



Norsk Hydro

Postadresse:
Postboks 4313, N-5013 Nygårdstangen
Kontoradr.: L. Hillesgt. 30, Bergen
Telefon: (05) 21 60 00
Telex: 40 632 hydro n

Rapport/Report

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Fordeling/Distribution A. Bjørseth E. Rygg E. Nysæther Arkiv B. Dahl A. Steen N. Telnæs T. Ramdahl T. Bockelie Vækerø (4) Partners	SOURCE ROCK EVALUATION WELL: 2/12-1 BY N.Telnæs, A.Steen and T. Ramdahl		VTE

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REGISTRERT

OLJEDIREKTORATET

Resyme/Konklusjon/Anbefaling
Summary/Conclusion/Recommendation

The Jurassic and deeper sediments have been evaluated for source rock potential and the Upper Jurassic can be divided into five organic facies with varying contents and types of organic matter:

- 1.(3988-3997m) Good source potential, average TOC=3.2%.
- 2.(3997-4235m) Fair/good source potential, average TOC=2.3%
- 3.(4235-4330m) Excellent source potential, average TOC=5.4%
- 4.(4330-4610m) Fair/good source potential, average TOC=2.4%
- 5.(4610-4672m) Interbedded coal/shale have good potential, sandstones have no source potential.

The Jurassic part of well 2/12-1 is marginally mature with respect to oil generation with a vitrinite reflectance of 0.61% in the bottom part of the Jurassic section.

The results from the vitrinite reflectance correlates very well with other maturity parameters such as biological markers and spore fluorescence

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I. INTRODUCTION

This report gives the results of the source rock evaluation and maturity estimations in well 2/12-1.

Well 2/12-1 was drilled by Norsk Hydro Produksjon A/S BY Treasure Scout and was spudded 4. october 1986 and reached TD at 4795 m in Permian siltstones. The target Upper Jurassic sandstones were oil bearing from 4597 m down to their basal Sst/Sh boundary at 4668m.

A well location/structural map for 2/12-1 is given in Fig. I.1.

Oilshow analysis of the Jurassic part of the well was undertaken on the rig by EXLOG. Based on these results intervals to be covered by Side Wall Cores (SWC) were selected. Selected SWC's, drillcuttings (DC) and Corecuttings (CC) were analysed by GeolabNor A/S. The remainder of the analytical work and the compilation of this report has been carried out at Norsk Hydro Research Center in Bergen, Norway.

A list of samples selected for geochemical analysis is given in Table I.1.

Figure I.2. gives a summary of the source rock evaluation and thermal maturities for well 2/12-1.



II. SOURCE ROCK EVALUATION

II.1. RockEval/TOC analysis.

Well 2/12-1 contains 622m of organic rich Upper Jurassic claystones. Rock-Eval and TOC measurements can divide the interval 3937-4610m into four Organic Facies with varying richness and hydrocarbon potential. The lower part of the Jurassic section (4610-4672m) consists of sandstones interbedded with coal and shale. The lowest investigated section 4672-4707m is of Triassic?/Permian age and is composed of claystones followed by sandstones in the lower part.

All data are presented in Table II.1.1. and are plotted versus depth in Fig. II.1.1.

Average source rock values are listed in Table II.1.2.

Except for S_1 -values (free hydrocarbons), all EXLOG-measurements are made on solvent extracted samples.



Average values:	S ₁	S ₂	Tmax	TOC	HI	PI	No. of sampl.
3988-3997m:	8.4	9.8	438	3.2	305	.48	5
3997-4235m:	5.3	6.3	440	2.3	267	.48	106
4235-4330m:	8.1	17.7	441	5.4	318	.33	40
4330-4610m:	4.3	5.2	443	2.4	222	.45	114

4610-4672m:							
SST's.....	6.8	2.3	435	1.8	126	.68	26
Coal/Shale.....	11.6	41.7	463	9.6	318	.34	13
4672-4707m:							
SST's.....	1.9	3.0	454	0.2	104	.48	3
Clyst/Dol.....	3.4	3.7	439	1.8	165	.55	13

Table II.1.2.: Average source rock properties for Well 2/12-1.



Organic Facies I: 3988-3997m (Middle Volgian)

The facies consists of claystones with TOC (Total Organic Carbon) values in the range 2.2-4.6 % and pyrolysis yields (S_2) in the range of 8.1-9.0 mg HC/g rock. Average values of TOC = 3.2 and S_2 = 9.8 suggests a good source rock potential.

S_1 -values above 8 mg/g rock indicates free hydrocarbons. Hydrogen Indices (HI) in the range of 240-380 indicates a potential for both gas and oil, and a Type II/III kerogen.

Organic Facies II: 3997-4235m (Middle/Early Volgian)

This section is uniformly composed of claystones. TOC-values range from 1-5 % and S_2 -values range from 2-17 mgHC/g rock. Average values of TOC = 2.3 and S_2 = 6.3 indicates a fair to good source rock potential. HI-values range from 100-350 with an average of 267. This indicates a gas/condensate prone source rock with a Type III kerogen.

Organic Facies III: 4235-4330m (Early Volgian)

This 95m thick claystone column represents an excellent source rock quality. TOC content ranges from 4-9 % with an average of 5.4 and S_2 -values range from 6-44 mgHC/g rock with an average of 17.7 mgHC/g rock. S_1 -values above 8 mgHC/g rock indicates free hydrocarbons. HI-values are generally above 300 with an average of 318 indicating a potential for oil/gas. Excellent source rock quality is combined with a Type II kerogen



Organic Facies IV: 4330-4610m (Early Volgian/L-M
Kimmeridgian)

This facies consists of a more mixed lithology dominated by marl, siltstone and clystone. The section represent a decrease in organic richness. TOC-values range from 1-5 % with an average of 2.4 %. S_2 -values vary from 2.5-10 mgHC/g rock with an average of 5.2 mgHC/g rock suggesting a fair to good source rock quality. HI-values range from 140-295 with an average of 222 indicating a gas/condensate prone organic matter of Type III.

Organic Facies V: 4610-4672m (Early Kimm./Oxfordian)

The section is described as sandstones with coal and shale interbeds. Analysed sandstone lithologies have an average S_1 -value of 6.8 mgHC/g rock indicating the presence of free hydrocarbons. Thin interbedded shale and coal have good source rock potential. Average TOC and S_2 -values are 9.6 % and 41.7 mgHC/g rock respectively. The coal interbeds have HI-values above 350 and have excellent source potential.

Organic Facies VI: 4672-4707m (Triassic?/Permian)

This facies is composed of a mixed dolomite, claystone, sandstone lithology followed by mainly sandstone in the lower part. Analysed dolomite and claystone samples have TOC and S_2 -values generally less than 3 % and 5 mgHC/g rock respectively. Average values are TOC = 1.8 % and S_2 = 3.7 mgHC/g rock indicating a fair source rock quality. HI-values range from 40-280 suggesting a mainly gas prone organic matter of type III. Analysed SST's (4705-10m) show a poor content of free hydrocarbons.



II.2. Extraction and group type separation.

36 samples have been selected for extraction, group type separation and chromatographic characterisation.

The amount of extractable organic matter (EOM) range from 0.03 % (4666.2 m) to 3.21 % (4663.3 m).

The results of extraction and group type separation are listed in Table II.2.1.

The Cretaceous samples have been included mainly for maturity studies and characterisation of shows.

Most the Upper Jurassic samples have EOM values in excess of 1% (10000 ppm) suggesting an excellent source potential.

EOM values are plotted versus depth in Fig. II.2.1. This figure shows that there are some very rich source rock horizons with EOM values in excess of 25000 ppm.

A graphical presentation of the gross composition of the extracts are given in Fig. II.2.2.

Most of the extracts are relatively rich in non-hydrocarbons (>55%) and this suggests that the Upper Jurassic section has not yet reached the main stage of oil generation. Some of the coaly material in the bottom part of the well is very rich in non-hydrocarbons. The high contents of hydrocarbons in the sample from 4400 m is probably an artifact resulting from low levels of extractable organic matter, or possibly contamination.

There is an increase in the contents of asphaltenes in the interval 4633.60 m to 4666.2 m.



Extraction and group type separation ratios are listed in Table II.2.2. and EOM/TOC is plotted versus depth in Fig. II.2.3..

The EOM/TOC values range from 0.03 to 1.89 with the higher values corresponding to contamination of migrated hydrocarbons. The samples at 3105 m and 3937 m are clearly contaminated by migrated hydrocarbons as seen by the EOM/TOC and SAT/TOC values.

The section from 4215 m to 4330 m and some of the samples in the bottom part of the well have relatively low values of SAT/TOC compared to the rest of the Upper Jurassic section.



II.3. Gas chromatography of saturated hydrocarbons.

All gas chromatograms together with the normalised distribution of n-alkanes and regular isoprenoids are given in Appendix I.

Table II.3.1. gives the molecular ratios from the gas chromatograms of the saturated hydrocarbons.

Most of the samples display a smooth unimodal distribution of n-alkanes with a slight odd over even predominance in the n-C₁₆ to n-C₂₃ region.

All the samples have a relatively low pristane/phytane ratio and a high relative concentration of C₁₆ to C₂₀ isoprenoids. In most of the samples the biomarkers are evident in the n-C₂₉ to n-C₃₅ region.

The sample from 4400 m have a high relative concentration of n-alkanes in the n-C₂₀ to n-C₃₀ region compared to the samples above and below. The relative concentration of biomarkers is also much lower in this sample andf the Pristane/Phytane ratio is higher.



II.4. Gas chromatography of aromatic hydrocarbons

The gas chromatograms of the aromatic fractions are given in Appendix II.

All of the samples are dominated by methylated polycyclic aromatic hydrocarbons, mostly of the naphthalene and phenanthrene series. The 1- and 9-methyl phenanthrenes isomerise to the 2- and 3-methyl phenanthrenes with increased thermal stress, and a conversion to the two latter compounds is often seen as a function of depth. However, this reaction is influenced by the matrix (type of organic matter), being much slower in a Type II than in a Type III kerogen (see the discussion of coals below). There is no apparant maturation trend in the distribution of the methyl phenanthrene isomers in this well, indicating mostly a Type II kerogen.

For coal samples there is an empirical correlation between the methyl phenanthrene distribution ratio calculated from the relative amounts of the various isomers ($MPDR = \frac{2-MP+3-MP}{2-MP+3-MP+9-MP+1-MP}$) and vitrinite reflectance R_o . From the MPDR an estimated vitrinite reflectance R_c can be calculated from the equation

$$R_c = 2.242 * MPDR - 0.166$$

Two samples from the well represent coals, and Table II.4.1. shows that calculated and measured vitrinite reflectance are in good agreement.

Depth (m)	MPDR	R_c	R_o
4633.6	0.39	0.70	0.67
4663.3	0.40	0.73	0.69

Table II.4.1.: Calculated versus measured vitrinite reflectance of two coal samples in well 2/12-1



II.5. Biological markers.

The saturated hydrocarbon fraction have been analysed by GC-MS using Selected Ion Monitoring (SIM) for the distribution of biological markers of the sterane and triterpane type.

Biomarker fragmentograms (m/z 191 and 217 from the saturated fraction) are given in Appendix III together with a tentative identification of selected compounds.

Tertiary/Cretaceous section:

The two samples from 2955 m and 3105 m both contain small amounts of Gammacerane and 28,30-bisnorhopane. The steranes in the sample from 3105 m are dominated by the low molecular weight pregnanes. The C_{27} to C_{30} steranes show a predominance of C_{29} steranes indicating a high input of terrestrially derived organic matter.

Two different lithologies have been picked from the sample at 3105 m. The carbonate lithology show an absence of Gammacerane and very low concentrations of 28,30-bisnorhopane. In addition, the extract from this lithology appears to have a higher maturity than the extract from the shaly lithology. This suggests that the sample has been slightly contaminated by migrated hydrocarbons. This is also supported by the fact that the carbonate lithology contains relatively more rearranged steranes than the shale.

The sample at 3937 m also show a high relative concentraion of the Pregnanes while there is an absence of Gammacerane and 28,30-bisnorhopane.



Jurassic section

The samples from 3980 m to 3992 m all appears to be contaminated by mature migrated hydrocarbons. All these samples have a predominance of C_{27} rearranged steranes (diasteranes) indicating a marine, siliciclastic source for these hydrocarbons. The presence of C_{30} 4-methylsteranes is indicative of contribution from dinoflagellates to the organic matter.

The sample from 3996 m and 4000 m are rich in C_{27} regular steranes indicating a marine dominated organic matter. The extract from 4000 m have a very low concentration of Rearranged steranes suggesting a low abundance of acidic clay minerals in this particular sample.

All the samples in the interval 4025 m to 4607 m are dominated by C_{27} steranes. There are rapid variations in the relative concentrations of regular steranes and rearranged steranes. This suggests an organic matter of predominantly marine origin with rapidly changing contents of carbonates. The latter probably controls the relative amounts of regular steranes versus rearranged steranes. Most of the samples are relatively rich in 4-methylsteranes originating in dinoflagellates. The distribution of triterpanes is very similar in all these samples.

The samples in the interval 4633.6 m to 4666.2 m all appears to be contaminated by migrated hydrocarbons. These migrated hydrocarbons also have a predominance of C_{27} steranes suggesting a predominantly marine origin.



II.6. Pyrolysis-gas chromatography.

The pyrolysis-gas chromatograms are given in Appendix IV, and the quantitative results are listed in Table II.6.1. Only samples from the rich Jurassic sequence have been analysed.

In general the pyrolysis-gas chromatograms display a homologous series of n-alkenes/n-alkanes extending up to at least C_{25} with minor amounts of aromatic compounds (mainly benzene, toluene and xylenes). The ratio of m-/p-xylenes to n-octene is used to illustrate the relative proportion of aromatic vs. aliphatic compounds, and this ratio is plotted versus depth in Figure II.6.1. The ratio is fairly uniform averaging 0.6, except for the four samples at 4167 m, 4247 m, 4633 m and 4663 m which all contain mostly woody kerogen. The two latter samples are coals.

The pyrograms demonstrates the generally high quality of the Jurassic source rocks which have a good remaining potential for generating liquid hydrocarbons.



II.7. Visual Kerogen Analysis.

The results of the visual kerogen analysis are listed in Table II.7.1. and the results are presented as bargraphs in Fig. II.7.1.

The contents of amorphous material range from 0 % to 90 % (4247 m) and there appears to be a general increase in the contents of amorphous material with depth, possibly reflecting the increasing maturity of the jurassic section.

The amount of Woody material (Vitrinite) range from 0 % (4247 m) to 90 % (4633.6 m) and is generally in the order of 40 %. Some of the samples in the lower part of the section are particularly rich in Woody material (> 70%).

The contents of palynomorphs (Exinite) range from 0 % to 35 % (4025 m). There is no correlation with elevated Hydrogen Indices and the contents of palynomorphs.

The contents of Inertinite range from 0 % (4172 m) to 70 % (3992 m).



III. MATURITY

III.1. Vitrinite reflectance.

The average vitrinite reflectance values are listed in Table III.1.1. and are plotted versus depth in Fig. III.1.1.

Vitrinite reflectance range from 0.37 % at 2955 m to 0.69 % at 4663 m. The samples from 4663.3 m and 4633.6 m ($R_o=0.69\%$ and 0.67% respectively) are both coaly samples and will normally display a higher vitrinite reflectance than associated shales and the results of $R_o = 0.61\%$ from the samples at 4653.7 m and 4660.0 m are probably more representative for this depth. This indicates that the lower part of the Jurassic section is marginally mature with respect to oil generation, but have not yet reached the main stage of oil generation.

This is a very low maturity considering the depth, but the maturity as indicated by vitrinite reflectance corresponds very well with the biological markers (III.3.). The temperature at this depth is high, and suggests that the different maturity parameters have not yet adjusted to the high temperatures at this depth.



III.2. Spore Fluorescence Colour.

The Spore Fluorescence Colour is listed in Table III.2.1.

Most of the samples in the well displays fluorescence of the spores and this confirms the relatively low maturities encountered at a depth of 4600 m.



III.3. Biological markers.

Epimerisation and isomerisation of steranes and pentacyclic triterpanes give good estimates of the thermal maturity in sediments that have not been contaminated by migrated hydrocarbons.

The calculated Sterane biomarker ratios are listed in Table III.3.1, and the epimerisation and isomerisation of regular C_{29} steranes are plotted versus depth in Fig. III.3.1.

The epimerisation of $\alpha\alpha\alpha$ - C_{29} steranes (%20S) varies from 28% of the thermodynamically stable 20S epimer at 3105 m (shale) to 57% at 4653.7m which is close to the equilibrium value for this reaction. A number of the samples contaminated by migrated hydrocarbons display a high 20S value indicating that these hydrocarbons have been generated from more mature source rocks.

The isomerisation of C_{29} -steranes (% $\alpha\beta\beta$) varies from 30% at 3105 m to 63% at 4660.0 m. The equilibrium value for this reaction is close to 60%.

The calculated Triterpane biomarker ratios are listed in Table III.3.2.

The ratio of T_s/T_m is affected by both input of organic matter and maturity. In well 2/12-1 this ratio varies from 0.32 at 2955 m to 3.1 at 4633.60 m and shows a general increase with depth. The epimerisation around C_{22} have reached equilibrium in all the samples except at 3105 m clearly indicating the low maturity at this depth.

The biomarkers agree very well with the vitrinite reflectance data where one expects the % $\alpha\beta\beta$ to reach equilibrium between 0.6% and 0.7% vitrinite reflectance.



IV. SUMMARY

The Jurassic and deeper sediments have been evaluated for source rock potential and the Upper Jurassic can be divided into five organic facies with varying contents and types of organic matter:

- 1.(3988-3997m) Good source potential, average TOC=3.2%.
- 2.(3997-4235m) Fair/good source potential, average TOC=2.3%
- 3.(4235-4330m) Excellent source potential, average TOC=5.4%
- 4.(4330-4610m) Fair/godd source potential,average TOC=2.4%
- 5.(4610-4672m) Interbedded coal/shale have good potential, sand-stones have no source potential.

The Jurassic part of well 2/12-1 is marginally mature with respct to oil generation with a vitrinite reflectance of 0.61% in the bottom part of the Jurassic section.

The results from the vitrinite reflectance correlates very well with other maturity parameters such as biological markers and spore fluorescence



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Fig. I.1

Well location map.

STRUCTURAL MAP

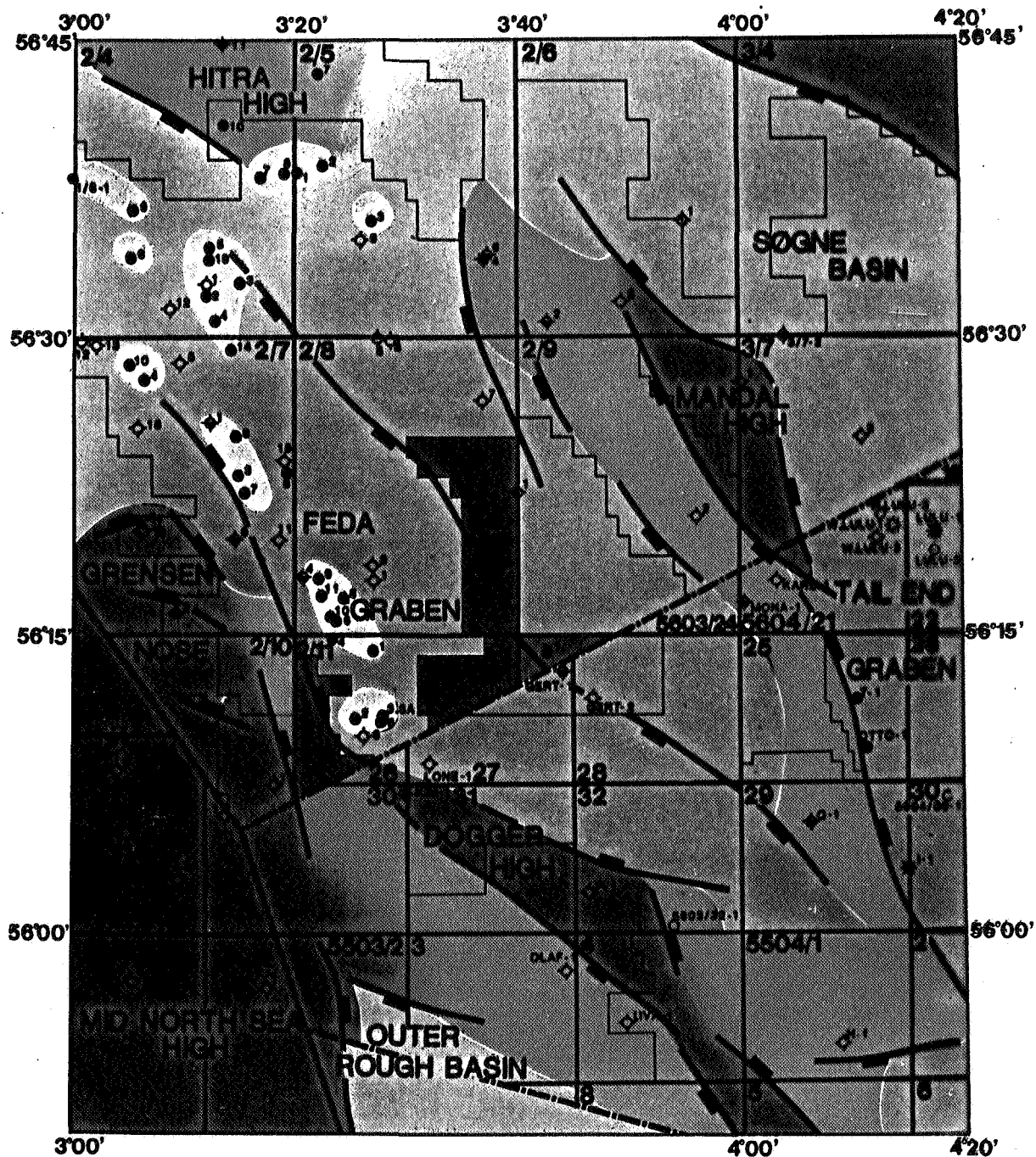


Fig. 1.2

Summary of source rock evaluation.

SOURCE ROCK SUMMARY WELL: 2/12-1

<i>DEPTH (M)</i>	<i>SOURCE POTENTIAL</i>	<i>KEROGEN TYPE</i>	<i>MATURITY</i>
<i>3988</i>	<i>GOOD</i>	<i>II/III</i>	<i>MARGINALLY MATURE</i>
<i>3997</i>	<i>FAIR/GOOD</i>	<i>III</i>	
<i>4235</i>	<i>EXCELLENT</i>	<i>II</i>	
<i>4330</i>	<i>FAIR/GOOD</i>	<i>III</i>	<i>MATURE</i>
<i>4610</i>	<i>POOR/ EXCELLENT</i>	<i>VARYING</i>	
<i>4672</i>	<i>FAIR</i>	<i>III</i>	
<i>4707</i>			

Fig. II.1.1

Results from OilShow Analysis versus depth.

~~NORSK HYDRO~~

Well : NORSE HYDRO 2/12-1

GEOCHEMICAL EVALUATION LOG

GENERAL DATA

Data Range : 3977 m to 4707 m

Plot Prepared on : 22 Dec 1986

Plot Scale : 1 to 5000

Exlog Laboratory : UNIT 505

Plot Prepared By :

Analysis : Oil Show Analyser

[illegible]

Fig. II.2.1

EOM plotted versus depth.

WELL: 2/12-1

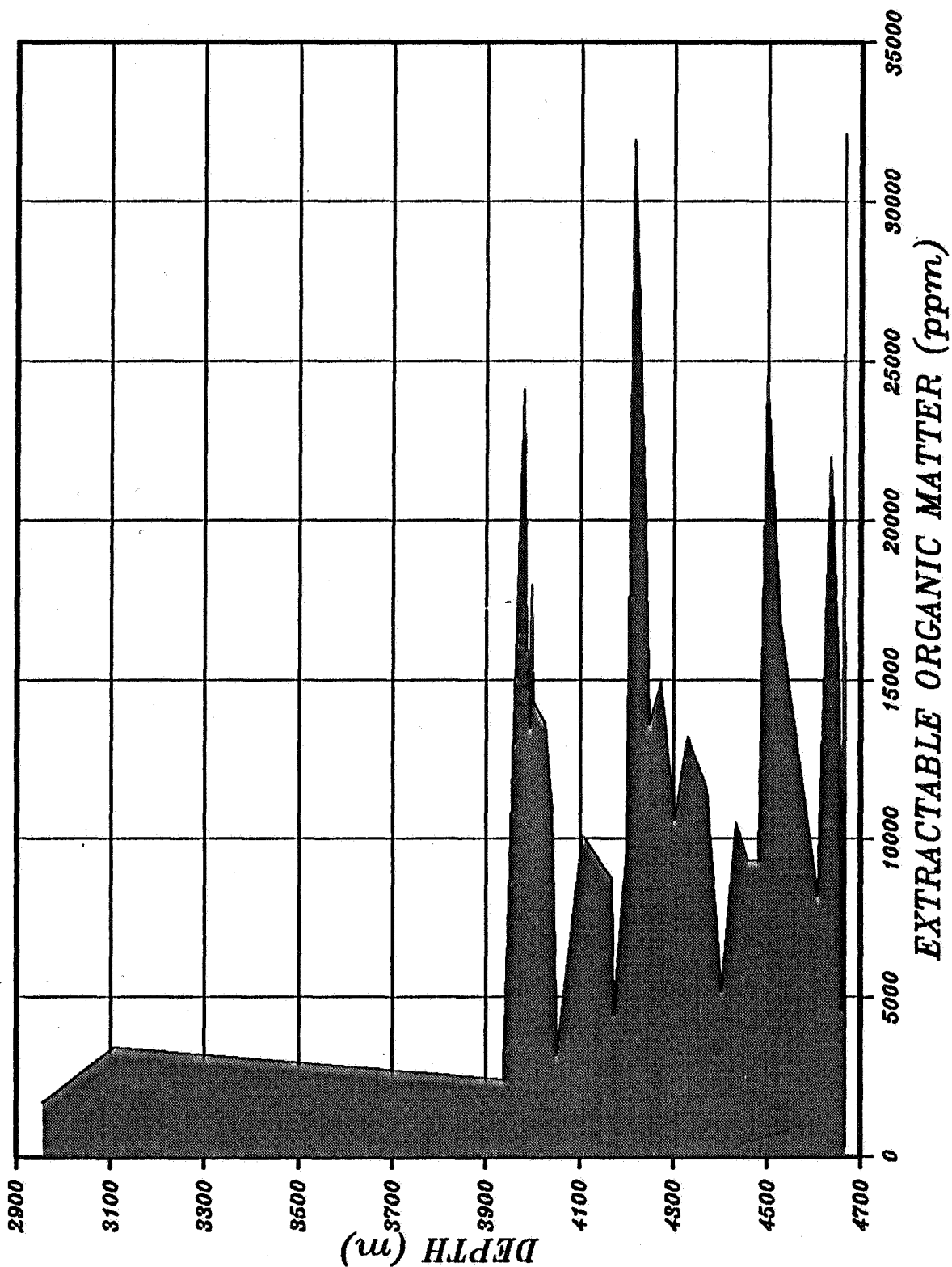
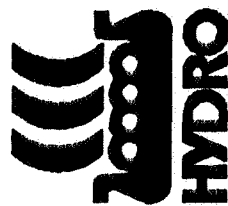


Fig. II.2.2

Gross composition of extracts.

WELL: 2/12-1

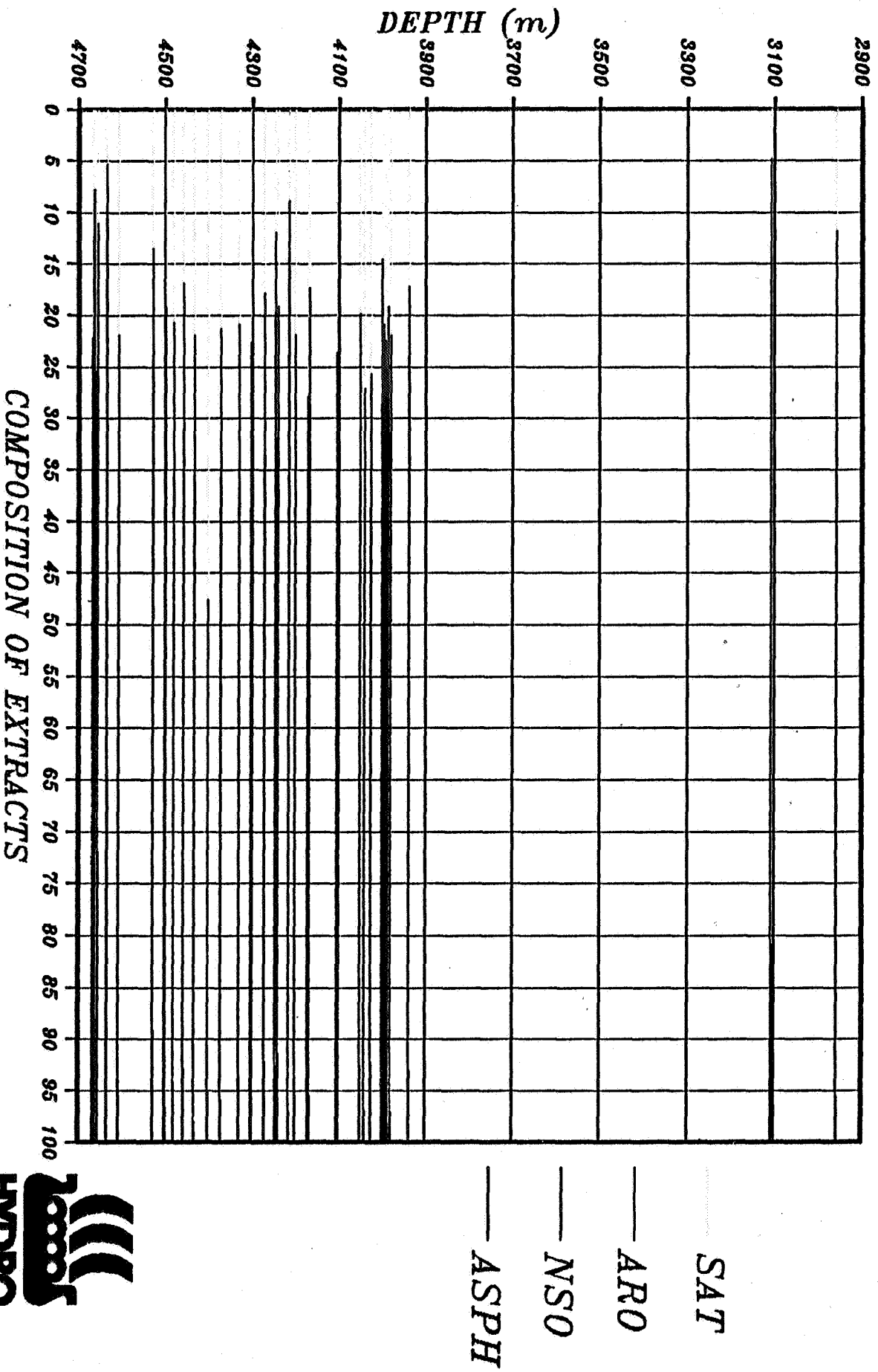


Fig. II.2.3

EOM/TOC plotted versus depth.

WELL: 2/12-1

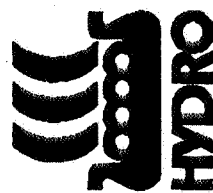
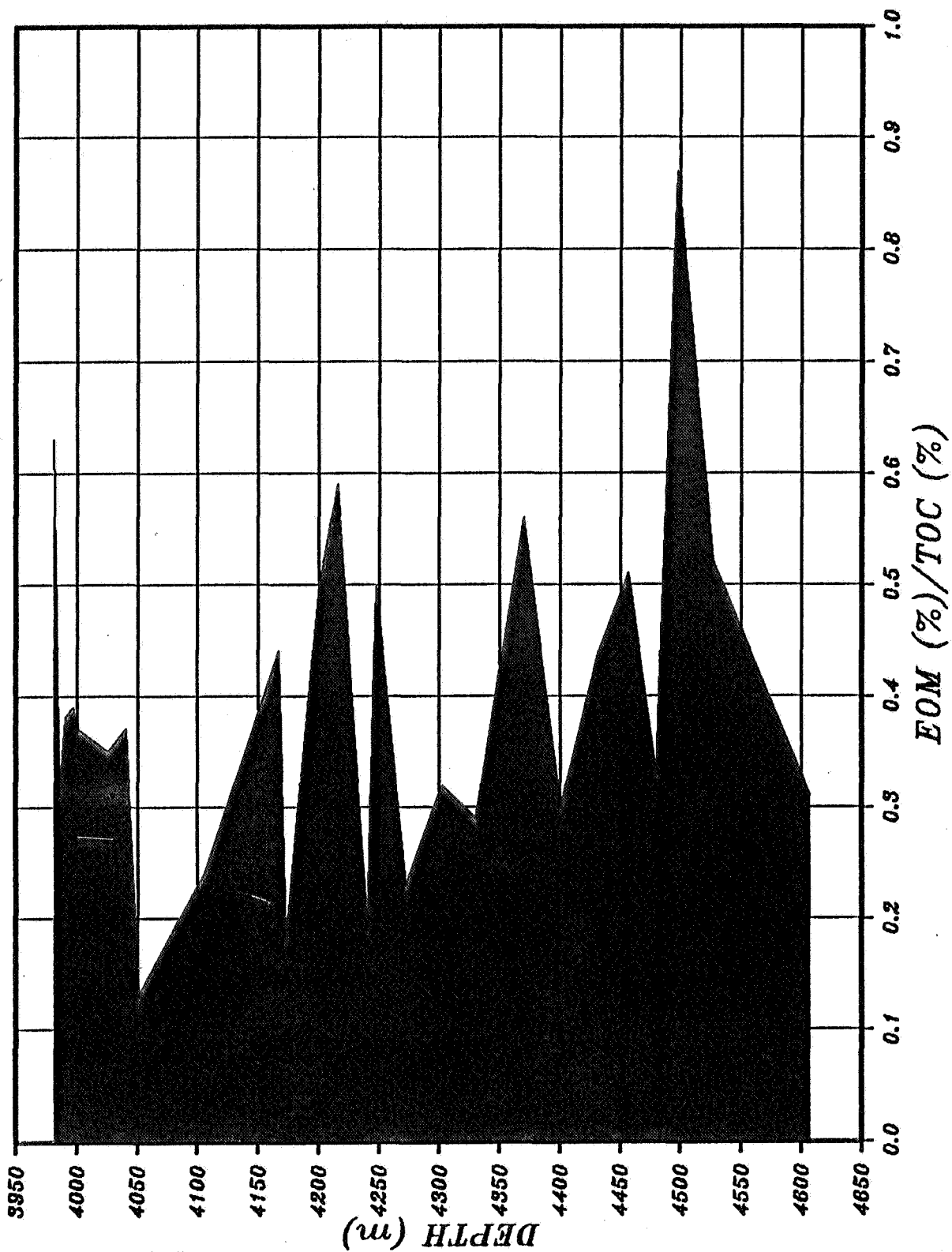


Fig. II.6.1

Xylene/n-octene ratios versus depth.

PY-GC DATA WELL 2/12-1

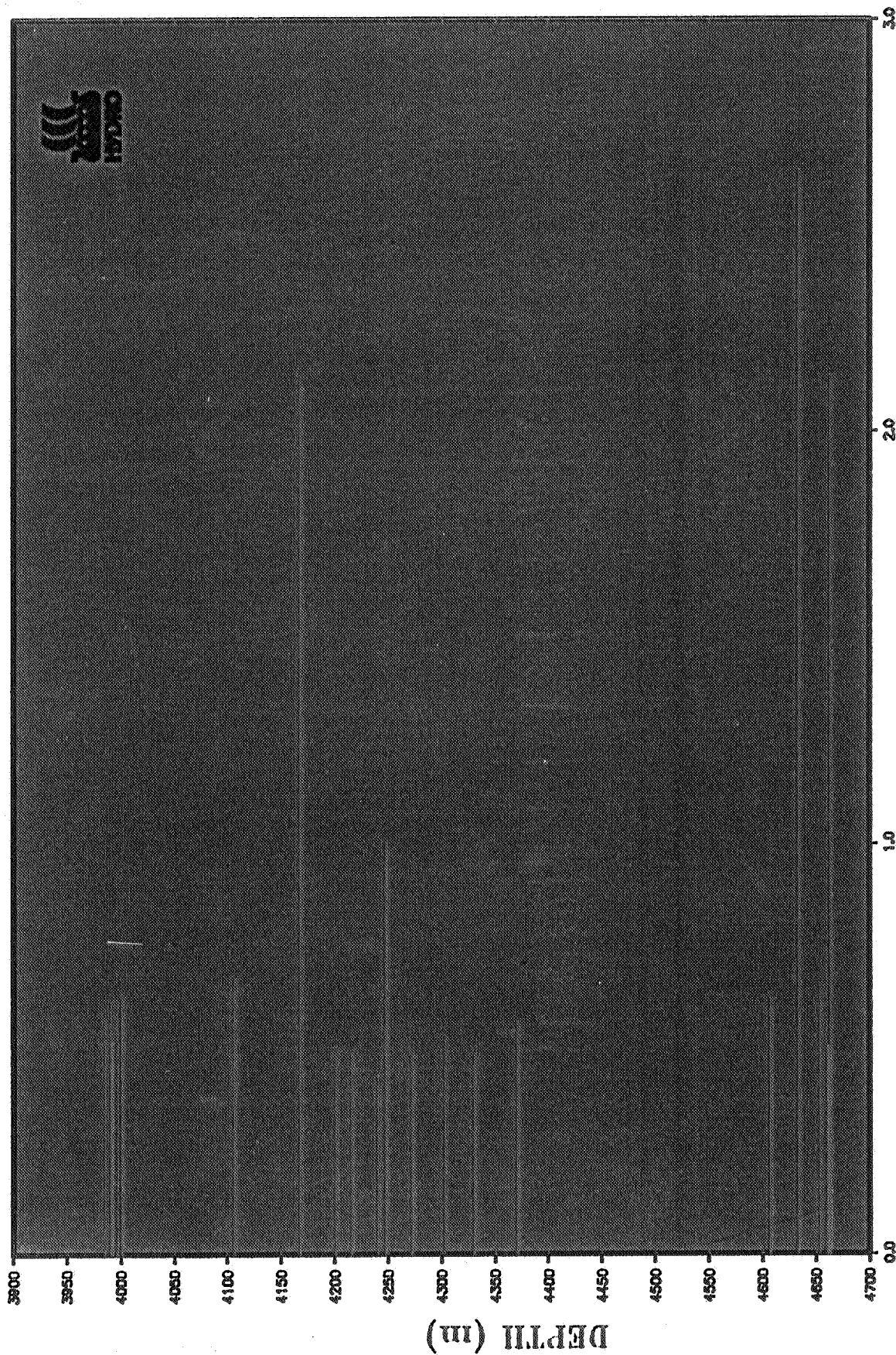
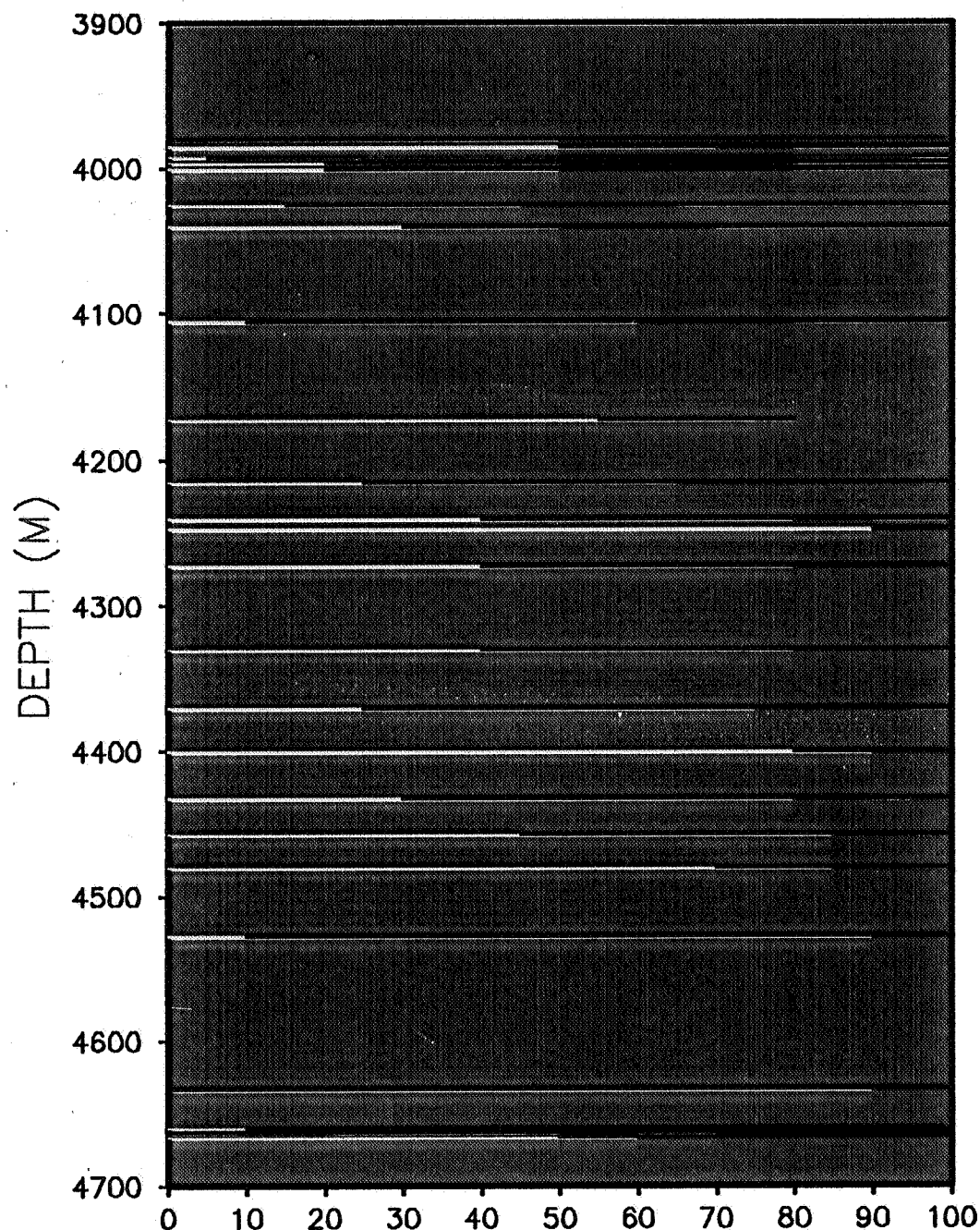


Fig. II.7.1

Visual Kerogen Analysis.

KEROGEN COMPOSITION

WELL: 2/12-1



WOODY

INERTINITE

PALYNOMORPHS



Fig. III.1.1

Vitrinite Reflectance versus depth.

VITRINITE REFLECTANCE WELL 2/12-1

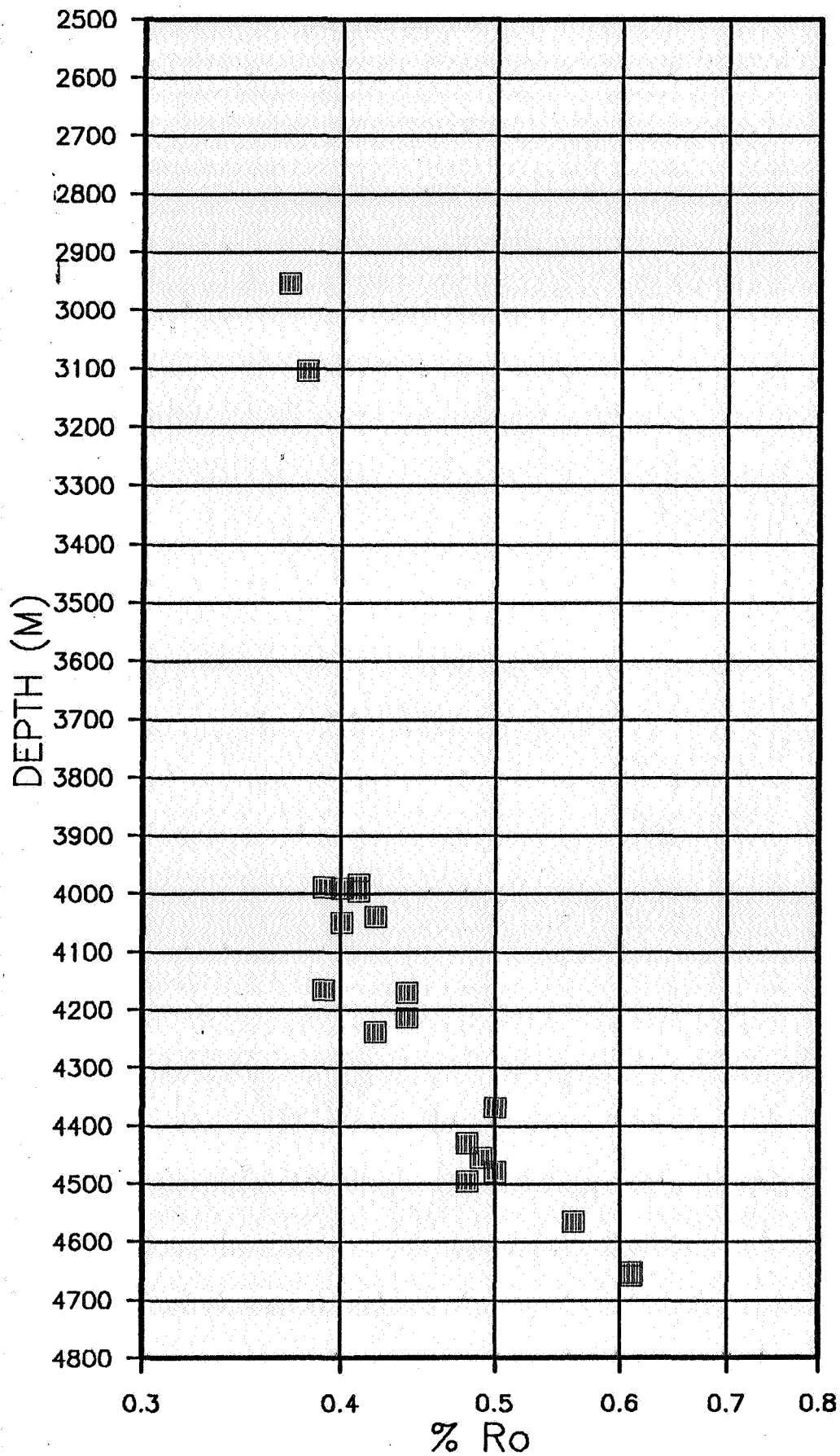


Fig. III.3.1

Isomerisation of steranes versus depth.

STERANE ISOMERISATION

WELL: 2/12-1

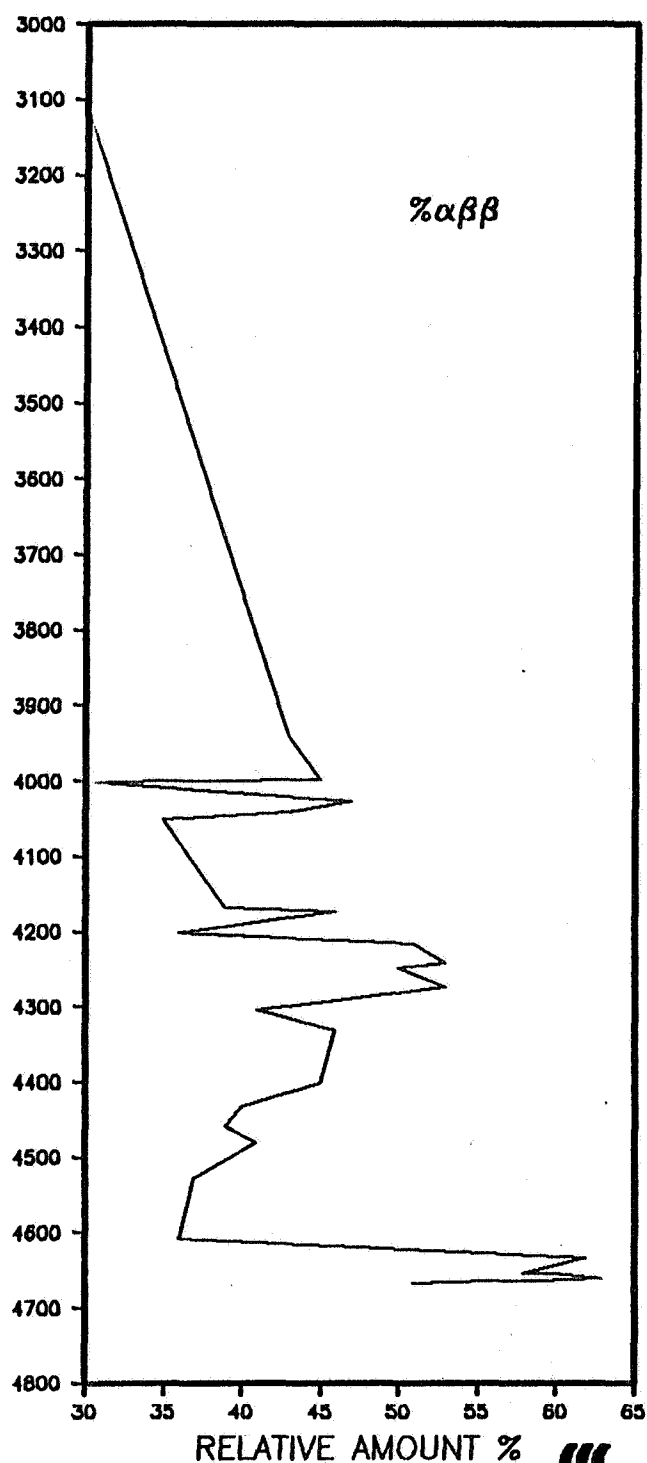
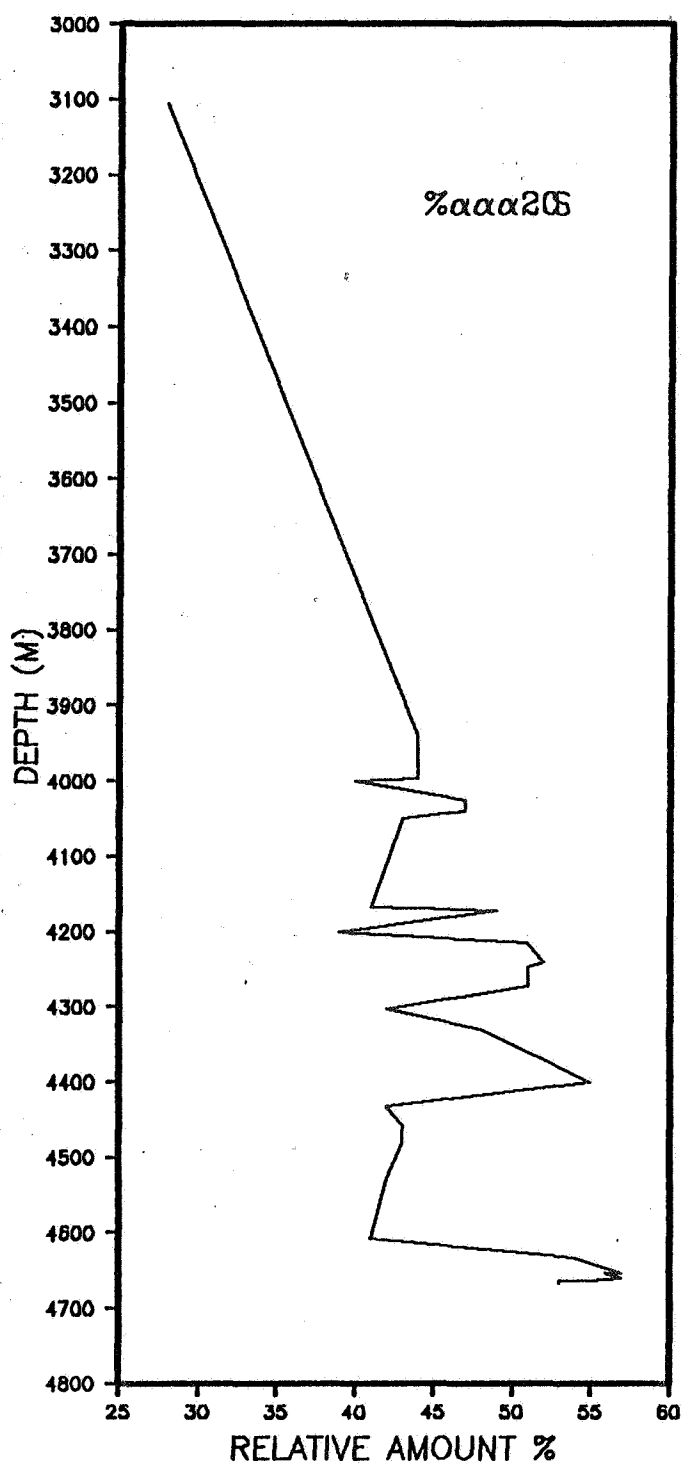


Table I.1

Samples selected for geochemical analysis

===== LITOLGY REPORT ON WELL 2/12-1										===== LISTED 29/04/87 12:45:02 =====				PAGE	1
DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL		GEOLOGICAL		GEOLOGICAL		FORMATION			
START	END	CODE	COMPANY	% SAMPLE	LITH.	PERIOD	EPOCH	AGE		GROUP/LOCAL		FORM./LOCAL			
2952.0	2955.0	DC	GEOLABNO	95	SH/CLYST	TERTIARY									
3102.0	3105.0	DC	GEOLABNO	60	CALC. CLYST	TERTIARY						ROGALAND		MAUREEN EQ.	
3102.0	3105.0	DC	GEOLABNO	40	SH/CLYST	TERTIARY						ROGALAND		MAUREEN EQ.	
3935.0	3937.0	DC	GEOLABNO	40	SH/CLYST	CRETACEOUS						CROMER KNOLL		R\DBY	
3935.0	3937.0	DC	GEOLABNO	50	SH/CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3975.0	3977.0	DC	EXLOG	80	MRL	CRETACEOUS						CROMER KNOLL		UTVIK	
3977.0	3980.0	DC	EXLOG	10	CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3980.0	3980.0	SWC	EXLOG	100	CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3980.0	3980.0	SWC	GEOLABNO	100	SH/CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3980.0	3982.0	DC	EXLOG	40	CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3980.0	3982.0	DC	EXLOG	20	LST	CRETACEOUS						CROMER KNOLL		UTVIK	
3982.0	3985.0	DC	EXLOG	80	CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3982.0	3985.0	DC	EXLOG	10	MRL	CRETACEOUS						CROMER KNOLL		UTVIK	
3985.0	3985.0	SWC	EXLOG	100	CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3985.0	3985.0	SWC	GEOLABNO	100	SH/CLYST	CRETACEOUS						CROMER KNOLL		UTVIK	
3990.0	3990.0	SWC	EXLOG	100	CLYST	JURASSIC								FARSUND	
3990.0	3990.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC								FARSUND	
3990.0	3992.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
3992.0	3992.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC								FARSUND	
3992.0	3995.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
3995.0	3997.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
3996.0	3996.0	SWC	EXLOG	100	SH	JURASSIC								FARSUND	
3996.0	3996.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC								FARSUND	
3997.0	4000.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4000.0	4000.0	SWC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4000.0	4000.0	SWC	GEOLABNO	90	SH/CLYST	JURASSIC								FARSUND	
4000.0	4002.0	DC	EXLOG	90	MRL	JURASSIC								FARSUND	
4002.0	4005.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4005.0	4007.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4007.0	4010.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4010.0	4012.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4012.0	4015.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4015.0	4017.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4017.0	4018.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4018.0	4020.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4020.0	4023.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4023.0	4025.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4025.0	4025.0	SWC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4025.0	4025.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC								FARSUND	
4025.0	4027.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4027.0	4030.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4030.0	4032.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4032.0	4035.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4035.0	4038.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4038.0	4040.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4040.0	4040.0	SWC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4040.0	4040.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC								FARSUND	
4040.0	4042.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4042.0	4045.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4045.0	4047.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4047.0	4050.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4050.0	4050.0	SWC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4050.0	4050.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC								FARSUND	
4050.0	4052.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	
4052.0	4055.0	DC	EXLOG	100	CLYST	JURASSIC								FARSUND	



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DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL PERIOD	GEOLOGICAL EPOCH	GEOLOGICAL AGE	FORMATION						
START	END	CODE	COMPANY	%	SAMPLE LITH.				GROUP/LOCAL	FORM./LOCAL					
=====															
4055.0	4057.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4057.0	4060.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4060.0	4062.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4062.0	4065.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4065.0	4067.0	DC	EXLOG	100	DOL	JURASSIC		VOLGIAN	TYNE	FARSUND					
4065.0	4067.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4067.0	4070.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4070.0	4072.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4072.0	4075.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4075.0	4077.0	DC	EXLOG	90	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4075.0	4077.0	DC	EXLOG	10	SST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4075.0	4167.0	DC	GEOLABNO	90	SH/CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4077.0	4080.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4080.0	4082.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4082.0	4085.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4085.0	4087.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4087.0	4090.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4090.0	4092.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4092.0	4095.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4092.0	4095.0	DC	EXLOG		SST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4095.0	4097.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4097.0	4100.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4100.0	4102.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4102.0	4105.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4105.0	4105.0	SWC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4105.0	4105.0	SWC	GEOLABNO	100	SH/CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4105.0	4107.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4107.0	4110.0	DC	EXLOG	50	MRL	JURASSIC		VOLGIAN	TYNE	FARSUND					
4110.0	4112.0	DC	EXLOG	80	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4112.0	4115.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4115.0	4117.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4117.0	4120.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4120.0	4122.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4122.0	4125.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4125.0	4127.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4127.0	4128.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4128.0	4130.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4130.0	4132.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4132.0	4135.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4135.0	4137.0	DC	EXLOG	60	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4137.0	4140.0	DC	EXLOG	90	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4140.0	4142.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4142.0	4145.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4145.0	4147.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4147.0	4150.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4150.0	4152.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4152.0	4155.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4155.0	4157.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4157.0	4160.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4160.0	4162.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4162.0	4165.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4165.0	4167.0	DC	EXLOG	80	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4167.0	4170.0	DC	EXLOG	40	LST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4170.0	4172.0	DC	EXLOG	60	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4172.0	4172.0	SWC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND					
4172.0	4172.0	SWC	GEOLABNO	100	SLST	JURASSIC		VOLGIAN	TYNE	FARSUND					



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DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL PERIOD	GEOLOGICAL		FORMATION	
START	END	CODE	COMPANY	% SAMPLE	LITH.		EPOCH	AGE	GROUP/LOCAL	FORM./LOCAL
4172.0	4175.0	DC	EXLOG	70	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4175.0	4178.0	DC	EXLOG	70	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4178.0	4180.0	DC	EXLOG	80	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4180.0	4182.0	DC	EXLOG	90	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4182.0	4185.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4185.0	4187.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4187.0	4190.0	DC	EXLOG	60	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4190.0	4192.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4192.0	4195.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4195.0	4197.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4197.0	4200.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4197.0	4200.0	DC	GEOLABNO	90	SH/CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4200.0	4202.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4202.0	4205.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4205.0	4207.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4207.0	4210.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4210.0	4212.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4212.0	4215.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4215.0	4215.0	SWC	EXLOG	100	SH	JURASSIC		VOLGIAN	TYNE	FARSUND
4215.0	4215.0	SWC	GEOLABNO	100	SLST	JURASSIC		VOLGIAN	TYNE	FARSUND
4215.0	4217.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4217.0	4220.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4220.0	4222.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4222.0	4225.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4225.0	4227.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4227.0	4230.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4230.0	4232.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4232.0	4235.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4235.0	4237.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4237.0	4240.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4240.0	4240.0	SWC	EXLOG	100	SH	JURASSIC		VOLGIAN	TYNE	FARSUND
4240.0	4240.0	SWC	GEOLABNO	100	SLST	JURASSIC		VOLGIAN	TYNE	FARSUND
4240.0	4242.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4242.0	4245.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4245.0	4247.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4247.0	4247.0	SWC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4247.0	4247.0	SWC	GEOLABNO	100	CALC. CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4247.0	4250.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4250.0	4252.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4252.0	4255.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4255.0	4257.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4257.0	4260.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4260.0	4262.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4262.0	4265.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4265.0	4267.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4267.0	4270.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4270.0	4272.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4270.0	4272.0	DC	GEOLABNO	100	SH/CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4272.0	4275.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4275.0	4277.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4277.0	4280.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4280.0	4282.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4282.0	4285.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4285.0	4287.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4287.0	4290.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND
4290.0	4292.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND



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DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL PERIOD	GEOLOGICAL EPOCH	GEOLOGICAL AGE	FORMATION			
START	END	CODE	COMPANY	%	SAMPLE LITH.				GROUP/LOCAL	FORM./LOCAL		
4292.0	4295.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4295.0	4297.0	DC	EXLOG	90	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4297.0	4300.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4300.0	4302.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4300.0	4302.0	DC	GEOLABNO	100	SH/CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4302.0	4305.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4305.0	4307.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4307.0	4310.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4310.0	4312.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4312.0	4315.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4315.0	4317.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4317.0	4320.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4320.0	4322.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4322.0	4325.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4325.0	4327.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4327.0	4330.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4327.0	4330.0	DC	GEOLABNO	100	SH/CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4330.0	4332.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4332.0	4335.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4335.0	4337.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4337.0	4340.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4340.0	4342.0	DC	EXLOG	100	CLYST	JURASSIC		VOLGIAN	TYNE	FARSUND		
4342.0	4345.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4345.0	4347.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4347.0	4350.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4350.0	4352.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4352.0	4355.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4355.0	4357.0	DC	EXLOG	70	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4357.0	4360.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4360.0	4362.0	DC	EXLOG	70	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4362.0	4365.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4365.0	4367.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	FARSUND		
4367.0	4370.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4367.0	4370.0	DC	GEOLABNO	50	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4370.0	4372.0	DC	EXLOG	60	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4372.0	4375.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4375.0	4377.0	DC	EXLOG	40	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4377.0	4380.0	DC	EXLOG	40	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4380.0	4380.0	SWC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4380.0	4382.0	DC	EXLOG	30	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4382.0	4385.0	DC	EXLOG	40	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4385.0	4387.0	DC	EXLOG	40	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4387.0	4390.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4390.0	4392.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4392.0	4395.0	DC	EXLOG	40	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4395.0	4397.0	DC	EXLOG	60	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4397.0	4400.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4397.0	4400.0	DC	GEOLABNO	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4400.0	4402.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4402.0	4405.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4405.0	4407.0	DC	EXLOG	30	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4407.0	4410.0	DC	EXLOG	30	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4410.0	4412.0	DC	EXLOG	40	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4412.0	4415.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4415.0	4417.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		
4417.0	4420.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND		



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DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL PERIOD	GEOLOGICAL EPOCH	GEOLOGICAL AGE	FORMATION		FORM./LOCAL				
START	END	CODE	COMPANY	%	SAMPLE LITH.				GROUP/LOCAL						
4420.0	4422.0	DC	EXLOG	50	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4422.0	4425.0	DC	EXLOG	60	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4425.0	4427.0	DC	EXLOG	60	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4427.0	4430.0	DC	EXLOG	70	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4430.0	4432.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4430.0	4432.0	DC	GEOLABNO	90	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4432.0	4435.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4435.0	4437.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4437.0	4440.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4440.0	4442.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4442.0	4445.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4445.0	4447.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4447.0	4450.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4450.0	4452.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4452.0	4455.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4455.0	4457.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4455.0	4457.0	DC	GEOLABNO	50	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4457.0	4460.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4460.0	4462.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4462.0	4465.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4465.0	4467.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4467.0	4470.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4470.0	4470.0	SWC	EXLOG	100	LST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4470.0	4472.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4472.0	4475.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4475.0	4477.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4477.0	4480.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4477.0	4480.0	DC	GEOLABNO	90	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4480.0	4482.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4482.0	4485.0	DC	EXLOG	40	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4485.0	4487.0	DC	EXLOG	30	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4487.0	4490.0	DC	EXLOG	20	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4490.0	4492.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4492.0	4495.0	DC	EXLOG	60	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4495.0	4497.0	DC	EXLOG	60	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4495.0	4497.0	DC	GEOLABNO	90	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4497.0	4500.0	DC	EXLOG	60	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4500.0	4502.0	DC	EXLOG	70	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4502.0	4505.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4505.0	4507.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4507.0	4510.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4510.0	4512.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4512.0	4515.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4515.0	4517.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4517.0	4520.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4520.0	4522.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4522.0	4525.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4525.0	4527.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4525.0	4527.0	DC	GEOLABNO	40	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4527.0	4530.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4530.0	4532.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4532.0	4535.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4535.0	4537.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4537.0	4540.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4540.0	4542.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					
4542.0	4545.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND					



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DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL	GEOLOGICAL	GEOLOGICAL	FORMATION	
START	END	CODE	COMPANY	%	SAMPLE LITH.	PERIOD	EPOCH	AGE	GROUP/LOCAL	FORM./LOCAL
4545.0	4547.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4547.0	4550.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4550.0	4552.0	DC	EXLOG	100	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4552.0	4555.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4555.0	4557.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4557.0	4560.0	DC	EXLOG	90	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4560.0	4562.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4562.0	4565.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4565.0	4567.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4565.0	4607.0	DC	GEOLABNO	70	SH/CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4567.0	4570.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4570.0	4572.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4572.0	4575.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4575.0	4577.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4577.0	4580.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4580.0	4582.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4582.0	4585.0	DC	EXLOG	40	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4585.0	4587.0	DC	EXLOG	30	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4587.0	4590.0	DC	EXLOG	20	SLST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4590.0	4592.0	DC	EXLOG	40	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4592.0	4595.0	DC	EXLOG	50	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4595.0	4597.0	DC	EXLOG	30	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4597.0	4600.0	DC	EXLOG	70	CLYST	JURASSIC		KIMMERIDGIAN	TYNE	HAUGESUND
4600.0	4602.0	DC	EXLOG	70	CLYST	JURASSIC		KIMMERIDGIAN	VESTLAND	SAND UNIT
4602.0	4605.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	VESTLAND	SAND UNIT
4605.0	4607.0	DC	EXLOG	80	CLYST	JURASSIC		KIMMERIDGIAN	VESTLAND	SAND UNIT
4607.0	4610.0	DC	EXLOG	10	CLYST	JURASSIC		KIMMERIDGIAN	VESTLAND	SAND UNIT
4610.0	4612.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4612.0	4615.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4615.0	4617.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4617.0	4620.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4620.0	4622.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4622.0	4625.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4625.0	4627.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4627.0	4630.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4628.0	4628.0	SWC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4630.0	4632.0	DC	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4633.6	4633.6	CORE	GEOLABNO	100	SLST/COAL	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4634.8	4634.8	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4636.9	4636.9	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4639.0	4639.0	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4639.8	4639.8	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4642.0	4642.0	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4643.7	4643.7	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4645.2	4645.2	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4646.8	4646.8	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4648.8	4648.8	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4649.5	4649.5	CORE	EXLOG	100	COAL	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4650.2	4650.2	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4652.7	4652.7	CORE	EXLOG	100	COAL	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4653.7	4653.7	CORE	GEOLABNO	100	SLST/COAL	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4655.4	4655.4	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4657.4	4657.4	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4658.3	4658.3	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4660.0	4660.0	CORE	GEOLABNO	100	SLST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT
4662.0	4662.0	CORE	EXLOG	100	SST	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT



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DEPTH (M)		SAMPLE		LITHOLOGY		GEOLOGICAL	GEOLOGICAL	GEOLOGICAL	FORMATION		
START	END	CODE	COMPANY	%	SAMPLE LITH.	PERIOD	EPOCH	AGE	GROUP/LOCAL	FORM./LOCAL	
4663.3	4663.3	CORE	GEOLABNO	100	COAL	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4663.4	4663.4	CORE	EXLOG	100	COAL	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4663.7	4663.7	CORE	EXLOG	100	SH	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4664.8	4664.8	CORE	EXLOG	100	SH	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4666.2	4666.2	CORE	GEOLABNO	100	COAL/SH	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4666.4	4666.4	CORE	EXLOG	100	SH	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4667.1	4667.1	CORE	EXLOG	100	SH	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4669.5	4669.5	CORE	EXLOG	100	SH	JURASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4672.0	4675.0	DC	EXLOG	90	LST	TRIASSIC		KIMMERIDGE/OXFO	VESTLAND	SAND UNIT	
4672.1	4672.1	CORE	EXLOG	100	SH	TRIASSIC					
4675.0	4677.0	DC	EXLOG	90	LST	PERMIAN			ZECHSTEIN		
4677.0	4680.0	DC	EXLOG	100	DOL	PERMIAN			ZECHSTEIN		
4680.0	4682.0	DC	EXLOG	100	DOL	PERMIAN			ZECHSTEIN		
4682.0	4685.0	DC	EXLOG	90	CLYST	PERMIAN			ZECHSTEIN		
4685.0	4687.0	DC	EXLOG	60	CLYST	PERMIAN			ZECHSTEIN		
4687.0	4690.0	DC	EXLOG	40	CLYST	PERMIAN			ROTLIEGENDES		
4690.0	4692.0	DC	EXLOG	40	CLYST	PERMIAN			ROTLIEGENDES		
4692.0	4695.0	DC	EXLOG	40	CLYST	PERMIAN			ROTLIEGENDES		
4695.0	4697.0	DC	EXLOG	30	CLYST	PERMIAN			ROTLIEGENDES		
4697.0	4697.0	SWC	EXLOG	100	CLYST	PERMIAN			ROTLIEGENDES		
4697.0	4700.0	DC	EXLOG	20	CLYST	PERMIAN			ROTLIEGENDES		
4700.0	4702.0	DC	EXLOG	20	CLYST	PERMIAN			ROTLIEGENDES		
4702.0	4705.0	DC	EXLOG	100	SST	PERMIAN			ROTLIEGENDES		
4705.0	4707.0	DC	EXLOG	100	SST	PERMIAN			ROTLIEGENDES		
4707.0	4707.0	SWC	EXLOG	100	SST	PERMIAN			ROTLIEGENDES		



Table II.1.1

Results from OilShow Analysis.

