PRE-CRETACEOUS HYDROCARBON POTENTIAL OF THE NORWEGIAN CENTRAL GRABEN

GEOCHEMICAL ANALYSIS
Well NOCS 2/6-2

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INTRODUCTION

General stratigraphic information for the well is given in the NPD Well Summary Sheet No 11. This data is used for the subdivison of the wells into zones of age, groups and formations.

The following stratigraphy is used (depth RKB):

Lower Cretaceous	3826 - 4118 m
Jurassic	4118 - 4723 m
Lower Jurassic	Absent
Triassic	4723 - 4760 m
Cromer Knoll Group	3826 - 4118 m
Tyne Group	4118 - 4560 m
Mandal Formation	4118 - 4149 m
Farsund Formation	4149 - 4236 m
Haugesund Formation	4236 - 4560 m
Vestland Group	4560 - 4723 m
Bryne Formation	4560 - 4723 m
Zechstein Group	4723 - 4760 m

LITHOLOGY AND TOTAL ORGANIC CARBON CONTENT

Figure 1 shows the variation in TOC over the analysed interval of the well plotted with a generalized litho-stratigraphic column. Only the analysed section of the well is shown in this figure.

Lower Cretaceous (3826 - 4118 m)

Cromer Knoll Group (3826 - 4118 m)

Samples were collected from 4000 m to TD in this well.

Valhall Formation (3851 - 4118 m)

Twelve samples were described in this formation. Six TOC analyses were performed on four different samples. The analysed samples are from 4000 m, 4040 m, 4100 m and 4110 m.

The lithology consists of greyish and brownish claystones. In the bottom sample (from 4110 m) there is a minor amount of a black claystone. This might represent material from the Mandal Fm.

The TOC content of all the analysed samples is poor to fair (0.21 - 0.32 %). The value for the black claystone from 4110 m is 0.32 %. This is extremely low and might be due to difficulties in picking out this material from the dark grey claystone in the same sample.

appears that the formation contains relatively thin limestone beds throughout.

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

Thirty-two samples were described from this formation and seventeen TOC analyses were performed. The samples from the upper part of this formation have a large content of caved material from the Haugesund Fm. (blackish claystone). The TOC content of this claystone is rich (range 2.72 - 3.91 %). The samples from the lower part of this formation are dominated by additives.

The in-situ lithologies of this formation are probably the greyish, brownish and reddish claystones and the sandstones. The claystones considered to be in-situ have a fair to good TOC content (range 0.62 - 1.75 %). The sandstone is probably the dominant in-situ lithology, but the amounts found in the samples were too small for analysis.

<u>Permian</u> (4723 - 4760 m, TD)

Zechstein Group (4723 - 4760 m)

The samples from this formation are dominated by additives and by dark claystones. The claystones are believed to be caved from the formations above. Minor amounts of various evaporites can be seen in the samples. These evaporites are probably the only in-situ lithology found in the samples. This evaporite was not analysed due to small quantities.

ROCK-EVAL ANALYSIS

1. Kerogen Type and Richness

(Hydrogen Index, Oxygen Index and Petroleum Potential)

Lower Cretaceous (3826 - 4118 m)

Valhall Formation (3851 - 4118 m)

Six samples were analysed.

The S1 and S2 peaks of most of the samples from the Valhall Fm. are below the detection limit of the Rock-Eval instrument. Only one hydrogen index could be calculated (from 4100 m) and it is 17. This strongly indicates that the samples are barren of hydrocarbons and that they can only contain type IV kerogen.

Jurassic (4118 - 4723 m)

Tyne Group (4118 - 4560 m)

Mandal Formation (4118 - 4149 m)

Four samples were analysed.

The analysed material is probably entirely caved from the Valhall Fm. The analysed samples are similar to those from the Valhall Fm.

Farsund Formation (4149 - 4236 m)

Eighteen samples were analysed from this formation.

Most of the analysed samples above 4200 m are caved. The caved samples are the brown grey and medium grey to dark grey claystones. The Rock-Eval results for these samples are the same as for the Valhall Fm. samples. Half of the analysed samples are considered to be caved.

The nine samples believed to be in-situ consist of blackish claystones and light grey to medium grey claystones. The blackish claystones have hydrogen indices in the range 216 to 287, indicating kerogen type II/III. They have petroleum potentials in the range 5.0 - 10.8 mg HC/g rock, which is fair to good. The light grey to medium grey claystones have very low hydrogen indices (range 34 - 46) and fairly high oxygen indices (range 69 - 81), indicating kerogen type IV. It appears that the Farsund Fm. contains mostly a dark claystone with a fair to good petroleum potential and kerogen type II/III. Due to the high maturity (see vitrinite chapter) the original samples might have contained kerogen type II. This lithology seems to be interbedded with greyish claystone with poor petroleum potential and kerogen type IV.

Haugesund Formation (4236 - 4560 m)

Forty-six samples were analysed and all samples are believed to be in-situ. All of the analysed samples, except the one from 4270 m, consist of blackish claystone. The one exception is a greyish claystone. The blackish claystones can be subdivided into two zones.

Zone 1. The blackish claystones from 4240 m to 4356 m
Zone 2. The blackish claystones from 4370 m to 4550 m

Zone 1 claystones have hydrogen indices in the range 229 to

283 indicating kerogen type II/III. Due to the high maturity (see vitrinite chapter) the original samples might have contained kerogen type II. The petroleum potential is good for all of these samples (range 6.9 - 11.3 mg HC/g rock).

Zone 2 claystones generally have hydrogen indices below 200 and even below 100. The hydrogen indices range from 58 to 260, with the lowest values just above 4500 m and the highest values spread out throughout the zone. These hydrogen indices indicate kerogen types II/III to IV. The petroleum potentials of these samples are also very variable ranging from 2.3 to 13.4 mg HC/g rock, indicating that they have a fair to good petroleum potential.

The one greyish sample from 4270 m has a hydrogen index of 3 and an oxygen index of 74 indicating type IV kerogen and it has a poor petroleum potential (0.1 mg HC/g rock).

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

This formation consists mostly of sandstone and tuff, but only claystones have been analysed. The blackish claystone samples analysed are believed to be caved. These blackish claystones have analytical results similar to those for the lower part of the Haugesund Fm..

Seventeen samples were analysed, of which ten are believed to be in-situ.

The samples considered to be in-situ are all grey and/or greyish red. The hydrogen indices range from 60 to 313 (although only one sample has a hydrogen index above 200), with the majority of the samples in the range 100 to 200. This latter range indicates kerogen type III. The very low

Tmax values for these samples (see discussion later) indicates that there is something anamalous about the Bryne Fm. claystones.

Permian (4723 - 4760 m, TD)

Zechstein Group (4723 - 4760 m)

The three samples analysed in this section are all believed to be caved. The Rock-Eval results are similar to those for the lower part of the Haugesund Fm..

No data for the Zechstein Group is therefore available.

2. Generation and Migration
(Production Index S1/(S1+S2) and S1/TOC)

The production index data for the Valhall Fm. samples are very unreliable due to the very low S1 and S2 values.

The production index data from the in-situ samples of the Tyne Group seem to fall into two different groups. One in the upper analysed section from about 4160 m to about 4360 m which has production indices ranging from 0.23 to 0.33 mg HC/g rock. The other in the lower analysed section from about 4360 m to about 4560 m which has production indices in the range 0.36 to 0.56 mg HC/g rock. The in-situ samples from the Bryne Fm. have even higher indices ranging 0.48 to 0.77 mg HC/g rock.

The S1/TOC data is approximately 1 for most of the analysed samples except in the Bryne Fm. and the lower part of the Haugesund Fm. where the S1/TOC can be more than 2.

One interpretation of these data is that the upper part of the Tyne Group (4160 m - 4360 m) contains mostly in-situ generated hydrocarbons, while the lower part of the Tyne Group (4360 m - 4560 m) contains both in-situ generated hydrocarbons and some migrated hydrocarbons. The high production index for the lower part of the Tyne Group is difficult to explain if there are not migrated hydrocarbons present. The very high production indices and the high S1/TOC data for the Bryne Fm. can only be explained as being due to migrated hydrocarbons. The high S2 values found might be due to migrated asphaltenes and not due to original kerogen being broken down during the pyrolysis.

3. Maturity (Tmax)

The Tmax data for the Valhall Fm. is unreliable due to the low S2 values. The Tmax of the blackish claystones of the Tyne Group is probably representative, although the values might be depressed somewhat due to migrated hydrocarbons in the lower part of the Tyne Group (4360 m - 4560 m). The in-situ samples of the Bryne Fm. have extremely low Tmax values (below 400^{o} C). These low values are probably due to migrated hydrocarbons.

The analysed section of the Tyne Group (4160 m - 4560 m) has reached oil window maturity based on Tmax values. The true maturity of the Bryne Fm. cannot be assessed on the basis of Tmax data.

EXTRACTION DATA

Jurassic (4118 - 4723 m)

Tyne Group (4118 - 4560 m)

Mandal Formation (4118 - 4149 m)

No extractions were performed.

Farsund Formation (4149 - 4236 m)

Two samples were extracted. For the composition of the samples see table 3e.

The two samples (4200 m and 4230 m) have extractable organic material contents (EOM) of 5583 ppm and 7764 ppm respectively. They have extractable hydrocarbon contents (EHC) of 3833 ppm and 6235 ppm respectively. Based on this both samples must be classified as rich both in EOM and EHC.

Normalized to total organic carbon (TOC) they have values of 295.41 and 289.73 mg EOM/g TOC and 202.82 and 232.66 mg EHC/g TOC respectively. Based on this both samples must be classified as rich both in EOM and EHC.

Both samples have a high content of saturated hydrocarbons and have a low content of non-hydrocarbons.

Haugesund Formation (4236 - 4560 m)

Ten samples were extracted. For the compositions and list of the samples, see table 3e.

The EOM values of all of the samples are rich (range 2420 to 13269 ppm) with the highest EOM values in the zone from 4430 m to 4544 m. The EHC is rich for all the samples, except the sample from 4398 m (range 1538 to 6818 ppm). The sample from 4398 m has a fair EHC (166 ppm). Again the highest values are found in the zone from 4430 m to 4544 m.

The zone from 4430 m to 4544 m has roughly double the content of EHC compared with the zone from 4270 m to 4356 m. The content of saturated hydrocarbons, in particular, is higher for the lower zone. See Table 3b.

Normalized to TOC the EOM is rich for all except two samples (range 211.74 to 290.11 mg EOM/g rock). The two exceptions are the samples from 4270 m and 4398 m which have values of 199.40 mg EOM/g rock and 99.20 mg EOM/g rock respectively, which means that the first sample has a good EOM, while the second has a fair EOM.

The observed data could be interpreted to mean that the samples in the zone from 4430 m to 4544 m contain migrated hydrocarbons, which have increased the amount of hydrocarbons found in the rock, alternatively that this lower zone is more mature and therefore has produced more hydrocarbons.

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

Two samples were extracted (4602 m and 4666 m). For the composition of the samples see Table 3e.

The sample from 4602 m is probably dominated by material caved from the Haugesund Fm..

Both samples have a rich EOM (13104 and 11052 ppm) and rich EHC (6169 and 5657 ppm). The proportion of hydrocarbons is high in both samples as is the content of saturated hydrocarbons.

Normalized to TOC, both the EOM (347.61 and 293.17 mg EOM/g rock) and EHC (163.64 and 150.08 mg HC/g rock) must be classified as rich.

Saturated Hydrocarbons

Jurassic (4118 - 4723 m)

Farsund Formation (4149 - 4236 m), Haugesund Formation (4236 - 4560 m) and Bryne Formation (4560 - 4723 m)

All of the analysed formations are discussed together in the saturated hydrocarbons section, because the saturated hydrocarbon data is very similar for all of the samples in all formations.

The calculated saturated ratios are very similar for all the analysed samples in this well. The CPI ranges from 1.06 to 1.16 which rules out immature kerogen type III as a source for the hydrocarbons. The isoprenoid to n-alkane ratios are moderate indicating that the samples are not immature but neither over-mature. The pristane/phytane ratios range from 0.84 to 1.40 which can probably be taken to indicate a fairly reducing environment of deposition. No significant variation can be seen between the analysed formations, indicating that the same types of saturated hydrocarbons are present throughout the analysed section.

The chromatograms are typical for hydrocarbons generated by mature type II kerogen, with a front-end biased chromatogram decreasing steadily towards the higher molecular weight end. Isoprenoid peaks are visible in all of the chromatograms indicating that the hydrocarbons are not too mature. In some of the samples a peak can be seen immediately after the nC_{15} peak. This is believed to be a contaminant (a phthalate) probably from some mud-additive.

Aromatic Hydrocarbons

Jurassic (4118 - 4723 m)

Farsund Formation (4149 - 4236 m)

The calculated aromatic ratios are fairly similar for both of the samples from this formation. The dibenzothiophene/ phenanthrene ratio is fairly low (0.23 and 0.22) indicating that the sulphur content is low. The MPI1 index is about 0.8 which indicates that the hydrocarbons are at oil window maturity.

The two chromatograms are more similar than they might appear at first sight, because the scale is different for the two chromatograms. Both chromatograms contain a very prominent peak (labelled "A" in figure 4) which is believed to be a contaminant from the drilling mud. The most abundant compounds in both samples seems to be phenanthrenes. Since phenanthrenes are formed by thermal alteration of kerogen, this should indicate that the hydrocarbons in these samples are fairly mature.

The chromatograms have the appearance of mature hydrocarbons generated from type II kerogen.

Haugesund Formation (4236 - 4560 m)

Ten samples were analysed, but two of them contained too little material of the aromatic fraction to give proper results (the samples from 4356 m and 4398 m). Therefore aromatic ratios were only calculated for eight samples.

The three samples from the zone from 4270 m to 4330 m are similar, both in aromatic ratios and in the overall appearance of the chromatograms. The dibenzothiophene/ phenanthrene ratio is similar to the one found in the Farsund Fm. and indicates a low sulphur content. The MPI1 suggests that the hydrocarbons are of oil window maturity. Phenanthrenes and the heavier naphthalenes dominate the chromatograms. They are typical of mature hydrocarbons.

The chromatograms probably represent hydrocarbons generated from kerogen type II.

The zone from 4356 m to 4544 m is more variable than the previous zone. The aromatic ratios are fairly similar within the zone, but could not be calculated for the samples from 4356 m and 4544 m. Most of the ratios are similar to those found in the upper zone, indicating that this lower zone has hydrocarbons of oil window maturity and that they contain relatively little sulphur.

The chromatograms of the samples are somewhat different. The chromatograms of the two upper samples are very poor due to the small amount of material available for analysis and they do not reveal any details about the composition of the aromatic hydrocarbon fraction.

The chromatograms of the samples from 4474 m, 4528 m and 4544 m are fairly similar to those from the upper zone of the Haugesund Fm., although the dimethylnaphthalenes are more prominent in these samples than in the upper zone. This could be a maturation effect but is more likely due to slight variations in the work-up procedure. However, these chromatograms probably represent the same type of hydrocarbons generated from the same type of kerogen as in the upper zone of the Haugesund Fm..

The chromatograms of the samples from 4430 m and 4482 m display peaks that are identical and proportional with the other chromatograms of the Haugesund Formation. However, they also contain a large unresolved hump which increases with increasing retention time. This probably represents residual/migrated oil. See discussion in thermal extraction/pyrolysis gas - chromatography sections.

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

The calculated aromatic ratios are similar to the other ones for this well although some of the ratios could not be calculated. The samples are lean in sulphur compounds as are the other samples from this well.

The first of the samples (from 4602 m) is believed to contain caved material (see discussion in previous sections). The chromatogram for this sample is very similar to the ones from 4430 m and 4482 m and it is believed to have the same hydrocarbon content as these samples (see discussion above).

The second of the samples (from 4666 m) is not very different from the first sample, but seems to contain less hydrocarbons in the form of identifiable peaks than does the first sample. Large amounts of the hydrocarbons are also present as a general "hump" in the chromatogram. This "hump" probably represents residual/migrated hydrocarbons. See discussion in thermal extraction/pyrolysis gas -

chromatography sections.

THERMAL EXTRACTION - GAS CHROMATOGRAPHY

Jurassic (4118 - 4723 m)

Tyne Group (4118 - 4560 m)

Mandal Formation (4118 - 4149 m)

One sample from this formation was analysed (from 4130 m). It consists of grey black to brown black claystone, although it is probably mixed with material caved from the Valhall Fm. and it is probably more representative of the Valhall Fm. than the Mandal Fm.

The chromatogram shows that the sample is virtually barren of free hydrocarbons.

Farsund Formation (4149 - 4236 m)

Six samples were analysed. Of these samples the one from 4200 m of a medium grey to dark grey claystone, probably represents material caved from the Valhall Fm.. This sample is virtually barren of free hydrocarbons.

The five samples thought to be in-situ have fairly similar chromatograms, although some variation can be found. The chromatogram of the first sample (4160 m) is very similar to the chromatogram of diesel (see Figure 6). However, the variation in the chromatograms for the samples of this formation is much greater than would be expected for a distilled product like diesel. The most likely explanation is that the samples contain mostly in-situ generated hydrocarbons. The reason for the lack of the material below C_{13} is probably that these hydrocarbons have escaped during the long storage period of the samples (seven years).

Haugesund Formation (4236 - 4560 m)

Twenty-seven samples have been analysed. The analysed samples might be divided into two zones, the upper zone from 4250 m to 4356 m and the lower zone from 4374 m to 4550 m.

The samples from the first zone generally have a unimodal distribution of hydrocarbons. The maximum in the samples seems to shift from around C_{15} to around C_{20}. As for the samples from the Farsund Fm., the lighter hydrocarbons have probably been lost during storage, and the chromatograms therefore represent a normal distribution of in-situ generated hydrocarbons. Some of the samples might also contain migrated/residual oil which is seen as an unresolved hump at the higher molecular weight end of some of the chromatograms.

The samples from the second zone are not markedly different from the samples from the first zone, but they tend to have a bimodal distribution of hydrocarbons, and some of them also clearly contain residual oil (migrated into the rock). An extreme example of both a bimodal distribution and of a sample containing residual oil can be seen in figure 7. The hydrocarbons in the nC_{20} - nC_{30} range believed to represent residual oil, left by hydrocarbons migrating through the rock. The lighter hydrocarbons, around nC_{13} are believed to be in-situ generated hydrocarbons.

The upper zone of the Haugesund Fm. (4236 m to about 4360 m) is believed to contain almost only hydrocarbons generated in-situ. If one assumes that the light hydrocarbons have been lost during seven years of storage the composition of the hydrocarbons of the samples would be typically produced by kerogen type II to II/III at close to peak oil generation maturity.

The lower zone of the Haugesund Fm. (about 4360 m to 4560 m) is believed to contain a mixture of in-situ generated hydrocarbons and migrated hydrocarbons of the residual oil type. The in-situ hydrocarbons are difficult to distinguish entirely from the migrated hydrocarbons. It therefore appears that the Haugesund Fm. (although itself a source rock), acts as a cap-rock, with the lower part impregnated with migrated hydrocarbons.

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

Seven samples have been analysed. The two upper samples (from 4580 m and 4602 m) are believed to contain caved material. The chromatograms are similar to those of the Haugesund Fm.. (Compare the chromatograms for 4540 m and for 4580 m for example). The sample from 4616 m is believed to be in-situ. The chromatogram of this sample is typical of residual oil, with a maximum at around nC_{22}. The front end of this chromatogram is dominated by a contaminant (between about 23 and 30 minutes retention time). The sample from 4656 m displays the same peak of residual oil around nC_{22} and the same contaminant, but it also contains some lighter hydrocarbons, and the distribution of hydrocarbons is clearly bimodal. The source of these lighter hydrocarbons might be caved material from the Haugesund Fm.. The sample from 4670 m is probably very strongly influenced by caved material from the Haugesund Fm. (see also discussion in previous sections). The front end of the chromatogram is dominated by the same contaminant as the other samples from the Bryne Fm.. The residual oil peak can be seen, but there also seems to be a second peak around nC_{30}/nC_{31}. This peak might represent a contaminant or heavy residual oil. The light hydrocarbons in the front end (around nC_{15}) are probably due to influence from caved material from the

Haugesund Fm.. The sample of grey red claystone from 4714 m contains the same contaminant as the other Bryne Fm. samples. It is also typical for the residual oils of the Bryne Fm. although it can not be excluded that the light hydrocarbons might be due to influence from caved material from the Haugesund Fm.. The chromatogram of the sample from the medium to dark grey claystone from the same depth is fairly similar, except that it contains more of the light hydrocarbons. This sample is also believed to be heavily influenced by caved material from the Haugesund Fm..

It appears that the hydrocarbon content of the lower part of the Haugesund Fm. and the Bryne Fm. is somewhat similar, in that both contain residual oil, but the Haugesund Fm. samples also contain in-situ generated lighter hydrocarbons.

<u>Permian</u> (4723 - 4760 m, TD)

Zechstein Group (4723 - 4760 m)

One sample was analysed. The sample is believed to contain only caved material (see previous discussions). The chromatogram is very similar to those of the Haugesund Fm. chromatograms of in-situ generated hydrocarbons. This chromatogram does not give any information about the Zechstein Group.

PYROLYSIS - GAS CHROMATOGRAPHY

Jurassic (4118 - 4723 m)

Tyne Group (4118 - 4560 m)

Mandal Formation (4118 - 4149 m)

One sample was analysed (from 4130 m). The analysed material is caved from the Valhall Fm. and the results are therefore applicable to the Valhall Fm. and not to the Mandal Fm.. The chromatogram shows a sample that is virtually barren.

Farsund Formation (4149 - 4236 m)

Six samples were analysed. The medium to dark grey sample from 4200 m is believed to be caved and the chromatogram shows a sample that is virtually barren. The other five chromatograms are similar and are typical of samples containing kerogen type II/III. There is, however, one abnormal feature in all of the pyrograms. At the higher molecular weight end of the pyrograms, (nC_{20} - nC_{30} range), the doublets are completely dominated by n-alkanes. These hydrocarbons are not believed to be cracking products of the kerogen of the samples, but are believed to come from asphaltenes or residual oil in the samples (see figure 8).

Haugesund Formation (4236 - 4560 m)

Twenty-seven samples were analysed. All of these samples are believed to be in-situ. The samples from the upper zone (from 4236 m to 4360 m) have very similar pyrograms and they are also similar to the pyrograms for the Farsund Fm.

samples. Figure 8 is a typical pyrogram for the upper zone of the Haugesund Fm.. The upper zone of the Haugesund Fm. contains kerogen type II/III but also some asphaltene and/or residual oil that comes from hydrocarbons that have probably migrated through the rock.

The samples from the lower zone of the Haugesund Fm. (4360 m to 4560 m) are somewhat different from those of the upper zone. In the nC_{20} - nC_{30} range, pyrograms are dominated by n-alkanes, which indicates asphaltenes/residual oil, probably due to migrated hydrocarbons. Otherwise the pyrograms are typical of samples containing kerogen type III. See figure 9 for a typical pyrogram of the lower zone.

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

Eight samples were analysed. The two samples from 4580 m and 4602 m are believed to be caved and the pyrograms are similar to those of the Haugesund Fm.. The two samples from 4616 m and 4656 m are believed to be in-situ. The pyrograms of these samples are similar and display a relatively large amount of asphaltenes/residual oil. The amount of hydrocarbons produced by pyrolysis of the kerogen of these samples is small. The samples probably contain smaller amounts of kerogen type III, but the total yield from this kerogen is small. See Figure 10 for a typical example.

The samples from 4670 m and 4714 m are probably strongly affected by caved material from the Haugesund Fm..

Permian (4723 - 4760 m, TD)

Zechstein Group (4723 - 4760 m)

One sample was analysed. It represents caved material.

VITRINITE REFLECTANCE ANALYSIS

Reflectance data can be found in Table 6. A reflectance/depth profile appears in Figure 11.

Twenty-five samples were analysed over the interval 940 m to 4714 m. Thirteen samples were analysed from the Tertiary section of the well. Lithologies are shales and coals and between 940 m and 2820 m, all samples contain moderate to high proportions of vitrinite to inertinite and generally low total amounts of phytoclasts. Reflectance values increase gently and regularly in this region of the profile, rising from 0.32 % at 940 m to 0.46 % at 2820 m. The claystone at 2300 m and the coal at 2480 m have depressed reflectances due to bitumen staining. Spores are present in almost all of these samples and both yellow and yellow-orange spore fluorescence colours are found. The sample from 2820 m, however, contains only yellow-orange spores, indicating an increase in maturity. The lowermost Tertiary sample (3000 m), again, has a claystone lithology but is very poor in organic matter and contains only a trace of vitrinite. A reflectance value of 0.47% was obtained from only 3 readings but it appears to be reliable as it fits well with the preceding gradient and also agrees with the yellow-orange and light orange fluorescing spores identified in this sample.

Six samples were analysed from the Cretaceous section of the well. The uppermost Cretaceous sample (3170 m) has a partly oxidized claystone lithology and also contains coal additive. Only a trace of phytoclasts are present, most of which are inertinite. Eleven vitrinite particles were located and form two distinct reflectance populations. The lower reflecting population (0.39 %, 6 readings) is almost certainly caved from the Tertiary, whereas the higher reflecting population (0.58 %, 4 readings) represents in-situ vitrinite but probably has an elevated reflectance due to the oxidized state of the lithology. The following two Cretaceous samples (3340 m and 3500 m) have pure chalk lithologies and are barren of organic matter. The two samples below this (3670 m and 4020 m) are mainly chalk but contain a trace amount of claystone. In the upper sample a reflectance value of 0.42 % was obtained from 5 readings, indicating that the claystone is caved. The trace of claystone in the lower sample is very calcareous and contains no vitrinite. The lowermost Cretaceous sample (4110 m) has a mixed calcareous claystone and marl lithology which is virtually barren of organic matter. Four vitrinites were located and these give an average reflectance of 0.79 %. The sample is virtually barren of fluorescing organic matter and no spores were detected.

Six samples were analysed from the Jurassic section of the well. The uppermost Jurassic sample has a calcareous claystone and limestone lithology which is virtually barren of organic matter. However, there is also a trace of organic rich claystone which contains moderate staining and a low amount of phytoclasts. A reflectance value of 0.82 % was obtained from 24 readings on the organic rich lithology. No vitrinite was located in the calcareous lithologies. In U.V. light one moderate orange spore was identified, indicating a slightly lower maturity equivalent to 0.6 % to 0.7 % Ro.

Three samples were analysed from the Haugesund Fm. The upper sample (4300 m) has a silty claystone lithology and moderate to high staining and liptinitic wisps and laminae. There is a moderate amount of phytoclasts which are largely inertinite. A reflectance value of 0.81 % was obtained from 16 readings. Much low-reflecting vitrinite (0.35 % - 0.5 % Ro) is also present. In U.V. light a large amount of fluorescing, hydrocarbon-rich fluid passes out of hair-line cracks in the rock surface. In addition, a high amount of fluorescing organic matter is present, mainly in the form of bituminite and semi-degraded material. Many partly degraded tasmanites algae are present and it appears that most of the semi-degraded material is of algal origin. No spores were identified in this sample. The next Haugesund sample (4398 m), again, has a silty claystone lithology but contains a high amount of very fine grained pyrite. Some of the cuttings have been turbodrilled. Bitumen staining is high and only a trace of phytoclasts are present, most of which are inertinite. A reflectance value of 0.84 % was obtained from 15 readings. In U.V. light viewing of the sample is made difficult by the large amount of yellow-green fluorescing liquid which pours from the cuttings. It is possible that this liquid is an additive as it appears to come mainly from turbodrilled cuttings. Some orange, semi-structured, organic matter is visible (possibly semi-degraded tasmanites algae) but no spores were found. The lowermost Haugesund Fm. sample (4498 m) is completely turbodrilled and also contains coal additive. Bitumen staining is high and a trace of phytoclasts are present. Six vitrinites were located and these give an average reflectance of 0.96 %. A trace of very dull reddish-orange fluorescence is present. This comes from liptodetrinite and semi-amorphous organic matter. Fluorescing fluid is, again, expelled from the cuttings but not as strongly as in the previous sample. Again, no spores were located.

Two samples were analysed from the Bryne Fm. The upper sample (4616 m) has a claystone and calcareous claystone lithology which is entirely turbodrilled. Organic matter is virtually barren but eleven vitrinites were located and these give an average reflectance of 0.96 %. In U.V. light a trace of dark reddish fluorescing organic matter is present and, again, fluorescing liquid passes from the cuttings. The lowermost sample from the Bryne Fm. (4714 m) has an organic rich claystone lithology and only a few of the cuttings are turbodrilled. Bitumen staining and liptinitic wisps are high but only a trace of phytoclasts are present. Vitrinites are small but generally have good surfaces and an average reflectance of 0.98 % was obtained from 27 readings. A high amount of dull fluorescing, reddish-orange bituminite and semi-amorphous organic matter is present. A small amount of fluorescing liquid passes from the cuttings and, again, no spores were identified.

To summarize the reflectance gradient for the well, a very smooth gentle increase in reflectance is seen over the interval 940 m to 3000 m and data is of good quality. The Cretaceous section of the well, on the other hand gives very poor data due to the absence of in-situ vitrinite. The lowermost Cretaceous sample, although organic lean, does appear to contain some in-situ vitrinite and gives a value of 0.79 %, indicating that maturity has risen from moderately mature to mature over the Cretaceous interval. Data for the Jurassic section of the well is generally of good quality, despite the turbodrilling between 4390 m and 4620 m. The data points show a more rapid increase in reflectance than in the upper section of the well, with values rising from approximately 0.8 % at 4150 m to 1 % at approximately 4700 m. The well is immature from the top of the analysed section down to a depth of approximately 2000 m, moderately mature from 2000 m to approximately 3450 m and mature from 3450 m to the bottom of the analysed section. Peak oil maturity is at approximately 4400 m.

VISUAL KEROGEN COMPOSITION

Twenty samples from this well were examined in transmitted light. The samples range from 4190 m (Farsund Fm.) to 4740 m (Zechstein). All of the samples are shale/claystone and most are grey-black or brown-black with some grey-red towards the base.

The data is plotted in Figure 12.

Two samples of grey-black, brown-black claystone from the Farsund Fm. were analysed. Both samples appear to be completely dominated by vitrinite (90 %, vitrodetrinite and amorphinite V) with only small amounts of liptinite (5 %, detrital and spore/pollen material) and inertinite (5 %, inertodetrinite). The samples appear to be very dark although an SCI of approximately 6 is observed (early oil window maturity).

Fourteen samples from the Haugesund Fm. were examined. In these samples, vitrinite is dominant throughout, although less so in the middle of the sequence. The vitrinite component in this section ranges from 60 % (4430 m and 4498 m) to 90 % (4260 m and 4550 m) and is mainly amorphous and detrital. The inertinite component is secondary and includes inertodetrinite throughout with some semi-fusinite recognizable. The inertinite content ranges from 5 % (4260 m) to 40 % (4498 m). Liptinite is minor throughout (trace to 10 %) and is mainly liptodetrinite with some spore/pollen material. In several samples the liptinite component occurs in aggregates. There is very little fluorescence observed and the sampled appear dark. It is possible that maturation or drilling affects have reduced the amount of recognizable liptinite material. Spore colour indices are very variable (everything from 5 to 8 observed). It is not clear if this is due to reworking or drilling artefacts. It appears that the whole formation is within the oil window.

Three samples from the Bryne Fm. were analysed (4616 m, 4670 m and 4714 m). The sample from 4714 m is a grey-red claystone and the kerogen extracted was too sparse for a confident compositional estimate. Vitrinite dominates in the remaining two samples (90% in 4616 m and 70 % in 4670 m). The vitrinite is both detrital and amorphous. The inertinite content (10 % in 4616 m and 30 % in 4670 m) contains both inertodetrinite and semi-fusinite. Only traces of liptodetrinite were observed. No estimate of SCI level was possible for this section.

The one sample from the Zechstein (4740 m) is a medium grey to dark grey claystone. It is difficult to give a precise composition for this sample but it appears to be dominated by vitrinite (60 %, vitrodetrinite and amorphinite V) with 30 % inertinite (semi-fusinite and inertodetrinite). The liptinite content is 10 %, mainly as liptodetrinite but also possibly resinite (the sample contains some amorphous, flaky, slightly fluorescent lumps which may be vitrinite or resinite). It was not possible to establish a SCI value for this sample.

GAS CHROMATOGRAPHY - MASS SPECTROMETRY

Five samples, one from the Mandal Fm.,three from the Haugesund Fm. and one from the Bryne Fm., were analysed by GC - MS.

Saturated Hydrocarbons

Terpanes

The M/Z 163 fragmentograms show only background noise, except for the sample from 4300 m, which clearly shows the steranes and triterpanes. The M/Z 177 fragmentograms only show the C_{29} $\alpha\beta$ hopane peak, except for the sample from 4300 m, which shows a complete pattern of steranes and triterpanes. The M/Z 191 fragmentograms show the tricyclic terpanes as minor components in all samples, compared to the pentacyclic compounds. The pentacyclic compounds show some variation between the different samples. In the Mandal Fm. sample the C_{30} $\alpha\beta$ hopane is the largest peak and there is approximately equal abundance of C_{29} $\alpha\beta$ hopane and the C_{31} $\alpha\beta$ hopanes. Peak x is also quite prominent in this sample. The Haugesund Fm. samples show some variation, especially in the relative intensity of the C_{29} $\alpha\beta$ hopane. This is the largest peak in the sample from 4430 m, whilst the samples from 4300 m and 4520 m show this as a minor peak. In these two samples the peak x has a similar relative intensity compared to C_{29} $\alpha\beta$ hopane, as in the Mandal Fm. sample, whilst it is not identified for the sample from 4430 m. In the Bryne Fm. sample the C_{29} $\alpha\beta$ hopane and C_{30} $\alpha\beta$ hopane peaks are of approximately equal height. This sample shows a large peak where the C_{30} 22R $\alpha\beta$ hopane would elute. This is probably gammacerane which coelutes with C_{30} 22R $\alpha\beta$ hopane. The presence of gammacerane indicates hydrocarbons generated from a lacustrine environment. The M/Z 205 fragmentograms mainly show the doublet from the C_{31} $\alpha\beta$ hopane. Again, the Bryne Fm. sample shows a strange distribution, with the second peak in the doublet, i.e. C_{31} $\alpha\beta$ hopane. It is presently not known why such a strange pattern is seen. Of the fragmentograms of the molecular ions, the M/Z 370 fragmentograms show the two peaks for 17 α trisnorhopane and 18α trisnorneohopane for most samples, whilst the 25,28,30 trisnorhopane is also found for the sample from 4430 m. The M/Z 384 fragmentograms show mainly background material whilst the M/Z 398 fragmentograms show some variations. The samples from the Mandal Fm., 4300 m in the Haugesund Fm. and the Bryne Fm. samples, show the C_{29} $\alpha\beta$ hopane and C_{30} $\alpha\beta$ hopane peaks. The two remaining samples from the Haugesund Fm. show these two peaks together with another peak eluting in front of the C_{29} $\alpha\beta$ hopane peak. It must be another C_{29} triterpane, but it is not identified. The rest of the molecular ion fragmentograms verify what has been discussed above.

Steranes

The M/Z 149 fragmentograms show only one large peak for some of the samples, whilst the Haugesund Fm. samples from 4300 m and 4430 m also show the steranes, with the C_{27} rearranged steranes as the largest peaks. The M/Z 189 fragmentograms show the rearranged steranes, especially the C_{27} components, as the major peaks. This is verified in the M/Z 259 fragmentograms. The M/Z 217 and M/Z 218 fragmentograms show a strange pattern where the Haugesund Fm. samples have a large abundance of C_{29} regular steranes. This indicates an input of terrestrial matter in these samples. The fragmentograms of the molecular ions verify what has been discussed above, especially the large abundance of the C_{29} regular steranes in the Haugesund Fm. samples.

Aromatic Hydrocarbons

Alkyl Benzenes

The M/Z 106 fragmentograms for the C_2 alkyl benzenes show the typical series of doublets for all five samples. The greatest difference between the samples is the relative abundance of the single peak with a retention time of approximately 41 minutes. This decreases with increasing depth for the Mandal and Haugesund Fm. samples, then increases again for the Bryne Fm. samples. The M/Z 134 fragmentograms for the C_4 alkyl benzenes show only a few distinct peaks, whilst the background is prominent. Further discussion is therefore not undertaken.

Naphthalenes

The M/Z 142 fragmentograms show that the methyl naphthalenes are affected by evaporation in almost all of the samples, whilst the M/Z 156 fragmentograms show some variation for the five samples. This is mainly in the relative intensity of the 2,6 + 2,7 dimethyl naphthalene peak versus the 1,4 + 2,3 + 1,5 dimethyl naphthalene peak. The former is the smallest in the Mandal Fm. sample and the Bryne Fm. sample, whilst they have approximately equal peak height in the Haugesund Fm. samples. This variation might be due to severe evaporation in the Mandal Fm. and Bryne Fm. samples. The M/Z 170 fragmentograms show only minor variation for the five samples.

Phenanthrenes

The M/Z 178 fragmentograms only show the single peak for phenanthrene, whilst the M/Z 192 fragmentograms show the two doublets for methyl phenanthrenes. The 9+1 methyl phenanthrene doublet is the largest for all five samples. The M/Z 206 and M/Z 220 fragmentograms for C_2 and C_3 substituted phenanthrenes respectively show only minor variations for the five samples.

Dibenzothiophenes

The M/Z 198 fragmentograms, representing methyl dibenzothiophenes, show that the 4 methyl dibenzothiophene is the largest peak and 1 methyl dibenzothiophene is the smallest peak, typical for well mature samples. The five samples have almost identical patterns. The M/Z 212 fragmentograms show the usual pattern for C_2 dibenzothiophenes in well mature samples. There are only minor variations between the five samples.

Aromatic Steranes

In the M/Z 231 fragmentograms the C_{20} and C_{21} peaks are the largest peaks in all five samples, clearly indicating high maturity. There is clearly a variation in the relative abundance of the C_{26} - C_{28} triaromatic steranes compared to the C_{20} - C_{21} triaromatic steranes, for the five samples. There is a far lower abundance of the C_{26} - C_{28} components in the sample from 4528 m in the Haugesund Fm. and the Bryne Fm. samples, than in the other samples. This probably represents the increase in maturity for these samples compared to the Mandal Fm. sample. The ratio of low molecular weight components to high molecular components is far larger for the triaromatic steranes than for the monoaromatic steranes in these samples.

CONCLUSIONS

1. Source Rock Potential

Lower Cretaceous (3826 - 4118 m)

Valhall Formation (3851 - 4118 m)

The Valhall Formation does not seem to have any source rock potential.

Jurassic (4118 - 4723 m)

Tyne Group (4118 - 4560 m)

Mandal Formation (4118 - 4149 m)

No in-situ samples from the Mandal Fm. were analysed, as caving was very prominent in this part of the well. No interpretation can therefore be given about the source rock potential of this formation. It is, however, possible that material from the Mandal Fm. can have been mixed into the material from the Farsund Fm. and Haugesund Fm. and thereby affected the hydrocarbon potential of these formations.

Farsund Formation (4149 - 4236 m)

This formation seems to have a rich potential for generation of hydrocarbons. The kerogen is believed to be of type II/III. The formation is probably mostly gas prone, although it is also believed to be capable of generating some oil.

The presence of migrated oil might have led to some over estimation of the hydrocarbon potential of this formation.

Haugesund Formation (4236 - 4560 m)

The upper zone of this formation (down to about 4360 m) seems to have a rich potential for generation of hydrocarbons. The kerogen is very similar to that of the Farsund Fm. The zone is probably mostly gas prone, although it is also believed that it can generate hydrocarbons in the form of oil.

For the lower zone of this formation (from about 4360 m), it is difficult to estimate the potential for generation of hydrocarbons due to the content of migrated hydrocarbons. The kerogen is believed to be mostly of type III and the zone is gas prone.

The Haugesund Fm. is considered to have a rich potential for hydrocarbon generation. However, it could be that the potential for hydrocarbon generation has been over estimated due to the presence of migrated oil.

Vestland Group (4560 - 4723 m)

Bryne Formation (4560 - 4723 m)

This formation probably has a very poor potential for hydrocarbon generation. This conclusion is mainly derived from the pyrograms of the samples believed to be in-situ. The other analysed samples are highly obscured by migrated hydrocarbons.

Permian (4723 - 4760 m, TD)

Zechstein Group (4723 - 4760 m)

No analyses on in-situ material could be performed. No information about this group has been derived.

2. Generation and Migration

Hydrocarbons seems to have migrated into the Haugesund Fm. (and possibly into the Farsund Fm). These hydrocarbons are mostly found as residual oil in the lower half of the Haugesund Fm. The original reservoir of these hydrocarbons was probably sandstones in the Vestland Group as seems to be confirmed by the presence of residual oil in the, otherwise barren, red claystones of the Bryne Formation.

3. Maturity

The well seems to become moderately mature at about 2000 m and it is mature from about 3450 m. Peak oil maturity is reached at about 4400 m.

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Figure: 1

Client: VARIOUS

TOC Data for Well NOCS 2/6–2

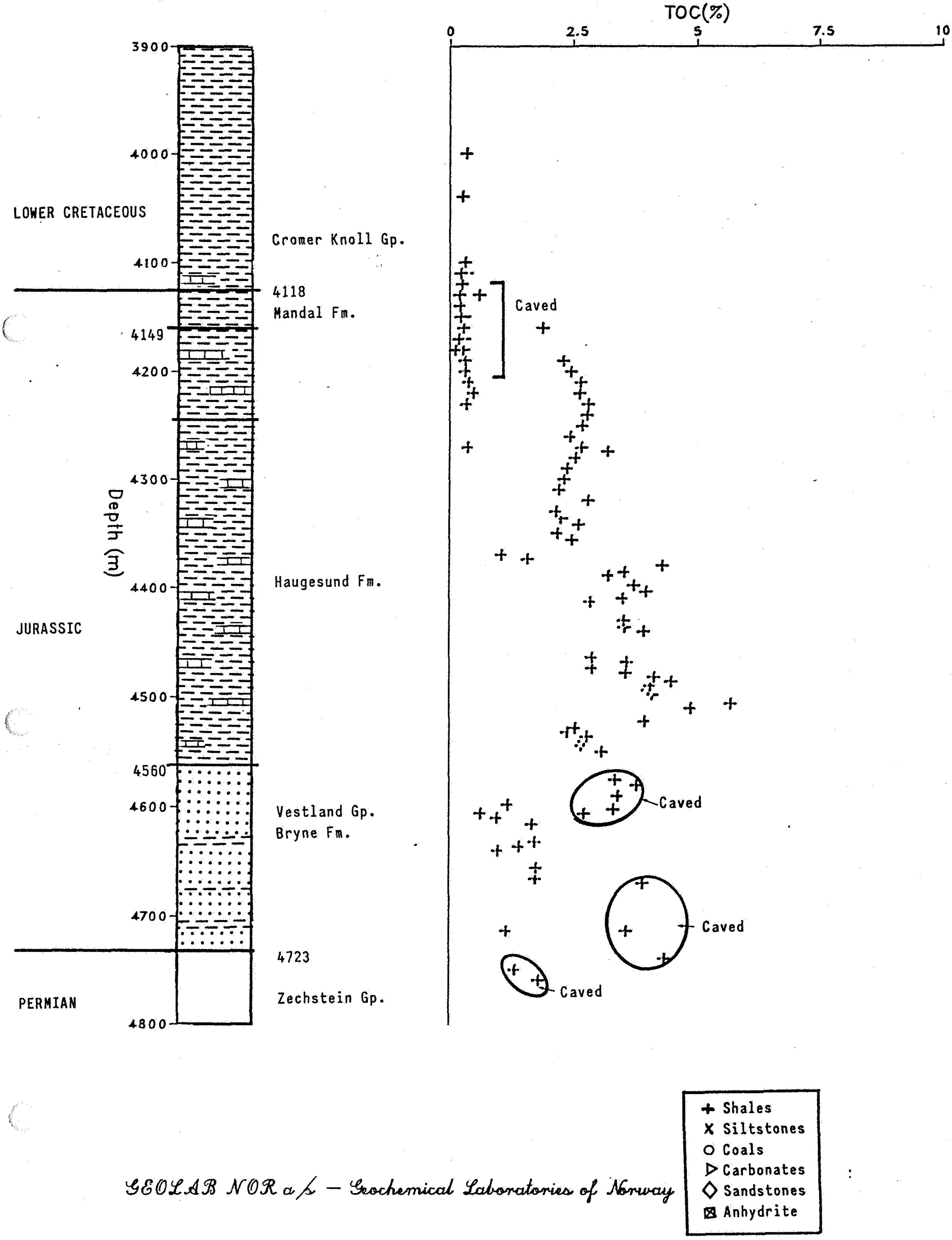

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Figure: 2

Client: VARIOUS GEOLAB NOR
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Production Index Data for Well NOCS 2/6-2

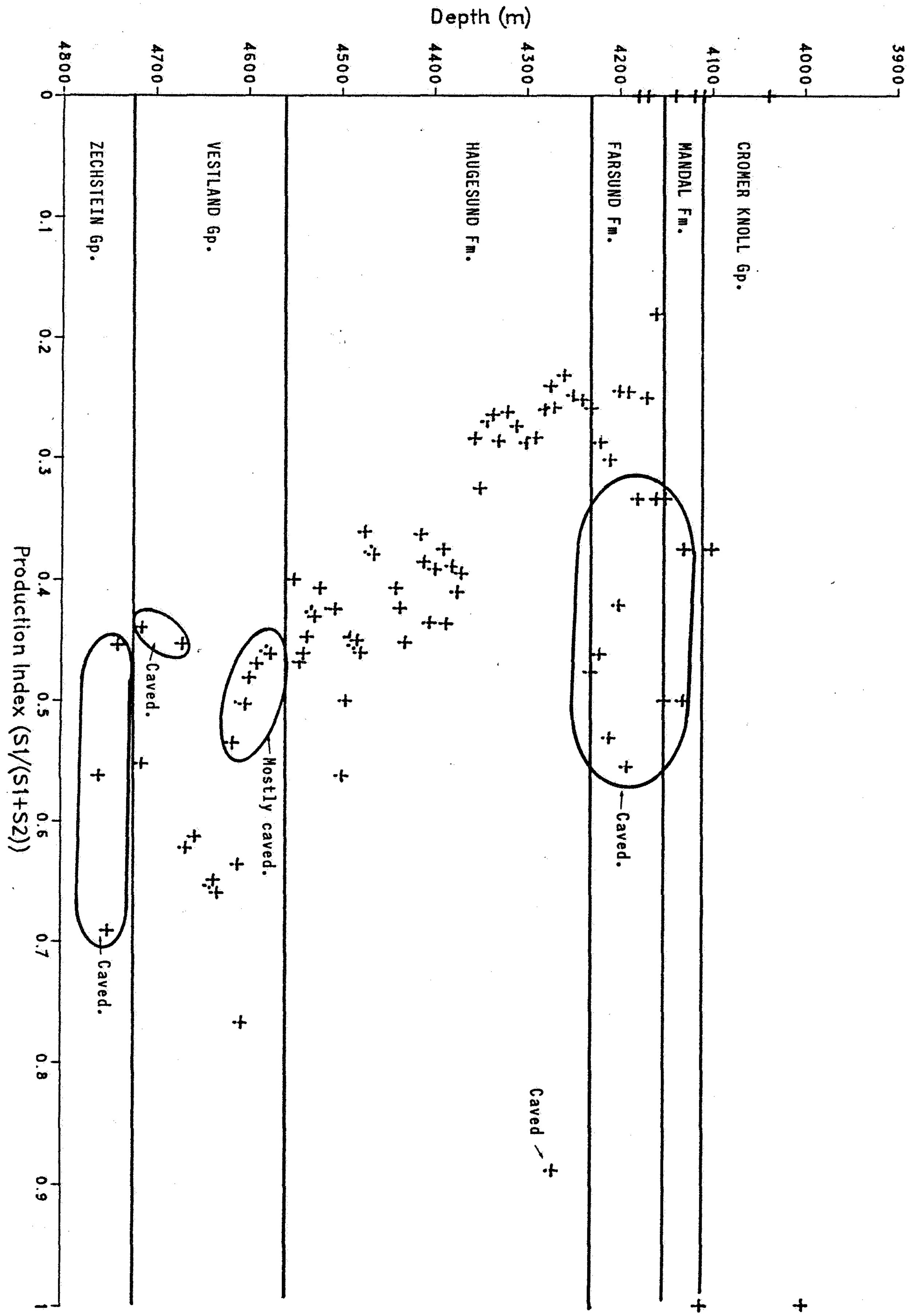

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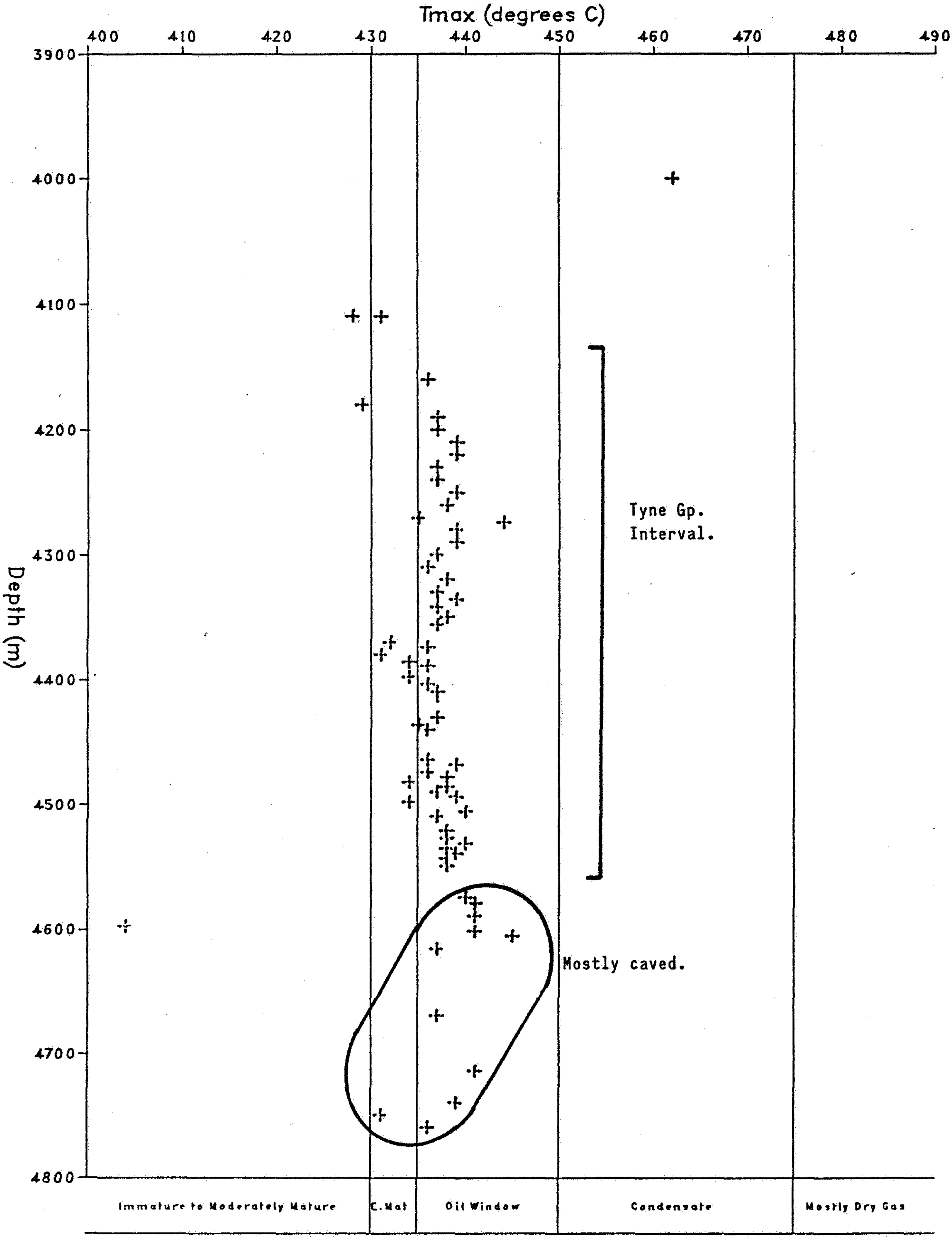
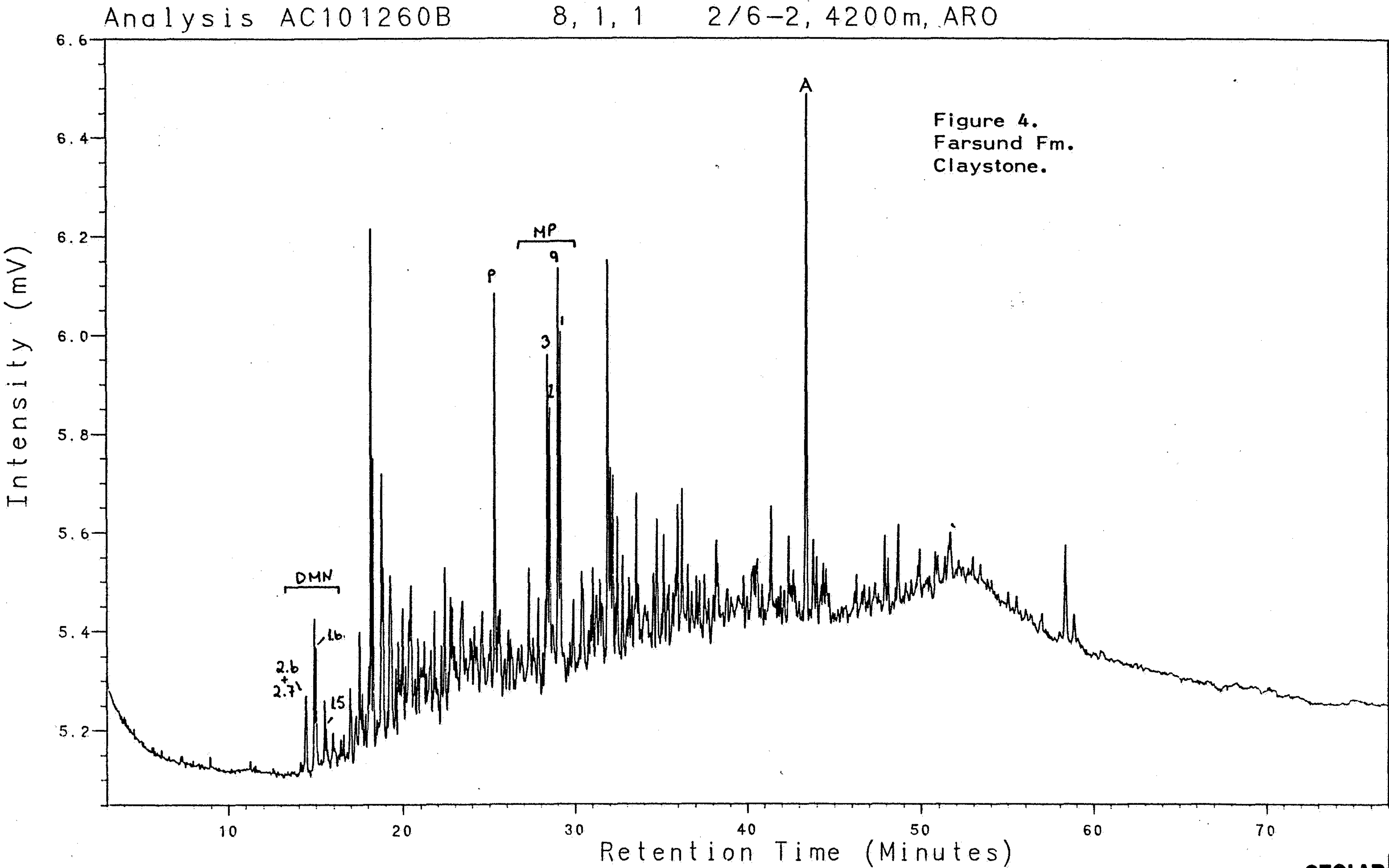
Figure: 3

Client: VARIOUS

Tmax Data for Well NOCS 2/6–2





NOCS 2/6-2 4160-4200m
AROMATIC GC (FID)
CLS: gy blk, brn blk

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Analysis AC101360B 8, 1, 1 2/6-2, 4528m, ARO

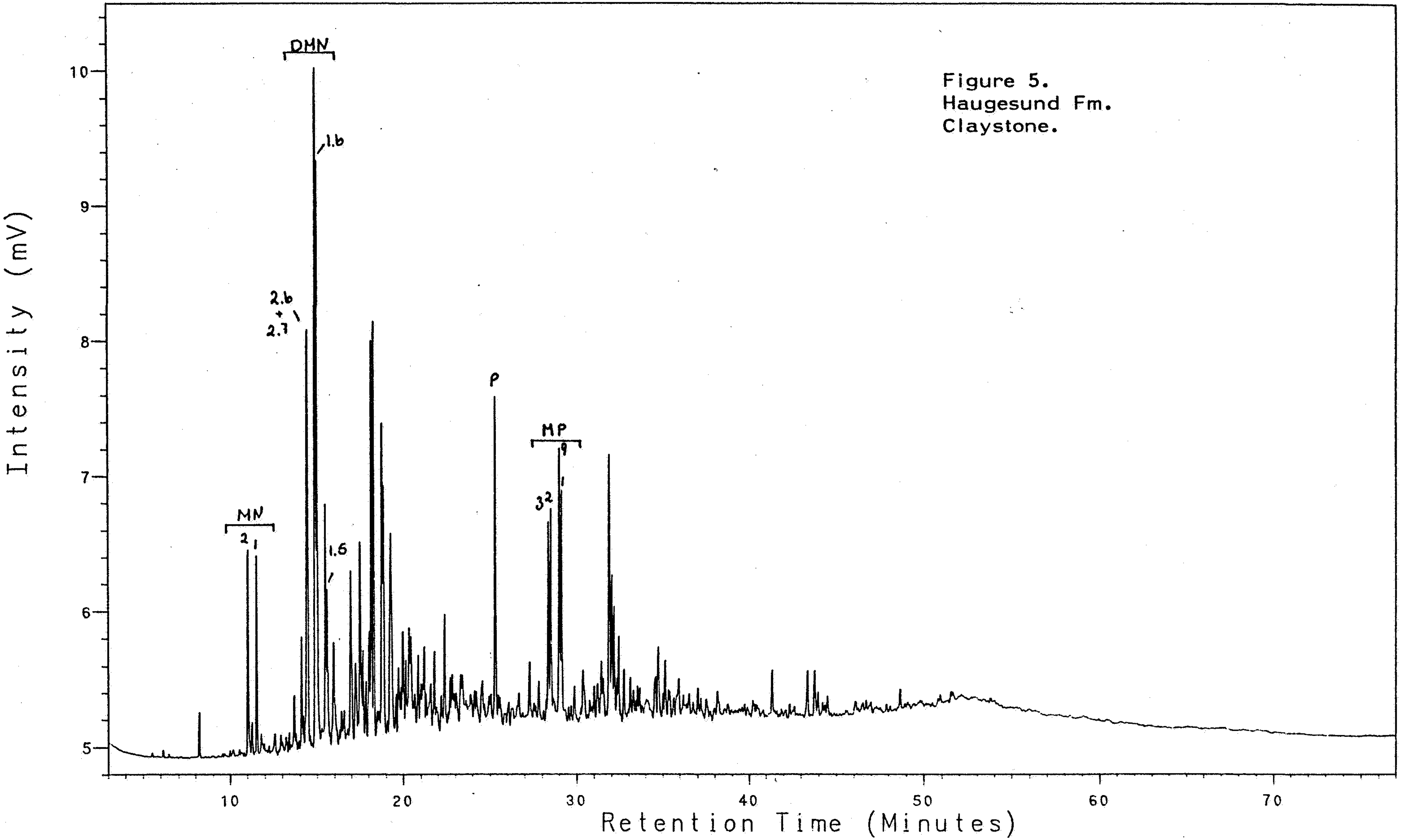

Figure 5.
Haugesund Fm.
Claystone.

NOCS 2/6-2 4506-28m
AROMATIC GC (FID)
CLS: gy blk, brn blk

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Analysis PC100342L   24, 1, 1   2/6-2, 4160m, S1

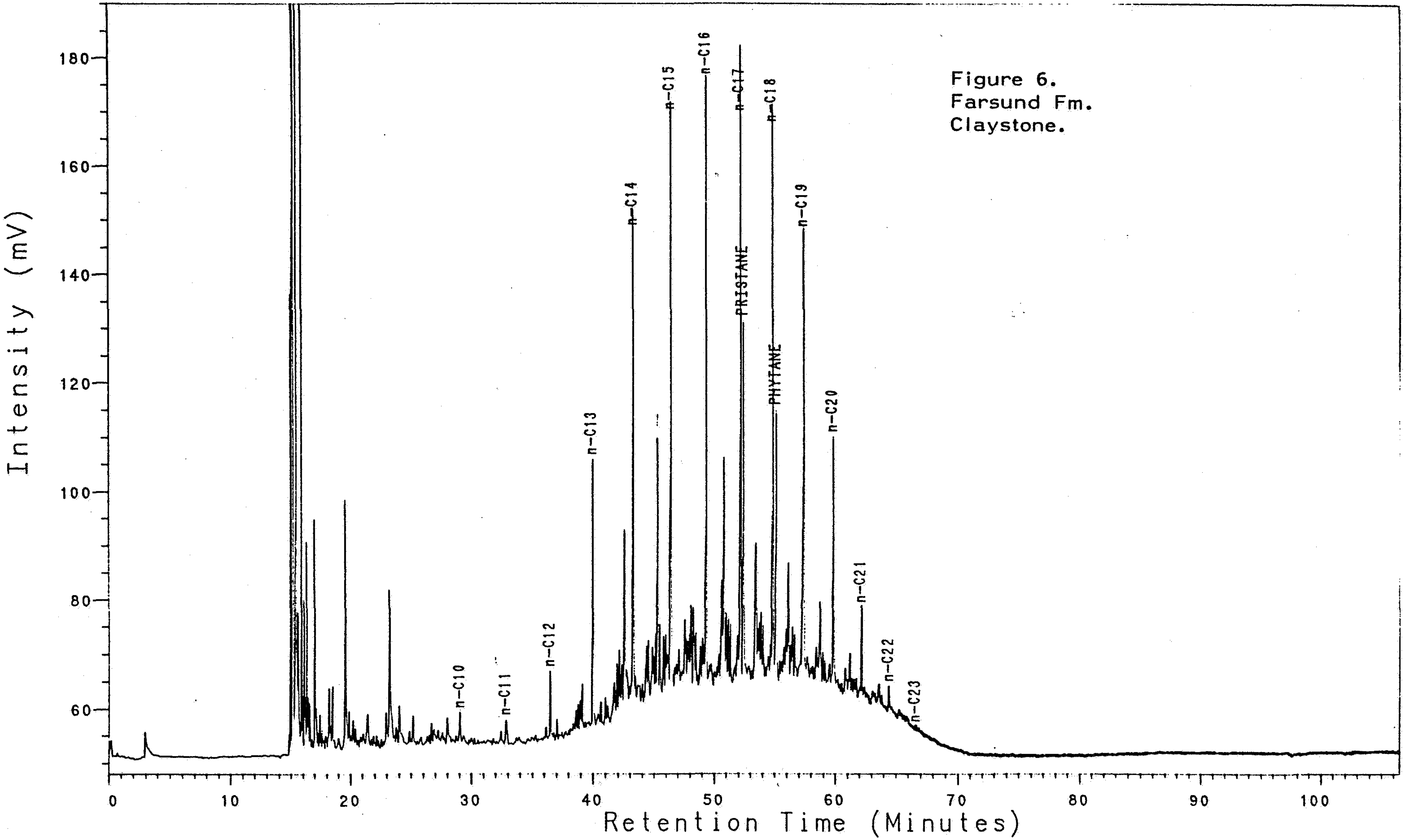

Figure 6.
Farsund Fm.
Claystone.

NOCS 2/6-2 4160m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

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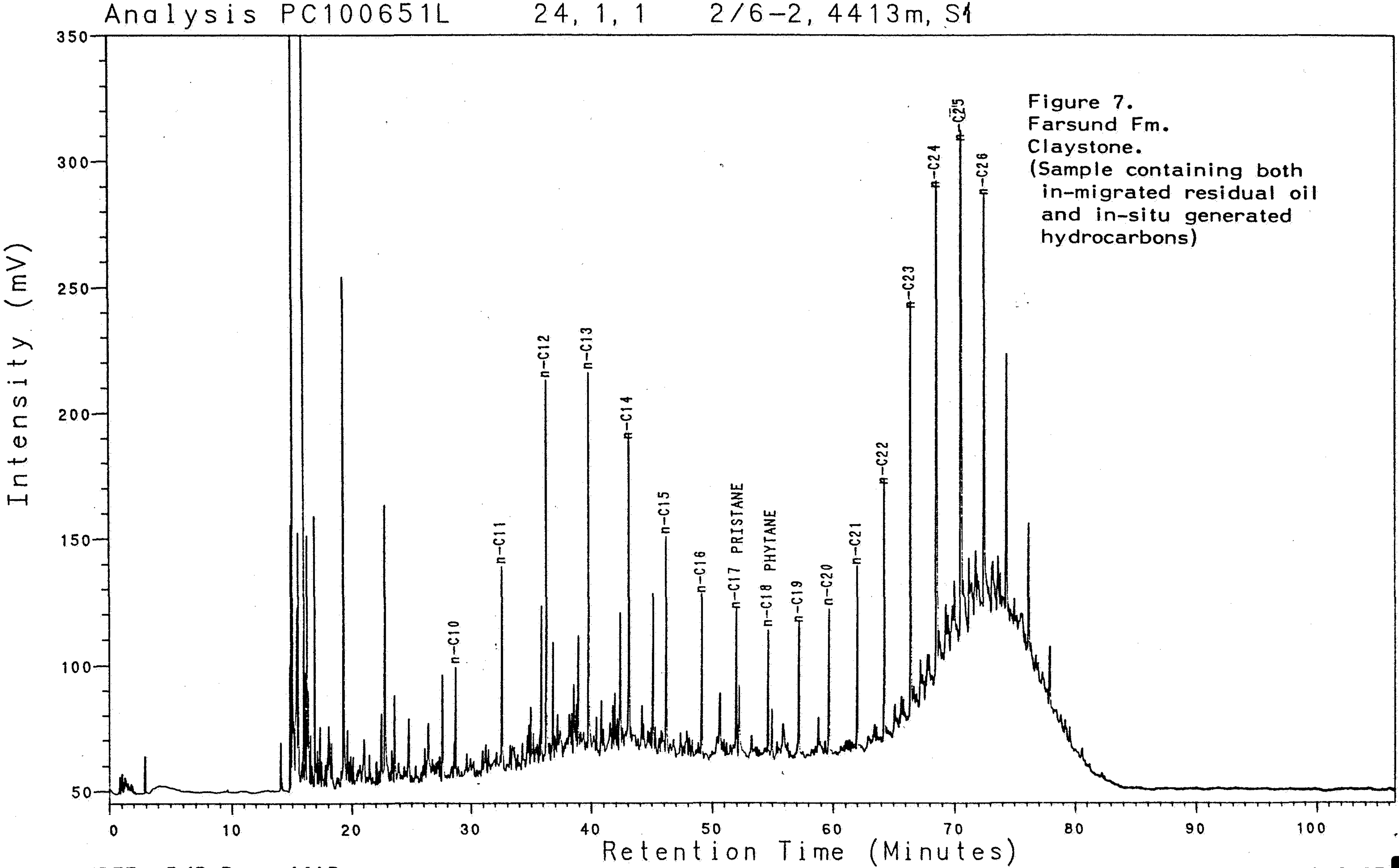

Figure 7.
Farsund Fm.
Claystone.
(Sample containing both in-migrated residual oil and in-situ generated hydrocarbons)

NOCS 2/6-2 4413m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

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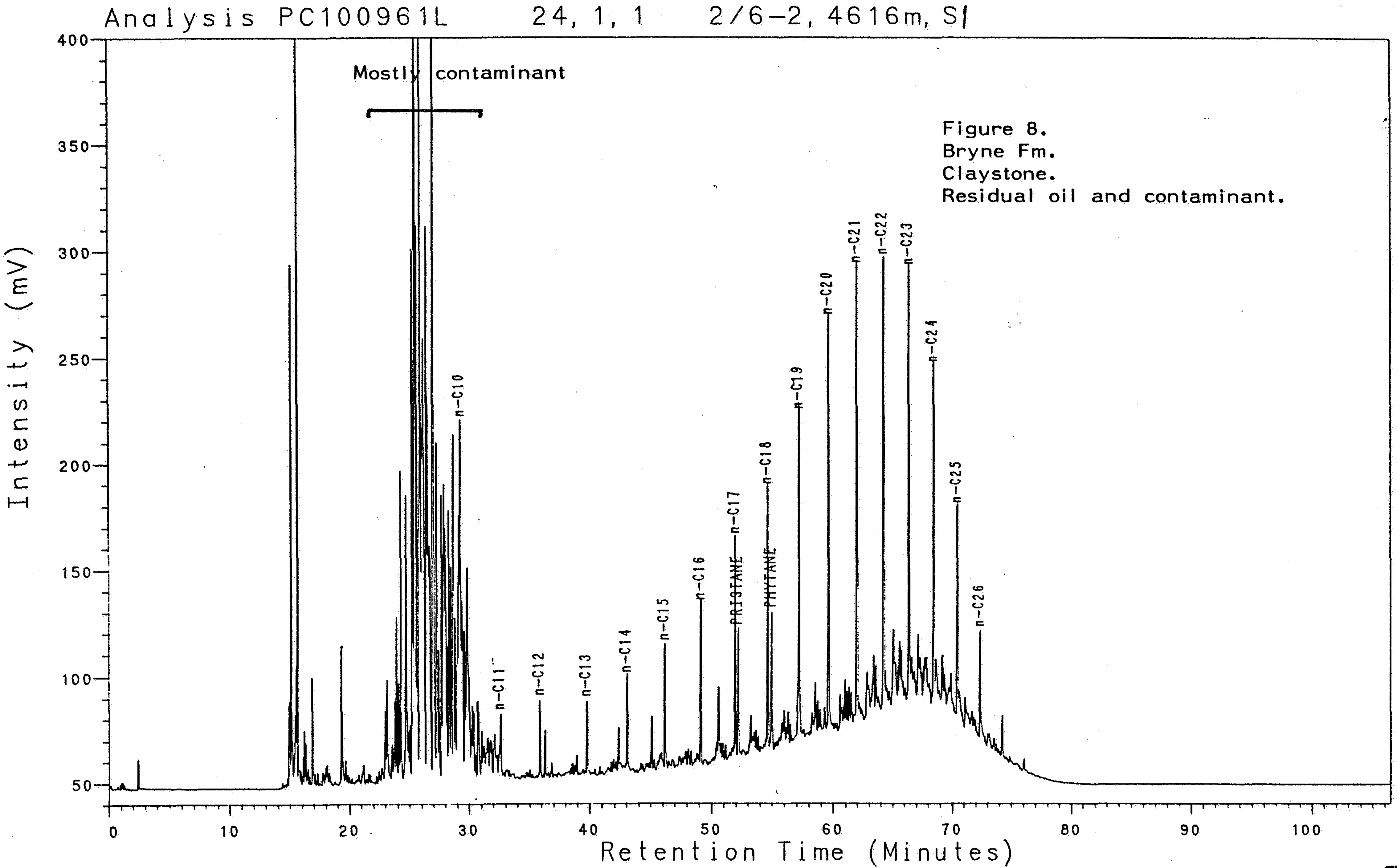

NOCS 2/6-2 4616m
THERMAL EXTRACTION GC (S1)
CLST: gy, gy red, m gy

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Analysis PC100383L 23, 1, 1 2/6-2, 4200m, S2

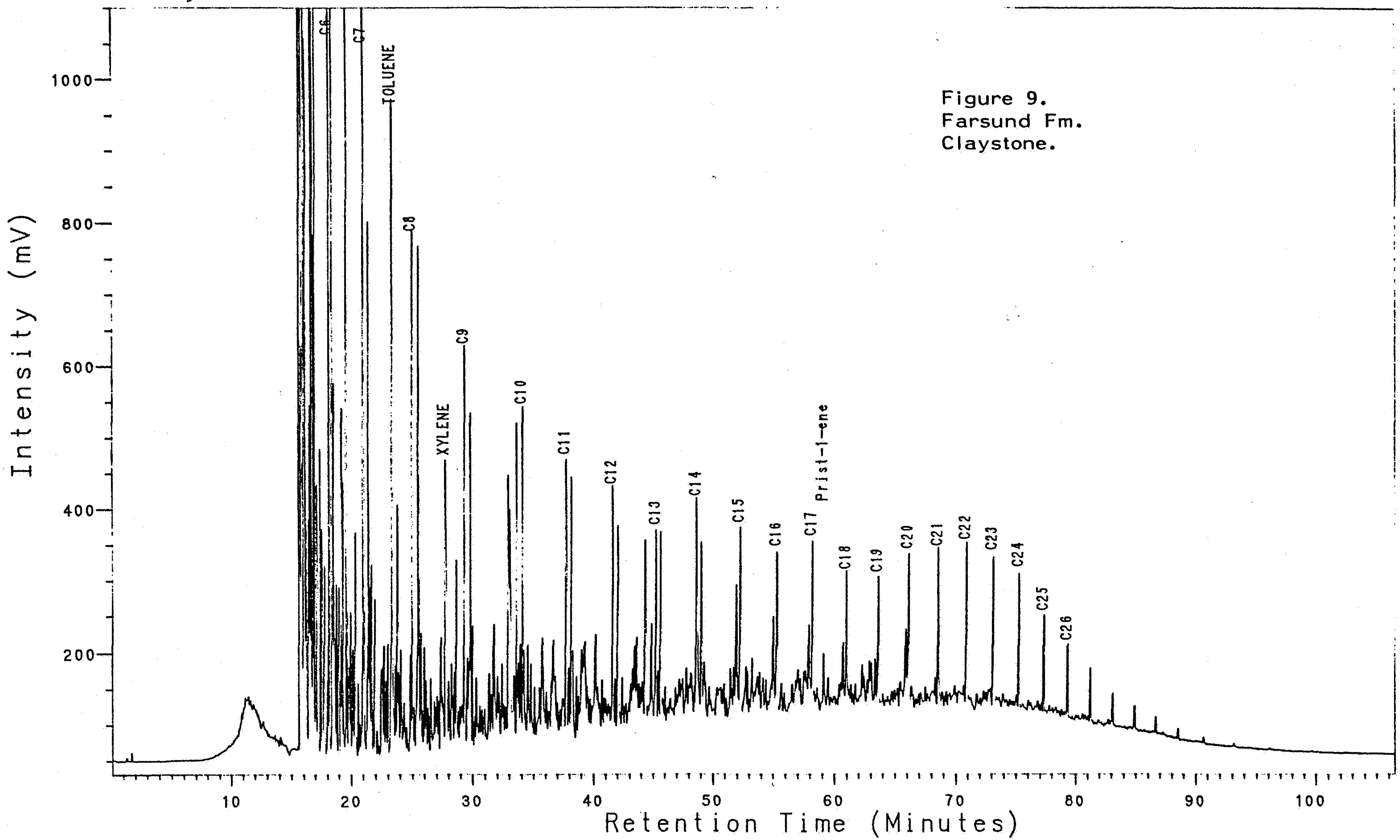

Figure 9.
Farsund Fm.
Claystone.

NOCS 2/6-2 4200m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

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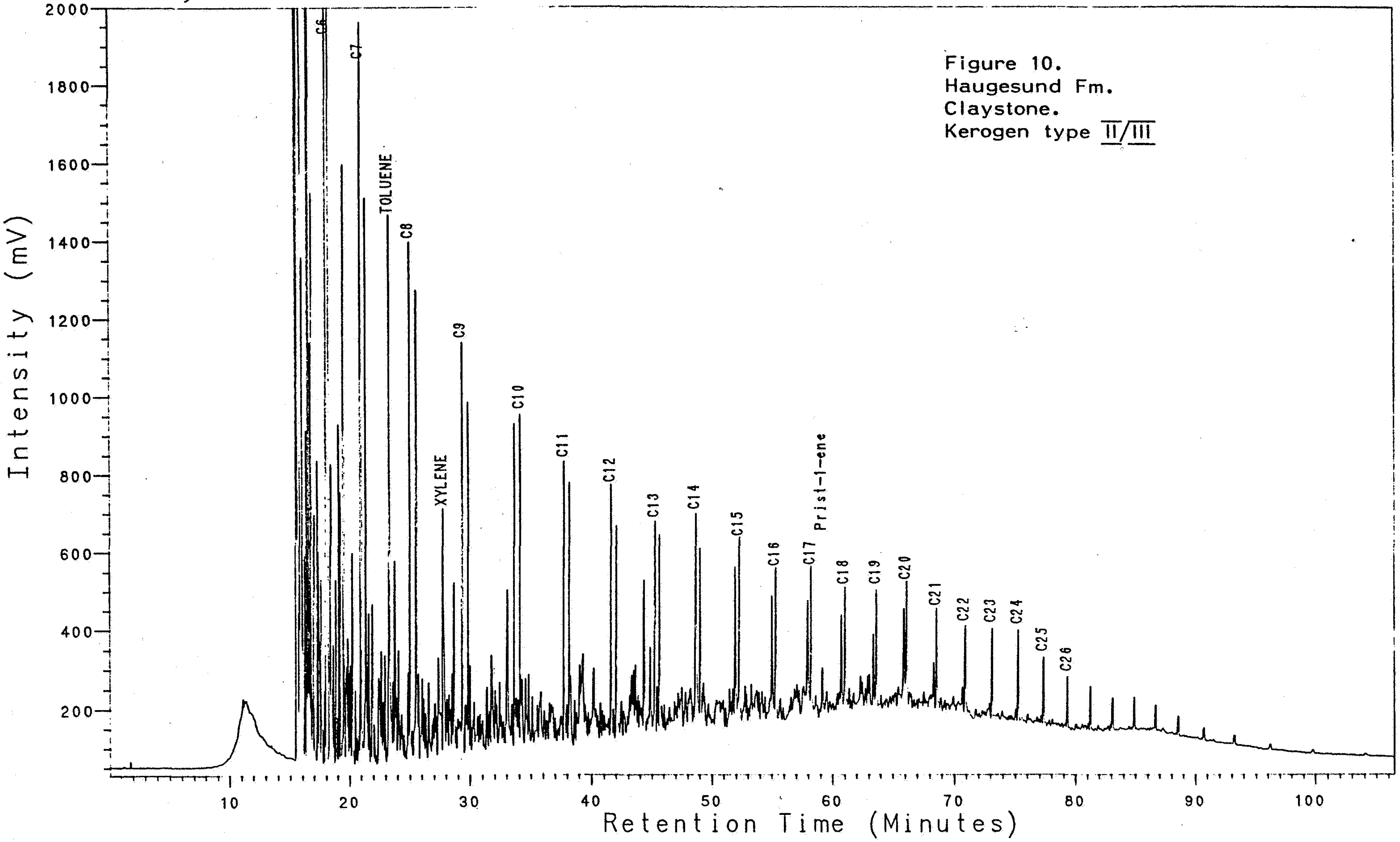
Analysis PC100432L 23, 1, 1 2/6-2, 4250m, S2



NOCS 2/6-2 4250m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

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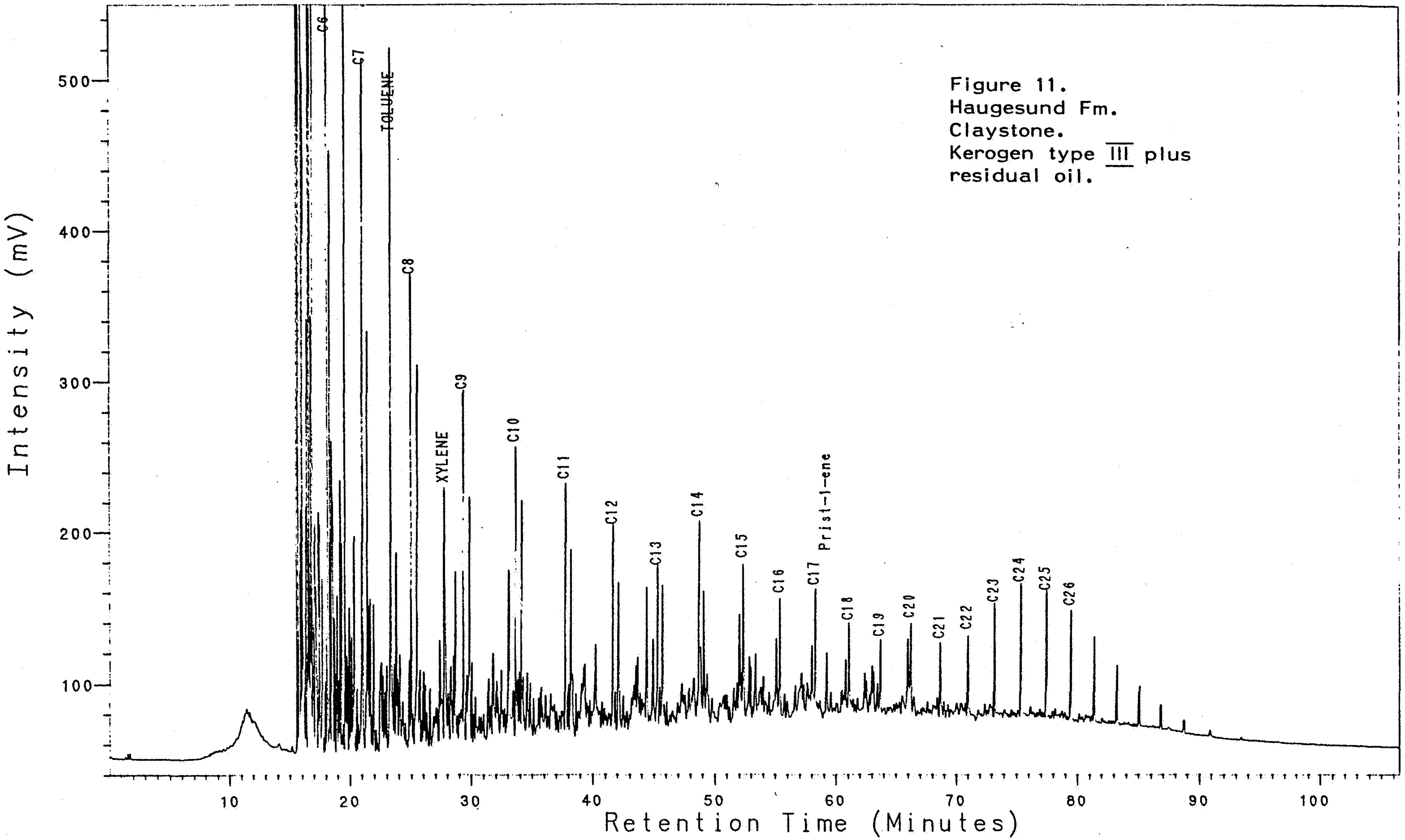
Analysis PC100581L 23, 1, 1 2/6-2, 4374m, S2



NOCS 2/6-2 4374m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

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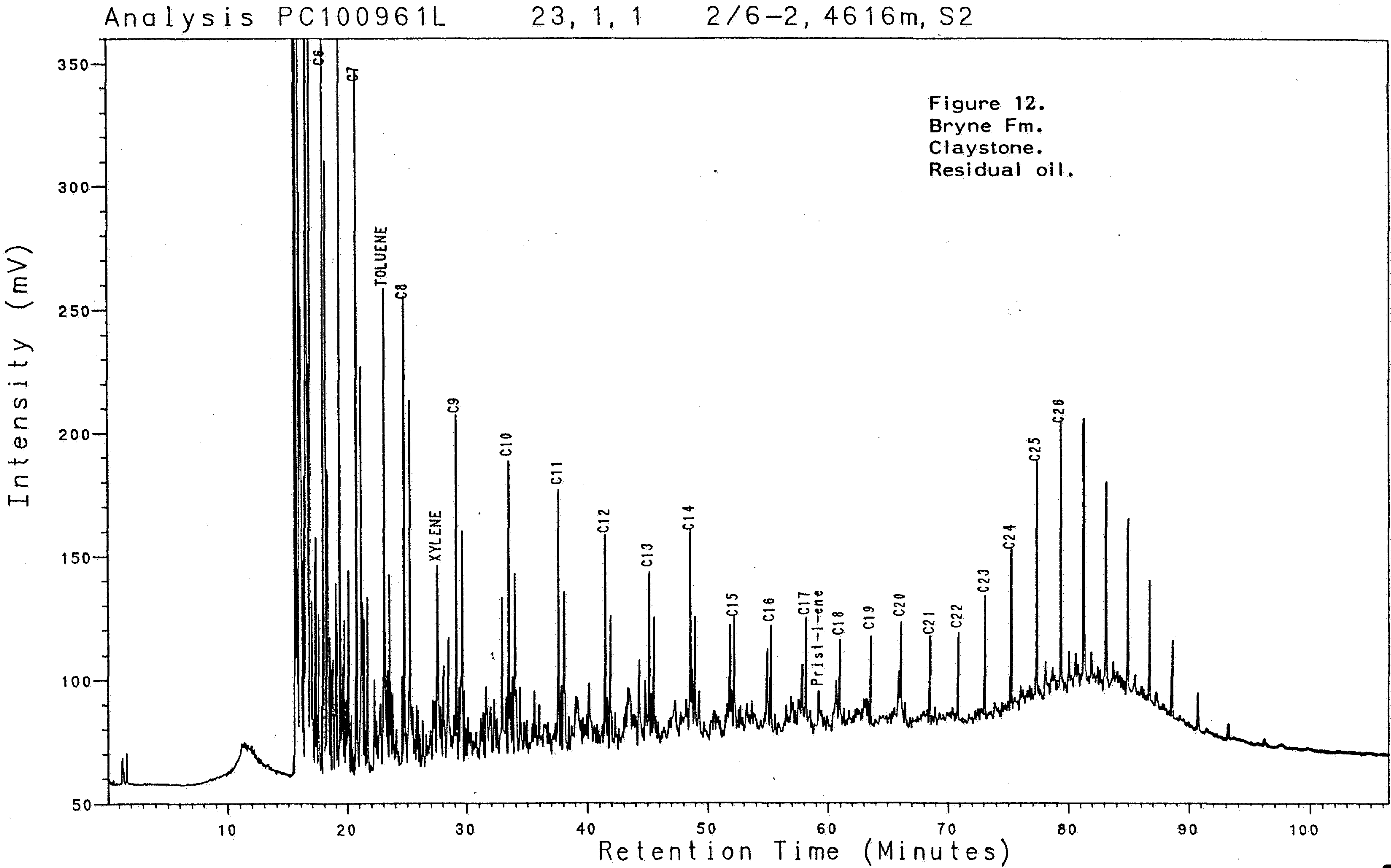

NOCS 2/6-2 4616m
PYROLYSIS GC (S2)
CLST: gy, gy red, m gy

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Figure 13: Vitrinite Reflectance versus Depth
Well NOCS 2/6-2

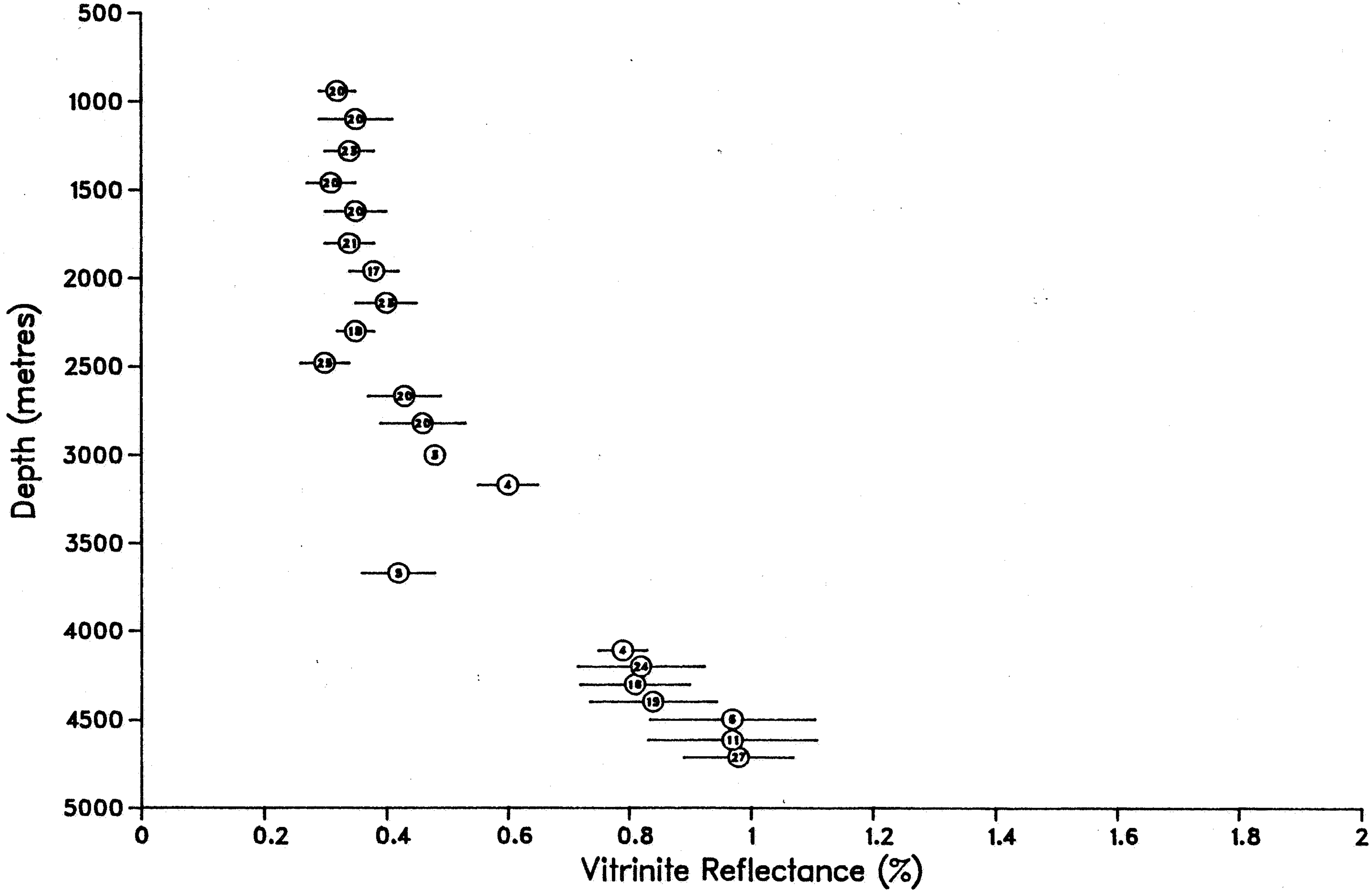

Figure 14: Kerogen Composition and Potential Hydrocarbon Products

Well NOCS 2/6-2

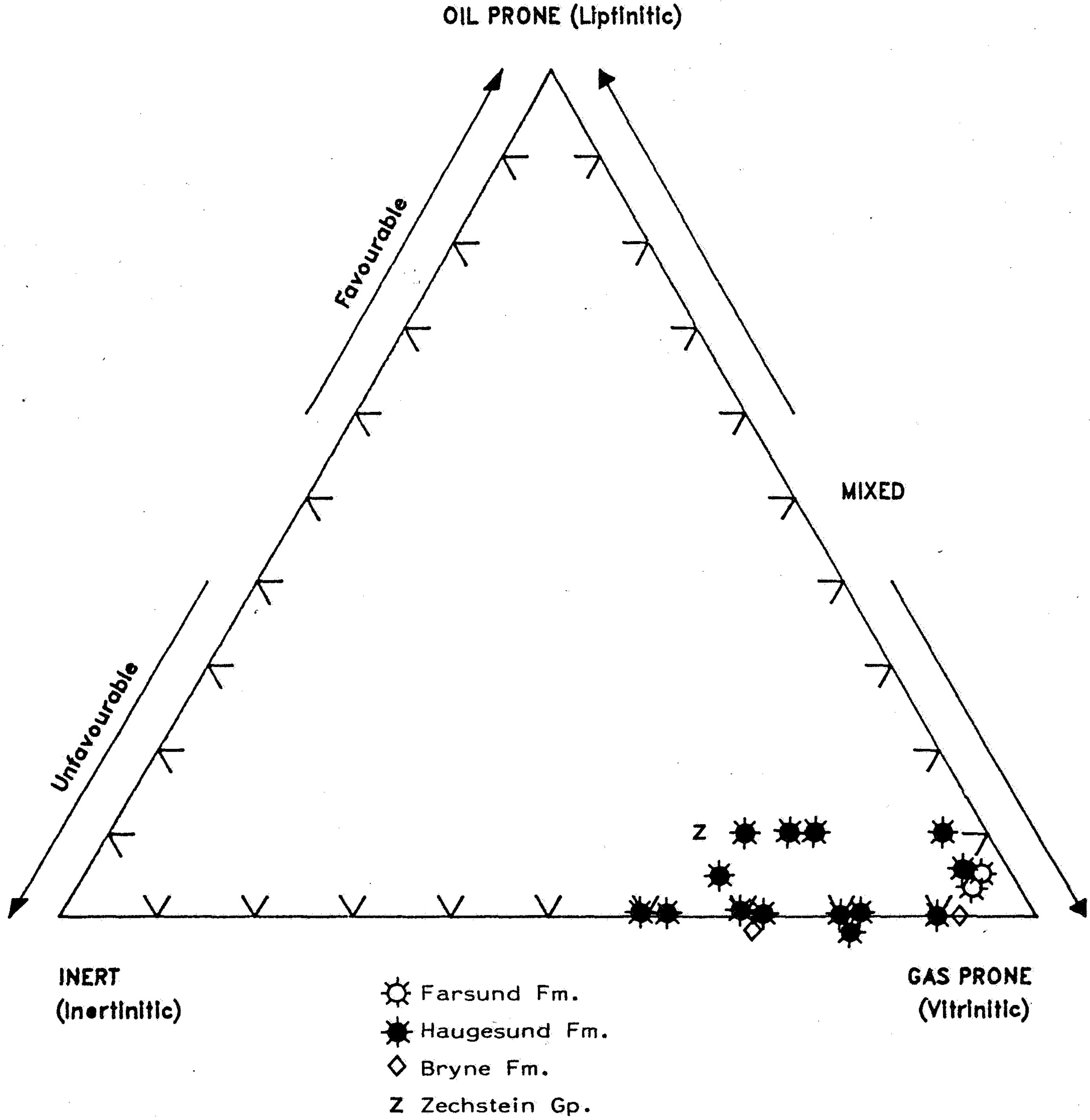

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Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4000.00						018
		0.32	80	Sh/Clst: ol gy, lt gy to m gy		018-1L
			5	Sh/Clst: dsk y brn, m drk gy, calc		018-2L
			5	Sh/Clst: gy red		018-3L
			5	Ca : w		018-4L
			5	Cont : dd		018-5L
4010.00						019
			80	Sh/Clst: ol gy, lt gy to m gy		019-1L
			5	Sh/Clst: dsk y brn, m drk gy, calc		019-2L
			5	Sh/Clst: gy red		019-3L
			5	Ca : w		019-4L
			5	Cont : dd		019-5L
4020.00						020
			90	Sh/Clst: ol gy, lt gy to m gy		020-1L
			10	Sh/Clst: dsk y brn, m drk gy, calc		020-2L
			tr	Sh/Clst: gy red		020-3L
4030.00						021
			85	Sh/Clst: ol gy, lt gy to m gy		021-1L
			10	Sh/Clst: dsk y brn, m drk gy, calc		021-2L
			5	Cont : Coal-ad, dd		021-3L
4040.00						022
		0.24	90	Sh/Clst: m gy to drk gy, calc		022-1L
			5	Sh/Clst: brn gy		022-2L
			5	Cont : dd		022-3L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4050.00						023
			90	Sh/Clst: m gy to drk gy, calc		023-1L
			5	Sh/Clst: brn gy		023-2L
			5	Cont : dd		023-3L
4060.00						024
			90	Sh/Clst: lt gy to drk gy, calc		024-1L
			5	Sh/Clst: brn gy, dol		024-2L
			5	Cont : Coal-ad		024-3L
4070.00						025
			90	Sh/Clst: lt gy to drk gy, calc		025-1L
			5	Sh/Clst: brn gy, dol		025-2L
			5	Cont : Coal-ad		025-3L
4080.00						026
			90	Sh/Clst: m gy to drk gy, calc		026-1L
			10	Sh/Clst: brn gy, dol		026-2L
4090.00						027
			90	Sh/Clst: m gy to drk gy, calc		027-1L
			10	Sh/Clst: brn gy, dol		027-2L
4100.00						028
			90	Sh/Clst: m gy to drk gy, calc		028-1L
		0.29	10	Sh/Clst: brn gy, dol		028-2L

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GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4110.00						029
		0.25	85	Sh/Clst: m gy to drk gy		029-1L
		0.21	10	Sh/Clst: brn gy, calc		029-3L
		0.32	5	Sh/Clst: gy blk, brn blk		029-2L
4120.00						030
	cvd		85	Sh/Clst: m gy to drk gy		030-1L
	cvd	0.23	10	Sh/Clst: brn gy, calc		030-3L
			5	Sh/Clst: gy blk, brn blk		030-2L
4130.00						031
	cvd		85	Sh/Clst: m gy to drk gy		031-1L
	cvd	0.18	10	Sh/Clst: brn gy, calc		031-3L
		0.58	5	Sh/Clst: gy blk, brn blk		031-2L
4140.00						032
	cvd		85	Sh/Clst: m gy to drk gy		032-1L
	cvd	0.19	10	Sh/Clst: brn gy, calc		032-3L
			5	Sh/Clst: gy blk, brn blk		032-2L
4150.00						033
	cvd	0.27	85	Sh/Clst: m gy to drk gy		033-1L
	cvd	0.20	10	Sh/Clst: brn gy, calc		033-3L
			5	Sh/Clst: gy blk, brn blk		033-2L
4160.00						034
	cvd	0.26	85	Sh/Clst: m gy to drk gy		034-1L
	cvd		10	Sh/Clst: brn gy, calc		034-3L
		1.87	5	Sh/Clst: gy blk, brn blk		034-2L

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Cvd	Type TOC%	%	Lithology description	Trb	Sample
4170.00						035
	cvd	0.27	85	Sh/Clst: m gy to drk gy		035-1L
	cvd	0.17	10	Sh/Clst: brn gy, calc		035-3L
			5	Sh/Clst: gy blk, brn blk		035-2L
			tr	S/Sst : w		035-4L
4180.00						036
	cvd	0.10	85	Sh/Clst: m gy to drk gy		036-1L
	cvd	0.25	10	Sh/Clst: brn gy, calc		036-3L
			5	Sh/Clst: gy blk, brn blk		036-2L
			tr	S/Sst : w		036-4L
4190.00						037
	cvd	0.29	85	Sh/Clst: m gy to drk gy		037-1L
	cvd		10	Sh/Clst: brn gy, calc		037-3L
		2.29	5	Sh/Clst: gy blk, brn blk		037-2L
			tr	S/Sst : w		037-4L
4200.00						038
	cvd	0.29	75	Sh/Clst: m gy to drk gy		038-1L
			10	Ca : w		038-2L
		2.44	5	Sh/Clst: gy blk, brn blk		038-3L
	cvd		5	Sh/Clst: brn gy		038-4L
			5	Cont : Coal-ad		038-5L
4210.00						039
			40	Ca : w, gy pi		039-1L
		0.36	40	Sh/Clst: lt gy to m gy		039-2L
		2.64	20	Sh/Clst: blk, gy blk, brn blk		039-3L

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4220.00						040
			60	Ca : w, gy pi		040-1L
		0.46	20	Sh/Clst: lt gy to m gy		040-2L
		2.62	20	Sh/Clst: blk, gy blk, brn blk		040-3L
4230.00						041
			40	Ca : w, gy pi		041-1L
		0.32	35	Sh/Clst: lt gy to m gy		041-2L
		2.80	25	Sh/Clst: blk, gy blk, brn blk, calc, pyr, slt		041-3L
4240.00						042
		2.78	40	Sh/Clst: gy blk, brn blk, calc, pyr, slt		042-1L
			30	Sh/Clst: lt gy to m gy		042-2L
			30	Ca : w, gy pi		042-3L
4250.00						043
	cvd		90	Sh/Clst: lt gy to m gy		043-1L
		2.67	10	Sh/Clst: gy blk, brn blk		043-2L
4260.00						044
		2.43	70	Sh/Clst: brn blk		044-1L
			10	Sh/Clst: lt gy to m gy		044-2L
			10	Ca : w		044-3L
			10	Cont : Coal-ad, dd, fib		044-4L
4270.00						045
		0.35	80	Sh/Clst: ol gy, lt gy to m gy, st		045-1L
			10	Cont : tar-ad		045-4L
		2.66	5	Sh/Clst: brn blk, st		045-2L
			5	Ca : w, st		045-3L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4274.00						046
			50	Sh/Clst: w, lt gy to m gy, calc		046-1L
		3.19	40	Sh/Clst: brn blk		046-2L
			10	Cont : Coal-ad, fib, tar-ad		046-3L
4280.00						047
		2.54	60	Sh/Clst: brn blk		047-1L
			30	Sh/Clst: w, lt gy to m gy		047-2L
			10	Ca : w		047-3L
4290.00						048
		2.37	70	Sh/Clst: brn blk, calc, pyr		048-1L
			20	Ca : w		048-2L
			10	Sh/Clst: lt gy to m gy		048-3L
4300.00						049
		2.31	70	Sh/Clst: brn blk, calc, pyr		049-1L
			10	Ca : w		049-2L
			10	Sh/Clst: lt gy to m gy		049-3L
			10	Cont : Coal-ad, fib		049-4L
4310.00						050
		2.20	50	Sh/Clst: brn blk, calc, pyr		050-1L
			20	Sh/Clst: lt gy to m gy		050-2L
			20	Ca : w		050-3L
			10	Cont : Coal-ad, fib		050-4L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4320.00						051
		2.80	50	Sh/Clst: brn blk, calc, pyr		051-1L
			20	Sh/Clst: lt gy to m gy		051-2L
			20	Ca : w		051-3L
			10	Cont : Coal-ad, fib		051-4L
4330.00						052
		2.15	50	Sh/Clst: brn blk, calc, pyr		052-1L
			20	Sh/Clst: lt gy to m gy		052-2L
			20	Ca : w		052-3L
			10	Cont : Coal-ad, fib		052-4L
4336.00						053
			40	Sh/Clst: lt gy to m gy, st		053-1L
		2.26	30	Sh/Clst: gy blk, brn blk		053-2L
			30	Ca : w, st		053-3L
4342.00						054
		2.61	60	Sh/Clst: gy blk, brn blk, carb, pyr		054-1L
			20	Sh/Clst: ol gy, lt gy to m gy		054-2L
			10	Ca : w, st		054-3L
			10	Cont : Coal-ad, cem, prp, dd, fib		054-4L
4350.00						055
		2.18	40	Sh/Clst: gy blk, brn blk, carb, pyr		055-1L
			30	Sh/Clst: w, ol gy, lt gy to m gy, calc		055-2L
			20	Ca : w		055-3L
			10	Cont : Coal-ad, cem, fib		055-4L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4356.00						056
		2.47	60	Sh/Clst: gy blk, brn blk, carb, pyr		056-1L
			20	Sh/Clst: w, ol gy, lt gy to m gy, calc		056-2L
			20	Ca : w, calc		056-3L
4370.00						057
		1.04	60	Sh/Clst: gy blk, brn blk, calc, pyr, slt, s		057-1L
			30	Cont : dd		057-3L
			10	Ca : dsk y brn, pyr, dol		057-2L
4374.00						058
		1.57	60	Sh/Clst: gy blk, brn blk, calc, pyr, slt, s		058-1L
			30	Cont : dd		058-3L
			10	Ca : dsk y brn, pyr, dol		058-2L
4380.00						059
		4.31	60	Sh/Clst: gy blk, brn blk, calc, pyr, slt, s		059-1L
			30	Cont : dd		059-3L
			10	Ca : dsk y brn, pyr, dol		059-2L
4386.00						060
		3.54	60	Sh/Clst: gy blk, brn blk, calc, pyr, slt, s		060-1L
			30	Cont : dd		060-3L
			10	Ca : dsk y brn, pyr, dol		060-2L

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GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4389.00						061
		3.22	50	Sh/Clst: gy blk, brn blk		061-1L
			40	Cont : Coal-ad, prp, dd, fib		061-3L
			10	Sh/Clst: w, lt gy		061-2L
4398.00						062
		3.73	80	Sh/Clst: gy blk, brn blk		062-1L
			20	Cont : Coal-ad, prp, dd, fib		062-2L
4404.00						063
		3.98	50	Sh/Clst: gy blk, brn blk		063-1L
			50	Cont : cem, dd		063-2L
4410.00						064
		3.50	70	Sh/Clst: gy blk, brn blk		064-1L
			30	Cont : cem, dd		064-2L
4413.00					trb	065
		2.84	40	Sh/Clst: gy blk, brn blk		065-1L
			30	Cont : Coal-ad, cem, dd, fib		065-4L
			20	Sh/Clst: lt gy to m gy		065-2L
			10	Ca : w		065-3L
4430.00					trb	066
		3.52	80	Sh/Clst: gy blk, brn blk		066-1L
			20	Cont : Coal-ad, cem, dd, fib		066-3L
			tr	Ca : w		066-2L

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GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4436.00					trb	067
		3.54	80	Sh/Clst: gy blk, brn blk		067-1L
			20	Cont : Coal-ad, cem, dd, fib		067-3L
			tr	Ca : w		067-2L
4440.00					trb	068
		3.93	80	Sh/Clst: gy blk, brn blk		068-1L
			20	Cont : Coal-ad, cem, dd, fib		068-3L
			tr	Ca : w		068-2L
4464.00						069
		2.88	80	Sh/Clst: gy blk, brn blk		069-1L
			20	Cont : Coal-ad, cem, dd, fib		069-3L
			tr	Ca : w		069-2L
4468.00						070
		3.58	80	Sh/Clst: gy blk, brn blk		070-1L
			20	Cont : Coal-ad, cem, dd, fib		070-3L
			tr	Ca : w		070-2L
4474.00						071
		2.88	80	Sh/Clst: gy blk, brn blk		071-1L
			20	Cont : Coal-ad, cem, dd, fib		071-3L
			tr	Ca : w		071-2L
4478.00					trb	072
		3.56	80	Sh/Clst: gy blk, brn blk		072-1L
			20	Cont : Coal-ad, cem, dd, fib		072-3L
			tr	Ca : w		072-2L

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GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description		Trb	Sample
4482.00						trb	073
		4.14	80	Sh/Clst:	gy blk, brn blk		073-1L
			20	Cont :	Coal-ad, cem, dd, fib		073-3L
			tr	Ca :	w		073-2L
4486.00						trb	074
		4.49	80	Sh/Clst:	gy blk, brn blk		074-1L
			20	Cont :	Coal-ad, cem, dd, fib		074-3L
			tr	Ca :	w		074-2L
4490.00						trb	075
		4.06	90	Sh/Clst:	gy blk, brn blk		075-1L
			10	Cont :	Coal-ad, cem, dd, fib		075-3L
			tr	Ca :	w		075-2L
4494.00							076
		4.02	90	Sh/Clst:	gy blk, brn blk		076-1L
			10	Cont :	Coal-ad, cem, dd, fib		076-3L
			tr	Ca :	w		076-2L
4498.00							077
		4.10	90	Sh/Clst:	gy blk, brn blk		077-1L
			10	Cont :	Coal-ad, cem, dd, fib		077-3L
			tr	Ca :	w		077-2L
4506.00							078
		5.69	90	Sh/Clst:	gy blk, brn blk		078-1L
			10	Cont :	Coal-ad, cem, dd, fib		078-3L
			tr	Ca :	w		078-2L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4510.00						079
		4.88	80	Sh/Clst: gy blk, brn blk		079-1L
			20	Cont : Coal-ad, cem, dd, fib		079-3L
			tr	Ca : w		079-2L
4516.00						080
			90	Cont : Coal-ad, tar-ad		080-2L
			10	Sh/Clst: gy blk, brn blk		080-1L
4522.00					trb	081
		3.95	90	Sh/Clst: gy blk, brn blk		081-1L
			10	Cont : dd		081-3L
			tr	Ca : w		081-2L
4528.00						082
		2.54	60	Sh/Clst: gy blk, brn blk		082-1L
			40	Cont : dd		082-3L
			tr	Ca : w		082-2L
4532.00						083
		2.38	80	Sh/Clst: gy blk, brn blk		083-1L
			20	Cont : dd		083-3L
			tr	Ca : w		083-2L
4536.00						084
		2.77	80	Sh/Clst: gy blk, brn blk		084-1L
			20	Cont : dd		084-3L
			tr	Ca : w		084-2L

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4540.00						085
		2.72	50	Sh/Clst: gy blk, brn blk		085-1L
			50	Cont : Coal-ad, tar-ad, dd		085-2L
4544.00						086
		2.66	50	Sh/Clst: gy blk, brn blk		086-1L
			50	Cont : Coal-ad, tar-ad, dd		086-2L
4550.00						087
			70	Cont : Coal-ad, tar-ad, dd		087-2L
		3.08	30	Sh/Clst: gy blk, brn blk		087-1L
4570.00						088
			90	Cont : Coal-ad, tar-ad, dd		088-2L
			10	Sh/Clst: gy red		088-1L
4575.00						089
	cvd	3.35	60	Sh/Clst: gy blk, brn blk, slt, s		089-1L
			30	Cont : Coal-ad, tar-ad, dd		089-3L
			10	S/Sst : w, gy pi, f, crs		089-2L
4580.00					trb	090
	cvd	3.78	50	Sh/Clst: gy blk, brn blk, slt, s		090-1L
			50	Cont : Coal-ad, dd		090-2L

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Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4590.00					trb	091
			80	Cont : Coal-ad, dd		091-2L
	cvd	3.41	20	Sh/Clst: gy blk, brn blk, slt, s		091-1L
4598.00					trb	092
		1.17	50	Sh/Clst: lt gy, sil, tuf		092-1L
			40	Cont : Coal-ad, dd		092-3L
	cvd		10	Sh/Clst: gy blk, brn blk		092-2L
4602.00					trb	093
			40	Cont : dd		093-5L
	cvd	3.32	20	Sh/Clst: gy blk, brn blk		093-1L
			20	S/Sst : gy, gy red, f		093-2L
			10	Sh/Clst: gy red, slt, s, sil, tuf		093-3L
			10	Sh/Clst: brn gy, wx		093-4L
4606.00					trb	094
		0.62	50	Sh/Clst: gy, gy red, slt, s, sil, tuf		094-1L
			30	Cont : Coal-ad, dd		094-5L
	cvd	2.72	10	Sh/Clst: gy blk, brn blk		094-2L
			5	Sh/Clst: brn gy		094-3L
			5	S/Sst : gy, gy red		094-4L
4610.00					trb	095
		0.95	50	Sh/Clst: gy, gy red, slt, s, sil, tuf		095-1L
			40	Cont : Coal-ad, prp, dd		095-4L
			5	S/Sst : gy, gy red		095-2L
	cvd		5	Sh/Clst: gy blk, brn blk		095-3L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4616.00						096
		1.67	40	Sh/Clst: gy, gy red, m gy, slt, s, sil, tuf		096-1L
			30	Cont : Coal-ad, prp, dd		096-6L
			10	Sh/Clst: m gy, slt		096-3L
			10	Sh/Clst: brn gy, wx		096-4L
			5	S/Sst : w, gy red, f		096-2L
	cvd		5	Sh/Clst: gy blk		096-5L
4620.00						097
			50	Cont : Coal-ad, cem, dd		097-5L
			30	Sh/Clst: gy, gy red, m gy, slt, s, sil, tuf		097-1L
			10	Sh/Clst: m gy, slt		097-2L
			5	Sh/Clst: brn gy, wx		097-3L
			5	S/Sst : w, gy red, f		097-4L
4624.00						098
			50	Cont : Coal-ad, cem, dd		098-5L
			30	Sh/Clst: gy, gy red, m gy, slt, s, sil, tuf		098-1L
			10	Sh/Clst: m gy, slt		098-2L
			5	Sh/Clst: brn gy, wx		098-3L
			5	S/Sst : w, gy red, f		098-4L
4628.00						099
			50	Cont : Coal-ad, cem, dd		099-5L
			30	Sh/Clst: gy, gy red, m gy, slt, s, sil, tuf		099-1L
			10	Sh/Clst: m gy, slt		099-2L
			5	Sh/Clst: brn gy, wx		099-3L
			5	S/Sst : w, gy red, f		099-4L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4632.00						100
			80	Cont : Coal-ad, prp, dd		100-4L
		1.72	10	Sh/Clst: gy, gy red, slt, s, sil		100-1L
			5	Sh/Clst: brn gy		100-2L
			5	Sh/Clst: drk gy		100-3L
4636.00						101
			50	Cont : Coal-ad, prp, dd		101-3L
		1.40	45	Sh/Clst: gy, gy red, slt, s, sil		101-1L
			5	Sh/Clst: drk gy		101-2L
4640.00						102
			80	Cont : Coal-ad, prp, dd		102-2L
		0.97	20	Sh/Clst: gy, gy red, slt, s		102-1L
4644.00						103
			90	Cont : Coal-ad, prp, dd		103-2L
			10	Sh/Clst: gy, gy red, slt, s		103-1L
4650.00						104
			95	Cont : Coal-ad, prp, dd		104-2L
			5	Sh/Clst: gy, gy red, slt, s		104-1L
4656.00						105
			90	Cont : Coal-ad, prp, dd		105-2L
		1.75	10	Sh/Clst: gy, gy red, slt, s		105-1L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4660.00						106
			95	Cont : Coal-ad, prp, dd		106-2L
			5	Sh/Clst: gy, gy red, slt, s		106-1L
4666.00						107
			95	Cont : Coal-ad, prp, dd		107-2L
		1.74	5	Sh/Clst: gy, gy red, slt, s		107-1L
4670.00						108
			70	Cont : prp, dd		108-2L
	cvd	3.91	30	Sh/Clst: drk gy, gy blk		108-1L
4674.00						109
			90	Cont : Coal-ad, prp, dd		109-2L
			10	Sh/Clst: gy, gy red, slt, s		109-1L
4678.00						110
			90	Cont : Coal-ad, prp, dd		110-2L
			10	Sh/Clst: gy, gy red, slt, s		110-1L
4682.00						111
			95	Cont : Coal-ad, prp, dd		111-2L
			5	Sh/Clst: gy, gy red, slt, s		111-1L
4686.00						112
			90	Cont : Coal-ad, prp, dd		112-2L
			10	Sh/Clst: gy, gy red, slt, s		112-1L

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Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4690.00						113
			90	Cont : Coal-ad, prp, dd		113-2L
			10	Sh/Clst: gy, gy red, slt, s		113-1L
4696.00						114
			100	Cont : Coal-ad, dd		114-2L
4700.00						115
			100	Cont : Coal-ad, dd		115-2L
4710.00						116
			100	Cont : Coal-ad, dd		116-2L
			tr	Sh/Clst		116-1L
4714.00						118
			60	Cont : Coal-ad, prp, dd		118-3L
		1.14	20	Sh/Clst: gy red, mic, st		118-1L
		3.57	20	Sh/Clst: m gy to drk gy, st, hd, sil		118-2L
4718.00						119
			100	Cont : Coal-ad, dd		119-1L
4722.00						120
			100	Cont : Coal-ad, dd		120-1L

Table 1 : Lithology description for well NOCS 2/6-2

Depth unit of measure: m

Depth Int	Depth Cvd	Type TOC%	%	Lithology description	Trb	Sample
4726.00						121
			95	Cont : Coal-ad, cem, dd		121-2L
			5	Other : w, evap		121-1L
4730.00						122
			95	Cont : Coal-ad, cem, dd		122-2L
			5	Other : w, evap		122-1L
4740.00						123
			80	Cont : Coal-ad, cem, dd		123-3L
			10	Other : w, evap		123-1L
	cvd	4.35	10	Sh/Clst: m gy to drk gy, slt, s, mic		123-2L
4750.00						124
	cvd	1.32	40	Sh/Clst: gy blk, ol blk, slt, s, mic, evap		124-1L
			30	Other : w, evap		124-2L
			30	Cont		124-3L
4760.00						125
	cvd		70	Sh/Clst: v col		125-1L
			10	Other : w, evap		125-2L
	cvd	1.80	10	Sh/Clst: gy blk, ol blk, slt, s, mic, evap		125-3L
	cvd		10	S/Sst : prp, dd		125-4L

Table 2 : Rock-Eval table for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4000.00	cut	Sh/Clst: ol gy, lt gy to m gy	0.02	–	0.32	–	0.32	–	100	–	1.00	462	018-1L
4040.00	cut	Sh/Clst: m gy to drk gy	–	–	0.23	–	0.24	–	96	–	–	296	022-1L
4100.00	cut	Sh/Clst: brn gy	0.03	0.05	0.44	0.11	0.29	17	152	0.1	0.38	358	028-2L
4110.00	cut	Sh/Clst: m gy to drk gy	0.01	–	0.33	–	0.25	–	132	–	1.00	428	029-1L
4110.00	cut	Sh/Clst: gy blk, brn blk	0.01	–	0.21	–	0.32	–	66	–	1.00	431	029-2L
4110.00	cut	Sh/Clst: brn gy	–	–	0.31	–	0.21	–	148	–	–	216	029-3L
4120.00	cut	Sh/Clst: brn gy	–	0.01	0.33	0.03	0.23	4	143	–	–	305	030-3L
4130.00	cut	Sh/Clst: gy blk, brn blk	0.09	0.15	0.19	0.79	0.58	26	33	0.2	0.38	397	031-2L
4130.00	cut	Sh/Clst: brn gy	0.01	0.01	0.23	0.04	0.18	6	128	–	0.50	238	031-3L
4140.00	cut	Sh/Clst: brn gy	–	–	0.28	–	0.19	–	147	–	–	239	032-3L
4150.00	cut	Sh/Clst: m gy to drk gy	0.01	0.02	0.20	0.10	0.27	7	74	–	0.33	259	033-1L
4150.00	cut	Sh/Clst: brn gy	0.01	0.01	0.32	0.03	0.20	5	160	–	0.50	252	033-3L
4160.00	cut	Sh/Clst: m gy to drk gy	0.01	0.02	0.24	0.08	0.26	8	92	–	0.33	250	034-1L
4160.00	cut	Sh/Clst: gy blk, brn blk	0.91	4.13	0.37	11.16	1.87	221	20	5.0	0.18	436	034-2L
4170.00	cut	Sh/Clst: m gy to drk gy	0.01	0.03	0.22	0.14	0.27	11	81	–	0.25	251	035-1L

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Table 2 : Rock-Eval table for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4170.00	cut	Sh/Clst: brn gy	-	0.01	0.36	0.03	0.17	6	212	-	-	251	035-3L
4180.00	cut	Sh/Clst: m gy to drk gy	-	-	0.10	-	0.10	-	100	-	-	-	036-1L
4180.00	cut	Sh/Clst: brn gy	0.02	0.04	0.61	0.07	0.25	16	244	0.1	0.33	429	036-3L
4190.00	cut	Sh/Clst: m gy to drk gy	0.05	0.04	0.26	0.15	0.29	14	90	0.1	0.56	339	037-1L
4190.00	cut	Sh/Clst: gy blk, brn blk	1.94	5.96	0.20	29.80	2.29	260	9	7.9	0.25	437	037-2L
4200.00	cut	Sh/Clst: m gy to drk gy	0.08	0.11	0.20	0.55	0.29	38	69	0.2	0.42	336	038-1L
4200.00	cut	Sh/Clst: gy blk, brn blk	1.71	5.28	0.43	12.28	2.44	216	18	7.0	0.24	437	038-3L
4210.00	cut	Sh/Clst: lt gy to m gy	0.17	0.15	0.29	0.52	0.36	42	81	0.3	0.53	342	039-2L
4210.00	cut	Sh/Clst: blk, gy blk, brn blk	2.93	6.77	0.25	27.08	2.64	256	9	9.7	0.30	439	039-3L
4220.00	cut	Sh/Clst: lt gy to m gy	0.18	0.21	0.42	0.50	0.46	46	91	0.4	0.46	350	040-2L
4220.00	cut	Sh/Clst: blk, gy blk, brn blk	2.84	7.04	0.33	21.33	2.62	269	13	9.9	0.29	439	040-3L
4230.00	cut	Sh/Clst: lt gy to m gy	0.10	0.11	0.22	0.50	0.32	34	69	0.2	0.48	351	041-2L
4230.00	cut	Sh/Clst: blk, gy blk, brn blk	2.81	8.03	0.14	57.36	2.80	287	5	10.8	0.26	437	041-3L
4240.00	cut	Sh/Clst: gy blk, brn blk	2.57	7.64	0.17	44.94	2.78	275	6	10.2	0.25	437	042-1L
4250.00	cut	Sh/Clst: gy blk, brn blk	2.16	6.55	0.23	28.48	2.67	245	9	8.7	0.25	439	043-2L

Table 2 : Rock-Eval table for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4260.00	cut	Sh/Clst: brn blk	2.07	6.87	0.11	62.45	2.43	283	5	8.9	0.23	438	044-1L
4270.00	cut	Sh/Clst: ol gy, lt gy to m gy	0.08	0.01	0.26	0.04	0.35	3	74	0.1	0.89	399	045-1L
4270.00	cut	Sh/Clst: brn blk	2.27	6.51	0.28	23.25	2.66	245	11	8.8	0.26	435	045-2L
4274.00	cut	Sh/Clst: brn blk	2.71	8.56	0.19	45.05	3.19	268	6	11.3	0.24	444	046-2L
4280.00	cut	Sh/Clst: brn blk	2.38	6.77	0.15	45.13	2.54	267	6	9.2	0.26	439	047-1L
4290.00	cut	Sh/Clst: brn blk	2.34	5.91	0.11	53.73	2.37	249	5	8.3	0.28	439	048-1L
4300.00	cut	Sh/Clst: brn blk	2.34	5.79	0.15	38.60	2.31	251	6	8.1	0.29	437	049-1L
4310.00	cut	Sh/Clst: brn blk	2.02	5.35	0.16	33.44	2.20	243	7	7.4	0.27	436	050-1L
4320.00	cut	Sh/Clst: brn blk	2.79	7.85	0.20	39.25	2.80	280	7	10.6	0.26	438	051-1L
4330.00	cut	Sh/Clst: brn blk	1.98	4.93	0.21	23.48	2.15	229	10	6.9	0.29	437	052-1L
4336.00	cut	Sh/Clst: gy blk, brn blk	1.99	5.53	0.19	29.11	2.26	245	8	7.5	0.26	439	053-2L
4342.00	cut	Sh/Clst: gy blk, brn blk	2.60	7.02	0.19	36.95	2.61	269	7	9.6	0.27	437	054-1L
4350.00	cut	Sh/Clst: gy blk, brn blk	2.50	5.19	0.23	22.57	2.18	238	11	7.7	0.33	438	055-1L
4356.00	cut	Sh/Clst: gy blk, brn blk	2.48	6.25	0.27	23.15	2.47	253	11	8.7	0.28	437	056-1L
4370.00	cut	Sh/Clst: gy blk, brn blk	0.90	1.38	0.27	5.11	1.04	133	26	2.3	0.39	432	057-1L

Table 2 : Rock-Eval table for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4374.00	cut	Sh/Clst: gy blk, brn blk	1.57	2.26	0.36	6.28	1.57	144	23	3.8	0.41	436	058-1L
4380.00	cut	Sh/Clst: gy blk, brn blk	4.87	7.65	0.62	12.34	4.31	177	14	12.5	0.39	431	059-1L
4386.00	cut	Sh/Clst: gy blk, brn blk	3.49	4.51	0.58	7.78	3.54	127	16	8.0	0.44	434	060-1L
4389.00	cut	Sh/Clst: gy blk, brn blk	3.80	6.33	0.27	23.44	3.22	197	8	10.1	0.38	436	061-1L
4398.00	cut	Sh/Clst: gy blk, brn blk	3.76	5.84	0.72	8.11	3.73	157	19	9.6	0.39	434	062-1L
4404.00	cut	Sh/Clst: gy blk, brn blk	4.67	6.06	0.76	7.97	3.98	152	19	10.7	0.44	436	063-1L
4410.00	cut	Sh/Clst: gy blk, brn blk	4.00	6.38	0.12	53.17	3.50	182	3	10.4	0.39	437	064-1L
4413.00	cut	Sh/Clst: gy blk, brn blk	4.20	7.38	0.26	28.38	2.84	260	9	11.6	0.36	437	065-1L
4430.00	cut	Sh/Clst: gy blk, brn blk	3.82	4.64	0.62	7.48	3.52	132	18	8.5	0.45	437	066-1L
4436.00	cut	Sh/Clst: gy blk, brn blk	3.66	4.99	0.35	14.26	3.54	141	10	8.6	0.42	435	067-1L
4440.00	cut	Sh/Clst: gy blk, brn blk	5.45	7.95	0.36	22.08	3.93	202	9	13.4	0.41	436	068-1L
4464.00	cut	Sh/Clst: gy blk, brn blk	3.10	5.07	0.25	20.28	2.88	176	9	8.2	0.38	436	069-1L
4468.00	cut	Sh/Clst: gy blk, brn blk	3.94	6.50	0.33	19.70	3.58	182	9	10.4	0.38	439	070-1L
4474.00	cut	Sh/Clst: gy blk, brn blk	2.73	4.84	0.30	16.13	2.88	168	10	7.6	0.36	436	071-1L
4478.00	cut	Sh/Clst: gy blk, brn blk	4.15	4.87	0.33	14.76	3.56	137	9	9.0	0.46	438	072-1L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4482.00	cut	Sh/Clst: gy blk, brn blk	4.04	4.94	0.59	8.37	4.14	119	14	9.0	0.45	434	073-1L
4486.00	cut	Sh/Clst: gy blk, brn blk	3.74	4.50	0.34	13.24	4.49	100	8	8.2	0.45	438	074-1L
4490.00	cut	Sh/Clst: gy blk, brn blk	2.97	3.67	0.59	6.22	4.06	90	15	6.6	0.45	437	075-1L
4494.00	cut	Sh/Clst: gy blk, brn blk	3.45	3.45	0.44	7.84	4.02	86	11	6.9	0.50	439	076-1L
4498.00	cut	Sh/Clst: gy blk, brn blk	3.04	2.36	0.57	4.14	4.10	58	14	5.4	0.56	434	077-1L
4506.00	cut	Sh/Clst: gy blk, brn blk	4.67	6.34	0.56	11.32	5.69	111	10	11.0	0.42	440	078-1L
4510.00	cut	Sh/Clst: gy blk, brn blk	4.42	6.01	0.60	10.02	4.88	123	12	10.4	0.42	437	079-1L
4522.00	cut	Sh/Clst: gy blk, brn blk	3.11	4.53	0.51	8.88	3.95	115	13	7.6	0.41	438	081-1L
4528.00	cut	Sh/Clst: gy blk, brn blk	2.48	3.28	0.43	7.63	2.54	129	17	5.8	0.43	438	082-1L
4532.00	cut	Sh/Clst: gy blk, brn blk	2.70	3.63	0.27	13.44	2.38	153	11	6.3	0.43	440	083-1L
4536.00	cut	Sh/Clst: gy blk, brn blk	3.55	4.39	0.31	14.16	2.77	158	11	7.9	0.45	438	084-1L
4540.00	cut	Sh/Clst: gy blk, brn blk	3.47	4.06	0.34	11.94	2.72	149	13	7.5	0.46	439	085-1L
4544.00	cut	Sh/Clst: gy blk, brn blk	3.17	3.60	0.36	10.00	2.66	135	14	6.8	0.47	438	086-1L
4550.00	cut	Sh/Clst: gy blk, brn blk	4.33	6.50	0.35	18.57	3.08	211	11	10.8	0.40	438	087-1L
4575.00	cut	Sh/Clst: gy blk, brn blk	5.15	6.01	0.26	23.12	3.35	179	8	11.2	0.46	440	089-1L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4580.00	cut	Sh/Clst: gy blk, brn blk	5.99	7.06	0.32	22.06	3.78	187	8	13.1	0.46	441	090-1L
4590.00	cut	Sh/Clst: gy blk, brn blk	4.66	5.27	0.29	18.17	3.41	155	9	9.9	0.47	441	091-1L
4598.00	cut	Sh/Clst: lt gy	1.26	1.36	0.51	2.67	1.17	116	44	2.6	0.48	404	092-1L
4602.00	cut	Sh/Clst: gy blk, brn blk	5.46	5.40	0.25	21.60	3.32	163	8	10.9	0.50	441	093-1L
4606.00	cut	Sh/Clst: gy, gy red	1.22	0.37	0.16	2.31	0.62	60	26	1.6	0.77	-	094-1L
4606.00	cut	Sh/Clst: gy blk, brn blk	3.21	3.19	0.41	7.78	2.72	117	15	6.4	0.50	445	094-2L
4610.00	cut	Sh/Clst: gy, gy red	2.22	1.27	0.44	2.89	0.95	134	46	3.5	0.64	354	095-1L
4616.00	cut	Sh/Clst: gy, gy red, m gy	3.15	2.74	0.23	11.91	1.67	164	14	5.9	0.53	437	096-1L
4632.00	cut	Sh/Clst: gy, gy red	4.56	2.35	0.55	4.27	1.72	137	32	6.9	0.66	357	100-1L
4636.00	cut	Sh/Clst: gy, gy red	3.81	2.06	0.21	9.81	1.40	147	15	5.9	0.65	349	101-1L
4640.00	cut	Sh/Clst: gy, gy red	2.72	1.44	0.45	3.20	0.97	148	46	4.2	0.65	347	102-1L
4656.00	cut	Sh/Clst: gy, gy red	3.51	2.22	0.22	10.09	1.75	127	13	5.7	0.61	393	105-1L
4666.00	cut	Sh/Clst: gy, gy red	4.36	2.65	0.26	10.19	1.74	152	15	7.0	0.62	387	107-1L
4670.00	cut	Sh/Clst: drk gy, gy blk	7.33	8.86	0.38	23.32	3.91	227	10	16.2	0.45	437	108-1L
4714.00	cut	Sh/Clst: gy red	4.41	3.57	0.29	12.31	1.14	313	25	8.0	0.55	368	118-1L

Table 2 : Rock-Eval table for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
4714.00	cut	Sh/Clst: m gy to drk gy	5.18	6.61	0.36	18.36	3.57	185	10	11.8	0.44	441	118-2L
4740.00	cut	Sh/Clst: m gy to drk gy	6.50	7.83	0.82	9.55	4.35	180	19	14.3	0.45	439	123-2L
4750.00	cut	Sh/Clst: gy blk, ol blk	3.49	1.56	0.28	5.57	1.32	118	21	5.1	0.69	431	124-1L
4760.00	cut	Sh/Clst: gy blk, ol blk	3.07	2.39	0.40	5.98	1.80	133	22	5.5	0.56	436	125-3L

Table 3 a: Weight of EOM and Chromatographic Fraction for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	Rock Extracted (g)	EOM (mg)	Sat (mg)	Aro (mg)	Asph (mg)	NSO (mg)	HC (mg)	Non-HC (mg)	TOC(e) (%)	Sample
4200.00	com	Composite sample - see table 3 e	1.2	6.7	4.2	0.4	0.6	1.5	4.6	2.1	1.89	126-0B
4230.00	com	Composite sample - see table 3 e	0.9	6.6	4.3	1.0	0.3	1.0	5.3	1.3	2.68	127-0B
4270.00	com	Composite sample - see table 3 e	1.7	8.9	2.9	1.9	0.4	3.7	4.8	4.1	2.58	128-0B
4300.00	com	Composite sample - see table 3 e	3.9	25.7	7.7	2.8	0.9	14.3	10.5	15.2	3.03	129-0B
4330.00	com	Composite sample - see table 3 e	1.3	8.7	2.4	0.5	0.5	5.3	2.9	5.8	3.21	130-0B
4356.00	com	Composite sample - see table 3 e	0.8	5.0	0.1	1.1	1.1	2.7	1.2	3.8	2.80	131-0B
4398.00	com	Composite sample - see table 3 e	6.6	16.0	0.1	1.0	0.6	14.3	1.1	14.9	2.44	132-0B
4430.00	com	Composite sample - see table 3 e	1.6	16.7	6.5	3.1	0.4	6.7	9.6	7.1	3.51	133-0B
4474.00	com	Composite sample - see table 3 e	1.0	8.9	2.8	1.2	0.5	4.4	4.0	4.9	4.31	134-0B
4482.00	com	Composite sample - see table 3 e	1.0	13.8	3.1	1.7	0.5	8.5	4.8	9.0	5.22	135-0B
4528.00	com	Composite sample - see table 3 e	0.9	10.2	4.6	1.4	0.6	3.6	6.0	4.2	5.39	136-0B
4544.00	com	Composite sample - see table 3 e	0.9	7.5	2.6	1.1	0.2	3.6	3.7	3.8	3.11	137-0B
4602.00	com	Composite sample - see table 3 e	2.5	32.5	11.0	4.3	0.3	16.9	15.3	17.2	3.77	138-0B
4666.00	com	Composite sample - see table 3 e	0.8	8.4	3.2	1.1	0.2	3.9	4.3	4.1	3.77	139-0B

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Table 3 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4200.00	com	Composite sample - see table 3 e	5583	3499	333	500	1250	3833	1749	126-0B
4230.00	com	Composite sample - see table 3 e	7764	5058	1176	352	1176	6235	1529	127-0B
4270.00	com	Composite sample - see table 3 e	5144	1676	1098	231	2138	2774	2369	128-0B
4300.00	com	Composite sample - see table 3 e	6606	1979	719	231	3676	2699	3907	129-0B
4330.00	com	Composite sample - see table 3 e	6796	1875	390	390	4140	2265	4531	130-0B
4356.00	com	Composite sample - see table 3 e	6410	128	1410	1410	3461	1538	4871	131-0B
4398.00	com	Composite sample - see table 3 e	2420	15	151	90	2163	166	2254	132-0B
4430.00	com	Composite sample - see table 3 e	10182	3963	1890	243	4085	5853	4329	133-0B
4474.00	com	Composite sample - see table 3 e	9175	2886	1237	515	4536	4123	5051	134-0B
4482.00	com	Composite sample - see table 3 e	13269	2980	1634	480	8173	4615	8653	135-0B
4528.00	com	Composite sample - see table 3 e	11590	5227	1590	681	4090	6818	4772	136-0B
4544.00	com	Composite sample - see table 3 e	7978	2765	1170	212	3829	3936	4042	137-0B
4602.00	com	Composite sample - see table 3 e	13104	4435	1733	120	6814	6169	6935	138-0B
4666.00	com	Composite sample - see table 3 e	11052	4210	1447	263	5131	5657	5394	139-0B

Table 3 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
4200.00	com	Composite sample - see table 3 e	295.41	185.19	17.64	26.46	66.14	202.82	92.59	126-0B
4230.00	com	Composite sample - see table 3 e	289.73	188.76	43.90	13.17	43.90	232.66	57.07	127-0B
4270.00	com	Composite sample - see table 3 e	199.40	64.97	42.57	8.96	82.90	107.54	91.86	128-0B
4300.00	com	Composite sample - see table 3 e	218.04	65.33	23.76	7.64	121.32	89.08	128.96	129-0B
4330.00	com	Composite sample - see table 3 e	211.74	58.41	12.17	12.17	128.99	70.58	141.16	130-0B
4356.00	com	Composite sample - see table 3 e	228.94	4.58	50.37	50.37	123.63	54.95	173.99	131-0B
4398.00	com	Composite sample - see table 3 e	99.20	0.62	6.20	3.72	88.66	6.82	92.38	132-0B
4430.00	com	Composite sample - see table 3 e	290.11	112.92	53.85	6.95	116.39	166.77	123.34	133-0B
4474.00	com	Composite sample - see table 3 e	212.88	66.97	28.70	11.96	105.25	95.68	117.21	134-0B
4482.00	com	Composite sample - see table 3 e	254.20	57.10	31.31	9.21	156.57	88.42	165.78	135-0B
4528.00	com	Composite sample - see table 3 e	215.04	96.98	29.52	12.65	75.90	126.50	88.55	136-0B
4544.00	com	Composite sample - see table 3 e	256.55	88.94	37.63	6.84	123.14	126.56	129.99	137-0B
4602.00	com	Composite sample - see table 3 e	347.61	117.65	45.99	3.21	180.76	163.64	183.97	138-0B
4666.00	com	Composite sample - see table 3 e	293.17	111.69	38.39	6.98	136.12	150.08	143.10	139-0B

Table 3 d: Composition of material extracted from the rock (%) for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	Sat / EOM	Aro / EOM	Asph / EOM	NSO / EOM	HC / EOM	Non-HC / EOM	Sat / Aro	HC / Non-HC	Sample
4200.00	com	Composite sample - see table 3 e	62.69	5.97	8.96	22.39	68.66	31.34	1050.00	219.05	126-0B
4230.00	com	Composite sample - see table 3 e	65.15	15.15	4.55	15.15	80.30	19.70	430.00	407.69	127-0B
4270.00	com	Composite sample - see table 3 e	32.58	21.35	4.49	41.57	53.93	46.07	152.63	117.07	128-0B
4300.00	com	Composite sample - see table 3 e	29.96	10.89	3.50	55.64	40.86	59.14	275.00	69.08	129-0B
4330.00	com	Composite sample - see table 3 e	27.59	5.75	5.75	60.92	33.33	66.67	480.00	50.00	130-0B
4356.00	com	Composite sample - see table 3 e	2.00	22.00	22.00	54.00	24.00	76.00	9.09	31.58	131-0B
4398.00	com	Composite sample - see table 3 e	0.63	6.25	3.75	89.38	6.88	93.13	10.00	7.38	132-0B
4430.00	com	Composite sample - see table 3 e	38.92	18.56	2.40	40.12	57.49	42.51	209.68	135.21	133-0B
4474.00	com	Composite sample - see table 3 e	31.46	13.48	5.62	49.44	44.94	55.06	233.33	81.63	134-0B
4482.00	com	Composite sample - see table 3 e	22.46	12.32	3.62	61.59	34.78	65.22	182.35	53.33	135-0B
4528.00	com	Composite sample - see table 3 e	45.10	13.73	5.88	35.29	58.82	41.18	328.57	142.86	136-0B
4544.00	com	Composite sample - see table 3 e	34.67	14.67	2.67	48.00	49.33	50.67	236.36	97.37	137-0B
4602.00	com	Composite sample - see table 3 e	33.85	13.23	0.92	52.00	47.08	52.92	255.81	88.95	138-0B
4666.00	com	Composite sample - see table 3 e	38.10	13.10	2.38	46.43	51.19	48.81	290.91	104.88	139-0B

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Table 3 e: List of composite samples appearing in the extraction tables for well NOCS 2/6-2

Depth unit of measure: m

NOTE: Depths shown in tables 3 a to d correspond to the composite samples' lower depth.

