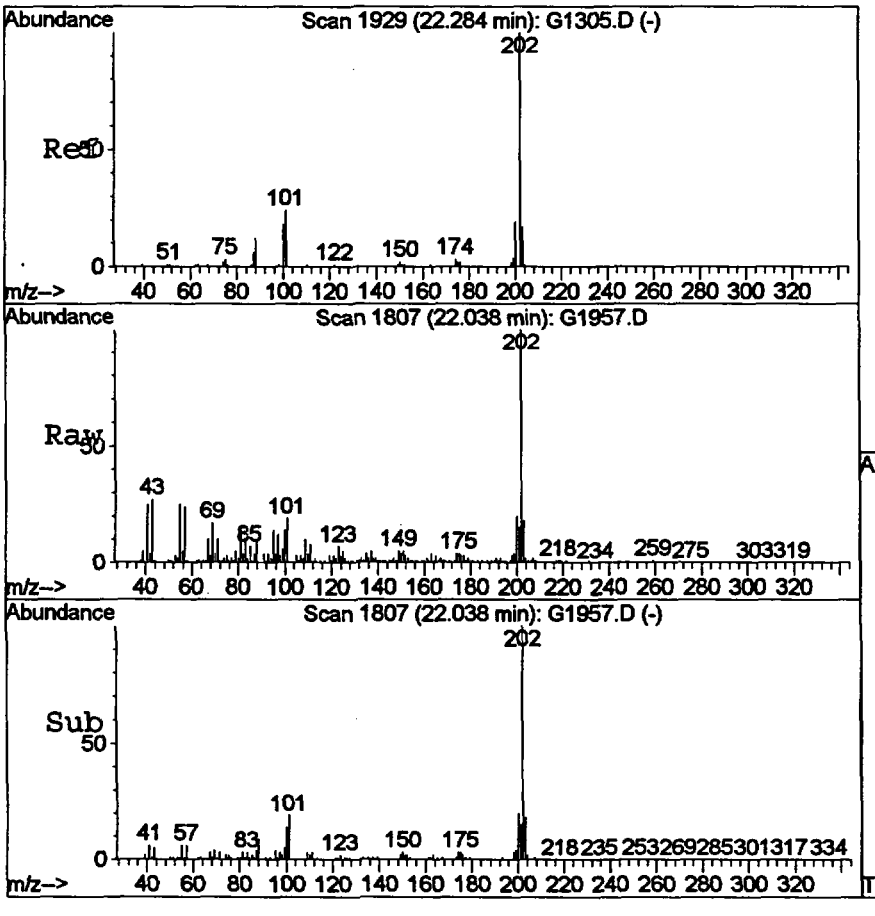


#61
Di-n-butylphthalate
Concen: 1.13 ng
RT: 20.69 min / Scan# 1675
Delta R.T. -0.00 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:149 Resp: 24730

Ion	Ratio	Lower	Upper
149	100		
150	0.0	0.0	29.2
104	0.0	0.0	23.2
0	0.0	0.0	0.0

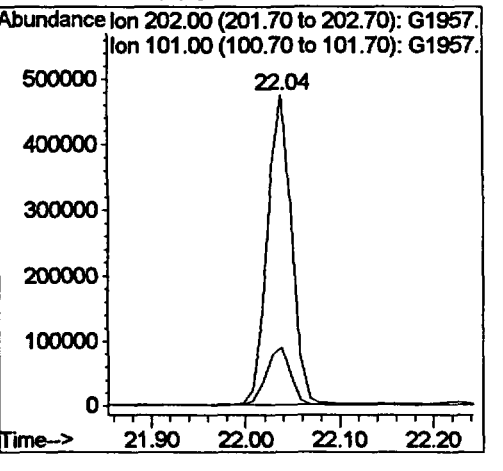


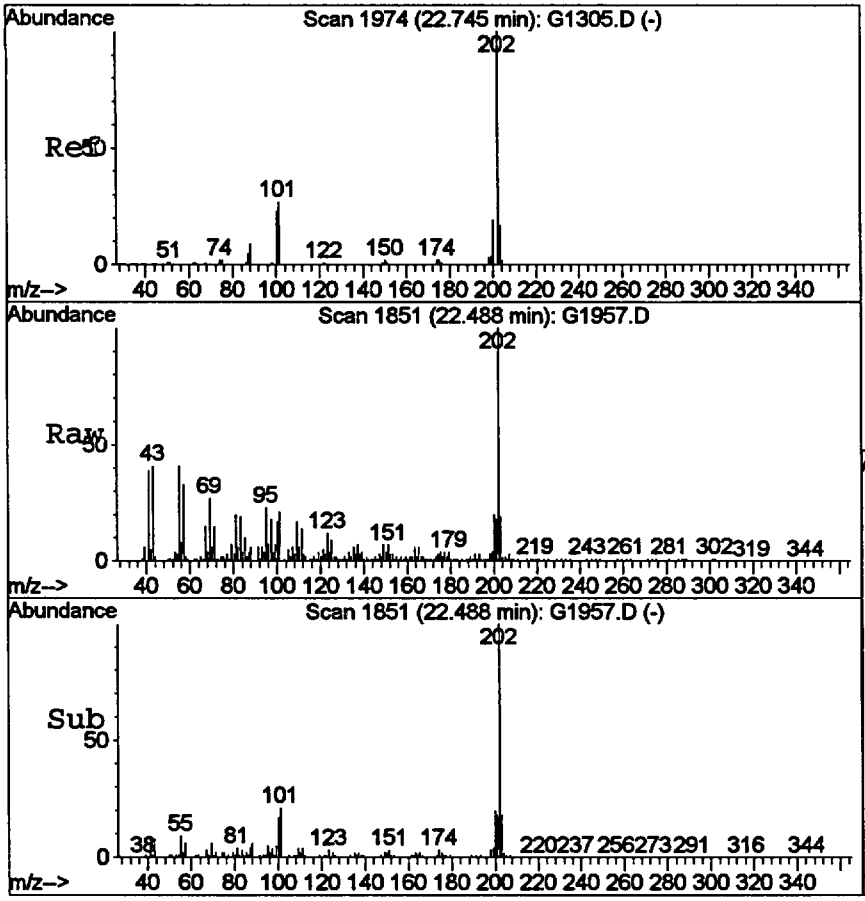


#62
Fluoranthene
Concen: 60.79 ng
RT: 22.04 min / Scan# 1807
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:202 Resp: 856489

Ion	Ratio	Lower	Upper
202	100		
101	18.9	0.6	40.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

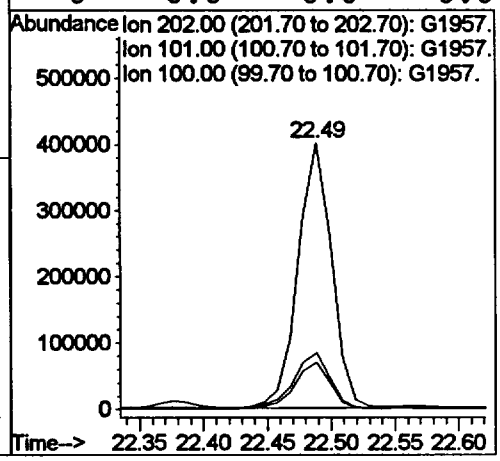


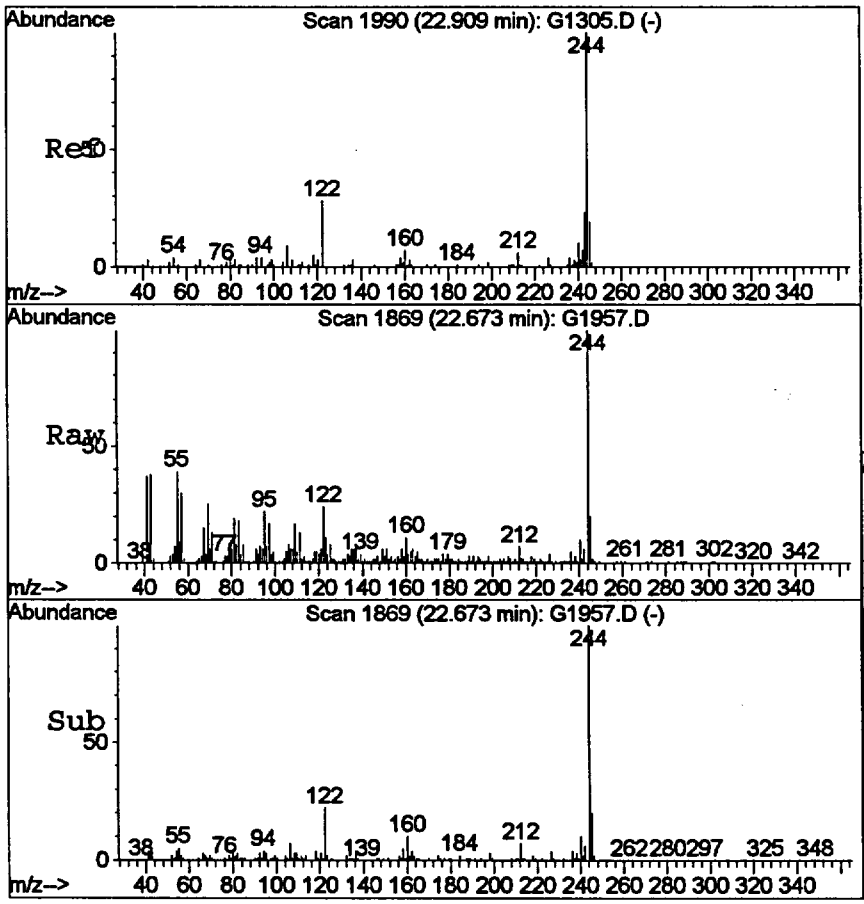


#64
Pyrene
Concen: 63.32 ng
RT: 22.49 min Scan# 1851
Delta R.T. 0.02 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:202 Resp: 730662

Ion	Ratio	Lower	Upper
202	100		
101	22.8	5.7	45.7
100	17.8	0.8	40.8
0	0.0	0.0	0.0

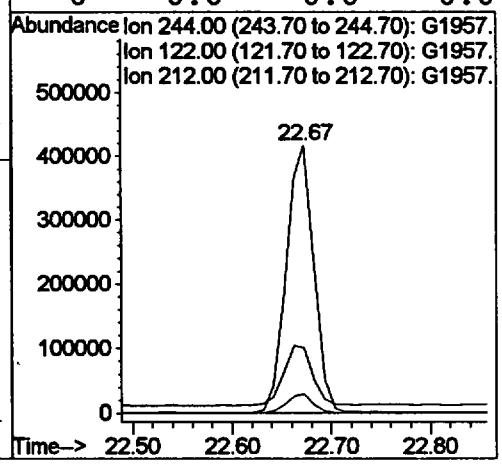


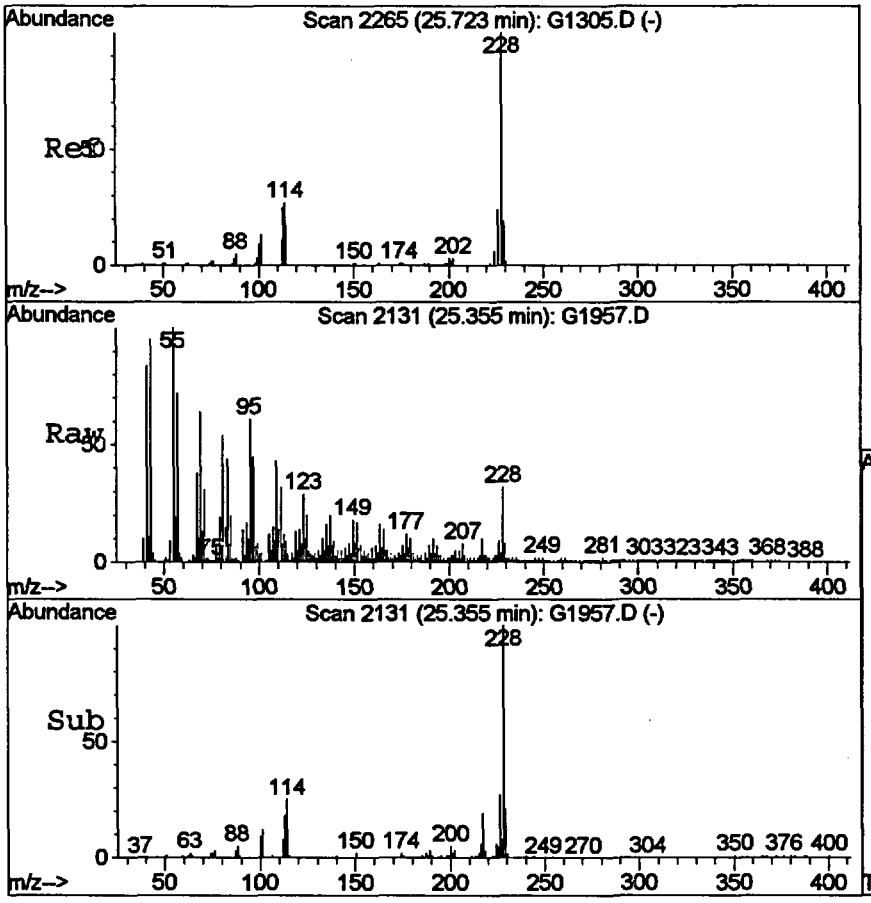


#65
Terphenyl-d14
Concen: 106.76 ng
RT: 22.67 min Scan# 1869
Delta R.T. 0.03 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:244 Resp: 796613

Ion	Ratio	Lower	Upper
244	100		
122	23.2	3.7	43.7
212	6.6	0.0	27.0
0	0.0	0.0	0.0

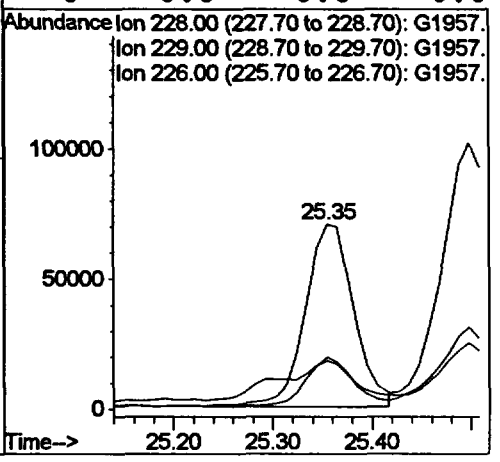


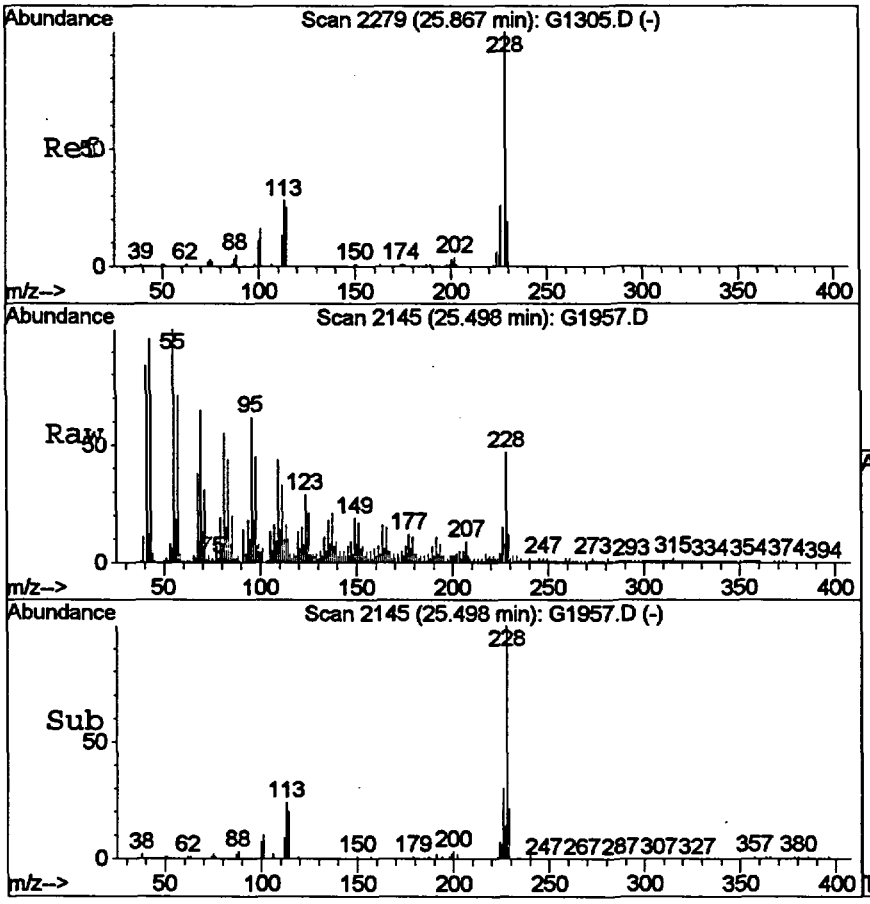


#67
Benzo(a)anthracene
Concen: 25.83 ng m
RT: 25.35 min / Scan# 2131
Delta R.T. 0.06 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:228 Resp: 238400

Ion	Ratio	Lower	Upper
228	100		
229	25.9	9.8	29.8
226	28.1	16.2	36.2
0	0.0	0.0	0.0

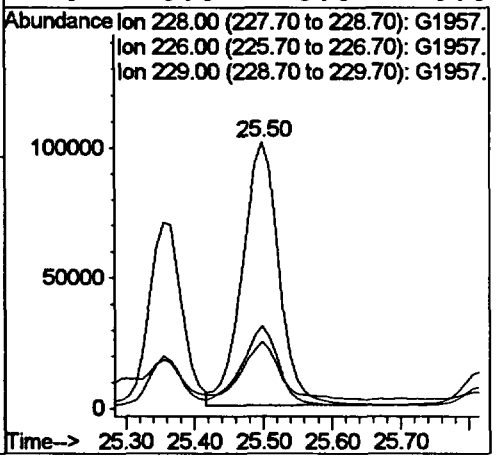


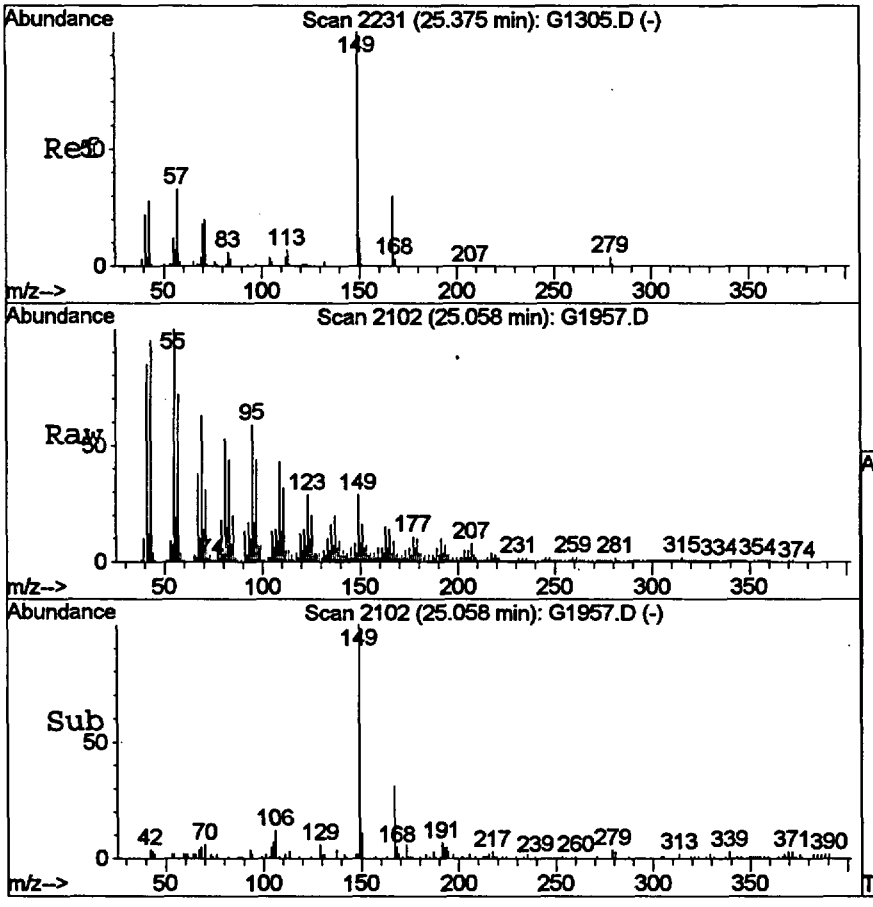


#69
Chrysene
Concen: 42.27 ng
RT: 25.50 min / Scan# 2145
Delta R.T. 0.06 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:228 Resp: 371810

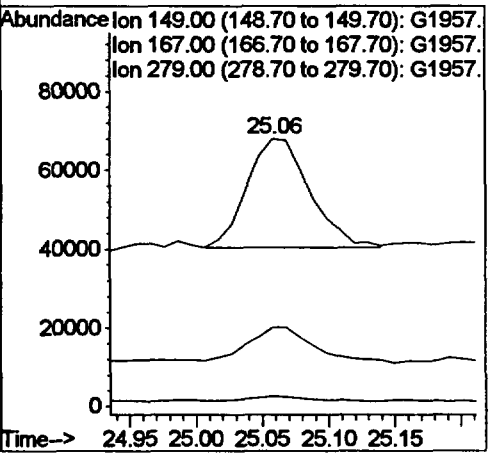
Ion	Ratio	Lower	Upper
228	100		
226	31.2	19.0	39.0
229	22.4	9.9	29.9
0	0.0	0.0	0.0

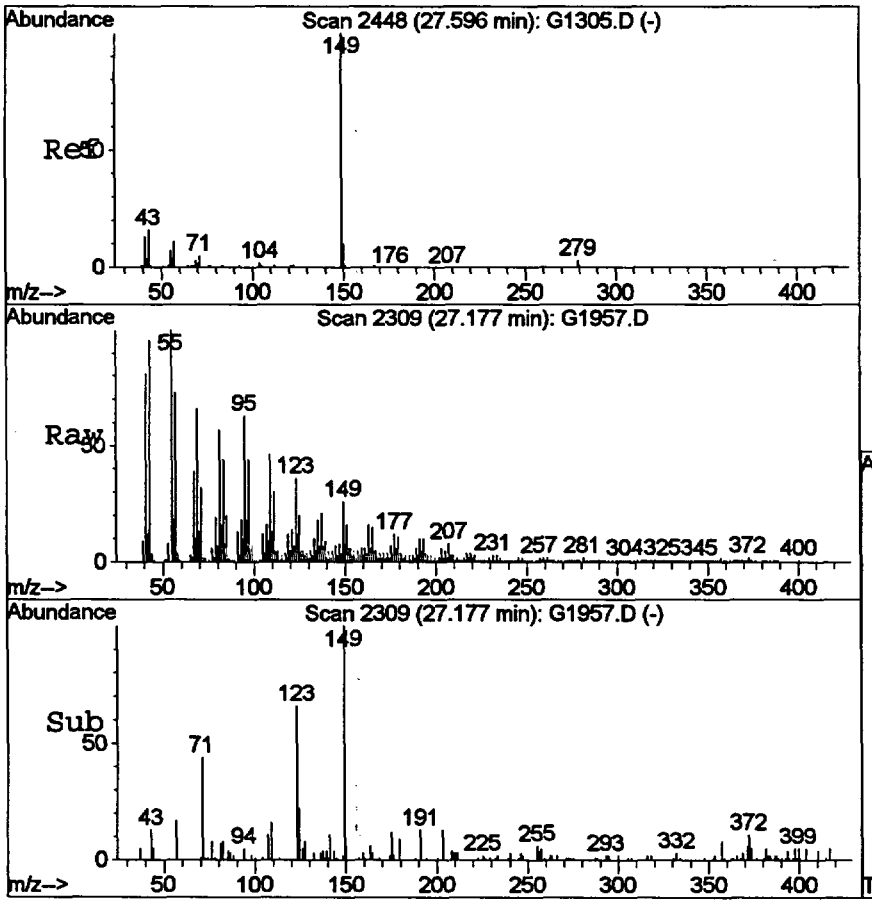




#70
bis(2-Ethylhexyl)phthalate
Concen: 7.22 ng
RT: 25.06 min /Scan# 2102
Delta R.T. 0.05 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

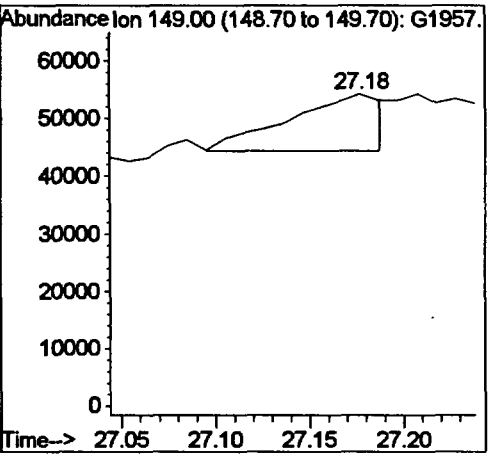
Tgt Ion:149	Resp:	90022	
Ion	Ratio	Lower	Upper
149	100		
167	37.5	10.6	50.6
279	0.0	0.0	23.8
0	0.0	0.0	0.0

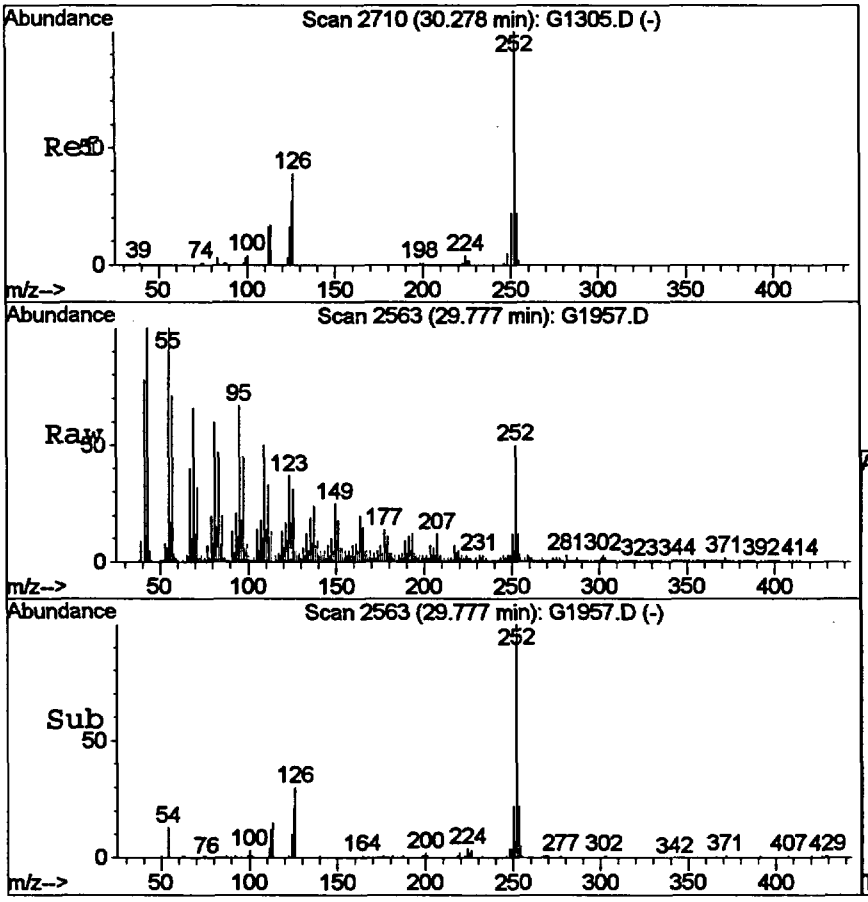




#72
Di-n-octylphthalate
Concen: 1.07 ng m
RT: 27.18 min /Scan# 2309
Delta R.T. 0.06 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:149	Resp:	34095	
Ion	Ratio	Lower	Upper
149	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

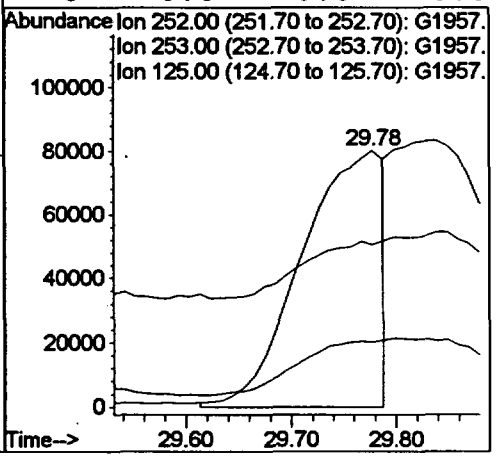


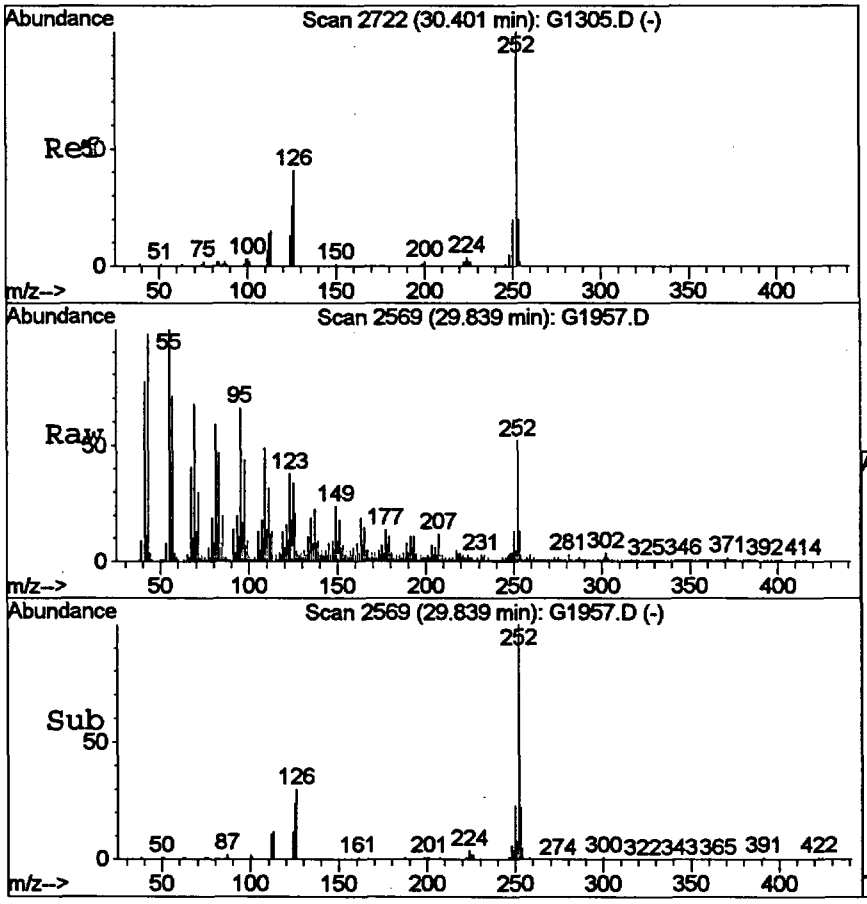


#73
Benzo(b)fluoranthene
Concen: 32.61 ng m
RT: 29.78 min / Scan# 2563
Delta R.T. 0.20 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:252 Resp: 432416

Ion	Ratio	Lower	Upper
252	100		
253	25.1	2.4	42.4
125	63.0	5.5	45.5#
0	0.0	0.0	0.0

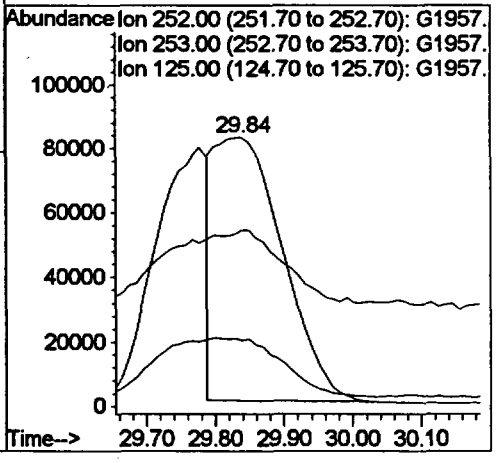


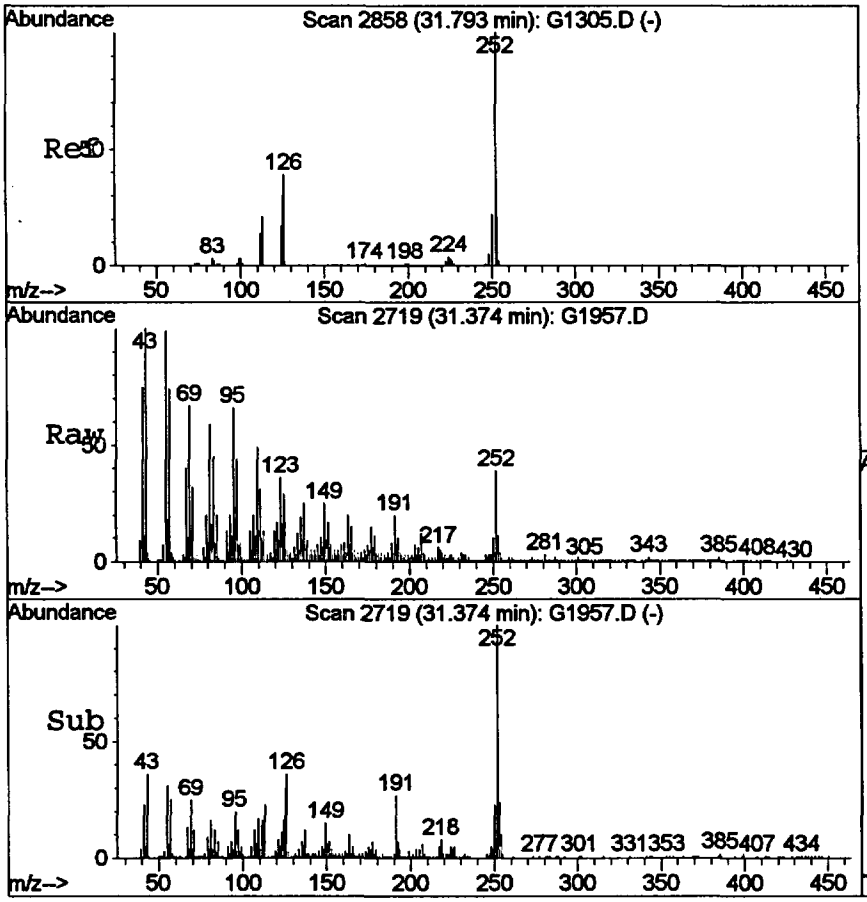


#74
Benzo(k)fluoranthene
Concen: 44.76 ng m
RT: 29.84 min / Scan# 2569
Delta R.T. 0.15 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:252 Resp: 564870

Ion	Ratio	Lower	Upper
252	100		
253	24.8	2.3	42.3
125	65.6	5.0	45.0#
0	0.0	0.0	0.0



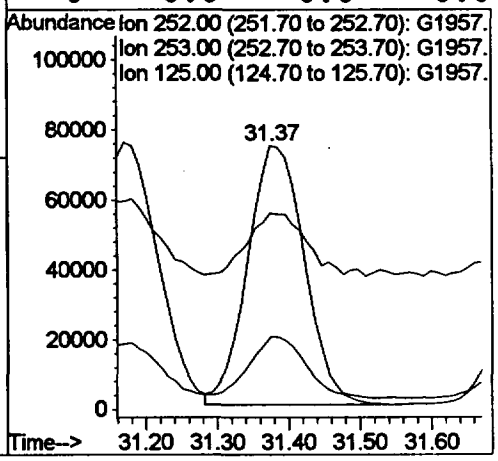


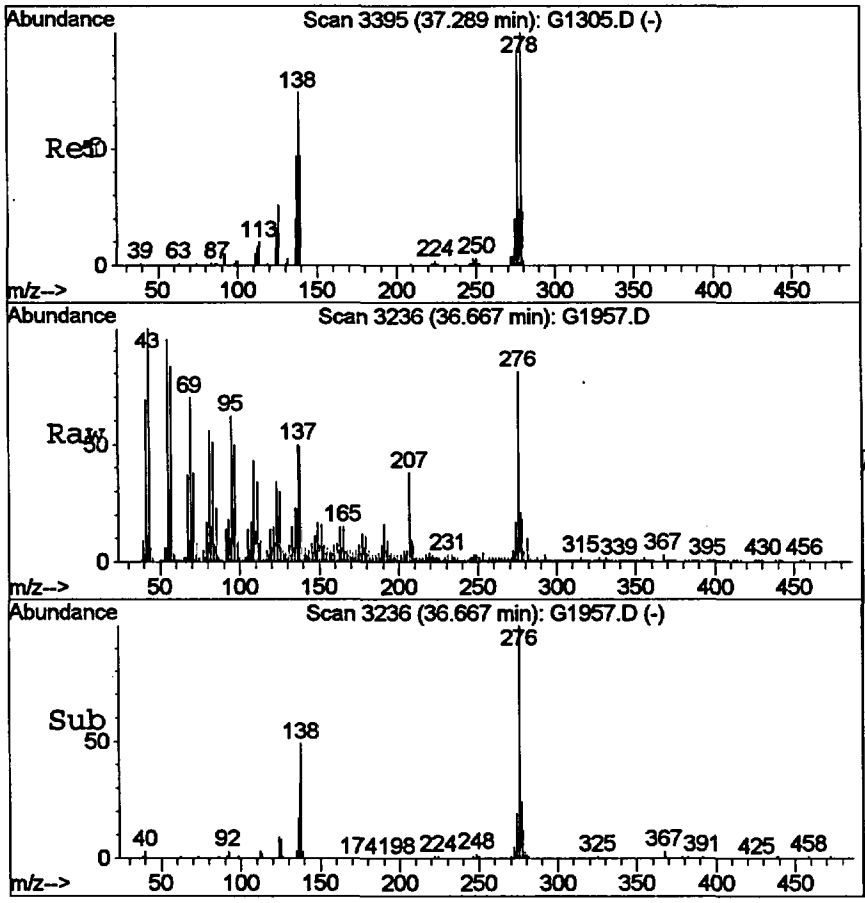
#75
Benzo(a)pyrene
Concen: 33.89 ng
RT: 31.37 min / Scan# 2719
Delta R.T. 0.15 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

CASE 25969
SDG# FFR76

Tgt Ion:252 Resp: 410765

Ion	Ratio	Lower	Upper
252	100		
253	23.4	12.0	32.0
125	28.4	19.7	35.7
0	0.0	0.0	0.0

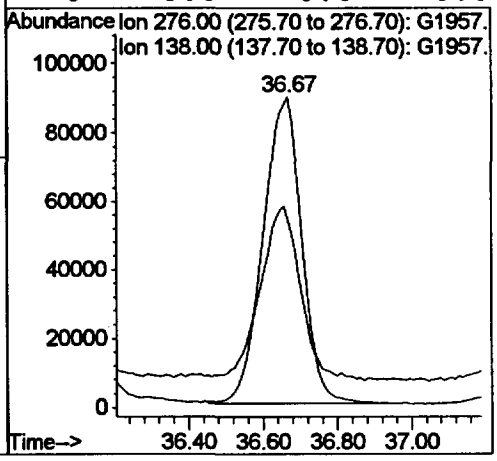




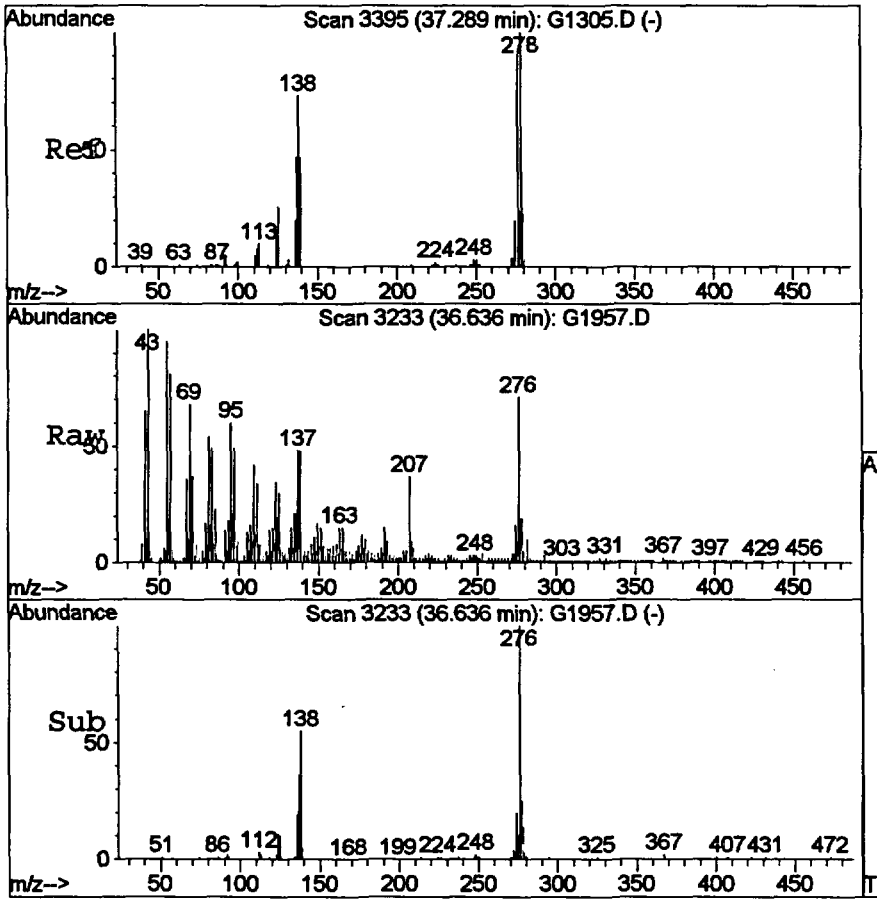
#76
Indeno(1,2,3-cd)pyrene
Concen: 46.09 ng
RT: 36.67 min / Scan# 3236
Delta R.T. 0.25 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:276 Resp: 643569

Ion	Ratio	Lower	Upper
276	100		
138	55.9	47.5	87.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

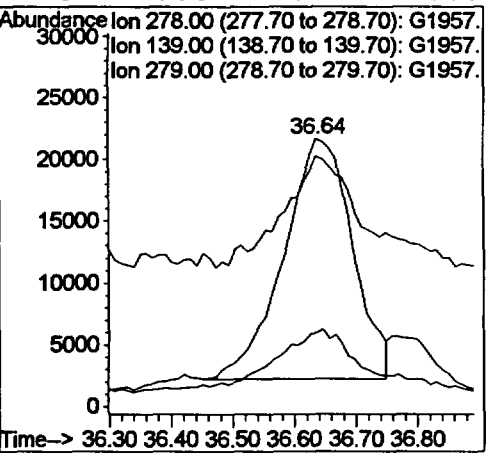


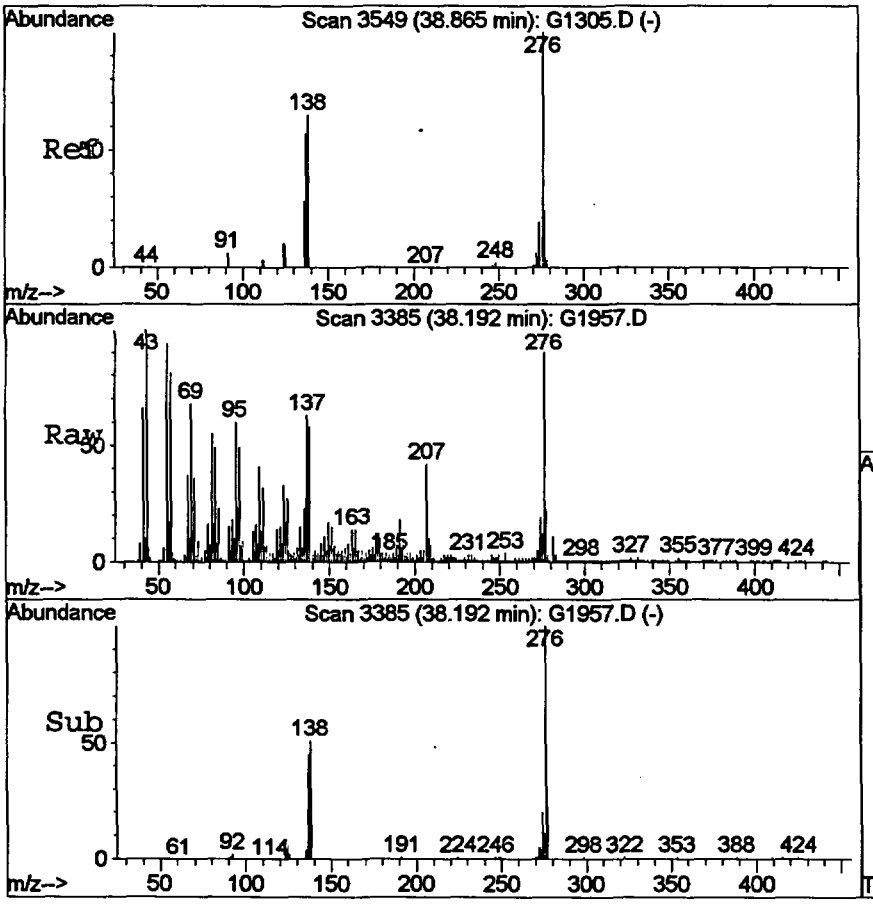
0553



#77
Dibenz(a,h)anthracene
Concen: 12.49 ng
RT: 36.64 min / Scan# 3233
Delta R.T. 0.21 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

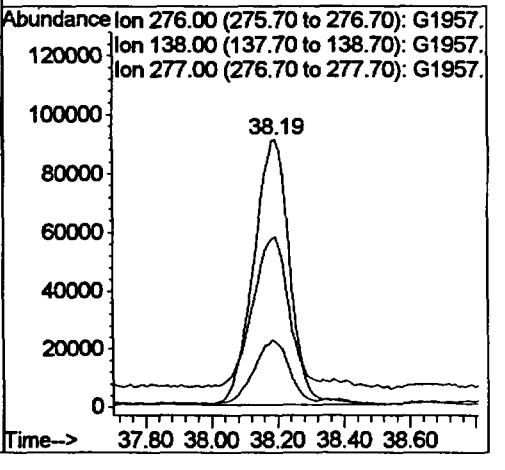
Tgt Ion:278	Resp:	150625	
Ion	Ratio	Lower	Upper
278	100		
139	51.2	21.5	61.5
279	35.4	3.9	43.9
0	0.0	0.0	0.0





#78
Benzo(g,h,i)perylene
Concen: 58.74 ng
RT: 38.19 min / Scan# 3385
Delta R.T. 0.28 min
Lab File: G1957.D
Acq: 22 Jan 98 23:13

Tgt Ion:276	Resp:	684487	
Ion	Ratio	Lower	Upper
276	100		
138	56.2	37.7	77.7
277	23.5	3.9	43.9
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:05 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	234138	40.00	ng		0.00
17) Naphthalene-d8	10.08	136	664992	40.00	ng		0.00
31) Acenaphthene-d10	16.29	164	315620	40.00	ng		0.00
51) Phenanthrene-d10	19.61	188	566019	40.00	ng		0.00
63) Chrysene-d12	25.42	240	361177	40.00	ng		0.06
71) Perylene-d12	31.61	264	482468	40.00	ng		0.15
System Monitoring Compounds							
2) 2-Fluorophenol	4.83	112	1021722	146.30	ng		0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery = 97.53%				
3) Phenol-d5	6.36	99	1368111	148.30	ng		0.02
Surrogate Spike 150.000	Range 24 - 113		Recovery = 98.87%				
7) 1,2-Dichlorobenzene-d4	7.43	152	404811	87.59	ng		0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 87.59%				
8) 2-Chlorophenol-d4	6.72	132	1024606	144.56	ng		0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 96.37%				
18) Nitrobenzene-d5	8.20	82	603063	102.09	ng		0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 102.09%				
35) 2-Fluorobiphenyl	14.28	172	970828	103.70	ng		0.02
Surrogate Spike 100.000	Range 30 - 115		Recovery = 103.70%				
52) 2,4,6-Tribromophenol	18.18	330	220092	156.35	ng		0.02
Surrogate Spike 150.000	Range 19 - 122		Recovery = 104.23%				
65) Terphenyl-d14	22.67	244	796613	106.76	ng		0.03
Surrogate Spike 100.000	Range 18 - 137		Recovery = 106.76%				
Target Compounds							Qvalue
4) Phenol	6.39	94	10784m	1.09	ng		0
42) Acenaphthene	16.37	153	14529m	1.77	ng		0
47) Diethylphthalate	17.36	149	16959	1.61	ng	#	60
48) Fluorene	17.58	166	13515m	1.47	ng		0
58) Phenanthrene	19.66	178	360661	25.91	ng		99
59) Anthracene	19.76	178	47575m	3.21	ng		100
60) Carbazole	20.07	167	61437	3.93	ng	#	61
61) Di-n-butylphthalate	20.69	149	24730	1.13	ng	#	79
62) Fluoranthene	22.04	202	856489	60.79	ng		96
64) Pyrene	22.49	202	730662	63.32	ng		94
67) Benzo(a)anthracene	25.35	228	238400m	25.83	ng		92
69) Chrysene	25.50	228	371810	42.27	ng		95
70) bis(2-Ethylhexyl)phthalate	25.06	149	90022	7.22	ng	#	87
72) Di-n-octylphthalate	27.18	149	34095m	1.07	ng		100
73) Benzo(b)fluoranthene	29.78	252	432416m	32.61	ng		76
74) Benzo(k)fluoranthene	29.84	252	564870m	44.76	ng		77
75) Benzo(a)pyrene	31.37	252	410765	33.89	ng		98

(#) = qualifier out of range (m) = manual integration 0555

Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40;S00501 Multiplr: 1.00
Quant Time: Jan 26 15:05 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
76)	Indeno(1,2,3-cd)pyrene	36.67	276	643569	46.09	ng	86
77)	Dibenz(a,h)anthracene	36.64	278	150625	12.49	ng	82
78)	Benzo(g,h,i)perylene	38.19	276	684487	58.74	ng	98

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

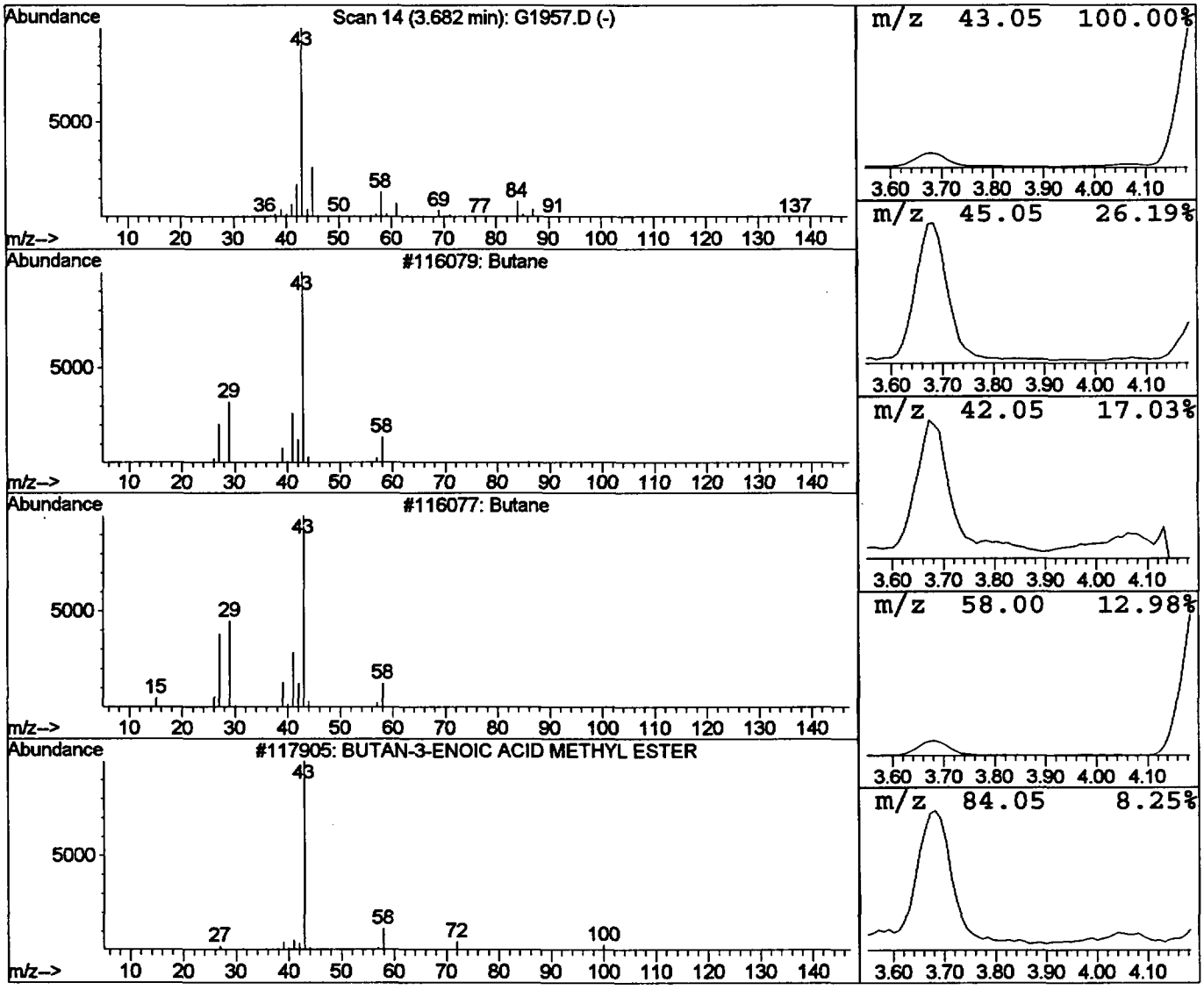
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 41 Butane UNKNOWN COMPOUND w.127-98 Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	49.22 ng	1641400	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	25
2	Butane	58	C4H10	000106-97-8	9
3	BUTAN-3-ENOIC ACID METHYL ESTER	100	C5H8O2	000000-00-0	9



0557

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

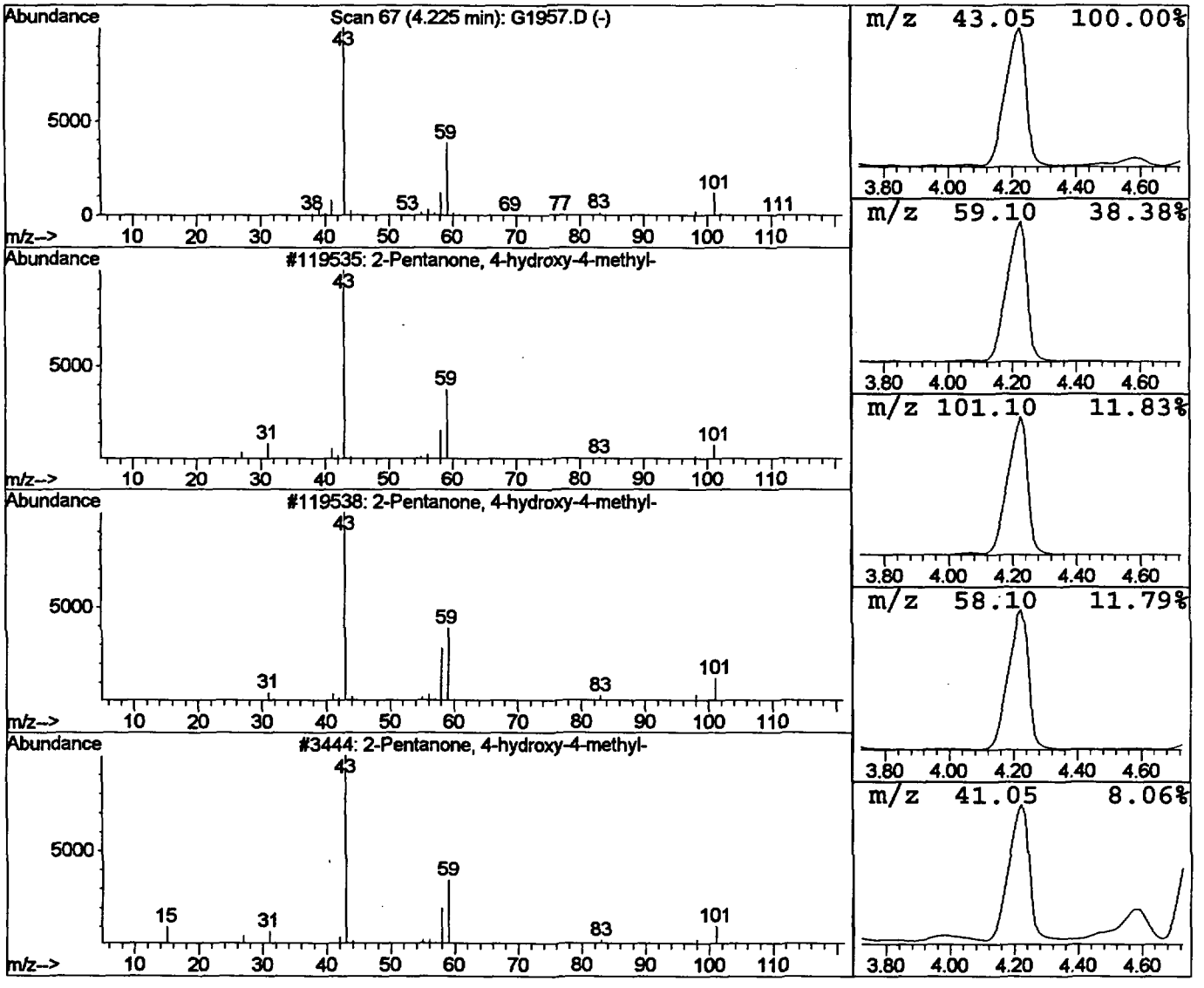
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.23	732.18 ng	24417800	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (A)	116	C6H12O2	000123-42-2	83
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50



0558

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

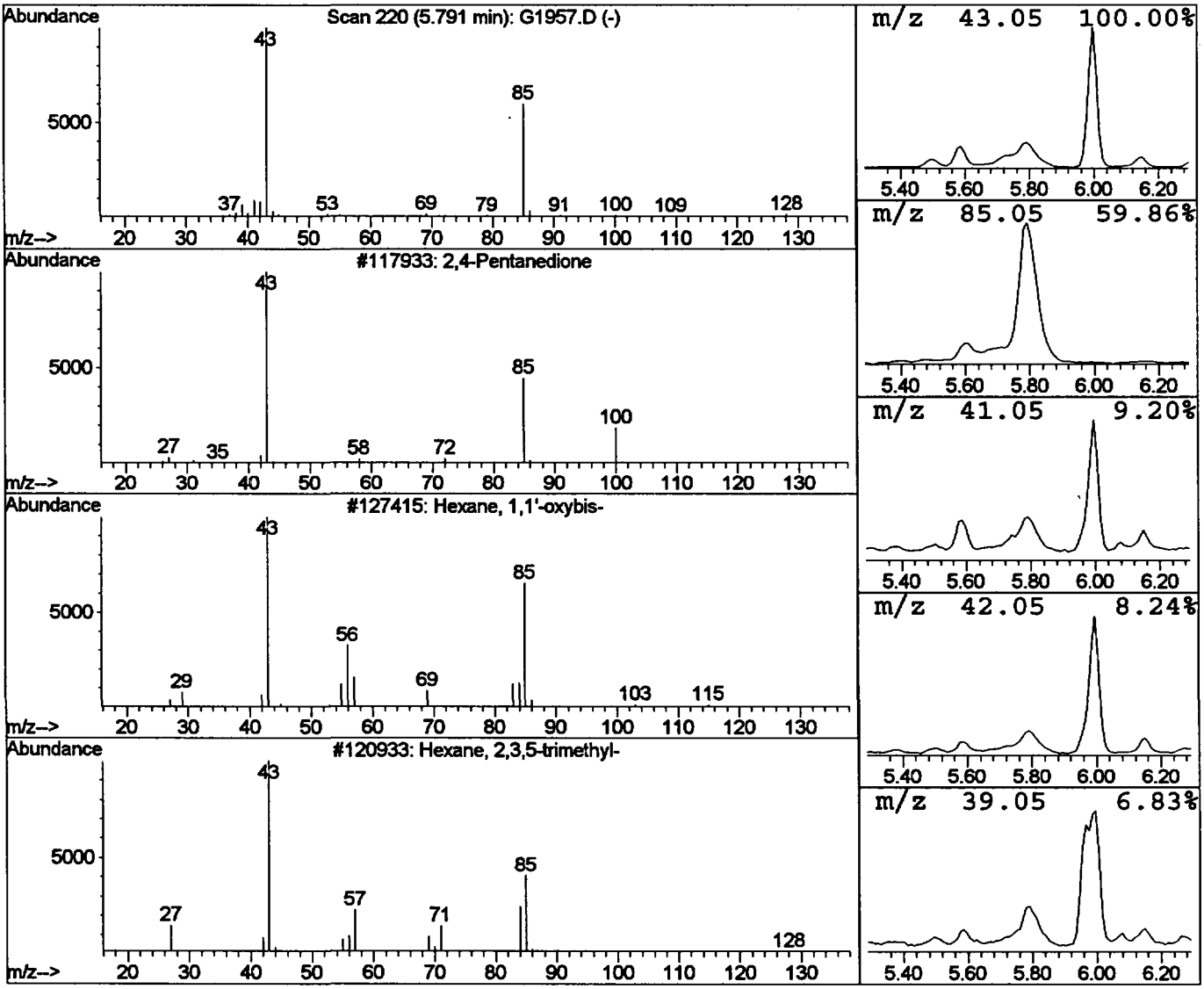
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 2,4-Pentanedione UNKNOWN COMPOUND 1-27-98 Concentration Rank 31

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.79	39.86 ng	1329180	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	39
2	Hexane, 1,1'-oxybis-	186	C12H26O	000112-58-3	39
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	28



0559

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

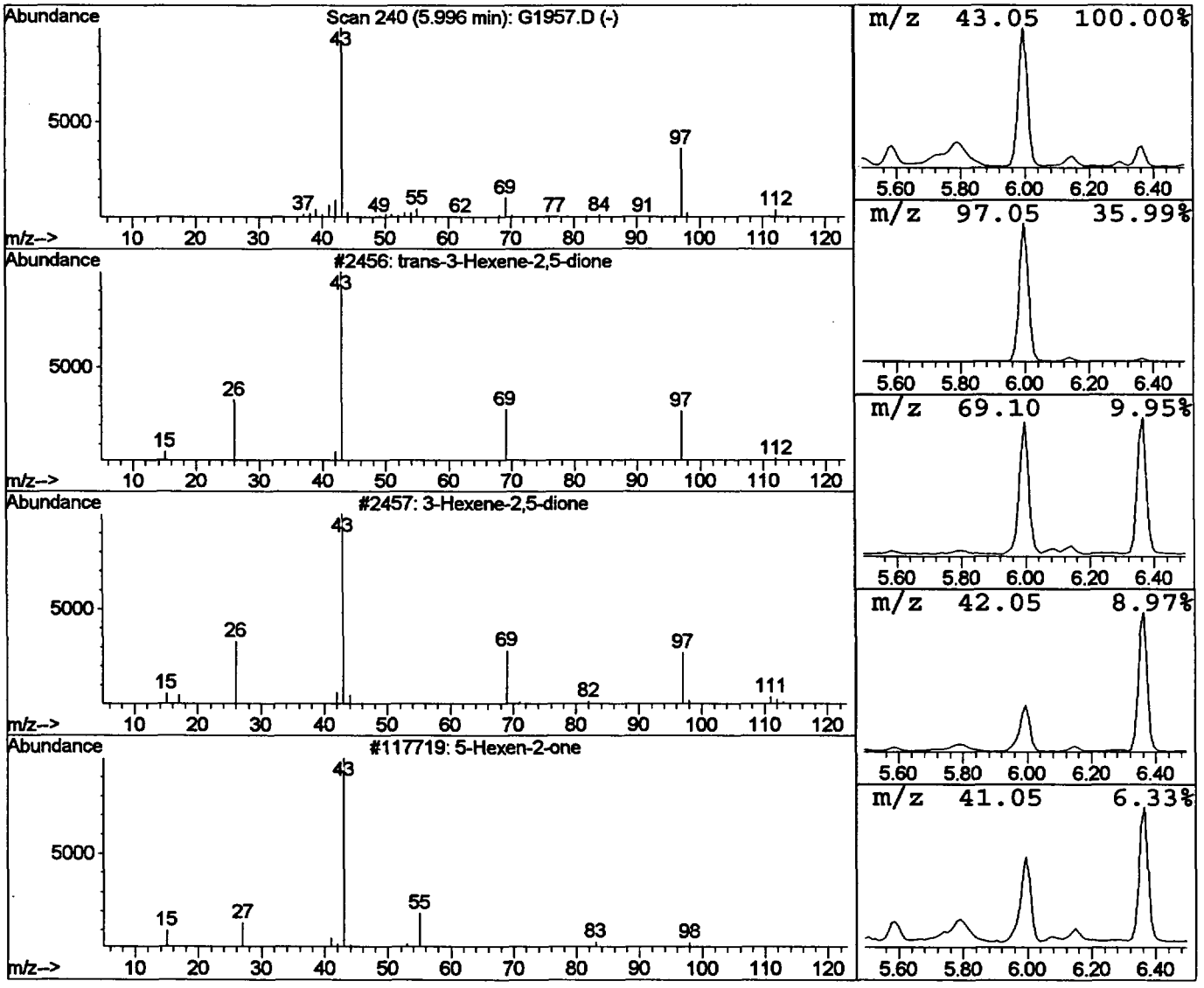
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 trans-3-Hexene-2,5-dione Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.00	88.84 ng	2962740	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
2	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	42
3	5-Hexen-2-one	98	C6H10O	000109-49-9	9



0560

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

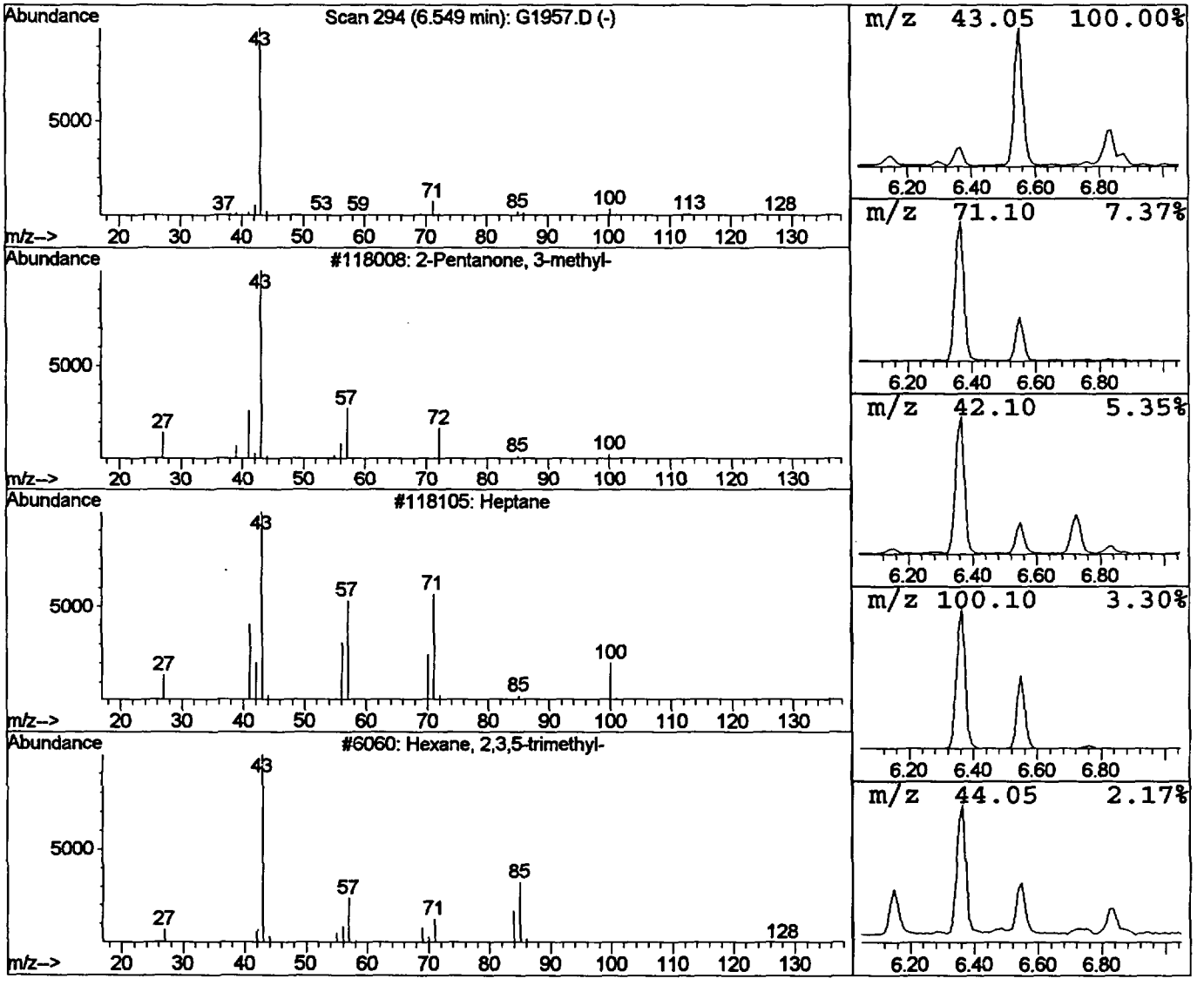
****

Peak Number 4 2-Pentanone, 3-methyl- Concentration Rank 21

UNKNOWN COMPOUND 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.55	57.22 ng	1908300	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	Heptane	100	C7H16	000142-82-5	7
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	7



0561

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

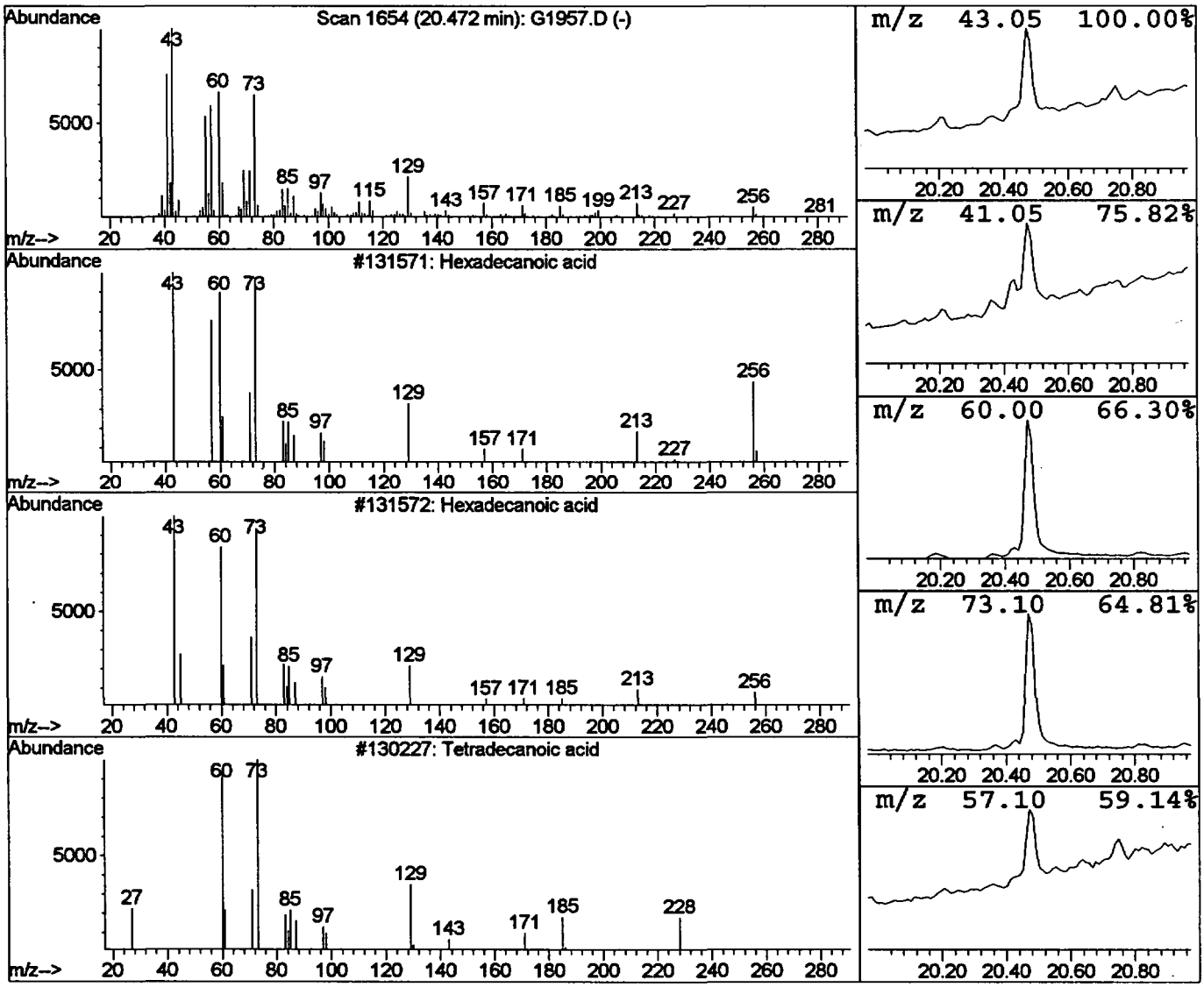
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 Hexadecanoic acid Concentration Rank 35

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.47	38.42 ng	1504290	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid	256	C16H32O2	000057-10-3	97
2	Hexadecanoic acid	256	C16H32O2	000057-10-3	93
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	91



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

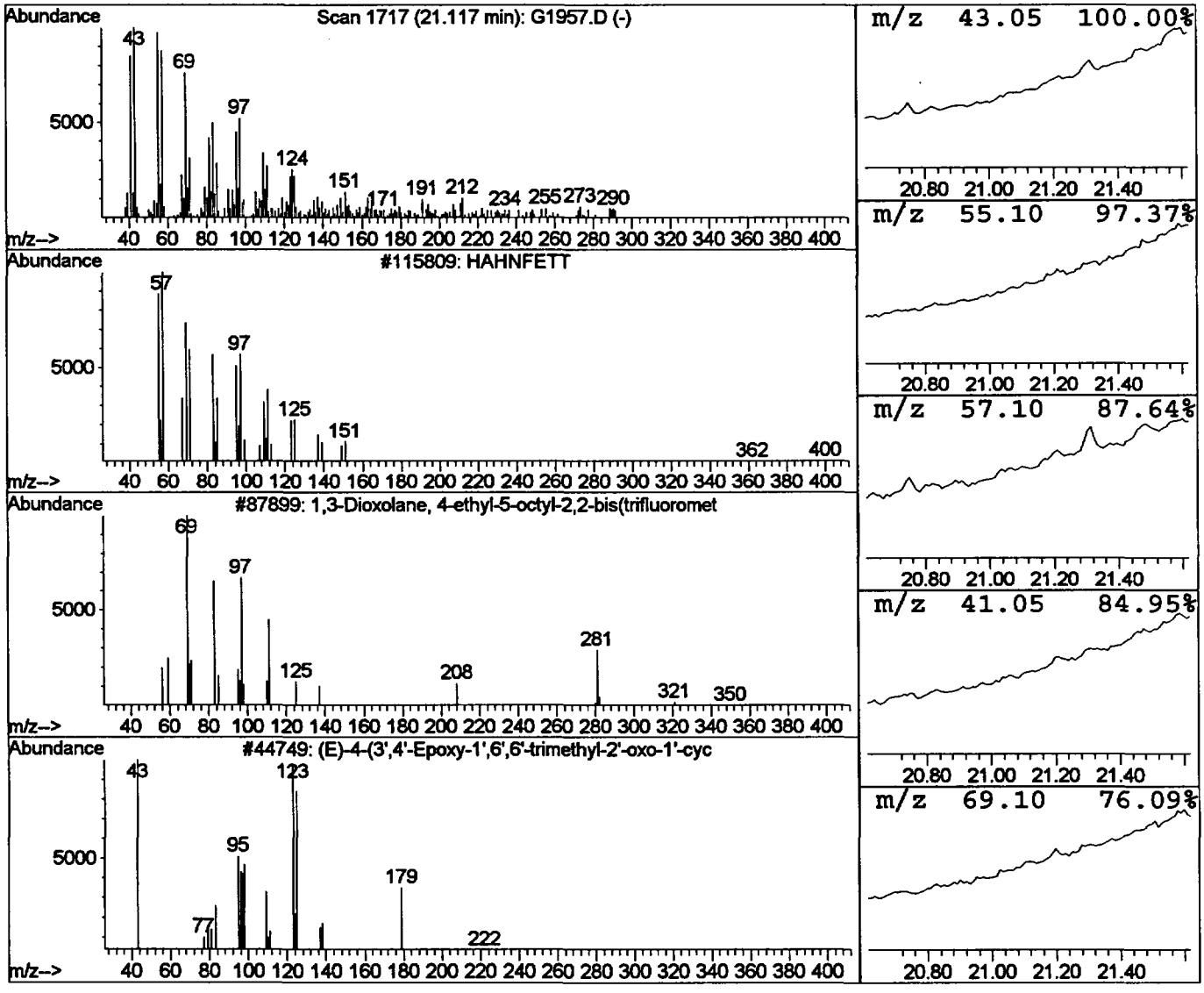
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 6 HAHNFETT UNKNOWN COMPOUND 01-27-98 Concentration Rank 34

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.12	39.20 ng	1534520	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	HAHNFETT	9999		000000-00-0	74
2	1,3-Dioxolane, 4-ethyl-5-octyl-2,2-	350	C15H24F6O2	038274-73-6	46
3	(E)-4-(3',4'-Epoxy-1',6',6'-trimeth	222	C13H18O3	080114-26-7	41



0563

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

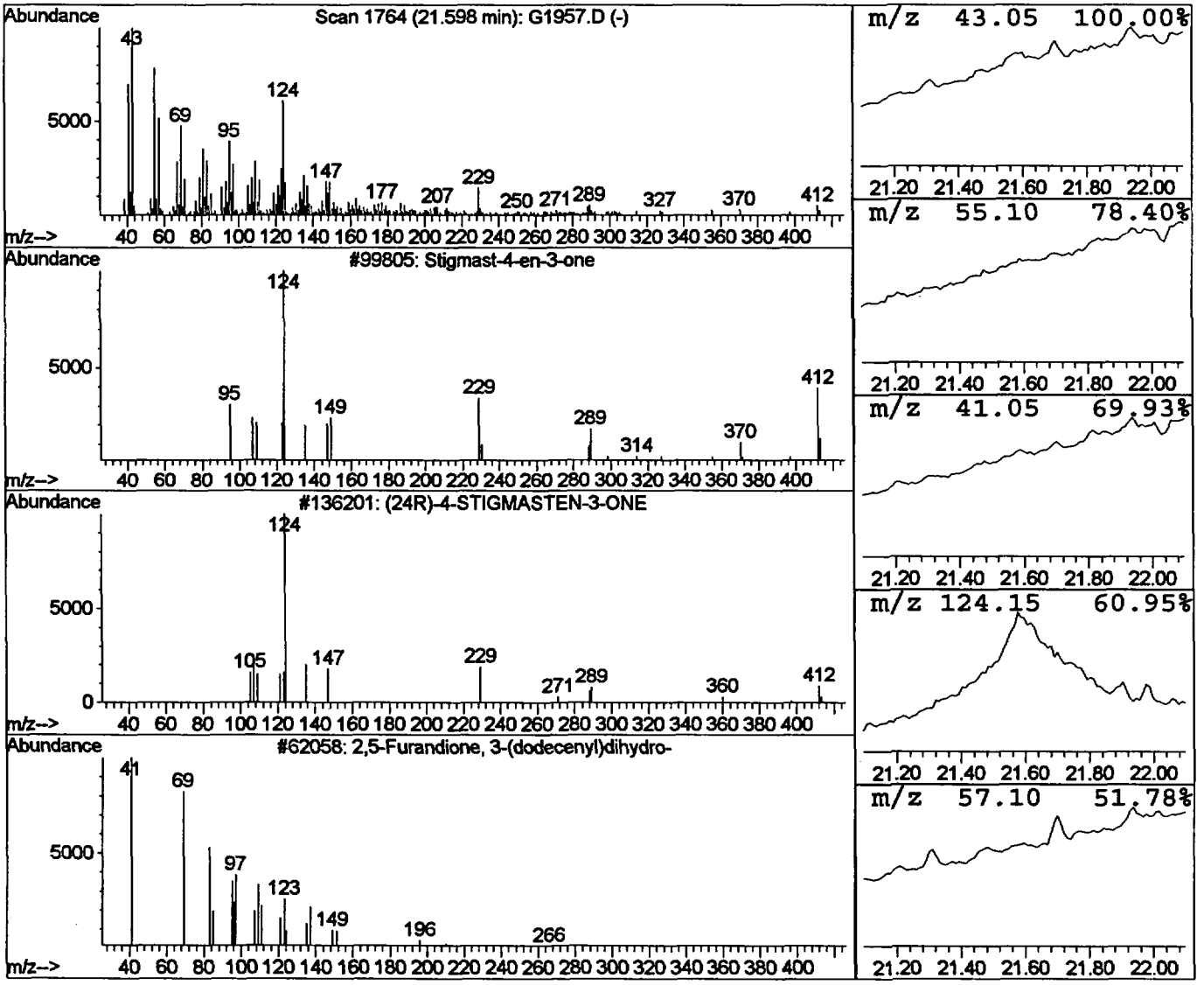
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 7 Stigmast-4-en-3-one Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.60	133.26 ng	5217190	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	55
2	(24R)-4-STIGMASTEN-3-ONE	412	C29H48O	001058-61-3	52
3	2,5-Furandione, 3-(dodecenyl)dihydr	266	C16H26O3	025377-73-5	51



0564

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

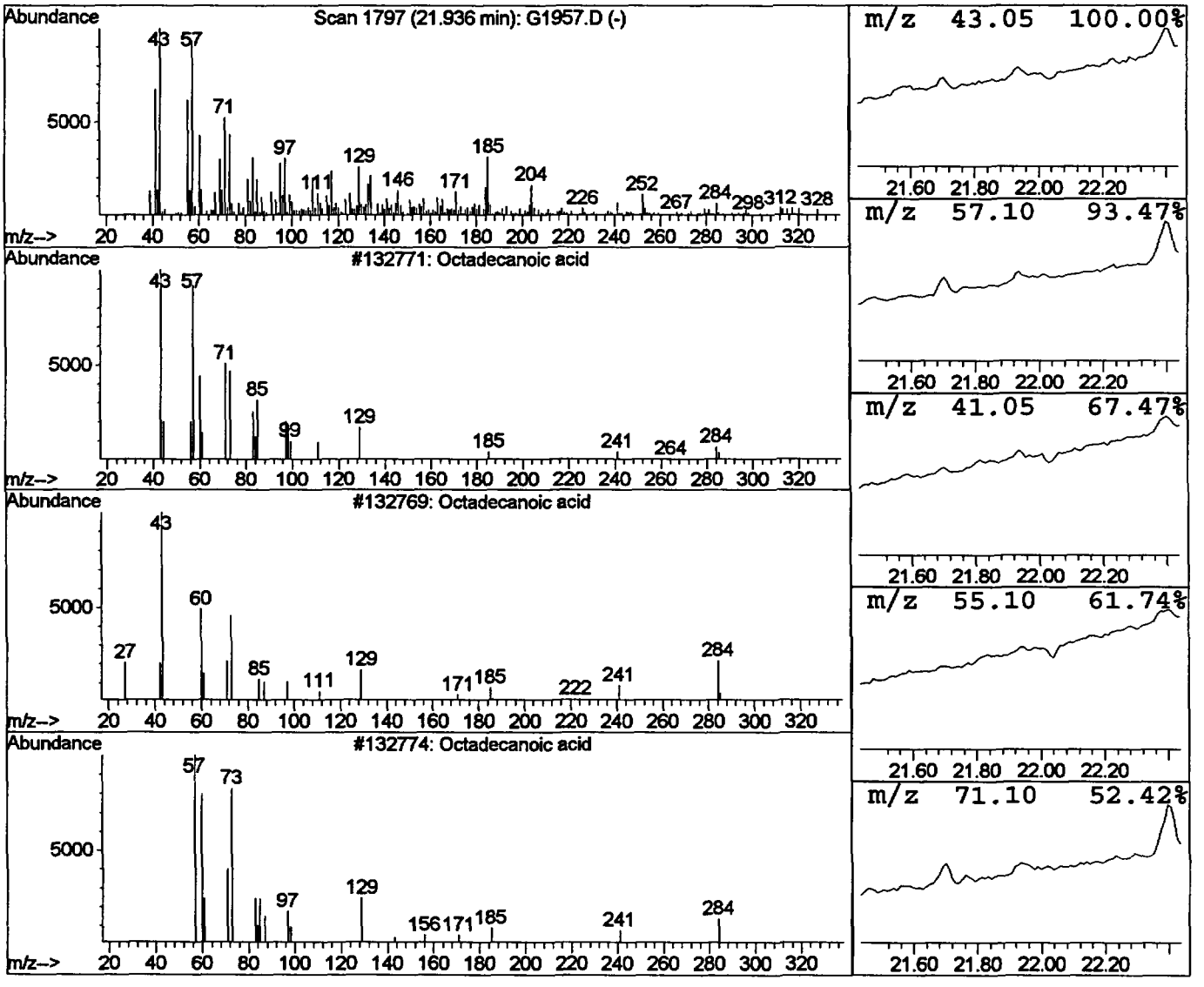
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 8 Octadecanoic acid Concentration Rank 41

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.94	24.51 ng	959462	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	44
2	Octadecanoic acid	284	C18H36O2	000057-11-4	38
3	Octadecanoic acid	284	C18H36O2	000057-11-4	18



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

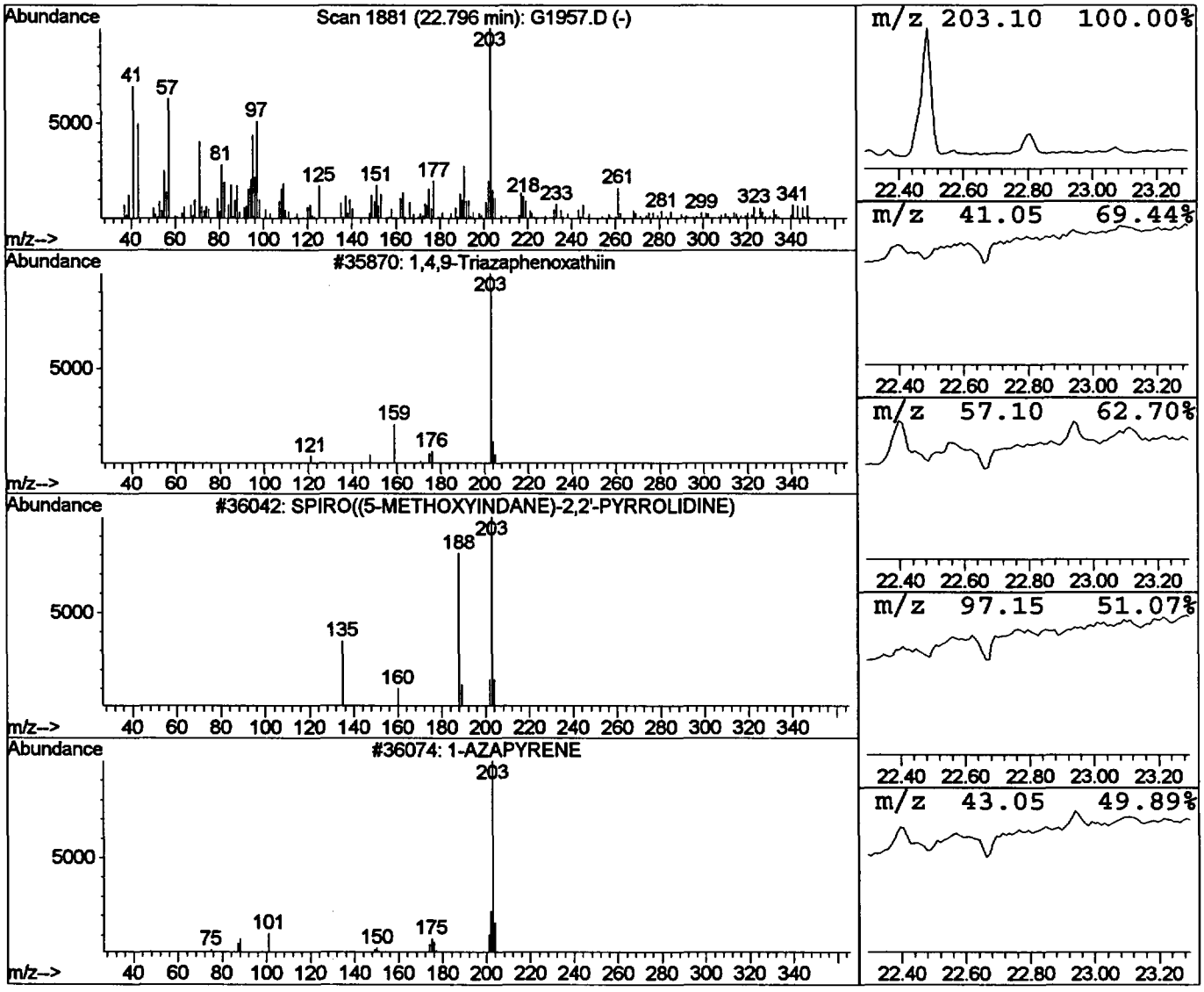
****

Peak Number 9 1,4,9-Triazaphenoxathiin Concentration Rank 24

UNKNOWN COMPOUND 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.80	49.73 ng	465559	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,4,9-Triazaphenoxathiin	203	C9H5N3OS	088078-85-7	32
2	SPIRO((5-METHOXYINDANE)-2,2'-PYRROL	203	C13H17NO	073304-99-1	28
3	1-AZAPYRENE	203	C15H9N	000000-00-0	25



0566

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

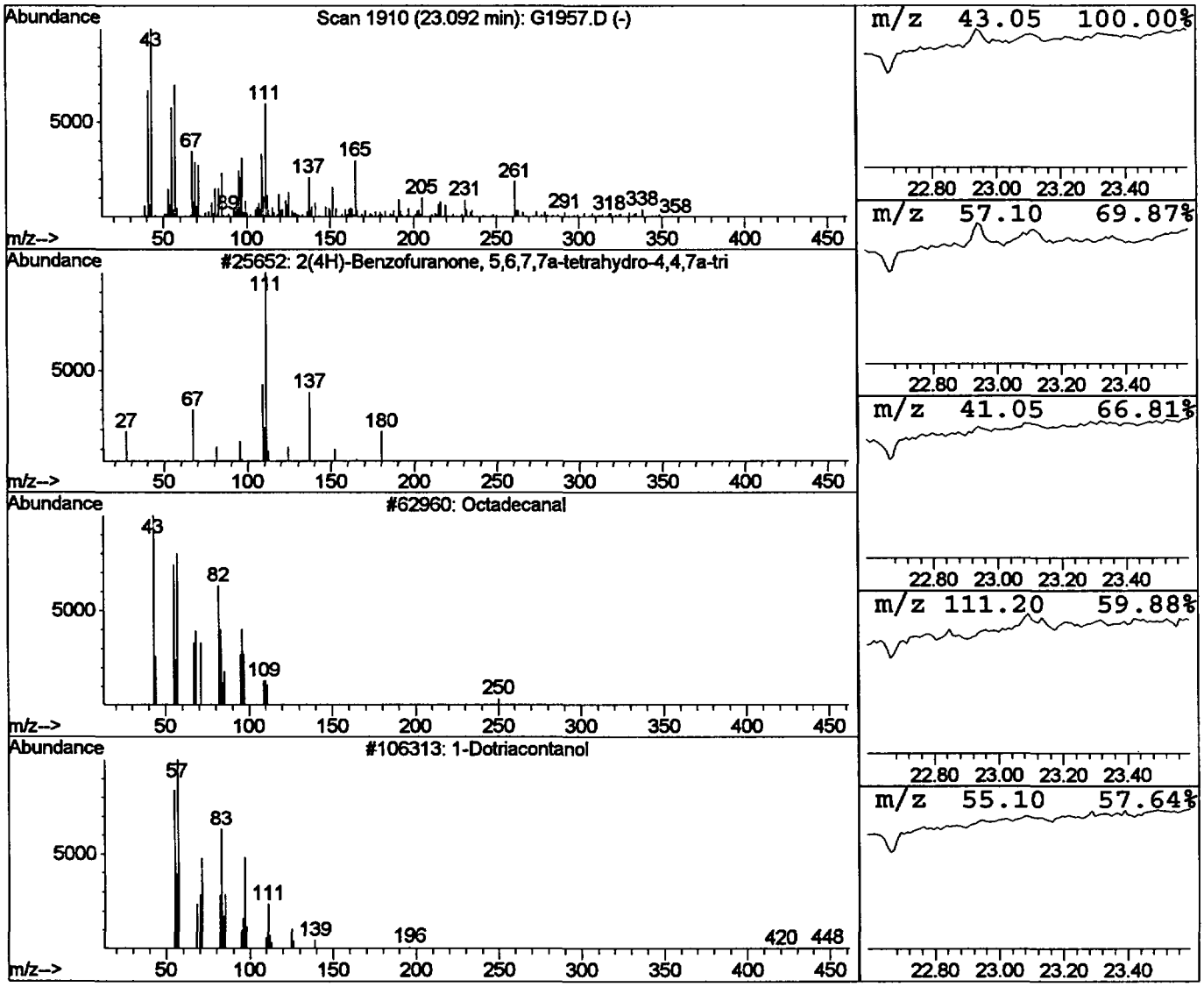
****

Peak Number 10 2(4H)-Benzofuranone, 5,6,7,7a- Concentration Rank 36

UNKNOWN COMPOUND cw 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.09	37.75 ng	353400	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2(4H)-Benzofuranone, 5,6,7,7a-tetra	180	C11H16O2	015356-74-8	35
2	Octadecanal	268	C18H36O	000638-66-4	18
3	1-Dotriacontanol	467	C32H66O	006624-79-9	14



0567

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

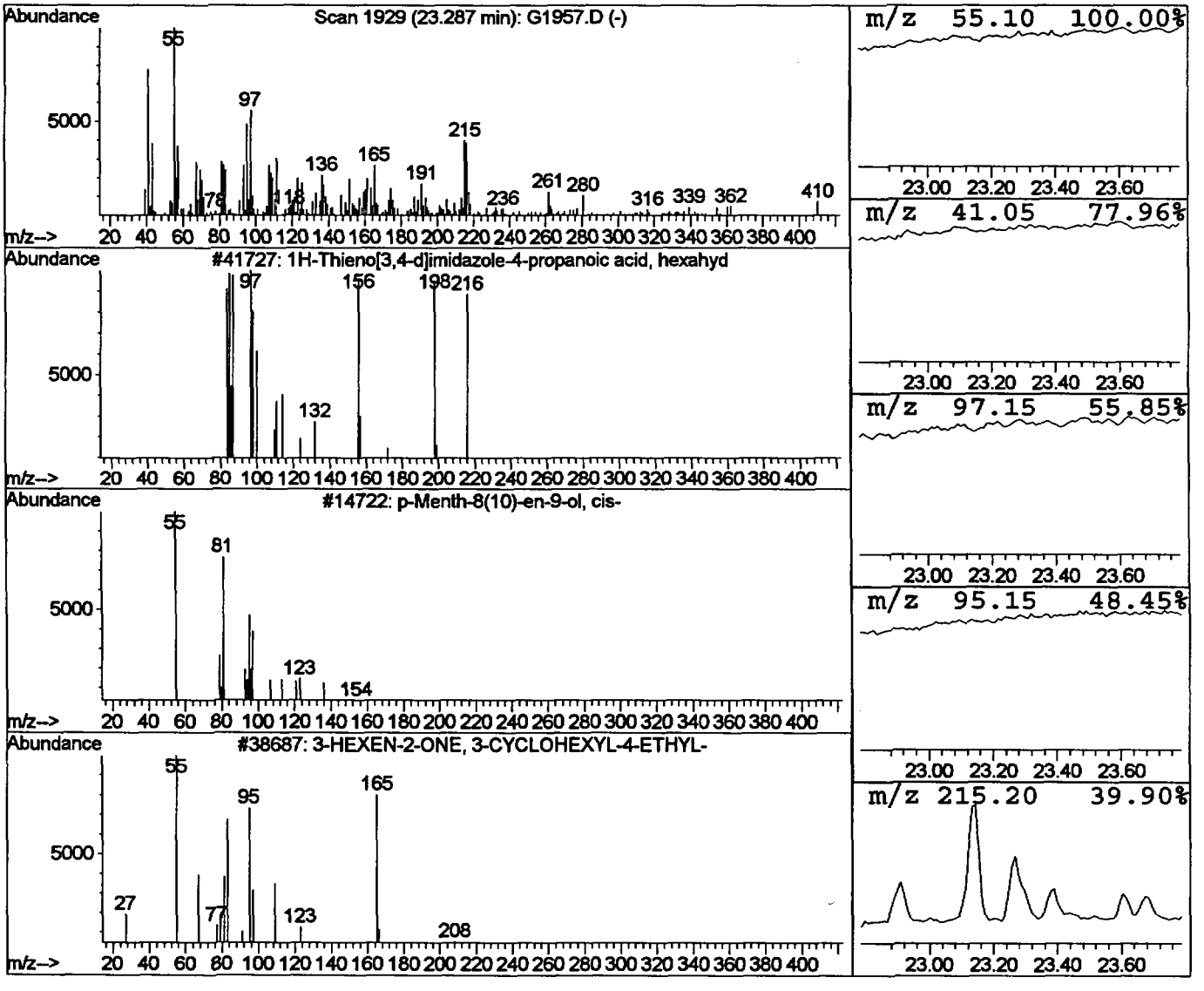
****

Peak Number 11 1H-Thieno[3,4-d]imidazole-4-pr Concentration Rank 18

UNKNOWN COMPOUND vol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.29	69.98 ng	655165	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1H-Thieno[3,4-d]imidazole-4-propano	216	C8H12N2O3S	016968-98-2	38
2	p-Menth-8(10)-en-9-ol, cis-	154	C10H18O	015714-13-3	22
3	3-HEXEN-2-ONE, 3-CYCLOHEXYL-4-ETHYL	208	C14H24O	000000-00-0	20



0568

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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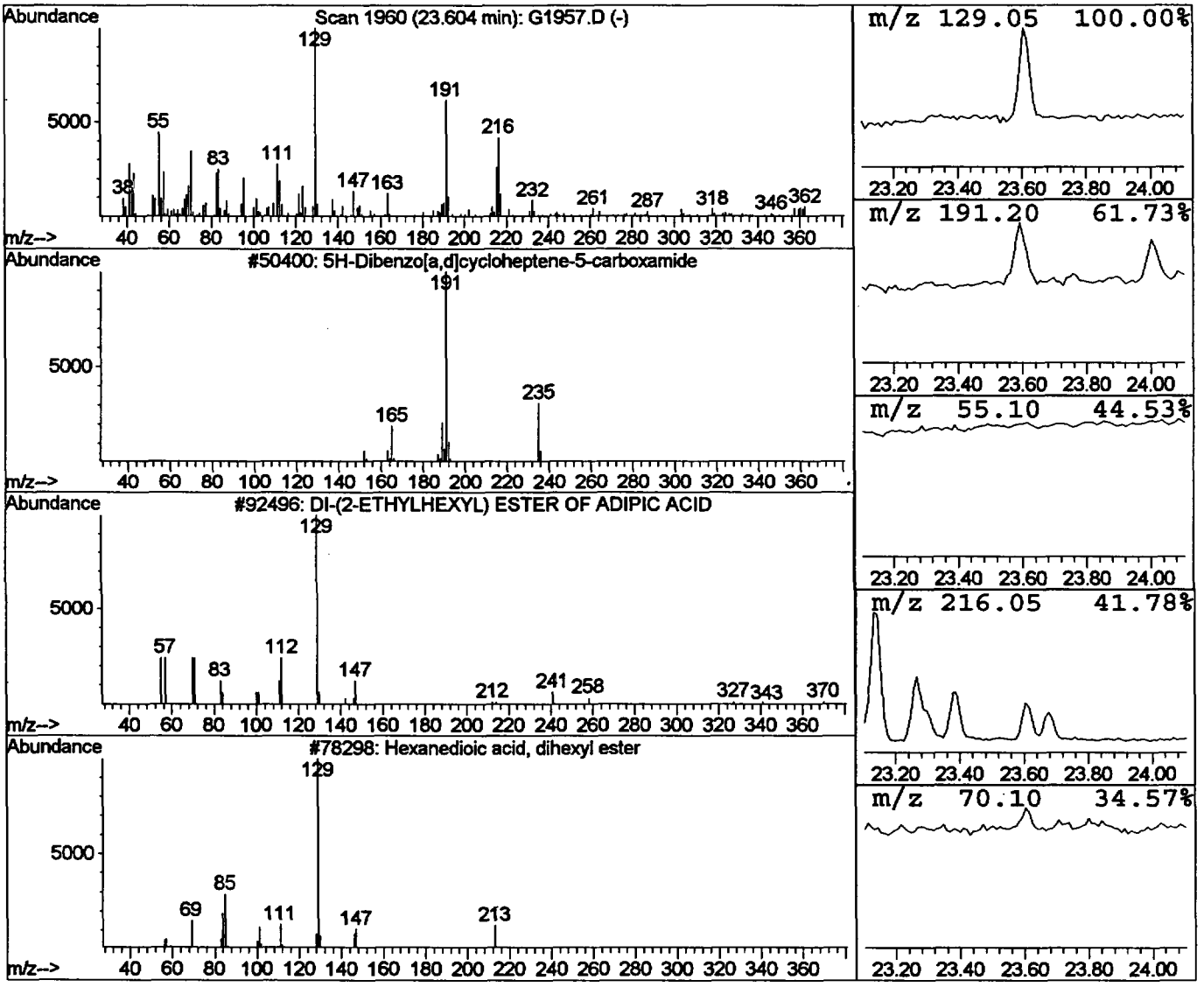
Peak Number 12 5H-Dibenzo[a,d]cycloheptene-5- Concentration Rank 27

UNKNOWN COMPOUND m01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.60	42.84 ng	401134	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5H-Dibenzo[a,d]cycloheptene-5-carbo	235	C16H13NO	010423-37-7	16
2	DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	12
3	Hexanedioic acid, dihexyl ester	314	C18H34O4	000110-33-8	12



0569

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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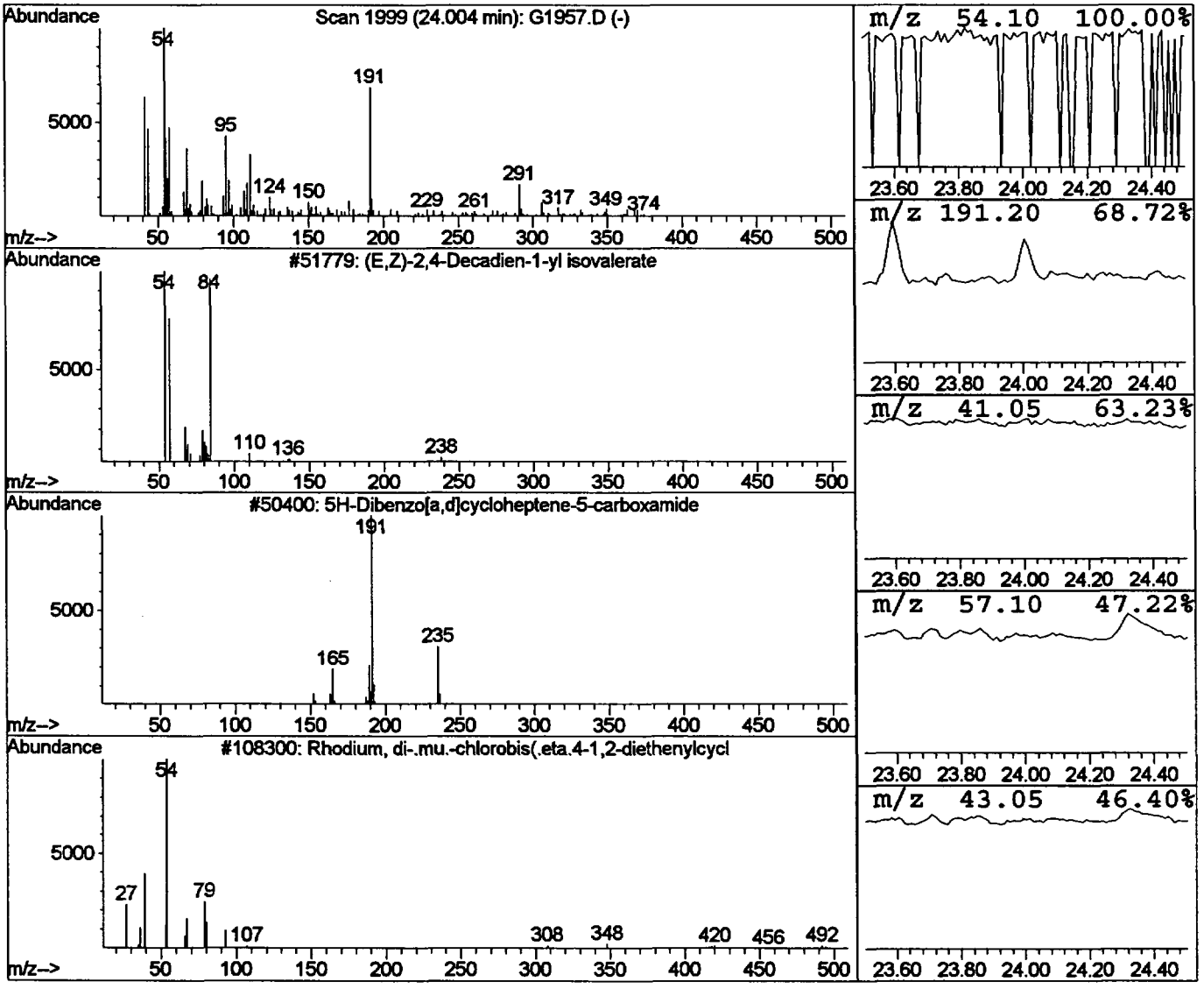
Peak Number 13 (E,Z)-2,4-Decadien-1-yl isoval Concentration Rank 23

UNKNOWN COMPOUND uc 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.00	54.16 ng	507103	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	(E,Z)-2,4-Decadien-1-yl isovalerate	238	C15H26O2	056699-32-2	42
2	5H-Dibenzo[a,d]cycloheptene-5-carbo	235	C16H13NO	010423-37-7	38
3	Rhodium, di-.mu.-chlorobis(.eta.4-1	492	C16H24Cl2Rh2	074825-26-6	36



0570

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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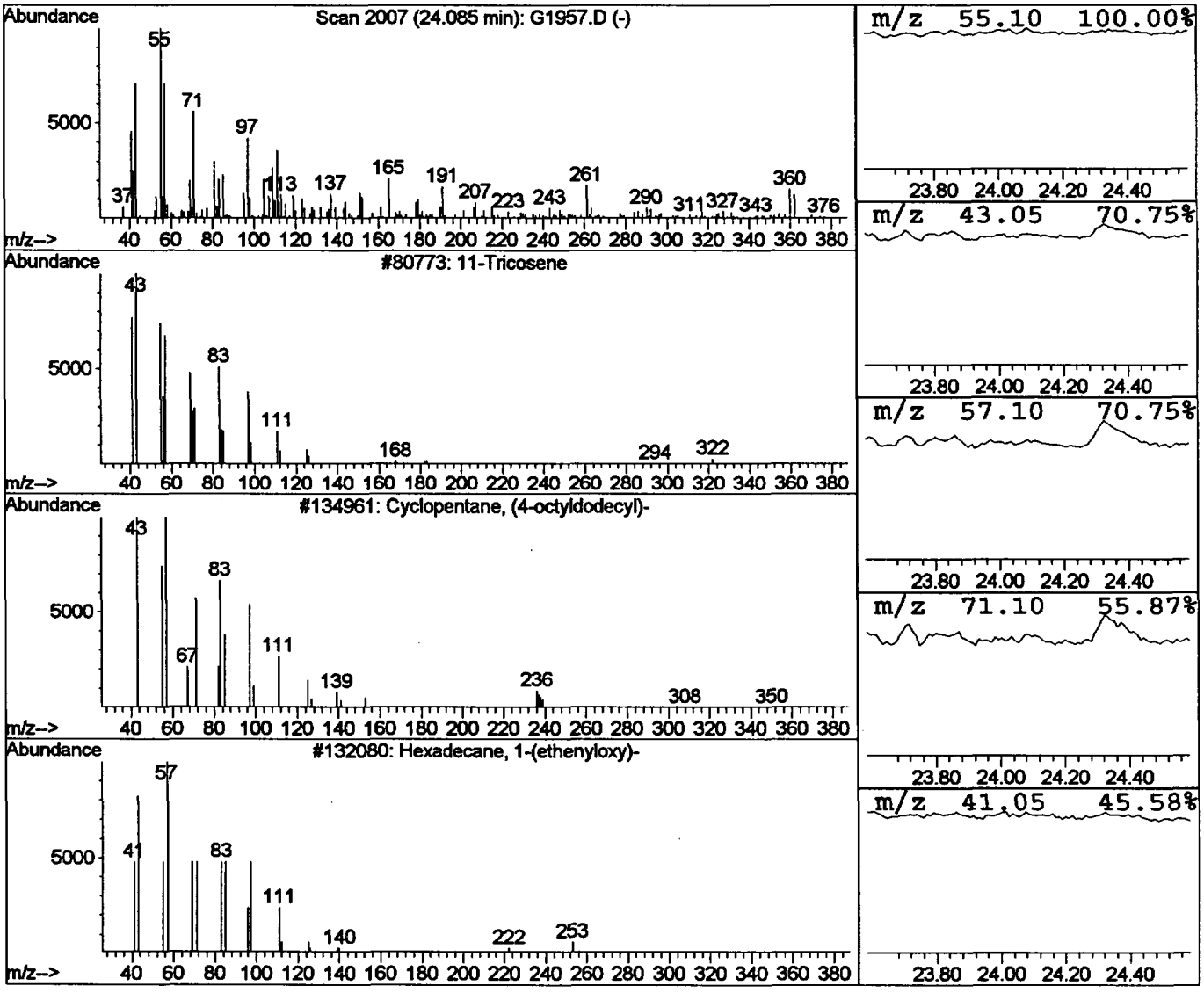
Peak Number 14 11-Tricosene UNKNOWN COMPOUND 01-27-98 Concentration Rank 38

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.09	33.26 ng	311354	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	11-Tricosene	322	C23H46	052078-56-5	25
2	Cyclopentane, (4-octyldodecyl)-	350	C25H50	005638-09-5	25
3	Hexadecane, 1-(ethenyloxy)-	268	C18H36O	000822-28-6	23



0571

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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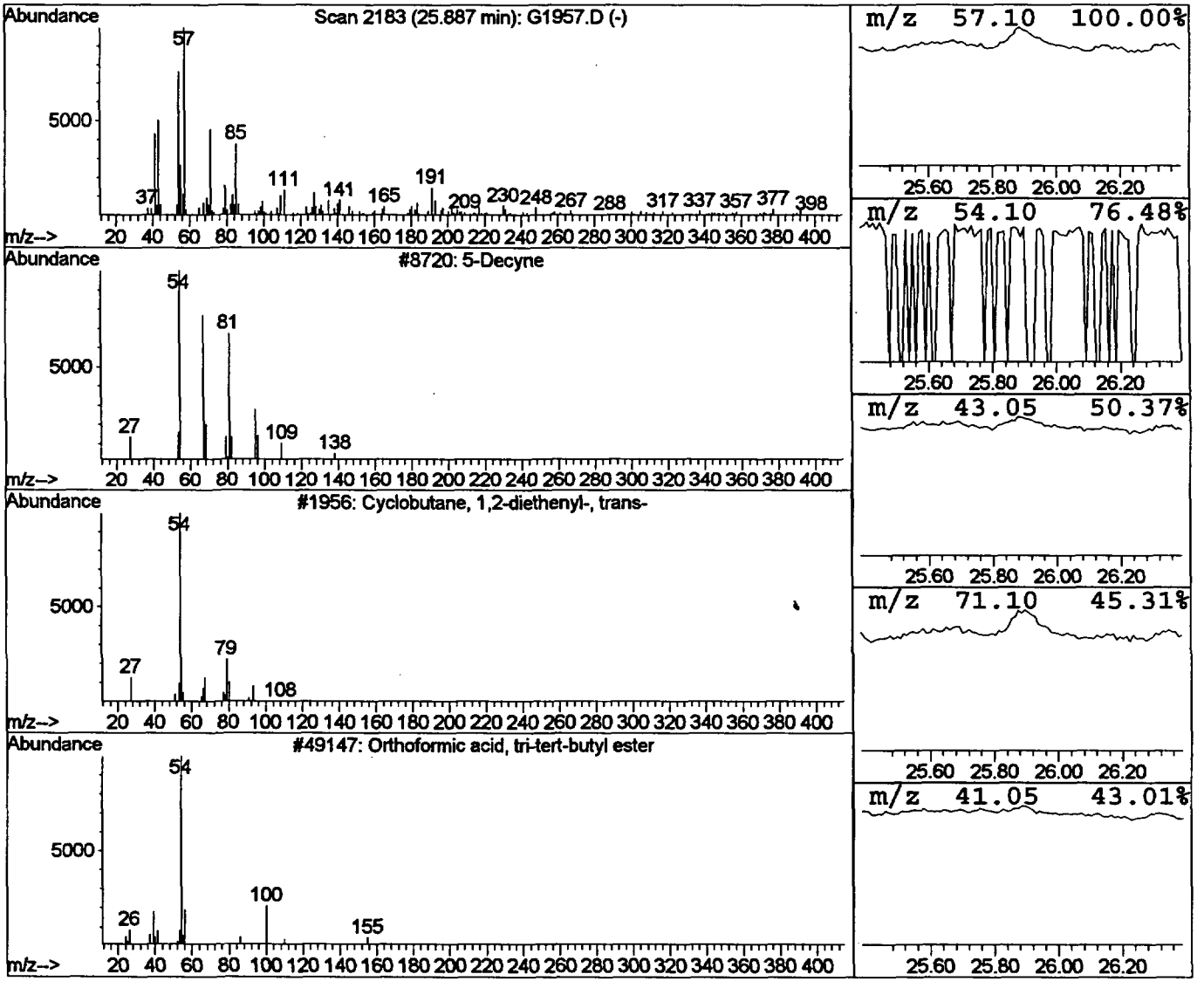
Peak Number 15 5-Decyne UNKNOWN COMPOUND Concentration Rank 16

Lee 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
25.89	84.83 ng	794223	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Decyne	138	C10H18	001942-46-7	45
2	Cyclobutane, 1,2-diethenyl-, trans-	108	C8H12	006553-48-6	45
3	Orthoformic acid, tri-tert-butyl es	232	C13H28O3	021372-83-8	45



0572

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

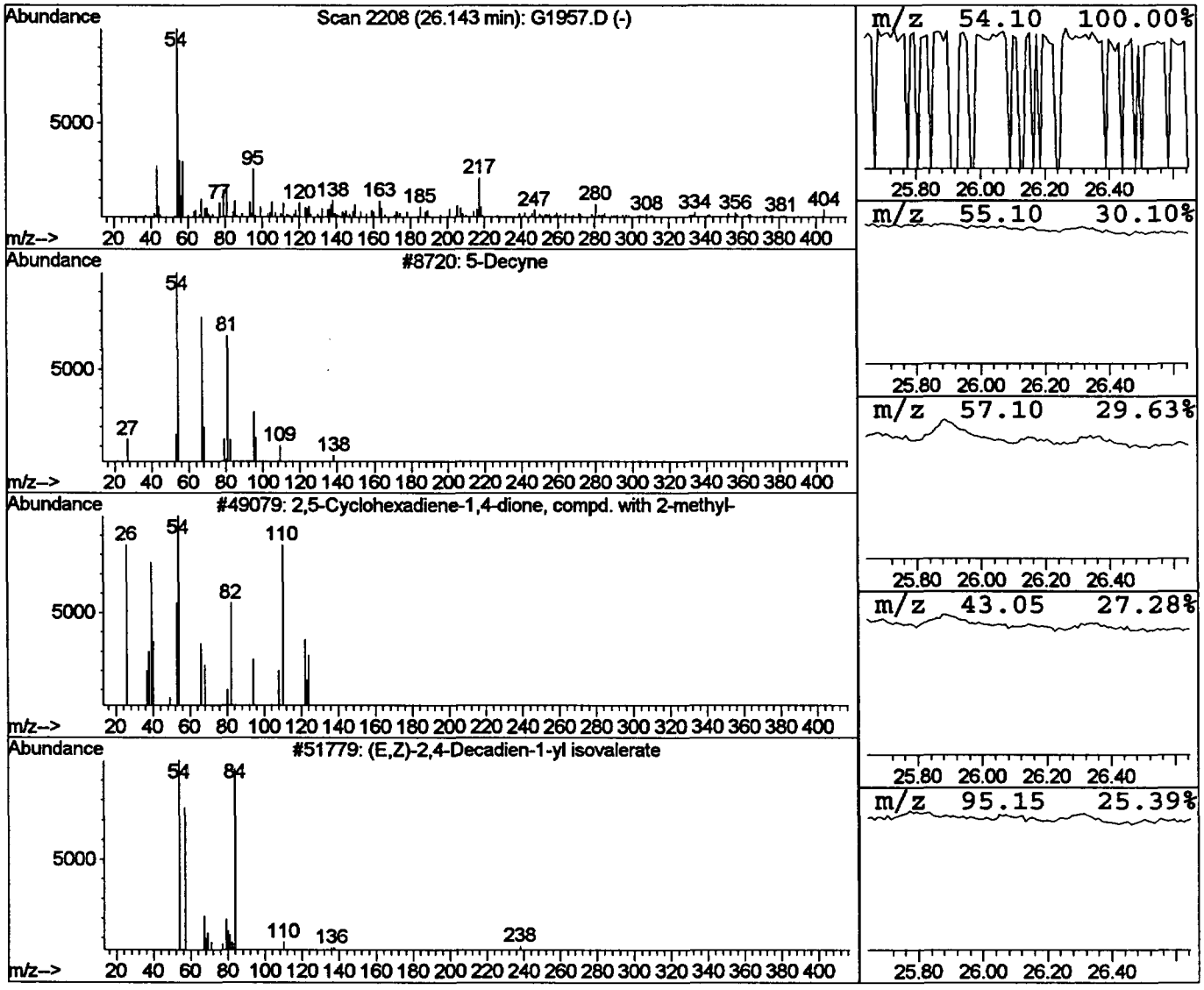
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 16 5-Decyne UNKNOWN COMPOUND clo(-27-97 Concentration Rank 37

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.14	34.76 ng	325403	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Decyne	138	C10H18	001942-46-7	72
2	2,5-Cyclohexadiene-1,4-dione, compd	232	C13H12O4	055836-33-4	64
3	(E,Z)-2,4-Decadien-1-yl isovalerate	238	C15H26O2	056699-32-2	50



0573

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

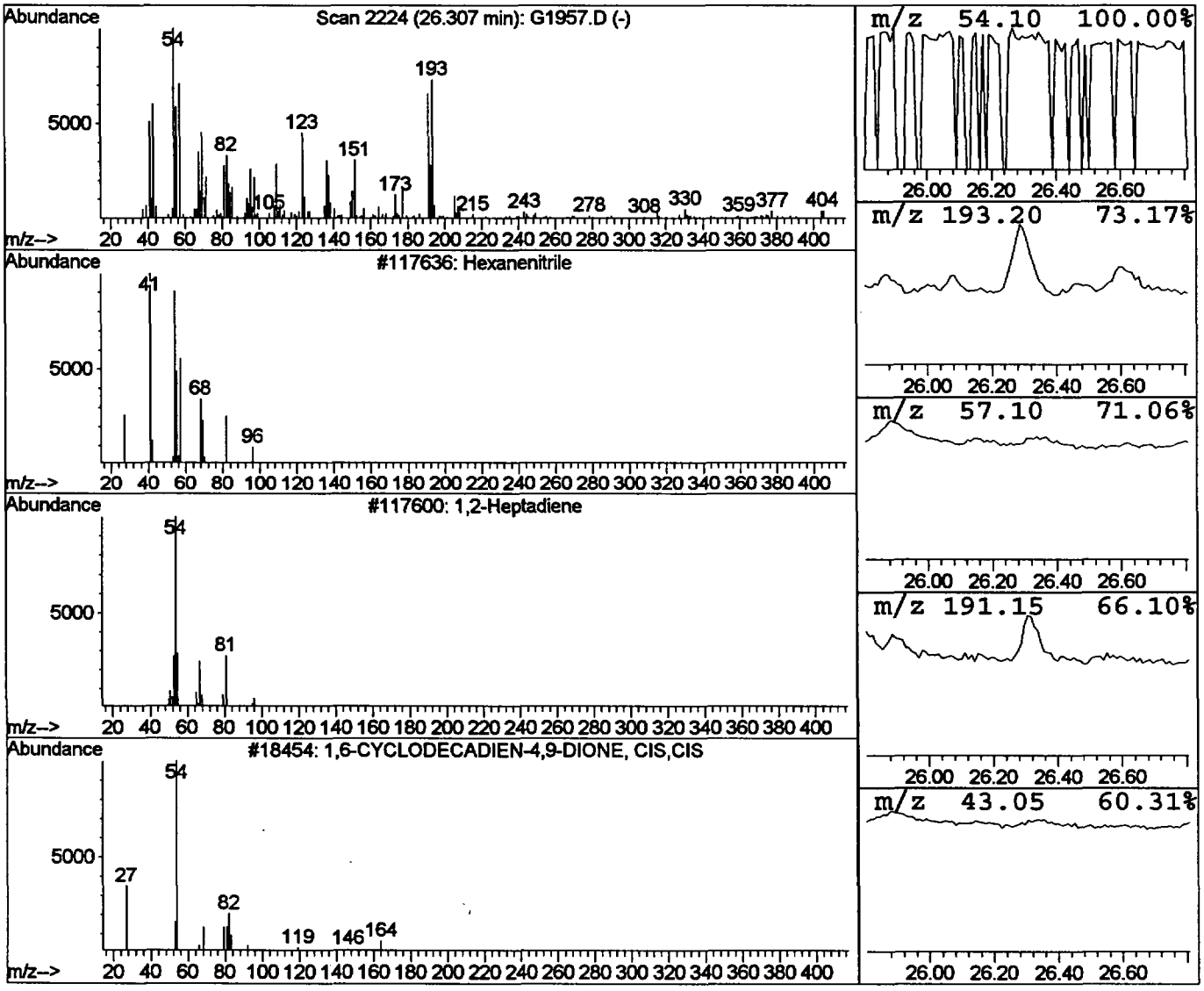
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 17 Hexanenitrile UNKNOWN COMPOUND Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.31	166.11 ng	1555210	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanenitrile	97	C6H11N	000628-73-9	43
2	1,2-Heptadiene	96	C7H12	002384-90-9	43
3	1,6-CYCLODECADIEN-4,9-DIONE, CIS,CI	164	C10H12O2	000000-00-0	37



0574

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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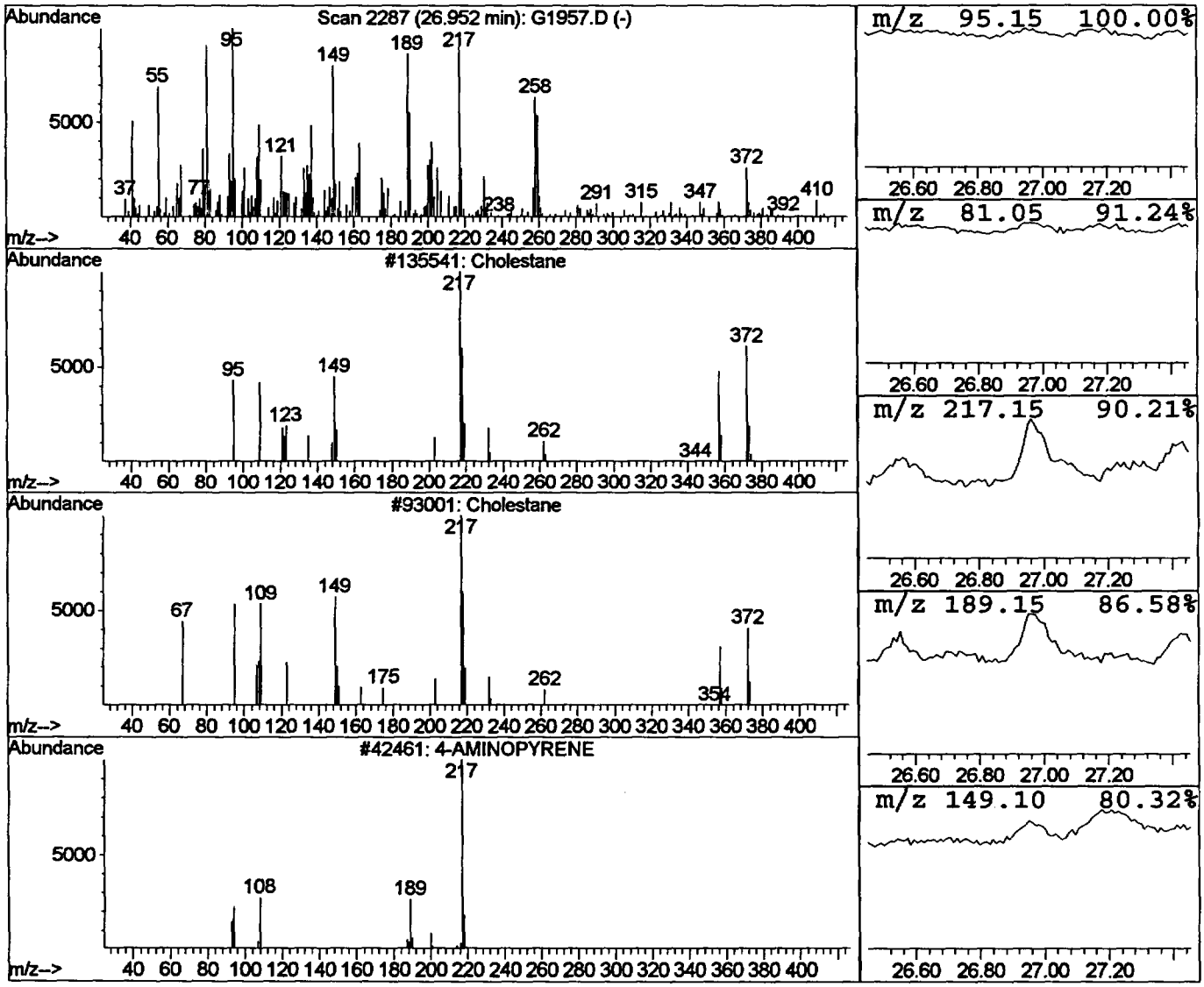
Peak Number 18 Cholestane UNKNOWN COMPOUND Concentration Rank 17

1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.95	77.48 ng	725423	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholestane	372	C27H48	000481-21-0	38
2	Cholestane	372	C27H48	000481-21-0	25
3	4-AMINOPYRENE	217	C16H11N	000000-00-0	18



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

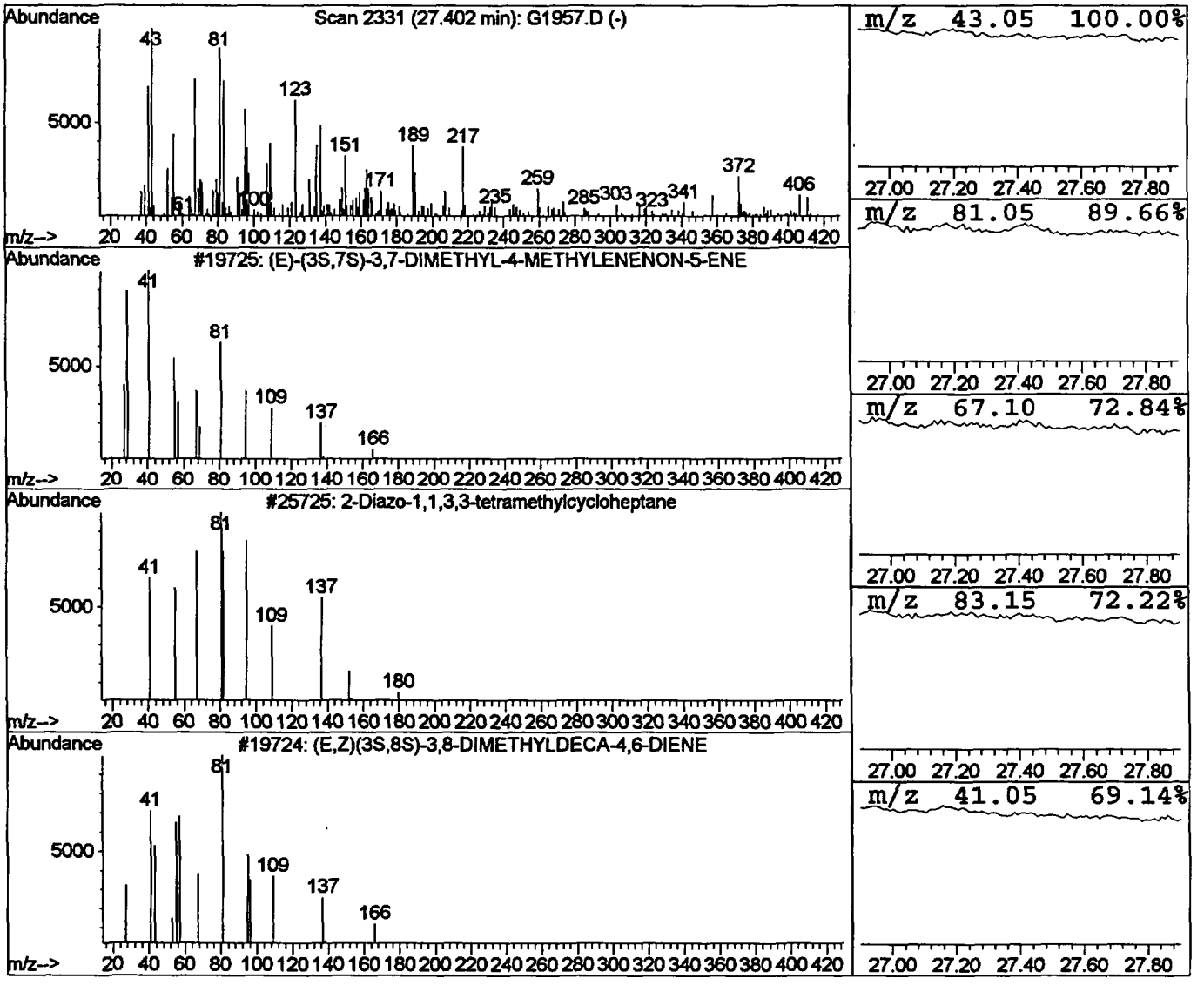
****

Peak Number 19 (E)-(3S,7S)-3,7-DIMETHYL-4-MET Concentration Rank 28

UNKNOWN COMPOUND vo1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.40	42.47 ng	397592	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	(E)-(3S,7S)-3,7-DIMETHYL-4-METHYLEN	166	C12H22	064247-46-7	35
2	2-Diazo-1,1,3,3-tetramethylcyclohep	180	C11H20N2	000000-00-0	32
3	(E,Z)(3S,8S)-3,8-DIMETHYLDECA-4,6-D	166	C12H22	065604-61-7	25



0576

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

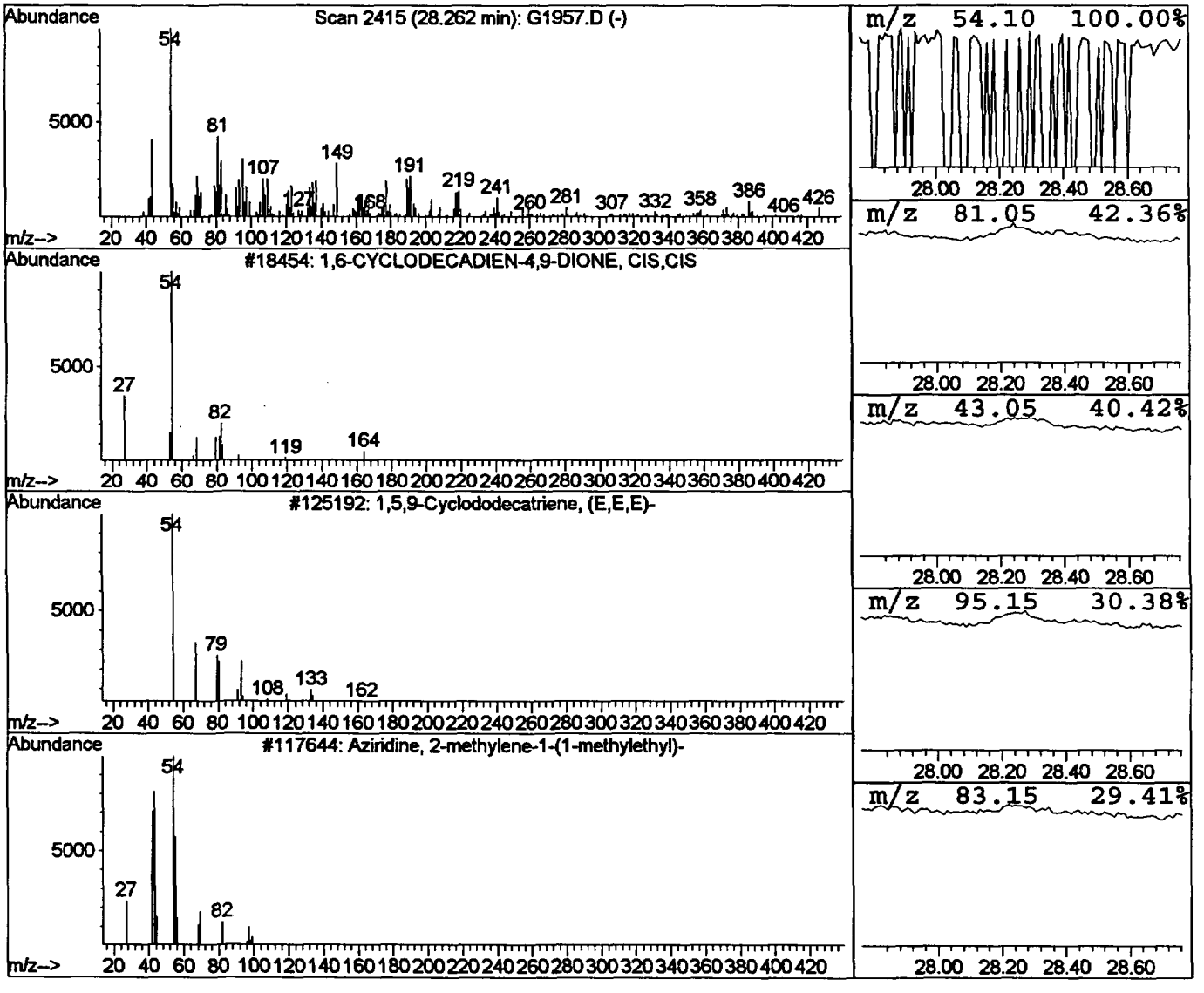
****

Peak Number 20 1,6-CYCLODECADIEN-4,9-DIONE, C Concentration Rank 4

UNKNOWN COMPOUND 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.26	135.57 ng	1269320	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,6-CYCLODECADIEN-4,9-DIONE, CIS,CI	164	C10H12O2	000000-00-0	53
2	1,5,9-Cyclododecatriene, (E,E,E)-	162	C12H18	000676-22-2	42
3	Aziridine, 2-methylene-1-(1-methyle	97	C6H11N	055268-35-4	42



0577

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D
Acq On : 22 Jan 98 23:13
Sample : S HP-7G 58073-005 FFR85
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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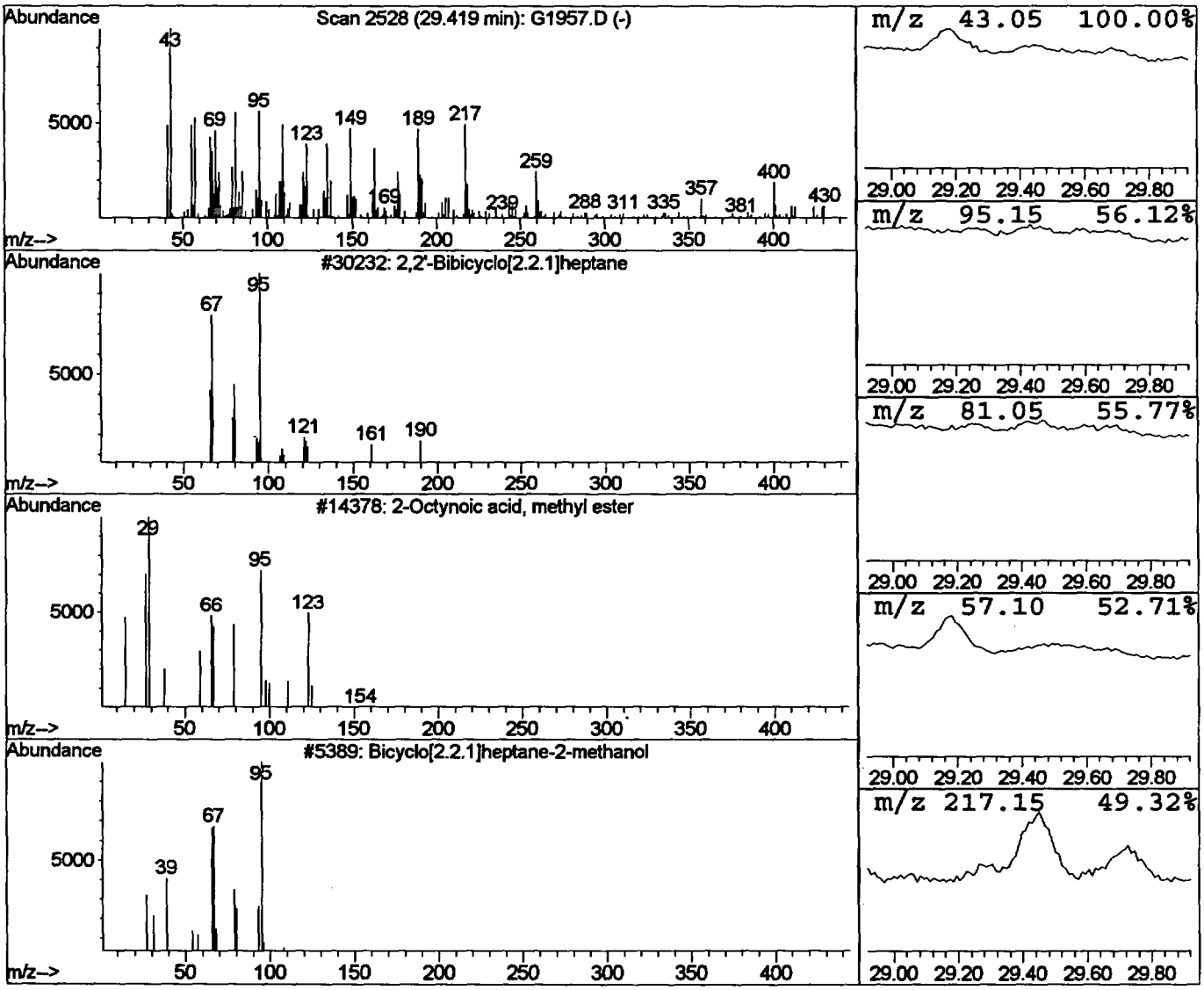
Peak Number 21 2,2'-Bibicyclo[2.2.1]heptane Concentration Rank 29

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.42	41.38 ng	761526	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2'-Bibicyclo[2.2.1]heptane	190	C14H22	018947-78-9	38
2	2-Octynoic acid, methyl ester	154	C9H14O2	000111-12-6	32
3	Bicyclo[2.2.1]heptane-2-methanol	126	C8H14O	005240-72-2	25



0578

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

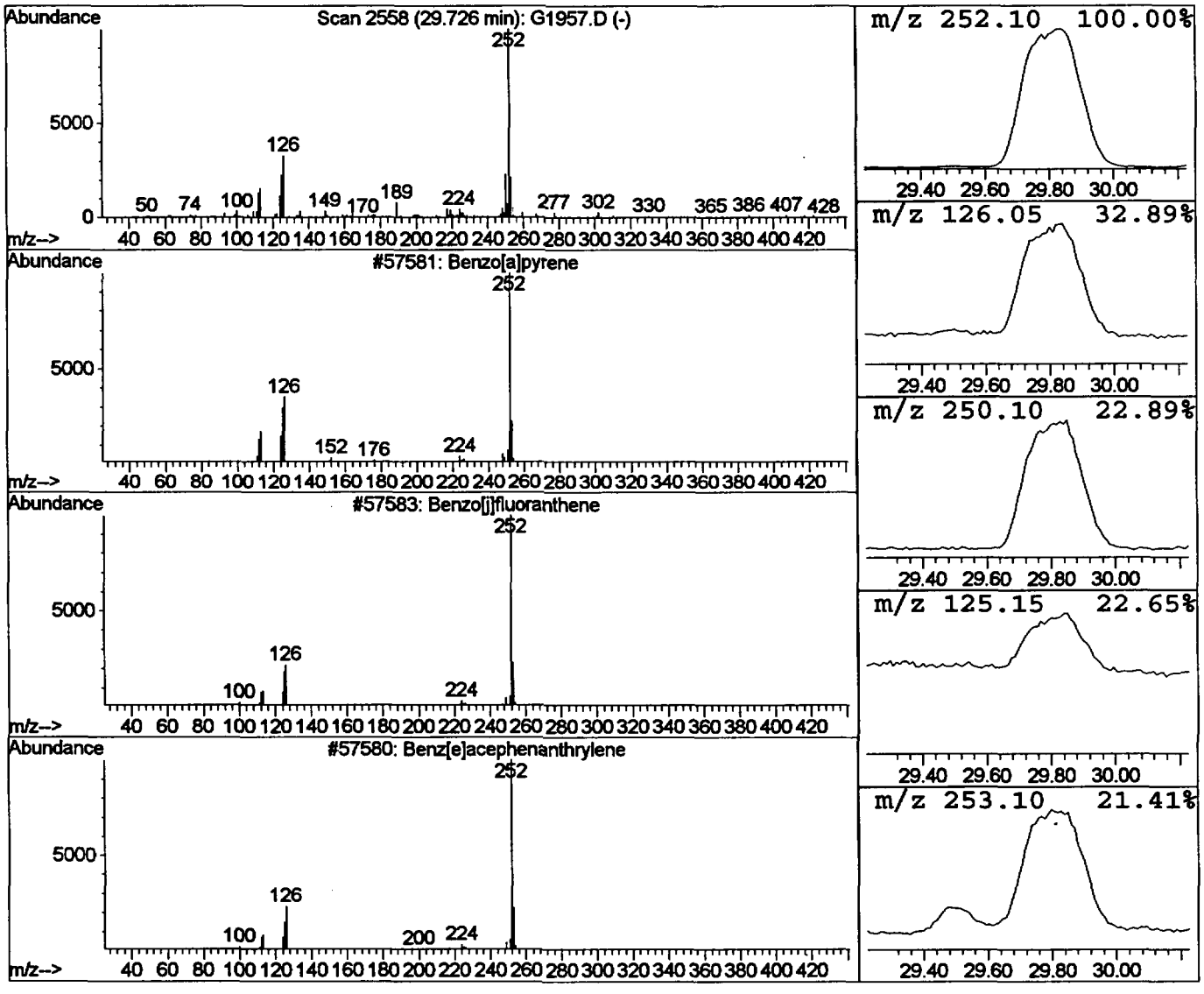
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 22 Benzo[a]pyrene Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.73	61.11 ng	1124720	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[a]pyrene	252	C20H12	000050-32-8	98
2	Benzo[j]fluoranthene	252	C20H12	000205-82-3	96
3	Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93



0579

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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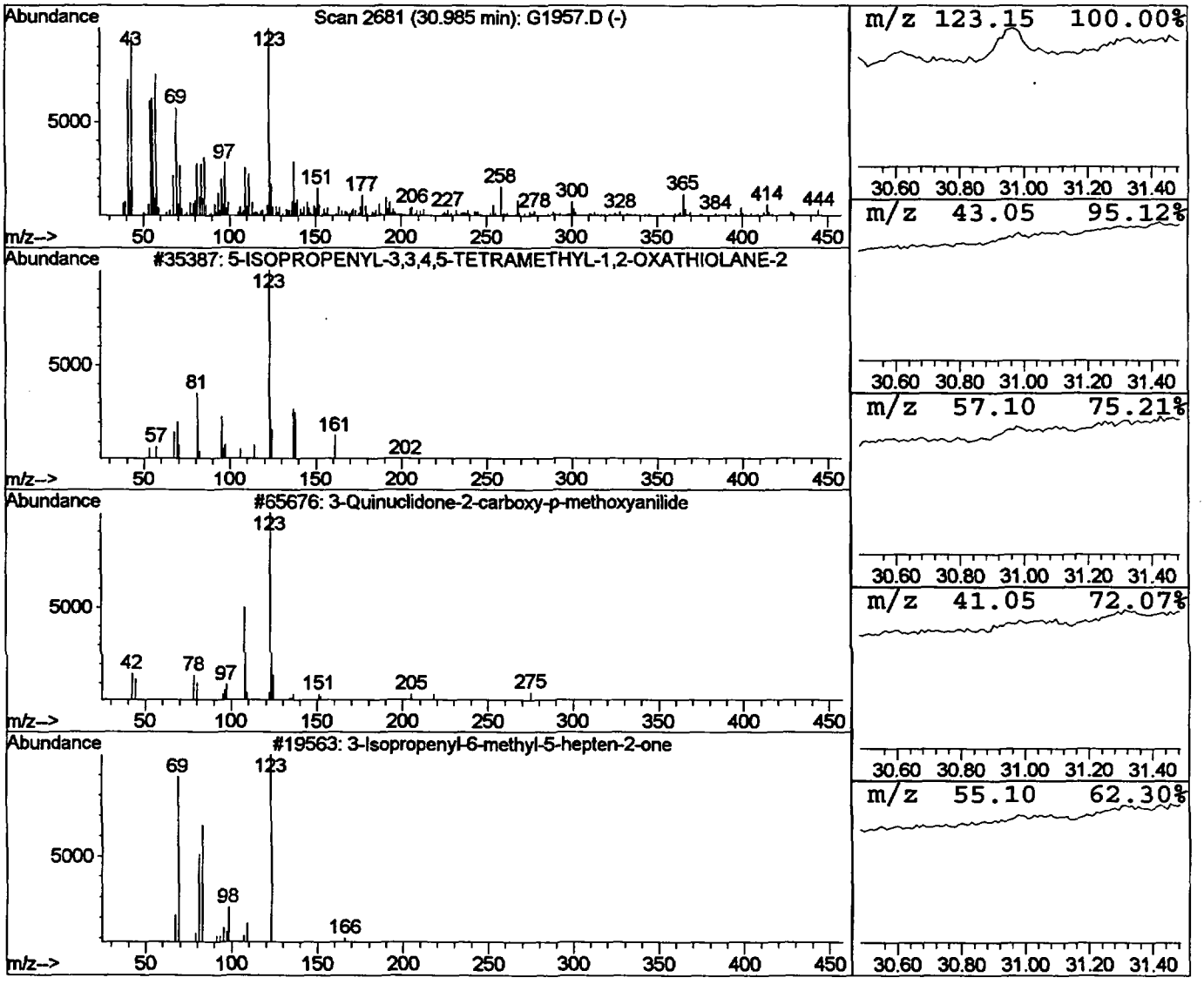
Peak Number 24 5-ISOPROPENYL-3,3,4,5-TETRAMET Concentration Rank 19

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.99	63.22 ng	1163520	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5-ISOPROPENYL-3,3,4,5-TETRAMETHYL-1	202	C10H18O2S	000000-00-0	43
2	3-Quinuclidone-2-carboxy-p-methoxya	276	C15H20N2O3	000000-00-0	38
3	3-Isopropenyl-6-methyl-5-hepten-2-o	166	C11H18O	026533-38-0	37



0580

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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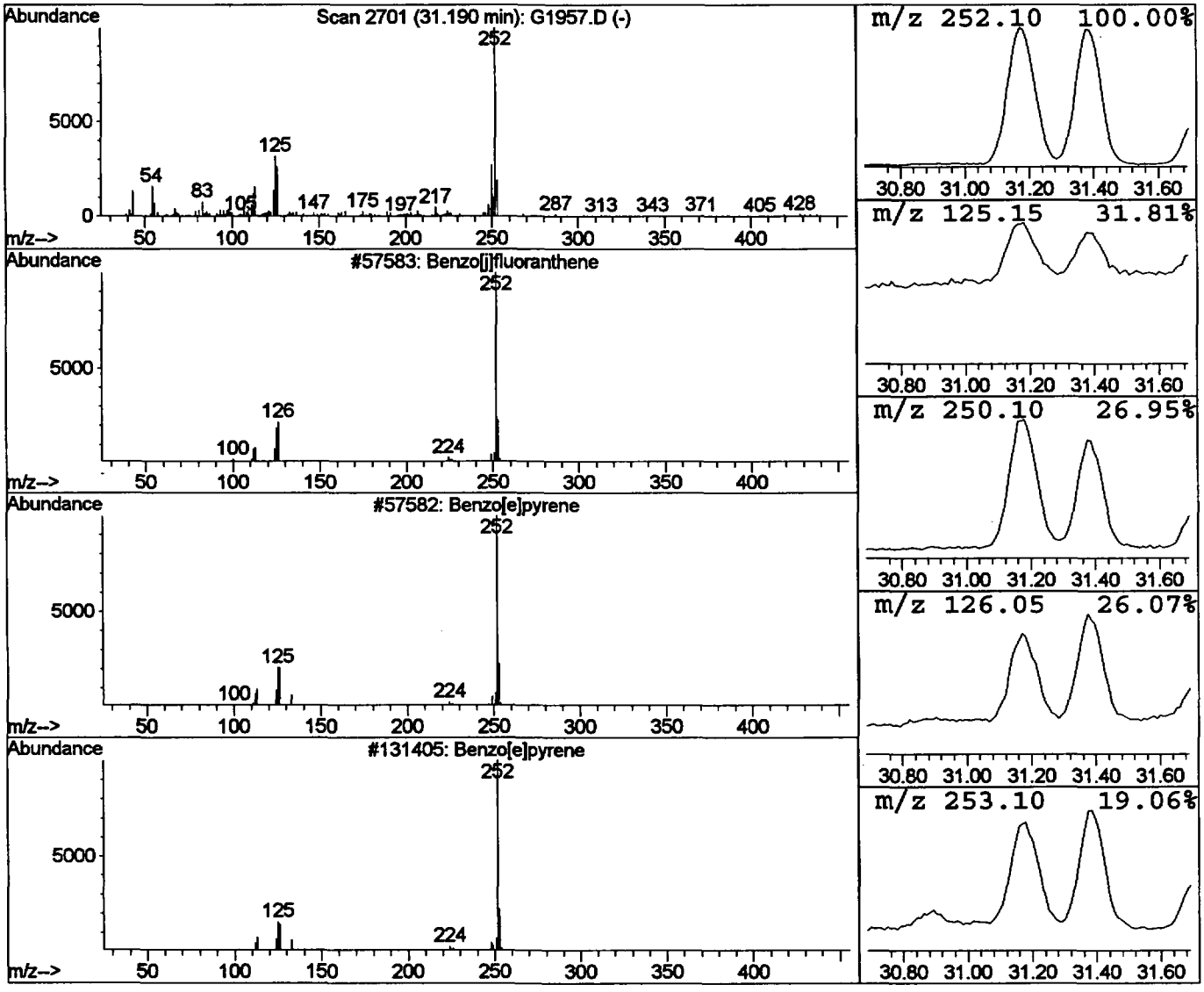
Peak Number 25 Benzo[j]fluoranthene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
31.19	123.62 ng	2275220	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[j]fluoranthene	252	C20H12	000205-82-3	96
2	Benzo[e]pyrene	252	C20H12	000192-97-2	95
3	Benzo[e]pyrene	252	C20H12	000192-97-2	93



0581

Library Search Compound Report

CASE 25969
SDG#FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

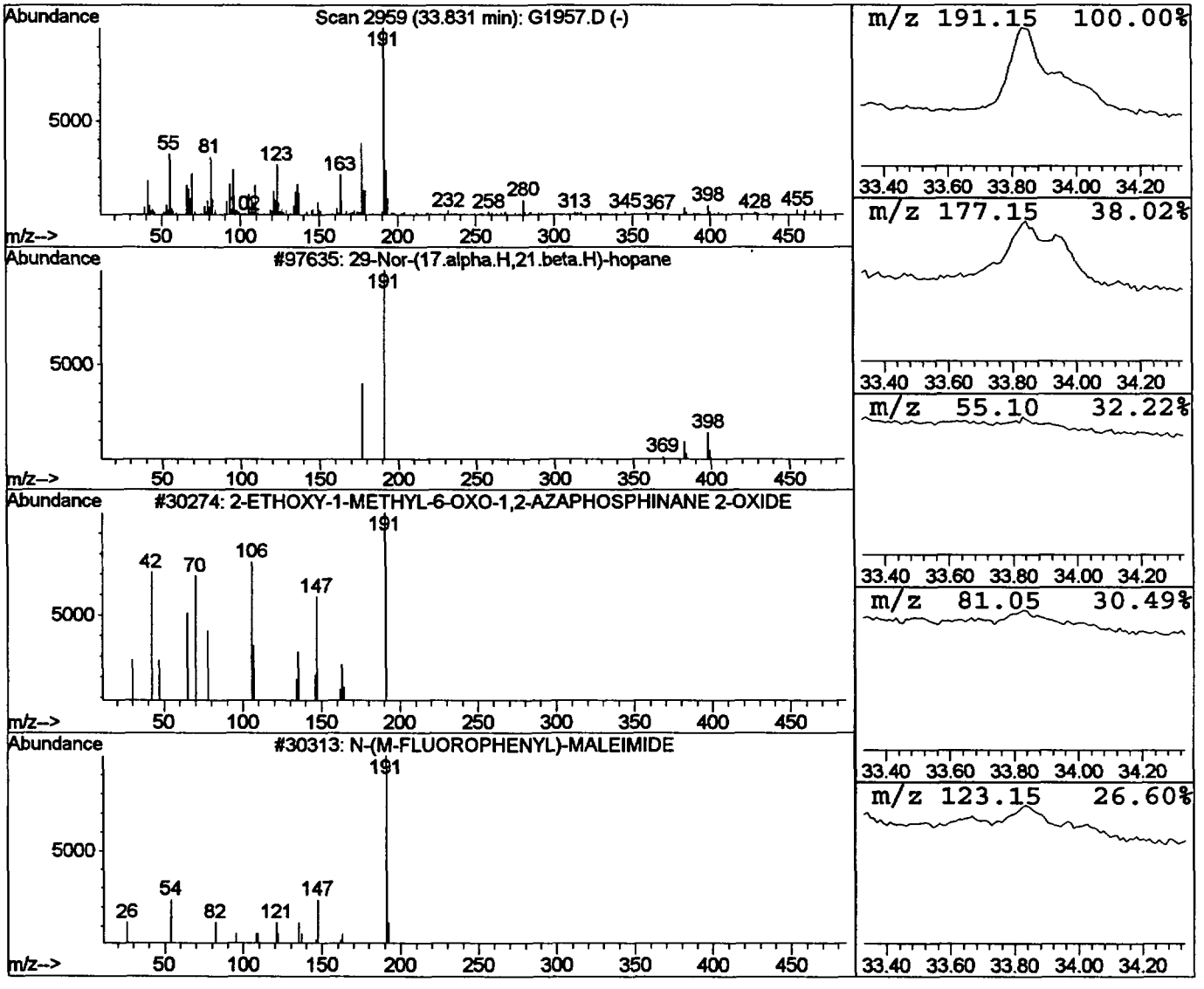
****

Peak Number 26 29-Nor-(17.alpha.H,21.beta.H)- Concentration Rank 2

UNKNOWN COMPOUND no 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.83	247.54 ng	4555950	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	29-Nor-(17.alpha.H,21.beta.H)-hopan	398	C29H50	000000-00-0	64
2	2-ETHOXY-1-METHYL-6-OXO-1,2-AZAPHOS	191	C7H14NO3P	093989-00-5	45
3	N-(M-FLUOROPHENYL)-MALEIMIDE	191	C10H6FNO2	000000-00-0	43



0582

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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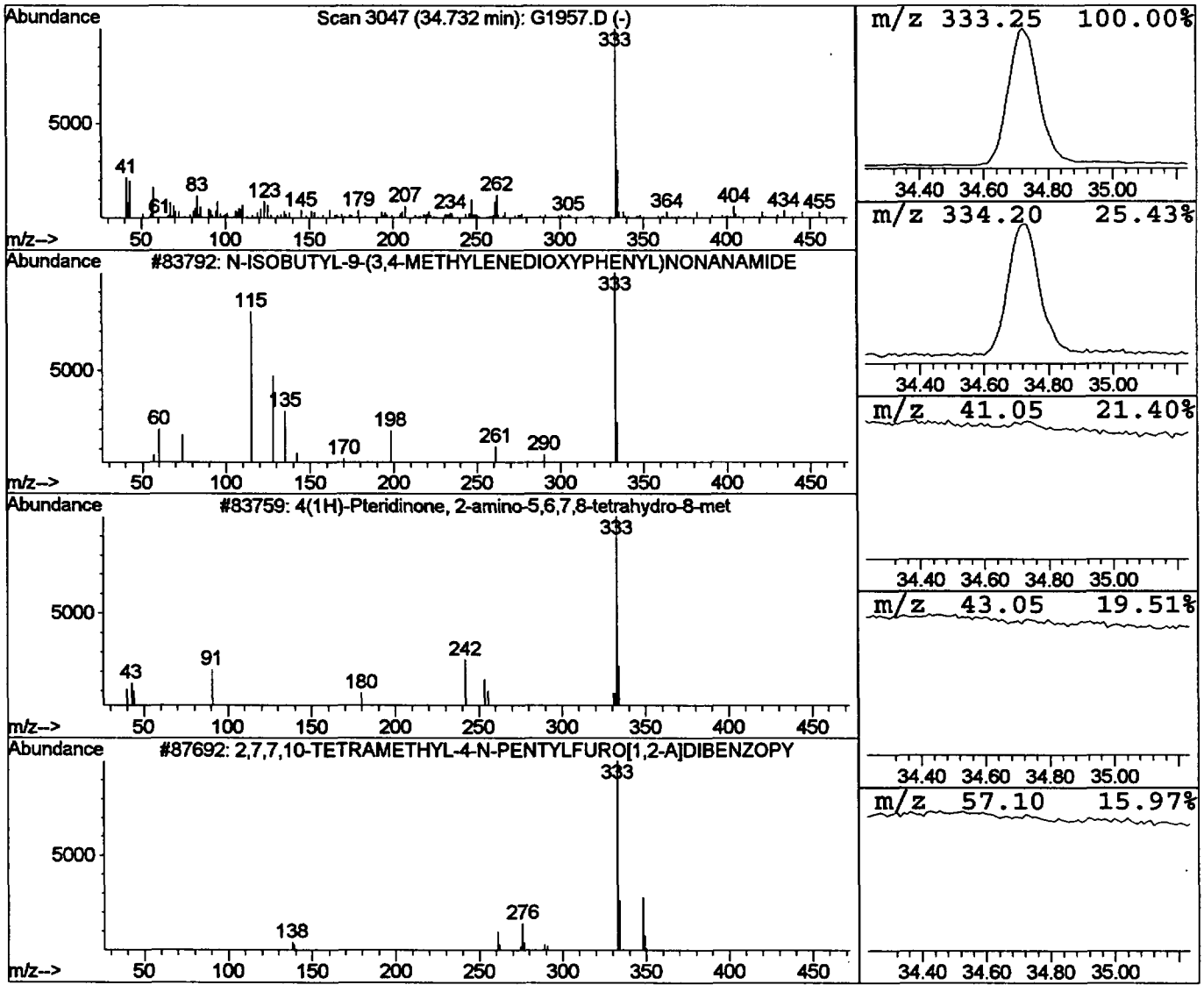
Peak Number 27 N-ISOBUTYL-9-(3,4-METHYLENEDIO Concentration Rank 26

UNKNOWN COMPOUND 11-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
34.73	48.23 ng	887642	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	N-ISOBUTYL-9-(3,4-METHYLENEDIOXYPHE	333	C20H31NO3	083029-42-9	53
2	4(1H)-Pteridinone, 2-amino-5,6,7,8-	333	C19H19N5O	038365-19-4	42
3	2,7,7,10-TETRAMETHYL-4-N-PENTYLFURO	348	C24H28O2	087734-66-5	36



0583

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

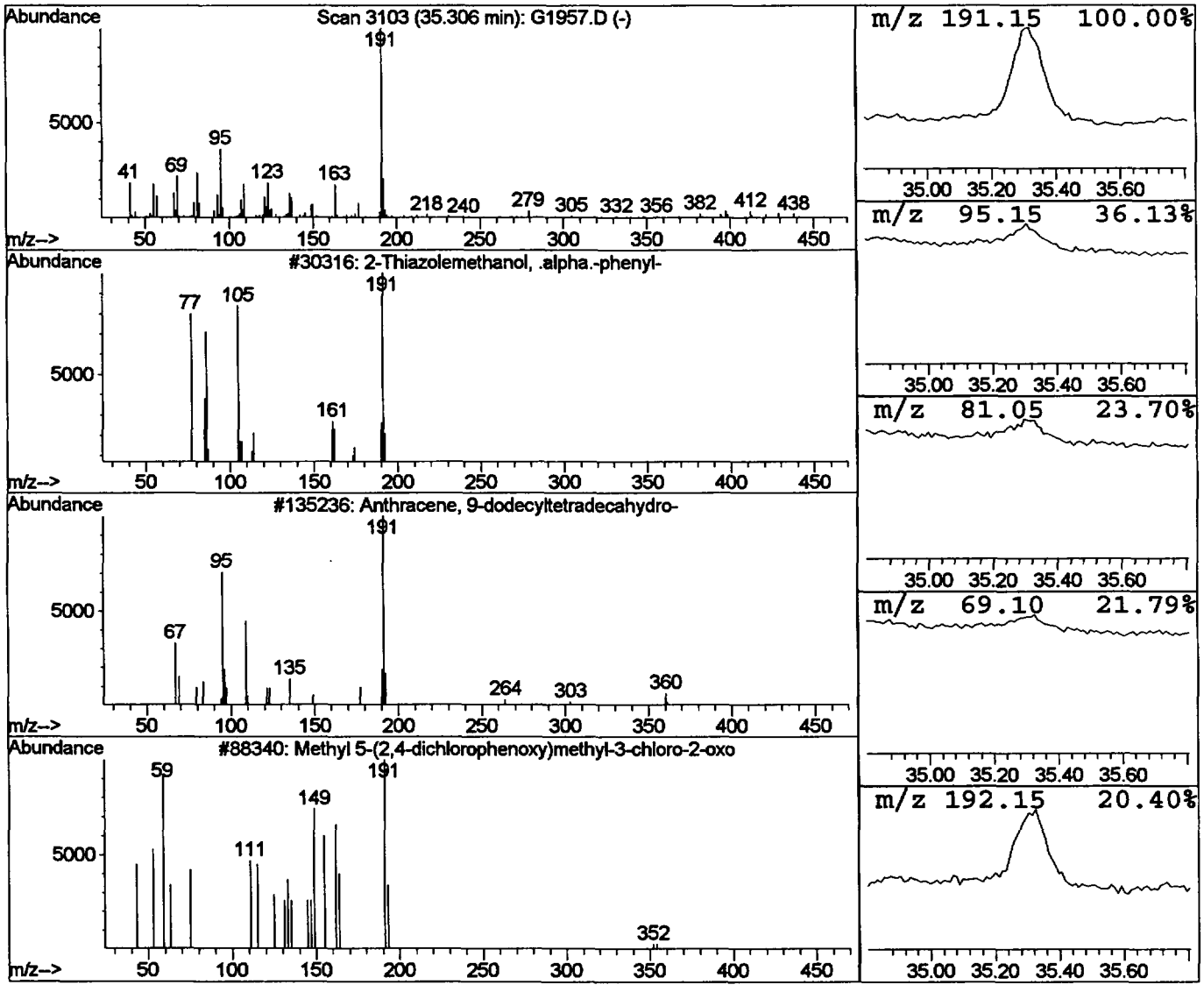
****

Peak Number 28 2-Thiazolemethanol, .alpha.-ph Concentration Rank 12

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.31	101.85 ng	1874450	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Thiazolemethanol, .alpha.-phenyl-	191	C10H9NOS	000879-52-7	55
2	Anthracene, 9-dodecyltetradecahydro	360	C26H48	055401-75-7	50
3	Methyl 5-(2,4-dichlorophenoxy)methy	352	C13H11Cl3O5	085858-62-4	46



0584

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

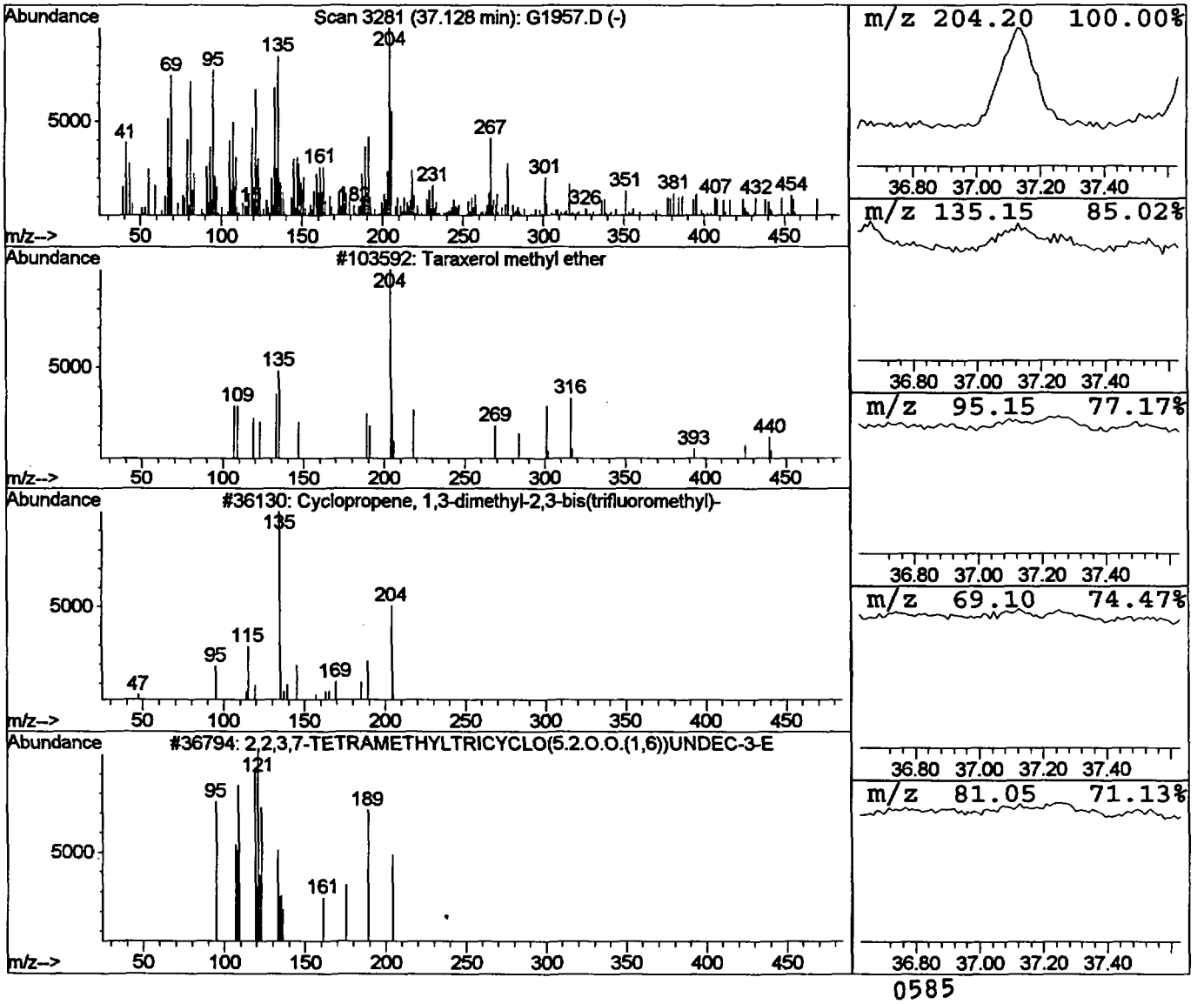
****

Peak Number 29 Taraxerol methyl ether Concentration Rank 22

UNKNOWN COMPOUND uo1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
37.13	54.22 ng	997964	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Taraxerol methyl ether	440	C31H52O	014021-23-9	83
2	Cyclopropene, 1,3-dimethyl-2,3-bis(	204	C7H6F6	054932-73-9	43
3	2,2,3,7-TETRAMETHYLTRICYCLO(5.2.0.O	204	C15H24	000000-00-0	38



0585

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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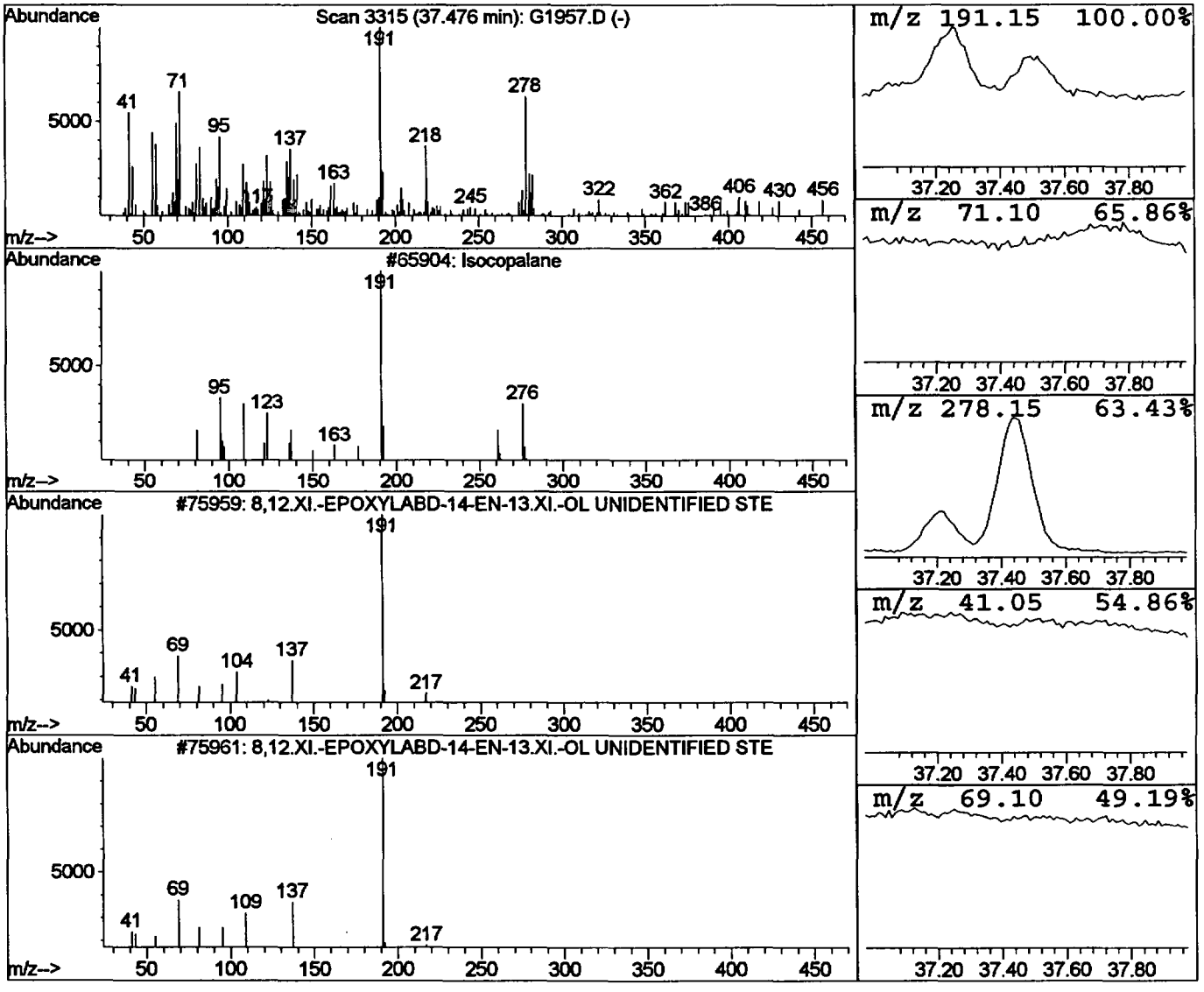
Peak Number 30 Isocopalane UNKNOWN COMPOUND clo 1-27-98 Concentration Rank 33

R.T.	EstConc	Area	Relative to ISTD	R.T.
37.48	39.21 ng	721573	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Isocopalane	276	C20H36	079191-19-8	46
2	8,12.XI.-EPOXYLABD-14-EN-13.XI.-OL	306	C20H34O2	056711-38-7	35
3	8,12.XI.-EPOXYLABD-14-EN-13.XI.-OL	306	C20H34O2	056711-40-1	35



0586

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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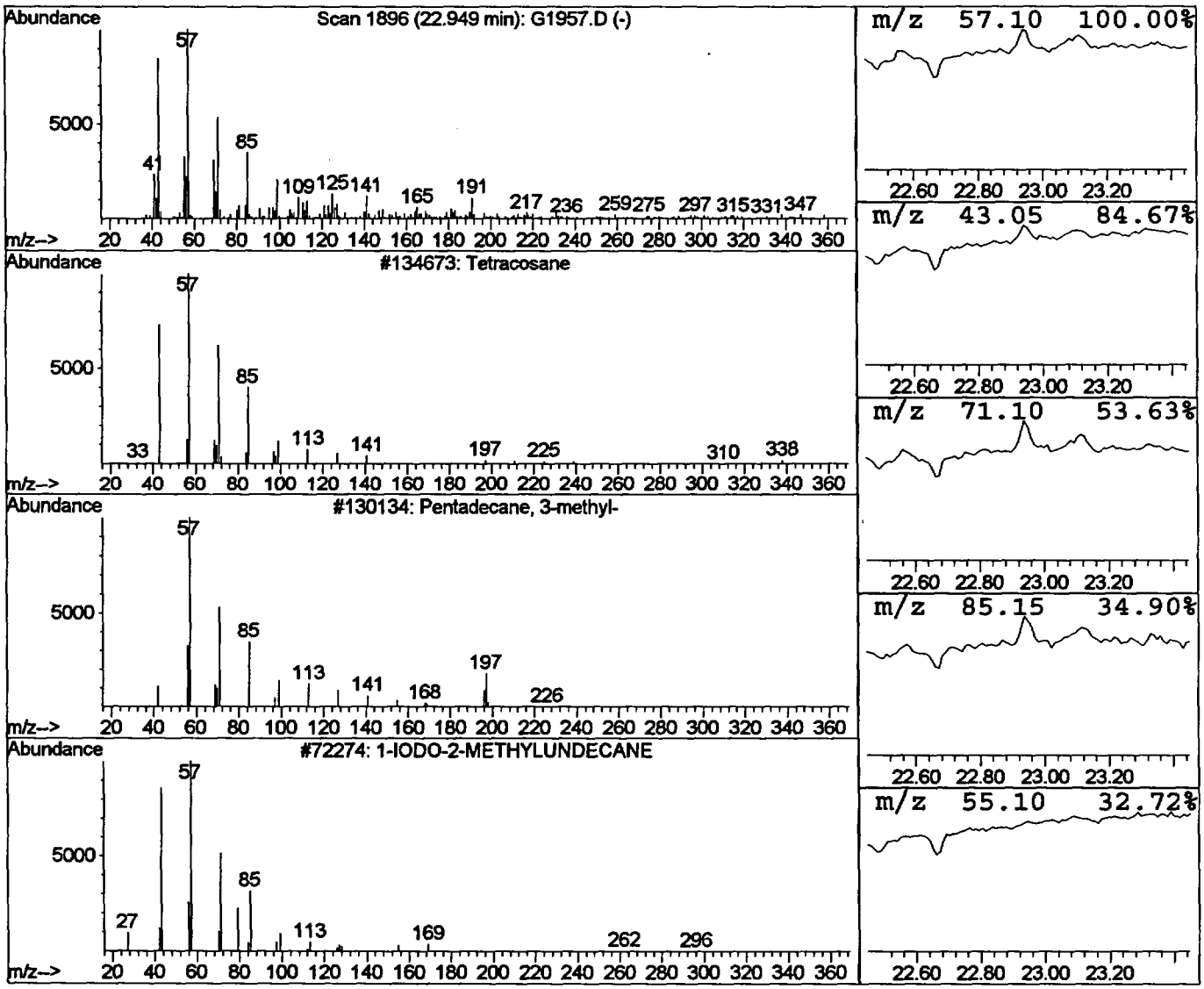
Peak Number 43 Tetracosane Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.95	94.67 ng	886314	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetracosane	338	C24H50	000646-31-1	93
2	Pentadecane, 3-methyl-	226	C16H34	002882-96-4	70
3	1-IODO-2-METHYLUNDECANE	296	C12H25I	073105-67-6	64



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

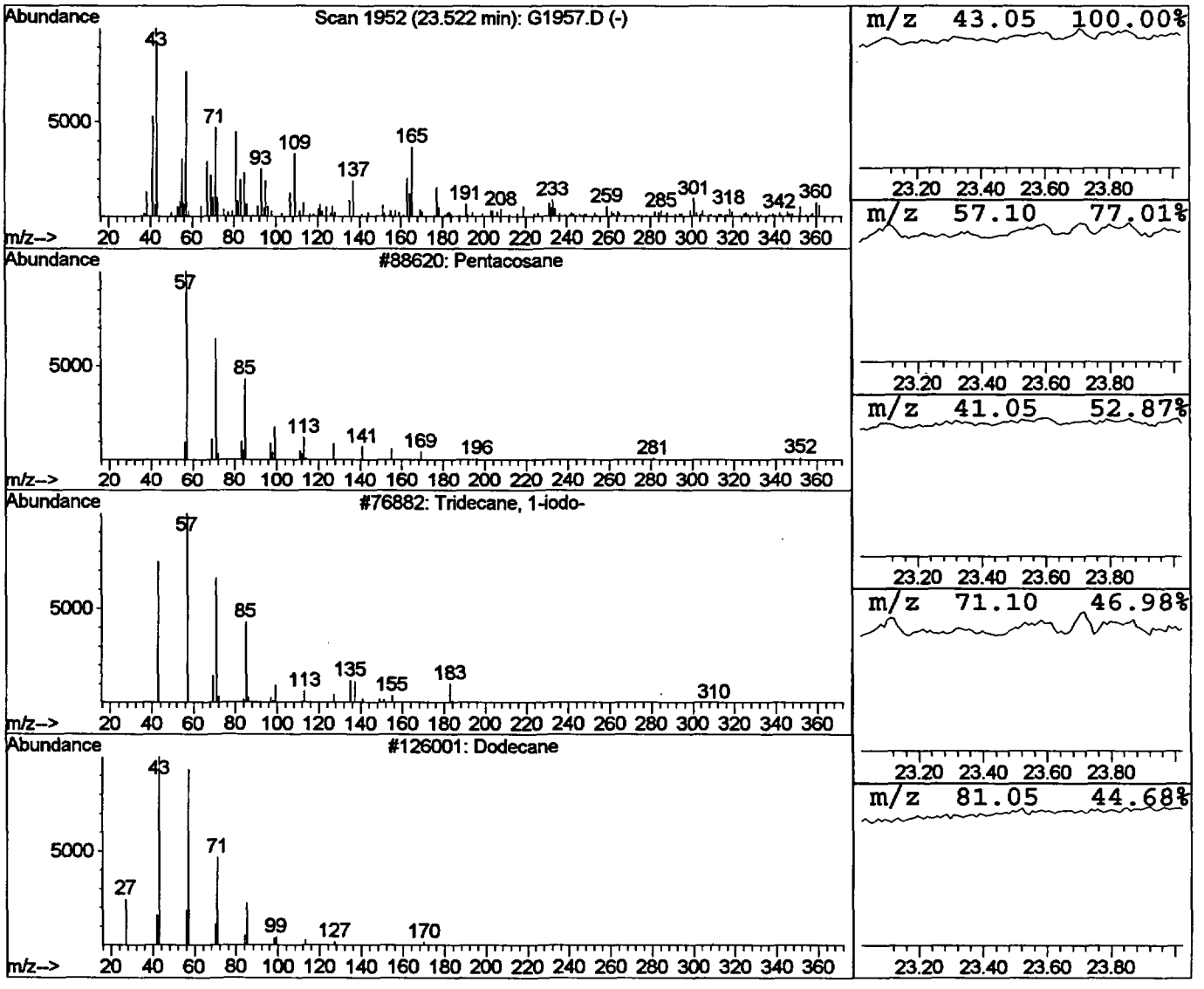
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 44 Pentacosane Concentration Rank 40

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.52	28.70 ng	268744	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentacosane	352	C25H52	000629-99-2	30
2	Tridecane, 1-iodo-	310	C13H27I	035599-77-0	27
3	Dodecane	170	C12H26	000112-40-3	25



0588

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

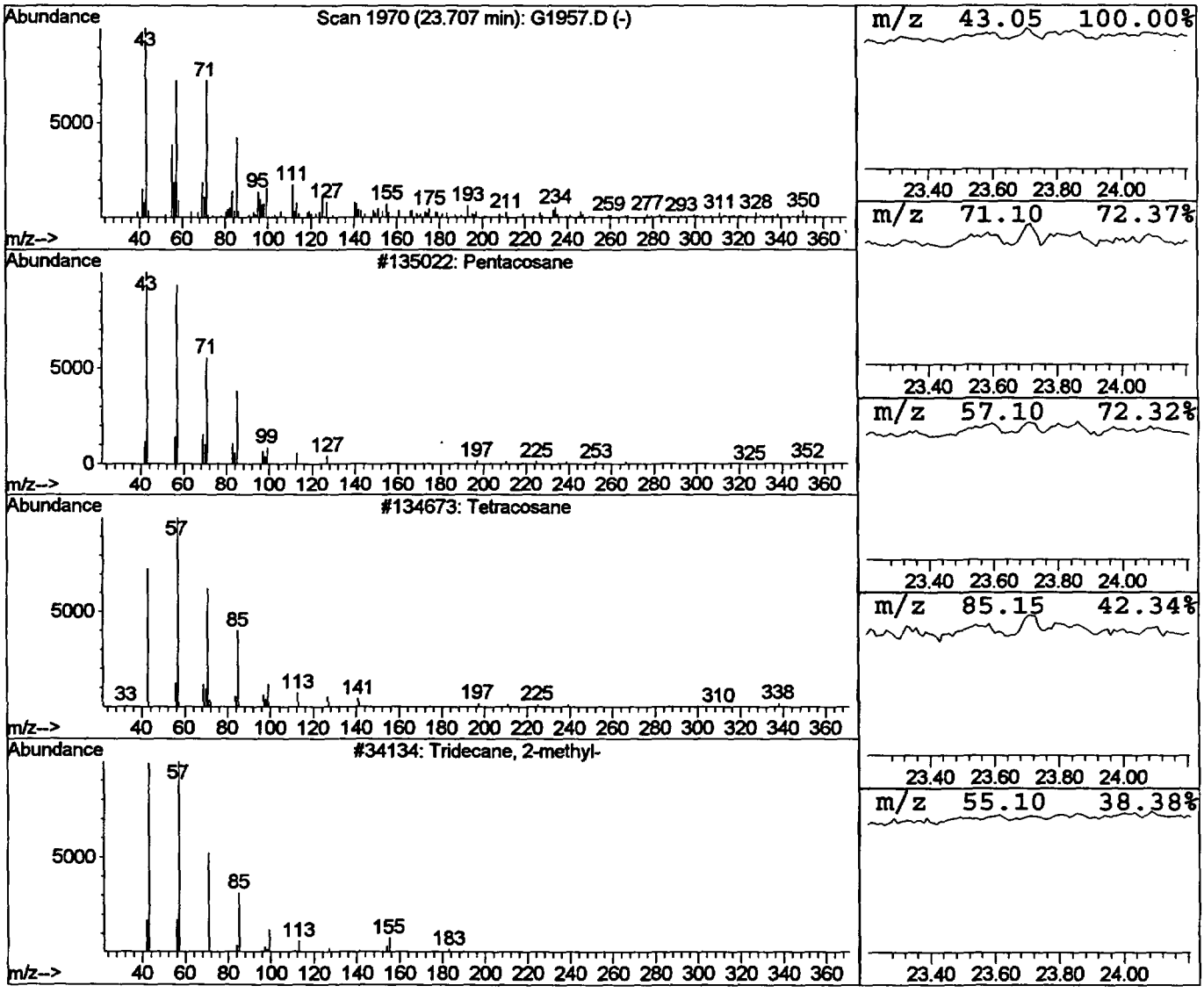
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 45 Pentacosane Concentration Rank 30

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.71	40.84 ng	382325	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentacosane	352	C25H52	000629-99-2	90
2	Tetracosane	338	C24H50	000646-31-1	78
3	Tridecane, 2-methyl-	198	C14H30	001560-96-9	60



0589

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

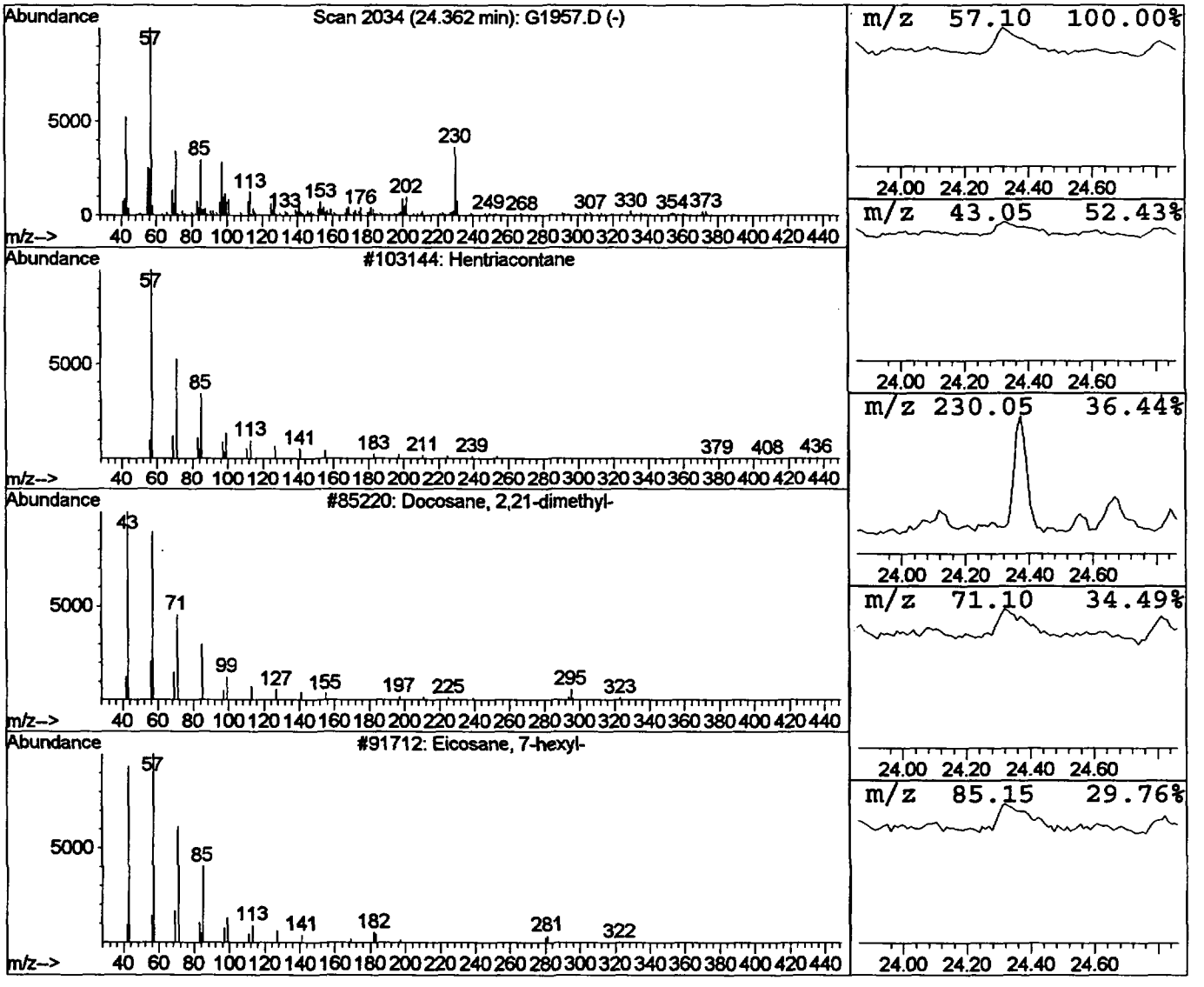
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 46 Hentriacontane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.36	109.11 ng	1021550	Chrysene-d12	25.42

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hentriacontane	436	C31H64	000630-04-6	46
2	Docosane, 2,21-dimethyl-	338	C24H50	077536-31-3	45
3	Eicosane, 7-hexyl-	366	C26H54	055333-99-8	43



0590

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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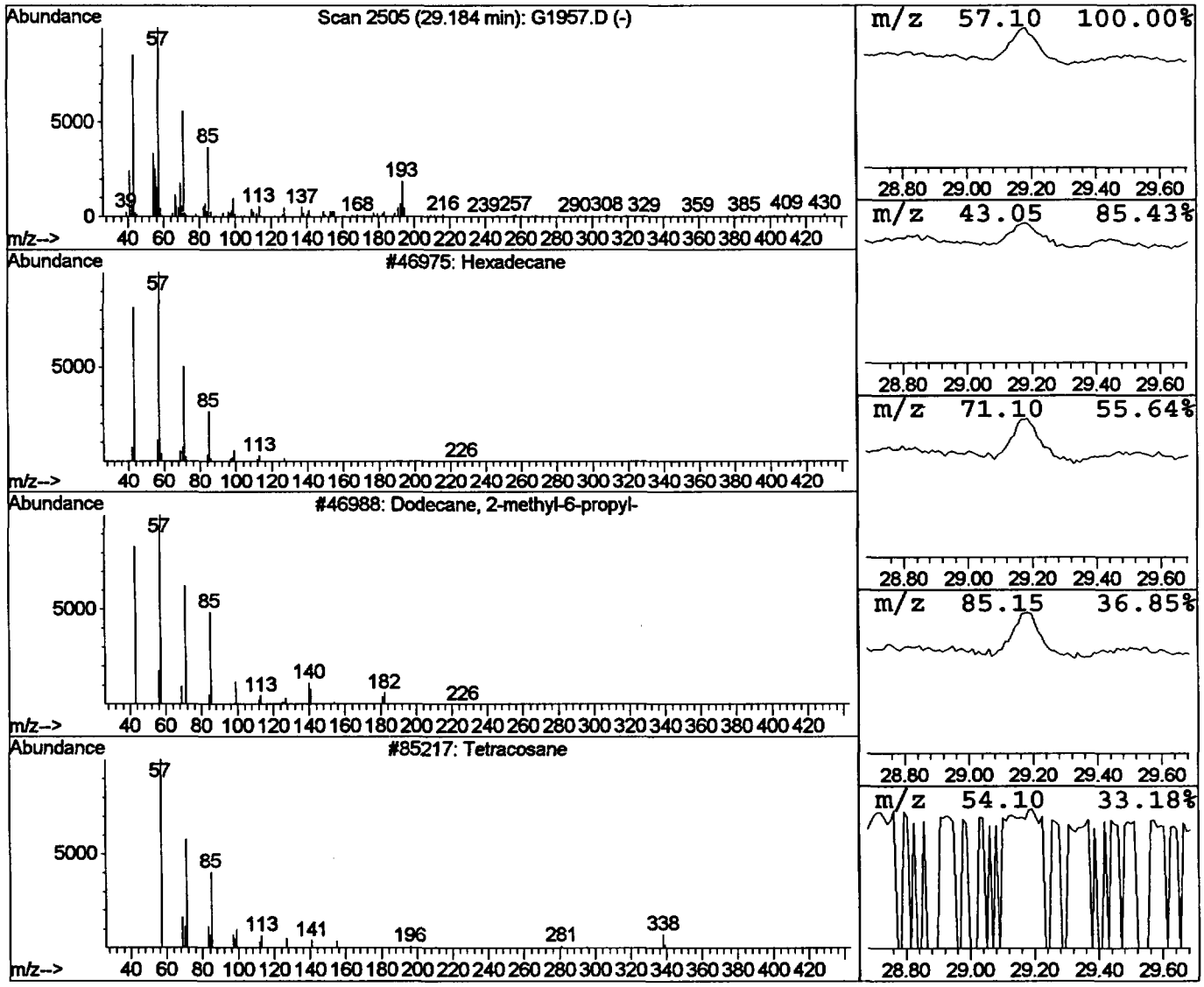
Peak Number 47 Hexadecane Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.18	105.54 ng	1942490	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	86
2	Dodecane, 2-methyl-6-propyl-	226	C16H34	055045-08-4	70
3	Tetracosane	338	C24H50	000646-31-1	62



0591

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Via:
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

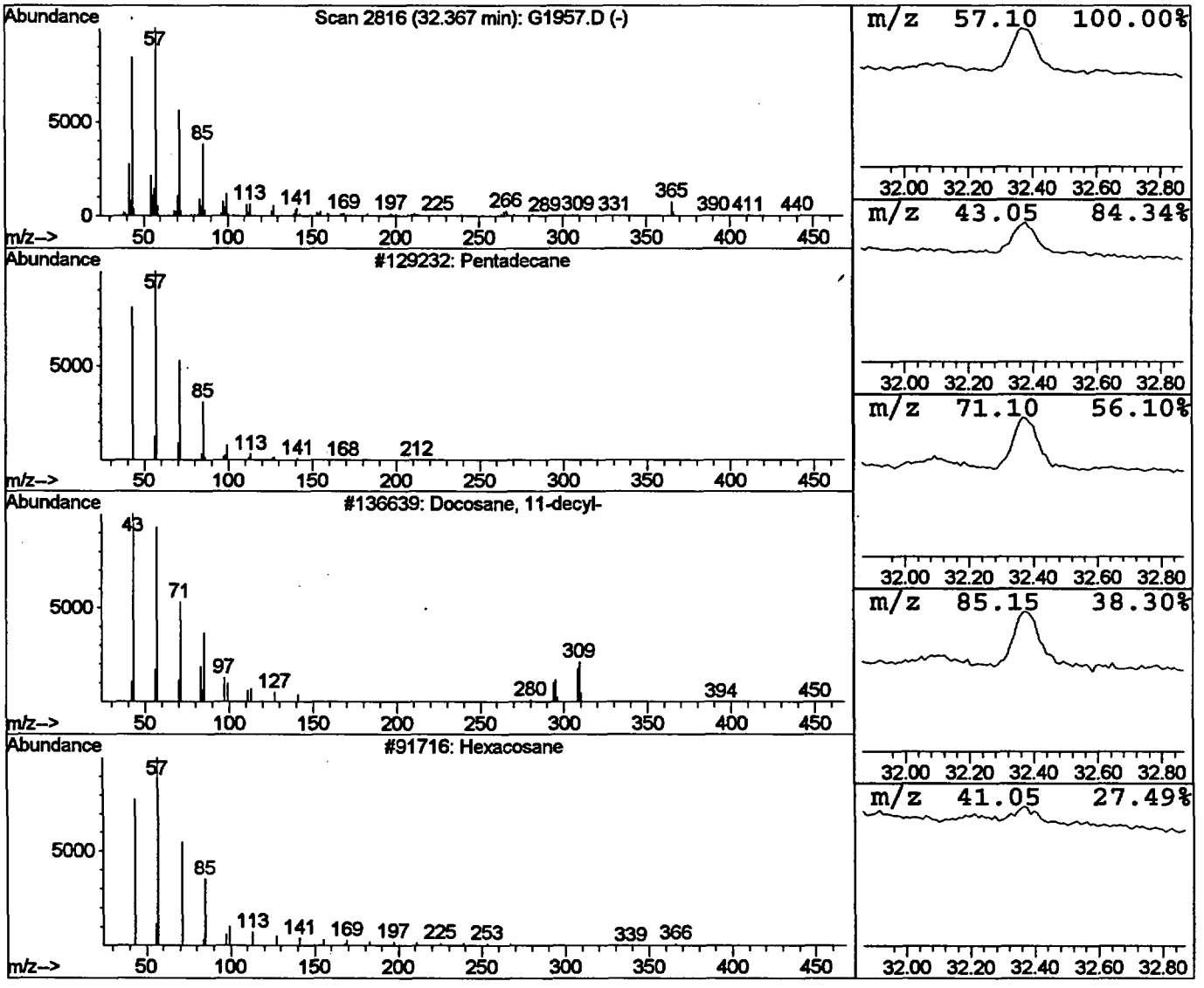
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 48 Pentadecane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.37	90.45 ng	1664640	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	93
2	Docosane, 11-decyl-	451	C32H66	055401-55-3	89
3	Hexacosane	366	C26H54	000630-01-3	89



0592

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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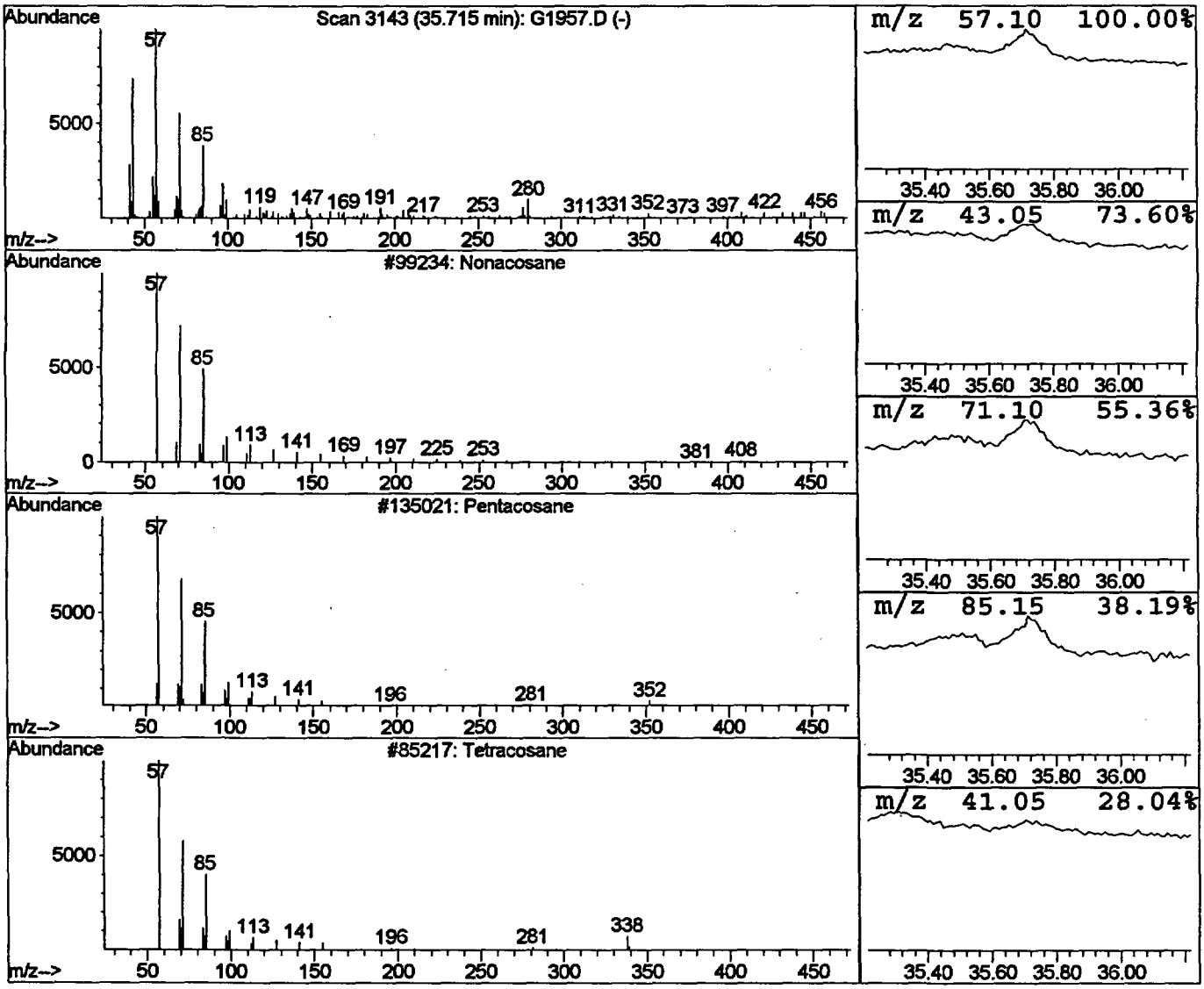
Peak Number 49 Nonacosane Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.72	39.44 ng	725925	Perylene-d12	31.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonacosane	408	C29H60	000630-03-5	76
2	Pentacosane	352	C25H52	000629-99-2	76
3	Tetracosane	338	C24H50	000646-31-1	76



0593

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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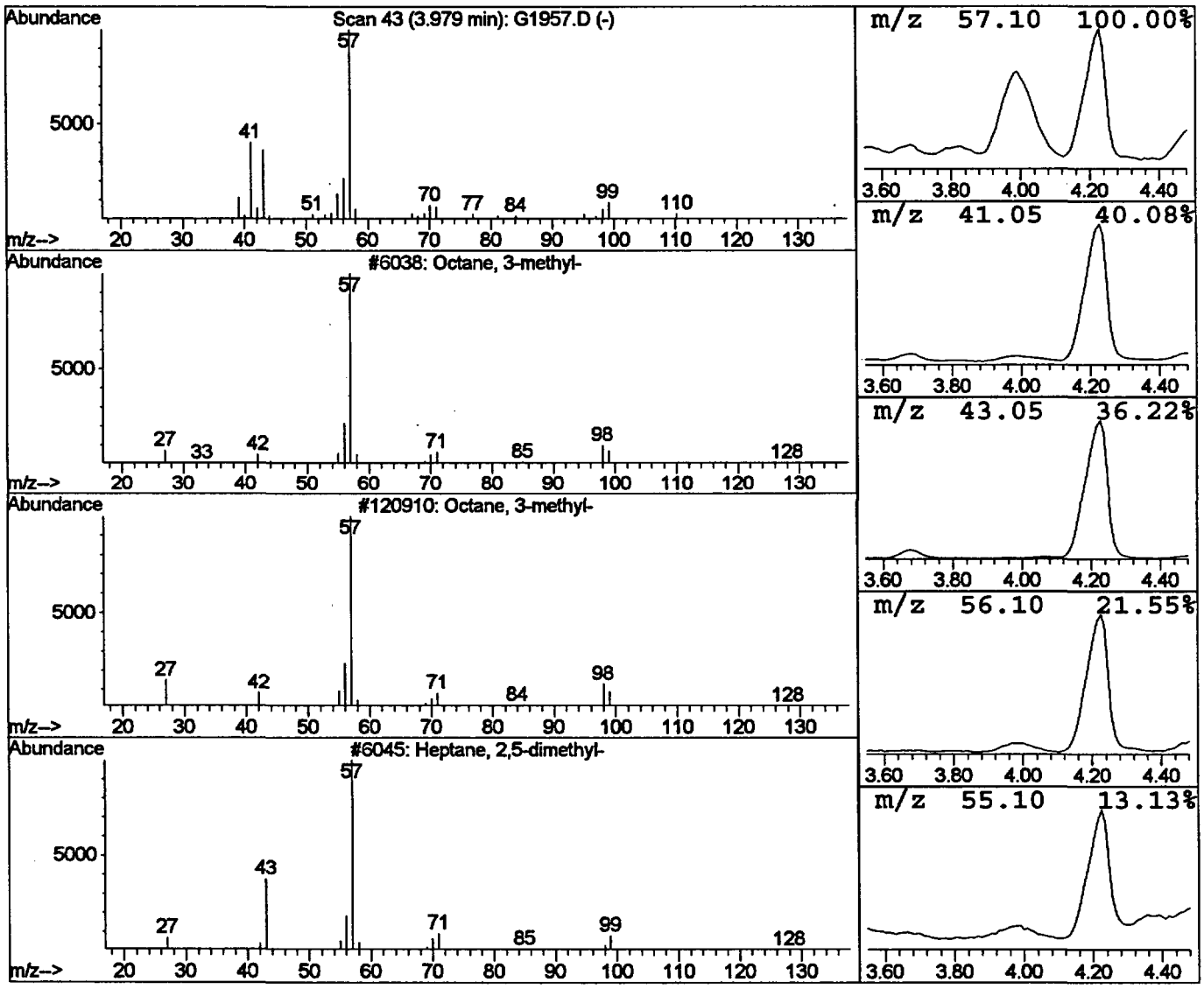
Peak Number 50 Octane, 3-methyl- Concentration Rank 59

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	11.65 ng	388558	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	59
2	Octane, 3-methyl-	128	C9H20	002216-33-3	53
3	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	50



0594

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE.25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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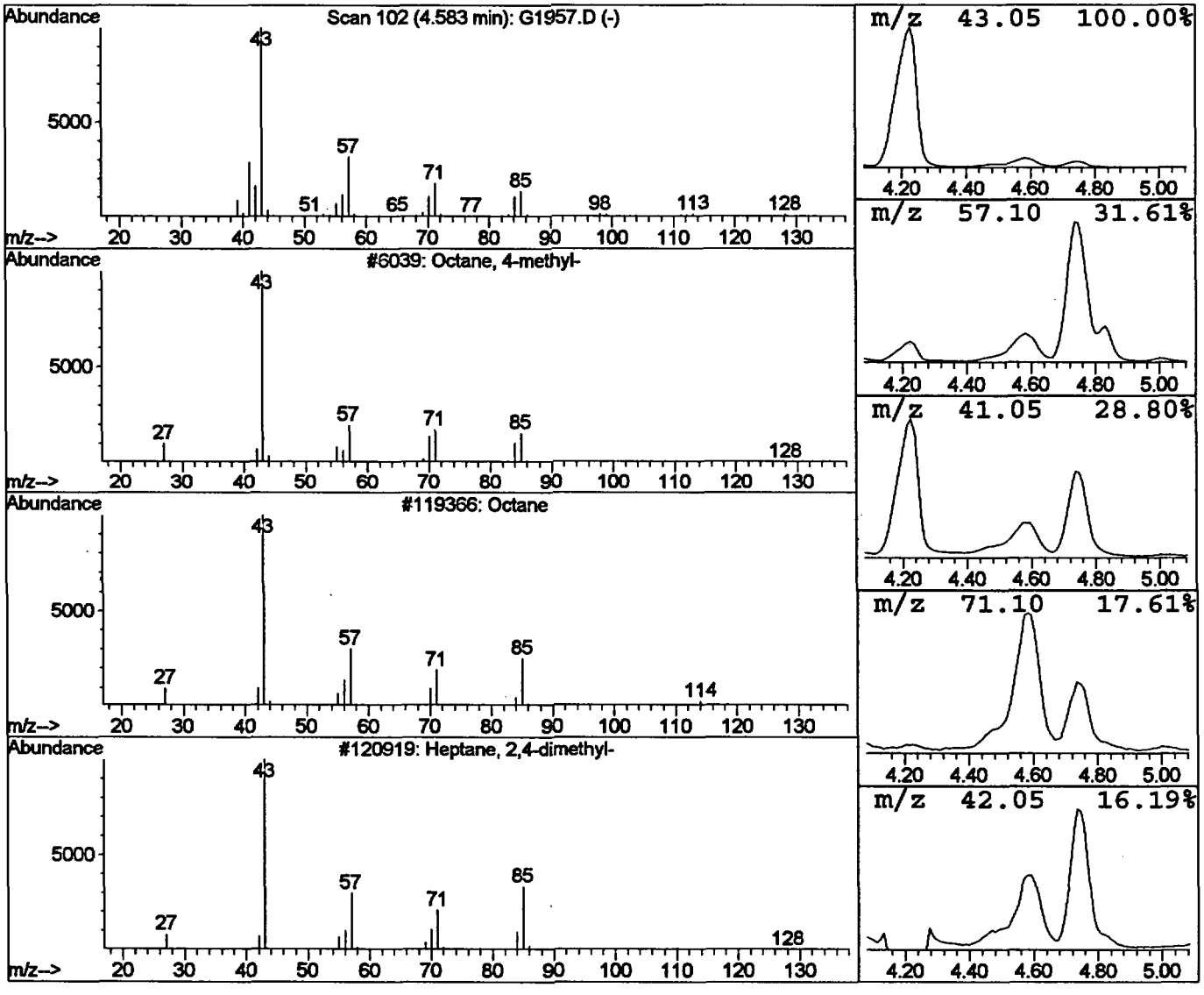
Peak Number 51 Octane, 4-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.58	106.45 ng	3549970	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Octane	114	C8H18	000111-65-9	64
3	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64



0595

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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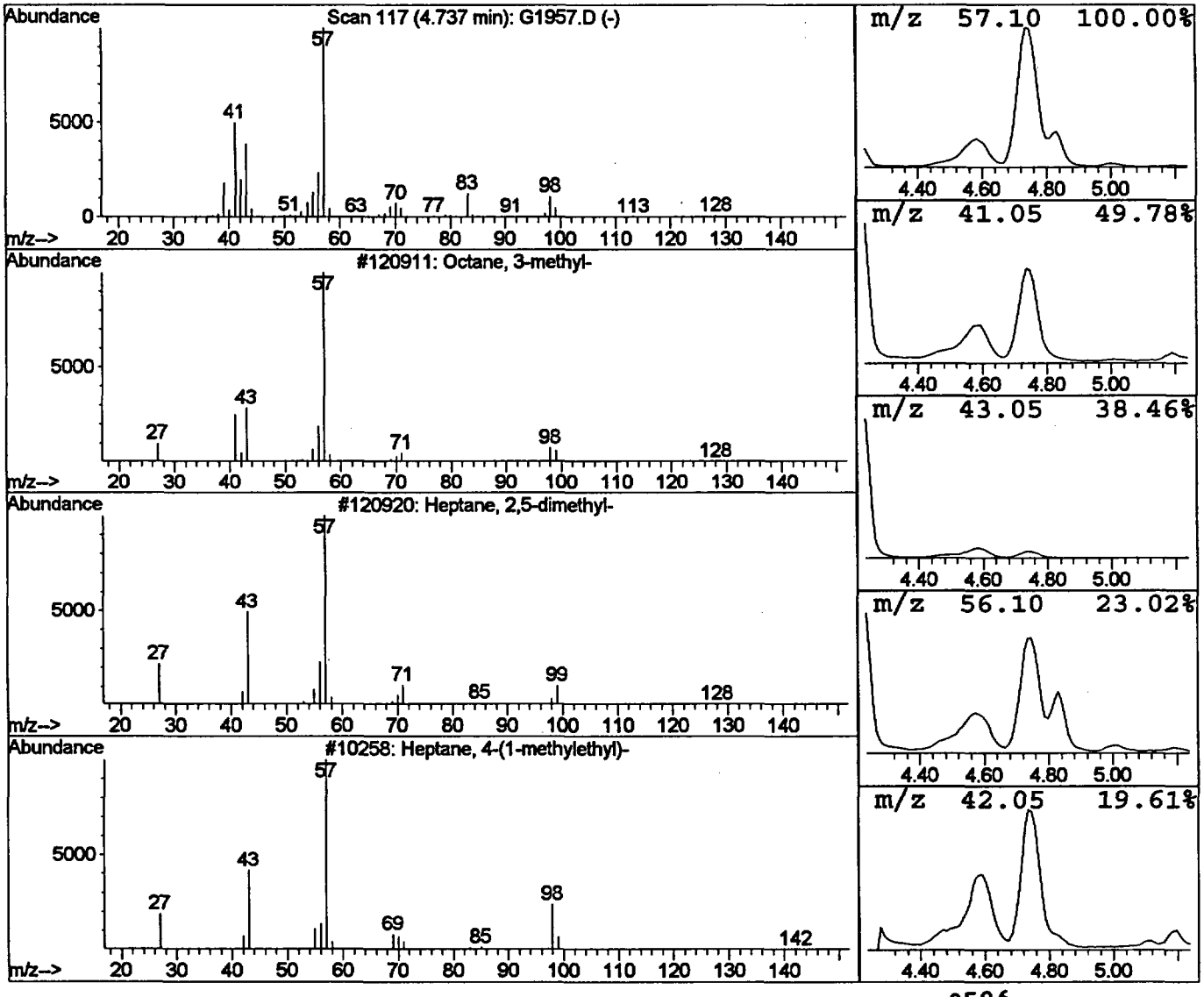
Peak Number 52 Octane, 3-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.74	121.62 ng	4056120	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	50
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	47
3	Heptane, 4-(1-methylethyl)-	142	C10H22	052896-87-4	43



0596

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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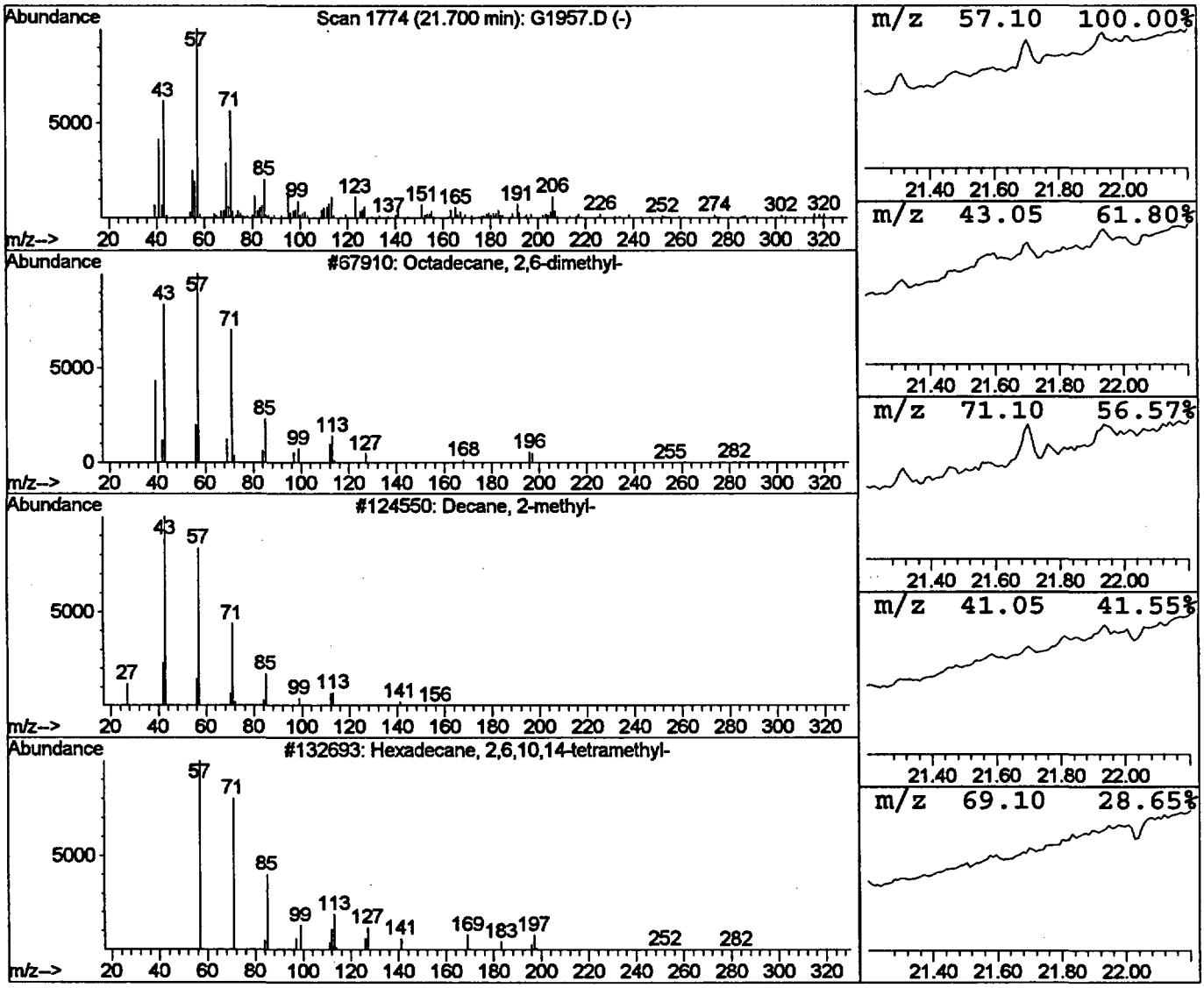
Peak Number 53 Octadecane, 2,6-dimethyl- Concentration Rank 57

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.70	12.15 ng	475534	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane, 2,6-dimethyl-	282	C20H42	075163-97-2	93
2	Decane, 2-methyl-	156	C11H24	006975-98-0	76
3	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	70



0597

Data File : Q:\HPCHEM\G\G19XX\G1957.D Vial: 8
Acq On : 22 Jan 98 23:13 Operator:
Sample : S HP-7G 58073-005 FFR85 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

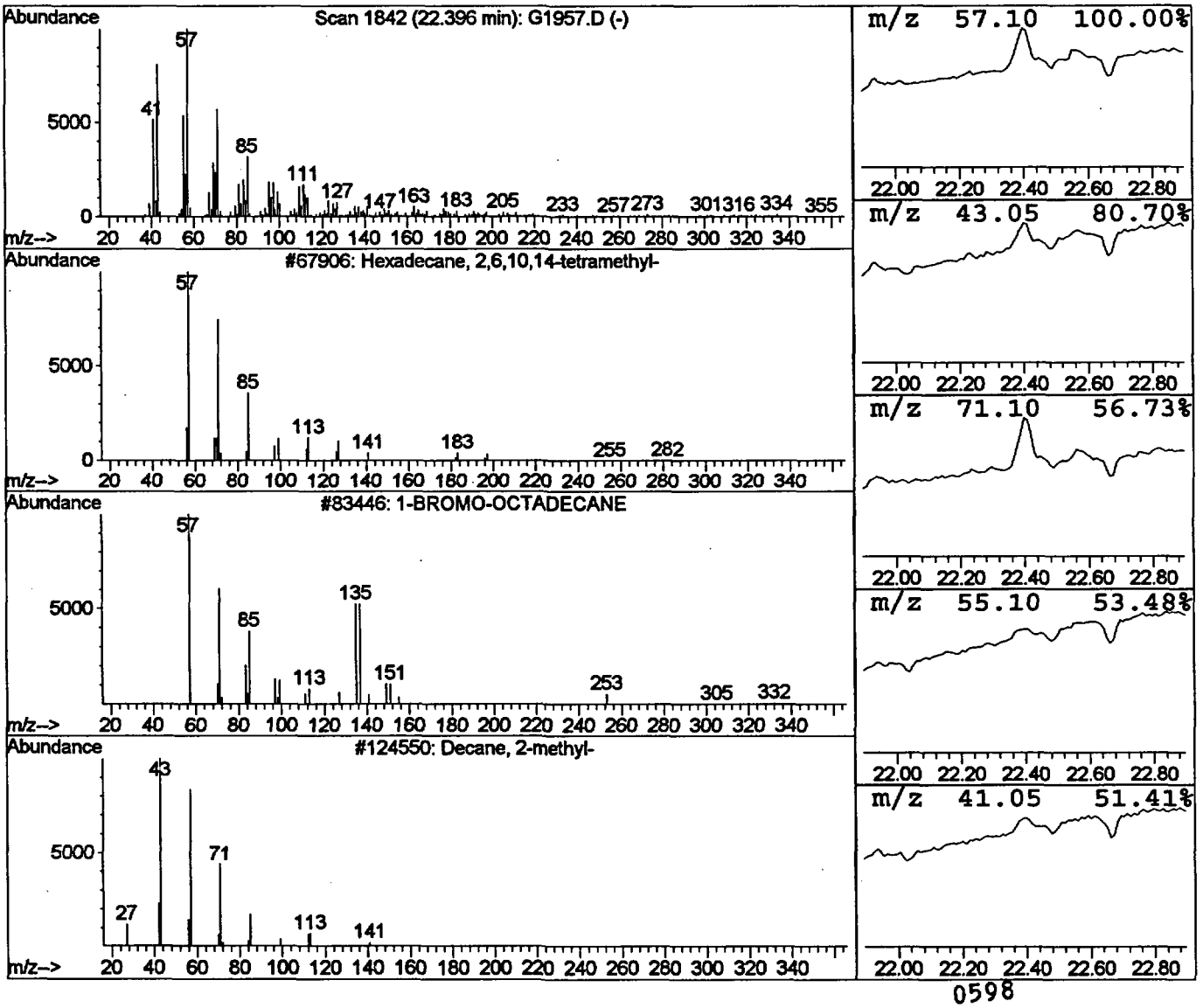
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 54 Hexadecane, 2,6,10,14-tetramet Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.40	109.71 ng	4295190	Phenanthrene-d10	19.61

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	93
2	1-BROMO-OCTADECANE	332	C18H37Br	000000-00-0	83
3	Decane, 2-methyl-	156	C11H24	006975-98-0	64



0598

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 22 Jan 98 23:13
Data File: Q:\HPCHEM\G\G19XX\G1957.D
Name: S HP-7G 58073-005 FFR85
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
2-Pentanone, 4-hydro	4.23	732.2	ng	24417800	ISTD01	7.07	1333980	40.0
2,4-Pentanedione	5.79	39.9	ng	1329180	ISTD01	7.07	1333980	40.0
trans-3-Hexene-2,5-d	6.00	88.8	ng	2962740	ISTD01	7.07	1333980	40.0
2-Pentanone, 3-methy	6.55	57.2	ng	1908300	ISTD01	7.07	1333980	40.0
Hexadecanoic acid	20.47	38.4	ng	1504290	ISTD04	19.61	1566020	40.0
HAHNFETT	21.12	39.2	ng	1534520	ISTD04	19.61	1566020	40.0
Stigmast-4-en-3-one	21.60	133.3	ng	5217190	ISTD04	19.61	1566020	40.0
Octadecanoic acid	21.94	24.5	ng	959462	ISTD04	19.61	1566020	40.0
1,4,9-Triazaphenoxat	22.80	49.7	ng	465559	ISTD05	25.42	374503	40.0
2(4H)-Benzofuranone,	23.09	37.7	ng	353400	ISTD05	25.42	374503	40.0
1H-Thieno[3,4-d]imid	23.29	70.0	ng	655165	ISTD05	25.42	374503	40.0
5H-Dibenzo[a,d]cyclo	23.60	42.8	ng	401134	ISTD05	25.42	374503	40.0
(E,Z)-2,4-Decadien-1	24.00	54.2	ng	507103	ISTD05	25.42	374503	40.0
11-Tricosene	24.09	33.3	ng	311354	ISTD05	25.42	374503	40.0
5-Decyne	25.89	84.8	ng	794223	ISTD05	25.42	374503	40.0
5-Decyne	26.14	34.8	ng	325403	ISTD05	25.42	374503	40.0
Hexanenitrile	26.31	166.1	ng	1555210	ISTD05	25.42	374503	40.0
Cholestane	26.95	77.5	ng	725423	ISTD05	25.42	374503	40.0
(E)-(3S,7S)-3,7-DIME	27.40	42.5	ng	397592	ISTD05	25.42	374503	40.0
1,6-CYCLODECADIEN-4,	28.26	135.6	ng	1269320	ISTD05	25.42	374503	40.0
2,2'-Bibicyclo[2.2.1	29.42	41.4	ng	761526	ISTD06	31.61	736197	40.0
Benzo[a]pyrene	29.73	61.1	ng	1124720	ISTD06	31.61	736197	40.0
Ethyl 2,2-dimethyl-1	30.60	31.6	ng	581023	ISTD06	31.61	736197	40.0
5-ISOPROPENYL-3,3,4,	30.99	63.2	ng	1163520	ISTD06	31.61	736197	40.0
Benzo[j]fluoranthene	31.19	123.6	ng	2275220	ISTD06	31.61	736197	40.0
29-Nor-(17.alpha.H,2	33.83	247.5	ng	4555950	ISTD06	31.61	736197	40.0
N-ISOBUTYL-9-(3,4-ME	34.73	48.2	ng	887642	ISTD06	31.61	736197	40.0
2-Thiazolemethanol,	35.31	101.8	ng	1874450	ISTD06	31.61	736197	40.0
Taraxerol methyl eth	37.13	54.2	ng	997964	ISTD06	31.61	736197	40.0
Isocopalane	37.48	39.2	ng	721573	ISTD06	31.61	736197	40.0
Additional Tentatively Identified Compounds								
Acetic acid, 1-methy	6.84	23.8	ng	794324	ISTD01	7.07	1333980	40.0
Phenol, 4-chloro-2-(	22.57	23.8	ng	222764	ISTD05	25.42	374503	40.0
4H-Cyclopenta[def]ph	20.90	21.3	ng	835588	ISTD04	19.61	1566020	40.0
Debromoisoaplysin-20	22.16	21.3	ng	834166	ISTD04	19.61	1566020	40.0
1,5,9-Cyclododecatri	24.92	20.1	ng	188269	ISTD05	25.42	374503	40.0
4-Hydroxy-2-hexanone	5.59	17.5	ng	583785	ISTD01	7.07	1333980	40.0
11-Isopropylidene-2-	38.92	16.2	ng	298036	ISTD06	31.61	736197	40.0
3-ACETOXYPYRIDINE	36.45	15.6	ng	286803	ISTD06	31.61	736197	40.0
2-Cyclohexen-1-ol	5.19	15.4	ng	513067	ISTD01	7.07	1333980	40.0
cis-1,3-Cyclohexaned	28.83	15.3	ng	282468	ISTD06	31.61	736197	40.0

HP-76 58073-005 FFR85 2513 01/22/98

CASE 25969
SDG# FFR76

Hydrocarbons: n-Alkanes

~~Butane~~	~~3.68~~	~~49.2 ng~~	1641400	ISTD01	7.07	1333980	40.0
~~Tetradecane~~	~~21.22~~	~~17.7 ng~~	692021	ISTD04	19.61	1566020	40.0
Tetracosane	22.95	94.7 ng	886314	ISTD05	25.42	374503	40.0
Pentacosane	23.52	28.7 ng	268744	ISTD05	25.42	374503	40.0
Pentacosane	23.71	40.8 ng	382325	ISTD05	25.42	374503	40.0
Hentriacontane	24.36	109.1 ng	1021550	ISTD05	25.42	374503	40.0
Hexadecane	29.18	105.5 ng	1942490	ISTD06	31.61	736197	40.0
Pentadecane	32.37	90.4 ng	1664640	ISTD06	31.61	736197	40.0
Nonacosane	35.72	39.4 ng	725925	ISTD06	31.61	736197	40.0
Subtotal:		575.6 ng					

Hydrocarbons: Branched Alkanes

Octane, 3-methyl-	3.98	11.7 ng	388558	ISTD01	7.07	1333980	40.0
Octane, 4-methyl-	4.58	106.4 ng	3549970	ISTD01	7.07	1333980	40.0
Octane, 3-methyl-	4.74	121.6 ng	4056120	ISTD01	7.07	1333980	40.0
Octadecane, 2,6-dime	21.70	12.1 ng	475534	ISTD04	19.61	1566020	40.0
Hexadecane, 2,6,10,1	22.40	109.7 ng	4295190	ISTD04	19.61	1566020	40.0
Subtotal:		361.6 ng					

Total Alkane Conc: (937.2 ng − 49.2 − 17.7) × R.F. = 22,000 ng/g

G1957.D LIN.M Mon Jan 26 15:44:13 1998

FFR85 58073-005 mo1/27/98

TIC: G1957.D

S HP-7G 58073-005 FFR85 01/22/98 23:13

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.682	rVB	0.266	1641395	3.601	3.867
2	3.979	rVV	0.133	388558	3.887	4.020
3	4.061	rVV	0.082	333582	4.020	4.102
4	4.225	rVV	0.287	24417833	4.102	4.389
5	4.583	rVV	0.276	3549969	4.389	4.665
6	4.737	rVV	0.123	4056122	4.665	4.788
7	4.829	rVB	0.174	3584974	4.788	4.962
8	5.187	rVB	0.195	513067	5.126	5.320
9	5.494	rBV	0.102	184305	5.433	5.535
10	5.587	rVV	0.113	583785	5.535	5.648
11	5.791	rVB	0.266	1329177	5.648	5.914
12	5.996	rBV	0.143	2962735	5.914	6.058
13	6.150	rVB	0.164	402742	6.058	6.221
14	6.365	rVB	0.143	3947826	6.313	6.457
15	6.549	rBV	0.164	1908300	6.457	6.621
16	6.723	rVV	0.113	3814714	6.672	6.784
17	6.836	rVB	0.133	794324	6.784	6.917
18	7.061	rBV	0.154	1333982	6.979	7.132
19	7.204	rVB	0.154	303799	7.132	7.286
20	7.440	rBV	0.205	3605359	7.347	7.552
21	8.064	rVB	0.133	180004	7.992	8.125
22	8.197	rVB	0.143	2105485	8.125	8.269
23	8.996	rVB	0.174	125937	8.924	9.098
24	10.081	rVB	0.235	1397103	9.999	10.234
25	14.278	rBV	0.174	2670139	14.196	14.370
26	16.295	rBV	0.102	1304407	16.244	16.346
27	18.178	rVV	0.154	1883462	18.117	18.271
28	18.445	rBV	0.143	128979	18.342	18.486
29	19.356	rBV	0.102	249936	19.284	19.386
30	19.612	rBV	0.082	1566018	19.561	19.642
31	19.663	rVB	0.061	850470	19.642	19.704
32	19.755	rBV	0.082	176385	19.704	19.786
33	20.062	rBV	0.113	308833	20.011	20.124
34	20.216	rBV	0.123	354877	20.134	20.257
35	20.369	rBV	0.061	218000	20.328	20.390
36	20.472	rBV	0.133	1504292	20.390	20.523
37	20.625	rBV	0.082	245187	20.574	20.656
38	20.687	rBV	0.061	259934	20.656	20.717
39	20.902	rBV	0.154	835588	20.779	20.932
40	21.117	rBV	0.205	1534516	20.932	21.137
41	21.219	rBV	0.102	692021	21.137	21.239
42	21.270	rBV	0.051	324758	21.239	21.291
43	21.598	rBV	0.297	5217189	21.342	21.639
44	21.700	rBV	0.092	475534	21.639	21.731
45	21.813	rBV	0.092	575363	21.731	21.823
46	21.936	rBV	0.123	959462	21.843	21.966
47	22.038	rBV	0.113	2107069	21.966	22.079
48	22.161	rBV	0.113	834166	22.079	22.192
49	22.396	rBV	0.235	4295185	22.192	22.427
50	22.488	rVV	0.102	1717653	22.427	22.529
51	22.570	rBV	0.051	222764	22.529	22.581
52	22.673	rVV	0.092	1984098	22.632	22.724
53	22.796	rVV	0.082	465559	22.734	22.816
54	22.949	rVV	0.123	886314	22.857	22.980
55	23.092	rBV	0.061	353400	23.041	23.103
56	23.287	rBV	0.123	655165	23.174	23.297