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1

Depth (m)	Group/Fm	% Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
2955.00		95 SH/CLYST	DC	0.4	0.6	1.3	0.7	98.5	192.4	0.36	426	GEOLABNOR
3105.00	MAUREEN EQ.	60 CALC.CLYST	DC	0.2	0.1	1.5	0.2	72.2	844.4	0.54	408	GEOLABNOR
3105.00	MAUREEN EQ.	40 SH/CLYST	DC	0.5	0.7	1.1	0.7	98.6	150.0	0.40	426	GEOLABNOR
3937.00	RØDBY	40 SH/CLYST	DC	0.4	0.3	1.0	1.0	33.0	93.2	0.53	426	GEOLABNOR
3937.00	RØDBY	50 SH/CLYST	DC	0.3	0.3	0.9	0.4	61.0	222.0	0.57	405	GEOLABNOR
3977.00	UTVIK	80 MRL	DC	21.3	7.6		3.3	227.5		0.74		EXLOG
3980.00	UTVIK	10 CLYST	DC	4.0	2.1		2.2	95.8		0.66	424	EXLOG
3980.00	UTVIK	100 CLYST	SWC	9.4	6.6		3.8	170.1		0.59	435	EXLOG
3982.00	UTVIK	40 CLYST	DC	30.3	10.4		4.3	241.2		0.74	433	EXLOG
3982.00	UTVIK	20 LST	DC	1.1	0.6		0.6	91.8		0.67	430	EXLOG
3985.00	UTVIK	80 CLYST	DC	9.6	14.9		4.2	353.9		0.39	433	EXLOG
3985.00	UTVIK	100 CLYST	SWC	8.4	15.8		5.1	309.6		0.35	437	EXLOG
3985.00	UTVIK	10 MRL	DC	1.6	0.6		0.8	74.1		0.73	421	EXLOG
3990.00	FARSUND	100 CLYST	SWC	8.4	15.8		4.2	381.2		0.35	432	EXLOG
3992.00	FARSUND	100 CLYST	DC	8.4	7.9		2.5	321.5		0.51	441	EXLOG
3995.00	FARSUND	100 CLYST	DC	9.0	6.4		2.2	291.9		0.58	440	EXLOG
3996.00	FARSUND	100 SH	SWC	8.1	13.4		4.6	293.4		0.38	436	EXLOG
3997.00	FARSUND	100 CLYST	DC	8.3	5.5		2.3	240.2		0.60	440	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4000.00	FARSUND	100	CLYST	DC	6.3	8.4		2.8	293.3		0.43	439	EXLOG
4000.00	FARSUND	100	CLYST	SWC	6.3	13.5		3.9	346.0		0.32	434	EXLOG
4002.00	FARSUND	90	MRL	DC	5.6	5.0		2.3	218.9		0.53	438	EXLOG
4005.00	FARSUND	100	CLYST	DC	6.8	5.6		2.2	252.0		0.55	441	EXLOG
4007.00	FARSUND	100	CLYST	DC	6.2	5.2		2.1	250.0		0.54	439	EXLOG
4010.00	FARSUND	100	CLYST	DC	5.3	4.1		2.0	204.5		0.56	438	EXLOG
4012.00	FARSUND	100	CLYST	DC	5.4	5.8		2.2	267.1		0.48	440	EXLOG
4015.00	FARSUND	100	CLYST	DC	5.6	6.1		2.1	294.2		0.48	443	EXLOG
4017.00	FARSUND	100	CLYST	DC	1.1	6.3		2.3	267.5		0.16	438	EXLOG
4018.00	FARSUND	100	CLYST	DC	5.7	10.5		3.3	315.0		0.35		EXLOG
4020.00	FARSUND	100	CLYST	DC	5.6	6.1		2.7	224.8		0.48	439	EXLOG
4023.00	FARSUND	100	CLYST	DC	9.0	17.4		4.7	368.2		0.34		EXLOG
4025.00	FARSUND	100	CLYST	DC	6.9	5.7		2.1	271.6		0.55	442	EXLOG
4025.00	FARSUND	100	CLYST	SWC	7.3	11.4		3.9	291.3		0.39	437	EXLOG
4027.00	FARSUND	100	CLYST	DC	6.8	5.9		2.2	265.5		0.53	442	EXLOG
4030.00	FARSUND	100	CLYST	DC	6.8	5.6		2.5	225.5		0.55	442	EXLOG
4032.00	FARSUND	100	CLYST	DC	6.3	5.4		2.6	207.3		0.54	440	EXLOG
4035.00	FARSUND	100	CLYST	DC	7.1	4.7		2.3	203.9		0.60	440	EXLOG
4038.00	FARSUND	100	CLYST	DC	6.4	5.4		2.2	241.3		0.54	441	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4040.00	FARSUND	100	CLYST	DC	6.8	6.1		2.9	208.6		0.53	440	EXLOG
4040.00	FARSUND	100	CLYST	SWC	5.6	6.2		3.0	208.4		0.48	432	EXLOG
4042.00	FARSUND	100	CLYST	DC	5.7	5.7		2.2	263.3		0.50	441	EXLOG
4045.00	FARSUND	100	CLYST	DC	5.2	4.8		2.0	239.6		0.52	438	EXLOG
4047.00	FARSUND	100	CLYST	DC	4.3	3.5		1.9	182.2		0.55	437	EXLOG
4050.00	FARSUND	100	CLYST	DC	4.3	3.5		1.6	220.3		0.55	437	EXLOG
4050.00	FARSUND	100	CLYST	SWC	2.2	4.5		2.4	186.7		0.33	434	EXLOG
4052.00	FARSUND	100	CLYST	DC	5.2	4.4		2.1	211.4		0.54	437	EXLOG
4055.00	FARSUND	100	CLYST	DC	5.9	4.3		1.9	225.4		0.58	439	EXLOG
4057.00	FARSUND	100	CLYST	DC	5.9	3.6		1.3	279.7		0.62	438	EXLOG
4060.00	FARSUND	100	CLYST	DC	6.2	3.3		1.2	284.6		0.65	437	EXLOG
4062.00	FARSUND	100	CLYST	DC	5.1	3.5		1.4	241.0		0.60	440	EXLOG
4065.00	FARSUND	100	CLYST	DC	4.6	3.3		1.3	260.0		0.59	439	EXLOG
4067.00	FARSUND	100	DOL	DC	1.9	0.4		0.4	100.0		0.81	440	EXLOG
4067.01	FARSUND	100	CLYST	DC	2.2	5.4		1.2	441.5		0.29	439	EXLOG
4070.00	FARSUND	100	CLYST	DC	4.5	4.0		1.8	229.1		0.53	441	EXLOG
4072.00	FARSUND	100	CLYST	DC	4.7	3.9		1.8	216.8		0.55	433	EXLOG
4075.00	FARSUND	100	CLYST	DC	5.5	2.9		1.4	207.1		0.65	439	EXLOG
4077.00	FARSUND	90	CLYST	DC	4.1	2.7		1.7	163.1		0.60	440	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4077.00	FARSUND	10	SST	DC	11.3	3.0		1.4	209.9		0.79		EXLOG
4080.00	FARSUND	100	CLYST	DC	5.2	4.5		1.4	314.7		0.54	441	EXLOG
4082.00	FARSUND	100	CLYST	DC	8.1	7.6		2.2	339.9		0.52	441	EXLOG
4085.00	FARSUND	100	CLYST	DC	7.8	8.7		3.2	274.8		0.47	439	EXLOG
4087.00	FARSUND	100	CLYST	DC	7.5	8.1		2.1	383.3		0.48	440	EXLOG
4090.00	FARSUND	100	CLYST	DC	6.2	5.2		2.2	242.8		0.54	439	EXLOG
4092.00	FARSUND	100	CLYST	DC	6.9	8.0		2.2	371.2		0.46	438	EXLOG
4095.00	FARSUND	100	CLYST	DC	6.5	0.5		0.3	147.1		0.93	438	EXLOG
4095.00	FARSUND		SST	DC	12.1	6.0		1.5	411.7		0.67	441	EXLOG
4097.00	FARSUND	100	CLYST	DC	6.7	6.4		1.7	367.2		0.51	440	EXLOG
4100.00	FARSUND	100	CLYST	DC	1.7	1.6		1.3	121.5		0.52	437	EXLOG
4102.00	FARSUND	100	CLYST	DC	8.8	21.8		4.3	504.6		0.29	435	EXLOG
4105.00	FARSUND	100	CLYST	DC	9.1	12.0		3.0	395.0		0.43	431	EXLOG
4105.00	FARSUND	100	CLYST	SWC	6.0	11.9		4.3	278.7		0.34	433	EXLOG
4107.00	FARSUND	100	CLYST	DC	9.5	1.5		1.4	107.4		0.87	438	EXLOG
4110.00	FARSUND	50	MRL	DC	0.9	1.5		1.4	103.6		0.40		EXLOG
4112.00	FARSUND	80	CLYST	DC	6.3	6.9		2.2	311.7		0.47	440	EXLOG
4115.00	FARSUND	100	CLYST	DC	6.4	6.5		1.8	357.7		0.49	440	EXLOG
4117.00	FARSUND	100	CLYST	DC	6.7	7.3		2.3	312.9		0.48	440	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4120.00	FARSUND	100	CLYST	DC	5.4	6.1		2.1	285.8		0.47	443	EXLOG
4122.00	FARSUND	100	CLYST	DC	5.7	6.2		2.0	311.0		0.48	443	EXLOG
4125.00	FARSUND	100	CLYST	DC	5.6	5.8		1.8	323.2		0.49	443	EXLOG
4127.00	FARSUND	100	CLYST	DC	0.7	5.8		1.9	310.8		0.11	440	EXLOG
4128.00	FARSUND	100	CLYST	DC	6.0	9.9		3.2	311.9		0.38		EXLOG
4130.00	FARSUND	100	CLYST	DC	6.3	10.6		3.4	309.6		0.37	435	EXLOG
4132.00	FARSUND	100	CLYST	DC	6.6	12.9		3.7	350.1		0.34	438	EXLOG
4135.00	FARSUND	100	CLYST	DC	4.5	4.1		2.0	207.0		0.52	444	EXLOG
4137.00	FARSUND	60	CLYST	DC	1.7	1.6		1.8	88.3		0.51	439	EXLOG
4140.00	FARSUND	90	CLYST	DC	4.9	6.0		2.0	300.5		0.45	444	EXLOG
4142.00	FARSUND	100	CLYST	DC	5.2	7.3		2.0	357.1		0.42	441	EXLOG
4145.00	FARSUND	100	CLYST	DC	4.2	5.7		1.7	336.5		0.42	445	EXLOG
4147.00	FARSUND	100	CLYST	DC	3.5	5.7		1.9	307.6		0.38	440	EXLOG
4150.00	FARSUND	100	CLYST	DC	4.2	6.5		2.0	321.7		0.39	440	EXLOG
4152.00	FARSUND	100	CLYST	DC	5.5	7.7		2.6	294.3		0.42	442	EXLOG
4155.00	FARSUND	100	CLYST	DC	5.0	8.1		2.6	309.9		0.38	441	EXLOG
4157.00	FARSUND	100	CLYST	DC	3.2	7.1		2.7	267.2		0.31	442	EXLOG
4160.00	FARSUND	100	CLYST	DC	3.8	6.4		2.5	253.2		0.37	443	EXLOG
4162.00	FARSUND	100	CLYST	DC	3.2	3.5		2.0	178.3		0.48	441	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	% Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4165.00	FARSUND	100 CLYST	DC	4.2	3.4		2.0	173.8		0.55	443	EXLOG
4167.00	FARSUND	80 CLYST	DC	4.4	4.6		2.0	229.5		0.49	441	EXLOG
4170.00	FARSUND	40 LST	DC	0.9	1.2		1.3	93.7		0.42		EXLOG
4172.00	FARSUND	60 CLYST	DC	4.7	6.3		2.2	292.1		0.43	444	EXLOG
4172.00	FARSUND	100 CLYST	SWC	2.3	4.7		2.4	191.4		0.33	436	EXLOG
4175.00	FARSUND	70 CLYST	DC	5.6	5.9		2.0	294.1		0.49	443	EXLOG
4178.00	FARSUND	70 CLYST	DC	3.9	2.8		1.8	160.6		0.58	441	EXLOG
4180.00	FARSUND	80 CLYST	DC	5.8	5.1		2.2	236.4		0.53	442	EXLOG
4182.00	FARSUND	90 CLYST	DC	4.9	5.2		1.8	281.4		0.49	446	EXLOG
4185.00	FARSUND	100 CLYST	DC	5.5	6.1		2.3	260.5		0.48	444	EXLOG
4187.00	FARSUND	100 CLYST	DC	4.8	5.6		1.8	315.1		0.46	446	EXLOG
4190.00	FARSUND	60 CLYST	DC	4.9	5.3		2.3	225.5		0.48	445	EXLOG
4192.00	FARSUND	100 CLYST	DC	4.4	5.0		1.5	342.2		0.47	445	EXLOG
4195.00	FARSUND	100 CLYST	DC	5.4	5.5		2.1	266.0		0.49	442	EXLOG
4197.00	FARSUND	100 CLYST	DC	5.7	5.8		1.9	301.6		0.49	443	EXLOG
4200.00	FARSUND	100 CLYST	DC	4.5	4.8		1.9	247.9		0.48	446	EXLOG
4202.00	FARSUND	100 CLYST	DC	4.7	5.0		1.8	272.7		0.48	444	EXLOG
4205.00	FARSUND	100 CLYST	DC	3.5	4.1		1.8	225.1		0.46	445	EXLOG
4207.00	FARSUND	100 CLYST	DC	5.1	5.7		1.9	291.8		0.47	446	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4210.00	FARSUND	100	CLYST	DC	5.5	7.4		2.2	343.5		0.43	443	EXLOG
4212.00	FARSUND	100	CLYST	DC	5.0	6.7		2.6	255.9		0.43	444	EXLOG
4215.00	FARSUND	100	CLYST	DC	6.0	13.6		3.5	385.6		0.30	436	EXLOG
4215.00	FARSUND	100	SH	SWC	5.9	13.2		5.4	243.4		0.31	437	EXLOG
4217.00	FARSUND	100	CLYST	DC	4.6	9.1		3.5	260.9		0.34	442	EXLOG
4220.00	FARSUND	100	CLYST	DC	4.9	13.3		4.3	312.5		0.27	441	EXLOG
4222.00	FARSUND	100	CLYST	DC	5.6	6.9		2.5	280.0		0.45	444	EXLOG
4225.00	FARSUND	100	CLYST	DC	4.7	6.8		1.9	356.8		0.41	441	EXLOG
4227.00	FARSUND	100	CLYST	DC	4.5	6.8		2.3	292.7		0.40	444	EXLOG
4230.00	FARSUND	100	CLYST	DC	4.7	6.4		3.0	212.7		0.43	440	EXLOG
4232.00	FARSUND	100	CLYST	DC	5.1	6.7		2.8	236.3		0.43	436	EXLOG
4235.00	FARSUND	100	CLYST	DC	6.6	14.4		4.0	358.5		0.31	443	EXLOG
4237.00	FARSUND	100	CLYST	DC	6.4	14.6		4.5	326.0		0.30	439	EXLOG
4240.00	FARSUND	100	CLYST	DC	10.7	30.4		7.9	383.0		0.26	441	EXLOG
4240.00	FARSUND	100	SH	SWC	13.9	37.6		10.4	362.7		0.27	434	EXLOG
4242.00	FARSUND	100	CLYST	DC	9.9	29.0		7.5	385.6		0.25	441	EXLOG
4245.00	FARSUND	100	CLYST	DC	11.4	31.9		8.2	387.2		0.26	441	EXLOG
4247.00	FARSUND	100	CLYST	DC	12.8	44.0		10.0	440.0		0.23	441	EXLOG
4247.00	FARSUND	100	CLYST	SWC	3.5	6.3		2.7	231.0		0.35	437	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	% Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4250.00	FARSUND	100 CLYST	DC	10.9	34.0		9.9	341.5		0.24	441	EXLOG
4252.00	FARSUND	100 CLYST	DC	7.7	12.1		4.1	299.3		0.39	440	EXLOG
4255.00	FARSUND	100 CLYST	DC	7.5	15.2		4.4	344.6		0.33	439	EXLOG
4257.00	FARSUND	100 CLYST	DC	7.6	16.1		4.7	339.7		0.32	444	EXLOG
4260.00	FARSUND	100 CLYST	DC	8.1	17.1		4.5	375.8		0.32	444	EXLOG
4262.00	FARSUND	100 CLYST	DC	7.7	14.9		4.3	349.8		0.34	441	EXLOG
4265.00	FARSUND	100 CLYST	DC	7.6	16.9		4.4	380.0		0.31	437	EXLOG
4267.00	FARSUND	100 CLYST	DC	8.6	17.1		5.1	335.8		0.34	441	EXLOG
4270.00	FARSUND	100 CLYST	DC	10.1	23.5		6.7	351.7		0.30	442	EXLOG
4272.00	FARSUND	100 CLYST	DC	10.5	22.7		6.4	353.6		0.32	443	EXLOG
4275.00	FARSUND	100 CLYST	DC	8.8	16.2		5.4	297.2		0.35	437	EXLOG
4277.00	FARSUND	100 CLYST	DC	9.9	15.1		6.1	246.9		0.40	435	EXLOG
4280.00	FARSUND	100 CLYST	DC	1.0	5.8		2.6	221.8		0.15	434	EXLOG
4282.00	FARSUND	100 CLYST	DC	6.4	18.3		9.0	202.5		0.26	443	EXLOG
4285.00	FARSUND	100 CLYST	DC	9.9	16.7		5.5	303.1		0.37	444	EXLOG
4287.00	FARSUND	100 CLYST	DC	5.6	10.8		4.0	270.3		0.34	446	EXLOG
4290.00	FARSUND	100 CLYST	DC	5.6	8.1		3.2	258.7		0.41	441	EXLOG
4292.00	FARSUND	100 CLYST	DC	7.1	14.9		4.7	317.7		0.32	441	EXLOG
4295.00	FARSUND	100 CLYST	DC	6.8	10.7		4.6	233.0		0.39	441	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4297.00	FARSUND	90	CLYST	DC	5.8	8.6		3.0	286.7		0.40	446	EXLOG
4300.00	FARSUND	100	CLYST	DC	5.9	10.7		3.9	276.5		0.36	444	EXLOG
4302.00	FARSUND	100	CLYST	DC	5.5	9.1		3.3	276.4		0.38	443	EXLOG
4305.00	FARSUND	100	CLYST	DC	5.8	10.4		3.8	270.1		0.36	443	EXLOG
4307.00	FARSUND	100	CLYST	DC	9.2	21.8		7.1	307.9		0.30	441	EXLOG
4310.00	FARSUND	100	CLYST	DC	9.6	24.6		7.2	343.8		0.28	443	EXLOG
4312.00	FARSUND	100	CLYST	DC	10.3	21.6		5.8	372.0		0.32	440	EXLOG
4315.00	FARSUND	100	CLYST	DC	8.9	16.5		4.9	338.3		0.35	443	EXLOG
4317.00	FARSUND	100	CLYST	DC	10.3	17.1		4.9	348.4		0.38	442	EXLOG
4320.00	FARSUND	100	CLYST	DC	6.0	10.3		3.4	305.1		0.37	444	EXLOG
4322.00	FARSUND	100	CLYST	DC	6.6	11.2		4.0	278.6		0.37	442	EXLOG
4325.00	FARSUND	100	CLYST	DC	9.0	15.6		4.7	332.3		0.37	439	EXLOG
4327.00	FARSUND	100	CLYST	DC	8.1	16.9		4.7	358.3		0.32	437	EXLOG
4330.00	FARSUND	100	CLYST	DC	7.4	13.4		4.6	294.7		0.35	442	EXLOG
4332.00	FARSUND	100	CLYST	DC	6.4	8.8		3.0	294.0		0.42	443	EXLOG
4335.00	FARSUND	100	CLYST	DC	6.2	8.4		3.0	281.3		0.42	443	EXLOG
4337.00	FARSUND	100	CLYST	DC	7.1	9.7		3.4	284.2		0.42	442	EXLOG
4340.00	FARSUND	100	CLYST	DC	4.8	6.2		2.1	295.7		0.44	445	EXLOG
4342.00	FARSUND	100	CLYST	DC	4.8	5.9		2.2	272.7		0.45	443	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4345.00	FARSUND	90	CLYST	DC	3.8	3.8		1.7	224.4		0.50	439	EXLOG
4347.00	FARSUND	100	CLYST	DC	4.1	4.7		1.9	244.8		0.46	443	EXLOG
4350.00	FARSUND	100	CLYST	DC	4.7	5.2		3.0	170.3		0.47	445	EXLOG
4352.00	FARSUND	100	CLYST	DC	4.3	6.4		2.7	241.0		0.40	444	EXLOG
4355.00	FARSUND	100	CLYST	DC	4.6	6.2		2.4	253.9		0.43	443	EXLOG
4357.00	FARSUND	70	CLYST	DC	3.7	4.3		1.8	235.9		0.46	445	EXLOG
4360.00	FARSUND	80	CLYST	DC	3.1	4.8		1.9	253.4		0.39	446	EXLOG
4362.00	FARSUND	70	CLYST	DC	4.5	4.7		2.0	233.5		0.49	446	EXLOG
4365.00	FARSUND	100	CLYST	DC	4.0	4.2		2.0	209.5		0.49	441	EXLOG
4367.00	FARSUND	100	CLYST	DC	4.5	5.8		2.2	259.5		0.44	447	EXLOG
4370.00	HAUGESUND	100	CLYST	DC	4.6	6.1		2.1	296.6		0.43	445	EXLOG
4372.00	HAUGESUND	60	SLST	DC	4.4	4.7		2.2	211.4		0.49	446	EXLOG
4375.00	HAUGESUND	50	SLST	DC	3.9	4.2		1.8	233.0		0.48	445	EXLOG
4377.00	HAUGESUND	40	SLST	DC	4.3	4.7		1.9	247.4		0.48	444	EXLOG
4380.00	HAUGESUND	100	CLYST	SWC	3.2	4.1		2.7	152.8		0.44	427	EXLOG
4380.00	HAUGESUND	40	SLST	DC	4.0	4.4		2.0	218.5		0.48	444	EXLOG
4382.00	HAUGESUND	30	SLST	DC	3.1	3.1		1.5	210.7		0.50	439	EXLOG
4385.00	HAUGESUND	40	SLST	DC	4.0	3.8		1.5	250.0		0.51	444	EXLOG
4387.00	HAUGESUND	40	SLST	DC	3.6	3.8		1.8	210.4		0.48	447	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4390.00	HAUGESUND	50	SLST	DC	3.8	5.2		2.0	258.0		0.42	448	EXLOG
4392.00	HAUGESUND	50	SLST	DC	3.7	3.6		1.7	208.1		0.51	445	EXLOG
4395.00	HAUGESUND	40	SLST	DC	4.0	4.0		1.8	225.3		0.50	447	EXLOG
4397.00	HAUGESUND	60	SLST	DC	3.9	4.4		1.6	269.1		0.47	444	EXLOG
4400.00	HAUGESUND	50	SLST	DC	3.7	3.8		1.7	216.8		0.50	446	EXLOG
4402.00	HAUGESUND	50	SLST	DC	3.8	4.8		1.8	268.9		0.44	446	EXLOG
4405.00	HAUGESUND	50	SLST	DC	4.3	4.2		1.6	254.6		0.51	445	EXLOG
4407.00	HAUGESUND	30	SLST	DC	4.3	3.9		1.7	224.4		0.53	443	EXLOG
4410.00	HAUGESUND	30	SLST	DC	4.3	4.2		1.7	241.0		0.51	442	EXLOG
4412.00	HAUGESUND	40	SLST	DC	3.5	3.7		1.8	210.9		0.49	442	EXLOG
4415.00	HAUGESUND	50	SLST	DC	4.2	4.7		1.8	263.5		0.47	448	EXLOG
4417.00	HAUGESUND	50	SLST	DC	4.1	5.4		2.2	252.3		0.43	445	EXLOG
4420.00	HAUGESUND	50	SLST	DC	4.1	4.1		1.9	221.0		0.50	447	EXLOG
4422.00	HAUGESUND	50	SLST	DC	4.6	5.0		1.9	270.4		0.48	446	EXLOG
4425.00	HAUGESUND	60	CLYST	DC	5.9	5.9		1.8	328.7		0.50	448	EXLOG
4427.00	HAUGESUND	60	CLYST	DC	5.7	5.6		2.2	258.6		0.51	446	EXLOG
4430.00	HAUGESUND	70	CLYST	DC	6.0	5.9		2.1	277.7		0.51	446	EXLOG
4432.00	HAUGESUND	90	CLYST	DC	5.6	7.8		2.4	324.7		0.42	446	EXLOG
4435.00	HAUGESUND	90	CLYST	DC	5.5	6.1		2.2	274.8		0.47	442	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4437.00	HAUGESUND	90	CLYST	DC	5.4	7.9		2.6	303.4		0.41	445	EXLOG
4440.00	HAUGESUND	90	CLYST	DC	5.3	5.8		2.2	267.6		0.48	443	EXLOG
4442.00	HAUGESUND	100	CLYST	DC	4.8	5.8		2.1	282.1		0.45	444	EXLOG
4445.00	HAUGESUND	100	CLYST	DC	4.4	5.7		2.0	289.8		0.44	444	EXLOG
4447.00	HAUGESUND	100	CLYST	DC	4.3	5.5		1.9	286.5		0.44	445	EXLOG
4450.00	HAUGESUND	100	CLYST	DC	1.9	1.7		0.9	176.6		0.53	443	EXLOG
4452.00	HAUGESUND	100	CLYST	DC	3.4	4.3		2.3	185.1		0.44	446	EXLOG
4455.00	HAUGESUND	100	CLYST	DC	3.7	4.8		2.5	198.0		0.43	443	EXLOG
4457.00	HAUGESUND	100	CLYST	DC	1.8	2.5		1.8	135.4		0.43	446	EXLOG
4460.00	HAUGESUND	80	CLYST	DC	2.2	3.7		1.8	204.9		0.37	445	EXLOG
4462.00	HAUGESUND	80	CLYST	DC	3.7	5.0		2.0	257.9		0.42	446	EXLOG
4465.00	HAUGESUND	80	CLYST	DC	3.6	5.1		1.9	272.6		0.42	444	EXLOG
4467.00	HAUGESUND	80	CLYST	DC	3.7	4.9		2.0	245.8		0.43	447	EXLOG
4470.00	HAUGESUND	80	CLYST	DC	3.8	4.6		1.9	236.1		0.46	445	EXLOG
4470.00	HAUGESUND	100	LST	SWC	0.2	0.2		0.3	57.6		0.47		EXLOG
4472.00	HAUGESUND	80	CLYST	DC	3.2	4.4		1.7	262.7		0.42	447	EXLOG
4475.00	HAUGESUND	80	CLYST	DC	4.1	6.2		2.0	312.0		0.39	449	EXLOG
4477.00	HAUGESUND	80	CLYST	DC	4.4	6.6		2.4	277.3		0.40	448	EXLOG
4480.00	HAUGESUND	80	CLYST	DC	4.6	7.6		2.8	268.3		0.38	438	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4482.00	HAUGESUND	80	CLYST	DC	4.4	5.1		2.3	221.8		0.46	441	EXLOG
4485.00	HAUGESUND	40	CLYST	DC	4.4	6.0		2.3	265.6		0.42	443	EXLOG
4487.00	HAUGESUND	30	SLST	DC	3.6	4.5		2.7	164.0		0.45	440	EXLOG
4490.00	HAUGESUND	20	SLST	DC	3.9	4.4		1.8	245.3		0.47	440	EXLOG
4492.00	HAUGESUND	80	CLYST	DC	3.6	5.7		3.0	193.9		0.39	438	EXLOG
4495.00	HAUGESUND	60	CLYST	DC	2.0	4.9		2.5	192.5		0.29	439	EXLOG
4497.00	HAUGESUND	60	CLYST	DC	4.2	4.8		2.8	169.9		0.47	438	EXLOG
4500.00	HAUGESUND	60	CLYST	DC	4.7	5.8		2.4	238.0		0.45	442	EXLOG
4502.00	HAUGESUND	70	CLYST	DC	4.0	5.4		2.3	232.5		0.42	442	EXLOG
4505.00	HAUGESUND	80	CLYST	DC	3.7	4.8		2.2	216.2		0.43	441	EXLOG
4507.00	HAUGESUND	80	CLYST	DC	3.3	4.0		2.3	178.2		0.46	442	EXLOG
4510.00	HAUGESUND	80	CLYST	DC	3.8	4.6		2.5	184.8		0.45		EXLOG
4512.00	HAUGESUND	80	CLYST	DC	3.8	4.4		3.0	146.2		0.46	442	EXLOG
4515.00	HAUGESUND	80	CLYST	DC	4.5	5.1		3.9	131.0		0.47	442	EXLOG
4517.00	HAUGESUND	90	CLYST	DC	5.3	6.8		6.6	102.4		0.44	441	EXLOG
4520.00	HAUGESUND	90	CLYST	DC	8.8	6.3		5.1	123.2		0.58	441	EXLOG
4522.00	HAUGESUND	90	CLYST	DC	4.1	6.9		4.9	141.6		0.37	442	EXLOG
4525.00	HAUGESUND	90	CLYST	DC	4.6	6.3		4.4	142.5		0.42	443	EXLOG
4527.00	HAUGESUND	90	CLYST	DC	3.9	6.0		3.2	184.6		0.40	445	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4530.00	HAUGESUND	90	CLYST	DC	4.2	7.0		3.5	201.7		0.37	443	EXLOG
4532.00	HAUGESUND	90	CLYST	DC	4.0	5.6		2.4	232.2		0.42	446	EXLOG
4535.00	HAUGESUND	90	CLYST	DC	5.2	5.7		2.6	219.0		0.48	444	EXLOG
4537.00	HAUGESUND	90	CLYST	DC	4.4	5.2		2.7	195.5		0.46	442	EXLOG
4540.00	HAUGESUND	90	CLYST	DC	3.8	4.9		2.8	174.7		0.44	445	EXLOG
4542.00	HAUGESUND	90	CLYST	DC	4.0	8.1		2.9	274.1		0.33		EXLOG
4545.00	HAUGESUND	90	CLYST	DC	4.6	5.7		2.5	229.7		0.45	440	EXLOG
4547.00	HAUGESUND	90	CLYST	DC	4.6	6.8		2.9	232.6		0.40	443	EXLOG
4550.00	HAUGESUND	90	CLYST	DC	4.6	7.7		2.7	287.3		0.37	444	EXLOG
4552.00	HAUGESUND	100	CLYST	DC	4.1	6.1		2.6	235.4		0.40	443	EXLOG
4555.00	HAUGESUND	90	CLYST	DC	4.1	4.9		2.6	189.5		0.45	444	EXLOG
4557.00	HAUGESUND	90	CLYST	DC	4.6	5.6		2.0	281.9		0.45	444	EXLOG
4560.00	HAUGESUND	90	CLYST	DC	3.3	5.6		2.2	250.5		0.37	445	EXLOG
4562.00	HAUGESUND	80	CLYST	DC	4.1	6.0		2.3	262.0		0.41	444	EXLOG
4565.00	HAUGESUND	80	CLYST	DC	4.8	7.0		4.4	161.2		0.40	444	EXLOG
4567.00	HAUGESUND	80	CLYST	DC	5.0	7.3		5.7	129.5		0.40	443	EXLOG
4570.00	HAUGESUND	80	CLYST	DC	4.6	6.3		3.2	194.7		0.42	445	EXLOG
4572.00	HAUGESUND	80	CLYST	DC	4.3	6.0		3.0	202.0		0.41	441	EXLOG
4575.00	HAUGESUND	80	CLYST	DC	4.8	6.8		3.7	185.9		0.41	444	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4577.00	HAUGESUND	80	CLYST	DC	4.7	6.3		3.0	207.6		0.43	444	EXLOG
4580.00	HAUGESUND	80	CLYST	DC	4.6	6.6		3.0	221.4		0.41	442	EXLOG
4582.00	HAUGESUND	80	CLYST	DC	4.0	5.3		2.7	196.3		0.43	445	EXLOG
4585.00	HAUGESUND	40	CLYST	DC	4.4	3.3		2.4	141.1		0.57	442	EXLOG
4587.00	HAUGESUND	30	SLST	DC	5.0	3.5		2.1	164.5		0.59	442	EXLOG
4590.00	HAUGESUND	20	SLST	DC	4.5	4.2		2.7	154.0		0.52	441	EXLOG
4592.00	HAUGESUND	40	CLYST	DC	4.9	3.8		2.2	174.2		0.56	443	EXLOG
4595.00	HAUGESUND	50	CLYST	DC	5.1	4.2		2.3	183.8		0.55	443	EXLOG
4597.00	HAUGESUND	30	CLYST	DC	4.4	3.2		2.2	143.9		0.58	440	EXLOG
4600.00	HAUGESUND	70	CLYST	DC	4.4	4.7		2.2	211.4		0.49	443	EXLOG
4602.00	SAND UNIT	70	CLYST	DC	4.6	4.6		2.5	179.6		0.50	442	EXLOG
4605.00	SAND UNIT	80	CLYST	DC	5.3	6.0		2.7	222.7		0.47	442	EXLOG
4607.00	SAND UNIT	80	CLYST	DC	4.8	6.5		2.6	247.7		0.42	442	EXLOG
4610.00	SAND UNIT	10	CLYST	DC	2.8	2.3		2.6	89.5		0.55	439	EXLOG
4612.00	SAND UNIT	100	SST	DC	3.7	1.4		1.5	90.3		0.73	441	EXLOG
4615.00	SAND UNIT	100	SST	DC	5.4	2.4		2.2	109.2		0.69	431	EXLOG
4617.00	SAND UNIT	100	SST	DC	3.0	3.4		3.6	93.4		0.47	440	EXLOG
4620.00	SAND UNIT	100	SST	DC	3.0	2.6		2.3	112.6		0.53	439	EXLOG
4622.00	SAND UNIT	100	SST	DC	3.9	3.8		3.2	118.4		0.50	442	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4625.00	SAND UNIT	100	SST	DC	2.7	2.2		2.2	101.4		0.55	443	EXLOG
4627.00	SAND UNIT	100	SST	DC	0.9	0.3		0.4	85.4		0.72	442	EXLOG
4628.00	SAND UNIT	100	SST	SWC	4.8	0.9		0.9	102.3		0.84	436	EXLOG
4630.00	SAND UNIT	100	SST	DC	0.9	0.4		0.4	86.7		0.69	442	EXLOG
4632.00	SAND UNIT	100	SST	DC	1.8	0.5		0.6	93.0		0.78	442	EXLOG
4633.60	SAND UNIT	100	SLST/COAL	CORE	14.7	58.7	0.8	16.7	351.6	4.8	0.20	452	GEOLABNOR
4634.76	SAND UNIT	100	SST	CORE	10.7	1.4		1.3	109.1		0.88	424	EXLOG
4636.89	SAND UNIT	100	SST	CORE	12.1	1.5		1.3	110.7		0.89	426	EXLOG
4638.97	SAND UNIT	100	SST	CORE	16.4	3.5		2.7	130.1		0.82	434	EXLOG
4639.75	SAND UNIT	100	SST	CORE	11.1	2.8		2.2	128.3		0.80	432	EXLOG
4641.95	SAND UNIT	100	SST	CORE	9.0	1.5		1.2	125.0		0.86	426	EXLOG
4643.71	SAND UNIT	100	SST	CORE	8.0	1.6		1.3	123.1		0.83	435	EXLOG
4645.18	SAND UNIT	100	SST	CORE	12.3	2.5		1.7	145.4		0.83	429	EXLOG
4646.75	SAND UNIT	100	SST	CORE	12.2	2.6		1.8	142.1		0.82	436	EXLOG
4648.76	SAND UNIT	100	SST	CORE	9.4	7.5		4.3	174.5		0.55	442	EXLOG
4649.49	SAND UNIT	100	COAL	CORE	32.1	62.7		18.3	343.2		0.34	448	EXLOG
4650.19	SAND UNIT	100	SST	CORE	12.7	6.8		5.4	126.2		0.65	446	EXLOG
4652.72	SAND UNIT	100	COAL	CORE	34.7	46.7		13.8	338.0		0.43	455	EXLOG
4653.70	SAND UNIT	100	SLST/COAL	CORE	8.5	54.6	0.4	11.4	478.3	3.5	0.13	456	GEOLABNOR

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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HYDRO

Depth (m)	Group/Fm	% Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4655.38	SAND UNIT	100 SST	CORE	4.0	1.0		0.9	109.0		0.81	429	EXLOG
4657.39	SAND UNIT	100 SST	CORE	8.1	2.5		2.0	128.8		0.76	430	EXLOG
4658.28	SAND UNIT	100 SST	CORE	16.5	5.0		4.0	124.4		0.77	440	EXLOG
4660.00	SAND UNIT	100 SLST	CORE	1.7	3.6	0.2	1.6	219.8	9.3	0.32	449	GEOLABNOR
4662.00	SAND UNIT	100 SST	CORE	8.3	1.3		1.3	103.9		0.86	429	EXLOG
4663.30	SAND UNIT	100 COAL	CORE	25.1	218.4	1.7	38.0	574.2	4.5	0.10	453	GEOLABNOR
4663.37	SAND UNIT	100 COAL	CORE	26.3	88.7		18.0	493.2		0.23	461	EXLOG
4663.73	SAND UNIT	100 SH	CORE	0.4	1.5		1.1	135.5		0.22	457	EXLOG
4664.75	SAND UNIT	100 SH	CORE	0.1	1.8		0.3	610.3		0.05	484	EXLOG
4666.20	SAND UNIT	100 COAL/SH	CORE	0.2	1.8	0.4	0.9	200.0	48.9	0.08	572	GEOLABNOR
4666.35	SAND UNIT	100 SH	CORE	0.0	0.1		0.3	15.6		0.44		EXLOG
4667.09	SAND UNIT	100 SH	CORE	0.1	0.1		0.3	44.8		0.46		EXLOG
4669.50	SAND UNIT	100 SH	CORE	0.1	0.5		0.2	305.9		0.09		EXLOG
4672.10		100 SH	CORE	0.2	0.4		0.2	238.9		0.31		EXLOG
4675.00	SAND UNIT	90 LST	DC	1.4	0.7		1.8	39.9		0.65	443	EXLOG
4677.00	ZECHSTEIN	90 LST	DC	1.2	0.6		0.6	94.9		0.68	438	EXLOG
4680.00	ZECHSTEIN	100 DOL	DC	7.7	1.1		1.1	100.0		0.87	427	EXLOG
4682.00	ZECHSTEIN	100 DOL	DC	1.7	0.9		0.8	116.5		0.65	438	EXLOG
4685.00	ZECHSTEIN	90 CLYST	DC	2.9	1.1		0.9	117.0		0.72	439	EXLOG

Table 2.1.1. SOURCE ROCK SCREENING DATA WELL 2/12-1 (cont'd)

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Depth (m)	Group/Fm	%	Lithology	Sample	S1 Kg/t	S2 Kg/t	S3 Kg/t	TOC %	HI	OI	PI	Tmax Deg.c	Company
4687.00	ZECHSTEIN	60	CLYST	DC	4.8	3.7		2.4	154.8		0.56	439	EXLOG
4690.00	ROTLIEGENDE	40	CLYST	DC	3.4	3.0		1.5	196.1		0.53	441	EXLOG
4692.00	ROTLIEGENDE	40	CLYST	DC	4.4	8.4		3.0	274.1		0.35	443	EXLOG
4695.00	ROTLIEGENDE	40	CLYST	DC	4.8	7.7		3.3	233.7		0.38	438	EXLOG
4697.00	ROTLIEGENDE	30	CLYST	DC	1.5	1.6		1.4	114.9		0.48	441	EXLOG
4697.00	ROTLIEGENDE	100	CLYST	SWC	0.5	0.4		0.3	150.0		0.53	448	EXLOG
4700.00	ROTLIEGENDE	20	CLYST	DC	5.2	9.0		3.3	268.7		0.37	438	EXLOG
4702.00	ROTLIEGENDE	20	CLYST	DC	5.0	9.3		3.3	286.2		0.35	439	EXLOG
4705.00	ROTLIEGENDE	100	SST	DC	0.5	0.4		0.4	107.3		0.52	440	EXLOG
4707.00	ROTLIEGENDE	100	SST	DC	5.1	8.4		0.0			0.38	438	EXLOG
4707.00	ROTLIEGENDE	100	SST	SWC	0.3	0.2		0.2	100.0		0.55	485	EXLOG

Table II.2.1

Results from Extraction and Group Type Separation.

Table 2.2.1. SOURCE ROCK EXTRACTION DATA I WELL 2/12-1

Petroleum Geochemistry Group
Research Center Bergen



Depth(m)	Group/Fm	EOM(mg)	EOM(%)	Hydrocarbons			Non Hydrocarbons		
				SAT(%)	ARO(%)	TOTAL(%)	NSO(%)	ASPH(%)	TOTAL(%)
2955.00		6.80	0.17	12	15	27	69	4	74
3105.00	MAUREEN EQ.	2.10	0.34	5	10	14	67	19	86
3105.00	MAUREEN EQ.	3.60	0.34	22	11	33	58	8	67
3937.00	RØDBY	3.50	0.24	23	17	40	54	6	60
3937.00	RØDBY	3.50	0.28	17	7	24	69	7	76
3980.00	UTVIK	42.40	2.41	22	9	31	66	3	69
3985.00	UTVIK	96.80	1.59	19	9	28	70	2	72
3990.00	FARSUND	56.20	1.59	25	13	38	59	3	62
3992.00	FARSUND	58.60	1.35	22	12	34	59	7	66
3996.00	FARSUND	126.10	1.80	21	11	32	63	5	68
4000.00	FARSUND	24.80	1.43	15	14	29	67	5	71
4025.00	FARSUND	122.10	1.36	26	13	39	54	8	61
4040.00	FARSUND	77.40	1.09	27	17	45	53	3	55
4050.00	FARSUND	21.70	0.32	20	17	36	56	7	64
4105.00	FARSUND	97.90	1.01	24	13	36	47	17	64
4167.00	FARSUND	26.60	0.87	17	11	29	67	5	71
4172.00	FARSUND	21.50	0.45	28	13	41	52	7	59
4200.00	FARSUND	25.60	0.97	22	17	39	55	6	61

Table 2.2.1. SOURCE ROCK EXTRACTION DATA I WELL 2/12-1 (cont'd)

Petroleum Geochemistry Group
Research Center Bergen



Depth(m)	Group/Fm	EOM(mg)	EOM(%)	Hydrocarbons			Non Hydrocarbons		
				SAT(%)	ARO(%)	TOTAL(%)	NSO(%)	ASPH(%)	TOTAL(%)
4215.00	FARSUND	41.80	3.19	9	6	14	83	3	86
4240.00	FARSUND	113.90	1.98	19	13	32	60	9	68
4247.00	FARSUND	24.20	1.36	12	8	20	73	7	80
4272.00	FARSUND	101.50	1.49	18	16	33	59	8	67
4302.00	FARSUND	32.30	1.06	23	16	39	58	4	61
4330.00	FARSUND	57.00	1.32	21	16	37	57	6	63
4370.00	HAUGESUND	24.90	1.16	21	15	36	60	4	64
4400.00	HAUGESUND	2.10	0.52	48	43	91	5	5	10
4432.00	HAUGESUND	31.10	1.05	22	14	35	63	2	65
4457.00	HAUGESUND	7.10	0.93	17	14	31	62	7	69
4480.00	HAUGESUND	8.70	0.93	21	15	36	59	6	64
4497.00	HAUGESUND	21.40	2.46	19	39	58	39	3	42
4527.00	HAUGESUND	3.70	1.68	14	11	24	65	11	76
4607.00	HAUGESUND	18.30	0.82	22	16	38	56	6	62
4633.60	SAND UNIT	222.60	2.20	5	5	11	54	35	89
4653.70	SAND UNIT	146.20	1.46	11	6	17	55	28	83
4660.00	SAND UNIT	45.70	0.46	25	35	60	28	12	40
4663.30	SAND UNIT	317.80	3.21	8	4	12	50	38	88
4666.20	SAND UNIT	3.60	0.03	22	22	44	31	25	56

Table II.2.2

Extraction and Group Type Separation ratios.

Table 2.2.2. SOURCE ROCK EXTRACTION DATA II WELL 2/12-1

Petroleum Geochemistry Group
Research Center Bergen



Depth(m)	Group/Fm	TOC (%)	EOM(%) / TOC(%)	SAT(%) / TOC(%)	SAT(%) / ARO(%)	HC/non HC
2955.00		0.66	0.26	17.88	0.80	0.36
3105.00	MAUREEN EQ.	0.18	1.89	123.33	2.00	0.50
3105.00	MAUREEN EQ.	0.72	0.47	6.67	0.51	0.17
3937.00	RØDBY	1.03	0.23	22.23	1.34	0.67
3937.00	RØDBY	0.41	0.68	41.95	2.49	0.32
3980.00	UTVIK	3.85	0.63	5.69	2.33	0.46
3985.00	UTVIK	5.11	0.31	3.74	2.15	0.39
3990.00	FARSUND	4.15	0.38	6.10	1.95	0.62
3992.00	FARSUND				1.88	0.52
3996.00	FARSUND	4.56	0.39	4.58	1.95	0.46
4000.00	FARSUND	3.89	0.37	3.73	1.03	0.40
4025.00	FARSUND	3.91	0.35	6.57	1.98	0.63
4040.00	FARSUND	2.97	0.37	9.12	1.56	0.80
4050.00	FARSUND	2.41	0.13	8.22	1.19	0.57
4105.00	FARSUND	4.27	0.24	5.50	1.84	0.57
4167.00	FARSUND	2.00	0.44	8.65	1.53	0.40
4172.00	FARSUND	2.44	0.18	11.43	2.15	0.69
4200.00	FARSUND	1.94	0.50	11.29	1.30	0.63

Table 2.2.2. SOURCE ROCK EXTRACTION DATA II WELL 2/12-1 (cont'd)

Petroleum Geochemistry Group
Research Center Bergen



Depth(m)	Group/Fm	TOC (%)	EOM(%) / TOC(%)	SAT(%) / TOC(%)	SAT(%) / ARO(%)	HC/non HC
4215.00	FARSUND	5.42	0.59	1.64	1.62	0.17
4240.00	FARSUND	10.37	0.19	1.84	1.49	0.47
4247.00	FARSUND	2.74	0.50	4.34	1.53	0.25
4272.00	FARSUND	6.42	0.23	2.77	1.15	0.50
4302.00	FARSUND	3.31	0.32	6.83	1.40	0.63
4330.00	FARSUND	4.56	0.29	4.58	1.32	0.58
4370.00	HAUGESUND	2.07	0.56	10.29	1.47	0.56
4400.00	HAUGESUND	1.73	0.30	27.51	1.11	9.47
4432.00	HAUGESUND	2.39	0.44	9.16	1.62	0.55
4457.00	HAUGESUND	1.81	0.51	9.34	1.20	0.45
4480.00	HAUGESUND	2.84	0.33	7.29	1.39	0.55
4497.00	HAUGESUND	2.82	0.87	6.81	0.49	1.38
4527.00	HAUGESUND	3.24	0.52	4.17	1.25	0.32
4607.00	HAUGESUND	2.62	0.31	8.36	1.34	0.62
4633.60	SAND UNIT	16.69	0.13	0.32	1.02	0.12
4653.70	SAND UNIT	11.42	0.13	0.97	1.76	0.21
4660.00	SAND UNIT	1.62	0.28	15.68	0.73	1.52
4663.30	SAND UNIT	38.04	0.08	0.21	1.86	0.14
4666.20	SAND UNIT	0.92	0.03	24.13	1.00	0.80

Table II.3.1

Molecular ratios from gas chromatography
of saturated hydrocarbons.

Table 2.3.1. SATURATED FRAC., MOLECULAR RATIOS WELL 2/12-1

Petroleum Geochemistry Group
Research Center Bergen



Depth	Group/Fm	Pr/n-C17	Pr/Ph	CPI-I	CPI-II	n-C15+/Total	n-C20/n-C25
2955.00		0.60	1.10	1.10	1.00		
3105.00	MAUREEN EQ.	0.50	0.90	1.00	1.00		
3105.00	MAUREEN EQ.	0.40	0.90	1.00	1.00		
3937.00	RØDBY	0.50	1.20	1.10	1.00		
3937.00	RØDBY	0.50	1.20	1.10	1.00		
3980.00	UTVIK	0.70	1.30	1.10	1.00		
3985.00	UTVIK	0.80	1.30	1.10	1.00		
3990.00	FARSUND	0.80	1.30	1.10	1.00		
3992.00	FARSUND	0.70	1.30	1.10	1.00		
3996.00	FARSUND	0.70	1.30	1.10	1.00		
4000.00	FARSUND	0.60	1.40	1.20	1.10		
4025.00	FARSUND	0.80	1.30	1.10	1.00		
4040.00	FARSUND	0.80	1.30	1.10	1.00		
4050.00	FARSUND	0.70	1.40	1.20	1.10		
4105.00	FARSUND	0.70	1.30	1.10	1.00		
4167.00	FARSUND	0.70	1.10	1.20	1.00		
4172.00	FARSUND	0.90	1.30	1.20	1.10		
4200.00	FARSUND	0.70	1.30	1.20	1.00		

Table 2.3.1. SATURATED FRAC., MOLECULAR RATIOS WELL 2/12-1 (cont'd)

Petroleum Geochemistry Group
Research Center Bergen



HYDRO

Depth	Group/Fm	Pr/n-C17	Pr/Ph	CPI-I	CPI-II	n-C15+/Total	n-C20/n-C25
4215.00	FARSUND	0.70	1.30	1.10	1.00		
4240.00	FARSUND	0.90	1.20	1.20	1.00		
4247.00	FARSUND	0.80	1.10	1.20	1.00		
4272.00	FARSUND	0.80	1.20	1.10	1.00		
4302.00	FARSUND	0.60	1.30	1.10	1.00		
4330.00	FARSUND	0.60	1.40	1.00	0.90		
4360.00	FARSUND	0.50	1.40	1.10	1.00		
4370.00	HAUGESUND	0.60	1.40	1.10	1.00		
4400.00	HAUGESUND	0.60	2.10	1.10	1.10		
4432.00	HAUGESUND	0.70	1.20	1.10	0.90		
4457.00	HAUGESUND	0.70	1.30	1.10	1.00		
4480.00	HAUGESUND	0.70	1.20	1.20	1.00		
4497.00	HAUGESUND	0.60	1.10	1.10	1.10		
4527.00	HAUGESUND	0.60	1.20	1.10	1.00		
4607.00	HAUGESUND	0.60	1.30	1.10	1.00		
4633.60	SAND UNIT	0.40	1.80	1.10	1.00		
4653.70	SAND UNIT	0.50	1.50	1.10	0.90		
4663.30	SAND UNIT	0.40	1.30	1.00	0.90		
4666.20	SAND UNIT	0.60	1.10	1.10	0.90		

Table II.6.1

Quantitative results from Pyrolysis gas chromatography

Table 2.6.1. PYROLYSIS-GASCHROMATOGRAPHY DATA 2/12-1

Petroleum Geochemistry Group
Research Center Bergen



HYDRO

Depth (m)	Group/Fm	C1 (%)	C2-C5 (%)	C1-C5 (%)	C6-C14 (%)	C15+ (%)	GORP C1-5/C6+	C1-C6 (%)	C7-C14 (%)	GOPI C1-6/C7+
3985.00	UTVIK	3.10	13.20	16.30	41.40	42.40	0.19			
3990.00	FARSUND	4.70	12.90	17.60	39.70	42.70	0.21			
3992.00	FARSUND	4.50	14.80	19.30	40.30	40.40	0.24			
3996.00	FARSUND	4.60	13.80	18.40	41.40	40.20	0.23			
4000.00	FARSUND	4.90	8.50	13.40	41.90	39.80	0.16			
4105.00	FARSUND	5.70	15.00	20.70	37.10	42.20	0.26			
4200.00	FARSUND	4.10	9.80	13.90	39.90	42.10	0.17			
4215.00	FARSUND	4.10	14.90	19.00	39.90	41.00	0.23			
4240.00	FARSUND	5.20	14.70	19.90	32.30	47.80	0.25			
4247.00	FARSUND	3.10	19.10	22.20	47.00	30.80	0.29			
4272.00	FARSUND	2.30	18.30	20.60	38.50	40.90	0.26			
4302.00	FARSUND	4.40	13.60	18.00	36.20	45.90	0.22			
4330.00	FARSUND	5.20	12.80	18.00	34.40	47.50	0.22			
4370.00	HAUGESUND	4.80	11.60	16.40	37.80	45.70	0.20			
4432.00	HAUGESUND	2.60	12.60	15.20	29.90	54.90	0.18			
4607.00	SAND UNIT	5.20	14.70	19.90	38.90	41.20	0.25			
4633.60	SAND UNIT	15.70	12.90	28.60	26.20	45.20	0.40			
4653.70	SAND UNIT	12.40	19.30	31.70	24.80	43.50	0.46			

Table 2.6.1. PYROLYSIS-GASCHROMATOGRAPHY DATA 2/12-1 (cont'd)

Petroleum Geochemistry Group
Research Center Bergen



HYDRO

Depth (m)	Group/Fm	C1 (%)	C2-C5 (%)	C1-C5 (%)	C6-C14 (%)	C15+ (%)	GORP C1-5/C6+	C1-C6 (%)	C7-C14 (%)	GOPI C1-6/C7+
4660.00	SAND UNIT	8.70	18.80	27.50	39.90	32.60	0.38			
4663.30	SAND UNIT	19.10	15.00	34.10	24.90	41.00	0.52			

Table II.7.1

Results of Visual Kerogen Analysis.

Table 2.7.1. KEROGEN COMPOSITION, SPORE AND POLLEN
COMPOSITION WELL 2/12-1

Petroleum Geochemistry Group
Research Center Bergen



HYDRO

Depth (m)	Group/Fm	Amorphous matr.	Woody	Inert- inite	Palyno- morphs	Algal Herbaceous	Reworked (%)	Particle size	Preserv. (1-3)
3980.00	UTVIK		50.00	50.00					
3980.00	UTVIK		50.00	50.00					
3985.00	UTVIK	50.00	20.00	10.00	20.00				
3992.00	FARSUND	5.00	20.00	70.00	5.00				
3996.00	FARSUND	20.00	30.00	30.00	20.00				
4000.00	FARSUND	20.00	30.00	30.00	20.00				
4025.00	FARSUND	15.00	30.00	20.00	35.00				
4040.00	FARSUND	30.00	20.00	20.00	30.00				
4105.00	FARSUND	10.00	50.00	20.00	20.00				
4172.00	FARSUND	55.00	20.00		5.00				
4215.00	FARSUND	25.00	40.00	30.00	5.00				
4240.00	FARSUND	40.00	40.00	10.00	10.00				
4247.00	FARSUND	90.00		10.00					
4272.00	FARSUND	40.00	40.00	20.00					
4330.00	FARSUND	40.00	40.00	15.00	5.00				
4370.00	HAUGESUND	25.00	50.00	20.00	5.00				
4400.00	HAUGESUND	80.00	10.00	10.00					
4432.00	HAUGESUND	30.00	50.00	10.00	10.00				

Table 2.7.1. KEROGEN COMPOSITION, SPORE AND POLLEN
COMPOSITION WELL 2/12-1 (cont'd)

Petroleum Geochemistry Group
Research Center Bergen



HYDRO

Depth (m)	Group/Fm	Amorphous matr.	Woody	Inert- inite	Palyno- morphs	Algal	Herbaceous	Reworked (%)	Particle size	Preserv. (1-3)
4457.00	HAUGESUND	45.00	40.00	10.00	5.00					
4480.00	HAUGESUND	70.00	15.00	10.00	5.00					
4527.00	HAUGESUND	10.00	80.00	10.00						
4633.60	SAND UNIT		90.00	10.00						
4660.00	SAND UNIT	10.00	40.00	50.00						
4663.30	SAND UNIT		70.00	30.00						
4666.20	SAND UNIT	50.00	10.00	40.00						

Table III.1.1

Vitrinite Reflectance results.

Table 3.1.1. VITRINITE REFLECTANCE DATA WELL 2/12-1
Average values

Petroleum Geochemistry Group
Research Center Bergen



Depth	Group/Fm	Population I	Population II	Population III
2955.00		0.37 (18)		
3105.00	MAUREEN EQ.	0.38 (10)		
3105.00	MAUREEN EQ.	0.39 (10)		
3985.00	UTVIK	0.41 (8)		
3990.00	FARSUND	0.39 (8)		
3992.00	FARSUND	0.40 (10)		
3996.00	FARSUND	0.41 (11)		
4000.00	FARSUND	0.41 (2)		
4025.00	FARSUND	0.43 (9)		
4040.00	FARSUND	0.42 (14)		
4050.00	FARSUND	0.40 (18)		
4105.00	FARSUND	0.41 (5)		
4167.00	FARSUND	0.42 (6)		
4172.00	FARSUND	0.44 (17)		
4200.00	FARSUND	0.46 (8)		
4215.00	FARSUND	0.44 (19)		
4240.00	FARSUND	0.42 (26)		
4272.00	FARSUND	0.42 (14)		

Table 3.1.1. VITRINITE REFLECTANCE DATA WELL 2/12-1 (cont'd)
Average values

Petroleum Geochemistry Group
Research Center Bergen



Depth	Group/Fm	Population I	Population II	Population III
4302.00	FARSUND	0.45 (8)		
4330.00	FARSUND	0.43 (11)		
4370.00	HAUGESUND	0.50 (29)		
4400.00	HAUGESUND	0.52 (9)		
4432.00	HAUGESUND	0.48 (16)		
4457.00	HAUGESUND	0.49 (17)		
4480.00	HAUGESUND	0.50 (13)		
4497.00	HAUGESUND	0.48 (18)		
4527.00	HAUGESUND	0.52 (9)		
4607.00	HAUGESUND	0.56 (27)		
4633.60	SAND UNIT	0.67 (60)		
4653.70	SAND UNIT	0.61 (28)		
4660.00	SAND UNIT	0.61 (24)		
4663.30	SAND UNIT	0.69 (51)		

Table III.2.1

Spore Fluorescence Colour.

Depth Typ Lithology	Spore Fluorescence Colour	Depth Typ Lithology	Spore Fluorescence Colour
2955.00 cut bulk	3	4457.00 cut bulk	5
3105.00 cut bulk	3	4480.00 cut bulk	5
3937.00 cut bulk	4	4497.00 cut bulk	5
3980.00 swc bulk	0	4527.00 cut bulk	5
3985.00 swc bulk	4+5	4567.00 cut bulk	5
3990.00 swc bulk	4+5	4607.00 cut bulk	5
3992.00 swc bulk	4+5	4633.60 ccp bulk	6
3996.00 swc bulk	4+5	4653.70 ccp bulk	6
4000.00 swc bulk	4+5	4660.00 ccp bulk	0
4025.00 swc bulk	5	4663.30 ccp bulk	0
4040.00 swc bulk	5	4666.20 ccp bulk	0
4050.00 swc bulk	4+5		
4077.00 cut bulk	0		
4105.00 swc bulk	5		
4132.00 cut bulk	5		
4167.00 cut bulk	4		
4172.00 swc bulk	4+5		
4200.00 cut bulk	4+5		
4215.00 swc bulk	0		
4220.00 swc bulk	0		
4240.00 swc bulk	6		
4247.00 swc bulk	0		
4272.00 cut bulk	4+5		
4302.00 cut bulk	4		
4330.00 cut bulk	0		
4370.00 cut bulk	5		
4400.00 cut bulk	5		
4432.00 cut bulk	5		

Table III.3.1

Sterane biomarker ratios.

STERANE ISOMERISATION
WELL: 2/12-1

DEPTH m	%AAA20S	%ABB
2955.0	38	44
3105 SH	28	30
3105 CA	43	47
3937 I	44	43
3937 II	47	48
3980.0	52	55
3985.0	50	54
3990.0	52	53
3992.0	52	52
3996.0	44	45
4000.0	40	30
4025.0	47	47
4040.0	47	43
4050.0	43	35
4105.0	53	50
4167.0	41	39
4172.0	49	46
4200.0	39	36
4215.0	51	51
4240.0	52	53
4247.0	51	50
4272.0	51	53
4302.0	42	41
4330.0	48	46
4370.0	41	38
4400.0	55	45
4432.0	42	40
4457.0	43	39
4480.0	43	41
4497.0	34	33
4527.0	42	37
4607.0	41	36
4633.6	54	62
4653.7	57	58
4653.7	56	60
4660.0	57	63
4663.3	55	59
4663.3	53	56
4666.2	53	51

Table III.3.1.: Sterane biomarker ratios from GC-MS of saturated hydrocarbons in well:2/12-1.

Table III.3.2

Triterpane biomarker ratios.

TRITERPANE RATIOS
WELL: 2/12-1

DEPTH m	Ts/Tm	NORHOP./ NHOP+HOP	BISNHOP/ BNH+NHOP	MORET/ HOPANE	BISH22S/ 22S+22R
2955.00	0.32	0.33	0.14	0.30	0.51
3105 SH	0.44	0.37	0.23	0.31	0.39
3105 CA	0.64	0.38	0.12	0.19	0.60
3937 I	1.11	0.35		0.15	0.60
3937 II	0.96	0.38		0.20	0.58
3980.00	1.62	0.29		0.13	0.60
3985.00	1.77	0.30		0.13	0.57
3990.00	1.54	0.29		0.14	0.60
3992.00	1.43	0.31		0.14	0.62
3996.00	1.47	0.36		0.15	0.58
4000.00	1.13	0.37		0.15	0.59
4025.00	1.29	0.31		0.13	0.59
4040.00	1.23	0.33		0.14	0.60
4050.00	1.00	0.29		0.16	0.57
4105.00	1.50	0.29		0.12	0.58
4167.00	1.13	0.33		0.15	0.59
4172.00	1.27	0.32		0.15	0.59
4200.00	1.13	0.37		0.15	0.60
4215.00	1.29	0.30		0.14	0.59
4240.00	1.15	0.30		0.13	0.59
4247.00	1.08	0.30		0.14	0.60
4272.00	1.23	0.30		0.13	0.59
4302.00	1.13	0.33		0.14	0.61
4330.00	1.50	0.31		0.14	0.59
4370.00	1.31	0.35		0.15	0.59
4400.00	0.62	0.36	0.27	0.19	0.61
4432.00	1.36	0.35		0.15	0.59
4457.00	1.21	0.34		0.15	0.59
4480.00	1.13	0.34		0.16	0.60
4497.00	0.16	0.46		0.41	0.52
4527.00	1.13	0.35		0.10	0.58
4607.00	1.20	0.35		0.15	0.58
4633.60	3.10	0.28	0.26	0.15	0.59
4653.70	2.75	0.29	0.21	0.10	0.63
4653.70	2.87	0.29	0.21	0.11	0.60
4660.00	2.71	0.28	0.10	0.11	0.60
4663.30	2.38	0.29	0.21	0.13	0.59
4663.30	2.50	0.29	0.22	0.13	0.59
4666.20	1.38	0.33		0.11	0.60

Table III.3.2.: Triterpane biomarker ratios from GC-MS of
saturated hydrocarbons from well:2/12-1.

APPENDIX I

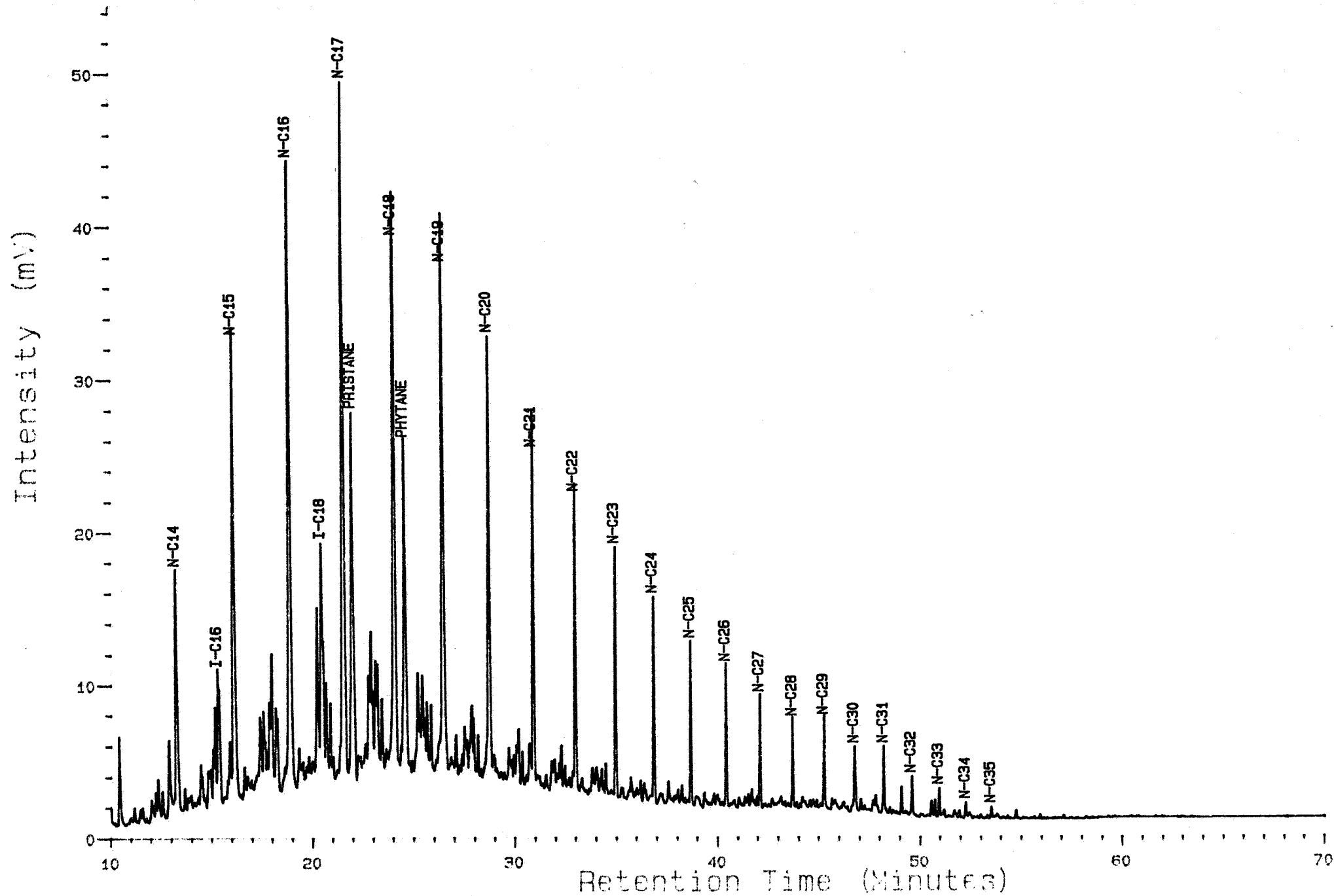
GAS CHROMATOGRAMS OF SATURATED HYDROCARBONS

NORMALISED N ALKANE DISTRIBUTION

Analysis CB021201S

7, 21, 1

2955 M

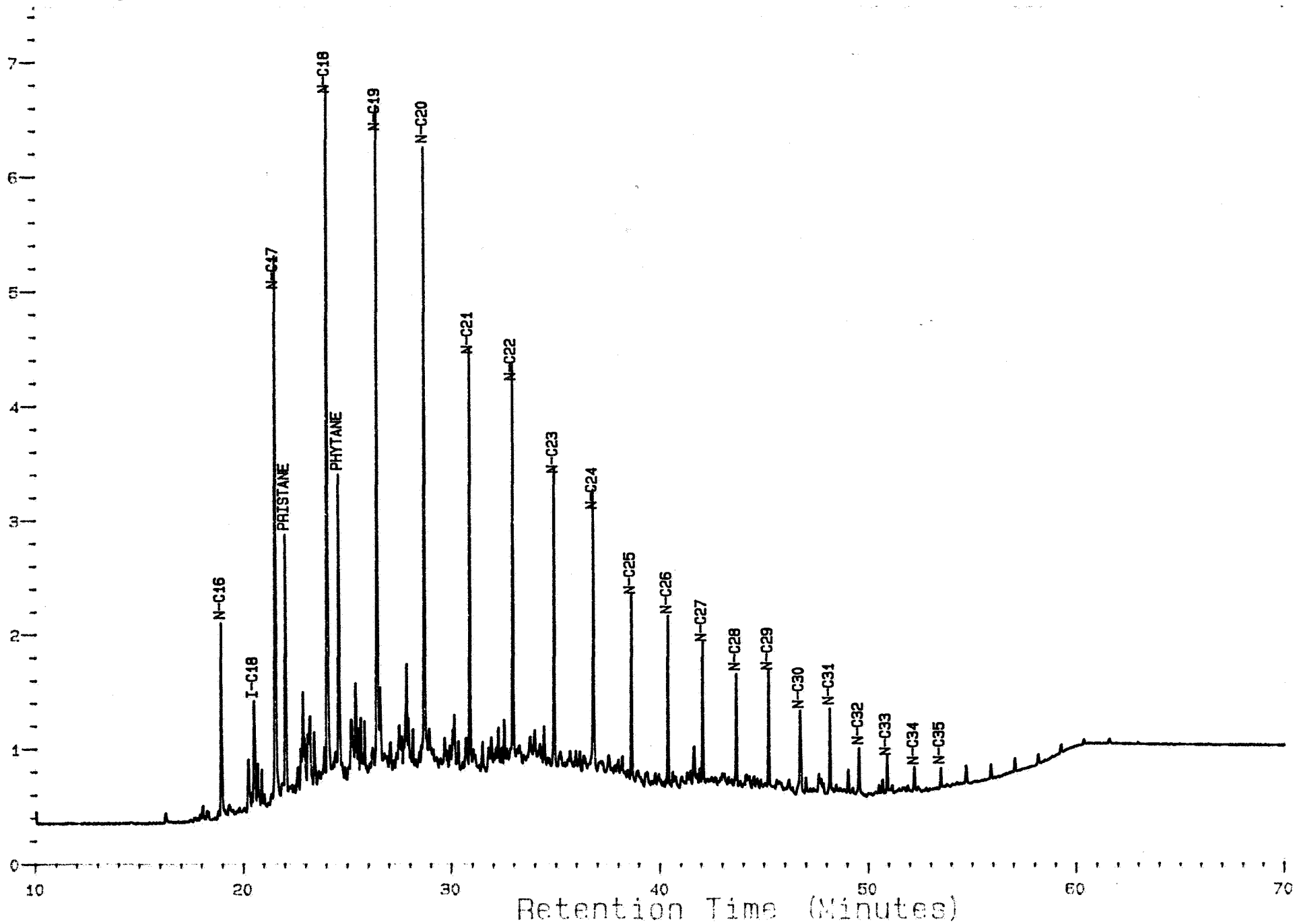


Analysis CB021201S

7, 20, 1

3105 M SHALE

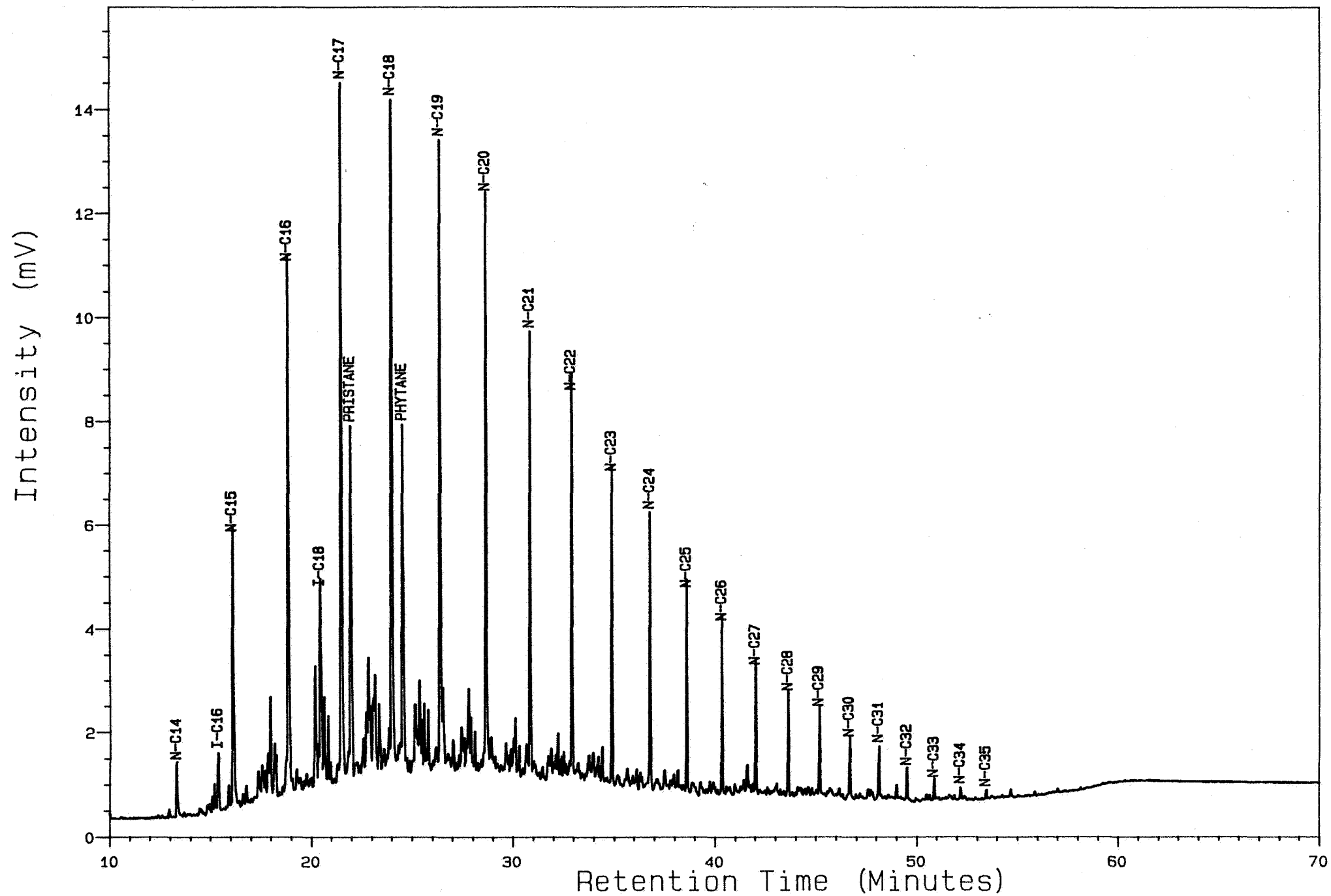
Intensity (mV)