Upper depth	Lower depth	Typ	Sample		Depth	Typ	Lithology	Sample
4160.00	4200.00	com	126-0B	is composed of:	4160.00	cut	Sh/Clst: gy blk, brn blk	034-2L
					4190.00	cut	Sh/Clst: gy blk, brn blk	037-2L
					4200.00	cut	Sh/Clst: gy blk, brn blk	038-3L
4210.00	4230.00	com	127-0B	is composed of:	4210.00	cut	Sh/Clst: blk, gy blk, brn blk	039-3L
					4220.00	cut	Sh/Clst: blk, gy blk, brn blk	040-3L
					4230.00	cut	Sh/Clst: blk, gy blk, brn blk, calc, pyr, slt	041-3L
4240.00	4270.00	com	128-0B	is composed of:	4240.00	cut	Sh/Clst: gy blk, brn blk, calc, pyr, slt	042-1L
					4250.00	cut	Sh/Clst: gy blk, brn blk	043-2L
					4260.00	cut	Sh/Clst: brn blk	044-1L
					4270.00	cut	Sh/Clst: brn blk, st	045-2L
4280.00	4300.00	com	129-0B	is composed of:	4280.00	cut	Sh/Clst: brn blk	047-1L
					4290.00	cut	Sh/Clst: brn blk, calc, pyr	048-1L
					4300.00	cut	Sh/Clst: brn blk, calc, pyr	049-1L
4310.00	4330.00	com	130-0B	is composed of:	4310.00	cut	Sh/Clst: brn blk, calc, pyr	050-1L
					4320.00	cut	Sh/Clst: brn blk, calc, pyr	051-1L
					4330.00	cut	Sh/Clst: brn blk, calc, pyr	052-1L

Table 3 e: List of composite samples appearing in the extraction tables for well NOCS 2/6-2

Depth unit of measure: m

NOTE: Depths shown in tables 3 a to d correspond to the composite samples' lower depth.

Upper depth	Lower depth	Typ	Sample		Depth	Typ	Lithology	Sample
4336.00	4356.00	com	131-0B	is composed of:	4336.00	cut	Sh/Clst: gy blk, brn blk	053-2L
					4342.00	cut	Sh/Clst: gy blk, brn blk, carb, pyr	054-1L
					4350.00	cut	Sh/Clst: gy blk, brn blk, carb, pyr	055-1L
					4356.00	cut	Sh/Clst: gy blk, brn blk, carb, pyr	056-1L
4380.00	4398.00	com	132-0B	is composed of:	4380.00	cut	Sh/Clst: gy blk, brn blk, calc, pyr, slt, s	059-1L
					4386.00	cut	Sh/Clst: gy blk, brn blk, calc, pyr, slt, s	060-1L
					4389.00	cut	Sh/Clst: gy blk, brn blk	061-1L
					4398.00	cut	Sh/Clst: gy blk, brn blk	062-1L
4404.00	4430.00	com	133-0B	is composed of:	4404.00	cut	Sh/Clst: gy blk, brn blk	063-1L
					4410.00	cut	Sh/Clst: gy blk, brn blk	064-1L
					4413.00	cut	Sh/Clst: gy blk, brn blk	065-1L
					4430.00	cut	Sh/Clst: gy blk, brn blk	066-1L
4436.00	4474.00	com	134-0B	is composed of:	4436.00	cut	Sh/Clst: gy blk, brn blk	067-1L
					4440.00	cut	Sh/Clst: gy blk, brn blk	068-1L
					4464.00	cut	Sh/Clst: gy blk, brn blk	069-1L
					4468.00	cut	Sh/Clst: gy blk, brn blk	070-1L
					4474.00	cut	Sh/Clst: gy blk, brn blk	071-1L

Table 3 e: List of composite samples appearing in the extraction tables for well NOCS 2/6-2

Depth unit of measure: m

NOTE: Depths shown in tables 3 a to d correspond to the composite samples' lower depth.

Upper depth	Lower depth	Typ	Sample		Depth	Typ	Lithology	Sample
4478.00	4482.00	com	135-0B	is composed of:	4478.00	cut	Sh/Clst: gy blk, brn blk	072-1L
					4482.00	cut	Sh/Clst: gy blk, brn blk	073-1L
4506.00	4528.00	com	136-0B	is composed of:	4506.00	cut	Sh/Clst: gy blk, brn blk	078-1L
					4510.00	cut	Sh/Clst: gy blk, brn blk	079-1L
					4522.00	cut	Sh/Clst: gy blk, brn blk	081-1L
					4528.00	cut	Sh/Clst: gy blk, brn blk	082-1L
4532.00	4544.00	com	137-0B	is composed of:	4532.00	cut	Sh/Clst: gy blk, brn blk	083-1L
					4536.00	cut	Sh/Clst: gy blk, brn blk	084-1L
					4540.00	cut	Sh/Clst: gy blk, brn blk	085-1L
					4544.00	cut	Sh/Clst: gy blk, brn blk	086-1L
4575.00	4602.00	com	138-0B	is composed of:	4575.00	cut	Sh/Clst: gy blk, brn blk, slt, s	089-1L
					4580.00	cut	Sh/Clst: gy blk, brn blk, slt, s	090-1L
					4590.00	cut	Sh/Clst: gy blk, brn blk, slt, s	091-1L
					4602.00	cut	Sh/Clst: gy blk, brn blk	093-1L
4616.00	4666.00	com	139-0B	is composed of:	4616.00	cut	Sh/Clst: gy, gy red, m gy, slt, s, sil, tuf	096-1L
					4636.00	cut	Sh/Clst: gy, gy red, slt, s, sil	101-1L
					4656.00	cut	Sh/Clst: gy, gy red, slt, s	105-1L
					4666.00	cut	Sh/Clst: gy, gy red, slt, s	107-1L

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Table 4 : Saturated Hydrocarbon Ratios for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	Pristane / nC17	Pristane / Phytane	Pristane + Phytane / nC17 + nC18	Phytane / nC18	CPI	Sample
4200.00	com	bulk	0.66	1.13	0.63	0.61	1.13	126-0B
4230.00	com	bulk	0.50	1.19	0.48	0.45	1.06	127-0B
4270.00	com	bulk	0.58	1.18	0.57	0.55	1.11	128-0B
4300.00	com	bulk	0.56	1.19	0.53	0.50	1.16	129-0B
4330.00	com	bulk	0.63	1.13	0.60	0.57	1.12	130-0B
4356.00	com	bulk	0.53	1.10	0.51	0.50	1.07	131-0B
4398.00	com	bulk	0.50	0.84	0.48	0.46	1.16	132-0B
4430.00	com	bulk	0.54	1.24	0.52	0.50	1.12	133-0B
4474.00	com	bulk	0.46	1.27	0.44	0.42	1.11	134-0B
4482.00	com	bulk	0.52	1.13	0.50	0.48	1.07	135-0B
4528.00	com	bulk	0.42	1.40	0.40	0.38	1.06	136-0B
4544.00	com	bulk	0.54	1.26	0.53	0.50	1.12	137-0B
4602.00	com	bulk	0.56	1.26	0.54	0.52	1.11	138-0B
4666.00	com	bulk	0.65	1.15	0.62	0.59	1.12	139-0B

Table 5 : Aromatic Hydrocarbon Ratios for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	DBT/P	4/1MDBT	(3+2)/1MDBT	Sample
4200.00	com	bulk	-	2.12	-	0.80	0.79	0.72	0.23	2.05	0.98	126-0B
4230.00	com	bulk	-	-	-	0.86	0.82	0.78	0.22	5.29	1.12	127-0B
4270.00	com	bulk	0.61	1.91	0.07	0.77	0.73	0.68	0.18	6.10	1.08	128-0B
4300.00	com	bulk	0.66	1.82	0.06	0.81	0.74	0.72	0.20	10.95	1.27	129-0B
4330.00	com	bulk	0.67	1.81	0.06	0.84	0.74	0.74	0.21	13.38	1.30	130-0B
4430.00	com	bulk	0.90	2.31	0.09	0.84	0.81	0.77	0.20	6.35	1.30	133-0B
4474.00	com	bulk	0.80	2.41	0.08	0.89	0.74	0.76	0.17	9.33	1.33	134-0B
4482.00	com	bulk	0.76	2.35	0.06	0.92	0.78	0.79	0.14	7.64	1.36	135-0B
4528.00	com	bulk	1.04	2.61	0.10	0.93	0.75	0.78	0.17	9.39	1.37	136-0B
4544.00	com	bulk	0.89	2.99	0.08	1.02	0.81	0.82	0.18	7.70	1.52	137-0B
4602.00	com	bulk	-	2.12	-	0.90	0.87	0.84	0.18	1.42	0.21	138-0B
4666.00	com	bulk	-	-	-	0.88	0.92	0.80	0.18	-	-	139-0B

Table 6 : Thermal Maturity Data for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	Tmax (°C)	Sample
940.00	cut	bulk	0.32	20	0.03	3+4	-	-	001-0B
1100.00	cut	bulk	0.35	20	0.06	3+4	-	-	002-0B
1280.00	cut	bulk	0.34	23	0.04	4	-	-	003-0B
1460.00	cut	bulk	0.31	20	0.04	4	-	-	004-0B
1620.00	cut	bulk	0.35	20	0.05	3+4	-	-	005-0B
1800.00	cut	bulk	0.34	21	0.04	3+4	-	-	006-0B
1960.00	cut	bulk	0.38	17	0.04	3+4	-	-	007-0B
2140.00	cut	bulk	0.40	23	0.05	3+4	-	-	008-0B
2300.00	cut	bulk	0.35	18	0.03	3+4	-	-	009-0B
2480.00	cut	bulk	0.30	25	0.04	3+4	-	-	010-0B
2666.00	cut	bulk	0.43	20	0.06	0	-	-	011-0B
2820.00	cut	bulk	0.46	20	0.07	4	-	-	012-0B
3000.00	cut	bulk	0.48	3	0.01	4+5	-	-	013-0B
3170.00	cut	bulk	0.60	4	0.05	5	-	-	014-0B

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Table 6 : Thermal Maturity Data for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	Tmax (°C)	Sample
3340.00	cut	bulk	NDP	-	-	0	-	-	015-0B
3500.00	cut	bulk	NDP	-	-	0	-	-	016-0B
3670.00	cut	bulk	0.42	5	0.06	5	-	-	017-0B
4020.00	cut	bulk	NDP	-	-	0	-	-	020-0B
4110.00	cut	bulk	0.79	4	0.04	-	-	-	029-0B
4190.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	6?	437	037-2L
4200.00	cut	bulk	0.82	24	0.10	-	-	-	038-0B
4230.00	cut	Sh/Clst: blk, gy blk, brn blk	-	-	-	-	6?	437	041-3L
4260.00	cut	Sh/Clst: brn blk	-	-	-	-	6?	438	044-1L
4300.00	cut	bulk	0.81	16	0.09	-	-	-	049-0B
4320.00	cut	Sh/Clst: brn blk	-	-	-	-	6?	438	051-1L
4356.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	6? 6.5?	437	056-1L
4370.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	432	057-1L
4398.00	cut	bulk	0.84	15	0.10	-	-	-	062-0B

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Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	Tmax (°C)	Sample
4410.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	437	064-1L
4413.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP (7.5-8)	437	065-1L
4430.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP (8?)	437	066-1L
4440.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	7?	436	068-1L
4474.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	5 - 8	436	071-1L
4482.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	434	073-1L
4494.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	439	076-1L
4498.00	cut	bulk	0.97	6	0.14	-	-	-	077-0B
4498.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	434	077-1L
4536.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	438	084-1L
4550.00	cut	Sh/Clst: gy blk, brn blk	-	-	-	-	NDP	438	087-1L
4616.00	cut	bulk	0.97	11	0.14	-	-	-	096-0B
4616.00	cut	Sh/Clst: gy, gy red, m gy	-	-	-	-	NDP	437	096-1L
4670.00	cut	Sh/Clst: drk gy, gy blk	-	-	-	-	NDP	437	108-1L

Table 6 : Thermal Maturity Data for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	Tmax (°C)	Sample
4714.00	cut	bulk	0.98	27	0.09	-	-	-	118-0B
4714.00	cut	Sh/Clst: gy red	-	-	-	-	NDP	368	118-1L
4740.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	NDP	439	123-2L

Table 7 : Visual Kerogen Composition Data for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	LIPT %	Amor L	Lip Det	Sp/Pol	Cuticl	Resin	Algae	Dinofl	Acrit	Bit L	INERT %	Fusin	SemFus	InDet	Micrin	Sclero	Bit I	VITR %	Tellin	Collin	VitDet	Amor V	Bit V	Sample
4190.00	cut	Sh/Clst: gy blk, brn blk	5		*	*							5			*				90			*	*		037-2L
4230.00	cut	Sh/Clst: blk, gy blk, brn blk	5		*	*							5			*				90			*	*		041-3L
4260.00	cut	Sh/Clst: brn blk	5		*	*							5			*				90			*	*		044-1L
4320.00	cut	Sh/Clst: brn blk	10		**	*							5		*	*				85	?	*	*	*		051-1L
4356.00	cut	Sh/Clst: gy blk, brn blk	10	*	**	*	?						20		**	*				70			*	**		056-1L
4370.00	cut	Sh/Clst: gy blk, brn blk	TR		*								20		*	*				80			*	**		057-1L
4410.00	cut	Sh/Clst: gy blk, brn blk	TR?										20			*				80			*	**		064-1L
4413.00	cut	Sh/Clst: gy blk, brn blk	10		**	*							25		*	*				65		*	*	**		065-1L
4430.00	cut	Sh/Clst: gy blk, brn blk	TR			*							40			*				60			*			066-1L
4440.00	cut	Sh/Clst: gy blk, brn blk	5		*	*							30		*	*				65			*	*		068-1L
4474.00	cut	Sh/Clst: gy blk, brn blk	10		*	*							20			*				70			*	**		071-1L
4482.00	cut	Sh/Clst: gy blk, brn blk	TR?		*								30?	?	*	*				70?			*	*		073-1L

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Table 7 : Visual Kerogen Composition Data for well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	LIPT %	Amor L	Lip Det	Sp/Pol	Cuticl	Resin	Algae	Dinofl	Acrit	Bit L	INERT %	Fusin	SemFus	IntDet	Micrin	Sclero	Bit I	VITR %	Telin	Collin	VitDet	Amor V	Bit V	Sample
4494.00	cut	Sh/Clst: gy blk, brn blk	TR?										30?			*				70?			*	**		076-1L
4498.00	cut	Sh/Clst: gy blk, brn blk	TR?										40?			*				60?			*	**		077-1L
4536.00	cut	Sh/Clst: gy blk, brn blk	TR?		*								20		?	*				80			*	*		084-1L
4550.00	cut	Sh/Clst: gy blk, brn blk	TR?			*							10?			*				90?		*	*			087-1L
4616.00	cut	Sh/Clst: gy, gy red, m gy	TR		*								10		*	*				90			*	**		096-1L
4670.00	cut	Sh/Clst: drk gy, gy blk	TR?		*								30	?	*	*				70		*	*	*		108-1L
4714.00	cut	Sh/Clst: gy red	NDP										NDP							NDP						118-1L
4740.00	cut	Sh/Clst: m gy to drk gy	10?		*			?					30?		*	*				60?			*	*		123-2L

Table 8 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
4130.00	cut	Sh/Clst: gy blk, brn blk	7.99	34.34	52.11	5.57	0.15	031-2L
4160.00	cut	Sh/Clst: gy blk, brn blk	3.44	17.20	41.11	38.26	4.13	034-2L
4190.00	cut	Sh/Clst: gy blk, brn blk	3.10	15.62	38.50	42.78	5.96	037-2L
4200.00	cut	Sh/Clst: m gy to drk gy	3.59	33.37	52.00	11.04	0.11	038-1L
4200.00	cut	Sh/Clst: gy blk, brn blk	3.25	14.95	40.38	41.42	5.28	038-3L
4220.00	cut	Sh/Clst: blk, gy blk, brn blk	2.90	14.04	34.24	48.82	7.04	040-3L
4230.00	cut	Sh/Clst: blk, gy blk, brn blk	2.86	14.27	34.81	48.07	8.03	041-3L
4250.00	cut	Sh/Clst: gy blk, brn blk	3.20	14.75	36.72	45.34	6.55	043-2L
4260.00	cut	Sh/Clst: brn blk	3.27	14.60	39.70	42.43	6.87	044-1L
4270.00	cut	Sh/Clst: brn blk	3.19	14.00	37.89	44.93	6.51	045-2L
4280.00	cut	Sh/Clst: brn blk	2.99	14.71	35.98	46.32	6.77	047-1L
4300.00	cut	Sh/Clst: brn blk	3.04	14.83	39.51	42.62	5.79	049-1L
4320.00	cut	Sh/Clst: brn blk	2.72	13.68	34.87	48.73	7.85	051-1L
4330.00	cut	Sh/Clst: brn blk	2.92	14.70	38.81	43.57	4.93	052-1L
4336.00	cut	Sh/Clst: gy blk, brn blk	3.07	14.94	37.67	44.33	5.53	053-2L

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Table 8 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
4342.00	cut	Sh/Clst: gy blk, brn blk	3.03	11.84	39.71	45.43	7.02	054-1L
4356.00	cut	Sh/Clst: gy blk, brn blk	4.33	14.23	38.09	43.36	6.25	056-1L
4374.00	cut	Sh/Clst: gy blk, brn blk	2.94	16.58	40.48	40.00	2.26	058-1L
4380.00	cut	Sh/Clst: gy blk, brn blk	3.30	14.90	38.60	43.21	7.65	059-1L
4389.00	cut	Sh/Clst: gy blk, brn blk	2.86	13.63	38.71	44.80	6.33	061-1L
4398.00	cut	Sh/Clst: gy blk, brn blk	3.46	16.10	40.98	39.46	5.84	062-1L
4410.00	cut	Sh/Clst: gy blk, brn blk	3.05	15.77	36.59	44.59	6.38	064-1L
4413.00	cut	Sh/Clst: gy blk, brn blk	2.69	13.76	36.33	47.21	7.38	065-1L
4430.00	cut	Sh/Clst: gy blk, brn blk	3.06	16.19	34.49	46.26	4.64	066-1L
4440.00	cut	Sh/Clst: gy blk, brn blk	3.72	16.77	44.14	35.37	7.95	068-1L
4468.00	cut	Sh/Clst: gy blk, brn blk	2.80	14.88	35.55	46.77	6.50	070-1L
4478.00	cut	Sh/Clst: gy blk, brn blk	4.28	17.58	33.59	44.55	4.87	072-1L
4486.00	cut	Sh/Clst: gy blk, brn blk	4.71	16.82	32.11	46.36	4.50	074-1L
4494.00	cut	Sh/Clst: gy blk, brn blk	3.46	16.15	32.50	47.88	3.45	076-1L
4506.00	cut	Sh/Clst: gy blk, brn blk	4.10	17.34	36.56	42.00	6.34	078-1L

Table 8 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
4522.00	cut	Sh/Clst: gy blk, brn blk	3.25	15.01	33.29	48.45	4.53	081-1L
4532.00	cut	Sh/Clst: gy blk, brn blk	3.02	15.68	39.59	41.71	3.63	083-1L
4540.00	cut	Sh/Clst: gy blk, brn blk	2.76	14.04	35.54	47.66	4.06	085-1L
4550.00	cut	Sh/Clst: gy blk, brn blk	2.27	12.84	33.18	51.71	6.50	087-1L
4580.00	cut	Sh/Clst: gy blk, brn blk	2.36	12.57	31.63	53.45	7.06	090-1L
4602.00	cut	Sh/Clst: gy blk, brn blk	2.32	13.27	33.10	51.31	5.40	093-1L
4616.00	cut	Sh/Clst: gy, gy red, m gy	2.24	13.78	34.23	49.76	2.74	096-1L
4656.00	cut	Sh/Clst: gy, gy red	2.69	15.02	35.67	46.62	2.22	105-1L
4670.00	cut	Sh/Clst: drk gy, gy blk	2.68	15.27	32.66	49.40	8.86	108-1L
4714.00	cut	Sh/Clst: gy red	3.06	16.32	33.90	46.72	3.57	118-1L
4714.00	cut	Sh/Clst: m gy to drk gy	3.14	15.54	32.10	49.22	6.61	118-2L
4760.00	cut	Sh/Clst: gy blk, ol blk	3.18	18.06	43.95	34.80	2.39	125-3L

Table 9: Variation in Triterpane Distribution for Well NOCS 2/6-2

Depth unit of measure: m

				B									C+D		J1	
Depth	Lithology	B/A	B/B+A	B+E+F	C/E	C/C+E	X/E	Z/E	Z/C	Z/Z+E	Q/E	E/E+F	C+D+E+F	D+F/C+E	J1+J2%	Sample
4200.00	Sh/Clst	0.50	0.34	0.18	0.51	0.34	0.22	0.10	0.20	0.09	0.33	0.88	0.34	0.14	47.31	126-0
4300.00	Sh/Clst	1.06	0.51	0.16	0.40	0.29	0.23	0.08	0.21	0.08	0.10	0.91	0.29	0.10	61.00	129-0
4430.00	Sh/Clst	2.28	0.70	0.23	0.66	0.40	0.17	0.11	0.17	0.10	0.30	0.84	0.41	0.22	56.35	133-0
4528.00	Sh/Clst	1.14	0.53	0.26	0.73	0.42	0.42	0.13	0.17	0.11	0.30	0.86	0.43	0.17	54.95	136-0
4666.00	Sh/Clst	1.08	0.52	0.25	0.57	0.36	0.20	0.11	0.20	0.10	0.25	0.90	0.37	0.12	50.60	139-0

Table 10: Variation in Sterane Distribution for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Sample
4200.00	Sh/Clst	0.84	52.17	78.30	1.20	0.78	0.62	0.52	126-0
4300.00	Sh/Clst	0.85	58.21	74.91	1.33	0.72	0.36	0.27	129-0
4430.00	Sh/Clst	0.59	39.74	69.98	1.13	0.75	0.38	0.31	133-0
4528.00	Sh/Clst	0.80	57.66	73.90	1.33	0.71	0.47	0.39	136-0
4666.00	Sh/Clst	0.80	44.32	74.86	1.45	0.77	0.45	0.37	139-0

Ratio1: a / a + j
Ratio2: q / q + t * 100%
Ratio3: 2(r + s)/(q + t + 2(r + s)) * 100%
Ratio4: a + b + c + d / h + k + l + n

Ratio5: r + s / r + s + q
Ratio6: u + v / u + v + q + r + s + t
Ratio7: u + v / u + v + i + m + n + q + r + s + t

Table 11: Aromatisation of Steranes for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Sample
4200.00	Sh/Clst	0.52	0.71	126-0
4300.00	Sh/Clst	0.53	0.71	129-0
4430.00	Sh/Clst	0.54	0.74	133-0
4528.00	Sh/Clst	0.75	0.46	136-0
4666.00	Sh/Clst	0.31	0.82	139-0

Ratio1: $\frac{C1+D1+E1+F1+G1+H1+I1}{C1+D1+E1+F1+G1+H1+I1 + c1+d1+e1+f1+g1}$

Ratio2: g1 / g1 + I1

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Table 12: Variation in Triaromatic Sterane Distribution for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
4200.00	Sh/Clst	0.71	0.68	0.49	0.48	0.62	126-0
4300.00	Sh/Clst	0.71	0.68	0.48	0.46	0.62	129-0
4430.00	Sh/Clst	0.65	0.62	0.41	0.38	0.53	133-0
4528.00	Sh/Clst	0.86	0.85	0.65	0.62	0.76	136-0
4666.00	Sh/Clst	0.80	0.81	0.56	0.52	0.67	139-0

Ratio1: a1 / a1 + g1
Ratio2: b1 / b1 + g1
Ratio3: a1 + b1 / a1 + b1 + c1 + d1 + e1 + f1 + g1
Ratio4: a1 / a1 + e1 + f1 + g1
Ratio5: a1 / a1 + d1

Table 13: Variation in Monoaromatic Sterane Distribution for Well NOCS 2/6-2

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Sample
4200.00	Sh/Clst	0.53	0.39	0.35	0.24	126-0
4300.00	Sh/Clst	0.53	0.36	0.37	0.24	129-0
4430.00	Sh/Clst	0.57	0.41	0.36	0.26	133-0
4528.00	Sh/Clst	0.55	0.46	0.41	0.30	136-0
4666.00	Sh/Clst	0.62	0.50	0.43	0.34	139-0

Ratio1: A1 / A1 + E1
Ratio2: B1 / B1 + E1

Ratio3: A1 / A1 + E1 + G1
Ratio4: A1+B1 / A1+B1+C1+D1+E1+F1+G1+H1+I1

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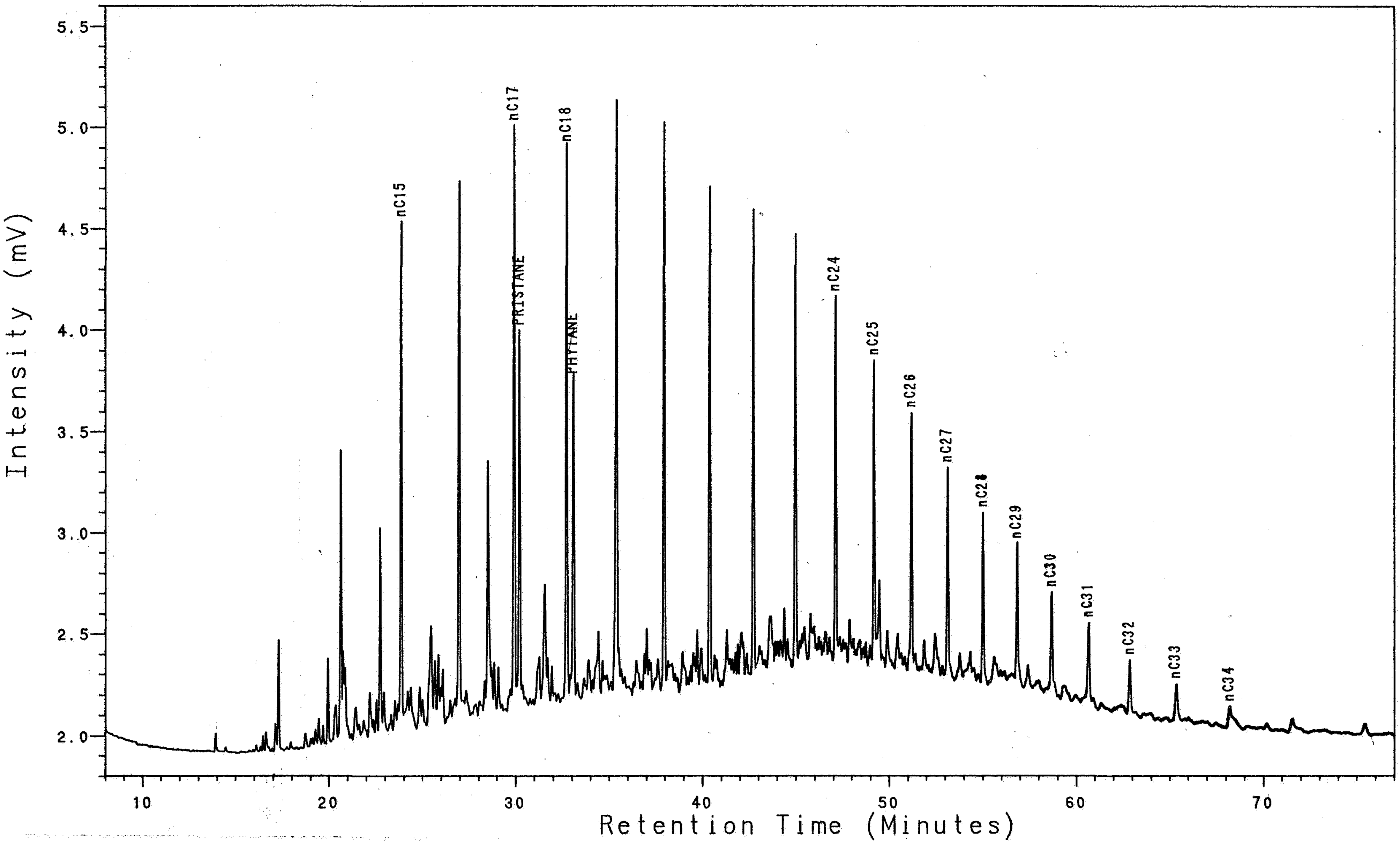
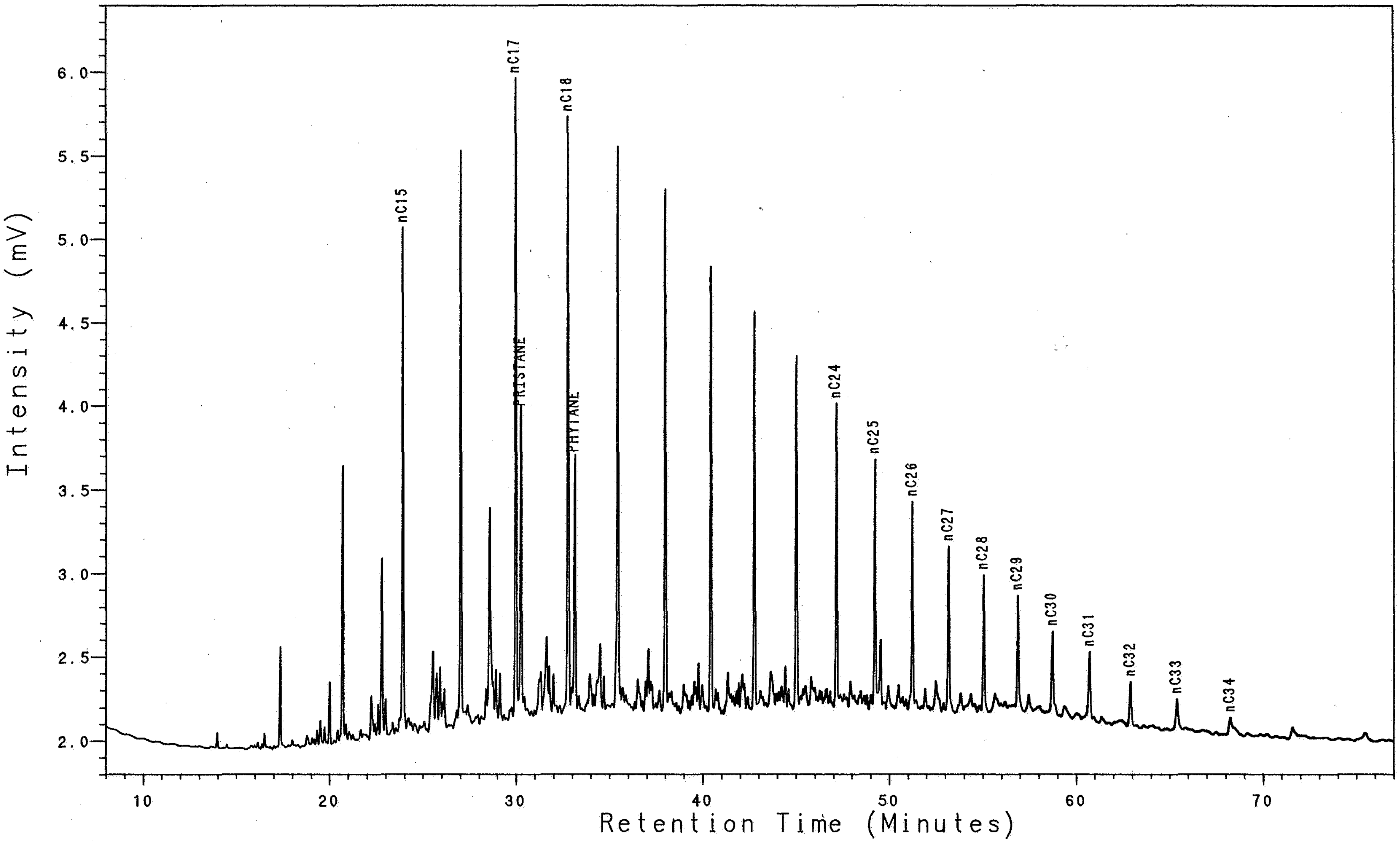
Analysis SC101260B 5, 1, 1 2/6-2, 4200m, SAT



NOCS 2/6-2 4160-4200m
SATURATED GC
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis SC101270B 5, 1, 1 2/6-2, 4230m, SAT



NOCS 2/6-2 4210-30m
SATURATED GC
CLST: blk, gy blk, brn blk

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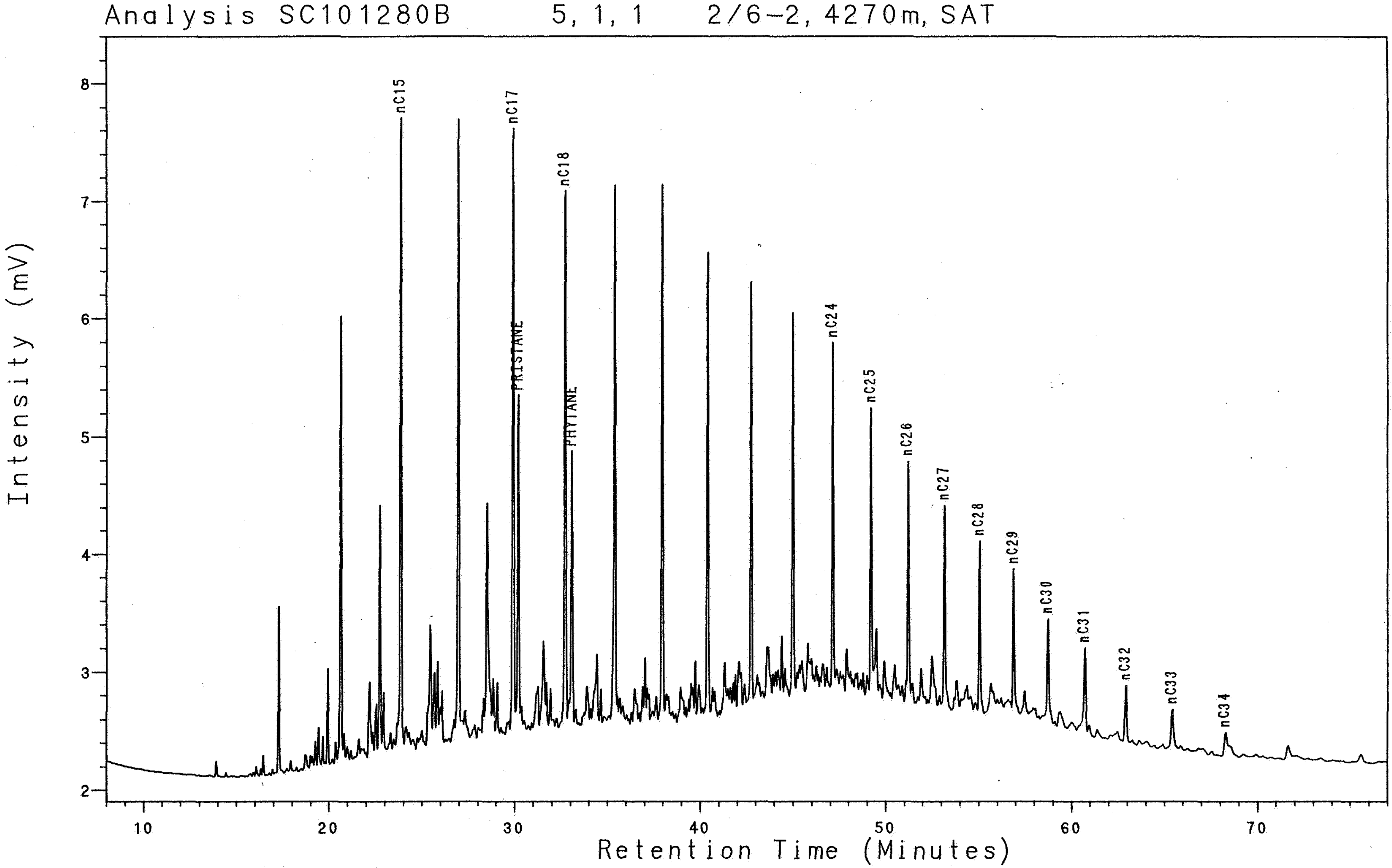
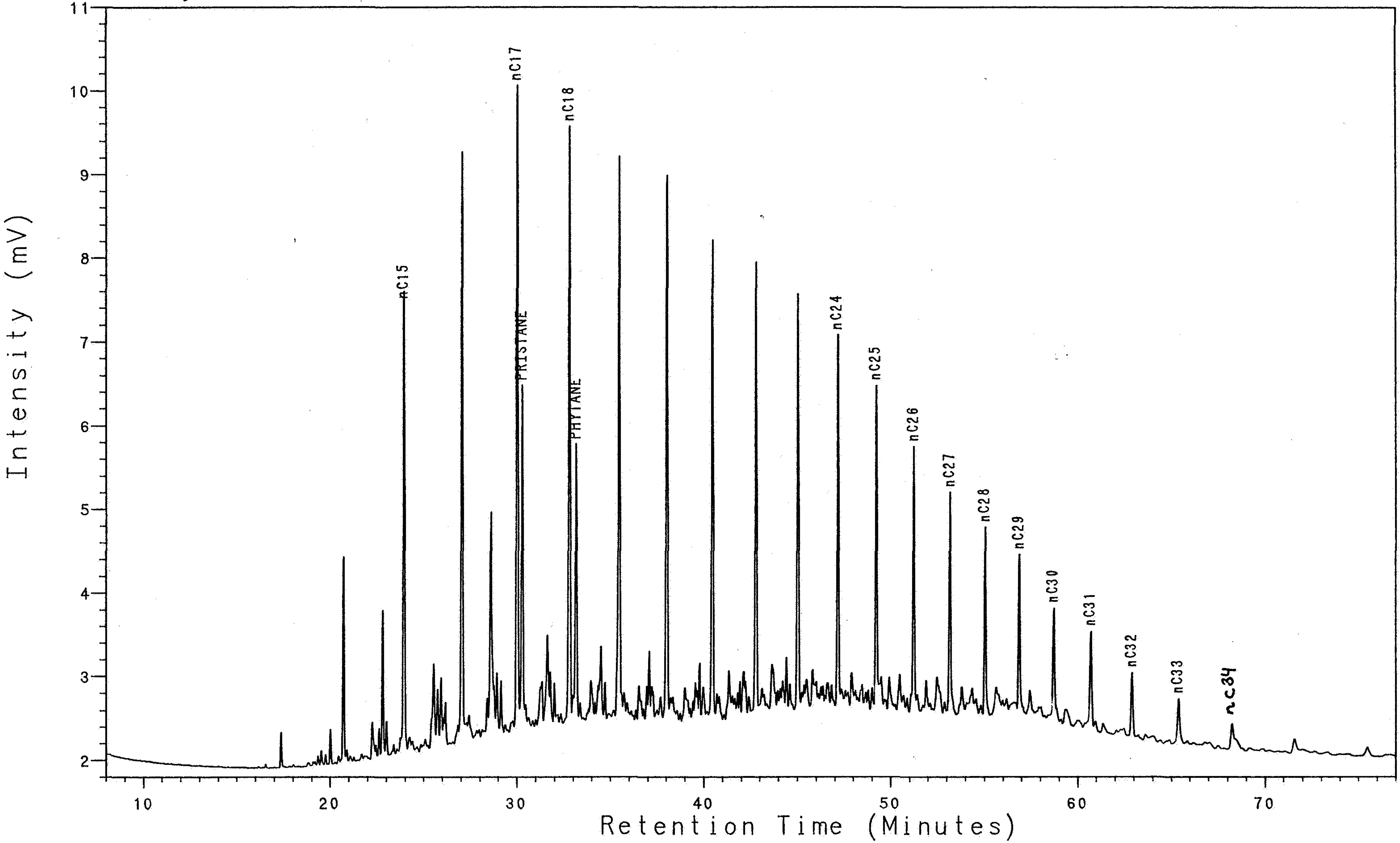
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4240-70m
SATURATED GC
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis SC101290B 5, 1, 1 2/6-2, 4300m, SAT



NOCS 2/6-2 4280-4300m
SATURATED GC
CLST: brn blk

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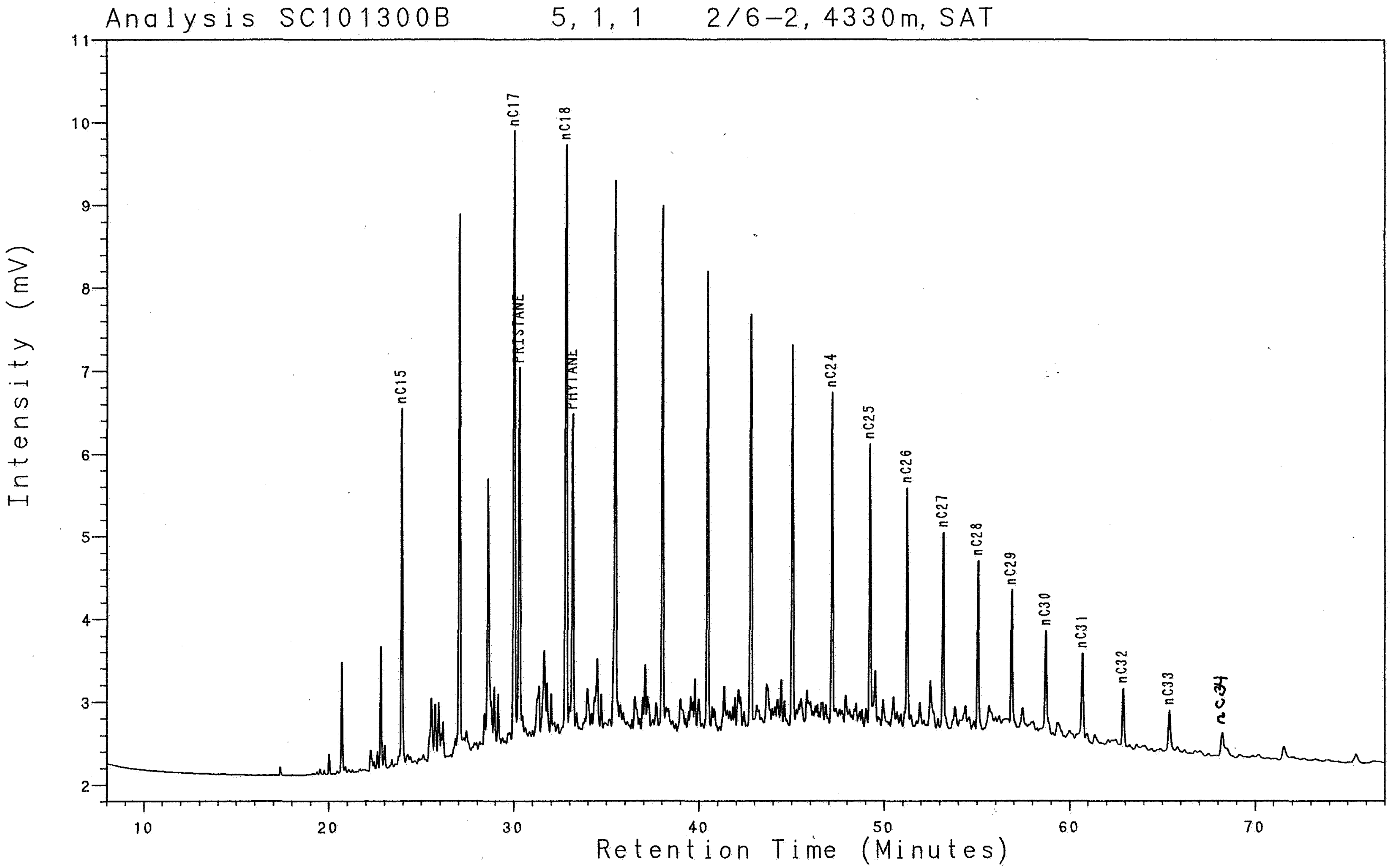
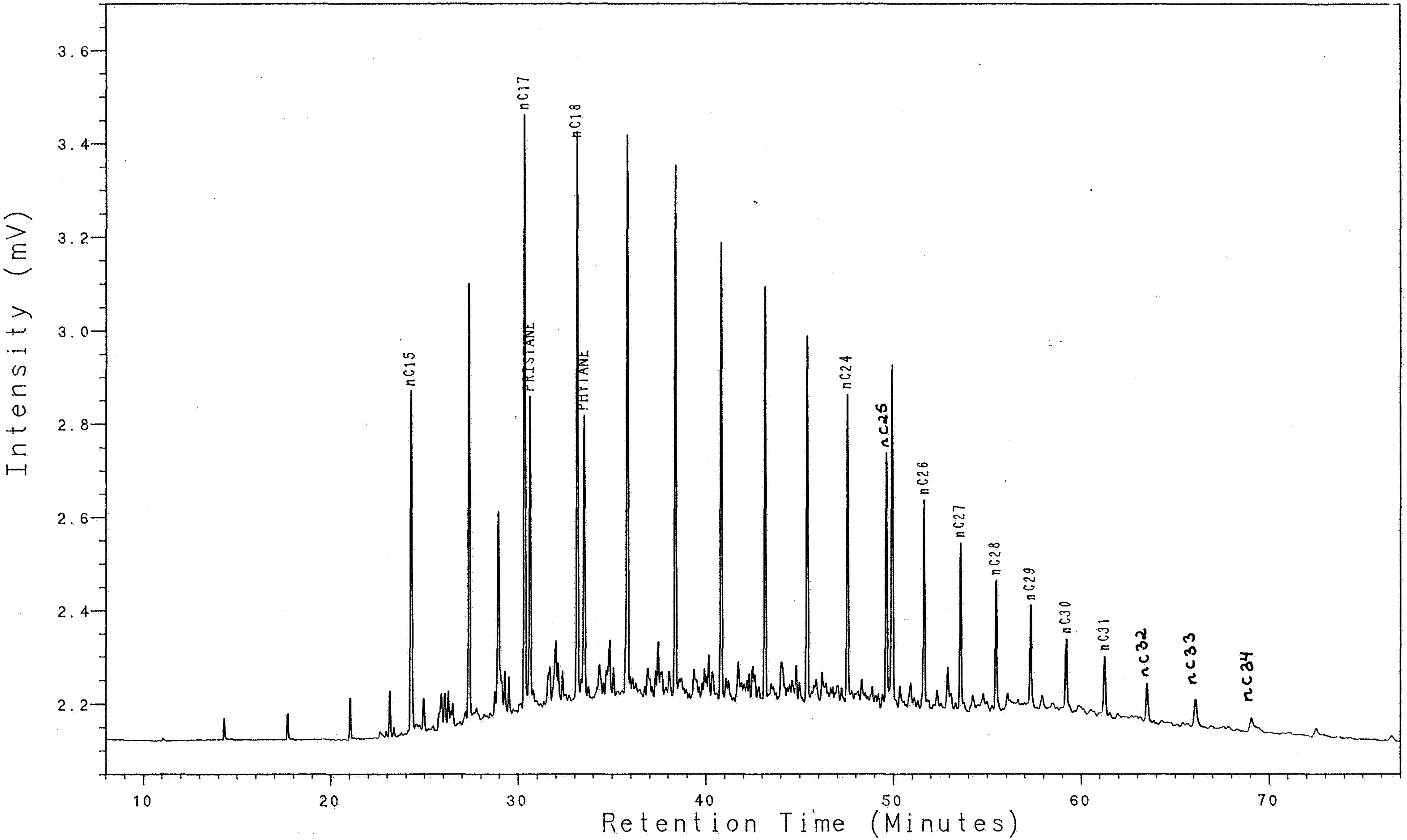
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4310-30m
SATURATED GC
CLST: brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis SC101310B 5, 1, 1 2/6-2, 4356m, SAT



NOCS 2/6-2 4336-56m
SATURATED GC
CLST: gy blk, brn blk

GEOLAB NOR
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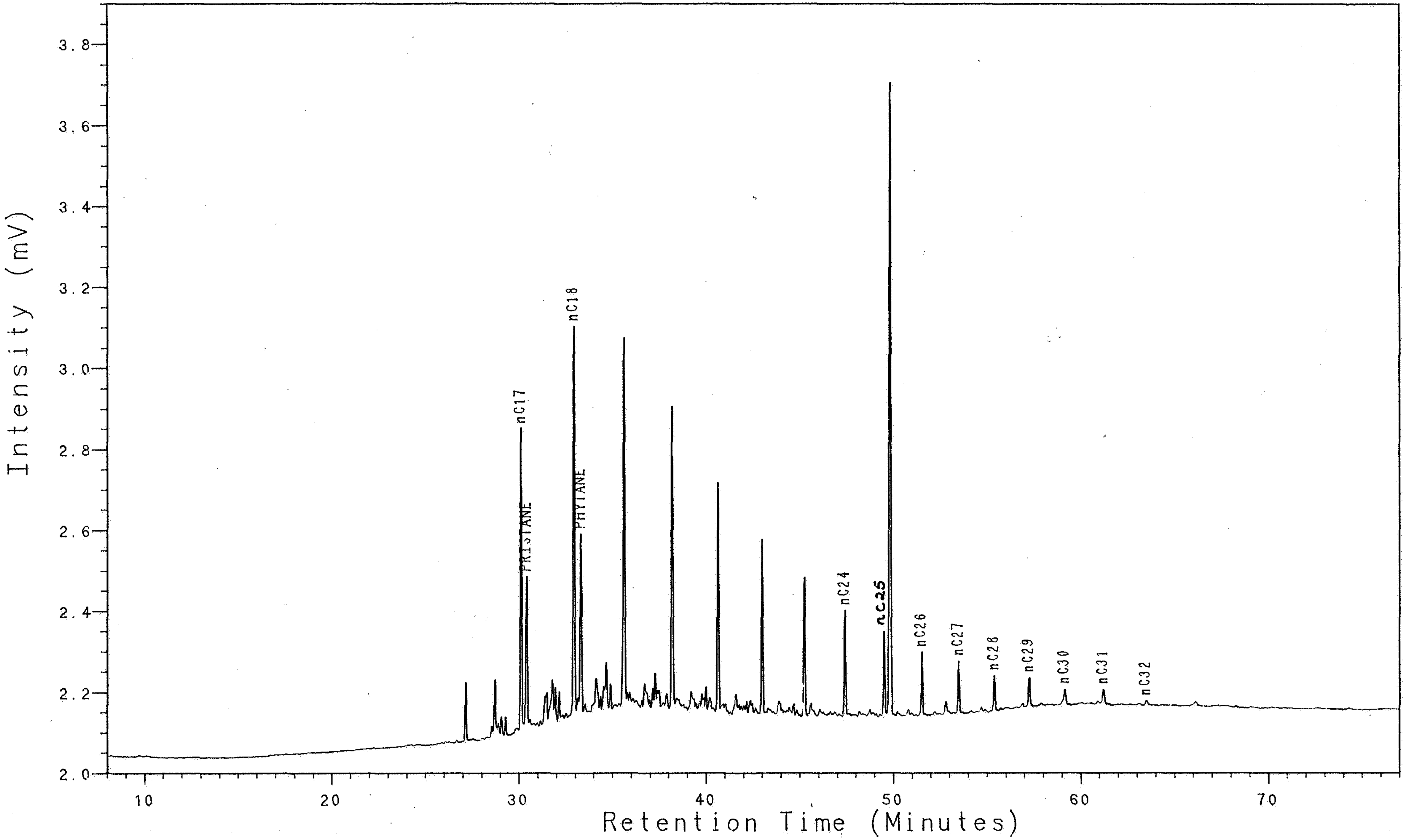
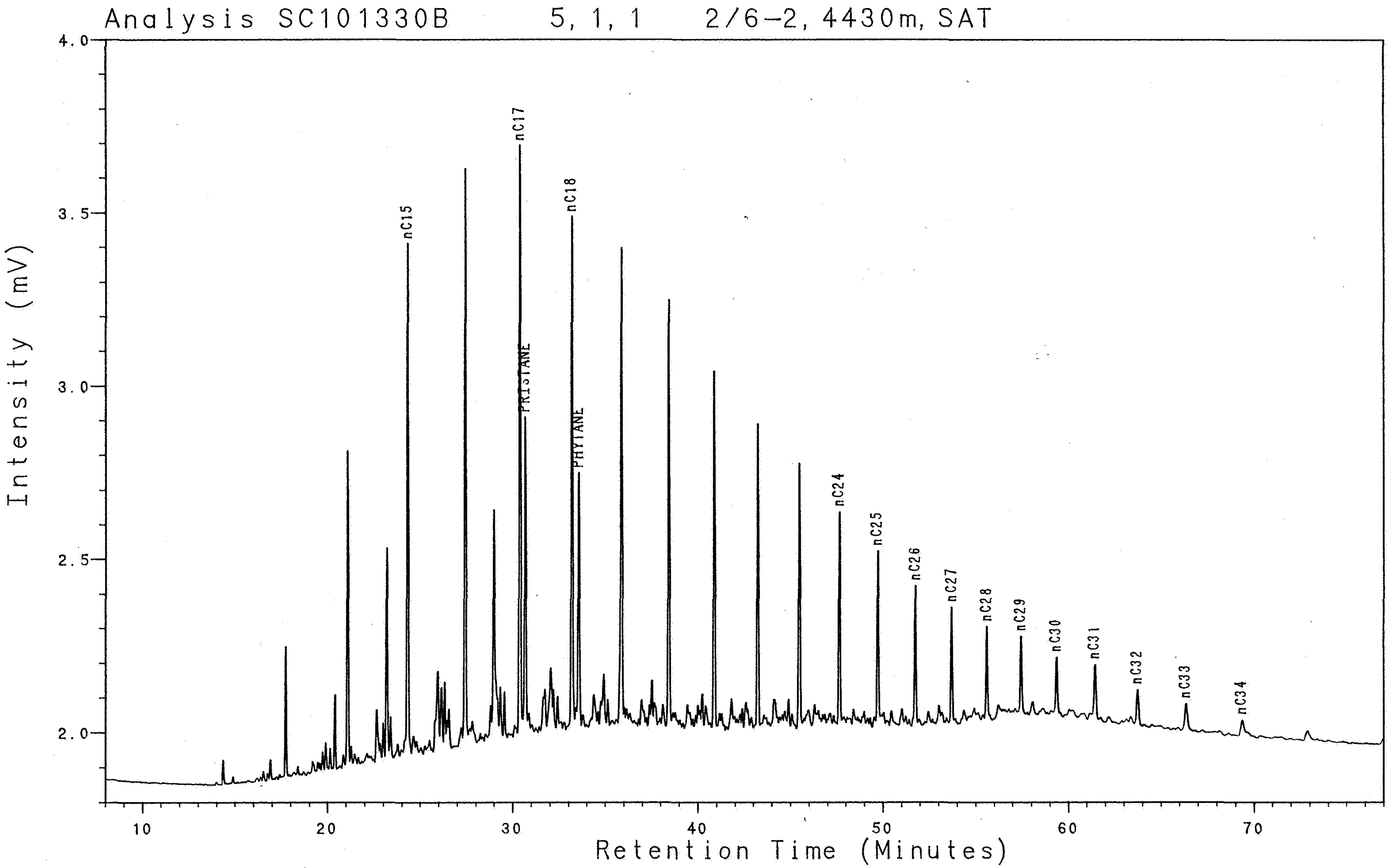
Analysis SC101320B 5, 1, 1 2/6-2, 4398m, SAT



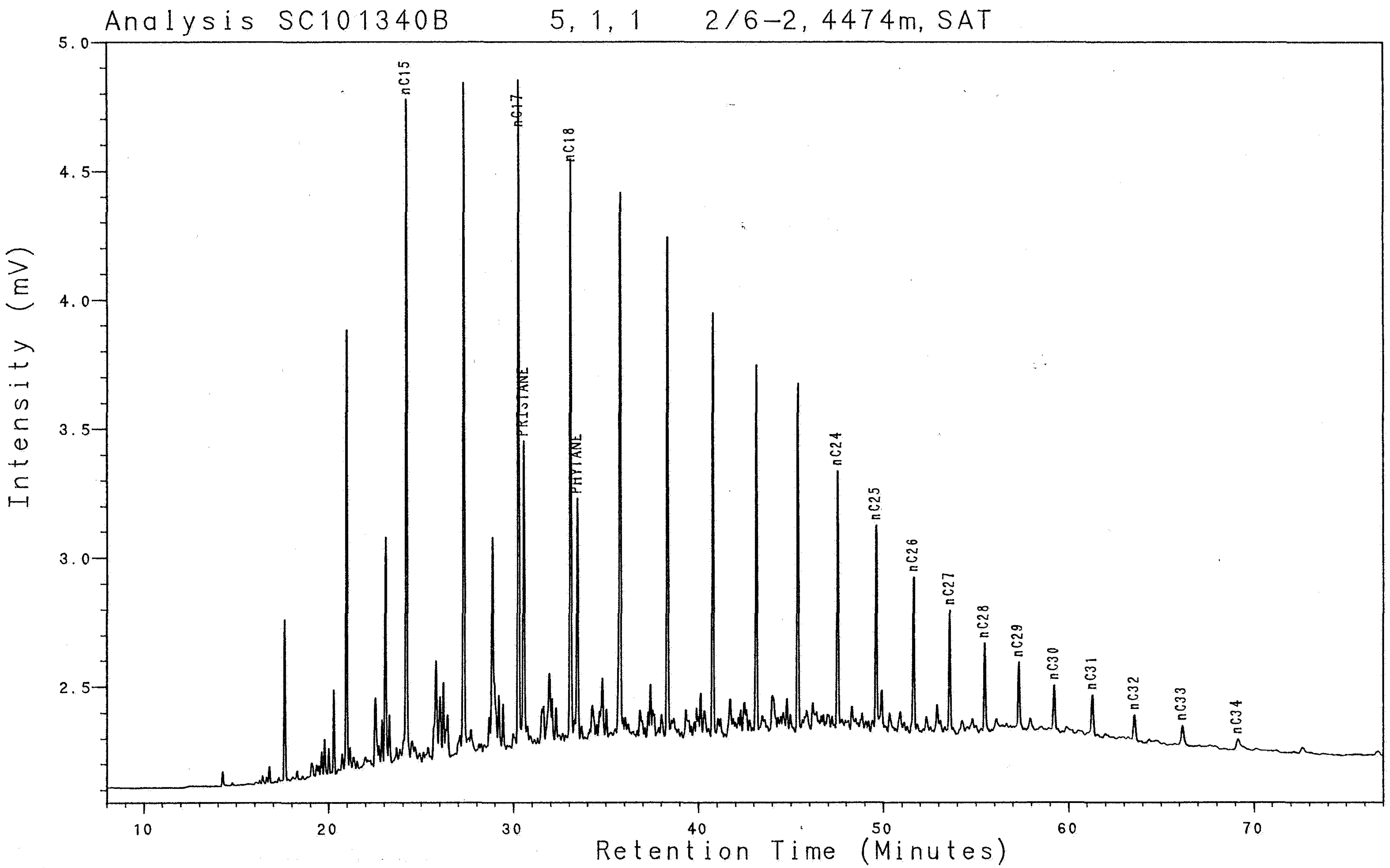
NOCS 2/6-2 4380-98m
SATURATED GC
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



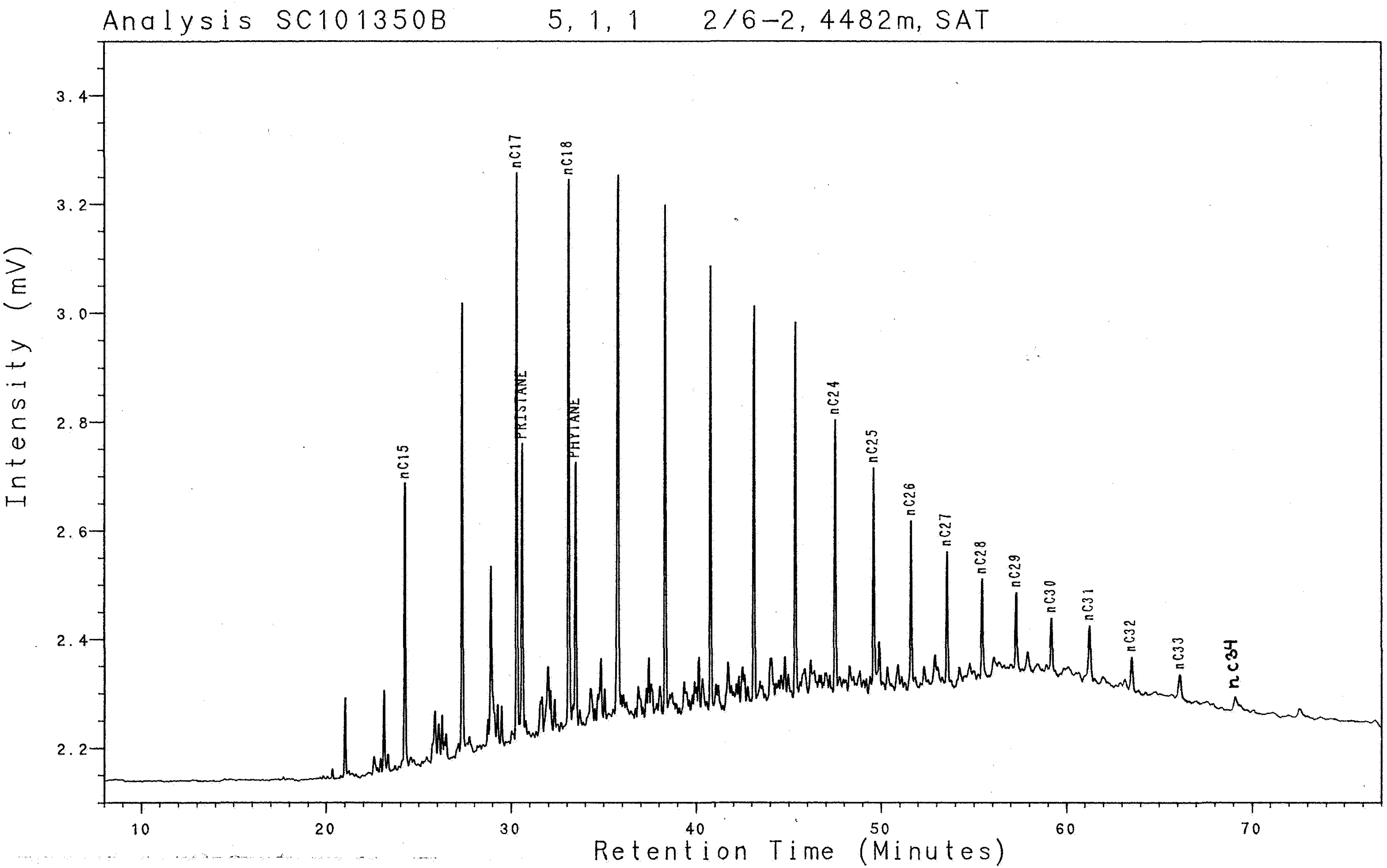
NOCS 2/6-2 4404-30m
SATURATED GC
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4436-74m
SATURATED GC
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4478-82m
SATURATED GC
CLST: gy blk, brn blk

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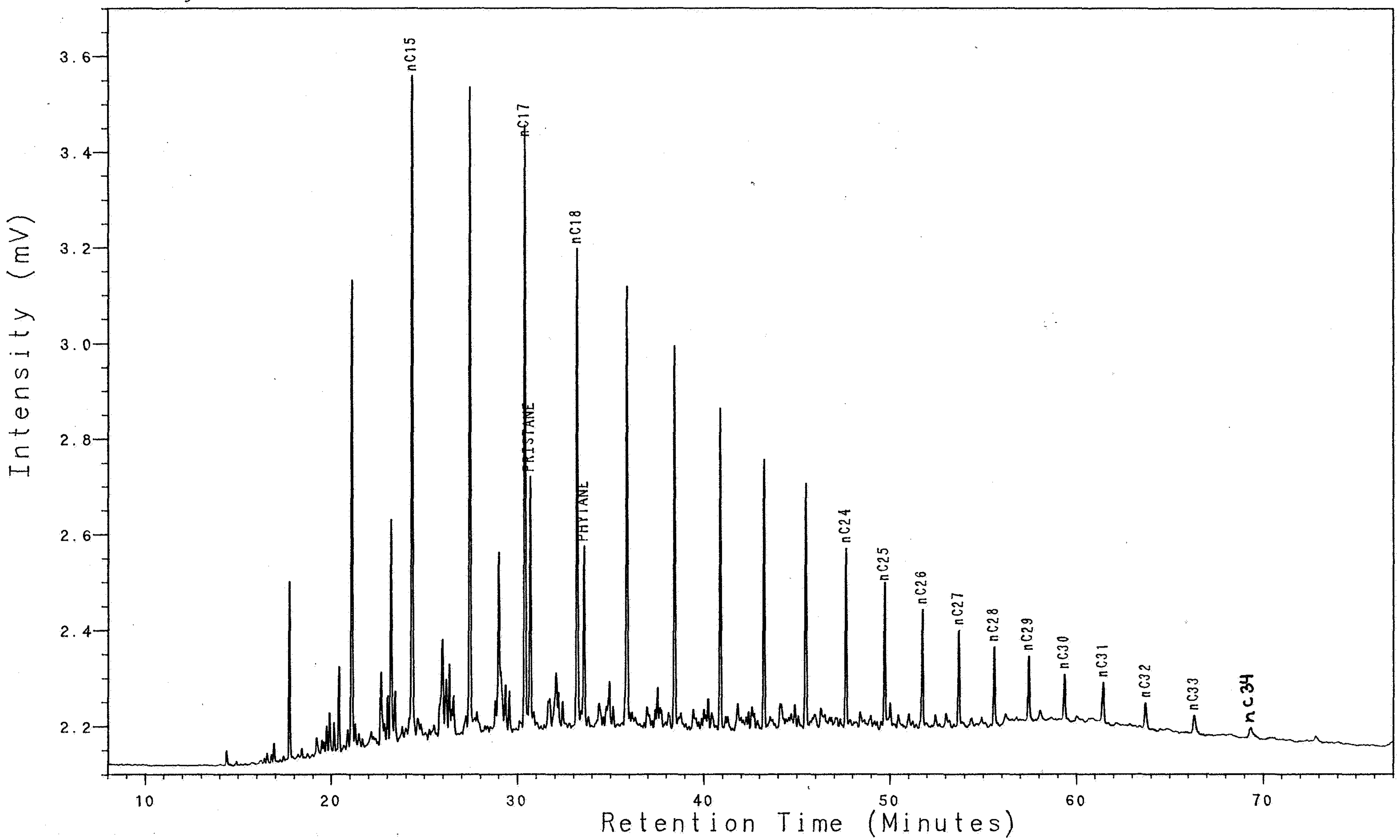
GEOCHEMICAL LABORATORIES OF NORWAY A/S

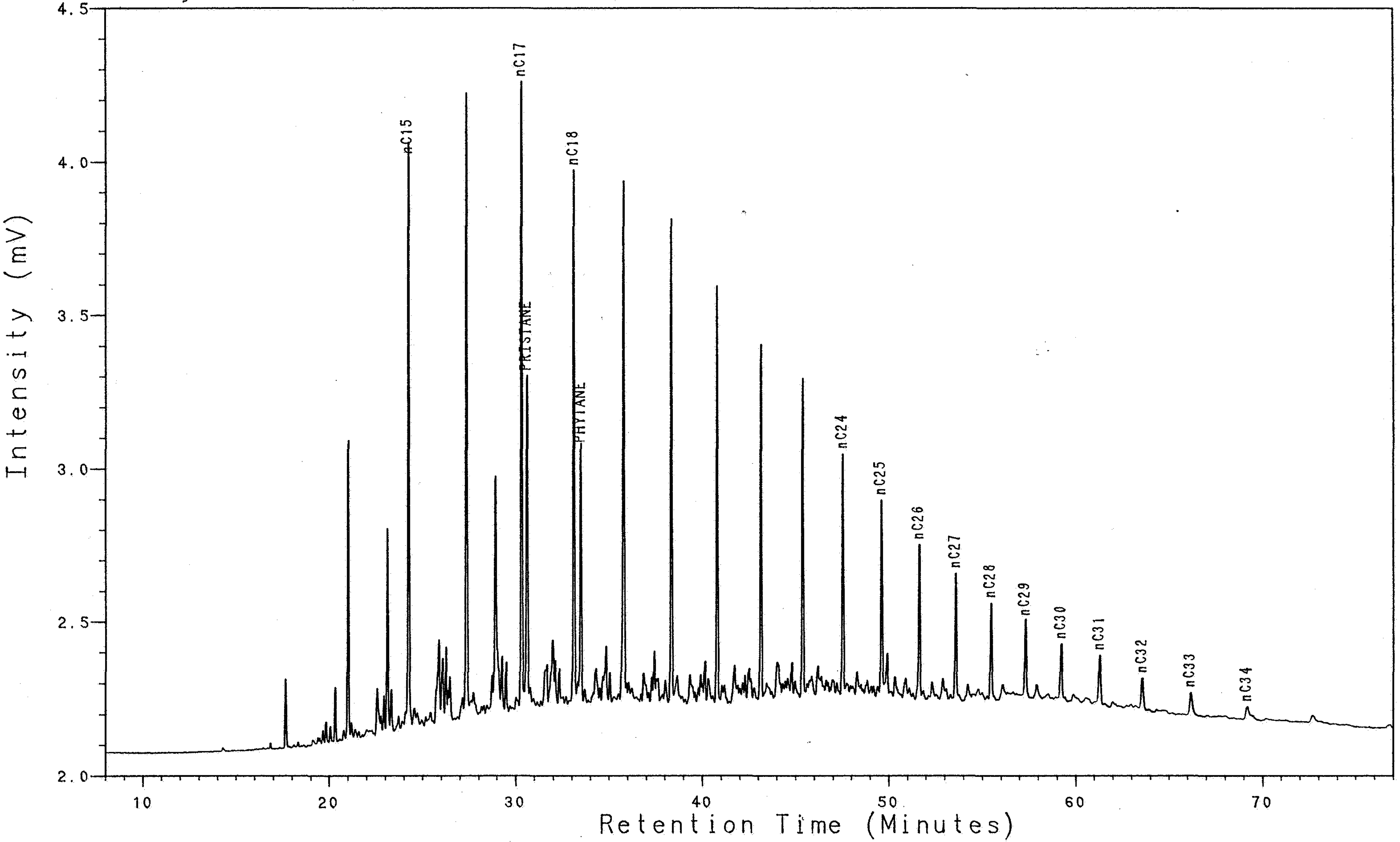
Analysis SC101360B 5, 1, 1 2/6-2, 4528m, SAT



NOCS 2/6-2 4506-28m
SATURATED GC
CLST: gy blk, brn blk

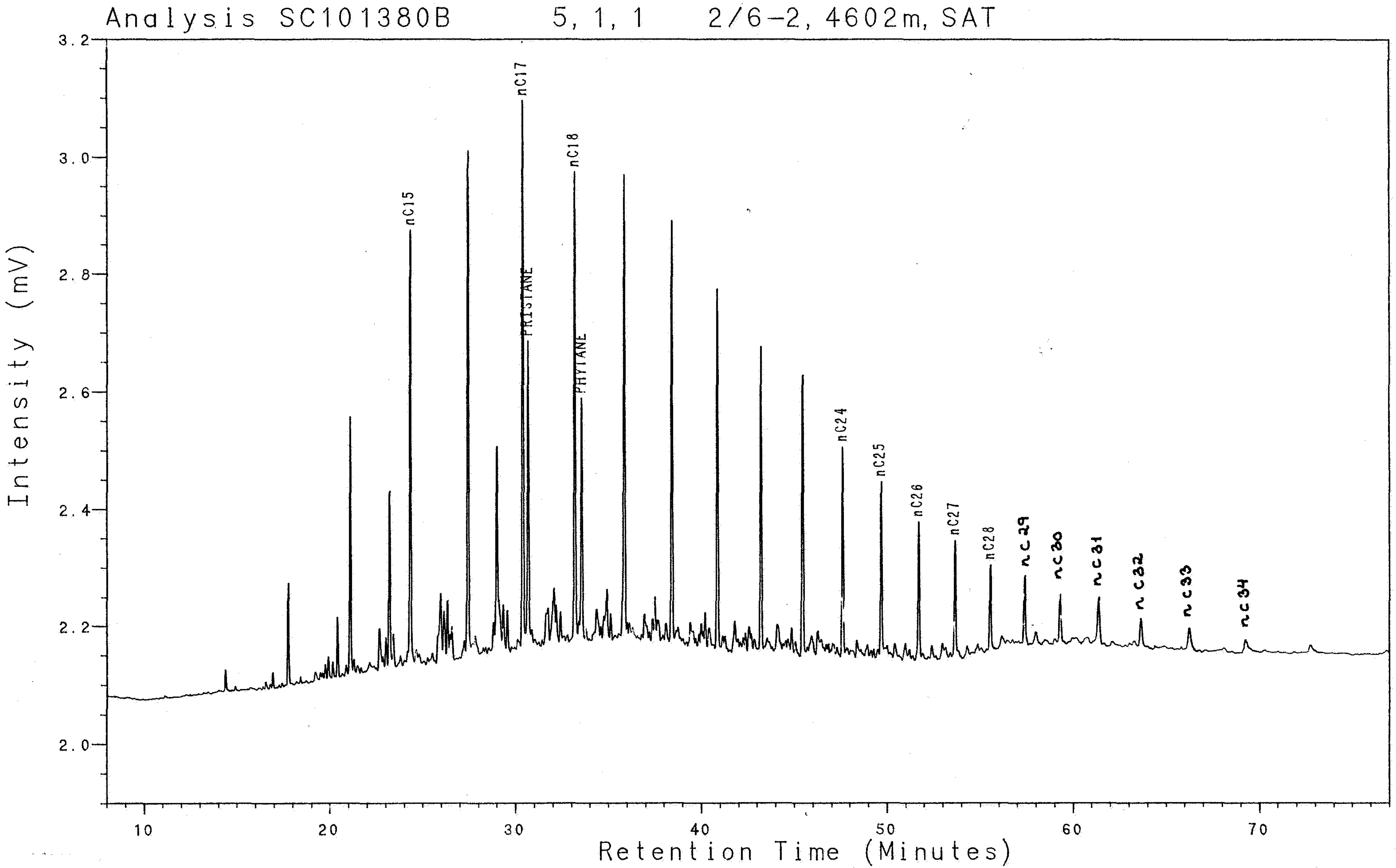
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis SC101370B 5, 1, 1 2/6-2, 4544m, SAT



NOCS 2/6-2 4532-44m
SATURATED GC
CLST: gy blk, brn blk

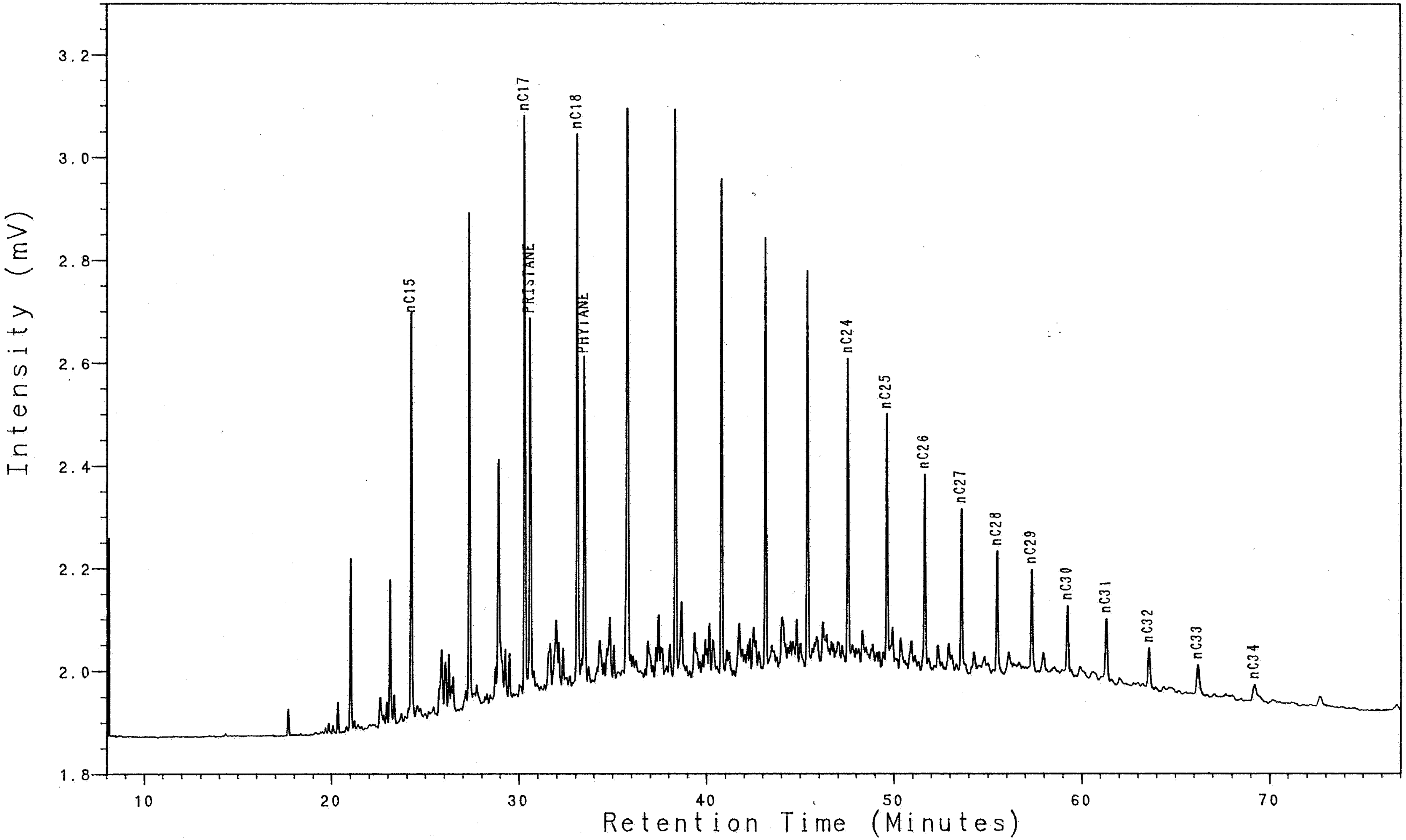
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4575-4602m
SATURATED GC
CLST: gy blk, brn blk

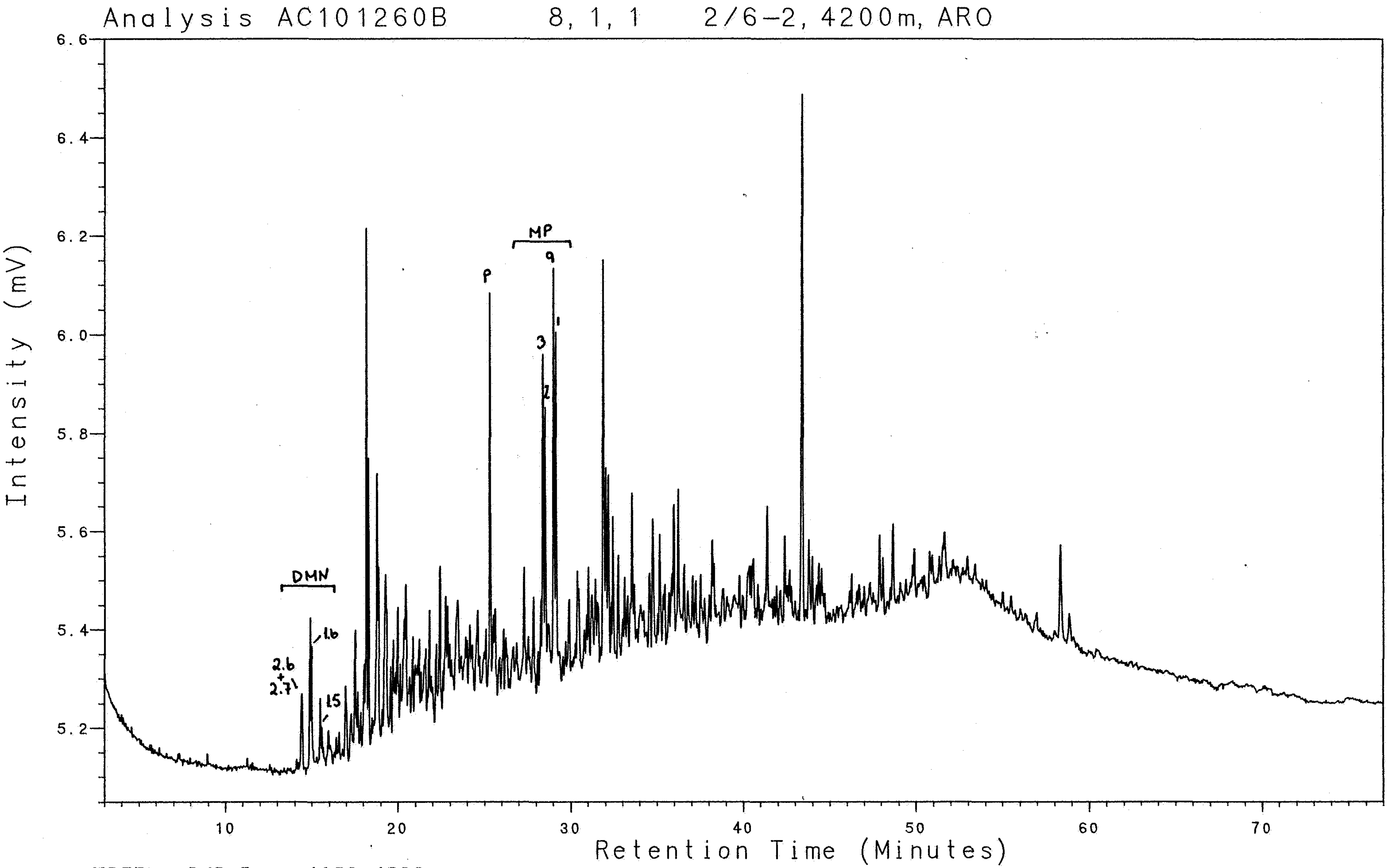
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis SC101390B 5, 1, 1 2/6-2, 4666m, SAT



NOCS 2/6-2 4616-66m
SATURATED GC
CLST: gy, gy red, m gy

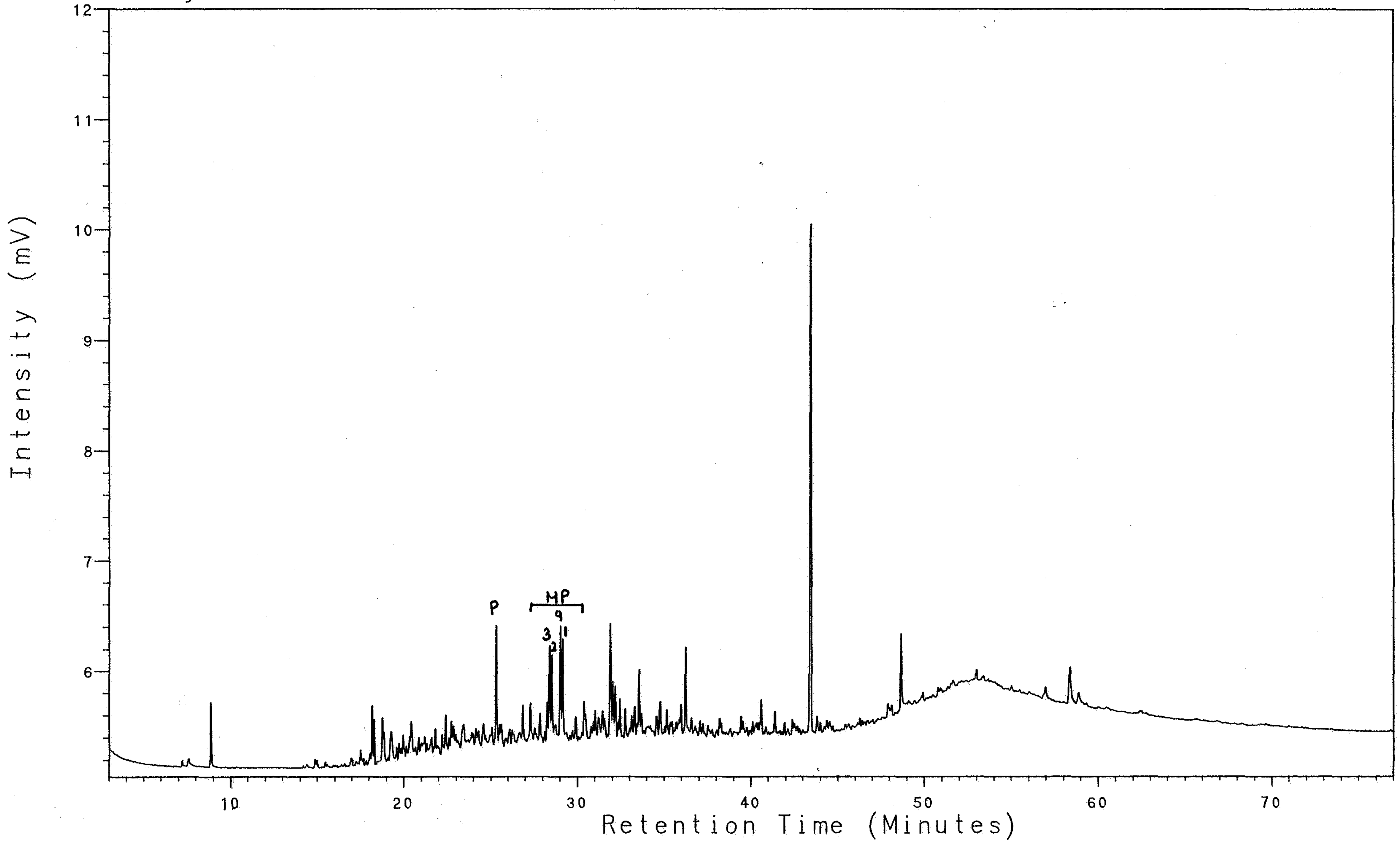
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4160-4200m
AROMATIC GC (FID)
CLST: gy blk, brn blk

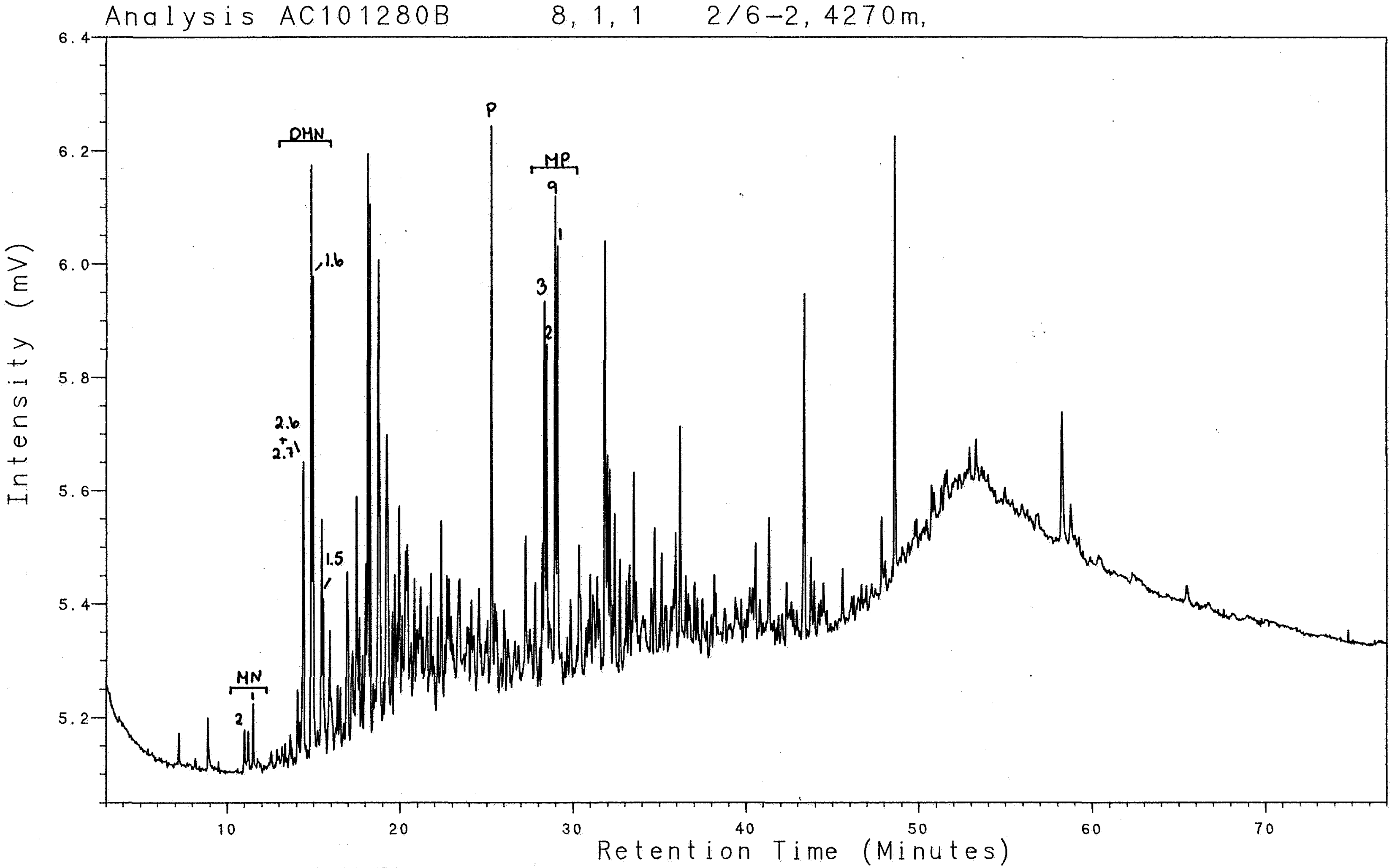
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101270B 8, 1, 1 2/6-2, 4230m, ARO



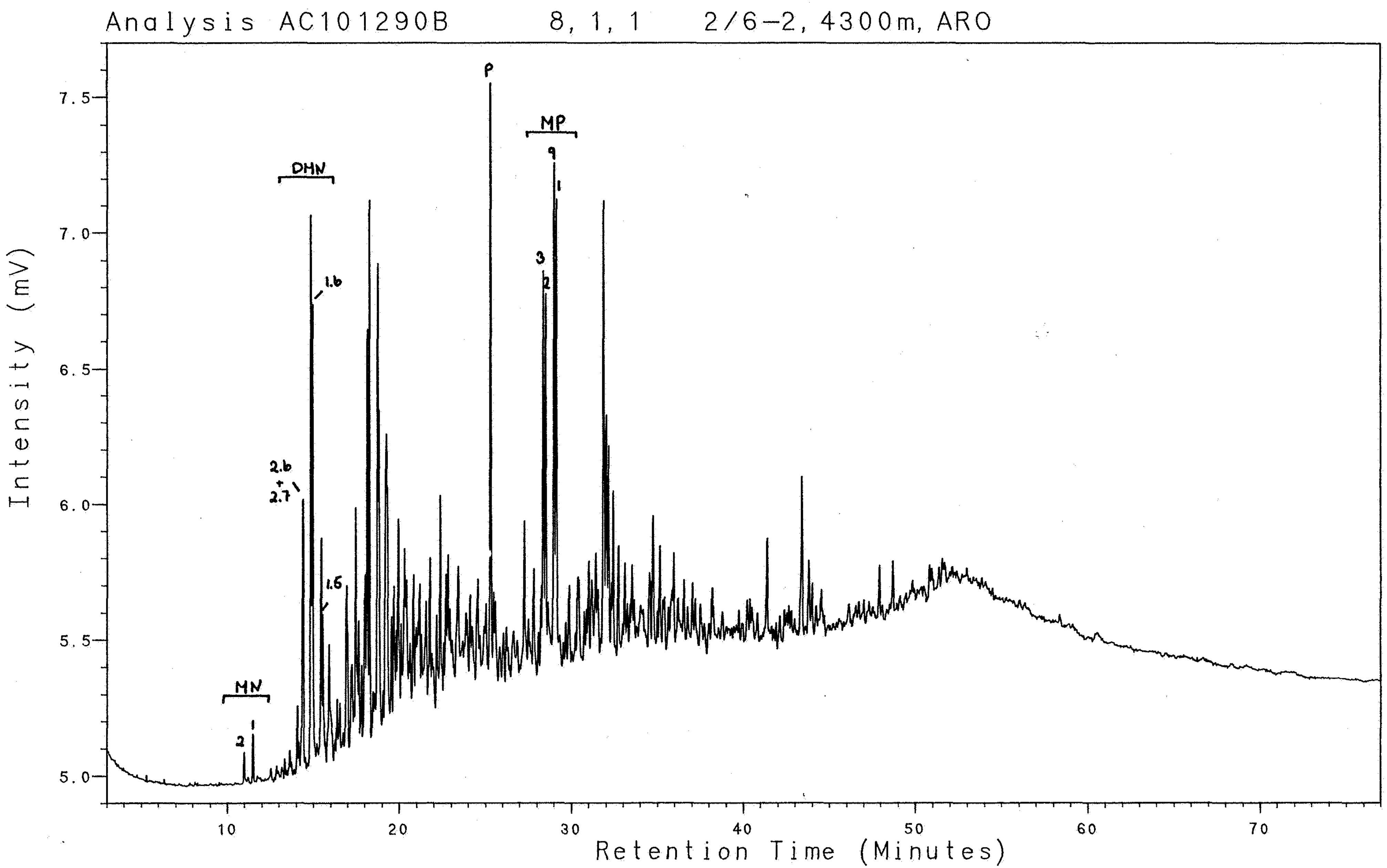
NOCS 2/6-2 4210-30m
AROMATIC GC (FID)
CLST: blk, gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4240-70m
AROMATIC GC (FID)
CLST: gy blk, brn blk

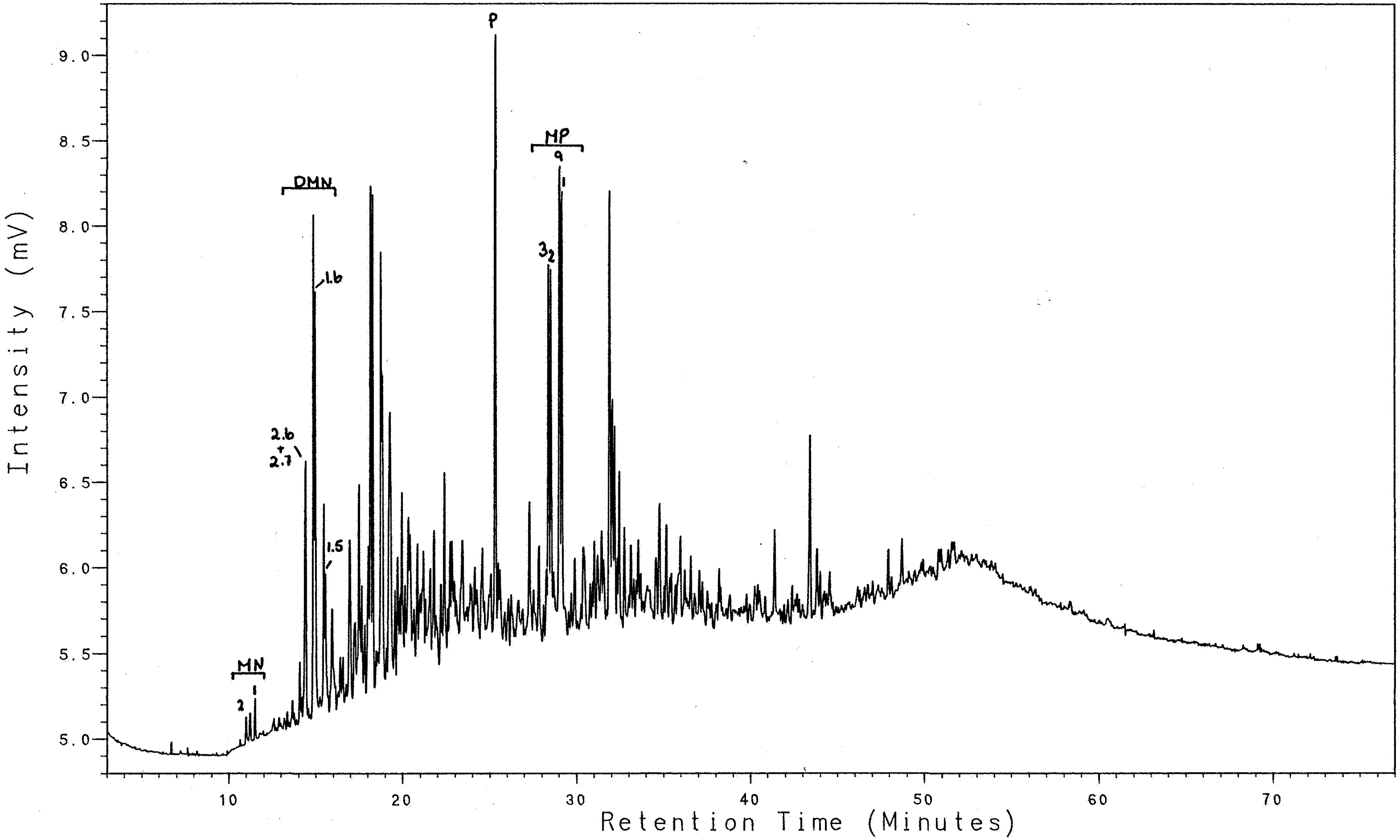
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4280-4300m
AROMATIC GC (FID)
CLST: brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

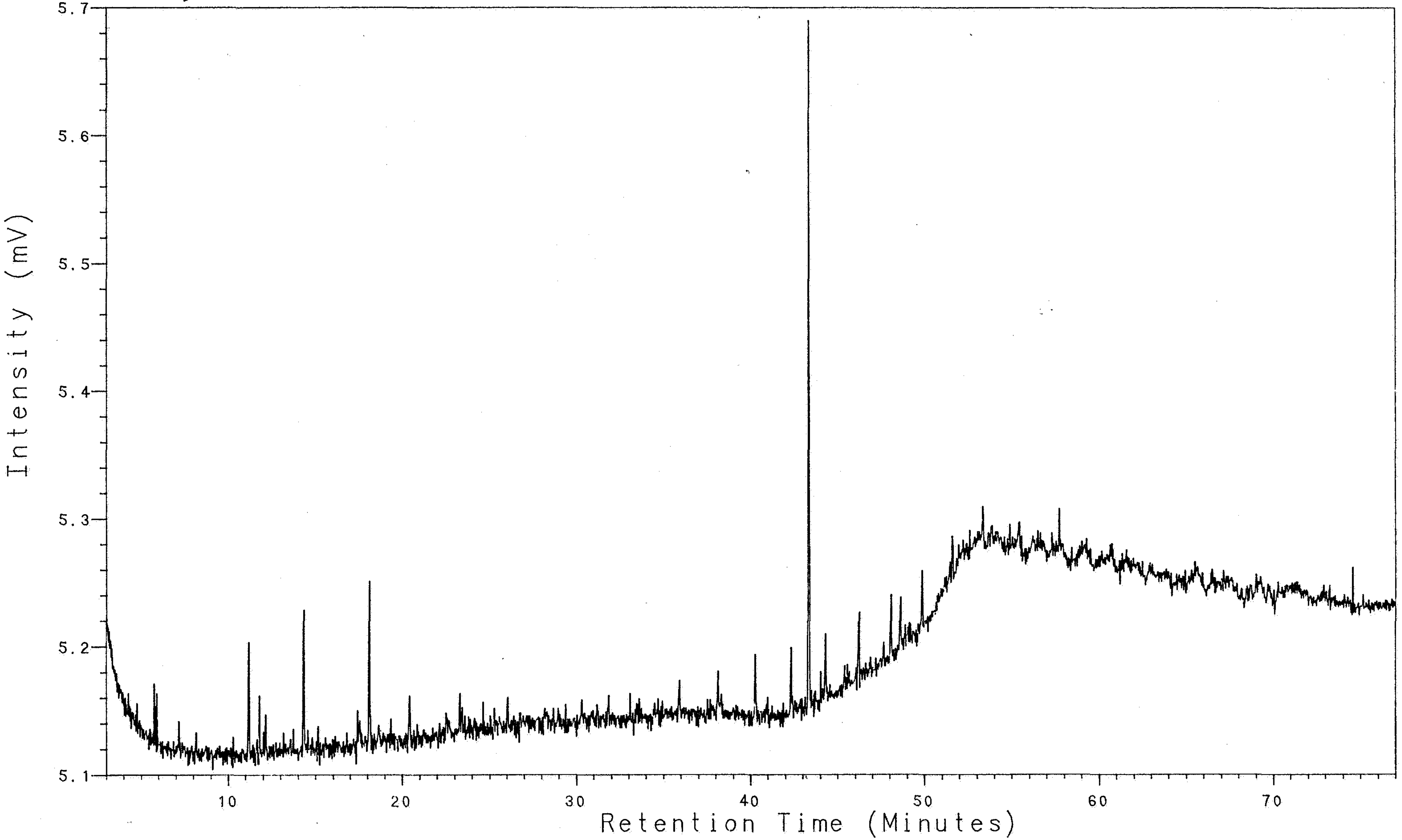
Analysis AC101300B 8, 1, 1 2/6-2, 4330m, ARO



NOCS 2/6-2 4310-30m
AROMATIC GC (FID)
CLST: brn blk

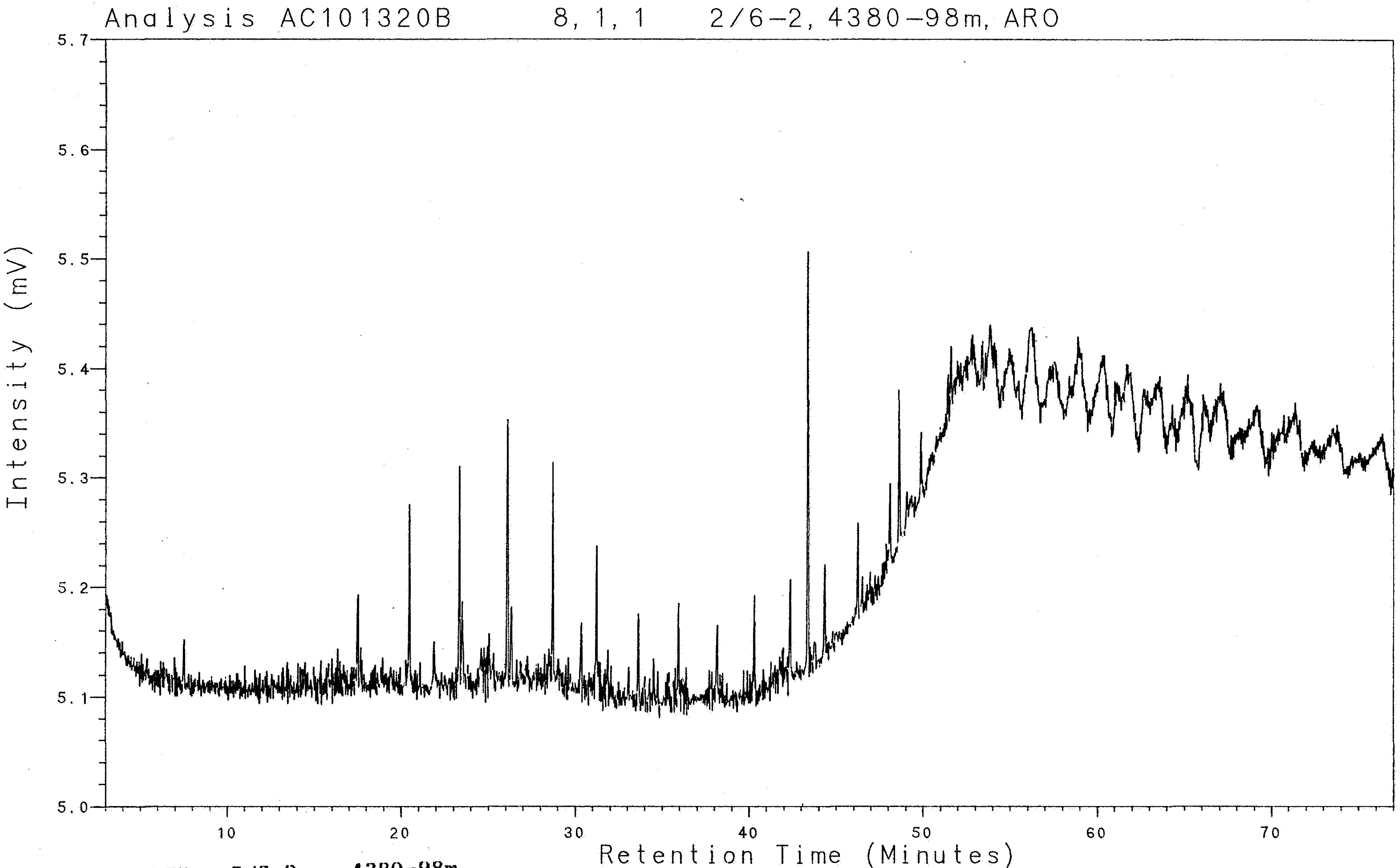
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101310B 8, 1, 1 2/6-2, 4356m, ARO



NOCS 2/6-2 4336-56m
AROMATIC GC (FID)
CLST: gy blk, brn blk

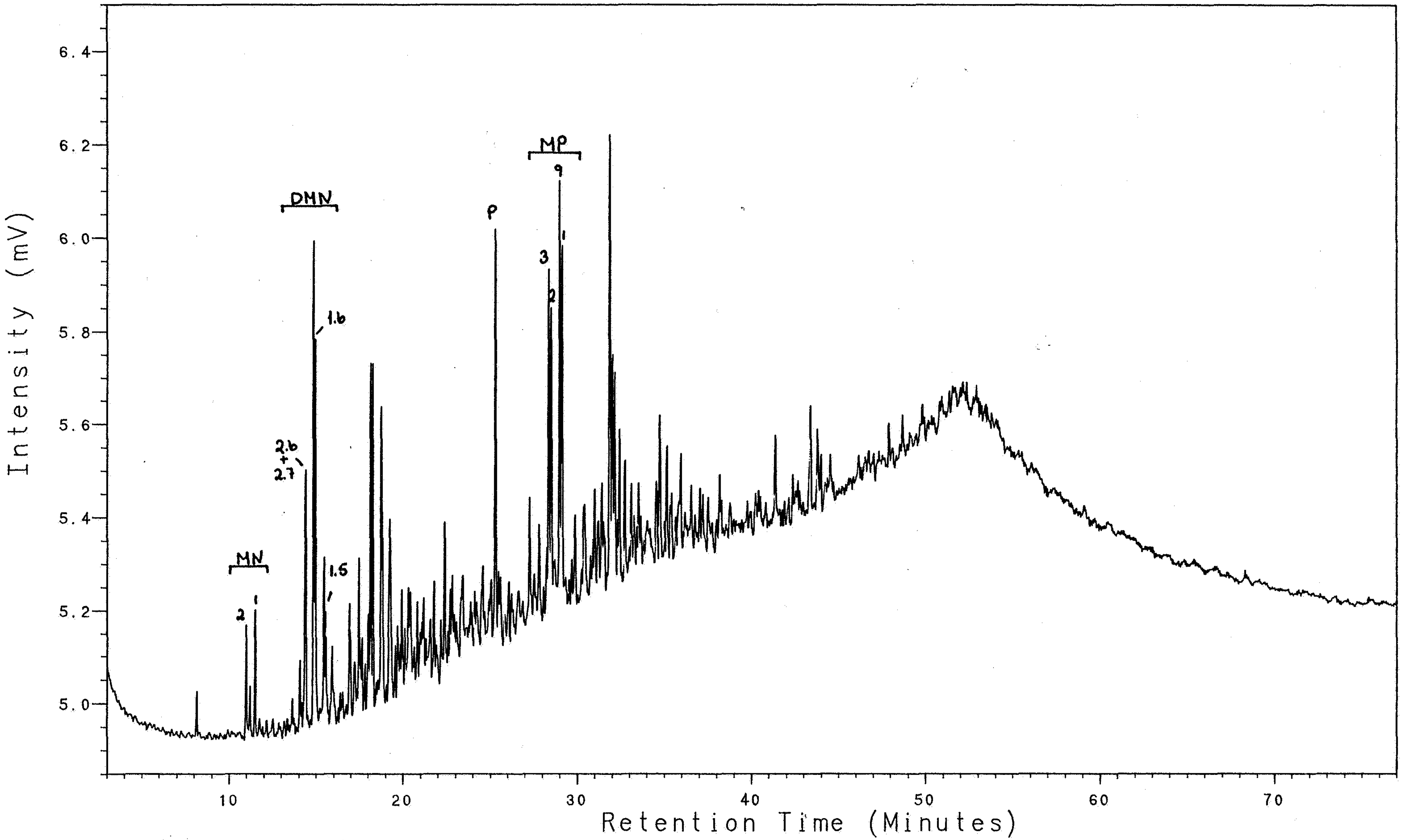
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4380-98m
AROMATIC GC (FID)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

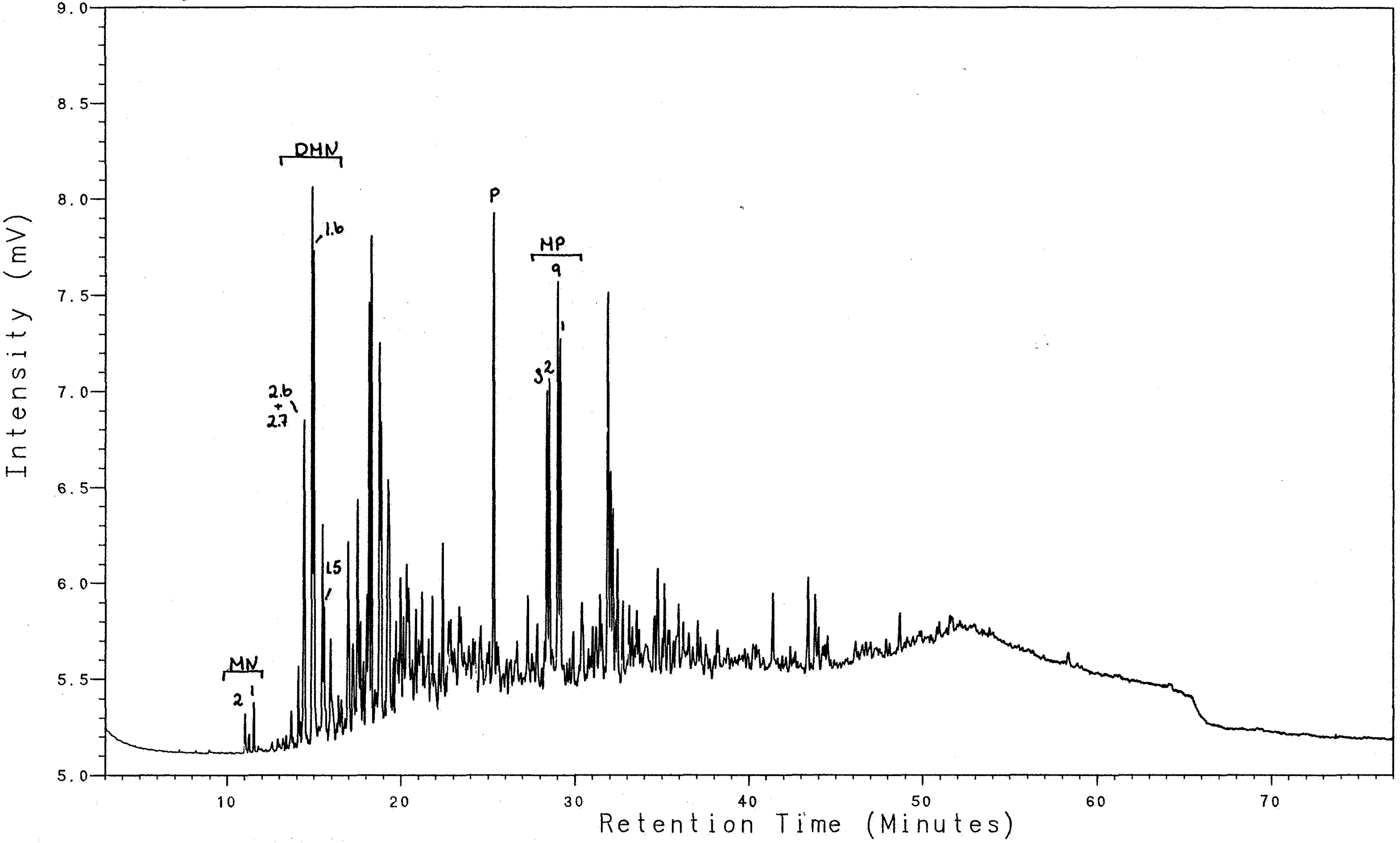
Analysis AC101330B 8, 1, 1 2/6-2, 4430m, ARO



NOCS 2/6-2 4404-30m
AROMATIC GC (FID)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

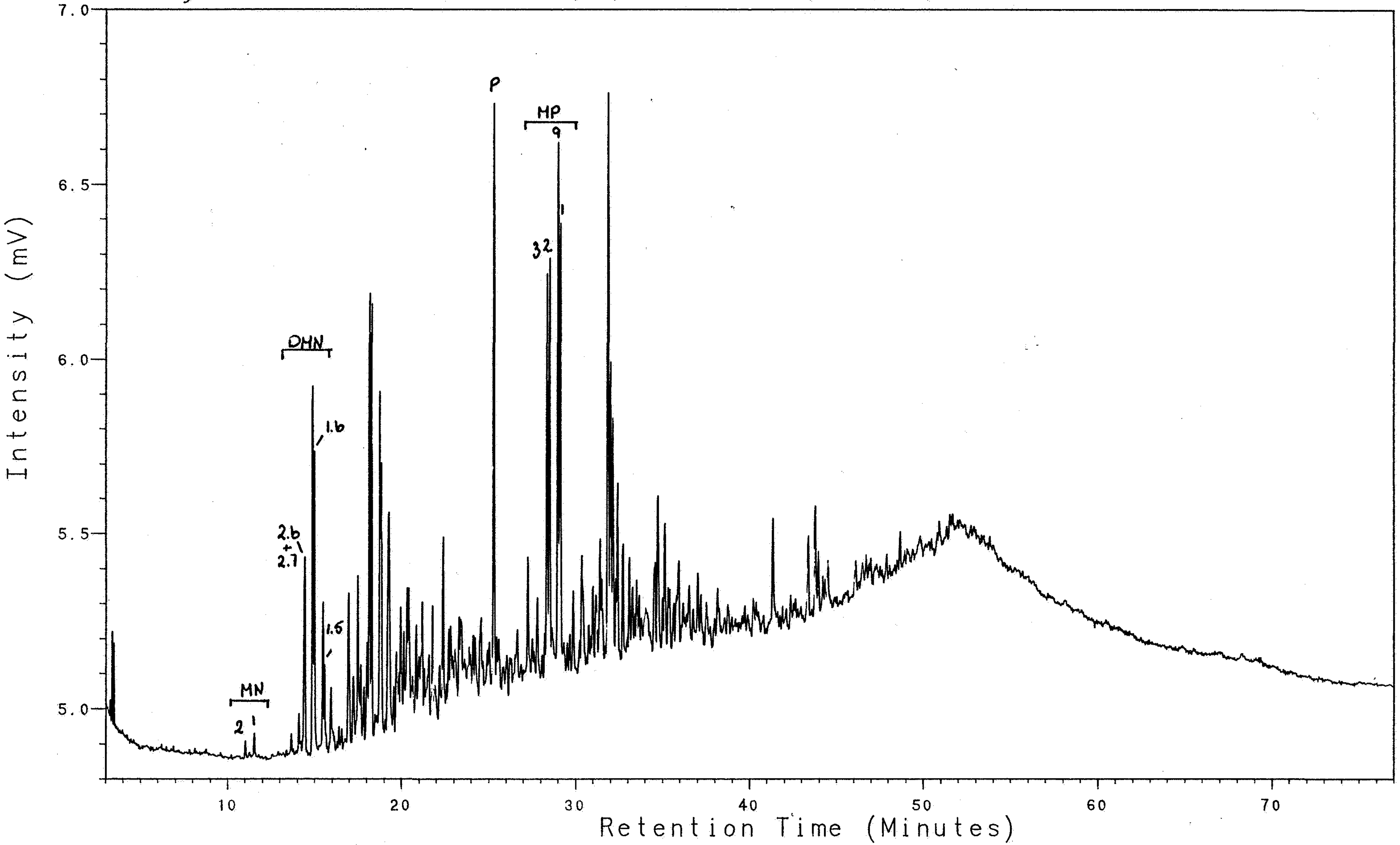
Analysis AC101340B 8, 1, 1 2/6-2, 4474m, ARO