57	23.522	rBV	0.092	268744	23.451	23.543
58	23.604	rVB	0.092	401134	23.553	23.645
59	23.707	rBV	0.102	382325	23.655	23.758
60	24.004	rBV	0.123	507103	23.932	24.055
61	24.085	rVB	0.092	311354	24.055	24.147
62	24.362	rVB	0.225	1021546	24.259	24.485
63	24.925	rBV	0.072	188269	24.894	24.966
64	25.037	rVB	0.133	449404	25.007	25.140
65	25.427	rVV	0.082	374503	25.386	25.467
66	25.498	rVB	0.102	561347	25.467	25.570
67	25.887	rVB	0.184	794223	25.846	26.031
68	26.143	rVB	0.092	325403	26.133	26.225
69	26.307	rVB	0.215	1555208	26.245	26.460
70	26.563	rBV	0.061	137943	26.522	26.583
71	26.952	rVB	0.154	725423	26.911	27.064
72	27.187	rBV	0.113	659119	27.105	27.218
73	27.402	rVB	0.113	397592	27.372	27.484
74	28.262	rVB	0.235	1269315	28.191	28.426
75	28.825	rBV	0.072	282468	28.774	28.846
76	29.184	rVB	0.235	1942492	29.091	29.327
77	29.419	rVB	0.164	761526	29.368	29.532
78	29.726	rBV	0.174	1124716	29.644	29.818
79	30.136	rBV	0.051	121890	30.105	30.156
80	30.596	rBV	0.123	581023	30.494	30.617
81	30.985	rBV	0.154	1163518	30.852	31.006
82	31.190	rVV	0.215	2275222	31.016	31.231
83	31.395	rVV	0.164	2362995	31.282	31.446
84	31.610	rBV	0.133	736197	31.548	31.682
85	32.204	rBV	0.072	270046	32.152	32.224
86	32.367	rVB	0.205	1664643	32.296	32.500
87	33.627	rVB	0.102	234565	33.616	33.719
88	33.831	rVB	0.389	4555948	33.770	34.159
89	34.732	rVB	0.205	887642	34.681	34.886
90	35.306	rVB	0.225	1874453	35.224	35.449
91	35.715	rVB	0.174	725925	35.623	35.797
92	36.452	rVV	0.082	286803	36.421	36.503
93	36.657	rVB	0.348	3524525	36.503	36.851
94	37.128	rBV	0.205	997964	36.995	37.199
95	37.476	rVB	0.195	721573	37.394	37.588
96	38.192	rBV	0.266	1779876	38.059	38.326
97	38.878	rBV	0.072	149477	38.827	38.899
98	38.919	rVB	0.092	298036	38.899	38.991
99	39.288	rBV	0.082	125634	39.226	39.308
100	40.373	rBV	0.072	133786	40.342	40.414

CASE 45969
SDG# FFR76

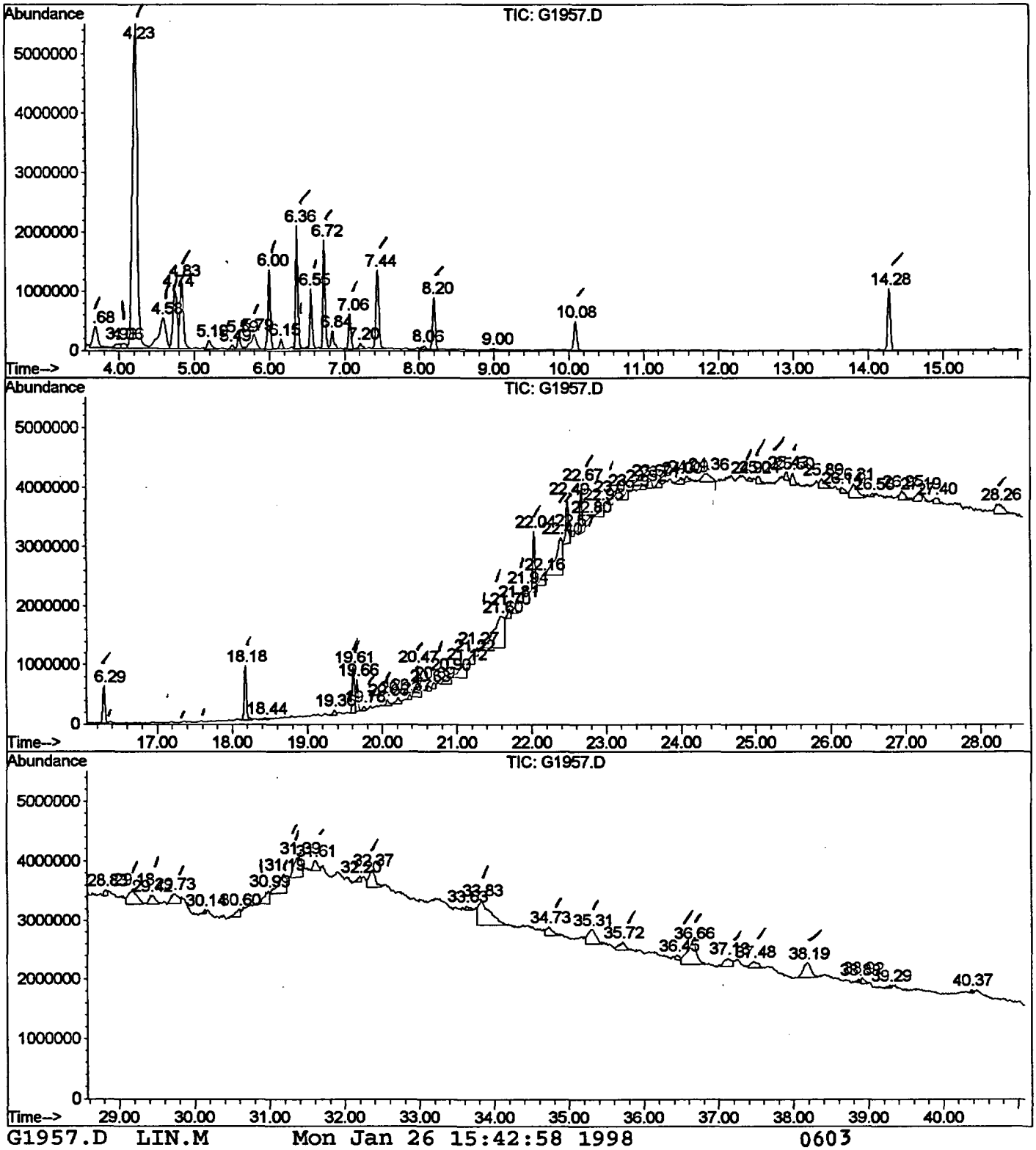
FFR85 58073-005 mo1-27-98

AP76 01/22/98 20:13

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1957.D
Operator :
Acquired : 22 Jan 98 23:13 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-005 FFR85
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 8
Quant File :CLPME7.RES



G1957.D LIN.M Mon Jan 26 15:42:58 1998 0603

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR86

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-006

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1958

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 40 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.6

Number TICs Found: 30

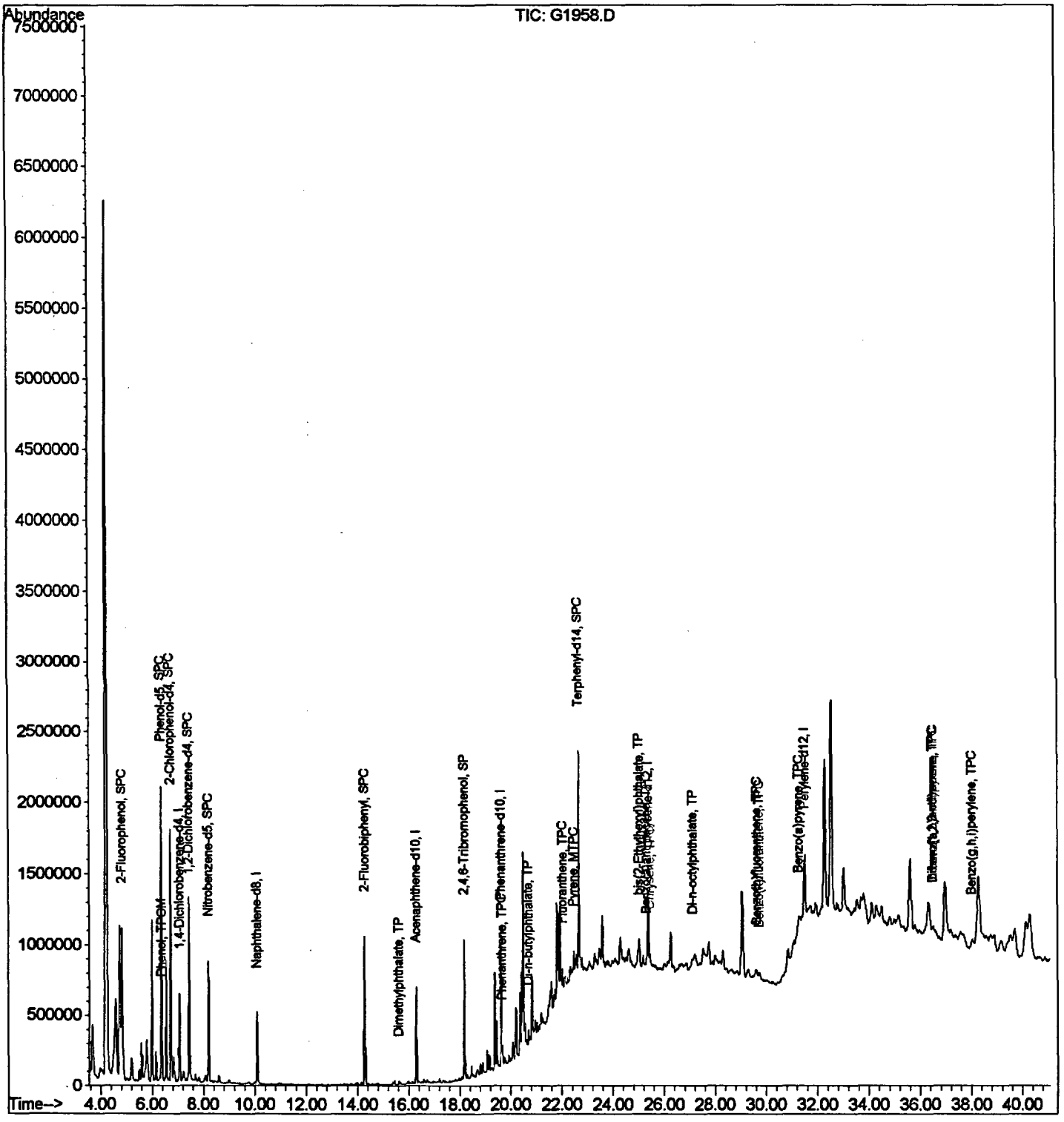
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

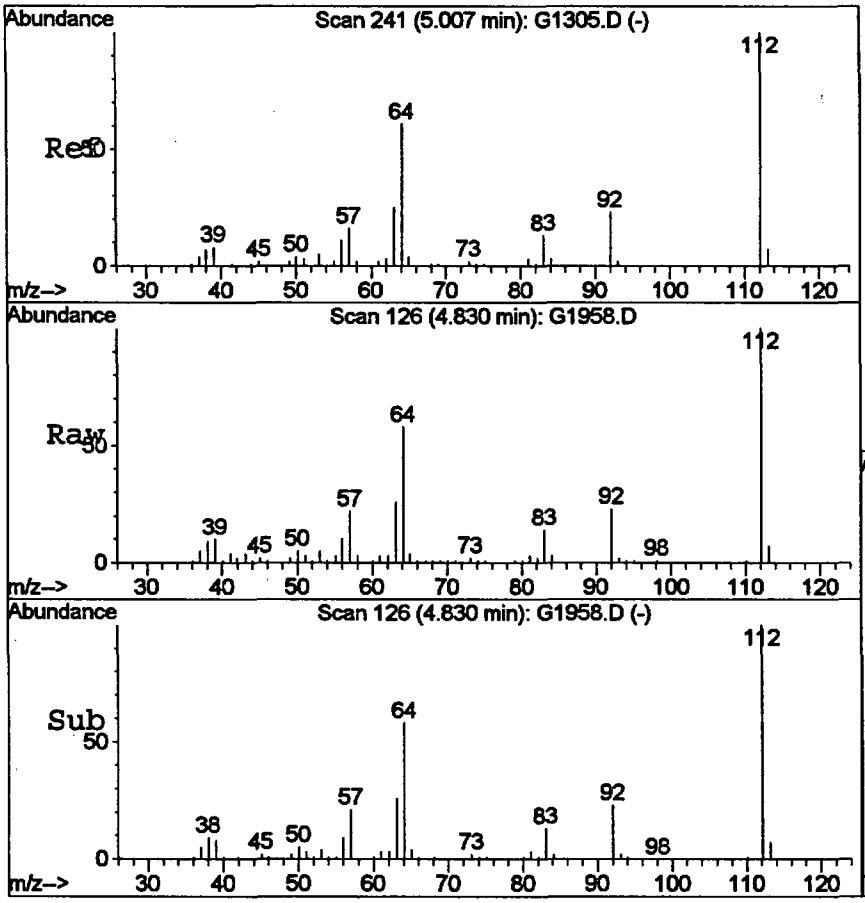
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.68	1400.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.24	21000.	JNAB
3.	822-67-3	2-Cyclohexen-1-ol	5.19	460.	JNB
4.		Unknown	5.59	540.	J
5.		Unknown	5.79	1200.	J
6.		trans-3-Hexene-2,5-dione	6.00	2000.	JB
7.		Unknown acid type	6.15	380.	J
8.		Unknown	6.55	1300.	J
9.	5343-96-4	2-Butanol, 3-methyl-, acetat	6.84	440.	JN
10.	1002-84-2	Pentadecanoic acid	19.37	880.	JN
11.	112-80-1	9-Octadecenoic acid (Z)-	19.45	400.	JN
12.	112-39-0	Hexadecanoic acid, methyl es	20.21	750.	JN
13.		Unknown	20.37	660.	J
14.		Unknown	20.43	640.	J
15.	57-10-3	Hexadecanoic acid	20.48	1800.	JN
16.		Unknown hydrocarbon	21.19	240.	J
17.		Unknown acid type	21.55	320.	J
18.		Unknown	21.59	240.	J
19.		Unknown	21.81	1800.	J
20.	57-11-4	Octadecanoic acid	21.94	960.	JN
21.		Unknown hydrocarbon	23.48	520.	J
22.	123-79-5	Hexanedioic acid, dioctyl es	23.59	770.	JNB
23.		Unknown	24.62	390.	J
24.		Unknown	27.76	620.	J
25.		Unknown	28.31	530.	J
26.		Unknown	32.55	5800.	J
27.		Unknown	33.03	1000.	J
28.		ERGOST-5-EN-3.BETA.-OL	36.34	880.	J
29.	83-48-7	Stigmasta-5,22-dien-3-ol, (3	36.99	2000.	JN
30.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.29	2400.	JN

Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:13 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

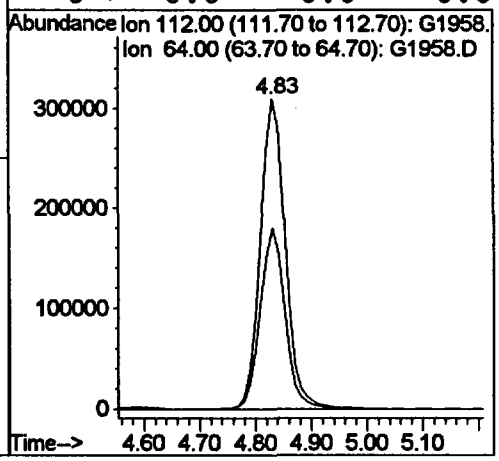


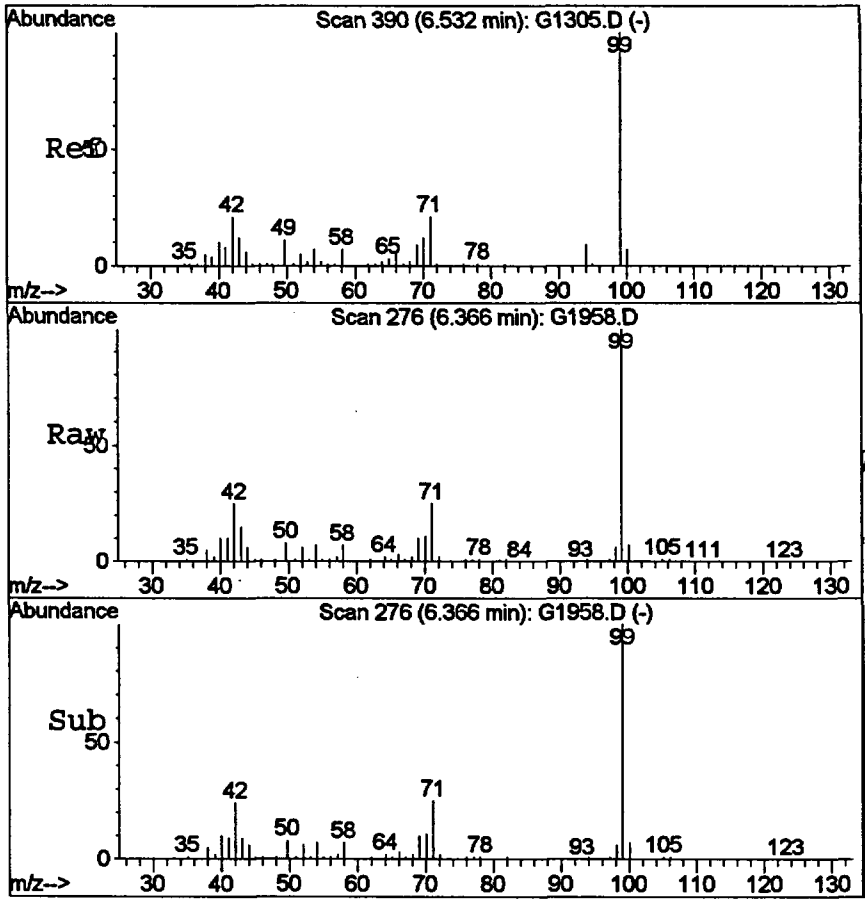


#2
2-Fluorophenol
Concen: 127.56 ng
RT: 4.83 min Scan# 126
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:112 Resp: 953424

Ion	Ratio	Lower	Upper
112	100		
64	58.0	40.2	80.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

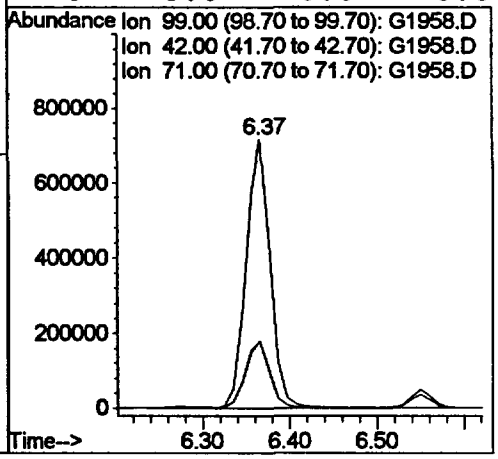


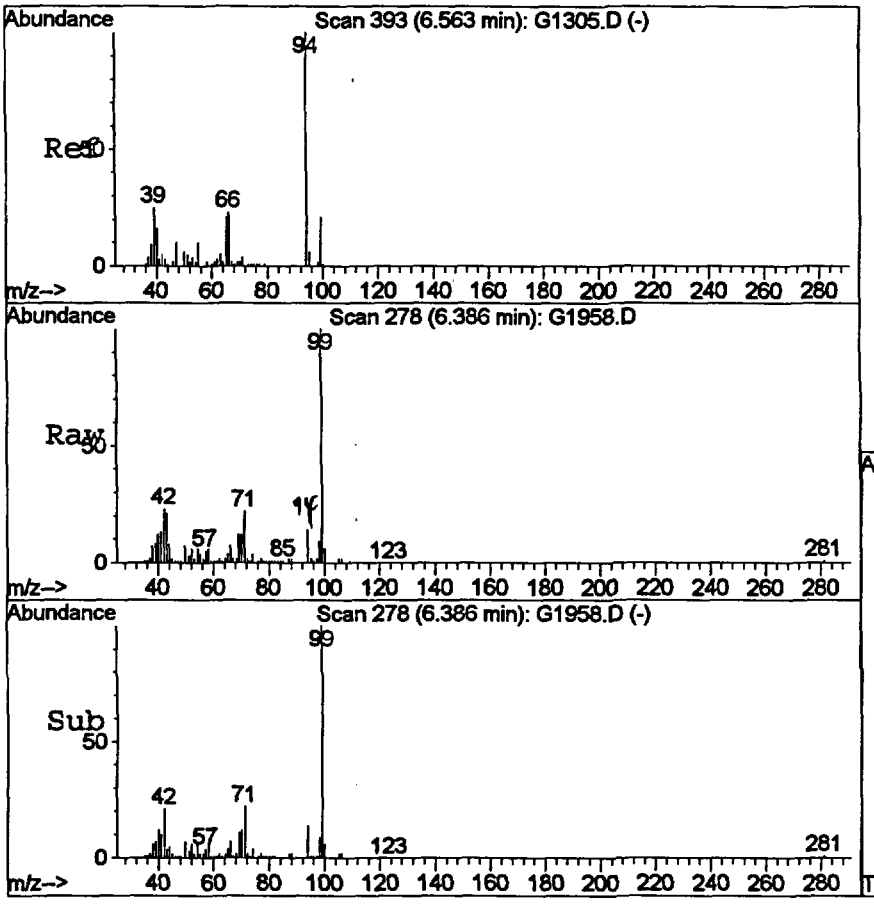


#3
Phenol-d5
Concen: 138.90 ng
RT: 6.37 min Scan# 276
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:99 Resp: 1371368

Ion	Ratio	Lower	Upper
99	100		
42	25.2	9.1	49.1
71	25.1	6.1	46.1
0	0.0	0.0	0.0

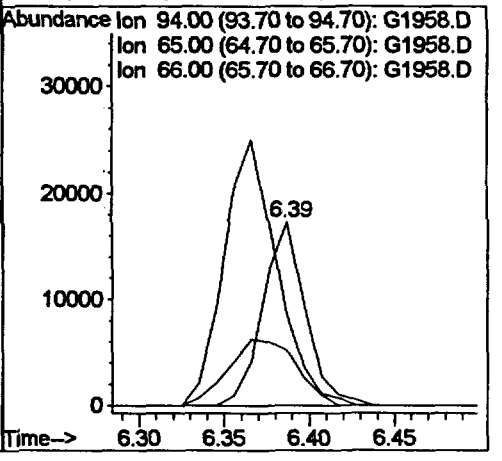


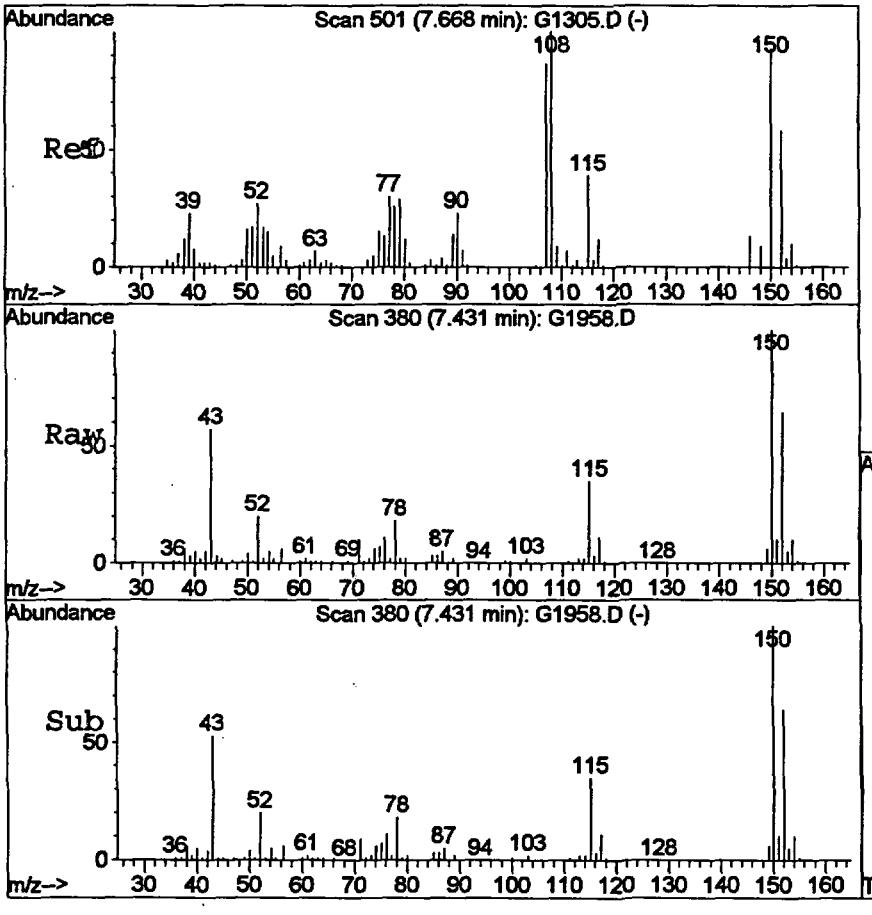


#4
Phenol
Concen: 2.83 ng
RT: 6.39 min /Scan# 278
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:94 Resp: 29993

Ion	Ratio	Lower	Upper
94	100		
65	57.5	5.6	45.6#
66	179.9	14.2	54.2#
0	0.0	0.0	0.0

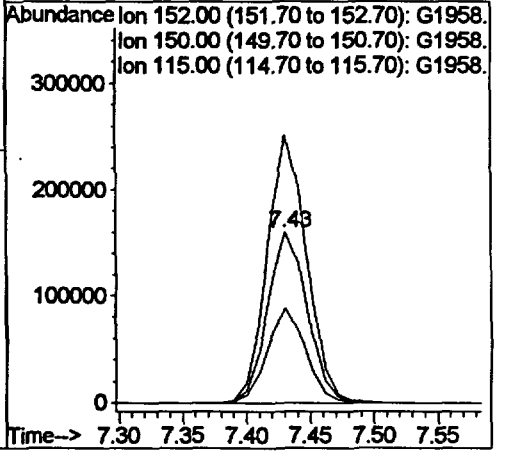


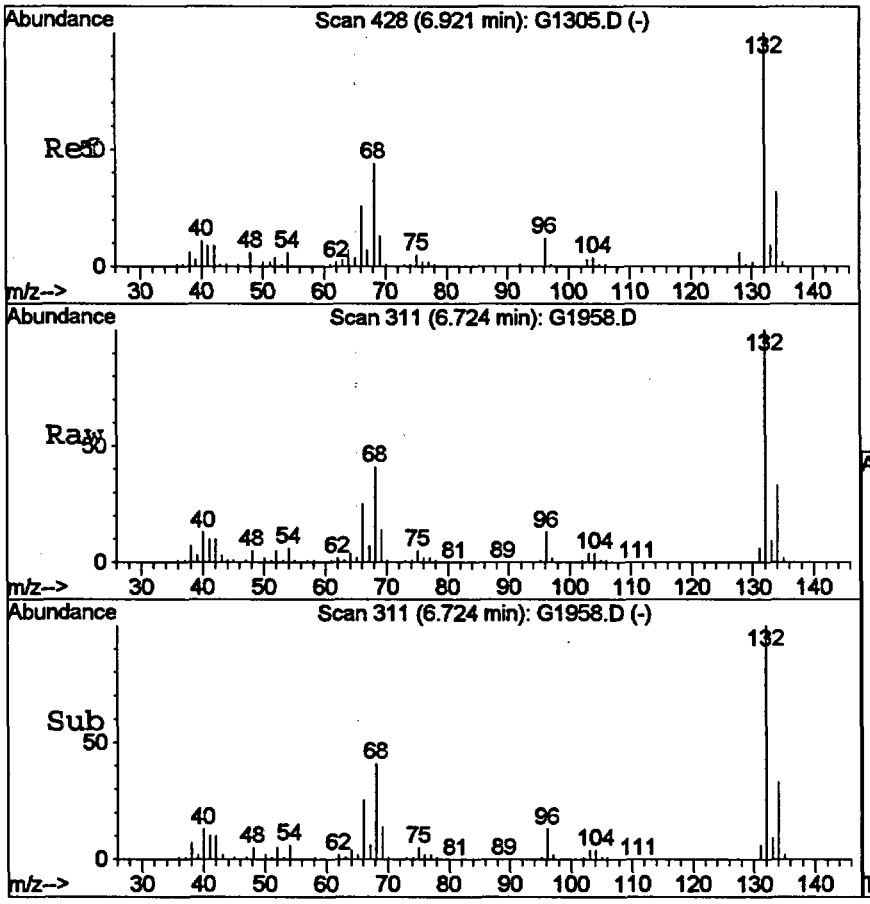


#7
1,2-Dichlorobenzene-d4
Concen: 69.81 ng
RT: 7.43 min Scan# 380
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:152 Resp: 345311

Ion	Ratio	Lower	Upper
152	100		
150	155.7	153.4	193.4
115	53.8	34.2	74.2
0	0.0	0.0	0.0

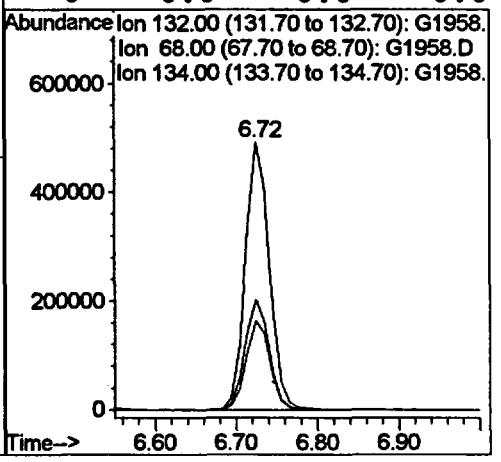


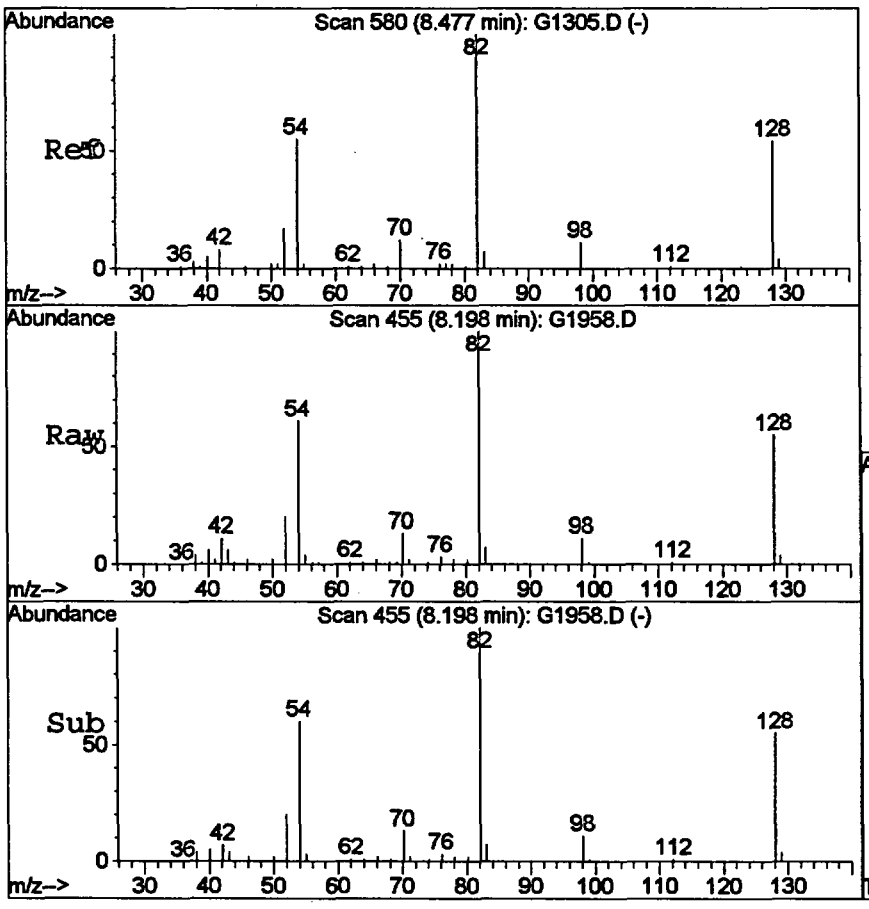


#8
2-Chlorophenol-d4
Concen: 132.67 ng
RT: 6.72 min Scan# 311
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:132 Resp: 1006432

Ion	Ratio	Lower	Upper
132	100		
68	41.5	23.4	63.4
134	33.3	12.7	52.7
0	0.0	0.0	0.0

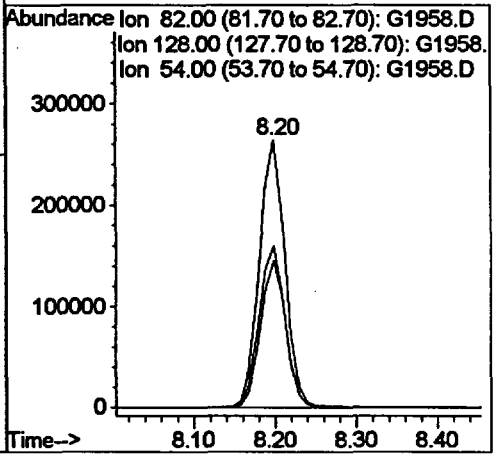


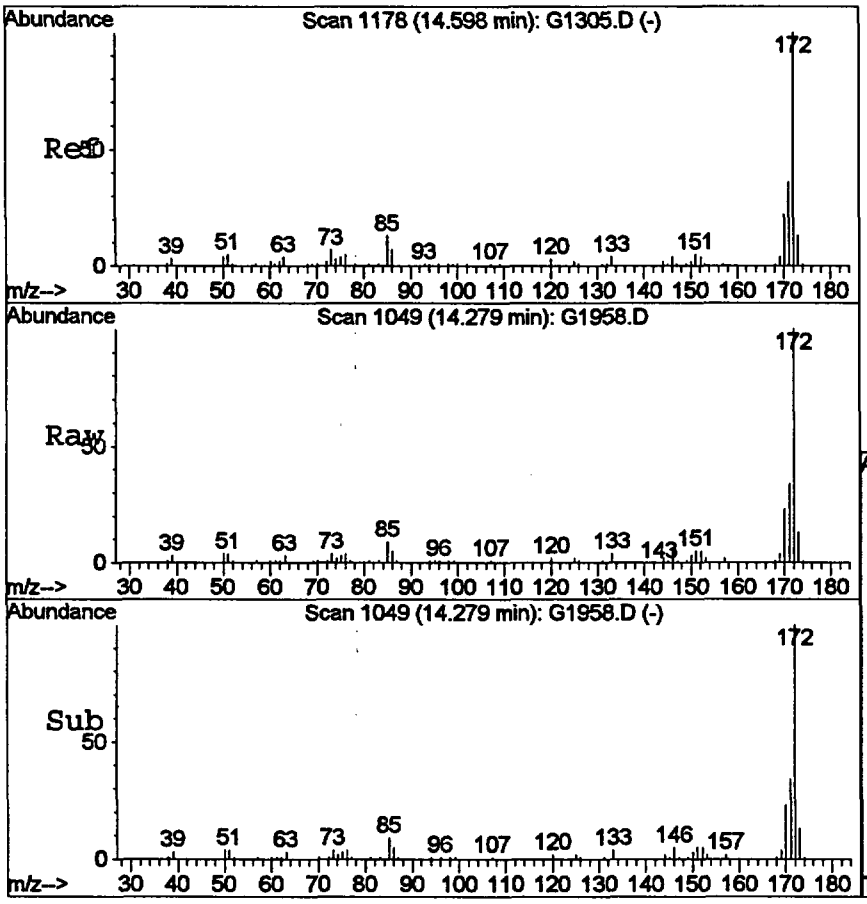


#18
Nitrobenzene-d5
Concen: 90.93 ng
RT: 8.20 min Scan# 455
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:82 Resp: 577686

Ion	Ratio	Lower	Upper
82	100		
128	54.2	33.9	73.9
54	61.1	43.9	83.9
0	0.0	0.0	0.0

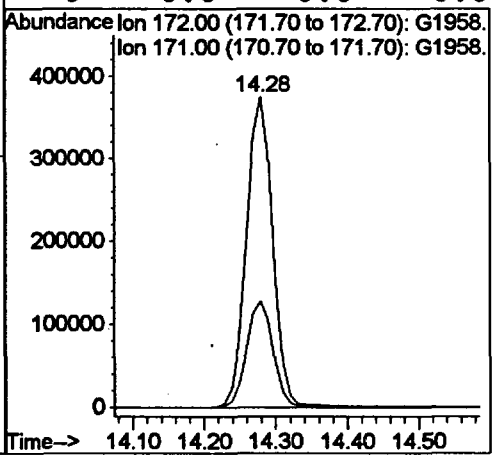


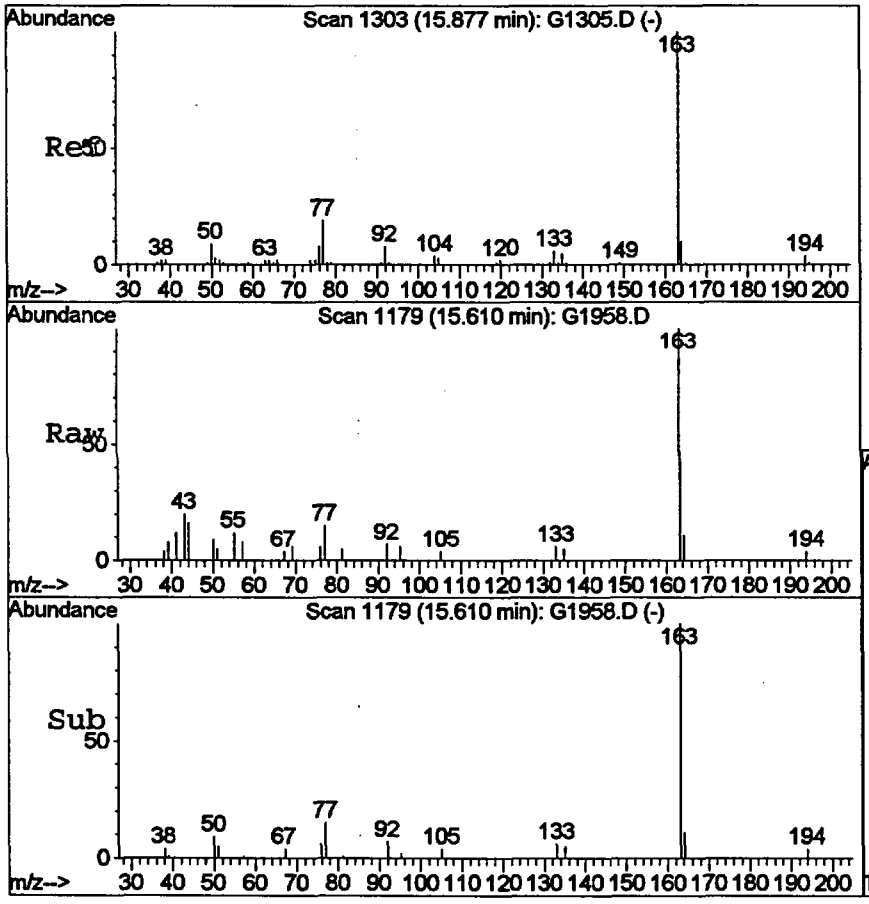


#35
2-Fluorobiphenyl
Concen: 96.25 ng
RT: 14.28 min Scan# 1049
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:172 Resp: 957358

Ion	Ratio	Lower	Upper
172	100		
171	34.1	14.1	54.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

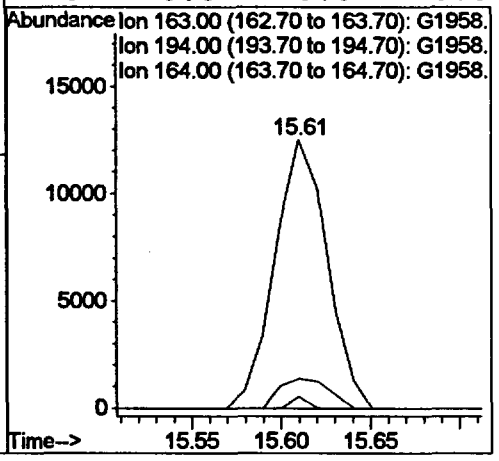




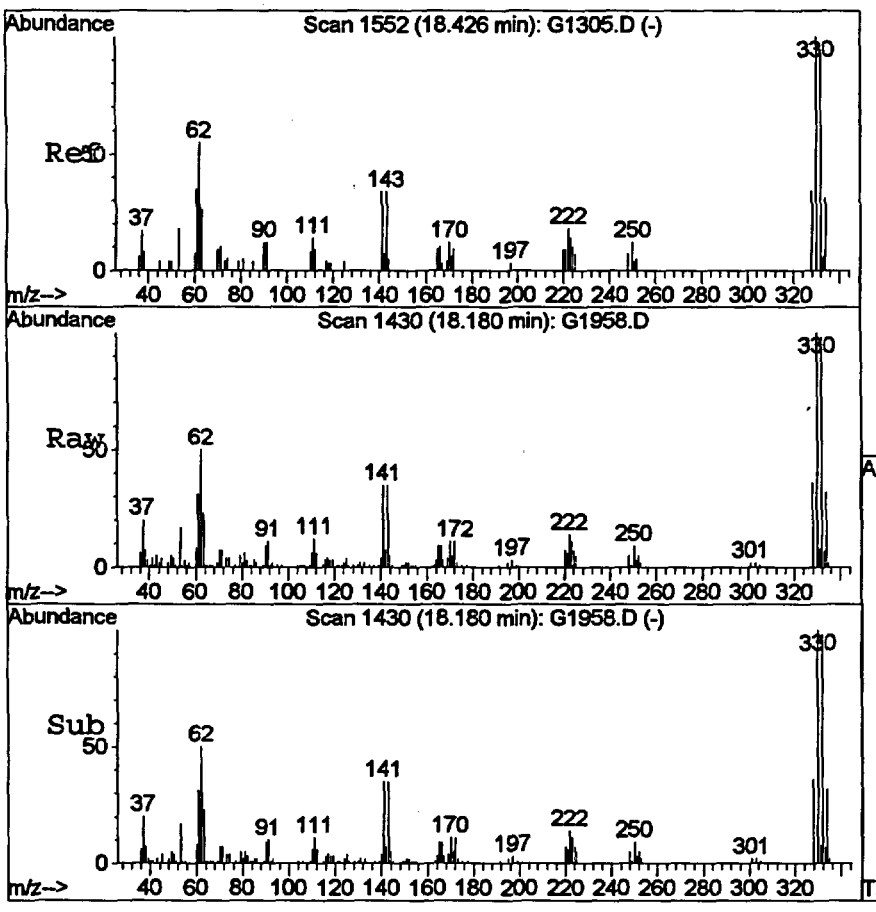
#38
Dimethylphthalate
Concen: 2.15 ng
RT: 15.61 min / Scan# 1179
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:163 Resp: 25379

Ion	Ratio	Lower	Upper
163	100		
194	0.0	0.0	24.1
164	0.0	0.0	30.2
0	0.0	0.0	0.0



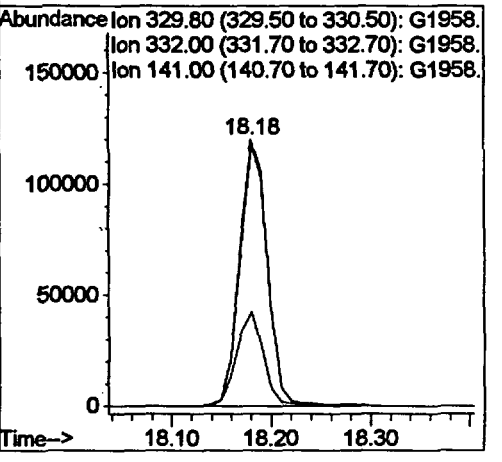
CASE 25969
SDG# FFR76

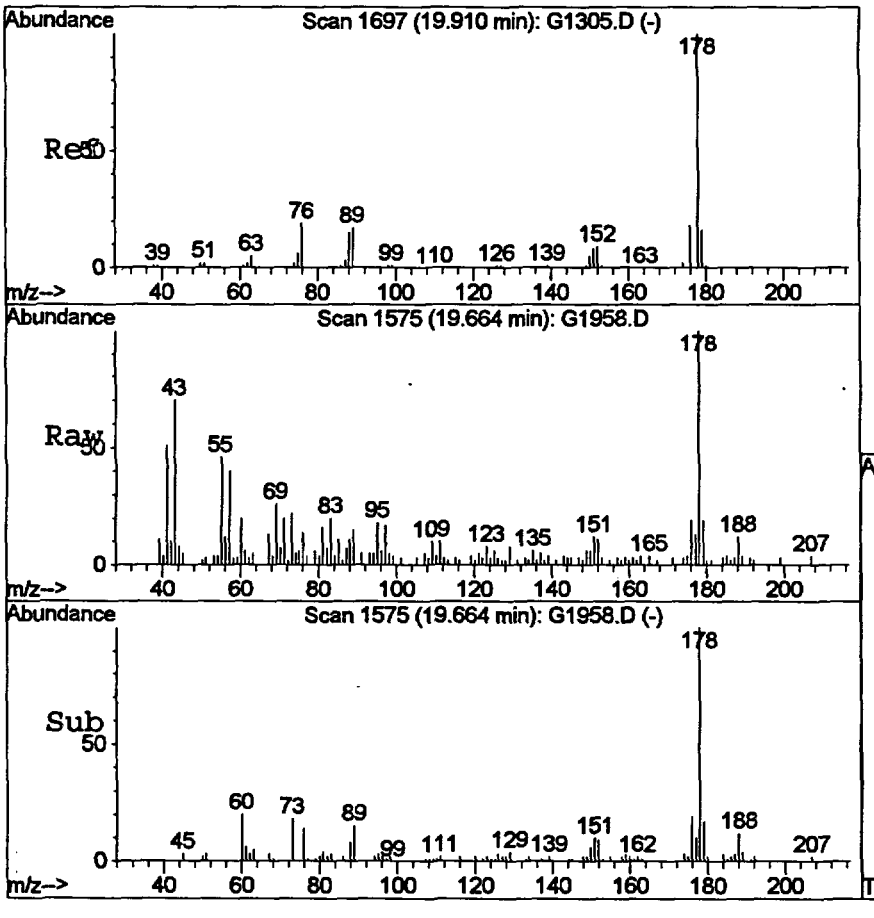


#52
2,4,6-Tribromophenol
Concen: 152.31 ng
RT: 18.18 min Scan# 1430
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:329.8 Resp: 232156

Ion	Ratio	Lower	Upper
330	100		
332	97.8	75.8	115.8
141	34.7	14.4	54.4
0	0.0	0.0	0.0

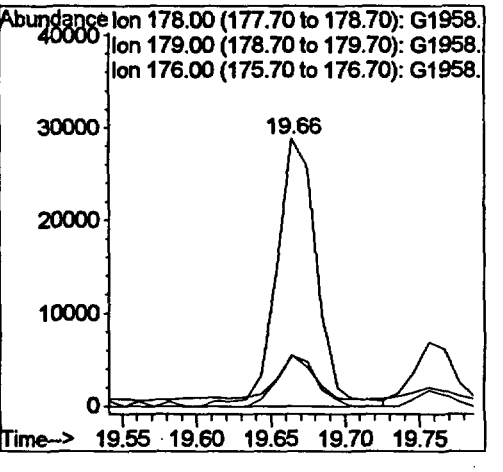




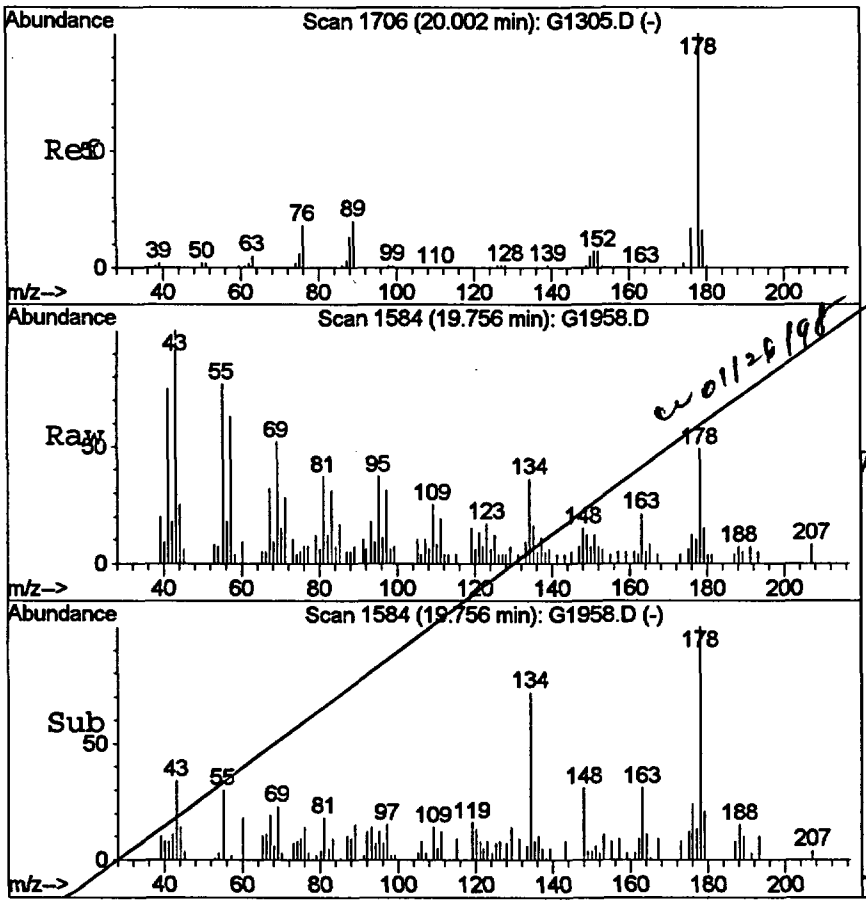
#58
Phenanthrene
Concen: 3.60 ng
RT: 19.66 min /Scan# 1575
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:178 Resp: 54211

Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	35.5
176	0.0	0.0	38.8
0	0.0	0.0	0.0



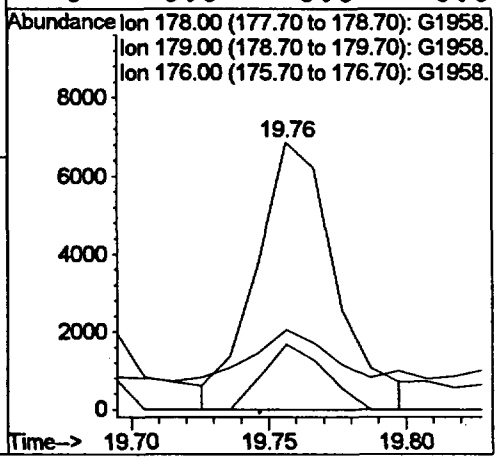
CASE 25969
SDG# FFR76

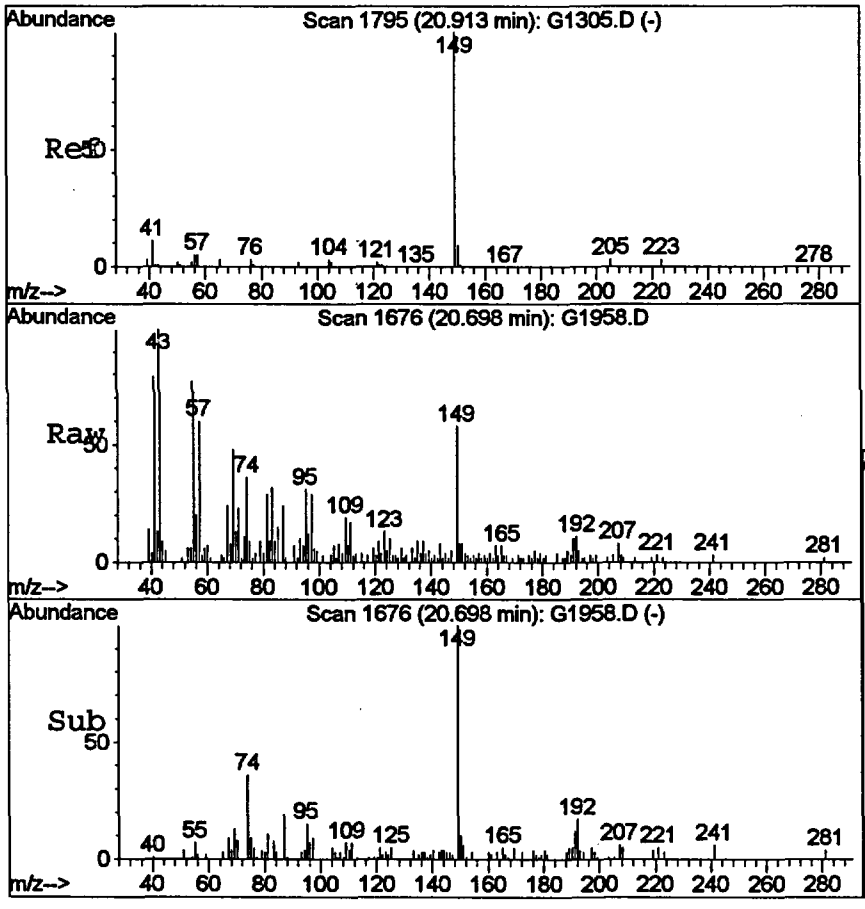


#59
Anthracene
Concen: 0.86 ng m
RT: 19.76 min Scan# 1584
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:178 Resp: 13798

Ion	Ratio	Lower	Upper
178	100		
179	29.9	0.0	34.8
176	24.5	0.0	38.4
0	0.0	0.0	0.0

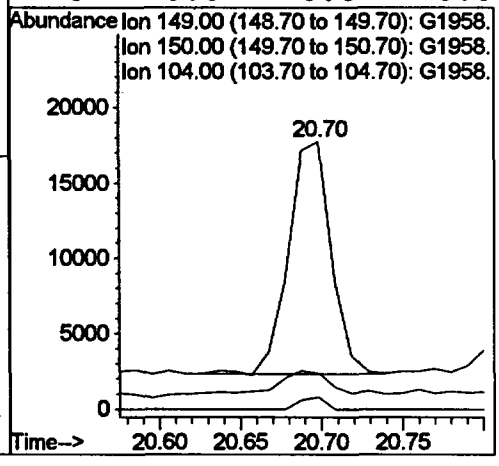




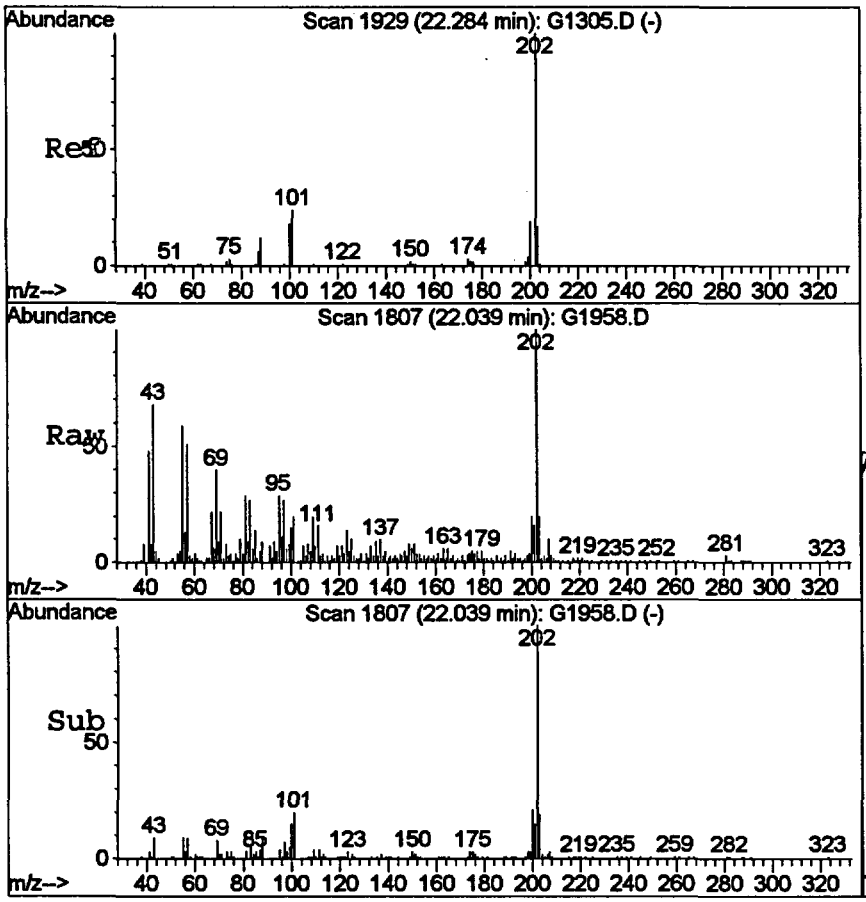
#61
Di-n-butylphthalate
Concen: 1.20 ng
RT: 20.70 min Scan# 1676
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:149 Resp: 28234

Ion	Ratio	Lower	Upper
149	100		
150	0.0	0.0	29.2
104	0.0	0.0	23.2
0	0.0	0.0	0.0

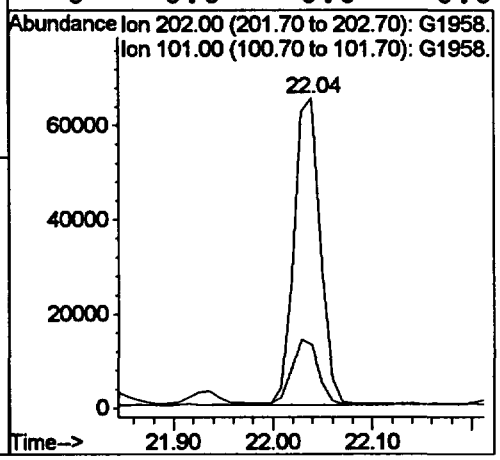


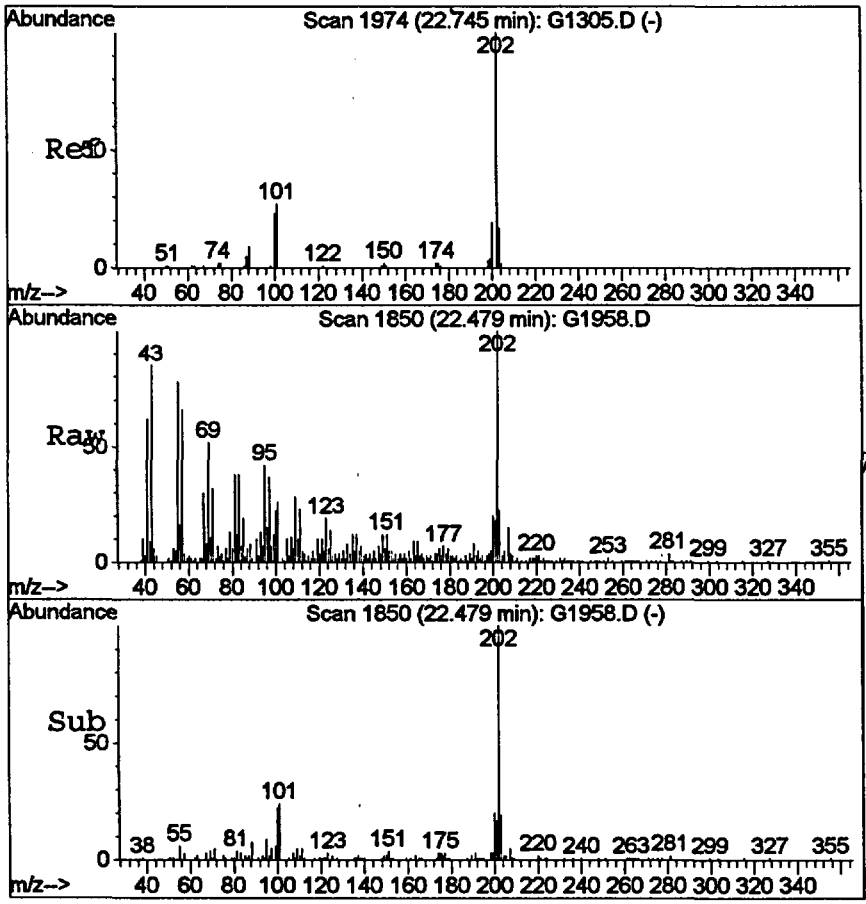
CASE 25969
SDG# FFR76



#62
Fluoranthene
Concen: 7.86 ng
RT: 22.04 min ✓ Scan# 1807
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

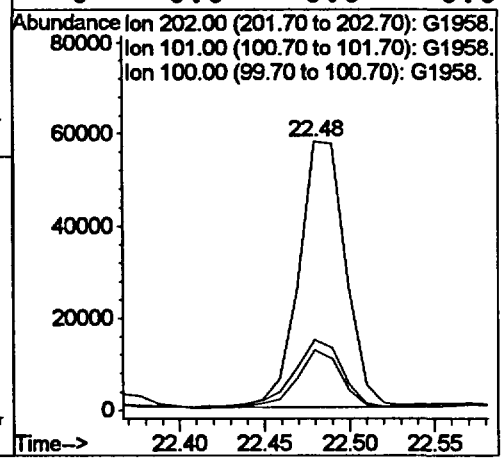
Tgt Ion:202	Resp:	119892	
Ion	Ratio	Lower	Upper
202	100		
101	21.4	0.6	40.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

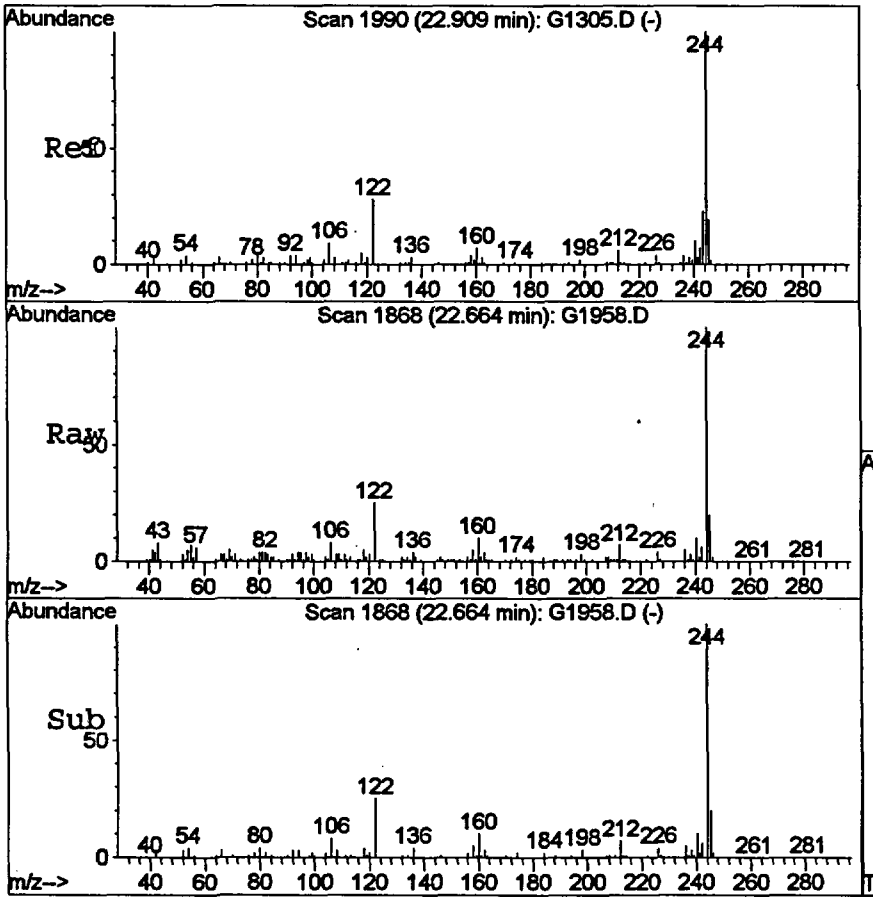




#64
Pyrene
Concen: 7.43 ng
RT: 22.48 min / Scan# 1850
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:202	Resp:	110887	
Ion	Ratio	Lower	Upper
202	100		
101	27.2	5.7	45.7
100	21.0	0.8	40.8
0	0.0	0.0	0.0

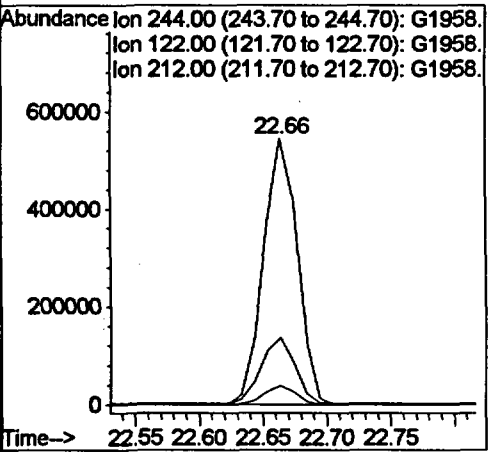


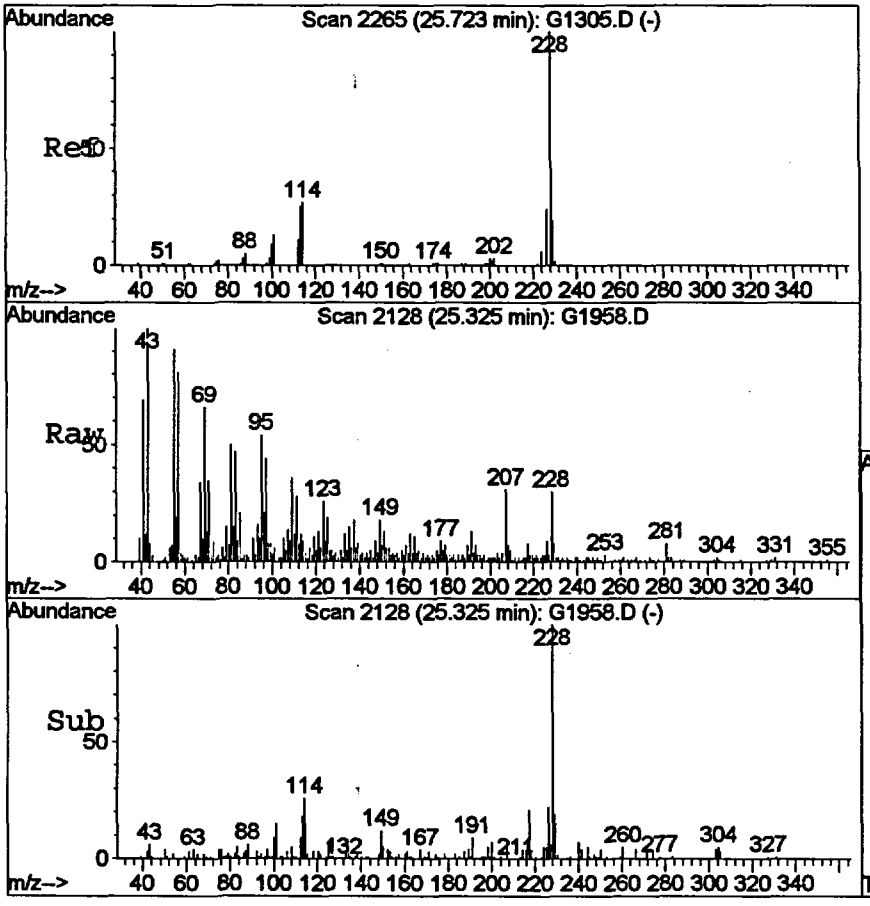


#65
Terphenyl-d14
Concen: 104.80 ng
RT: 22.66 min Scan# 1868
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:244 Resp: 1011065

Ion	Ratio	Lower	Upper
244	100		
122	24.5	3.7	43.7
212	6.8	0.0	27.0
0	0.0	0.0	0.0

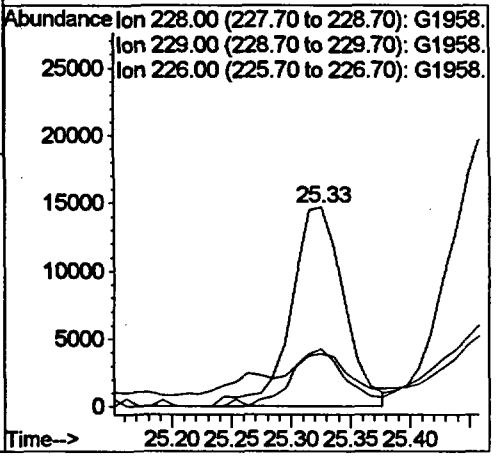


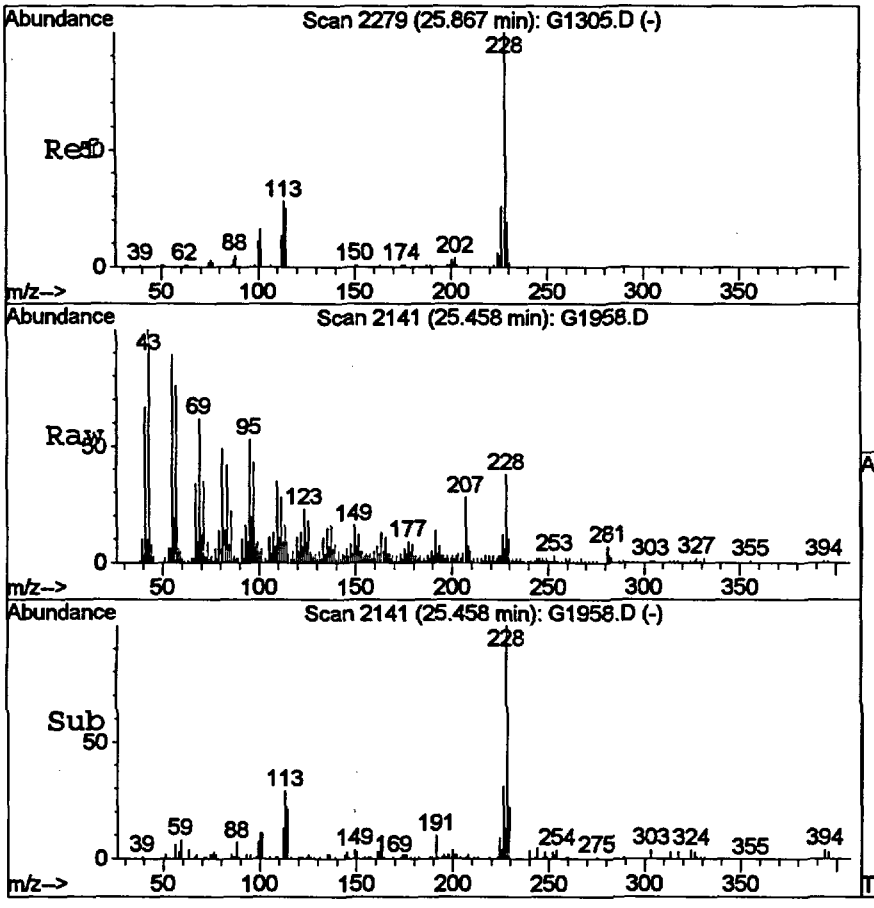


#67
Benzo(a)anthracene
Concen: 3.82 ng
RT: 25.33 min /Scan# 2128
Delta R.T. 0.03 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:228 Resp: 45553

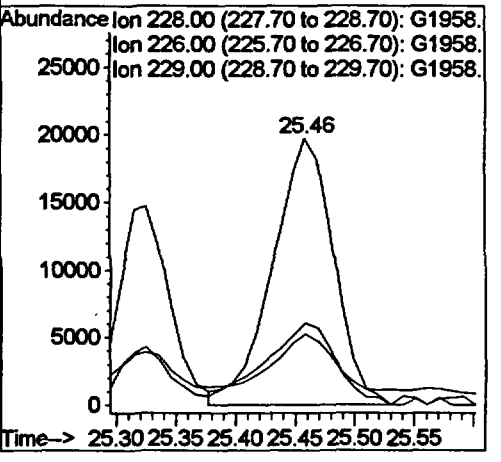
Ion	Ratio	Lower	Upper
228	100		
229	0.0	9.8	29.8#
226	0.0	16.2	36.2#
0	0.0	0.0	0.0

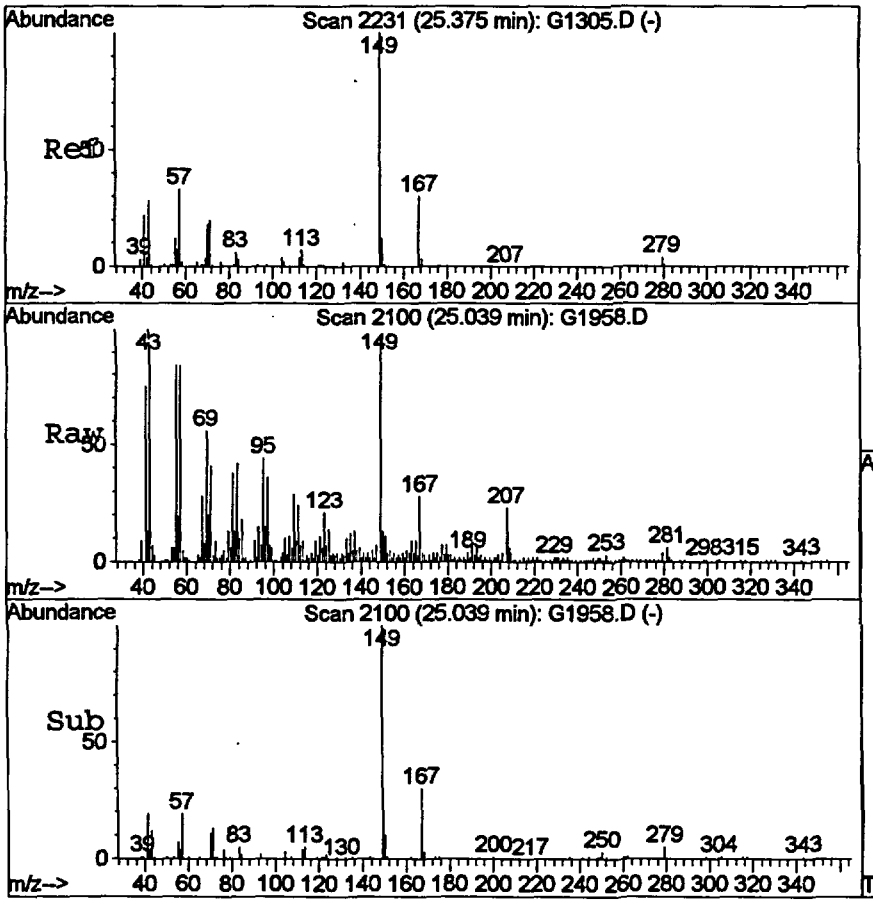




#69
Chrysene
Concen: 6.15 ng
RT: 25.46 min / Scan# 2141
Delta R.T. 0.02 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

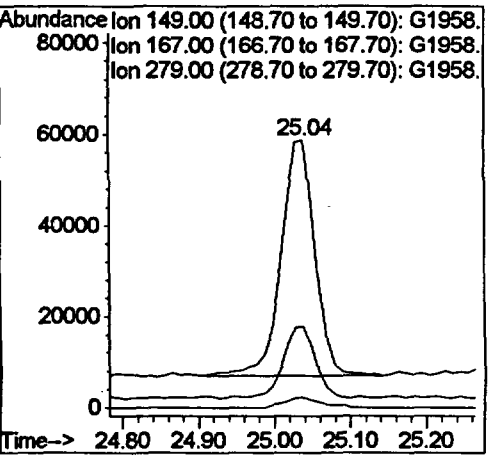
Tgt Ion:228	Resp:	69932	
Ion	Ratio	Lower	Upper
228	100		
226	35.9	19.0	39.0
229	0.0	9.9	29.9#
0	0.0	0.0	0.0

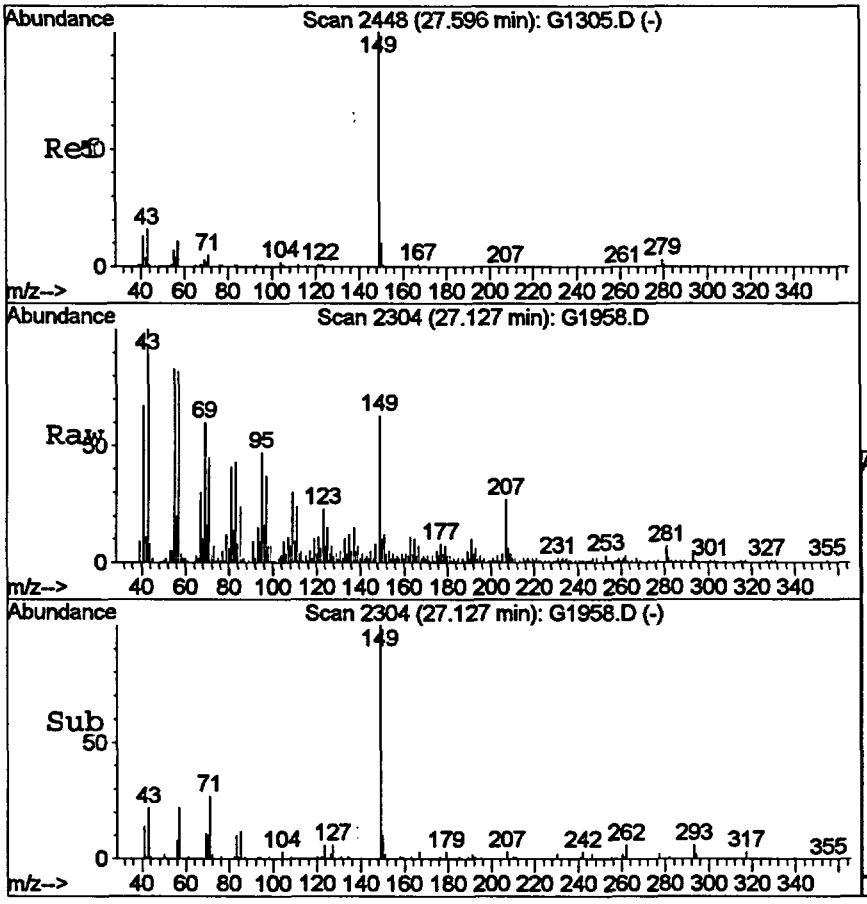




#70
bis(2-Ethylhexyl)phthalate
Concen: 9.91 ng
RT: 25.04 min / Scan# 2100
Delta R.T. 0.03 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:149	Resp:	159722	
Ion	Ratio	Lower	Upper
149	100		
167	29.0	10.6	50.6
279	0.0	0.0	23.8
0	0.0	0.0	0.0

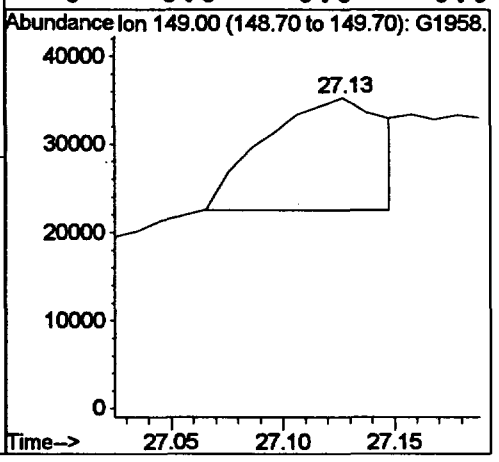


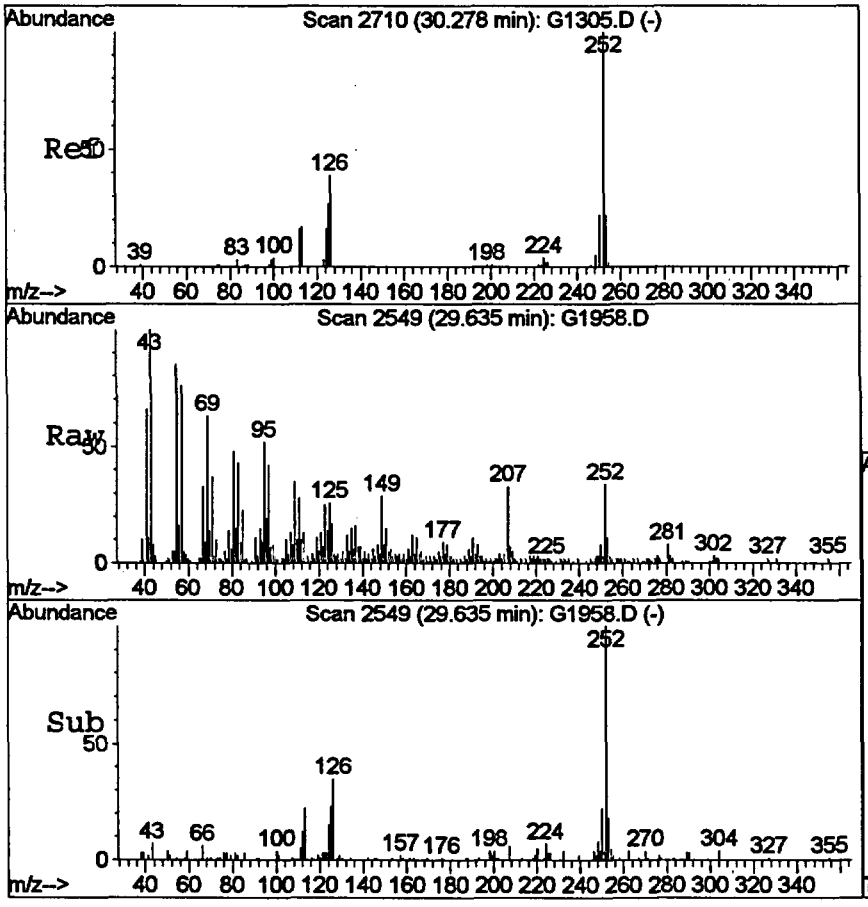


#72
Di-n-octylphthalate
Concen: 1.29 ng m
RT: 27.13 min / Scan# 2304
Delta R.T. 0.01 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:149 Resp: 47253

Ion	Ratio	Lower	Upper
149	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

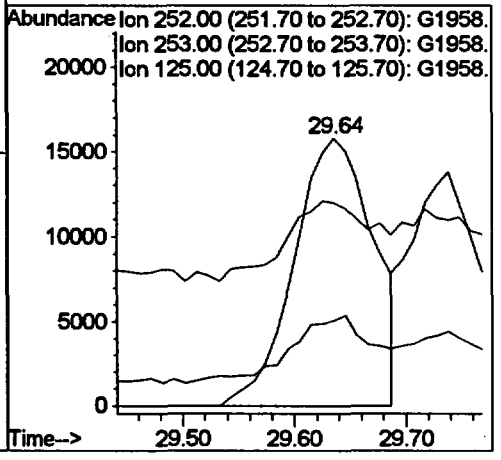


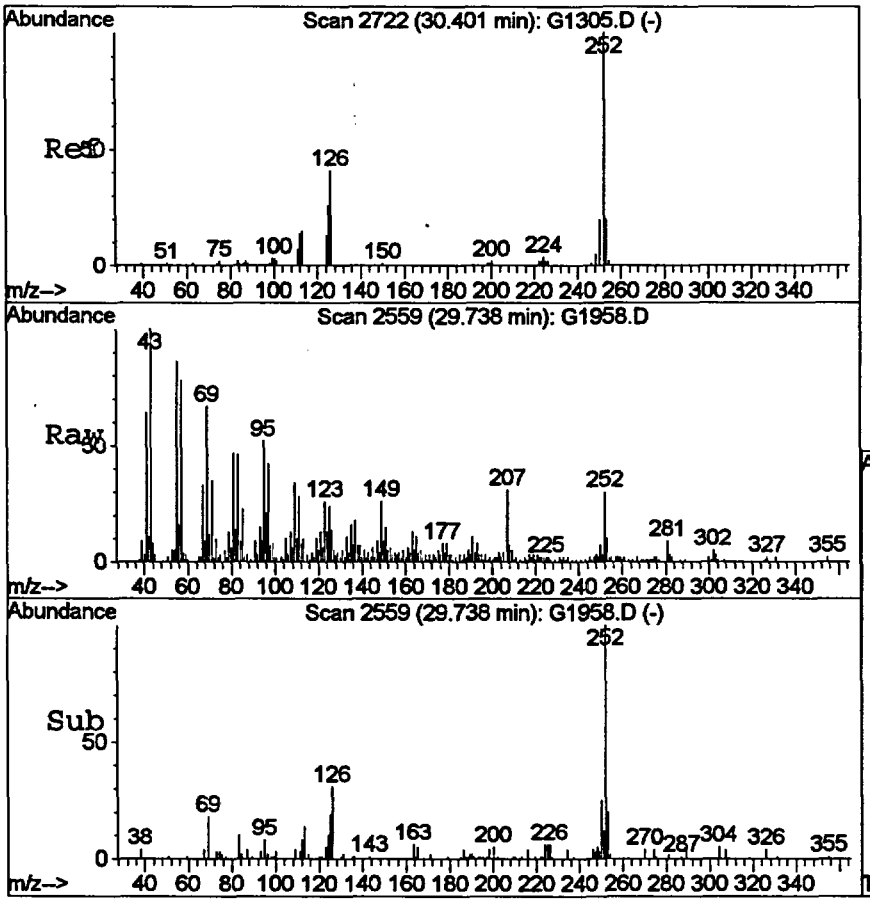


#73
Benzo(b)fluoranthene
Concen: 5.13 ng
RT: 29.64 min / Scan# 2549
Delta R.T. 0.06 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:252 Resp: 77951

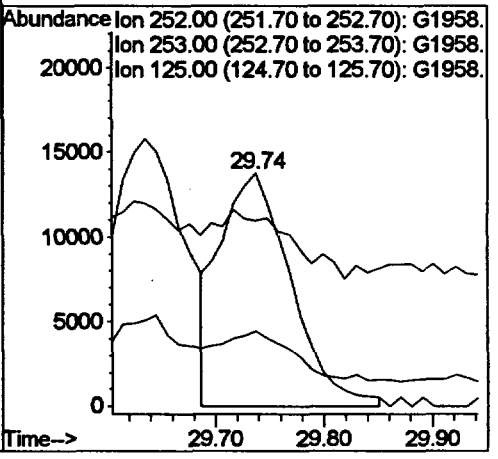
Ion	Ratio	Lower	Upper
252	100		
253	26.4	2.4	42.4
125	32.6	5.5	45.5
0	0.0	0.0	0.0

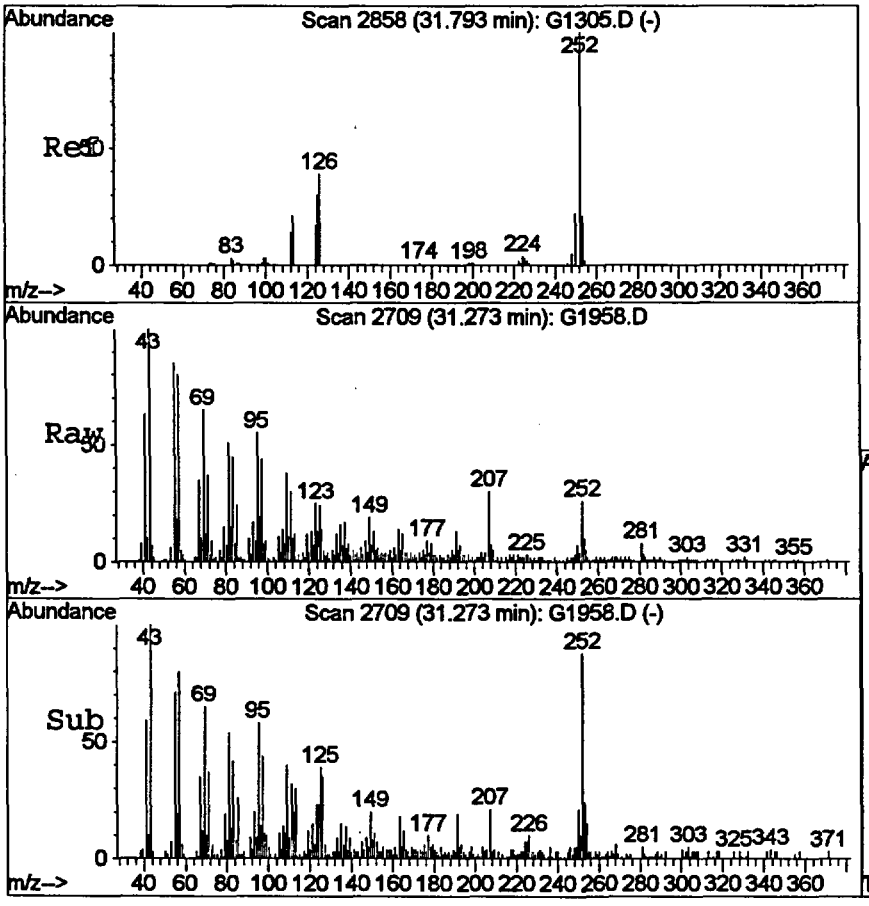




#74
Benzo(k)fluoranthene
Concen: 4.33 ng m
RT: 29.74 min / Scan# 2559
Delta R.T. 0.05 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

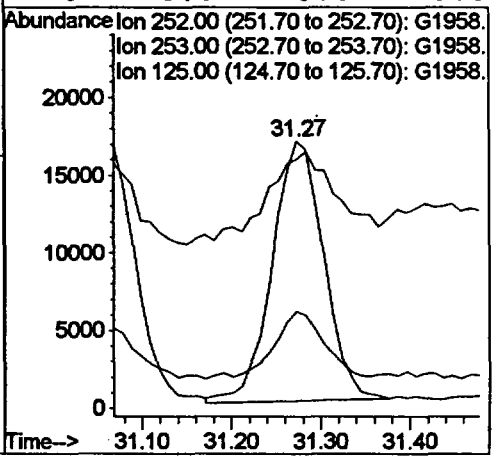
Tgt Ion:252	Resp:	62654	
Ion	Ratio	Lower	Upper
252	100		
253	32.2	2.3	42.3
125	79.9	5.0	45.0#
0	0.0	0.0	0.0



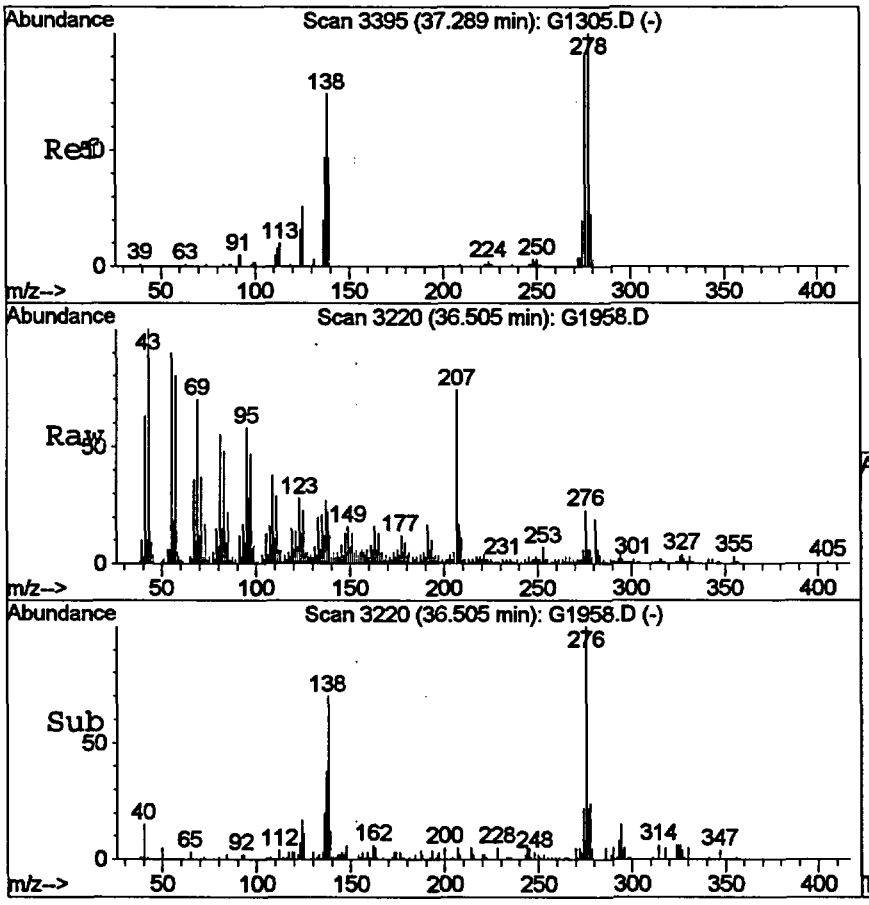


#75
Benzo(a)pyrene
Concen: 4.82 ng
RT: 31.27 min / Scan# 2709
Delta R.T. 0.05 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:252	Resp:	66959	
Ion	Ratio	Lower	Upper
252	100		
253	25.6	12.0	32.0
125	51.4	19.7	35.7#
0	0.0	0.0	0.0



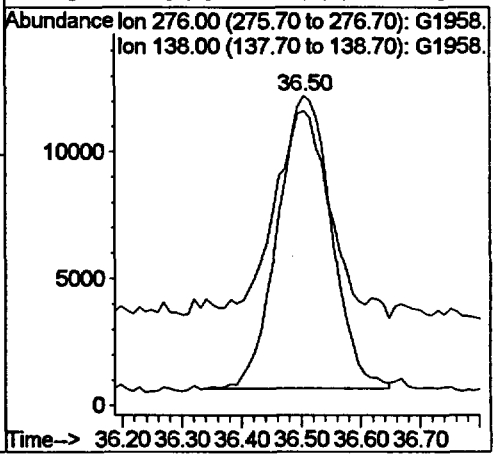
CASE 25969
SDG# FFR76

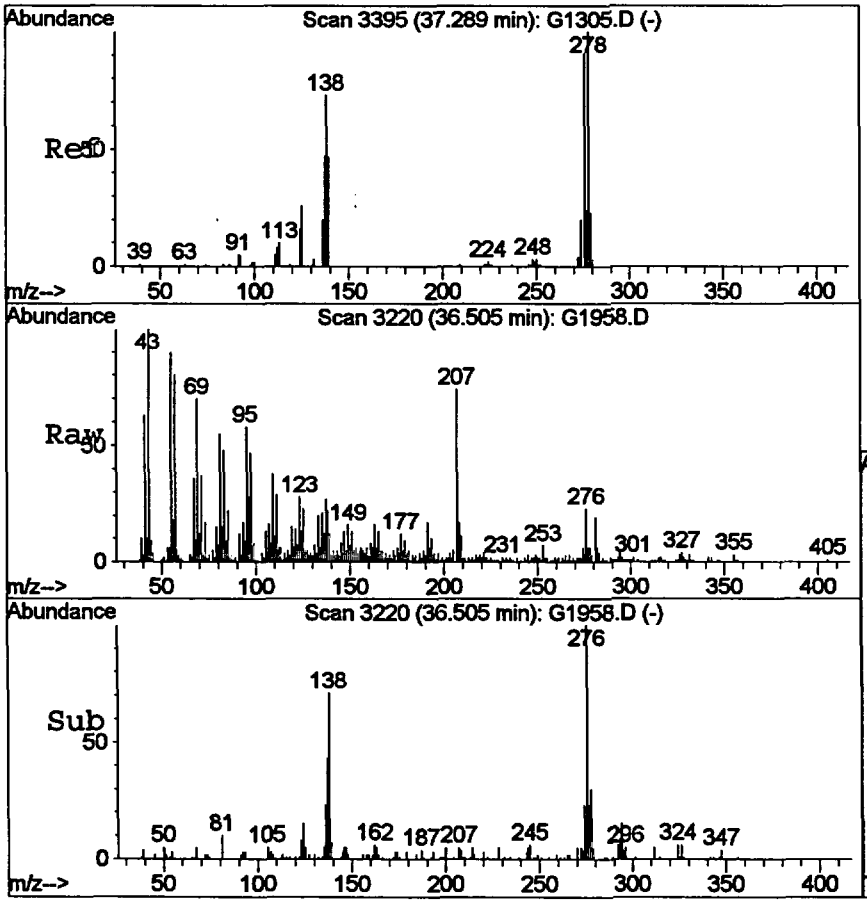


#76
Indeno(1,2,3-cd)pyrene
Concen: 4.54 ng
RT: 36.50 min /Scan# 3220
Delta R.T. 0.09 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:276 Resp: 72622

Ion	Ratio	Lower	Upper
276	100		
138	63.8	47.5	87.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

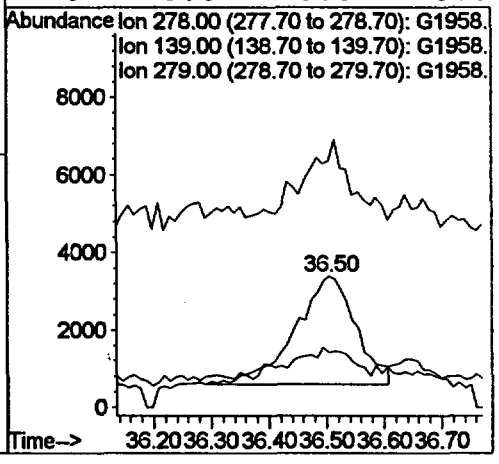




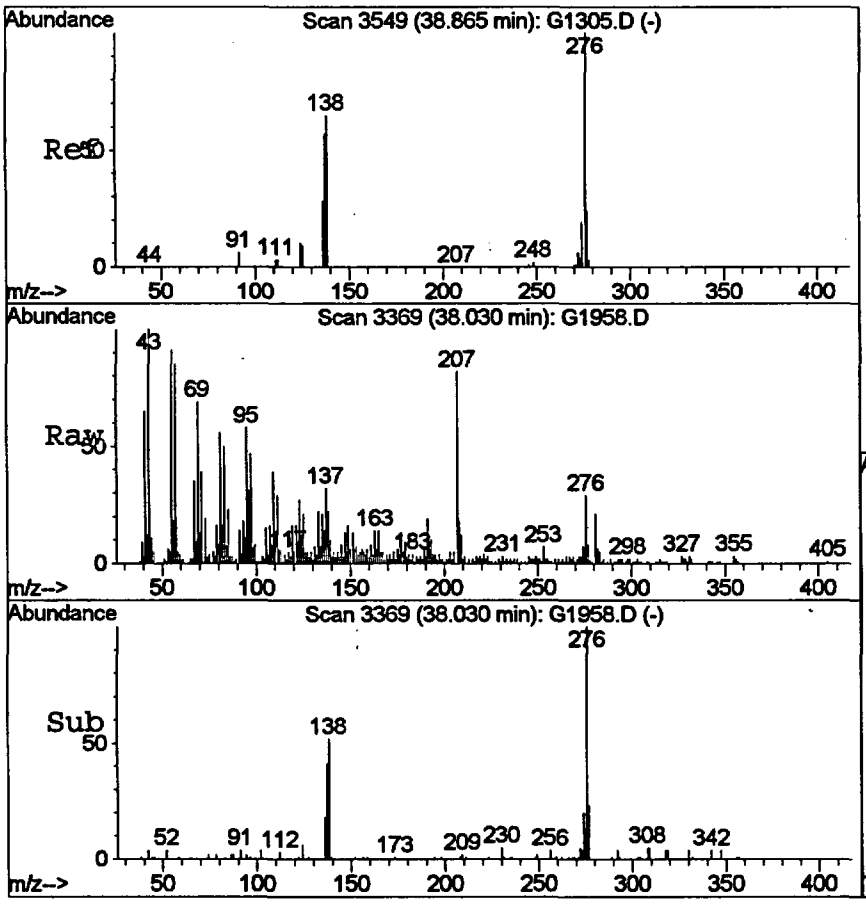
#77
Dibenz(a,h)anthracene
Concen: 1.47 ng
RT: 36.50 min /Scan# 3220
Delta R.T. 0.08 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:278 Resp: 20312

Ion	Ratio	Lower	Upper
278	100		
139	0.0	21.5	61.5#
279	0.0	3.9	43.9#
0	0.0	0.0	0.0

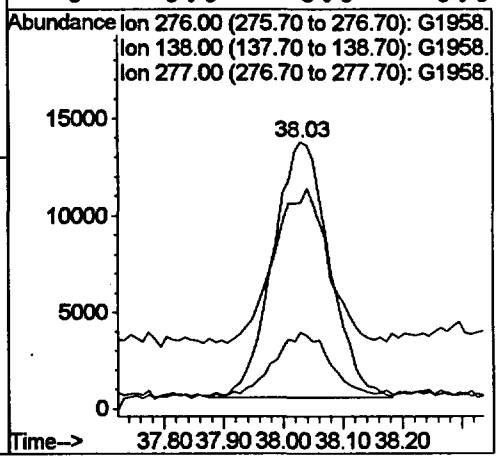


0619



#78
Benzo(g,h,i)perylene
Concen: 6.54 ng
RT: 38.03 min / Scan# 3369
Delta R.T. 0.12 min
Lab File: G1958.D
Acq: 22 Jan 98 23:59

Tgt Ion:276	Resp:	87211	
Ion	Ratio	Lower	Upper
276	100		
138	57.8	37.7	77.7
277	23.3	3.9	43.9
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:13 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	250588	40.00	ng	0.00
17) Naphthalene-d8	10.09	136	715250	40.00	ng	0.02
31) Acenaphthene-d10	16.30	164	335320	40.00	ng	0.00
51) Phenanthrene-d10	19.62	188	612890	40.00	ng	0.02
63) Chrysene-d12	25.39	240	466976	40.00	ng	0.03
71) Perylene-d12	31.52	264	552513	40.00	ng	0.06
System Monitoring Compounds						
2) 2-Fluorophenol	4.83	112	953424	127.56	ng	0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery = 85.04%			
3) Phenol-d5	6.37	99	1371368	138.90	ng	0.02
Surrogate Spike 150.000	Range 24 - 113		Recovery = 92.60%			
7) 1,2-Dichlorobenzene-d4	7.43	152	345311	69.81	ng	0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 69.81%			
8) 2-Chlorophenol-d4	6.72	132	1006432	132.67	ng	0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 88.45%			
18) Nitrobenzene-d5	8.20	82	577686	90.93	ng	0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 90.93%			
35) 2-Fluorobiphenyl	14.28	172	957358	96.25	ng	0.02
Surrogate Spike 100.000	Range 30 - 115		Recovery = 96.25%			
52) 2,4,6-Tribromophenol	18.18	330	232156	152.31	ng	0.02
Surrogate Spike 150.000	Range 19 - 122		Recovery = 101.54%			
65) Terphenyl-d14	22.66	244	1011065	104.80	ng	0.02
Surrogate Spike 100.000	Range 18 - 137		Recovery = 104.80%			
Target Compounds						Qvalue
4) Phenol	6.39	94	29993	2.83	ng	# 1
38) Dimethylphthalate	15.61	163	25379	2.15	ng	# 77
58) Phenanthrene	19.66	178	54211	3.60	ng	# 60
61) Di-n-butylphthalate	20.70	149	28234	1.20	ng	# 79
62) Fluoranthene	22.04	202	119892	7.86	ng	98
64) Pyrene	22.48	202	110887	7.43	ng	98
67) Benzo(a)anthracene	25.33	228	45553	3.82	ng	# 52
69) Chrysene	25.46	228	69932	6.15	ng	# 75
70) bis(2-Ethylhexyl)phthalate	25.04	149	159722	9.91	ng	# 96
72) Di-n-octylphthalate	27.13	149	47253m	1.29	ng	100
73) Benzo(b)fluoranthene	29.64	252	77951	5.13	ng	89
74) Benzo(k)fluoranthene	29.74	252	62654m	4.33	ng	88
75) Benzo(a)pyrene	31.27	252	66959	4.82	ng	# 71
76) Indeno(1,2,3-cd)pyrene	36.50	276	72622	4.54	ng	95
77) Dibenz(a,h)anthracene	36.50	278	20312	1.47	ng	# 40
78) Benzo(g,h,i)perylene	38.03	276	87211	6.54	ng	100

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

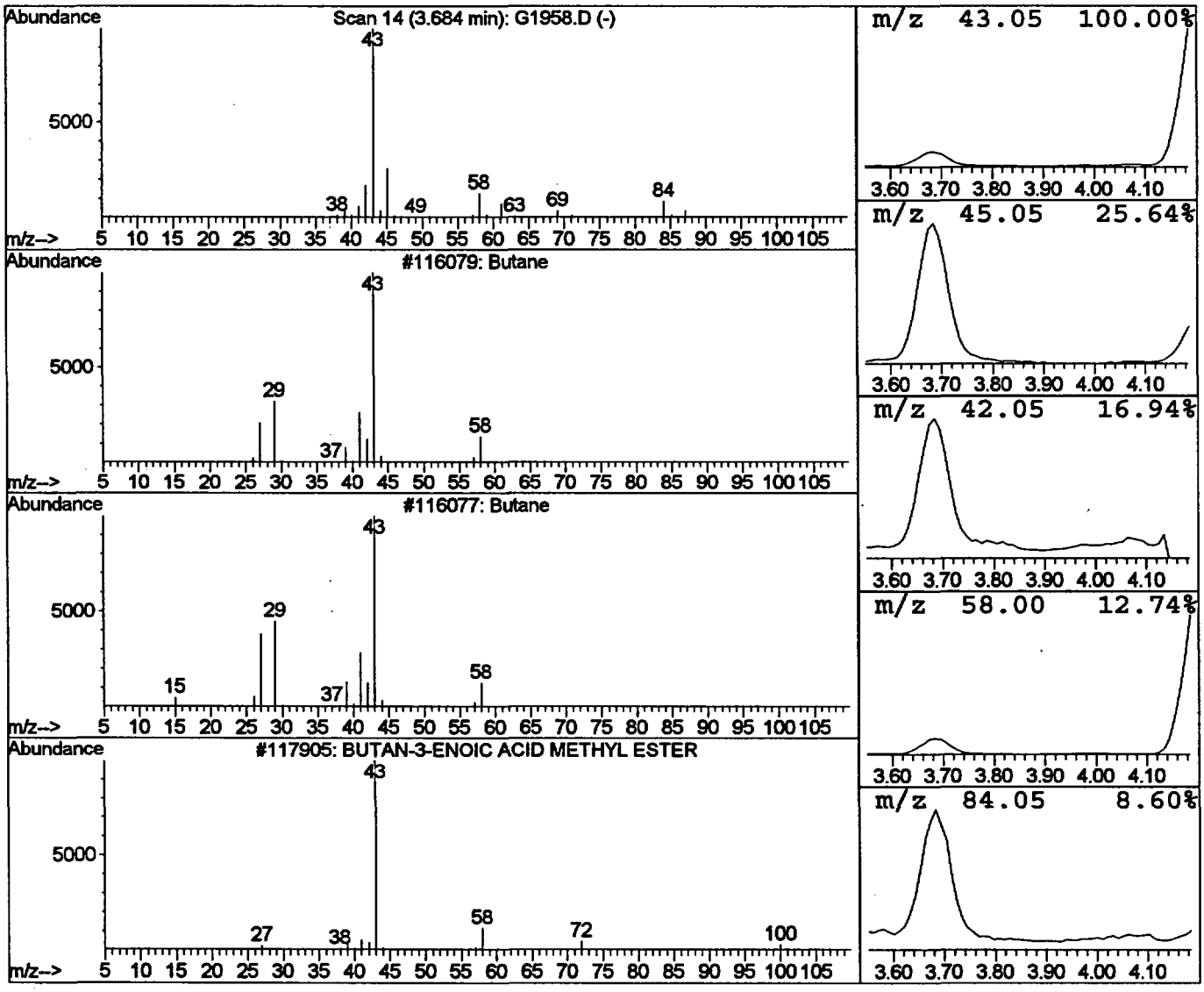
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 41 Butane UNKNOWN COMPOUND clo 1-27-98 Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	49.16 ng	1764870	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	38
2	Butane	58	C4H10	000106-97-8	25
3	BUTAN-3-ENOIC ACID METHYL ESTER	100	C5H8O2	000000-00-0	9



0622

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

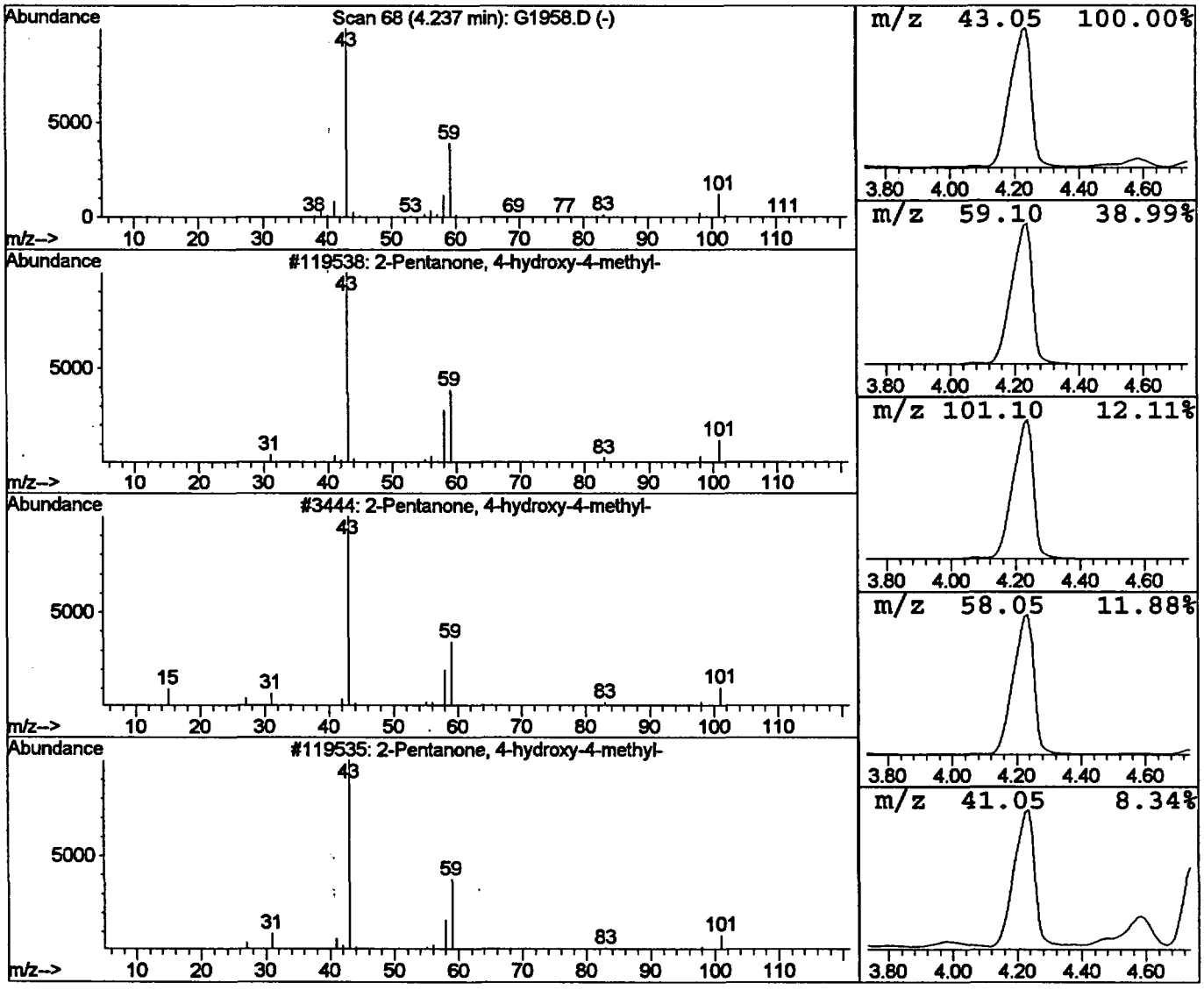
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.24	771.21 ng	27689500	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (A)	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50



0623

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

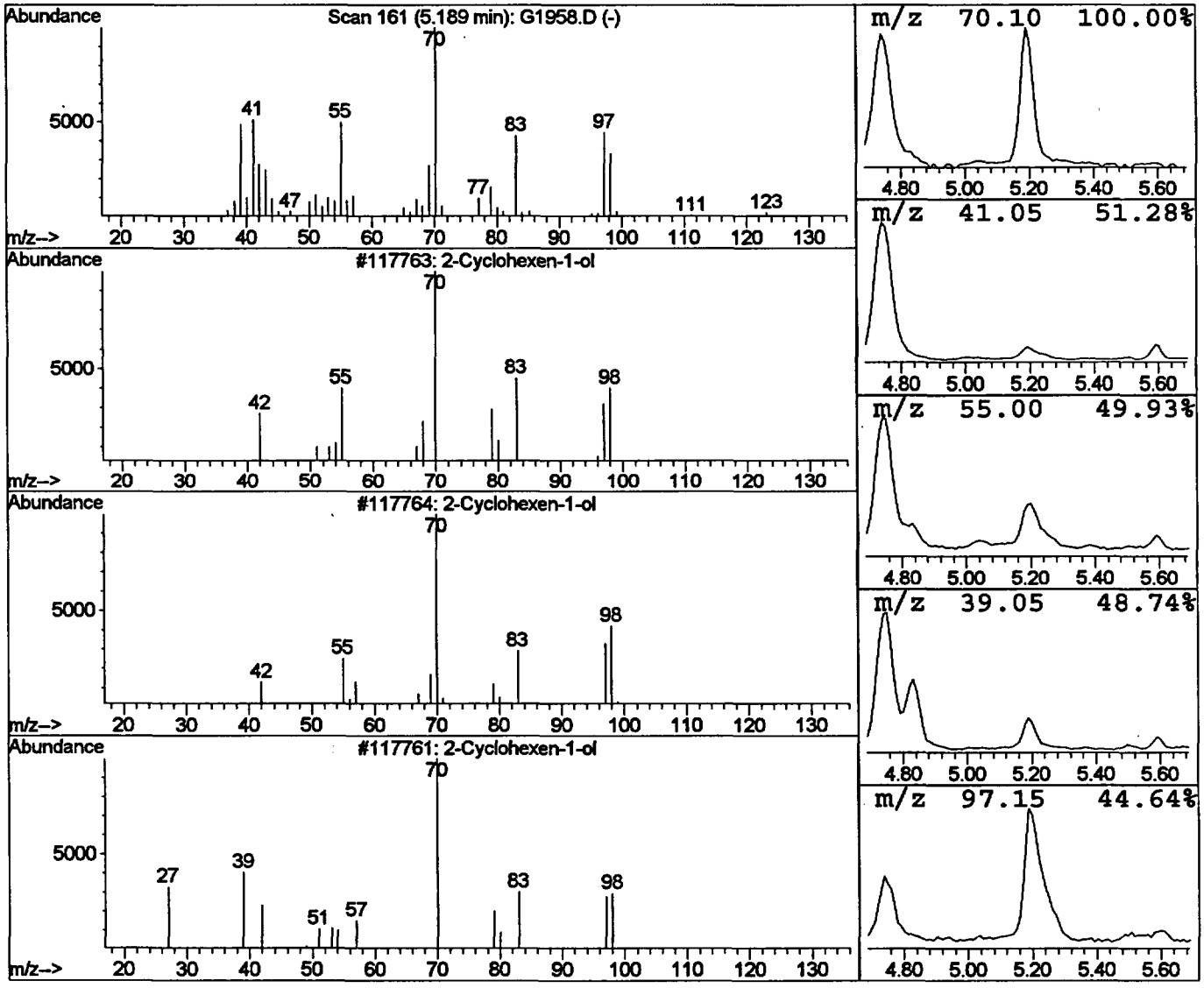
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 2-Cyclohexen-1-ol Concentration Rank 33

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.19	16.50 ng	592543	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	72
2	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	64
3	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	64



0624

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

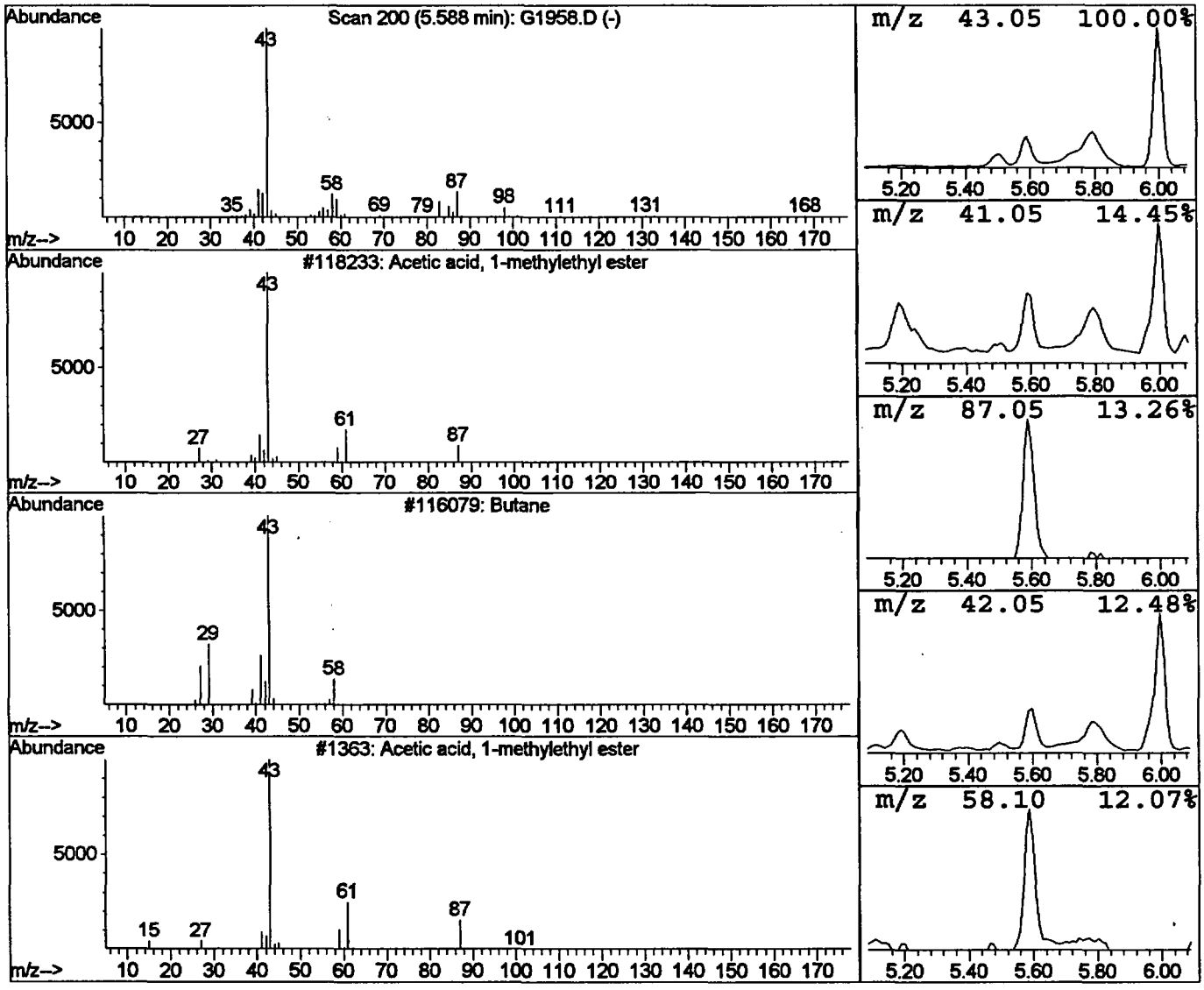
****

Peak Number 3 Acetic acid, 1-methylethyl est Concentration Rank 30

UNKNOWN COMPOUND 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.59	19.45 ng	698246	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	38
2	Butane	58	C4H10	000106-97-8	38
3	Acetic acid, 1-methylethyl ester	102	C5H10O2	000108-21-4	38



0625

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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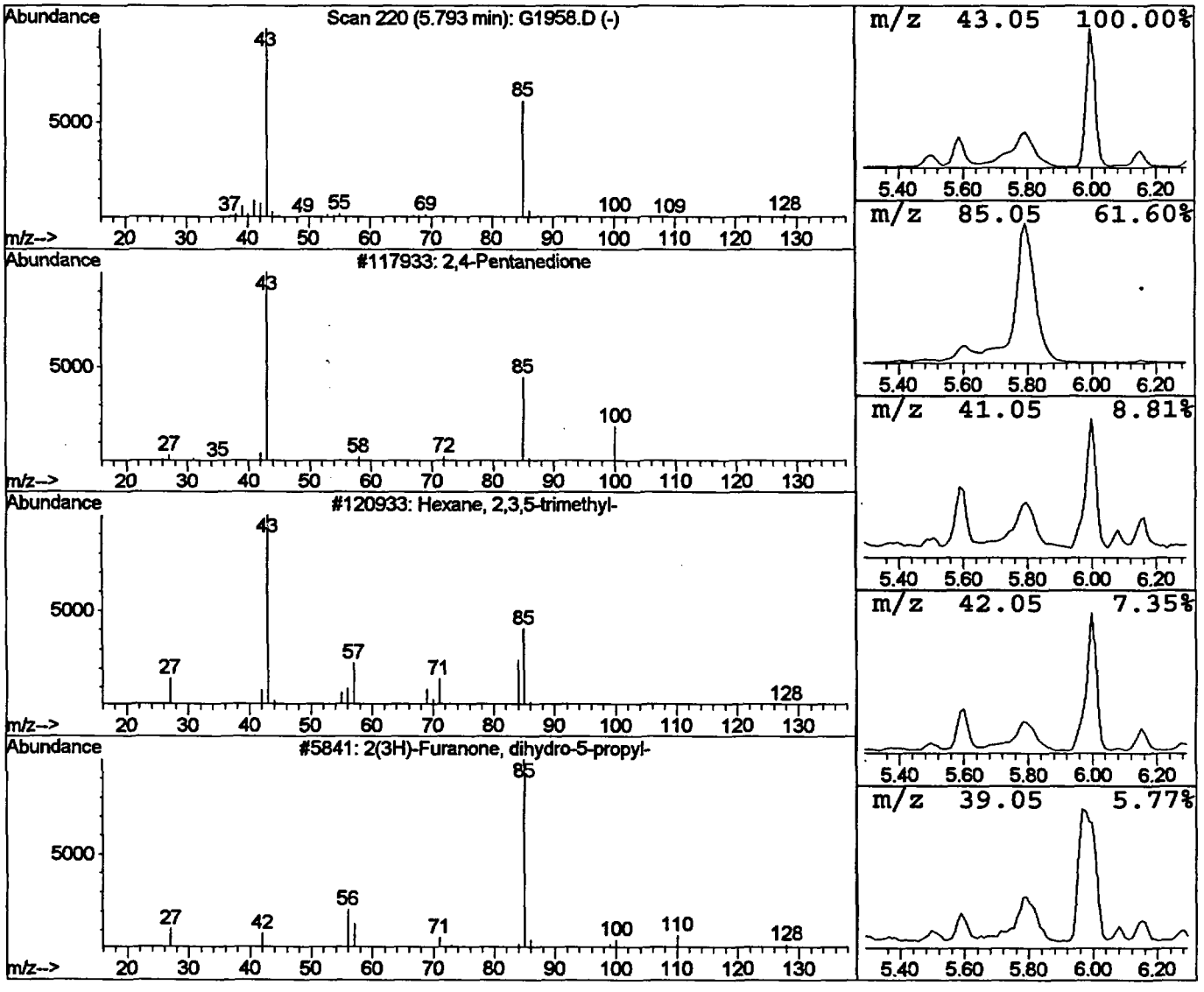
Peak Number 4 2,4-Pentanedione UNKNOWN COMPOUND Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.79	42.17 ng	1514170	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	39
2	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	38
3	2(3H)-Furanone, dihydro-5-propyl-	128	C7H12O2	000105-21-5	9



0626

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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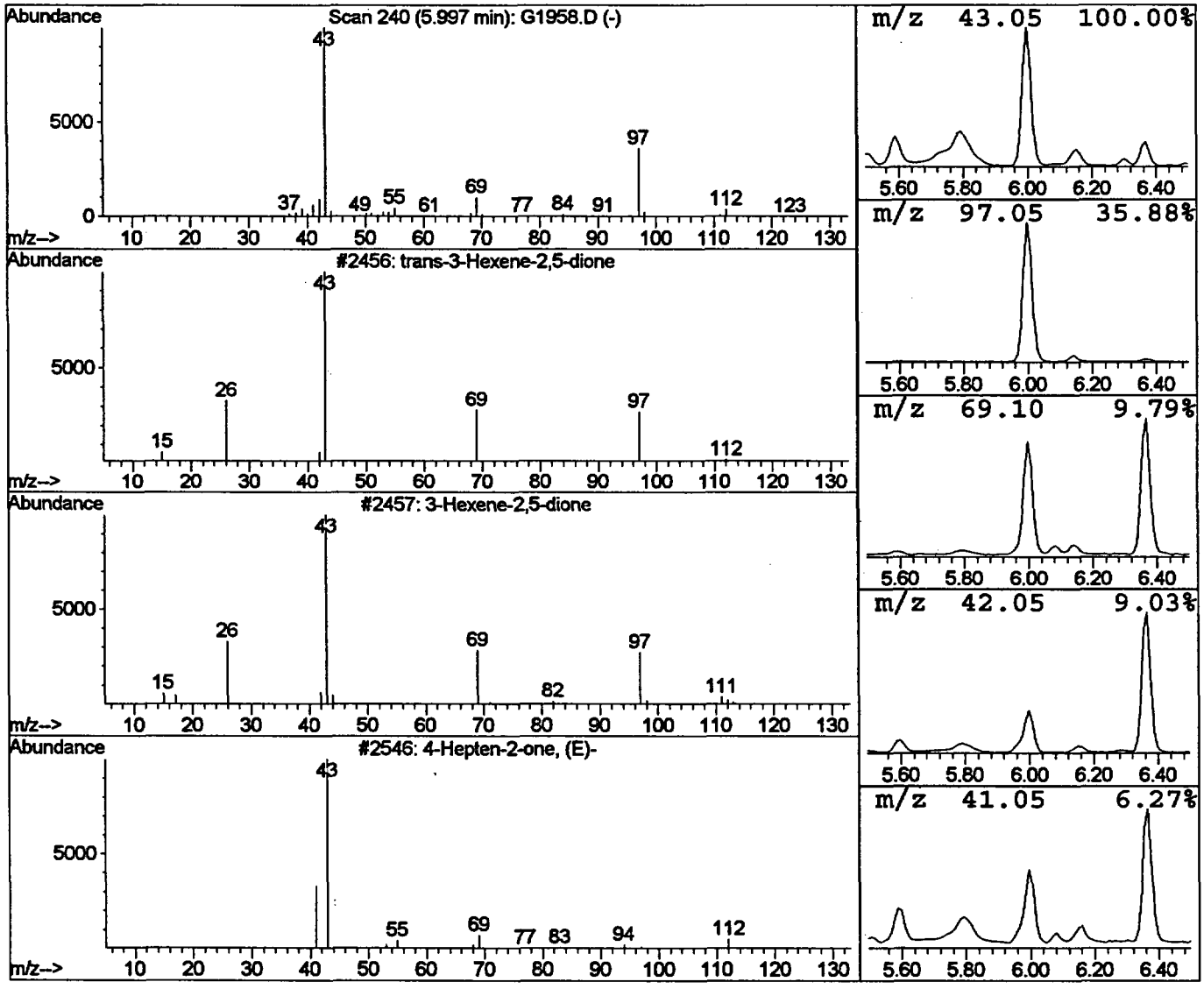
Peak Number 5 trans-3-Hexene-2,5-dione Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.00	71.57 ng	2569610	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
2	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	42
3	4-Hepten-2-one, (E)-	112	C7H12O	036678-43-0	37



0627

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

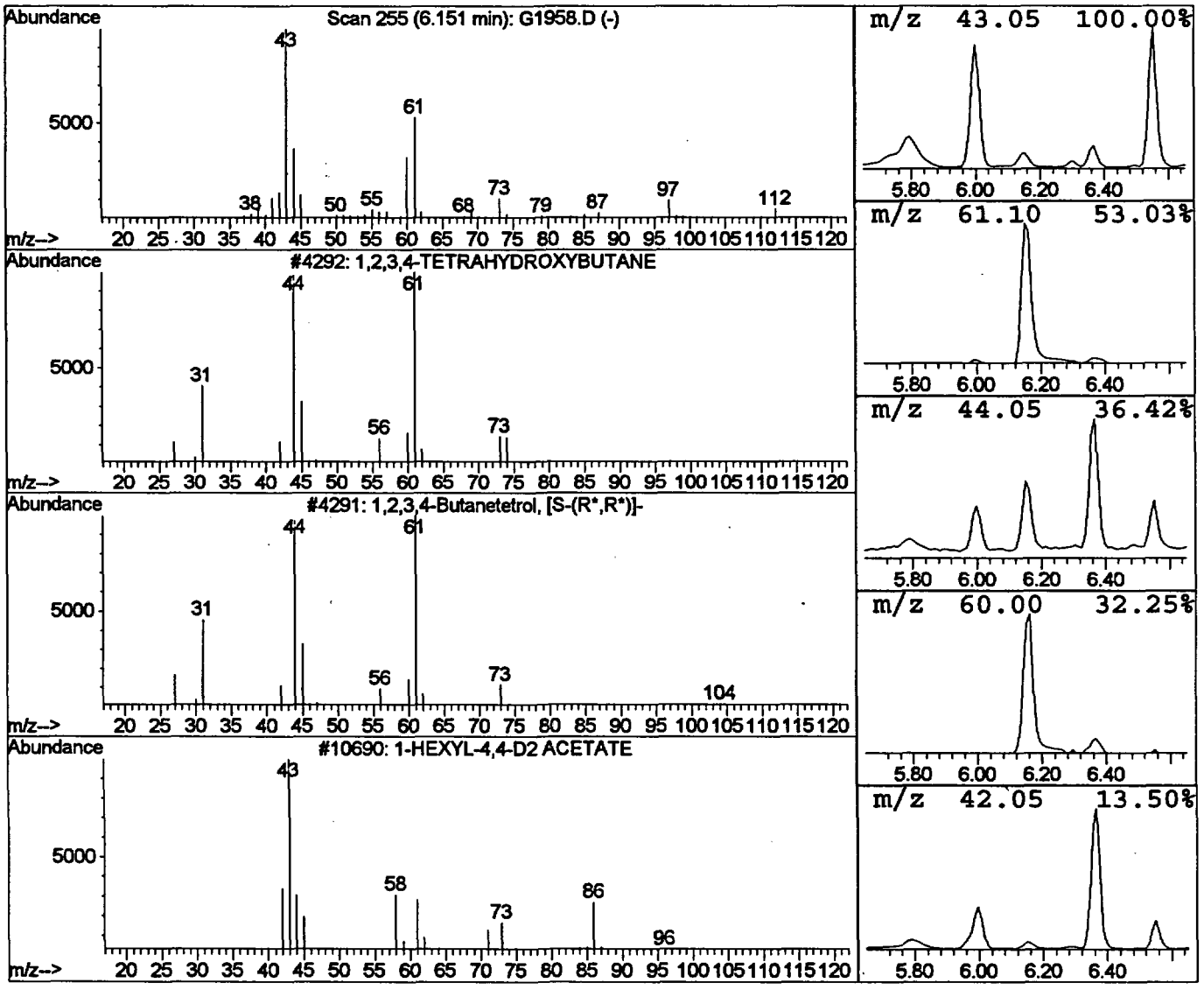
****

Peak Number 6 1,2,3,4-TETRAHYDROXYBUTANE Concentration Rank 37

Unknown Acid Type 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.15	13.63 ng	489284	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2,3,4-TETRAHYDROXYBUTANE	122	C4H10O4	000000-00-0	28
2	1,2,3,4-Butanetetrol, [S-(R*,R*)]-	122	C4H10O4	002319-57-5	25
3	1-HEXYL-4,4-D2 ACETATE	144	C8H14D2O2	056051-62-8	10



0628

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

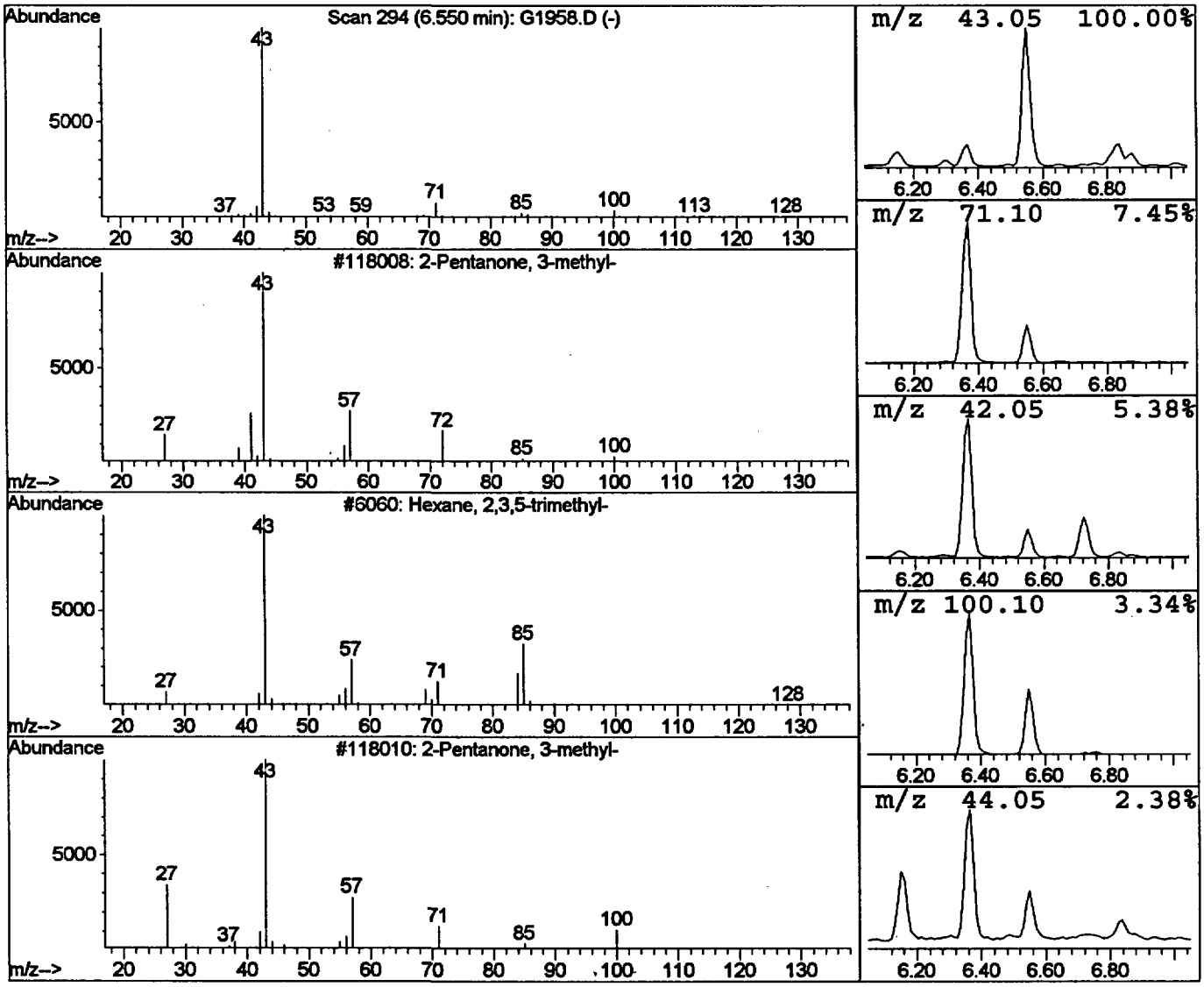
****

Peak Number 7 2-Pentanone, 3-methyl- Concentration Rank 14

UNKNOWN COMPOUND no1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.55	46.32 ng	1663120	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	7
3	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	7



0629

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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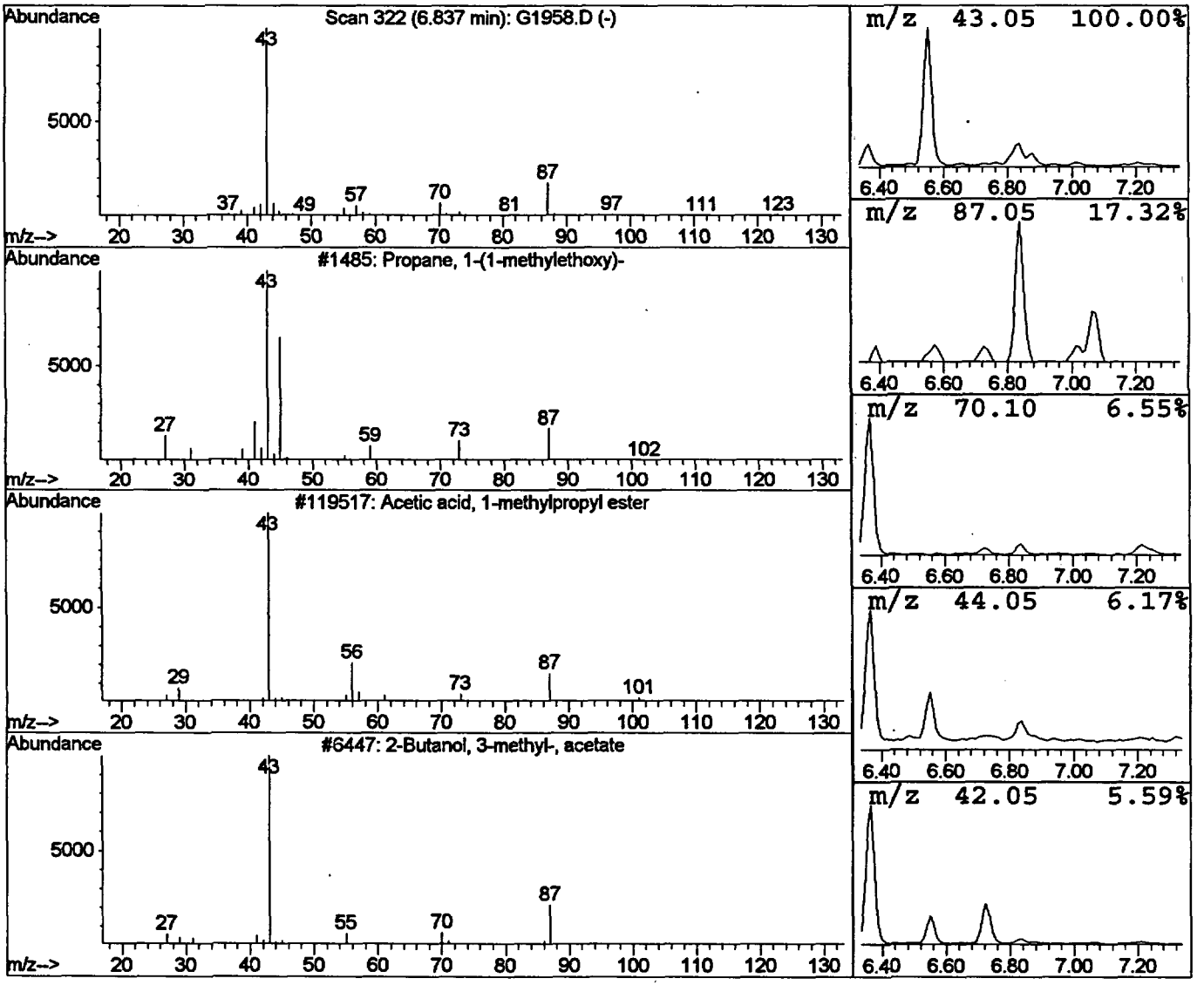
Peak Number 8 Propane, 1-(1-methylethoxy)- Concentration Rank 34

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.84	15.66 ng	562400	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 1-(1-methylethoxy)-	102	C6H14O	000627-08-7	9
2	Acetic acid, 1-methylpropyl ester	116	C6H12O2	000105-46-4	9
3	2-Butanol, 3-methyl-, acetate	130	C7H14O2	005343-96-4	9



0630

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

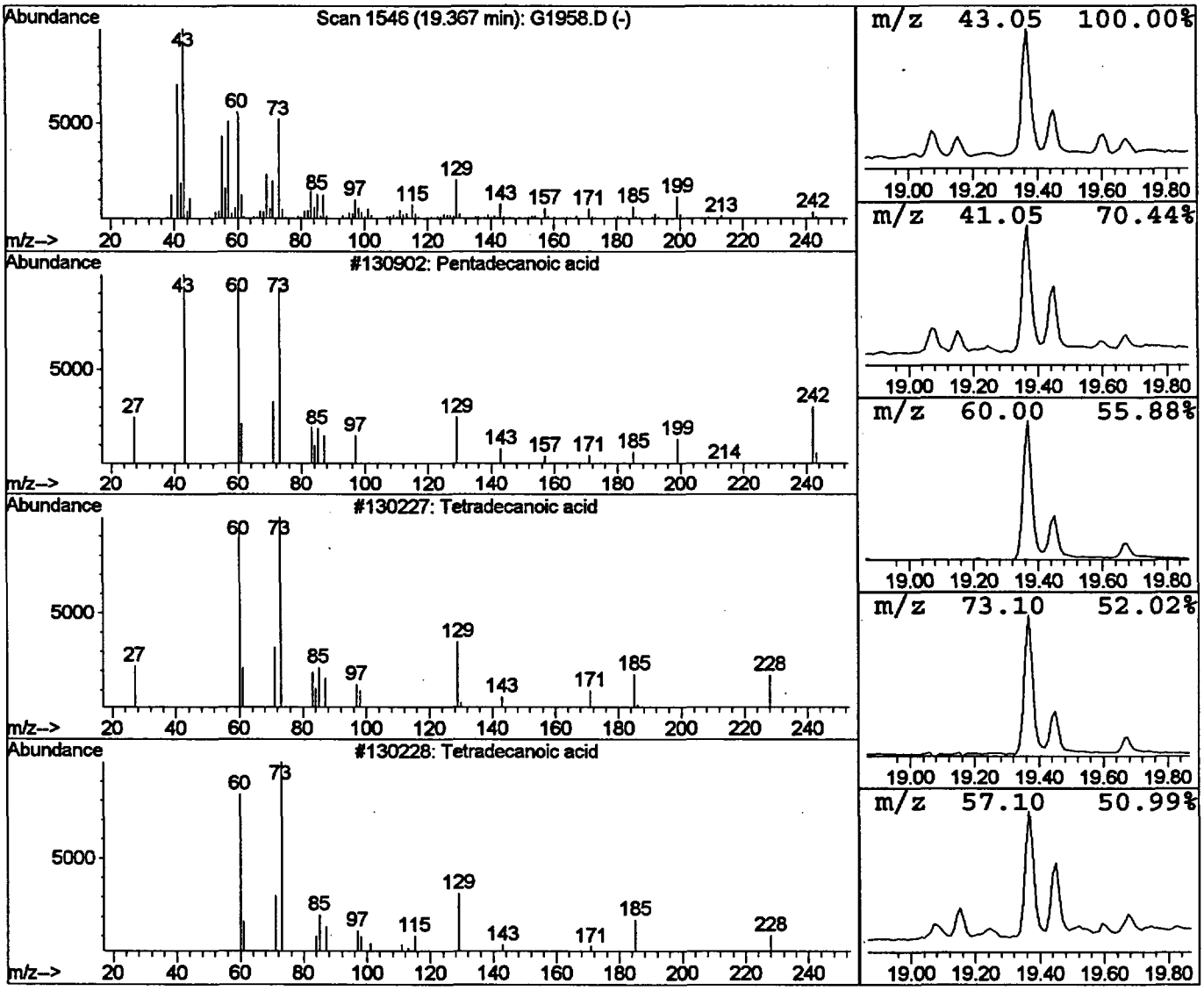
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 10 Pentadecanoic acid Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.37	31.51 ng	1351380	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	87
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	87



0631

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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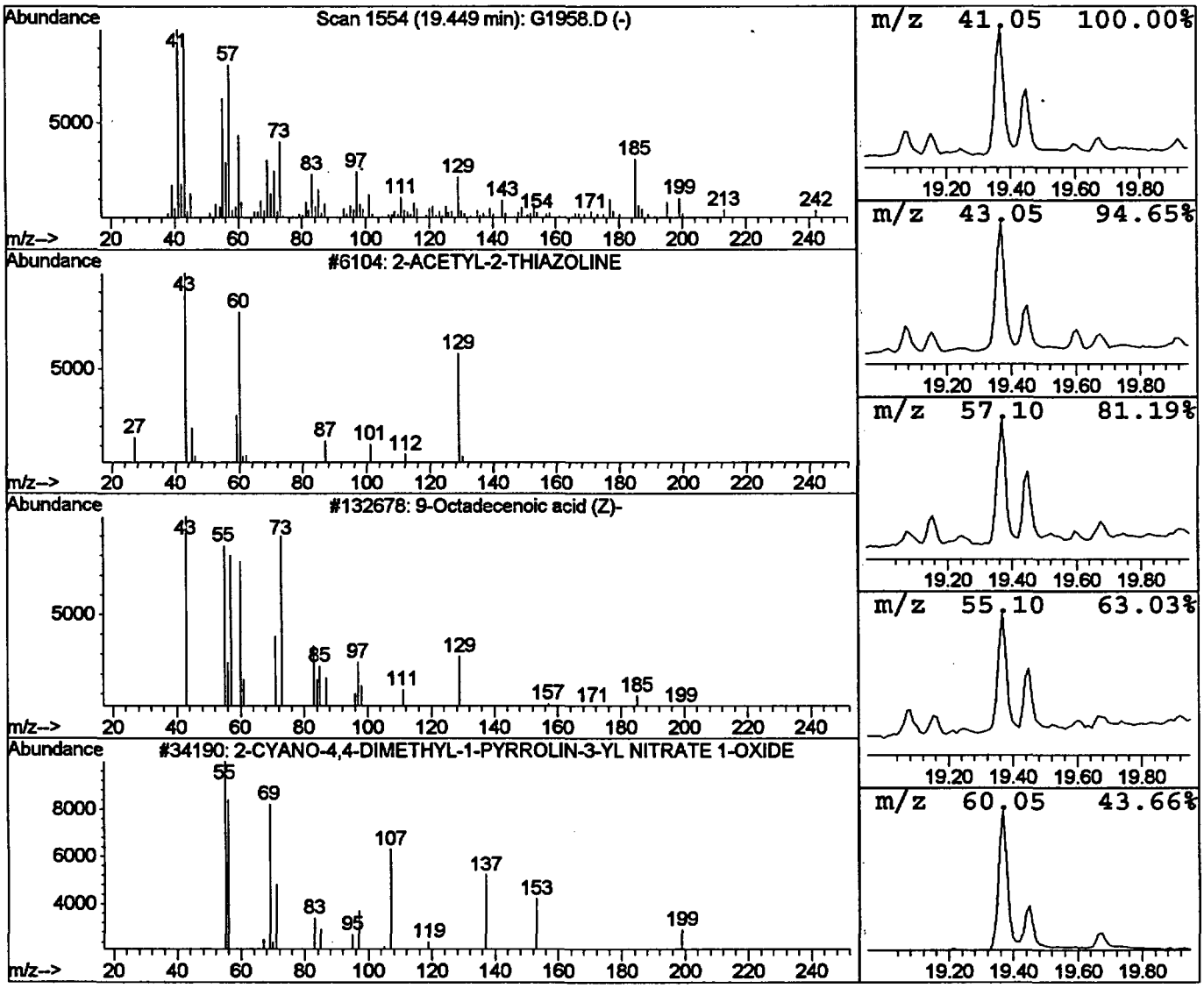
Peak Number 11 2-ACETYL-2-THIAZOLINE Concentration Rank 35

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.45	14.26 ng	611485	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-ACETYL-2-THIAZOLINE	129	C5H7NOS	000000-00-0	16
2	9-Octadecenoic acid (Z)-	282	C18H34O2	000112-80-1	14
3	2-CYANO-4,4-DIMETHYL-1-PYRROLIN-3-Y	199	C7H9N3O4	072700-94-8	11



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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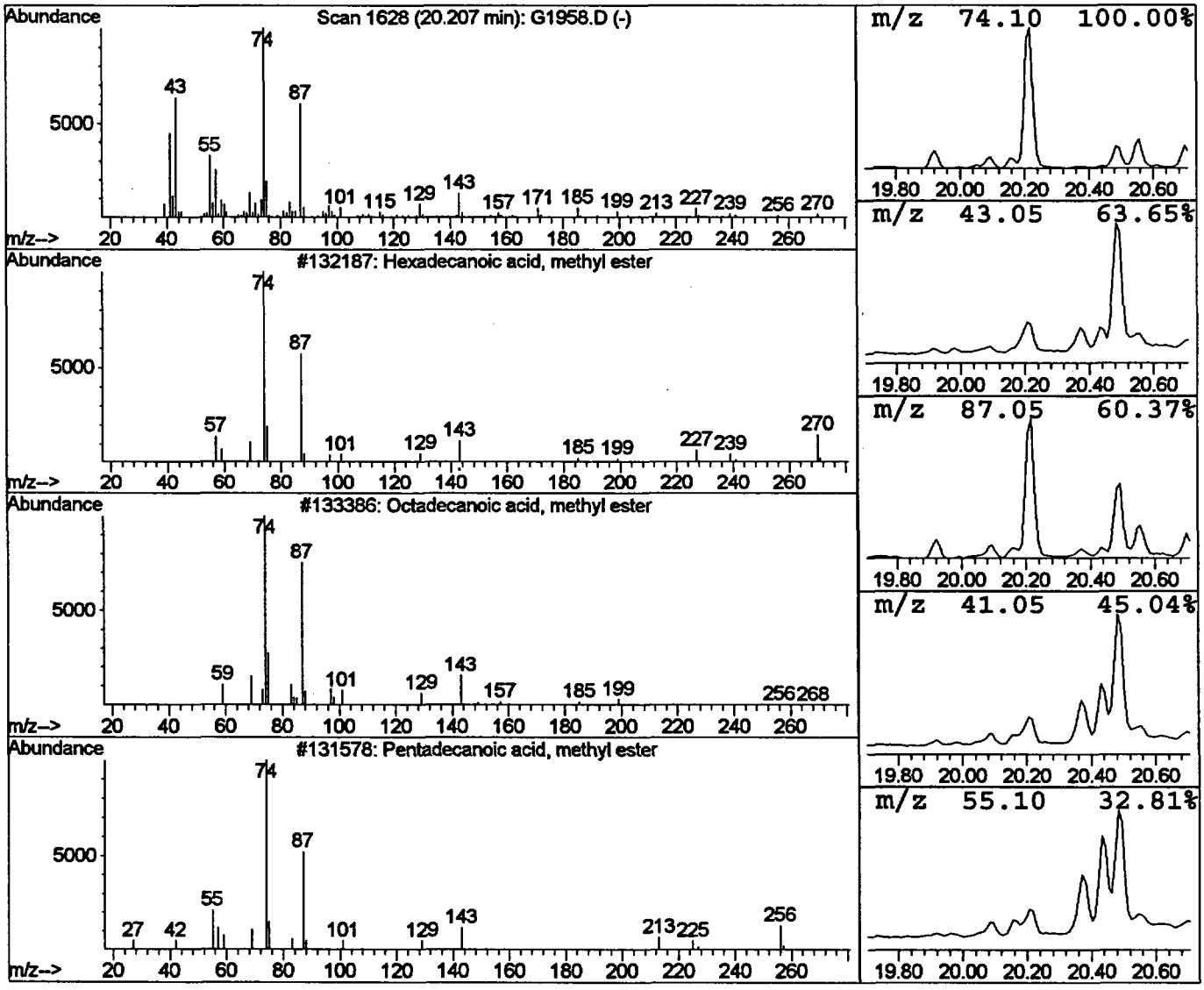
Peak Number 12 Hexadecanoic acid, methyl este Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.21	27.13 ng	1163480	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, methyl ester	270	C17H34O2	000112-39-0	94
2	Octadecanoic acid, methyl ester	298	C19H38O2	000112-61-8	90
3	Pentadecanoic acid, methyl ester	256	C16H32O2	007132-64-1	87



0633

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

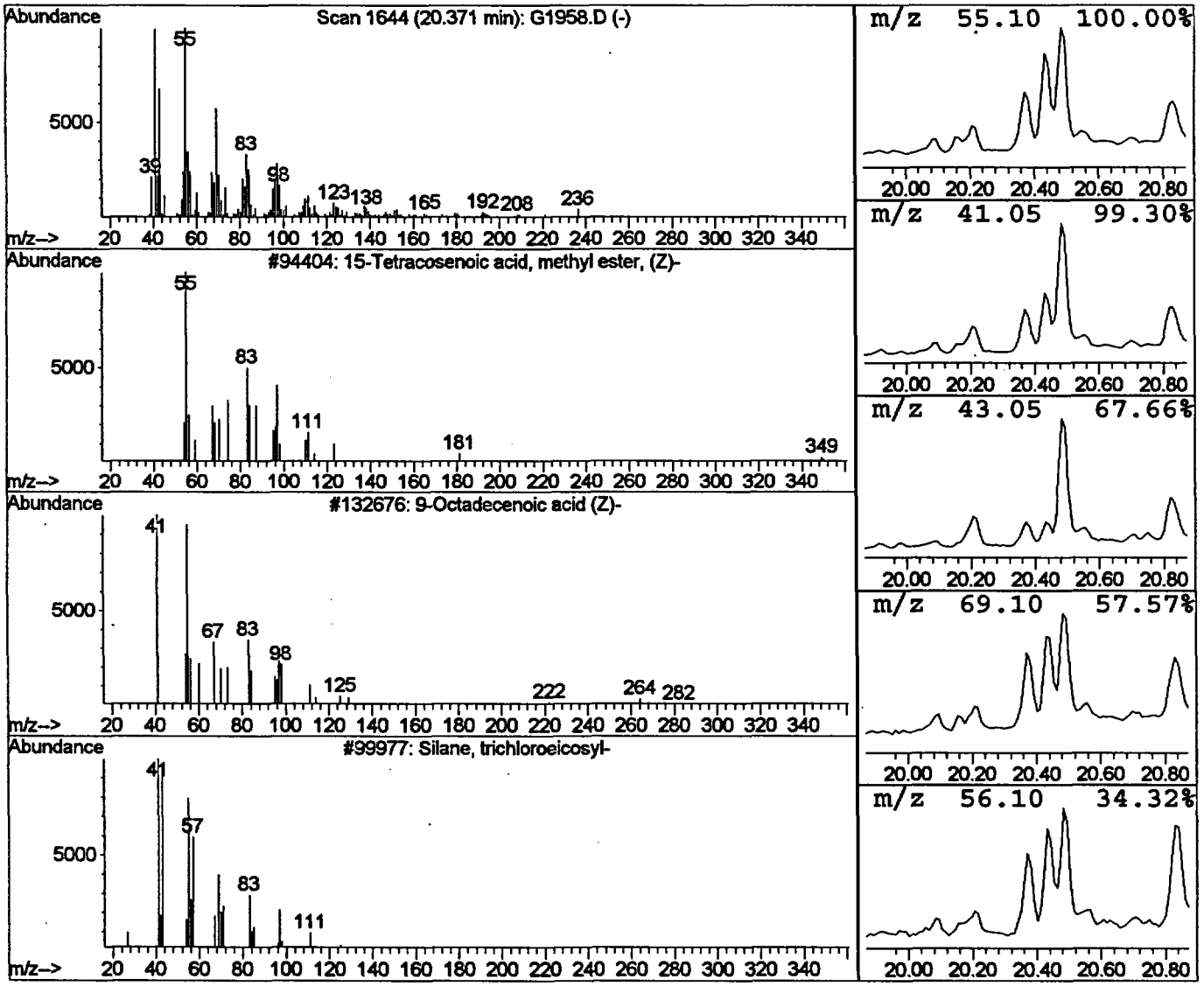
****

Peak Number 13 15-Tetracosenoic acid, methyl Concentration Rank 26

UNKNOWN COMPOUND 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.37	23.90 ng	1025010	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	87
2	9-Octadecenoic acid (Z)-	282	C18H34O2	000112-80-1	50
3	Silane, trichloroeicosyl-	414	C20H41Cl3Si	018733-57-8	49



0634

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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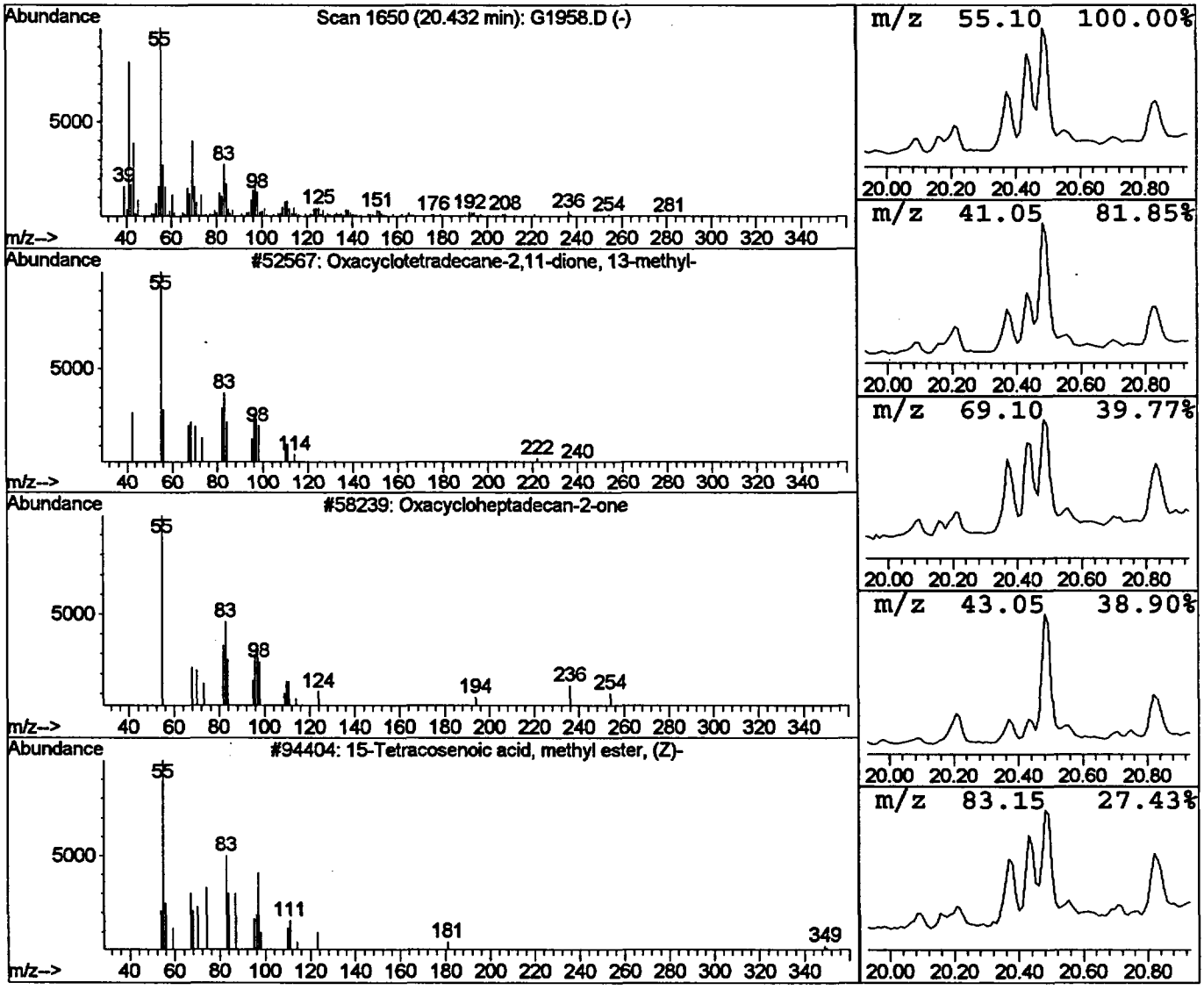
Peak Number 14 Oxacyclotetradecane-2,11-dione Concentration Rank 27

UNKNOWN COMPOUND no1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.43	23.19 ng	994331	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxacyclotetradecane-2,11-dione, 13-	240	C14H24O3	074685-36-2	62
2	Oxacycloheptadecan-2-one	254	C16H30O2	000109-29-5	58
3	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	50



0635

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

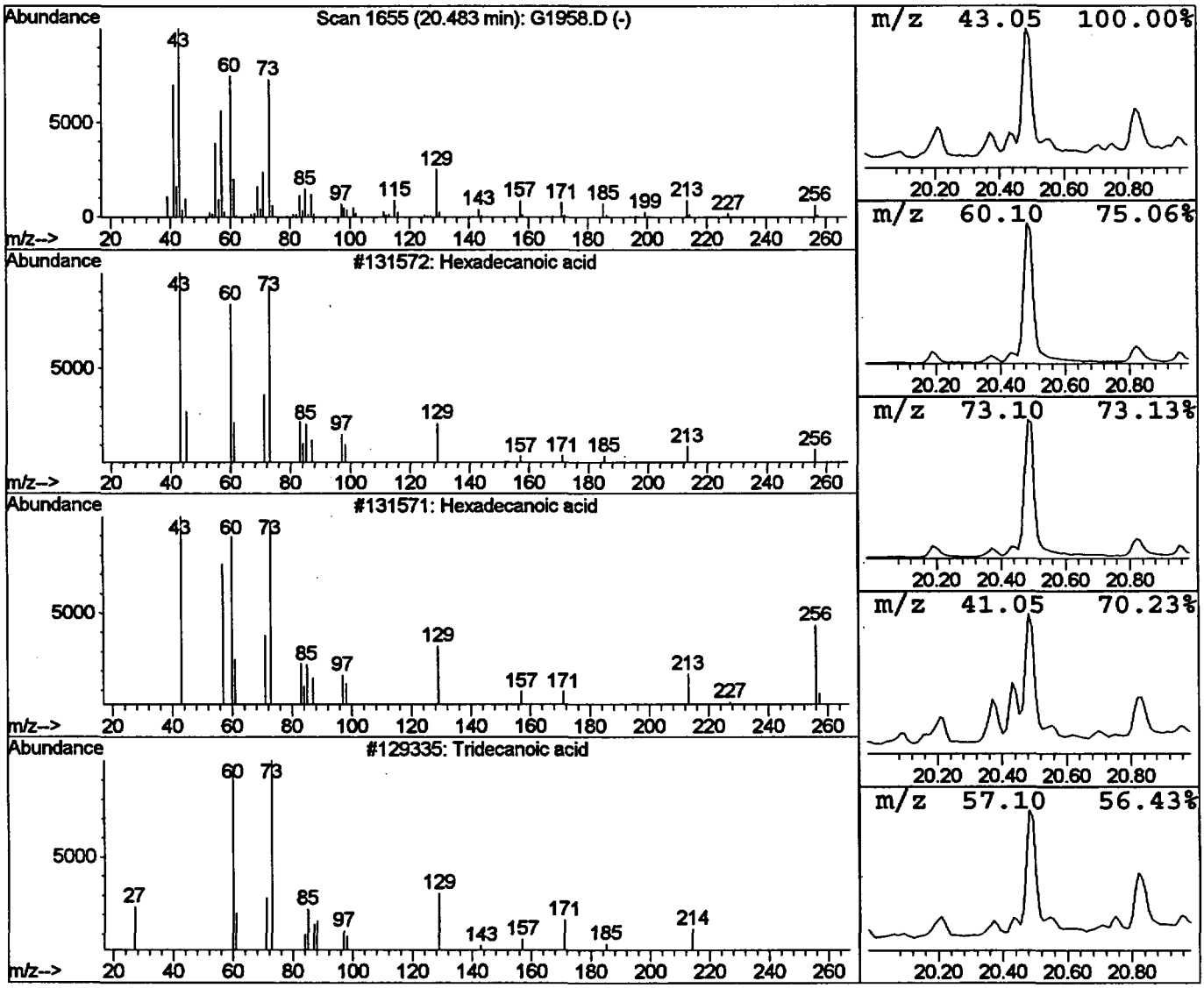
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 15 Hexadecanoic acid Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.48	65.78 ng	2820700	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid	256	C16H32O2	000057-10-3	80
2	Hexadecanoic acid	256	C16H32O2	000057-10-3	78
3	Tridecanoic acid	214	C13H26O2	000638-53-9	72



0636

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

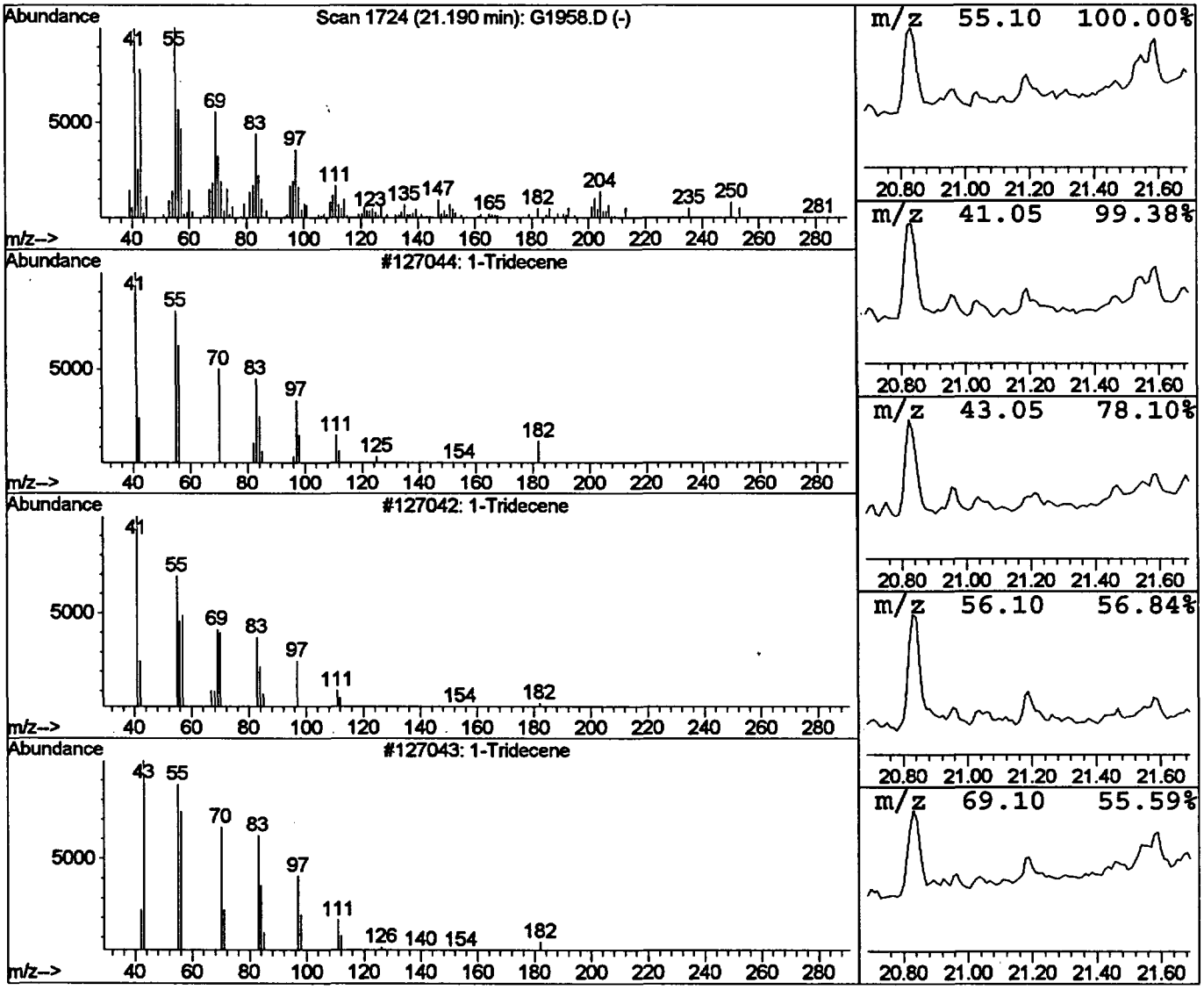
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 16 1-Tridecene UNKNOWN HYDROCARBON 1-27-98 Concentration Rank 42

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.19	8.78 ng	376633	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Tridecene	182	C13H26	002437-56-1	86
2	1-Tridecene	182	C13H26	002437-56-1	83
3	1-Tridecene	182	C13H26	002437-56-1	64



0637

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

CASE 25969
SDG# FFR76

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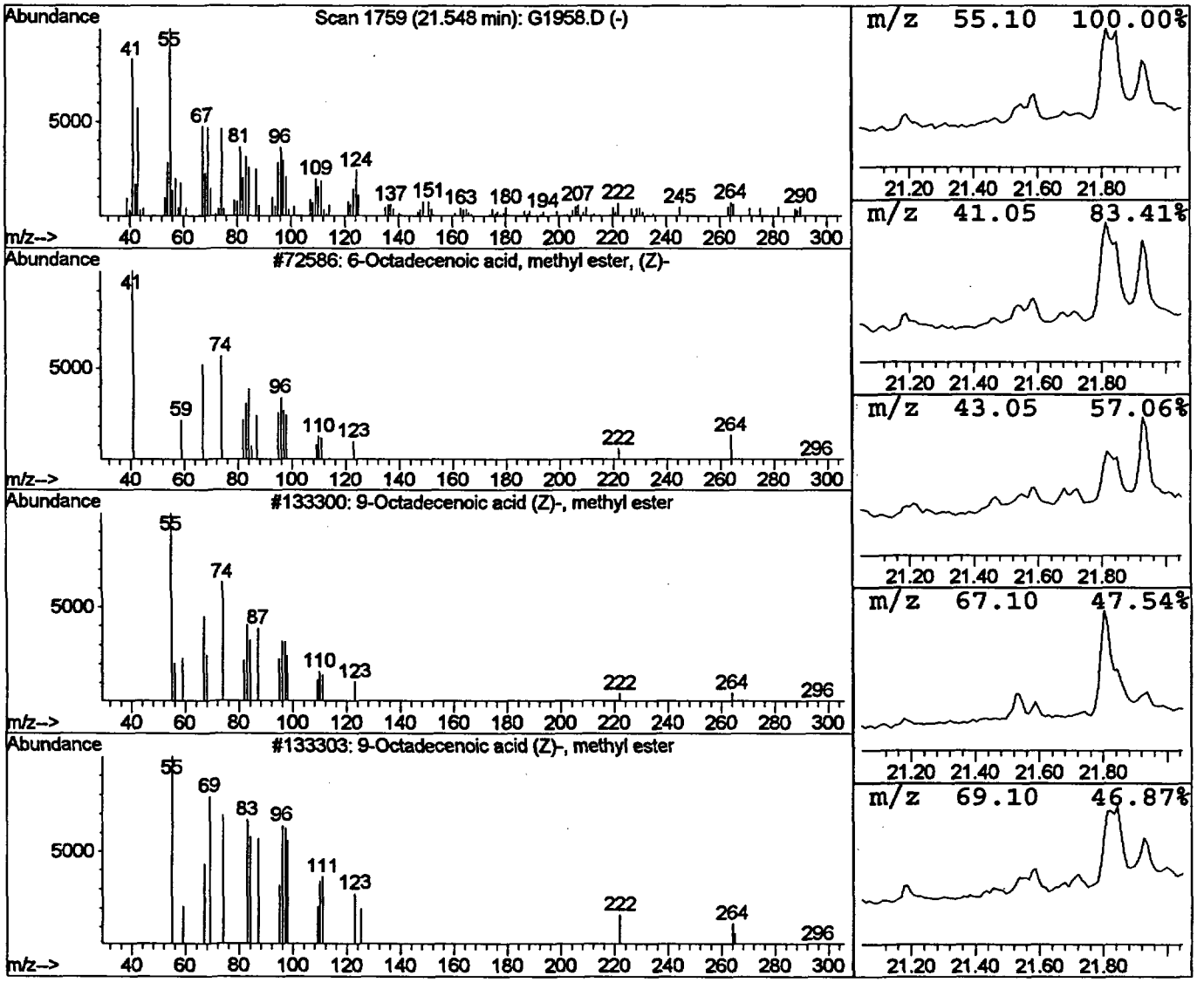
Peak Number 17 6-Octadecenoic acid, methyl es Concentration Rank 40

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.55	11.54 ng	494769	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	6-Octadecenoic acid, methyl ester,	296	C19H36O2	002777-58-4	68
2	9-Octadecenoic acid (Z)-, methyl es	296	C19H36O2	000112-62-9	58
3	9-Octadecenoic acid (Z)-, methyl es	296	C19H36O2	000112-62-9	49



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D
Acq On : 22 Jan 98 23:59
Sample : S HP-7G 58073-006 FFR86
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

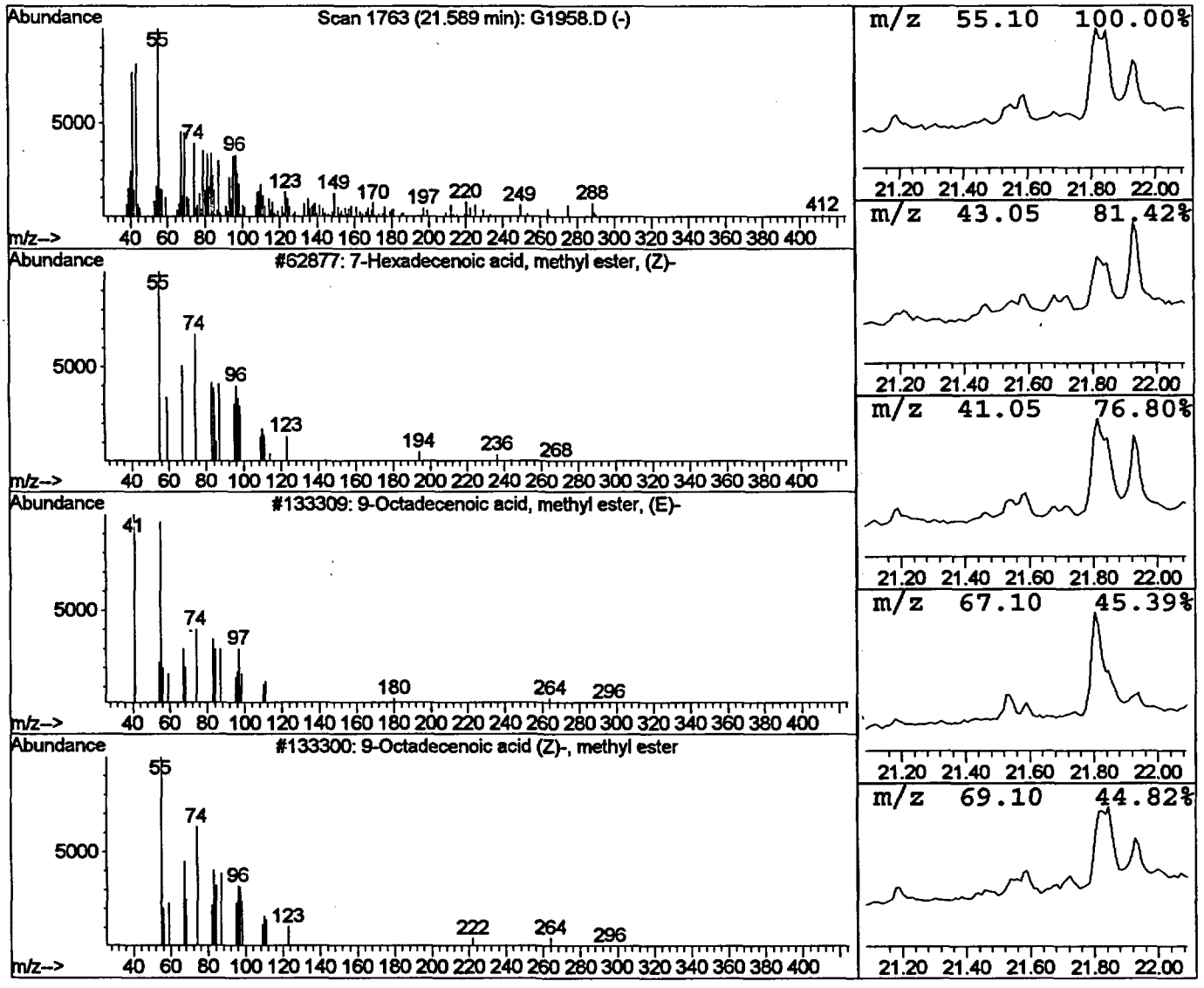
****

Peak Number 18 7-Hexadecenoic acid, methyl es Concentration Rank 43

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.59	8.50 ng	364661	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	7-Hexadecenoic acid, methyl ester,	268	C17H32O2	056875-67-3	64
2	9-Octadecenoic acid, methyl ester,	296	C19H36O2	001937-62-8	58
3	9-Octadecenoic acid (Z)-, methyl es	296	C19H36O2	000112-62-9	52



0639

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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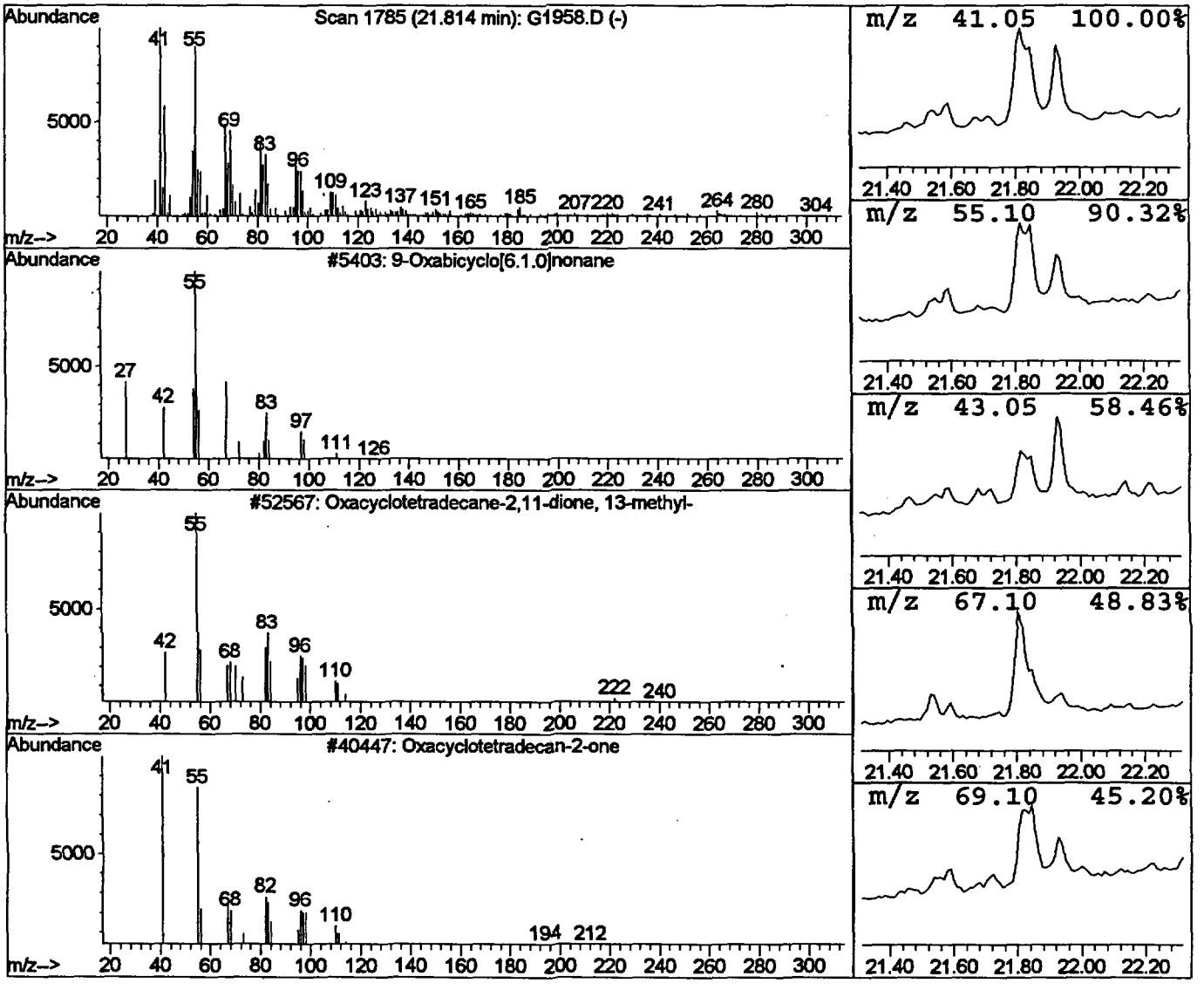
Peak Number 19 9-Oxabicyclo[6.1.0]nonane Concentration Rank 12

UNKNOWN COMPOUND 10-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.81	64.23 ng	2754360	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Oxabicyclo[6.1.0]nonane	126	C8H14O	000286-62-4	64
2	Oxacyclotetradecane-2,11-dione, 13-	240	C14H24O3	074685-36-2	53
3	Oxacyclotetradecan-2-one	212	C13H24O2	001725-04-8	53



0640

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

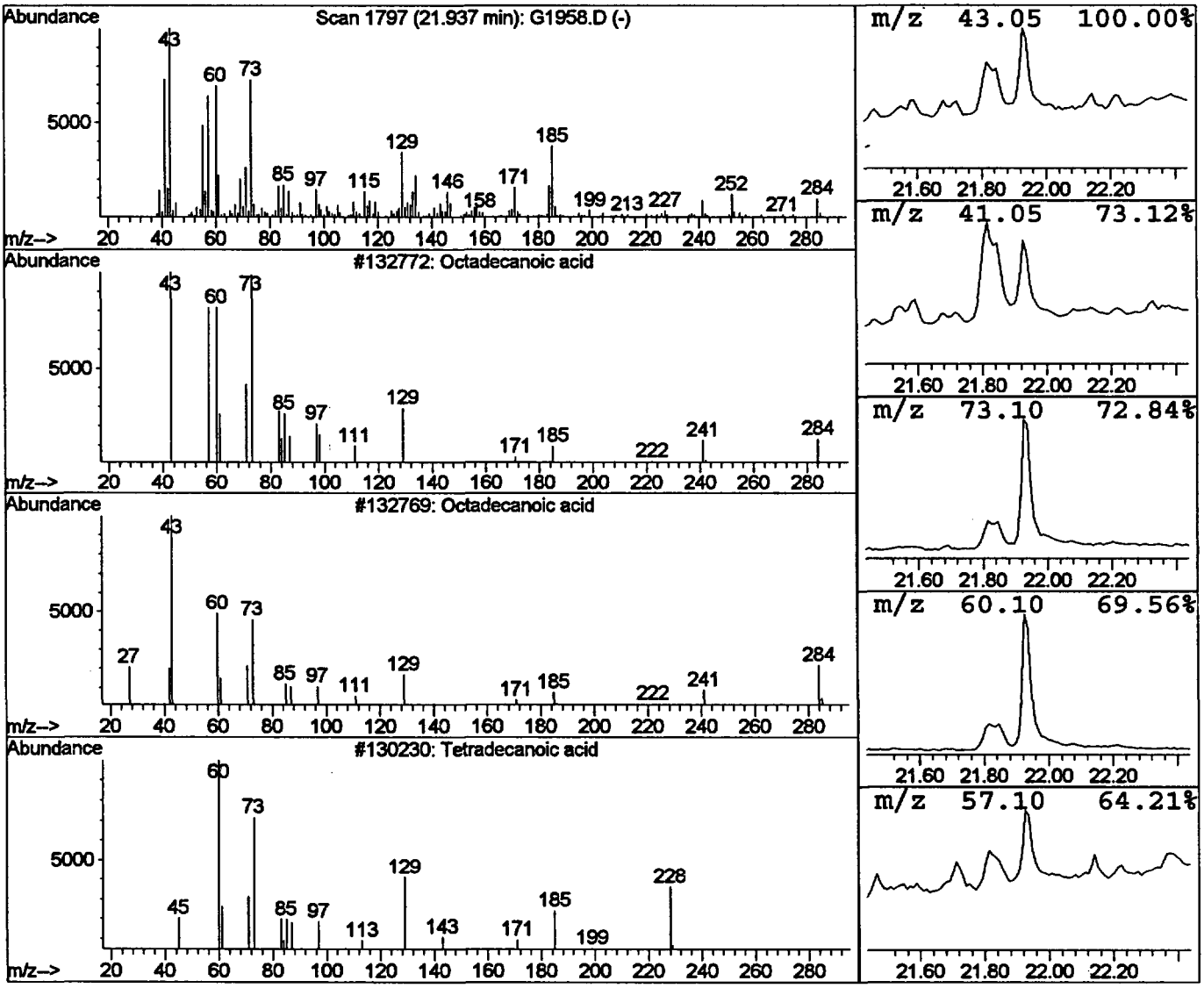
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 20 Octadecanoic acid Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.94	34.42 ng	1476140	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	89
2	Octadecanoic acid	284	C18H36O2	000057-11-4	78
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	49



0641

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

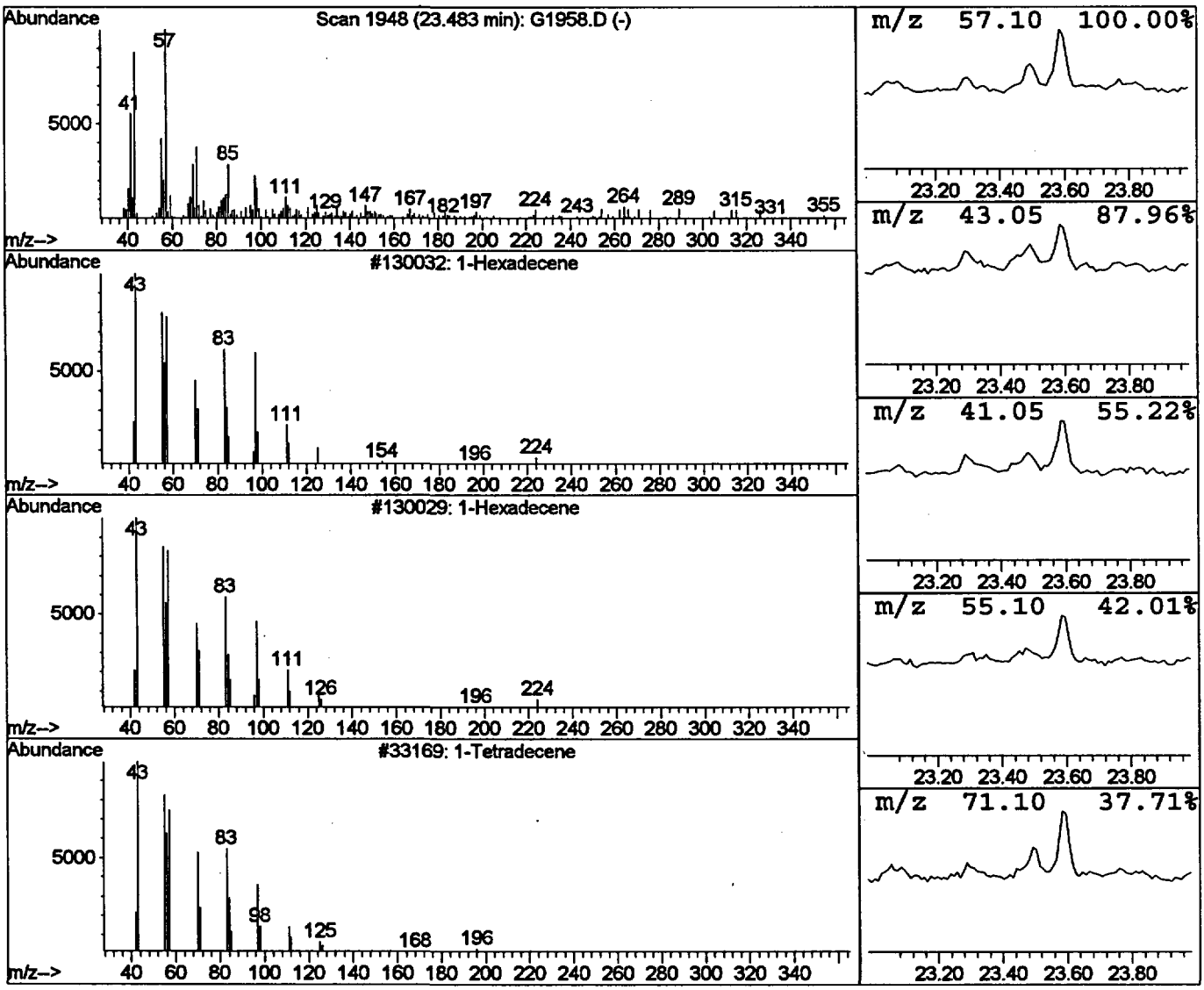
****

Peak Number 21 1-Hexadecene Concentration Rank 32

UNKNOWN HYDROCARBON 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.48	18.62 ng	547297	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexadecene	224	C16H32	000629-73-2	20
2	1-Hexadecene	224	C16H32	000629-73-2	18
3	1-Tetradecene	196	C14H28	001120-36-1	18



0642

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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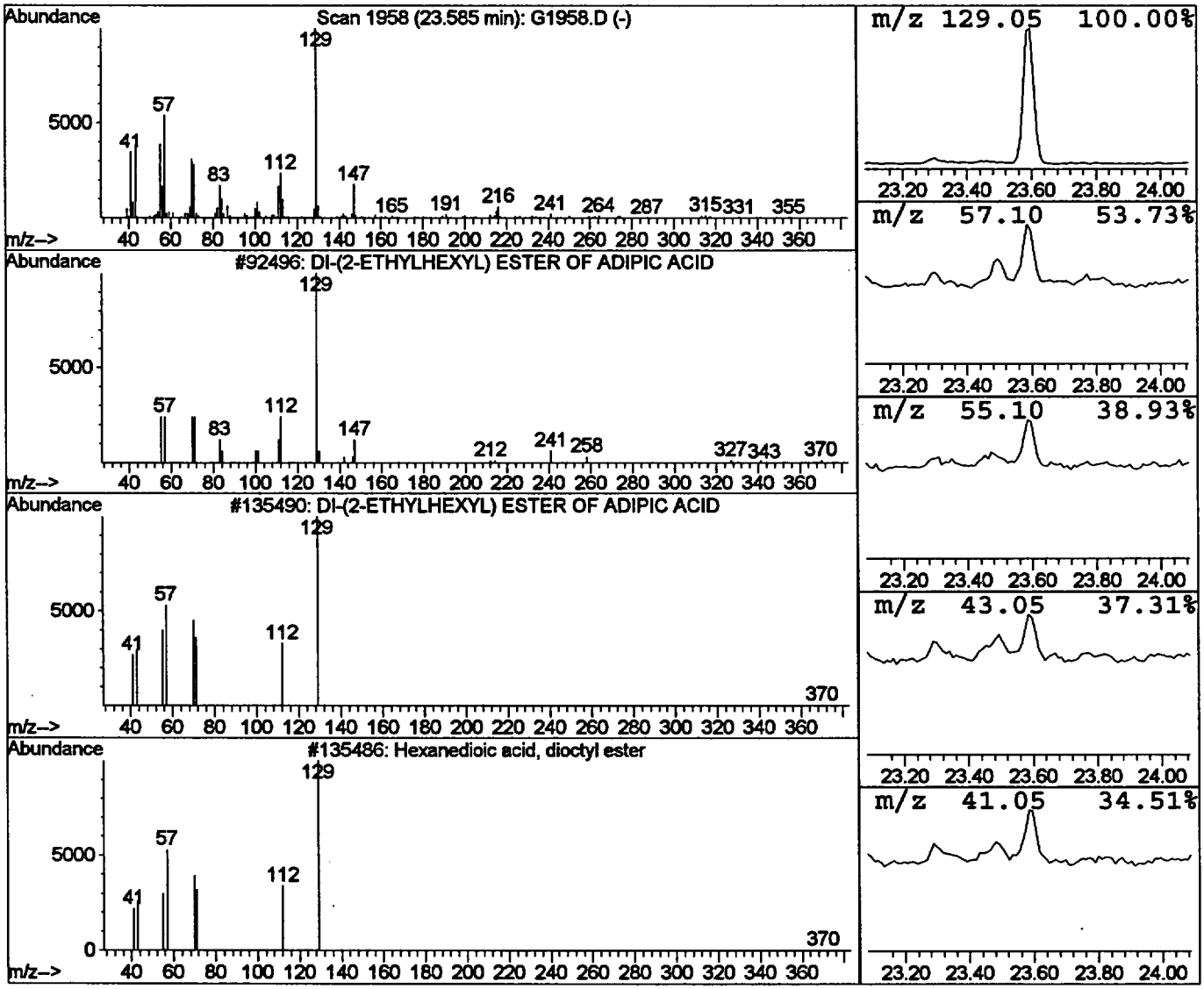
Peak Number 22 DI-(2-ETHYLHEXYL) ESTER OF ADI Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.59	27.80 ng	817096	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	86
2	DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	59
3	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	59



0643

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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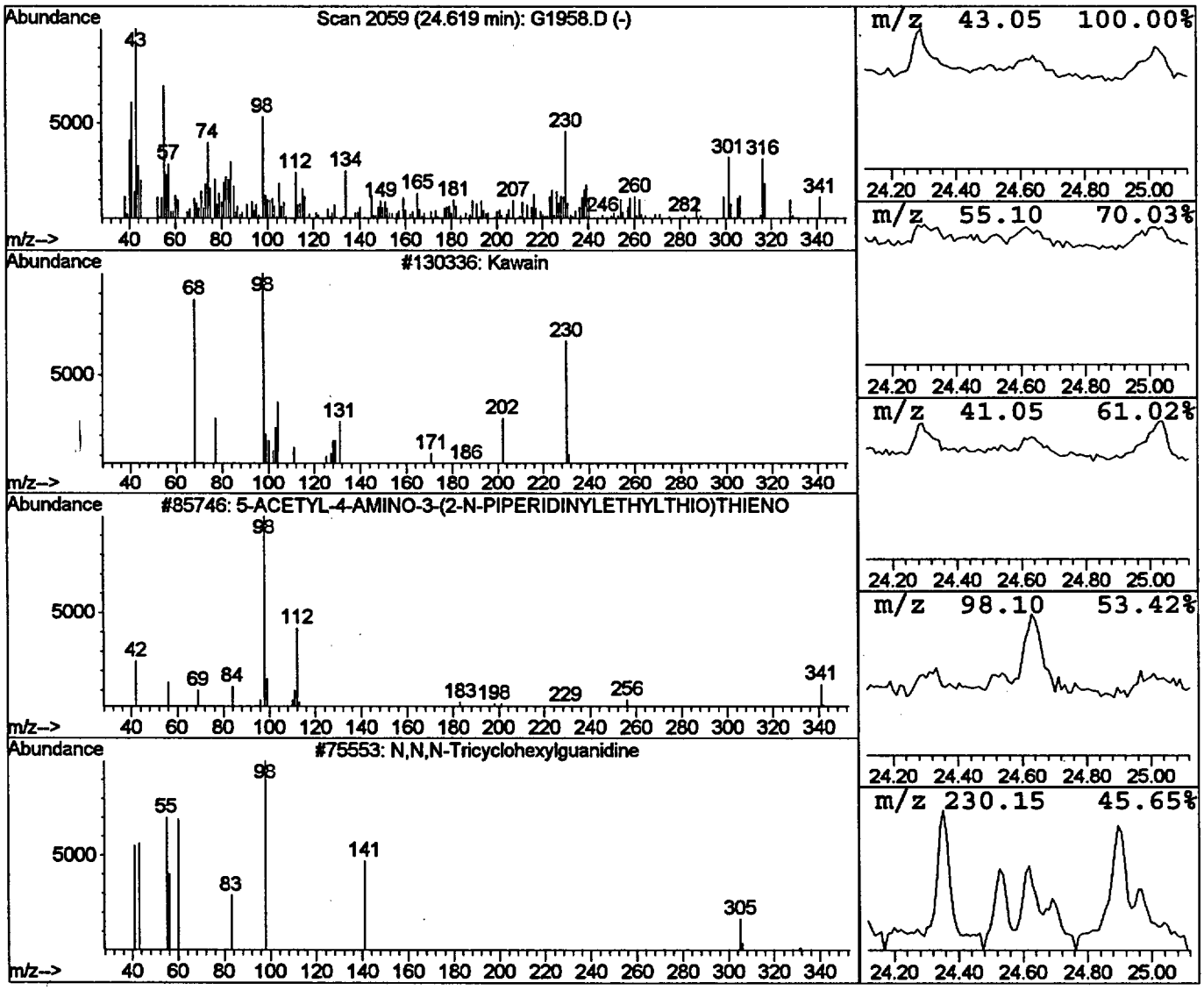
Peak Number 23 Kawain UNKNOWN COMPOUND 1-27-98 Concentration Rank 36

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.62	14.15 ng	415853	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Kawain	230	C14H14O3	000500-64-1	35
2	5-ACETYL-4-AMINO-3-(2-N-PIPERIDINYL	341	C14H19N3OS3	097090-69-2	14
3	N,N,N-Tricyclohexylguanidine	305	C19H35N3	000000-00-0	10



0644

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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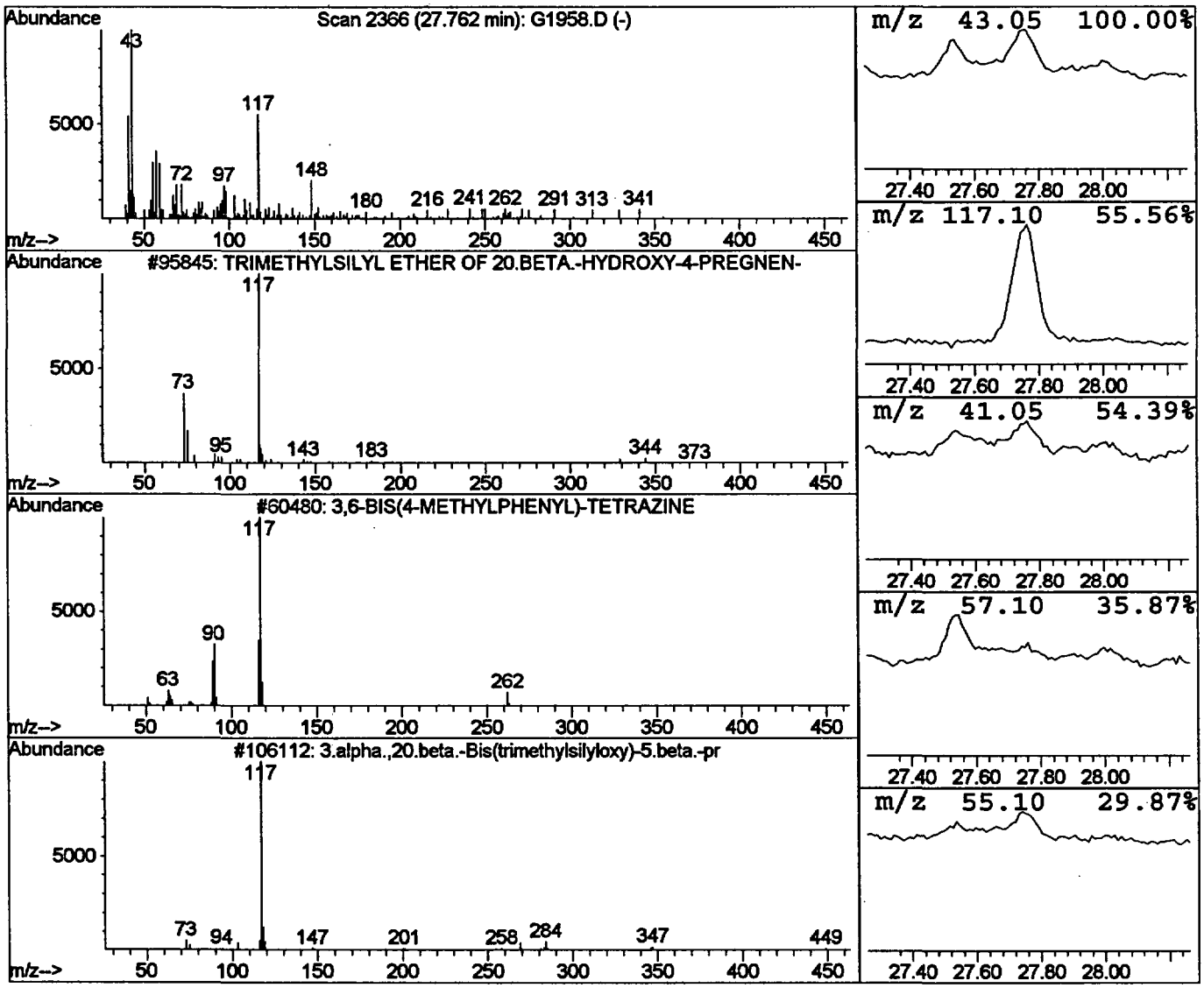
Peak Number 24 TRIMETHYLSILYL ETHER OF 20.BET Concentration Rank 29

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.76	22.36 ng	657214	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	TRIMETHYLSILYL ETHER OF 20.BETA.-HY	388	C24H40O2Si	016134-51-3	17
2	3,6-BIS(4-METHYLPHENYL)-TETRAZINE	262	C16H14N4	051973-26-3	12
3	3.alpha.,20.beta.-Bis(trimethylsily	464	C27H52O2Si2	063753-95-7	12



0645

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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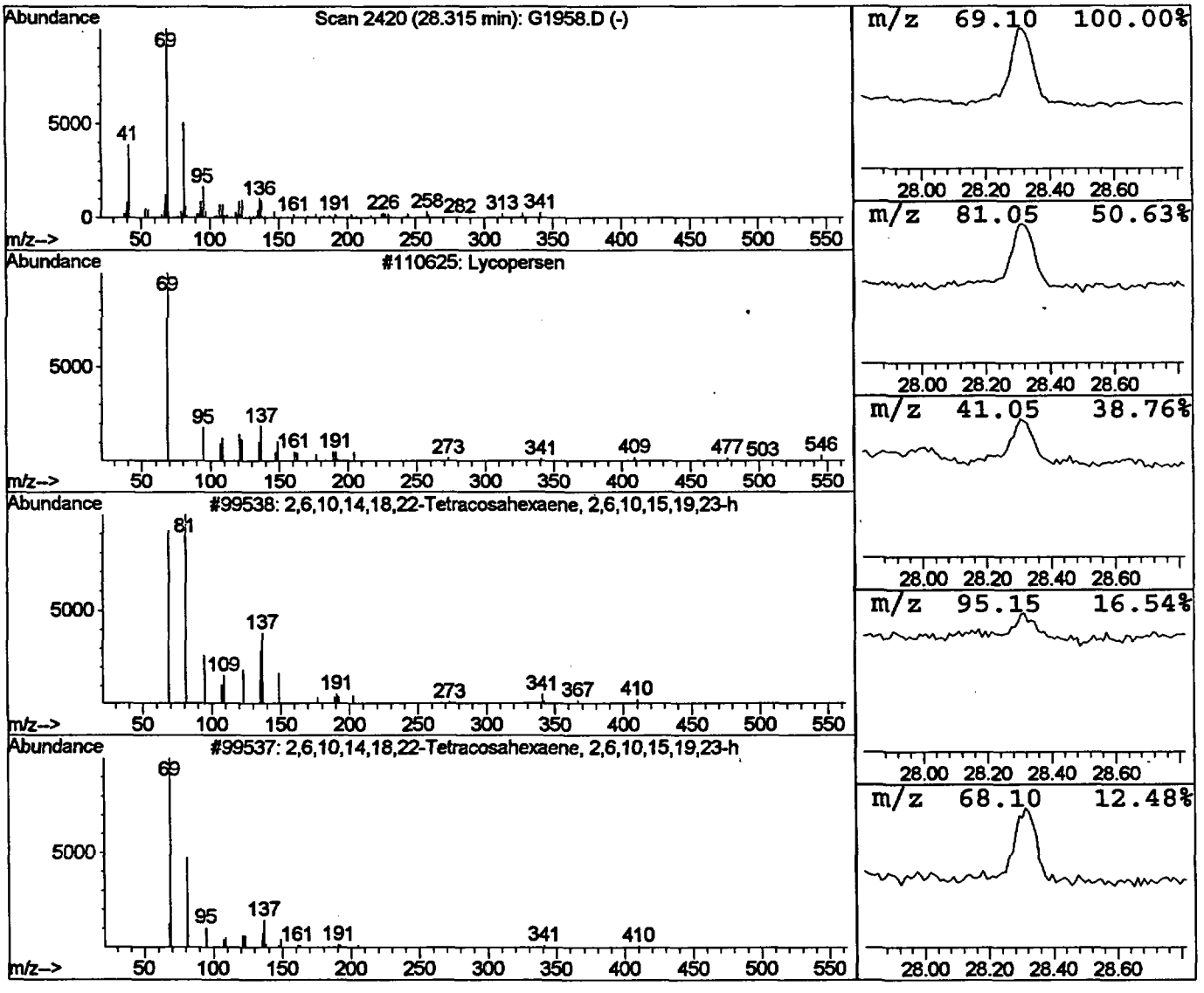
Peak Number 25 Lycopersen UNKNOWN COMPOUND 01-27-98 Concentration Rank 31

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.31	19.03 ng	559369	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Lycopersen	547	C40H66	000502-62-5	72
2	2,6,10,14,18,22-Tetracosahexaene, 2	410	C30H50	000111-02-4	64
3	2,6,10,14,18,22-Tetracosahexaene, 2	410	C30H50	007683-64-9	64



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Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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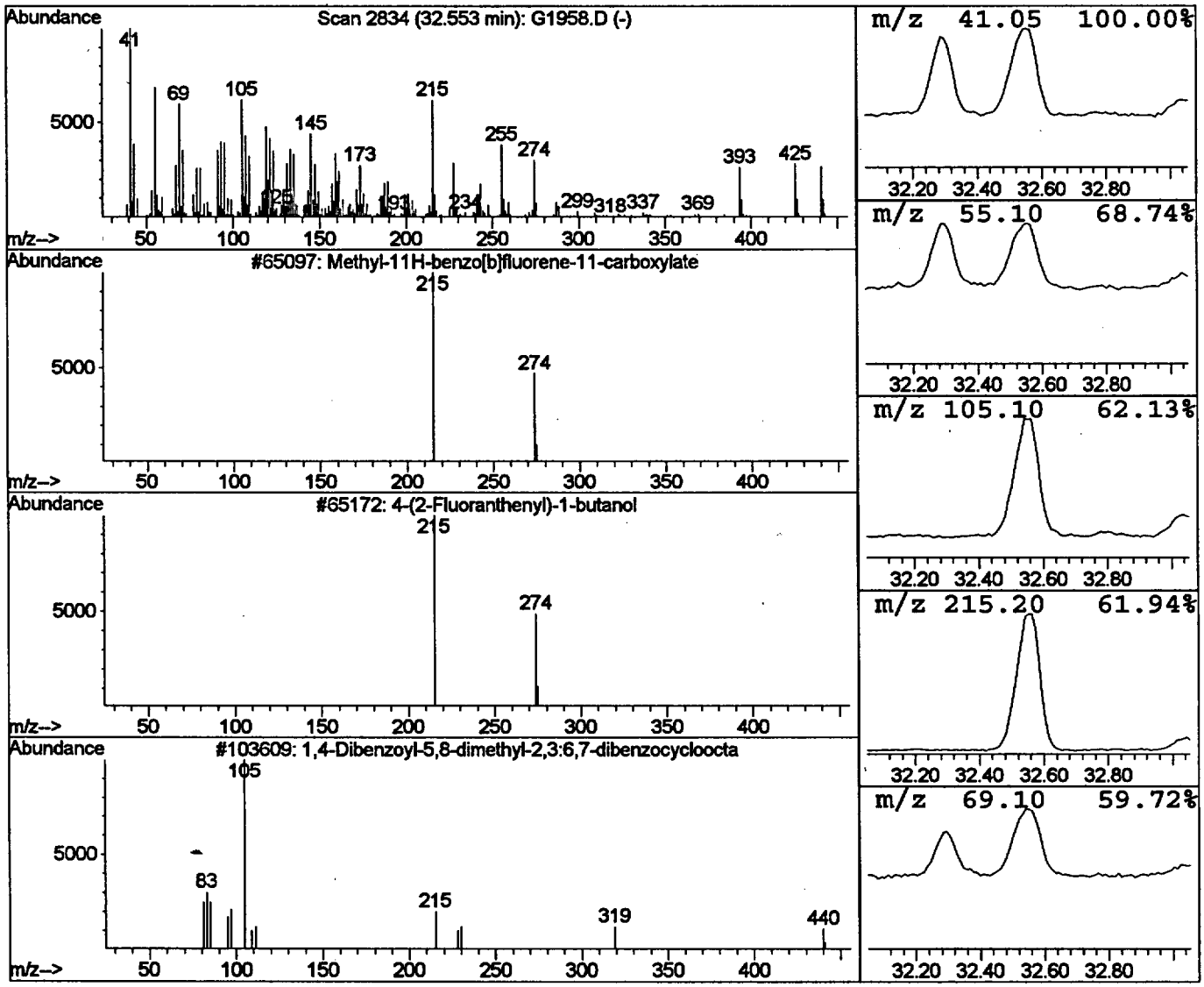
Peak Number 26 Methyl-11H-benzo[b]fluorene-11 Concentration Rank 2

UNKNOWN COMPOUND mo 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.55	207.10 ng	8130610	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Methyl-11H-benzo[b]fluorene-11-carb	274	C19H14O2	088746-49-0	14
2	4-(2-Fluoranthenyl)-1-butanol	274	C20H18O	088746-60-5	14
3	1,4-Dibenzoyl-5,8-dimethyl-2,3:6,7-	440	C32H24O2	093222-81-2	11



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Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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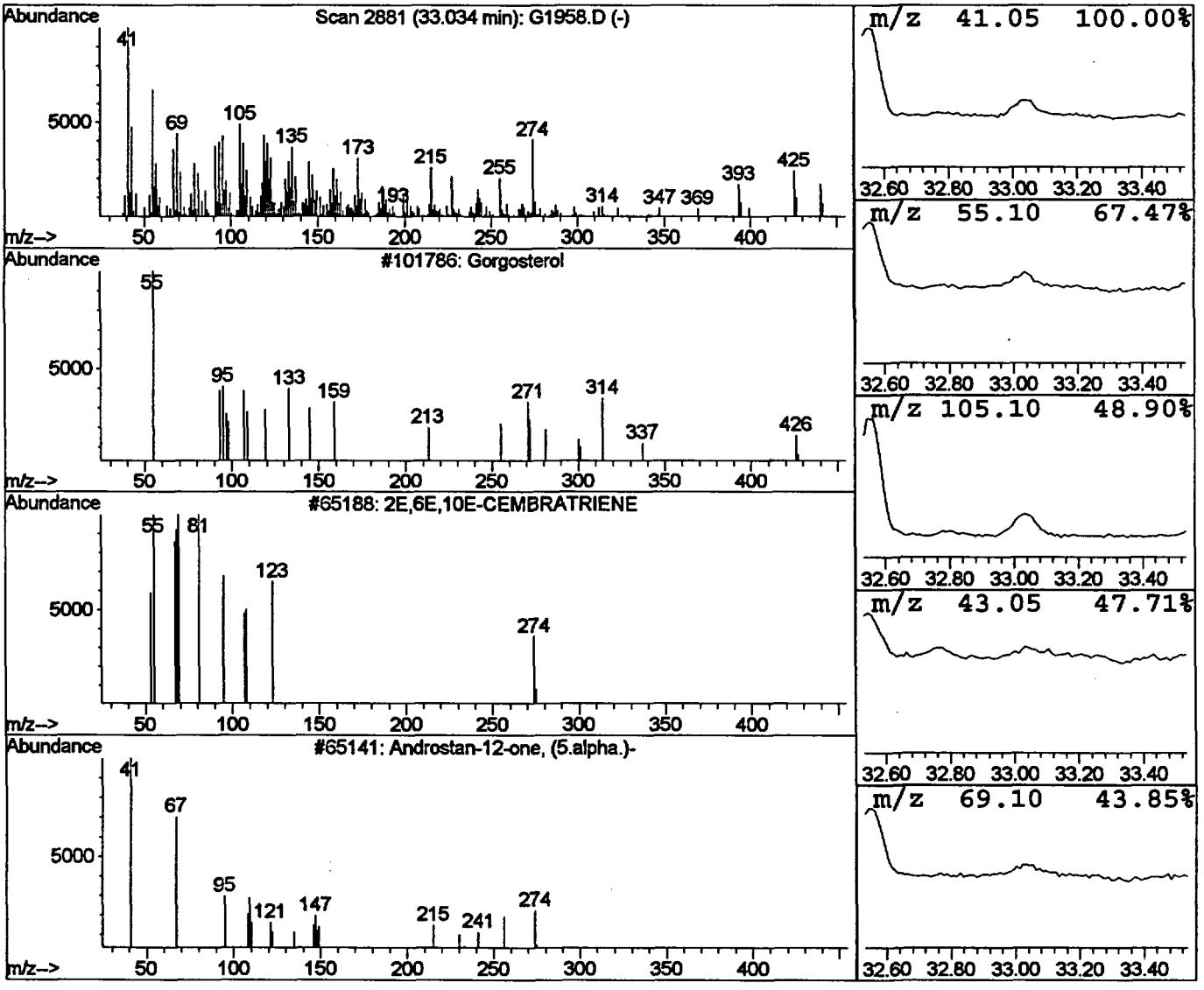
Peak Number 27 Gorgosterol UNKNOWN COMPOUND Concentration Rank 16

mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.03	36.39 ng	1428540	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Gorgosterol	426	C30H50O	029782-65-8	25
2	2E,6E,10E-CEMBRATRIENE	274	C20H34	037867-25-7	10
3	Androstan-12-one, (5.alpha.)-	274	C19H30O	003676-09-3	9



0648

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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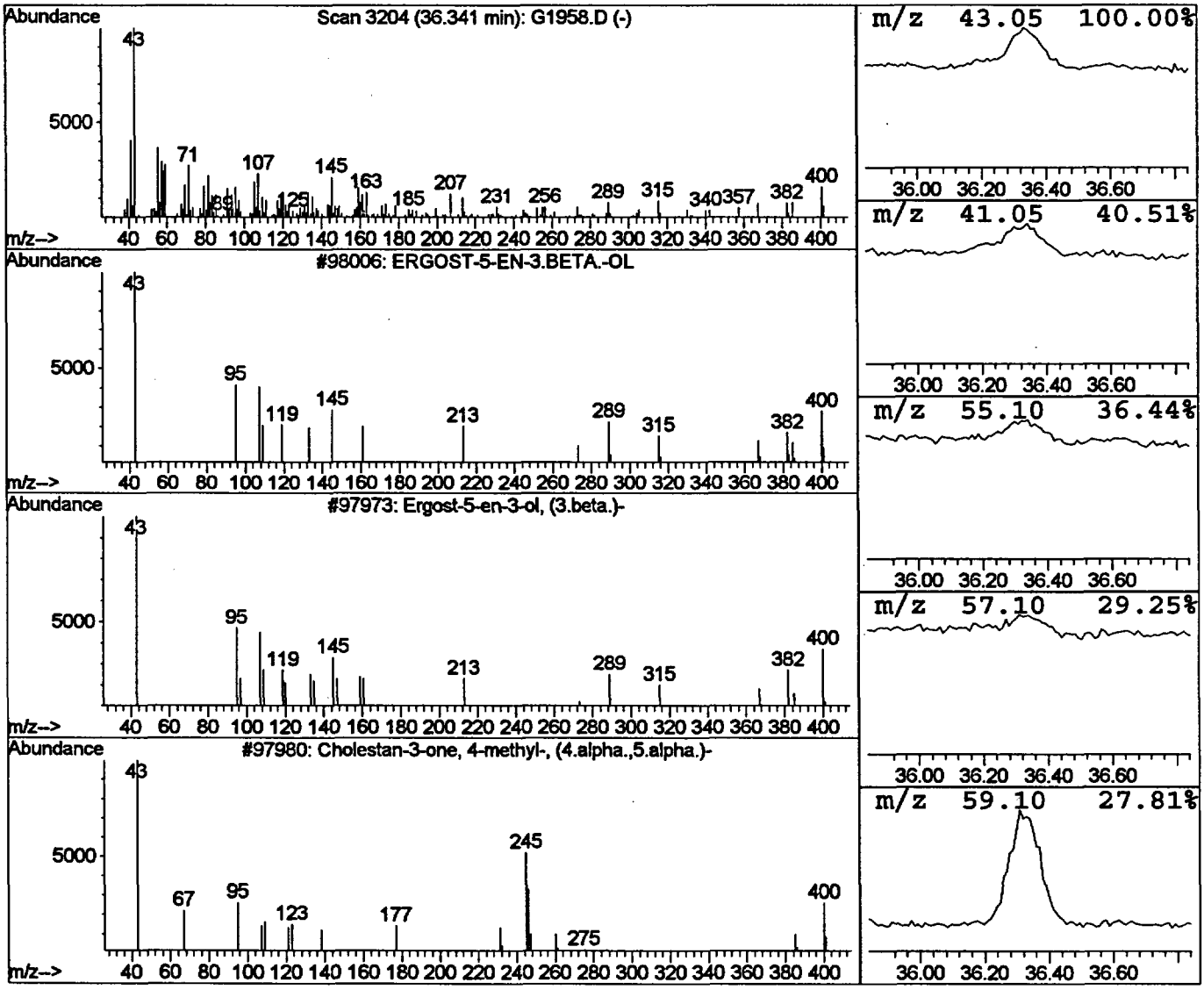
Peak Number 28 ERGOST-5-EN-3.BETA.-OL Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.34	31.73 ng	1245790	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	ERGOST-5-EN-3.BETA.-OL	400	C28H48O	000000-00-0	95
2	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	42
3	Cholestan-3-one, 4-methyl-, (4.alph	400	C28H48O	000984-87-2	11



0649

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D
Acq On : 22 Jan 98 23:59
Sample : S HP-7G 58073-006 FFR86
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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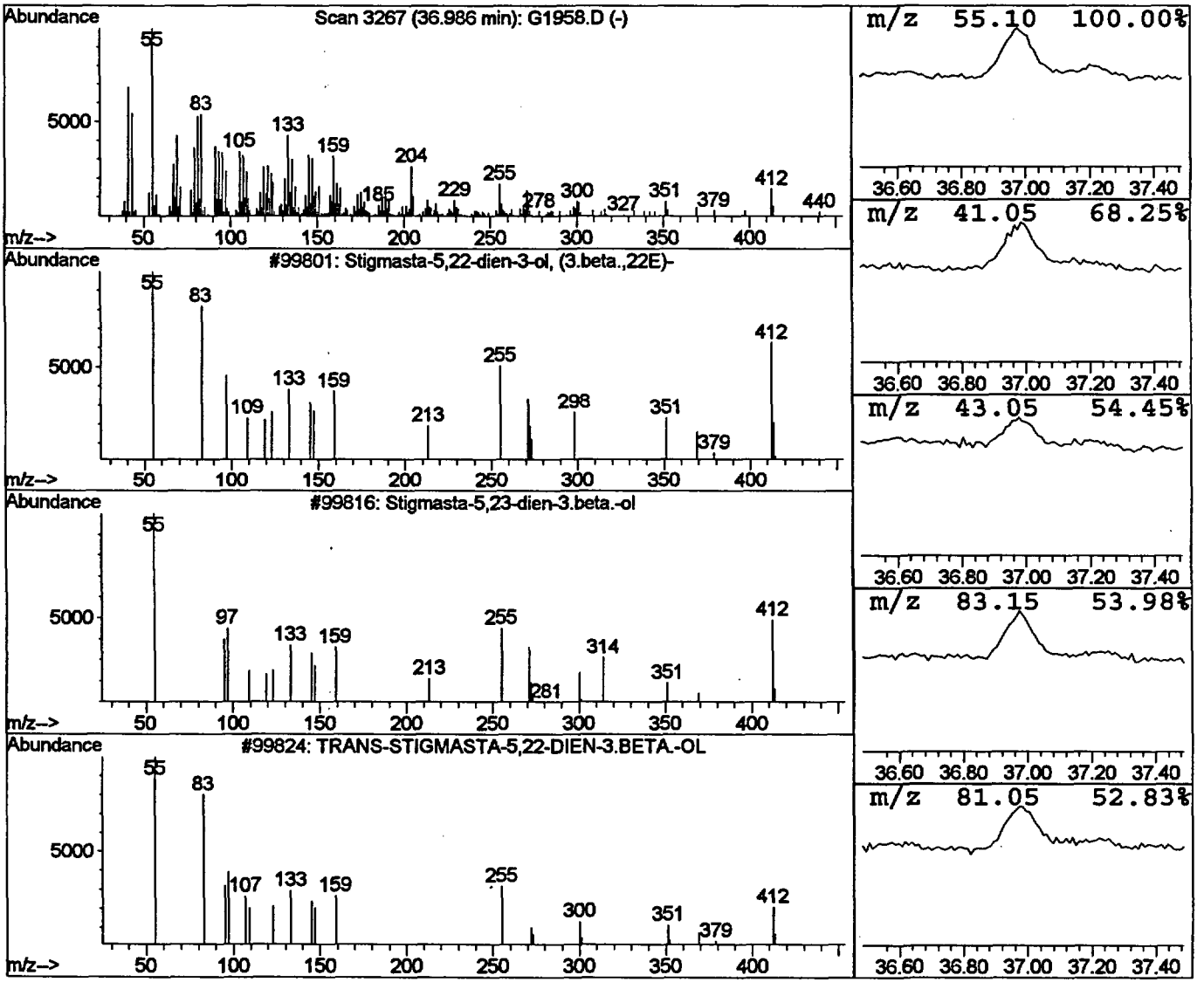
Peak Number 29 Stigmasta-5,22-dien-3-ol, (3.b Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.99	71.93 ng	2823790	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmasta-5,22-dien-3-ol, (3.beta.,	412	C29H48O	000083-48-7	86
2	Stigmasta-5,23-dien-3.beta.-ol	412	C29H48O	038485-29-9	86
3	TRANS-STIGMASTA-5,22-DIEN-3.BETA.-O	412	C29H48O	000000-00-0	64



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D
Acq On : 22 Jan 98 23:59
Sample : S HP-7G 58073-006 FFR86
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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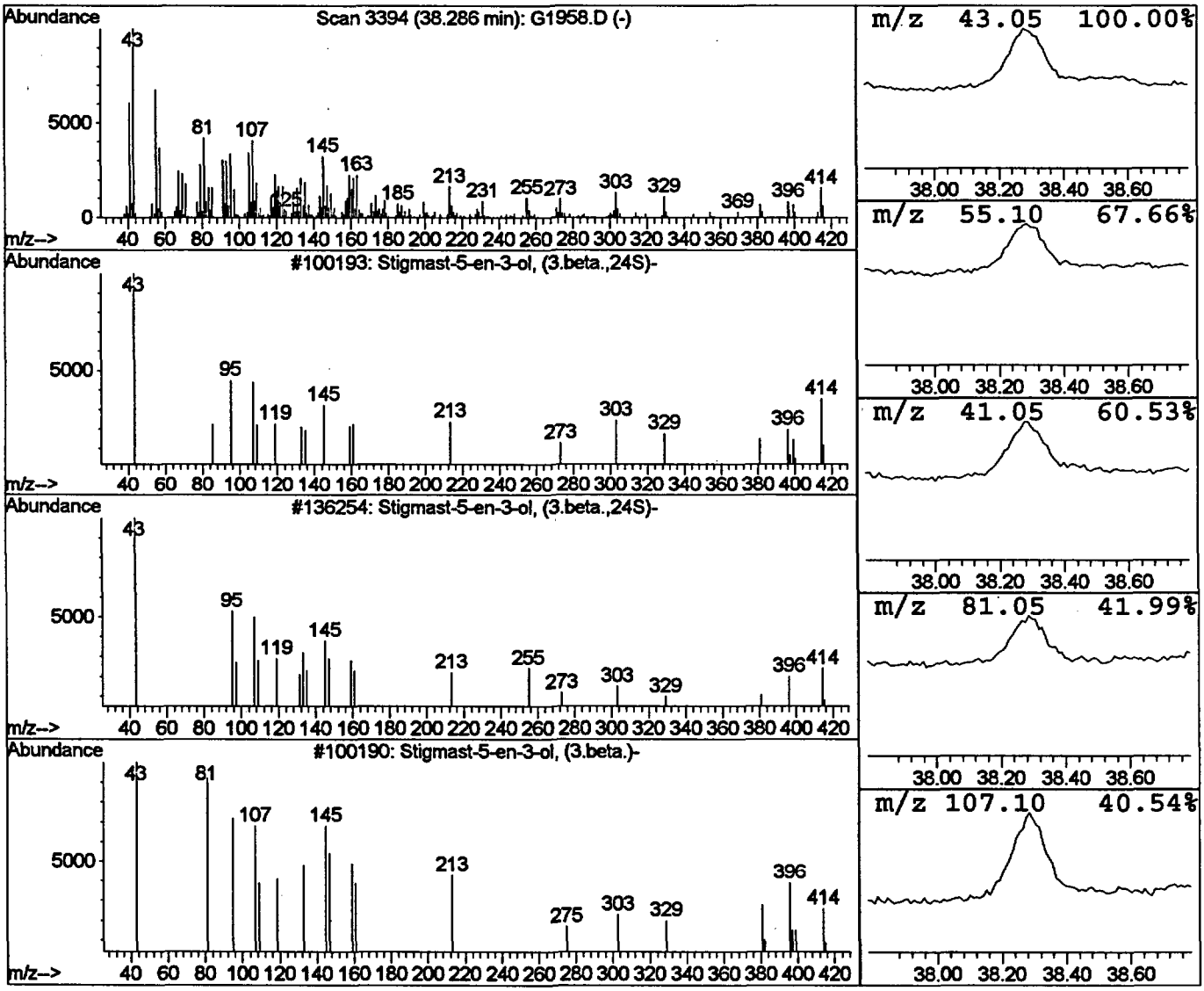
Peak Number 30 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.29	87.35 ng	3429420	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	99
2	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	83
3	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	76



0651

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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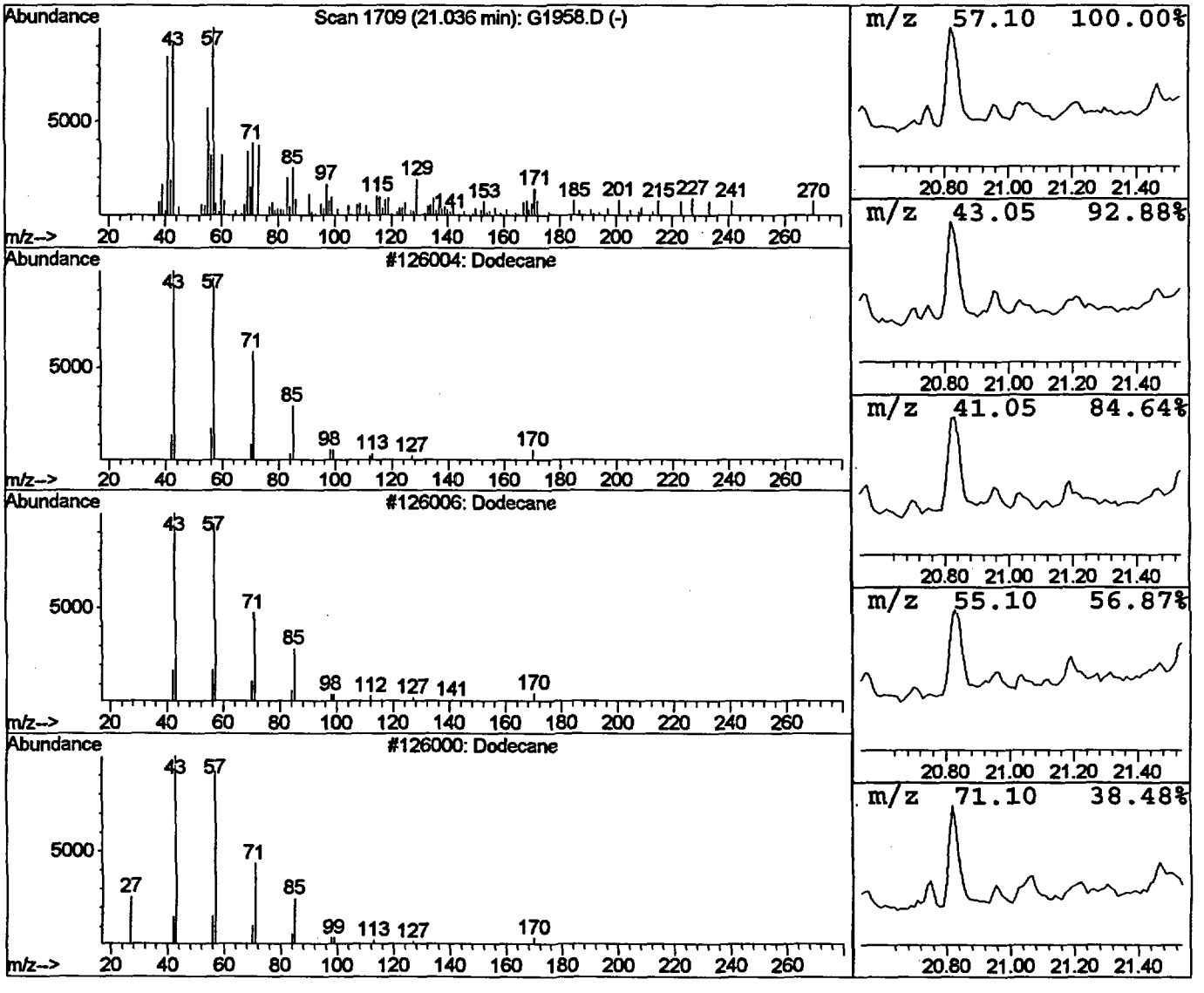
Peak Number 42 Dodecane Concentration Rank 58

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.04	4.97 ng	213122	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane	170	C12H26	000112-40-3	30
2	Dodecane	170	C12H26	000112-40-3	30
3	Dodecane	170	C12H26	000112-40-3	30



0652

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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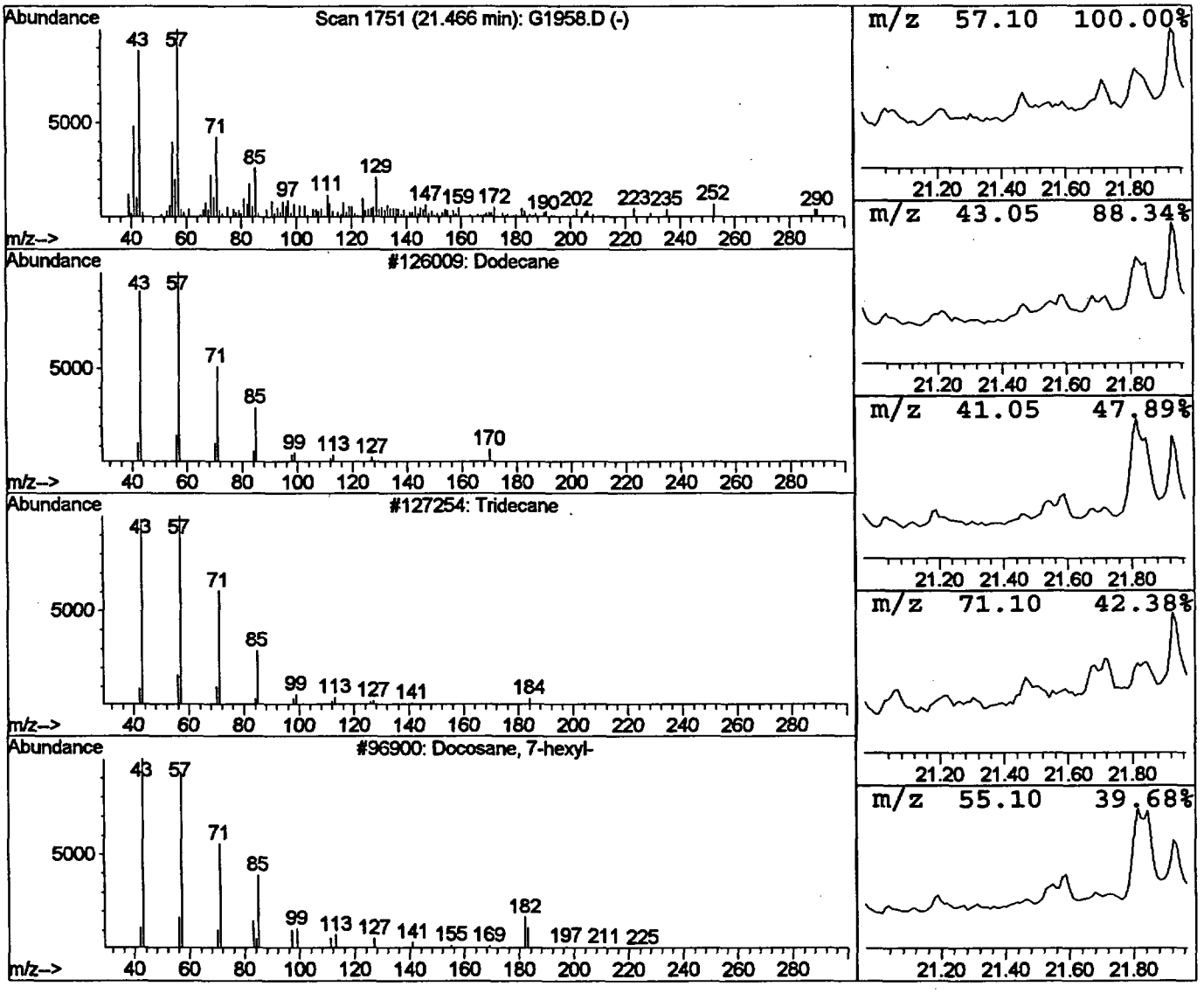
Peak Number 43 Dodecane Concentration Rank 48