Analysis CB021201S

7, 19, 1

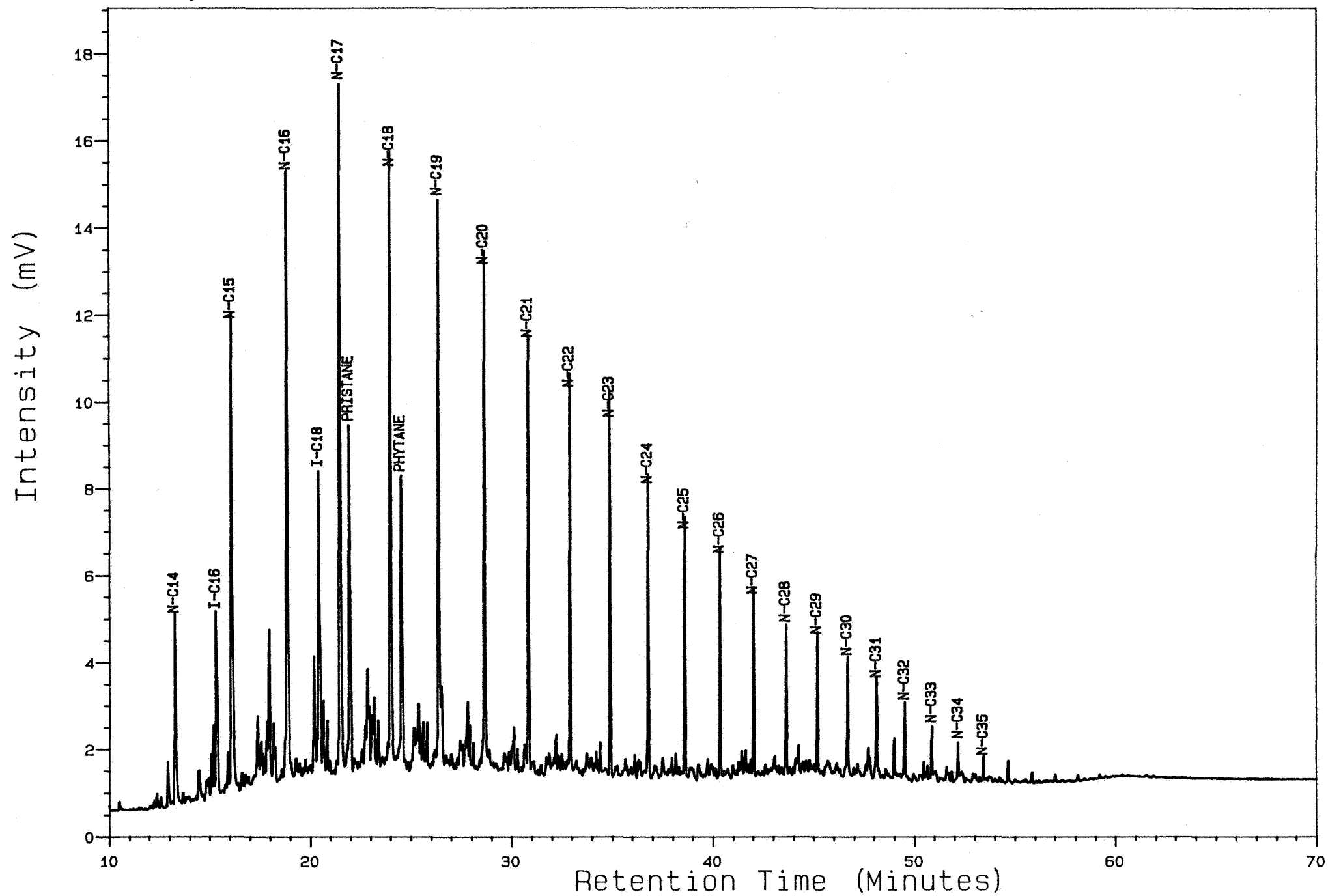
3105 M CARBONATE



Analysis CB021201S

7, 18, 1

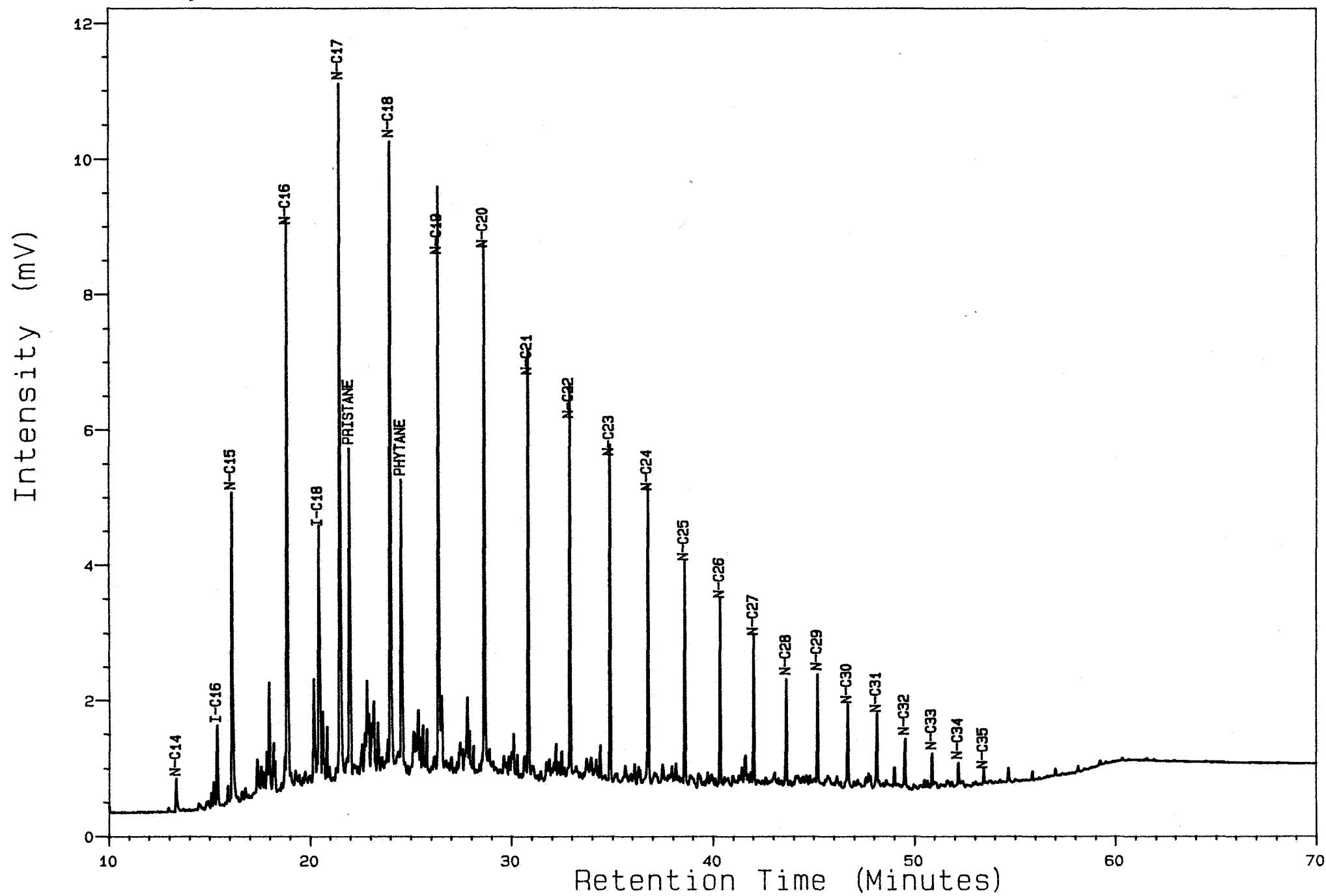
3937 M I



Analysis CB021201S

7, 17, 1

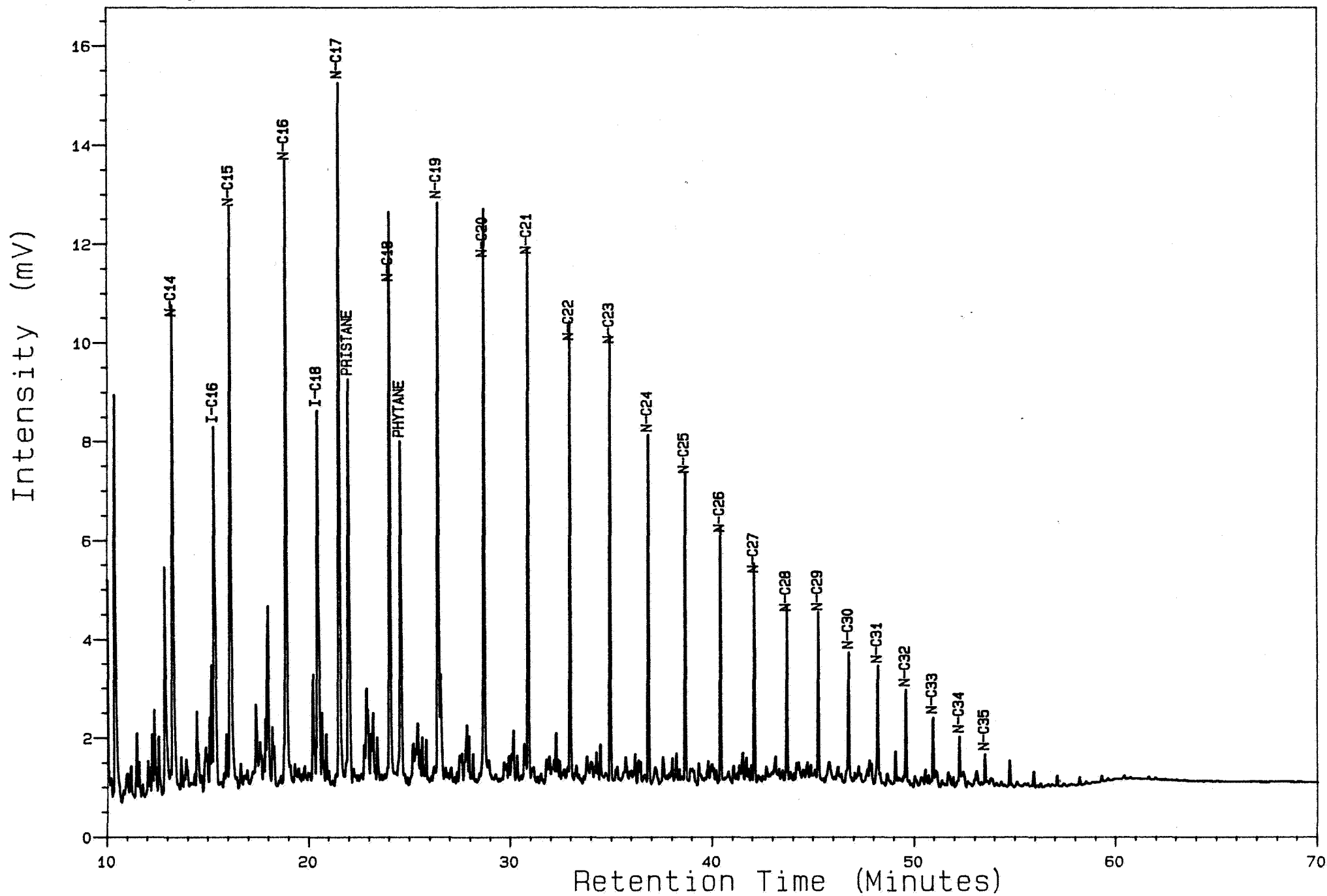
3937 M



Analysis CB021201S

7, 16, 1

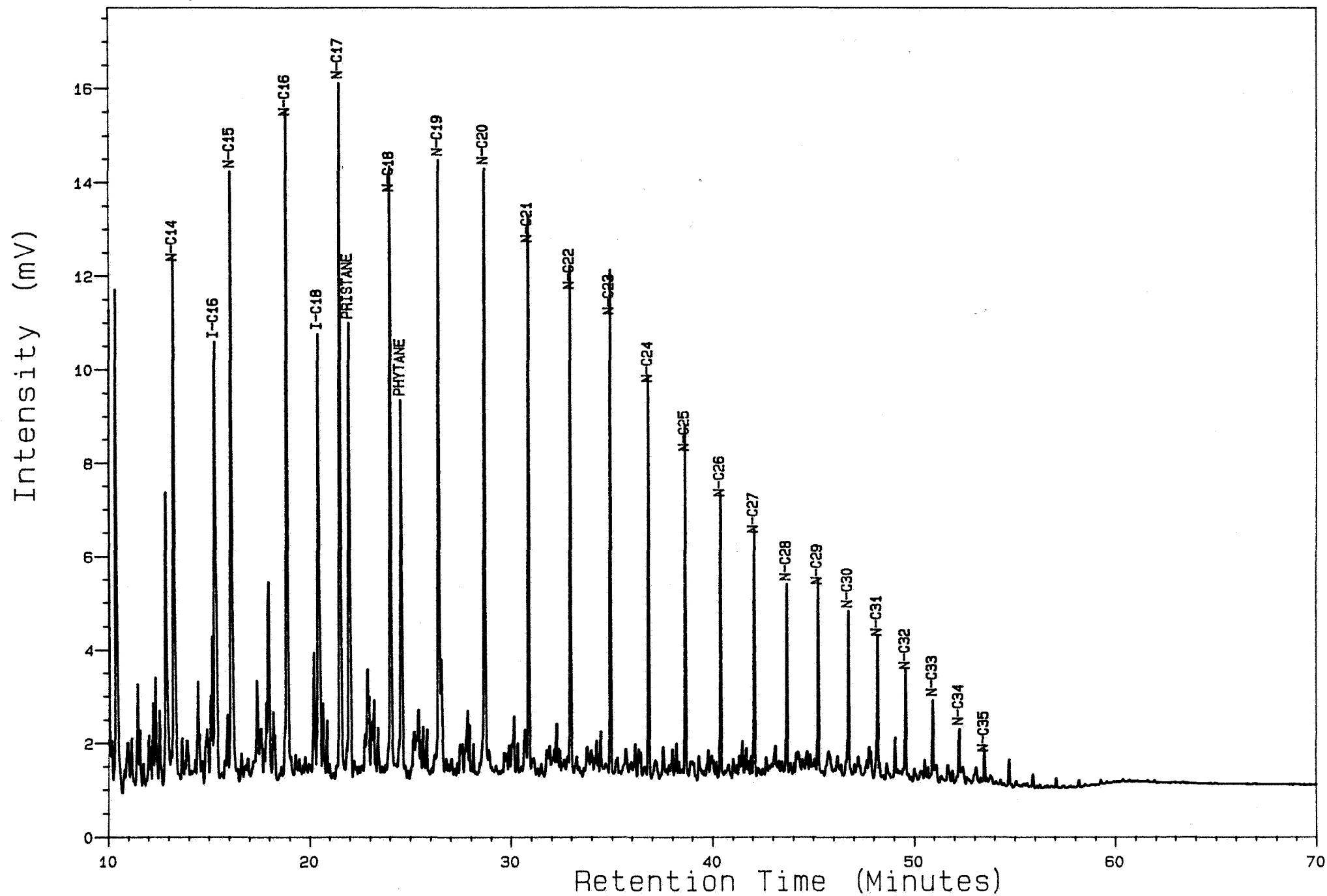
3980 M



Analysis CB021201S

7, 15, 1

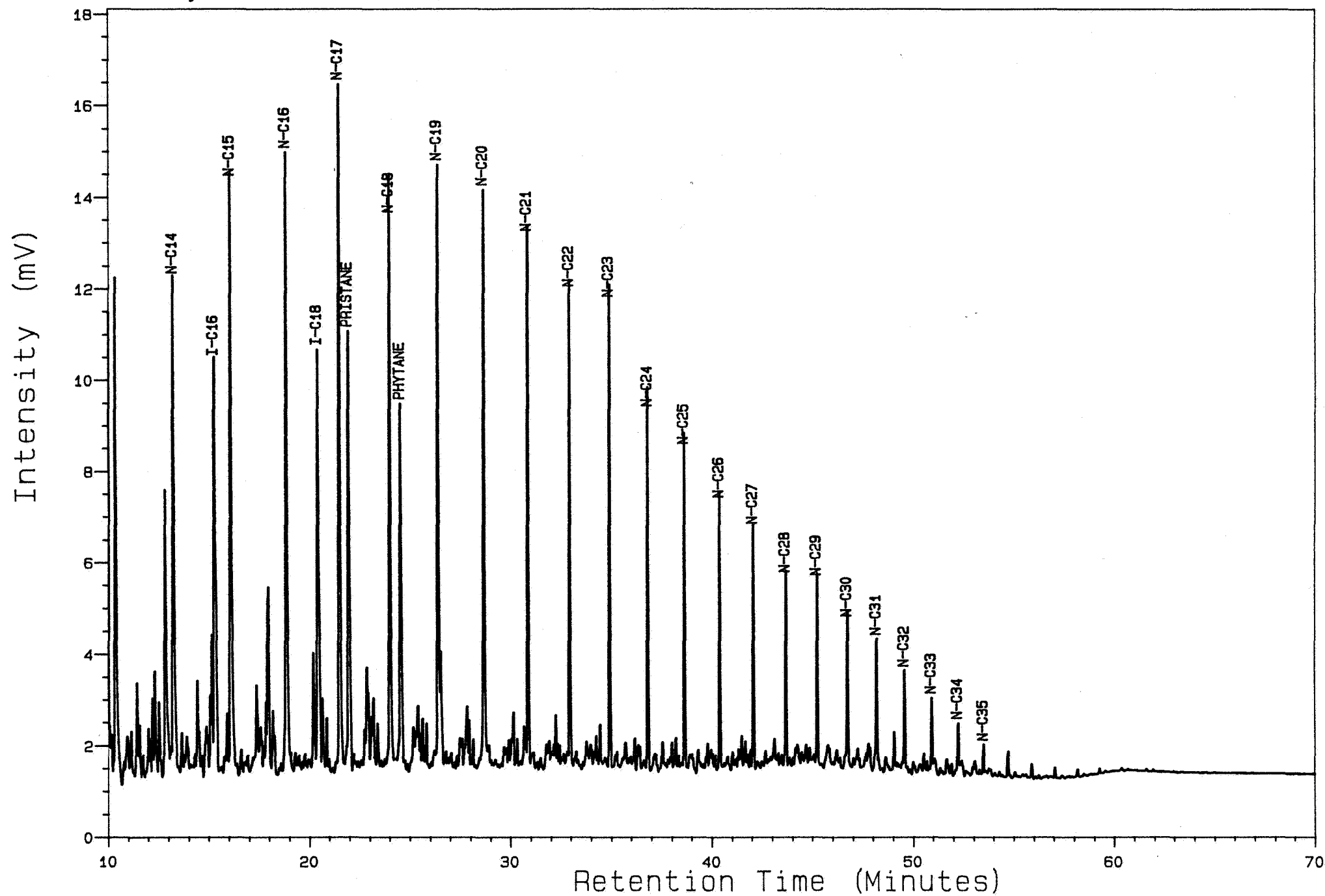
3985 M



Analysis CB021201S

7, 14, 1

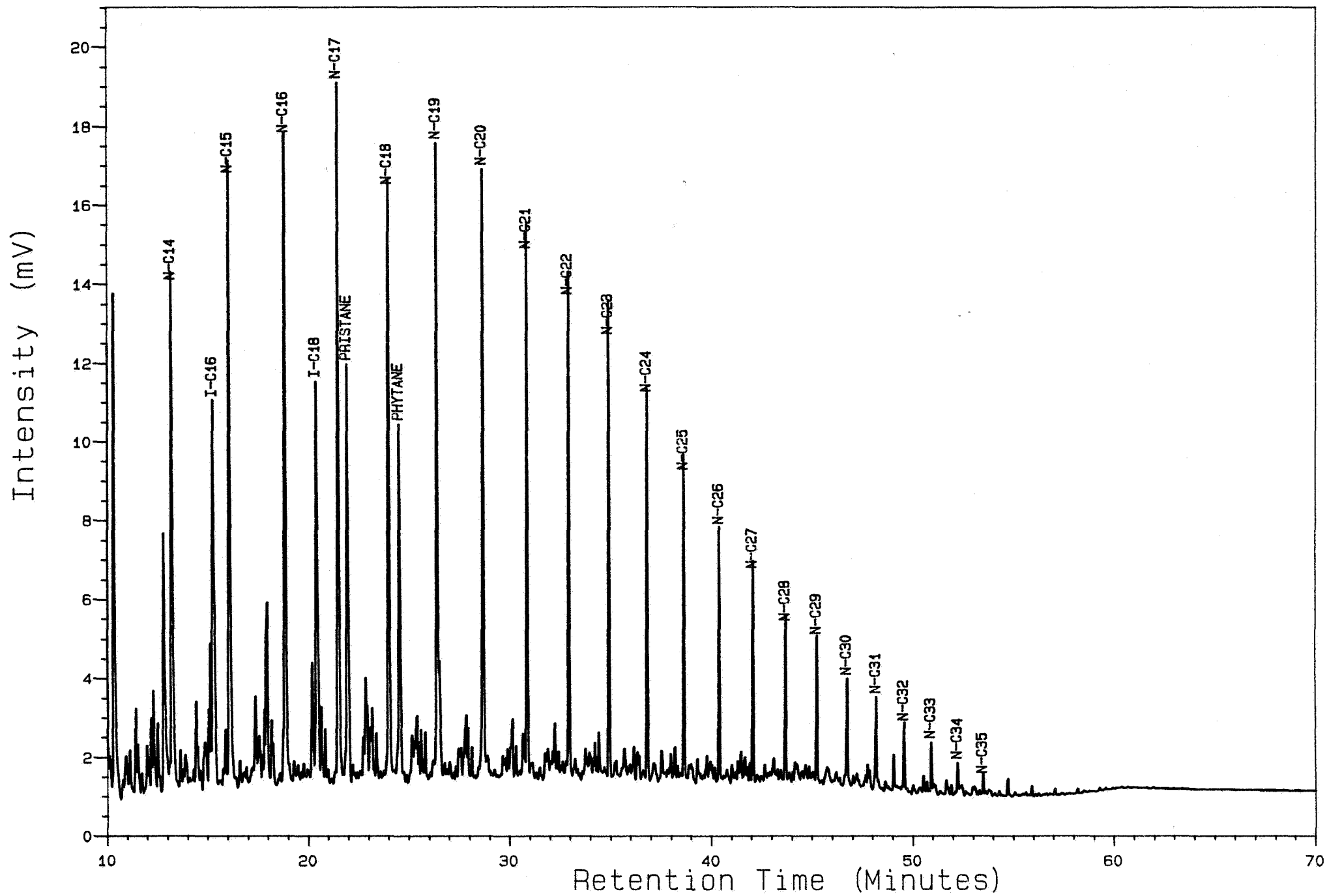
3990 M



Analysis CB021201S

7, 13, 1

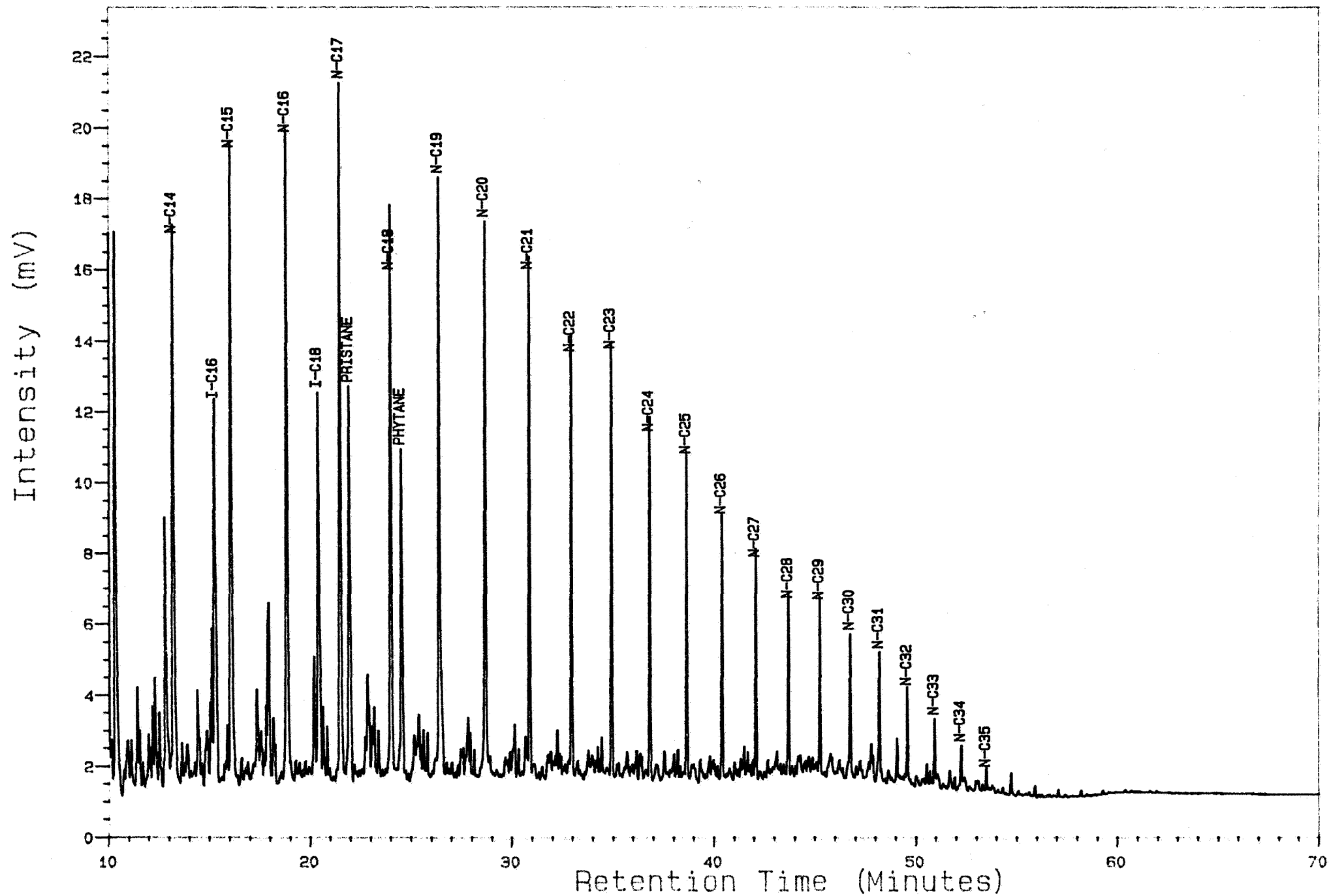
3992 M



Analysis CB021201S

7, 12, 1

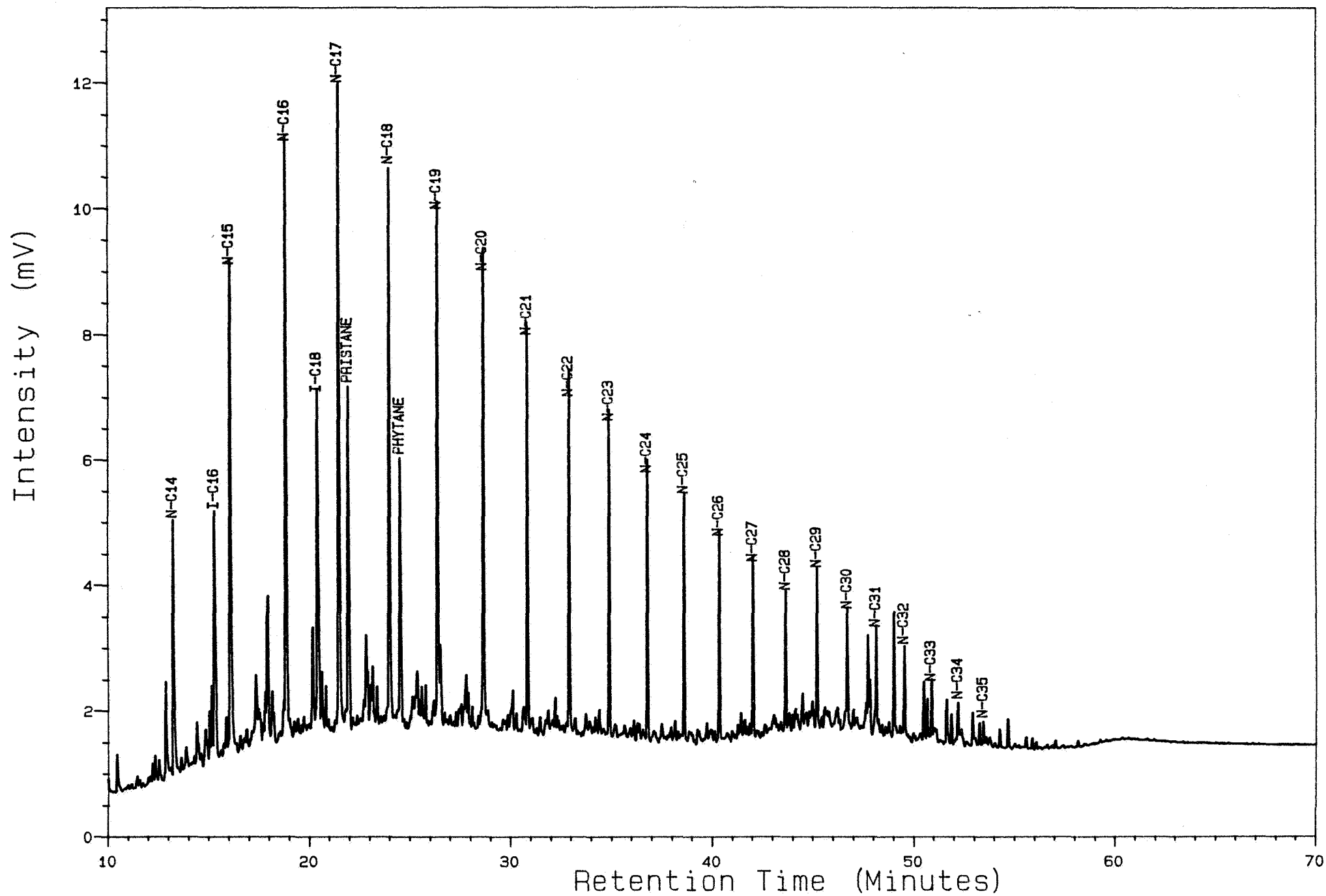
3996 M



Analysis CB021201S

7, 11, 1

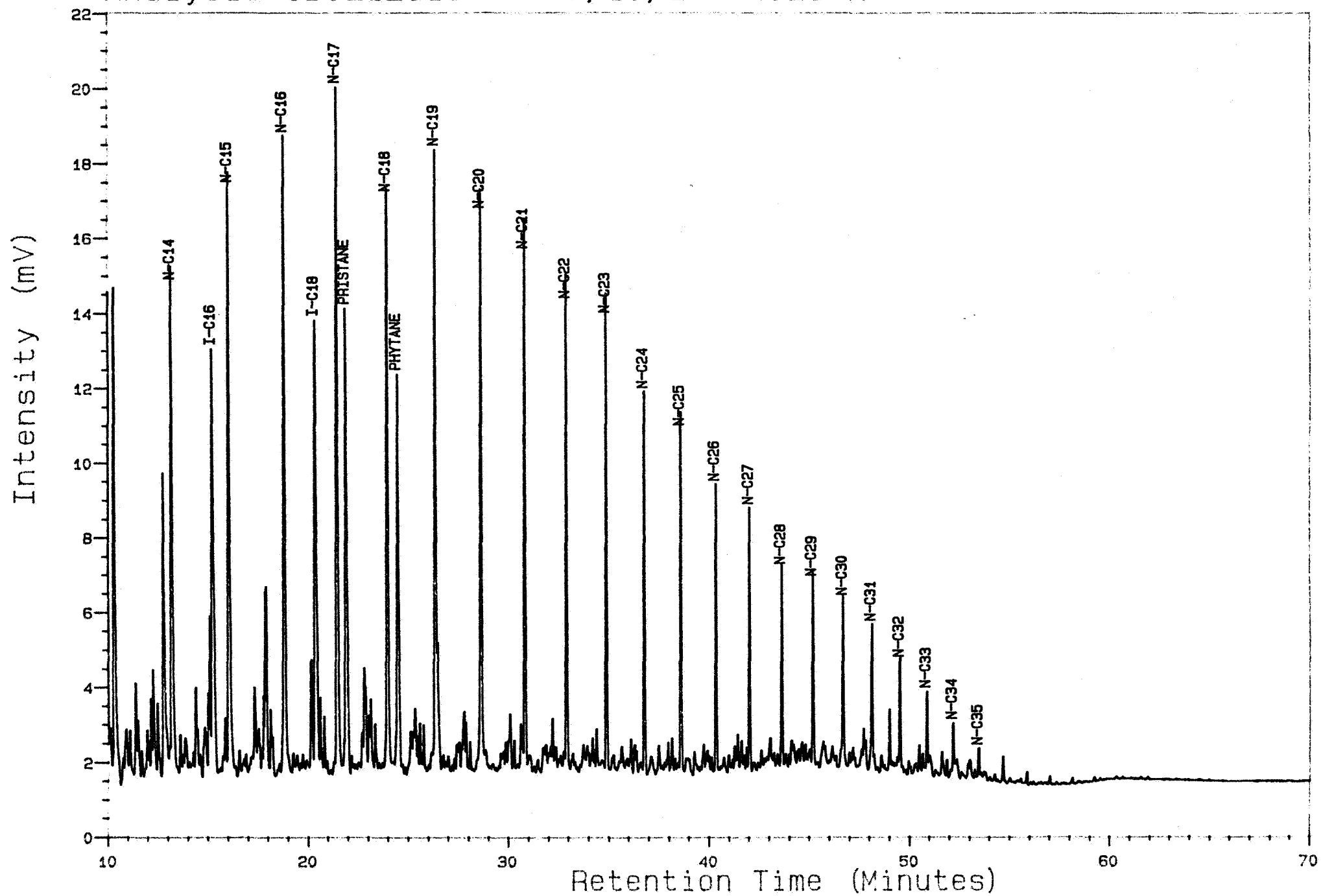
4000 M



Analysis CB021201S

7, 10, 1

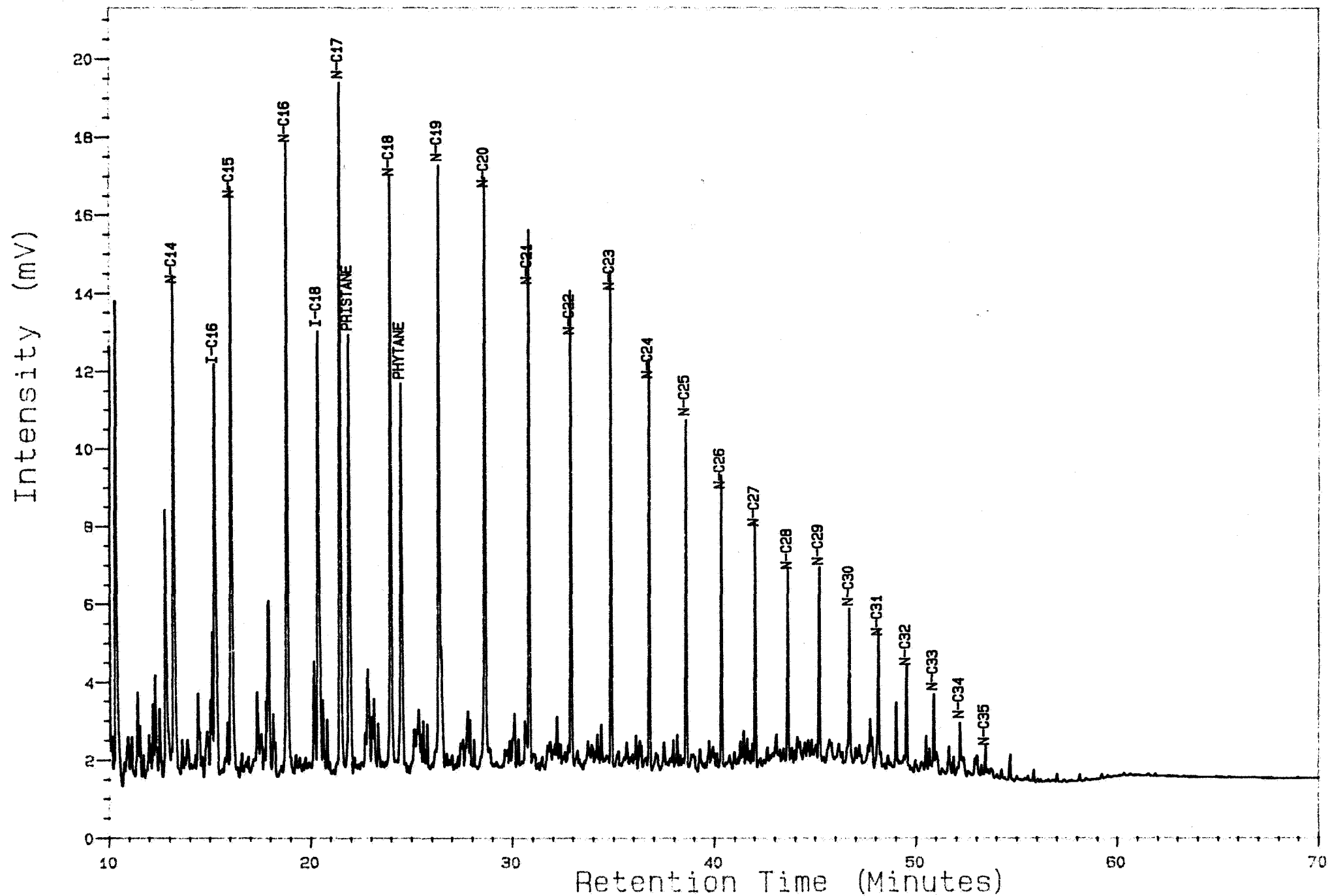
4025 M



Analysis CB021201S

7, 9, 1

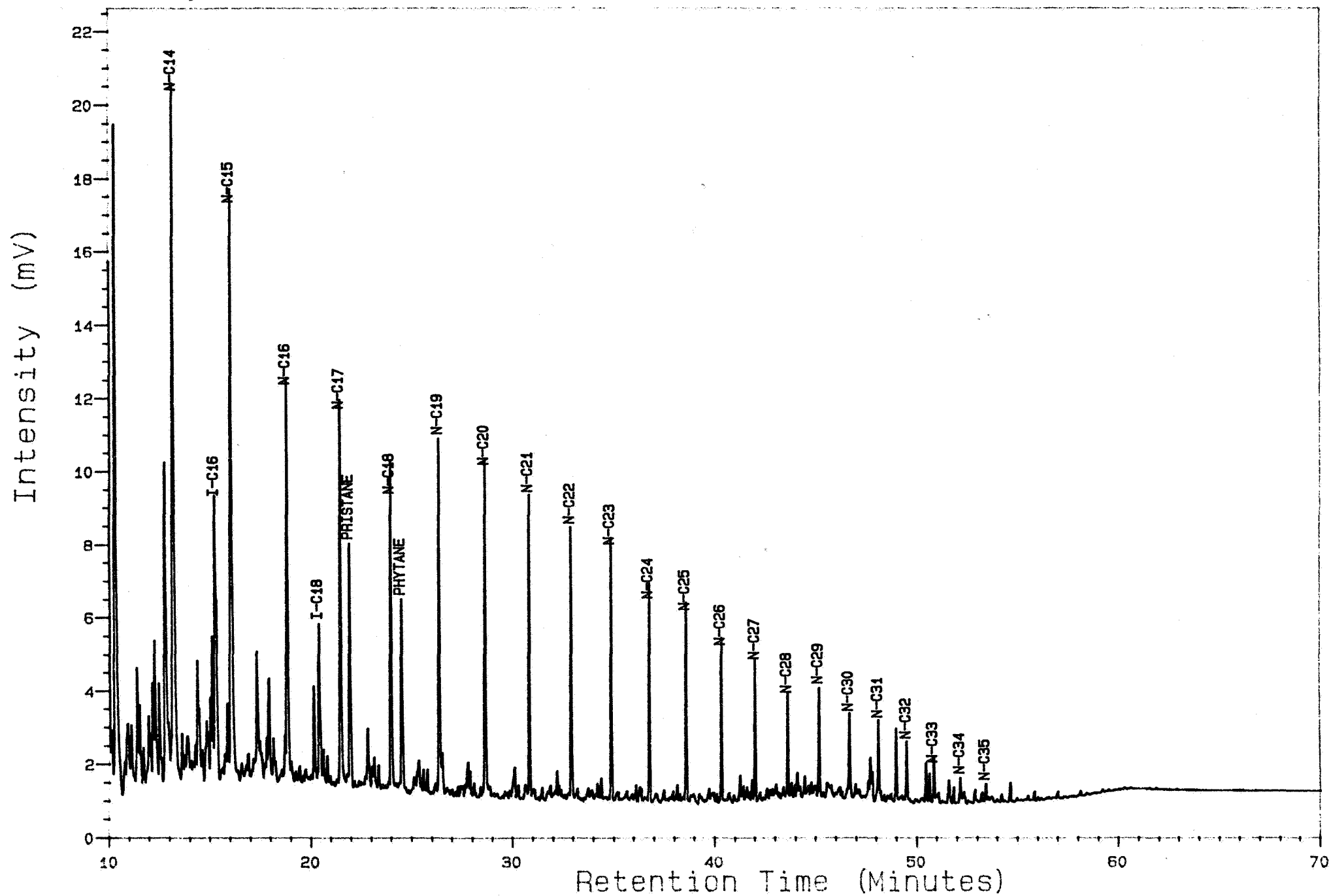
4040 M



Analysis CB021201S

7, 8, 1

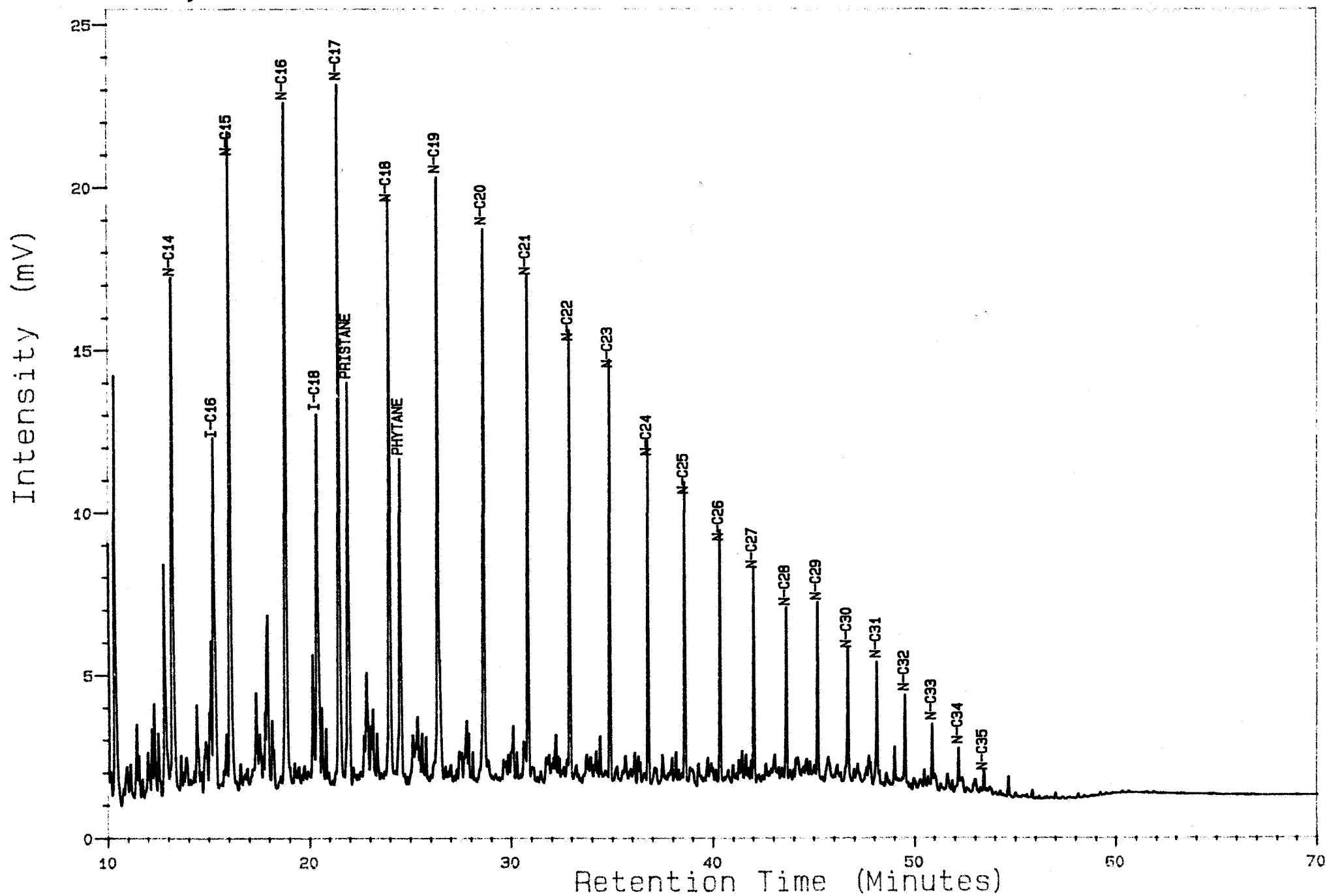
4050 M



Analysis CB021201S

7, 7, 1

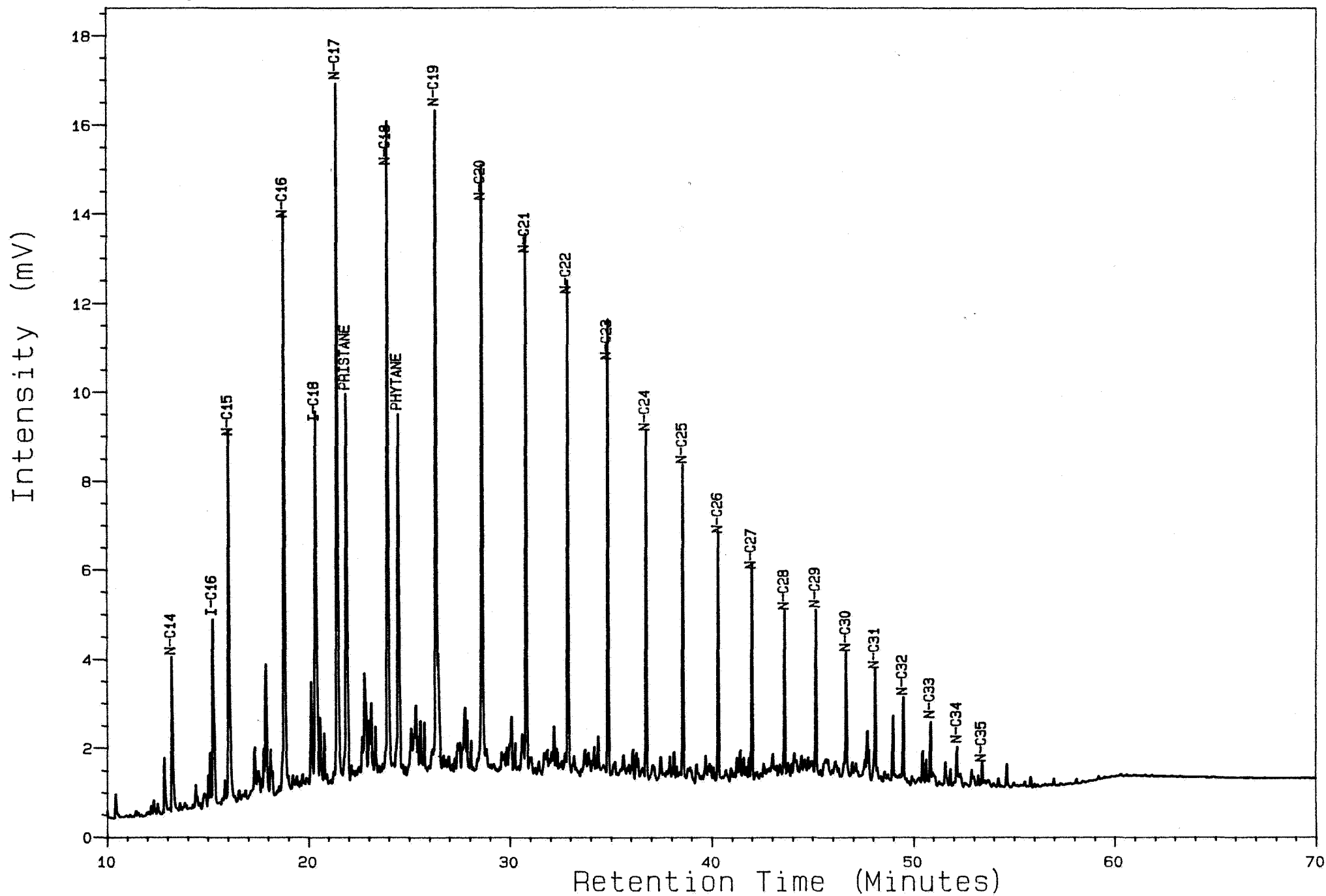
4105 M



Analysis CB021201S

7, 6, 1

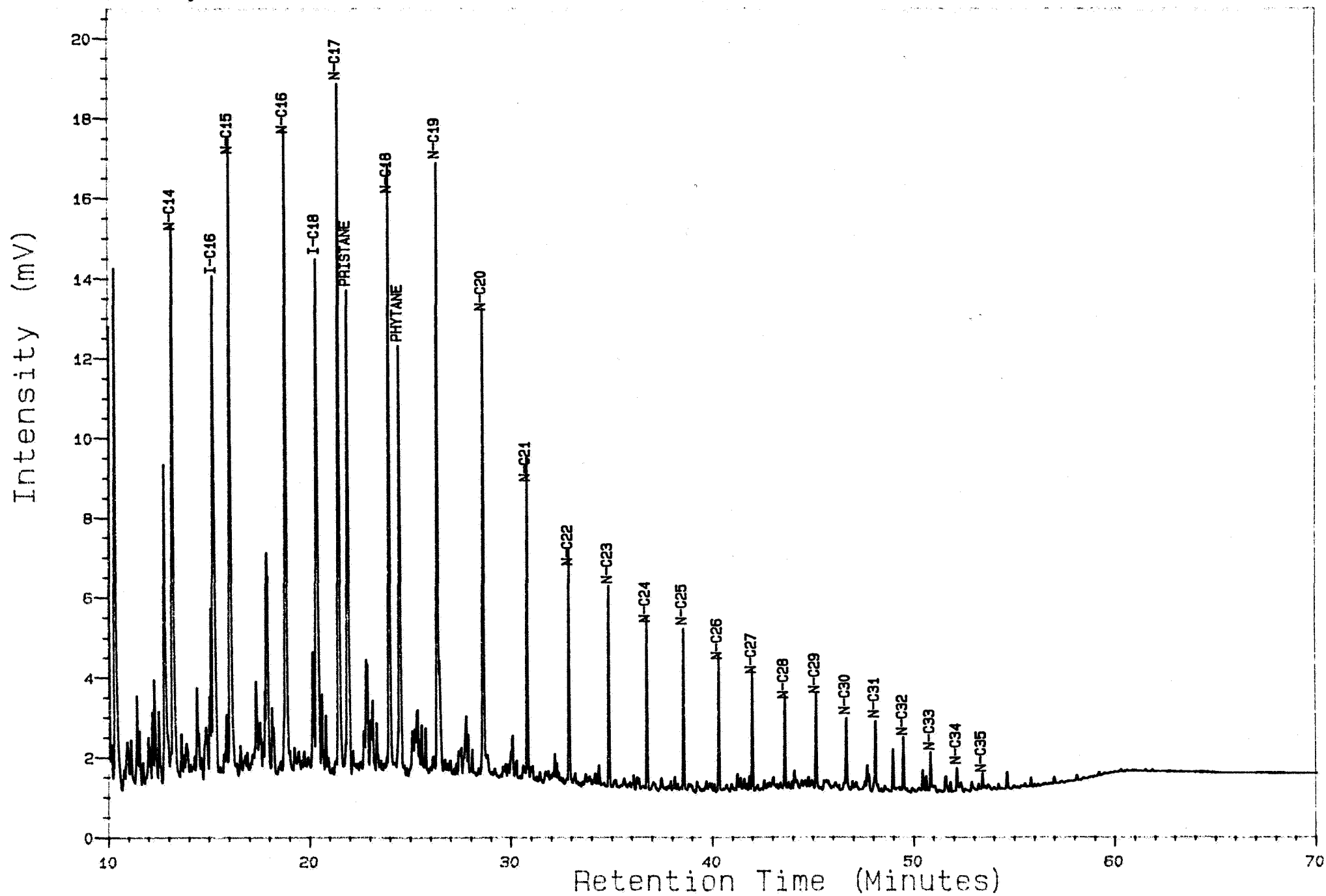
4167 M



Analysis CB021201S

7, 5, 1

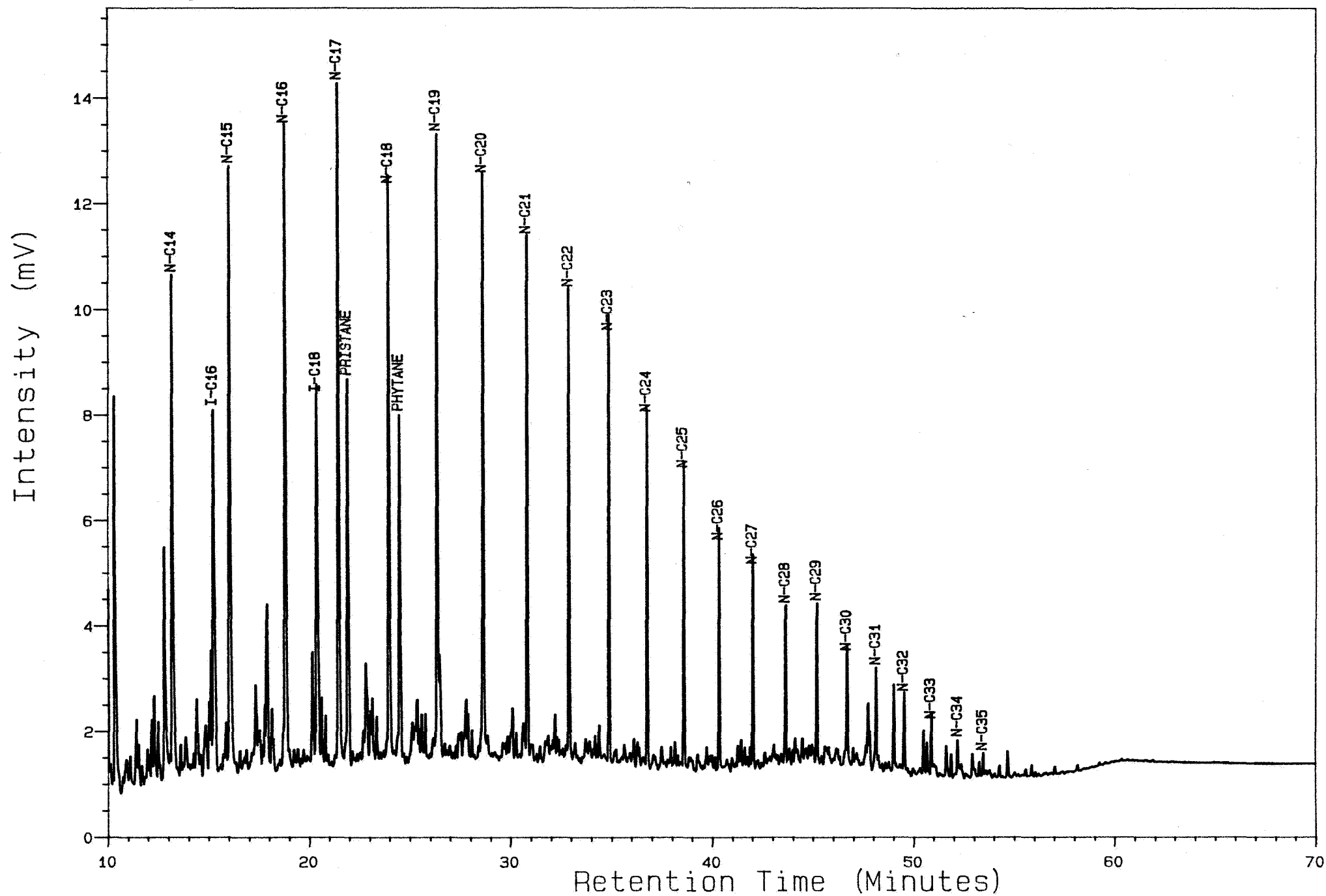
4172 M



Analysis CB021201S

7, 4, 1

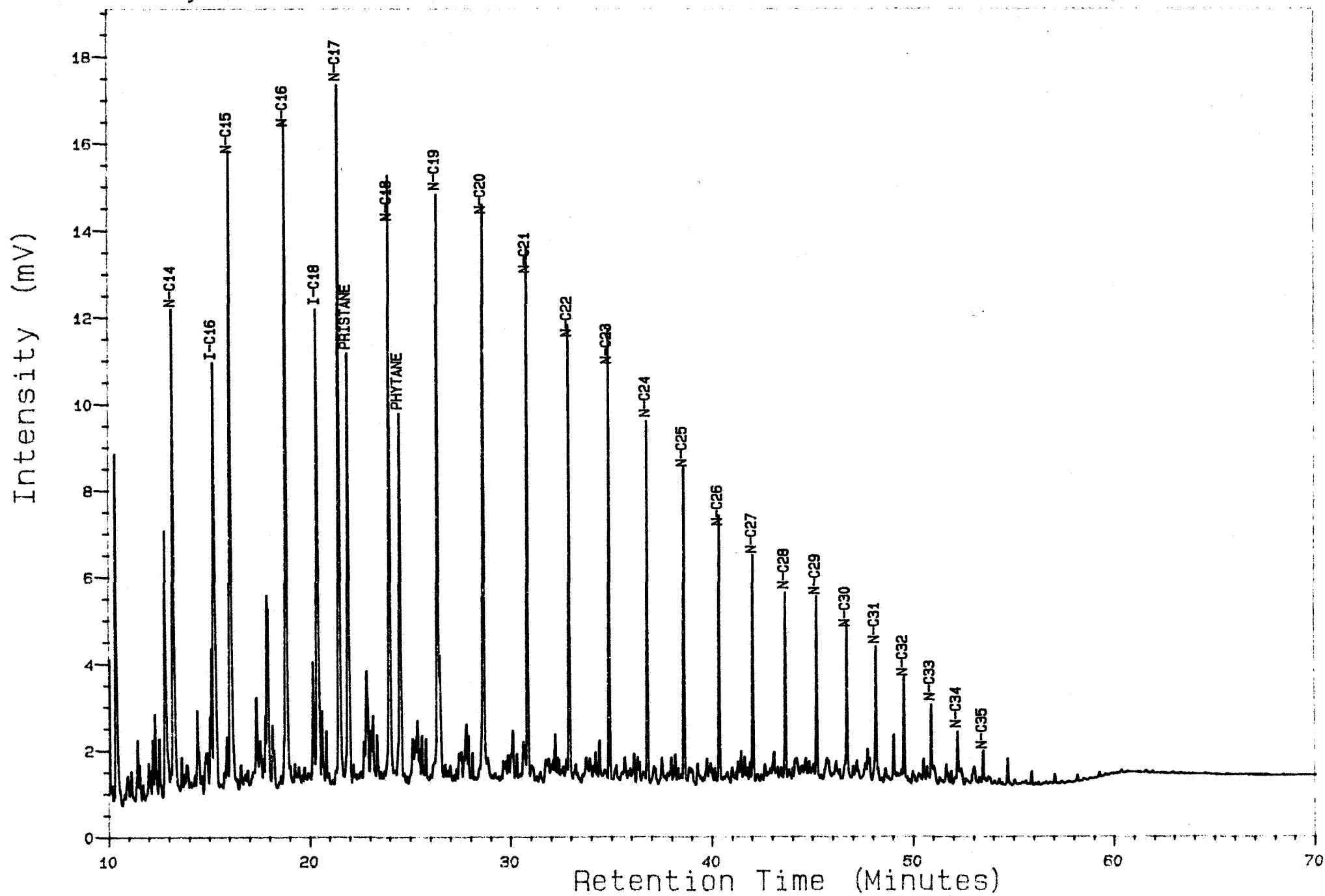
4200 M



Analysis CB021201S

7, 3, 1

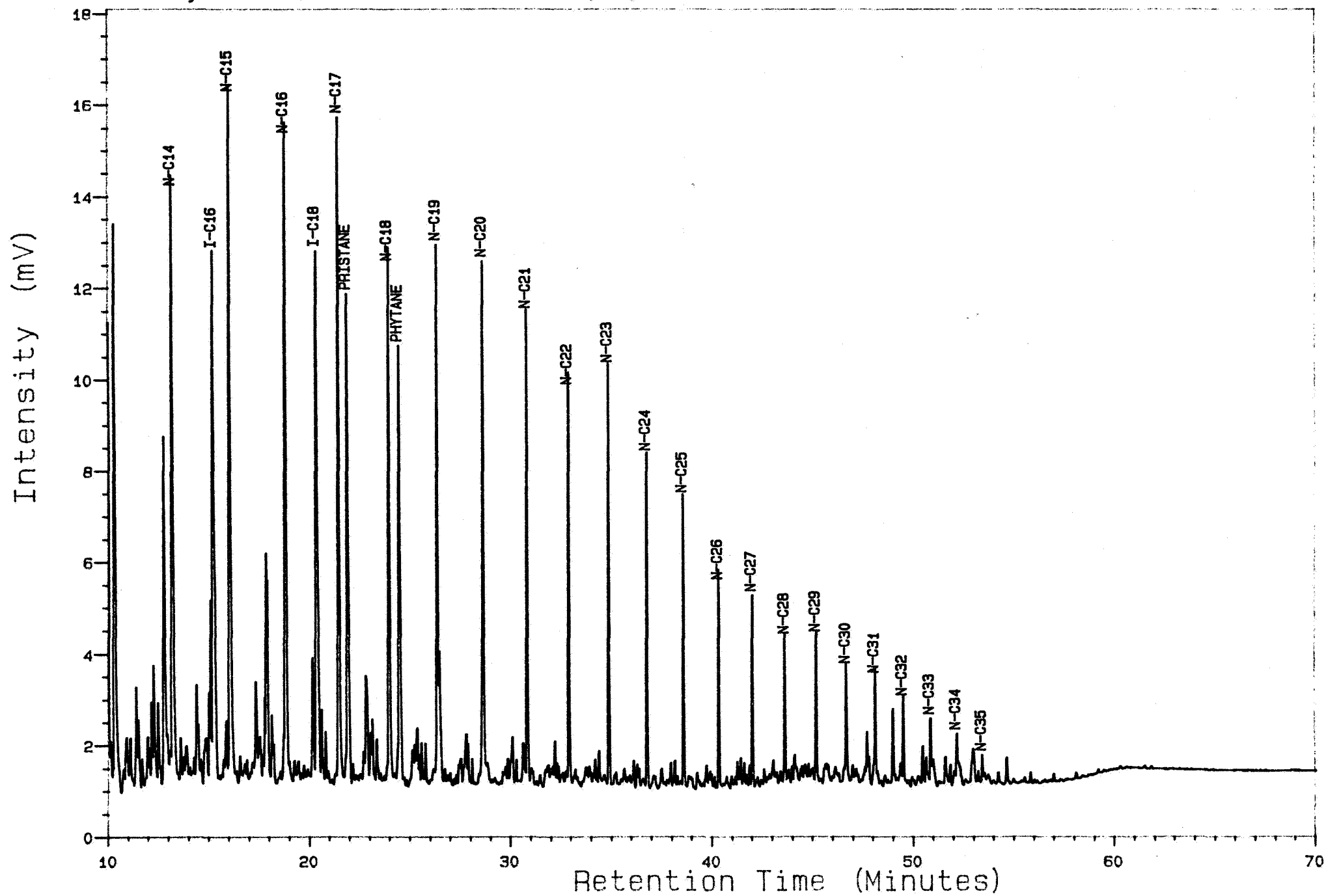
4215 M



Analysis CB021201S

7, 2, 1

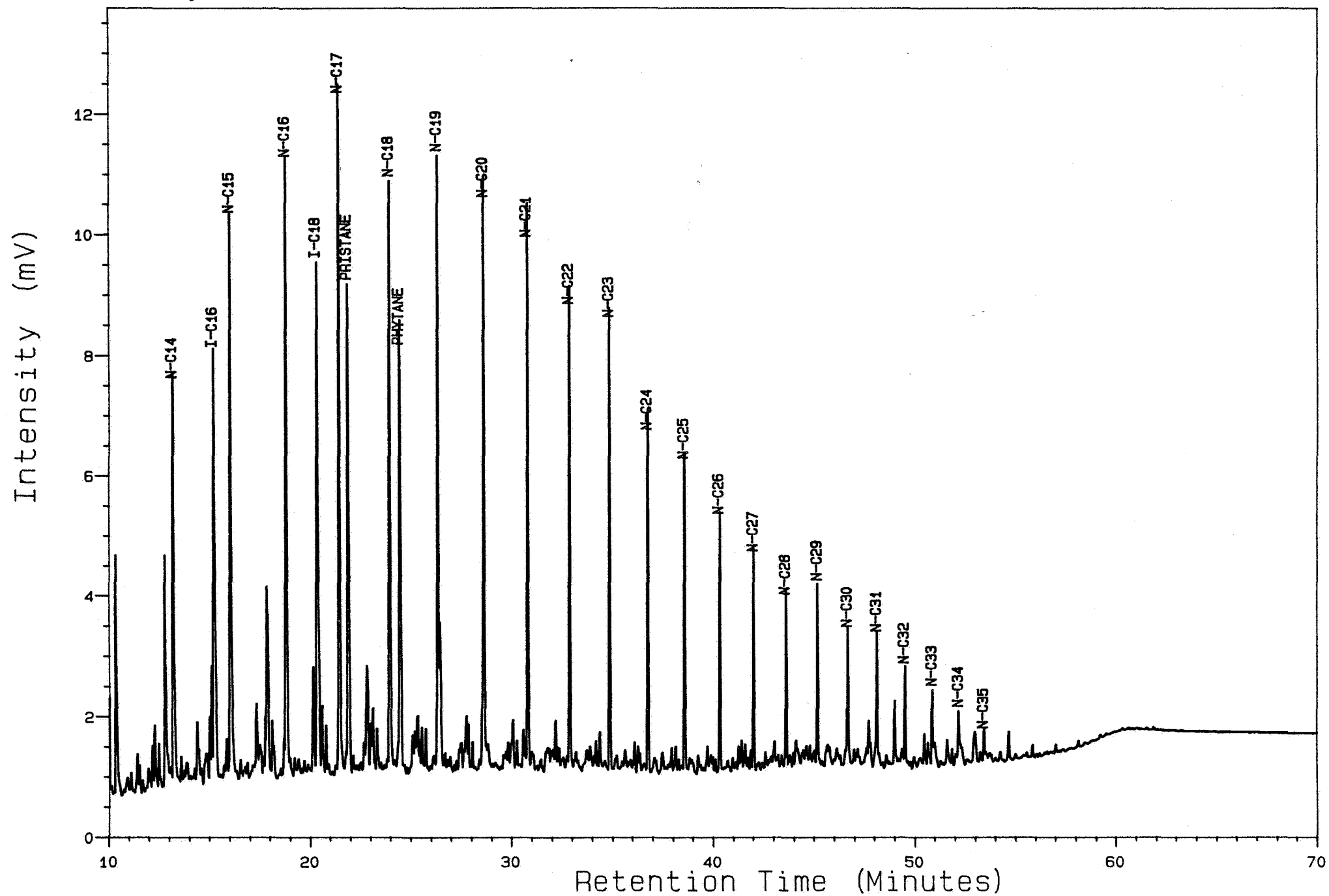
4240 M



Analysis B021201S

7, 18, 1

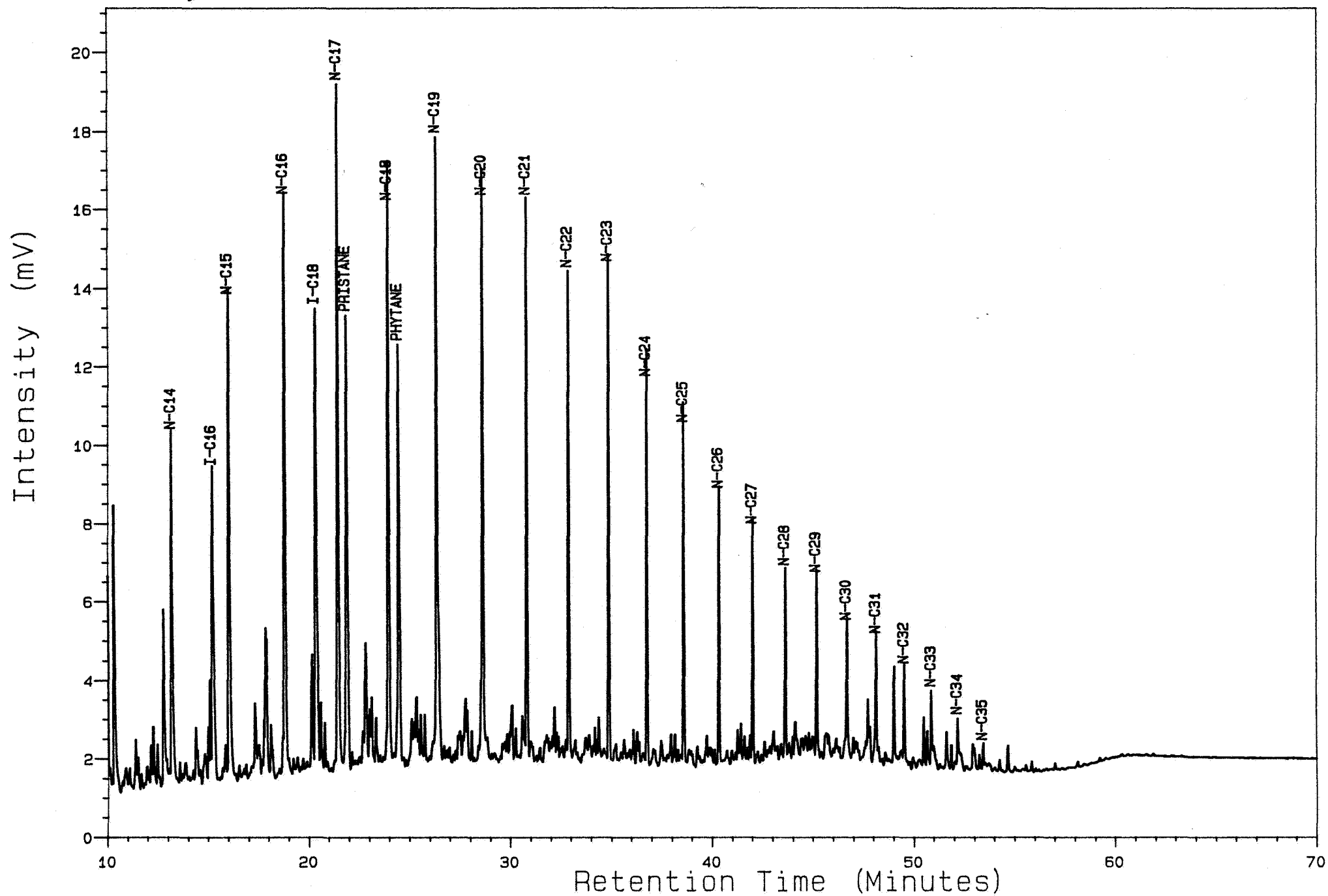
4247M



Analysis B021201S

7, 17, 1

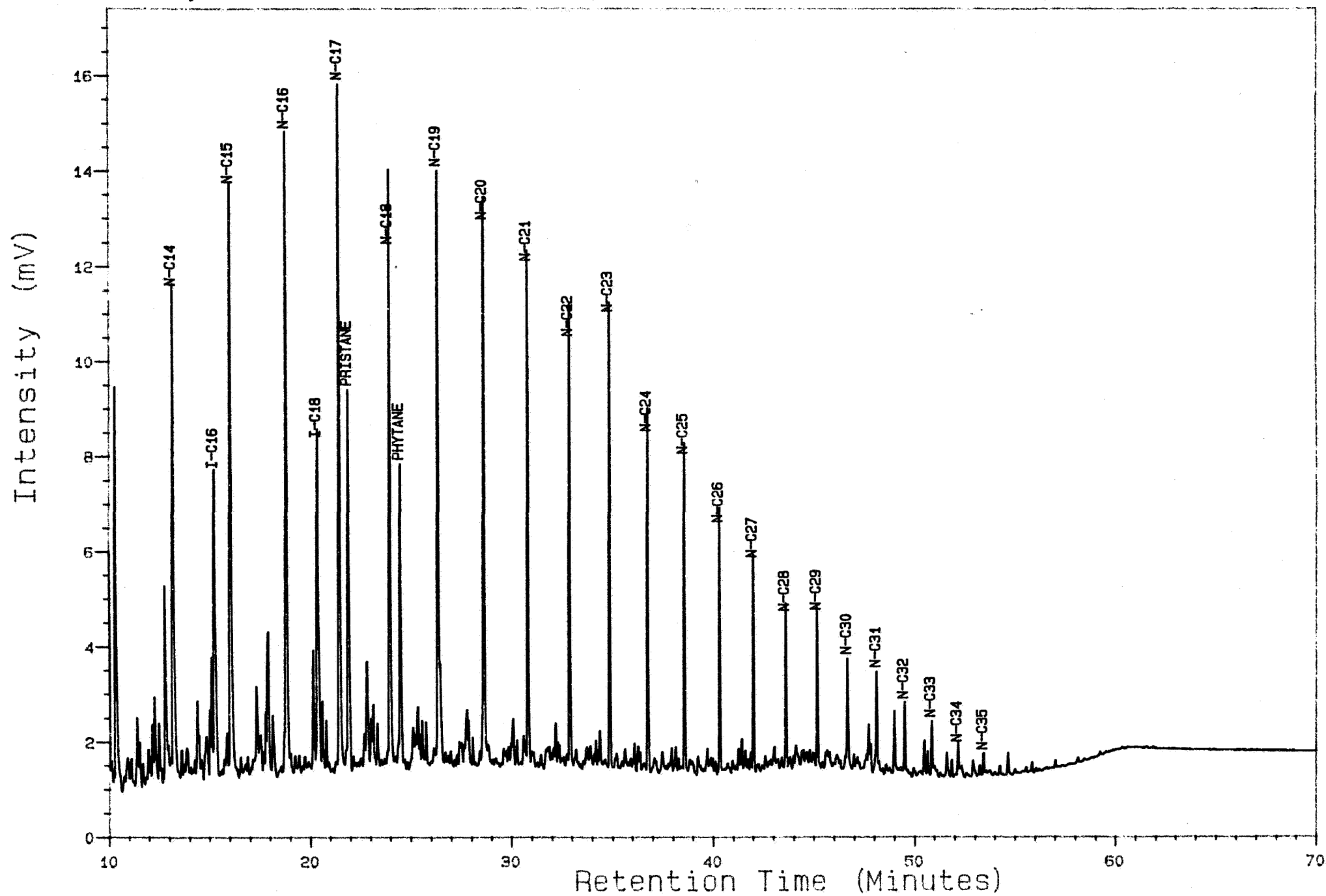
4272M



Analysis B021201S

7, 16, 1

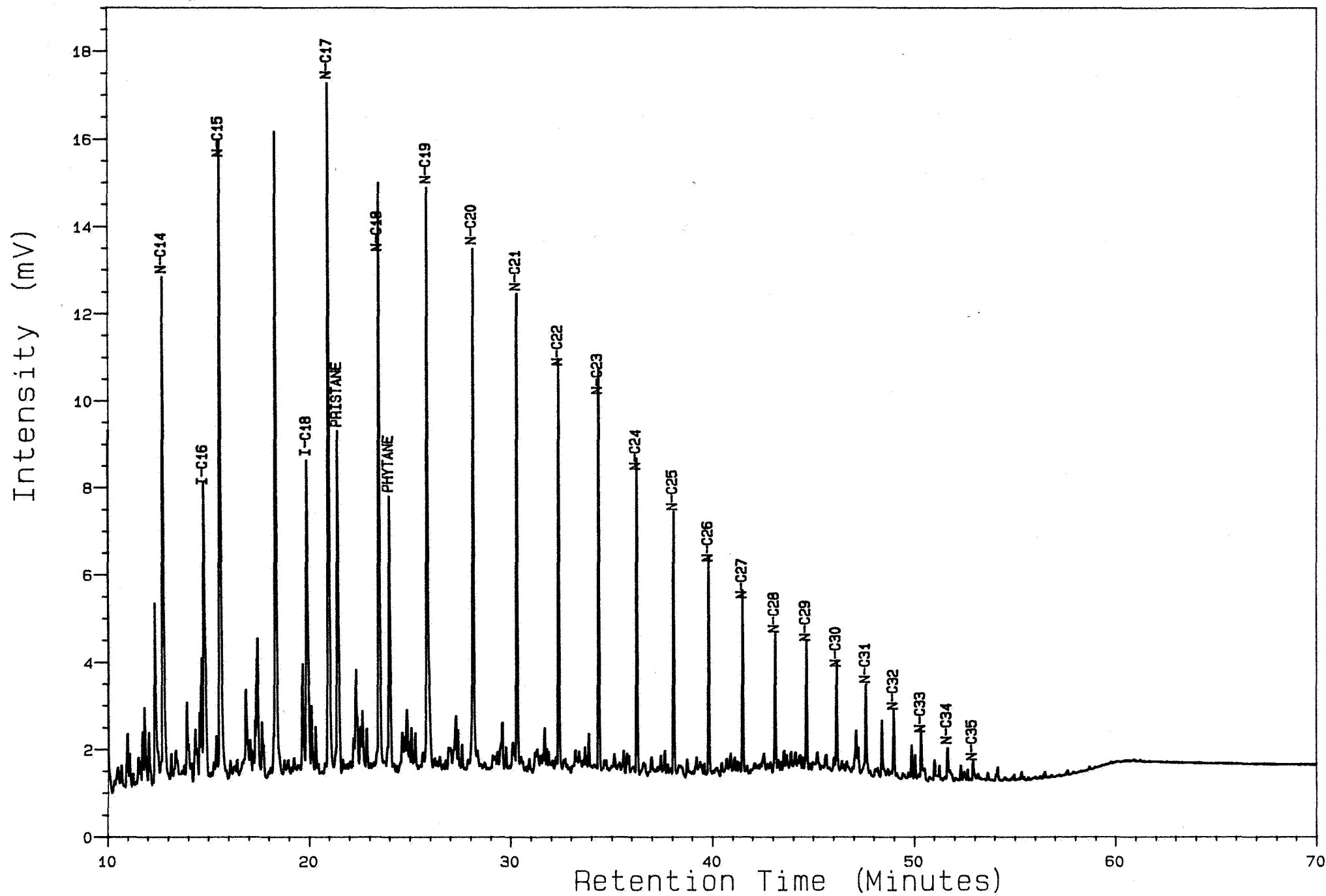
4302M



Analysis B021201S

7, 14, 1

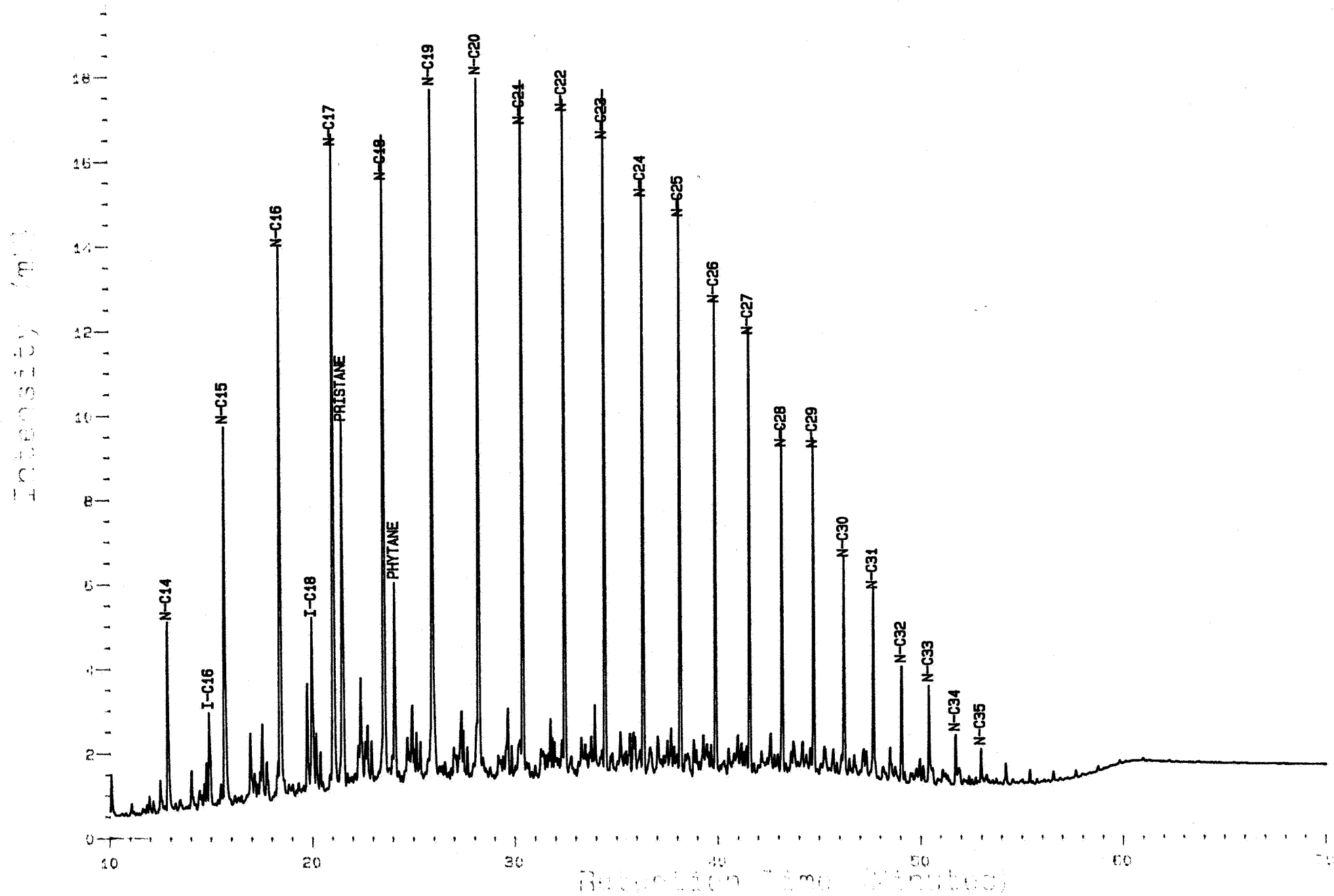
4370M



Analysis B021201S

7, 13, 1

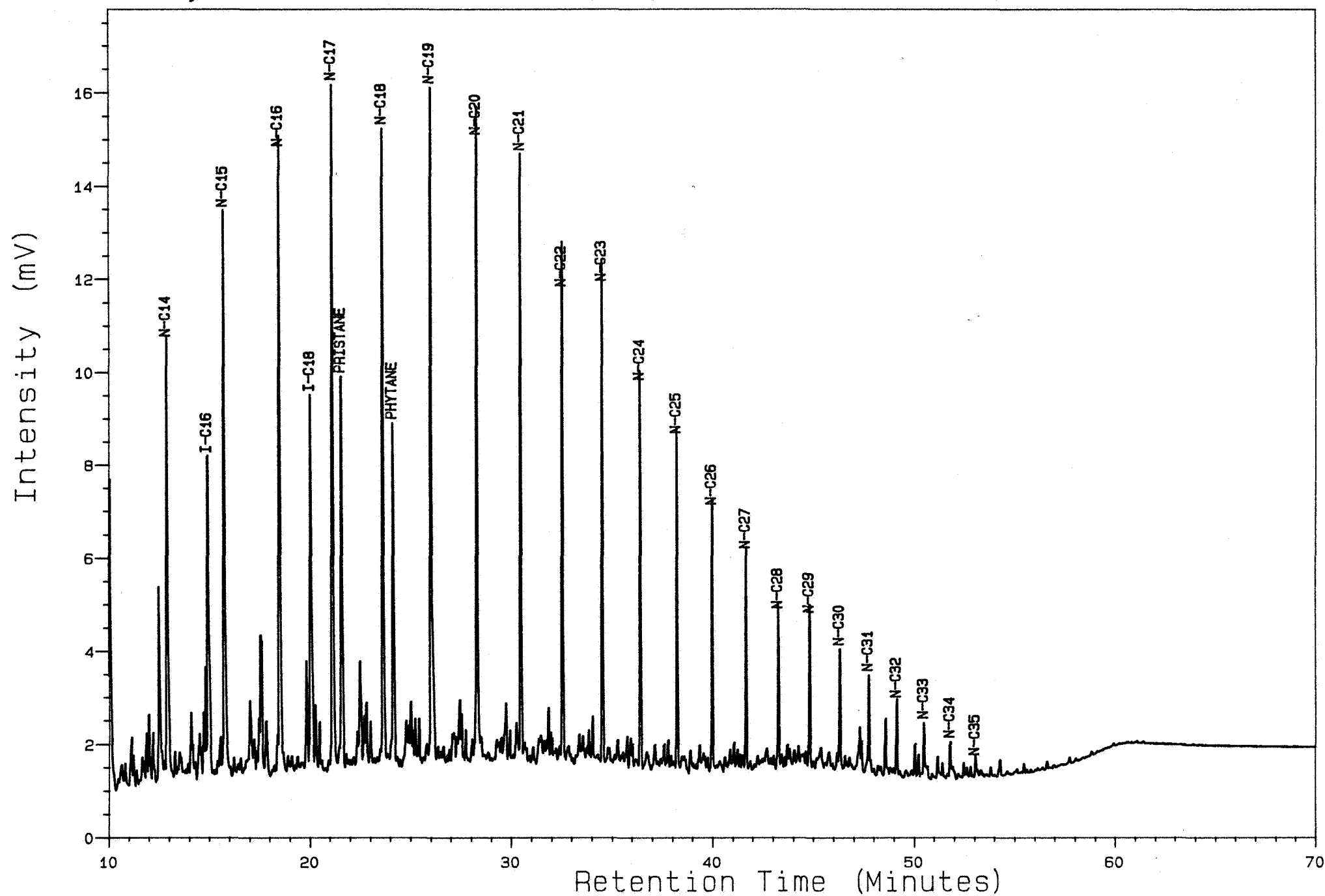
4400M



Analysis B021201S

7, 12, 1

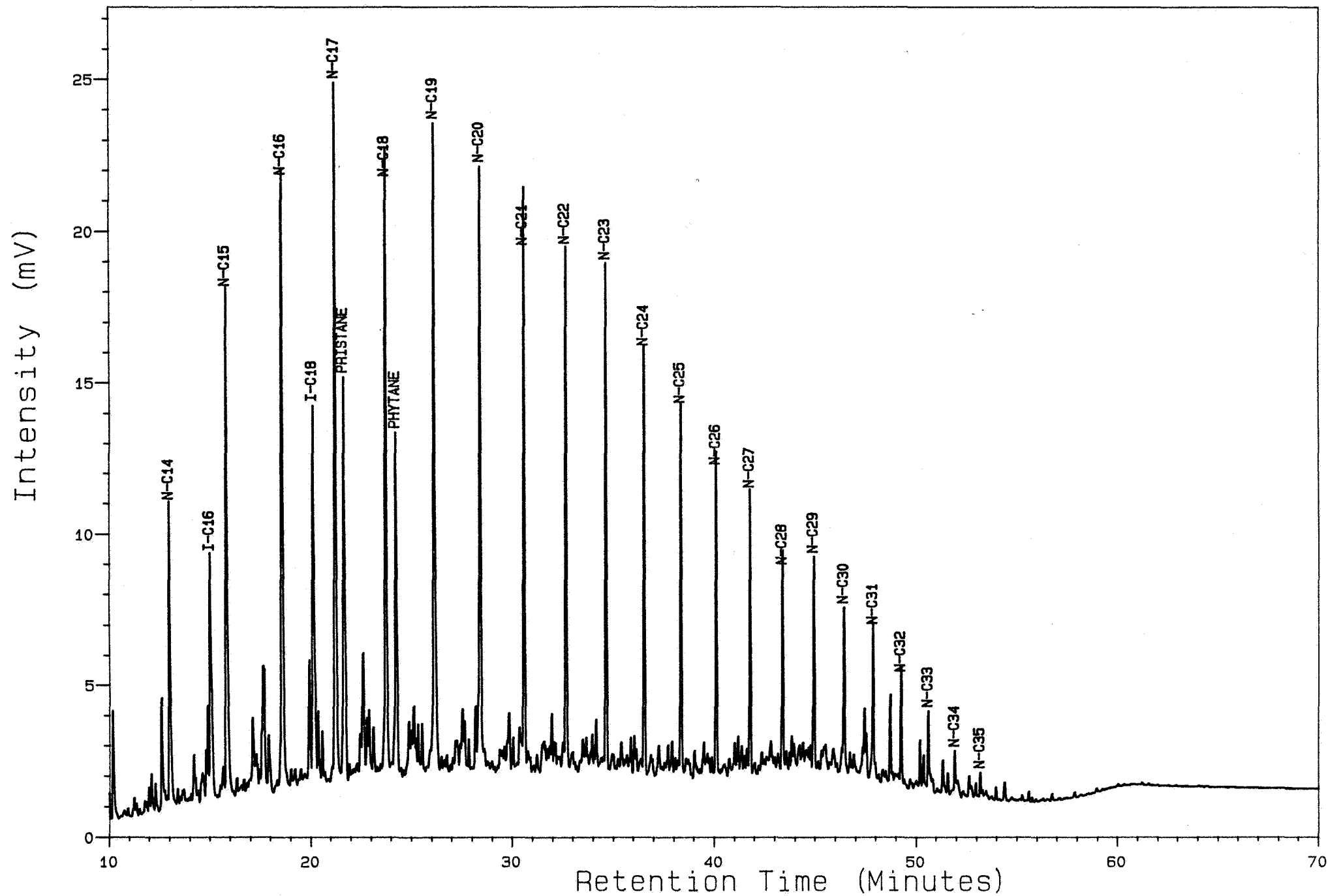
4432M



Analysis B021201S

7, 11, 1

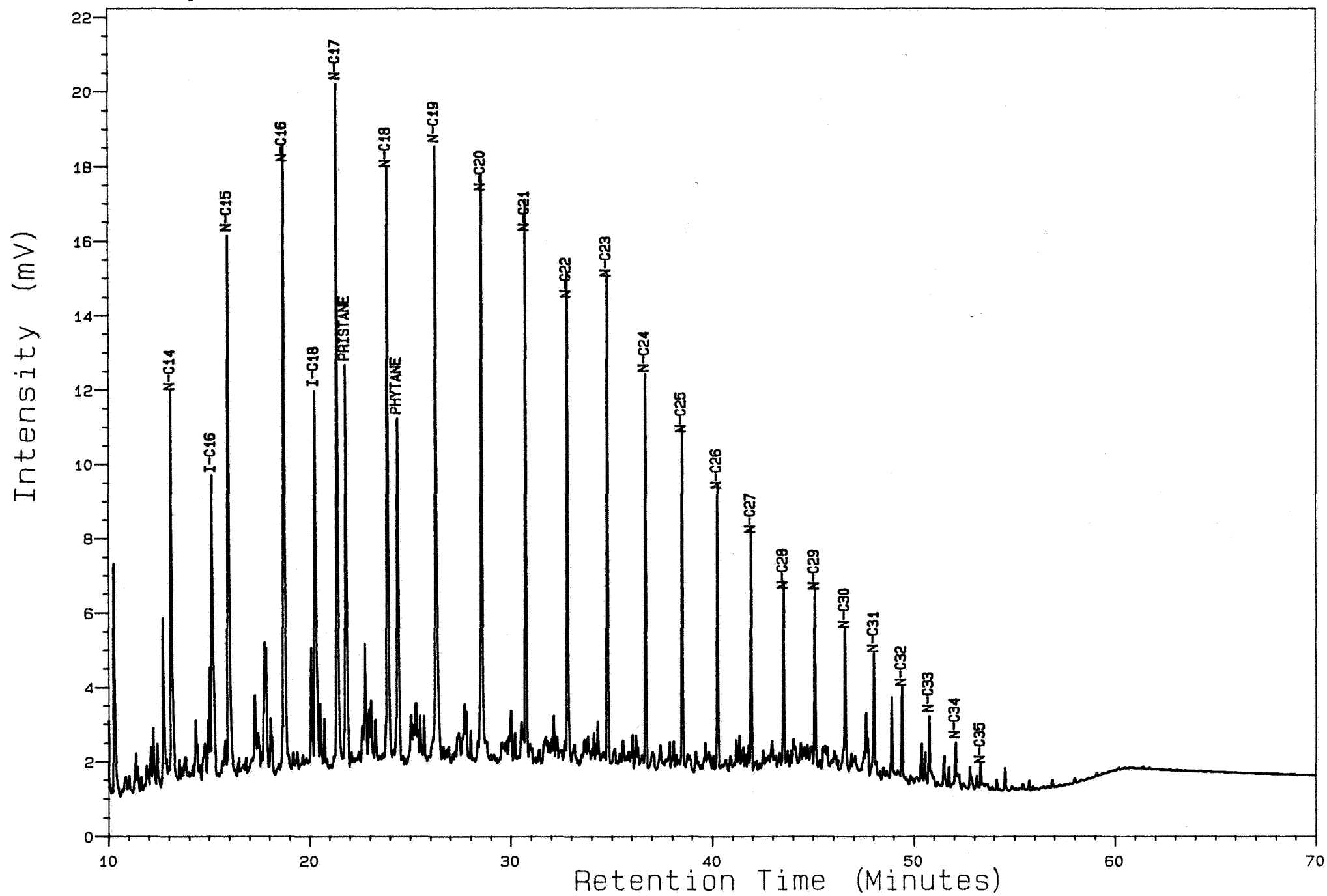
4457M



Analysis B021201S

7, 10, 1

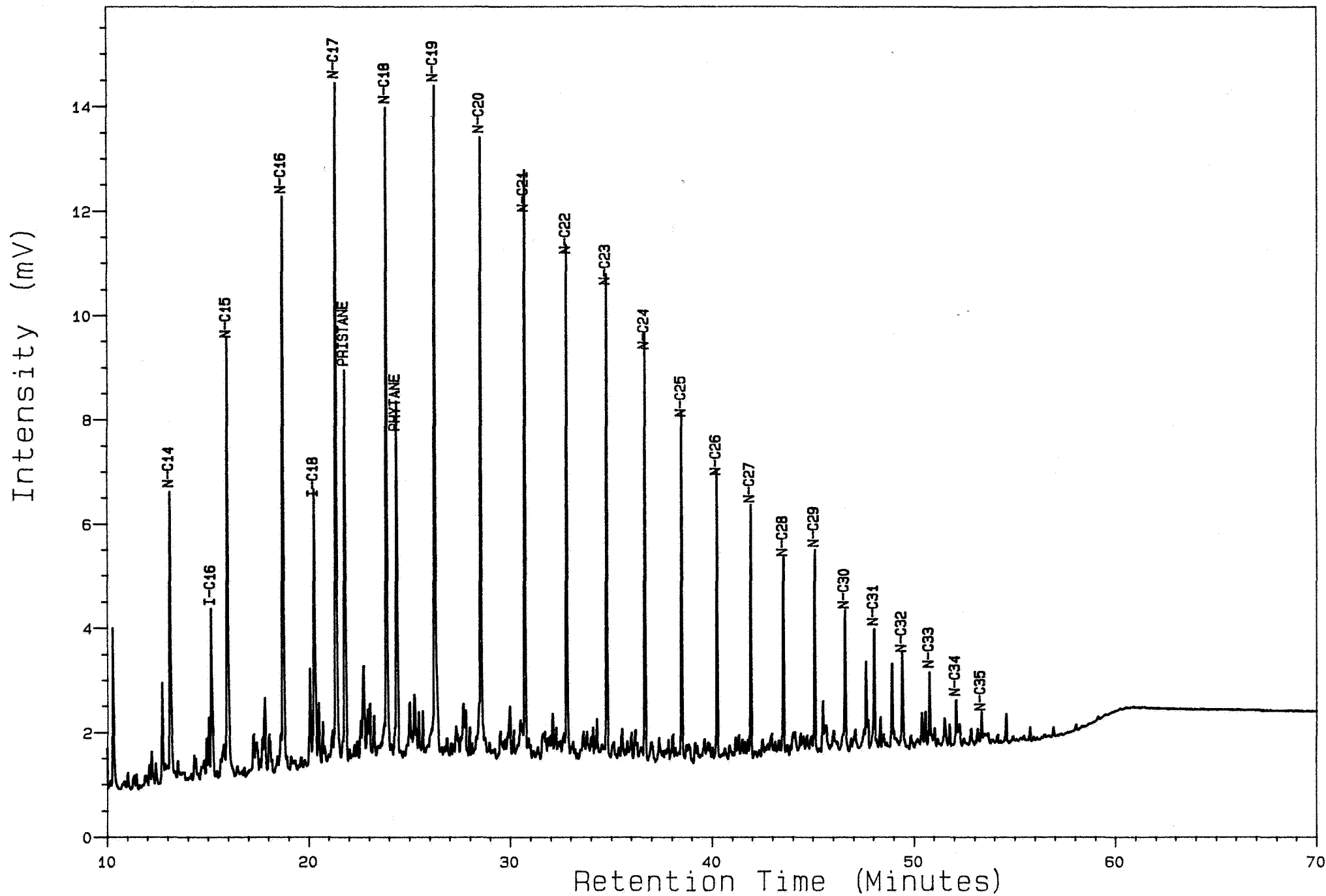
4480M



Analysis B021201S

7, 9, 1

4497M

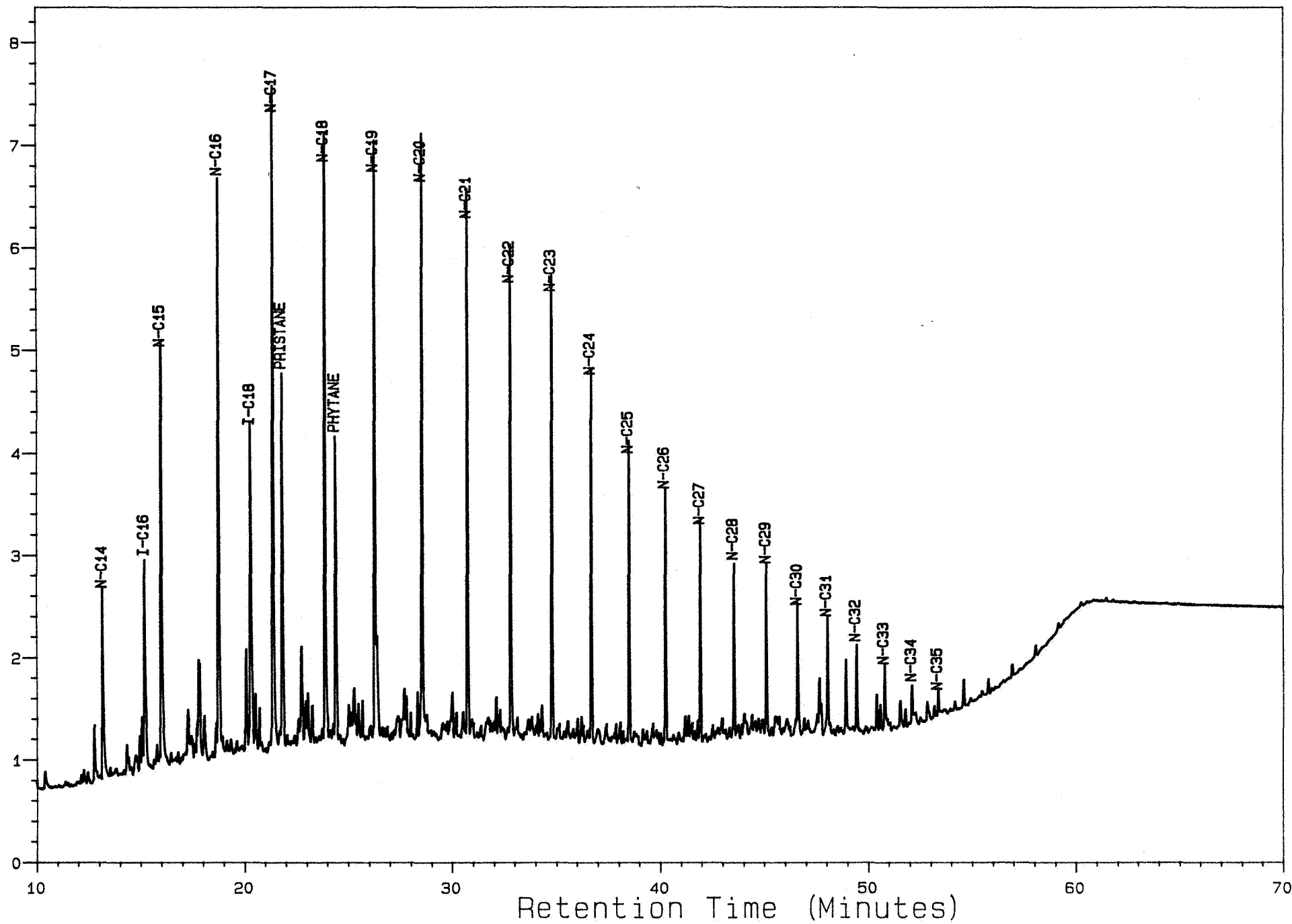


Analysis B021201S

7, 8, 1

4527M

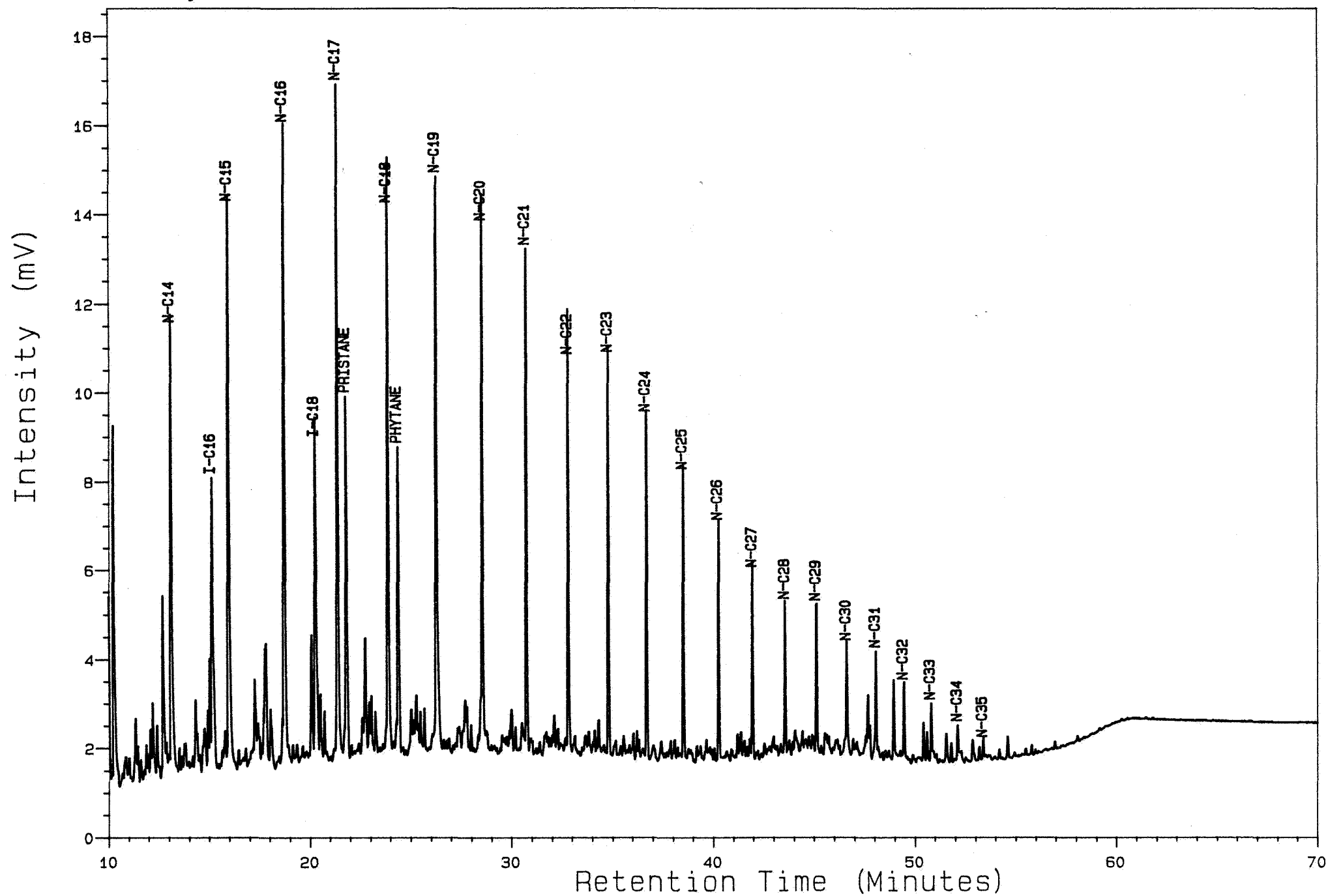
Intensity (mV)



Analysis B021201S

7, 7, 1

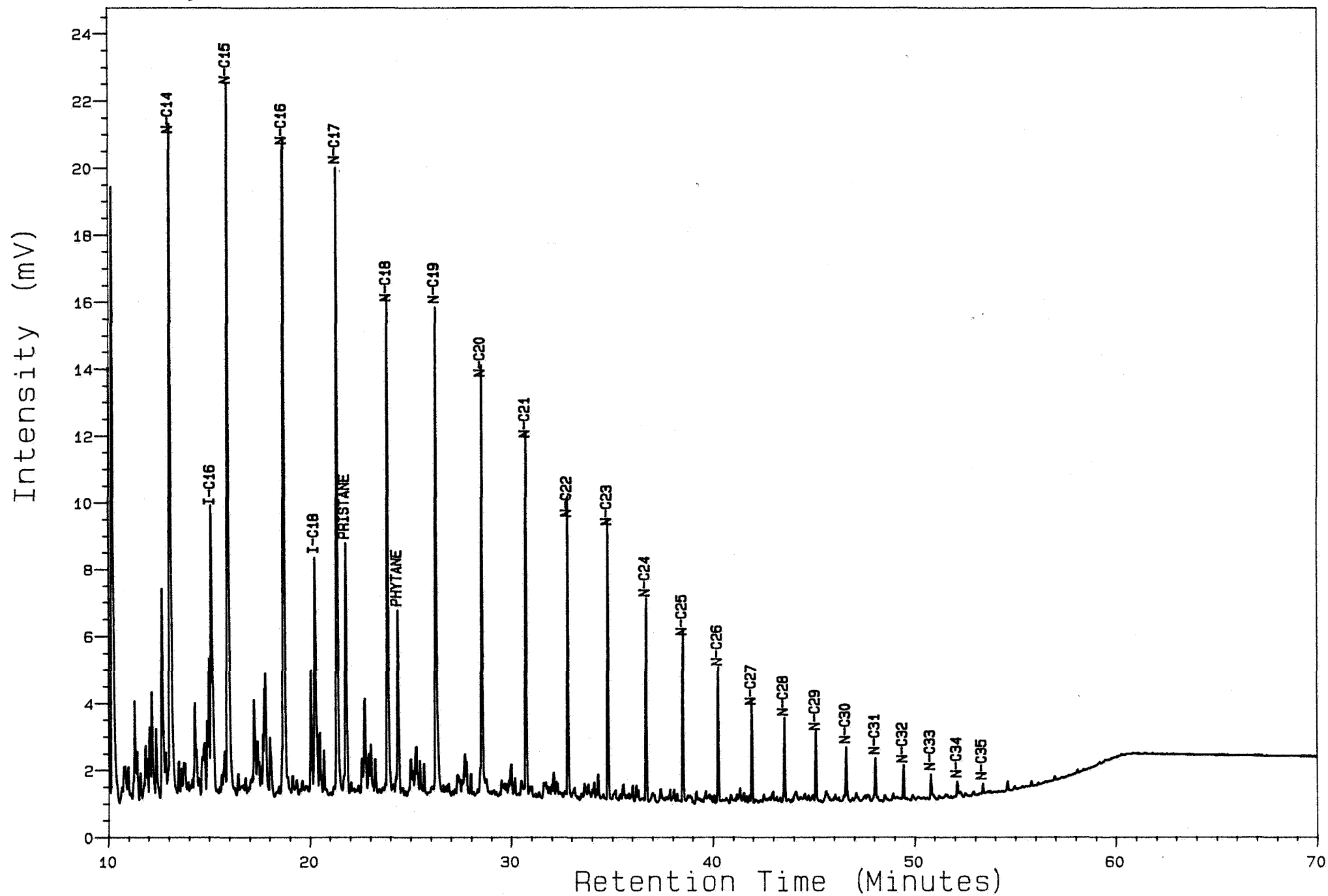
4607M



Analysis B021201S

7, 6, 1

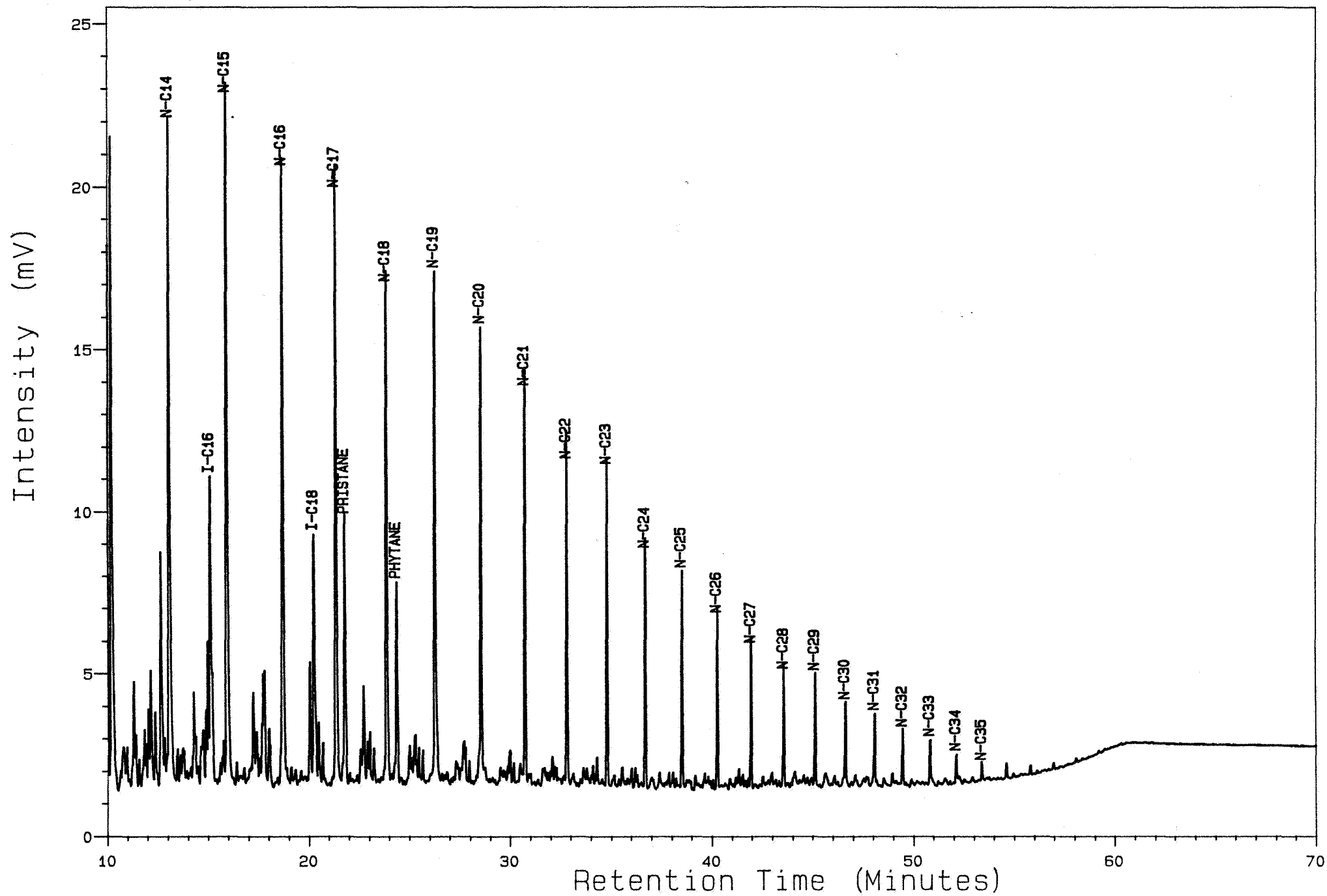
4633.6M



Analysis B021201S

7, 5, 1

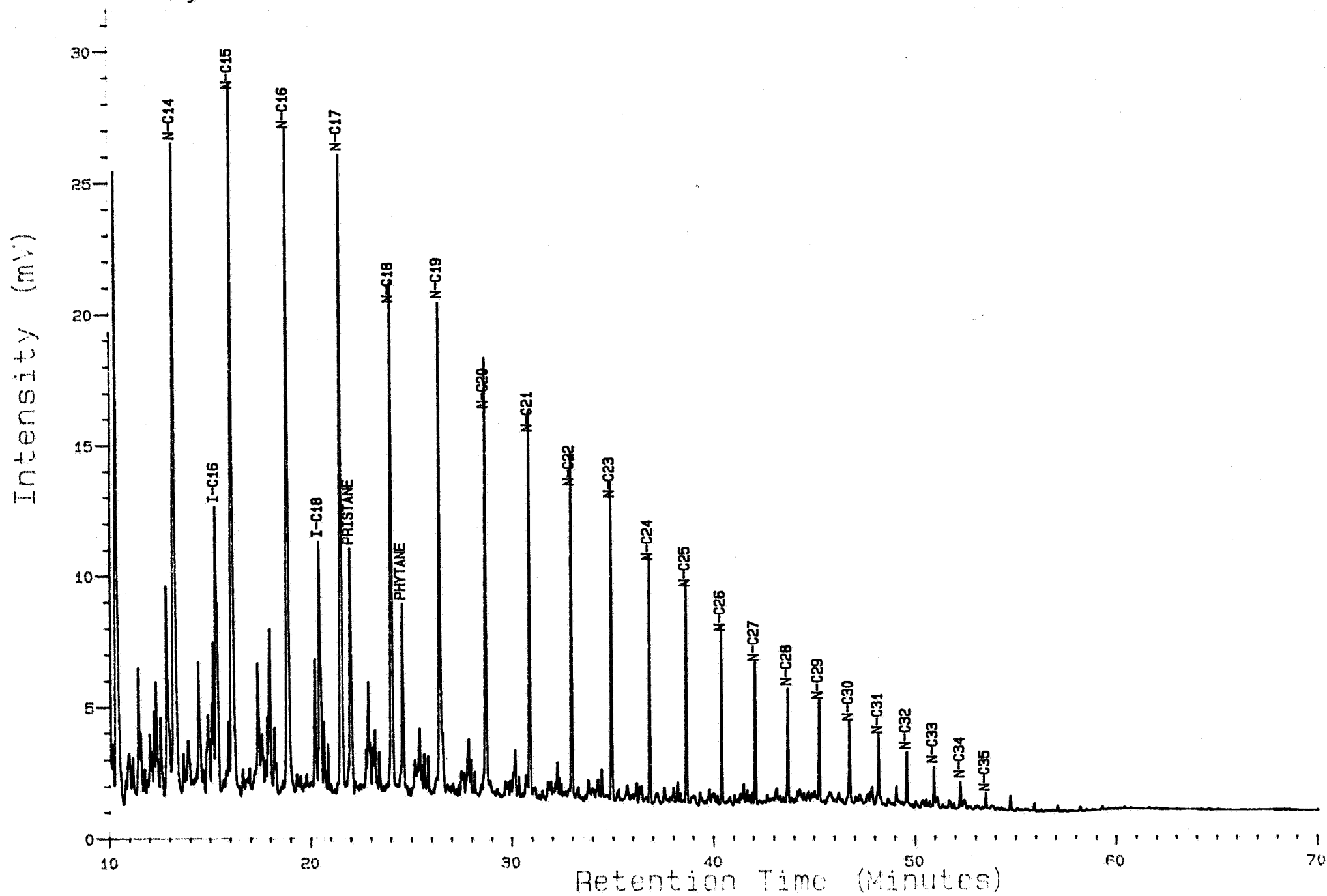
4653.7M



Analysis CB021201S

7, 22, 1

4663.3 M

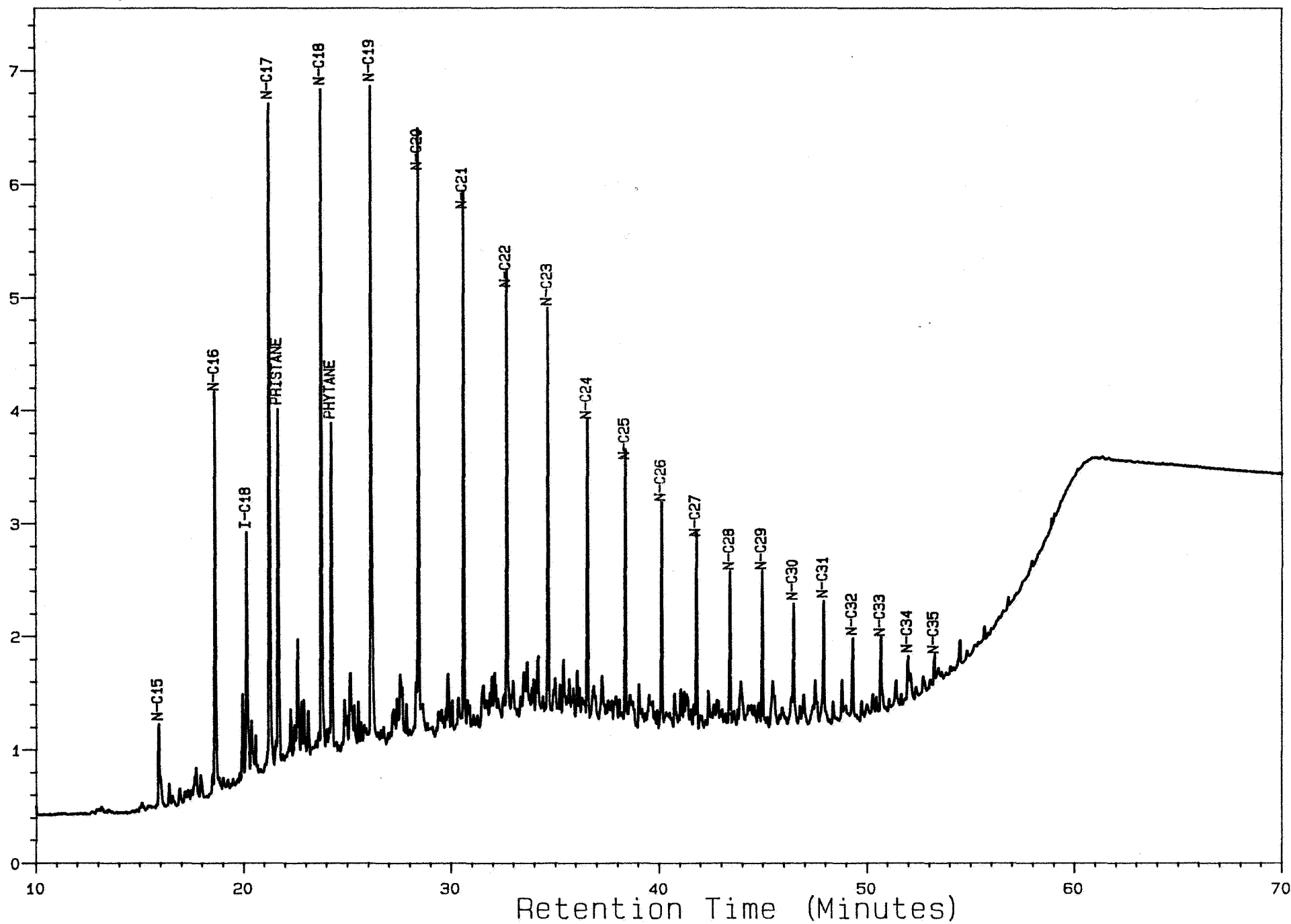


Analysis B021201S

7, 2, 1

4666.2M

Intensity (mV)



MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 5-Apr-87 Time 1:31

Analysis: CB021201S Sample Name: 2955 M

Sample ID: 0

Bottle: 1

Sample 21 Injection 1

Peak R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
16	13.176	13.062	1400.0	15438	91117	2.039 N-C14	LO
26	15.259	15.127	1473.8	8853	70584	1.580 I-C16	LO
29	15.997	15.859	1500.0	30745	209212	4.683 N-C15	LO
41	18.757	18.595	1600.0	40652	307268	6.878 N-C16	LO
49	20.371	20.202	1660.4	15164	131217	2.937 I-C18	0
54	21.427	21.254	1700.0	45592	341458	7.643 N-C17	0
55	21.891	21.716	1718.4	24034	197661	4.424 PRISIANE	LO
65	23.947	23.763	1800.0	38393	325536	7.286 N-C18	0
67	24.480	24.295	1822.1	22298	188757	4.225 PHYTANE	0
67	26.357	26.164	1900.0	36921	279277	6.251 N-C19	0
67	28.653	28.451	2000.0	28139	167006	3.738 N-C20	FO
102	30.840	30.634	2100.0	24671	118021	2.642 N-C21	0
116	32.925	32.715	2200.0	20238	92966	2.081 N-C22	0
126	34.915	34.700	2300.0	16294	64448	1.443 N-C23	LO
133	36.813	36.595	2400.0	13245	53076	1.188 N-C24	
140	38.637	38.416	2500.0	10645	39522	0.885 N-C25	
146	40.384	40.166	2600.0	9403	36002	0.806 N-C26	LO
155	42.072	41.858	2700.0	7419	28698	0.642 N-C27	LO
160	43.683	43.472	2800.0	5939	21206	0.475 N-C28	FO
168	45.235	45.027	2900.0	6093	23609	0.528 N-C29	LO
173	46.739	46.534	3000.0	3995	20093	0.450 N-C30	
179	48.179	47.977	3100.0	4378	18551	0.415 N-C31	0
182	49.571	49.372	3200.0	2512	9748	0.218 N-C32	0
185	50.925	50.729	3300.0	1876	7596	0.170 N-C33	FO
189	52.237	52.044	3400.0	994	4042	0.090 N-C34	FO
193	53.507	53.316	3500.0	741	3316	0.074 N-C35	FO

Re: 304955 1617692 36.209
 Ic: 739628 4467684 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 23:58

Analysis: CB021201S Sample Name: 3105 M SHALE

Sample ID: 0

Bottle: 1

Sample 20 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
1	18.872	18.595	1600.0	1667	6141	2.698	N-C16	
3	20.459	20.194	1661.2	934	5269	2.315	I-C18	0
6	21.467	21.209	1700.0	4731	19027	8.360	N-C17	
7	21.971	21.717	1720.1	2214	9323	4.096	PRISTANE	
13	23.973	23.735	1800.0	6001	24157	10.614	N-C18	0
14	24.531	24.297	1823.3	2528	10419	4.578	PHYTANE	
19	26.368	26.148	1900.0	5748	20392	8.960	N-C19	FO
25	28.653	28.451	2000.0	5256	17531	7.703	N-C20	0
	30.832	30.634	2100.0	3627	11461	5.036	N-C21	LO
	32.904	32.710	2200.0	3423	10758	4.727	N-C22	
40	34.888	34.697	2300.0	2587	7941	3.489	N-C23	
43	36.776	36.589	2400.0	2388	8020	3.524	N-C24	
45	38.600	38.416	2500.0	1628	5238	2.301	N-C25	
46	40.349	40.172	2600.0	1469	4513	1.983	N-C26	
48	42.024	41.853	2700.0	1216	3809	1.674	N-C27	
49	43.640	43.475	2800.0	947	2778	1.221	N-C28	
50	45.187	45.027	2900.0	1026	3280	1.441	N-C29	
51	46.691	46.537	3000.0	670	3139	1.379	N-C30	
53	48.131	47.982	3100.0	717	2319	1.019	N-C31	
55	49.533	49.390	3200.0	384	1303	0.573	N-C32	
56	50.875	50.736	3300.0	312	1004	0.441	N-C33	
57	52.187	52.053	3400.0	202	719	0.316	N-C34	
58	53.456	53.327	3500.0	172	540	0.237	N-C35	

Residual	11920	48519	21.318
Total	61766	227600	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:
Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7 Date 4-Apr-87 Time 22:24
Analysis: CB021201S Sample Name: 3105 M CARBONATE Sample ID: 0 Bottle: 1
Sample 19 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
1	13.299	13.156	1400.0	1031	3844	0.494	N-C14	
3	15.357	15.192	1474.1	1087	5189	0.667	I-C16	
5	16.077	15.904	1500.0	5269	23108	2.971	N-C15	
13	18.797	18.595	1600.0	10189	48516	6.237	N-C16	LO
15	20.400	20.201	1660.8	3971	25571	3.287	I-C18	0
19	21.432	21.235	1700.0	13246	64103	8.241	N-C17	
20	21.917	21.721	1719.3	6466	33390	4.293	PRISTANE	
31	23.944	23.751	1800.0	12690	63156	8.119	N-C18	LO
	24.499	24.307	1823.1	6568	36270	4.663	PHYTANE	LO
	26.349	26.161	1900.0	11966	50836	6.536	N-C19	FO
53	28.635	28.451	2000.0	11134	47675	6.129	N-C20	0
62	30.819	30.637	2100.0	8523	30886	3.971	N-C21	0
74	32.893	32.714	2200.0	7594	24772	3.185	N-C22	
81	34.877	34.700	2300.0	6138	19728	2.536	N-C23	
86	36.771	36.595	2400.0	5270	18059	2.322	N-C24	
90	38.589	38.416	2500.0	4072	12502	1.607	N-C25	
93	40.339	40.172	2600.0	3397	10591	1.362	N-C26	
97	42.019	41.858	2700.0	2546	8278	1.064	N-C27	LO
98	43.629	43.475	2800.0	2021	6199	0.797	N-C28	
99	45.176	45.027	2900.0	1674	5596	0.719	N-C29	
100	46.675	46.531	3000.0	1146	3932	0.505	N-C30	
101	48.125	47.987	3100.0	973	3420	0.440	N-C31	
103	49.517	49.384	3200.0	618	2155	0.277	N-C32	
104	50.864	50.736	3300.0	397	1236	0.159	N-C33	
105	52.173	52.050	3400.0	234	1513	0.195	N-C34	
106	53.445	53.327	3500.0	161	487	0.063	N-C35	

Re Val 51302 226824 29.161
To 179684 777835 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 CB021201S, 18, 1

Reported on 19-May-87 at 08:03

Page 1

MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:
 Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7 Date 4-Apr-87 Time 20:51
 Analysis: CB021201S Sample Name: 3937 M I Sample ID: 0 Bottle: 1
 Sample 18 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
3	13.232	13.104	1400.0	4396	19594	1.855	N-C14	
8	15.285	15.138	1473.3	4196	23862	2.259	I-C16	LO
10	16.035	15.880	1500.0	10887	57051	5.400	N-C15	LO
18	18.776	18.595	1600.0	13929	77820	7.366	N-C16	0
20	20.371	20.192	1660.4	6941	43306	4.099	I-C18	0
24	21.416	21.239	1700.0	15668	79030	7.481	N-C17	
25	21.901	21.725	1719.3	7658	41599	3.938	PRISTANE	
33	23.936	23.762	1800.0	13999	68159	6.452	N-C18	
24	24.488	24.315	1823.0	6585	35844	3.393	PHYTANE	0
26	26.333	26.163	1900.0	12843	54852	5.192	N-C19	FO
53	28.619	28.451	2000.0	11870	51716	4.895	N-C20	0
61	30.800	30.635	2100.0	9996	36750	3.479	N-C21	LO
71	32.877	32.714	2200.0	9027	31253	2.958	N-C22	
77	34.856	34.695	2300.0	8835	29723	2.814	N-C23	
83	36.755	36.595	2400.0	6916	24964	2.363	N-C24	
88	38.573	38.416	2500.0	5959	20600	1.950	N-C25	
92	40.325	40.172	2600.0	5223	17142	1.623	N-C26	
100	42.000	41.850	2700.0	4350	14872	1.408	N-C27	LO
104	43.616	43.469	2800.0	3435	11547	1.093	N-C28	
109	45.171	45.027	2900.0	3224	11365	1.076	N-C29	
110	46.669	46.529	3000.0	2614	8842	0.837	N-C30	
116	48.107	47.969	3100.0	2279	10019	0.948	N-C31	0
118	49.507	49.372	3200.0	1682	5667	0.536	N-C32	
121	50.861	50.729	3300.0	1227	6875	0.651	N-C33	LO
124	52.173	52.044	3400.0	903	5998	0.568	N-C34	0
125	53.424	53.297	3500.0	558	1577	0.149	N-C35	

Re: 61346 266410 25.218
 To: 236549 1056438 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 19:18

Analysis: CB021201S Sample Name: 3937 M

Sample ID: 0

Bottle: 1

Sample 17 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z Identity	Type
1	13.309	13.168	1400.0	468	1647	0.324 N-C14	
3	15.339	15.176	1473.4	1166	5160	1.015 I-C16	
4	16.075	15.904	1500.0	4525	19220	3.782 N-C15	
10	18.795	18.595	1600.0	8111	35532	6.991 N-C16	
12	20.389	20.194	1660.6	3794	21517	4.234 I-C18	0
16	21.427	21.234	1700.0	10169	44882	8.831 N-C17	
17	21.917	21.726	1719.5	4673	22573	4.441 PRISTANE	
26	23.944	23.758	1800.0	9191	39751	7.821 N-C18	LO
	24.499	24.314	1823.2	4130	18250	3.591 PHYTANE	
	26.336	26.157	1900.0	8587	32376	6.370 N-C19	FO
42	28.624	28.451	2000.0	7646	28181	5.545 N-C20	0
48	30.800	30.628	2100.0	6305	21165	4.164 N-C21	LO
56	32.877	32.706	2200.0	5735	18182	3.577 N-C22	
61	34.861	34.691	2300.0	4971	15882	3.125 N-C23	
64	36.760	36.591	2400.0	4352	14299	2.813 N-C24	
68	38.584	38.416	2500.0	3301	10665	2.098 N-C25	
70	40.333	40.169	2600.0	2731	8552	1.683 N-C26	
74	42.013	41.852	2700.0	2220	7298	1.436 N-C27	LO
75	43.629	43.472	2800.0	1552	5425	1.067 N-C28	
76	45.181	45.027	2900.0	1603	5305	1.044 N-C29	
77	46.675	46.523	3000.0	1155	3992	0.785 N-C30	
79	48.120	47.972	3100.0	1021	3390	0.667 N-C31	
81	49.523	49.377	3200.0	691	2316	0.456 N-C32	
82	50.872	50.729	3300.0	496	2364	0.465 N-C33	
83	52.184	52.044	3400.0	338	2005	0.394 N-C34	
84	53.435	53.297	3500.0	216	782	0.154 N-C35	

Re: 27284 117551 23.128
 To: 126433 508262 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 CB021201S.16.1

Reported on 19-May-87 at 08:02

Page 1

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 17:45

Analysis: CB021201S Sample Name: 3980 M

Sample ID: 0

Bottle: 1

Sample 16 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	Z	Identity	Type
25	13.189	13.047	1400.0	9569	49651	4.016	N-C14					
32	15.253	15.089	1472.4	7249	46551	3.766	I-C16					LO
34	16.040	15.867	1500.0	11600	62985	5.095	N-C15					LO
43	18.797	18.595	1600.0	12467	64529	5.220	N-C16					
46	20.381	20.180	1659.9	7506	47936	3.878	I-C18					0
50	21.440	21.240	1700.0	14041	66573	5.385	N-C17					
51	21.917	21.718	1719.0	8102	46905	3.794	PRISTANE					
59	23.957	23.759	1800.0	11417	55399	4.481	N-C18					
	24.504	24.306	1822.8	6816	36677	2.967	PHYTANE					0
	26.360	26.164	1900.0	11543	49507	4.005	N-C19					FO
75	28.645	28.451	2000.0	11384	47462	3.839	N-C20					
82	30.832	30.634	2100.0	10687	38877	3.145	N-C21					LO
90	32.915	32.713	2200.0	9131	31696	2.564	N-C22					
97	34.899	34.694	2300.0	9010	31181	2.522	N-C23					
103	36.803	36.595	2400.0	7027	24352	1.970	N-C24					
108	38.627	38.416	2500.0	6215	20936	1.694	N-C25					
112	40.373	40.165	2600.0	5105	17223	1.393	N-C26					
120	42.053	41.847	2700.0	4435	14771	1.195	N-C27					LO
125	43.669	43.465	2800.0	3463	11776	0.953	N-C28					
130	45.229	45.027	2900.0	3355	11184	0.905	N-C29					
132	46.728	46.528	3000.0	2477	9006	0.728	N-C30					
138	48.171	47.972	3100.0	2391	10467	0.847	N-C31					0
140	49.571	49.374	3200.0	1812	5803	0.469	N-C32					
144	50.925	50.730	3300.0	1355	7748	0.627	N-C33					LO
147	52.237	52.044	3400.0	1008	7367	0.596	N-C34					0
149	53.496	53.304	3500.0	635	4763	0.385	N-C35					LO

Re	97198	414884	33.561
To	276998	1236208	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 CB021201S,15,1

Reported on 19-May-87 at 08:02

Page 1

M U L T I C H R O M V3.2

Analyst Name :JANNICKE Analysis ID:
Information :J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7 Date 4-Apr-87 Time 16:13
Analysis:CB021201S Sample Name:3985 M Sample ID: 0 Bottle:1
Sample 15 Injection 1

Peak	R/T #	RT	Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
40	13.189	13.047	1400.0	10812	57328	3.459	N-C14		
49	15.243	15.079	1472.0	9288	62313	3.760	I-C16		LO
51	16.043	15.870	1500.0	12765	71236	4.299	N-C15		LO
61	18.797	18.595	1600.0	14036	70183	4.235	N-C16		LO
64	20.371	20.169	1659.5	9409	59981	3.619	I-C18		0
68	21.443	21.242	1700.0	14646	74860	4.517	N-C17		
69	21.912	21.711	1718.6	9635	58198	3.512	PRISTANE		
77	23.963	23.763	1800.0	12894	62630	3.779	N-C18		LO
	24.499	24.299	1822.3	7941	44962	2.713	PHYTANE		0
	26.365	26.167	1900.0	12832	55802	3.367	N-C19		FO
96	28.648	28.451	2000.0	12784	57612	3.476	N-C20		FO
104	30.827	30.629	2100.0	11864	45707	2.758	N-C21		LO
114	32.909	32.711	2200.0	10675	38013	2.294	N-C22		
121	34.893	34.694	2300.0	10768	37402	2.257	N-C23		
128	36.797	36.598	2400.0	8584	29613	1.787	N-C24		
133	38.616	38.416	2500.0	7433	25459	1.536	N-C25		
138	40.368	40.170	2600.0	6029	21153	1.276	N-C26		
146	42.048	41.852	2700.0	5267	18143	1.095	N-C27		LO
151	43.664	43.470	2800.0	4014	14687	0.886	N-C28		
158	45.219	45.027	2900.0	4124	14184	0.856	N-C29		
160	46.717	46.528	3000.0	3313	11635	0.702	N-C30		
166	48.163	47.975	3100.0	3070	14713	0.888	N-C31		0
169	49.560	49.374	3200.0	2224	7460	0.450	N-C32		