NOCS 2/6-2 4436-74m
AROMATIC GC (FID)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

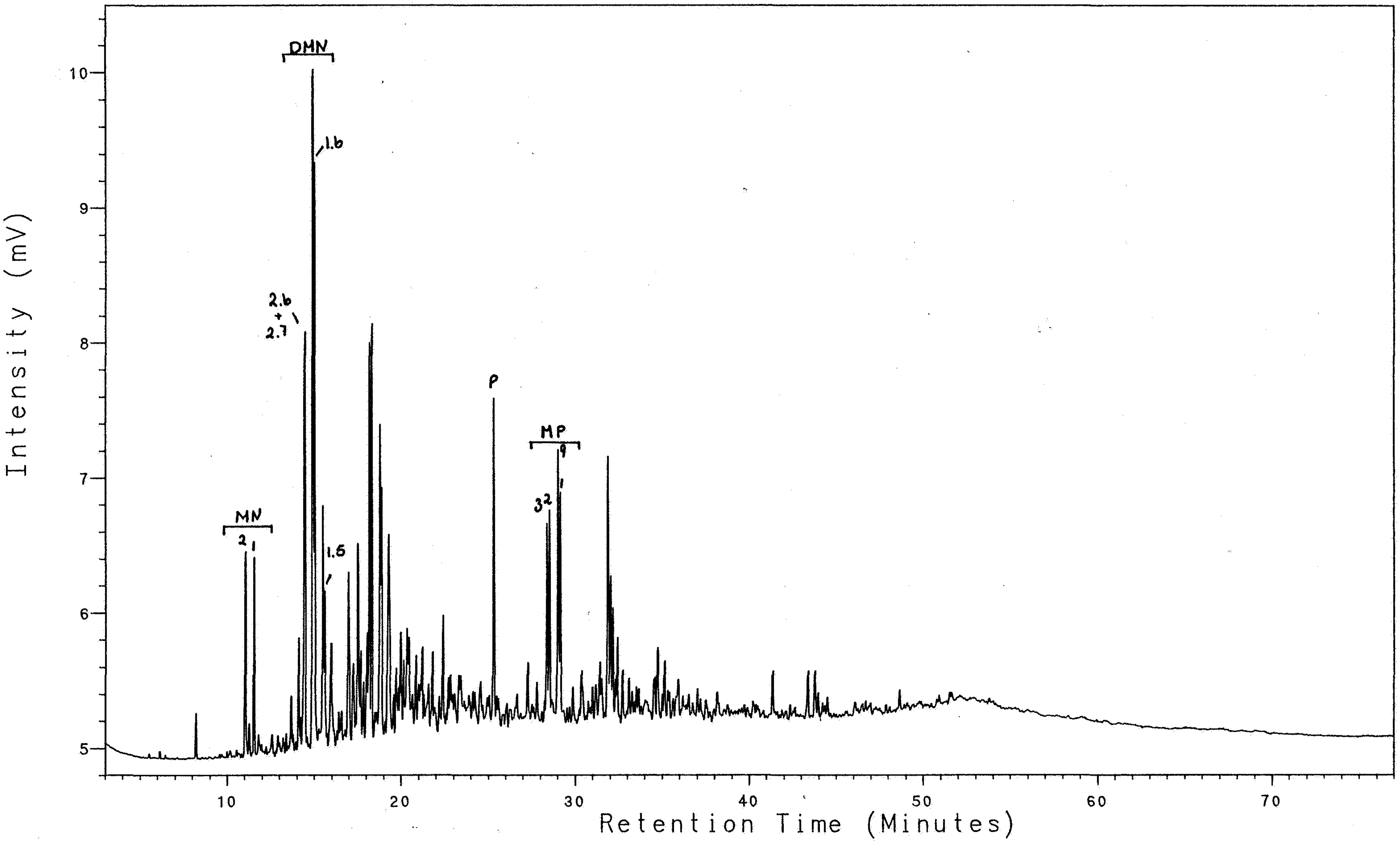
Analysis AC101350B 8, 1, 1 2/6-2, 4482m, ARO



NOCS 2/6-2 4478-82m
AROMATIC GC (FID)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

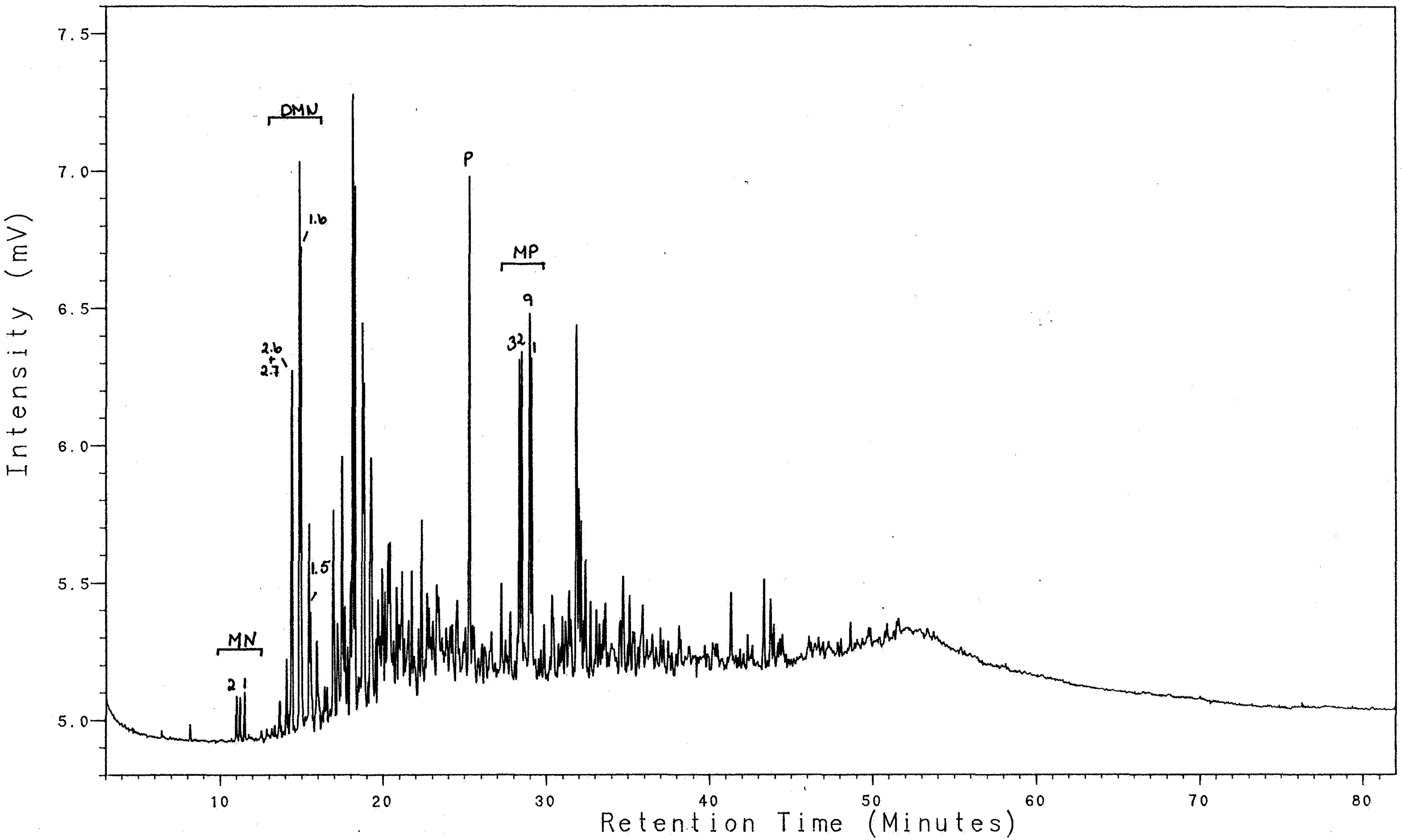
Analysis AC101360B 8, 1, 1 2/6-2, 4528m, ARO



NOCS 2/6-2 4506-28m
AROMATIC GC (FID)
CLST: gy blk, brn blk

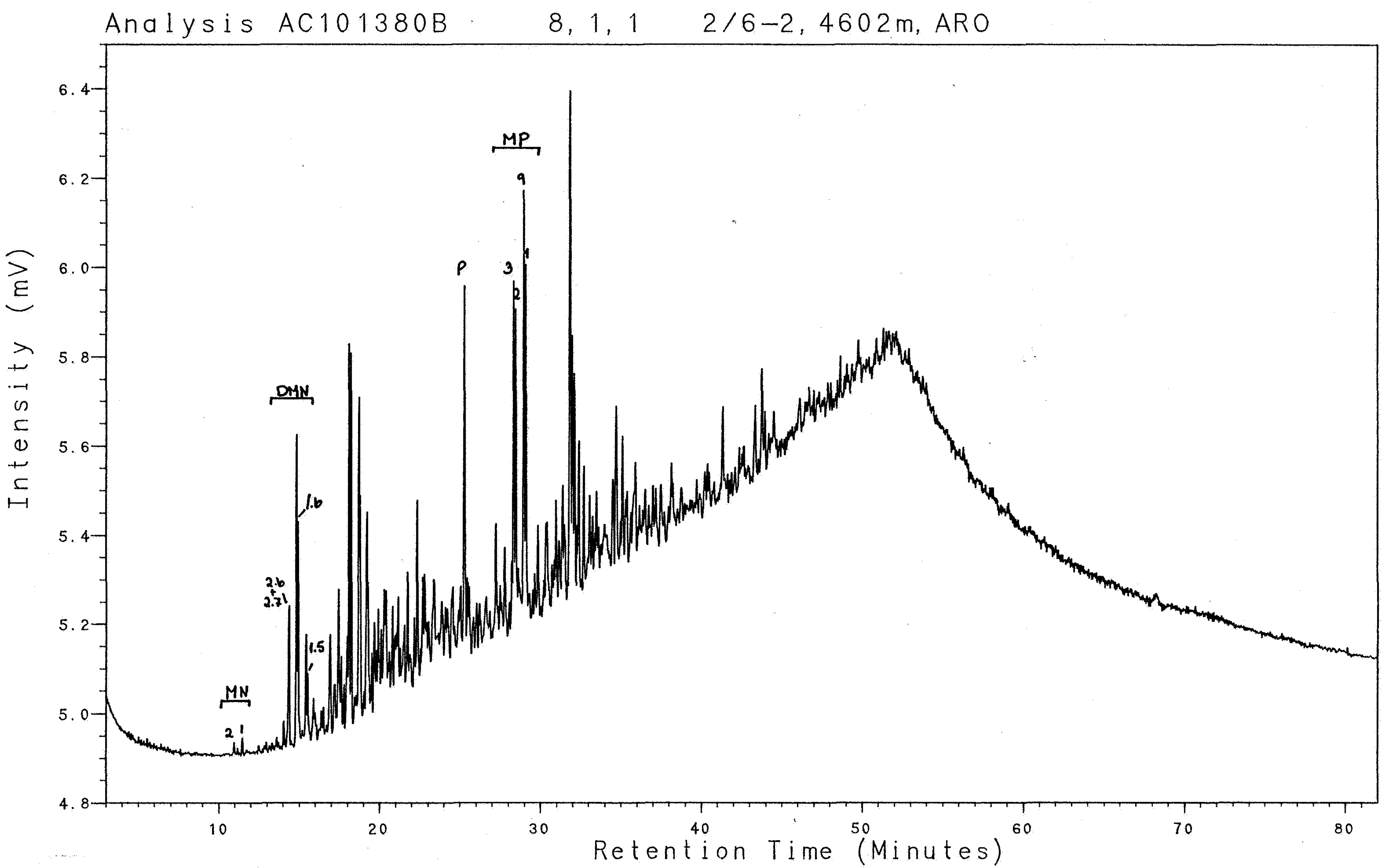
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101370B 8, 1, 1 2/6-2, 4544m, ARO



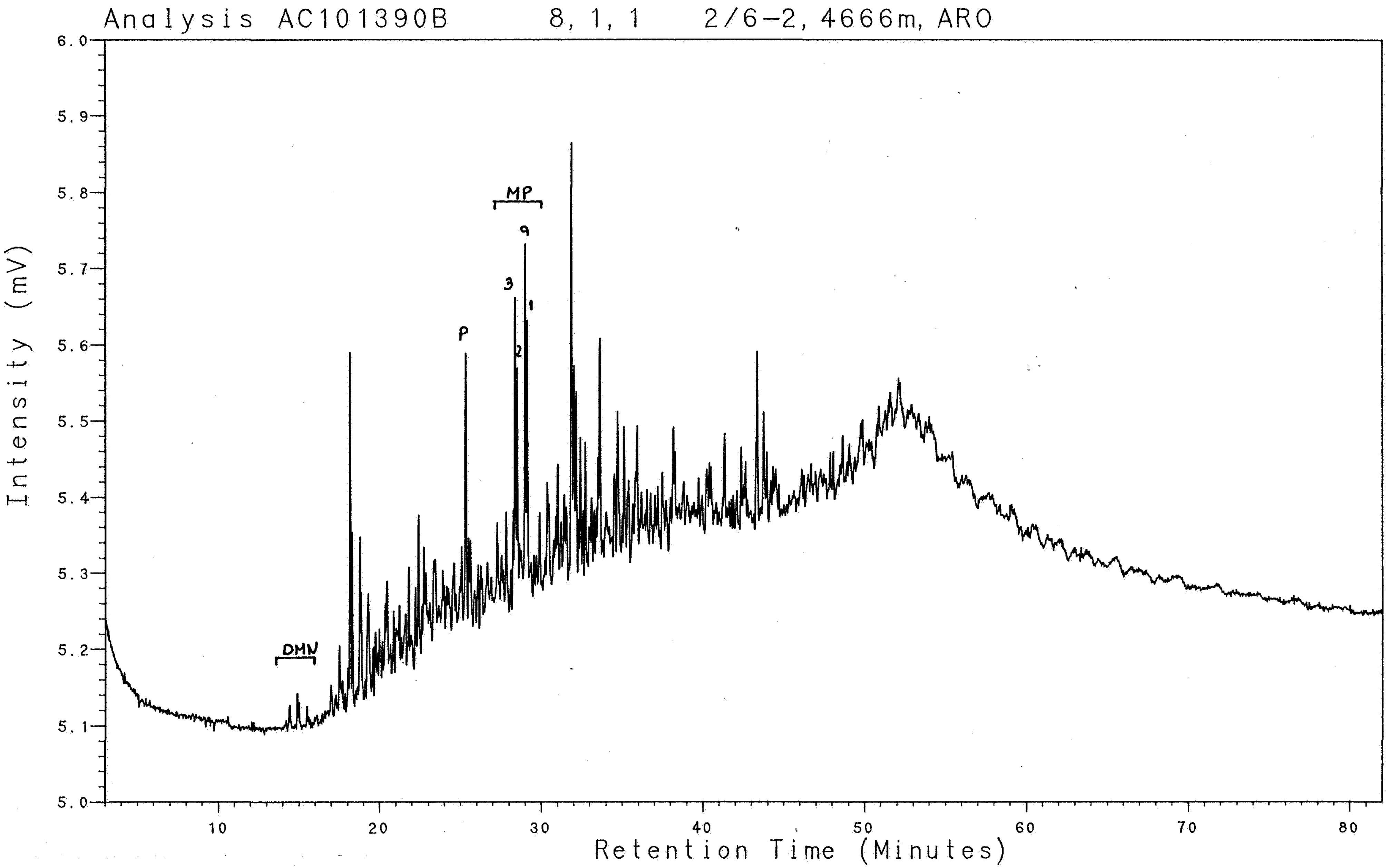
NOCS 2/6-2 4532-44m
AROMATIC GC (FID)
CLST: gy blk,brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



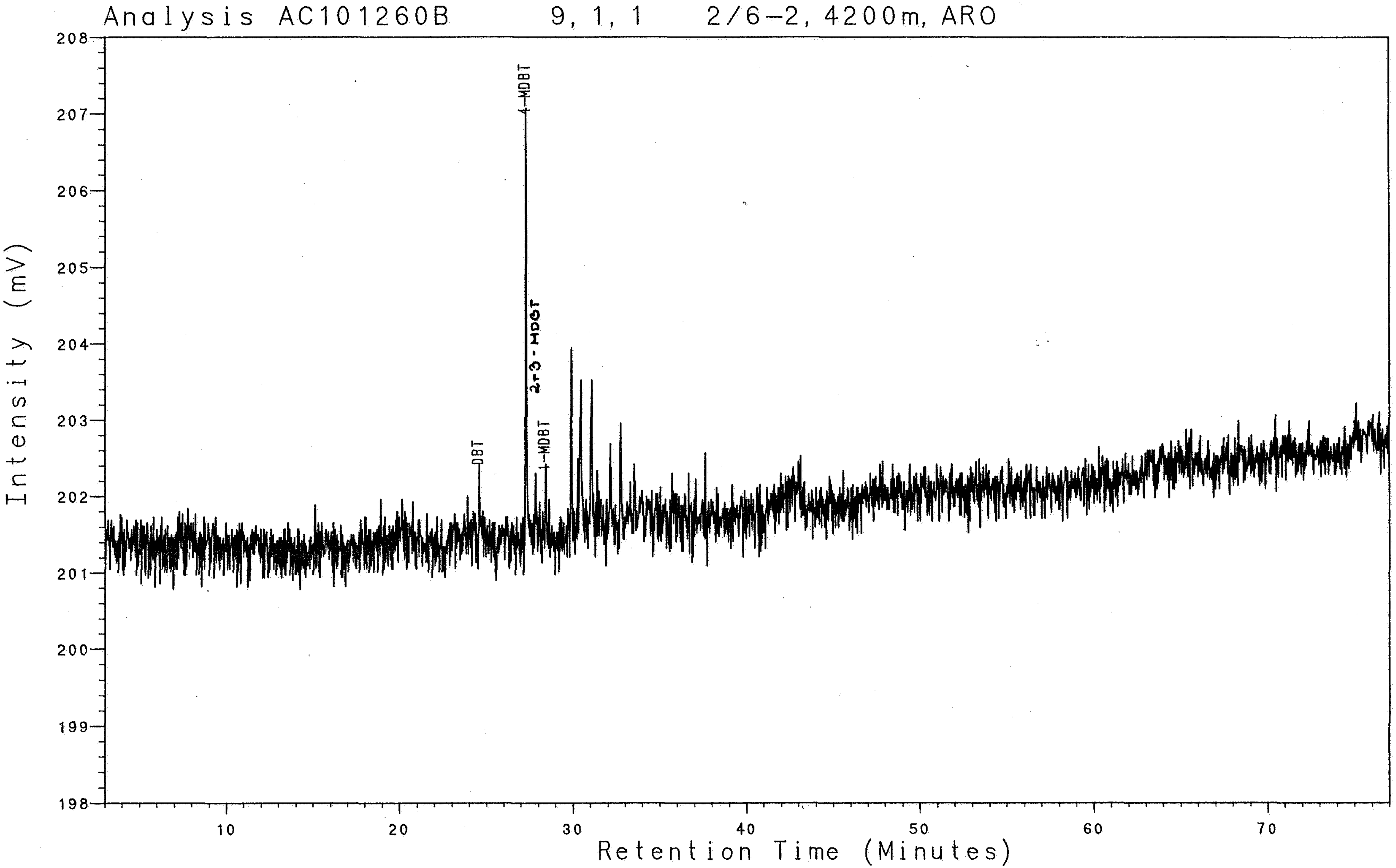
NOCS 2/6-2 4575-4602m
AROMATIC GC (FID)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4616-66m
AROMATIC GC (FID)
CLST: gy, gy red, m gy

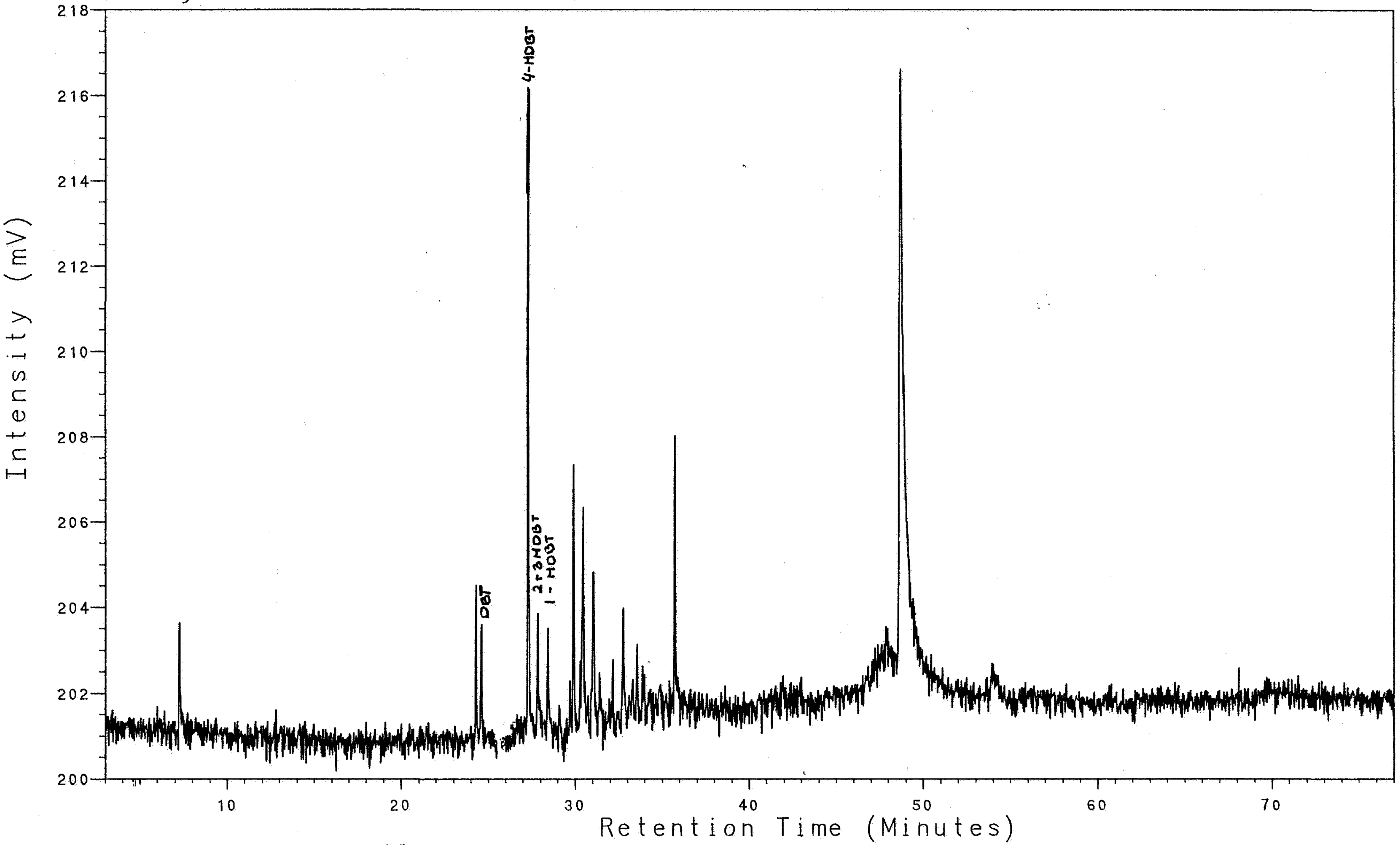
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4160-4200m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

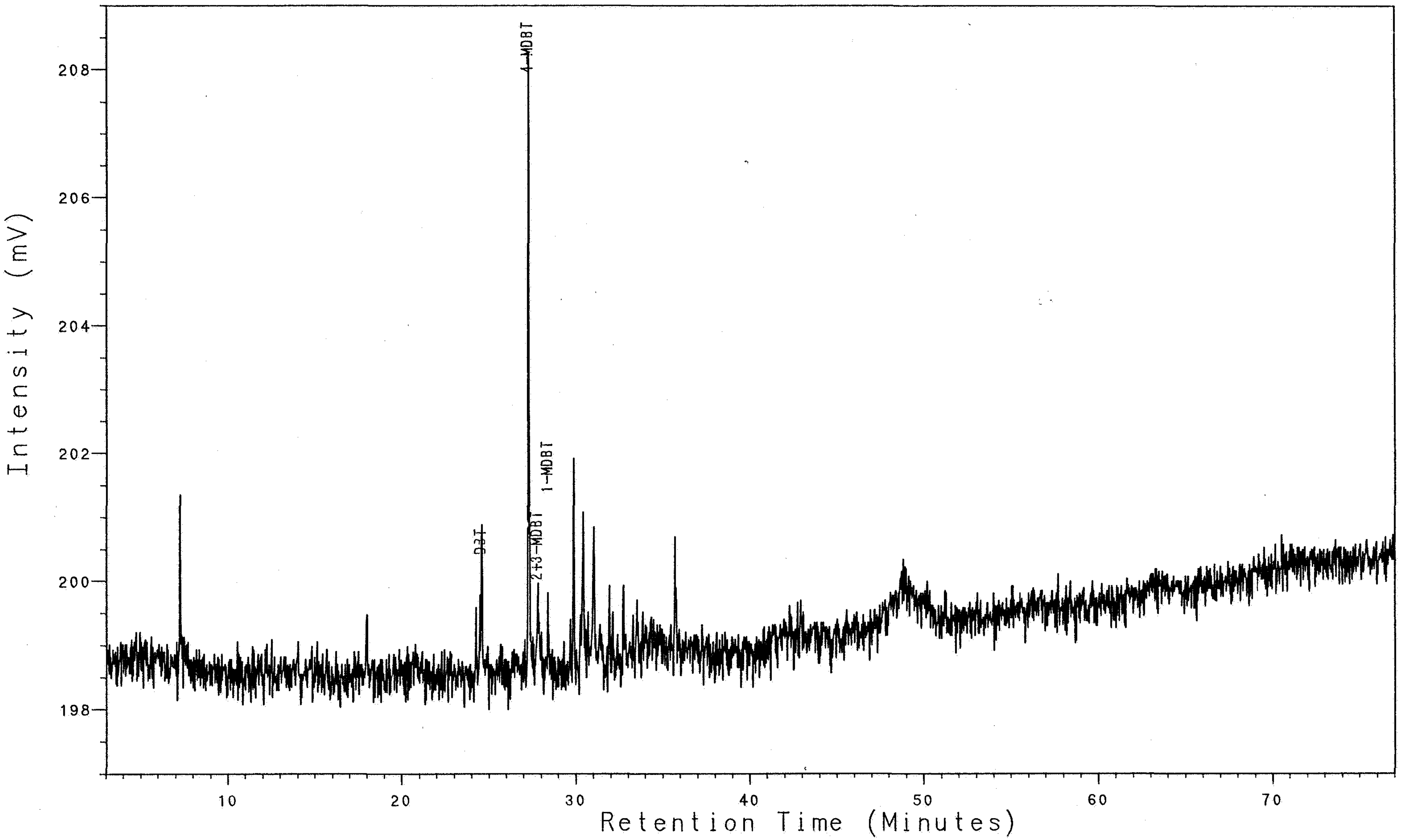
Analysis AC101270B 9, 1, 1 2/6-2, 4230m, ARO



NOCS 2/6-2 4210-30m
AROMATIC GC (FPD)
CLST: blk, gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

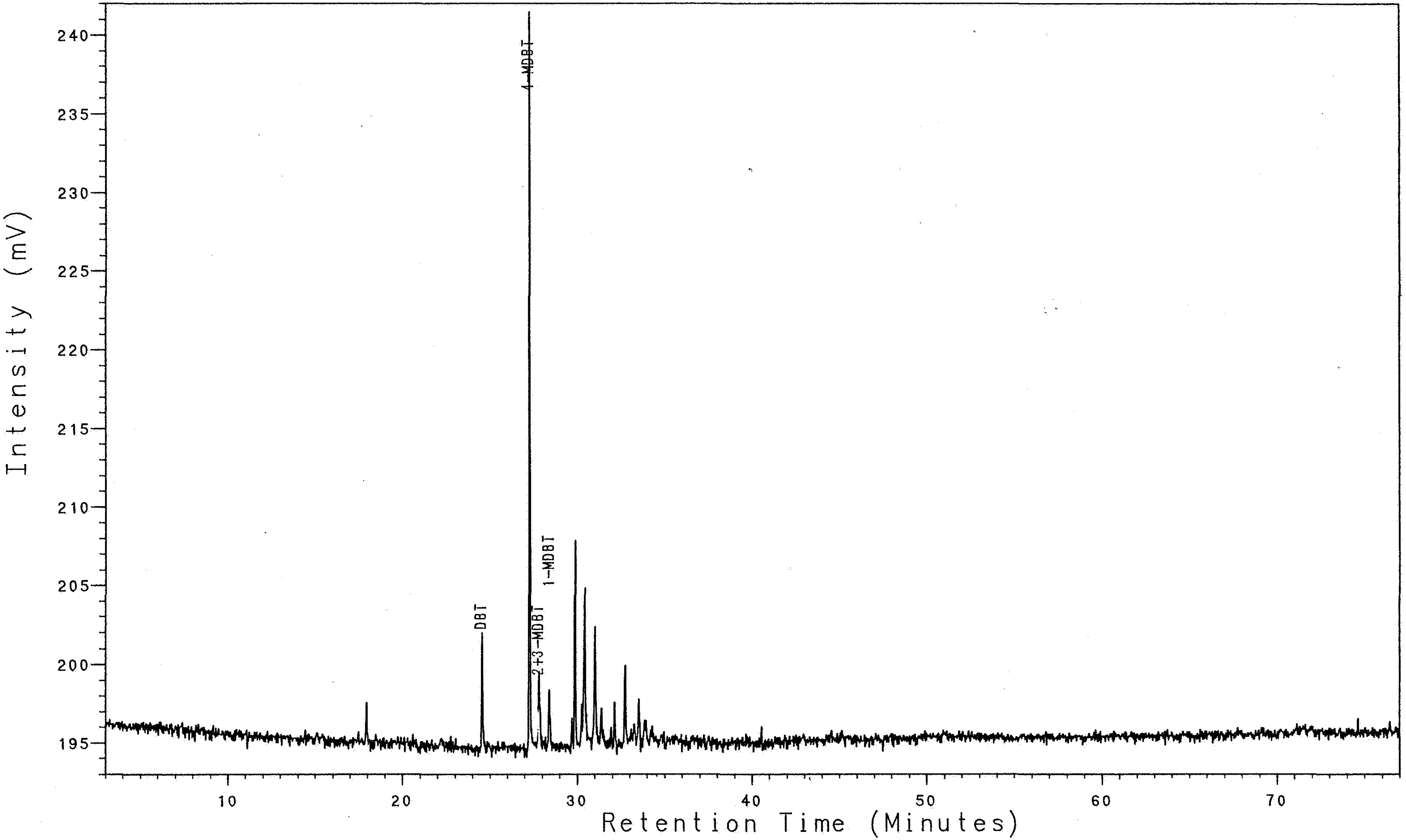
Analysis AC101280B   9, 1, 1   2/6-2, 4270m, SAT



NOCS 2/6-2 4240-70m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

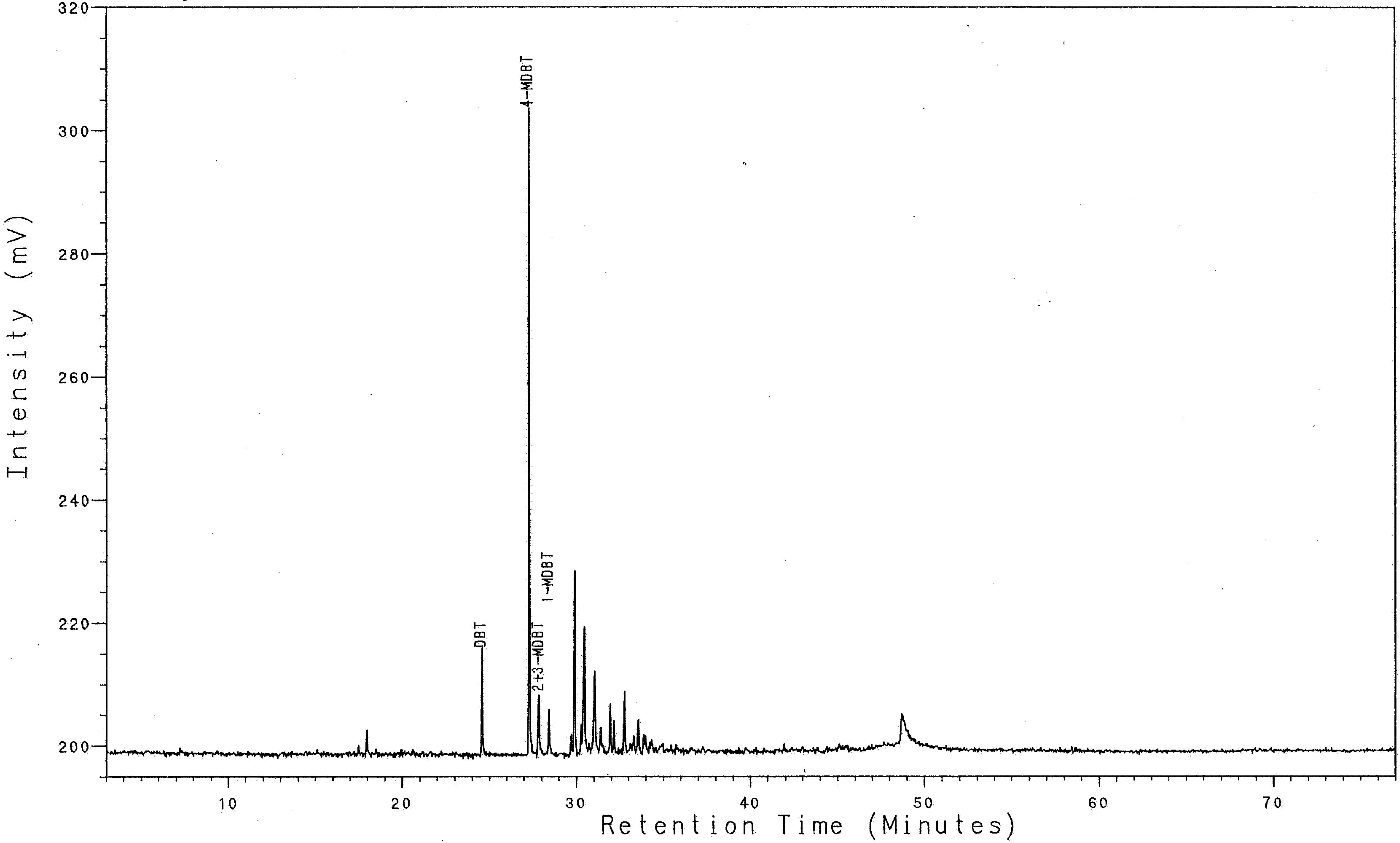
Analysis AC101290B 9, 1, 1 2/6-2, 4300m, ARO



NOCS 2/6-2 4280-4300m
AROMATIC GC (FPD)
CLST: brn blk

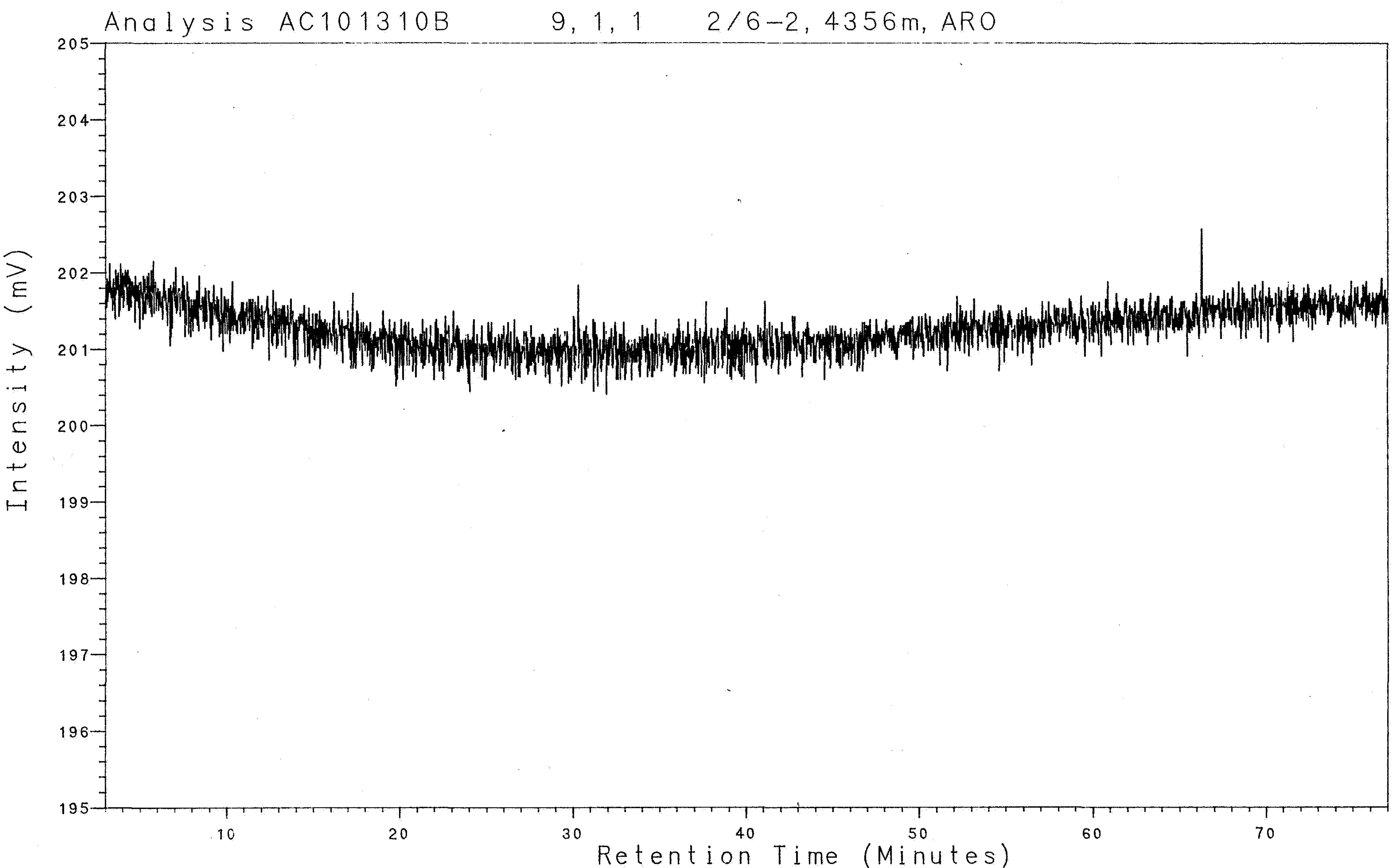
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101300B 9, 1, 1 2/6-2, 4330m, ARO



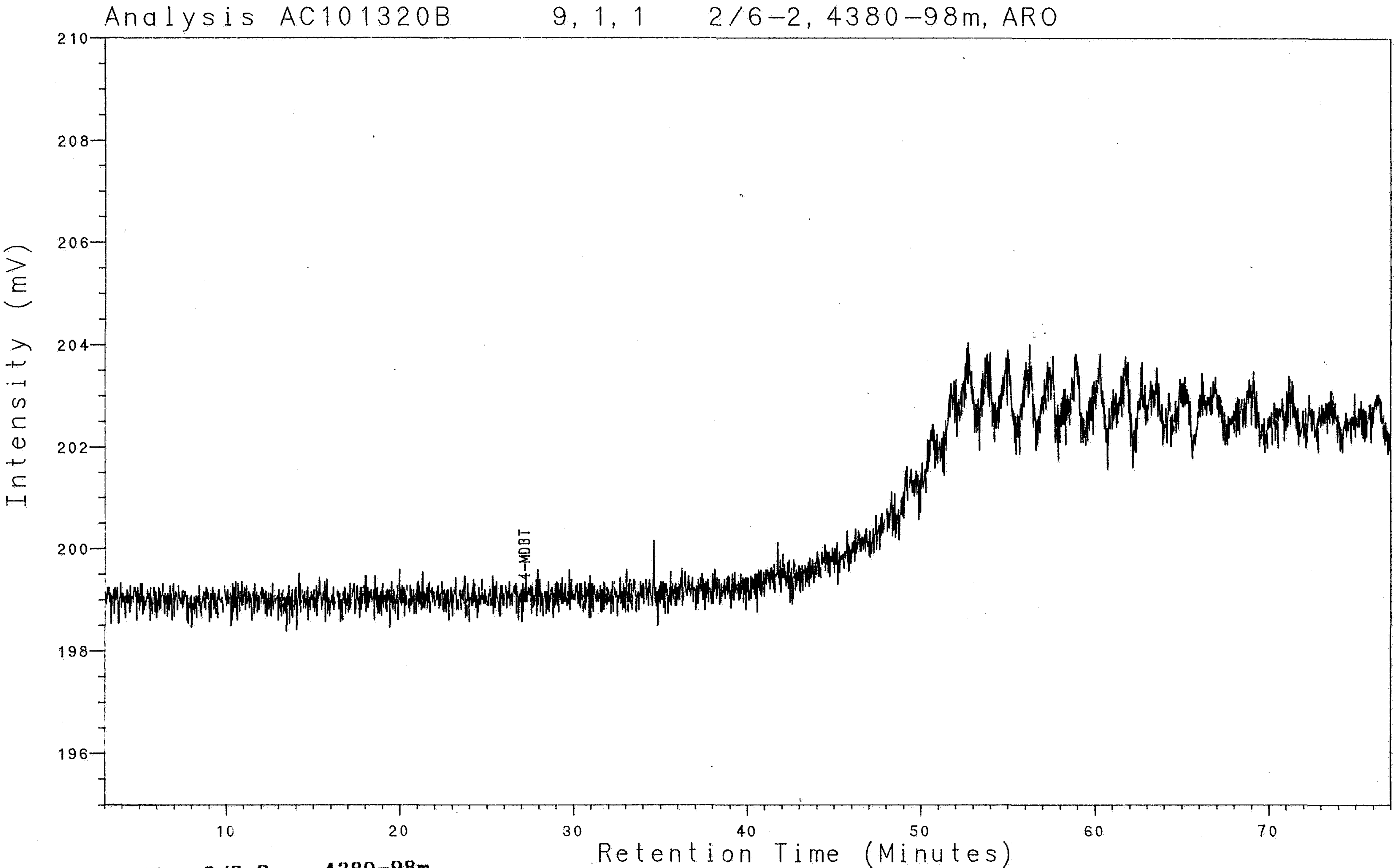
NOCS 2/6-2 4310-30m
AROMATIC GC (FPD)
CLST: brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4336-56m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

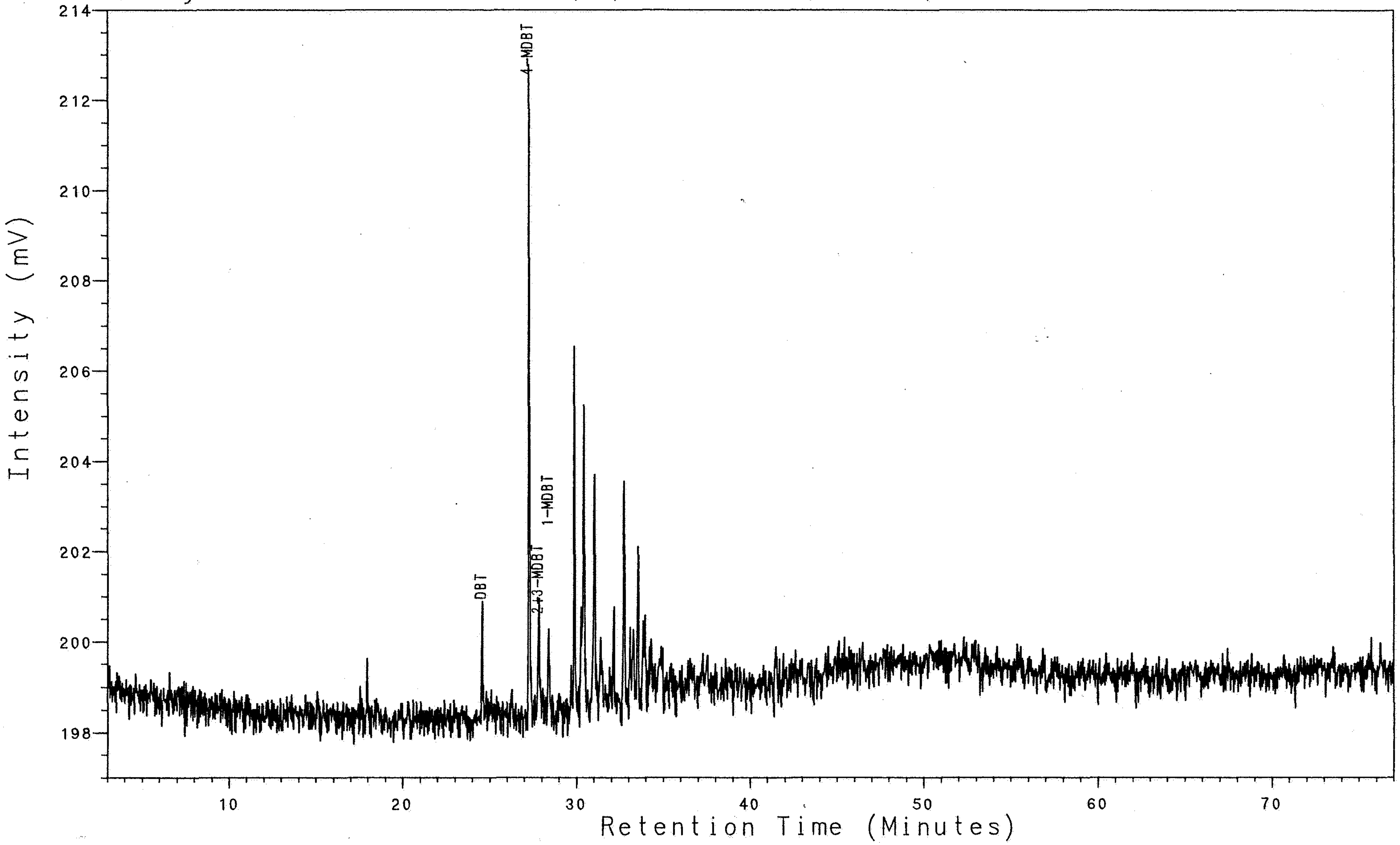
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4380-98m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

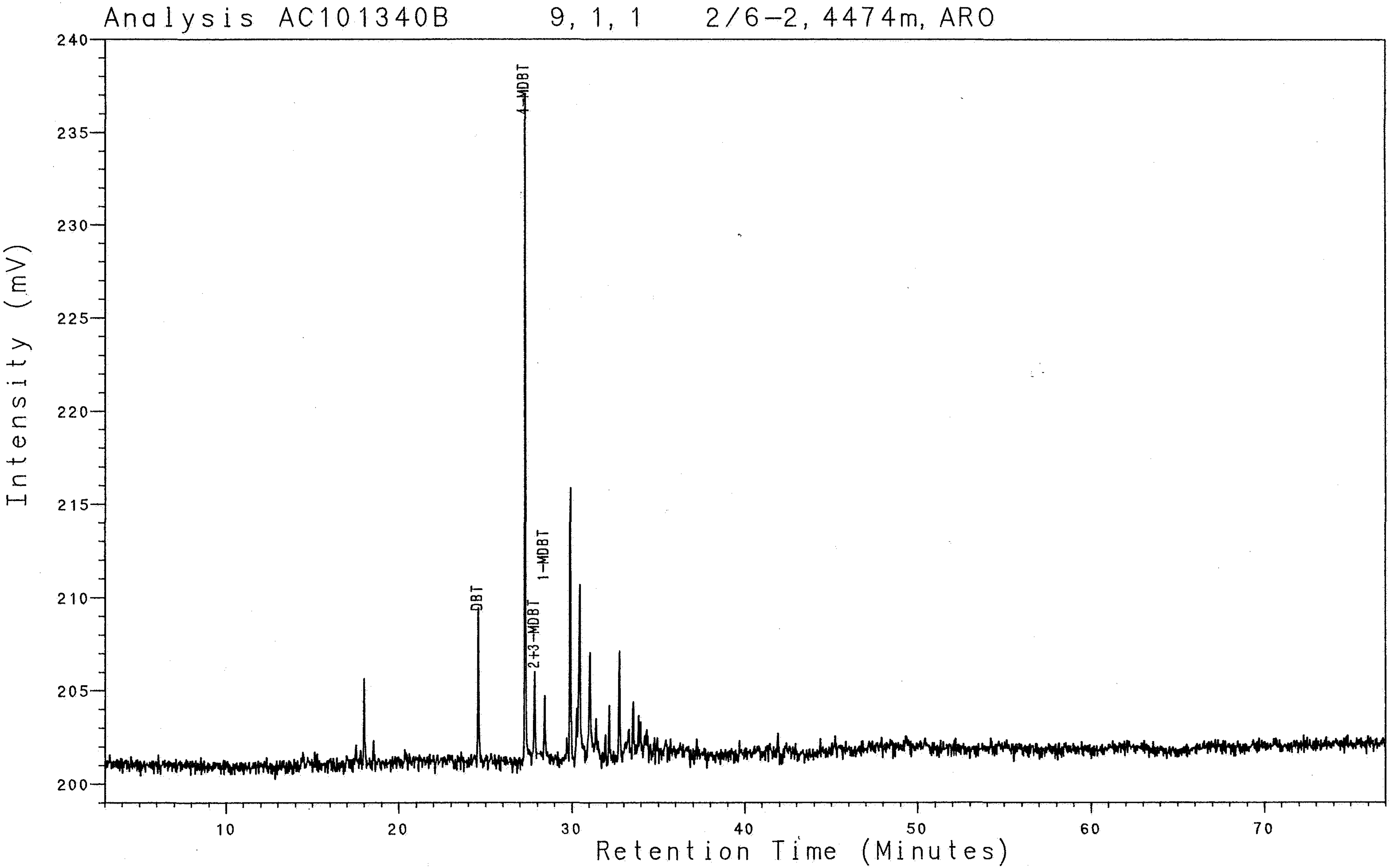
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101330B 9, 1, 1 2/6-2, 4430m, ARO



NOCS 2/6-2 4404-30m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

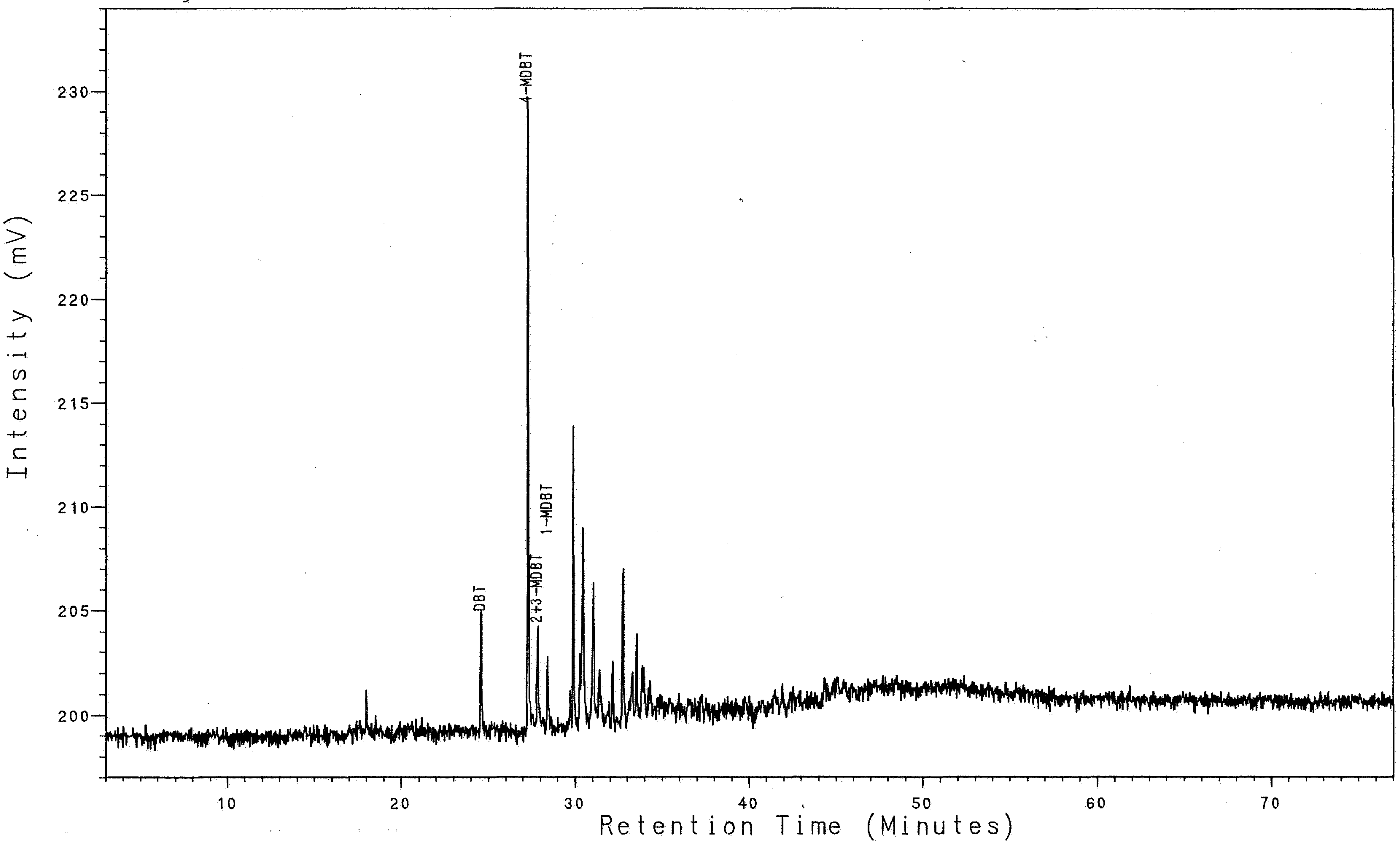
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4436-74m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

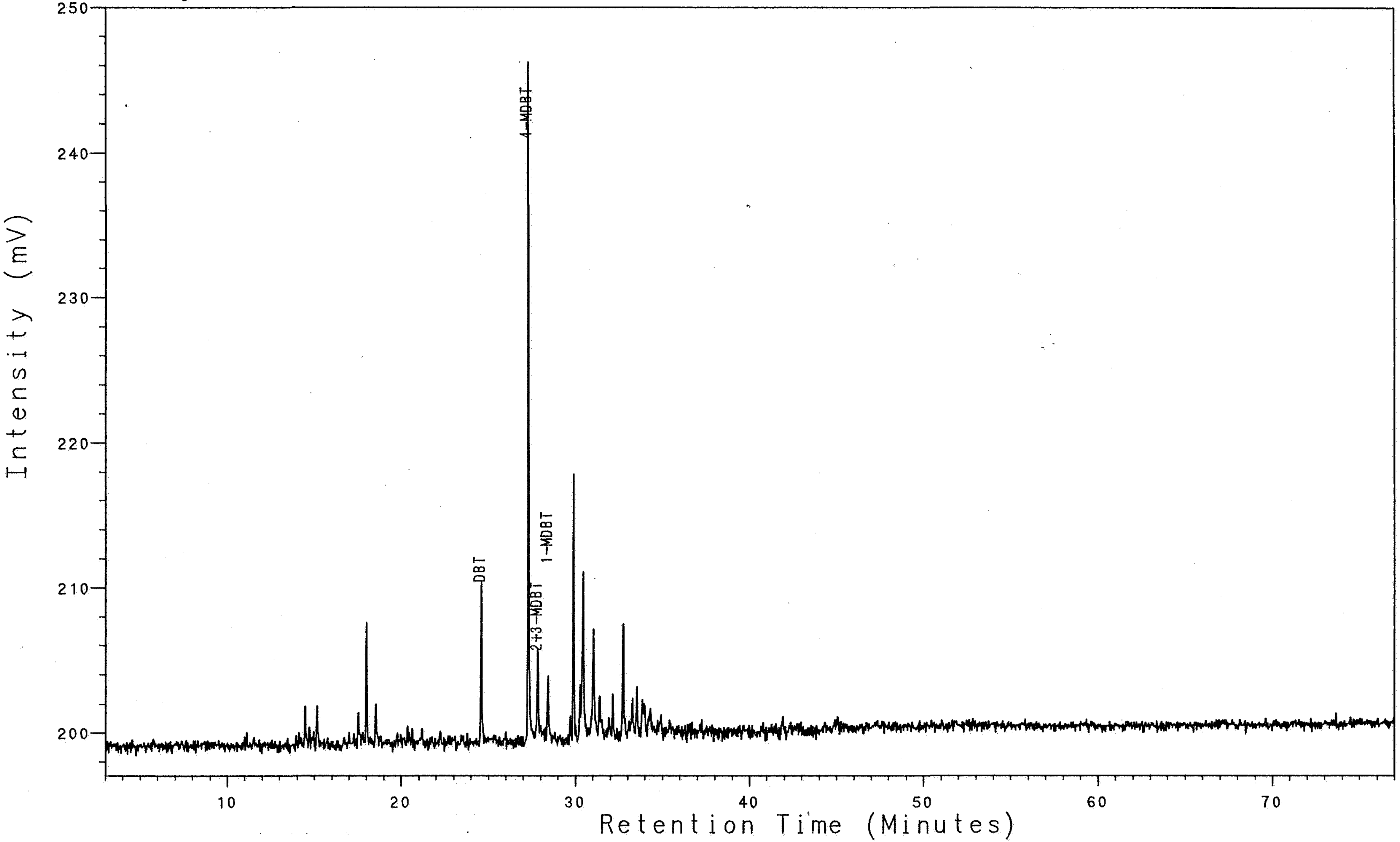
Analysis AC101350B 9, 1, 1 2/6-2, 4482m, ARO



NOCS 2/6-2 4478-82m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

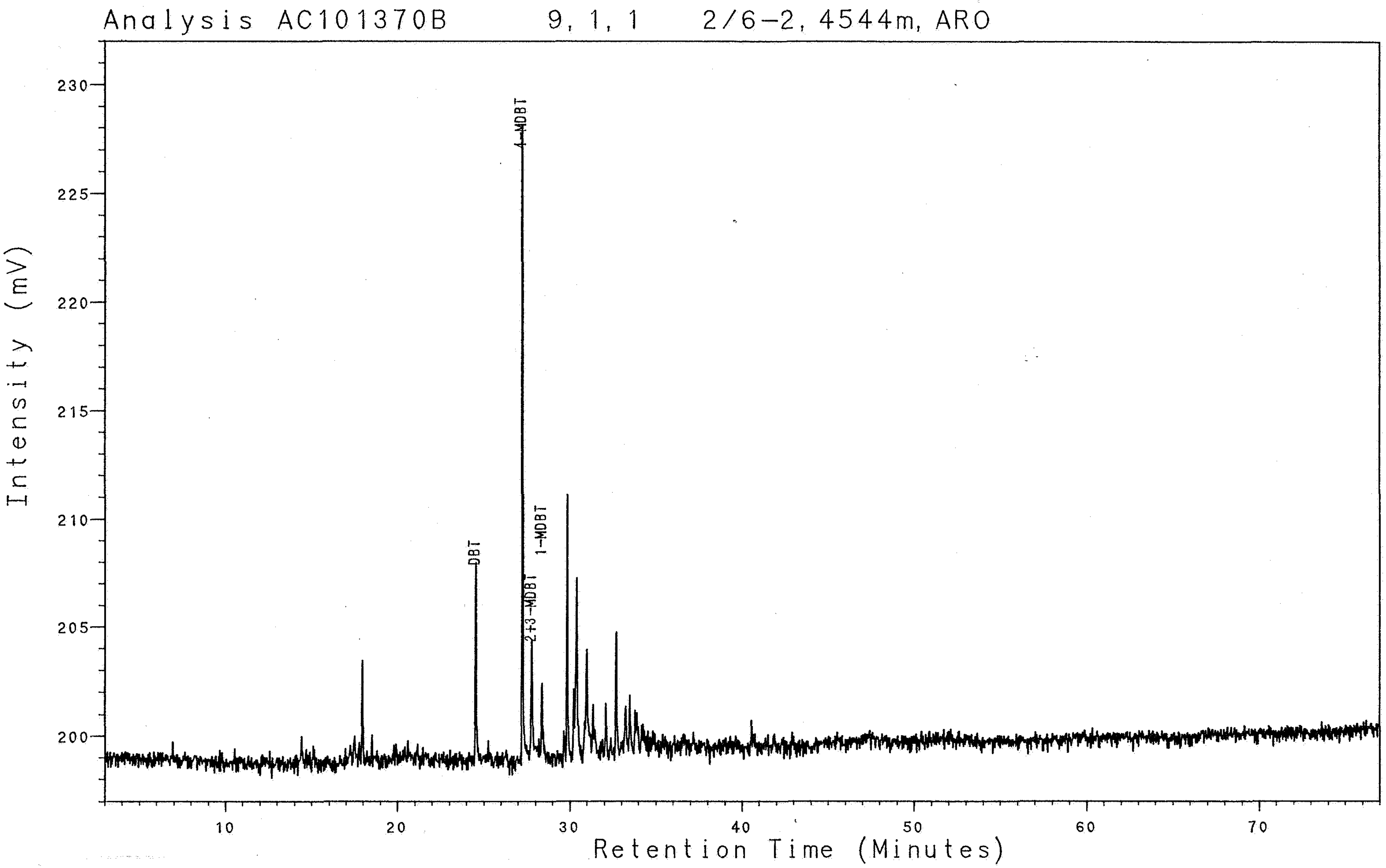
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101360B 9, 1, 1 2/6-2, 4528m, ARO



NOCS 2/6-2 4506-28m
AROMATIC GC (FPD)
CLST: gy blk, brn blk

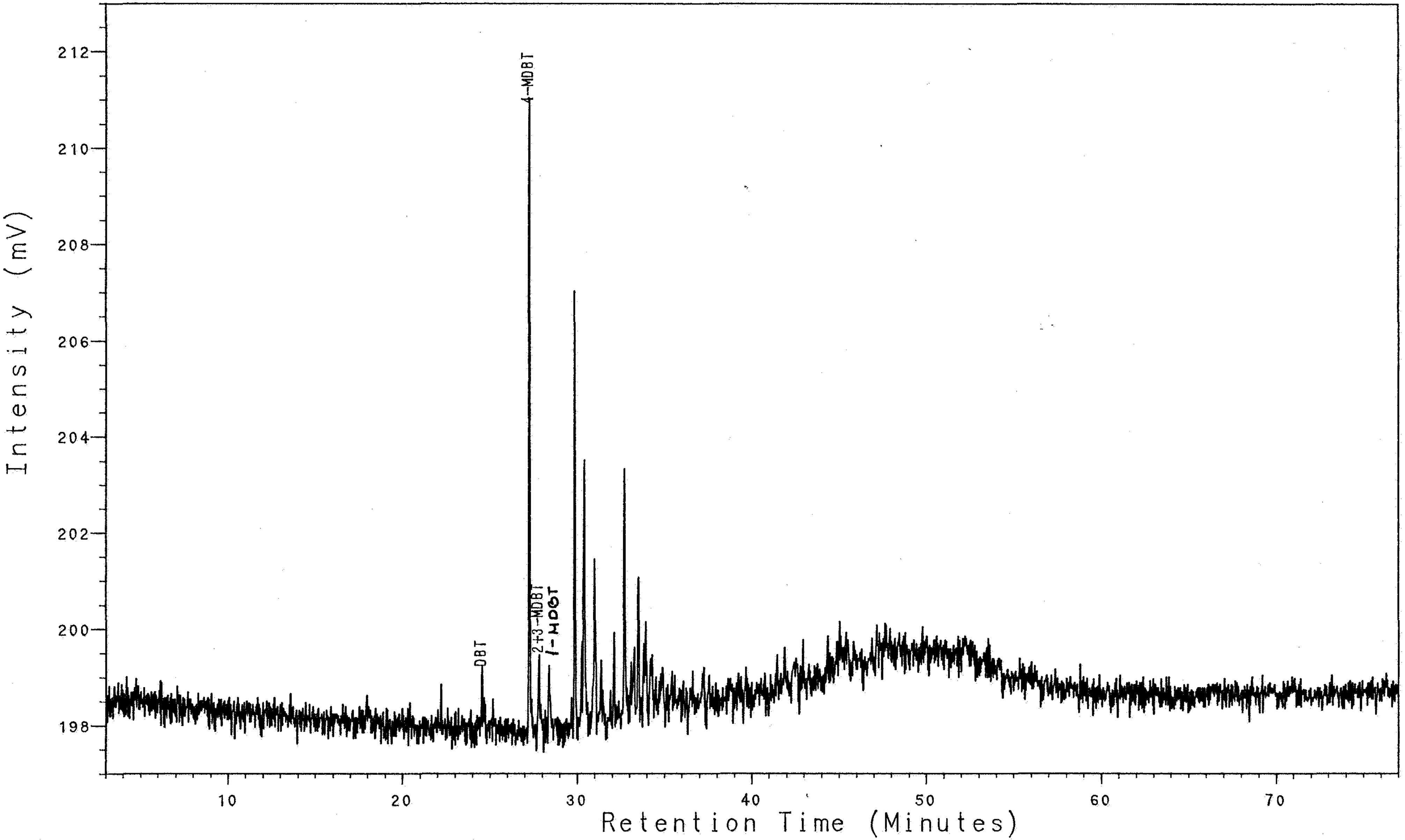
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4532-44m
AROMATIC GC (FPD)
CLST: gy blk,brn blk

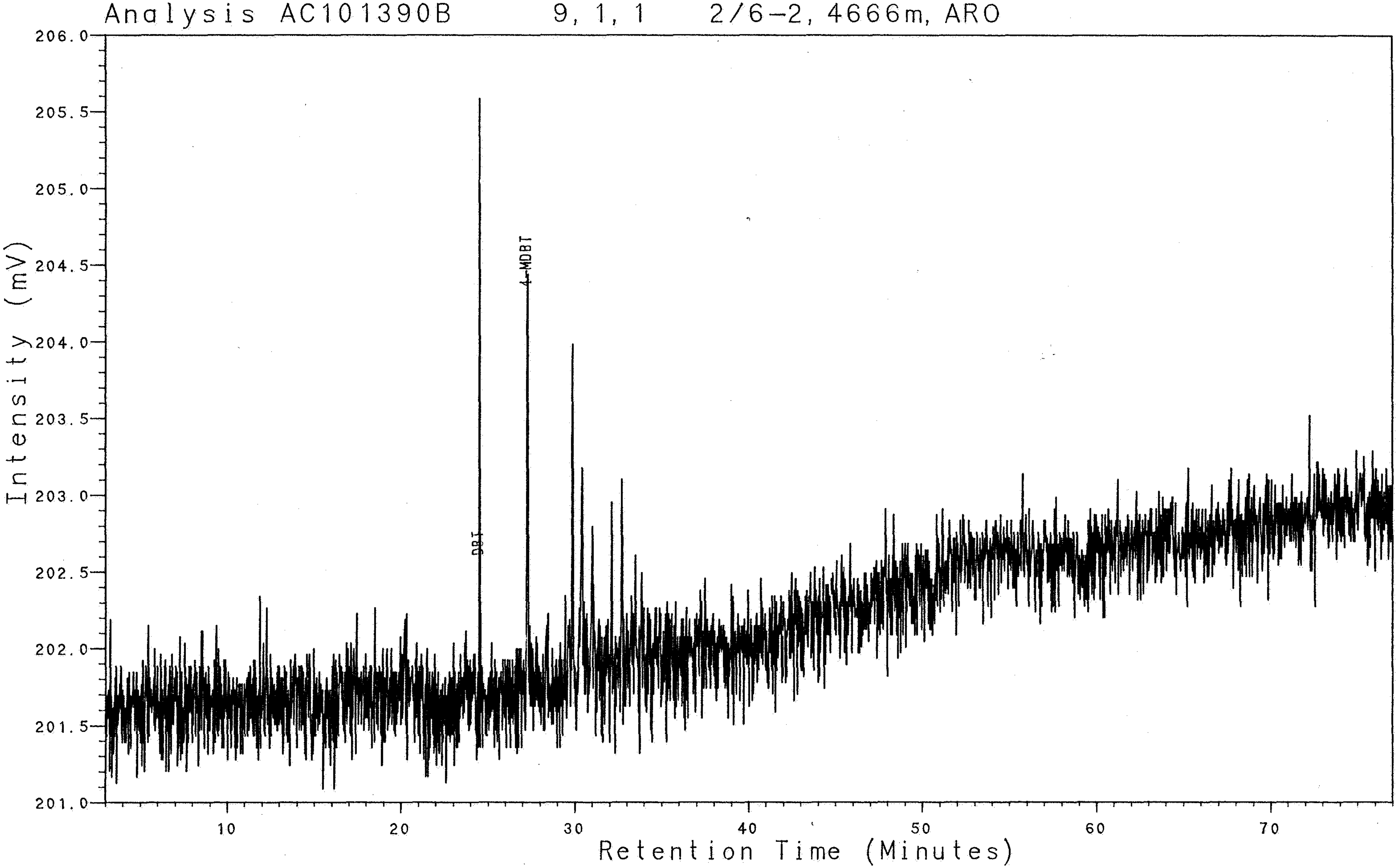
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis AC101380B 9, 1, 1 2/6-2, 4602m, ARO



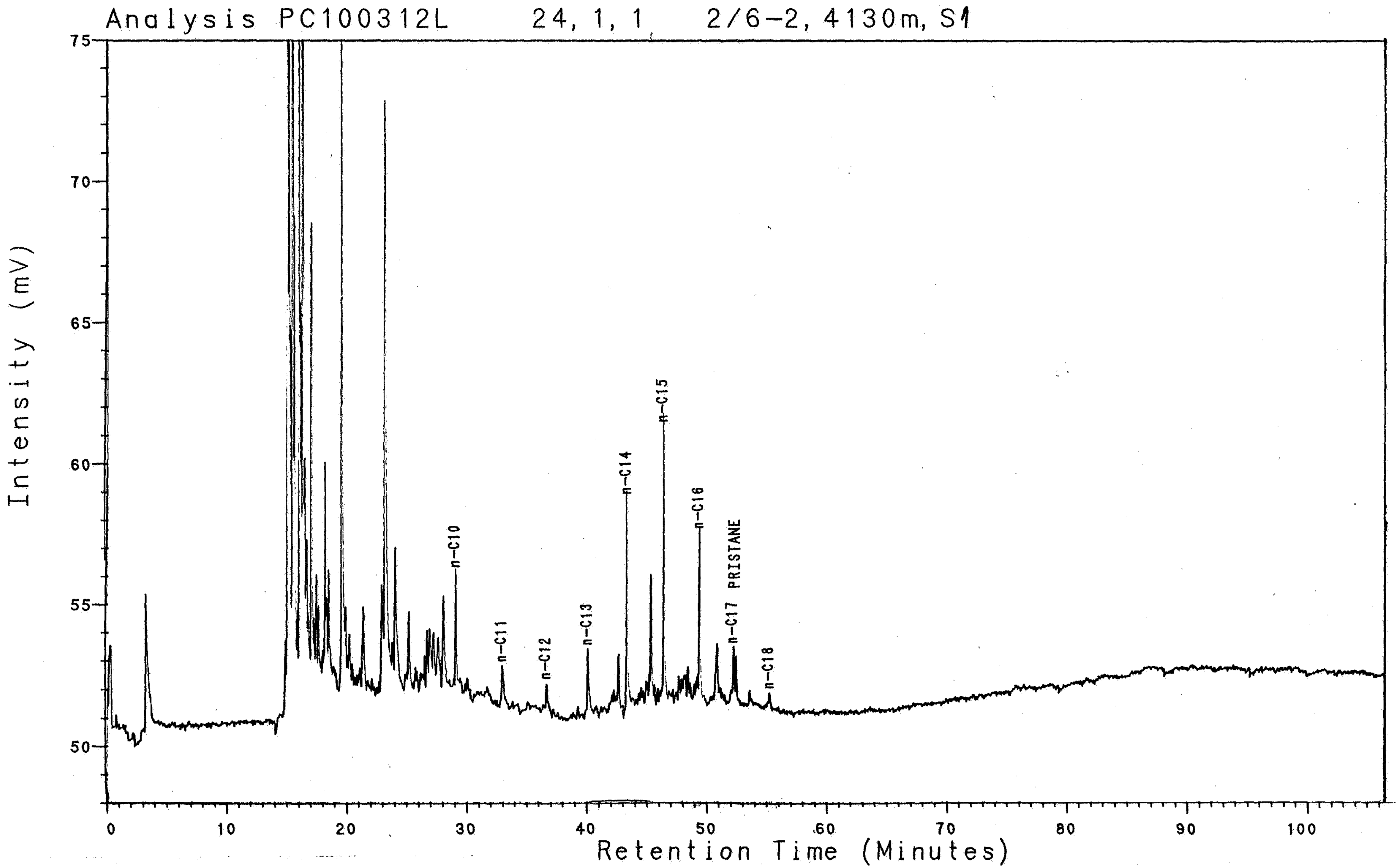
NOCS 2/6-2 4575-4602m
AROMATIC GC (FPD)
CLST gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



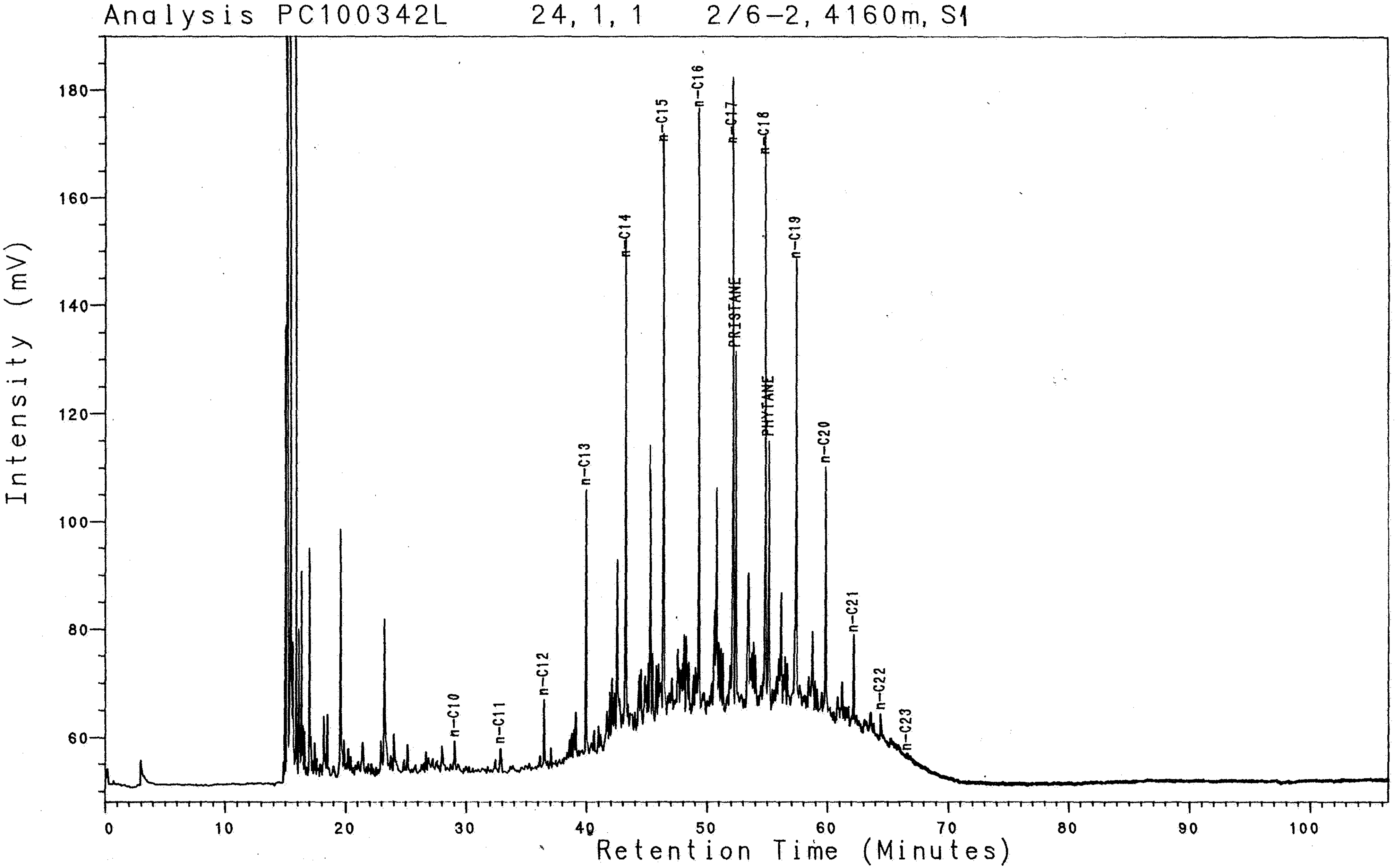
NOCS 2/6-2 4616-66m
AROMATIC GC (FPD)
CLST: gy, gy red, m gy

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



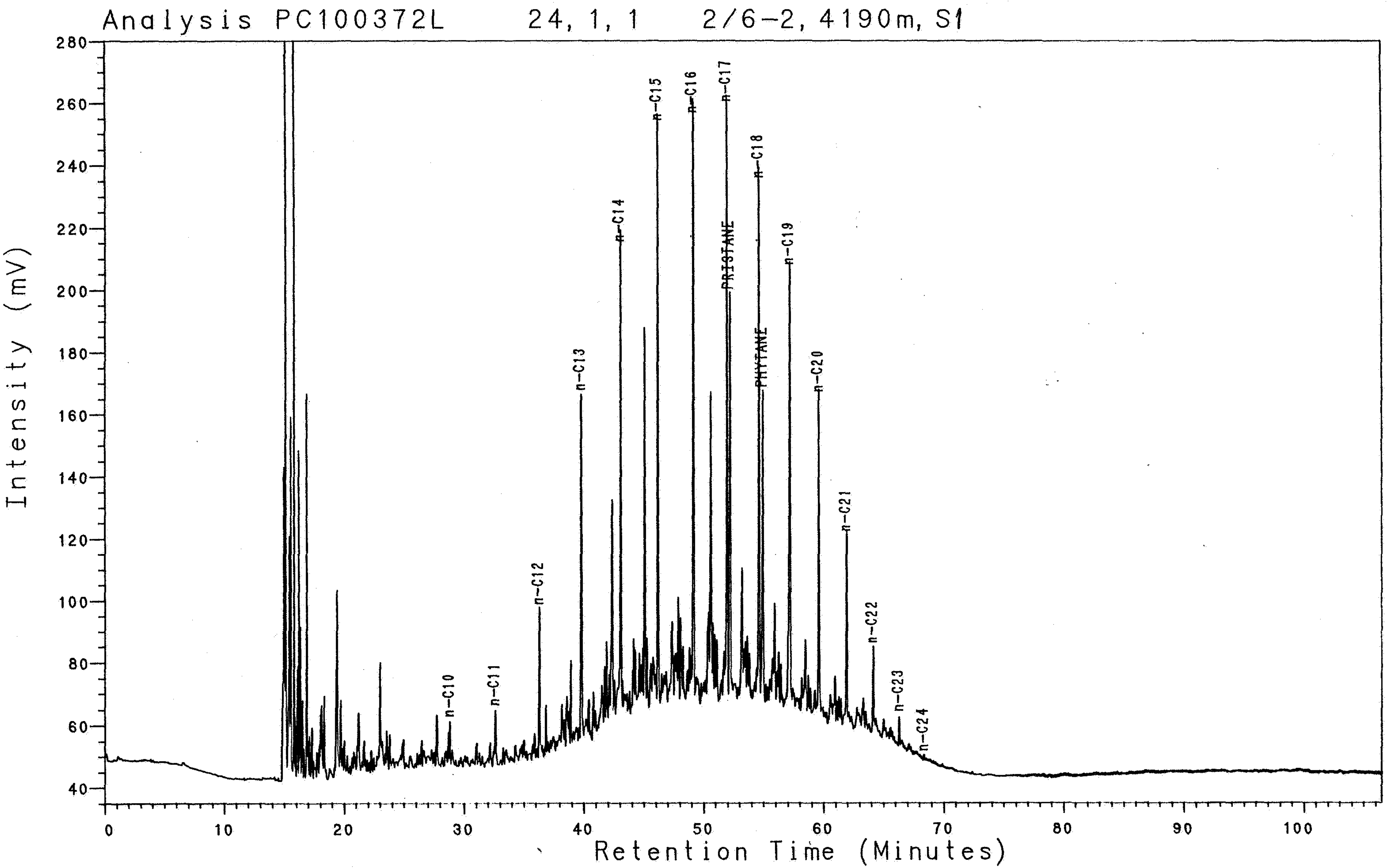
NOCS 2/6-2 4130m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4160m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

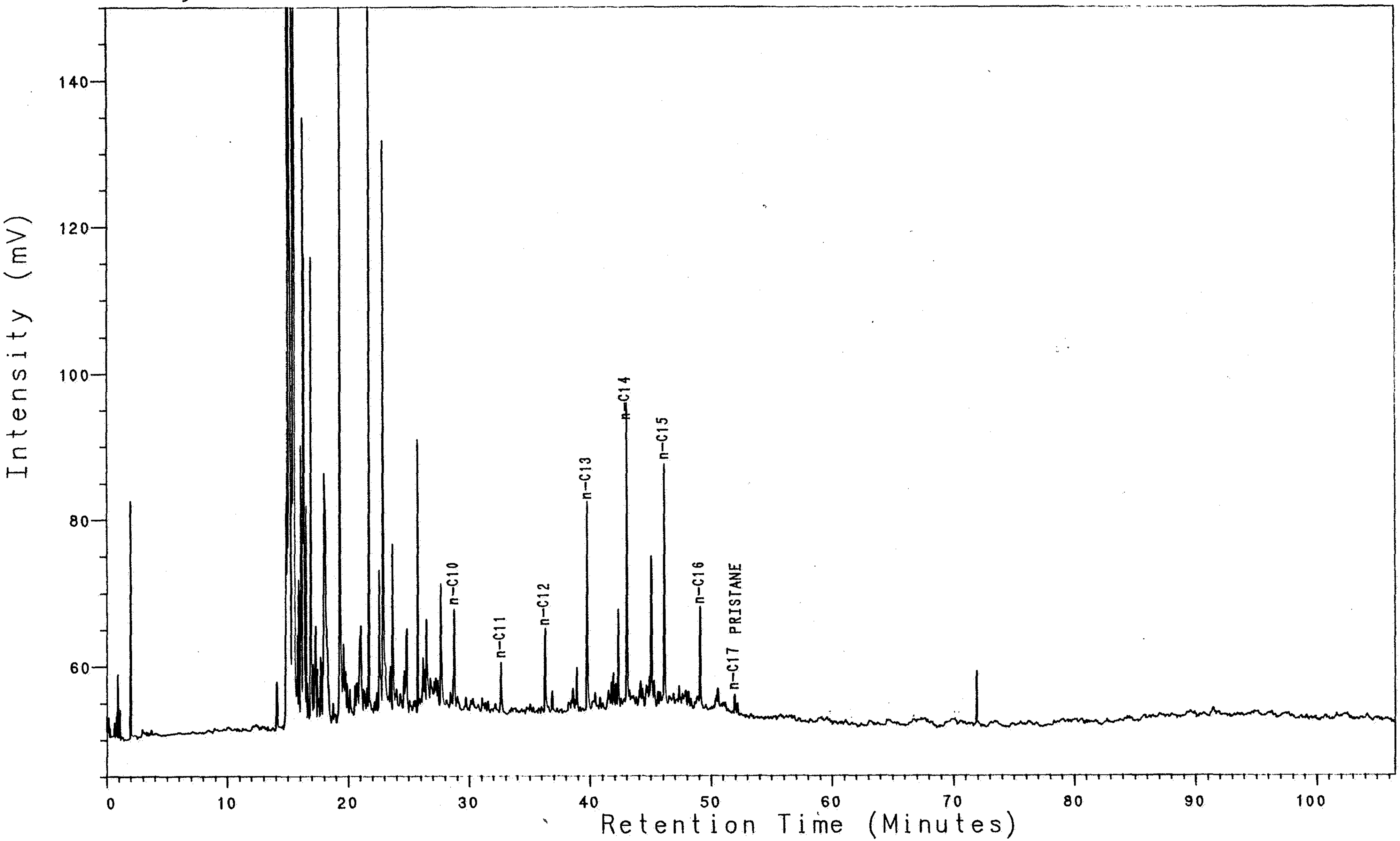
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4190m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

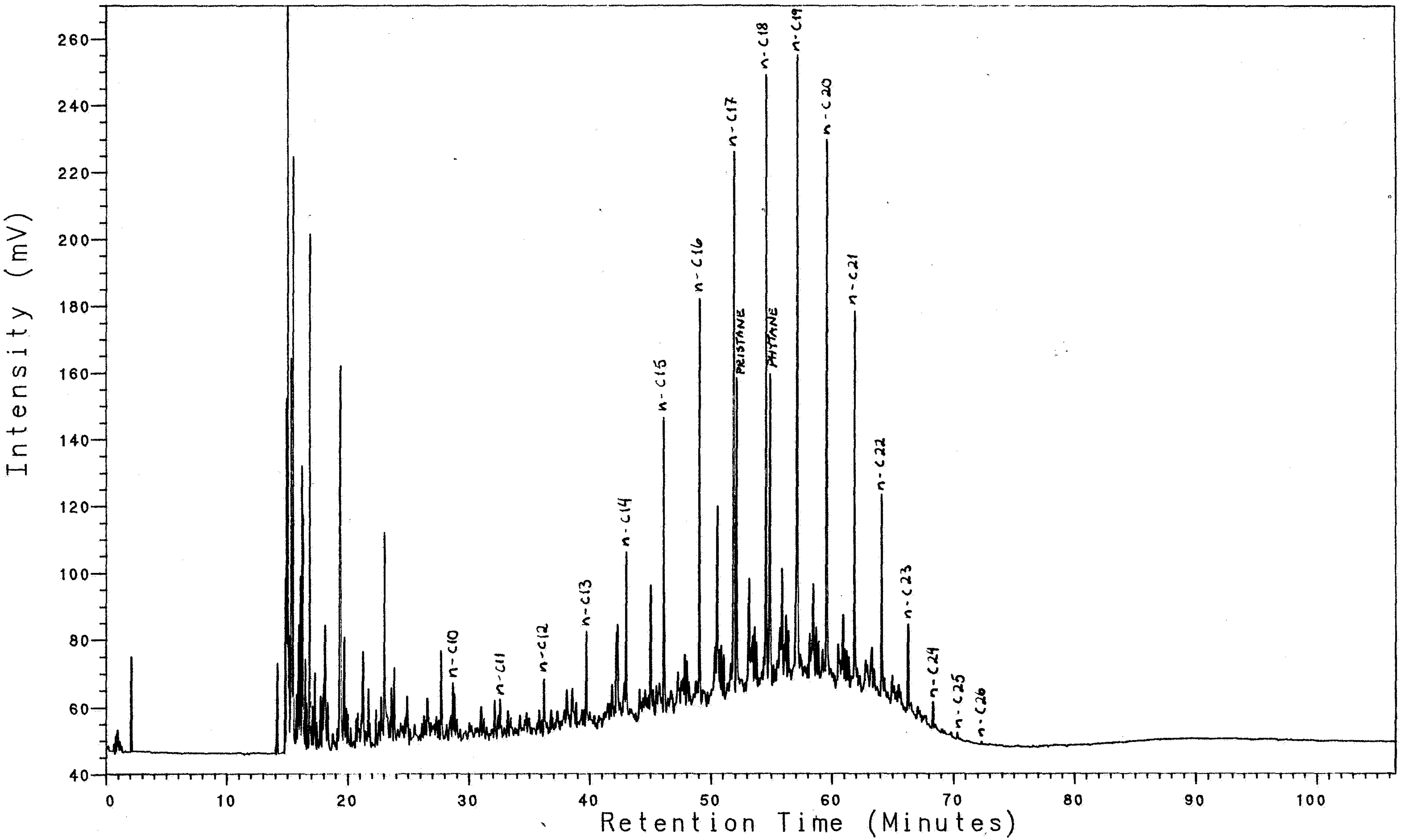
Analysis PC100381L   24, 1, 1   2/6-2, 4200m, S1



NOCS 2/6-2 4200m
THERMAL EXTRACTION GC (S1)
CLST:m gy to drk gy

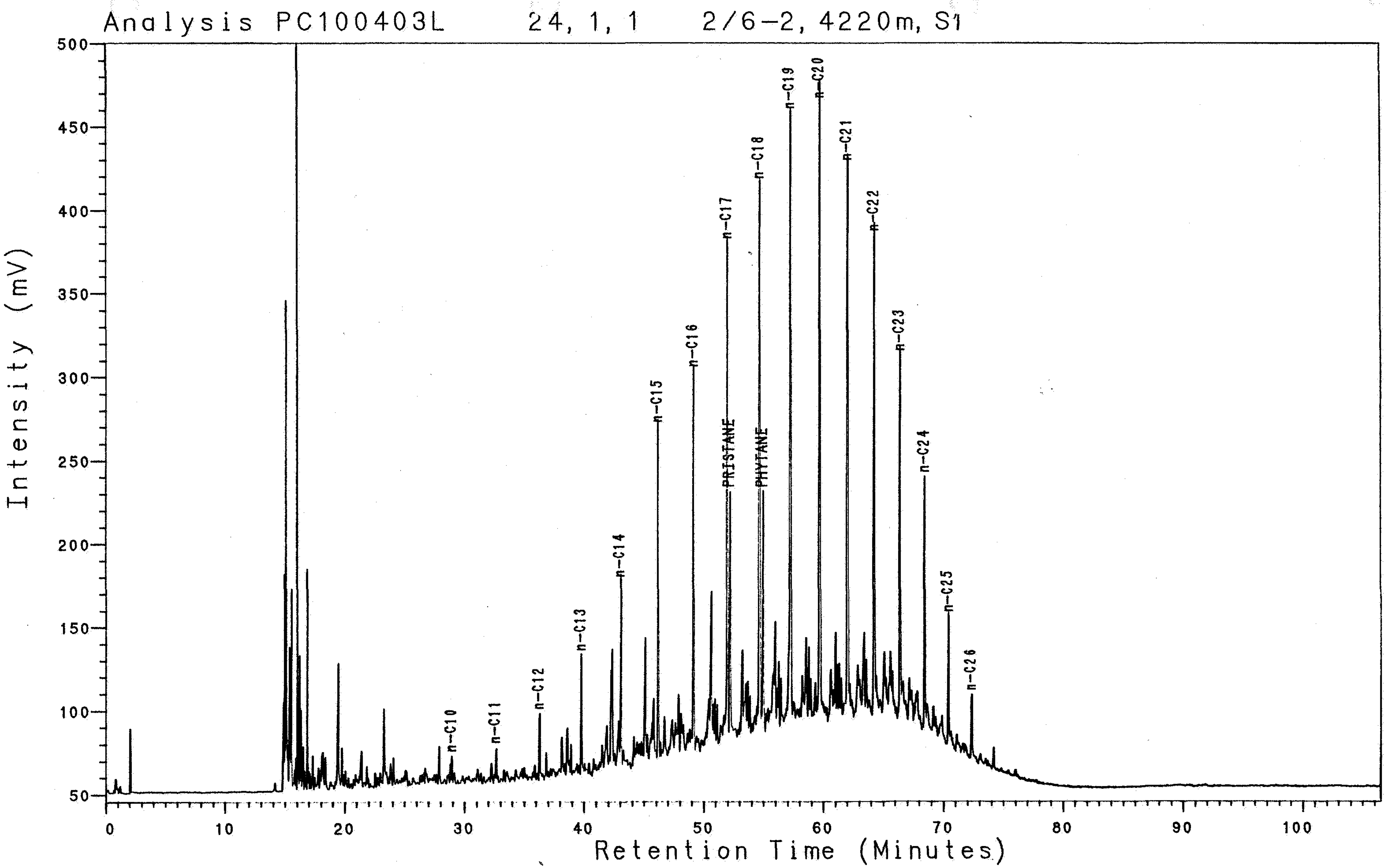
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100383L 24, 1, 1 2/6-2, 4200m, S1



NOCS 2/6-2 4200m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

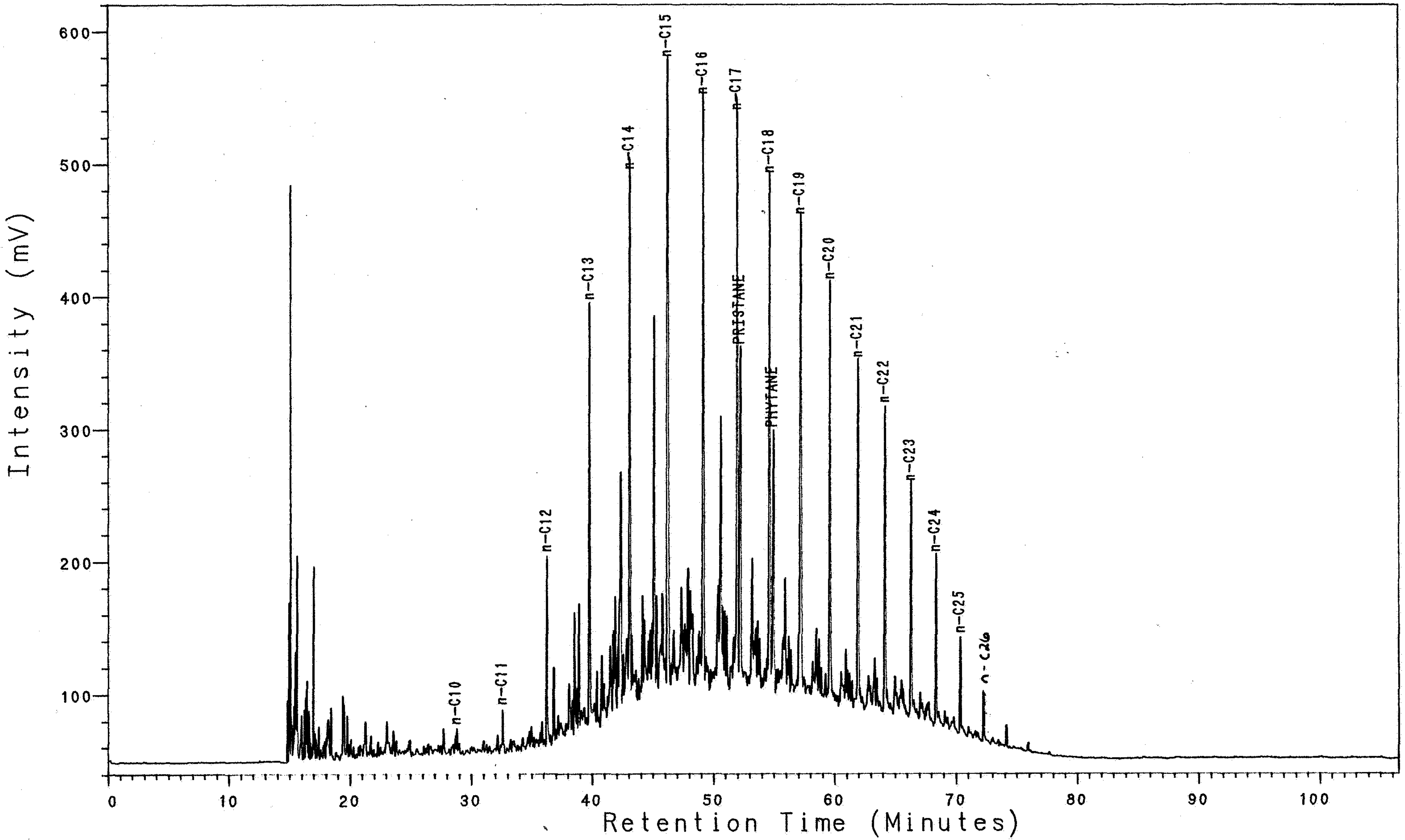
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4220m
THERMAL EXTRACTION GC (S1)
CLST:blk, gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

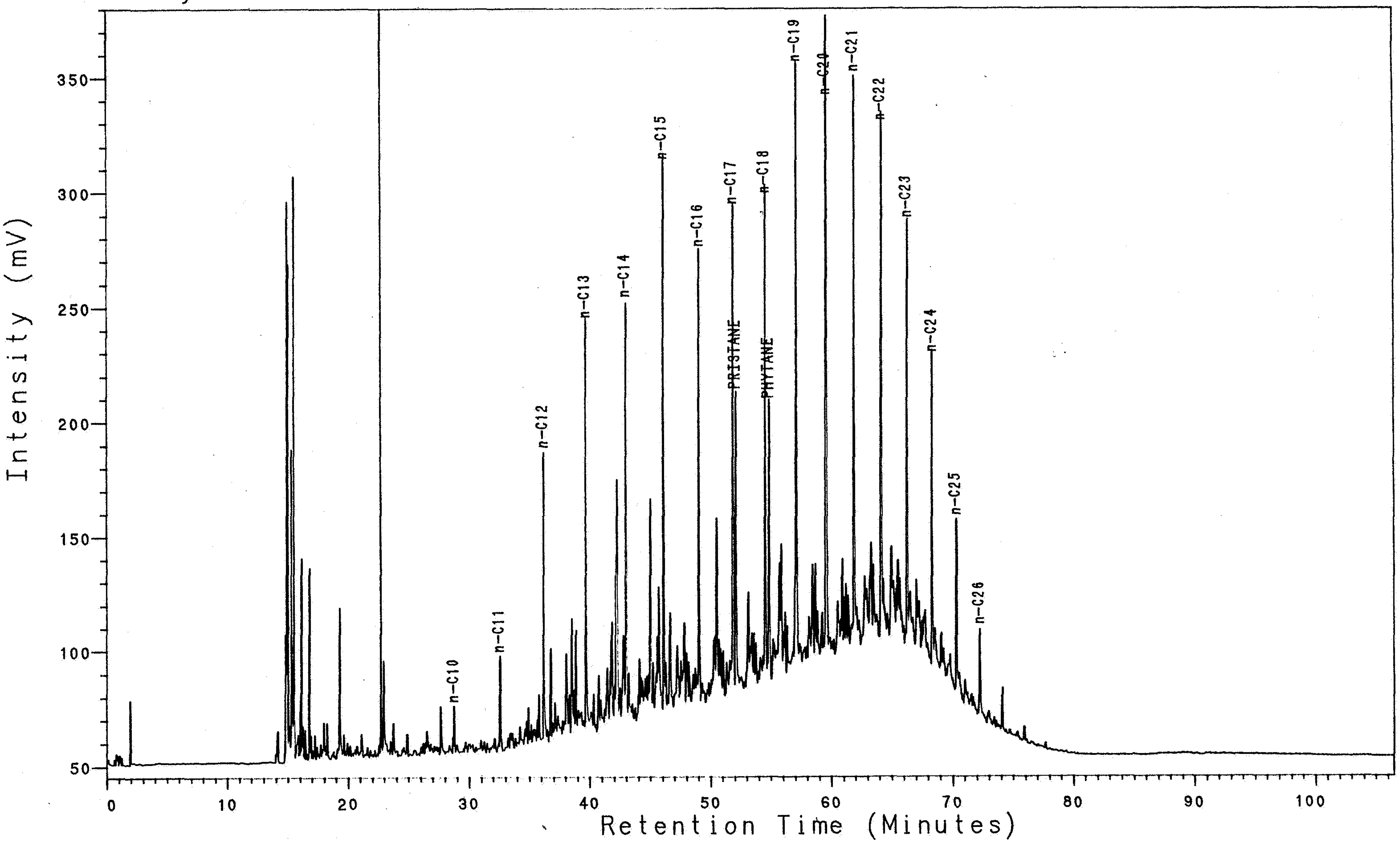
Analysis PC100413L 24, 1, 1 2/6-2, 4230m, S1



NOCS 2/6-2 4230m
THERMAL EXTRACTION GC (S1)
CLST:blk, gy blk, brn blk

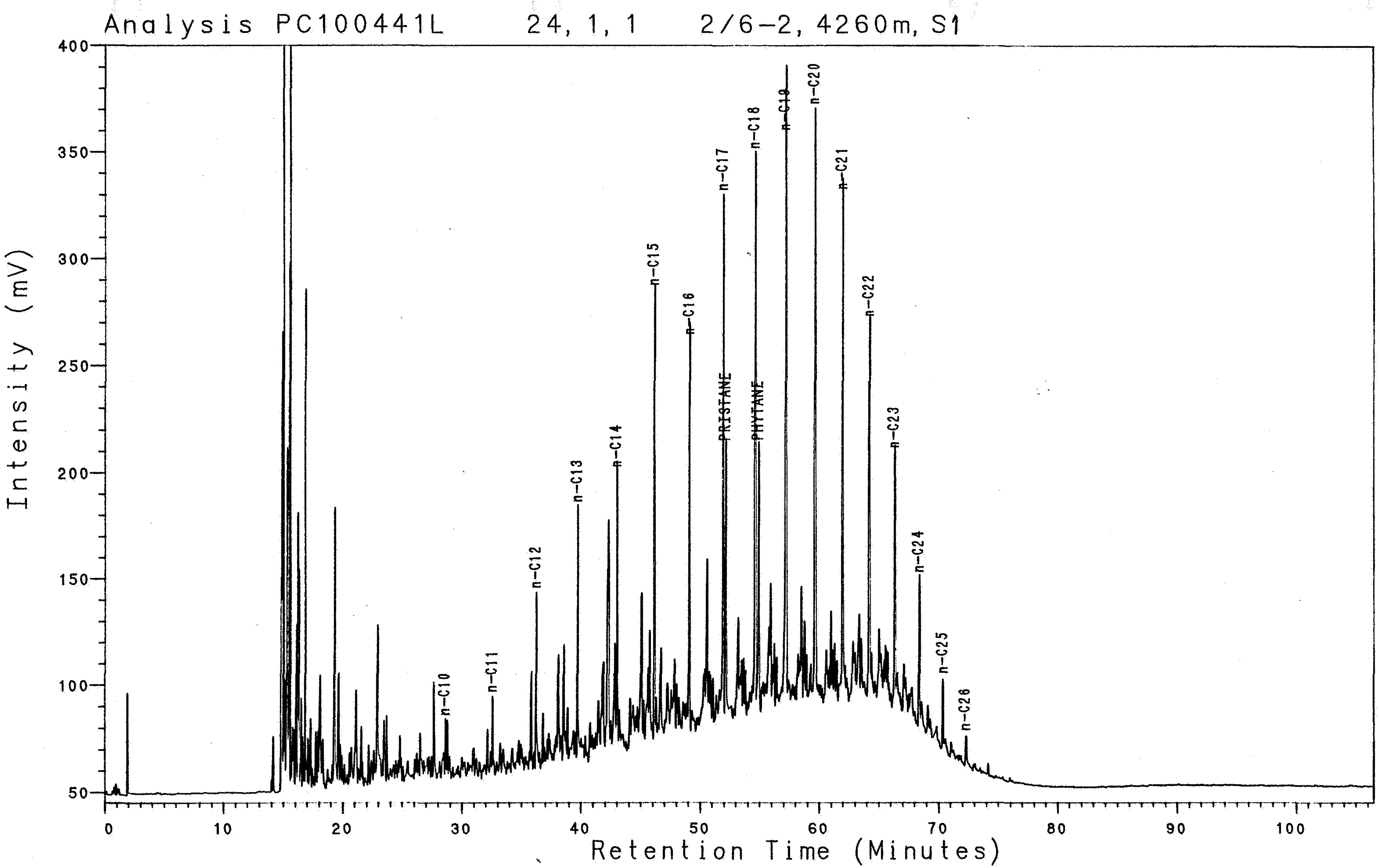
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100432L 24, 1, 1 2/6-2, 4250m, S1



NOCS 2/6-2 4250m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

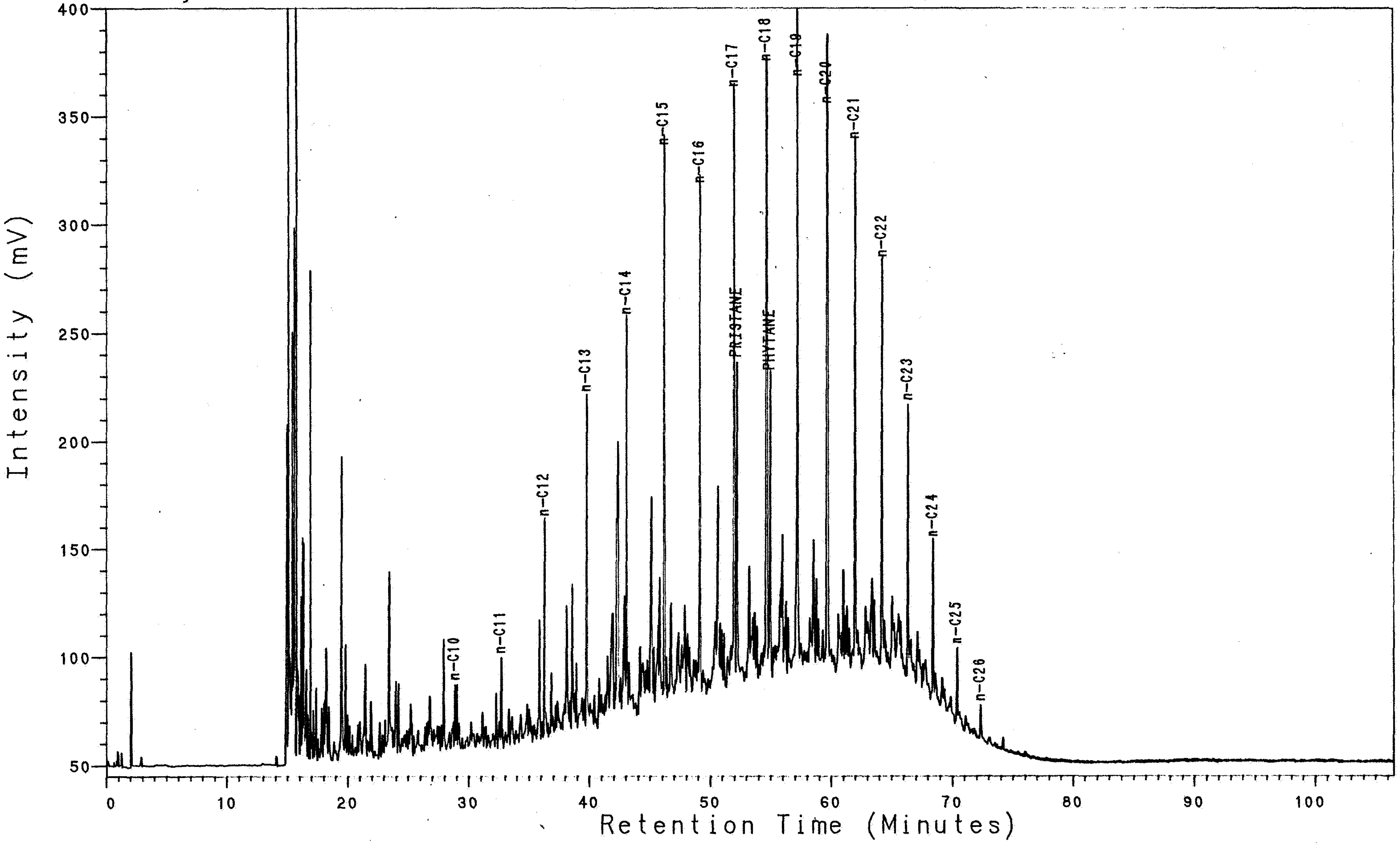
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4260m
THERMAL EXTRACTION GC (S1)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

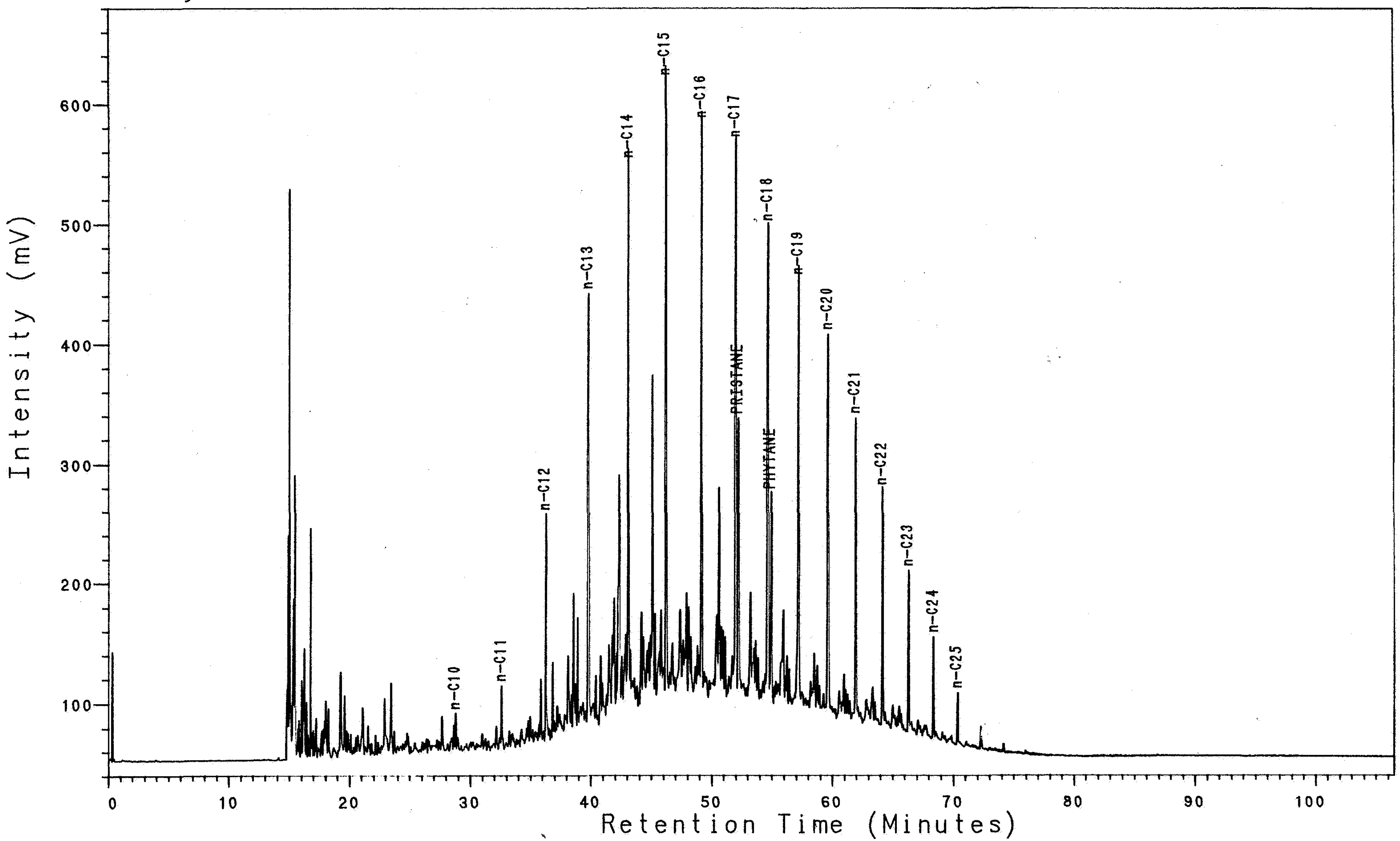
Analysis PC100452L 24, 1, 1 2/6-2, 4270m, S1



NOCS 2/6-2 4270m
THERMAL EXTRACTION GC (S1)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

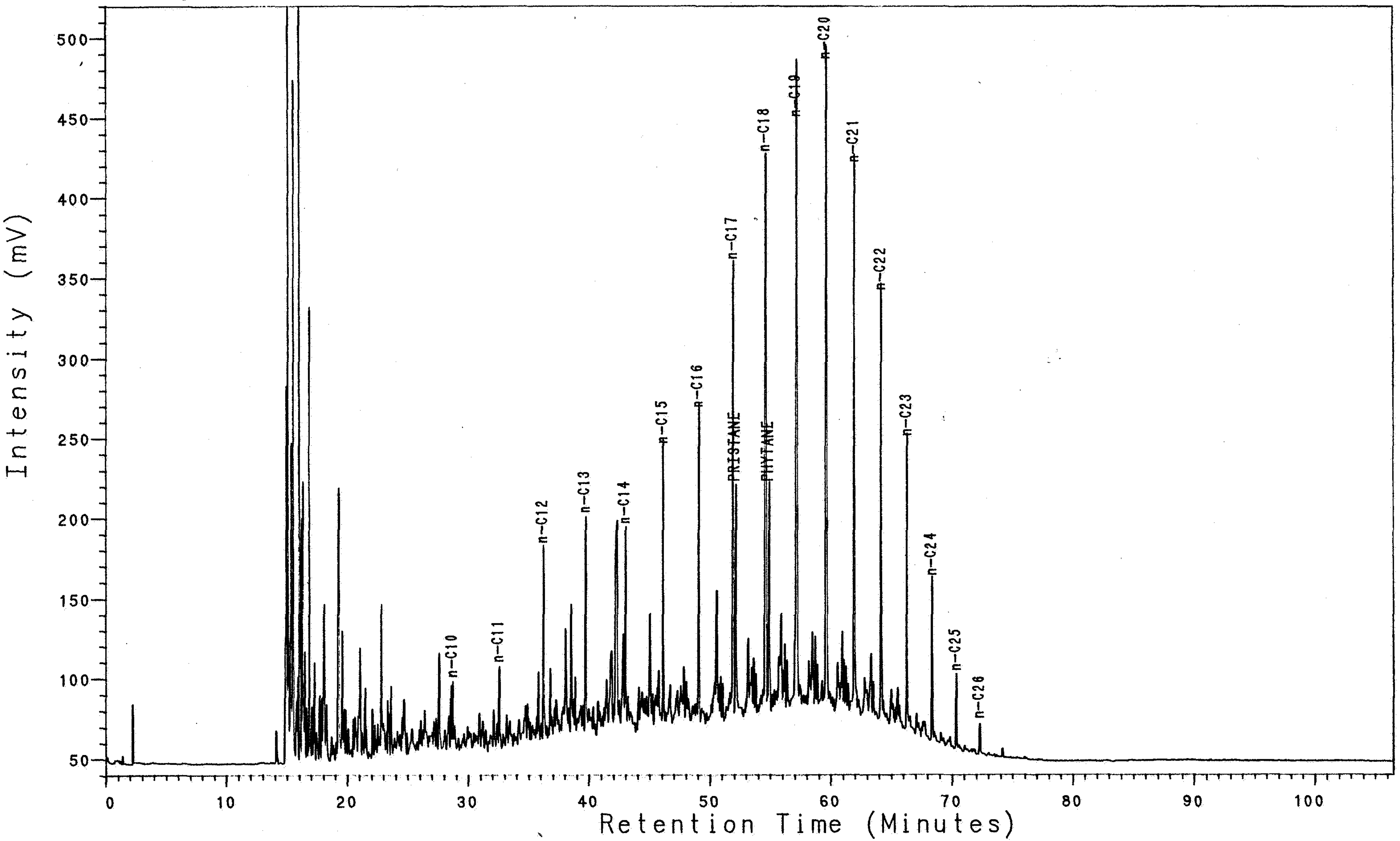
Analysis PC100471L   24, 1, 1   2/6-2, 4280m, S1



NOCS 2/6-2 4280m
THERMAL EXTRACTION GC (S1)
CLST:brn blk

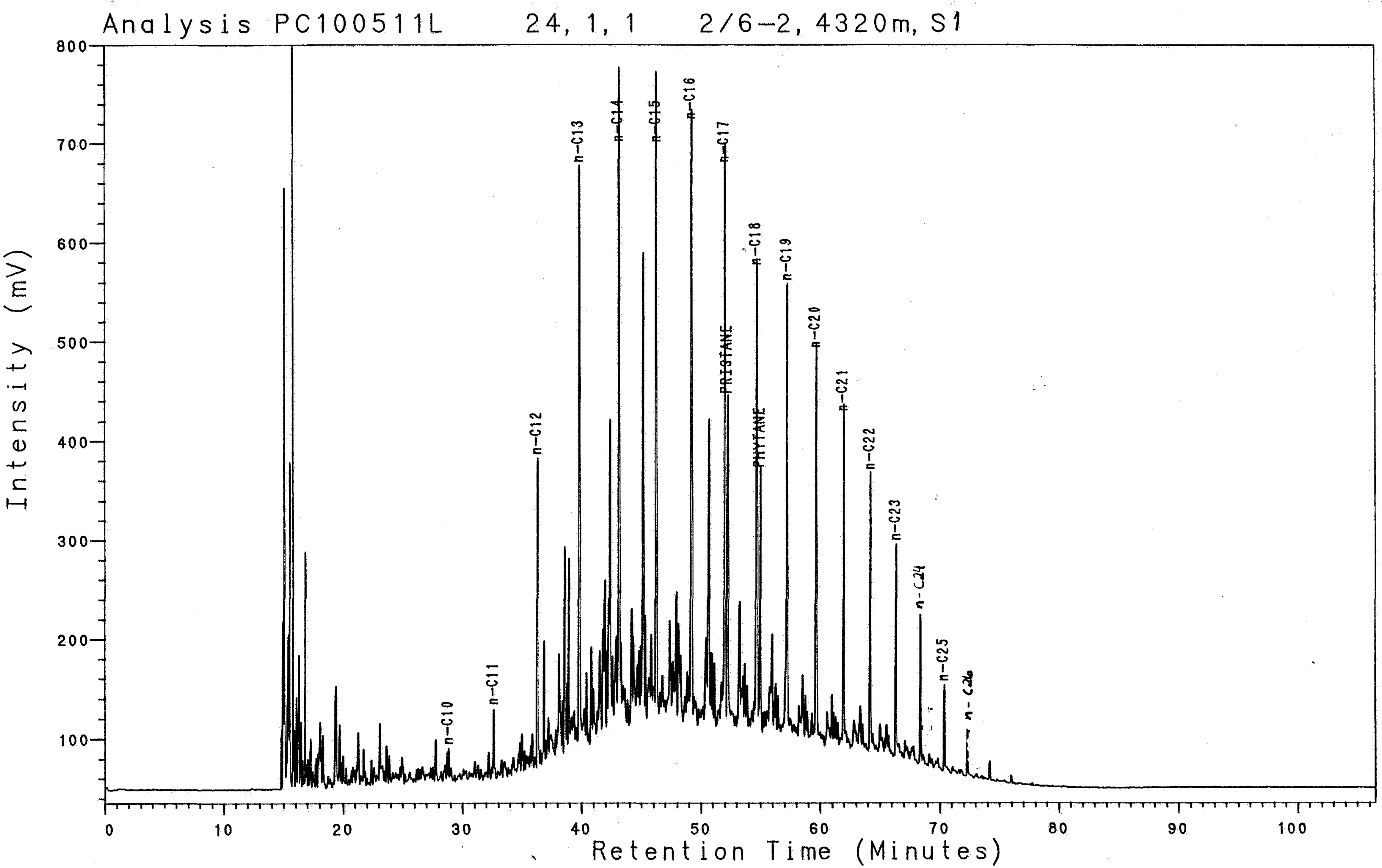
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100491L 24, 1, 1 2/6-2, 4300m, S1



NOCS 2/6-2 4300m
THERMAL EXTRACTION GC (S1)
CLST:brn blk

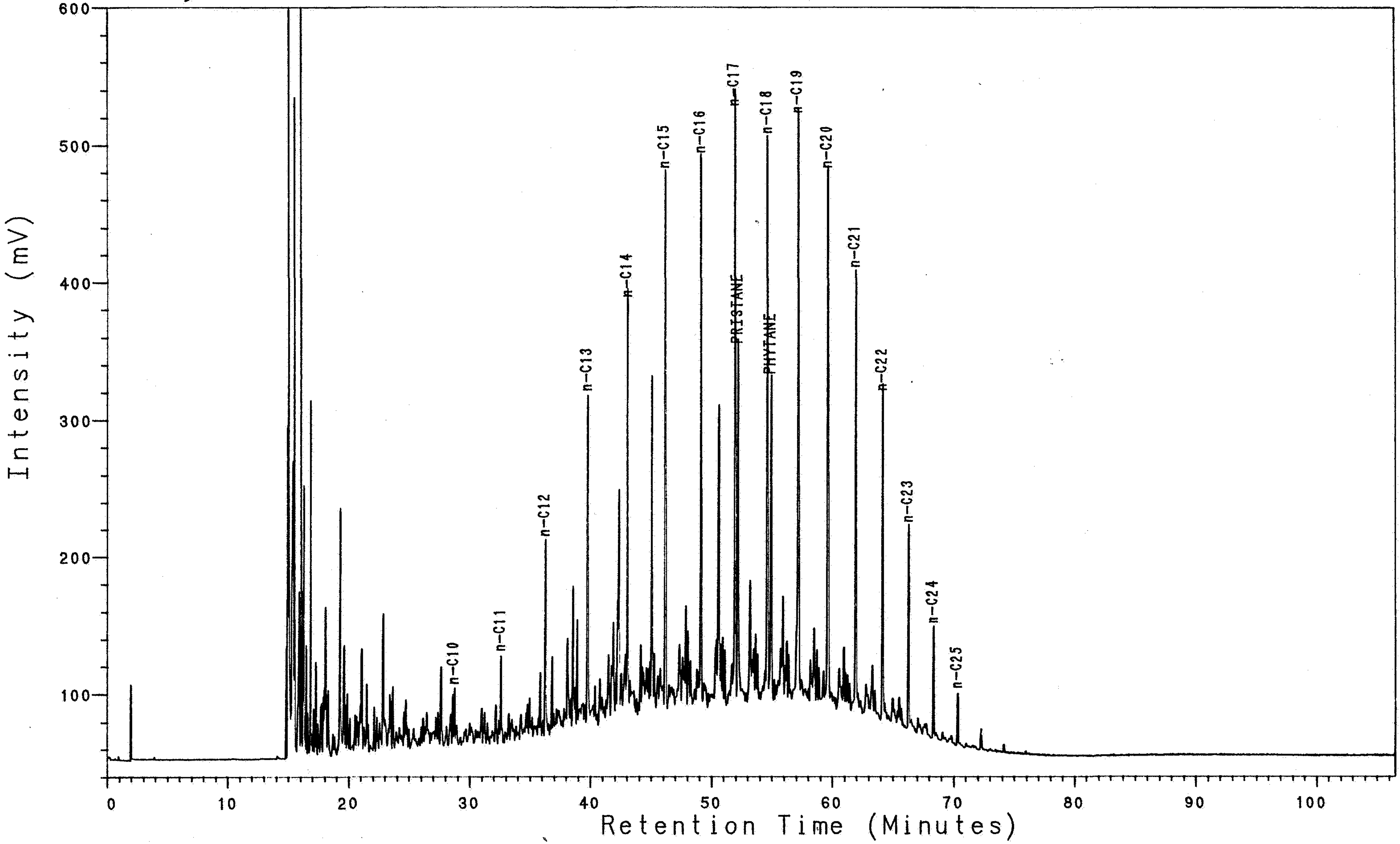
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4320m
THERMAL EXTRACTION GC (S1)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

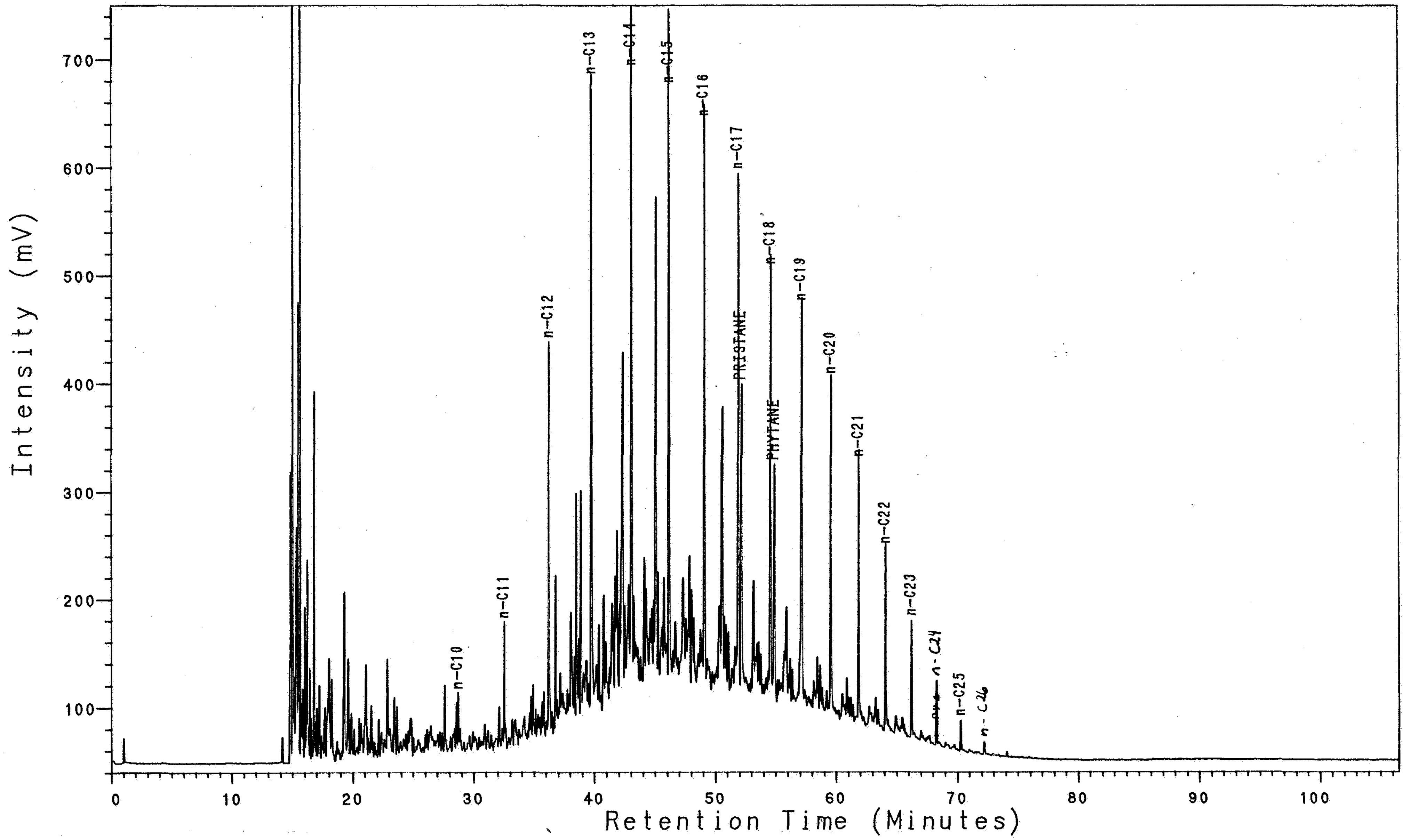
Analysis PC100521L 24, 1, 1 2/6-2, 4330m, S1