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.47	7.37 ng	315873	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane	170	C12H26	000112-40-3	46
2	Tridecane	184	C13H28	000629-50-5	46
3	Docosane, 7-hexyl-	394	C28H58	055373-86-9	43



0653

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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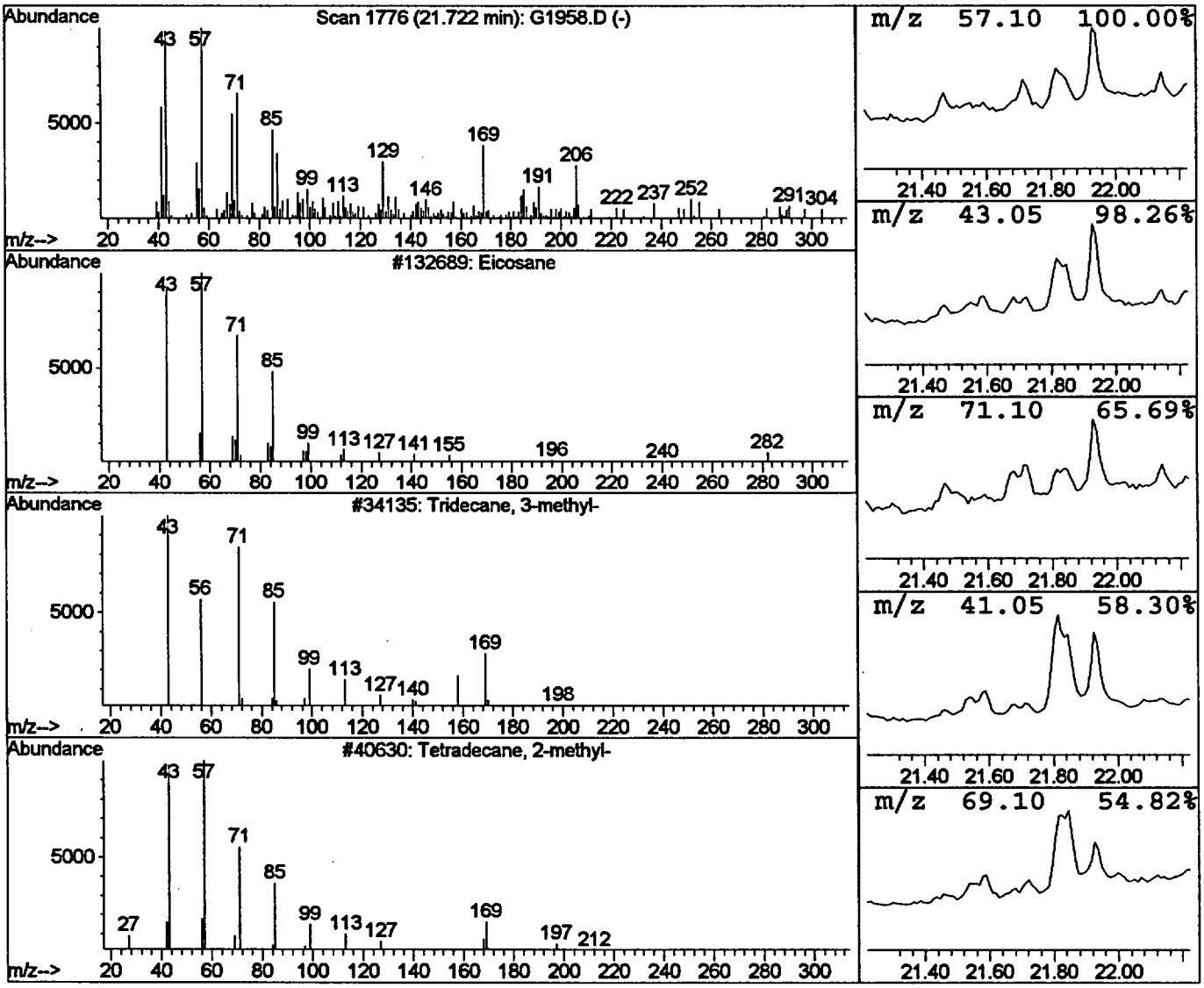
Peak Number 44 Eicosane Concentration Rank 38

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.72	12.33 ng	528955	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	55
2	Tridecane, 3-methyl-	198	C14H30	006418-41-3	49
3	Tetradecane, 2-methyl-	212	C15H32	001560-95-8	46



Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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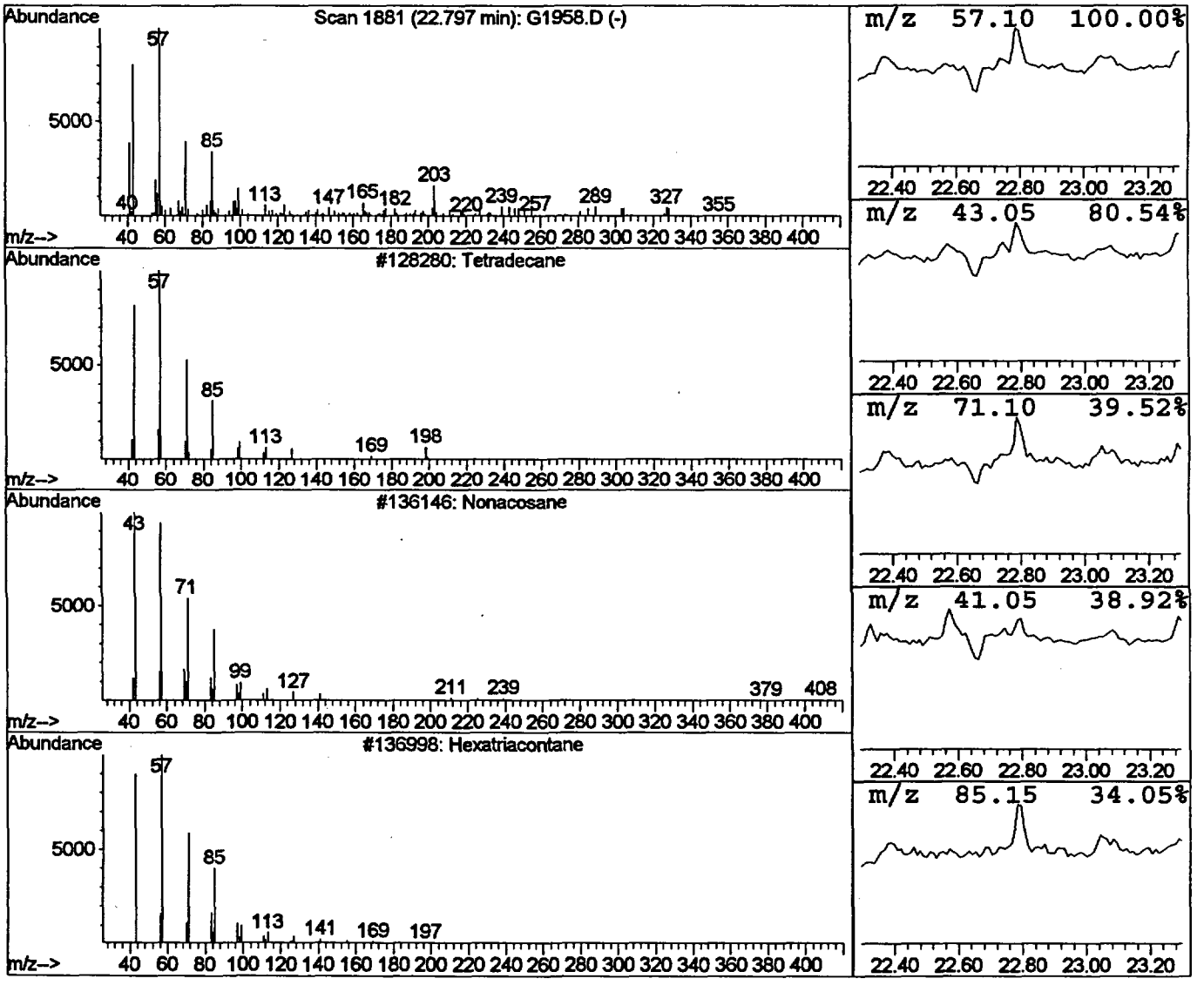
Peak Number 45 Tetradecane Concentration Rank 49

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.80	6.76 ng	198777	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecane	198	C14H30	000629-59-4	49
2	Nonacosane	408	C29H60	000630-03-5	49
3	Hexatriacontane	507	C36H74	000630-06-8	49



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Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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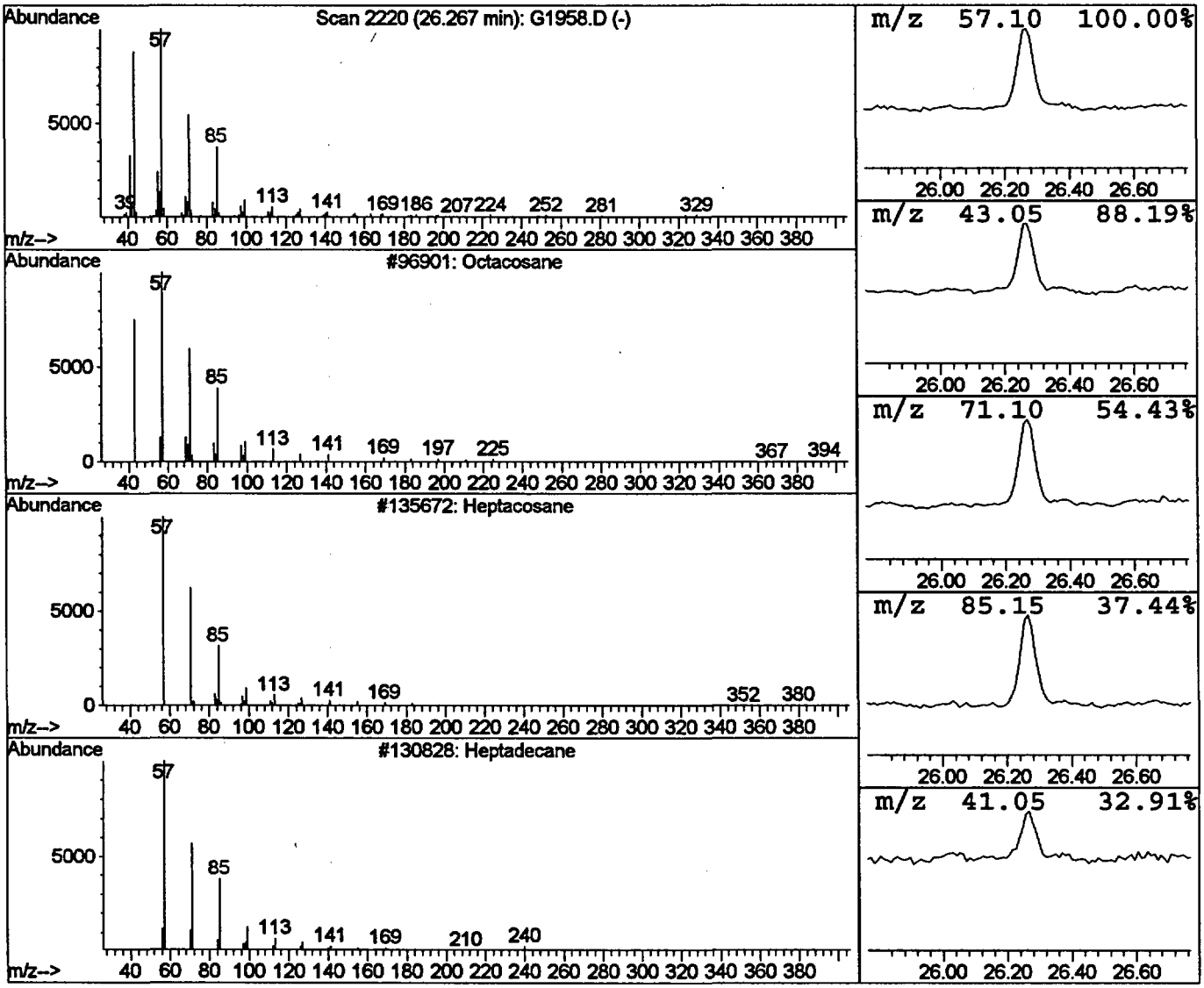
Peak Number 46 Octacosane Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.27	28.92 ng	849991	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	90
2	Heptacosane	380	C27H56	000593-49-7	90
3	Heptadecane	240	C17H36	000629-78-7	87



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

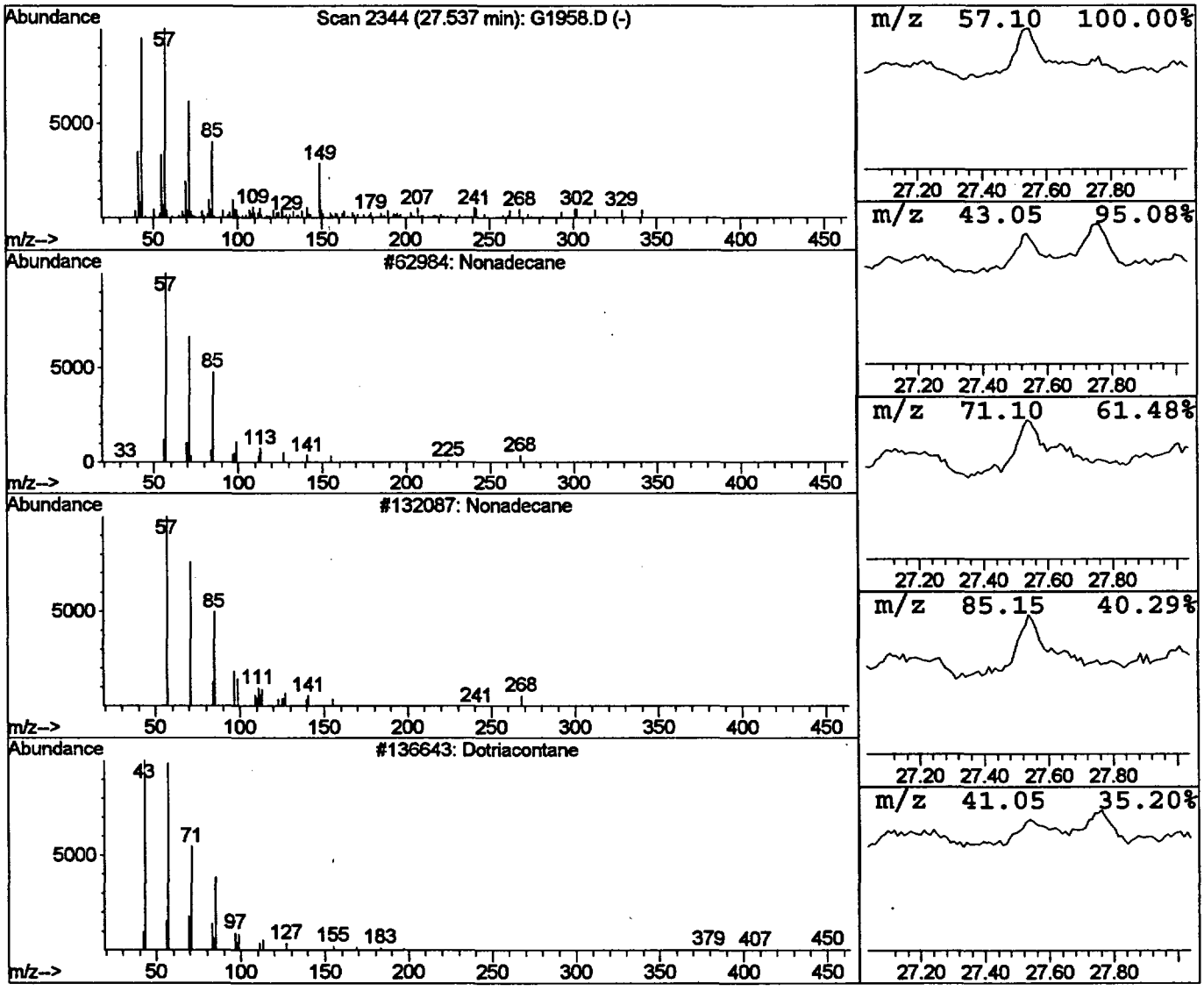
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 47 Nonadecane Concentration Rank 41

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.54	9.90 ng	291036	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonadecane	268	C19H40	000629-92-5	53
2	Nonadecane	268	C19H40	000629-92-5	52
3	Dotriacontane	451	C32H66	000544-85-4	52



0057

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

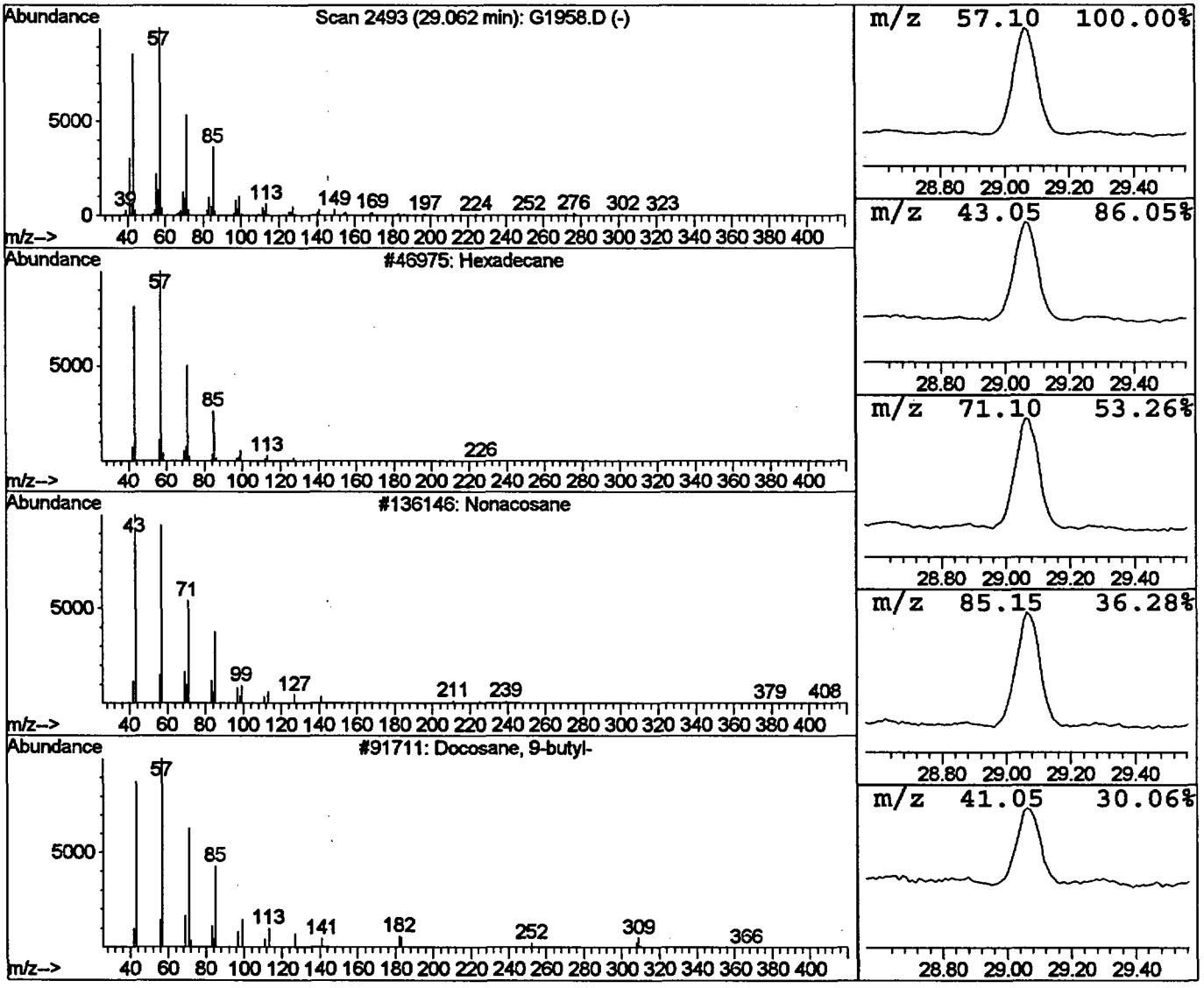
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 48 Hexadecane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.06	80.09 ng	3144390	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	94
2	Nonacosane	408	C29H60	000630-03-5	91
3	Docosane, 9-butyl-	366	C26H54	055282-14-9	91



0658

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

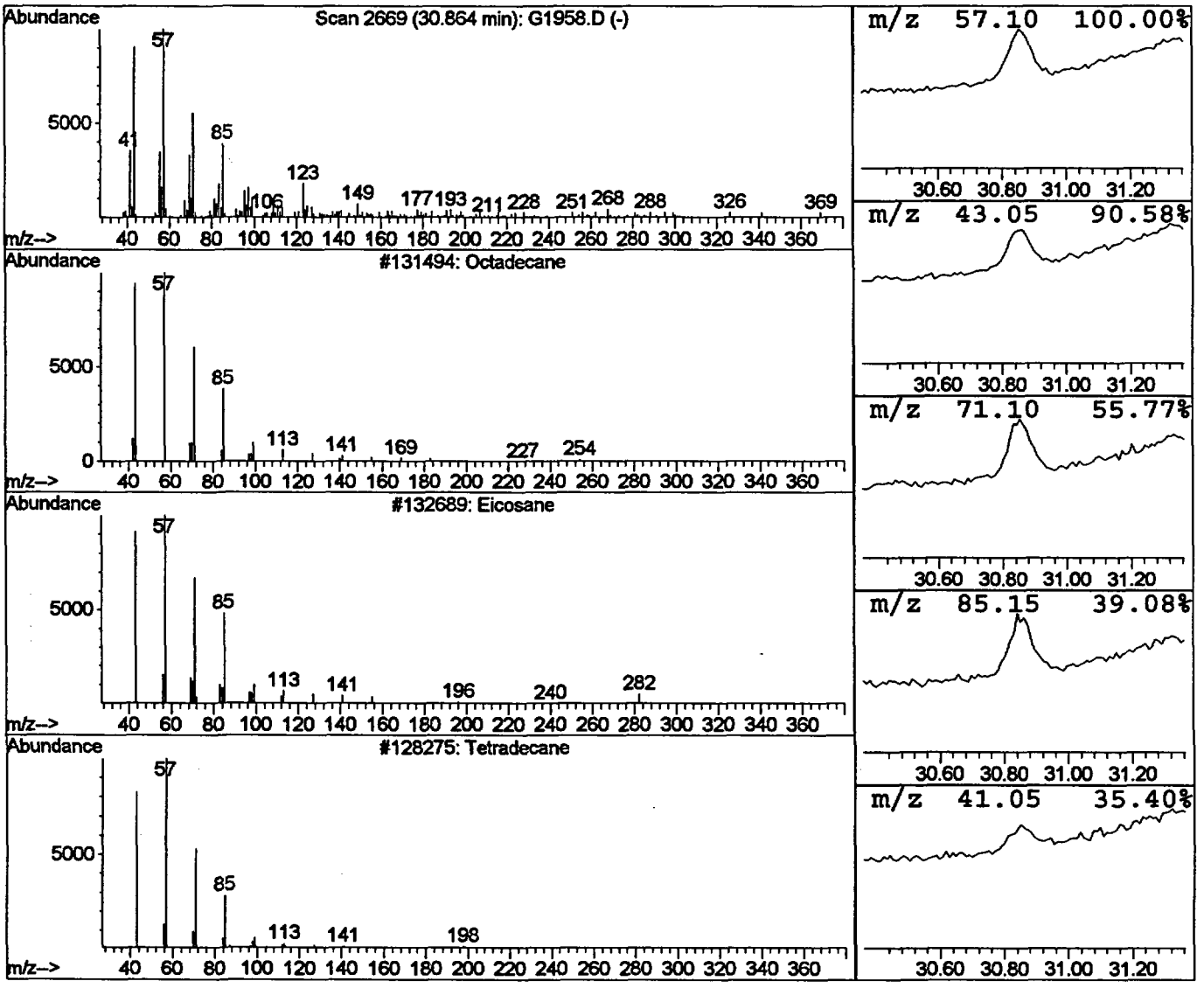
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 49 Octadecane Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.86	23.08 ng	906019	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	95
2	Eicosane	282	C20H42	000112-95-8	93
3	Tetradecane	198	C14H30	000629-59-4	93



0659

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D
Acq On : 22 Jan 98 23:59
Sample : S HP-7G 58073-006 FFR86
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial: 9
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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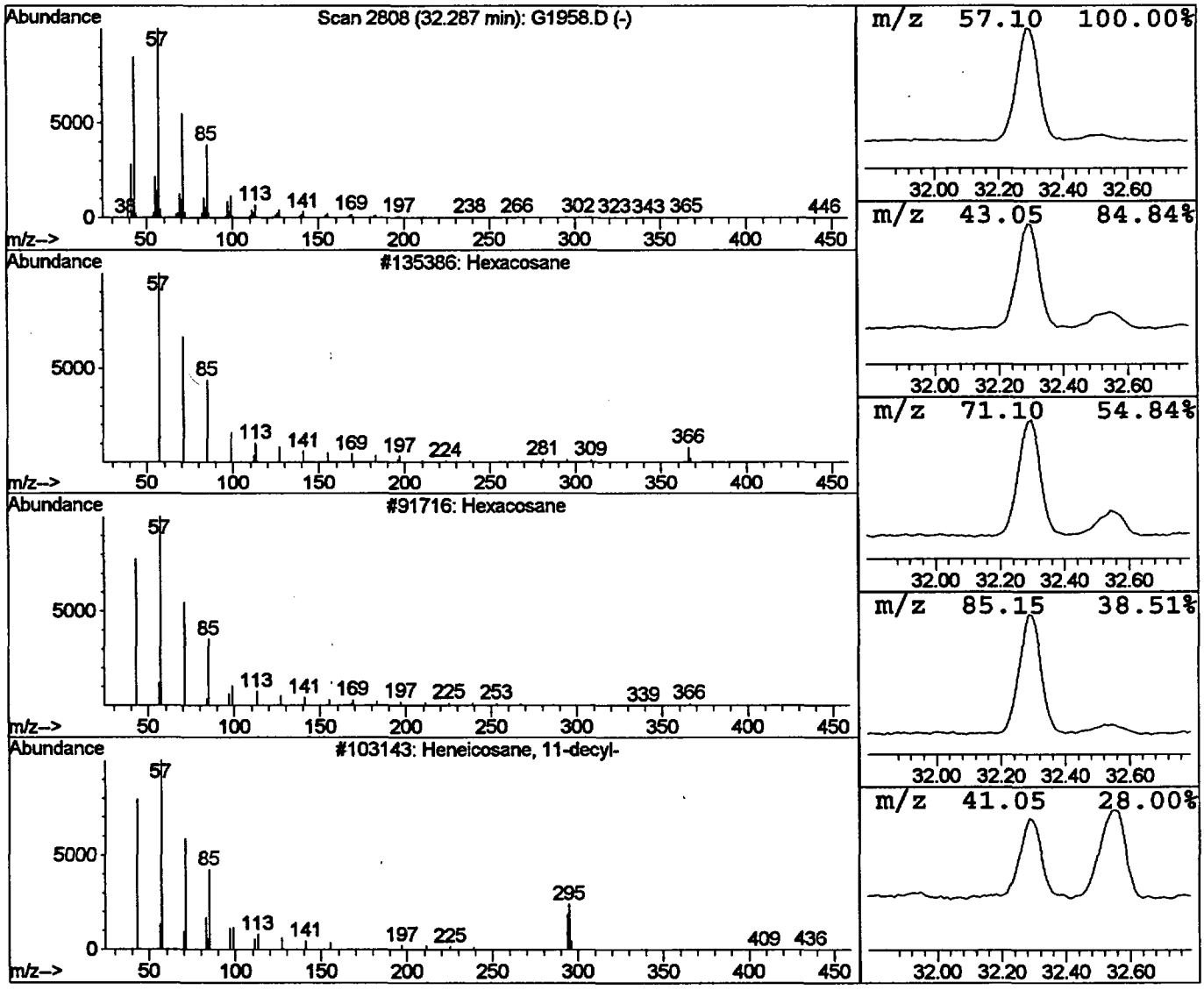
Peak Number 50 Hexacosane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.29	123.48 ng	4847670	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexacosane	366	C26H54	000630-01-3	94
2	Hexacosane	366	C26H54	000630-01-3	93
3	Heneicosane, 11-decyl-	436	C31H64	055320-06-4	91



0660

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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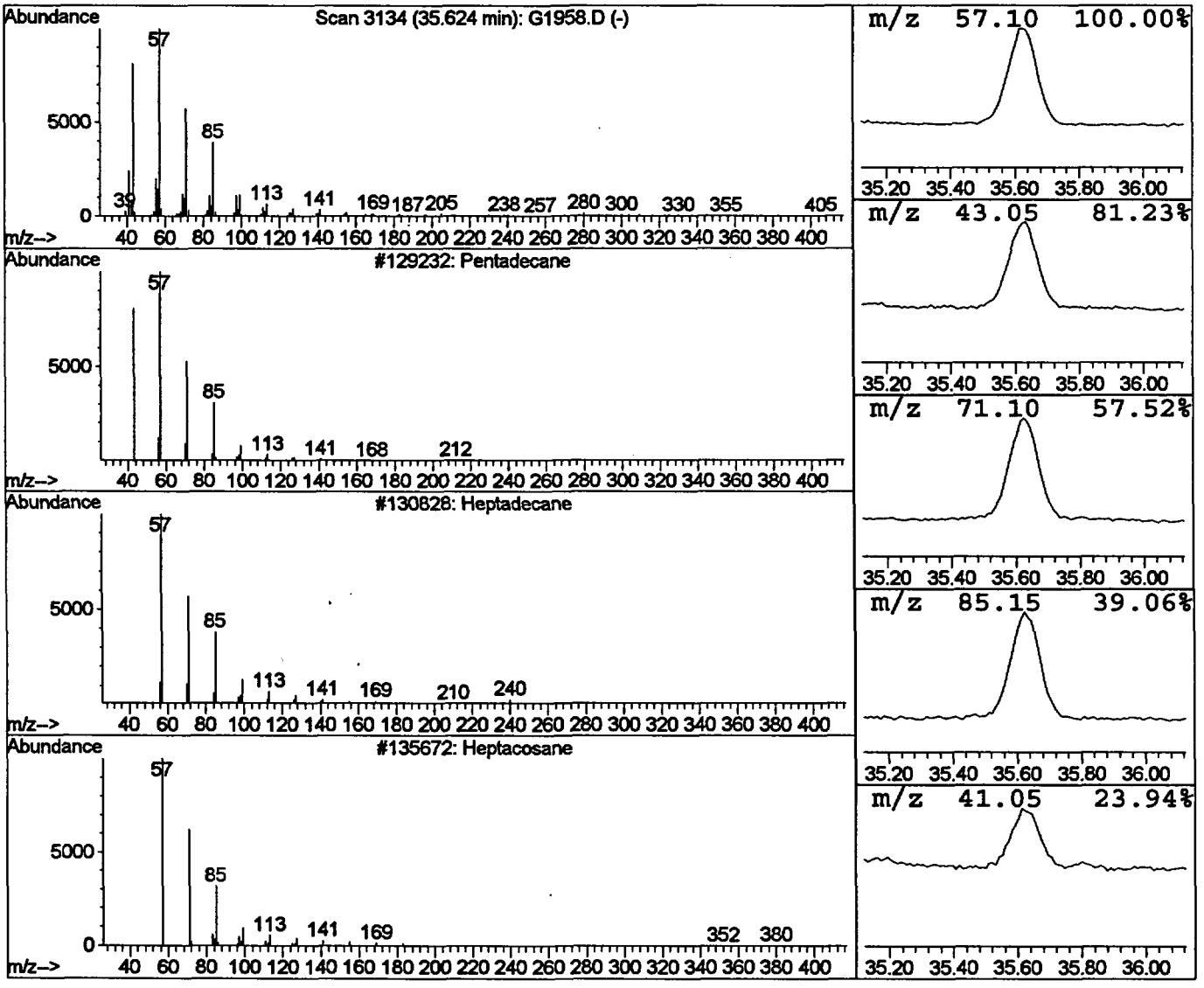
Peak Number 51 Pentadecane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.62	78.35 ng	3076010	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecane	212	C15H32	000629-62-9	94
2	Heptadecane	240	C17H36	000629-78-7	93
3	Heptacosane	380	C27H56	000593-49-7	91



Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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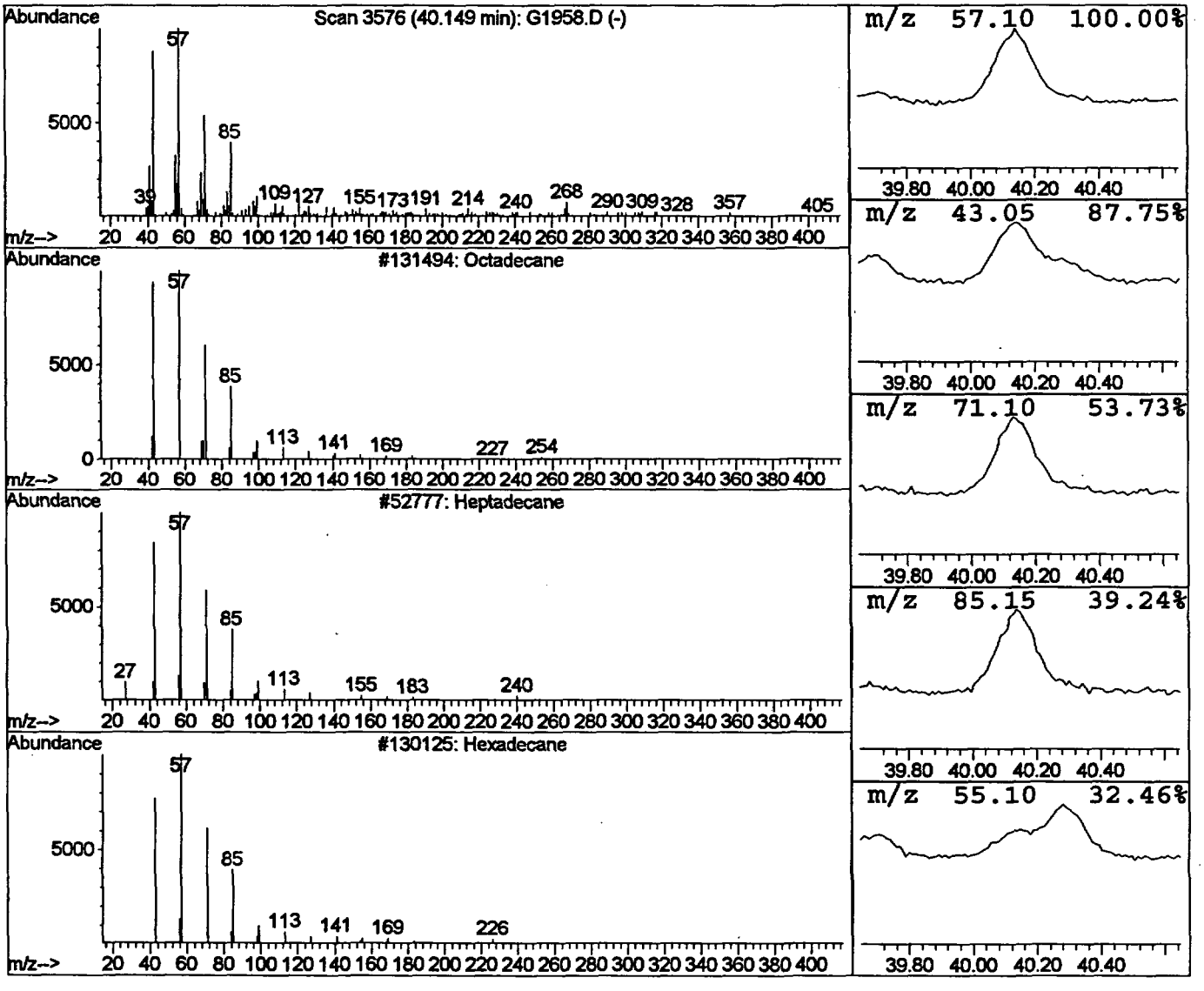
Peak Number 52 Octadecane Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.15	35.81 ng	1405760	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	96
2	Heptadecane	240	C17H36	000629-78-7	96
3	Hexadecane	226	C16H34	000544-76-3	96



0662

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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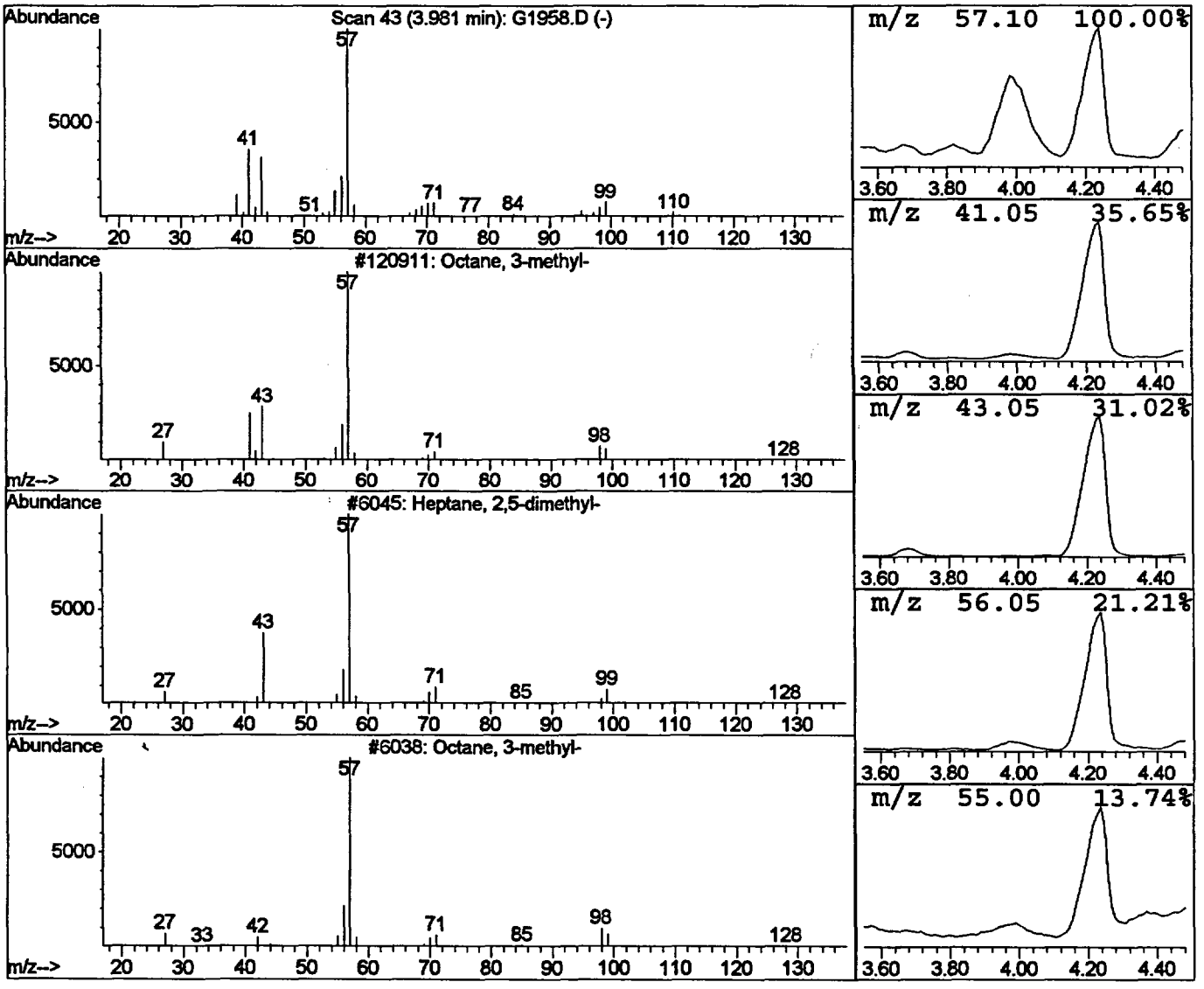
Peak Number 53 Octane, 3-methyl- Concentration Rank 39

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	11.87 ng	426193	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	64
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	56
3	Octane, 3-methyl-	128	C9H20	002216-33-3	45



0663

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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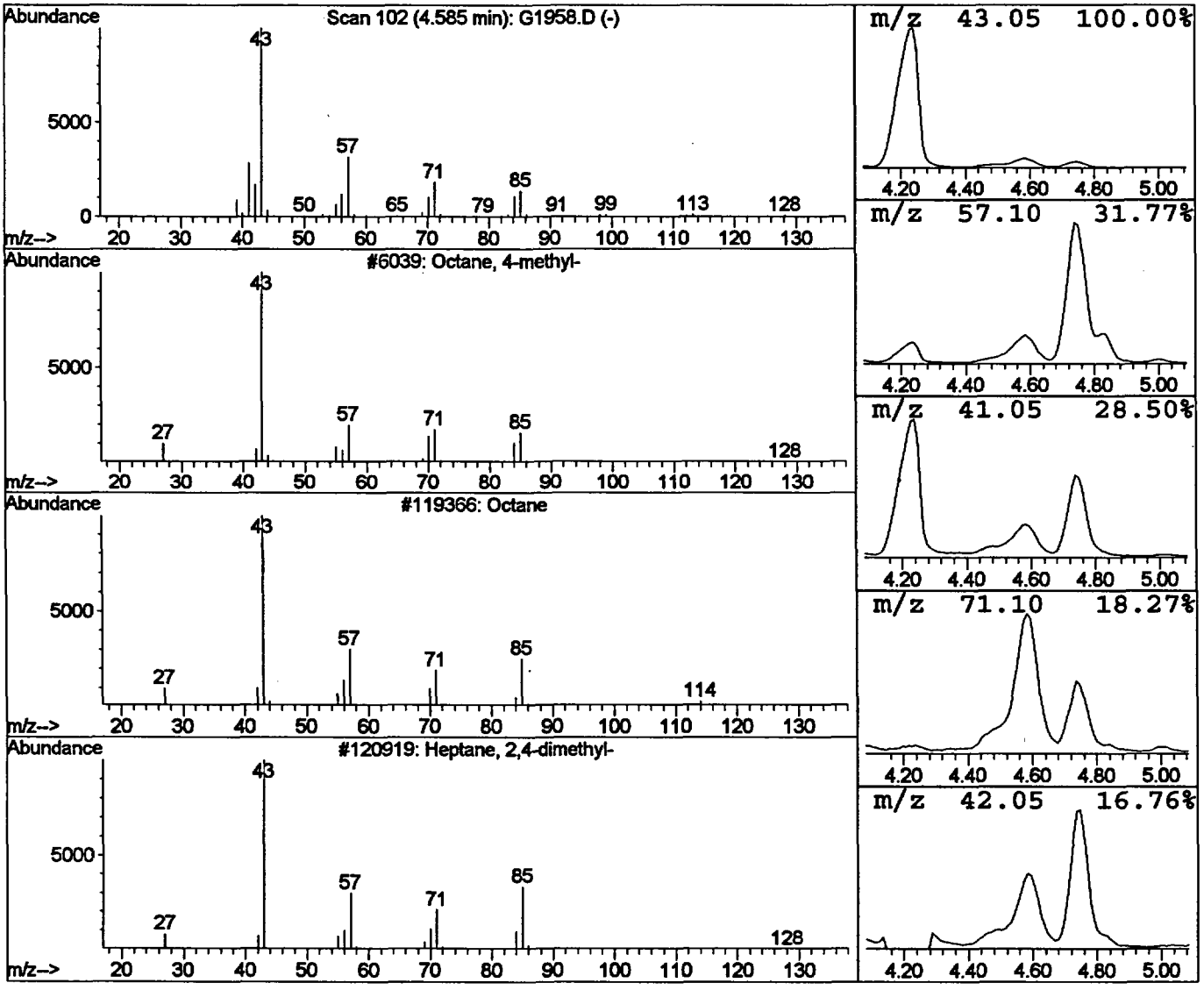
Peak Number 54 Octane, 4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.58	97.94 ng	3516550	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Octane	114	C8H18	000111-65-9	64
3	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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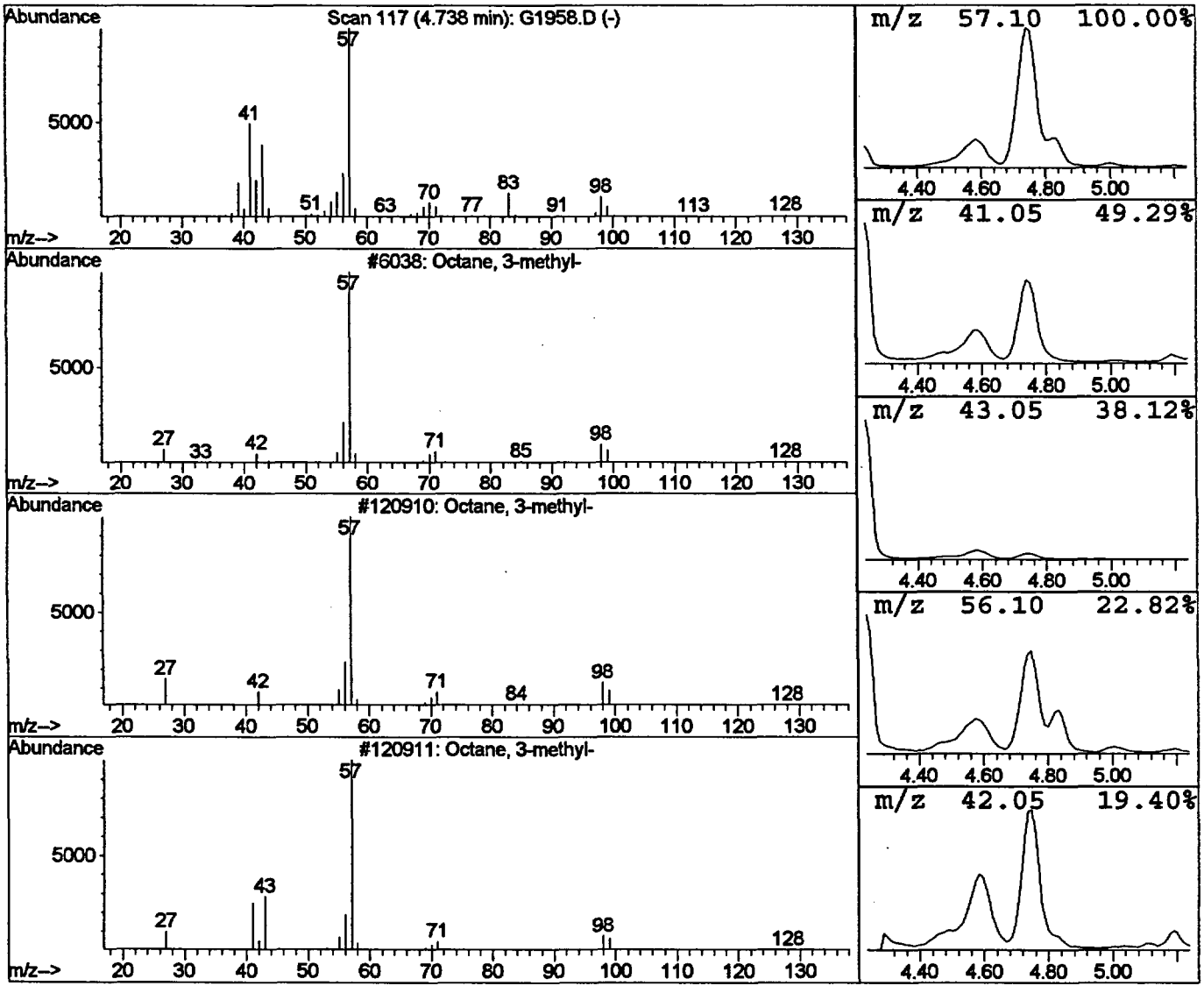
Peak Number 55 Octane, 3-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.74	120.02 ng	4309250	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	58
2	Octane, 3-methyl-	128	C9H20	002216-33-3	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	50



0665

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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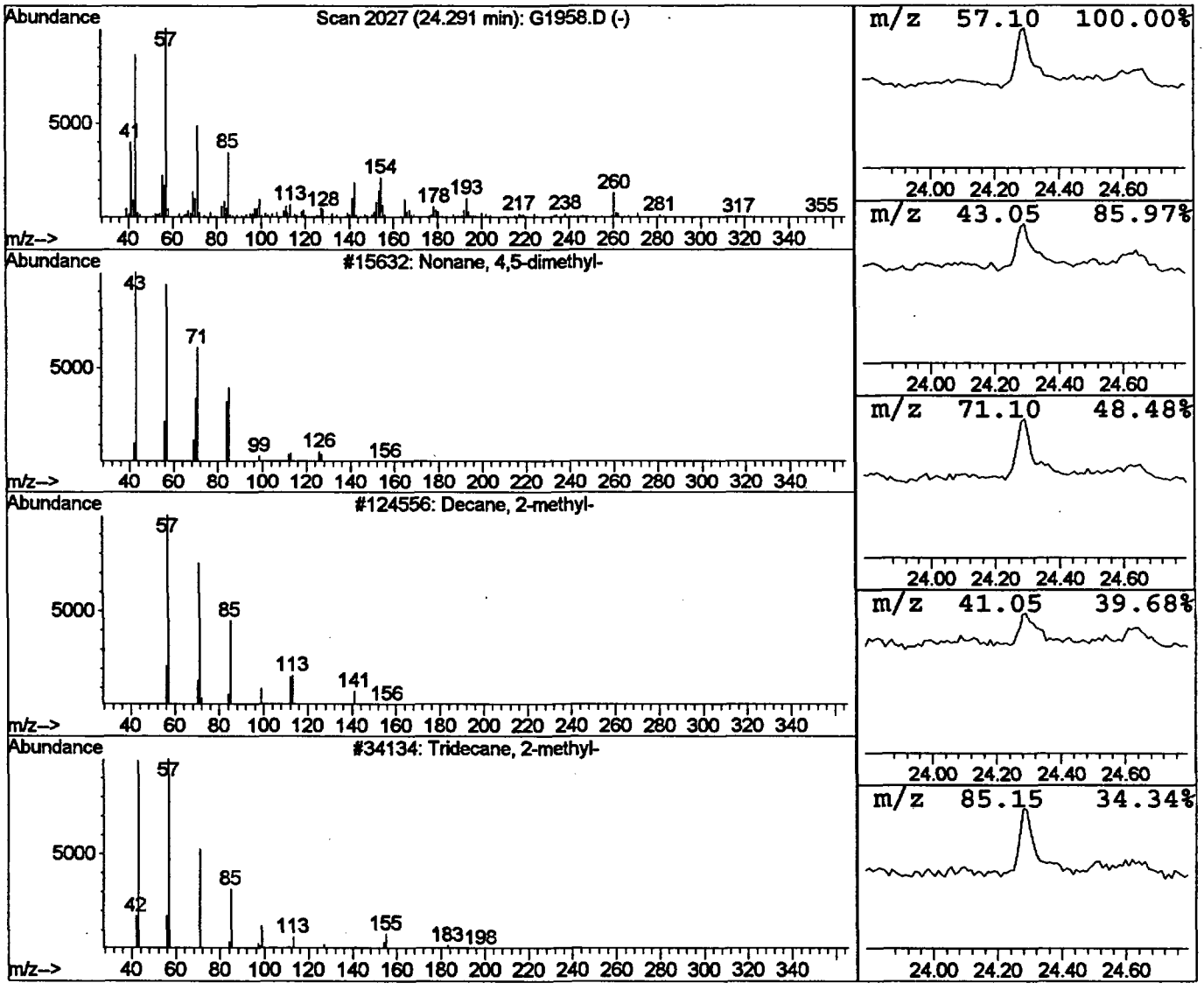
Peak Number 56 Nonane, 4,5-dimethyl- Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.29	26.91 ng	790742	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Nonane, 4,5-dimethyl-	156	C11H24	017302-23-7	42
2	Decane, 2-methyl-	156	C11H24	006975-98-0	41
3	Tridecane, 2-methyl-	198	C14H30	001560-96-9	41



0666

Data File : Q:\HPCHEM\G\G19XX\G1958.D Vial: 9
Acq On : 22 Jan 98 23:59 Operator:
Sample : S HP-7G 58073-006 FFR86 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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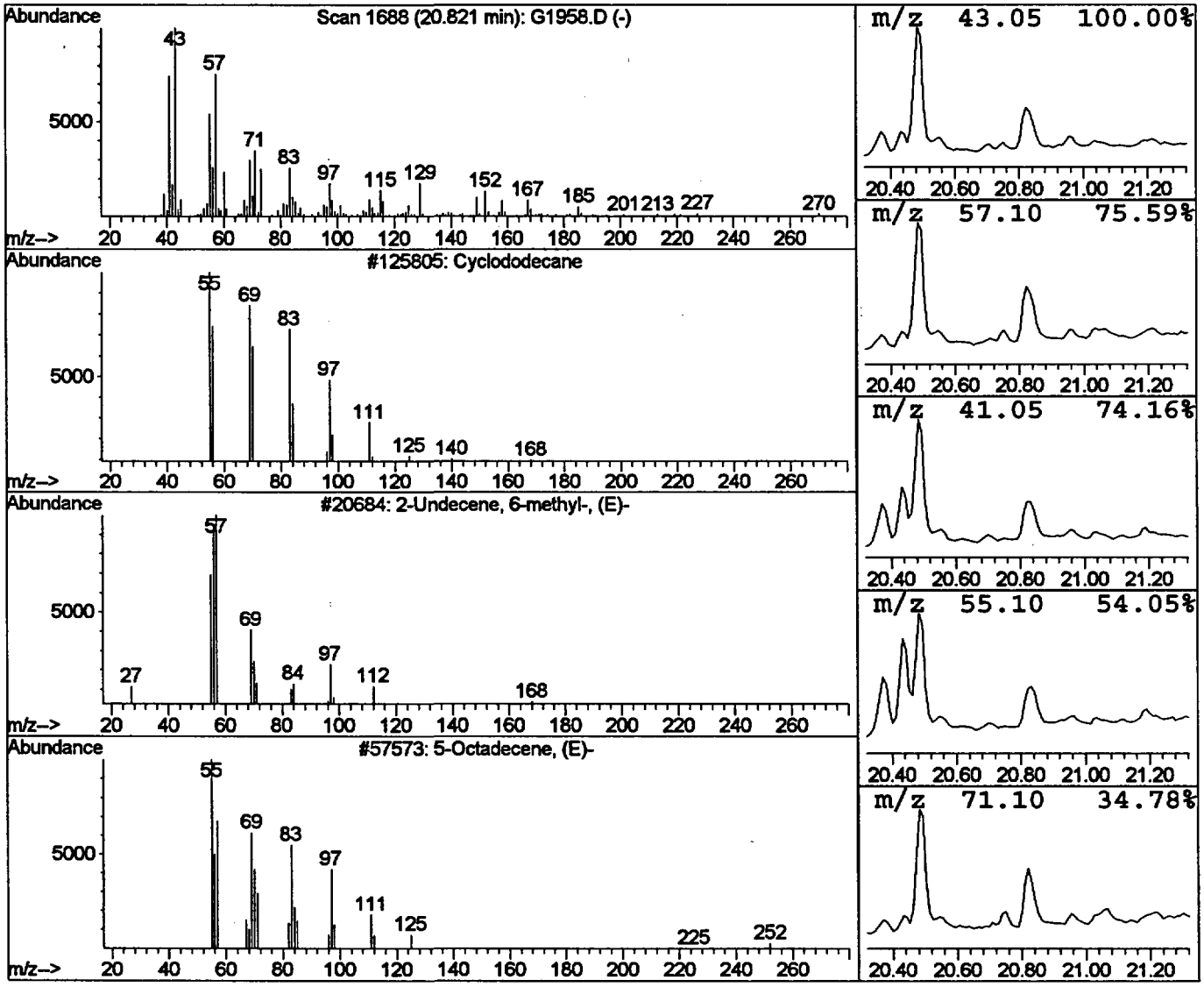
Peak Number 57 Cyclododecane Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.82	31.05 ng	1331460	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecane	168	C12H24	000294-62-2	41
2	2-Undecene, 6-methyl-, (E)-	168	C12H24	074630-61-8	30
3	5-Octadecene, (E)-	252	C18H36	007206-21-5	25



0667

CASE 25969
SDG# FFR76

Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 22 Jan 98 23:59
Data File: Q:\HPCHEM\G\G19XX\G1958.D
Name: S HP-7G 58073-006 FFR86
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
2-Pentanone, 4-hydro	4.24	771.2	ng	27689500	ISTD01	7.07	1436160	40.0
2-Cyclohexen-1-ol	5.19	16.5	ng	592543	ISTD01	7.07	1436160	40.0
Acetic acid, 1-methy	5.59	19.4	ng	698246	ISTD01	7.07	1436160	40.0
2,4-Pentanedione	5.79	42.2	ng	1514170	ISTD01	7.07	1436160	40.0
trans-3-Hexene-2,5-d	6.00	71.6	ng	2569610	ISTD01	7.07	1436160	40.0
1,2,3,4-TETRAHYDROXY	6.15	13.6	ng	489284	ISTD01	7.07	1436160	40.0
2-Pentanone, 3-methy	6.55	46.3	ng	1663120	ISTD01	7.07	1436160	40.0
Propane, 1-(1-methyl	6.84	15.7	ng	562400	ISTD01	7.07	1436160	40.0
Pentadecanoic acid,	19.07	8.1	ng	349414	ISTD04	19.62	1715310	40.0
Pentadecanoic acid	19.37	31.5	ng	1351380	ISTD04	19.62	1715310	40.0
2-ACETYL-2-THIAZOLIN	19.45	14.3	ng	611485	ISTD04	19.62	1715310	40.0
Hexadecanoic acid, m	20.21	27.1	ng	1163480	ISTD04	19.62	1715310	40.0
15-Tetracosenoic aci	20.37	23.9	ng	1025010	ISTD04	19.62	1715310	40.0
Oxacyclotetradecane-	20.43	23.2	ng	994331	ISTD04	19.62	1715310	40.0
Hexadecanoic acid	20.48	65.8	ng	2820700	ISTD04	19.62	1715310	40.0
1-Tridecene	21.19	8.8	ng	376633	ISTD04	19.62	1715310	40.0
6-Octadecenoic acid,	21.55	11.5	ng	494769	ISTD04	19.62	1715310	40.0
7-Hexadecenoic acid,	21.59	8.5	ng	364661	ISTD04	19.62	1715310	40.0
9-Oxabicyclo[6.1.0]n	21.81	64.2	ng	2754360	ISTD04	19.62	1715310	40.0
Octadecanoic acid	21.94	34.4	ng	1476140	ISTD04	19.62	1715310	40.0
1-Hexadecene	23.48	18.6	ng	547297	ISTD05	25.39	1175560	40.0
DI-(2-ETHYLHEXYL) ES	23.59	27.8	ng	817096	ISTD05	25.39	1175560	40.0
Kawain	24.62	14.1	ng	415853	ISTD05	25.39	1175560	40.0
TRIMETHYLSILYL ETHER	27.76	22.4	ng	657214	ISTD05	25.39	1175560	40.0
Lycopersen	28.31	19.0	ng	559369	ISTD05	25.39	1175560	40.0
Methyl-11H-benzo[b]f	32.55	207.1	ng	8130610	ISTD06	31.52	1570390	40.0
Gorgosterol	33.03	36.4	ng	1428540	ISTD06	31.52	1570390	40.0
ERGOST-5-EN-3.BETA.-	36.34	31.7	ng	1245790	ISTD06	31.52	1570390	40.0
Stigmasta-5,22-dien-	36.99	71.9	ng	2823790	ISTD06	31.52	1570390	40.0
Stigmast-5-en-3-ol,	38.29	87.4	ng	3429420	ISTD06	31.52	1570390	40.0
Additional Tentatively Identified Compounds								
7-Hexadecenoic acid,	20.09	7.9	ng	339359	ISTD04	19.62	1715310	40.0
7-Tetradecene	22.57	7.8	ng	230044	ISTD05	25.39	1175560	40.0
PROPYL HEXANOATE	7.21	7.8	ng	280586	ISTD01	7.07	1436160	40.0
1H-Purine, 6-methoxy	18.68	6.2	ng	266665	ISTD04	19.62	1715310	40.0
2-Pentanone, 3-methy	5.51	6.2	ng	221037	ISTD01	7.07	1436160	40.0
Heptadecanoic acid,	20.55	6.1	ng	261484	ISTD04	19.62	1715310	40.0
Cyclopentaneundecano	18.46	5.9	ng	255064	ISTD04	19.62	1715310	40.0
Decanoic acid	20.95	5.9	ng	251124	ISTD04	19.62	1715310	40.0
Tridecanoic acid	23.30	5.3	ng	155039	ISTD05	25.39	1175560	40.0
2-Propenoic acid, 3-	18.90	5.0	ng	214392	ISTD04	19.62	1715310	40.0

HP 7G 58073-006 FFR86 01/22/98 23:59

CASE 25969
SDG# FFR76

Hydrocarbons: n-Alkanes

~~Butane~~	~~3.68~~	~~49.2 ng~~	1764870	ISTD01	7.07	1436160	40.0
Dodecane	21.04	5.0 ng	213122	ISTD04	19.62	1715310	40.0
Dodecane	21.47	7.4 ng	315873	ISTD04	19.62	1715310	40.0
Eicosane	21.72	12.3 ng	528955	ISTD04	19.62	1715310	40.0
Tetradecane	22.80	6.8 ng	198777	ISTD05	25.39	1175560	40.0
Octacosane	26.27	28.9 ng	849991	ISTD05	25.39	1175560	40.0
Nonadecane	27.54	9.9 ng	291036	ISTD05	25.39	1175560	40.0
Hexadecane	29.06	80.1 ng	3144390	ISTD06	31.52	1570390	40.0
Octadecane	30.86	23.1 ng	906019	ISTD06	31.52	1570390	40.0
Hexacosane	32.29	123.5 ng	4847670	ISTD06	31.52	1570390	40.0
Pentadecane	35.62	78.4 ng	3076010	ISTD06	31.52	1570390	40.0
Octadecane	40.15	35.8 ng	1405760	ISTD06	31.52	1570390	40.0
Subtotal:		460.2 ng					

Hydrocarbons: Branched Alkanes

Octane, 3-methyl-	3.98	11.9 ng	426193	ISTD01	7.07	1436160	40.0
Octane, 4-methyl-	4.58	97.9 ng	3516550	ISTD01	7.07	1436160	40.0
Octane, 3-methyl-	4.74	120.0 ng	4309250	ISTD01	7.07	1436160	40.0
Nonane, 4,5-dimethyl	24.29	26.9 ng	790742	ISTD05	25.39	1175560	40.0
Subtotal:		256.7 ng					

Hydrocarbons: Cyclic Alkanes

Cyclododecane	20.82	31.0 ng	1331460	ISTD04	19.62	1715310	40.0
Subtotal:		31.0 ng					

Total Alkane Conc: (748.0 ng − 49.2) x D.F. = 19,000 ng/mg

G1958.D LIN.M Mon Jan 26 15:55:58 1998

FFR86 58073-006 mo1/27/98

TIC: G1958.D

S HP-7G 58073-006 FFR86 01/22/98 23:59

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.684	rVB	0.276	1764865	3.602	3.878
2	3.981	rBV	0.164	426193	3.878	4.042
3	4.237	rBV	0.287	27689547	4.114	4.400
4	4.585	rVV	0.266	3516551	4.400	4.667
5	4.738	rVV	0.123	4309248	4.667	4.789
6	4.830	rVB	0.174	3386306	4.789	4.963
7	5.189	rVB	0.184	592543	5.137	5.322
8	5.506	rBV	0.102	221037	5.434	5.537
9	5.588	rVV	0.113	698246	5.537	5.649
10	5.793	rVB	0.266	1514166	5.649	5.915
11	5.997	rBV	0.143	2569607	5.915	6.059
12	6.151	rVB	0.113	489284	6.100	6.212
13	6.366	rVB	0.143	4103053	6.315	6.458
14	6.550	rBV	0.154	1663115	6.458	6.612
15	6.724	rBV	0.113	3677630	6.673	6.786
16	6.837	rVB	0.133	562400	6.786	6.919
17	7.062	rVB	0.143	1436163	6.980	7.123
18	7.205	rBV	0.174	280586	7.123	7.297
19	7.441	rBV	0.195	3758744	7.359	7.553
20	7.676	rVB	0.113	136531	7.646	7.758
21	7.820	rVB	0.143	131805	7.758	7.901
22	8.065	rBV	0.133	155260	7.994	8.127
23	8.198	rVB	0.133	2058892	8.137	8.270
24	8.598	rVB	0.184	174735	8.516	8.700
25	10.082	rVB	0.184	1465976	10.010	10.195
26	14.279	rBV	0.174	2619918	14.197	14.371
27	16.296	rBV	0.102	1381525	16.245	16.347
28	18.180	rBV	0.154	2050307	18.108	18.262
29	18.456	rBV	0.154	255064	18.364	18.518
30	18.681	rBV	0.154	266665	18.599	18.753
31	18.794	rVV	0.102	165715	18.753	18.855
32	18.896	rVV	0.113	214392	18.855	18.968
33	19.070	rVV	0.113	349414	19.009	19.122
34	19.152	rVB	0.072	196572	19.122	19.193
35	19.367	rBV	0.102	1351383	19.306	19.408
36	19.449	rVB	0.092	611485	19.408	19.500
37	19.623	rBV	0.092	1715311	19.562	19.654
38	19.664	rVV	0.051	248996	19.654	19.705
39	19.756	rVB	0.102	148715	19.715	19.818
40	19.920	rBV	0.082	136551	19.869	19.951
41	20.094	rBV	0.113	339359	20.012	20.125
42	20.207	rBV	0.164	1163484	20.125	20.289
43	20.371	rBV	0.082	1025008	20.319	20.401
44	20.432	rVV	0.051	994331	20.401	20.452
45	20.483	rVV	0.072	2820696	20.452	20.524
46	20.555	rVB	0.061	261484	20.534	20.596
47	20.698	rBV	0.061	222532	20.667	20.729
48	20.821	rBV	0.102	1331461	20.790	20.893
49	20.954	rVV	0.072	251124	20.934	21.005
50	21.036	rVV	0.082	213122	21.005	21.087
51	21.190	rBV	0.092	376633	21.149	21.241
52	21.466	rBV	0.082	315873	21.405	21.486
53	21.548	rVV	0.072	494769	21.497	21.568
54	21.589	rVB	0.072	364661	21.568	21.640
55	21.722	rBV	0.113	528955	21.640	21.753
56	21.814	rVV	0.133	2754358	21.753	21.886

57	21.937	rVB	0.123	1476140	21.886	22.009
58	22.039	rVB	0.051	218067	22.009	22.060
59	22.101	rBV	0.041	117667	22.070	22.111
60	22.326	rBV	0.061	213833	22.285	22.346
61	22.479	rVB	0.061	200388	22.449	22.510
62	22.572	rVV	0.072	230044	22.551	22.623
63	22.664	rVV	0.143	3212378	22.623	22.766
64	22.797	rVB	0.082	198777	22.766	22.848
65	23.298	rBV	0.061	155039	23.268	23.329
66	23.483	rBV	0.133	547297	23.411	23.544
67	23.585	rVB	0.102	817096	23.544	23.646
68	24.291	rBV	0.164	790742	24.240	24.404
69	24.619	rVB	0.113	415853	24.578	24.691
70	25.029	rVB	0.184	961160	24.936	25.121
71	25.387	rBV	0.113	1175561	25.325	25.438
72	26.267	rVB	0.143	849991	26.206	26.349
73	27.537	rBV	0.102	291036	27.496	27.598
74	27.762	rVB	0.133	657214	27.711	27.844
75	28.315	rVB	0.143	559369	28.264	28.407
76	29.062	rVB	0.225	3144387	28.970	29.195
77	30.864	rBV	0.143	906019	30.772	30.915
78	31.519	rBV	0.154	1570385	31.437	31.591
79	32.287	rVV	0.215	4847665	32.205	32.420
80	32.553	rVB	0.266	8130608	32.440	32.707
81	33.034	rVB	0.205	1428535	32.973	33.177
82	35.624	rVB	0.225	3076011	35.522	35.747
83	36.341	rVB	0.195	1245789	36.259	36.453
84	36.986	rBV	0.235	2823793	36.873	37.109
85	38.286	rBV	0.266	3429421	38.163	38.429
86	40.149	rBV	0.164	1405760	40.036	40.200

FFR86 58073-006 w 01-27-98

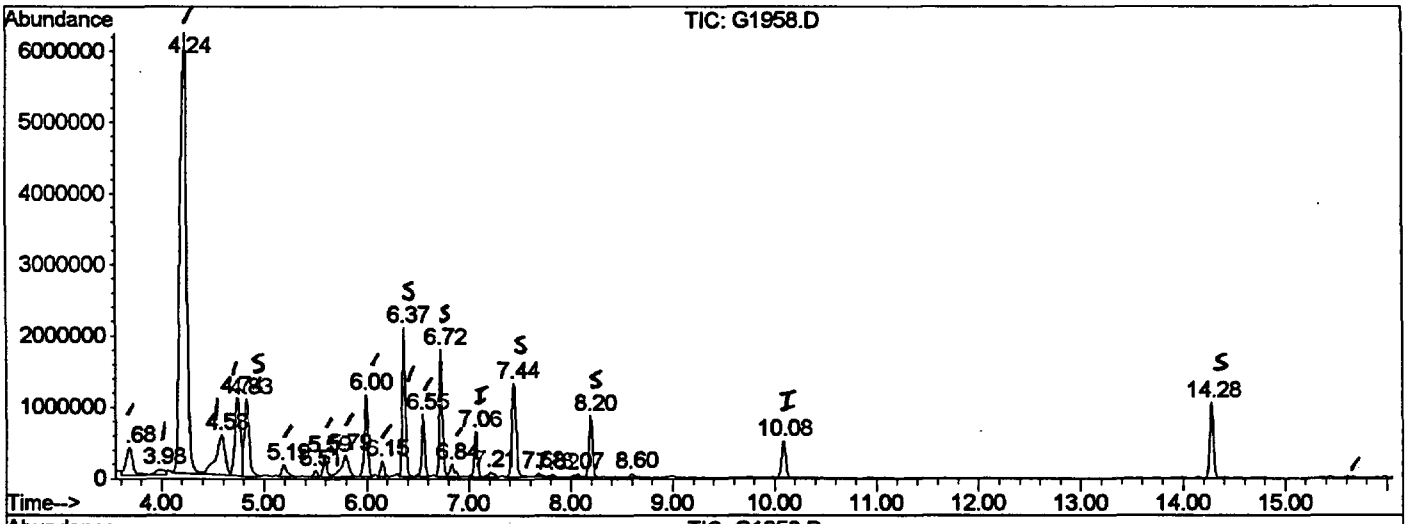
HP76 01/22/98 23:59

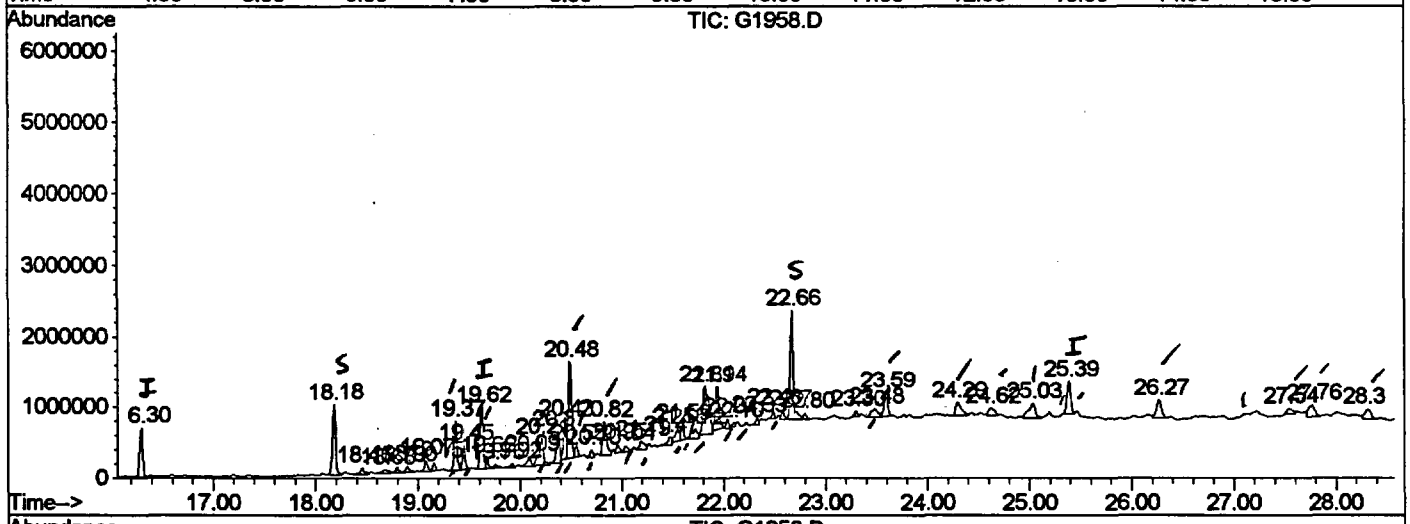
BASE 25969
SOG# FFR76

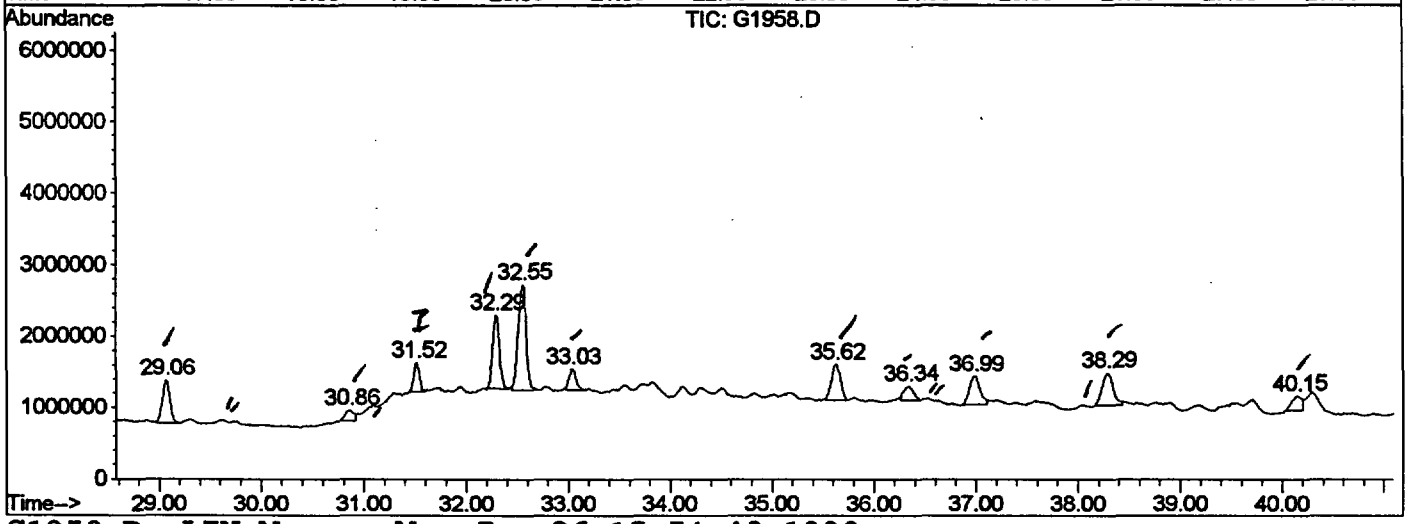
CASE 25969
SDG# FFR76

LSC Report - Integrated Chromatogram

File : Q:\HPCHEM\G\G19XX\G1958.D
Operator :
Acquired : 22 Jan 98 23:59 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-006 FFR86
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 9
Quant File :CLPME7.RES







G1958.D LIN.M Mon Jan 26 15:54:48 1998

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR87

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-007

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1959

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 34 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 30

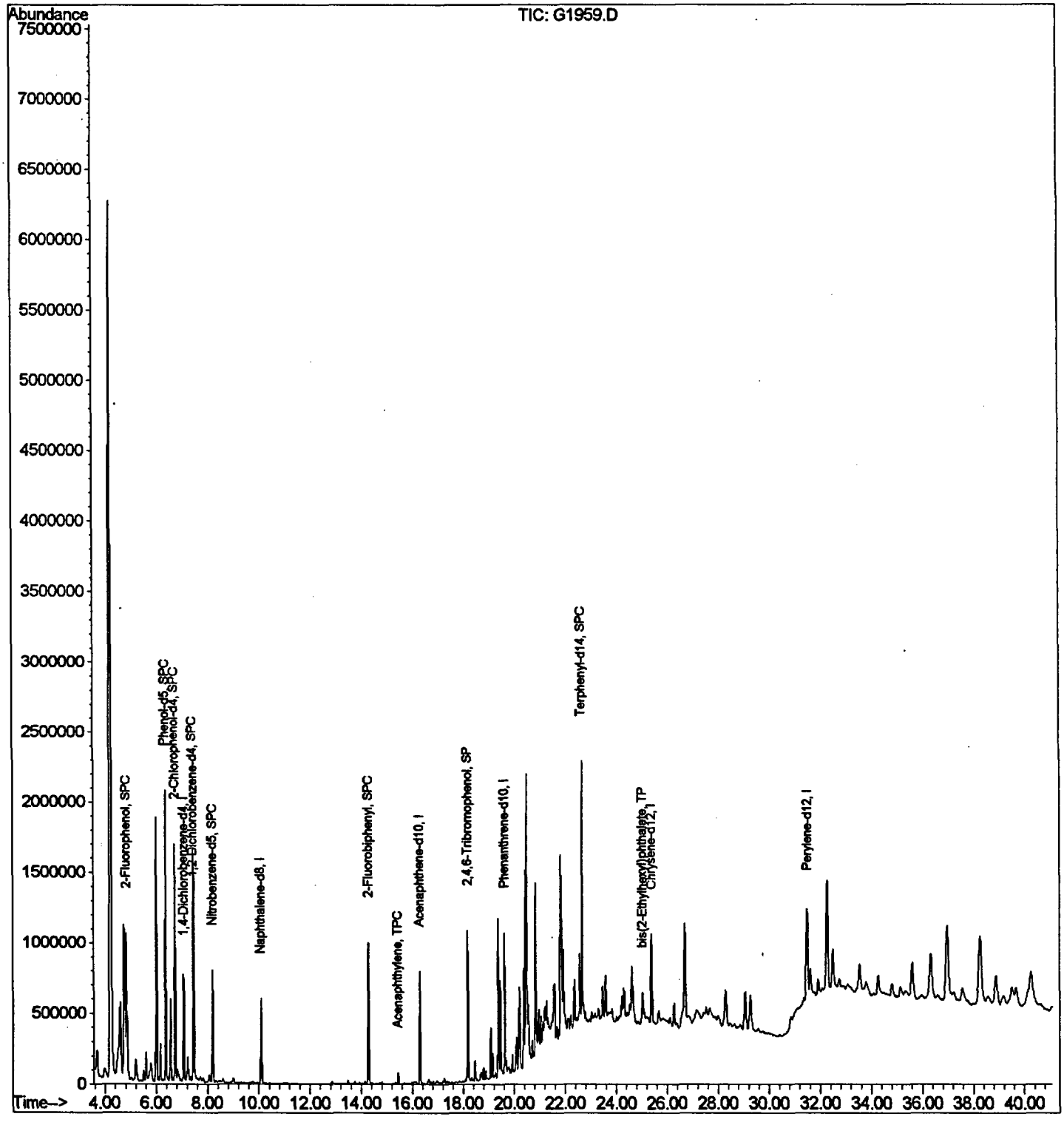
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.68	460.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.24	17000.	JNAB
3.	822-67-3	2-Cyclohexen-1-ol	5.19	390.	JNB
4.		Unknown	5.78	480.	J
5.		trans-3-Hexene-2,5-dione	6.00	2600.	JB
6.		Unknown	6.55	640.	J
7.	1002-84-2	Pentadecanoic acid	19.38	1400.	JN
8.	112-80-1	9-Octadecenoic acid (Z)-	19.45	620.	JN
9.		Unknown	20.09	360.	J
10.	7132-64-1	Pentadecanoic acid, methyl e	20.21	980.	JN
11.		Unknown	20.38	940.	J
12.		Unknown	20.44	1200.	J
13.	57-10-3	Hexadecanoic acid	20.49	2000.	JN
14.	2490-49-5	Hexadecanoic acid, 14-methyl	20.56	450.	JN
15.		Unknown hydrocarbon	20.83	1800.	J
16.		Unknown	21.55	360.	J
17.	112-80-1	9-Octadecenoic acid (Z)-	21.83	2800.	JN
18.	57-11-4	Octadecanoic acid	21.93	980.	JN
19.		Unknown	22.57	660.	J
20.		Unknown	23.47	370.	J
21.	123-79-5	Hexanedioic acid, dioctyl es	23.59	440.	JNB
22.	23470-00-0	Hexadecanoic acid, 2-hydroxy	24.62	1200.	JN
23.		Unknown	26.69	2100.	J
24.		Unknown	28.29	810.	J
25.		Unknown	29.26	420.	J
26.	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	36.32	640.	JN
27.	38485-29-9	Stigmasta-5,23-dien-3.beta.-	36.98	1000.	JN
28.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.26	1100.	JN
29.		Unknown	38.89	410.	J
30.	55722-32-2	STIGMASTA-4,22-DIEN-3-ONE	40.26	780.	JN

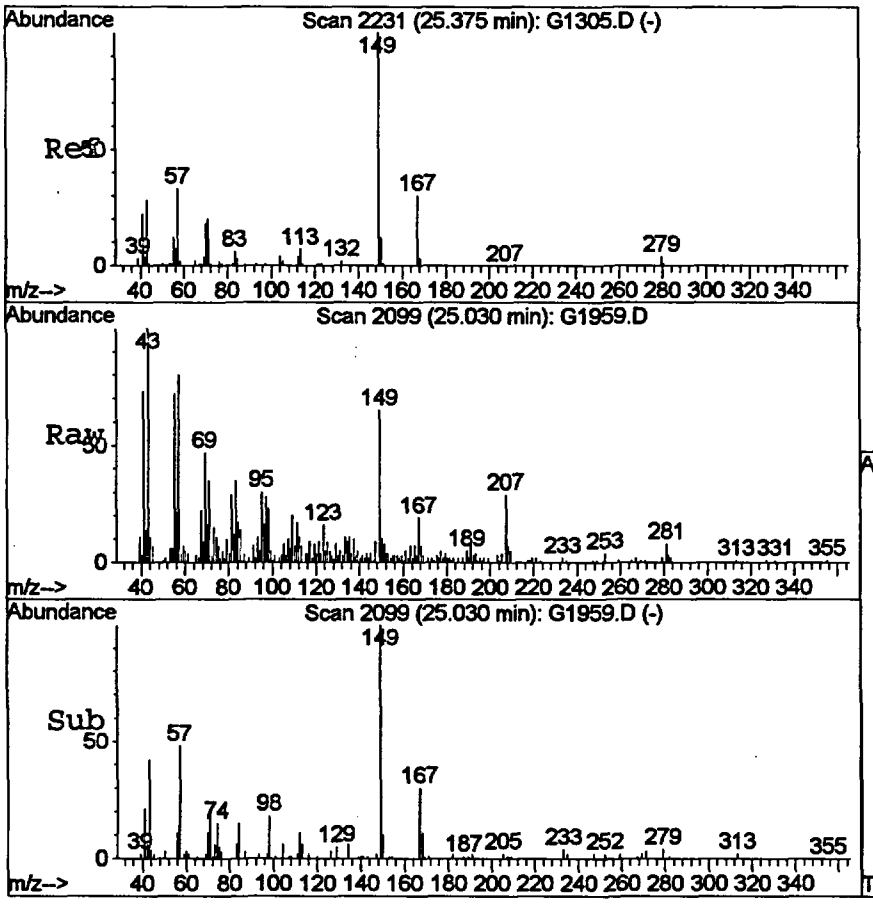
Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 1
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:16 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



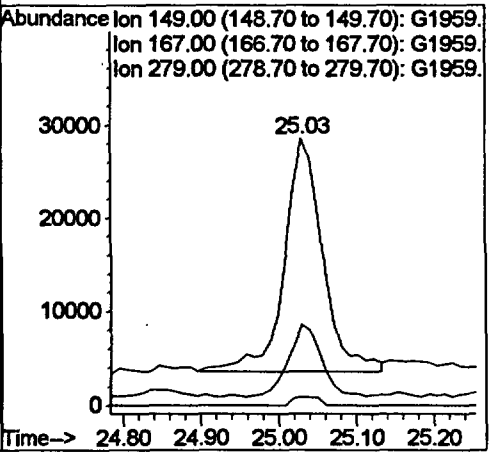
CASE 25969
SDG# FFR76



#70
bis(2-Ethylhexyl)phthalate
Concen: 4.55 ng
RT: 25.03 min / Scan# 2099
Delta R.T. 0.02 min
Lab File: G1959.D
Acq: 23 Jan 98 00:46

Tgt Ion:149 Resp: 85307

Ion	Ratio	Lower	Upper
149	100		
167	26.2	10.6	50.6
279	0.0	0.0	23.8
0	0.0	0.0	0.0



0677

Sample Name: S HP-7G 58073-007 FFR87
G1959.D CLPME7.M Mon Jan 26 15:17:40 1998

Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:16 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	285831	40.00	ng	0.01
17) Naphthalene-d8	10.08	136	827404	40.00	ng	0.01
31) Acenaphthene-d10	16.30	164	389708	40.00	ng	0.01
51) Phenanthrene-d10	19.62	188	719055	40.00	ng	0.02
63) Chrysene-d12	25.39	240	542949	40.00	ng	0.03
71) Perylene-d12	31.51	264	588185	40.00	ng	0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.83	112	874421	102.56	ng	0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery = 68.37%			
3) Phenol-d5	6.37	99	1266456	112.46	ng	0.02
Surrogate Spike 150.000	Range 24 - 113		Recovery = 74.97%			
7) 1,2-Dichlorobenzene-d4	7.43	152	302351	53.59	ng	0.01
Surrogate Spike 100.000	Range 20 - 130		Recovery = 53.59%			
8) 2-Chlorophenol-d4	6.73	132	925391	106.95	ng	0.01
Surrogate Spike 150.000	Range 20 - 130		Recovery = 71.30%			
18) Nitrobenzene-d5	8.20	82	524030	71.30	ng	0.01
Surrogate Spike 100.000	Range 23 - 120		Recovery = 71.30%			
35) 2-Fluorobiphenyl	14.28	172	916106	79.25	ng	0.02
Surrogate Spike 100.000	Range 30 - 115		Recovery = 79.25%			
52) 2,4,6-Tribromophenol	18.18	330	257470	143.97	ng	0.02
Surrogate Spike 150.000	Range 19 - 122		Recovery = 95.98%			
65) Terphenyl-d14	22.66	244	1154136	102.89	ng	0.02
Surrogate Spike 100.000	Range 18 - 137		Recovery = 102.89%			
Target Compounds						Qvalue
39) Acenaphthylene	~~15.44~~ 15.89	~~152~~	~~20522~~	~~1.20~~	ng	# 61
70) bis(2-Ethylhexyl)phthalate	25.03	149	85307	4.55	ng	# 92

0678

(#) = qualifier out of range (m) = manual integration

CASE 25969
SDG# FFR76

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

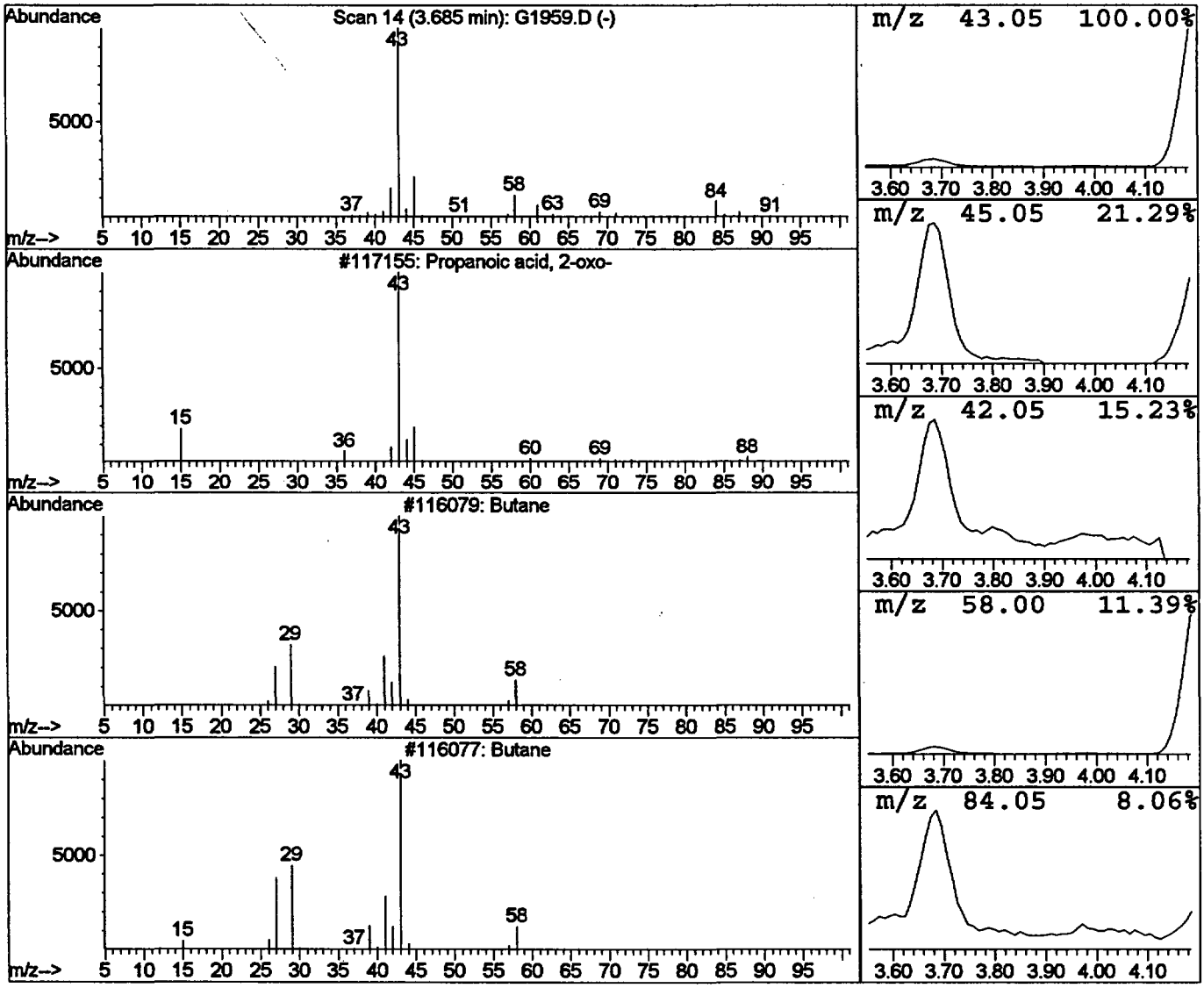
****

Peak Number 1 Propanoic acid, 2-oxo- Concentration Rank 26

UNKNOWN COMPOUND mel 1/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	18.26 ng	745692	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Propanoic acid, 2-oxo-	88	C3H4O3	000127-17-3	33
2	Butane	58	C4H10	000106-97-8	32
3	Butane	58	C4H10	000106-97-8	9



0679

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

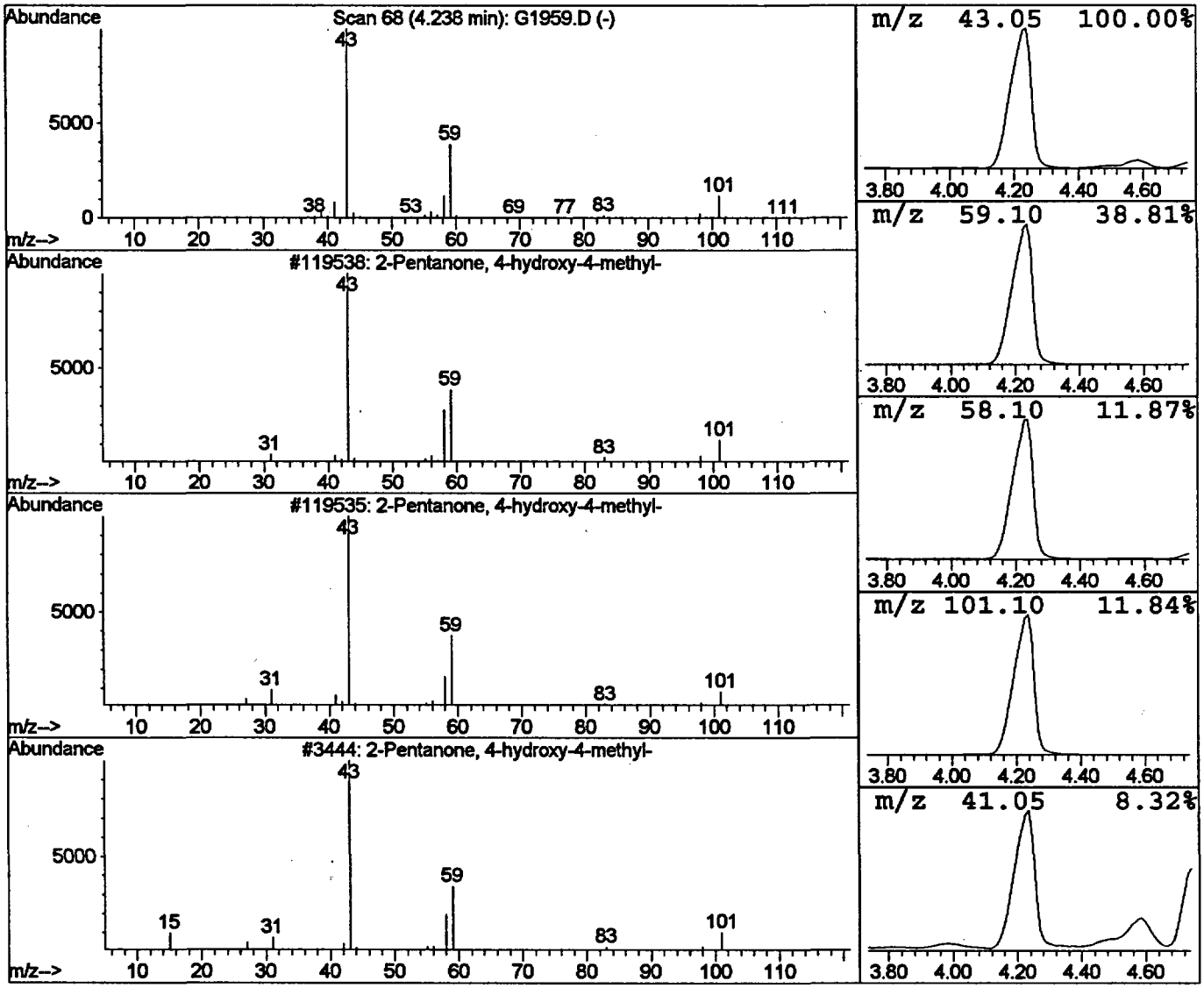
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.24	684.18 ng	27947200	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50



0680

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

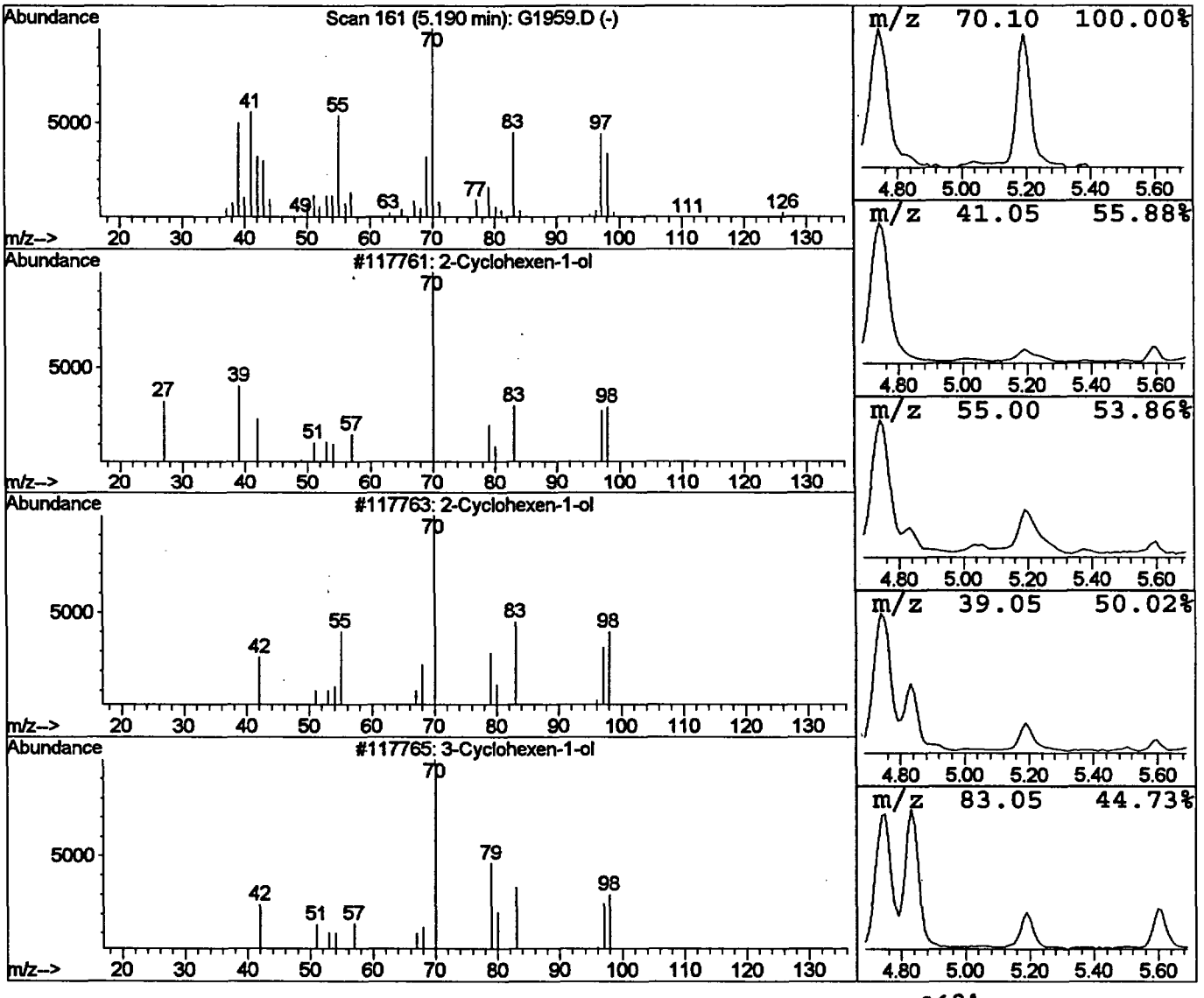
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 2-Cyclohexen-1-ol Concentration Rank 33

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.19	15.41 ng	629475	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	72
2	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	68
3	3-Cyclohexen-1-ol	98	C6H10O	000822-66-2	53



0681

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

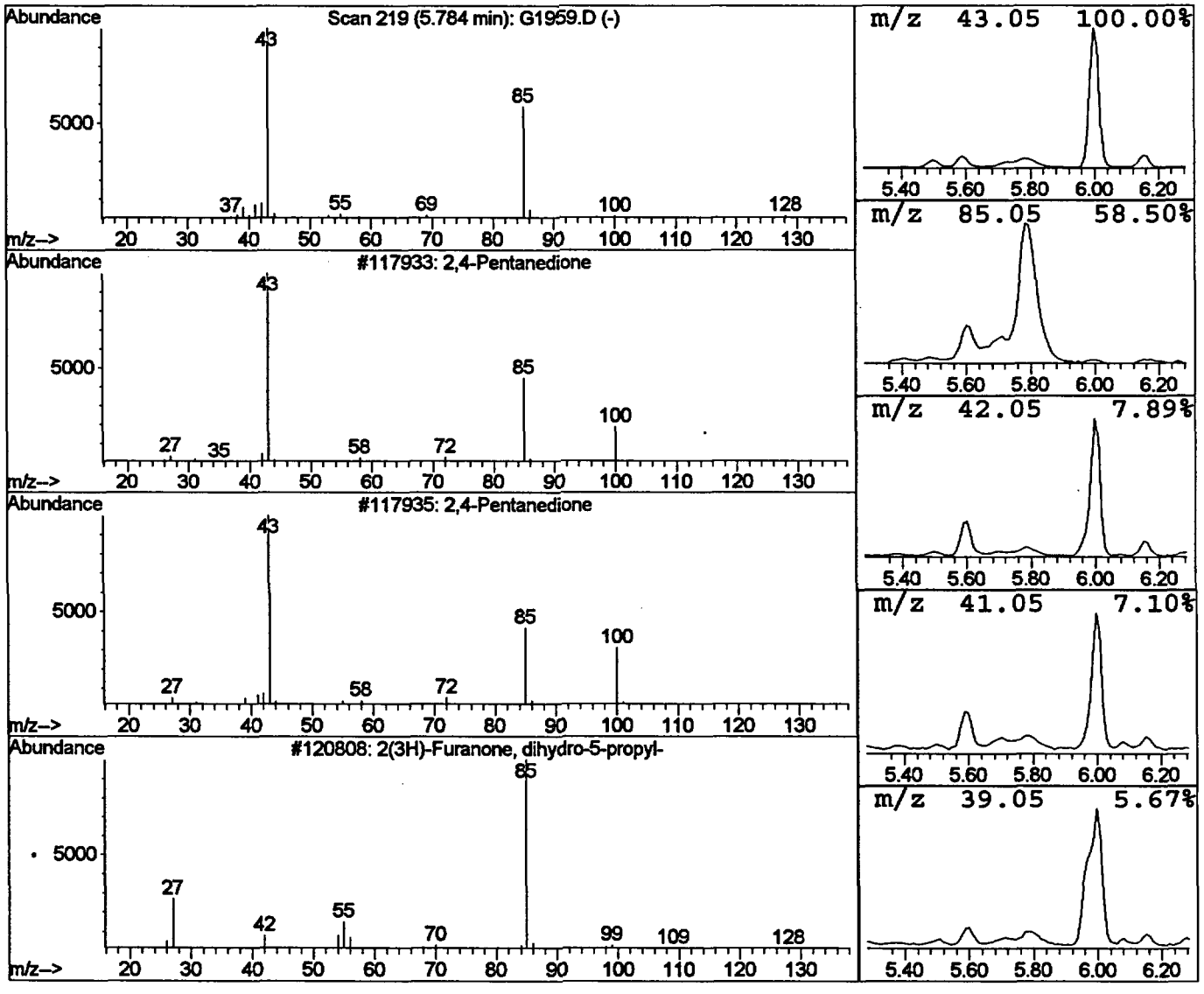
****

Peak Number 4 2,4-Pentanedione Concentration Rank 25

UNKNOWN COMPOUND 10/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.78	19.02 ng	777114	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2,4-Pentanedione	100	C5H8O2	000123-54-6	40
2	2,4-Pentanedione	100	C5H8O2	000123-54-6	39
3	2(3H)-Furanone, dihydro-5-propyl-	128	C7H12O2	000105-21-5	9



0682

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

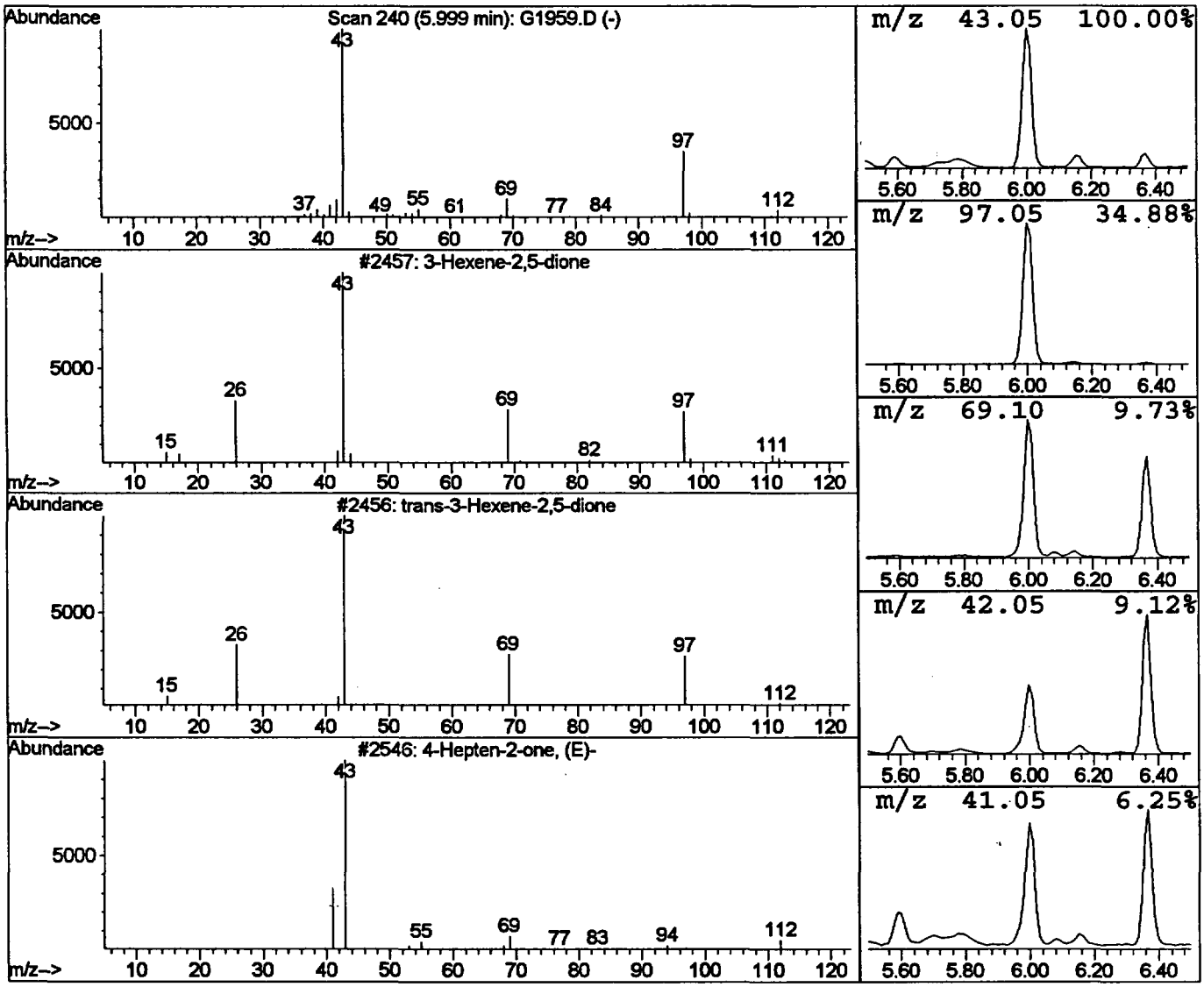
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 3-Hexene-2,5-dione Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.00	101.17 ng	4132620	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	42
(2)	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
3	4-Hepten-2-one, (E)-	112	C7H12O	036678-43-0	37



Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

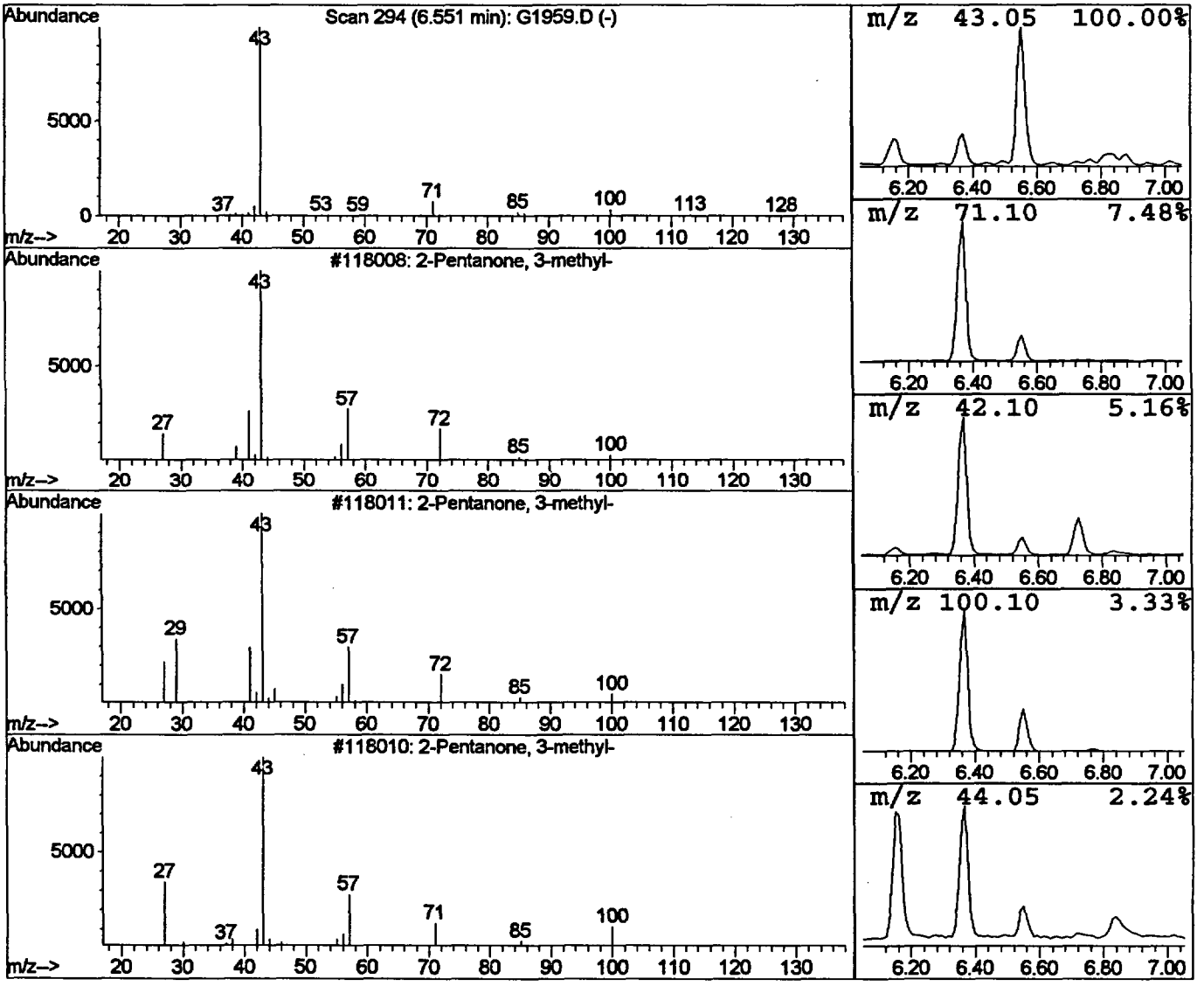
****

Peak Number 7 2-Pentanone, 3-methyl- Concentration Rank 21

UNKNOWN COMPOUND 3-1-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.55	25.53 ng	1042950	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
3	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	7



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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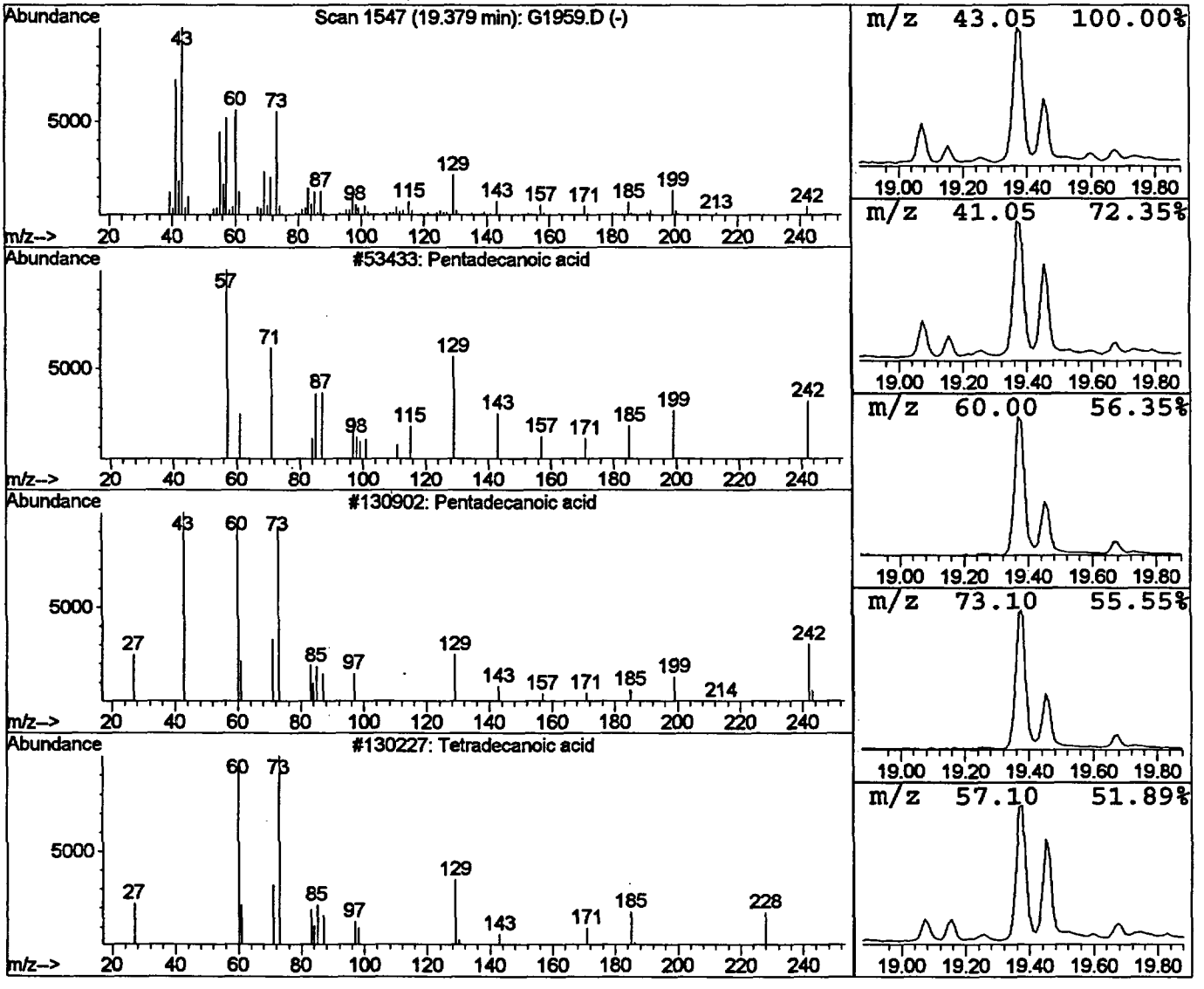
Peak Number 8 Pentadecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.38	54.99 ng	2586790	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecanoic acid	242	C15H30O2	001002-84-2	93
2	Pentadecanoic acid	242	C15H30O2	001002-84-2	91
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	87



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CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

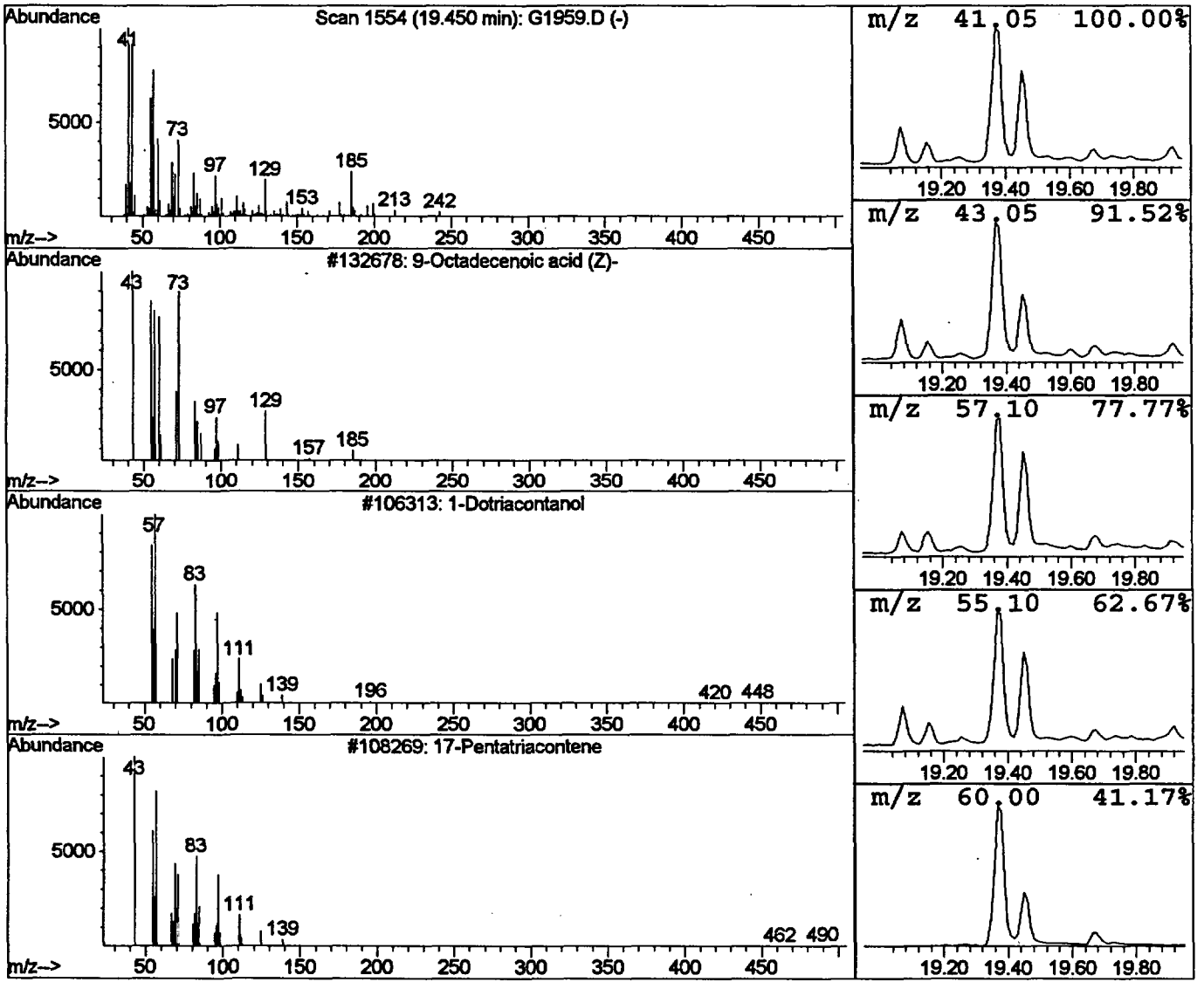
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 9 9-Octadecenoic acid (Z)- Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.45	24.55 ng	1154620	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-	282	C18H34O2	000112-80-1	53
2	1-Dotriacontanol	467	C32H66O	006624-79-9	25
3	17-Pentatriacontene	491	C35H70	006971-40-0	12



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Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

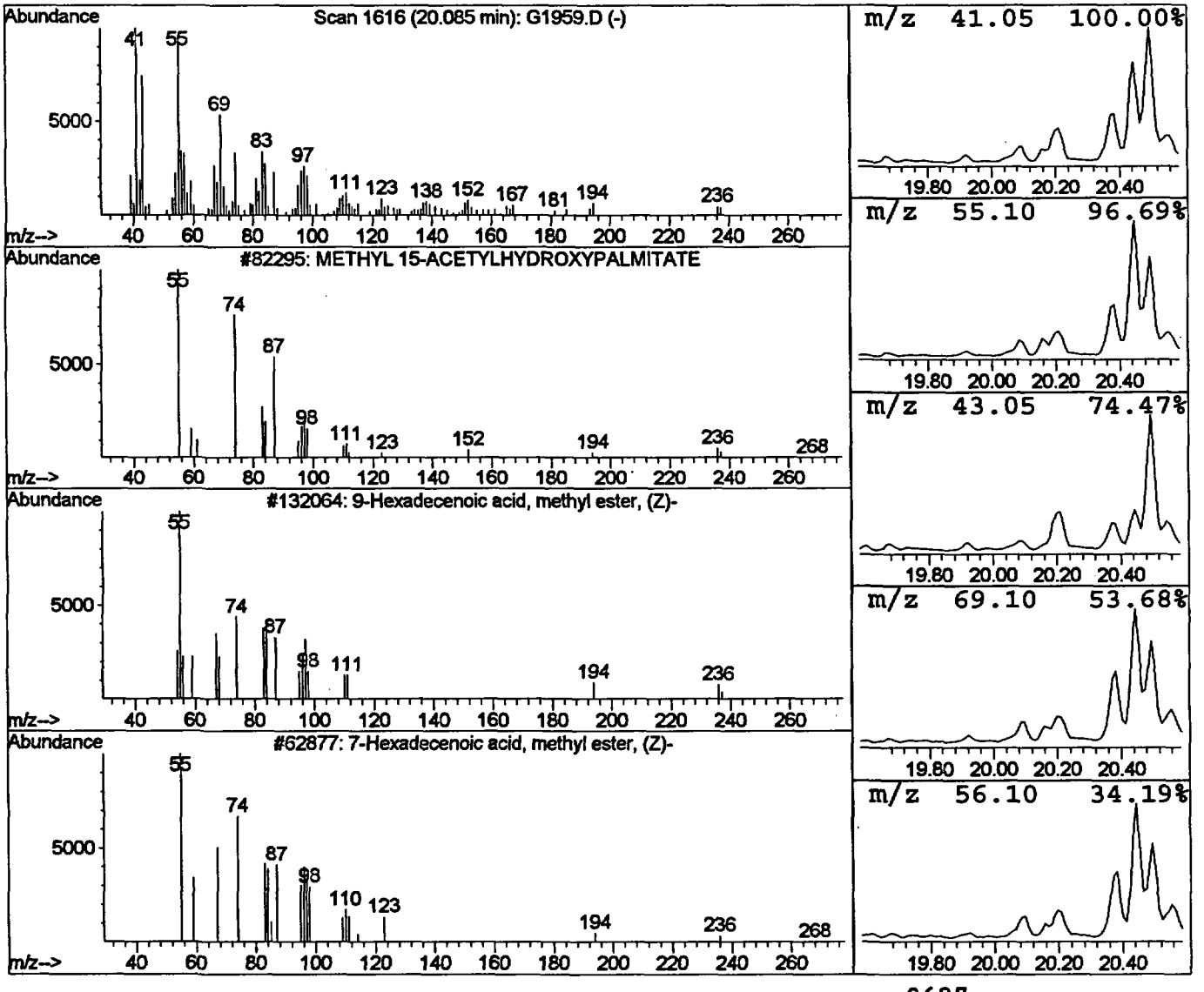
****

Peak Number 10 METHYL 15-ACETYLHYDROXYPALMITA Concentration Rank 37

UNKNOWN COMPOUND 1/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.09	14.17 ng	666754	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	METHYL 15-ACETYLHYDROXYPALMITATE	328	C19H36O4	000000-00-0	68
2	9-Hexadecenoic acid, methyl ester,	268	C17H32O2	001120-25-8	68
3	7-Hexadecenoic acid, methyl ester,	268	C17H32O2	056875-67-3	58



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CASE 25969
SDG# FFR76

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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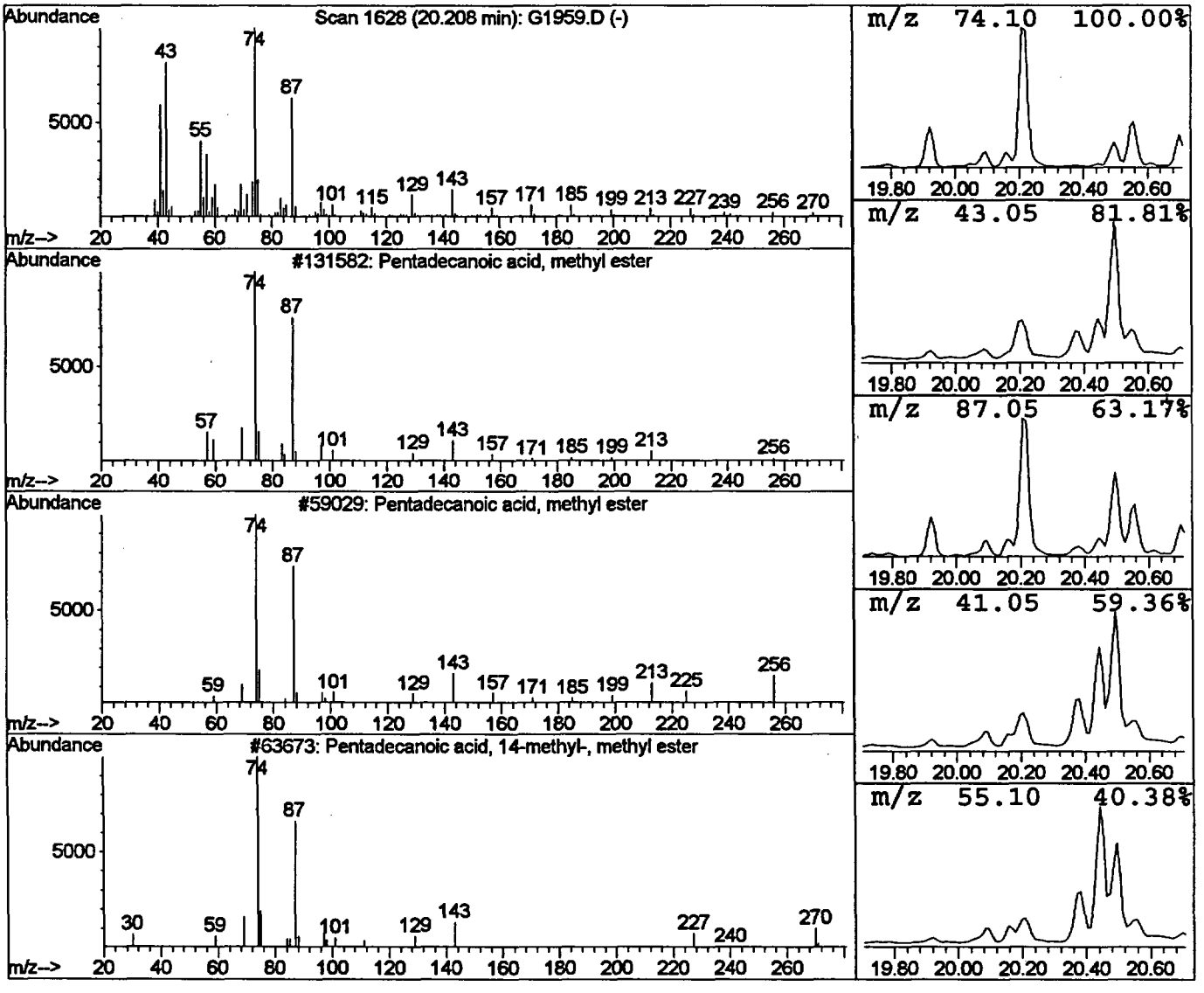
Peak Number 11 Pentadecanoic acid, methyl est Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.21	38.69 ng	1819900	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecanoic acid, methyl ester	256	C16H32O2	007132-64-1	94
2	Pentadecanoic acid, methyl ester	256	C16H32O2	007132-64-1	94
3	Pentadecanoic acid, 14-methyl-, met	270	C17H34O2	005129-60-2	93



0688

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

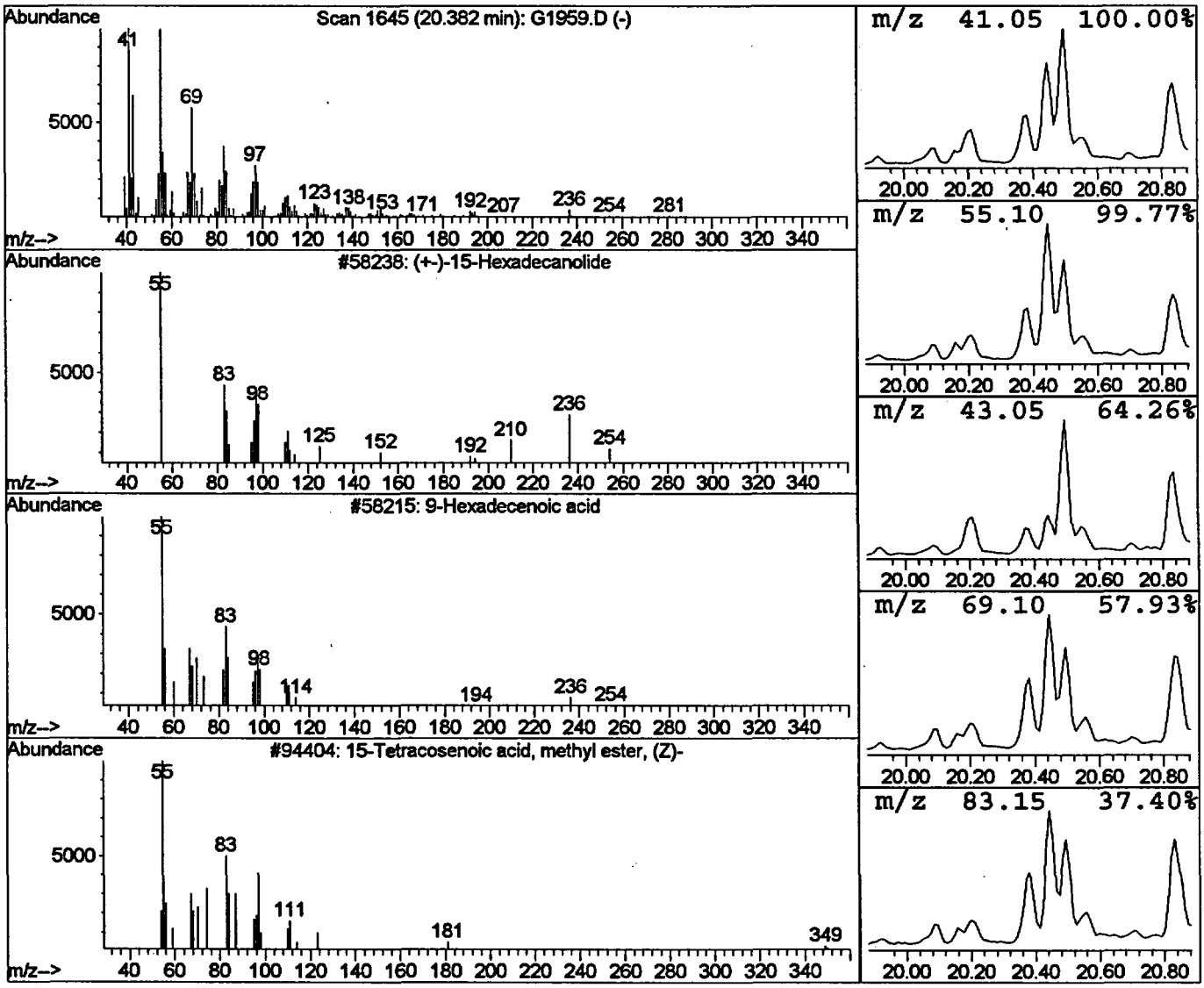
****

Peak Number 12 (+-)-15-Hexadecanolide mol-27-98 Concentration Rank 17

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.38	37.39 ng	1758840	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	(+-)-15-Hexadecanolide	254	C16H30O2	095338-36-6	95
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	91
3	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	87



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CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

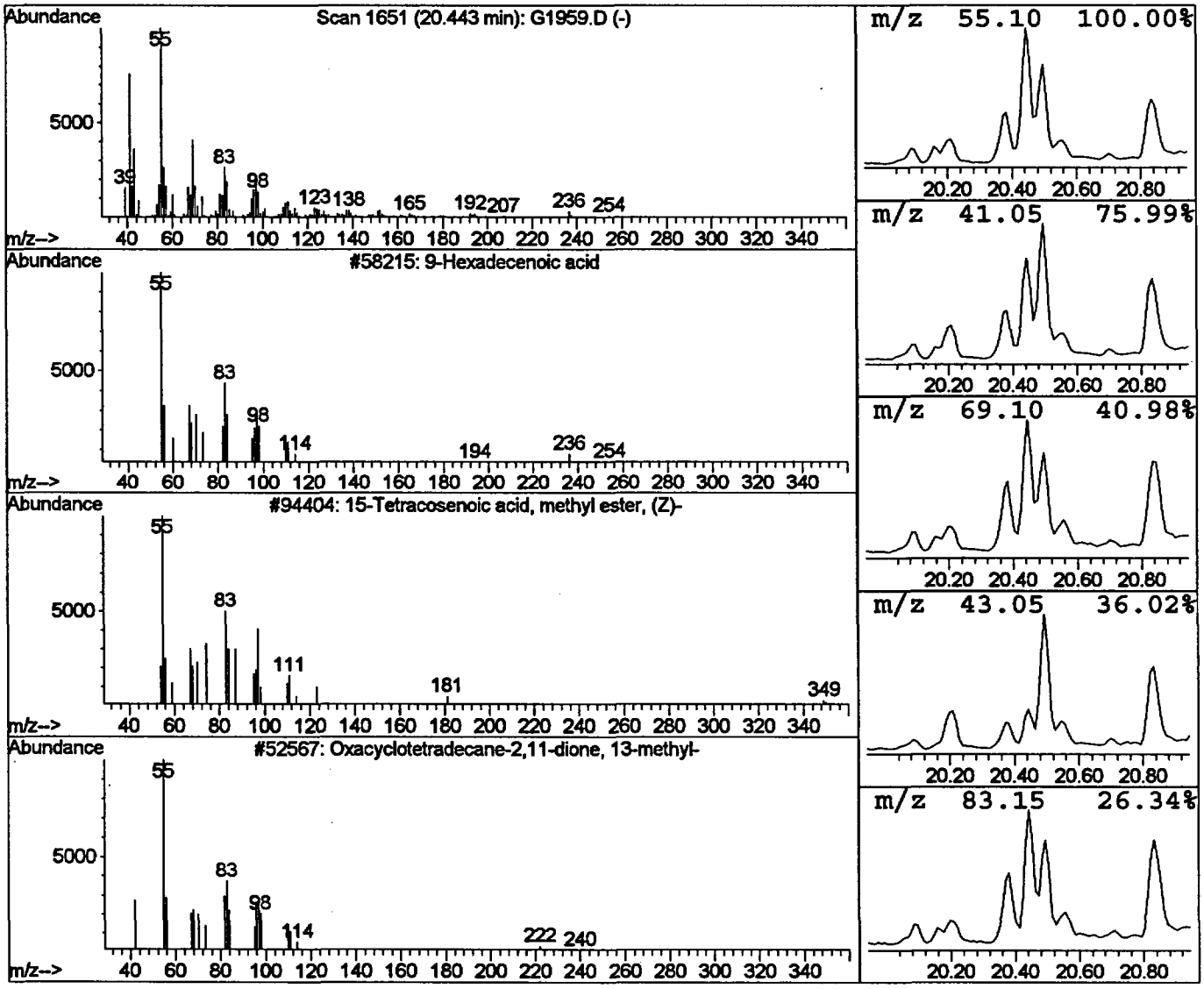
****

Peak Number 13 9-Hexadecenoic acid Concentration Rank 10

UNKNOWN COMPOUND w1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.44	48.90 ng	2300200	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	64
2	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	53
3	Oxacyclotetradecane-2,11-dione, 13-	240	C14H24O3	074685-36-2	52



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Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D
Acq On : 23 Jan 98 00:46
Sample : S HP-7G 58073-007 FFR87
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial: 10
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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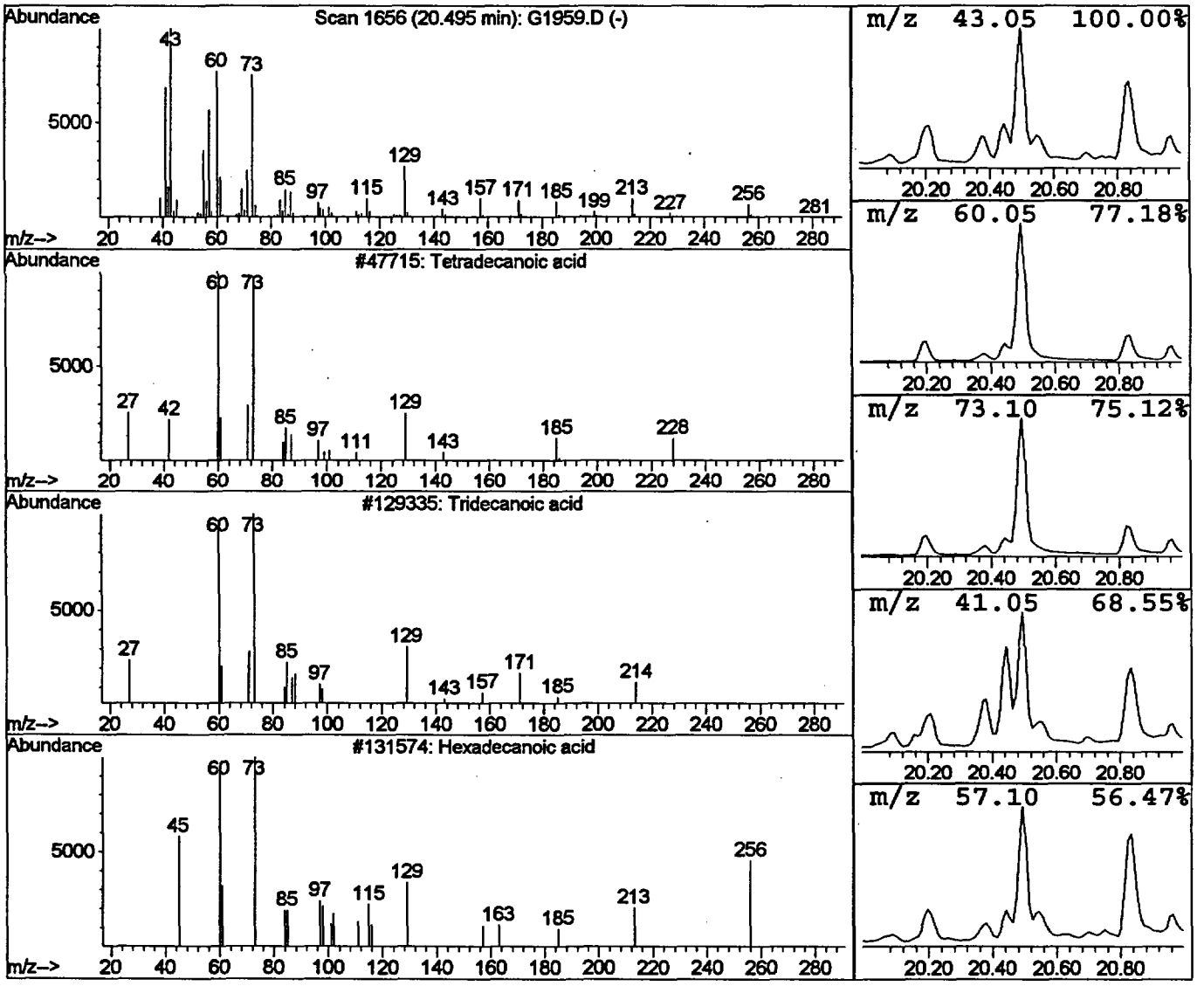
Peak Number 14 Tetradecanoic acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.49	78.58 ng	3696630	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetradecanoic acid	228	C14H28O2	000544-63-8	74
2	Tridecanoic acid	214	C13H26O2	000638-53-9	72
3	Hexadecanoic acid	256	C16H32O2	000057-10-3	72



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CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D
Acq On : 23 Jan 98 00:46
Sample : S HP-7G 58073-007 FFR87
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

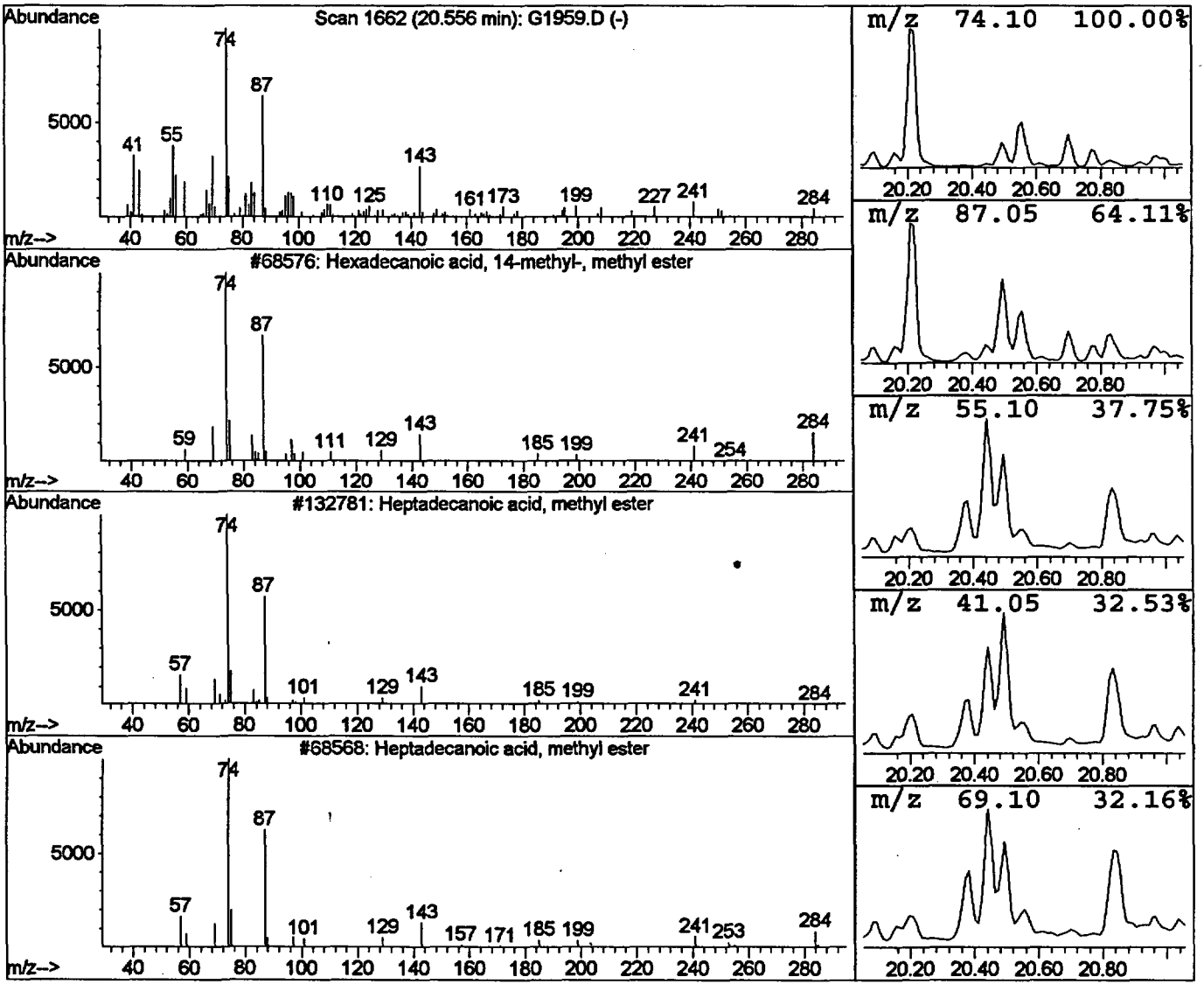
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 15 Hexadecanoic acid, 14-methyl-, Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.56	17.70 ng	832647	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, 14-methyl-, meth	284	C18H36O2	002490-49-5	64
2	Heptadecanoic acid, methyl ester	284	C18H36O2	001731-92-6	53
3	Heptadecanoic acid, methyl ester	284	C18H36O2	001731-92-6	53



0692

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

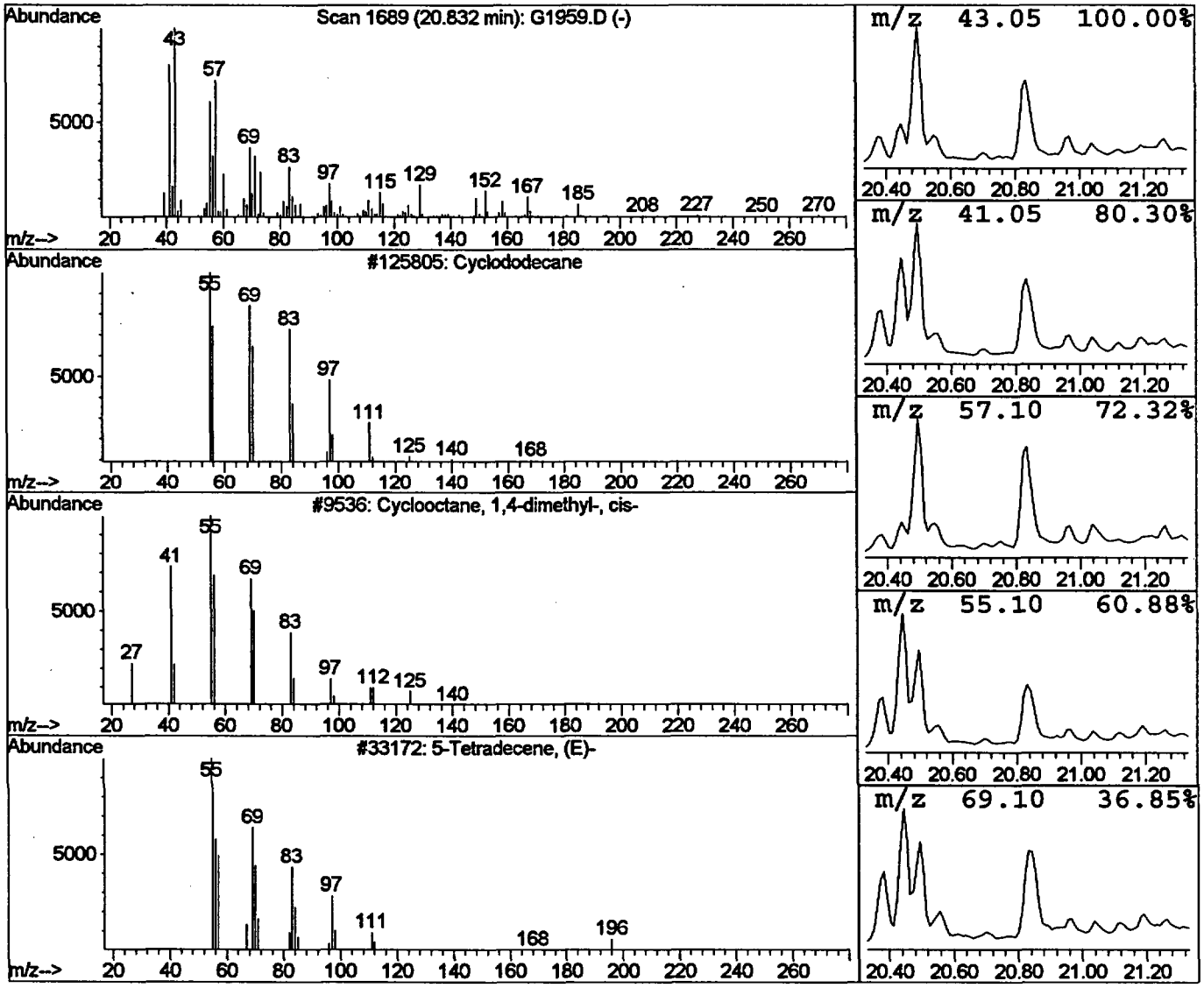
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 51 Cyclododecane UNKNOWN HYDROCARBON cc 01-27-98 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.83	71.26 ng	3352070	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecane	168	C12H24	000294-62-2	51
2	Cyclooctane, 1,4-dimethyl-, cis-	140	C10H20	013151-99-0	25
3	5-Tetradecene, (E)-	196	C14H28	041446-66-6	25



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Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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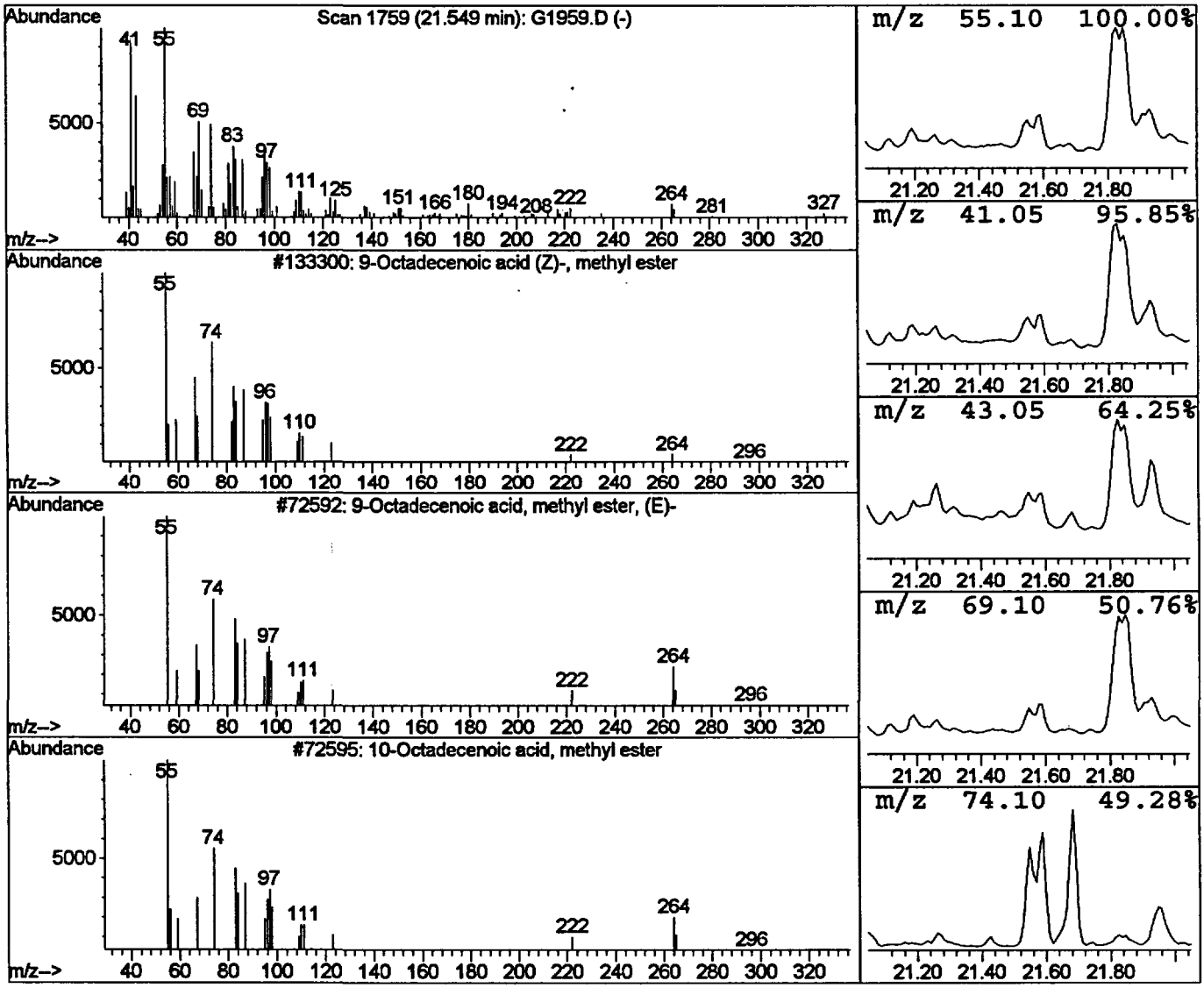
Peak Number 16 9-Octadecenoic acid (Z)-, meth Concentration Rank 36

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.55	14.23 ng	669571	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-, methyl es	296	C19H36O2	000112-62-9	95
2	9-Octadecenoic acid, methyl ester,	296	C19H36O2	001937-62-8	94
3	10-Octadecenoic acid, methyl ester	296	C19H36O2	013481-95-3	94



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Acq On : 23 Jan 98 00:46 Operator:
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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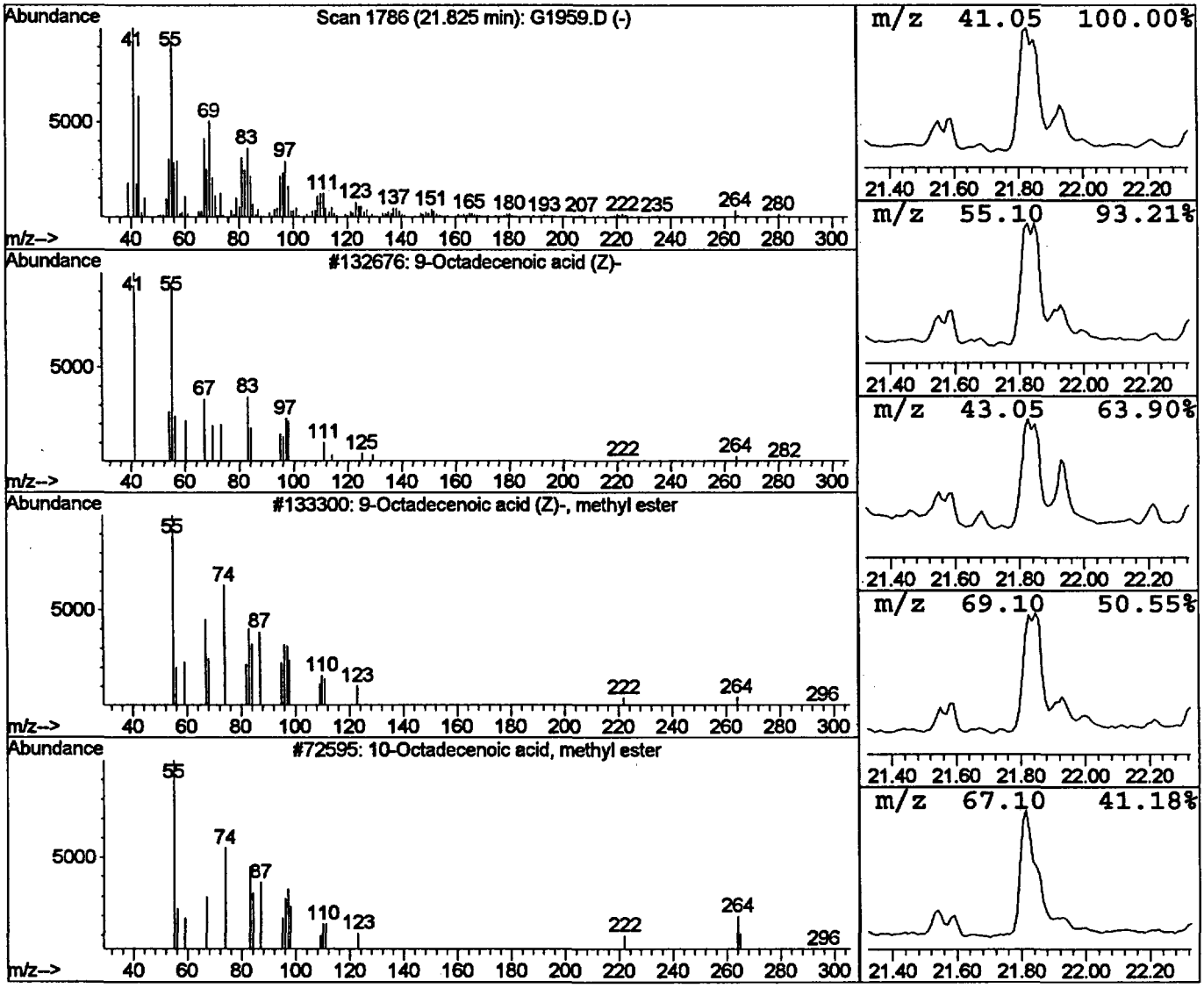
Peak Number 17 9-Octadecenoic acid (Z)- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.83	112.94 ng	5312480	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-	282	C18H34O2	000112-80-1	94
2	9-Octadecenoic acid (Z)-, methyl es	296	C19H36O2	000112-62-9	91
3	10-Octadecenoic acid, methyl ester	296	C19H36O2	013481-95-3	72



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Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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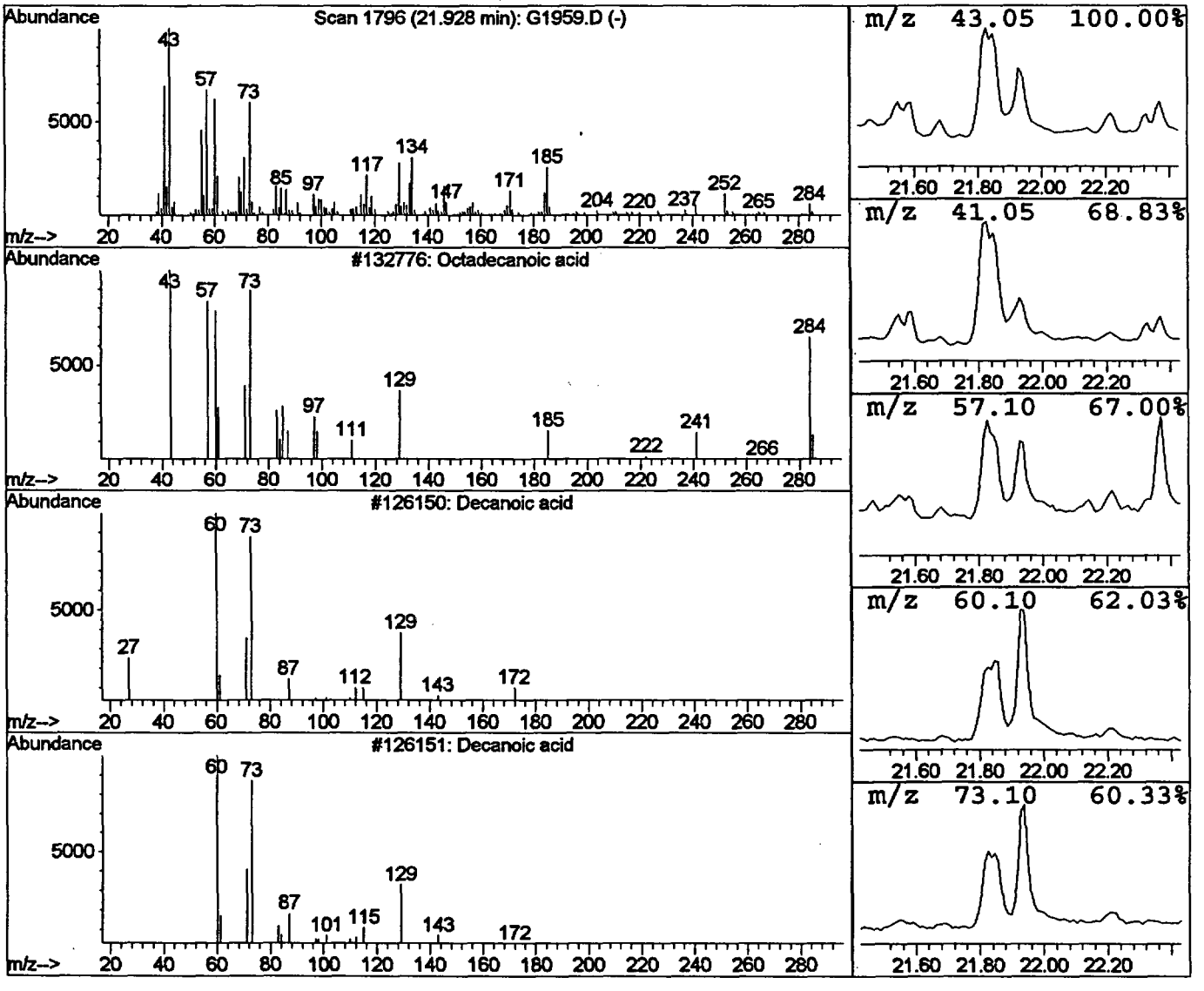
Peak Number 18 Octadecanoic acid Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.93	38.80 ng	1825280	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	53
2	Decanoic acid	172	C10H20O2	000334-48-5	42
3	Decanoic acid	172	C10H20O2	000334-48-5	38



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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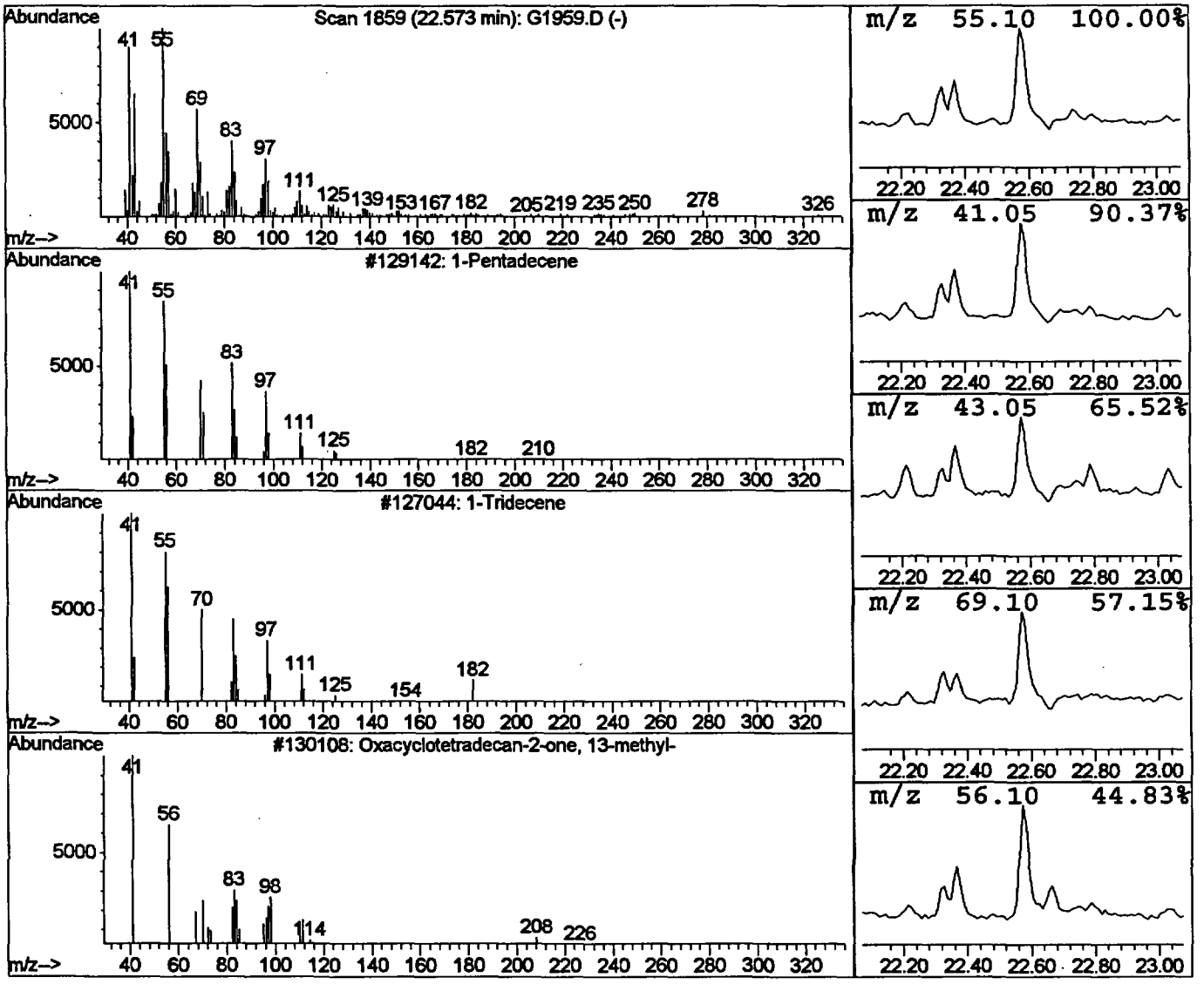
Peak Number 19 1-Pentadecene UNKNOWN COMPOUND Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.57	26.22 ng	1136800	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentadecene	210	C15H30	013360-61-7	90
2	1-Tridecene	182	C13H26	002437-56-1	81
3	Oxacyclotetradecan-2-one, 13-methyl	226	C14H26O2	057092-32-7	72



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Acq On : 23 Jan 98 00:46 Operator:
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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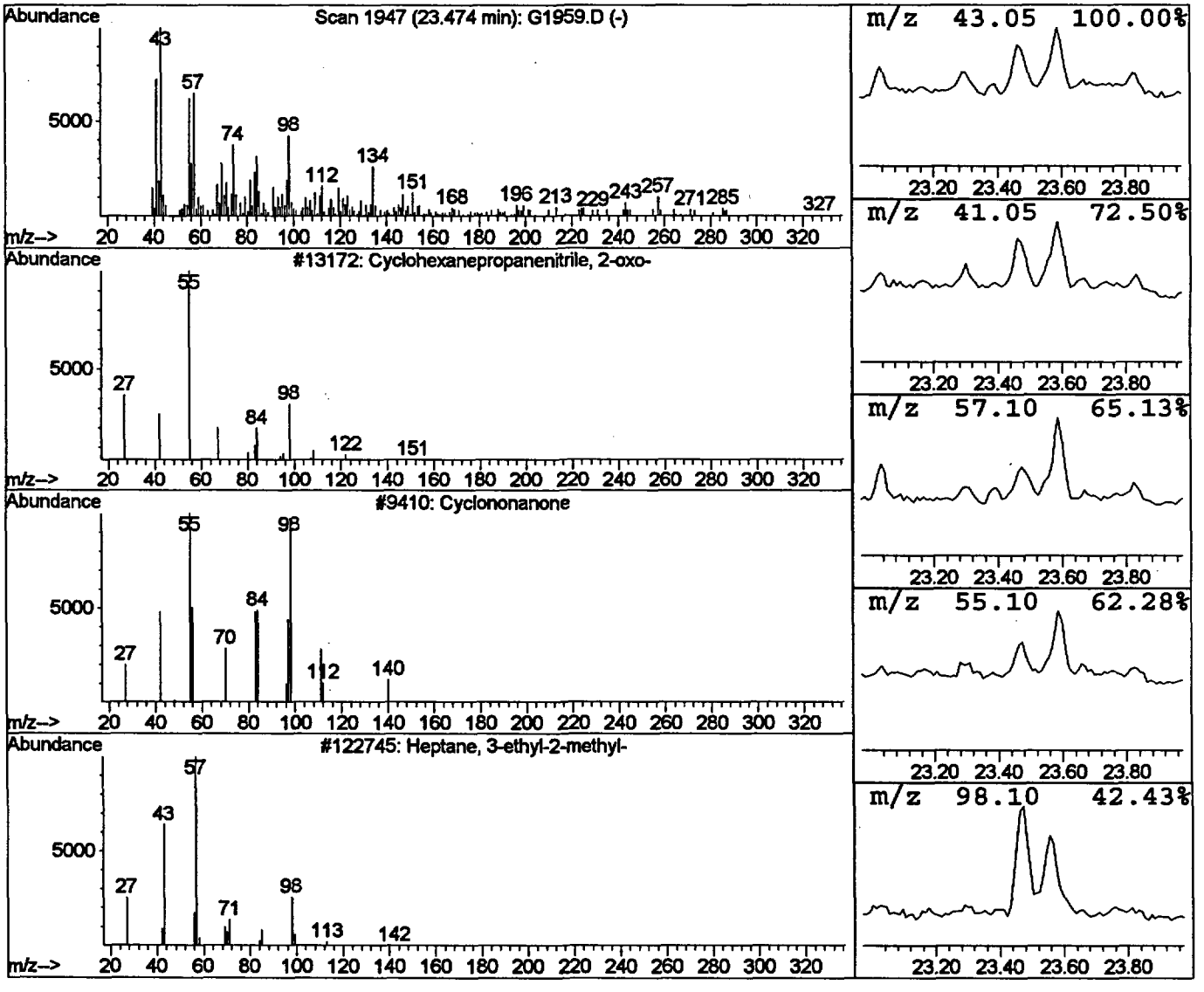
Peak Number 20 Cyclohexanepropanenitrile, 2-o Concentration Rank 35

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	14.67 ng	636169	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclohexanepropanenitrile, 2-oxo-	151	C9H13NO	004594-78-9	32
2	Cyclononanone	140	C9H16O	003350-30-9	22
3	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	18



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Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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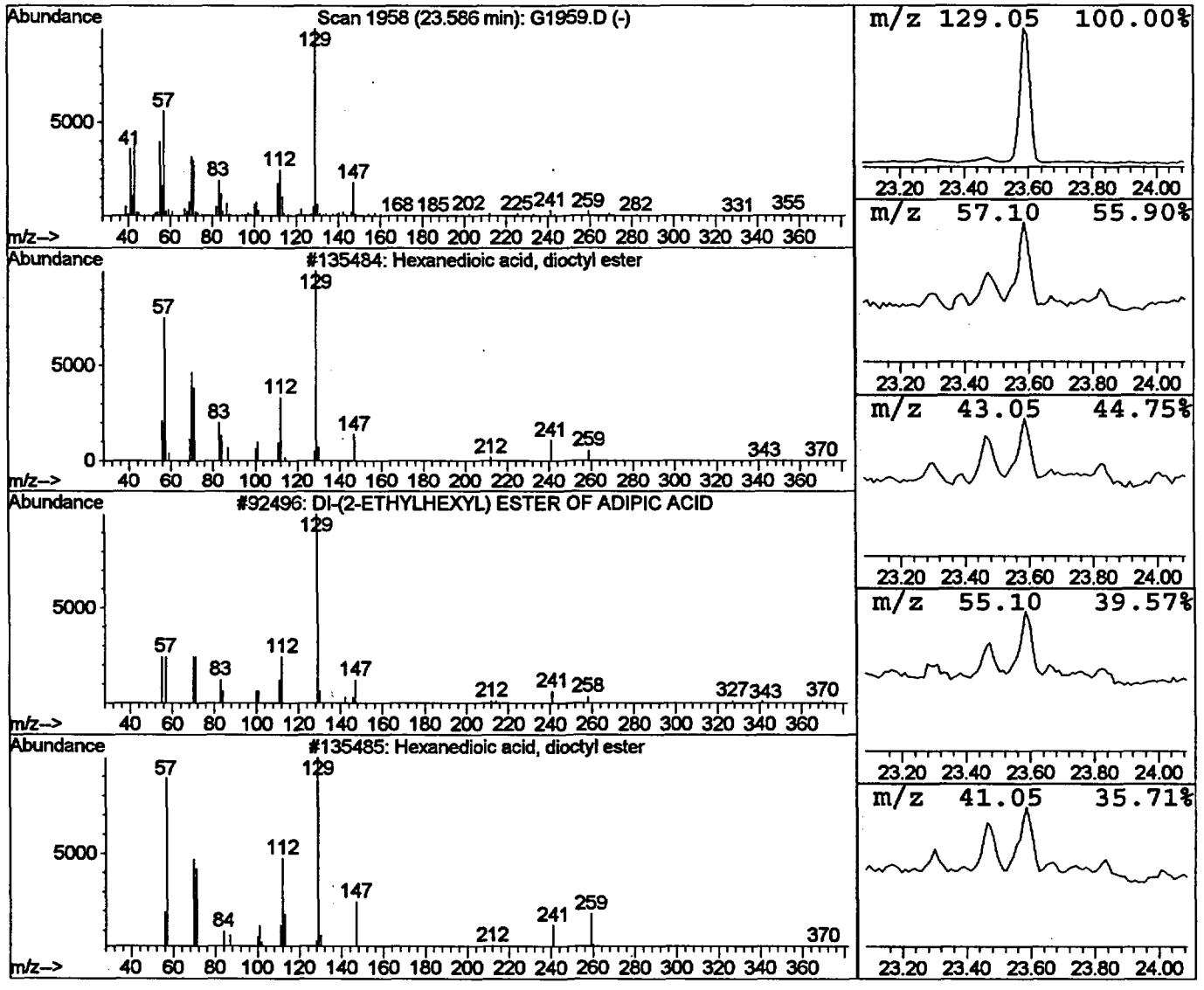
Peak Number 21 Hexanedioic acid, dioctyl este Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.59	17.64 ng	764779	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	86
2	DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	78
3	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	62



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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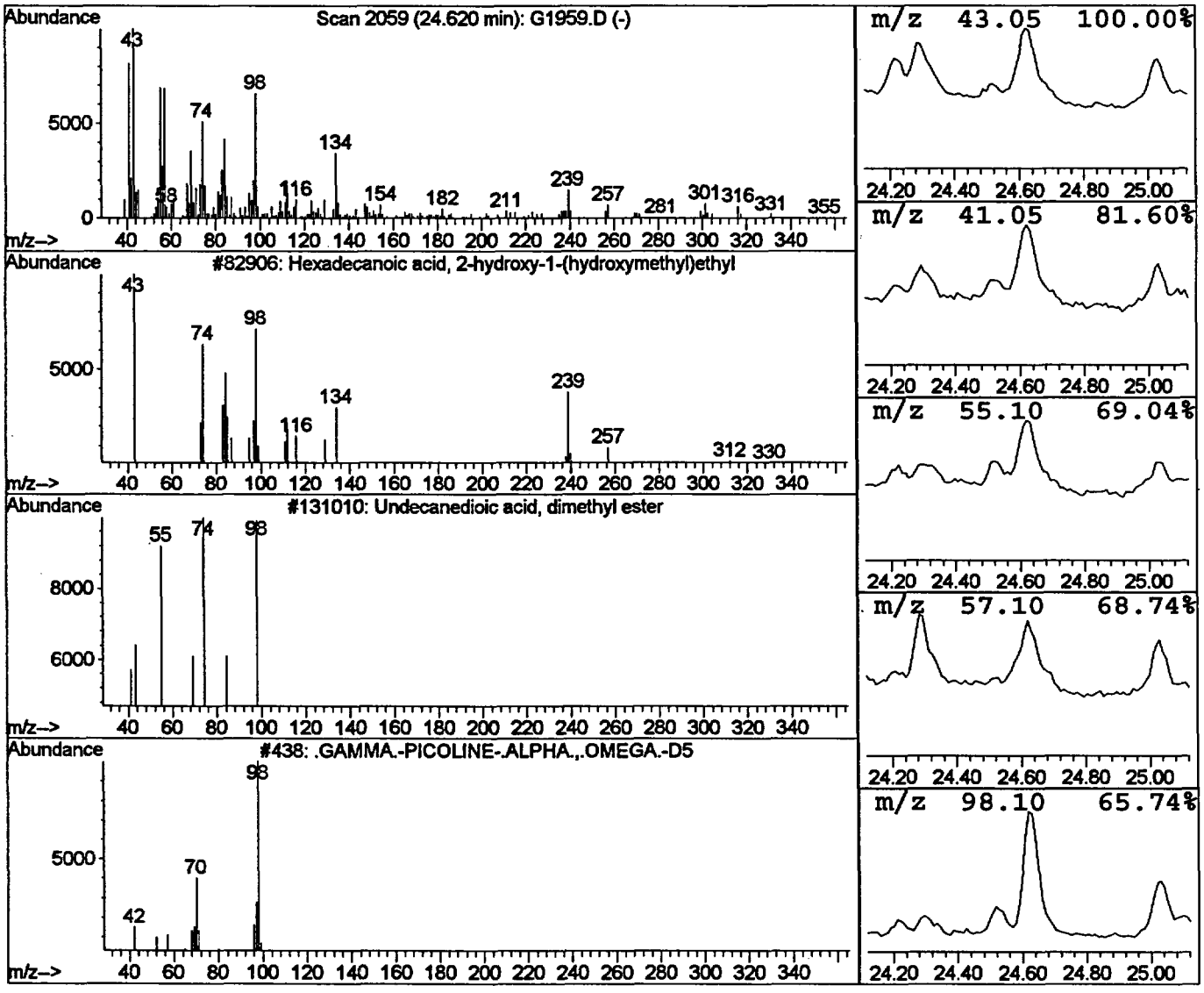
Peak Number 22 Hexadecanoic acid, 2-hydroxy-1 Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.62	45.90 ng	1990400	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, 2-hydroxy-1-(hyd	330	C19H38O4	023470-00-0	87
2	Undecanedioic acid, dimethyl ester	244	C13H24O4	004567-98-0	35
3	.GAMMA.-PICOLINE-.ALPHA.,.OMEGA.-D5	93	C6H2D5N	029372-32-5	18



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CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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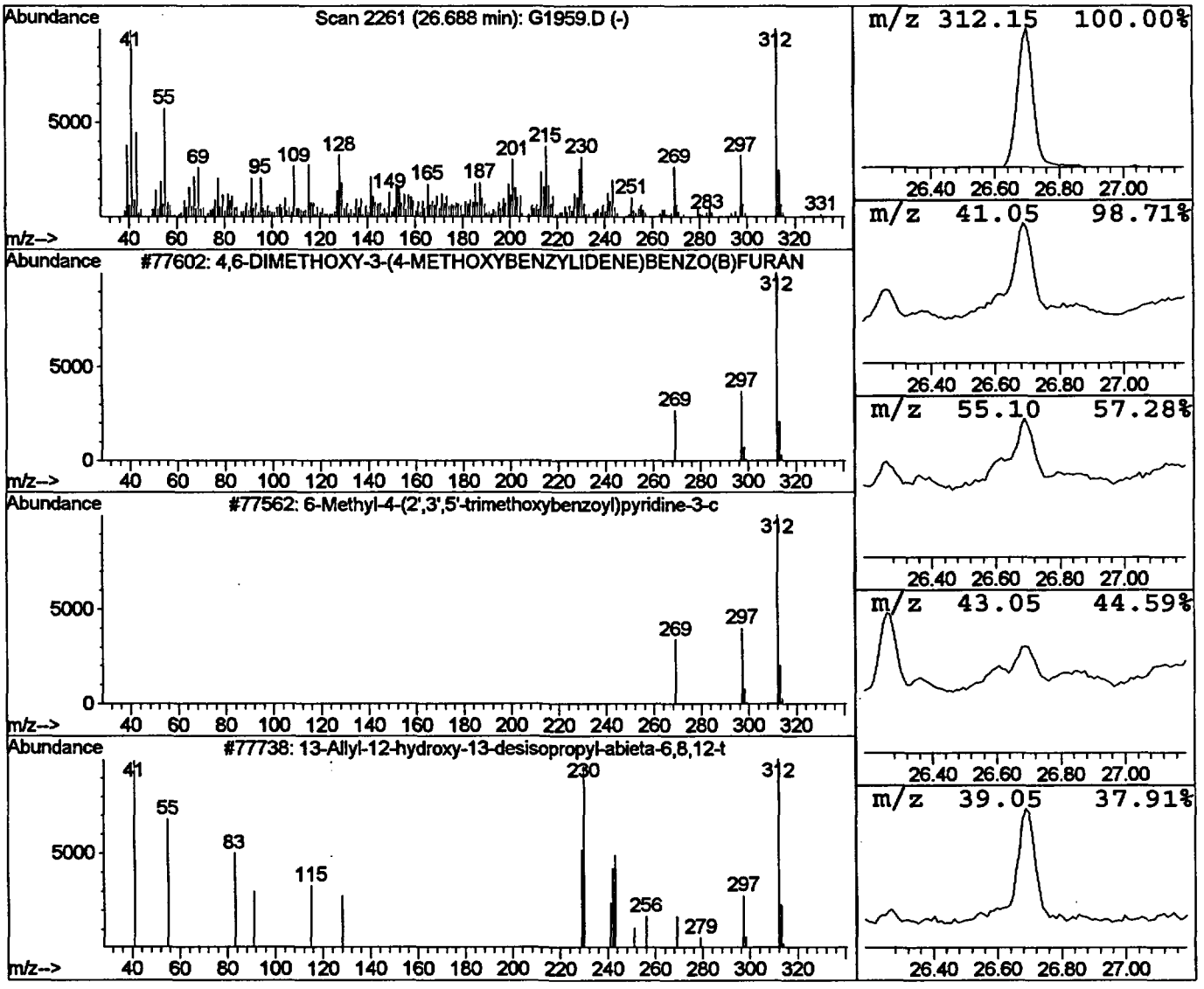
Peak Number 23 4,6-DIMETHOXY-3-(4-METHOXYBENZ Concentration Rank 6

UNKNOWN COMPOUND mo1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.69	82.21 ng	3565090	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	4,6-DIMETHOXY-3-(4-METHOXYBENZYLIDE	312	C18H16O5	000000-00-0	90
2	6-Methyl-4-(2',3',5'-trimethoxybenz	312	C17H16N2O4	083640-55-5	78
3	13-Allyl-12-hydroxy-13-desisopropyl	312	C20H24O3	084808-23-1	70



Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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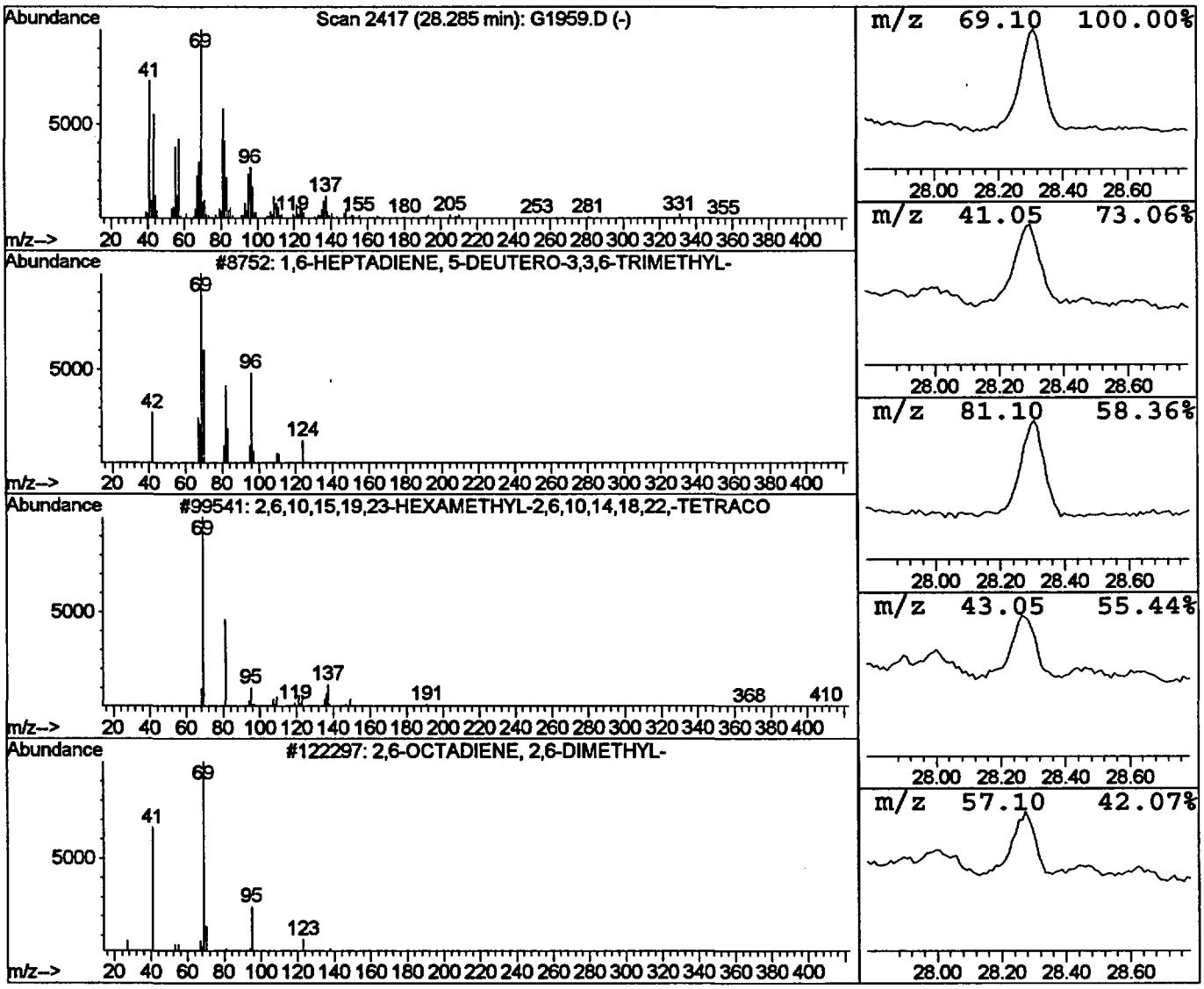
Peak Number 24 1,6-HEPTADIENE, 5-DEUTERO-3,3, Concentration Rank 18

UNKNOWN COMPOUND 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.29	32.16 ng	1394750	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,6-HEPTADIENE, 5-DEUTERO-3,3,6-TRI	138	C10H17D	000000-00-0	52
2	2,6,10,15,19,23-HEXAMETHYL-2,6,10,1	410	C30H50	000000-00-0	38
3	2,6-OCTADIENE, 2,6-DIMETHYL-	138	C10H18	002609-23-6	38



0702

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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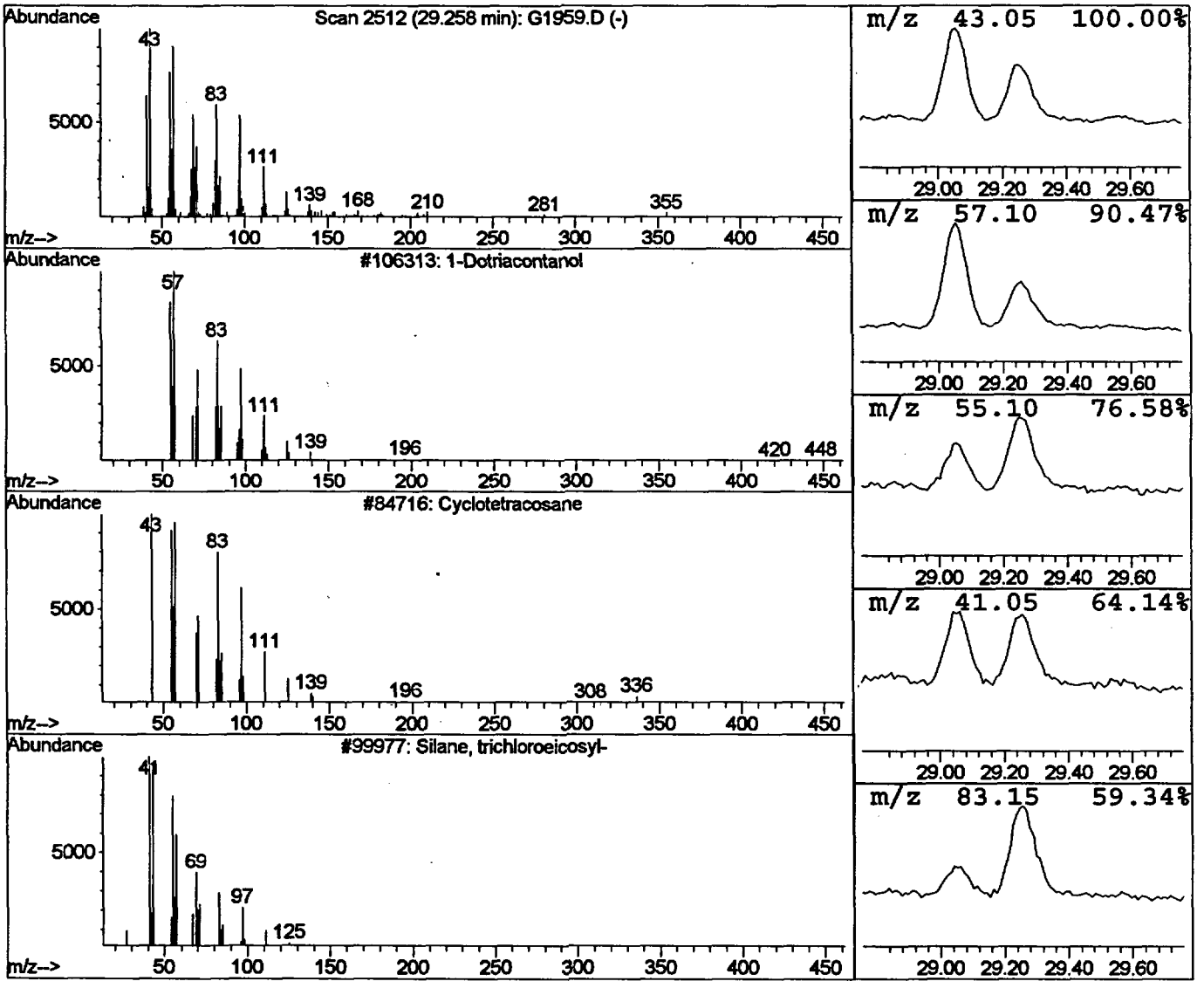
Peak Number 25 1-Dotriacontanol UNKNOWN COMPOUND 01-27-98 Concentration Rank 30

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.26	16.73 ng	1460090	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Dotriacontanol	467	C32H66O	006624-79-9	94
2	Cyclotetracosane	336	C24H48	000297-03-0	91
3	Silane, trichloroeicosyl-	414	C20H41Cl3Si	018733-57-8	87



0703

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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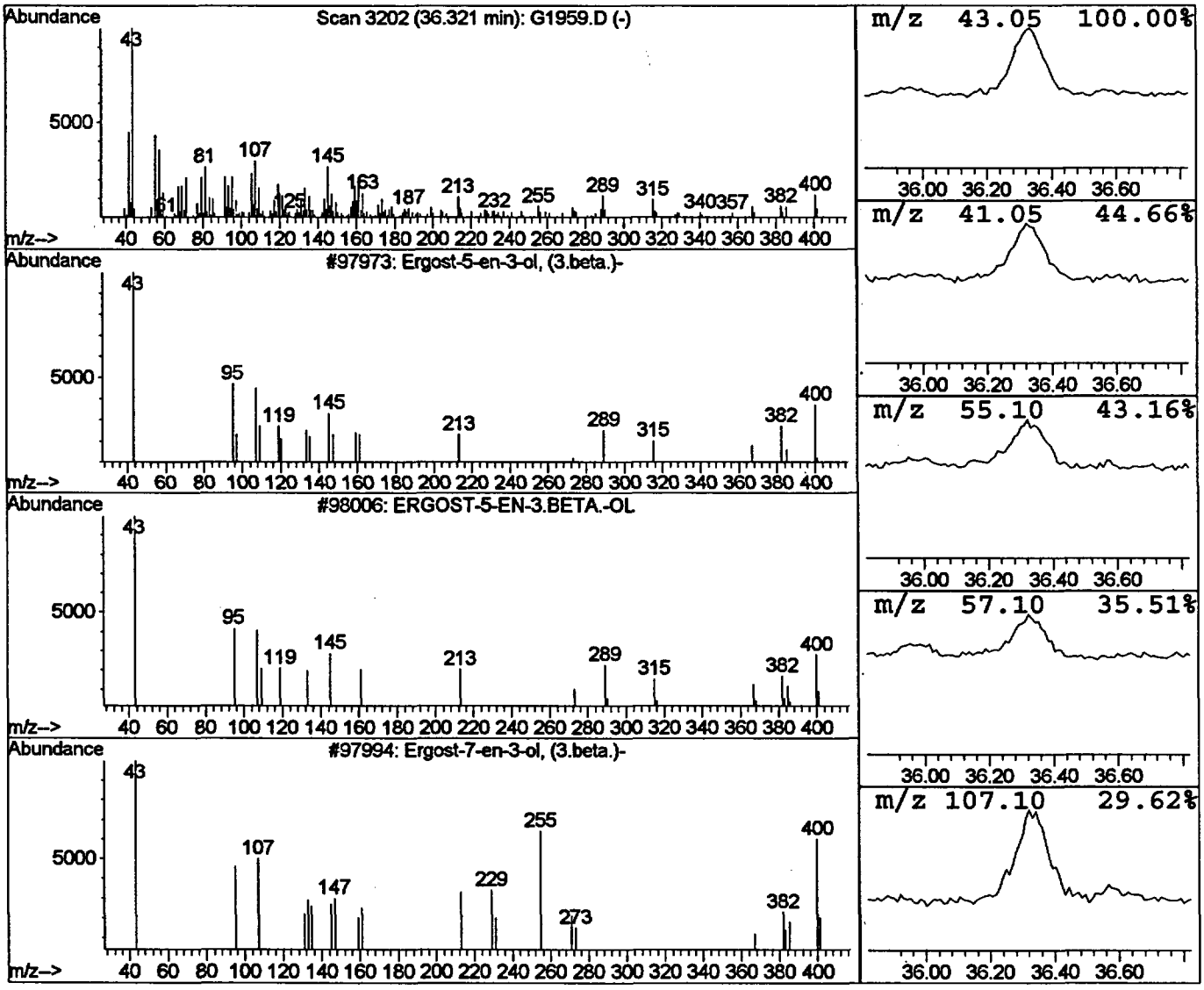
Peak Number 26 Ergost-5-en-3-ol, (3.beta.)- Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.32	25.38 ng	2215680	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	97
2	ERGOST-5-EN-3.BETA.-OL	400	C28H48O	000000-00-0	95
3	Ergost-7-en-3-ol, (3.beta.)-	400	C28H48O	026047-31-4	55



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Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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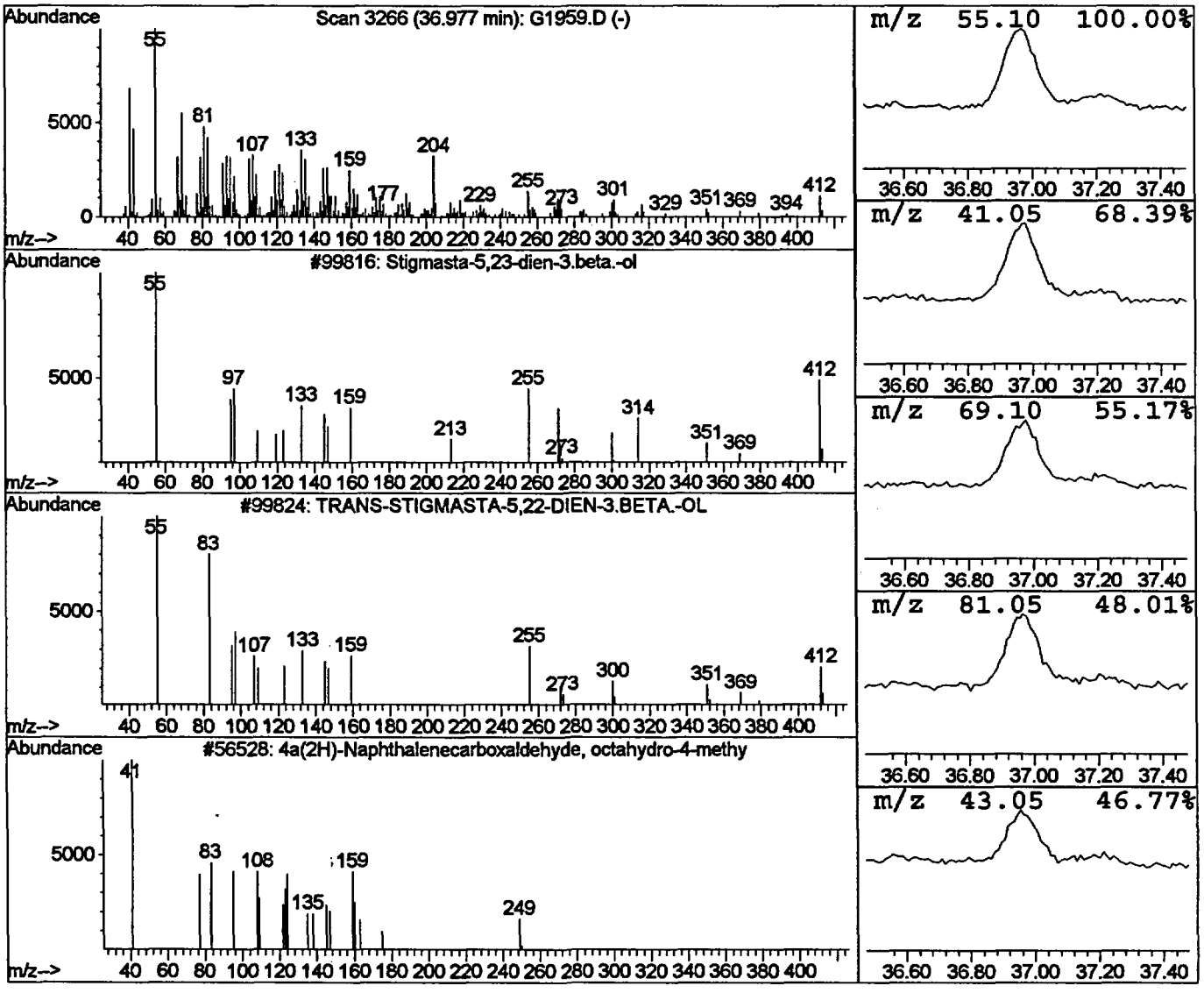
Peak Number 27 Stigmasta-5,23-dien-3.beta.-ol Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.98	41.64 ng	3635420	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmasta-5,23-dien-3.beta.-ol	412	C29H48O	038485-29-9	70
2	TRANS-STIGMASTA-5,22-DIEN-3.BETA.-O	412	C29H48O	000000-00-0	56
3	4a(2H)-Naphthalenecarboxaldehyde, o	250	C15H22O3	056298-89-6	46



0705

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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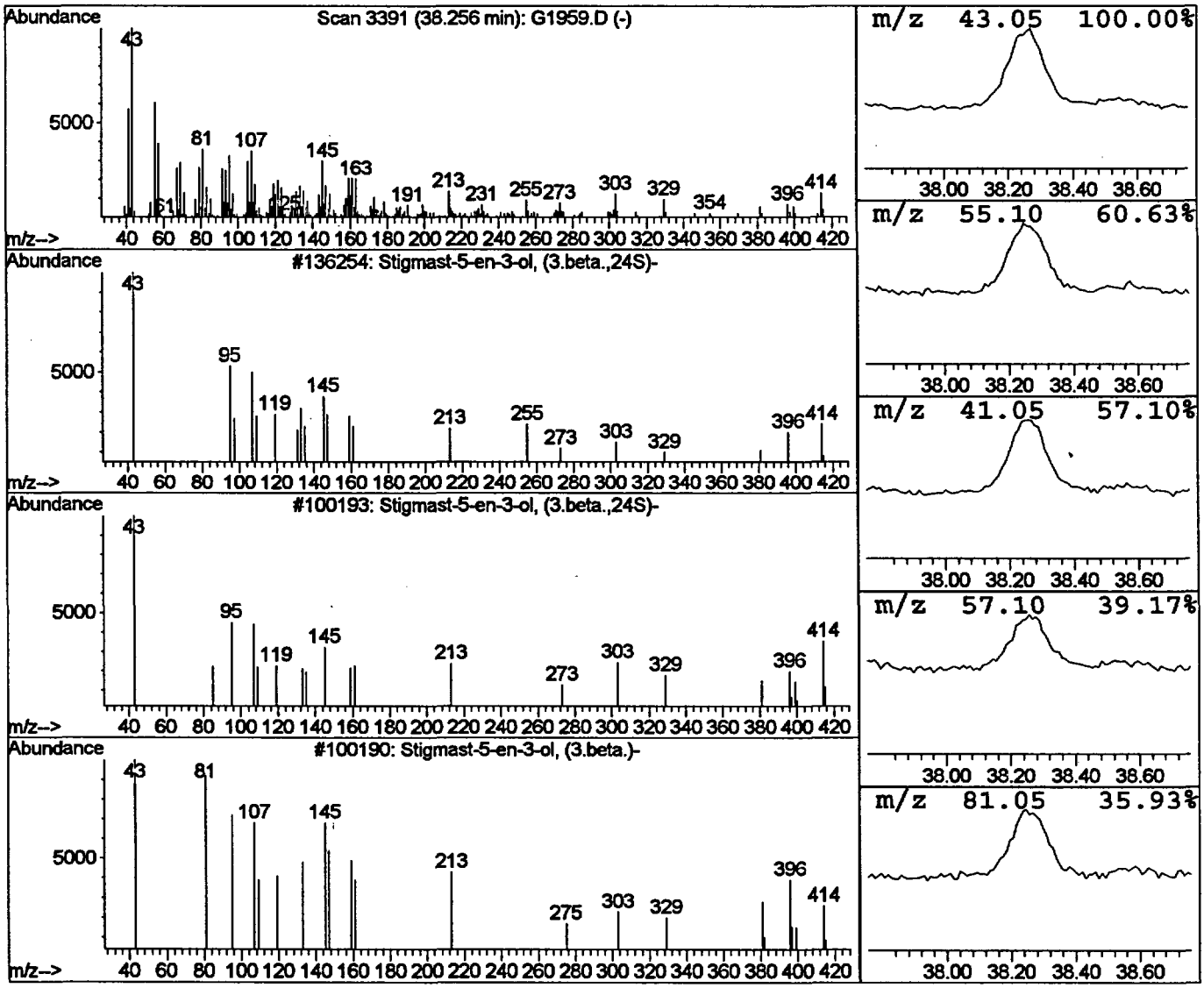
Peak Number 28 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.26	42.06 ng	3671330	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	89
2	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	89
3	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	58



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Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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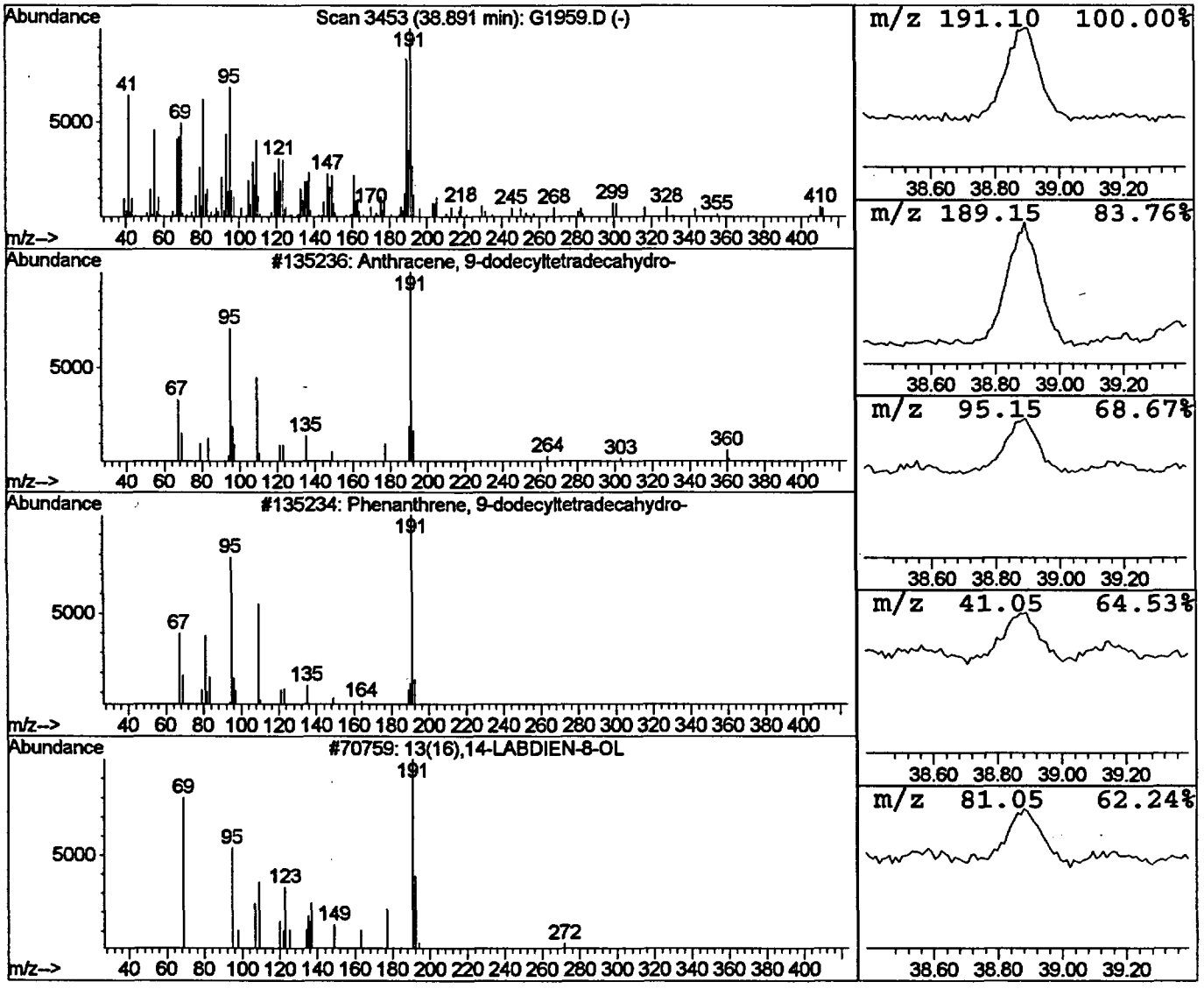
Peak Number 29 Anthracene, 9-dodecyltetradeca Concentration Rank 31

UNKNOWN COMPOUND 01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.89	16.39 ng	1430450	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Anthracene, 9-dodecyltetradecahydro	360	C26H48	055401-75-7	43
2	Phenanthrene, 9-dodecyltetradecahyd	360	C26H48	055334-01-5	43
3	13(16),14-LABDIEN-8-OL	290	C20H34O	000000-00-0	38



0707

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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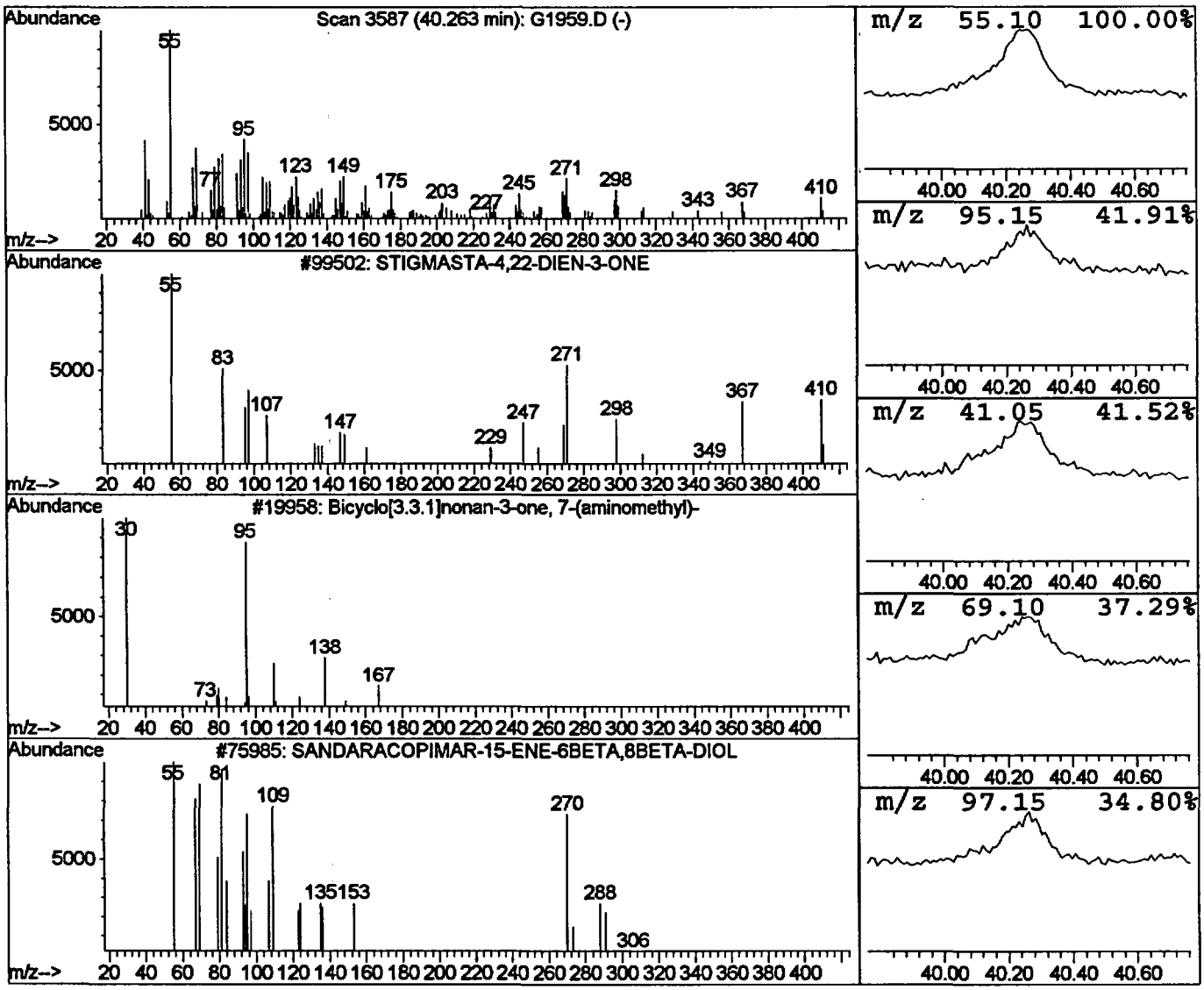
Peak Number 30 STIGMASTA-4,22-DIEN-3-ONE Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.26	30.81 ng	2689220	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	STIGMASTA-4,22-DIEN-3-ONE	410	C29H46O	055722-32-2	78
2	Bicyclo[3.3.1]nonan-3-one, 7-(amino	167	C10H17NO	056701-31-6	9
3	SANDARACOPIMAR-15-ENE-6BETA,8BETA-D	306	C20H34O2	041756-27-8	6



0708

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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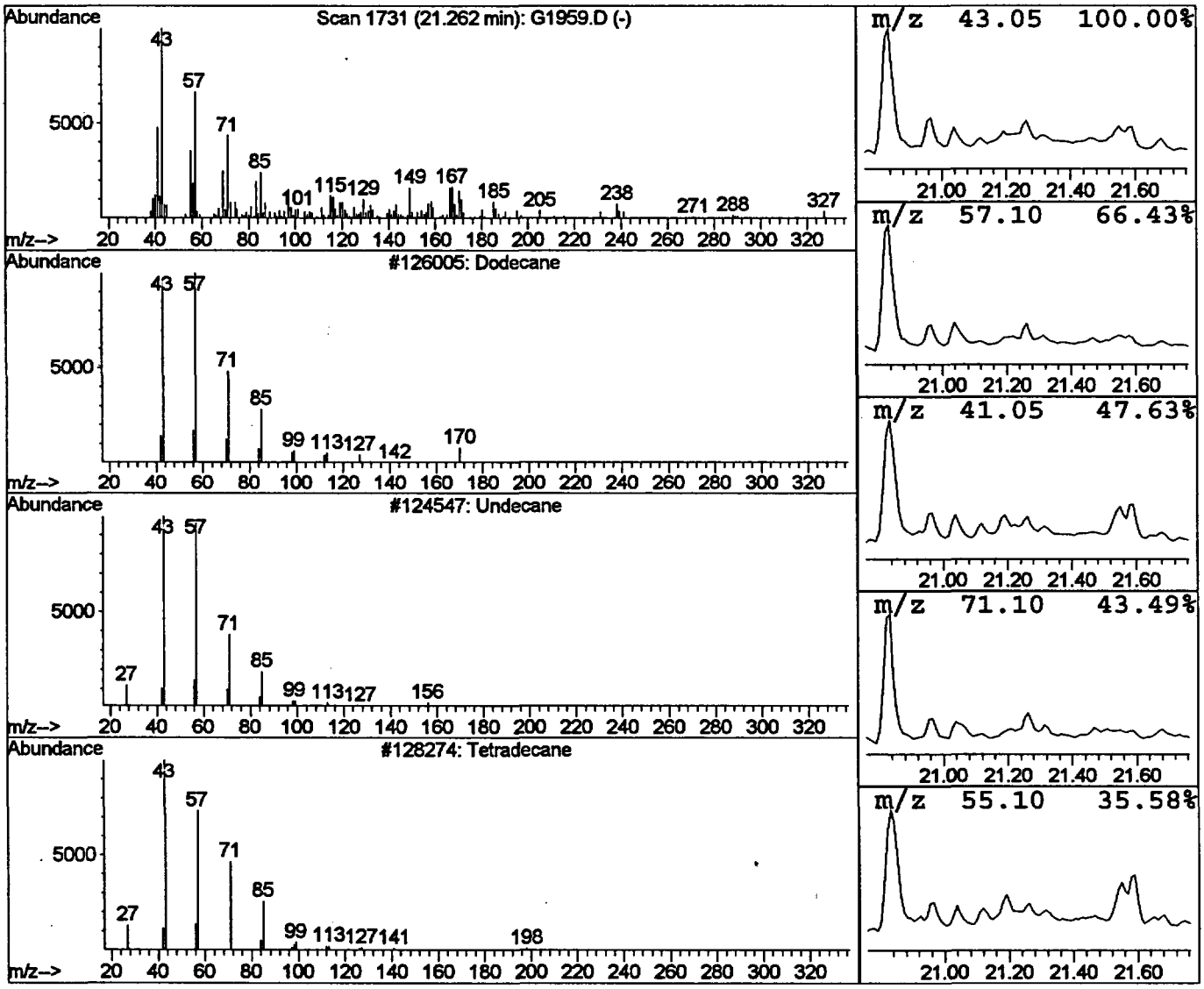
Peak Number 41 Dodecane Concentration Rank 54

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.26	9.09 ng	427797	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane	170	C12H26	000112-40-3	46
2	Undecane	156	C11H24	001120-21-4	38
3	Tetradecane	198	C14H30	000629-59-4	35



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Acq On : 23 Jan 98 00:46 Operator:
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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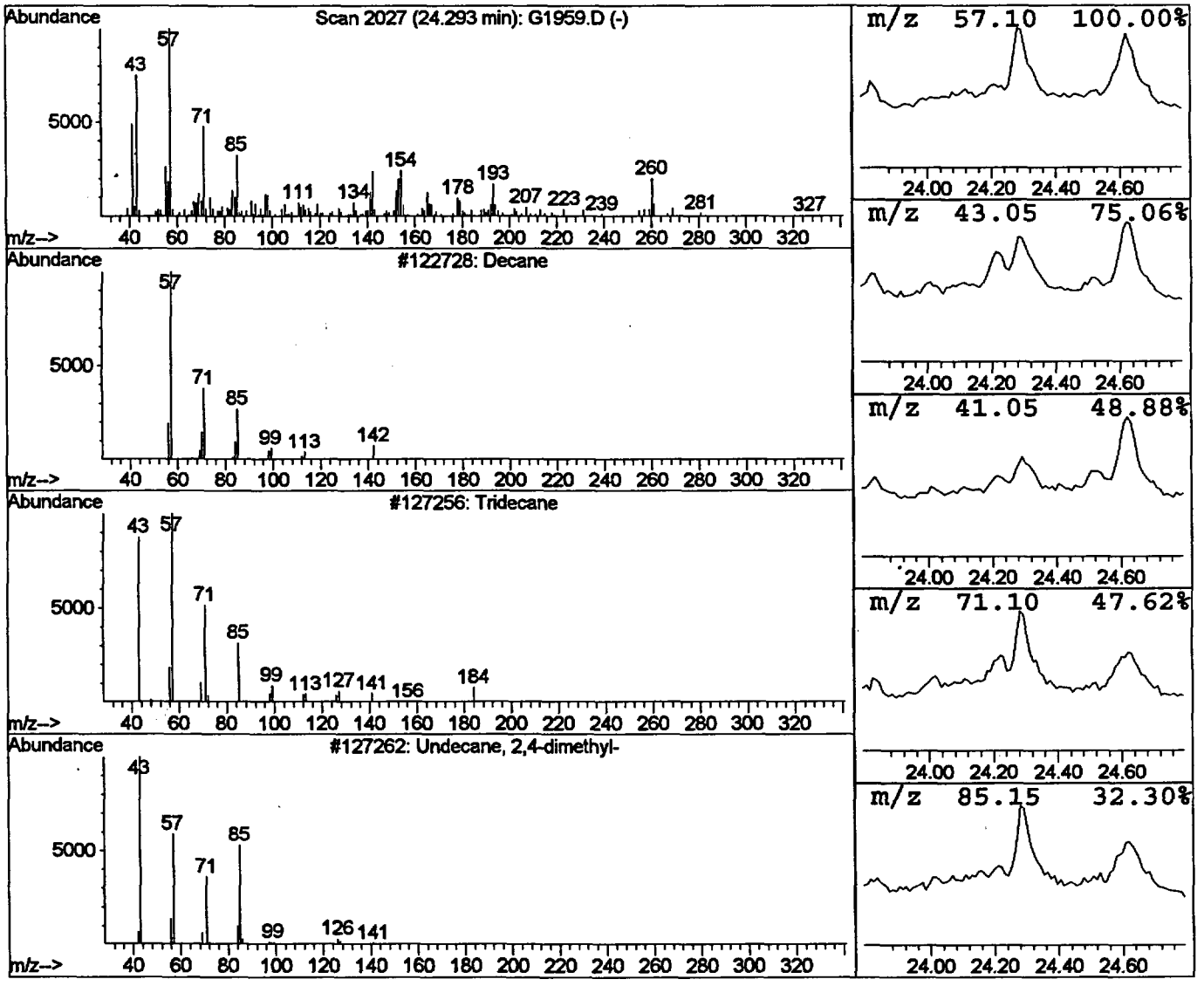
Peak Number 42 Decane Concentration Rank 29

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.29	17.03 ng	738633	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane	142	C10H22	000124-18-5	38
2	Tridecane	184	C13H28	000629-50-5	30
3	Undecane, 2,4-dimethyl-	184	C13H28	017312-80-0	25



0710

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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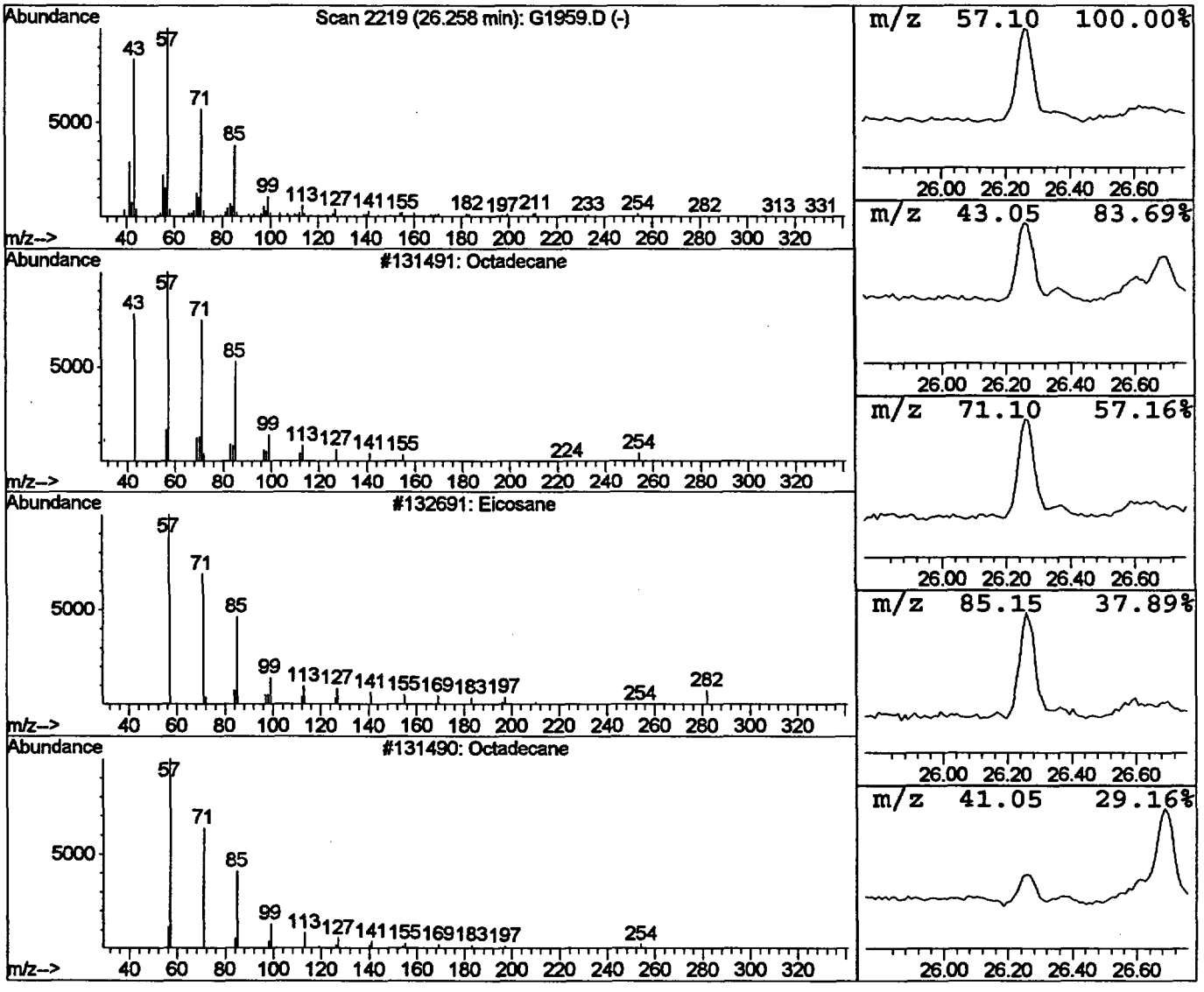
Peak Number 43 Octadecane Concentration Rank 43

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.26	12.49 ng	541736	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	97
2	Eicosane	282	C20H42	000112-95-8	95
3	Octadecane	254	C18H38	000593-45-3	93



0711

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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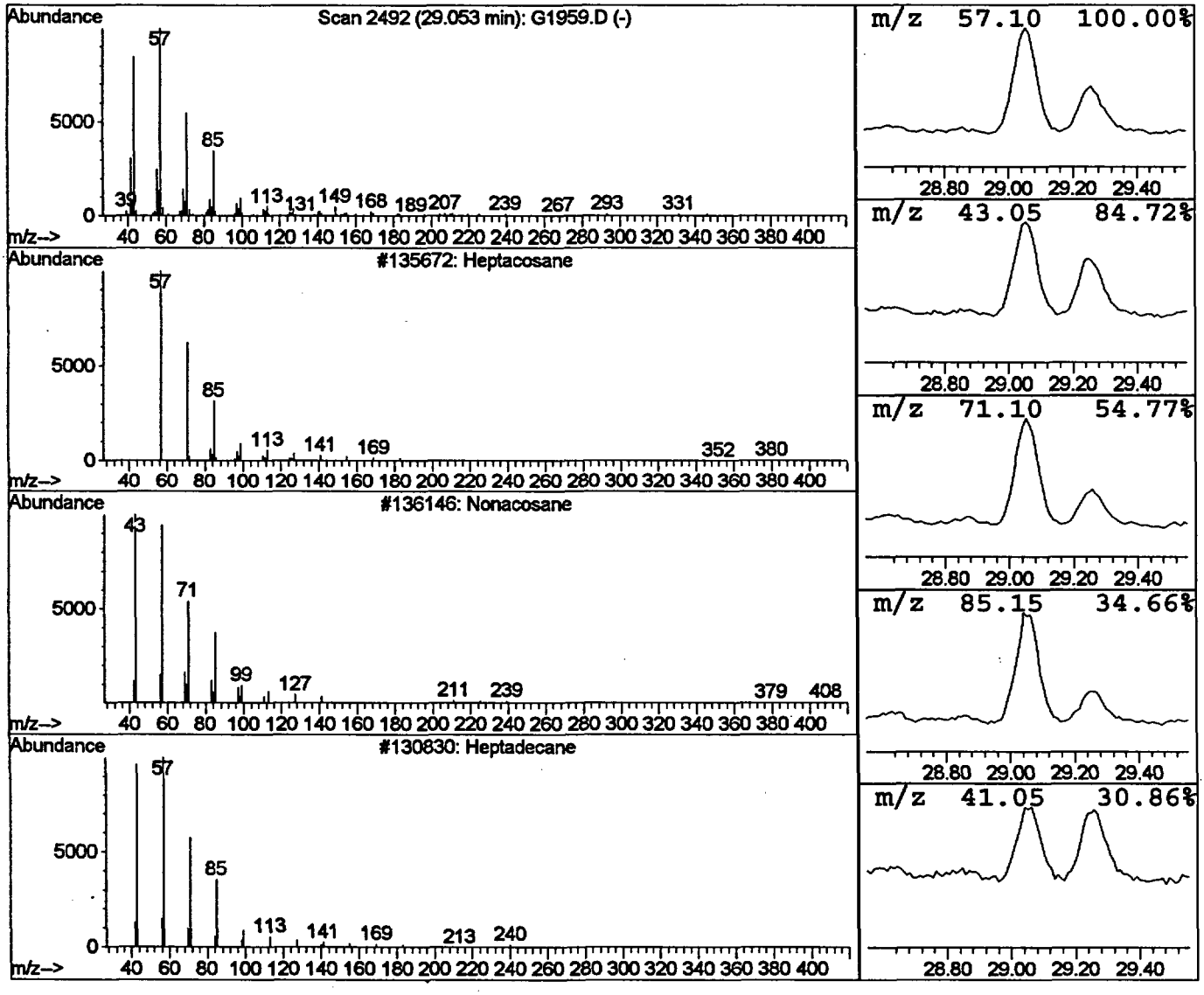
Peak Number 44 Heptacosane Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.05	15.87 ng	1385090	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptacosane	380	C27H56	000593-49-7	91
2	Nonacosane	408	C29H60	000630-03-5	91
3	Heptadecane	240	C17H36	000629-78-7	87



0712

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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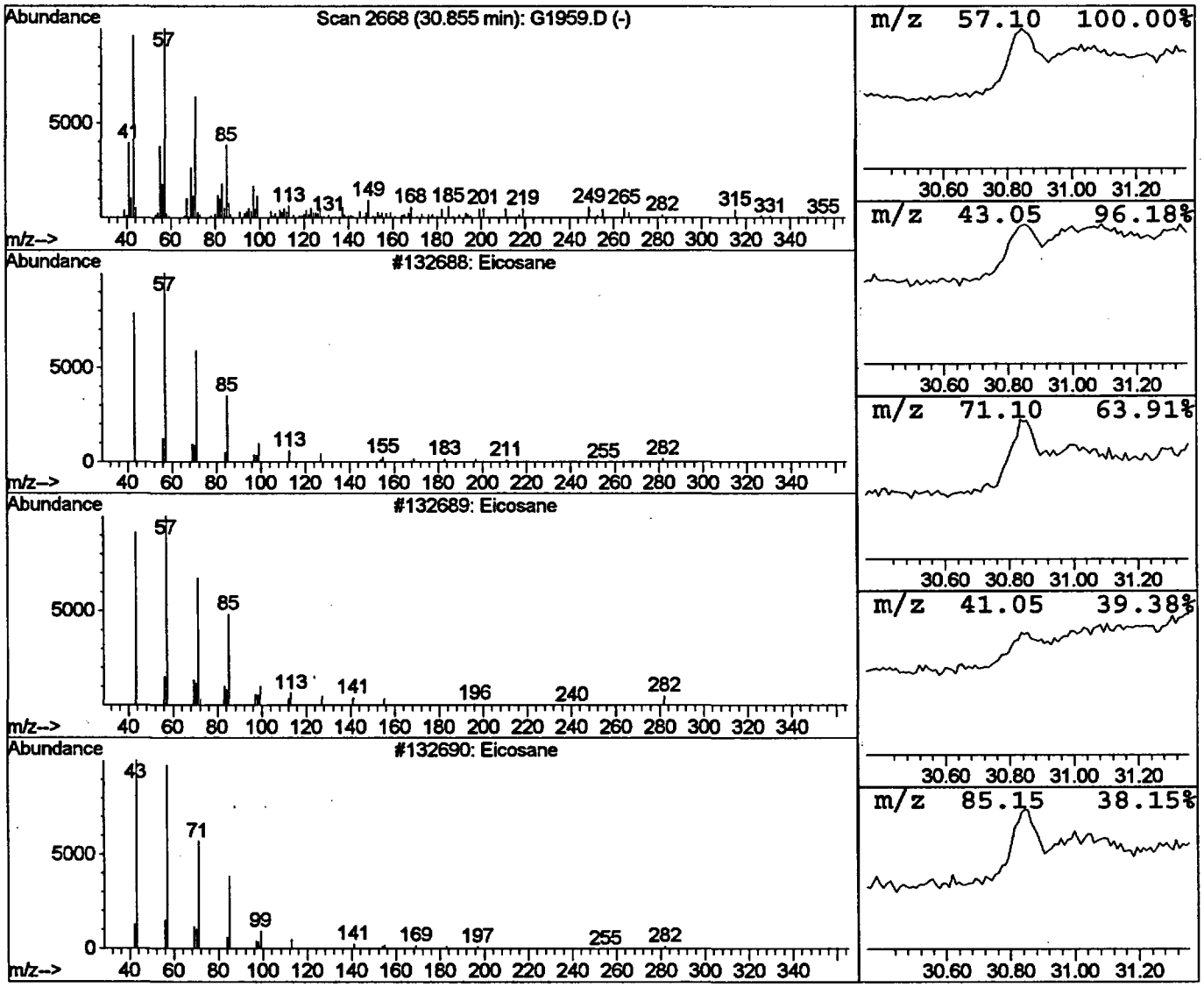
Peak Number 45 Eicosane Concentration Rank 67

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.85	5.81 ng	507023	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	95
2	Eicosane	282	C20H42	000112-95-8	89
3	Eicosane	282	C20H42	000112-95-8	89



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Acq On : 23 Jan 98 00:46 Operator:
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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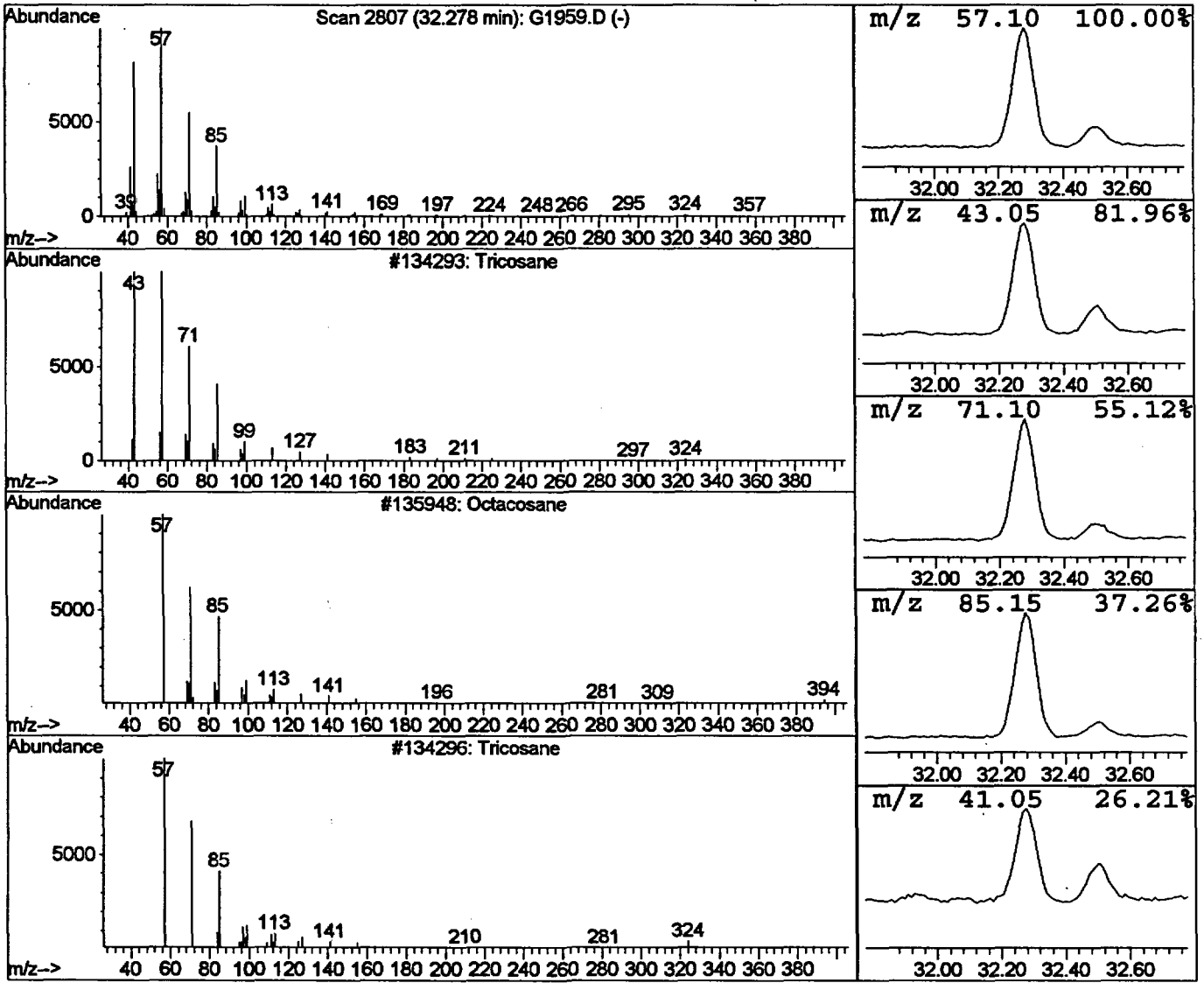
Peak Number 46 Tricosane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.28	39.03 ng	3406840	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricosane	324	C23H48	000638-67-5	93
2	Octacosane	394	C28H58	000630-02-4	91
3	Tricosane	324	C23H48	000638-67-5	90