173	50.915	50.730	3300.0	1718	9793	0.591	N-C33		LO
176	52.227	52.044	3400.0	1157	8671	0.523	N-C34		0
178	53.477	53.296	3500.0	688	2745	0.166	N-C35		LO

Re al 157156 682728 41.197
To 365125 1657211 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using:Area

Analysis:7 CB021201S,14,1

Reported on 19-May-87 at 08:02

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MULTICHROM V3.2

Analyst Name :JANNICKE

Analysis ID:

Information :J023 GEDKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 4-Apr-87 Time 14:39

Analysis:CB021201S Sample Name:3990 M

Sample ID: 0

Bottle:1

Sample 14 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
41	13.187	13.045	1400.0	10514	56284	3.429	N-C14	
50	15.237	15.073	1471.9	9028	60933	3.712	I-C16	LO
52	16.037	15.865	1500.0	12931	69598	4.240	N-C15	LO
61	18.797	18.595	1600.0	13394	70648	4.304	N-C16	
63	20.371	20.169	1659.6	9179	58219	3.547	I-C18	0
67	21.437	21.236	1700.0	14857	73828	4.498	N-C17	
68	21.907	21.706	1718.6	9538	56087	3.417	PRISTANE	
77	23.957	23.758	1800.0	12859	62499	3.807	N-C18	LO
	24.499	24.299	1822.5	7905	44356	2.702	PHYTANE	0
	26.360	26.162	1900.0	12910	55873	3.404	N-C19	FO
96	28.648	28.451	2000.0	12502	57313	3.492	N-C20	FO
104	30.827	30.629	2100.0	11750	45492	2.771	N-C21	LO
113	32.909	32.711	2200.0	10469	37731	2.299	N-C22	
121	34.893	34.694	2300.0	10571	37387	2.278	N-C23	
128	36.792	36.593	2400.0	8365	29455	1.794	N-C24	
133	38.616	38.416	2500.0	7307	25513	1.554	N-C25	
137	40.363	40.165	2600.0	6064	21204	1.292	N-C26	
146	42.048	41.852	2700.0	5382	18402	1.121	N-C27	LO
151	43.664	43.470	2800.0	4253	14985	0.913	N-C28	
157	45.219	45.027	2900.0	4150	14394	0.877	N-C29	
159	46.712	46.522	3000.0	3207	11712	0.713	N-C30	
165	48.160	47.972	3100.0	2873	13504	0.823	N-C31	0
168	49.560	49.374	3200.0	2097	7333	0.447	N-C32	
172	50.915	50.730	3300.0	1639	9290	0.566	N-C33	LO
175	52.227	52.044	3400.0	1138	8160	0.497	N-C34	0
177	53.488	53.307	3500.0	643	2755	0.168	N-C35	LO

ReQual 155322 678548 41.337
 Ic 360846 1641504 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using:Area

Analysis: 7 CB021201S.13.1

Reported on 19-May-87 at 08:02

Page 1

MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:
Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7 Date 4-Apr-87 Time 13:10
Analysis: CB021201S Sample Name: 3992 M Sample ID: 0 Bottle: 1
Sample 13 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
41	13.165	13.037	1400.0	12557	71147	3.764	N-C14	
50	15.227	15.078	1472.2	9710	67159	3.553	I-C16	LO
52	16.019	15.862	1500.0	15610	86996	4.602	N-C15	LO
61	18.779	18.595	1600.0	16313	87921	4.651	N-C16	
64	20.349	20.165	1659.4	10086	66966	3.543	I-C18	0
68	21.421	21.237	1700.0	17526	90185	4.771	N-C17	
69	21.891	21.706	1718.6	10508	66314	3.508	PRISTANE	
78	23.947	23.762	1800.0	15102	76263	4.034	N-C18	LO
	24.483	24.297	1822.3	8923	51828	2.742	PHYTANE	0
	26.349	26.164	1900.0	15847	83794	4.433	N-C19	
77	28.637	28.451	2000.0	15239	70247	3.716	N-C20	FO
106	30.816	30.628	2100.0	13924	56791	3.004	N-C21	LO
117	32.899	32.709	2200.0	12573	46968	2.485	N-C22	
125	34.883	34.691	2300.0	12083	45532	2.409	N-C23	
132	36.792	36.599	2400.0	9895	34888	1.846	N-C24	
137	38.611	38.416	2500.0	8169	29050	1.537	N-C25	
142	40.363	40.170	2600.0	6430	23175	1.226	N-C26	
151	42.045	41.855	2700.0	5598	18841	0.997	N-C27	LO
156	43.659	43.470	2800.0	4104	14143	0.748	N-C28	
161	45.213	45.027	2900.0	3681	13039	0.690	N-C29	
163	46.712	46.528	3000.0	2550	9659	0.511	N-C30	
169	48.157	47.975	3100.0	2338	10849	0.574	N-C31	0
171	49.549	49.368	3200.0	1667	5565	0.294	N-C32	
175	50.904	50.725	3300.0	1299	7138	0.378	N-C33	LO
178	52.216	52.039	3400.0	810	6131	0.324	N-C34	0
179	53.477	53.301	3500.0	514	1795	0.095	N-C35	

Re: 169508 747975 39.568
To: 402563 1890359 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 11:40

Analysis: CB0212015 Sample Name: 3996 M

Sample ID: 0

Bottle: 1

Sample 12 Injection 1

Peak	R/T #	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
47	13.152	13.027	1400.0	15698	98127	4.180	N-C14	LO
55	15.213	15.069	1472.1	10699	77772	3.313	I-C16	LO
57	16.011	15.859	1500.0	17812	104131	4.436	N-C15	LO
66	18.773	18.595	1600.0	18117	102965	4.386	N-C16	
69	20.349	20.168	1659.4	10826	74164	3.159	I-C18	0
73	21.427	21.243	1700.0	19399	103506	4.409	N-C17	
74	21.891	21.706	1718.4	11020	71071	3.028	PRISTANE	
83	23.947	23.759	1800.0	15996	85666	3.649	N-C18	LO
	24.488	24.299	1822.5	9149	54185	2.308	PHYTANE	0
	26.355	26.162	1900.0	16561	88948	3.789	N-C19	0
100	28.648	28.451	2000.0	15446	73034	3.111	N-C20	FO
109	30.832	30.630	2100.0	14583	57986	2.470	N-C21	LO
120	32.920	32.713	2200.0	12208	47909	2.041	N-C22	
128	34.909	34.697	2300.0	12218	47066	2.005	N-C23	
135	36.808	36.591	2400.0	10199	37621	1.603	N-C24	
140	38.637	38.416	2500.0	9135	32151	1.370	N-C25	
145	40.389	40.169	2600.0	7483	26776	1.141	N-C26	
153	42.072	41.852	2700.0	6486	22990	0.979	N-C27	LO
158	43.688	43.469	2800.0	5060	18533	0.789	N-C28	
166	45.245	45.027	2900.0	4959	17961	0.765	N-C29	
169	46.741	46.524	3000.0	4052	19340	0.824	N-C30	0
175	48.189	47.972	3100.0	3674	18433	0.785	N-C31	0
178	49.581	49.365	3200.0	2583	9084	0.387	N-C32	
183	50.936	50.720	3300.0	1959	11490	0.489	N-C33	LO
186	52.248	52.033	3400.0	1263	9242	0.394	N-C34	0
188	53.499	53.284	3500.0	661	2558	0.109	N-C35	LO

Re Total 223229 1034713 44.079
 To 480474 2347424 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 10:08

Analysis: CB021201S Sample Name: 4000 M

Sample ID: 0

Bottle: 1

Sample 11 Injection 1

Peak	R/T #	RT	Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
5	13.229	13.087	1400.0	4046	17800	2.654	N-C14		
9	15.275	15.110	1472.5	3923	22202	3.311	I-C16		LO
11	16.051	15.878	1500.0	7615	35566	5.304	N-C15		
17	18.797	18.595	1600.0	9174	40631	6.059	N-C16		
19	20.373	20.173	1659.8	5404	31277	4.664	I-C18		0
22	21.435	21.236	1700.0	10193	47535	7.089	N-C17		
23	21.917	21.719	1719.1	5289	26478	3.949	PRISTANE		
29	23.960	23.765	1800.0	8643	36152	5.391	N-C18		
24	24.504	24.309	1822.7	4092	18515	2.761	PHYTANE		
26	26.357	26.165	1900.0	8324	33315	4.968	N-C19		0
4	28.640	28.451	2000.0	7623	32362	4.826	N-C20		LO
48	30.824	30.635	2100.0	6413	21478	3.203	N-C21		
53	32.899	32.710	2200.0	5709	19416	2.895	N-C22		
59	34.883	34.693	2300.0	5186	17405	2.595	N-C23		
62	36.781	36.592	2400.0	4458	14915	2.224	N-C24		
66	38.605	38.416	2500.0	3900	12525	1.868	N-C25		
68	40.352	40.166	2600.0	3315	10773	1.607	N-C26		
73	42.035	41.851	2700.0	2874	9709	1.448	N-C27		LO
74	43.653	43.472	2800.0	2208	7553	1.126	N-C28		
80	45.205	45.027	2900.0	2553	9031	1.347	N-C29		
82	46.707	46.531	3000.0	1739	6153	0.918	N-C30		
87	48.147	47.973	3100.0	1743	9269	1.382	N-C31		FO
92	49.549	49.378	3200.0	1427	5573	0.831	N-C32		LO
95	50.896	50.727	3300.0	891	3171	0.473	N-C33		
98	52.216	52.049	3400.0	670	5687	0.848	N-C34		LO
101	53.475	53.310	3500.0	400	3605	0.538	N-C35		LO

Reval 40510 172483 25.721
 To 158321 670582 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 8:35

Analysis: CB021201S Sample Name: 4025 M

Sample ID: 0

Bottle: 1

Sample 10 Injection 1

Peak	R/T	n.	RT	Corr	RT	Val	Hght	uV	Area	uVs	%	Identity	Type
46	13.141		13.031		1400.0		12947		71796		3.145	N-C14	
54	15.187		15.060		1471.7		11237		81961		3.590	I-C16	L0
56	15.992		15.858		1500.0		15798		89812		3.934	N-C15	
67	18.752		18.595		1600.0		16835		92171		4.038	N-C16	
70	20.312		20.156		1659.0		11987		82229		3.602	I-C18	0
74	21.395		21.239		1700.0		18102		97107		4.254	N-C17	
75	21.848		21.693		1718.0		12303		80016		3.505	PRISTANE	
83	23.920		23.766		1800.0		15408		80638		3.532	N-C18	L0
	24.445		24.291		1821.9		10446		61351		2.688	PHYTANE	
	26.317		26.164		1900.0		16274		88701		3.886	N-C19	0
105	28.603		28.451		2000.0		15190		70323		3.081	N-C20	
109	30.784		30.631		2100.0		14629		58442		2.560	N-C21	L0
119	32.867		32.713		2200.0		13181		50542		2.214	N-C22	L0
127	34.851		34.695		2300.0		12702		49033		2.148	N-C23	
134	36.755		36.598		2400.0		10158		38927		1.705	N-C24	
139	38.573		38.416		2500.0		9520		34174		1.497	N-C25	
144	40.325		40.170		2600.0		7659		28203		1.235	N-C26	
153	42.011		41.858		2700.0		7037		24682		1.081	N-C27	L0
158	43.624		43.473		2800.0		5355		19822		0.868	N-C28	F0
166	45.176		45.027		2900.0		5055		19678		0.862	N-C29	
170	46.677		46.530		3000.0		4571		20926		0.917	N-C30	0
176	48.125		47.980		3100.0		3923		20417		0.894	N-C31	0
180	49.517		49.374		3200.0		2945		10644		0.466	N-C32	L0
185	50.872		50.730		3300.0		2240		13821		0.605	N-C33	L0
188	52.184		52.044		3400.0		1449		11731		0.514	N-C34	0
191	53.445		53.307		3500.0		763		3077		0.135	N-C35	L0

Re	219428	982602	43.043
To	477142	2282825	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 CB021201S.9.1

Reported on 19-May-87 at 08:01

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MULTICHROM V3.2

Analyst Name :JANNICKE Analysis ID:
Information :J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7 Date 4-Apr-87 Time 7:02
Analysis:CB021201S Sample Name:4040 M Sample ID: 0 Bottle:1
Sample 9 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
44	13.139	13.032	1400.0	12284	68091	3.331	N-C14	
53	15.189	15.066	1471.9	10451	70958	3.471	I-C16	LO
55	15.989	15.860	1500.0	14857	84366	4.127	N-C15	
66	18.747	18.595	1600.0	16023	86161	4.215	N-C16	
69	20.307	20.155	1659.0	11265	74302	3.635	I-C18	0
73	21.389	21.238	1700.0	17518	91274	4.465	N-C17	
74	21.848	21.696	1718.2	11173	72571	3.550	PRISTANE	
82	23.915	23.763	1800.0	15128	76881	3.761	N-C18	LO
	24.440	24.288	1821.9	9783	57316	2.804	PHYTANE	
	26.312	26.160	1900.0	15168	84084	4.113	N-C19	0
97	28.603	28.451	2000.0	14837	67486	3.301	N-C20	
105	30.779	30.623	2100.0	13685	55873	2.733	N-C21	LO
115	32.861	32.703	2200.0	12168	48951	2.395	N-C22	LO
123	34.851	34.689	2300.0	12661	46826	2.291	N-C23	
130	36.755	36.590	2400.0	10470	37362	1.828	N-C24	
135	38.584	38.416	2500.0	8854	32158	1.573	N-C25	
140	40.325	40.160	2600.0	7476	26456	1.294	N-C26	
149	42.011	41.847	2700.0	6272	22806	1.116	N-C27	LO
154	43.629	43.468	2800.0	4999	17847	0.873	N-C28	FO
162	45.187	45.027	2900.0	4916	17771	0.869	N-C29	0
165	46.680	46.522	3000.0	3952	18658	0.913	N-C30	
171	48.120	47.964	3100.0	3570	18497	0.905	N-C31	0
175	49.517	49.363	3200.0	2562	9378	0.459	N-C32	LO
180	50.872	50.720	3300.0	2041	12955	0.634	N-C33	LO
183	52.173	52.022	3400.0	1364	11531	0.564	N-C34	0
186	53.435	53.285	3500.0	743	2902	0.142	N-C35	LO

Re: 186335 830766 40.640
To: 430555 2044227 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using:Area

Analysis: 7 CB021201S, 8, 1

Reported on 19-May-87 at 08:01

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MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:
Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7 Date 4-Apr-87 Time 5:29
Analysis: CB021201S Sample Name: 4050 M Sample ID: 0 Bottle: 1
Sample 8 Injection 1

Peak	R/T #	RT	Corr	RT Val	Hght uV	Area uVs	% Identity	Type
47	13.115	12.996	1400.0	18567	115165	7.302	N-C14	
56	15.208	15.070	1472.9	7641	52278	3.315	I-C16	LO
59	15.987	15.842	1500.0	15965	92959	5.894	N-C15	LO
69	18.765	18.595	1600.0	10725	49569	3.143	N-C16	LO
71	20.360	20.193	1660.3	4283	23074	1.463	I-C18	0
75	21.408	21.243	1700.0	10436	46656	2.958	N-C17	
76	21.880	21.716	1718.8	6447	32872	2.084	PRISTANE	
84	23.925	23.765	1800.0	8894	37718	2.392	N-C18	
	24.467	24.307	1822.6	5068	23665	1.501	PHYTANE	
	26.323	26.167	1900.0	9693	37921	2.404	N-C19	0
99	28.603	28.451	2000.0	9179	38512	2.442	N-C20	LO
104	30.784	30.636	2100.0	8250	28580	1.812	N-C21	LO
109	32.861	32.716	2200.0	7330	26143	1.658	N-C22	
115	34.840	34.698	2300.0	7149	23546	1.493	N-C23	
120	36.733	36.594	2400.0	5938	19817	1.257	N-C24	
125	38.552	38.416	2500.0	5366	17589	1.115	N-C25	
129	40.299	40.166	2600.0	4463	14151	0.897	N-C26	
136	41.981	41.852	2700.0	3906	12516	0.794	N-C27	LO
143	43.592	43.466	2800.0	2809	8947	0.567	N-C28	FO
150	45.149	45.027	2900.0	2958	10503	0.666	N-C29	LO
152	46.643	46.523	3000.0	2130	7657	0.485	N-C30	
158	48.083	47.966	3100.0	2211	10219	0.648	N-C31	FO
161	49.480	49.367	3200.0	1586	5603	0.355	N-C32	
164	50.821	50.711	3300.0	1119	4133	0.262	N-C33	
167	52.141	52.033	3400.0	682	2832	0.180	N-C34	FO
171	53.403	53.297	3500.0	435	1343	0.085	N-C35	

Re Total 187381 833118 52.826
To 350608 1577086 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name :JANNICKE Analysis ID:
 Information :J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 4-Apr-87 Time 3:57

Analysis:CB021201S Sample Name:4105 M

Sample ID: 0 Bottle:1

Sample 7 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
37	13.123	13.024	1400.0	15218	89088	3.947	N-C14	
45	15.179	15.064	1472.2	10676	76857	3.405	I-C16	LO
47	15.971	15.850	1500.0	19876	114531	5.074	N-C15	LO
58	18.736	18.595	1600.0	20734	118124	5.234	N-C16	
61	20.307	20.165	1659.3	11232	78768	3.490	I-C18	0
65	21.384	21.242	1700.0	21207	118528	5.251	N-C17	
66	21.843	21.701	1718.2	12220	77833	3.448	PRISTANE	
76	23.904	23.762	1800.0	17751	98465	4.363	N-C18	LO
	24.440	24.297	1822.3	9738	58110	2.575	PHYTANE	
	26.307	26.164	1900.0	18163	100208	4.440	N-C19	
96	28.595	28.451	2000.0	16698	81342	3.604	N-C20	FO
104	30.779	30.633	2100.0	15404	63693	2.822	N-C21	LO
116	32.861	32.714	2200.0	13937	57000	2.525	N-C22	0
125	34.845	34.696	2300.0	12903	51212	2.269	N-C23	LO
133	36.744	36.594	2400.0	10491	40720	1.804	N-C24	
139	38.568	38.416	2500.0	9213	35779	1.585	N-C25	LO
145	40.315	40.165	2600.0	7698	28945	1.282	N-C26	
154	42.000	41.852	2700.0	6641	25170	1.115	N-C27	LO
159	43.613	43.468	2800.0	5229	19731	0.874	N-C28	
167	45.171	45.027	2900.0	5407	19389	0.859	N-C29	LO
170	46.661	46.520	3000.0	4136	20305	0.900	N-C30	0
176	48.109	47.969	3100.0	3810	19156	0.849	N-C31	0
179	49.507	49.368	3200.0	2627	9199	0.408	N-C32	
183	50.861	50.725	3300.0	2019	12398	0.549	N-C33	LO
187	52.163	52.028	3400.0	1361	11073	0.491	N-C34	0
189	53.413	53.280	3500.0	694	3170	0.140	N-C35	