NOCS 2/6-2 4330m
THERMAL EXTRACTION GC (S1)
CLST:brn blk

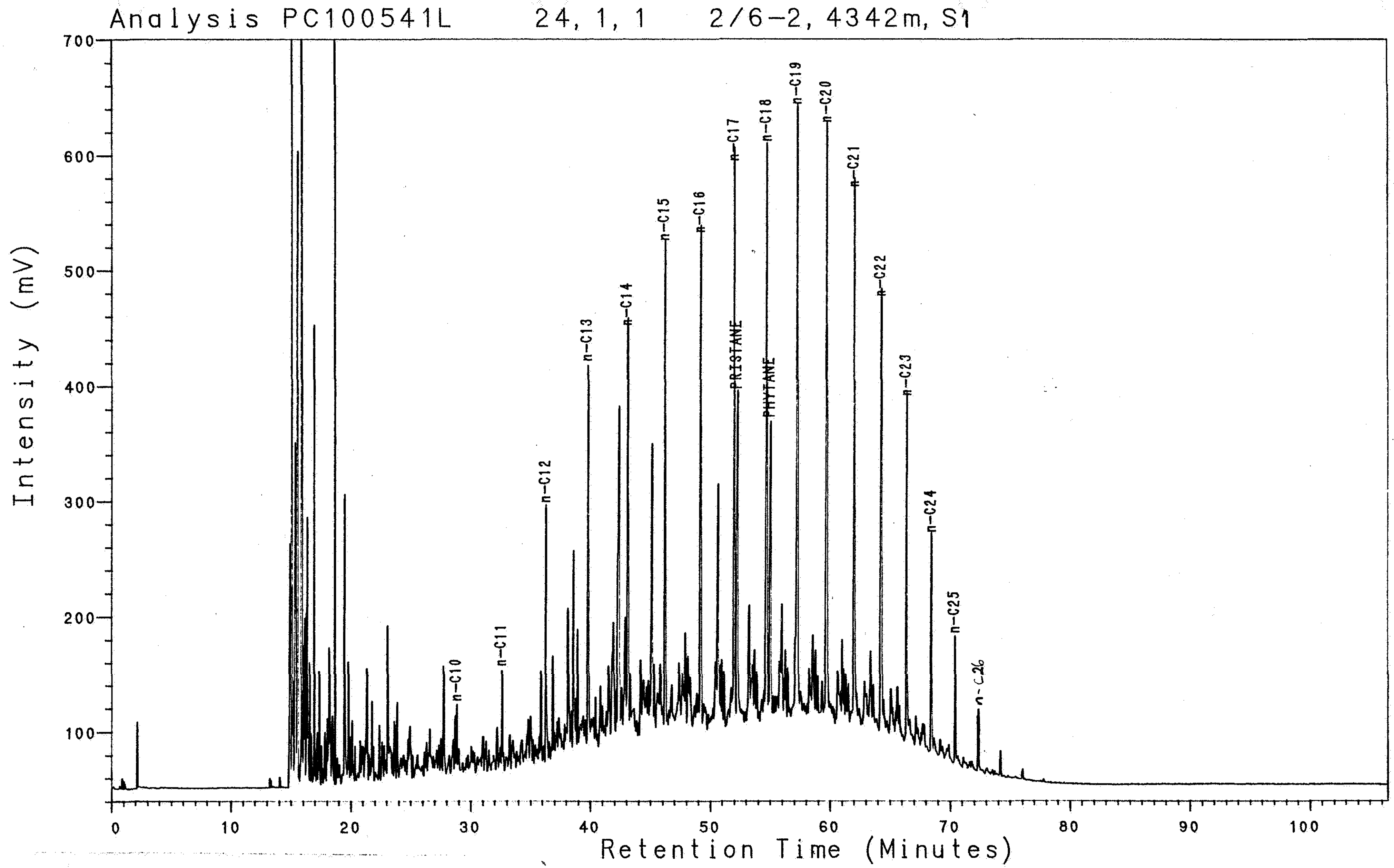
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100532L 24, 1, 1 2/6-2, 4336m, S1



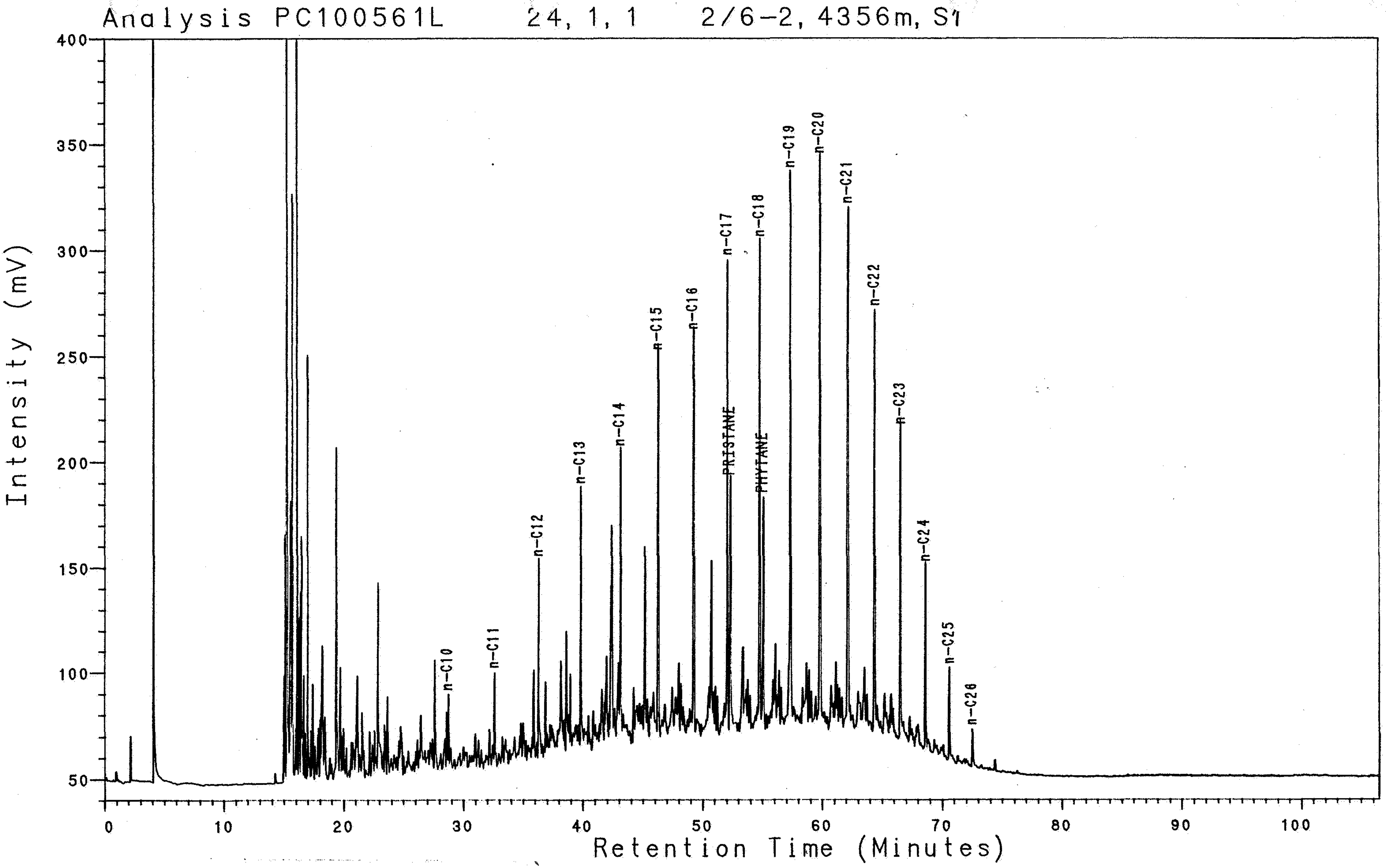
NOCS 2/6-2 4336m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



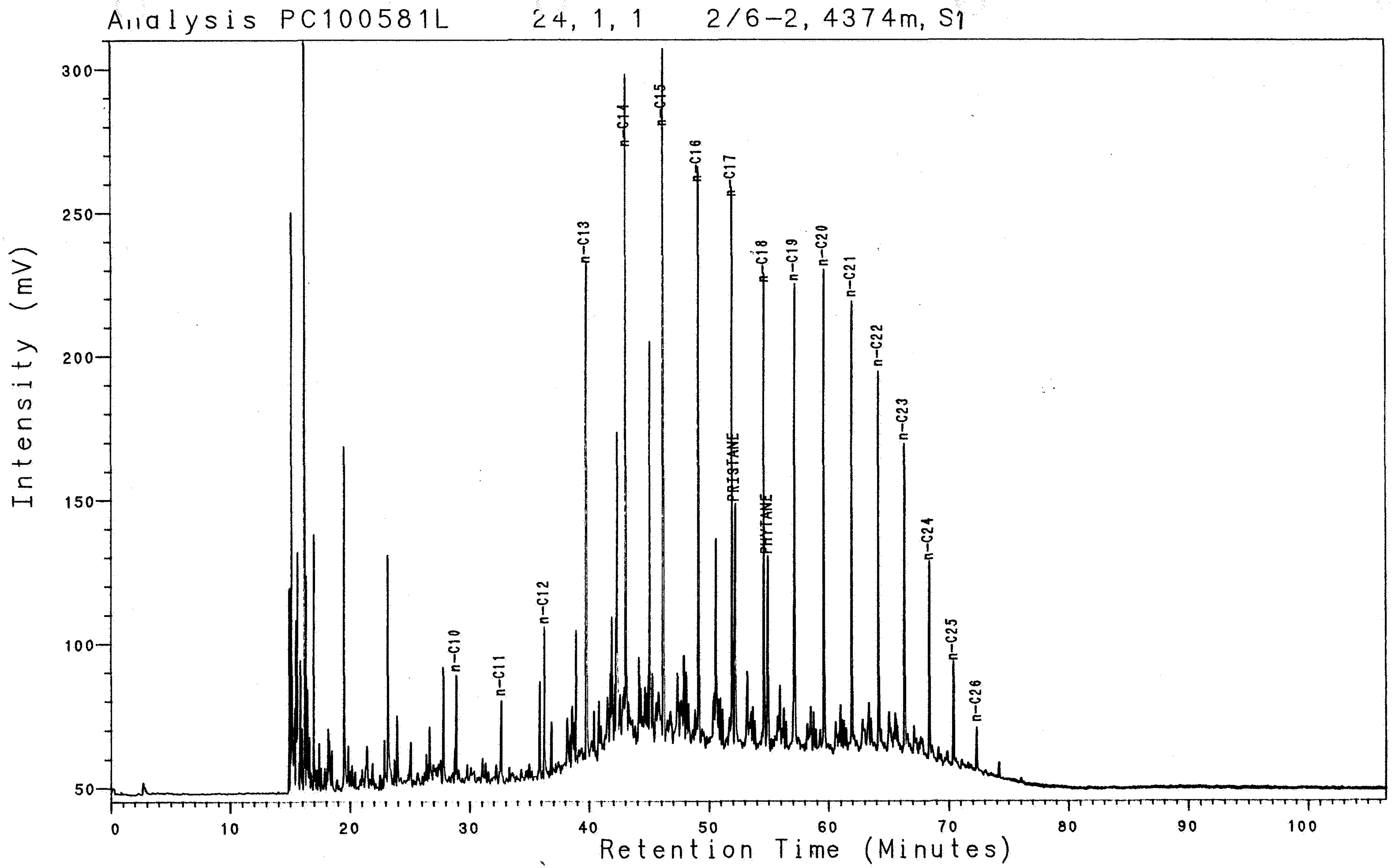
NOCS 2/6-2 4342m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4356m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

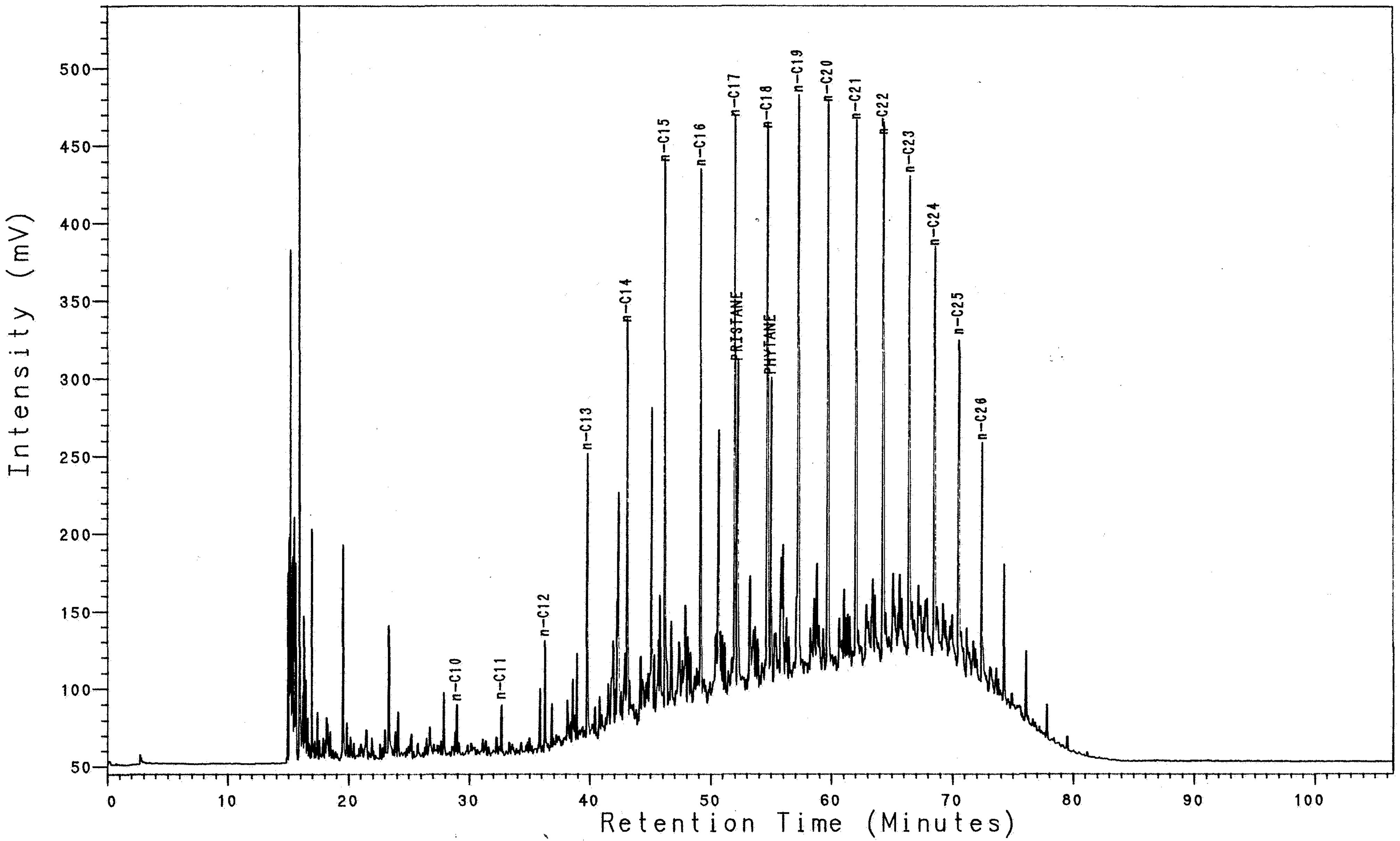
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4374m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

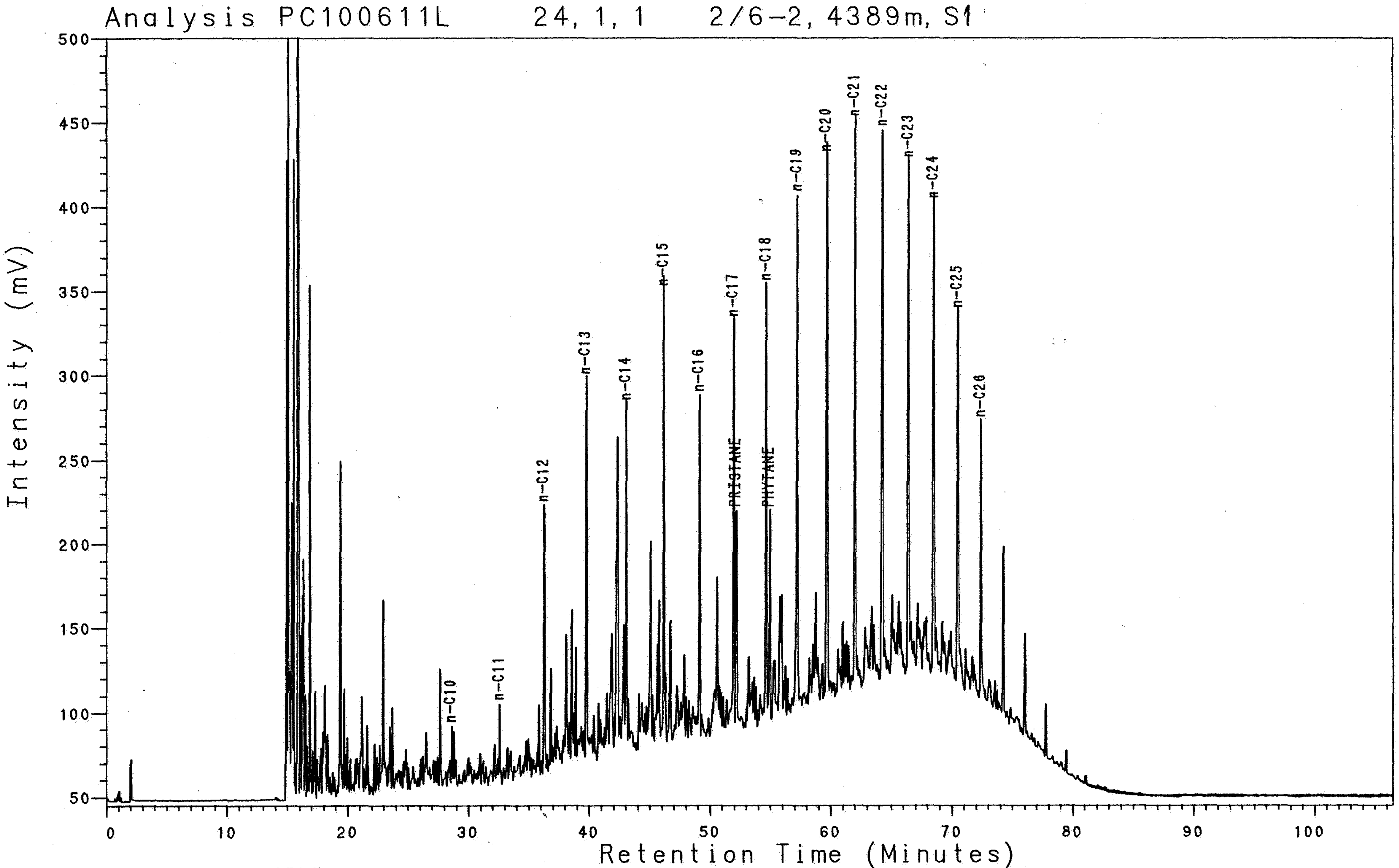
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100591L 24, 1, 1 2/6-2, 4380m, S1



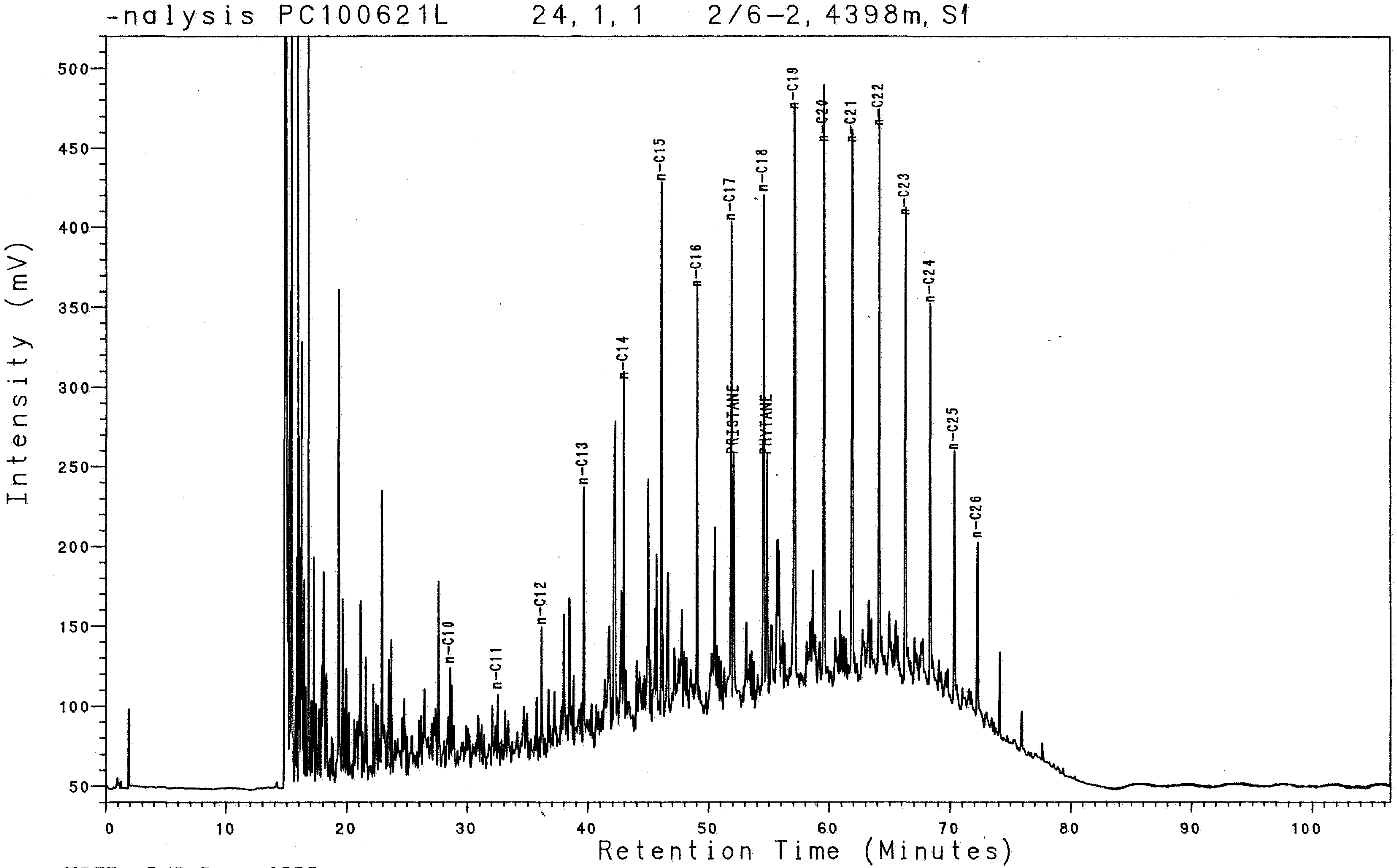
NOCS 2/6-2 4380m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4389m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

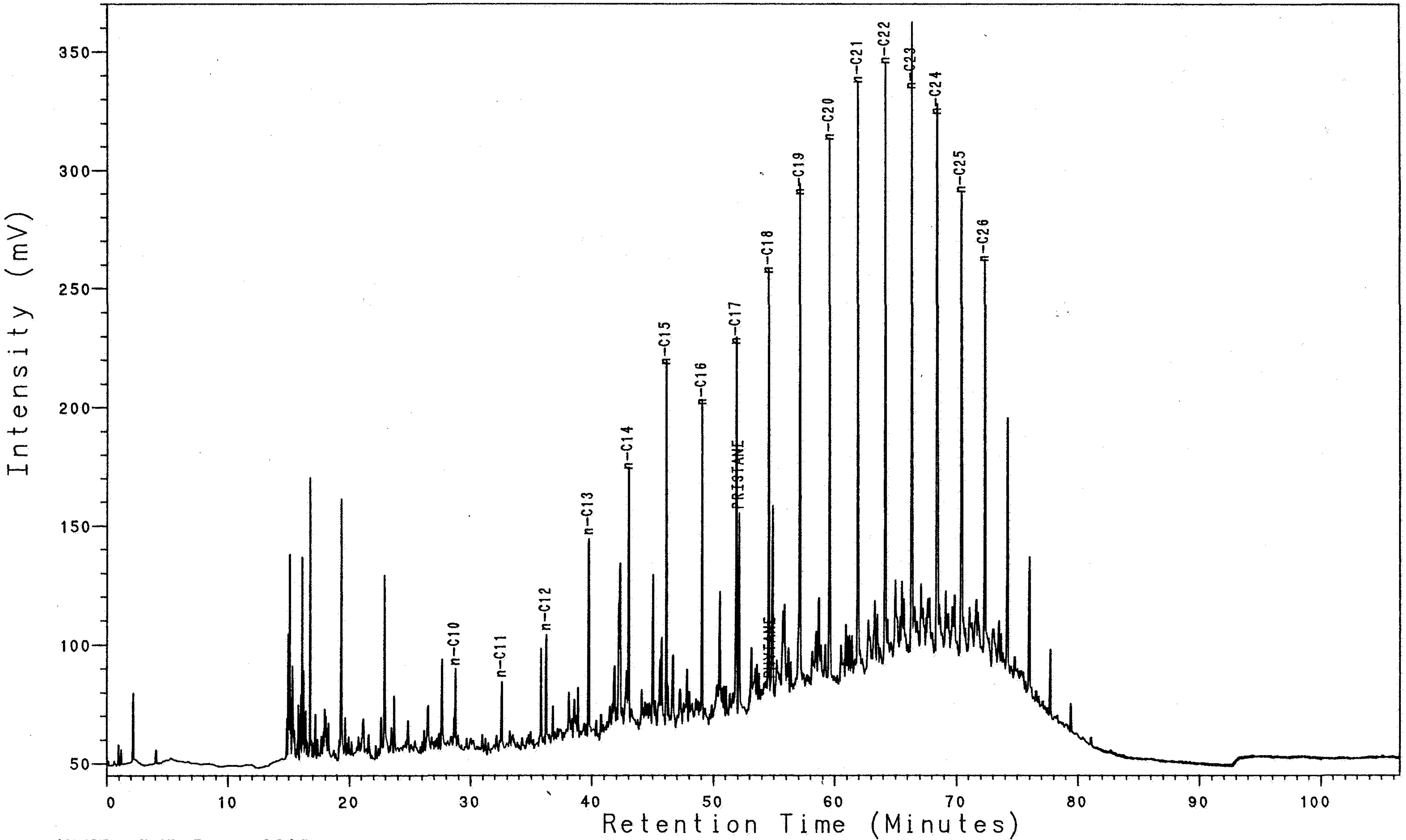
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



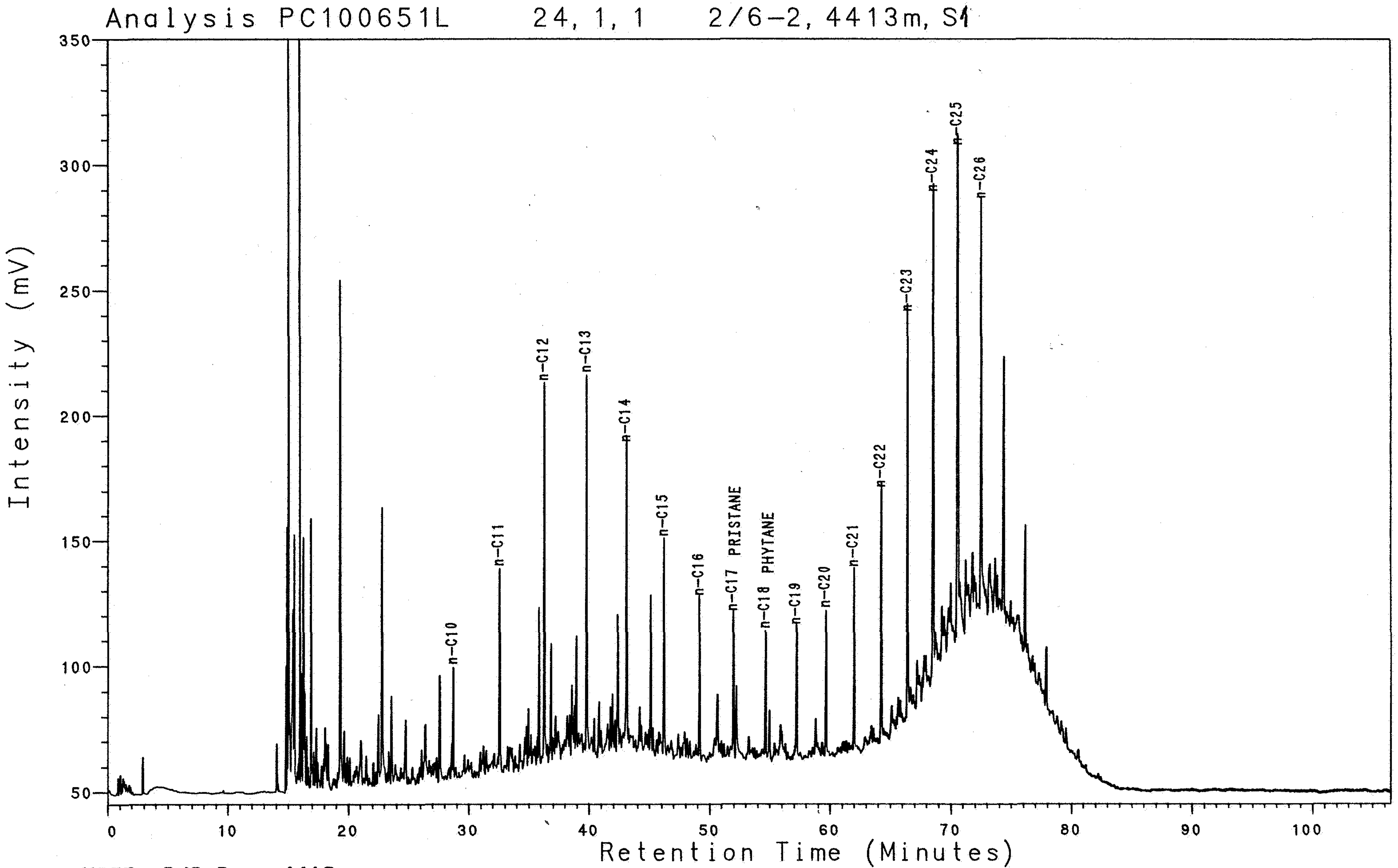
NOCS 2/6-2 4398m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100641L 24, 1, 1 2/6-2, 4410m, S1



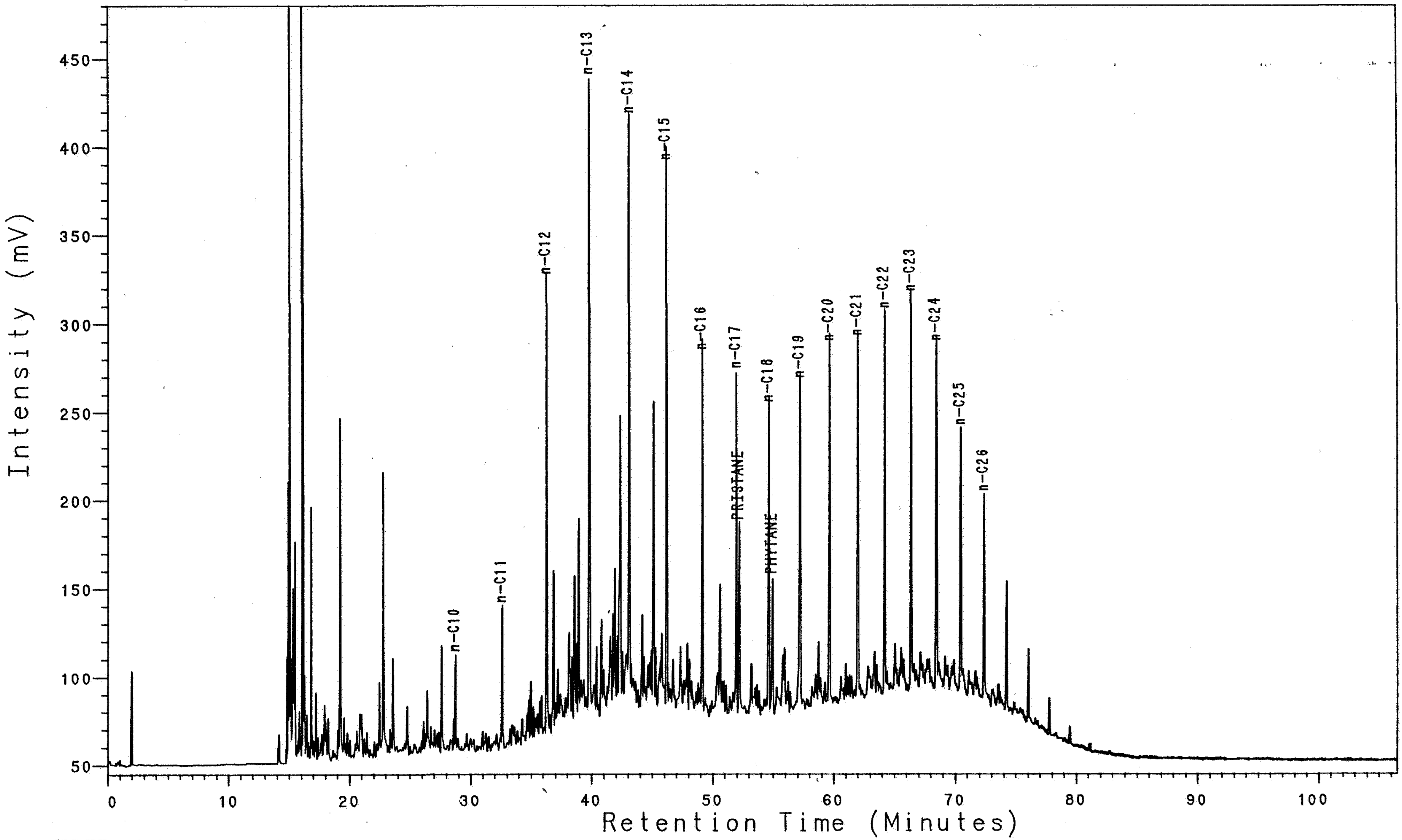
NOCS 2/6-2 4410m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk



NOCS 2/6-2 4413m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

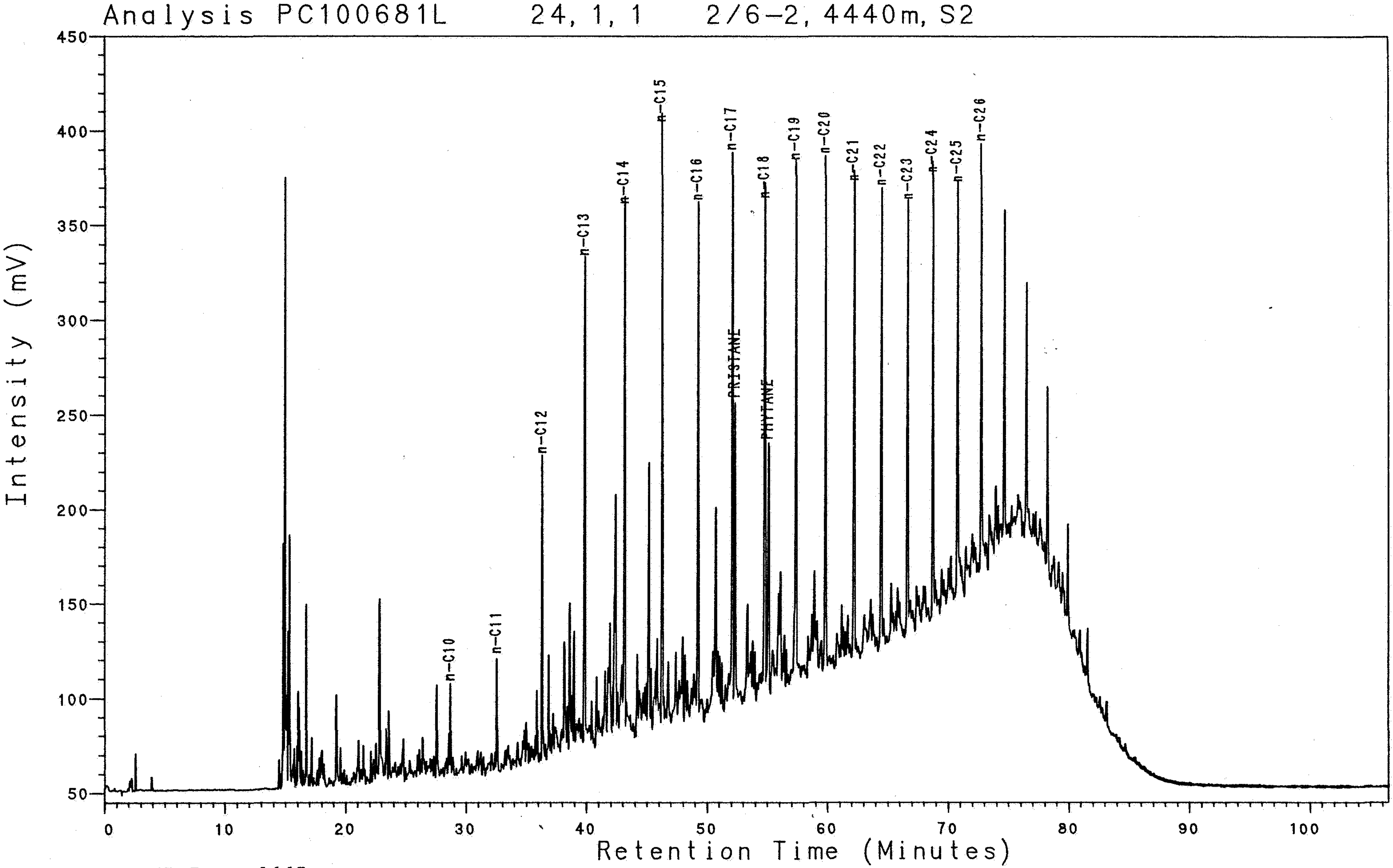
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100661L 24, 1, 1 2/6-2, 4430m, S1



NOCS 2/6-2 4430m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

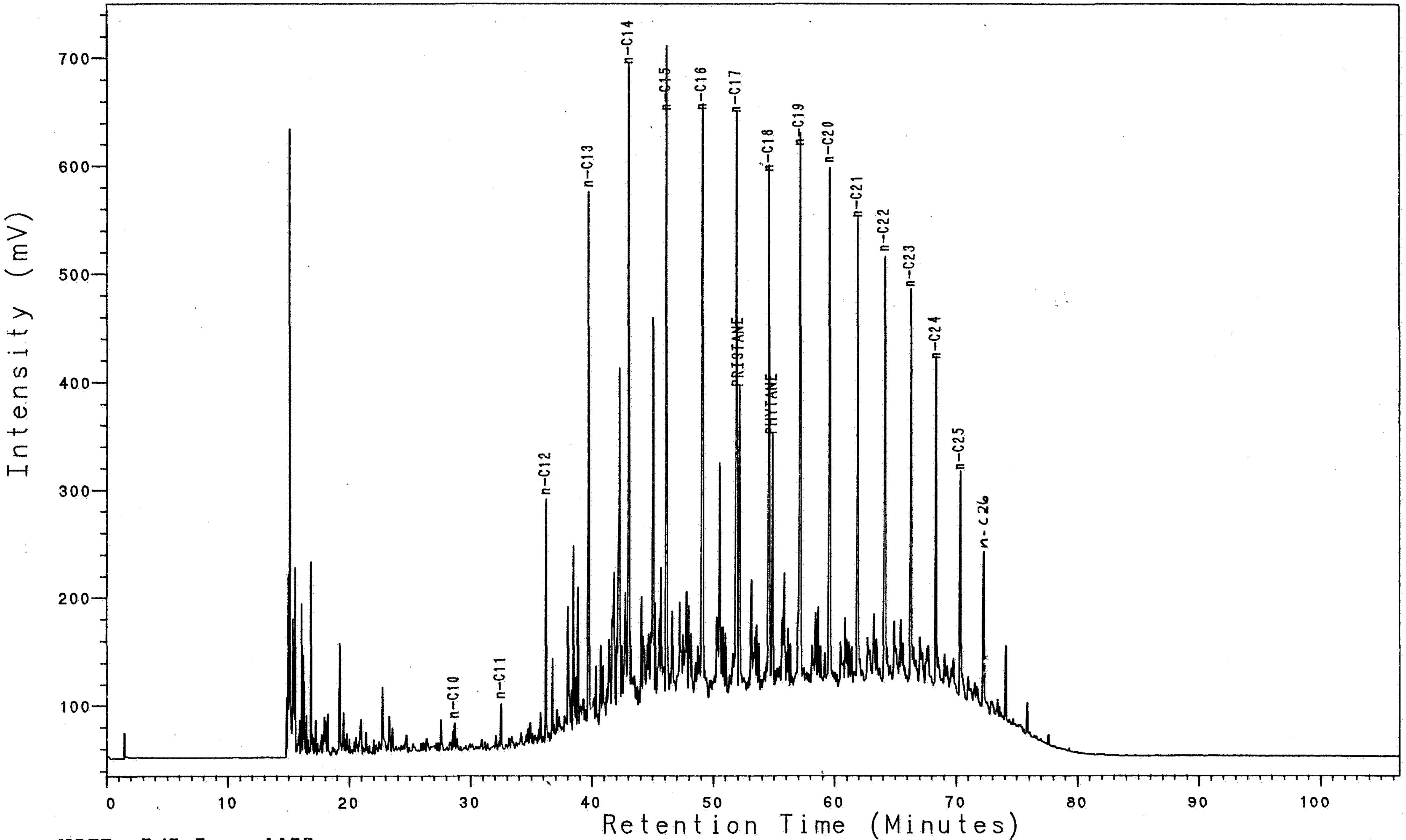
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4440m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

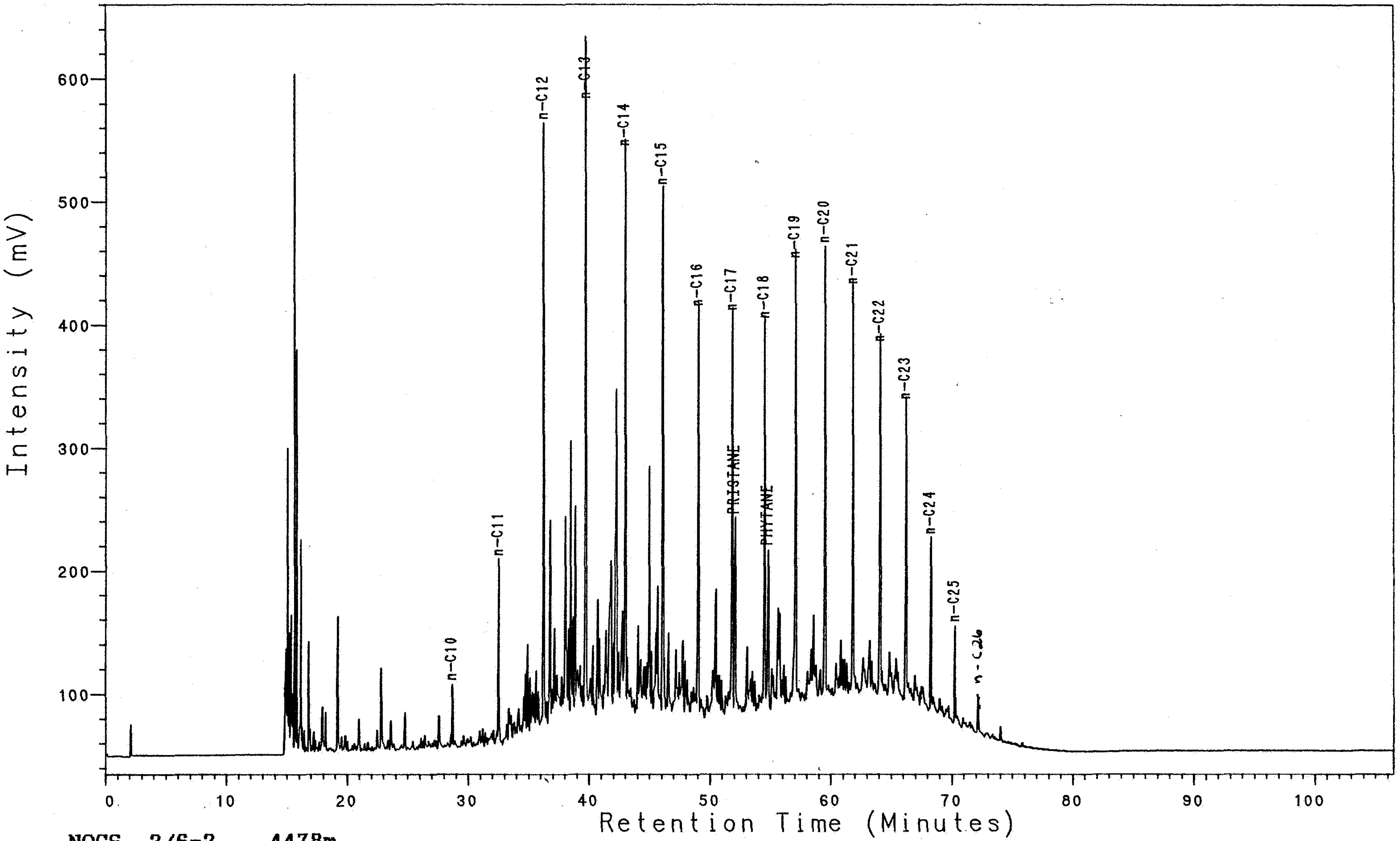
Analysis PC100701L 24, 1, 1 2/6-2, 4468m, S1



NOCS 2/6-2 4468m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

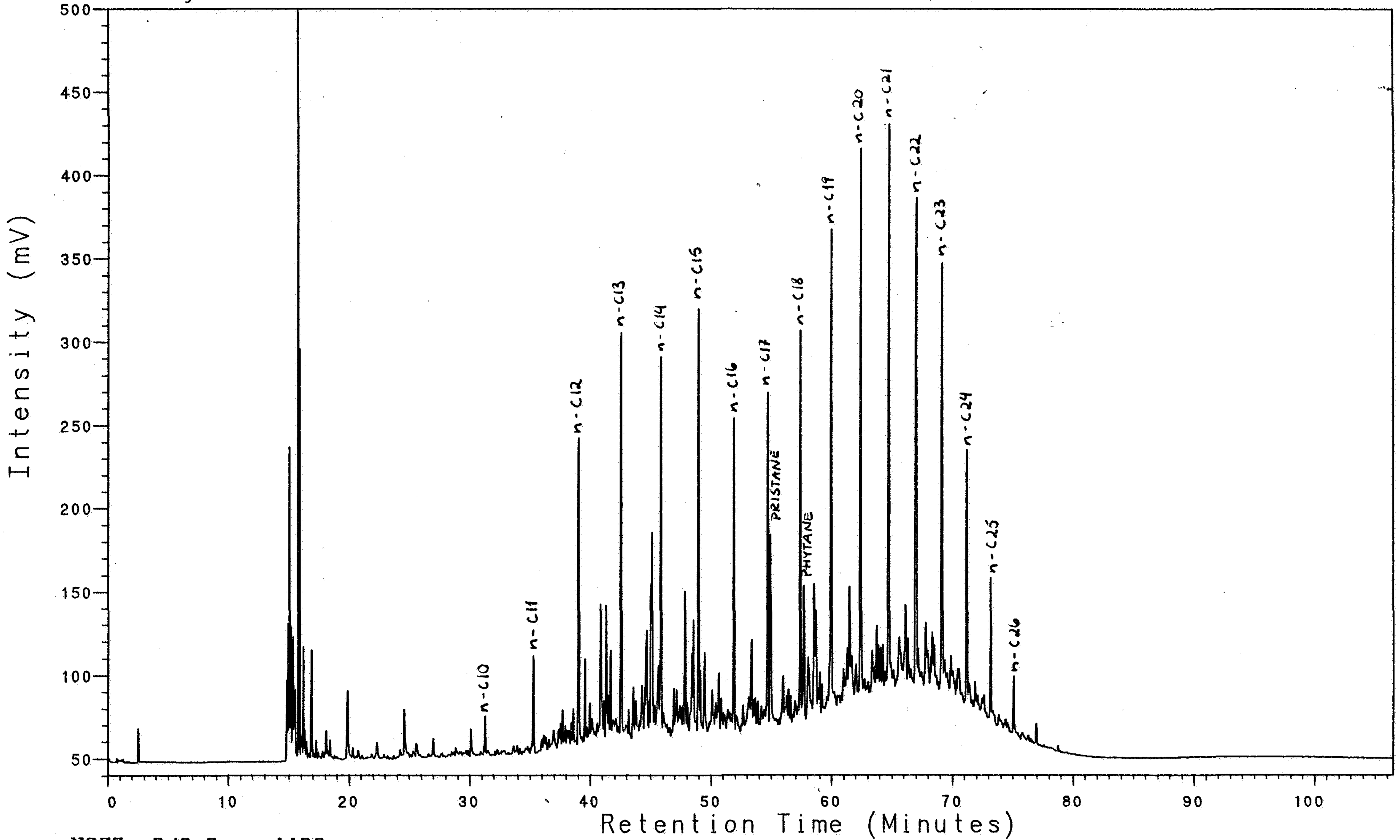
Analysis PC100721L 24, 1, 1 2/6-2, 4478m, S1



NOCS 2/6-2 4478m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

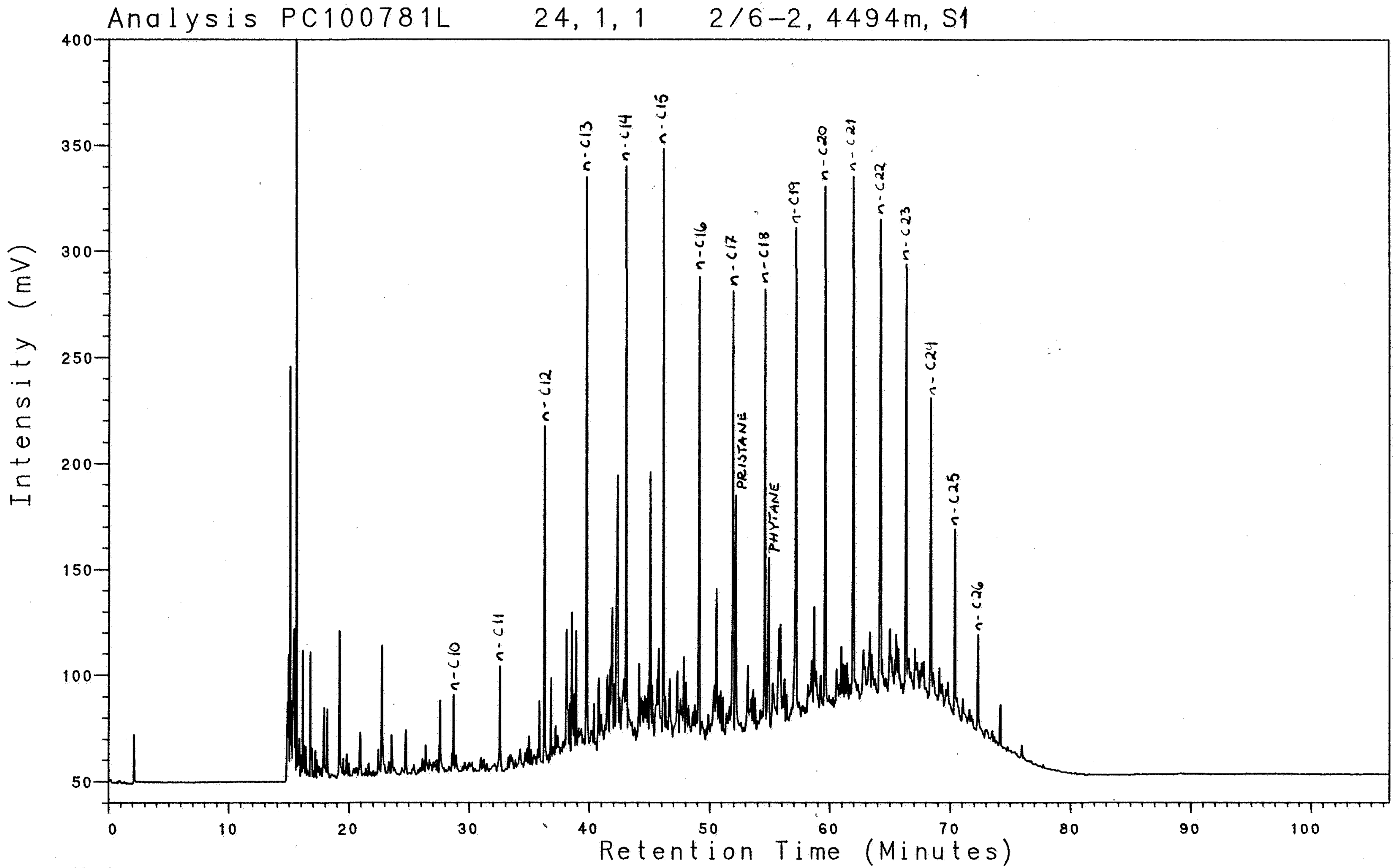
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100741L 24, 1, 1 2/6-2, 4486m, S1



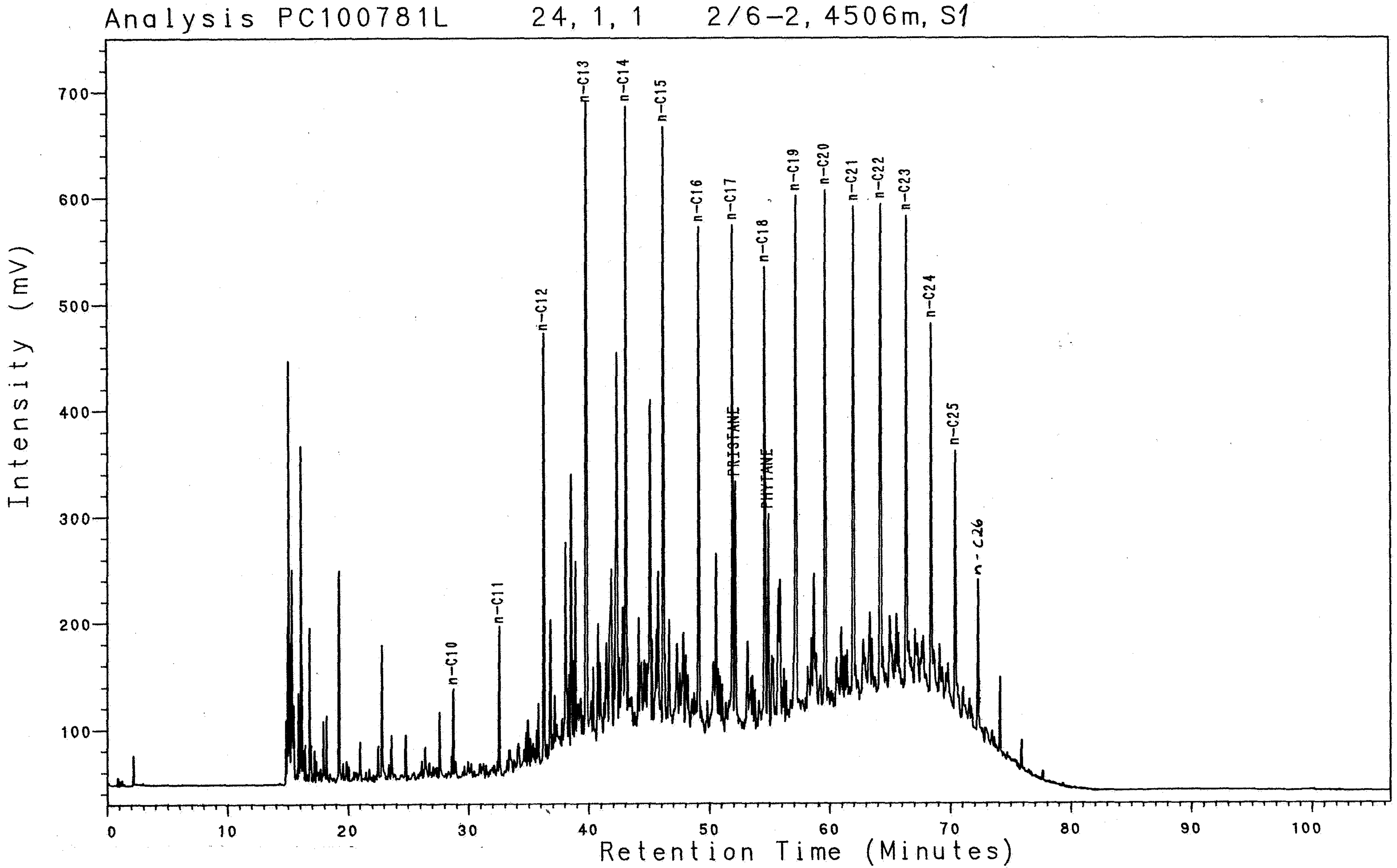
NOCS 2/6-2 4486m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4494m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

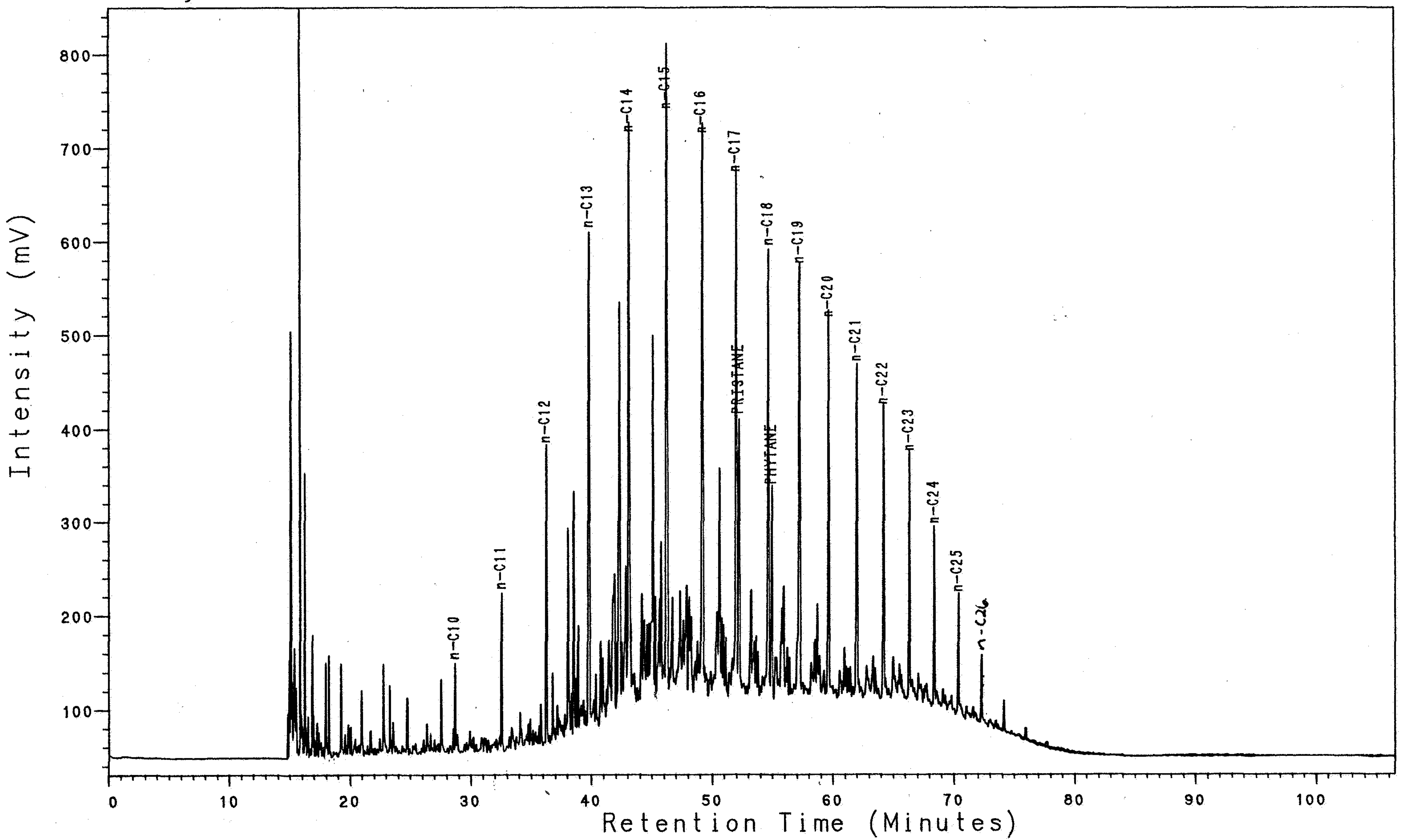
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4506m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

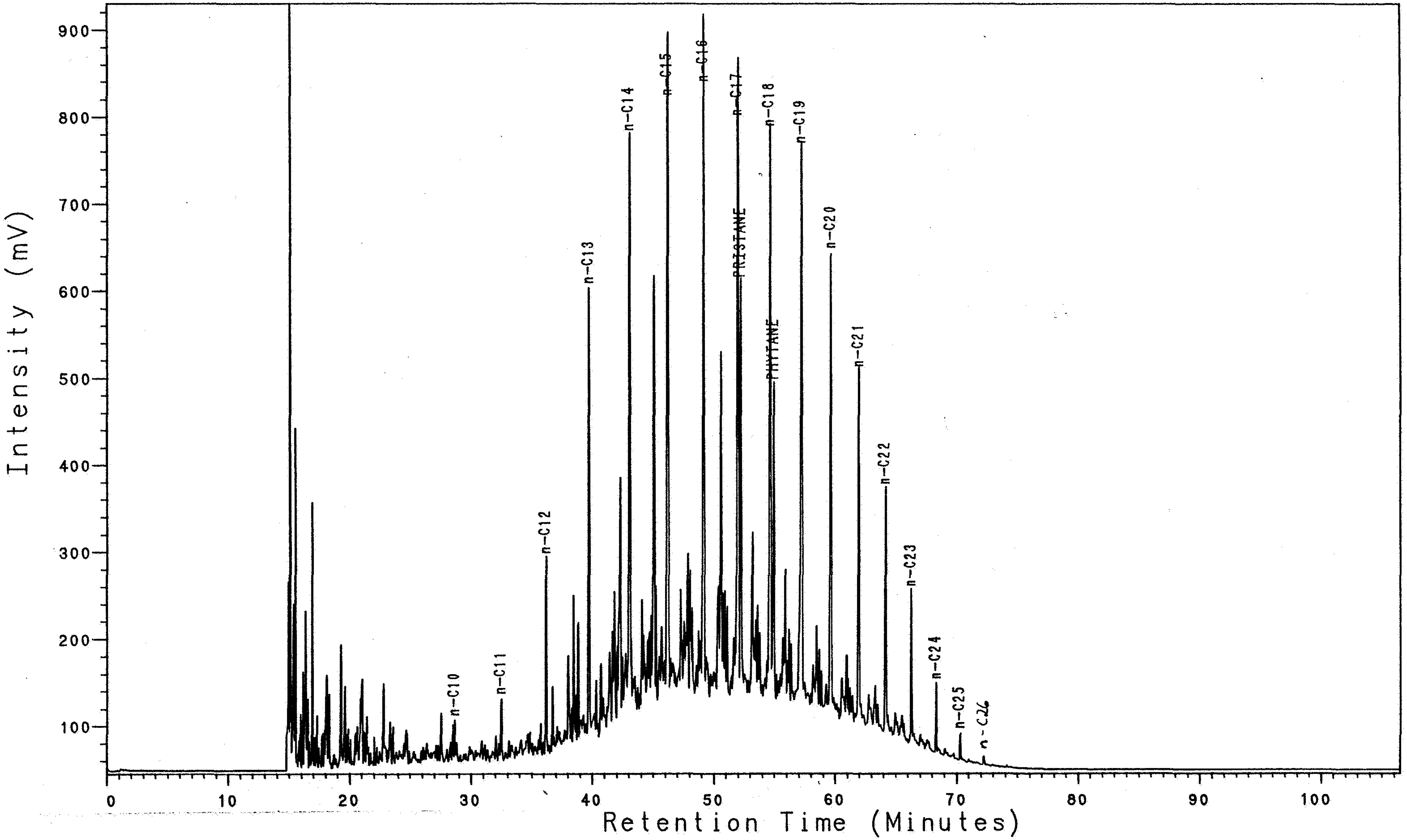
Analysis PC100811L 24, 1, 1 2/6-2, 4522m, S1



NOCS 2/6-2 4522m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

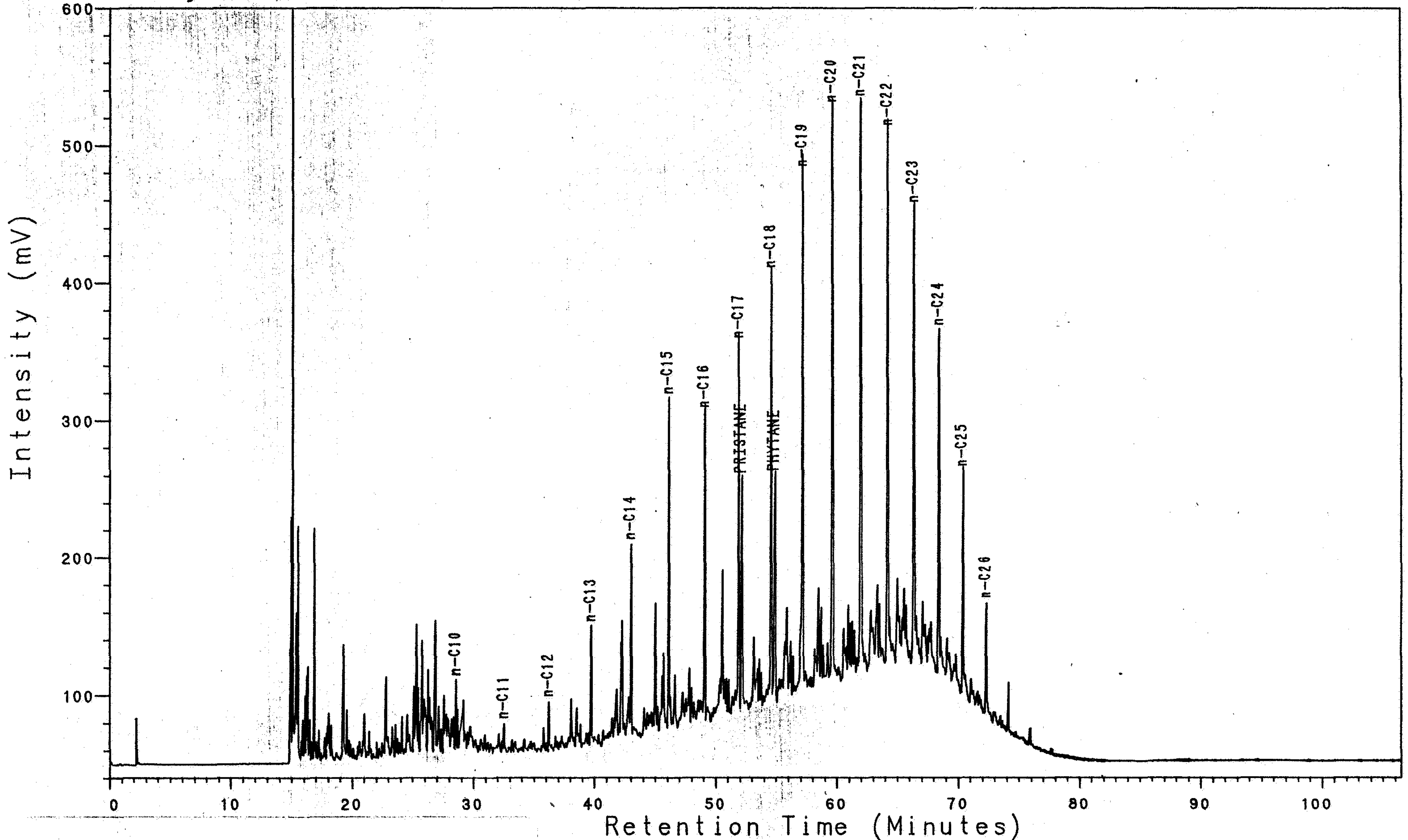
Analysis PC100831L 24, 1, 1 2/6-2, 4532m, S1



NOCS 2/6-2 4532m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

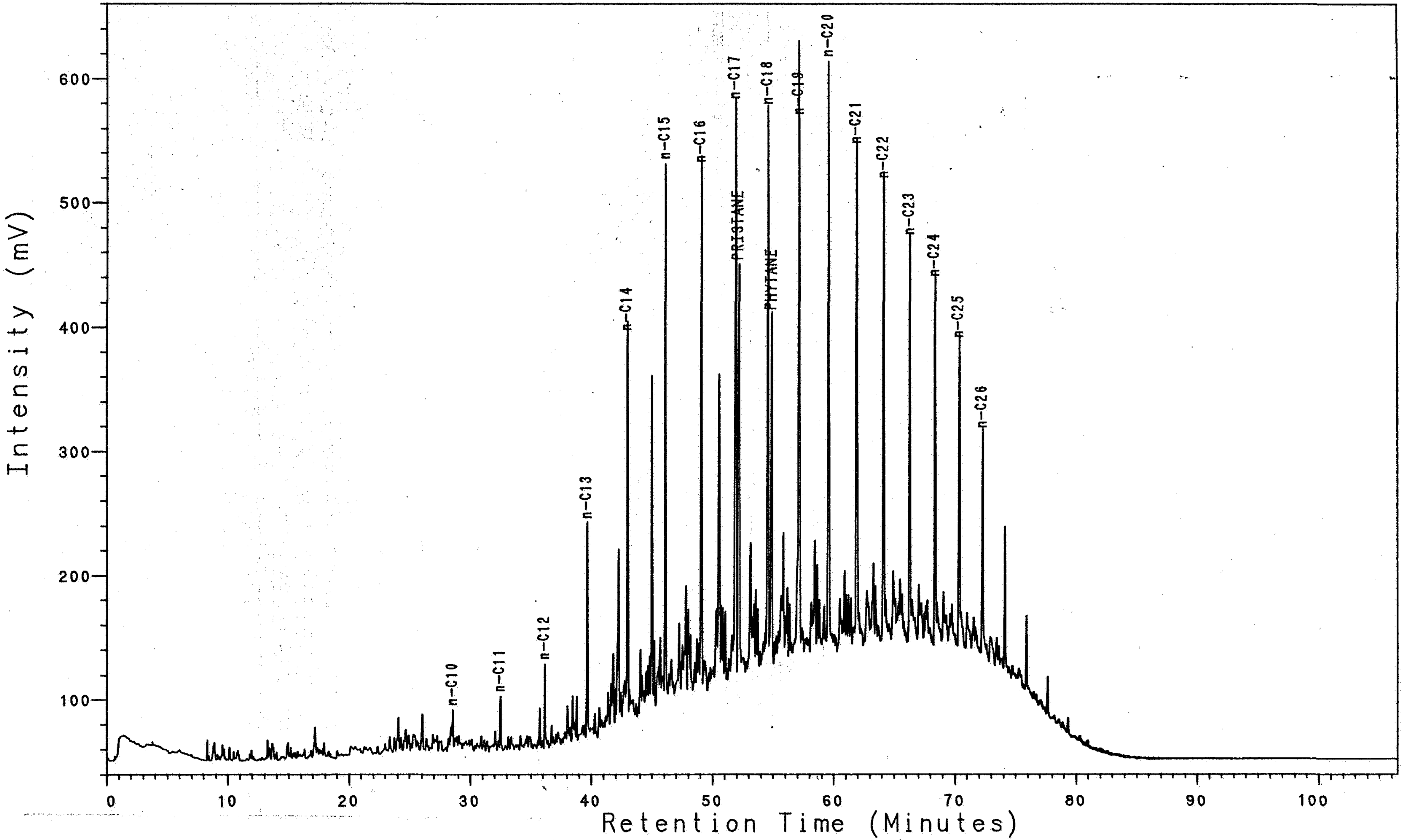
Analysis PC100851L 24, 1, 1 2/6-2, 4540m, S1



NOCS 2/6-2 4540m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

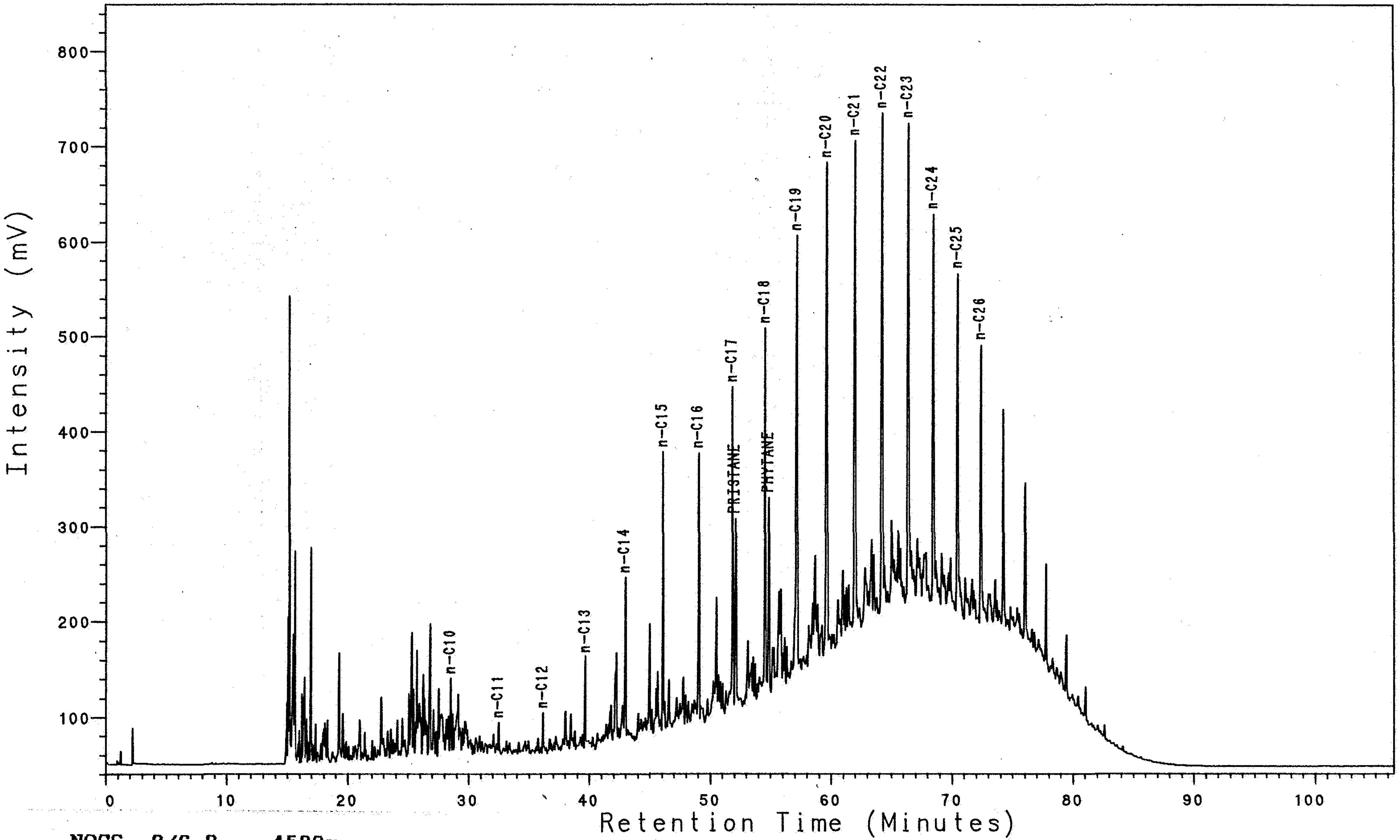
Analysis PC100871L 24, 1, 1 2/6-2, 4550m, S1



NOCS 2/6-2 4550m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

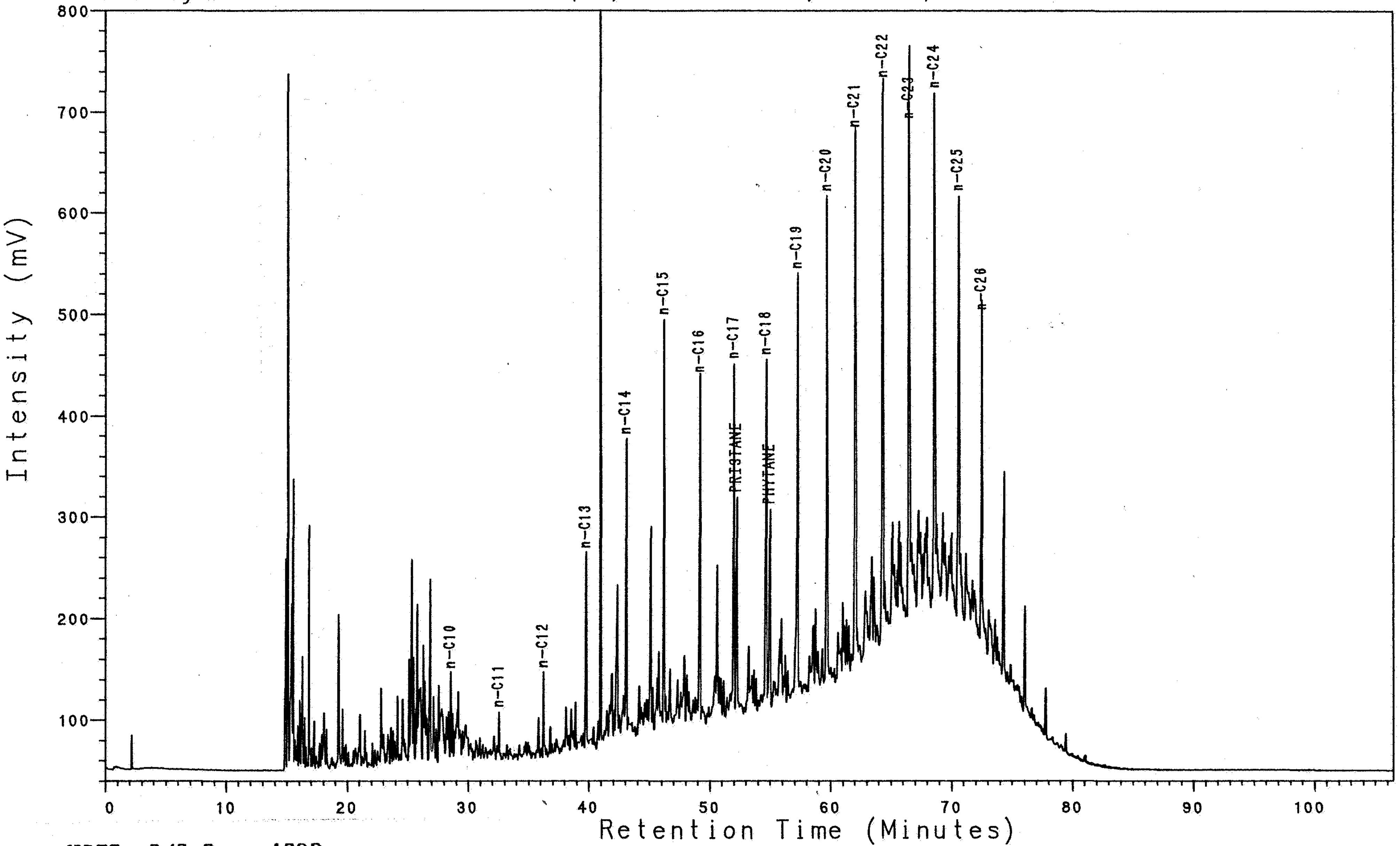
Analysis PC100901L 24, 1, 1 2/6-2, 4580m, S1



NOCS 2/6-2 4580m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

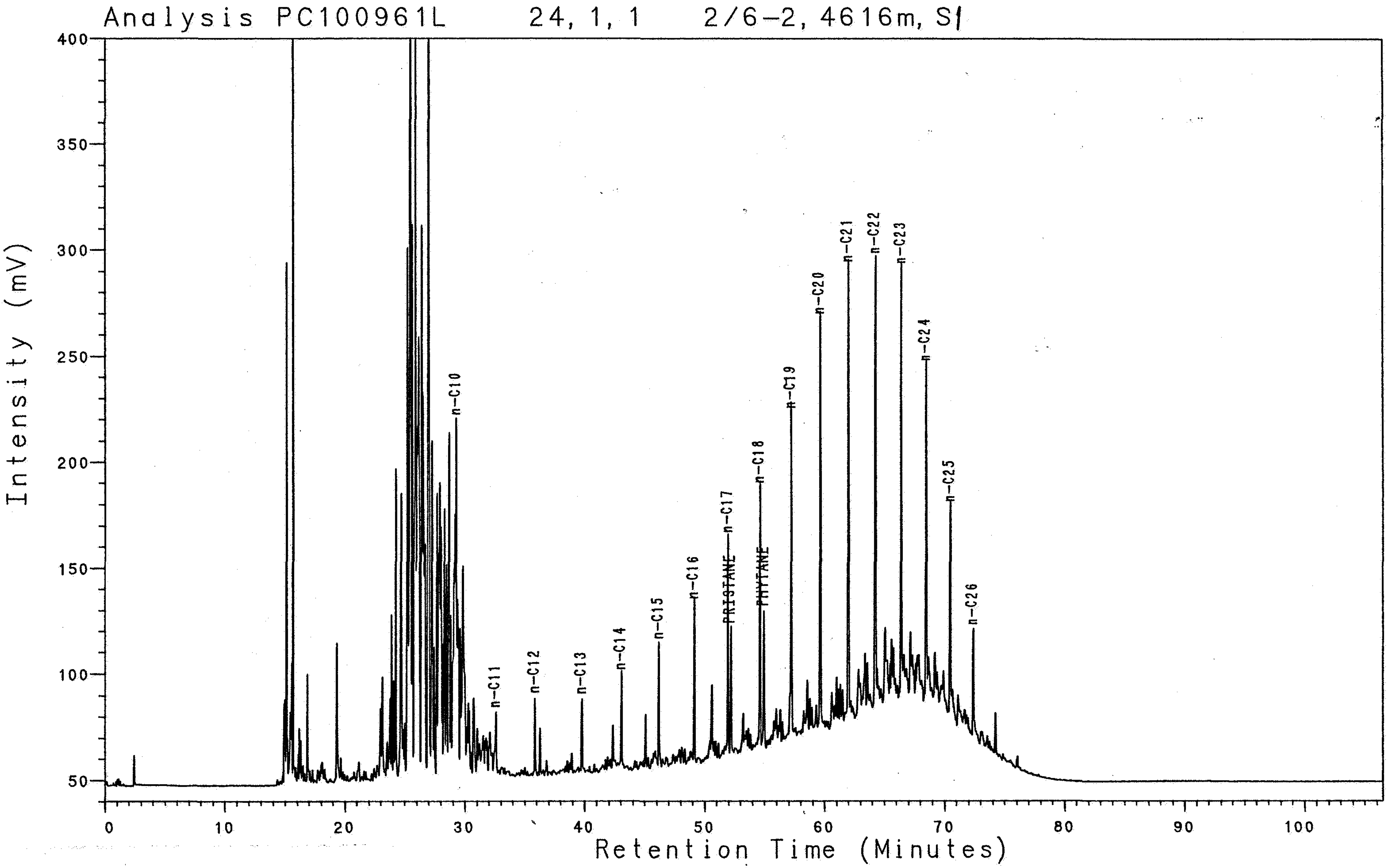
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100931L 24, 1, 1 2/6-2, 4602m, S1



NOCS 2/6-2 4602m
THERMAL EXTRACTION GC (S1)
CLST: gy blk, brn blk

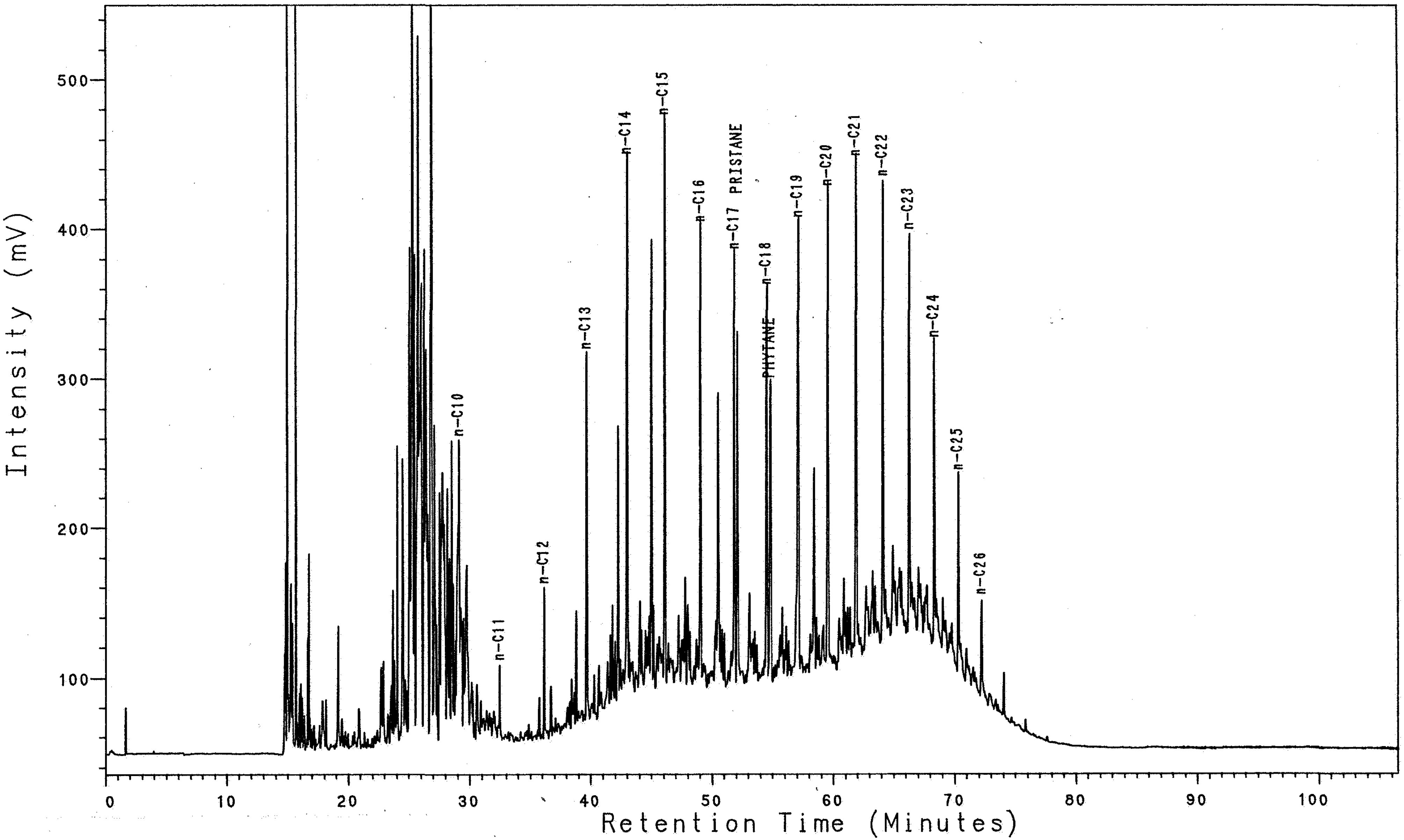
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4616m
THERMAL EXTRACTION GC (S1)
CLST:gy, gy red, m gy

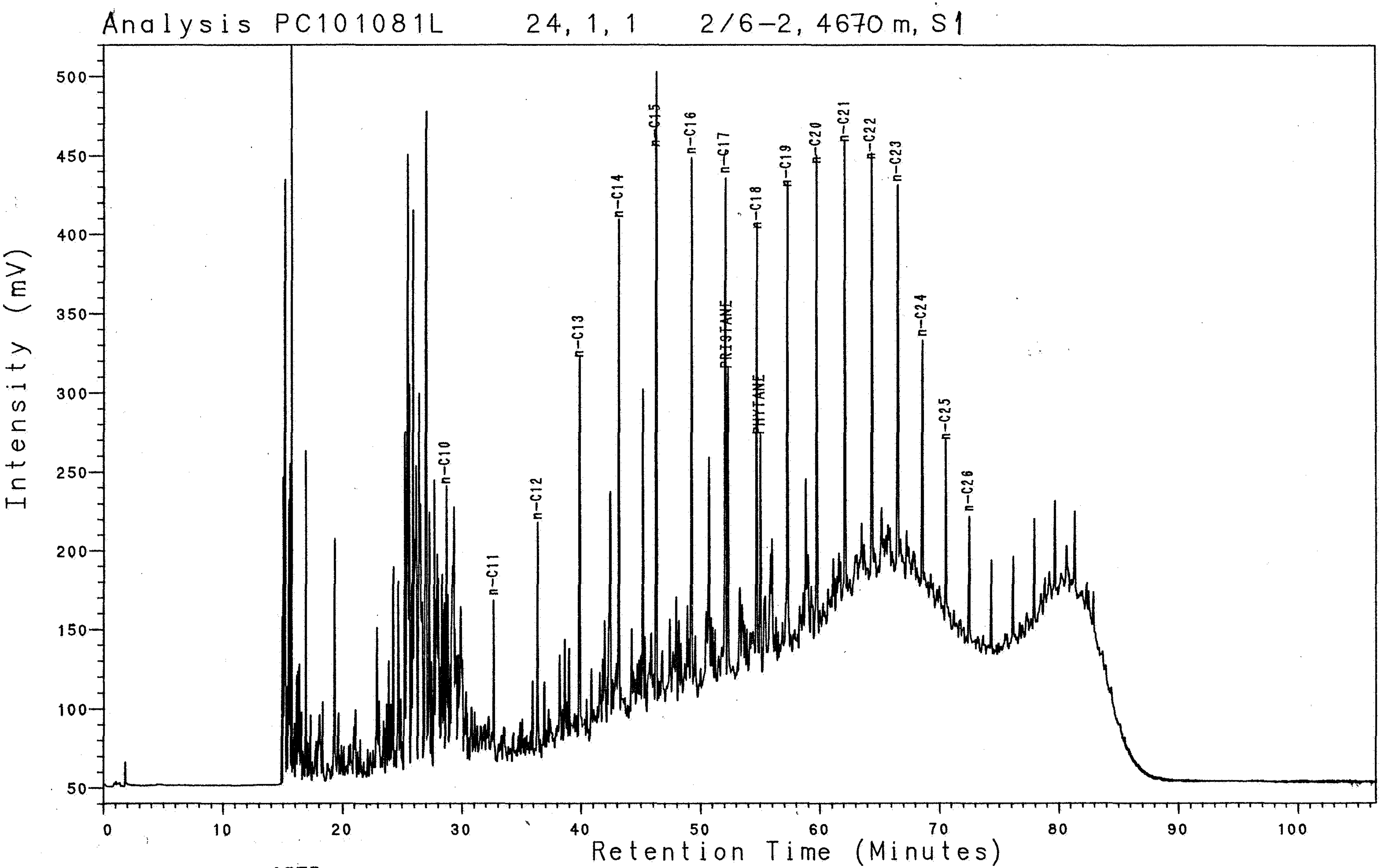
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC101051L 24, 1, 1 2/6-2, 4656m, S1



NOCS 2/6-2 4656m
THERMAL EXTRACTION GC (S1)
CLST:gy, gy red

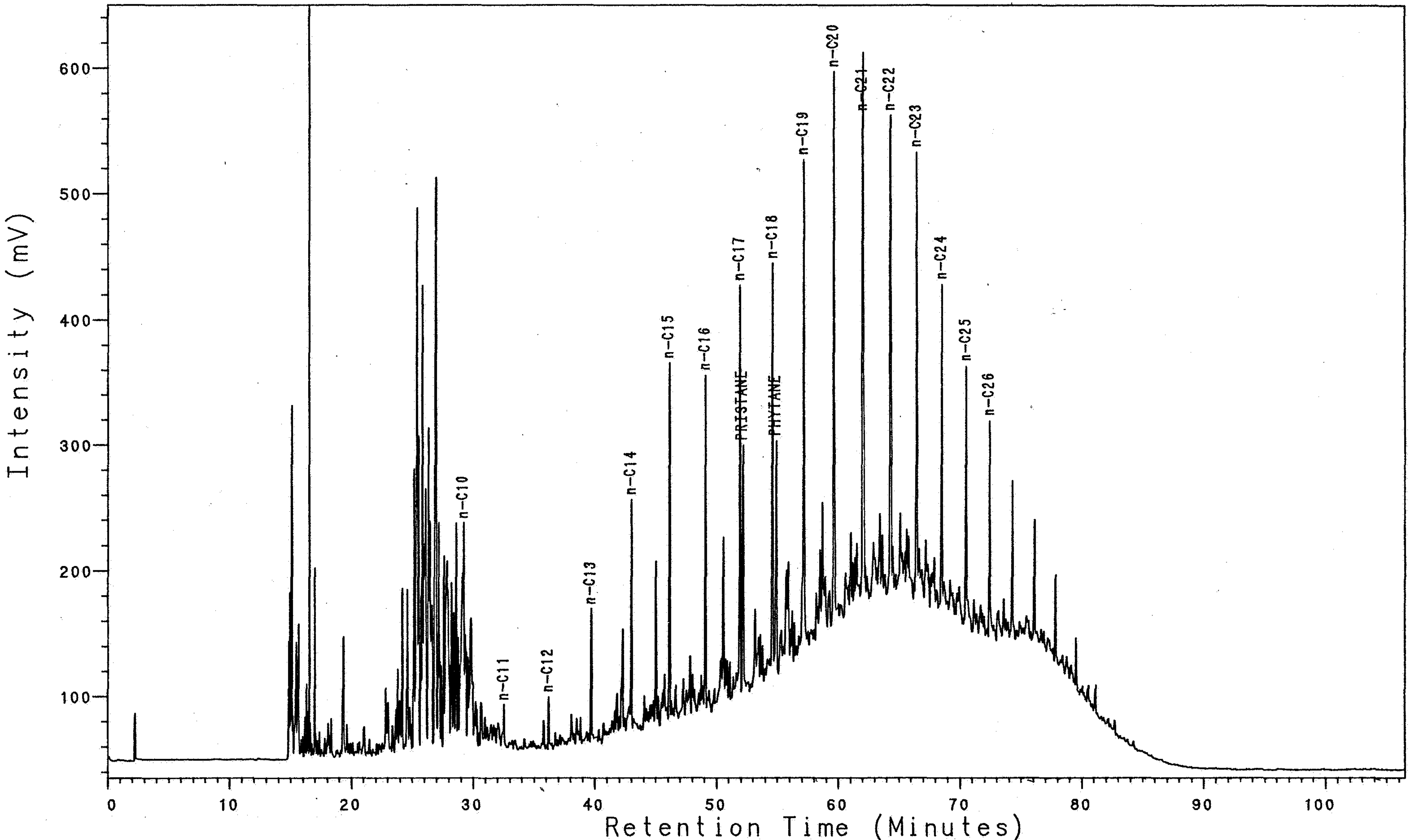
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4670m
THERMAL EXTRACTION GC (S1)
CLST:drk gy, gy blk

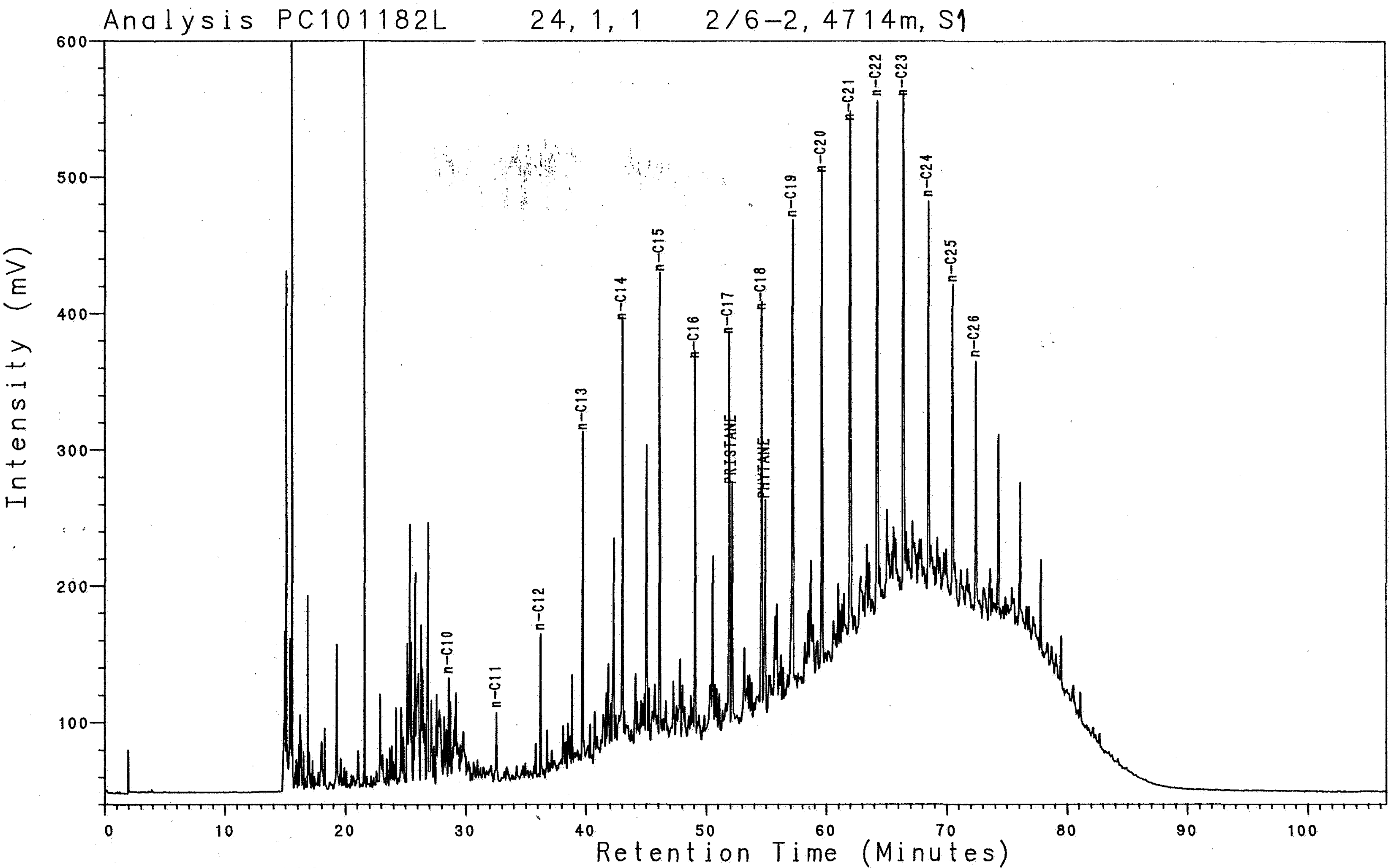
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC101181L 24, 1, 1 2/6-2, 4714m, S1



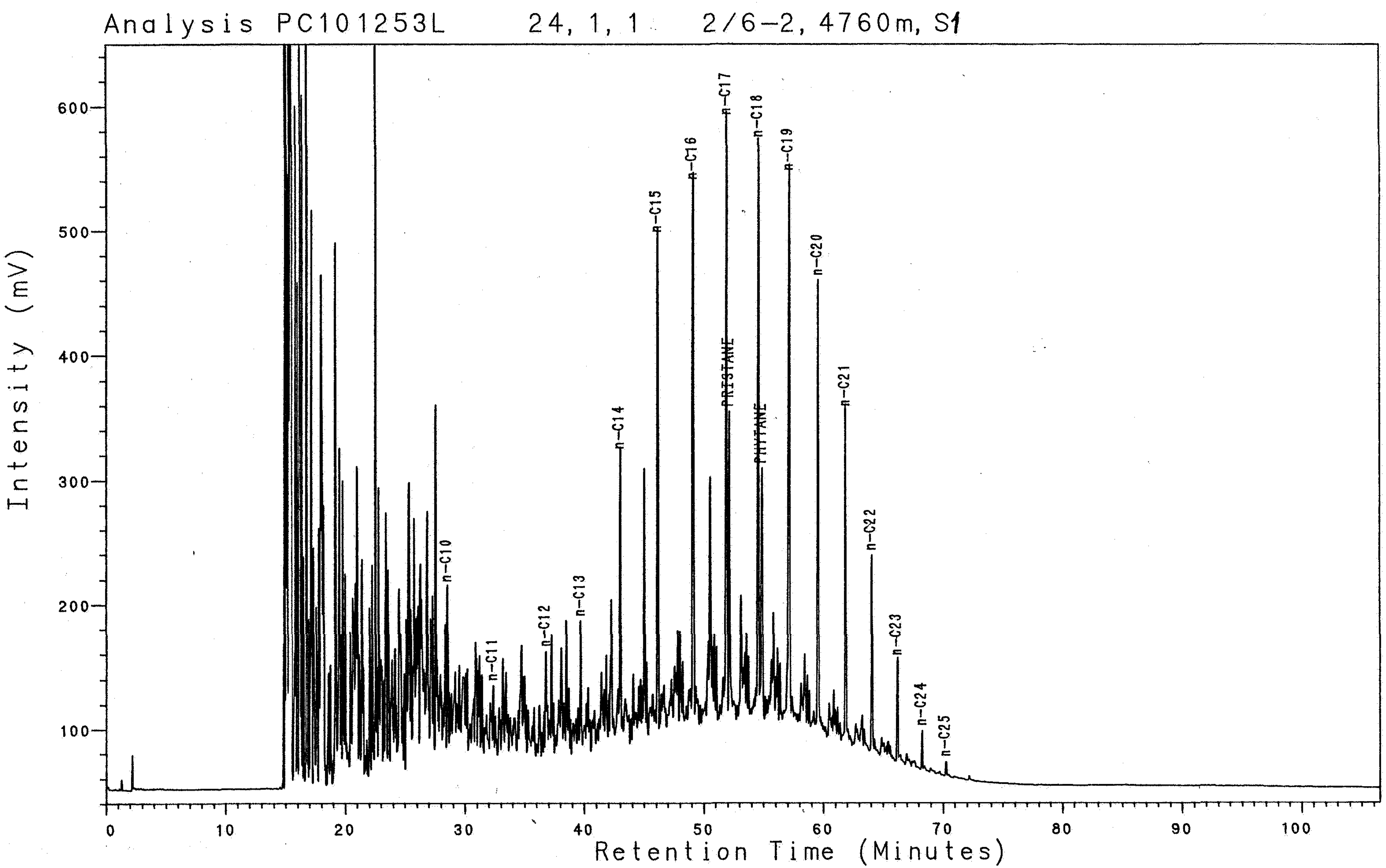
NOCS 2/6-2 4714m
THERMAL EXTRACTION GC (S1)
CLST: gy red

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



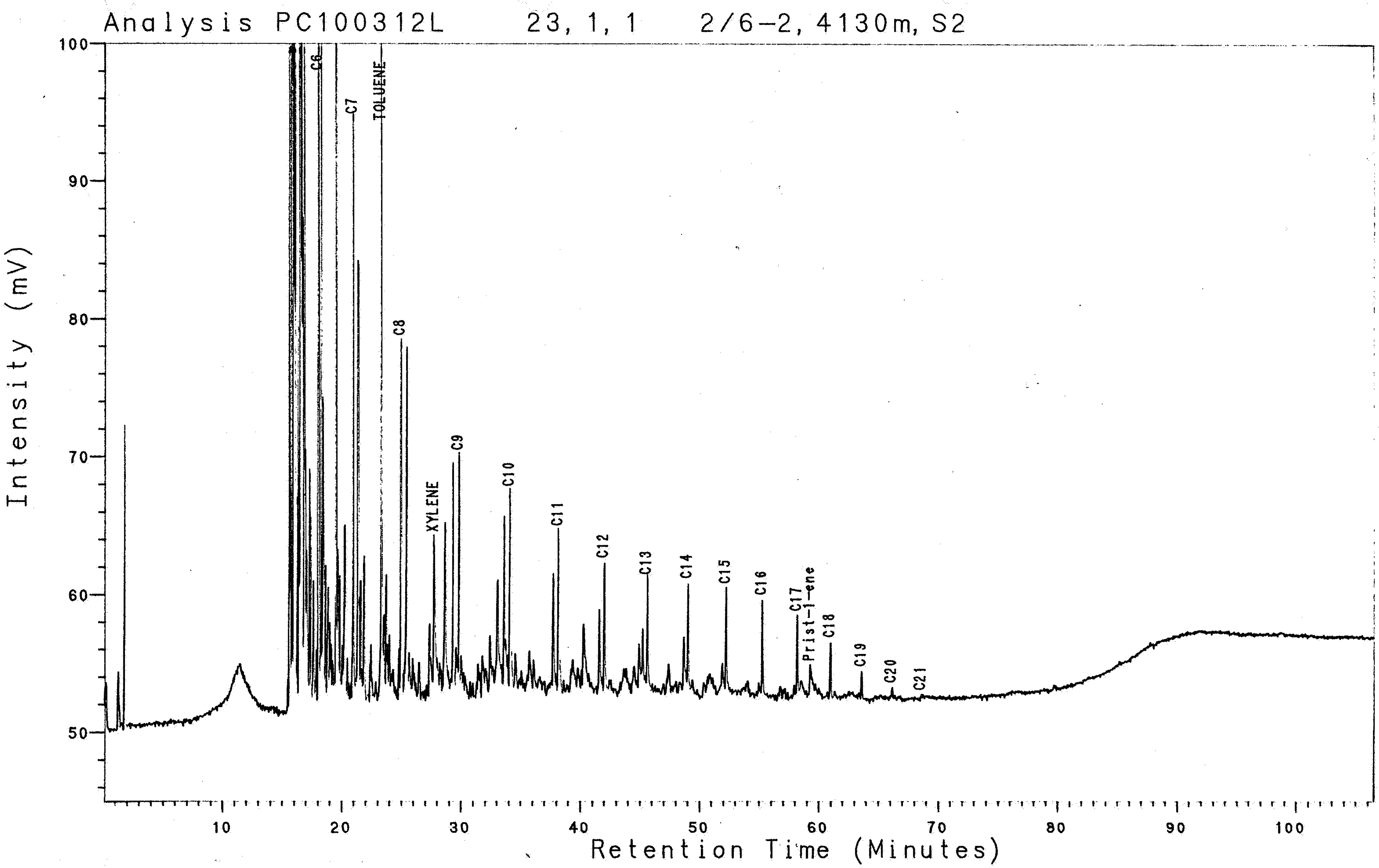
NOCS 2/6-2 4714m
THERMAL EXTRACTION GC (S1)
CLST:m gy to drk gy

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



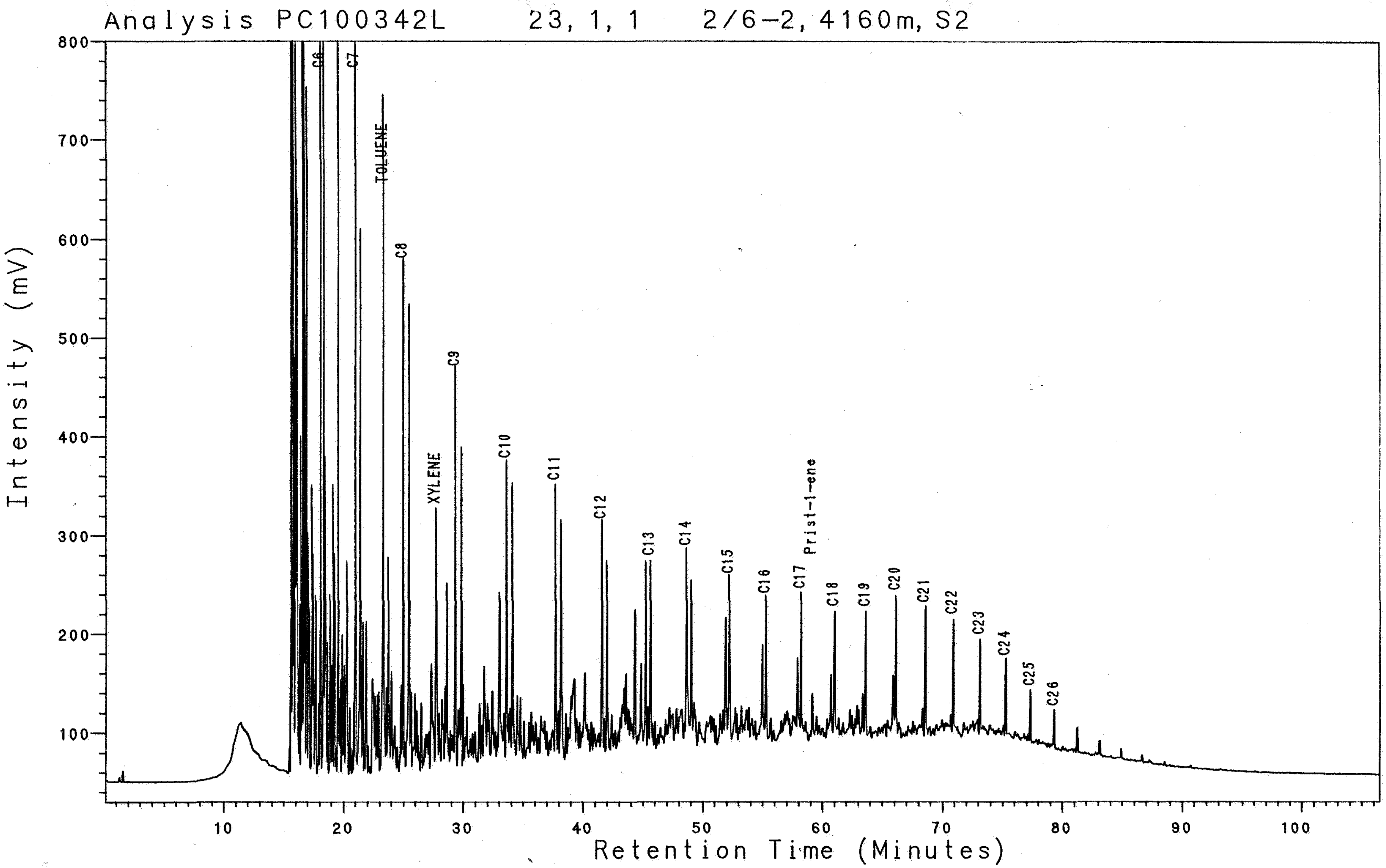
NOCS 2/6-2 4760m
THERMAL EXTRACTION GC (S1)
CLST:gy blk, ol blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



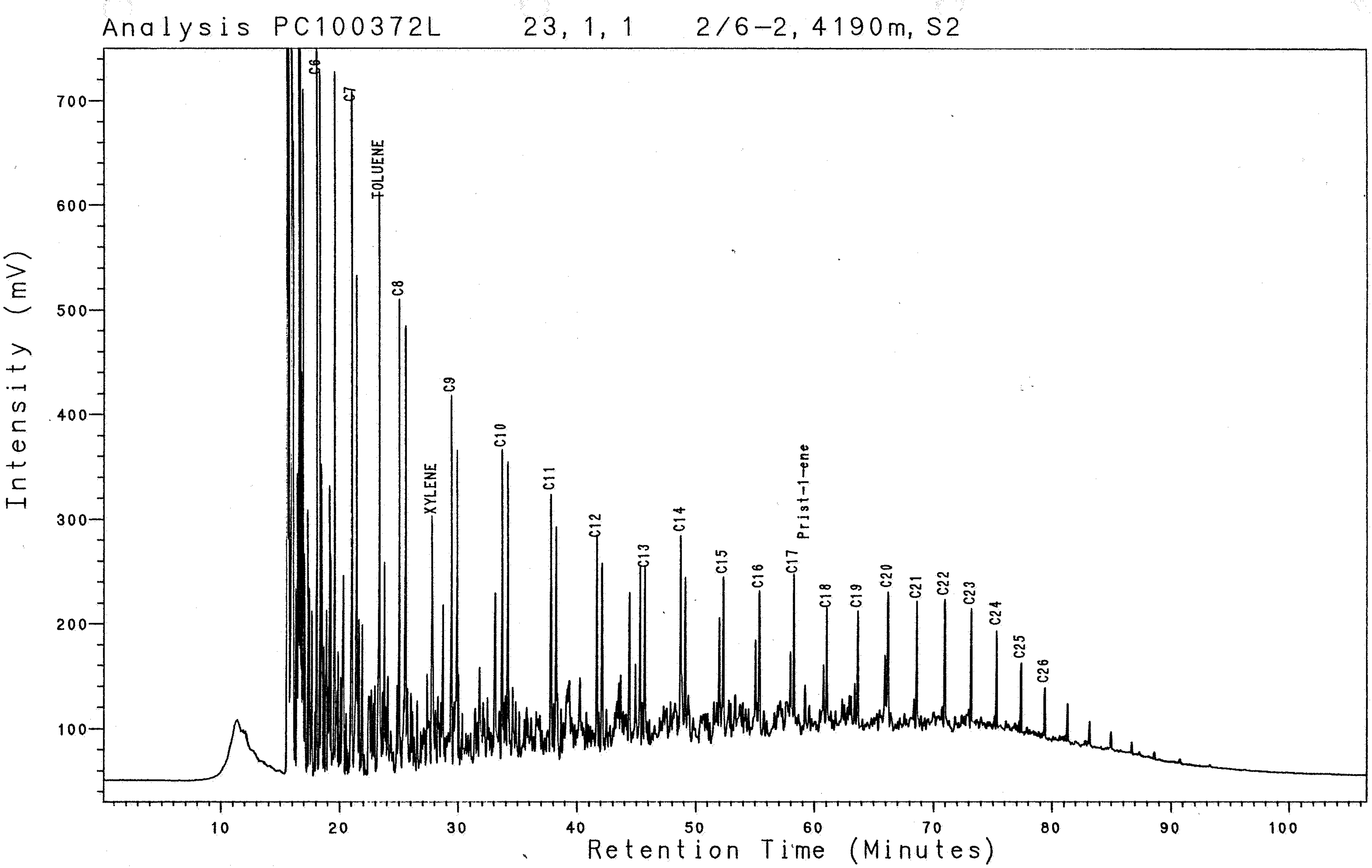
NOCS 2/6-2 4130m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



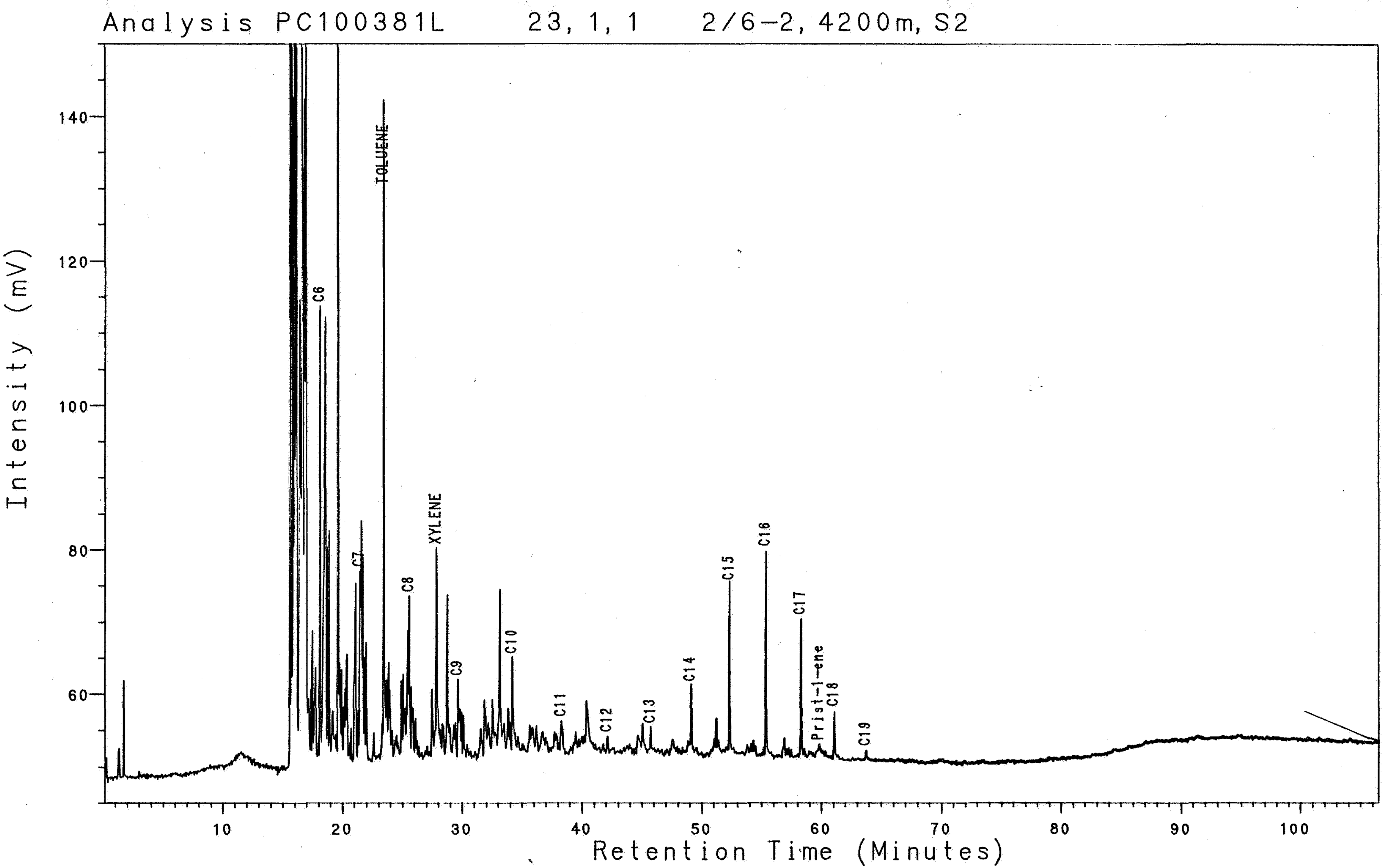
NOCS 2/6-2 4160m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4190m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

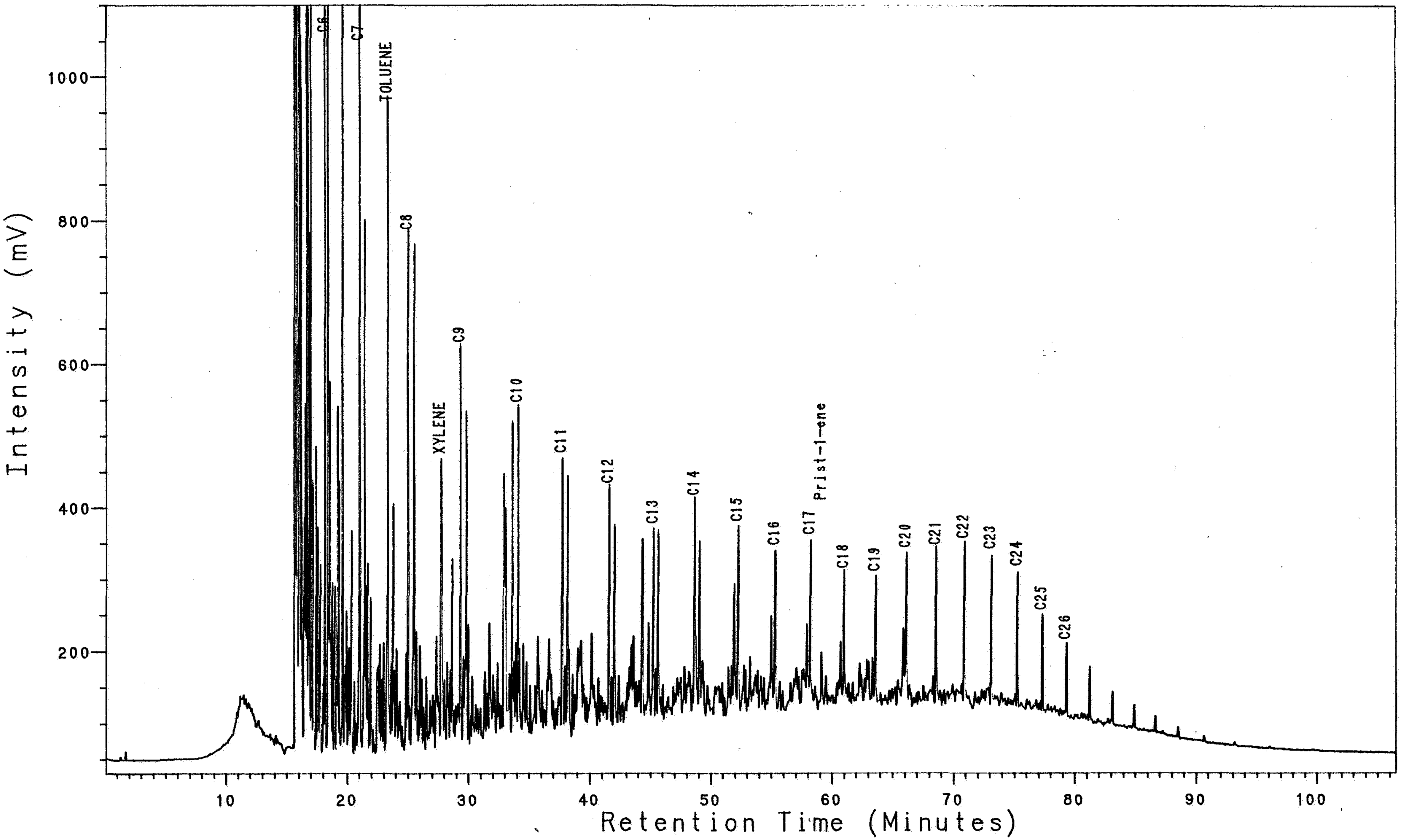
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4200m
PYROLYSIS GC (S2)
CLST:m gy to drk gy

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

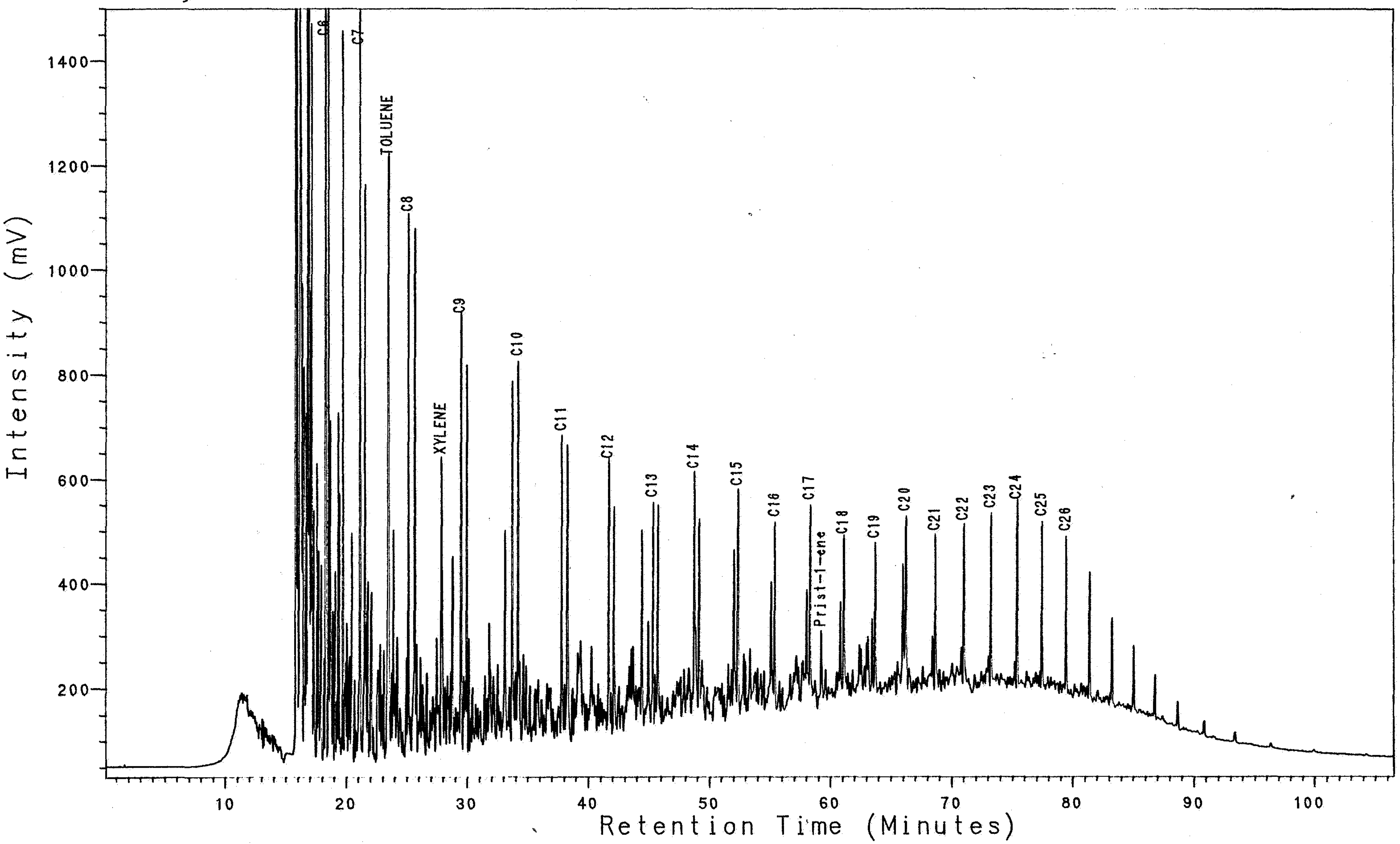
Analysis PC100383L 23, 1, 1 2/6-2, 4200m, S2



NOCS 2/6-2 4200m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

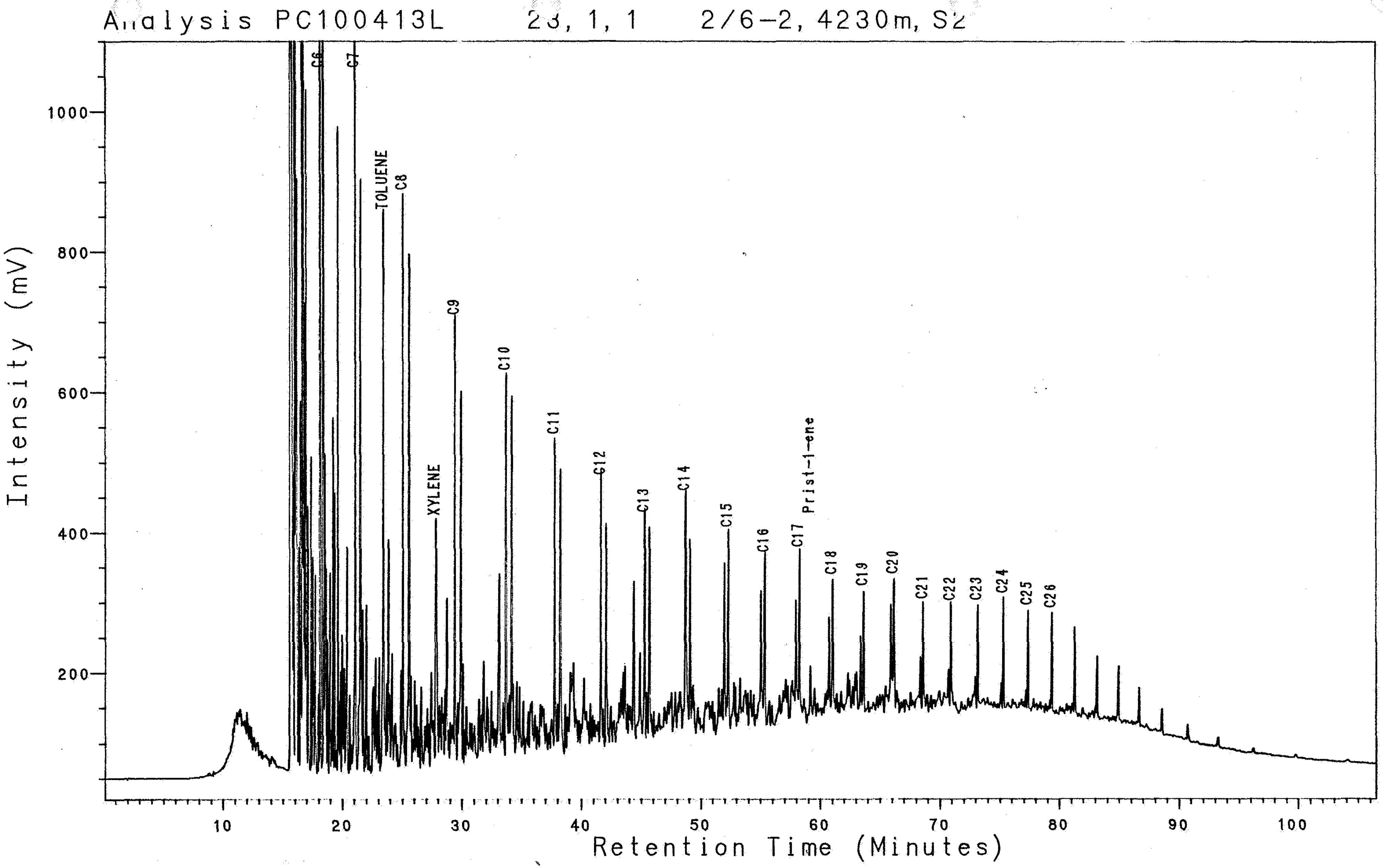
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100403L 23, 1, 1 2/6-2, 4220m, S2