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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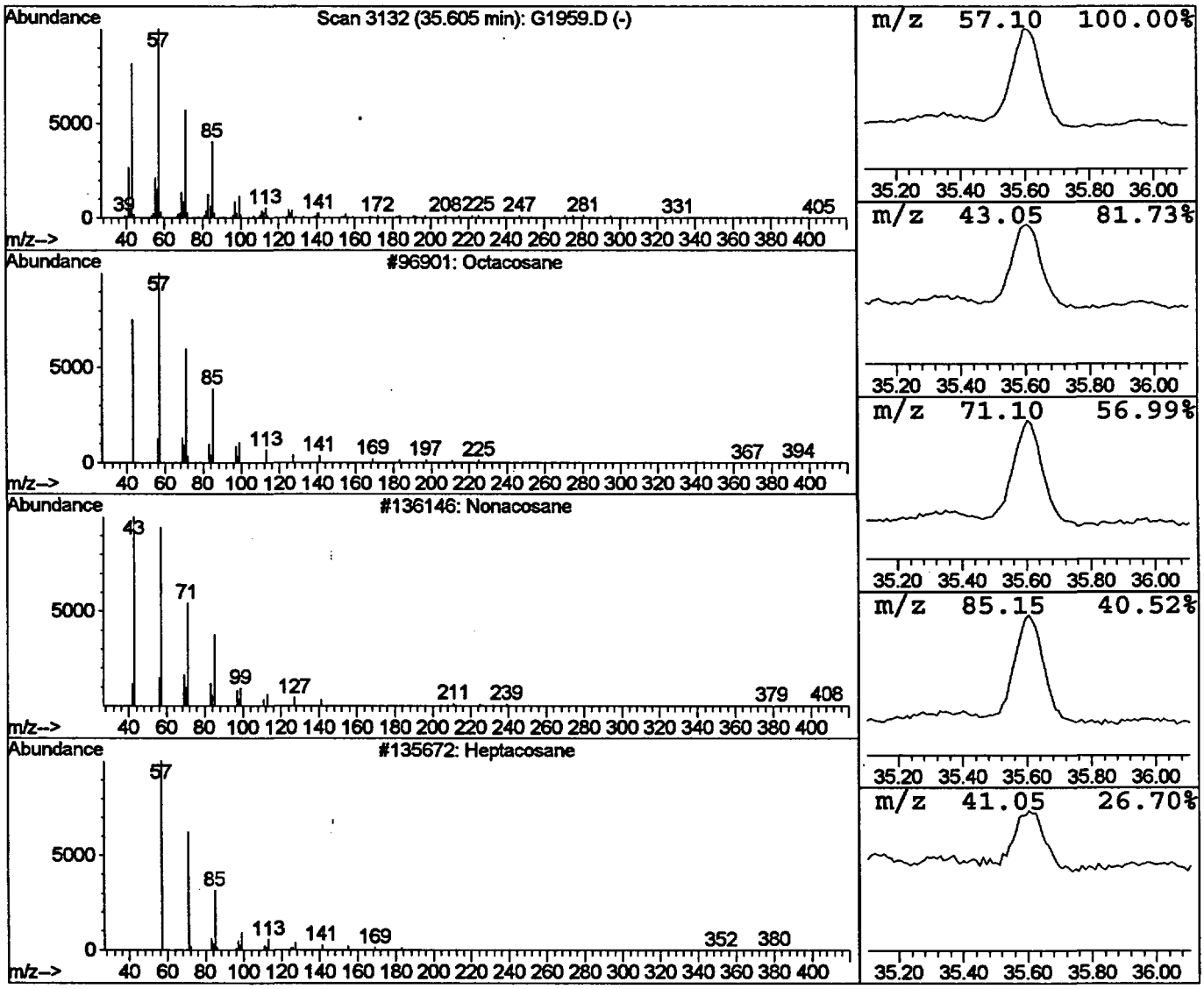
Peak Number 47 Octacosane Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.60	19.71 ng	1720400	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octacosane	394	C28H58	000630-02-4	87
2	Nonacosane	408	C29H60	000630-03-5	87
3	Heptacosane	380	C27H56	000593-49-7	83



Library Search Compound Report

CASE 25969

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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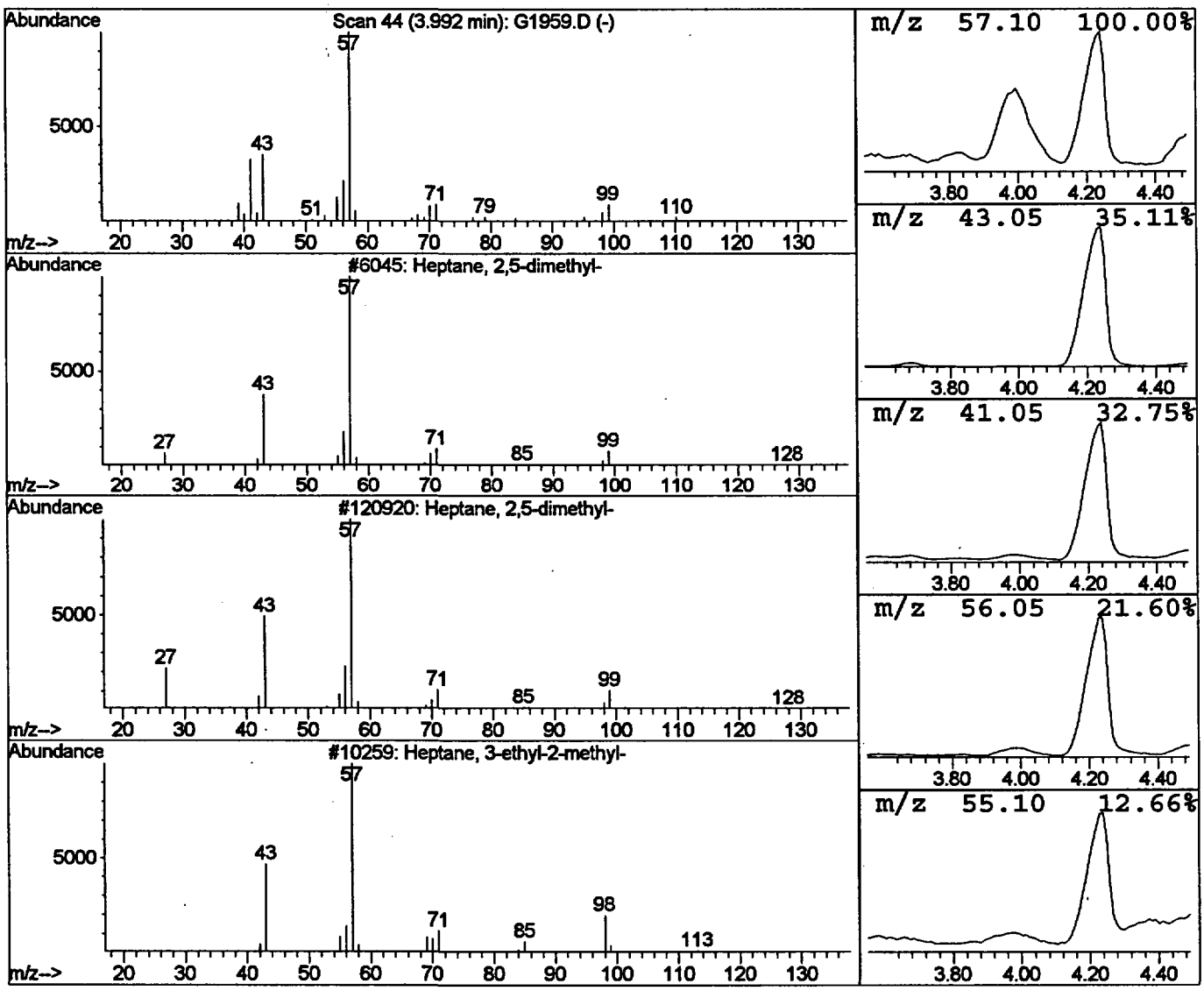
Peak Number 48 Heptane, 2,5-dimethyl- Concentration Rank 44

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.99	11.01 ng	449910	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	64
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	64
3	Heptane, 3-ethyl-2-methyl-	142	C10H22	014676-29-0	50



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
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Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

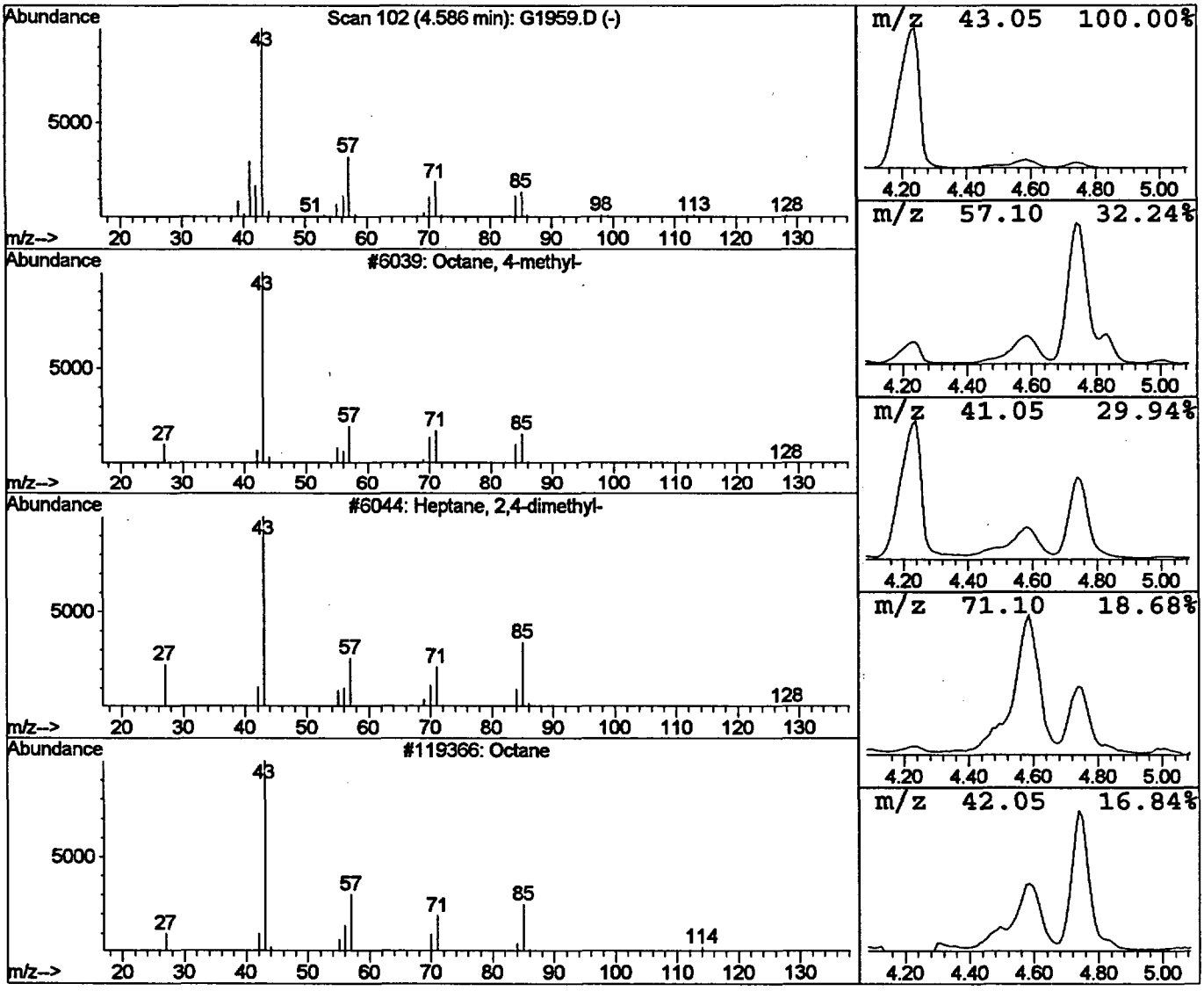
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 49 Octane, 4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.59	90.27 ng	3687120	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64
3	Octane	114	C8H18	000111-65-9	64



0717

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
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Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

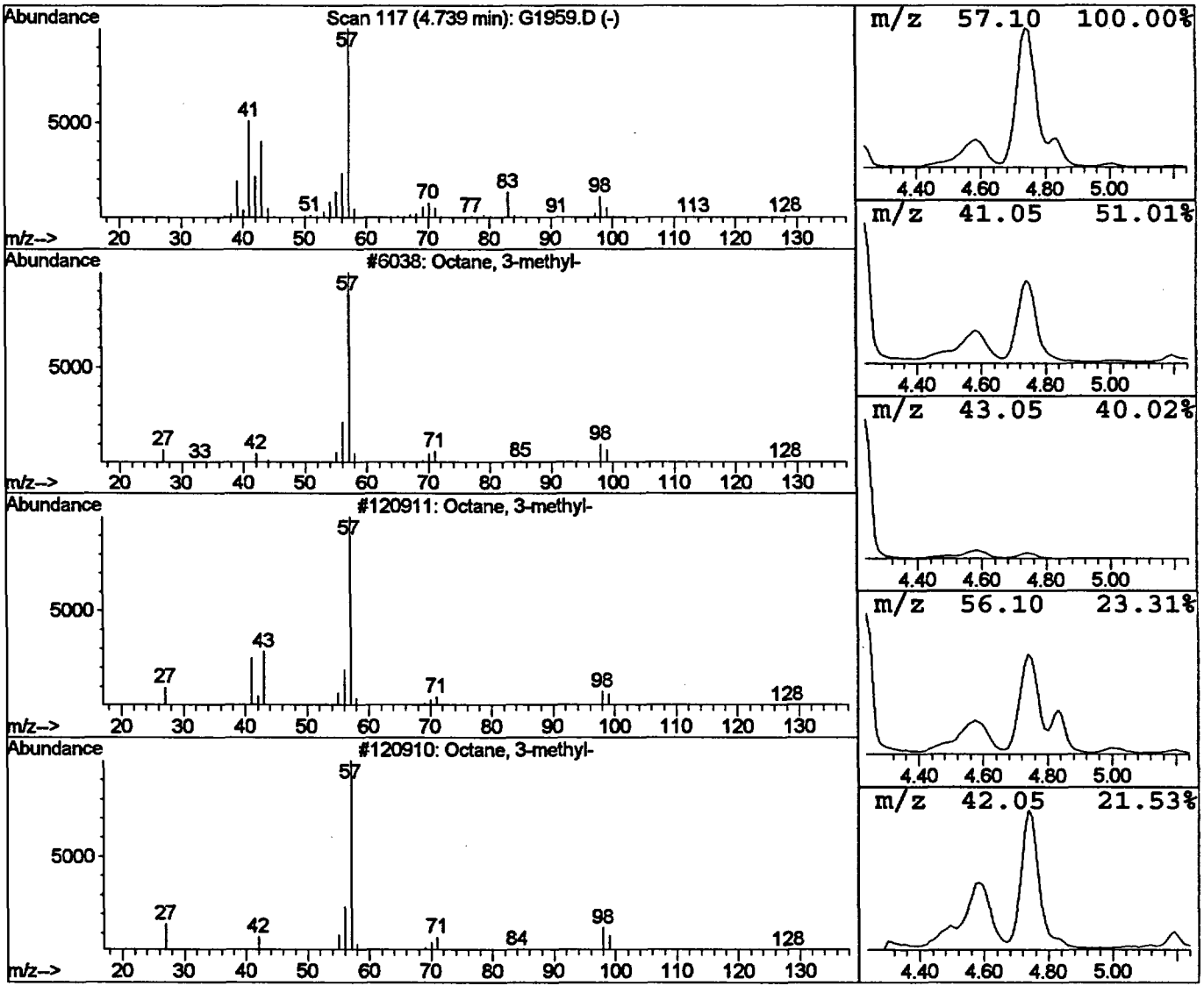
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 50 Octane, 3-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.74	105.12 ng	4293700	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	58
2	Octane, 3-methyl-	128	C9H20	002216-33-3	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	47



0718

Data File : Q:\HPCHEM\G\G19XX\G1959.D Vial: 10
Acq On : 23 Jan 98 00:46 Operator:
Sample : S HP-7G 58073-007 FFR87 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

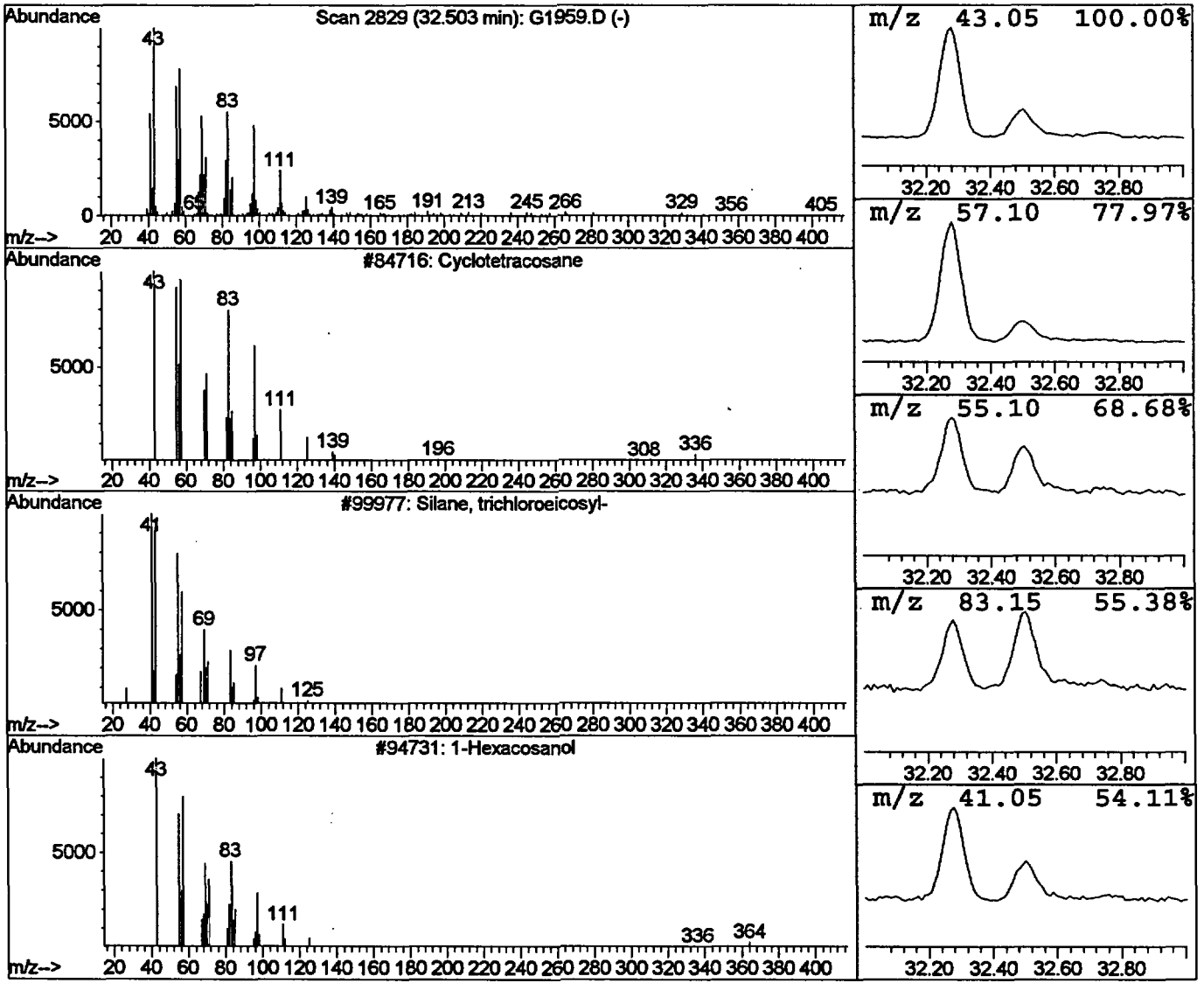
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 52 Cyclotetracosane Concentration Rank 34

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.50	15.35 ng	1339760	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetracosane	336	C24H48	000297-03-0	87
2	Silane, trichloroeicosyl-	414	C20H41Cl3Si	018733-57-8	87
3	1-Hexacosanol	382	C26H54O	000506-52-5	87



Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 23 Jan 98 00:46
Data File: Q:\HPCHEM\G\G19XX\G1959.D
Name: S HP-7G 58073-007 FFR87
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

CASE 25969
SDG# FFR76

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
Propanoic acid, 2-ox	3.68	18.3	ng	745692	ISTD01	7.07	1633900	40.0
2-Pentanone, 4-hydro	4.24	684.2	ng	27947200	ISTD01	7.07	1633900	40.0
2-Cyclohexen-1-ol	5.19	15.4	ng	629475	ISTD01	7.07	1633900	40.0
2,4-Pentanedione	5.78	19.0	ng	777114	ISTD01	7.07	1633900	40.0
3-Hexene-2,5-dione	6.00	101.2	ng	4132620	ISTD01	7.07	1633900	40.0
1,2,3-Propanetriol	6.15	13.8	ng	563609	ISTD01	7.07	1633900	40.0
2-Pentanone, 3-methy	6.55	25.5	ng	1042950	ISTD01	7.07	1633900	40.0
Pentadecanoic acid	19.38	55.0	ng	2586790	ISTD04	19.62	1881610	40.0
9-Octadecenoic acid	19.45	24.5	ng	1154620	ISTD04	19.62	1881610	40.0
METHYL 15-ACETYLHYDR	20.09	14.2	ng	666754	ISTD04	19.62	1881610	40.0
Pentadecanoic acid,	20.21	38.7	ng	1819900	ISTD04	19.62	1881610	40.0
(+-)-15-Hexadecanoli	20.38	37.4	ng	1758840	ISTD04	19.62	1881610	40.0
9-Hexadecenoic acid	20.44	48.9	ng	2300200	ISTD04	19.62	1881610	40.0
Tetradecanoic acid	20.49	78.6	ng	3696630	ISTD04	19.62	1881610	40.0
Hexadecanoic acid, 1	20.56	17.7	ng	832647	ISTD04	19.62	1881610	40.0
9-Octadecenoic acid	21.55	14.2	ng	669571	ISTD04	19.62	1881610	40.0
9-Octadecenoic acid	21.83	112.9	ng	5312480	ISTD04	19.62	1881610	40.0
Octadecanoic acid	21.93	38.8	ng	1825280	ISTD04	19.62	1881610	40.0
1-Pentadecene	22.57	26.2	ng	1136800	ISTD05	25.39	1734550	40.0
Cyclohexanepropaneni	23.47	14.7	ng	636169	ISTD05	25.39	1734550	40.0
Hexanedioic acid, di	23.59	17.6	ng	764779	ISTD05	25.39	1734550	40.0
Hexadecanoic acid, 2	24.62	45.9	ng	1990400	ISTD05	25.39	1734550	40.0
4,6-DIMETHOXY-3-(4-M	26.69	82.2	ng	3565090	ISTD05	25.39	1734550	40.0
1,6-HEPTADIENE, 5-DE	28.29	32.2	ng	1394750	ISTD05	25.39	1734550	40.0
1-Dotriacontanol	29.26	16.7	ng	1460090	ISTD06	31.51	3491850	40.0
Ergost-5-en-3-ol, (3	36.32	25.4	ng	2215680	ISTD06	31.51	3491850	40.0
Stigmasta-5,23-dien-	36.98	41.6	ng	3635420	ISTD06	31.51	3491850	40.0
Stigmast-5-en-3-ol,	38.26	42.1	ng	3671330	ISTD06	31.51	3491850	40.0
Anthracene, 9-dodecy	38.89	16.4	ng	1430450	ISTD06	31.51	3491850	40.0
STIGMASTA-4,22-DIEN-	40.26	30.8	ng	2689220	ISTD06	31.51	3491850	40.0
Additional Tentatively Identified Compounds								
Pentadecanoic acid,	19.07	13.8	ng	648655	ISTD04	19.62	1881610	40.0
3-PYRROLIDINOL	5.59	13.5	ng	553040	ISTD01	7.07	1633900	40.0
3,4-DIAMINO-1,2,4-TR	7.22	13.3	ng	544309	ISTD01	7.07	1633900	40.0
10-Octadecenoic acid	21.59	12.7	ng	599583	ISTD04	19.62	1881610	40.0
Thymidine	24.22	10.9	ng	473196	ISTD05	25.39	1734550	40.0
Heptadecanoic acid	20.97	10.5	ng	495351	ISTD04	19.62	1881610	40.0
1-ISOPROPYL-4-METHYL	33.55	10.5	ng	917700	ISTD06	31.51	3491850	40.0
5.alpha.-Pregnan-20-	25.66	10.0	ng	434291	ISTD05	25.39	1734550	40.0
5.ALPHA.-STIGMAST-3-	39.67	9.9	ng	864253	ISTD06	31.51	3491850	40.0
17-Octadecenal	31.62	9.6	ng	841230	ISTD06	31.51	3491850	40.0

CASE 25969
SDG# FFR76

Hydrocarbons: n-Alkanes #A76 58073-007 FFR87 01/23/98 0046

Dodecane	21.26	9.1 ng	427797	ISTD04	19.62	1881610	40.0
Decane	24.29	17.0 ng	738633	ISTD05	25.39	1734550	40.0
Octadecane	26.26	12.5 ng	541736	ISTD05	25.39	1734550	40.0
Heptacosane	29.05	15.9 ng	1385090	ISTD06	31.51	3491850	40.0
Eicosane	30.85	5.8 ng	507023	ISTD06	31.51	3491850	40.0
Tricosane	32.28	39.0 ng	3406840	ISTD06	31.51	3491850	40.0
Octacosane	35.60	19.7 ng	1720400	ISTD06	31.51	3491850	40.0
Subtotal:		119.0 ng					

Hydrocarbons: Branched Alkanes

Heptane, 2,5-dimethy	3.99	11.0 ng	449910	ISTD01	7.07	1633900	40.0
Octane, 4-methyl-	4.59	90.3 ng	3687120	ISTD01	7.07	1633900	40.0
Octane, 3-methyl-	4.74	105.1 ng	4293700	ISTD01	7.07	1633900	40.0
Subtotal:		206.4 ng					

Hydrocarbons: Cyclic Alkanes

~~Cyclododecane~~	~~20.83~~	~~71.3 ng~~	3352070	ISTD04	19.62	1881610	40.0
Cyclotetracosane	32.50	15.3 ng	1339760	ISTD06	31.51	3491850	40.0
Subtotal:		86.6 ng					

Total Alkane Conc: (412.0 ng −71.3) x D.F. = 8600 ng/kg

G1959.D LIN.M Mon Jan 26 16:18:56 1998

FFR87 58073-007 01/27/98

TIC: G1959.D

S HP-7G 58073-007 FFR87 6/13/98 00:46

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.685	rVB	0.154	745692	3.623	3.777
2	3.992	rBV	0.225	449910	3.879	4.105
3	4.238	rVV	0.297	27947184	4.105	4.401
4	4.586	rVV	0.266	3687117	4.401	4.668
5	4.739	rVV	0.123	4293697	4.668	4.791
6	4.831	rVB	0.164	3170139	4.791	4.954
7	5.190	rVB	0.246	629475	5.077	5.323
8	5.497	rBV	0.102	190531	5.435	5.538
9	5.589	rVV	0.123	553040	5.538	5.661
10	5.784	rVB	0.256	777114	5.661	5.917
11	5.999	rBV	0.143	4132615	5.917	6.060
12	6.152	rVB	0.123	563609	6.111	6.234
13	6.367	rVB	0.154	3844399	6.316	6.469
14	6.551	rVB	0.113	1042945	6.510	6.623
15	6.725	rBV	0.113	3393671	6.674	6.787
16	6.838	rVB	0.133	321387	6.787	6.920
17	7.063	rBV	0.143	1633904	6.981	7.125
18	7.217	rVV	0.164	544309	7.125	7.288
19	7.452	rBV	0.195	4772626	7.360	7.555
20	8.200	rVB	0.143	2007149	8.128	8.271
21	10.083	rBV	0.235	1684310	10.012	10.247
22	14.280	rBV	0.184	2499153	14.188	14.373
23	15.437	rVB	0.143	150372	15.386	15.529
24	16.297	rBV	0.143	1602883	16.236	16.379
25	18.181	rBV	0.164	2205056	18.109	18.273
26	18.457	rBV	0.113	325625	18.416	18.529
27	18.703	rBV	0.174	257597	18.590	18.764
28	18.795	rVB	0.092	153288	18.764	18.857
29	19.072	rBV	0.113	648655	19.000	19.113
30	19.153	rVB	0.082	286873	19.113	19.194
31	19.379	rBV	0.113	2586789	19.307	19.420
32	19.450	rVB	0.092	1154616	19.420	19.512
33	19.624	rBV	0.092	1881610	19.563	19.655
34	19.676	rVB	0.051	168357	19.655	19.706
35	19.921	rBV	0.102	253458	19.860	19.962
36	20.085	rBV	0.123	666754	20.003	20.126
37	20.208	rBV	0.174	1819901	20.126	20.300
38	20.382	rBV	0.102	1758838	20.310	20.413
39	20.443	rVV	0.051	2300195	20.413	20.464
40	20.495	rVV	0.072	3696628	20.464	20.535
41	20.556	rVB	0.133	832647	20.535	20.669
42	20.699	rBV	0.061	214189	20.669	20.730
43	20.832	rBV	0.164	3352068	20.740	20.904
44	20.965	rVB	0.102	495351	20.904	21.006
45	21.037	rBV	0.072	356307	21.006	21.078
46	21.119	rBV	0.072	347022	21.078	21.150
47	21.191	rVV	0.072	388671	21.150	21.221
48	21.262	rVV	0.072	427797	21.221	21.293
49	21.314	rVB	0.061	149185	21.293	21.354
50	21.549	rVV	0.072	669571	21.498	21.569
51	21.590	rVB	0.061	599583	21.569	21.631
52	21.682	rVB	0.072	154873	21.641	21.713
53	21.825	rBV	0.133	5312484	21.754	21.887
54	21.928	rVB	0.164	1825277	21.887	22.051
55	22.092	rVB	0.102	281676	22.061	22.163
56	22.214	rBV	0.113	298986	22.163	22.276

57	22.327	rBV	0.072	444038	22.276	22.348
58	22.368	rVB	0.061	452856	22.348	22.409
59	22.573	rBV	0.123	1136796	22.501	22.624
60	22.665	rVV	0.143	3868989	22.624	22.767
61	22.788	rVB	0.102	161216	22.767	22.870
62	23.033	rBV	0.072	146826	22.992	23.064
63	23.300	rVB	0.102	246623	23.259	23.361
64	23.474	rVV	0.113	636169	23.412	23.525
65	23.586	rVV	0.113	764779	23.525	23.637
66	23.822	rVB	0.143	296236	23.801	23.945
67	24.221	rBV	0.092	473196	24.160	24.252
68	24.293	rVB	0.123	738633	24.252	24.374
69	24.518	rBV	0.082	286264	24.477	24.559
70	24.620	rVB	0.246	1990400	24.559	24.804
71	25.030	rBV	0.143	852508	24.938	25.081
72	25.388	rBV	0.133	1734550	25.316	25.449
73	25.664	rBV	0.143	434291	25.593	25.736
74	26.105	rVB	0.123	257419	26.064	26.186
75	26.258	rBV	0.133	541736	26.197	26.330
76	26.688	rBV	0.276	3565091	26.494	26.770
77	27.139	rBV	0.082	171615	27.067	27.149
78	27.528	rVB	0.113	167956	27.487	27.599
79	27.671	rVB	0.215	410920	27.620	27.835
80	28.285	rVB	0.195	1394750	28.193	28.388
81	29.053	rBV	0.195	1385091	28.961	29.155
82	29.258	rVB	0.276	1460093	29.166	29.442
83	30.855	rBV	0.143	507023	30.763	30.906
84	31.489	rBV	0.184	3491850	31.387	31.571
85	31.623	rVB	0.164	841230	31.571	31.735
86	31.930	rVB	0.143	330313	31.878	32.022
87	32.278	rVB	0.225	3406836	32.186	32.411
88	32.503	rBV	0.256	1339755	32.421	32.677
89	32.749	rVB	0.113	198391	32.718	32.831
90	33.547	rVB	0.184	917700	33.475	33.660
91	34.274	rVB	0.235	674750	34.202	34.438
92	34.817	rVB	0.174	496447	34.745	34.919
93	35.605	rVB	0.246	1720399	35.513	35.758
94	36.321	rVB	0.256	2215681	36.219	36.475
95	36.977	rBV	0.297	3635420	36.844	37.140
96	38.256	rVB	0.328	3671330	38.123	38.451
97	38.891	rVB	0.235	1430449	38.778	39.014
98	39.505	rVV	0.143	325178	39.454	39.597
99	39.669	rVB	0.256	864253	39.618	39.874
100	40.263	rVB	0.430	2689222	40.068	40.498

CASE 25969
SDG# FFR76

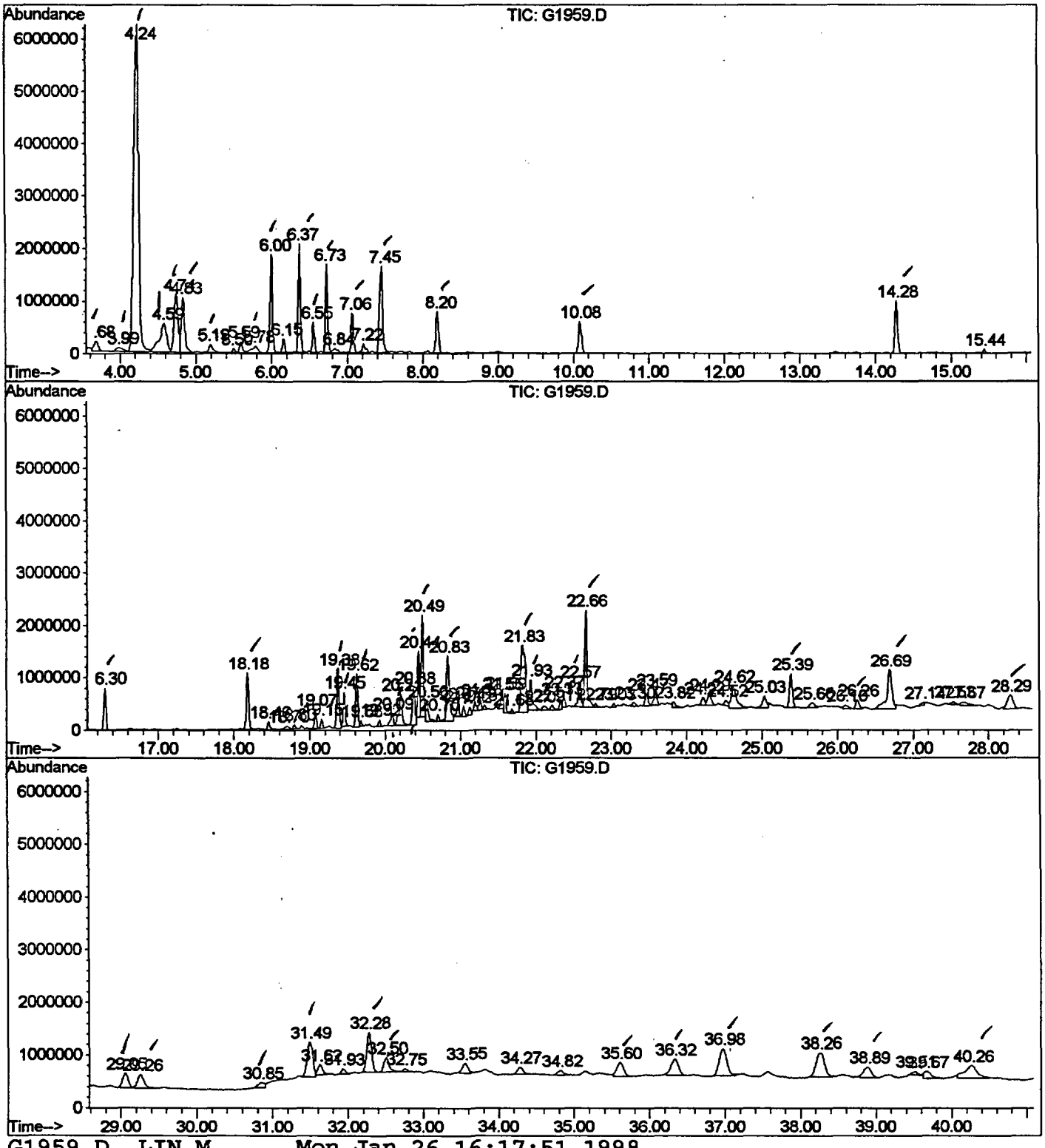
FFR87 58073-007 W 01-27-98

HP-7G 01/23/98 ~~00:01~~ 00:46 CP 2/4/98

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1959.D
Operator :
Acquired : 23 Jan 98 00:46 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-007 FFR87
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 10
Quant File :CLPME7.RES



G1959.D LIN.M Mon Jan 26 16:17:51 1998

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR91

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-008

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1960

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 29 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.1

Number TICs Found: 30

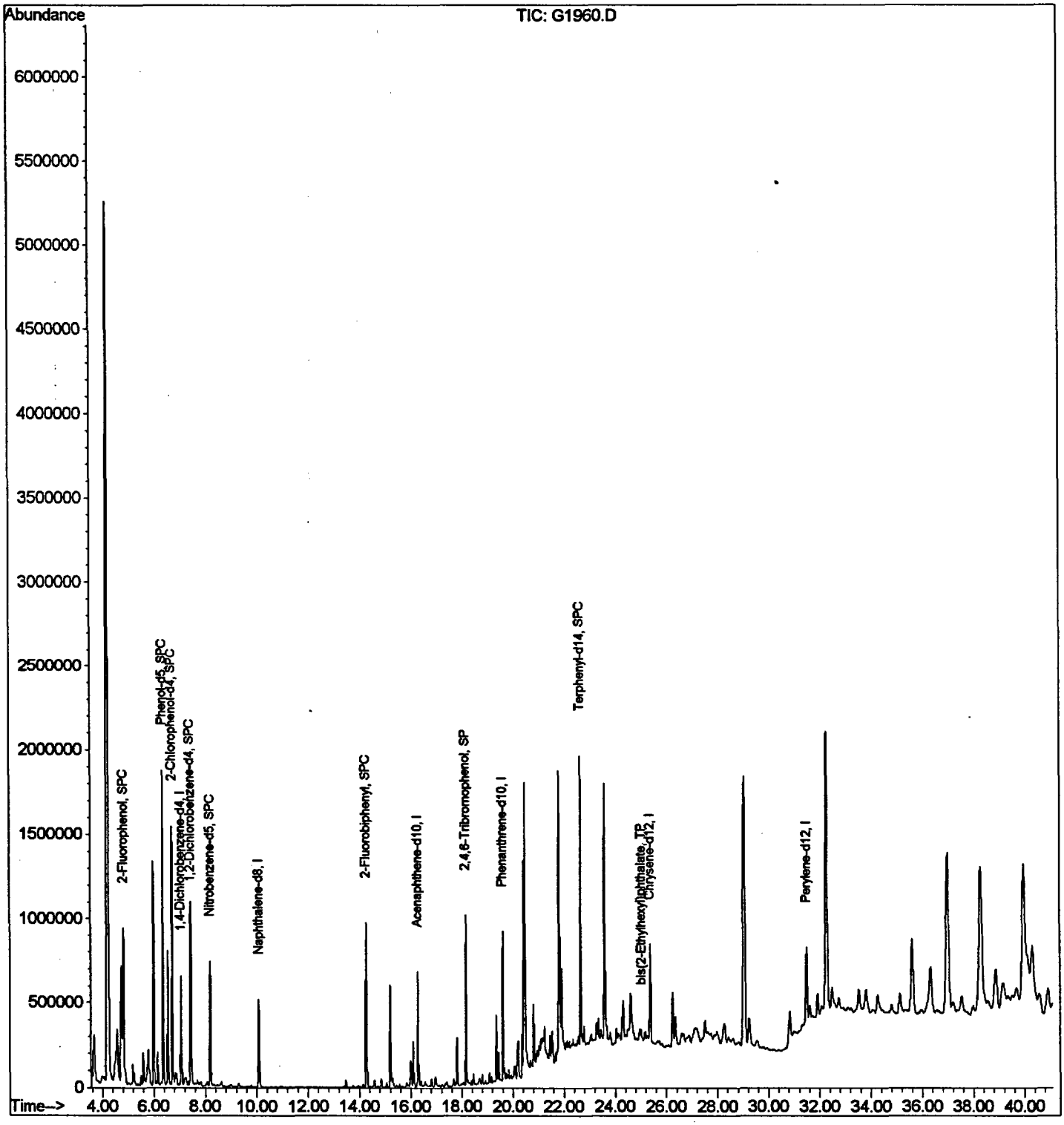
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.68	800.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.22	15000.	JNAB
3.	104-76-7	1-Hexanol, 2-ethyl-	4.75	1800.	JN
4.		Unknown	5.79	720.	J
5.		trans-3-Hexene-2,5-dione	6.00	2000.	JB
6.		Unknown	6.55	1000.	J
7.	1135-66-6	Isolongifolene	15.21	1000.	JN
8.		Unknown	17.82	400.	J
9.		Unknown acid type	19.37	390.	J
10.		Unknown	20.44	1400.	J
11.	57-10-3	Hexadecanoic acid	20.49	2100.	JN
12.		Unknown	21.55	390.	J
13.		Unknown	21.82	3000.	J
14.	57-11-4	Octadecanoic acid	21.94	810.	JN
15.	511-15-9	Totarol	23.60	2400.	JN
16.	19047-85-9	Phosphonic acid, dioctadecyl	24.32	530.	JN
17.	23470-00-0	Hexadecanoic acid, 2-hydroxy	24.62	840.	JN
18.		Unknown	26.37	390.	J
19.		Unknown	28.28	410.	J
20.	112-92-5	1-Octadecanol + unknown	29.25	500.	JN
21.		Unknown	32.49	490.	J
22.	4651-51-8	Ergost-5-en-3-ol, (3.beta.)-	36.33	1000.	JN
23.	14021-23-9	Taraxerol methyl ether	37.00	3400.	JN
24.		Unknown	37.56	480.	J
25.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.28	3800.	JN
26.		Unknown	38.88	950.	J
27.		Unknown	39.14	720.	J
28.	5912-72-1	28-Norolean-17-en-3-one	39.97	4300.	JN
29.		Unknown	40.31	1400.	J
30.		Unknown	40.93	430.	J

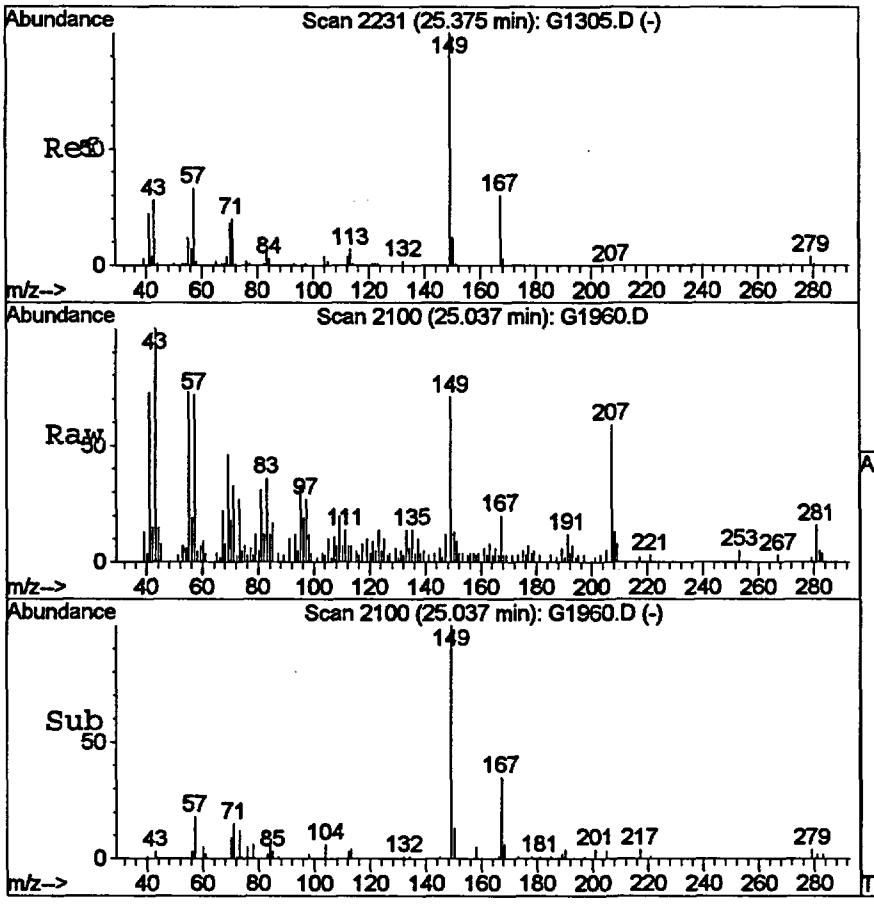
Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:21 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

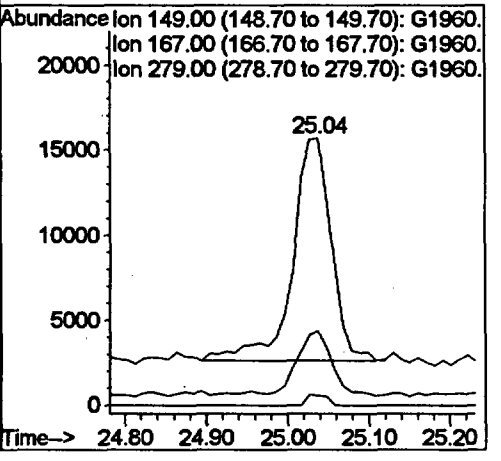


CASE 25969
SDG# FFR76



#70
bis(2-Ethylhexyl)phthalate
Concen: 2.67 ng
RT: 25.04 min / Scan# 2100
Delta R.T. 0.03 min
Lab File: G1960.D
Acq: 23 Jan 98 1:32

Tgt Ion:149	Resp:	43044	
Ion	Ratio	Lower	Upper
149	100		
167	0.0	10.6	50.6#
279	0.0	0.0	23.8
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:21 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	241360	40.00	ng	0.00
17) Naphthalene-d8	10.09	136	697355	40.00	ng	0.02
31) Acenaphthene-d10	16.29	164	331446	40.00	ng	0.00
51) Phenanthrene-d10	19.62	188	616345	40.00	ng	0.02
63) Chrysene-d12	25.39	240	466225	40.00	ng	0.03
71) Perylene-d12	31.51	264	483630	40.00	ng	0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.83	112	819053	113.77	ng	0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery = 75.85%			
3) Phenol-d5	6.36	99	1215307	127.80	ng	0.02
Surrogate Spike 150.000	Range 24 - 113		Recovery = 85.20%			
7) 1,2-Dichlorobenzene-d4	7.43	152	297214	62.38	ng	0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 62.38%			
8) 2-Chlorophenol-d4	6.72	132	862594	118.06	ng	0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 78.71%			
18) Nitrobenzene-d5	8.20	82	485402	78.36	ng	0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 78.36%			
35) 2-Fluorobiphenyl	14.28	172	875039	89.01	ng	0.02
Surrogate Spike 100.000	Range 30 - 115		Recovery = 89.01%			
52) 2,4,6-Tribromophenol	18.18	330	239802	156.44	ng	0.02
Surrogate Spike 150.000	Range 19 - 122		Recovery = 104.29%			
65) Terphenyl-d14	22.66	244	1082821	112.42	ng	0.02
Surrogate Spike 100.000	Range 18 - 137		Recovery = 112.42%			
Target Compounds						Qvalue
70) bis(2-Ethylhexyl)phthalate	25.04	149	43044	2.67	ng	# 49

(#) = qualifier out of range (m) = manual integration 0730
G1960.D CLPME7.M Mon Jan 26 15:21:31 1998 Page 1

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

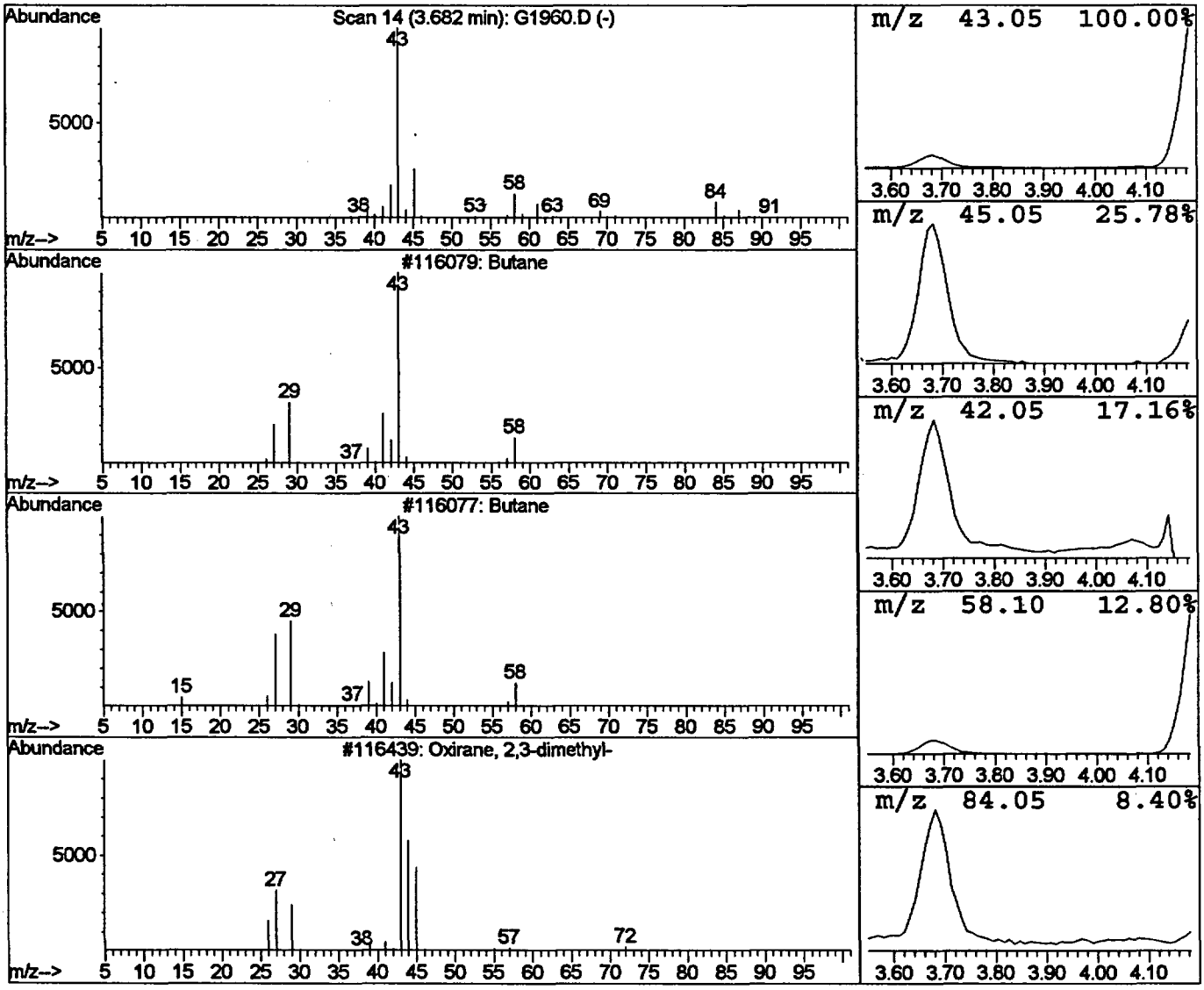
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 41 Butane UNKNOWN COMPOUND no. 27-98 Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	33.90 ng	1166830	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	25
2	Butane	58	C4H10	000106-97-8	9
3	Oxirane, 2,3-dimethyl-	72	C4H8O	003266-23-7	9



0731

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

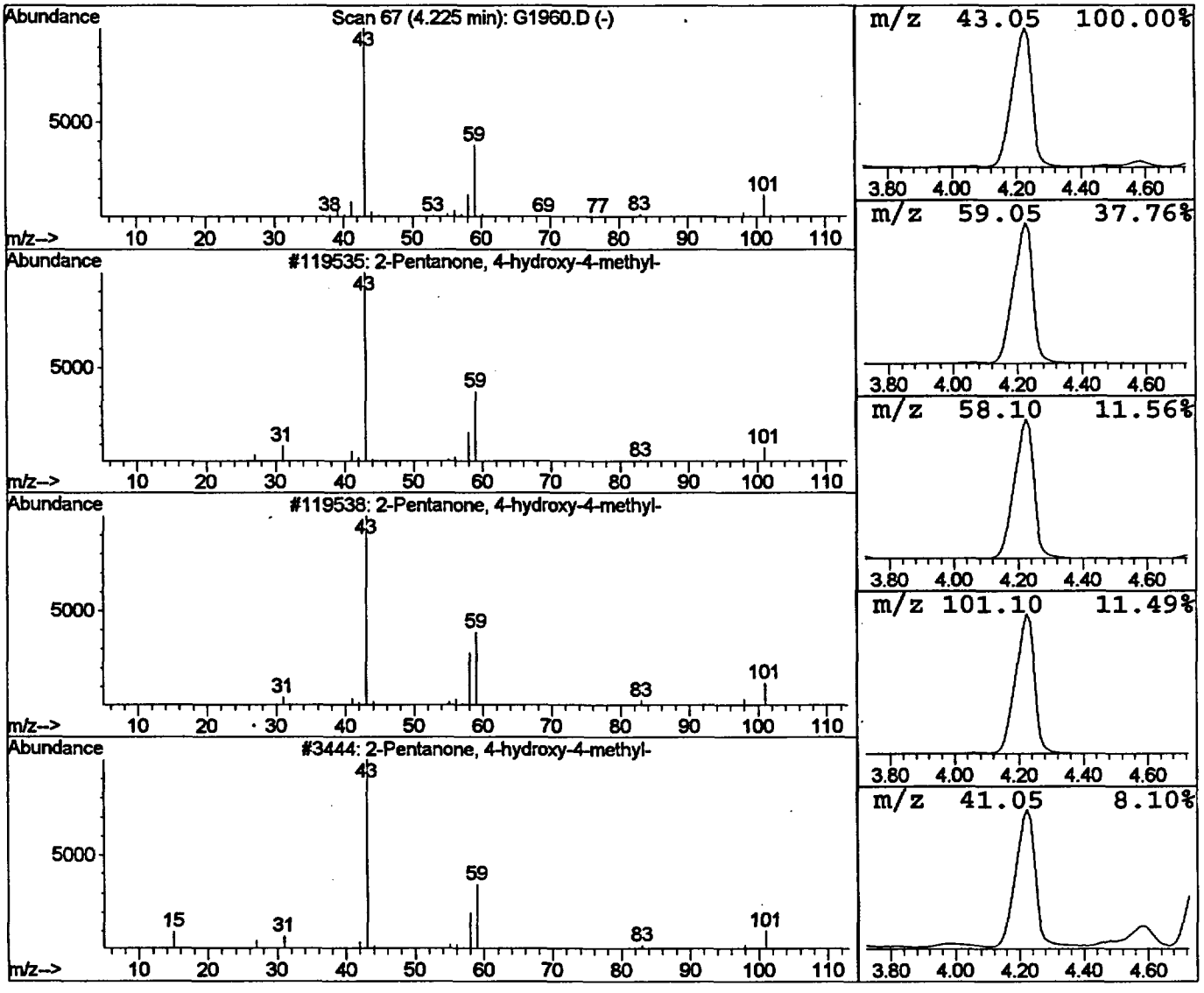
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.22	639.03 ng	21995100	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (A)	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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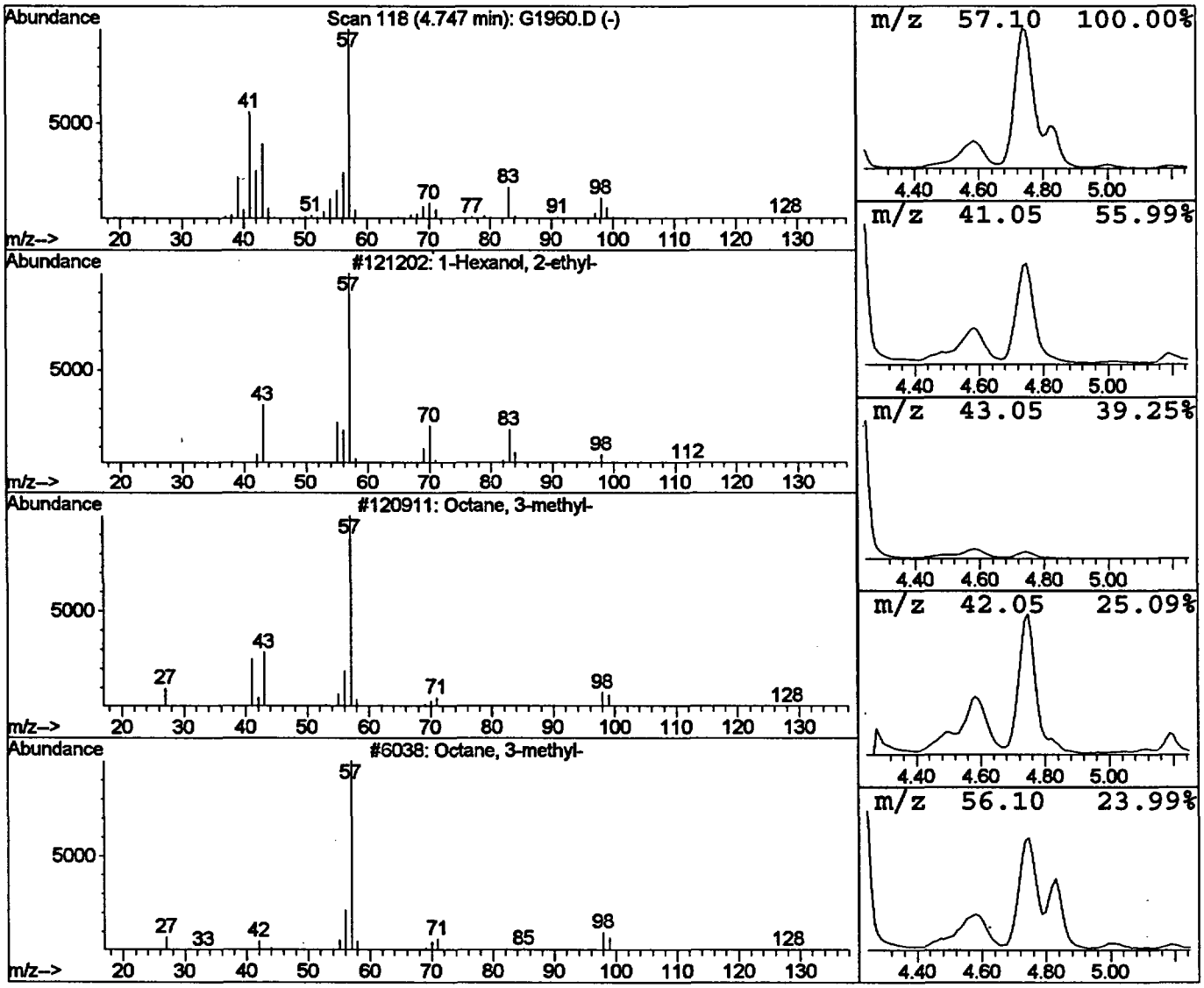
Peak Number 2 1-Hexanol, 2-ethyl- Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.75	77.41 ng	2664550	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexanol, 2-ethyl-	130	C8H18O	000104-76-7	50
2	Octane, 3-methyl-	128	C9H20	002216-33-3	47
3	Octane, 3-methyl-	128	C9H20	002216-33-3	47



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

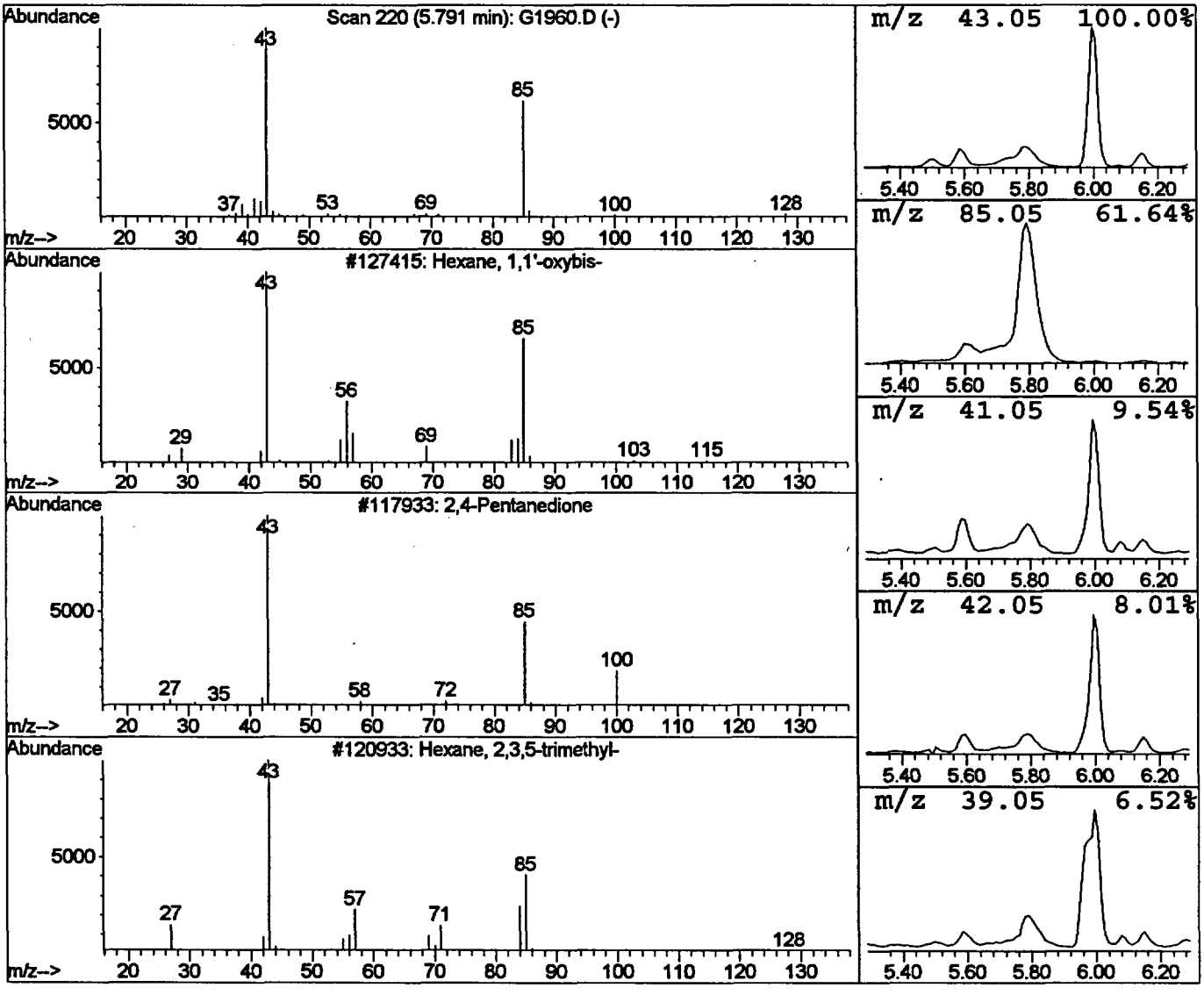
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 Hexane, 1,1'-oxybis- UNKNOWN COMPOUND no 1/27/98 Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.79	30.51 ng	1050080	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 1,1'-oxybis-	186	C12H26O	000112-58-3	56
2	2,4-Pentanedione	100	C5H8O2	000123-54-6	39
3	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	28



0734

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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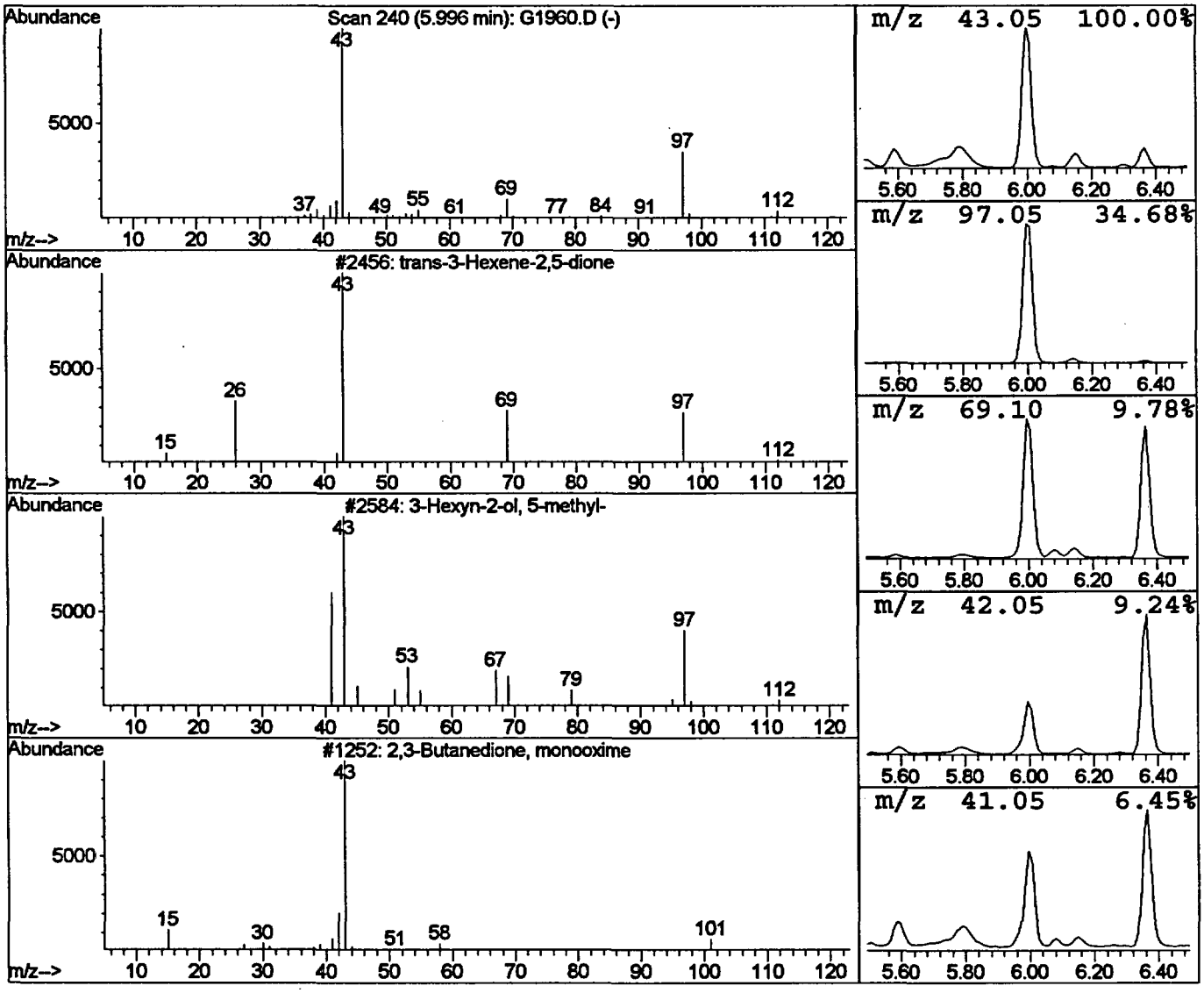
Peak Number 4 trans-3-Hexene-2,5-dione Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.00	86.43 ng	2974930	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
2	3-Hexyn-2-ol, 5-methyl-	112	C7H12O	023293-50-7	9
3	2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	9



0735

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

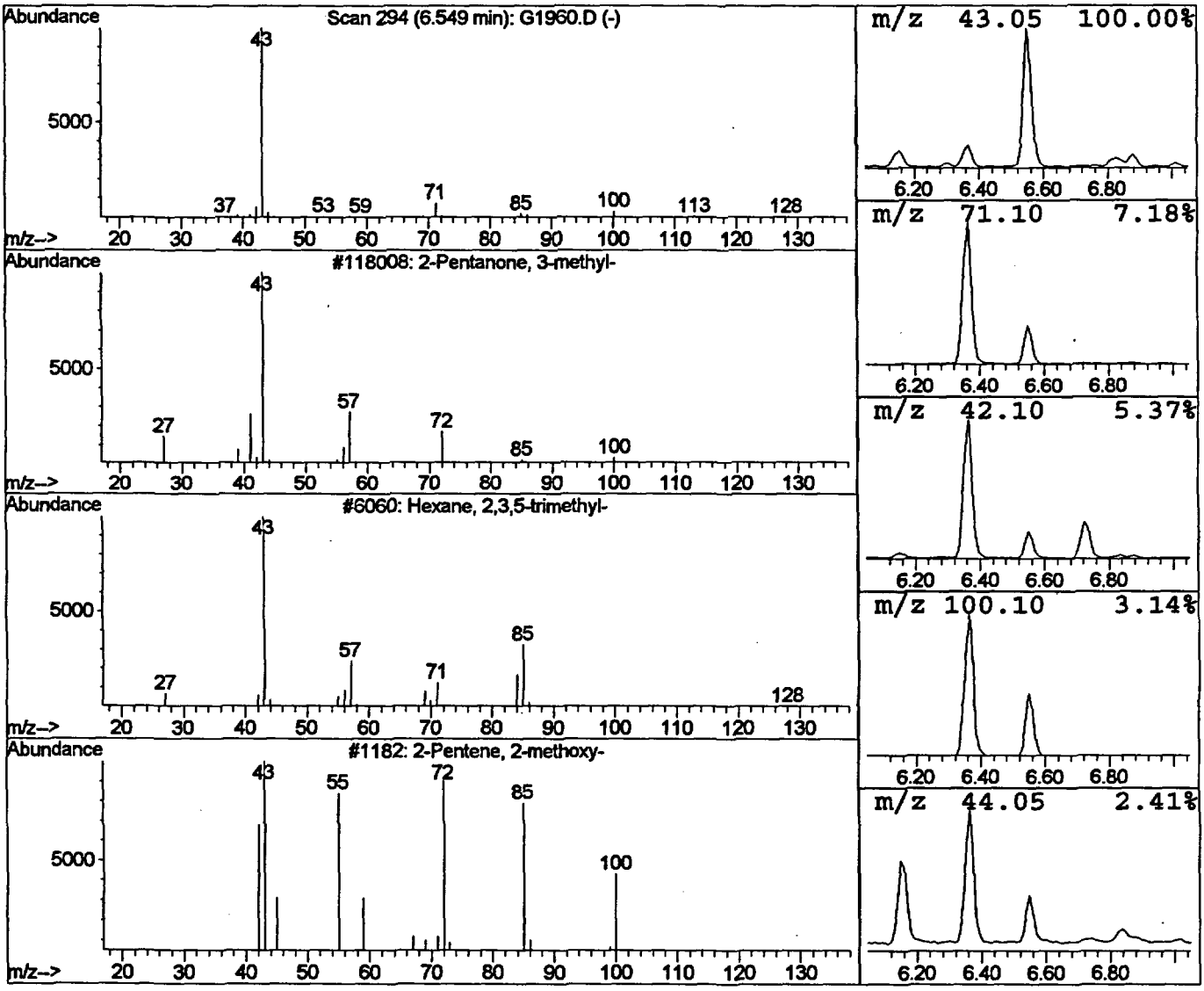
****

Peak Number 5 2-Pentanone, 3-methyl- Concentration Rank 17

UNKNOWN COMPOUND no 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.55	43.34 ng	1491880	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2	Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	7
3	2-Pentene, 2-methoxy-	100	C6H12O	061142-47-0	7



0736

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

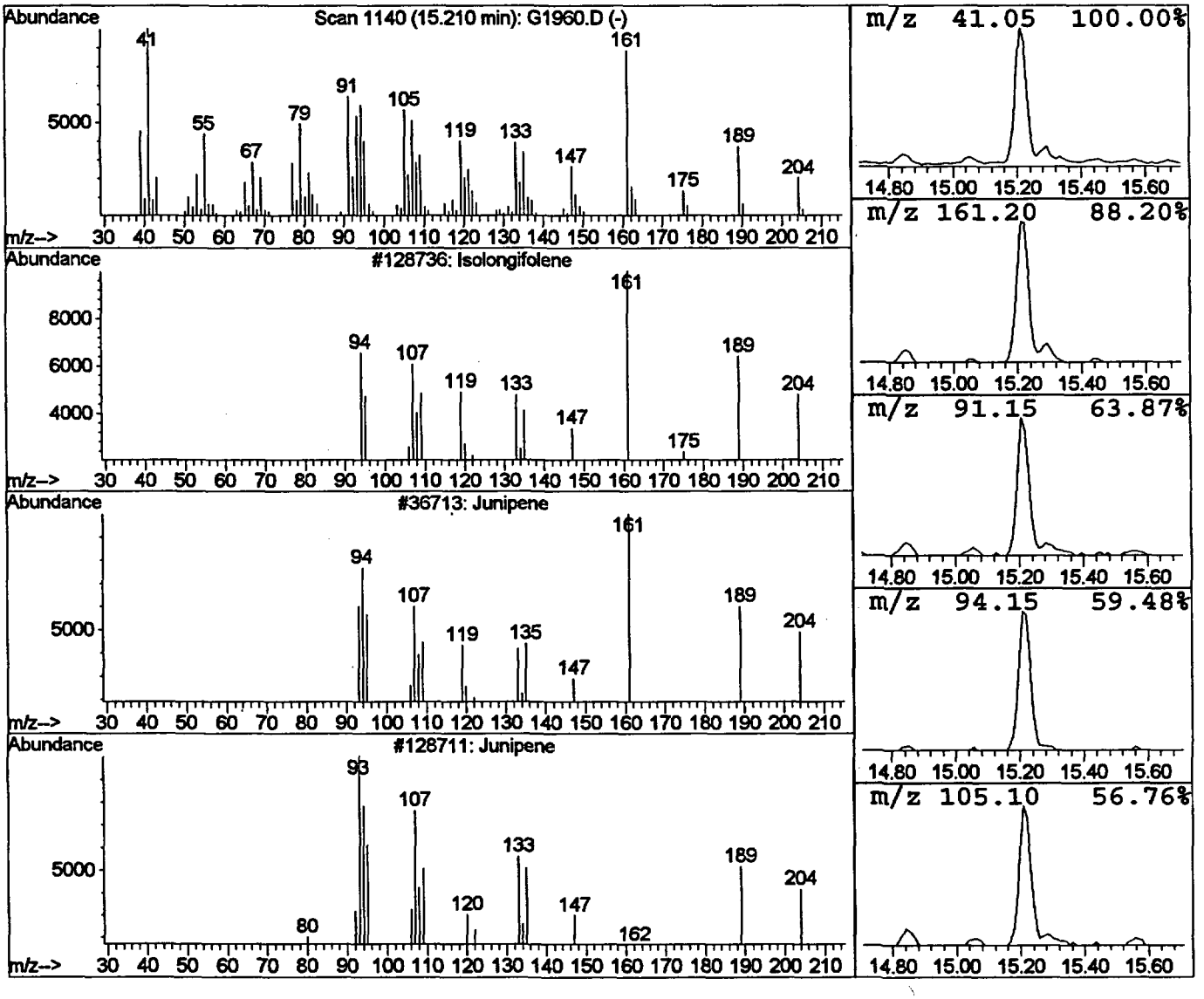
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 6 Isolongifolene Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.21	42.40 ng	1536250	Acenaphthene-d10	16.29

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Isolongifolene	204	C15H24	001135-66-6	99
2	Junipene	204	C15H24	000475-20-7	99
3	Junipene	204	C15H24	000475-20-7	97



0737

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

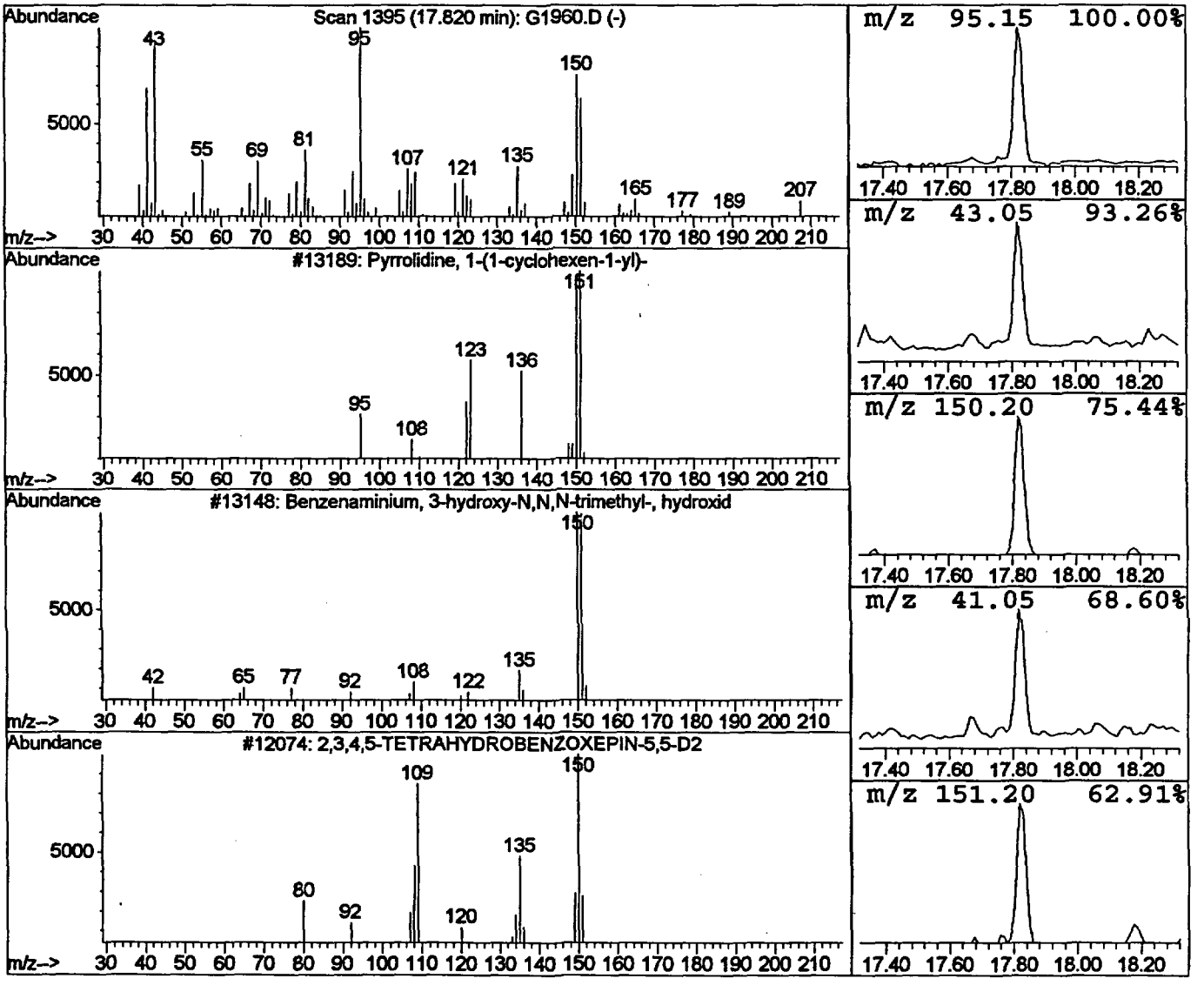
****

Peak Number 8 Pyrrolidine, 1-(1-cyclohexen-1 Concentration Rank 35

UNKNOWN COMPOUND wo1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.82	16.92 ng	613067	Acenaphthene-d10	16.29

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pyrrolidine, 1-(1-cyclohexen-1-yl)-	151	C10H17N	001125-99-1	52
2	Benzenaminium, 3-hydroxy-N,N,N-trim	151	C9H13NO	031061-59-3	42
3	2,3,4,5-TETRAHYDROBENZOXEPIN-5,5-D2	148	C10H10D2O	041807-17-4	41



0738

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

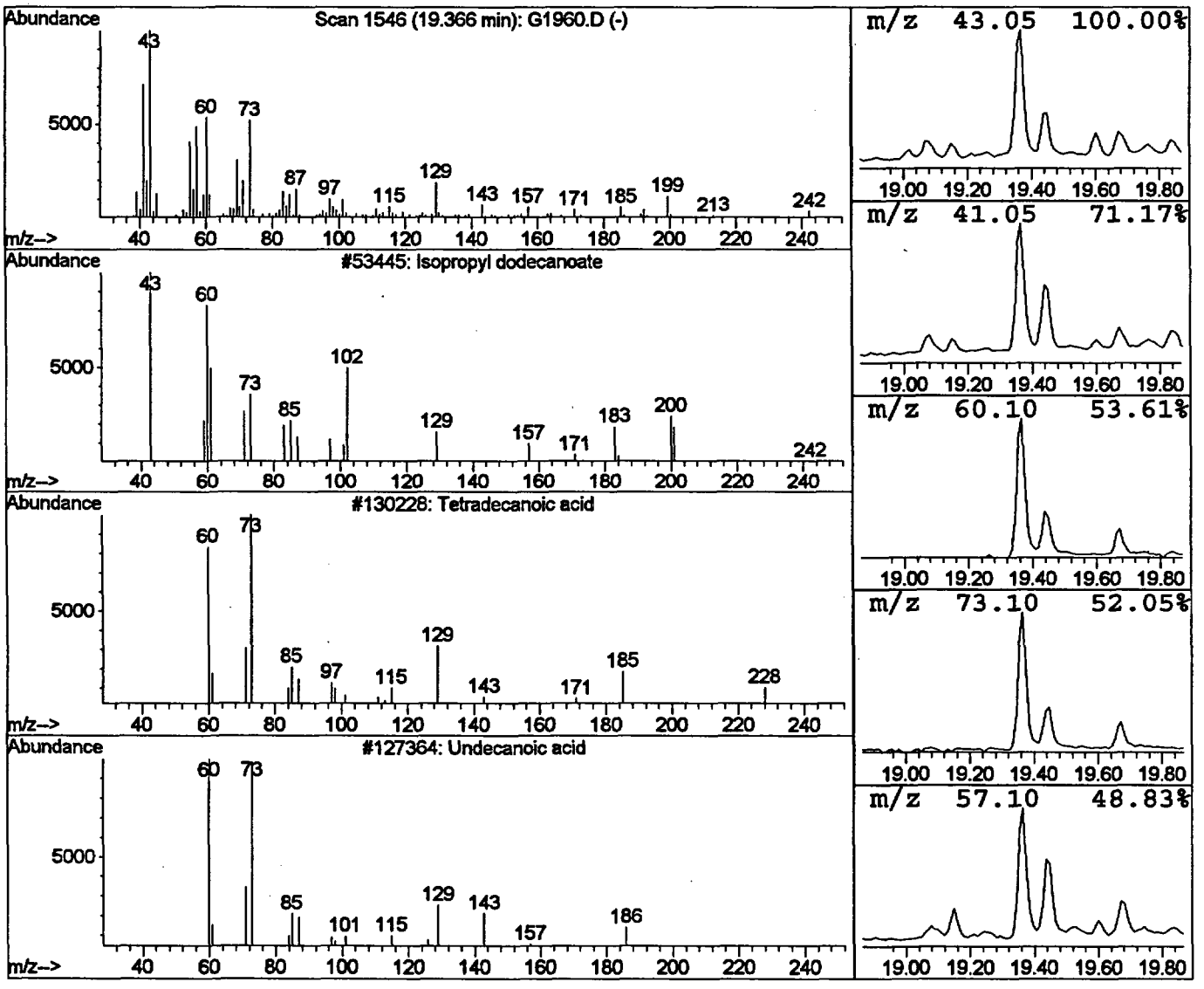
****

Peak Number 9 ~~Isopropyl dodecanoate~~ Concentration Rank 36

Unknown Acid Type mol->7-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.37	16.83 ng	707701	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Isopropyl dodecanoate	242	C15H30O2	000000-00-0	83
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	81
3	Undecanoic acid	186	C11H22O2	000112-37-8	80



0739

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D
Acq On : 23 Jan 98 1:32
Sample : S HP-7G 58073-008 FFR91
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial: 41
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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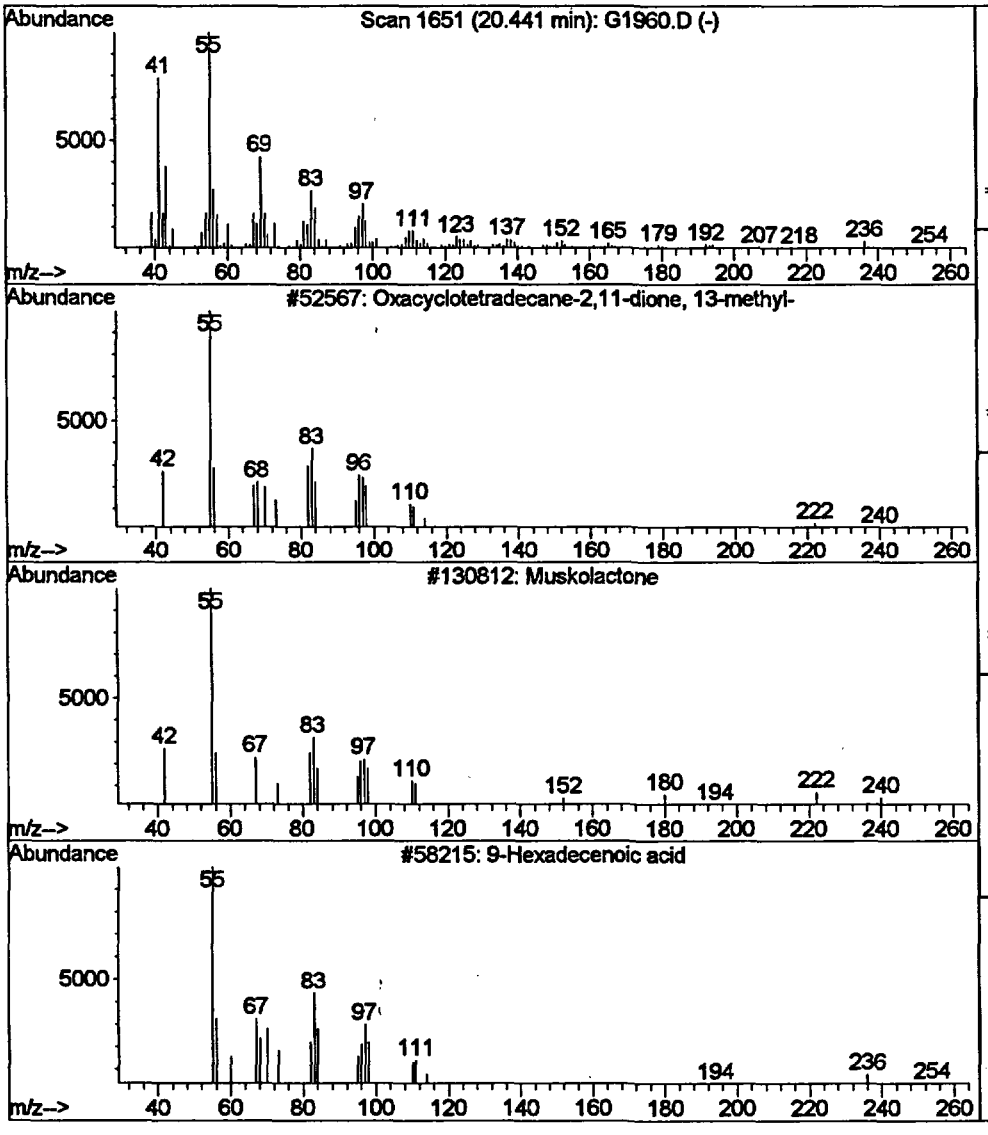
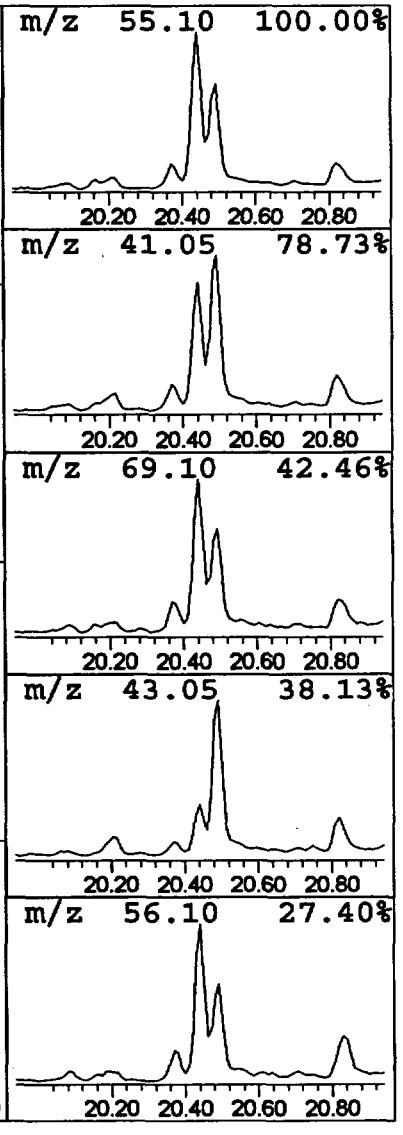
Peak Number 10 Oxacyclotetradecane-2,11-dione Concentration Rank 14

UNKNOWN COMPOUND mo 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.44	59.39 ng	2497780	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxacyclotetradecane-2,11-dione, 13-	240	C14H24O3	074685-36-2	74
2	Muskolactone	240	C15H28O2	000106-02-5	72
3	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	64





0740

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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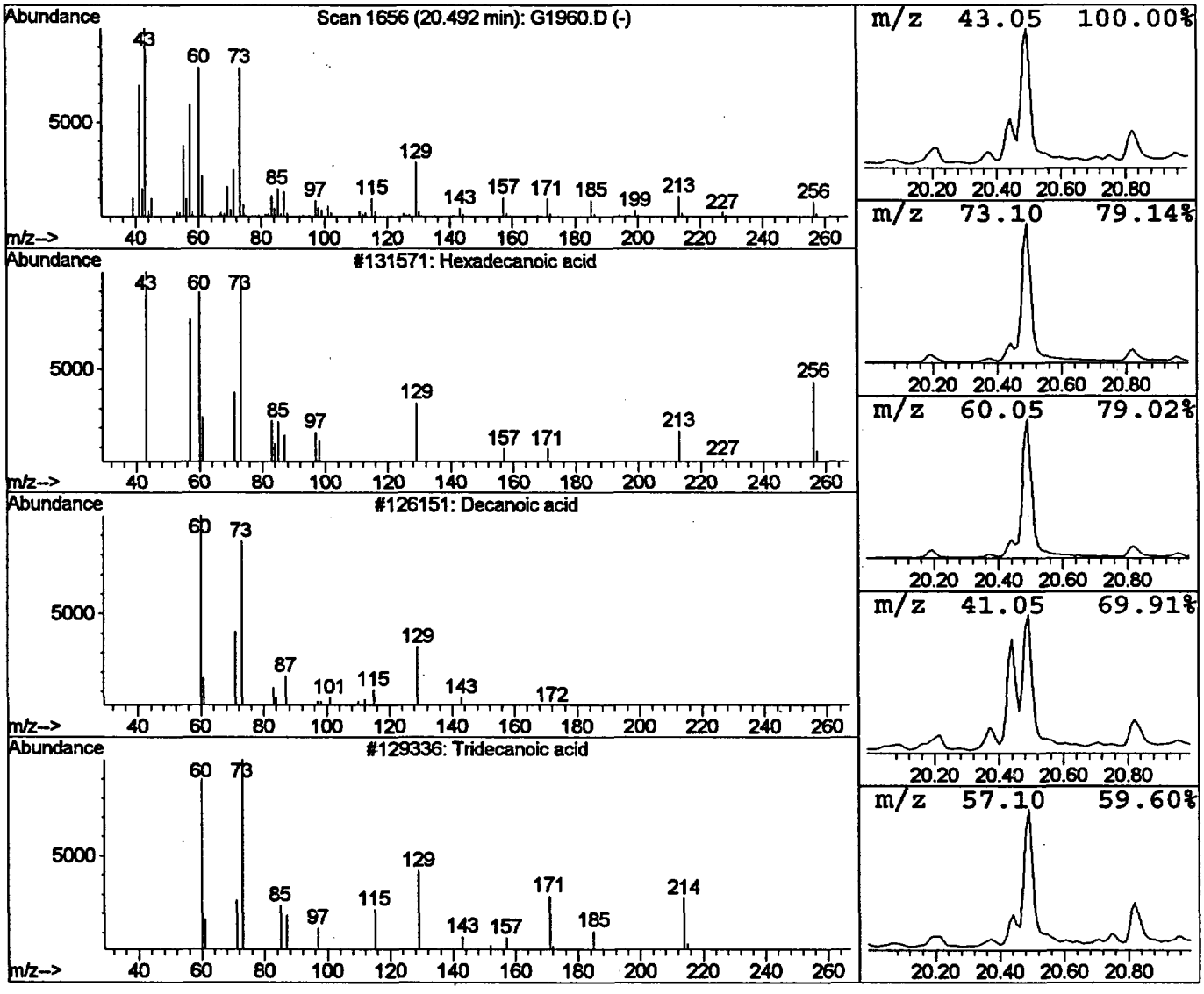
Peak Number 11 Hexadecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.49	90.52 ng	3807010	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid	256	C16H32O2	000057-10-3	91
2	Decanoic acid	172	C10H20O2	000334-48-5	76
3	Tridecanoic acid	214	C13H26O2	000638-53-9	72



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

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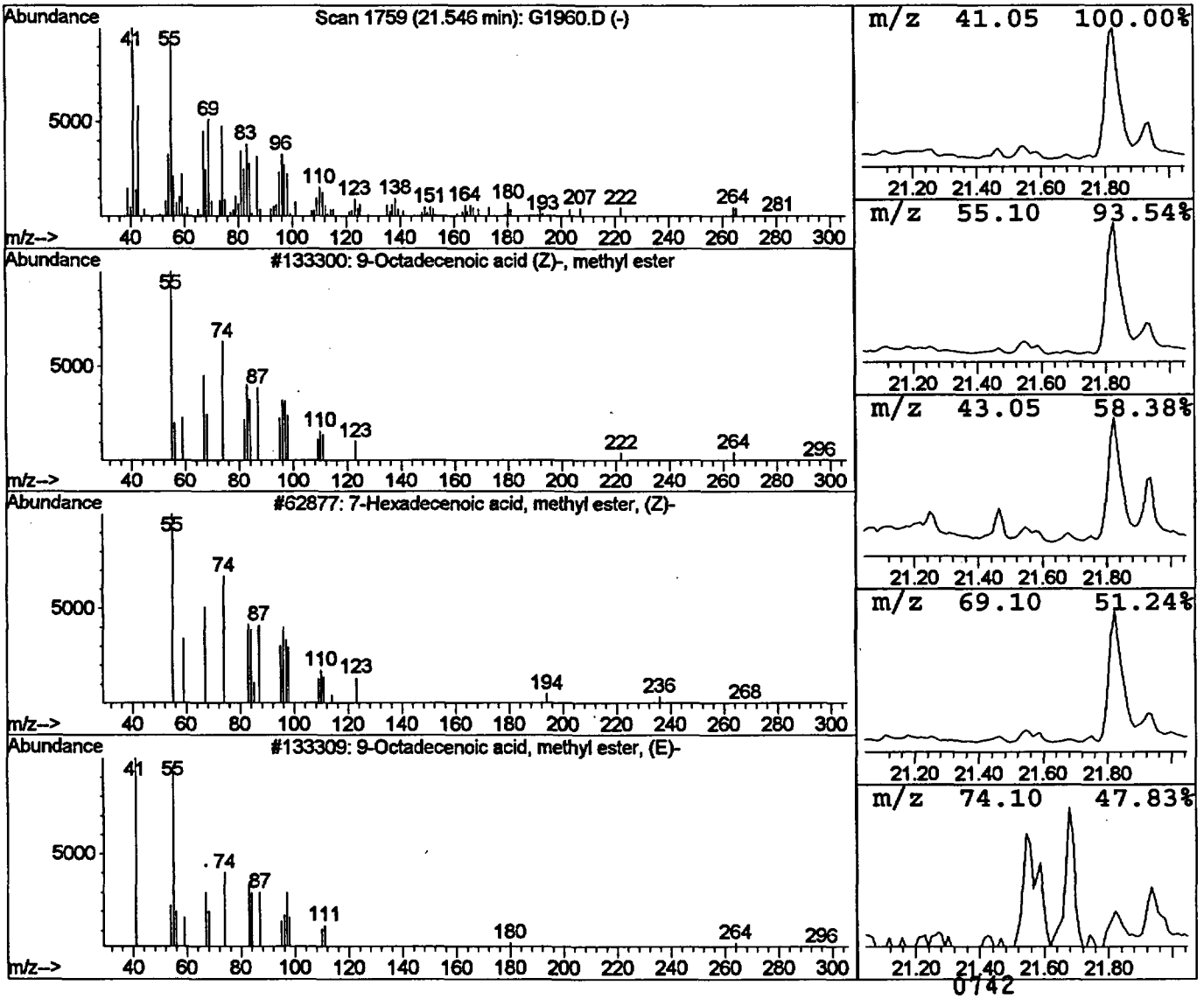
Peak Number 12 9-Octadecenoic acid (Z)-, meth Concentration Rank 37

UNKNOWN COMPOUND
w01-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.55	16.64 ng	699762	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-, methyl es	296	C19H36O2	000112-62-9	95
2	7-Hexadecenoic acid, methyl ester,	268	C17H32O2	056875-67-3	91
3	9-Octadecenoic acid, methyl ester,	296	C19H36O2	001937-62-8	87



0742

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
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Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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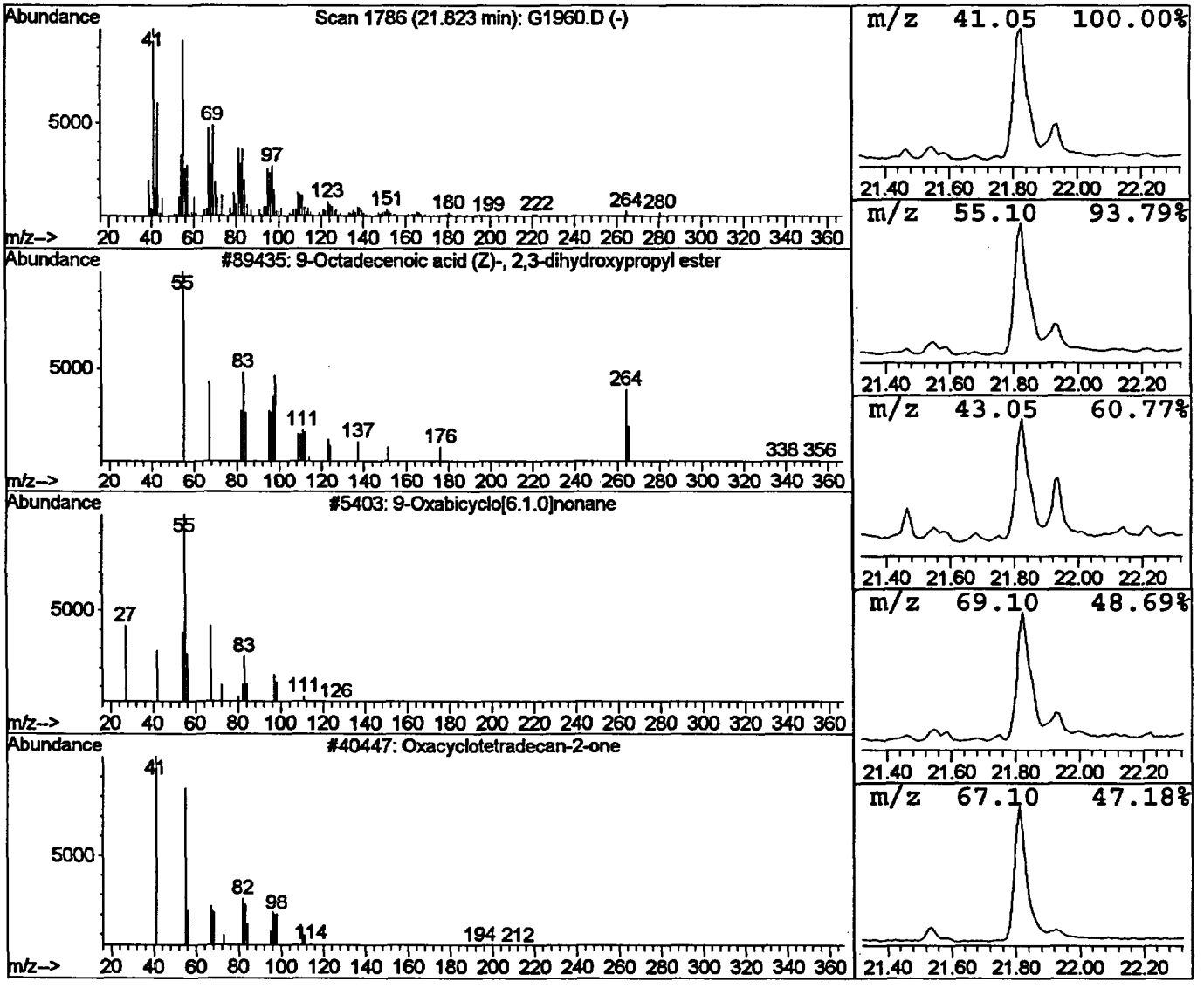
Peak Number 13 9-Octadecenoic acid (Z)-, 2,3- Concentration Rank 7

UNKNOWN COMPOUND cm1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.82	130.06 ng	5470020	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-, 2,3-dihyd	356	C21H40O4	000111-03-5	87
2	9-Oxabicyclo[6.1.0]nonane	126	C8H14O	000286-62-4	78
3	Oxacyclotetradecan-2-one	212	C13H24O2	001725-04-8	58



0743

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

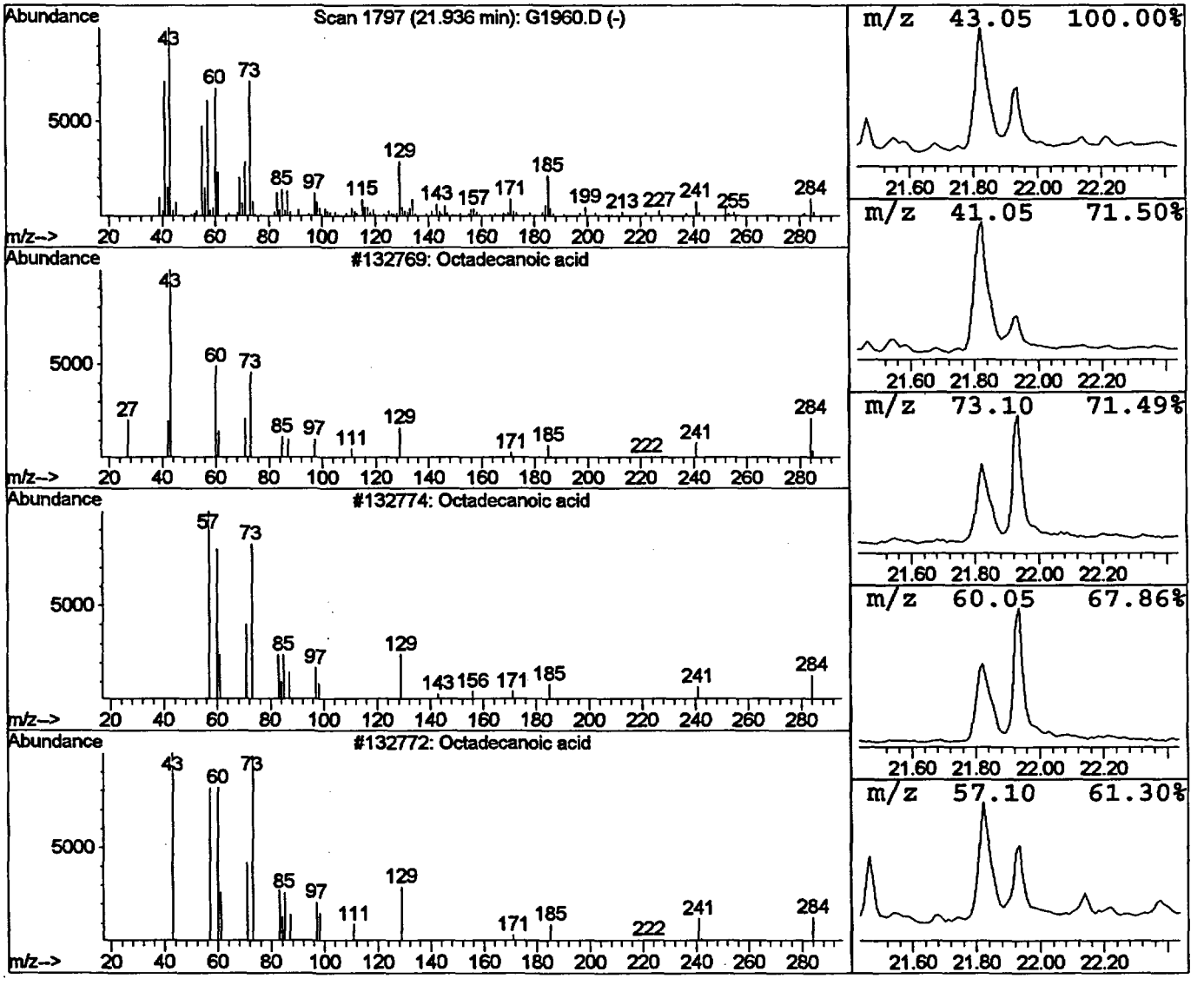
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 14 Octadecanoic acid Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.94	34.49 ng	1450800	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	89
2	Octadecanoic acid	284	C18H36O2	000057-11-4	64
3	Octadecanoic acid	284	C18H36O2	000057-11-4	60



0744

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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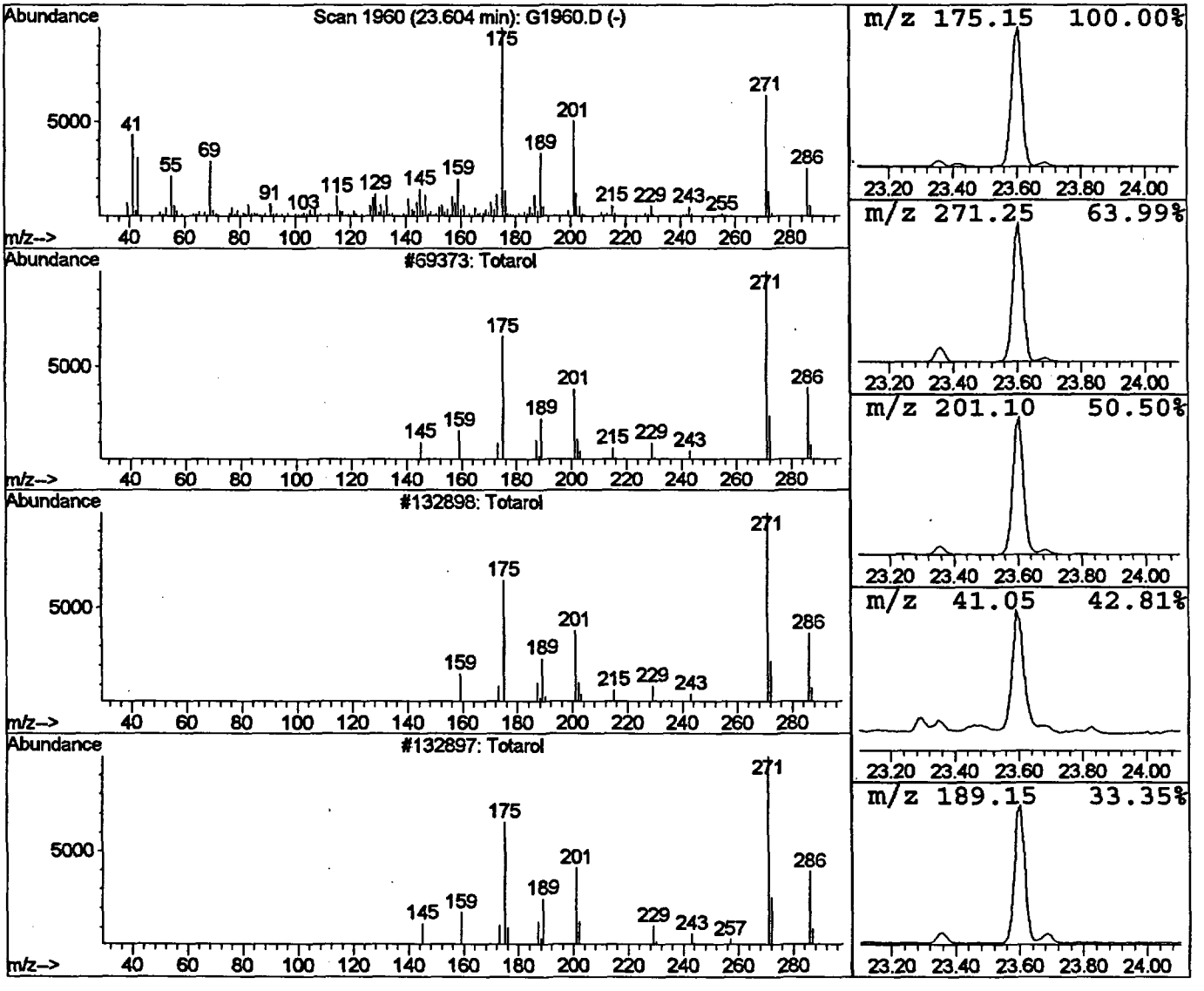
Peak Number 15 Totarol Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.60	102.96 ng	4281360	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Totarol	286	C20H30O	000511-15-9	90
2	Totarol	286	C20H30O	000511-15-9	89
3	Totarol	286	C20H30O	000511-15-9	64



0745

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

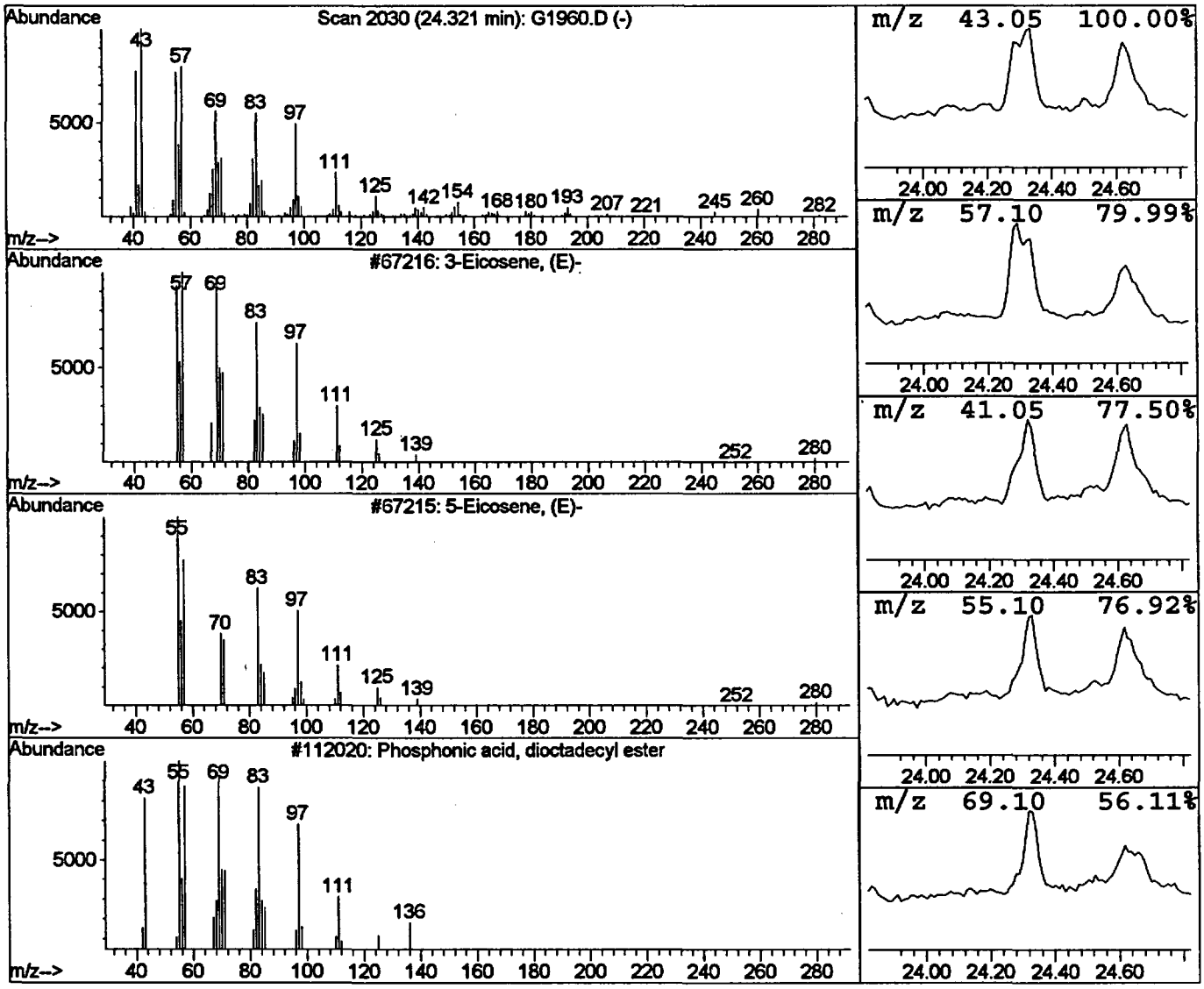
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 16 3-Eicosene, (E)- Concentration Rank 27

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.32	22.77 ng	946681	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Eicosene, (E)-	280	C20H40	074685-33-9	95
2	5-Eicosene, (E)-	280	C20H40	074685-30-6	94
(3)	Phosphonic acid, dioctadecyl ester	587	C36H75O3P	019047-85-9	91



0746

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

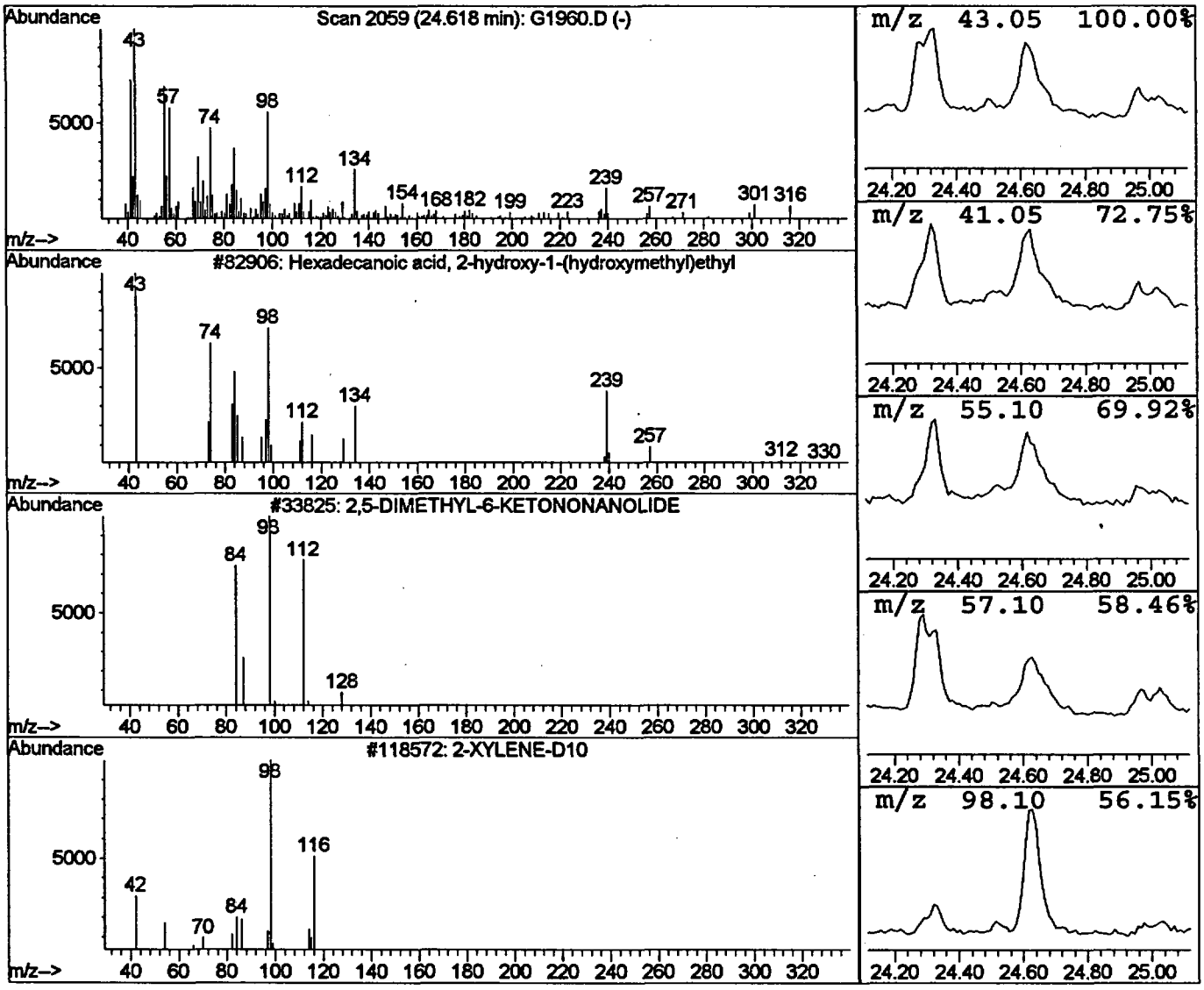
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 17 Hexadecanoic acid, 2-hydroxy-1 Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.62	35.85 ng	1490880	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecanoic acid, 2-hydroxy-1-(hyd	330	C19H38O4	023470-00-0	46
2	2,5-DIMETHYL-6-KETONONANOLIDE	198	C11H18O3	013030-98-3	38
3	2-XYLENE-D10	106	C8D10	000000-00-0	22



0747

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

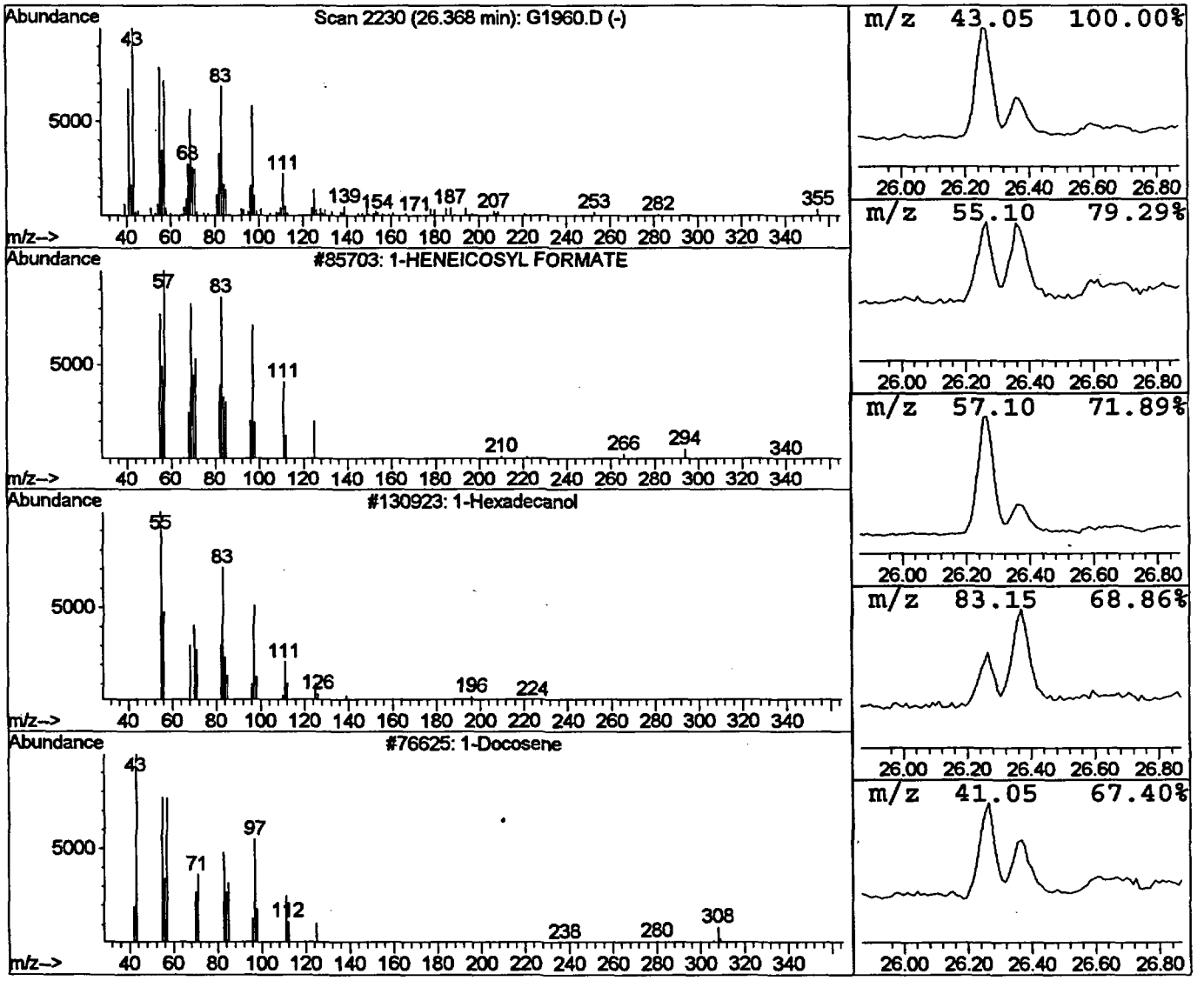
****

Peak Number 18 1-HENEICOSYL FORMATE Concentration Rank 38

UNKNOWN COMPOUND wol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.37	16.49 ng	685626	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-HENEICOSYL FORMATE	340	C22H44O2	077899-03-7	72
2	1-Hexadecanol	242	C16H34O	036653-82-4	72
3	1-Docosene	308	C22H44	001599-67-3	64



0748

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

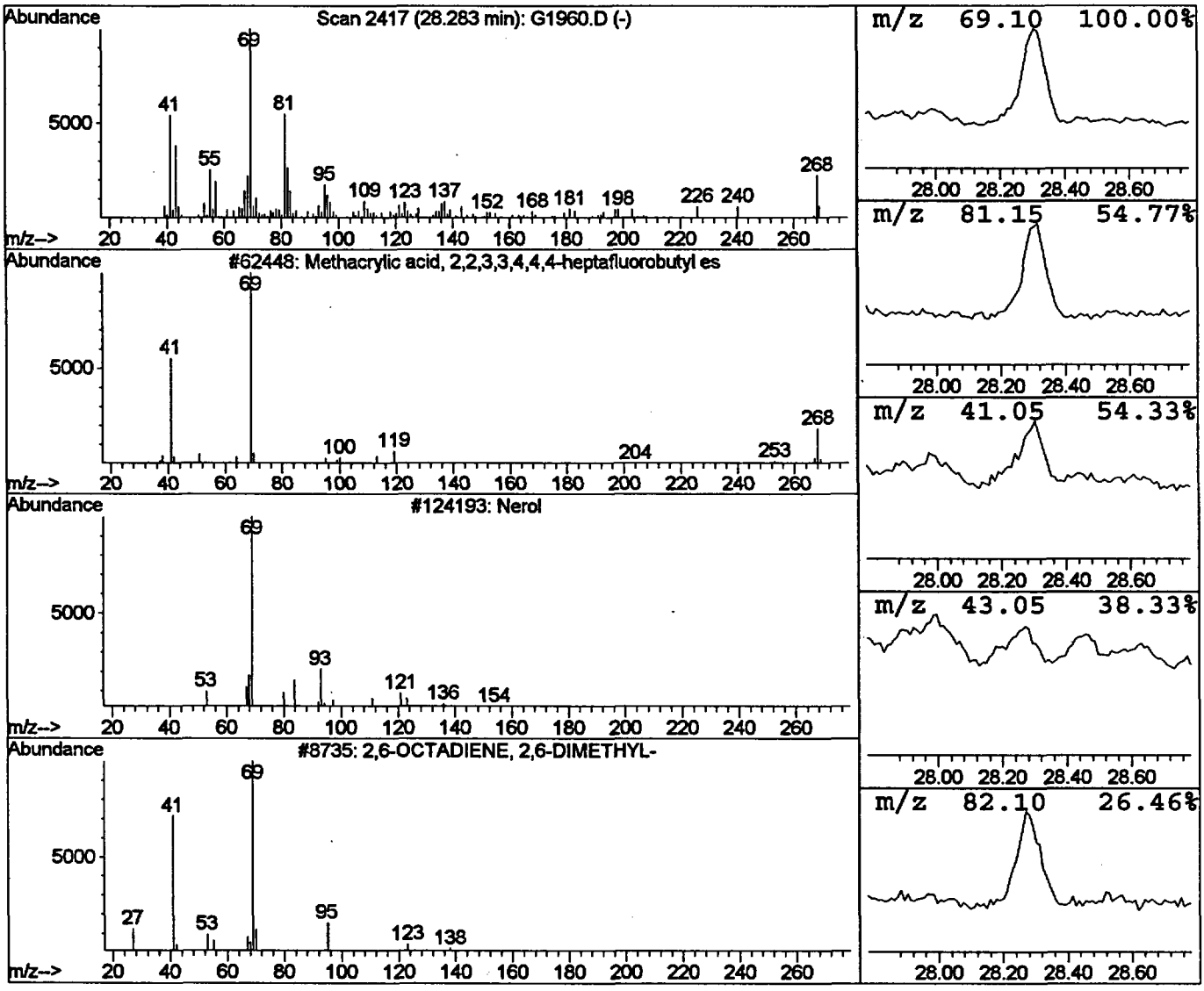
****

Peak Number 19 Methacrylic acid, 2,2,3,3,4,4, Concentration Rank 34

UNKNOWN COMPOUND w01->7-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
28.28	17.35 ng	721486	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Methacrylic acid, 2,2,3,3,4,4,4-hep	268	C8H7F7O2	013695-31-3	47
2	Nerol	154	C10H18O	000106-25-2	43
3	2,6-OCTADIENE, 2,6-DIMETHYL-	138	C10H18	002609-23-6	43



0749

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

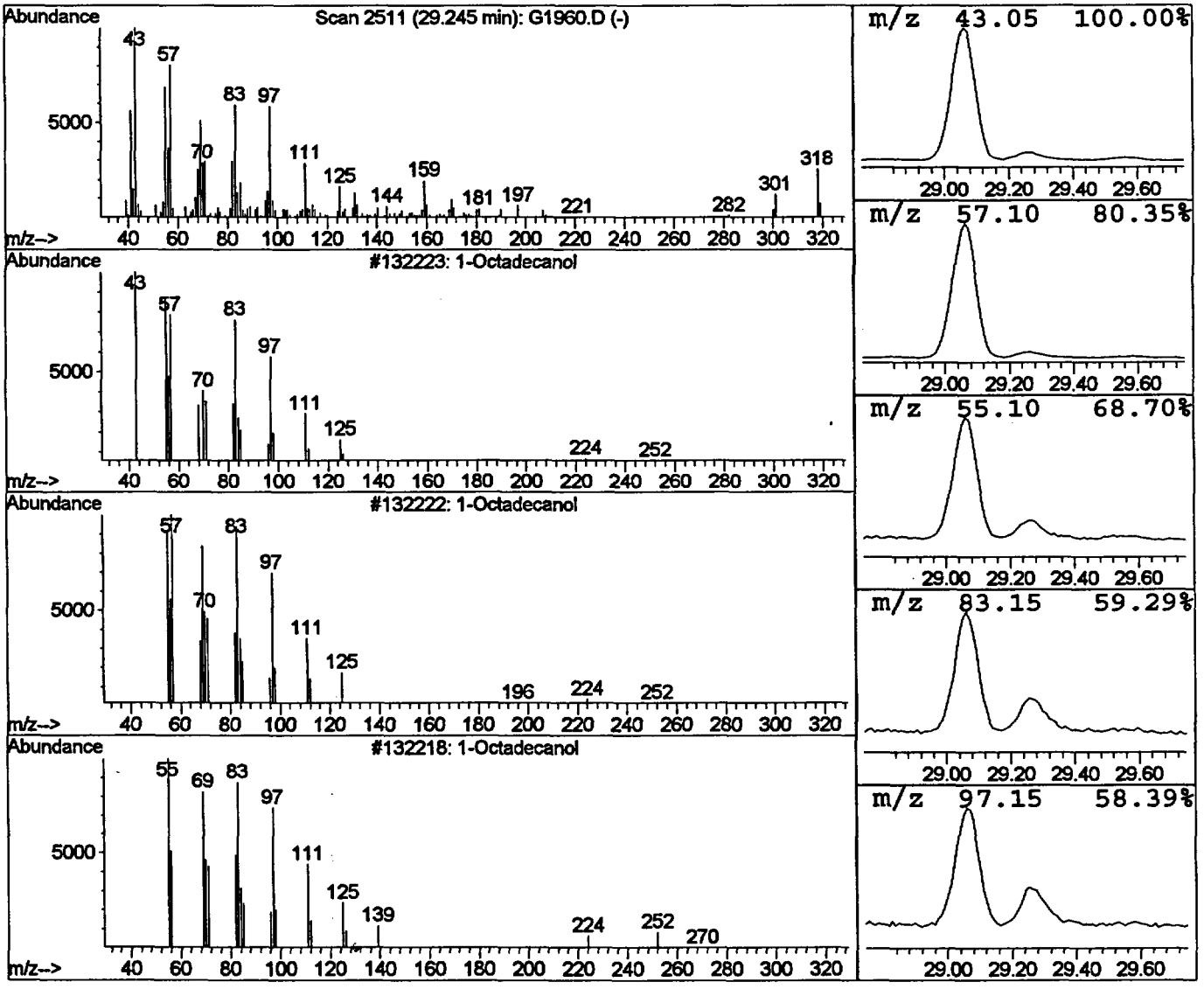
****

Peak Number 20 1-Octadecanol Concentration Rank 29

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.25	21.46 ng	972515	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Octadecanol + unknown	270	C18H38O	000112-92-5	46
2	1-Octadecanol	270	C18H38O	000112-92-5	46
3	1-Octadecanol	270	C18H38O	000112-92-5	43

no: 1-27-98



0750

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D
Acq On : 23 Jan 98 1:32
Sample : S HP-7G 58073-008 FFR91
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Via
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

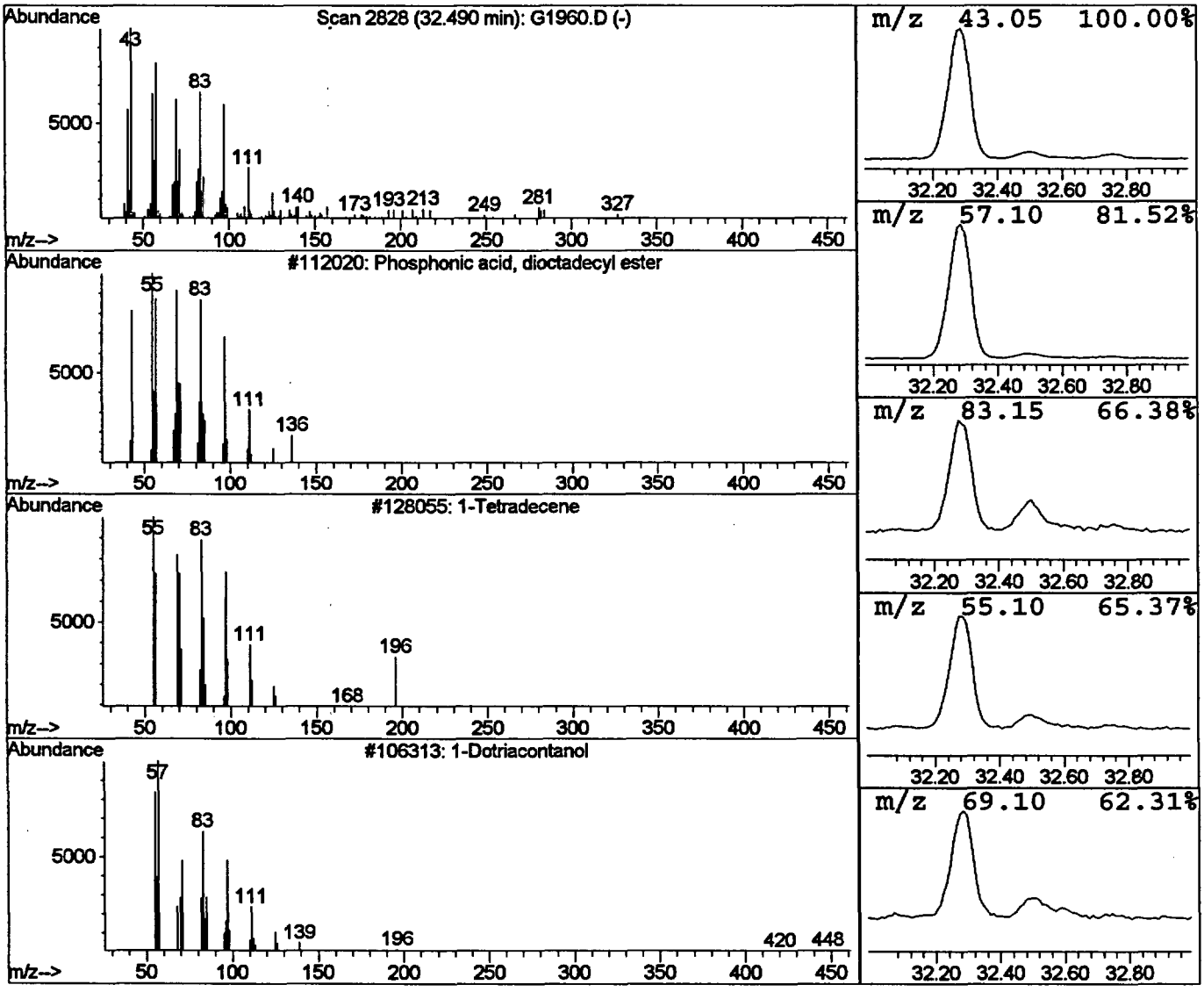
****

Peak Number 21 Phosphonic acid, dioctadecyl e Concentration Rank 30

UNKNOWN COMPOUND mol-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.49	20.82 ng	943481	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Phosphonic acid, dioctadecyl ester	587	C36H75O3P	019047-85-9	80
2	1-Tetradecene	196	C14H28	001120-36-1	68
3	1-Dotriacontanol	467	C32H66O	006624-79-9	64



Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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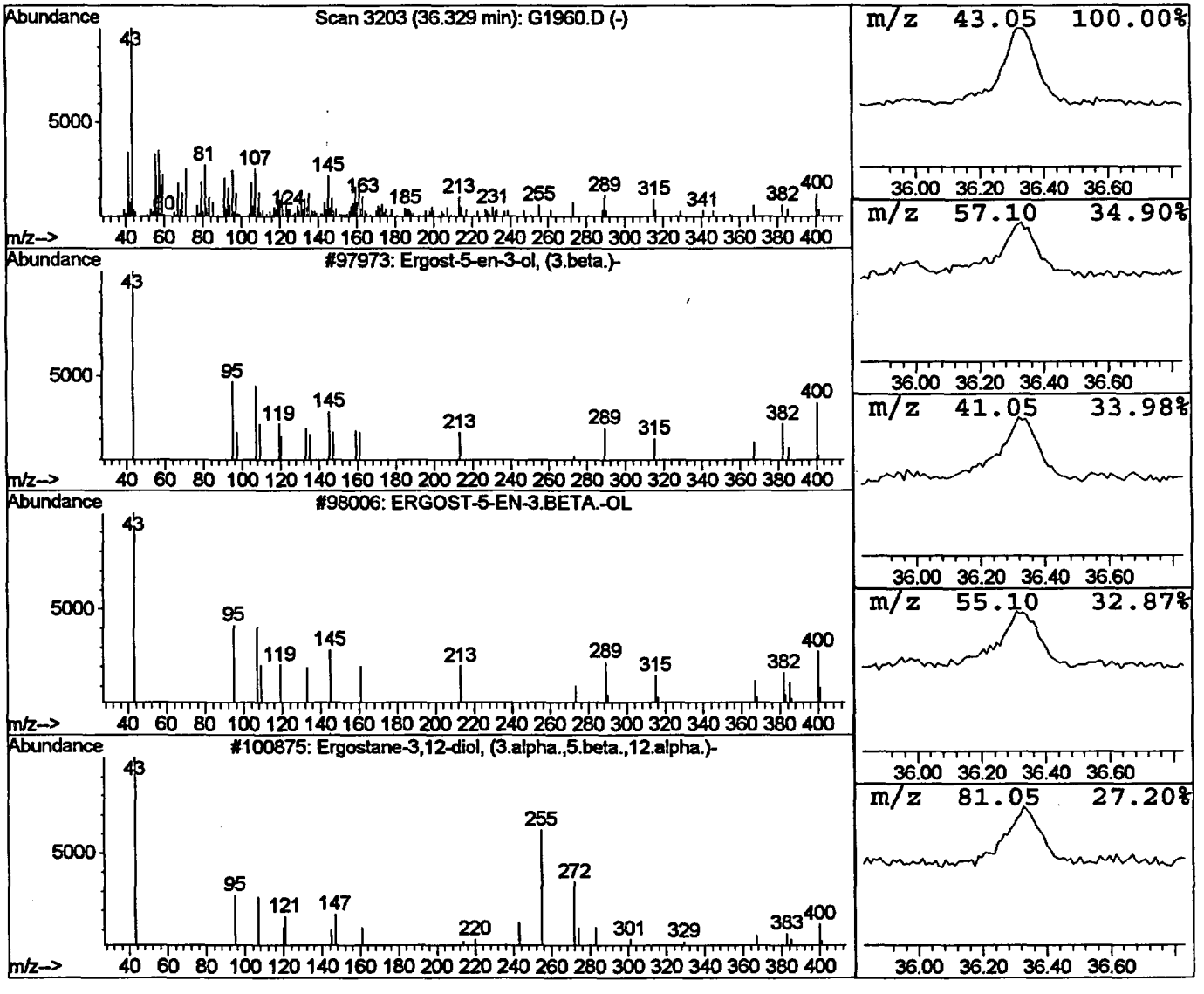
Peak Number 22 Ergost-5-en-3-ol, (3.beta.)- Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.33	44.31 ng	2007800	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	98
2	ERGOST-5-EN-3.BETA.-OL	400	C28H48O	000000-00-0	97
3	Ergostane-3,12-diol, (3.alpha.,5.be	418	C28H50O2	056052-70-1	27



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

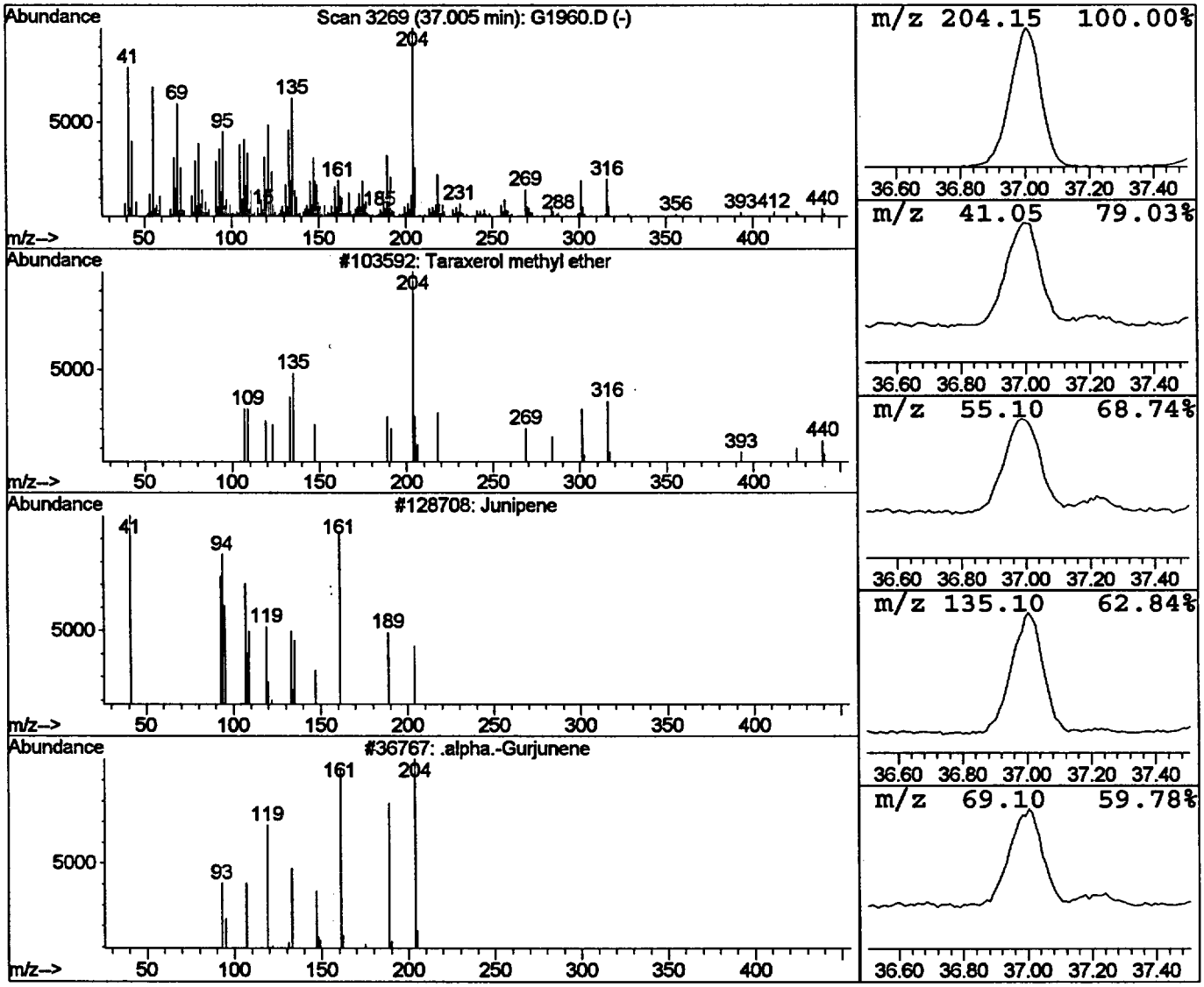
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 23 Taraxerol methyl ether Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
37.00	147.19 ng	6668870	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Taraxerol methyl ether	440	C31H52O	014021-23-9	96
2	Junipene	204	C15H24	000475-20-7	58
3	.alpha.-Gurjunene	204	C15H24	000489-40-7	49



0753

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

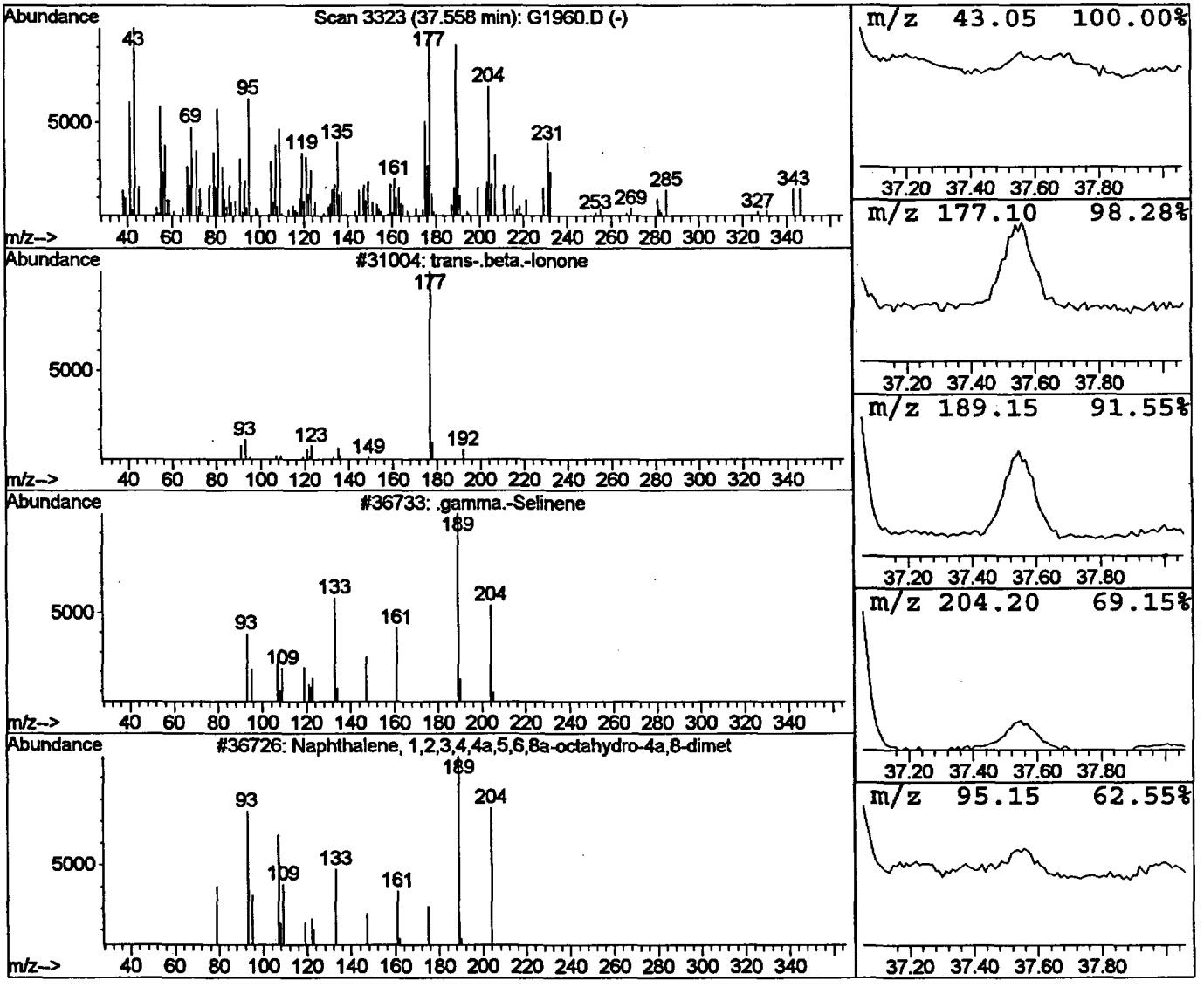
****

Peak Number 24 trans-.beta.-Ionone Concentration Rank 31

UNKNOWN COMPOUND mol -27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
37.56	20.39 ng	923743	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-.beta.-Ionone	192	C13H20O	000079-77-6	22
2	.gamma.-Selinene	204	C15H24	000515-17-3	22
3	Naphthalene, 1,2,3,4,4a,5,6,8a-octa	204	C15H24	000473-13-2	22



0754

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

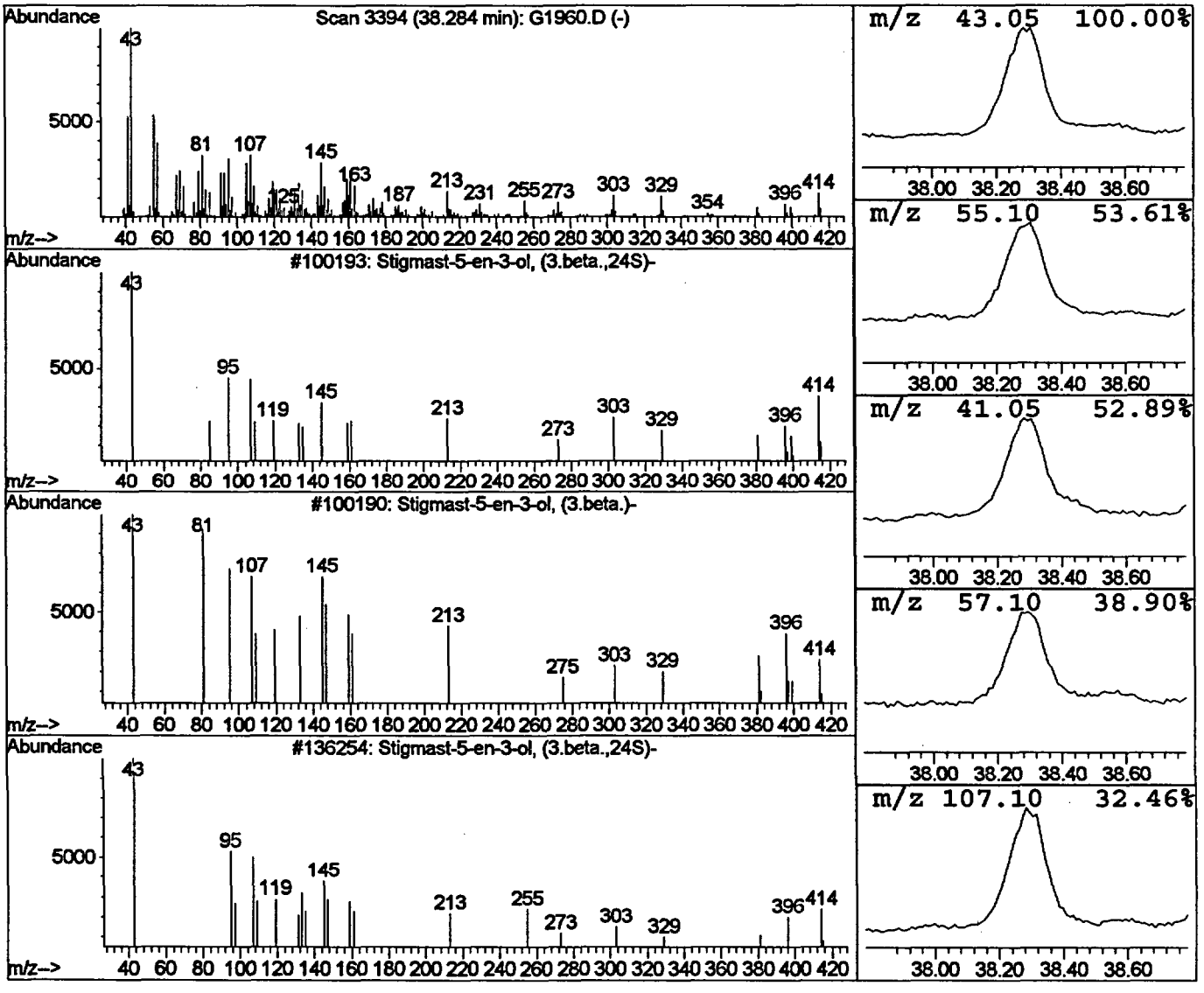
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 25 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.28	161.09 ng	7298960	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	97
2	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	87
3	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	46



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

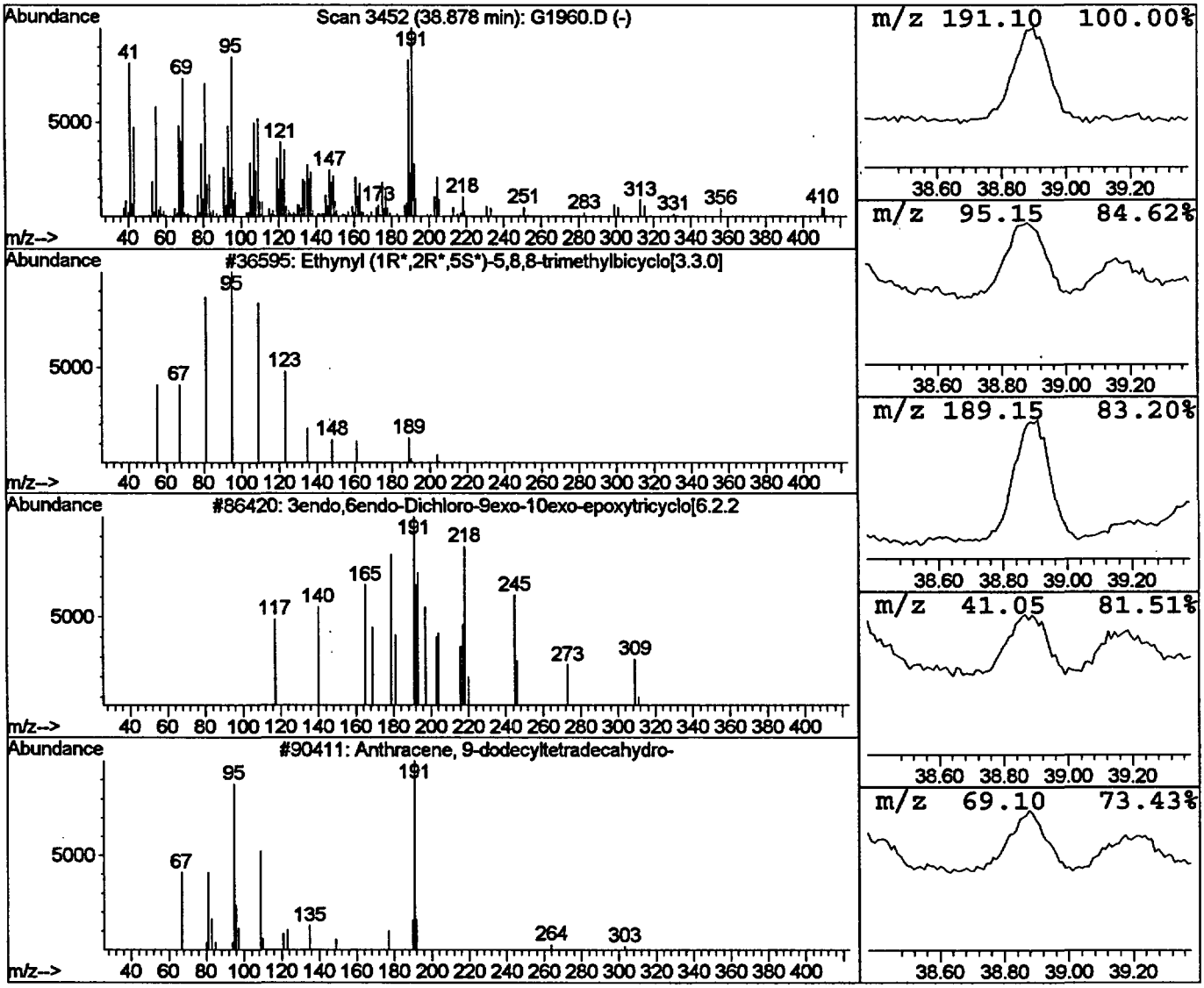
****

Peak Number 26 Ethynyl (1R*,2R*,5S*)-5,8,8-tr Concentration Rank 19

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.88	40.36 ng	1828800	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Ethynyl (1R*,2R*,5S*)-5,8,8-trimeth	204	C14H20O	085544-99-6	38
2	3endo,6endo-Dichloro-9exo-10exo-epo	344	C16H10Cl2N4O	075917-34-9	38
3	Anthracene, 9-dodecyltetradecahydro	360	C26H48	055401-75-7	35



0756

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

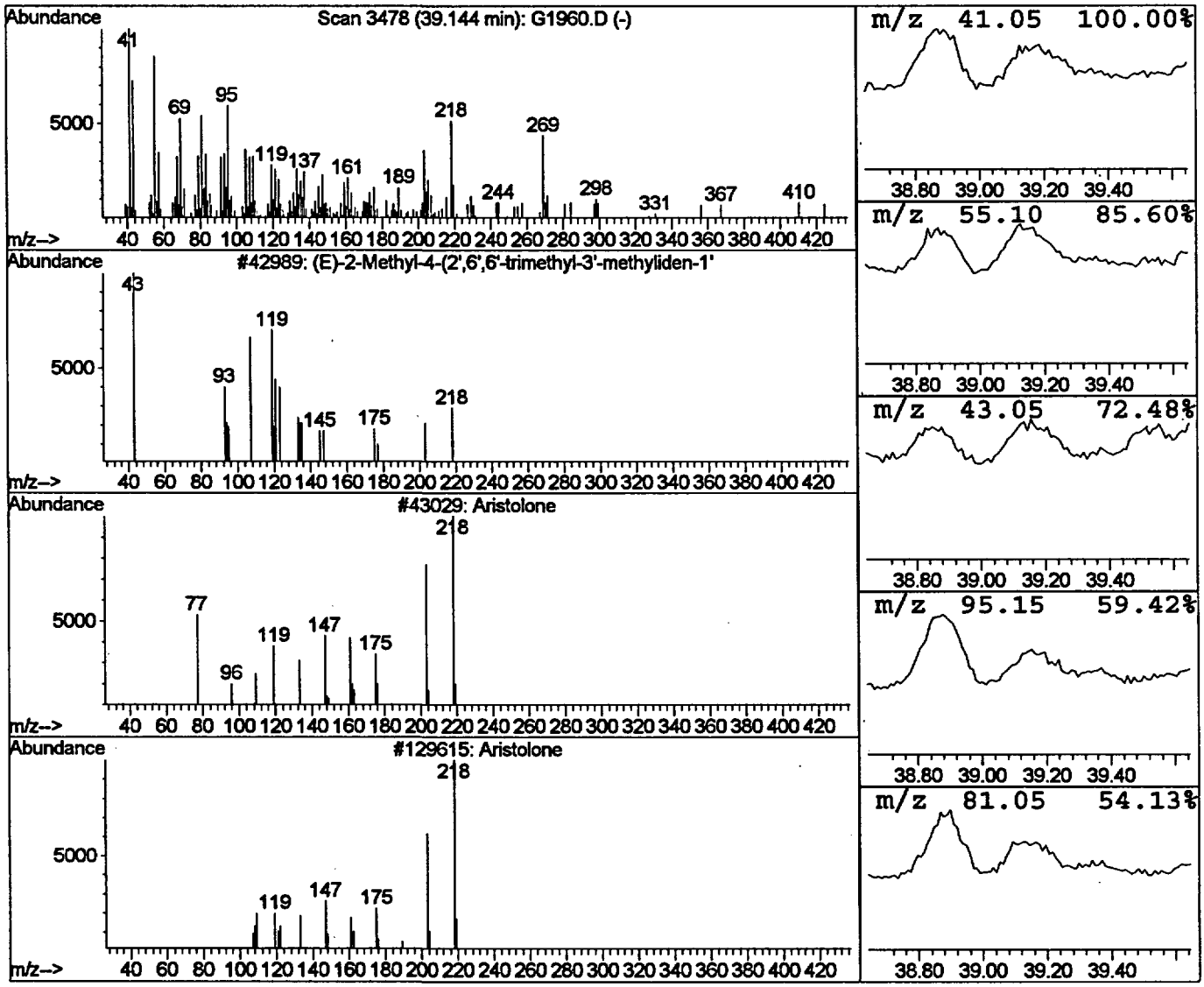
****

Peak Number 27 (E)-2-Methyl-4-(2',6',6'-trime Concentration Rank 23

UNKNOWN COMPOUND wil 2/7/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.14	30.72 ng	1391880	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	(E)-2-Methyl-4-(2',6',6'-trimethyl-	218	C15H22O	077822-46-9	47
2	Aristolone	218	C15H22O	006831-17-0	46
3	Aristolone	218	C15H22O	006831-17-0	38



0757

CASE 25969
SDG#FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D
Acq On : 23 Jan 98 1:32
Sample : S HP-7G 58073-008 FFR91
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

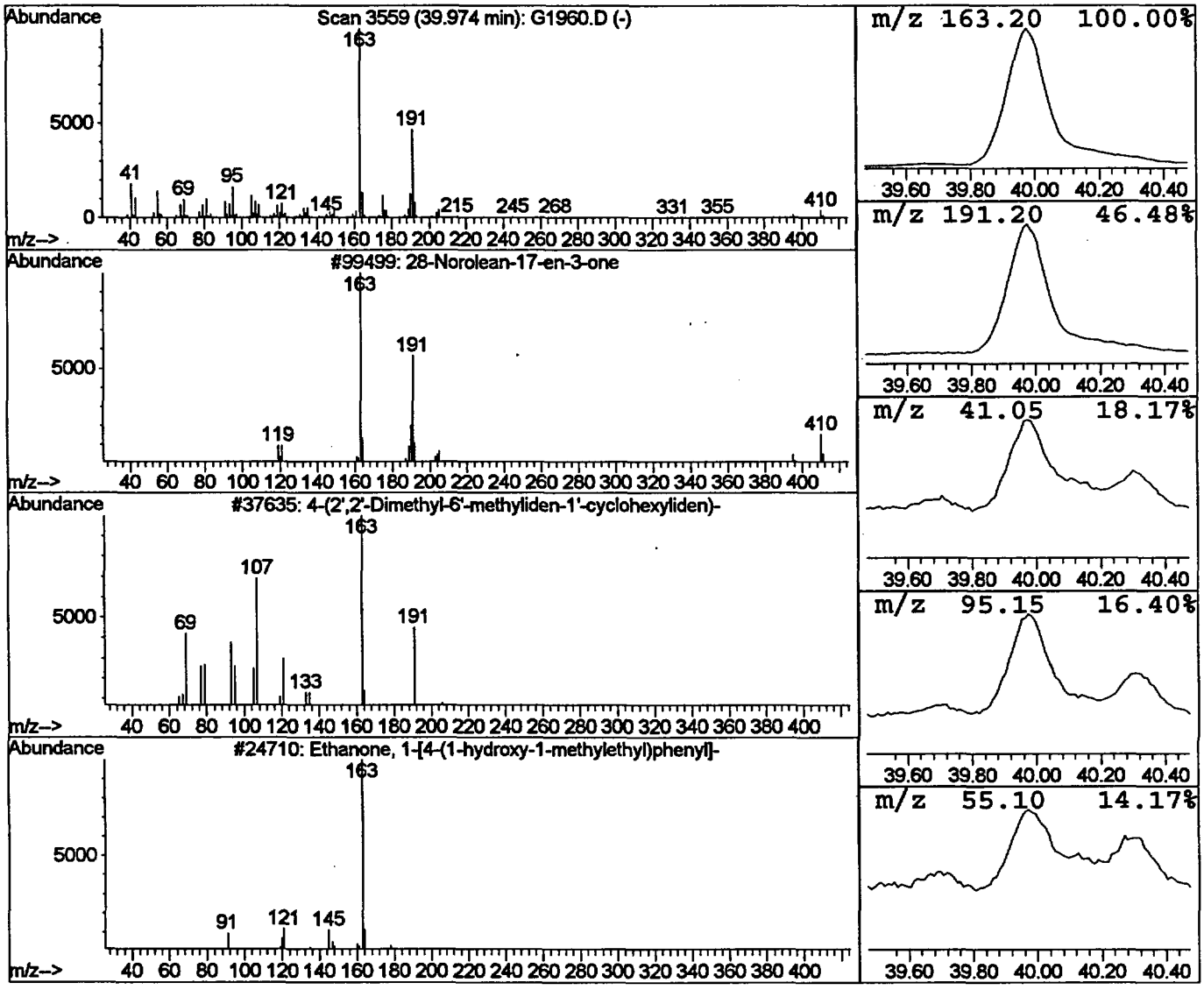
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 28 28-Norolean-17-en-3-one Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.97	183.56 ng	8317120	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	28-Norolean-17-en-3-one	410	C29H46O	005912-72-1	55
2	4-(2',2'-Dimethyl-6'-methyliden-1'-	206	C14H22O	093175-74-7	43
3	Ethanone, 1-[4-(1-hydroxy-1-methyle	178	C11H14O2	054549-72-3	38



0758

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

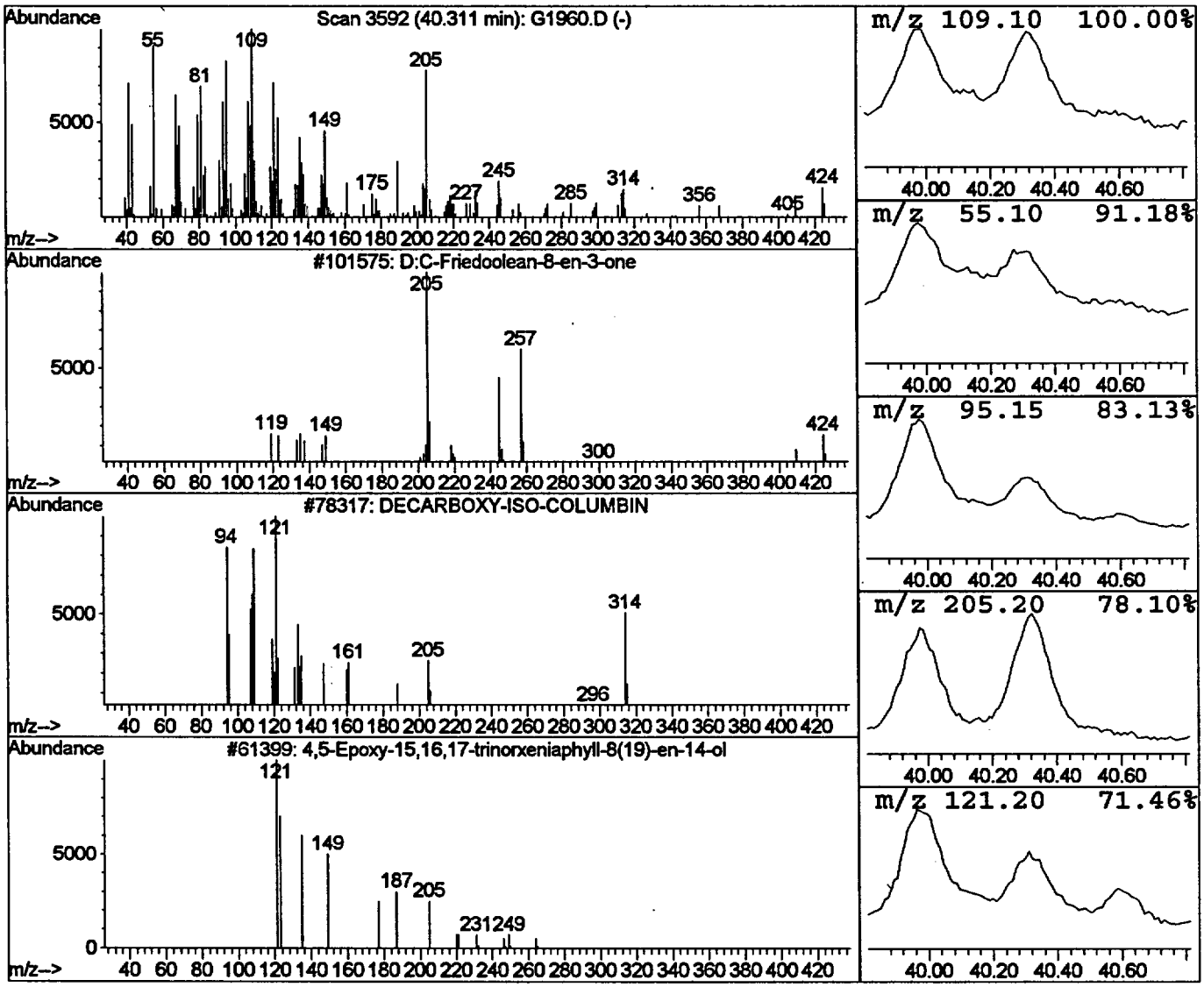
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 29 D:C-Friedoolean-8-en-3-one Concentration Rank 13

R.T.	EstConc	UNKNOWN COMPOUND	Relative to ISTD	R.T.
40.31	59.97 ng	2717390	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	D:C-Friedoolean-8-en-3-one	424	C30H48O	022611-26-3	53
2	DECARBOXY-ISO-COLUMBIN	314	C19H22O4	010404-52-1	52
3	4,5-Epoxy-15,16,17-trinorxeniaphyll	264	C17H28O2	080993-98-2	43



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Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

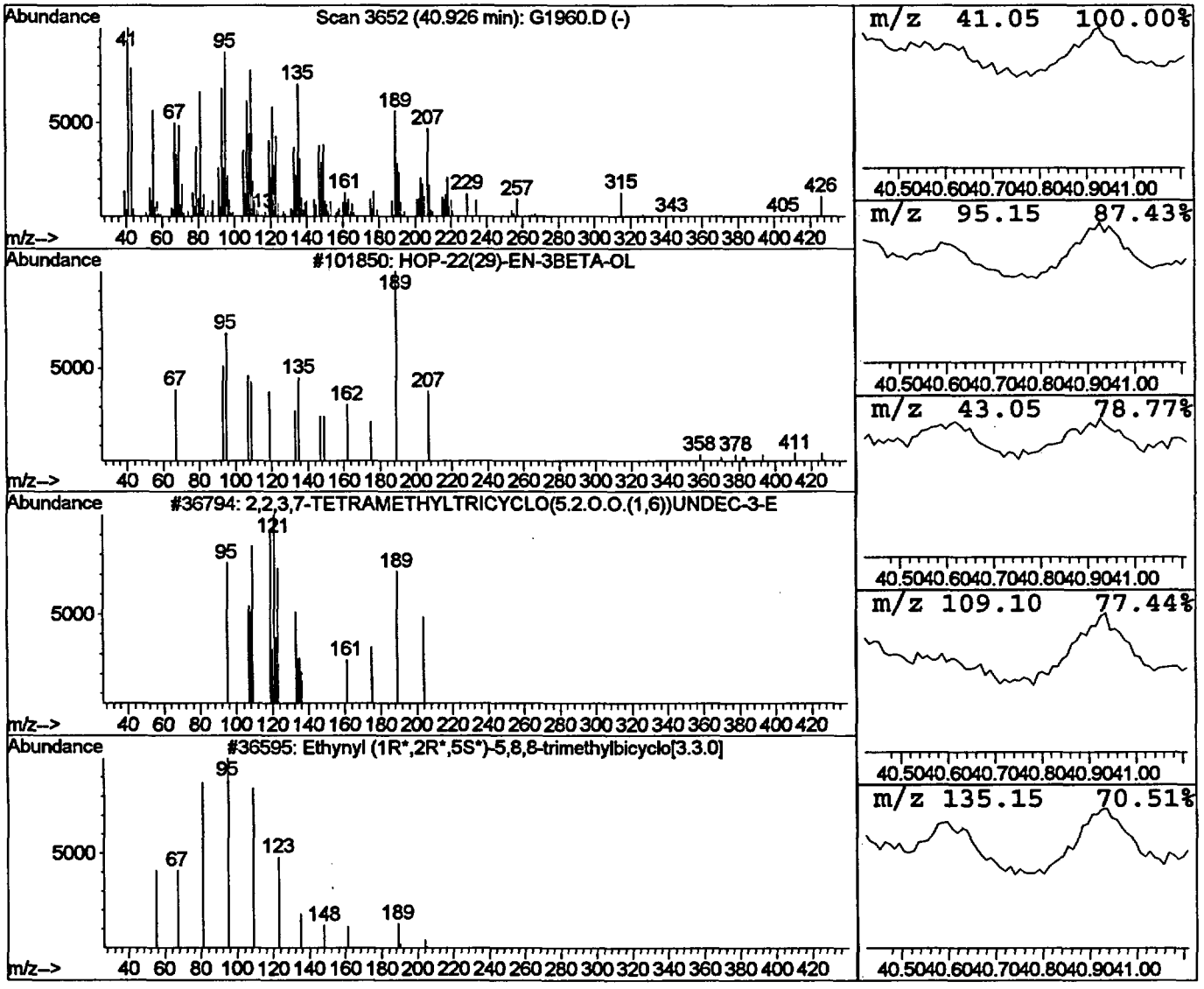
****

Peak Number 30 HOP-22(29)-EN-3BETA-OL Concentration Rank 33

UNKNOWN COMPOUND w1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.93	18.46 ng	836509	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	HOP-22(29)-EN-3BETA-OL	426	C30H50O	058801-23-3	91
2	2,2,3,7-TETRAMETHYLTRICYCLO(5.2.0.0	204	C15H24	000000-00-0	50
3	Ethynyl (1R*,2R*,5S*)-5,8,8-trimeth	204	C14H20O	085544-99-6	46



0760

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

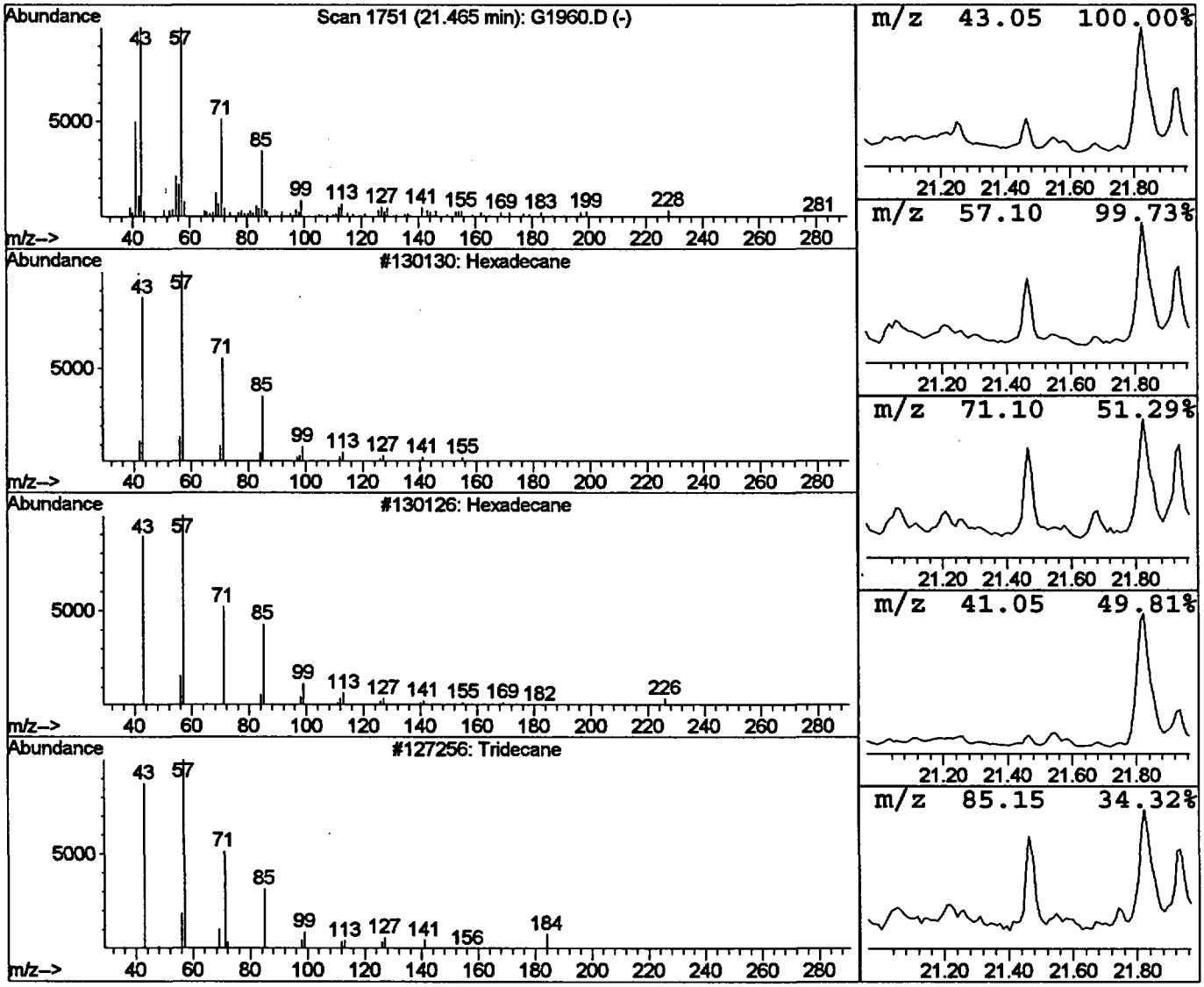
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 42 Hexadecane Concentration Rank 56

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.46	6.41 ng	269480	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane	226	C16H34	000544-76-3	86
2	Hexadecane	226	C16H34	000544-76-3	86
3	Tridecane	184	C13H28	000629-50-5	86



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

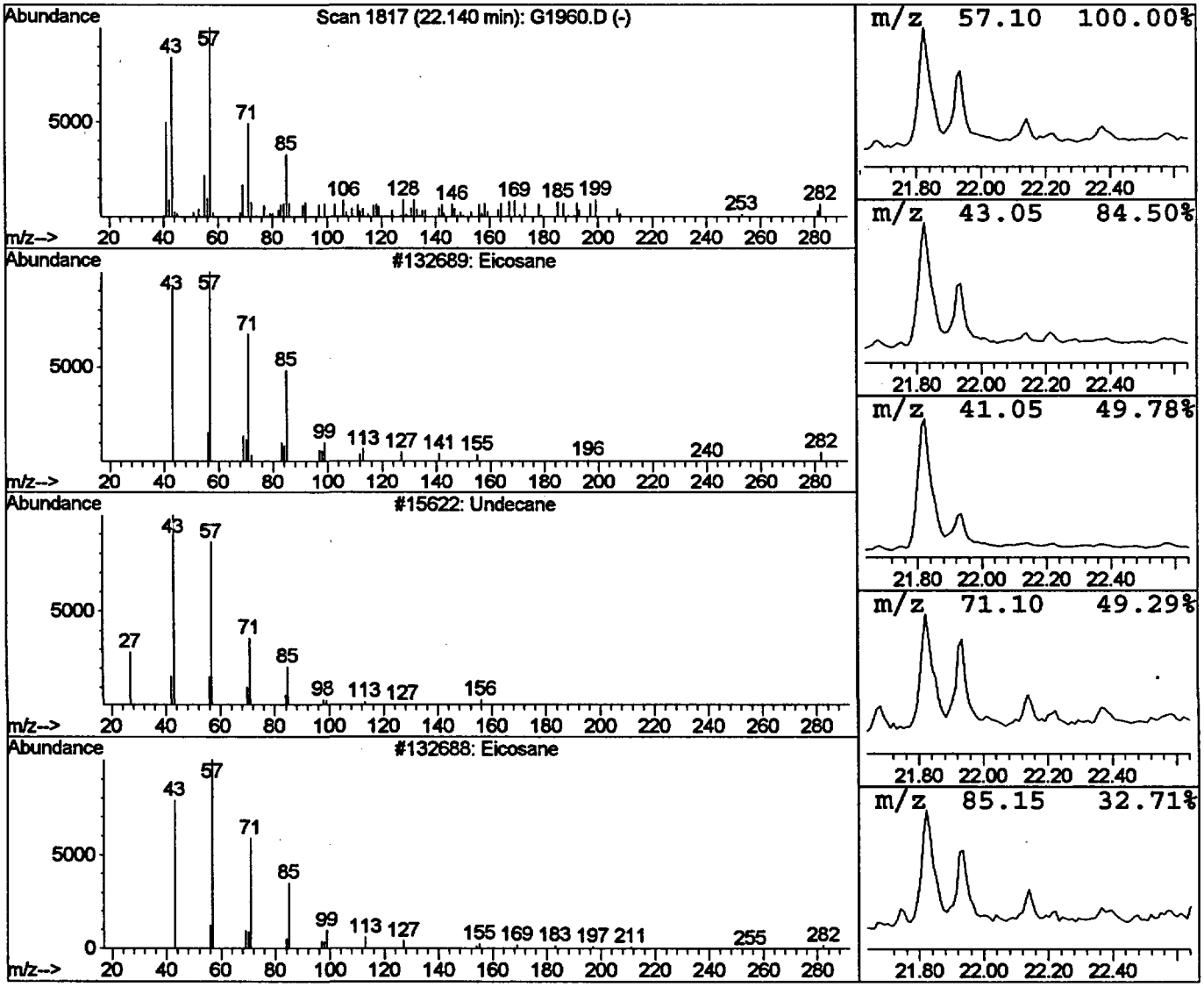
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 43 Eicosane Concentration Rank 68

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.14	5.11 ng	214817	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	91
2	Undecane	156	C11H24	001120-21-4	64
3	Eicosane	282	C20H42	000112-95-8	59



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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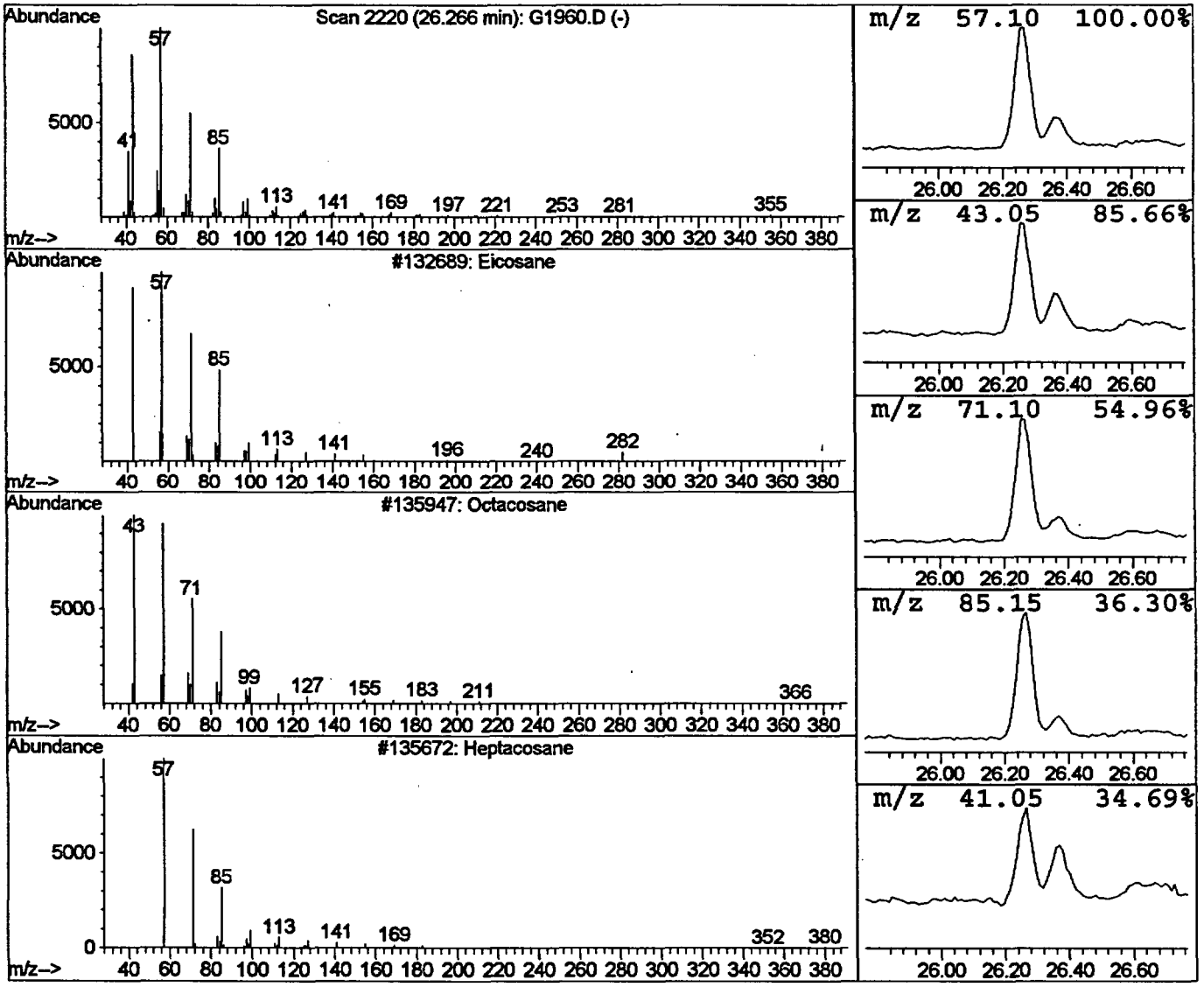
Peak Number 44 Eicosane Concentration Rank 26

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.27	27.33 ng	1136410	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	95
2	Octacosane	394	C28H58	000630-02-4	91
3	Heptacosane	380	C27H56	000593-49-7	91



0763

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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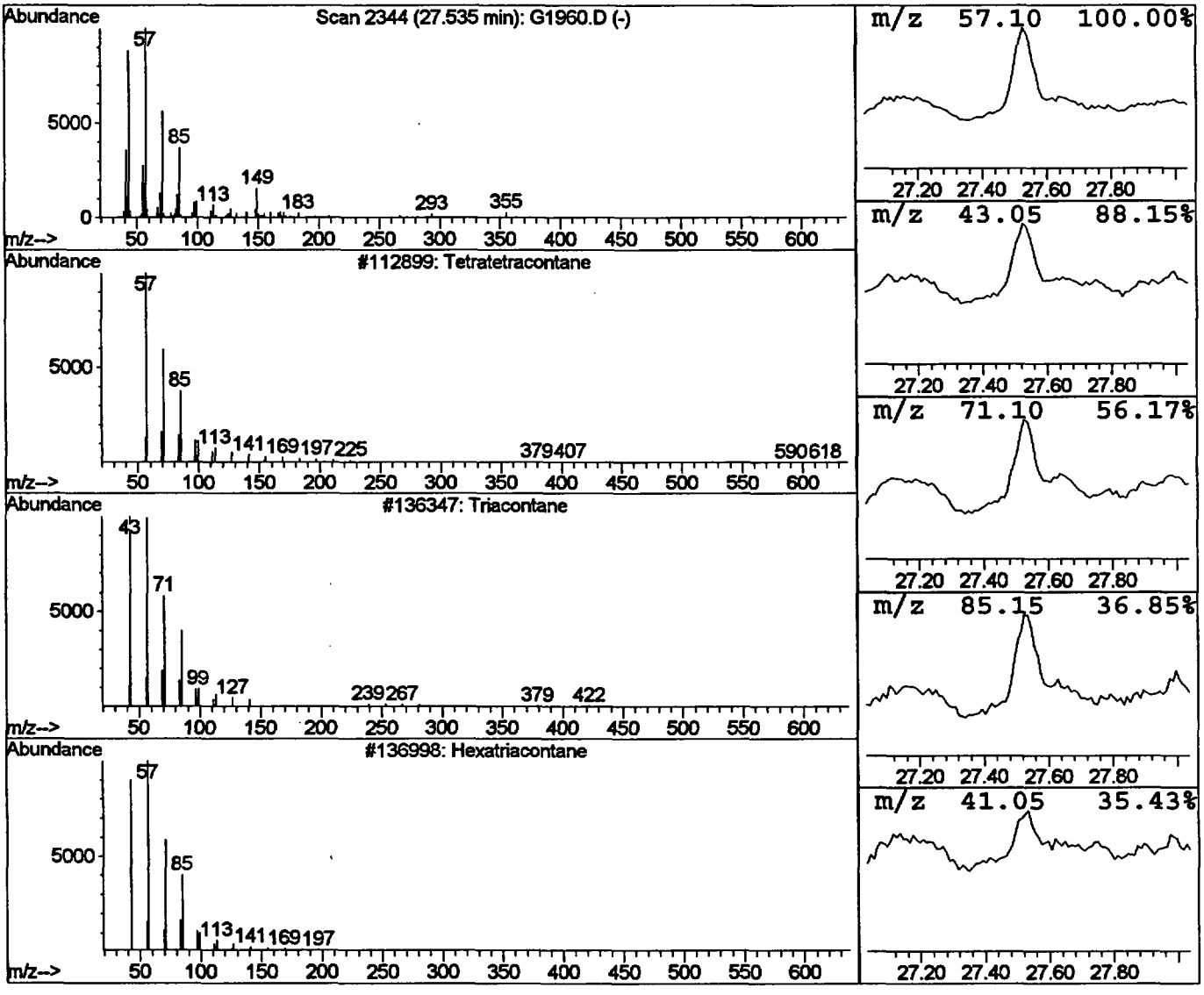
Peak Number 45 Tetratetracontane Concentration Rank 49

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.54	11.73 ng	487849	Chrysene-d12	25.39

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tetratetracontane	619	C44H90	007098-22-8	81
2	Triacontane	422	C30H62	000638-68-6	81
3	Hexatriacontane	507	C36H74	000630-06-8	81



0764

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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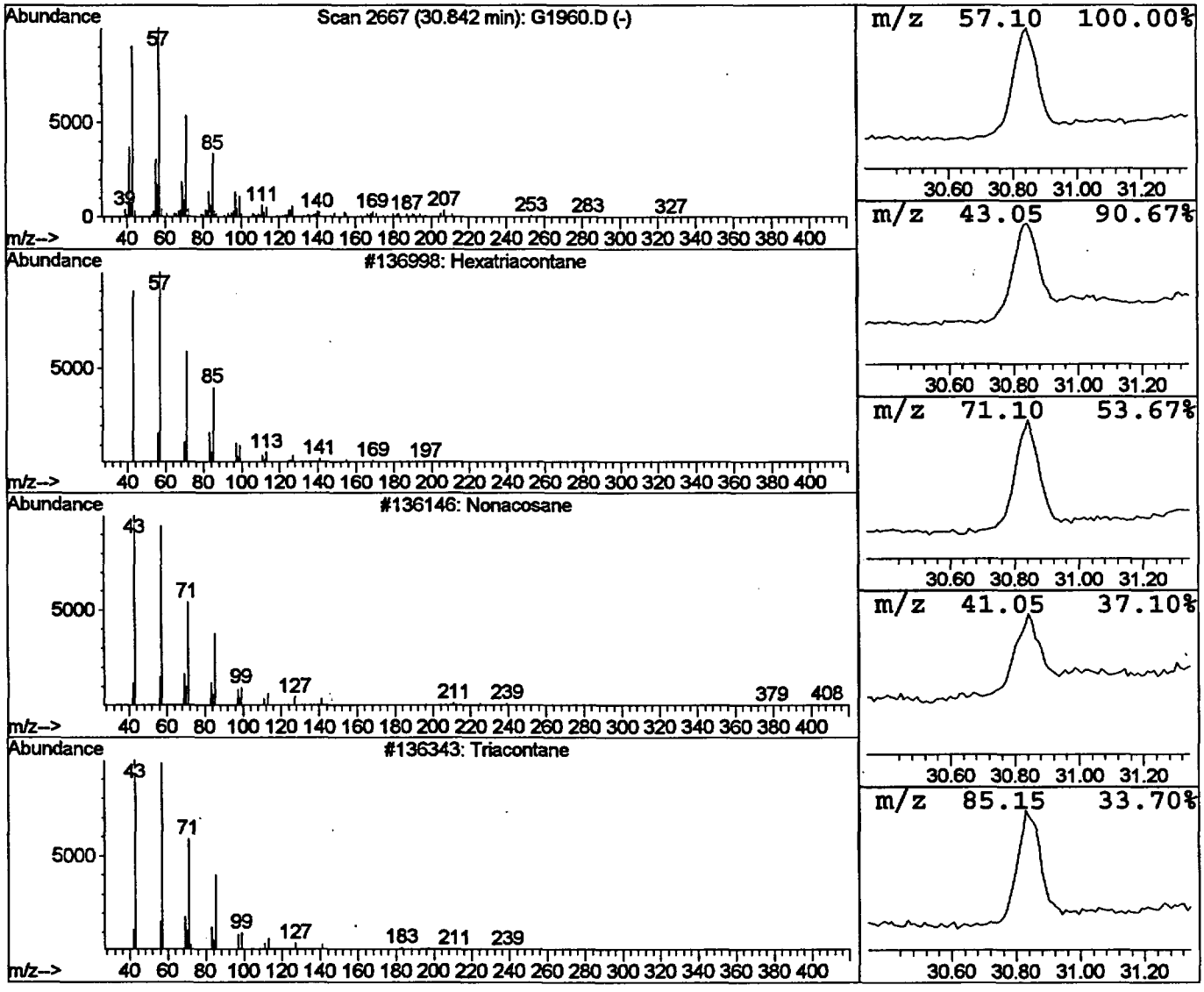
Peak Number 46 Hexatriacontane Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.84	28.40 ng	1286970	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	90
2	Nonacosane	408	C29H60	000630-03-5	87
3	Triacontane	422	C30H62	000638-68-6	87



Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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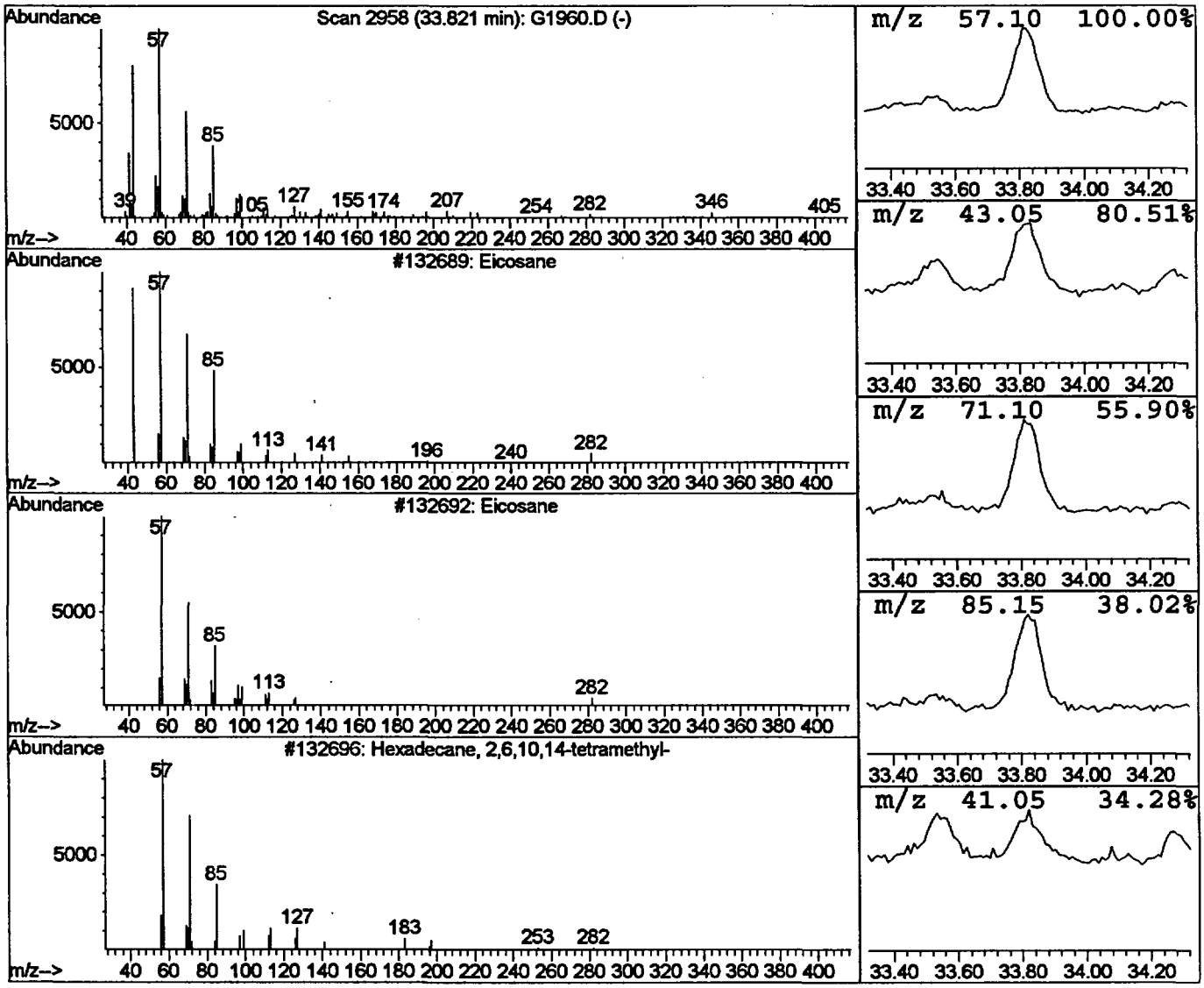
Peak Number 47 Eicosane Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.82	19.96 ng	904351	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	93
2	Eicosane	282	C20H42	000112-95-8	93
3	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	93



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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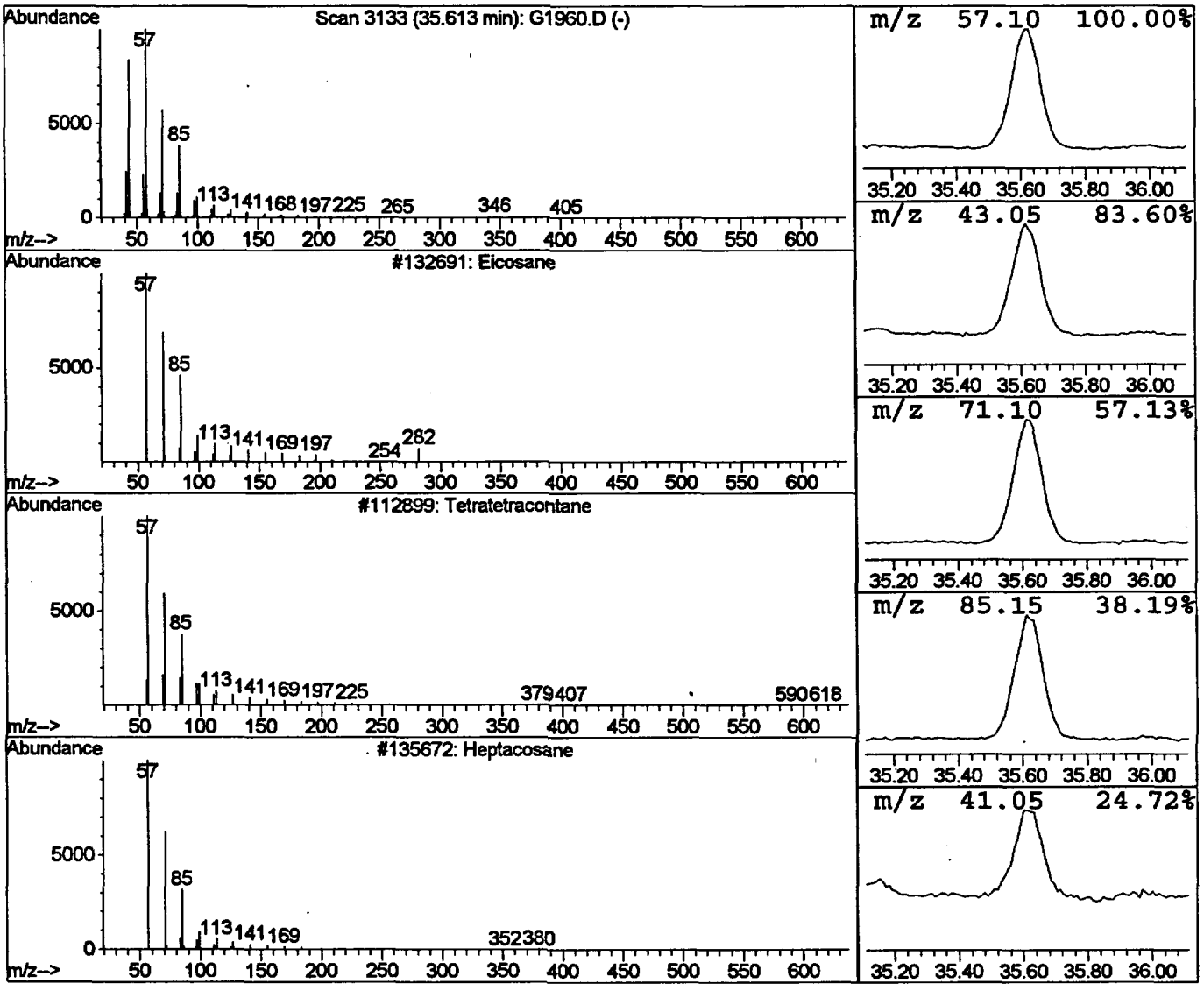
Peak Number 48 Eicosane Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.61	61.26 ng	2775730	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	93
2	Tetratetracontane	619	C44H90	007098-22-8	91
3	Heptacosane	380	C27H56	000593-49-7	91



0767

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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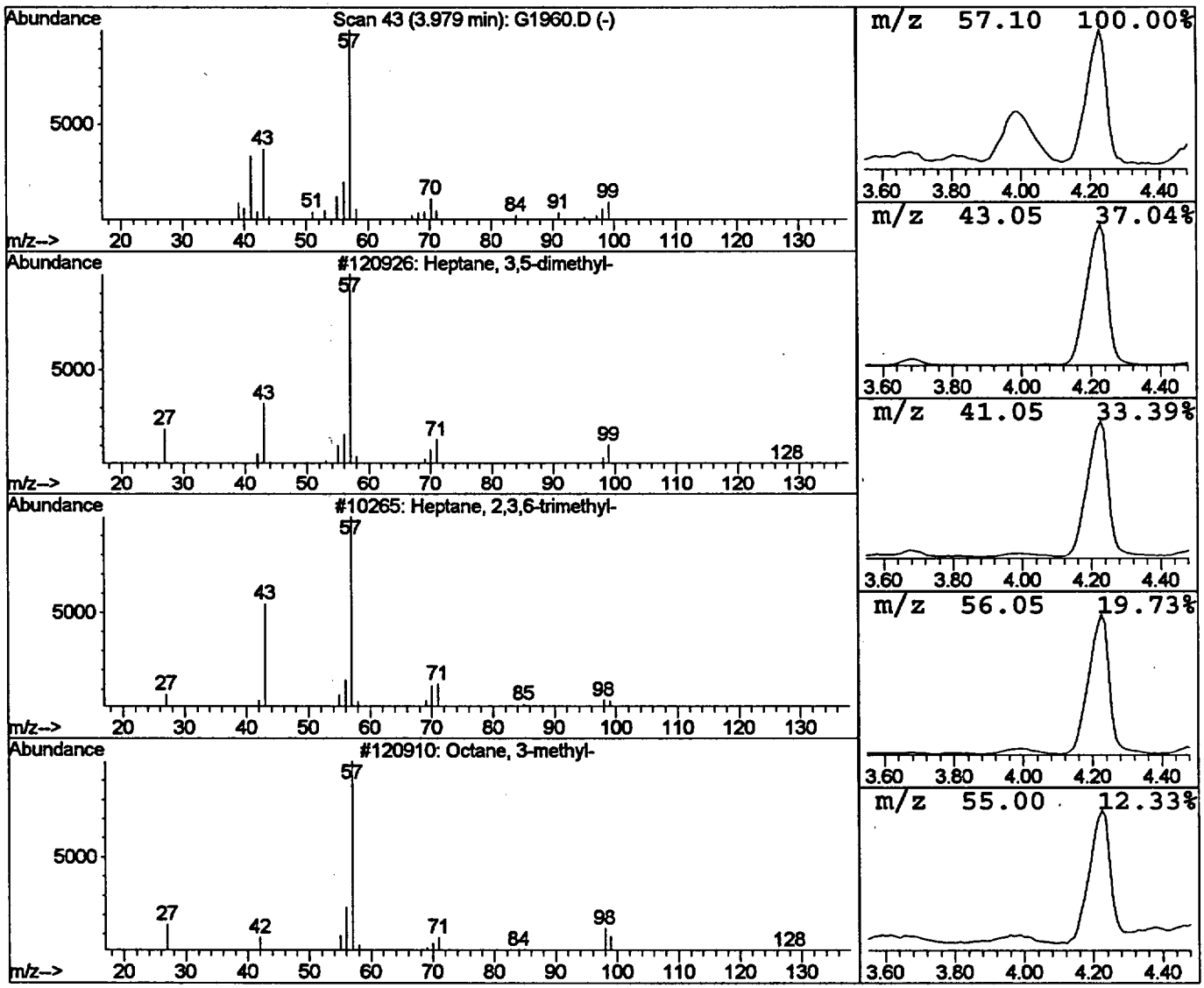
Peak Number 49 Heptane, 3,5-dimethyl- Concentration Rank 63

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	6.05 ng	208253	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	59
2	Heptane, 2,3,6-trimethyl-	142	C10H22	004032-93-3	53
3	Octane, 3-methyl-	128	C9H20	002216-33-3	53



Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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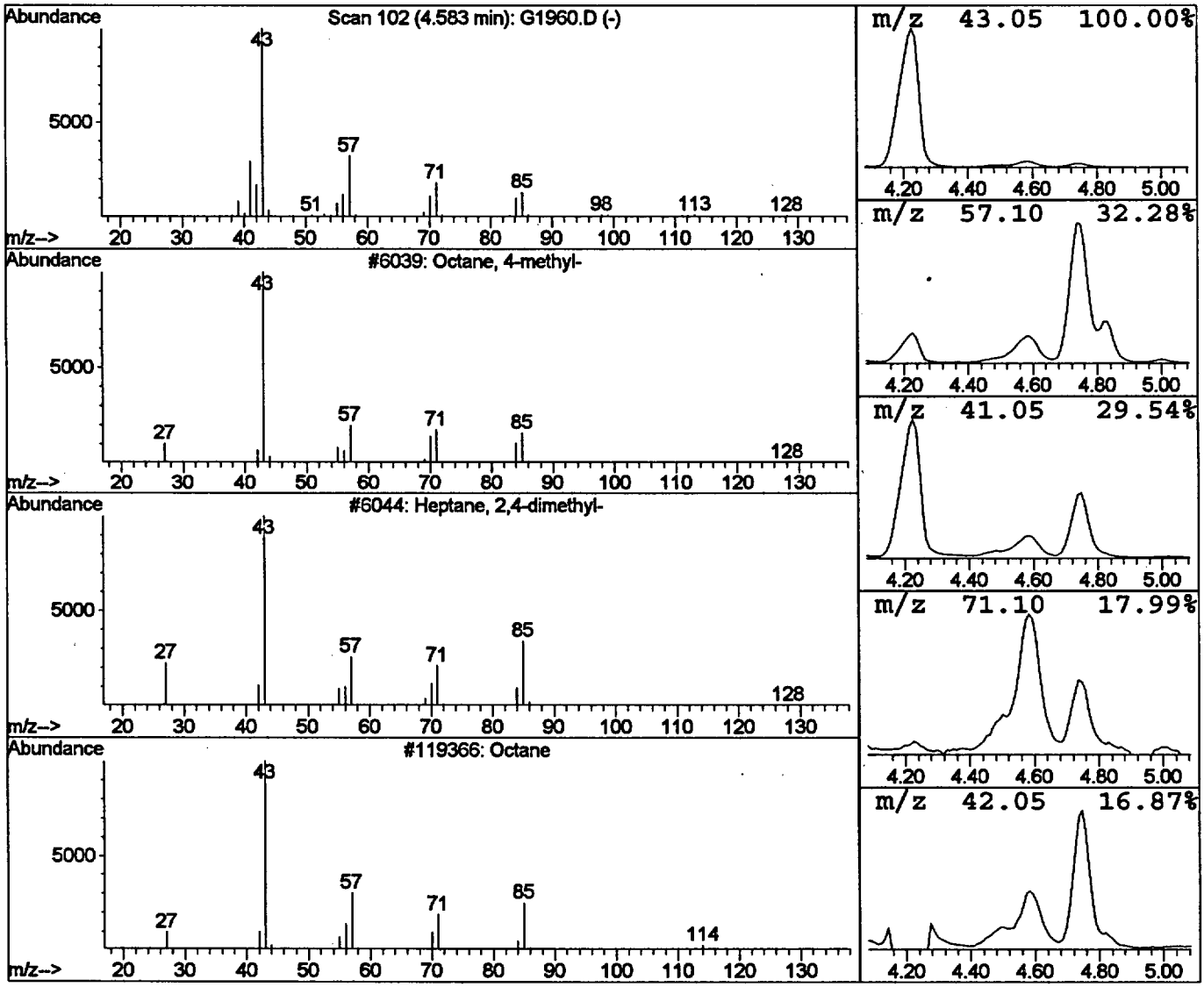
Peak Number 50 Octane, 4-methyl- Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.58	58.69 ng	2020010	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64
3	Octane	114	C8H18	000111-65-9	64



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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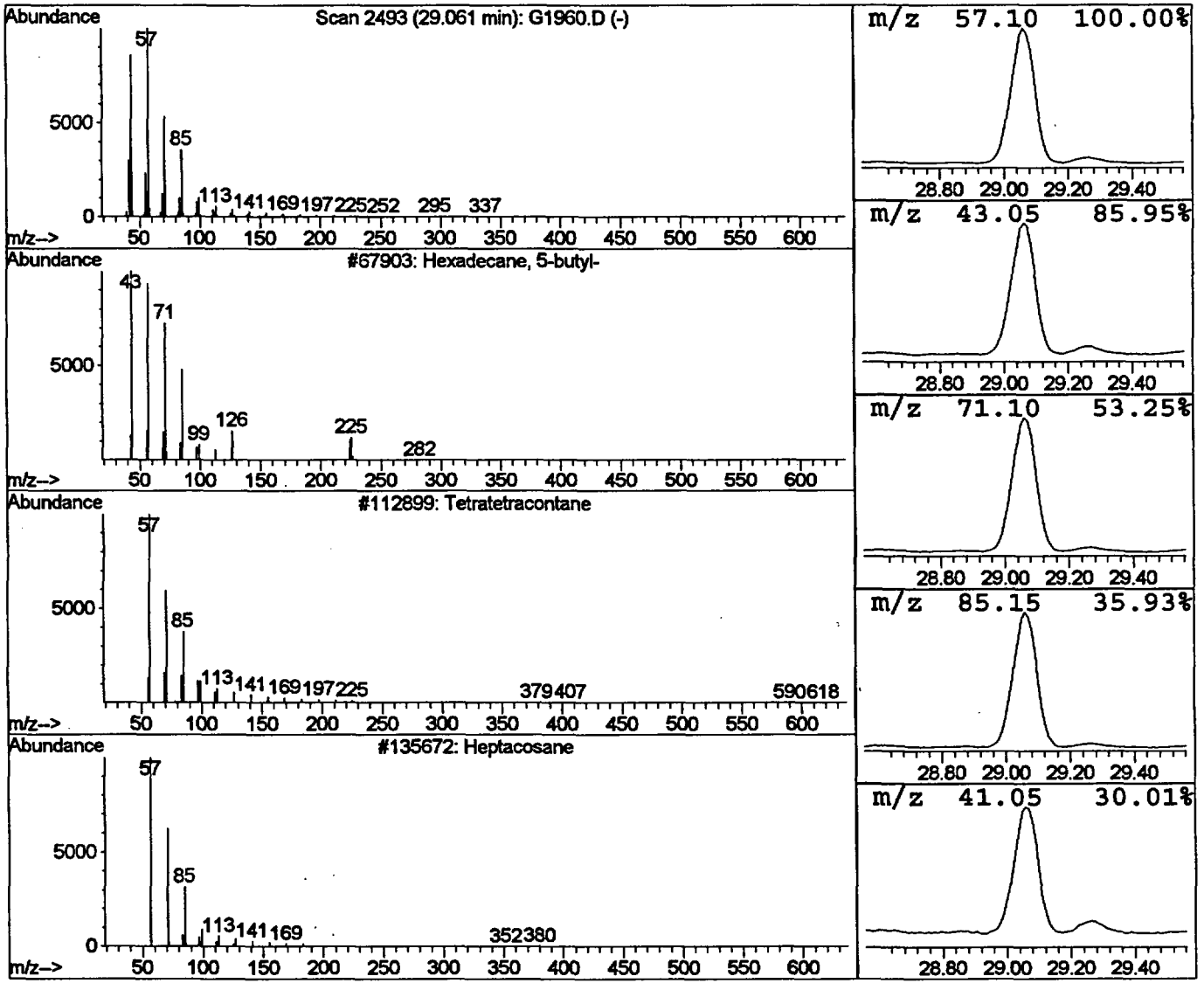
Peak Number 51 Hexadecane, 5-butyl- Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.06	183.61 ng	8319260	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 5-butyl-	282	C20H42	006912-07-8	93
2	Tetratetracontane	619	C44H90	007098-22-8	91
3	Heptacosane	380	C27H56	000593-49-7	91



0770

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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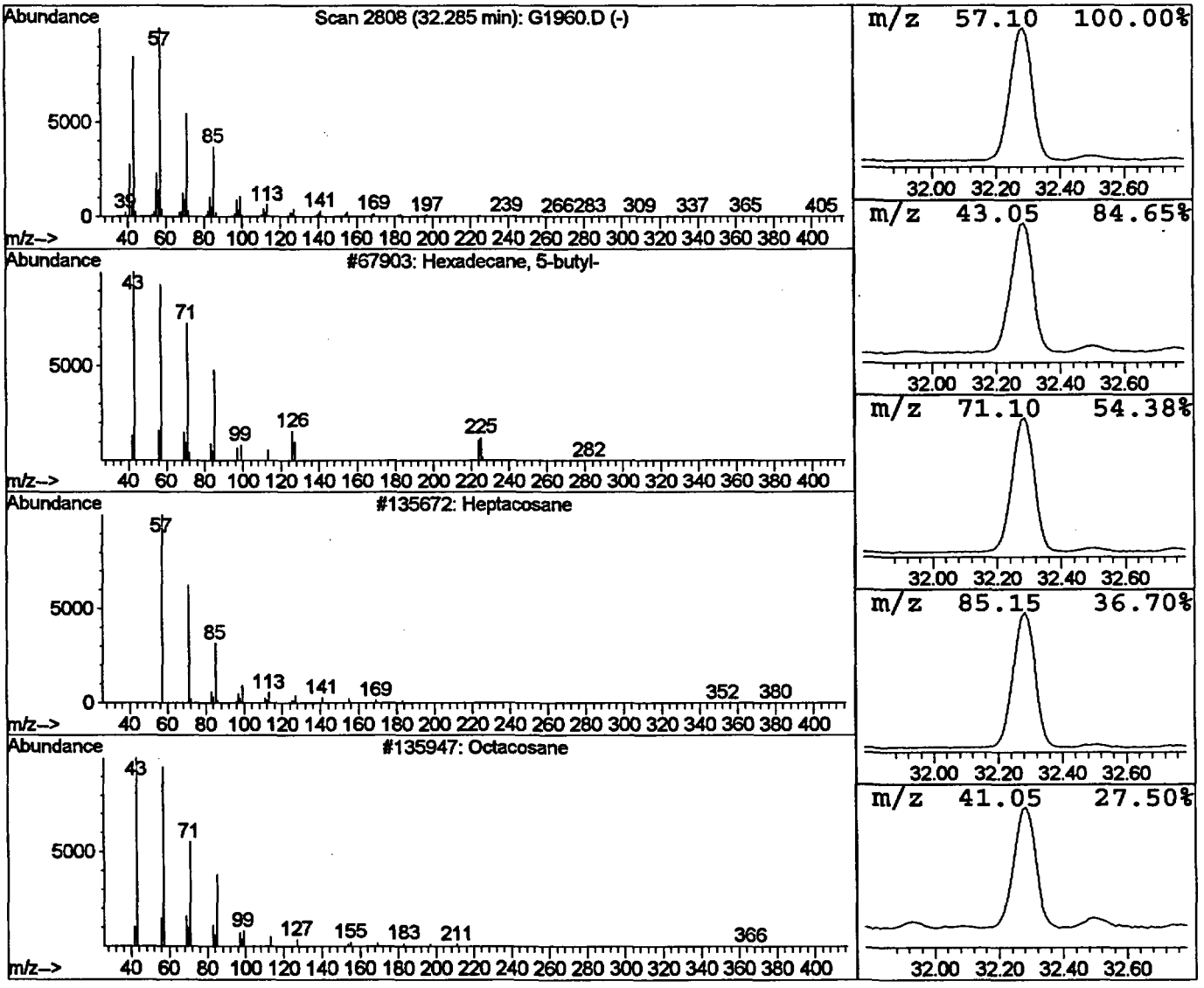
Peak Number 52 Hexadecane, 5-butyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.29	181.66 ng	8230870	Perylene-d12	31.51

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexadecane, 5-butyl-	282	C20H42	006912-07-8	93
2	Heptacosane	380	C27H56	000593-49-7	91
3	Octacosane	394	C28H58	000630-02-4	91



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1960.D Vial: 11
Acq On : 23 Jan 98 1:32 Operator:
Sample : S HP-7G 58073-008 FFR91 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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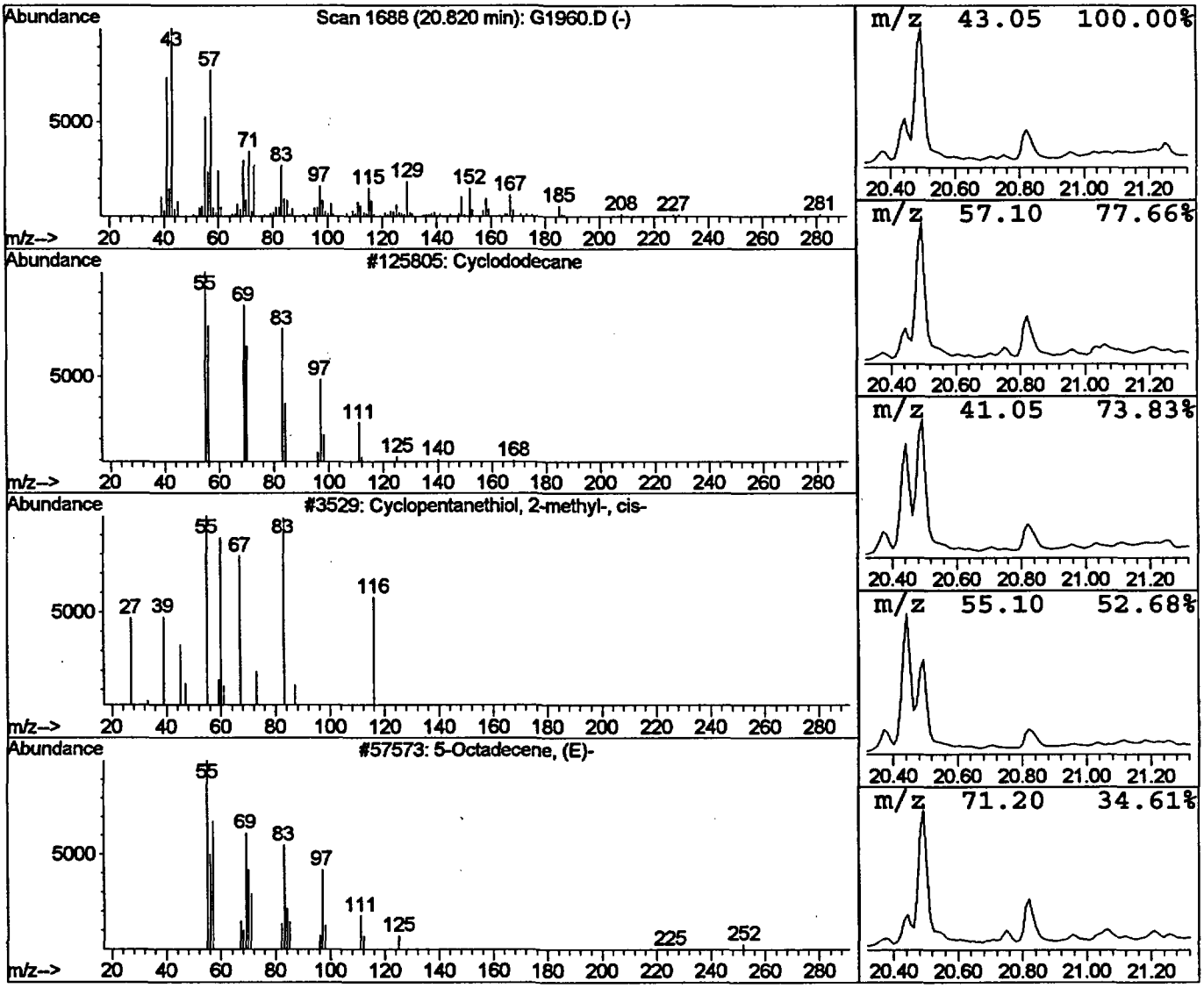
Peak Number 53 Cyclododecane Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.82	22.57 ng	949401	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecane	168	C12H24	000294-62-2	35
2	Cyclopentanethiol, 2-methyl-, cis-	116	C6H12S	001638-94-4	22
3	5-Octadecene, (E)-	252	C18H36	007206-21-5	18



CASE 25969
SDG# FFR76

Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 23 Jan 98 1:32
Data File: Q:\HPCHEM\G\G19XX\G1960.D
Name: S HP-7G 58073-008 FFR91
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
2-Pentanone, 4-hydro	4.22	639.0	ng	21995100	ISTD01	7.07	1376790	40.0
1-Hexanol, 2-ethyl-	4.75	77.4	ng	2664550	ISTD01	7.07	1376790	40.0
Hexane, 1,1'-oxybis-	5.79	30.5	ng	1050080	ISTD01	7.07	1376790	40.0
trans-3-Hexene-2,5-d	6.00	86.4	ng	2974930	ISTD01	7.07	1376790	40.0
2-Pentanone, 3-methy	6.55	43.3	ng	1491880	ISTD01	7.07	1376790	40.0
Isolongifolene	15.21	42.4	ng	1536250	ISTD03	16.29	1449200	40.0
Bicyclo[3.1.1]heptan	16.11	16.2	ng	586666	ISTD03	16.29	1449200	40.0
Pyrrolidine, 1-(1-cy	17.82	16.9	ng	613067	ISTD03	16.29	1449200	40.0
Isopropyl dodecanoat	19.37	16.8	ng	707701	ISTD04	19.62	1682370	40.0
Oxacyclotetradecane-	20.44	59.4	ng	2497780	ISTD04	19.62	1682370	40.0
Hexadecanoic acid	20.49	90.5	ng	3807010	ISTD04	19.62	1682370	40.0
9-Octadecenoic acid	21.55	16.6	ng	699762	ISTD04	19.62	1682370	40.0
9-Octadecenoic acid	21.82	130.1	ng	5470020	ISTD04	19.62	1682370	40.0
Octadecanoic acid	21.94	34.5	ng	1450800	ISTD04	19.62	1682370	40.0
Totarol	23.60	103.0	ng	4281360	ISTD05	25.39	1663320	40.0
3-Eicosene, (E)-	24.32	22.8	ng	946681	ISTD05	25.39	1663320	40.0
Hexadecanoic acid, 2	24.62	35.9	ng	1490880	ISTD05	25.39	1663320	40.0
1-HENEICOSYL FORMATE	26.37	16.5	ng	685626	ISTD05	25.39	1663320	40.0
Methacrylic acid, 2,	28.28	17.4	ng	721486	ISTD05	25.39	1663320	40.0
1-Octadecanol	29.25	21.5	ng	972515	ISTD06	31.51	1812360	40.0
Phosphonic acid, dio	32.49	20.8	ng	943481	ISTD06	31.51	1812360	40.0
Ergost-5-en-3-ol, (3	36.33	44.3	ng	2007800	ISTD06	31.51	1812360	40.0
Taraxerol methyl eth	37.00	147.2	ng	6668870	ISTD06	31.51	1812360	40.0
trans-.beta.-Ionone	37.56	20.4	ng	923743	ISTD06	31.51	1812360	40.0
Stigmast-5-en-3-ol,	38.28	161.1	ng	7298960	ISTD06	31.51	1812360	40.0
Ethynyl (1R*,2R*,5S*	38.88	40.4	ng	1828800	ISTD06	31.51	1812360	40.0
(E)-2-Methyl-4-(2',6	39.14	30.7	ng	1391880	ISTD06	31.51	1812360	40.0
28-Norolean-17-en-3-	39.97	183.6	ng	8317120	ISTD06	31.51	1812360	40.0
D:C-Friedoolean-8-en	40.31	60.0	ng	2717390	ISTD06	31.51	1812360	40.0
HOP-22(29)-EN-3BETA-	40.93	18.5	ng	836509	ISTD06	31.51	1812360	40.0
Additional Tentatively Identified Compounds								
Hexadecanoic acid, m	20.22	16.0	ng	674175	ISTD04	19.62	1682370	40.0
3-D-2-BUTYL ACETATE	5.59	15.7	ng	539379	ISTD01	7.07	1376790	40.0
Oxacyclotetradecane-	20.37	14.4	ng	603639	ISTD04	19.62	1682370	40.0
Chola-5,22-dien-3-ol	35.14	14.2	ng	644596	ISTD06	31.51	1812360	40.0
(+-)-3-Isopropyliden	21.25	13.7	ng	576526	ISTD04	19.62	1682370	40.0
3-Cyclohexen-1-ol	5.19	12.8	ng	439666	ISTD01	7.07	1376790	40.0
4-,,inside''-Methyl-	33.53	12.7	ng	575846	ISTD06	31.51	1812360	40.0
6-(2-IMINO-3-OXAZOLI	31.94	12.3	ng	556401	ISTD06	31.51	1812360	40.0
1,2,3-Propanetriol	6.15	12.2	ng	420056	ISTD01	7.07	1376790	40.0
Cholest-5-en-3-ol (3	34.27	10.9	ng	495725	ISTD06	31.51	1812360	40.0

CASE 25969
SDG# FFR76

Hydrocarbons: n-Alkanes HP76 580B008 FFR91 01/26/98 01:32

~~Butane~~	3.68	33.9 ng	1166830	ISTD01	7.07	1376790	40.0
Hexadecane	21.46	6.4 ng	269480	ISTD04	19.62	1682370	40.0
Eicosane	22.14	5.1 ng	214817	ISTD04	19.62	1682370	40.0
Eicosane	26.27	27.3 ng	1136410	ISTD05	25.39	1663320	40.0
Tetratetracontane	27.54	11.7 ng	487849	ISTD05	25.39	1663320	40.0
Hexatriacontane	30.84	28.4 ng	1286970	ISTD06	31.51	1812360	40.0
Eicosane	33.82	20.0 ng	904351	ISTD06	31.51	1812360	40.0
Eicosane	35.61	61.3 ng	2775730	ISTD06	31.51	1812360	40.0
Subtotal:		194.1 ng					

Hydrocarbons: Branched Alkanes

Heptane, 3,5-dimethy	3.98	6.1 ng	208253	ISTD01	7.07	1376790	40.0
Octane, 4-methyl-	4.58	58.7 ng	2020010	ISTD01	7.07	1376790	40.0
Hexadecane, 5-butyl-	29.06	183.6 ng	8319260	ISTD06	31.51	1812360	40.0
Hexadecane, 5-butyl-	32.29	181.7 ng	8230870	ISTD06	31.51	1812360	40.0
Subtotal:		430.0 ng					

Hydrocarbons: Cyclic Alkanes

Cyclododecane	20.82	22.6 ng	949401	ISTD04	19.62	1682370	40.0
Subtotal:		22.6 ng					

Total Alkane Conc: (646.7 ng − 33.9) × RF = 14,000 ug/kg

G1960.D LIN.M Mon Jan 26 16:55:07 1998

FFR91 58073-008 wo 1/27-98

TIC: G1960.D

S HP-7G 58073-008 FFR91 01/23/98 132

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.682	rVB	0.225	1166832	3.570	3.795
2	3.979	rBV	0.133	208253	3.897	4.030
3	4.225	rBV	0.307	21995110	4.102	4.409
4	4.583	rVV	0.256	2020014	4.409	4.665
5	4.747	rVV	0.123	2664548	4.665	4.788
6	4.829	rVB	0.174	2878914	4.788	4.962
7	5.187	rVB	0.184	439666	5.136	5.320
8	5.505	rBV	0.102	160930	5.443	5.546
9	5.587	rVV	0.123	539379	5.546	5.668
10	5.791	rVB	0.235	1050083	5.668	5.904
11	5.996	rBV	0.133	2974928	5.924	6.057
12	6.150	rVB	0.123	420056	6.098	6.221
13	6.365	rVB	0.143	3551740	6.313	6.457
14	6.549	rBV	0.164	1491879	6.457	6.620
15	6.723	rVV	0.113	3151506	6.672	6.784
16	6.835	rVV	0.072	214268	6.784	6.856
17	7.071	rBV	0.154	1376789	6.979	7.132
18	7.204	rBV	0.102	144606	7.132	7.235
19	7.439	rBV	0.195	2990974	7.358	7.552
20	8.197	rVB	0.143	1701716	8.136	8.279
21	10.091	rVB	0.225	1422777	10.009	10.234
22	14.278	rBV	0.184	2386694	14.196	14.380
23	14.851	rVB	0.184	130381	14.769	14.954
24	15.210	rBV	0.164	1536251	15.097	15.261
25	15.291	rVB	0.123	139744	15.261	15.384
26	16.008	rBV	0.123	393187	15.936	16.059
27	16.110	rVB	0.113	586666	16.059	16.172
28	16.295	rBV	0.195	1449197	16.172	16.366
29	16.960	rBV	0.174	207440	16.889	17.063
30	17.820	rVB	0.205	613067	17.718	17.922
31	18.178	rBV	0.123	1941240	18.127	18.250
32	18.455	rBV	0.102	136179	18.414	18.516
33	18.680	rVV	0.195	173811	18.567	18.762
34	19.079	rBV	0.133	164315	18.987	19.120
35	19.366	rBV	0.092	707701	19.315	19.407
36	19.448	rVB	0.092	326759	19.407	19.499
37	19.622	rBV	0.092	1682373	19.571	19.663
38	20.083	rVB	0.133	259200	20.001	20.134
39	20.216	rBV	0.123	674175	20.134	20.257
40	20.369	rBV	0.082	603639	20.318	20.400
41	20.441	rVV	0.061	2497780	20.400	20.461
42	20.492	rVB	0.205	3807013	20.461	20.666
43	20.820	rBV	0.123	949401	20.779	20.902
44	20.953	rBV	0.082	182457	20.902	20.983
45	21.035	rBV	0.092	212434	20.994	21.086
46	21.117	rBV	0.061	183675	21.086	21.147
47	21.250	rVB	0.174	576526	21.229	21.403
48	21.465	rBV	0.092	269480	21.403	21.495
49	21.546	rVB	0.133	699762	21.495	21.628
50	21.680	rBV	0.082	144227	21.628	21.710
51	21.823	rBV	0.174	5470020	21.710	21.884
52	21.936	rVB	0.174	1450804	21.884	22.058
53	22.140	rBV	0.113	214817	22.058	22.171
54	22.570	rBV	0.102	193013	22.509	22.611
55	22.662	rVV	0.143	3460892	22.611	22.754
56	22.795	rVB	0.113	259563	22.754	22.867

CASE 25969
SOC# FFR76

57	23.072	rBV	0.133	194709	22.990	23.123
58	23.297	rBV	0.092	252367	23.236	23.328
59	23.358	rVV	0.072	268337	23.328	23.399
60	23.451	rVV	0.113	254472	23.410	23.522
61	23.604	rVB	0.215	4281363	23.533	23.748
62	23.829	rVB	0.123	214175	23.799	23.922
63	24.065	rBV	0.092	250286	24.014	24.106
64	24.321	rBV	0.154	946681	24.239	24.392
65	24.515	rBV	0.082	164424	24.464	24.546
66	24.618	rVB	0.256	1490881	24.556	24.812
67	24.966	rBV	0.082	173661	24.915	24.996
68	25.027	rVB	0.123	213846	24.996	25.119
69	25.201	rVV	0.092	136747	25.140	25.232
70	25.385	rVB	0.195	1663318	25.324	25.519
71	26.266	rBV	0.133	1136409	26.184	26.317
72	26.368	rVB	0.174	685626	26.317	26.491
73	26.614	rBV	0.092	213537	26.542	26.634
74	27.116	rBV	0.143	418687	26.983	27.126
75	27.535	rBV	0.133	487849	27.453	27.587
76	28.283	rBV	0.225	721486	28.150	28.375
77	29.061	rBV	0.225	8319256	28.938	29.163
78	29.245	rVB	0.276	972515	29.173	29.450
79	30.842	rBV	0.195	1286972	30.729	30.924
80	31.507	rBV	0.154	1812359	31.415	31.569
81	31.630	rVB	0.123	313560	31.579	31.702
82	31.937	rBV	0.154	556401	31.866	32.019
83	32.091	rVV	0.092	224606	32.050	32.142
84	32.285	rVV	0.235	8230868	32.173	32.408
85	32.490	rVV	0.235	943481	32.429	32.664
86	32.756	rVB	0.164	286967	32.705	32.869
87	33.534	rVB	0.205	575846	33.463	33.667
88	33.821	rVB	0.225	904351	33.739	33.964
89	34.271	rVB	0.225	495725	34.210	34.435
90	35.142	rBV	0.235	644596	35.060	35.295
91	35.613	rVB	0.287	2775731	35.500	35.787
92	36.329	rVB	0.287	2007803	36.227	36.513
93	37.005	rBV	0.276	6668874	36.851	37.128
94	37.558	rVB	0.399	923743	37.476	37.875
95	38.284	rBV	0.399	7298963	38.110	38.510
96	38.878	rVB	0.256	1828799	38.755	39.011
97	39.144	rBV	0.266	1391881	39.042	39.308
98	39.974	rBV	0.379	8317116	39.820	40.199
99	40.311	rVB	0.287	2717387	40.219	40.506
100	40.926	rBV	0.225	836509	40.813	41.038