Re: actual 180100 828271 36.697
 To 455182 2257066 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using:Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Injection : J023 GEDKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 4-Apr-87 Time 2:24

Analysis: CB021201S Sample Name: 4167 M

Sample ID: 0

Bottle: 1

Sample 6 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
4	13.208	13.097	1400.0	3473	14730	1.298	N-C14	
8	15.240	15.112	1472.4	4142	22554	1.988	I-C16	LO
10	16.013	15.879	1500.0	8270	40936	3.608	N-C15	LO
16	18.752	18.595	1600.0	12832	63092	5.560	N-C16	
18	20.315	20.160	1659.4	8336	50984	4.493	I-C18	0
21	21.384	21.231	1700.0	15521	78978	6.960	N-C17	
22	21.848	21.696	1718.4	8623	53099	4.679	PRISTANE	
30	23.904	23.755	1800.0	14532	71021	6.259	N-C18	LO
24	24.440	24.292	1822.3	7980	45986	4.053	PHYTANE	0
26	26.307	26.162	1900.0	14554	75137	6.621	N-C19	
48	28.592	28.451	2000.0	13322	58321	5.140	N-C20	
54	30.773	30.631	2100.0	12003	46411	4.090	N-C21	LO
64	32.856	32.713	2200.0	11008	39740	3.502	N-C22	LO
71	34.835	34.690	2300.0	10208	36307	3.200	N-C23	
77	36.739	36.593	2400.0	7795	28411	2.504	N-C24	
82	38.563	38.416	2500.0	7001	23958	2.111	N-C25	
87	40.309	40.166	2600.0	5576	19479	1.717	N-C26	
94	41.992	41.852	2700.0	4811	16458	1.450	N-C27	LO
98	43.608	43.472	2800.0	3688	12824	1.130	N-C28	FO
104	45.160	45.027	2900.0	3663	12756	1.124	N-C29	
105	46.653	46.523	3000.0	2599	9326	0.822	N-C30	0
111	48.099	47.972	3100.0	2526	12624	1.112	N-C31	0
113	49.496	49.372	3200.0	1819	6129	0.540	N-C32	
116	50.851	50.729	3300.0	1392	7701	0.679	N-C33	LO
119	52.163	52.044	3400.0	889	6829	0.602	N-C34	LO
122	53.413	53.297	3500.0	514	1502	0.132	N-C35	

Re	ual	60088	279453	24.627
Io		247164	1134743	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 CB021201S.5.1

Reported on 19-May-87 at 08:01

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MULTICHROM V3.2

Analyst Name :JANNICKE Analysis ID:
Information :J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7 Date 4-Apr-87 Time 0:51
Analysis:CB021201S Sample Name:4172 M Sample ID: 0 Bottle:1
Sample 5 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	Z	Identity	Type
41	13.123	13.031	1400.0	13273	71519	4.202	N-C14					
49	15.152	15.047	1471.3	12376	88829	5.220	I-C16					L0
51	15.971	15.860	1500.0	15668	86772	5.099	N-C15					L0
62	18.725	18.595	1600.0	15874	87487	5.141	N-C16					
65	20.275	20.145	1658.6	12771	90717	5.331	I-C18					0
69	21.368	21.239	1700.0	17049	88644	5.209	N-C17					
70	21.821	21.693	1718.0	12006	76937	4.521	PRISTANE					
80	23.888	23.760	1800.0	15076	72707	4.272	N-C18					L0
	24.408	24.281	1821.7	10566	59084	3.472	PHYTANE					
	26.285	26.159	1900.0	15173	77901	4.578	N-C19					0
101	28.576	28.451	2000.0	11647	52831	3.104	N-C20					L0
108	30.757	30.633	2100.0	8054	27821	1.635	N-C21					L0
112	32.835	32.712	2200.0	5786	19889	1.169	N-C22					
118	34.819	34.697	2300.0	5015	17066	1.003	N-C23					
122	36.712	36.591	2400.0	4300	14197	0.834	N-C24					
127	38.536	38.416	2500.0	4018	12562	0.738	N-C25					
131	40.277	40.164	2600.0	3370	10609	0.623	N-C26					
136	41.960	41.853	2700.0	3003	9477	0.557	N-C27					L0
140	43.568	43.467	2800.0	2306	7324	0.430	N-C28					
144	45.123	45.027	2900.0	2361	8203	0.482	N-C29					
145	46.621	46.531	3000.0	1675	6020	0.354	N-C30					
151	48.067	47.982	3100.0	1739	7346	0.432	N-C31					0
153	49.459	49.379	3200.0	1309	4296	0.252	N-C32					
156	50.811	50.736	3300.0	923	3229	0.190	N-C33					
159	52.120	52.050	3400.0	579	3930	0.231	N-C34					0
162	53.381	53.316	3500.0	384	1489	0.087	N-C35					L0

Re Total 164755 694930 40.835
Io 361056 1701813 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using:Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEDKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 23:24

Analysis: CB021201S Sample Name: 4200 M

Sample ID: 0

Bottle: 1

Sample 4 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	Z	Identity	Type
23	13.160	13.041	1400.0	9257	46532	4.049	N-C14					
30	15.216	15.078	1472.1	6886	43535	3.788	I-C16					LO
32	16.011	15.865	1500.0	11265	58887	5.124	N-C15					LO
40	18.765	18.595	1600.0	12058	58427	5.084	N-C16					LO
42	20.336	20.166	1659.4	7147	43875	3.818	I-C18					0
45	21.411	21.241	1700.0	12781	63327	5.510	N-C17					FO
46	21.880	21.711	1718.6	7274	42240	3.675	PRISTANE					LO
55	23.931	23.762	1800.0	10982	52521	4.570	N-C18					LO
	24.467	24.298	1822.3	6497	33473	2.913	PHYTANE					0
	26.331	26.162	1900.0	11783	48683	4.236	N-C19					0
	28.619	28.451	2000.0	11076	48372	4.209	N-C20					0
80	30.800	30.632	2100.0	9864	36713	3.195	N-C21					LO
87	32.883	32.715	2200.0	8807	31427	2.735	N-C22					
94	34.861	34.693	2300.0	8457	29269	2.547	N-C23					
99	36.765	36.597	2400.0	6754	23315	2.029	N-C24					
104	38.584	38.416	2500.0	5760	19352	1.684	N-C25					
108	40.331	40.163	2600.0	4558	15764	1.372	N-C26					
114	42.019	41.852	2700.0	4048	13281	1.156	N-C27					LO
118	43.637	43.472	2800.0	3002	10530	0.916	N-C28					0
125	45.192	45.027	2900.0	3003	10454	0.910	N-C29					
127	46.685	46.521	3000.0	2048	7382	0.642	N-C30					
132	48.131	47.967	3100.0	1958	10809	0.940	N-C31					0
134	49.528	49.365	3200.0	1447	4983	0.434	N-C32					
137	50.875	50.712	3300.0	1067	3690	0.321	N-C33					
140	52.195	52.033	3400.0	662	4587	0.399	N-C34					0
143	53.456	53.295	3500.0	399	1182	0.103	N-C35					

Re	ual	89099	386627	33.642
To		257939	1149239	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 CB021201S.3.1

Reported on 19-May-87 at 08:00

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MULTICHROM V3.2

Analyst Name :JANNICKE

Analysis ID:

Information :J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 3-Apr-87 Time 21:53

Analysis:CB021201S Sample Name:4215 M

Sample ID: 0

Bottle:1

Sample 3 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
18	13.139	13.034	1400.0	10807	57922	3.848	N-C14	
25	15.173	15.053	1471.4	9768	67213	4.465	I-C16	LO
27	15.987	15.860	1500.0	14486	77148	5.125	N-C15	LO
37	18.744	18.595	1600.0	14383	71020	4.718	N-C16	
40	20.301	20.153	1658.9	10855	68337	4.553	I-C18	0
43	21.389	21.241	1700.0	15889	80724	5.362	N-C17	
44	21.853	21.705	1718.4	9839	58922	3.914	PRISTANE	
51	23.909	23.762	1800.0	13821	67442	4.480	N-C18	
	24.440	24.293	1822.1	8356	46651	3.099	PHYTANE	
	26.312	26.165	1900.0	13211	70942	4.713	N-C19	
60	28.597	28.451	2000.0	12963	55016	3.655	N-C20	
75	30.781	30.633	2100.0	12187	44675	2.968	N-C21	LO
84	32.861	32.710	2200.0	10461	38566	2.562	N-C22	LO
92	34.845	34.692	2300.0	10376	36005	2.392	N-C23	
99	36.749	36.594	2400.0	8301	28935	1.922	N-C24	
104	38.573	38.416	2500.0	7185	25220	1.675	N-C25	
109	40.320	40.165	2600.0	6135	21331	1.417	N-C26	
117	42.005	41.852	2700.0	5226	18522	1.230	N-C27	LO
122	43.621	43.470	2800.0	4245	14991	0.996	N-C28	
130	45.176	45.027	2900.0	4163	15007	0.997	N-C29	LO
134	46.675	46.528	3000.0	3384	12076	0.802	N-C30	0
139	48.120	47.975	3100.0	3111	15280	1.015	N-C31	0
141	49.517	49.374	3200.0	2294	7920	0.526	N-C32	
145	50.872	50.730	3300.0	1779	9882	0.656	N-C33	LO
148	52.184	52.044	3400.0	1208	9317	0.619	N-C34	0
150	53.445	53.307	3500.0	704	2575	0.171	N-C35	

Re	ual	108570	483548	32.121
Te		323708	1505387	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using:Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J023 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 20:21

Analysis: CB0212015 Sample Name: 4240 M

Sample ID: 0

Bottle: 1

Sample 2 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	%	Identity	Type
44	13.120	13.023	1400.0	12736	68727	4.143	N-C14					
52	15.152	15.040	1471.2	11492	80983	4.882	I-C16					LO
54	15.973	15.855	1500.0	14962	81556	4.916	N-C15					LO
64	18.733	18.595	1600.0	14231	75038	4.523	N-C16					
66	20.280	20.142	1658.5	11512	76478	4.610	I-C18					0
69	21.379	21.240	1700.0	14398	71411	4.305	N-C17					0
70	21.827	21.688	1717.7	10624	63872	3.850	PRISTANE					
77	23.904	23.766	1800.0	11622	55129	3.323	N-C18					
	24.419	24.280	1821.5	9477	51850	3.125	PHYTANE					
	26.301	26.163	1900.0	11521	46602	2.809	N-C19					FO
94	28.589	28.451	2000.0	11287	50989	3.074	N-C20					0
100	30.768	30.631	2100.0	10330	38454	2.318	N-C21					LO
107	32.845	32.710	2200.0	8873	31206	1.881	N-C22					
114	34.829	34.696	2300.0	9199	31511	1.899	N-C23					
119	36.728	36.596	2400.0	7302	23721	1.430	N-C24					
124	38.547	38.416	2500.0	6353	20927	1.261	N-C25					
130	40.288	40.162	2600.0	4742	16422	0.990	N-C26					
138	41.976	41.855	2700.0	4181	14176	0.854	N-C27					LO
142	43.584	43.468	2800.0	3244	11592	0.699	N-C28					0
148	45.139	45.027	2900.0	3253	11580	0.698	N-C29					0
151	46.632	46.525	3000.0	2398	8544	0.515	N-C30					
157	48.072	47.969	3100.0	2530	13323	0.803	N-C31					0
160	49.469	49.370	3200.0	1845	6271	0.378	N-C32					LO
163	50.829	50.734	3300.0	1446	10517	0.634	N-C33					LO
166	52.131	52.039	3400.0	1111	10927	0.659	N-C34					
169	53.400	53.312	3500.0	616	5302	0.320	N-C35					LO

Re	ual	160888	681861	41.101
Tr		362171	1658969	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S.20.1

Reported on 18-May-87 at 15:18

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MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 15:25

Analysis: B021201S Sample Name: 4215M

Sample ID: 0

Bottle: 1

Sample 20 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
48	12.824	12.857	1400.0	1448	4701	0.033	N-C14	FO
56	15.053	15.093	1476.7	1580	16605	0.116	I-C16	0
60	15.731	15.772	1500.0	376	698	0.005	N-C15	0
75	18.547	18.595	1600.0	1282	3450	0.024	N-C16	
83	20.136	20.149	1657.8	1956	11400	0.080	I-C18	LO
87	21.296	21.284	1700.0	2021	25870	0.181	N-C17	FO
88	21.509	21.493	1709.1	1233	5829	0.041	PRISTANE	LO
97	23.632	23.569	1800.0	760	2235	0.016	N-C18	
	24.403	24.322	1830.5	1192	7799	0.054	PHYTANE	0
107	26.157	26.039	1900.0	1630	9180	0.064	N-C19	0
121	28.624	28.451	2000.0	7006	28902	0.202	N-C20	FO
134	30.880	30.680	2100.0	121361	1324275	9.252	N-C21	FOH
144	32.725	32.503	2200.0	13432	49593	0.346	N-C22	0
154	34.741	34.495	2300.0	6684	105311	0.736	N-C23	0
171	36.997	36.724	2400.0	53699	99526	0.695	N-C24	
181	38.709	38.416	2500.0	629067	262206	1.832	N-C25	
182	44.405	45.027	2900.0	525	4679	0.033	N-C29	

Residual	1988285	12351370	86.291
Total	2833536	14313630	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 B021201S,19,1

Reported on 18-May-87 at 15:18

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MULTICHROM V3.2

Analyst Name :JANNICKE

Analysis ID:

Information :J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 3-Apr-87 Time 13:44

Analysis:B021201S Sample Name:4240M

Sample ID: 0

Bottle:1

Sample 19 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
44	13.117	13.015	1400.0	13794	74475	3.823	N-C14	
52	15.149	15.031	1471.1	12183	87575	4.496	I-C16	LO
54	15.976	15.851	1500.0	16187	88150	4.525	N-C15	LO
64	18.741	18.595	1600.0	14789	73494	3.773	N-C16	
67	20.280	20.134	1658.1	12839	86375	4.434	I-C18	0
71	21.389	21.243	1700.0	16408	81634	4.191	N-C17	
72	21.827	21.680	1717.4	11601	73035	3.749	PRISTANE	
80	23.909	23.763	1800.0	13174	64541	3.313	N-C18	
	24.424	24.278	1821.4	10601	60686	3.115	PHYTANE	
	26.312	26.166	1900.0	13452	72252	3.709	N-C19	0
97	28.597	28.451	2000.0	12977	62727	3.220	N-C20	0
102	30.784	30.636	2100.0	11580	44136	2.266	N-C21	LO
109	32.867	32.718	2200.0	9788	35754	1.835	N-C22	
116	34.845	34.695	2300.0	9770	35880	1.842	N-C23	
122	36.744	36.593	2400.0	8108	26739	1.373	N-C24	
127	38.568	38.416	2500.0	6779	23426	1.203	N-C25	
132	40.315	40.166	2600.0	5518	18405	0.945	N-C26	
141	42.000	41.855	2700.0	4769	15884	0.815	N-C27	LO
146	43.605	43.464	2800.0	3417	12524	0.643	N-C28	0
153	45.165	45.027	2900.0	3629	12620	0.648	N-C29	0
156	46.659	46.523	3000.0	2498	9234	0.474	N-C30	
162	48.109	47.977	3100.0	2610	14308	0.735	N-C31	0
165	49.501	49.372	3200.0	1872	6775	0.348	N-C32	LO
168	50.861	50.735	3300.0	1594	10892	0.559	N-C33	LO
171	52.173	52.050	3400.0	1000	7055	0.362	N-C34	
174	53.424	53.303	3500.0	579	2765	0.142	N-C35	

ReQual 228752 846635 43.462
To 450268 1947977 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using:Area

Analysis: 7 R021201S, 18, 1

Reported on 18-May-87 at 15:17

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEDKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 12:15

Analysis: R021201S Sample Name: 4247M

Sample ID: 0

Bottle: 1

Sample 18 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
15	13.147	13.042	1400.0	6719	31069	3.310	N-C14	
20	15.176	15.055	1471.4	7122	42208	4.496	I-C16	LO
22	15.989	15.862	1500.0	9260	44632	4.754	N-C15	LO
28	18.744	18.595	1600.0	10158	45791	4.878	N-C16	LO
30	20.285	20.139	1658.4	8470	50290	5.357	I-C18	0
33	21.381	21.237	1700.0	11358	51074	5.440	N-C17	0
34	21.827	21.684	1717.6	7875	42568	4.534	PRISTANE	
41	23.907	23.767	1800.0	9662	41408	4.411	N-C18	
	24.411	24.272	1821.0	7414	38504	4.102	PHYTANE	
	26.301	26.167	1900.0	10050	38576	4.109	N-C19	FO
56	28.581	28.451	2000.0	9777	43662	4.651	N-C20	0
61	30.763	30.631	2100.0	9332	32786	3.492	N-C21	LO
66	32.845	32.713	2200.0	7917	26835	2.858	N-C22	
72	34.827	34.693	2300.0	7659	26608	2.834	N-C23	
77	36.728	36.593	2400.0	6005	20073	2.138	N-C24	
82	38.552	38.416	2500.0	5229	17658	1.881	N-C25	
86	40.304	40.169	2600.0	4291	14067	1.498	N-C26	
92	41.987	41.852	2700.0	3668	12271	1.307	N-C27	LO
96	43.600	43.466	2800.0	2860	9567	1.019	N-C28	
100	45.160	45.027	2900.0	2979	10118	1.078	N-C29	
101	46.659	46.526	3000.0	2118	7461	0.795	N-C30	
105	48.104	47.972	3100.0	2255	11112	1.184	N-C31	0
107	49.501	49.370	3200.0	1566	5254	0.560	N-C32	
110	50.861	50.731	3300.0	1250	7952	0.847	N-C33	LO
113	52.173	52.044	3400.0	793	5434	0.579	N-C34	
116	53.424	53.295	3500.0	513	2127	0.227	N-C35	

Re	ual	59613	259667	27.660
To		215915	938772	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S.17.1

Reported on 18-May-87 at 15:17

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 10:45

Analysis: B021201S Sample Name: 4272M

Sample ID: 0 Bottle: 1

Sample 17 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
30	13.136	13.039	1400.0	8803	44115	2.583	N-C14	
35	15.168	15.056	1471.5	7993	50781	2.974	I-C16	LO
37	15.979	15.861	1500.0	12300	64944	3.803	N-C15	LO
44	18.733	18.595	1600.0	14677	76064	4.454	N-C16	
46	20.280	20.142	1658.5	11691	74065	4.337	I-C18	0
49	21.379	21.241	1700.0	17301	88211	5.166	N-C17	FO
50	21.816	21.679	1717.4	11516	73741	4.318	PRISTANE	LO
57	23.899	23.762	1800.0	15221	76361	4.472	N-C18	
	24.408	24.271	1821.2	10560	62576	3.664	PHYTANE	
	26.301	26.165	1900.0	15576	85335	4.997	N-C19	
76	28.587	28.451	2000.0	15058	79776	4.672	N-C20	0
82	30.773	30.635	2100.0	14255	56676	3.319	N-C21	LO
92	32.856	32.716	2200.0	12422	49404	2.893	N-C22	0
100	34.840	34.697	2300.0	12866	48519	2.841	N-C23	
107	36.739	36.594	2400.0	10543	36465	2.135	N-C24	
113	38.563	38.416	2500.0	9138	32089	1.879	N-C25	
119	40.315	40.169	2600.0	7048	25538	1.495	N-C26	
128	42.000	41.855	2700.0	6267	21959	1.286	N-C27	LO
134	43.616	43.472	2800.0	4850	17522	1.026	N-C28	0
141	45.171	45.027	2900.0	4719	17259	1.011	N-C29	0
144	46.669	46.526	3000.0	3556	17899	1.048	N-C30	
150	48.109	47.967	3100.0	3367	18580	1.088	N-C31	0
152	49.512	49.370	3200.0	2410	8182	0.479	N-C32	
156	50.861	50.720	3300.0	1956	12333	0.722	N-C33	LO
159	52.173	52.033	3400.0	1185	7898	0.463	N-C34	
162	53.435	53.295	3500.0	617	2649	0.155	N-C35	

Re	ual	126390	558720	32.718
To		362284	1707659	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S, 16, 1

Reported on 18-May-87 at 15:17

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MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:

Information : J022 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 9:15

Analysis: B021201S Sample Name: 4302M

Sample ID: 0 Bottle: 1

Sample 16 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
32	13.131	13.024	1400.0	10121	51049	4.148	N-C14	
38	15.189	15.066	1472.1	6418	39081	3.176	I-C16	LO
40	15.984	15.855	1500.0	12267	64354	5.229	N-C15	
48	18.747	18.595	1600.0	13330	63499	5.160	N-C16	LO
50	20.309	20.159	1659.3	7126	41911	3.406	I-C18	0
53	21.384	21.235	1700.0	14313	69224	5.625	N-C17	FO
54	21.848	21.700	1718.4	7964	44215	3.593	PRISTANE	LO
61	23.904	23.758	1800.0	12464	57481	4.671	N-C18	
24.435	24.289	1822.1	6314	34170	2.777	PHYTANE	0	
26.307	26.163	1900.0	12325	60937	4.952	N-C19		
28.592	28.451	2000.0	11752	47860	3.889	N-C20	LO	
83	30.773	30.632	2100.0	10778	40383	3.281	N-C21	LO
90	32.851	32.710	2200.0	9610	34735	2.822	N-C22	
97	34.835	34.693	2300.0	9783	35220	2.862	N-C23	
103	36.733	36.592	2400.0	7623	26030	2.115	N-C24	
108	38.557	38.416	2500.0	6867	22920	1.862	N-C25	
113	40.304	40.165	2600.0	5556	18087	1.470	N-C26	
119	41.992	41.855	2700.0	4543	14937	1.214	N-C27	LO
123	43.600	43.465	2800.0	3435	11375	0.924	N-C28	
128	45.160	45.027	2900.0	3335	11361	0.923	N-C29	
129	46.659	46.528	3000.0	2153	8062	0.655	N-C30	
134	48.104	47.975	3100.0	2084	9251	0.752	N-C31	0
136	49.501	49.374	3200.0	1447	5173	0.420	N-C32	
139	50.851	50.725	3300.0	1151	6373	0.518	N-C33	LO
142	52.155	52.030	3400.0	643	2006	0.163	N-C34	
145	53.424	53.301	3500.0	437	1648	0.134	N-C35	

Re	96555	409336	33.261
To	280394	1230679	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 B021201S.15.1

Reported on 18-May-87 at 15:17

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MULTICHROM V3.2

Analyst Name :JANNICKE Analysis ID:
Information :J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 3-Apr-87 Time 7:45

Analysis:B021201S Sample Name:4330M

Sample ID: 0 Bottle:1

Sample 15 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
25	12.701	12.850	1400.0	7055	35206	4.830	N-C14	
30	14.765	14.938	1472.7	3474	20300	2.785	I-C16	LO
32	15.541	15.723	1500.0	8517	42573	5.840	N-C15	LO
40	19.867	20.099	1660.6	3865	21950	3.011	I-C18	0
43	20.928	21.172	1700.0	9431	43237	5.932	N-C17	
44	21.389	21.639	1718.3	4729	23719	3.254	PRISTANE	
50	23.445	23.719	1800.0	8116	34137	4.683	N-C18	
51	23.976	24.256	1822.2	3544	16453	2.257	PHYTANE	
	25.840	26.142	1900.0	8067	38229	5.245	N-C19	LO
	28.123	28.451	2000.0	7668	32653	4.480	N-C20	0
68	30.299	30.630	2100.0	7216	25275	3.467	N-C21	LO
73	32.376	32.711	2200.0	6226	21866	3.000	N-C22	
79	34.357	34.695	2300.0	6915	22326	3.063	N-C23	
82	36.259	36.600	2400.0	4787	16239	2.228	N-C24	
86	38.072	38.416	2500.0	4322	14761	2.025	N-C25	
90	39.824	40.172	2600.0	3570	11414	1.566	N-C26	
94	41.504	41.855	2700.0	2866	9403	1.290	N-C27	
96	43.120	43.474	2800.0	2302	8768	1.203	N-C28	0
101	44.669	45.027	2900.0	2096	7299	1.001	N-C29	
102	49.144	49.511	3200.0	1511	6639	0.911	N-C32	
104	50.285	50.655	3300.0	432	1639	0.225	N-C33	0
107	51.568	51.940	3400.0	227	848	0.116	N-C34	LO
109	52.688	53.062	3500.0	249	878	0.120	N-C35	FO

Residual 65632 273124 37.469
Total 172815 728936 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using:Area

Analysis: 7 B021201S, 4, 1

Reported on 18-May-87 at 15:15

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : 3022 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 2-Apr-87 Time 15:13

Analysis: B021201S Sample Name: 4360M

Sample ID: 0

Bottle: 1

Sample 4 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	% Identity	Type
24	12.992	12.983	1400.0	12716	64390	5.075 N-C14	
31	15.024	15.014	1471.1	6872	42010	3.311 I-C16	LO
35	15.848	15.837	1500.0	15053	76122	6.000 N-C15	LO
43	18.608	18.595	1600.0	15174	73777	5.815 N-C16	
45	20.163	20.148	1658.7	6567	37202	2.932 I-C18	0
48	21.256	21.239	1700.0	15840	73573	5.799 N-C17	FO
49	21.693	21.676	1717.3	7398	38384	3.026 PRISTANE	LO
55	23.781	23.761	1800.0	14410	62382	4.917 N-C18	
56	24.285	24.265	1821.0	5405	27273	2.150 PHYTANE	
60	26.184	26.161	1900.0	13965	64660	5.097 N-C19	
69	28.477	28.451	2000.0	13301	55607	4.383 N-C20	0
77	30.659	30.631	2100.0	11677	42245	3.330 N-C21	
84	32.739	32.710	2200.0	10202	35922	2.831 N-C22	
92	34.720	34.690	2300.0	9576	34179	2.694 N-C23	
100	36.627	36.596	2400.0	7725	26009	2.050 N-C24	
105	38.448	38.416	2500.0	6539	22231	1.752 N-C25	
111	40.203	40.171	2600.0	5473	18147	1.430 N-C26	
118	41.885	41.854	2700.0	4259	14730	1.161 N-C27	LO
123	43.504	43.472	2800.0	3490	11989	0.945 N-C28	
126	45.059	45.027	2900.0	3222	10710	0.844 N-C29	
129	46.557	46.526	3000.0	2336	7882	0.621 N-C30	
131	48.008	47.976	3100.0	2038	7944	0.626 N-C31	0
133	49.403	49.371	3200.0	1564	5396	0.425 N-C32	
134	50.765	50.734	3300.0	1248	5759	0.454 N-C33	
135	52.077	52.046	3400.0	791	4588	0.362 N-C34	0
136	53.328	53.297	3500.0	531	1732	0.137 N-C35	

Re Total	95376	403810	31.830
To	292746	1268657	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S, 14, 1

Reported on 18-May-87 at 15:17

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE Analysis ID:

Information : J022 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 6:16

Analysis: B021201S Sample Name: 4370M

Sample ID: 0 Bottle: 1

Sample 14 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
20	12.699	12.853	1400.0	11252	57495	4.616	N-C14	
28	14.741	14.921	1472.1	6743	42923	3.446	I-C16	LO
30	15.531	15.719	1500.0	14432	76273	6.123	N-C15	LO
39	19.851	20.092	1660.5	7124	44388	3.563	I-C18	O
42	20.915	21.169	1700.0	15683	78896	6.334	N-C17	FO
43	21.373	21.633	1718.2	7802	46611	3.742	PRISTANE	LO
50	23.429	23.714	1800.0	13329	63379	5.088	N-C18	
51	23.960	24.251	1822.1	6210	33332	2.676	PHYTANE	O
	25.827	26.141	1900.0	13292	66531	5.341	N-C19	LO
	28.109	28.451	2000.0	11830	52065	4.180	N-C20	FO
72	30.288	30.631	2100.0	10802	40022	3.213	N-C21	LO
82	32.365	32.710	2200.0	9310	34120	2.739	N-C22	
88	34.344	34.690	2300.0	9206	31552	2.533	N-C23	
95	36.243	36.591	2400.0	7213	24935	2.002	N-C24	
100	38.067	38.416	2500.0	6006	21284	1.709	N-C25	
104	39.808	40.162	2600.0	4978	17078	1.371	N-C26	
110	41.488	41.847	2700.0	4159	13719	1.101	N-C27	
112	43.104	43.468	2800.0	3118	11127	0.893	N-C28	
119	44.659	45.027	2900.0	2965	10928	0.877	N-C29	
123	46.149	46.522	3000.0	2449	9386	0.754	N-C30	LO
128	47.597	47.974	3100.0	1978	7899	0.634	N-C31	
130	48.989	49.370	3200.0	1480	5389	0.433	N-C32	
133	50.341	50.726	3300.0	1013	3186	0.256	N-C33	
136	51.661	52.050	3400.0	717	4545	0.365	N-C34	
140	52.912	53.304	3500.0	413	1833	0.147	N-C35	

Residual 102500 446762 35.866

To 276004 1245657 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S.13.1

Reported on 18-May-87 at 15:17

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MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 4:49

Analysis: B021201S Sample Name: 4400M

Sample ID: 0

Bottle: J

Sample 13 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	Z	Identity	Type
4	12.805	12.981	1400.0	4428	19687	1.381	N-C14					
8	14.861	15.065	1473.2	2164	11352	0.796	I-C16					LO
10	15.613	15.827	1500.0	8870	43242	3.033	N-C15					LO
18	18.344	18.595	1600.0	12630	57245	4.016	N-C16					LO
20	19.928	20.185	1660.3	4092	24975	1.752	I-C18					0
24	20.971	21.232	1700.0	15486	79339	5.566	N-C17					0
25	21.424	21.687	1718.0	8622	50075	3.513	PRISTANE					LO
32	23.483	23.753	1800.0	15089	74889	5.253	N-C18					
	24.029	24.302	1822.8	4571	24337	1.707	PHYTANE					0
	25.880	26.160	1900.0	15973	78702	5.521	N-C19					
49	28.163	28.451	2000.0	16305	73952	5.188	N-C20					FO
56	30.339	30.629	2100.0	15992	63215	4.434	N-C21					
67	32.416	32.708	2200.0	16011	64918	4.554	N-C22					0
76	34.397	34.690	2300.0	16015	61443	4.310	N-C23					
86	36.296	36.591	2400.0	14046	55343	3.882	N-C24					LO
94	38.120	38.416	2500.0	13605	52654	3.694	N-C25					LO
102	39.867	40.168	2600.0	11251	43617	3.060	N-C26					LO
109	41.549	41.855	2700.0	10517	39948	2.802	N-C27					LO
115	43.160	43.471	2800.0	8149	30803	2.161	N-C28					FO
122	44.712	45.027	2900.0	7877	29506	2.070	N-C29					LO
127	46.211	46.530	3000.0	5143	21606	1.516	N-C30					0
132	47.651	47.974	3100.0	4437	17301	1.214	N-C31					
135	49.048	49.375	3200.0	2729	11245	0.789	N-C32					0
139	50.403	50.734	3300.0	2280	11743	0.824	N-C33					
141	51.715	52.050	3400.0	1159	7986	0.560	N-C34					
144	52.965	53.304	3500.0	823	3889	0.273	N-C35					0

R Total 75726 372515 26.132
To 313991 1425525 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 R021201S.12.1

Reported on 18-May-87 at 15:16

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 8-Apr-87 Time 3:18

Analysis: R021201S Sample Name: 4432M

Sample ID: 0

Bottle: 7

Sample 12 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	Z	Identity	Type
17	12.864	12.970	1400.0	9295	45548	3.583	N-C14					
24	14.893	15.016	1471.6	6822	41830	3.291	I-C16					LO
26	15.699	15.828	1500.0	11985	60910	4.791	N-C15					LO
35	18.443	18.595	1600.0	13495	61857	4.866	N-C16					LO
37	19.999	20.155	1659.0	8027	48526	3.817	I-C18					0
40	21.080	21.239	1700.0	14607	70793	5.569	N-C17					FO
41	21.533	21.694	1718.0	8394	46380	3.648	PRISTANE					LO
48	23.597	23.764	1800.0	13426	58484	4.601	N-C18					
24	24.109	24.277	1821.4	7273	38732	3.047	PHYTANE					0
25	25.992	26.165	1900.0	14350	69764	5.488	N-C19					
6	28.272	28.451	2000.0	14011	60892	4.790	N-C20					0
74	30.453	30.635	2100.0	12930	47689	3.751	N-C21					LO
81	32.525	32.709	2200.0	11038	40764	3.207	N-C22					
88	34.509	34.695	2300.0	10799	38186	3.004	N-C23					
95	36.408	36.595	2400.0	8524	29781	2.343	N-C24					
100	38.227	38.416	2500.0	7257	24926	1.961	N-C25					
104	39.973	40.168	2600.0	5770	19725	1.552	N-C26					
111	41.656	41.855	2700.0	4753	15559	1.224	N-C27					LO
116	43.264	43.468	2800.0	3503	12990	1.022	N-C28					FO
123	44.819	45.027	2900.0	3467	11788	0.927	N-C29					
125	46.317	46.530	3000.0	2556	9910	0.780	N-C30					LO
130	47.757	47.974	3100.0	2102	10985	0.864	N-C31					0
132	49.149	49.370	3200.0	1599	5714	0.449	N-C32					
135	50.499	50.723	3300.0	1126	6035	0.475	N-C33					0
138	51.811	52.039	3400.0	742	4662	0.367	N-C34					0
141	53.061	53.293	3500.0	448	2008	0.158	N-C35					

Re	Qual	89835	386786	30.426
Io		288135	1271227	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 1:51

Analysis: B0212015 Sample Name: 4457M

Sample ID: 0

Bottle: 1

Sample 11 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	%	Identity	Type
8	12.965	13.007	1400.0	9890	48477	2.163	N-C14					
13	14.989	15.037	1471.7	8025	52685	2.351	I-C16					LO
15	15.789	15.840	1500.0	16652	89872	4.011	N-C15					LO
24	18.536	18.595	1600.0	20276	117353	5.237	N-C16					0
27	20.088	20.148	1658.7	12337	80087	3.574	I-C18					0
30	21.181	21.242	1700.0	22680	123872	5.528	N-C17					
31	21.619	21.679	1717.4	13182	83569	3.730	PRISTANE					
41	23.701	23.763	1800.0	20467	110573	4.935	N-C18					LO
24	24.205	24.267	1821.0	11066	66625	2.973	PHYTANE					
26	26.104	26.167	1900.0	20925	117072	5.225	N-C19					
61	28.387	28.451	2000.0	19914	110761	4.943	N-C20					0
70	30.568	30.631	2100.0	19281	84624	3.777	N-C21					0
80	32.653	32.714	2200.0	17179	74157	3.310	N-C22					LO
89	34.637	34.696	2300.0	16614	69661	3.109	N-C23					LO
95	36.536	36.594	2400.0	14050	56586	2.525	N-C24					
102	38.360	38.416	2500.0	12156	50360	2.248	N-C25					LO
111	40.101	40.162	2600.0	10618	41342	1.845	N-C26					
118	41.789	41.855	2700.0	9330	34835	1.555	N-C27					LO
126	43.395	43.465	2800.0	7225	28824	1.286	N-C28					FO
136	44.952	45.027	2900.0	7019	28925	1.291	N-C29					0
142	46.440	46.519	3000.0	5425	27989	1.249	N-C30					0
149	47.885	47.969	3100.0	5185	25329	1.130	N-C31					FO
154	49.272	49.359	3200.0	3742	13254	0.592	N-C32					0
158	50.627	50.718	3300.0	2601	15057	0.672	N-C33					LO
162	51.939	52.034	3400.0	1381	9506	0.424	N-C34					
165	53.197	53.296	3500.0	841	6472	0.289	N-C35					LO

Re	tual	138795	672824	30.028
To		446858	2240688	100.000

Sample Type: SA	Scale Factor: 1.000	Amount: 1.000
Method: MSDS	Calibration: MSDS	Type: UC Using: Area

Analysis: 7 B021201S, 10, 1

Reported on 18-May-87 at 15:16

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 3-Apr-87 Time 0:23

Analysis: B021201S Sample Name: 4480M

Sample ID: 0 Bottle: 1

Sample 10 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
17	13.091	13.027	1400.0	10255	51320	3.055	N-C14	
23	15.123	15.050	1471.5	8063	50875	3.029	I-C16	L0
25	15.933	15.856	1500.0	14314	76117	4.531	N-C15	L0
33	18.685	18.595	1600.0	15790	74710	4.448	N-C16	
36	20.237	20.147	1658.7	10024	62766	3.737	I-C18	0
39	21.331	21.241	1700.0	18113	91598	5.453	N-C17	
40	21.768	21.679	1717.3	10696	64131	3.818	PRISTANE	
48	23.856	23.767	1800.0	15874	81149	4.831	N-C18	
	24.365	24.277	1821.2	9108	52396	3.119	PHYTANE	
	26.253	26.165	1900.0	16435	94869	5.648	N-C19	
60	28.539	28.451	2000.0	15718	79855	4.754	N-C20	L0
73	30.723	30.635	2100.0	15070	60307	3.590	N-C21	0
84	32.797	32.710	2200.0	13142	53153	3.164	N-C22	0
91	34.787	34.699	2300.0	13080	49156	2.926	N-C23	
99	36.685	36.597	2400.0	10510	39232	2.336	N-C24	
104	38.504	38.416	2500.0	9095	33752	2.009	N-C25	
111	40.251	40.168	2600.0	7617	27592	1.643	N-C26	
119	41.933	41.855	2700.0	6525	23481	1.398	N-C27	L0
124	43.544	43.471	2800.0	4973	18415	1.096	N-C28	0
132	45.096	45.027	2900.0	4807	18477	1.100	N-C29	L0
136	46.589	46.525	3000.0	3478	12504	0.744	N-C30	
142	48.029	47.969	3100.0	3346	17171	1.022	N-C31	F0
146	49.421	49.365	3200.0	2423	8466	0.504	N-C32	
149	50.776	50.723	3300.0	1820	10437	0.621	N-C33	L0
152	52.077	52.028	3400.0	1141	7067	0.421	N-C34	0
155	53.328	53.283	3500.0	627	2312	0.138	N-C35	

ReQual 112379 518472 30.865
To 354421 1679779 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S.9.1

Reported on 18-May-87 at 15:16

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M U L T I C H R O M V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEDKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 2-Apr-87 Time 22:56

Analysis: B021201S Sample Name: 4497M

Sample ID: 0

Bottle: 1

Sample 9 Injection 1

Peak	R/T	RT	Corr	RT	Val	Hght	uV	Area	uVs	Z	Identity	Type
10	13.107	13.043	1400.0	5366	23621	2.435	N-C14					
16	15.155	15.081	1472.3	3202	16032	1.653	I-C16					LO
18	15.939	15.862	1500.0	8148	37075	3.822	N-C15					
22	18.685	18.595	1600.0	10459	43977	4.533	N-C16					
24	20.245	20.158	1659.2	5257	29240	3.014	I-C18					0
29	21.320	21.234	1700.0	12931	62368	6.429	N-C17					LO
30	21.768	21.683	1717.8	7236	36553	3.768	PRISTANE					
37	23.837	23.755	1800.0	11970	50926	5.249	N-C18					0
	24.347	24.266	1821.2	6759	33977	3.502	PHYTANE					
	26.237	26.159	1900.0	12467	57723	5.950	N-C19					
53	28.525	28.451	2000.0	11626	50109	5.165	N-C20					0
60	30.707	30.632	2100.0	11144	40534	4.178	N-C21					0
69	32.787	32.711	2200.0	9737	35987	3.710	N-C22					LO
77	34.771	34.694	2300.0	9158	32004	3.299	N-C23					
82	36.669	36.593	2400.0	8116	27644	2.850	N-C24					
88	38.493	38.416	2500.0	6618	22424	2.311	N-C25					
96	40.240	40.166	2600.0	5478	19225	1.982	N-C26					
103	41.925	41.854	2700.0	4872	17301	1.783	N-C27					LO
108	43.539	43.470	2800.0	3752	13453	1.387	N-C28					LO
113	45.093	45.027	2900.0	3682	13545	1.396	N-C29					LO
116	46.595	46.531	3000.0	2504	9200	0.948	N-C30					
121	48.040	47.979	3100.0	2242	10201	1.052	N-C31					0
124	49.432	49.373	3200.0	1784	7918	0.816	N-C32					
128	50.787	50.730	3300.0	1392	6134	0.632	N-C33					0
132	52.109	52.055	3400.0	849	3317	0.342	N-C34					FO
136	53.360	53.307	3500.0	521	1643	0.169	N-C35					

Re	ual	58818	267993	27.625
To		226286	970124	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 R021201S.8.1

Reported on 18-May-87 at 15:16

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MULTICHROM V3.2

Analyst Name :JANNICKE

Analysis ID:

Information :J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 2-Apr-87 Time 21:30

Analysis:R021201S Sample Name:4527M

Sample ID: 0

Bottle:1

Sample 8 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
2	13.160	13.072	1400.0	1854	7398	1.982	N-C14	
4	15.181	15.080	1471.8	1987	9316	2.495	I-C16	LO
5	15.976	15.869	1500.0	4054	17207	4.609	N-C15	
8	18.720	18.595	1600.0	5510	21344	5.717	N-C16	
10	20.272	20.152	1659.0	3198	16554	4.434	I-C18	0
13	21.349	21.233	1700.0	6439	26015	6.968	N-C17	0
14	21.800	21.685	1717.9	3563	15903	4.260	PRISTANE	
20	23.867	23.758	1800.0	5919	22358	5.989	N-C18	
24	24.381	24.275	1821.5	2916	12852	3.442	PHYTANE	
26	26.261	26.161	1900.0	5820	25882	6.933	N-C19	0
32	28.544	28.451	2000.0	5879	23324	6.247	N-C20	LO
35	30.728	30.637	2100.0	5317	18050	4.835	N-C21	
38	32.803	32.713	2200.0	4770	16191	4.337	N-C22	
43	34.787	34.698	2300.0	4518	14579	3.905	N-C23	
46	36.685	36.599	2400.0	3602	11720	3.139	N-C24	
49	38.501	38.416	2500.0	2942	9833	2.634	N-C25	
50	40.256	40.172	2600.0	2485	8110	2.172	N-C26	
54	41.939	41.856	2700.0	2157	7001	1.875	N-C27	LO
55	43.552	43.471	2800.0	1681	5494	1.472	N-C28	
57	45.107	45.027	2900.0	1672	5793	1.552	N-C29	
58	46.605	46.527	3000.0	1197	4194	1.123	N-C30	
61	48.051	47.974	3100.0	1082	3885	1.041	N-C31	
63	49.451	49.375	3200.0	835	2836	0.760	N-C32	
66	50.800	50.725	3300.0	633	2555	0.684	N-C33	
69	52.120	52.046	3400.0	377	2365	0.633	N-C34	
70	53.371	53.298	3500.0	253	771	0.207	N-C35	

Re	Qual	15224	61804	16.555
To		95883	373333	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using:Area

Analysis: 7 B021201S, 7, 1

Reported on 18-May-87 at 15:15

Page 1

M U L T I C H R O M V3.2

Analyst Name : JANNICKE Analysis ID:
Information : J022 GEOKJEMI WELL: 2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7 Date 2-Apr-87 Time 20:04
Analysis: B021201S Sample Name: 4607M Sample ID: 0 Bottle: 1
Sample 7 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
28	13.059	13.010	1400.0	10049	49394	3.787	N-C14	
35	15.101	15.046	1471.7	6510	39298	3.013	I-C16	LO
38	15.907	15.848	1500.0	12634	64203	4.923	N-C15	0
47	18.664	18.595	1600.0	14198	66396	5.091	N-C16	LO
49	20.213	20.144	1658.6	7616	44808	3.436	I-C18	0
52	21.309	21.240	1700.0	14988	72832	5.584	N-C17	
53	21.747	21.677	1717.4	8058	46426	3.560	PRISTANE	
62	23.829	23.759	1800.0	13318	62783	4.814	N-C18	LO
	24.344	24.273	1821.4	6801	35672	2.735	PHYTANE	
	26.237	26.166	1900.0	12663	63621	4.878	N-C19	
78	28.523	28.451	2000.0	12481	56546	4.336	N-C20	LO
84	30.712	30.637	2100.0	11278	40877	3.134	N-C21	LO
92	32.787	32.708	2200.0	9862	35418	2.716	N-C22	
98	34.776	34.694	2300.0	9166	32973	2.528	N-C23	
105	36.680	36.595	2400.0	7857	27208	2.086	N-C24	LO
110	38.504	38.416	2500.0	6538	22769	1.746	N-C25	
116	40.256	40.169	2600.0	5378	18734	1.436	N-C26	
122	41.939	41.852	2700.0	4399	15873	1.217	N-C27	LO
126	43.557	43.472	2800.0	3465	12622	0.968	N-C28	0
133	45.112	45.027	2900.0	3350	12725	0.976	N-C29	LO
137	46.611	46.526	3000.0	2335	8855	0.679	N-C30	
143	48.056	47.972	3100.0	2332	9727	0.746	N-C31	0
146	49.453	49.370	3200.0	1692	5956	0.457	N-C32	
149	50.800	50.718	3300.0	1268	5423	0.416	N-C33	
152	52.120	52.038	3400.0	793	5062	0.388	N-C34	0
155	53.371	53.289	3500.0	447	1358	0.104	N-C35	

Re	102308	446667	34.248
To	291774	1304229	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis: 7 B021201S.6, 1

Reported on 18-May-87 at 15:15

Page 1

MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:
Information : J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 2-Apr-87 Time 18:38

Analysis: B021201S Sample Name: 4633.6M

Sample ID: 0

Bottle: 1

Sample 6 Injection 1

Peak	R/T	RT	Corr	RT Val	Hght	Area	uV	%	Identity	Type
36	13.024	12.981	1400.0	19464	109063	6.700	N-C14			
45	15.083	15.033	1471.8	8530	56627	3.479	I-C16			L0
48	15.891	15.839	1500.0	21116	115246	7.080	N-C15			L0
55	18.656	18.595	1600.0	19437	100346	6.164	N-C16			
62	20.227	20.163	1659.2	6977	43375	2.665	I-C18			0
65	21.309	21.244	1700.0	18583	90382	5.552	N-C17			
66	21.763	21.697	1718.0	7424	39740	2.441	PRISTANE			
74	23.835	23.765	1800.0	14741	69578	4.274	N-C18			
	24.360	24.290	1821.9	5129	22768	1.399	PHYTANE			
	26.237	26.164	1900.0	14435	66560	4.089	N-C19			FO
89	28.528	28.451	2000.0	12623	49417	3.036	N-C20			
97	30.717	30.639	2100.0	10822	40597	2.494	N-C21			0
104	32.792	32.711	2200.0	8927	31744	1.950	N-C22			
112	34.779	34.696	2300.0	8390	28145	1.729	N-C23			
118	36.685	36.602	2400.0	6050	20575	1.264	N-C24			
123	38.501	38.416	2500.0	5101	16853	1.035	N-C25			
127	40.256	40.172	2600.0	4034	13089	0.804	N-C26			
134	41.933	41.851	2700.0	3120	10417	0.640	N-C27			L0
136	43.552	43.471	2800.0	2524	8202	0.504	N-C28			
138	45.107	45.027	2900.0	2092	7030	0.432	N-C29			
139	46.611	46.532	3000.0	1507	5065	0.311	N-C30			
141	48.056	47.979	3100.0	1231	5039	0.310	N-C31			
143	49.451	49.375	3200.0	1013	3296	0.202	N-C32			
144	50.808	50.733	3300.0	734	3745	0.230	N-C33			
145	52.120	52.046	3400.0	442	2962	0.182	N-C34			0
146	53.381	53.309	3500.0	292	1013	0.062	N-C35			

Re Total 151558 666938 40.971
To 356293 1627810 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
Method: MSDS Calibration: MSDS Type: UC Using: Area

Reported on 18-May-87 at 15:15

Page 1

MULTICHROM V3.2

Analyst Name : JANNICKE Analysis ID:
 Information : J022 GEOKJEM1 WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7 Date 2-Apr-87 Time 17:10
 Analysis: R021201S Sample Name: 4653.7M Sample ID: 0 Bottle: 1
 Sample 5 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
45	13.016	12.981	1400.0	20467	122155	6.279	N-C14	LO
54	15.067	15.026	1471.6	9328	62356	3.205	I-C16	LO
58	15.880	15.837	1500.0	21448	114312	5.876	N-C15	LO
68	18.645	18.595	1600.0	19098	100143	5.148	N-C16	
70	20.211	20.157	1659.1	7592	46438	2.387	I-C18	0
73	21.296	21.241	1700.0	19098	98186	5.047	N-C17	FO
74	21.744	21.688	1717.7	8310	46131	2.371	PRISTANE	LO
82	23.824	23.764	1800.0	15679	75243	3.868	N-C18	
	24.339	24.278	1821.4	6095	30729	1.580	PHYTANE	
	26.232	26.167	1900.0	15511	73572	3.782	N-C19	0
96	28.520	28.451	2000.0	13874	61289	3.150	N-C20	0
104	30.704	30.630	2100.0	12734	47131	2.423	N-C21	LO
111	32.787	32.708	2200.0	10779	38482	1.978	N-C22	
119	34.781	34.699	2300.0	10070	36210	1.861	N-C23	
127	36.680	36.593	2400.0	7664	27527	1.415	N-C24	
132	38.507	38.416	2500.0	6657	23514	1.209	N-C25	
137	40.256	40.165	2600.0	5552	19162	0.985	N-C26	
144	41.944	41.854	2700.0	4587	15835	0.814	N-C27	LO
148	43.560	43.470	2800.0	3814	14101	0.725	N-C28	0
152	45.117	45.027	2900.0	3466	11669	0.600	N-C29	
154	46.616	46.526	3000.0	2424	8747	0.450	N-C30	
156	48.067	47.976	3100.0	2179	9242	0.475	N-C31	0
158	49.459	49.369	3200.0	1714	6026	0.310	N-C32	
159	50.829	50.739	3300.0	1370	6424	0.330	N-C33	
160	52.131	52.041	3400.0	876	4977	0.256	N-C34	0
162	53.392	53.302	3500.0	564	1930	0.099	N-C35	

Re: 190699 843861 43.377
 To: 421647 1945393 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using: Area

Analysis:7 B0212015.3.1

Reported on 18-May-87 at 15:15

Page 1

MULTICHROM V3.2

Analyst Name :JANNICKE

Analysis ID:

Information :J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel:7 Title: CHANNEL 7

Date 2-Apr-87 Time 13:39

Analysis:B0212015 Sample Name:4663.3M

Sample ID: 0 Bottle:1

Sample 3 Injection 1

Peak	R/T m.	RT Corr	RT Val	Hght uV	Area uVs	Z	Identity	Type
35	12.976	12.976	1400.0	11366	53911	6.678	N-C14	
44	15.019	15.019	1471.5	4189	14950	1.852	I-C16	
47	15.835	15.835	1500.0	11578	54594	6.762	N-C15	
55	18.595	18.595	1600.0	10733	47187	5.845	N-C16	LO
57	20.152	20.152	1658.9	3731	20474	2.536	I-C18	0
60	21.237	21.238	1700.0	10710	45851	5.680	N-C17	0
61	21.677	21.678	1717.4	3913	17526	2.171	PRISTANE	
67	23.763	23.763	1800.0	9119	35685	4.420	N-C18	
	24.264	24.264	1820.9	2845	13184	1.633	PHYTANE	
	26.160	26.160	1900.0	8348	35508	4.398	N-C19	
76	28.451	28.451	2000.0	7233	24102	2.985	N-C20	
80	30.627	30.627	2100.0	6721	22331	2.766	N-C21	
84	32.707	32.707	2200.0	5420	18560	2.299	N-C22	
88	34.693	34.693	2300.0	4983	16461	2.039	N-C23	
92	36.595	36.595	2400.0	3713	11994	1.486	N-C24	
95	38.416	38.416	2500.0	3040	9810	1.215	N-C25	
98	40.171	40.171	2600.0	2337	7828	0.970	N-C26	
100	41.853	41.854	2700.0	1888	6072	0.752	N-C27	
101	43.467	43.467	2800.0	1542	4992	0.618	N-C28	
102	45.027	45.027	2900.0	1361	4532	0.561	N-C29	
103	46.531	46.531	3000.0	1002	3376	0.418	N-C30	
104	47.976	47.976	3100.0	874	2836	0.351	N-C31	
106	49.376	49.377	3200.0	672	2221	0.275	N-C32	
107	50.725	50.726	3300.0	543	2852	0.353	N-C33	
108	52.048	52.049	3400.0	356	2282	0.283	N-C34	
109	53.307	53.307	3500.0	216	692	0.086	N-C35	

R Total 81939 327503 40.567
 To 200373 807311 100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000
 Method: MSDS Calibration: MSDS Type: UC Using:Area

MULTICHROM V3.2

Analyst Name : JANNICKE

Analysis ID:

Information : J022 GEOKJEMI WELL:2/12-1

GCMS SATURATES 4 DEG/MIN.

Channel: 7 Title: CHANNEL 7

Date 2-Apr-87 Time 12:01

Analysis: R021201S Sample Name: 4666.2M

Sample ID: 0

Bottle: 1

Sample 2 Injection 1

Peak	R/T #	RT	Corr	RT Val	Hght uV	Area uVs	% Identity	Type
1	15.907	15.902	1500.0	629	1829	0.583	N-C15	
2	18.600	18.595	1600.0	3469	13064	4.162	N-C16	
4	20.128	20.130	1658.9	2132	10512	3.349	I-C18	
7	21.219	21.226	1700.0	5823	23318	7.429	N-C17	0
8	21.640	21.649	1716.7	3012	13237	4.217	PRISTANE	
14	23.736	23.755	1800.0	5763	21953	6.994	N-C18	
15	24.221	24.242	1820.3	2780	11711	3.731	PHYTANE	
21	26.131	26.160	1900.0	5740	24124	7.685	N-C19	
28	28.411	28.451	2000.0	5296	21788	6.941	N-C20	0
30	30.592	30.633	2100.0	4724	16248	5.176	N-C21	0
32	32.675	32.716	2200.0	3867	13374	4.261	N-C22	
40	34.659	34.700	2300.0	3557	12177	3.879	N-C23	
48	36.557	36.600	2400.0	2613	9291	2.960	N-C24	
51	38.373	38.416	2500.0	2369	7621	2.428	N-C25	
54	40.123	40.167	2600.0	1967	7146	2.277	N-C26	
58	41.805	41.851	2700.0	1674	5422	1.727	N-C27	
60	43.421	43.468	2800.0	1346	4726	1.506	N-C28	
61	44.979	45.027	2900.0	1332	4896	1.560	N-C29	
63	46.477	46.527	3000.0	915	3028	0.965	N-C30	
66	47.923	47.974	3100.0	970	3510	1.118	N-C31	
68	49.320	49.372	3200.0	677	2572	0.819	N-C32	
71	50.672	50.725	3300.0	649	3197	1.019	N-C33	
73	51.984	52.038	3400.0	381	3313	1.055	N-C34	0
74	53.253	53.309	3500.0	233	702	0.224	N-C35	

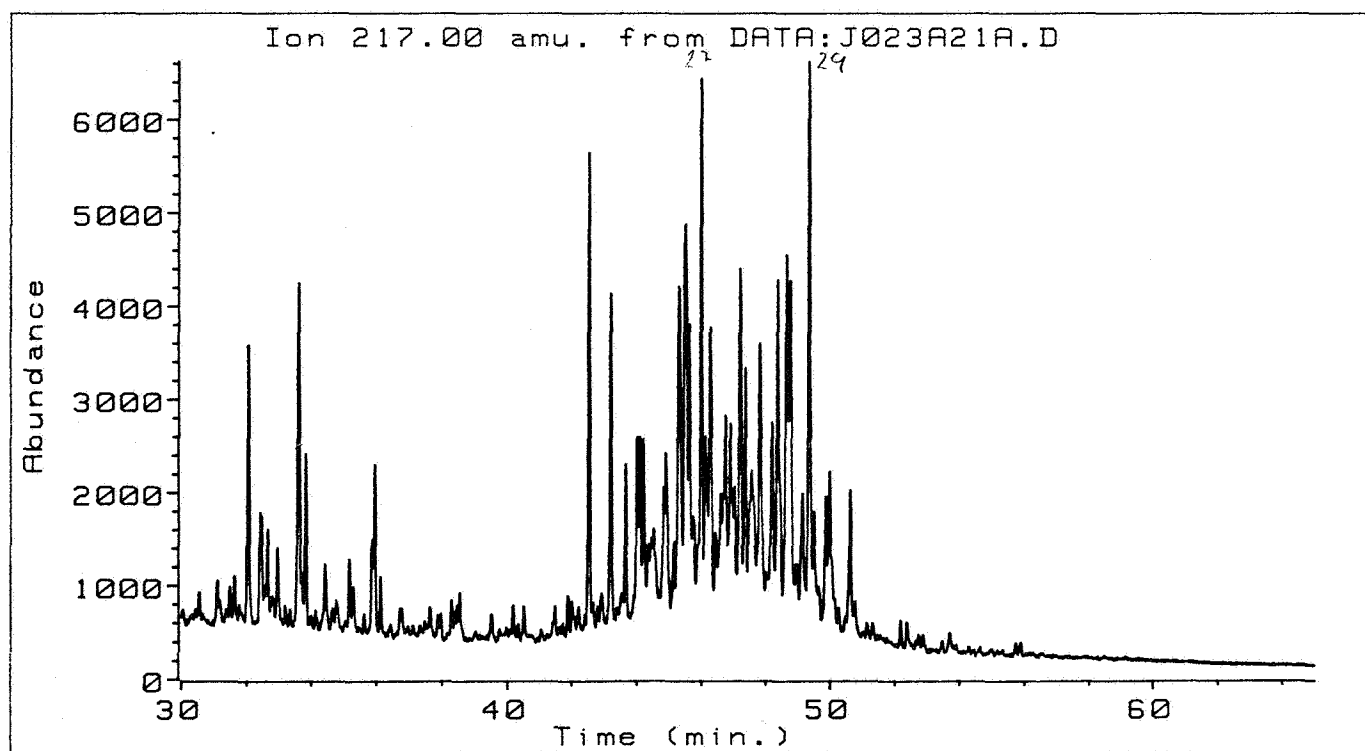
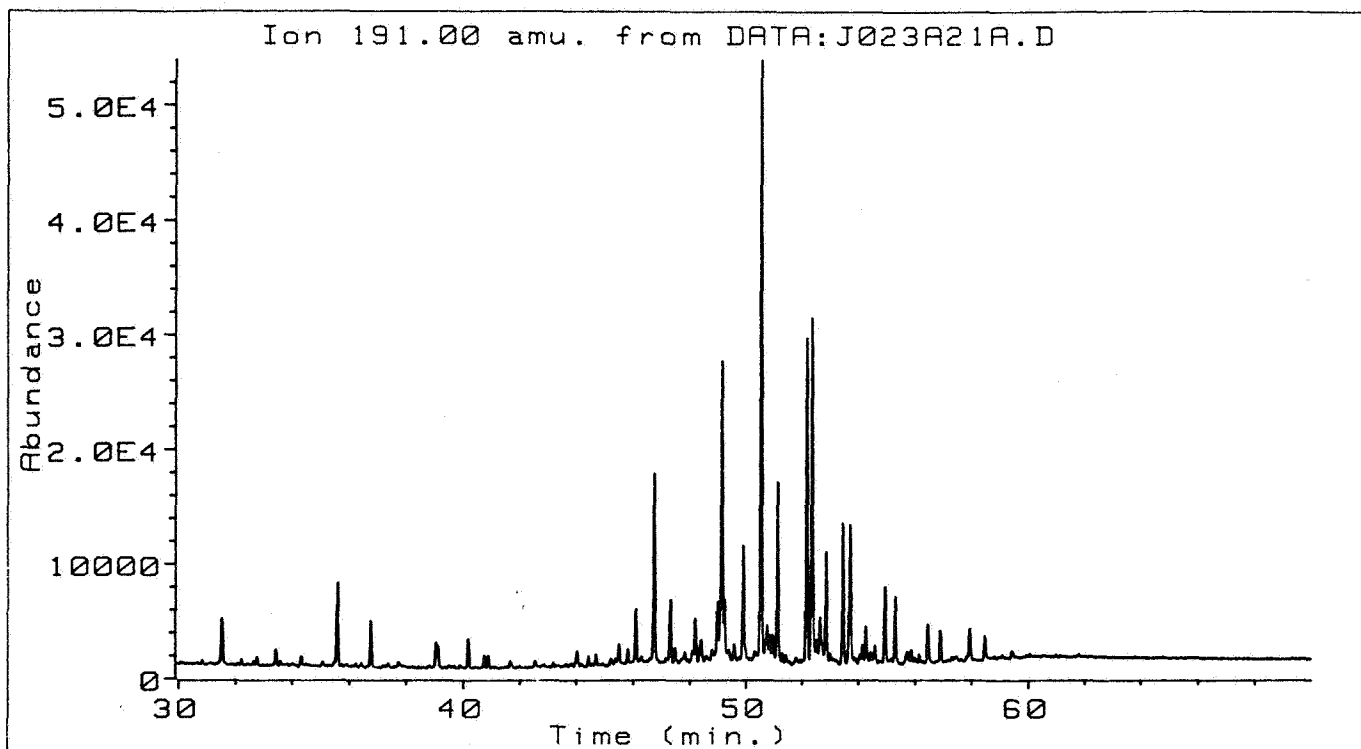
Residual	15986	75130	23.935
Total	77903	313890	100.000

Sample Type: SA Scale Factor: 1.000 Amount: 1.000

Method: MSDS Calibration: MSDS Type: UC Using: Area

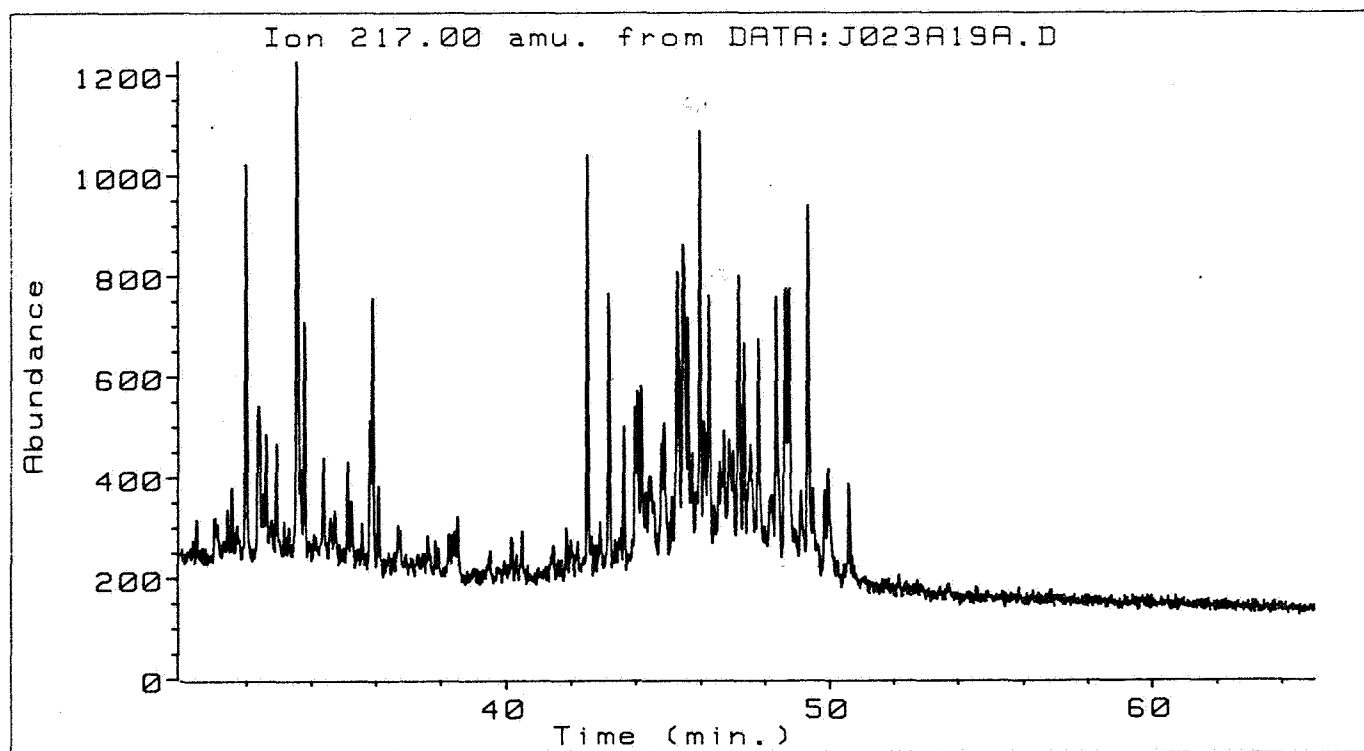
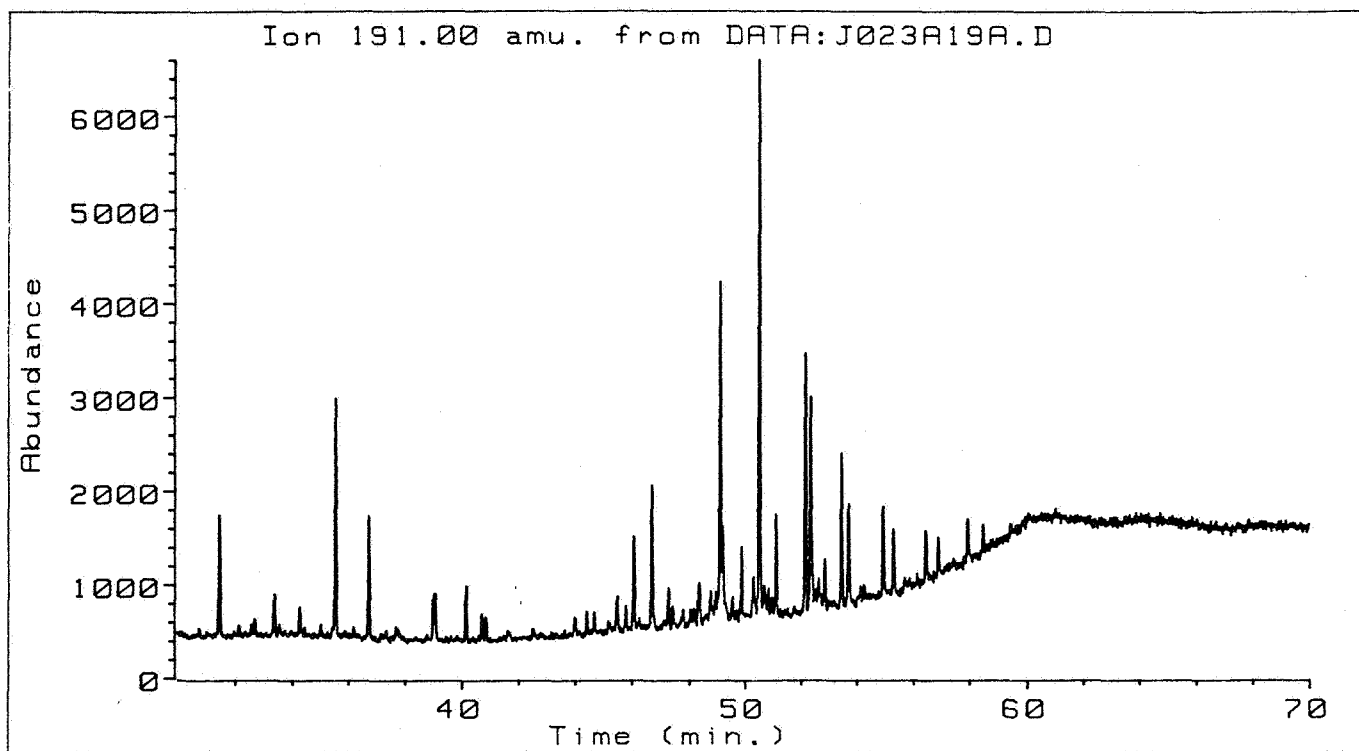
APPENDIX II

GAS CHROMATOGRAMS OF AROMATIC HYDROCARBONS



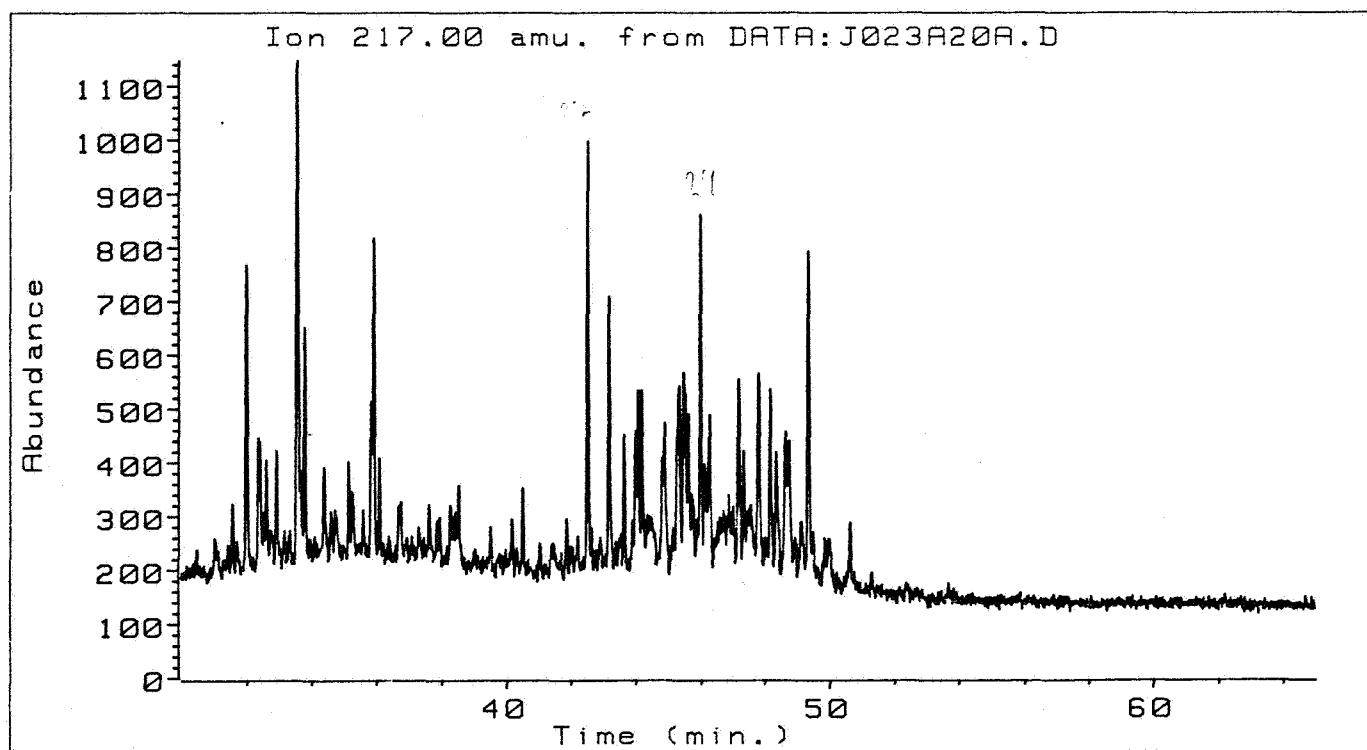
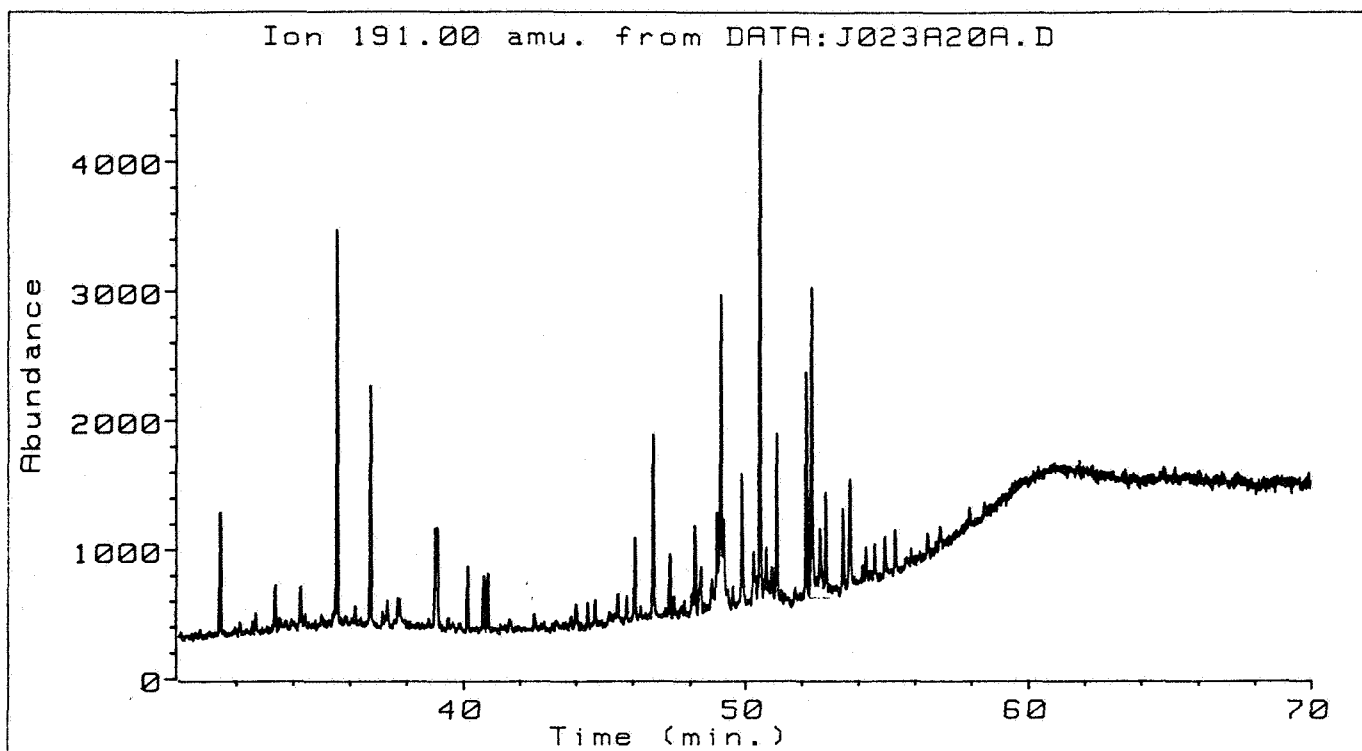
2/12-1

2955 m



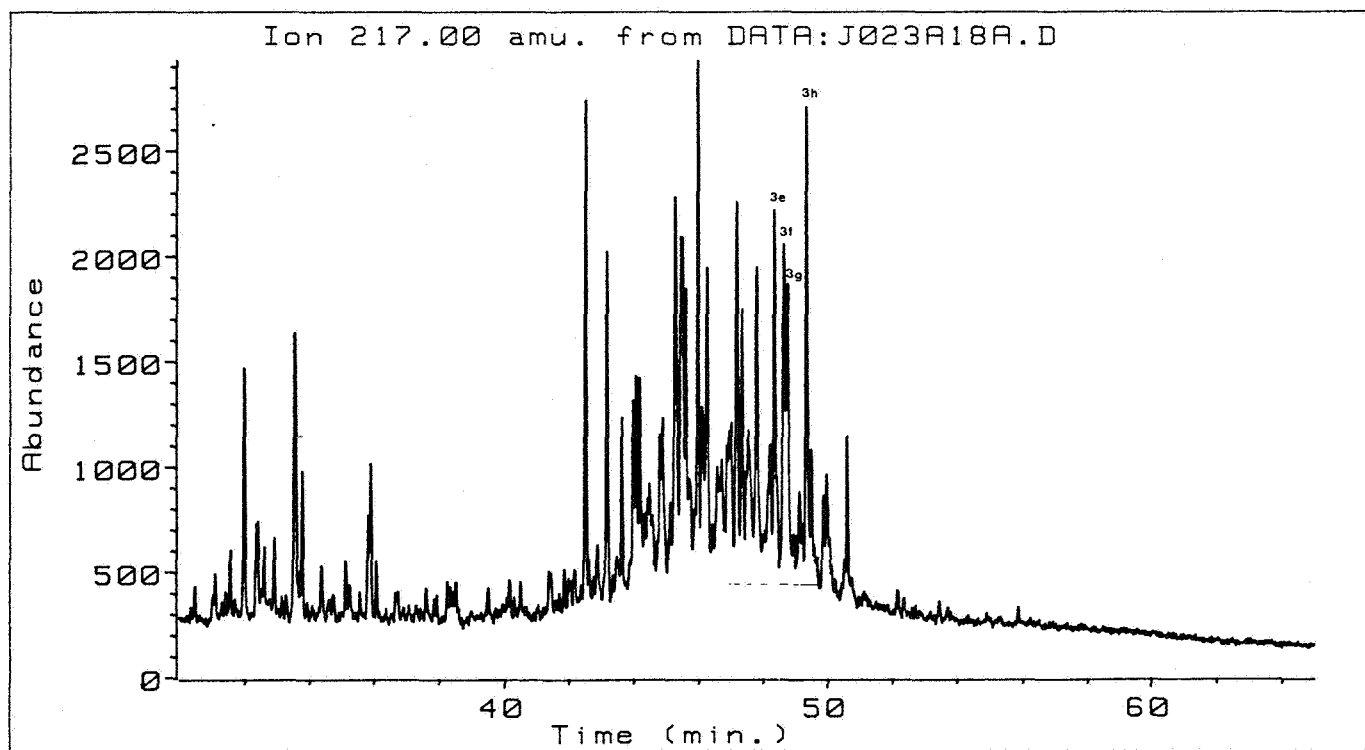
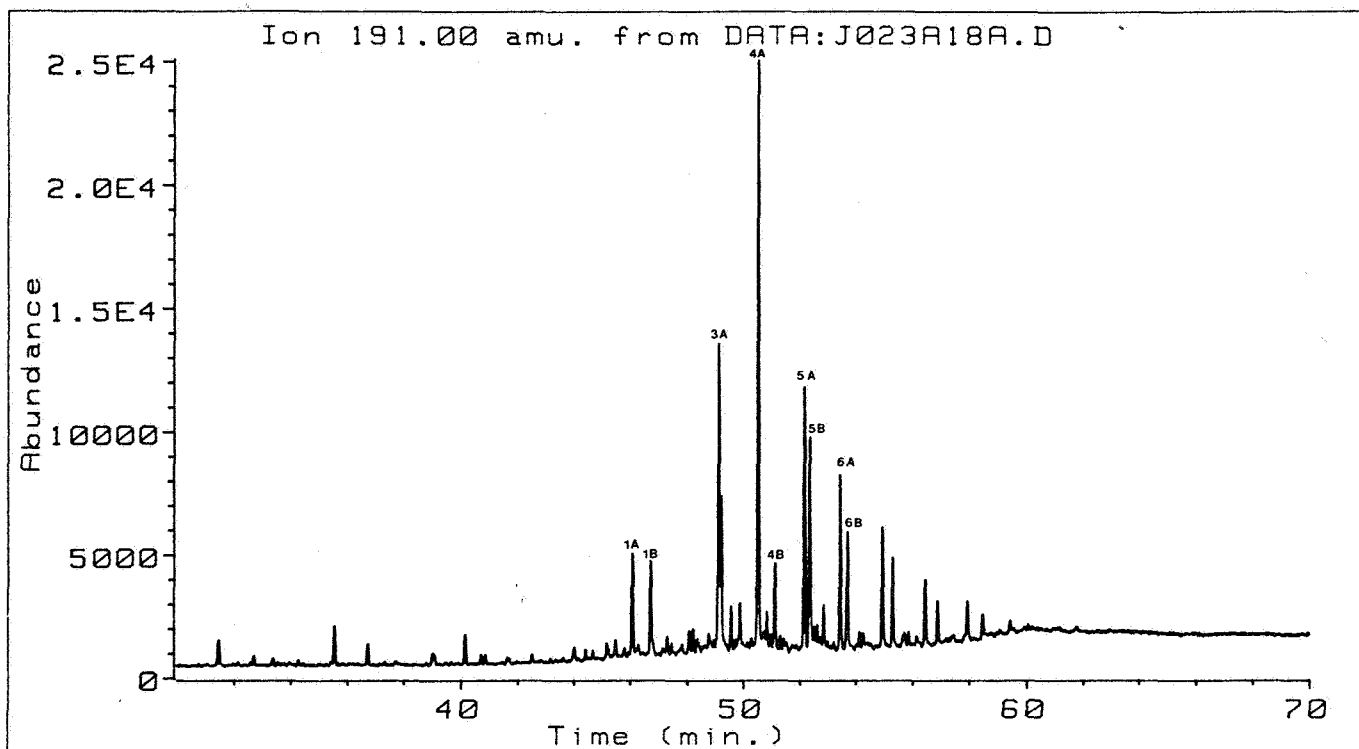
2/12-1

3105 m (carb.)