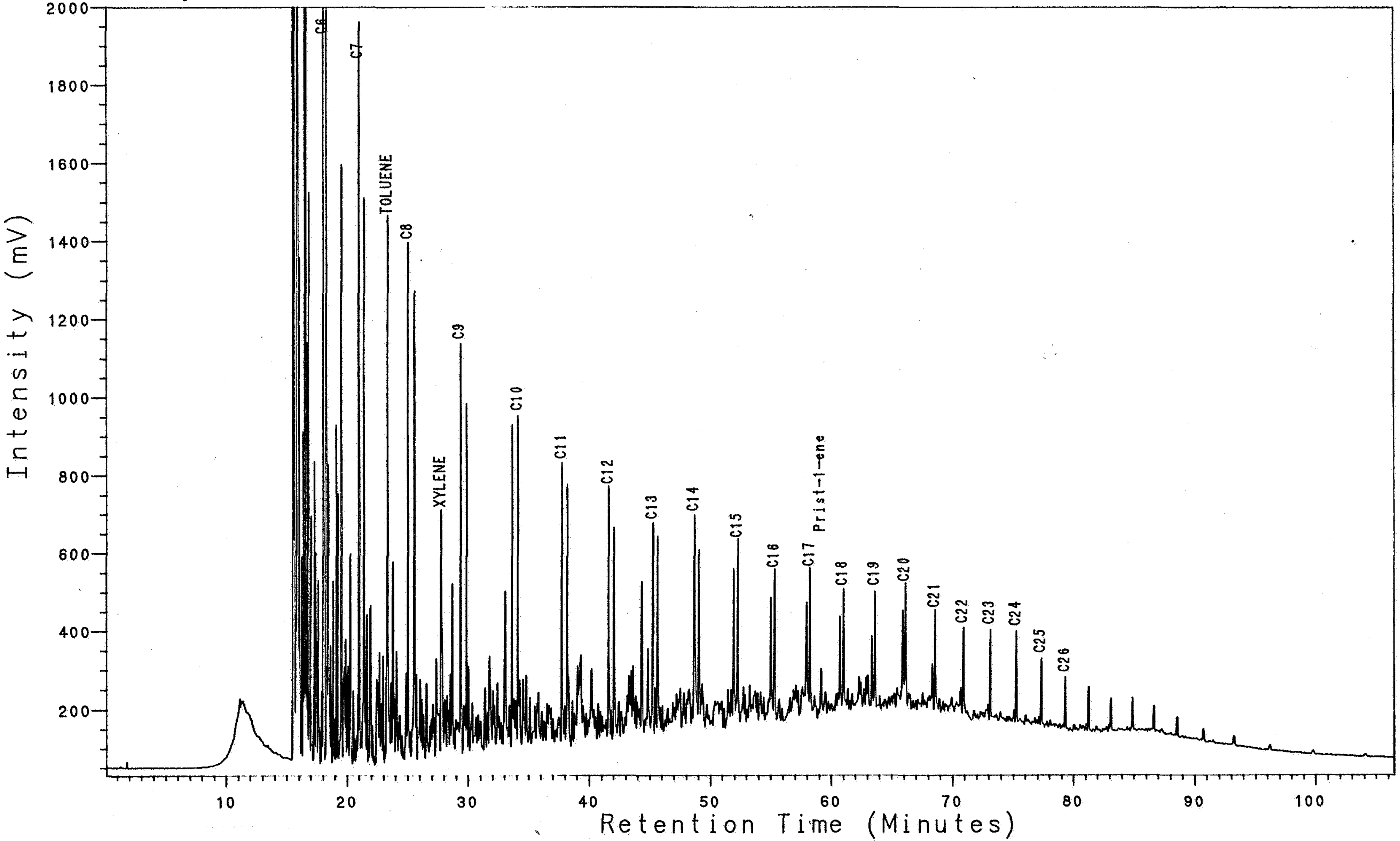
NOCS 2/6-2 4220m
PYROLYSIS GC (S2)
CLST:blk, gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4230m
PYROLYSIS GC (S2)
CLST:blk, gy blk, brn blk

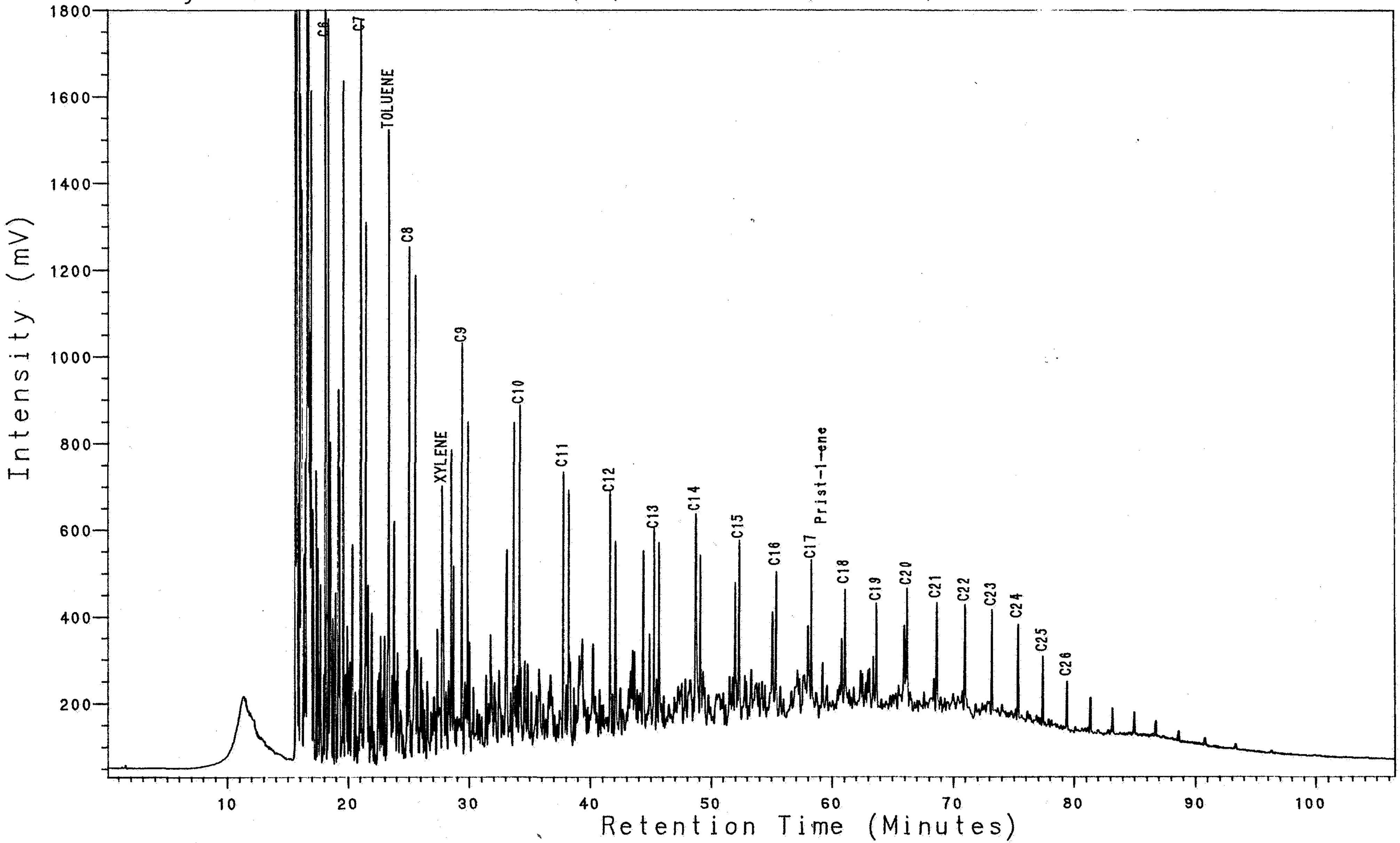
Analysis PC100432L 23, 1, 1 2/6-2, 4250m, S2



NOCS 2/6-2 4250m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

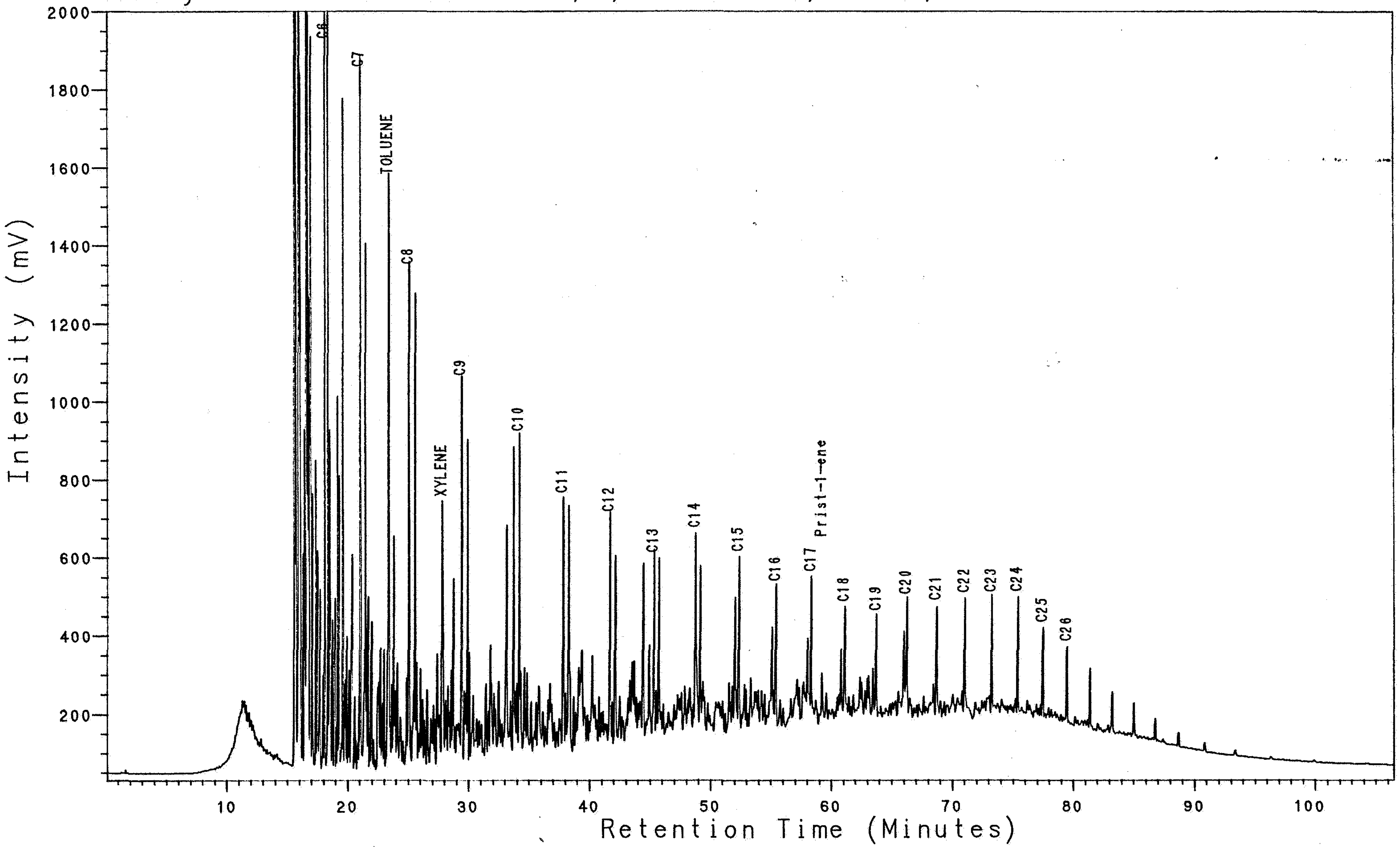
Analysis PC100441L   23, 1, 1   2/6-2, 4260m, S2



NOCS 2/6-2 4260m
PYROLYSIS GC (S2)
CLST:brn blk

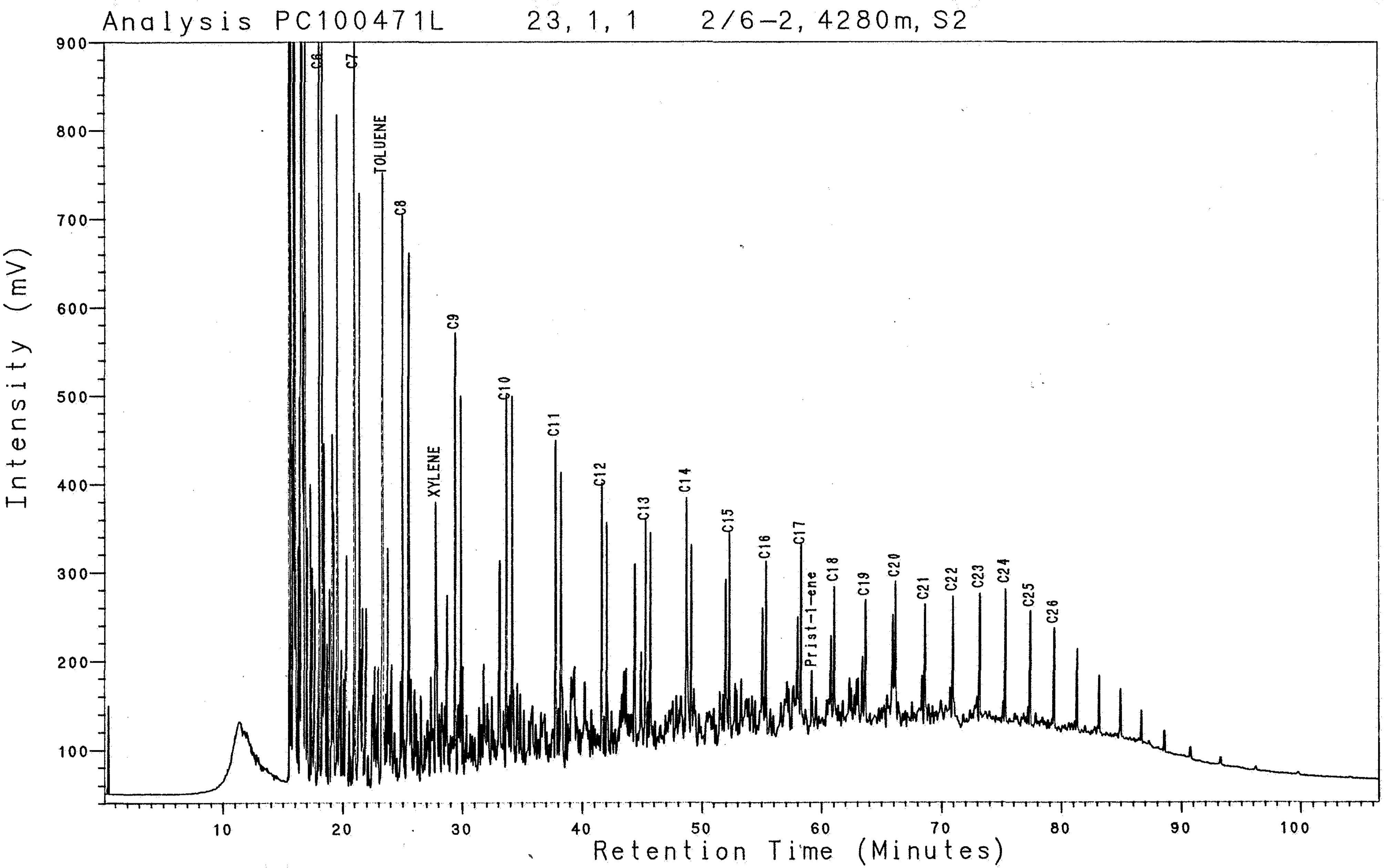
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100452L   23, 1, 1   2/6-2, 4270m, S2



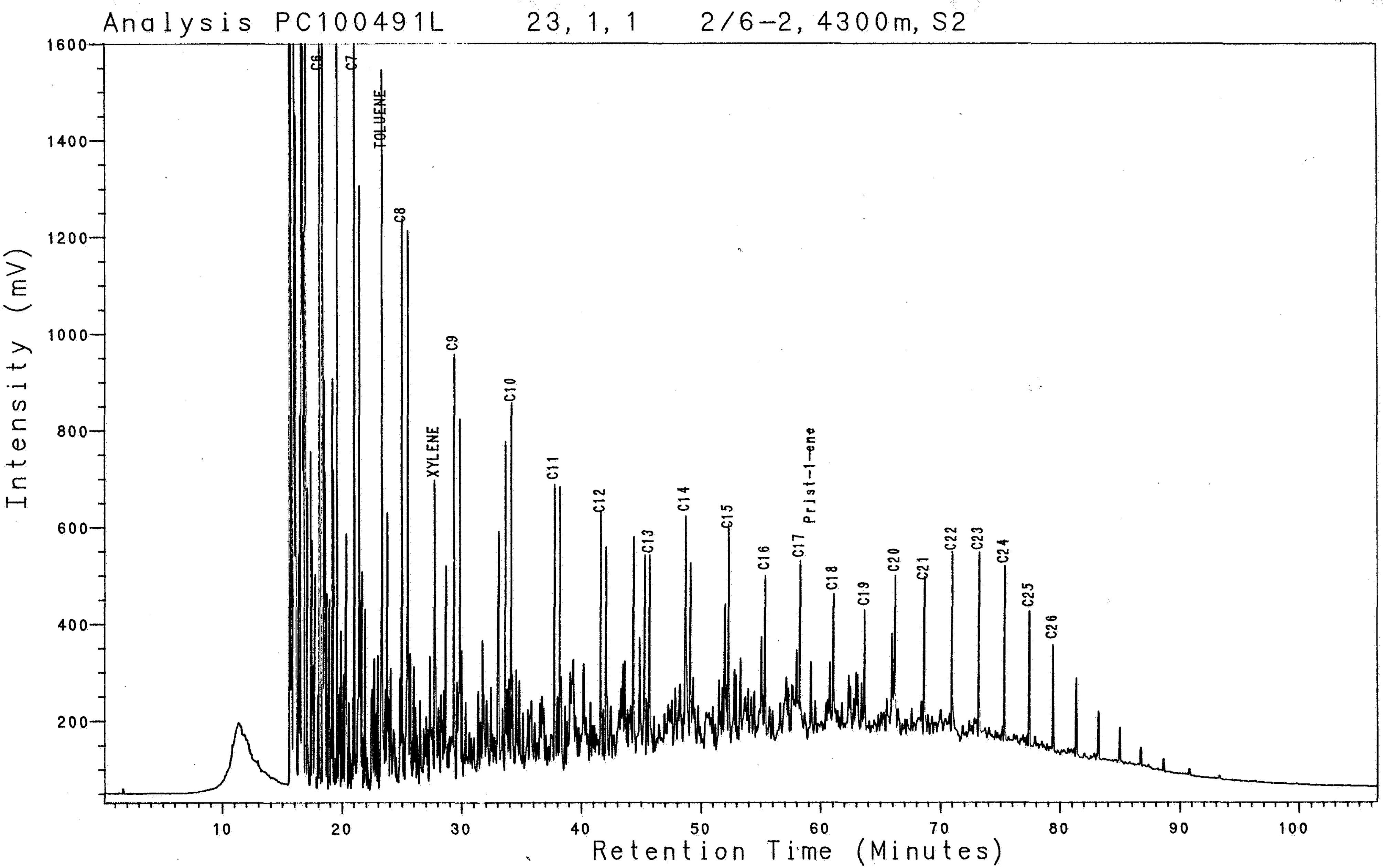
NOCS 2/6-2 4270m
PYROLYSIS GC (S2)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



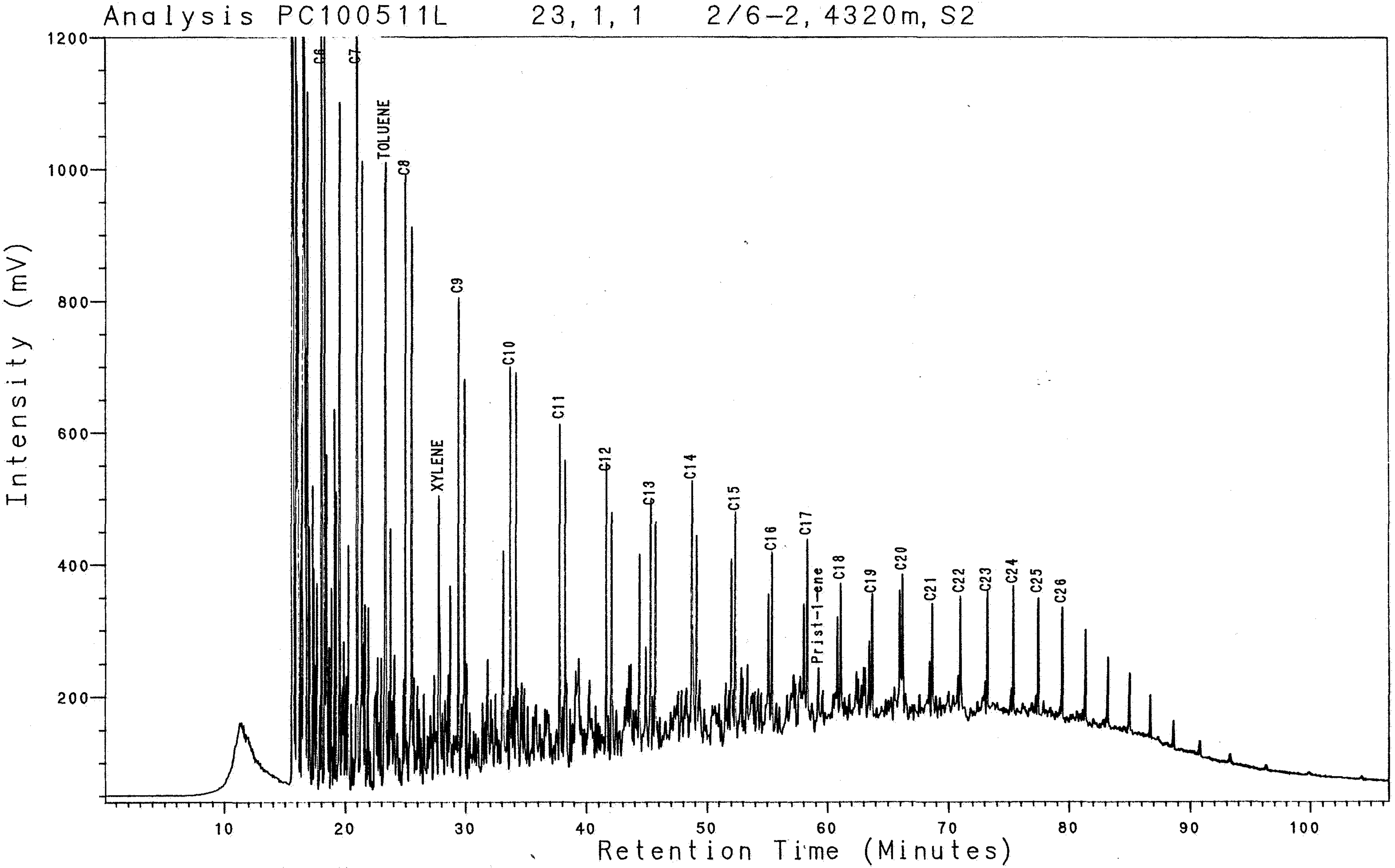
NOCS 2/6-2 4280m
PYROLYSIS GC (S2)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



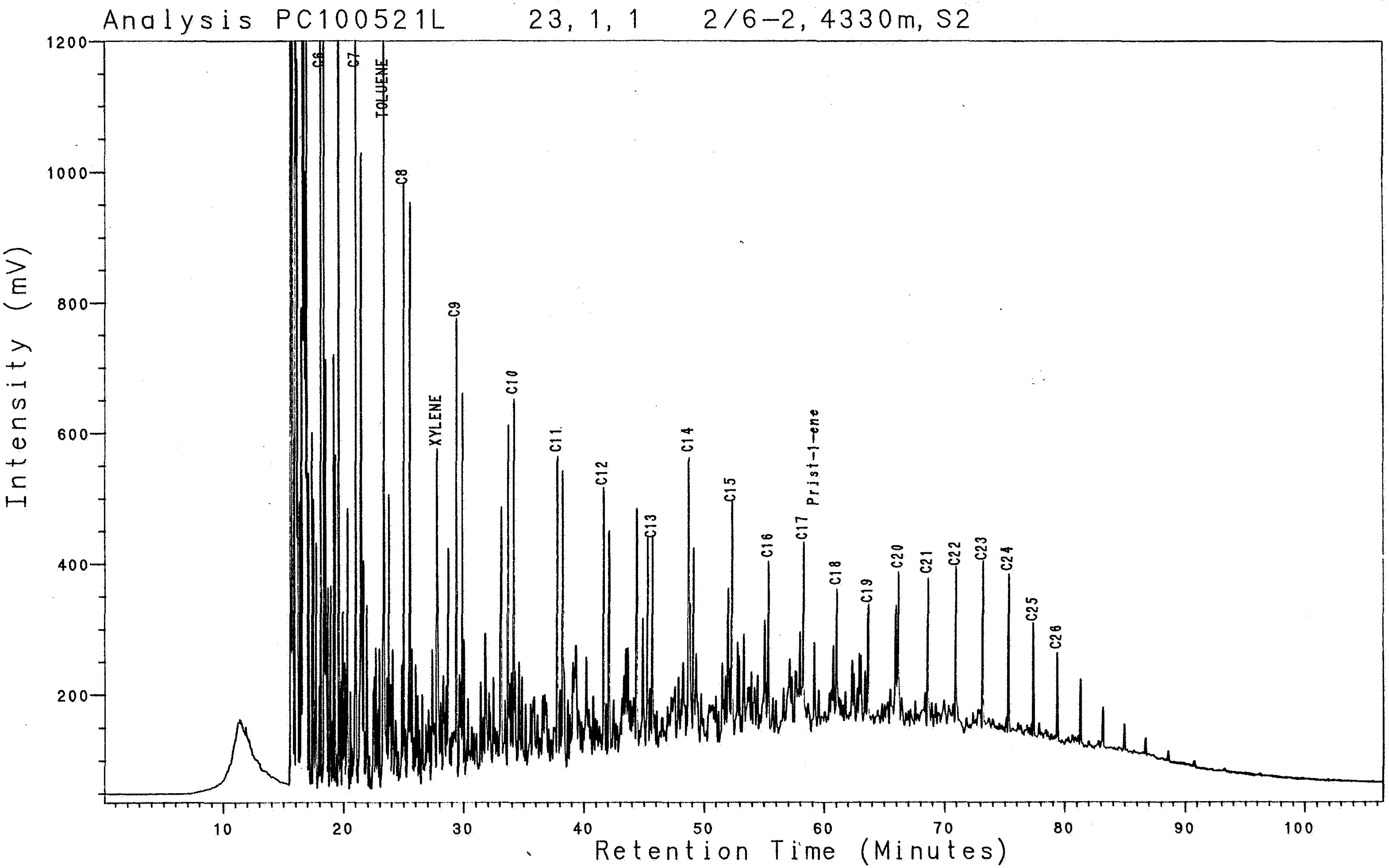
NOCS 2/6-2 4300m
PYROLYSIS GC (S2)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4320m
PYROLYSIS GC (S2)
CLST:brn blk

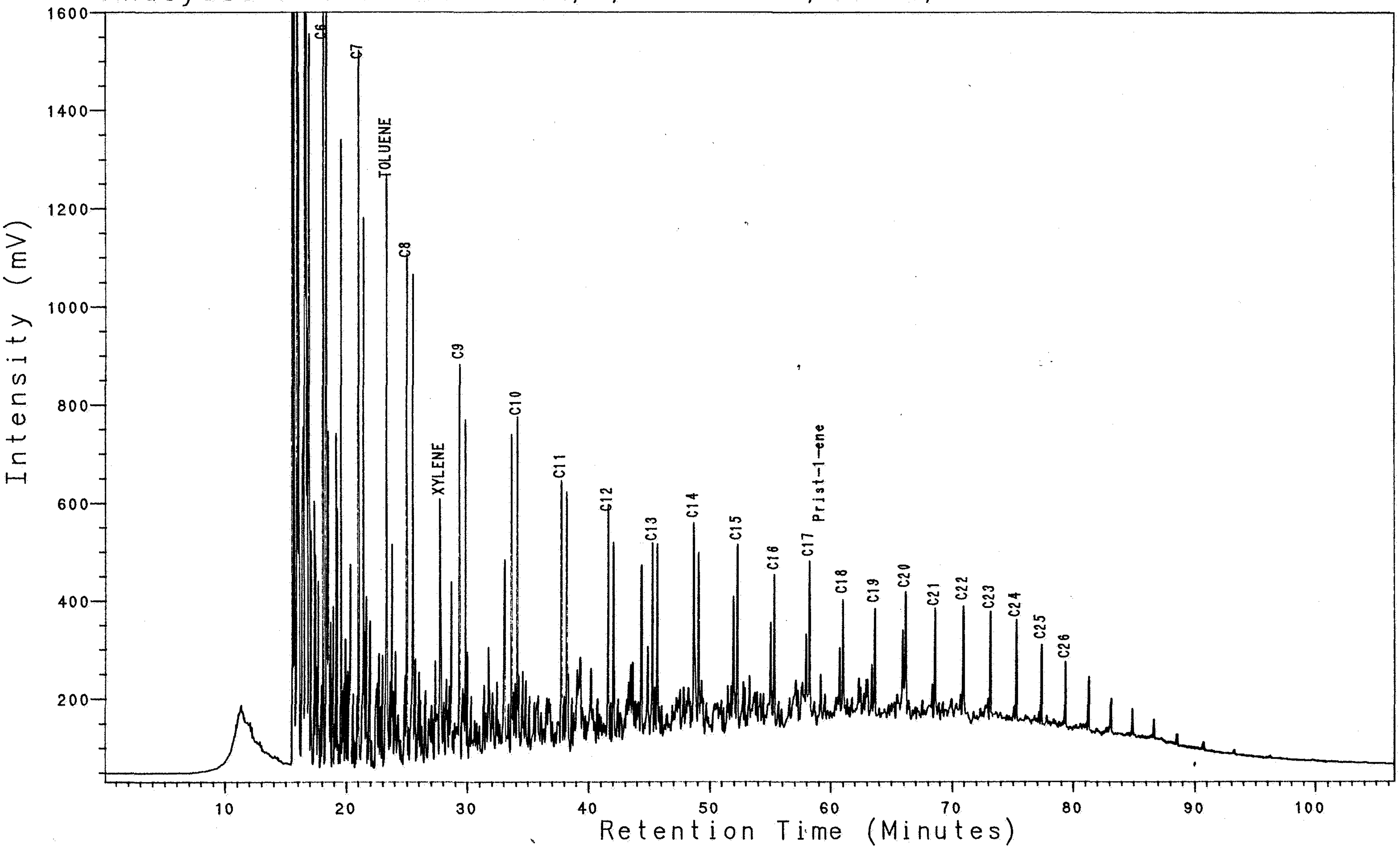
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4330m
PYROLYSIS GC (S2)
CLST:brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

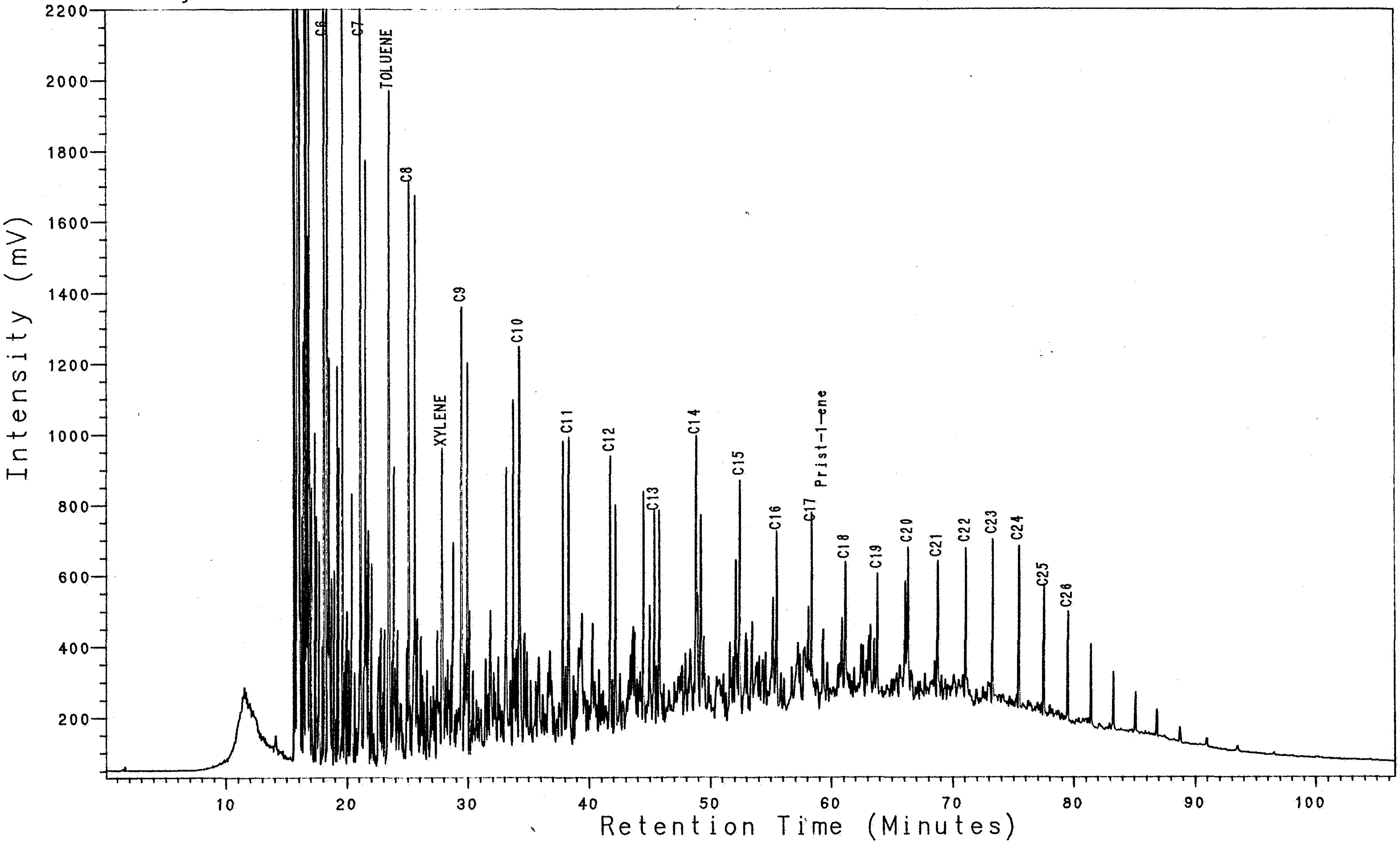
Analysis PC100532L 23, 1, 1 2/6-5, 4336m, S2



NOCS 2/6-2 4336m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

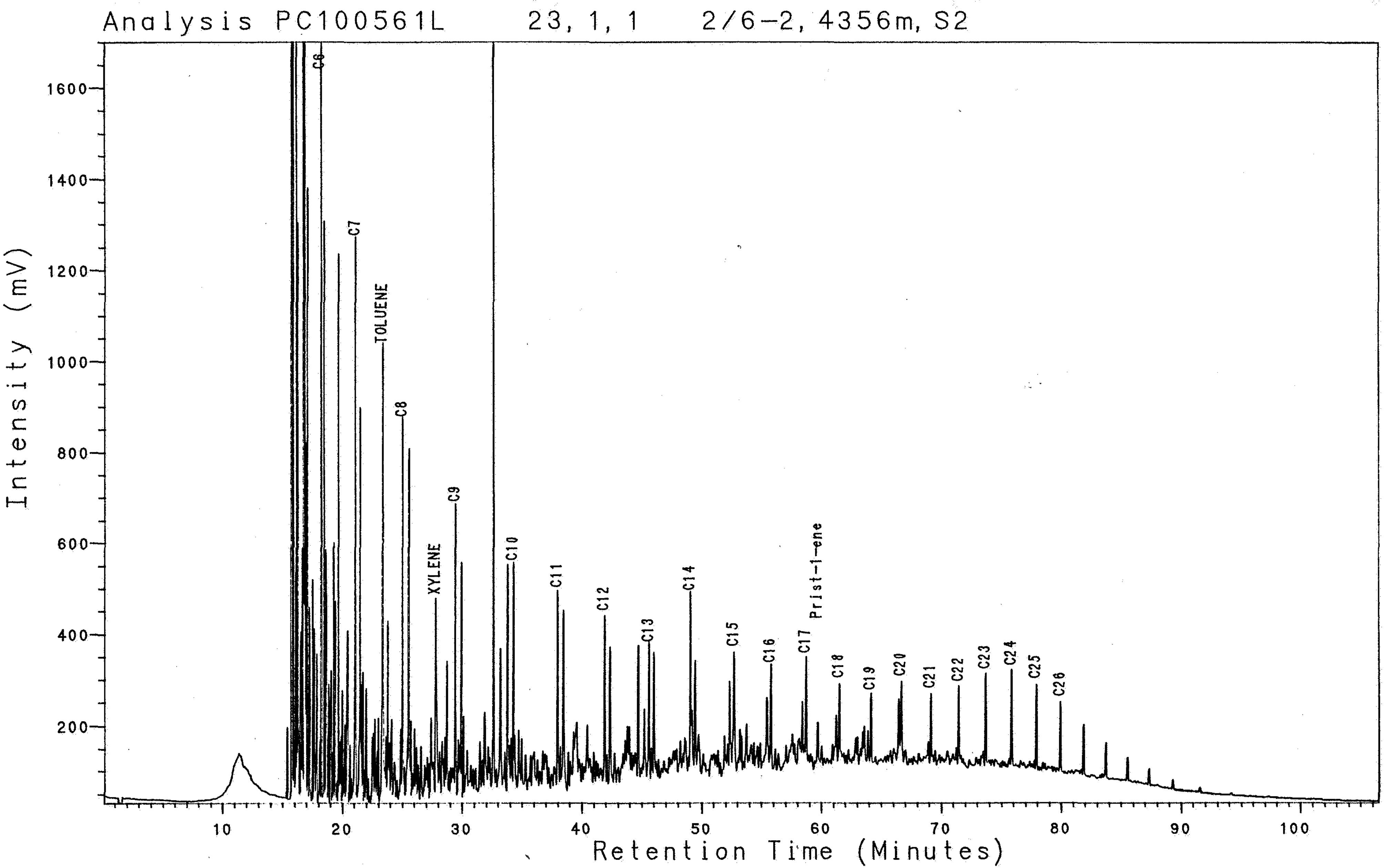
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100541L   23, 1, 1   2/6-2, 4342m, S2



NOCS 2/6-2 4342m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

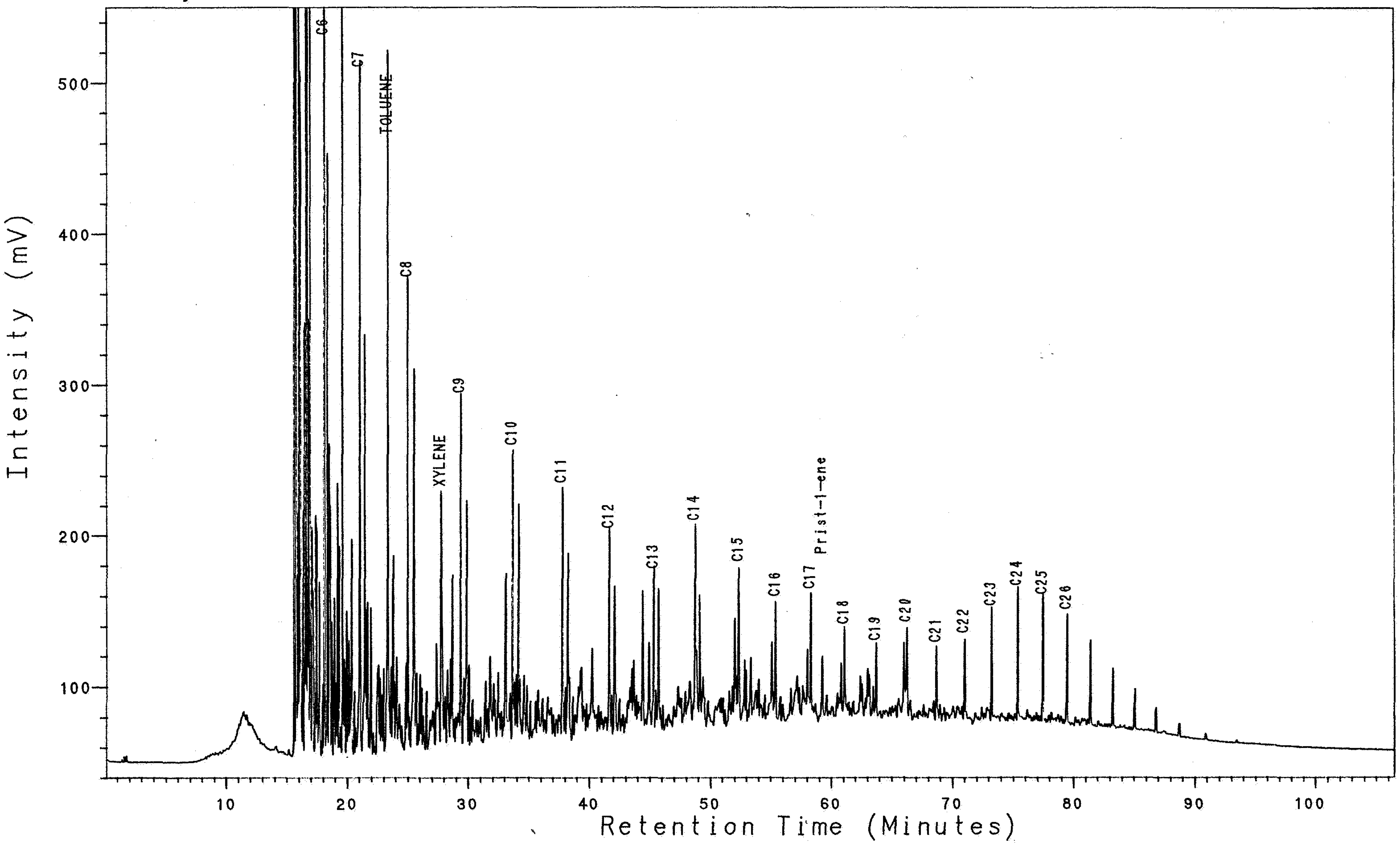
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4356m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

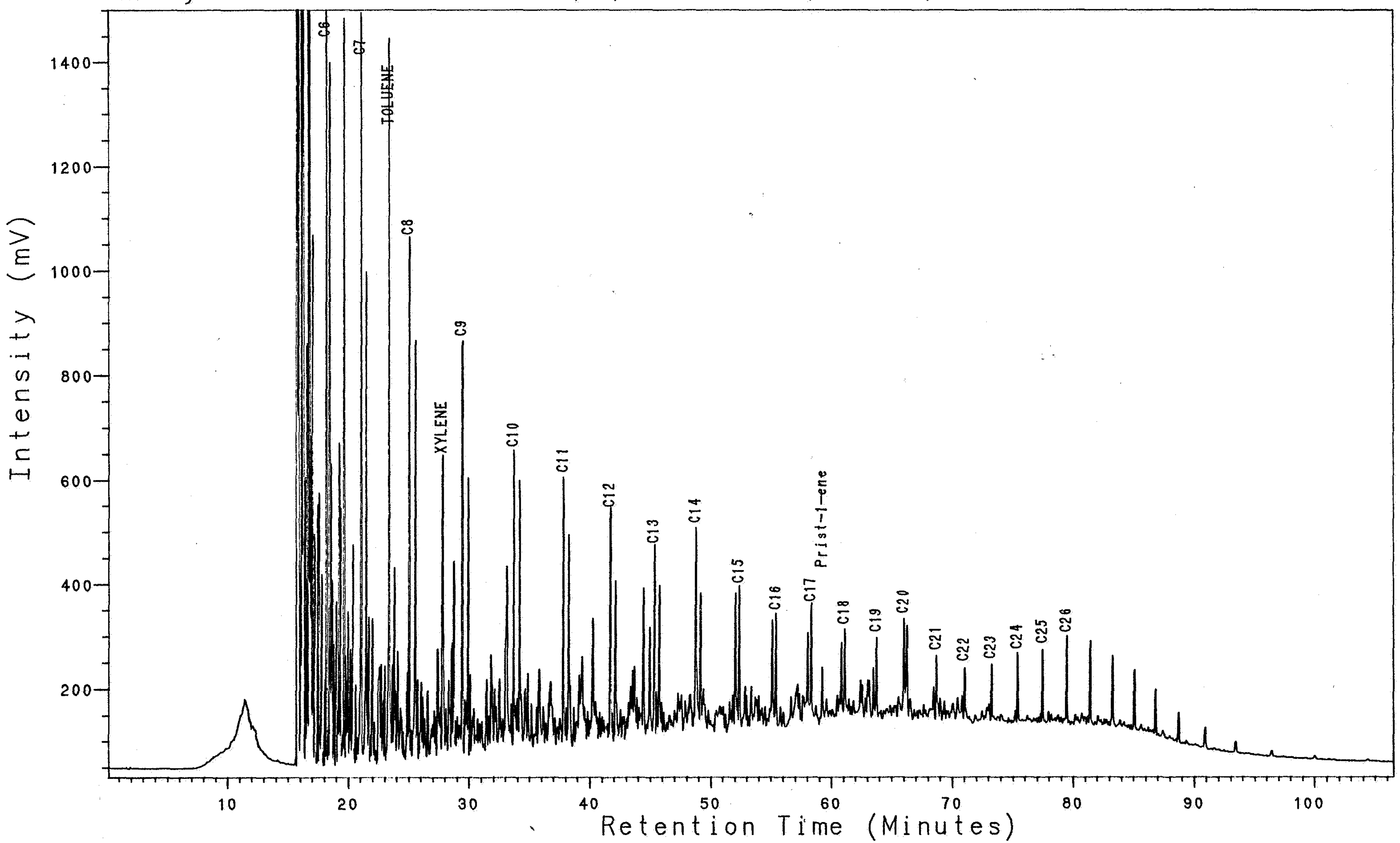
Analysis PC100581L 23, 1, 1 2/6-2, 4374m, S2



NOCS 2/6-2 4374m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

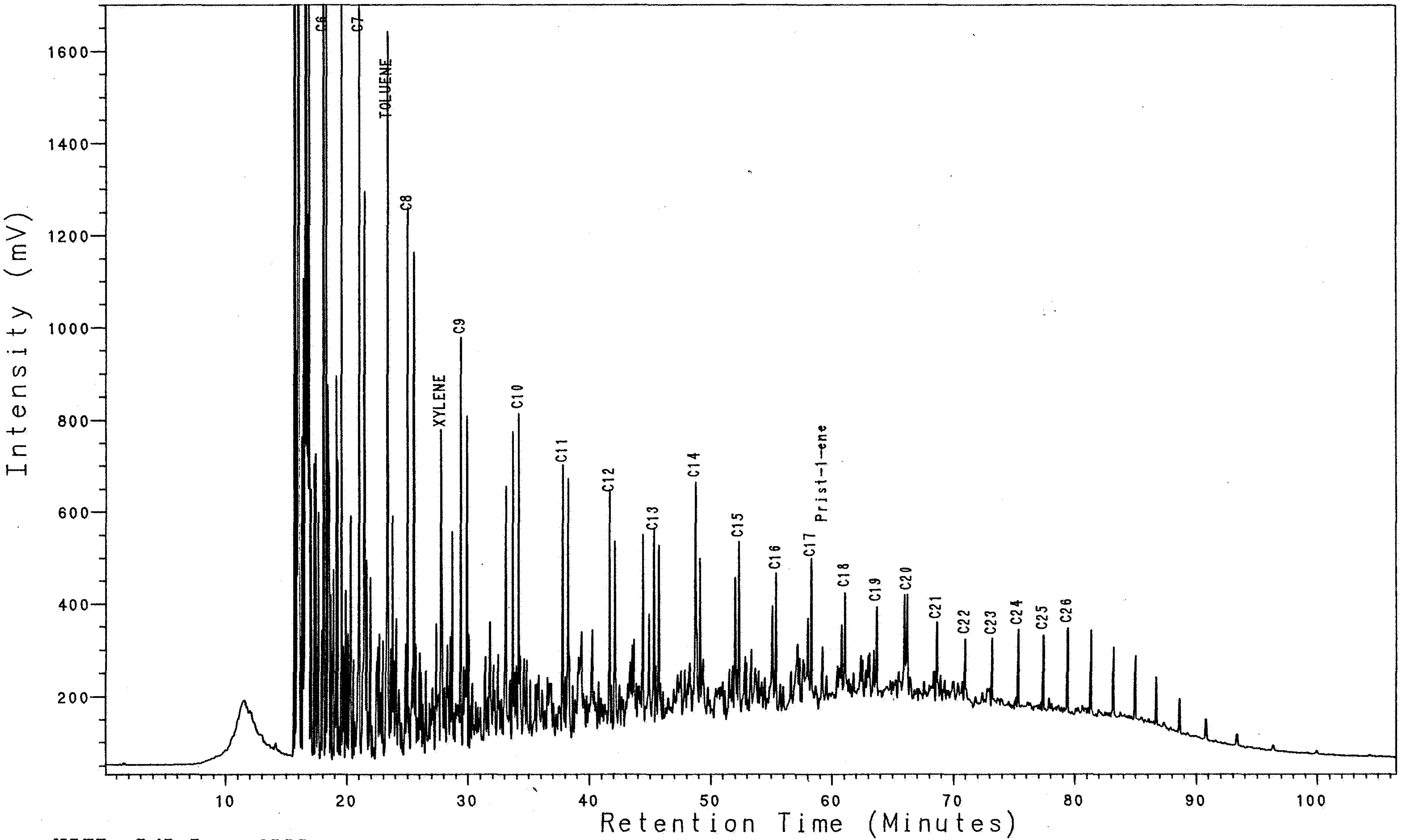
Analysis PC100591L 23, 1, 1 2/6-2, 4380m, S2



NOCS 2/6-2 4380m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

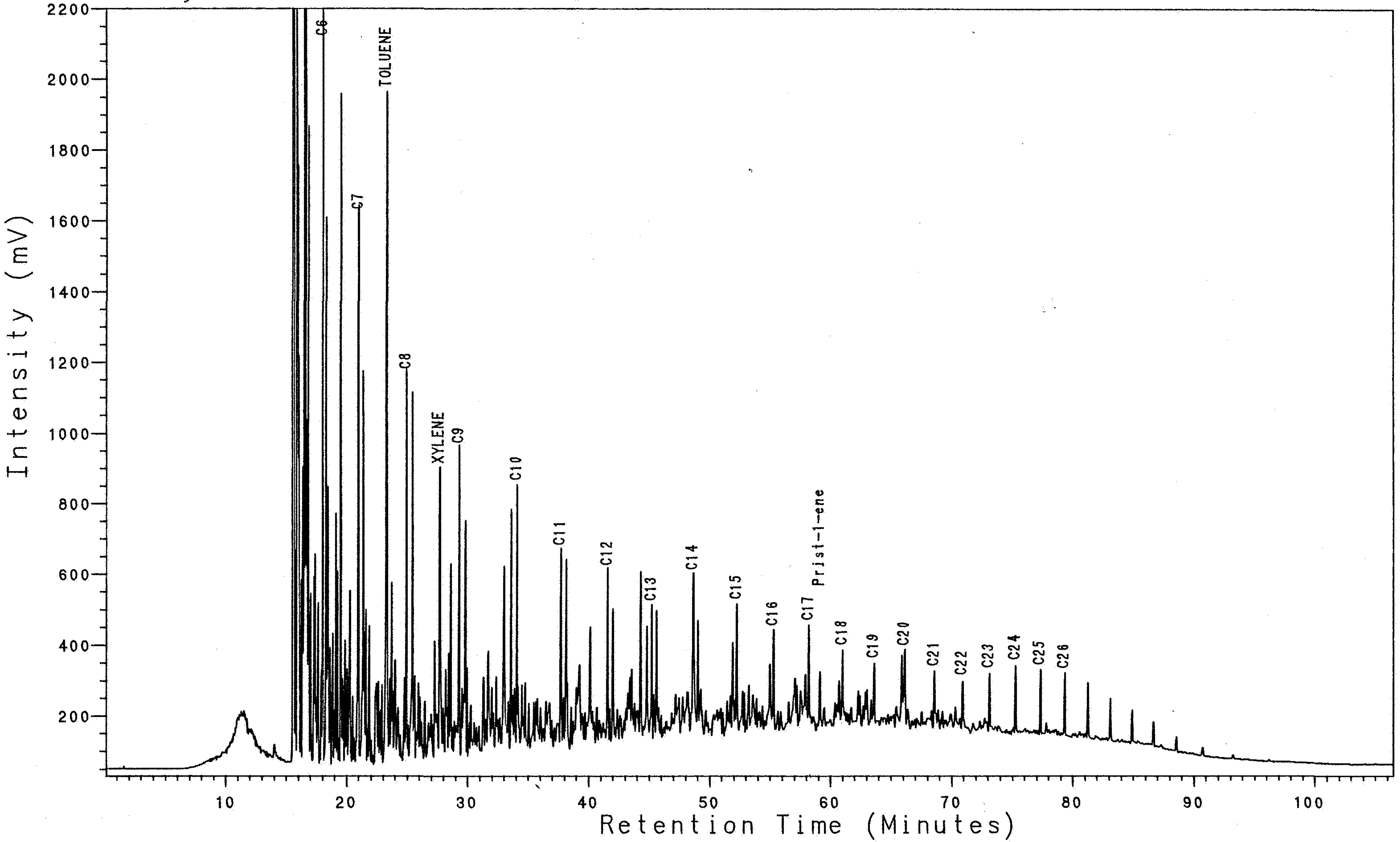
Analysis PC100611L 23, 1, 1 2/6-2, 4389m, S2



NOCS 2/6-2 4389m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

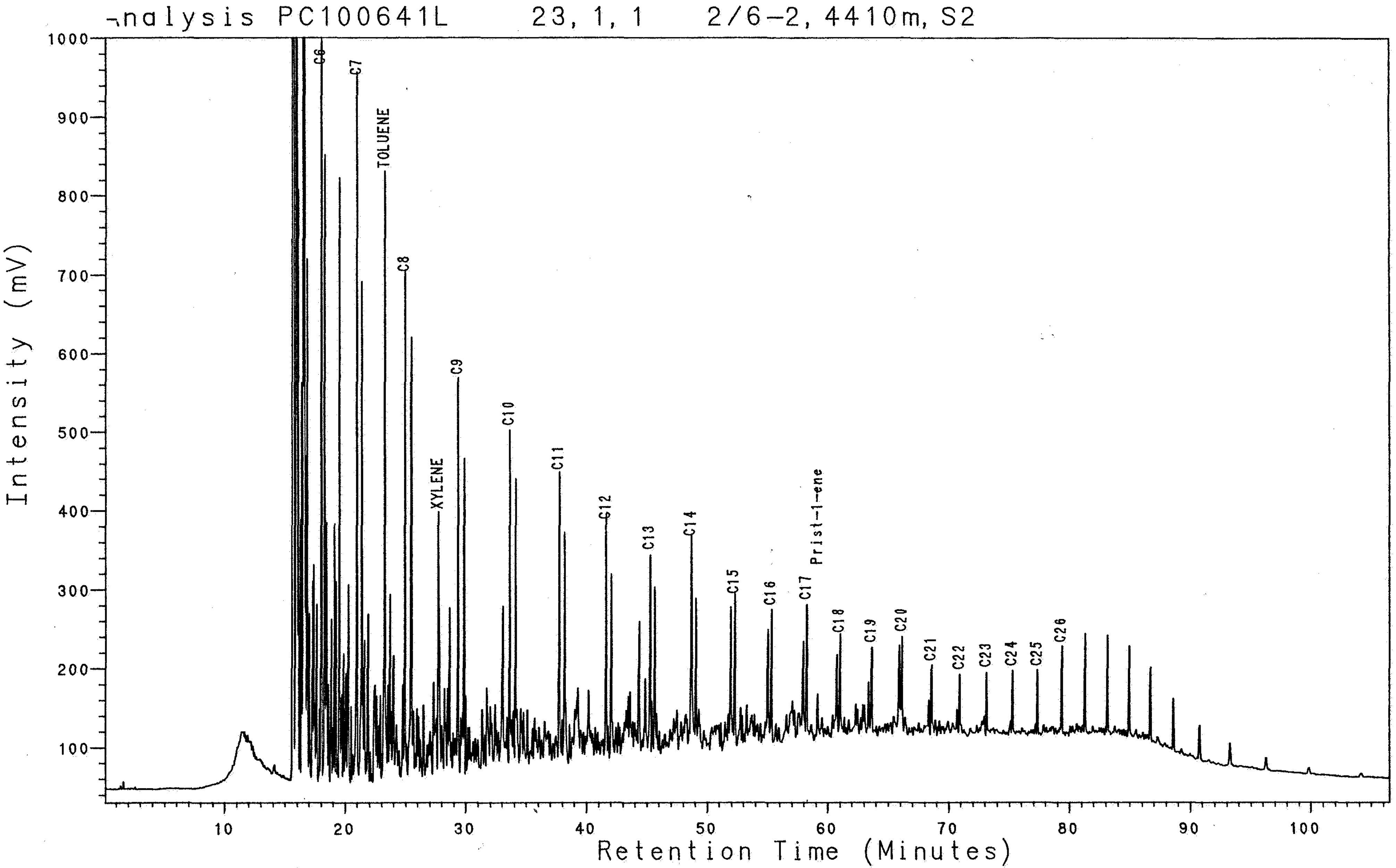
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100621L 23, 1, 1 2/6-2, 4398m, S2



NOCS 2/6-2 4398m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

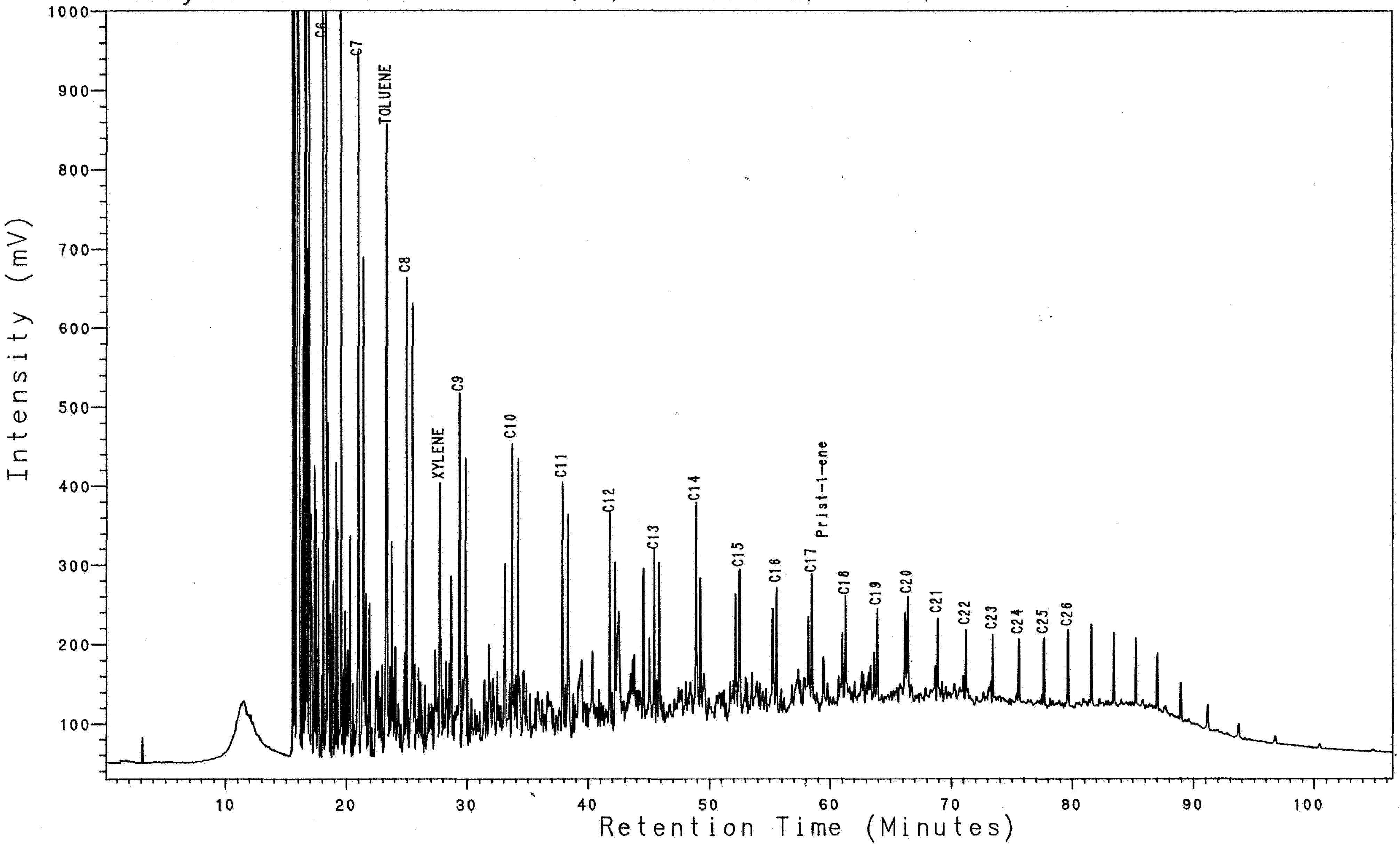
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4410m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

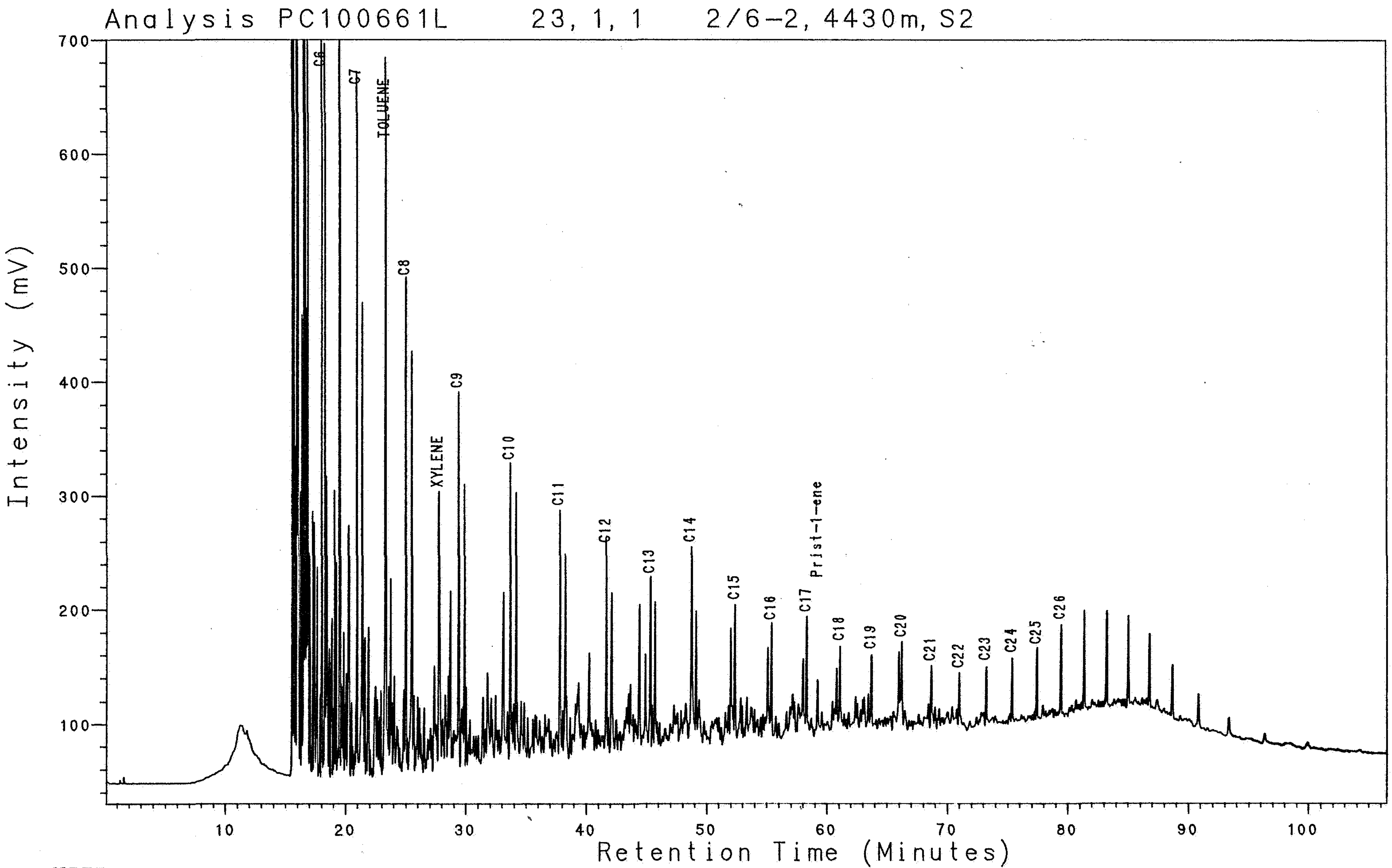
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100651L 23, 1, 1 2/6-2, 4413m, S2



NOCS 2/6-2 4413m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

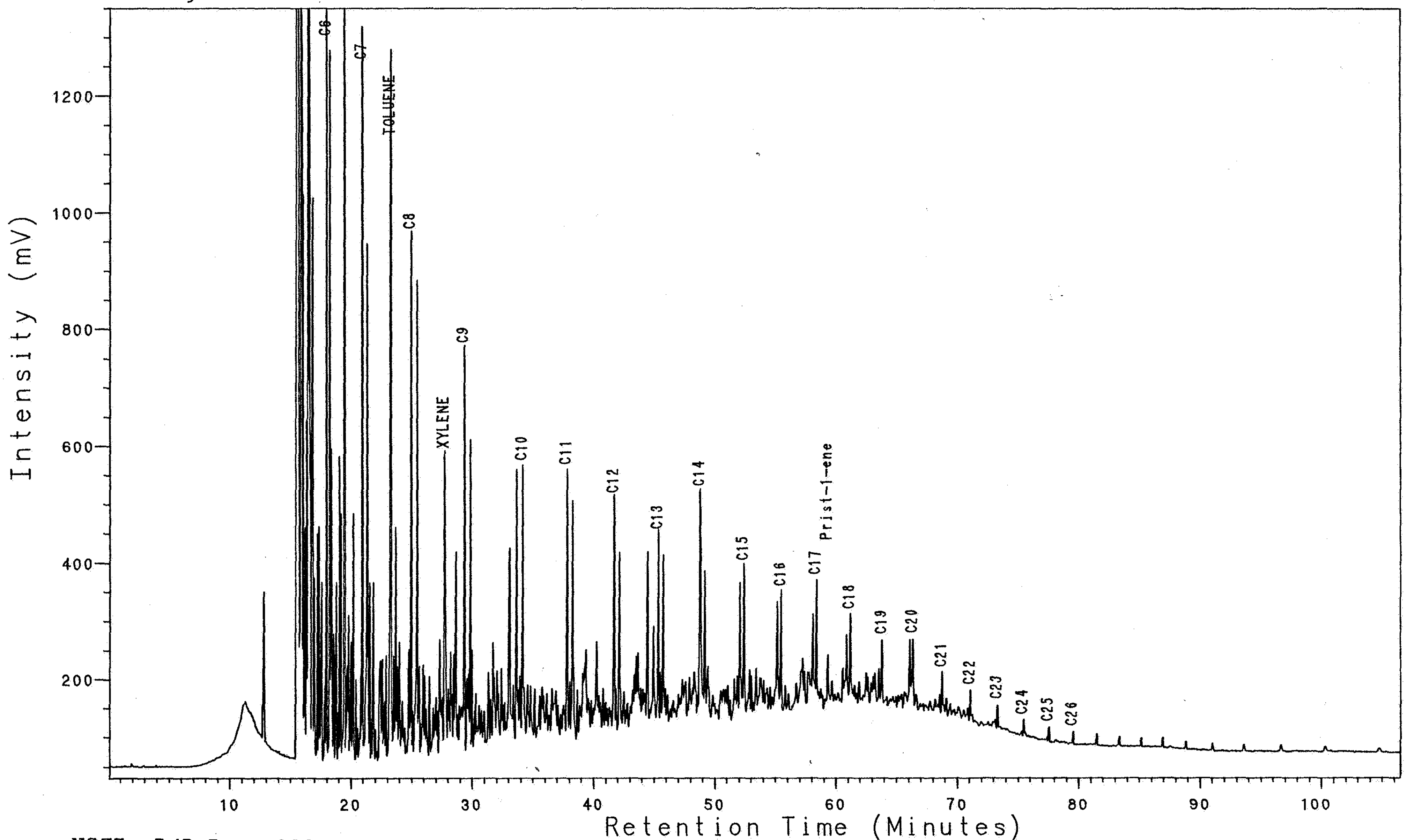
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4430m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

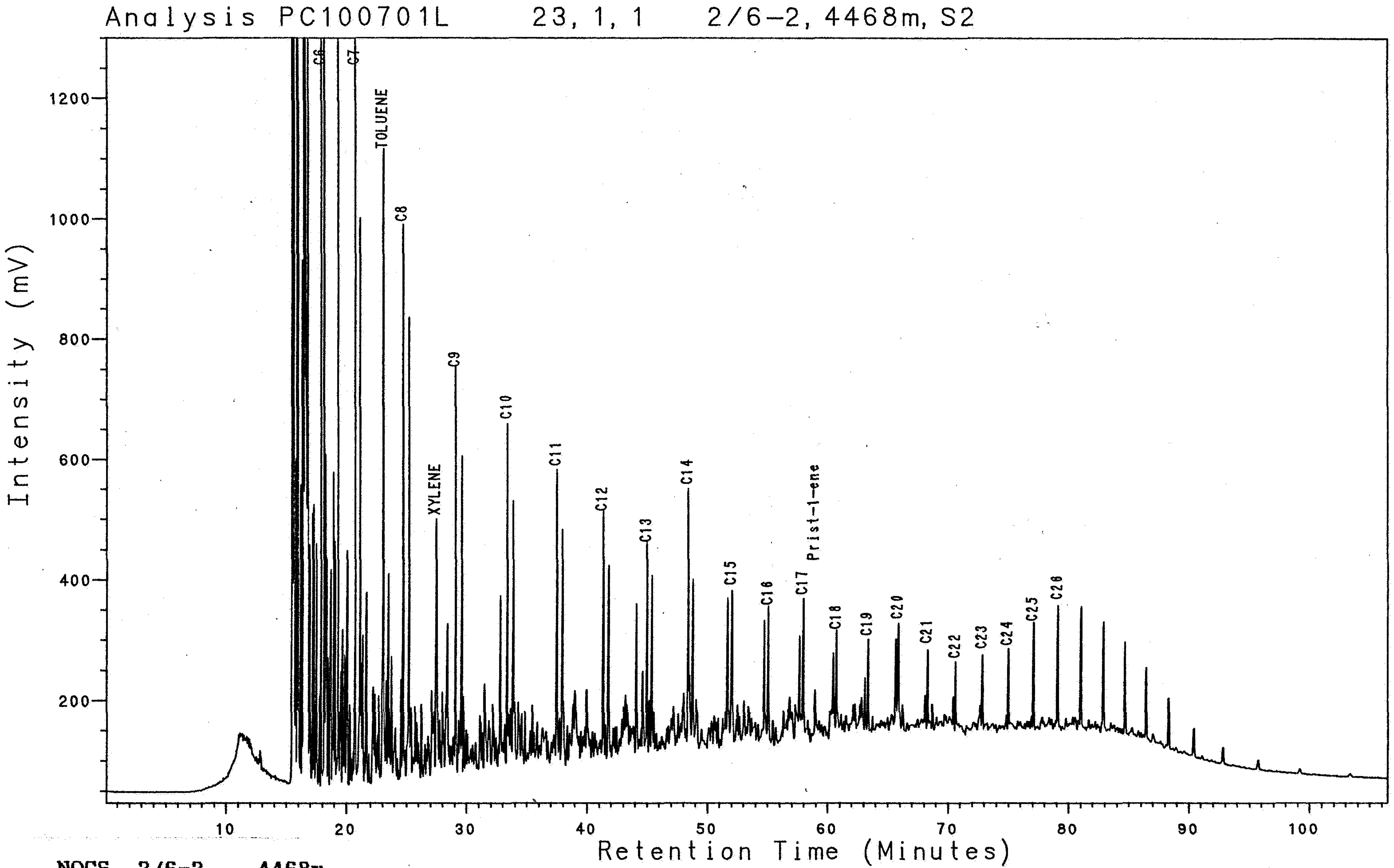
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100681L 23, 1, 1 2/6-2, 4440m, S2



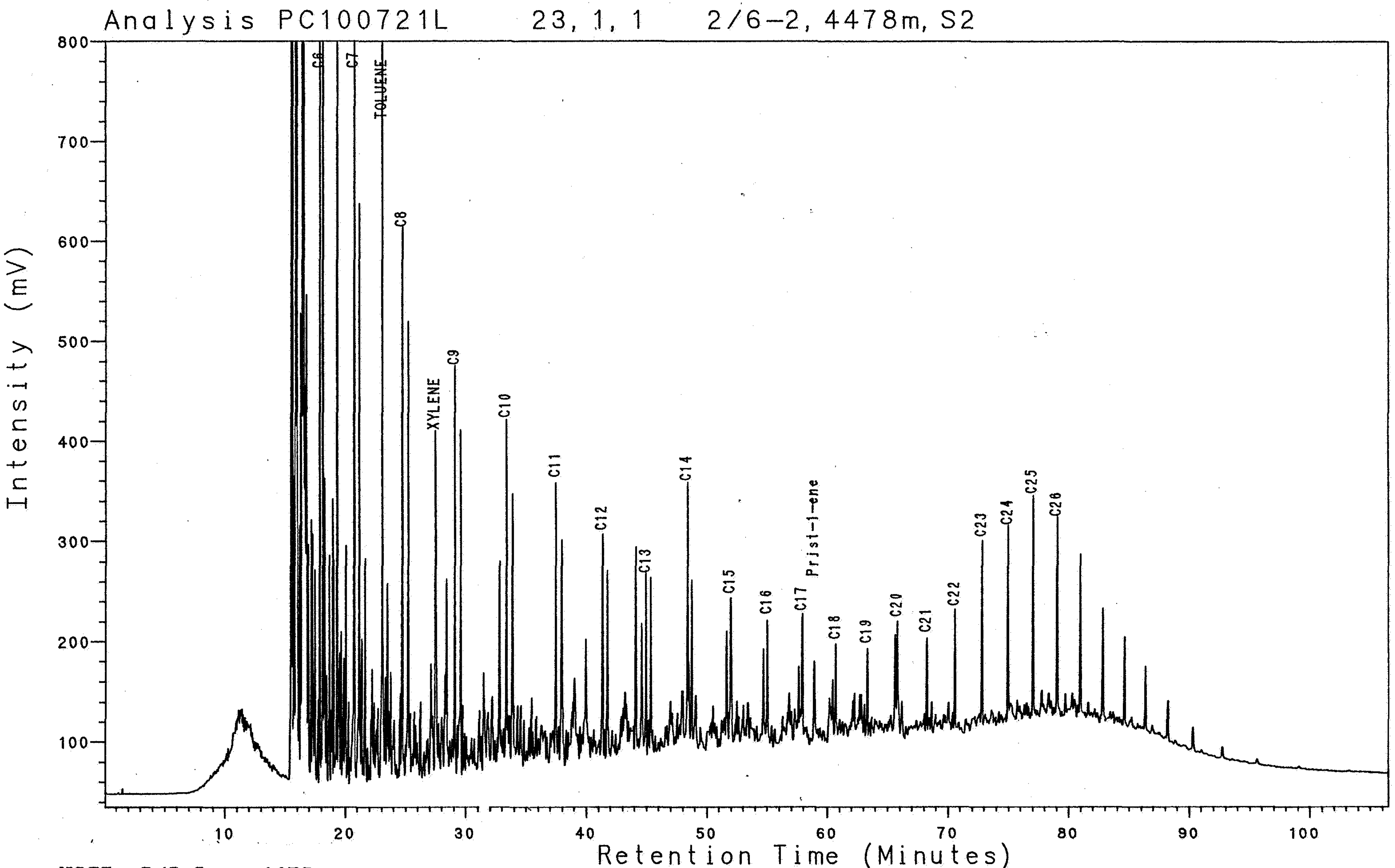
NOCS 2/6-2 4440m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4468m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

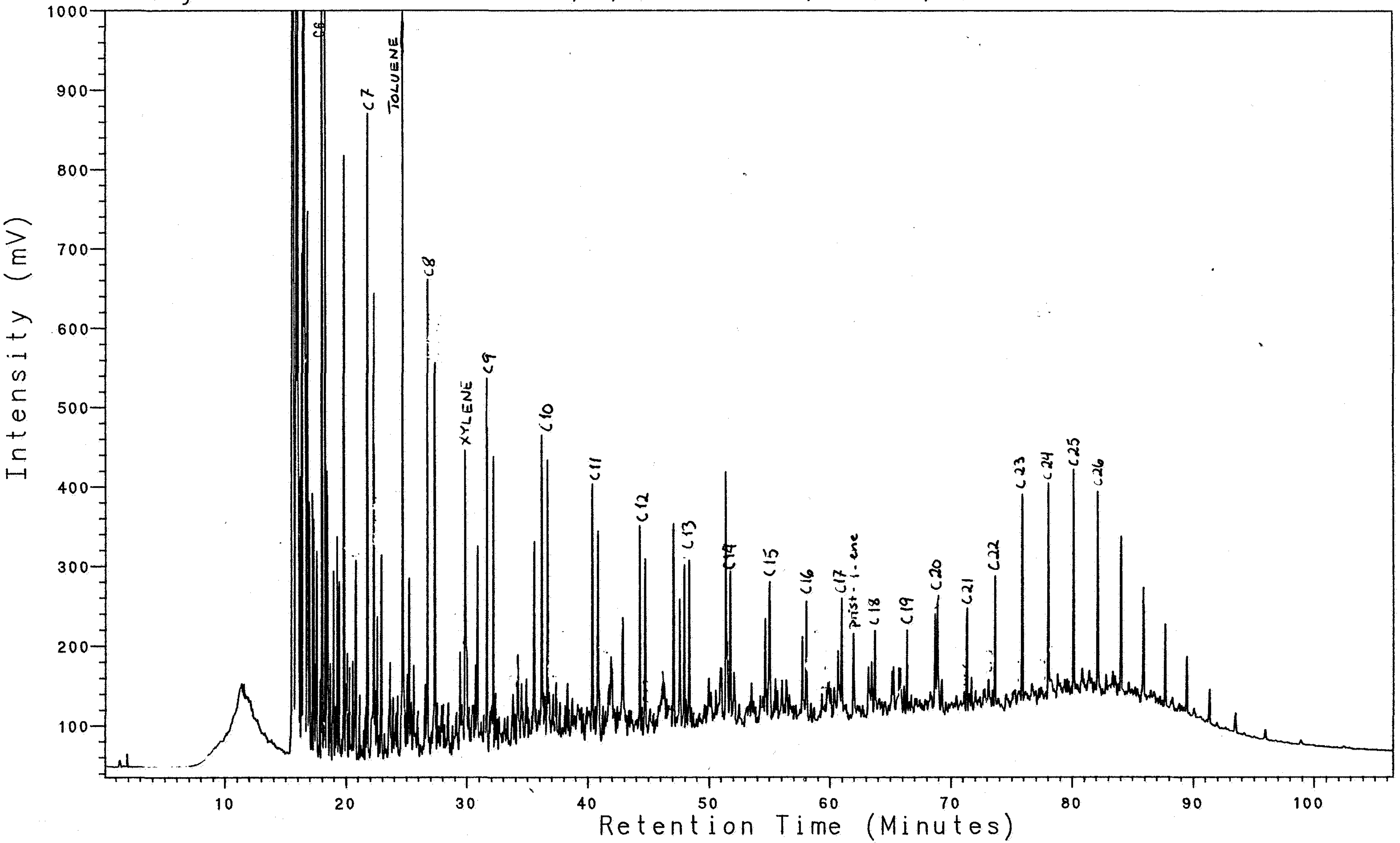
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4478m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

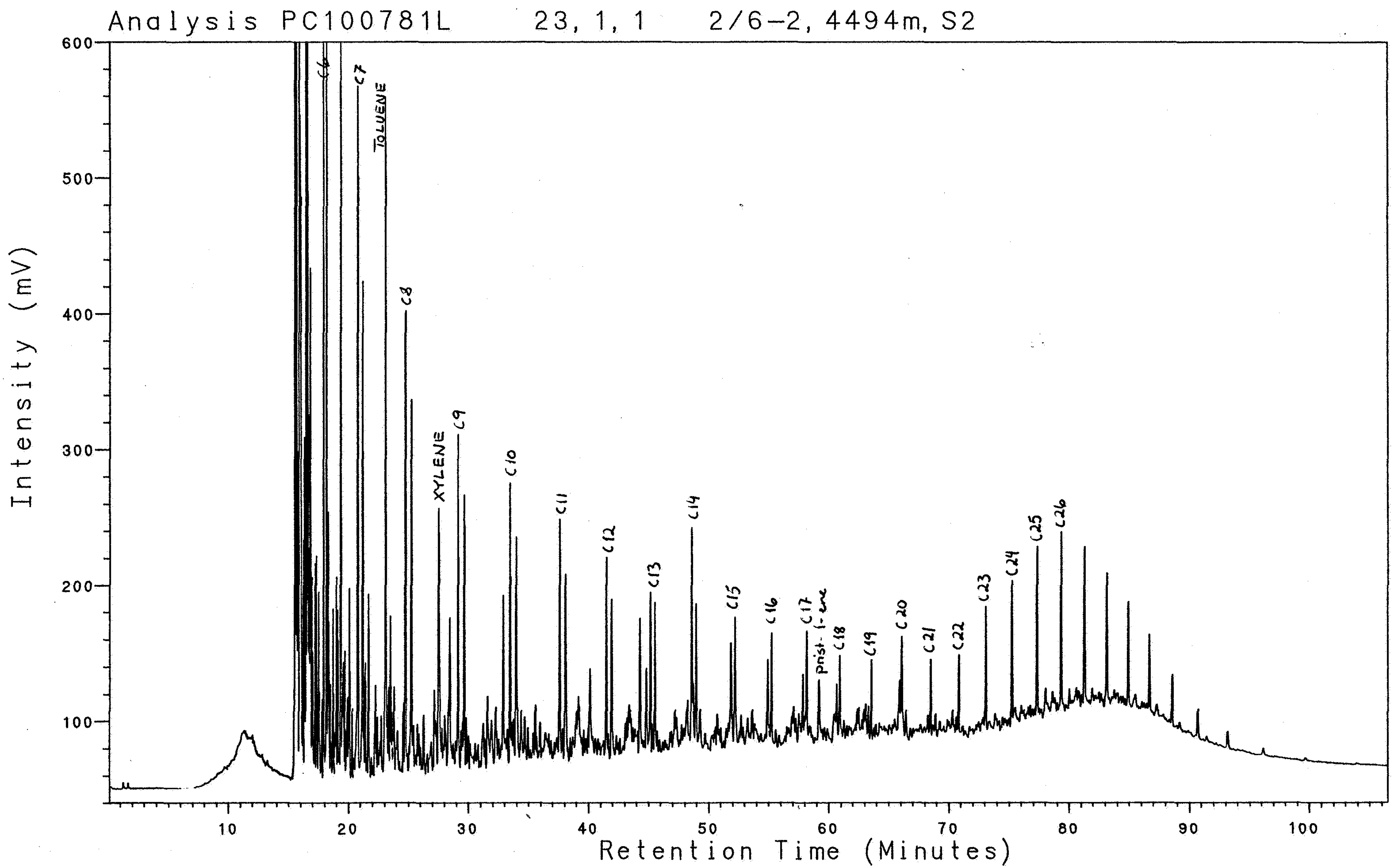
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100741L 23, 1, 1 2/6-2, 4486m, S2



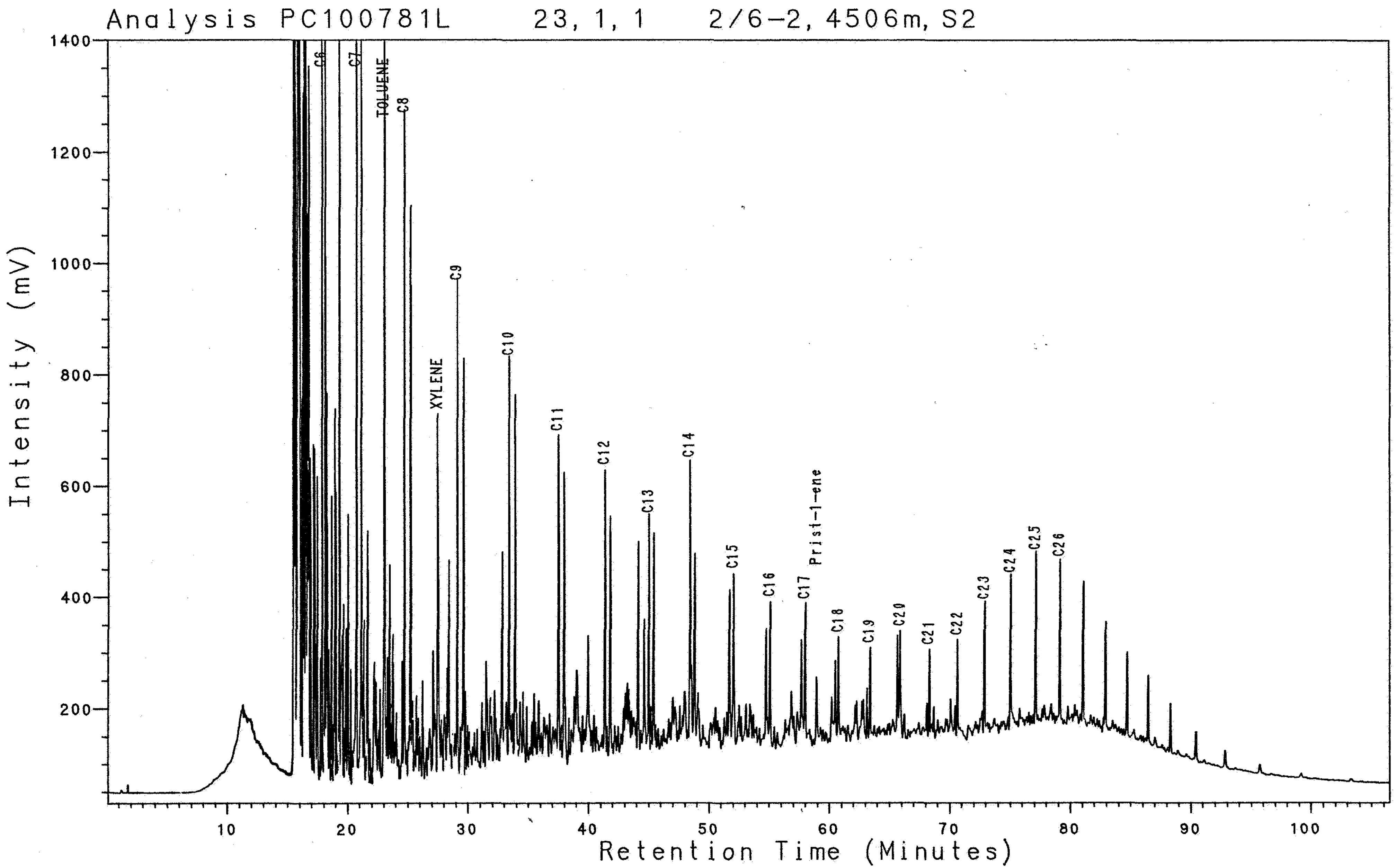
NOCS 2/6-2 4486m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



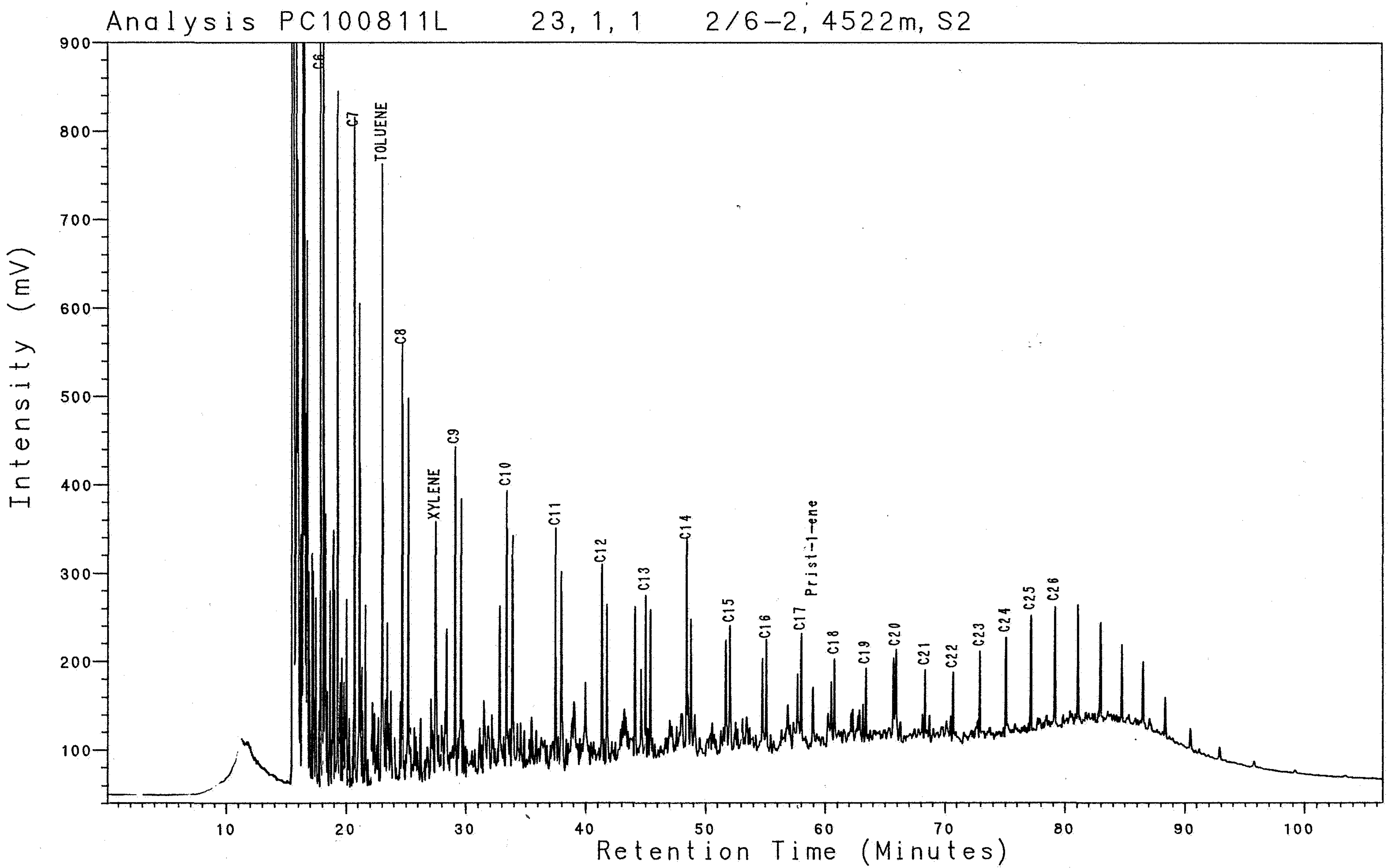
NOCS 2/6-2 4494m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4506m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

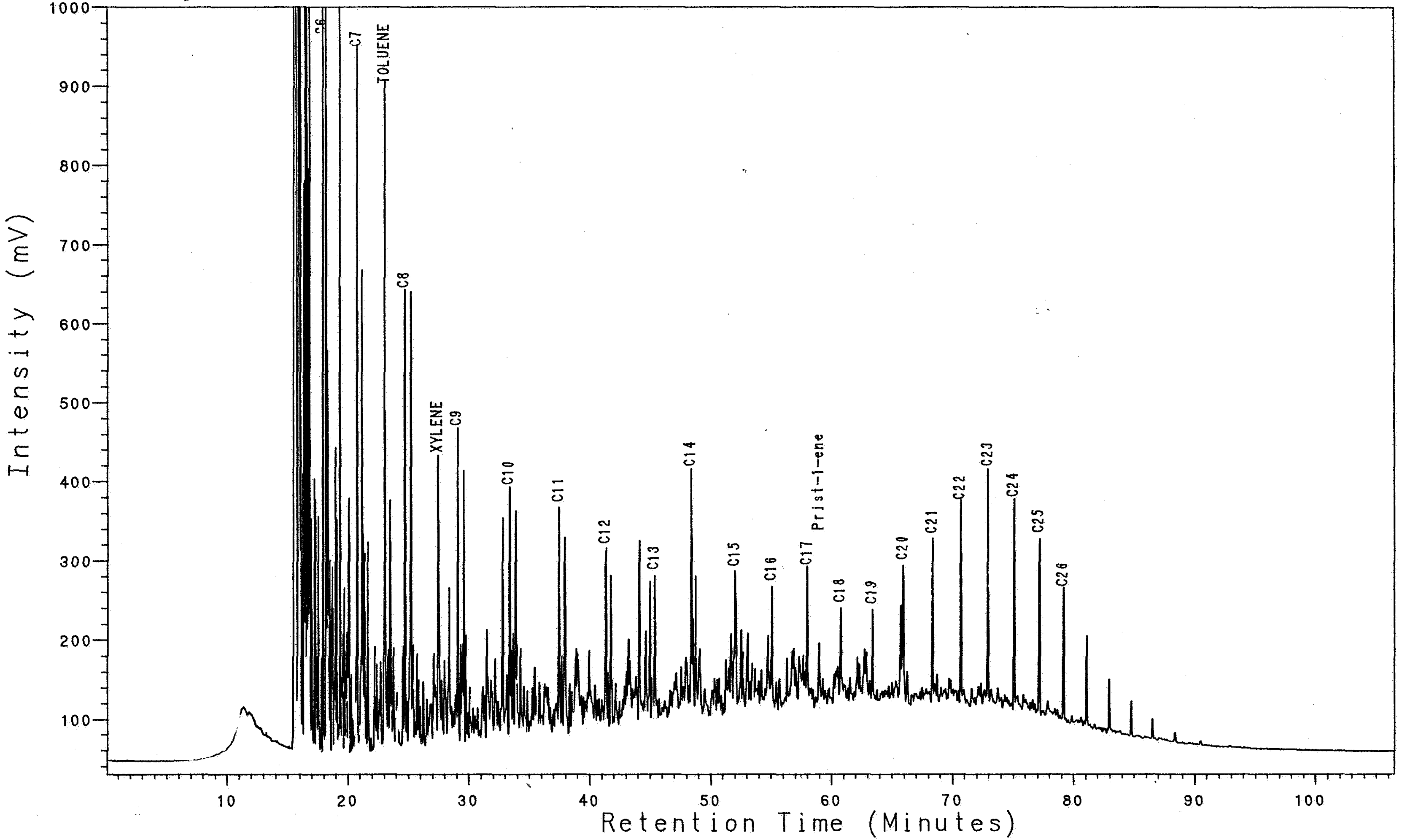
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4522m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

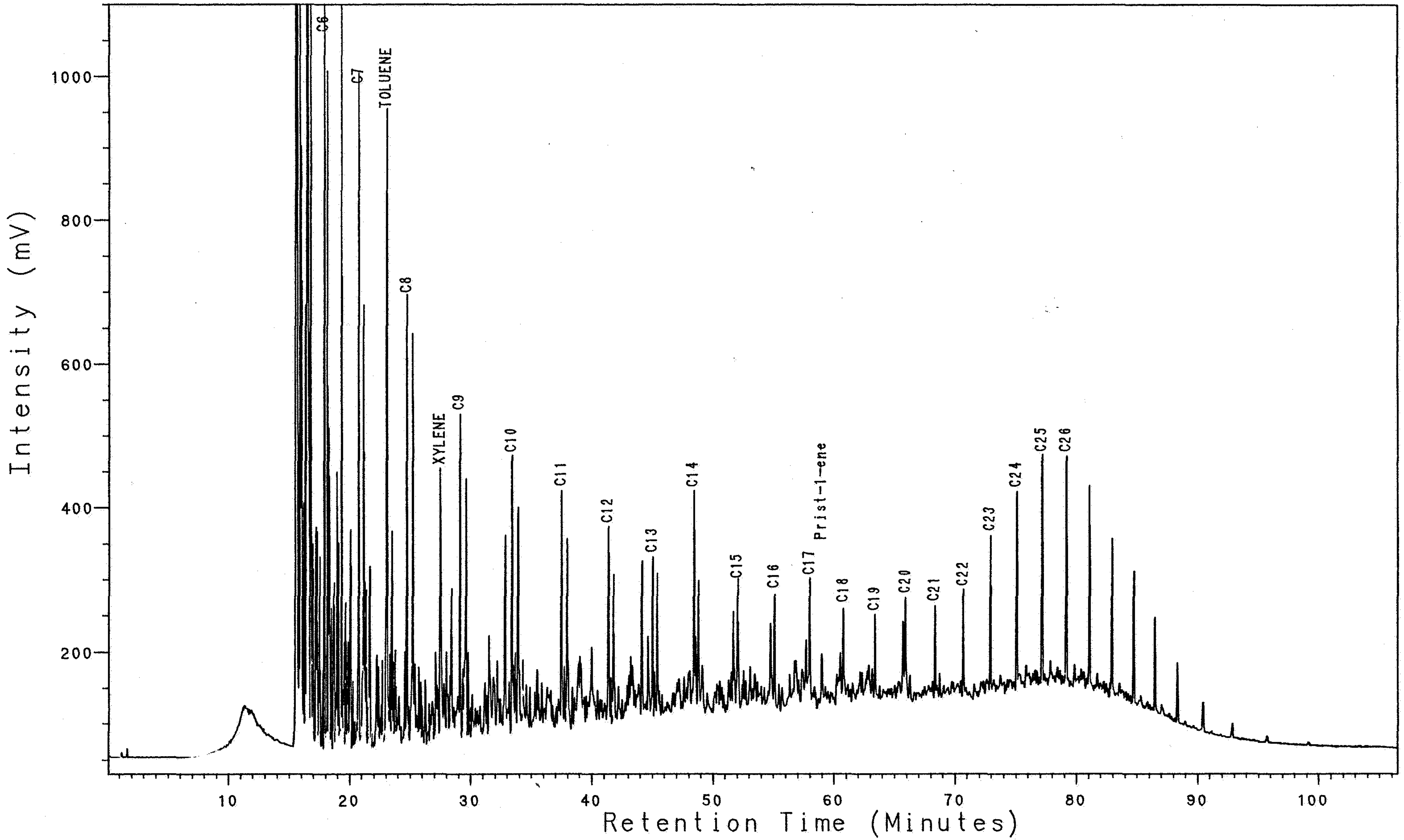
Analysis PC100831L 23, 1, 1 2/6-2, 4532m, S2



NOCS 2/6-2 4532m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

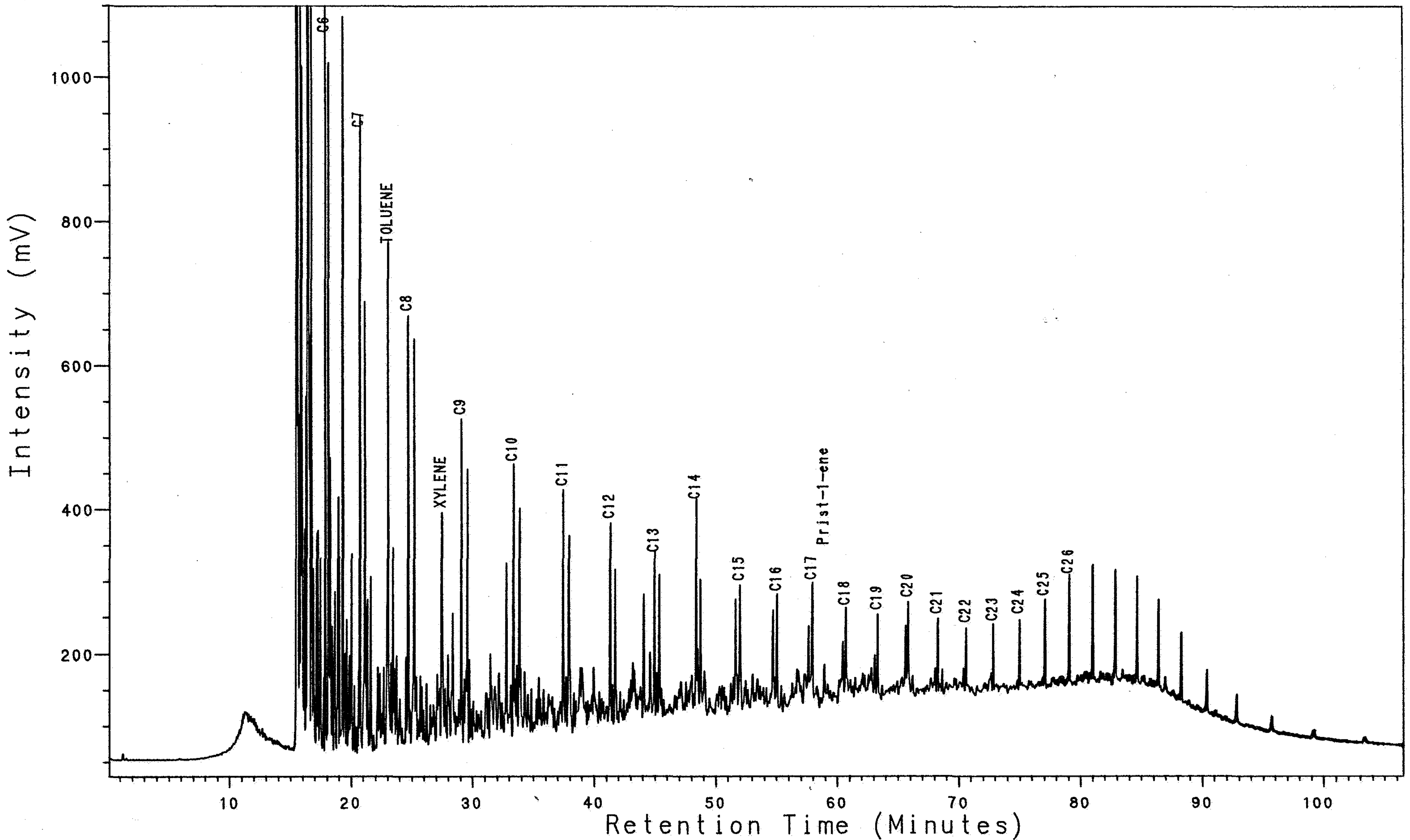
Analysis PC100851L 23, 1, 1 2/6-2, 4540m, S2



NOCS 2/6-2 4540m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

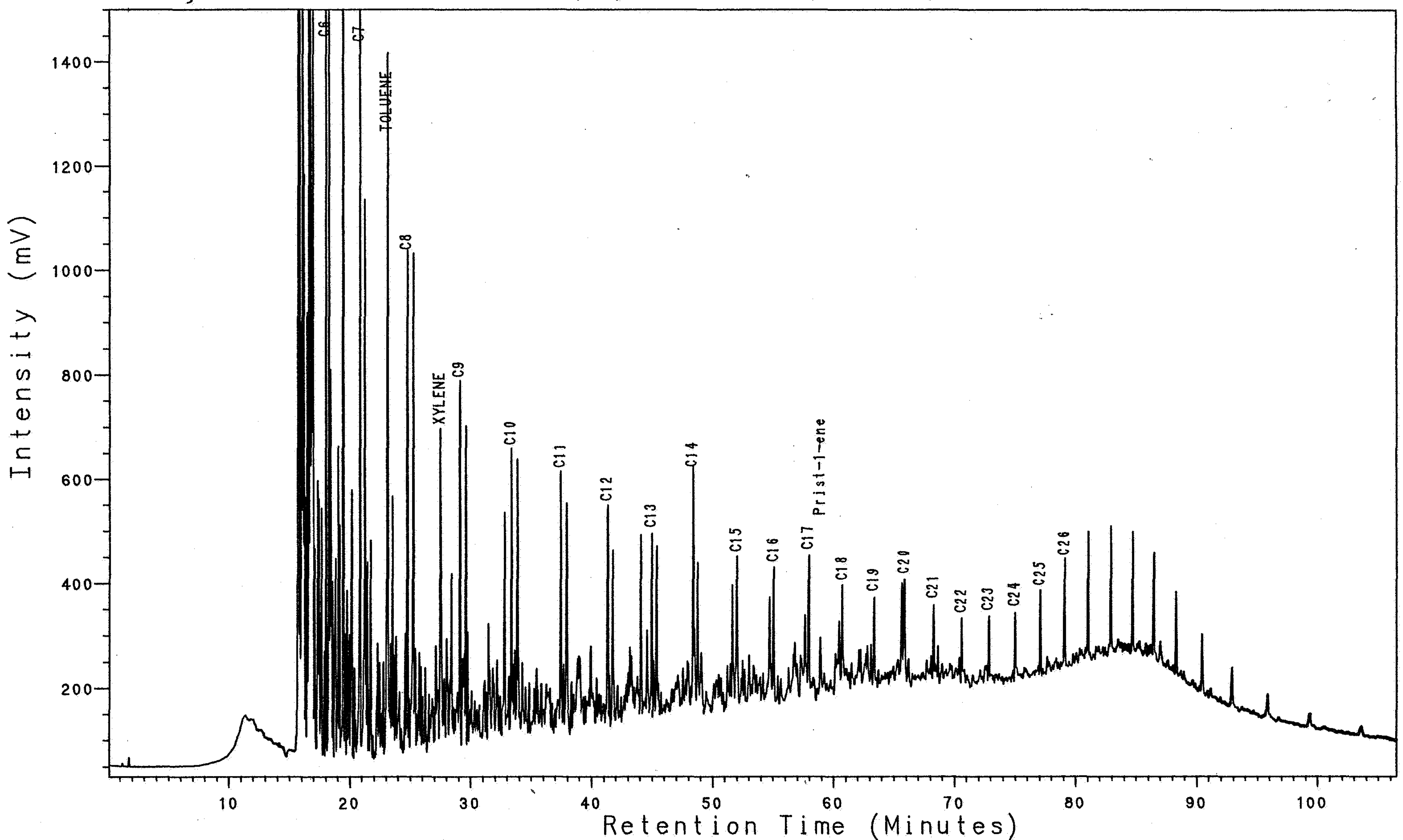
Analysis PC100871L 23, 1, 1 2/6-2, 4550m, S2



NOCS 2/6-2 4550m
PYROLYSIS GC (S2)
CLST:gy blk, brn blk

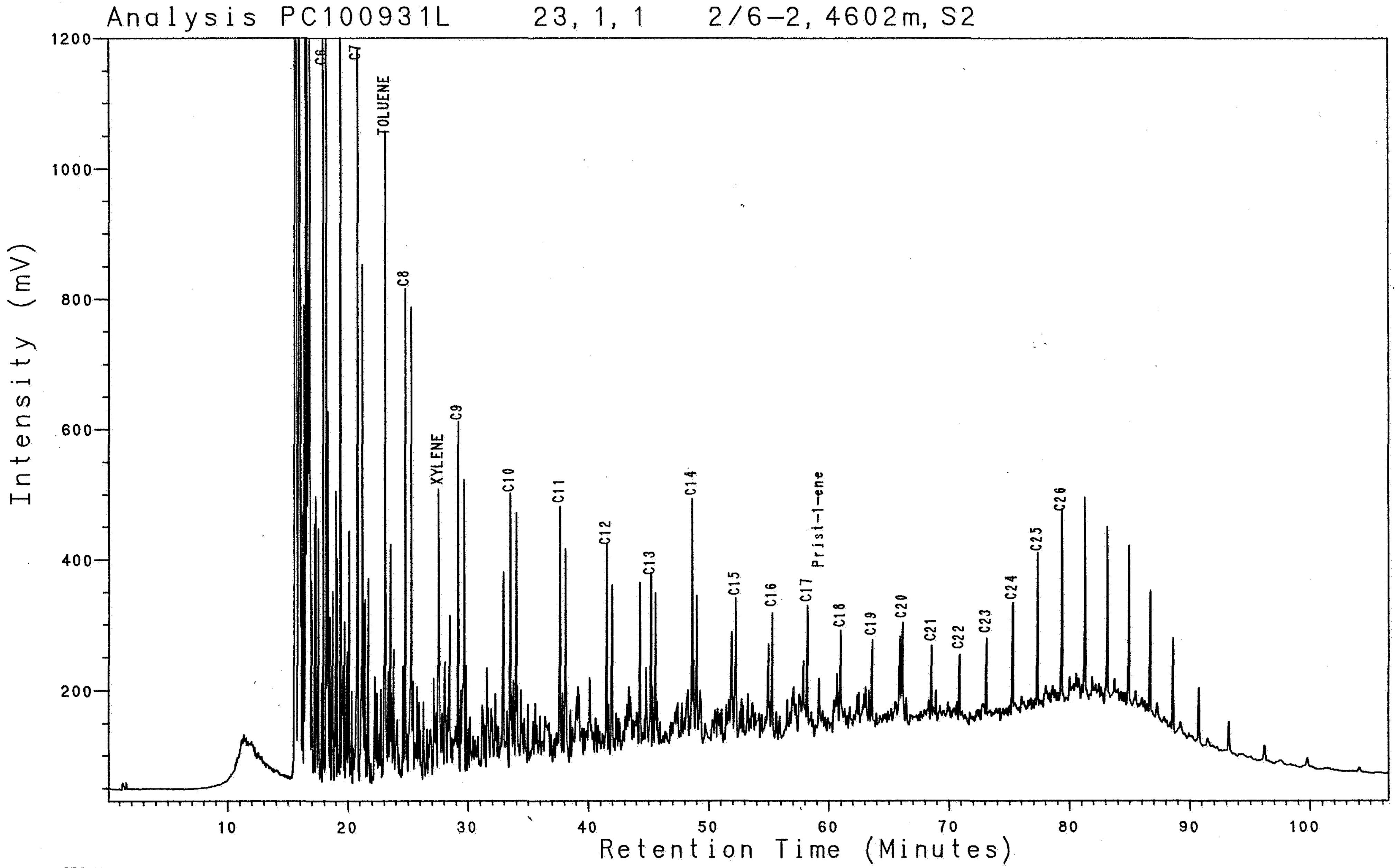
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC100901L   23, 1, 1   2/6-2, 4580m, S2



NOCS 2/6-2 4580m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

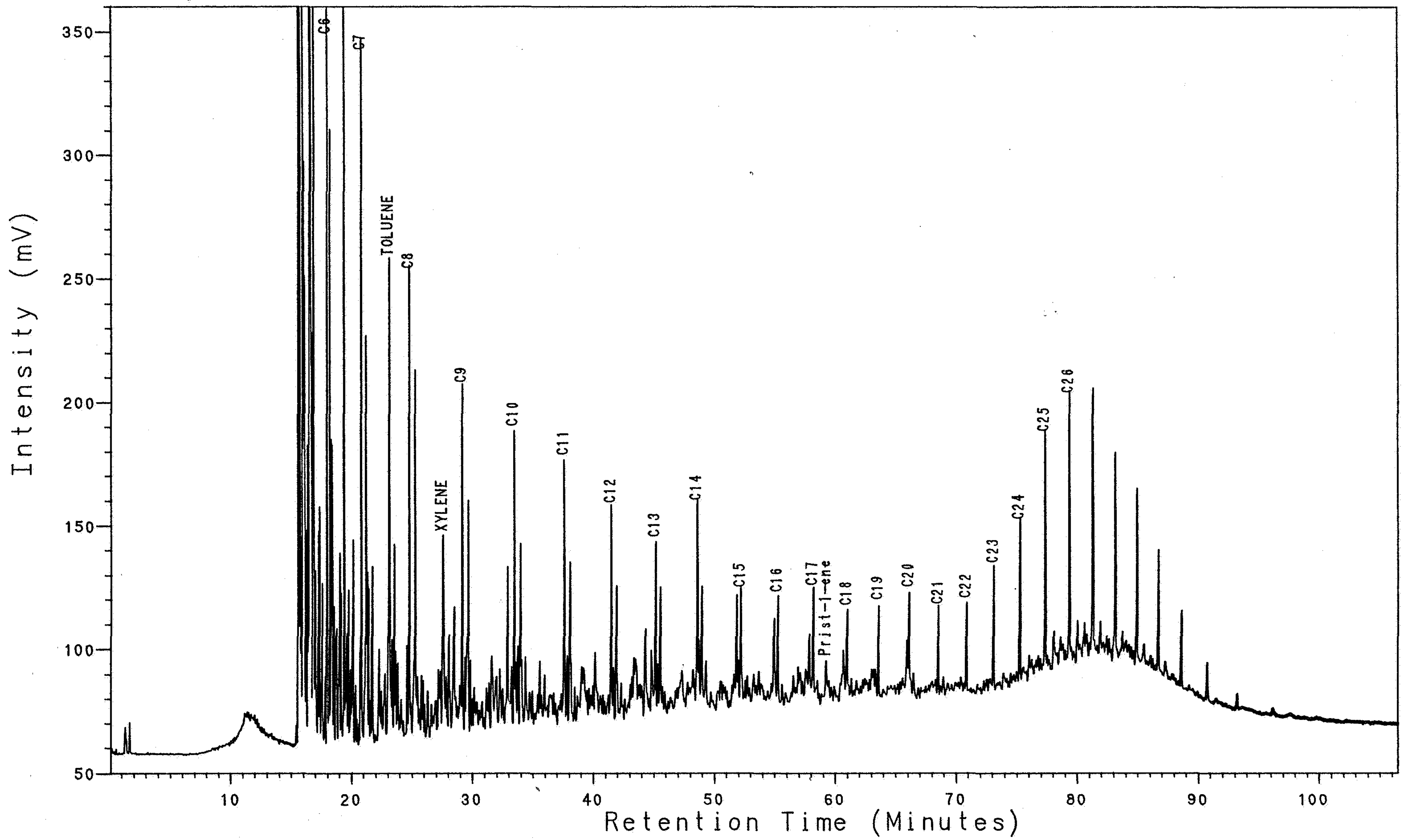
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4602m
PYROLYSIS GC (S2)
CLST: gy blk, brn blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

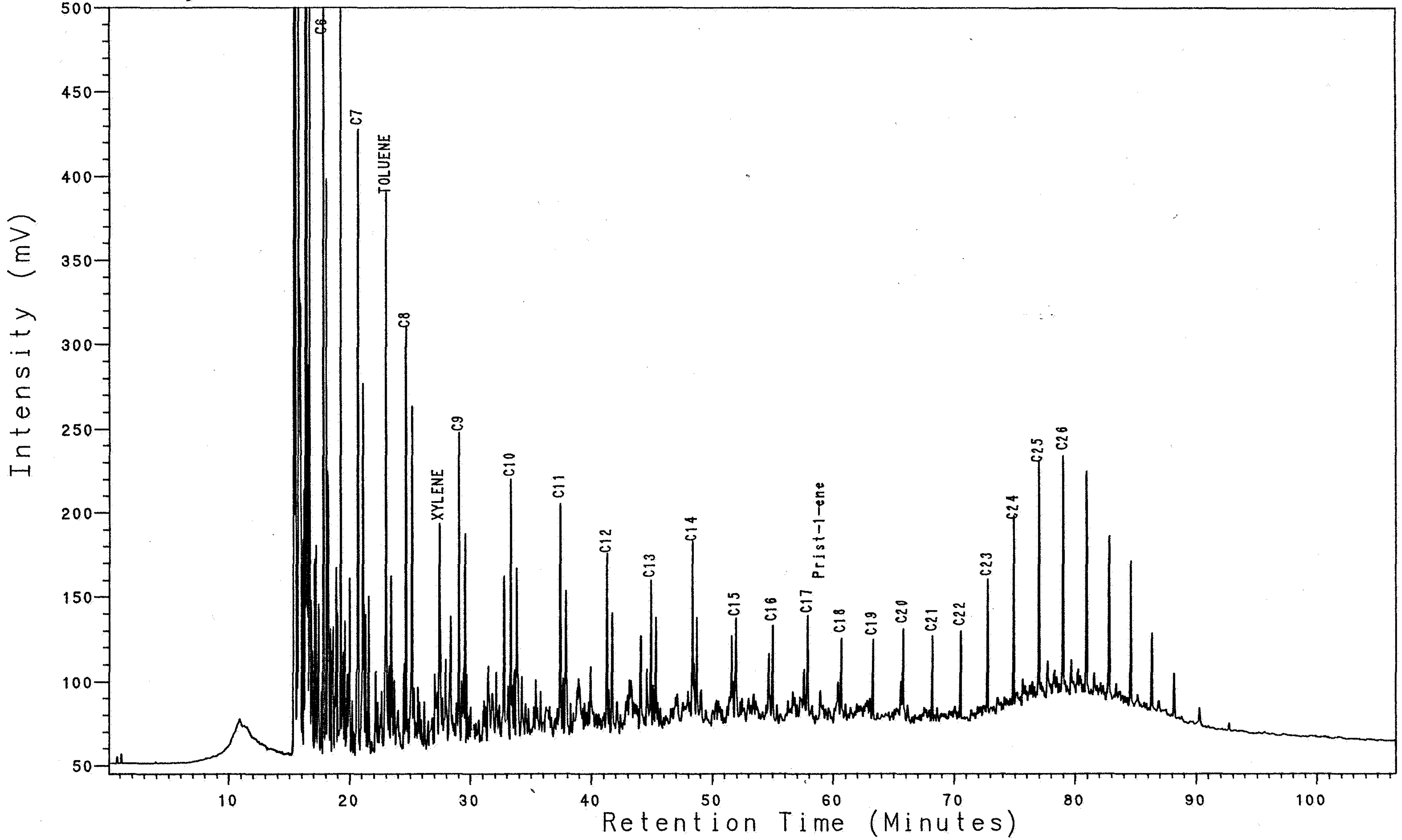
Analysis PC100961L 23, 1, 1 2/6-2, 4616m, S2



NOCS 2/6-2 4616m
PYROLYSIS GC (S2)
CLST: gy, gy red, m gy

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

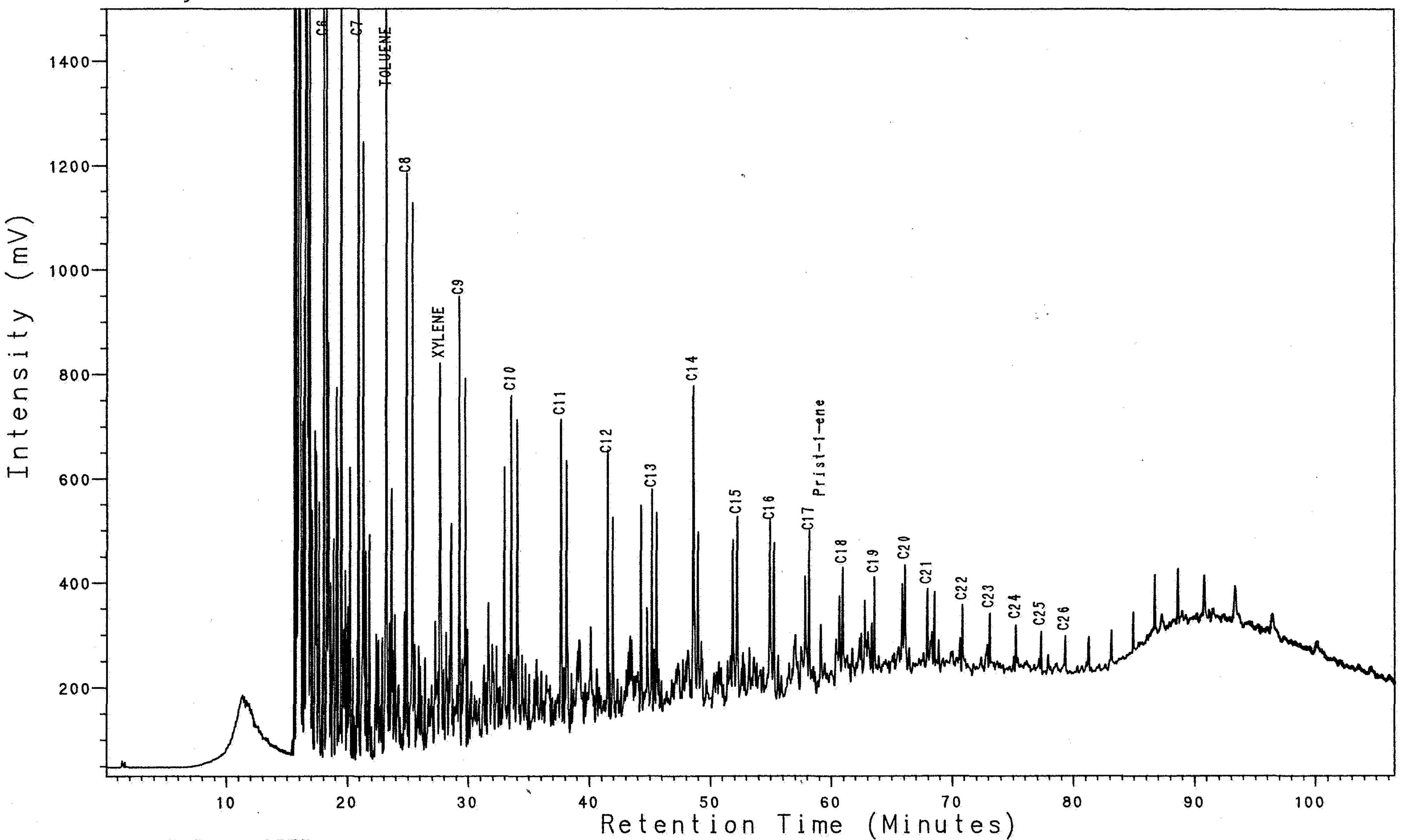
Analysis PC101051L 23, 1, 1 2/6-2, 4656m, S2



NOCS 2/6-2 4656m
PYROLYSIS GC (S2)
CLST: gy, gy red

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

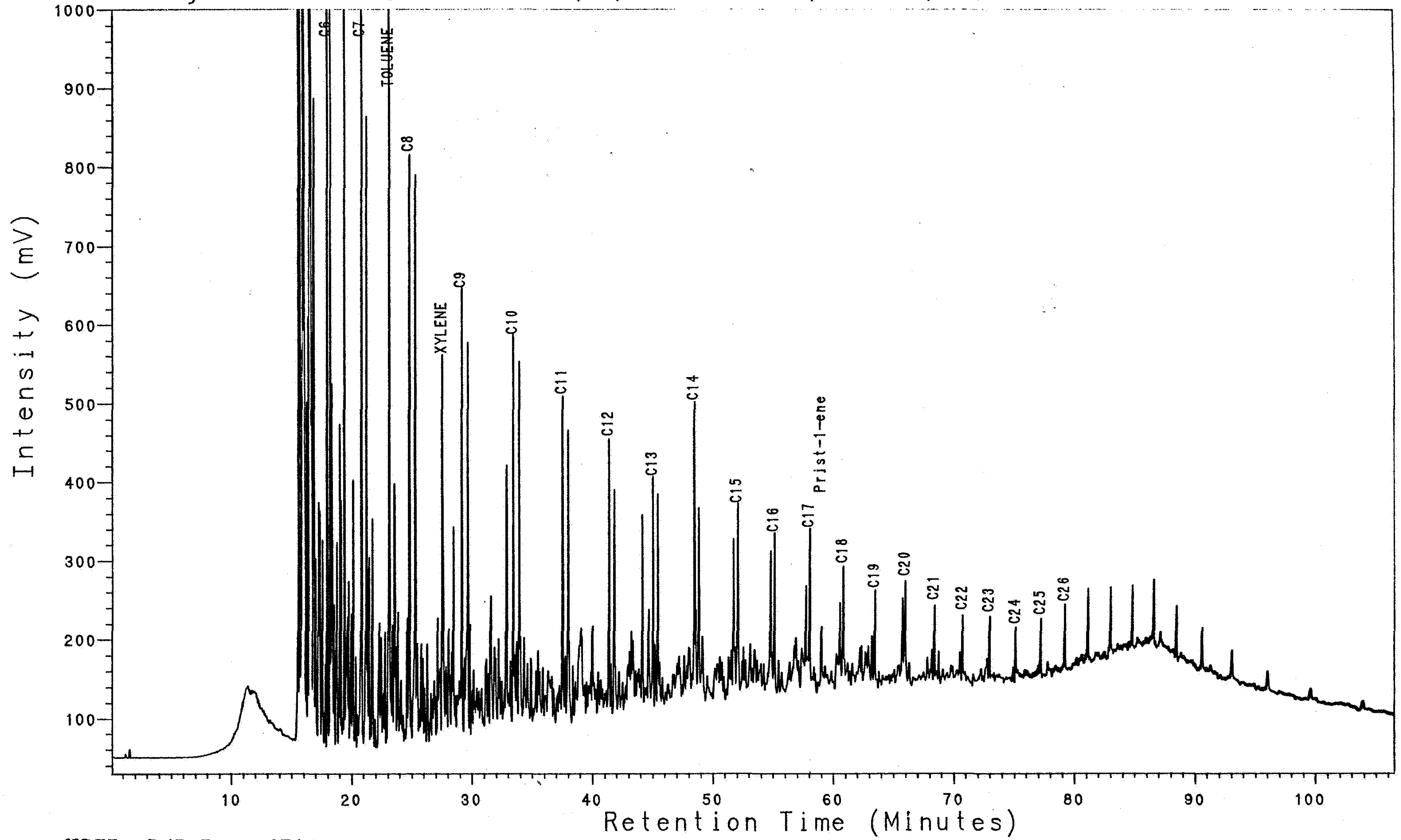
Analysis PC101081L   23, 1, 1   2/6-2, 4670 m, S2