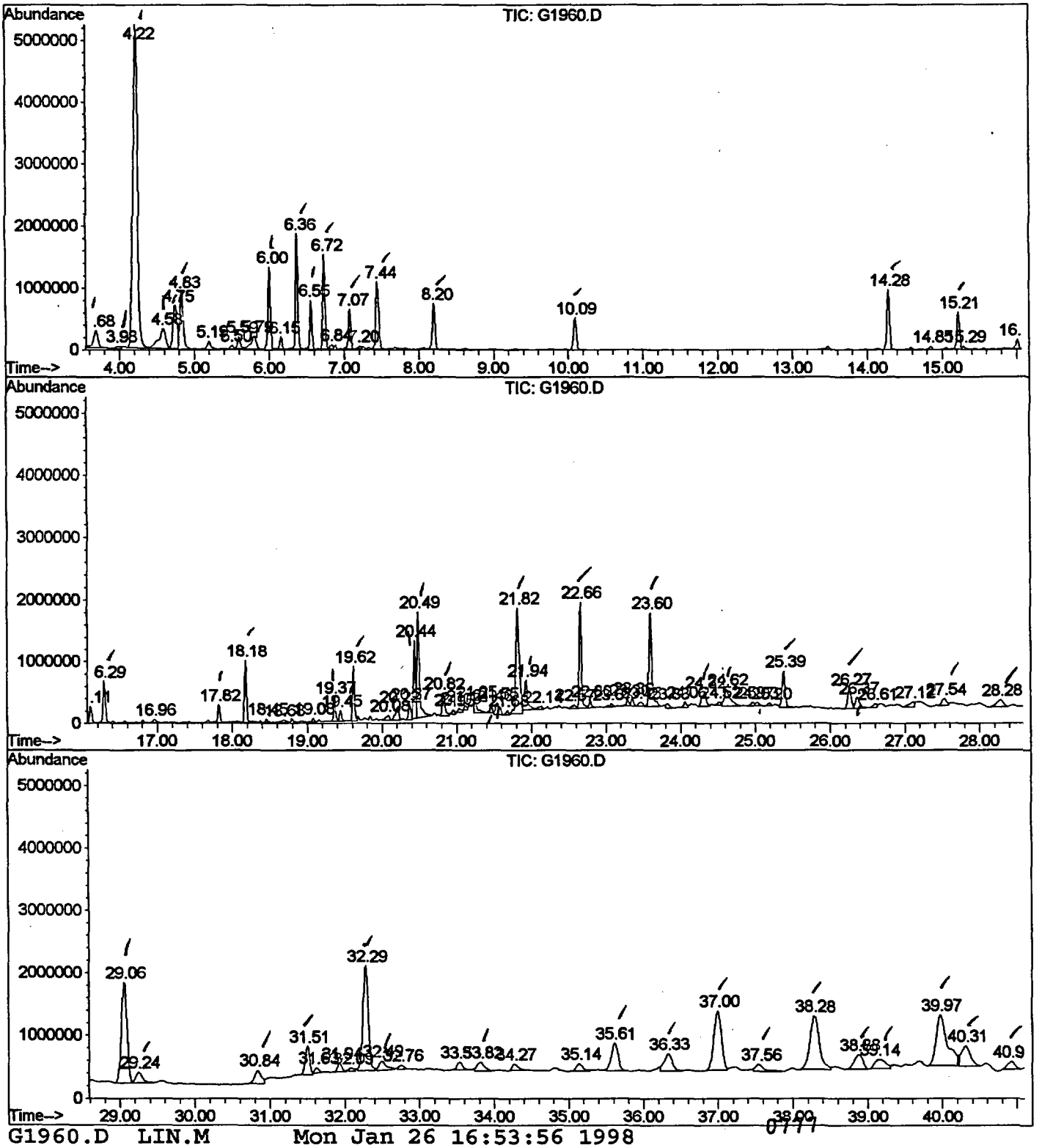
FFR91 58073-008 w01-27-98

HP-76 01/23/98 1:32

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1960.D
Operator :
Acquired : 23 Jan 98 1:32 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-008 FFR91
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 11
Quant File :CLPME7.RES



G1960.D LIN.M Mon Jan 26 16:53:56 1998

0777

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR92

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-009

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1967

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 34 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/23/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

Number TICs Found: 30

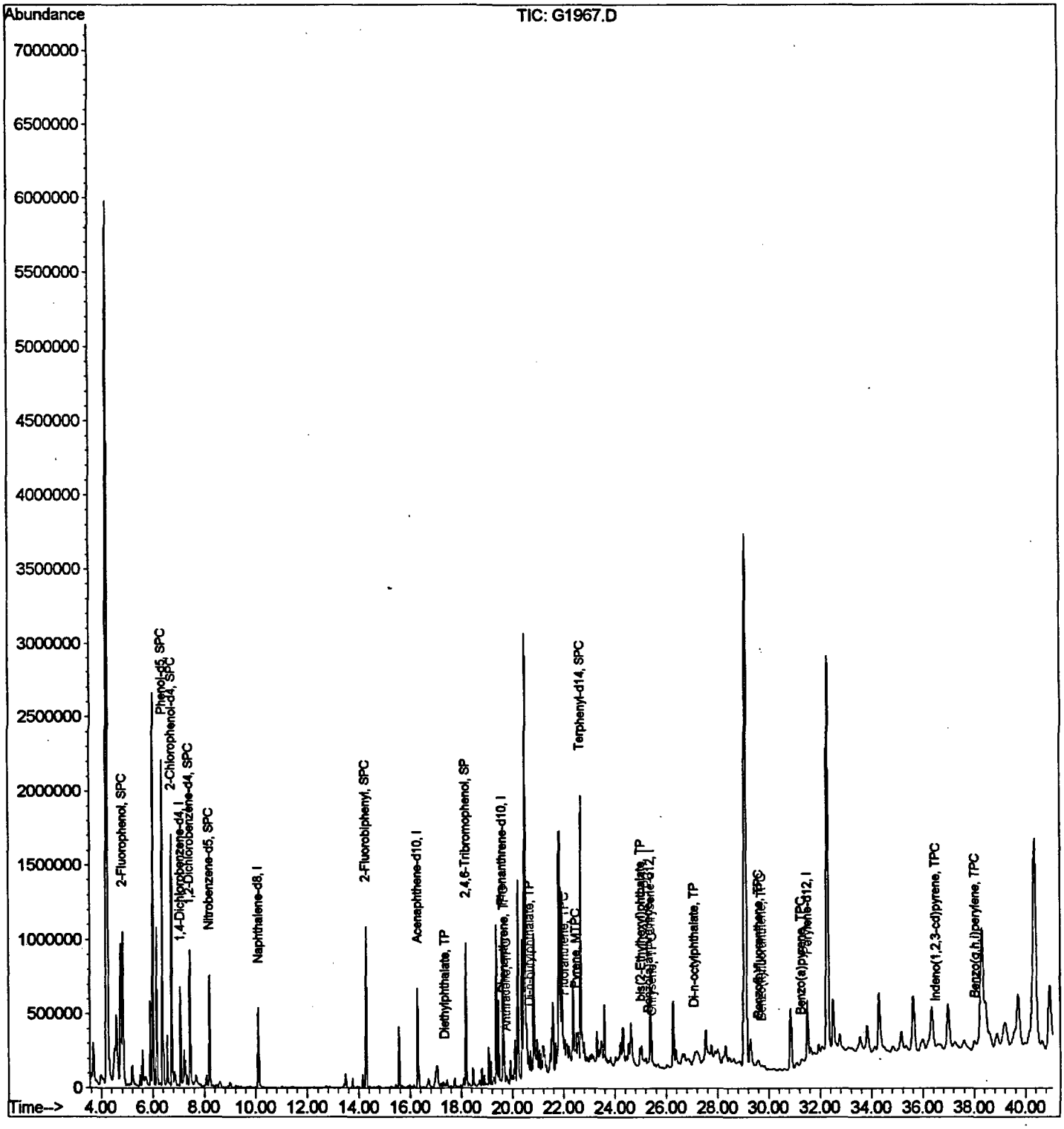
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

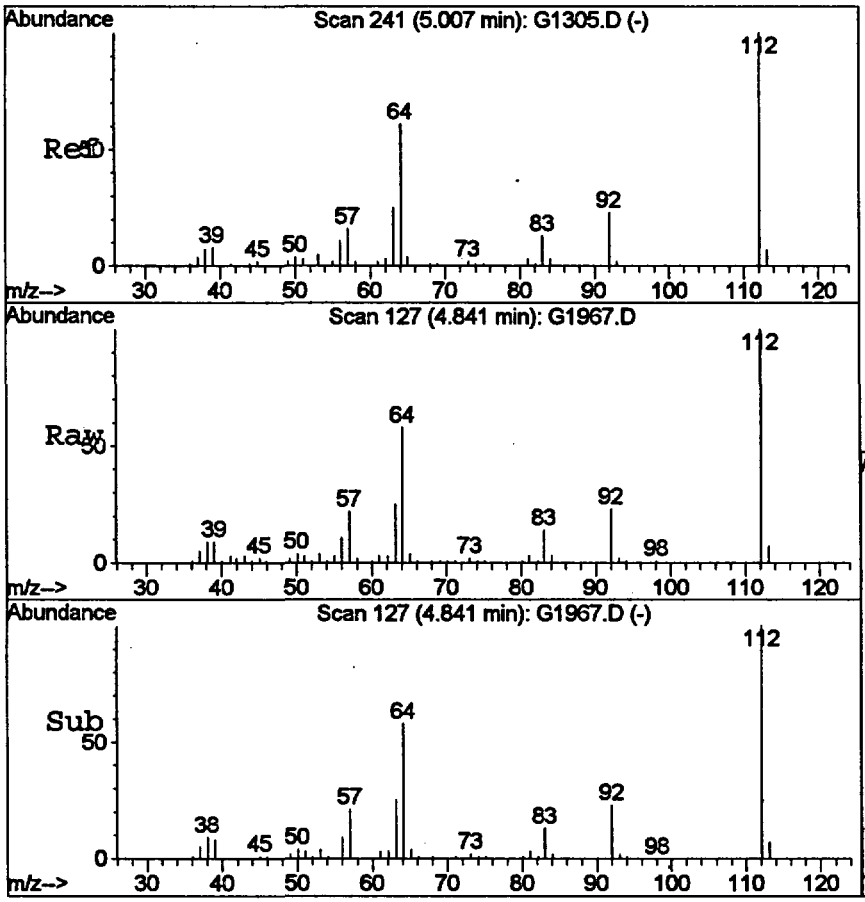
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.68	660.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.24	18000.	JNAB
3.		Unknown	4.51	800.	J
4.	100-79-8	1,3-Dioxolane-4-methanol, 2,	5.90	940.	JN
5.		trans-3-Hexene-2,5-dione	6.01	4200.	JB
6.		Unknown ketone	6.15	1700.	J
7.		Unknown	6.56	590.	J
8.		Unknown acid type	17.04	620.	J
9.	1002-84-2	Pentadecanoic acid	19.38	1200.	JN
10.	112-80-1	9-Octadecenoic acid (Z)-	19.46	550.	JN
11.		Unknown	20.23	1900.	J
12.		Unknown	20.38	1300.	J
13.		Unknown	20.45	1400.	J
14.	57-10-3	Hexadecanoic acid	20.50	4000.	JN
15.		Unknown	20.83	1500.	J
16.	112-80-1	9-Octadecenoic acid (Z)-	21.86	3900.	JN
17.	57-11-4	Octadecanoic acid	21.94	1400.	JN
18.		Unknown	22.38	850.	J
19.	123-79-5	Hexanedioic acid, dioctyl es	23.60	580.	JNB
20.		Unknown	24.32	630.	J
21.	23470-00-0	Hexadecanoic acid, 2-hydroxy	24.63	940.	JN
22.	506-52-5	1-Hexacosanol	29.29	550.	JN
23.	57-88-5	Cholest-5-en-3-ol (3.beta.)-	34.30	1300.	JN
24.		ERGOST-5-EN-3.BETA.-OL	36.35	1300.	J
25.	38485-29-9	Stigmasta-5,23-dien-3.beta.-	36.99	1200.	JN
26.	83-47-6	Stigmast-5-en-3-ol, (3.beta.	38.32	3700.	JN
27.		Unknown	39.20	1000.	J
28.	5060-25-3	(24R)-5.ALPHA.-STIGMASTAN-3-	39.73	2000.	JN
29.		Unknown	40.38	7500.	J
30.		Unknown	40.97	1900.	J

Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:28 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

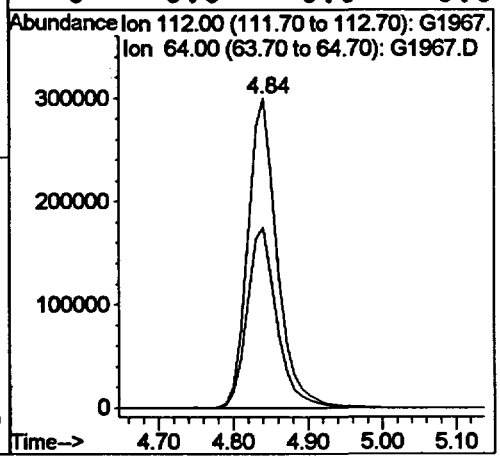


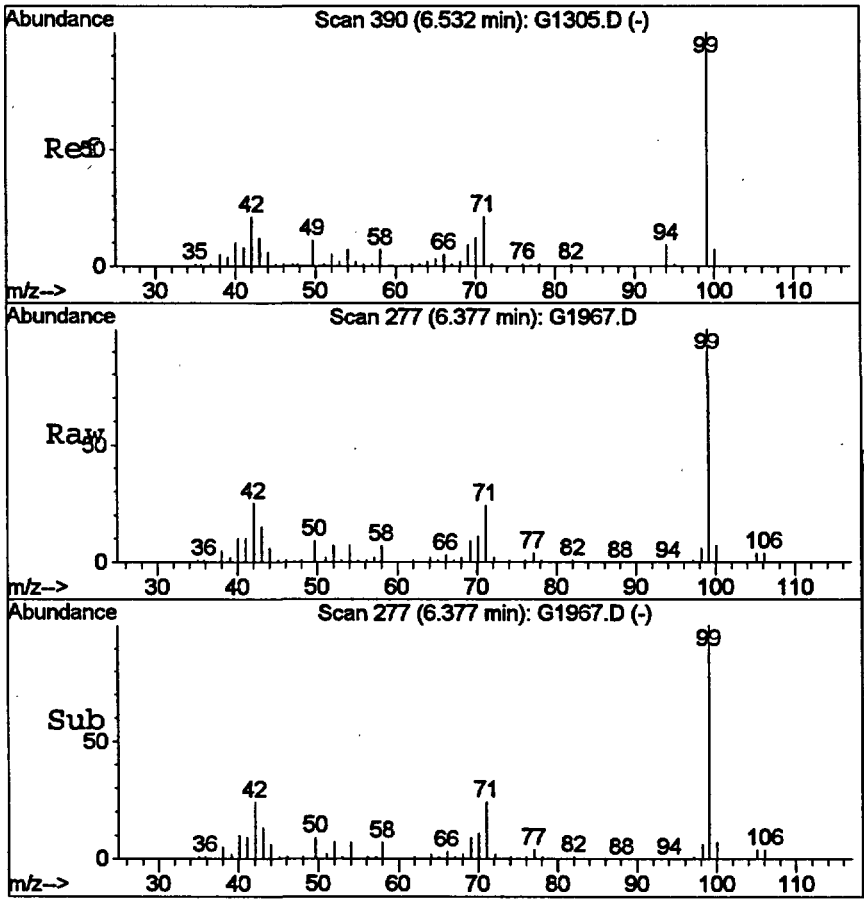


#2
2-Fluorophenol
Concen: 104.88 ng
RT: 4.84 min Scan# 127
Delta R.T. 0.02 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:112 Resp: 820619

Ion	Ratio	Lower	Upper
112	100		
64	59.1	39.6	79.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

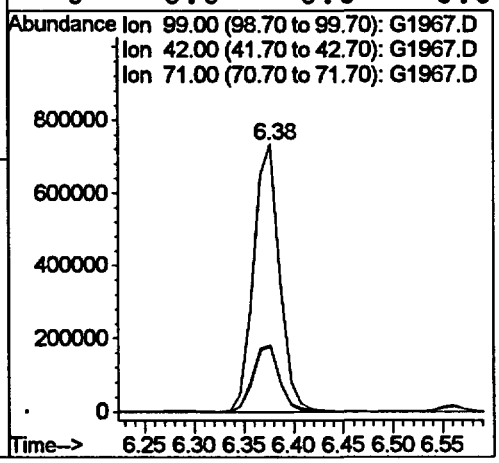


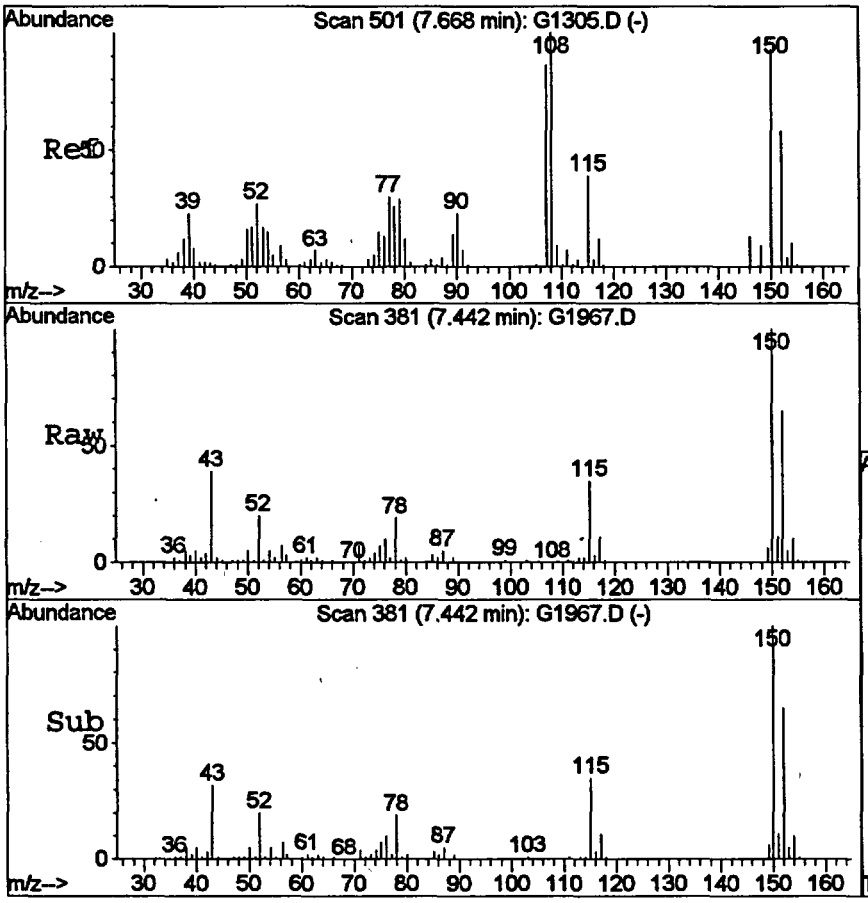


#3
Phenol-d5
Concen: 132.45 ng
RT: 6.38 min Scan# 277
Delta R.T. 0.01 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:99 Resp: 1342262

Ion	Ratio	Lower	Upper
99	100		
42	26.2	7.0	47.0
71	25.0	4.6	44.6
0	0.0	0.0	0.0

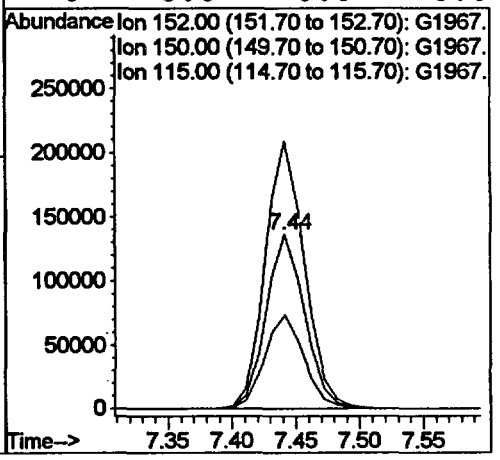


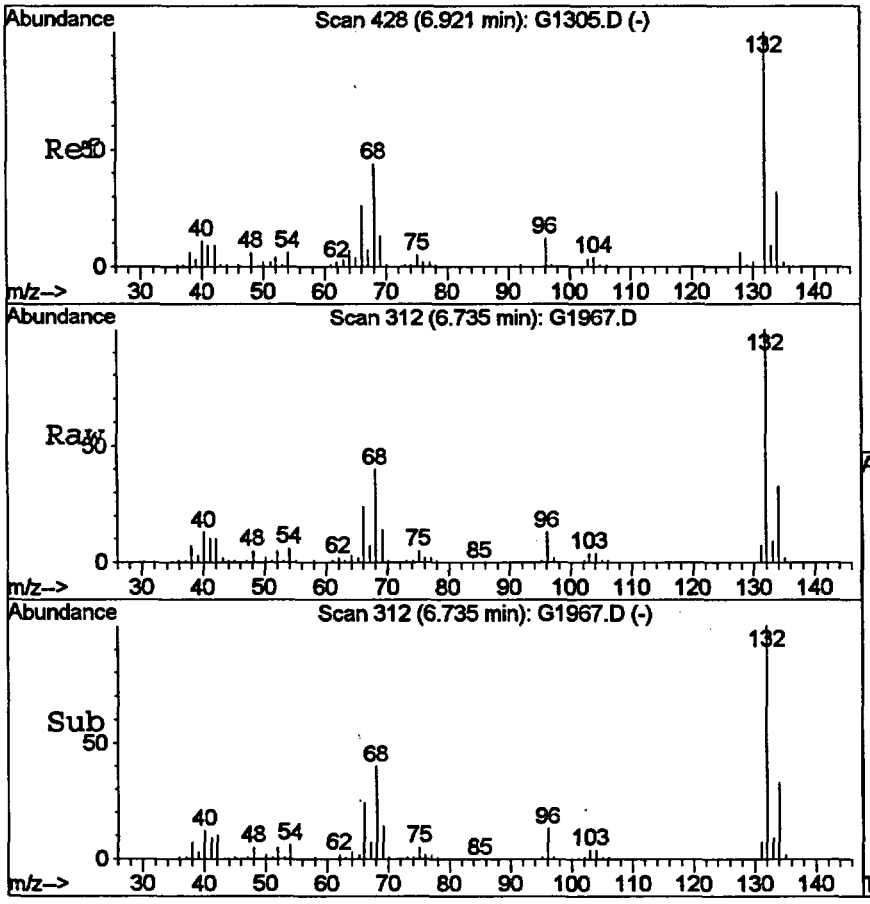


#7
1,2-Dichlorobenzene-d4
Concen: 59.24 ng
RT: 7.44 min Scan# 381
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:152 Resp: 286734

Ion	Ratio	Lower	Upper
152	100		
150	155.4	154.9	194.9
115	55.0	34.6	74.6
0	0.0	0.0	0.0

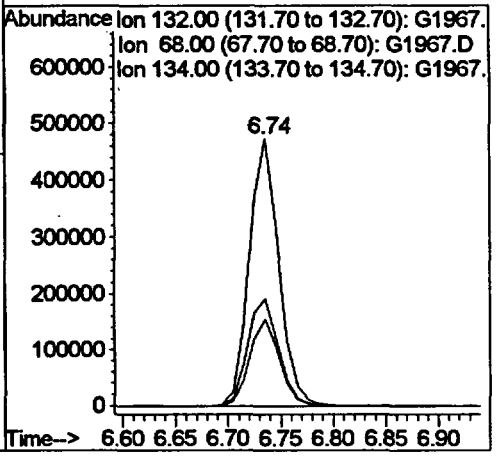




#8
2-Chlorophenol-d4
Concen: 118.26 ng
RT: 6.74 min Scan# 312
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:132 Resp: 924352

Ion	Ratio	Lower	Upper
132	100		
68	42.5	22.5	62.5
134	32.9	13.1	53.1
0	0.0	0.0	0.0



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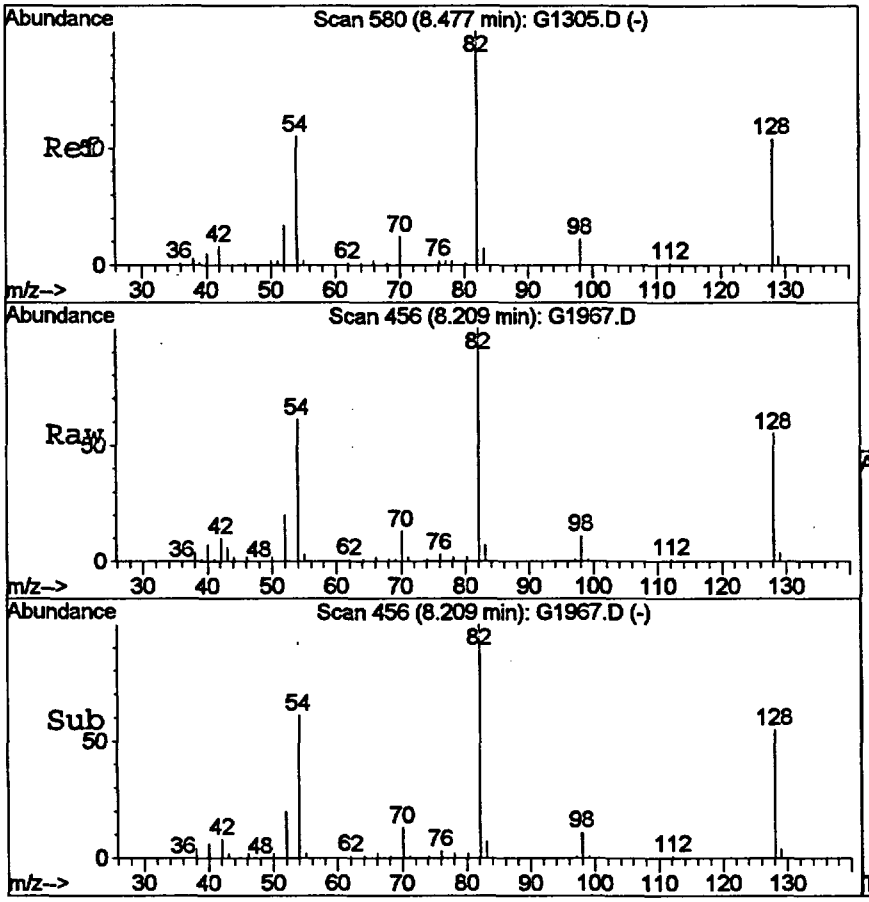
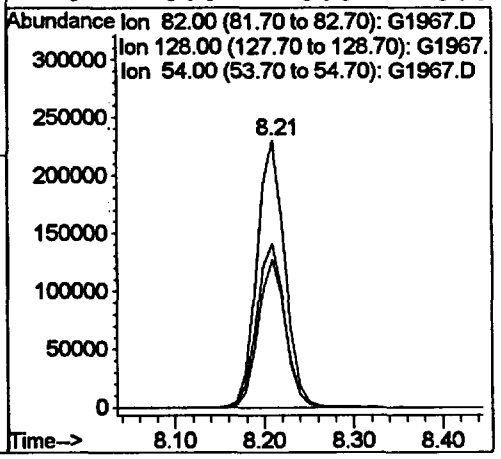
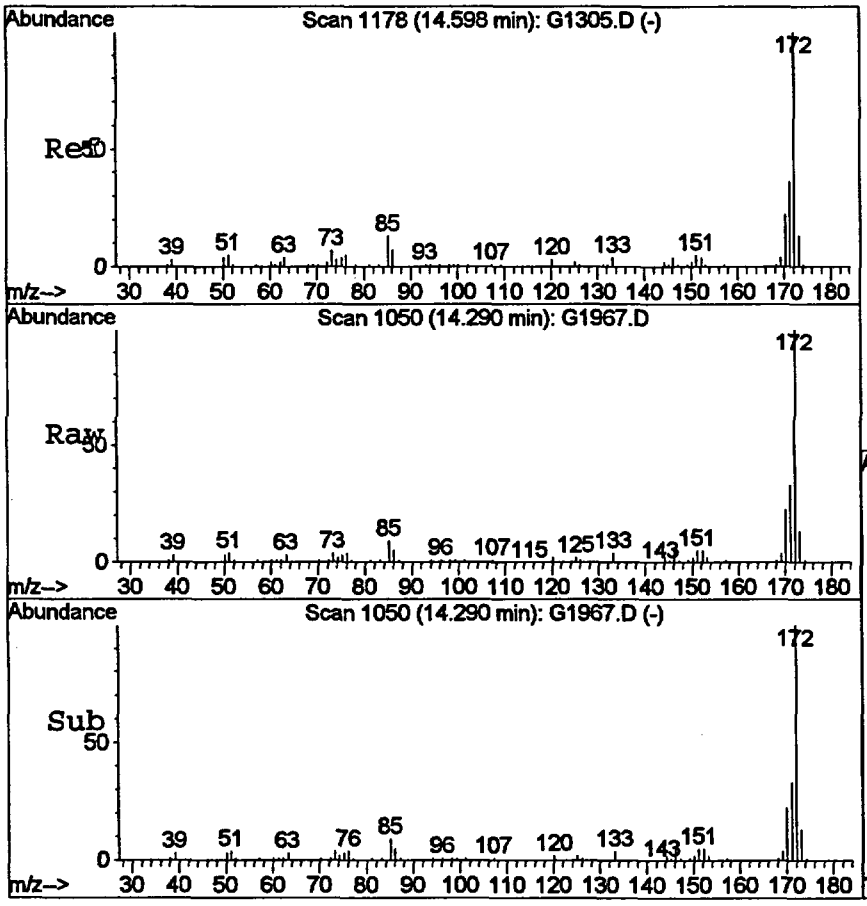


#18
Nitrobenzene-d5
Concen: 77.76 ng
RT: 8.21 min Scan# 456
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:82 Resp: 500648

Ion	Ratio	Lower	Upper
82	100		
128	54.6	35.5	75.5
54	61.7	41.9	81.9
0	0.0	0.0	0.0

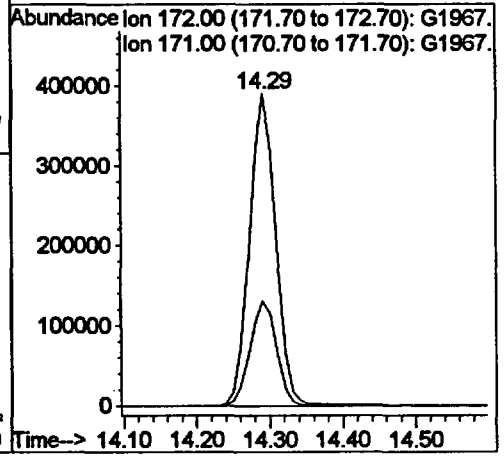




#35
2-Fluorobiphenyl
Concen: 97.58 ng
RT: 14.29 min Scan# 1050
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:172 Resp: 973301

Ion	Ratio	Lower	Upper
172	100		
171	33.9	13.7	53.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



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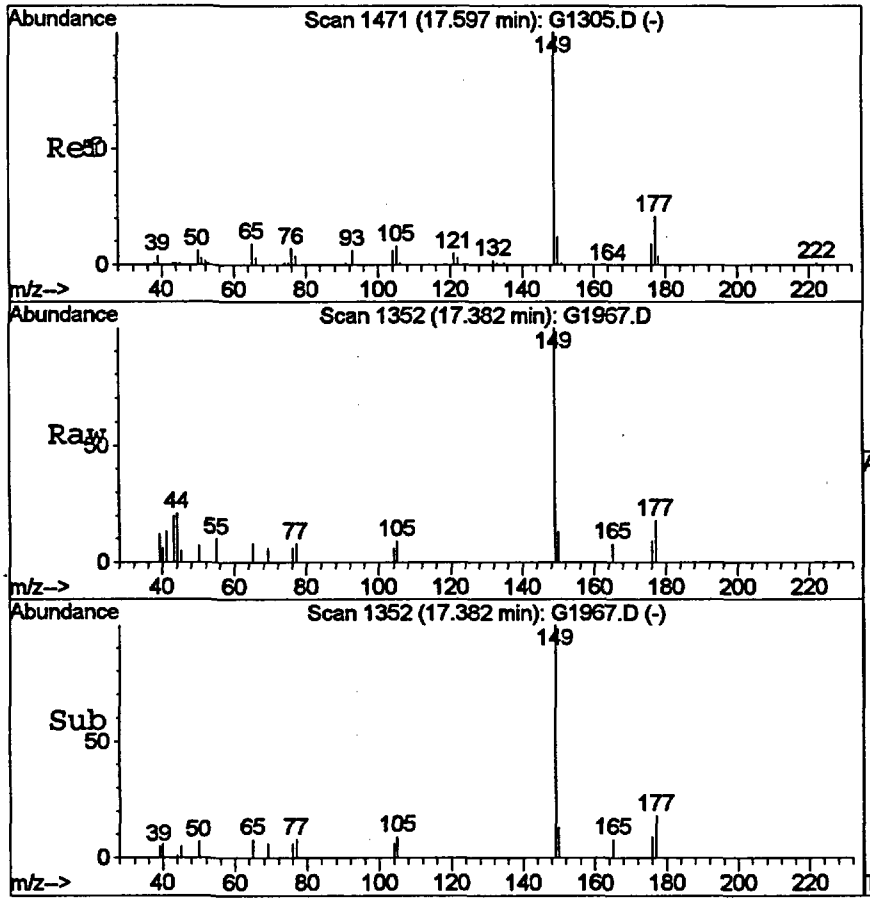
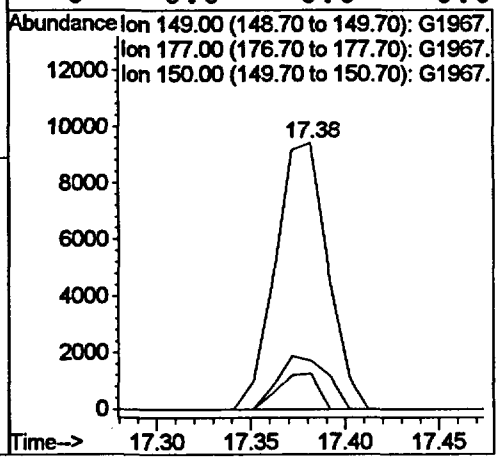
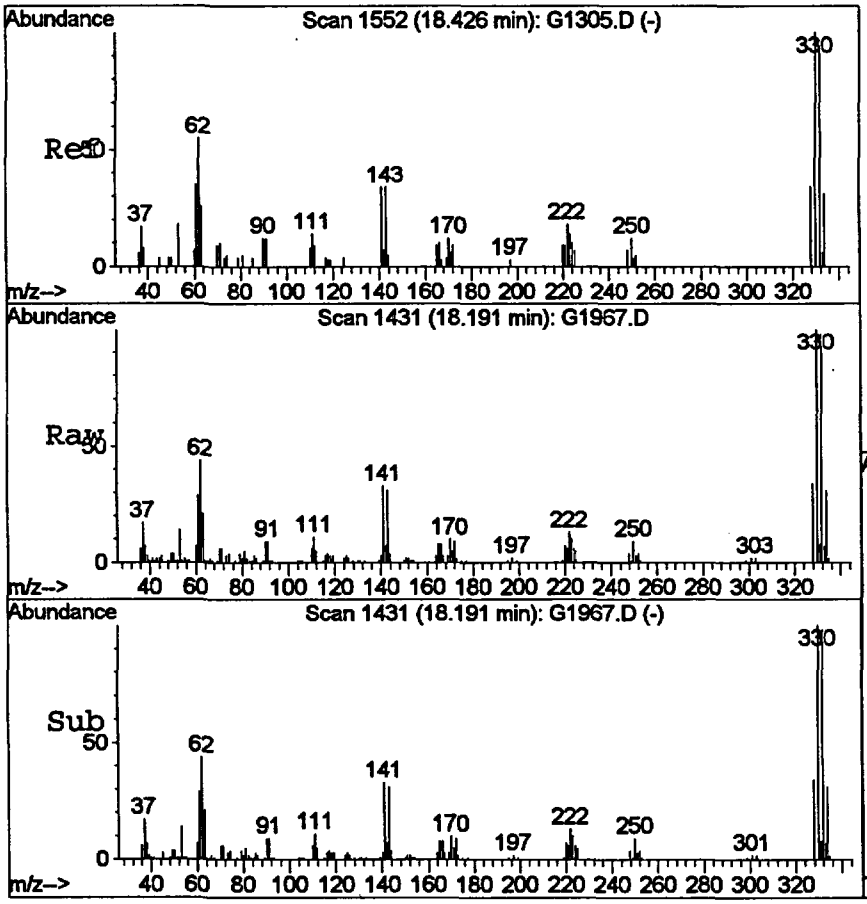


#47
Diethylphthalate
Concen: 1.62 ng
RT: 17.38 min, Scan# 1352
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

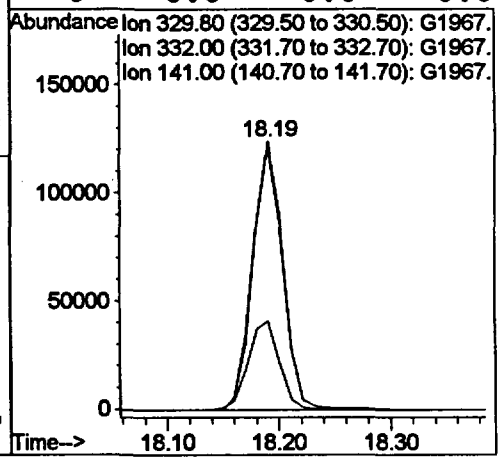
Tgt Ion:149	Resp:	18191	
Ion	Ratio	Lower	Upper
149	100		
177	0.0	0.6	40.6#
150	0.0	0.0	31.6
0	0.0	0.0	0.0





#52
2,4,6-Tribromophenol
Concen: 151.65 ng
RT: 18.19 min Scan# 1431
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:329.8	Resp:	232424	
Ion	Ratio	Lower	Upper
330	100		
332	96.9	77.6	117.6
141	34.0	13.7	53.7
0	0.0	0.0	0.0



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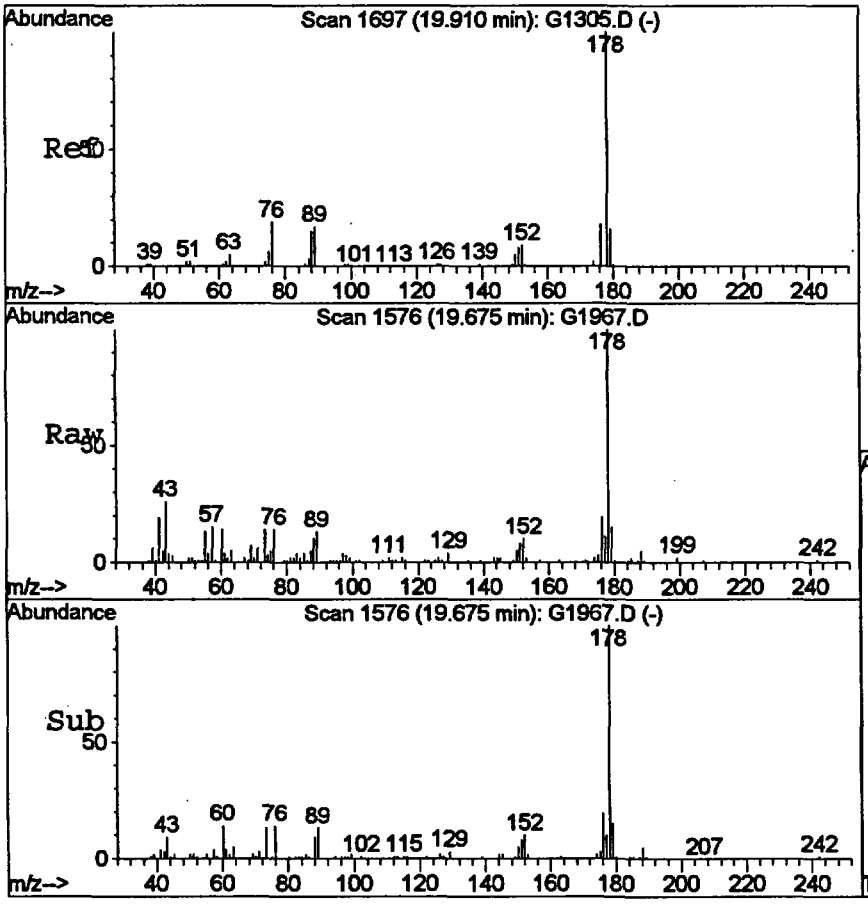
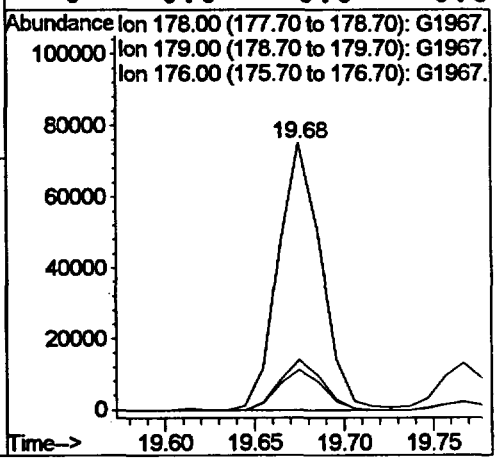
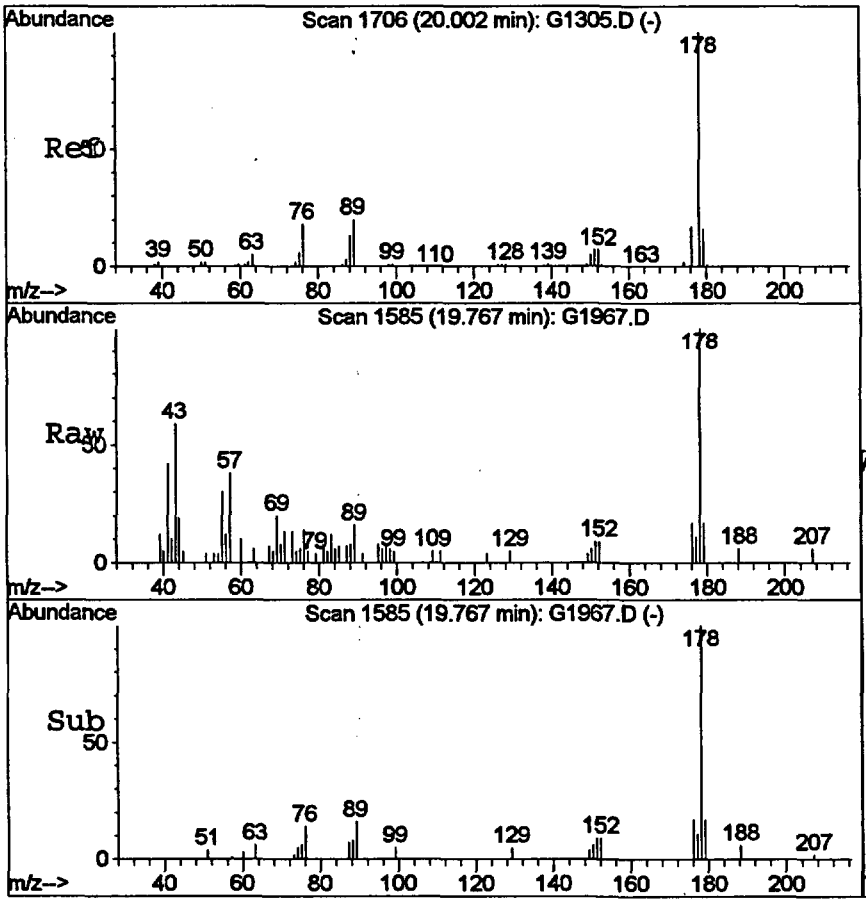


#58
Phenanthrene
Concen: 8.07 ng
RT: 19.68 min, Scan# 1576
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:178 Resp: 125504

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	35.5
176	18.5	0.0	38.1
0	0.0	0.0	0.0

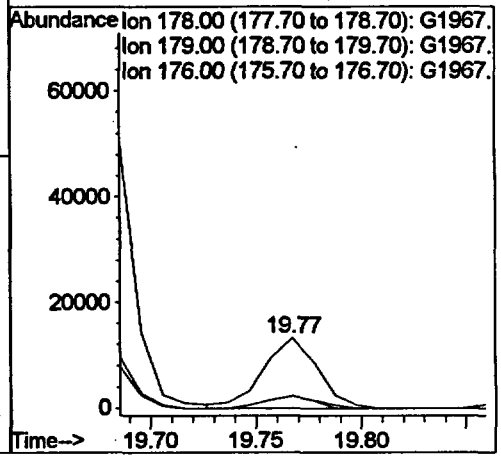


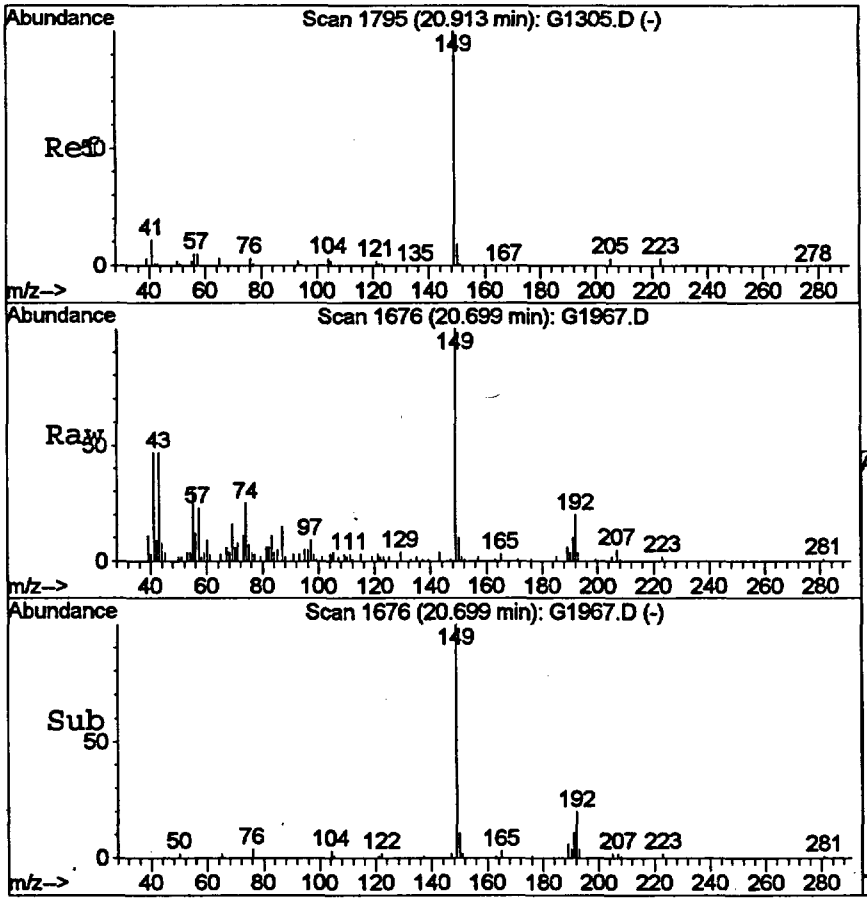


#59
Anthracene
Concen: 1.48 ng m
RT: 19.77 min, Scan# 1585
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:178 Resp: 23787

Ion	Ratio	Lower	Upper
178	100		
179	17.4	0.0	34.9
176	17.3	0.0	37.7
0	0.0	0.0	0.0

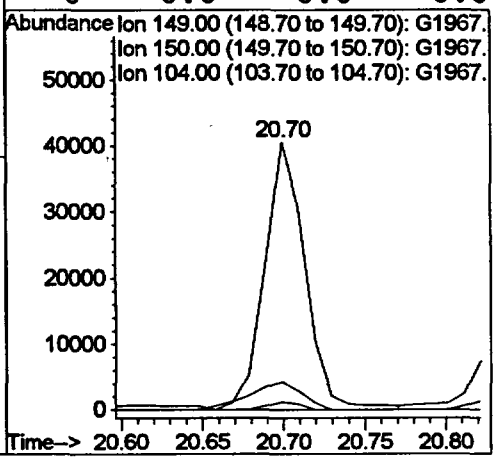


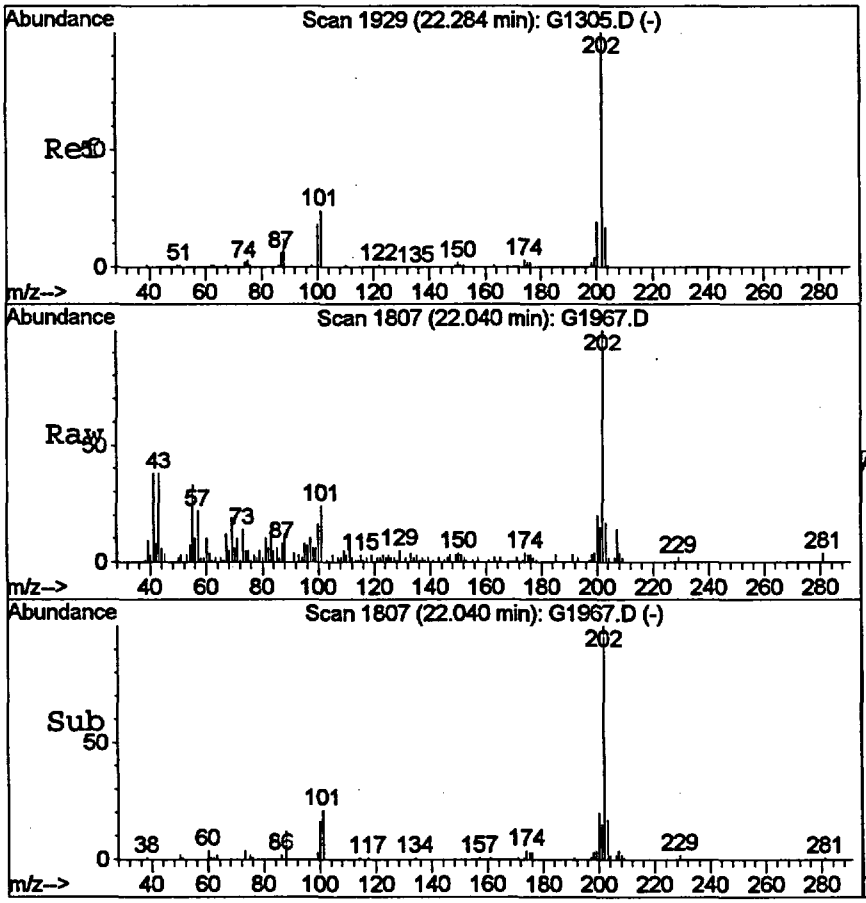


#61
Di-n-butylphthalate
Concen: 2.90 ng
RT: 20.70 min / Scan# 1676
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:149 Resp: 70453

Ion	Ratio	Lower	Upper
149	100		
150	0.0	0.0	29.0
104	0.0	0.0	23.0
0	0.0	0.0	0.0

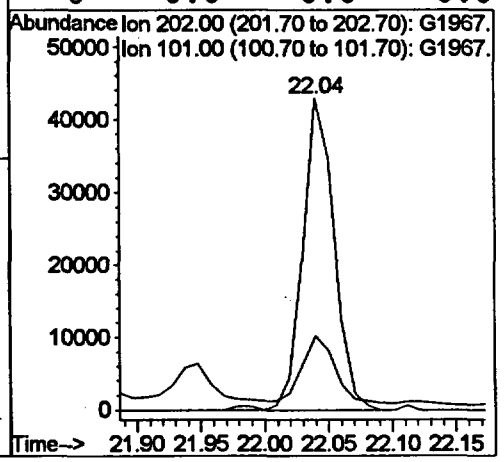


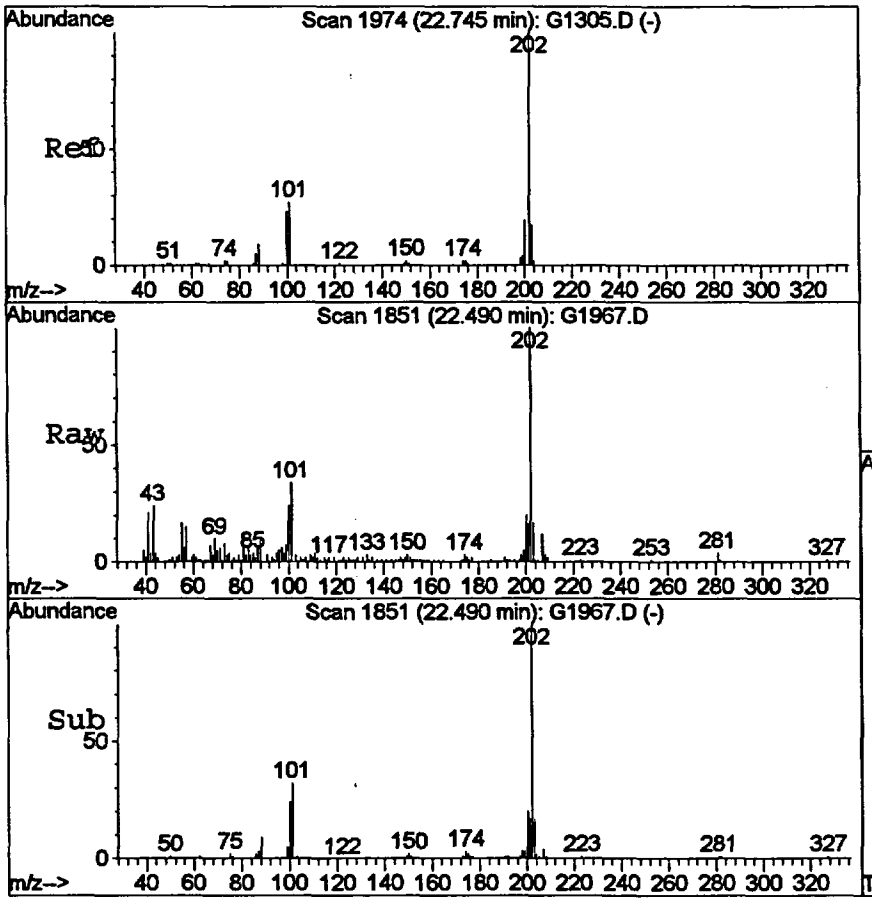


#62
Fluoranthene
Concen: 4.70 ng
RT: 22.04 min / Scan# 1807
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:202 Resp: 73231

Ion	Ratio	Lower	Upper
202	100		
101	22.5	1.9	41.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

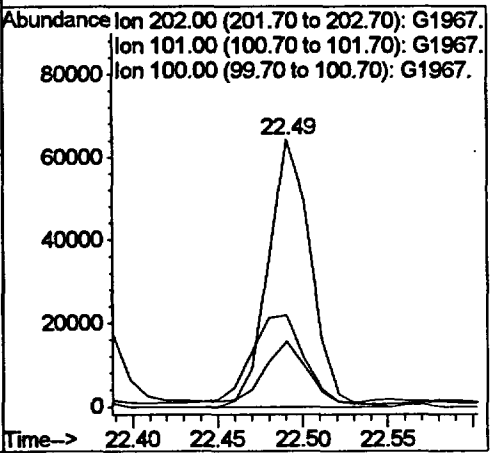


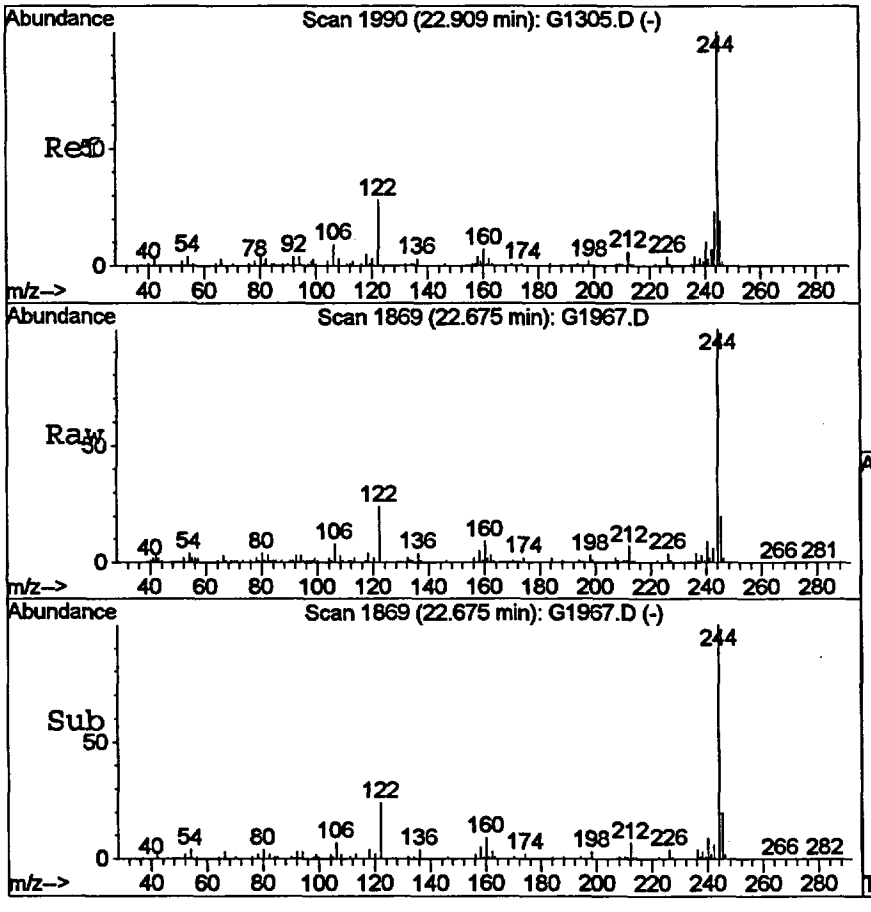


#64
Pyrene
Concen: 6.87 ng
RT: 22.49 min / Scan# 1851
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:202 Resp: 110680

Ion	Ratio	Lower	Upper
202	100		
101	40.5	5.7	45.7
100	24.5	0.9	40.9
0	0.0	0.0	0.0

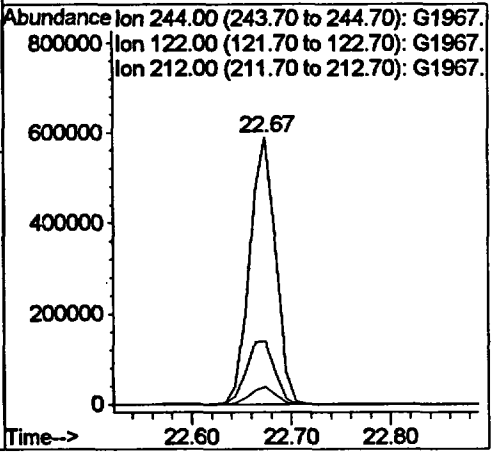


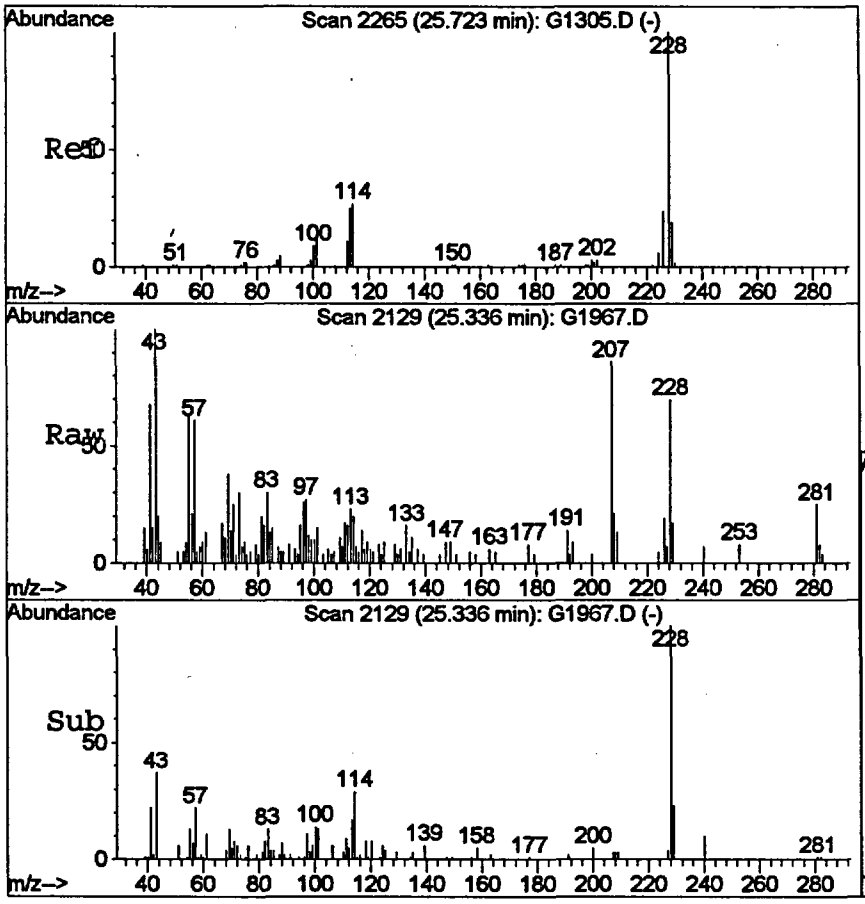


#65
Terphenyl-d14
Concen: 107.73 ng
RT: 22.67 min Scan# 1869
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:244 Resp: 1071111

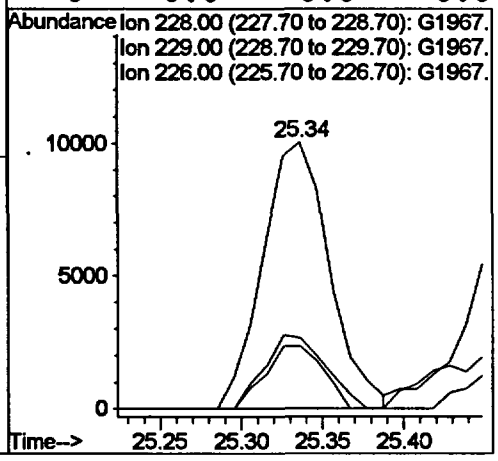
Ion	Ratio	Lower	Upper
244	100		
122	26.2	5.4	45.4
212	6.5	0.0	26.2
0	0.0	0.0	0.0

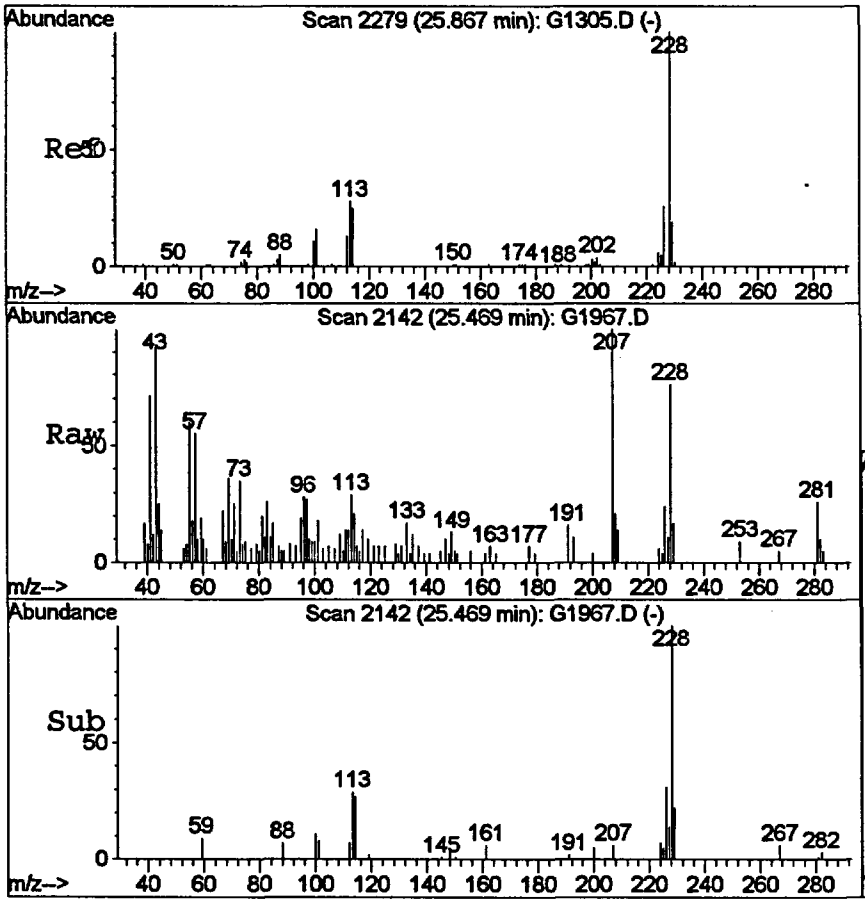




#67
Benzo(a)anthracene
Concen: 2.36 ng
RT: 25.34 min / Scan# 2129
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

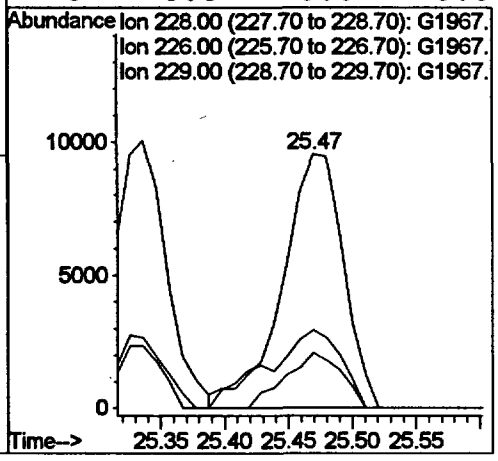
Tgt Ion:228	Resp:	28728	
Ion	Ratio	Lower	Upper
228	100		
229	0.0	9.9	29.9#
226	0.0	15.8	35.8#
0	0.0	0.0	0.0

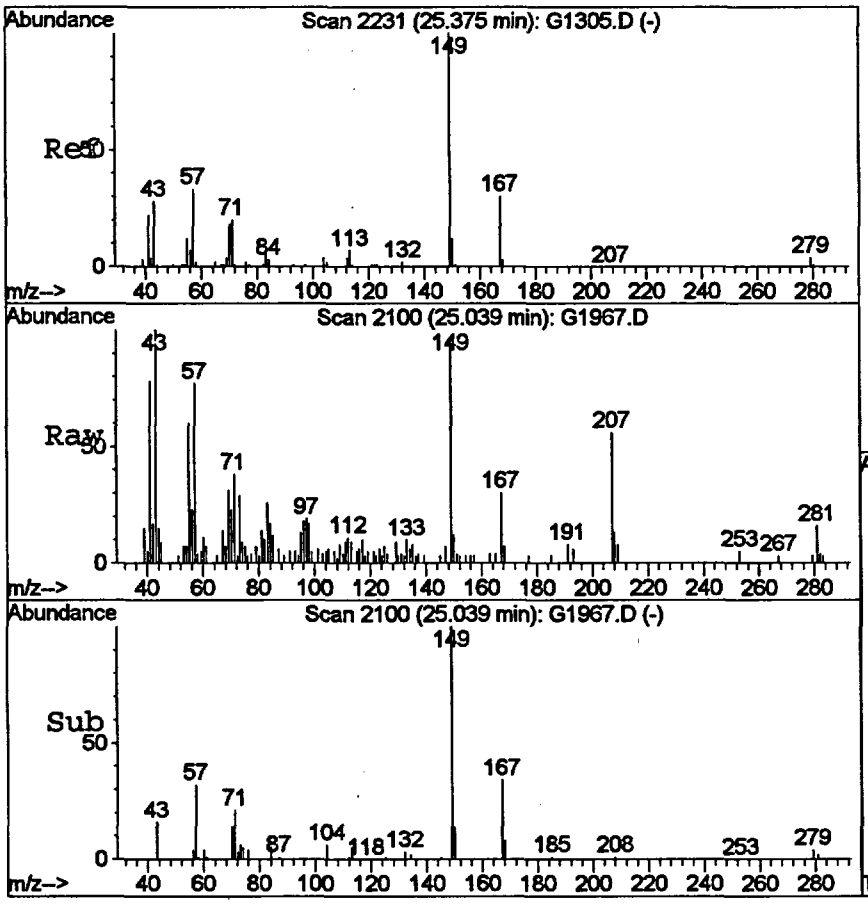




#69
Chrysene
Concen: 2.75 ng
RT: 25.47 min / Scan# 2142
Delta R.T. -0.01 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

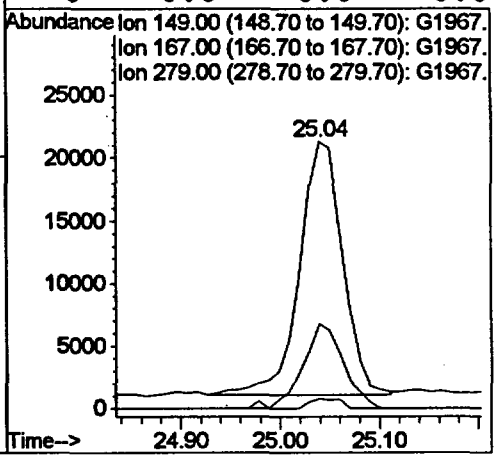
Tgt Ion:228	Resp:	31706	
Ion	Ratio	Lower	Upper
228	100		
226	0.0	18.0	38.0#
229	0.0	9.8	29.8#
0	0.0	0.0	0.0

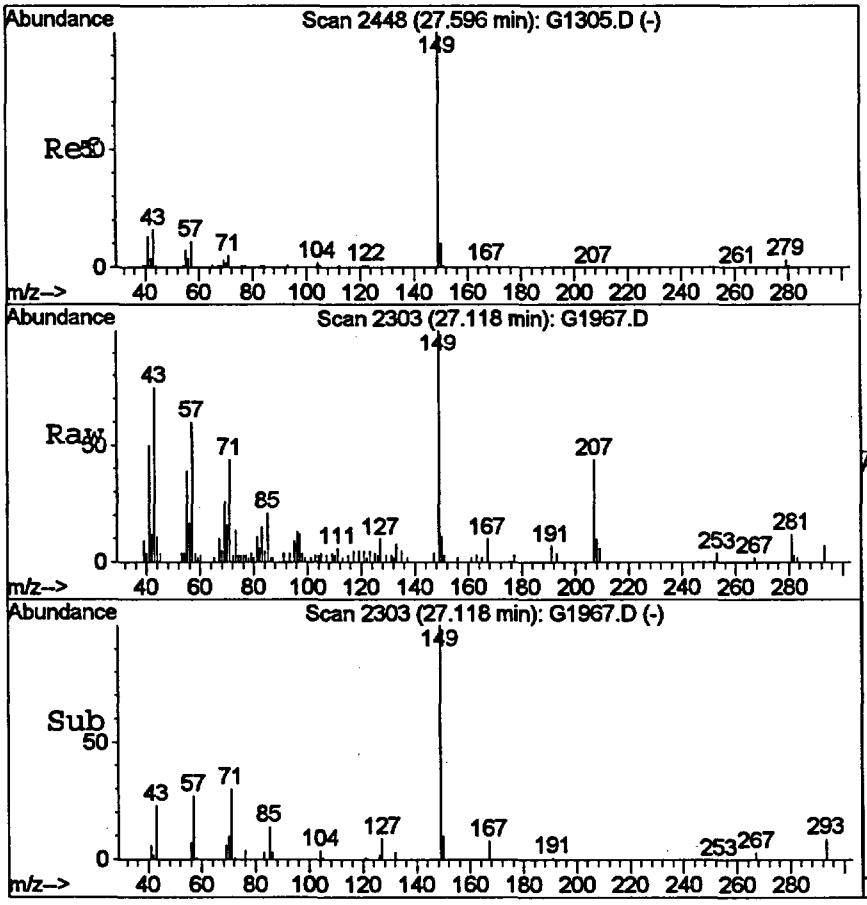




#70
bis(2-Ethylhexyl)phthalate
Concen: 3.60 ng
RT: 25.04 min / Scan# 2100
Delta R.T. -0.01 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

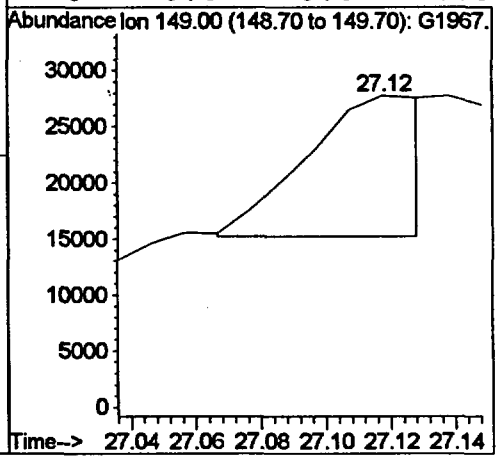
Tgt Ion:149	Resp:	61452	
Ion	Ratio	Lower	Upper
149	100		
167	31.4	10.0	50.0
279	0.0	0.0	23.7
0	0.0	0.0	0.0

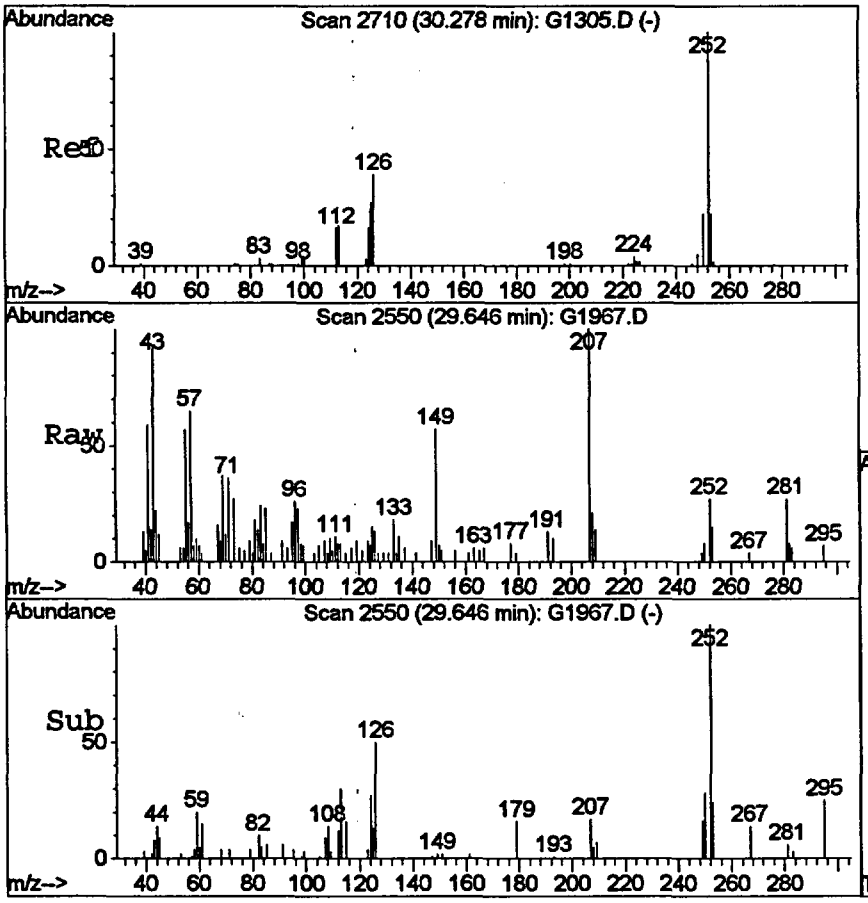




#72
Di-n-octylphthalate
Concen: 1.16 ng m
RT: 27.12 min / Scan# 2303
Delta R.T. -0.04 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:149	Resp:	31652	
Ion	Ratio	Lower	Upper
149	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

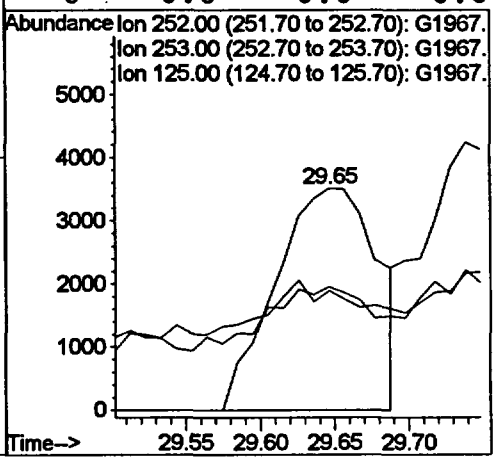


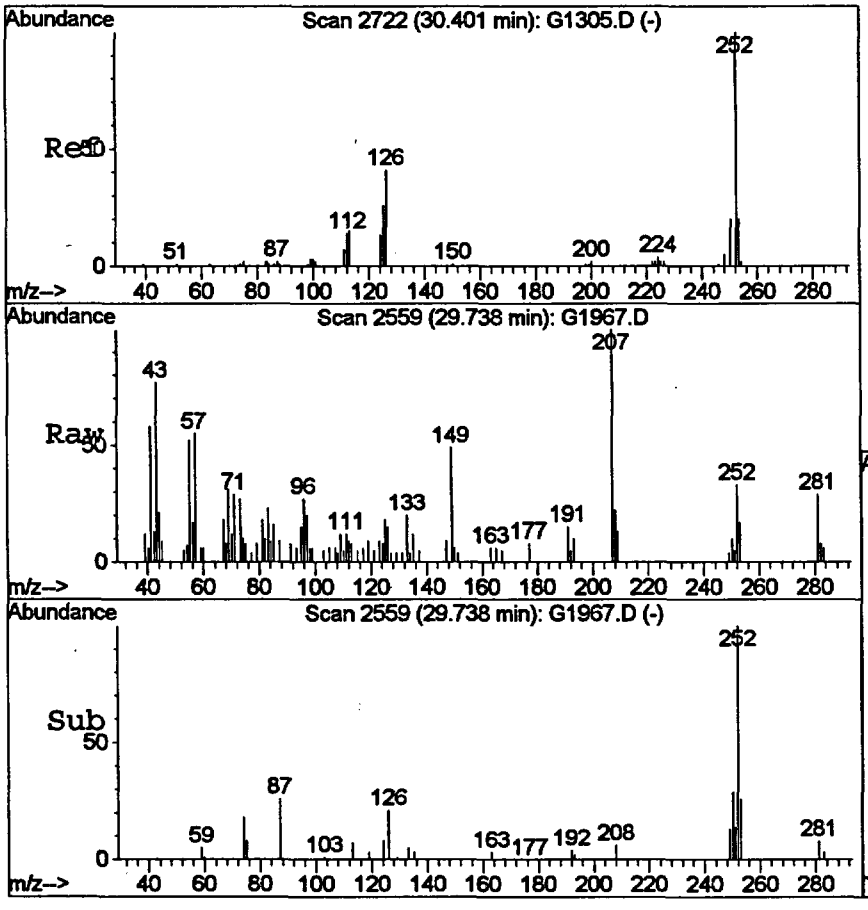


#73
Benzo(b)fluoranthene
Concen: 1.51 ng
RT: 29.65 min / Scan# 2550
Delta R.T. -0.01 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:252 Resp: 16601

Ion	Ratio	Lower	Upper
252	100		
253	0.0	2.2	42.2#
125	0.0	8.0	48.0#
0	0.0	0.0	0.0

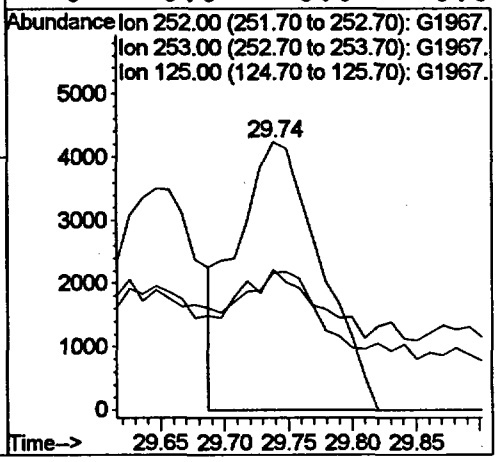


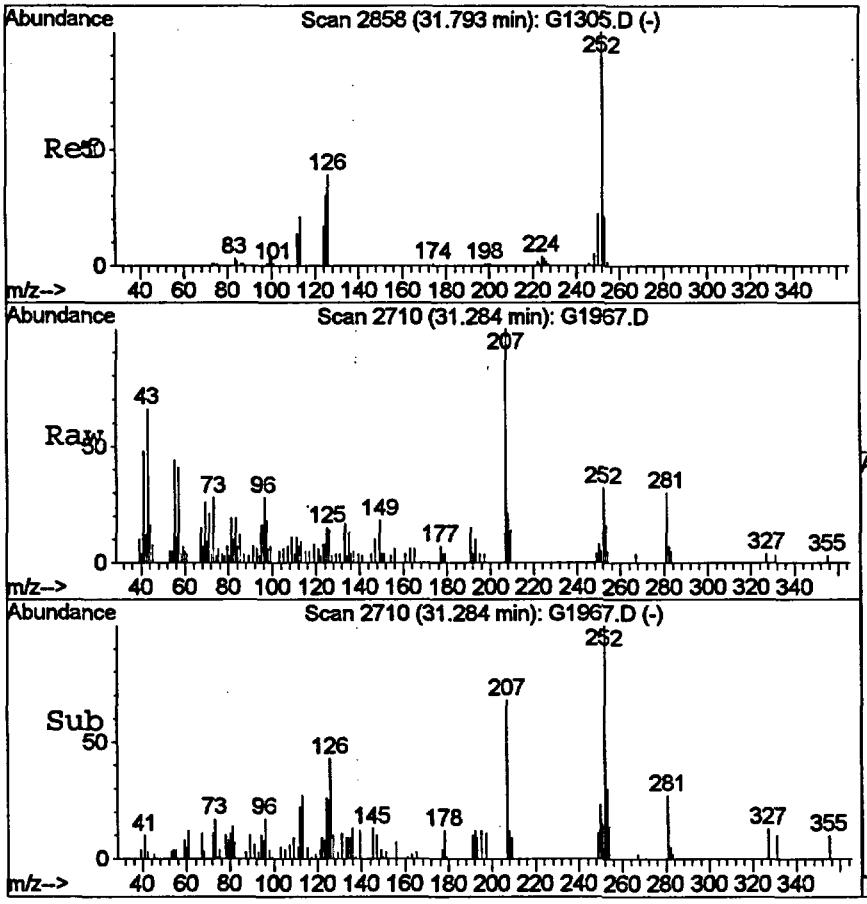


#74
Benzo(k)fluoranthene
Concen: 1.86 ng
RT: 29.74 min / Scan# 2559
Delta R.T. -0.02 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:252 Resp: 19403

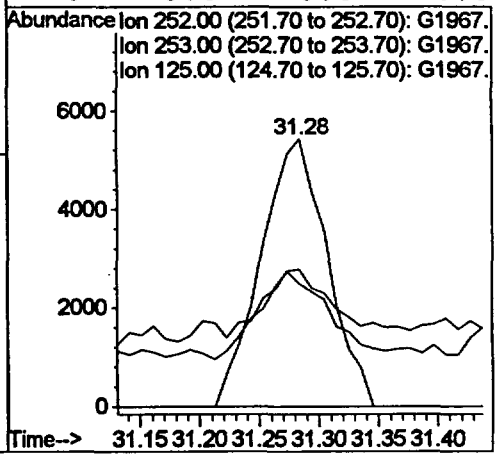
Ion	Ratio	Lower	Upper
252	100		
253	0.0	1.8	41.8#
125	0.0	7.2	47.2#
0	0.0	0.0	0.0

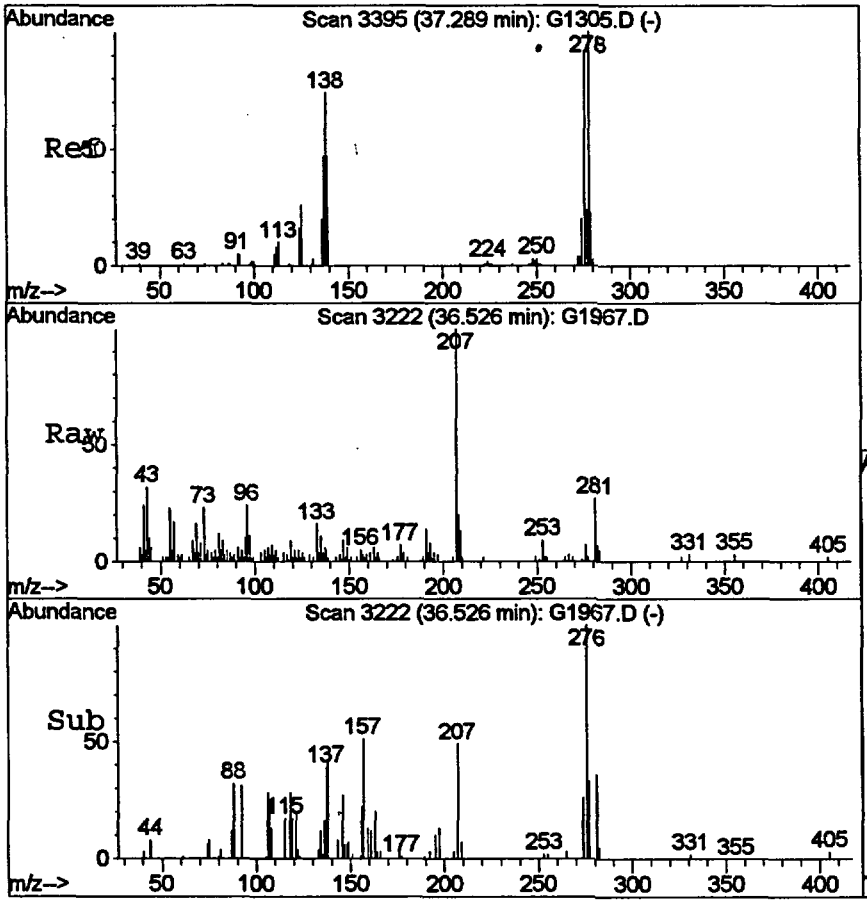




#75
Benzo(a)pyrene
Concen: 2.03 ng
RT: 31.28 min Scan# 2710
Delta R.T. 0.00 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

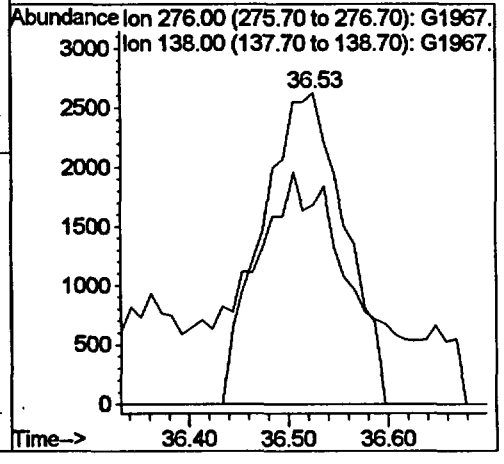
Tgt Ion:252	Resp:	20889	
Ion	Ratio	Lower	Upper
252	100		
253	0.0	12.8	32.8#
125	0.0	23.1	39.1#
0	0.0	0.0	0.0

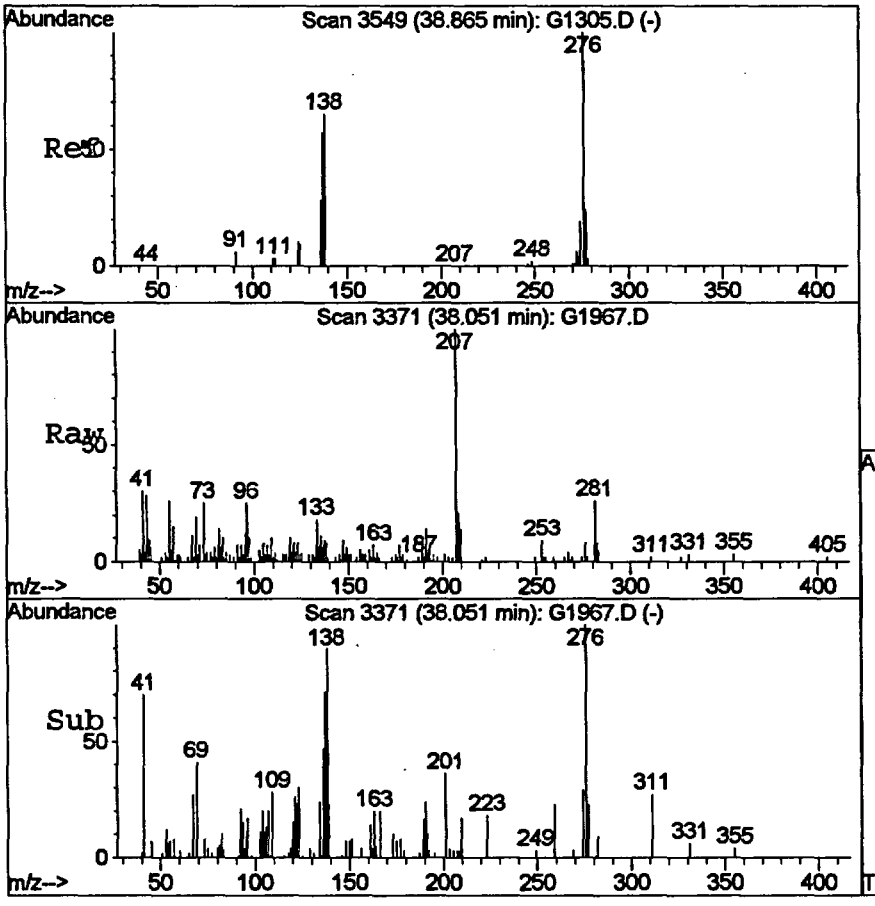




#76
Indeno(1,2,3-cd)pyrene
Concen: 1.18 ng
RT: 36.53 min Scan# 3222
Delta R.T. 0.01 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:276	Resp:	15094	
Ion	Ratio	Lower	Upper
276	100		
138	0.0	50.7	90.7#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

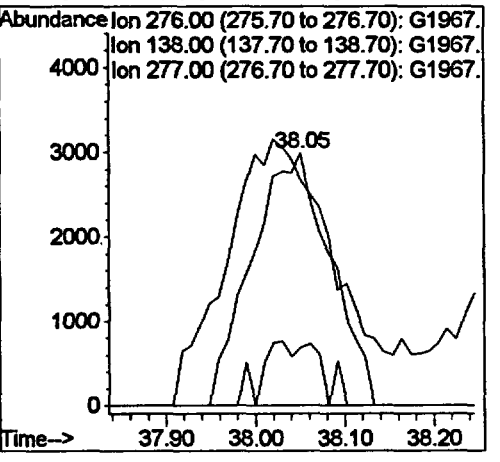




#78
Benzo(g,h,i)perylene
Concen: 1.66 ng
RT: 38.05 min Scan# 3371
Delta R.T. 0.03 min
Lab File: G1967.D
Acq: 23 Jan 98 11:55

Tgt Ion:276 Resp: 18269

Ion	Ratio	Lower	Upper
276	100		
138	0.0	40.1	80.1#
277	0.0	3.8	43.8#
0	0.0	0.0	0.0



0793

Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial:
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 15:28 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1966.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	245943	40.00	ng		0.00
17) Naphthalene-d8	10.10	136	725752	40.00	ng		0.00
31) Acenaphthene-d10	16.31	164	341876	40.00	ng		0.00
51) Phenanthrene-d10	19.62	188	631346	40.00	ng		0.00
63) Chrysene-d12	25.40	240	474685	40.00	ng		0.00
71) Perylene-d12	31.52	264	412426	40.00	ng		0.01
System Monitoring Compounds							
2) 2-Fluorophenol	4.84	112	820619	104.88	ng		0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery = 69.92%				
3) Phenol-d5	6.38	99	1342262	132.45	ng		0.01
Surrogate Spike 150.000	Range 24 - 113		Recovery = 88.30%				
7) 1,2-Dichlorobenzene-d4	7.44	152	286734	59.24	ng		0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 59.24%				
8) 2-Chlorophenol-d4	6.74	132	924352	118.26	ng		0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 78.84%				
18) Nitrobenzene-d5	8.21	82	500648	77.76	ng		0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 77.76%				
35) 2-Fluorobiphenyl	14.29	172	973301	97.58	ng		0.00
Surrogate Spike 100.000	Range 30 - 115		Recovery = 97.58%				
52) 2,4,6-Tribromophenol	18.19	330	232424	151.65	ng		0.00
Surrogate Spike 150.000	Range 19 - 122		Recovery = 101.10%				
65) Terphenyl-d14	22.67	244	1071111	107.73	ng		0.00
Surrogate Spike 100.000	Range 18 - 137		Recovery = 107.73%				
Target Compounds							Qvalue
47) Diethylphthalate	17.38	149	18191	1.62	ng	#	61
58) Phenanthrene	19.68	178	125504	8.07	ng		99
59) Anthracene	19.77	178	23787m	1.48	ng		99
61) Di-n-butylphthalate	20.70	149	70453	2.90	ng	#	79
62) Fluoranthene	22.04	202	73231	4.70	ng		99
64) Pyrene	22.49	202	110680	6.87	ng		80
67) Benzo(a)anthracene	25.34	228	28728	2.36	ng	#	52
69) Chrysene	25.47	228	31706	2.75	ng	#	51
70) bis(2-Ethylhexyl)phthalate	25.04	149	61452	3.60	ng	#	96
72) Di-n-octylphthalate	27.12	149	31652m	1.16	ng		100
73) Benzo(b)fluoranthene	29.65	252	16601	1.51	ng	#	50
74) Benzo(k)fluoranthene	29.74	252	19403	1.86	ng	#	51
75) Benzo(a)pyrene	31.28	252	20889	2.03	ng	#	47
76) Indeno(1,2,3-cd)pyrene	36.53	276	15094	1.18	ng	#	14
78) Benzo(g,h,i)perylene	38.05	276	18269	1.66	ng	#	29

0794

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

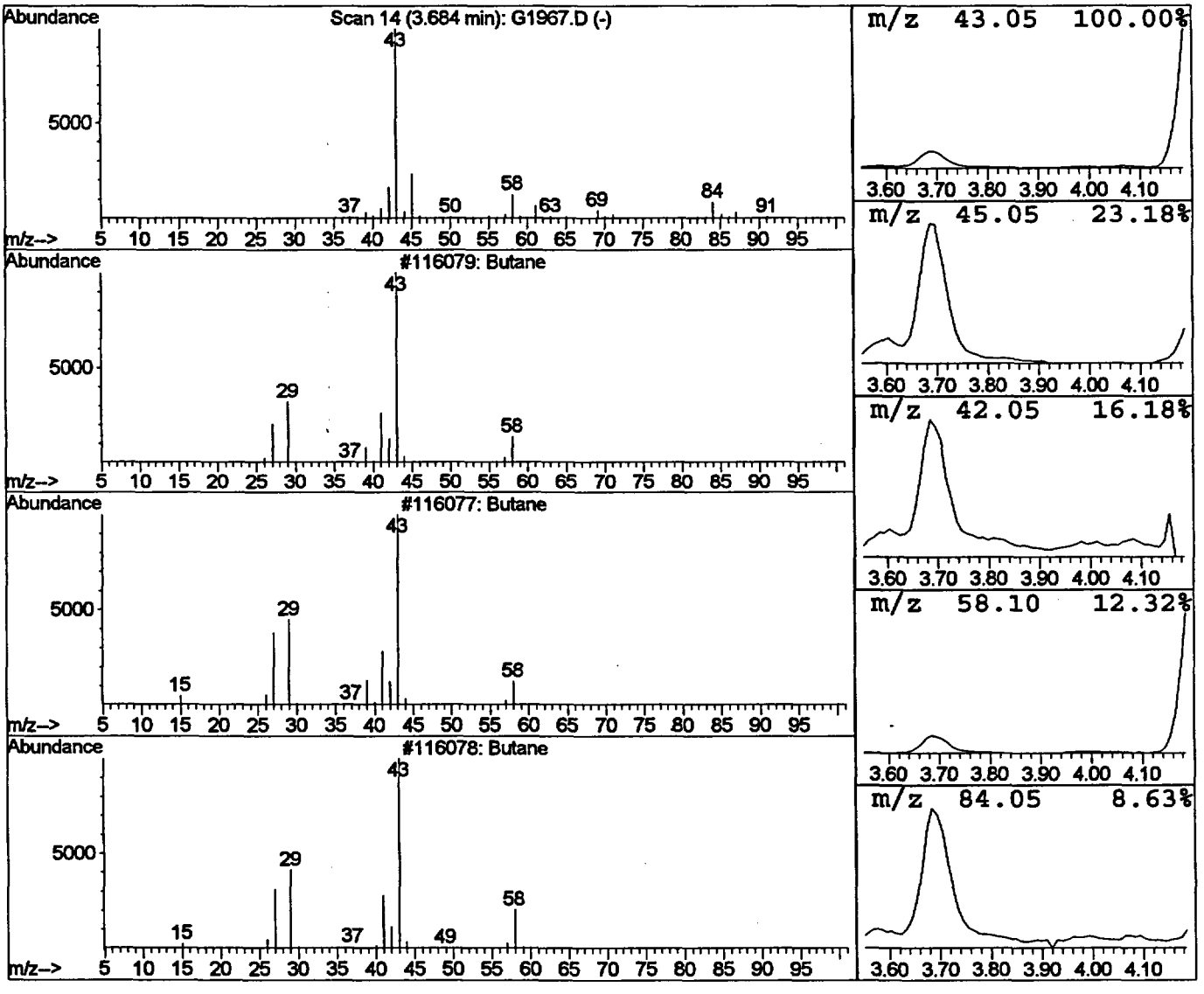
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 41 Butane UNKNOWN COMPOUND Concentration Rank 34

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.68	26.14 ng	914173	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	35
2	Butane	58	C4H10	000106-97-8	12
3	Butane	58	C4H10	000106-97-8	9



0795

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

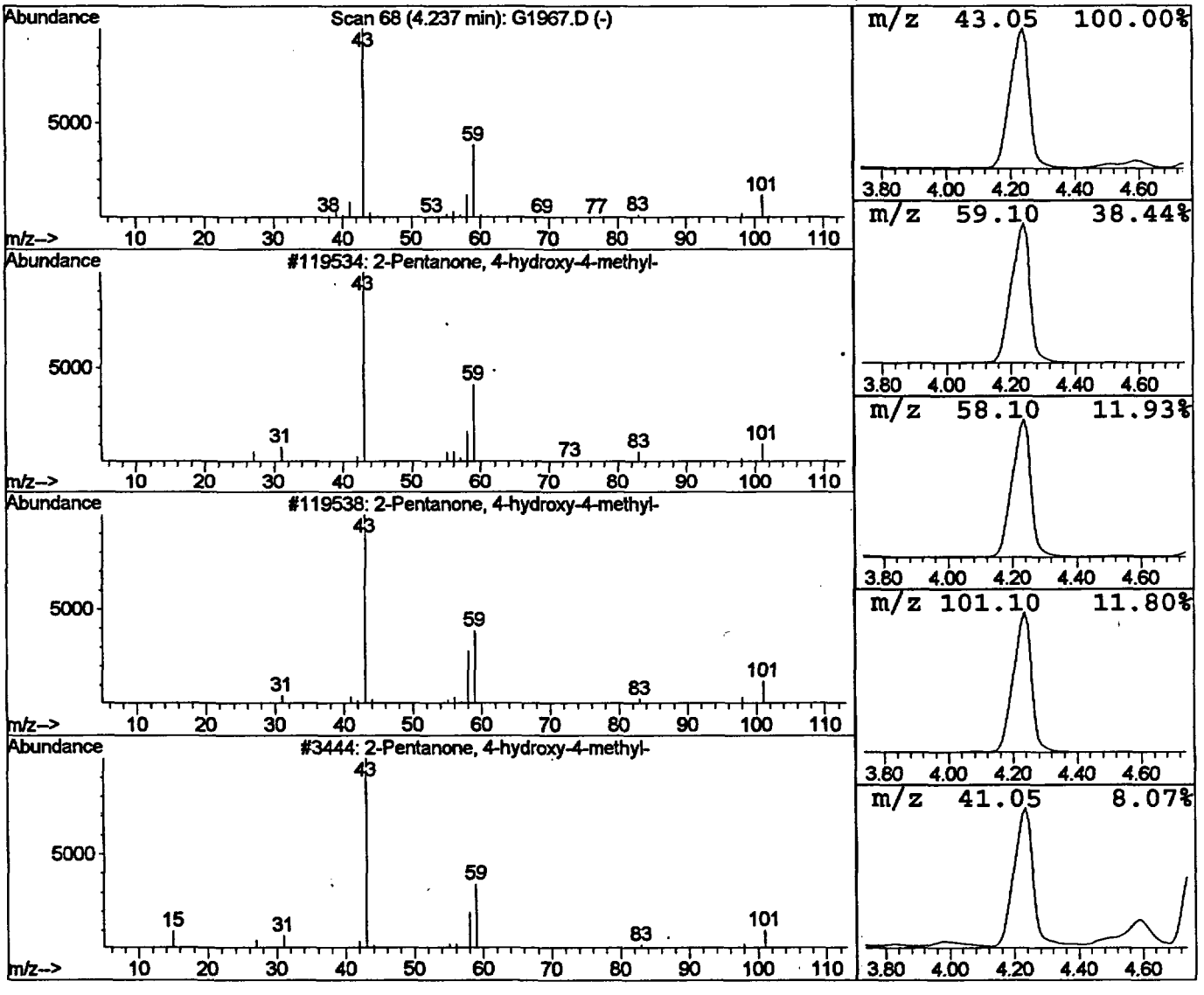
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.24	700.61 ng	24505500	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl- (A)	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50



0796

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

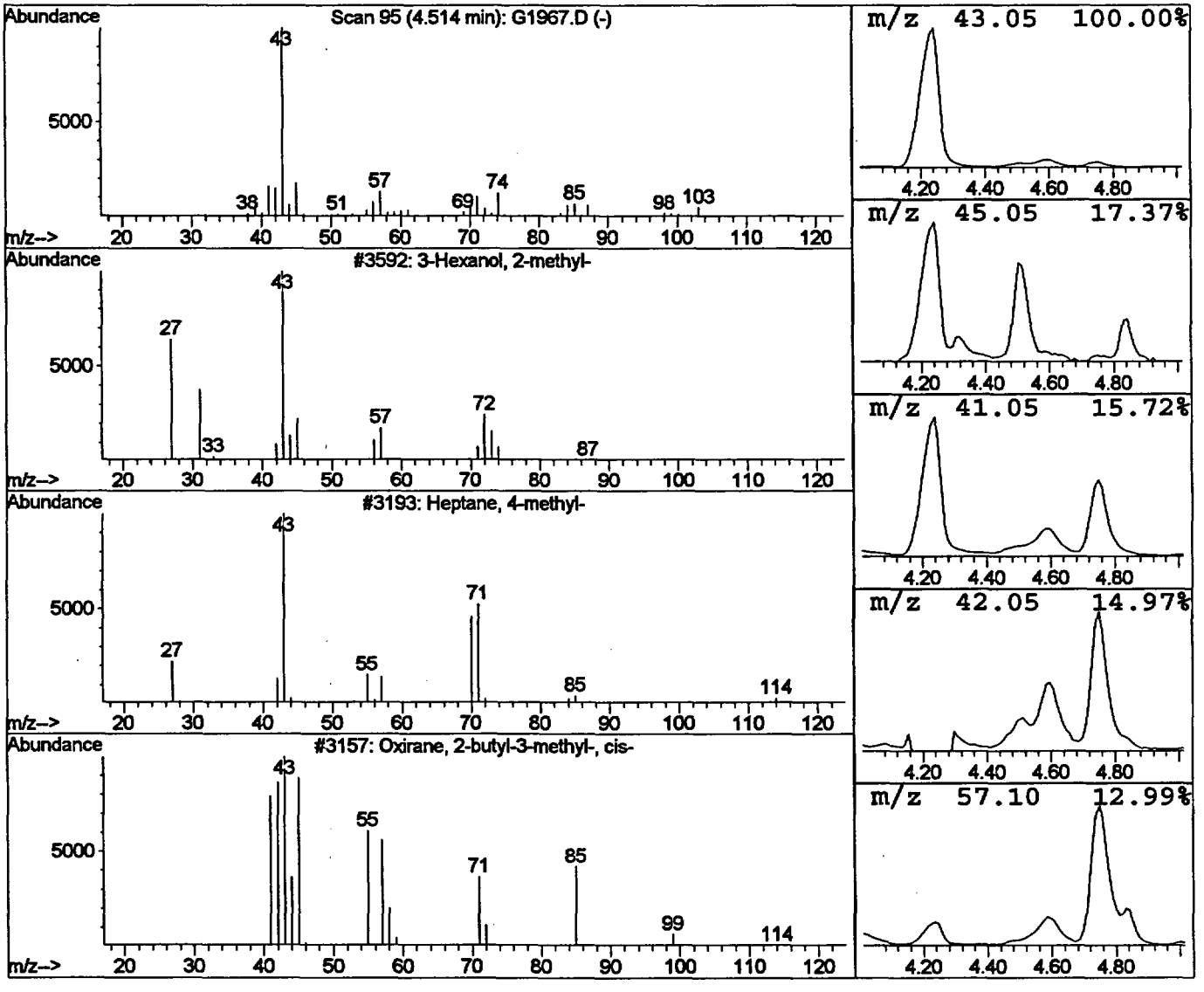
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 3-Hexanol, 2-methyl- UNKNOWN COMPOUND Concentration Rank 31

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.51	31.80 ng	1112330	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hexanol, 2-methyl-	116	C7H16O	000617-29-8	36
2	Heptane, 4-methyl-	114	C8H18	000589-53-7	32
3	Oxirane, 2-butyl-3-methyl-, cis-	114	C7H14O	056052-93-8	32



0797

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D
Acq On : 23 Jan 98 11:55
Sample : S HP-7G 58073-009 FFR92
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Operator:
Inst : GC/MS Ins
Multiplr: 1.00

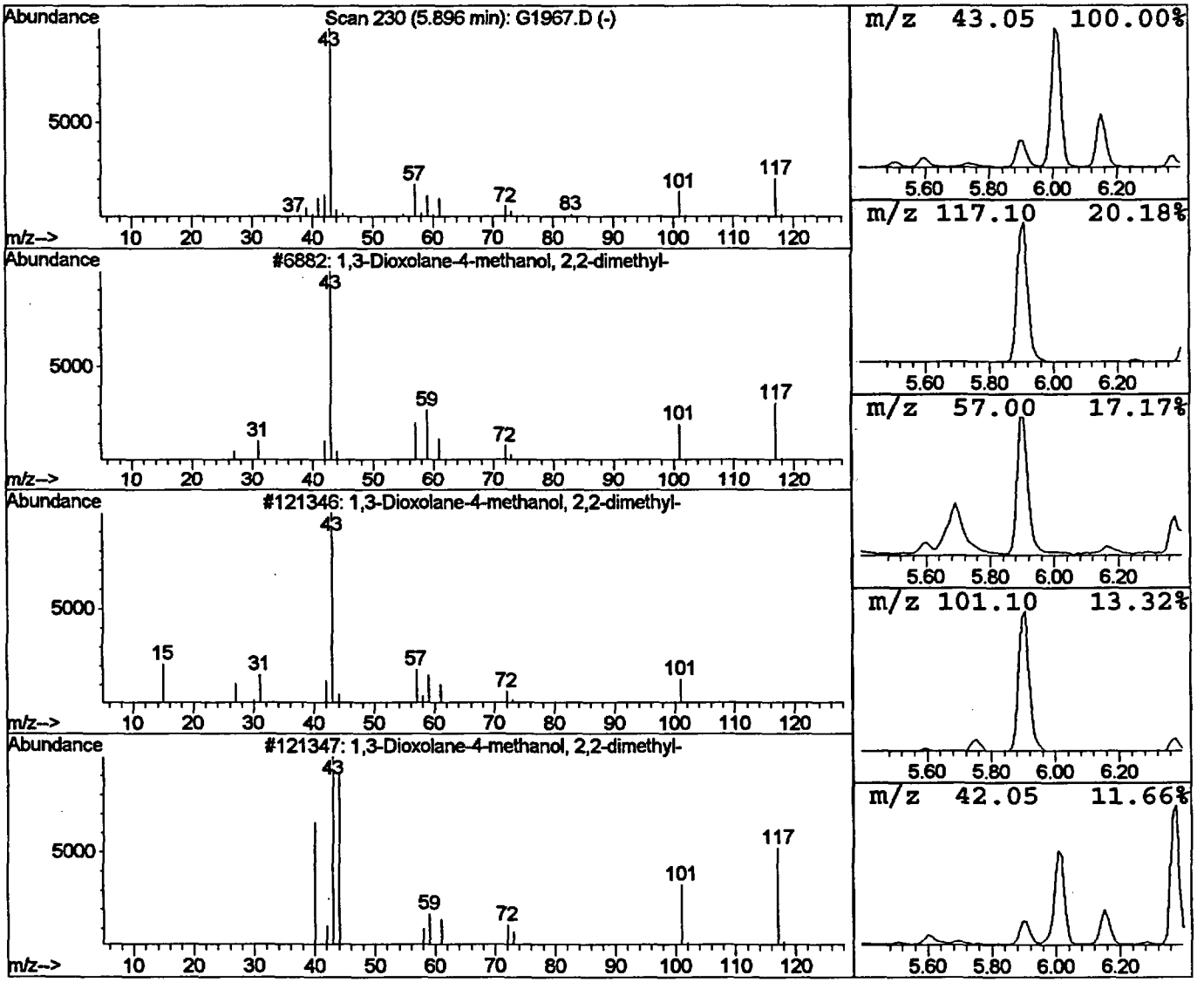
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 1,3-Dioxolane-4-methanol, 2,2- Concentration Rank 28

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.90	37.37 ng	1307070	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Dioxolane-4-methanol, 2,2-dimet	132	C6H12O3	000100-79-8	64
2	1,3-Dioxolane-4-methanol, 2,2-dimet	132	C6H12O3	000100-79-8	59
3	1,3-Dioxolane-4-methanol, 2,2-dimet	132	C6H12O3	000100-79-8	42



0798

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D
Acq On : 23 Jan 98 11:55
Sample : S HP-7G 58073-009 FFR92
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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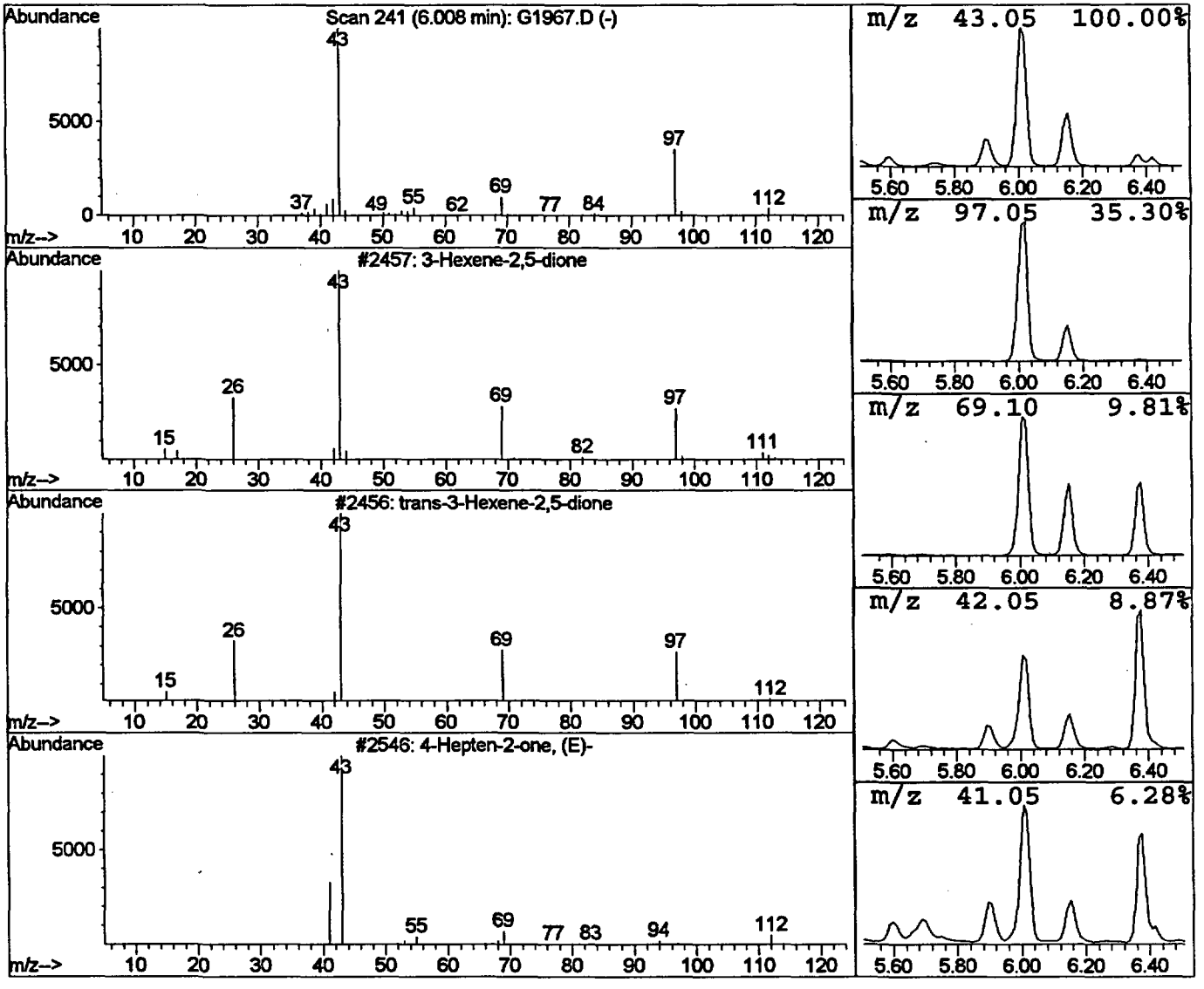
Peak Number 4 3-Hexene-2,5-dione Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.01	165.31 ng	5781990	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	42
(2)	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	42
3	4-Hepten-2-one, (E)-	112	C7H12O	036678-43-0	37



0799

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

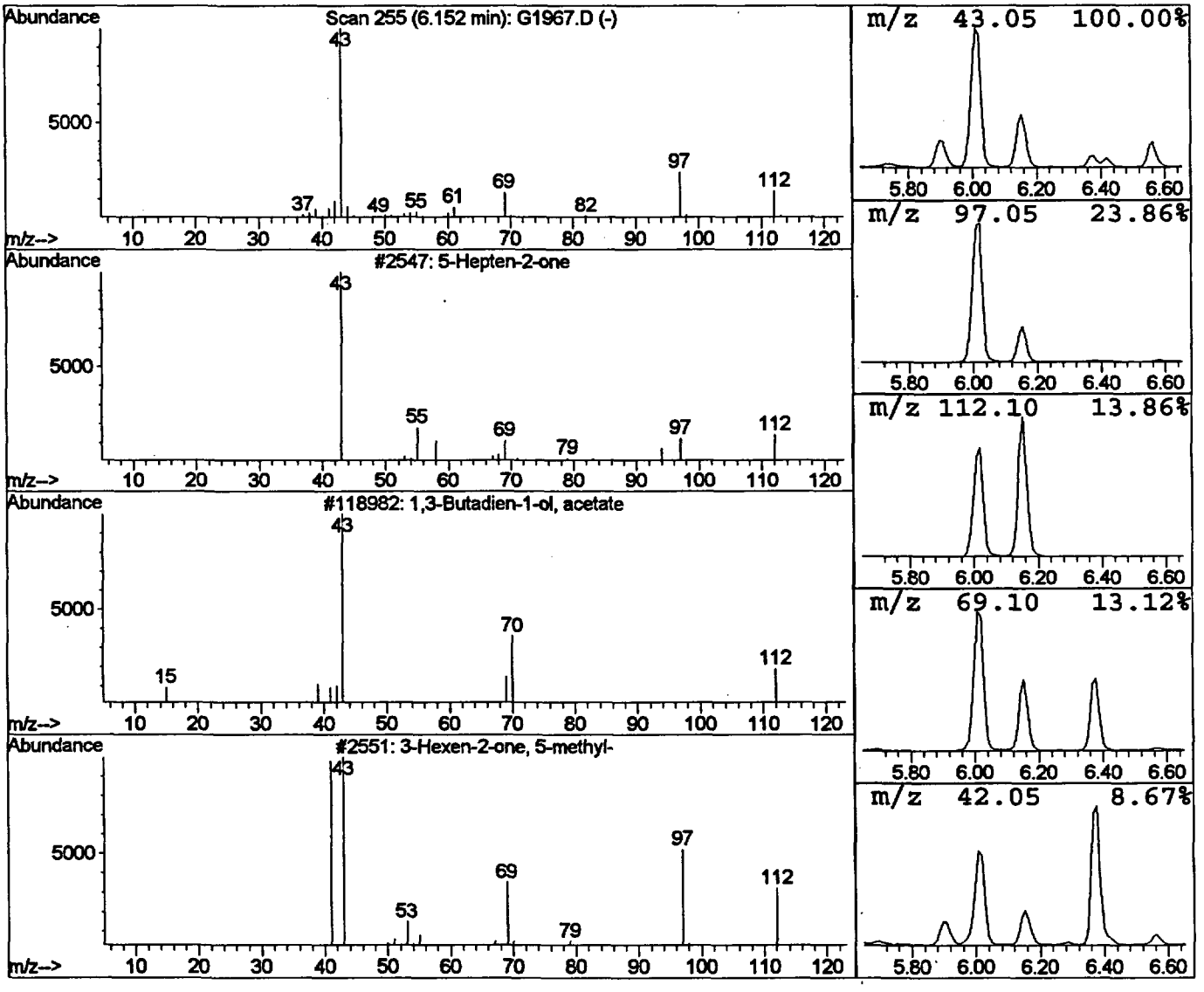
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 ~~5-Hepten-2-one~~ Unknown Ketone ww 11-7-98 Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.15	66.60 ng	2329650	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5-Hepten-2-one	112	C7H12O	006714-00-7	37
2	1,3-Butadien-1-ol, acetate	112	C6H8O2	001515-76-0	37
3	3-Hexen-2-one, 5-methyl-	112	C7H12O	005166-53-0	37



0800

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

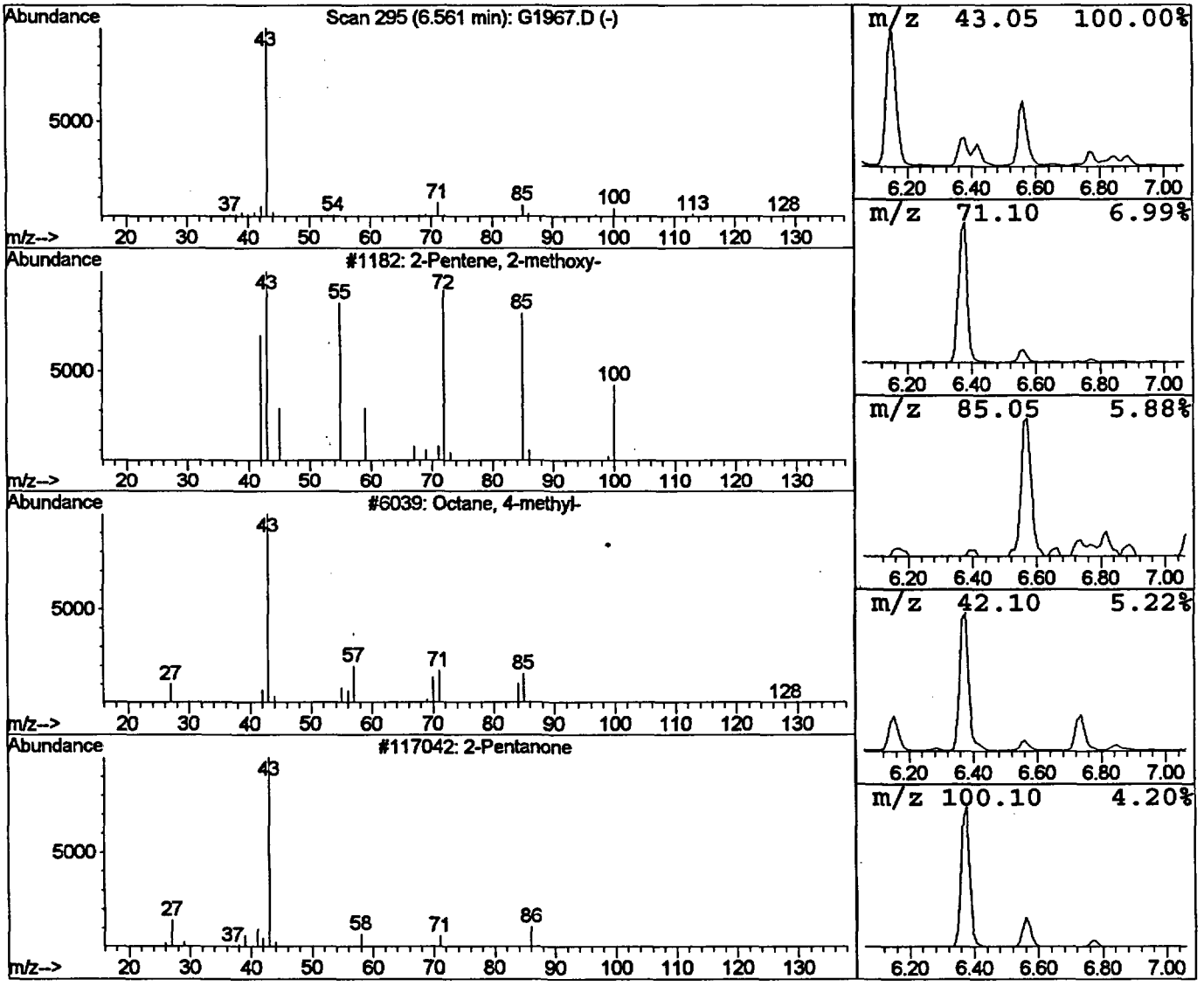
****

Peak Number 6 2-Pentene, 2-methoxy- Concentration Rank 37

UNKNOWN COMPOUND

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.56	23.37 ng	817335	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentene, 2-methoxy-	100	C6H12O	061142-47-0	38
2	Octane, 4-methyl-	128	C9H20	002216-34-4	9
3	2-Pentanone	86	C5H10O	000107-87-9	9



0801

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

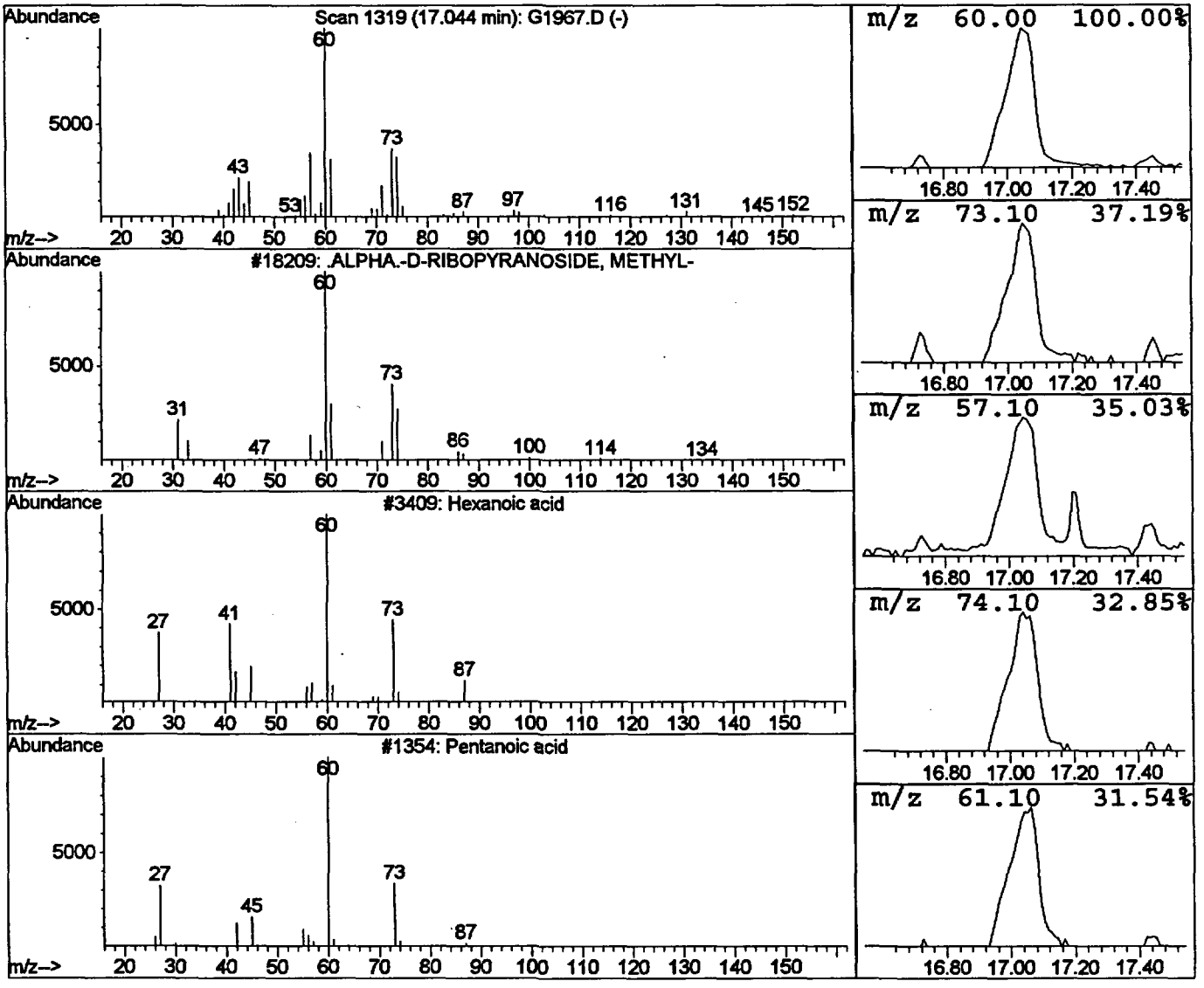
****

Peak Number 8 .ALPHA.-D-RIBOPYRANOSIDE, METH Concentration Rank 36

Unknown Acid type mol - 27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.04	24.68 ng	964299	Acenaphthene-d10	16.31

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	.ALPHA.-D-RIBOPYRANOSIDE, METHYL-	164	C6H12O5	000000-00-0	45
2	Hexanoic acid	116	C6H12O2	000142-62-1	42
3	Pentanoic acid	102	C5H10O2	000109-52-4	42



0802

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

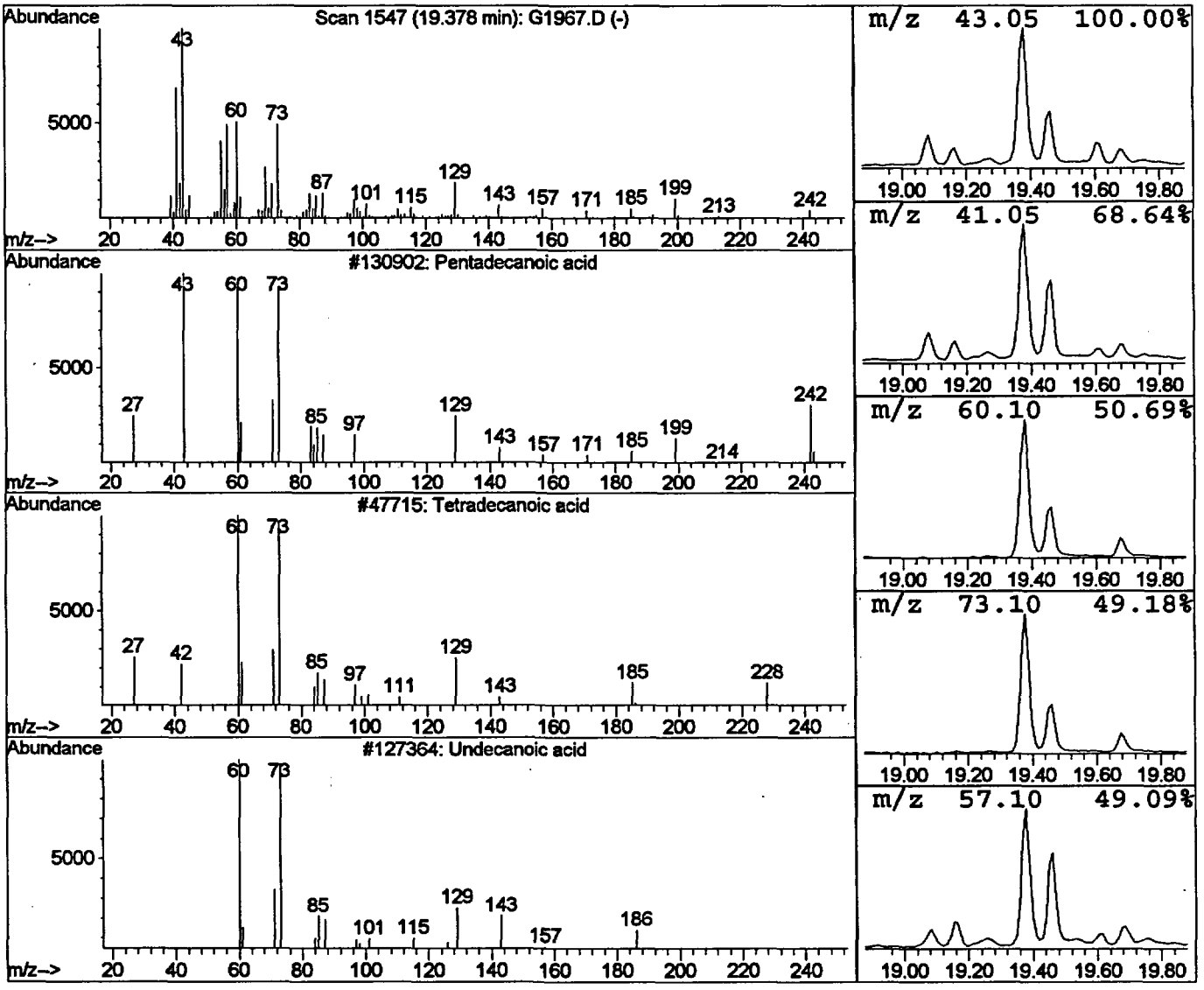
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 9 Pentadecanoic acid Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.38	47.54 ng	2125780	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentadecanoic acid	242	C15H30O2	001002-84-2	87
2	Tetradecanoic acid	228	C14H28O2	000544-63-8	72
3	Undecanoic acid	186	C11H22O2	000112-37-8	72



0803

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

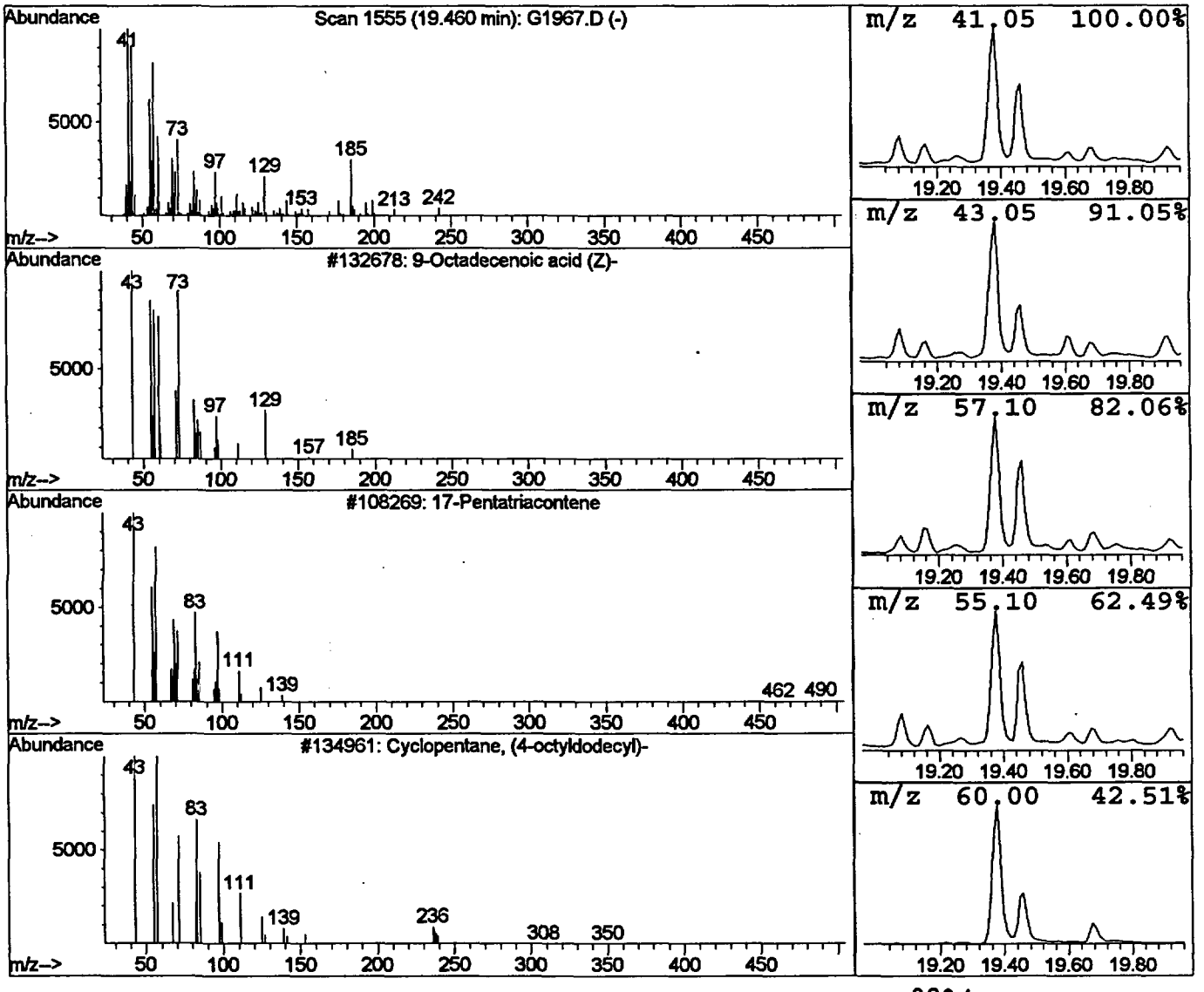
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 10 9-Octadecenoic acid (Z)- Concentration Rank 40

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.46	21.68 ng	969563	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-	282	C18H34O2	000112-80-1	47
2	17-Pentatriacontene	491	C35H70	006971-40-0	22
3	Cyclopentane, (4-octyldodecyl)-	350	C25H50	005638-09-5	22



0804

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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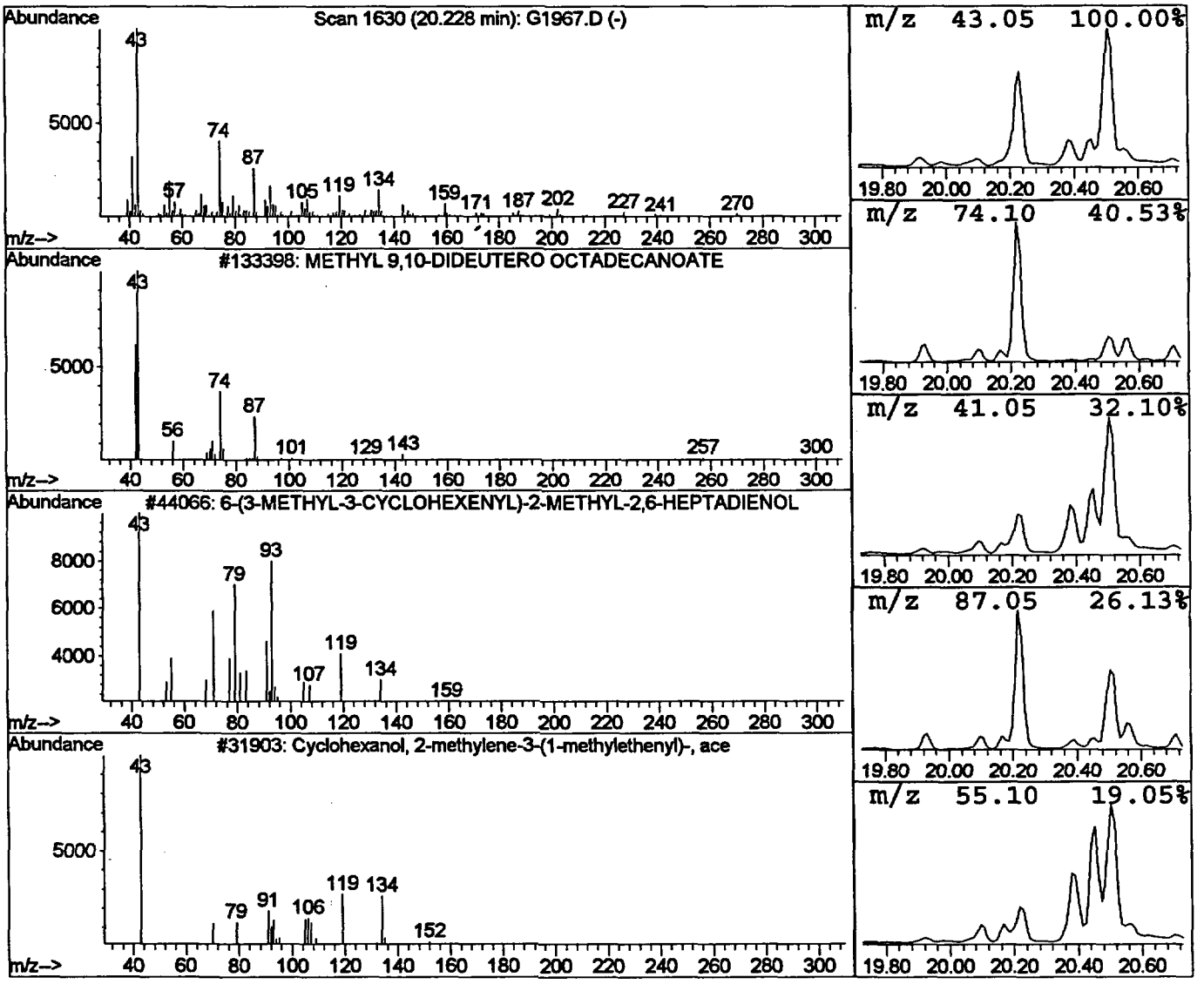
Peak Number 11 METHYL 9,10-DIDEUTERO OCTADECA Concentration Rank 12

UNKNOWN COMPOUND w 11/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.23	75.36 ng	3369990	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	METHYL 9,10-DIDEUTERO OCTADECANOATE	298	C19H36D2O2	029800-73-5	43
2	6-(3-METHYL-3-CYCLOHEXENYL)-2-METHY	220	C15H24O	018681-09-9	10
3	Cyclohexanol, 2-methylene-3-(1-meth	194	C12H18O2	054824-09-8	10



0805

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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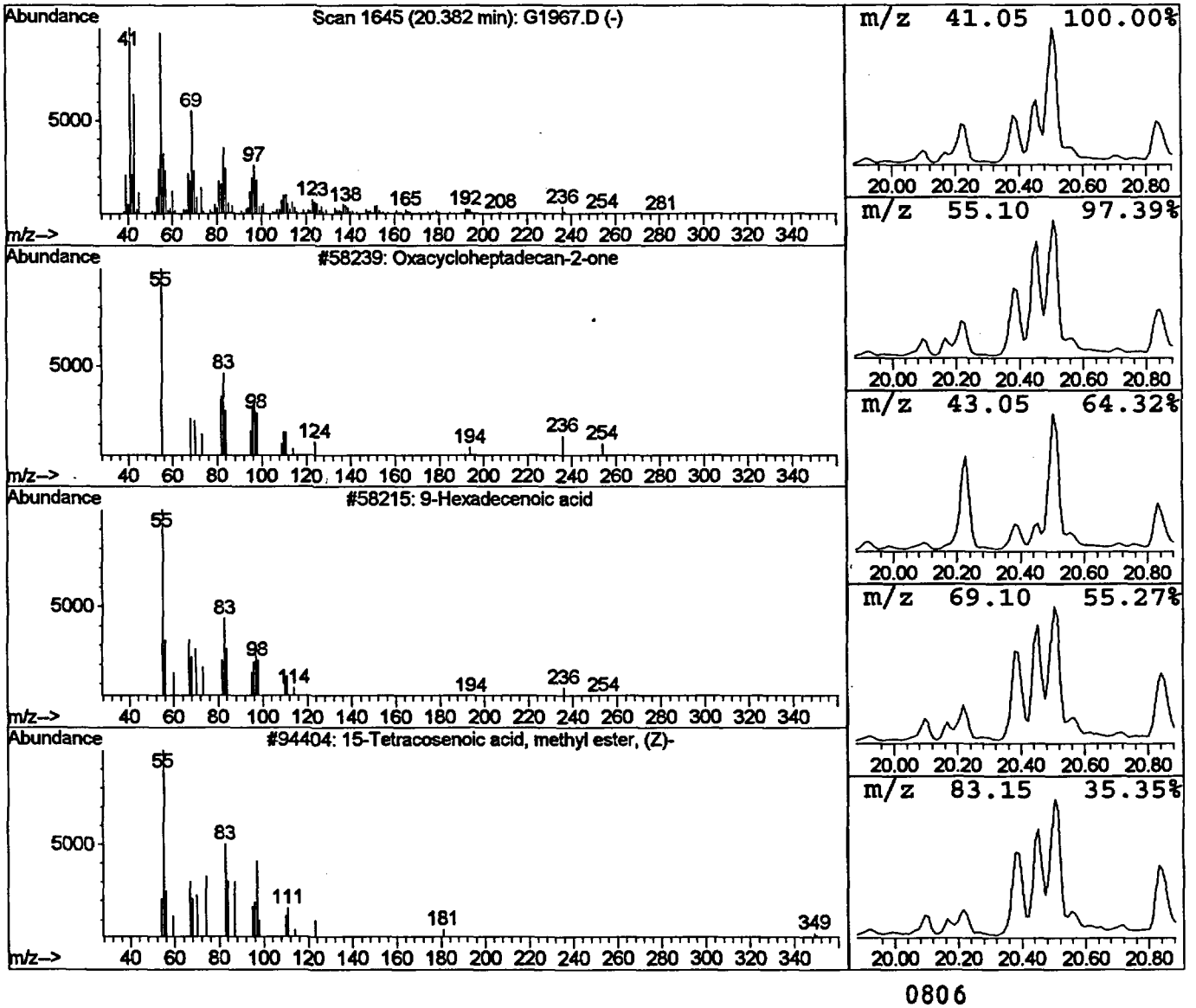
Peak Number 12 Oxacycloheptadecan-2-one Concentration Rank 20

UNKNOWN COMPOUND 1/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.38	51.93 ng	2322030	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxacycloheptadecan-2-one	254	C16H30O2	000109-29-5	87
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	83
3	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	80



0806

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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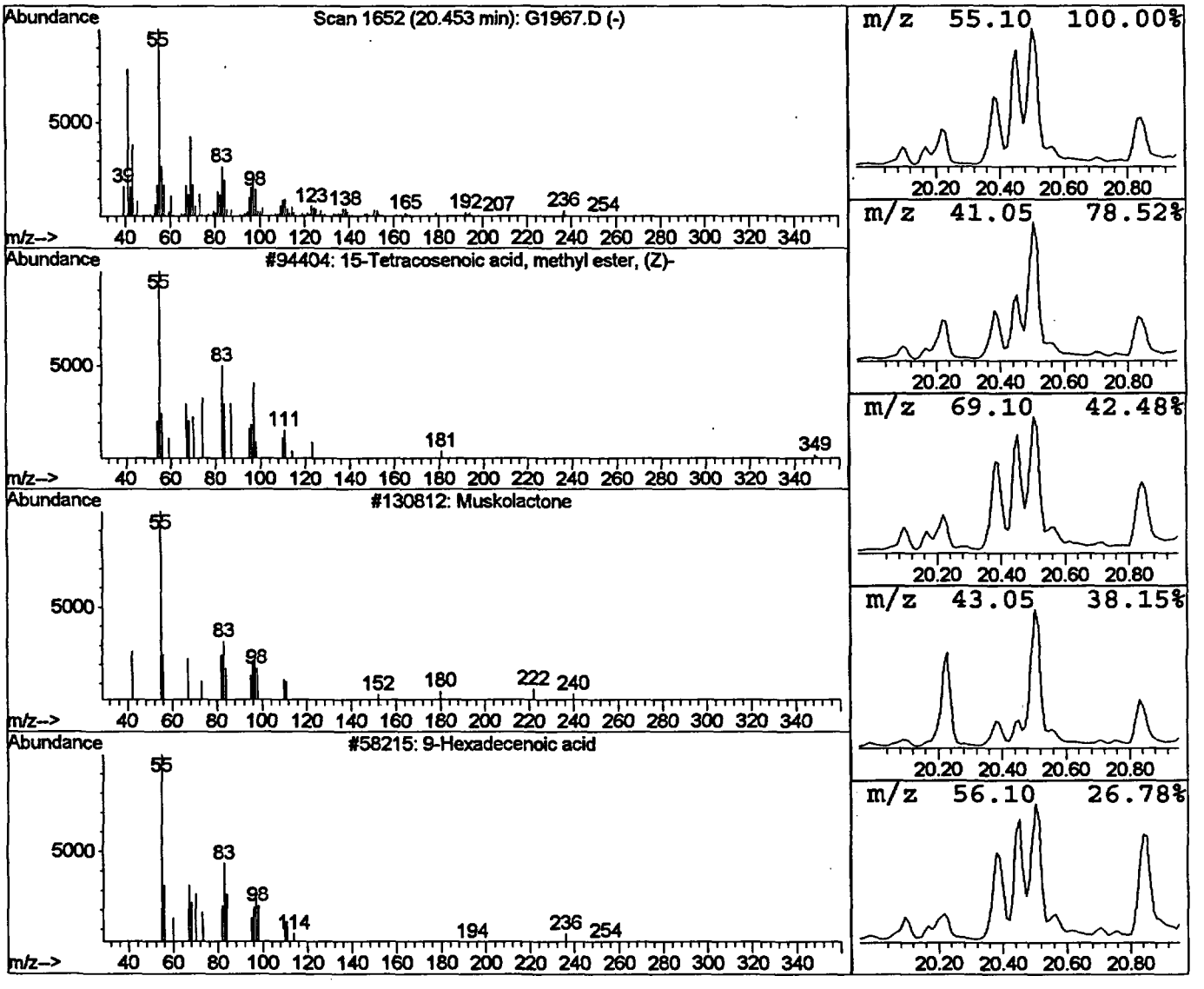
Peak Number 13 15-Tetracosenoic acid, methyl Concentration Rank 16

UNKNOWN COMPOUND mo1/28/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.45	56.53 ng	2528060	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	15-Tetracosenoic acid, methyl ester	380	C25H48O2	002733-88-2	72
2	Muskolactone	240	C15H28O2	000106-02-5	72
3	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	72



0807

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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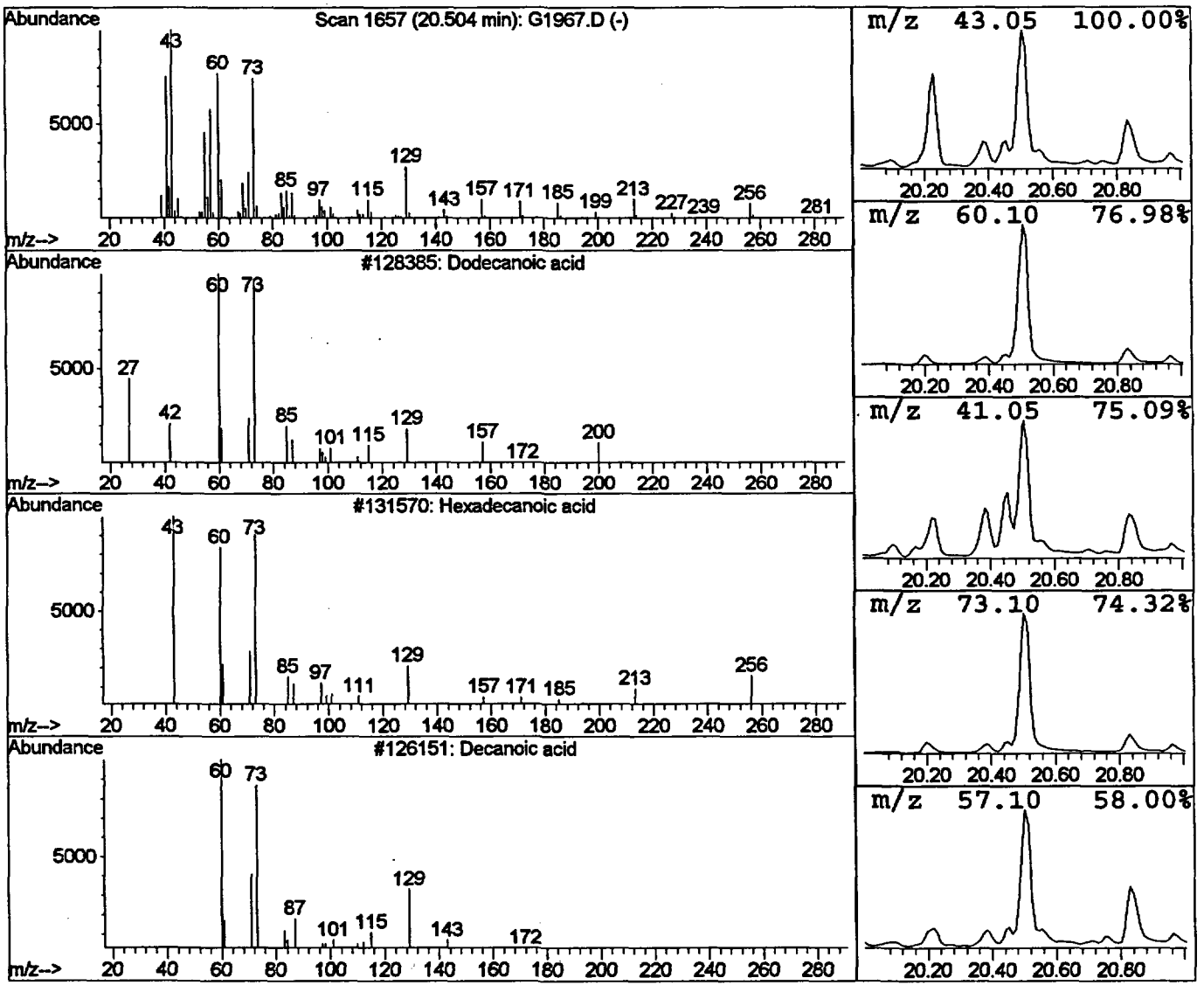
Peak Number 14 Dodecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.50	158.93 ng	7106840	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecanoic acid	200	C12H24O2	000143-07-7	80
(2)	Hexadecanoic acid	256	C16H32O2	000057-10-3	78
3	Decanoic acid	172	C10H20O2	000334-48-5	76



0808

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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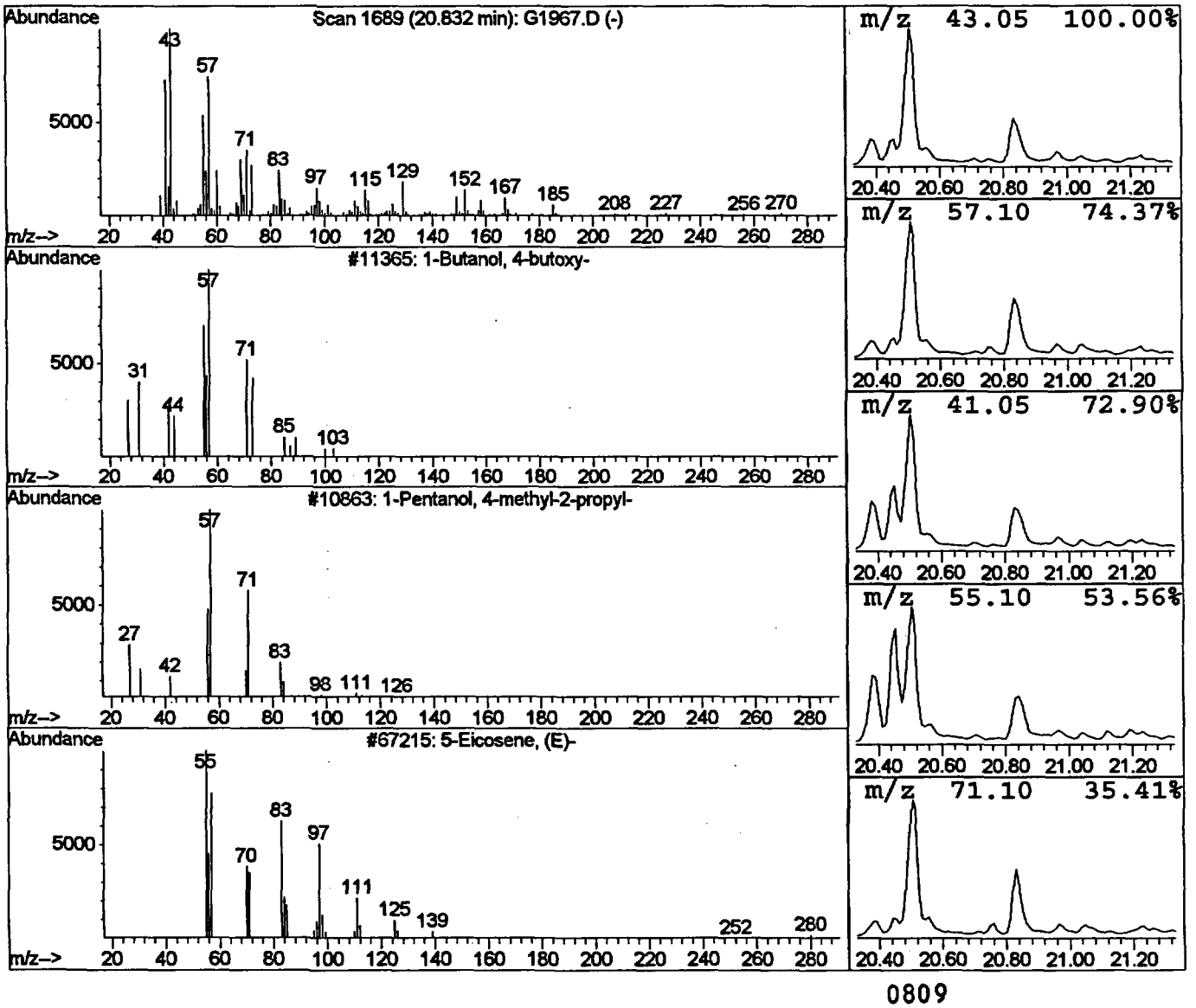
Peak Number 15 1-Butanol, 4-butoxy- Concentration Rank 15

UNKNOWN COMPOUND wo137191

R.T.	EstConc	Area	Relative to ISTD	R.T.
20.83	61.32 ng	2742090	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Butanol, 4-butoxy-	146	C8H18O2	004161-24-4	27
2	1-Pentanol, 4-methyl-2-propyl-	144	C9H20O	054004-41-0	22
3	5-Eicosene, (E)-	280	C20H40	074685-30-6	18



0809

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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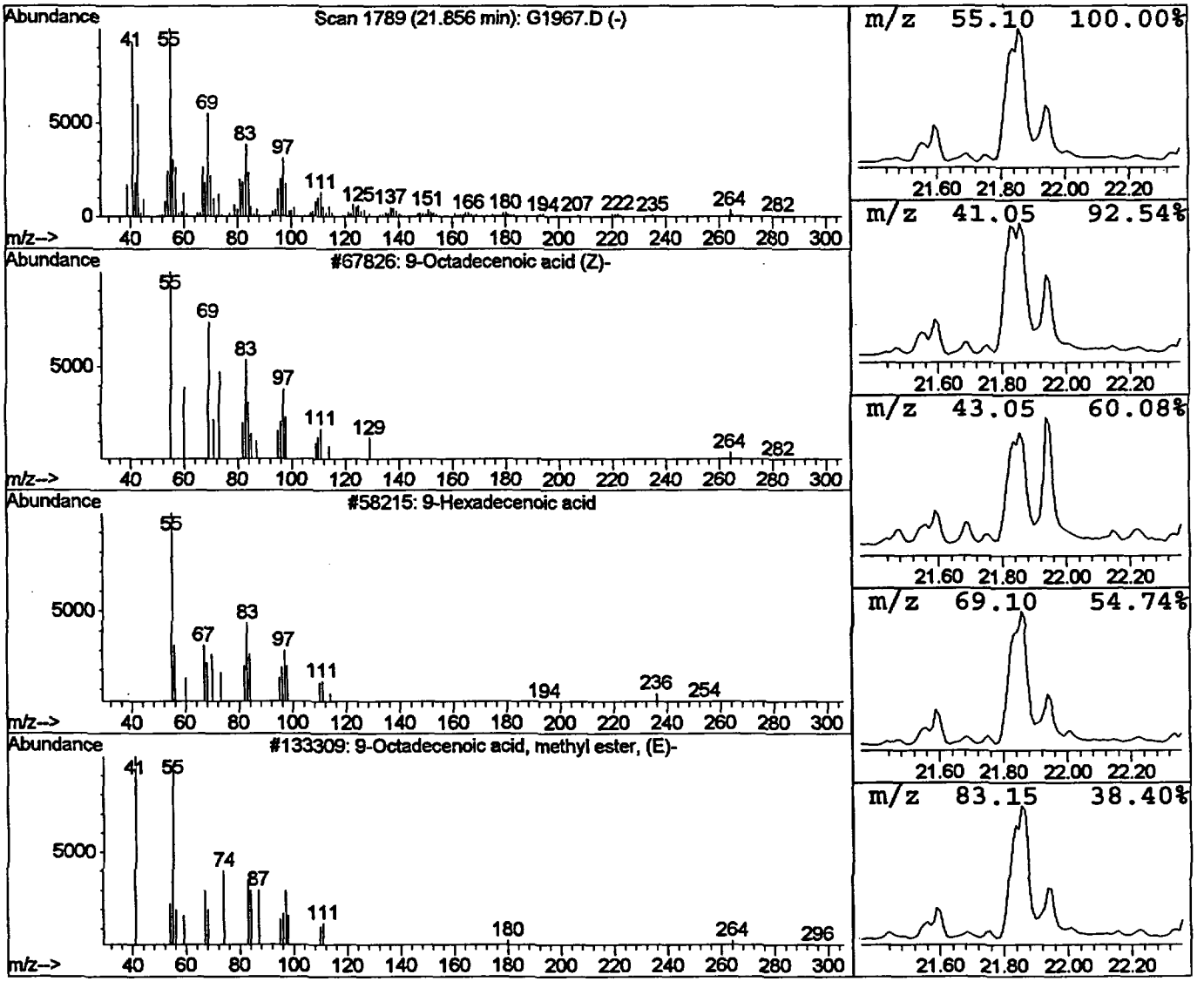
Peak Number 16 9-Octadecenoic acid (Z)- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.86	155.99 ng	6975290	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	9-Octadecenoic acid (Z)-	282	C18H34O2	000112-80-1	94
2	9-Hexadecenoic acid	254	C16H30O2	002091-29-4	91
3	9-Octadecenoic acid, methyl ester,	296	C19H36O2	001937-62-8	91



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Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

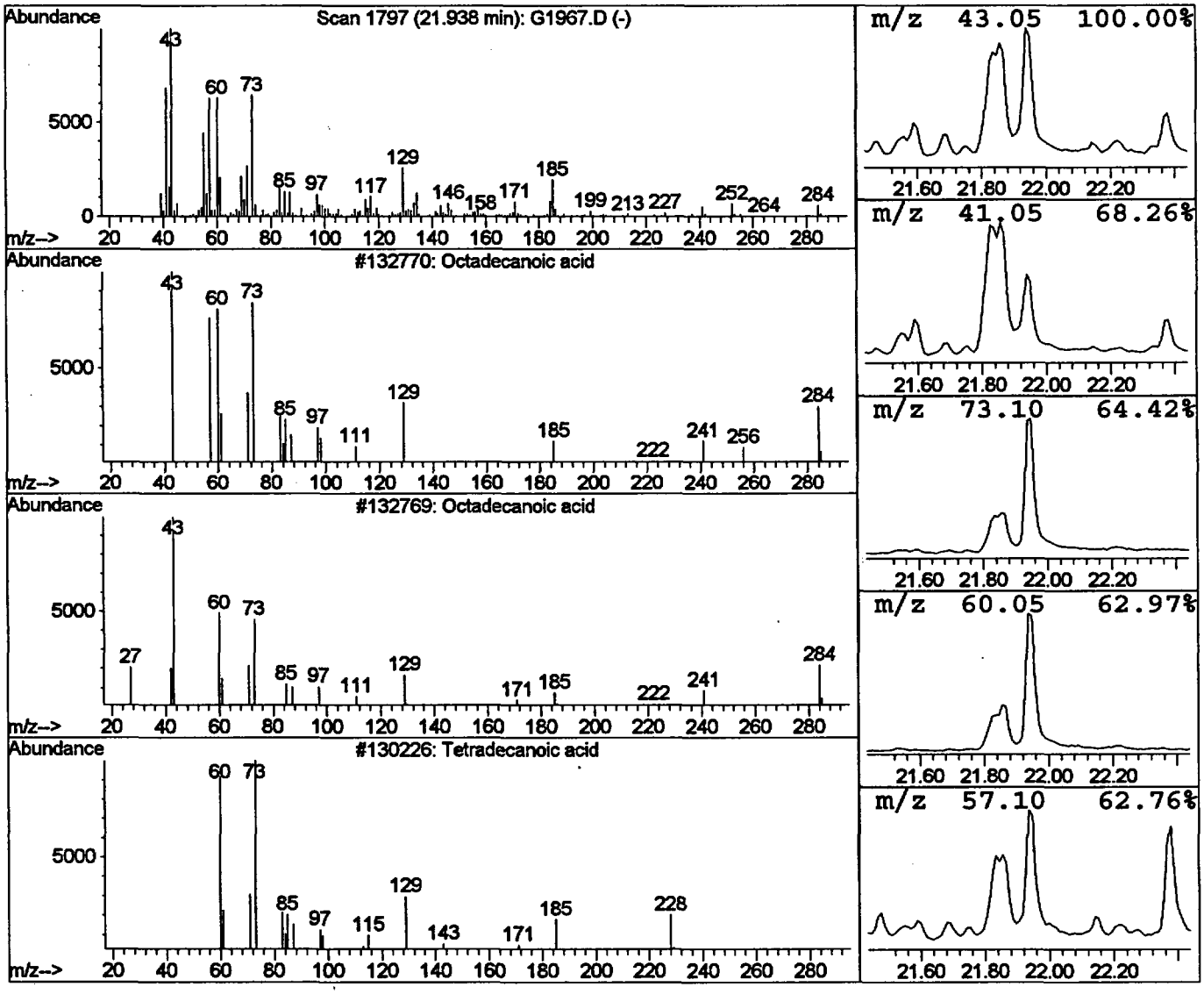
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 17 Octadecanoic acid Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.94	56.28 ng	2516600	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	70
2	Octadecanoic acid	284	C18H36O2	000057-11-4	60
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	58



0811

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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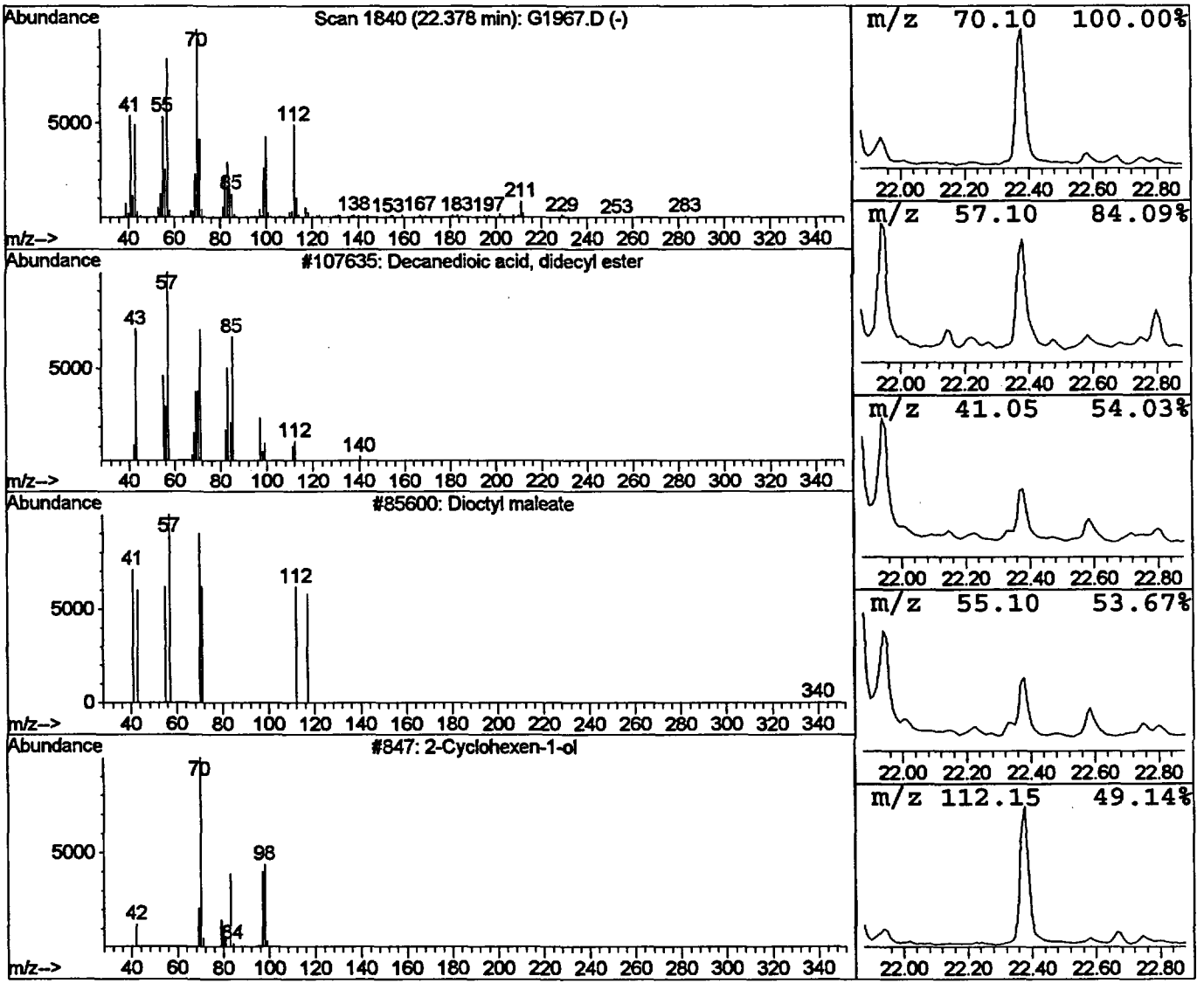
Peak Number 18 Decanedioic acid, didecyl este Concentration Rank 30

UNKNOWN COMPOUND 1/27/98

R.T.	EstCon	Area	Relative to ISTD	R.T.
22.38	33.68 ng	1506100	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Decanedioic acid, didecyl ester	482	C30H58O4	002432-89-5	27
2	Dioctyl maleate	340	C20H36O4	000000-00-0	27
3	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	22



0812

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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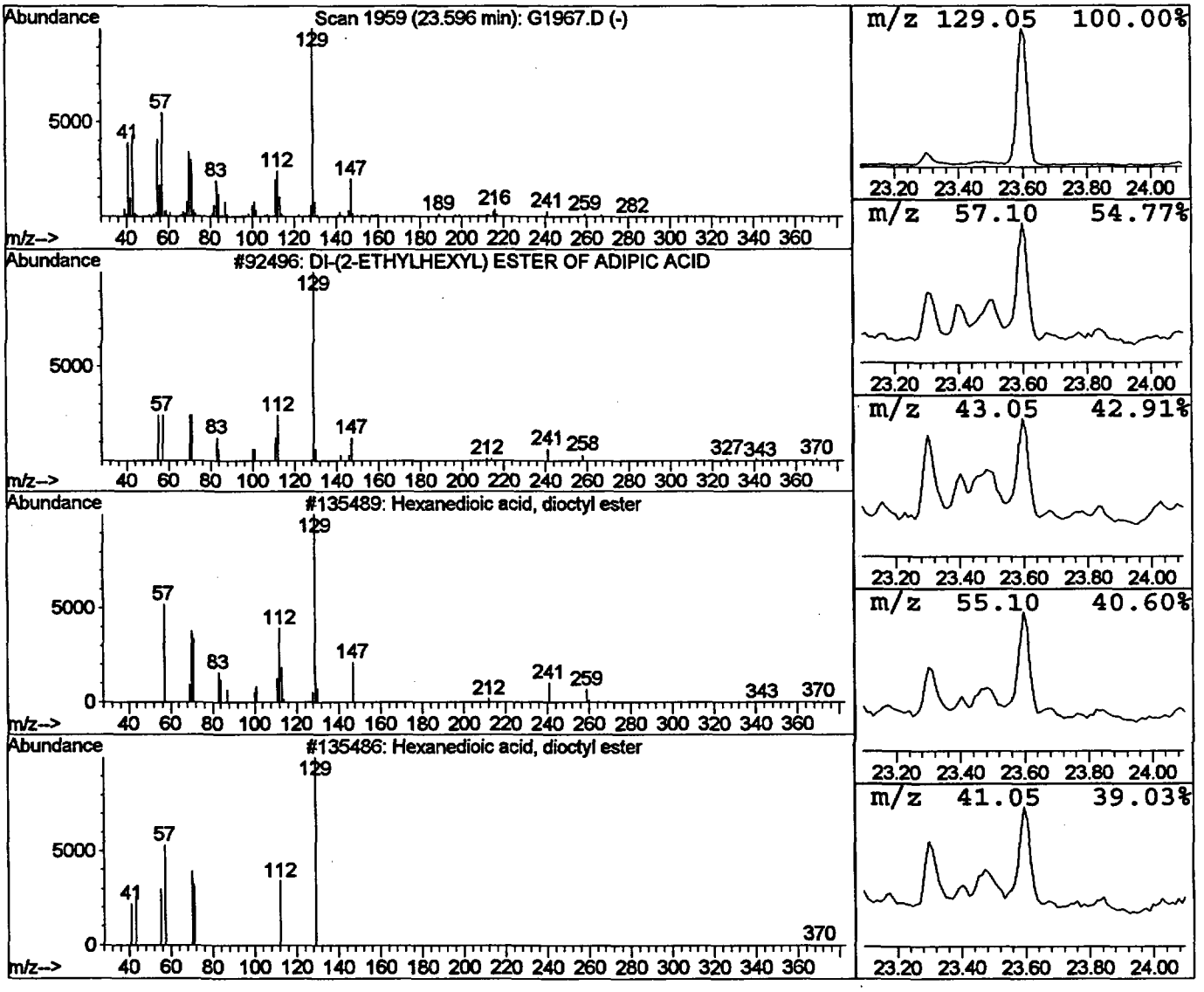
Peak Number 19 DI-(2-ETHYLHEXYL) ESTER OF ADI Concentration Rank 38

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.60	23.06 ng	905620	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	64
2	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	50
3	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	50



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

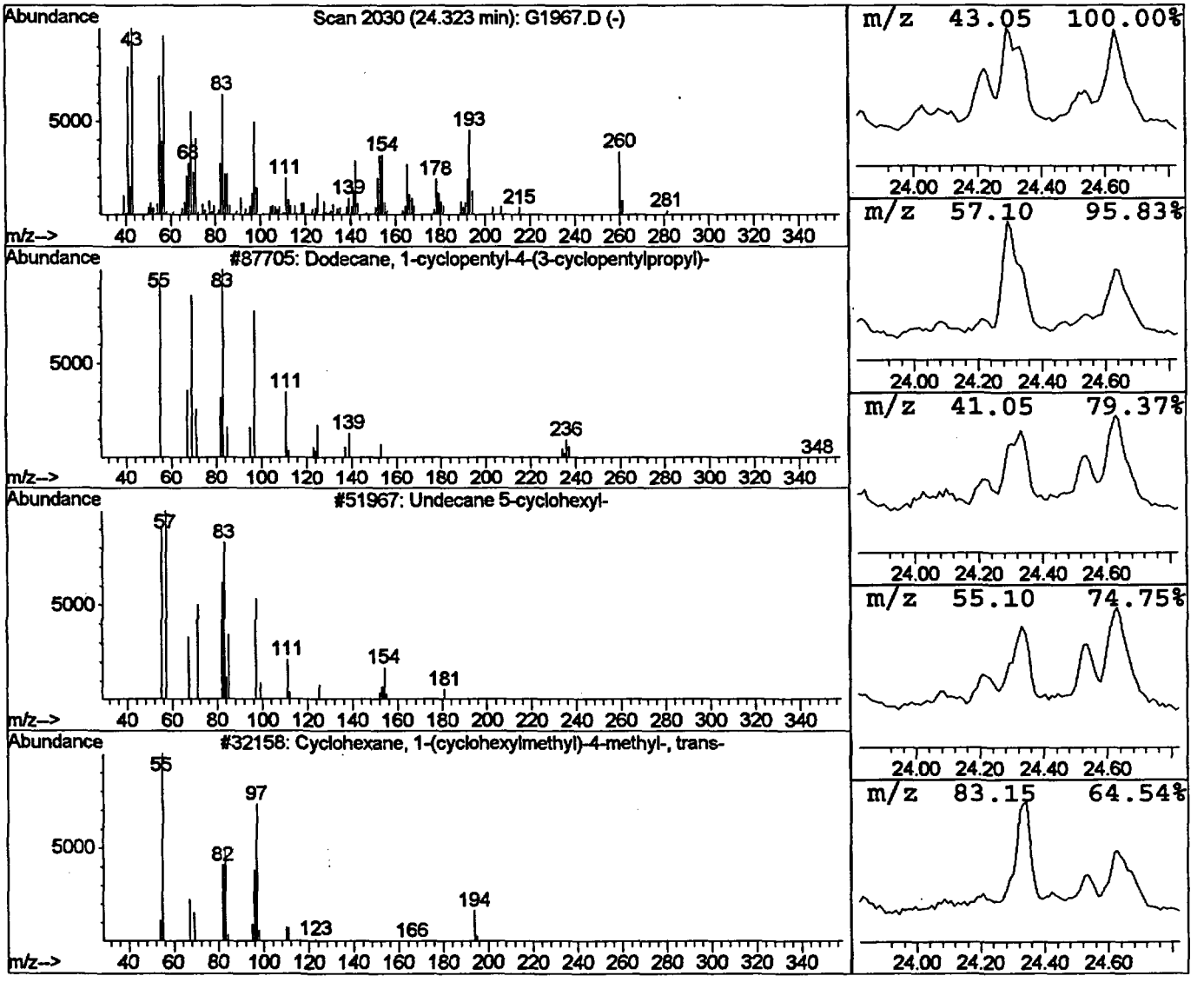
****

Peak Number 20 Dodecane, 1-cyclopentyl-4-(3-c Concentration Rank 35

UNKNOWN COMPOUND mol 27 98

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.32	24.76 ng	972329	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dodecane, 1-cyclopentyl-4-(3-cyclop	348	C25H48	007225-68-5	10
2	Undecane 5-cyclohexyl-	238	C17H34	013151-80-9	10
3	Cyclohexane, 1-(cyclohexylmethyl)-4	194	C14H26	054823-98-2	10



0814

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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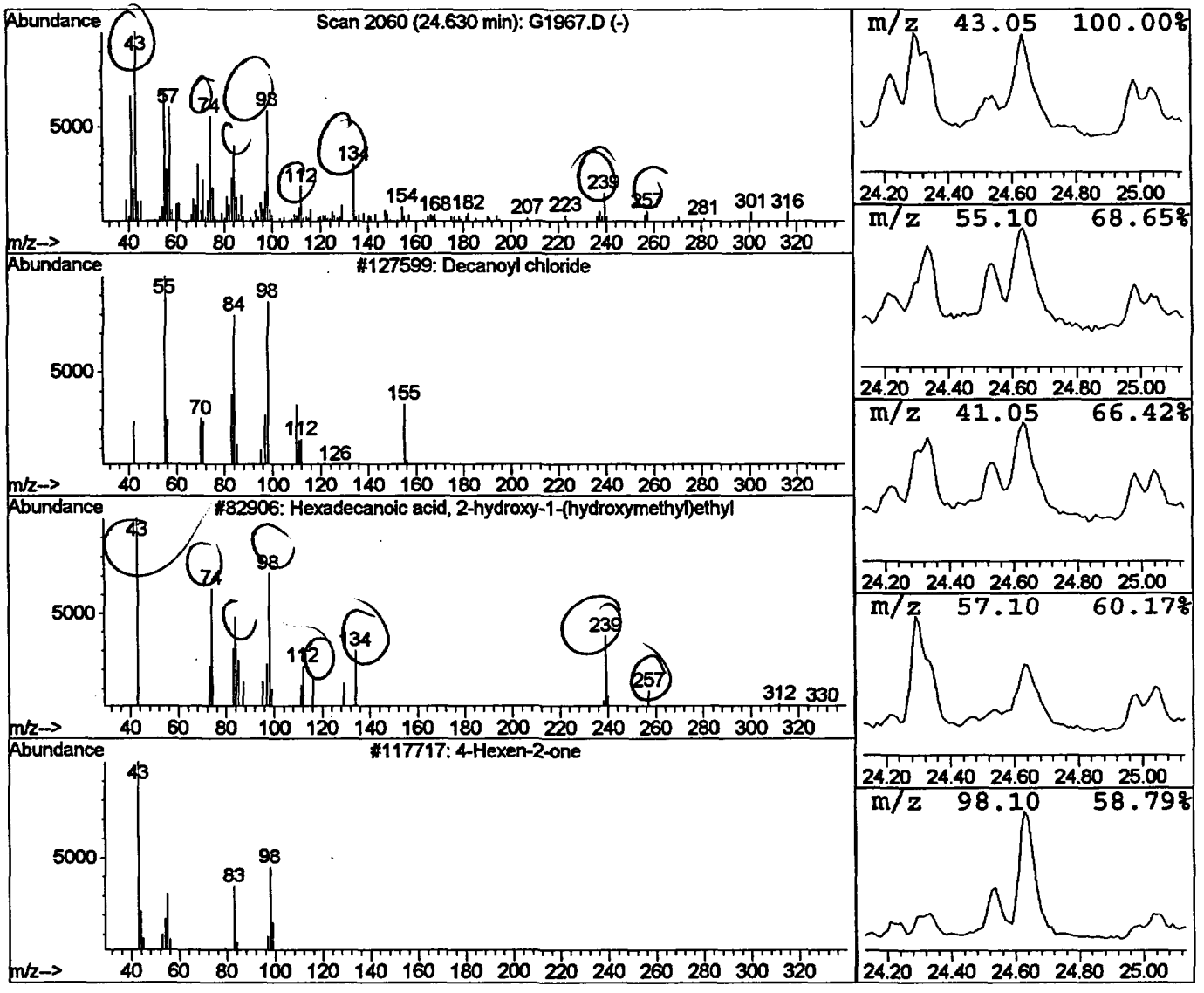
Peak Number 21 Decanoyl chloride Concentration Rank 29

R.T.	EstConc	Area	Relative to ISTD	R.T.
24.63	37.17 ng	1459320	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Decanoyl chloride	190	C10H19ClO	000112-13-0	38
2	Hexadecanoic acid, 2-hydroxy-1-(hyd	330	C19H38O4	023470-00-0	38
3	4-Hexen-2-one	98	C6H10O	025659-22-7	14



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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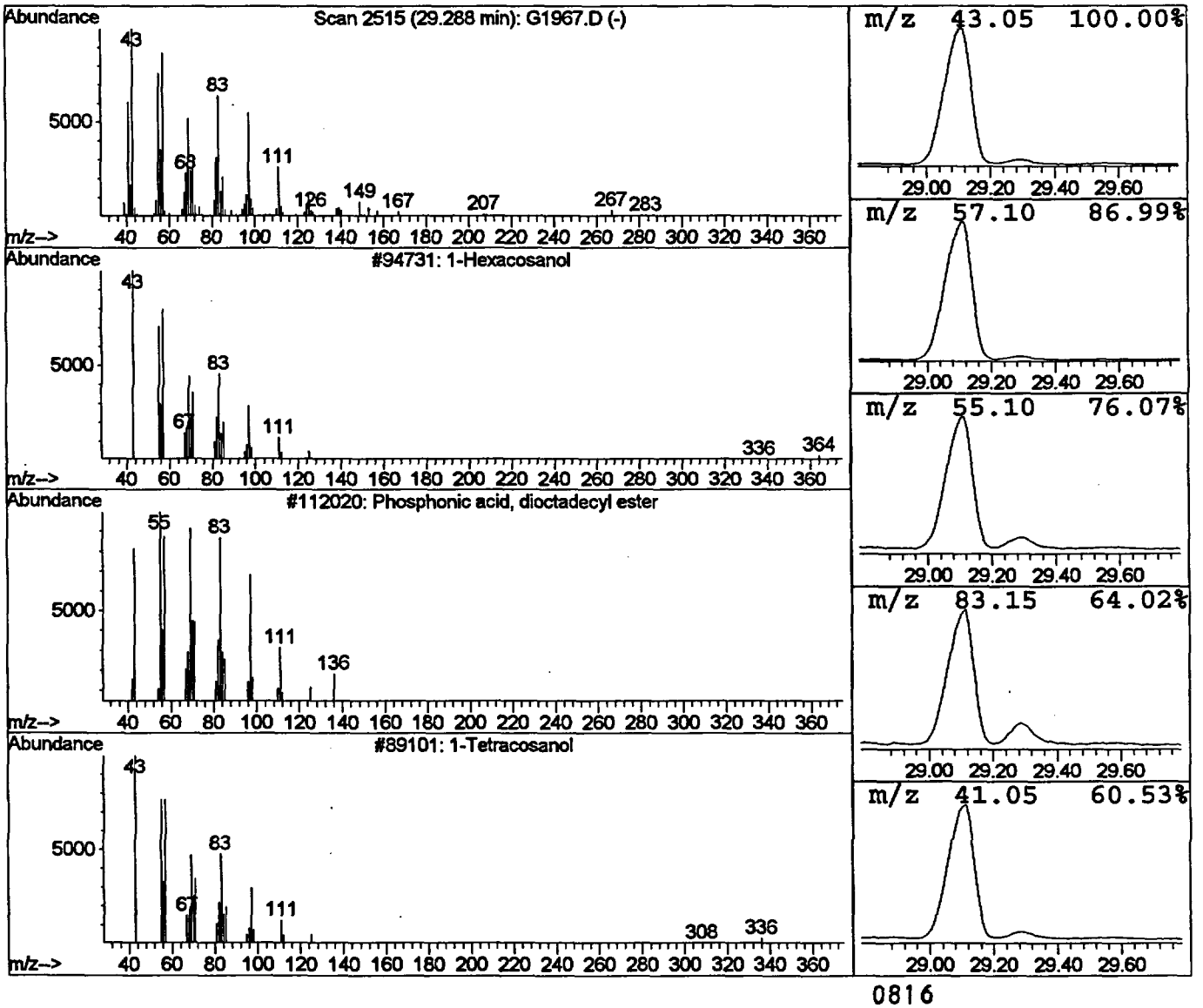
Peak Number 22 1-Hexacosanol Concentration Rank 39

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.29	21.85 ng	949335	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexacosanol	382	C26H54O	000506-52-5	74
2	Phosphonic acid, dioctadecyl ester	587	C36H75O3P	019047-85-9	74
3	1-Tetracosanol	354	C24H50O	000506-51-4	58



0816

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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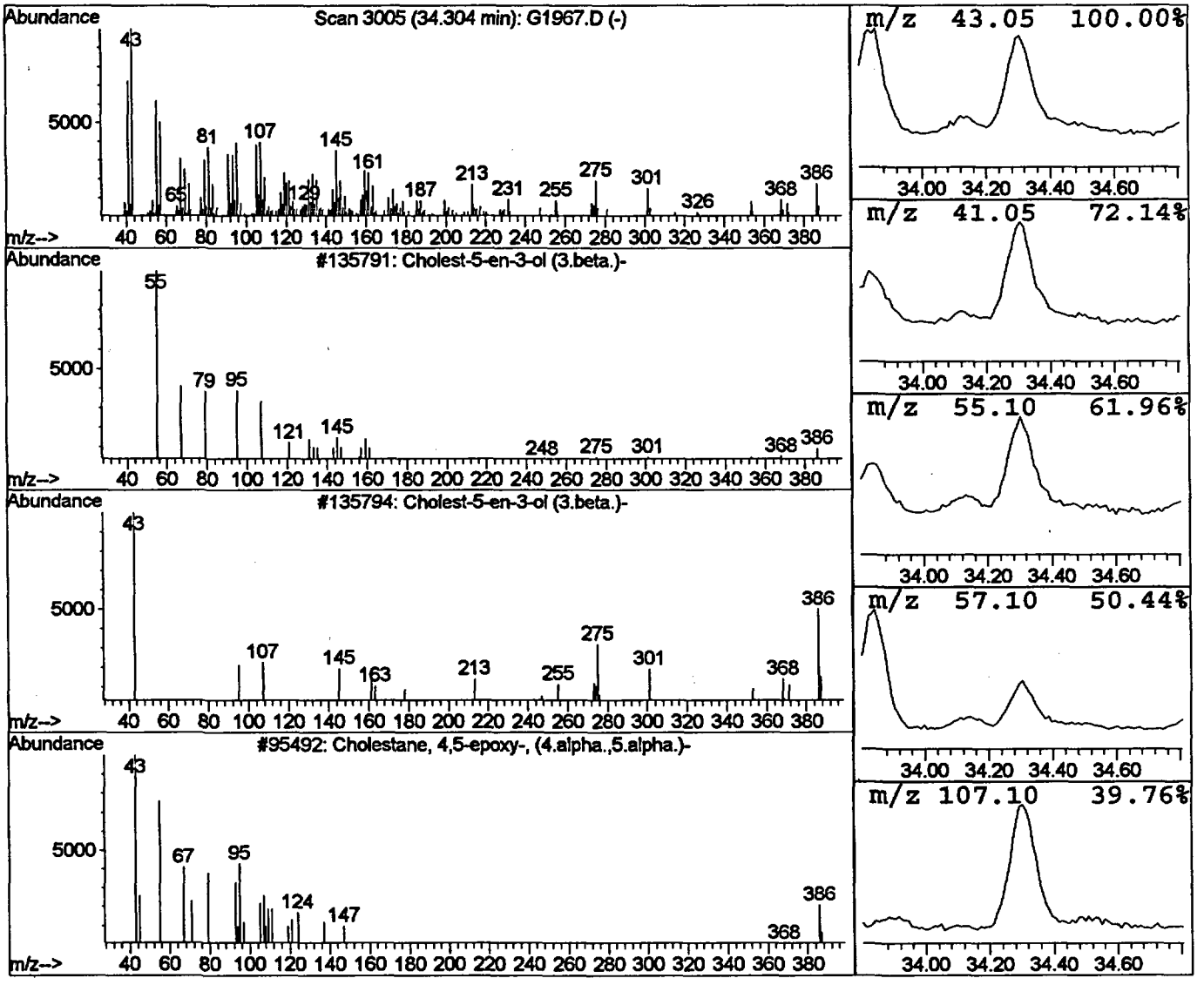
Peak Number 23 Cholest-5-en-3-ol (3.beta.)- Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
34.30	51.65 ng	2243900	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	93
2	Cholest-5-en-3-ol (3.beta.)-	386	C27H46O	000057-88-5	74
3	Cholestane, 4,5-epoxy-, (4.alpha.,5	386	C27H46O	006079-19-2	70



0817

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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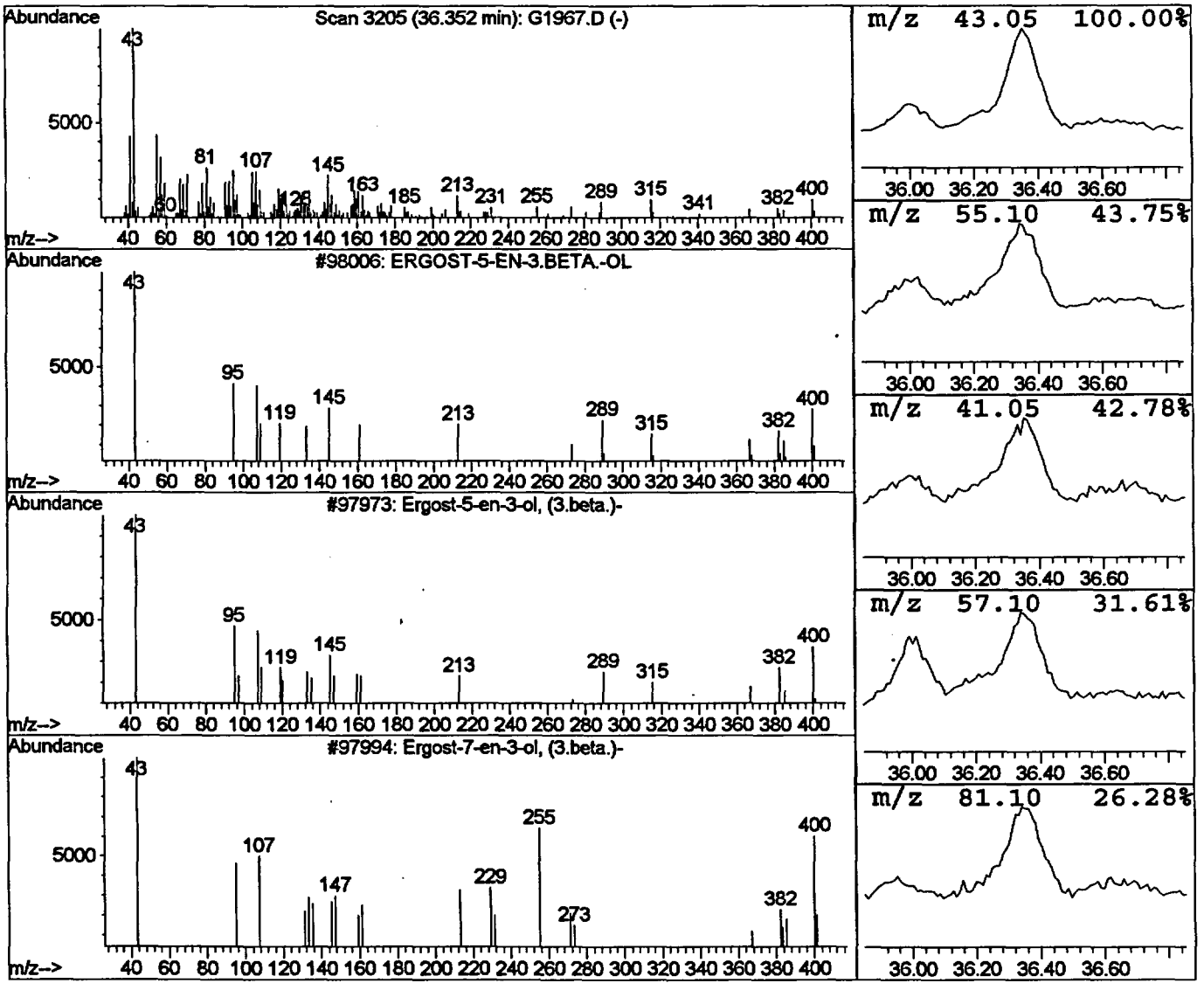
Peak Number 24 ERGOST-5-EN-3.BETA.-OL Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.35	52.59 ng	2284960	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	ERGOST-5-EN-3.BETA.-OL	400	C28H48O	000000-00-0	99
2	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	98
3	Ergost-7-en-3-ol, (3.beta.)-	400	C28H48O	026047-31-4	92



0818

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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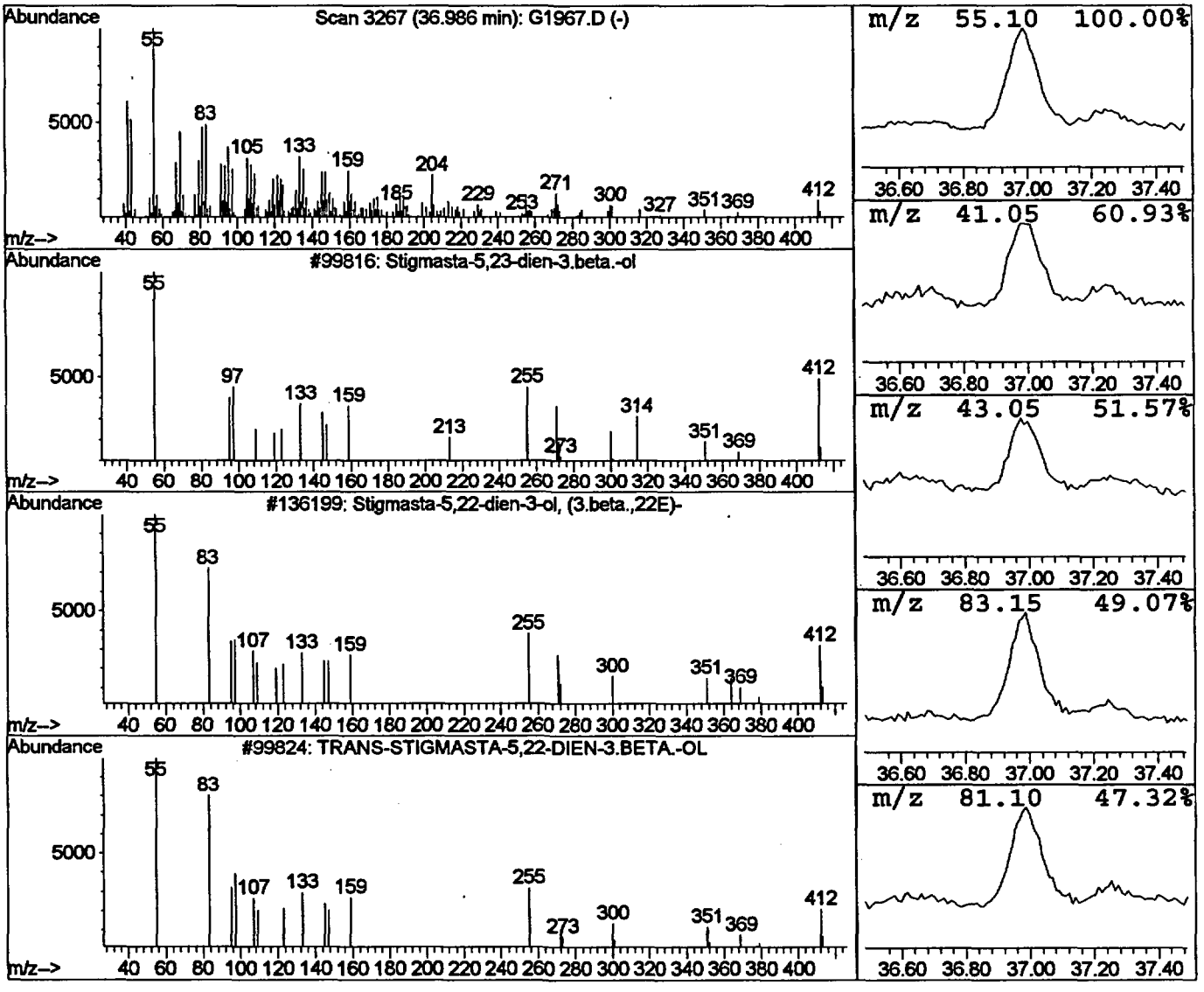
Peak Number 25 Stigmasta-5,23-dien-3.beta.-ol Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
36.99	45.83 ng	1990940	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmasta-5,23-dien-3.beta.-ol	412	C29H48O	038485-29-9	89
2	Stigmasta-5,22-dien-3-ol, (3.beta.,	412	C29H48O	000083-48-7	70
3	TRANS-STIGMASTA-5,22-DIEN-3.BETA.-O	412	C29H48O	000000-00-0	64



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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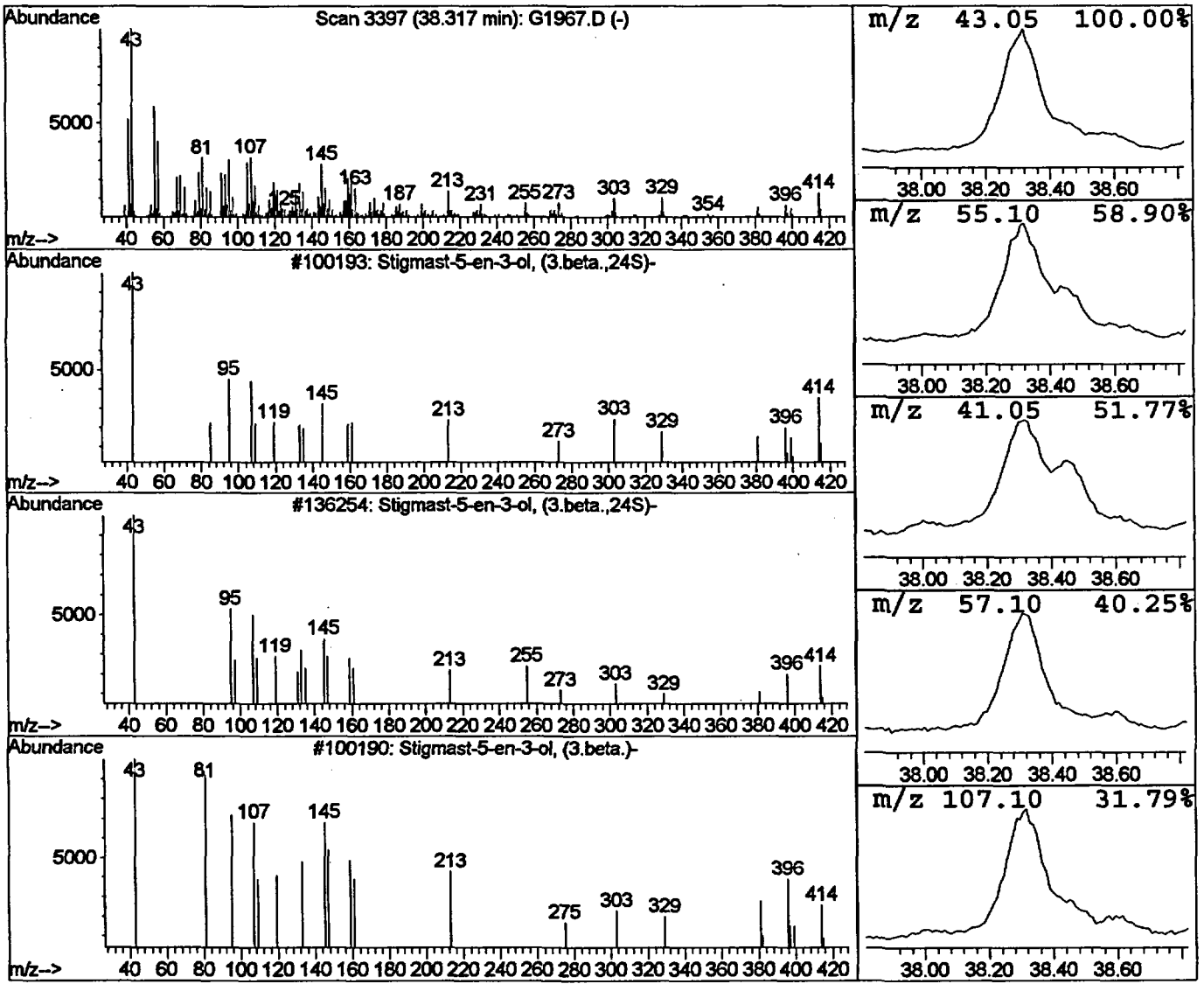
Peak Number 26 Stigmast-5-en-3-ol, (3.beta.,2 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
38.32	147.47 ng	6407090	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	98
2	Stigmast-5-en-3-ol, (3.beta.,24S)-	414	C29H50O	000083-47-6	95
3	Stigmast-5-en-3-ol, (3.beta.)-	414	C29H50O	000083-46-5	91



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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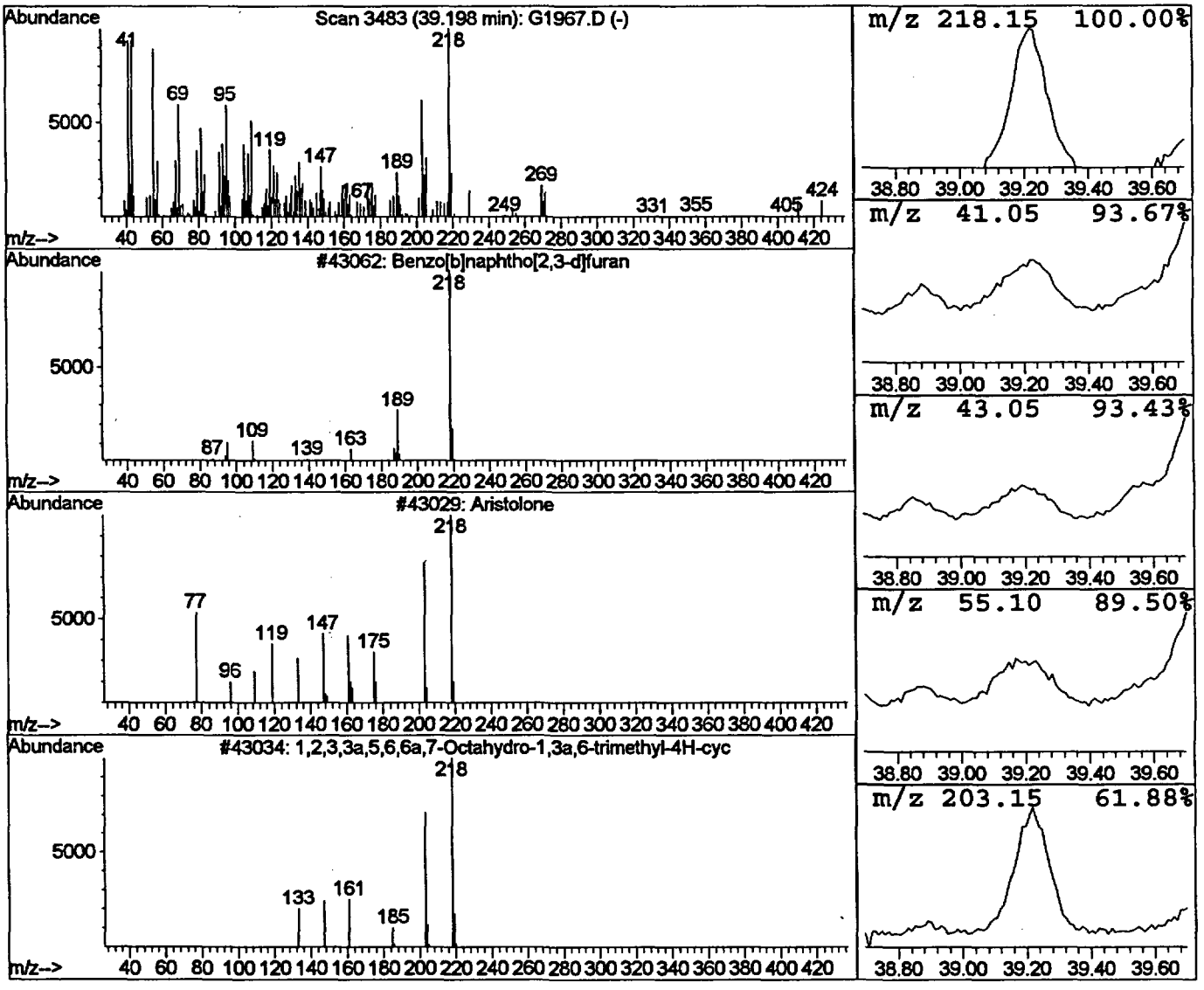
Peak Number 27 Benzo[b]naphtho[2,3-d]furan Concentration Rank 27

UNKNOWN COMPOUND ms 1-27-98

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.20	39.42 ng	1712600	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzo[b]naphtho[2,3-d]furan	218	C16H10O	000243-42-5	58
2	Aristolone	218	C15H22O	006831-17-0	55
3	1,2,3,3a,5,6,6a,7-Octahydro-1,3a,6-	218	C15H22O	071583-68-1	53



0821

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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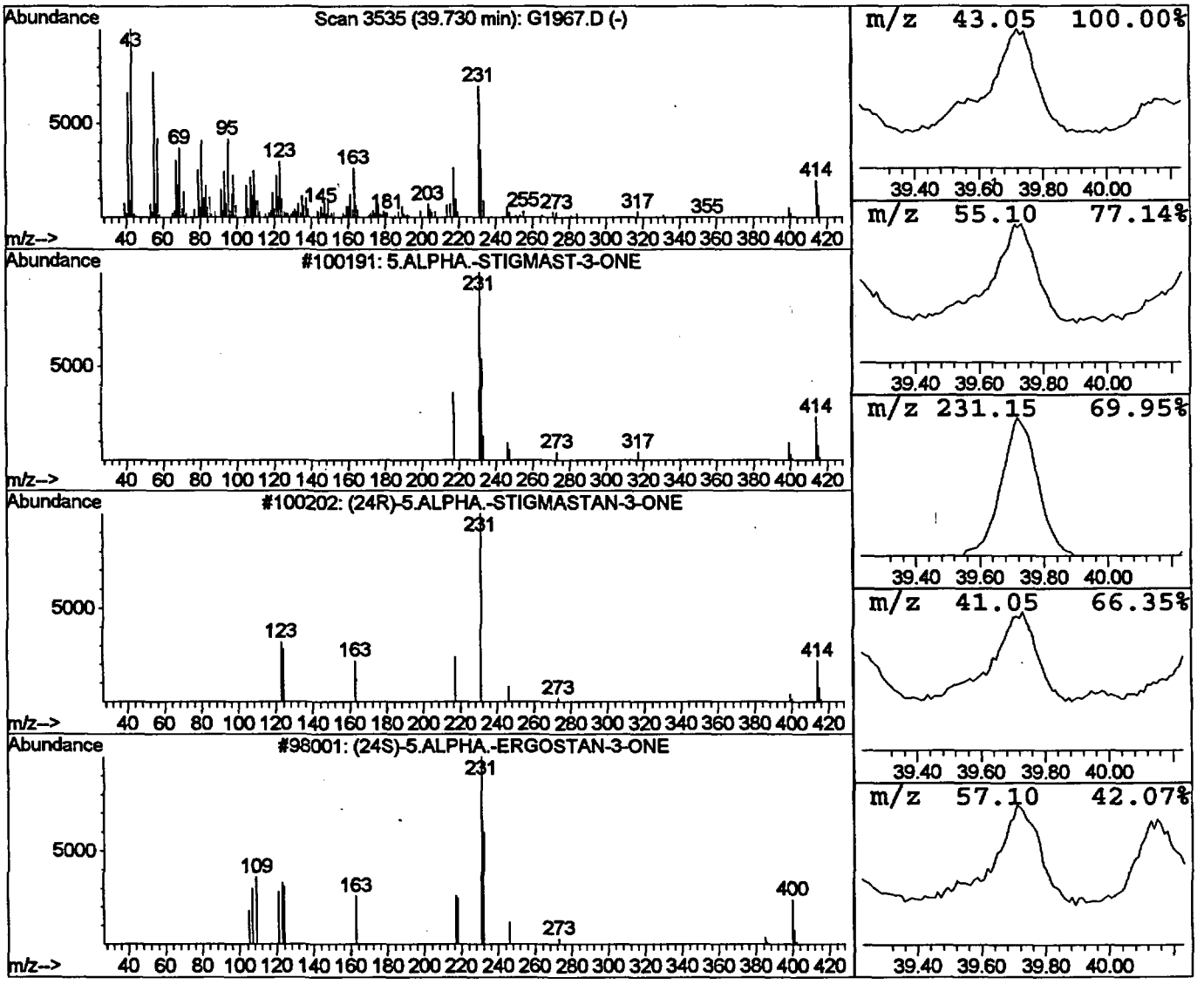
Peak Number 28 5.ALPHA.-STIGMAST-3-ONE Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
39.73	79.51 ng	3454330	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	5.ALPHA.-STIGMAST-3-ONE	414	C29H50O	000083-46-5	95
(2)	(24R)-5.ALPHA.-STIGMASTAN-3-ONE	414	C29H50O	005060-25-3	58
3	(24S)-5.ALPHA.-ERGOSTAN-3-ONE	400	C28H48O	059461-38-0	42



0822

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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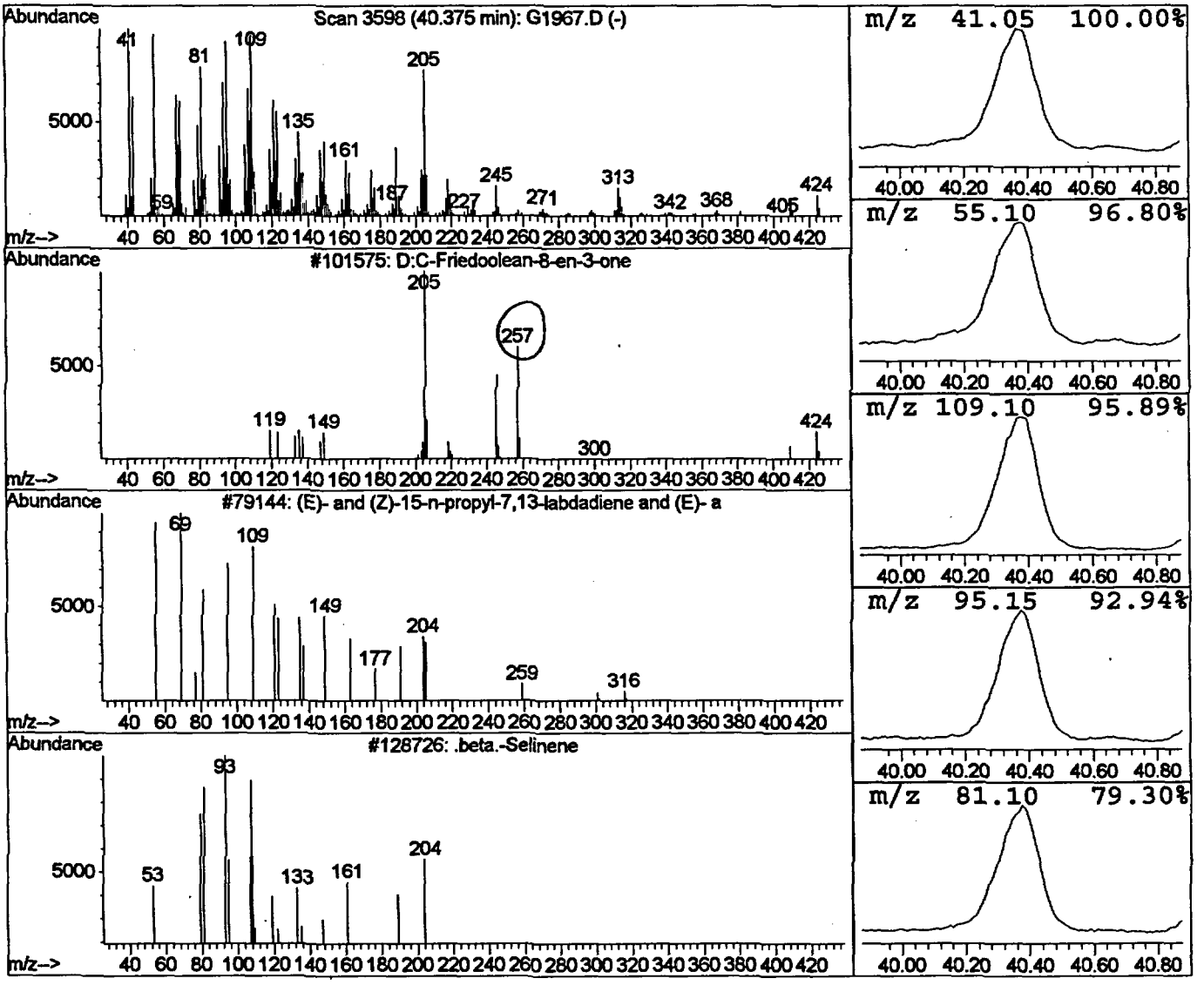
Peak Number 29 D:C-Friedoolean-8-en-3-one Concentration Rank 4

UNKNOWN COMPOUND wo 1/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.38	298.10 ng	12951300	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	D:C-Friedoolean-8-en-3-one	424	C30H48O	022611-26-3	70
2	(E)- and (Z)-15-n-propyl-7,13-labda	316	C23H40	087953-43-3	42
3	.beta.-Selinene	204	C15H24	017066-67-0	40



0823

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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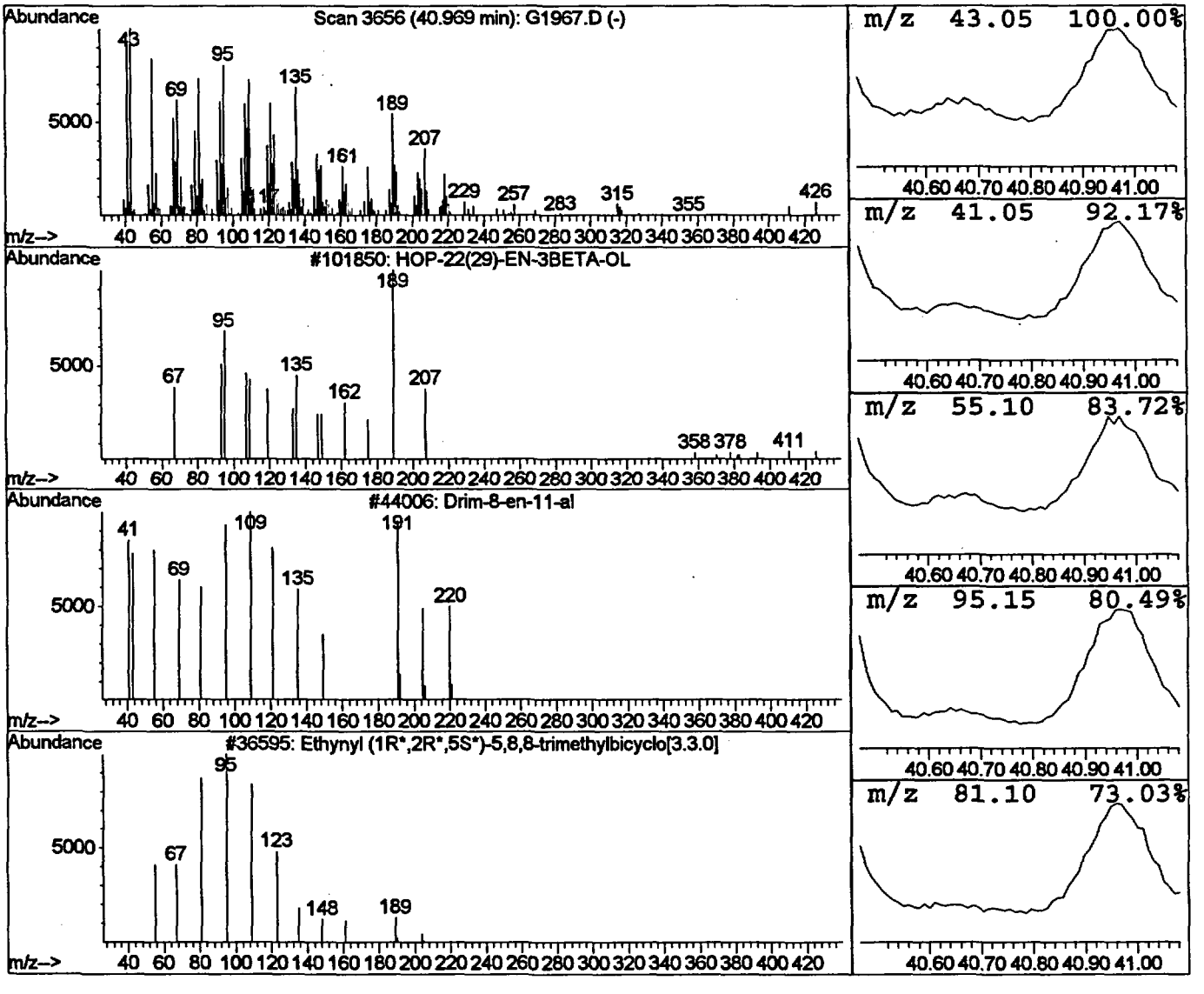
Peak Number 30 HOP-22(29)-EN-3BETA-OL Concentration Rank 11

UNKNOWN COMPOUND 1/27/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
40.97	76.41 ng	3319850	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	HOP-22(29)-EN-3BETA-OL	426	C30H50O	058801-23-3	87
2	Drim-8-en-11-al	220	C15H24O	068985-10-4	80
3	Ethynyl (1R*,2R*,5S*)-5,8,8-trimeth	204	C14H20O	085544-99-6	60



0824

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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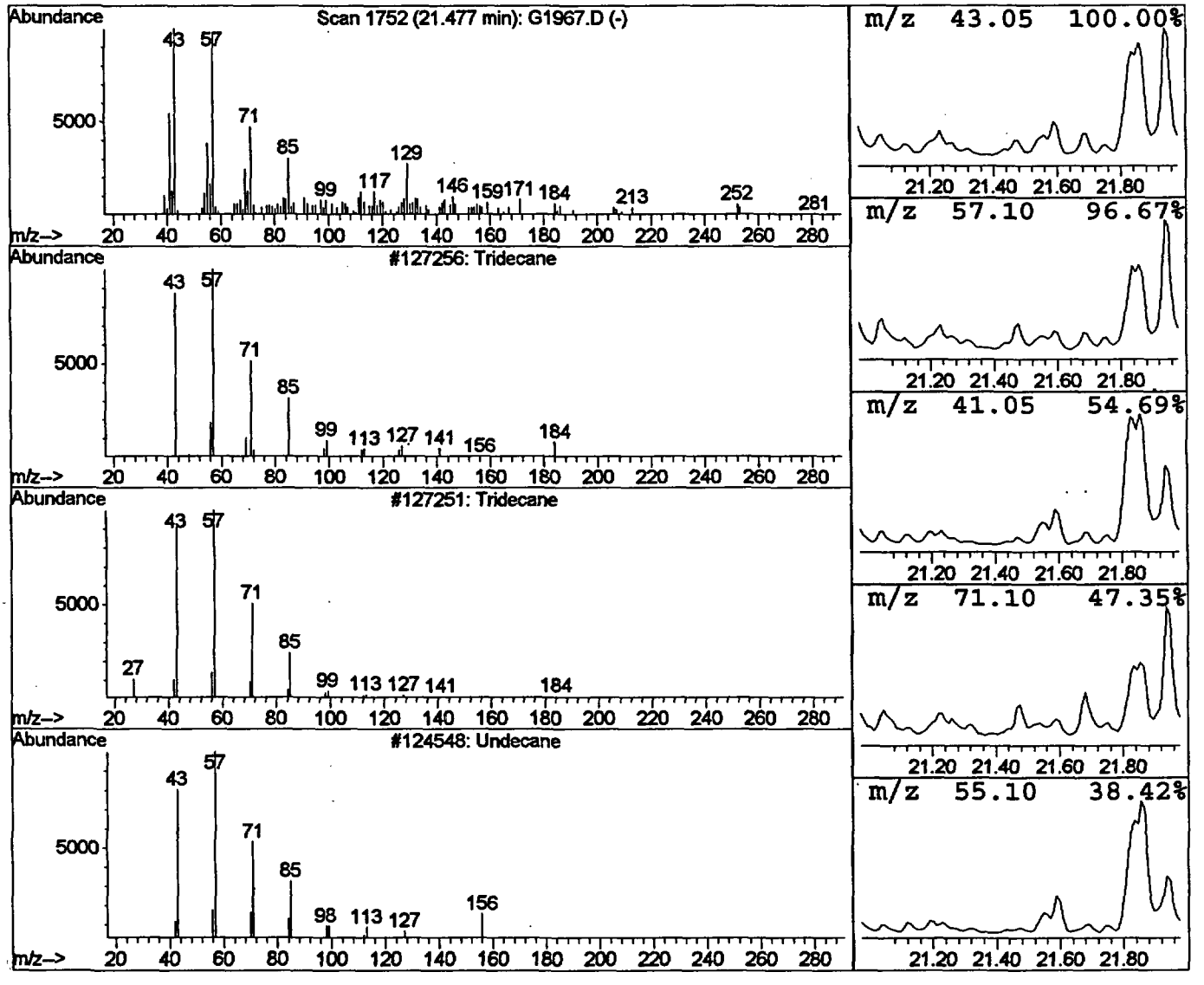
Peak Number 42 Tridecane Concentration Rank 64

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.48	9.22 ng	412188	Phenanthrene-d10	19.62

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane	184	C13H28	000629-50-5	89
2	Tridecane	184	C13H28	000629-50-5	64
3	Undecane	156	C11H24	001120-21-4	50



Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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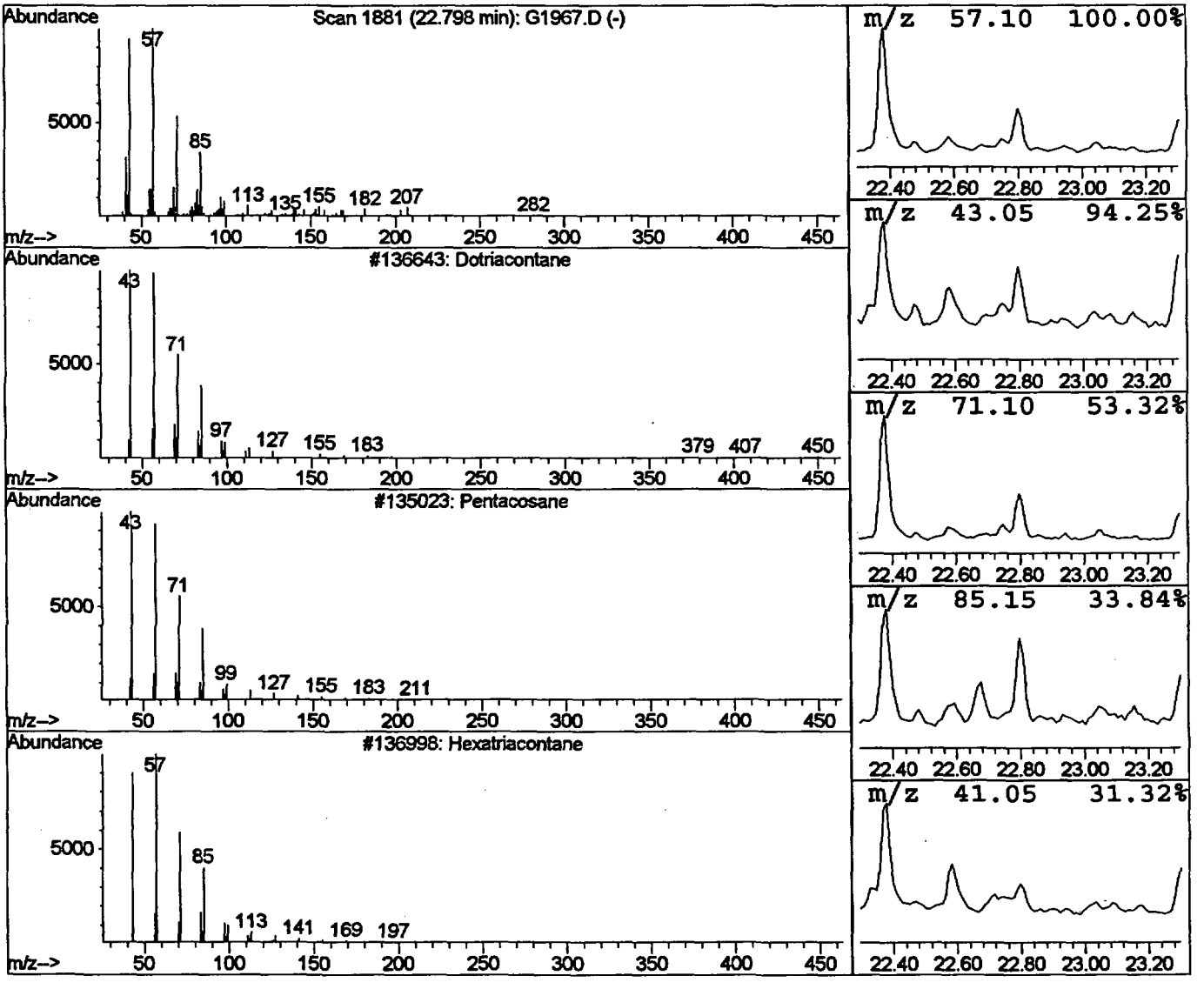
Peak Number 43 Dotriacontane Concentration Rank 74

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.80	7.47 ng	293158	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dotriacontane	451	C32H66	000544-85-4	74
2	Pentacosane	352	C25H52	000629-99-2	74
3	Hexatriacontane	507	C36H74	000630-06-8	72



Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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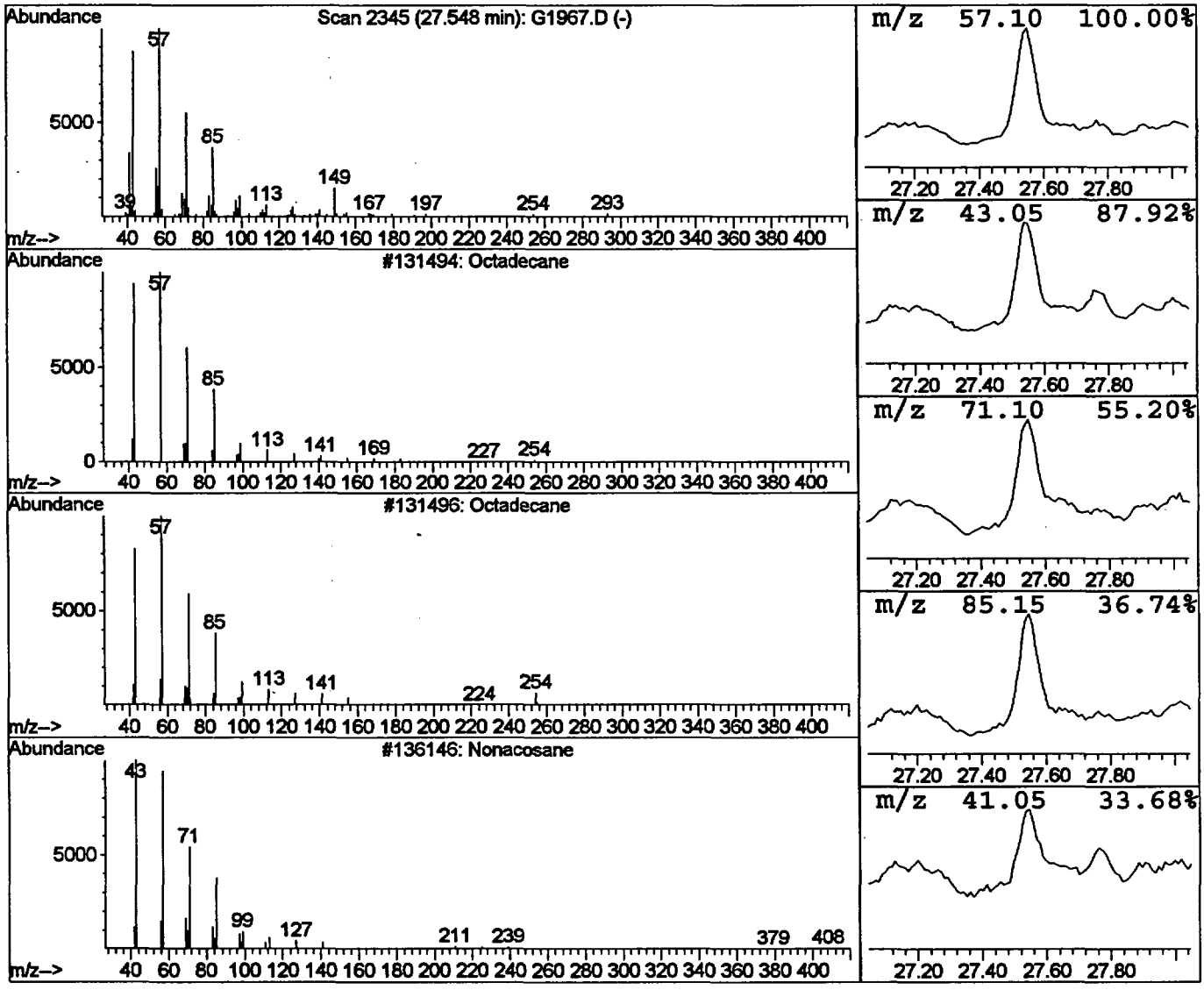
Peak Number 45 Octadecane Concentration Rank 32

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.55	31.56 ng	1239050	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	97
2	Octadecane	254	C18H38	000593-45-3	95
3	Nonacosane	408	C29H60	000630-03-5	87



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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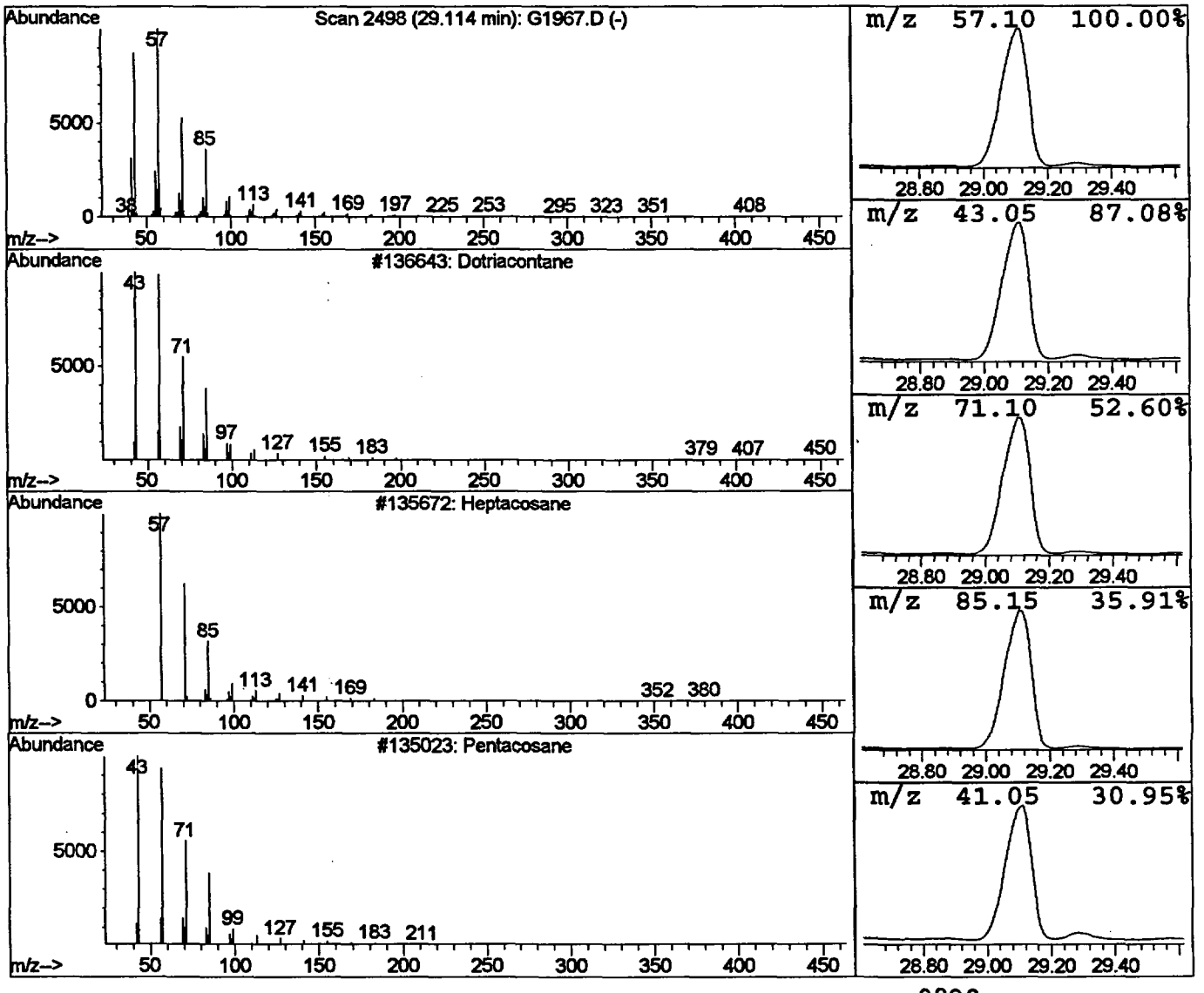
Peak Number 46 Dotriacontane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
29.11	474.91 ng	20632900	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Dotriacontane	451	C32H66	000544-85-4	91
2	Heptacosane	380	C27H56	000593-49-7	91
3	Pentacosane	352	C25H52	000629-99-2	91