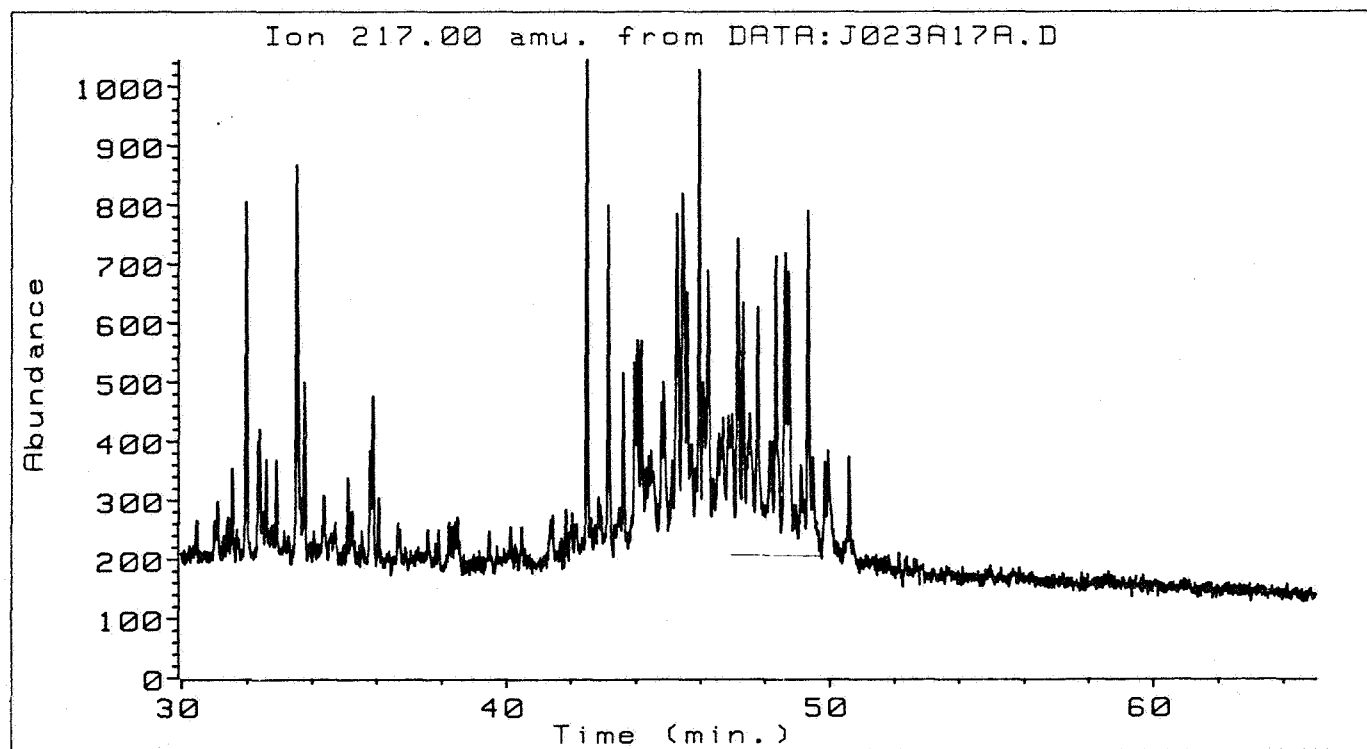
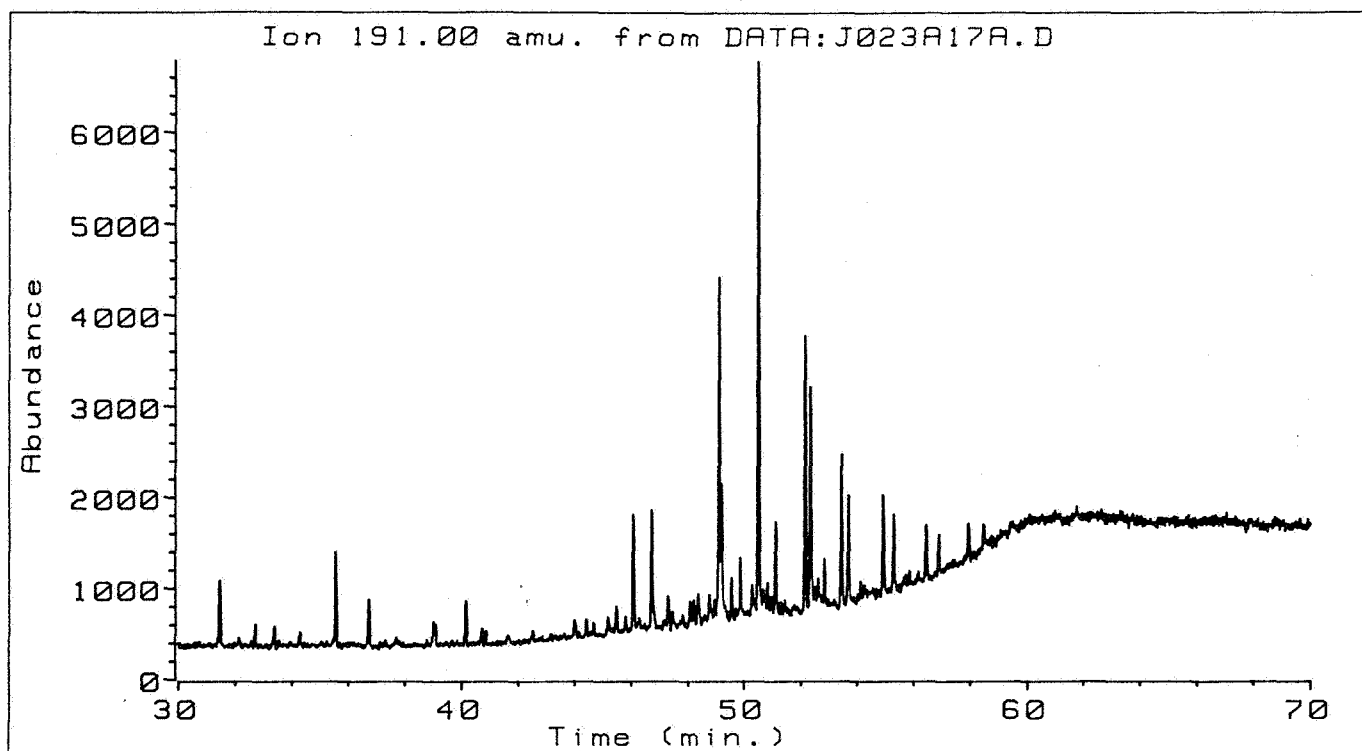
2/12-1

3105 m (shale)



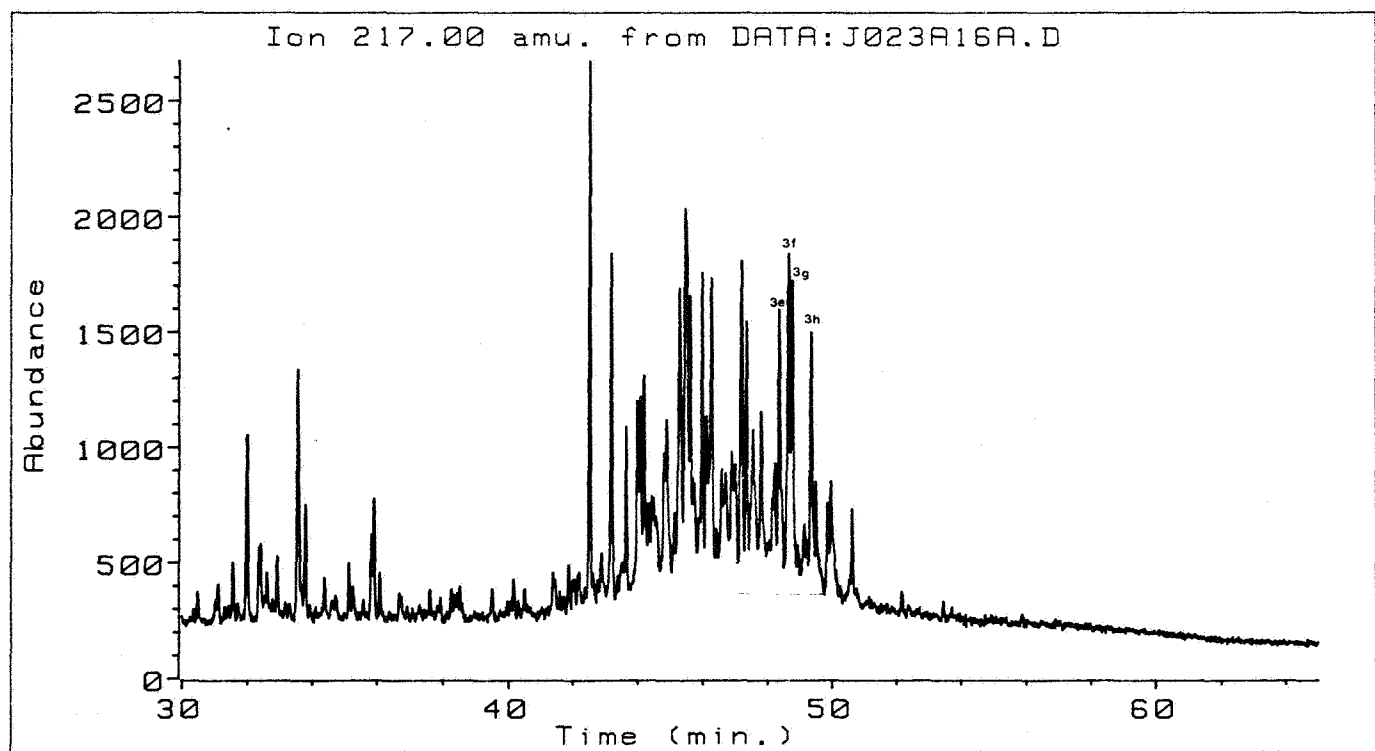
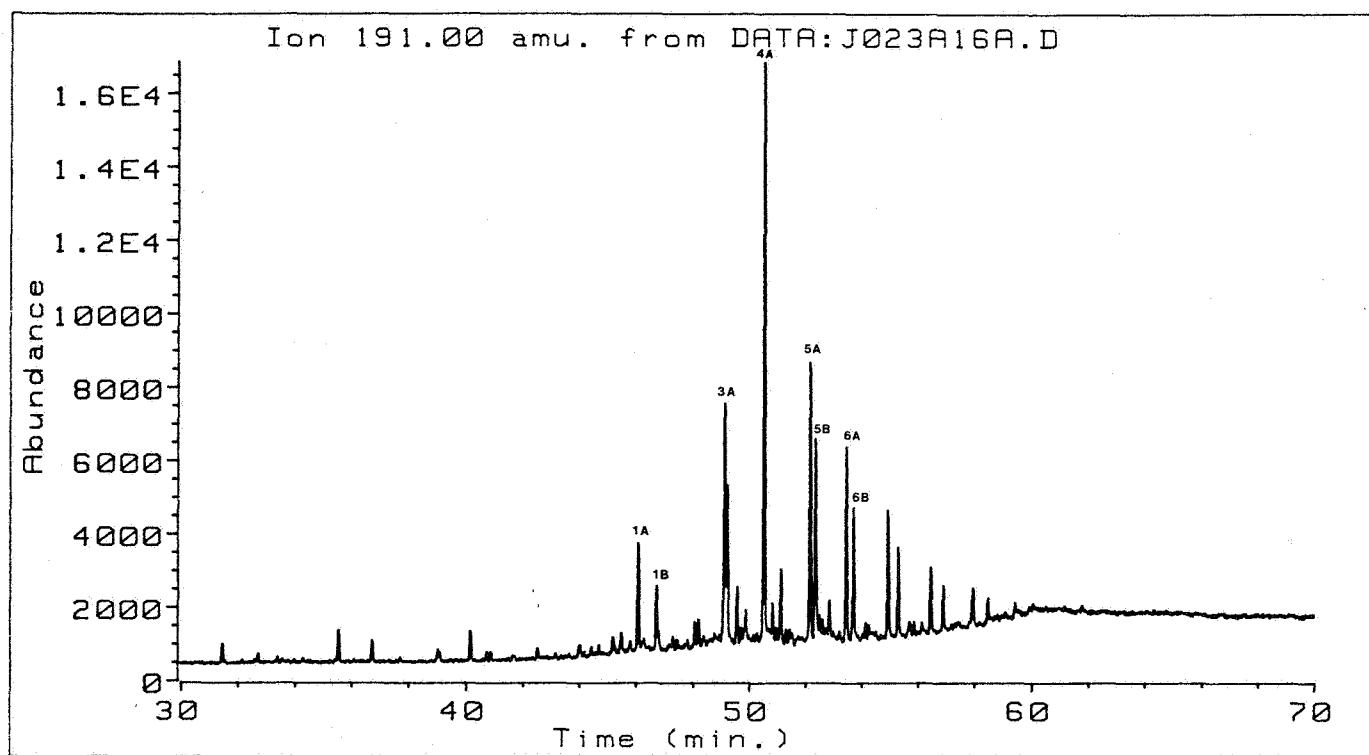
2/12-1

3937 m



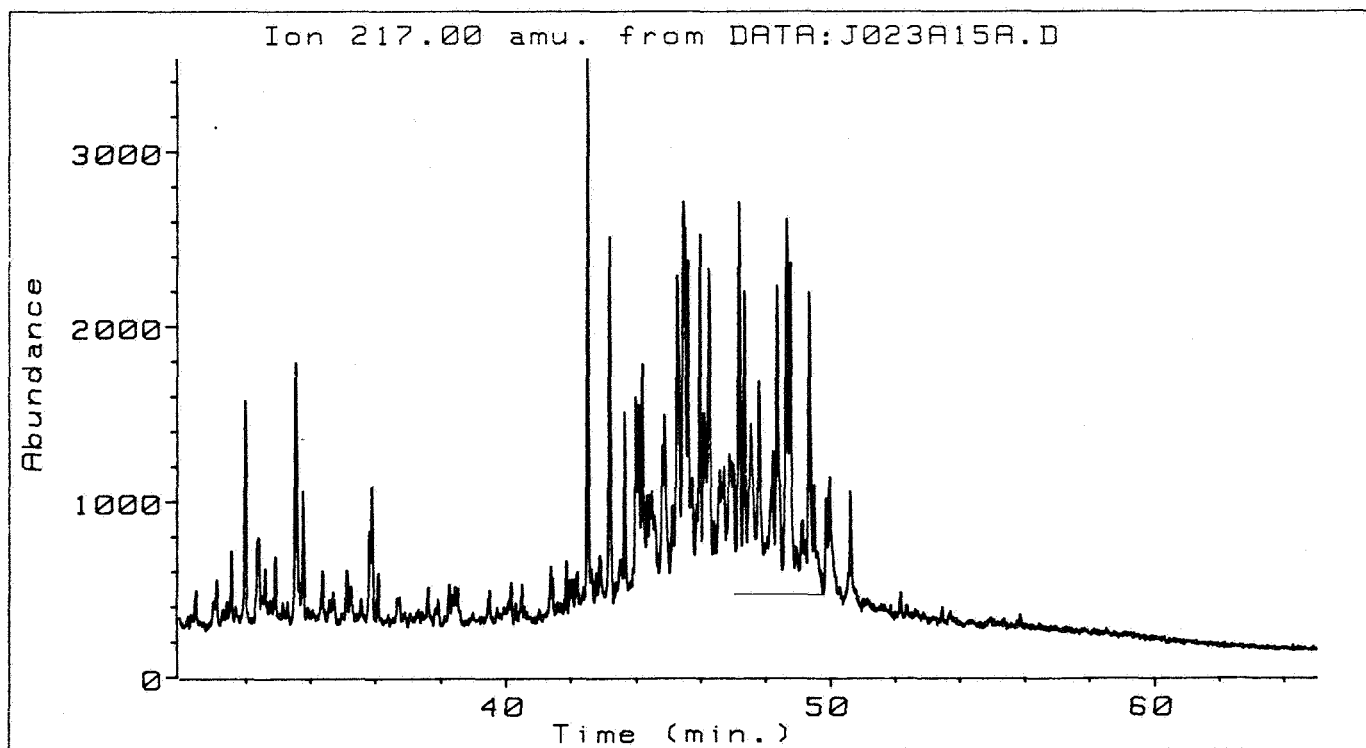
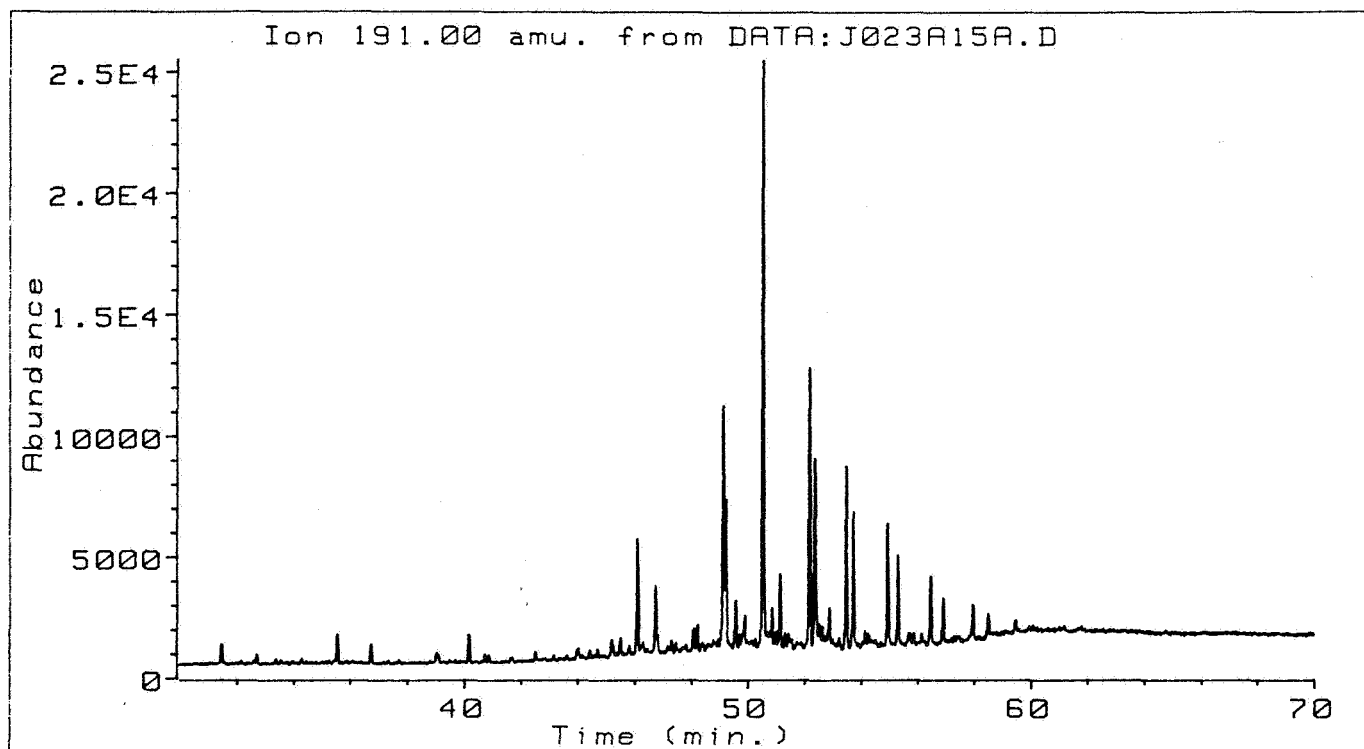
2/12-1

3937 m



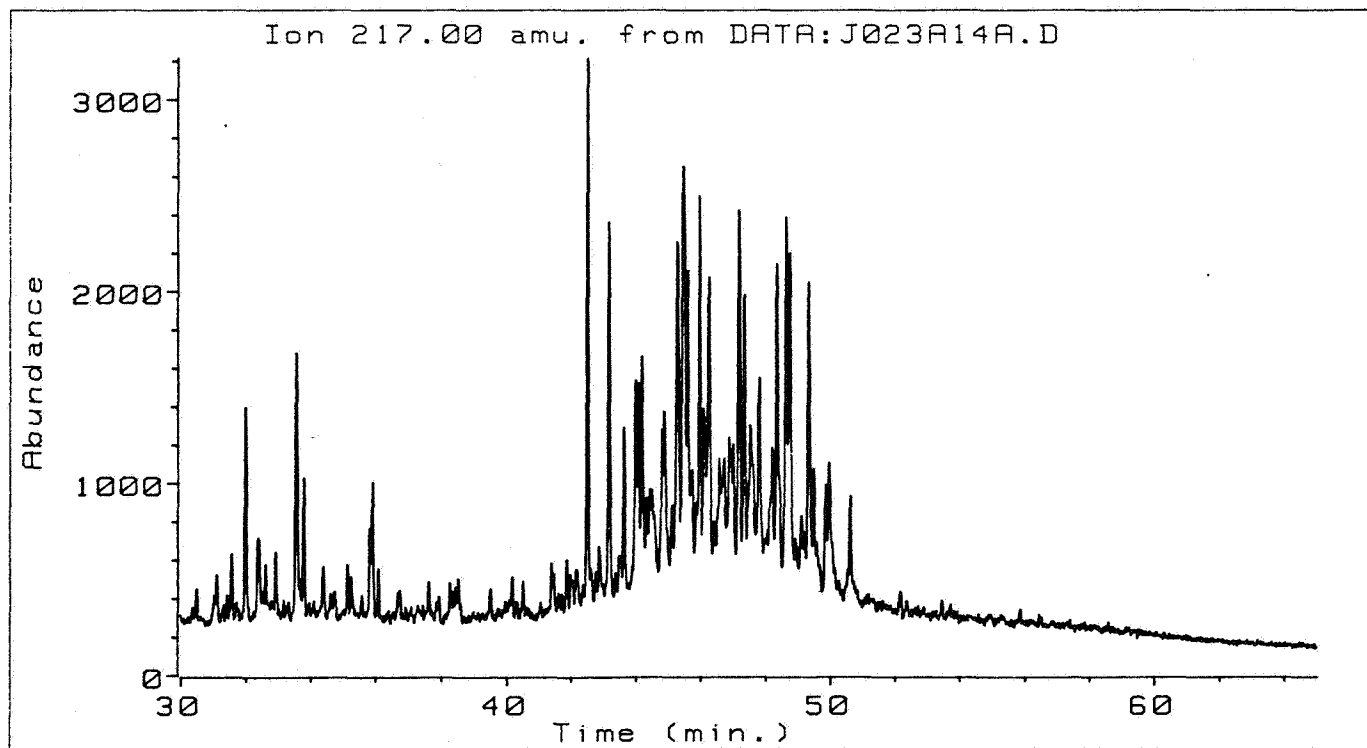
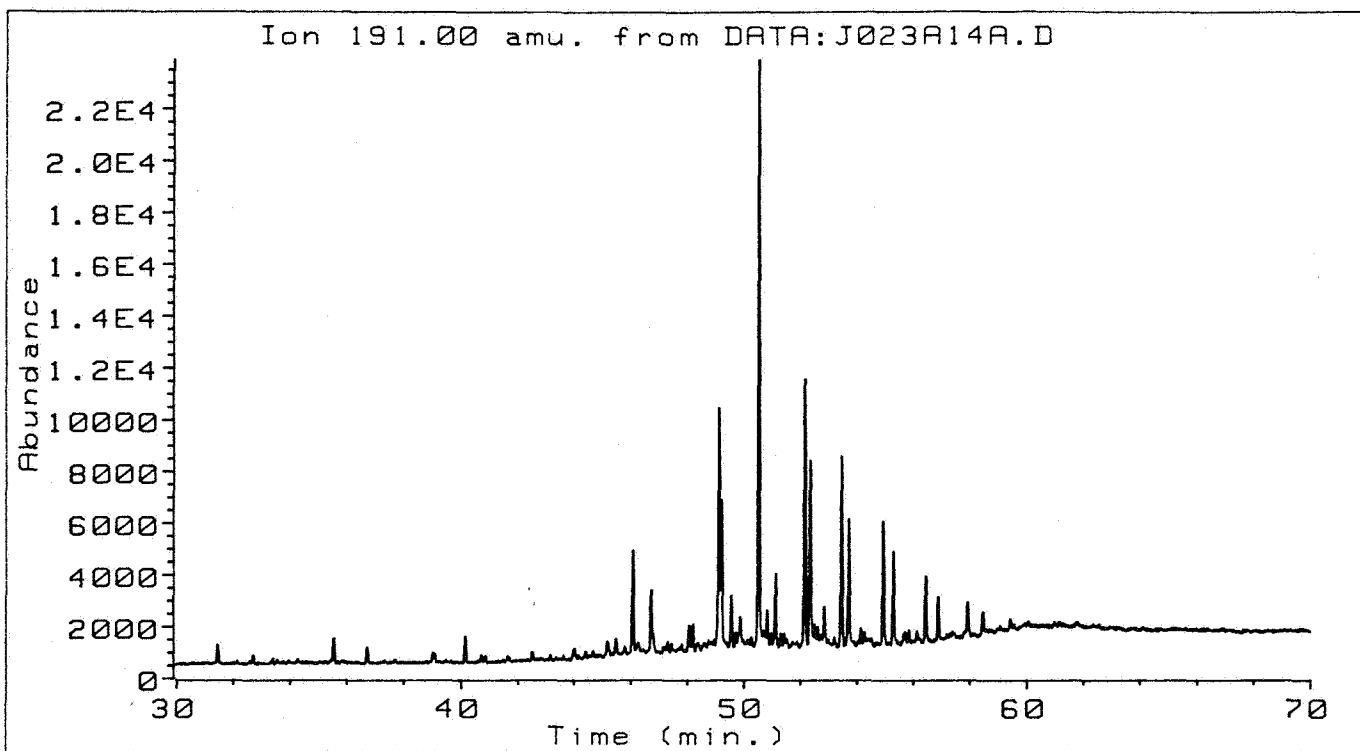
2/12-1

3980 m



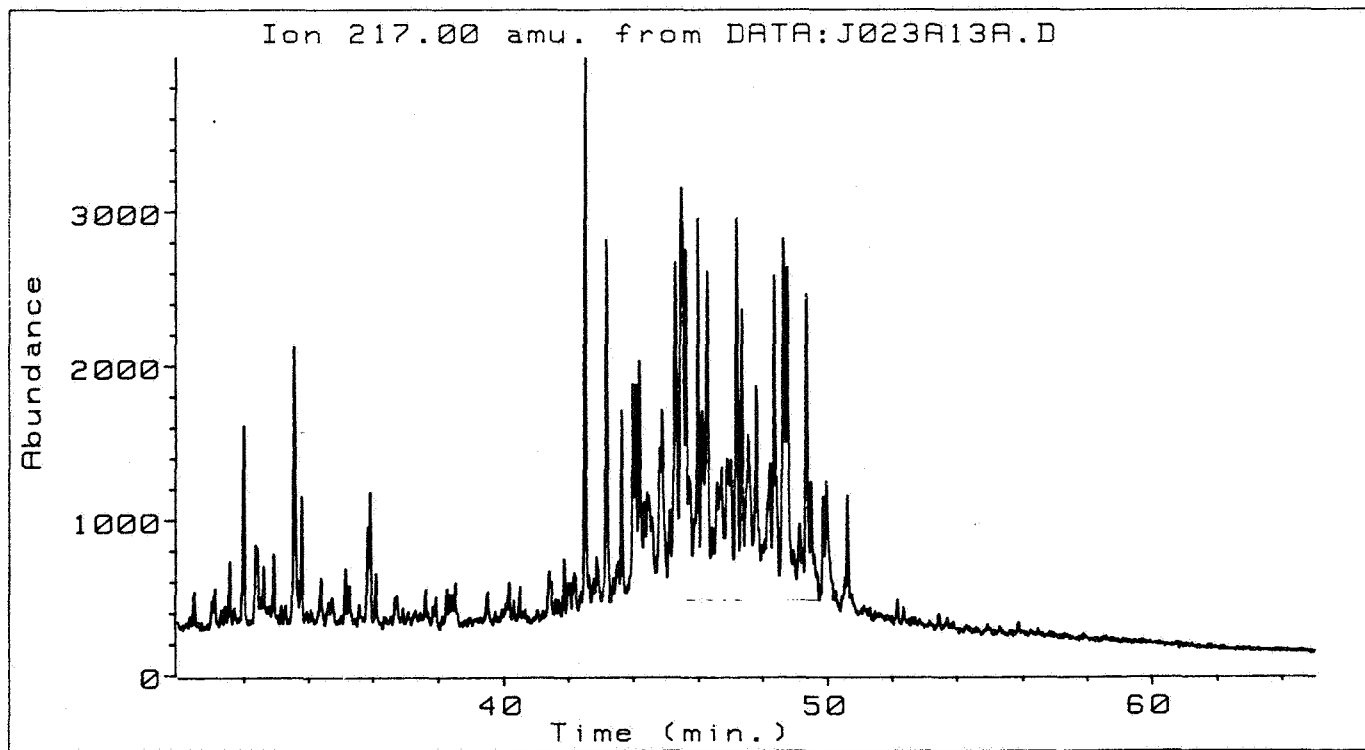
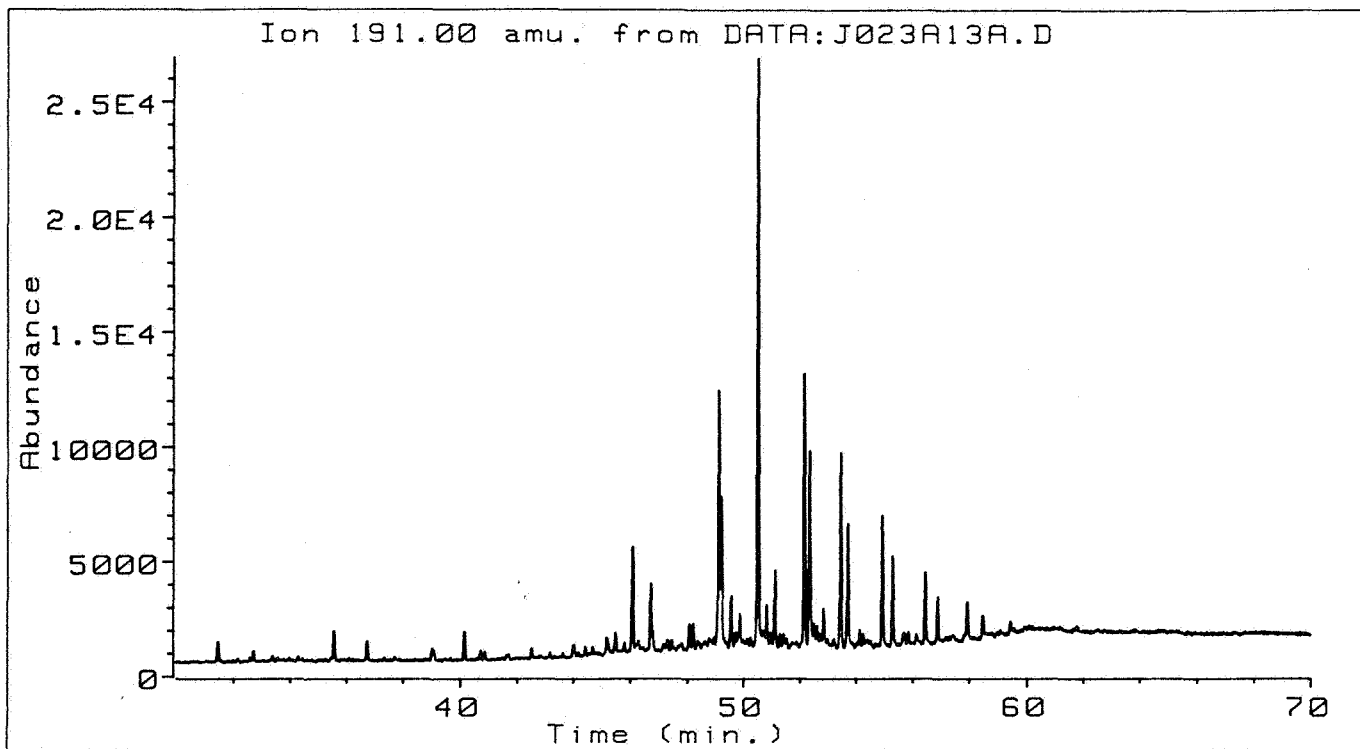
2/12-1

3985 m



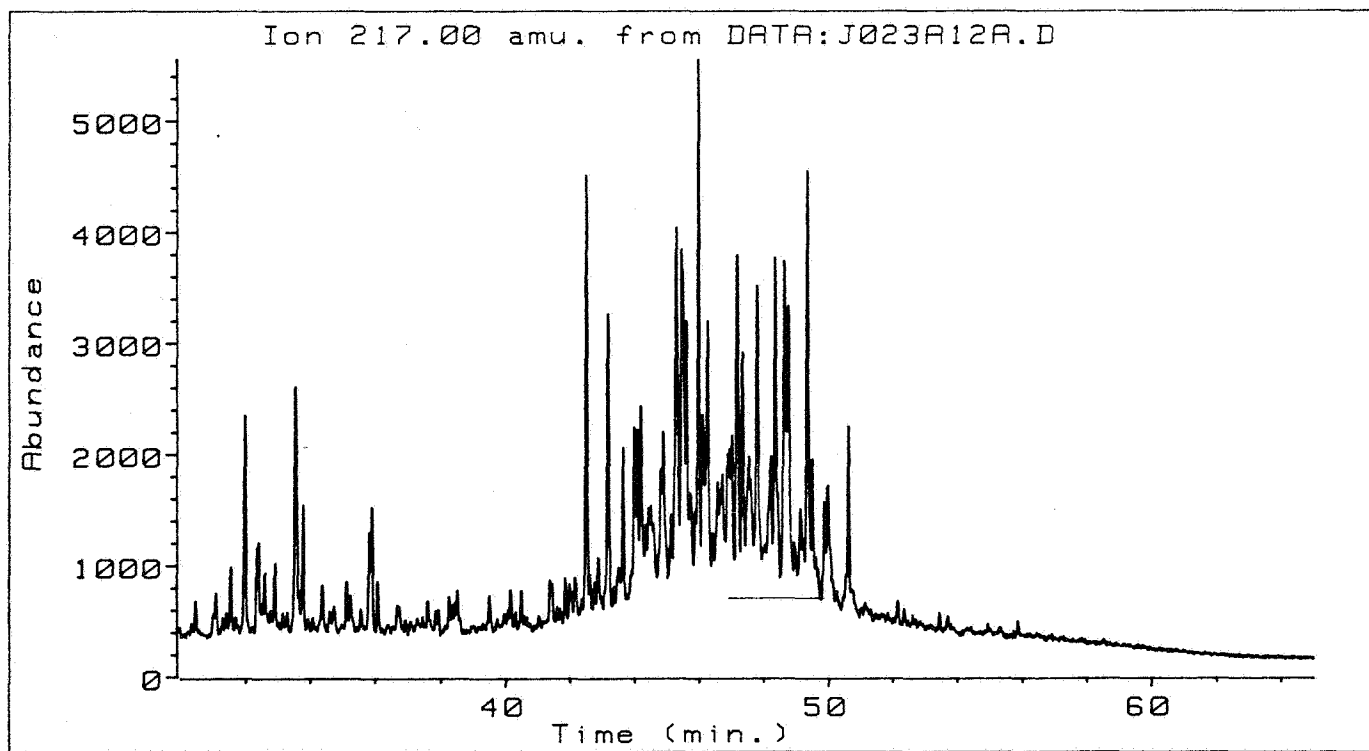
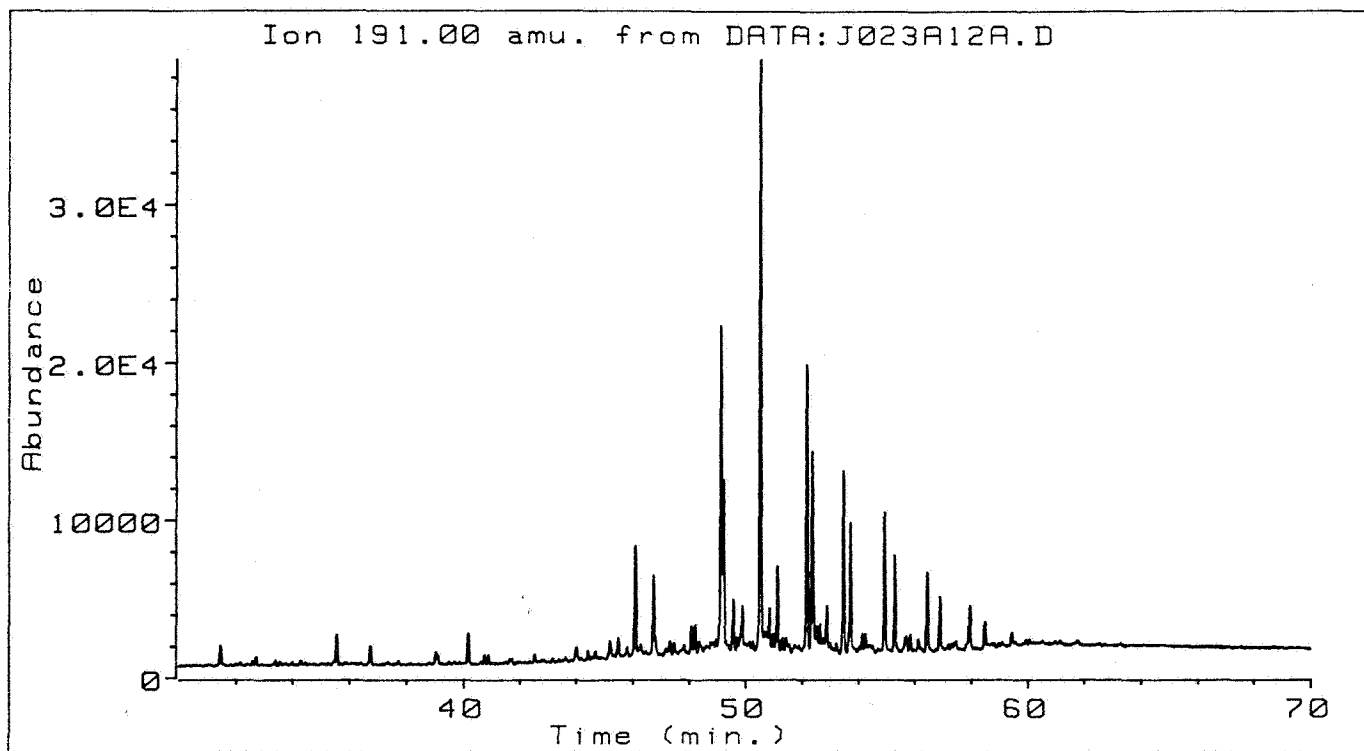
2/12-1

3990 m



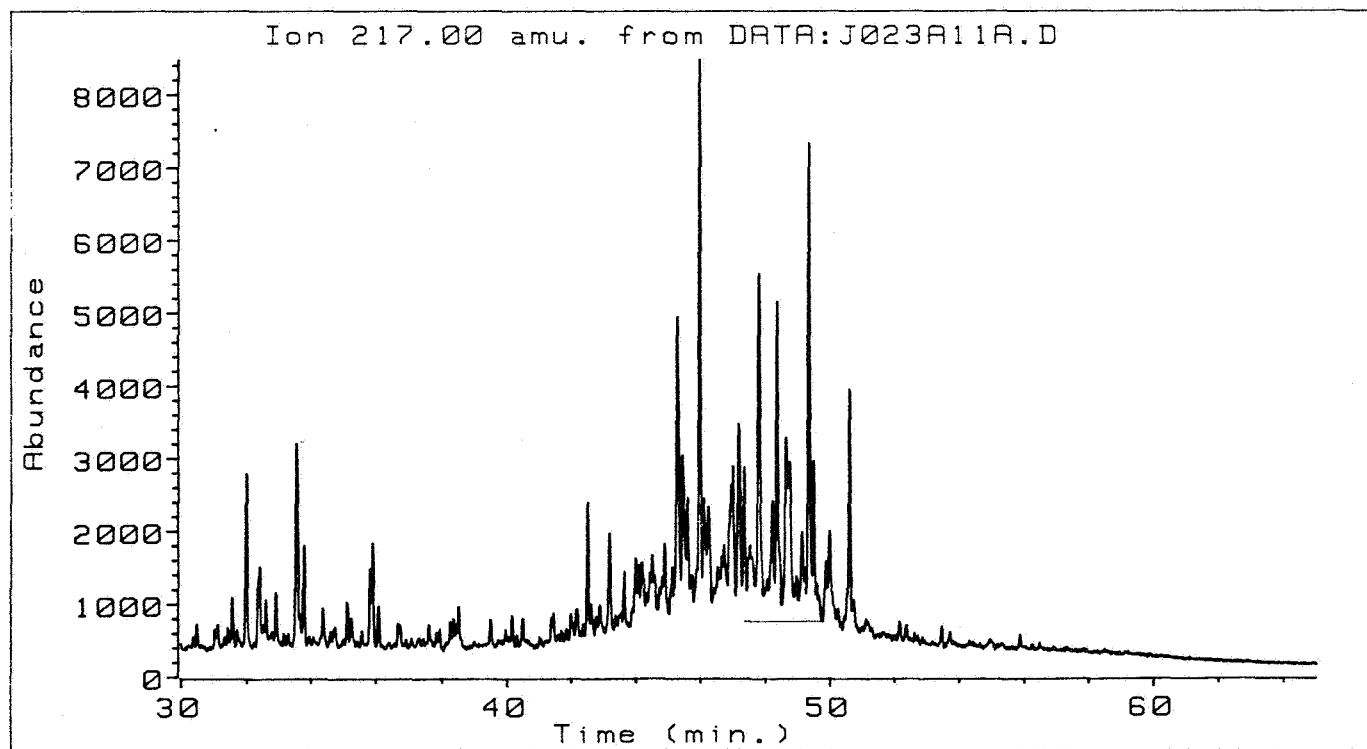
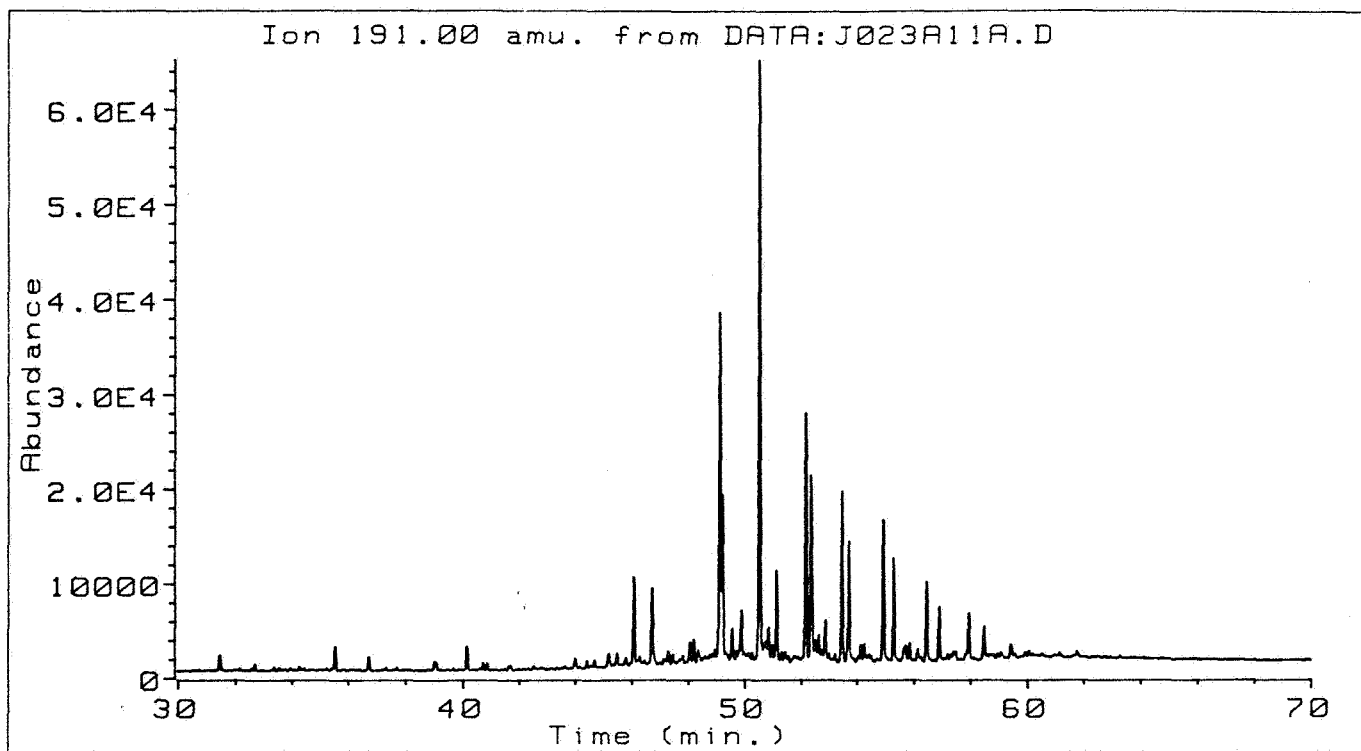
2/12-1

3992 m



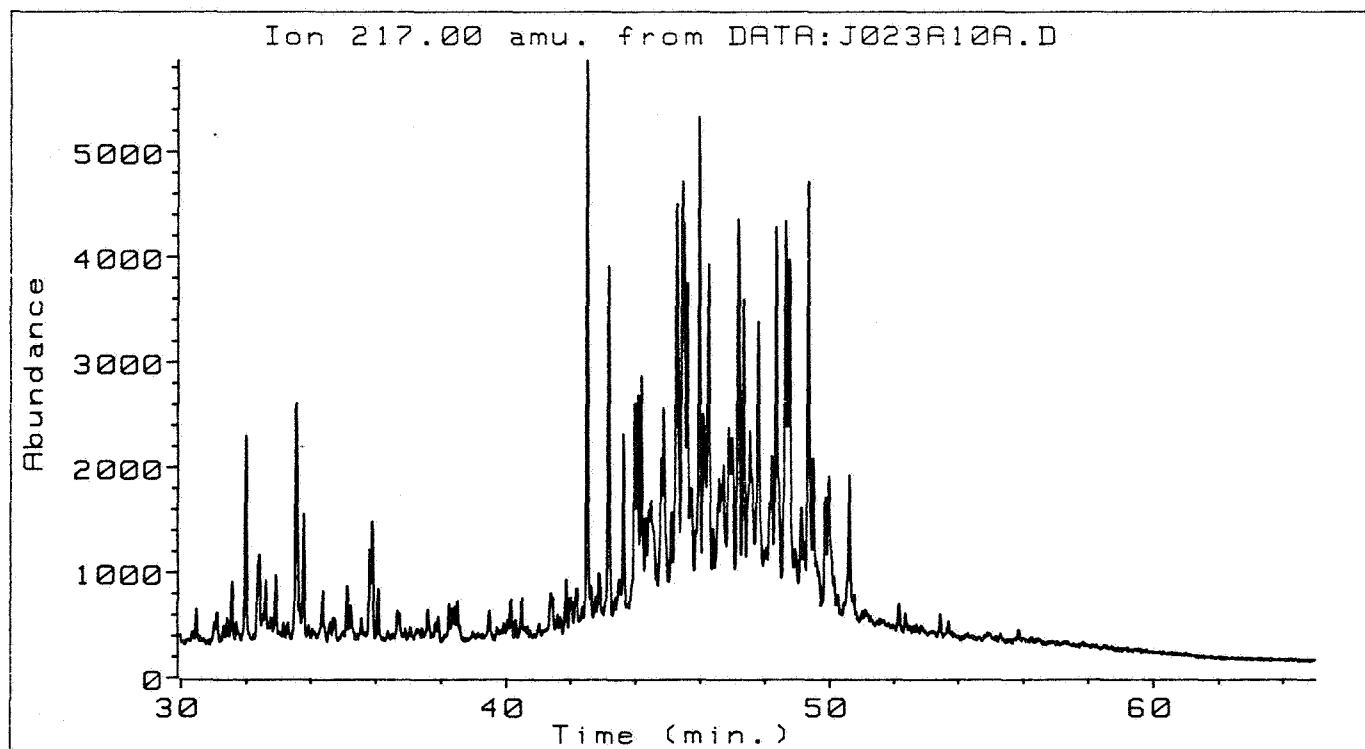
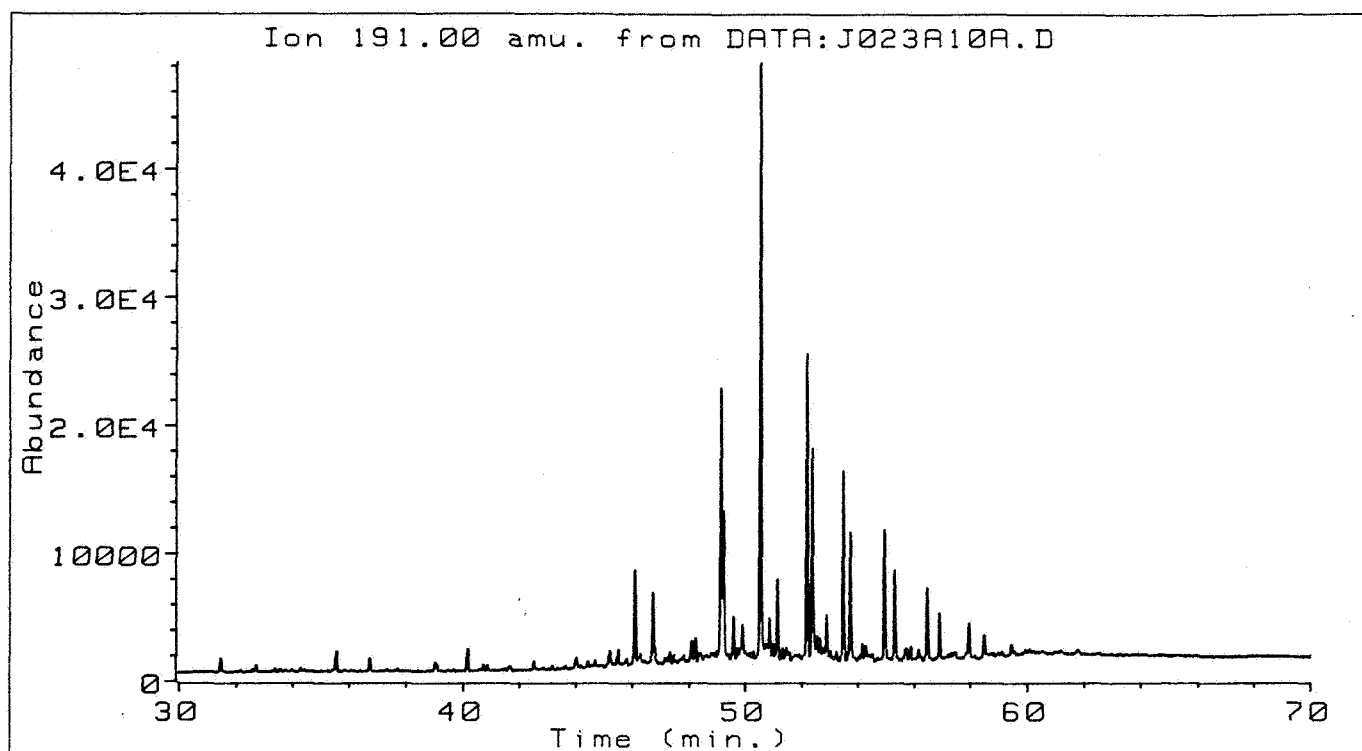
2/12-1

3996 m



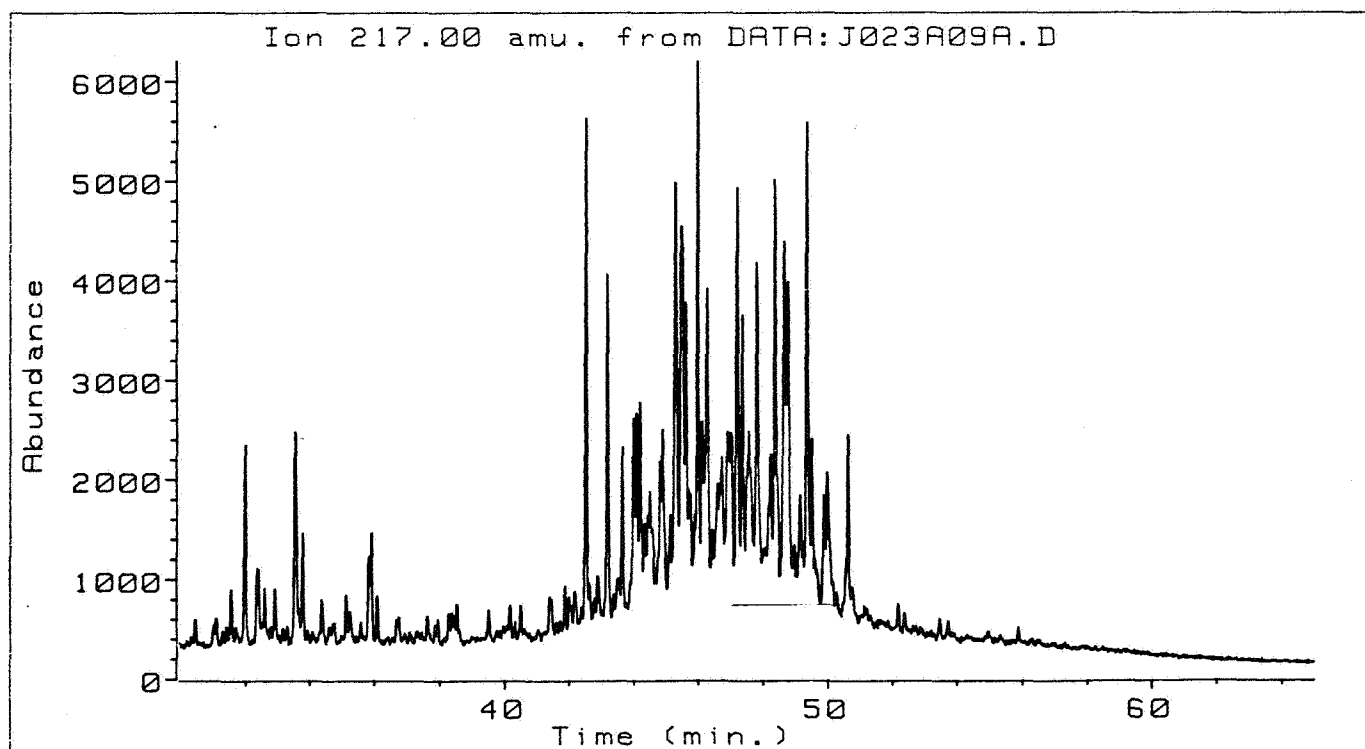
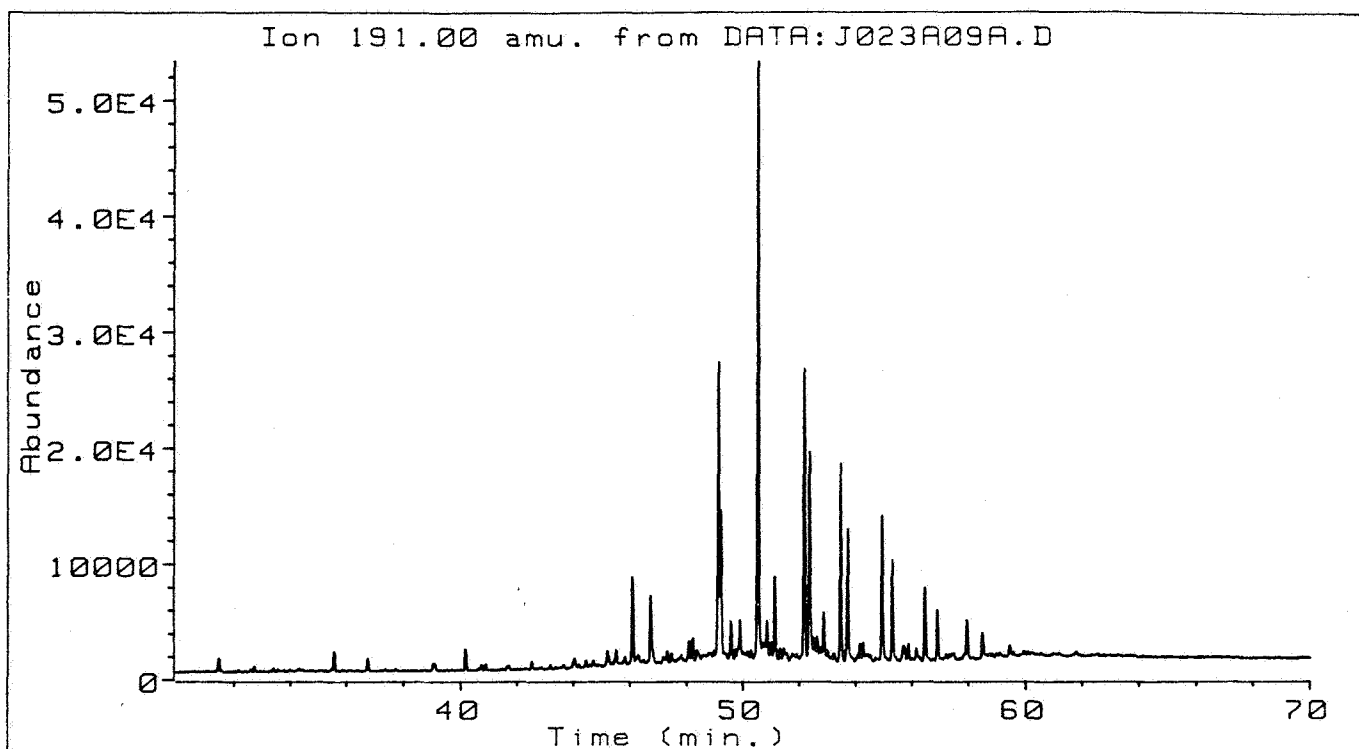
2/12-1

4000 m



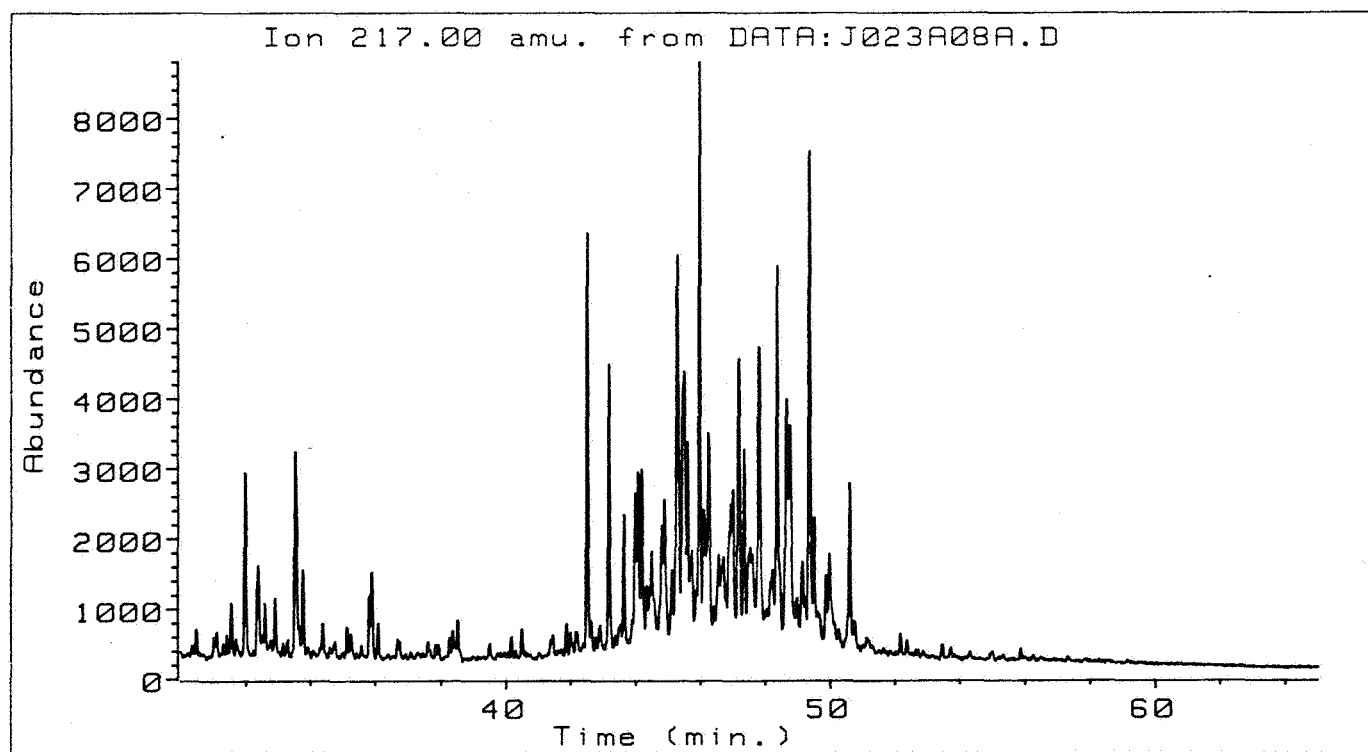
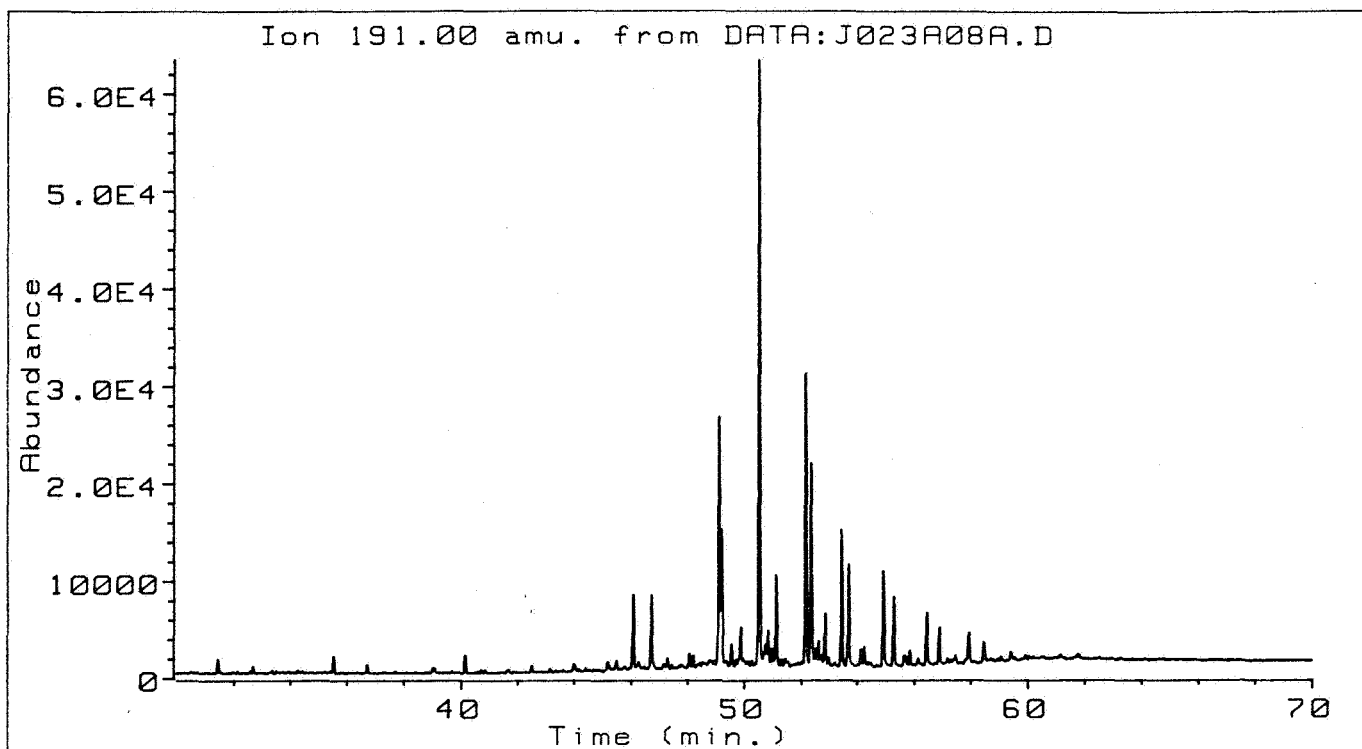
2/12-1

4025 m



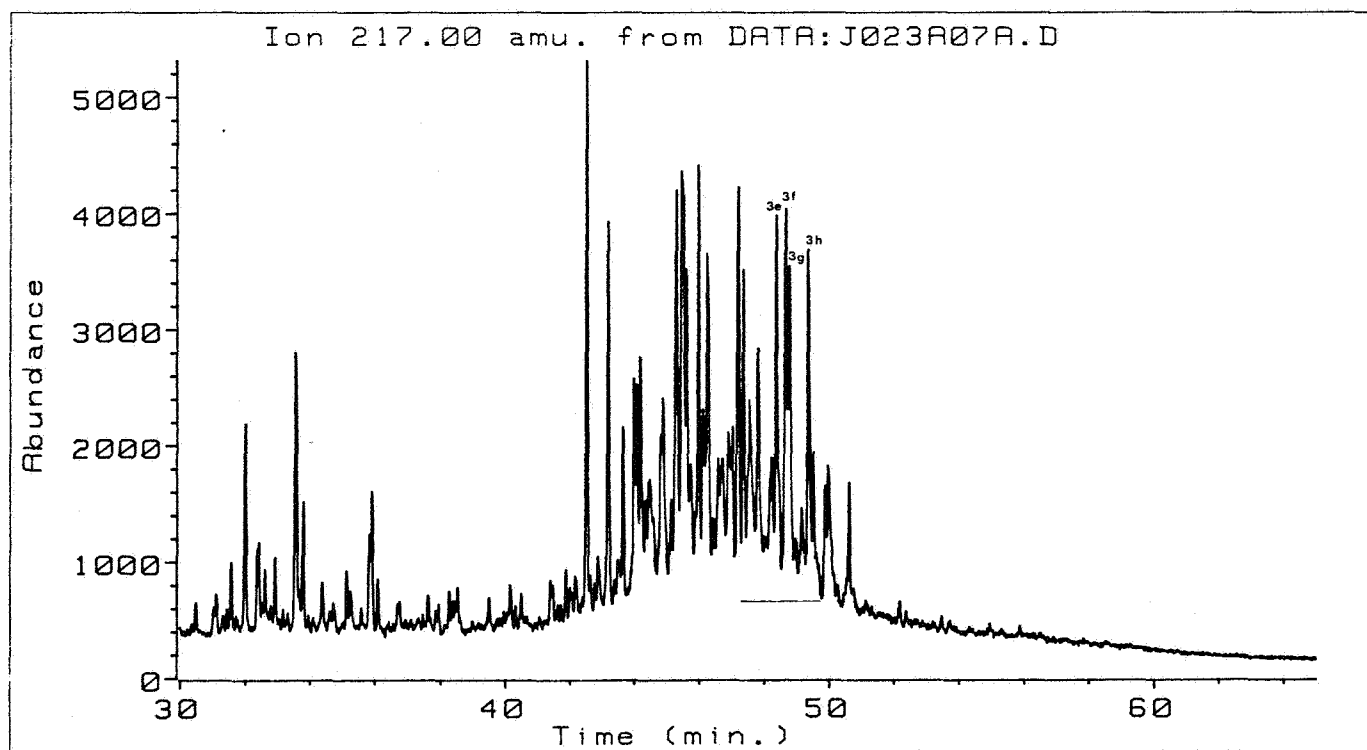
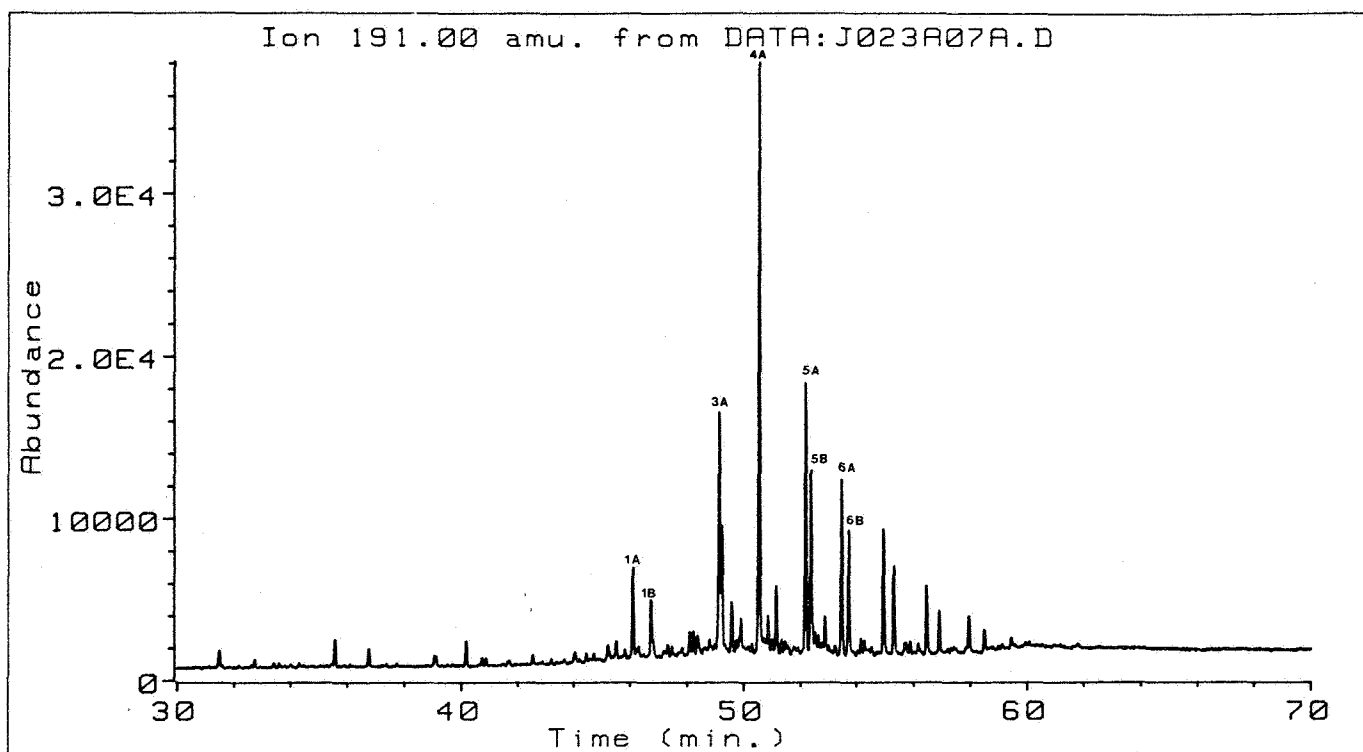
2/12-1