NOCS 2/6-2 4670m
PYROLYSIS GC (S2)
CLST:drk gy, gy blk

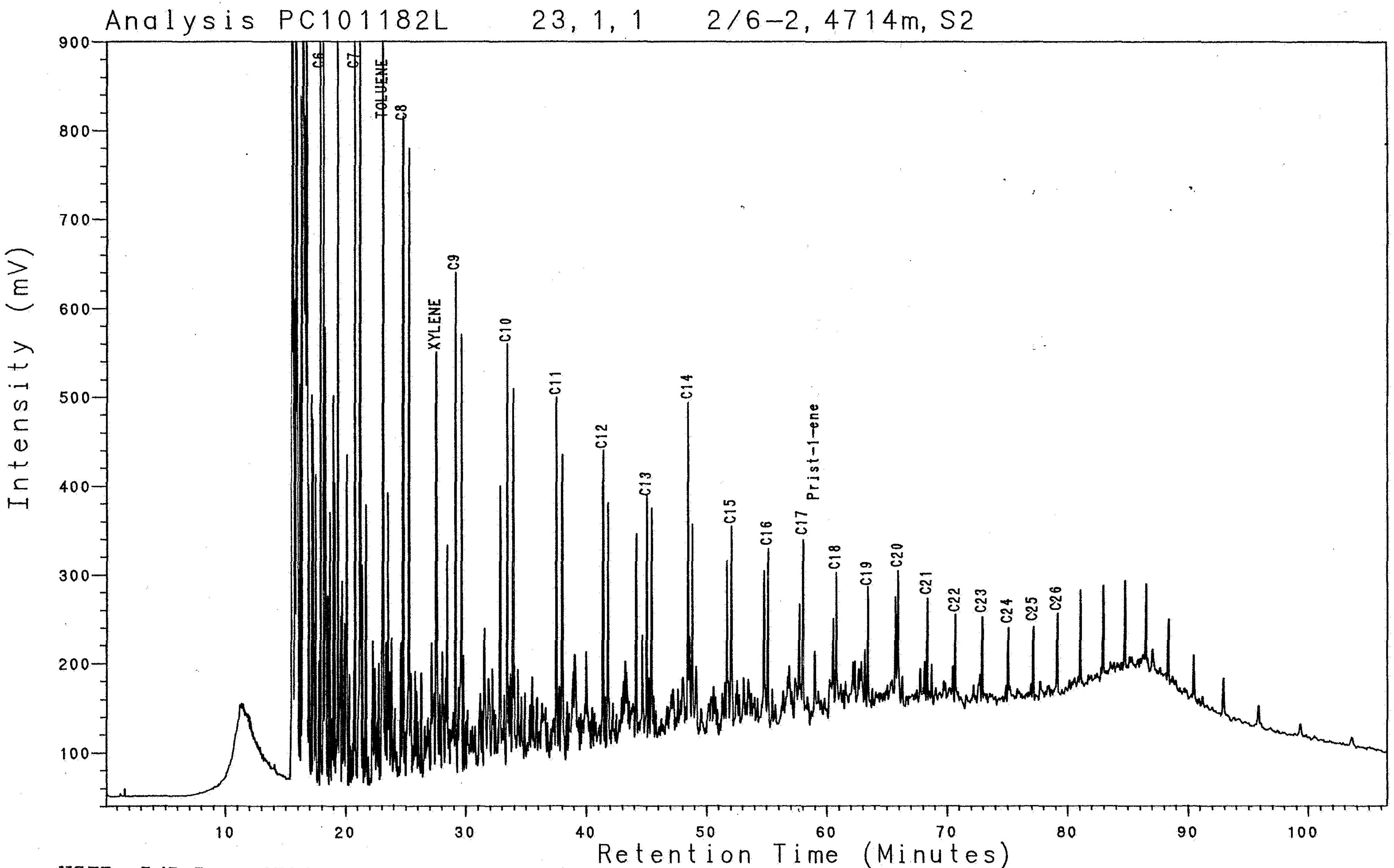
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Analysis PC101181L 23, 1, 1 2/6-2, 4714m, S2



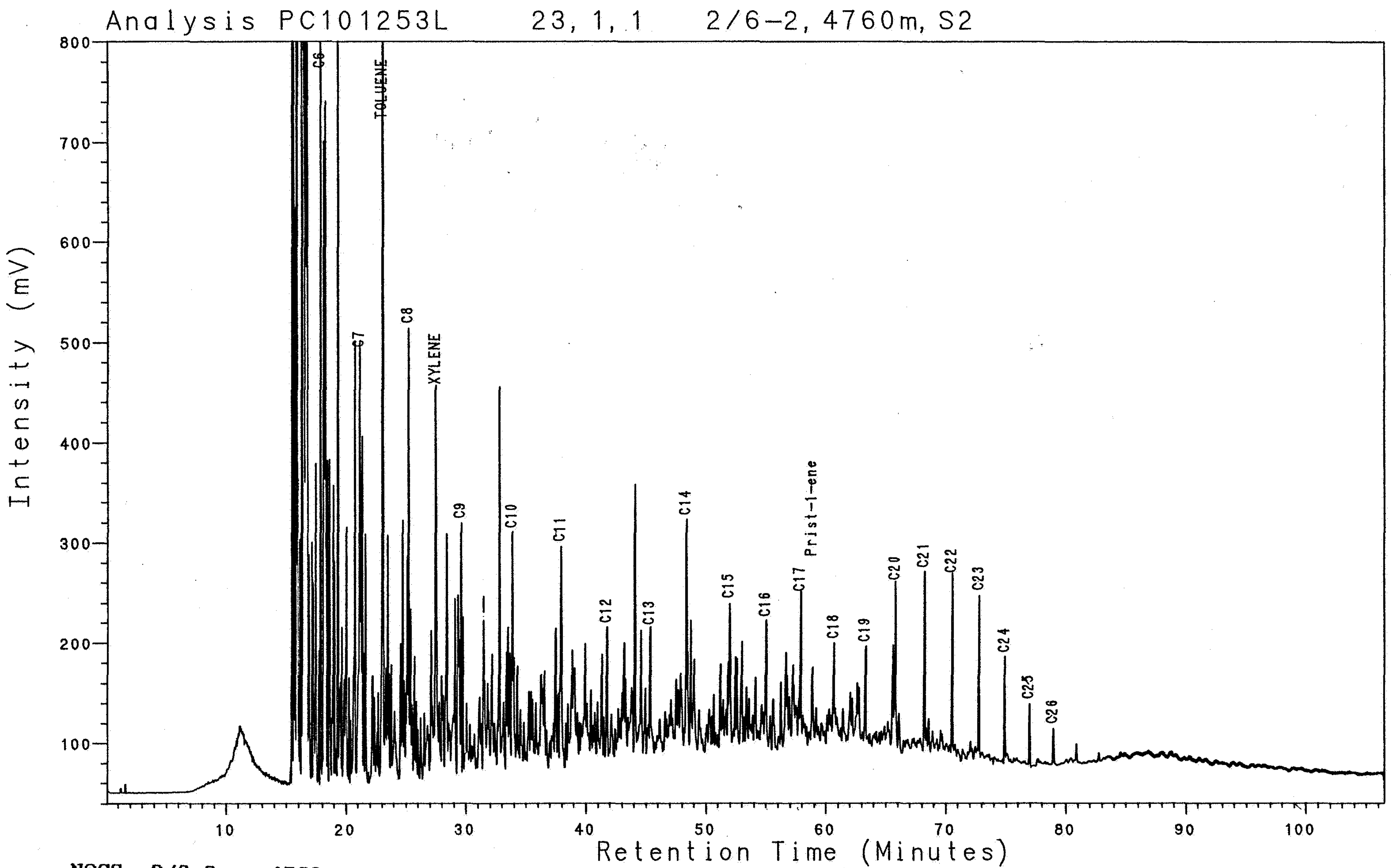
NOCS 2/6-2 4714m
PYROLYSIS GC (S2)
CLST: gy red

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



NOCS 2/6-2 4714m
PYROLYSIS GC (S2)
CLST:m gy to drk gy

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S



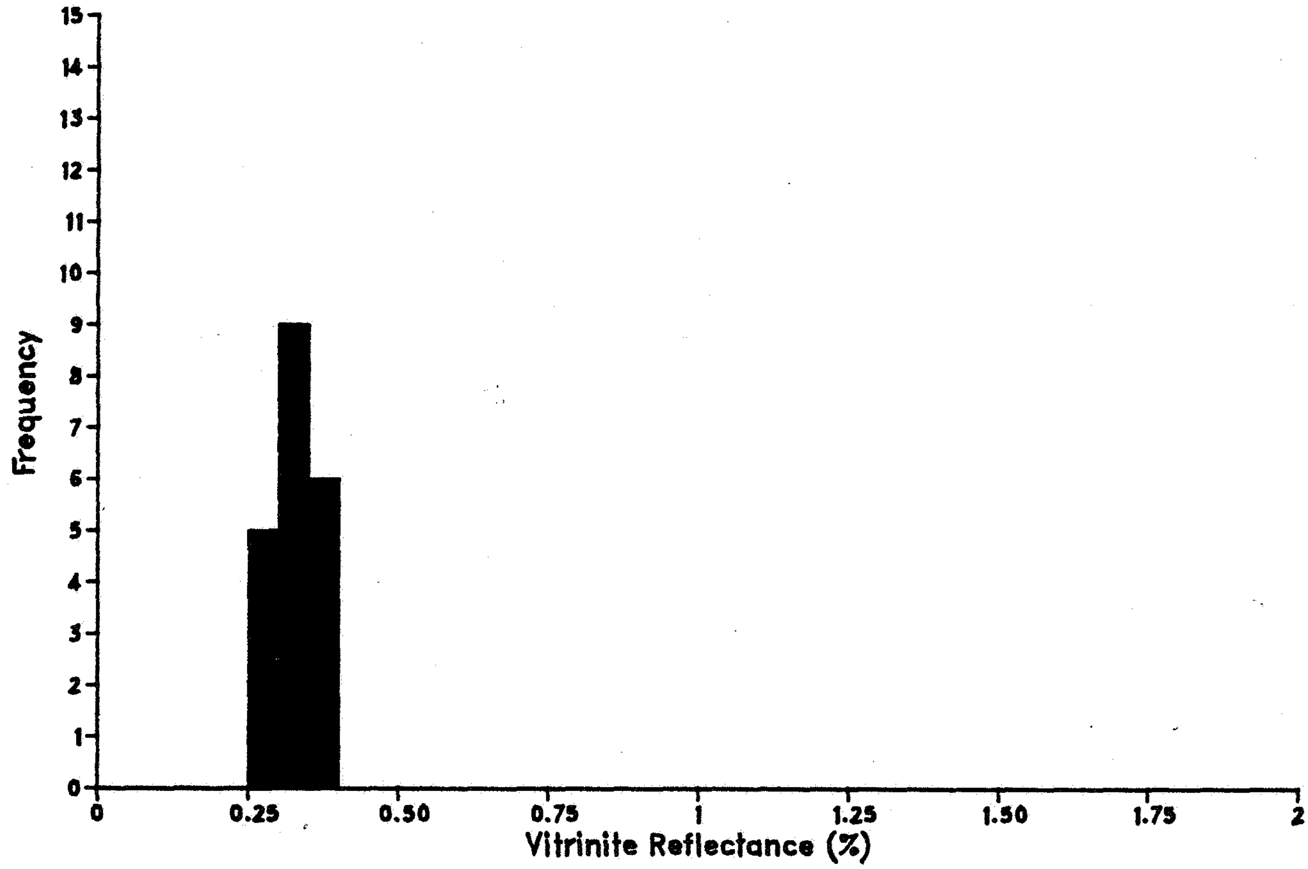
NOCS 2/6-2 4760m
PYROLYSIS GC (S2)
CLST: gy blk, ol blk

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 940.00(m)
Sample: 1- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.400):	0.32	0.03	20

Readings:

0.260	0.280	0.290	0.290	0.290	0.300	0.300	0.300	0.300	0.310
0.310	0.320	0.320	0.340	0.350	0.350	0.350	0.360	0.360	0.370

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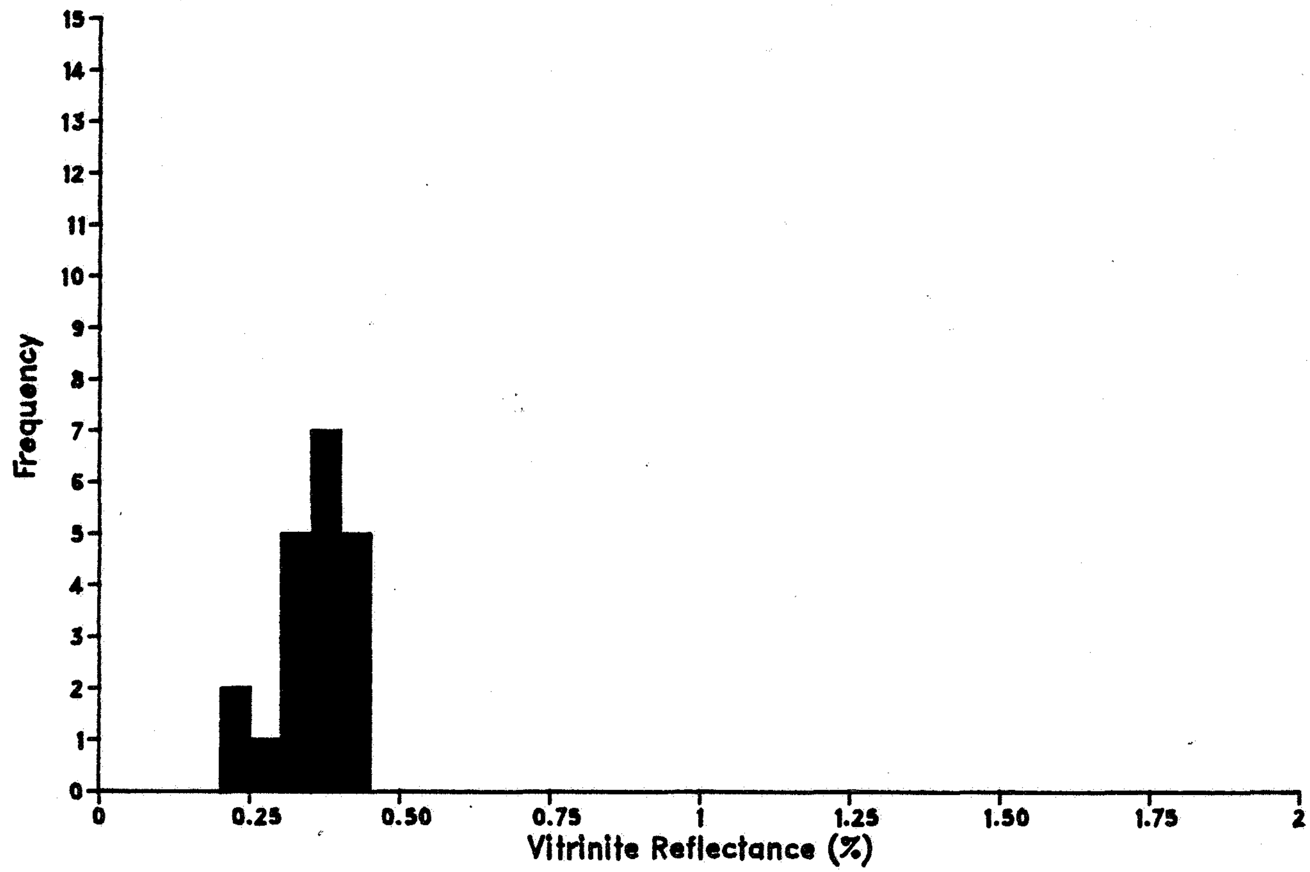
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 1100.00(m)
Sample: 2- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.200 to 0.450):	0.35	0.06	20

Readings:

0.240	0.240	0.260	0.310	0.320	0.330	0.330	0.340	0.370	0.370
0.380	0.380	0.380	0.390	0.390	0.400	0.400	0.410	0.410	0.440

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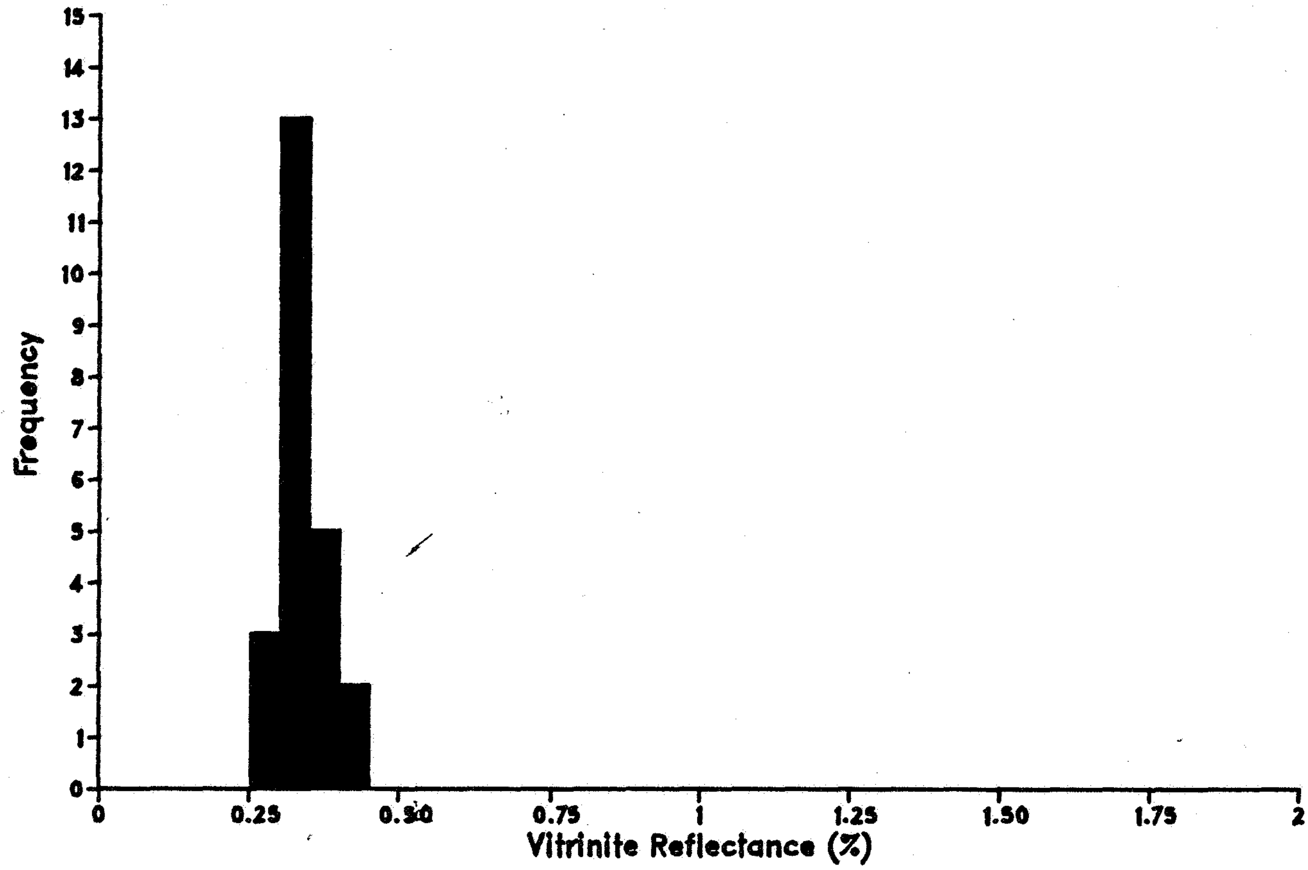
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 1280.00(m)
Sample: 3- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.450):	0.34	0.04	23

Readings:

0.270	0.270	0.290	0.310	0.310	0.310	0.320	0.320	0.330	0.330
0.340	0.340	0.340	0.340	0.340	0.340	0.360	0.360	0.370	0.370
0.390	0.400	0.400							

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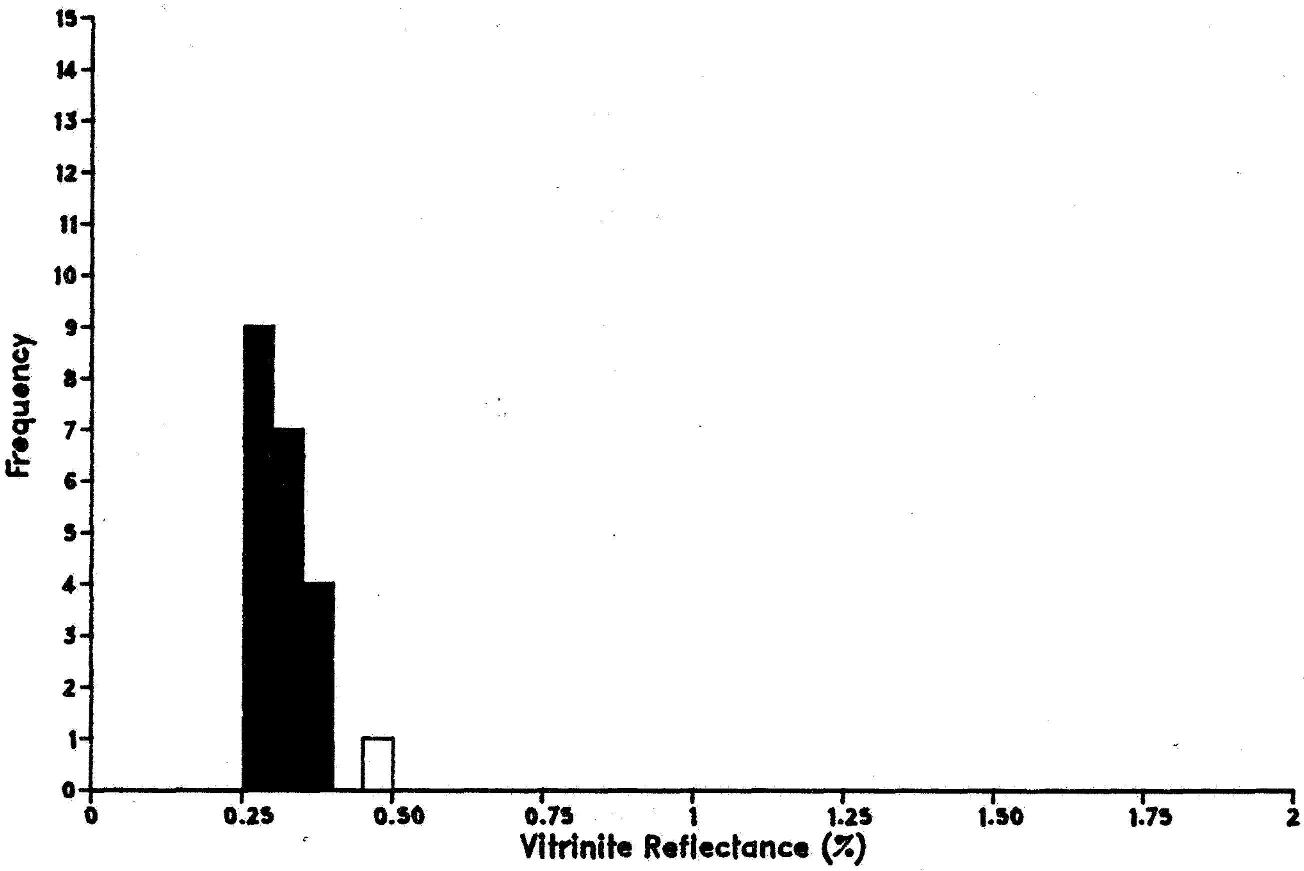
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 1460.00(m)
Sample: 4- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.400):	0.31	0.04	20
Population Two (from 0.450 to 0.500):	0.49	0.00	1

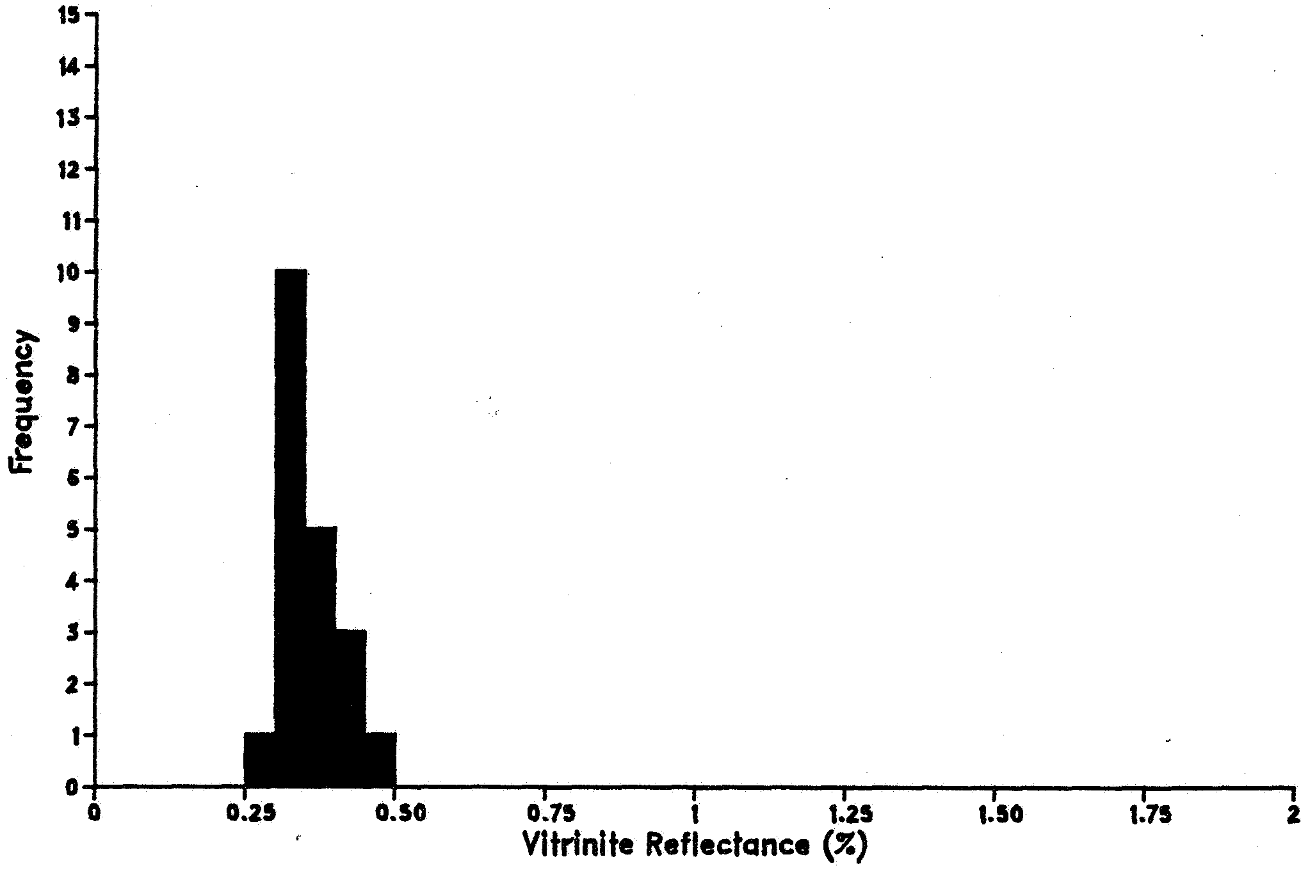
Readings:

0.250	0.270	0.280	0.280	0.280	0.290	0.290	0.290	0.290	0.310
0.310	0.310	0.310	0.310	0.330	0.330	0.350	0.360	0.360	0.390
0.490									

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 1620.00(m)
Sample: 5- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.500):	0.35	0.05	20

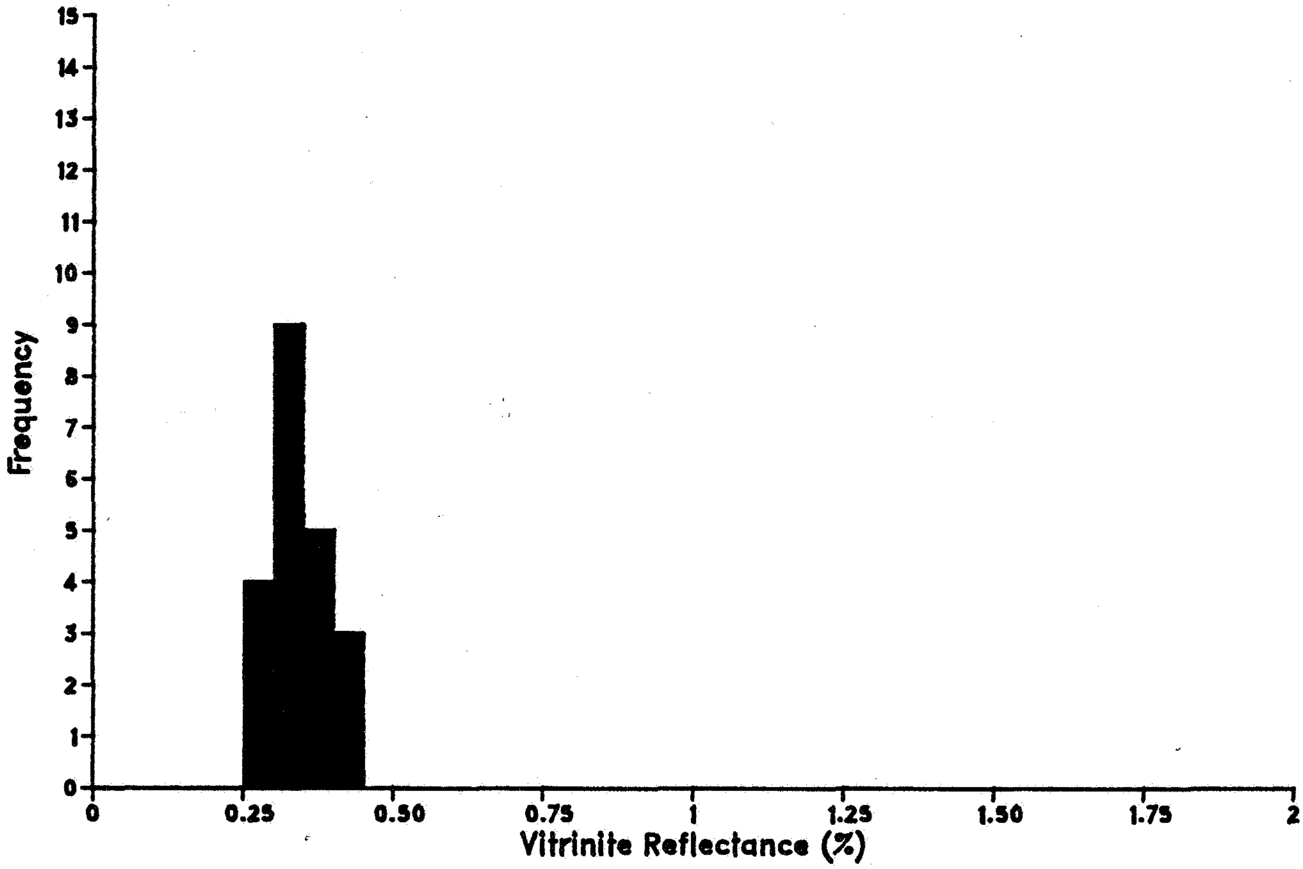
Readings:

0.280	0.300	0.310	0.310	0.320	0.320	0.320	0.320	0.330	0.330
0.340	0.350	0.350	0.360	0.360	0.370	0.400	0.420	0.430	0.460

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 1800.00(m)
Sample: 6- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.450):	0.34	0.04	21

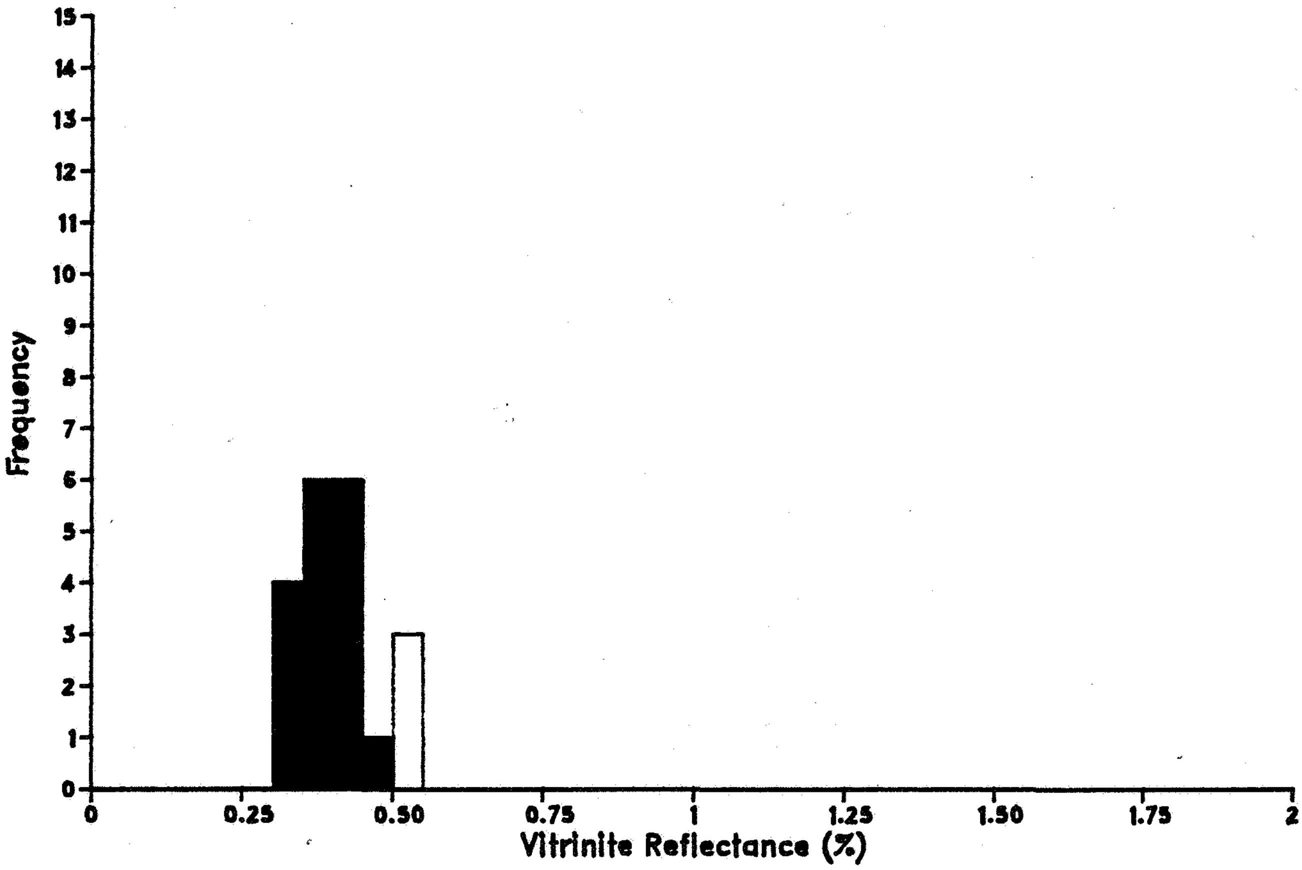
Readings:

0.270	0.280	0.280	0.290	0.310	0.310	0.320	0.320	0.330	0.330
0.330	0.330	0.340	0.350	0.370	0.370	0.370	0.370	0.410	0.420
0.420									

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 1960.00(m)
Sample: 7- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.300 to 0.499):	0.38	0.04	17
Population Two (from 0.500 to 0.550):	0.52	0.02	3

Readings:

0.300	0.330	0.330	0.340	0.370	0.370	0.380	0.380	0.390	0.390
0.400	0.400	0.400	0.410	0.430	0.430	0.470	0.500	0.520	0.530

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Vitrinite Reflectance Histogram

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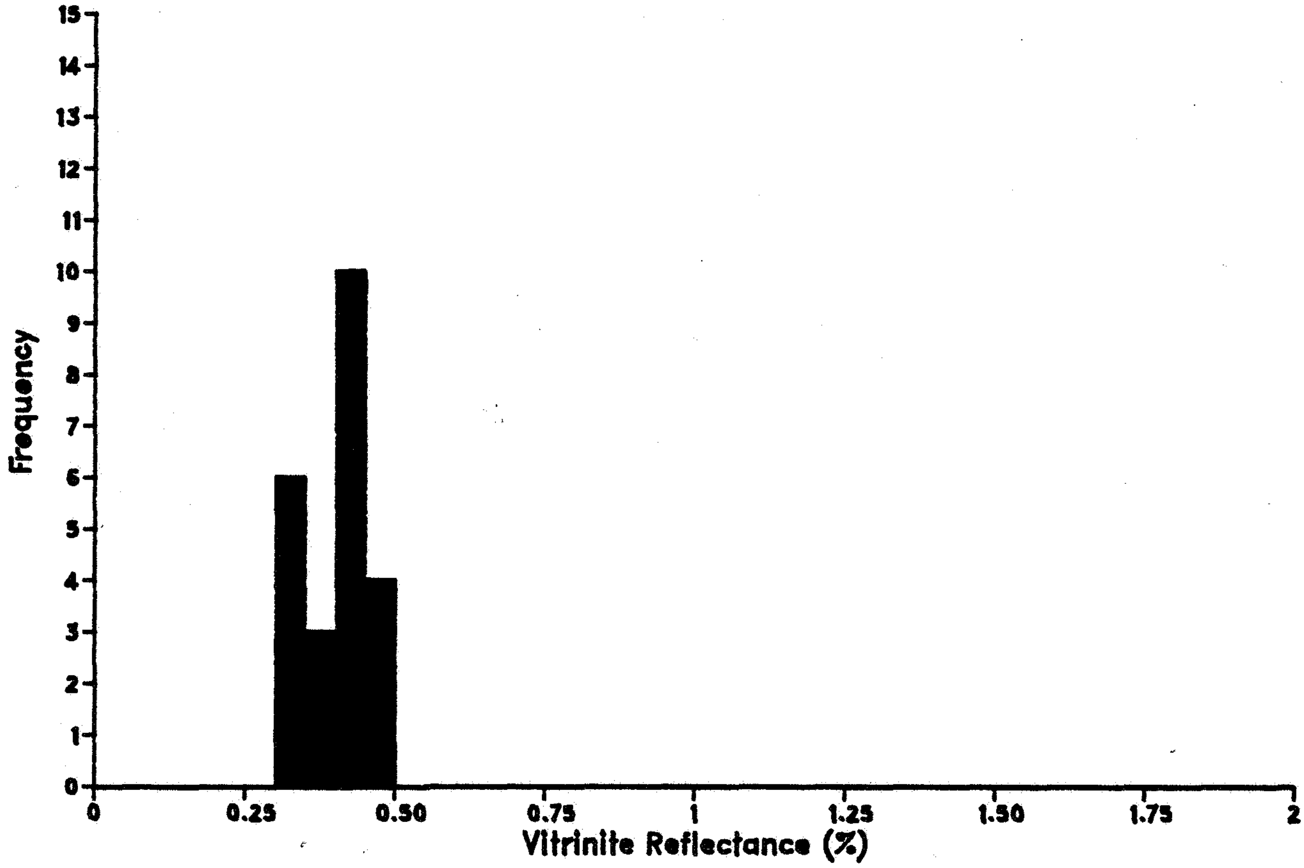
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 2140.00(m)
Sample: 8-0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.300 to 0.500):	0.40	0.05	23

Readings:

0.310	0.320	0.320	0.320	0.330	0.340	0.370	0.380	0.390	0.400
0.400	0.410	0.410	0.410	0.410	0.420	0.420	0.420	0.440	0.460
0.470	0.470	0.490							

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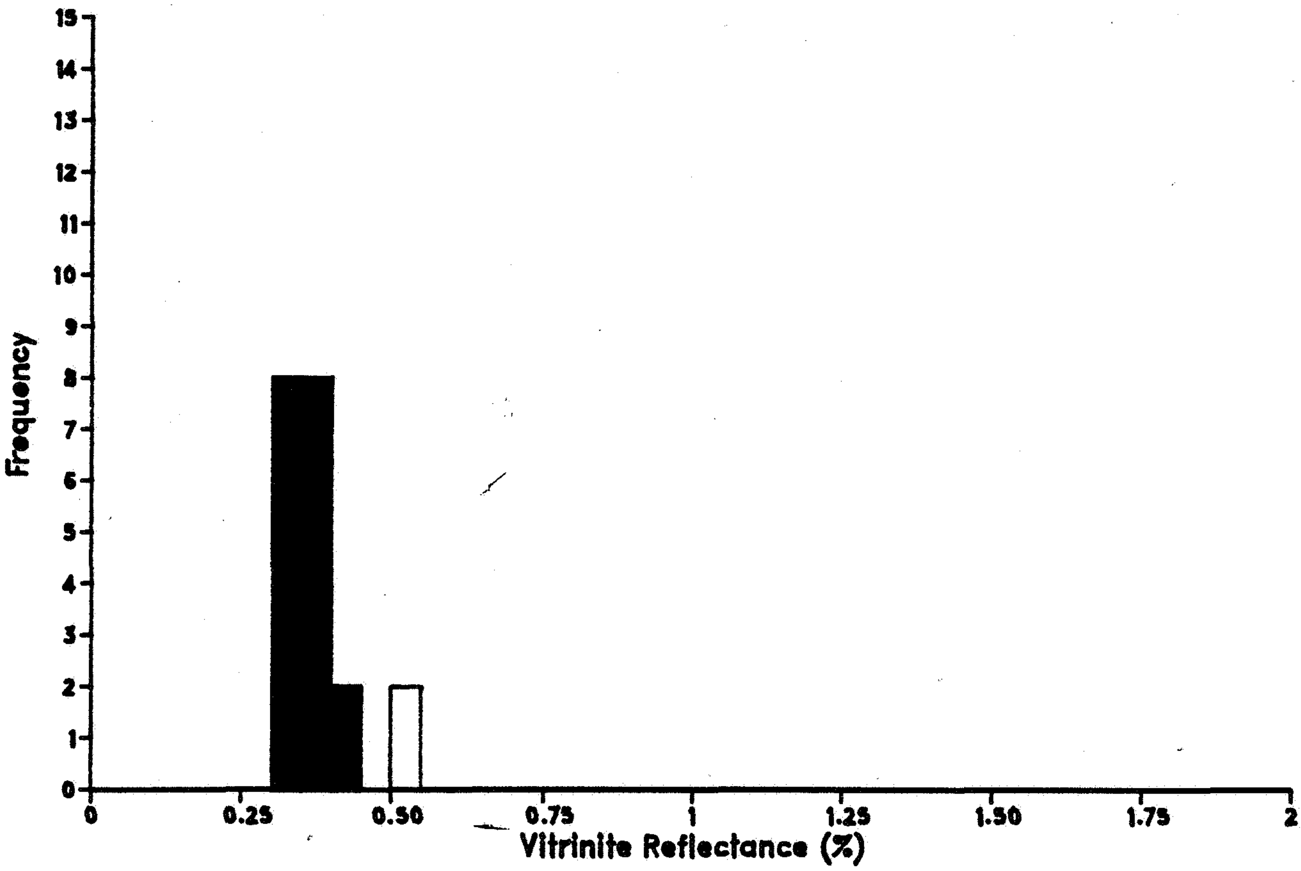
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 2300.00(m)
Sample: 9- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.300 to 0.450):	0.35	0.03	18
Population Two (from 0.500 to 0.550):	0.53	0.02	2

Readings:

0.300	0.310	0.320	0.320	0.340	0.340	0.340	0.340	0.350	0.360
0.360	0.360	0.360	0.370	0.380	0.390	0.400	0.410	0.510	0.540

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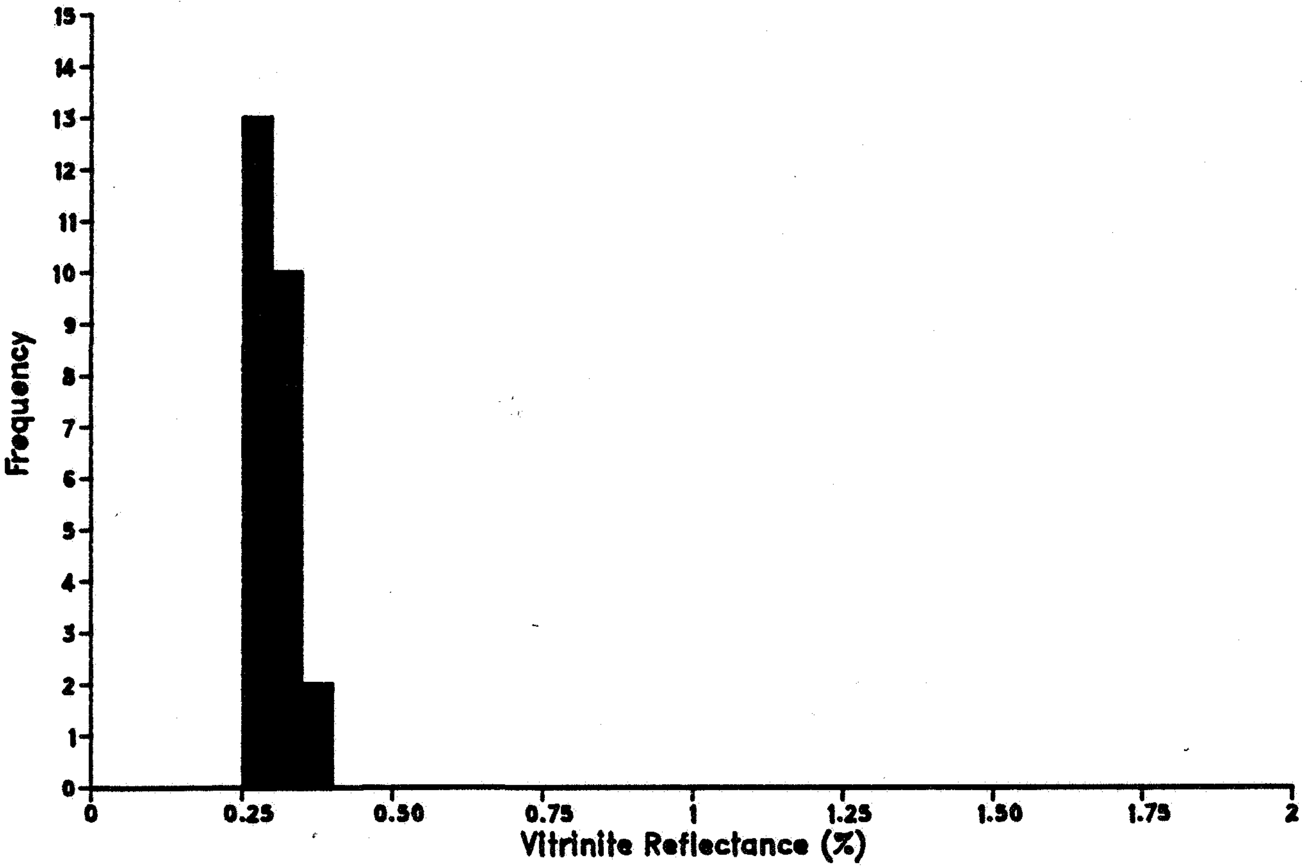
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 2480.00(m)
Sample: 10- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.400):	0.30	0.04	25

Readings:

0.250	0.250	0.260	0.270	0.270	0.270	0.270	0.270	0.270	0.280
0.280	0.280	0.290	0.300	0.310	0.310	0.320	0.320	0.330	0.330
0.340	0.340	0.340	0.360	0.380					

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Vitrinite Reflectance Histogram

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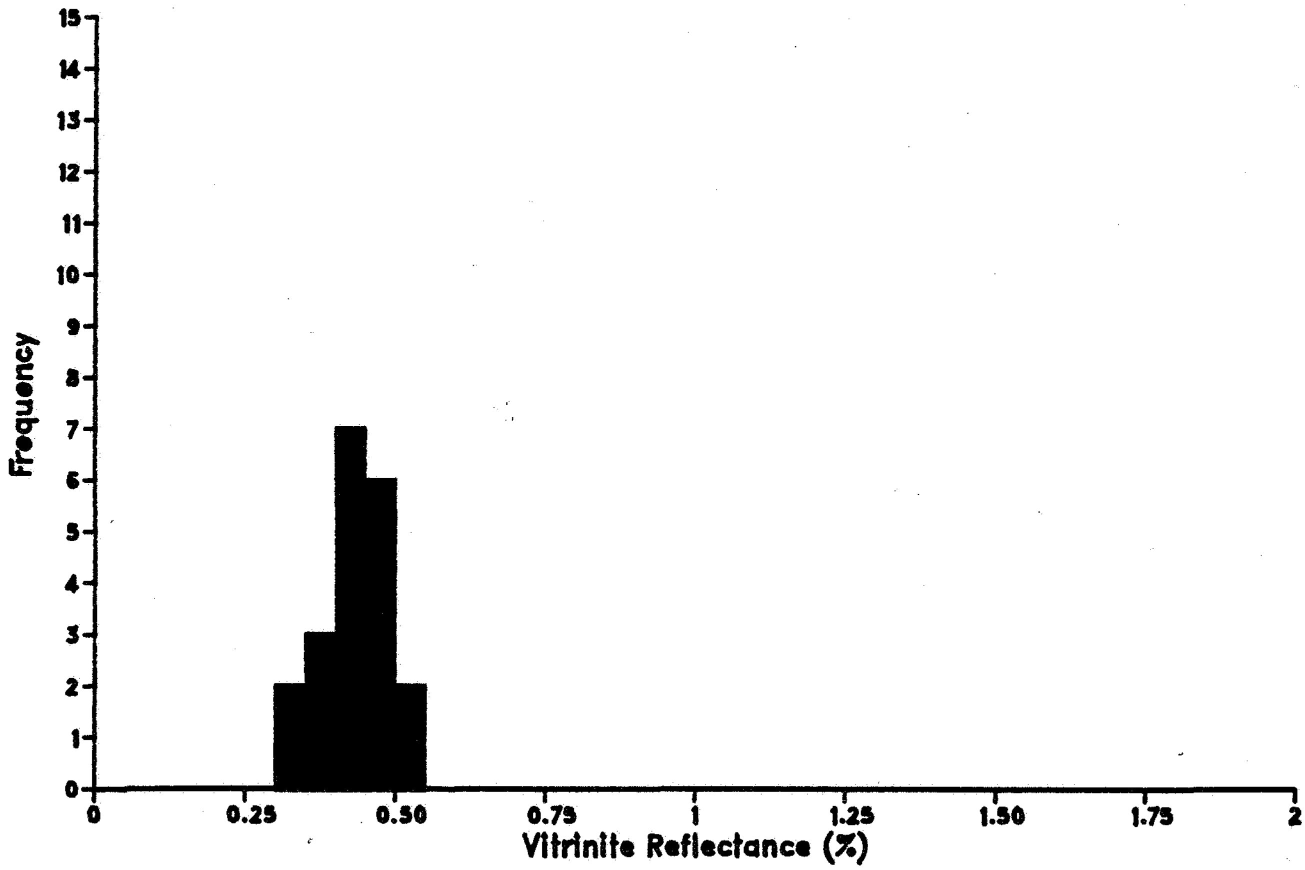
Well: NOCS 2/6-2
Depth: 2666.00(m)
Sample: 11- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.300 to 0.550):	0.43	0.06	20

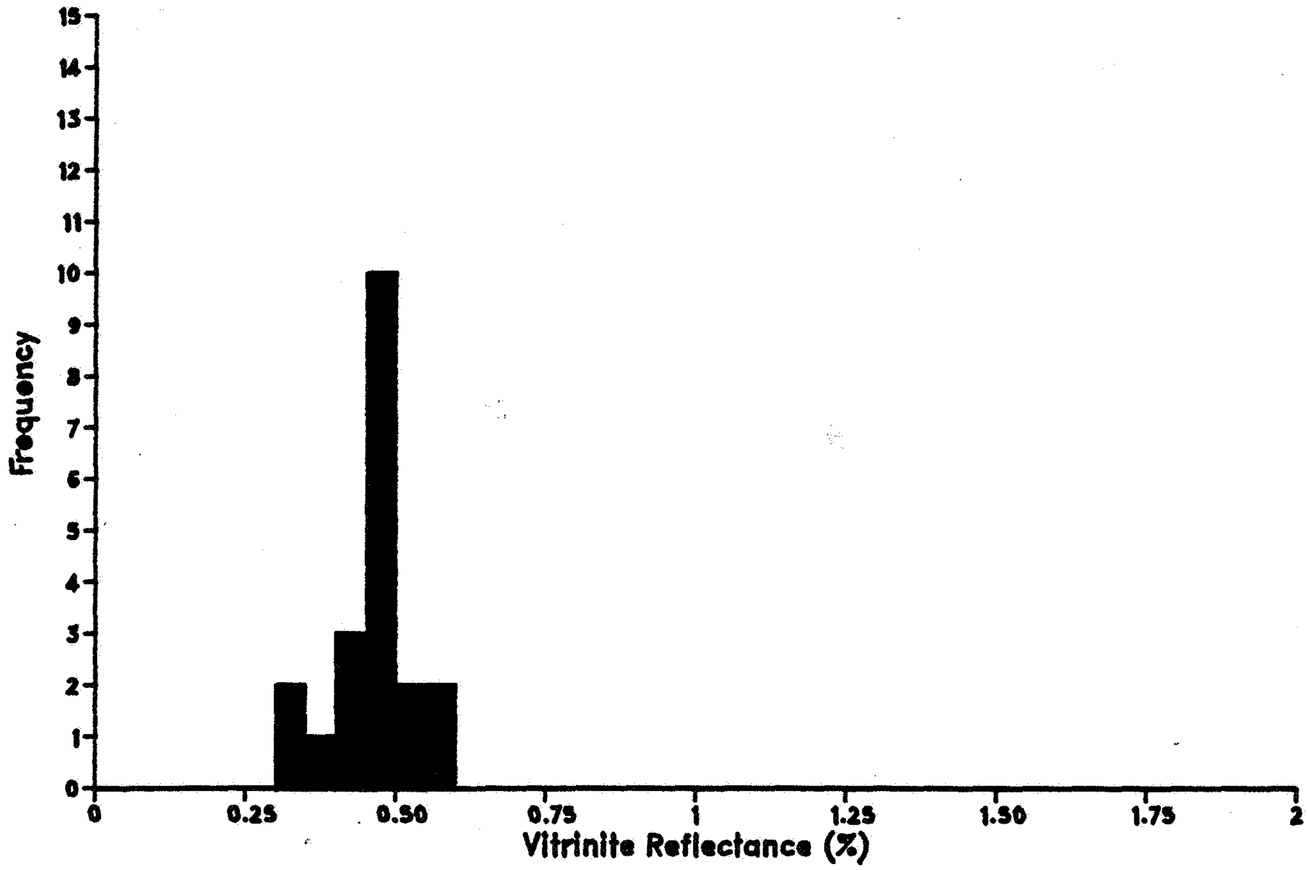
Readings:

0.320	0.330	0.360	0.370	0.380	0.400	0.410	0.410	0.430	0.440
0.440	0.440	0.460	0.460	0.470	0.480	0.480	0.490	0.500	0.540

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 2820.00(m)
Sample: 12- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.300 to 0.600):	0.46	0.07	20

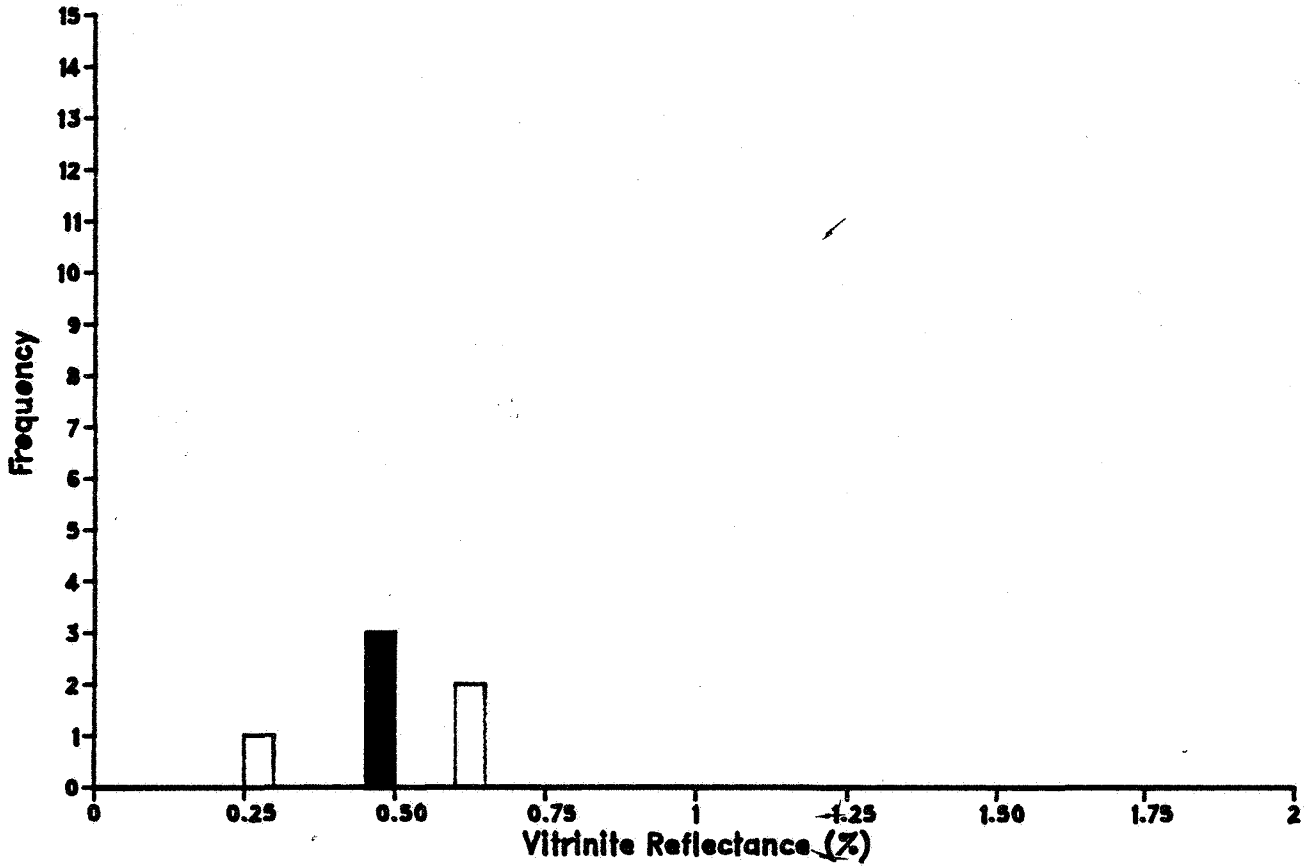
Readings:

0.320	0.340	0.350	0.400	0.420	0.440	0.450	0.450	0.460	0.460
0.470	0.470	0.480	0.480	0.480	0.480	0.520	0.520	0.560	0.560

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 3000.00(m)
Sample: 13- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.500):	0.48	0.01	3
Population Two (from 0.250 to 0.300):	0.28	0.00	1
Population Three (from 0.600 to 0.650):	0.62	0.01	2

Readings:

0.280 0.470 0.470 0.490 0.610 0.630

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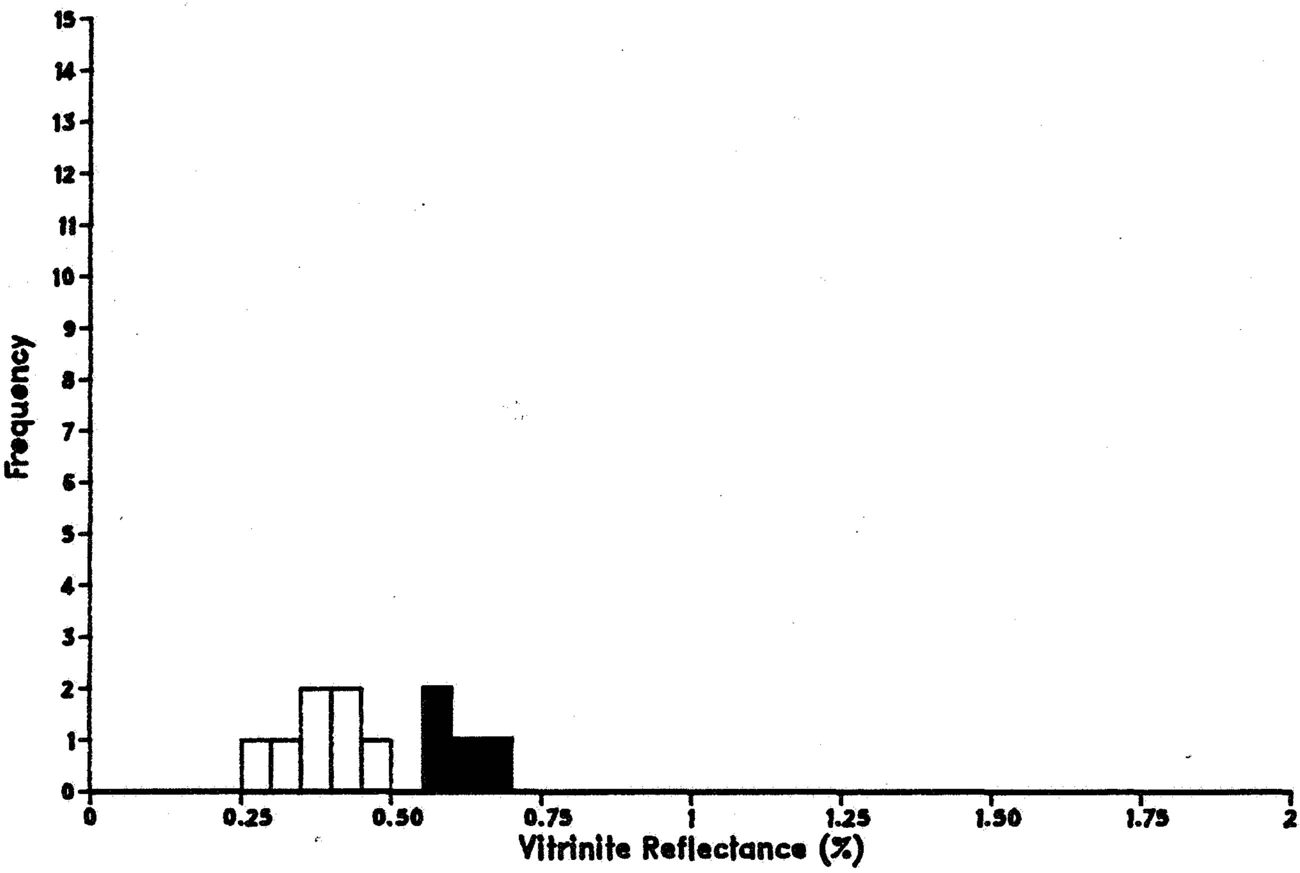
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 3170.00(m)
Sample: 14- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.550 to 0.700):	0.60	0.05	4
Population Two (from 0.250 to 0.500):	0.37	0.06	7

Readings:

0.260 0.340 0.350 0.370 0.410 0.410 0.460 0.550 0.570 0.600
0.660

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Vitrinite Reflectance Histogram

GEOLAB NOR
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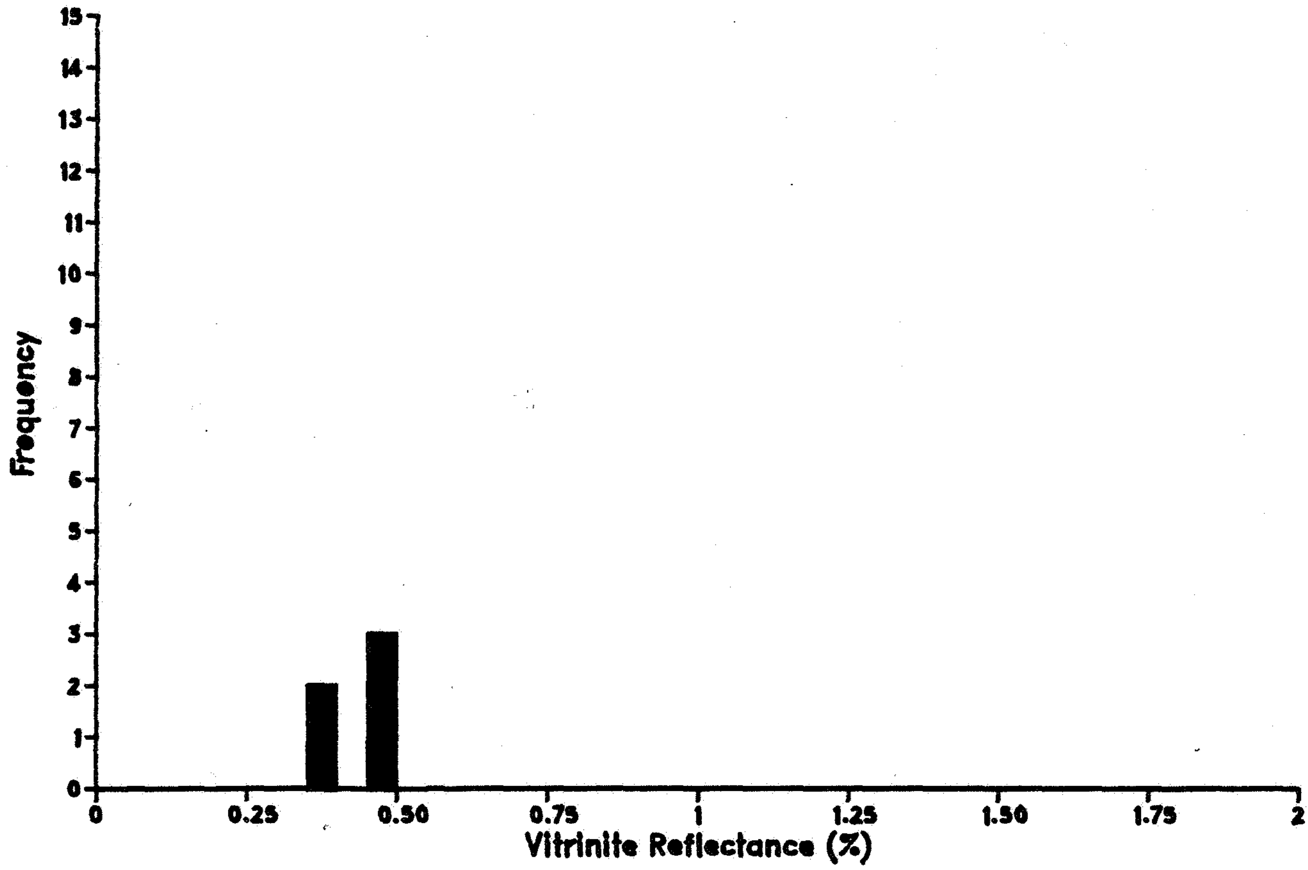
Well: NOCS 2/6-2
Depth: 3670.00(m)
Sample: 17- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.350 to 0.500):	0.42	0.06	5

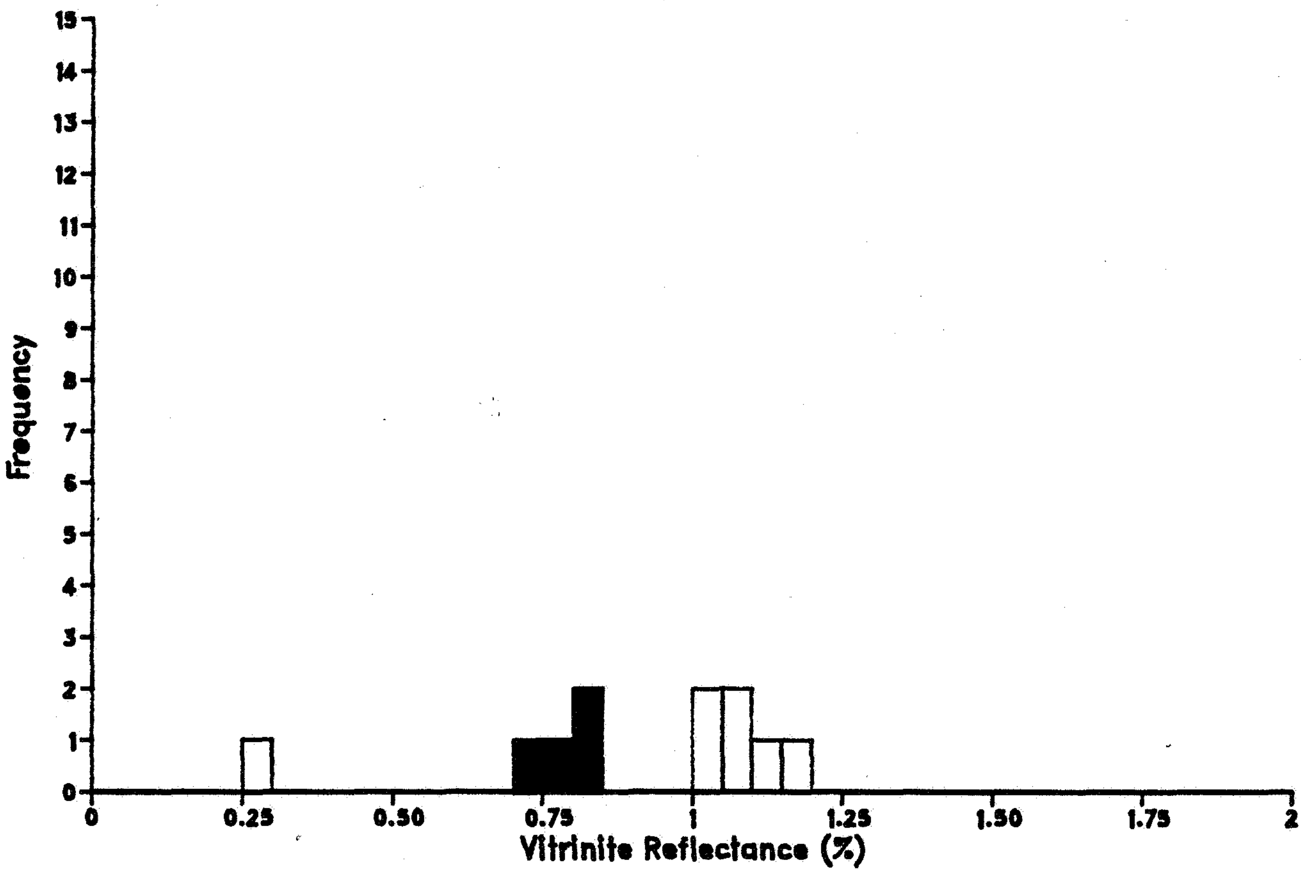
Readings:

0.360 0.360 0.450 0.460 0.480

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4110.00(m)
Sample: 29- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.700 to 0.849):	0.79	0.04	4
Population Two (from 0.250 to 0.300):	0.28	0.00	1
Population Three (from 1.000 to 1.200):	1.09	0.06	6

Readings:

0.278 0.740 0.792 0.801 0.839 1.025 1.030 1.085 1.090 1.142
1.160

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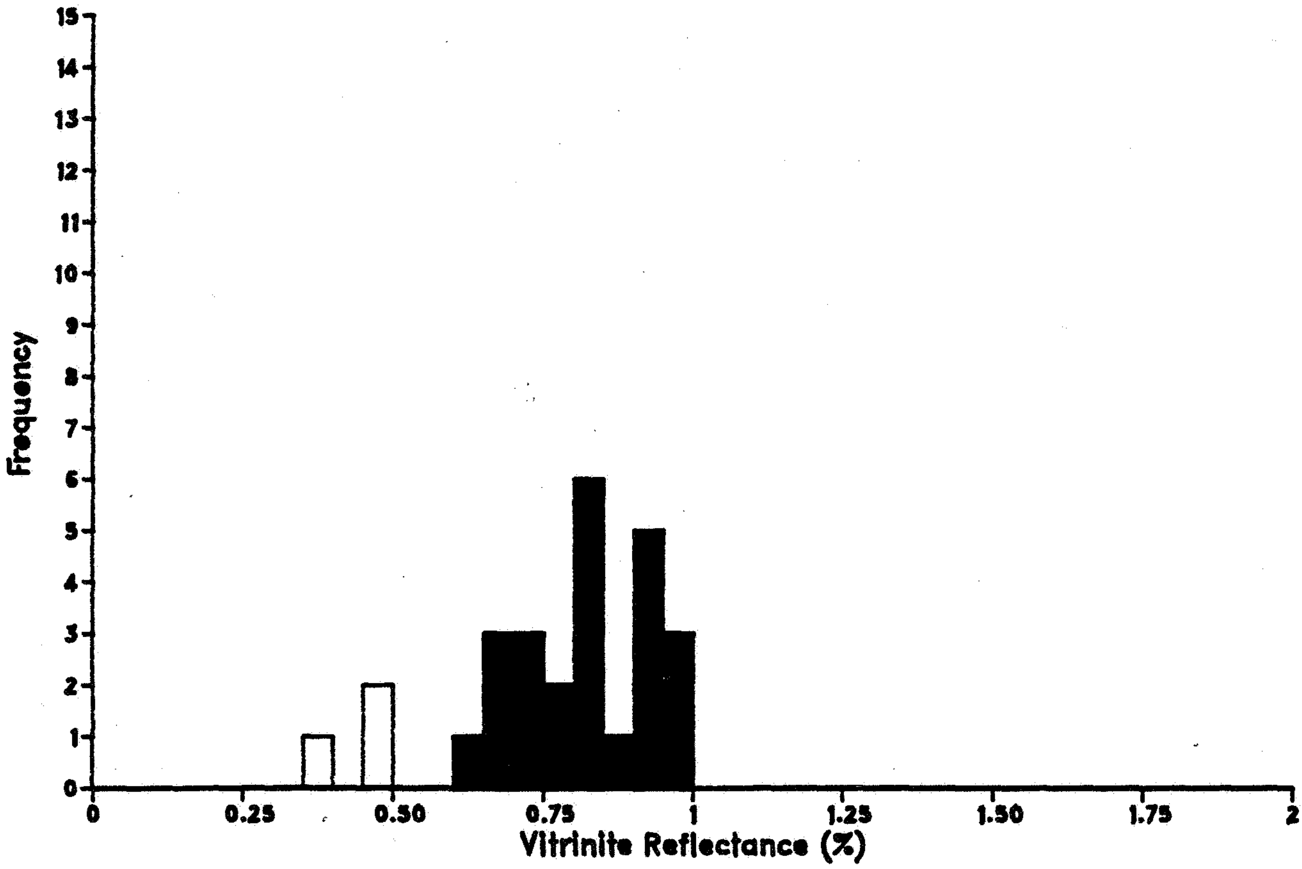
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4200.00(m)
Sample: 38- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.600 to 1.000):	0.82	0.10	24
Population Two (from 0.350 to 0.500):	0.45	0.06	3

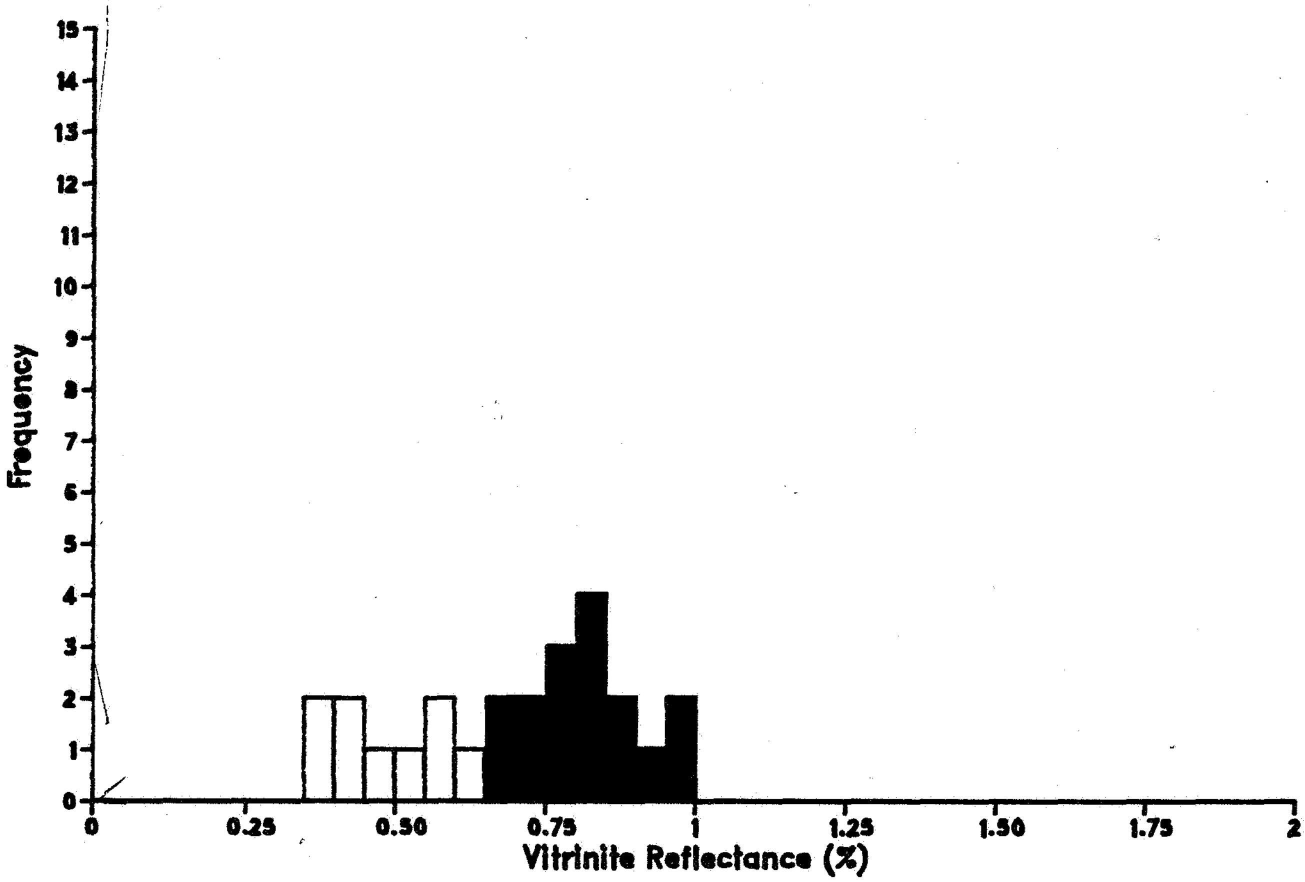
Readings:

0.384	0.475	0.485	0.644	0.653	0.663	0.694	0.731	0.732	0.741
0.787	0.799	0.804	0.812	0.814	0.819	0.820	0.827	0.891	0.904
0.909	0.912	0.924	0.924	0.953	0.993	0.998			

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4300.00(m)
Sample: 49- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.650 to 1.000):	0.81	0.09	16
Population Two (from 0.350 to 0.649):	0.49	0.08	9

Readings:

0.388	0.392	0.443	0.448	0.492	0.501	0.553	0.565	0.613	0.679
0.688	0.708	0.730	0.753	0.782	0.796	0.807	0.817	0.842	0.844
0.855	0.864	0.931	0.951	0.979					

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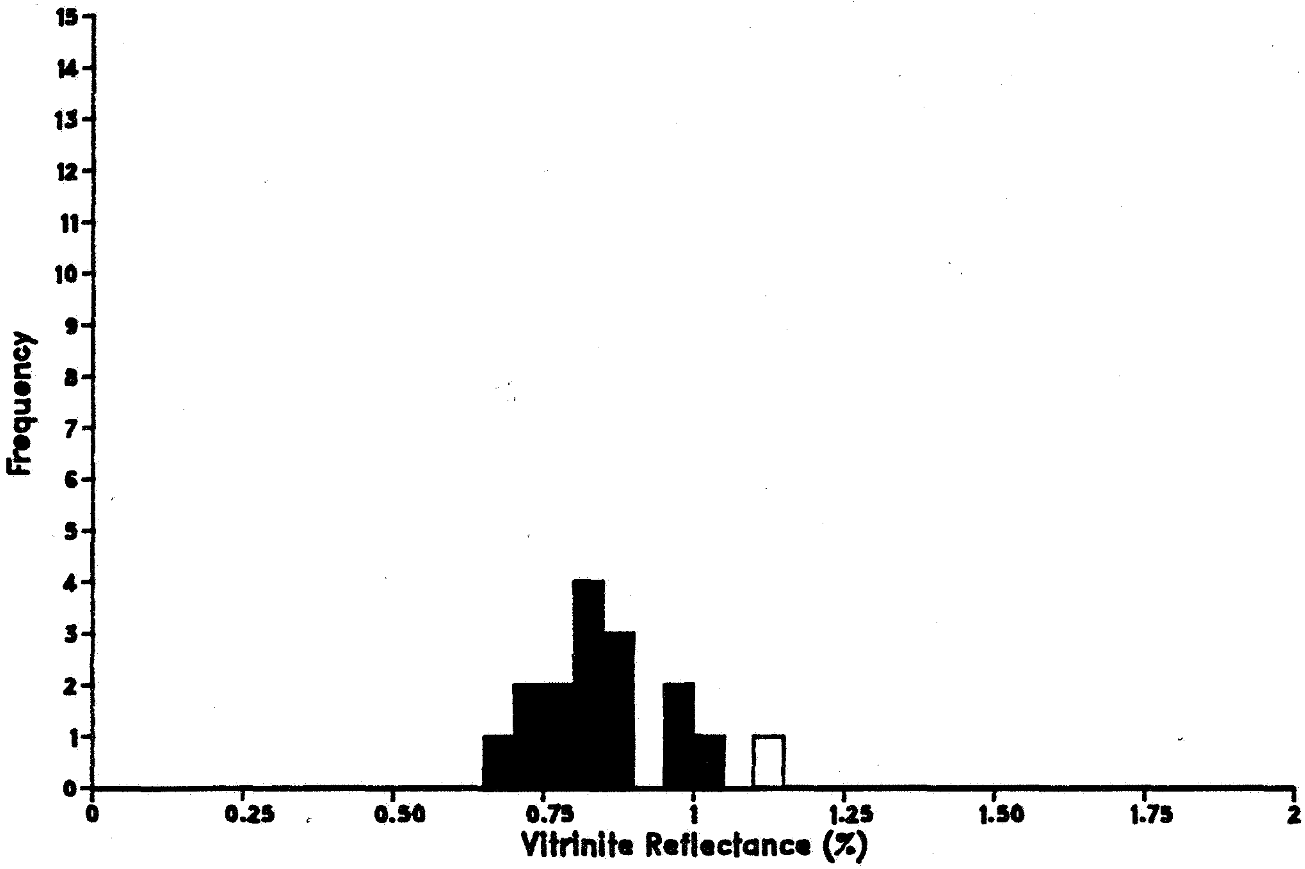
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4398.00(m)
Sample: 62- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.650 to 1.050):	0.84	0.10	15
Population Two (from 1.100 to 1.150):	1.12	0.00	1

Readings:

0.658	0.718	0.746	0.750	0.793	0.803	0.814	0.821	0.835	0.877
0.884	0.898	0.956	0.981	1.049	1.120				

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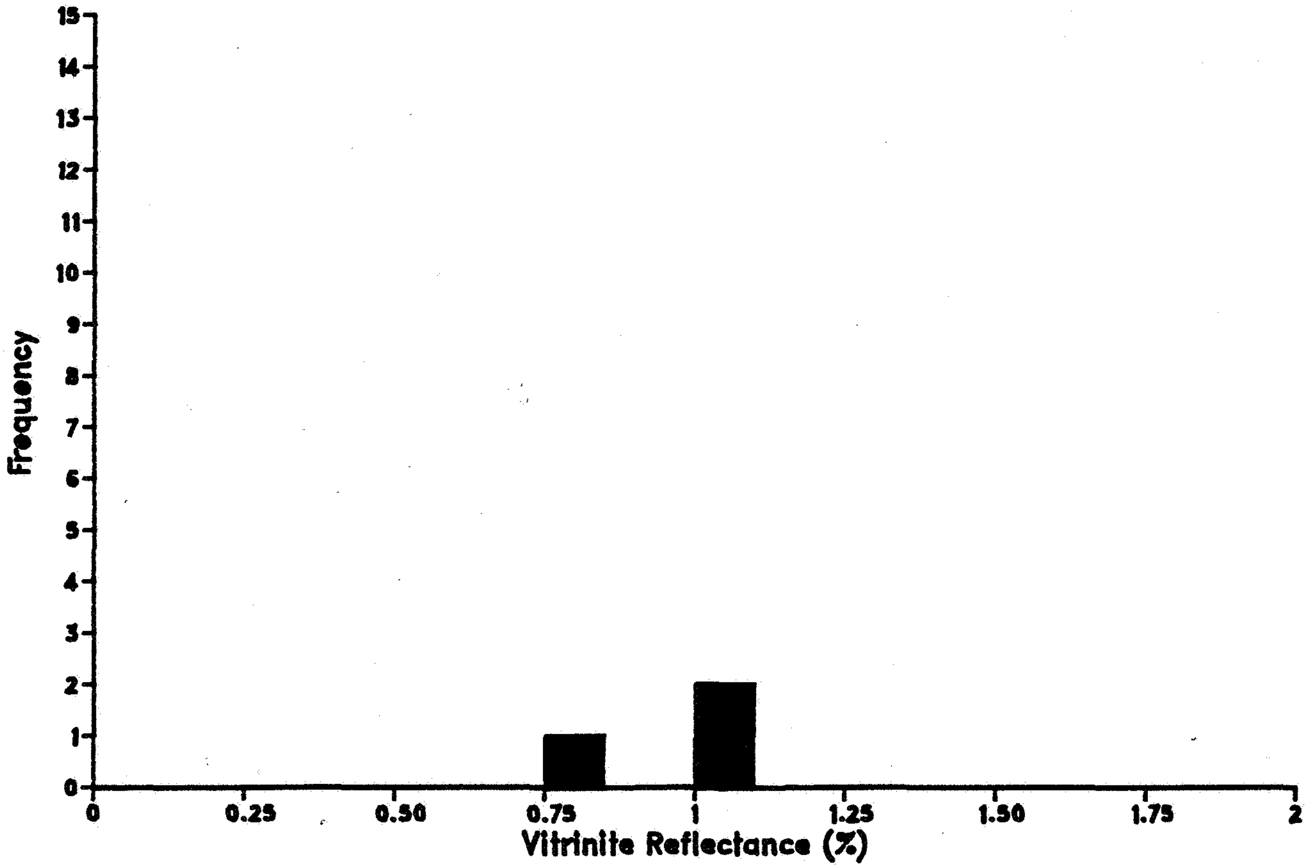
Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4498.00(m)
Sample: 77- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.750 to 1.100):	0.97	0.14	6

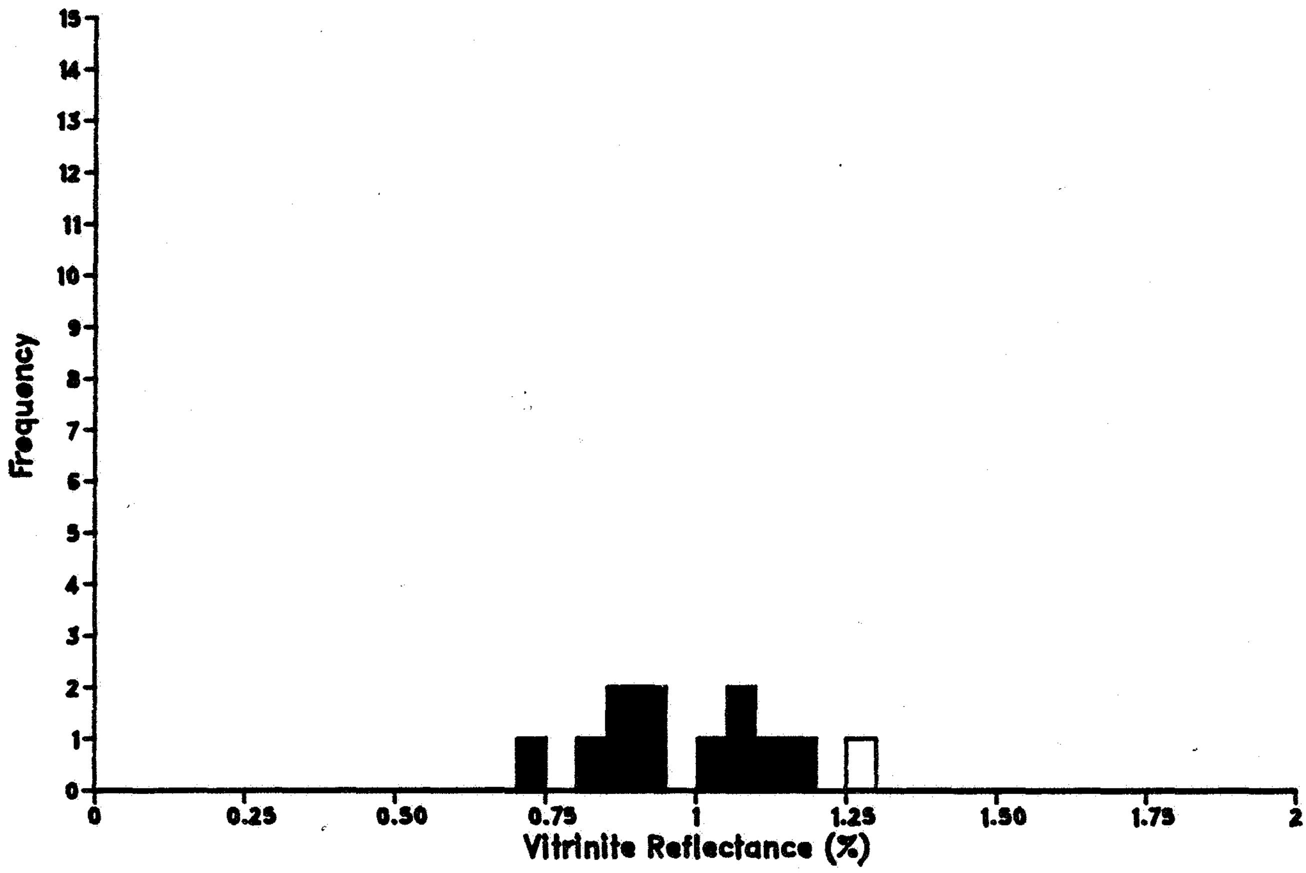
Readings:

0.557	0.774	0.813	1.017	1.049	1.051	1.087

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4616.00(m)
Sample: 96- 0b



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.700 to 1.200):	0.97	0.14	11
Population Two (from 1.250 to 1.300):	1.29	0.00	1

Readings:

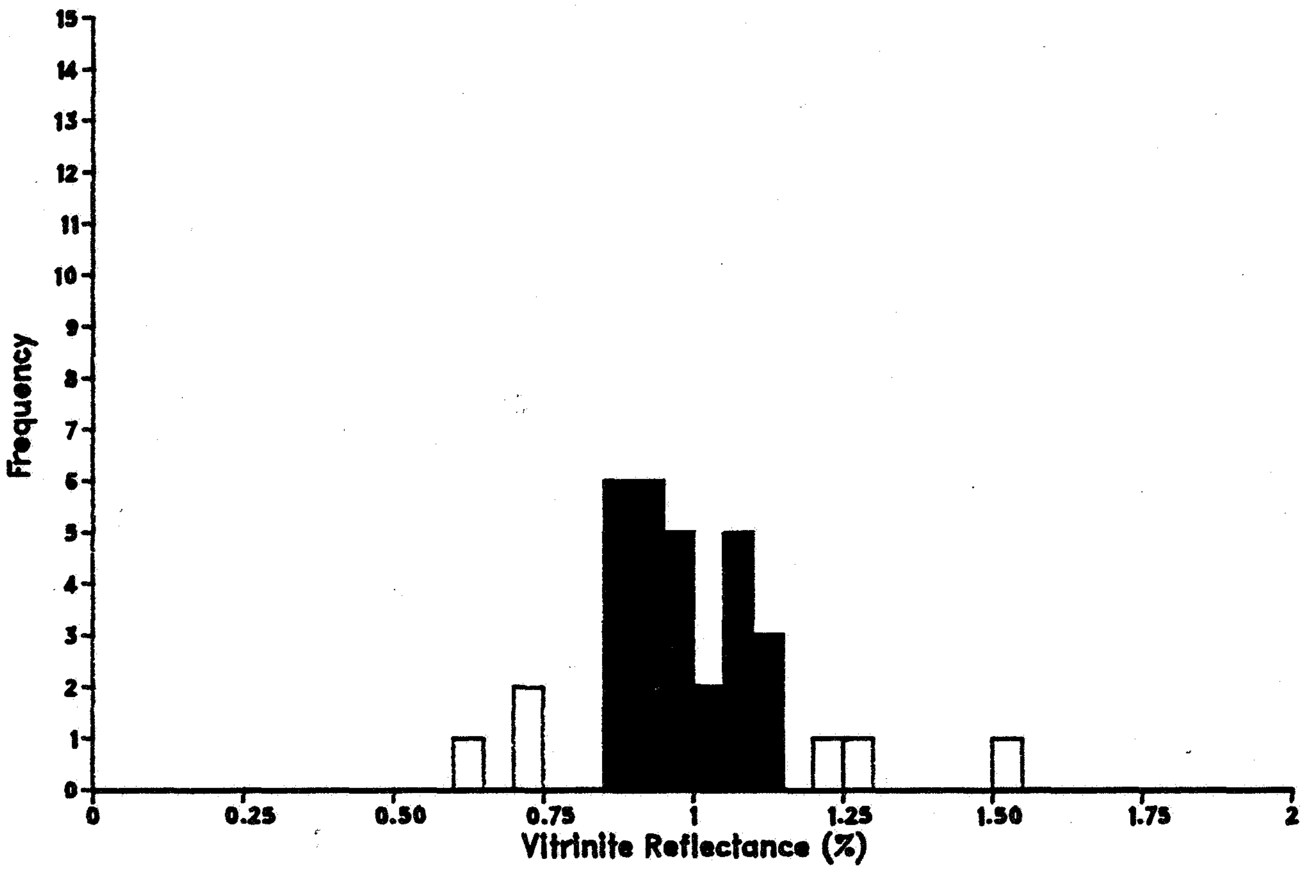
0.709 0.843 0.859 0.888 0.924 0.938 1.027 1.065 1.069 1.130
1.169 1.292

GEOLAB NOR a/s — Geochemical Laboratories of Norway

Vitrinite Reflectance Histogram

GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

Well: NOCS 2/6-2
Depth: 4714.00(m)
Sample: 118- 0b

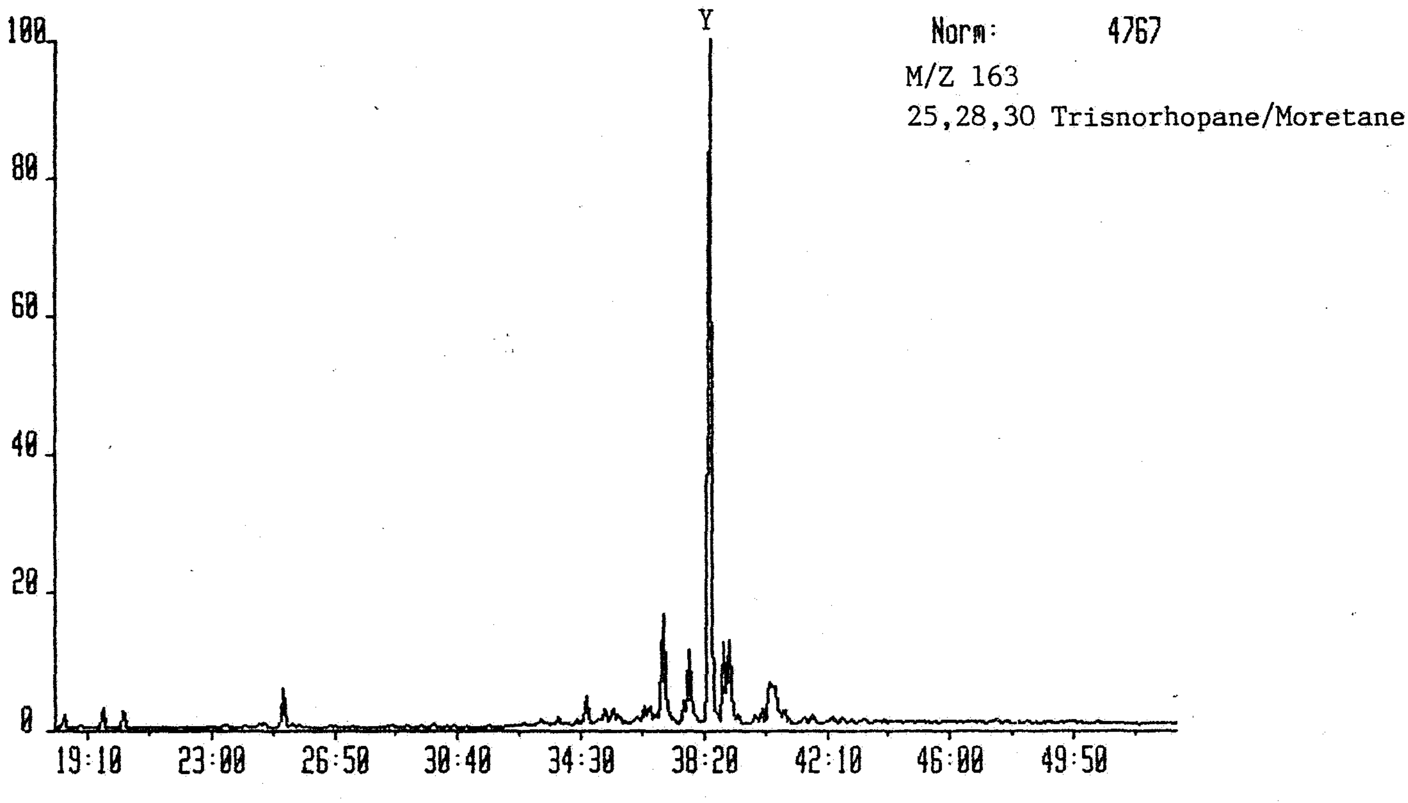


Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.850 to 1.150):	0.98	0.09	27
Population Two (from 0.600 to 0.750):	0.70	0.07	3
Population Three (from 1.200 to 1.550):	1.35	0.15	3

Readings:

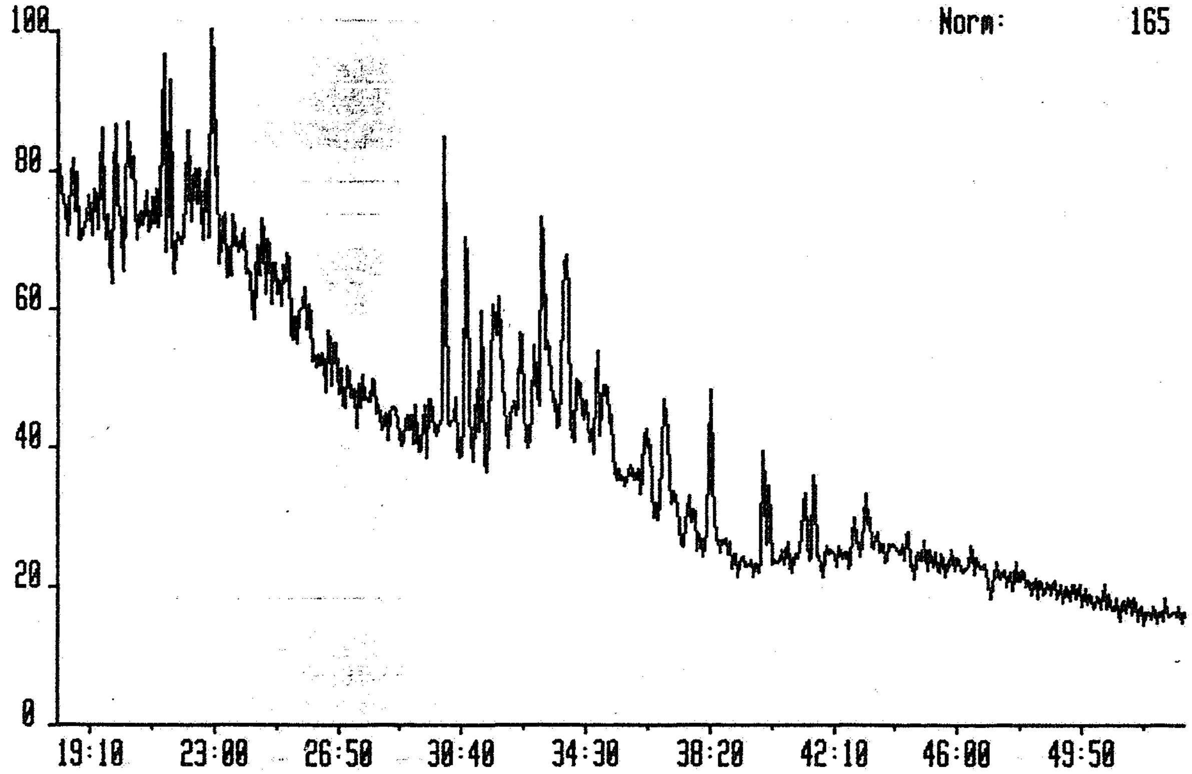
0.618	0.725	0.744	0.862	0.868	0.875	0.876	0.880	0.899	0.901
0.911	0.924	0.935	0.940	0.945	0.971	0.977	0.986	0.995	0.999
1.004	1.022	1.065	1.066	1.070	1.087	1.090	1.138	1.142	1.144
1.246	1.283	1.518							

EXAMPLE OF PEAK IDENTIFICATION FOR 25, 28, 30 TRISNORHOPANE/MORETANE

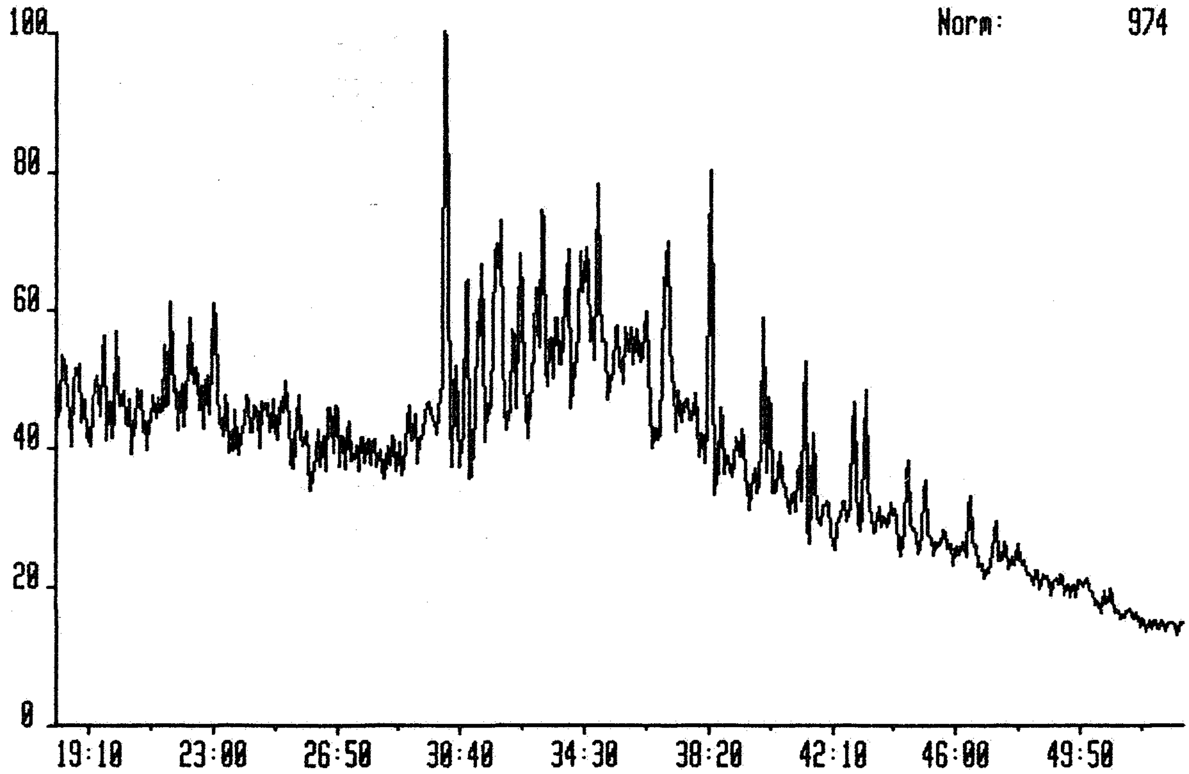


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

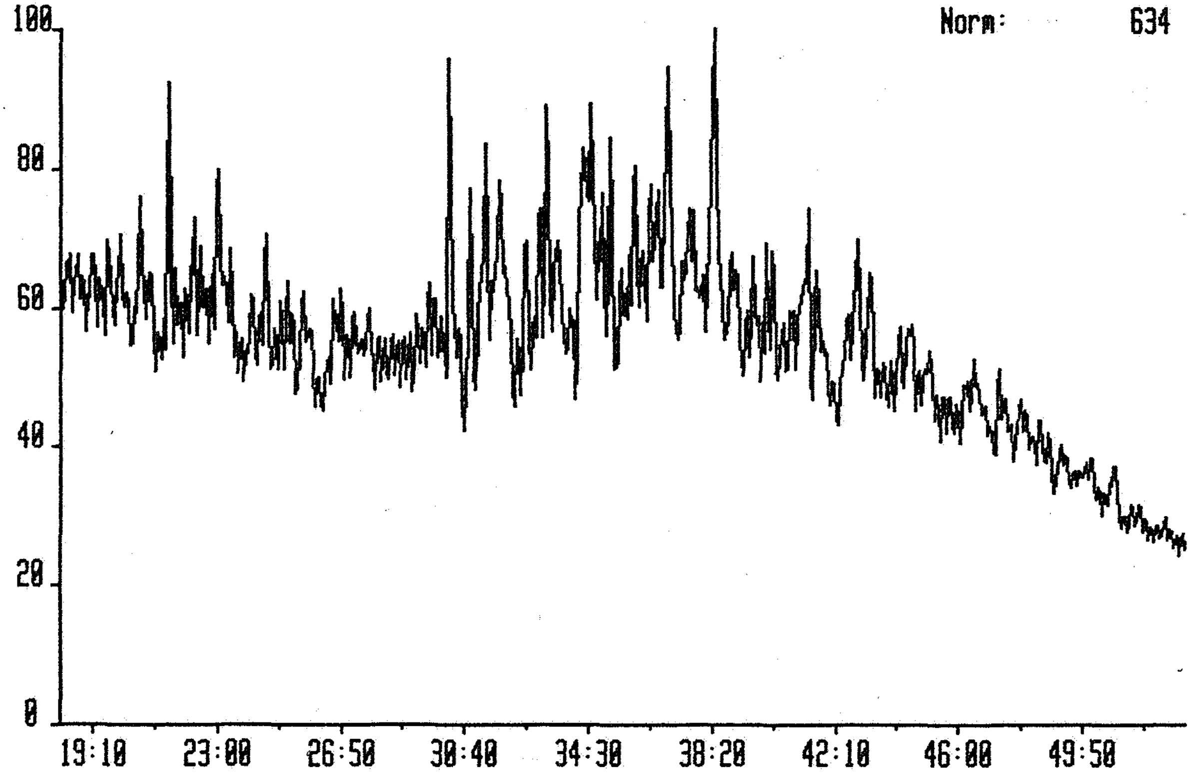
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 163.1485
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



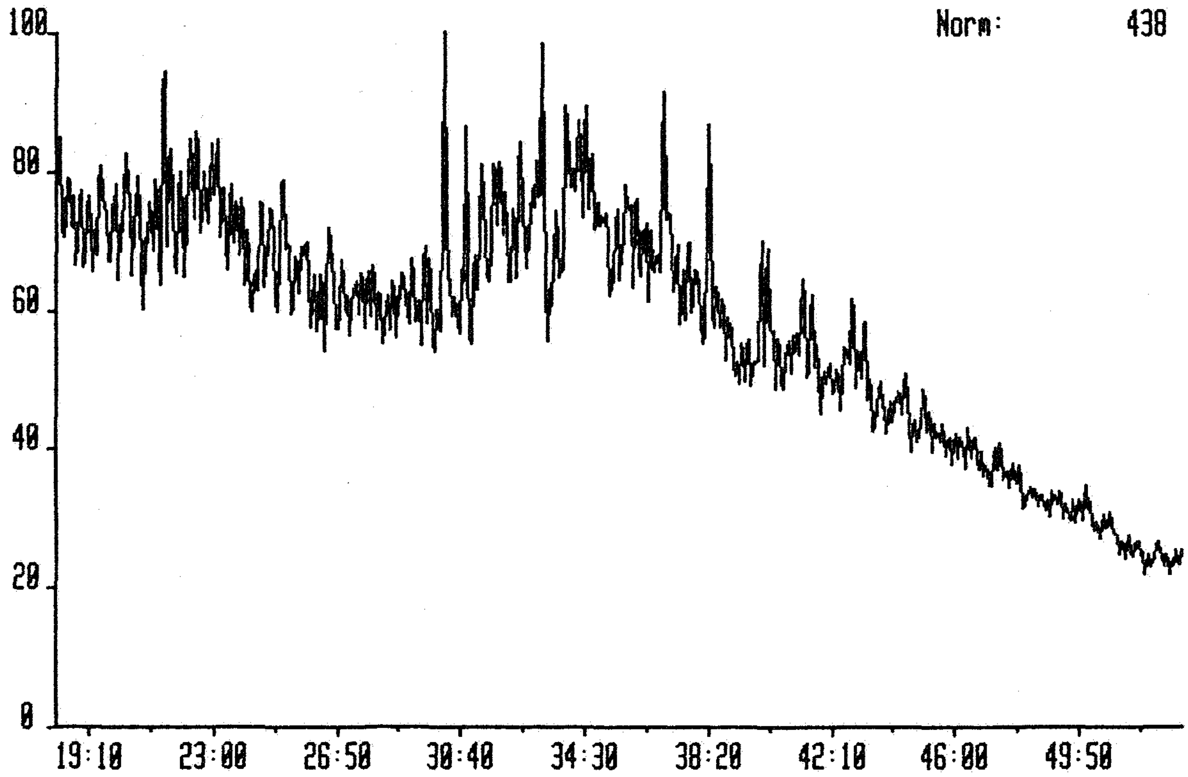
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 163.1485
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 163.1485
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

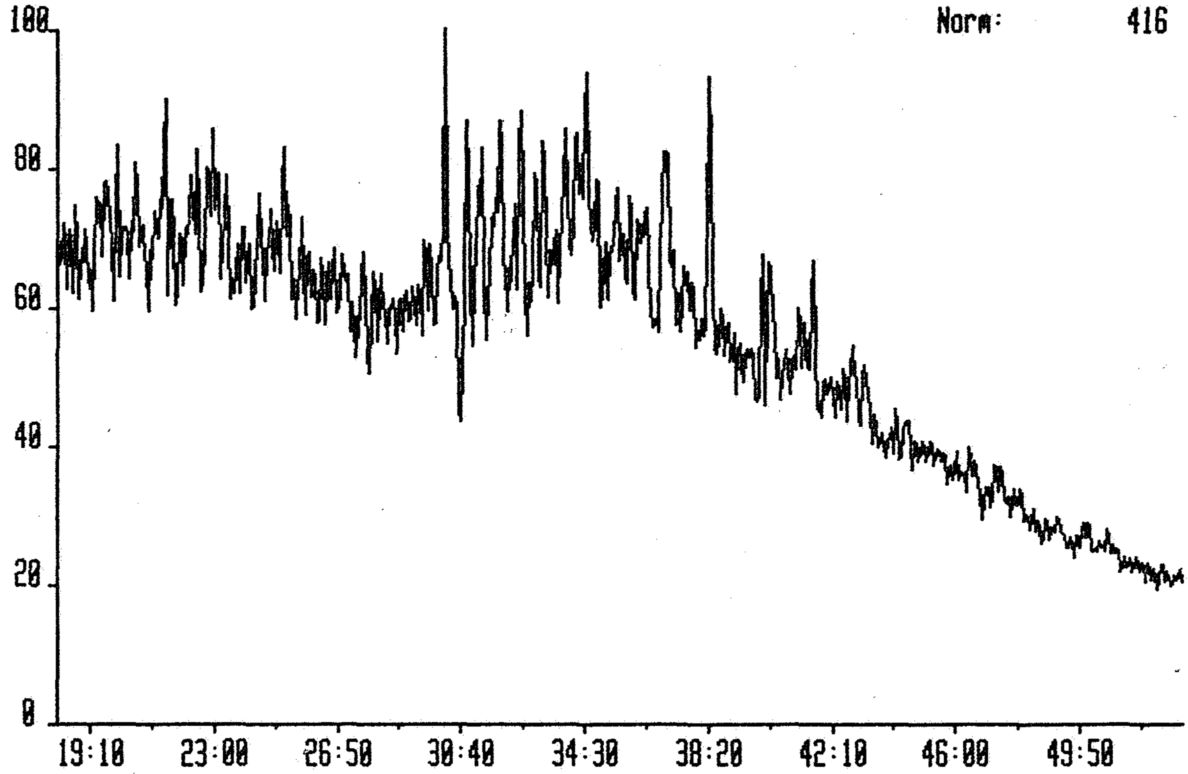


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 163.1485
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

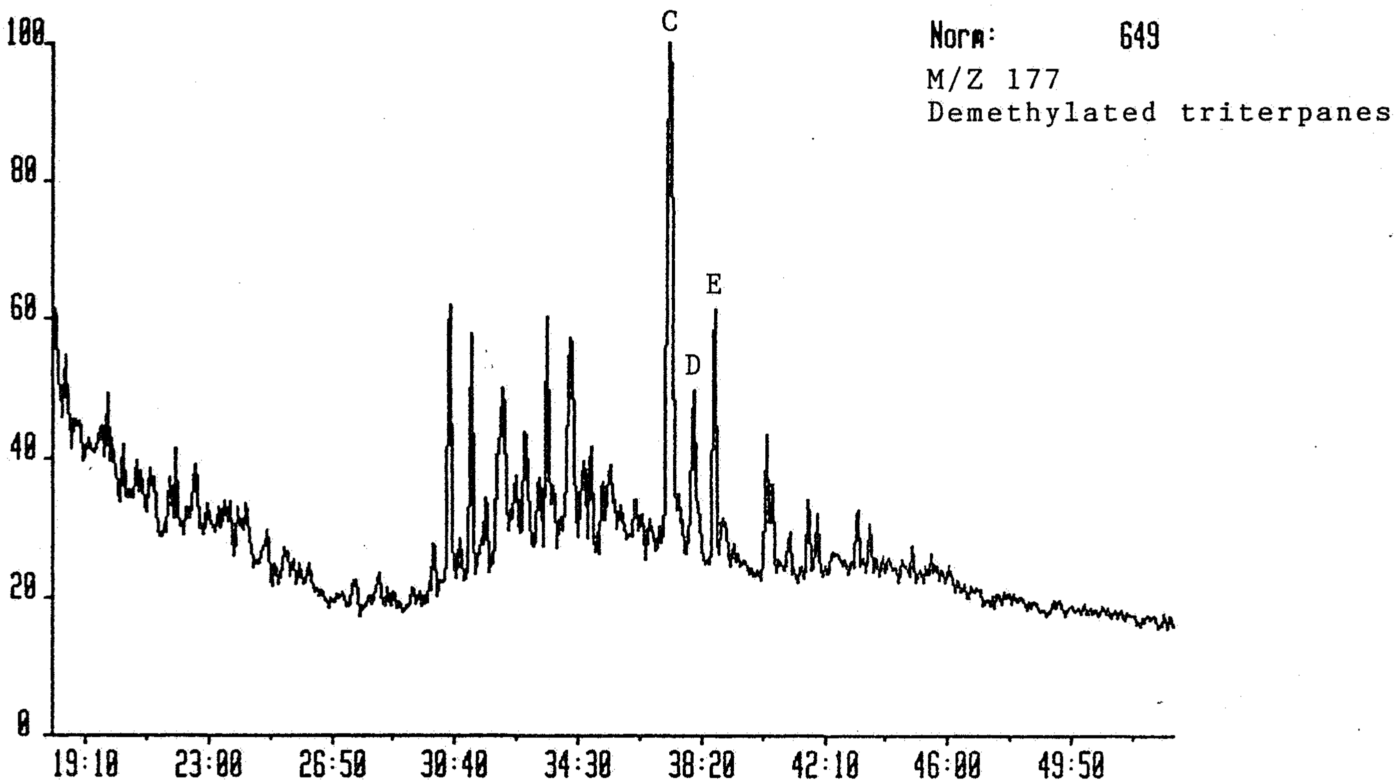


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 163.1485
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

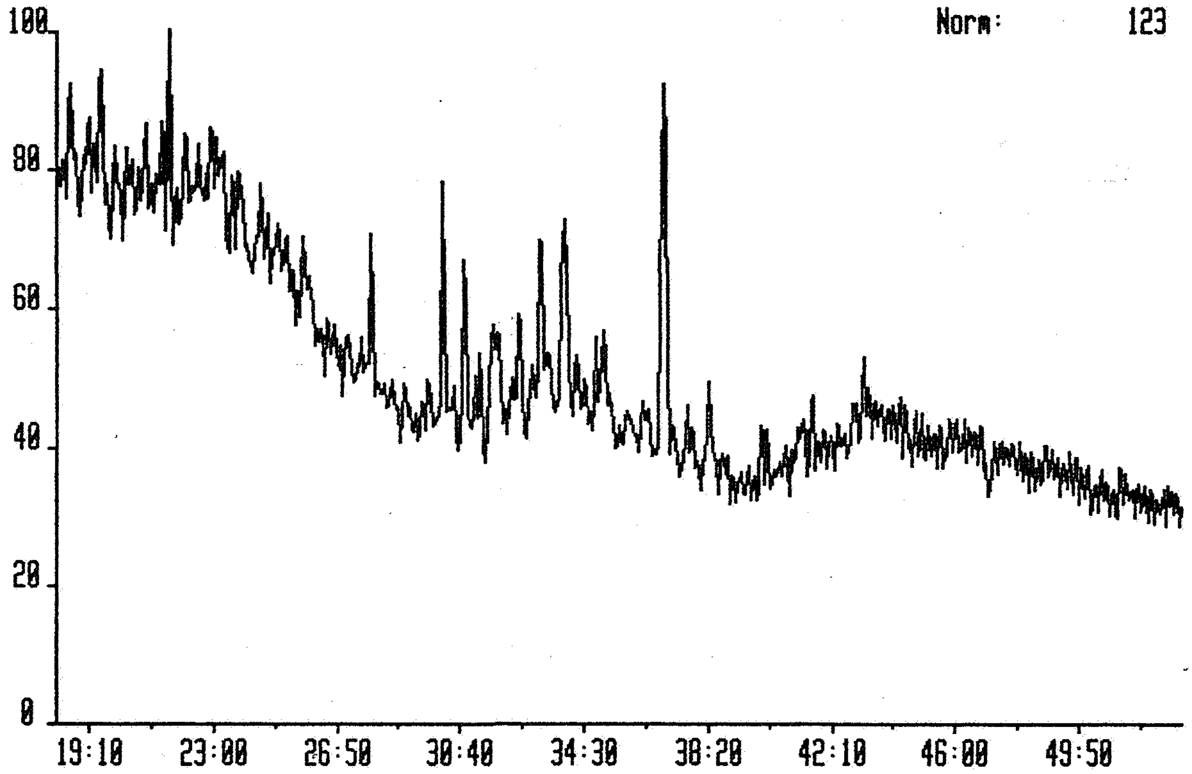


EXAMPLE OF PEAK IDENTIFICATION FOR DEMETHYLATED TRITERPANES

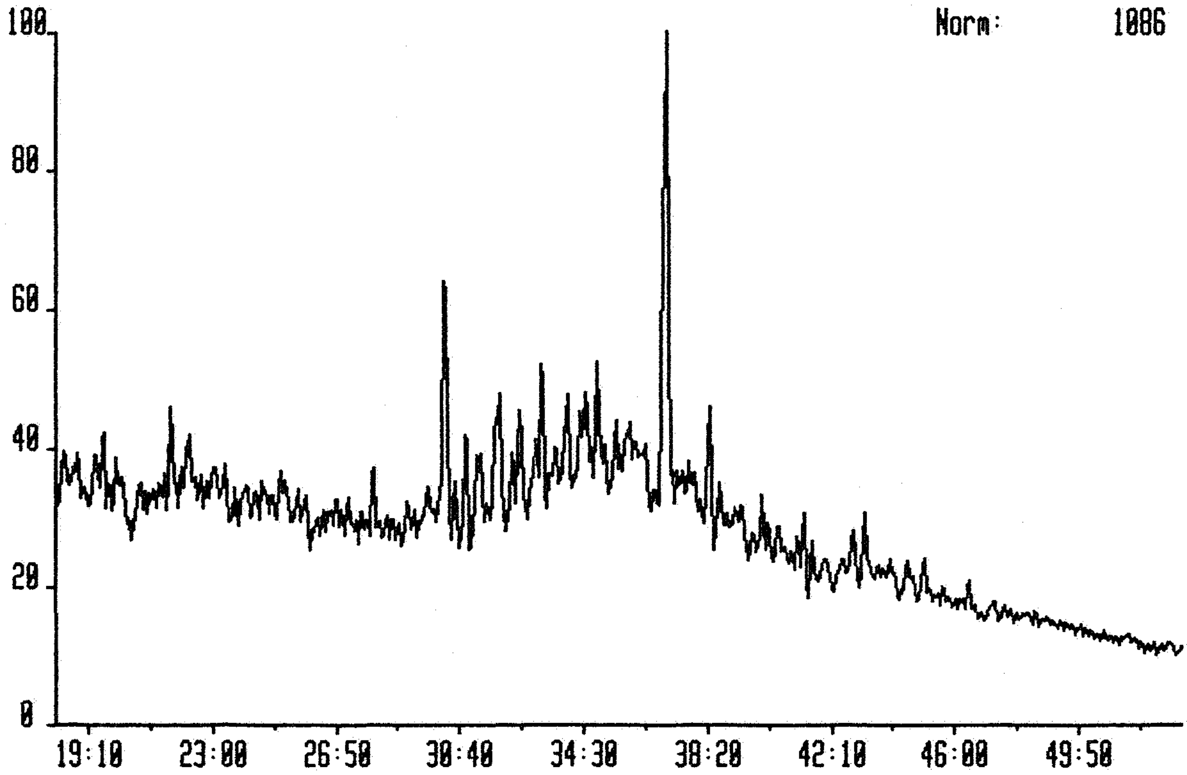


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

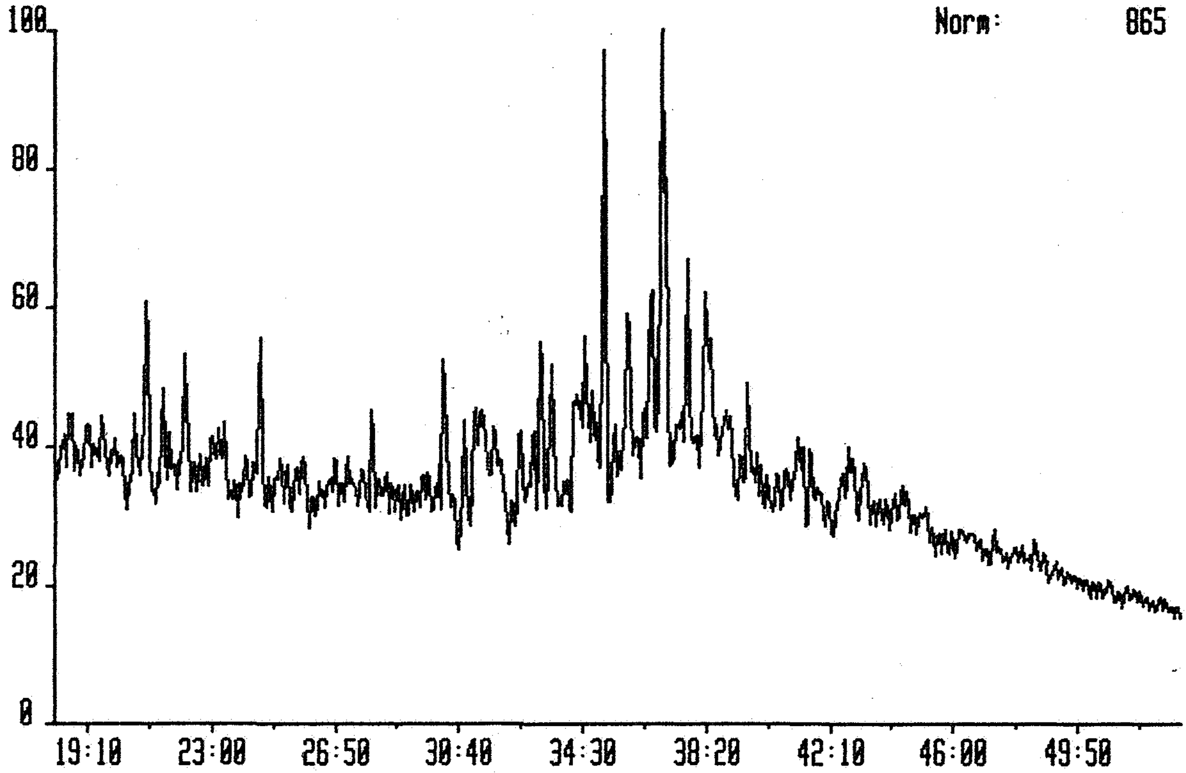
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 177.1642
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



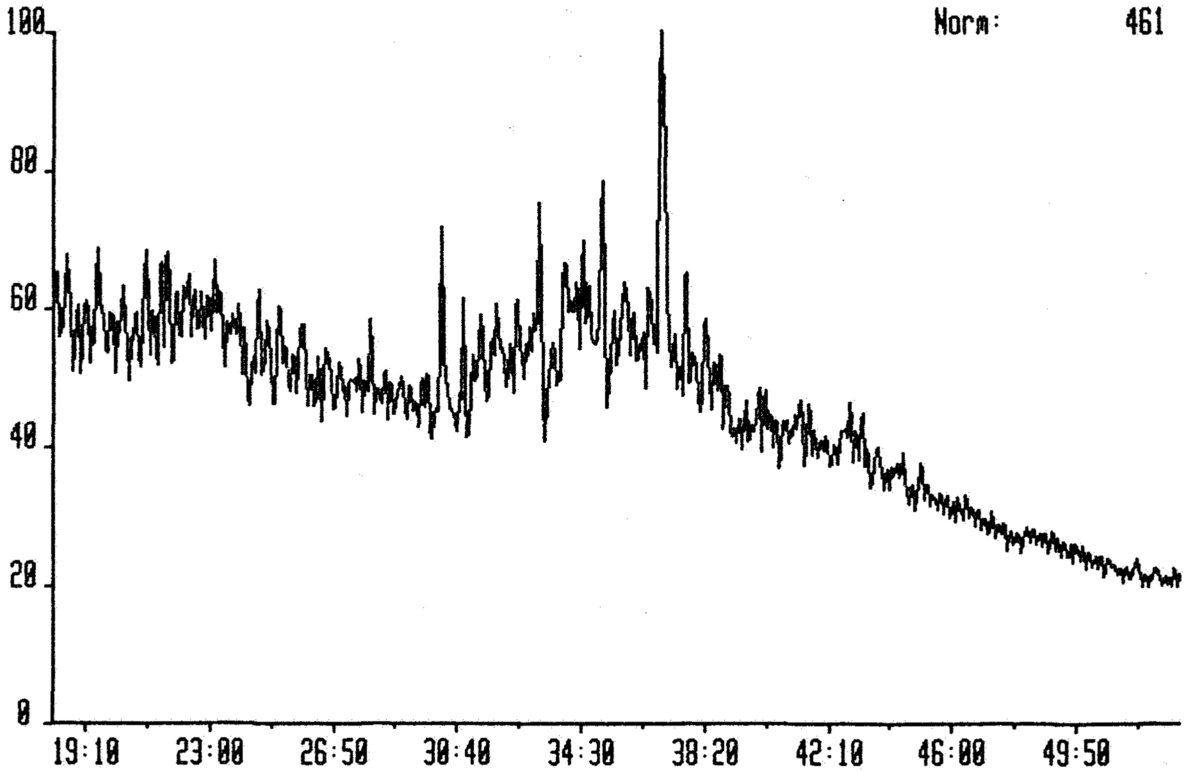
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 177.1642
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