0828

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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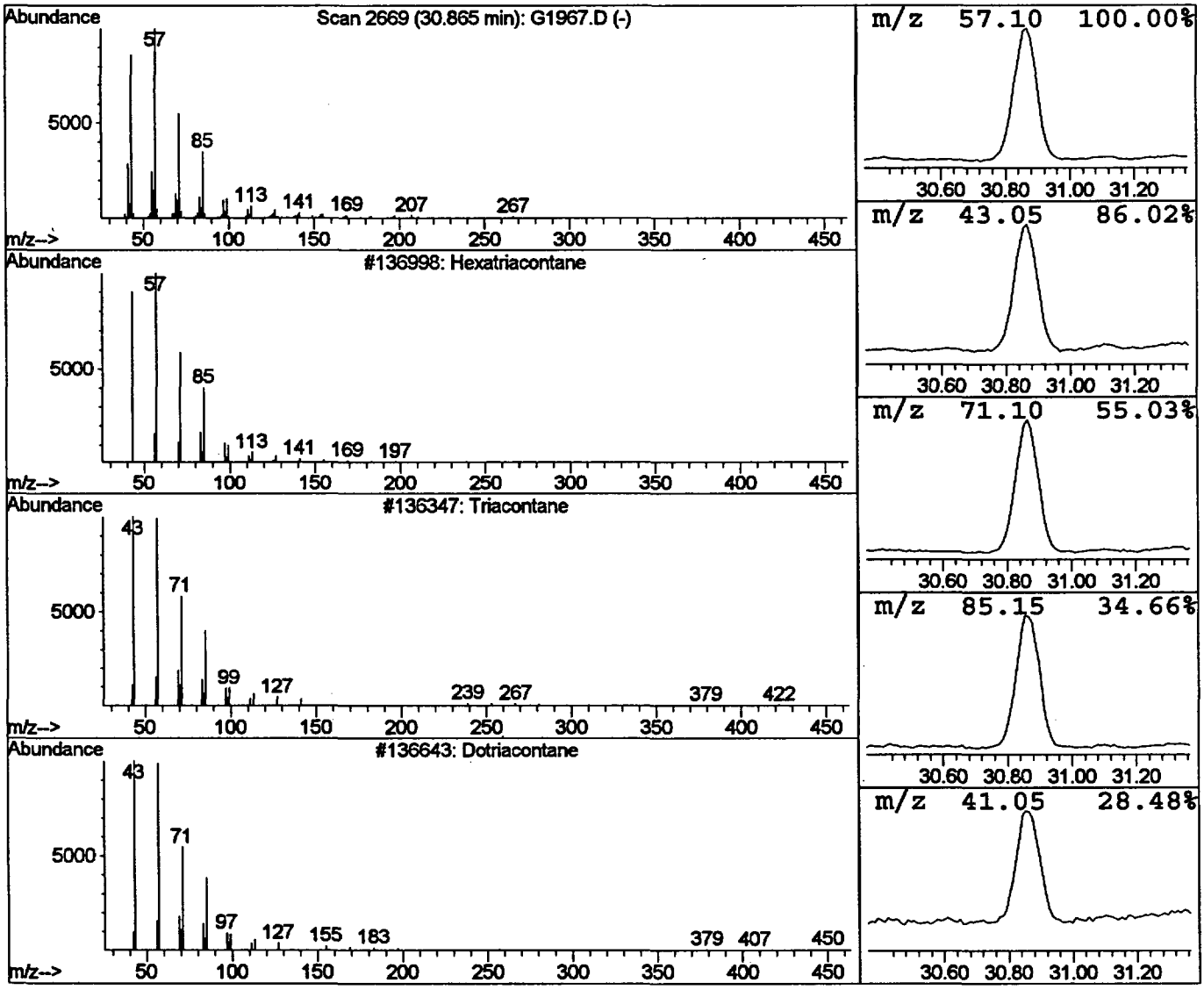
Peak Number 47 Hexatriacontane Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
30.86	48.87 ng	2123120	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	93
2	Triacontane	422	C30H62	000638-68-6	91
3	Dotriacontane	451	C32H66	000544-85-4	91



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Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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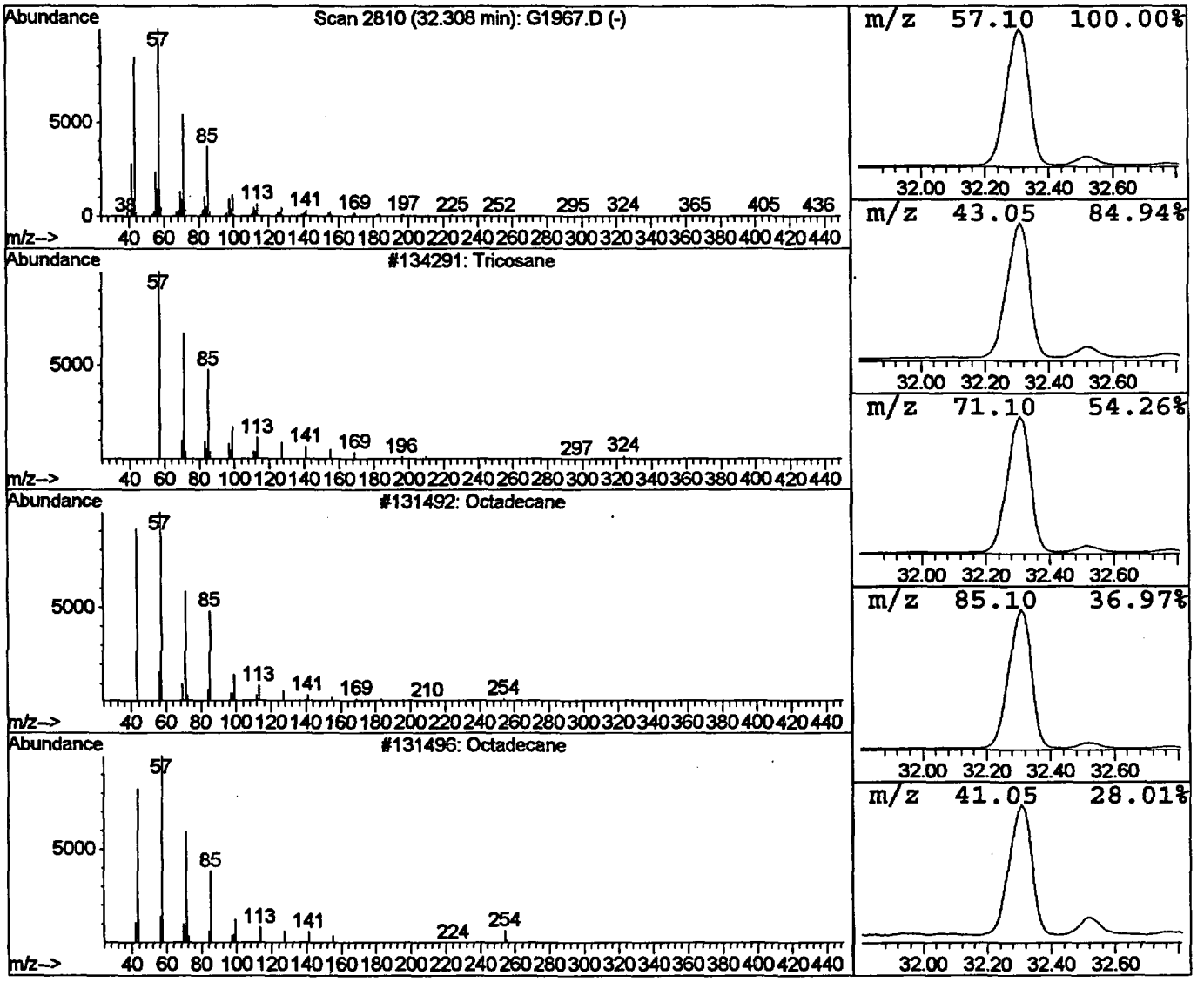
Peak Number 48 Tricosane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.31	310.40 ng	13485500	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Tricosane	324	C23H48	000638-67-5	97
2	Octadecane	254	C18H38	000593-45-3	97
3	Octadecane	254	C18H38	000593-45-3	96



0830

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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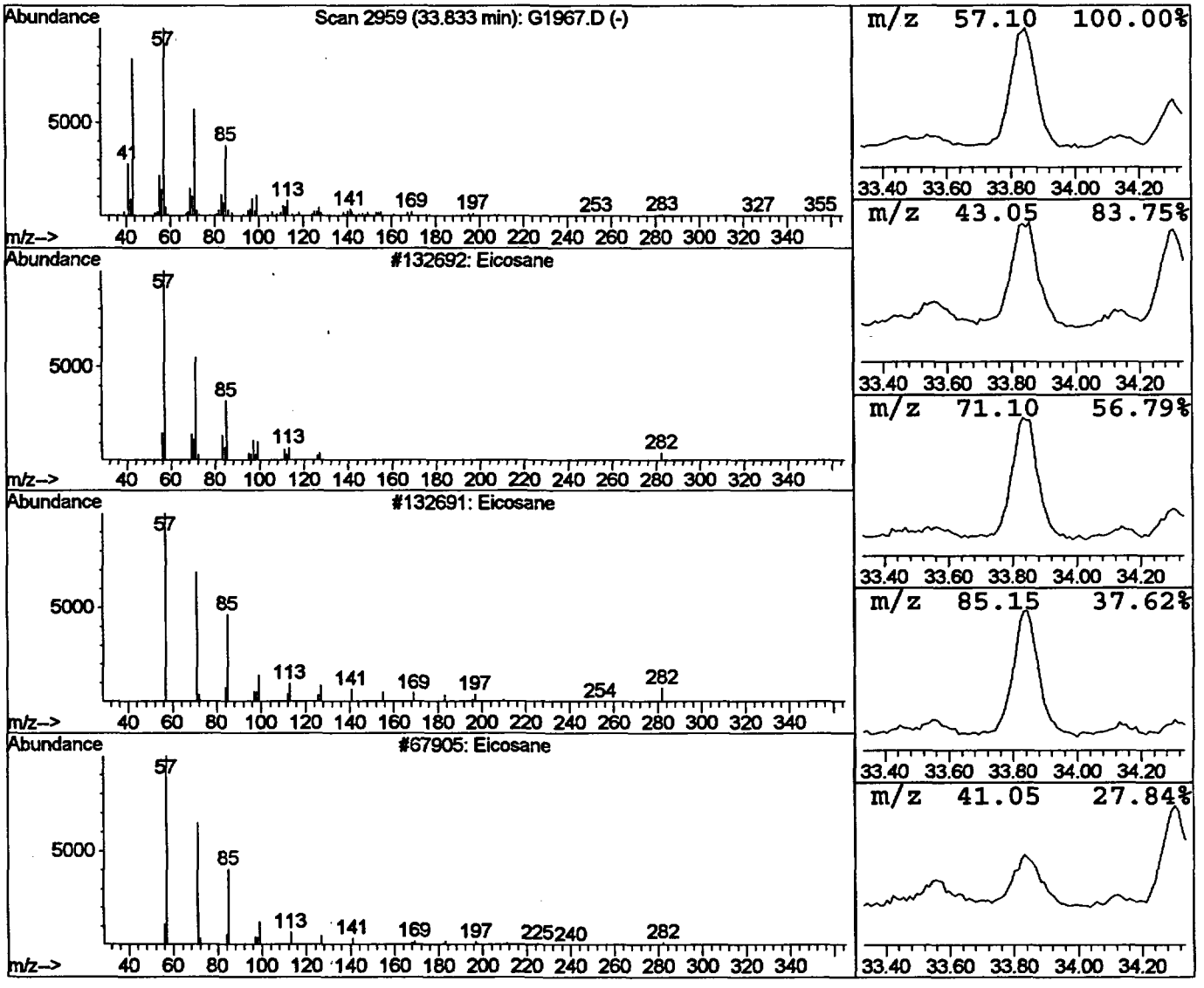
Peak Number 49 Eicosane Concentration Rank 33

R.T.	EstConc	Area	Relative to ISTD	R.T.
33.83	26.60 ng	1155710	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane	282	C20H42	000112-95-8	96
2	Eicosane	282	C20H42	000112-95-8	93
3	Eicosane	282	C20H42	000112-95-8	93



0831

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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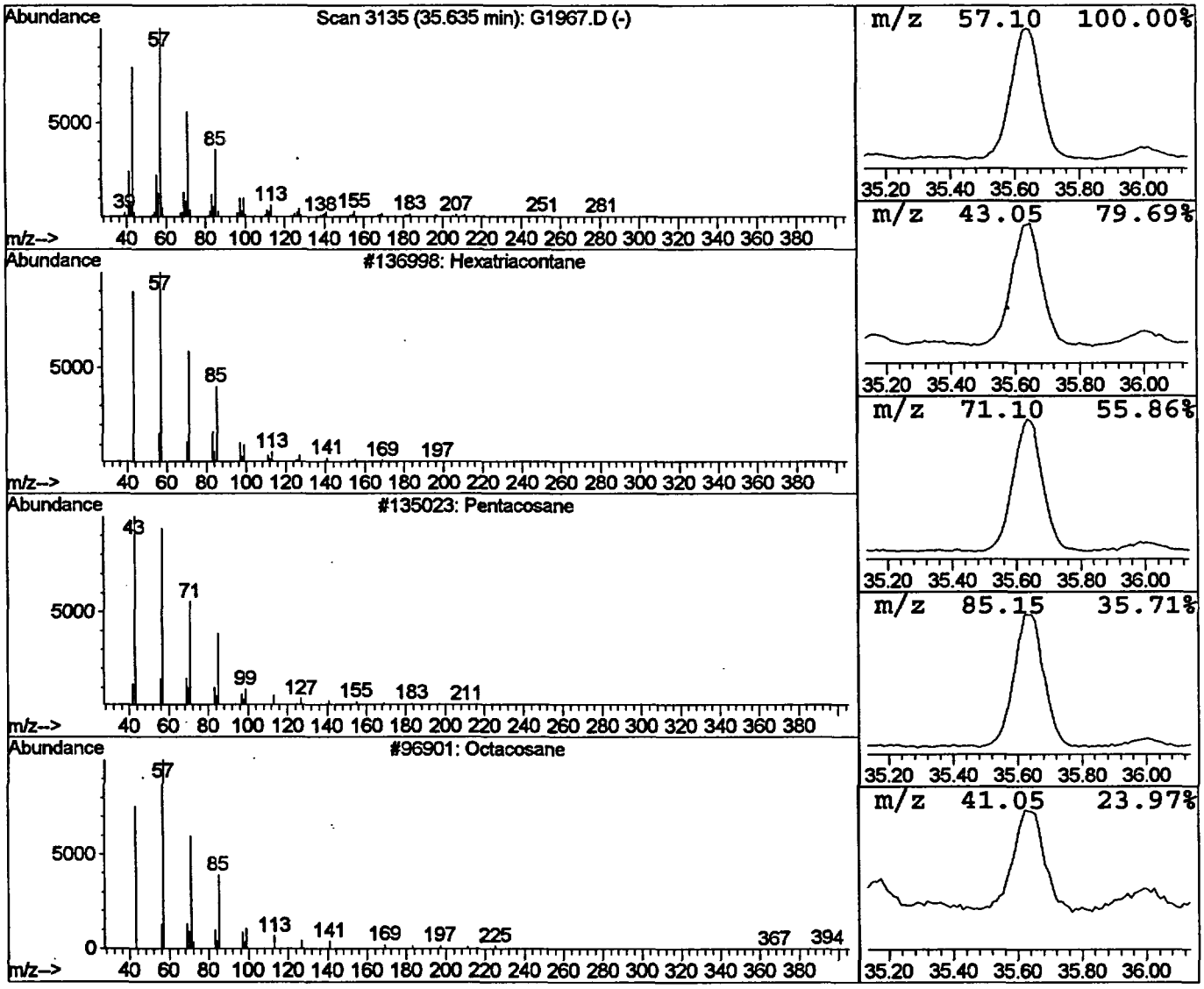
Peak Number 50 Hexatriacontane Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
35.64	55.27 ng	2401350	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexatriacontane	507	C36H74	000630-06-8	95
2	Pentacosane	352	C25H52	000629-99-2	91
3	Octacosane	394	C28H58	000630-02-4	91



0832

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D
Acq On : 23 Jan 98 11:55
Sample : S HP-7G 58073-009 FFR92
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

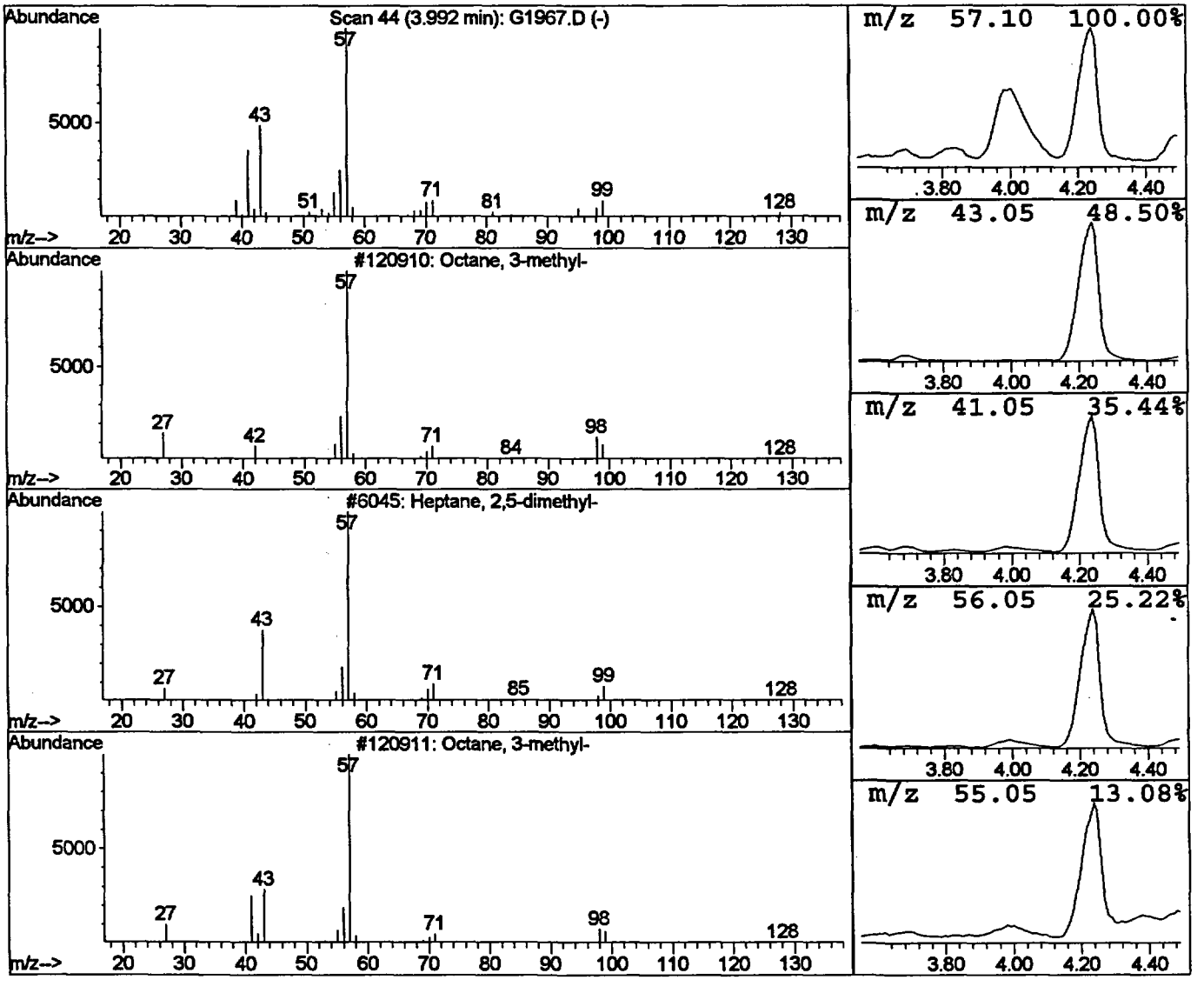
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 51 Octane, 3-methyl- Concentration Rank 54

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.99	13.36 ng	467137	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	80
2	Heptane, 2,5-dimethyl-	128	C9H20	002216-30-0	78
3	Octane, 3-methyl-	128	C9H20	002216-33-3	64



0833

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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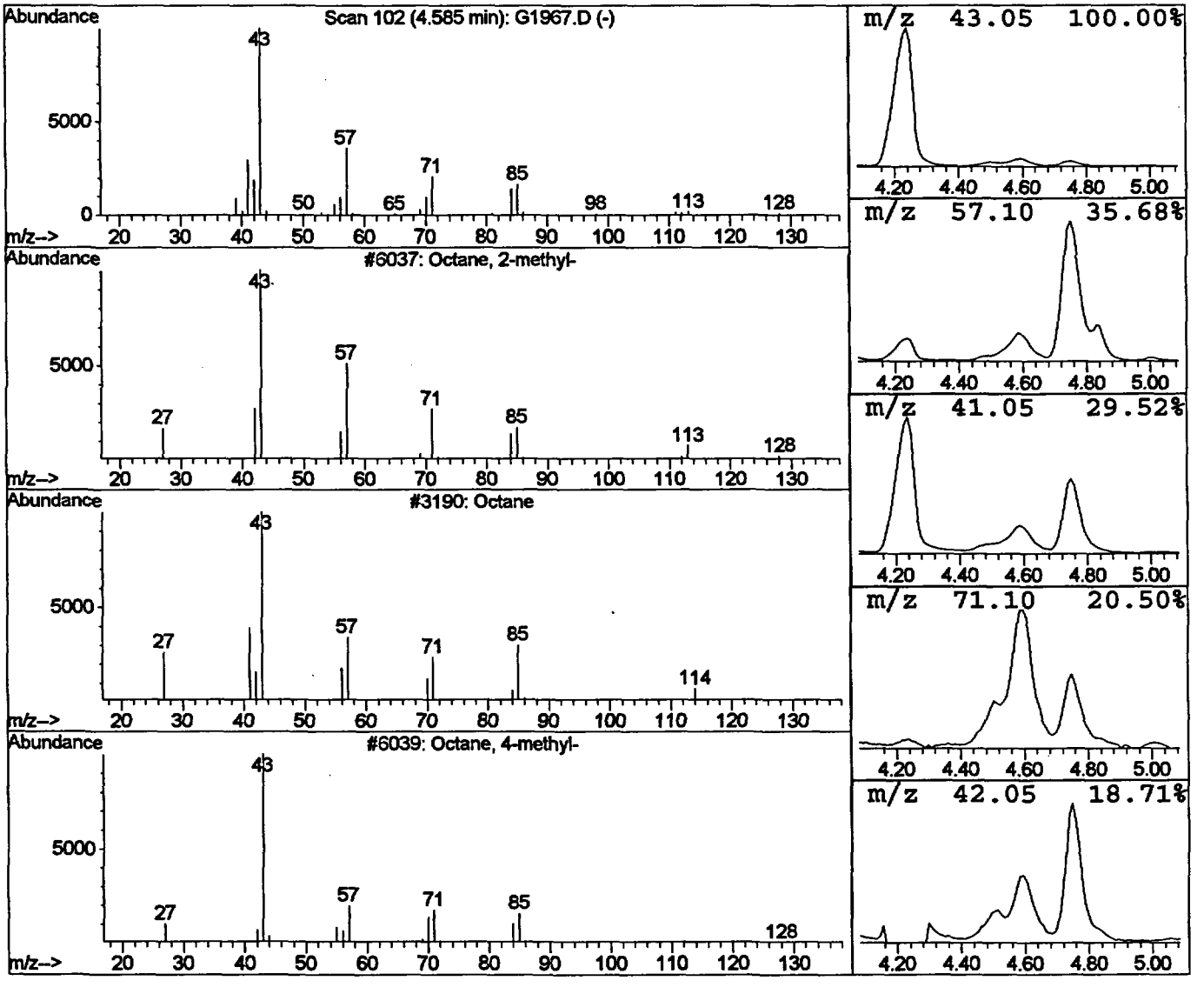
Peak Number 52 Octane, 2-methyl- Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.59	64.75 ng	2264790	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2-methyl-	128	C9H20	003221-61-2	59
2	Octane	114	C8H18	000111-65-9	59
3	Octane, 4-methyl-	128	C9H20	002216-34-4	59



Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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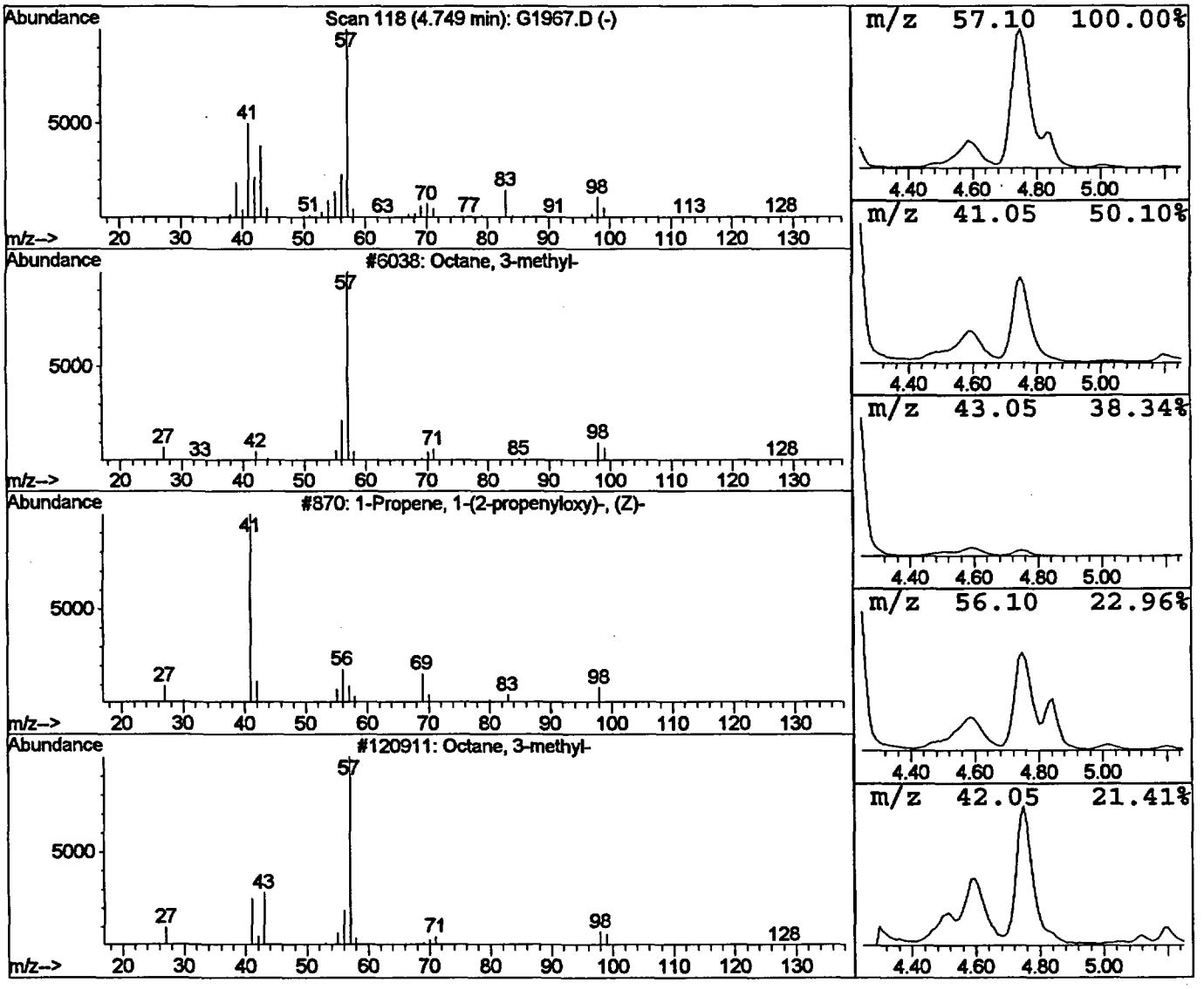
Peak Number 53 Octane, 3-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.75	101.15 ng	3537860	1,4-Dichlorobenzene-d4	7.07

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	52
2	1-Propene, 1-(2-propenyloxy)-, (Z)-	98	C6H10O	061142-12-9	50
3	Octane, 3-methyl-	128	C9H20	002216-33-3	47



0835

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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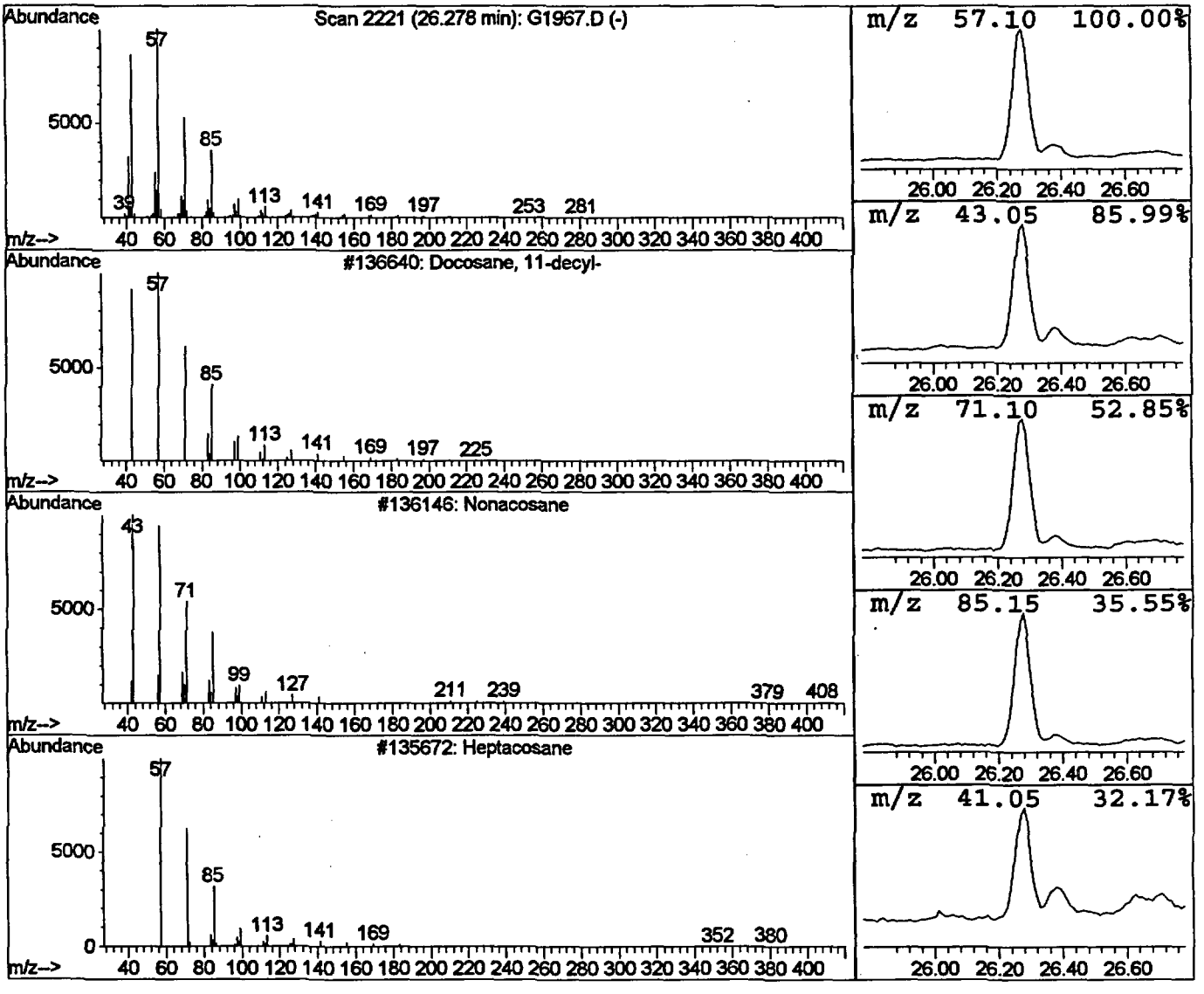
Peak Number 54 Docosane, 11-decyl- Concentration Rank 26

R.T.	EstConc	Area	Relative to ISTD	R.T.
26.28	40.25 ng	1580450	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Docosane, 11-decyl-	451	C32H66	055401-55-3	91
2	Nonacosane	408	C29H60	000630-03-5	91
3	Heptacosane	380	C27H56	000593-49-7	91



0836

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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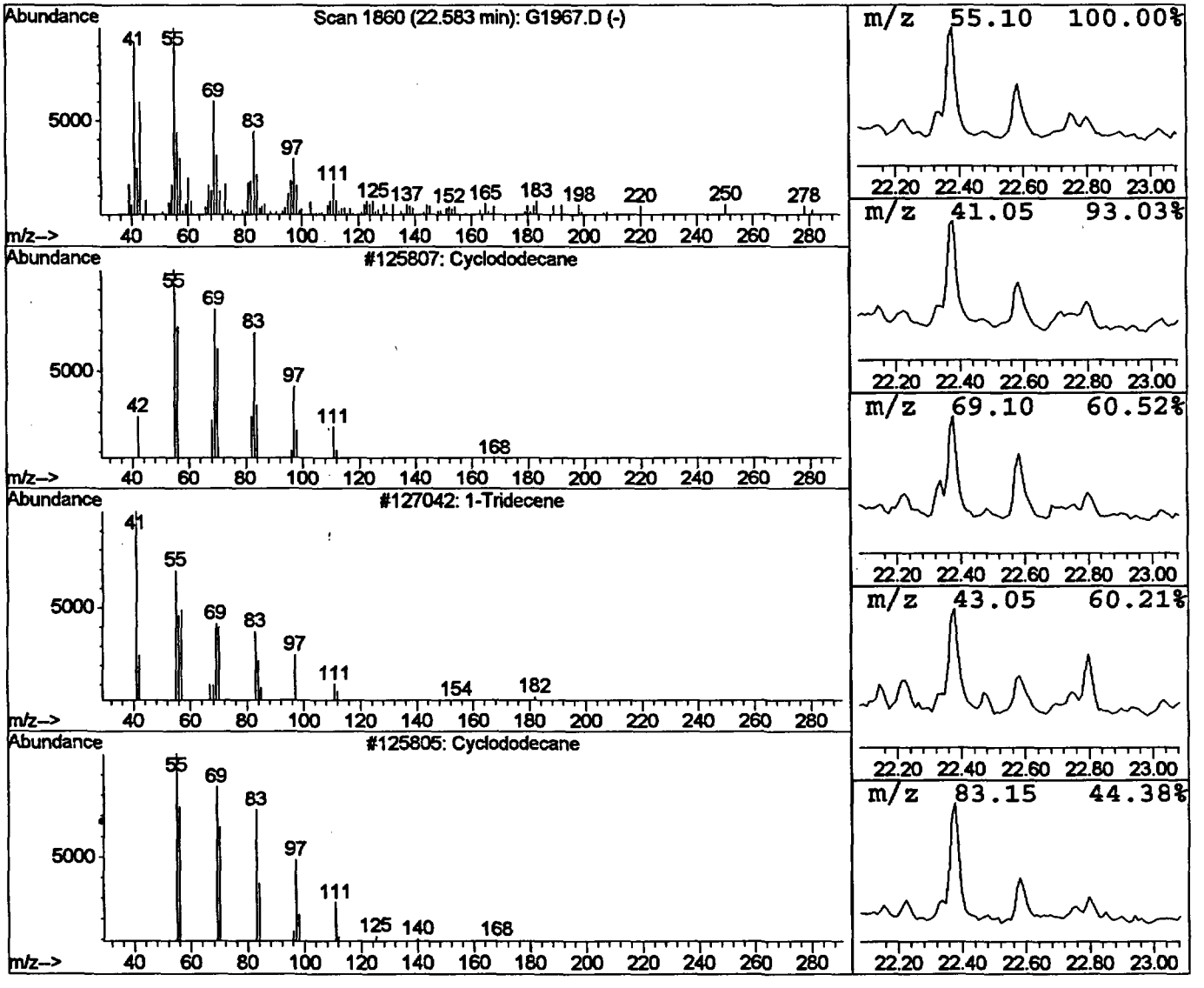
Peak Number 55 Cyclododecane Concentration Rank 55

R.T.	EstConc	Area	Relative to ISTD	R.T.
22.58	12.81 ng	503140	Chrysene-d12	25.40

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclododecane	168	C12H24	000294-62-2	96
2	1-Tridecene	182	C13H26	002437-56-1	86
3	Cyclododecane	168	C12H24	000294-62-2	70



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1967.D Vial: 1
Acq On : 23 Jan 98 11:55 Operator:
Sample : S HP-7G 58073-009 FFR92 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

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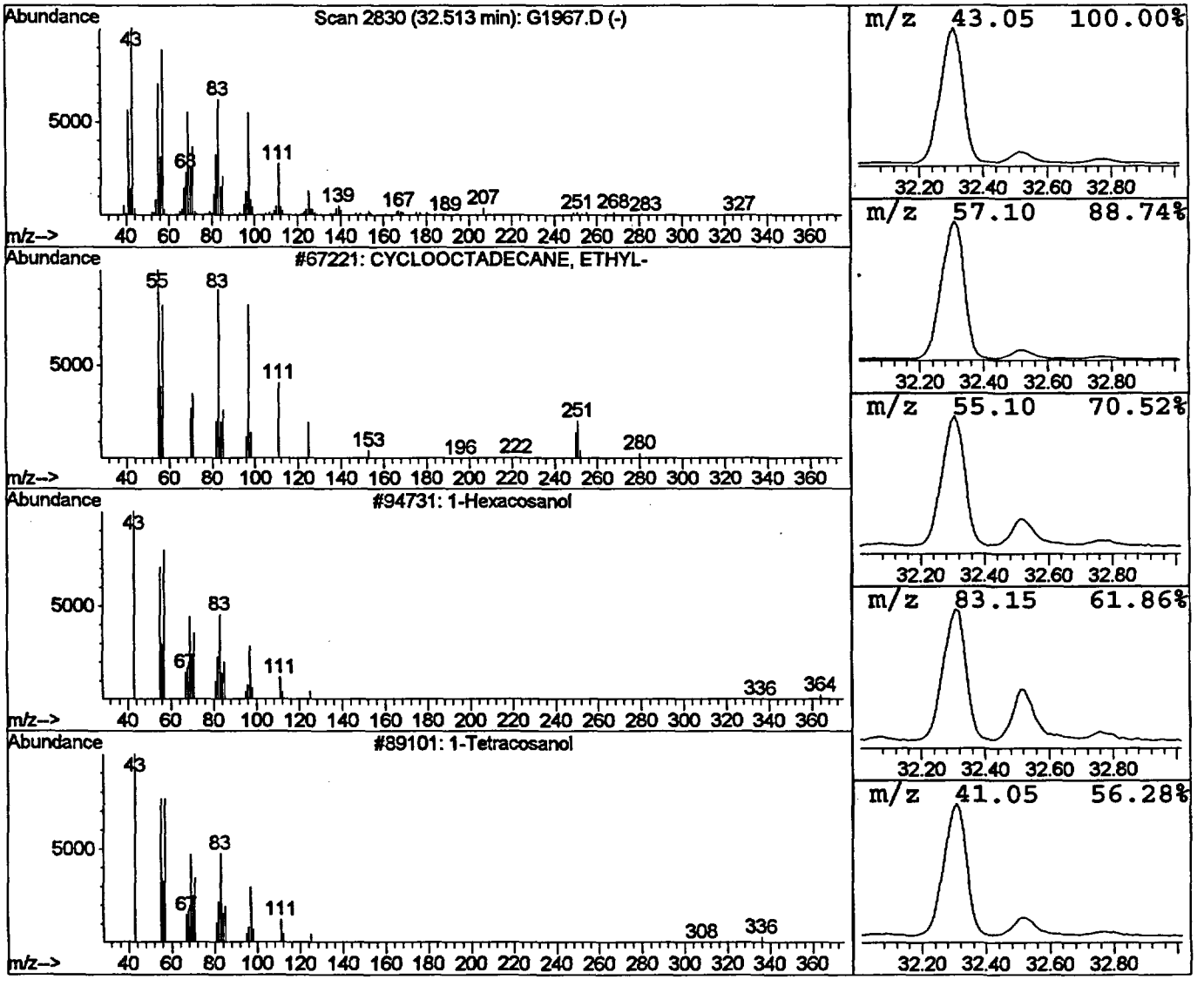
Peak Number 56 CYCLOOCTADECANE, ETHYL- Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
32.51	46.63 ng	2026080	Perylene-d12	31.52

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	CYCLOOCTADECANE, ETHYL-	280	C20H40	000000-00-0	90
2	1-Hexacosanol	382	C26H54O	000506-52-5	81
3	1-Tetracosanol	354	C24H50O	000506-51-4	81



0838

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 23 Jan 98 11:55
Data File: Q:\HPCHEM\G\G19XX\G1967.D
Name: S HP-7G 58073-009 FFR92
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 30 Tentatively Identified Compounds								
2-Pentanone, 4-hydro	4.24	700.6	ng	24505500	ISTD01	7.07	1399090	40.0
3-Hexanol, 2-methyl-	4.51	31.8	ng	1112330	ISTD01	7.07	1399090	40.0
1,3-Dioxolane-4-meth	5.90	37.4	ng	1307070	ISTD01	7.07	1399090	40.0
3-Hexene-2,5-dione	6.01	165.3	ng	5781990	ISTD01	7.07	1399090	40.0
5-Hepten-2-one	6.15	66.6	ng	2329650	ISTD01	7.07	1399090	40.0
2-Pentene, 2-methoxy	6.56	23.4	ng	817335	ISTD01	7.07	1399090	40.0
Ethanone, 1-(2-hydro	15.58	20.7	ng	808574	ISTD03	16.31	1562590	40.0
.ALPHA.-D-RIBOPYRANO	17.04	24.7	ng	964299	ISTD03	16.31	1562590	40.0
Pentadecanoic acid	19.38	47.5	ng	2125780	ISTD04	19.62	1788700	40.0
9-Octadecenoic acid	19.46	21.7	ng	969563	ISTD04	19.62	1788700	40.0
METHYL 9,10-DIDEUTER	20.23	75.4	ng	3369990	ISTD04	19.62	1788700	40.0
Oxacycloheptadecan-2	20.38	51.9	ng	2322030	ISTD04	19.62	1788700	40.0
15-Tetracosenoic aci	20.45	56.5	ng	2528060	ISTD04	19.62	1788700	40.0
Dodecanoic acid	20.50	158.9	ng	7106840	ISTD04	19.62	1788700	40.0
1-Butanol, 4-butoxy-	20.83	61.3	ng	2742090	ISTD04	19.62	1788700	40.0
9-Octadecenoic acid	21.86	156.0	ng	6975290	ISTD04	19.62	1788700	40.0
Octadecanoic acid	21.94	56.3	ng	2516600	ISTD04	19.62	1788700	40.0
Decanedioic acid, di	22.38	33.7	ng	1506100	ISTD04	19.62	1788700	40.0
DI-(2-ETHYLHEXYL) ES	23.60	23.1	ng	905620	ISTD05	25.40	1570560	40.0
Dodecane, 1-cyclopen	24.32	24.8	ng	972329	ISTD05	25.40	1570560	40.0
Decanoyl chloride	24.63	37.2	ng	1459320	ISTD05	25.40	1570560	40.0
1-Hexacosanol	29.29	21.9	ng	949335	ISTD06	31.52	1737840	40.0
Cholest-5-en-3-ol (3	34.30	51.6	ng	2243900	ISTD06	31.52	1737840	40.0
ERGOST-5-EN-3.BETA.-	36.35	52.6	ng	2284960	ISTD06	31.52	1737840	40.0
Stigmasta-5,23-dien-	36.99	45.8	ng	1990940	ISTD06	31.52	1737840	40.0
Stigmast-5-en-3-ol,	38.32	147.5	ng	6407090	ISTD06	31.52	1737840	40.0
Benzo[b]naphtho[2,3-	39.20	39.4	ng	1712600	ISTD06	31.52	1737840	40.0
5.ALPHA.-STIGMAST-3-	39.73	79.5	ng	3454330	ISTD06	31.52	1737840	40.0
D:C-Friedoolean-8-en	40.38	298.1	ng	12951300	ISTD06	31.52	1737840	40.0
HOP-22(29)-EN-3BETA-	40.97	76.4	ng	3319850	ISTD06	31.52	1737840	40.0
Additional Tentatively Identified Compounds								
10-Octadecenoic acid	21.59	18.4	ng	824257	ISTD04	19.62	1788700	40.0
1,3-Dioxane-2-propan	5.60	18.3	ng	641679	ISTD01	7.07	1399090	40.0
3,4-DIAMINO-1,2,4-TR	7.22	17.1	ng	599247	ISTD01	7.07	1399090	40.0
2-Pentanone, 5-metho	32.77	16.9	ng	734616	ISTD06	31.52	1737840	40.0
7-Hexadecenoic acid,	21.55	15.6	ng	698118	ISTD04	19.62	1788700	40.0
Ethane, (methylselen	38.90	15.6	ng	677441	ISTD06	31.52	1737840	40.0
(6E,10E)-2,6,12,15-T	35.16	15.1	ng	656503	ISTD06	31.52	1737840	40.0
1,2-Benzenedicarboxy	28.00	14.2	ng	556909	ISTD05	25.40	1570560	40.0
4-ACETYL-2,2,3,7-TET	37.60	14.2	ng	615999	ISTD06	31.52	1737840	40.0
1-Docosanol	35.98	14.0	ng	608451	ISTD06	31.52	1737840	40.0

CASE 25969
SDG# FFR76

HR7G 58073.009 FFR92 01/23/98 11:55

Hydrocarbons: n-Alkanes

~~Butane~~	~~3.68~~	~~26.1~~	ng	914173	ISTD01	7.07	1399090	40.0
Tridecane	21.48	9.2	ng	412188	ISTD04	19.62	1788700	40.0
Dotriacontane	22.80	7.5	ng	293158	ISTD05	25.40	1570560	40.0
~~Eicosane~~	~~26.64~~	~~8.0~~	ng	312213	ISTD05	25.40	1570560	40.0
Octadecane	27.55	31.6	ng	1239050	ISTD05	25.40	1570560	40.0
Dotriacontane	29.11	474.9	ng	20632900	ISTD06	31.52	1737840	40.0
Hexatriacontane	30.86	48.9	ng	2123120	ISTD06	31.52	1737840	40.0
Tricosane	32.31	310.4	ng	13485500	ISTD06	31.52	1737840	40.0
Eicosane	33.83	26.6	ng	1155710	ISTD06	31.52	1737840	40.0
Hexatriacontane	35.64	55.3	ng	2401350	ISTD06	31.52	1737840	40.0
Subtotal:		998.4	ng					

Hydrocarbons: Branched Alkanes

Octane, 3-methyl-	3.99	13.4	ng	467137	ISTD01	7.07	1399090	40.0
Octane, 2-methyl-	4.59	64.8	ng	2264790	ISTD01	7.07	1399090	40.0
Octane, 3-methyl-	4.75	101.1	ng	3537860	ISTD01	7.07	1399090	40.0
Docosane, 11-decyl-	26.28	40.3	ng	1580450	ISTD05	25.40	1570560	40.0
Subtotal:		219.5	ng					

Hydrocarbons: Cyclic Alkanes

Cyclododecane	22.58	12.8	ng	503140	ISTD05	25.40	1570560	40.0
CYCLOOCTADECANE, ETH	32.51	46.6	ng	2026080	ISTD06	31.52	1737840	40.0
Subtotal:		59.4	ng					

Total Alkane Conc: (1277.3 ng − 26.1 − 8) × D.F. = 31,000 ✓ ug/kg

G1967.D LIN.M Mon Jan 26 17:07:42 1998

FFR92 58073-009 cc 01/27/98

TIC: G1967.D

S HP-7G 58073-009 FFR92 01/23/98 11:55

CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.684	rVB	0.143	914173	3.633	3.777
2	3.992	rBV	0.215	467137	3.910	4.125
3	4.237	rVV	0.287	24505540	4.125	4.411
4	4.514	rVV	0.123	1112325	4.411	4.534
5	4.585	rVV	0.143	2264792	4.534	4.677
6	4.749	rVV	0.123	3537859	4.677	4.800
7	4.841	rVB	0.164	2950821	4.800	4.964
8	5.200	rBV	0.143	384755	5.148	5.292
9	5.599	rBV	0.102	641679	5.558	5.660
10	5.896	rBV	0.092	1307068	5.855	5.947
11	6.008	rVB	0.143	5781991	5.947	6.090
12	6.152	rBV	0.133	2329647	6.090	6.223
13	6.377	rBV	0.154	4585142	6.326	6.479
14	6.561	rVB	0.205	817335	6.479	6.684
15	6.735	rBV	0.123	3520122	6.684	6.807
16	6.848	rVB	0.123	313116	6.807	6.930
17	7.073	rBV	0.113	1399091	7.022	7.134
18	7.216	rVV	0.113	599247	7.134	7.247
19	7.268	rVV	0.051	274590	7.247	7.298
20	7.442	rBV	0.143	2555686	7.380	7.523
21	7.677	rVV	0.195	298216	7.575	7.769
22	8.209	rVB	0.143	1764449	8.148	8.291
23	10.103	rBV	0.235	1508928	10.021	10.257
24	14.290	rBV	0.164	2650684	14.208	14.372
25	15.580	rBV	0.113	808574	15.529	15.642
26	16.307	rVB	0.205	1562590	16.246	16.450
27	17.044	rBV	0.256	964299	16.911	17.167
28	18.191	rVB	0.143	2057692	18.129	18.273
29	18.457	rBV	0.164	293577	18.365	18.529
30	19.081	rBV	0.102	444556	19.030	19.133
31	19.378	rBV	0.113	2125780	19.307	19.419
32	19.460	rVB	0.092	969563	19.419	19.511
33	19.624	rVV	0.092	1788704	19.563	19.655
34	19.675	rVB	0.072	512970	19.655	19.726
35	19.921	rBV	0.092	394401	19.870	19.962
36	20.095	rVB	0.113	614911	20.023	20.136
37	20.228	rBV	0.184	3369990	20.136	20.320
38	20.382	rBV	0.092	2322034	20.330	20.422
39	20.453	rVV	0.051	2528062	20.422	20.474
40	20.504	rVV	0.133	7106839	20.474	20.607
41	20.699	rVB	0.072	286887	20.668	20.740
42	20.832	rVV	0.143	2742085	20.791	20.934
43	20.965	rVV	0.072	460609	20.945	21.016
44	21.190	rVV	0.061	297476	21.149	21.211
45	21.231	rVB	0.082	327511	21.221	21.303
46	21.477	rBV	0.113	412188	21.395	21.508
47	21.549	rVV	0.061	698118	21.508	21.569
48	21.590	rVB	0.061	824257	21.569	21.630
49	21.692	rBV	0.082	409143	21.630	21.712
50	21.856	rVV	0.133	6975286	21.774	21.907
51	21.938	rVV	0.113	2516595	21.907	22.019
52	22.224	rVV	0.113	553404	22.173	22.286
53	22.378	rVV	0.123	1506096	22.296	22.419
54	22.490	rVV	0.061	476694	22.460	22.521
55	22.542	rVV	0.041	280629	22.521	22.562
56	22.583	rVV	0.072	503140	22.562	22.634

57	22.675	rVV	0.133	3985767	22.634	22.767
58	22.798	rVB	0.102	293158	22.767	22.869
59	23.299	rBV	0.113	528461	23.248	23.360
60	23.473	rVB	0.113	449043	23.422	23.535
61	23.596	rVB	0.113	905620	23.535	23.647
62	24.221	rBV	0.092	315492	24.169	24.261
63	24.323	rVB	0.143	972329	24.261	24.405
64	24.538	rBV	0.082	354503	24.487	24.569
65	24.630	rVB	0.317	1459320	24.569	24.886
66	24.978	rBV	0.082	282680	24.917	24.999
67	25.039	rVV	0.143	396034	25.009	25.152
68	25.398	rBV	0.154	1570564	25.295	25.449
69	26.278	rBV	0.154	1580452	26.186	26.340
70	26.381	rVB	0.143	362032	26.340	26.483
71	26.637	rBV	0.123	312213	26.555	26.677
72	27.138	rBV	0.164	527603	26.995	27.159
73	27.548	rBV	0.256	1239047	27.374	27.630
74	27.763	rVB	0.123	290555	27.711	27.834
75	27.998	rVB	0.184	556909	27.967	28.152
76	28.326	rVB	0.154	489058	28.244	28.397
77	29.114	rBV	0.256	20632921	28.960	29.216
78	29.288	rVB	0.215	949335	29.216	29.431
79	30.865	rBV	0.235	2123116	30.752	30.987
80	31.520	rBV	0.184	1737837	31.407	31.591
81	32.308	rVV	0.256	13485502	32.175	32.431
82	32.513	rVV	0.256	2026080	32.431	32.687
83	32.769	rVB	0.266	734616	32.707	32.973
84	33.557	rVV	0.225	480492	33.485	33.710
85	33.833	rVB	0.256	1155711	33.751	34.007
86	34.304	rBV	0.276	2243900	34.202	34.478
87	35.164	rVB	0.215	656503	35.062	35.277
88	35.635	rVB	0.287	2401349	35.502	35.789
89	35.983	rBV	0.246	608451	35.860	36.106
90	36.352	rVV	0.358	2284958	36.137	36.495
91	36.986	rBV	0.266	1990939	36.874	37.140
92	37.601	rVB	0.338	615999	37.539	37.877
93	38.000	rBV	0.164	343674	37.928	38.092
94	38.317	rBV	0.287	6407091	38.133	38.420
95	38.901	rBV	0.235	677441	38.768	39.003
96	39.198	rVB	0.328	1712595	39.044	39.372
97	39.730	rVB	0.430	3454328	39.474	39.904
98	40.375	rVB	0.502	12951272	40.078	40.580
99	40.651	rVB	0.164	324263	40.610	40.774
100	40.969	rBV	0.235	3319847	40.805	41.040

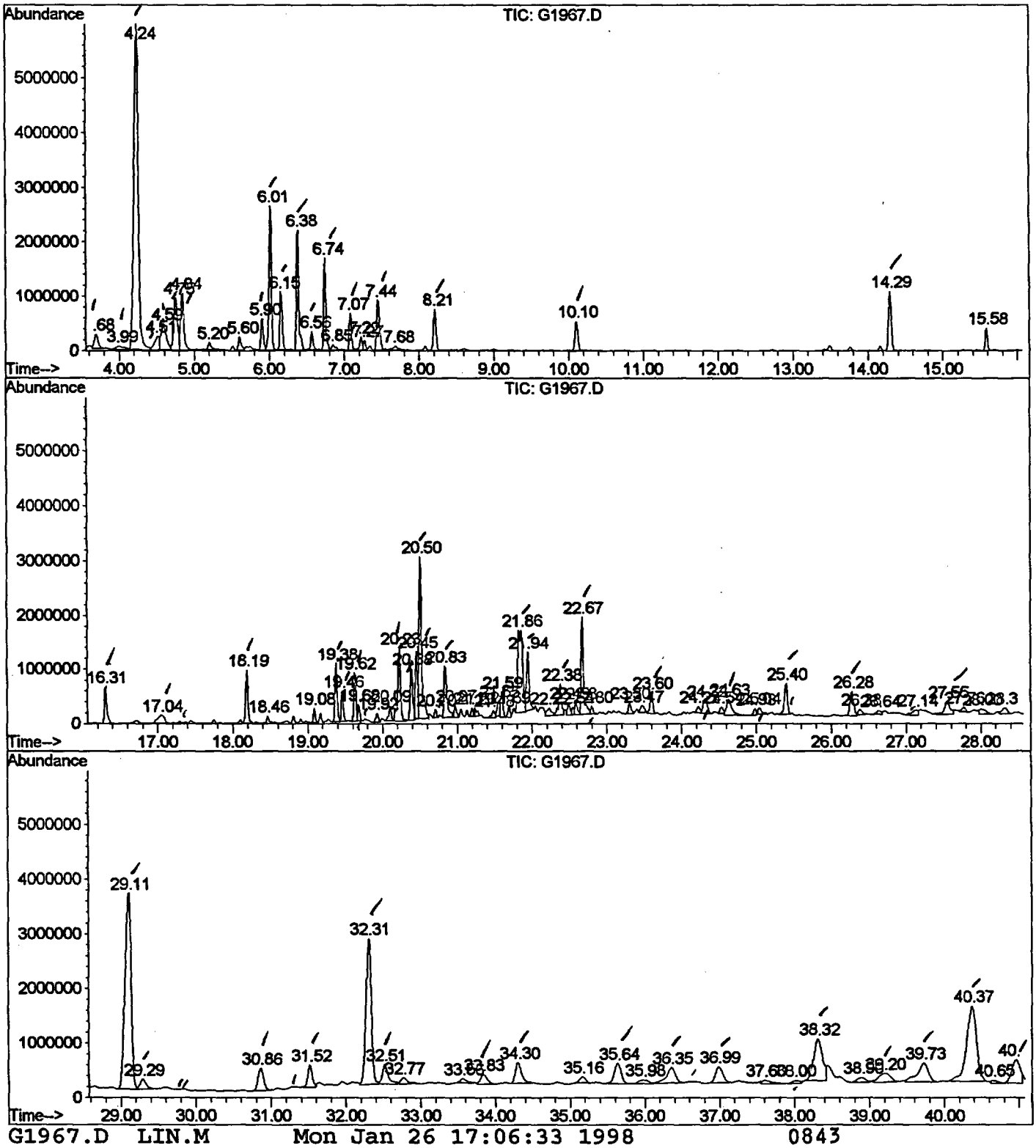
CASE 25969
306# FFR76

FFR 92 58073-009 HP76 01/28/98 11:55

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\G\G19XX\G1967.D
Operator :
Acquired : 23 Jan 98 11:55 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-009 FFR92
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 1
Quant File :CLPME7.RES



G1967.D LIN.M Mon Jan 26 17:06:33 1998 0843

SEMIVOLATILES

STANDARDS DATA

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date(s): 1/08/98 1/08/98

Calibration Times: 1044 1403

LAB FILE ID: RRF20 =G1894 RRF50 =G1895
RRF80 =G1896 RRF120=G1897 RRF160=G1898

	COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD	
	Phenol	1.950	1.610	1.660	1.452	1.451	1.625	12.6	*
	bis(2-Chloroethyl)ether	1.384	1.190	1.218	1.099	1.072	1.193	10.3	*
	2-Chlorophenol	1.553	1.290	1.288	1.176	1.171	1.296	12.0	*
	1,3-Dichlorobenzene	1.647	1.481	1.454	1.364	1.319	1.453	8.7	*
	1,4-Dichlorobenzene	1.710	1.494	1.508	1.426	1.358	1.499	8.8	*
	1,2-Dichlorobenzene	1.539	1.385	1.376	1.289	1.232	1.364	8.5	*
	2-Methylphenol	1.146	1.073	1.106	0.942	0.916	1.037	9.8	*
	2,2'-oxybis(1-Chloropropane)	3.640	3.124	3.367	3.044	2.932	3.221	8.8	
	4-Methylphenol	1.200	1.169	1.255	1.106	1.102	1.166	5.6	*
	N-Nitroso-di-n-propylamine	1.002	0.872	0.913	0.832	0.802	0.884	8.8	*
	Hexachloroethane	0.500	0.456	0.477	0.437	0.434	0.461	6.0	*
	Nitrobenzene	0.406	0.366	0.383	0.354	0.340	0.370	6.9	*
	Isophorone	0.828	0.743	0.763	0.706	0.672	0.742	8.0	*
	2-Nitrophenol	0.256	0.220	0.216	0.212	0.210	0.223	8.5	*
	2,4-Dimethylphenol	0.402	0.330	0.331	0.301	0.293	0.331	13.0	*
	bis(2-Chloroethoxy)methane	0.524	0.449	0.451	0.422	0.398	0.449	10.5	*
	2,4-Dichlorophenol	0.411	0.342	0.319	0.306	0.298	0.335	13.6	*
	1,2,4-Trichlorobenzene	0.392	0.343	0.332	0.317	0.299	0.337	10.4	*
	Naphthalene	0.936	0.860	0.896	0.842	0.806	0.868	5.8	*
	4-Chloroaniline	0.486	0.440	0.428	0.390	0.370	0.423	10.7	
	Hexachlorobutadiene	0.134	0.121	0.125	0.116	0.112	0.122	7.0	
	4-Chloro-3-methylphenol	0.266	0.232	0.235	0.217	0.212	0.232	9.1	*
	2-Methylnaphthalene	0.675	0.609	0.576	0.524	0.498	0.576	12.2	*
	Hexachlorocyclopentadiene	0.235	0.227	0.248	0.236	0.233	0.236	3.2	
	2,4,6-Trichlorophenol	0.450	0.373	0.363	0.337	0.333	0.371	12.7	*
	2,4,5-Trichlorophenol	0.000	0.396	0.409	0.368	0.359	0.383	6.1	*
	2-Chloronaphthalene	1.326	1.167	1.142	1.067	1.006	1.142	10.6	*
	2-Nitroaniline	0.000	0.287	0.292	0.273	0.272	0.281	3.6	
	Dimethylphthalate	1.640	1.385	1.330	1.268	1.173	1.359	12.9	
	Acenaphthylene	1.923	1.749	1.776	1.653	1.586	1.737	7.4	*
	2,6-Dinitrotoluene	0.322	0.311	0.319	0.313	0.304	0.314	2.2	*
	3-Nitroaniline	0.000	0.349	0.351	0.328	0.321	0.337	4.4	
	Acenaphthene	1.125	1.019	1.027	0.947	0.897	1.003	8.6	*
	2,4-Dinitrophenol	0.000	0.093	0.128	0.149	0.169	0.135	24.0	
	4-Nitrophenol	0.000	0.105	0.111	0.107	0.108	0.108	2.3	
	Dibenzofuran	1.979	1.765	1.595	1.449	1.358	1.629	15.3	*
	2,4-Dinitrotoluene	0.420	0.420	0.432	0.424	0.411	0.421	1.8	*

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

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date(s): 1/08/98 1/08/98

Calibration Times: 1044 1403

LAB FILE ID: RRF20 =G1894 RRF50 =G1895
RRF80 =G1896 RRF120=G1897 RRF160=G1898

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD	
Diethylphthalate		1.573	1.324	1.298	1.219	1.120	1.307	12.9	
4-Chlorophenyl-phenylether	*	0.652	0.549	0.527	0.496	0.456	0.536	13.7	*
Fluorene	*	1.335	1.195	1.176	1.096	1.033	1.167	9.8	*
4-Nitroaniline		0.000	0.373	0.376	0.354	0.343	0.362	4.3	
4,6-Dinitro-2-methylphenol		0.000	0.102	0.116	0.121	0.124	0.116	8.4	
N-Nitrosodiphenylamine (1)		0.620	0.515	0.483	0.453	0.407	0.496	16.2	
4-Bromophenyl-phenylether	*	0.167	0.144	0.144	0.135	0.121	0.142	11.8	*
Hexachlorobenzene	*	0.184	0.165	0.166	0.152	0.141	0.162	10.0	*
Pentachlorophenol	*	0.000	0.108	0.110	0.104	0.100	0.106	4.2	*
Phenanthrene	*	1.094	0.979	0.968	0.898	0.816	0.951	10.8	*
Anthracene	*	1.153	1.032	1.010	0.950	0.864	1.002	10.6	*
Carbazole		1.240	1.088	1.042	0.976	0.893	1.048	12.4	
Di-n-butylphthalate		1.836	1.554	1.482	1.409	1.251	1.506	14.3	
Fluoranthene	*	1.090	0.991	0.984	0.912	0.831	0.962	10.0	*
Pyrene	*	1.541	1.366	1.303	1.198	1.106	1.303	12.8	*
Butylbenzylphthalate		1.170	1.018	0.959	0.928	0.846	0.984	12.3	
3,3'-Dichlorobenzidine		0.312	0.312	0.317	0.302	0.304	0.309	2.0	
Benzo(a)anthracene	*	1.132	1.029	1.051	1.007	0.967	1.037	5.9	*
Chrysene	*	1.061	0.977	1.001	0.952	0.909	0.980	5.8	*
bis(2-Ethylhexyl)phthalate		1.723	1.499	1.449	1.403	1.274	1.470	11.2	
Di-n-octylphthalate		3.150	2.810	2.775	2.789	2.580	2.821	7.3	
Benzo(b)fluoranthene	*	1.179	1.098	1.142	1.101	1.112	1.126	3.0	*
Benzo(k)fluoranthene	*	1.138	1.059	1.101	1.100	1.040	1.088	3.5	*
Benzo(a)pyrene	*	1.080	1.018	1.054	1.025	1.005	1.036	2.9	*
Indeno(1,2,3-cd)pyrene	*	1.226	1.154	1.190	1.161	1.126	1.171	3.2	*
Dibenz(a,h)anthracene	*	1.040	0.992	1.033	1.006	0.973	1.009	2.8	*
Benzo(g,h,i)perylene	*	1.047	0.949	0.998	0.980	0.958	0.986	3.9	*
Nitrobenzene-d5	*	0.367	0.329	0.361	0.324	0.317	0.340	6.7	*
2-Fluorobiphenyl	*	1.389	1.200	1.223	1.095	1.046	1.191	11.2	*
Terphenyl-d14	*	0.982	0.852	0.857	0.748	0.713	0.830	12.7	*
Phenol-d5	*	1.708	1.520	1.683	1.427	1.362	1.540	9.9	*
2-Fluorophenol	*	1.289	1.156	1.242	1.100	1.069	1.171	7.9	*
2,4,6-Tribromophenol		0.102	0.094	0.100	0.090	0.083	0.094	8.2	
2-Chlorophenol-d4	*	1.338	1.194	1.270	1.111	1.066	1.196	9.3	*
1,2-Dichlorobenzene-d4	*	0.929	0.793	0.798	0.714	0.677	0.782	12.4	*

(1) Cannot be separated from Diphenylamine

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

Response Factor Report GC/MS Ins

CASE 25969
SDG# FFR76

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Calibration

COPY-ORIGINAL IS FILED IN CSF

Calibration Files
20 =G1894.D 50 =G1895.D 80 =G1896.D
120 =G1897.D 160 =G1898.D

25910/DNF55

		Compound	20	50	80	120	160	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	SPC	2-Fluorophenol	1.289	1.156	1.242	1.100	1.069	1.171	7.94
3)	SPC	Phenol-d5	1.709	1.520	1.683	1.427	1.362	1.540	9.94
4)	TPCM	Phenol	1.950	1.610	1.660	1.452	1.451	1.624	12.59
5)	TPC	bis(2-Chloroethyl)eth	1.384	1.190	1.218	1.099	1.072	1.193	10.32
6)	MTPC	2-Chlorophenol	1.553	1.290	1.288	1.177	1.171	1.296	11.95
7)	SPC	1,2-Dichlorobenzene-d	0.929	0.793	0.799	0.714	0.677	0.782	12.41
8)	SPC	2-Chlorophenol-d4	1.338	1.194	1.270	1.111	1.066	1.196	9.32
9)	TPC	1,3-Dichlorobenzene	1.647	1.481	1.454	1.364	1.319	1.453	8.73
10)	MTPC	1,4-Dichlorobenzene	1.710	1.494	1.509	1.426	1.358	1.499	8.81
11)	TPC	1,2-Dichlorobenzene	1.539	1.385	1.376	1.289	1.232	1.364	8.53
12)	TC	2-Methylphenol	1.146	1.073	1.106	0.942	0.916	1.037	9.86
13)	TP	2,2'-oxybis(1-chlorop	3.641	3.124	3.367	3.044	2.932	3.221	8.81
14)	TPC	4-Methylphenol	1.200	1.169	1.255	1.106	1.102	1.167	5.56
15)	MTPC	n-Nitroso-di-n-propyl	1.002	0.872	0.913	0.832	0.802	0.884	8.80
16)	TPC	Hexachloroethane	0.500	0.456	0.477	0.437	0.434	0.461	6.04
17)	I	Naphthalene-d8	ISTD						
18)	SPC	Nitrobenzene-d5	0.367	0.329	0.361	0.324	0.317	0.340	6.65
19)	TPC	Nitrobenzene	0.406	0.366	0.383	0.354	0.340	0.370	6.90
20)	TPC	Isophorone	0.828	0.743	0.763	0.706	0.672	0.742	7.96
21)	TPC	2-Nitrophenol	0.257	0.221	0.216	0.212	0.210	0.223	8.53
22)	TPC	2,4-Dimethylphenol	0.402	0.330	0.331	0.301	0.293	0.331	12.93
23)	TPC	bis(2-Chloroethoxy)me	0.524	0.449	0.451	0.422	0.398	0.449	10.51
24)	TPC	2,4-Dichlorophenol	0.411	0.342	0.319	0.306	0.298	0.335	13.67
25)	MTPC	1,2,4-Trichlorobenzen	0.393	0.343	0.332	0.317	0.299	0.337	10.48
26)	TPC	Naphthalene	0.936	0.860	0.896	0.842	0.806	0.868	5.76
27)	TP	4-Chloroaniline	0.486	0.440	0.428	0.390	0.371	0.423	10.66
28)	TP	Hexachlorobutadiene	0.134	0.121	0.125	0.116	0.111	0.121	7.01
29)	MTPC	4-Chloro-3-methylphen	0.266	0.232	0.235	0.217	0.212	0.232	9.07
30)	TPC	2-Methylnaphthalene	0.675	0.609	0.576	0.524	0.498	0.576	12.22
31)	I	Acenaphthene-d10	ISTD						
32)	TP	Hexachlorocyclopentad	0.235	0.227	0.248	0.236	0.233	0.236	3.33
33)	TPC	2,4,6-Trichlorophenol	0.450	0.373	0.363	0.337	0.333	0.371	12.74
34)	TPC	2,4,5-Trichlorophenol		0.396	0.409	0.368	0.359	0.383	6.14
35)	SPC	2-Fluorobiphenyl	1.389	1.200	1.223	1.095	1.046	1.191	11.18
36)	TPC	2-Chloronaphthalene	1.327	1.167	1.142	1.067	1.006	1.142	10.62
37)	TP	2-Nitroaniline		0.287	0.292	0.273	0.272	0.281	3.55
38)	TP	Dimethylphthalate	1.641	1.385	1.330	1.269	1.173	1.359	12.92
39)	TPC	Acenaphthylene	1.923	1.749	1.776	1.653	1.586	1.737	7.40
40)	TPC	2,6-Dinitrotoluene	0.322	0.311	0.319	0.313	0.304	0.314	2.30
41)	TP	3-Nitroaniline		0.349	0.351	0.328	0.321	0.338	4.45

0846

(#) = Out of Range

Response Factor Report GC/MS Ins

CASE 25969
SDG# FFR76

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Calibration

COPY-ORIGINAL IS FILED IN CSF 25969DN155

Calibration Files
20 =G1894.D 50 =G1895.D 80 =G1896.D
120 =G1897.D 160 =G1898.D

	Compound	20	50	80	120	160	Avg		%RSD
42)	MTPCAcenaphthene	1.125	1.019	1.027	0.947	0.897	1.003	✓	8.64
43)	TP 2,4-Dinitrophenol		0.093	0.128	0.149	0.169	0.135	✓	23.99
44)	MTP 4-Nitrophenol		0.105	0.111	0.107	0.108	0.108	✓	2.29
45)	TPC Dibenzofuran	1.979	1.765	1.595	1.449	1.358	1.629	✓	15.28
46)	MTPC2,4-Dinitrotoluene	0.420	0.420	0.432	0.424	0.411	0.421	✓	1.79
47)	TP Diethylphthalate	1.573	1.324	1.298	1.219	1.120	1.307	✓	12.92
48)	TPC Fluorene	1.335	1.195	1.176	1.096	1.033	1.167	✓	9.79
49)	TPC 4-Chlorophenyl-phenyl	0.652	0.549	0.527	0.496	0.456	0.536	✓	13.73
50)	TP 4-Nitroaniline		0.373	0.376	0.354	0.343	0.362	✓	4.41
51)	I Phenanthrene-d10	----------ISTD----------							
52)	SP 2,4,6-Tribromophenol	0.102	0.094	0.100	0.090	0.083	0.094	✓	8.04
53)	TP 4,6-Dinitro-2-methylp		0.102	0.116	0.121	0.125	0.116	✓	8.53
54)	TP n-Nitrosodiphenylamin	0.620	0.515	0.483	0.453	0.407	0.496	✓	16.11
55)	TPC 4-Bromophenyl-phenyle	0.167	0.144	0.144	0.135	0.121	0.142	✓	11.83
56)	TPC Hexachlorobenzene	0.184	0.165	0.167	0.152	0.141	0.162	✓	9.95
57)	MTPCPentachlorophenol		0.108	0.110	0.104	0.101	0.106	✓	3.88
58)	TPC Phenanthrene	1.094	0.979	0.968	0.898	0.816	0.951	✓	10.83
59)	TPC Anthracene	1.153	1.032	1.011	0.950	0.865	1.002	✓	10.63
60)	TP Carbazole	1.240	1.088	1.042	0.976	0.893	1.048	✓	12.39
61)	TP Di-n-butylphthalate	1.836	1.555	1.482	1.409	1.251	1.507	✓	14.33
62)	TPC Fluoranthene	1.090	0.991	0.984	0.912	0.831	0.962	✓	10.03
63)	I Chrysene-d12	----------ISTD----------							
64)	MTPCPyrene	1.541	1.367	1.303	1.198	1.106	1.303	✓	12.75
65)	SPC Terphenyl-d14	0.982	0.852	0.857	0.748	0.713	0.830	✓	12.71
66)	TP Butylbenzylphthalate	1.170	1.018	0.959	0.928	0.846	0.984	✓	12.26
67)	TPC Benzo(a)anthracene	1.132	1.029	1.051	1.007	0.967	1.037	✓	5.92
68)	TP 3,3'-Dichlorobenzidin	0.312	0.312	0.317	0.302	0.304	0.309	✓	2.00
69)	TPC Chrysene	1.061	0.977	1.001	0.953	0.909	0.980	✓	5.79
70)	TP bis(2-Ethylhexyl)phth	1.723	1.499	1.449	1.403	1.274	1.470	✓	11.19
71)	I Perylene-d12	----------ISTD----------							
72)	TP Di-n-octylphthalate	3.150	2.810	2.775	2.789	2.580	2.821	✓	7.29
73)	TPC Benzo(b)fluoranthene	1.179	1.098	1.142	1.101	1.112	1.126	✓	3.03
74)	TPC Benzo(k)fluoranthene	1.138	1.059	1.101	1.100	1.040	1.088	✓	3.55
75)	TPC Benzo(a)pyrene	1.080	1.018	1.054	1.025	1.005	1.036	✓	2.93
76)	TPC Indeno(1,2,3-cd)pyren	1.227	1.154	1.190	1.161	1.126	1.172	✓	3.26
77)	TPC Dibenz(a,h)anthracene	1.040	0.992	1.033	1.006	0.973	1.009	✓	2.77
78)	TPC Benzo(g,h,i)perylene	1.047	0.949	0.999	0.980	0.958	0.986	✓	3.94

1 spec out

0847

(#) = Out of Range

CASE 25969
SDG# FFR76

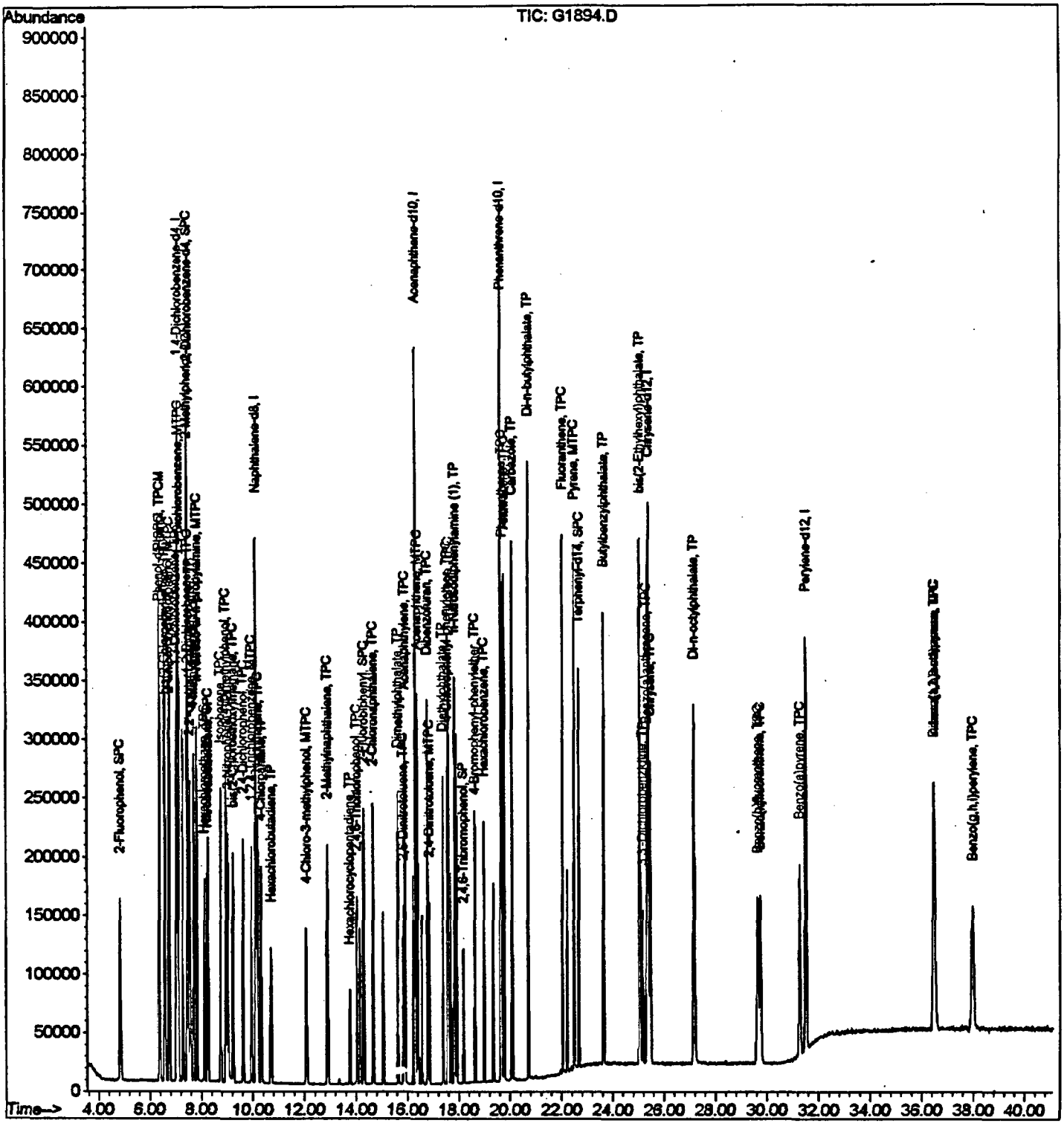
Quantitation Report

Data File : Q:\HPCHEM\G\DATA\G1894.D /
Acq On : 8 Jan 98 10:44
Sample : HP-7G SSTD020GZ
Misc : S00496 IS=40ng S00501
Quant Time: Jan 8 12:10 1998

Vial: 1
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910/DAFSS

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1894.D/ Vial:
Acq On : 8 Jan 98 10:44 Operator:
Sample : HP-7G SSTD020GZ Inst : GC/MS Ins
Misc : S00496 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 12:10 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF
25910/DNF55

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	215194	40.00	ng		0.00
17) Naphthalene-d8	10.11	136	627930	40.00	ng		0.00
31) Acenaphthene-d10	16.31	164	315801	40.00	ng		0.00
51) Phenanthrene-d10	19.63	188	579744	40.00	ng		0.01
63) Chrysene-d12	25.39	240	418101	40.00	ng		0.00
71) Perylene-d12	31.50	264	371085	40.00	ng		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.83	112	138711	22.15	ng		0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery =	14.77%		#	
3) Phenol-d5	6.37	99	183832	22.65	ng		0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery =	15.10%			
7) 1,2-Dichlorobenzene-d4	7.45	152	99996	21.66	ng		0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery =	21.66%			
8) 2-Chlorophenol-d4	6.73	132	143958	22.58	ng		0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery =	15.05%		#	
18) Nitrobenzene-d5	8.22	82	115197	20.44	ng		0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery =	20.44%		#	
35) 2-Fluorobiphenyl	14.30	172	219397	21.50	ng		0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery =	21.50%		#	
52) 2,4,6-Tribromophenol	18.19	330	29623	20.77	ng		0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery =	13.85%			
65) Terphenyl-d14	22.67	244	205185	24.82	ng		0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery =	24.82%		#	
Target Compounds							Qvalue
4) Phenol	6.39	94	209794	25.06	ng		89
5) bis(2-Chloroethyl)ether	6.59	63	148913	23.75	ng	#	1
6) 2-Chlorophenol	6.77	128	167070	25.08	ng		99
9) 1,3-Dichlorobenzene	7.03	146	177237	22.80	ng		98
10) 1,4-Dichlorobenzene	7.11	146	183968	22.85	ng		100
11) 1,2-Dichlorobenzene	7.48	146	165575	22.46	ng		98
12) 2-Methylphenol	7.44	108	123338	21.84	ng		95
13) 2,2'-oxybis(1-chloropropan	7.55	45	391713	24.11	ng		100
14) 4-Methylphenol	7.71	108	129101	20.94	ng		97
15) n-Nitroso-di-n-propylamine	7.83	70	107772	23.31	ng		86
16) Hexachloroethane	8.12	117	53826	22.42	ng		84
19) Nitrobenzene	8.26	77	127455	22.28	ng		99
20) Isophorone	8.75	82	259857	22.46	ng		93
21) 2-Nitrophenol	9.03	139	80539	23.48	ng	#	87
22) 2,4-Dimethylphenol	8.95	107	126155	26.07	ng		95
23) bis(2-Chloroethoxy)methane	9.23	93	164549	23.57	ng		99
24) 2,4-Dichlorophenol	9.62	162	129181	24.76	ng		93

(#) = qualifier out of range (m) = manual integration 0849

Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1894.D / Vial
Acq On : 8 Jan 98 10:44 Operator:
Sample : HP-7G SSTD020GZ Inst : GC/MS Ins
Misc : S00496 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 12:10 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF
25910DNFS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.95	180	123239	23.24	ng		99
26)	Naphthalene	10.18	128	293881	19.47	ng		98
27)	4-Chloroaniline	10.32	127	152569	23.75	ng		98
28)	Hexachlorobutadiene	10.71	225	41977	22.30	ng		99
29)	4-Chloro-3-methylphenol	12.08	107	83487	23.98	ng		81
30)	2-Methylnaphthalene	12.89	142	211949	23.68	ng		95
32)	Hexachlorocyclopentadiene	13.77	237	37107	20.79	ng	#	90
33)	2,4,6-Trichlorophenol	14.03	196	71103	24.94	ng		97
36)	2-Chloronaphthalene	14.67	162	209467	23.37	ng		90
38)	Dimethylphthalate	15.63	163	259037	23.67	ng	#	95
39)	Acenaphthylene	15.91	152	303649	19.93	ng		97
40)	2,6-Dinitrotoluene	15.85	165	50920	21.02	ng	#	79
42)	Acenaphthene	16.39	153	177618	19.59	ng		97
45)	Dibenzofuran	16.78	168	312467	24.15	ng		95
46)	2,4-Dinitrotoluene	16.85	165	66295	20.62	ng	#	92
47)	Diethylphthalate	17.38	149	248454	23.72	ng		100
48)	Fluorene	17.60	166	210874	20.16	ng		99
49)	4-Chlorophenyl-phenylether	17.56	204	102929	23.95	ng		99
54)	n-Nitrosodiphenylamine (1)	17.84	169	179589	24.05	ng		98
55)	4-Bromophenyl-phenylether	18.64	248	48486	22.49	ng		94
56)	Hexachlorobenzene	18.99	284	53227	21.92	ng	#	74
58)	Phenanthrene	19.67	178	316984	19.46	ng		100
59)	Anthracene	19.77	178	334270	19.71	ng		100
60)	Carbazole	20.08	167	359349	22.14	ng		98
61)	Di-n-butylphthalate	20.71	149	532243	22.83	ng		99
62)	Fluoranthene	22.04	202	315860	19.37	ng		92
64)	Pyrene	22.49	202	322083	20.76	ng		91
66)	Butylbenzylphthalate	23.65	149	244488	23.38	ng		92
67)	Benzo(a)anthracene	25.33	228	236686	19.90	ng		98
68)	3,3'-Dichlorobenzidine	25.17	252	65183	17.05	ng		96
69)	Chrysene	25.47	228	221839	19.80	ng		97
70)	bis(2-Ethylhexyl)phthalate	25.05	149	360203	23.38	ng	#	97
72)	Di-n-octylphthalate	27.17	149	584375	24.67	ng		100
73)	Benzo(b)fluoranthene	29.64	252	218698	20.57	ng		96
74)	Benzo(k)fluoranthene	29.74	252	211220	20.80	ng		96
75)	Benzo(a)pyrene	31.26	252	200398	21.12	ng		95
76)	Indeno(1,2,3-cd)pyrene	36.47	276	227570	20.45	ng		96
77)	Dibenz(a,h)anthracene	36.48	278	193021	20.17	ng		98
78)	Benzo(g,h,i)perylene	37.97	276	194243	20.98	ng		95

0850

(#) = qualifier out of range (m) = manual integration

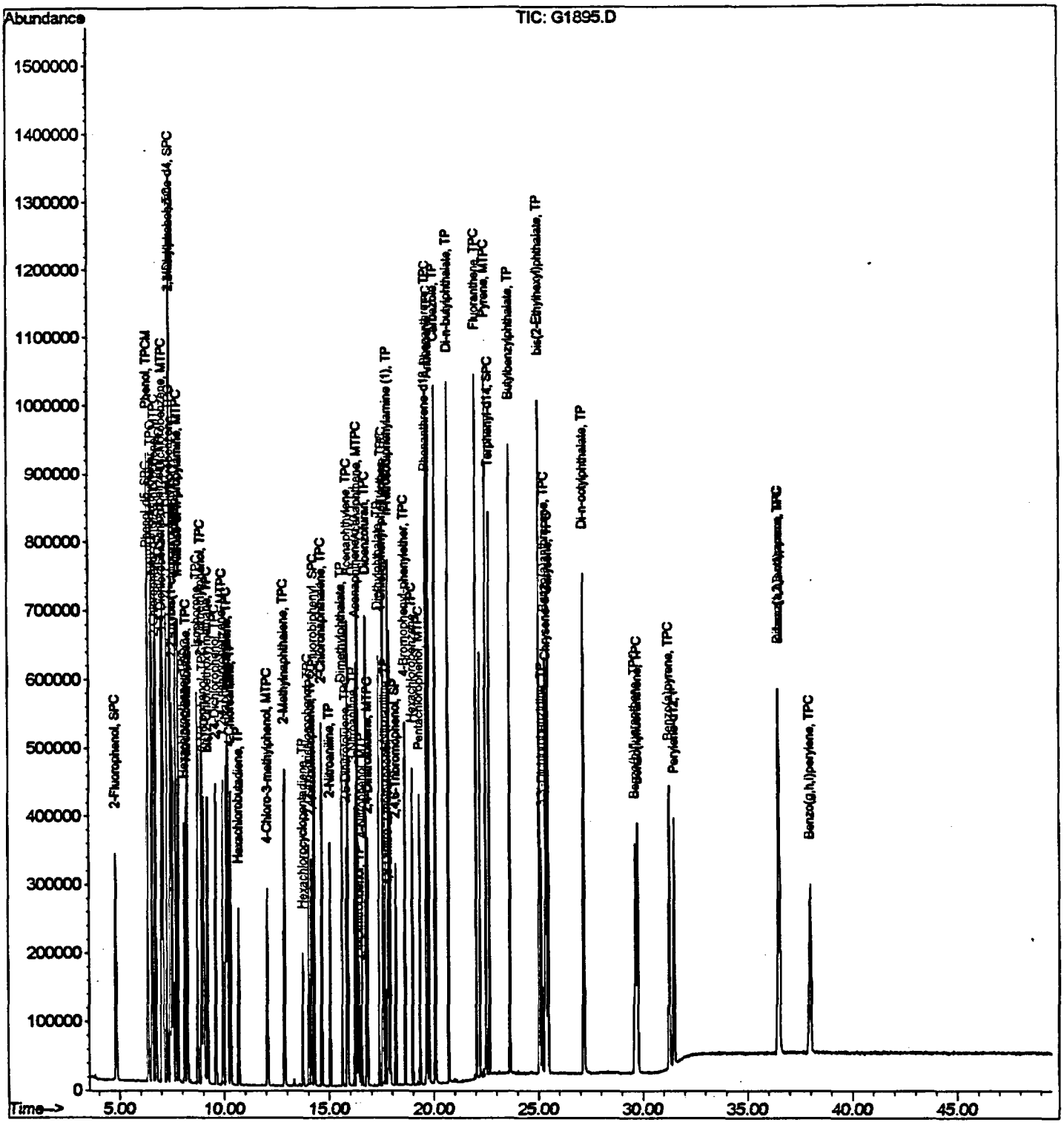
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D
Acq On : 8 Jan 98 11:30
Sample : HP-7G SSTD050GZ
Misc : S00497 IS=40ng S00501
Quant Time: Jan 8 12:20 1998

Vial: 2
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

COPY-ORIGINAL IS FILED IN CSF 25910DN155



0851

Quantitation Report (Not Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D Vial: 2
Acq On : 8 Jan 98 11:30 Operator:
Sample : HP-7G SSTD050GZ Inst : GC/MS Ins
Misc : S00497 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 12:20 1998 Quant Results File: CLPME7SRES

FILED IN CSF

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1891.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 5 pages

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	214481	40.00	ng		0.00
17) Naphthalene-d8	10.10	136	636937	40.00	ng		0.00
31) Acenaphthene-d10	16.31	164	324326	40.00	ng		0.00
51) Phenanthrene-d10	19.62	188	597722	40.00	ng		0.00
63) Chrysene-d12	25.39	240	437743	40.00	ng		0.00
71) Perylene-d12	31.50	264	389061	40.00	ng		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.82	112	309974	49.66	ng		0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 33.11%				
3) Phenol-d5	6.36	99	407565	50.39	ng		0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 33.59%				
7) 1,2-Dichlorobenzene-d4	7.44	152	212583	46.20	ng		0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 46.20%				
8) 2-Chlorophenol-d4	6.72	132	320206	50.40	ng		0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 33.60%				
18) Nitrobenzene-d5	8.21	82	262289	45.89	ng		0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 45.89%				
35) 2-Fluorobiphenyl	14.29	172	486417	46.42	ng		0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 46.42%				
52) 2,4,6-Tribromophenol	18.18	330	70297	47.81	ng		0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 31.87%				
65) Terphenyl-d14	22.66	244	466010	53.84	ng		0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 53.84%				
Target Compounds							Qvalue
4) Phenol	6.38	94	431524	51.72	ng		88
5) bis(2-Chloroethyl)ether	6.58	63	319090	51.06	ng		97
6) 2-Chlorophenol	6.76	128	345746	52.08	ng		99
9) 1,3-Dichlorobenzene	7.02	146	397168	51.27	ng		98
10) 1,4-Dichlorobenzene	7.10	146	400464	49.91	ng		99
11) 1,2-Dichlorobenzene	7.47	146	371401	50.54	ng		98
12) 2-Methylphenol	7.44	108	287788	51.13	ng		96
13) 2,2'-oxybis(1-chloropropan	7.54	45	837530	51.72	ng	#	83
14) 4-Methylphenol	7.70	108	313529	51.02	ng		96
15) n-Nitroso-di-n-propylamine	7.82	70	233914	50.77	ng		87
16) Hexachloroethane	8.11	117	122203	51.08	ng		86
19) Nitrobenzene	8.25	77	291319	50.20	ng		99
20) Isophorone	8.74	82	591470	50.40	ng		92
21) 2-Nitrophenol	9.02	139	175618	50.48	ng		97
22) 2,4-Dimethylphenol	8.94	107	262807	53.55	ng		94
23) bis(2-Chloroethoxy)methane	9.22	93	357337	50.47	ng		99
24) 2,4-Dichlorophenol	9.61	162	272280	51.45	ng		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D Vial: 2
Acq On : 8 Jan 98 11:30 Operator:
Sample : HP-7G SSTD050GZ Inst : GC/MS Ins
Misc : S00497 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 12:20 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25969/DMFS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.94	180	273011	50.75	ng		99
26)	Naphthalene	10.17	128	684930	44.73	ng		98
27)	4-Chloroaniline	10.31	127	350027	53.73	ng		99
28)	Hexachlorobutadiene	10.70	225	96408	50.49	ng		99
29)	4-Chloro-3-methylphenol	12.06	107	184488	52.25	ng		83
30)	2-Methylnaphthalene	12.88	142	485100	53.42	ng		96
32)	Hexachlorocyclopentadiene	13.76	237	91871	50.13	ng	#	91
33)	2,4,6-Trichlorophenol	14.02	196	151192	51.64	ng		99
34)	2,4,5-Trichlorophenol	14.15	196	160644	49.38	ng		99
36)	2-Chloronaphthalene	14.66	162	473096	51.39	ng		91
37)	2-Nitroaniline	15.05	65	116203	53.37	ng		87
38)	Dimethylphthalate	15.62	163	561519	49.96	ng		99
39)	Acenaphthylene	15.90	152	709223	45.34	ng		97
40)	2,6-Dinitrotoluene	15.84	165	125939	50.63	ng		88
41)	3-Nitroaniline	16.20	138	141656	51.57	ng		82
42)	Acenaphthene	16.39	153	412968	44.34	ng		98
43)	2,4-Dinitrophenol	16.47	184	37896	46.43	ng	#	62
44)	4-Nitrophenol	16.57	109	42545	51.21	ng	#	87
45)	Dibenzofuran	16.78	168	715500	53.85	ng		96
46)	2,4-Dinitrotoluene	16.85	165	170165	51.54	ng	#	90
47)	Diethylphthalate	17.38	149	536621	49.88	ng		99
48)	Fluorene	17.59	166	484481	45.10	ng		100
49)	4-Chlorophenyl-phenylether	17.56	204	222472	50.40	ng		98
50)	4-Nitroaniline	17.70	138	151410	52.78	ng		90
53)	4,6-Dinitro-2-methylphenol	17.79	198	76334	48.38	ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.83	169	384999	50.01	ng		99
55)	4-Bromophenyl-phenylether	18.63	248	107757	48.47	ng		94
56)	Hexachlorobenzene	18.99	284	123643	49.38	ng		94
57)	Pentachlorophenol	19.34	266	80870	47.70	ng		98
58)	Phenanthrene	19.67	178	731794	43.57	ng		99
59)	Anthracene	19.77	178	770772	44.08	ng		100
60)	Carbazole	20.07	167	813156	48.60	ng		98
61)	Di-n-butylphthalate	20.71	149	1161477	48.33	ng		99
62)	Fluoranthene	22.04	202	740253	44.04	ng		92
64)	Pyrene	22.49	202	747756	46.02	ng		92
66)	Butylbenzylphthalate	23.64	149	556774	50.86	ng		92
67)	Benzo(a)anthracene	25.33	228	563155	45.21	ng		97
68)	3,3'-Dichlorobenzidine	25.17	252	170664	42.65	ng		97
69)	Chrysene	25.47	228	534633	45.58	ng		97
70)	bis(2-Ethylhexyl)phthalate	25.04	149	820383	50.86	ng		99
72)	Di-n-octylphthalate	27.16	149	1366489	55.02	ng		100
73)	Benzo(b)fluoranthene	29.63	252	533970	47.90	ng		96
74)	Benzo(k)fluoranthene	29.74	252	515023	48.38	ng		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : Q:\HPCHEM\G\DATA\G1895.D
Acq On : 8 Jan 98 11:30
Sample : HP-7G SSTD050GZ
Misc : S00497 IS=40ng S00501
Quant Time: Jan 8 12:20 1998

Vial: CASE 25969
Operator: SDG# FFR76
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25910 ID AFS

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) Benzo(a)pyrene	31.26	252	495109	49.76 ng	96
76) Indeno(1,2,3-cd)pyrene	36.48	276	561057	48.08 ng	96
77) Dibenz(a,h)anthracene	36.49	278	482363	48.09 ng	99
78) Benzo(g,h,i)perylene	37.98	276	461691	47.56 ng	96

0854

(#) = qualifier out of range (m) = manual integration

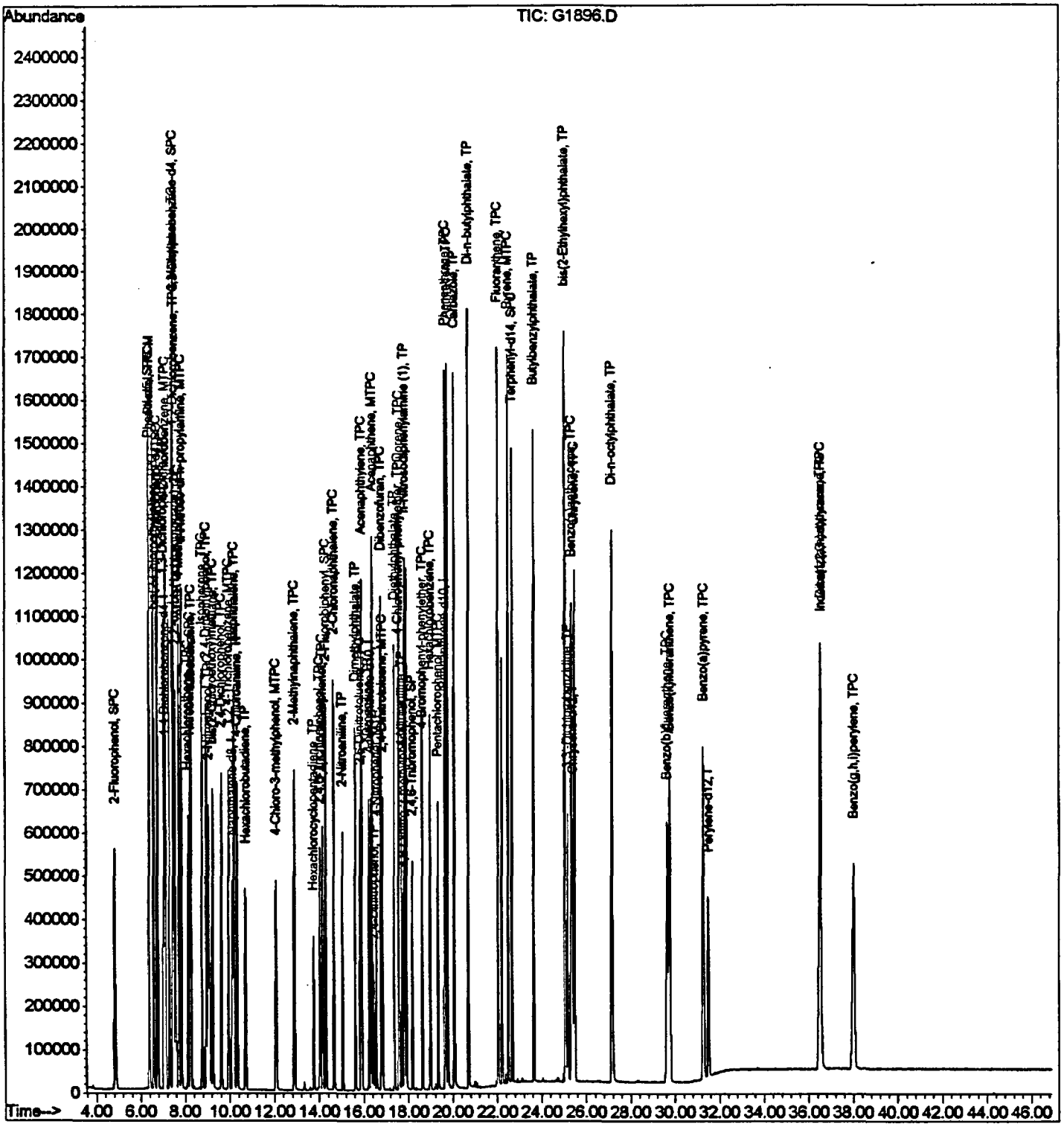
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

COPY-ORIGINAL IS FILED IN CSF25969/FFR55



0855

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910/DNFSS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	218406	40.00	ng	0.00
17) Naphthalene-d8	10.11	136	671082	40.00	ng	0.00
31) Acenaphthene-d10	16.30	164	340322	40.00	ng	0.00
51) Phenanthrene-d10	19.63	188	639704	40.00	ng	0.01
63) Chrysene-d12	25.39	240	496227	40.00	ng	0.00
71) Perylene-d12	31.49	264	443881	40.00	ng	0.00

System Monitoring Compounds

2) 2-Fluorophenol	4.83	112	542648	85.37	ng	0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 56.91%			
3) Phenol-d5	6.36	99	735021	89.25	ng	0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 59.50%			
7) 1,2-Dichlorobenzene-d4	7.45	152	348823	74.45	ng	0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 74.45%			
8) 2-Chlorophenol-d4	6.73	132	554653	85.74	ng	0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 57.16%			
18) Nitrobenzene-d5	8.21	82	484071	80.39	ng	0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 80.39%			
35) 2-Fluorobiphenyl	14.30	172	832454	75.70	ng	0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 75.70%			
52) 2,4,6-Tribromophenol	18.19	330	127449	80.98	ng	0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 53.99%			
65) Terphenyl-d14	22.67	244	850760	86.71	ng	0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 86.71%			

Target Compounds						Qvalue
4) Phenol	6.38	94	725242	85.36	ng	87
5) bis(2-Chloroethyl)ether	6.59	63	532213	83.63	ng	# 1
6) 2-Chlorophenol	6.76	128	562814	83.25	ng	99
9) 1,3-Dichlorobenzene	7.03	146	635300	80.53	ng	98
10) 1,4-Dichlorobenzene	7.11	146	658937	80.65	ng	99
11) 1,2-Dichlorobenzene	7.47	146	600924	80.30	ng	99
12) 2-Methylphenol	7.44	108	483292	84.32	ng	97
13) 2,2'-oxybis(1-chloropropan	7.55	45	1470600	89.18	ng	100
14) 4-Methylphenol	7.70	108	548410	87.64	ng	96
15) n-Nitroso-di-n-propylamine	7.83	70	398813	85.00	ng	87
16) Hexachloroethane	8.10	117	208466	85.57	ng	88
19) Nitrobenzene	8.26	77	513662	84.02	ng	98
20) Isophorone	8.75	82	1023819	82.81	ng	93
21) 2-Nitrophenol	9.02	139	290193	79.17	ng	96
22) 2,4-Dimethylphenol	8.94	107	443751	85.82	ng	93
23) bis(2-Chloroethoxy)methane	9.22	93	605004	81.10	ng	98
24) 2,4-Dichlorophenol	9.62	162	427720	76.70	ng	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY=ORIGINAL IS FILED IN CSF 25910/DNF55

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.93	180	445962	78.68	ng		100
26)	Naphthalene	10.17	128	1201994	74.50	ng		98
27)	4-Chloroaniline	10.31	127	574488	83.69	ng		99
28)	Hexachlorobutadiene	10.69	225	167601	83.30	ng		98
29)	4-Chloro-3-methylphenol	12.06	107	315415	84.79	ng		87
30)	2-Methylnaphthalene	12.88	142	773107	80.81	ng		96
32)	Hexachlorocyclopentadiene	13.75	237	168913	87.83	ng		95
33)	2,4,6-Trichlorophenol	14.03	196	247077	80.42	ng		98
34)	2,4,5-Trichlorophenol	14.14	196	278317	81.53	ng		99
36)	2-Chloronaphthalene	14.65	162	776986	80.43	ng		92
37)	2-Nitroaniline	15.05	65	198418	86.85	ng		88
38)	Dimethylphthalate	15.63	163	905019	76.74	ng		100
39)	Acenaphthylene	15.90	152	1208795	73.64	ng		98
40)	2,6-Dinitrotoluene	15.84	165	217016	83.14	ng		92
41)	3-Nitroaniline	16.21	138	239196	82.99	ng		82
42)	Acenaphthene	16.38	153	699300	71.56	ng		99
43)	2,4-Dinitrophenol	16.48	184	87154	101.77	ng		90
44)	4-Nitrophenol	16.57	109	75512	86.63	ng	#	84
45)	Dibenzofuran	16.77	168	1085770	77.88	ng		99
46)	2,4-Dinitrotoluene	16.84	165	294121	84.90	ng	#	93
47)	Diethylphthalate	17.38	149	883622	78.28	ng		100
48)	Fluorene	17.59	166	800421	71.01	ng		99
49)	4-Chlorophenyl-phenylether	17.56	204	358831	77.47	ng		97
50)	4-Nitroaniline	17.70	138	255976	85.04	ng		89
53)	4,6-Dinitro-2-methylphenol	17.80	198	148410	87.88	ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.84	169	618053	75.01	ng		99
55)	4-Bromophenyl-phenylether	18.64	248	183650	77.18	ng		95
56)	Hexachlorobenzene	18.98	284	213104	79.52	ng		94
57)	Pentachlorophenol	19.34	266	140265	77.30	ng		99
58)	Phenanthrene	19.67	178	1237929	68.87	ng		99
59)	Anthracene	19.76	178	1292869	69.08	ng		99
60)	Carbazole	20.08	167	1333498	74.47	ng		99
61)	Di-n-butylphthalate	20.70	149	1896350	73.73	ng		100
62)	Fluoranthene	22.04	202	1258673	69.97	ng		94
64)	Pyrene	22.49	202	1293286	70.22	ng		94
66)	Butylbenzylphthalate	23.64	149	951734	76.70	ng		94
67)	Benzo(a)anthracene	25.33	228	1043413	73.90	ng		97
68)	3,3'-Dichlorobenzidine	25.17	252	314514	69.34	ng		97
69)	Chrysene	25.47	228	993188	74.69	ng		97
70)	bis(2-Ethylhexyl)phthalate	25.04	149	1437982	78.64	ng		99
72)	Di-n-octylphthalate	27.16	149	2463690	86.94	ng		100
73)	Benzo(b)fluoranthene	29.65	252	1013711	79.71	ng		98
74)	Benzo(k)fluoranthene	29.76	252	977387	80.47	ng		96

(#) = qualifier out of range (m) = manual integration

CASE 25989
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial: 3
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 3570/MHSS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	Benzo(a)pyrene	31.28	252	935868	82.45	ng	97
76)	Indeno(1,2,3-cd)pyrene	36.51	276	1056558	79.36	ng	94
77)	Dibenz(a,h)anthracene	36.52	278	916934	80.12	ng	100
78)	Benzo(g,h,i)perylene	38.01	276	886433	80.04	ng	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

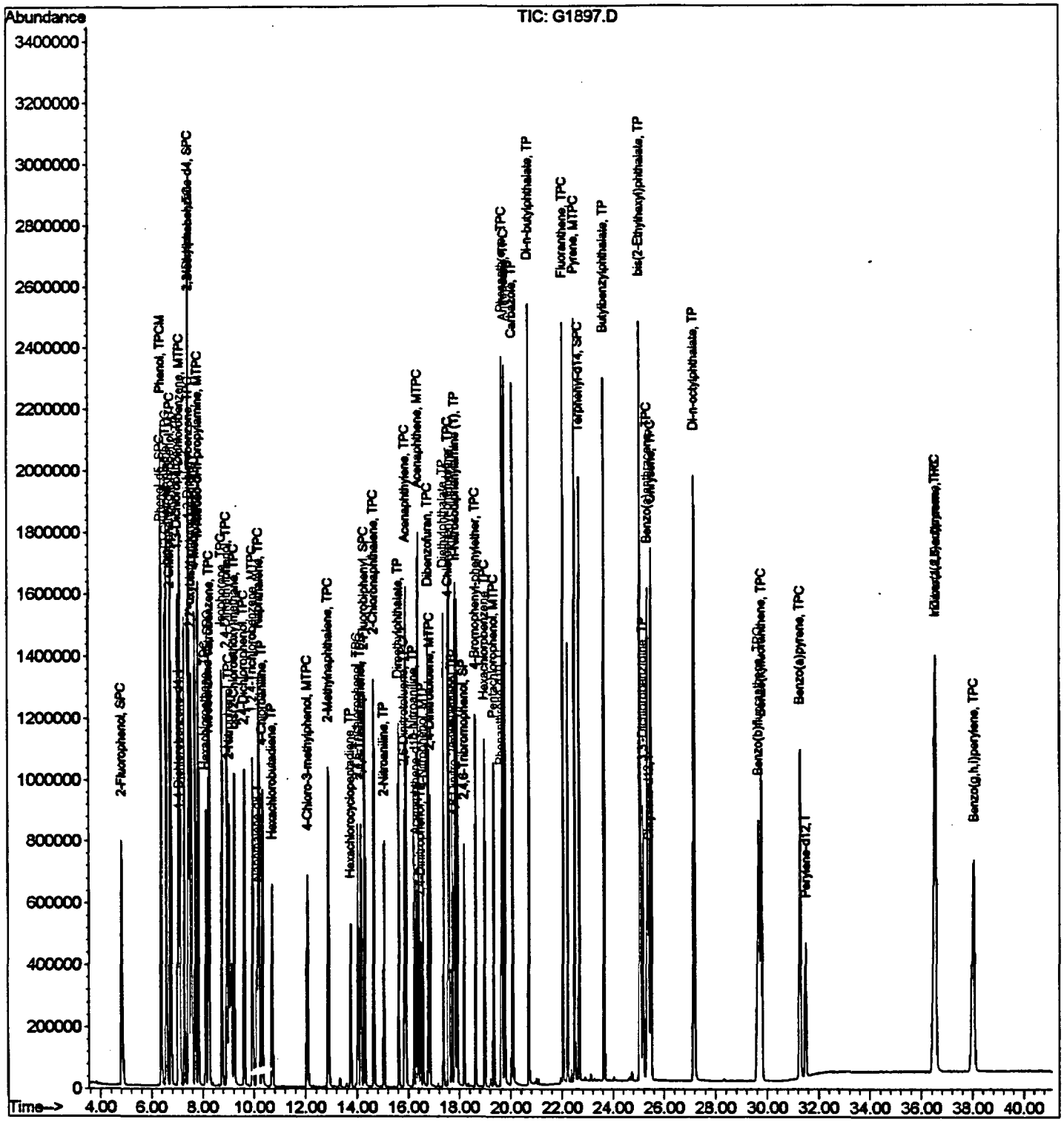
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1897.D
Acq On : 8 Jan 98 13:17
Sample : HP-7G SSTD120GZ
Misc : S00499 IS=40ng S00501
Quant Time: Jan 8 13:59 1998

Vial: 54
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

COPY-ORIGINAL IS FILED IN CSF 5/10/98 MPSS



Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1897.D
Acq On : 8 Jan 98 13:17
Sample : HP-7G SSTD120GZ
Misc : S00499 IS=40ng S00501
Quant Time: Jan 8 13:59 1998

Vial: 4
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25910(DNFSS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	231050	40.00	ng	0.00
17) Naphthalene-d8	10.11	136	700859	40.00	ng	0.00
31) Acenaphthene-d10	16.30	164	354686	40.00	ng	0.00
51) Phenanthrene-d10	19.63	188	660189	40.00	ng	0.00
63) Chrysene-d12	25.40	240	514683	40.00	ng	0.00
71) Perylene-d12	31.50	264	451453	40.00	ng	0.00

System Monitoring Compounds

2) 2-Fluorophenol	4.83	112	762643	113.41	ng	0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 75.61%			
3) Phenol-d5	6.36	99	988963	113.51	ng	0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 75.67%			
7) 1,2-Dichlorobenzene-d4	7.45	152	494897	99.84	ng	0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 99.84%			
8) 2-Chlorophenol-d4	6.73	132	770432	112.57	ng	0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 75.05%			
18) Nitrobenzene-d5	8.21	82	680948	108.28	ng	0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 108.28%			
35) 2-Fluorobiphenyl	14.30	172	1164960	101.65	ng	0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 101.65%			
52) 2,4,6-Tribromophenol	18.19	330	179091	110.27	ng	0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 73.51%			
65) Terphenyl-d14	22.67	244	1155675	113.56	ng	0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 113.56%			

Target Compounds						Qvalue
4) Phenol	6.38	94	1006147	111.95	ng	88
5) bis(2-Chloroethyl)ether	6.59	63	761677	113.14	ng	92
6) 2-Chlorophenol	6.76	128	815505	114.02	ng	98
9) 1,3-Dichlorobenzene	7.03	146	945692	113.32	ng	98
10) 1,4-Dichlorobenzene	7.11	146	988169	114.32	ng	99
11) 1,2-Dichlorobenzene	7.48	146	893801	112.90	ng	99
12) 2-Methylphenol	7.45	108	653208	107.73	ng	97
13) 2,2'-oxybis(1-chloropropan	7.55	45	2109697	120.93	ng #	83
14) 4-Methylphenol	7.70	108	766416	115.78	ng	96
15) n-Nitroso-di-n-propylamine	7.83	70	576887	116.23	ng	87
16) Hexachloroethane	8.10	117	303242	117.66	ng	85
19) Nitrobenzene	8.26	77	744966	116.67	ng	98
20) Isophorone	8.75	82	1485101	115.01	ng	92
21) 2-Nitrophenol	9.02	139	446498	116.64	ng	93
22) 2,4-Dimethylphenol	8.94	107	632547	117.13	ng	93
23) bis(2-Chloroethoxy)methane	9.23	93	888328	114.02	ng	98
24) 2,4-Dichlorophenol	9.62	162	642540	110.33	ng	94

(#) = qualifier out of range (m) = manual integration 0860

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR78

Data File : Q:\HPCHEM\G\DATA\G1897.D
Acq On : 8 Jan 98 13:17
Sample : HP-7G SSTD120GZ
Misc : S00499 IS=40ng S00501
Quant Time: Jan 8 13:59 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 5/10/DMFSS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.94	180	665827	112.48	ng		99
26)	Naphthalene	10.18	128	1769792	105.04	ng		98
27)	4-Chloroaniline	10.32	127	819138	114.26	ng		98
28)	Hexachlorobutadiene	10.70	225	244109	116.18	ng		99
29)	4-Chloro-3-methylphenol	12.07	107	455870	117.34	ng		85
30)	2-Methylnaphthalene	12.88	142	1100705	110.16	ng		96
32)	Hexachlorocyclopentadiene	13.75	237	251143	125.30	ng		95
33)	2,4,6-Trichlorophenol	14.03	196	358552	111.98	ng		99
34)	2,4,5-Trichlorophenol	14.15	196	391374	110.01	ng		99
36)	2-Chloronaphthalene	14.66	162	1135859	112.82	ng		92
37)	2-Nitroaniline	15.06	65	290057	121.82	ng		87
38)	Dimethylphthalate	15.63	163	1349808	109.82	ng		100
39)	Acenaphthylene	15.90	152	1758457	102.78	ng		98
40)	2,6-Dinitrotoluene	15.85	165	333202	122.48	ng		89
41)	3-Nitroaniline	16.22	138	349503	116.36	ng	#	82
42)	Acenaphthene	16.39	153	1007342	98.90	ng		98
43)	2,4-Dinitrophenol	16.48	184	158835	177.96	ng		96
44)	4-Nitrophenol	16.58	109	114214	125.72	ng	#	84
45)	Dibenzofuran	16.78	168	1542325	106.15	ng		99
46)	2,4-Dinitrotoluene	16.85	165	451051	124.93	ng		94
47)	Diethylphthalate	17.39	149	1296925	110.24	ng		100
48)	Fluorene	17.60	166	1165699	99.22	ng		99
49)	4-Chlorophenyl-phenylether	17.56	204	527933	109.36	ng		97
50)	4-Nitroaniline	17.71	138	377156	120.22	ng		90
53)	4,6-Dinitro-2-methylphenol	17.80	198	240310	137.89	ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.85	169	897162	105.50	ng		97
55)	4-Bromophenyl-phenylether	18.64	248	267219	108.82	ng		94
56)	Hexachlorobenzene	18.99	284	301341	108.96	ng		93
57)	Pentachlorophenol	19.34	266	206438	110.24	ng		99
58)	Phenanthrene	19.68	178	1777693	95.82	ng		99
59)	Anthracene	19.77	178	1881434	97.42	ng		99
60)	Carbazole	20.08	167	1933728	104.64	ng		99
61)	Di-n-butylphthalate	20.70	149	2791355	105.16	ng		100
62)	Fluoranthene	22.04	202	1806931	97.33	ng		94
64)	Pyrene	22.50	202	1849252	96.80	ng		94
66)	Butylbenzylphthalate	23.64	149	1433553	111.39	ng		92
67)	Benzo(a)anthracene	25.34	228	1555016	106.18	ng		97
68)	3,3'-Dichlorobenzidine	25.18	252	466469	99.15	ng		97
69)	Chrysene	25.48	228	1470772	106.64	ng		96
70)	bis(2-Ethylhexyl)phthalate	25.04	149	2166871	114.25	ng		100
72)	Di-n-octylphthalate	27.16	149	3777729	131.08	ng		100
73)	Benzo(b)fluoranthene	29.66	252	1491033	115.27	ng		98
74)	Benzo(k)fluoranthene	29.78	252	1489919	120.61	ng		96

(#) = qualifier out of range (m) = manual integration

Data File : Q:\HPCHEM\G\DATA\G1897.D CASE 25989 SDG# FFR76 Vial: 4 CASE 2598 SDG# FFR7
Acq On : 8 Jan 98 13:17 Operator:
Sample : HP-7G SSTD120GZ Inst : GC/MS
Misc : S00499 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 13:59 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M COPY-ORIGINAL IS FILED IN CSF25910DMS
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75)	Benzo(a)pyrene	31.29	252	1387693	120.20 ng	97
76)	Indeno(1,2,3-cd)pyrene	36.54	276	1572840	116.15 ng	95
77)	Dibenz(a,h)anthracene	36.55	278	1362911	117.09 ng	99
78)	Benzo(g,h,i)perylene	38.05	276	1326822	117.80 ng	95

(#) = qualifier out of range (m) = manual integration 0862

Quantitation Report

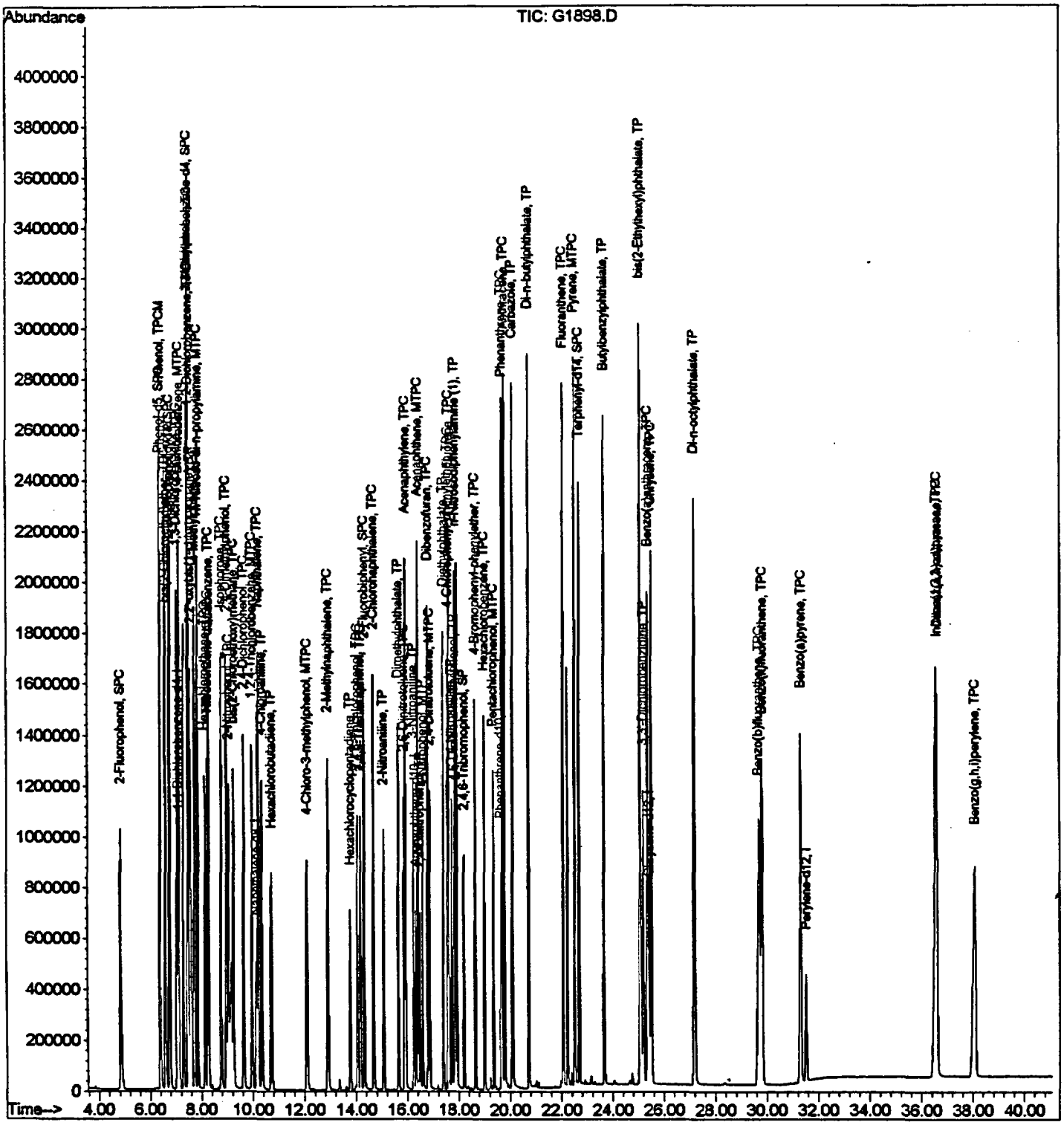
CASE 25969
SDG#FFR76

Data File : Q:\HPCHEM\G\DATA\G1898.D
Acq On : 8 Jan 98 14:03
Sample : HP-7G SSTD160GZ
Misc : S00500 IS=40ng S00501
Quant Time: Jan 8 14:45 1998

Vial: 5
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF
25910/DNFSS

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1898.D
Acq On : 8 Jan 98 14:03
Sample : HP-7G SSTD160GZ
Misc : S00500 IS=40ng S00501
Quant Time: Jan 8 14:45 1998

Vial: 5
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF
25910 bnFSS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	228455	40.00	ng	0.00
17) Naphthalene-d8	10.11	136	712413	40.00	ng	0.00
31) Acenaphthene-d10	16.31	164	355890	40.00	ng	0.00
51) Phenanthrene-d10	19.62	188	676624	40.00	ng	0.00
63) Chrysene-d12	25.40	240	511333	40.00	ng	0.00
71) Perylene-d12	31.51	264	442699	40.00	ng	0.02

System Monitoring Compounds

2) 2-Fluorophenol	4.83	112	977046	146.94	ng	0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 97.96%			
3) Phenol-d5	6.37	99	1244499	144.46	ng	0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 96.31%			
7) 1,2-Dichlorobenzene-d4	7.44	152	618977	126.29	ng	0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 126.29%#			
8) 2-Chlorophenol-d4	6.74	132	973876	143.92	ng	0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 95.95%			
18) Nitrobenzene-d5	8.22	82	904084	141.43	ng	0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 141.43%#			
35) 2-Fluorobiphenyl	14.30	172	1488332	129.43	ng	0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 129.43%#			
52) 2,4,6-Tribromophenol	18.19	330	225164	135.27	ng	0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 90.18%			
65) Terphenyl-d14	22.67	244	1457672	144.18	ng	0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 144.18%#			

Target Compounds						Qvalue
4) Phenol	6.39	94	1326028	149.21	ng	88
5) bis(2-Chloroethyl)ether	6.59	63	979533	147.15	ng	# 1
6) 2-Chlorophenol	6.77	128	1070077	151.32	ng	98
9) 1,3-Dichlorobenzene	7.02	146	1205308	146.06	ng	99
10) 1,4-Dichlorobenzene	7.11	146	1241026	145.21	ng	99
11) 1,2-Dichlorobenzene	7.47	146	1125760	143.82	ng	98
12) 2-Methylphenol	7.44	108	836648	139.55	ng	97
13) 2,2'-oxybis(1-chloropropan	7.54	45	2678995	155.31	ng	# 83
14) 4-Methylphenol	7.71	108	1007370	153.91	ng	97
15) n-Nitroso-di-n-propylamine	7.83	70	732918	149.34	ng	87
16) Hexachloroethane	8.11	117	396739	155.69	ng	86
19) Nitrobenzene	8.26	77	969552	149.38	ng	97
20) Isophorone	8.75	82	1914843	145.89	ng	92
21) 2-Nitrophenol	9.03	139	599420	154.05	ng	96
22) 2,4-Dimethylphenol	8.95	107	836081	152.31	ng	94
23) bis(2-Chloroethoxy)methane	9.23	93	1135154	143.34	ng	98
24) 2,4-Dichlorophenol	9.62	162	849041	143.43	ng	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

Data File : Q:\HPCHEM\G\DATA\G1898.D
Acq On : 8 Jan 98 14:03
Sample : HP-7G SSTD160GZ
Misc : S00500 IS=40ng S00501
Quant Time: Jan 8 14:45 1998

Vial: CASE 25969
Operator: SDG# FFR76
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910/DAFS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.94	180	852647	141.70 ng		99
26)	Naphthalene	10.17	128	2296482	134.09 ng		98
27)	4-Chloroaniline	10.33	127	1055994	144.91 ng		97
28)	Hexachlorobutadiene	10.70	225	317729	148.76 ng		99
29)	4-Chloro-3-methylphenol	12.08	107	605014	153.20 ng		85
30)	2-Methylnaphthalene	12.89	142	1417843	139.60 ng		97
32)	Hexachlorocyclopentadiene	13.76	237	331483	164.83 ng		94
33)	2,4,6-Trichlorophenol	14.03	196	474242	147.61 ng		99
34)	2,4,5-Trichlorophenol	14.16	196	510949	143.14 ng		99
36)	2-Chloronaphthalene	14.67	162	1431660	141.72 ng		92
37)	2-Nitroaniline	15.06	65	386829	161.91 ng		87
38)	Dimethylphthalate	15.63	163	1670253	135.43 ng		100
39)	Acenaphthylene	15.91	152	2258152	131.55 ng		98
40)	2,6-Dinitrotoluene	15.86	165	432678	158.51 ng		90
41)	3-Nitroaniline	16.23	138	457470	151.78 ng	#	81
42)	Acenaphthene	16.40	153	1277498	125.00 ng		98
43)	2,4-Dinitrophenol	16.48	184	240856	268.95 ng		95
44)	4-Nitrophenol	16.58	109	153578	168.48 ng	#	84
45)	Dibenzofuran	16.78	168	1932740	132.57 ng		99
46)	2,4-Dinitrotoluene	16.86	165	585650	161.66 ng		94
47)	Diethylphthalate	17.39	149	1594713	135.09 ng		100
48)	Fluorene	17.60	166	1471054	124.79 ng		99
49)	4-Chlorophenyl-phenylether	17.57	204	649065	133.99 ng		96
50)	4-Nitroaniline	17.72	138	487716	154.94 ng		90
53)	4,6-Dinitro-2-methylphenol	17.80	198	337209	188.79 ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.84	169	1102439	126.49 ng		98
55)	4-Bromophenyl-phenylether	18.63	248	327747	130.23 ng		93
56)	Hexachlorobenzene	18.99	284	381686	134.65 ng		94
57)	Pentachlorophenol	19.35	266	272207	141.84 ng		98
58)	Phenanthrene	19.69	178	2209355	116.20 ng		99
59)	Anthracene	19.77	178	2339944	118.21 ng		98
60)	Carbazole	20.08	167	2417751	127.66 ng		99
61)	Di-n-butylphthalate	20.71	149	3385431	124.45 ng		100
62)	Fluoranthene	22.05	202	2249047	118.20 ng		94
64)	Pyrene	22.49	202	2262473	119.21 ng		95
66)	Butylbenzylphthalate	23.65	149	1731156	135.39 ng		92
67)	Benzo(a)anthracene	25.35	228	1978600	135.99 ng		97
68)	3,3'-Dichlorobenzidine	25.18	252	621269	132.91 ng		97
69)	Chrysene	25.49	228	1858649	135.65 ng		96
70)	bis(2-Ethylhexyl)phthalate	25.05	149	2605389	138.27 ng		100
72)	Di-n-octylphthalate	27.17	149	4568691	161.65 ng		100
73)	Benzo(b)fluoranthene	29.68	252	1968592	155.20 ng		98
74)	Benzo(k)fluoranthene	29.80	252	1842134	152.07 ng		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1898.D Vial: 5
Acq On : 8 Jan 98 14:03 Operator:
Sample : HP-7G SSTD160GZ Inst : GC/MS Ins
Misc : S00500 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 14:45 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF
25969DMFS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75) Benzo(a)pyrene	31.30	252	1779311	157.17	ng	97
76) Indeno(1,2,3-cd)pyrene	36.56	276	1994658	150.22	ng	94
77) Dibenz(a,h)anthracene	36.58	278	1723288	150.98	ng	99
78) Benzo(g,h,i)perylene	38.06	276	1696172	153.56	ng	94

(#) = qualifier out of range (m) = manual integration

SEMIVOLATILE CONTINUING CALIBRATION CHECK

CASE 25969
SDG# FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date: 1/22/98 Time:1644

Lab File ID:G1949 Init. Calib. Date(s): 1/08/98 1/08/98

Init. Calib. Times: 1044 1403

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.625	1.692	0.800	4.1	25.0
bis(2-Chloroethyl)ether	1.193	1.254	0.700	5.1	25.0
2-Chlorophenol	1.296	1.326	0.800	2.3	25.0
1,3-Dichlorobenzene	1.453	1.472	0.600	1.3	25.0
1,4-Dichlorobenzene	1.499	1.515	0.500	1.1	25.0
1,2-Dichlorobenzene	1.364	1.384	0.400	1.5	25.0
2-Methylphenol	1.037	1.089	0.700	5.0	25.0
2,2'-oxybis(1-Chloropropane)	3.221	3.436		6.7	
4-Methylphenol	1.166	1.196	0.600	2.6	25.0
N-Nitroso-di-n-propylamine	0.884	0.916	0.500	3.6	25.0
Hexachloroethane	0.461	0.469	0.300	1.7	25.0
Nitrobenzene	0.370	0.391	0.200	5.7	25.0
Isophorone	0.742	0.744	0.400	0.3	25.0
2-Nitrophenol	0.223	0.241	0.100	8.1	25.0
2,4-Dimethylphenol	0.331	0.323	0.200	-2.4	25.0
bis(2-Chloroethoxy)methane	0.449	0.444	0.300	-1.1	25.0
2,4-Dichlorophenol	0.335	0.343	0.200	2.4	25.0
1,2,4-Trichlorobenzene	0.337	0.339	0.200	0.6	25.0
Naphthalene	0.868	0.862	0.700	-0.7	25.0
4-Chloroaniline	0.423	0.445		5.2	
Hexachlorobutadiene	0.122	0.119		-2.4	
4-Chloro-3-methylphenol	0.232	0.232	0.200	0.0	25.0
2-Methylnaphthalene	0.576	0.602	0.400	4.5	25.0
Hexachlorocyclopentadiene	0.236	0.250		5.9	
2,4,6-Trichlorophenol	0.371	0.373	0.200	0.5	25.0
2,4,5-Trichlorophenol	0.383	0.402	0.200	5.0	25.0
2-Chloronaphthalene	1.142	1.196	0.800	4.7	25.0
2-Nitroaniline	0.281	0.331		17.8	
Dimethylphthalate	1.359	1.410		3.8	
Acenaphthylene	1.737	1.756	0.900	1.1	25.0
2,6-Dinitrotoluene	0.314	0.338	0.200	7.6	25.0
3-Nitroaniline	0.337	0.390		15.7	
Acenaphthene	1.003	1.039	0.900	3.6	25.0
2,4-Dinitrophenol	0.135	0.182		34.8	
4-Nitrophenol	0.108	0.120		11.1	
Dibenzofuran	1.629	1.758	0.800	7.9	25.0
2,4-Dinitrotoluene	0.421	0.454	0.200	7.8	25.0

All other compounds must meet a minimum RRF of 0.010

SEMIVOLATILE CONTINUING CALIBRATION CHECK

CASE 25969
SDG# FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date: 1/22/98 Time:1644

Lab File ID:G1949 Init. Calib. Date(s): 1/08/98 1/08/98

Init. Calib. Times: 1044 1403

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.307	1.338		2.4	
4-Chlorophenyl-phenylether	0.536	0.547	0.400	2.0	25.0
Fluorene	1.167	1.169	0.900	0.2	25.0
4-Nitroaniline	0.362	0.402		11.0	
4,6-Dinitro-2-methylphenol	0.116	0.142		22.4	
N-Nitrosodiphenylamine (1)	0.496	0.512		3.2	
4-Bromophenyl-phenylether	0.142	0.156	0.100	9.8	25.0
Hexachlorobenzene	0.162	0.172	0.100	6.2	25.0
Pentachlorophenol	0.106	0.122	0.050	15.1	25.0
Phenanthrene	0.951	0.984	0.700	3.5	25.0
Anthracene	1.002	1.047	0.700	4.5	25.0
Carbazole	1.048	1.103		5.2	
Di-n-butylphthalate	1.506	1.541		2.3	
Fluoranthene	0.962	0.996	0.600	3.5	25.0
Pyrene	1.303	1.278	0.600	-1.9	25.0
Butylbenzylphthalate	0.984	0.930		-5.5	
3,3'-Dichlorobenzidine	0.309	0.321		3.9	
Benzo(a)anthracene	1.037	1.022	0.800	-1.4	25.0
Chrysene	0.980	0.974	0.700	-0.6	25.0
bis(2-Ethylhexyl)phthalate	1.470	1.381		-6.0	
Di-n-octylphthalate	2.821	2.653		-6.0	
Benzo(b)fluoranthene	1.126	1.099	0.700	-2.4	25.0
Benzo(k)fluoranthene	1.088	1.046	0.700	-3.9	25.0
Benzo(a)pyrene	1.036	1.005	0.700	-3.0	25.0
Indeno(1,2,3-cd)pyrene	1.171	1.158	0.500	-1.1	25.0
Dibenz(a,h)anthracene	1.009	1.000	0.400	-0.9	25.0
Benzo(g,h,i)perylene	0.986	0.966	0.500	-2.0	25.0
Nitrobenzene-d5	0.340	0.355	0.200	4.4	25.0
2-Fluorobiphenyl	1.191	1.186	0.700	-0.4	25.0
Terphenyl-d14	0.830	0.826	0.500	-0.5	25.0
Phenol-d5	1.540	1.576	0.800	2.3	25.0
2-Fluorophenol	1.171	1.193	0.600	1.9	25.0
2,4,6-Tribromophenol	0.094	0.099		5.3	
2-Chlorophenol-d4	1.196	1.211	0.800	1.2	25.0
1,2-Dichlorobenzene-d4	0.782	0.790	0.400	1.0	25.0

(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of 0.010

CASE 25969
SDG# FFR76

Evaluate Continuing Calibration Report

Data File : Q:\HPCHEM\G\DATA\G1949.D
Acq On : 22 Jan 98 16:44
Sample : HP-7G SSTD050GF
Misc : S00497 ; IS=40ng S00501

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.02
2	SPC	2-Fluorophenol	1.171	1.193	-1.9	95	0.02
3	SPC	Phenol-d5	1.540	1.576	-2.3	95	0.00
4	TPCM	Phenol	1.624	1.693	-4.2	97	0.00
5	TPC	bis(2-Chloroethyl)ether	1.193	1.255	-5.2	97	0.02
6	MTPC	2-Chlorophenol	1.296	1.326	-2.3	94	0.02
7	SPC	1,2-Dichlorobenzene-d4	0.782	0.790	-1.0	91	0.00
8	SPC	2-Chlorophenol-d4	1.196	1.211	-1.3	93	0.00
9	TPC	1,3-Dichlorobenzene	1.453	1.472	-1.3	91	0.02
10	MTPC	1,4-Dichlorobenzene	1.499	1.515	-1.1	93	0.02
11	TPC	1,2-Dichlorobenzene	1.364	1.384	-1.5	92	0.00
12	TC	2-Methylphenol	1.037	1.089	-5.0	93	0.00
13	TP	2,2'-oxybis(1-chloropropane	3.221	3.436	-6.7	101	0.00
14	TPC	4-Methylphenol	1.167	1.196	-2.5	94	0.00
15	MTPC	n-Nitroso-di-n-propylamine	0.884	0.917	-3.7	96	0.00
16	TPC	Hexachloroethane	0.461	0.469	-1.7	94	0.02
17	I	Naphthalene-d8	1.000	1.000	0.0	93	0.00
18	SPC	Nitrobenzene-d5	0.340	0.355	-4.4	100	0.02
19	TPC	Nitrobenzene	0.370	0.391	-5.7	99	0.00
20	TPC	Isophorone	0.742	0.744	-0.3	93	0.02
21	TPC	2-Nitrophenol	0.223	0.241	-8.1	101	0.02
22	TPC	2,4-Dimethylphenol	0.331	0.323	2.4	91	0.02
23	TPC	bis(2-Chloroethoxy)methane	0.449	0.444	1.1	92	0.00
24	TPC	2,4-Dichlorophenol	0.335	0.343	-2.4	93	0.02
25	MTPC	1,2,4-Trichlorobenzene	0.337	0.339	-0.6	92	0.02
26	TPC	Naphthalene	0.868	0.862	0.7	93	0.02
27	TP	4-Chloroaniline	0.423	0.445	-5.2	94	0.02
28	TP	Hexachlorobutadiene	0.121	0.119	1.7	91	0.02
29	MTPC	4-Chloro-3-methylphenol	0.232	0.232	0.0	93	0.02
30	TPC	2-Methylnaphthalene	0.576	0.602	-4.5	92	0.02
31	I	Acenaphthene-d10	1.000	1.000	0.0	89	0.02
32	TP	Hexachlorocyclopentadiene	0.236	0.250	-5.9	98	0.02
33	TPC	2,4,6-Trichlorophenol	0.371	0.373	-0.5	89	0.02
34	TPC	2,4,5-Trichlorophenol	0.383	0.402	-5.0	90	0.00
35	SPC	2-Fluorobiphenyl	1.191	1.186	0.4	88	0.00
36	TPC	2-Chloronaphthalene	1.142	1.196	-4.7	91	0.00
37	TP	2-Nitroaniline	0.281	0.331	-17.8	103	0.00
38	TP	Dimethylphthalate	1.359	1.410	-3.8	91	0.00
39	TPC	Acenaphthylene	1.737	1.756	-1.1	89	0.00
40	TPC	2,6-Dinitrotoluene	0.314	0.338	-7.6	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1949.D
Acq On : 22 Jan 98 16:44
Sample : HP-7G SSTD050GF
Misc : S00497 ; IS=40ng S00501

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 300%

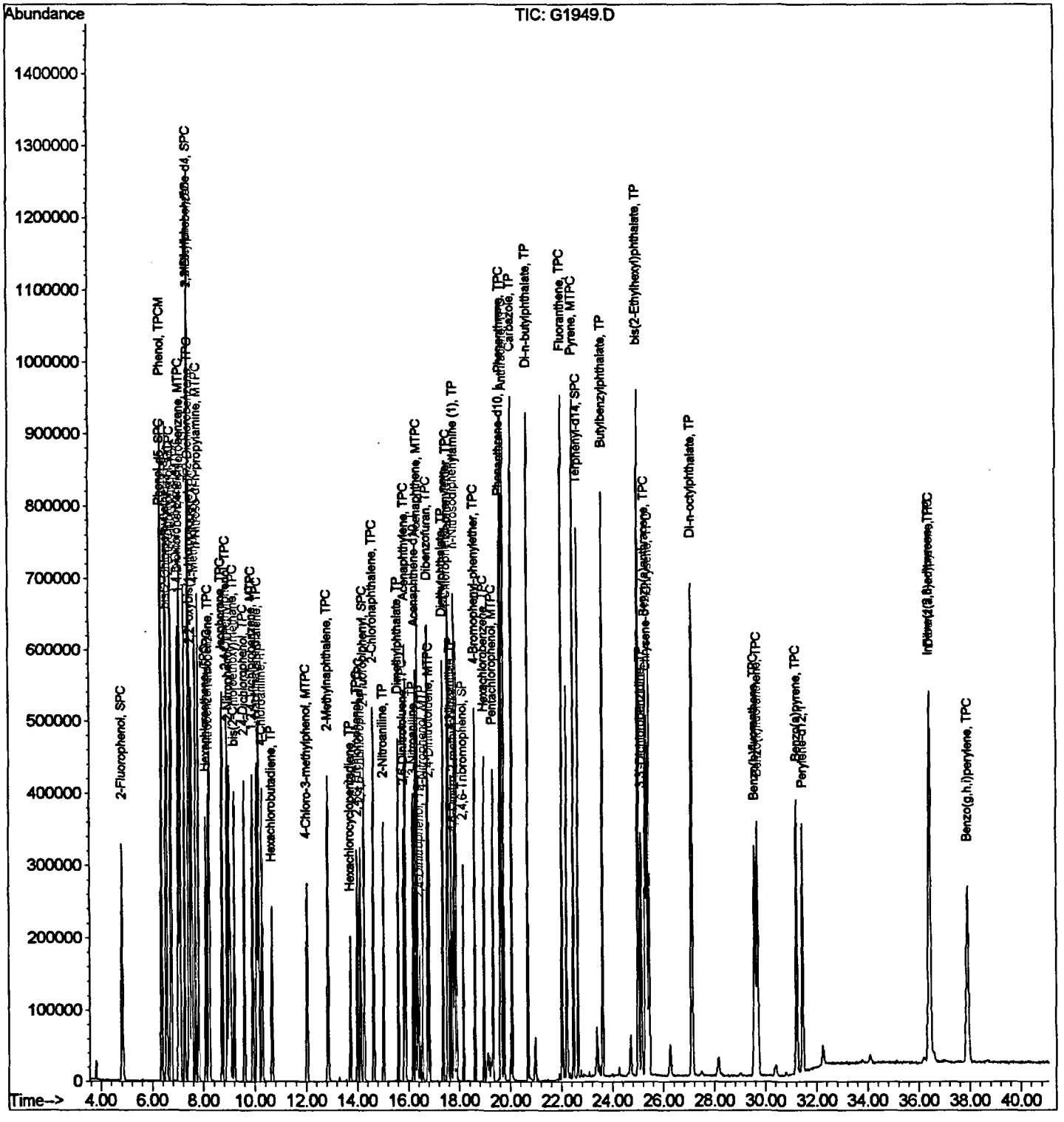
		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TP	3-Nitroaniline	0.338	0.390	-15.4	99	0.02
42	MTPC	Acenaphthene	1.003	1.039	-3.6	91	0.02
43	TP	2,4-Dinitrophenol	0.135	0.182	-34.8	174	0.00
44	MTP	4-Nitrophenol	0.108	0.120	-11.1	101	0.00
45	TPC	Dibenzofuran	1.629	1.758	-7.9	89	0.02
46	MTPC	2,4-Dinitrotoluene	0.421	0.454	-7.8	96	0.00
47	TP	Diethylphthalate	1.307	1.338	-2.4	90	0.00
48	TPC	Fluorene	1.167	1.169	-0.2	87	0.00
49	TPC	4-Chlorophenyl-phenylether	0.536	0.547	-2.1	89	0.00
50	TP	4-Nitroaniline	0.362	0.402	-11.0	96	0.00
51	I	Phenanthrene-d10	1.000	1.000	0.0	89	0.00
52	SP	2,4,6-Tribromophenol	0.094	0.099	-5.3	94	0.00
53	TP	4,6-Dinitro-2-methylphenol	0.116	0.143	-23.3	124	0.00
54	TP	n-Nitrosodiphenylamine (1)	0.496	0.512	-3.2	88	0.00
55	TPC	4-Bromophenyl-phenylether	0.142	0.156	-9.9	96	0.00
56	TPC	Hexachlorobenzene	0.162	0.172	-6.2	92	0.00
57	MTPC	Pentachlorophenol	0.106	0.122	-15.1	100	0.00
58	TPC	Phenanthrene	0.951	0.984	-3.5	89	0.00
59	TPC	Anthracene	1.002	1.047	-4.5	90	0.00
60	TP	Carbazole	1.048	1.103	-5.2	90	0.00
61	TP	Di-n-butylphthalate	1.507	1.541	-2.3	88	0.00
62	TPC	Fluoranthene	0.962	0.996	-3.5	89	0.00
63	I	Chrysene-d12	1.000	1.000	0.0	97	0.00
64	MTPC	Pyrene	1.303	1.278	1.9	91	0.00
65	SPC	Terphenyl-d14	0.830	0.826	0.5	94	0.00
66	TP	Butylbenzylphthalate	0.984	0.930	5.5	89	0.00
67	TPC	Benzo(a)anthracene	1.037	1.022	1.4	96	0.00
68	TP	3,3'-Dichlorobenzidine	0.309	0.321	-3.9	100	0.00
69	TPC	Chrysene	0.980	0.974	0.6	97	0.00
70	TP	bis(2-Ethylhexyl)phthalate	1.470	1.381	6.1	89	0.00
71	I	Perylene-d12	1.000	1.000	0.0	98	0.02
72	TP	Di-n-octylphthalate	2.821	2.653	6.0	93	0.02
73	TPC	Benzo(b)fluoranthene	1.126	1.099	2.4	99	0.00
74	TPC	Benzo(k)fluoranthene	1.088	1.046	3.9	97	0.00
75	TPC	Benzo(a)pyrene	1.036	1.005	3.0	97	0.02
76	TPC	Indeno(1,2,3-cd)pyrene	1.172	1.158	1.2	99	0.00
77	TPC	Dibenz(a,h)anthracene	1.009	1.000	0.9	99	0.02
78	TPC	Benzo(g,h,i)perylene	0.986	0.966	2.0	100	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : Q:\HPCHEM\G\DATA\G1949.D / Vial: 5
Acq On : 22 Jan 98 16:44 Operator: GC/MS
Sample : HP-7G SSTD050GF Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 22 17:26 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



CASE 25969
SDG# FFR76

Quantitation Report (Not Reviewed)

Data File : Q:\HPCHEM\G\DATA\G1949.D
Acq On : 22 Jan 98 16:44
Sample : HP-7G SSTD050GF
Misc : S00497 ; IS=40ng S00501
Quant Time: Jan 22 17:26 1998

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1946.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.06	152	196905	40.00	ng		0.02
17) Naphthalene-d8	10.07	136	590844	40.00	ng		0.00
31) Acenaphthene-d10	16.29	164	288562	40.00	ng		0.02
51) Phenanthrene-d10	19.60	188	530350	40.00	ng		0.00
63) Chrysene-d12	25.36	240	425346	40.00	ng		0.00
71) Perylene-d12	31.46	264	382783	40.00	ng		0.02
System Monitoring Compounds							
2) 2-Fluorophenol	4.81	112	293664	45.74	ng		0.02
Surrogate Spike 150.000	Range 21 - 110		Recovery = 30.49%				
3) Phenol-d5	6.35	99	387905	46.80	ng		0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 31.20%				
7) 1,2-Dichlorobenzene-d4	7.42	152	194338	49.73	ng		0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 49.73%				
8) 2-Chlorophenol-d4	6.72	132	298041	48.01	ng		0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 32.01%#				
18) Nitrobenzene-d5	8.19	82	262417	48.33	ng		0.02
Surrogate Spike 100.000	Range 35 - 114		Recovery = 48.33%				
35) 2-Fluorobiphenyl	14.26	172	427962	50.06	ng		0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 50.06%				
52) 2,4,6-Tribromophenol	18.16	330	65950	49.13	ng		0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 32.75%				
65) Terphenyl-d14	22.64	244	439381	50.39	ng		0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 50.39%				
Target Compounds							Qvalue
4) Phenol	6.37	94	416594	46.97	ng		98
5) bis(2-Chloroethyl)ether	6.57	63	308789	47.67	ng	#	98
6) 2-Chlorophenol	6.75	128	326467	47.57	ng		98
9) 1,3-Dichlorobenzene	7.01	146	362256	49.25	ng		99
10) 1,4-Dichlorobenzene	7.09	146	372905	49.43	ng		99
11) 1,2-Dichlorobenzene	7.45	146	340715	48.72	ng		100
12) 2-Methylphenol	7.42	108	268114	46.93	ng		99
13) 2,2'-oxybis(1-chloropropan	7.52	45	845771	47.01	ng	#	100
14) 4-Methylphenol	7.68	108	294464	47.03	ng		99
15) n-Nitroso-di-n-propylamine	7.80	70	225580	47.99	ng		94
16) Hexachloroethane	8.09	117	115363	47.21	ng		99
19) Nitrobenzene	8.23	77	289021	48.15	ng		98
20) Isophorone	8.72	82	549449	48.32	ng		100
21) 2-Nitrophenol	9.00	139	178134	50.60	ng		95
22) 2,4-Dimethylphenol	8.92	107	238448	47.87	ng		98
23) bis(2-Chloroethoxy)methane	9.19	93	328189	47.87	ng		100
24) 2,4-Dichlorophenol	9.59	162	253493	50.74	ng		99

0872

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1949.D Vial:
Acq On : 22 Jan 98 16:44 Operator: GC/MS
Sample : HP-7G SSTD050GF Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 22 17:26 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1946.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.91	180	250426	51.00	ng		99
26)	Naphthalene	10.14	128	636323	48.42	ng		100
27)	4-Chloroaniline	10.29	127	328913	48.21	ng		99
28)	Hexachlorobutadiene	10.67	225	88153	48.37	ng		99
29)	4-Chloro-3-methylphenol	12.03	107	171241	47.05	ng		99
30)	2-Methylnaphthalene	12.85	142	444543	50.27	ng		100
32)	Hexachlorocyclopentadiene	13.73	237	90164	47.81	ng	#	94
33)	2,4,6-Trichlorophenol	14.00	196	134700	48.79	ng		99
34)	2,4,5-Trichlorophenol	14.12	196	144956	49.23	ng		99
36)	2-Chloronaphthalene	14.63	162	431356	50.20	ng		98
37)	2-Nitroaniline	15.03	65	119480	47.17	ng		98
38)	Dimethylphthalate	15.60	163	508412	50.84	ng		99
39)	Acenaphthylene	15.88	152	633560	50.30	ng		100
40)	2,6-Dinitrotoluene	15.82	165	122066	52.31	ng		98
41)	3-Nitroaniline	16.19	138	140801	50.11	ng	#	97
42)	Acenaphthene	16.37	153	374663	49.89	ng		99
43)	2,4-Dinitrophenol	16.45	184	65775	53.77	ng		98
44)	4-Nitrophenol	16.55	109	43136	46.29	ng		97
45)	Dibenzofuran	16.76	168	634127	50.18	ng		99
46)	2,4-Dinitrotoluene	16.82	165	163835	50.07	ng	#	97
47)	Diethylphthalate	17.36	149	482464	49.97	ng		99
48)	Fluorene	17.58	166	421539	49.64	ng		100
49)	4-Chlorophenyl-phenylether	17.54	204	197220	49.70	ng		99
50)	4-Nitroaniline	17.68	138	144998	49.43	ng		99
53)	4,6-Dinitro-2-methylphenol	17.77	198	94511	52.08	ng	#	99
54)	n-Nitrosodiphenylamine (1)	17.81	169	339214	49.25	ng		100
55)	4-Bromophenyl-phenylether	18.61	248	103603	51.39	ng		98
56)	Hexachlorobenzene	18.97	284	114279	49.23	ng		98
57)	Pentachlorophenol	19.32	266	81204	48.96	ng		98
58)	Phenanthrene	19.66	178	652206	49.58	ng		99
59)	Anthracene	19.75	178	694093	49.87	ng		99
60)	Carbazole	20.05	167	731506	49.42	ng		100
61)	Di-n-butylphthalate	20.69	149	1021479	50.25	ng		100
62)	Fluoranthene	22.02	202	660107	49.60	ng		99
64)	Pyrene	22.47	202	679448	50.00	ng		99
66)	Butylbenzylphthalate	23.62	149	494730	50.47	ng		93
67)	Benzo(a)anthracene	25.30	228	543393	50.15	ng		99
68)	3,3'-Dichlorobenzidine	25.13	252	170610	49.51	ng		99
69)	Chrysene	25.44	228	517908	49.52	ng		99
70)	bis(2-Ethylhexyl)phthalate	25.01	149	734212	50.51	ng		98
72)	Di-n-octylphthalate	27.12	149	1269228	53.14	ng		100
73)	Benzo(b)fluoranthene	29.57	252	526025	51.96	ng		99
74)	Benzo(k)fluoranthene	29.69	252	500674	49.34	ng		98

0873

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1949.D Vial: 1
Acq On : 22 Jan 98 16:44 Operator: GC/MS
Sample : HP-7G SSTD050GF Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 22 17:26 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1946.D
DataAcq Meth : CLPME7

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75) Benzo(a)pyrene	31.22	252	480831	50.16	ng	99
76) Indeno(1,2,3-cd)pyrene	36.41	276	553952	48.71	ng	97
77) Dibenz(a,h)anthracene	36.42	278	478253	48.24	ng	99
78) Benzo(g,h,i)perylene	37.91	276	462245	48.32	ng	97

0874

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date: 1/23/98 Time:1100

Lab File ID:G1966 Init. Calib. Date(s): 1/08/98 1/08/98

Init. Calib. Times: 1044 1403

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.625	1.732	0.800	6.6	25.0
bis(2-Chloroethyl)ether	1.193	1.227	0.700	2.8	25.0
2-Chlorophenol	1.296	1.379	0.800	6.4	25.0
1,3-Dichlorobenzene	1.453	1.491	0.600	2.6	25.0
1,4-Dichlorobenzene	1.499	1.547	0.500	3.2	25.0
1,2-Dichlorobenzene	1.364	1.388	0.400	1.8	25.0
2-Methylphenol	1.037	1.126	0.700	8.6	25.0
2,2'-oxybis(1-Chloropropane)	3.221	3.310		2.8	
4-Methylphenol	1.166	1.229	0.600	5.4	25.0
N-Nitroso-di-n-propylamine	0.884	0.872	0.500	-1.4	25.0
Hexachloroethane	0.461	0.476	0.300	3.2	25.0
Nitrobenzene	0.370	0.387	0.200	4.6	25.0
Isophorone	0.742	0.732	0.400	-1.3	25.0
2-Nitrophenol	0.223	0.249	0.100	11.6	25.0
2,4-Dimethylphenol	0.331	0.325	0.200	-1.8	25.0
bis(2-Chloroethoxy)methane	0.449	0.451	0.300	0.4	25.0
2,4-Dichlorophenol	0.335	0.336	0.200	0.3	25.0
1,2,4-Trichlorobenzene	0.337	0.329	0.200	-2.4	25.0
Naphthalene	0.868	0.870	0.700	0.2	25.0
4-Chloroaniline	0.423	0.453		7.1	
Hexachlorobutadiene	0.122	0.112		-8.2	
4-Chloro-3-methylphenol	0.232	0.229	0.200	-1.3	25.0
2-Methylnaphthalene	0.576	0.581	0.400	0.9	25.0
Hexachlorocyclopentadiene	0.236	0.223		-5.5	
2,4,6-Trichlorophenol	0.371	0.370	0.200	-0.3	25.0
2,4,5-Trichlorophenol	0.383	0.393	0.200	2.6	25.0
2-Chloronaphthalene	1.142	1.155	0.800	1.1	25.0
2-Nitroaniline	0.281	0.330		17.4	
Dimethylphthalate	1.359	1.356		-0.2	
Acenaphthylene	1.737	1.728	0.900	-0.5	25.0
2,6-Dinitrotoluene	0.314	0.336	0.200	7.0	25.0
3-Nitroaniline	0.337	0.391		16.0	
Acenaphthene	1.003	1.025	0.900	2.2	25.0
2,4-Dinitrophenol	0.135	0.167		23.7	
4-Nitrophenol	0.108	0.113		4.6	
Dibenzofuran	1.629	1.760	0.800	8.0	25.0
2,4-Dinitrotoluene	0.421	0.455	0.200	8.1	25.0

All other compounds must meet a minimum RRF of 0.010

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date: 1/23/98 Time:1100

Lab File ID:G1966 Init. Calib. Date(s): 1/08/98 1/08/98

Init. Calib. Times: 1044 1403

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.307	1.314		0.5	
4-Chlorophenyl-phenylether	0.536	0.524	0.400	-2.2	25.0
Fluorene	1.167	1.181	0.900	1.2	25.0
4-Nitroaniline	0.362	0.410		13.2	
4,6-Dinitro-2-methylphenol	0.116	0.131		12.9	
N-Nitrosodiphenylamine (1)	0.496	0.517		4.2	
4-Bromophenyl-phenylether	0.142	0.143	0.100	0.7	25.0
Hexachlorobenzene	0.162	0.166	0.100	2.5	25.0
Pentachlorophenol	0.106	0.116	0.050	9.4	25.0
Phenanthrene	0.951	0.986	0.700	3.7	25.0
Anthracene	1.002	1.020	0.700	1.8	25.0
Carbazole	1.048	1.103		5.2	
Di-n-butylphthalate	1.506	1.539		2.2	
Fluoranthene	0.962	0.988	0.600	2.7	25.0
Pyrene	1.303	1.357	0.600	4.1	25.0
Butylbenzylphthalate	0.984	0.992		0.8	
3,3'-Dichlorobenzidine	0.309	0.368		19.1	
Benzo(a)anthracene	1.037	1.028	0.800	-0.9	25.0
Chrysene	0.980	0.972	0.700	-0.8	25.0
bis(2-Ethylhexyl)phthalate	1.470	1.440		-2.0	
Di-n-octylphthalate	2.821	2.646		-6.2	
Benzo(b)fluoranthene	1.126	1.068	0.700	-5.2	25.0
Benzo(k)fluoranthene	1.088	1.014	0.700	-6.8	25.0
Benzo(a)pyrene	1.036	0.996	0.700	-3.9	25.0
Indeno(1,2,3-cd)pyrene	1.171	1.241	0.500	6.0	25.0
Dibenz(a,h)anthracene	1.009	1.056	0.400	4.6	25.0
Benzo(g,h,i)perylene	0.986	1.068	0.500	8.3	25.0
Nitrobenzene-d5	0.340	0.355	0.200	4.4	25.0
2-Fluorobiphenyl	1.191	1.167	0.700	-2.0	25.0
Terphenyl-d14	0.830	0.838	0.500	1.0	25.0
Phenol-d5	1.540	1.648	0.800	7.0	25.0
2-Fluorophenol	1.171	1.272	0.600	8.6	25.0
2,4,6-Tribromophenol	0.094	0.097		3.2	
2-Chlorophenol-d4	1.196	1.271	0.800	6.3	25.0
1,2-Dichlorobenzene-d4	0.782	0.787	0.400	0.6	25.0

(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of 0.010

Evaluate Continuing Calibration Report

Data File : Q:\HPCHEM\G\DATA\G1966.D Vial: 1
Acq On : 23 Jan 98 11:00 Operator: GC/MS
Sample : HP-7G SSTD050GG Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00
2	SPC	2-Fluorophenol	1.171	1.273	-8.7	124	0.00
3	SPC	Phenol-d5	1.540	1.648	-7.0	122	0.00
4	TPCM	Phenol	1.624	1.732	-6.7	121	0.00
5	TPC	bis(2-Chloroethyl)ether	1.193	1.227	-2.8	116	0.00
6	MTPC	2-Chlorophenol	1.296	1.379	-6.4	121	0.00
7	SPC	1,2-Dichlorobenzene-d4	0.782	0.787	-0.6	112	0.00
8	SPC	2-Chlorophenol-d4	1.196	1.271	-6.3	120	0.00
9	TPC	1,3-Dichlorobenzene	1.453	1.491	-2.6	114	0.00
10	MTPC	1,4-Dichlorobenzene	1.499	1.547	-3.2	117	0.00
11	TPC	1,2-Dichlorobenzene	1.364	1.388	-1.8	113	0.00
12	TC	2-Methylphenol	1.037	1.126	-8.6	118	0.00
13	TP	2,2'-oxybis(1-chloropropane	3.221	3.310	-2.8	119	0.00
14	TPC	4-Methylphenol	1.167	1.229	-5.3	119	0.00
15	MTPC	n-Nitroso-di-n-propylamine	0.884	0.872	1.4	113	0.00
16	TPC	Hexachloroethane	0.461	0.476	-3.3	118	0.00
17	I	Naphthalene-d8	1.000	1.000	0.0	113	0.00
18	SPC	Nitrobenzene-d5	0.340	0.355	-4.4	121	0.00
19	TPC	Nitrobenzene	0.370	0.387	-4.6	119	0.00
20	TPC	Isophorone	0.742	0.732	1.3	111	0.00
21	TPC	2-Nitrophenol	0.223	0.249	-11.7	127	0.00
22	TPC	2,4-Dimethylphenol	0.331	0.325	1.8	111	0.00
23	TPC	bis(2-Chloroethoxy)methane	0.449	0.451	-0.4	113	0.00
24	TPC	2,4-Dichlorophenol	0.335	0.336	-0.3	111	0.00
25	MTPC	1,2,4-Trichlorobenzene	0.337	0.329	2.4	108	0.00
26	TPC	Naphthalene	0.868	0.870	-0.2	114	0.00
27	TP	4-Chloroaniline	0.423	0.453	-7.1	116	0.00
28	TP	Hexachlorobutadiene	0.121	0.112	7.4	104	0.00
29	MTPC	4-Chloro-3-methylphenol	0.232	0.229	1.3	112	0.00
30	TPC	2-Methylnaphthalene	0.576	0.581	-0.9	108	0.00
31	I	Acenaphthene-d10	1.000	1.000	0.0	104	0.00
32	TP	Hexachlorocyclopentadiene	0.236	0.223	5.5	102	0.00
33	TPC	2,4,6-Trichlorophenol	0.371	0.370	0.3	103	0.00
34	TPC	2,4,5-Trichlorophenol	0.383	0.393	-2.6	103	0.00
35	SPC	2-Fluorobiphenyl	1.191	1.167	2.0	101	0.00
36	TPC	2-Chloronaphthalene	1.142	1.155	-1.1	103	0.00
37	TP	2-Nitroaniline	0.281	0.330	-17.4	120	0.00
38	TP	Dimethylphthalate	1.359	1.356	0.2	102	0.00
39	TPC	Acenaphthylene	1.737	1.728	0.5	103	0.00
40	TPC	2,6-Dinitrotoluene	0.314	0.336	-7.0	112	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1966.D Vial: 1
Acq On : 23 Jan 98 11:00 Operator: GC/MS
Sample : HP-7G SSTD050GG Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TP	3-Nitroaniline	0.338	0.391	-15.7	116	0.00
42	MTPC	Acenaphthene	1.003	1.025	-2.2	105	0.00
43	TP	2,4-Dinitrophenol	0.135	0.167	-23.7	186	0.00
44	MTP	4-Nitrophenol	0.108	0.113	-4.6	112	0.00
45	TPC	Dibenzofuran	1.629	1.760	-8.0	104	0.00
46	MTPC	2,4-Dinitrotoluene	0.421	0.455	-8.1	113	0.00
47	TP	Diethylphthalate	1.307	1.314	-0.5	103	0.00
48	TPC	Fluorene	1.167	1.181	-1.2	103	0.00
49	TPC	4-Chlorophenyl-phenylether	0.536	0.524	2.2	99	0.00
50	TP	4-Nitroaniline	0.362	0.410	-13.3	114	0.00
51	I	Phenanthrene-d10	1.000	1.000	0.0	103	0.00
52	SP	2,4,6-Tribromophenol	0.094	0.097	-3.2	107	0.00
53	TP	4,6-Dinitro-2-methylphenol	0.116	0.131	-12.9	132	0.00
54	TP	n-Nitrosodiphenylamine (1)	0.496	0.517	-4.2	104	0.00
55	TPC	4-Bromophenyl-phenylether	0.142	0.143	-0.7	102	0.00
56	TPC	Hexachlorobenzene	0.162	0.166	-2.5	104	0.00
57	MTPC	Pentachlorophenol	0.106	0.116	-9.4	111	0.00
58	TPC	Phenanthrene	0.951	0.986	-3.7	104	0.00
59	TPC	Anthracene	1.002	1.020	-1.8	102	0.00
60	TP	Carbazole	1.048	1.103	-5.2	105	0.00
61	TP	Di-n-butylphthalate	1.507	1.539	-2.1	102	0.00
62	TPC	Fluoranthene	0.962	0.988	-2.7	103	0.00
63	I	Chrysene-d12	1.000	1.000	0.0	105	0.00
64	MTPC	Pyrene	1.303	1.357	-4.1	105	0.00
65	SPC	Terphenyl-d14	0.830	0.838	-1.0	104	0.00
66	TP	Butylbenzylphthalate	0.984	0.992	-0.8	103	0.00
67	TPC	Benzo(a)anthracene	1.037	1.028	0.9	105	0.00
68	TP	3,3'-Dichlorobenzidine	0.309	0.368	-19.1	124	0.00
69	TPC	Chrysene	0.980	0.972	0.8	105	0.00
70	TP	bis(2-Ethylhexyl)phthalate	1.470	1.440	2.0	101	0.00
71	I	Perylene-d12	1.000	1.000	0.0	112	0.00
72	TP	Di-n-octylphthalate	2.821	2.646	6.2	105	0.00
73	TPC	Benzo(b)fluoranthene	1.126	1.068	5.2	109	0.00
74	TPC	Benzo(k)fluoranthene	1.088	1.014	6.8	107	0.00
75	TPC	Benzo(a)pyrene	1.036	0.996	3.9	109	0.00
76	TPC	Indeno(1,2,3-cd)pyrene	1.172	1.241	-5.9	120	0.00
77	TPC	Dibenz(a,h)anthracene	1.009	1.056	-4.7	119	0.00
78	TPC	Benzo(g,h,i)perylene	0.986	1.069	-8.4	126	0.00

0878

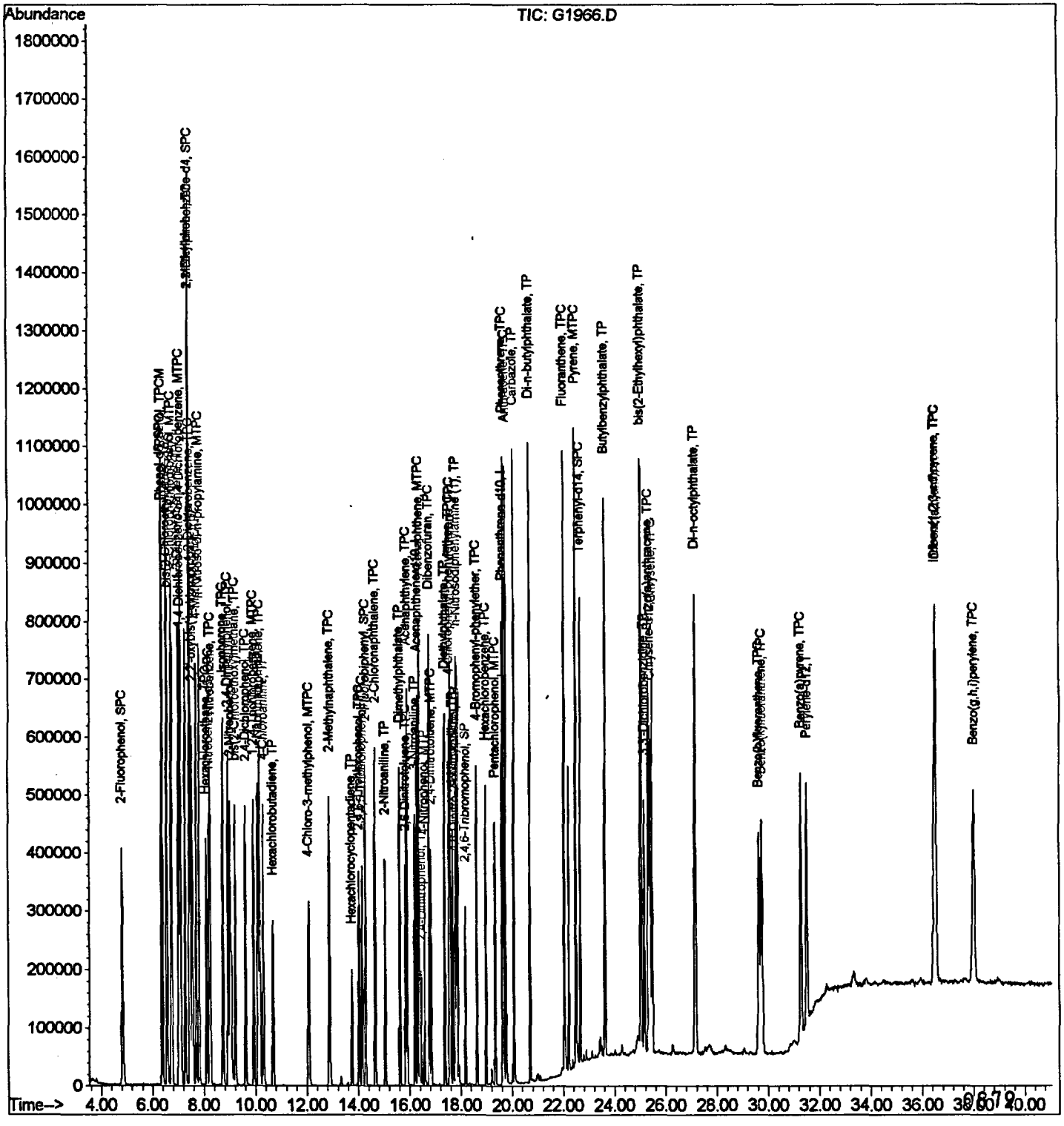
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

CASE 25969
SDG# EFR76

Data File : Q:\HPCHEM\G\DATA\G1966.D / Vial
Acq On : 23 Jan 98 11:00 Operator : GC/MS
Sample : HP-7G SSTD050GG Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 23 11:58 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1966.D Vial:
Acq On : 23 Jan 98 11:00 Operator: GC/MS
Sample : HP-7G SSTD050GG Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 23 11:58 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1966.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	241893	40.00	ng		0.00
17) Naphthalene-d8	10.10	136	718358	40.00	ng		0.00
31) Acenaphthene-d10	16.30	164	336756	40.00	ng		0.00
51) Phenanthrene-d10	19.63	188	617005	40.00	ng		0.00
63) Chrysene-d12	25.40	240	461662	40.00	ng		0.00
71) Perylene-d12	31.51	264	435189	40.00	ng		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.82	112	384778	50.00	ng		0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 33.33%				
3) Phenol-d5	6.36	99	498354	50.00	ng		0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 33.33%				
7) 1,2-Dichlorobenzene-d4	7.44	152	238018	50.00	ng		0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 50.00%				
8) 2-Chlorophenol-d4	6.73	132	384393	50.00	ng		0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 33.33%				
18) Nitrobenzene-d5	8.21	82	318620	50.00	ng		0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 50.00%				
35) 2-Fluorobiphenyl	14.29	172	491274	50.00	ng		0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 50.00%				
52) 2,4,6-Tribromophenol	18.19	330	74889	50.00	ng		0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 33.33%				
65) Terphenyl-d14	22.67	244	483510	50.00	ng		0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 50.00%				
Target Compounds							Qvalue
4) Phenol	6.38	94	523757	50.00	ng		100
5) bis(2-Chloroethyl)ether	6.58	63	370953	50.00	ng		100
6) 2-Chlorophenol	6.75	128	416846	50.00	ng		100
9) 1,3-Dichlorobenzene	7.02	146	450950	50.00	ng		100
10) 1,4-Dichlorobenzene	7.10	146	467768	50.00	ng		100
11) 1,2-Dichlorobenzene	7.47	146	419543	50.00	ng		100
12) 2-Methylphenol	7.44	108	340407	50.00	ng		100
13) 2,2'-oxybis(1-chloropropan	7.54	45	1000778	50.00	ng	#	100
14) 4-Methylphenol	7.71	108	371583	50.00	ng		100
15) n-Nitroso-di-n-propylamine	7.82	70	263814	50.00	ng		100
16) Hexachloroethane	8.09	117	143925	50.00	ng		100
19) Nitrobenzene	8.25	77	347627	50.00	ng		100
20) Isophorone	8.74	82	657564	50.00	ng		100
21) 2-Nitrophenol	9.02	139	223647	50.00	ng		100
22) 2,4-Dimethylphenol	8.93	107	291747	50.00	ng		100
23) bis(2-Chloroethoxy)methane	9.21	93	405388	50.00	ng		100
24) 2,4-Dichlorophenol	9.62	162	302059	50.00	ng		100

(#) = qualifier out of range (m) = manual integration 0880

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1966.D / Vial: 1
Acq On : 23 Jan 98 11:00 Operator: GC/MS
Sample : HP-7G SSTD050GG Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 23 11:58 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1966.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.93	180	295783	50.00	ng		100
26)	Naphthalene	10.16	128	780842	50.00	ng		100
27)	4-Chloroaniline	10.31	127	406672	50.00	ng		100
28)	Hexachlorobutadiene	10.68	225	100406	50.00	ng		100
29)	4-Chloro-3-methylphenol	12.08	107	205753	50.00	ng		100
30)	2-Methylnaphthalene	12.88	142	521786	50.00	ng		100
32)	Hexachlorocyclopentadiene	13.75	237	93999	50.00	ng	#	100
33)	2,4,6-Trichlorophenol	14.03	196	155821	50.00	ng		100
34)	2,4,5-Trichlorophenol	14.15	196	165351	50.00	ng		100
36)	2-Chloronaphthalene	14.66	162	486181	50.00	ng		100
37)	2-Nitroaniline	15.05	65	138912	50.00	ng		100
38)	Dimethylphthalate	15.62	163	570936	50.00	ng		100
39)	Acenaphthylene	15.90	152	727244	50.00	ng		100
40)	2,6-Dinitrotoluene	15.84	165	141412	50.00	ng		100
41)	3-Nitroaniline	16.21	138	164733	50.00	ng	#	100
42)	Acenaphthene	16.39	153	431596	50.00	ng		100
43)	2,4-Dinitrophenol	16.48	184	70466	50.00	ng		100
44)	4-Nitrophenol	16.59	109	47727	50.00	ng		100
45)	Dibenzofuran	16.78	168	740917	50.00	ng		100
46)	2,4-Dinitrotoluene	16.85	165	191732	50.00	ng	#	100
47)	Diethylphthalate	17.38	149	553230	50.00	ng		100
48)	Fluorene	17.59	166	497097	50.00	ng		100
49)	4-Chlorophenyl-phenylether	17.55	204	220629	50.00	ng		100
50)	4-Nitroaniline	17.70	138	172550	50.00	ng		100
53)	4,6-Dinitro-2-methylphenol	17.79	198	100741	50.00	ng	#	100
54)	n-Nitrosodiphenylamine (1)	17.84	169	398590	50.00	ng		100
55)	4-Bromophenyl-phenylether	18.63	248	110018	50.00	ng		100
56)	Hexachlorobenzene	18.99	284	128321	50.00	ng		100
57)	Pentachlorophenol	19.35	266	89455	50.00	ng		100
58)	Phenanthrene	19.67	178	760081	50.00	ng		100
59)	Anthracene	19.76	178	786463	50.00	ng		100
60)	Carbazole	20.08	167	851034	50.00	ng		100
61)	Di-n-butylphthalate	20.70	149	1186750	50.00	ng		100
62)	Fluoranthene	22.04	202	761984	50.00	ng		100
64)	Pyrene	22.49	202	783081	50.00	ng		100
66)	Butylbenzylphthalate	23.63	149	572396	50.00	ng		100
67)	Benzo(a)anthracene	25.33	228	592967	50.00	ng		100
68)	3,3'-Dichlorobenzidine	25.17	252	212426	50.00	ng		100
69)	Chrysene	25.48	228	561198	50.00	ng		100
70)	bis(2-Ethylhexyl)phthalate	25.05	149	831204	50.00	ng		100
72)	Di-n-octylphthalate	27.16	149	1439436	50.00	ng		100
73)	Benzo(b)fluoranthene	29.65	252	580809	50.00	ng		100
74)	Benzo(k)fluoranthene	29.76	252	551513	50.00	ng		100

0881

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1966.D/ Vial:
Acq On : 23 Jan 98 11:00 Operator: GC/MS
Sample : HP-7G SSTD050GG Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 23 11:58 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1966.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	Benzo(a)pyrene	31.28	252	541615	50.00	ng	100
76)	Indeno(1,2,3-cd)pyrene	36.51	276	675036	50.00	ng	100
77)	Dibenz(a,h)anthracene	36.52	278	574681	50.00	ng	100
78)	Benzo(g,h,i)perylene	38.02	276	581253	50.00	ng	100

(#) = qualifier out of range (m) = manual integration

0882

SEMIVOLATILES

RAW QC DATA

DFTPP

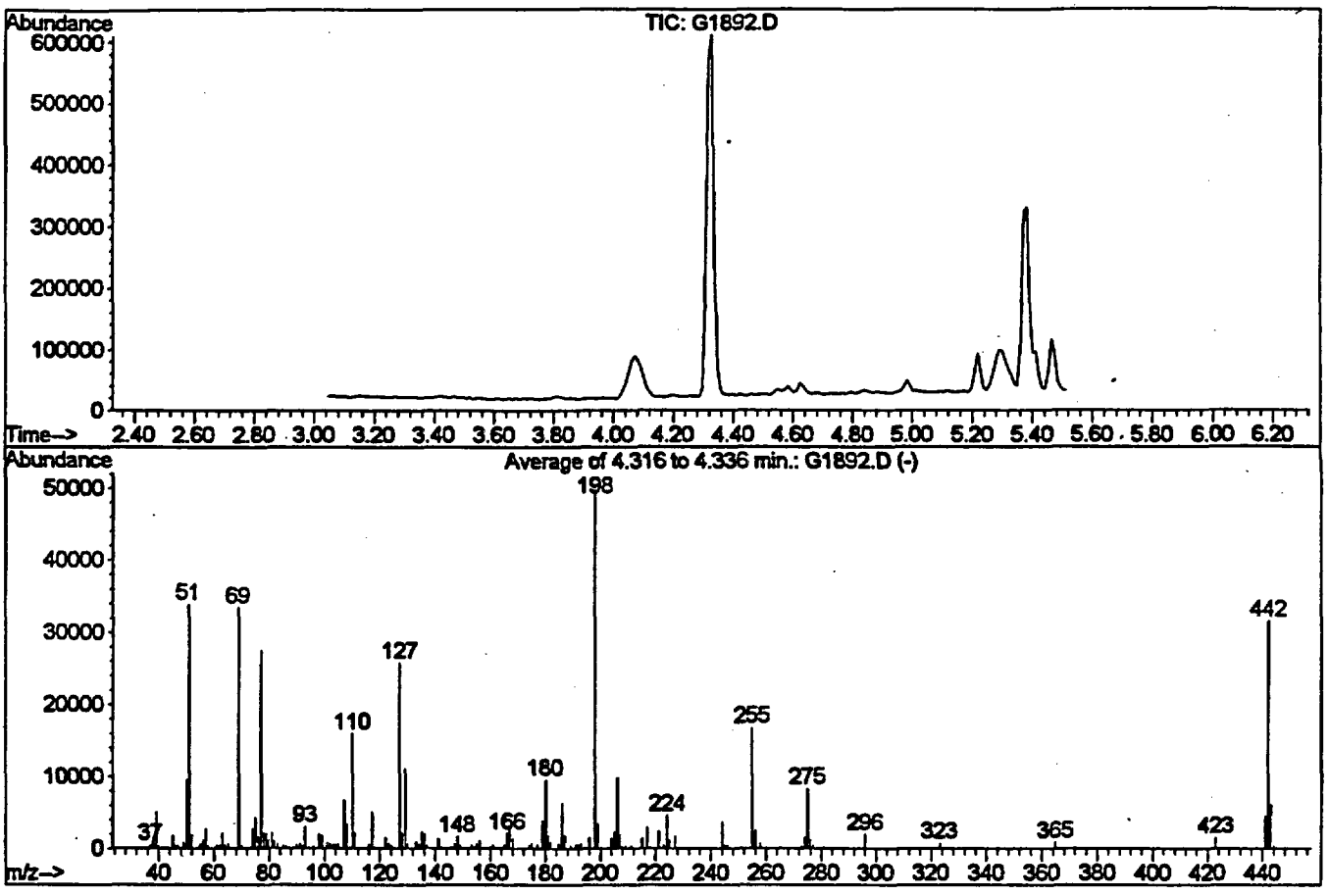
CASE 25960
SDG # FFR76

Data File : Q:\HPCHEM\G\DATA\G1892.D
Acq On : 8 Jan 98 9:25
Sample : (HP-7G) 50 ng DFTPP
Misc : 2ul S00147

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\DFT72UL.M
Title :

COPY-ORIGINAL IS FILED IN CSF 25960 DN F55



AutoFind: Scans 125, 126, 127; Background Corrected with Scan 120

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	68.0	33765	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.01	100	67.2	33343	PASS
70	69	0.00	2	1.1	383	PASS
127	198	25	75	51.6	25630	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	49624	PASS
199	198	5	9	6.9	3418	PASS
275	198	10	30	16.7	8300	PASS
365	198	1	100	1.7	867	PASS
441	443	0.01	99	73.0	4454	PASS
442	198	40	110	63.5	31517	PASS
443	442	15	24	19.4	6104	PASS

0883

G1892.D DFT72UL.M Thu Jan 08 09:31:27 1998 CLAYTON

KR 77

CASE 25969
SDG# FFR76

COPY-ORIGINAL IS FILED IN CSF 25969DN55

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	478	51.00	33765 ✓	69.00	33343	82.00	1067
38.00	1075	51.95	1814	70.00	383	83.05	735
39.05	5029	55.00	609	73.10	171	83.95	47
40.00	467	56.00	1160	74.10	2726	85.05	411
41.00	225	57.00	2728	75.10	4279	85.95	263
43.95	32	58.00	420	76.05	1636	90.05	494
44.95	1721	61.00	486	77.05	27365	91.05	597
46.00	415	62.00	485	78.05	2091	92.05	401
47.00	370	63.00	2119	79.00	2004	93.05	2998
48.95	840	64.00	457	79.95	1223	96.00	283
50.05	9601	65.05	604	80.95	2085	98.05	1972

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
99.05	1731	116.05	546	133.05	914	153.00	420
101.00	803	117.05	5068	134.05	541	154.00	192
102.00	643	118.00	180	135.05	2310	155.00	597
103.00	551	122.10	1523	136.05	2019	156.00	1057
104.00	561	123.05	709	137.05	492	160.00	180
105.00	599	124.00	420	141.05	1345	161.00	525
107.00	6737	125.05	168	142.05	224	165.00	581
108.00	3287	127.05	25630	146.05	167	166.00	2070
109.00	280	128.05	2091	147.05	674	167.00	3095
110.00	15870	129.05	11072	148.00	1644	168.00	1351
111.00	2146	130.05	694	149.00	432	173.95	429

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.05	732	192.05	537	211.05	385	245.95	466
176.95	536	193.05	757	215.00	1414	255.00	16700
178.95	3855	196.00	1541	217.00	2905	256.00	2473
180.00	9531	198.00	49624 ✓	218.00	199	258.00	707
181.00	1736	199.00	3418	220.95	2363	265.00	183
182.00	1018	204.00	1389	223.00	466	272.95	281
185.00	659	205.05	2317	224.05	4583	273.95	1514
186.05	6241	206.00	9803	225.05	1095	274.95	8300
187.05	1767	207.00	1889	226.95	1668	275.95	1182
188.95	430	208.00	267	244.00	3679	277.00	511
191.05	619	209.00	361	245.00	447	281.05	168

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.00	1978						
323.00	756						
334.05	217						
364.90	867						
372.05	196						
422.95	1530						
441.00	4454						
442.00	31517 ✓						
443.00	6104						
444.00	495						

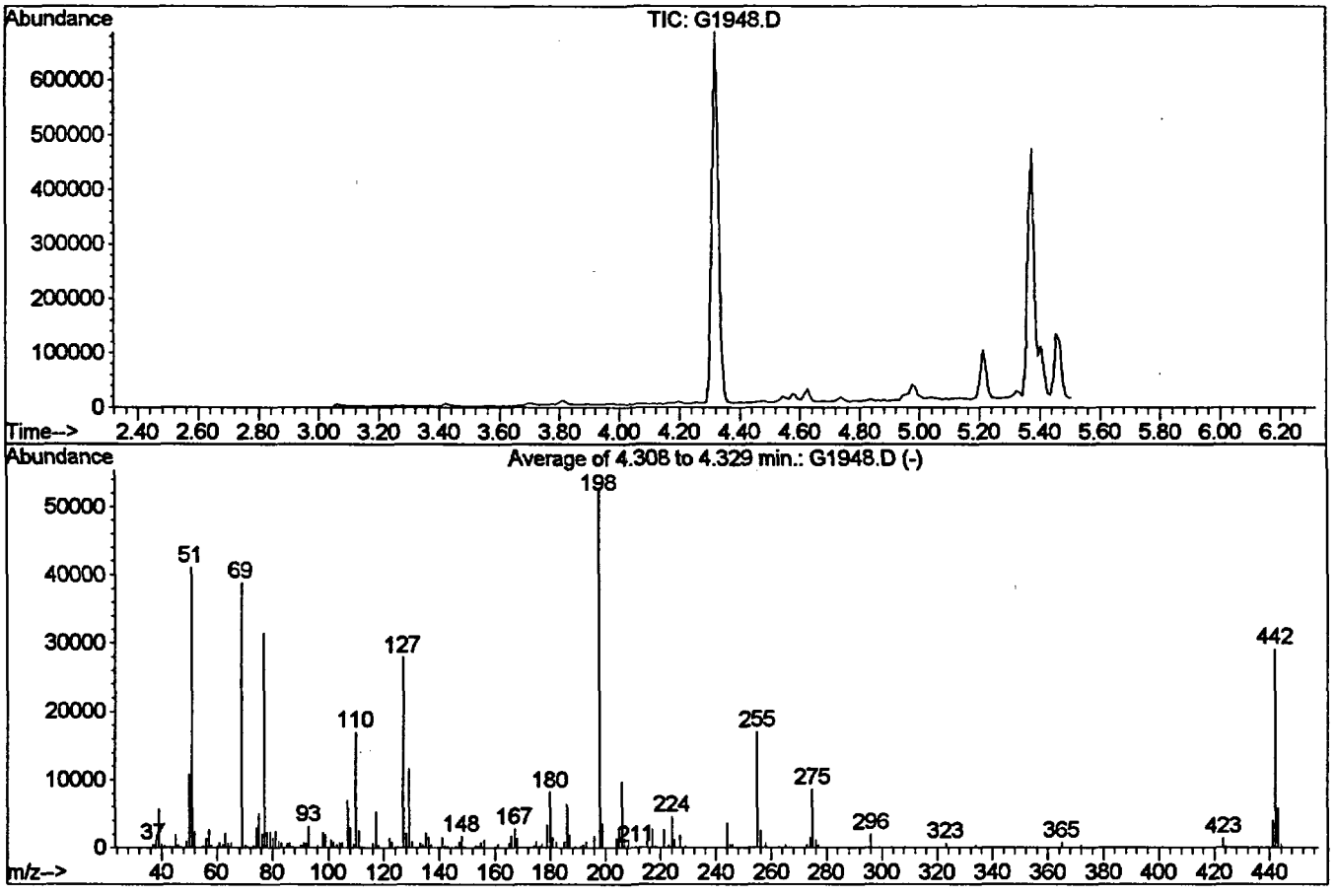
CASE 25988
SDG# FFR76

DFTPP

Data File : Q:\HPCHEM\G\DATA\G1948.D
Acq On : 22 Jan 98 16:33
Sample : (HP-7G) 50 ng DFTPP
Misc : 2ul S00147

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\DFT72UL.M
Title :



AutoFind: Scans 124, 125, 126; Background Corrected with Scan 120

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	77.7	41019	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.01	100	73.6	38859	PASS
70	69	0.00	2	1.1	426	PASS
127	198	25	75	53.0	27979	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	52768	PASS
199	198	5	9	6.6	3497	PASS
275	198	10	30	16.3	8608	PASS
365	198	1	100	1.5	802	PASS
441	443	0.01	99	70.4	4030	PASS
442	198	40	110	55.2	29127	PASS
443	442	15	24	19.6	5723	PASS

0885

✓ 01/22/98

G1948.D DFT72UL.M Thu Jan 22 16:38:58 1998 CLAYTON

RAT-7

CASE 25969
SDG# FFR76

Average of 4.308 to 4.329 min.: G1948.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	471	51.00	41019	65.05	744	80.00	1511
38.00	1146	52.00	2325	69.00	38859	81.05	2444
39.05	5782	55.05	346	70.05	426	82.05	1035
40.00	560	56.00	1280	71.10	178	83.05	757
41.05	338	57.00	2702	73.10	264	85.05	579
43.05	126	58.00	372	74.10	3007	86.05	711
44.00	144	60.00	251	75.05	4990	87.05	174
45.05	1901	61.00	781	76.05	2059	90.10	400
46.00	403	62.10	500	77.05	31384	91.05	752
49.00	963	63.05	2119	78.05	2353	92.05	653
50.05	10864	64.00	673	79.05	2346	93.05	3185

Average of 4.308 to 4.329 min.: G1948.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.10	291	110.00	17019	128.05	2179	146.00	180
98.05	2205	111.05	2552	129.05	11622	147.00	873
99.00	1842	112.10	169	130.05	988	148.00	1676
101.00	1115	116.10	688	133.05	693	149.00	208
102.00	823	117.10	5305	134.05	457	153.00	372
103.05	491	118.05	397	135.05	2163	154.00	185
104.00	792	122.00	1413	136.05	1596	155.00	781
105.05	767	123.00	852	137.05	448	156.05	1175
107.00	6915	124.05	210	141.00	1493	160.00	206
108.05	2999	124.95	176	142.05	265	161.05	620
109.10	536	127.05	27979	143.05	167	165.00	688

Average of 4.308 to 4.329 min.: G1948.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
166.00	1782	185.05	837	205.00	2381	225.05	1170
167.05	2840	186.05	6351	206.10	9723	227.00	1776
168.00	1421	187.05	1878	207.00	1540	228.95	181
174.05	293	189.05	205	208.05	884	244.00	3661
175.05	943	191.05	193	211.00	222	245.00	482
176.05	168	192.05	477	215.00	1192	246.00	461
177.00	538	192.95	826	216.95	2744	255.00	16994
179.00	3349	196.00	1727	217.95	177	256.00	2555
180.05	8214	198.00	52768	221.05	2589	258.00	702
181.05	1508	199.00	3497	223.00	404	264.95	379
182.05	820	204.00	1375	224.05	4533	272.95	490

Average of 4.308 to 4.329 min.: G1948.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.05	1516	441.00	4030				
275.00	8608	442.00	29127				
276.00	1155	443.00	5723				
276.95	481	444.05	534				
296.00	1943						
323.05	661						
333.95	374						
364.95	802						
372.05	355						
423.05	1440						
423.95	188						

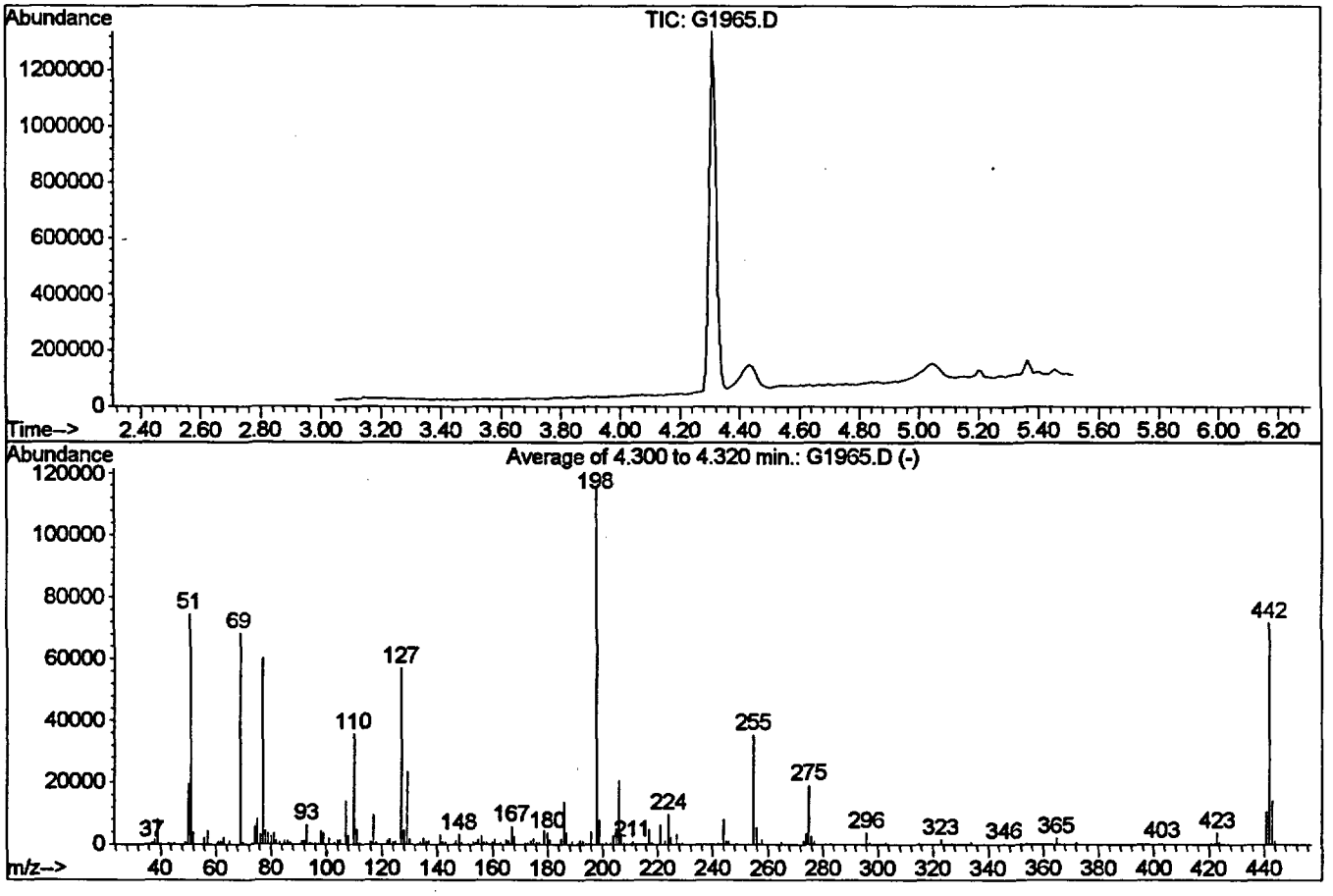
CASE 25969
SDG# FFR76

DFTPP

Data File : Q:\HPCHEM\G\DATA\G1965.D
Acq On : 23 Jan 98 10:47
Sample : (HP-7G) 50 ng DFTPP
Misc : 2ul S00147

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\DFT72UL.M
Title :



AutoFind: Scans 123, 124, 125; Background Corrected with Scan 119

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	64.5	74597	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.01	100	59.1	68371	PASS
70	69	0.00	2	1.0	698	PASS
127	198	25	75	49.2	56984	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	115741	PASS
199	198	5	9	6.8	7899	PASS
275	198	10	30	16.5	19076	PASS
365	198	1	100	1.6	1900	PASS
441	443	0.01	99	75.9	10763	PASS
442	198	40	110	62.0	71752	PASS
443	442	15	24	19.8	14185	PASS

0887

G1965.D DFT72UL.M Fri Jan 23 10:53:35 1998 CLAYTON

CASE 23969
SDG# FFR76

Average of 4.300 to 4.320 min.: G1965.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	611	55.05	206	73.10	343	85.05	1178
38.05	1551	56.00	2133	74.10	5602	86.00	1103
39.05	8154	57.00	4391	75.05	8024	87.05	756
40.00	350	61.00	1004	76.15	3264	91.05	1234
43.05	356	62.00	881	77.05	60224	92.10	1153
44.00	115	63.05	2287	78.05	4414	93.05	6211
45.05	409	65.05	1234	79.05	3561	94.10	478
49.05	701	67.10	28	80.00	2879	95.15	138
50.05	19668	69.00	68371	81.05	3616	96.05	332
51.00	74597	70.05	698	82.05	1388	97.15	92
52.00	4051	71.10	99	83.05	755	98.05	4202

Average of 4.300 to 4.320 min.: G1965.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
99.00	3511	116.05	1024	130.00	1873	147.00	1407
99.90	168	117.05	9556	131.05	202	148.00	3218
101.00	1985	118.10	832	133.05	99	149.00	768
103.00	657	119.00	208	134.05	853	151.20	408
104.00	1410	122.00	1149	135.05	1965	152.00	173
105.00	1436	123.05	1758	136.05	1230	153.00	908
107.00	13850	124.00	762	137.05	1212	154.00	646
108.05	2820	125.05	959	141.05	2915	155.05	1604
110.00	35557	127.05	56984	142.05	1030	156.10	2576
111.05	4739	128.05	4544	143.00	730	157.05	711
112.10	522	129.05	23376	146.10	282	158.00	693

Average of 4.300 to 4.320 min.: G1965.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.00	266	172.95	513	187.05	3871	200.00	431
160.00	752	174.00	1189	188.05	191	201.55	584
161.05	1496	175.05	2033	189.05	931	203.00	628
162.00	174	176.05	854	191.05	273	204.00	2815
163.00	570	177.00	827	192.00	1293	205.05	5153
165.05	1432	178.05	184	193.00	1250	206.05	20663
166.05	1169	178.95	4452	194.00	187	207.00	3869
167.05	5724	180.05	3807	195.10	223	208.00	583
168.05	2578	181.05	1530	196.00	3946	209.00	420
168.95	184	185.05	1836	198.00	115741	210.15	388
172.00	402	186.05	13695	199.00	7899	210.70	400

Average of 4.300 to 4.320 min.: G1965.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.05	890	228.00	405	253.00	260	281.05	189
215.00	175	229.00	581	255.00	35291	282.00	23
216.05	239	230.95	169	256.00	5329	283.05	472
216.95	4733	234.95	171	257.00	375	296.00	3824
217.95	500	237.05	171	258.00	1658	296.95	505
221.00	6318	242.00	444	264.95	751	303.05	530
223.00	1231	243.00	251	273.00	1191	314.90	441
224.05	9650	244.00	8099	274.00	3410	323.05	1548
225.05	2482	245.00	1097	274.95	19076	327.00	376
226.05	187	245.95	907	275.95	2683	333.95	810
226.95	3241	249.00	168	276.95	1246	346.00	361

Average of 4.300 to 4.320 min.: G1965.D
(HP-7G) 50 ng DFTPP

CASE 25969
SDG# FFR76

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.00	432	441.00	10763				
354.00	472	442.00	71752				
355.10	212	443.00	14185				
364.95	1900	444.00	1165				
372.05	810						
402.00	189						
403.00	475						
420.95	416						
422.00	466						
423.05	3733						
424.05	765						

CASE 25969
SDG# FFR76

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: SBLKS1

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-010

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1950

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKS1

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-010

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1950

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

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	44.	J
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	Dibenz(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.

SBLKS1

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-010

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1950

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

% Moisture: 0 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

Number TICs Found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown	3.67	140.	J
2.	123-42-2	2-Pentanone, 4-hydroxy-4-met	4.21	9600.	JNA
3.	822-67-3	2-Cyclohexen-1-ol	5.18	280.	JN
4.		trans-3-Hexene-2,5-dione	5.99	330.	J
5.	123-79-5	Hexanedioic acid, dioctyl es	23.58	120.	JN
6.	28553-12-0	1,2-Benzenedicarboxylic acid	27.11	170.	JN
7.		Unknown phthalate	27.60	98.	J
8.		Unknown phthalate	27.97	95.	J
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
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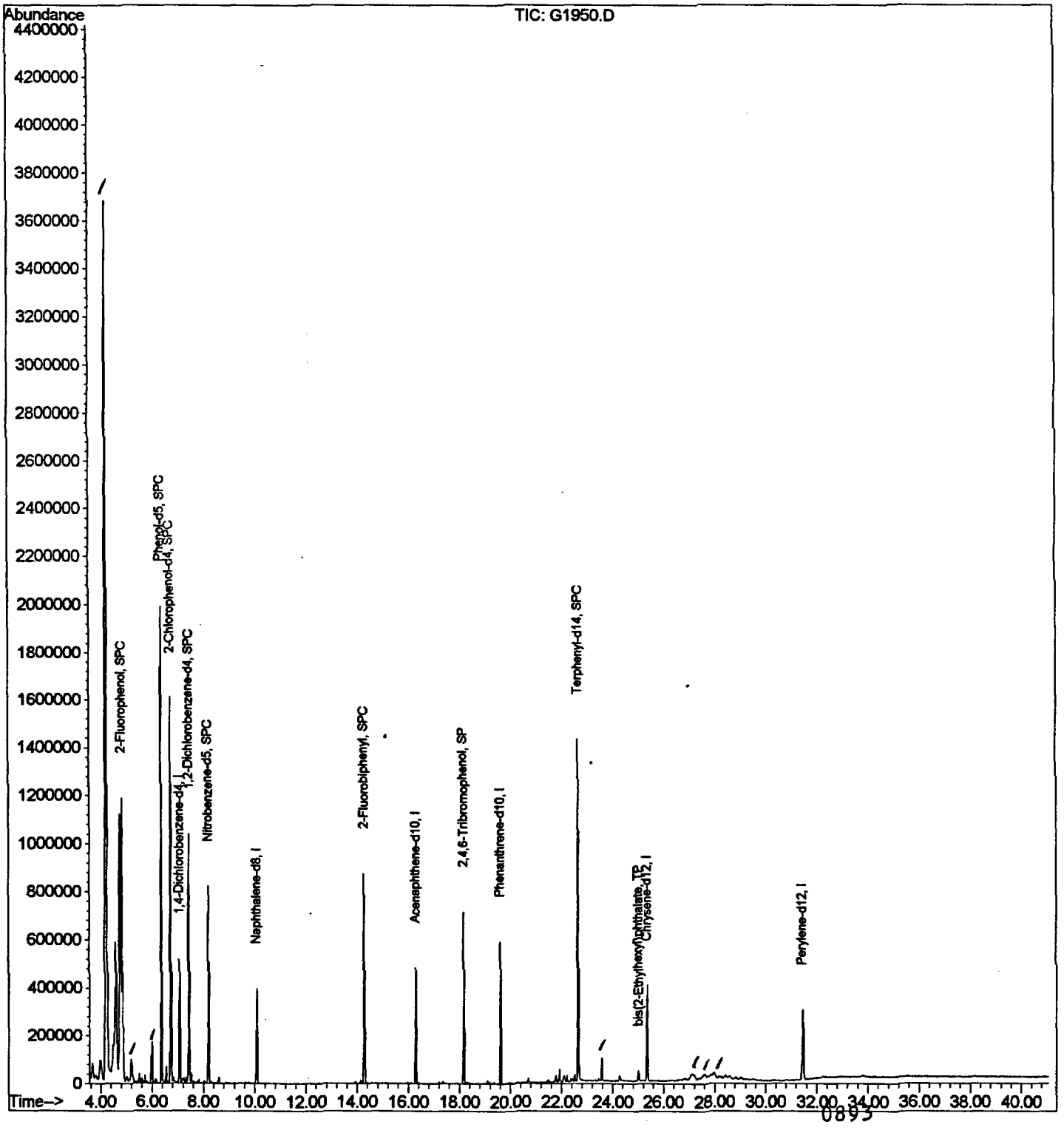
24.					
25.					
26.					
27.					
28.					
29.					
30.					