4040 m



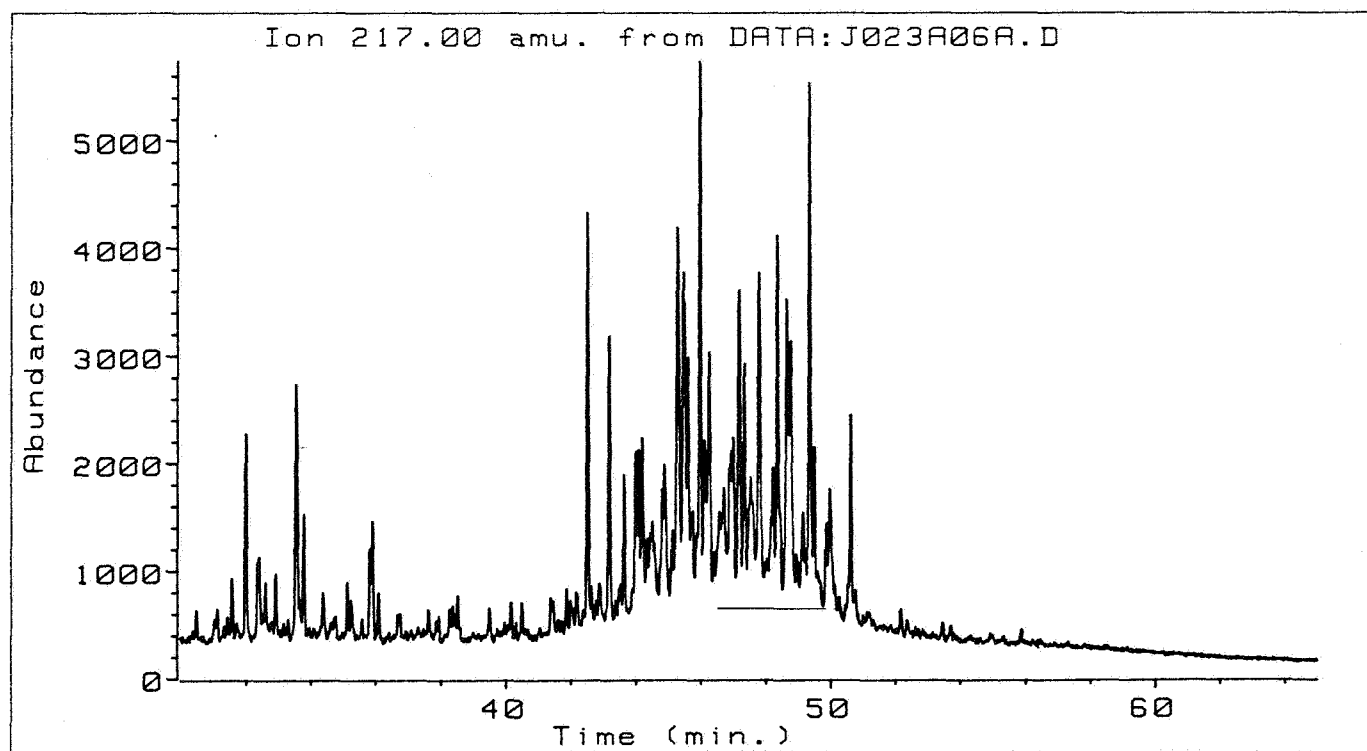
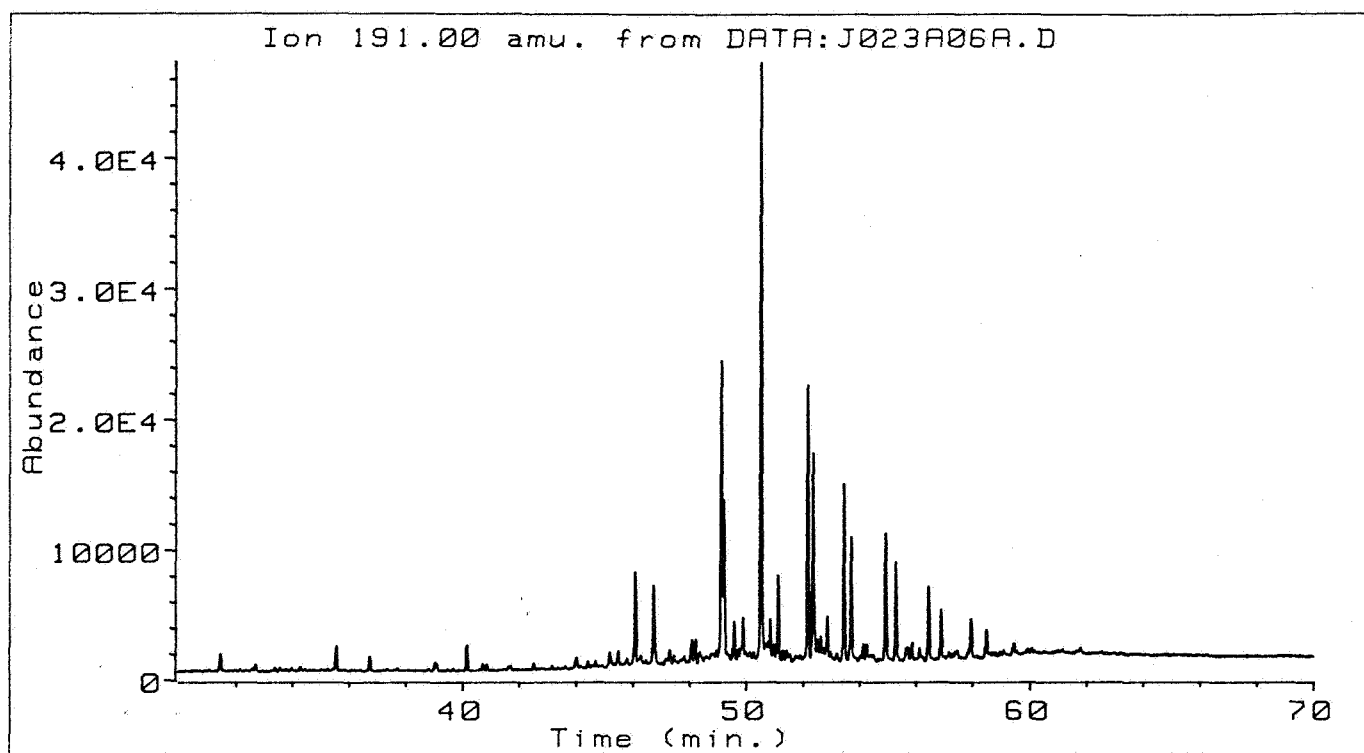
2/12-1

4050 m



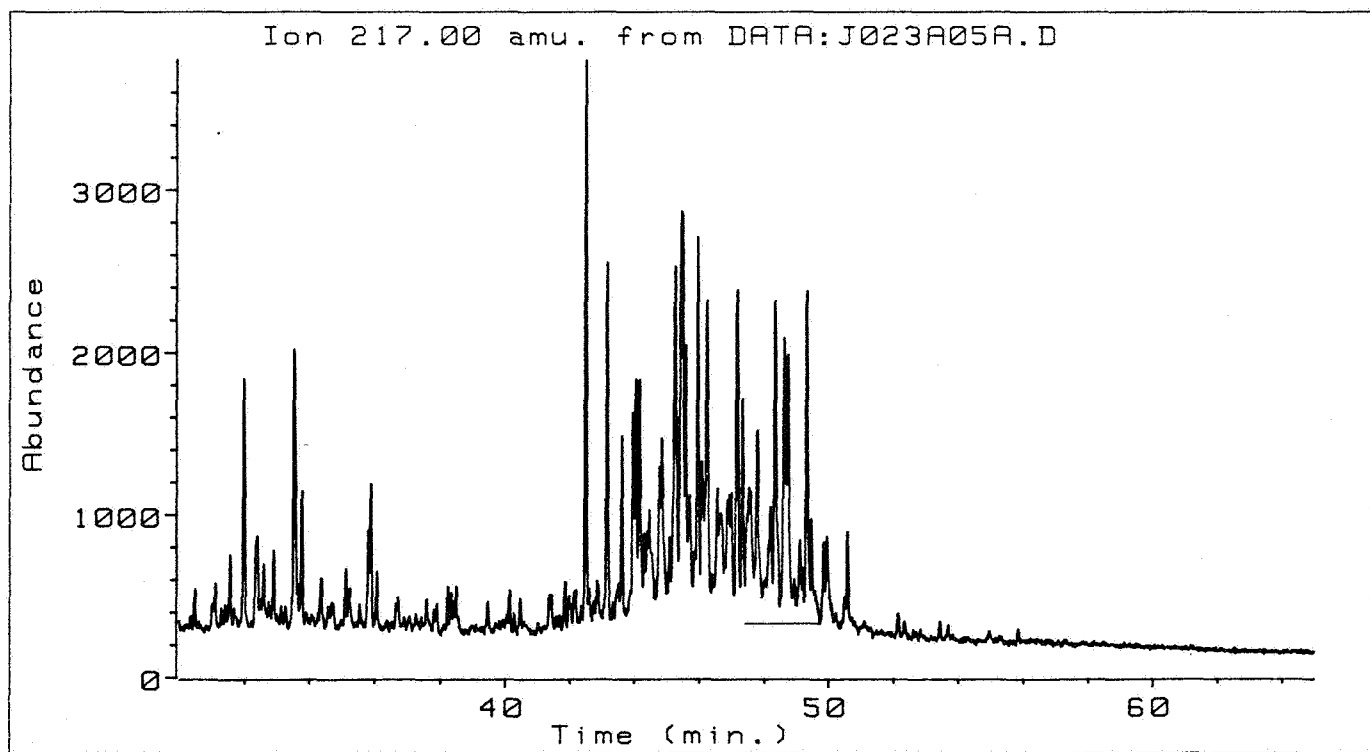
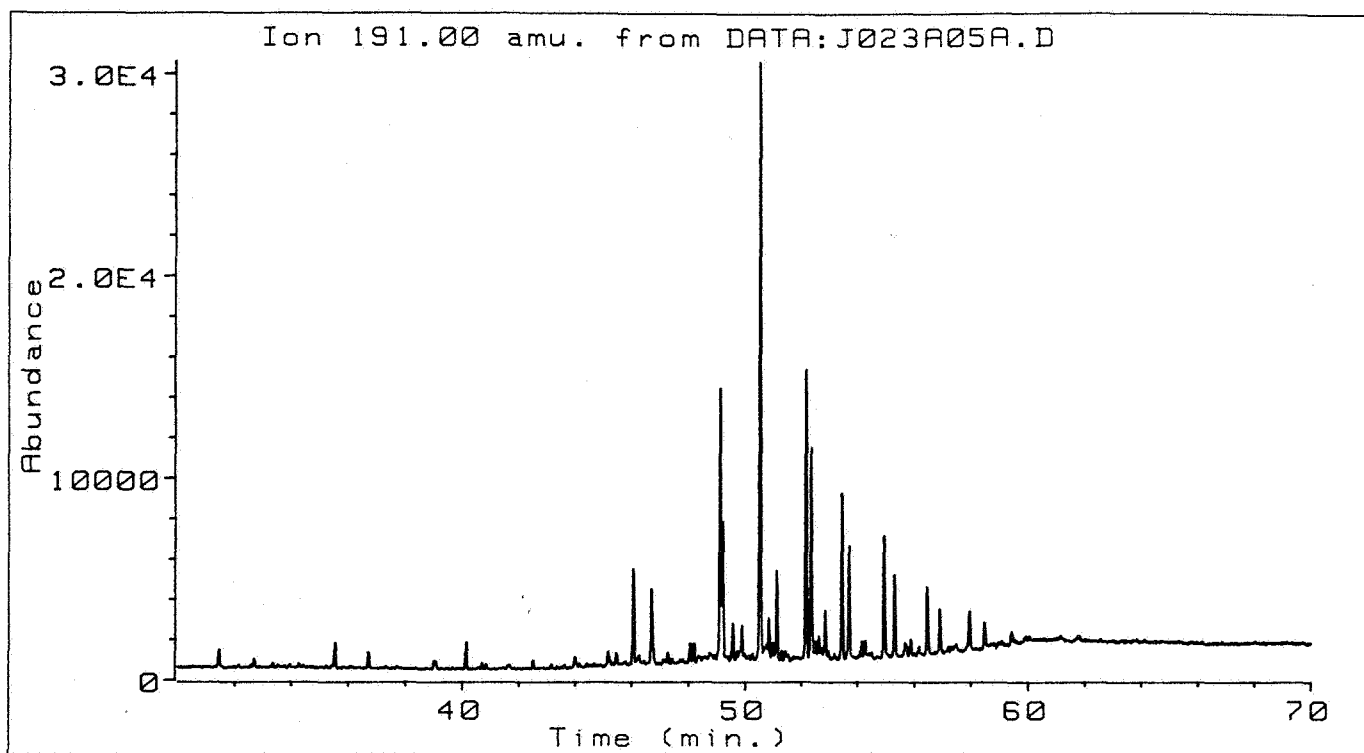
2/12-1

4105 m



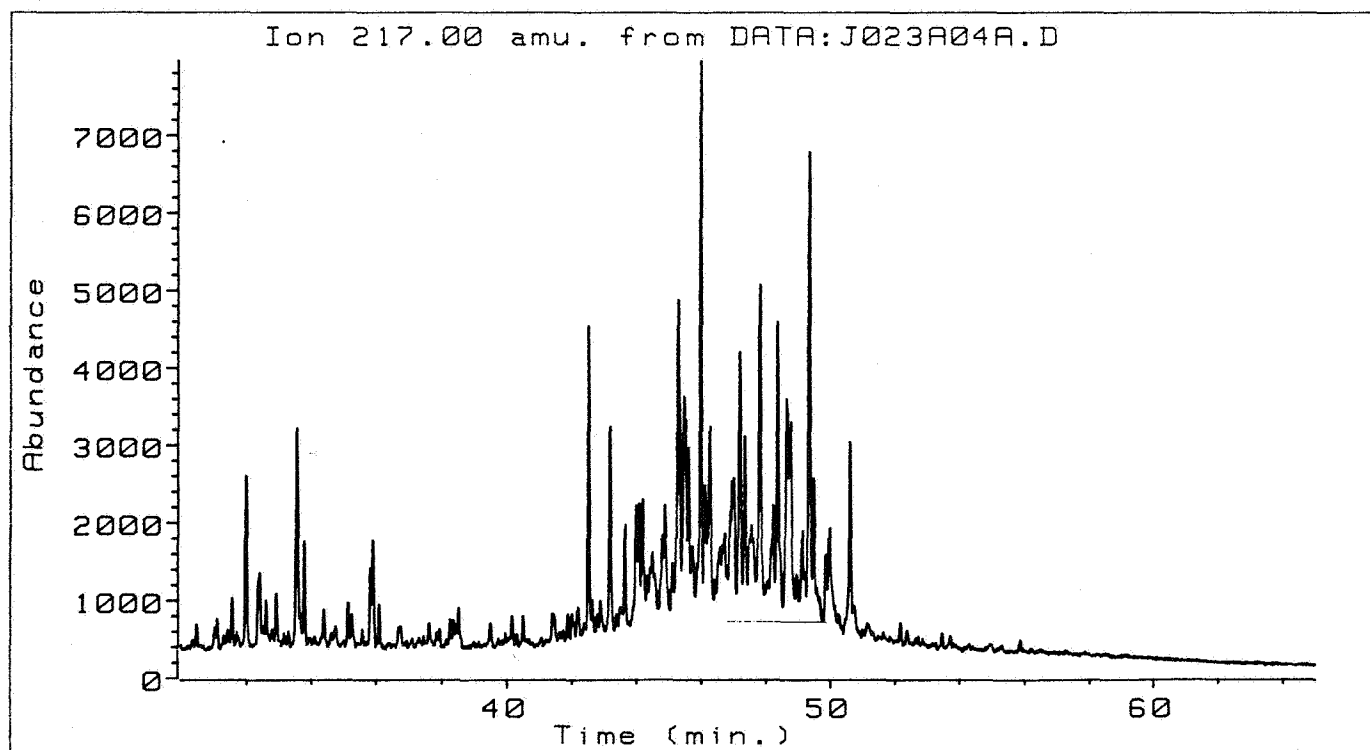
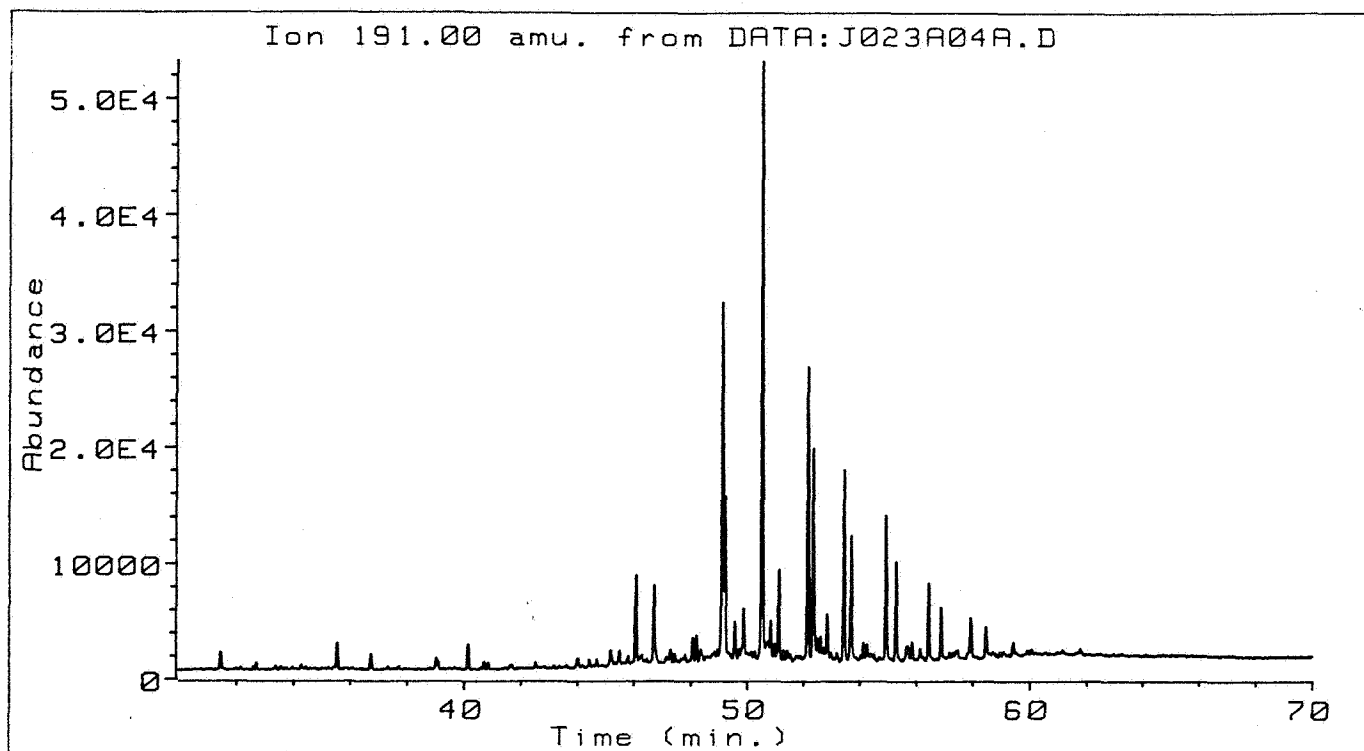
2/12-1

4167 m



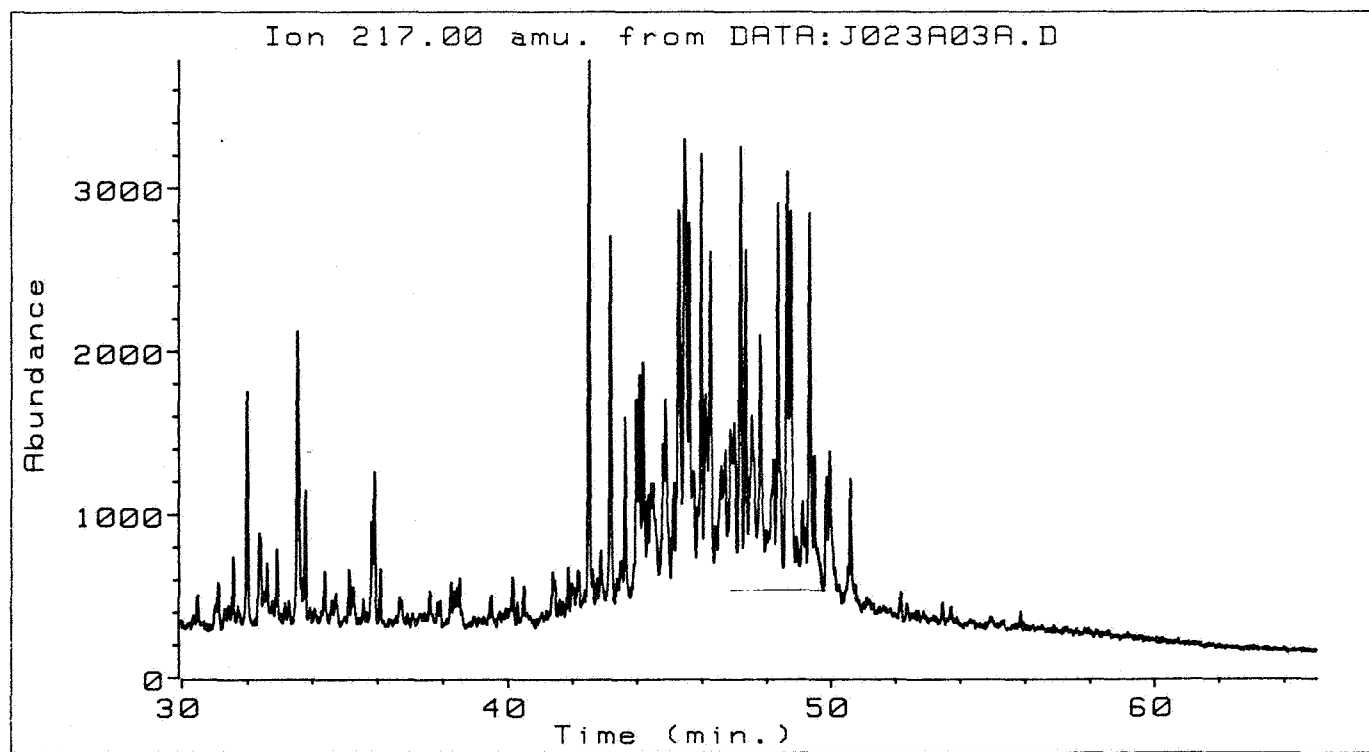
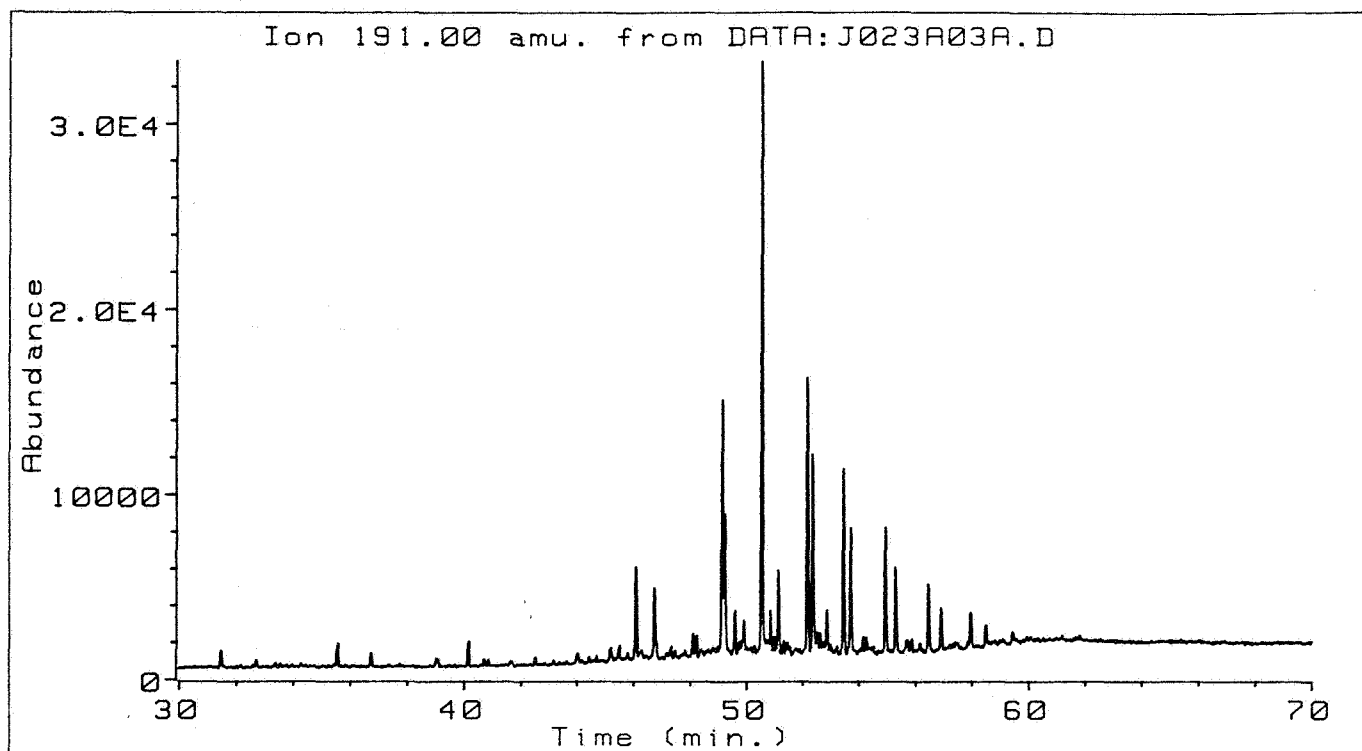
2/12-1

4172 m



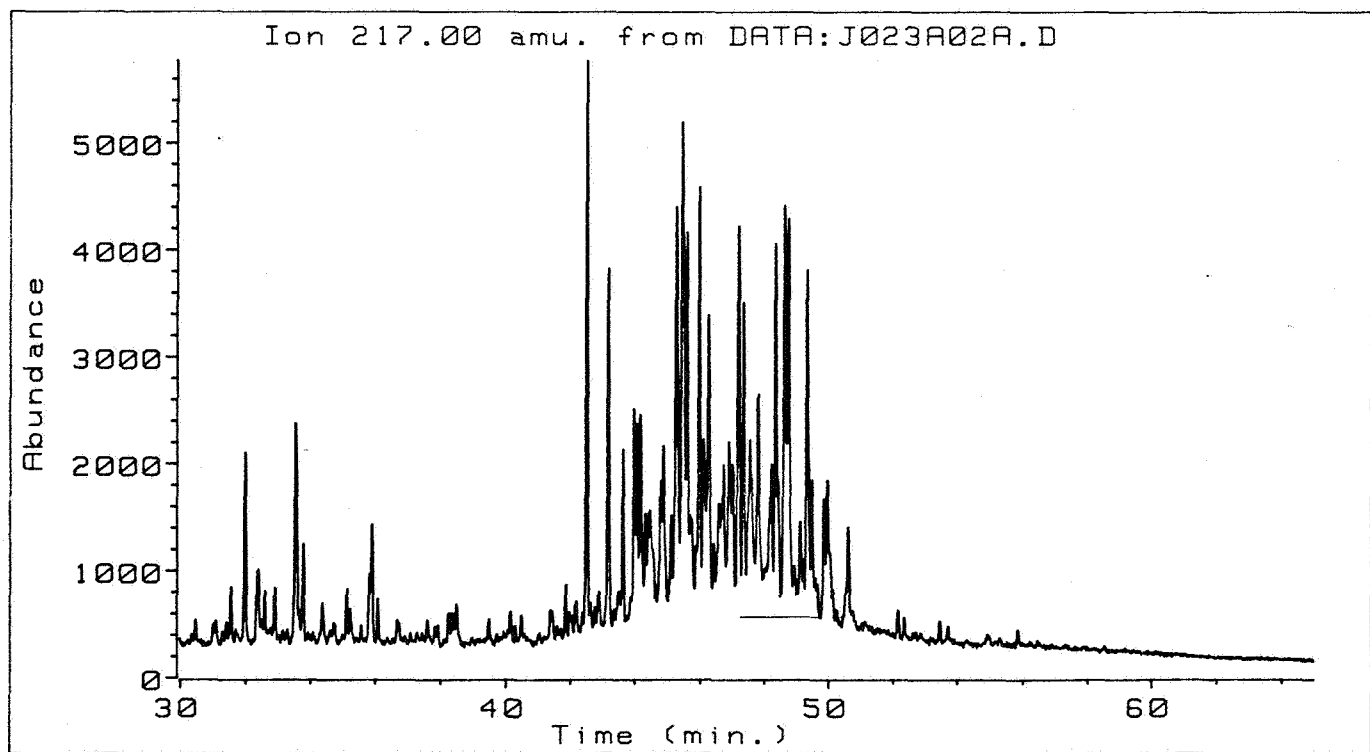
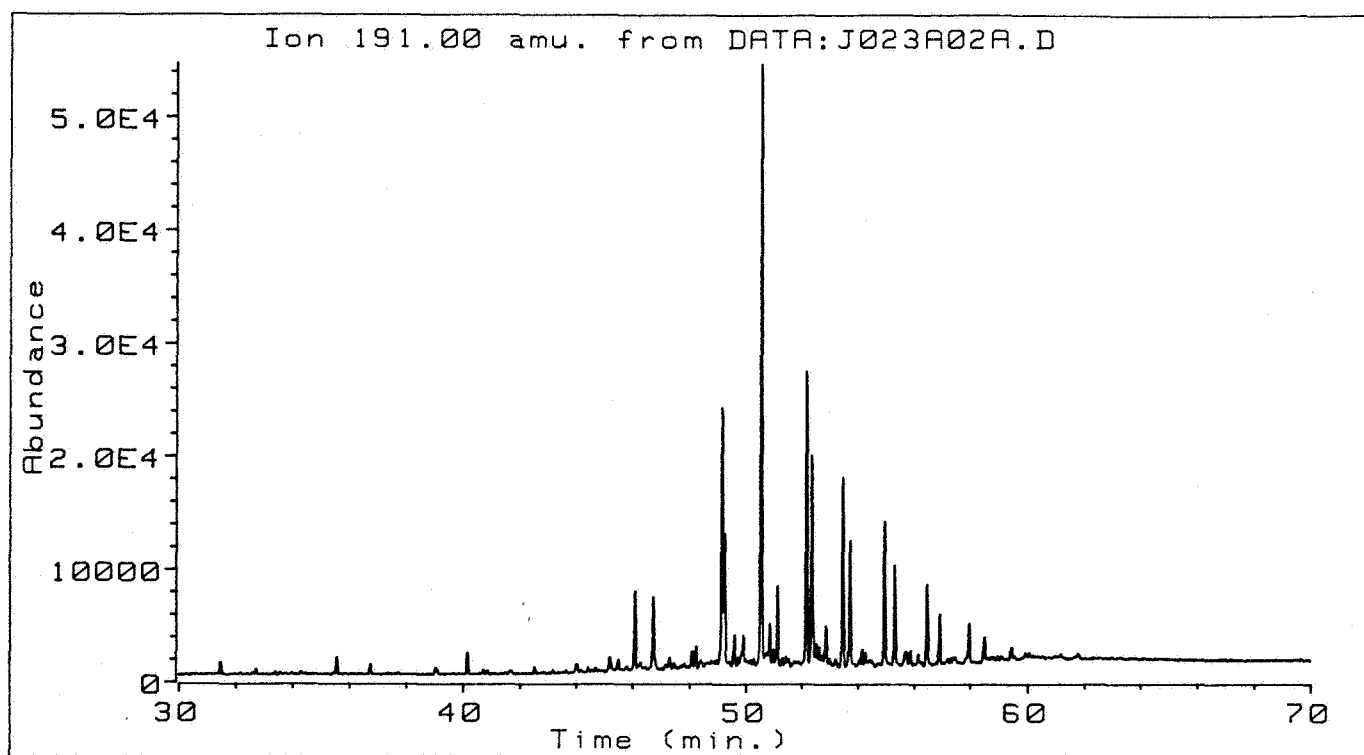
2/12-1

4200 m



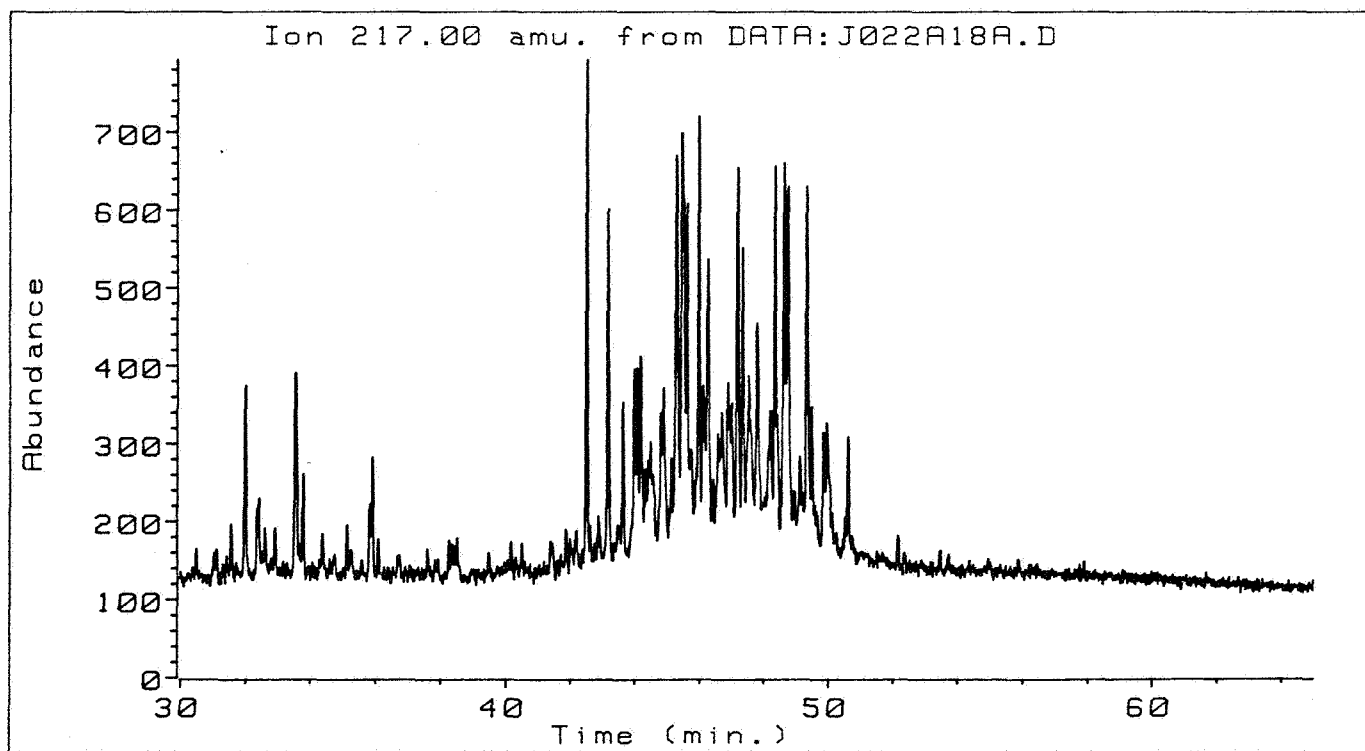
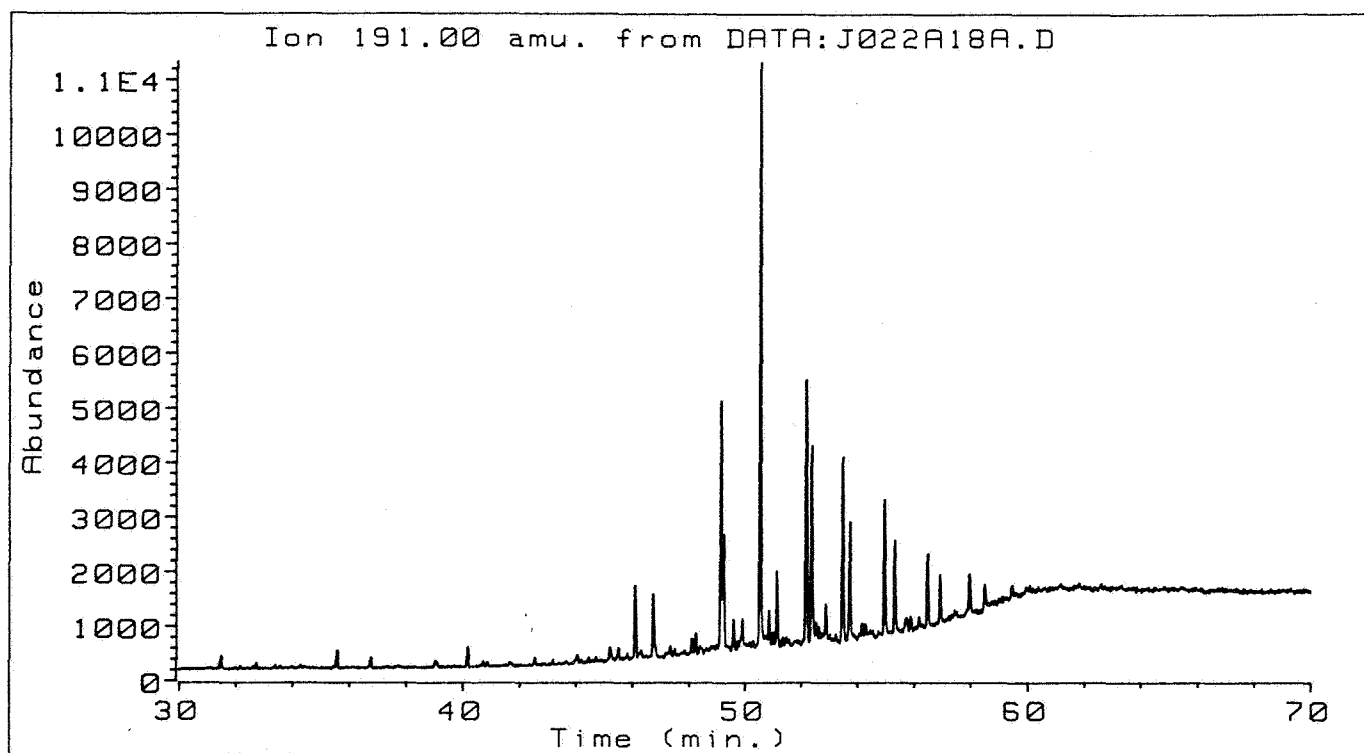
2/12-1

4215 m



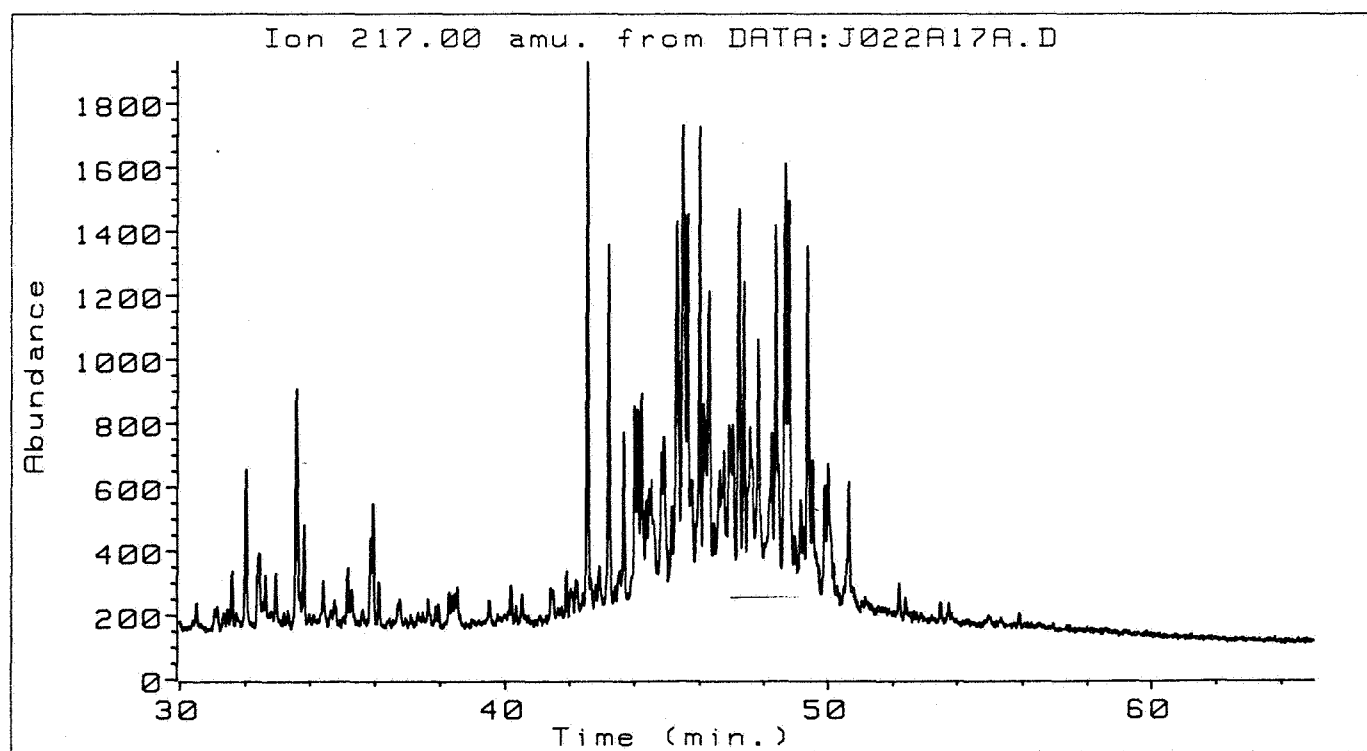
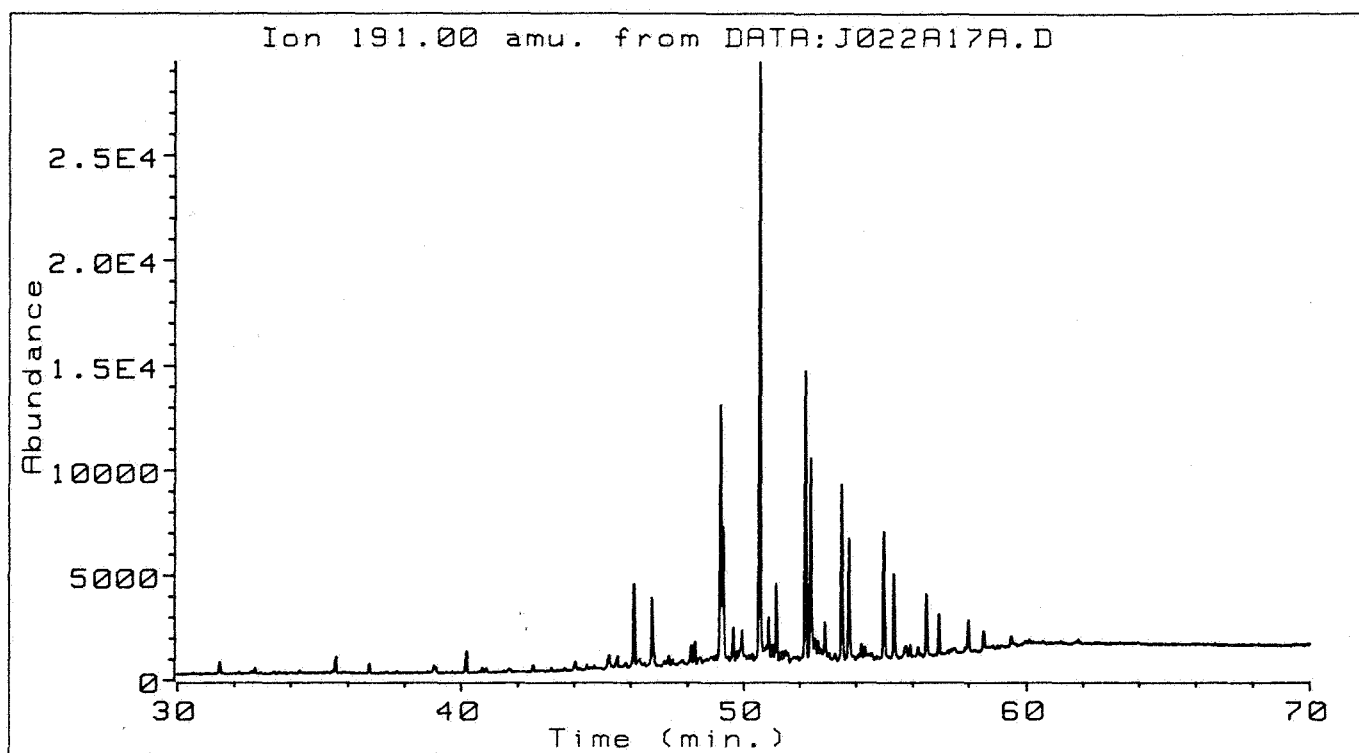
2/12 1

4240 m



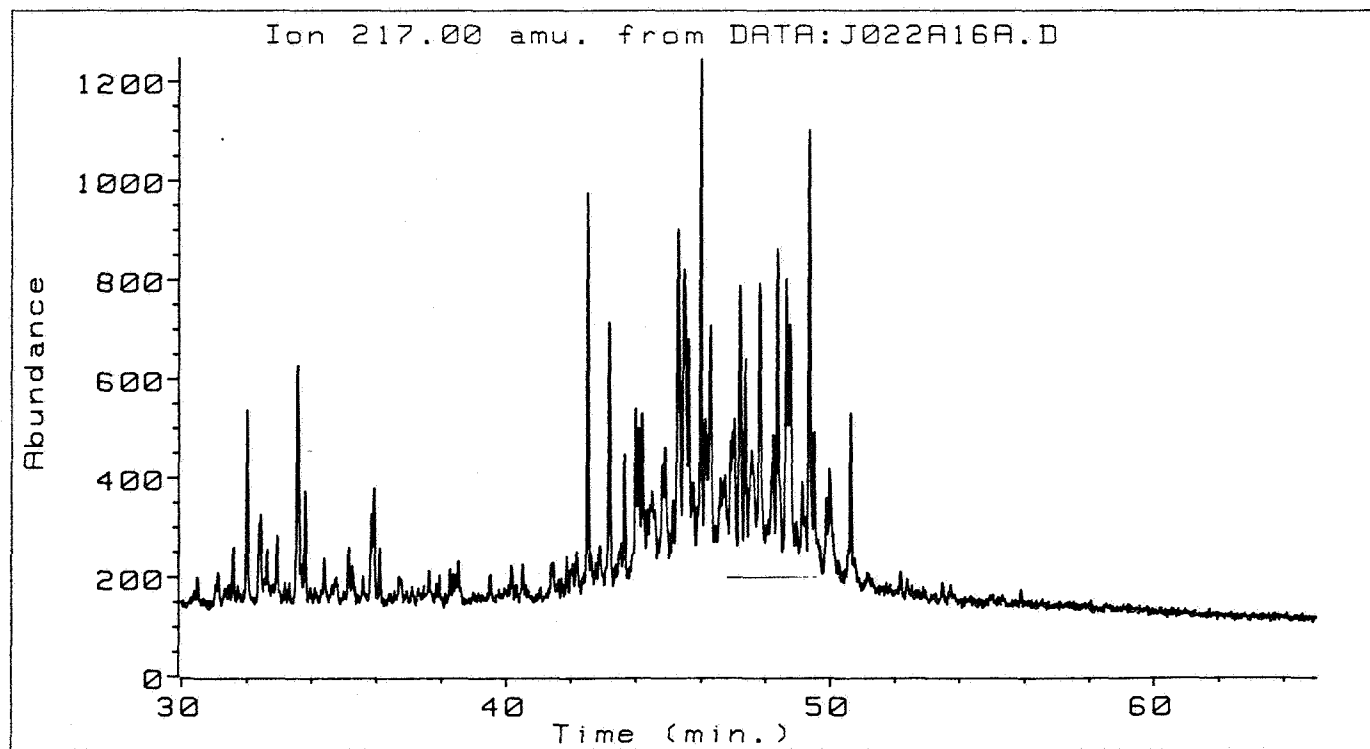
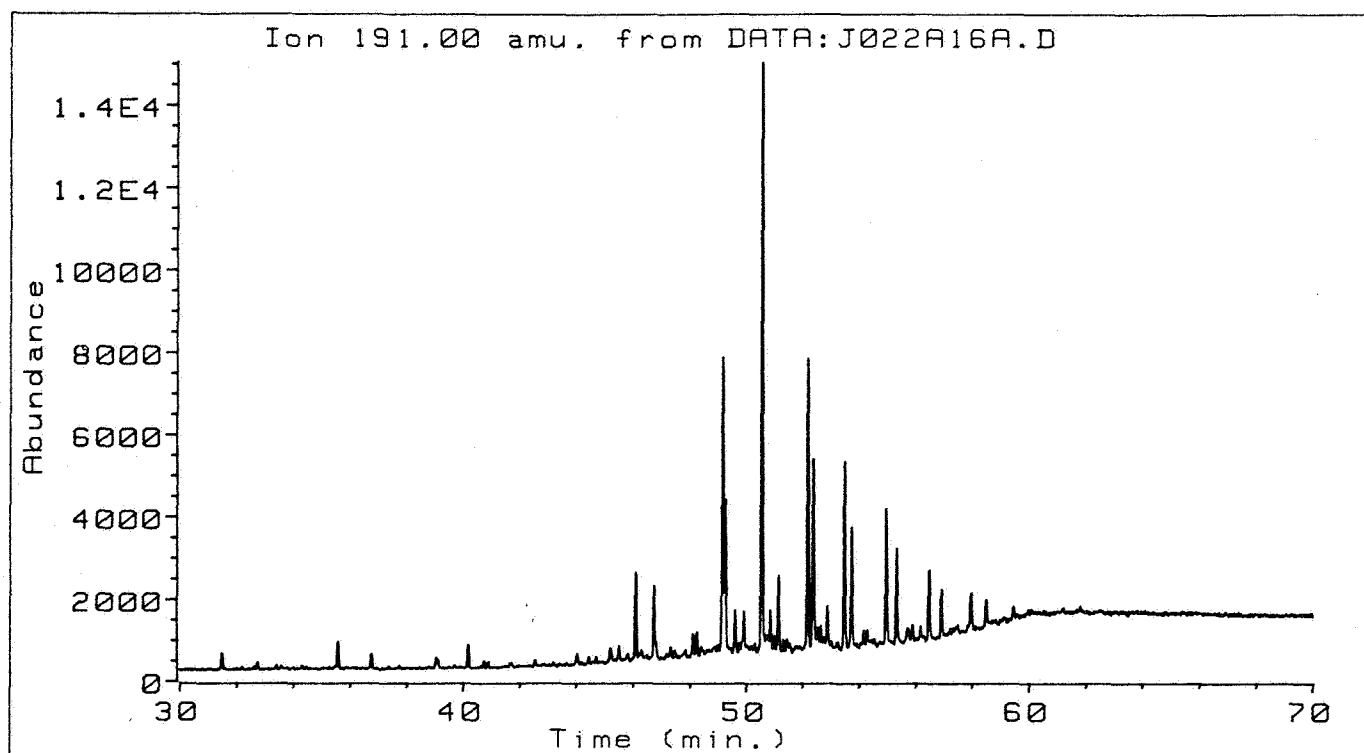
2/12-1

4247 m



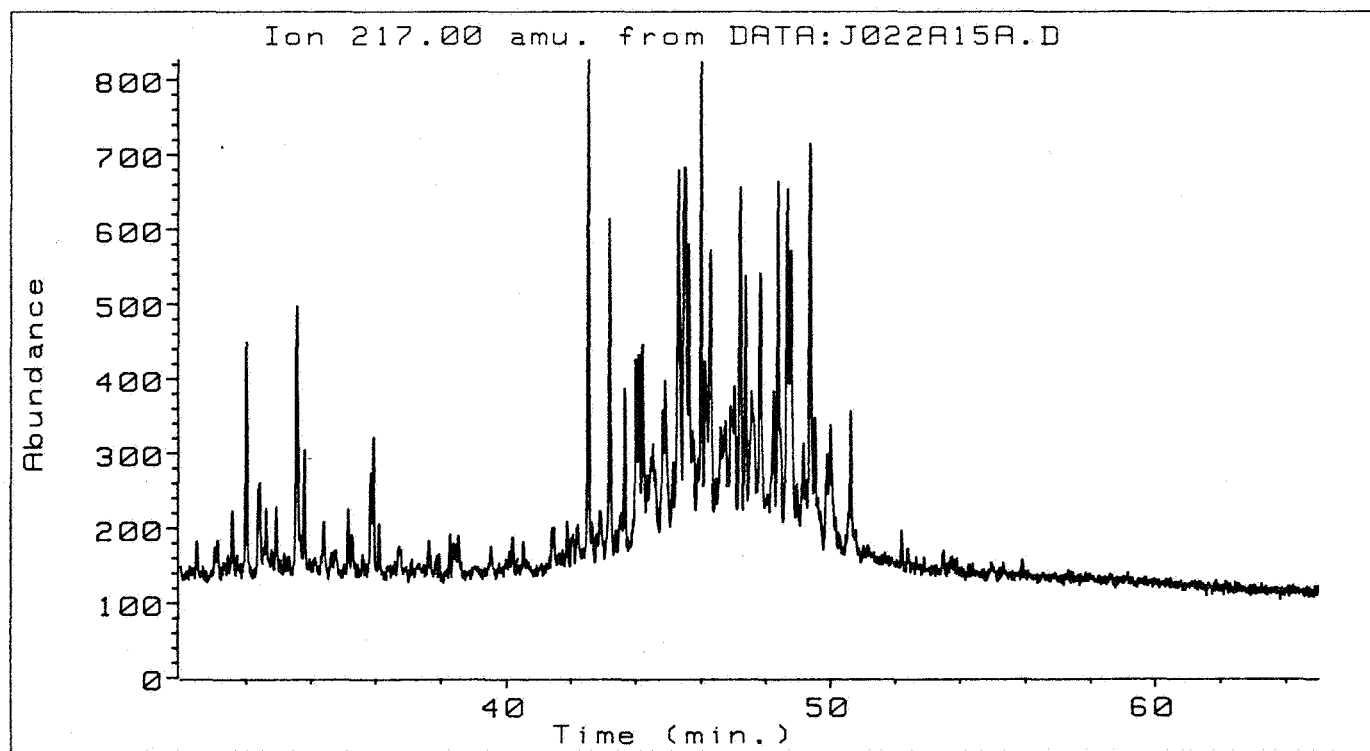
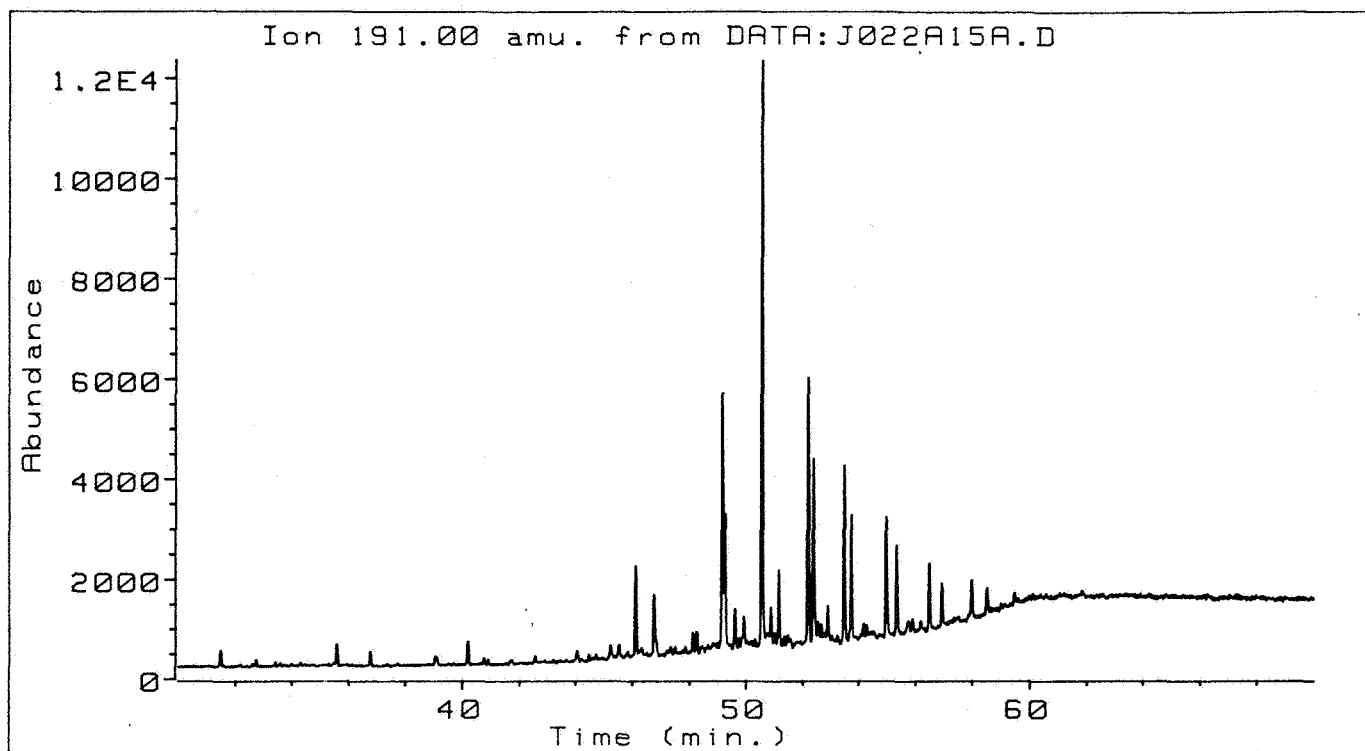
2/12-1

4272 m



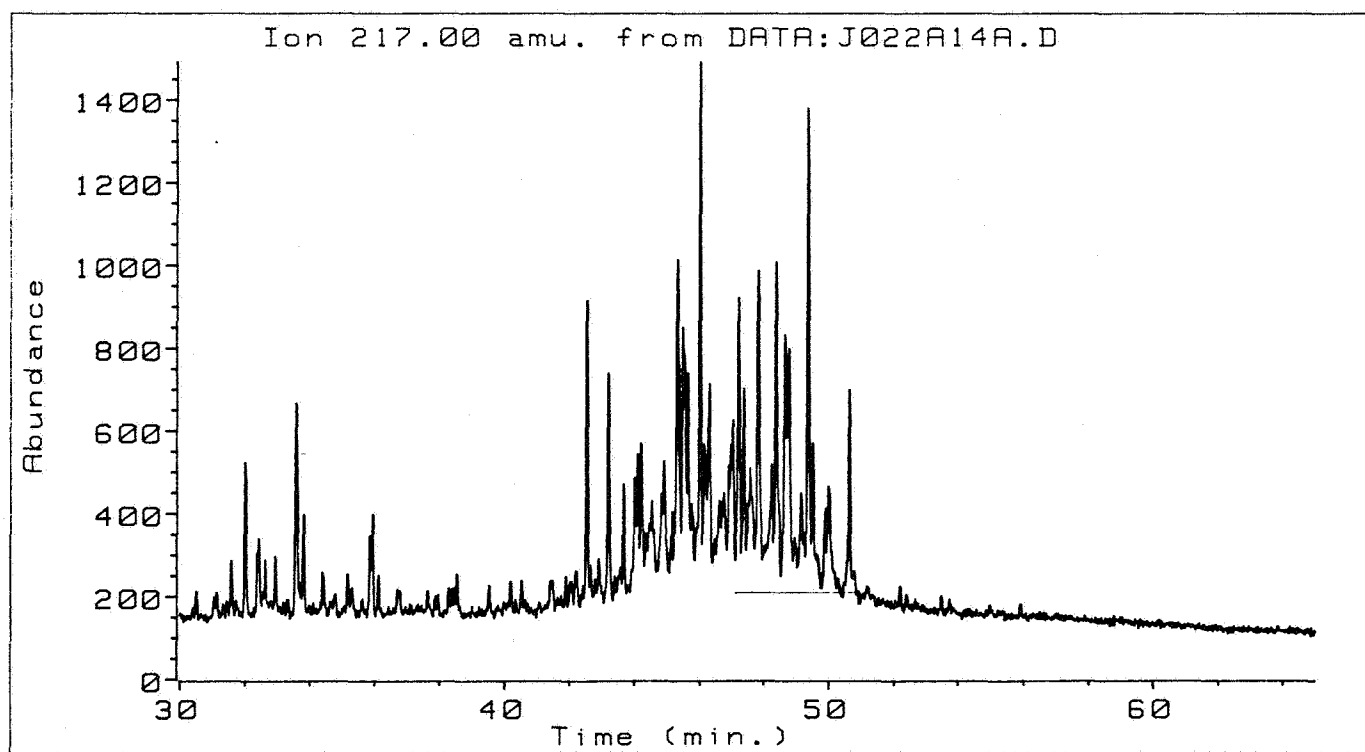
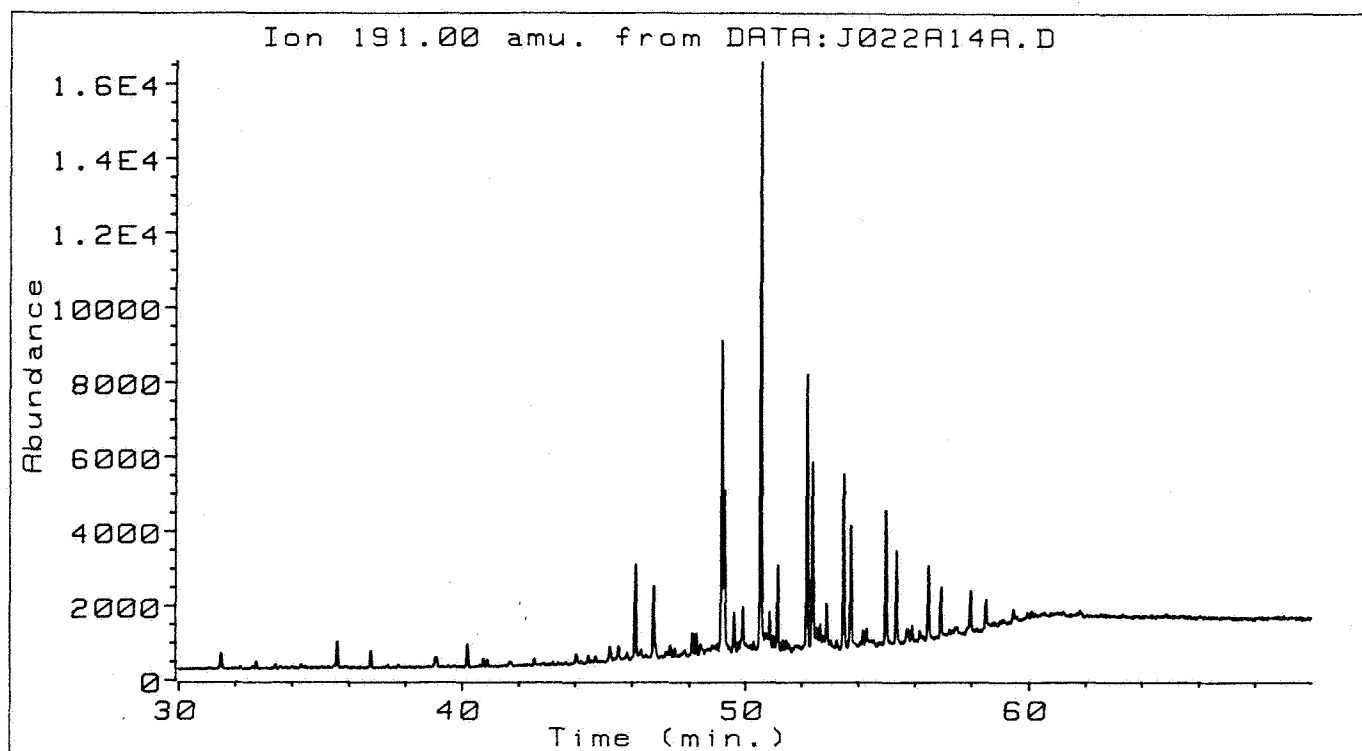
2/12-1

4302 m



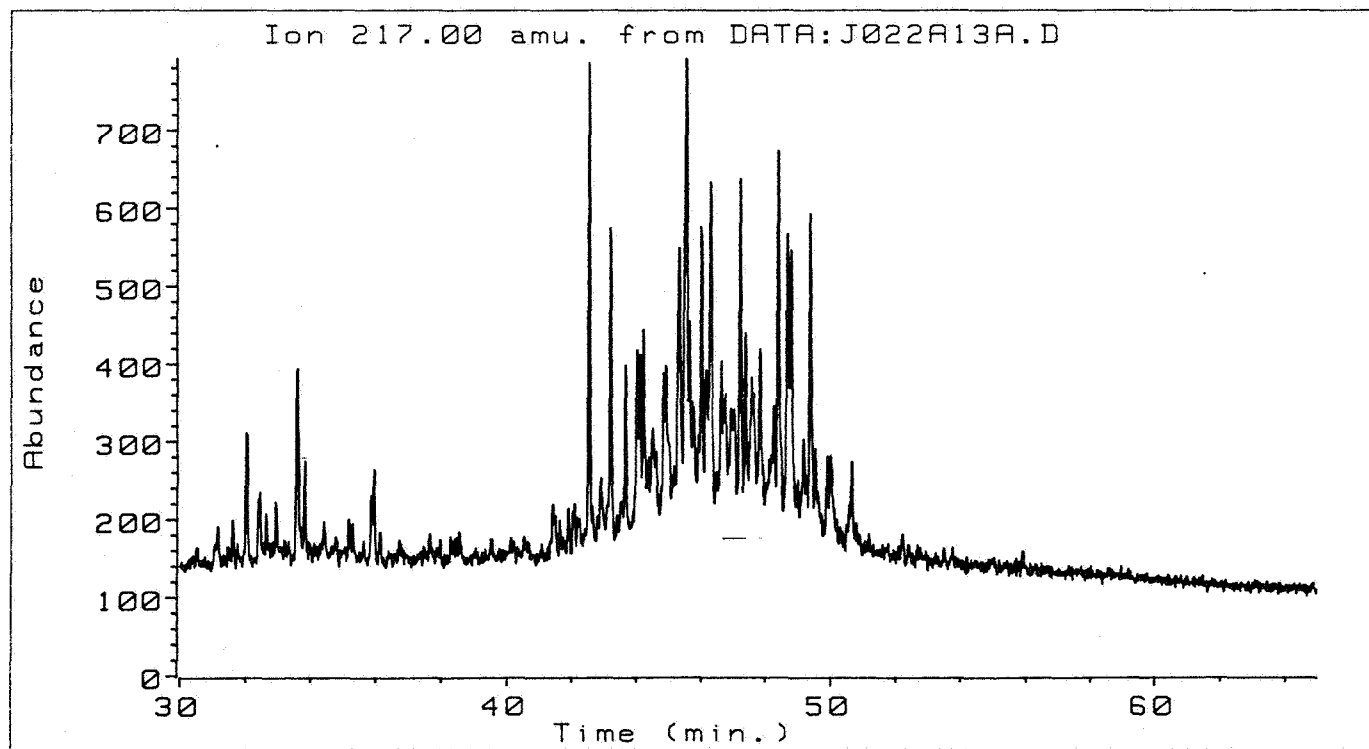
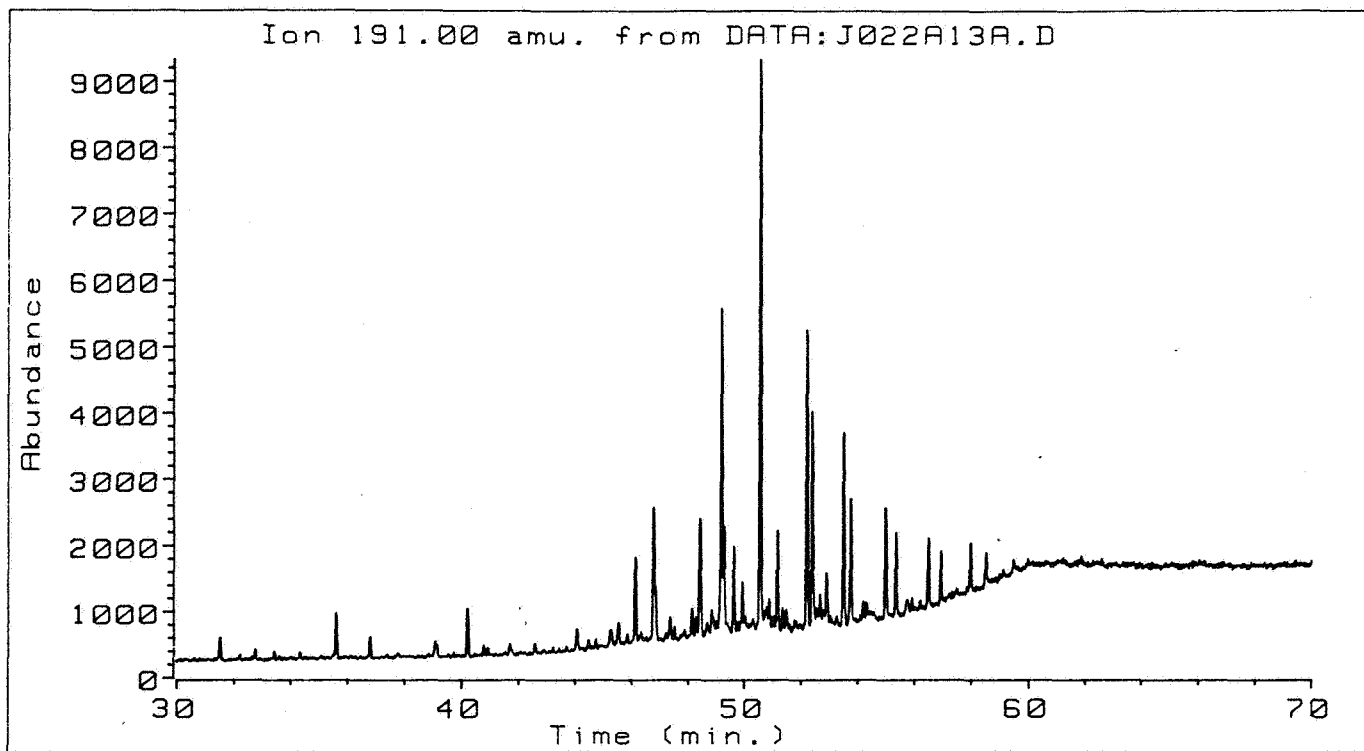
2/12-1