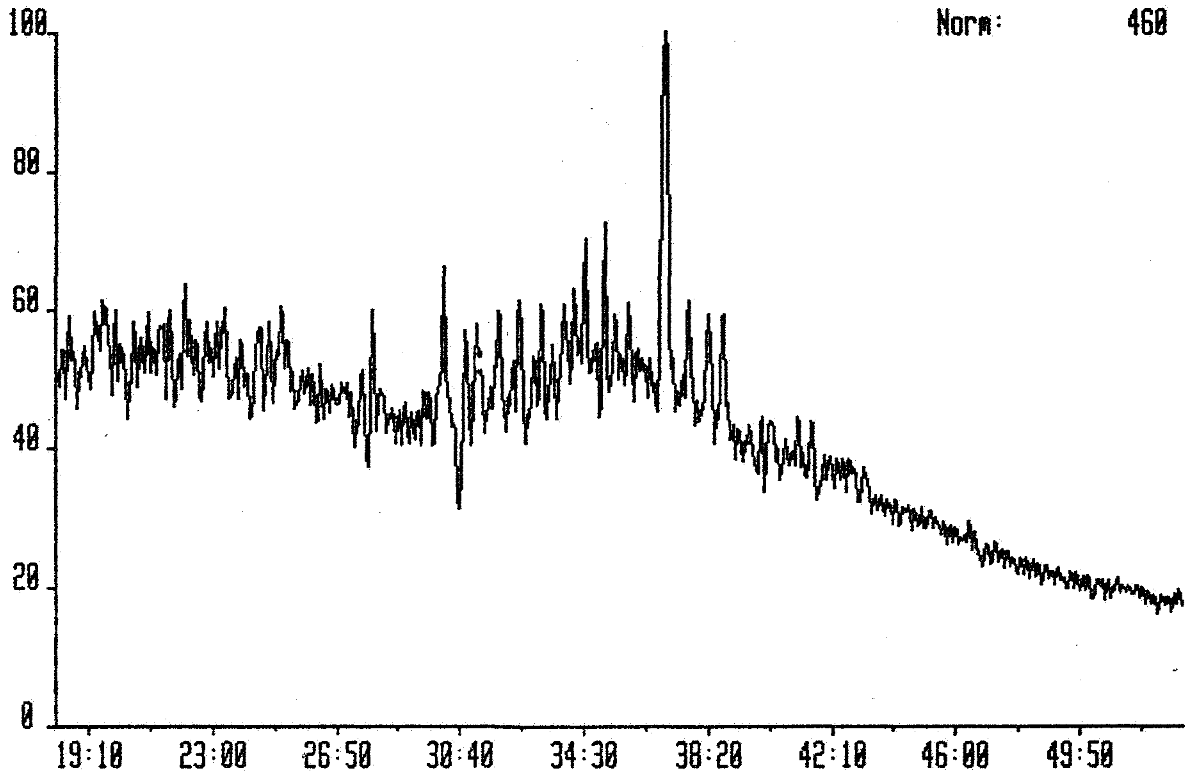
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 177.1642
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 177.1642
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

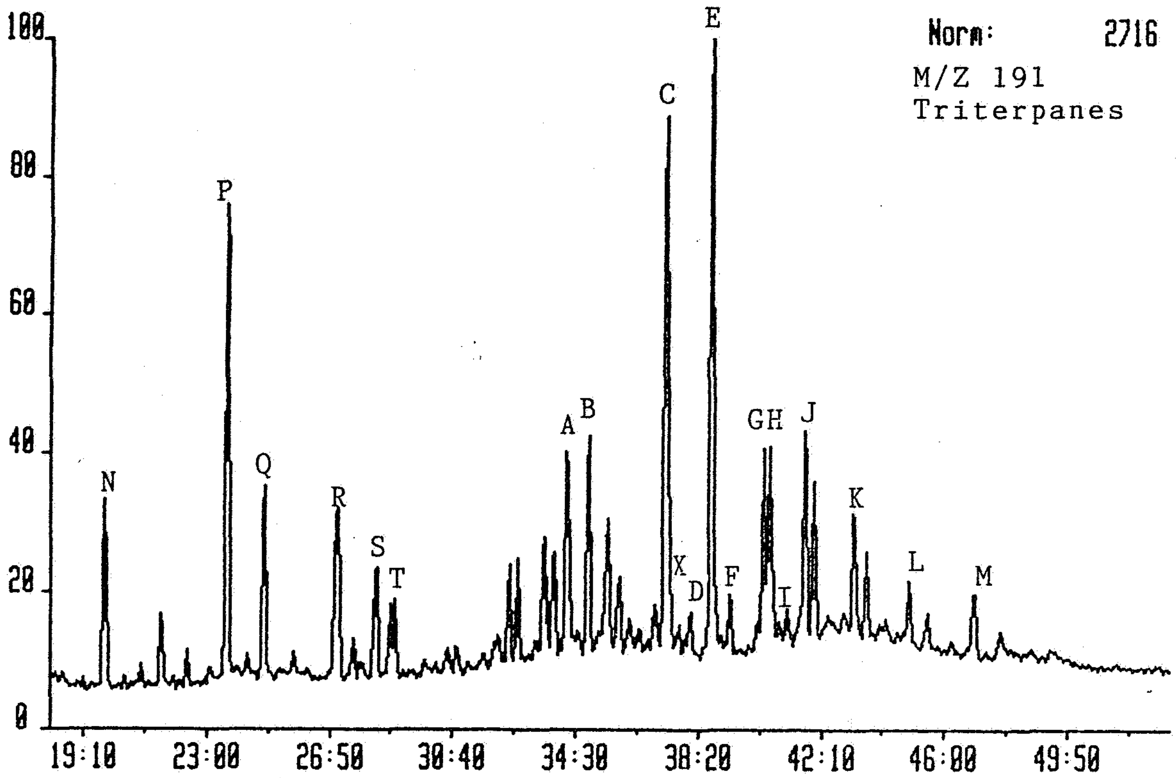


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 177.1642
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

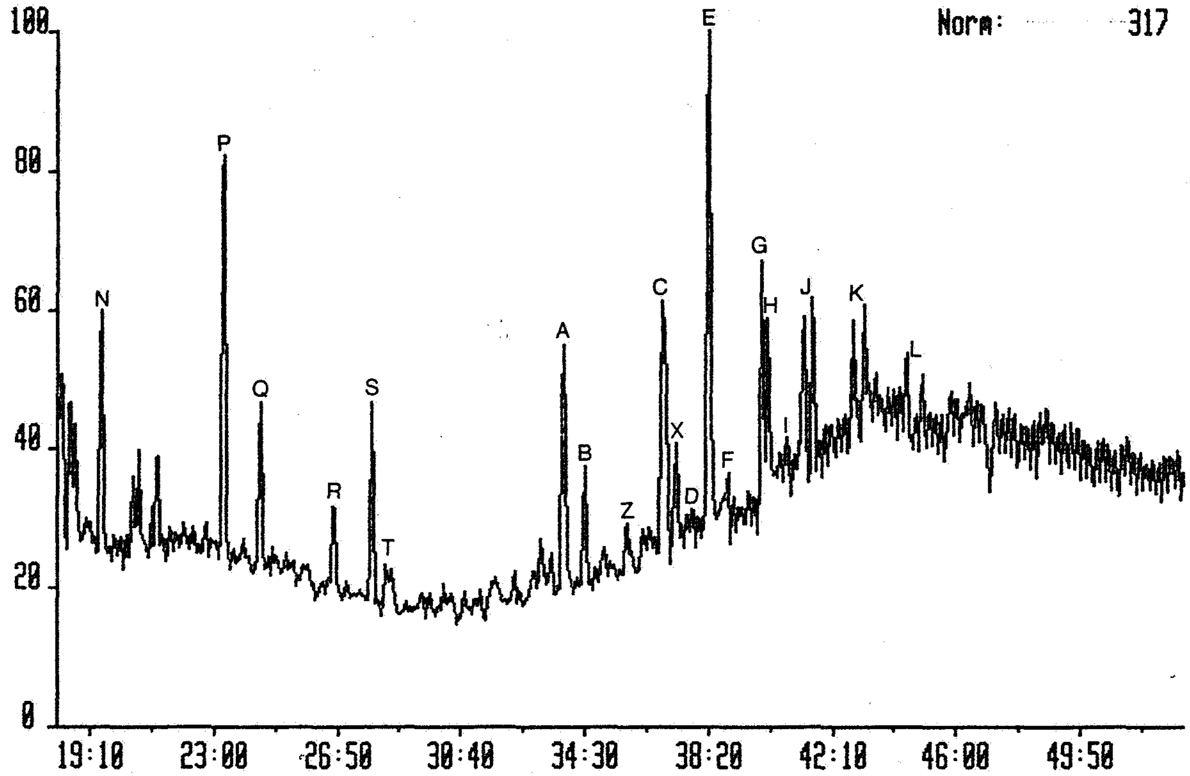


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

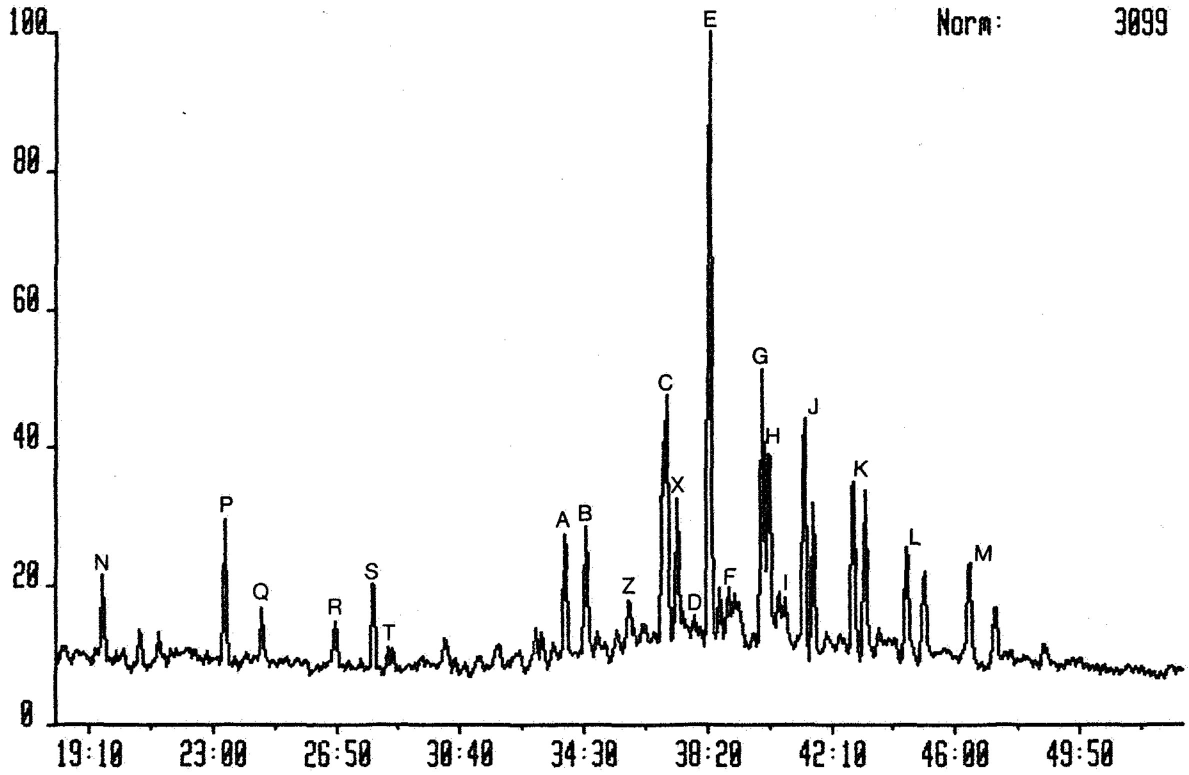
EXAMPLE OF PEAK IDENTIFICATION FOR TRITERPANES



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 191.1800
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

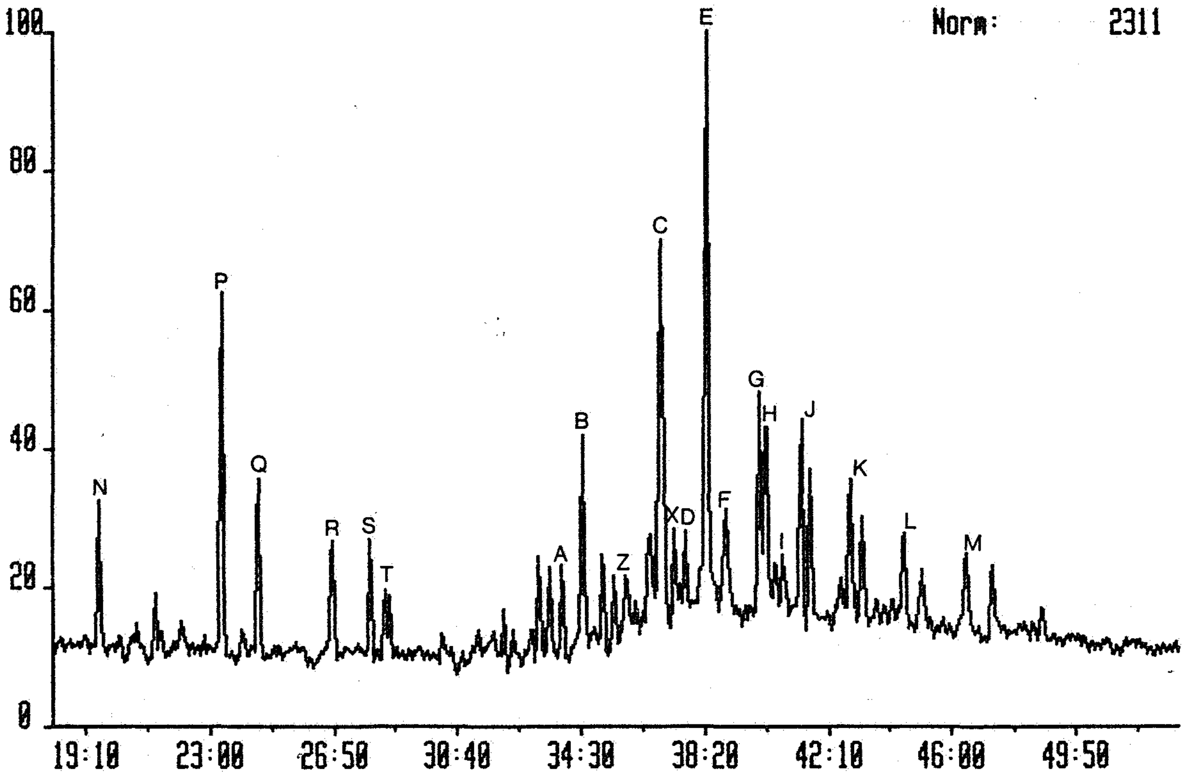


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 191.1800
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

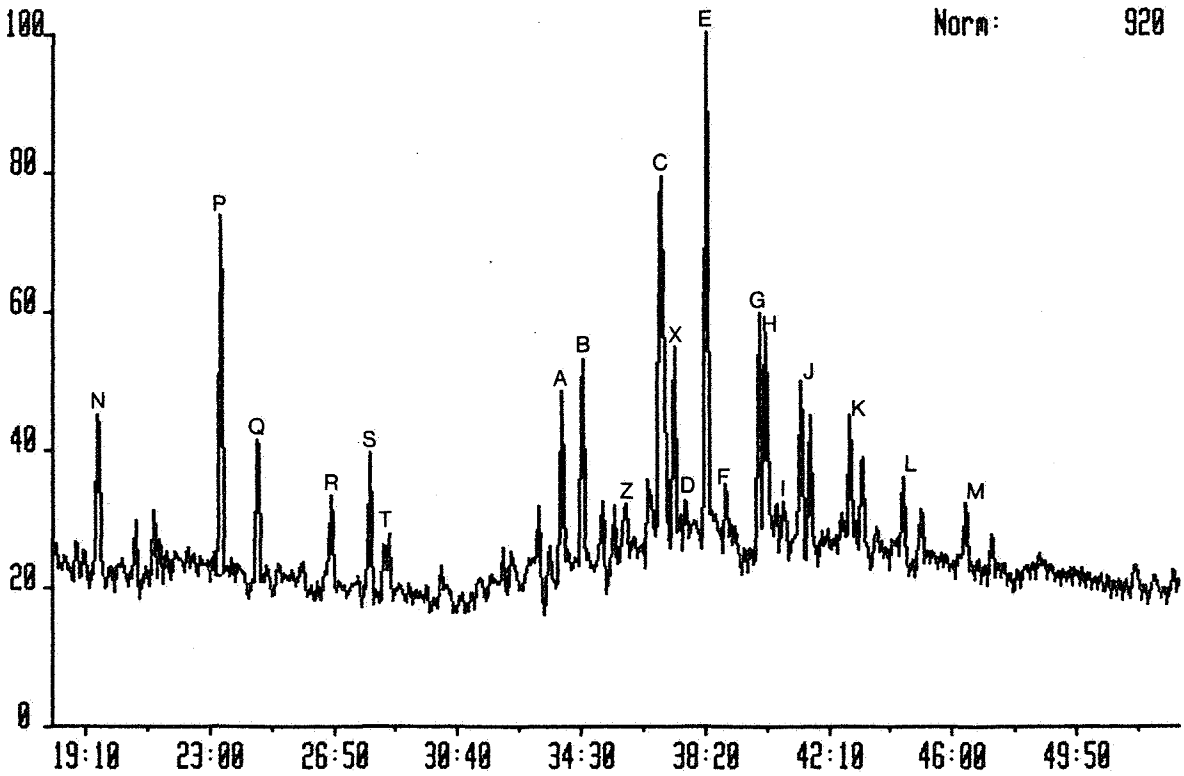


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 12 Injection 1   Group 1   Mass 191.1800
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

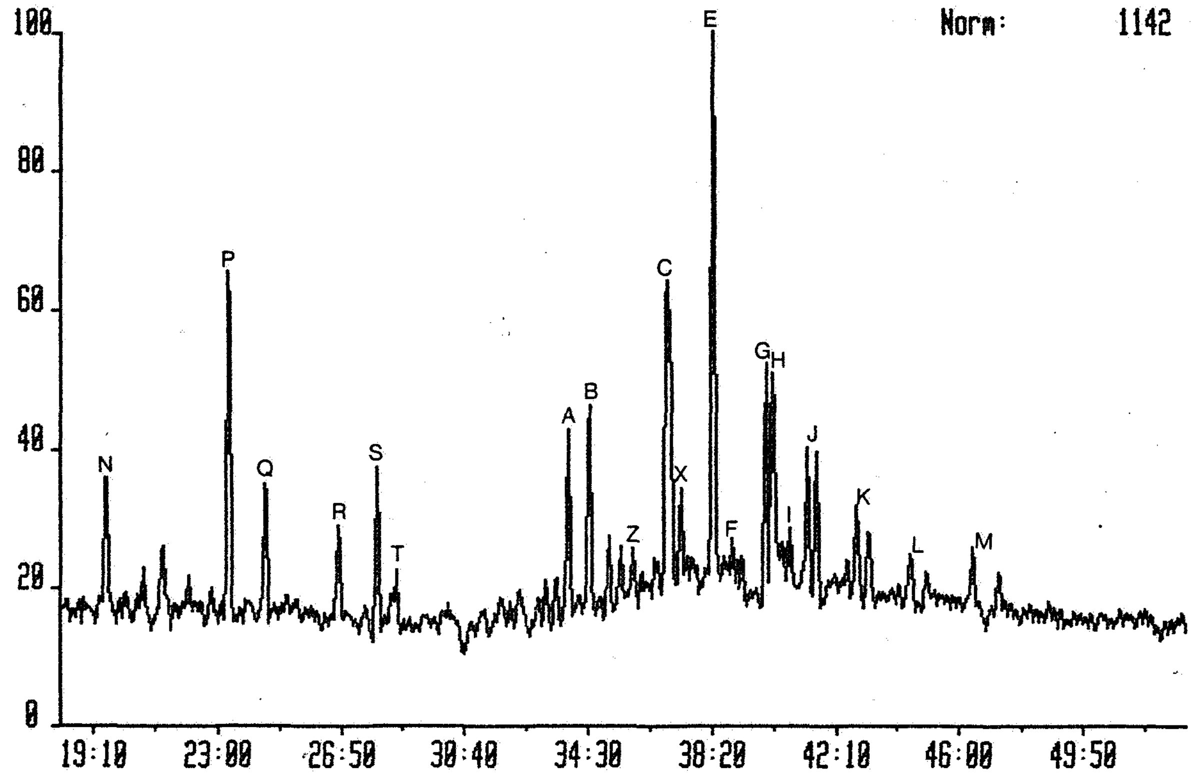


CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 13 Injection 1   Group 1   Mass 191.1800
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



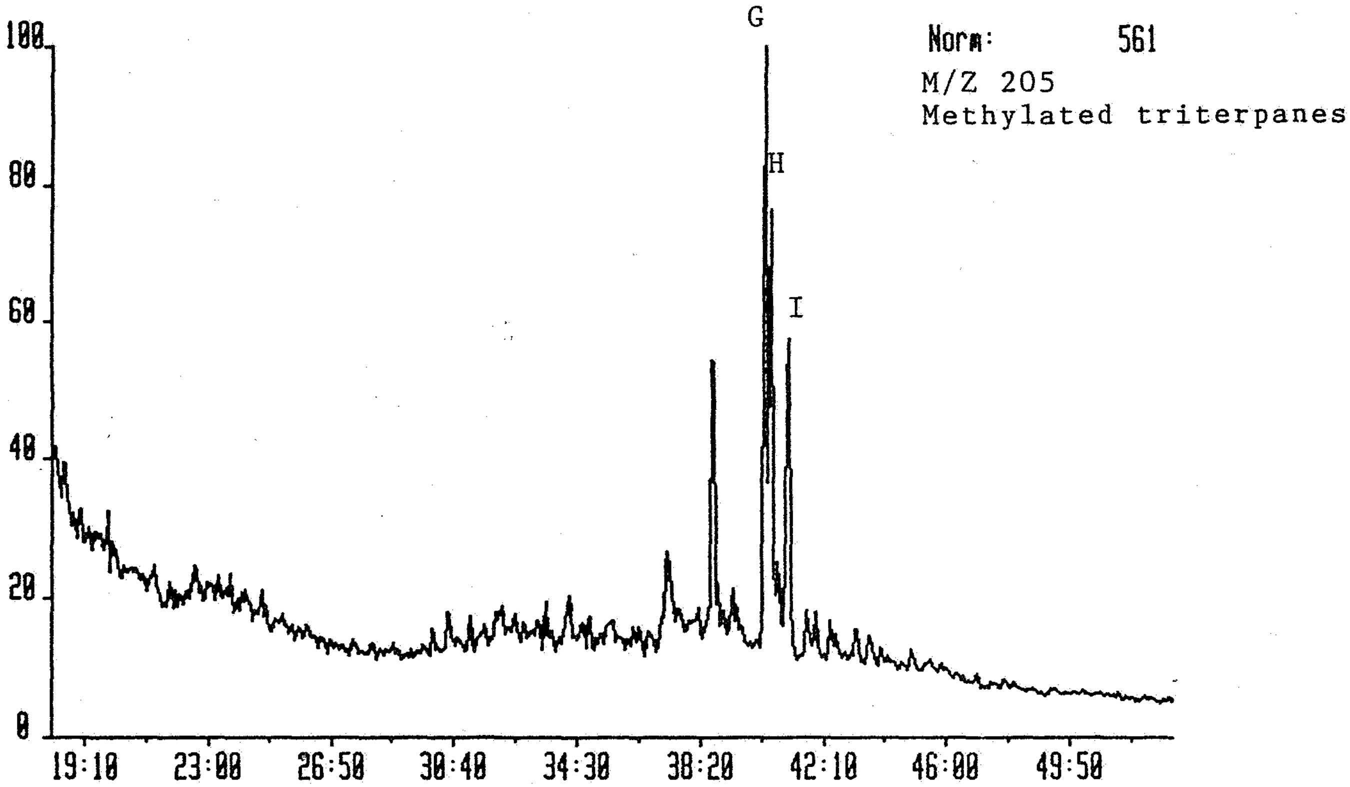
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 191.1800
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



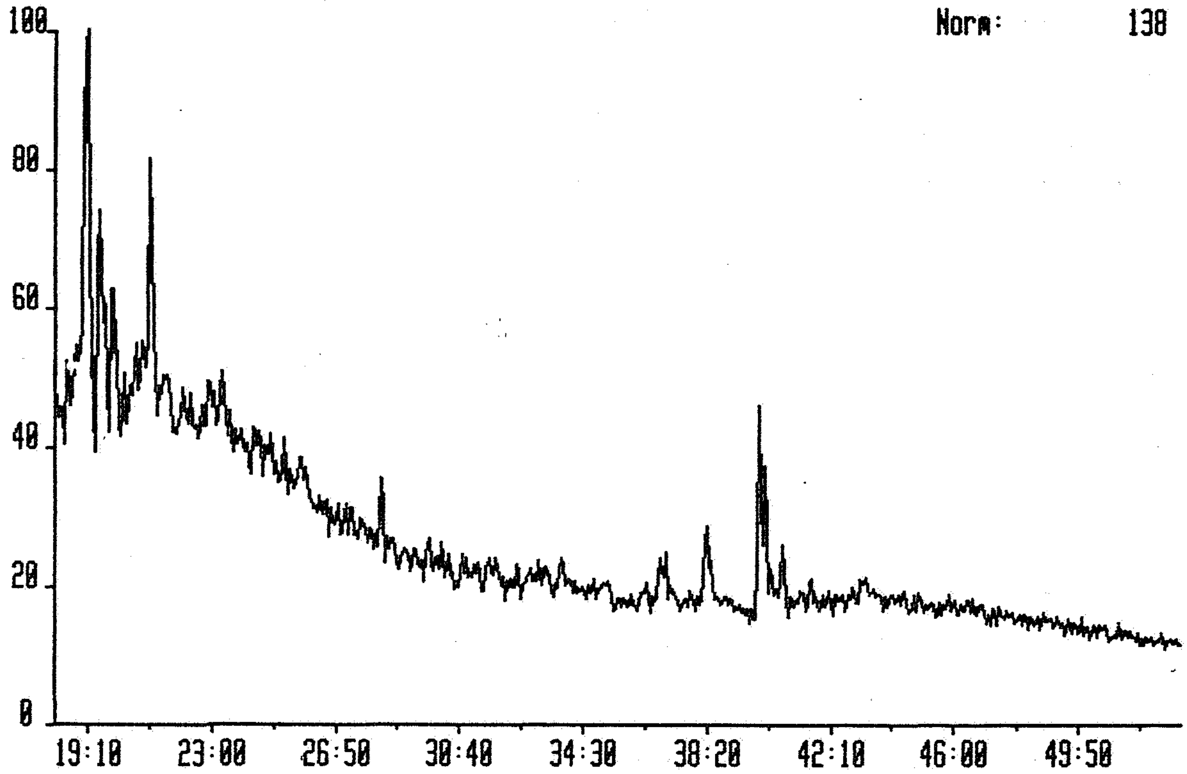
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

EXAMPLE OF IDENTIFICATION FOR METHYLATED TRITERPANES

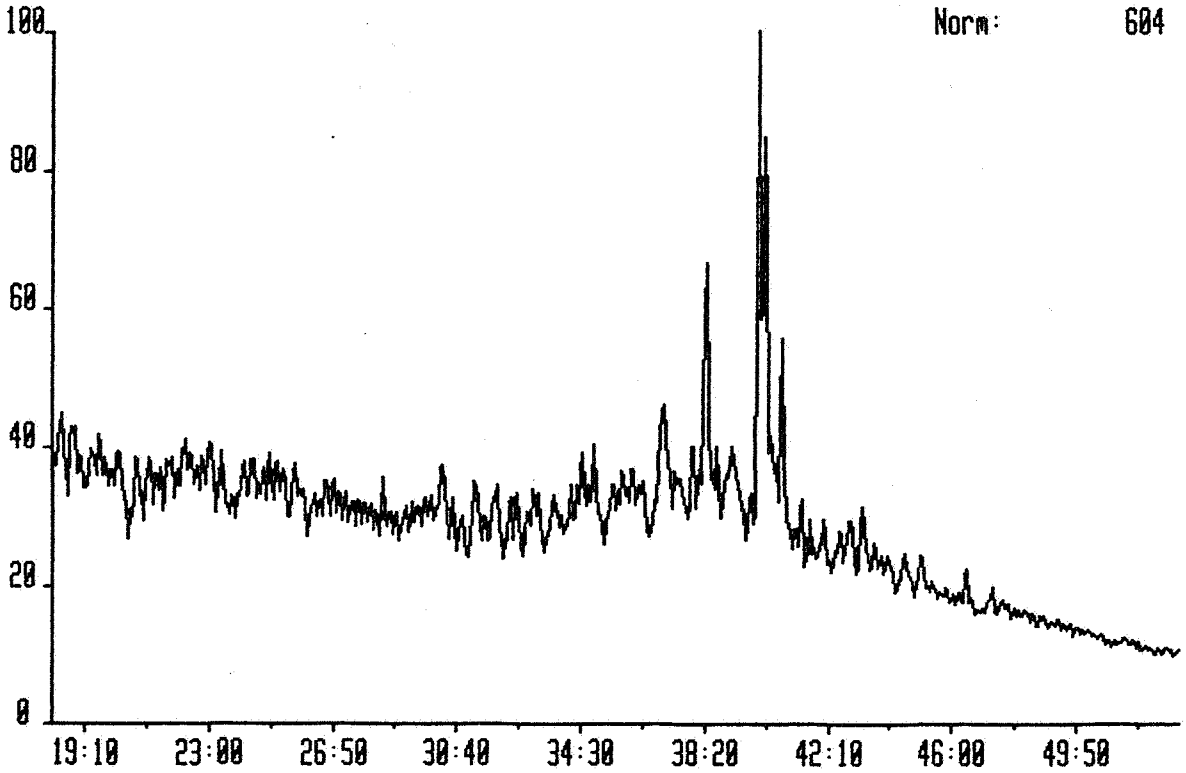


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 205.1956
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

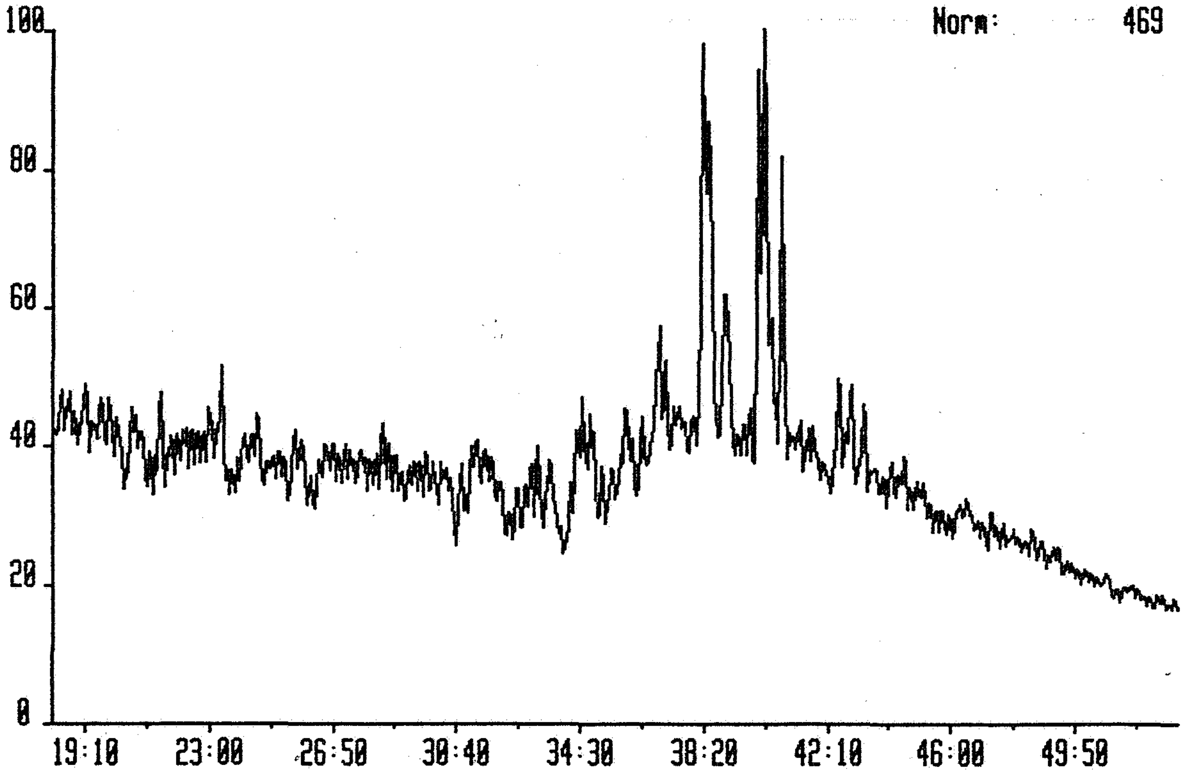


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 205.1956
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

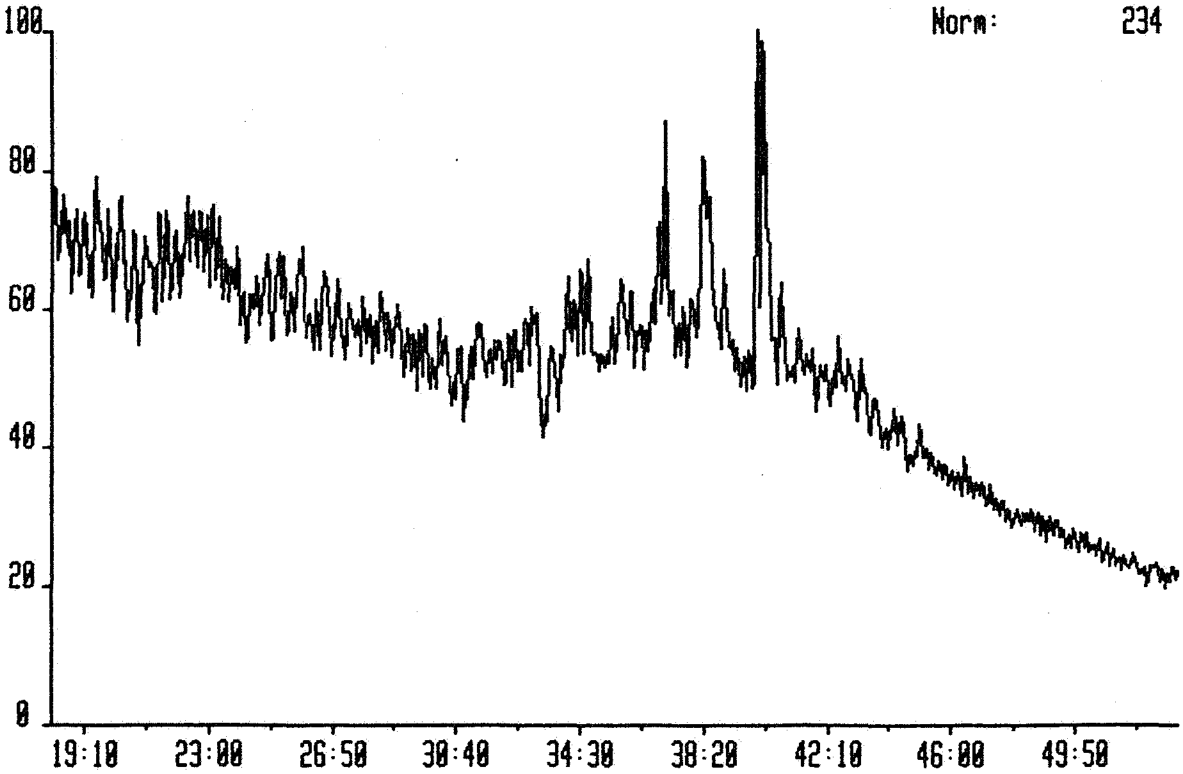


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

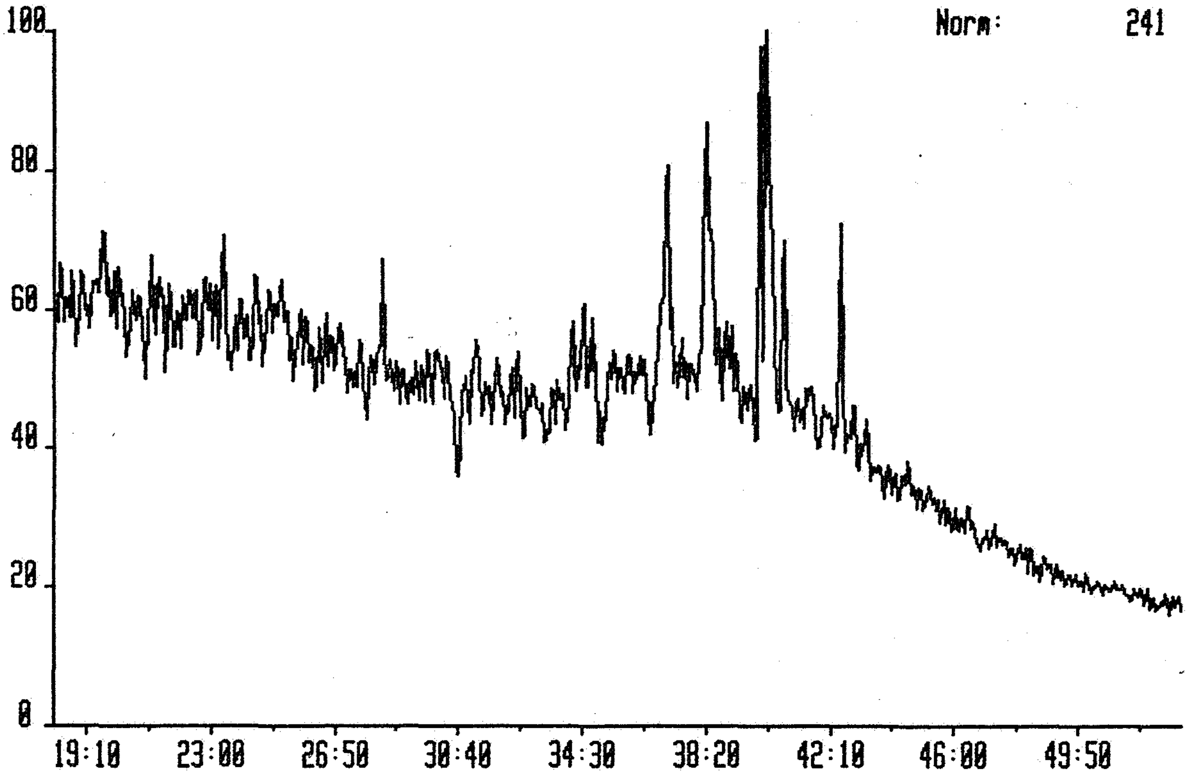
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 205.1956
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



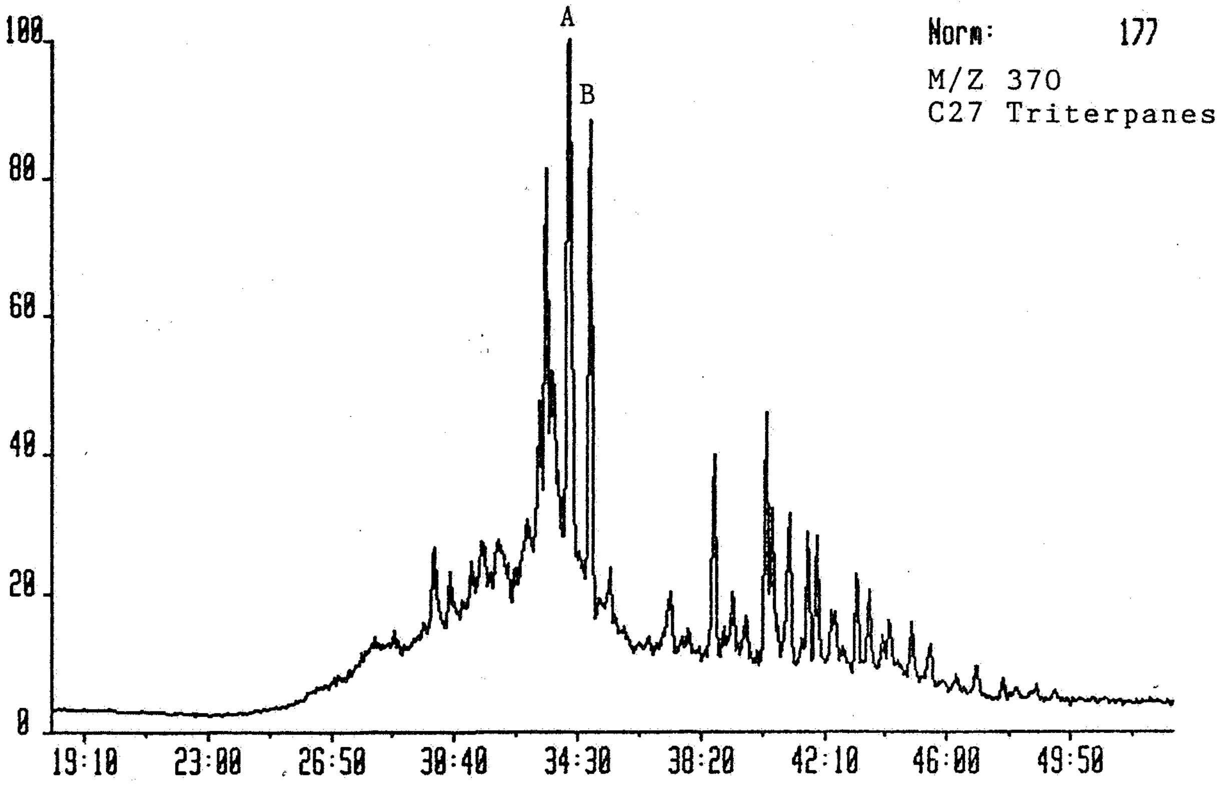
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 205.1956
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 205.1956
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

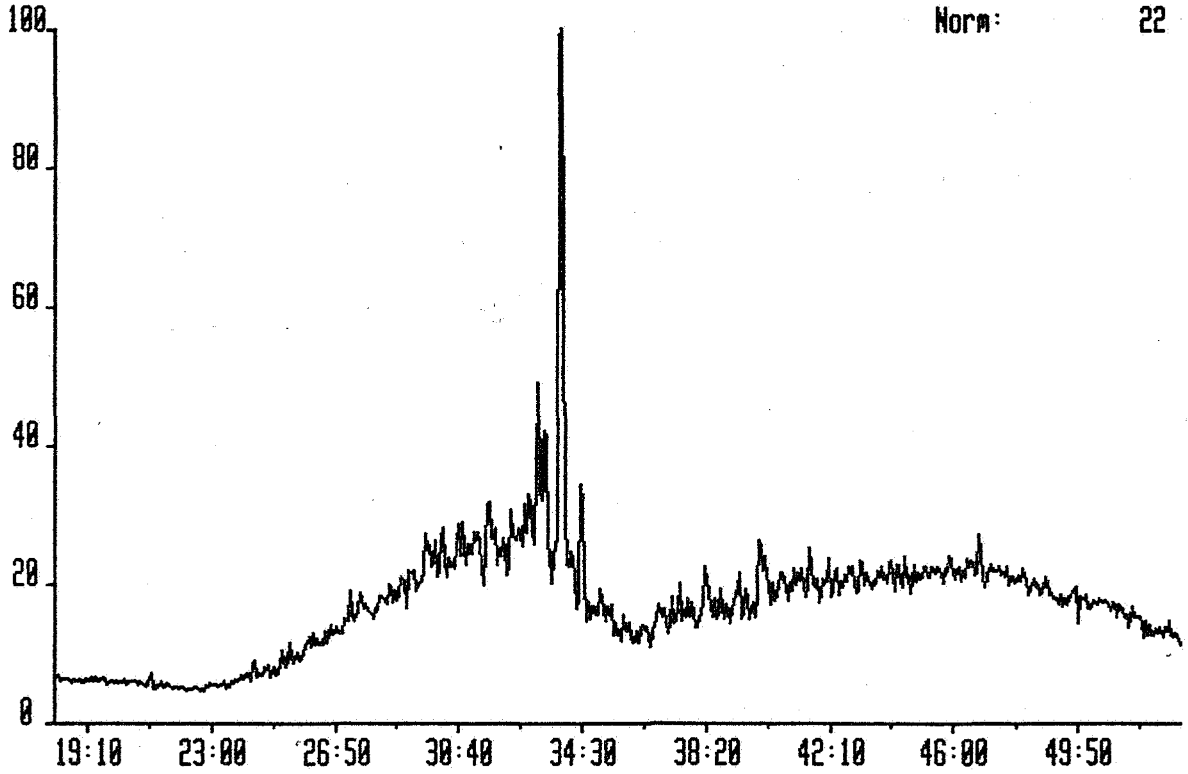


EXAMPLE OF PEAK IDENTIFICATION FOR C27 TRITERPANES

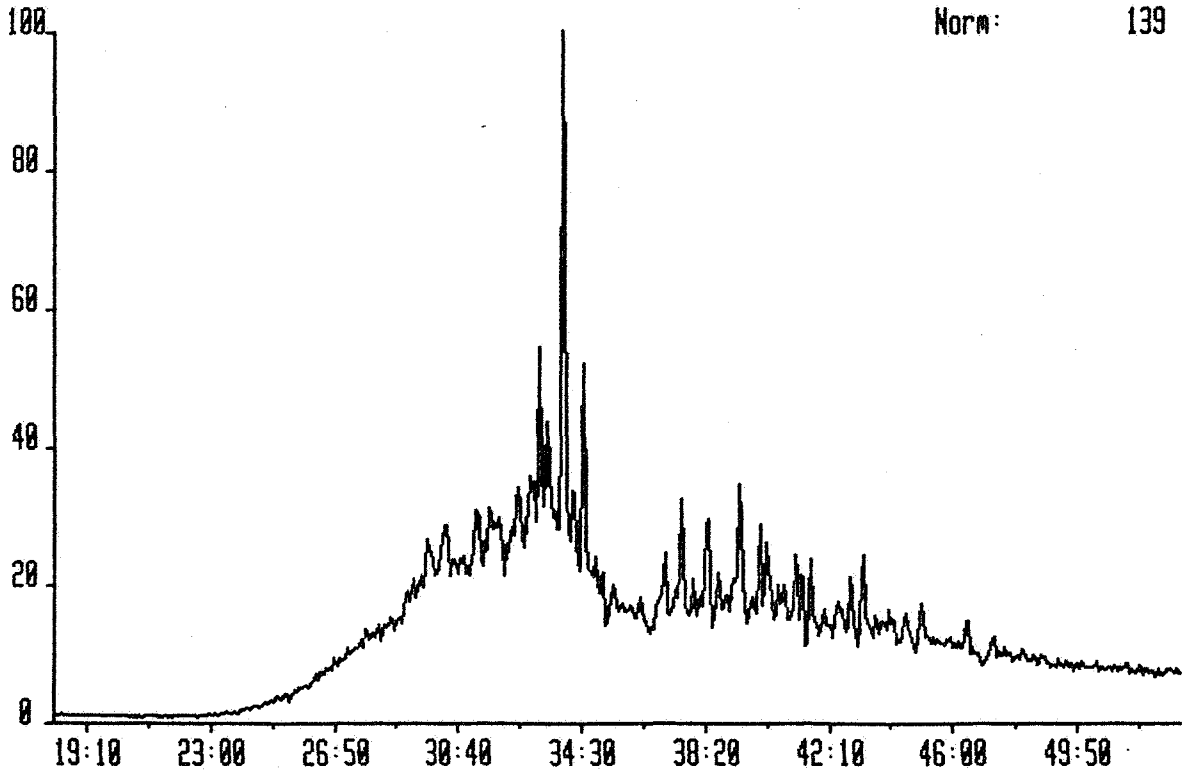


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

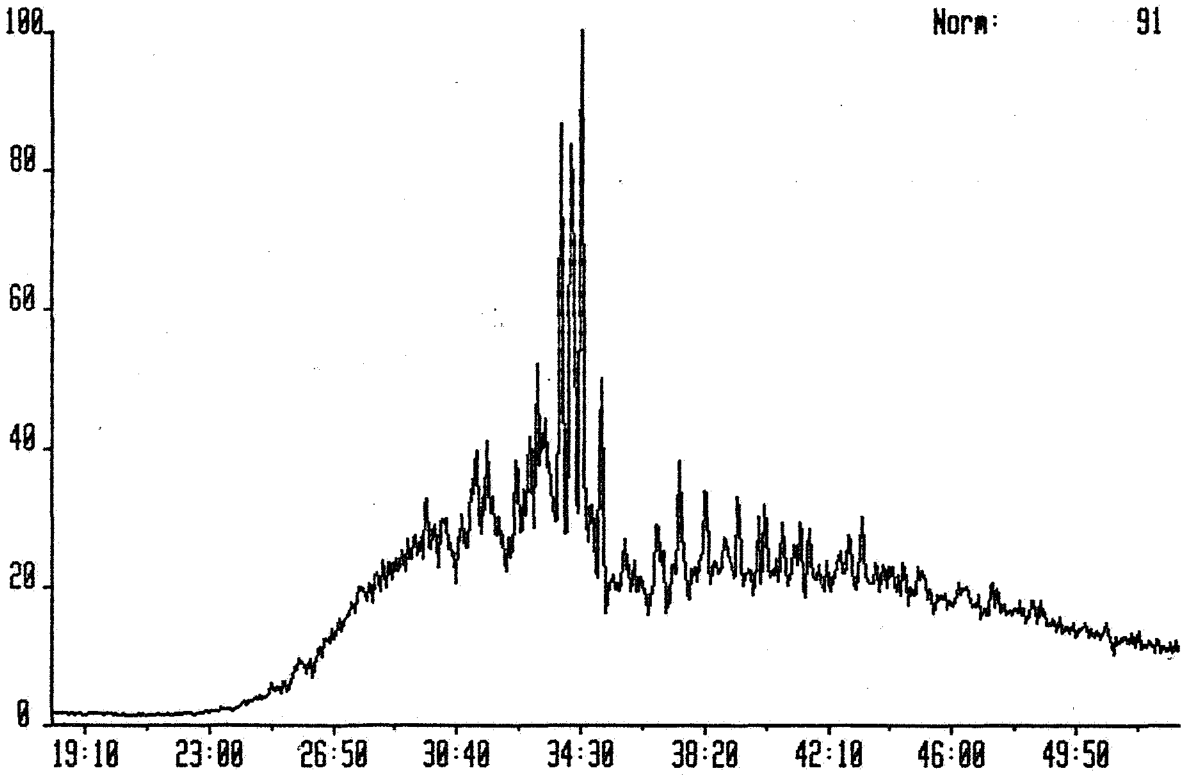
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 370.3608
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



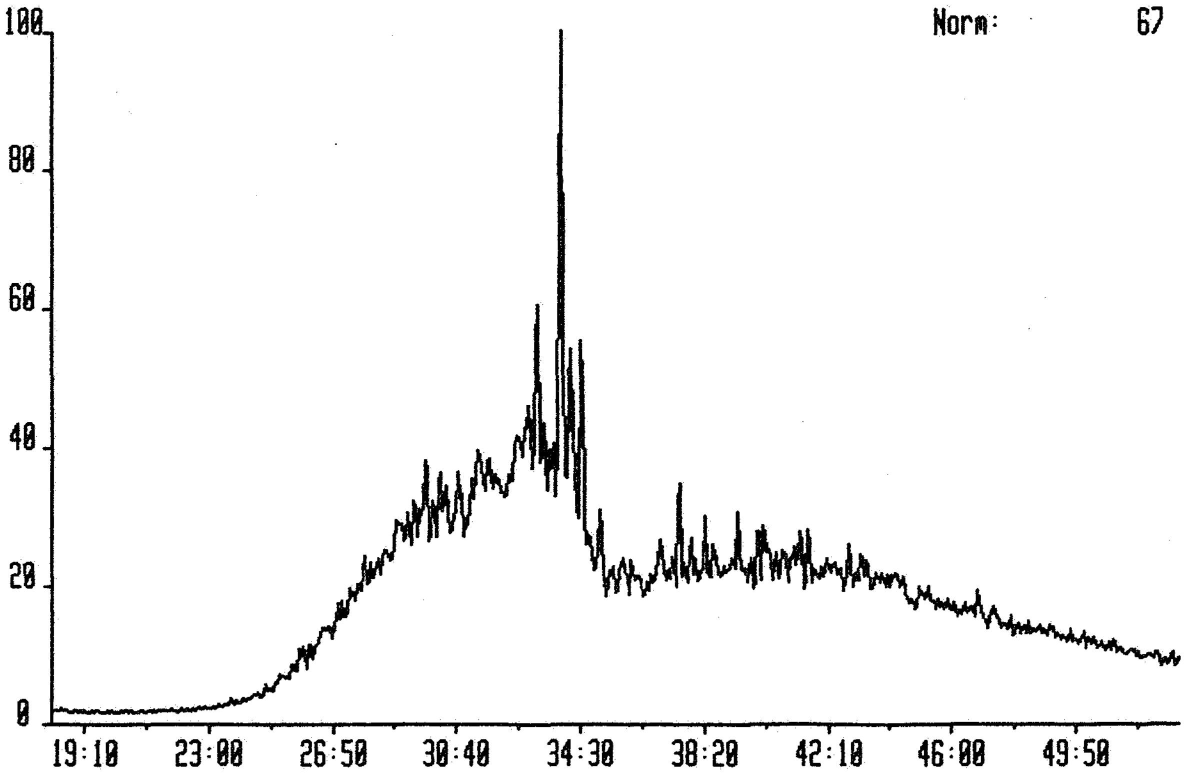
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 370.3608
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 370.3608
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

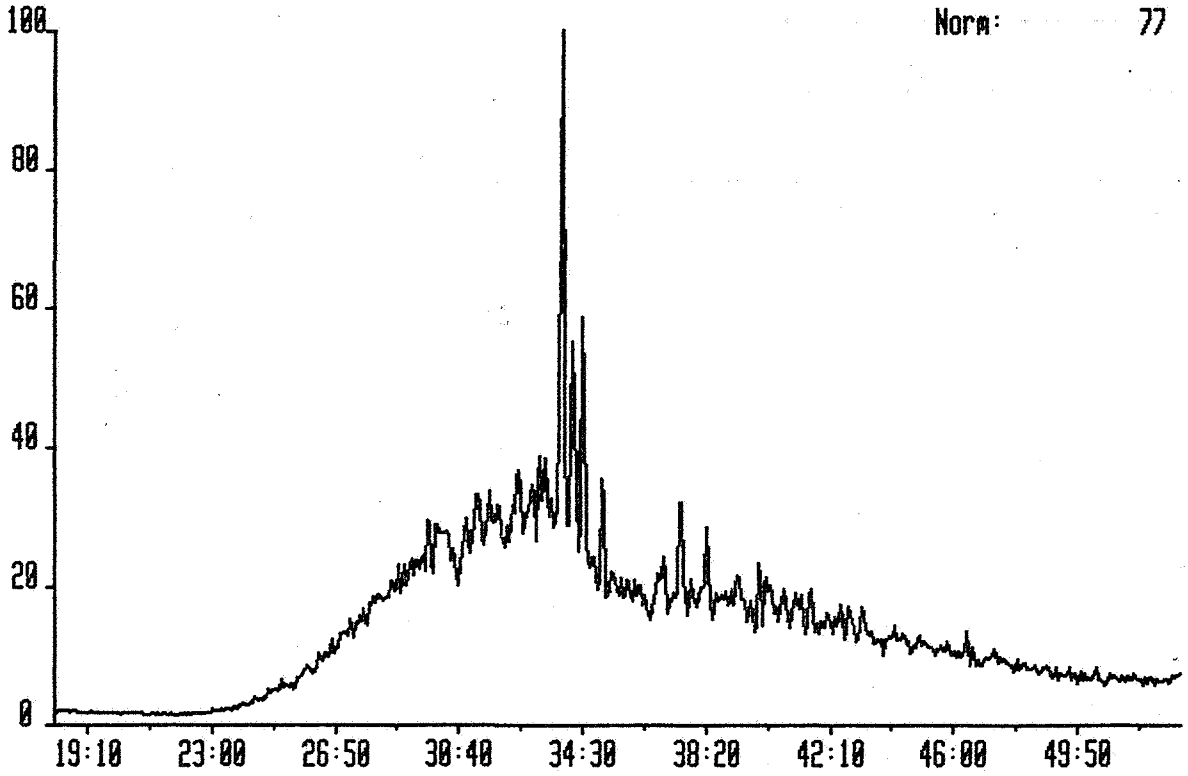


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 370.3608
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



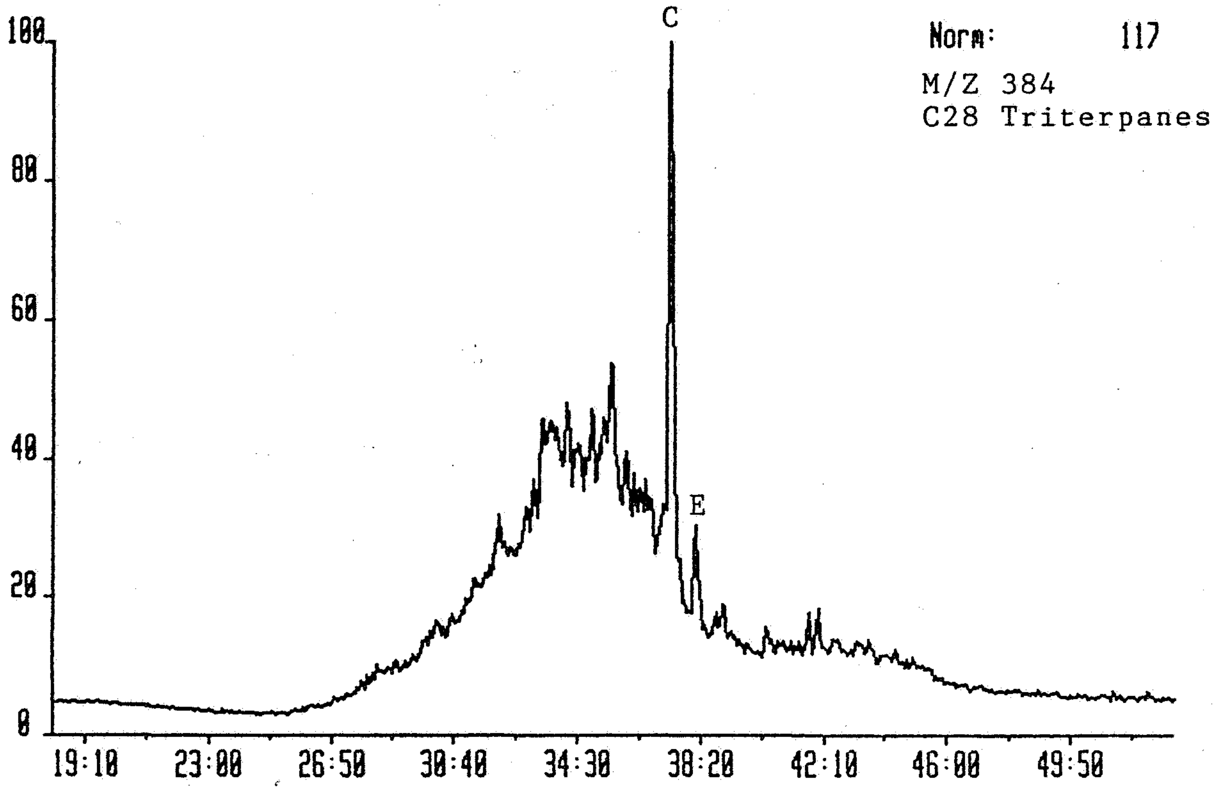
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 370.3608
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



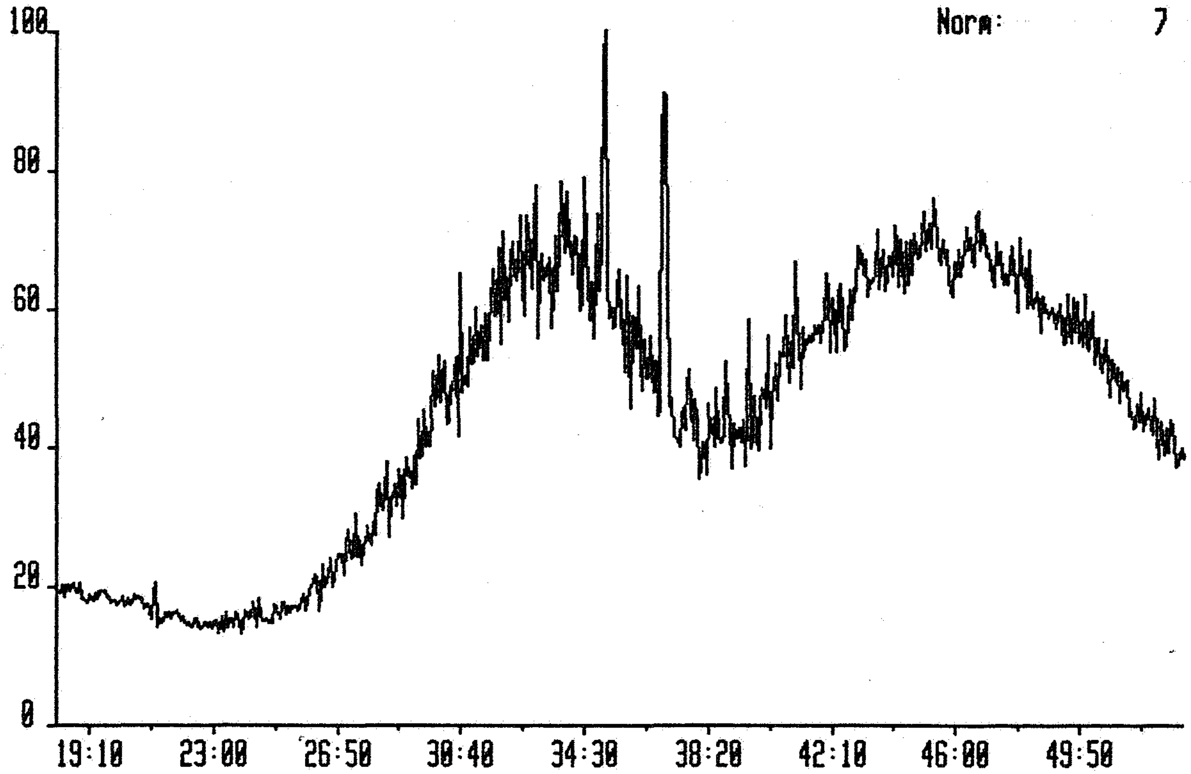
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

EXAMPLE OF PEAK IDENTIFICATION FOR C28 TRITERPANES

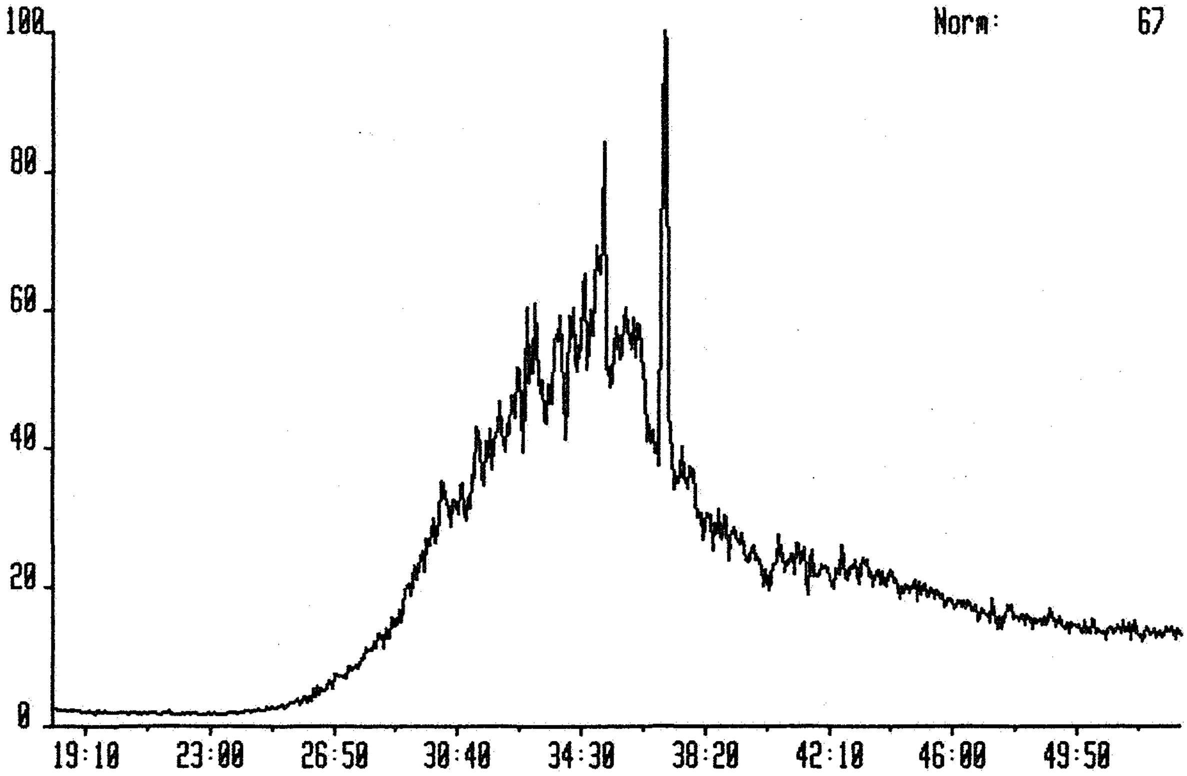


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 384.3757
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

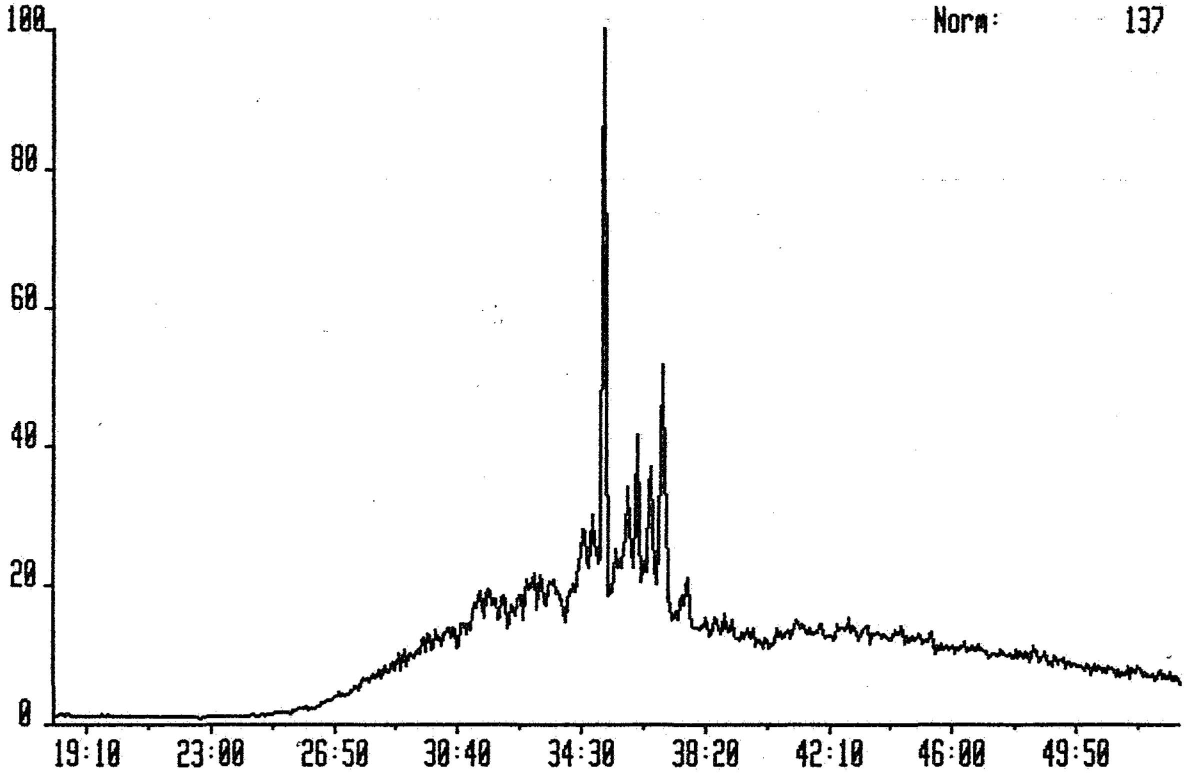


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 384.3757
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

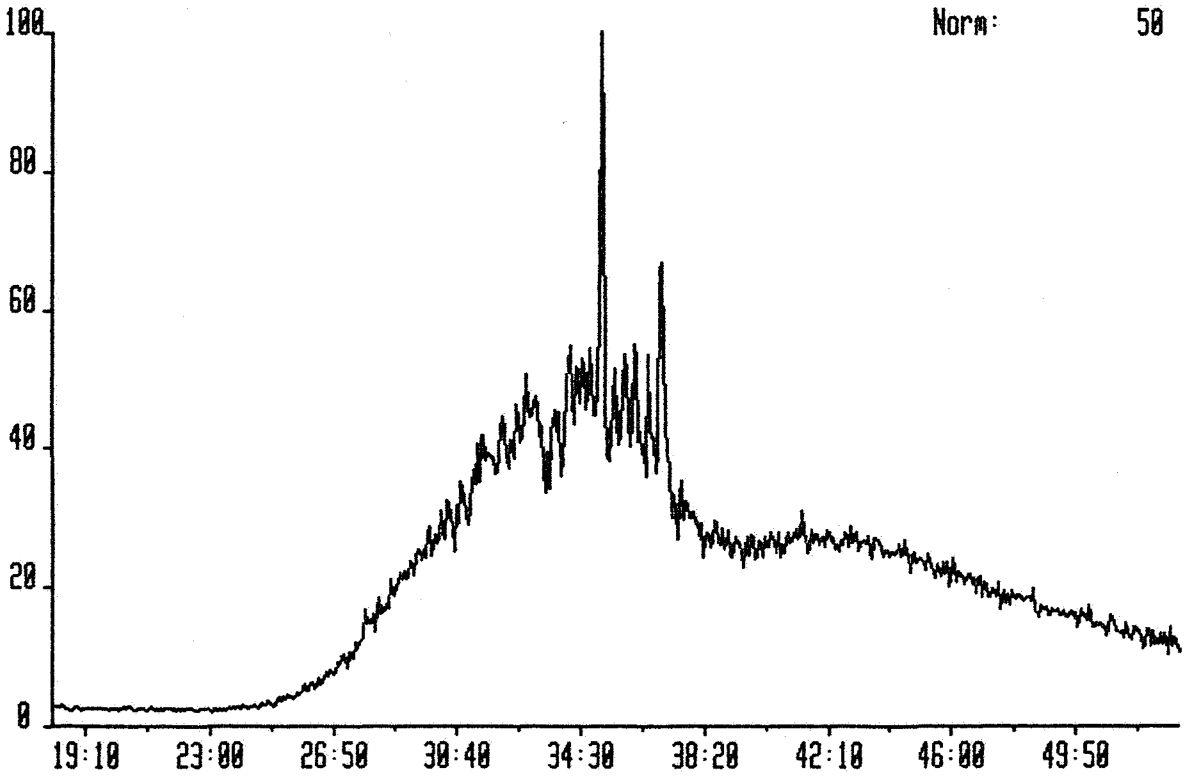


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 384.3757
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

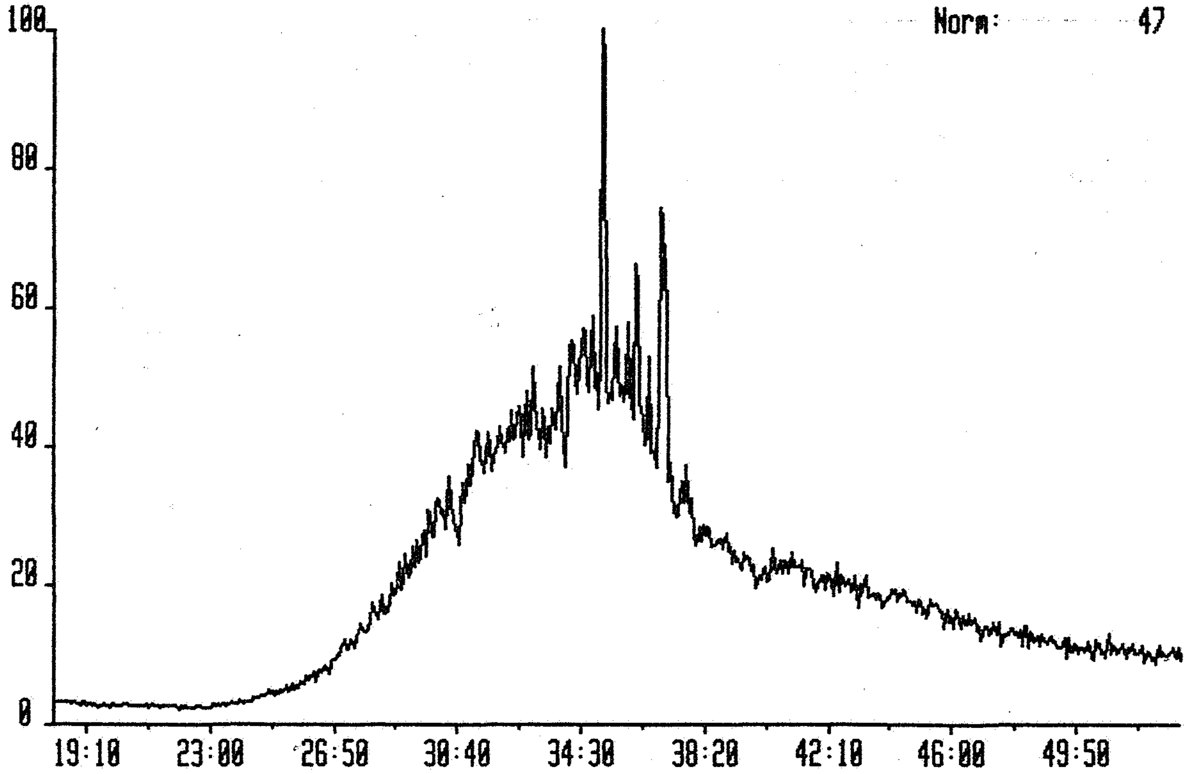


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 384.3757
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



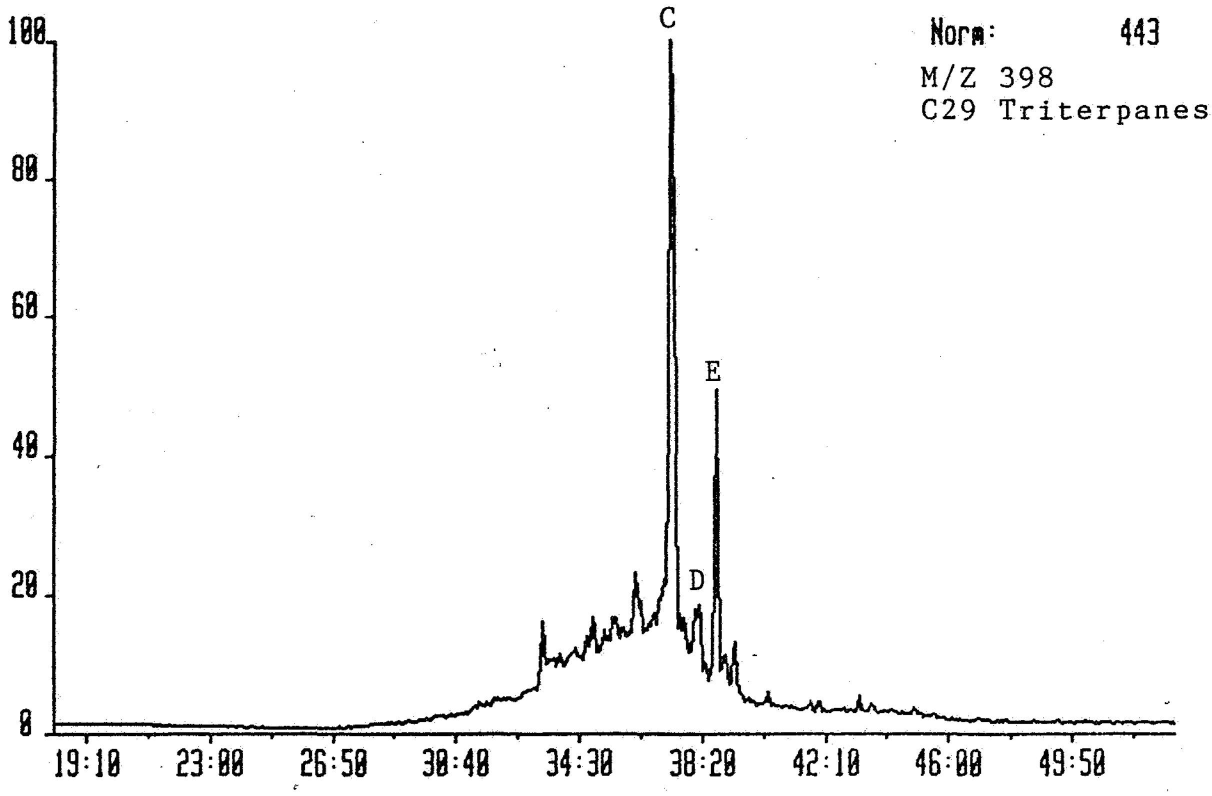
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 14 Injection 1   Group 1   Mass 384.3757
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

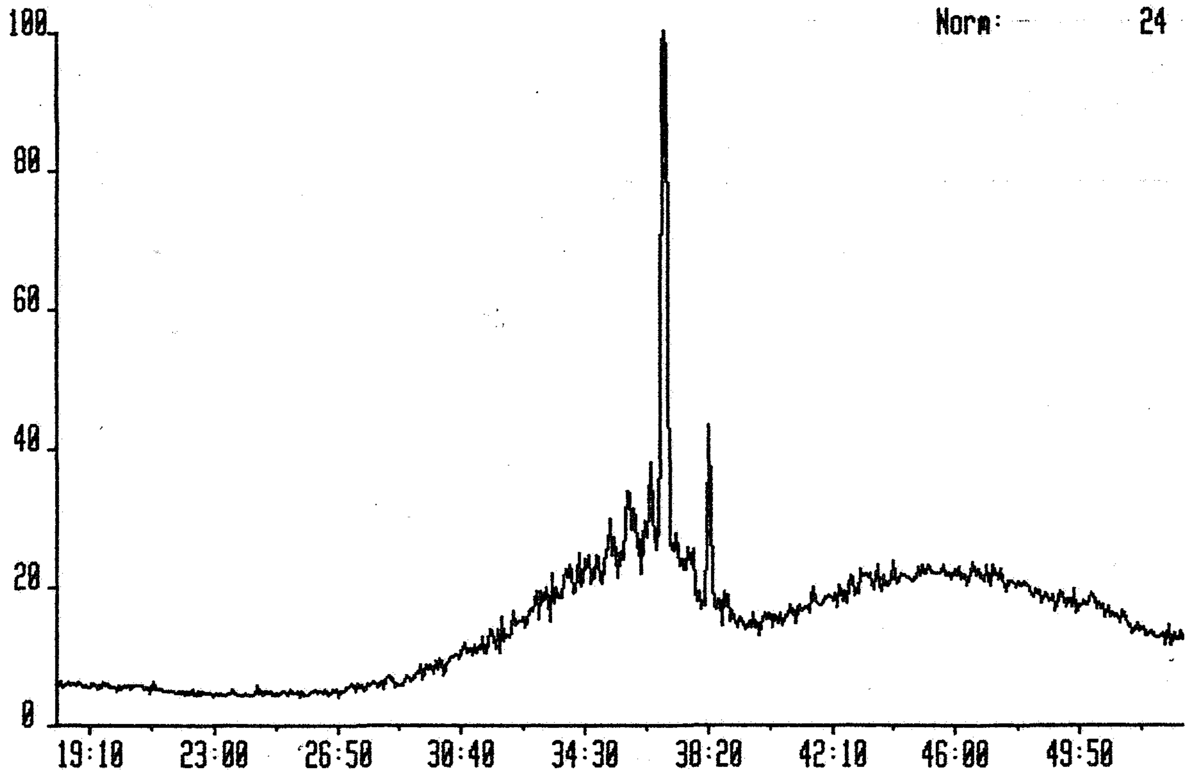


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

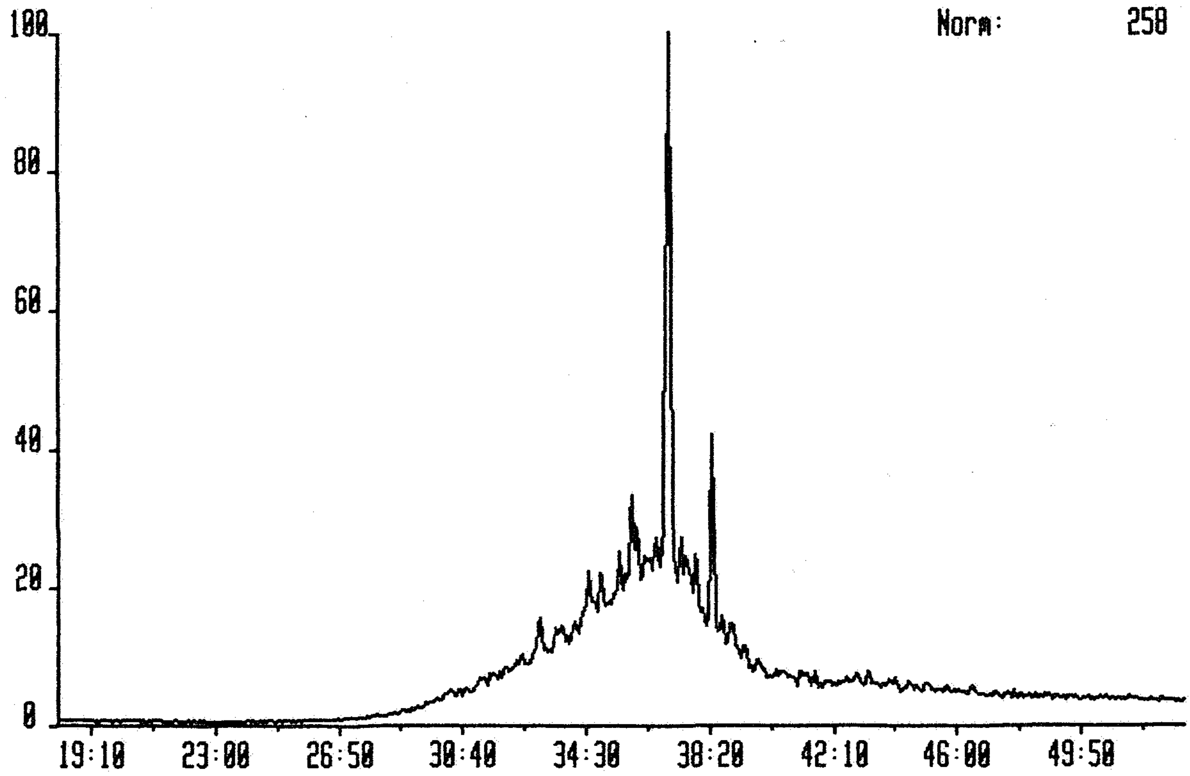
EXAMPLE OF PEAK IDENTIFICATION FOR C29 TRITERPANES



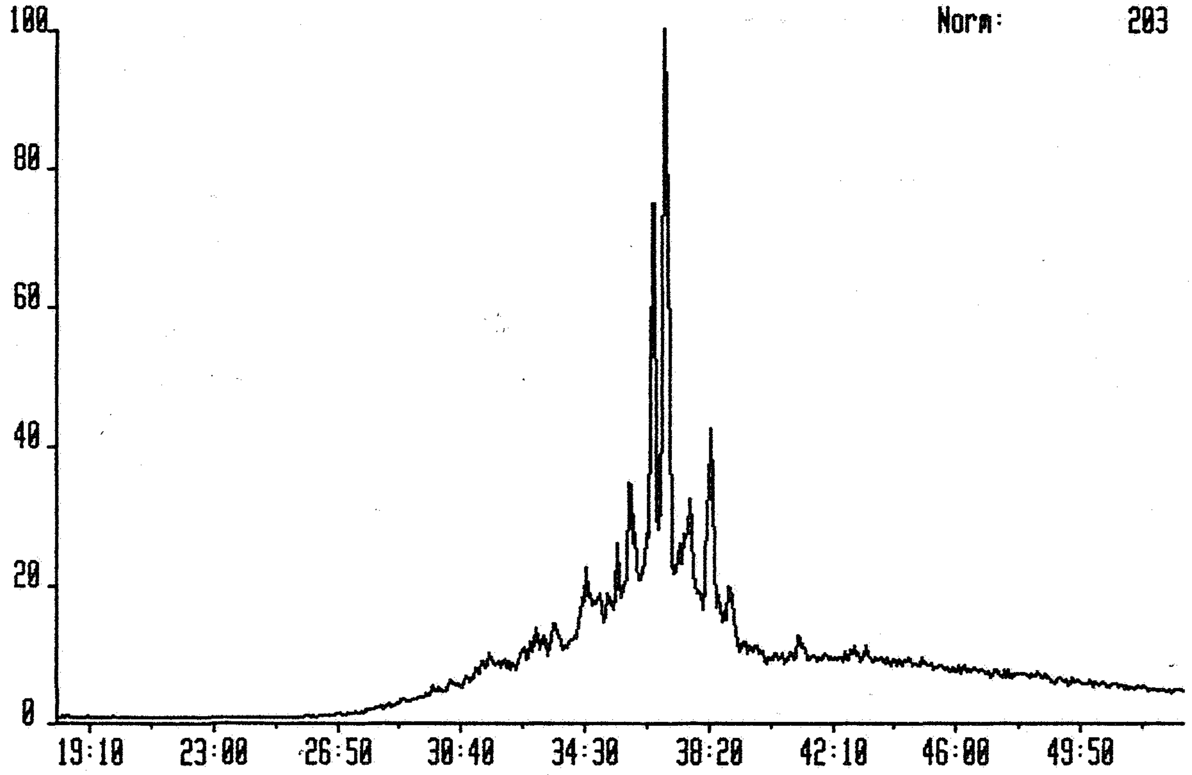
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 398.3914
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



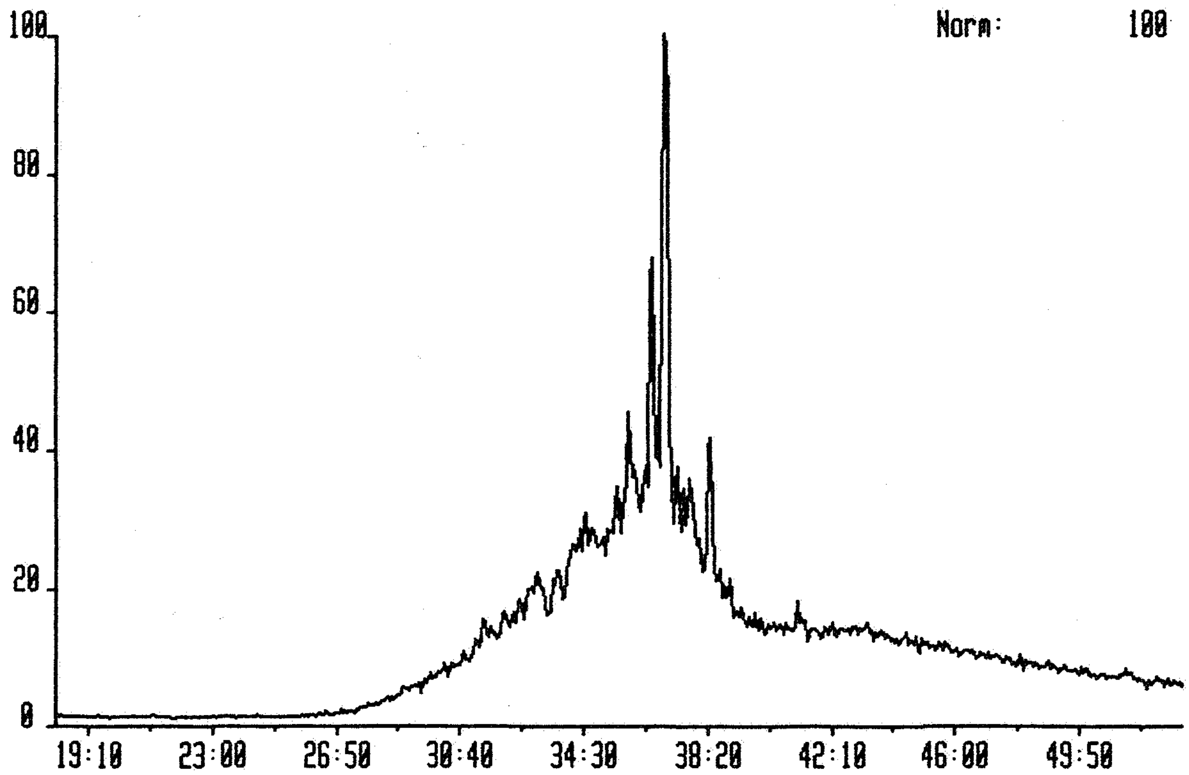
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 398.3914
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 398.3914
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

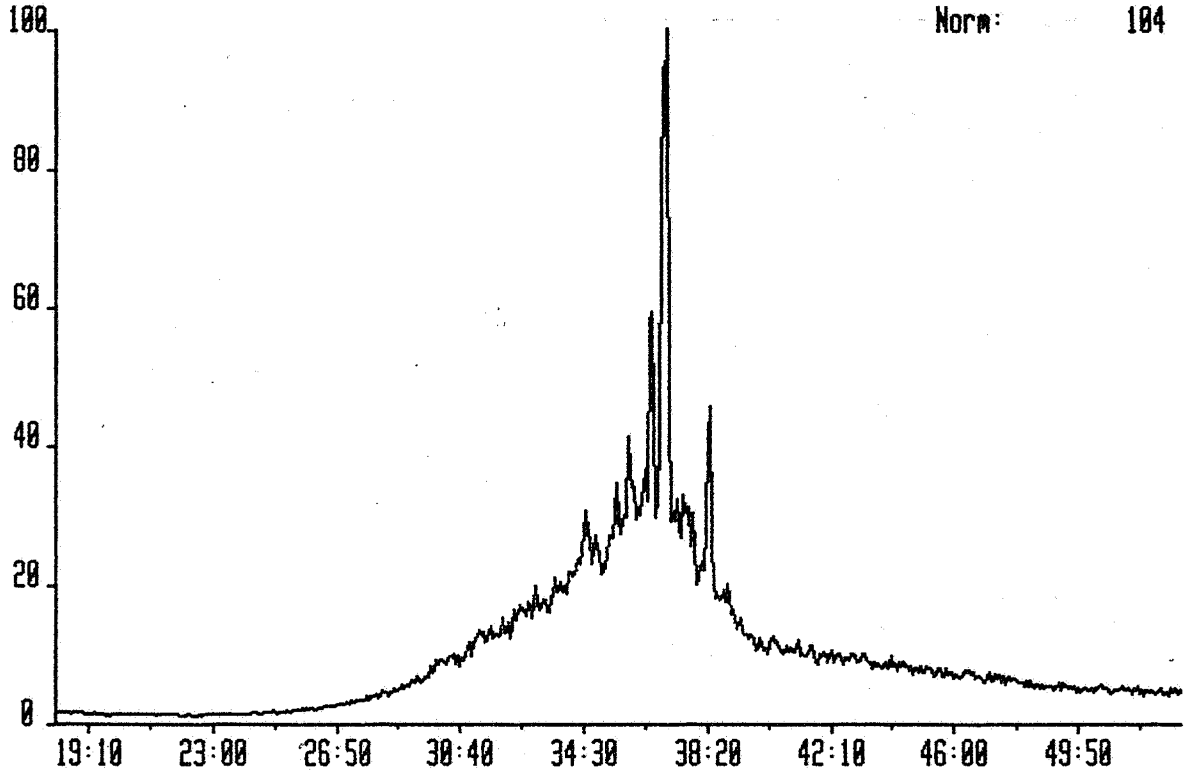


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 398.3914
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



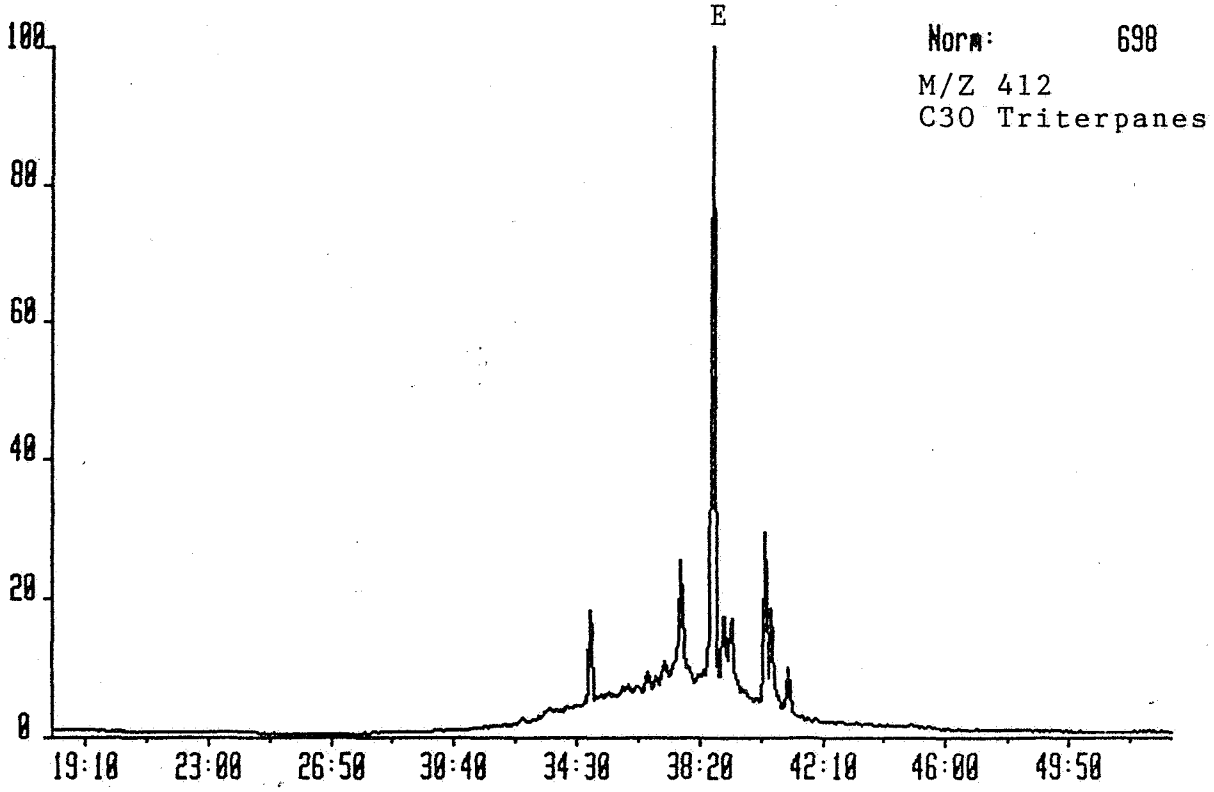
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 398.3914
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

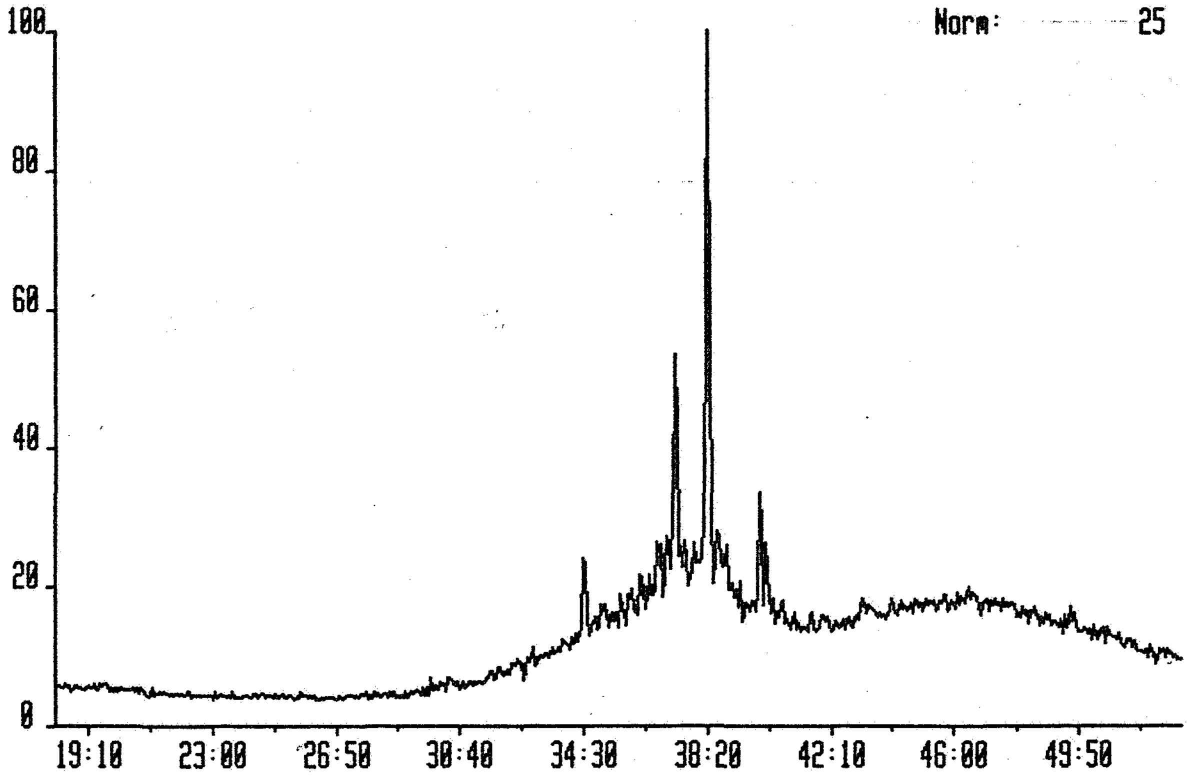


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

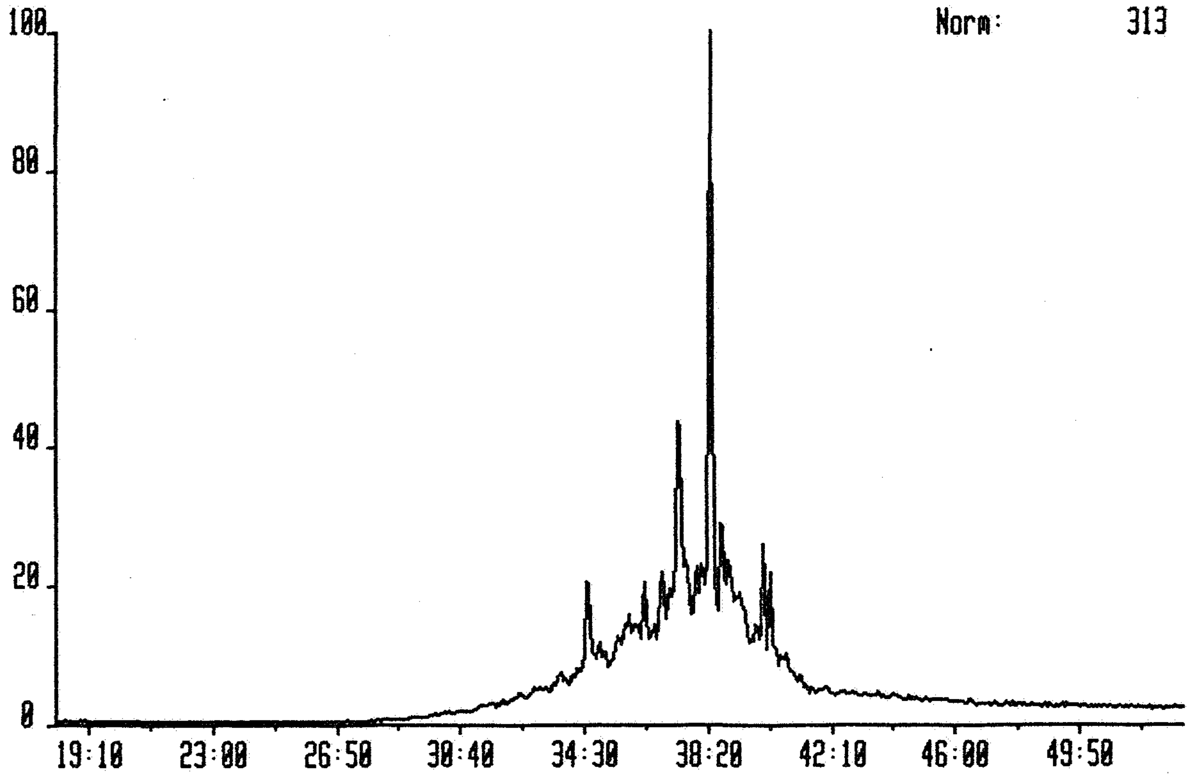
EXAMPLE OF PEAK IDENTIFICATION FOR C30 TRITERPANES



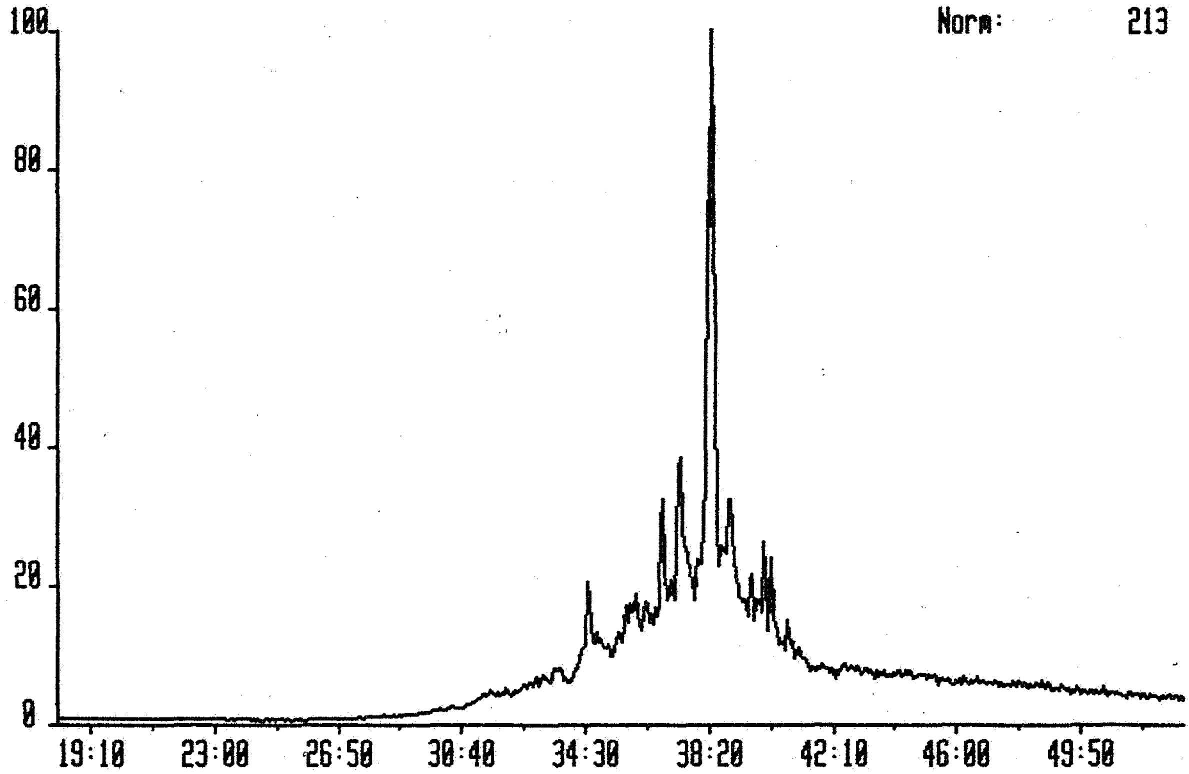
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 412.4069
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



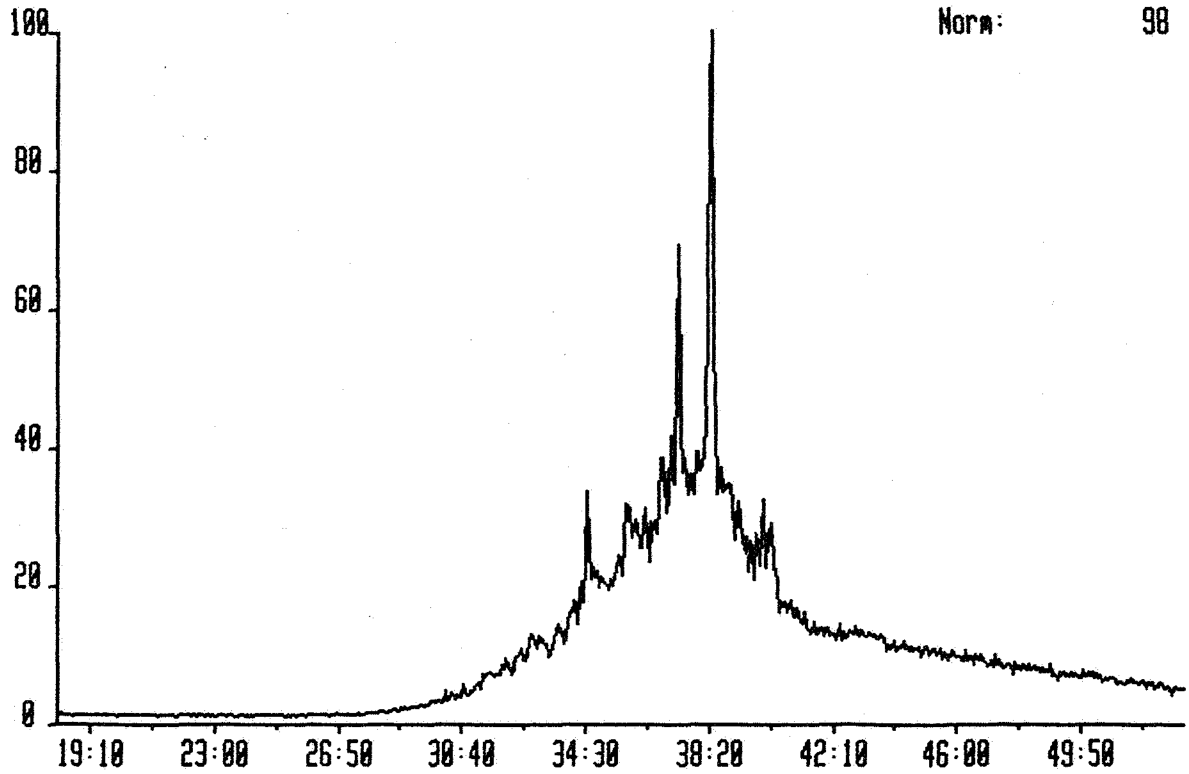
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 412.4069
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



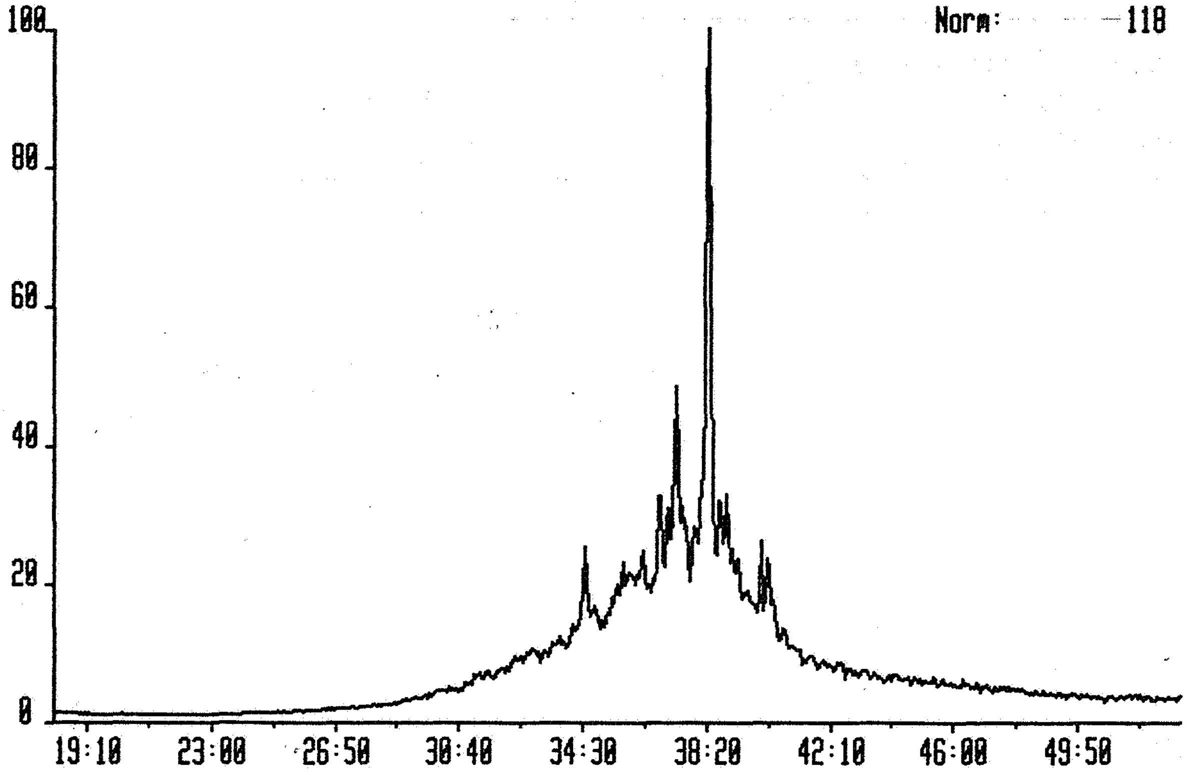
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 412.4069
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 412.4069
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

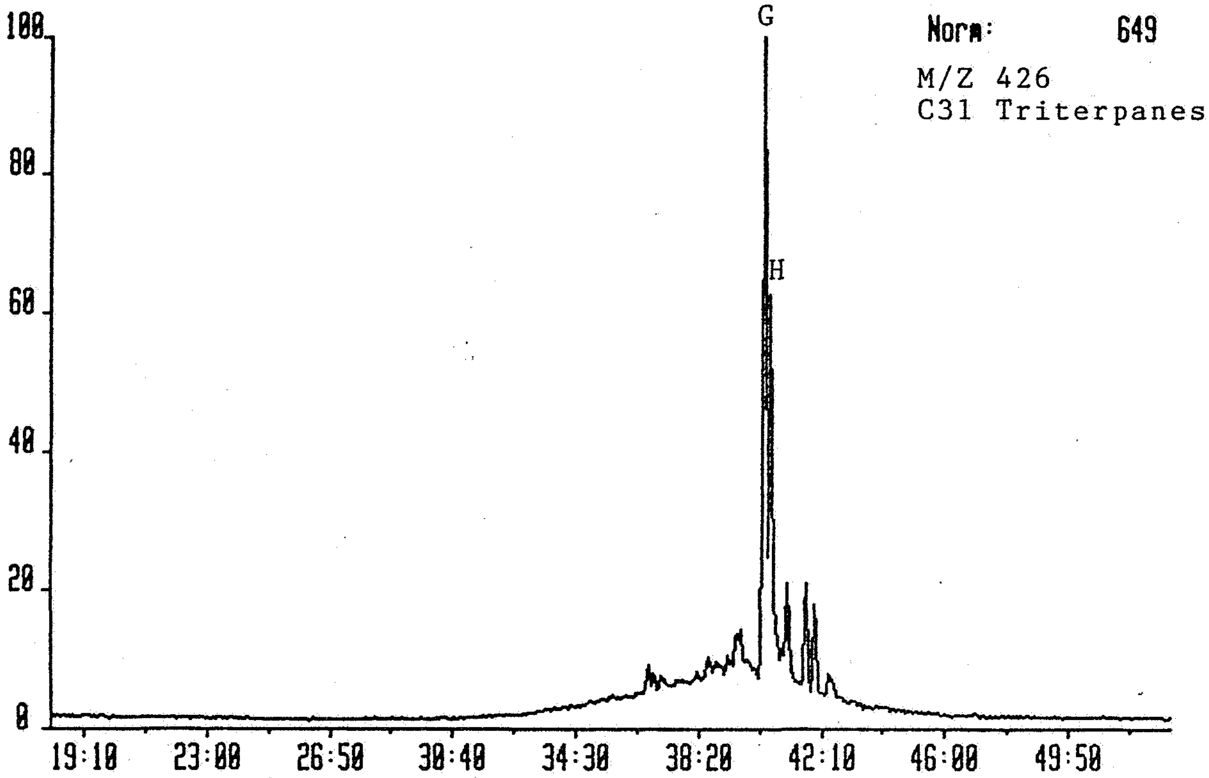


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 412.4069
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

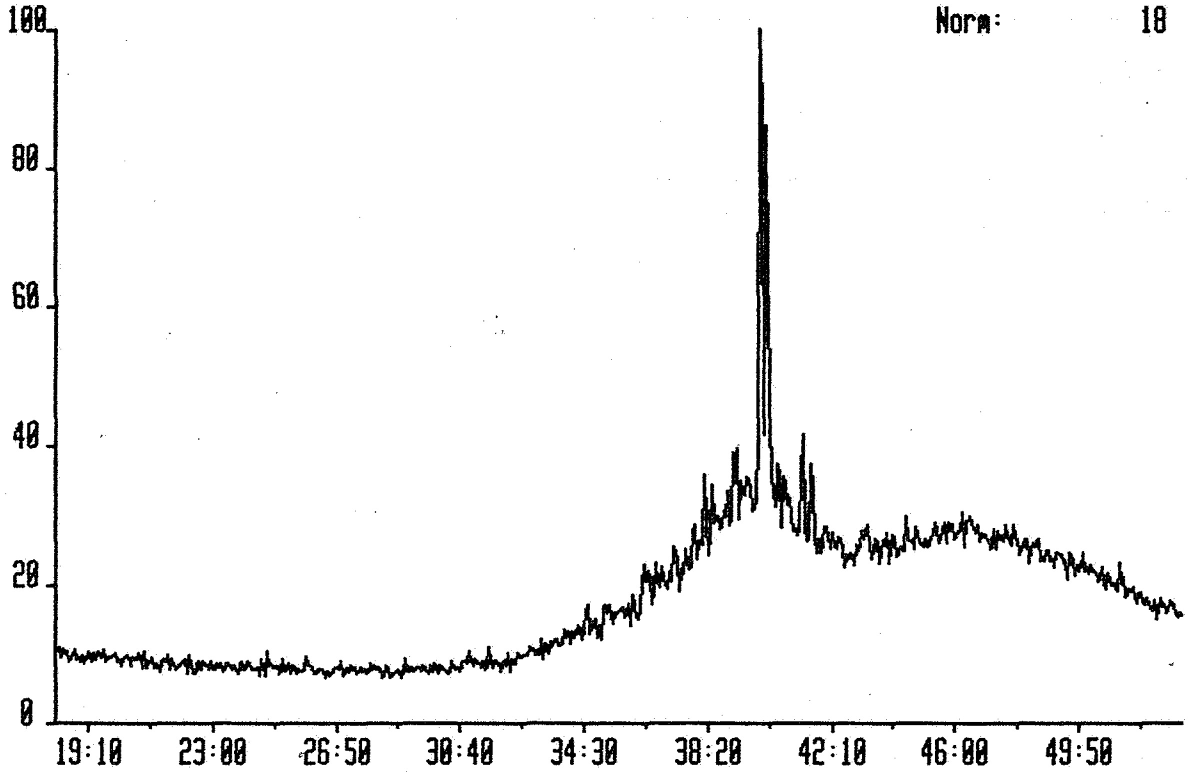


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

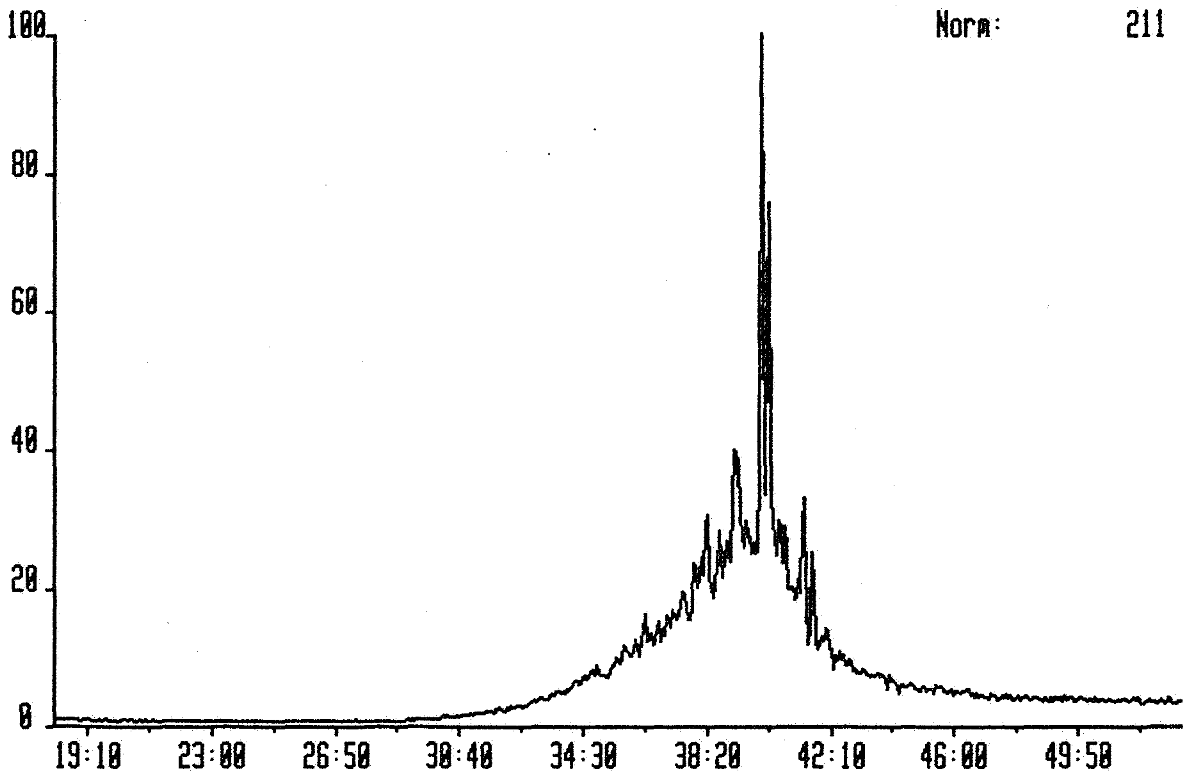
EXAMPLE OF PEAK IDENTIFICATION FOR C31 TRITERPANES



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 426.4226
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

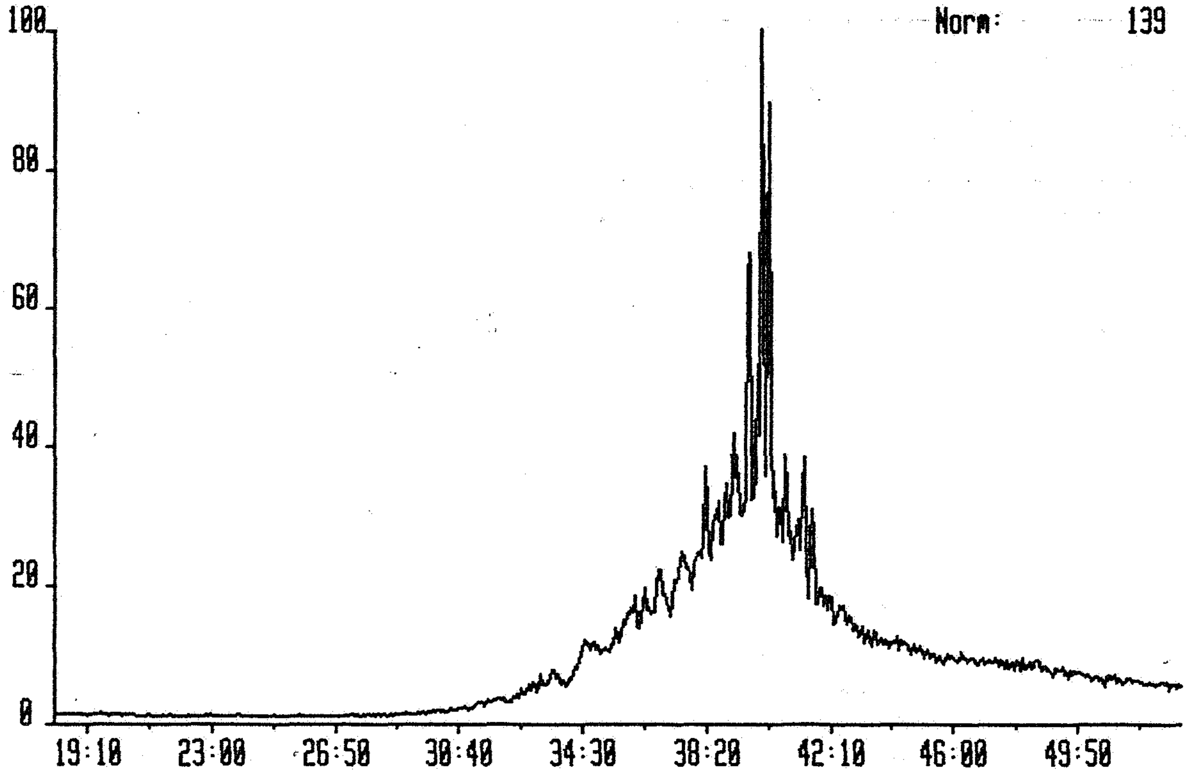


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 426.4226
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

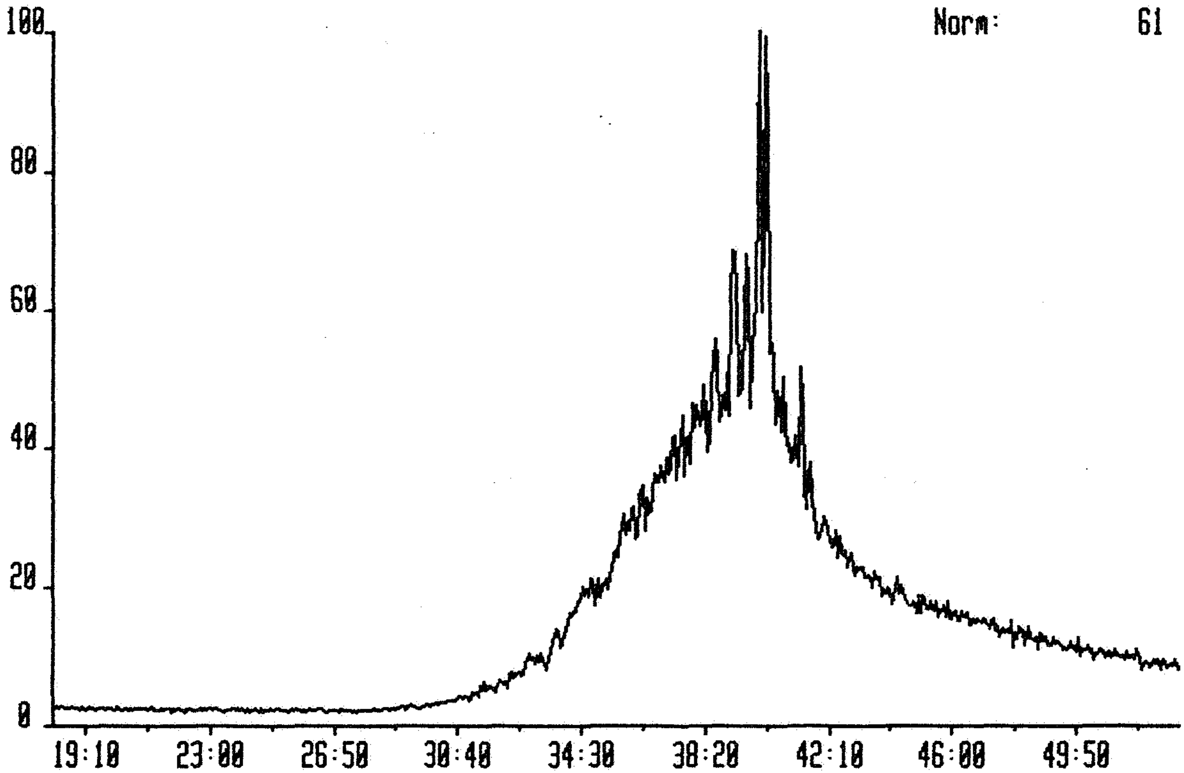


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

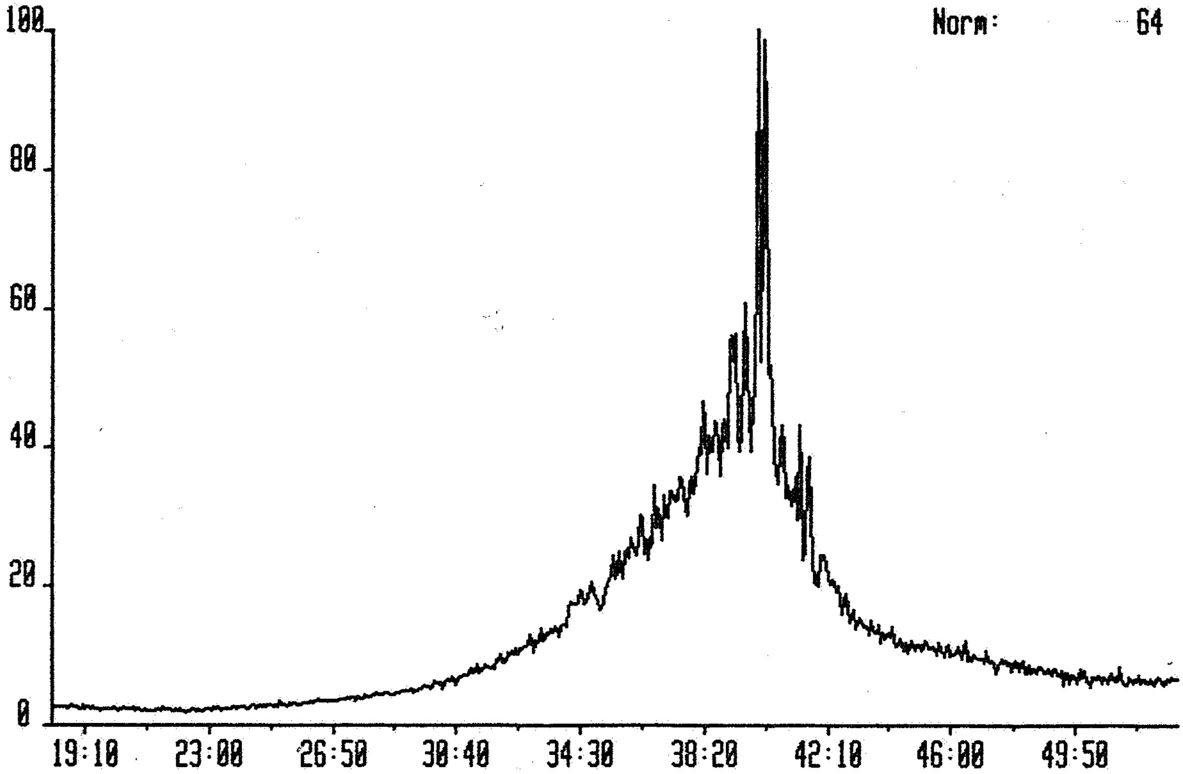
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 426.4226
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