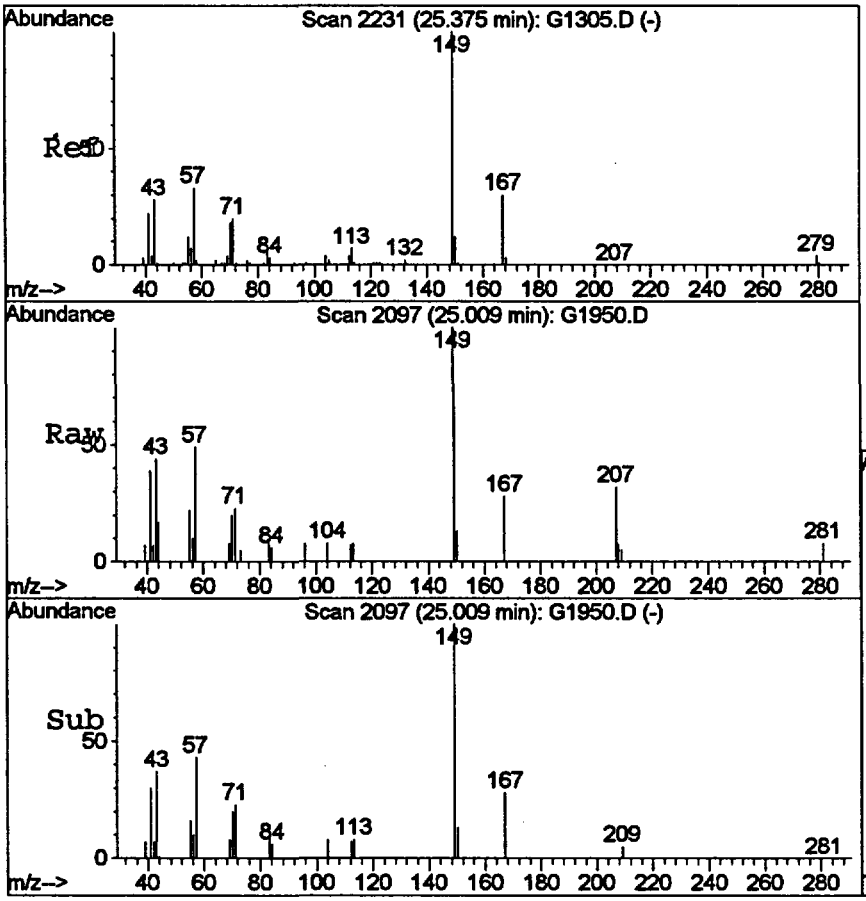
Quantitation Report

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:09 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



0893

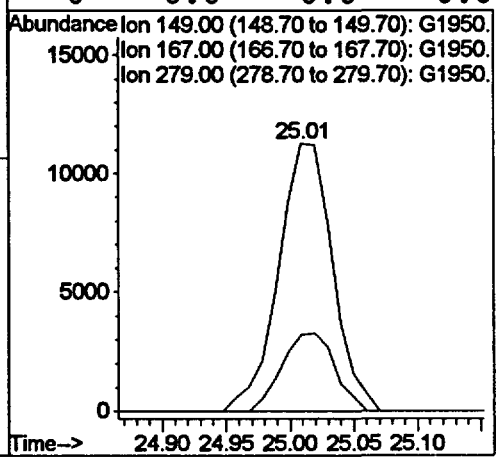


#70
bis(2-Ethylhexyl)phthalate
Concen: 2.62 ng
RT: 25.01 min Scan# 2097
Delta R.T. -0.00 min
Lab File: G1950.D
Acq: 22 Jan 98 17:50

CASE 25969
SDG# HR76

Tgt Ion:149 Resp: 33096

Ion	Ratio	Lower	Upper
149	100		
167	0.0	10.6	50.6#
279	0.0	0.0	23.8
0	0.0	0.0	0.0



0894

Sample Name: S HP-7G 58073-010 SBLKS1
G1950.D CLPME7.M Mon Jan 26 11:09:17 1998

Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial:
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 11:09 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.06	152	175008	40.00	ng	0.00
17) Naphthalene-d8	10.07	136	521940	40.00	ng	0.00
31) Acenaphthene-d10	16.29	164	247856	40.00	ng	0.00
51) Phenanthrene-d10	19.61	188	444889	40.00	ng	0.01
63) Chrysene-d12	25.36	240	366054	40.00	ng	0.00
71) Perylene-d12	31.45	264	324892	40.00	ng	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	4.82	112	864614	165.63	ng	0.01
Surrogate Spike 150.000	Range 25 - 121		Recovery = 110.42%			
3) Phenol-d5	6.36	99	1163724	168.77	ng	0.01
Surrogate Spike 150.000	Range 24 - 113		Recovery = 112.51%			
7) 1,2-Dichlorobenzene-d4	7.43	152	378877	109.68	ng	0.01
Surrogate Spike 100.000	Range 20 - 130		Recovery = 109.68%			
8) 2-Chlorophenol-d4	6.71	132	854902	161.36	ng	0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 107.57%			
18) Nitrobenzene-d5	8.19	82	533783	115.13	ng	0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 115.13%			
35) 2-Fluorobiphenyl	14.27	172	807453	109.83	ng	0.01
Surrogate Spike 100.000	Range 30 - 115		Recovery = 109.83%			
52) 2,4,6-Tribromophenol	18.17	330	179010	161.79	ng	0.01
Surrogate Spike 150.000	Range 19 - 122		Recovery = 107.86%			
65) Terphenyl-d14	22.65	244	914694	120.95	ng	0.01
Surrogate Spike 100.000	Range 18 - 137		Recovery = 120.95%			
Target Compounds						Qvalue
70) bis(2-Ethylhexyl)phthalate	25.01	149	33096	2.62	ng	# 49

0895

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

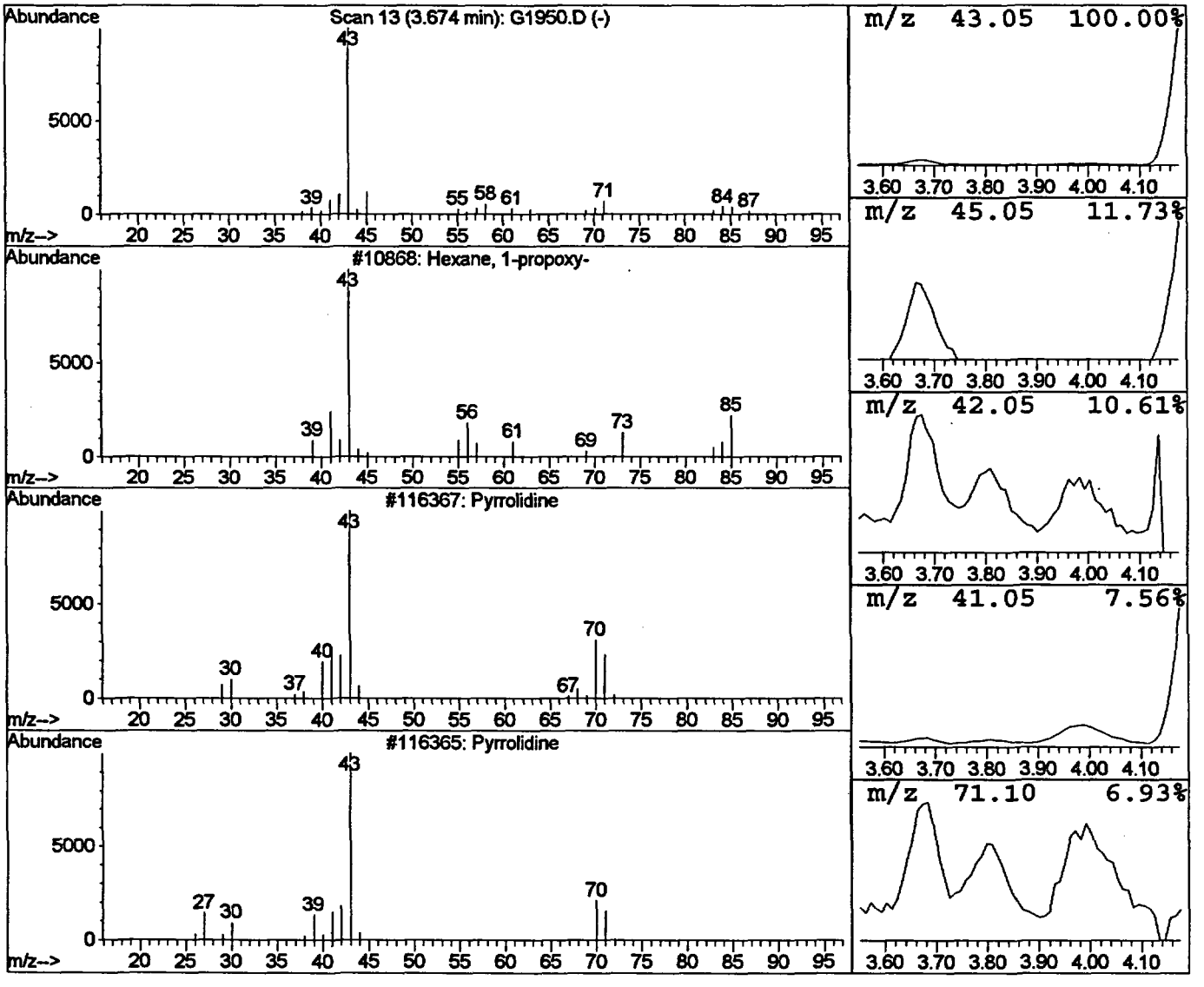
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 ~~Hexane, 1-propoxy-~~ Unknown 01/26/98 Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.67	8.65 ng	221799	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 1-propoxy-	144	C9H20O	053685-78-2	9
2	Pyrrolidine	71	C4H9N	000123-75-1	7
3	Pyrrolidine	71	C4H9N	000123-75-1	5



0896

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

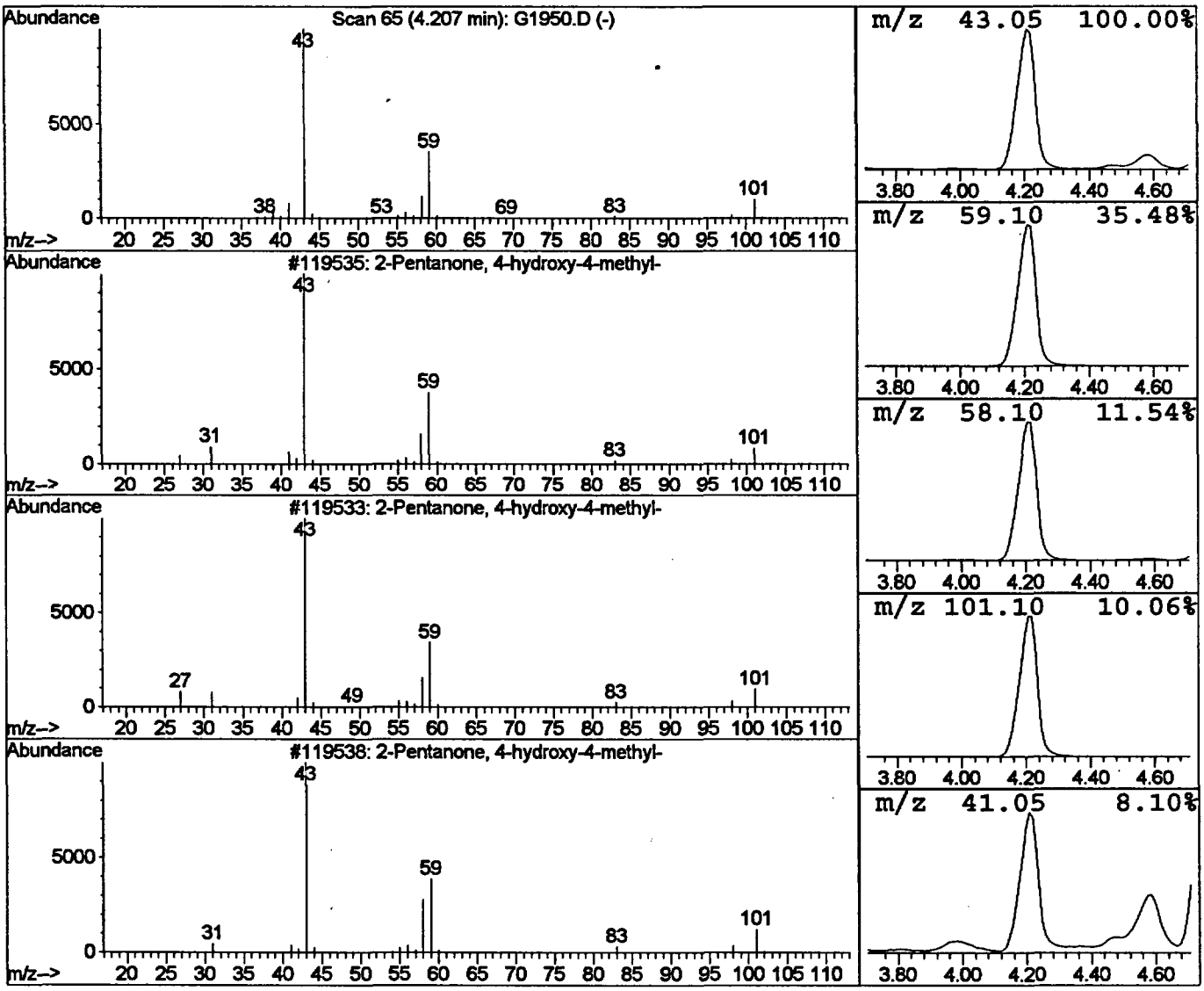
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 2-Pentanone, 4-hydroxy-4-methy Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.21	573.65 ng (A)	14701500	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	64
2	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	59
3	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	45



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

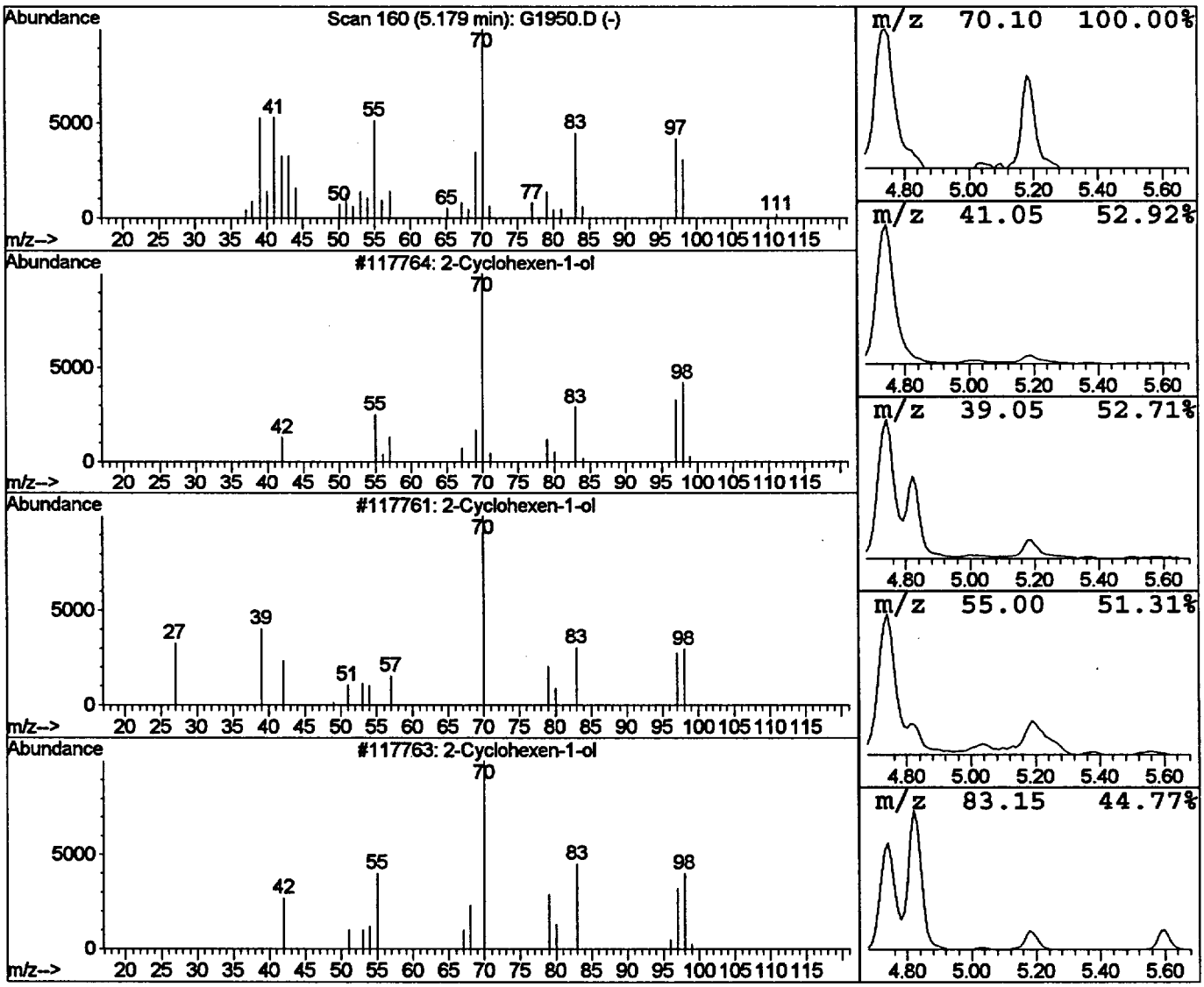
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 4 2-Cyclohexen-1-ol Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.18	17.11 ng	438578	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	64
2	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	64
3	2-Cyclohexen-1-ol	98	C6H10O	000822-67-3	64



0898

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

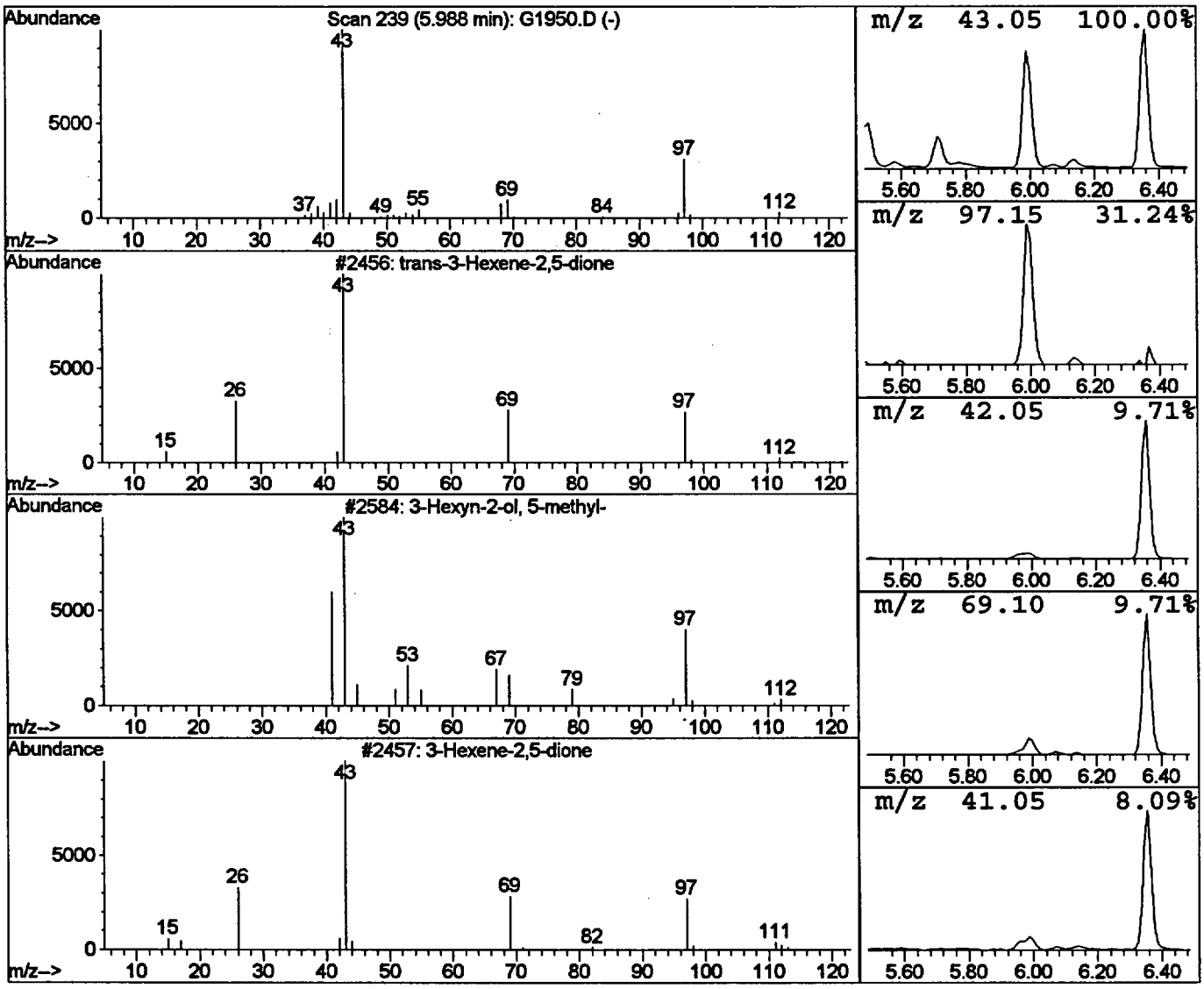
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 trans-3-Hexene-2,5-dione Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.99	19.76 ng	506358	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-3-Hexene-2,5-dione	112	C6H8O2	000000-00-0	40
2	3-Hexyn-2-ol, 5-methyl-	112	C7H12O	023293-50-7	38
3	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	9



Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

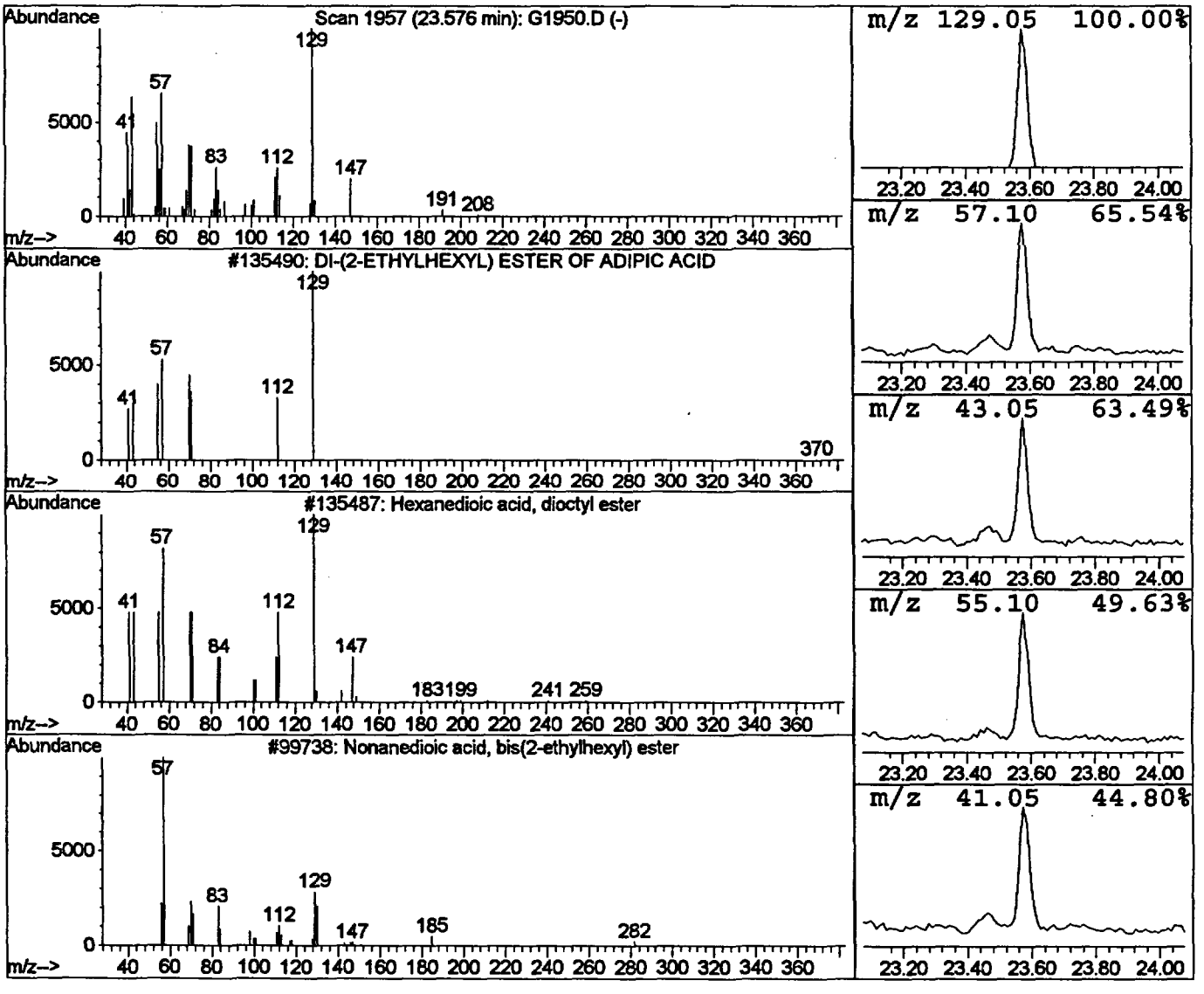
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 6 DI-(2-ETHYLHEXYL) ESTER OF ADI Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.58	7.09 ng	200842	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	DI-(2-ETHYLHEXYL) ESTER OF ADIPIC A	370	C22H42O4	000000-00-0	43
2	Hexanedioic acid, dioctyl ester	370	C22H42O4	000123-79-5	38
3	Nonanedioic acid, bis(2-ethylhexyl)	412	C25H48O4	000103-24-2	38



0900

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

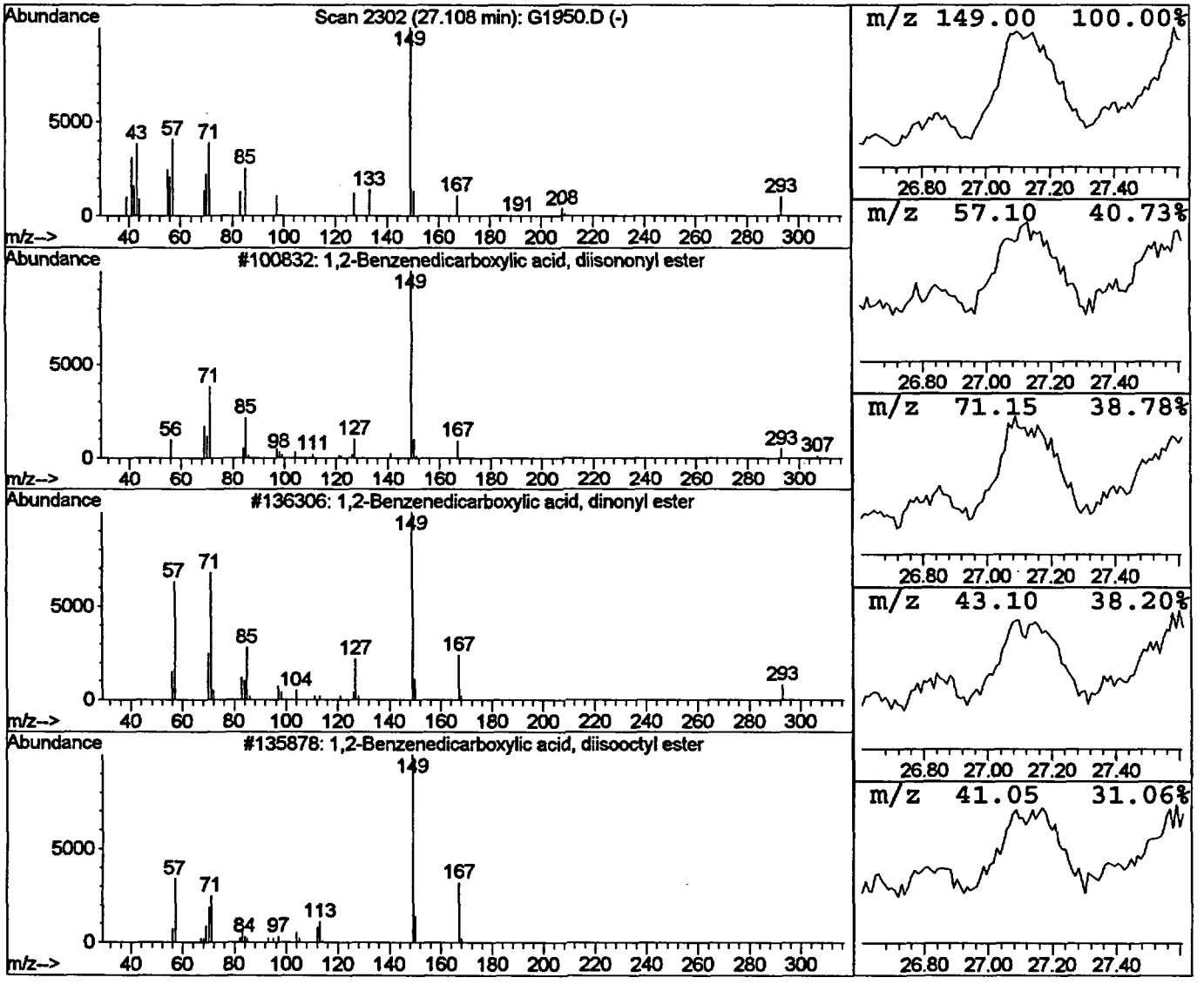
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 7 1,2-Benzenedicarboxylic acid, Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.11	10.23 ng	289549	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Benzenedicarboxylic acid, diiso	418	C26H42O4	028553-12-0	64
2	1,2-Benzenedicarboxylic acid, dinon	418	C26H42O4	000084-76-4	50
3	1,2-Benzenedicarboxylic acid, diiso	390	C24H38O4	027554-26-3	40



0901

Library Search Compound Report

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

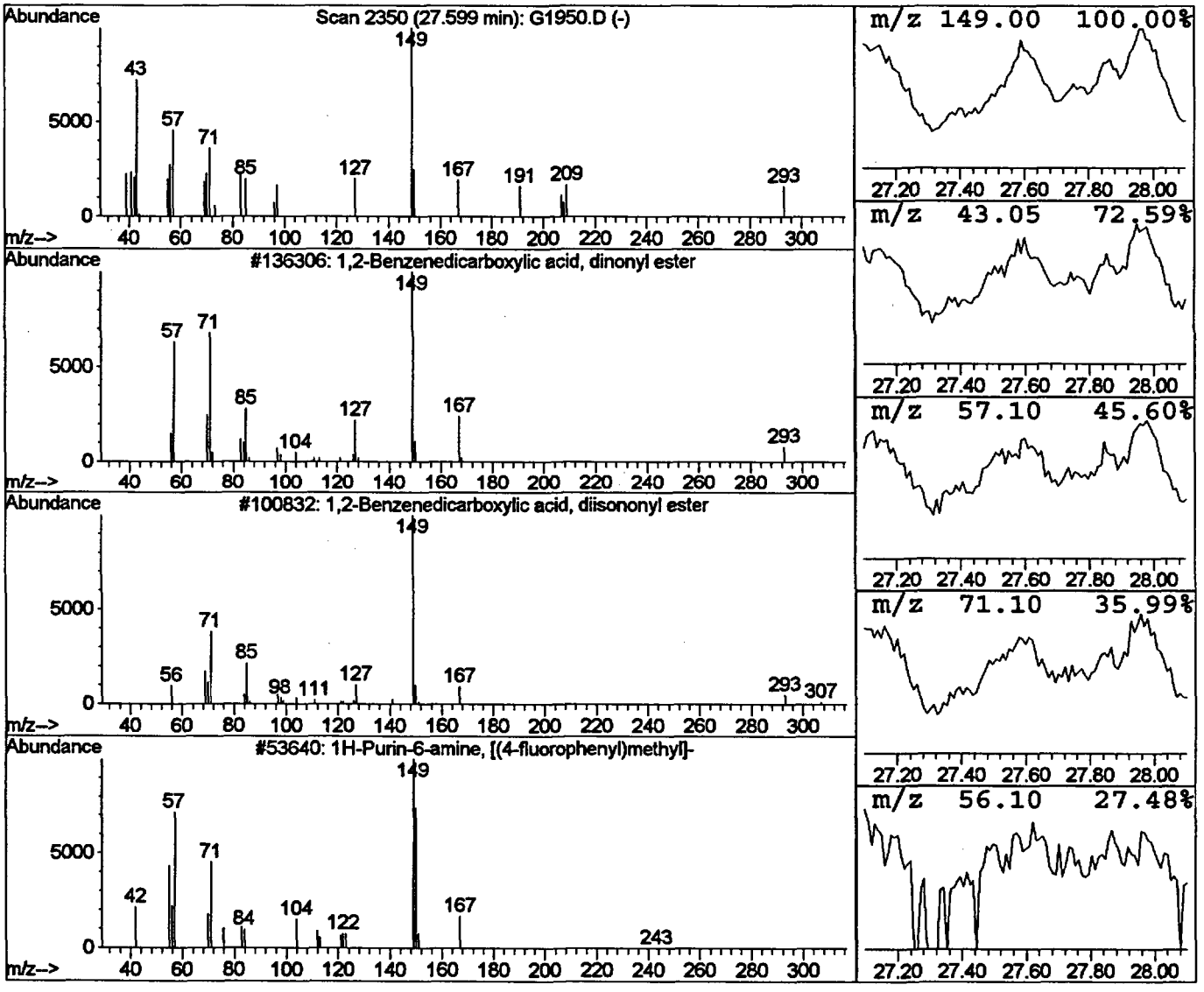
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 8 ~~1,2-Benzenedicarboxylic acid,~~ Unknown phthalate Concentration Rank 10 cio 1/26/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.60	5.87 ng	166240	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Benzenedicarboxylic acid, dinon	418	C26H42O4	000084-76-4	59
2	1,2-Benzenedicarboxylic acid, diiso	418	C26H42O4	028553-12-0	38
3	1H-Purin-6-amine, [(4-fluorophenyl)	243	C12H10FN5	074421-46-8	17



0902

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

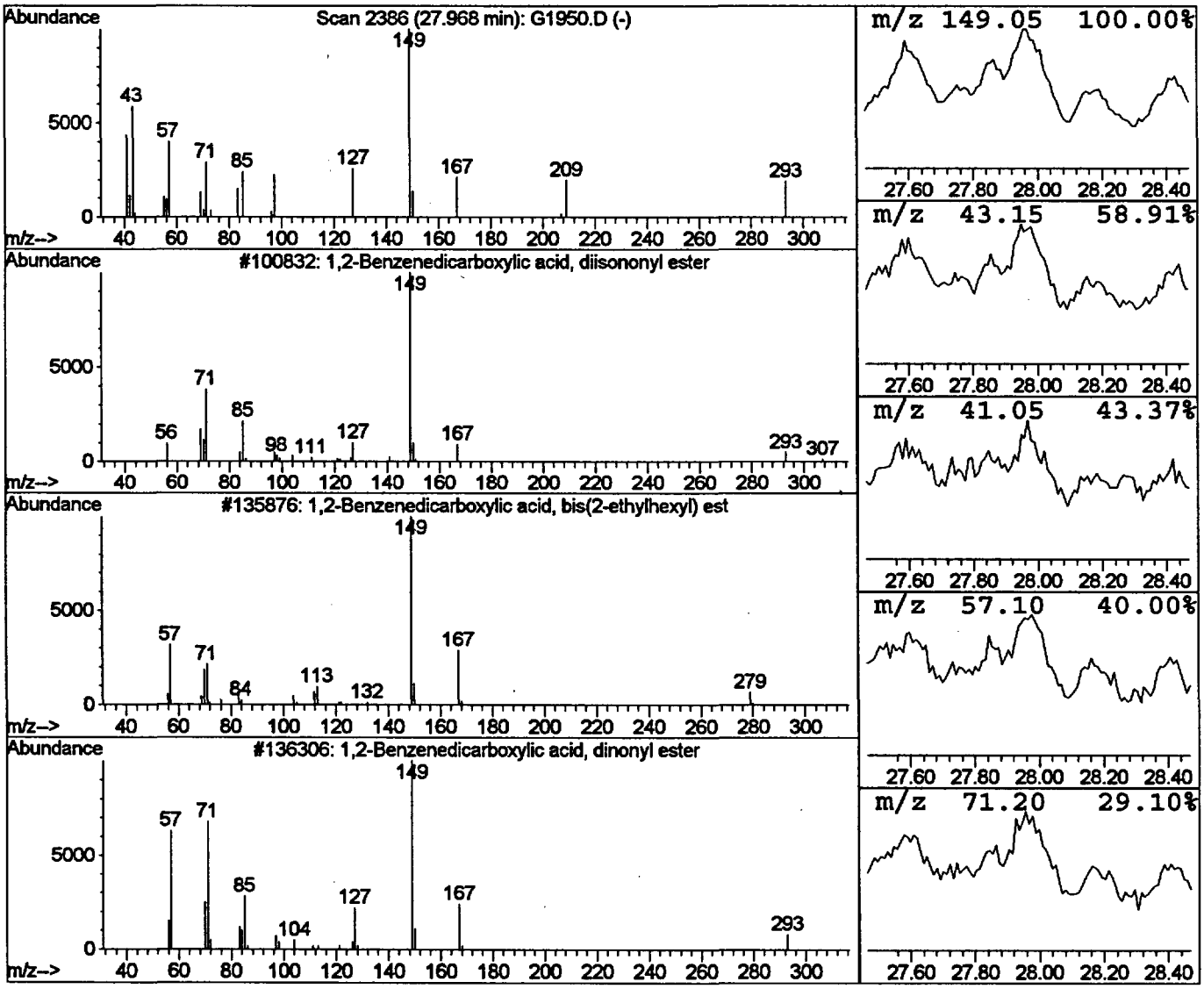
****

Peak Number 9 ~~1,2-Benzenedicarboxylic acid,~~ Concentration Rank 11

Continuous phthalate 10/26/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
27.97	5.68 ng	160720	Chrysene-d12	25.36

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1,2-Benzenedicarboxylic acid, diiso	418	C26H42O4	028553-12-0	50
2	1,2-Benzenedicarboxylic acid, bis(2	390	C24H38O4	000117-81-7	43
3	1,2-Benzenedicarboxylic acid, dinon	418	C26H42O4	000084-76-4	40



0903

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

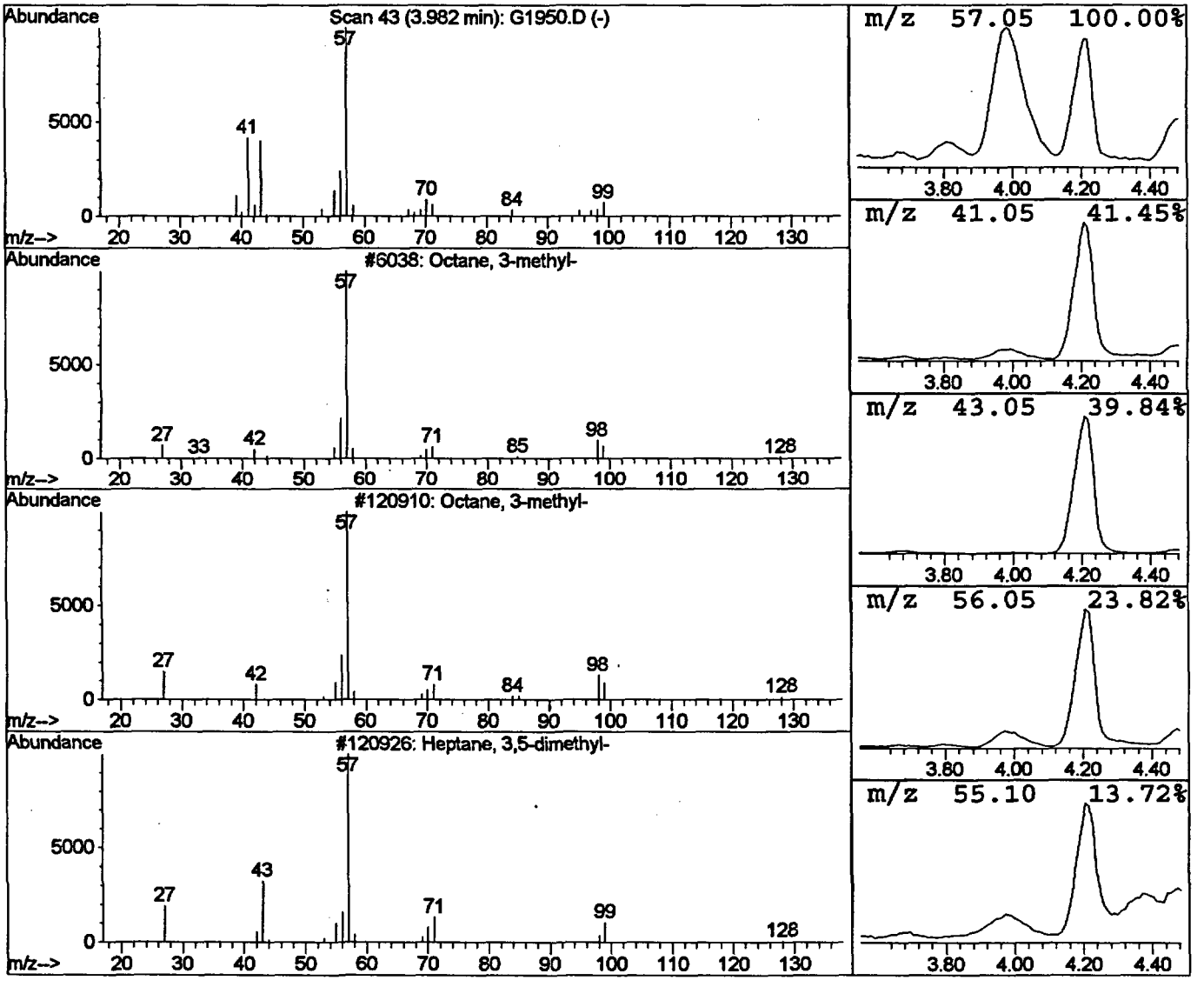
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 10 Octane, 3-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.98	19.17 ng	491401	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 3-methyl-	128	C9H20	002216-33-3	53
2	Octane, 3-methyl-	128	C9H20	002216-33-3	53
3	Heptane, 3,5-dimethyl-	128	C9H20	000926-82-9	43



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

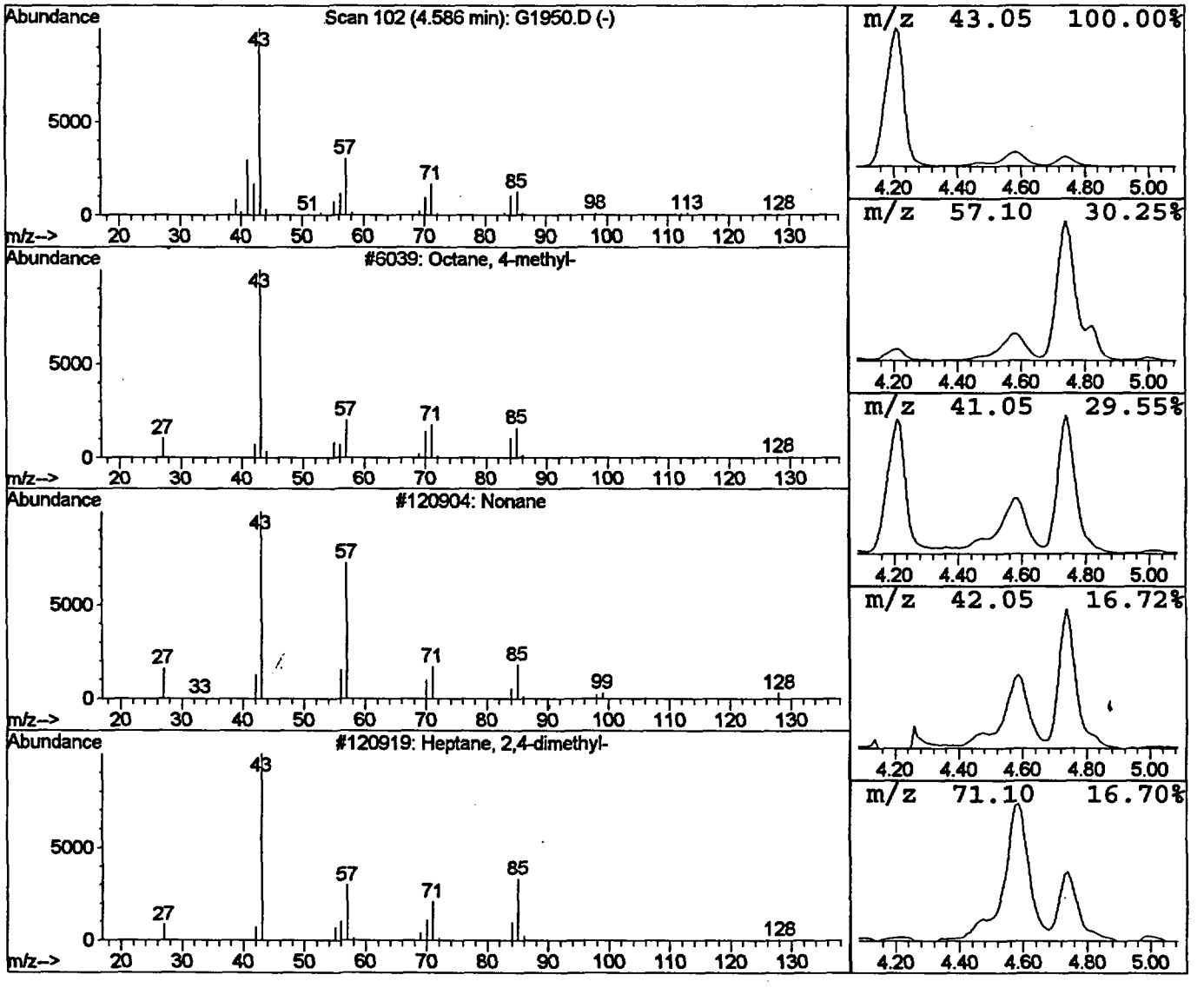
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 11 Octane, 4-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.59	142.54 ng	3653120	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 4-methyl-	128	C9H20	002216-34-4	74
2	Nonane	128	C9H20	000111-84-2	72
3	Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	64



0905

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1950.D Vial: 1
Acq On : 22 Jan 98 17:50 Operator:
Sample : S HP-7G 58073-010 SBLKS1 Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00

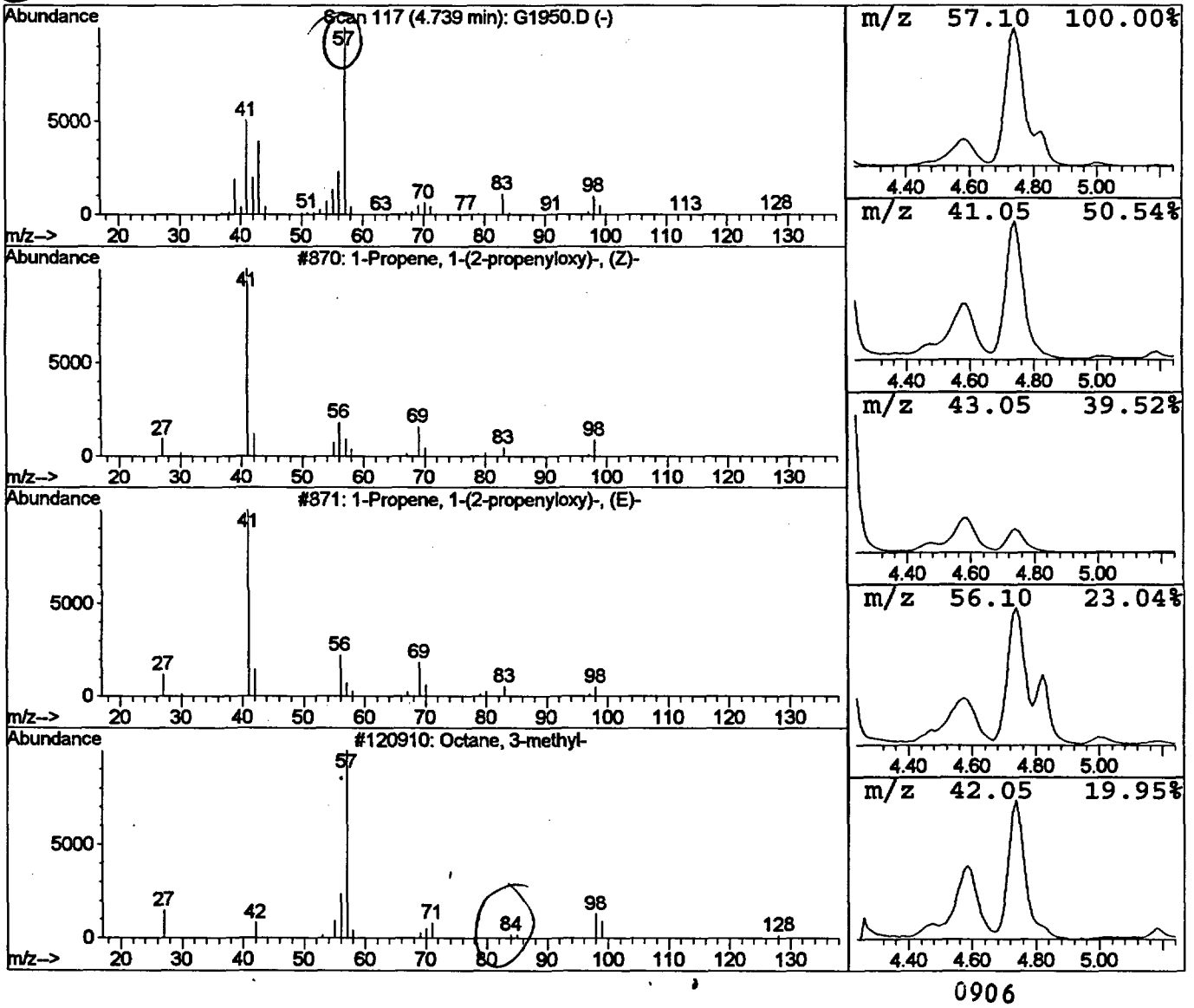
Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 1-Propene, 1-(2-propenyloxy)-, Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.74	157.47 ng	4035570	1,4-Dichlorobenzene-d4	7.06

Hit# of 3	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propene, 1-(2-propenyloxy)-, (Z)-	98	C6H10O	061142-12-9	53
2	1-Propene, 1-(2-propenyloxy)-, (E)-	98	C6H10O	061142-13-0	53
3	Octane, 3-methyl-	128	C9H20	002216-33-3	50



0906

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 22 Jan 98 17:50
Data File: Q:\HPCHEM\G\G19XX\G1950.D
Name: S HP-7G 58073-010 SBLKS1
Misc: SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Method: CLPME7
Title: SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Top 9 Tentatively Identified Compounds								
Hexane, 1-propoxy-	3.67	8.7	ng	221799	ISTD01	7.06	1025130	40.0
2-Pentanone, 4-hydro	4.21	573.6	ng	14701500	ISTD01	7.06	1025130	40.0
1-Propene, 1-(2-prop	4.74	157.5	ng	4035570	ISTD01	7.06	1025130	40.0
2-Cyclohexen-1-ol	5.18	17.1	ng	438578	ISTD01	7.06	1025130	40.0
trans-3-Hexene-2,5-d	5.99	19.8	ng	506358	ISTD01	7.06	1025130	40.0
DI-(2-ETHYLHEXYL) ES	23.58	7.1	ng	200842	ISTD05	25.36	1132490	40.0
1,2-Benzenedicarboxy	27.11	10.2	ng	289549	ISTD05	25.36	1132490	40.0
1,2-Benzenedicarboxy	27.60	5.9	ng	166240	ISTD05	25.36	1132490	40.0
1,2-Benzenedicarboxy	27.97	5.7	ng	160720	ISTD05	25.36	1132490	40.0
Hydrocarbons: Branched Alkanes								
Octane, 3-methyl-	3.98	19.2	ng	491401	ISTD01	7.06	1025130	40.0
Octane, 4-methyl-	4.59	142.5	ng	3653120	ISTD01	7.06	1025130	40.0
Subtotal:		161.7	ng					
alkane	4.74	157.5						
Total Alkane Conc:		161.7	ng	+157.5	x RF.	= 530	ug/kg	

G1950.D LIN.M Mon Jan 26 11:11:24 1998

wo 1/26/98

TIC: G1950.D

S HP-7G 58073-010 SBLKS1 01/22/98 17:50

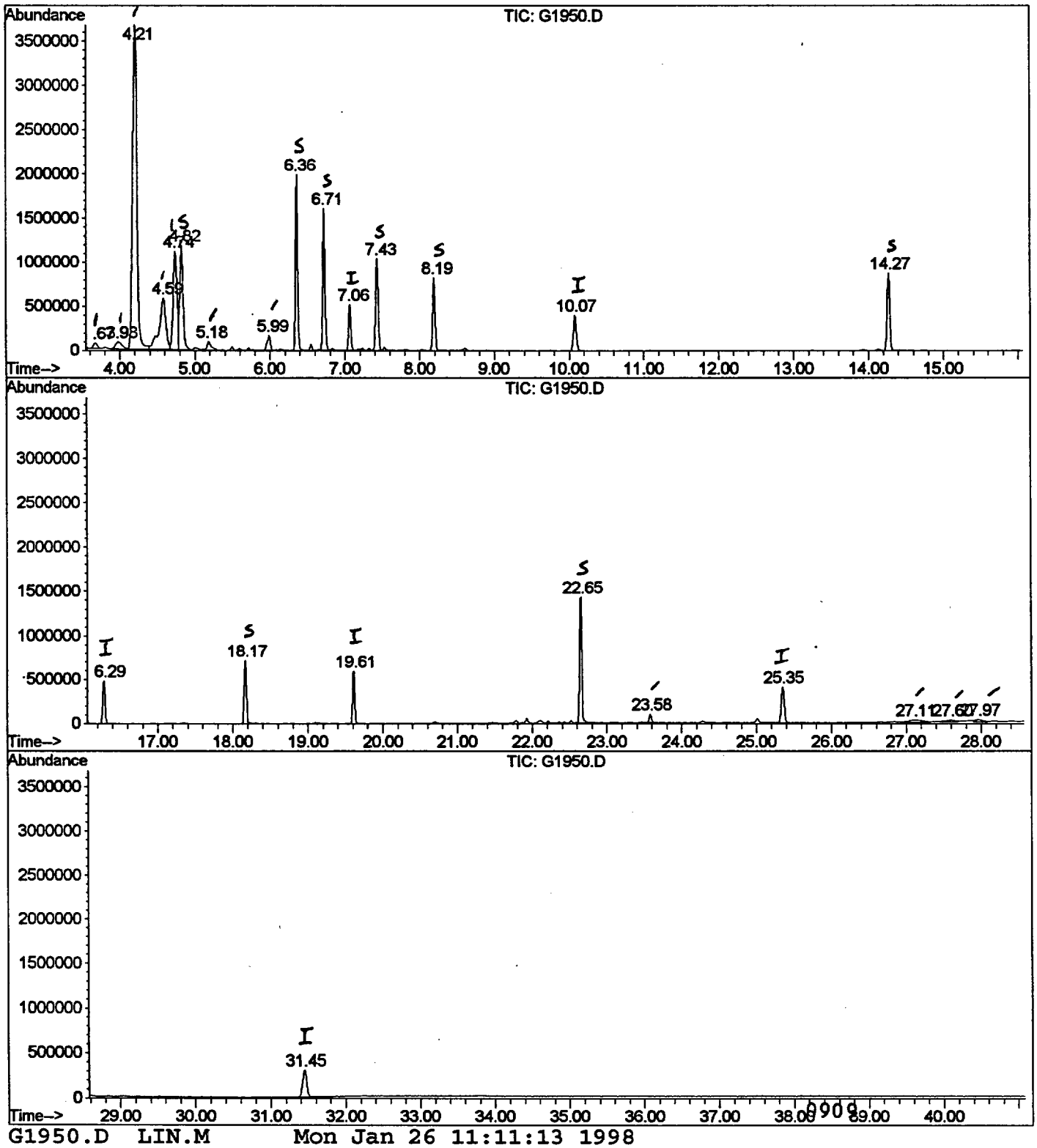
CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	3.674	rVB	0.133	221799	3.613	3.746
2	3.982	rBV	0.225	491401	3.879	4.104
3	4.207	rVV	0.287	14701538	4.104	4.391
4	4.586	rVV	0.276	3653117	4.391	4.667
5	4.739	rVV	0.113	4035567	4.667	4.780
6	4.821	rVB	0.164	3421090	4.780	4.944
7	5.179	rVB	0.256	438578	5.077	5.333
8	5.988	rBV	0.133	506358	5.906	6.039
9	6.357	rBV	0.225	3512798	6.265	6.490
10	6.715	rBV	0.123	3275839	6.674	6.797
11	7.063	rBV	0.113	1025126	7.012	7.124
12	7.432	rVB	0.133	2342210	7.360	7.493
13	8.189	rBV	0.143	1758847	8.117	8.261
14	10.073	rVB	0.246	1068987	10.001	10.247
15	14.270	rBV	0.184	2196334	14.188	14.372
16	16.287	rVB	0.154	1007668	16.215	16.369
17	18.171	rBV	0.215	1448833	18.048	18.263
18	19.614	rVB	0.246	1146456	19.553	19.798
19	22.654	rBV	0.184	2868676	22.573	22.757
20	23.576	rBV	0.133	200842	23.514	23.647
21	25.347	rVB	0.184	1132491	25.275	25.459
22	27.108	rBV	0.348	289549	26.954	27.302
23	27.599	rBV	0.246	166240	27.446	27.691
24	27.968	rVB	0.195	160720	27.896	28.090
25	31.448	rBV	0.195	1107189	31.346	31.540

CASE 25969
SDG# FFR76

LSC Report - Integrated Chromatogram

File : Q:\HPCHEM\G\G19XX\G1950.D
Operator :
Acquired : 22 Jan 98 17:50 using AcqMethod CLPME7
Instrument : GC/MS Ins
Sample Name: S HP-7G 58073-010 SBLKS1
Misc Info : SOIL CASE 25969 SDG#FFR76 IS=40,S00501
Vial Number: 1
Quant File :CLPME7.RES



G1950.D LIN.M Mon Jan 26 11:11:13 1998

909

CASE 25969
SDG# FFR76

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83MS

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004MS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1955

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3000.	
111-44-4	bis(2-Chloroethyl)ether	520.	U
95-57-8	2-Chlorophenol	2900.	
541-73-1	1,3-Dichlorobenzene	520.	U
106-46-7	1,4-Dichlorobenzene	1600.	
95-50-1	1,2-Dichlorobenzene	520.	U
95-48-7	2-Methylphenol	520.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520.	U
106-44-5	4-Methylphenol	520.	U
621-64-7	N-Nitroso-di-n-propylamine	1900.	
67-72-1	Hexachloroethane	520.	U
98-95-3	Nitrobenzene	520.	U
78-59-1	Isophorone	520.	U
88-75-5	2-Nitrophenol	520.	U
105-67-9	2,4-Dimethylphenol	520.	U
111-91-1	bis(2-Chloroethoxy)methane	520.	U
120-83-2	2,4-Dichlorophenol	520.	U
120-82-1	1,2,4-Trichlorobenzene	2000.	
91-20-3	Naphthalene	520.	U
106-47-8	4-Chloroaniline	520.	U
87-68-3	Hexachlorobutadiene	520.	U
59-50-7	4-Chloro-3-methylphenol	3800.	
91-57-6	2-Methylnaphthalene	520.	U
77-47-4	Hexachlorocyclopentadiene	520.	U
88-06-2	2,4,6-Trichlorophenol	520.	U
95-95-4	2,4,5-Trichlorophenol	1300.	U
91-58-7	2-Chloronaphthalene	520.	U
88-74-4	2-Nitroaniline	1300.	U
131-11-3	Dimethylphthalate	520.	U
208-96-8	Acenaphthylene	30.	J
606-20-2	2,6-Dinitrotoluene	520.	U
99-09-2	3-Nitroaniline	1300.	U
83-32-9	Acenaphthene	2600.	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83MS

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004MS

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1955

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300.	U
100-02-7	4-Nitrophenol	4000.	
132-64-9	Dibenzofuran	520.	U
121-14-2	2,4-Dinitrotoluene	2500.	
84-66-2	Diethylphthalate	30.	J
7005-72-3	4-Chlorophenyl-phenylether	520.	U
86-73-7	Fluorene	520.	U
100-01-6	4-Nitroaniline	1300.	U
534-52-1	4,6-Dinitro-2-methylphenol	1300.	U
86-30-6	N-Nitrosodiphenylamine (1)	520.	U
101-55-3	4-Bromophenyl-phenylether	520.	U
118-74-1	Hexachlorobenzene	520.	U
87-86-5	Pentachlorophenol	2400.	
85-01-8	Phenanthrene	390.	J
120-12-7	Anthracene	72.	J
86-74-8	Carbazole	92.	J
84-74-2	Di-n-butylphthalate	120.	J
206-44-0	Fluoranthene	1000.	
129-00-0	Pyrene	3000.	
85-68-7	Butylbenzylphthalate	100.	J
91-94-1	3,3'-Dichlorobenzidine	520.	U
56-55-3	Benzo(a)anthracene	550.	
218-01-9	Chrysene	990.	
117-81-7	bis(2-Ethylhexyl)phthalate	850.	B
117-84-0	Di-n-octylphthalate	520.	U
205-99-2	Benzo(b)fluoranthene	1400.	
207-08-9	Benzo(k)fluoranthene	1100.	
50-32-8	Benzo(a)pyrene	800.	
193-39-5	Indeno(1,2,3-cd)pyrene	1500.	
53-70-3	Dibenz(a,h)anthracene	520.	U
191-24-2	Benzo(g,h,i)perylene	1500.	

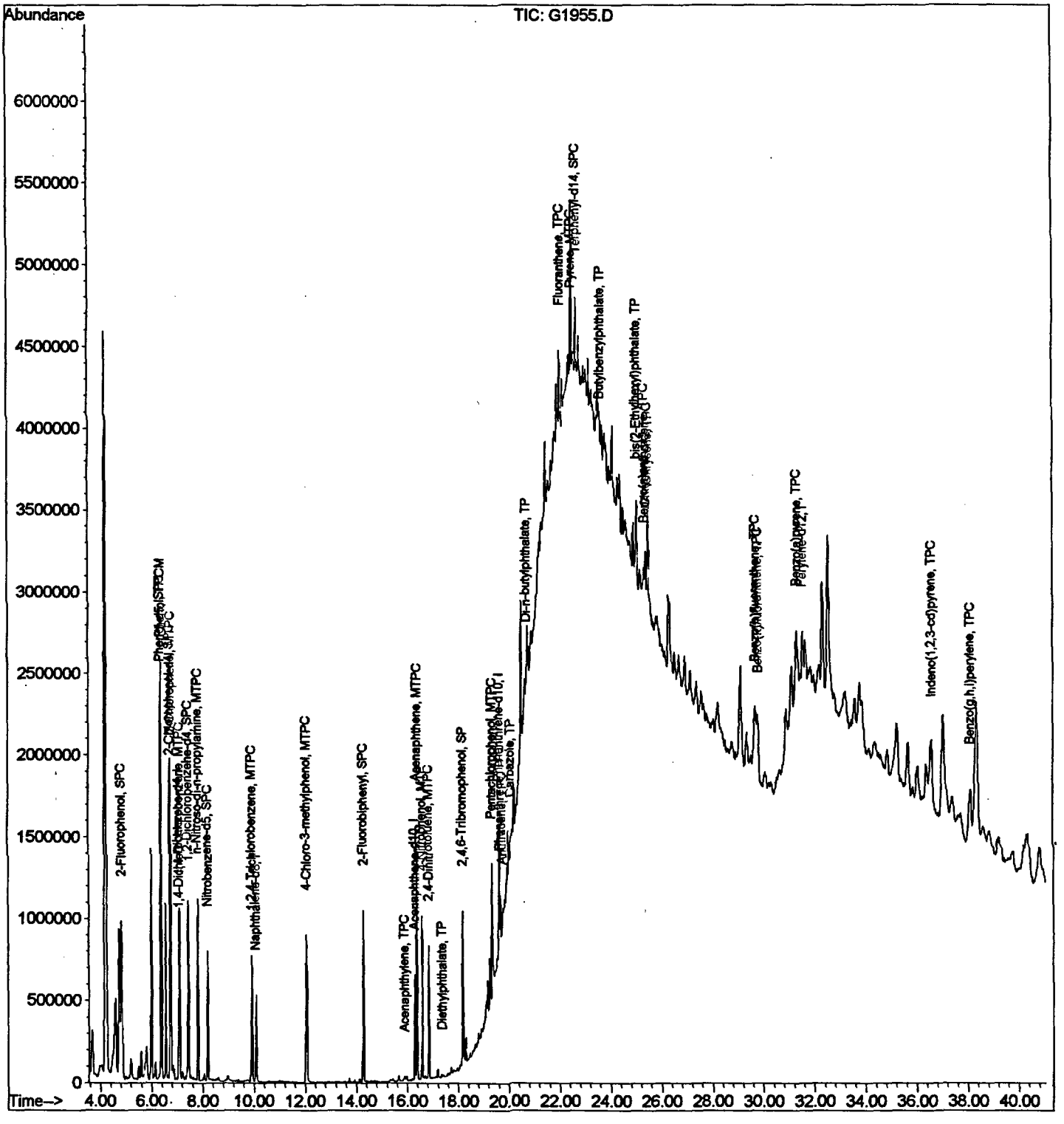
(1) - Cannot be separated from Diphenylamine

Quantitation Report

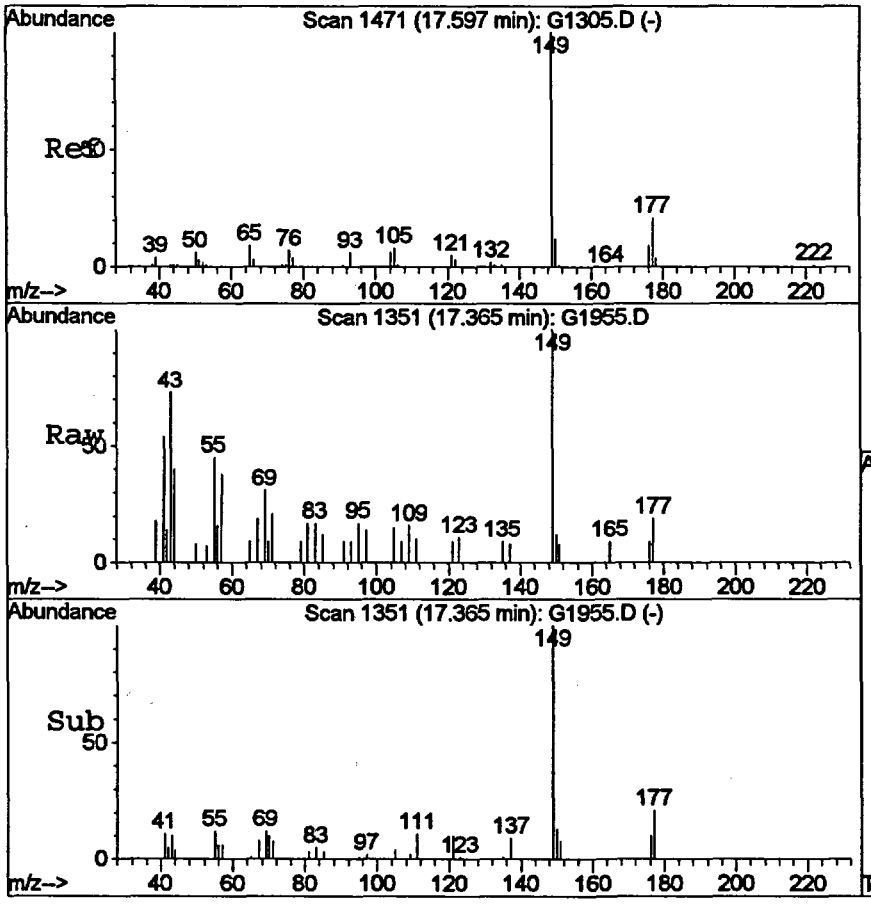
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1955.D Vial: 8
Acq On : 22 Jan 98 21:41 Operator:
Sample : S HP-7G 58073-004MS FFR83MS Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:20 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



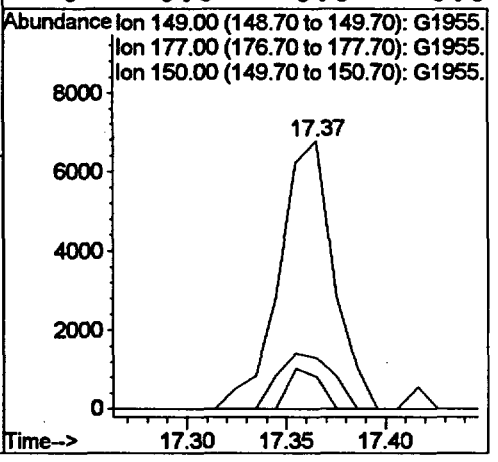
CASE 25969
SDG# FFR76



#47
Diethylphthalate
Concen: 1.16 ng m
RT: 17.37 min Scan# 1351
Delta R.T. 0.00 min
Lab File: G1955.D
Acq: 22 Jan 98 21:41

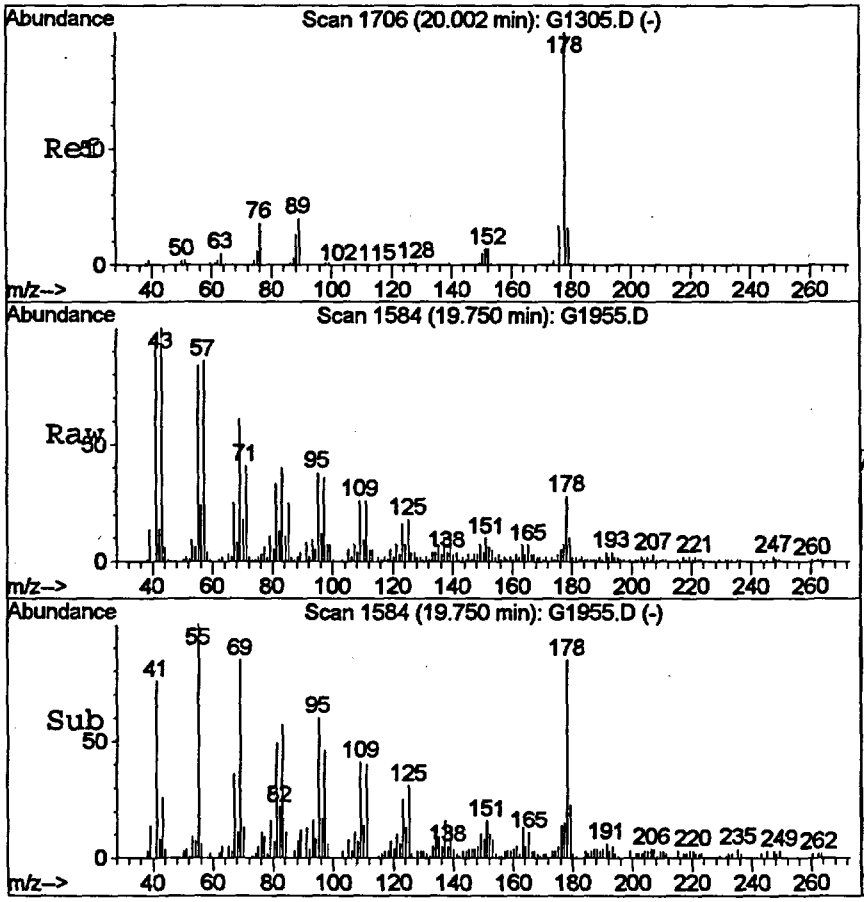
Tgt Ion:149 Resp: 12925

Ion	Ratio	Lower	Upper
149	100		
177	19.3	0.9	40.9
150	12.2	0.0	31.7
0	0.0	0.0	0.0



0913

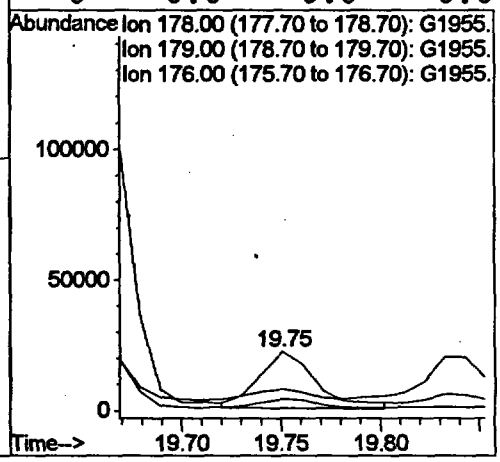
Sample Name: S HP-7G 58073-004MS FFR83MS
G1955.D CLPME7.M Mon Jan 26 13:48:44 1998 CLAYTON



#59
Anthracene
Concen: 2.75 ng m
RT: 19.75 min Scan# 1584
Delta R.T. 0.00 min
Lab File: G1955.D
Acq: 22 Jan 98 21:41

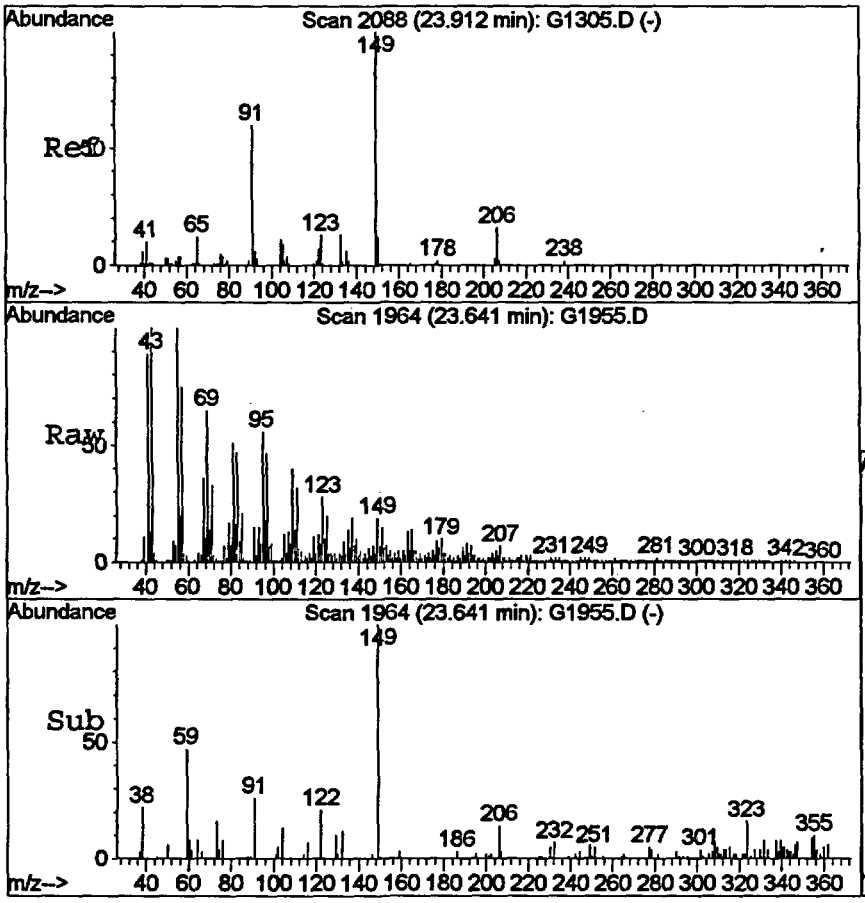
Tgt Ion:178 Resp: 43388

Ion	Ratio	Lower	Upper
178	100		
179	35.7	0.0	34.8#
176	18.9	0.0	38.4
0	0.0	0.0	0.0



0914

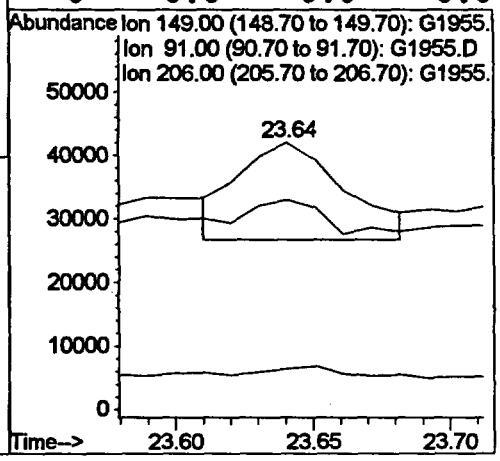
Sample Name: S HP-7G 58073-004MS FFR83MS
G1955.D CLPME7.M Mon Jan 26 13:48:54 1998 CLAYTON



#66
Butylbenzylphthalate
Concen: 3.97 ng m
RT: 23.64 min Scan# 1964
Delta R.T. 0.02 min
Lab File: G1955.D
Acq: 22 Jan 98 21:41

Tgt Ion:149 Resp: 41005

Ion	Ratio	Lower	Upper
149	100		
91	78.4	34.2	74.2#
206	15.2	0.0	36.1
0	0.0	0.0	0.0



0915

Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1955.D Vial: 6
Acq On : 22 Jan 98 21:41 Operator:
Sample : S HP-7G 58073-004MS FFR83MS Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:20 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	242161	40.00	ng		0.00
17) Naphthalene-d8	10.08	136	705805	40.00	ng		0.00
31) Acenaphthene-d10	16.29	164	334024	40.00	ng		0.00
51) Phenanthrene-d10	19.62	188	603290	40.00	ng		0.01
63) Chrysene-d12	25.41	240	443910	40.00	ng		0.05
71) Perylene-d12	31.54	264	542613	40.00	ng		0.09
System Monitoring Compounds							
2) 2-Fluorophenol	4.82	112	839799	116.26	ng		0.01
Surrogate Spike 150.000	Range 25 - 121		Recovery = 77.51%				
3) Phenol-d5	6.36	99	1231178	129.04	ng		0.01
Surrogate Spike 150.000	Range 24 - 113		Recovery = 86.03%				
7) 1,2-Dichlorobenzene-d4	7.42	152	329666	68.97	ng		0.00
Surrogate Spike 100.000	Range 20 - 130		Recovery = 68.97%				
8) 2-Chlorophenol-d4	6.72	132	888385	121.18	ng		0.00
Surrogate Spike 150.000	Range 20 - 130		Recovery = 80.79%				
18) Nitrobenzene-d5	8.19	82	526903	84.04	ng		0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery = 84.04%				
35) 2-Fluorobiphenyl	14.27	172	965568	97.46	ng		0.01
Surrogate Spike 100.000	Range 30 - 115		Recovery = 97.46%				
52) 2,4,6-Tribromophenol	18.17	330	229859	153.20	ng		0.01
Surrogate Spike 150.000	Range 19 - 122		Recovery = 102.13%				
65) Terphenyl-d14	22.68	244	786267	85.73	ng		0.03
Surrogate Spike 100.000	Range 18 - 137		Recovery = 85.73%				
Target Compounds							Qvalue
4) Phenol	6.38	94	1177062	114.87	ng		100
6) 2-Chlorophenol	6.75	128	887840	110.57	ng		99
10) 1,4-Dichlorobenzene	7.10	146	557559	60.79	ng		100
15) n-Nitroso-di-n-propylamine	7.80	70	407538	73.45	ng		99
25) 1,2,4-Trichlorobenzene	9.91	180	453947	75.87	ng		99
29) 4-Chloro-3-methylphenol	12.05	107	594896	145.41	ng		99
39) Acenaphthylene	15.89	152	17116	1.17	ng	#	61
42) Acenaphthene	16.37	153	862972	99.49	ng		100
44) 4-Nitrophenol	16.58	109	155683	155.90	ng		96
46) 2,4-Dinitrotoluene	16.83	165	371047	97.83	ng	#	98
47) Diethylphthalate	17.37	149	12925m	1.16	ng		0
57) Pentachlorophenol	19.33	266	167383	90.60	ng		99
58) Phenanthrene	19.66	178	221208	14.91	ng		99
59) Anthracene	19.75	178	43388m	2.75	ng		98
60) Carbazole	20.07	167	58772	3.53	ng	#	61
61) Di-n-butylphthalate	20.69	149	107603	4.63	ng	#	40
62) Fluoranthene	22.04	202	590735	39.34	ng		92

(#) = qualifier out of range (m) = manual integration 0916

Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1955.D Vial: 6
Acq On : 22 Jan 98 21:41 Operator:
Sample : S HP-7G 58073-004MS FFR83MS Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:20 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
64)	Pyrene	22.49	202	1653892	116.62	ng	90
66)	Butylbenzylphthalate	23.64	149	41005m	3.97	ng	33
67)	Benzo(a)anthracene	25.35	228	240914	21.24	ng	97
69)	Chrysene	25.48	228	409961	37.92	ng	97
70)	bis(2-Ethylhexyl)phthalate	25.04	149	498402	32.52	ng	98
73)	Benzo(b)fluoranthene	29.69	252	790652	53.02	ng	97
74)	Benzo(k)fluoranthene	29.79	252	596966	42.06	ng	94
75)	Benzo(a)pyrene	31.32	252	421791	30.94	ng	96
76)	Indeno(1,2,3-cd)pyrene	36.58	276	881434	56.12	ng	88
78)	Benzo(g,h,i)perylene	38.11	276	735195	56.10	ng	100

0917

(#) = qualifier out of range (m) = manual integration

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83MSD

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004MSD

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1956

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	3200.	
111-44-4	bis(2-Chloroethyl)ether	520.	U
95-57-8	2-Chlorophenol	3100.	
541-73-1	1,3-Dichlorobenzene	520.	U
106-46-7	1,4-Dichlorobenzene	1700.	
95-50-1	1,2-Dichlorobenzene	520.	U
95-48-7	2-Methylphenol	520.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	520.	U
106-44-5	4-Methylphenol	520.	U
621-64-7	N-Nitroso-di-n-propylamine	2000.	
67-72-1	Hexachloroethane	520.	U
98-95-3	Nitrobenzene	520.	U
78-59-1	Isophorone	520.	U
88-75-5	2-Nitrophenol	520.	U
105-67-9	2,4-Dimethylphenol	520.	U
111-91-1	bis(2-Chloroethoxy)methane	520.	U
120-83-2	2,4-Dichlorophenol	520.	U
120-82-1	1,2,4-Trichlorobenzene	2100.	
91-20-3	Naphthalene	520.	U
106-47-8	4-Chloroaniline	520.	U
87-68-3	Hexachlorobutadiene	520.	U
59-50-7	4-Chloro-3-methylphenol	4000.	
91-57-6	2-Methylnaphthalene	520.	U
77-47-4	Hexachlorocyclopentadiene	520.	U
88-06-2	2,4,6-Trichlorophenol	520.	U
95-95-4	2,4,5-Trichlorophenol	1300.	U
91-58-7	2-Chloronaphthalene	520.	U
88-74-4	2-Nitroaniline	1300.	U
131-11-3	Dimethylphthalate	520.	U
208-96-8	Acenaphthylene	29.	J
606-20-2	2,6-Dinitrotoluene	520.	U
99-09-2	3-Nitroaniline	1300.	U
83-32-9	Acenaphthene	2700.	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FFR83MSD

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004MSD

Sample wt/vol: 30.0 (g/ml) G Lab File ID: G1956

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: 36 decanted: (Y/N) N Date Extracted: 1/19/98

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 1/22/98

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 9.1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
51-28-5	2,4-Dinitrophenol	1300.	U
100-02-7	4-Nitrophenol	4200.	E
132-64-9	Dibenzofuran	520.	U
121-14-2	2,4-Dinitrotoluene	2600.	
84-66-2	Diethylphthalate	52.	J
7005-72-3	4-Chlorophenyl-phenylether	520.	U
86-73-7	Fluorene	520.	U
100-01-6	4-Nitroaniline	1300.	U
534-52-1	4,6-Dinitro-2-methylphenol	1300.	U
86-30-6	N-Nitrosodiphenylamine (1)	520.	U
101-55-3	4-Bromophenyl-phenylether	520.	U
118-74-1	Hexachlorobenzene	520.	U
87-86-5	Pentachlorophenol	2900.	
85-01-8	Phenanthrene	420.	J
120-12-7	Anthracene	71.	J
86-74-8	Carbazole	88.	J
84-74-2	Di-n-butylphthalate	140.	J
206-44-0	Fluoranthene	1100.	
129-00-0	Pyrene	3000.	
85-68-7	Butylbenzylphthalate	84.	J
91-94-1	3,3'-Dichlorobenzidine	520.	U
56-55-3	Benzo(a)anthracene	570.	
218-01-9	Chrysene	1000.	
117-81-7	bis(2-Ethylhexyl)phthalate	740.	B
117-84-0	Di-n-octylphthalate	120.	J
205-99-2	Benzo(b)fluoranthene	1400.	
207-08-9	Benzo(k)fluoranthene	1100.	
50-32-8	Benzo(a)pyrene	820.	
193-39-5	Indeno(1,2,3-cd)pyrene	1400.	
53-70-3	Dibenz(a,h)anthracene	520.	U
191-24-2	Benzo(g,h,i)perylene	1300.	

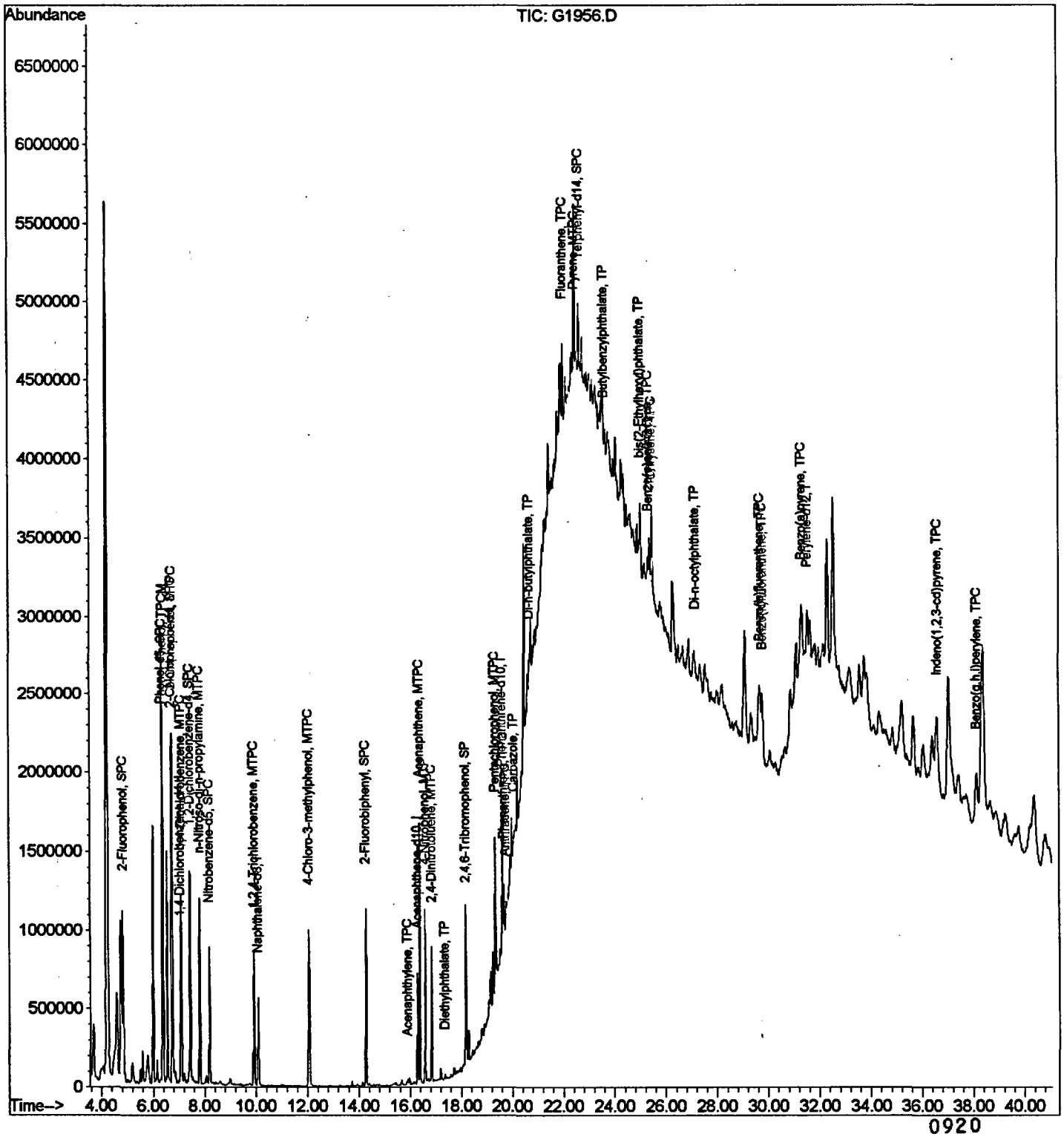
(1) - Cannot be separated from Diphenylamine

Quantitation Report

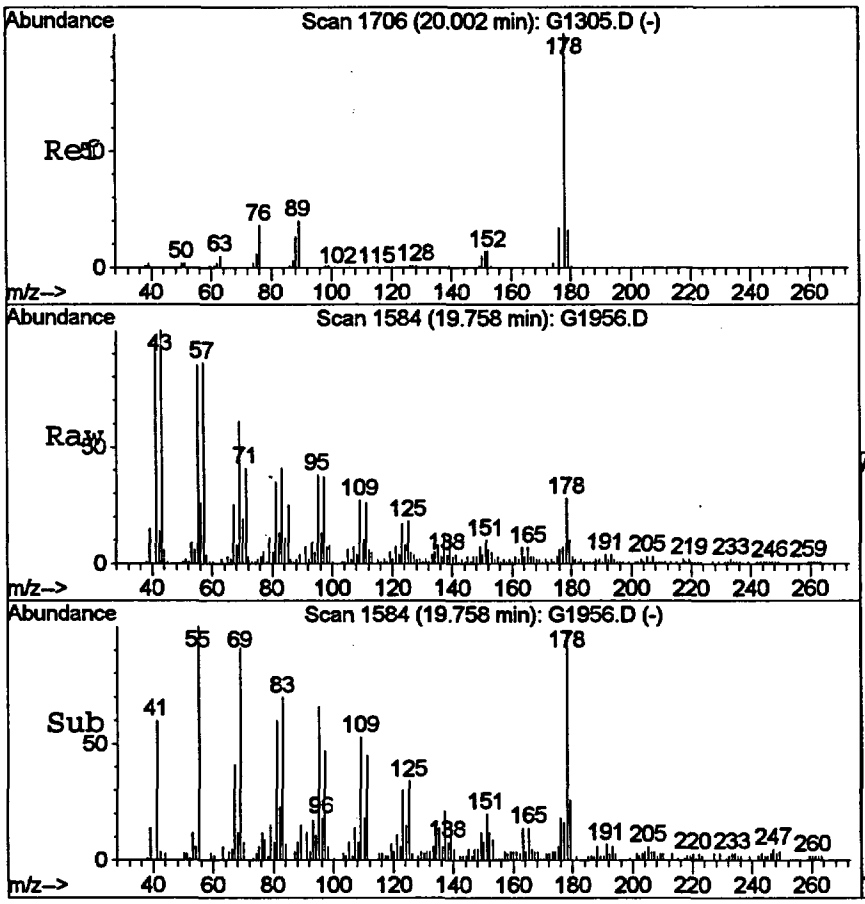
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1956.D Vial:
Acq On : 22 Jan 98 22:27 Operator:
Sample : S HP-7G 58073-004MSD FFR83MSD Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:35 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



0920

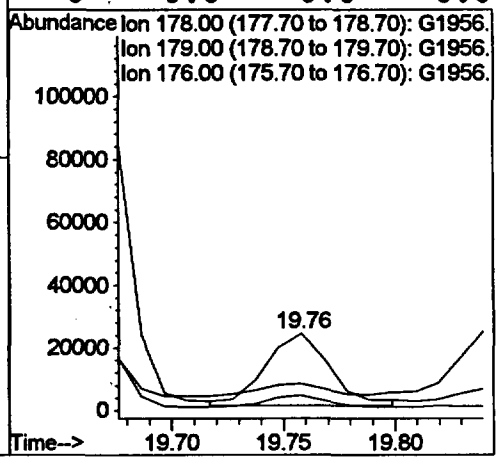


#59
Anthracene
Concen: 2.74 ng m
RT: 19.76 min Scan# 1584
Delta R.T. 0.01 min
Lab File: G1956.D
Acq: 22 Jan 98 22:27

CASE 25969
SDG# FFR76

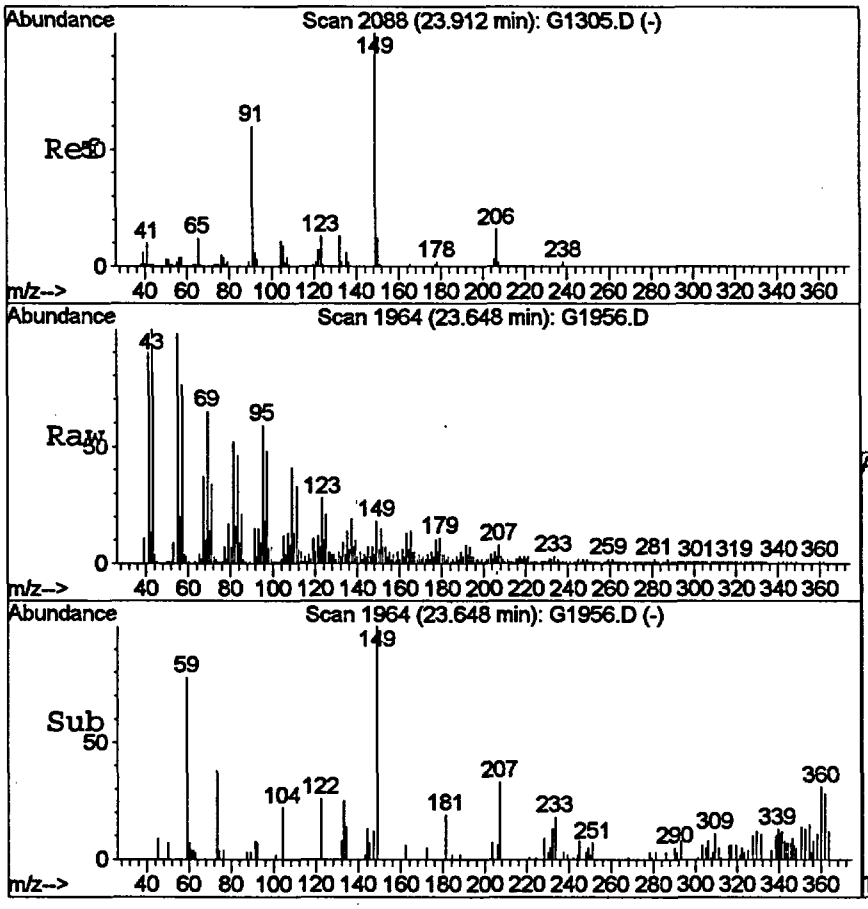
Tgt Ion:178 Resp: 45954

Ion	Ratio	Lower	Upper
178	100		
179	34.9	0.0	34.8#
176	20.3	0.0	38.4
0	0.0	0.0	0.0



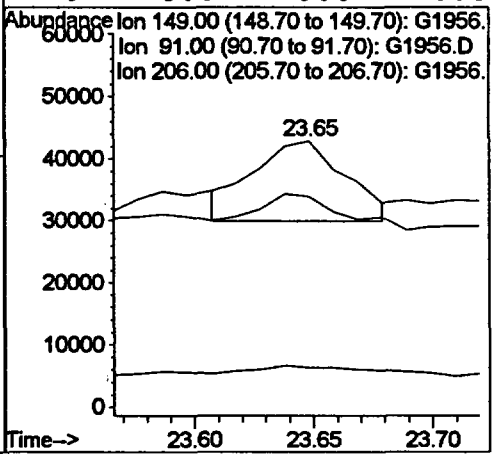
0921

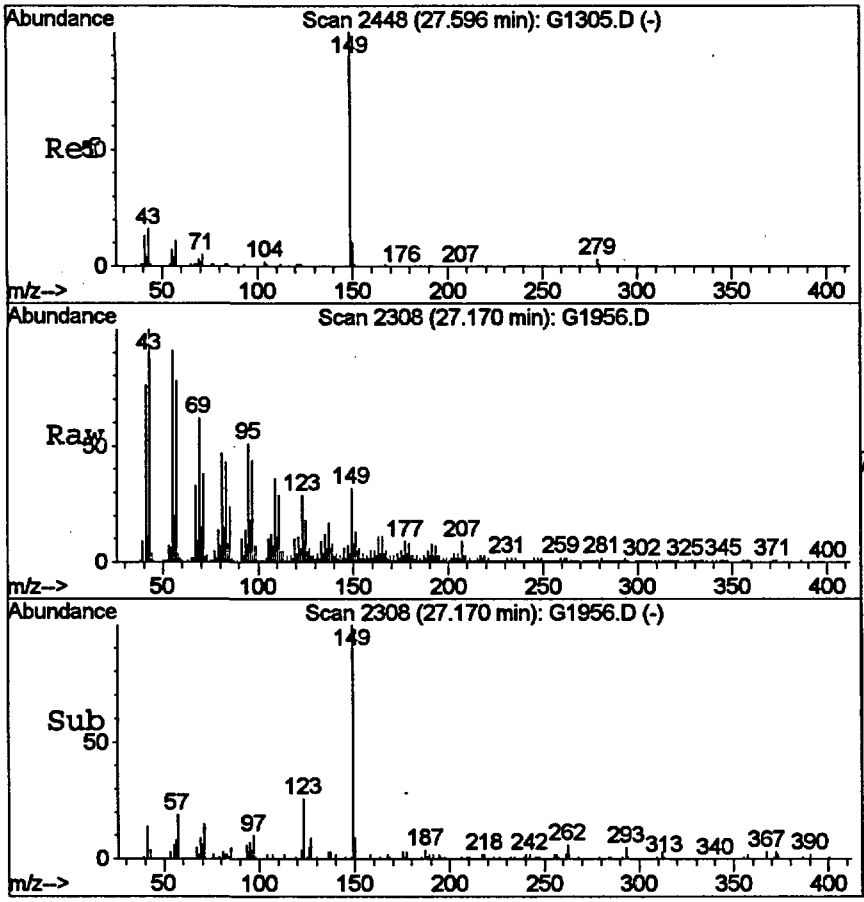
Sample Name: S HP-7G 58073-004MSD FFR83MSD
G1956.D CLPME7.M Mon Jan 26 13:46:43 1998 CLAYTON Page 1



#66 Butylbenzylphthalate
Concen: 3.23 ng m
RT: 23.65 min Scan# 1964
Delta R.T. 0.03 min
Lab File: G1956.D
Acq: 22 Jan 98 22:27

Tgt Ion:149	Resp:	35537	
Ion	Ratio	Lower	Upper
149	100		
91	79.1	34.2	74.2#
206	14.7	0.0	36.1
0	0.0	0.0	0.0

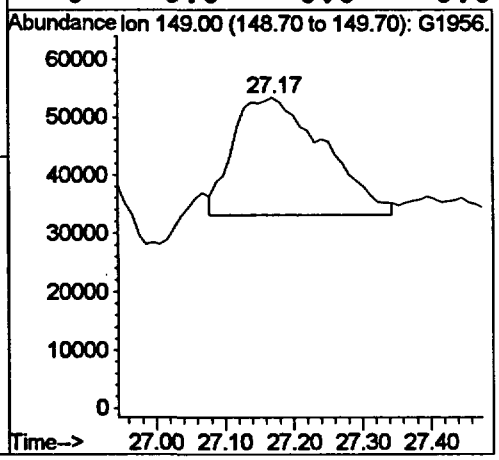




#72
Di-n-octylphthalate
Concen: 4.82 ng m
RT: 27.17 min Scan# 2308
Delta R.T. 0.05 min
Lab File: G1956.D
Acq: 22 Jan 98 22:27

Tgt Ion:149 Resp: 186898

Ion	Ratio	Lower	Upper
149	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Sample Name: S HP-7G 58073-004MSD FFR83MSD
G1956.D CLPME7.M Mon Jan 26 13:47:12 1998 CLAYTON Page 1

Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\G19XX\G1956.D Vial: 7
Acq On : 22 Jan 98 22:27 Operator:
Sample : S HP-7G 58073-004MSD FFR83MSD Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:35 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.06	152	260164	40.00	ng		0.00
17) Naphthalene-d8	10.08	136	751099	40.00	ng		0.01
31) Acenaphthene-d10	16.29	164	357889	40.00	ng		0.00
51) Phenanthrene-d10	19.61	188	639864	40.00	ng		0.01
63) Chrysene-d12	25.42	240	472967	40.00	ng		0.06
71) Perylene-d12	31.56	264	585083	40.00	ng		0.10
System Monitoring Compounds							
2) 2-Fluorophenol	4.83	112	955587	123.14	ng		0.02
Surrogate Spike 150.000	Range 25 - 121		Recovery =	82.09%			
3) Phenol-d5	6.36	99	1360671	132.74	ng		0.01
Surrogate Spike 150.000	Range 24 - 113		Recovery =	88.49%			
7) 1,2-Dichlorobenzene-d4	7.43	152	360544	70.21	ng		0.01
Surrogate Spike 100.000	Range 20 - 130		Recovery =	70.21%			
8) 2-Chlorophenol-d4	6.73	132	987255	125.35	ng		0.01
Surrogate Spike 150.000	Range 20 - 130		Recovery =	83.57%			
18) Nitrobenzene-d5	8.19	82	582018	87.23	ng		0.00
Surrogate Spike 100.000	Range 23 - 120		Recovery =	87.23%			
35) 2-Fluorobiphenyl	14.27	172	1049462	98.86	ng		0.01
Surrogate Spike 100.000	Range 30 - 115		Recovery =	98.86%			
52) 2,4,6-Tribromophenol	18.18	330	247732	155.67	ng		0.02
Surrogate Spike 150.000	Range 19 - 122		Recovery =	103.78%			
65) Terphenyl-d14	22.68	244	806246	82.51	ng		0.03
Surrogate Spike 100.000	Range 18 - 137		Recovery =	82.51%			
Target Compounds							Qvalue
4) Phenol	6.39	94	1339991	121.72	ng		100
6) 2-Chlorophenol	6.75	128	1025496	118.87	ng		98
10) 1,4-Dichlorobenzene	7.09	146	635917	64.53	ng		99
15) n-Nitroso-di-n-propylamine	7.81	70	467255	78.38	ng		98
25) 1,2,4-Trichlorobenzene	9.92	180	518273	81.40	ng		100
29) 4-Chloro-3-methylphenol	12.06	107	661298	151.89	ng		99
39) Acenaphthylene	15.89	152	17519	1.11	ng	#	61
42) Acenaphthene	16.38	153	976353	105.06	ng		99
44) 4-Nitrophenol	16.58	109	172734	161.44	ng		97
46) 2,4-Dinitrotoluene	16.84	165	410919	101.11	ng		99
47) Diethylphthalate	17.36	149	24025	2.01	ng	#	60
57) Pentachlorophenol	19.34	266	215299	109.88	ng		99
58) Phenanthrene	19.67	178	252575	16.05	ng		99
59) Anthracene	19.76	178	45954m	2.74	ng		99
60) Carbazole	20.07	167	59990	3.40	ng	#	54
61) Di-n-butylphthalate	20.69	149	131463	5.33	ng	#	50
62) Fluoranthene	22.04	202	653560	41.03	ng		92

0924

(#) = qualifier out of range (m) = manual integration

Data File : Q:\HPCHEM\G\G19XX\G1956.D Vial: 7
Acq On : 22 Jan 98 22:27 Operator:
Sample : S HP-7G 58073-004MSD FFR83MSD Inst : GC/MS Ins
Misc : SOIL CASE 25969 SDG#FFR76 IS=40,S00501 Multiplr: 1.00
Quant Time: Jan 26 13:35 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1949.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
64)	Pyrene	22.50	202	1767662	116.98	ng	89
66)	Butylbenzylphthalate	23.65	149	35537m	3.23	ng	33
67)	Benzo(a)anthracene	25.36	228	266090	22.02	ng	99
69)	Chrysene	25.49	228	468361	40.66	ng	94
70)	bis(2-Ethylhexyl)phthalate	25.05	149	465813	28.53	ng	98
72)	Di-n-octylphthalate	27.17	149	186898m	4.82	ng	100
73)	Benzo(b)fluoranthene	29.71	252	858197	53.37	ng	99
74)	Benzo(k)fluoranthene	29.80	252	639177	41.76	ng	97
75)	Benzo(a)pyrene	31.34	252	463991	31.57	ng	96
76)	Indeno(1,2,3-cd)pyrene	36.61	276	916660	54.13	ng	89
78)	Benzo(g,h,i)perylene	38.14	276	728906	51.58	ng	99

(#) = qualifier out of range (m) = manual integration

SEMIVOLATILES

GPC DATA

SEMIVOLATILES

GPC DATA

Internal Standard & Surrogate Summary Report - BNA WATER

CASE 25969
SDG# FFR76

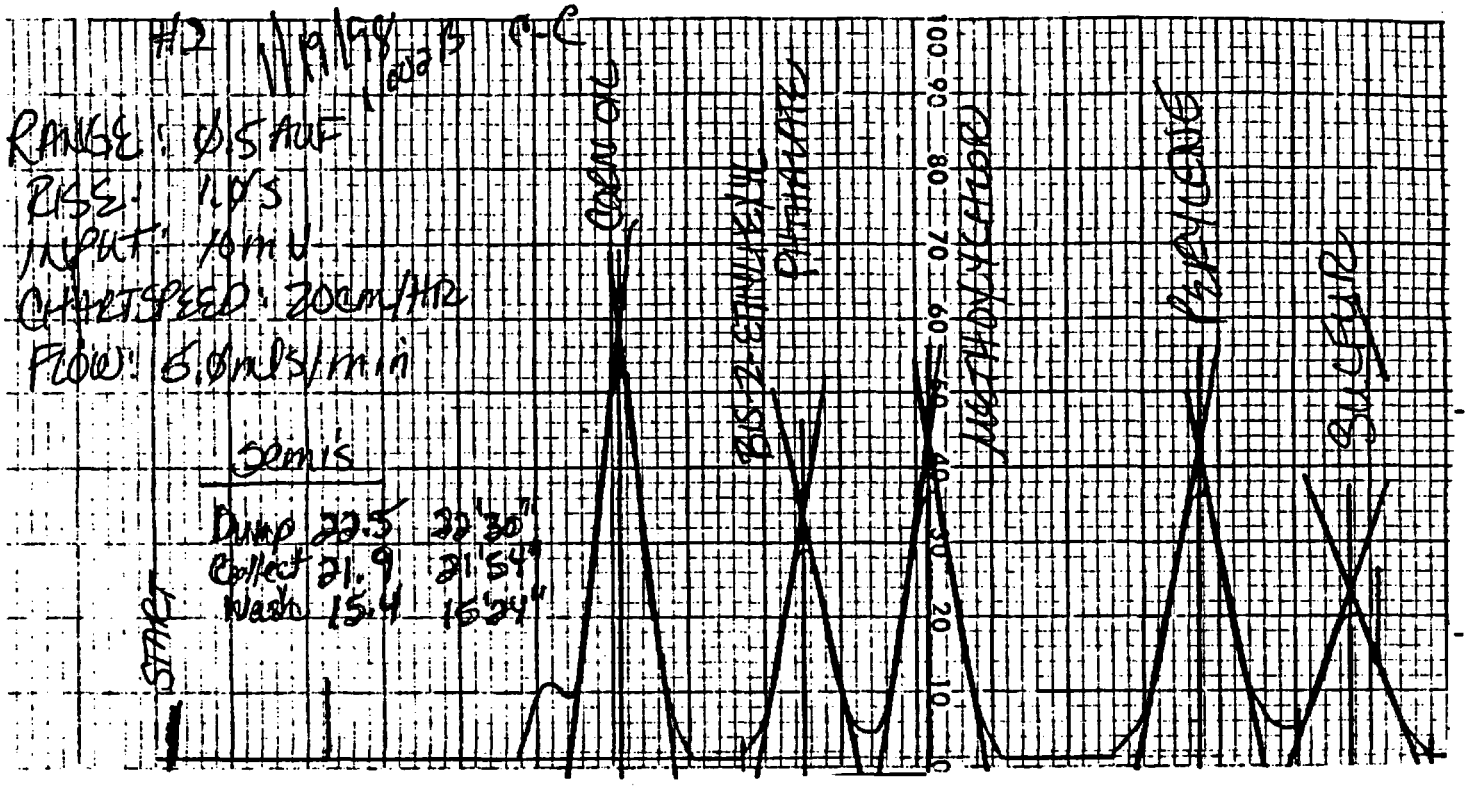
Data File : Q:\HPCHEM\G\DATA\G1947.D
Acq On : 20 Jan 98 12:59
Sample : HP-7G GPC QC 1002 01/19/98
Misc : IS=40ng S00501

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00

CC Std file: G1946.D Tune file: G1945.D

Cpd	Internal Standards	Sample Area	CC Area	% Diff.	Pass-Fail
1)	1,4-Dichlorobenzene-d4	165238	179459	92	Pass
17)	Naphthalene-d8	486321	547021	89	Pass
31)	Acenaphthene-d10	234351	260862	90	Pass
51)	Phenanthrene-d10	431402	477336	90	Pass
63)	Chrysene-d12	349182	385548	91	Pass
71)	Perylene-d12	321760	354208	91	Pass

	Sample RT	CC RT	Diff.	Pass-Fail
1,4-Dichlorobenzene-d4	7.053	7.048	0.005	Pass
Naphthalene-d8	10.062	10.068	-0.005	Pass
Acenaphthene-d10	16.276	16.271	0.005	Pass
Phenanthrene-d10	19.603	19.598	0.005	Pass
Chrysene-d12	25.347	25.352	-0.005	Pass
Perylene-d12	31.448	31.443	0.005	Pass



Action Required _____

Comments _____

CASE 25969
SDG# FFR76

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:G1892 DFTPP Injection Date: 1/08/98

Instrument ID:HP-7G DFTPP Injection Time:0925

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	68.0
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	67.2
70	Less than 2.0% of mass 69	0.8(1.1)1
127	25.0 - 75.0% of mass 198	51.6
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	6.9
275	10.0 - 30.0% of mass 198	16.7
365	Greater than 0.75% of mass 198	1.75
441	Present, but less than mass 443	9.0
442	40.0 - 110.0% of mass 198	63.5
443	15.0 - 24.0% of mass 442	12.3(19.4)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020GZ	G1894	G1894	1/08/98	1044
02	SSTD050GZ	G1895	G1895	1/08/98	1130
03	SSTD080GZ	G1896	G1896	1/08/98	1225
04	SSTD120GZ	G1897	G1897	1/08/98	1317
05	SSTD160GZ	G1898	G1898	1/08/98	1403
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CASE 25969
SDG# FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:G1945 DFTPP Injection Date: 1/20/98

Instrument ID:HP-7G DFTPP Injection Time:1156

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	78.4
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	72.0
70	Less than 2.0% of mass 69	0.0(0.0)1
127	25.0 - 75.0% of mass 198	54.8
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	7.0
275	10.0 - 30.0% of mass 198	17.5
365	Greater than 0.75% of mass 198	1.85
441	Present, but less than mass 443	8.9
442	40.0 - 110.0% of mass 198	62.0
443	15.0 - 24.0% of mass 442	12.1(19.5)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050GE	G1946	G1946	1/20/98	1208
02	GPC011998	G1947	G1947	1/20/98	1259
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

CASE 25969
SDG# FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date(s): 1/08/98 1/08/98

Calibration Times: 1044 1403

LAB FILE ID: RRF20 =G1894 RRF50 =G1895
RRF80 =G1896 RRF120=G1897 RRF160=G1898

	COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD	
*	Phenol	1.950	1.610	1.660	1.452	1.451	1.625	12.6	*
*	bis(2-Chloroethyl)ether	1.384	1.190	1.218	1.099	1.072	1.193	10.3	*
*	2-Chlorophenol	1.553	1.290	1.288	1.176	1.171	1.296	12.0	*
*	1,3-Dichlorobenzene	1.647	1.481	1.454	1.364	1.319	1.453	8.7	*
*	1,4-Dichlorobenzene	1.710	1.494	1.508	1.426	1.358	1.499	8.8	*
*	1,2-Dichlorobenzene	1.539	1.385	1.376	1.289	1.232	1.364	8.5	*
*	2-Methylphenol	1.146	1.073	1.106	0.942	0.916	1.037	9.8	*
	2,2'-oxybis(1-Chloropropane)	3.640	3.124	3.367	3.044	2.932	3.221	8.8	
*	4-Methylphenol	1.200	1.169	1.255	1.106	1.102	1.166	5.6	*
*	N-Nitroso-di-n-propylamine	1.002	0.872	0.913	0.832	0.802	0.884	8.8	*
*	Hexachloroethane	0.500	0.456	0.477	0.437	0.434	0.461	6.0	*
*	Nitrobenzene	0.406	0.366	0.383	0.354	0.340	0.370	6.9	*
*	Isophorone	0.828	0.743	0.763	0.706	0.672	0.742	8.0	*
*	2-Nitrophenol	0.256	0.220	0.216	0.212	0.210	0.223	8.5	*
*	2,4-Dimethylphenol	0.402	0.330	0.331	0.301	0.293	0.331	13.0	*
*	bis(2-Chloroethoxy)methane	0.524	0.449	0.451	0.422	0.398	0.449	10.5	*
*	2,4-Dichlorophenol	0.411	0.342	0.319	0.306	0.298	0.335	13.6	*
*	1,2,4-Trichlorobenzene	0.392	0.343	0.332	0.317	0.299	0.337	10.4	*
*	Naphthalene	0.936	0.860	0.896	0.842	0.806	0.868	5.8	*
	4-Chloroaniline	0.486	0.440	0.428	0.390	0.370	0.423	10.7	
	Hexachlorobutadiene	0.134	0.121	0.125	0.116	0.112	0.122	7.0	
*	4-Chloro-3-methylphenol	0.266	0.232	0.235	0.217	0.212	0.232	9.1	*
*	2-Methylnaphthalene	0.675	0.609	0.576	0.524	0.498	0.576	12.2	*
	Hexachlorocyclopentadiene	0.235	0.227	0.248	0.236	0.233	0.236	3.2	
*	2,4,6-Trichlorophenol	0.450	0.373	0.363	0.337	0.333	0.371	12.7	*
*	2,4,5-Trichlorophenol	0.000	0.396	0.409	0.368	0.359	0.383	6.1	*
*	2-Chloronaphthalene	1.326	1.167	1.142	1.067	1.006	1.142	10.6	*
	2-Nitroaniline	0.000	0.287	0.292	0.273	0.272	0.281	3.6	
	Dimethylphthalate	1.640	1.385	1.330	1.268	1.173	1.359	12.9	
*	Acenaphthylene	1.923	1.749	1.776	1.653	1.586	1.737	7.4	*
*	2,6-Dinitrotoluene	0.322	0.311	0.319	0.313	0.304	0.314	2.2	*
	3-Nitroaniline	0.000	0.349	0.351	0.328	0.321	0.337	4.4	
*	Acenaphthene	1.125	1.019	1.027	0.947	0.897	1.003	8.6	*
	2,4-Dinitrophenol	0.000	0.093	0.128	0.149	0.169	0.135	24.0	
	4-Nitrophenol	0.000	0.105	0.111	0.107	0.108	0.108	2.3	
*	Dibenzofuran	1.979	1.765	1.595	1.449	1.358	1.629	15.3	*
*	2,4-Dinitrotoluene	0.420	0.420	0.432	0.424	0.411	0.421	1.8	*

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

CASE 25969
SDG# FFR76

6C
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date(s): 1/08/98 1/08/98

Calibration Times: 1044 1403

LAB FILE ID: RRF20 =G1894 RRF50 =G1895
RRF80 =G1896 RRF120=G1897 RRF160=G1898

COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD	
Diethylphthalate		1.573	1.324	1.298	1.219	1.120	1.307	12.9	
4-Chlorophenyl-phenylether	*	0.652	0.549	0.527	0.496	0.456	0.536	13.7	*
Fluorene	*	1.335	1.195	1.176	1.096	1.033	1.167	9.8	*
4-Nitroaniline		0.000	0.373	0.376	0.354	0.343	0.362	4.3	
4,6-Dinitro-2-methylphenol		0.000	0.102	0.116	0.121	0.124	0.116	8.4	
N-Nitrosodiphenylamine (1)		0.620	0.515	0.483	0.453	0.407	0.496	16.2	
4-Bromophenyl-phenylether	*	0.167	0.144	0.144	0.135	0.121	0.142	11.8	*
Hexachlorobenzene	*	0.184	0.165	0.166	0.152	0.141	0.162	10.0	*
Pentachlorophenol	*	0.000	0.108	0.110	0.104	0.100	0.106	4.2	*
Phenanthrene	*	1.094	0.979	0.968	0.898	0.816	0.951	10.8	*
Anthracene	*	1.153	1.032	1.010	0.950	0.864	1.002	10.6	*
Carbazole		1.240	1.088	1.042	0.976	0.893	1.048	12.4	
Di-n-butylphthalate		1.836	1.554	1.482	1.409	1.251	1.506	14.3	
Fluoranthene	*	1.090	0.991	0.984	0.912	0.831	0.962	10.0	*
Pyrene	*	1.541	1.366	1.303	1.198	1.106	1.303	12.8	*
Butylbenzylphthalate		1.170	1.018	0.959	0.928	0.846	0.984	12.3	
3,3'-Dichlorobenzidine		0.312	0.312	0.317	0.302	0.304	0.309	2.0	
Benzo(a)anthracene	*	1.132	1.029	1.051	1.007	0.967	1.037	5.9	*
Chrysene	*	1.061	0.977	1.001	0.952	0.909	0.980	5.8	*
bis(2-Ethylhexyl)phthalate		1.723	1.499	1.449	1.403	1.274	1.470	11.2	
Di-n-octylphthalate		3.150	2.810	2.775	2.789	2.580	2.821	7.3	
Benzo(b)fluoranthene	*	1.179	1.098	1.142	1.101	1.112	1.126	3.0	*
Benzo(k)fluoranthene	*	1.138	1.059	1.101	1.100	1.040	1.088	3.5	*
Benzo(a)pyrene	*	1.080	1.018	1.054	1.025	1.005	1.036	2.9	*
Indeno(1,2,3-cd)pyrene	*	1.226	1.154	1.190	1.161	1.126	1.171	3.2	*
Dibenz(a,h)anthracene	*	1.040	0.992	1.033	1.006	0.973	1.009	2.8	*
Benzo(g,h,i)perylene	*	1.047	0.949	0.998	0.980	0.958	0.986	3.9	*
Nitrobenzene-d5	*	0.367	0.329	0.361	0.324	0.317	0.340	6.7	*
2-Fluorobiphenyl	*	1.389	1.200	1.223	1.095	1.046	1.191	11.2	*
Terphenyl-d14	*	0.982	0.852	0.857	0.748	0.713	0.830	12.7	*
Phenol-d5	*	1.708	1.520	1.683	1.427	1.362	1.540	9.9	*
2-Fluorophenol	*	1.289	1.156	1.242	1.100	1.069	1.171	7.9	*
2,4,6-Tribromophenol		0.102	0.094	0.100	0.090	0.083	0.094	8.2	
2-Chlorophenol-d4	*	1.338	1.194	1.270	1.111	1.066	1.196	9.3	*
1,2-Dichlorobenzene-d4	*	0.929	0.793	0.798	0.714	0.677	0.782	12.4	*

(1) Cannot be separated from Diphenylamine
* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

0930

Response Factor Report GC/MS Ins

CASE 25969
SDG# FFR76

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Calibration

COPY-ORIGINAL IS FILED IN CSF
25910/DAF55

Calibration Files
20 =G1894.D 50 =G1895.D 80 =G1896.D
120 =G1897.D 160 =G1898.D

		Compound	20	50	80	120	160	Avg		%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD							
2)	SPC	2-Fluorophenol	1.289	1.156	1.242	1.100	1.069	1.171	✓	7.94
3)	SPC	Phenol-d5	1.709	1.520	1.683	1.427	1.362	1.540	✓	9.94
4)	TPC	MPhenol	1.950	1.610	1.660	1.452	1.451	1.624	✓	12.59
5)	TPC	bis(2-Chloroethyl)eth	1.384	1.190	1.218	1.099	1.072	1.193	✓	10.32
6)	MTPC	2-Chlorophenol	1.553	1.290	1.288	1.177	1.171	1.296	✓	11.95
7)	SPC	1,2-Dichlorobenzene-d	0.929	0.793	0.799	0.714	0.677	0.782	✓	12.41
8)	SPC	2-Chlorophenol-d4	1.338	1.194	1.270	1.111	1.066	1.196	✓	9.32
9)	TPC	1,3-Dichlorobenzene	1.647	1.481	1.454	1.364	1.319	1.453	✓	8.73
10)	MTPC	1,4-Dichlorobenzene	1.710	1.494	1.509	1.426	1.358	1.499	✓	8.81
11)	TPC	1,2-Dichlorobenzene	1.539	1.385	1.376	1.289	1.232	1.364	✓	8.53
12)	TC	2-Methylphenol	1.146	1.073	1.106	0.942	0.916	1.037	✓	9.86
13)	TP	2,2'-oxybis(1-chlorop	3.641	3.124	3.367	3.044	2.932	3.221	✓	8.81
14)	TPC	4-Methylphenol	1.200	1.169	1.255	1.106	1.102	1.167	✓	5.56
15)	MTPC	n-Nitroso-di-n-propyl	1.002	0.872	0.913	0.832	0.802	0.884	✓	8.80
16)	TPC	Hexachloroethane	0.500	0.456	0.477	0.437	0.434	0.461	✓	6.04
17)	I	Naphthalene-d8	ISTD							
18)	SPC	Nitrobenzene-d5	0.367	0.329	0.361	0.324	0.317	0.340	✓	6.65
19)	TPC	Nitrobenzene	0.406	0.366	0.383	0.354	0.340	0.370	✓	6.90
20)	TPC	Isophorone	0.828	0.743	0.763	0.706	0.672	0.742	✓	7.96
21)	TPC	2-Nitrophenol	0.257	0.221	0.216	0.212	0.210	0.223	✓	8.53
22)	TPC	2,4-Dimethylphenol	0.402	0.330	0.331	0.301	0.293	0.331	✓	12.93
23)	TPC	bis(2-Chloroethoxy)me	0.524	0.449	0.451	0.422	0.398	0.449	✓	10.51
24)	TPC	2,4-Dichlorophenol	0.411	0.342	0.319	0.306	0.298	0.335	✓	13.67
25)	MTPC	1,2,4-Trichlorobenzen	0.393	0.343	0.332	0.317	0.299	0.337	✓	10.48
26)	TPC	Naphthalene	0.936	0.860	0.896	0.842	0.806	0.868	✓	5.76
27)	TP	4-Chloroaniline	0.486	0.440	0.428	0.390	0.371	0.423	✓	10.66
28)	TP	Hexachlorobutadiene	0.134	0.121	0.125	0.116	0.111	0.121	✓	7.01
29)	MTPC	4-Chloro-3-methylphen	0.266	0.232	0.235	0.217	0.212	0.232	✓	9.07
30)	TPC	2-Methylnaphthalene	0.675	0.609	0.576	0.524	0.498	0.576	✓	12.22
31)	I	Acenaphthene-d10	ISTD							
32)	TP	Hexachlorocyclopentad	0.235	0.227	0.248	0.236	0.233	0.236	✓	3.33
33)	TPC	2,4,6-Trichlorophenol	0.450	0.373	0.363	0.337	0.333	0.371	✓	12.74
34)	TPC	2,4,5-Trichlorophenol		0.396	0.409	0.368	0.359	0.383	✓	6.14
35)	SPC	2-Fluorobiphenyl	1.389	1.200	1.223	1.095	1.046	1.191	✓	11.18
36)	TPC	2-Chloronaphthalene	1.327	1.167	1.142	1.067	1.006	1.142	✓	10.62
37)	TP	2-Nitroaniline		0.287	0.292	0.273	0.272	0.281	✓	3.55
38)	TP	Dimethylphthalate	1.641	1.385	1.330	1.269	1.173	1.359	✓	12.92
39)	TPC	Acenaphthylene	1.923	1.749	1.776	1.653	1.586	1.737	✓	7.40
40)	TPC	2,6-Dinitrotoluene	0.322	0.311	0.319	0.313	0.304	0.314	✓	2.30
41)	TP	3-Nitroaniline		0.349	0.351	0.328	0.321	0.338	✓	4.45

0931

(#) = Out of Range

Response Factor Report GC/MS Ins

CASE 25969
SDG# FFR76

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Calibration

COPY-ORIGINAL IS FILED IN CSF 25969DA155

Calibration Files
20 =G1894.D 50 =G1895.D 80 =G1896.D
120 =G1897.D 160 =G1898.D

	Compound	20	50	80	120	160	Avg		%RSD
42)	MTPC Acenaphthene	1.125	1.019	1.027	0.947	0.897	1.003	✓	8.64
43)	TP 2,4-Dinitrophenol		0.093	0.128	0.149	0.169	0.135	✓	23.99
44)	MTP 4-Nitrophenol		0.105	0.111	0.107	0.108	0.108	✓	2.29
45)	TPC Dibenzofuran	1.979	1.765	1.595	1.449	1.358	1.629	✓	15.28
46)	MTPC 2,4-Dinitrotoluene	0.420	0.420	0.432	0.424	0.411	0.421	✓	1.79
47)	TP Diethylphthalate	1.573	1.324	1.298	1.219	1.120	1.307	✓	12.92
48)	TPC Fluorene	1.335	1.195	1.176	1.096	1.033	1.167	✓	9.79
49)	TPC 4-Chlorophenyl-phenyl	0.652	0.549	0.527	0.496	0.456	0.536	✓	13.73
50)	TP 4-Nitroaniline		0.373	0.376	0.354	0.343	0.362	✓	4.41
51)	I Phenanthrene-d10	ISTD							
52)	SP 2,4,6-Tribromophenol	0.102	0.094	0.100	0.090	0.083	0.094	✓	8.04
53)	TP 4,6-Dinitro-2-methylp		0.102	0.116	0.121	0.125	0.116	✓	8.53
54)	TP n-Nitrosodiphenylamin	0.620	0.515	0.483	0.453	0.407	0.496	✓	16.11
55)	TPC 4-Bromophenyl-phenyle	0.167	0.144	0.144	0.135	0.121	0.142	✓	11.83
56)	TPC Hexachlorobenzene	0.184	0.165	0.167	0.152	0.141	0.162	✓	9.95
57)	MTPC Pentachlorophenol		0.108	0.110	0.104	0.101	0.106	✓	3.88
58)	TPC Phenanthrene	1.094	0.979	0.968	0.898	0.816	0.951	✓	10.83
59)	TPC Anthracene	1.153	1.032	1.011	0.950	0.865	1.002	✓	10.63
60)	TP Carbazole	1.240	1.088	1.042	0.976	0.893	1.048	✓	12.39
61)	TP Di-n-butylphthalate	1.836	1.555	1.482	1.409	1.251	1.507	✓	14.33
62)	TPC Fluoranthene	1.090	0.991	0.984	0.912	0.831	0.962	✓	10.03
63)	I Chrysene-d12	ISTD							
64)	MTPC Pyrene	1.541	1.367	1.303	1.198	1.106	1.303	✓	12.75
65)	SPC Terphenyl-d14	0.982	0.852	0.857	0.748	0.713	0.830	✓	12.71
66)	TP Butylbenzylphthalate	1.170	1.018	0.959	0.928	0.846	0.984	✓	12.26
67)	TPC Benzo(a)anthracene	1.132	1.029	1.051	1.007	0.967	1.037	✓	5.92
68)	TP 3,3'-Dichlorobenzidin	0.312	0.312	0.317	0.302	0.304	0.309	✓	2.00
69)	TPC Chrysene	1.061	0.977	1.001	0.953	0.909	0.980	✓	5.79
70)	TP bis(2-Ethylhexyl)phth	1.723	1.499	1.449	1.403	1.274	1.470	✓	11.19
71)	I Perylene-d12	ISTD							
72)	TP Di-n-octylphthalate	3.150	2.810	2.775	2.789	2.580	2.821	✓	7.29
73)	TPC Benzo(b)fluoranthene	1.179	1.098	1.142	1.101	1.112	1.126	✓	3.03
74)	TPC Benzo(k)fluoranthene	1.138	1.059	1.101	1.100	1.040	1.088	✓	3.55
75)	TPC Benzo(a)pyrene	1.080	1.018	1.054	1.025	1.005	1.036	✓	2.93
76)	TPC Indeno(1,2,3-cd)pyren	1.227	1.154	1.190	1.161	1.126	1.172	✓	3.26
77)	TPC Dibenz(a,h)anthracene	1.040	0.992	1.033	1.006	0.973	1.009	✓	2.77
78)	TPC Benzo(g,h,i)perylene	1.047	0.949	0.999	0.980	0.958	0.986	✓	3.94

1 spec out

0932

(#) = Out of Range

Quantitation Report

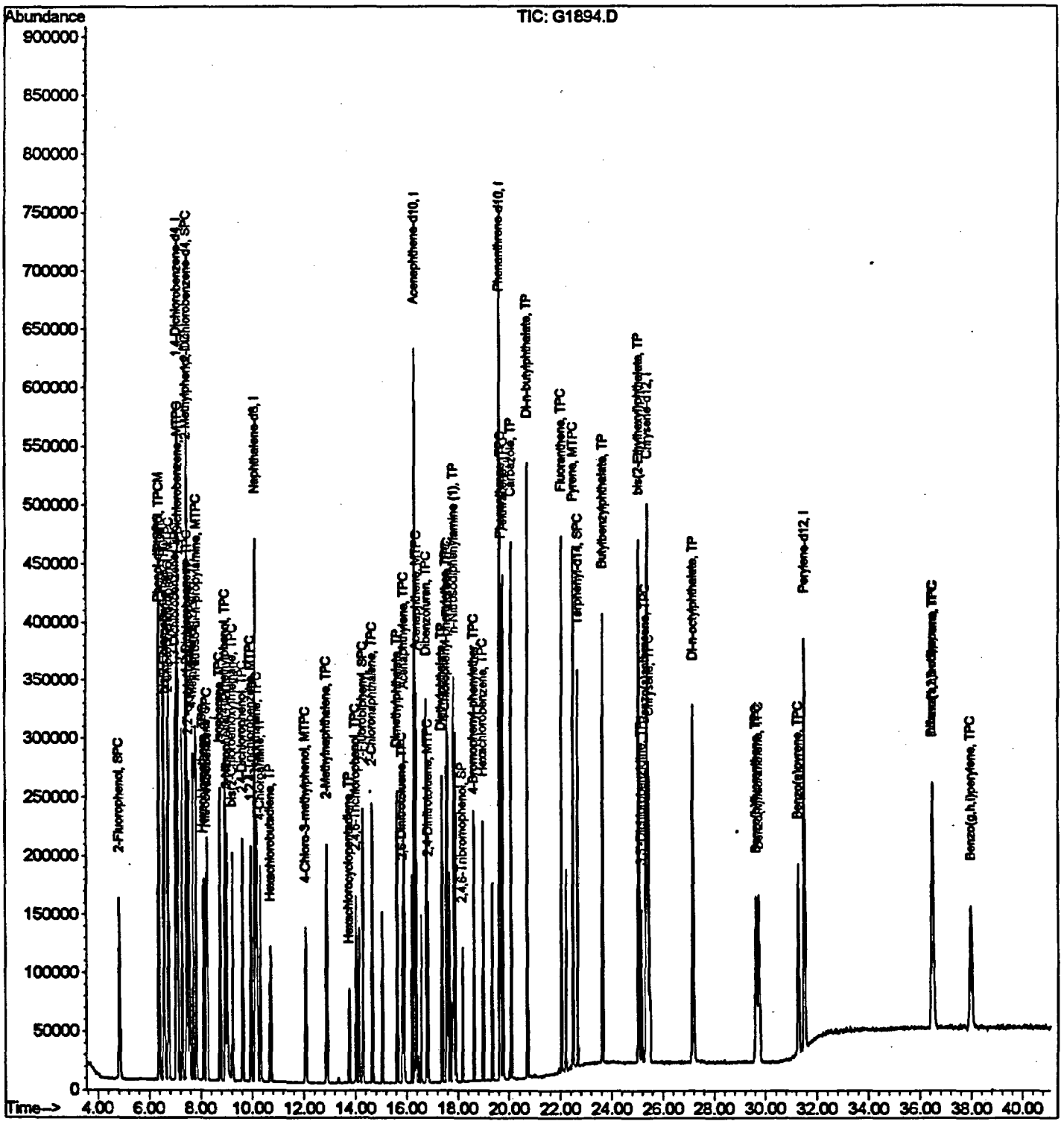
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1894.D
Acq On : 8 Jan 98 10:44
Sample : HP-7G SSTD020GZ
Misc : S00496 IS=40ng S00501
Quant Time: Jan 8 12:10 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910/DAFSS

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



0933

Quantitation Report (QT Reviewed)

Data File : Q:\HPCHEM\G\DATA\G1894.D
Acq On : 8 Jan 98 10:44
Sample : HP-7G SSTD020GZ
Misc : S00496 IS=40ng S00501
Quant Time: Jan 8 12:10 1998

Vial: 1 CASE 25969
Operator: SDG# FFR76
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25910 DNF55

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	215194	40.00	ng		0.00
17) Naphthalene-d8	10.11	136	627930	40.00	ng		0.00
31) Acenaphthene-d10	16.31	164	315801	40.00	ng		0.00
51) Phenanthrene-d10	19.63	188	579744	40.00	ng		0.01
63) Chrysene-d12	25.39	240	418101	40.00	ng		0.00
71) Perylene-d12	31.50	264	371085	40.00	ng		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.83	112	138711	22.15	ng		0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery =	14.77%#			
3) Phenol-d5	6.37	99	183832	22.65	ng		0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery =	15.10%			
7) 1,2-Dichlorobenzene-d4	7.45	152	99996	21.66	ng		0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery =	21.66%			
8) 2-Chlorophenol-d4	6.73	132	143958	22.58	ng		0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery =	15.05%#			
18) Nitrobenzene-d5	8.22	82	115197	20.44	ng		0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery =	20.44%#			
35) 2-Fluorobiphenyl	14.30	172	219397	21.50	ng		0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery =	21.50%#			
52) 2,4,6-Tribromophenol	18.19	330	29623	20.77	ng		0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery =	13.85%			
65) Terphenyl-d14	22.67	244	205185	24.82	ng		0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery =	24.82%#			
Target Compounds							Qvalue
4) Phenol	6.39	94	209794	25.06	ng		89
5) bis(2-Chloroethyl)ether	6.59	63	148913	23.75	ng	#	1
6) 2-Chlorophenol	6.77	128	167070	25.08	ng		99
9) 1,3-Dichlorobenzene	7.03	146	177237	22.80	ng		98
10) 1,4-Dichlorobenzene	7.11	146	183968	22.85	ng		100
11) 1,2-Dichlorobenzene	7.48	146	165575	22.46	ng		98
12) 2-Methylphenol	7.44	108	123338	21.84	ng		95
13) 2,2'-oxybis(1-chloropropan	7.55	45	391713	24.11	ng		100
14) 4-Methylphenol	7.71	108	129101	20.94	ng		97
15) n-Nitroso-di-n-propylamine	7.83	70	107772	23.31	ng		86
16) Hexachloroethane	8.12	117	53826	22.42	ng		84
19) Nitrobenzene	8.26	77	127455	22.28	ng		99
20) Isophorone	8.75	82	259857	22.46	ng		93
21) 2-Nitrophenol	9.03	139	80539	23.48	ng	#	87
22) 2,4-Dimethylphenol	8.95	107	126155	26.07	ng		95
23) bis(2-Chloroethoxy)methane	9.23	93	164549	23.57	ng		99
24) 2,4-Dichlorophenol	9.62	162	129181	24.76	ng		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1894.D
Acq On : 8 Jan 98 10:44
Sample : HP-7G SSTD020GZ
Misc : S00496 IS=40ng S00501
Quant Time: Jan 8 12:10 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF
25910 DNFS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.95	180	123239	23.24	ng		99
26)	Naphthalene	10.18	128	293881	19.47	ng		98
27)	4-Chloroaniline	10.32	127	152569	23.75	ng		98
28)	Hexachlorobutadiene	10.71	225	41977	22.30	ng		99
29)	4-Chloro-3-methylphenol	12.08	107	83487	23.98	ng		81
30)	2-Methylnaphthalene	12.89	142	211949	23.68	ng		95
32)	Hexachlorocyclopentadiene	13.77	237	37107	20.79	ng	#	90
33)	2,4,6-Trichlorophenol	14.03	196	71103	24.94	ng		97
36)	2-Chloronaphthalene	14.67	162	209467	23.37	ng		90
38)	Dimethylphthalate	15.63	163	259037	23.67	ng	#	95
39)	Acenaphthylene	15.91	152	303649	19.93	ng		97
40)	2,6-Dinitrotoluene	15.85	165	50920	21.02	ng	#	79
42)	Acenaphthene	16.39	153	177618	19.59	ng		97
45)	Dibenzofuran	16.78	168	312467	24.15	ng		95
46)	2,4-Dinitrotoluene	16.85	165	66295	20.62	ng	#	92
47)	Diethylphthalate	17.38	149	248454	23.72	ng		100
48)	Fluorene	17.60	166	210874	20.16	ng		99
49)	4-Chlorophenyl-phenylether	17.56	204	102929	23.95	ng		99
54)	n-Nitrosodiphenylamine (1)	17.84	169	179589	24.05	ng		98
55)	4-Bromophenyl-phenylether	18.64	248	48486	22.49	ng		94
56)	Hexachlorobenzene	18.99	284	53227	21.92	ng	#	74
58)	Phenanthrene	19.67	178	316984	19.46	ng		100
59)	Anthracene	19.77	178	334270	19.71	ng		100
60)	Carbazole	20.08	167	359349	22.14	ng		98
61)	Di-n-butylphthalate	20.71	149	532243	22.83	ng		99
62)	Fluoranthene	22.04	202	315860	19.37	ng		92
64)	Pyrene	22.49	202	322083	20.76	ng		91
66)	Butylbenzylphthalate	23.65	149	244488	23.38	ng		92
67)	Benzo(a)anthracene	25.33	228	236686	19.90	ng		98
68)	3,3'-Dichlorobenzidine	25.17	252	65183	17.05	ng		96
69)	Chrysene	25.47	228	221839	19.80	ng		97
70)	bis(2-Ethylhexyl)phthalate	25.05	149	360203	23.38	ng	#	97
72)	Di-n-octylphthalate	27.17	149	584375	24.67	ng		100
73)	Benzo(b)fluoranthene	29.64	252	218698	20.57	ng		96
74)	Benzo(k)fluoranthene	29.74	252	211220	20.80	ng		96
75)	Benzo(a)pyrene	31.26	252	200398	21.12	ng		95
76)	Indeno(1,2,3-cd)pyrene	36.47	276	227570	20.45	ng		96
77)	Dibenz(a,h)anthracene	36.48	278	193021	20.17	ng		98
78)	Benzo(g,h,i)perylene	37.97	276	194243	20.98	ng		95

0935

(#) = qualifier out of range (m) = manual integration

Quantitation Report

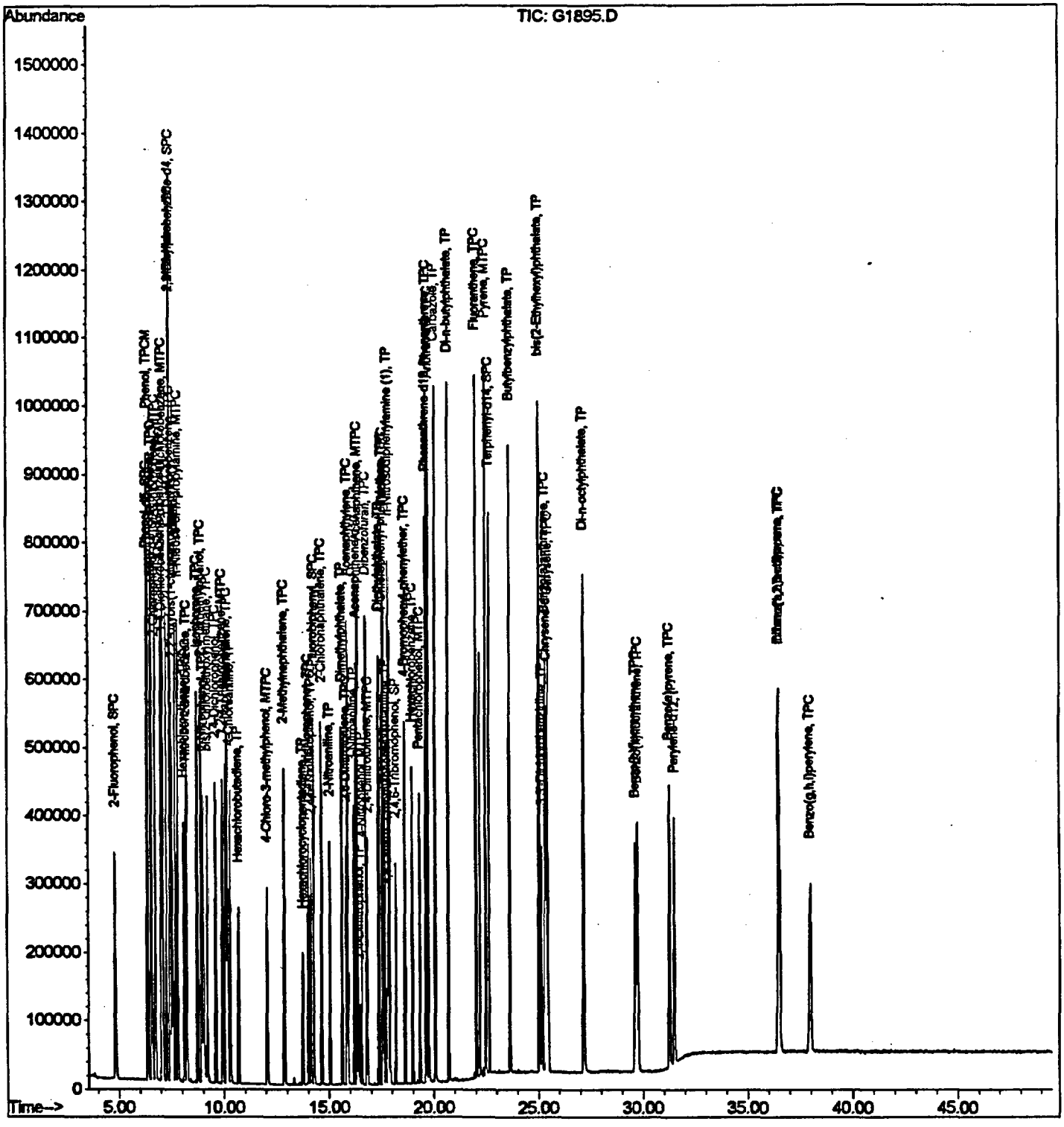
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D
Acq On : 8 Jan 98 11:30
Sample : HP-7G SSTD050GZ
Misc : S00497 IS=40ng S00501
Quant Time: Jan 8 12:20 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

COPY-ORIGINAL IS FILED IN CSF 25910/DNT55



Quantitation Report (Not Reviewed) CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D Vial: 2
Acq On : 8 Jan 98 11:30 Operator:
Sample : HP-7G SSTD050GZ Inst : GC/MS Ins
Misc : S00497 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 12:20 1998 Quant Results File: CLPME7.RES

FILED IN CSF

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1895.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25900 TONFS 5

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.07	152	214481	40.00 ng	0.00
17) Naphthalene-d8	10.10	136	636937	40.00 ng	0.00
31) Acenaphthene-d10	16.31	164	324326	40.00 ng	0.00
51) Phenanthrene-d10	19.62	188	597722	40.00 ng	0.00
63) Chrysene-d12	25.39	240	437743	40.00 ng	0.00
71) Perylene-d12	31.50	264	389061	40.00 ng	0.00

System Monitoring Compounds					
2) 2-Fluorophenol	4.82	112	309974	49.66 ng	0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery =	33.11%	
3) Phenol-d5	6.36	99	407565	50.39 ng	0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery =	33.59%	
7) 1,2-Dichlorobenzene-d4	7.44	152	212583	46.20 ng	0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery =	46.20%	
8) 2-Chlorophenol-d4	6.72	132	320206	50.40 ng	0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery =	33.60%	
18) Nitrobenzene-d5	8.21	82	262289	45.89 ng	0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery =	45.89%	
35) 2-Fluorobiphenyl	14.29	172	486417	46.42 ng	0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery =	46.42%	
52) 2,4,6-Tribromophenol	18.18	330	70297	47.81 ng	0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery =	31.87%	
65) Terphenyl-d14	22.66	244	466010	53.84 ng	0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery =	53.84%	

Target Compounds						Qvalue
4) Phenol	6.38	94	431524	51.72 ng		88
5) bis(2-Chloroethyl)ether	6.58	63	319090	51.06 ng		97
6) 2-Chlorophenol	6.76	128	345746	52.08 ng		99
9) 1,3-Dichlorobenzene	7.02	146	397168	51.27 ng		98
10) 1,4-Dichlorobenzene	7.10	146	400464	49.91 ng		99
11) 1,2-Dichlorobenzene	7.47	146	371401	50.54 ng		98
12) 2-Methylphenol	7.44	108	287788	51.13 ng		96
13) 2,2'-oxybis(1-chloropropan	7.54	45	837530	51.72 ng	#	83
14) 4-Methylphenol	7.70	108	313529	51.02 ng		96
15) n-Nitroso-di-n-propylamine	7.82	70	233914	50.77 ng		87
16) Hexachloroethane	8.11	117	122203	51.08 ng		86
19) Nitrobenzene	8.25	77	291319	50.20 ng		99
20) Isophorone	8.74	82	591470	50.40 ng		92
21) 2-Nitrophenol	9.02	139	175618	50.48 ng		97
22) 2,4-Dimethylphenol	8.94	107	262807	53.55 ng		94
23) bis(2-Chloroethoxy)methane	9.22	93	357337	50.47 ng		99
24) 2,4-Dichlorophenol	9.61	162	272280	51.45 ng		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D
Acq On : 8 Jan 98 11:30
Sample : HP-7G SSTD050GZ
Misc : S00497 IS=40ng S00501
Quant Time: Jan 8 12:20 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25970/DNFS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.94	180	273011	50.75	ng		99
26)	Naphthalene	10.17	128	684930	44.73	ng		98
27)	4-Chloroaniline	10.31	127	350027	53.73	ng		99
28)	Hexachlorobutadiene	10.70	225	96408	50.49	ng		99
29)	4-Chloro-3-methylphenol	12.06	107	184488	52.25	ng		83
30)	2-Methylnaphthalene	12.88	142	485100	53.42	ng		96
32)	Hexachlorocyclopentadiene	13.76	237	91871	50.13	ng	#	91
33)	2,4,6-Trichlorophenol	14.02	196	151192	51.64	ng		99
34)	2,4,5-Trichlorophenol	14.15	196	160644	49.38	ng		99
36)	2-Chloronaphthalene	14.66	162	473096	51.39	ng		91
37)	2-Nitroaniline	15.05	65	116203	53.37	ng		87
38)	Dimethylphthalate	15.62	163	561519	49.96	ng		99
39)	Acenaphthylene	15.90	152	709223	45.34	ng		97
40)	2,6-Dinitrotoluene	15.84	165	125939	50.63	ng		88
41)	3-Nitroaniline	16.20	138	141656	51.57	ng		82
42)	Acenaphthene	16.39	153	412968	44.34	ng		98
43)	2,4-Dinitrophenol	16.47	184	37896	46.43	ng	#	62
44)	4-Nitrophenol	16.57	109	42545	51.21	ng	#	87
45)	Dibenzofuran	16.78	168	715500	53.85	ng		96
46)	2,4-Dinitrotoluene	16.85	165	170165	51.54	ng	#	90
47)	Diethylphthalate	17.38	149	536621	49.88	ng		99
48)	Fluorene	17.59	166	484481	45.10	ng		100
49)	4-Chlorophenyl-phenylether	17.56	204	222472	50.40	ng		98
50)	4-Nitroaniline	17.70	138	151410	52.78	ng		90
53)	4,6-Dinitro-2-methylphenol	17.79	198	76334	48.38	ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.83	169	384999	50.01	ng		99
55)	4-Bromophenyl-phenylether	18.63	248	107757	48.47	ng		94
56)	Hexachlorobenzene	18.99	284	123643	49.38	ng		94
57)	Pentachlorophenol	19.34	266	80870	47.70	ng		98
58)	Phenanthrene	19.67	178	731794	43.57	ng		99
59)	Anthracene	19.77	178	770772	44.08	ng		100
60)	Carbazole	20.07	167	813156	48.60	ng		98
61)	Di-n-butylphthalate	20.71	149	1161477	48.33	ng		99
62)	Fluoranthene	22.04	202	740253	44.04	ng		92
64)	Pyrene	22.49	202	747756	46.02	ng		92
66)	Butylbenzylphthalate	23.64	149	556774	50.86	ng		92
67)	Benzo(a)anthracene	25.33	228	563155	45.21	ng		97
68)	3,3'-Dichlorobenzidine	25.17	252	170664	42.65	ng		97
69)	Chrysene	25.47	228	534633	45.58	ng		97
70)	bis(2-Ethylhexyl)phthalate	25.04	149	820383	50.86	ng		99
72)	Di-n-octylphthalate	27.16	149	1366489	55.02	ng		100
73)	Benzo(b)fluoranthene	29.63	252	533970	47.90	ng		96
74)	Benzo(k)fluoranthene	29.74	252	515023	48.38	ng		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1895.D Vial: 2
Acq On : 8 Jan 98 11:30 Operator:
Sample : HP-7G SSTD050GZ Inst : GC/MS Ins
Misc : S00497 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 12:20 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25969DATA FS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75) Benzo(a)pyrene	31.26	252	495109	49.76	ng	96
76) Indeno(1,2,3-cd)pyrene	36.48	276	561057	48.08	ng	96
77) Dibenz(a,h)anthracene	36.49	278	482363	48.09	ng	99
78) Benzo(g,h,i)perylene	37.98	276	461691	47.56	ng	96

(#) = qualifier out of range (m) = manual integration

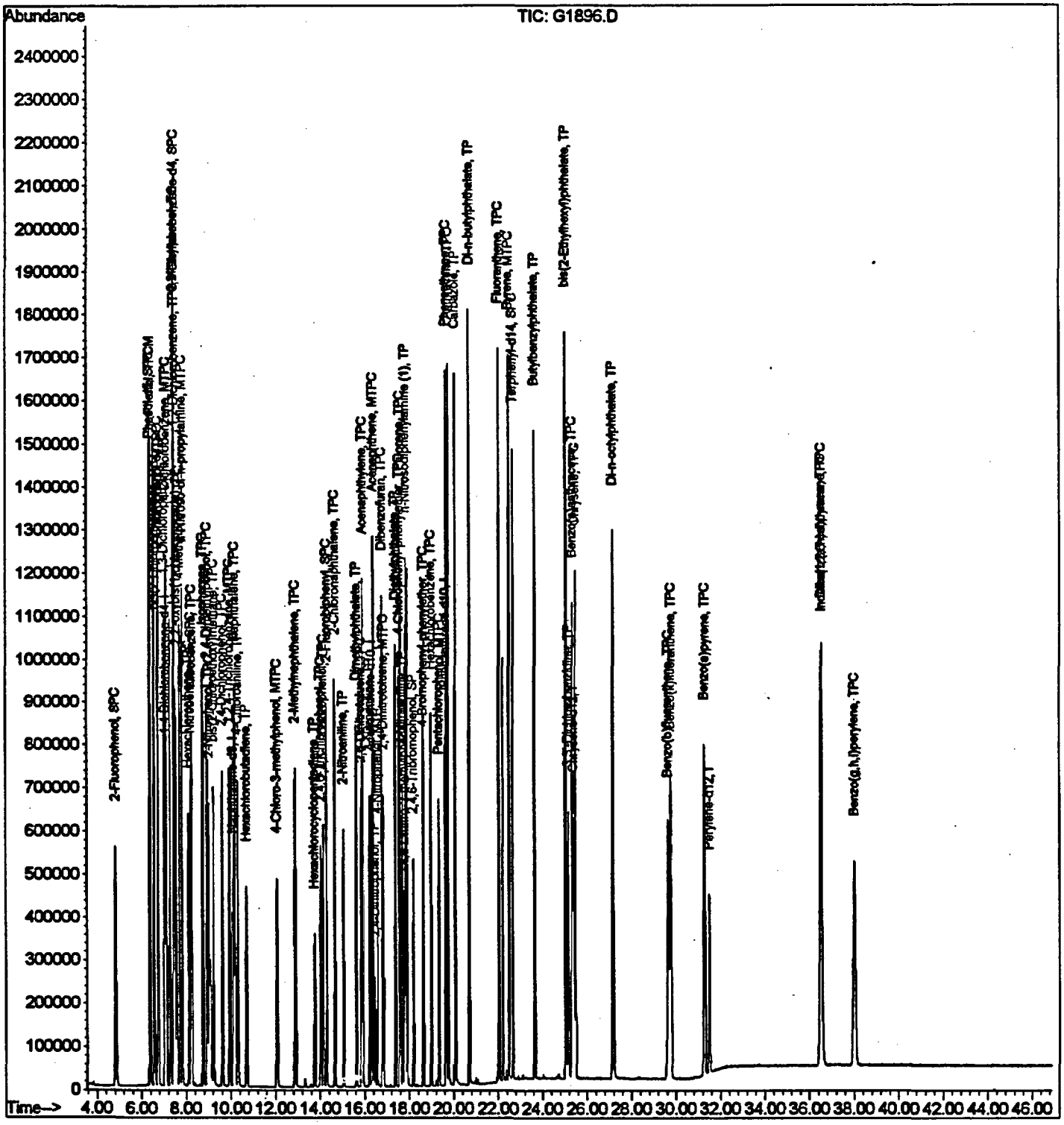
Quantitation Report

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial: CASE 25969
Operator: SDG# FFR76
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

COPY-ORIGINAL IS FILED IN CSF25910/BNT55



Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910/DNFSS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	218406	40.00 ng	0.00
17) Naphthalene-d8	10.11	136	671082	40.00 ng	0.00
31) Acenaphthene-d10	16.30	164	340322	40.00 ng	0.00
51) Phenanthrene-d10	19.63	188	639704	40.00 ng	0.01
63) Chrysene-d12	25.39	240	496227	40.00 ng	0.00
71) Perylene-d12	31.49	264	443881	40.00 ng	0.00

System Monitoring Compounds

2) 2-Fluorophenol	4.83	112	542648	85.37 ng	0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 56.91%		
3) Phenol-d5	6.36	99	735021	89.25 ng	0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 59.50%		
7) 1,2-Dichlorobenzene-d4	7.45	152	348823	74.45 ng	0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 74.45%		
8) 2-Chlorophenol-d4	6.73	132	554653	85.74 ng	0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 57.16%		
18) Nitrobenzene-d5	8.21	82	484071	80.39 ng	0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 80.39%		
35) 2-Fluorobiphenyl	14.30	172	832454	75.70 ng	0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 75.70%		
52) 2,4,6-Tribromophenol	18.19	330	127449	80.98 ng	0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 53.99%		
65) Terphenyl-d14	22.67	244	850760	86.71 ng	0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 86.71%		

Target Compounds					Qvalue
4) Phenol	6.38	94	725242	85.36 ng	87
5) bis(2-Chloroethyl)ether	6.59	63	532213	83.63 ng	# 1
6) 2-Chlorophenol	6.76	128	562814	83.25 ng	99
9) 1,3-Dichlorobenzene	7.03	146	635300	80.53 ng	98
10) 1,4-Dichlorobenzene	7.11	146	658937	80.65 ng	99
11) 1,2-Dichlorobenzene	7.47	146	600924	80.30 ng	99
12) 2-Methylphenol	7.44	108	483292	84.32 ng	97
13) 2,2'-oxybis(1-chloropropan	7.55	45	1470600	89.18 ng	100
14) 4-Methylphenol	7.70	108	548410	87.64 ng	96
15) n-Nitroso-di-n-propylamine	7.83	70	398813	85.00 ng	87
16) Hexachloroethane	8.10	117	208466	85.57 ng	88
19) Nitrobenzene	8.26	77	513662	84.02 ng	98
20) Isophorone	8.75	82	1023819	82.81 ng	93
21) 2-Nitrophenol	9.02	139	290193	79.17 ng	96
22) 2,4-Dimethylphenol	8.94	107	443751	85.82 ng	93
23) bis(2-Chloroethoxy)methane	9.22	93	605004	81.10 ng	98
24) 2,4-Dichlorophenol	9.62	162	427720	76.70 ng	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D
Acq On : 8 Jan 98 12:25
Sample : HP-7G SSTD080GZ
Misc : S00498 IS=40ng S00501
Quant Time: Jan 8 13:12 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25910/DNF55

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.93	180	445962	78.68	ng		100
26)	Naphthalene	10.17	128	1201994	74.50	ng		98
27)	4-Chloroaniline	10.31	127	574488	83.69	ng		99
28)	Hexachlorobutadiene	10.69	225	167601	83.30	ng		98
29)	4-Chloro-3-methylphenol	12.06	107	315415	84.79	ng		87
30)	2-Methylnaphthalene	12.88	142	773107	80.81	ng		96
32)	Hexachlorocyclopentadiene	13.75	237	168913	87.83	ng		95
33)	2,4,6-Trichlorophenol	14.03	196	247077	80.42	ng		98
34)	2,4,5-Trichlorophenol	14.14	196	278317	81.53	ng		99
36)	2-Chloronaphthalene	14.65	162	776986	80.43	ng		92
37)	2-Nitroaniline	15.05	65	198418	86.85	ng		88
38)	Dimethylphthalate	15.63	163	905019	76.74	ng		100
39)	Acenaphthylene	15.90	152	1208795	73.64	ng		98
40)	2,6-Dinitrotoluene	15.84	165	217016	83.14	ng		92
41)	3-Nitroaniline	16.21	138	239196	82.99	ng		82
42)	Acenaphthene	16.38	153	699300	71.56	ng		99
43)	2,4-Dinitrophenol	16.48	184	87154	101.77	ng		90
44)	4-Nitrophenol	16.57	109	75512	86.63	ng	#	84
45)	Dibenzofuran	16.77	168	1085770	77.88	ng		99
46)	2,4-Dinitrotoluene	16.84	165	294121	84.90	ng	#	93
47)	Diethylphthalate	17.38	149	883622	78.28	ng		100
48)	Fluorene	17.59	166	800421	71.01	ng		99
49)	4-Chlorophenyl-phenylether	17.56	204	358831	77.47	ng		97
50)	4-Nitroaniline	17.70	138	255976	85.04	ng		89
53)	4,6-Dinitro-2-methylphenol	17.80	198	148410	87.88	ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.84	169	618053	75.01	ng		99
55)	4-Bromophenyl-phenylether	18.64	248	183650	77.18	ng		95
56)	Hexachlorobenzene	18.98	284	213104	79.52	ng		94
57)	Pentachlorophenol	19.34	266	140265	77.30	ng		99
58)	Phenanthrene	19.67	178	1237929	68.87	ng		99
59)	Anthracene	19.76	178	1292869	69.08	ng		99
60)	Carbazole	20.08	167	1333498	74.47	ng		99
61)	Di-n-butylphthalate	20.70	149	1896350	73.73	ng		100
62)	Fluoranthene	22.04	202	1258673	69.97	ng		94
64)	Pyrene	22.49	202	1293286	70.22	ng		94
66)	Butylbenzylphthalate	23.64	149	951734	76.70	ng		94
67)	Benzo(a)anthracene	25.33	228	1043413	73.90	ng		97
68)	3,3'-Dichlorobenzidine	25.17	252	314514	69.34	ng		97
69)	Chrysene	25.47	228	993188	74.69	ng		97
70)	bis(2-Ethylhexyl)phthalate	25.04	149	1437982	78.64	ng		99
72)	Di-n-octylphthalate	27.16	149	2463690	86.94	ng		100
73)	Benzo(b)fluoranthene	29.65	252	1013711	79.71	ng		98
74)	Benzo(k)fluoranthene	29.76	252	977387	80.47	ng		96

(#) = qualifier out of range (m) = manual integration

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1896.D Vial:
Acq On : 8 Jan 98 12:25 Operator:
Sample : HP-7G SSTD080GZ Inst : GC/MS Ins
Misc : S00498 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 13:12 1998 Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 2570/MISS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75)	Benzo(a)pyrene	31.28	252	935868	82.45	ng	97
76)	Indeno(1,2,3-cd)pyrene	36.51	276	1056558	79.36	ng	94
77)	Dibenz(a,h)anthracene	36.52	278	916934	80.12	ng	100
78)	Benzo(g,h,i)perylene	38.01	276	886433	80.04	ng	94

(#) = qualifier out of range (m) = manual integration

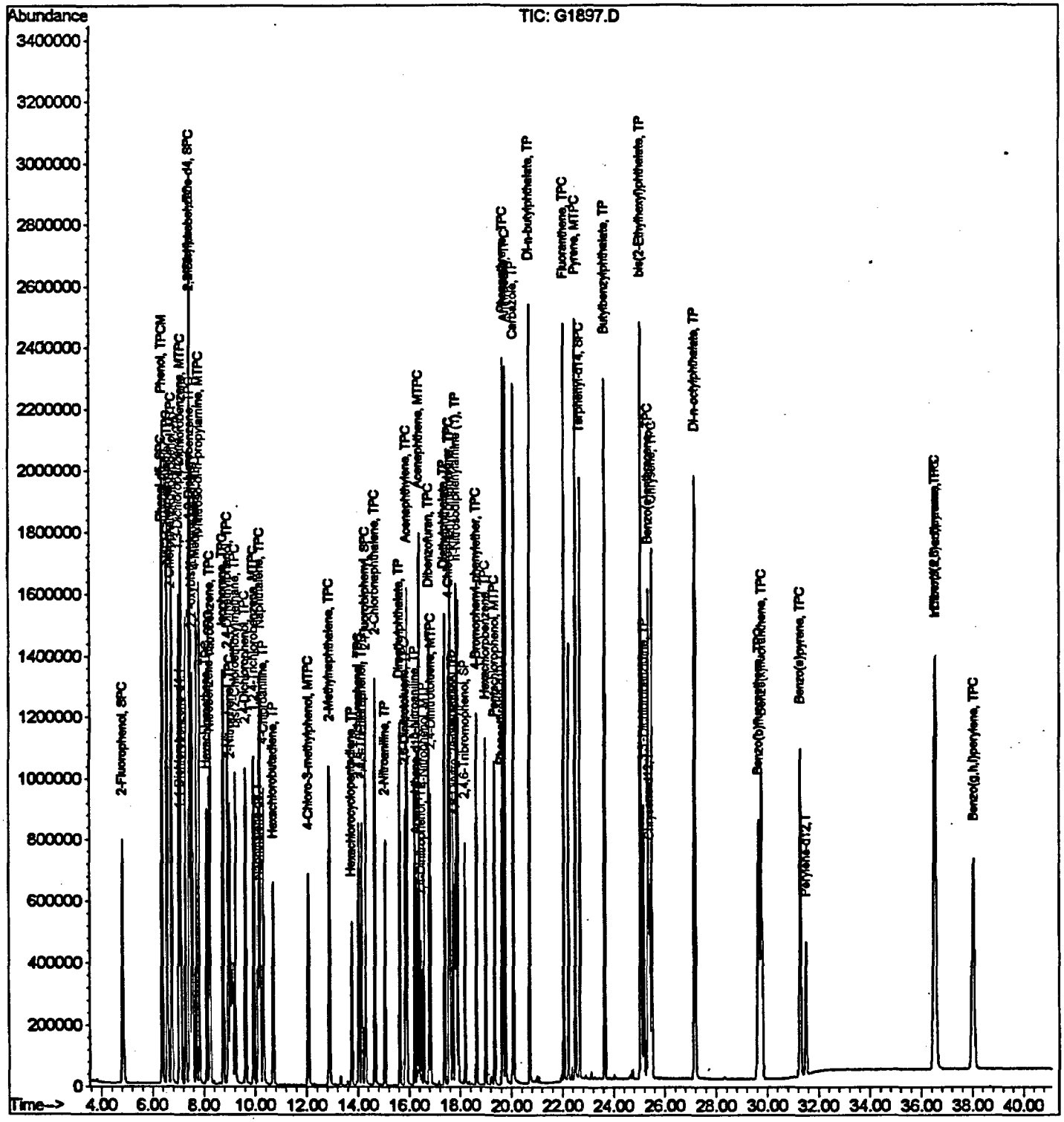
Quantitation Report

Data File : Q:\HPCHEM\G\DATA\G1897.D
Acq On : 8 Jan 98 13:17
Sample : HP-7G SSTD120GZ
Misc : S00499 IS=40ng S00501
Quant Time: Jan 8 13:59 1998

Vial: CASE 25969
Operator: SDG# FFR76
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

COPY-ORIGINAL IS FILED IN CSF) 5/10/MPSS



Quantitation Report (Not Reviewed)

CASE 25988
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1897.D Vial:
Acq On : 8 Jan 98 13:17 Operator:
Sample : HP-7G SSTD120GZ Inst : GC/MS Ins
Misc : S00499 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 13:59 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25988FSS

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	231050	40.00	ng	0.00
17) Naphthalene-d8	10.11	136	700859	40.00	ng	0.00
31) Acenaphthene-d10	16.30	164	354686	40.00	ng	0.00
51) Phenanthrene-d10	19.63	188	660189	40.00	ng	0.00
63) Chrysene-d12	25.40	240	514683	40.00	ng	0.00
71) Perylene-d12	31.50	264	451453	40.00	ng	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.83	112	762643	113.41	ng	0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 75.61%			
3) Phenol-d5	6.36	99	988963	113.51	ng	0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 75.67%			
7) 1,2-Dichlorobenzene-d4	7.45	152	494897	99.84	ng	0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 99.84%			
8) 2-Chlorophenol-d4	6.73	132	770432	112.57	ng	0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 75.05%			
18) Nitrobenzene-d5	8.21	82	680948	108.28	ng	0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 108.28%			
35) 2-Fluorobiphenyl	14.30	172	1164960	101.65	ng	0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 101.65%			
52) 2,4,6-Tribromophenol	18.19	330	179091	110.27	ng	0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 73.51%			
65) Terphenyl-d14	22.67	244	1155675	113.56	ng	0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 113.56%			
Target Compounds						Qvalue
4) Phenol	6.38	94	1006147	111.95	ng	88
5) bis(2-Chloroethyl)ether	6.59	63	761677	113.14	ng	92
6) 2-Chlorophenol	6.76	128	815505	114.02	ng	98
9) 1,3-Dichlorobenzene	7.03	146	945692	113.32	ng	98
10) 1,4-Dichlorobenzene	7.11	146	988169	114.32	ng	99
11) 1,2-Dichlorobenzene	7.48	146	893801	112.90	ng	99
12) 2-Methylphenol	7.45	108	653208	107.73	ng	97
13) 2,2'-oxybis(1-chloropropan	7.55	45	2109697	120.93	ng	# 83
14) 4-Methylphenol	7.70	108	766416	115.78	ng	96
15) n-Nitroso-di-n-propylamine	7.83	70	576887	116.23	ng	87
16) Hexachloroethane	8.10	117	303242	117.66	ng	85
19) Nitrobenzene	8.26	77	744966	116.67	ng	98
20) Isophorone	8.75	82	1485101	115.01	ng	92
21) 2-Nitrophenol	9.02	139	446498	116.64	ng	93
22) 2,4-Dimethylphenol	8.94	107	632547	117.13	ng	93
23) bis(2-Chloroethoxy)methane	9.23	93	888328	114.02	ng	98
24) 2,4-Dichlorophenol	9.62	162	642540	110.33	ng	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1897.D Vial:
Acq On : 8 Jan 98 13:17 Operator:
Sample : HP-7G SSTD120GZ Inst : GC/MS Ins
Misc : S00499 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 13:59 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF 25969/DMFSS

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.94	180	665827	112.48	ng		99
26)	Naphthalene	10.18	128	1769792	105.04	ng		98
27)	4-Chloroaniline	10.32	127	819138	114.26	ng		98
28)	Hexachlorobutadiene	10.70	225	244109	116.18	ng		99
29)	4-Chloro-3-methylphenol	12.07	107	455870	117.34	ng		85
30)	2-Methylnaphthalene	12.88	142	1100705	110.16	ng		96
32)	Hexachlorocyclopentadiene	13.75	237	251143	125.30	ng		95
33)	2,4,6-Trichlorophenol	14.03	196	358552	111.98	ng		99
34)	2,4,5-Trichlorophenol	14.15	196	391374	110.01	ng		99
36)	2-Chloronaphthalene	14.66	162	1135859	112.82	ng		92
37)	2-Nitroaniline	15.06	65	290057	121.82	ng		87
38)	Dimethylphthalate	15.63	163	1349808	109.82	ng		100
39)	Acenaphthylene	15.90	152	1758457	102.78	ng		98
40)	2,6-Dinitrotoluene	15.85	165	333202	122.48	ng		89
41)	3-Nitroaniline	16.22	138	349503	116.36	ng	#	82
42)	Acenaphthene	16.39	153	1007342	98.90	ng		98
43)	2,4-Dinitrophenol	16.48	184	158835	177.96	ng		96
44)	4-Nitrophenol	16.58	109	114214	125.72	ng	#	84
45)	Dibenzofuran	16.78	168	1542325	106.15	ng		99
46)	2,4-Dinitrotoluene	16.85	165	451051	124.93	ng		94
47)	Diethylphthalate	17.39	149	1296925	110.24	ng		100
48)	Fluorene	17.60	166	1165699	99.22	ng		99
49)	4-Chlorophenyl-phenylether	17.56	204	527933	109.36	ng		97
50)	4-Nitroaniline	17.71	138	377156	120.22	ng		90
53)	4,6-Dinitro-2-methylphenol	17.80	198	240310	137.89	ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.85	169	897162	105.50	ng		97
55)	4-Bromophenyl-phenylether	18.64	248	267219	108.82	ng		94
56)	Hexachlorobenzene	18.99	284	301341	108.96	ng		93
57)	Pentachlorophenol	19.34	266	206438	110.24	ng		99
58)	Phenanthrene	19.68	178	1777693	95.82	ng		99
59)	Anthracene	19.77	178	1881434	97.42	ng		99
60)	Carbazole	20.08	167	1933728	104.64	ng		99
61)	Di-n-butylphthalate	20.70	149	2791355	105.16	ng		100
62)	Fluoranthene	22.04	202	1806931	97.33	ng		94
64)	Pyrene	22.50	202	1849252	96.80	ng		94
66)	Butylbenzylphthalate	23.64	149	1433553	111.39	ng		92
67)	Benzo(a)anthracene	25.34	228	1555016	106.18	ng		97
68)	3,3'-Dichlorobenzidine	25.18	252	466469	99.15	ng		97
69)	Chrysene	25.48	228	1470772	106.64	ng		96
70)	bis(2-Ethylhexyl)phthalate	25.04	149	2166871	114.25	ng		100
72)	Di-n-octylphthalate	27.16	149	3777729	131.08	ng		100
73)	Benzo(b)fluoranthene	29.66	252	1491033	115.27	ng		98
74)	Benzo(k)fluoranthene	29.78	252	1489919	120.61	ng		95

(#) = qualifier out of range (m) = manual integration

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1897.D Vial: 4
Acq On : 8 Jan 98 13:17 Operator:
Sample : HP-7G SSTD120GZ Inst : GC/MS Ins
Misc : S00499 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 13:59 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF25910DMFS 5

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) Benzo(a)pyrene	31.29	252	1387693	120.20 ng	97
76) Indeno(1,2,3-cd)pyrene	36.54	276	1572840	116.15 ng	95
77) Dibenz(a,h)anthracene	36.55	278	1362911	117.09 ng	99
78) Benzo(g,h,i)perylene	38.05	276	1326822	117.80 ng	95

0947

(#) = qualifier out of range (m) = manual integration

Quantitation Report

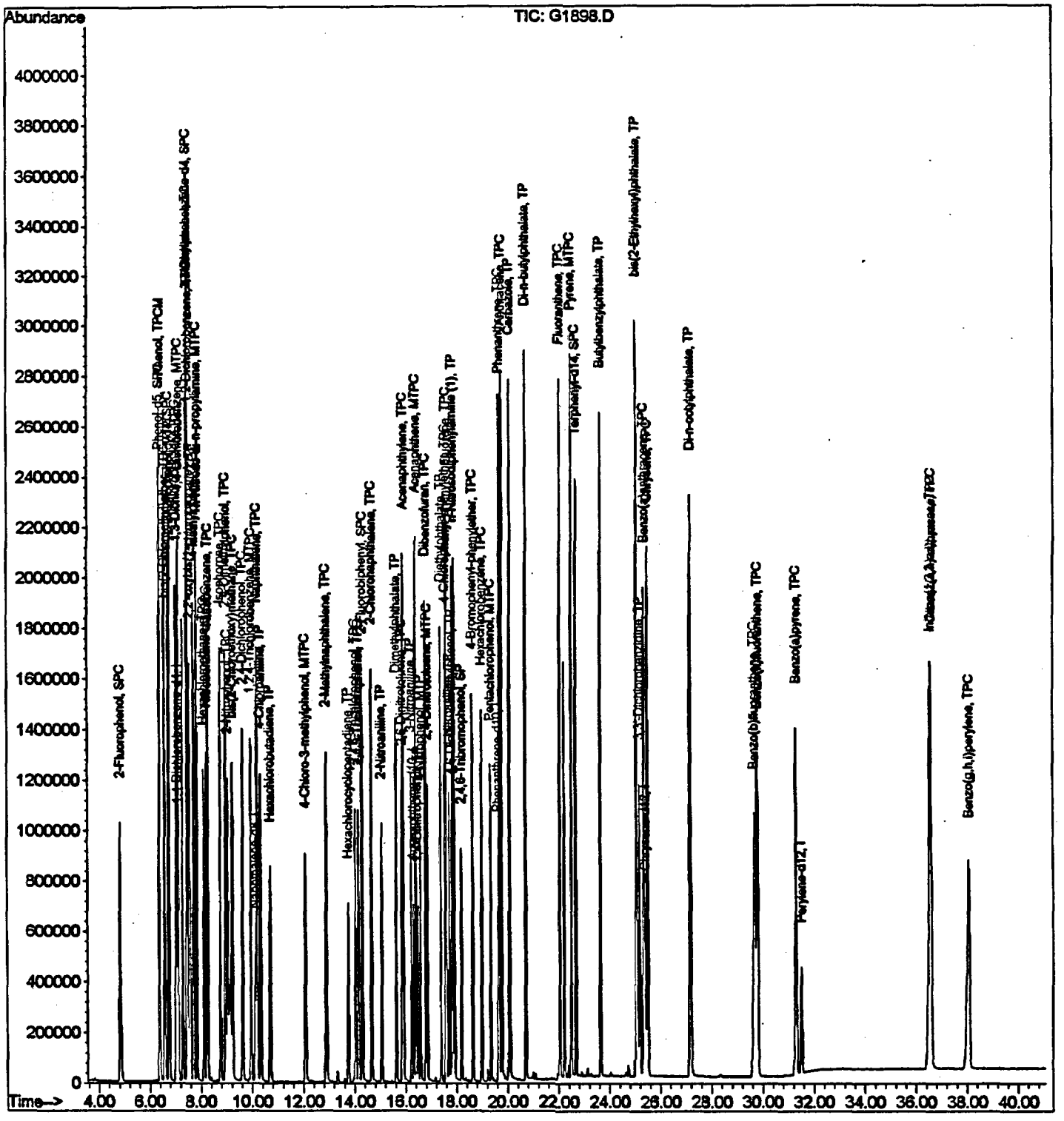
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1898.D
Acq On : 8 Jan 98 14:03
Sample : HP-7G SSTD160GZ
Misc : S00500 IS=40ng S00501
Quant Time: Jan 8 14:45 1998

Vial:
Operator:
Inst : GC/MS Ins
Multiplr: 1.00
Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF
25910/DNFSS

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

CASE 25989
SDG# FFR78

Data File : Q:\HPCHEM\G\DATA\G1898.D Vial: 5
Acq On : 8 Jan 98 14:03 Operator:
Sample : HP-7G SSTD160GZ Inst : GC/MS Ins
Misc : S00500 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 14:45 1998 Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910fnf55

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.08	152	228455	40.00	ng		0.00
17) Naphthalene-d8	10.11	136	712413	40.00	ng		0.00
31) Acenaphthene-d10	16.31	164	355890	40.00	ng		0.00
51) Phenanthrene-d10	19.62	188	676624	40.00	ng		0.00
63) Chrysene-d12	25.40	240	511333	40.00	ng		0.00
71) Perylene-d12	31.51	264	442699	40.00	ng		0.02
System Monitoring Compounds							
2) 2-Fluorophenol	4.83	112	977046	146.94	ng		0.00
Surrogate Spike 150.000	Range 21 - 110		Recovery = 97.96%				
3) Phenol-d5	6.37	99	1244499	144.46	ng		0.00
Surrogate Spike 150.000	Range 10 - 110		Recovery = 96.31%				
7) 1,2-Dichlorobenzene-d4	7.44	152	618977	126.29	ng		0.00
Surrogate Spike 100.000	Range 16 - 110		Recovery = 126.29%#				
8) 2-Chlorophenol-d4	6.74	132	973876	143.92	ng		0.00
Surrogate Spike 150.000	Range 33 - 110		Recovery = 95.95%				
18) Nitrobenzene-d5	8.22	82	904084	141.43	ng		0.00
Surrogate Spike 100.000	Range 35 - 114		Recovery = 141.43%#				
35) 2-Fluorobiphenyl	14.30	172	1488332	129.43	ng		0.00
Surrogate Spike 100.000	Range 43 - 116		Recovery = 129.43%#				
52) 2,4,6-Tribromophenol	18.19	330	225164	135.27	ng		0.00
Surrogate Spike 150.000	Range 10 - 123		Recovery = 90.18%				
65) Terphenyl-d14	22.67	244	1457672	144.18	ng		0.00
Surrogate Spike 100.000	Range 33 - 141		Recovery = 144.18%#				
Target Compounds							Qvalue
4) Phenol	6.39	94	1326028	149.21	ng		88
5) bis(2-Chloroethyl)ether	6.59	63	979533	147.15	ng	#	1
6) 2-Chlorophenol	6.77	128	1070077	151.32	ng		98
9) 1,3-Dichlorobenzene	7.02	146	1205308	146.06	ng		99
10) 1,4-Dichlorobenzene	7.11	146	1241026	145.21	ng		99
11) 1,2-Dichlorobenzene	7.47	146	1125760	143.82	ng		98
12) 2-Methylphenol	7.44	108	836648	139.55	ng		97
13) 2,2'-oxybis(1-chloropropan	7.54	45	2678995	155.31	ng	#	83
14) 4-Methylphenol	7.71	108	1007370	153.91	ng		97
15) n-Nitroso-di-n-propylamine	7.83	70	732918	149.34	ng		87
16) Hexachloroethane	8.11	117	396739	155.69	ng		86
19) Nitrobenzene	8.26	77	969552	149.38	ng		97
20) Isophorone	8.75	82	1914843	145.89	ng		92
21) 2-Nitrophenol	9.03	139	599420	154.05	ng		96
22) 2,4-Dimethylphenol	8.95	107	836081	152.31	ng		94
23) bis(2-Chloroethoxy)methane	9.23	93	1135154	143.34	ng		98
24) 2,4-Dichlorophenol	9.62	162	849041	143.43	ng		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed) CASE 25969 SDG# FFR78

Data File : Q:\HPCHEM\G\DATA\G1898.D Vial: 5
Acq On : 8 Jan 98 14:03 Operator:
Sample : HP-7G SSTD160GZ Inst : GC/MS Ins
Misc : S00500 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 14:45 1998 Quant Results File: CLPME7.RES

COPY-ORIGINAL IS FILED IN CSF 25910/DAFS

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.94	180	852647	141.70 ng		99
26)	Naphthalene	10.17	128	2296482	134.09 ng		98
27)	4-Chloroaniline	10.33	127	1055994	144.91 ng		97
28)	Hexachlorobutadiene	10.70	225	317729	148.76 ng		99
29)	4-Chloro-3-methylphenol	12.08	107	605014	153.20 ng		85
30)	2-Methylnaphthalene	12.89	142	1417843	139.60 ng		97
32)	Hexachlorocyclopentadiene	13.76	237	331483	164.83 ng		94
33)	2,4,6-Trichlorophenol	14.03	196	474242	147.61 ng		99
34)	2,4,5-Trichlorophenol	14.16	196	510949	143.14 ng		99
36)	2-Chloronaphthalene	14.67	162	1431660	141.72 ng		92
37)	2-Nitroaniline	15.06	65	386829	161.91 ng		87
38)	Dimethylphthalate	15.63	163	1670253	135.43 ng		100
39)	Acenaphthylene	15.91	152	2258152	131.55 ng		98
40)	2,6-Dinitrotoluene	15.86	165	432678	158.51 ng		90
41)	3-Nitroaniline	16.23	138	457470	151.78 ng	#	81
42)	Acenaphthene	16.40	153	1277498	125.00 ng		98
43)	2,4-Dinitrophenol	16.48	184	240856	268.95 ng		95
44)	4-Nitrophenol	16.58	109	153578	168.48 ng	#	84
45)	Dibenzofuran	16.78	168	1932740	132.57 ng		99
46)	2,4-Dinitrotoluene	16.86	165	585650	161.66 ng		94
47)	Diethylphthalate	17.39	149	1594713	135.09 ng		100
48)	Fluorene	17.60	166	1471054	124.79 ng		99
49)	4-Chlorophenyl-phenylether	17.57	204	649065	133.99 ng		96
50)	4-Nitroaniline	17.72	138	487716	154.94 ng		90
53)	4,6-Dinitro-2-methylphenol	17.80	198	337209	188.79 ng	#	94
54)	n-Nitrosodiphenylamine (1)	17.84	169	1102439	126.49 ng		98
55)	4-Bromophenyl-phenylether	18.63	248	327747	130.23 ng		93
56)	Hexachlorobenzene	18.99	284	381686	134.65 ng		94
57)	Pentachlorophenol	19.35	266	272207	141.84 ng		98
58)	Phenanthrene	19.69	178	2209355	116.20 ng		99
59)	Anthracene	19.77	178	2339944	118.21 ng		98
60)	Carbazole	20.08	167	2417751	127.66 ng		99
61)	Di-n-butylphthalate	20.71	149	3385431	124.45 ng		100
62)	Fluoranthene	22.05	202	2249047	118.20 ng		94
64)	Pyrene	22.49	202	2262473	119.21 ng		95
66)	Butylbenzylphthalate	23.65	149	1731156	135.39 ng		92
67)	Benzo(a)anthracene	25.35	228	1978600	135.99 ng		97
68)	3,3'-Dichlorobenzidine	25.18	252	621269	132.91 ng		97
69)	Chrysene	25.49	228	1858649	135.65 ng		96
70)	bis(2-Ethylhexyl)phthalate	25.05	149	2605389	138.27 ng		100
72)	Di-n-octylphthalate	27.17	149	4568691	161.65 ng		100
73)	Benzo(b)fluoranthene	29.68	252	1968592	155.20 ng		98
74)	Benzo(k)fluoranthene	29.80	252	1842134	152.07 ng		95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1898.D Vial: 5
Acq On : 8 Jan 98 14:03 Operator:
Sample : HP-7G SSTD160GZ Inst : GC/MS Ins
Misc : S00500 IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 8 14:45 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1893.D
DataAcq Meth : CLPME7

COPY-ORIGINAL IS FILED IN CSF
25969DNFS

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
75) Benzo(a)pyrene	31.30	252	1779311	157.17	ng	97
76) Indeno(1,2,3-cd)pyrene	36.56	276	1994658	150.22	ng	94
77) Dibenz(a,h)anthracene	36.58	278	1723288	150.98	ng	99
78) Benzo(g,h,i)perylene	38.06	276	1696172	153.56	ng	94

0951

(#) = qualifier out of range (m) = manual integration

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date: 1/20/98 Time:1208

Lab File ID:G1946 Init. Calib. Date(s): 1/08/98 1/08/98

Init. Calib. Times: 1044 1403

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.625	1.802	0.800	10.9	25.0
bis(2-Chloroethyl)ether	1.193	1.316	0.700	10.3	25.0
2-Chlorophenol	1.296	1.394	0.800	7.6	25.0
1,3-Dichlorobenzene	1.453	1.494	0.600	2.8	25.0
1,4-Dichlorobenzene	1.499	1.533	0.500	2.3	25.0
1,2-Dichlorobenzene	1.364	1.421	0.400	4.2	25.0
2-Methylphenol	1.037	1.160	0.700	11.9	25.0
2,2'-oxybis(1-Chloropropane)	3.221	3.655		13.5	
4-Methylphenol	1.166	1.272	0.600	9.1	25.0
N-Nitroso-di-n-propylamine	0.884	0.955	0.500	8.0	25.0
Hexachloroethane	0.461	0.496	0.300	7.6	25.0
Nitrobenzene	0.370	0.406	0.200	9.7	25.0
Isophorone	0.742	0.770	0.400	3.8	25.0
2-Nitrophenol	0.223	0.238	0.100	6.7	25.0
2,4-Dimethylphenol	0.331	0.337	0.200	1.8	25.0
bis(2-Chloroethoxy)methane	0.449	0.464	0.300	3.3	25.0
2,4-Dichlorophenol	0.335	0.338	0.200	0.9	25.0
1,2,4-Trichlorobenzene	0.337	0.332	0.200	-1.5	25.0
Naphthalene	0.868	0.890	0.700	2.5	25.0
4-Chloroaniline	0.423	0.462		9.2	
Hexachlorobutadiene	0.122	0.123		0.8	
4-Chloro-3-methylphenol	0.232	0.246	0.200	6.0	25.0
2-Methylnaphthalene	0.576	0.599	0.400	4.0	25.0
Hexachlorocyclopentadiene	0.236	0.261		10.6	
2,4,6-Trichlorophenol	0.371	0.383	0.200	3.2	25.0
2,4,5-Trichlorophenol	0.383	0.408	0.200	6.5	25.0
2-Chloronaphthalene	1.142	1.191	0.800	4.3	25.0
2-Nitroaniline	0.281	0.351		24.9	
Dimethylphthalate	1.359	1.386		2.0	
Acenaphthylene	1.737	1.746	0.900	0.5	25.0
2,6-Dinitrotoluene	0.314	0.323	0.200	2.9	25.0
3-Nitroaniline	0.337	0.389		15.4	
Acenaphthene	1.003	1.041	0.900	3.8	25.0
2,4-Dinitrophenol	0.135	0.170		25.9	
4-Nitrophenol	0.108	0.129		19.4	
Dibenzofuran	1.629	1.752	0.800	7.6	25.0
2,4-Dinitrotoluene	0.421	0.454	0.200	7.8	25.0

All other compounds must meet a minimum RRF of 0.010

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Instrument ID:HP-7G Calibration Date: 1/20/98 Time:1208

Lab File ID:G1946 Init. Calib. Date(s): 1/08/98 1/08/98

Init. Calib. Times: 1044 1403

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.307	1.338		2.4	
4-Chlorophenyl-phenylether	0.536	0.550	0.400	2.6	25.0
Fluorene	1.167	1.177	0.900	0.8	25.0
4-Nitroaniline	0.362	0.407		12.4	
4,6-Dinitro-2-methylphenol	0.116	0.137		18.1	
N-Nitrosodiphenylamine (1)	0.496	0.520		4.8	
4-Bromophenyl-phenylether	0.142	0.152	0.100	7.0	25.0
Hexachlorobenzene	0.162	0.175	0.100	8.0	25.0
Pentachlorophenol	0.106	0.125	0.050	17.9	25.0
Phenanthrene	0.951	0.992	0.700	4.3	25.0
Anthracene	1.002	1.050	0.700	4.8	25.0
Carbazole	1.048	1.116		6.5	
Di-n-butylphthalate	1.506	1.533		1.8	
Fluoranthene	0.962	1.004	0.600	4.4	25.0
Pyrene	1.303	1.278	0.600	-1.9	25.0
Butylbenzylphthalate	0.984	0.922		-6.3	
3,3'-Dichlorobenzidine	0.309	0.324		4.8	
Benzo(a)anthracene	1.037	1.019	0.800	-1.7	25.0
Chrysene	0.980	0.984	0.700	0.4	25.0
bis(2-Ethylhexyl)phthalate	1.470	1.367		-7.0	
Di-n-octylphthalate	2.821	2.496		-11.5	
Benzo(b)fluoranthene	1.126	1.058	0.700	-6.0	25.0
Benzo(k)fluoranthene	1.088	1.060	0.700	-2.6	25.0
Benzo(a)pyrene	1.036	1.002	0.700	-3.3	25.0
Indeno(1,2,3-cd)pyrene	1.171	1.188	0.500	1.4	25.0
Dibenz(a,h)anthracene	1.009	1.036	0.400	2.7	25.0
Benzo(g,h,i)perylene	0.986	1.000	0.500	1.4	25.0
Nitrobenzene-d5	0.340	0.368	0.200	8.2	25.0
2-Fluorobiphenyl	1.191	1.185	0.700	-0.5	25.0
Terphenyl-d14	0.830	0.820	0.500	-1.2	25.0
Phenol-d5	1.540	1.684	0.800	9.4	25.0
2-Fluorophenol	1.171	1.304	0.600	11.4	25.0
2,4,6-Tribromophenol	0.094	0.101		7.4	
2-Chlorophenol-d4	1.196	1.261	0.800	5.4	25.0
1,2-Dichlorobenzene-d4	0.782	0.794	0.400	1.5	25.0

(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of 0.010

Evaluate Continuing Calibration Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1946.D Vial: 1
Acq On : 20 Jan 98 12:08 Operator: GC/MS
Sample : HP-7G SSTD050GE Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	84	-0.02
2	SPC	2-Fluorophenol	1.171	1.304	-11.4	94	-0.02
3	SPC	Phenol-d5	1.540	1.684	-9.4	93	-0.01
4	TPCM	Phenol	1.624	1.802	-11.0	94	-0.01
5	TPC	bis(2-Chloroethyl)ether	1.193	1.316	-10.3	93	-0.02
6	MTPC	2-Chlorophenol	1.296	1.394	-7.6	90	-0.02
7	SPC	1,2-Dichlorobenzene-d4	0.782	0.794	-1.5	84	-0.01
8	SPC	2-Chlorophenol-d4	1.196	1.261	-5.4	88	-0.01
9	TPC	1,3-Dichlorobenzene	1.453	1.494	-2.8	84	-0.02
10	MTPC	1,4-Dichlorobenzene	1.499	1.533	-2.3	86	-0.02
11	TPC	1,2-Dichlorobenzene	1.364	1.421	-4.2	86	-0.01
12	TC	2-Methylphenol	1.037	1.161	-12.0	90	-0.01
13	TP	2,2'-oxybis(1-chloropropane	3.221	3.655	-13.5	98	-0.01
14	TPC	4-Methylphenol	1.167	1.272	-9.0	91	-0.01
15	MTPC	n-Nitroso-di-n-propylamine	0.884	0.955	-8.0	92	-0.01
16	TPC	Hexachloroethane	0.461	0.496	-7.6	91	-0.02
17	I	Naphthalene-d8	1.000	1.000	0.0	86	-0.02
18	SPC	Nitrobenzene-d5	0.340	0.368	-8.2	96	-0.02
19	TPC	Nitrobenzene	0.370	0.406	-9.7	95	-0.01
20	TPC	Isophorone	0.742	0.770	-3.8	89	-0.02
21	TPC	2-Nitrophenol	0.223	0.238	-6.7	93	-0.02
22	TPC	2,4-Dimethylphenol	0.331	0.337	-1.8	88	-0.02
23	TPC	bis(2-Chloroethoxy)methane	0.449	0.464	-3.3	89	-0.02
24	TPC	2,4-Dichlorophenol	0.335	0.338	-0.9	85	-0.02
25	MTPC	1,2,4-Trichlorobenzene	0.337	0.332	1.5	83	-0.02
26	TPC	Naphthalene	0.868	0.890	-2.5	89	-0.02
27	TP	4-Chloroaniline	0.423	0.462	-9.2	90	-0.02
28	TP	Hexachlorobutadiene	0.121	0.123	-1.7	88	-0.02
29	MTPC	4-Chloro-3-methylphenol	0.232	0.246	-6.0	91	-0.03
30	TPC	2-Methylnaphthalene	0.576	0.599	-4.0	84	-0.02
31	I	Acenaphthene-d10	1.000	1.000	0.0	80	-0.02
32	TP	Hexachlorocyclopentadiene	0.236	0.261	-10.6	93	-0.02
33	TPC	2,4,6-Trichlorophenol	0.371	0.383	-3.2	83	-0.02
34	TPC	2,4,5-Trichlorophenol	0.383	0.408	-6.5	83	-0.02
35	SPC	2-Fluorobiphenyl	1.191	1.185	0.5	79	-0.02
36	TPC	2-Chloronaphthalene	1.142	1.191	-4.3	82	-0.01
37	TP	2-Nitroaniline	0.281	0.351	-24.9	99	-0.01
38	TP	Dimethylphthalate	1.359	1.386	-2.0	80	-0.01
39	TPC	Acenaphthylene	1.737	1.746	-0.5	80	-0.01
40	TPC	2,6-Dinitrotoluene	0.314	0.323	-2.9	84	-0.01

0954

(#) = Out of Range

Evaluate Continuing Calibration Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1946.D Vial: 1
Acq On : 20 Jan 98 12:08 Operator: GC/MS
Sample : HP-7G SSTD050GE Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 300%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41	TP	3-Nitroaniline	0.338	0.389	-15.1	90	-0.01
42	MTPC	Acenaphthene	1.003	1.041	-3.8	82	-0.02
43	TP	2,4-Dinitrophenol	0.135	0.170	-25.9	146	-0.01
44	MTP	4-Nitrophenol	0.108	0.129	-19.4	99	-0.01
45	TPC	Dibenzofuran	1.629	1.752	-7.6	80	-0.02
46	MTPC	2,4-Dinitrotoluene	0.421	0.454	-7.8	87	-0.01
47	TP	Diethylphthalate	1.307	1.338	-2.4	81	-0.01
48	TPC	Fluorene	1.167	1.177	-0.9	79	0.00
49	TPC	4-Chlorophenyl-phenylether	0.536	0.550	-2.6	81	-0.01
50	TP	4-Nitroaniline	0.362	0.407	-12.4	88	-0.01
51	I	Phenanthrene-d10	1.000	1.000	0.0	80	-0.01
52	SP	2,4,6-Tribromophenol	0.094	0.101	-7.4	86	-0.01
53	TP	4,6-Dinitro-2-methylphenol	0.116	0.137	-18.1	107	-0.01
54	TP	n-Nitrosodiphenylamine (1)	0.496	0.520	-4.8	81	-0.01
55	TPC	4-Bromophenyl-phenylether	0.142	0.152	-7.0	84	-0.01
56	TPC	Hexachlorobenzene	0.162	0.175	-8.0	84	-0.01
57	MTPC	Pentachlorophenol	0.106	0.125	-17.9	92	0.00
58	TPC	Phenanthrene	0.951	0.992	-4.3	81	-0.01
59	TPC	Anthracene	1.002	1.050	-4.8	81	0.00
60	TP	Carbazole	1.048	1.116	-6.5	82	-0.01
61	TP	Di-n-butylphthalate	1.507	1.533	-1.7	79	0.00
62	TPC	Fluoranthene	0.962	1.004	-4.4	81	-0.01
63	I	Chrysene-d12	1.000	1.000	0.0	88	-0.01
64	MTPC	Pyrene	1.303	1.278	1.9	82	0.00
65	SPC	Terphenyl-d14	0.830	0.820	1.2	85	-0.01
66	TP	Butylbenzylphthalate	0.984	0.922	6.3	80	0.00
67	TPC	Benzo(a)anthracene	1.037	1.019	1.7	87	-0.01
68	TP	3,3'-Dichlorobenzidine	0.309	0.324	-4.9	92	-0.01
69	TPC	Chrysene	0.980	0.984	-0.4	89	-0.01
70	TP	bis(2-Ethylhexyl)phthalate	1.470	1.367	7.0	80	-0.01
71	I	Perylene-d12	1.000	1.000	0.0	91	-0.02
72	TP	Di-n-octylphthalate	2.821	2.496	11.5	81	-0.02
73	TPC	Benzo(b)fluoranthene	1.126	1.058	6.0	88	-0.02
74	TPC	Benzo(k)fluoranthene	1.088	1.060	2.6	91	-0.02
75	TPC	Benzo(a)pyrene	1.036	1.002	3.3	90	-0.02
76	TPC	Indeno(1,2,3-cd)pyrene	1.172	1.188	-1.4	94	-0.02
77	TPC	Dibenz(a,h)anthracene	1.009	1.036	-2.7	95	-0.03
78	TPC	Benzo(g,h,i)perylene	0.986	1.000	-1.4	96	-0.02

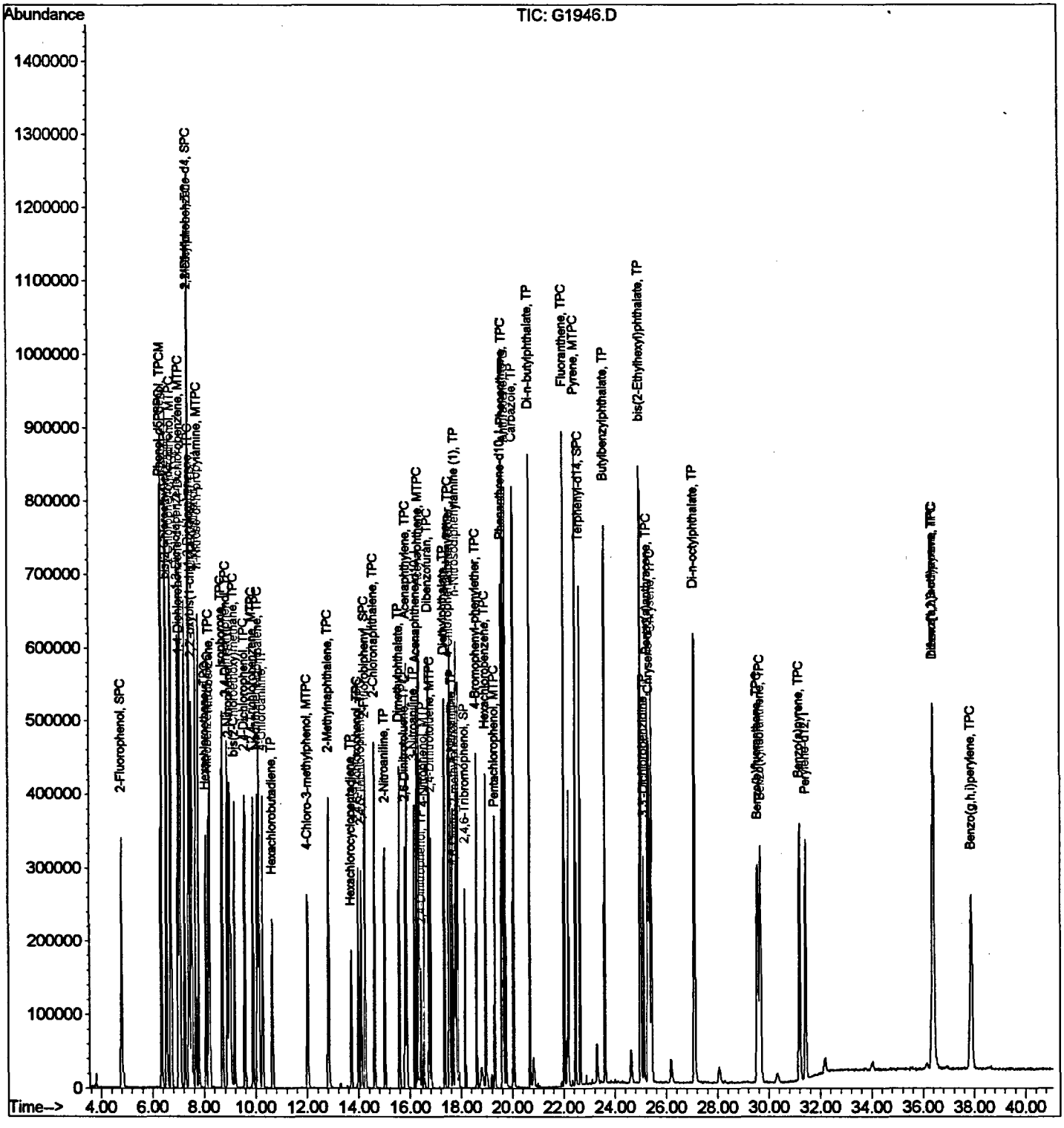
0955

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : Q:\HPCHEM\G\DATA\G1946.D Vial: 1
Acq On : 20 Jan 98 12:08 Operator: GC/MS
Sample : HP-7G SSTD050GE Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 20 12:49 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1946.D Vial: 1
Acq On : 20 Jan 98 12:08 Operator: GC/MS
Sample : HP-7G SSTD050GE Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 20 12:49 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1940.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.05	152	179459	40.00	ng		-0.02
17) Naphthalene-d8	10.07	136	547021	40.00	ng		-0.02
31) Acenaphthene-d10	16.27	164	260862	40.00	ng		-0.02
51) Phenanthrene-d10	19.60	188	477336	40.00	ng		-0.01
63) Chrysene-d12	25.35	240	385548	40.00	ng		-0.01
71) Perylene-d12	31.44	264	354208	40.00	ng		-0.02
System Monitoring Compounds							
2) 2-Fluorophenol	4.80	112	292585	53.02	ng		-0.02
Surrogate Spike 150.000	Range 21 - 110		Recovery = 35.35%				
3) Phenol-d5	6.34	99	377715	51.57	ng		-0.01
Surrogate Spike 150.000	Range 10 - 110		Recovery = 34.38%				
7) 1,2-Dichlorobenzene-d4	7.42	152	178095	50.71	ng		-0.01
Surrogate Spike 100.000	Range 16 - 110		Recovery = 50.71%				
8) 2-Chlorophenol-d4	6.71	132	282916	50.56	ng		-0.01
Surrogate Spike 150.000	Range 33 - 110		Recovery = 33.71%				
18) Nitrobenzene-d5	8.17	82	251330	50.93	ng		-0.02
Surrogate Spike 100.000	Range 35 - 114		Recovery = 50.93%				
35) 2-Fluorobiphenyl	14.25	172	386422	47.37	ng		-0.02
Surrogate Spike 100.000	Range 43 - 116		Recovery = 47.37%				
52) 2,4,6-Tribromophenol	18.16	330	60406	47.81	ng		-0.01
Surrogate Spike 150.000	Range 10 - 123		Recovery = 31.87%				
65) Terphenyl-d14	22.64	244	395194	50.29	ng		-0.01
Surrogate Spike 100.000	Range 33 - 141		Recovery = 50.29%				
Target Compounds							Qvalue
4) Phenol	6.36	94	404134	51.49	ng		98
5) bis(2-Chloroethyl)ether	6.56	63	295216	50.41	ng	#	98
6) 2-Chlorophenol	6.73	128	312771	50.95	ng		96
9) 1,3-Dichlorobenzene	7.00	146	335167	50.82	ng		100
10) 1,4-Dichlorobenzene	7.08	146	343803	50.37	ng		99
11) 1,2-Dichlorobenzene	7.45	146	318699	51.24	ng		100
12) 2-Methylphenol	7.42	108	260338	51.97	ng		100
13) 2,2'-oxybis(1-chloropropan	7.52	45	819888	51.41	ng	#	99
14) 4-Methylphenol	7.67	108	285304	52.70	ng		100
15) n-Nitroso-di-n-propylamine	7.79	70	214206	51.57	ng		96
16) Hexachloroethane	8.07	117	111345	51.71	ng		96
19) Nitrobenzene	8.22	77	277877	50.38	ng		97
20) Isophorone	8.71	82	526339	49.99	ng		98
21) 2-Nitrophenol	8.98	139	162980	49.69	ng		95
22) 2,4-Dimethylphenol	8.90	107	230562	49.54	ng		99
23) bis(2-Chloroethoxy)methane	9.19	93	317377	50.44	ng		99
24) 2,4-Dichlorophenol	9.58	162	231282	50.41	ng		99

(#) = qualifier out of range (m) = manual integration

Data File : Q:\HPCHEM\G\DATA\G1946.D Vial: 1
Acq On : 20 Jan 98 12:08 Operator: GC/MS
Sample : HP-7G SSTD050GE Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 20 12:49 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1940.D
DataAcq Meth : CLPME7

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
25)	1,2,4-Trichlorobenzene	9.89	180	227287	50.02	ng		99
26)	Naphthalene	10.13	128	608316	50.20	ng		100
27)	4-Chloroaniline	10.27	127	315854	51.21	ng		98
28)	Hexachlorobutadiene	10.65	225	84365	48.24	ng		99
29)	4-Chloro-3-methylphenol	12.01	107	168495	51.80	ng		96
30)	2-Methylnaphthalene	12.83	142	409388	49.55	ng		100
32)	Hexachlorocyclopentadiene	13.71	237	85242	47.40	ng	#	94
33)	2,4,6-Trichlorophenol	13.99	196	124787	49.46	ng		98
34)	2,4,5-Trichlorophenol	14.11	196	133090	48.54	ng		99
36)	2-Chloronaphthalene	14.62	162	388411	48.63	ng		99
37)	2-Nitroaniline	15.02	65	114494	49.63	ng		93
38)	Dimethylphthalate	15.60	163	452017	49.71	ng		99
39)	Acenaphthylene	15.87	152	569368	49.28	ng		100
40)	2,6-Dinitrotoluene	15.81	165	105475	49.44	ng		98
41)	3-Nitroaniline	16.18	138	127005	49.03	ng	#	94
42)	Acenaphthene	16.35	153	339476	50.18	ng		99
43)	2,4-Dinitrophenol	16.45	184	55289	52.73	ng		97
44)	4-Nitrophenol	16.55	109	42119	50.12	ng		94
45)	Dibenzofuran	16.74	168	571218	50.74	ng		99
46)	2,4-Dinitrotoluene	16.81	165	147904	51.37	ng	#	94
47)	Diethylphthalate	17.36	149	436446	49.73	ng		98
48)	Fluorene	17.57	166	383830	50.15	ng		100
49)	4-Chlorophenyl-phenylether	17.53	204	179363	48.92	ng		99
50)	4-Nitroaniline	17.67	138	132602	49.82	ng		98
53)	4,6-Dinitro-2-methylphenol	17.77	198	81663	48.89	ng	#	61
54)	n-Nitrosodiphenylamine (1)	17.81	169	309976	50.64	ng		99
55)	4-Bromophenyl-phenylether	18.61	248	90717	47.67	ng		98
56)	Hexachlorobenzene	18.96	284	104468	47.62	ng		98
57)	Pentachlorophenol	19.32	266	74633	47.88	ng		99
58)	Phenanthrene	19.65	178	592032	50.15	ng		99
59)	Anthracene	19.74	178	626376	49.80	ng		99
60)	Carbazole	20.05	167	666117	48.70	ng		99
61)	Di-n-butylphthalate	20.68	149	914836	48.68	ng		100
62)	Fluoranthene	22.01	202	598947	48.74	ng		100
64)	Pyrene	22.46	202	615866	49.72	ng		99
66)	Butylbenzylphthalate	23.61	149	444291	49.91	ng		94
67)	Benzo(a)anthracene	25.29	228	491056	50.20	ng		99
68)	3,3'-Dichlorobenzidine	25.14	252	156192	51.60	ng		99
69)	Chrysene	25.43	228	474035	50.89	ng		98
70)	bis(2-Ethylhexyl)phthalate	25.00	149	658832	50.45	ng		98
72)	Di-n-octylphthalate	27.10	149	1105056	50.07	ng		100
73)	Benzo(b)fluoranthene	29.57	252	468386	49.72	ng		99
74)	Benzo(k)fluoranthene	29.68	252	469505	49.69	ng		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1946.D Vial:
Acq On : 20 Jan 98 12:08 Operator: GC/MS
Sample : HP-7G SSTD050GE Inst : GC/MS Ins
Misc : S00497 ; IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 20 12:49 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1940.D
DataAcq Meth : CLPME7

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
75) Benzo(a)pyrene	31.21	252	443489	49.75 ng	98
76) Indeno(1,2,3-cd)pyrene	36.41	276	526194	50.08 ng	96
77) Dibenz(a,h)anthracene	36.41	278	458668	50.93 ng	97
78) Benzo(g,h,i)perylene	37.89	276	442630	49.51 ng	97

0959

(#) = qualifier out of range (m) = manual integration

DFTPP

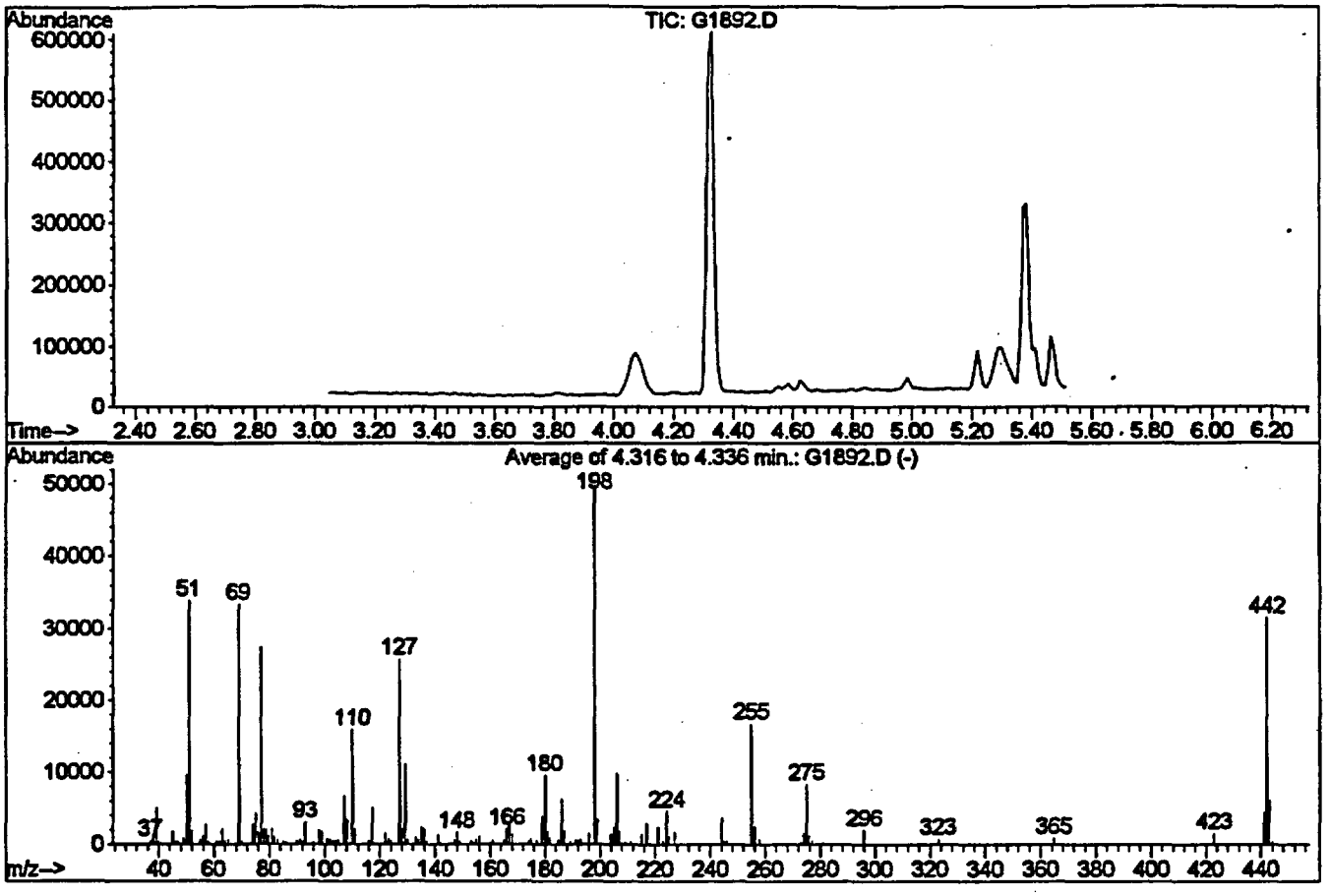
CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1892.D
Acq On : 8 Jan 98 9:25
Sample : (HP-7G) 50 ng DFTPP
Misc : 2ul S00147

Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\DFT72UL.M
Title :

COPY-ORIGINAL IS FILED IN CSF 25910 DN F55



AutoFind: Scans 125, 126, 127; Background Corrected with Scan 120

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	68.0	33765	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.01	100	67.2	33343	PASS
70	69	0.00	2	1.1	383	PASS
127	198	25	75	51.6	25630	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	49624	PASS
199	198	5	9	6.9	3418	PASS
275	198	10	30	16.7	8300	PASS
365	198	1	100	1.7	867	PASS
441	443	0.01	99	73.0	4454	PASS
442	198	40	110	63.5	31517	PASS
443	442	15	24	19.4	6104	PASS

0960

G1892.D DFT72UL.M Thu Jan 08 09:31:27 1998 CLAYTON

KRT7

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP

COPY-ORIGINAL IS FILED IN CSF 25910/DnF55

CASE 25969
SDG#FFR76

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	478	51.00	33765 ✓	69.00	33343	82.00	1067
38.00	1075	51.95	1814	70.00	383	83.05	735
39.05	5029	55.00	609	73.10	171	83.95	47
40.00	467	56.00	1160	74.10	2726	85.05	411
41.00	225	57.00	2728	75.10	4279	85.95	263
43.95	32	58.00	420	76.05	1636	90.05	494
44.95	1721	61.00	486	77.05	27365	91.05	597
46.00	415	62.00	485	78.05	2091	92.05	401
47.00	370	63.00	2119	79.00	2004	93.05	2998
48.95	840	64.00	457	79.95	1223	96.00	283
50.05	9601	65.05	604	80.95	2085	98.05	1972

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
99.05	1731	116.05	546	133.05	914	153.00	420
101.00	803	117.05	5068	134.05	541	154.00	192
102.00	643	118.00	180	135.05	2310	155.00	597
103.00	551	122.10	1523	136.05	2019	156.00	1057
104.00	561	123.05	709	137.05	492	160.00	180
105.00	599	124.00	420	141.05	1345	161.00	525
107.00	6737	125.05	168	142.05	224	165.00	581
108.00	3287	127.05	25630	146.05	167	166.00	2070
109.00	280	128.05	2091	147.05	674	167.00	3095
110.00	15870	129.05	11072	148.00	1644	168.00	1351
111.00	2146	130.05	694	149.00	432	173.95	429

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.05	732	192.05	537	211.05	385	245.95	466
176.95	536	193.05	757	215.00	1414	255.00	16700
178.95	3855	196.00	1541	217.00	2905	256.00	2473
180.00	9531	198.00	49624 ✓	218.00	199	258.00	707
181.00	1736	199.00	3418	220.95	2363	265.00	183
182.00	1018	204.00	1389	223.00	466	272.95	281
185.00	659	205.05	2317	224.05	4583	273.95	1514
186.05	6241	206.00	9803	225.05	1095	274.95	8300
187.05	1767	207.00	1889	226.95	1668	275.95	1182
188.95	430	208.00	267	244.00	3679	277.00	511
191.05	619	209.00	361	245.00	447	281.05	168

Average of 4.316 to 4.336 min.: G1892.D
(HP-7G) 50 ng DFTPP

Modified:subtracted

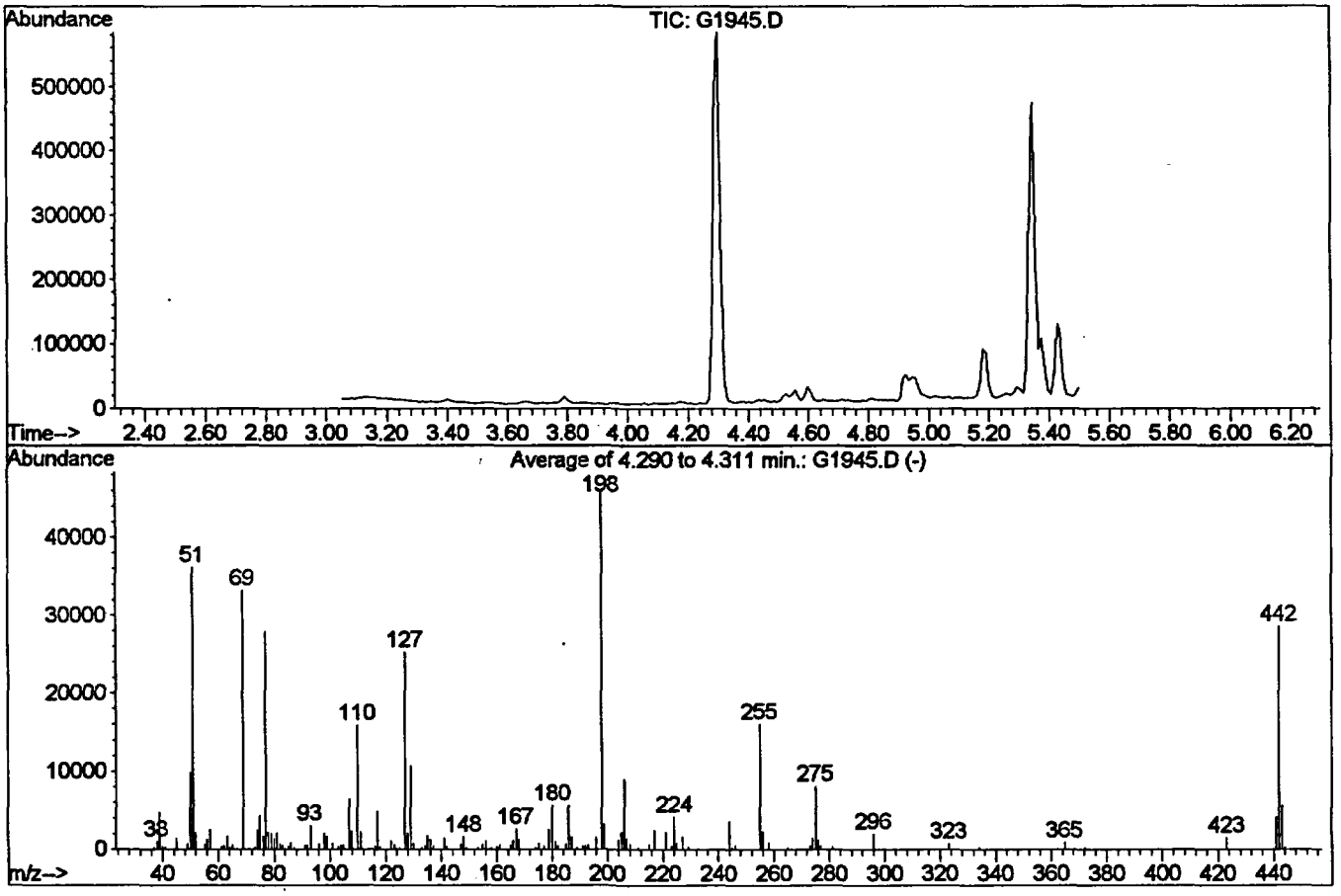
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.00	1978						
323.00	756						
334.05	217						
364.90	867						
372.05	196						
422.95	1530						
441.00	4454						
442.00	31517 ✓						
443.00	6104						
444.00	495						

DFTPP

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1945.D
Acq On : 20 Jan 98 11:56
Sample : (HP-7G) 50 ng DFTPP
Misc : 2ul S00147
Vial: 1
Operator: GC/MS
Inst : GC/MS Ins
Multiplr: 1.00

Method : Q:\HPCHEM\G\METHODS\DFT72UL.M
Title :



AutoFind: Scans 122, 123, 124; Background Corrected with Scan 118

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	80	78.4	36155	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.01	100	72.0	33195	PASS
70	69	0.00	2	0.0	0	PASS
127	198	25	75	54.8	25261	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	46109	PASS
199	198	5	9	7.0	3229	PASS
275	198	10	30	17.5	8074	PASS
365	198	1	100	1.8	852	PASS
441	443	0.01	99	73.5	4110	PASS
442	198	40	110	62.0	28602	PASS
443	442	15	24	19.5	5591	PASS

CASE 25969
SDG# FFR76

Average of 4.290 to 4.311 min.: G1945.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.95	184	55.05	643	75.05	4319	86.05	820
38.00	1039	56.00	1297	76.05	1754	87.05	175
39.05	4709	57.00	2576	77.05	27976	91.05	559
40.00	378	61.05	403	78.05	2207	92.05	501
41.05	266	62.05	489	79.05	2094	93.05	2999
44.00	32	63.10	1676	80.05	1417	96.10	724
45.05	1442	64.10	213	81.05	2143	98.05	2071
49.00	670	65.05	577	82.05	751	99.00	1623
50.05	9830	69.00	33195	83.05	522	101.00	769
51.00	36155	73.10	190	83.95	108	103.05	398
52.00	2108	74.10	2533	85.05	413	104.05	567

Average of 4.290 to 4.311 min.: G1945.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.00	535	124.95	204	142.10	406	166.00	1193
107.00	6425	127.05	25261	147.00	617	167.05	2602
108.00	2329	128.05	2061	148.00	1591	168.00	1231
110.00	15877	129.05	10667	149.00	176	173.95	235
111.05	2191	130.05	769	153.00	220	175.05	777
116.10	440	133.05	199	155.00	603	176.95	468
117.05	4921	134.05	416	156.10	1048	178.95	2565
118.05	359	135.05	1705	158.00	187	180.05	5623
122.05	1137	136.05	1257	160.00	373	181.05	1018
123.00	644	137.05	431	161.05	589	182.00	424
123.95	167	141.05	1389	165.00	524	185.05	588

Average of 4.290 to 4.311 min.: G1945.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.05	5619	206.05	9063	229.00	349	276.00	1150
187.05	1589	207.00	1392	244.00	3603	276.95	515
189.05	180	208.00	683	245.00	223	281.05	378
191.05	373	211.10	199	246.00	494	296.00	1986
191.95	439	215.00	615	255.00	16035	323.05	730
193.00	496	216.95	2445	256.00	2337	334.00	227
196.00	1506	221.05	2265	258.00	841	364.95	852
198.00	46109	223.05	431	264.95	188	372.05	198
199.00	3229	224.05	4165	273.05	426	423.05	1520
204.00	1285	225.00	842	274.05	1427	441.00	4110
205.00	2193	226.95	1638	275.05	8074	442.00	28602

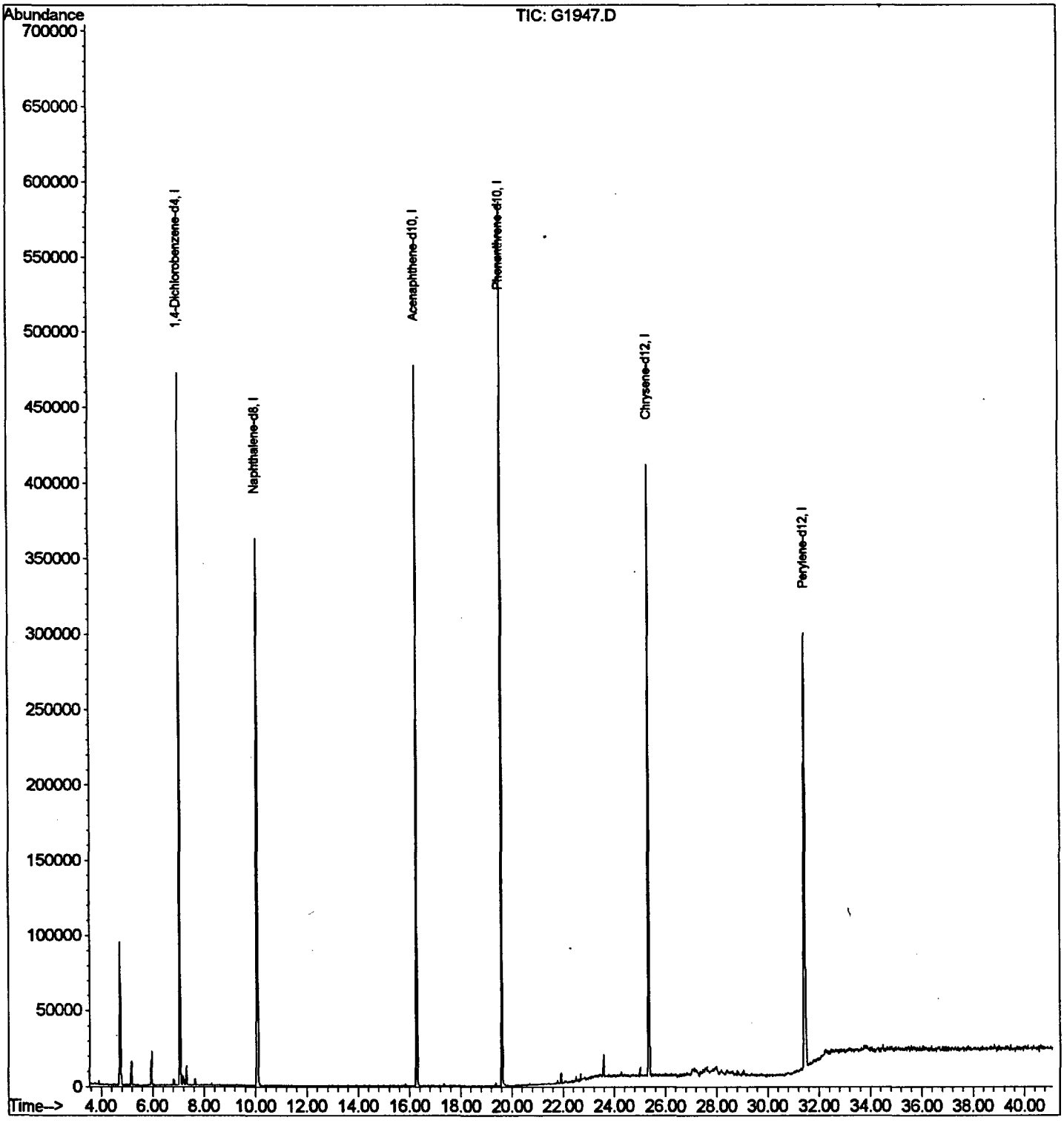
Average of 4.290 to 4.311 min.: G1945.D
(HP-7G) 50 ng DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.00	5591						
444.00	292						

Quantitation Report

Data File : Q:\HPCHEM\G\DATA\G1947.D Vial: 1
Acq On : 20 Jan 98 12:59 Operator:
Sample : HP-7G GPC QC 1002 01/19/98 Inst : GC/MS Ins
Misc : IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 20 13:41 1998 Quant Results File: CLPME7.RES

Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Single Level Calibration



Quantitation Report (Not Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\G\DATA\G1947.D Vial: 1
Acq On : 20 Jan 98 12:59 Operator:
Sample : HP-7G GPC QC 1002 01/19/98 Inst : GC/MS Ins
Misc : IS=40ng S00501 Multiplr: 1.00
Quant Time: Jan 20 13:41 1998 Quant Results File: CLPME7.RES

Quant Method : Q:\HPCHEM\G\METHODS\CLPME7.M
Title : SEMI-VOLATILES BY GC/MS CLP SOW 8/94
Last Update : Thu Jan 08 10:20:28 1998
Response via : Continuing Cal File: Q:\HPCHEM\G\DATA\G1946.D
DataAcq Meth : CLPME7

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.05	152	165238	40.00	ng	0.00
17) Naphthalene-d8	10.06	136	486321	40.00	ng	0.00
31) Acenaphthene-d10	16.28	164	234351	40.00	ng	0.00
51) Phenanthrene-d10	19.60	188	431402	40.00	ng	0.00
63) Chrysene-d12	25.35	240	349182	40.00	ng	0.00
71) Perylene-d12	31.45	264	321760	40.00	ng	0.00

System Monitoring Compounds					
2) 2-Fluorophenol	0.00	112	0	0.00	ng
Surrogate Spike 150.000	Range 21 - 110		Recovery =	0.00%#	
3) Phenol-d5	0.00	99	0	0.00	ng
Surrogate Spike 150.000	Range 10 - 110		Recovery =	0.00%#	
7) 1,2-Dichlorobenzene-d4	0.00	152	0	0.00	ng
Surrogate Spike 100.000	Range 16 - 110		Recovery =	0.00%#	
8) 2-Chlorophenol-d4	0.00	132	0	0.00	ng
Surrogate Spike 150.000	Range 33 - 110		Recovery =	0.00%#	
18) Nitrobenzene-d5	0.00	82	0	0.00	ng
Surrogate Spike 100.000	Range 35 - 114		Recovery =	0.00%#	
35) 2-Fluorobiphenyl	0.00	172	0	0.00	ng
Surrogate Spike 100.000	Range 43 - 116		Recovery =	0.00%#	
52) 2,4,6-Tribromophenol	0.00	330	0	0.00	ng
Surrogate Spike 150.000	Range 10 - 123		Recovery =	0.00%#	
65) Terphenyl-d14	0.00	244	0	0.00	ng
Surrogate Spike 100.000	Range 33 - 141		Recovery =	0.00%#	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

VOLATILES DATA

VOLATILES

QC DATA

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	FFR76	106	95	93		0
02	FFR81	108	96	99		0
03	FFR82	110	93	99		0
04	FFR83	100	99	99		0
05	FFR83MS	114	90	100		0
06	FFR83MSD	108	93	100		0
07	FFR85	101	98	99		0
08	FFR86	100	99	100		0
09	FFR87	110	96	102		0
10	FFR91	105	92	101		0
11	FFR92	108	98	98		0
12	VBLKBA	98	104	98		0
13	VBLKBV	100	102	102		0
14	VBLKBW	100	100	96		0
15	VHBLK	104	98	98		0
16						
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	QC LIMITS
SMC1 (TOL) = Toluene-d8	(84-138)
SMC2 (BFB) = Bromofluorobenzene	(59-113)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix Spike - EPA Sample No.: FFR83 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	67.	0.	81.	121	59-172
Trichloroethene	67.	0.	61.	91	62-137
Benzene	67.	0.	64.	95	66-142
Toluene	67.	0.	68.	101	59-139
Chlorobenzene	67.	0.	63.	94	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	67.	74.	110	9	22	59-172
Trichloroethene	67.	57.	85	7	24	62-137
Benzene	67.	62.	92	3	21	66-142
Toluene	67.	63.	94	7	21	59-139
Chlorobenzene	67.	60.	89	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:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKBA

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9133 Lab Sample ID:58073-010a3

Date Analyzed: 1/22/98 Time Analyzed:1442

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

Instrument ID:HP-2B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFR83	58073-004	B9144	2103
02	VHBLK	58073-011	B9148	0006
03				
04				
05				
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKBV

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9037 Lab Sample ID:58073-010a1

Date Analyzed: 1/16/98 Time Analyzed:1924

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

Instrument ID:HP-2B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFR85	58073-005	B9042	2243
02	FFR86	58073-006	B9043	2315
03	FFR87	58073-007	B9044	2346
04	FFR91	58073-008	B9045	0017
05	FFR92	58073-009	B9046	0048
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COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKBW

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9052 Lab Sample ID:58073-010a2

Date Analyzed: 1/19/98 Time Analyzed:0853

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

Instrument ID:HP-2B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	FFR76	58073-001	B9053	0942
02	FFR81	58073-002	B9054	1013
03	FFR82	58073-003	B9055	1045
04	FFR83MS	58073-004MS	B9056	1117
05	FFR83MSD	58073-004MSD	B9057	1153
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COMMENTS:

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9021 BFB Injection Date: 1/16/98

Instrument ID:HP-2B BFB Injection Time:0758

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.5
75	30.0 - 66.0% of mass 95	52.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5(0.7)1
174	50.0 - 120.0% of mass 95	74.2
175	4.0 - 9.0% of mass 174	6.0(8.1)1
176	93.0 - 101.0% of mass 174	72.2(97.3)1
177	5.0 - 9.0% of mass 176	4.9(6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050BU	B9022	B9022	1/16/98	0834
02	VSTD020BU	B9024	B9024	1/16/98	0959
03	VSTD200BU	B9026	B9026	1/16/98	1114
04	VSTD100BU	B9027	B9027	1/16/98	1157
05	VSTD010BU	B9028	B9028	1/16/98	1256
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9033 BFB Injection Date: 1/16/98

Instrument ID:HP-2B BFB Injection Time:1612

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.6
75	30.0 - 66.0% of mass 95	50.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	70.6
175	4.0 - 9.0% of mass 174	5.3(7.6)1
176	93.0 - 101.0% of mass 174	70.8(100.2)1
177	5.0 - 9.0% of mass 176	5.4(7.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050BV	B9036	B9036	1/16/98	1823
02	VBLKBV	58073-010a1	B9037	1/16/98	1924
03	FFR85	58073-005	B9042	1/16/98	2243
04	FFR86	58073-006	B9043	1/16/98	2315
05	FFR87	58073-007	B9044	1/16/98	2346
06	FFR91	58073-008	B9045	1/17/98	0017
07	FFR92	58073-009	B9046	1/17/98	0048
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5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9050 BFB Injection Date: 1/19/98

Instrument ID:HP-2B BFB Injection Time:0727

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.0
75	30.0 - 66.0% of mass 95	52.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.9
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	73.0
175	4.0 - 9.0% of mass 174	5.3(7.3)1
176	93.0 - 101.0% of mass 174	71.5(97.9)1
177	5.0 - 9.0% of mass 176	5.3(7.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050BW	B9051	B9051	1/19/98	0804
02	VBLKBW	58073-010a2	B9052	1/19/98	0853
03	FFR76	58073-001	B9053	1/19/98	0942
04	FFR81	58073-002	B9054	1/19/98	1013
05	FFR82	58073-003	B9055	1/19/98	1045
06	FFR83MS	58073-004MS	B9056	1/19/98	1117
07	FFR83MSD	58073-004MSD	B9057	1/19/98	1153
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5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID:B9131 BFB Injection Date: 1/22/98

Instrument ID:HP-2B BFB Injection Time:1321

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.3
75	30.0 - 66.0% of mass 95	56.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0(0.0)1
174	50.0 - 120.0% of mass 95	71.6
175	4.0 - 9.0% of mass 174	5.4(7.5)1
176	93.0 - 101.0% of mass 174	68.6(95.9)1
177	5.0 - 9.0% of mass 176	5.9(8.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050BA	B9132	B9132	1/22/98	1356
02	VBLKBA	58073-010a3	B9133	1/22/98	1442
03	FFR83	58073-004	B9144	1/22/98	2103
04	VHBLK	58073-011	B9148	1/23/98	0006
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8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID (Standard):B9036 Date Analyzed: 1/16/98

Instrument ID:HP-2B Time Analyzed:1823

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

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	539851	9.10	2678167	11.22	1624725	16.99
	UPPER LIMIT	1079702	9.60	5356334	11.72	3249450	17.49
	LOWER LIMIT	269925	8.60	1339083	10.72	812362	16.49
	EPA SAMPLE NO.						
01	VBLKBV	650924	9.10	3190745	11.23	1985574	17.00
02	FFR85	591652	9.09	2952585	11.19	1764855	16.96
03	FFR86	614006	9.04	3053285	11.16	1842369	16.93
04	FFR87	529366	9.07	2638932	11.18	1435886	16.96
05	FFR91	544492	9.07	2728636	11.17	1511737	16.94
06	FFR92	558550	9.07	2762632	11.17	1530037	16.94
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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 of QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID (Standard):B9051 Date Analyzed: 1/19/98

Instrument ID:HP-2B Time Analyzed:0804

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

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	603363	9.09	2923882	11.19	1797881	16.98
	UPPER LIMIT	1206726	9.59	5847764	11.69	3595762	17.48
	LOWER LIMIT	301681	8.59	1461941	10.69	898940	16.48
	EPA SAMPLE NO.						
01	VBLKBW	644926	9.10	3049787	11.22	1869280	16.99
02	FFR76	573989	9.10	2955559	11.23	1719337	17.00
03	FFR81	552046	9.08	2667710	11.19	1498557	16.96
04	FFR82	537918	9.06	2593960	11.18	1423590	16.95
05	FFR83MS	508834	9.03	2664800	11.15	1449164	16.92
06	FFR83MSD	542851	9.04	2766216	11.16	1558593	16.94
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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 of QC limits with an asterisk.
* Values outside of QC limits.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Lab File ID (Standard):B9132 Date Analyzed: 1/22/98

Instrument ID:HP-2B Time Analyzed:1356

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

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	531166	9.06	2598289	11.18	1549908	16.95
	UPPER LIMIT	1062332	9.56	5196578	11.68	3099816	17.45
	LOWER LIMIT	265583	8.56	1299144	10.68	774954	16.45
	EPA SAMPLE NO.						
01	VBLKBA	354085	9.04	1659511	11.16	1001432	16.92
02	FFR83	539635	9.11	2648972	11.21	1570551	16.97
03	VHBLK	524745	9.05	2843043	11.18	1661669	16.95
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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 of QC limits with an asterisk.
* Values outside of QC limits.