4330 m



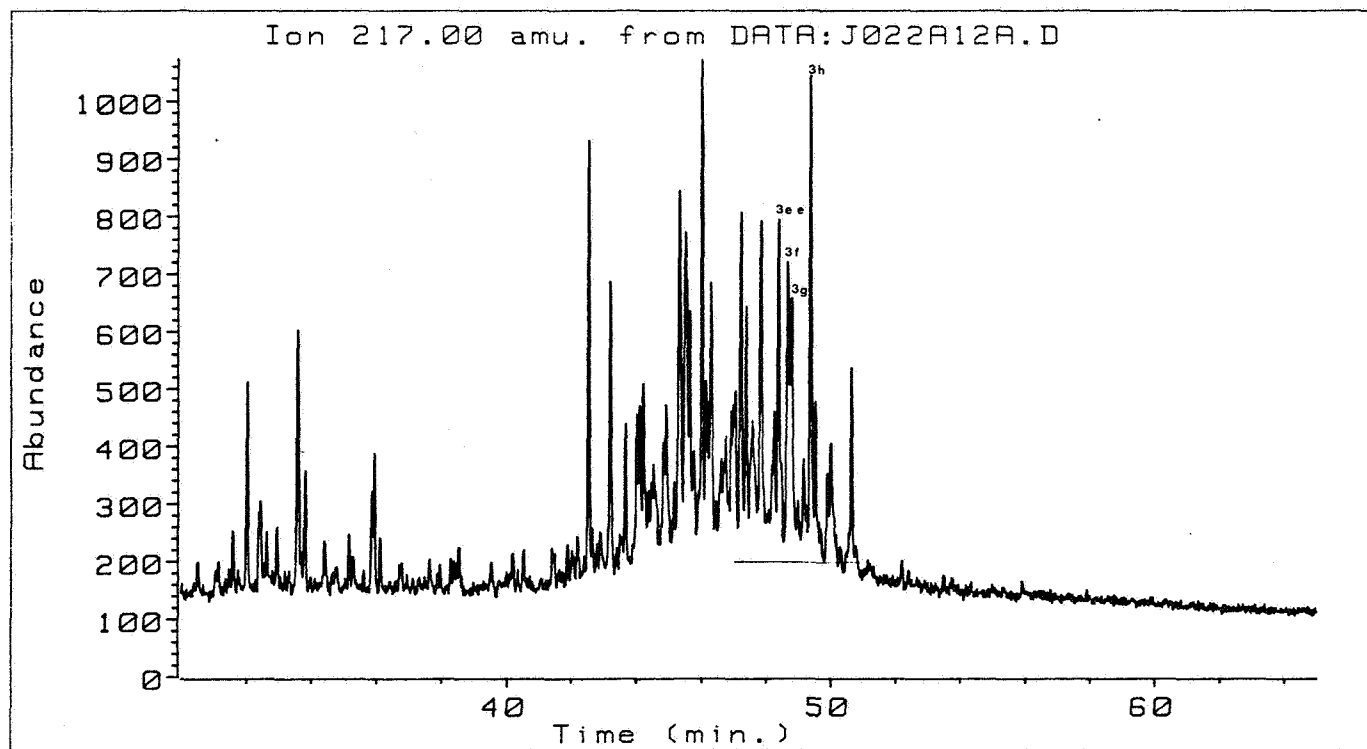
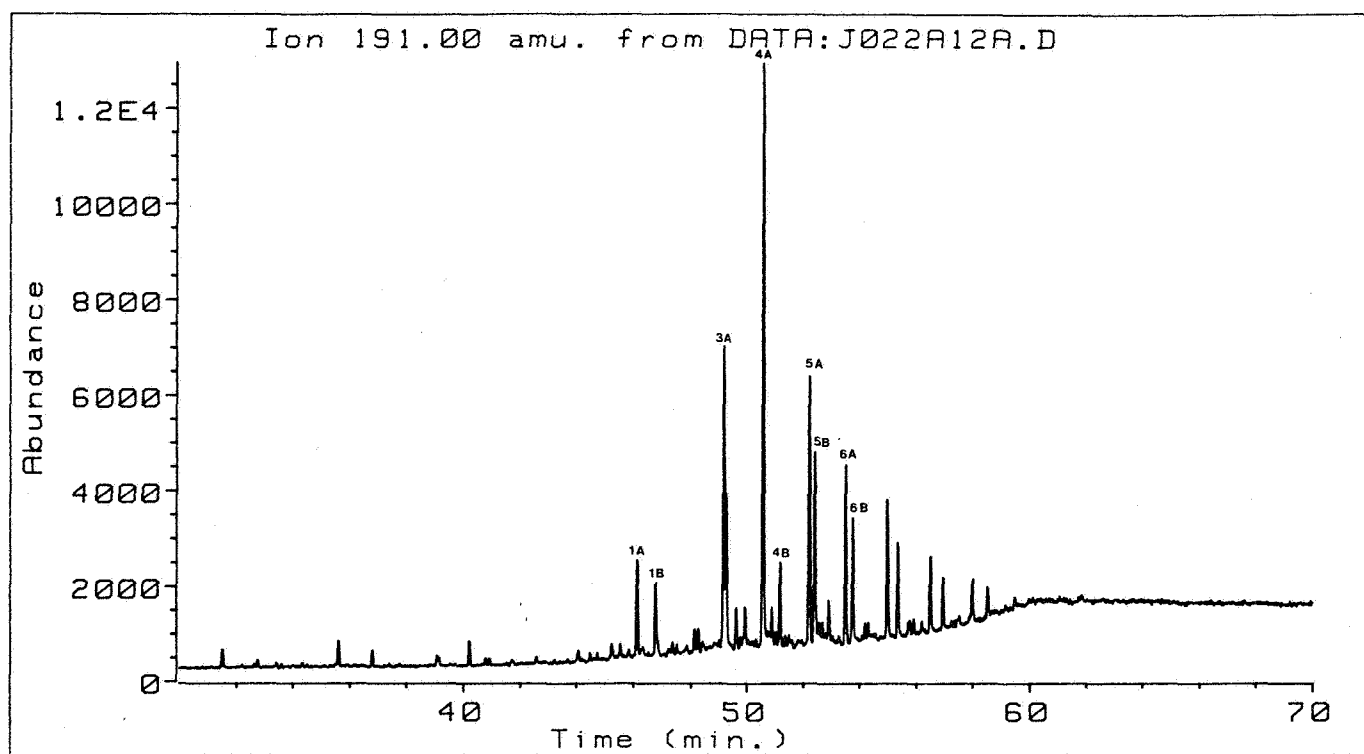
2/12-1

4370 m



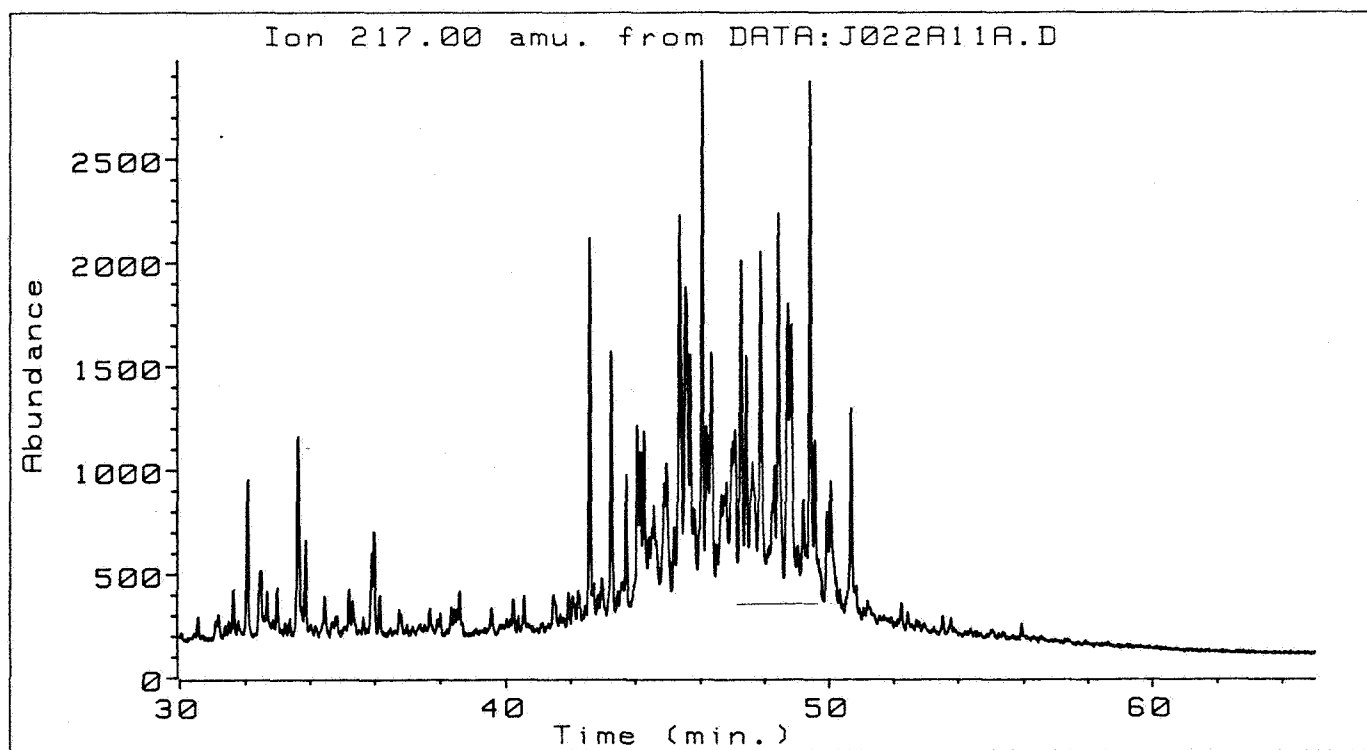
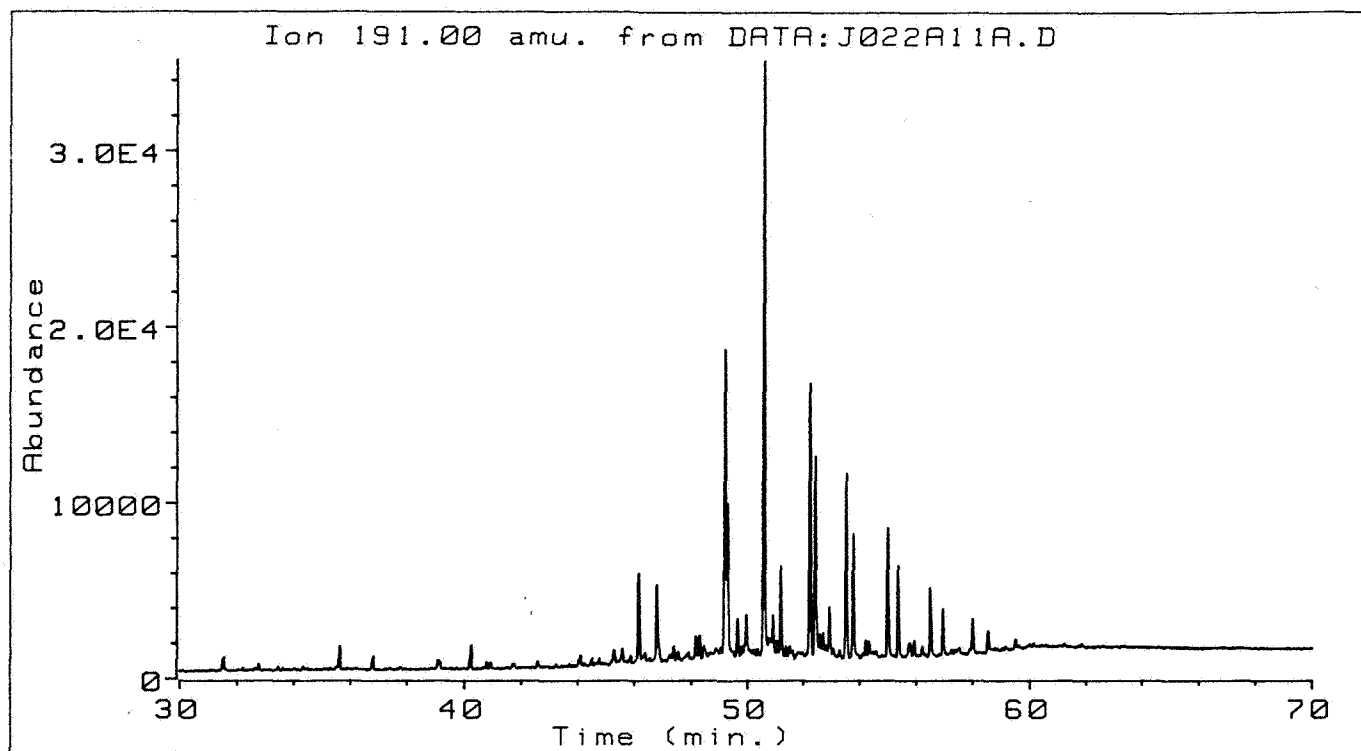
2/12-1

4400 m



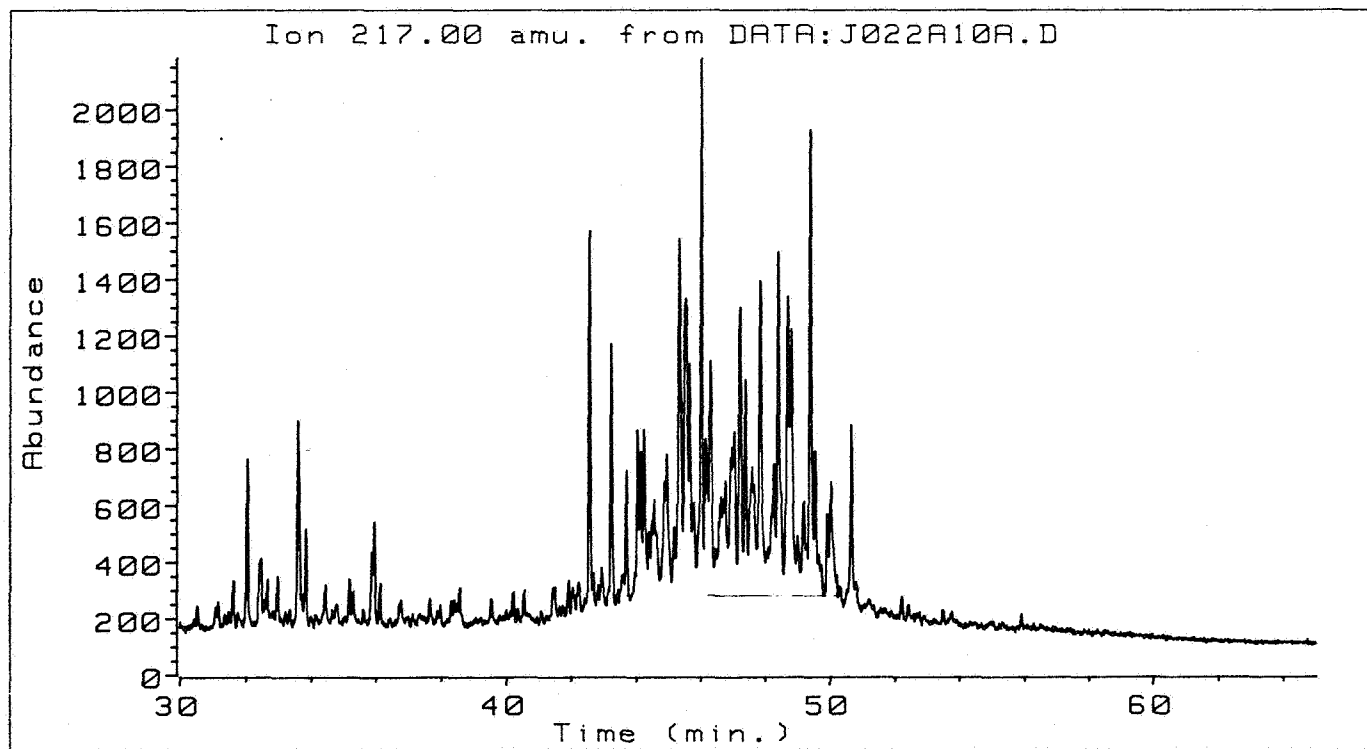
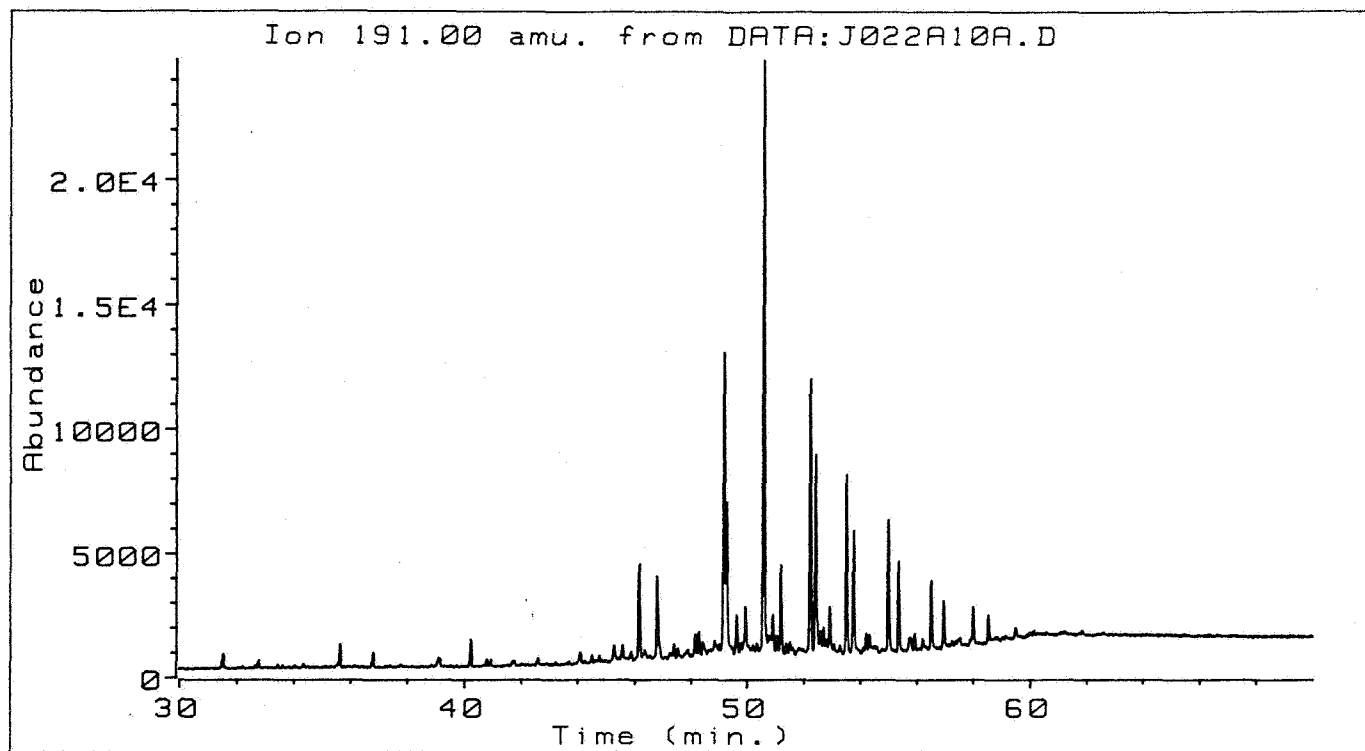
2/12-1

4432 m



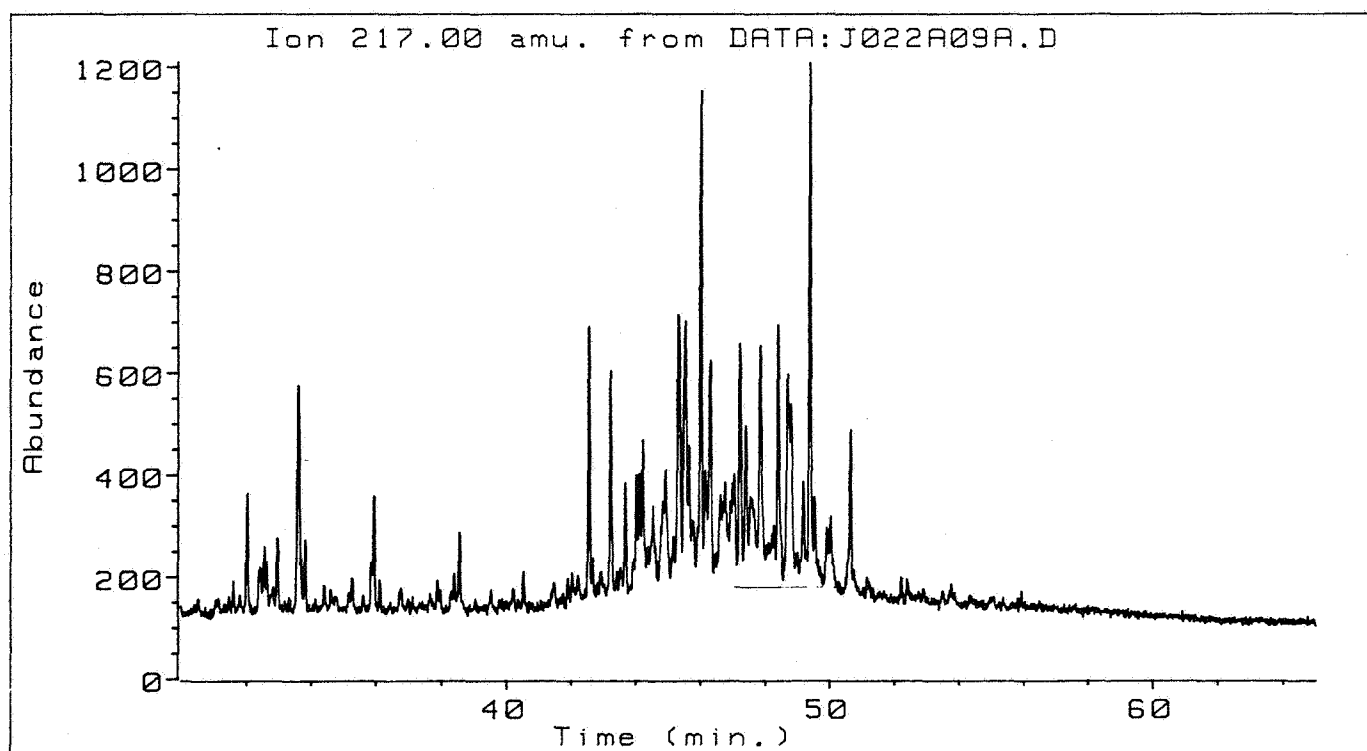
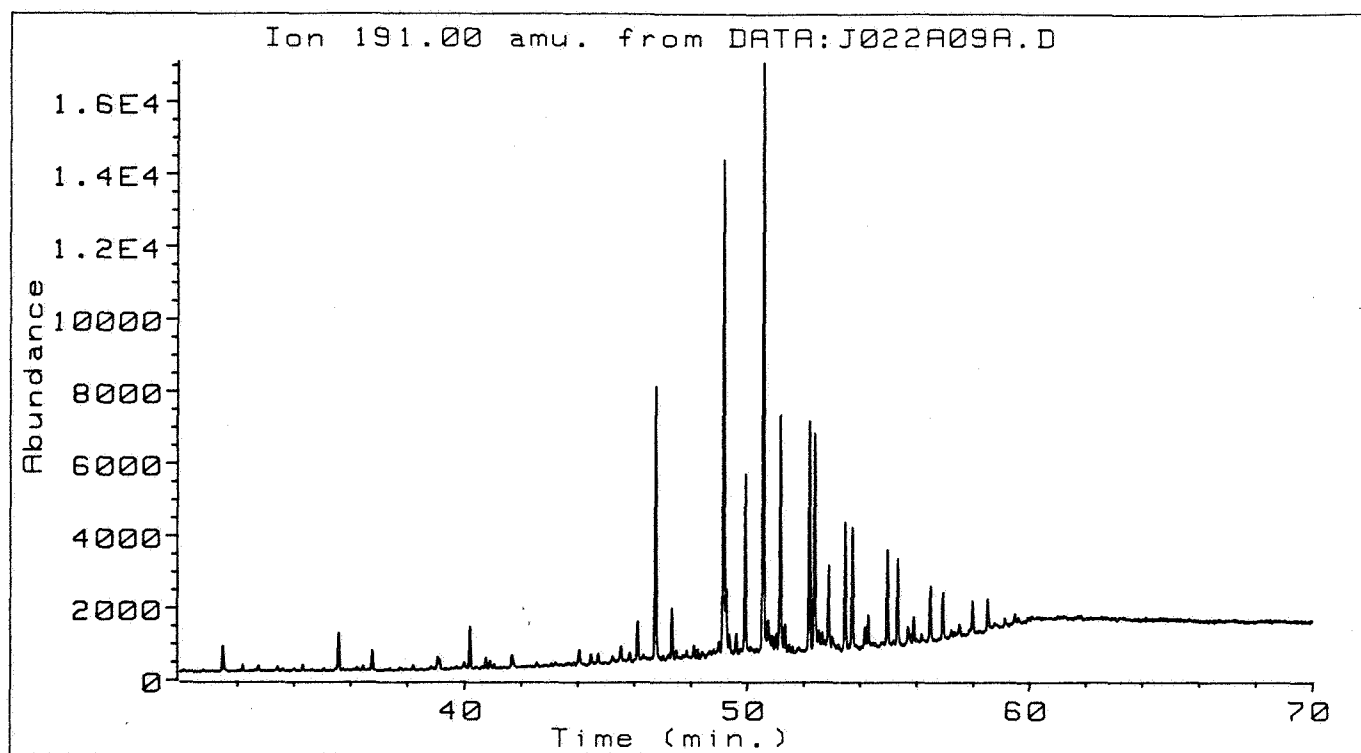
2/12-1

4457 m



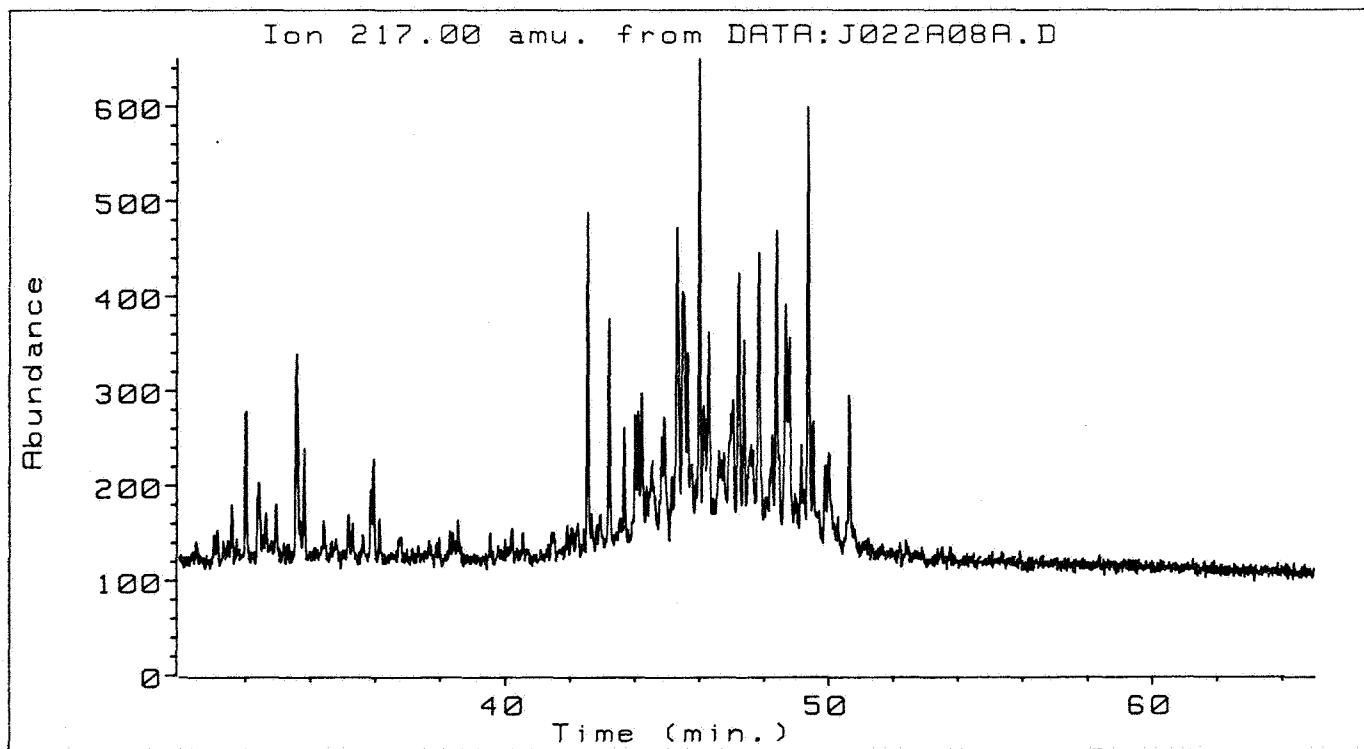
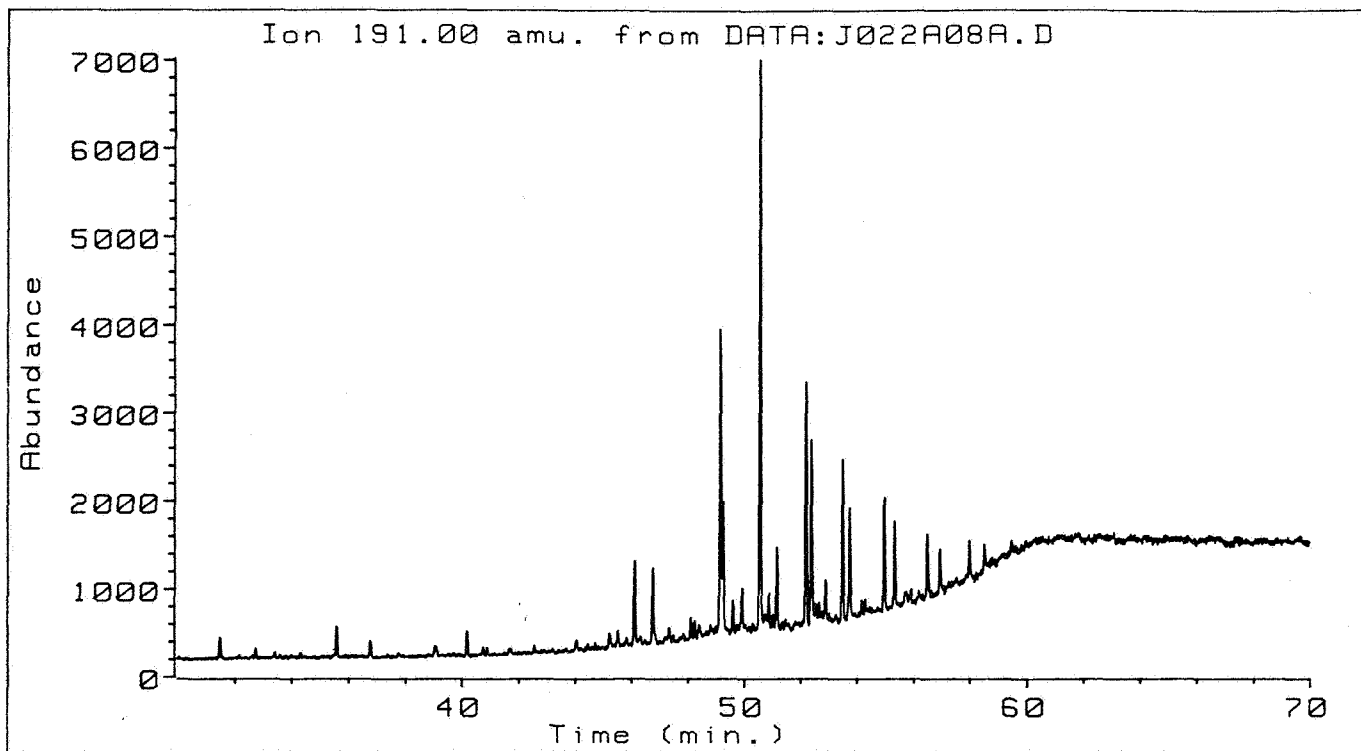
2/12-1

4480 m



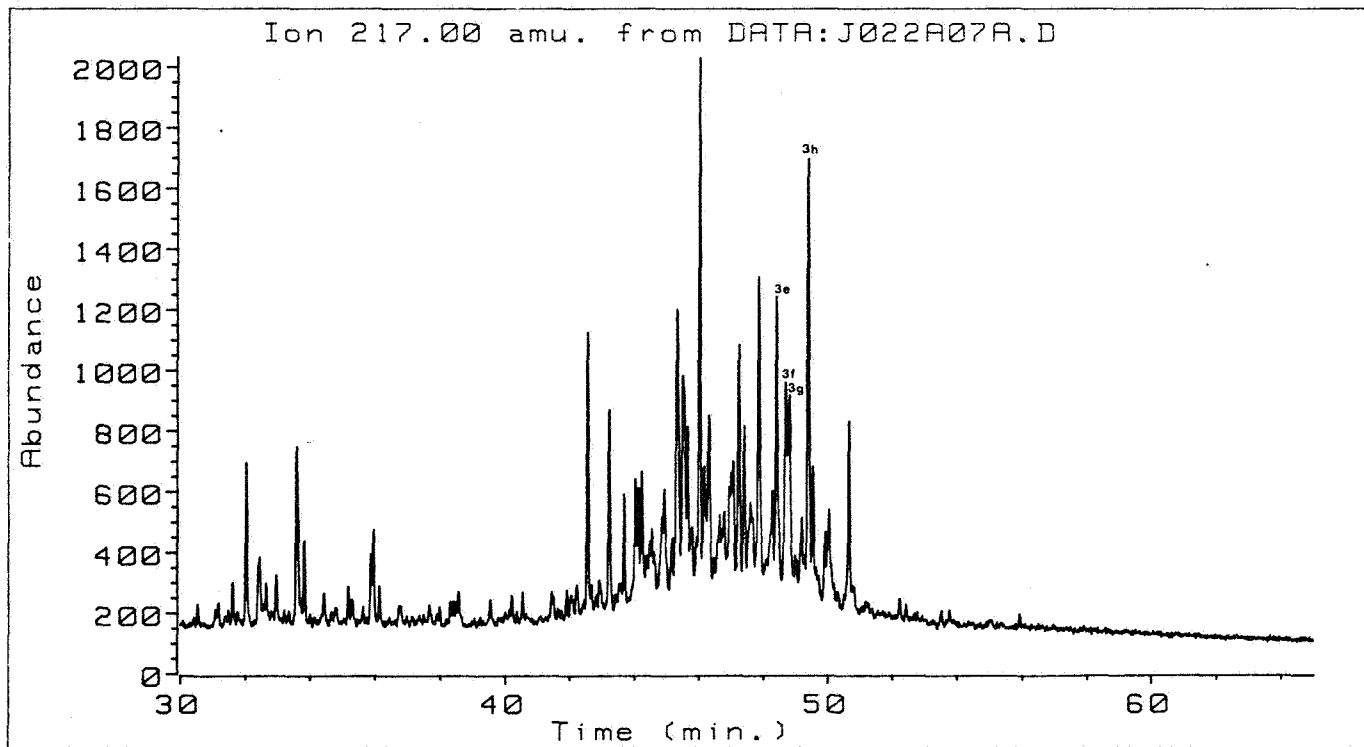
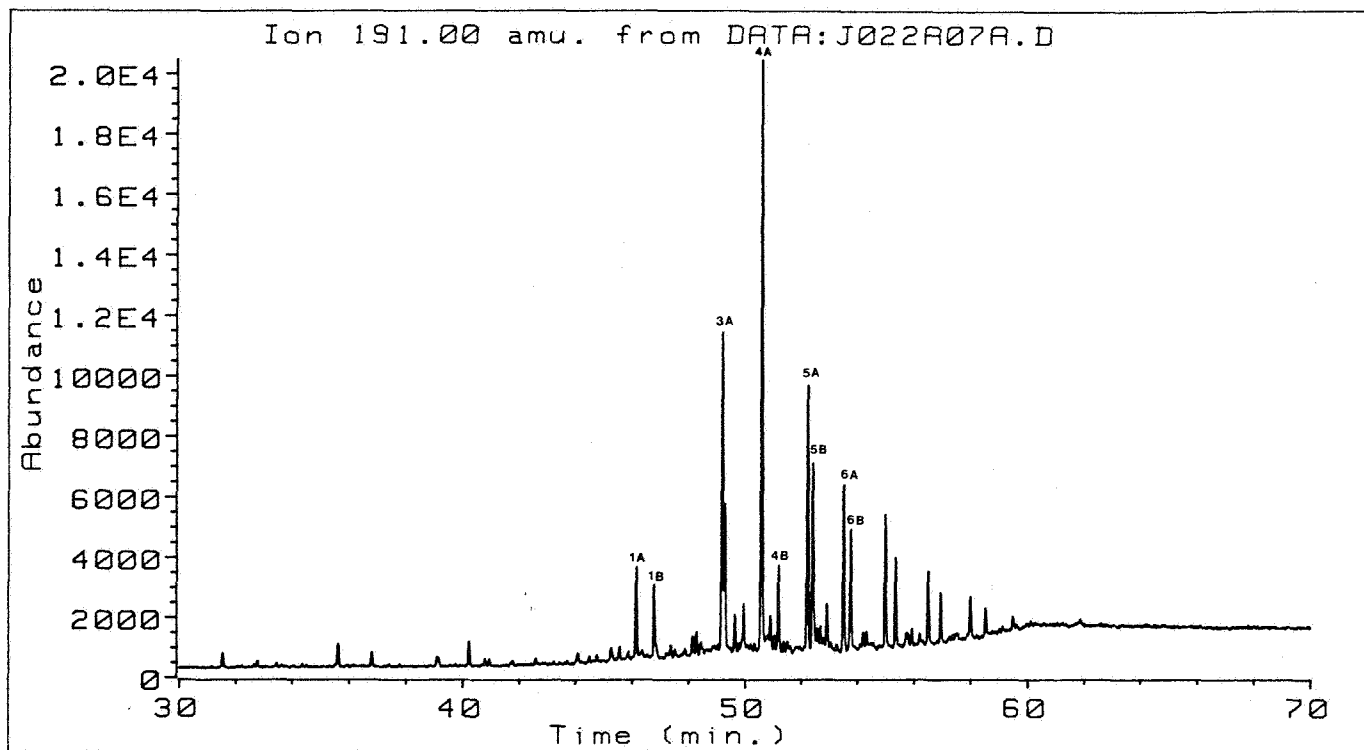
2/12-1

4497 m



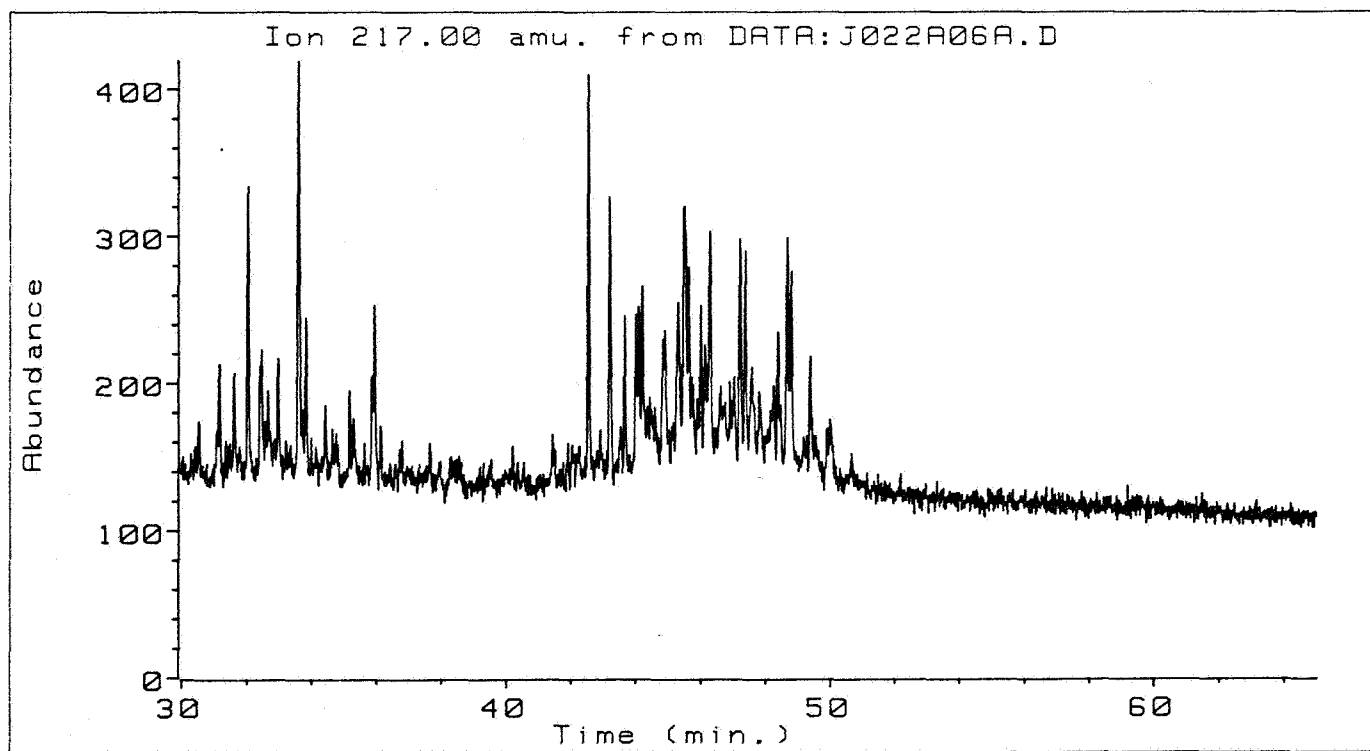
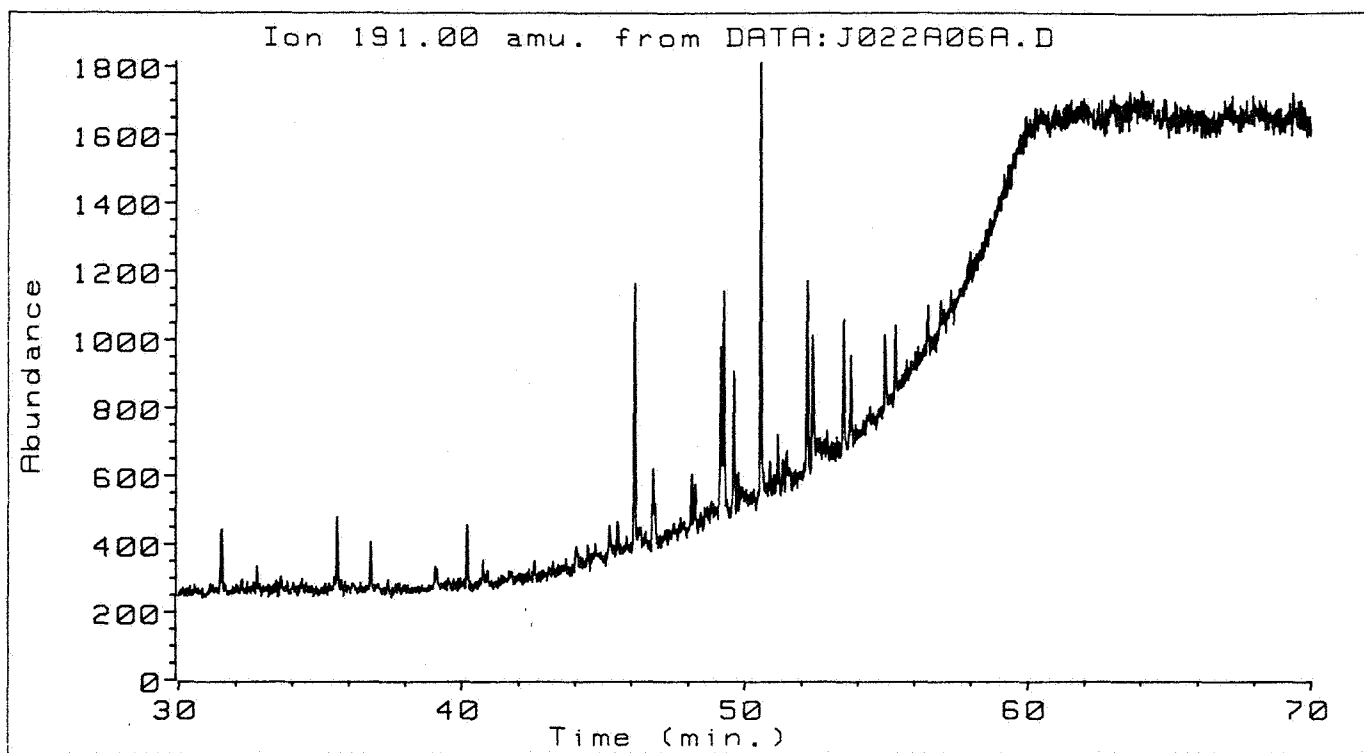
2/12-1

4527 m



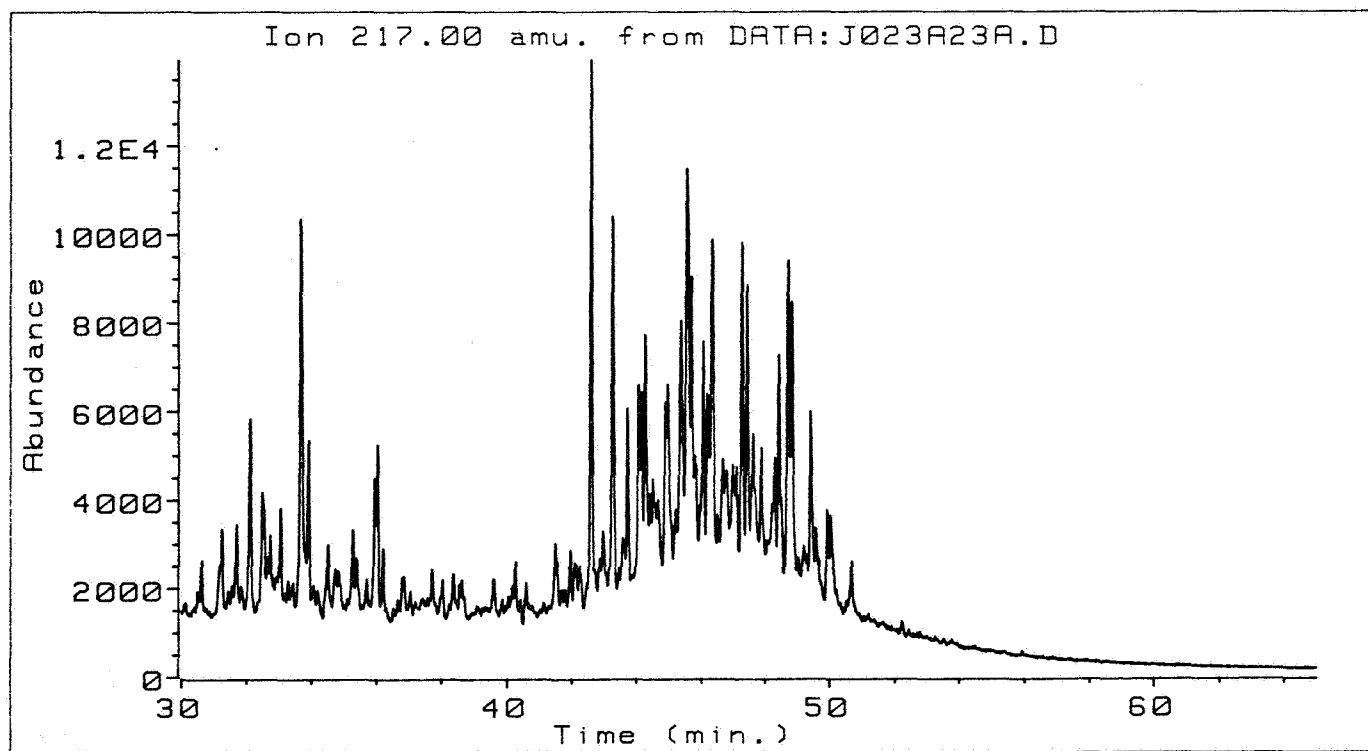
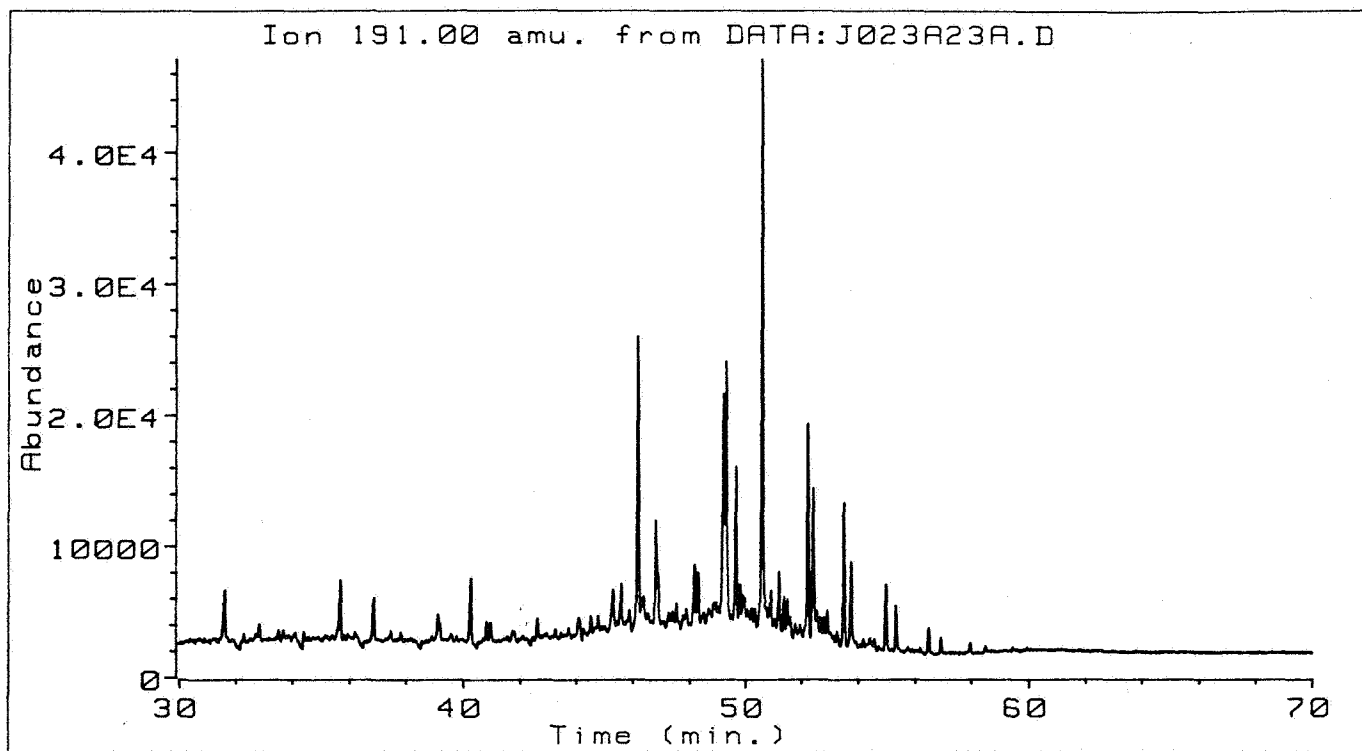
2/12-1

4607 m



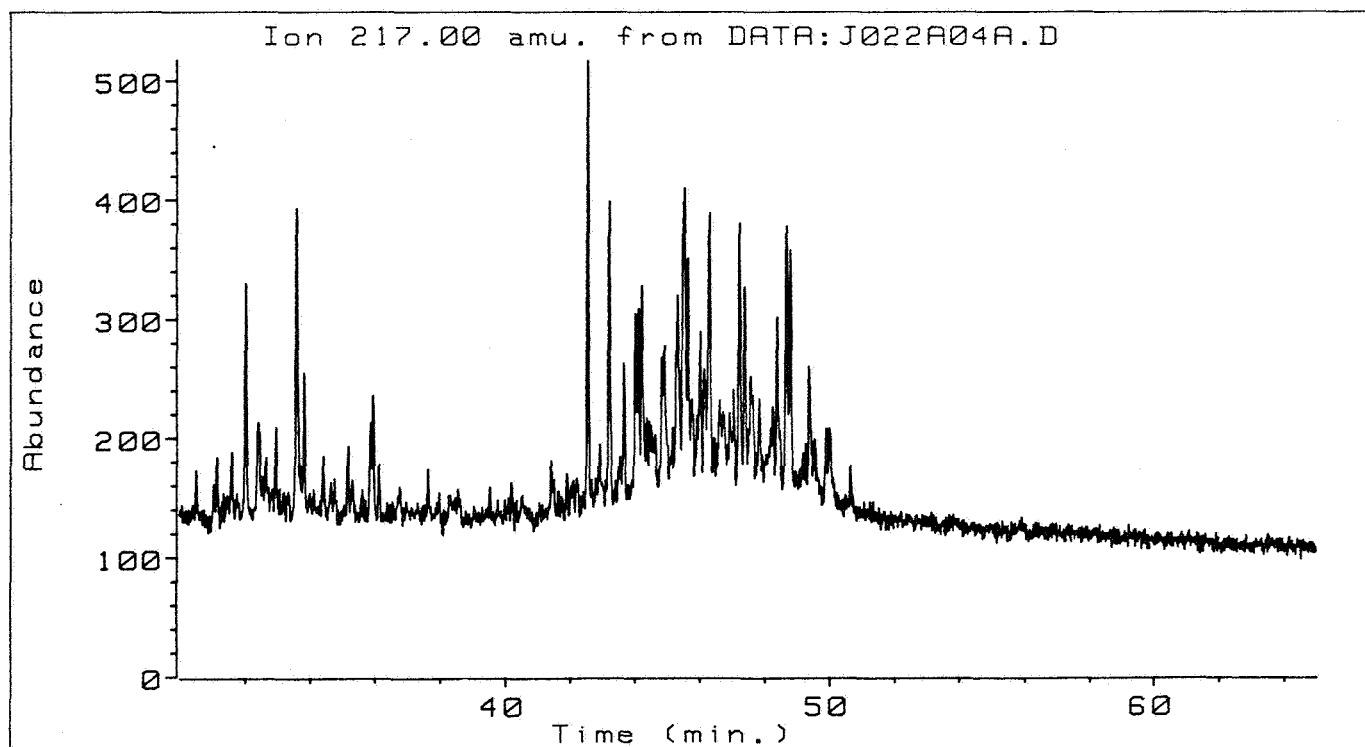
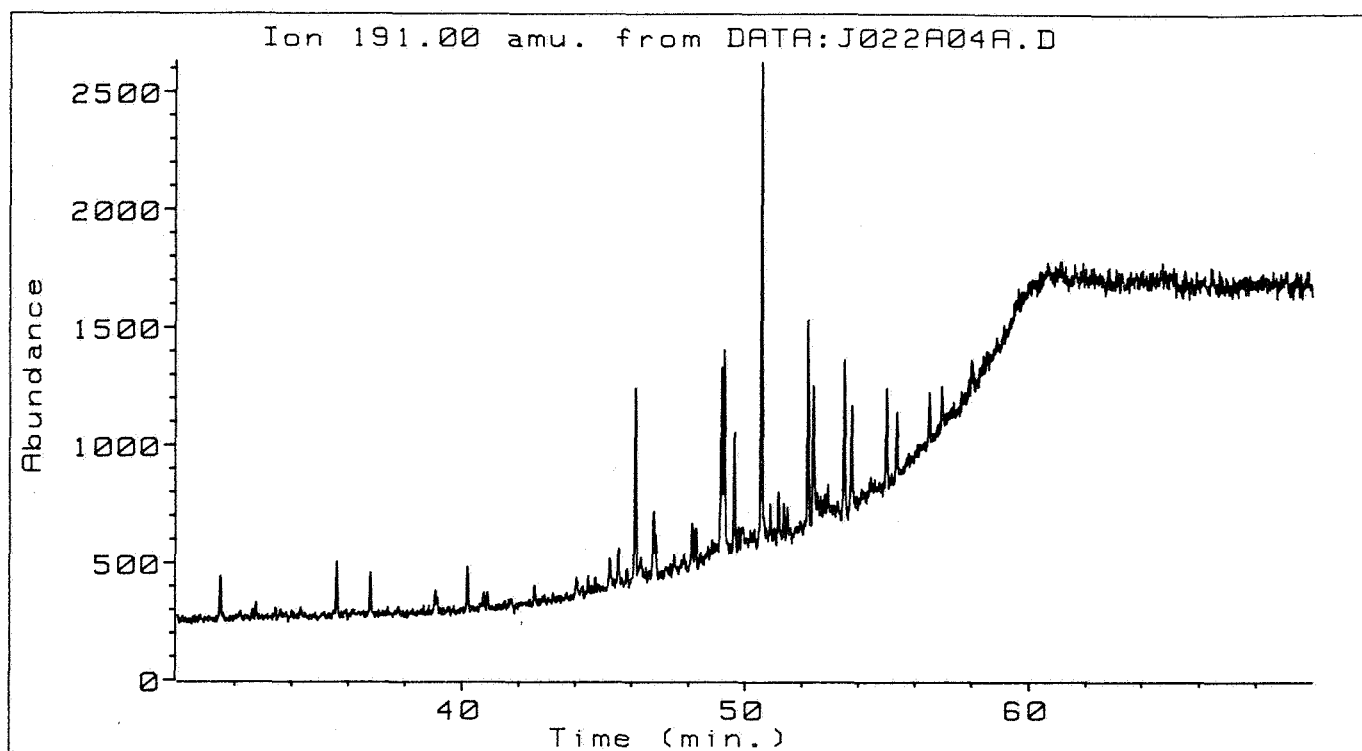
2/12-1

4633.6 m



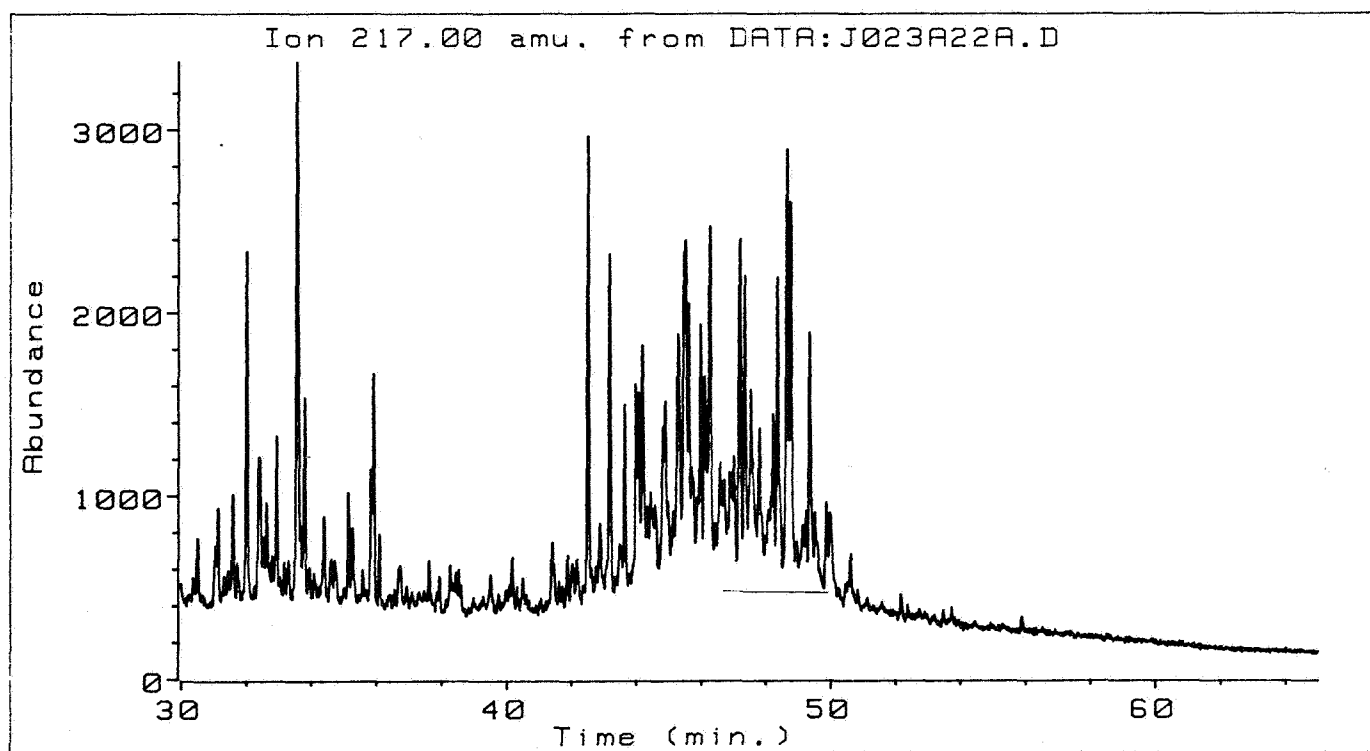
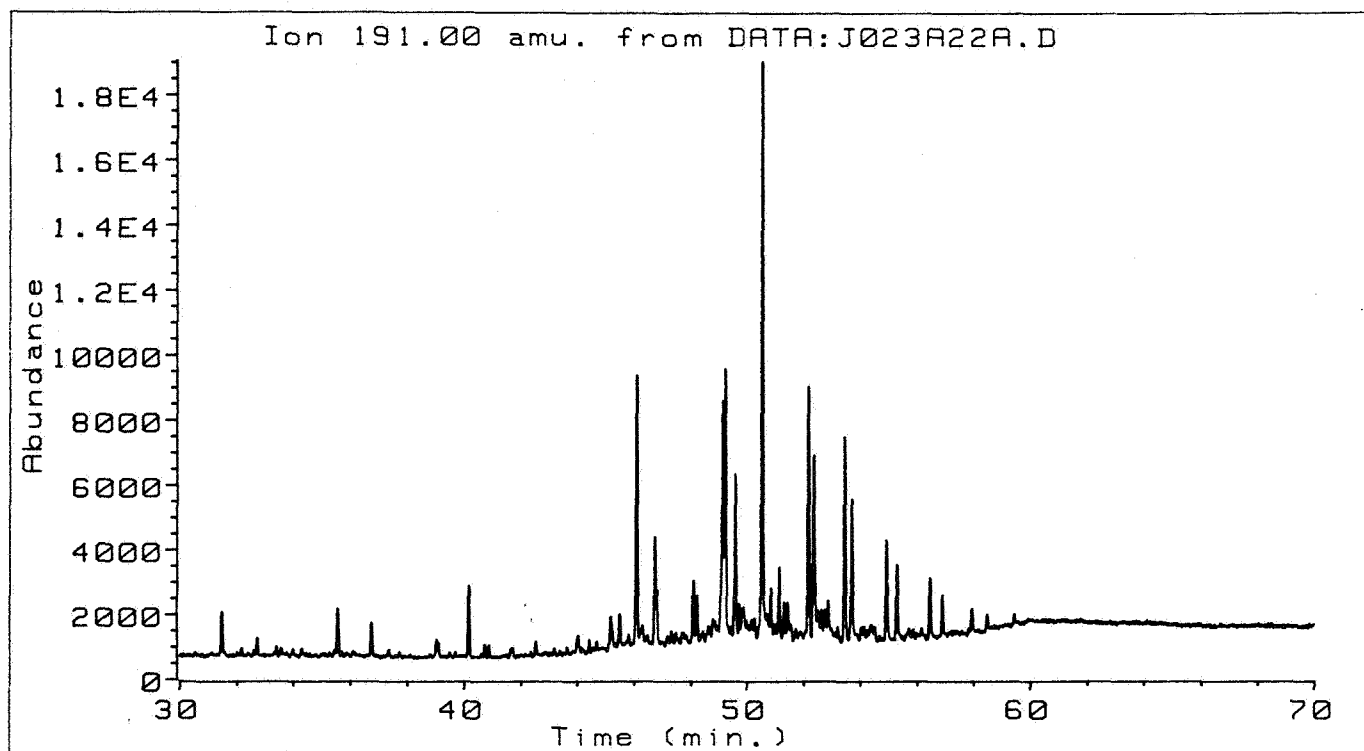
2/12 1

4653.7 m



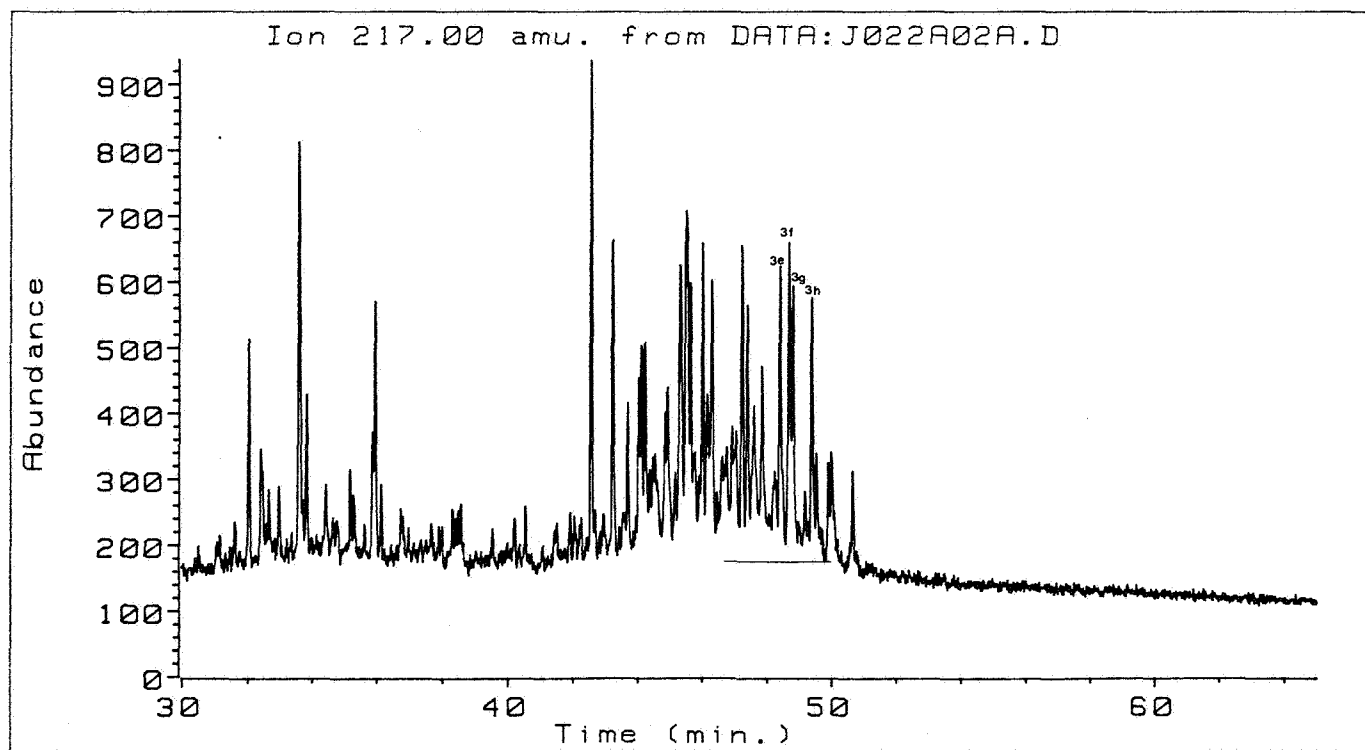
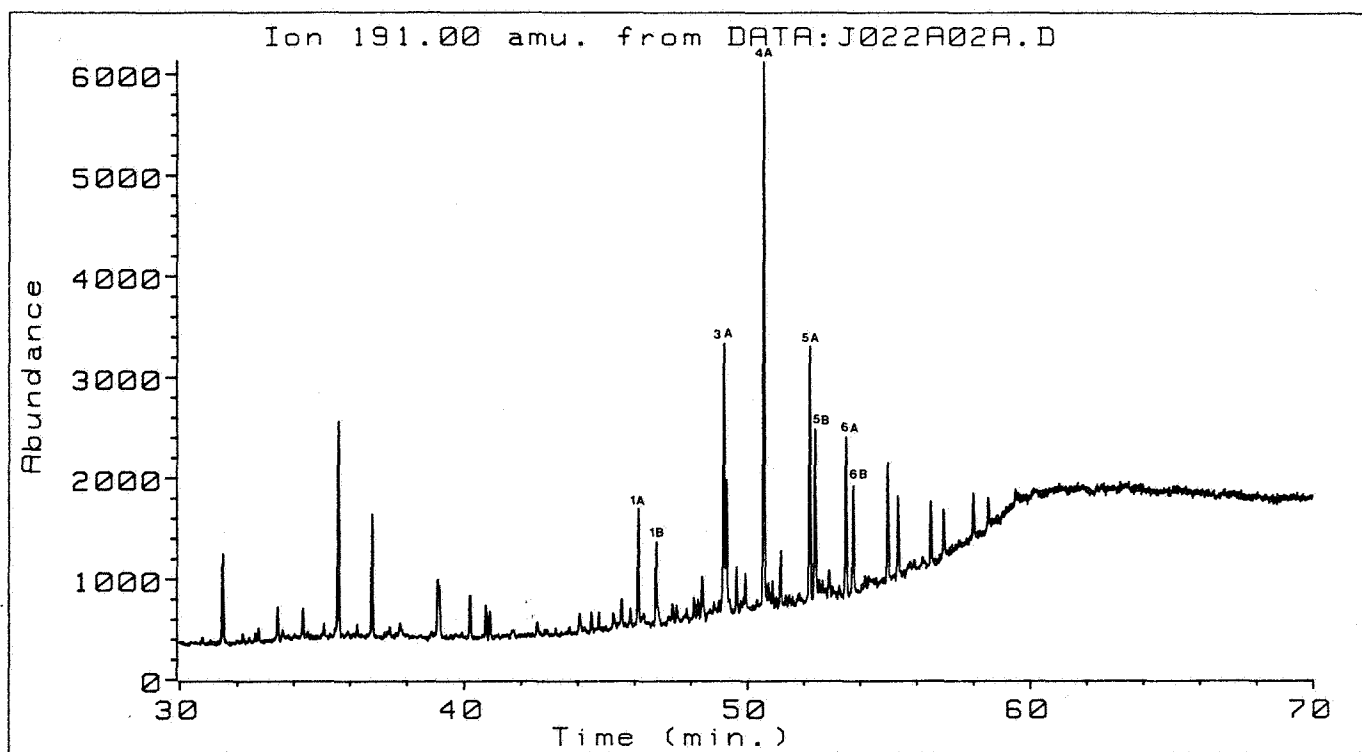
2/12-1

4660 m



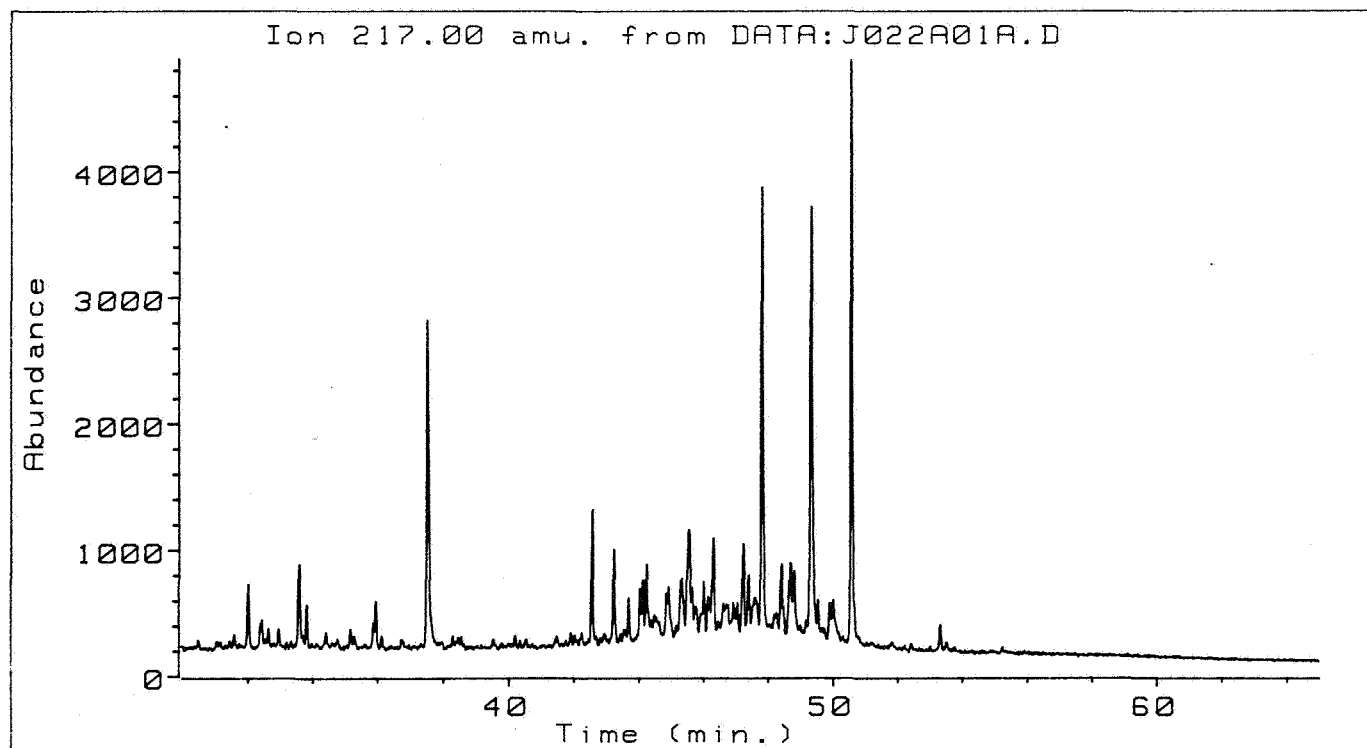
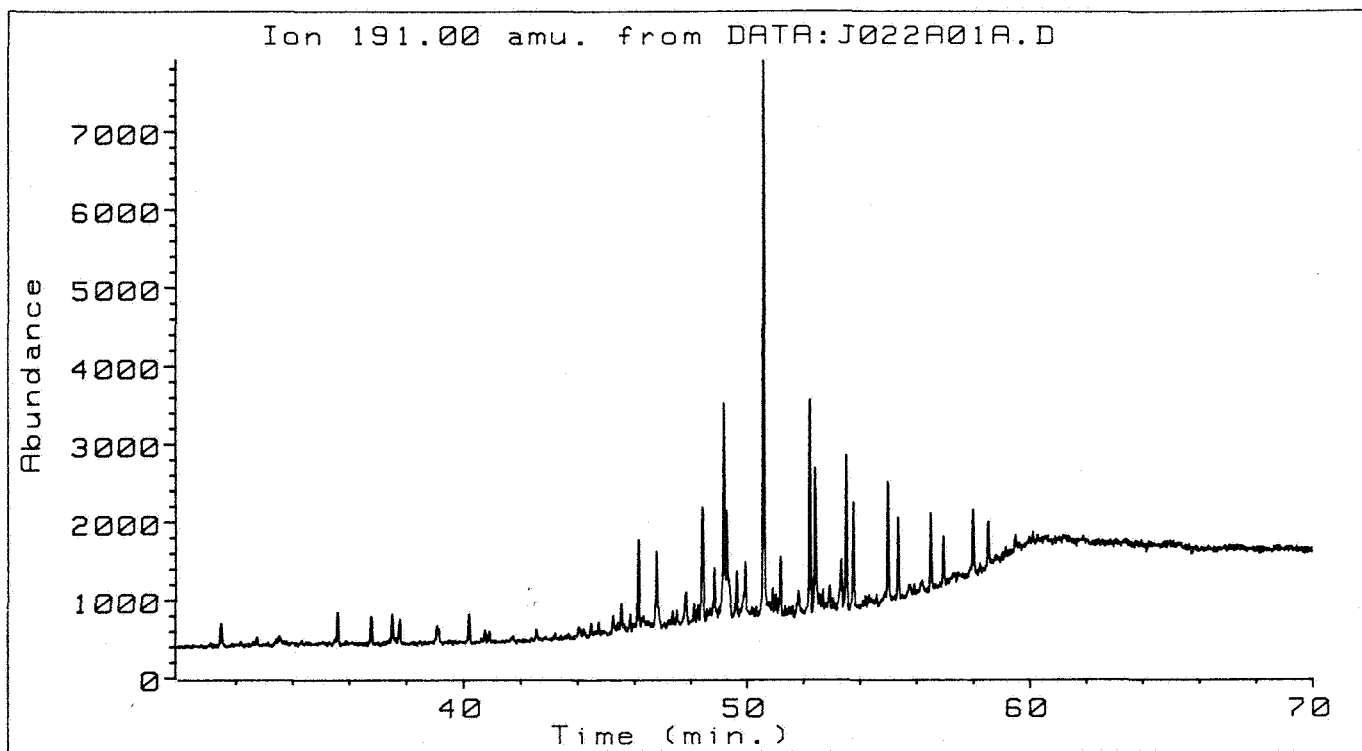
2/12-1

4663.3 m



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4666.2 m



Standard