VOLATILES

SAMPLE DATA

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR76

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-001

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9053

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 17 Date Analyzed: 1/19/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown hydrocarbon	7.05	6.	J
2.		Unknown hydrocarbon	10.61	6.	J
3.	541-05-9	Cyclotrisiloxane, hexamethyl	15.19	22.	JNB
4.	556-67-2	Cyclotetrasiloxane, octameth	19.80	440.	JNB
5.		Unknown hydrocarbon	21.42	7.	J
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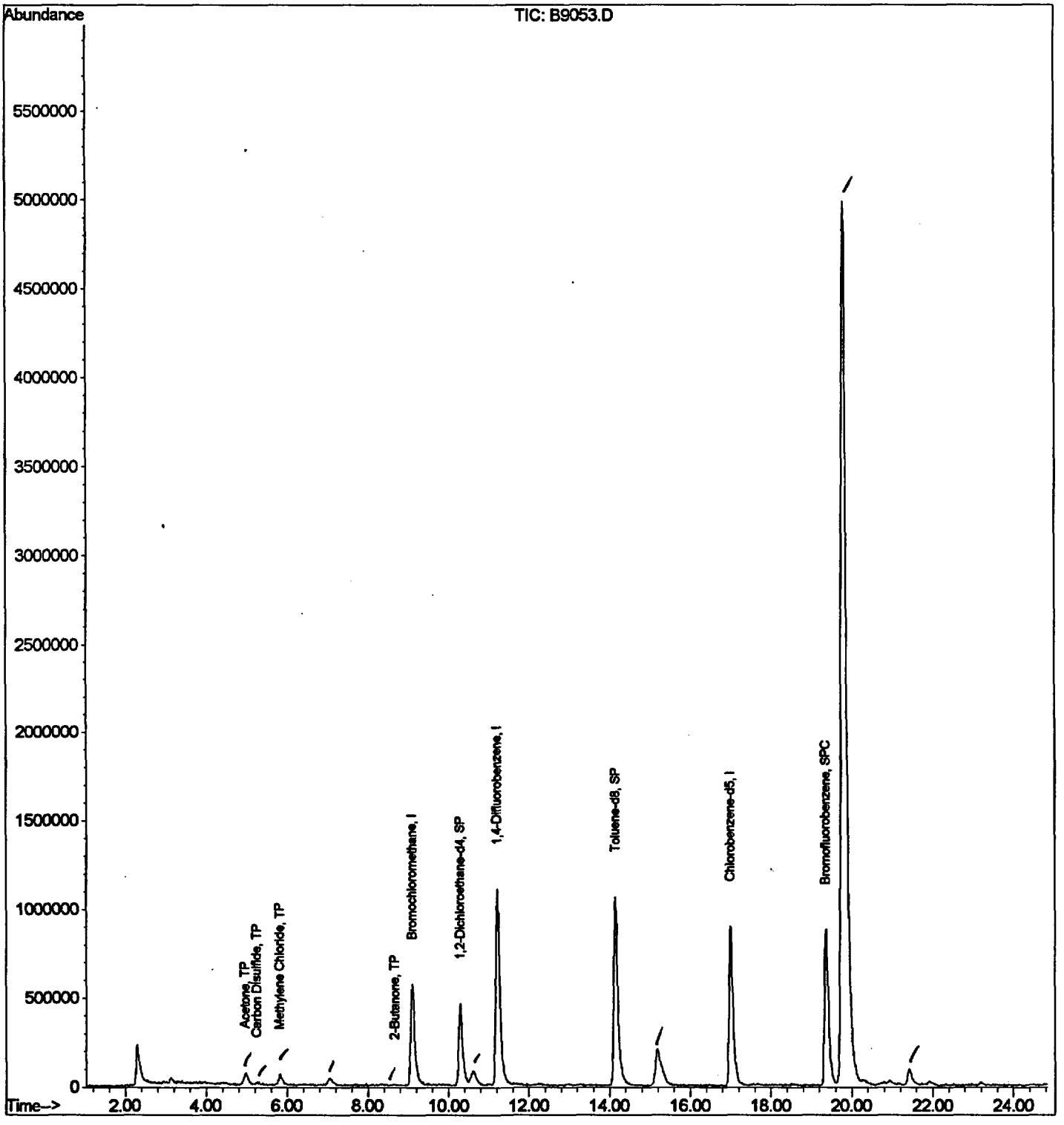
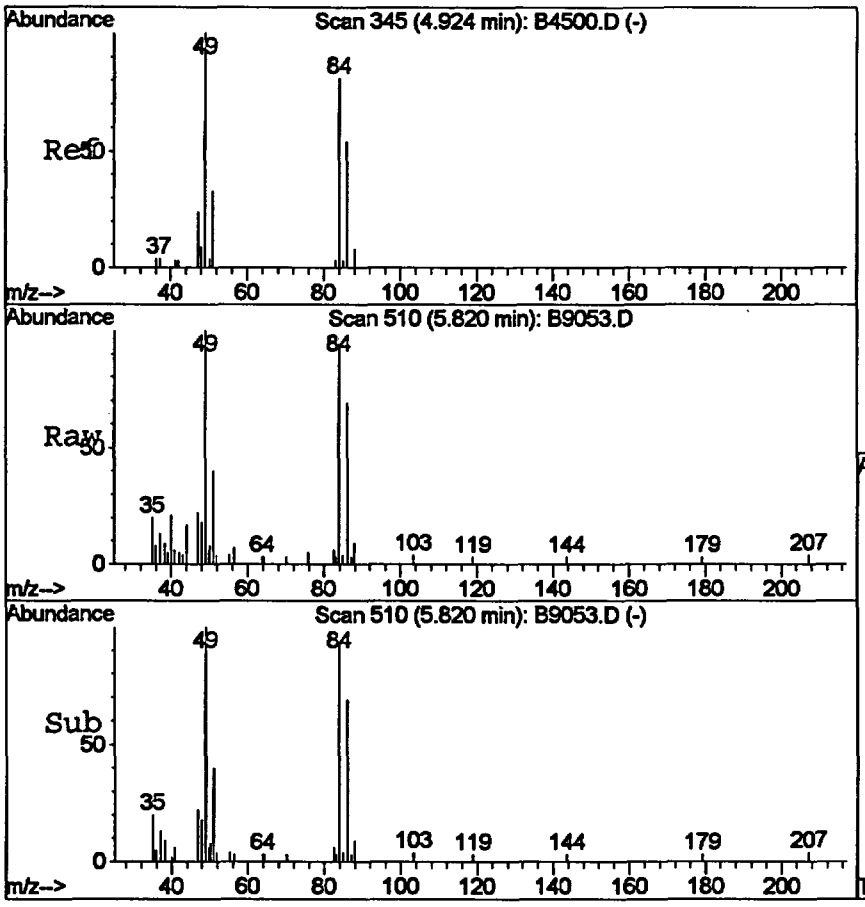
Quantitation Report

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial: 1
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 14:46 1998 Quant Results File: CLPVS2.RES

Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Single Level Calibration

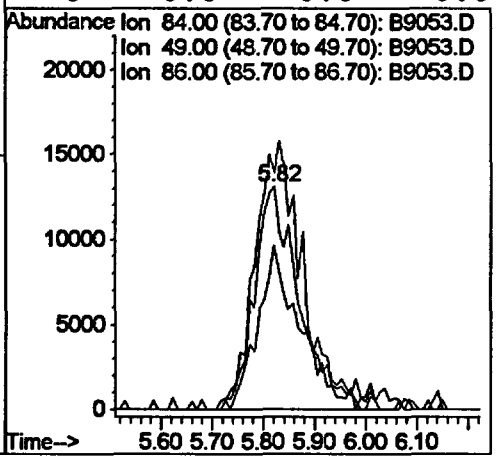


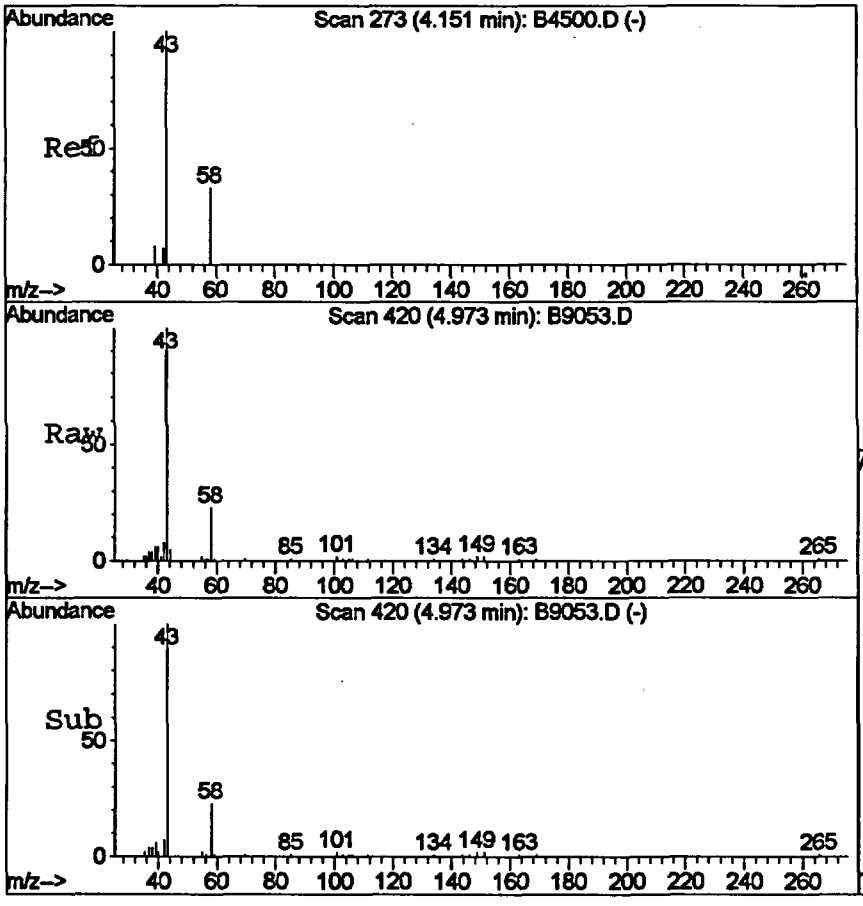


#6
Methylene Chloride
Concen: 4.79 ng
RT: 5.82 min / Scan# 510
Delta R.T. 0.01 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:84 Resp: 80343

Ion	Ratio	Lower	Upper
84	100		
49	111.8	97.7	137.7
86	73.2	46.9	86.9
0	0.0	0.0	0.0

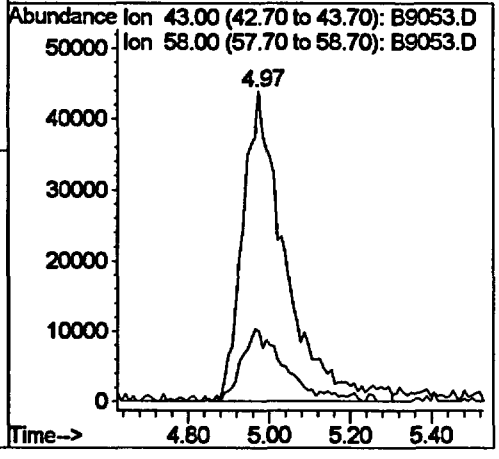


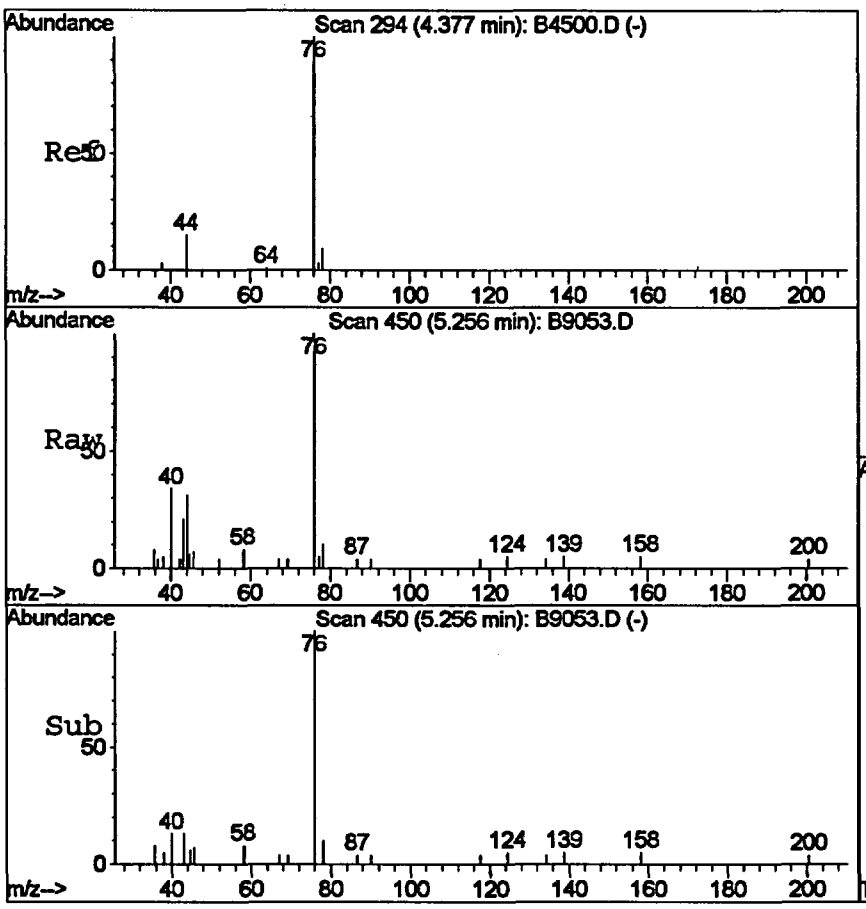


#7
Acetone
Concen: 61.75 ng
RT: 4.97 min / Scan# 420
Delta R.T. 0.02 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:43 Resp: 321110

Ion	Ratio	Lower	Upper
43	100		
58	22.9	1.3	41.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

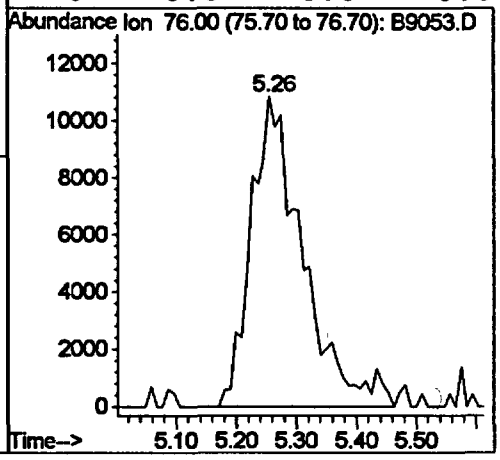


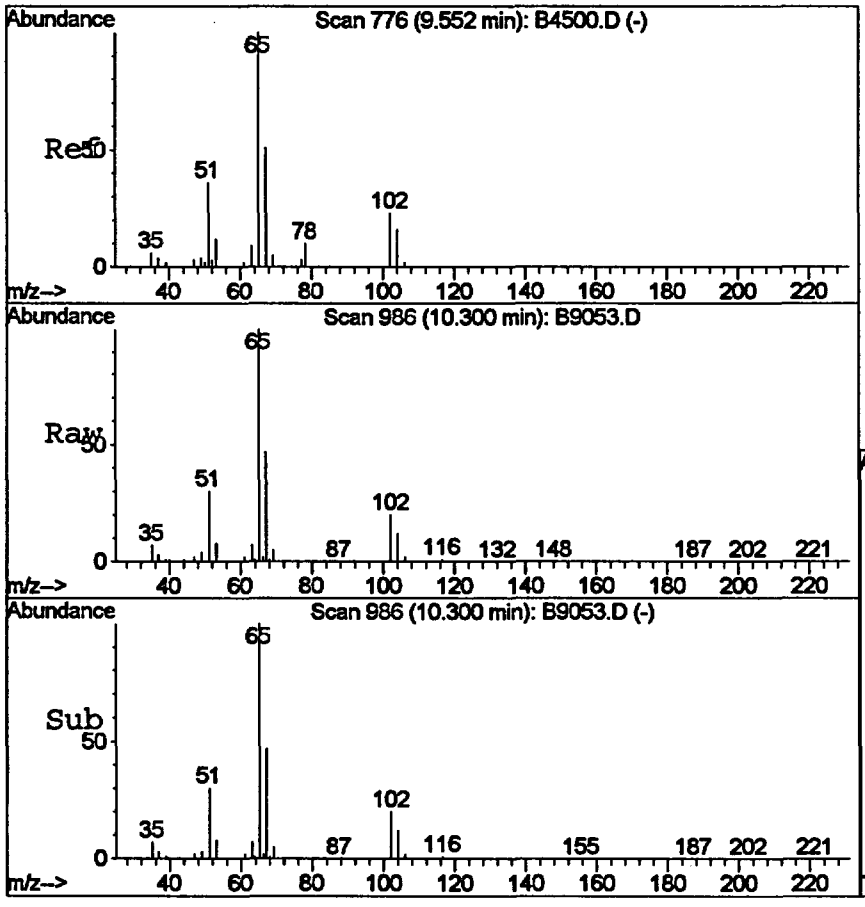


#8
Carbon Disulfide
Concen: 1.52 ng m
RT: 5.26 min /Scan# 450
Delta R.T. 0.01 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:76 Resp: 64414

Ion	Ratio	Lower	Upper
76	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

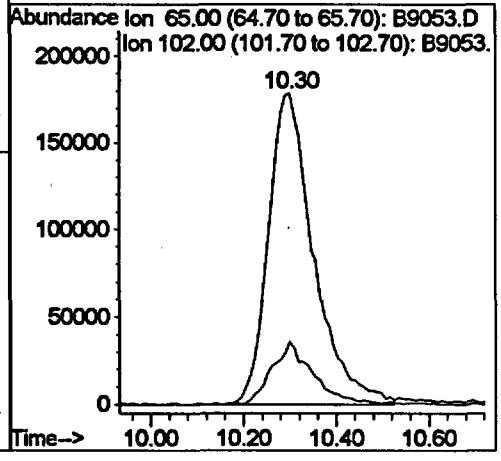


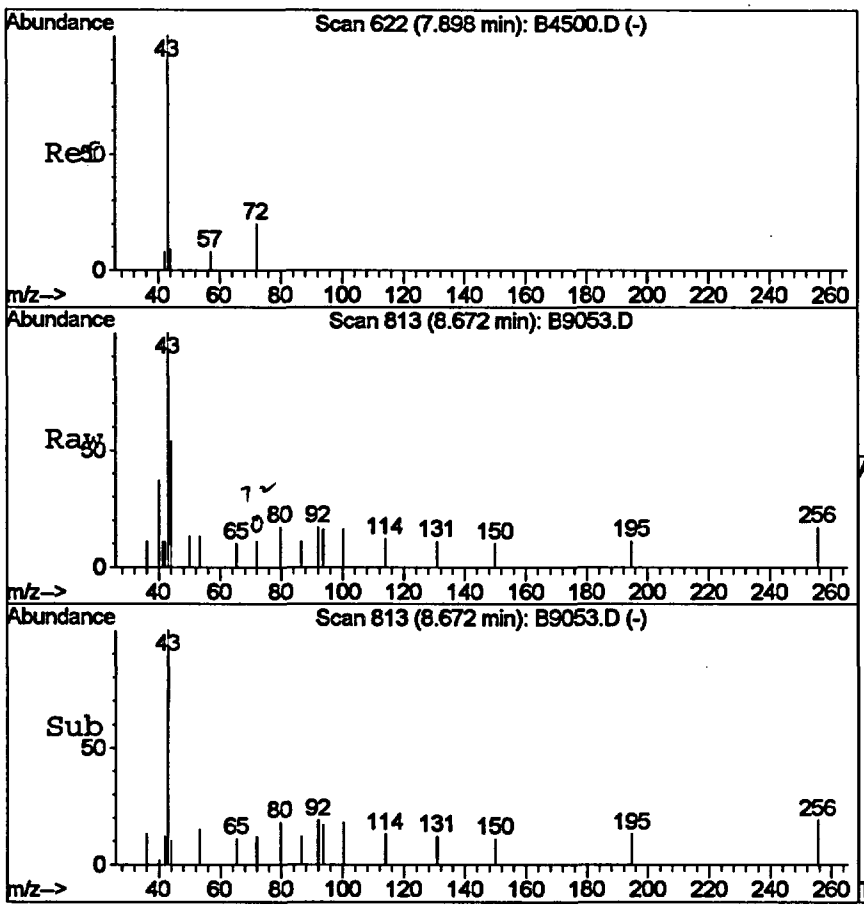


#13
1,2-Dichloroethane-d4
Concen: 46.62 ng
RT: 10.30 min Scan# 986
Delta R.T. 0.03 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:65 Resp: 1206495

Ion	Ratio	Lower	Upper
65	100		
102	20.0	0.0	37.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

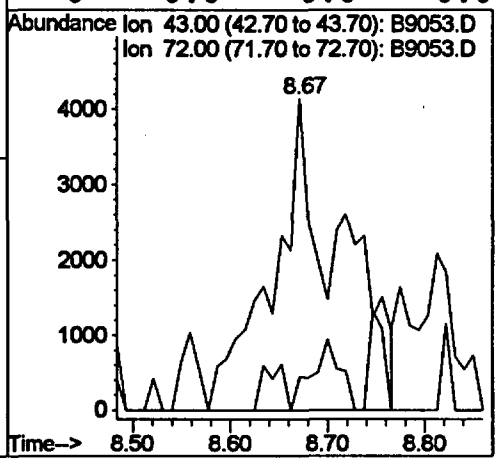


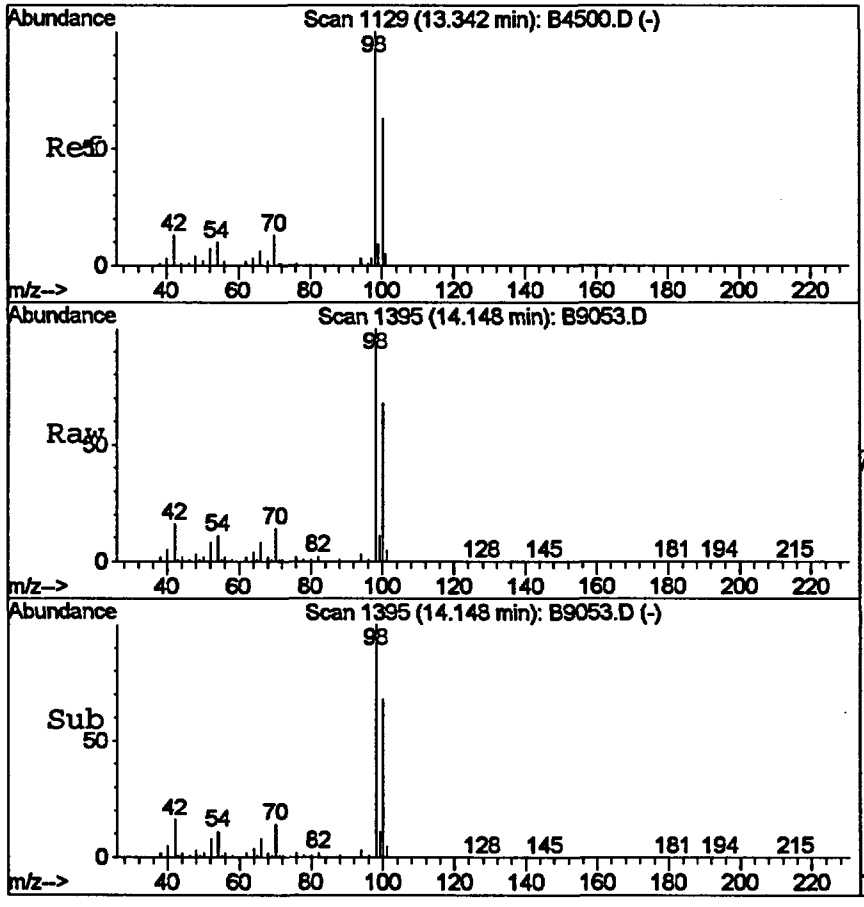


#15
2-Butanone
Concen: 3.13 ng
RT: 8.67 min /Scan# 813
Delta R.T. 0.05 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:43 Resp: 20105

Ion	Ratio	Lower	Upper
43	100		
72	10.6	9.2	49.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

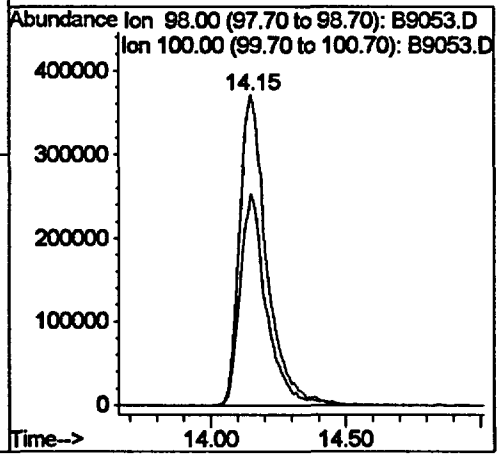


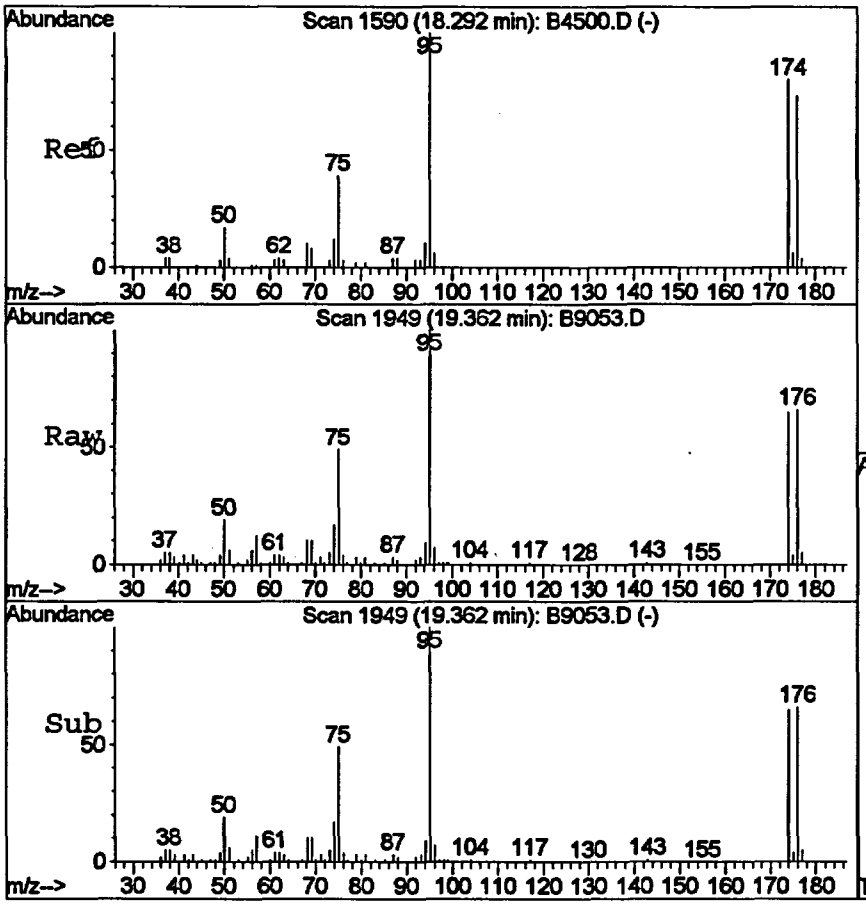


#33
Toluene-d8
Concen: 52.76 ng
RT: 14.15 min Scan# 1395
Delta R.T. 0.02 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:98 Resp: 2590256

Ion	Ratio	Lower	Upper
98	100		
100	68.3	48.7	88.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0

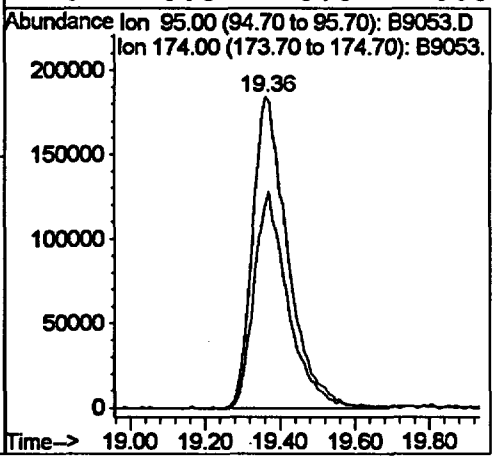




#37
Bromofluorobenzene
Concen: 47.69 ng
RT: 19.36 min Scan# 1949
Delta R.T. 0.03 min
Lab File: B9053.D
Acq: 19 Jan 98 9:42

Tgt Ion:95 Resp: 1203628

Ion	Ratio	Lower	Upper
95	100		
174	64.7	48.1	88.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial:
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 14:46 1998 Quant Results File: CLPVS2.RES

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Continuing Cal File: Q:\HPCHEM\B\DATA\B9051.D
DataAcq Meth : CLPVS2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.10	128	573989	50.00	ng	0.00
16) 1,4-Difluorobenzene	11.23	114	2955559	50.00	ng	0.04
28) Chlorobenzene-d5	17.00	117	1719337	50.00	ng	0.02
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	10.30	65	1206495	46.62	ng	0.03
Surrogate Spike 50.000	Range 70 - 121		Recovery = 93.24%			
33) Toluene-d8	14.15	98	2590256	52.76	ng	0.02
Surrogate Spike 50.000	Range 84 - 138		Recovery = 105.52%			
37) Bromofluorobenzene	19.36	95	1203628	47.69	ng	0.03
Surrogate Spike 50.000	Range 59 - 113		Recovery = 95.38%			
Target Compounds						Qvalue
6) Methylene Chloride	5.82	84	80343	4.79	ng	94
7) Acetone	4.97	43	321110	61.75	ng	97
8) Carbon Disulfide	5.26	76	64414m	1.52	ng	100
15) 2-Butanone	8.67	43	20105	3.13	ng	65

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial: 1
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

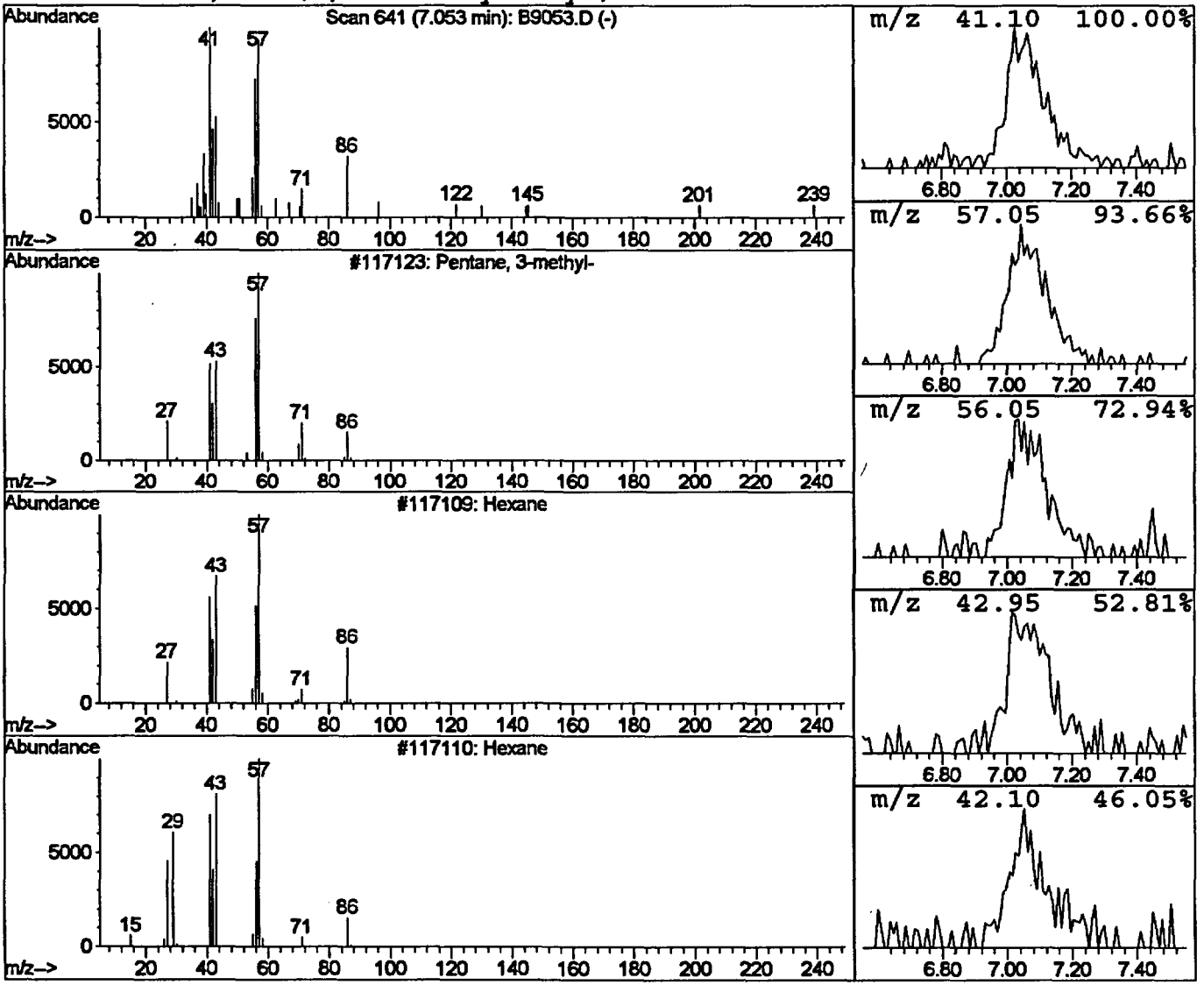
****

Peak Number 2 ~~Pentane, 3-methyl-~~ Concentration Rank 6

Unknown Hydro Carbon ms 1/22/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.05	5.04 ng	406847	Bromochloromethane	9.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	12
2	Hexane	86	C6H14	000110-54-3	9
3	Hexane	86	C6H14	000110-54-3	9
4	Disulfide, bis(1,1-dimethylethyl)	178	C8H18S2	000110-06-5	9



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial: 1
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

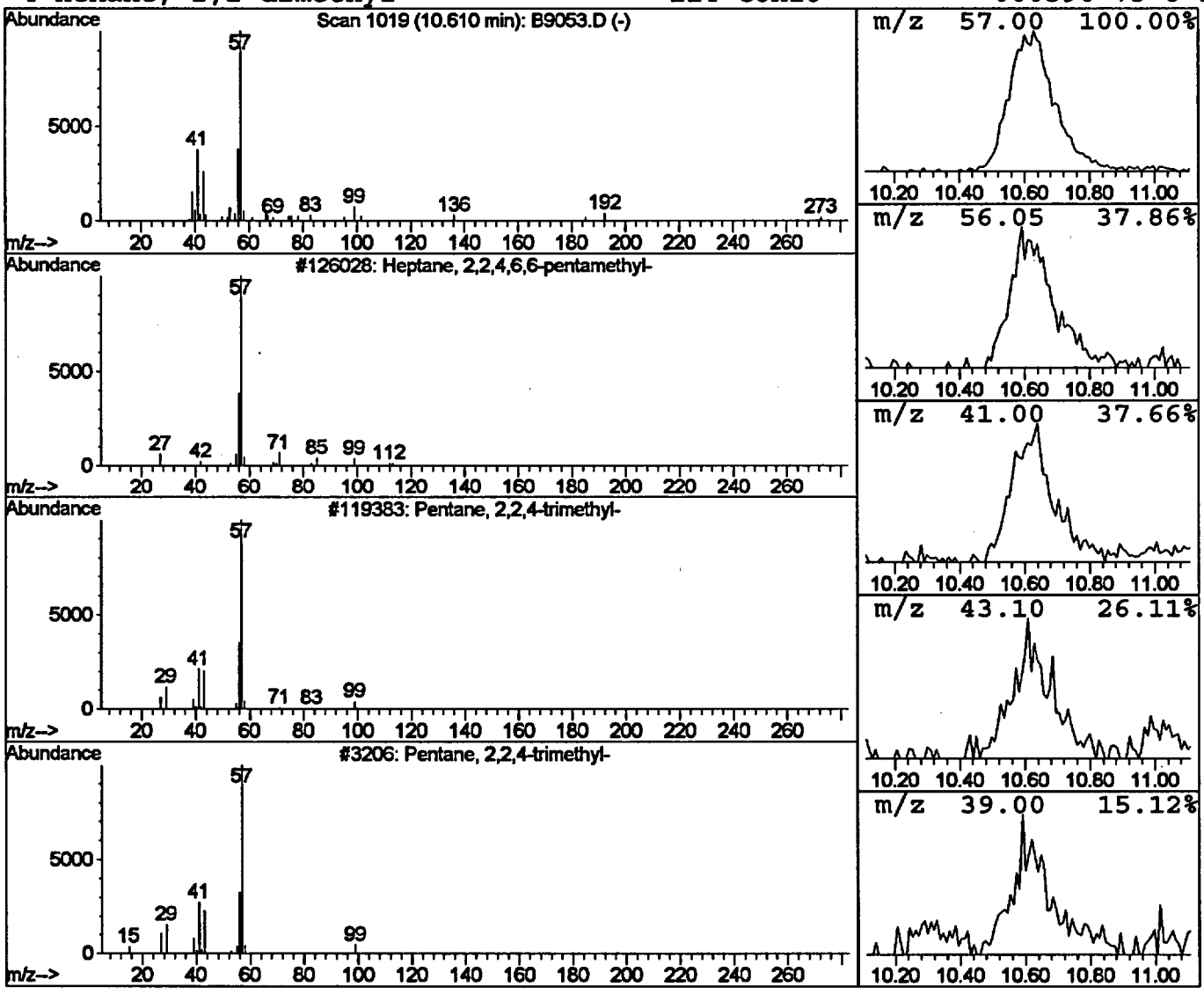
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 ~~Heptane, 2,2,4,6,6-pentamethyl~~ Unknown hydrocarbon cl 01/22/98 ; Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.61	5.11 ng	802662	1,4-Difluorobenzene	11.23

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptane, 2,2,4,6,6-pentamethyl-	170	C12H26	013475-82-6	33
2	Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	33
3	Pentane, 2,2,4-trimethyl-	114	C8H18	000540-84-1	50
4	Hexane, 2,2-dimethyl-	114	C8H18	000590-73-8	10



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial: 1
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

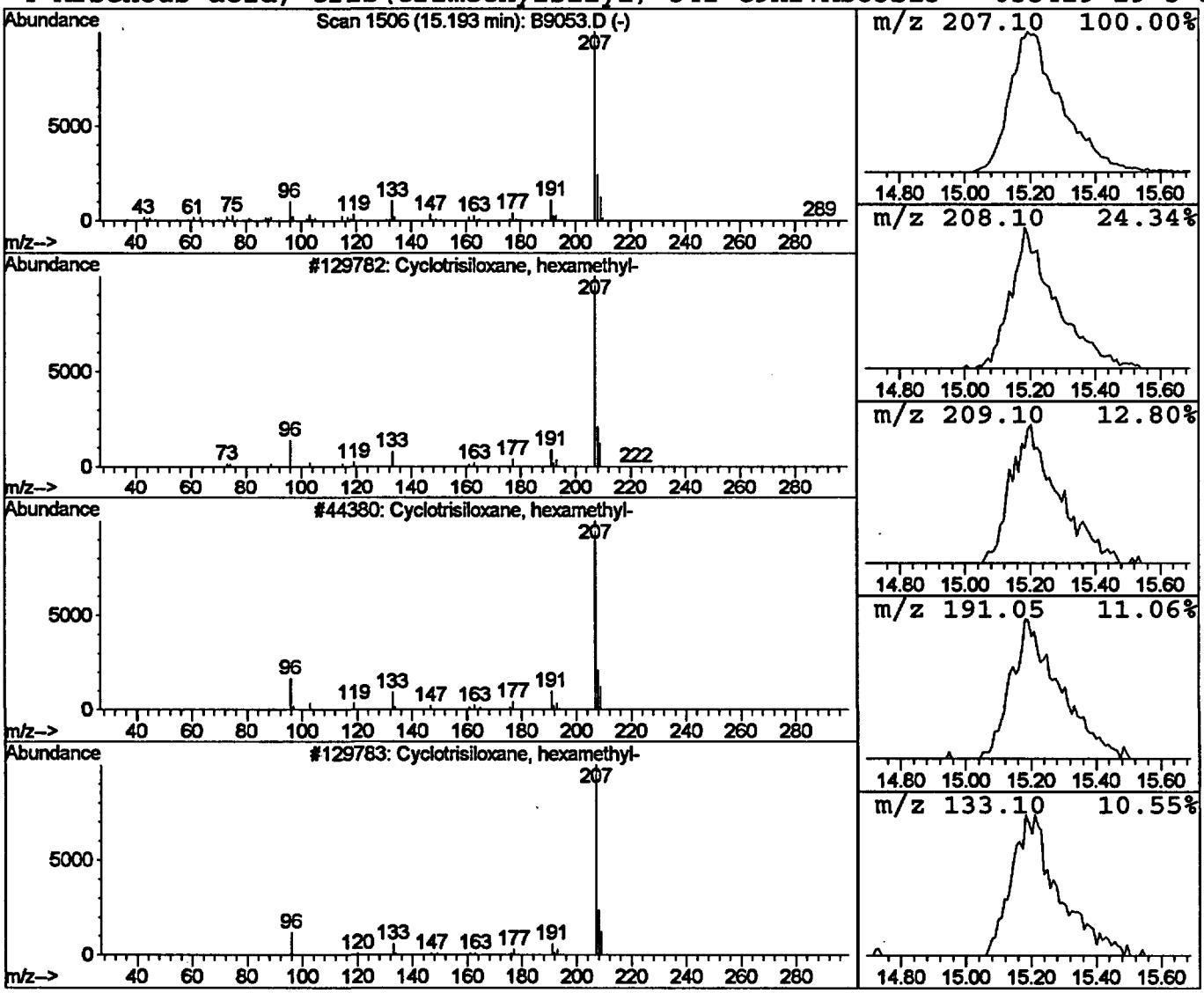
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 4 Cyclotrisiloxane, hexamethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
X15.19	18.63 ng	2285560	Chlorobenzene-d5	17.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
✓1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	80
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	87
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
4	Arsenous acid, tris(trimethylsilyl)	342	C9H27AsO3Si3	055429-29-3	39



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9053.D
Acq On : 19 Jan 98 9:42
Sample : HP-2B FFR76 58073-001
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

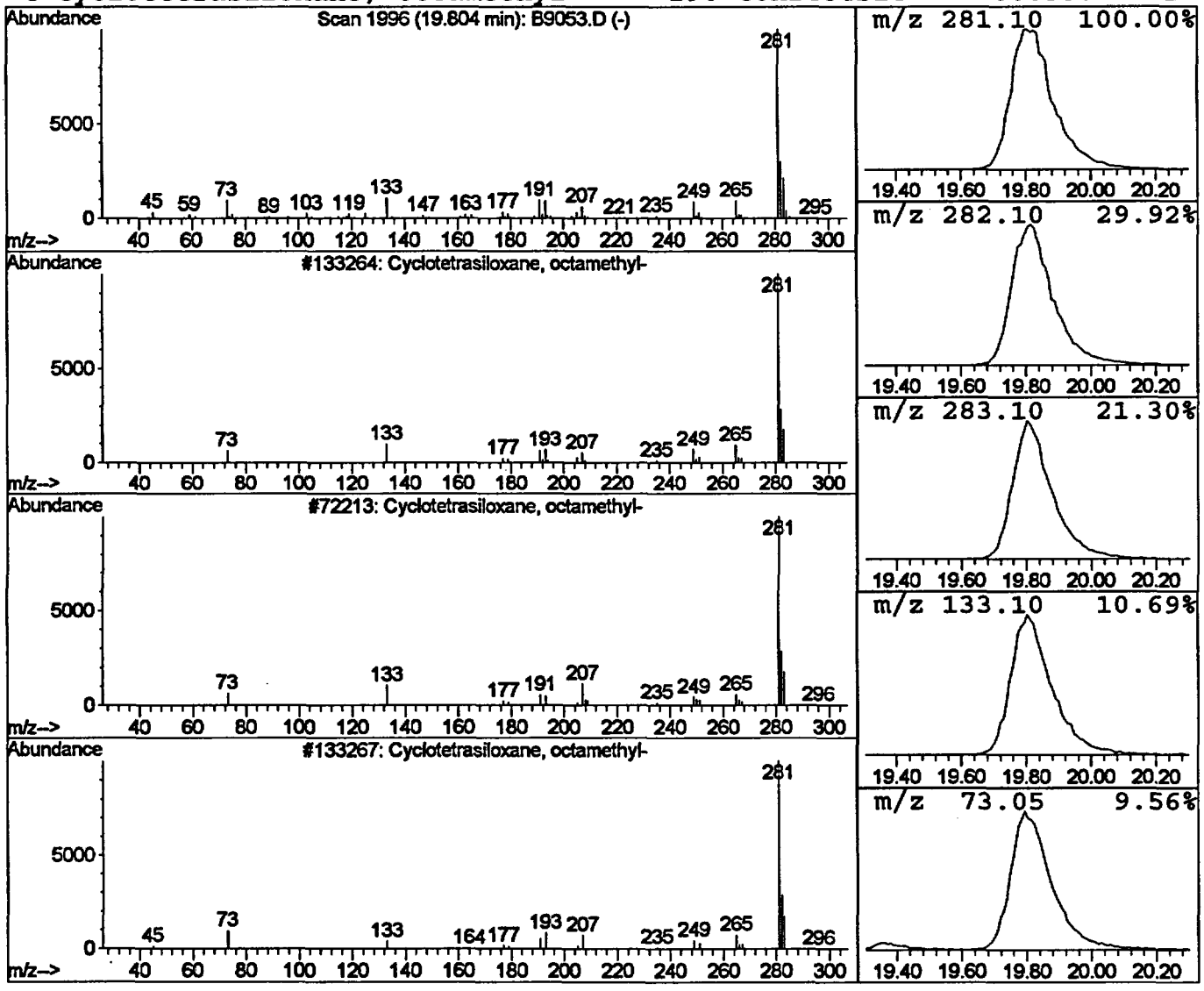
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 Cyclotetrasiloxane, octamethyl Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.80	367.13 ng	45030900	Chlorobenzene-d5	17.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	83
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	78



0027

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial: 1
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

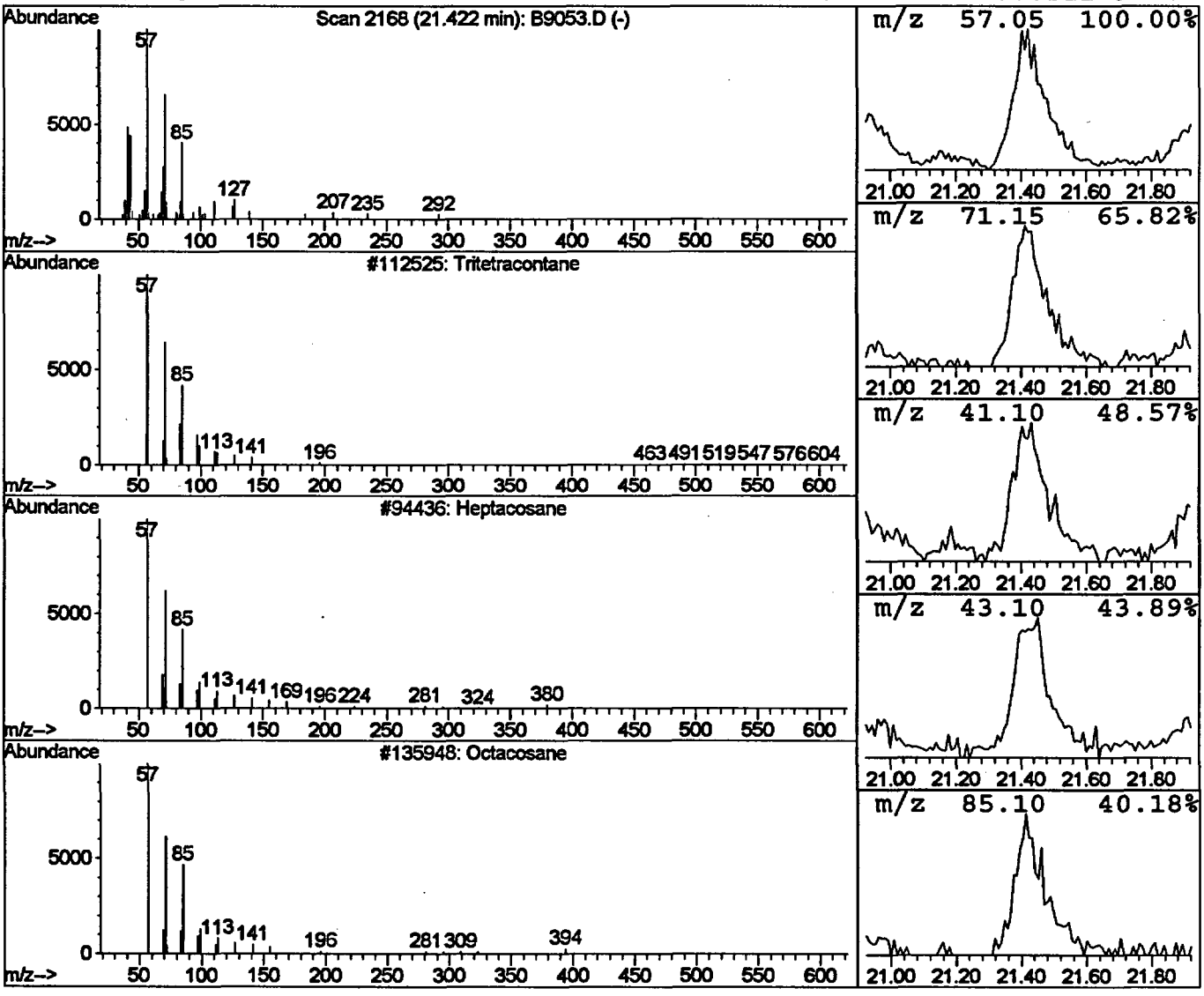
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 6 ~~Tritetracontane~~ Unknown hydrocarbon uo1/21/98 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.42	5.72 ng	702065	Chlorobenzene-d5	17.00

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tritetracontane	605	C43H88	007098-21-7	50
2	Heptacosane	380	C27H56	000593-49-7	50
3	Octacosane	394	C28H58	000630-02-4	50
4	Eicosane	282	C20H42	000112-95-8	56



0028

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9053.D Vial: 1
Acq On : 19 Jan 98 9:42 Operator:
Sample : HP-2B FFR76 58073-001 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

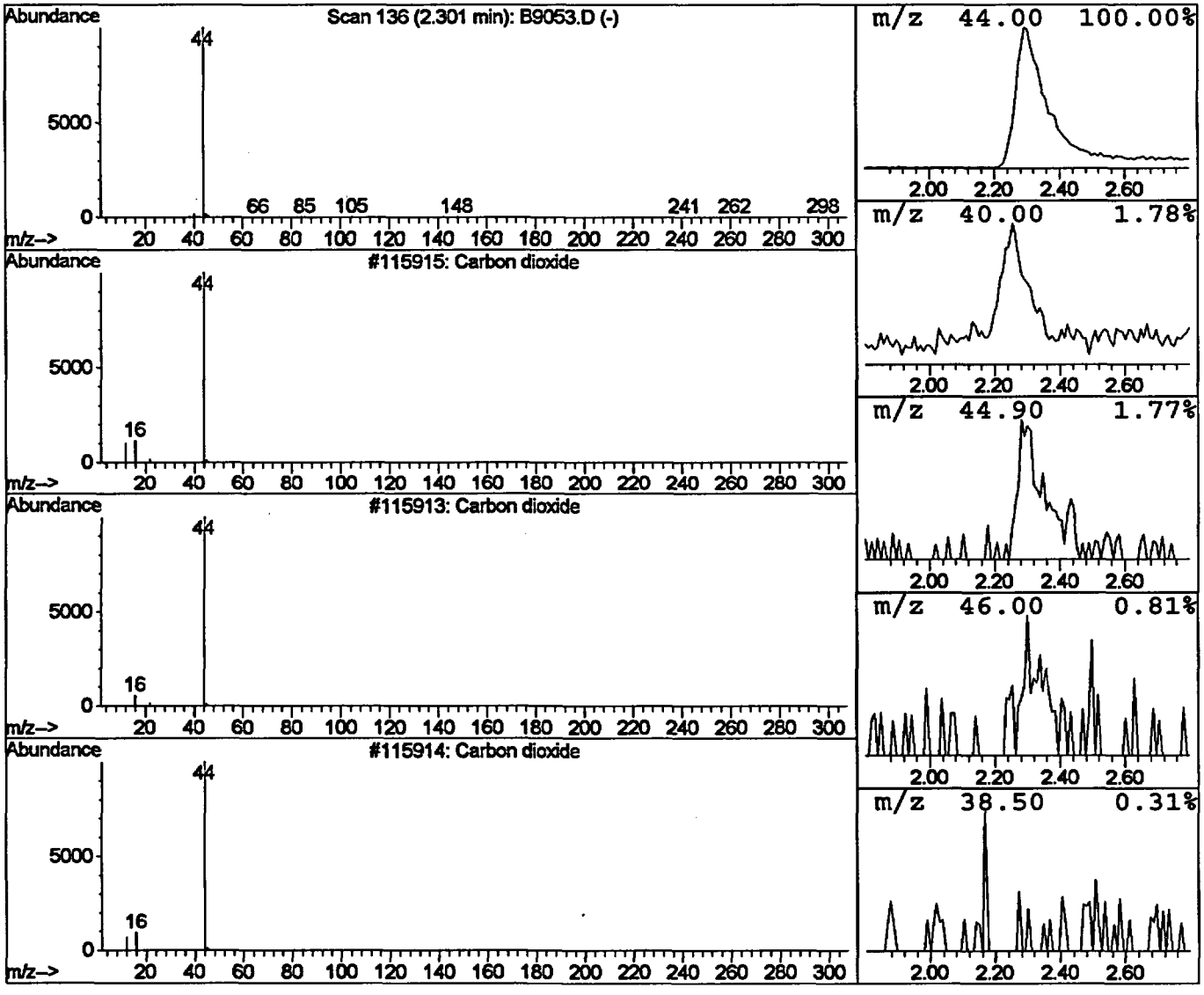
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 Carbon dioxide (Organic Artifact) Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.30	19.99 ng	1614690	Bromochloromethane	9.10

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	4
3	Carbon dioxide	44	CO2	000124-38-9	4
4	TRIDEUTEROACETONITRILE	41	C2D3N	002206-26-0	4



0029

CASE 25969
SDG# FFR76

Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 19 Jan 98 9:42
Data File: Q:\HPCHEM\B\B90XX\B9053.D
Name: HP-2B FFR76 58073-001
Misc: CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Method: CLPVS2
Title: VOA BY GCMS 8260
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.30	20.0	ng	1614690	ISTD01	9.10	4038270	50.0
Pentane, 3-methyl-	7.05	5.0	ng	406847	ISTD01	9.10	4038270	50.0
Heptane, 2,2,4,6,6-p	10.61	5.1	ng	802662	ISTD02	11.23	7860440	50.0
Cyclotrisiloxane, he	15.19	18.6	ng	2285560	ISTD03	17.00	6132850	50.0
Cyclotetrasiloxane,	19.80	367.1	ng	45030900	ISTD03	17.00	6132850	50.0
Tritetracontane	21.42	5.7	ng	702065	ISTD03	17.00	6132850	50.0

B9053.D DON.M Thu Jan 22 14:48:14 1998

TIC: B9053.D

HP-2B FFR76 58073-001 01/19/98 9:42

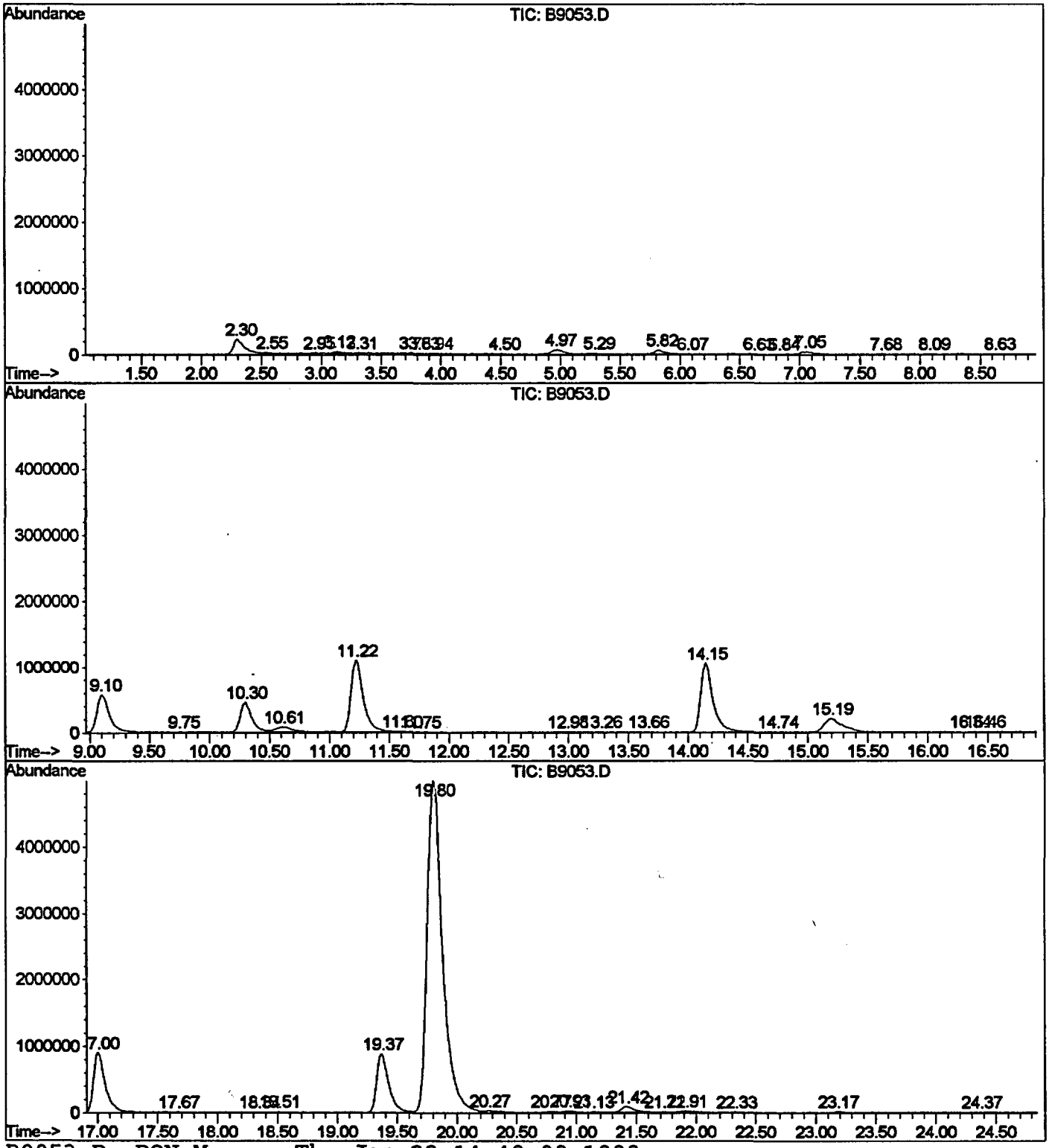
CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	2.301	rBV	0.358	1614691	2.160	2.517
2	2.555	rVB	0.151	60981	2.517	2.668
3	2.950	rBV	0.132	54149	2.856	2.988
4	3.120	rVB	0.226	163327	3.044	3.270
5	3.308	rBV	0.075	33881	3.270	3.345
6	3.750	rVV	0.151	41001	3.609	3.759
7	3.825	rVB	0.094	36814	3.759	3.854
8	3.938	rBV	0.094	40861	3.891	3.985
9	4.503	rVB	0.113	50598	4.437	4.550
10	4.973	rBV	0.320	496710	4.813	5.133
11	5.293	rBV	0.207	87374	5.133	5.340
12	5.820	rBV	0.358	411200	5.660	6.018
13	6.074	rVB	0.132	34359	6.018	6.150
14	6.630	rVB	0.113	40524	6.564	6.677
15	6.837	rBV	0.188	68395	6.677	6.865
16	7.053	rVV	0.433	406847	6.865	7.298
17	7.684	rVB	0.151	36581	7.580	7.731
18	8.088	rBV	0.169	38967	7.994	8.163
19	8.634	rBV	0.169	35770	8.521	8.690
20	9.104	rVB	0.508	4038267	8.954	9.462
21	9.754	rBV	0.132	44113	9.688	9.820
22	10.300	rBV	0.339	3072040	10.158	10.497
23	10.610	rVB	0.376	802662	10.497	10.874
24	11.222	rBV	0.489	7860435	11.081	11.570
25	11.598	rVV	0.151	56978	11.570	11.721
26	11.749	rVB	0.188	67114	11.721	11.909
27	12.982	rBV	0.245	117306	12.869	13.113
28	13.264	rVB	0.132	36637	13.207	13.339
29	13.659	rVB	0.132	34071	13.546	13.678
30	14.148	rVV	0.621	7584316	13.960	14.581
31	14.741	rVB	0.132	35860	14.713	14.845
32	15.193	rBV	0.583	2285558	14.939	15.522
33	16.341	rVB	0.132	31154	16.237	16.369
34	16.463	rVB	0.151	34809	16.407	16.557
35	17.000	rBV	0.565	6132852	16.859	17.423
36	17.668	rVB	0.151	41405	17.593	17.743
37	18.336	rVB	0.151	34797	18.327	18.477
38	18.505	rBV	0.226	67639	18.477	18.703
39	19.371	rBV	0.414	6200931	19.211	19.625
40	19.804	rVV	0.621	45030929	19.625	20.246
41	20.265	rVB	0.320	275860	20.246	20.566
42	20.773	rBV	0.282	137669	20.566	20.848
43	20.933	rVV	0.264	200593	20.848	21.112
44	21.131	rVV	0.151	50642	21.112	21.263
45	21.422	rVV	0.414	702065	21.263	21.677
46	21.724	rVV	0.113	38426	21.677	21.789
47	21.912	rVB	0.339	213674	21.789	22.128
48	22.326	rVB	0.169	41030	22.279	22.448
49	23.173	rBV	0.282	117359	23.032	23.314
50	24.368	rBV	0.132	32651	24.255	24.387

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\B\B90XX\B9053.D
Operator :
Acquired : 19 Jan 98 9:42 using AcqMethod CLPVS2
Instrument : GC/MS Ins
Sample Name: HP-2B FFR76 58073-001
Misc Info : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Vial Number: 1
Quant File :CLPVS2.RES



B9053.D DON.M Thu Jan 22 14:48:08 1998

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR81

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-002

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9054

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 37 Date Analyzed: 1/19/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

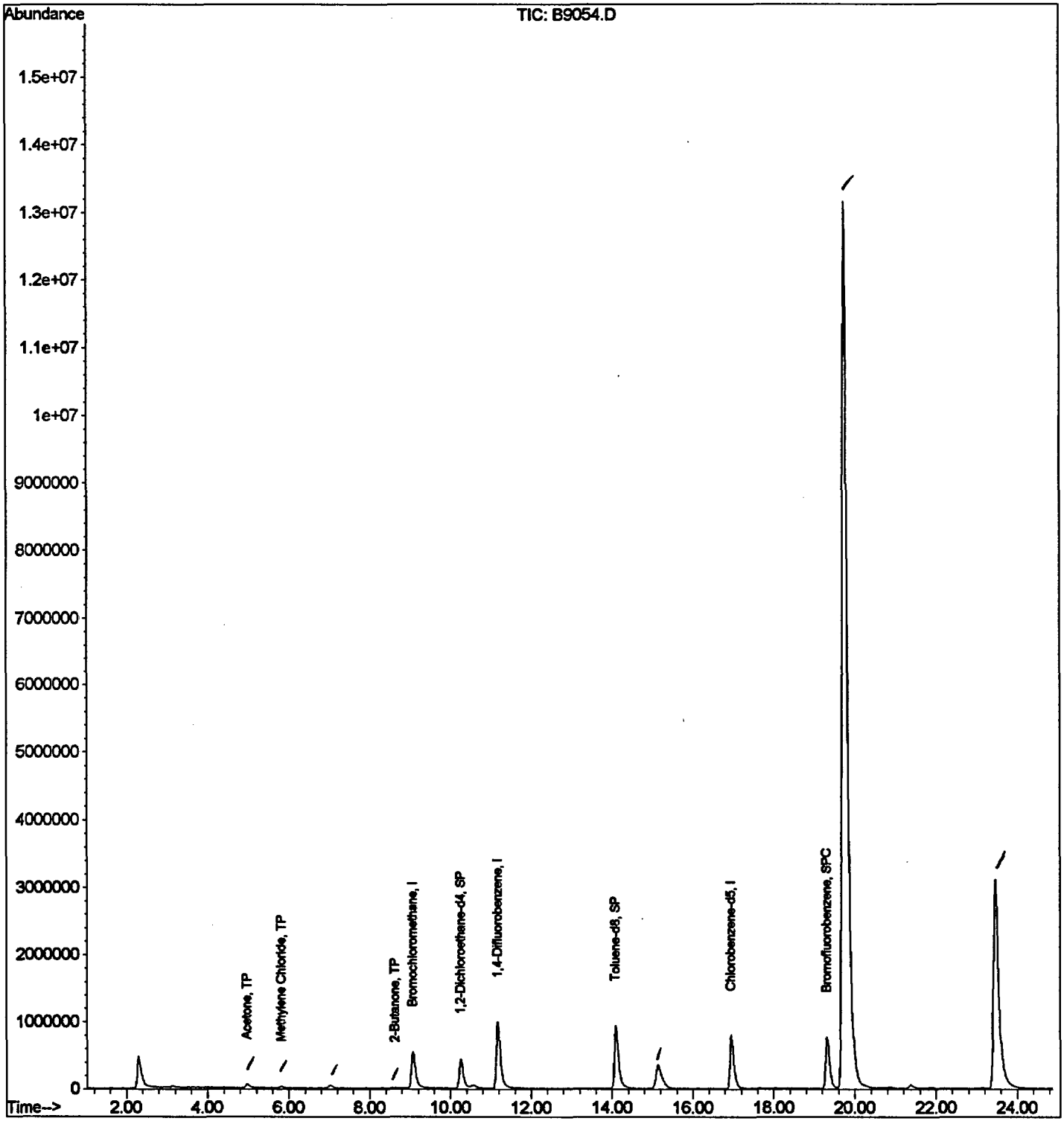
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		Unknown hydrocarbon	7.04	8.	J
2.	541-05-9	Cyclotrisiloxane, hexamethyl	15.14	52.	JNB
3.	556-67-2	Cyclotetrasiloxane, octameth	19.76	1700.	JNB
4.	3789-85-3	Benzoic acid, 2-[(trimethyls	23.47	420.	JNB
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

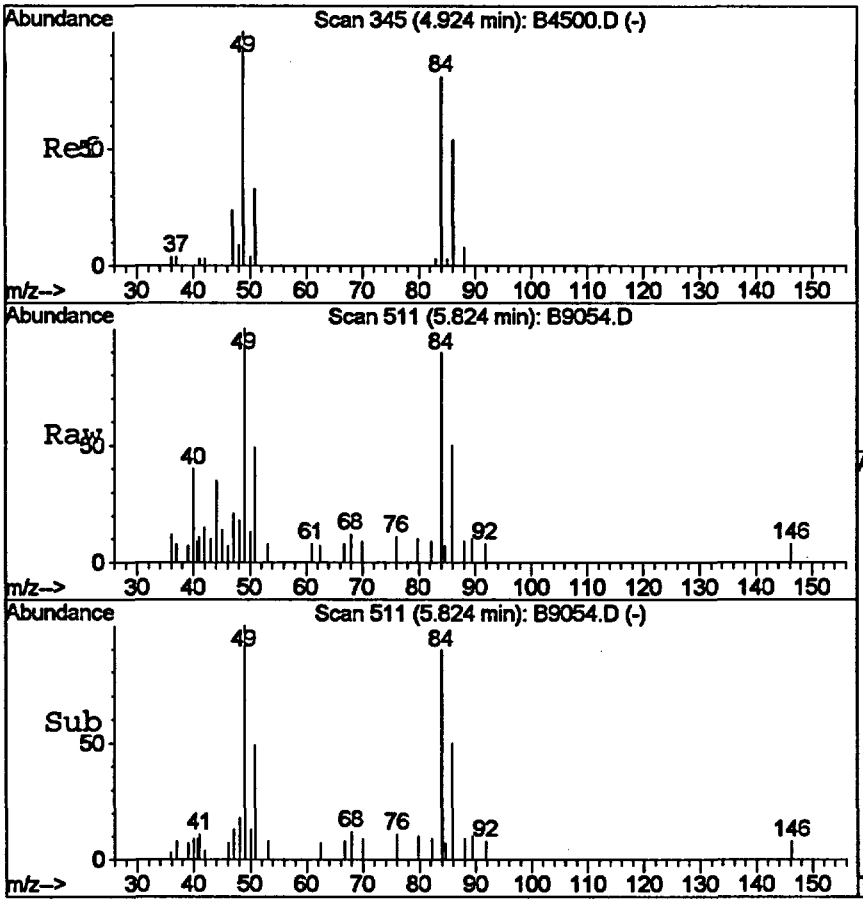
Quantitation Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial: 2
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 14:51 1998 Quant Results File: CLPVS2.RES

Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Single Level Calibration

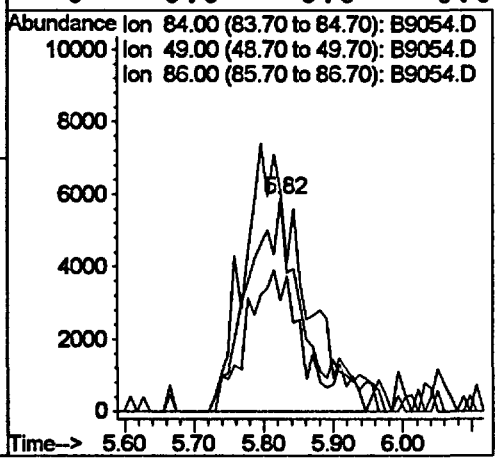


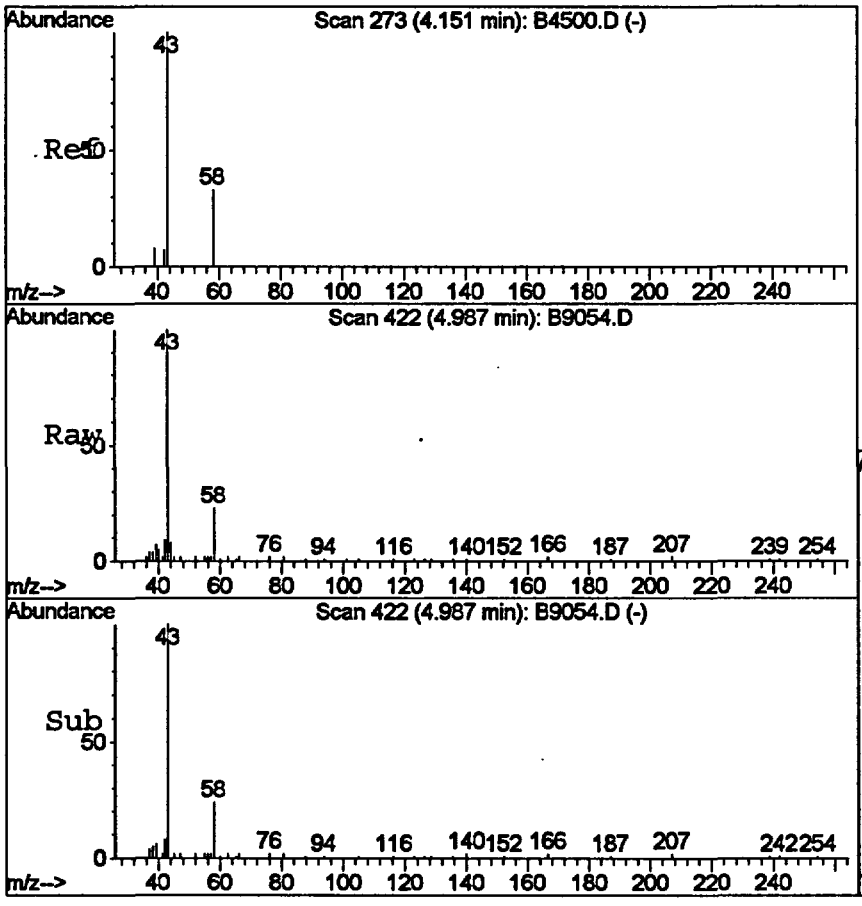


#6
Methylene Chloride
Concen: 2.05 ng
RT: 5.82 min / Scan# 511
Delta R.T. 0.01 min
Lab File: B9054.D
Acq: 19 Jan 98 10:13

Tgt Ion:84 Resp: 33076

Ion	Ratio	Lower	Upper
84	100		
49	103.7	97.7	137.7
86	52.2	46.9	86.9
0	0.0	0.0	0.0

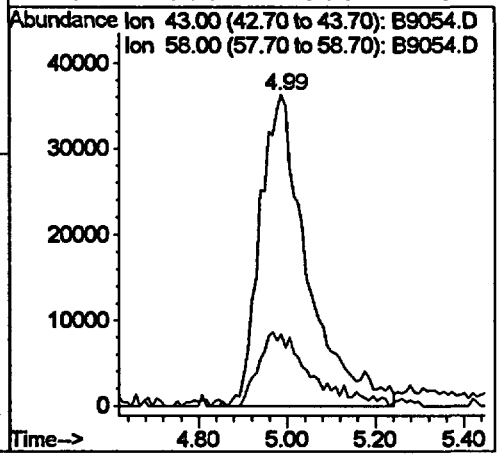




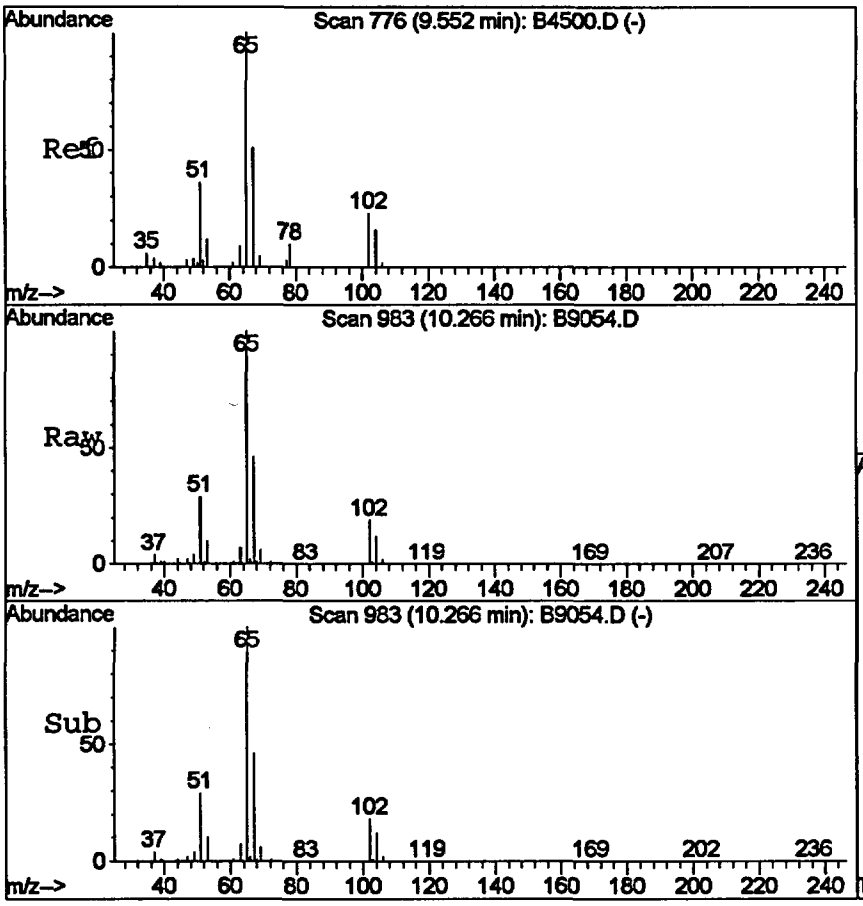
#7
Acetone
Concen: 54.30 ng
RT: 4.99 min / Scan# 422
Delta R.T. 0.03 min
Lab File: B9054.D
Acq: 19 Jan 98 10:13

Tgt Ion:43 Resp: 271587

Ion	Ratio	Lower	Upper
43	100		
58	23.1	1.3	41.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

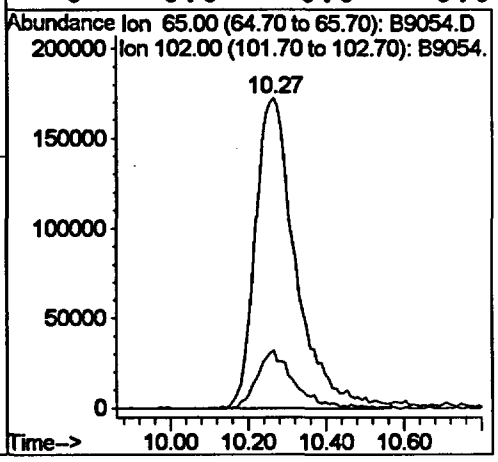


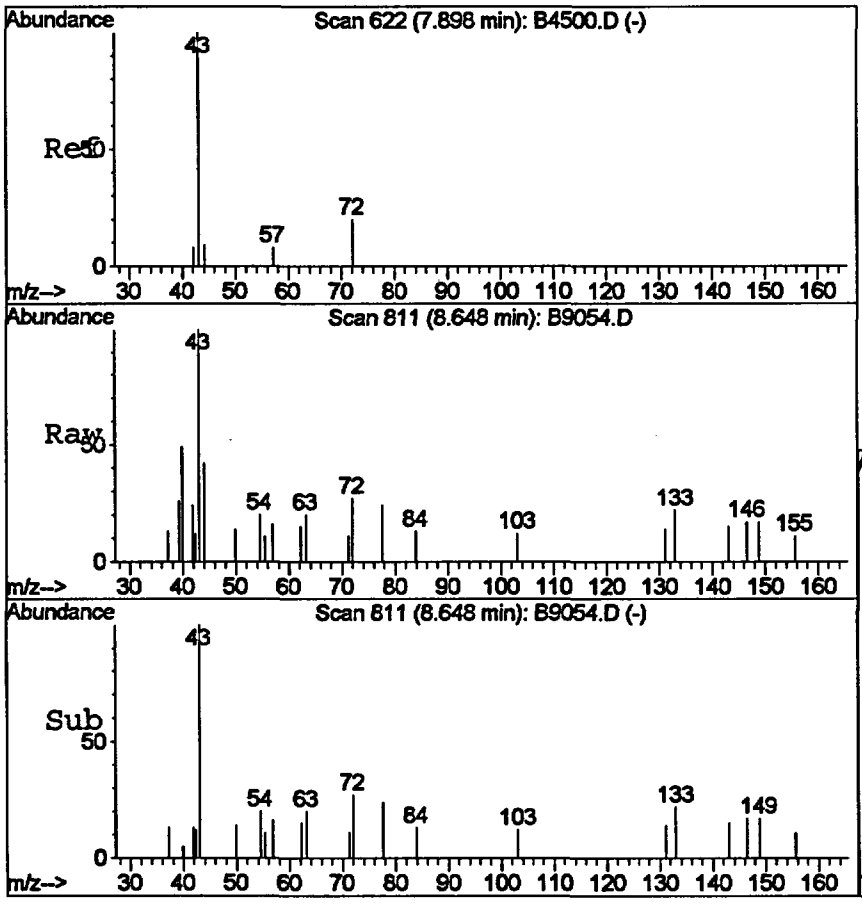
CASE 25969
SDG# FFR76



#13
1,2-Dichloroethane-d4
Concen: 49.81 ng
RT: 10.27 min Scan# 983
Delta R.T. -0.01 min
Lab File: B9054.D
Acq: 19 Jan 98 10:13

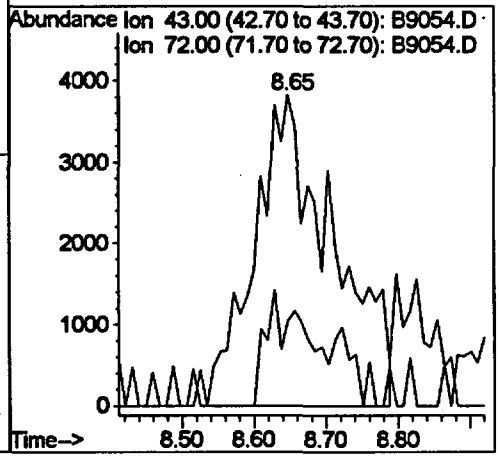
Tgt Ion:65	Resp: 1239991		
Ion	Ratio	Lower	Upper
65	100		
102	18.5	0.0	37.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0



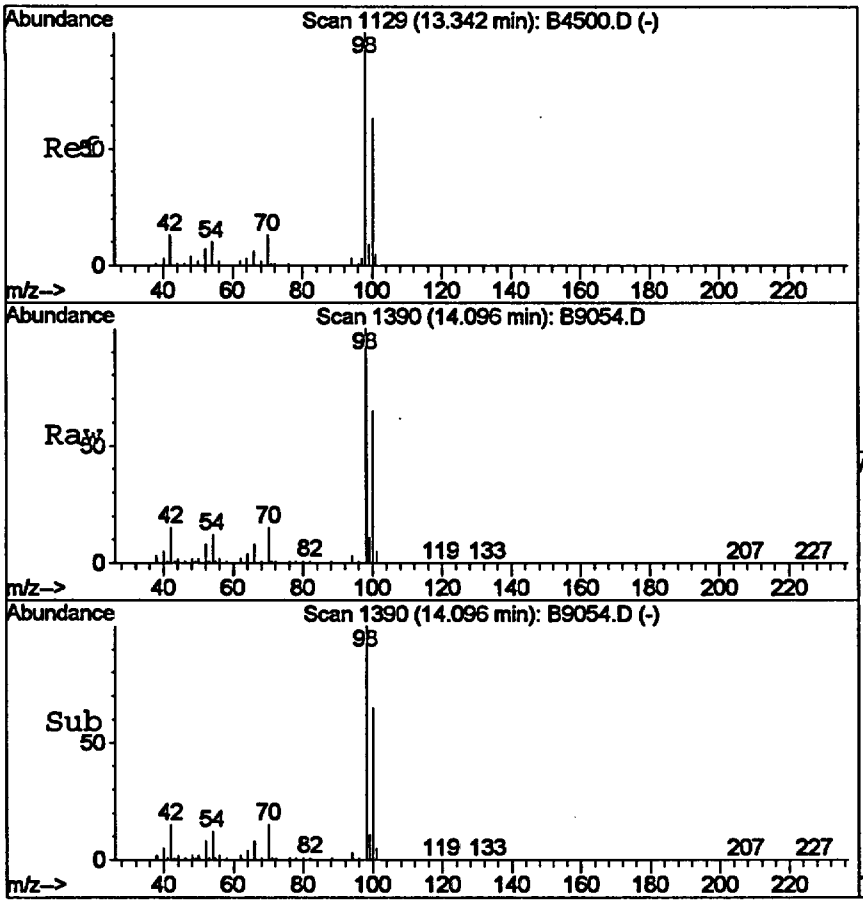


#15
2-Butanone
Concen: 4.68 ng m
RT: 8.65 min / Scan# 811
Delta R.T. 0.02 min
Lab File: B9054.D
Acq: 19 Jan 98 10:13

Tgt Ion:43	Resp: 28927		
Ion	Ratio	Lower	Upper
43	100		
72	27.2	9.2	49.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



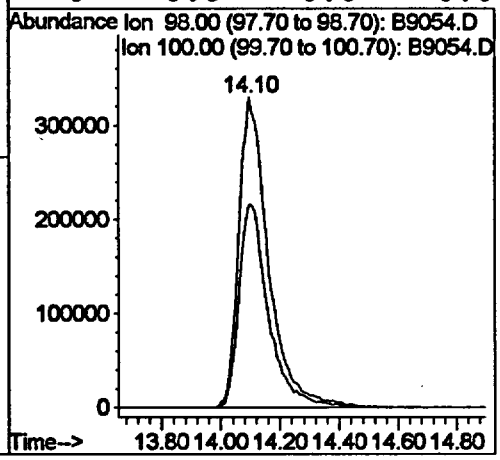
Sample Name: HP-2B FFR81 58073-002
B9054.D CLPVS2.M Thu Jan 22 14:52:12 1998

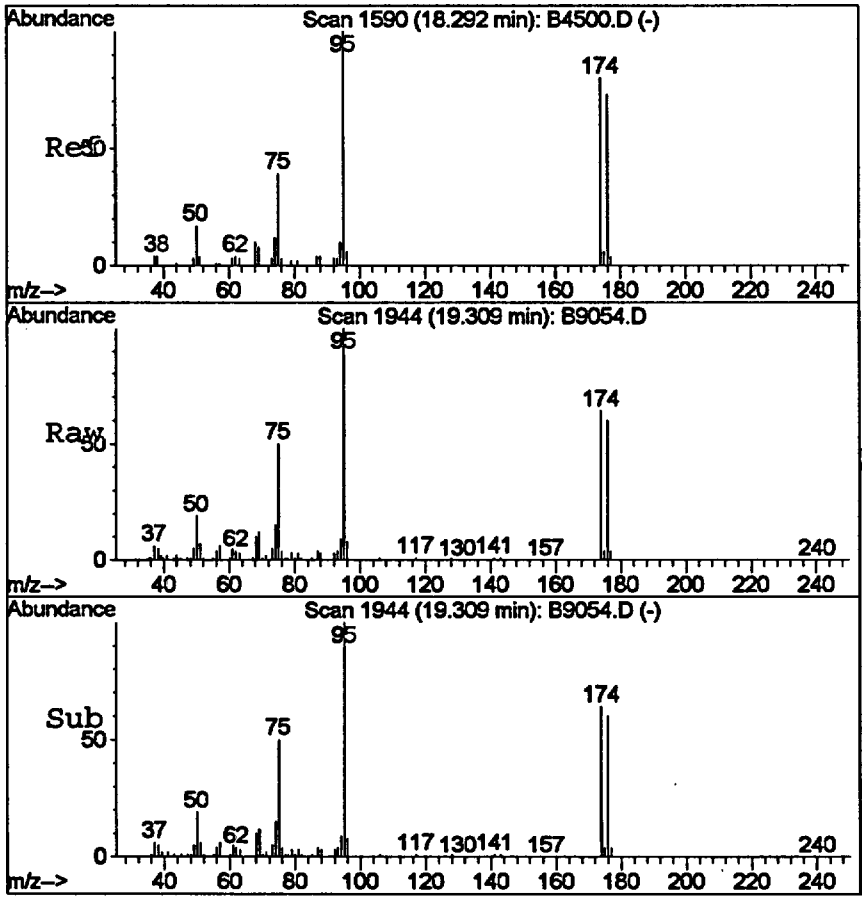


#33
Toluene-d8
Concen: 53.90 ng
RT: 14.10 min Scan# 1390
Delta R.T. -0.03 min
Lab File: B9054.D
Acq: 19 Jan 98 10:13

Tgt Ion:98 Resp: 2306776

Ion	Ratio	Lower	Upper
98	100		
100	65.3	48.7	88.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0

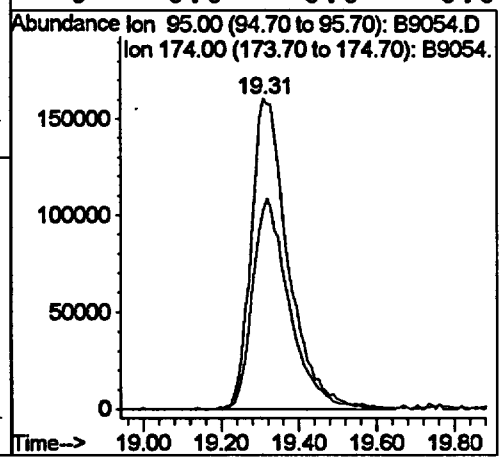




#37
Bromofluorobenzene
Concen: 48.22 ng
RT: 19.31 min Scan# 1944
Delta R.T. -0.02 min
Lab File: B9054.D
Acq: 19 Jan 98 10:13

Tgt Ion:95 Resp: 1060616

Ion	Ratio	Lower	Upper
95	100		
174	63.8	48.1	88.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed) CASE 25969 SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial: 2
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 14:51 1998 Quant Results File: CLPVS2.RES

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Continuing Cal File: Q:\HPCHEM\B\DATA\B9051.D
DataAcq Meth : CLPVS2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.08	128	552046	50.00	ng	0.00
16) 1,4-Difluorobenzene	11.19	114	2667710	50.00	ng	0.00
28) Chlorobenzene-d5	16.96	117	1498557	50.00	ng	-0.02
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	10.27	65	1239991	49.81	ng	0.00
Surrogate Spike 50.000	Range 70 - 121		Recovery = 99.62%			
33) Toluene-d8	14.10	98	2306776	53.90	ng	-0.03
Surrogate Spike 50.000	Range 84 - 138		Recovery = 107.80%			
37) Bromofluorobenzene	19.31	95	1060616	48.22	ng	-0.02
Surrogate Spike 50.000	Range 59 - 113		Recovery = 96.44%			
Target Compounds						Qvalue
6) Methylene Chloride	5.82	84	33076	2.05	ng	85
7) Acetone	4.99	43	271587	54.30	ng	96
15) 2-Butanone	8.65	43	28927m	4.68	ng	96

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial:
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

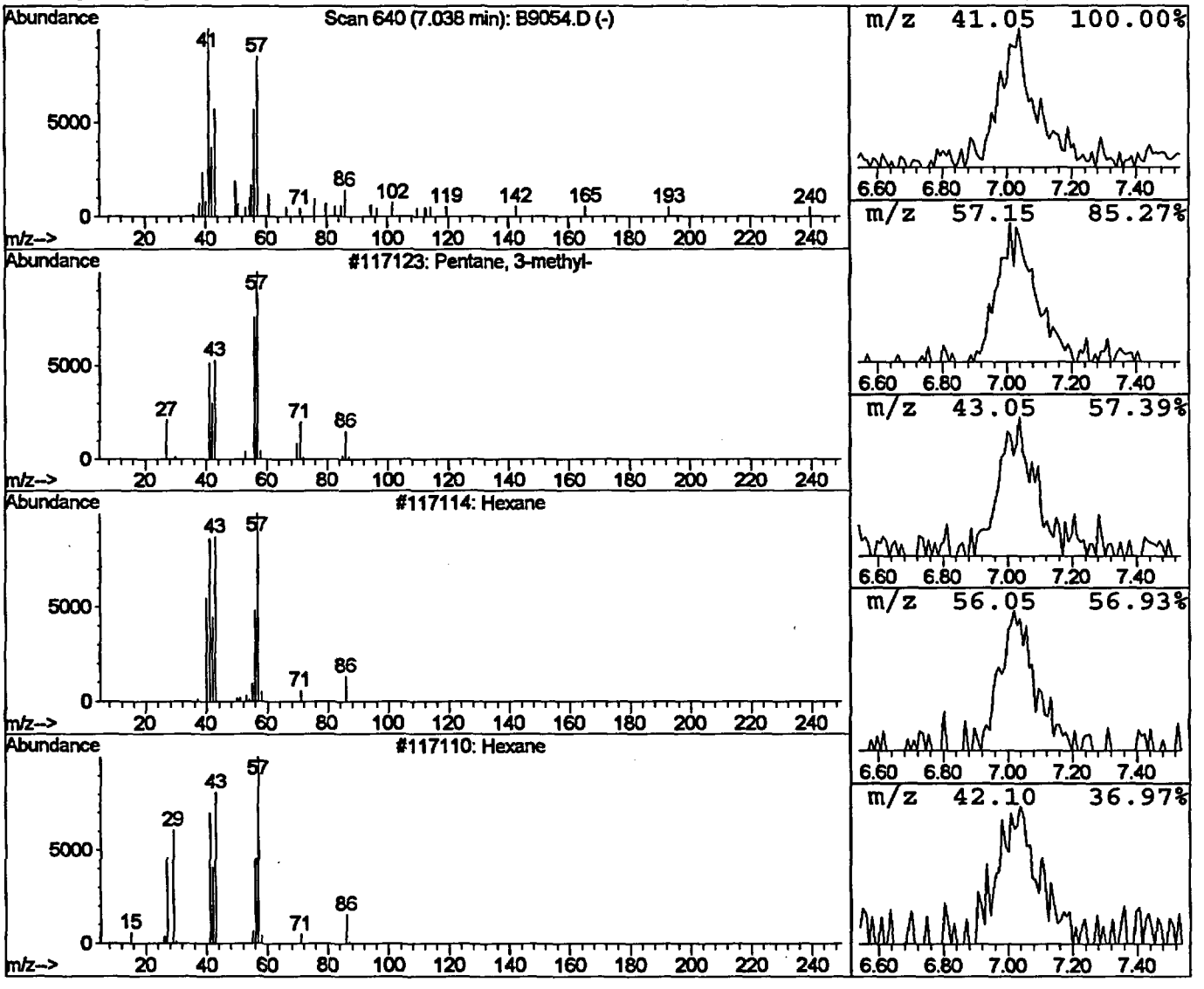
****

Peak Number 2 ~~Pentane, 3-methyl~~ Concentration Rank 5

Unknown hydrocarbon isomer

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.04	5.14 ng	420813	Bromochloromethane	9.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	53
2	Hexane	86	C6H14	000110-54-3	53
3	Hexane	86	C6H14	000110-54-3	38
4	Hexane	86	C6H14	000110-54-3	32



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial: 2
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

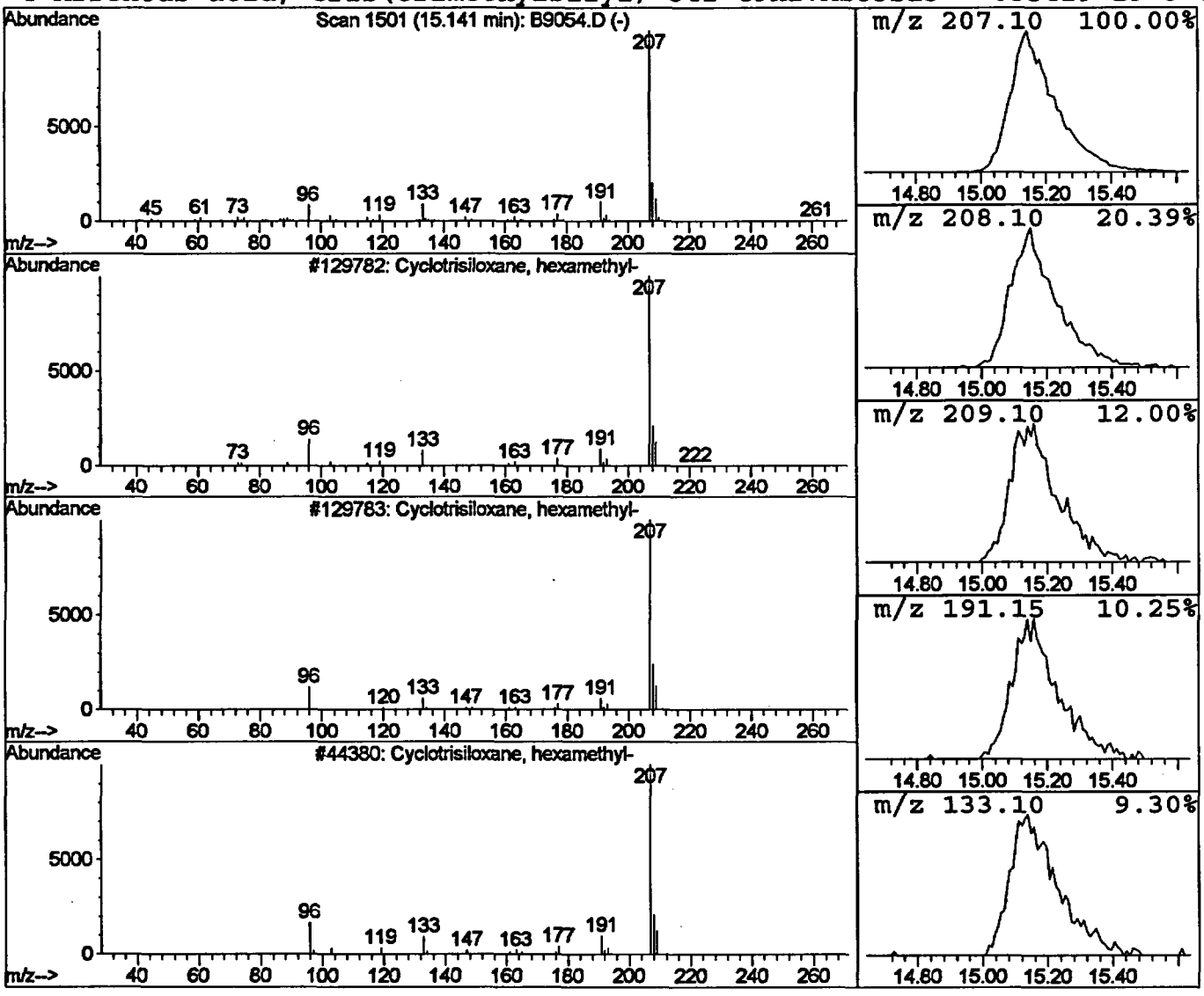
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 Cyclotrisiloxane, hexamethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.14	32.91 ng	3597560	Chlorobenzene-d5	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	87
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	72
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	87
4	Arsenous acid, tris(trimethylsilyl)	342	C9H27AsO3Si3	055429-29-3	40



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial: 2
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

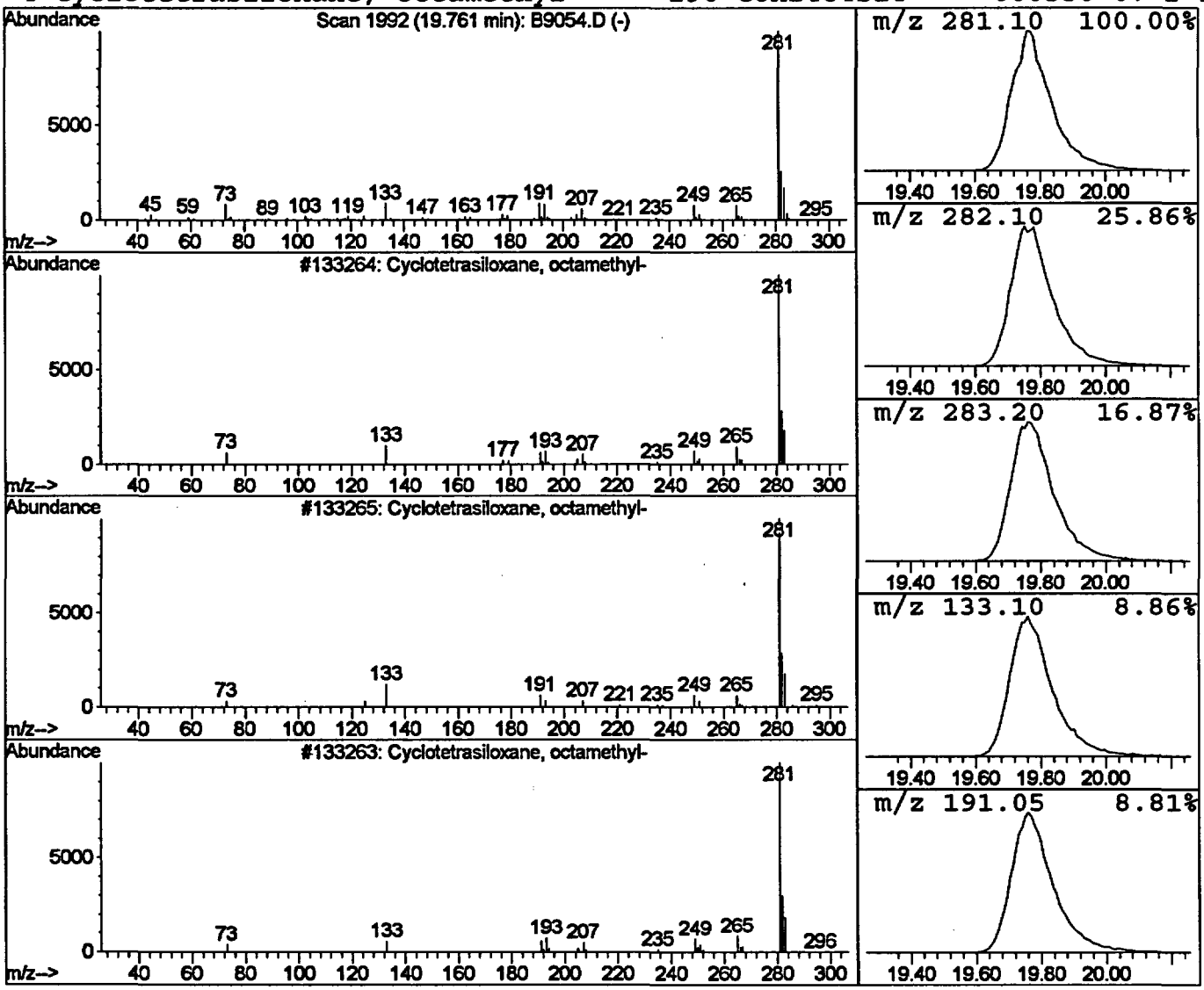
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 4 Cyclotetrasiloxane, octamethyl Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.76	1081.94 ng	118282000	Chlorobenzene-d5	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	93
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90



CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial: 2
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

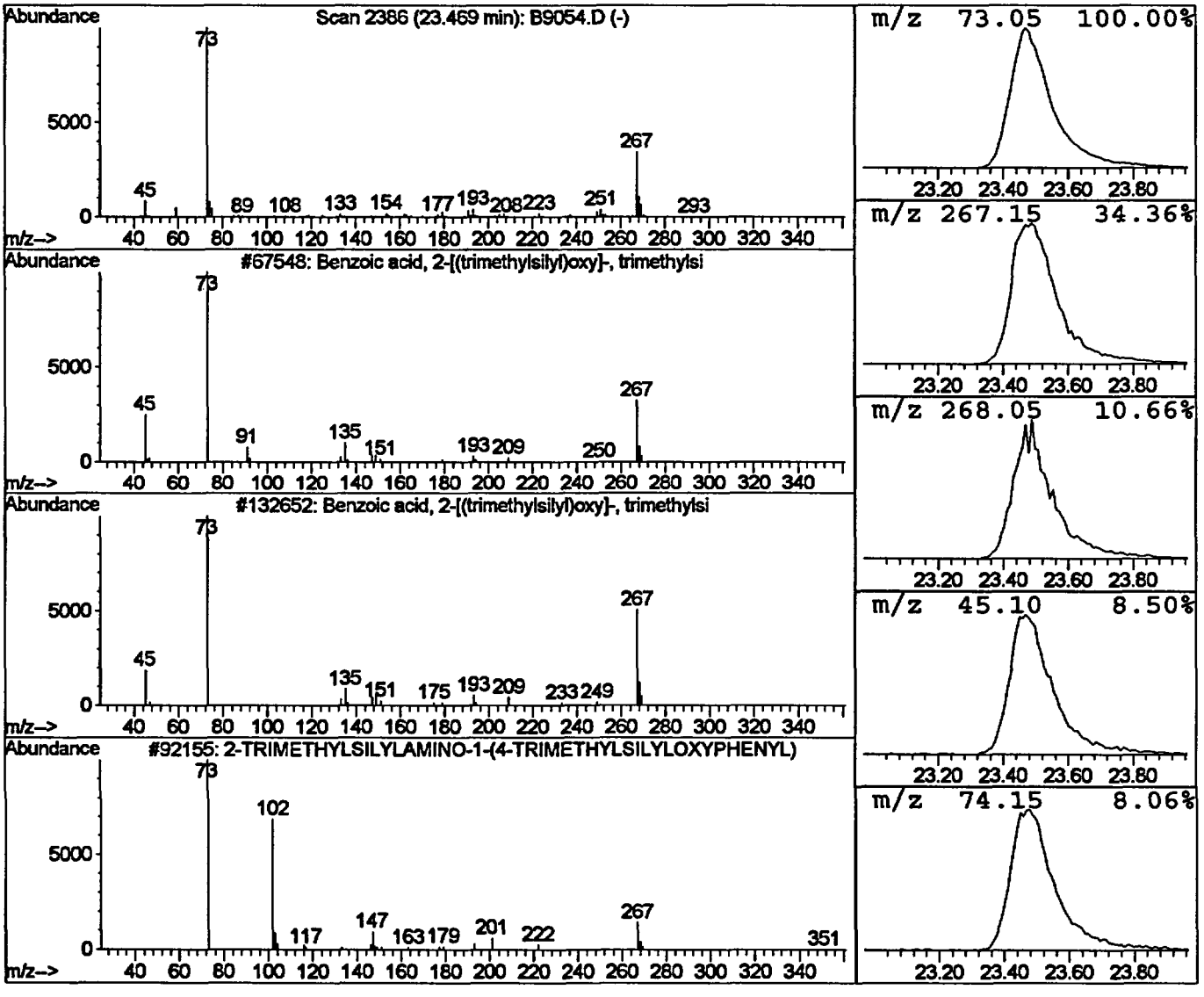
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 Benzoic acid, 2-[(trimethylsil Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	265.45 ng	29019600	Chlorobenzene-d5	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	282	C13H22O3Si2	003789-85-3	9
2	Benzoic acid, 2-[(trimethylsilyl)ox	282	C13H22O3Si2	003789-85-3	39
3	2-TRIMETHYLSILYLAMINO-1-(4-TRIMETHY	369	C17H35NO2Si3	000000-00-0	9
4	O-HYDROXYBENZYL ALCOHOL 2TMS	268	C13H24O2Si2	000000-00-0	9



0043

Library Search Compound Report

Data File : Q:\HPCHEM\B\B90XX\B9054.D Vial: 2
Acq On : 19 Jan 98 10:13 Operator:
Sample : HP-2B FFR81 58073-002 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

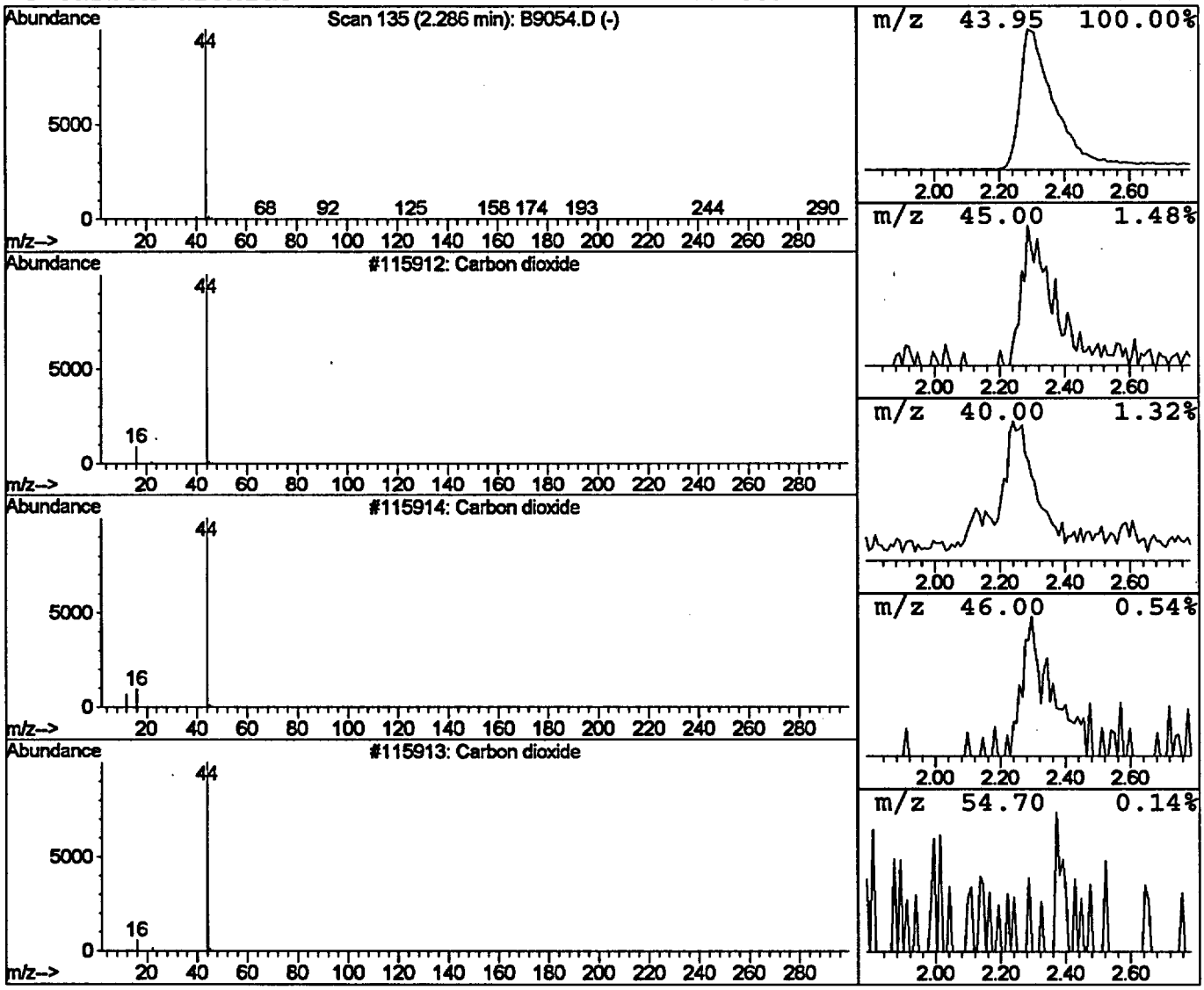
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 Carbon dioxide (Organic Analyst) Concentration Rank 3
(01/22/98)

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.29	46.06 ng	3773230	Bromochloromethane	9.08

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	4
3	Carbon dioxide	44	CO2	000124-38-9	4
4	Carbon dioxide	44	CO2	000124-38-9	4



0044

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 19 Jan 98 10:13
Data File: Q:\HPCHEM\B\B90XX\B9054.D
Name: HP-2B FFR81 58073-002
Misc: CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Method: CLPVS2
Title: VOA BY GCMS 8260
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.29	46.1	ng	3773230	ISTD01	9.08	4095880	50.0
Pentane, 3-methyl-	7.04	5.1	ng	420813	ISTD01	9.08	4095880	50.0
Cyclotrisiloxane, he	15.14	32.9	ng	3597560	ISTD03	16.96	5466170	50.0
Cyclotetrasiloxane,	19.76	1081.9	ng	118282000	ISTD03	16.96	5466170	50.0
Benzoic acid, 2-[(tr	23.47	265.4	ng	29019600	ISTD03	16.96	5466170	50.0

B9054.D DON.M Thu Jan 22 14:53:15 1998

TIC: B9054.D

HP-2B FFR81 58073-002 01/19/98 10:13

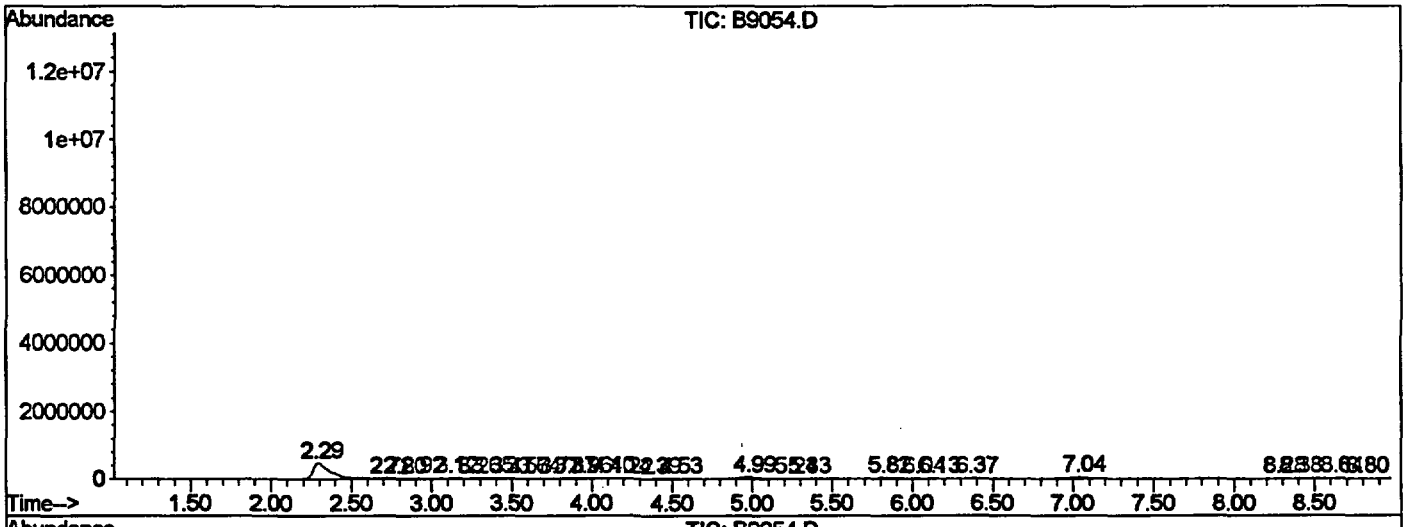
CASE 25969
SDG# FFR76

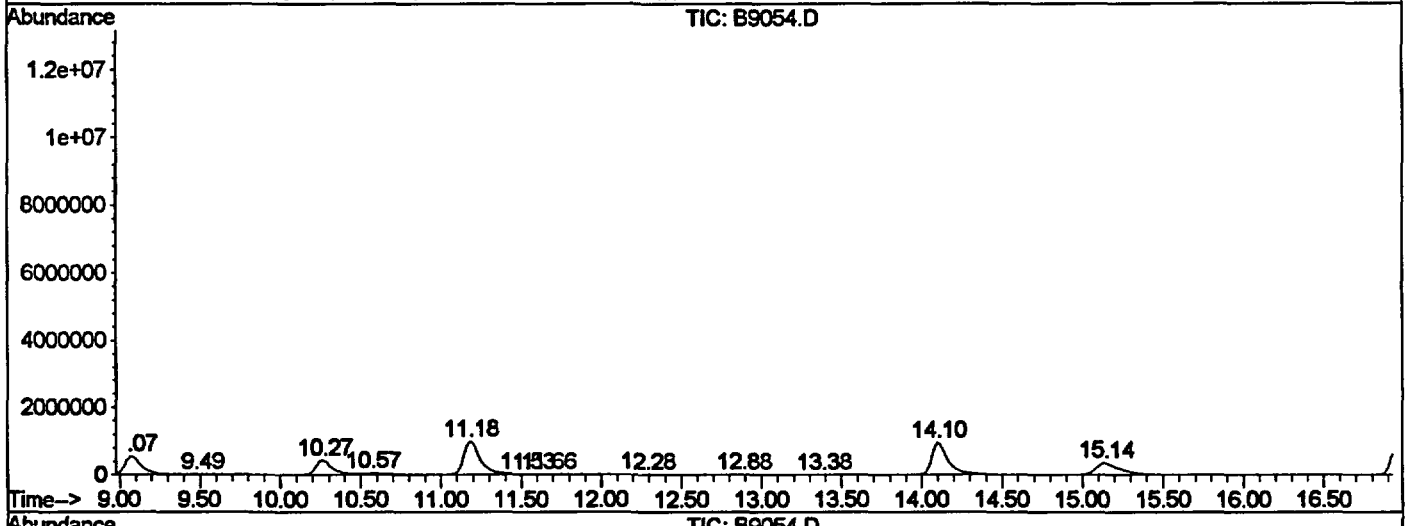
Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	2.286	rVV	0.508	3773232	2.192	2.700
2	2.719	rVV	0.056	69001	2.700	2.757
3	2.804	rVV	0.056	71205	2.757	2.813
4	2.917	rVV	0.169	209023	2.851	3.020
5	3.124	rVV	0.226	350961	3.020	3.246
6	3.265	rVV	0.075	87247	3.246	3.321
7	3.350	rVV	0.094	101907	3.321	3.415
8	3.472	rVV	0.094	101762	3.415	3.510
9	3.566	rVV	0.075	79985	3.510	3.585
10	3.641	rVV	0.132	152038	3.585	3.717
11	3.773	rVV	0.132	143569	3.717	3.848
12	3.867	rVV	0.075	76460	3.848	3.924
13	3.961	rVV	0.151	135704	3.924	4.074
14	4.102	rVV	0.094	72768	4.093	4.187
15	4.215	rVV	0.094	58506	4.187	4.281
16	4.394	rVV	0.151	99815	4.319	4.469
17	4.526	rVV	0.169	99754	4.469	4.639
18	4.987	rBV	0.414	543181	4.789	5.203
19	5.241	rVV	0.075	46174	5.203	5.279
20	5.326	rVB	0.132	70800	5.279	5.410
21	5.824	rVV	0.301	192570	5.655	5.956
22	6.041	rVB	0.113	47837	5.956	6.069
23	6.135	rBV	0.113	50793	6.069	6.182
24	6.370	rVB	0.151	38784	6.276	6.427
25	7.038	rBV	0.414	420813	6.860	7.274
26	8.281	rVV	0.113	55696	8.233	8.346
27	8.384	rVB	0.151	48818	8.346	8.497
28	8.638	rVV	0.113	40119	8.553	8.666
29	8.798	rVB	0.132	47882	8.704	8.836
30	9.071	rBV	0.452	4095875	8.949	9.400
31	9.485	rVV	0.094	50325	9.400	9.494
32	10.266	rBV	0.376	3095821	10.097	10.473
33	10.567	rVB	0.320	400488	10.473	10.793
34	11.179	rVV	0.452	7099314	11.057	11.508
35	11.527	rVV	0.113	64352	11.508	11.621
36	11.659	rVV	0.151	58613	11.621	11.772
37	12.280	rVB	0.169	62973	12.186	12.355
38	12.882	rBV	0.132	41507	12.826	12.957
39	13.381	rVB	0.169	54827	13.315	13.484
40	14.096	rBV	0.715	6850736	13.898	14.614
41	15.141	rBV	0.527	3597558	14.971	15.498
42	16.957	rVB	0.583	5466174	16.816	17.399
43	19.319	rBV	0.395	5177106	19.187	19.582
44	19.761	rVV	0.941	118281584	19.582	20.523
45	20.777	rVV	0.169	63939	20.655	20.824
46	20.900	rVB	0.245	143352	20.824	21.069
47	21.370	rBV	0.320	422648	21.276	21.596
48	21.888	rVB	0.263	150001	21.784	22.048
49	23.149	rBV	0.188	81363	23.064	23.252
50	23.469	rBV	0.828	29019566	23.252	24.080

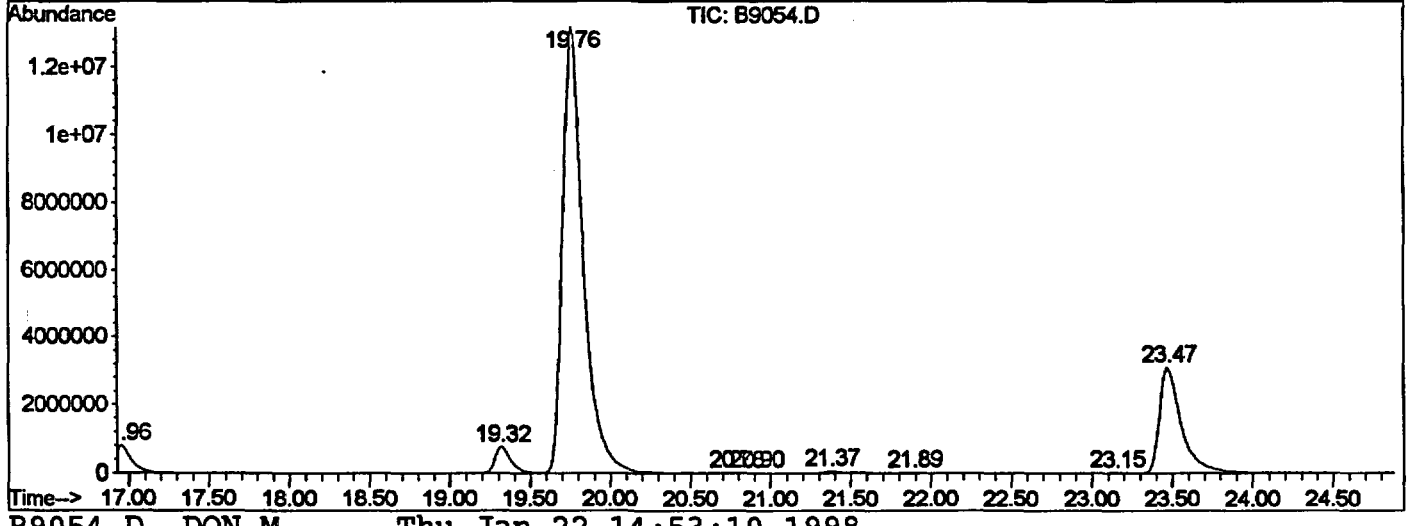
LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\B\B90XX\B9054.D
Operator :
Acquired : 19 Jan 98 10:13 using AcqMethod CLPVS2
Instrument : GC/MS Ins
Sample Name: HP-2B FFR81 58073-002
Misc Info : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Vial Number: 2
Quant File :CLPVS2.RES







B9054.D DON.M Thu Jan 22 14:53:10 1998

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR82

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-003

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9055

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 38 Date Analyzed: 1/19/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

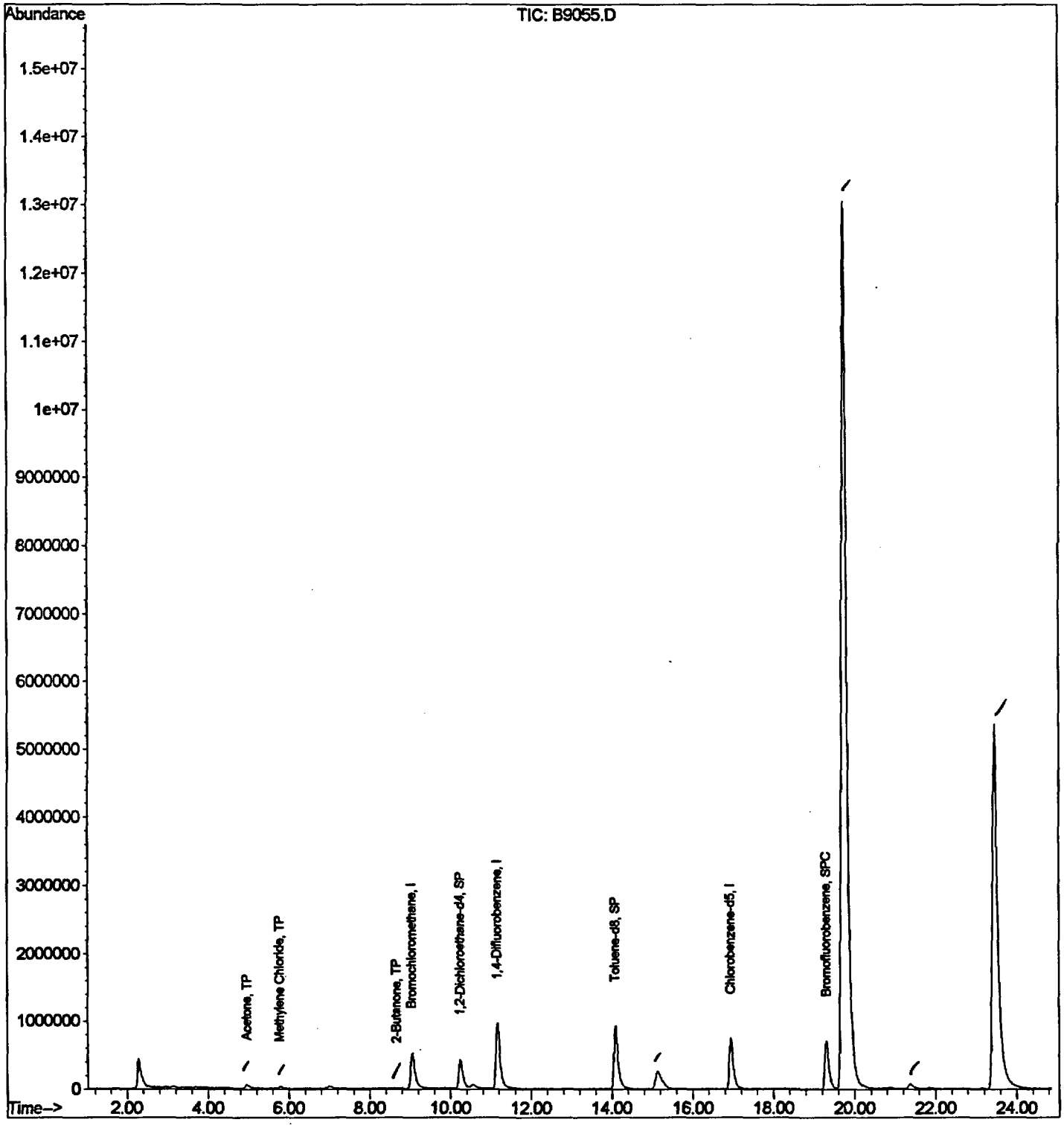
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	541-05-9 ✓	Cyclotrisiloxane, hexamethyl	15.15	45.	JNB ✓
2.	556-67-2 ✓	Cyclotetrasiloxane, octameth	19.75	1800.	JNB ✓
3.		Unknown hydrocarbon	21.38	11.	J
4.	3789-85-3 ✓	Benzoic acid, 2-[(trimethyls	23.47	790.	JNB ✓
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

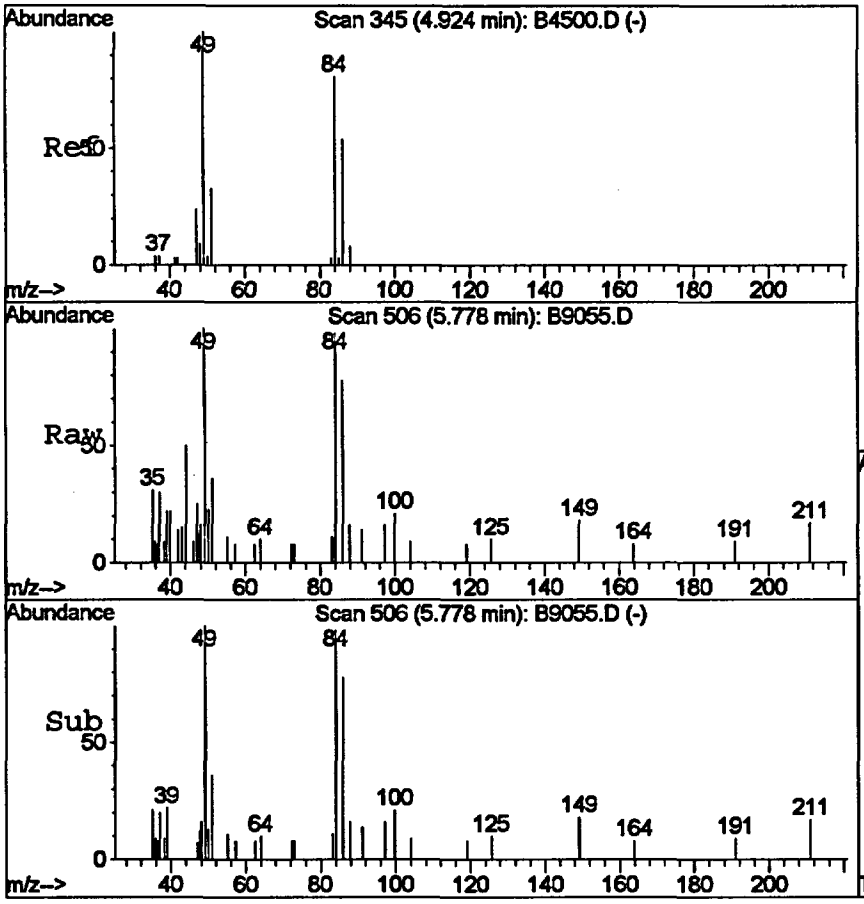
CASE 25969
SDG# FFR76

Quantitation Report

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial: 3
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 15:03 1998 Quant Results File: CLPVS2.RES

Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Single Level Calibration

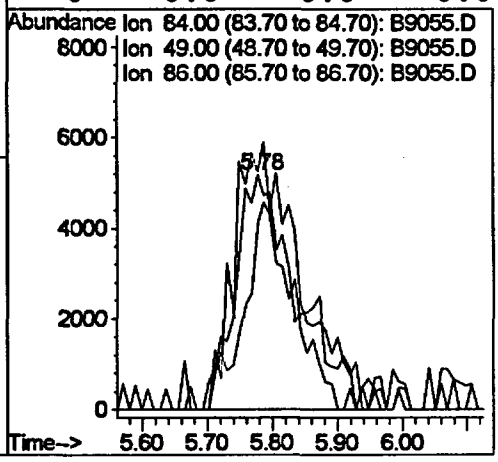


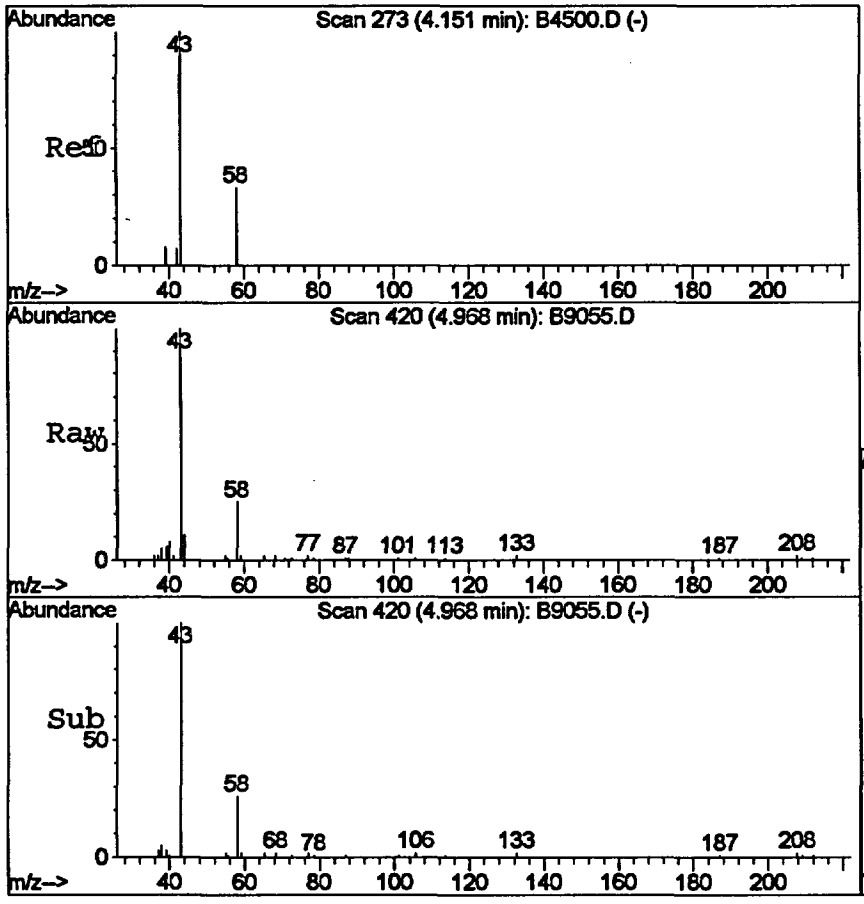


#6
Methylene Chloride
Concen: 2.26 ng
RT: 5.78 min /Scan# 506
Delta R.T. -0.03 min
Lab File: B9055.D
Acq: 19 Jan 98 10:45

Tgt Ion:84 Resp: 35531

Ion	Ratio	Lower	Upper
84	100		
49	89.6	97.7	137.7#
86	79.6	46.9	86.9
0	0.0	0.0	0.0

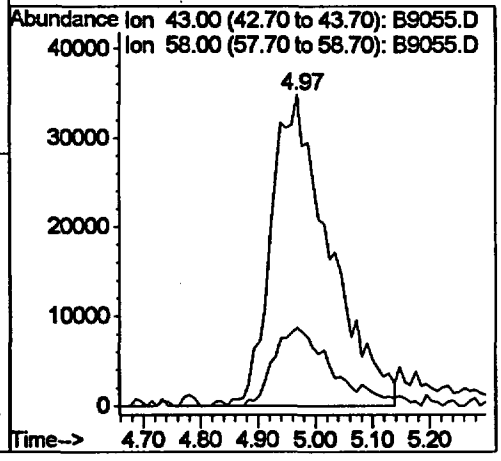


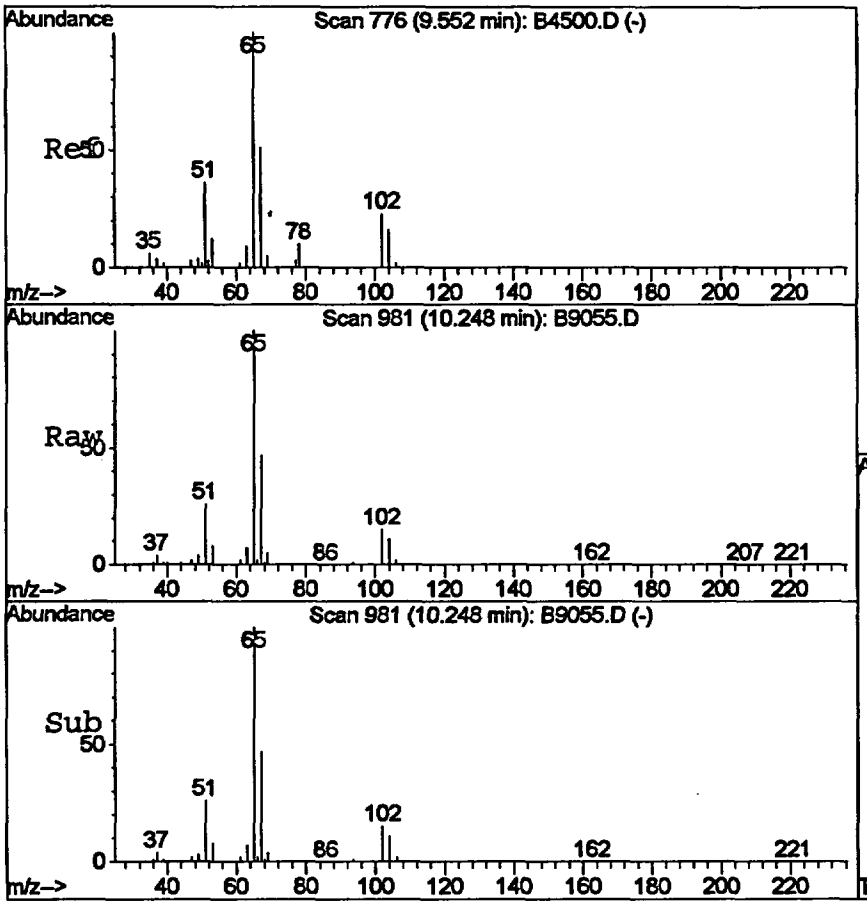


#7
Acetone
Concen: 50.58 ng
RT: 4.97 min /Scan# 420
Delta R.T. 0.01 min
Lab File: B9055.D
Acq: 19 Jan 98 10:45

Tgt Ion:43 Resp: 246482

Ion	Ratio	Lower	Upper
43	100		
58	24.9	1.3	41.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

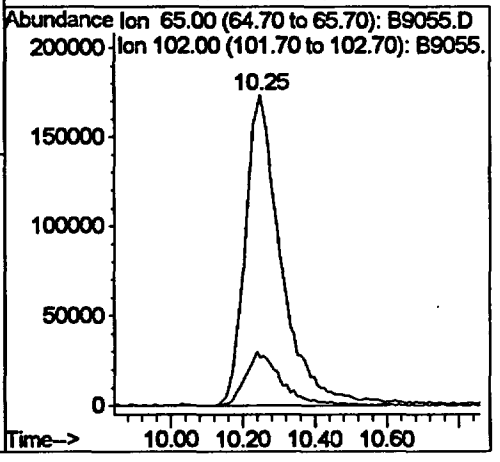


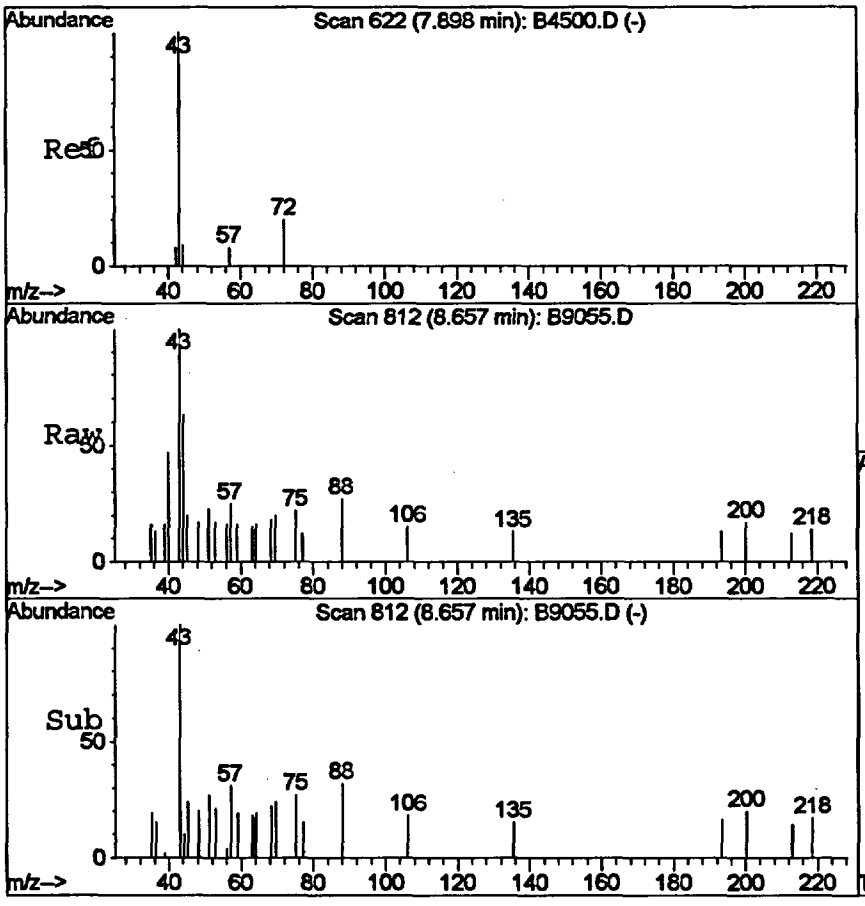


#13
1,2-Dichloroethane-d4
Concen: 49.60 ng
RT: 10.25 min Scan# 981
Delta R.T. -0.02 min
Lab File: B9055.D
Acq: 19 Jan 98 10:45

Tgt Ion:65 Resp: 1203077

Ion	Ratio	Lower	Upper
65	100		
102	15.3	0.0	37.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

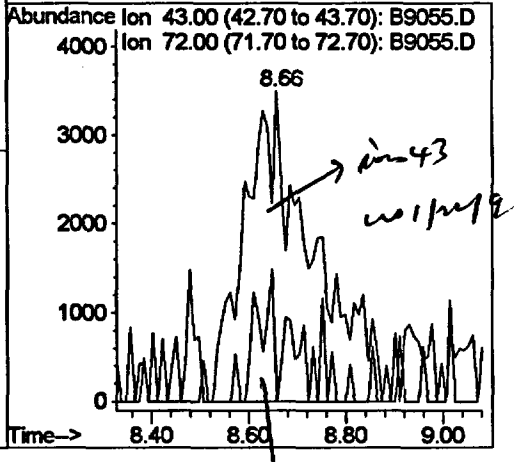


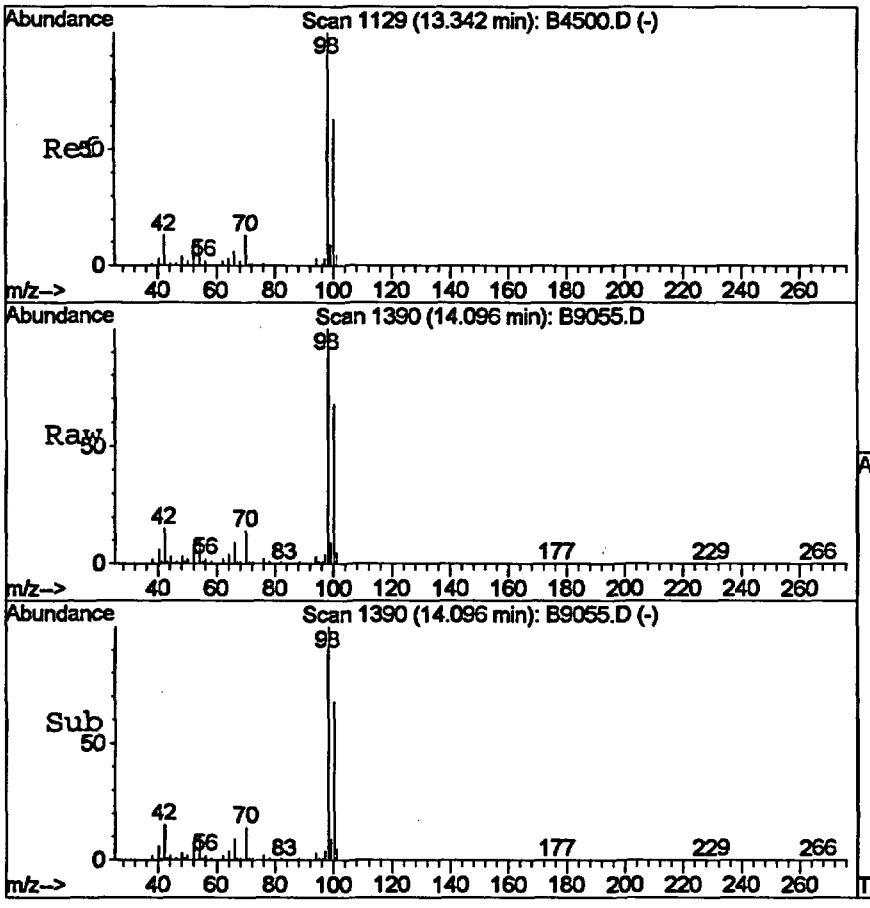


#15
2-Butanone
Concen: 5.59 ng
RT: 8.66 min / Scan# 812
Delta R.T. 0.03 min
Lab File: B9055.D
Acq: 19 Jan 98 10:45

Tgt Ion:43 Resp: 33699

Ion	Ratio	Lower	Upper
43	100		
72	0.0	9.2	49.2#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

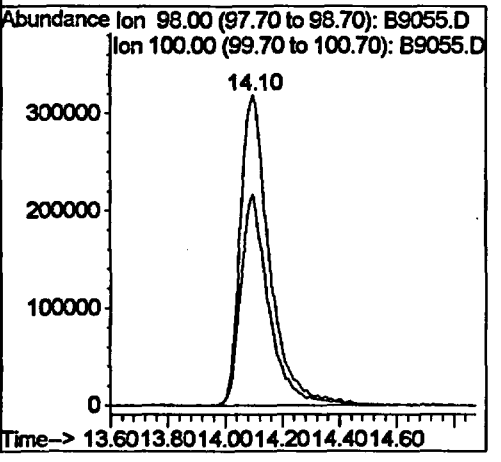


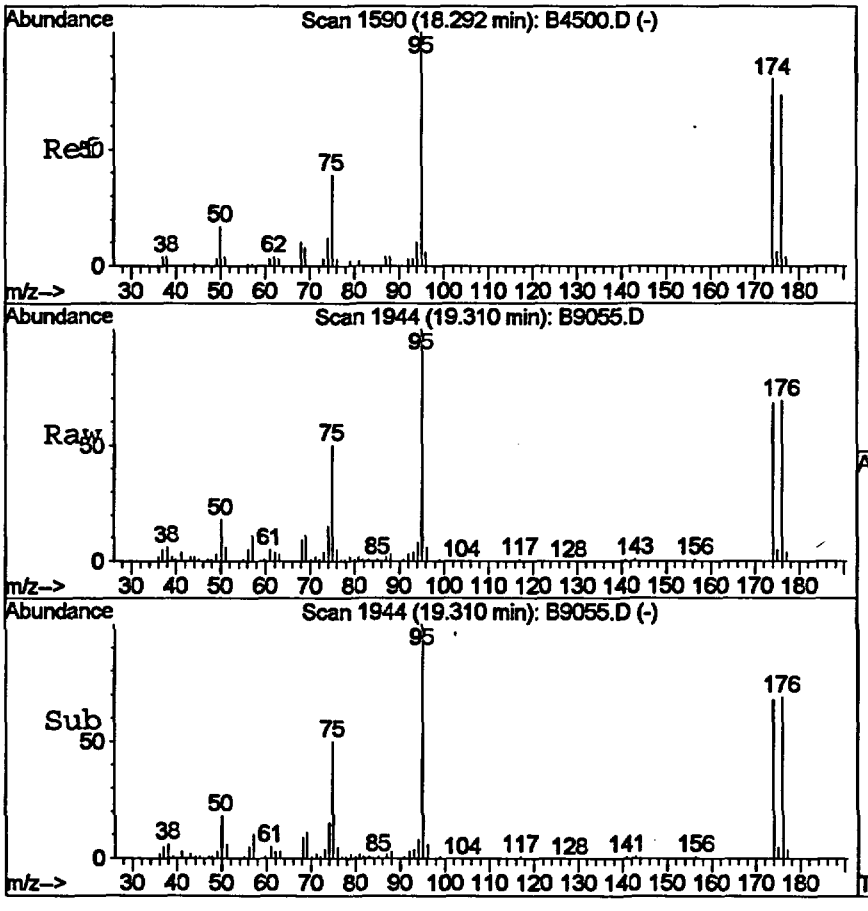


#33
Toluene-d8
Concen: 55.43 ng
RT: 14.10 min Scan# 1390
Delta R.T. -0.03 min
Lab File: B9055.D
Acq: 19 Jan 98 10:45

Tgt Ion:98 Resp: 2253466

Ion	Ratio	Lower	Upper
98	100		
100	68.0	48.7	88.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0

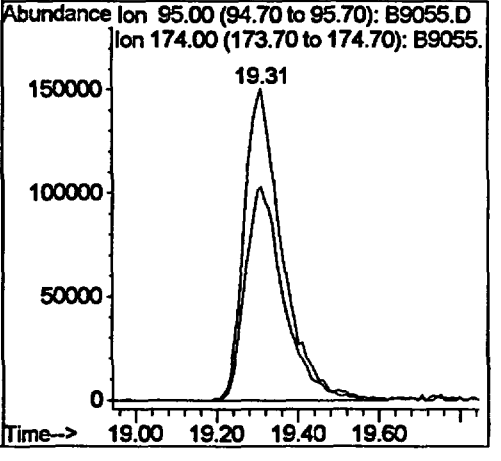




#37
Bromofluorobenzene
Concen: 46.69 ng
RT: 19.31 min Scan# 1944
Delta R.T. -0.02 min
Lab File: B9055.D
Acq: 19 Jan 98 10:45

Tgt Ion:95 Resp: 975688

Ion	Ratio	Lower	Upper
95	100		
174	68.5	48.1	88.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial:
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 15:03 1998 Quant Results File: CLPVS2.RES

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Continuing Cal File: Q:\HPCHEM\B\DATA\B9051.D
DataAcq Meth : CLPVS2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.06	128	537918	50.00	ng	-0.02
16) 1,4-Difluorobenzene	11.18	114	2593960	50.00	ng	-0.02
28) Chlorobenzene-d5	16.95	117	1423590	50.00	ng	-0.03
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	10.25	65	1203077	49.60	ng	-0.02
Surrogate Spike 50.000	Range 70 - 121		Recovery = 99.20%			
33) Toluene-d8	14.10	98	2253466	55.43	ng	-0.03
Surrogate Spike 50.000	Range 84 - 138		Recovery = 110.86%			
37) Bromofluorobenzene	19.31	95	975688	46.69	ng	-0.02
Surrogate Spike 50.000	Range 59 - 113		Recovery = 93.38%			
Target Compounds						Qvalue
6) Methylene Chloride	5.78	84	35531	2.26	ng	# 78
7) Acetone	4.97	43	246482	50.58	ng	92
15) 2-Butanone	8.66	43	33699	5.59	ng	# 45

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial: 3
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

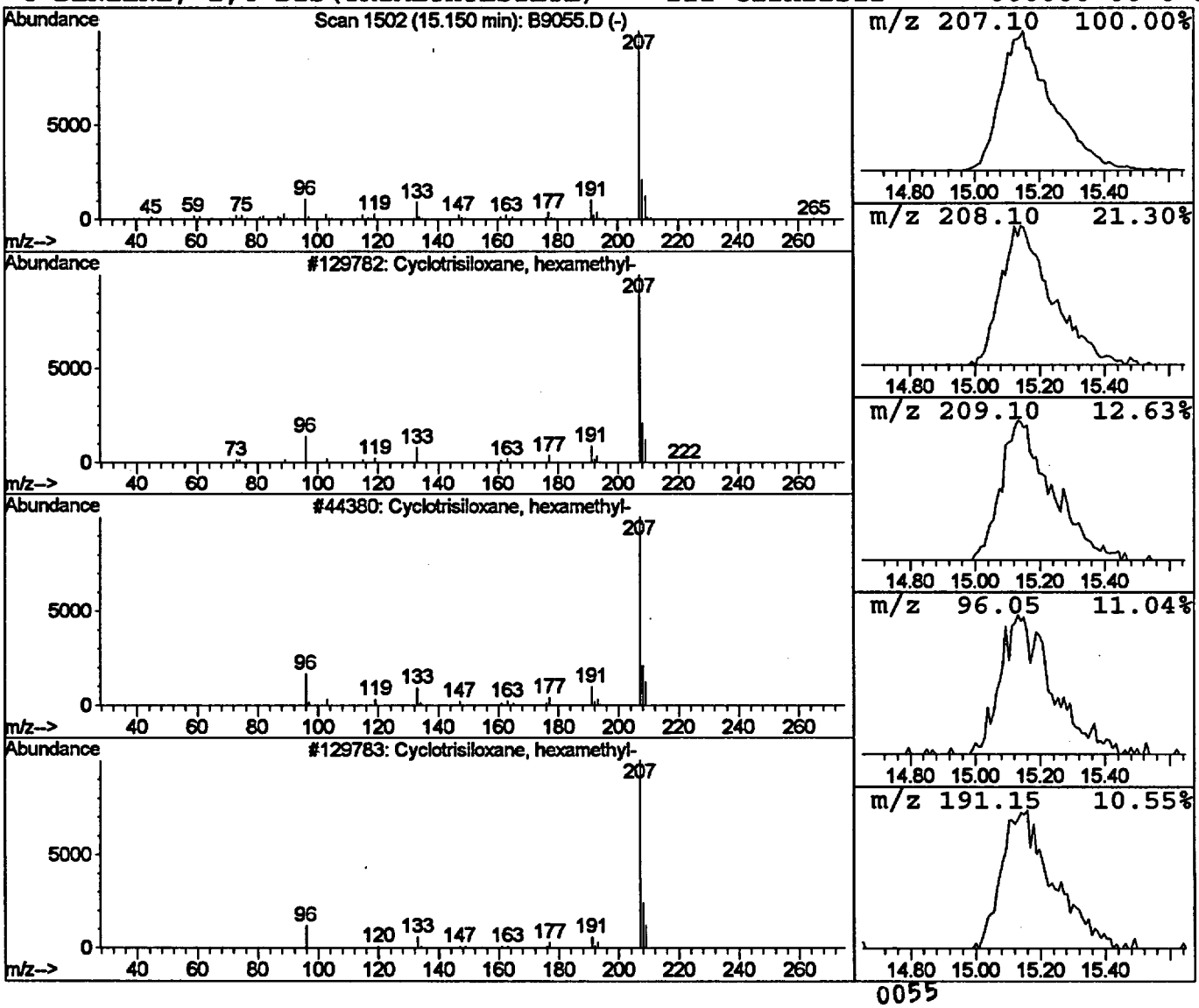
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 Cyclotrisiloxane, hexamethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.15	27.87 ng	2849490	Chlorobenzene-d5	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	87
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	83
4	BENZENE, 1,4-BIS(TRIMETHYLSILYL)-	222	C12H22Si2	000000-00-0	50



0055

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial: 3
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

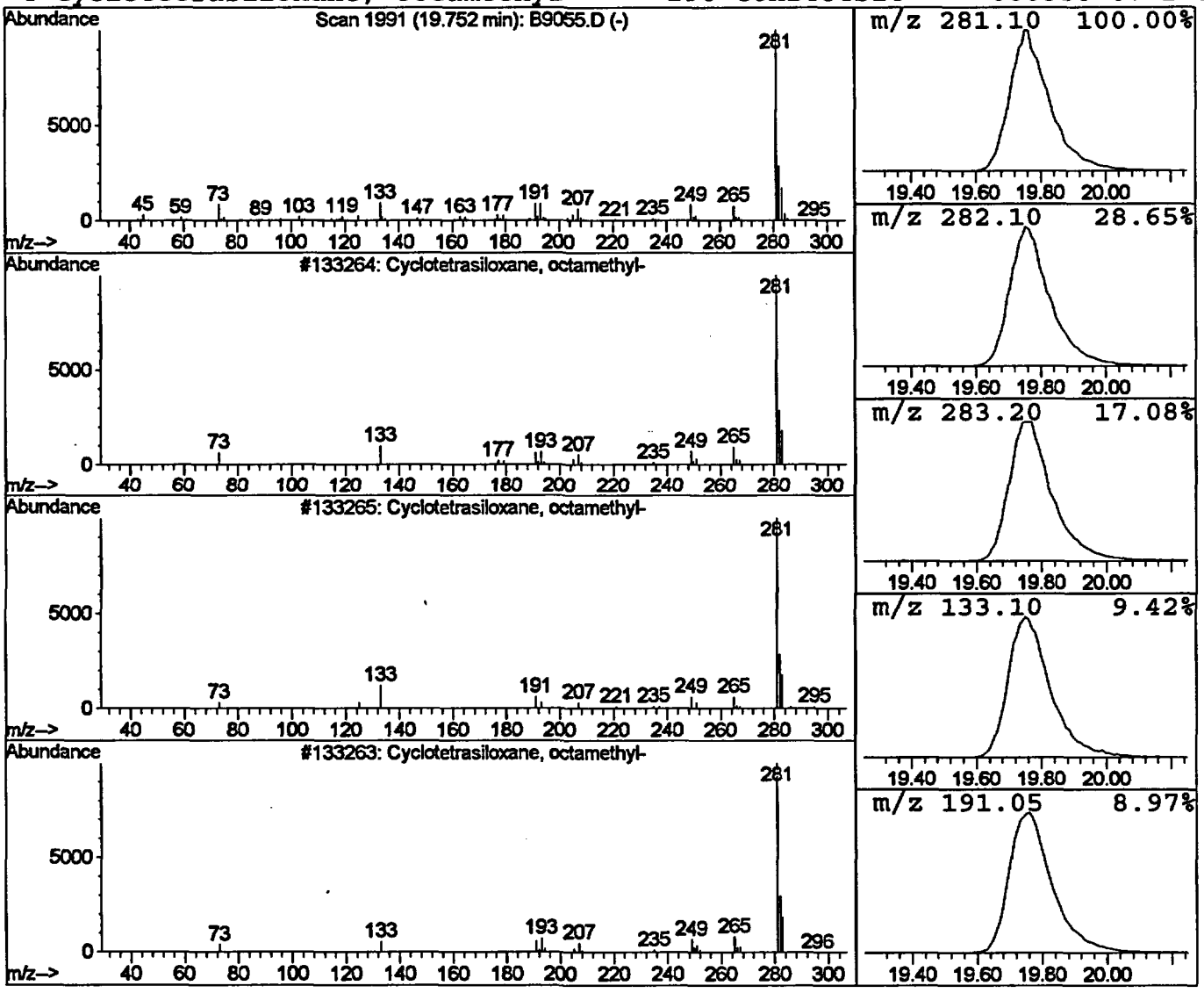
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 Cyclotetrasiloxane, octamethyl Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.75	1138.44 ng	116407000	Chlorobenzene-d5	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	72
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	93
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	43



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

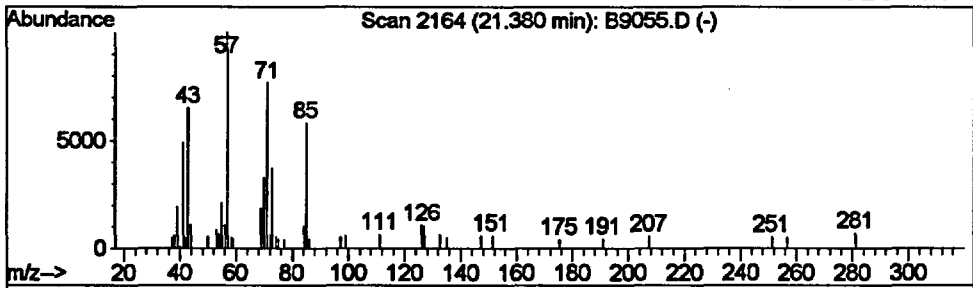
****

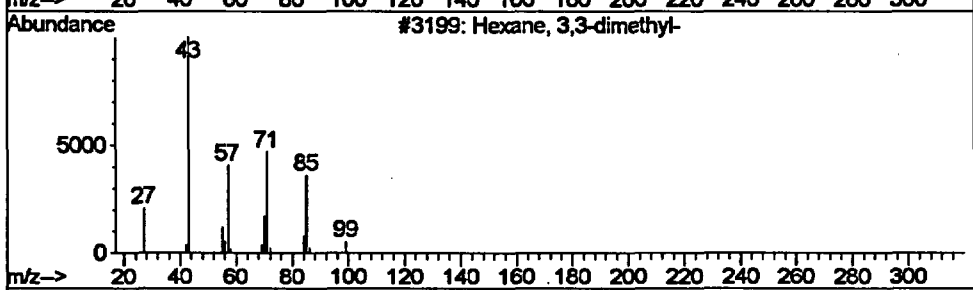
Peak Number 4 ~~Hexane, 3,3-dimethyl-~~ Concentration Rank 5

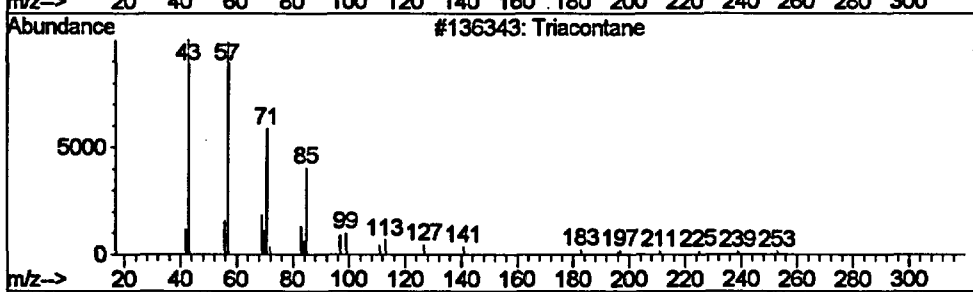
Unknown hydrocarbon mol/pe/98

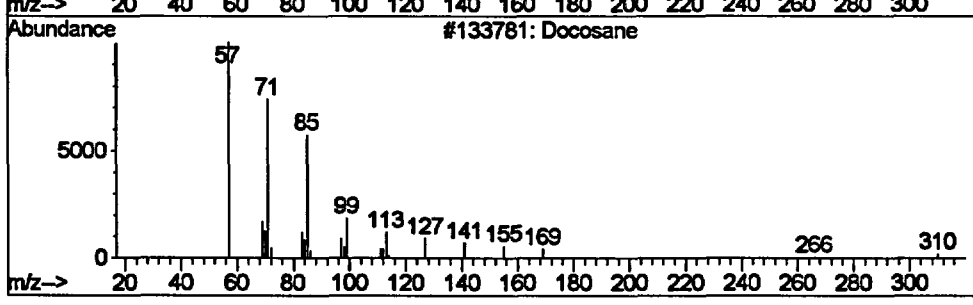
R.T.	EstConc	Area	Relative to ISTD	R.T.
21.38	6.62 ng	676511	Chlorobenzene-d5	16.95

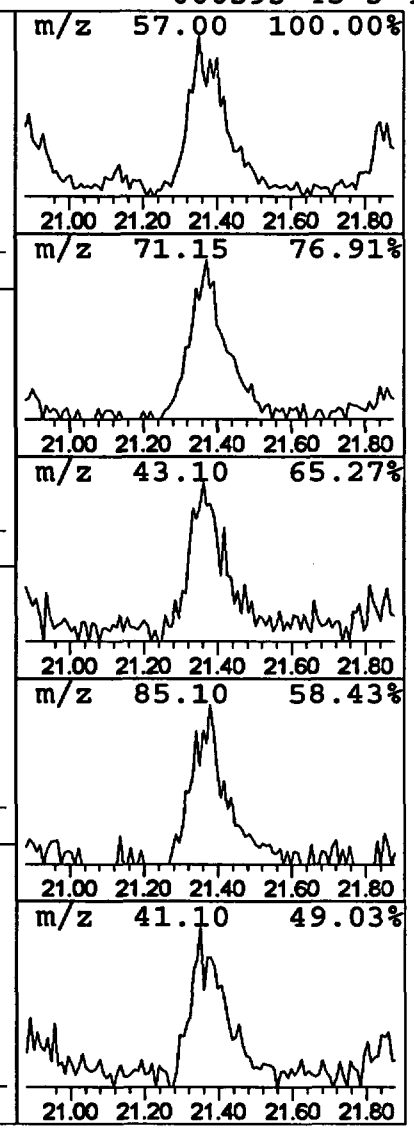
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexane, 3,3-dimethyl-	114	C8H18	000563-16-6	53
2	Triacontane	422	C30H62	000638-68-6	42
3	Docosane	310	C22H46	000629-97-0	53
4	Octadecane	254	C18H38	000593-45-3	42











0057

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial: 3
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

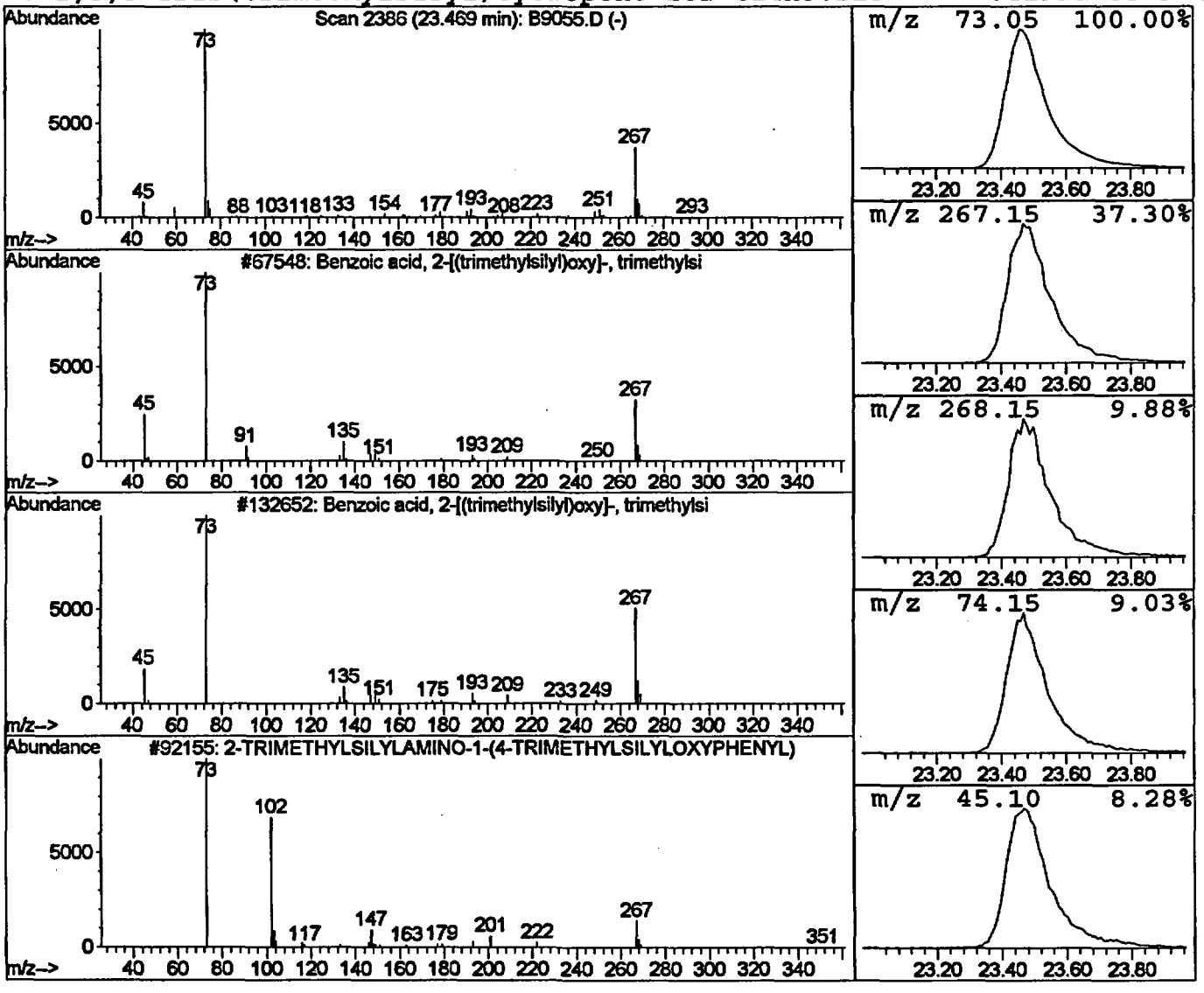
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 5 Benzoic acid, 2-[(trimethylsil Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
23.47	489.03 ng	50003800	Chlorobenzene-d5	16.95

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	282	C13H22O3Si2	003789-85-3	38
2	Benzoic acid, 2-[(trimethylsilyl)ox	282	C13H22O3Si2	003789-85-3	9
3	2-TRIMETHYLSILYLAMINO-1-(4-TRIMETHY	369	C17H35NO2Si3	000000-00-0	9
4	2,5,5-Tris(trimethylsilyl)cyclopent	282	C14H30Si3	041991-85-9	25



0058

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9055.D Vial: 3
Acq On : 19 Jan 98 10:45 Operator:
Sample : HP-2B FFR82 58073-003 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

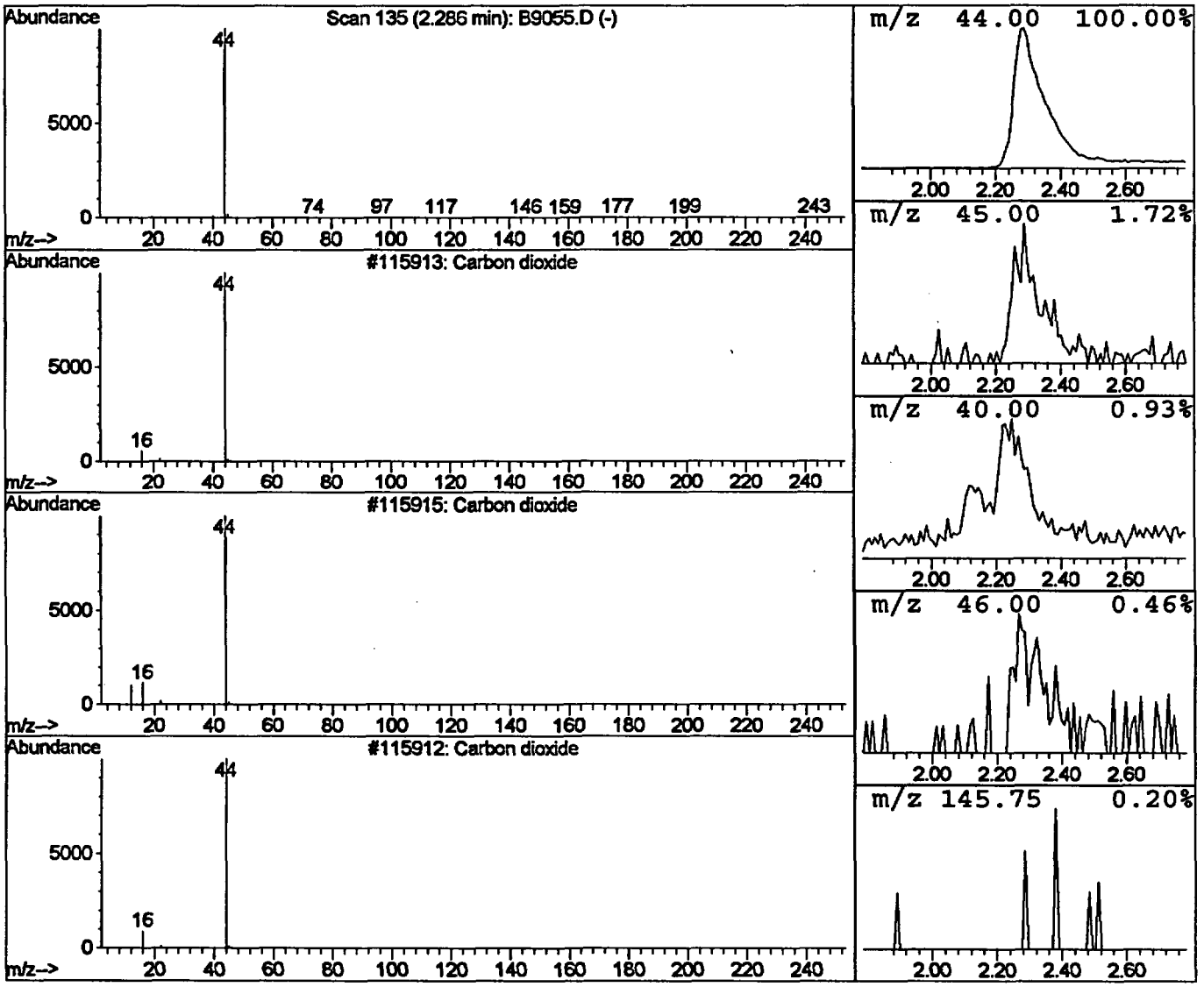
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 1 Carbon dioxide (Organic Artifact) Concentration Rank 3
[illegible] 01/22/98

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.29	39.45 ng	3092220	Bromochloromethane	9.06

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	4
2	Carbon dioxide	44	CO2	000124-38-9	4
3	Carbon dioxide	44	CO2	000124-38-9	4
4	Carbon dioxide	44	CO2	000124-38-9	4



0059

CASE 25969
SDG# FFR76

Tentatively Identified Compound (LSC) summary

Operator ID: Date Acquired: 19 Jan 98 10:45
Data File: Q:\HPCHEM\B\B90XX\B9055.D
Name: HP-2B FFR82 58073-003
Misc: CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Method: CLPVS2
Title: VOA BY GCMS 8260
Library Searched: Q:\DATABASE\WILEY138.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide	2.29	39.4	ng	3092220	ISTD01	9.06	3919600	50.0
Cyclotrisiloxane, he	15.15	27.9	ng	2849490	ISTD03	16.95	5112550	50.0
Cyclotetrasiloxane,	19.75	1138.4	ng	116407000	ISTD03	16.95	5112550	50.0
Hexane, 3,3-dimethyl	21.38	6.6	ng	676511	ISTD03	16.95	5112550	50.0
Benzoic acid, 2-[(tr	23.47	489.0	ng	50003800	ISTD03	16.95	5112550	50.0

B9055.D DON.M Thu Jan 22 15:04:48 1998

TIC: B9055.D

HP-2B FFR82 58073-003 61/19/98 10:45

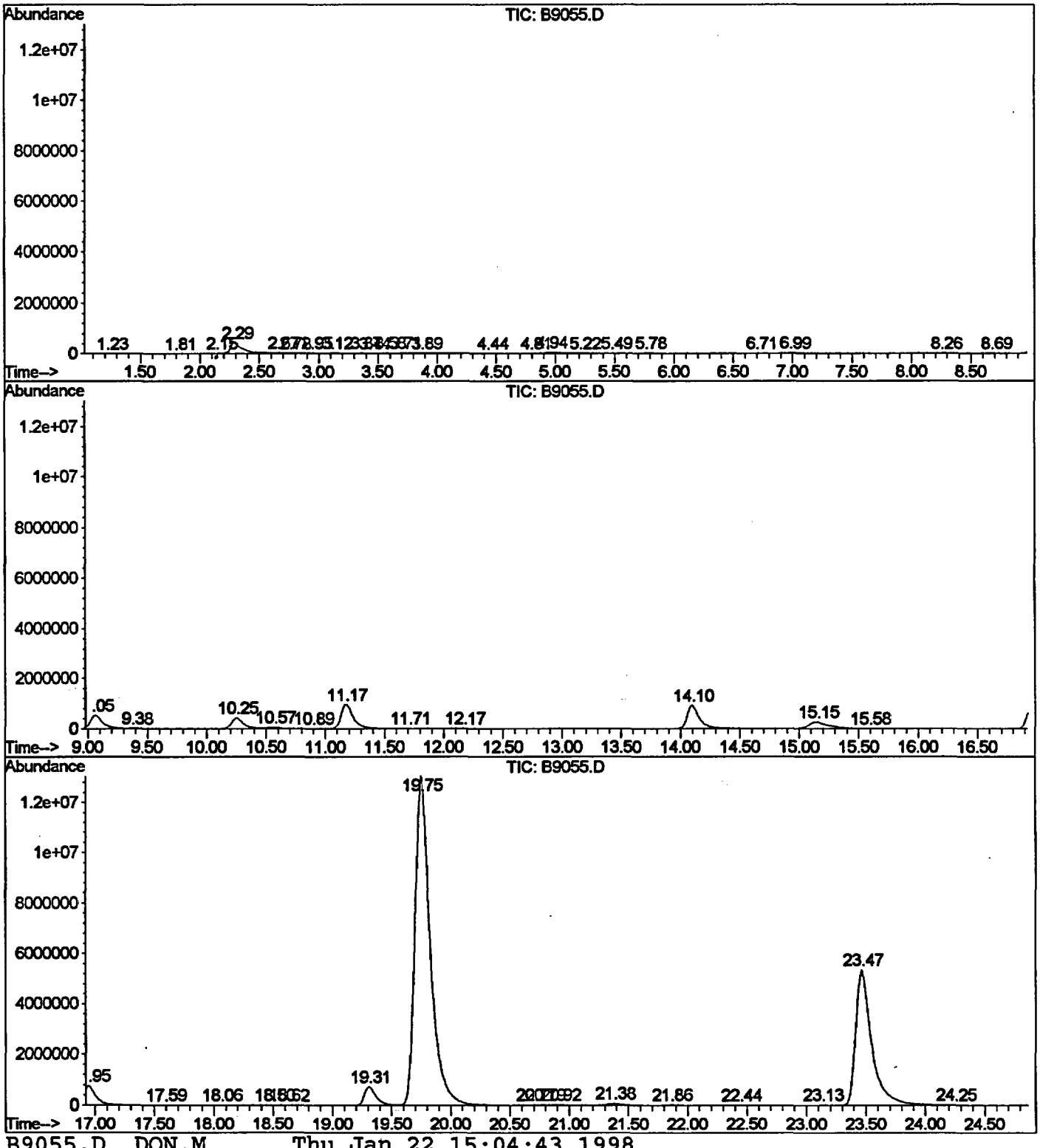
CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	1.233	rVB	0.113	39436	1.176	1.289
2	1.807	rVB	0.169	41660	1.797	1.967
3	2.155	rBV	0.226	78799	1.967	2.192
4	2.286	rBV	0.414	3092220	2.192	2.606
5	2.672	rVV	0.113	115525	2.606	2.719
6	2.776	rVV	0.094	80241	2.719	2.813
7	2.955	rVV	0.169	139787	2.813	2.983
8	3.124	rVV	0.207	179174	3.058	3.265
9	3.369	rVV	0.151	92996	3.265	3.416
10	3.444	rVV	0.075	44878	3.416	3.491
11	3.576	rVV	0.094	49443	3.491	3.585
12	3.707	rVV	0.188	105446	3.585	3.773
13	3.886	rVB	0.132	38142	3.867	3.999
14	4.441	rVB	0.188	80630	4.376	4.564
15	4.808	rBV	0.132	49805	4.733	4.865
16	4.940	rBV	0.264	334437	4.865	5.128
17	5.222	rVB	0.169	88887	5.185	5.354
18	5.486	rVB	0.151	41373	5.448	5.599
19	5.778	rVB	0.282	222059	5.693	5.975
20	6.709	rVB	0.151	51832	6.634	6.785
21	6.992	rBV	0.282	291517	6.860	7.142
22	8.262	rBV	0.113	52746	8.234	8.347
23	8.685	rVB	0.245	84886	8.554	8.798
24	9.052	rBV	0.471	3919601	8.874	9.344
25	9.382	rVV	0.188	83774	9.344	9.532
26	10.248	rBV	0.358	2997499	10.097	10.455
27	10.568	rVV	0.395	608704	10.455	10.850
28	10.887	rVV	0.113	46411	10.850	10.963
29	11.170	rVV	0.696	7200317	10.963	11.659
30	11.706	rVV	0.113	45273	11.659	11.772
31	12.167	rBV	0.188	57448	12.017	12.205
32	14.096	rVB	0.602	6541509	13.955	14.557
33	15.150	rVB	0.583	2849491	14.953	15.536
34	15.583	rVB	0.207	37713	15.536	15.743
35	16.948	rBV	0.508	5112547	16.797	17.305
36	17.588	rVB	0.132	38981	17.569	17.700
37	18.058	rBV	0.132	42712	17.945	18.077
38	18.500	rVB	0.094	44782	18.472	18.566
39	18.623	rBV	0.169	47919	18.566	18.736
40	19.310	rBV	0.358	4916808	19.187	19.545
41	19.752	rVV	0.960	116406616	19.545	20.505
42	20.712	rVV	0.151	95699	20.599	20.749
43	20.787	rVV	0.056	39809	20.749	20.806
44	20.919	rVV	0.245	169601	20.806	21.051
45	21.380	rBV	0.452	676511	21.239	21.690
46	21.860	rVB	0.245	144367	21.766	22.010
47	22.443	rVB	0.188	43109	22.330	22.519
48	23.130	rBV	0.263	104035	23.008	23.271
49	23.469	rBV	0.941	50003792	23.271	24.212
50	24.250	rVV	0.169	60270	24.212	24.382

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\B\B90XX\B9055.D
Operator :
Acquired : 19 Jan 98 10:45 using AcqMethod CLPVS2
Instrument : GC/MS Ins
Sample Name: HP-2B FFR82 58073-003
Misc Info : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Vial Number: 3
Quant File :CLPVS2.RES



B9055.D DON.M Thu Jan 22 15:04:43 1998

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR83

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-004

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9144

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 25 Date Analyzed: 1/22/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

Number TICs Found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

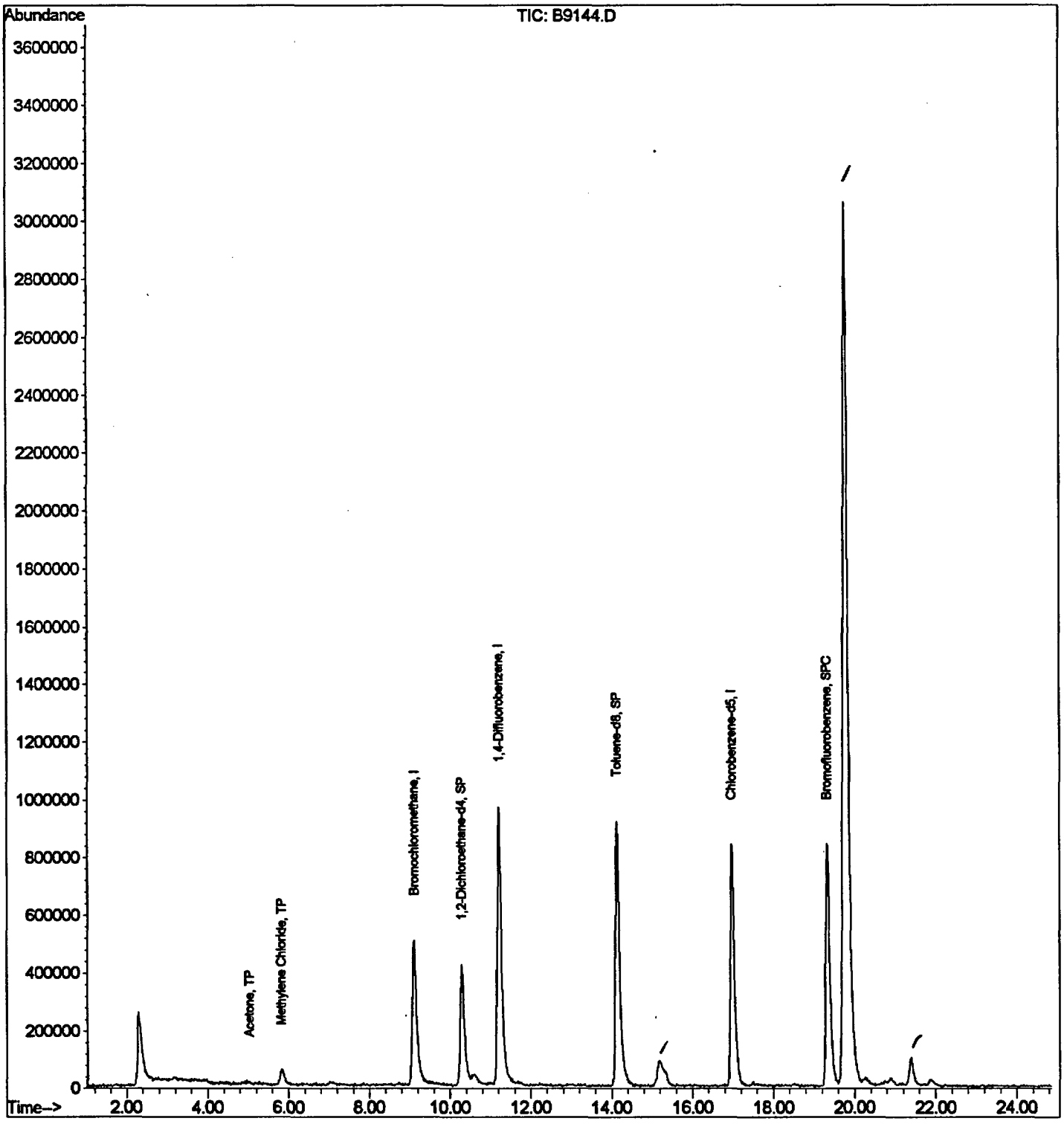
	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	541-05-9	Cyclotrisiloxane, hexamethyl	15.17	13.	JNB
2.	556-67-2	Cyclotetrasiloxane, octameth	19.77	300.	JNB
3.		Unknown hydrocarbon	21.39	8.	J
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

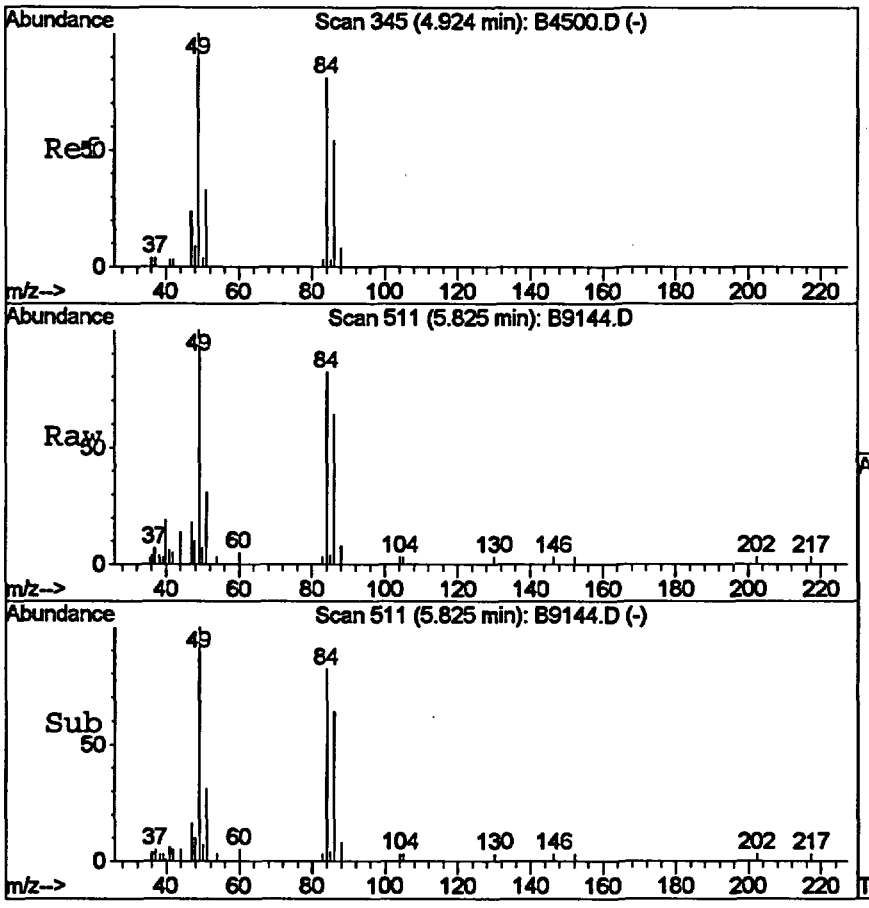
Quantitation Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\DATA\B9144.D Vial: 10
Acq On : 22 Jan 98 21:03 Operator:
Sample : HP-2B FFR83 58073-004 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 23:26 1998 Quant Results File: CLPVS2.RES

Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Single Level Calibration

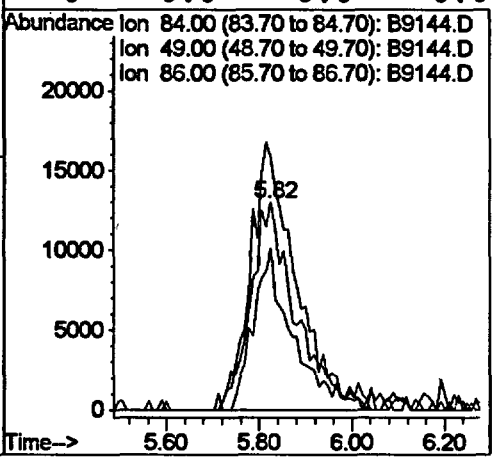


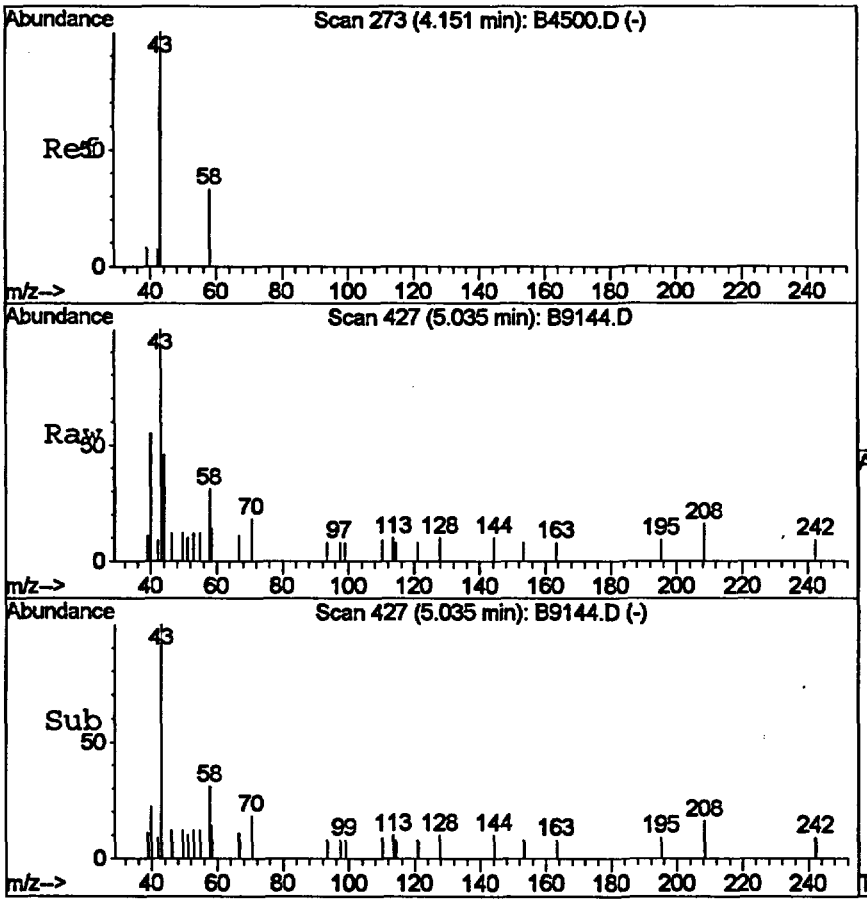


#6
Methylene Chloride
Concen: 5.56 ng
RT: 5.82 min / Scan# 511
Delta R.T. 0.06 min
Lab File: B9144.D
Acq: 22 Jan 98 21:03

Tgt Ion:84 Resp: 89926

Ion	Ratio	Lower	Upper
84	100		
49	117.1	97.7	137.7
86	77.9	46.9	86.9
0	0.0	0.0	0.0

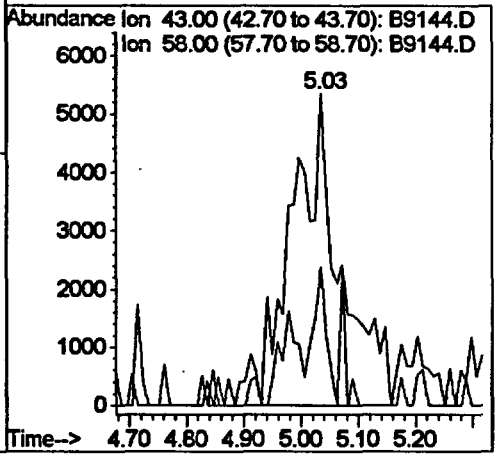


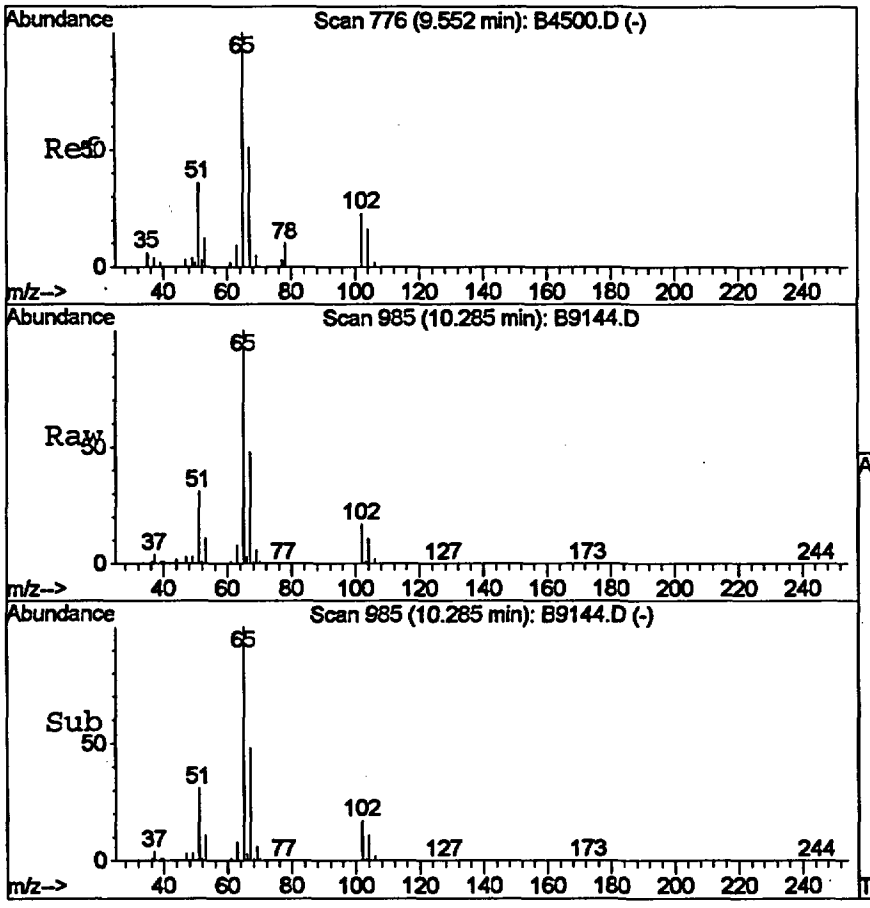


#7
Acetone
Concen: 5.20 ng
RT: 5.03 min / Scan# 427
Delta R.T. 0.11 min
Lab File: B9144.D
Acq: 22 Jan 98 21:03

Tgt Ion:43 Resp: 32558

Ion	Ratio	Lower	Upper
43	100		
58	44.5	1.3	41.3#
0	0.0	0.0	0.0
0	0.0	0.0	0.0

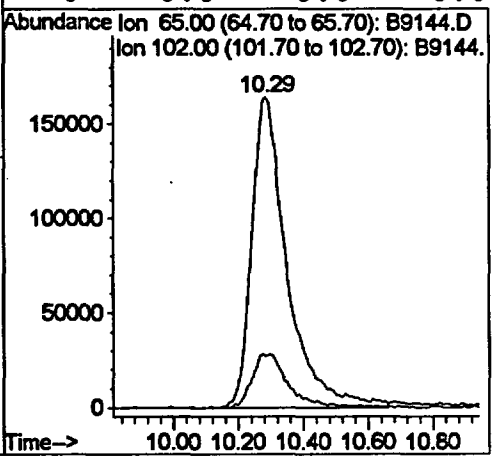


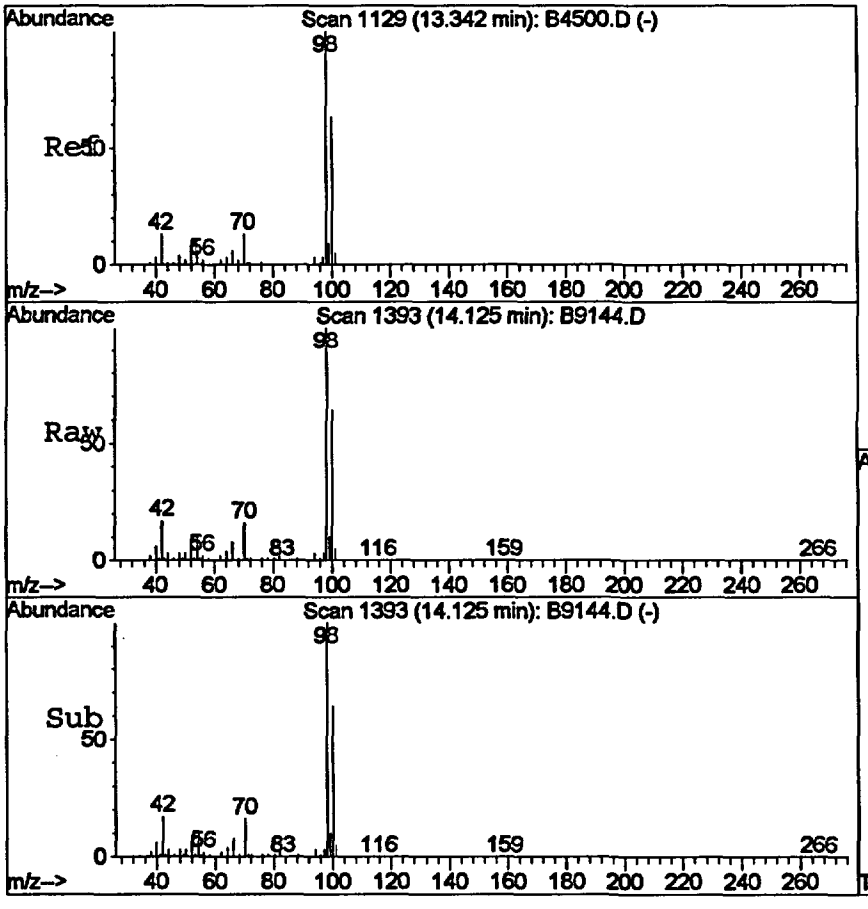


#13
1,2-Dichloroethane-d4
Concen: 49.36 ng
RT: 10.29 min Scan# 985
Delta R.T. 0.04 min
Lab File: B9144.D
Acq: 22 Jan 98 21:03

Tgt Ion:65 Resp: 1237250

Ion	Ratio	Lower	Upper
65	100		
102	16.6	0.0	37.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

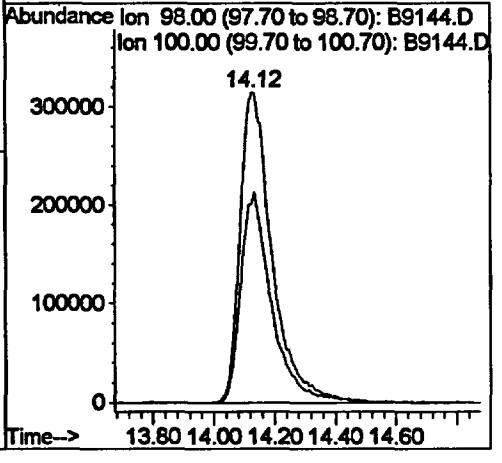


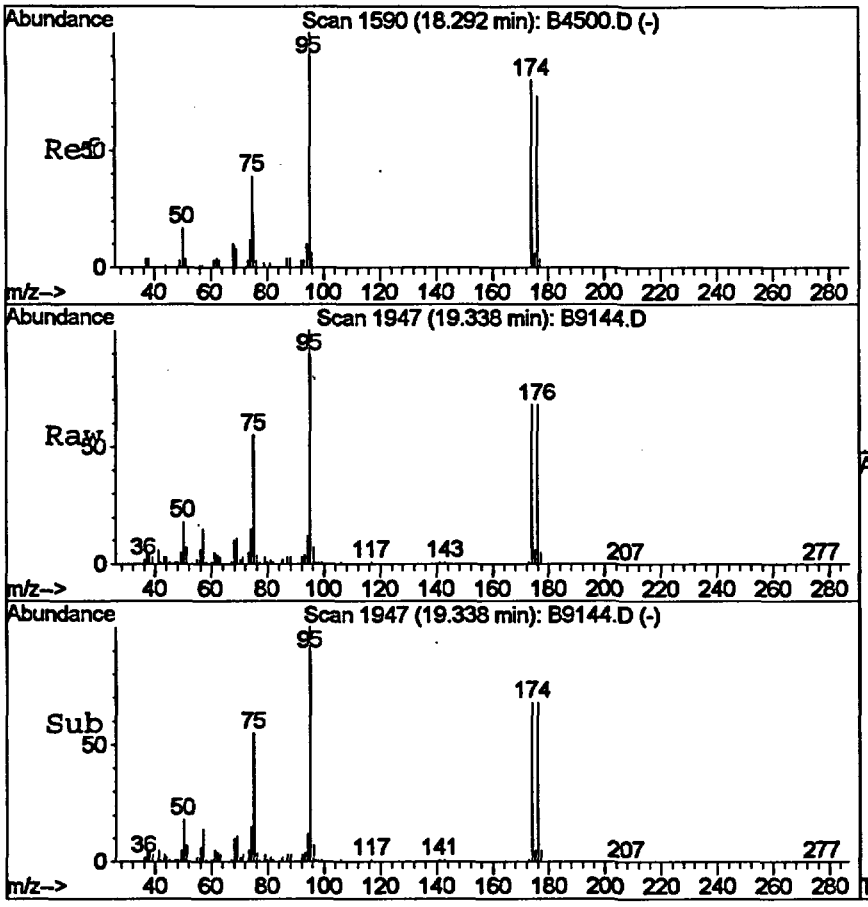


#33
Toluene-d8
Concen: 50.52 ng
RT: 14.12 min Scan# 1393
Delta R.T. 0.02 min
Lab File: B9144.D
Acq: 22 Jan 98 21:03

Tgt Ion:98 Resp: 2297401

Ion	Ratio	Lower	Upper
98	100		
100	63.9	48.7	88.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0

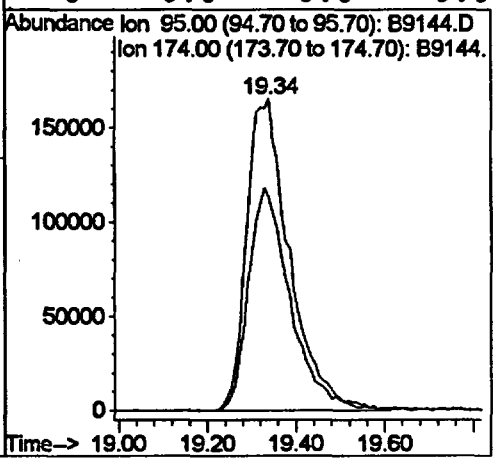




#37
Bromofluorobenzene
Concen: 49.57 ng
RT: 19.34 min Scan# 1947
Delta R.T. 0.03 min
Lab File: B9144.D
Acq: 22 Jan 98 21:03

Tgt Ion:95 Resp: 1108607

Ion	Ratio	Lower	Upper
95	100		
174	68.3	48.1	88.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

Data File : Q:\HPCHEM\B\DATA\B9144.D Vial: 10
Acq On : 22 Jan 98 21:03 Operator:
Sample : HP-2B FFR83 58073-004 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00
Quant Time: Jan 22 23:26 1998 Quant Results File: CLPVS2.RES

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Continuing Cal File: Q:\HPCHEM\B\DATA\B9132.D
DataAcq Meth : CLPVS2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.11	128	539635	50.00	ng	0.05
16) 1,4-Difluorobenzene	11.21	114	2648972	50.00	ng	0.03
28) Chlorobenzene-d5	16.97	117	1570551	50.00	ng	0.02
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	10.29	65	1237250	49.36	ng	0.04
Surrogate Spike 50.000	Range 70 - 121		Recovery = 98.72%			
33) Toluene-d8	14.12	98	2297401	50.52	ng	0.02
Surrogate Spike 50.000	Range 84 - 138		Recovery = 101.04%			
37) Bromofluorobenzene	19.34	95	1108607	49.57	ng	0.03
Surrogate Spike 50.000	Range 59 - 113		Recovery = 99.14%			
Target Compounds						Qvalue
6) Methylene Chloride	5.82	84	89926	5.56	ng	95
7) Acetone	5.03	43	32558	5.20	ng	# 51

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\DATA\B9144.D Via:
Acq On : 22 Jan 98 21:03 Operator:
Sample : HP-2B FFR83 58073-004 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

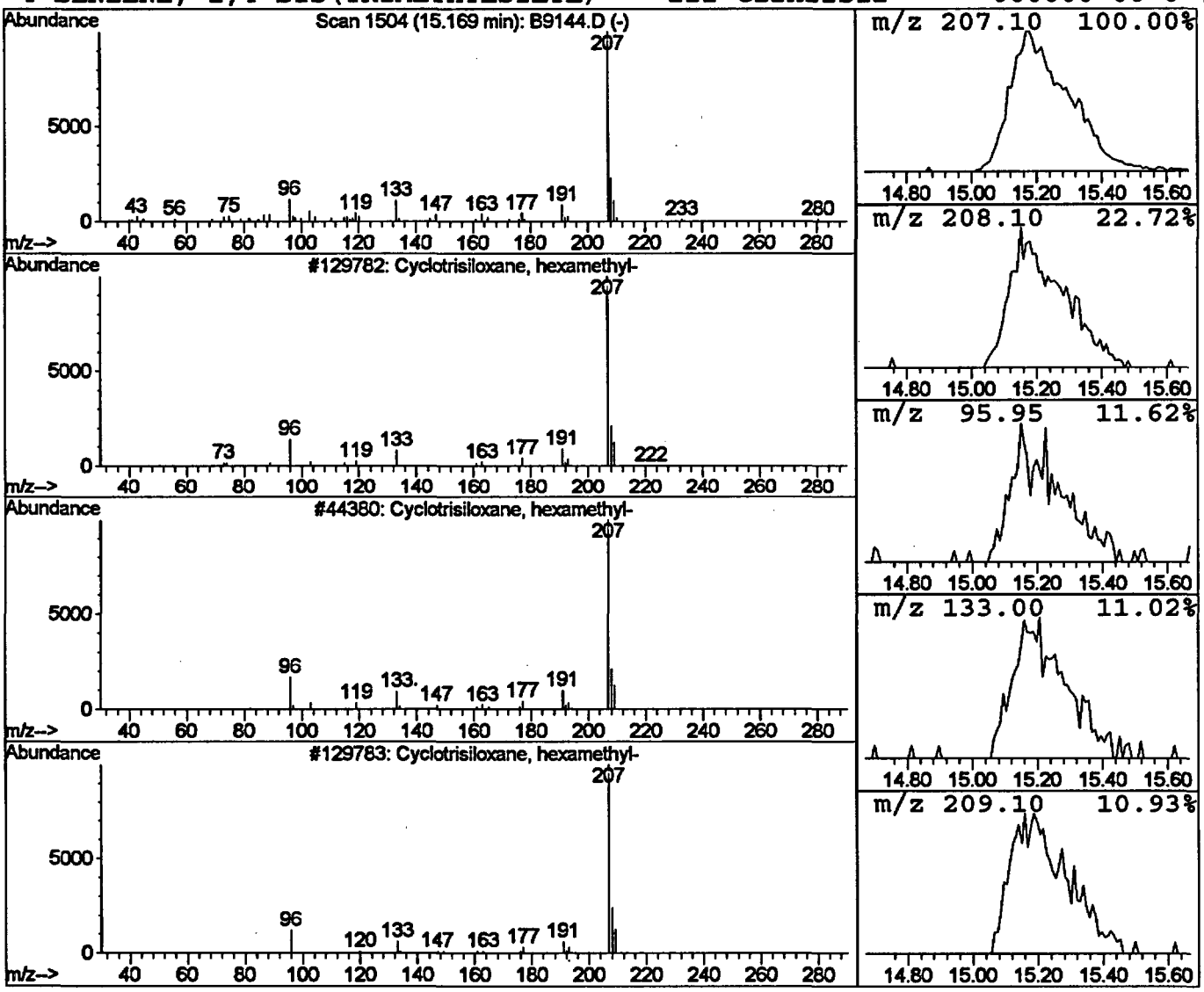
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 Cyclotrisiloxane, hexamethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.17	9.68 ng	1118060	Chlorobenzene-d5	16.97

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	80
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
4	BENZENE, 1,4-BIS(TRIMETHYLSILYL)-	222	C12H22Si2	000000-00-0	72



0070

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\DATA\B9144.D Vial: 16
Acq On : 22 Jan 98 21:03 Operator:
Sample : HP-2B FFR83 58073-004 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr:

CASE 25969
SDG# FFR76

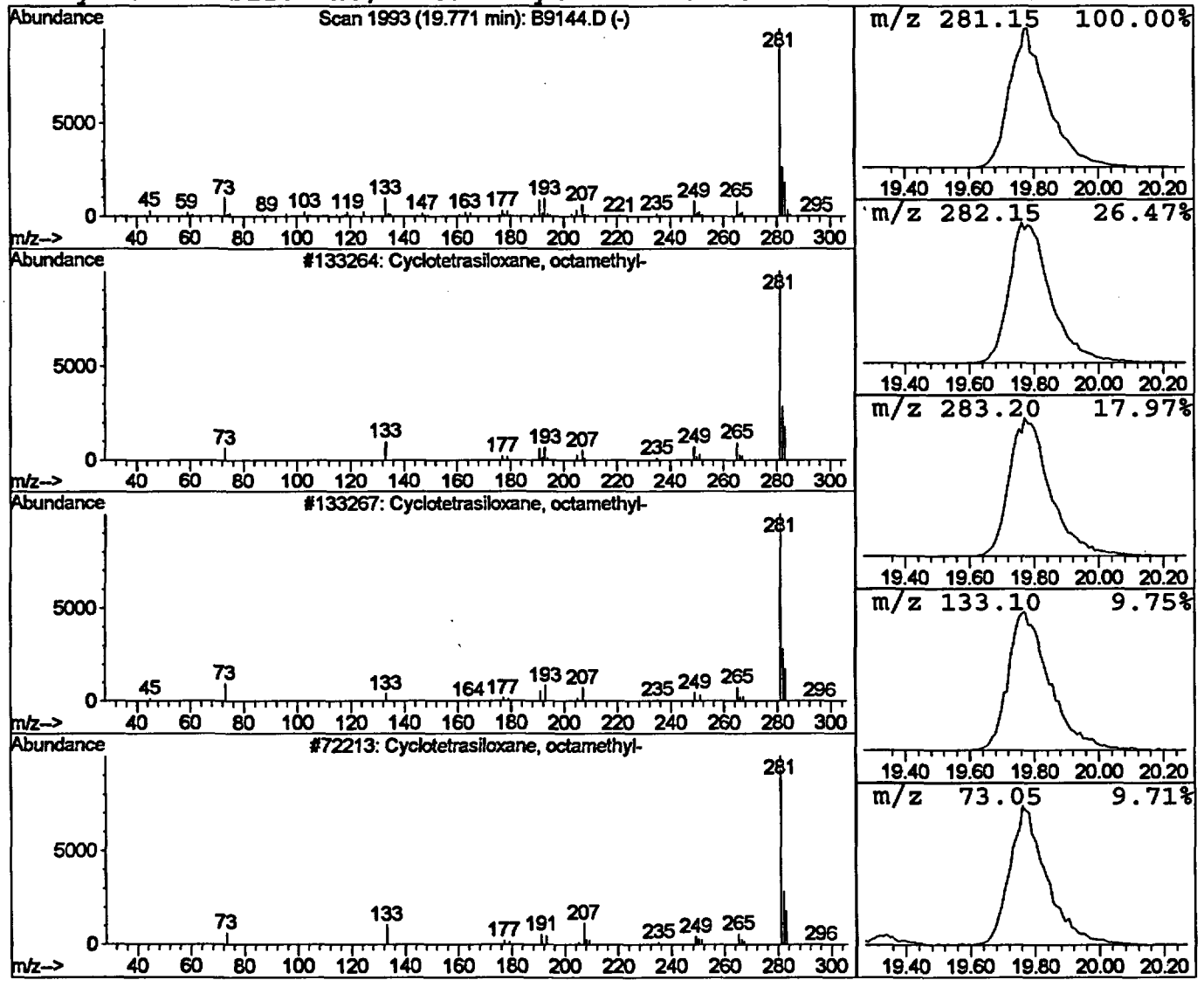
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 Cyclotetrasiloxane, octamethyl Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.77	229.20 ng	26479000	Chlorobenzene-d5	16.97

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	90
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	78
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	49



0071

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\DATA\B9144.D Vial: 10
Acq On : 22 Jan 98 21:03 Operator:
Sample : HP-2B FFR83 58073-004 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

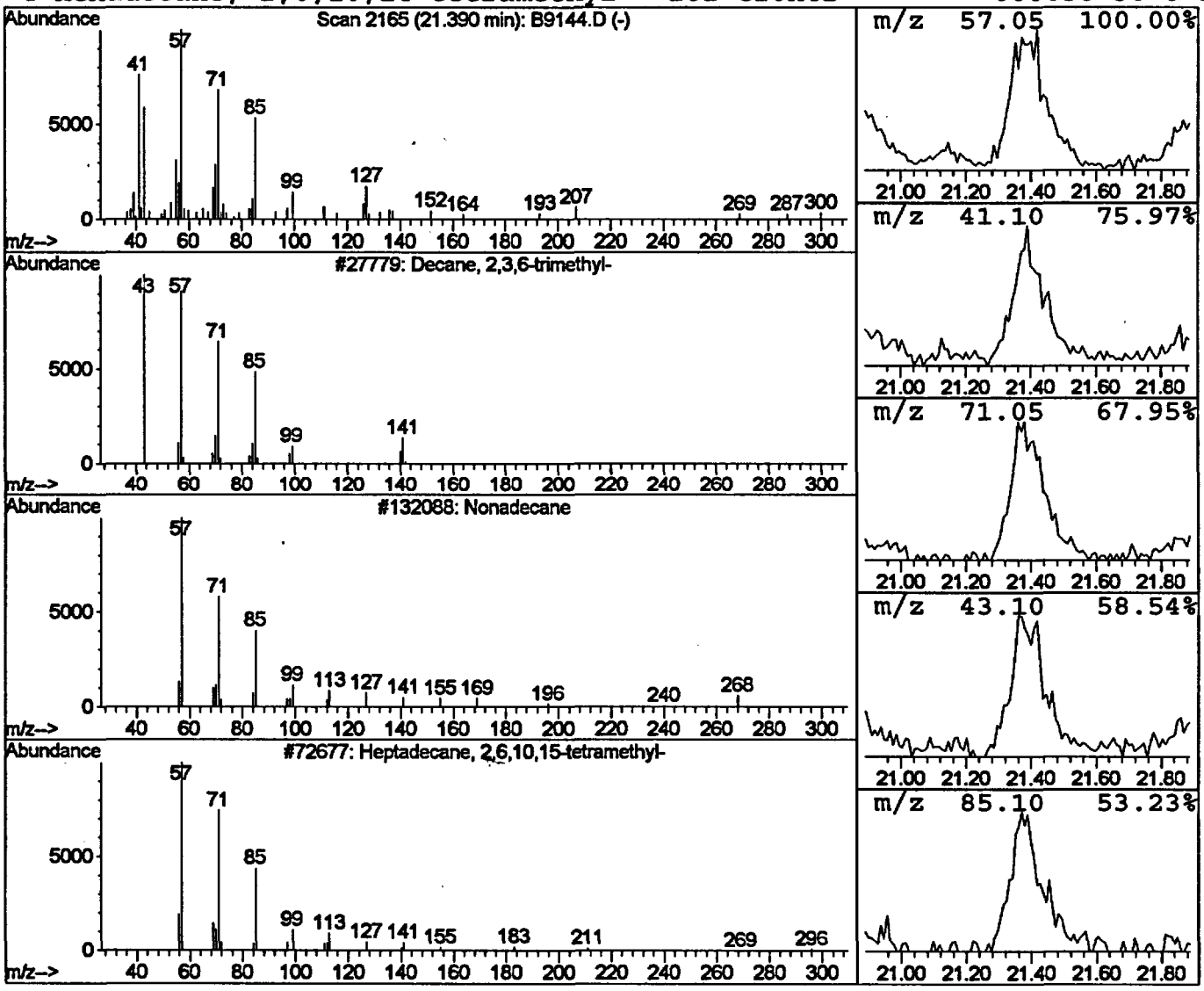
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 4 ~~Decane, 2,3,6-trimethyl-~~ Unknown hydrocarb @ 01/22/98 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
21.39	6.41 ng	740517	Chlorobenzene-d5	16.97

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane, 2,3,6-trimethyl-	184	C13H28	062238-12-4	45
2	Nonadecane	268	C19H40	000629-92-5	72
3	Heptadecane, 2,6,10,15-tetramethyl-	296	C21H44	054833-48-6	64
4	Hexadecane, 2,6,10,14-tetramethyl-	282	C20H42	000638-36-8	59



Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\DATA\B9144.D Vial: 10
Acq On : 22 Jan 98 21:03 Operator:
Sample : HP-2B FFR83 58073-004 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V0 Multiplr: 1.00

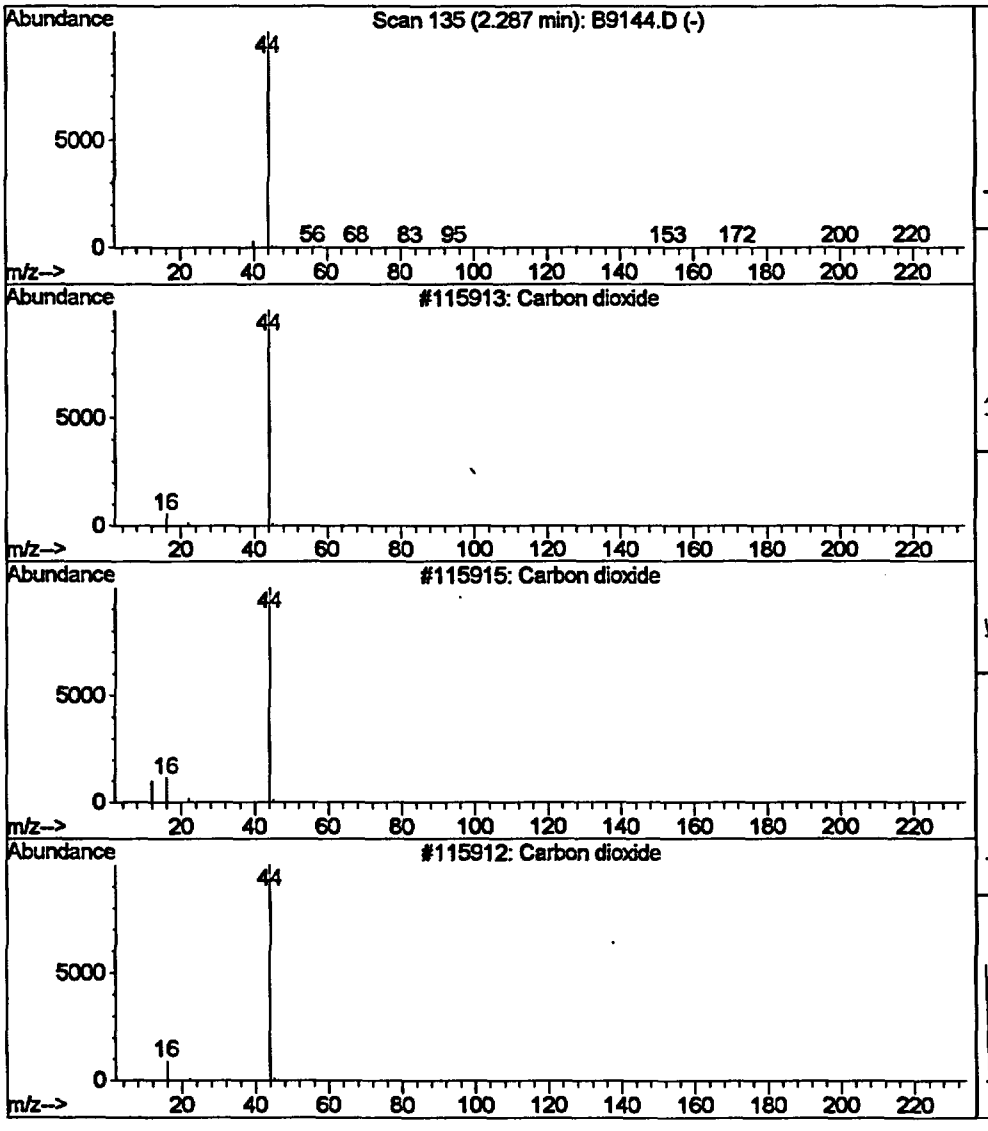
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

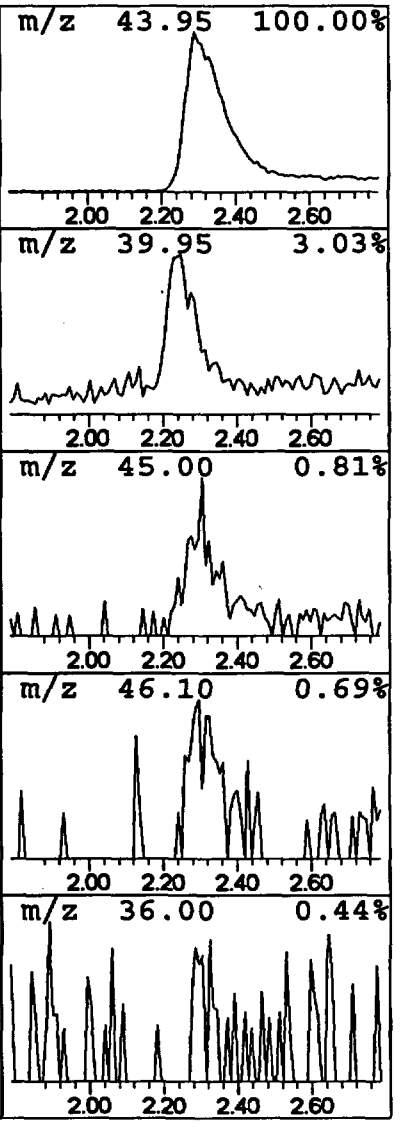
****

Peak Number 1 Carbon dioxide (verified @ 01/22/98 Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.29	29.44 ng	2292520	Bromochloromethane	9.11

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbon dioxide	44	CO2	000124-38-9	3
2	Carbon dioxide	44	CO2	000124-38-9	3
3	Carbon dioxide	44	CO2	000124-38-9	3
4	Carbon dioxide	44	CO2	000124-38-9	3





0073

Tentatively Identified Compound (LSC) summary

CASE 25969
SDG# FFR76

Operator ID: Date Acquired: 22 Jan 98 21:03
Data File: Q:\HPCHEM\B\DATA\B9144.D
Name: HP-2B FFR83 58073-004
Misc: CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Method: CLPVS2
Title: VOA BY GCMS 8260
Library Searched: Q:\DATABASE\WILEY138.L

01/22/98

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
Carbon dioxide (artifact)	2.29	29.4	ng	2292520	ISTD01	9.11	3893840	50.0
Cyclotrisiloxane, he	15.17	9.7	ng	1118060	ISTD03	16.97	5776460	50.0
Cyclotetrasiloxane,	19.77	229.2	ng	26479000	ISTD03	16.97	5776460	50.0
Decane, 2,3,6-trimet	21.39	6.4	ng	740517	ISTD03	16.97	5776460	50.0

B9144.D CLPVS2.M Thu Jan 22 23:29:01 1998

TIC: B9144.D

HP-2B FFR83 58073-004 01/22/98 21:03

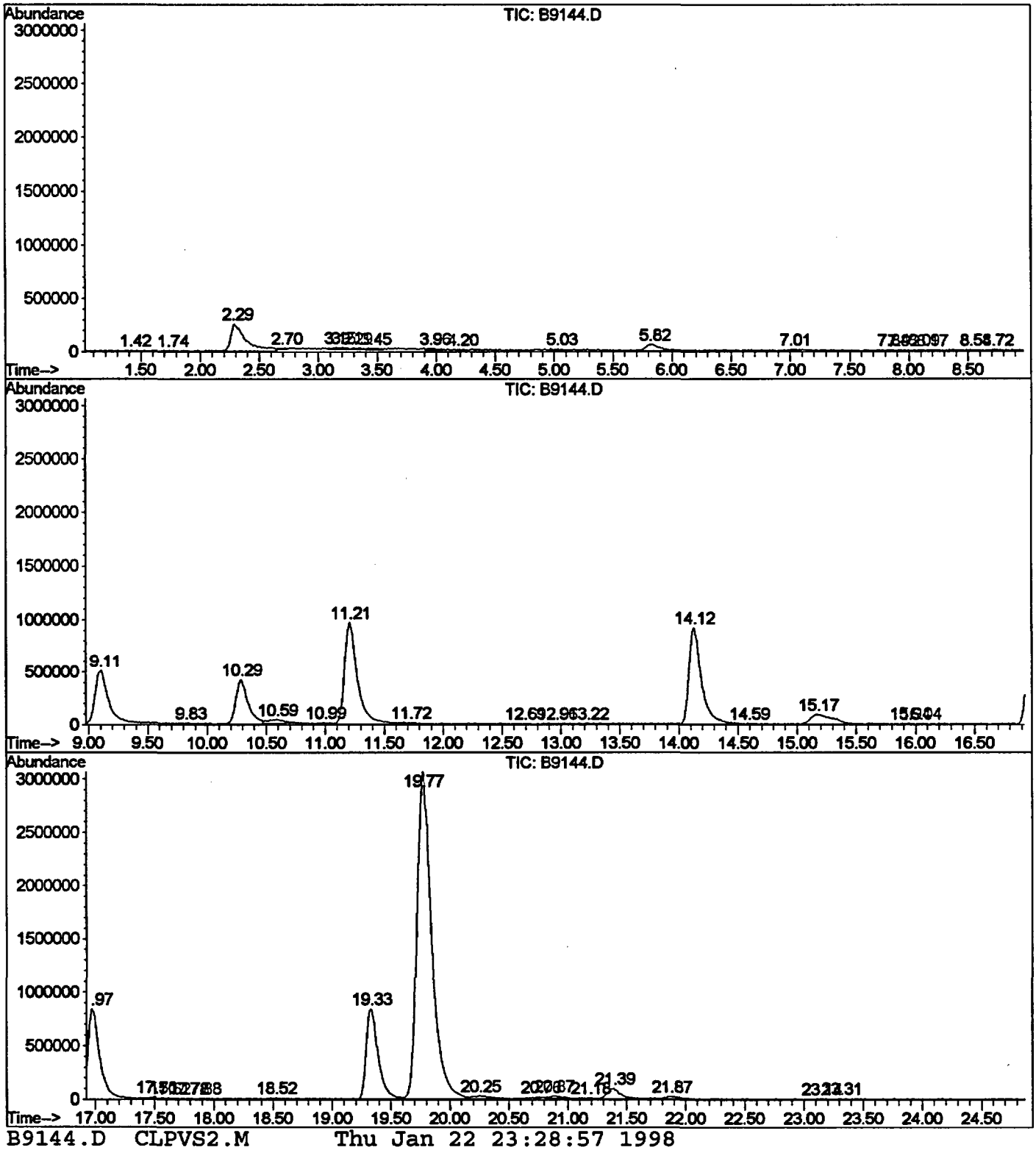
CASE 25969
SDG# FFR76

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	1.421	rVB	0.169	38546	1.346	1.515
2	1.741	rBV	0.188	34136	1.628	1.816
3	2.287	rBV	0.471	2292523	2.174	2.644
4	2.701	rVV	0.094	41560	2.644	2.738
5	3.152	rVV	0.113	56634	3.077	3.190
6	3.209	rVV	0.075	35784	3.190	3.265
7	3.294	rVV	0.132	49608	3.265	3.397
8	3.454	rVB	0.151	51093	3.397	3.548
9	3.962	rVB	0.151	81182	3.905	4.056
10	4.197	rBV	0.094	34090	4.169	4.263
11	5.035	rVB	0.169	72737	4.959	5.129
12	5.825	rBV	0.395	485065	5.637	6.032
13	7.011	rBV	0.169	81434	6.917	7.086
14	7.839	rBV	0.132	44173	7.763	7.895
15	7.923	rVB	0.132	33196	7.895	8.027
16	8.093	rVB	0.113	35623	8.027	8.140
17	8.168	rBV	0.169	47551	8.140	8.309
18	8.535	rVB	0.207	67904	8.403	8.610
19	8.723	rBV	0.188	80331	8.610	8.799
20	9.109	rBV	0.395	3893844	8.968	9.363
21	9.834	rVB	0.132	35594	9.777	9.909
22	10.285	rBV	0.414	3068812	10.060	10.474
23	10.587	rVB	0.358	390277	10.474	10.831
24	10.991	rBV	0.169	71636	10.907	11.076
25	11.208	rVV	0.621	7290823	11.076	11.697
26	11.716	rVV	0.169	59638	11.697	11.866
27	12.685	rBV	0.169	40048	12.544	12.713
28	12.958	rVB	0.188	35477	12.920	13.109
29	13.221	rVB	0.151	33158	13.109	13.259
30	14.125	rBV	0.583	6776140	13.955	14.539
31	14.586	rVB	0.151	36525	14.539	14.689
32	15.169	rBV	0.471	1118055	14.991	15.461
33	15.941	rVB	0.151	33444	15.856	16.007
34	16.035	rVB	0.169	41234	16.007	16.176
35	16.967	rBV	0.489	5776464	16.854	17.343
36	17.503	rVV	0.207	71638	17.343	17.550
37	17.616	rVV	0.169	51797	17.550	17.720
38	17.776	rVB	0.151	41698	17.720	17.870
39	17.880	rBV	0.151	37484	17.870	18.021
40	18.519	rVB	0.207	93039	18.435	18.642
41	19.329	rBV	0.395	5904110	19.206	19.602
42	19.771	rVV	0.565	26478972	19.602	20.166
43	20.251	rVB	0.301	253226	20.166	20.467
44	20.759	rVV	0.056	37260	20.712	20.768
45	20.872	rVB	0.263	199187	20.806	21.070
46	21.182	rBV	0.169	38508	21.070	21.239
47	21.390	rVB	0.395	740517	21.239	21.634
48	21.869	rVB	0.395	248052	21.728	22.124
49	23.140	rVB	0.132	43588	23.083	23.215
50	23.309	rBV	0.132	41741	23.215	23.347

LSC Report - Integrated Chromatogram

CASE 25969
SDG# FFR76

File : Q:\HPCHEM\B\DATA\B9144.D
Operator :
Acquired : 22 Jan 98 21:03 using AcqMethod CLPVS2
Instrument : GC/MS Ins
Sample Name: HP-2B FFR83 58073-004
Misc Info : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 V00464
Vial Number: 10
Quant File :CLPVS2.RES



B9144.D CLPVS2.M Thu Jan 22 23:28:57 1998

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FFR85

Lab Name:CLAYTON LABORATORY Contract:68-D5-0005

Lab Code:CLAYTN Case No.:25969 SAS No.: SDG No.:FFR76

Matrix: (soil/water) SOIL Lab Sample ID:58073-005

Sample wt/vol: 5.00 (g/ml) G Lab File ID: B9042

Level: (low/med) LOW Date Received: 1/15/98

% Moisture: not dec. 30 Date Analyzed: 1/16/98

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

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	541-05-9	Cyclotrisiloxane, hexamethyl	15.17	12.	JN
2.	556-67-2	Cyclotetrasiloxane, octameth	19.76	120.	JNB
3.		Unknown hydrocarbon	21.37	11.	J
4.	3789-85-3	Benzoic acid, 2-[(trimethyls	23.47	9.	JN
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
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22.					
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24.					
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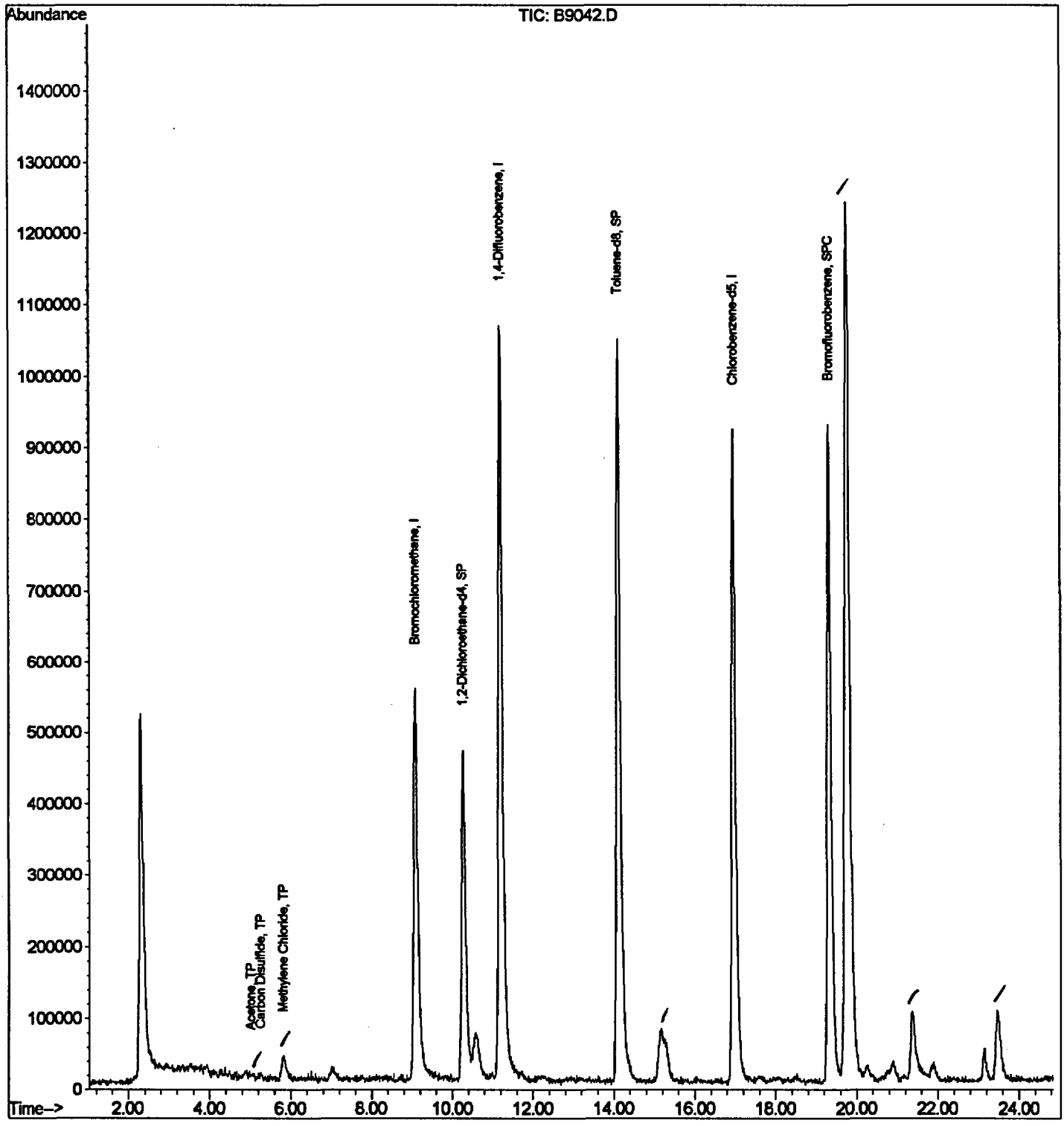
26.					
27.					
28.					
29.					
30.					

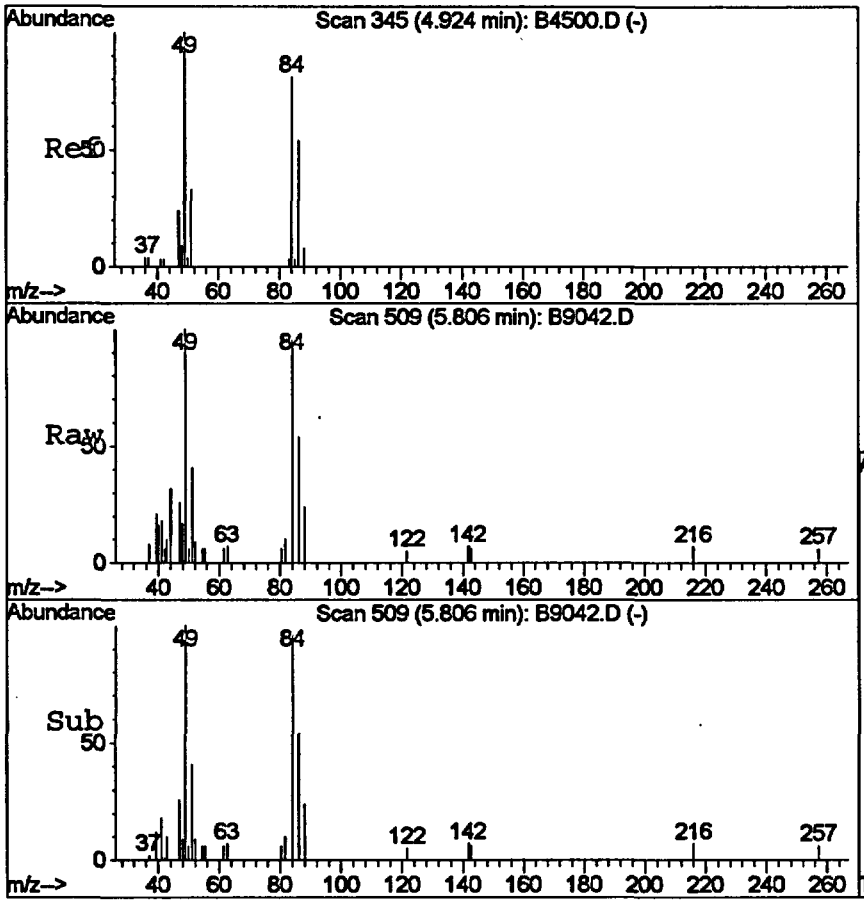
Quantitation Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9042.D Vial:
Acq On : 16 Jan 98 22:43 Operator:
Sample : HP-2B FFR85 58073-005 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 Multiplr: 1.00
Quant Time: Jan 22 13:48 1998 Quant Results File: CLPVS2.RES

Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Single Level Calibration

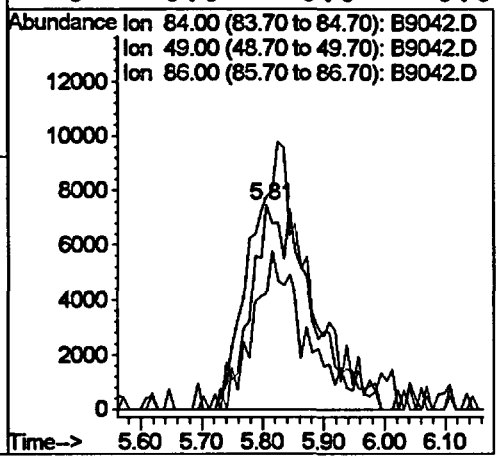


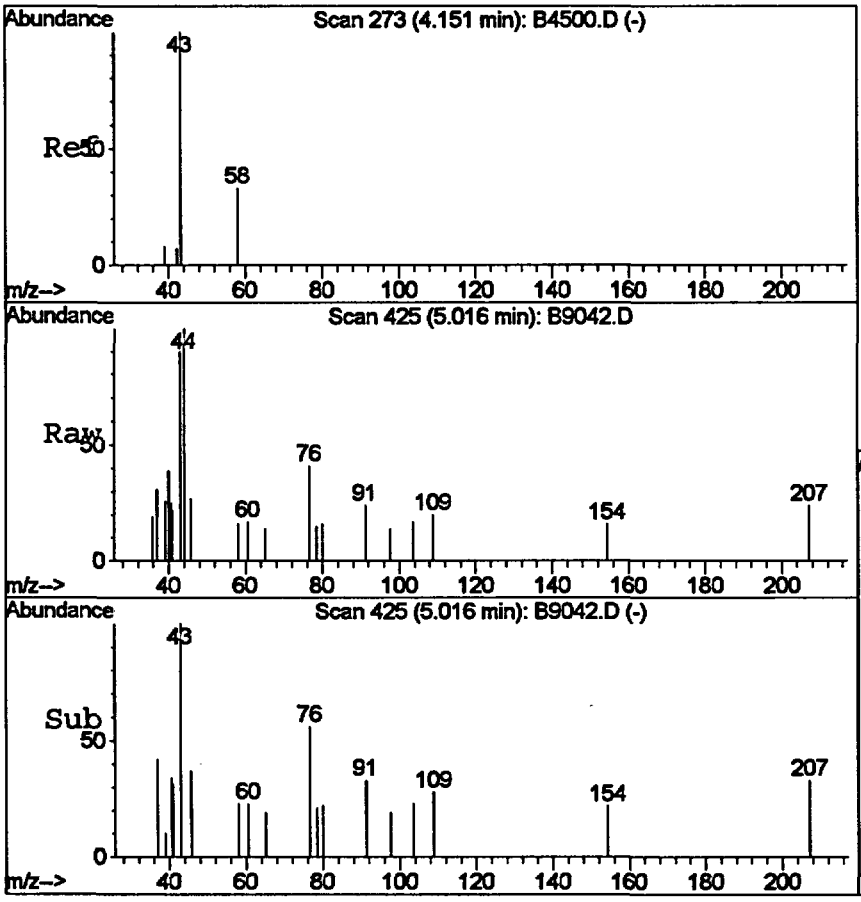


#6
Methylene Chloride
Concen: 3.22 ng
RT: 5.81 min / Scan# 509
Delta R.T. -0.01 min
Lab File: B9042.D
Acq: 16 Jan 98 22:43

Tgt Ion:84 Resp: 52019

Ion	Ratio	Lower	Upper
84	100		
49	103.8	115.5	155.5#
86	56.1	52.2	92.2
0	0.0	0.0	0.0

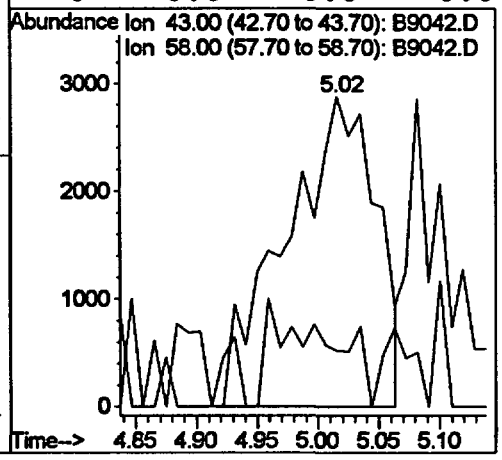




#7
Acetone
Concen: 3.07 ng m
RT: 5.02 min / Scan# 425
Delta R.T. 0.07 min
Lab File: B9042.D
Acq: 16 Jan 98 22:43

Tgt Ion:43 Resp: 14851

Ion	Ratio	Lower	Upper
43	100		
58	18.3	12.2	52.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Quantitation Report (QT Reviewed)

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9042.D Vial: 5
Acq On : 16 Jan 98 22:43 Operator:
Sample : HP-2B FFR85 58073-005 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 Multiplr: 1.00
Quant Time: Jan 22 13:54 1998 Quant Results File: CLPVS2.RES

Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Last Update : Fri Jan 16 12:27:25 1998
Response via : Continuing Cal File: Q:\HPCHEM\B\DATA\B9036.D
DataAcq Meth : CLPVS2

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	9.09	128	591652	50.00	ng	0.00
16) 1,4-Difluorobenzene	11.19	114	2952585	50.00	ng	-0.03
28) Chlorobenzene-d5	16.96	117	1764855	50.00	ng	-0.03
System Monitoring Compounds						
13) 1,2-Dichloroethane-d4	10.28	65	1305629	49.44	ng	0.00
Surrogate Spike 50.000	Range 70 - 121		Recovery = 98.88%			
33) Toluene-d8	14.12	98	2595135	50.22	ng	-0.02
Surrogate Spike 50.000	Range 84 - 138		Recovery = 100.44%			
37) Bromofluorobenzene	19.32	95	1241859	48.76	ng	-0.02
Surrogate Spike 50.000	Range 59 - 113		Recovery = 97.52%			
Target Compounds						Qvalue
6) Methylene Chloride	5.81	84	52019	3.22	ng	# 76
7) Acetone	5.02	43	14851m	3.07	ng	46

(#) = qualifier out of range (m) = manual integration

Library Search Compound Report

CASE 25969
SDG# FFR76

Data File : Q:\HPCHEM\B\B90XX\B9042.D Vial: 5
Acq On : 16 Jan 98 22:43 Operator:
Sample : HP-2B FFR85 58073-005 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 Multiplr: 1.00

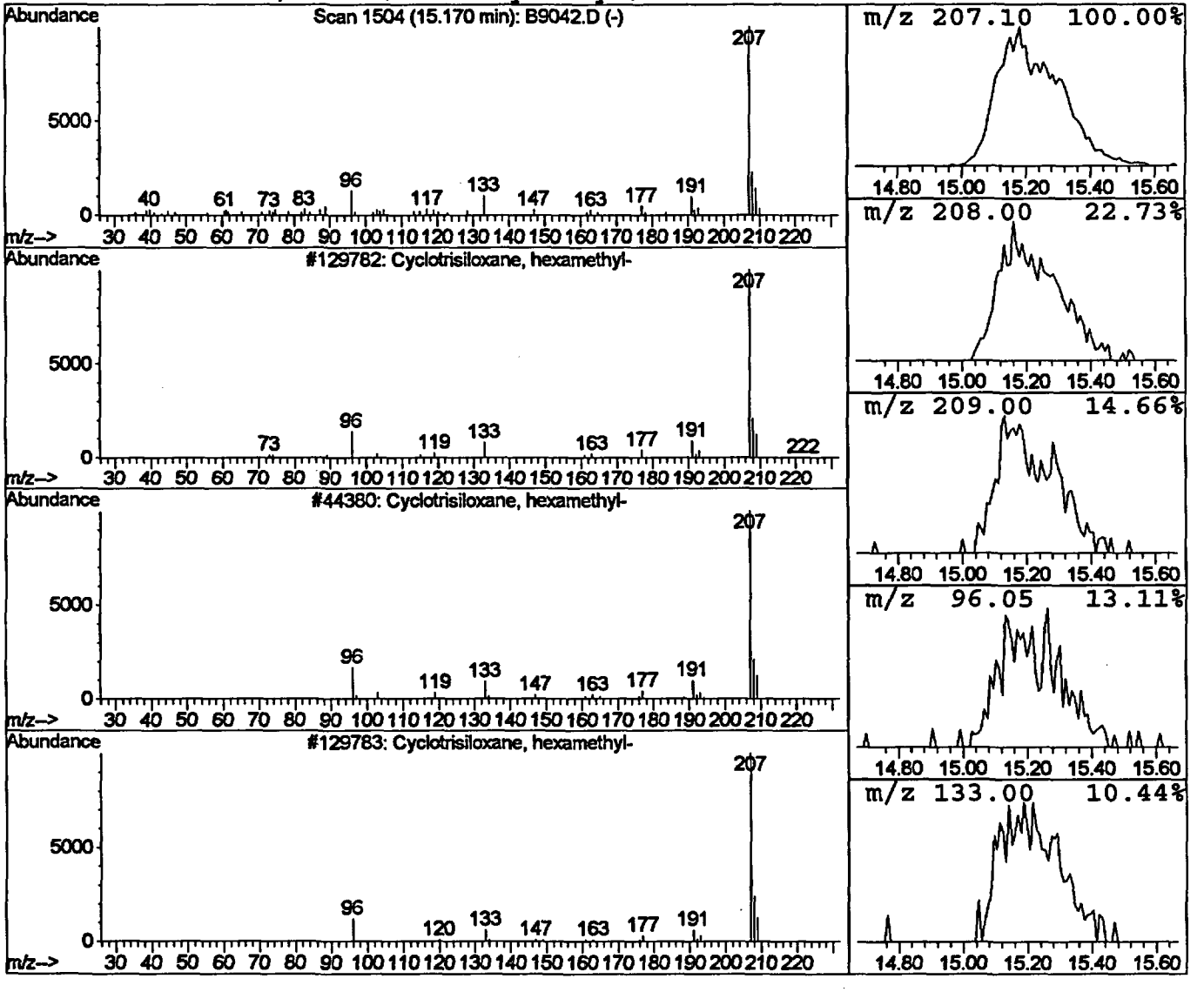
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 2 Cyclotrisiloxane, hexamethyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.17	8.44 ng	1075750	Chlorobenzene-d5	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	90
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	83
4	Arsenous acid, tris(trimethylsilyl)	342	C9H27AsO3Si3	055429-29-3	50



Data File : Q:\HPCHEM\B\B90XX\B9042.D Vial: 5
Acq On : 16 Jan 98 22:43 Operator:
Sample : HP-2B FFR85 58073-005 Inst : GC/MS Ins
Misc : CASE 25969 SDG#FFR76 5g SOIL IS/SS=50 Multiplr: 1.00

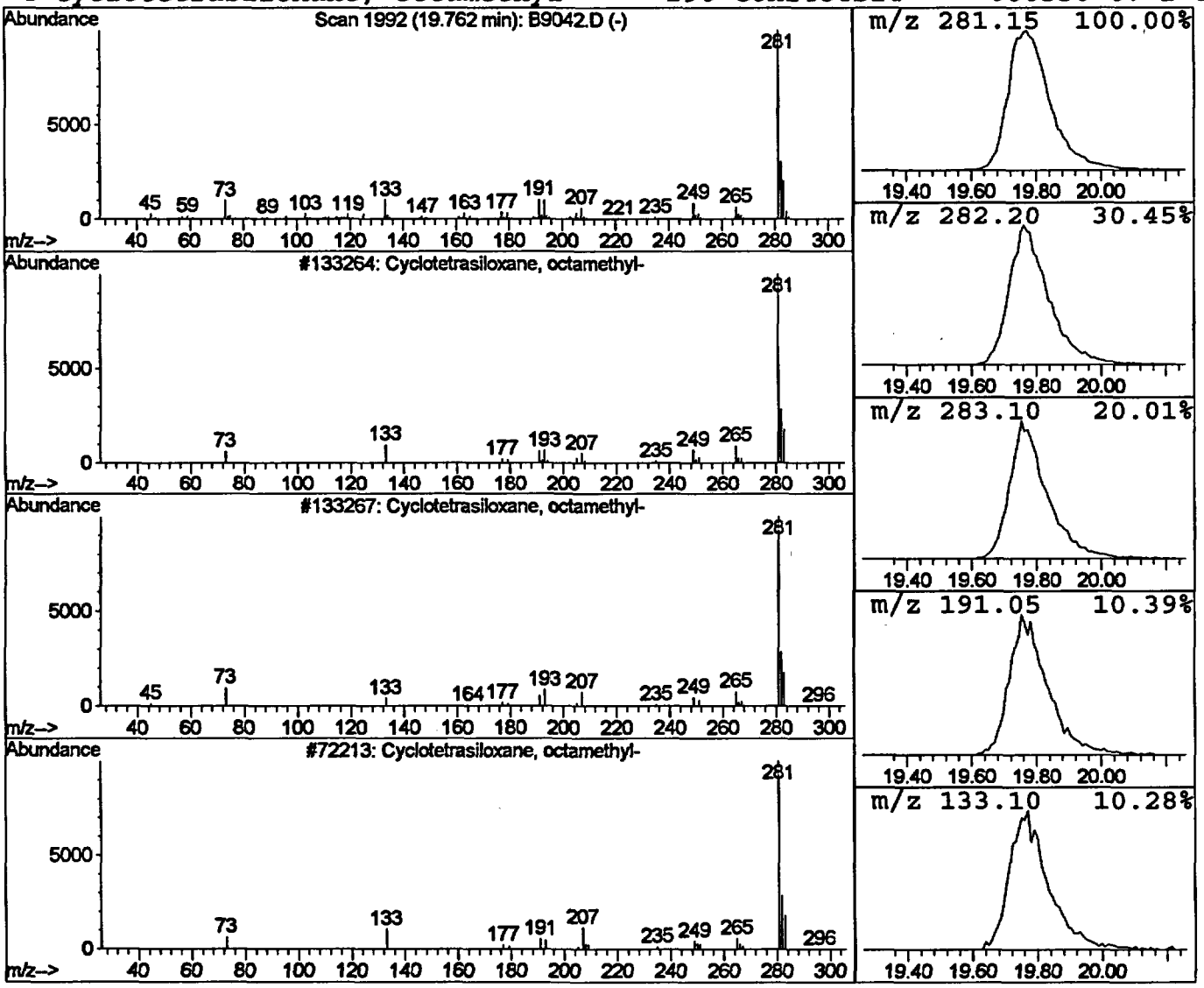
Quant Method : Q:\HPCHEM\B\METHODS\CLPVS2.M
Title : VOA BY GCMS 8260
Library : Q:\DATABASE\WILEY138.L

****

Peak Number 3 Cyclotetrasiloxane, octamethyl Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.76	86.22 ng	10984800	Chlorobenzene-d5	16.96

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	91
2	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	86
3	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	74
4	Cyclotetrasiloxane, octamethyl-	296	C8H24O4Si4	000556-67-2	83



Contract Laboratory Analytical Services Support (CLASS) Record of Communication

Name: Molly Boyter

Date/Time of Contact: 1/27/98 12:04 PM

Contact/Org./Phone: Kelly Kolb/ Clayton Environmental Consultants, Inc./ (248) 344-1770

Type of Inquiry: Analytical Issue

Contact Recv'd Via: ☒ Phone ☐ Fax ☐ Vmail ☐ Memo ☐ Other

Initiated By: ☐ EPA ☐ CLASS ☐ Engr. Contr. ☒ Lab ☐ Region ☐ SCC ☐ Other

Lab: CLAYTN Contract #: 68-D5-0167 Case #: 25969 SDG: Region: 6

SOW: Affected Samples: Invoice #:

Discussion/Issue:

01/28/98 Kelly Kolb, CLAYTN, reported the following information. The method blanks (soils) for the case were contaminated. The blanks for SDG FFR69 had 34ppb and SDG FFR76 had 74.5 ppb of arochlor 1260. Also, the samples in SDG FFR76 don't appear to contain PCB (arochlor 1260). SDG FFR69 does have two samples that have 540,000 ppb of arochlor 1260, samples FFR72 and FFR75 . The lab does not want to reextract the samples because all of their lab equipment may be contaminated, especially because sample FFR72 is the MS/MSD and the lab would have to analyze it three times.
How should the lab proceed?

01/28/98 CLASS faxed the problem to Ray Flores, Region 6 TPO. Ray asked if the samples that were detected as having arochlor 1260 had any other hits for single component pesticides.

01/28/98 CLASS inquired with Kelly, and she stated that none of the samples had been analyzed for pesticides yet. The arochlor 1260 was DETECTED during the screening of the BNA portions (to determine the concentration level) by GC. Therefore, the lab is unable to determine whether or not there have been hits on the above sample for any pesticides.
Also, sample FFR80 was found to contain high levels of arochlor 1260.

Resolution:

01/29/98 Ray called CLASS and stated that the lab should continue with analysis according to the SOW. The Region may decided to pursue reduced value after reviewing the lab's data package.

01/29/98 CLASS relayed the above resolution to the lab. They stated they would reextract the samples for Pesticide/PCB analysis and continue, noting the problems in the case narrative. The lab requested changing the MS/MSD from FFR72 (likely to have high levels of arochlor 1260) to FFR89 in order to cut down on laboratory contamination. Is this acceptable?

01/29/98 CLASS relayed this request to the Region. The Region agreed on using FFR89 as an MS/MSD instead of FFR72.

CLPAS Notification: Yes Completed Date/Time: 1/30/98 3:09 PM

Referred To: Date/Time: W.A.#: ST&R

Distribution: ◉ Lab ◉ Region ◉ CLASS ○ AOC ○ Work Assign. Man.

CASE 25969
SDG# FFR76

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

CLP COMMUNICATION LOG Copy: Original in 25969/FFR69

Name: Lilly Kolb

Message ☐ Recv'd/☑ Sent Via ☑ Phone ☐ V-Mail ☐ Other ☐ FAX ☐ Memo

Date/Time of Contact 01/27/98 12:40

Initiated by: ☑ Lab ☐ Class ☐ Region ☐ Other ____

Contact Name/Organization/Phone #: Molly Porter - CLASS

Case No. 25969 SDG No. FFR69, FFR76 Region ____

Affected Samples: ____

Discussion/Issue:

The laboratory believes the method blanks associated with SDGs FFR69 and FFR76 contain carry over contamination that is due to the extremely high levels of A 1260 in the samples that are in these SDGs.
Standards and instrument blanks analyzed directly before the method blank were clean so contamination from the instrument is not possible
The blank contamination is at 68ppb for SDG FFR69 and at 149 ppb for SDG FFR76. The soils samples are out by hold by 3 days.

Resolution:

Resolution Completed ☐ Yes Date/Time____

☐ No Referred to ____ Date/Time____

☐ N/A (not applicable)

CASE 25969
SDG# FFR76 Copy; Original in 25969/FFR69

CLAYTON ENVIRONMENTAL CONSULTANTS, INC.

CLP COMMUNICATION LOG

Name: Kelly Kolb

Message ☐ Recv'd/☐ Sent Via ☐ Phone ☐ FAX ☐ V-Mail ☐ Memo ☐ Other

Date/Time of Contact 01/28/98 09:50

Initiated by: ☐ Lab ☐ Region ☐ Class ☐ Other ____

Contact Name/Organization/Phone #: Ray Flores, Region VI

Case No. 25969 SDG No. FFR69, FFR726 Region 6

Affected Samples: -

Discussion/Issue: For FFR69,
the lab has not analyzed the samples. They stopped after the blank because it was contaminated (1.5×CRQL) Samples FFR72 and FFR75 are known to contain extremely high concentrations (~~540,000~~ ppb as detected during screening activities. As far as we can tell, based on Mass Spec. analysis, the other samples are clear. For FFR76, even though the blank is slightly contaminated, the associated samples appear to be clean.

Resolution:
FFR72 MSD 545,000 ppb (ug/kg 1260) FFR88 - insufficient
Put to Molly FFR75 sample, FFR80 also ← FFR75+80
Use FFR89 as MS/MSD. FFR89 for MS/MS
FFR69 Blank 34 ug/kg A1260
FFR726 74.5 ug/kg A1260
Information given to Molly at 10:35 on 01/28/98

Resolution Completed ☐ Yes Date/Time ____
☐ No Referred to ____ Date/Time ____
☐ N/A (not applicable)

1753

Re-extract - Analyze the samples for pesticides 2/95