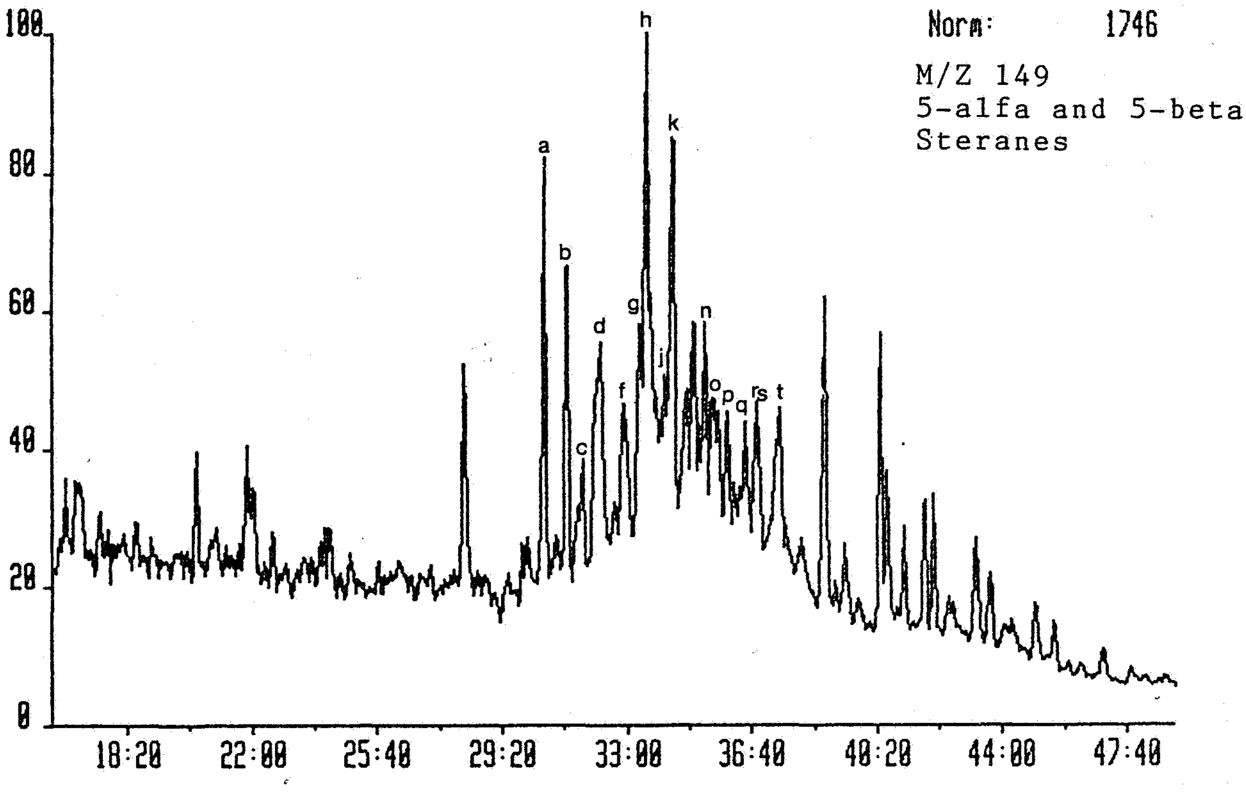
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 426.4226
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 426.4226
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

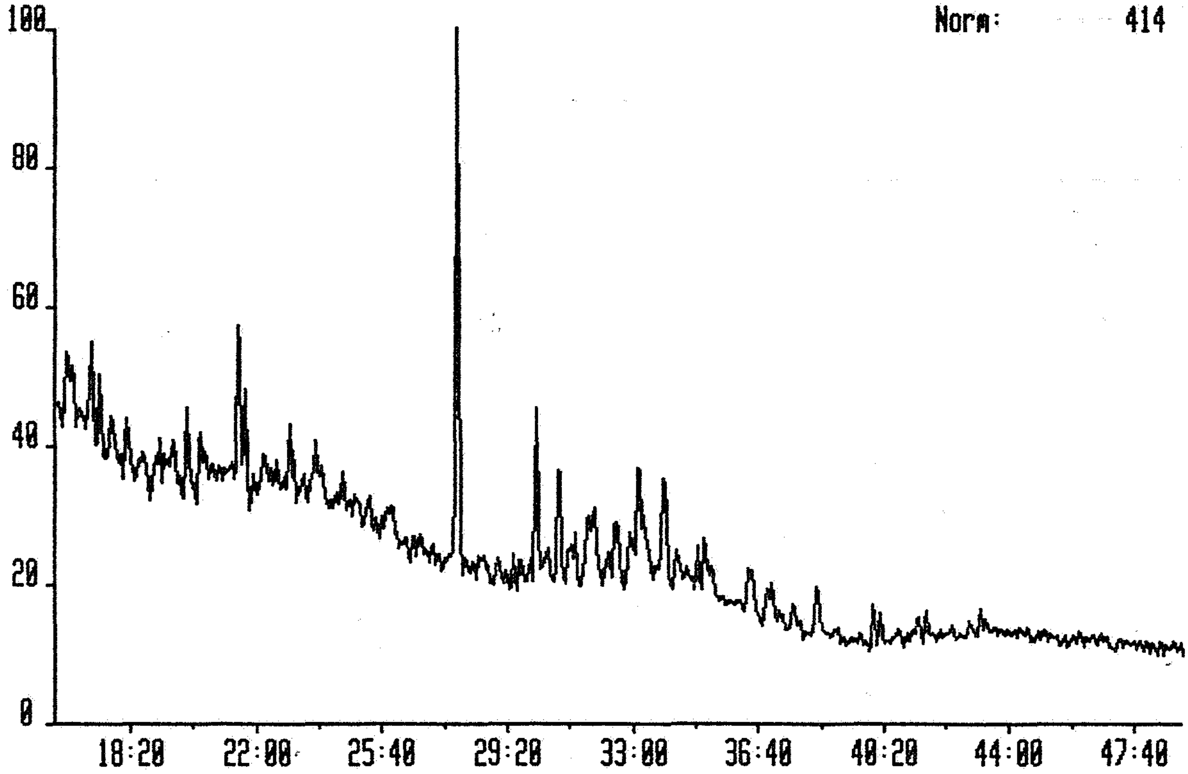


EXAMPLE OF PEAK IDENTIFICATION FOR 5-ALFA AND 5-BETA STERANES

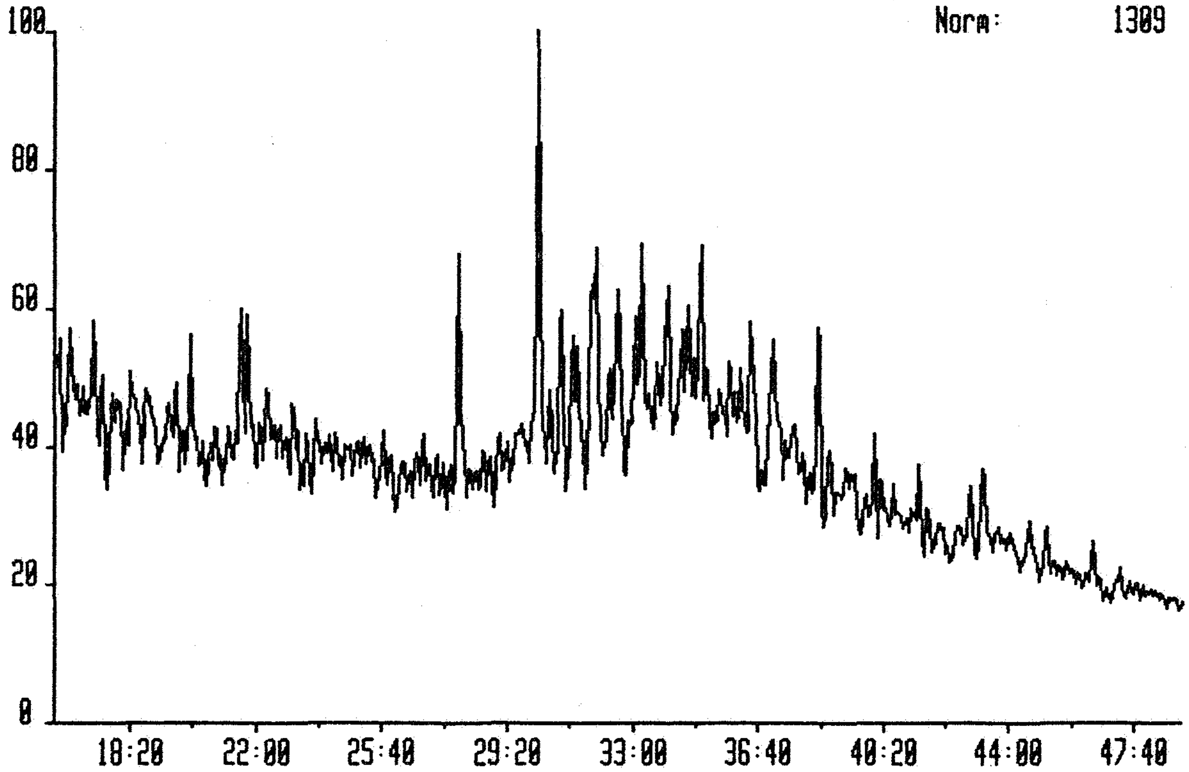


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

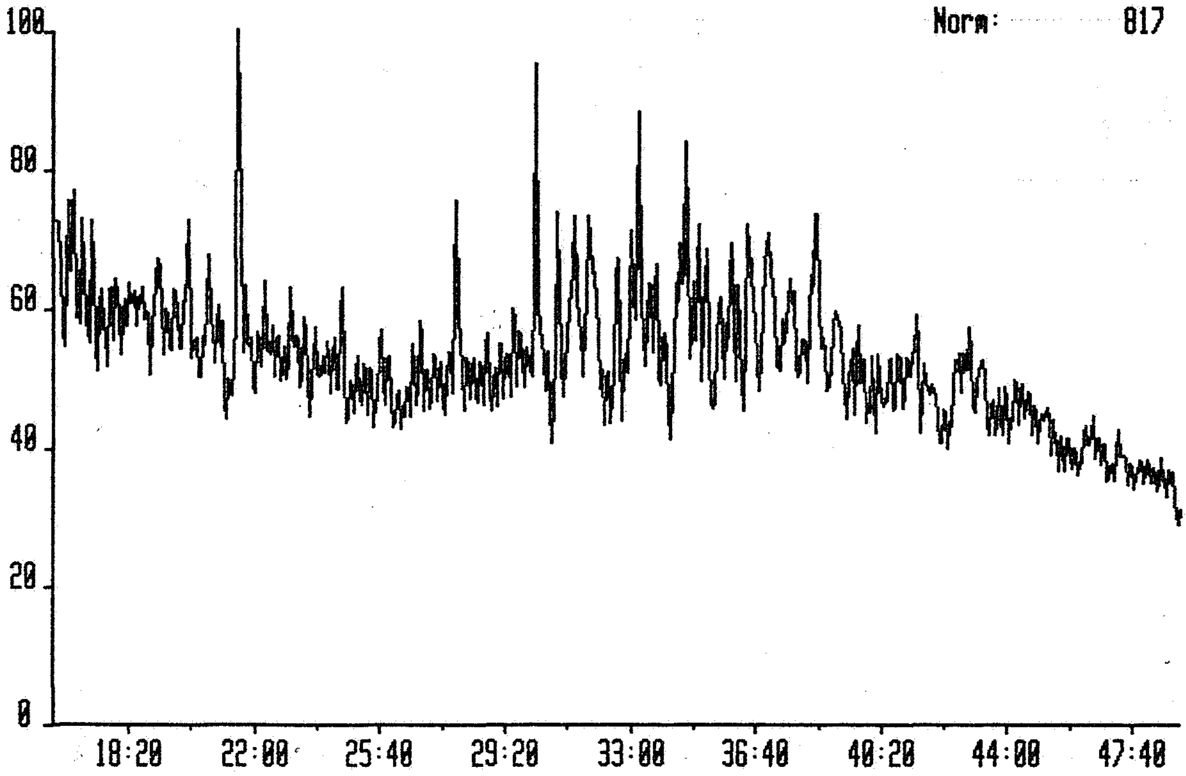
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 149.1328
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



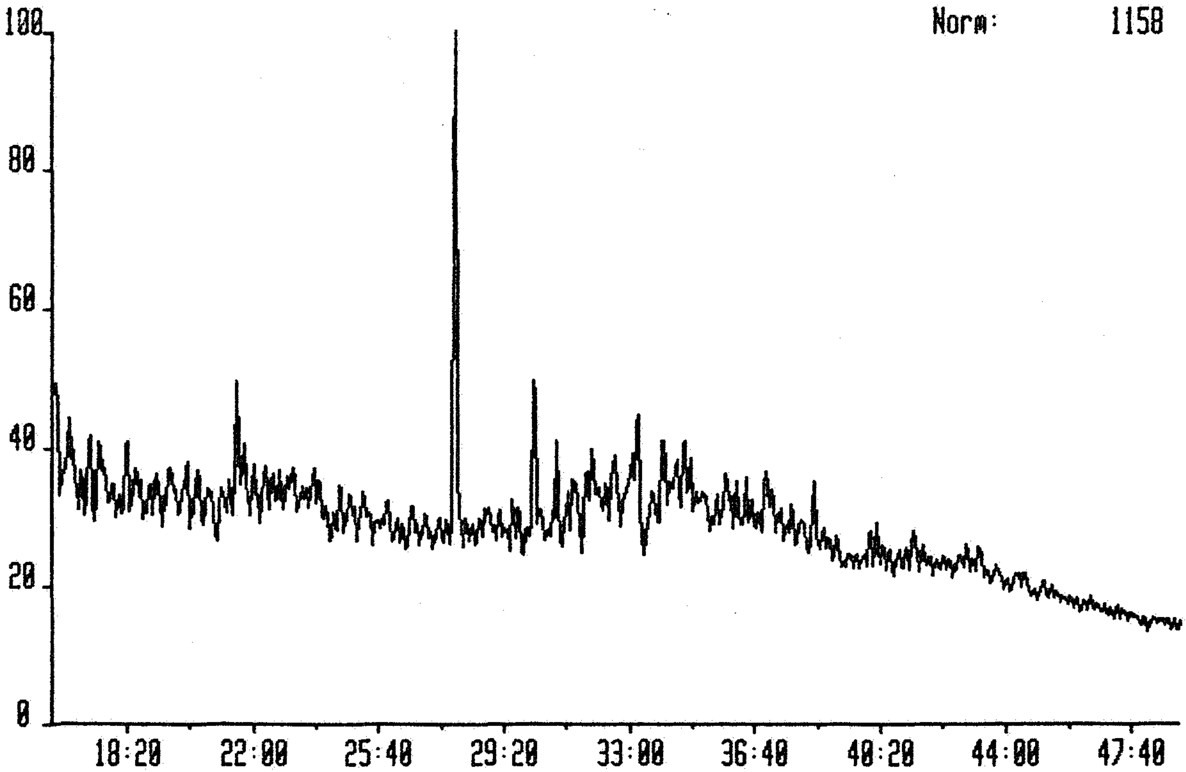
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 149.1328
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



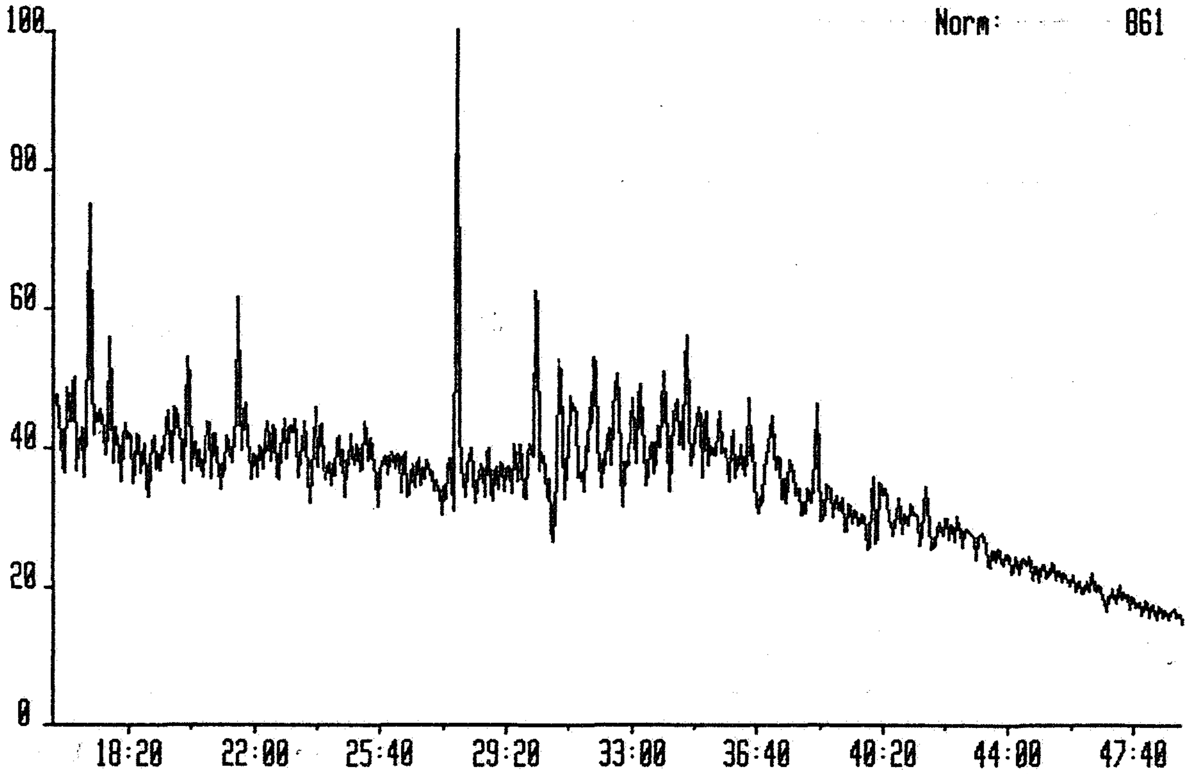
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 149.1328
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 149.1328
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

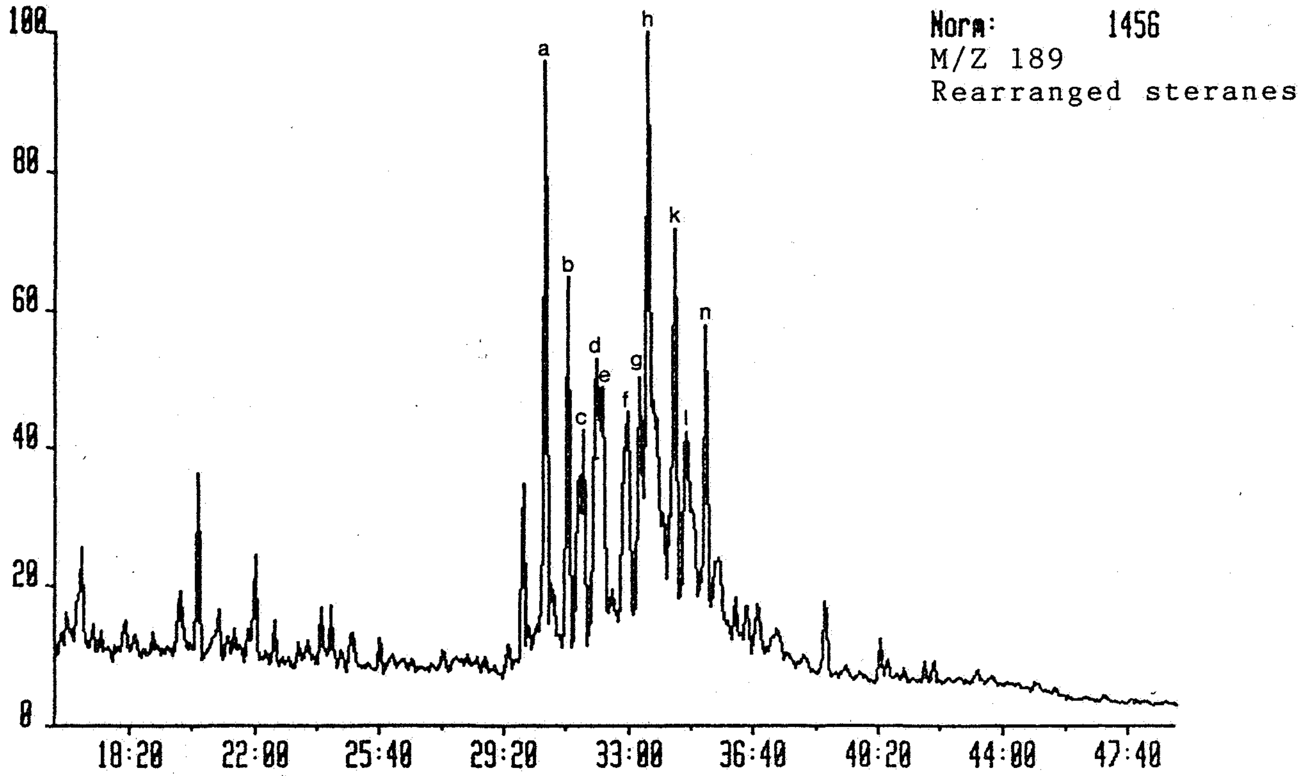


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 149.1328
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

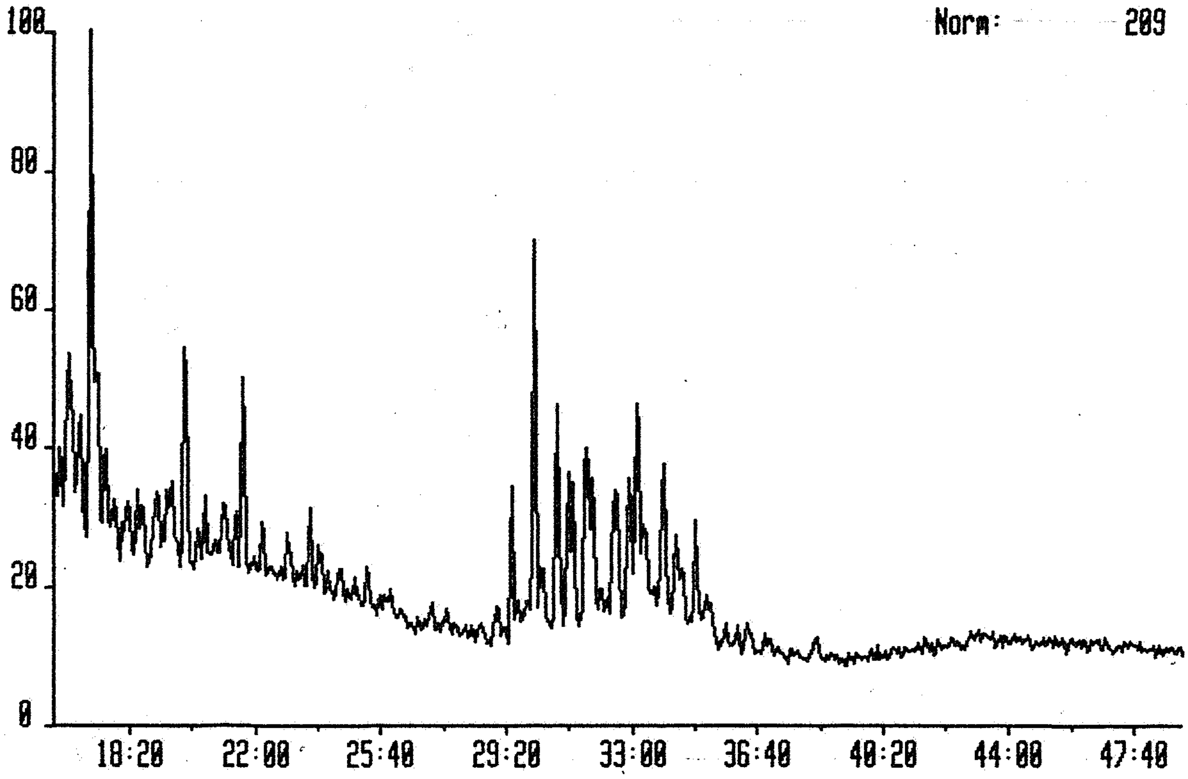


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

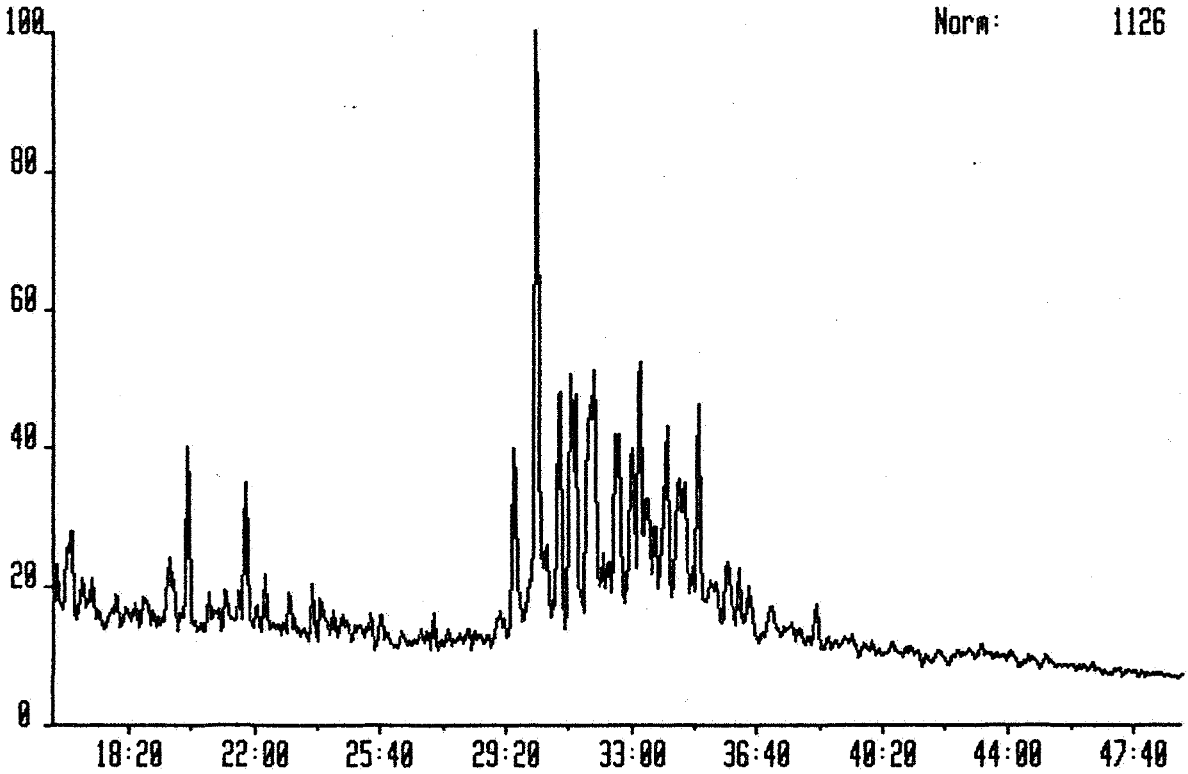
EXAMPLE OF PEAK IDENTIFICATION FOR REARRANGED STERANES



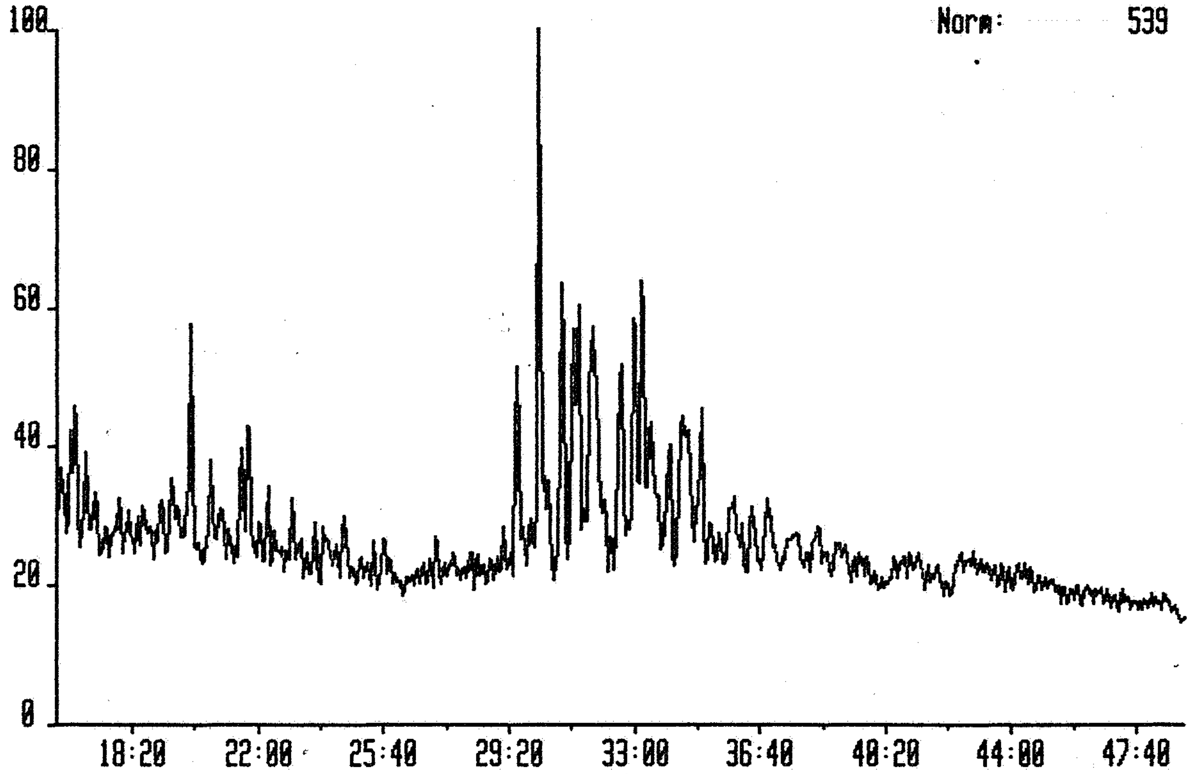
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 189.1643
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



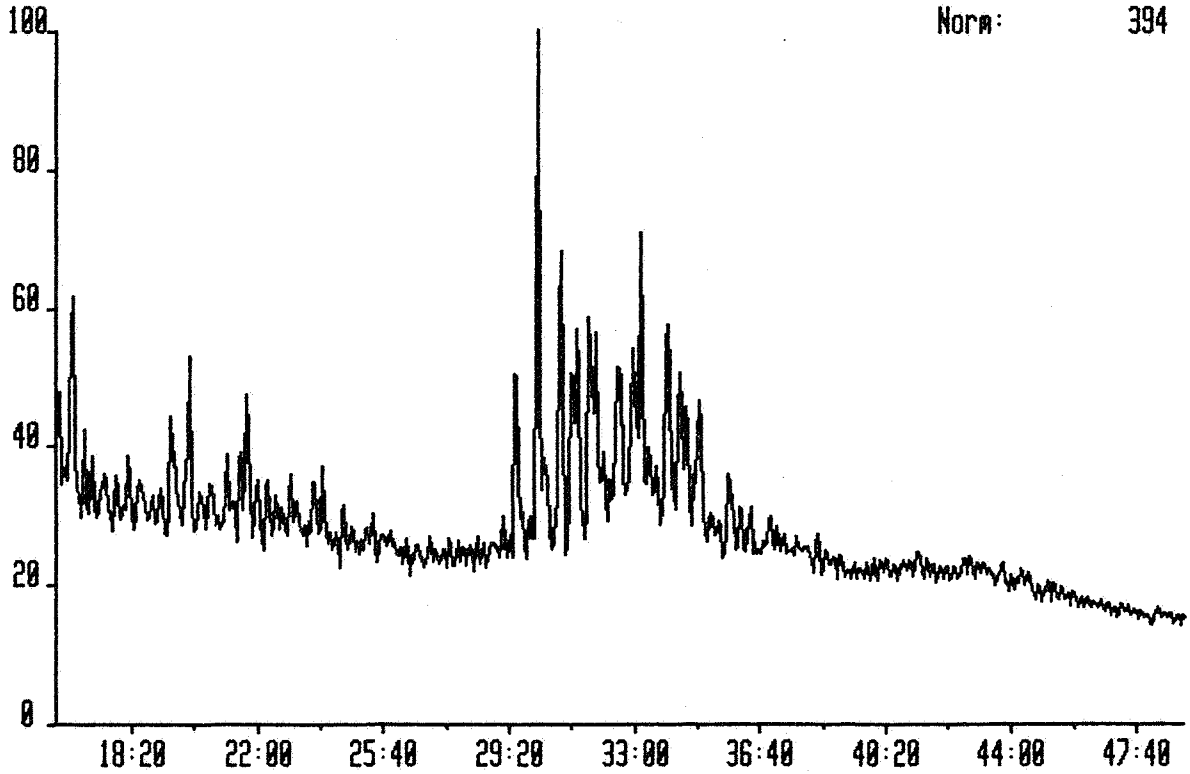
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 189.1643
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 189.1643
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

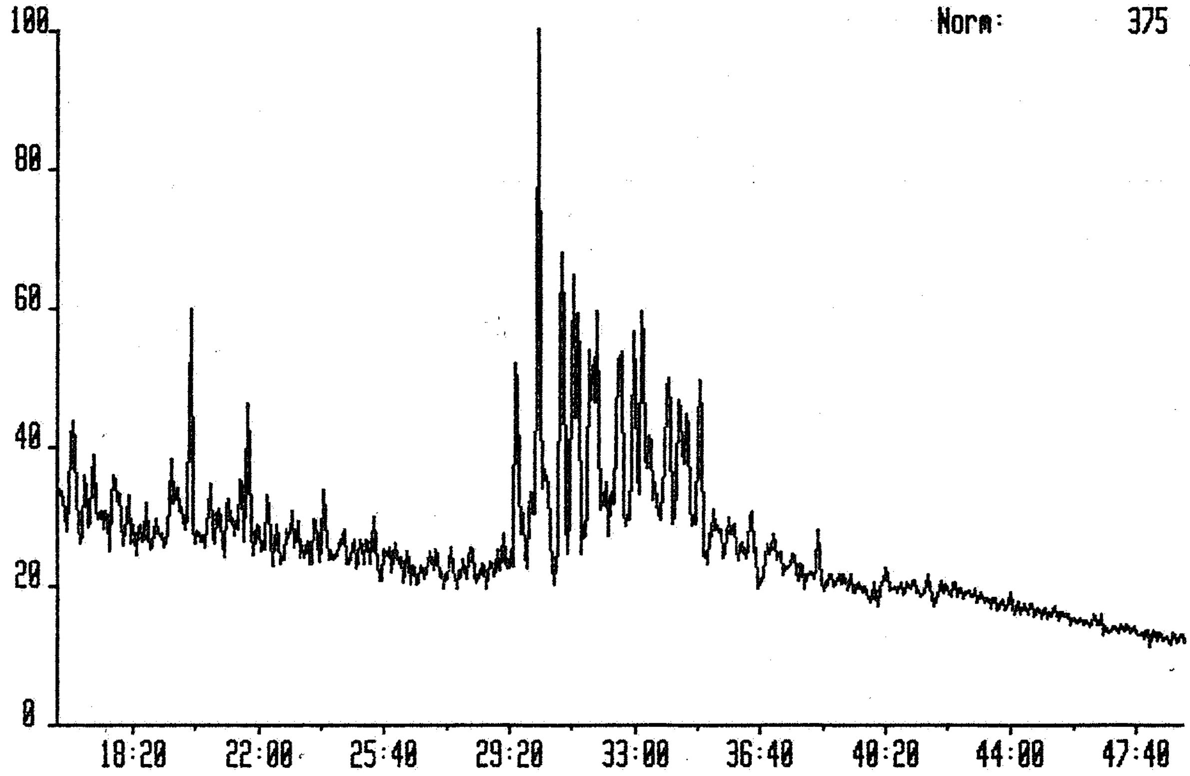


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 189.1643
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

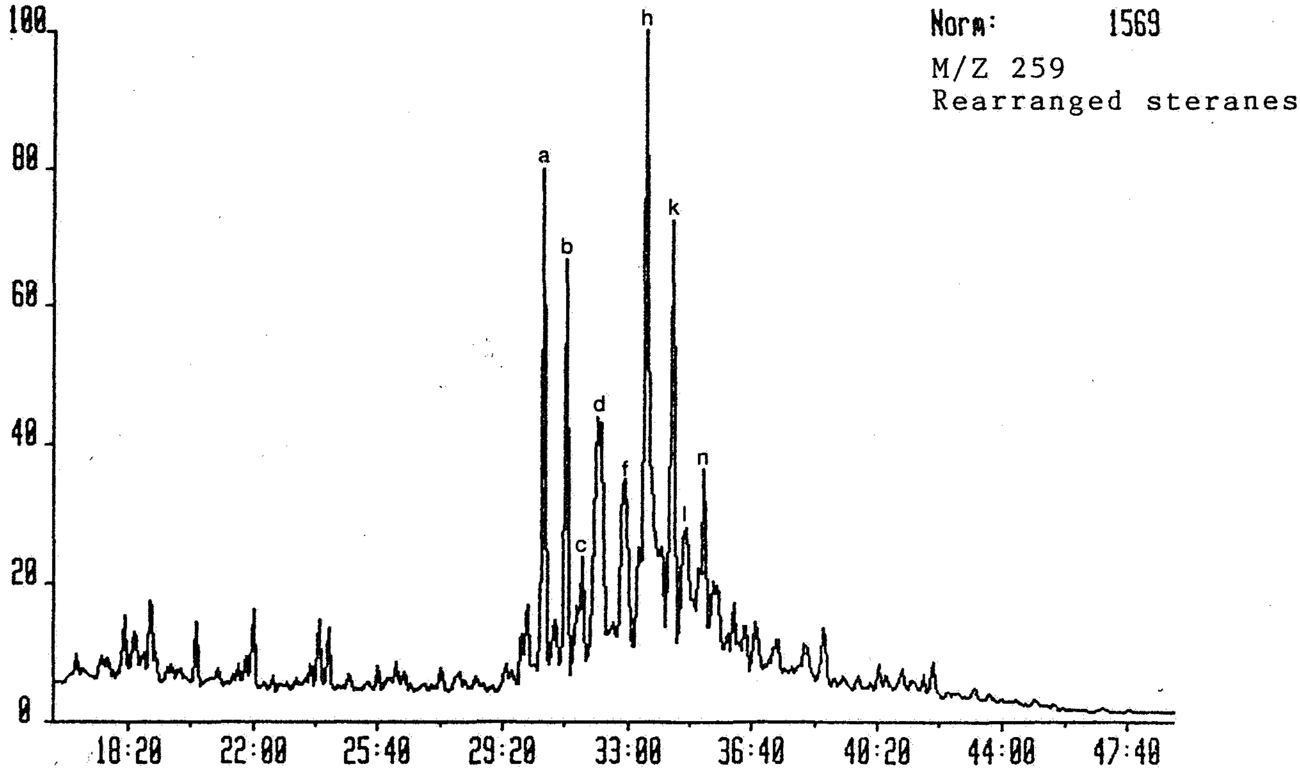


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 14 Injection 1   Group 1   Mass 189.1643
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

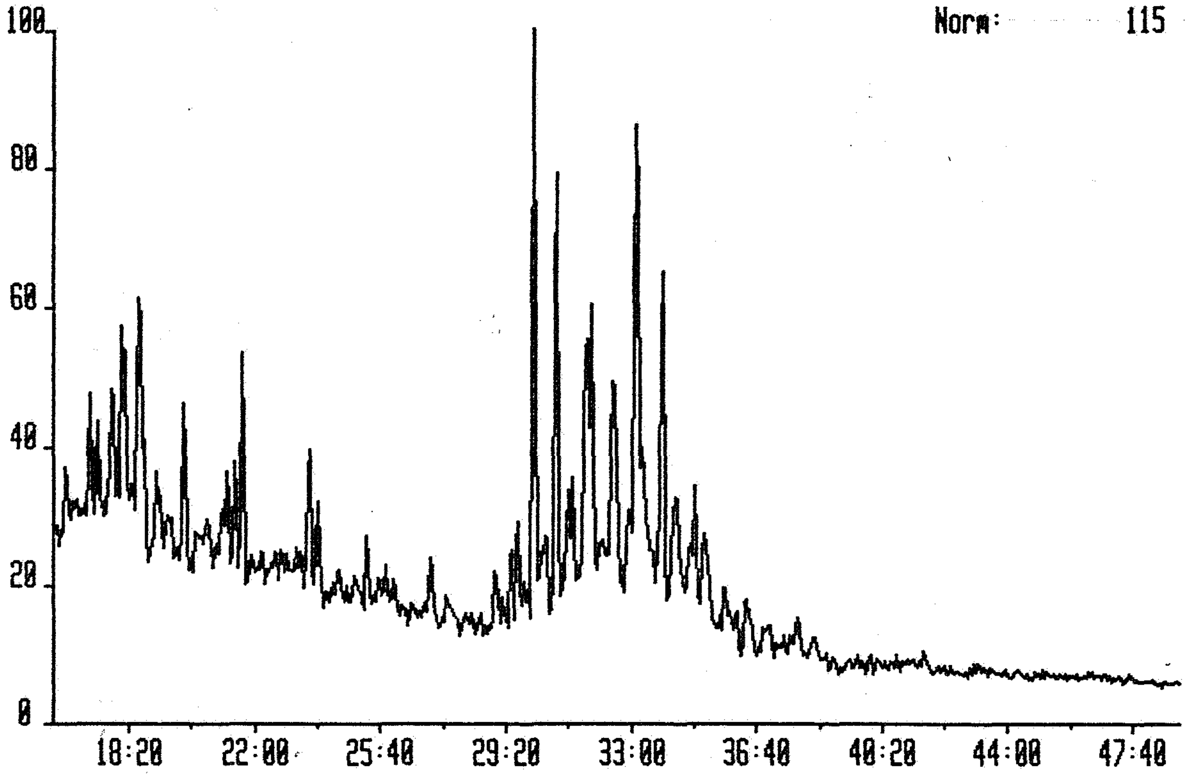


EXAMPLE OF PEAK IDENTIFICATION FOR REARRANGED STERANES

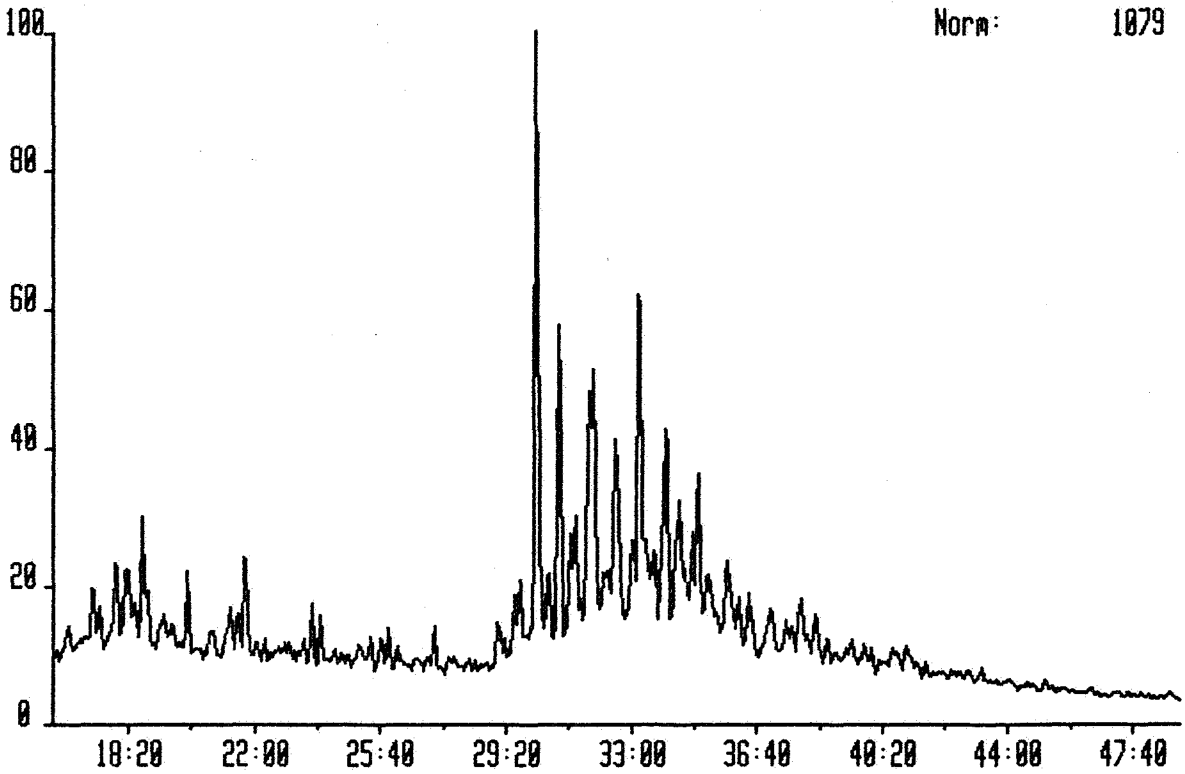


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 259.2427
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

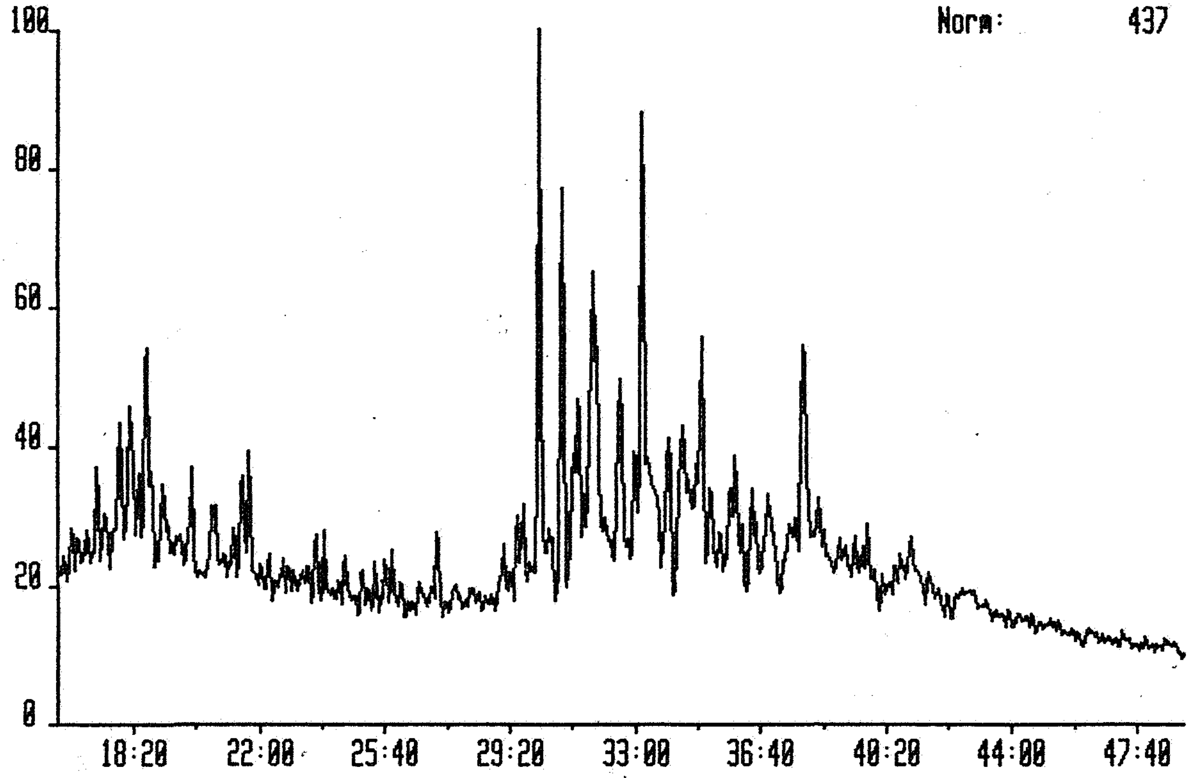


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 259.2427
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

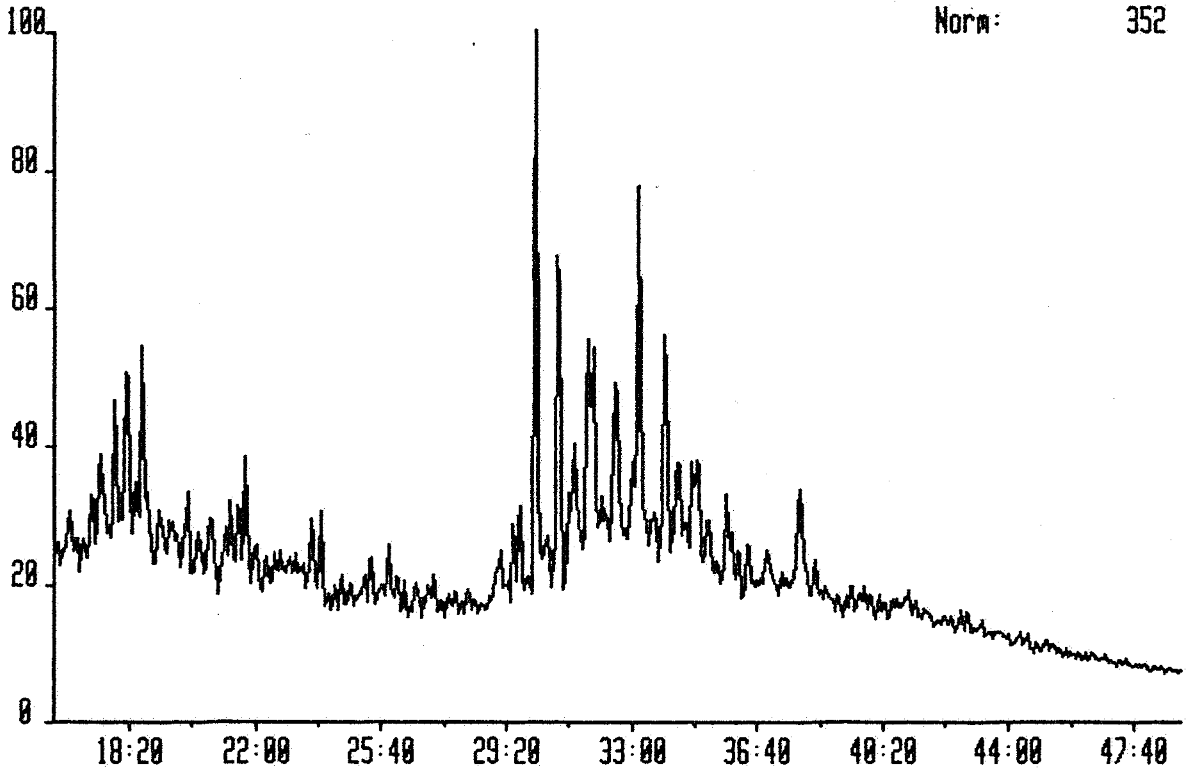


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 259.2427
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

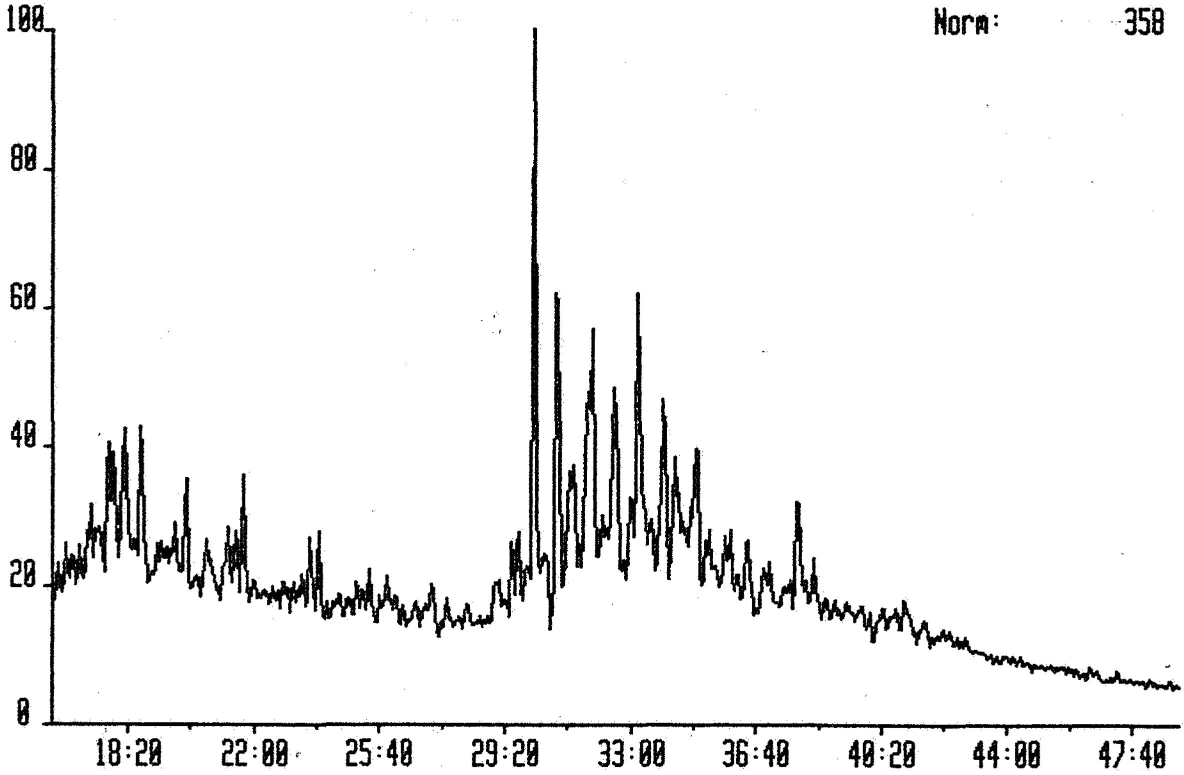


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 259.2427
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

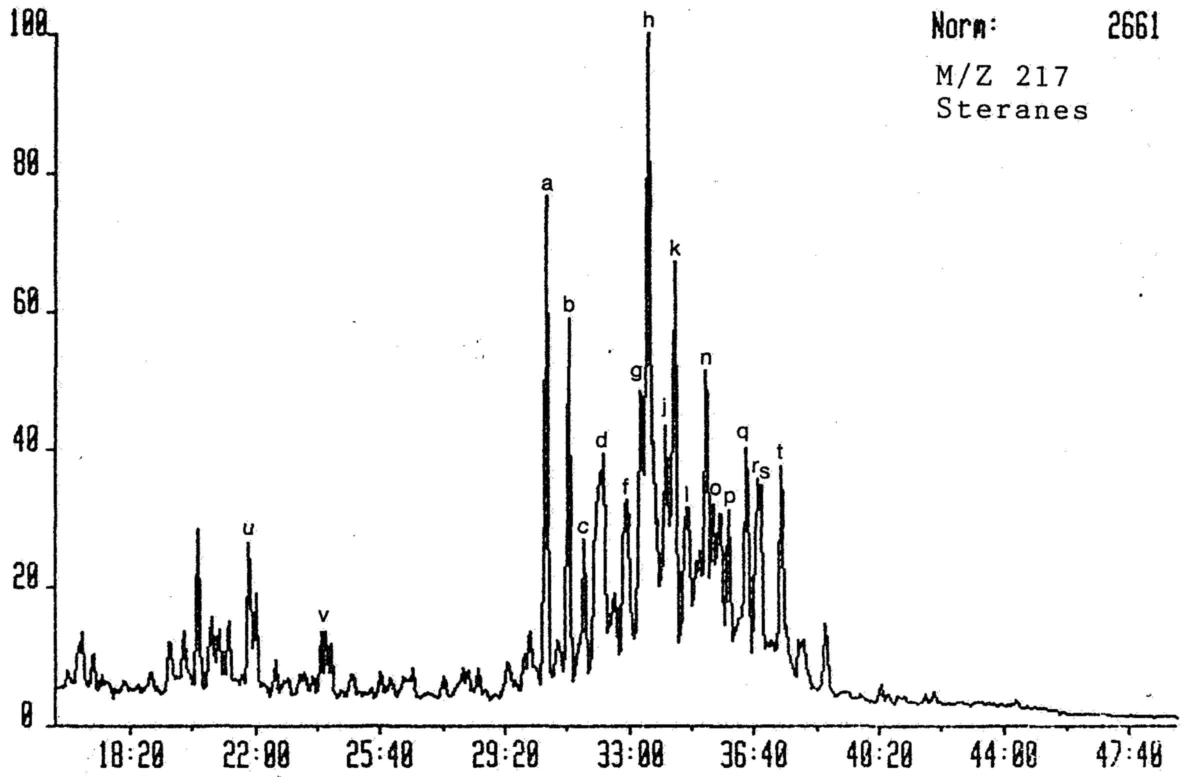


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

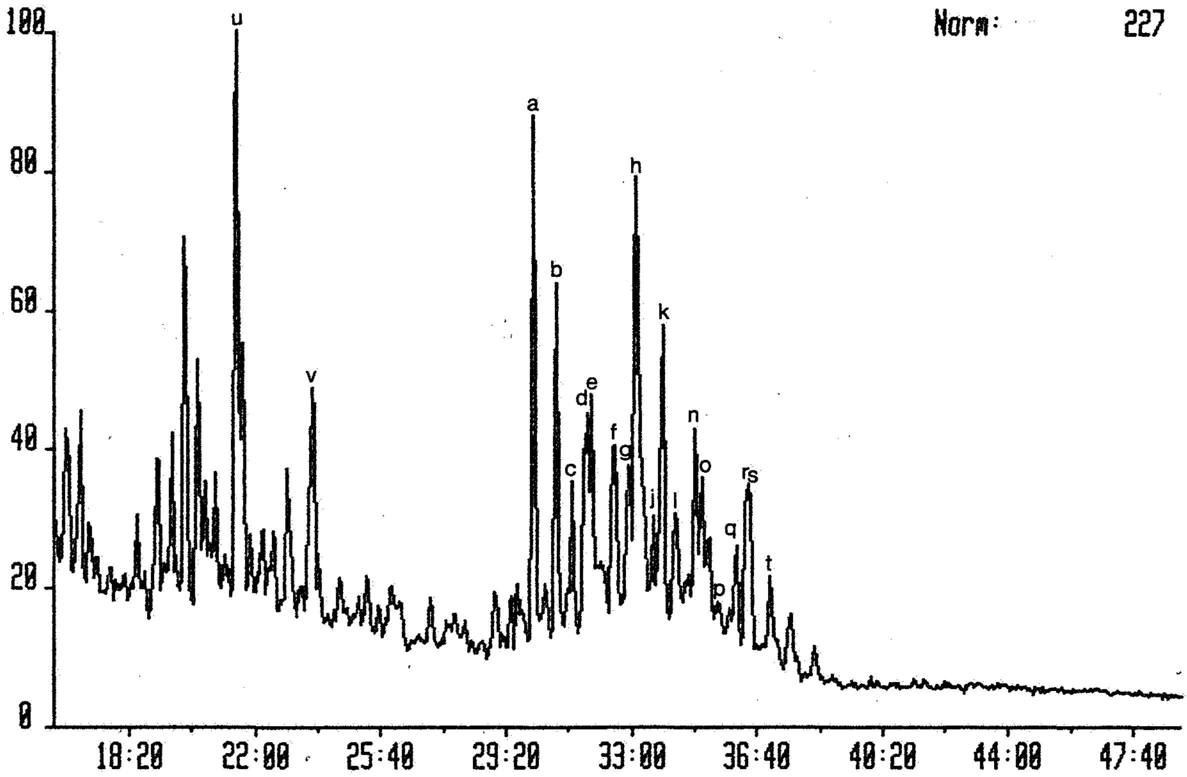
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 259.2427
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



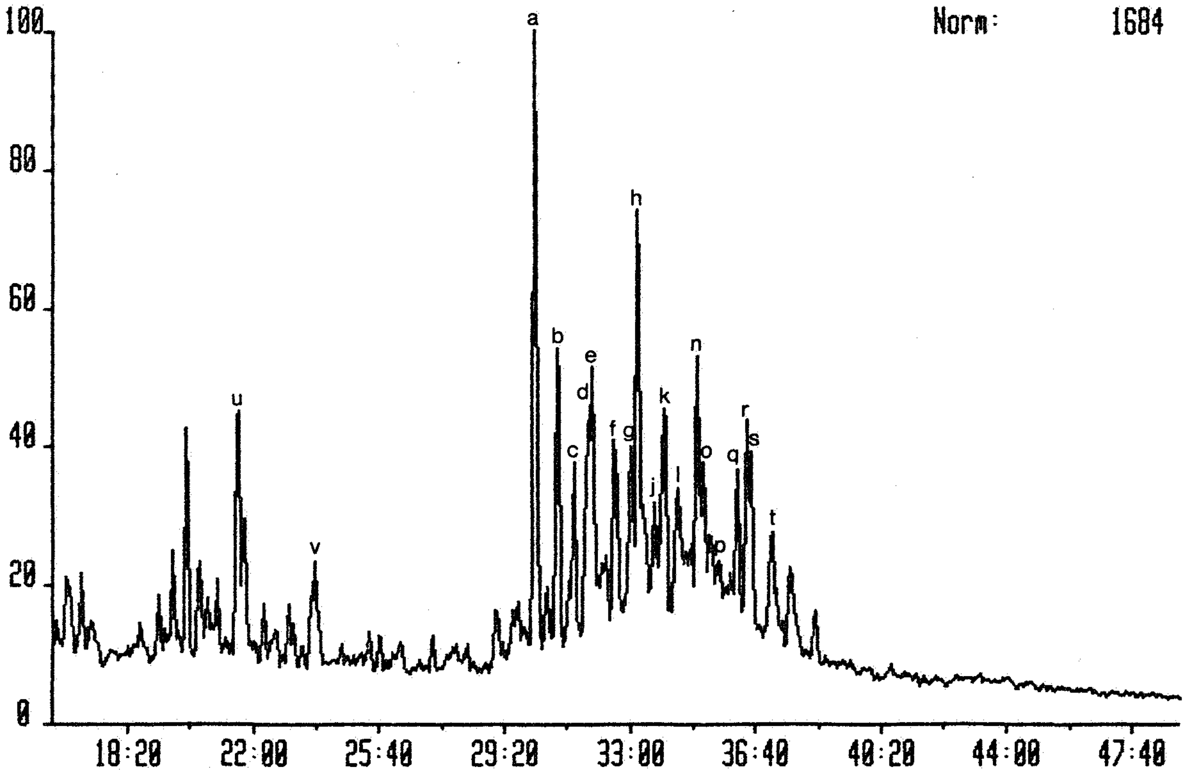
EXAMPLE OF PEAK IDENTIFICATION FOR STERANES



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 217.1956
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

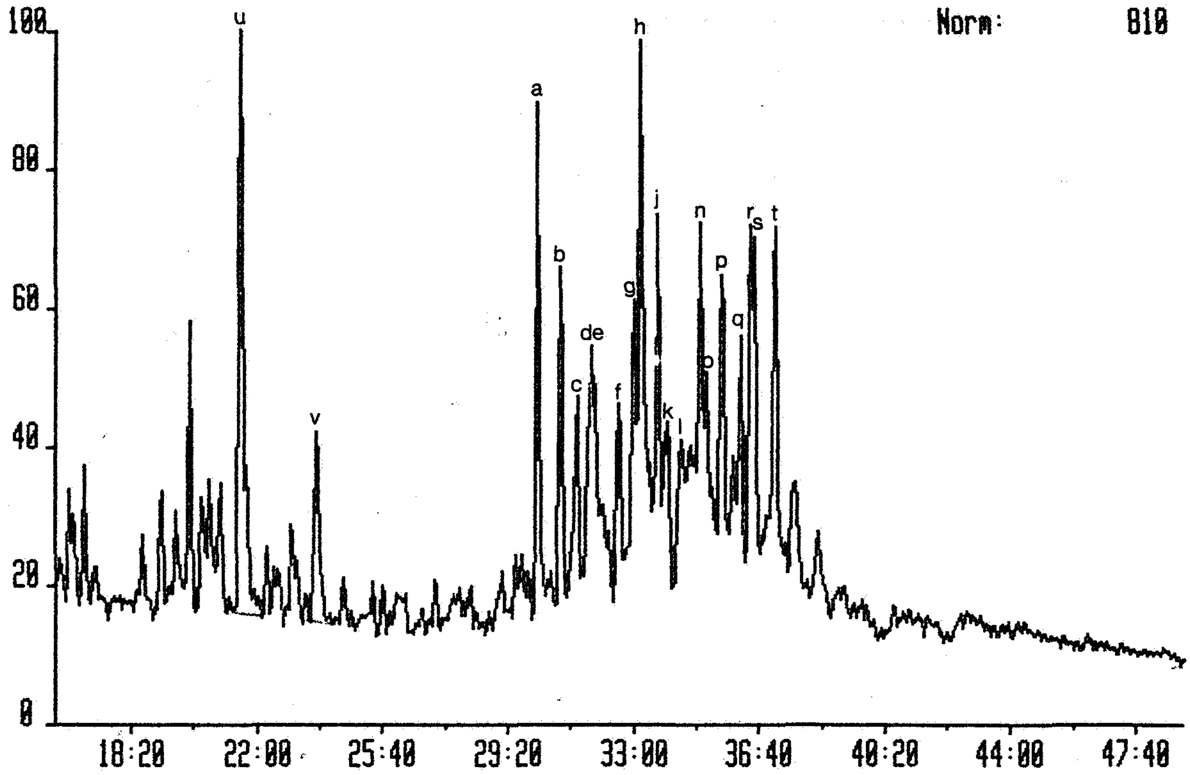


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 217.1956
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

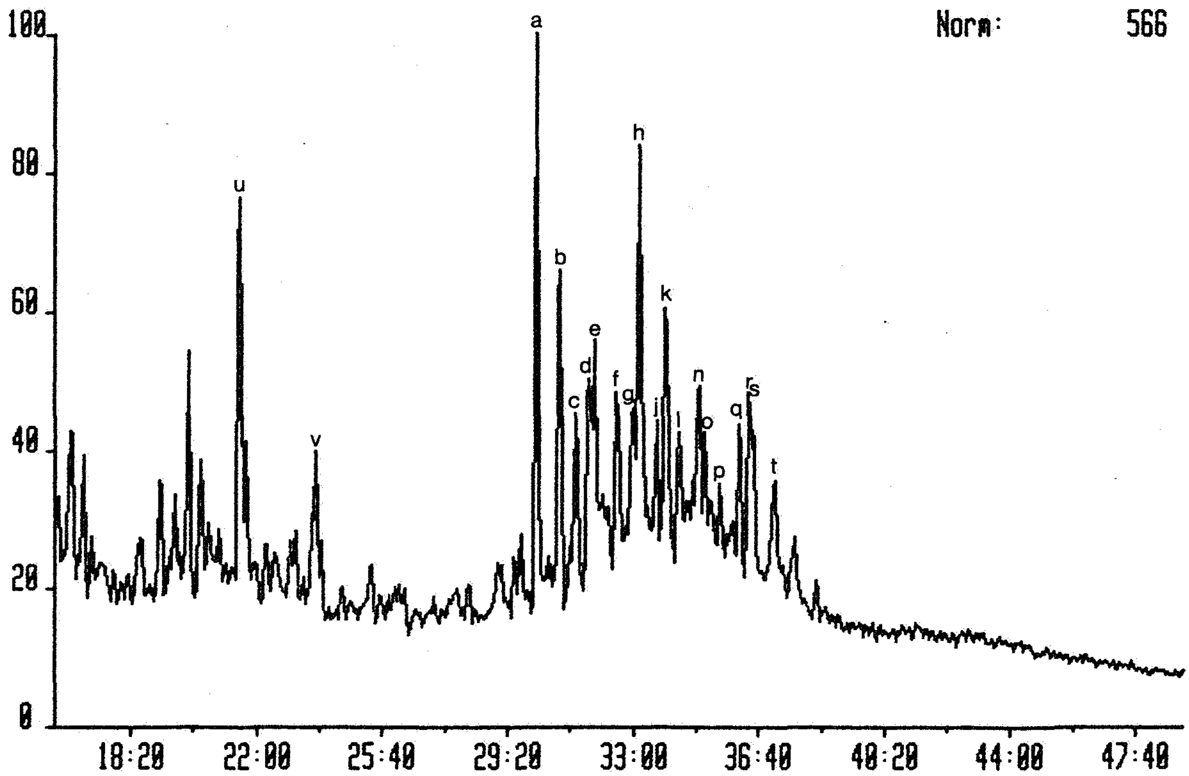


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 12 Injection 1   Group 1   Mass 217.1956
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

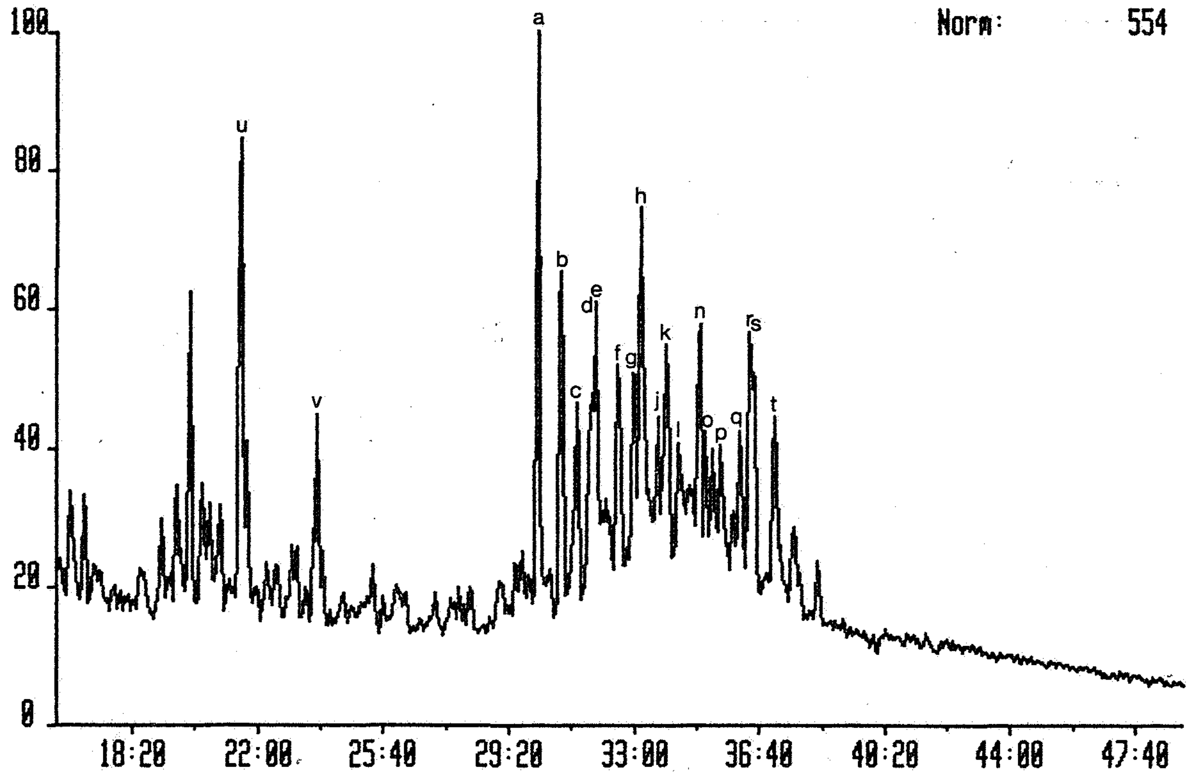


CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 13 Injection 1   Group 1   Mass 217.1956
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

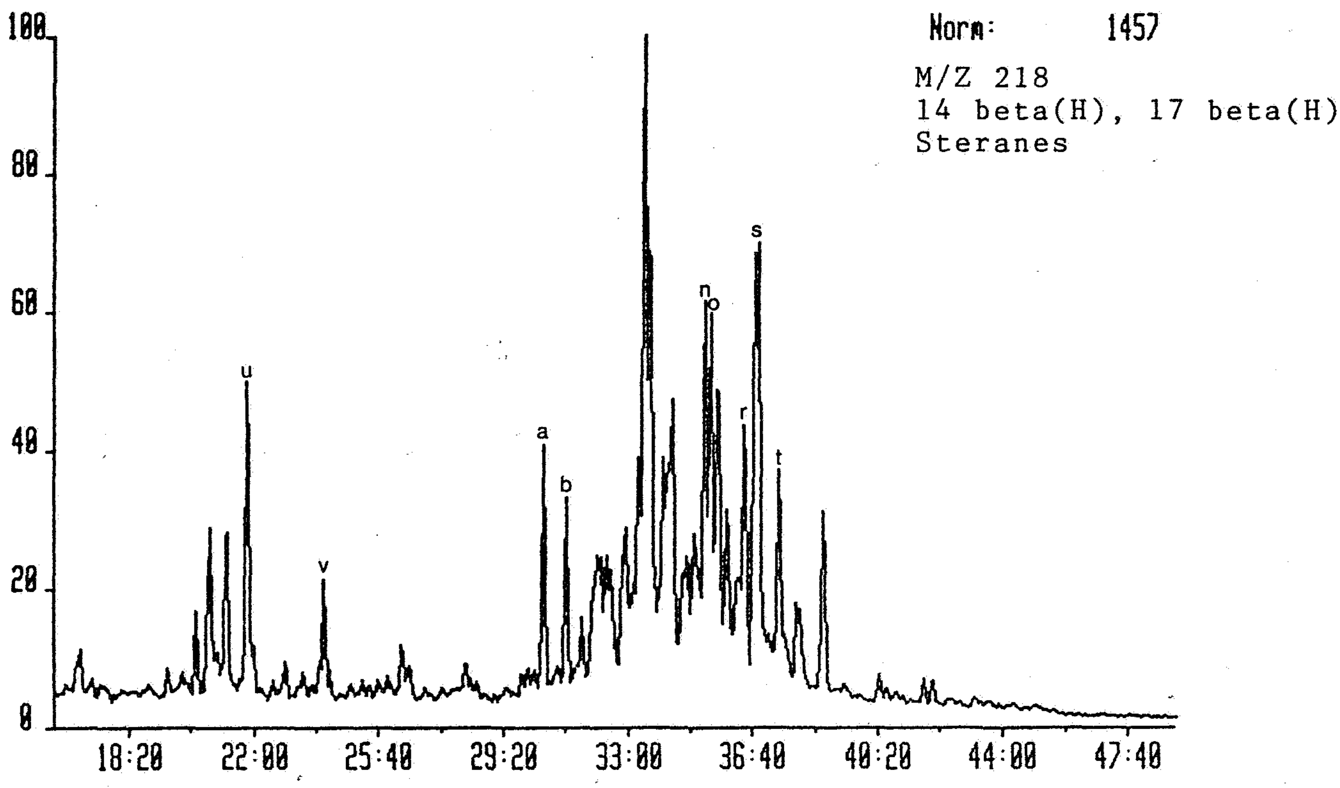


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

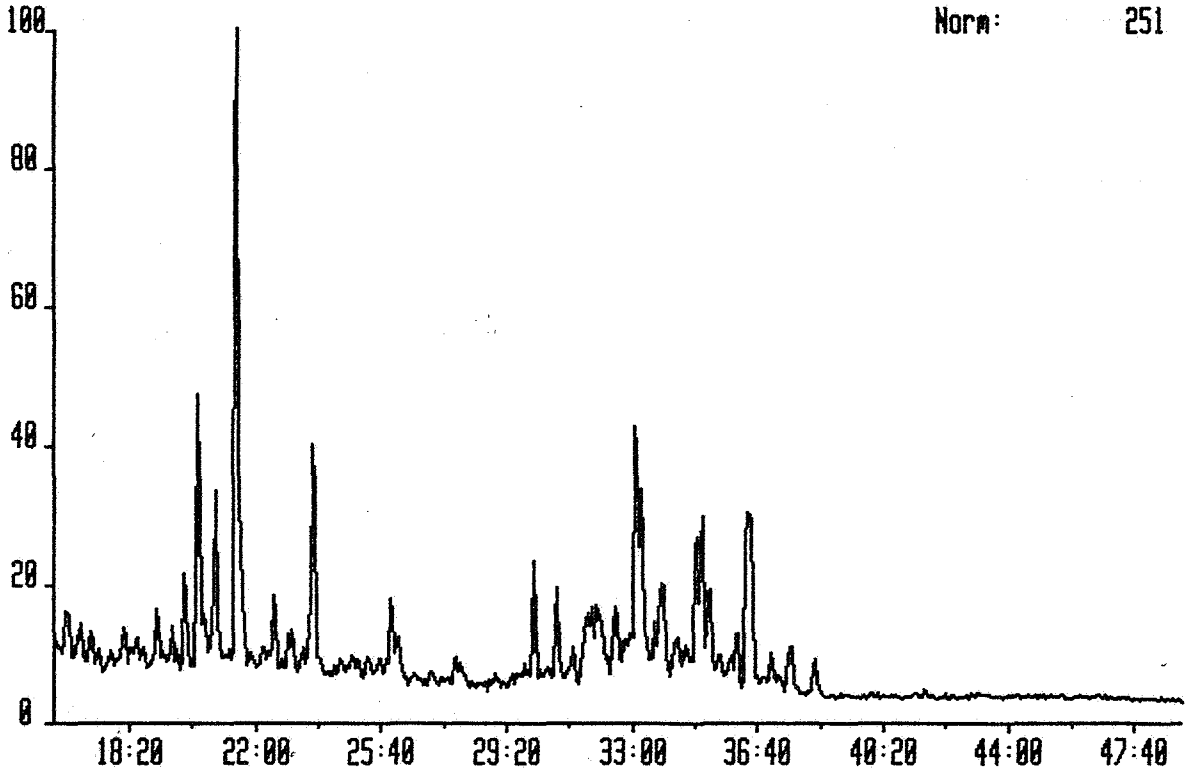
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 217.1956
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



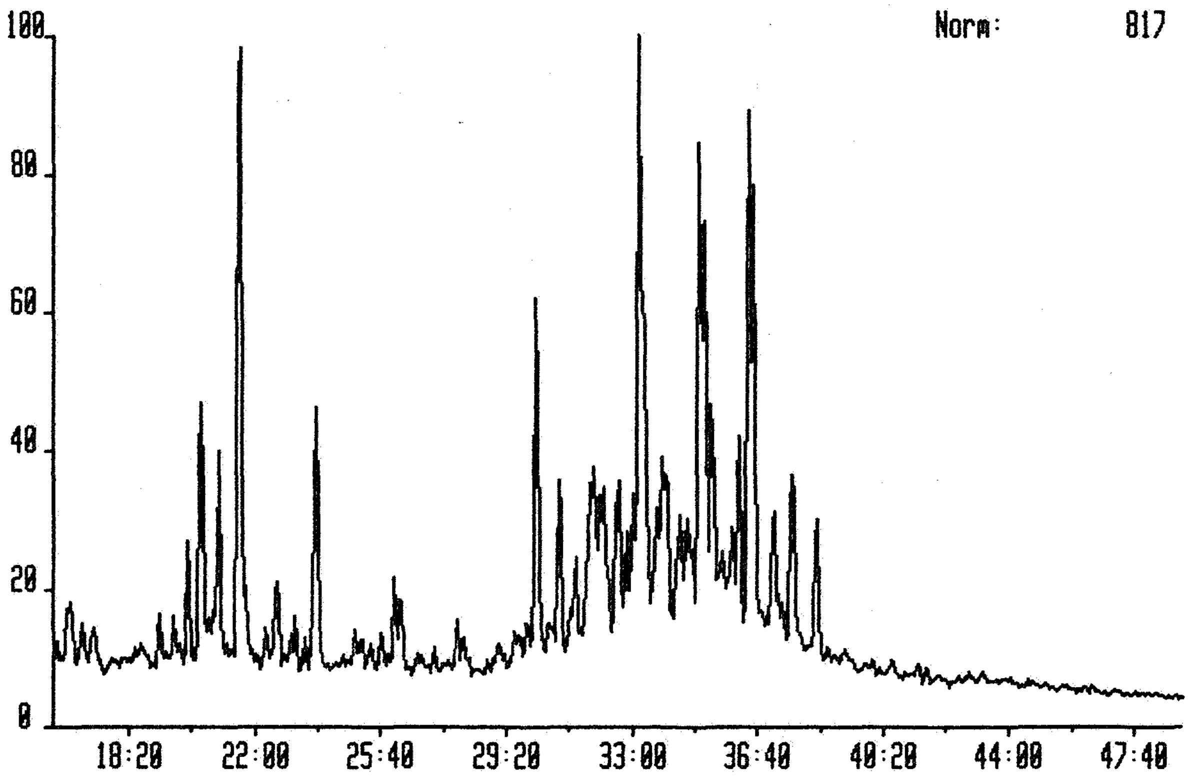
EXAMPLE OF PEAK IDENTIFICATION FOR 14 BETA(H), 17 BETA(H) STERANES



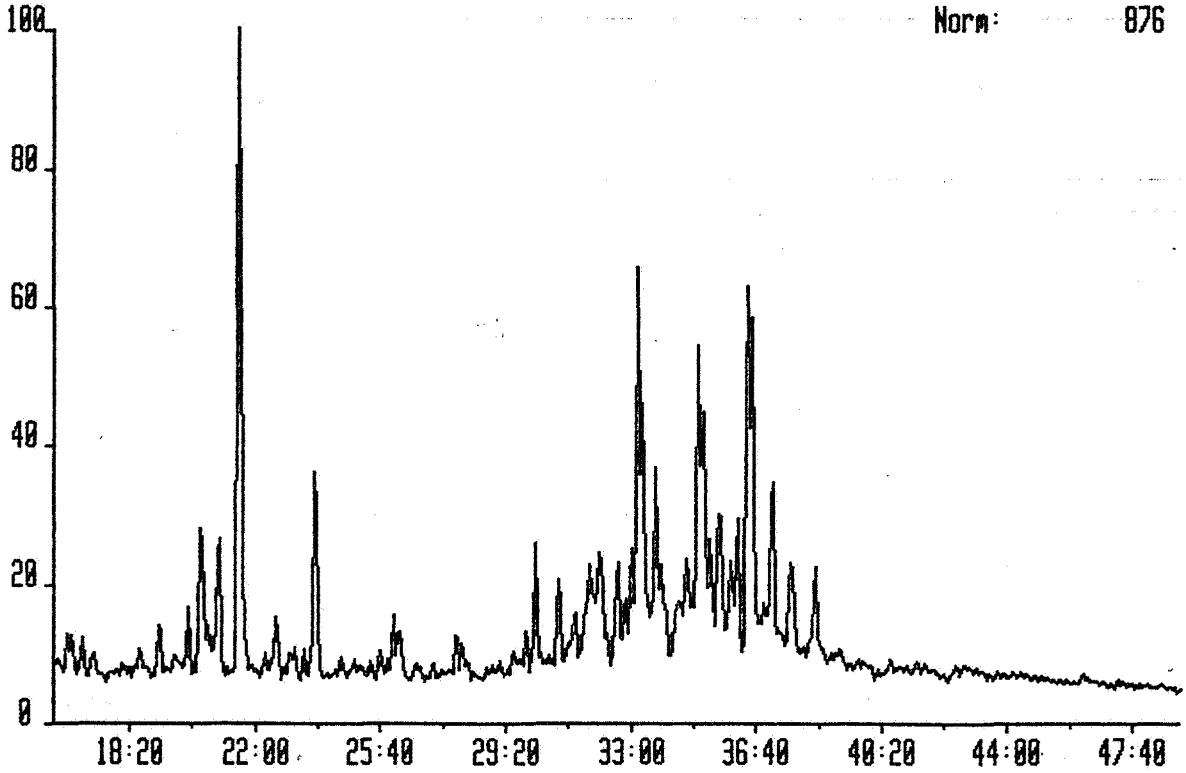
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 218.2034
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



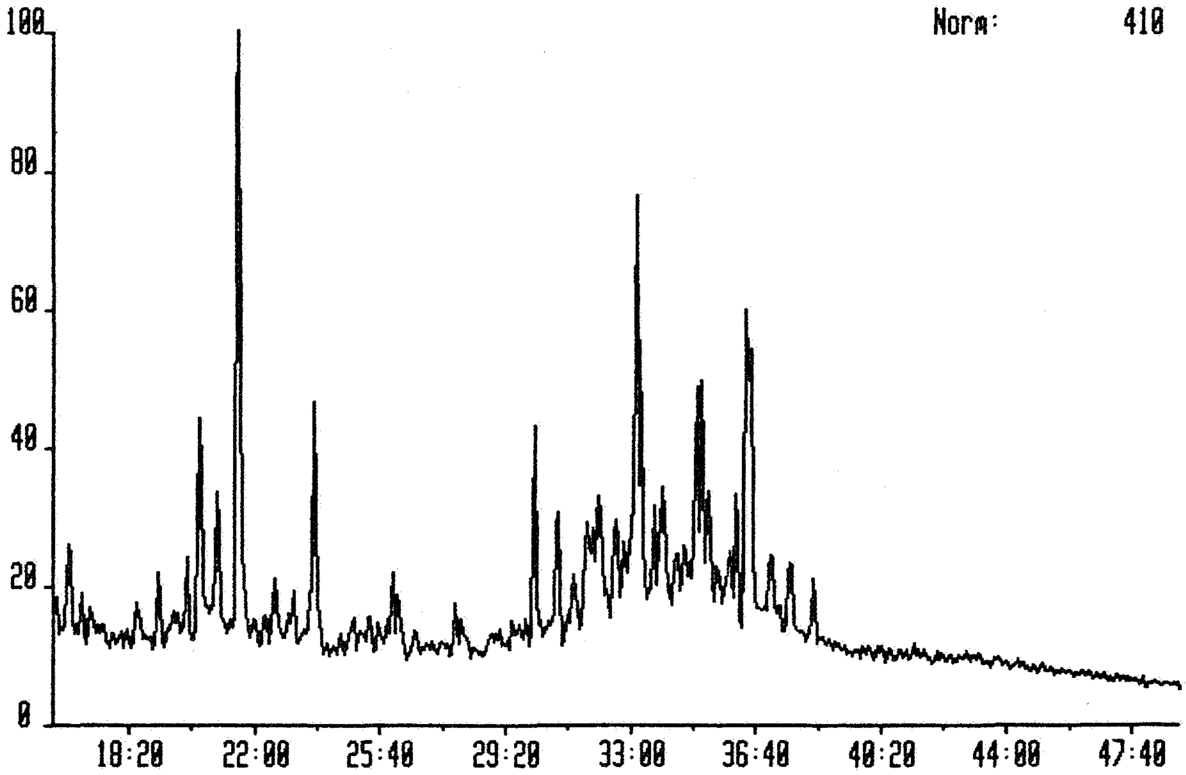
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 218.2034
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 218.2034
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

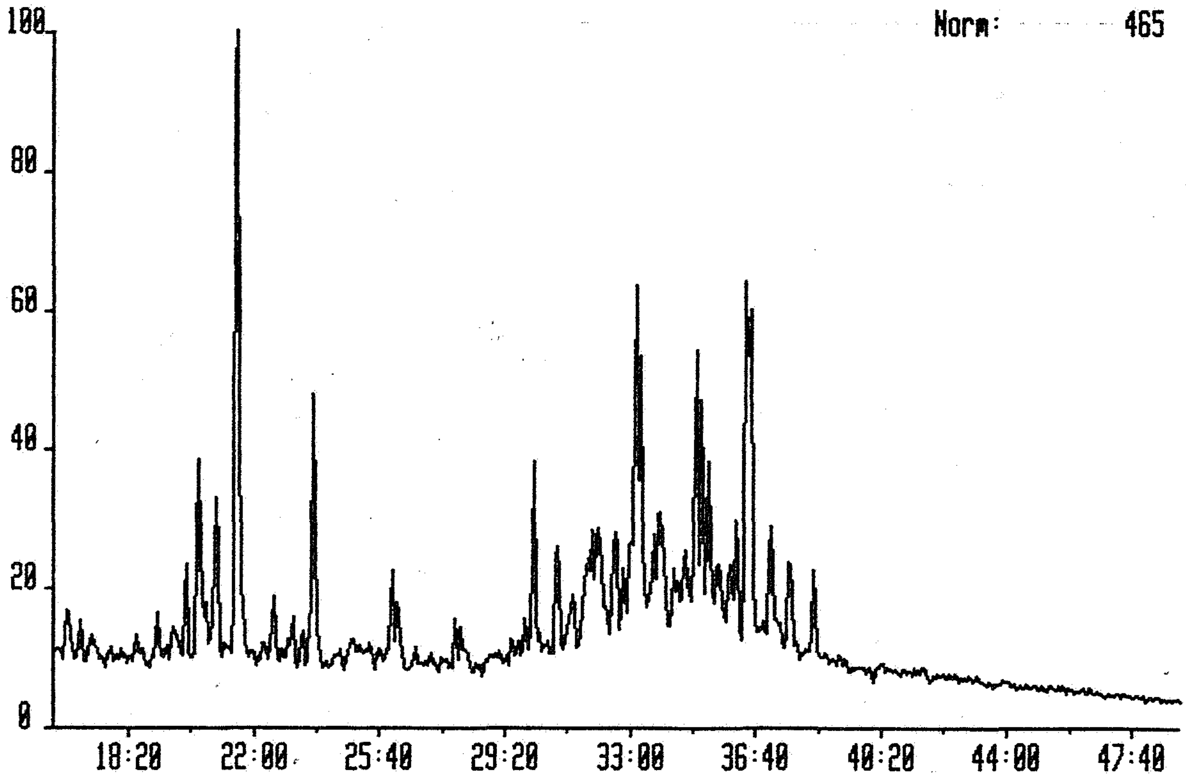


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 218.2034
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

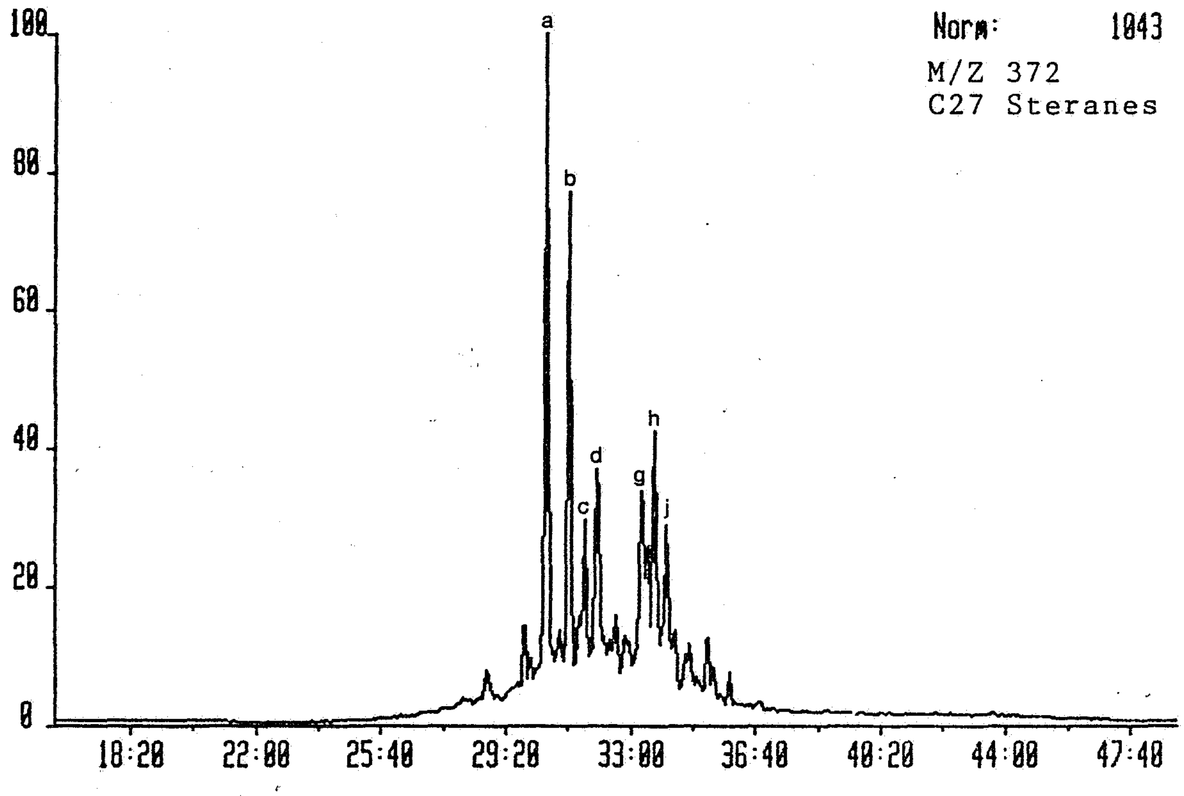


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 218.2034
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

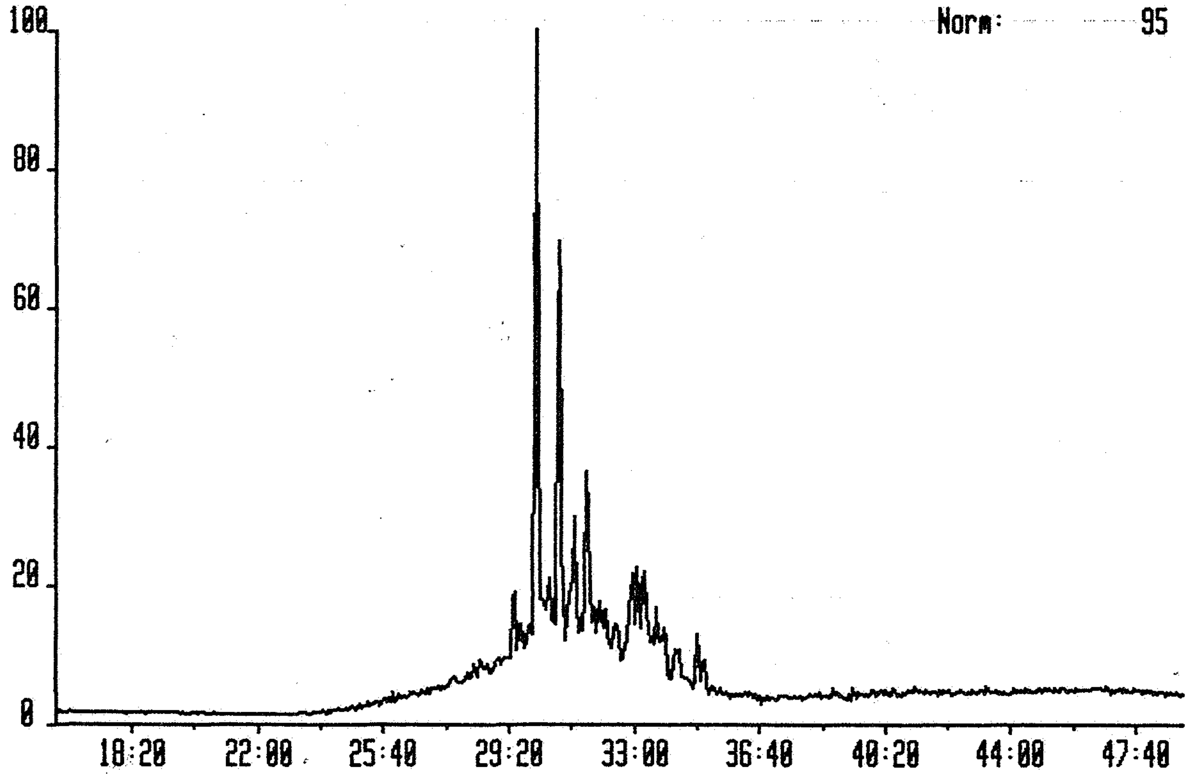


EXAMPLE OF PEAK IDENTIFICATION FOR C27 STERANES

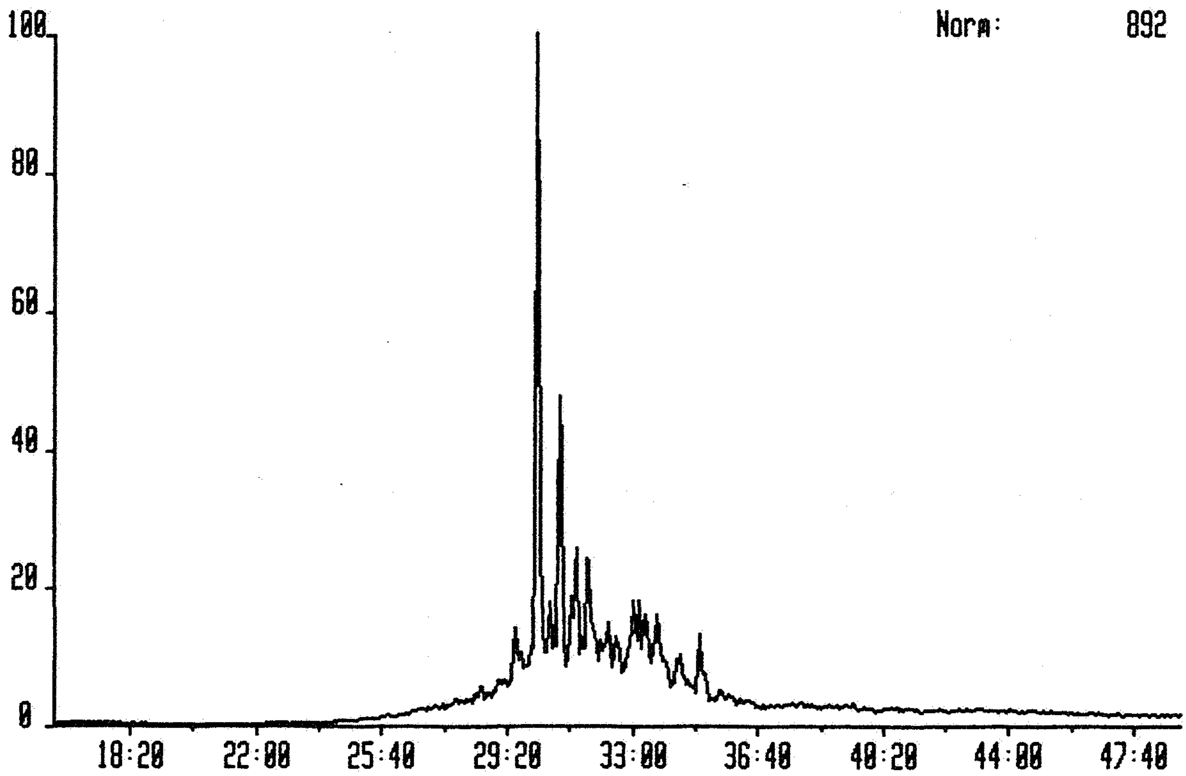


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

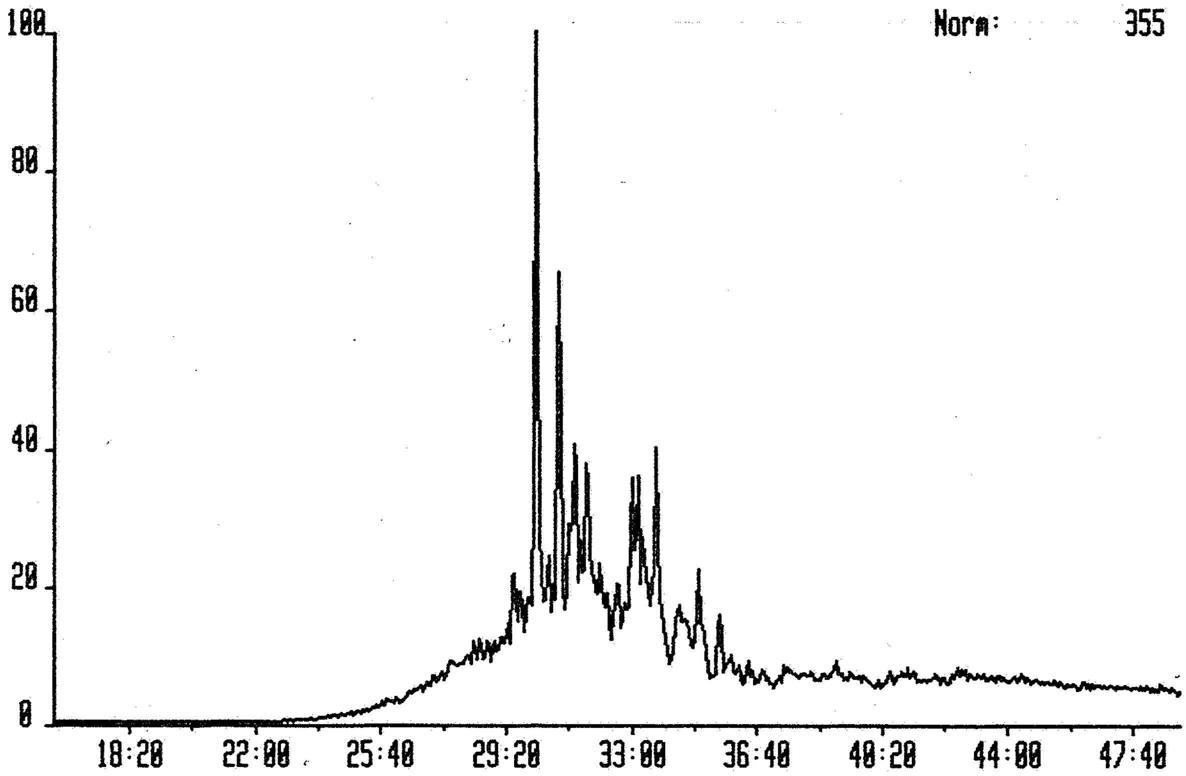
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 372.3756
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



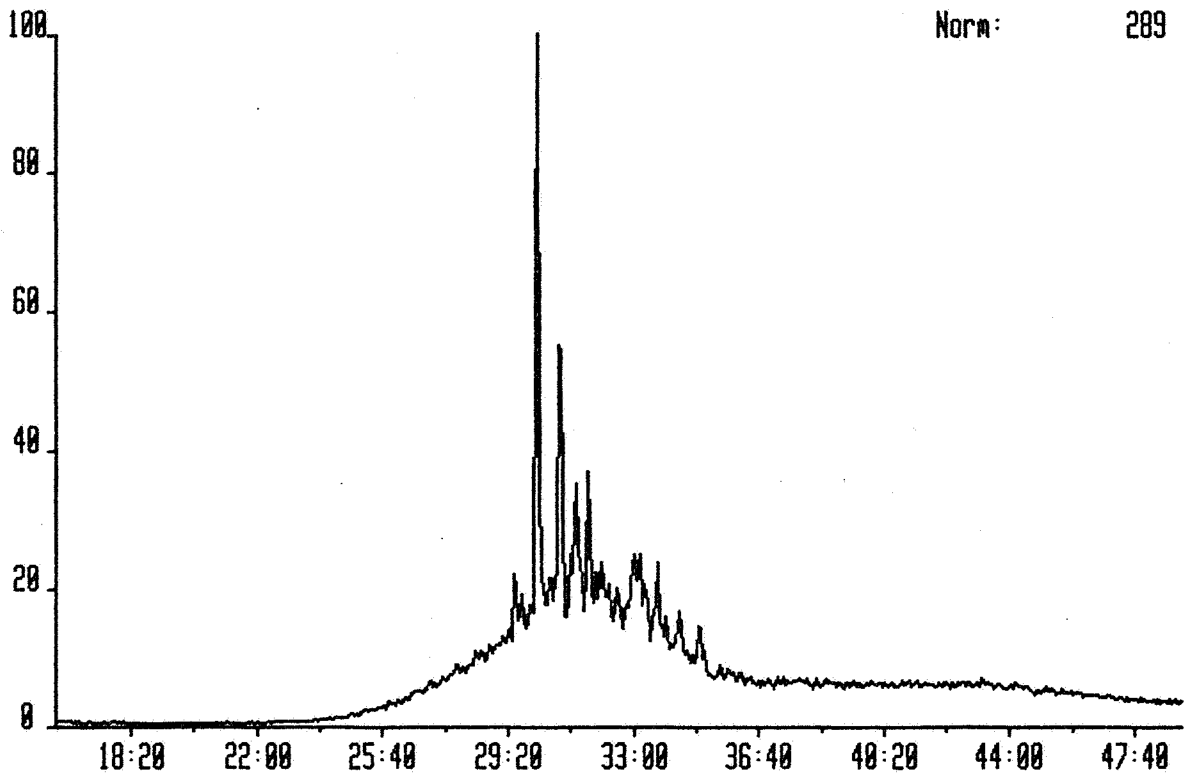
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 372.3756
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 372.3756
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

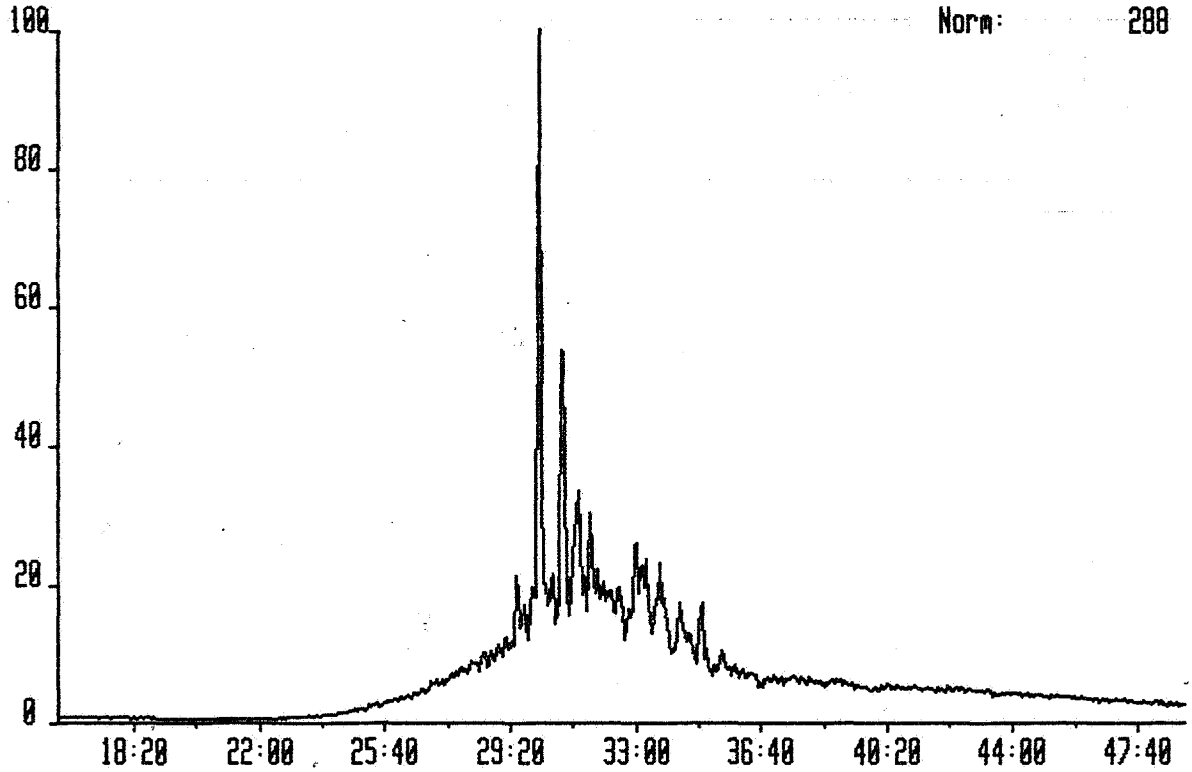


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 372.3756
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



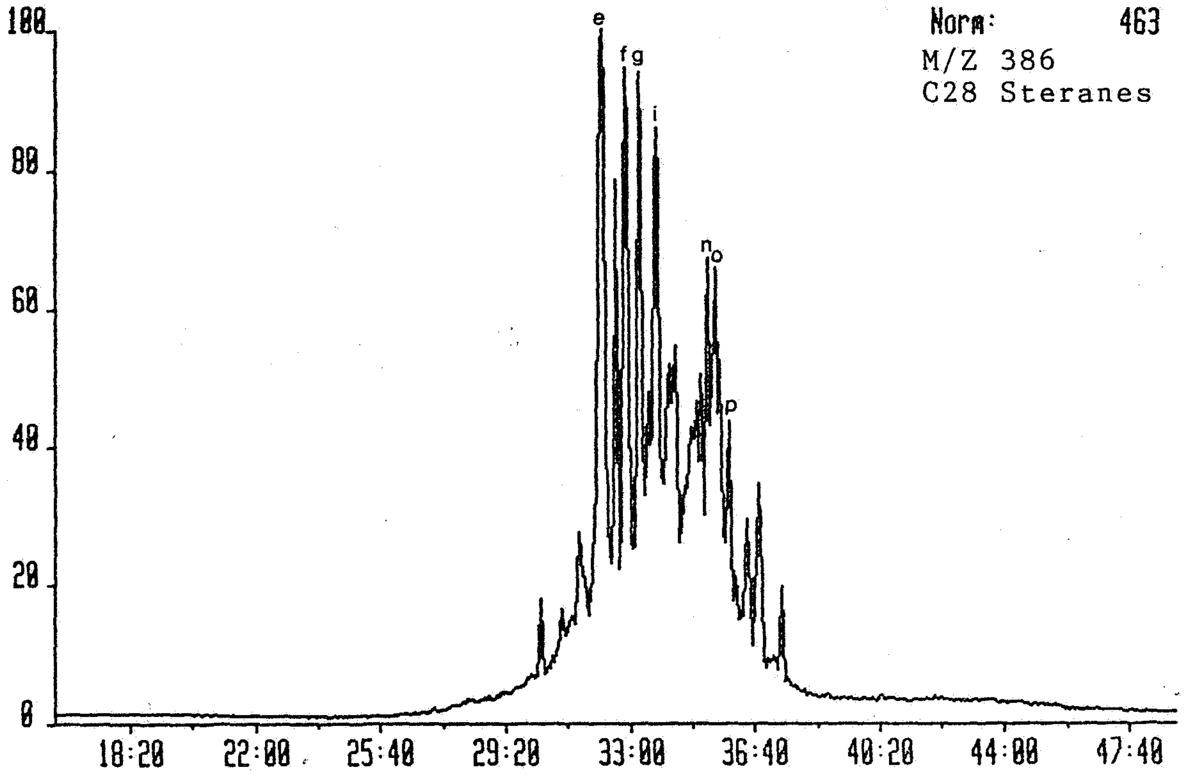
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6   24-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:SAT1
Sample 14 Injection 1   Group 1   Mass 372.3756
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

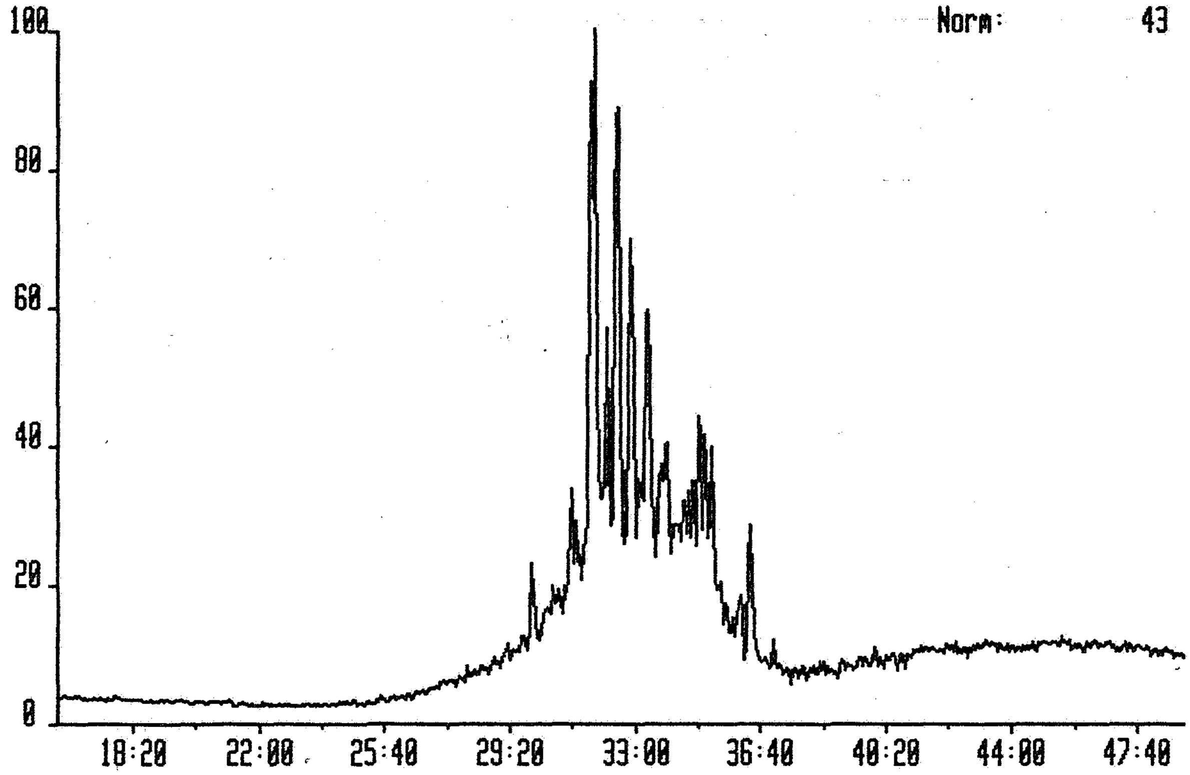


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

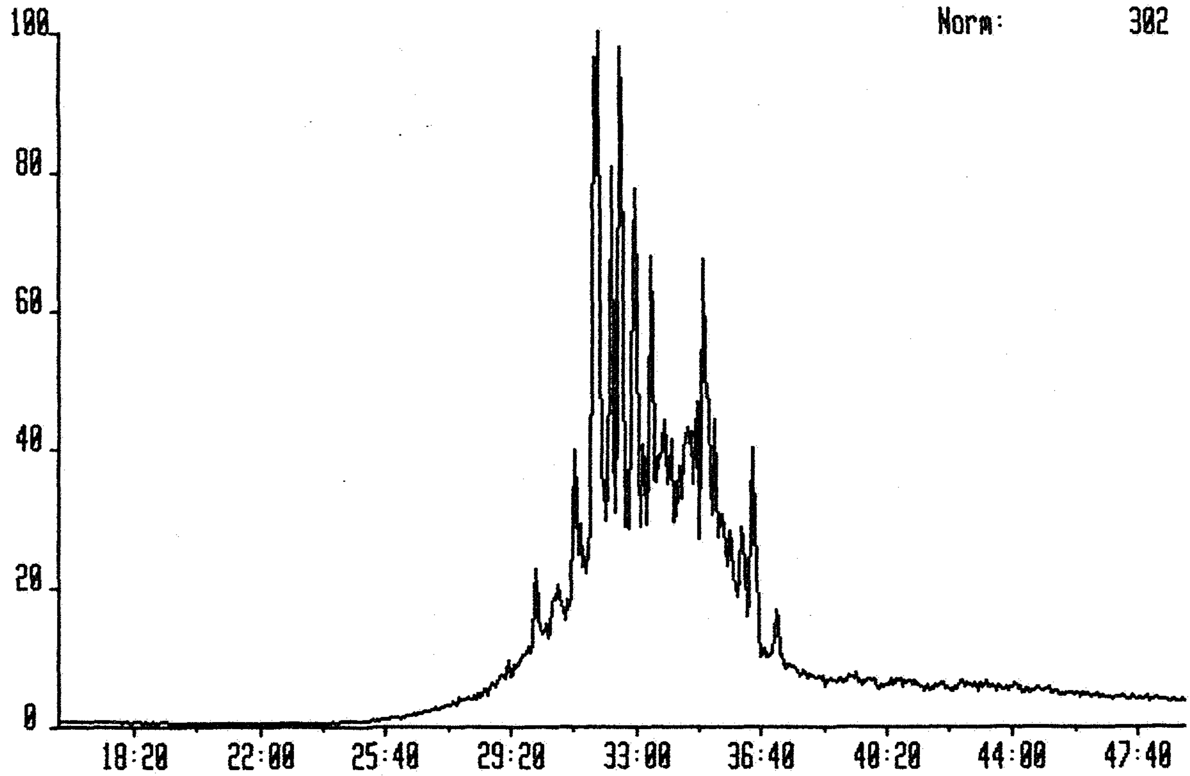
EXAMPLE OF PEAK IDENTIFICATION FOR C28 STERANES



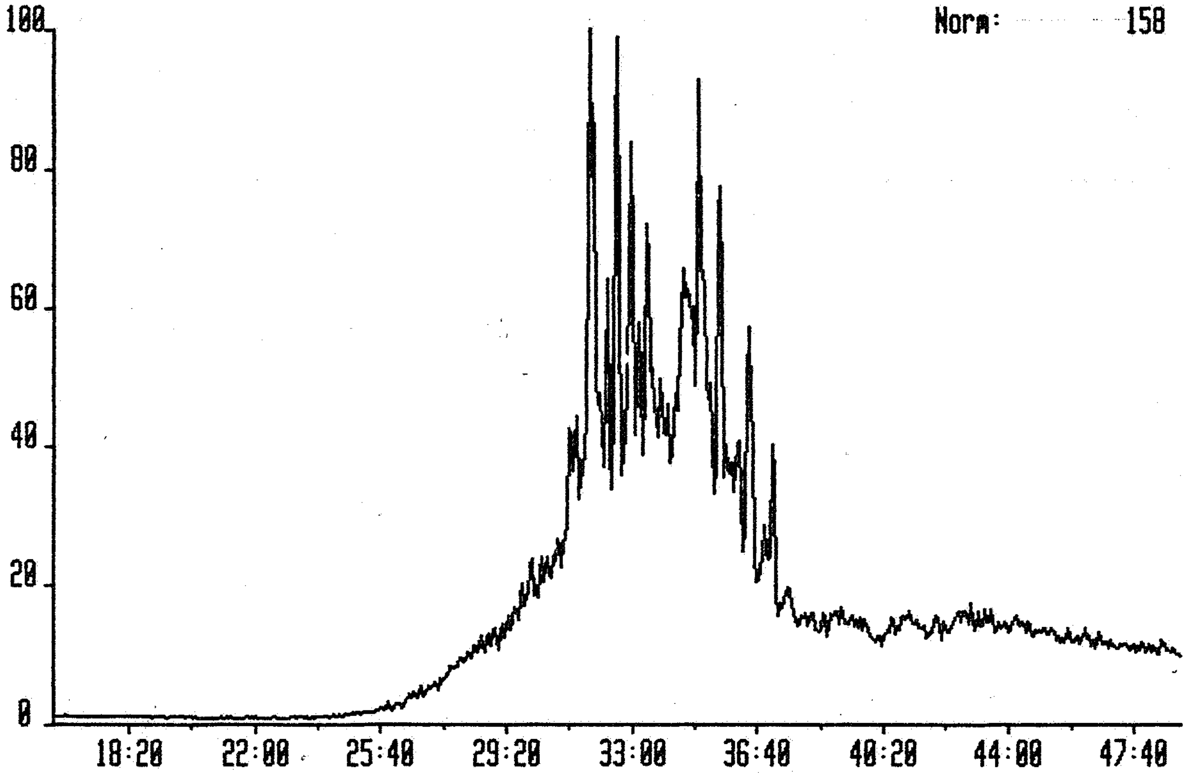
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 386.3913
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



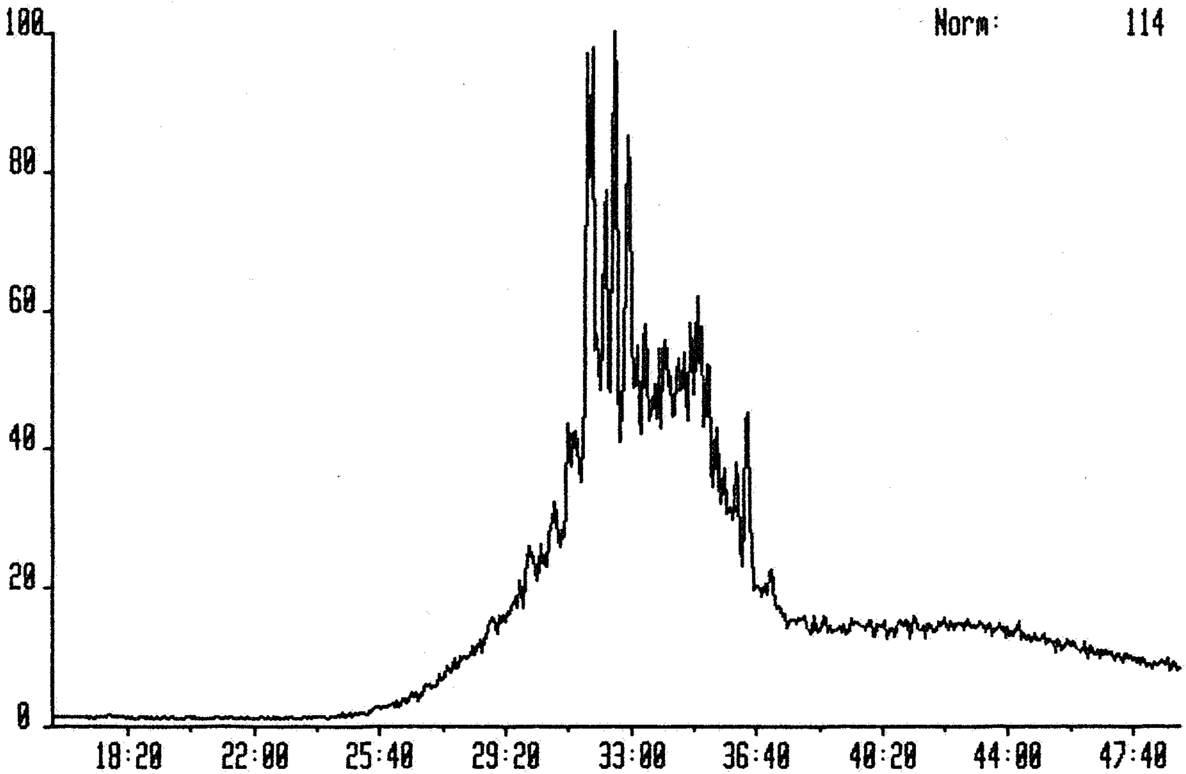
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 386.3913
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 386.3913
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

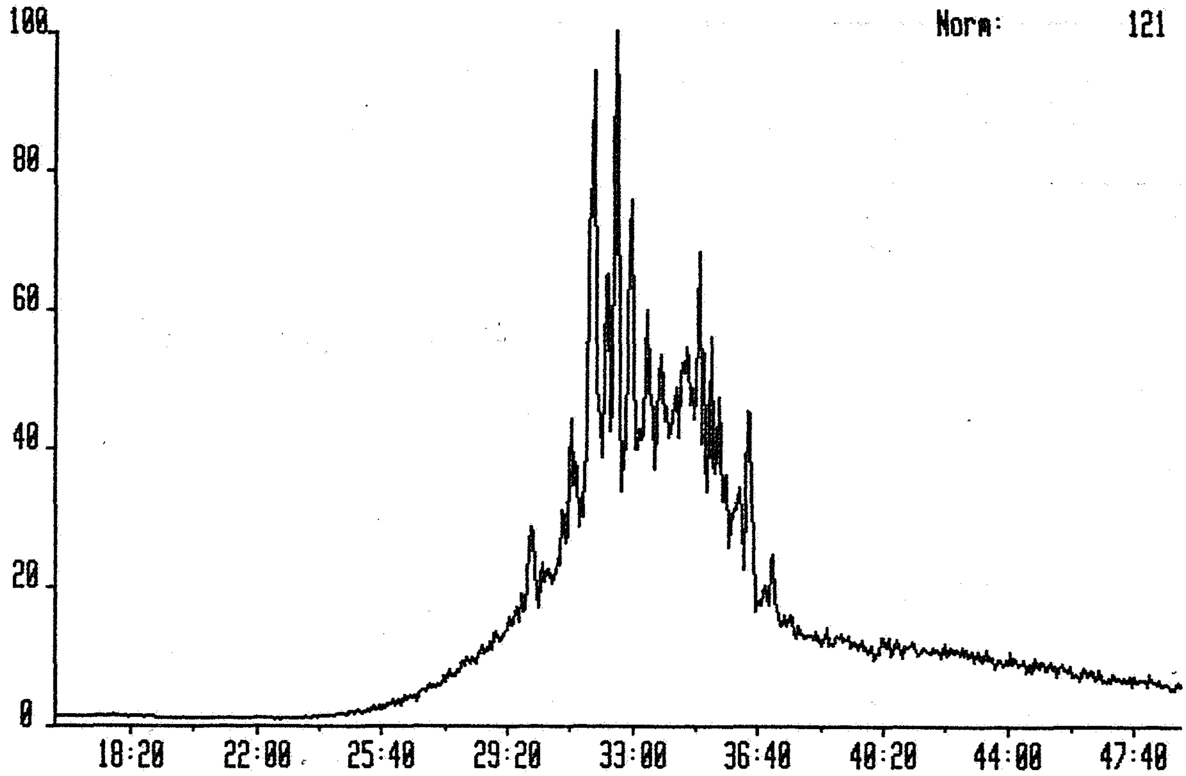


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 386.3913
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

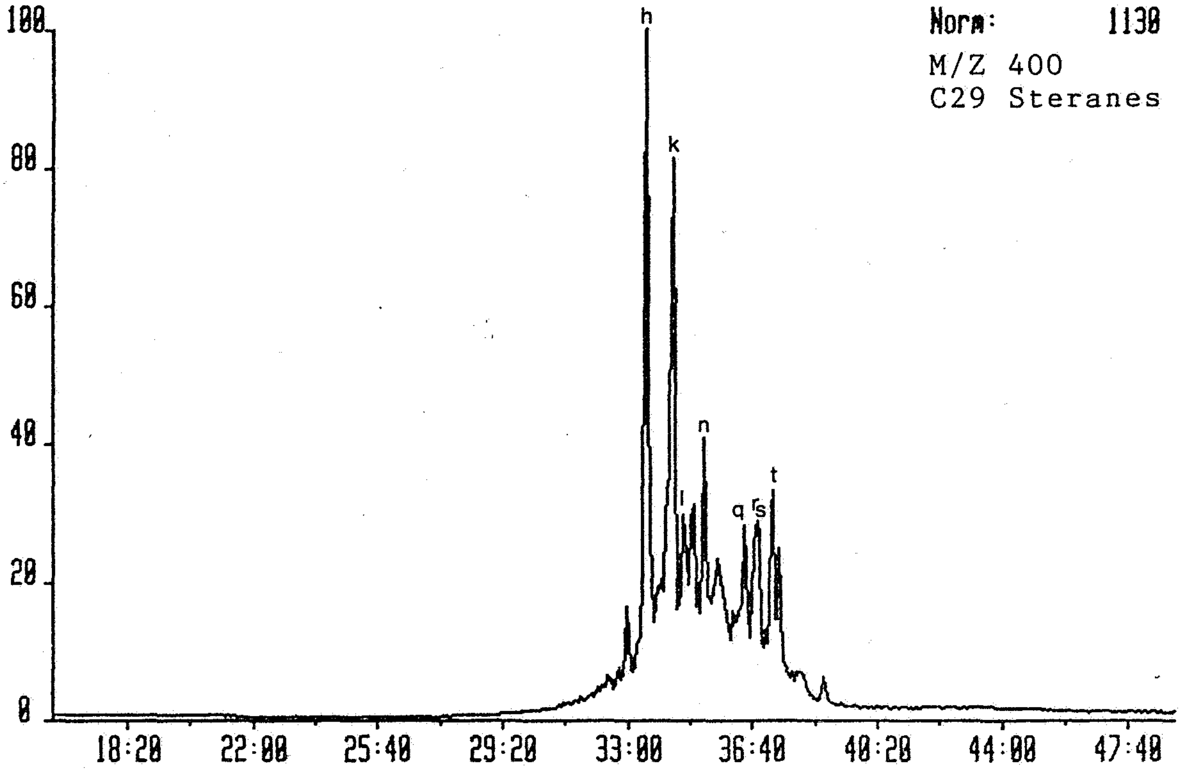


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

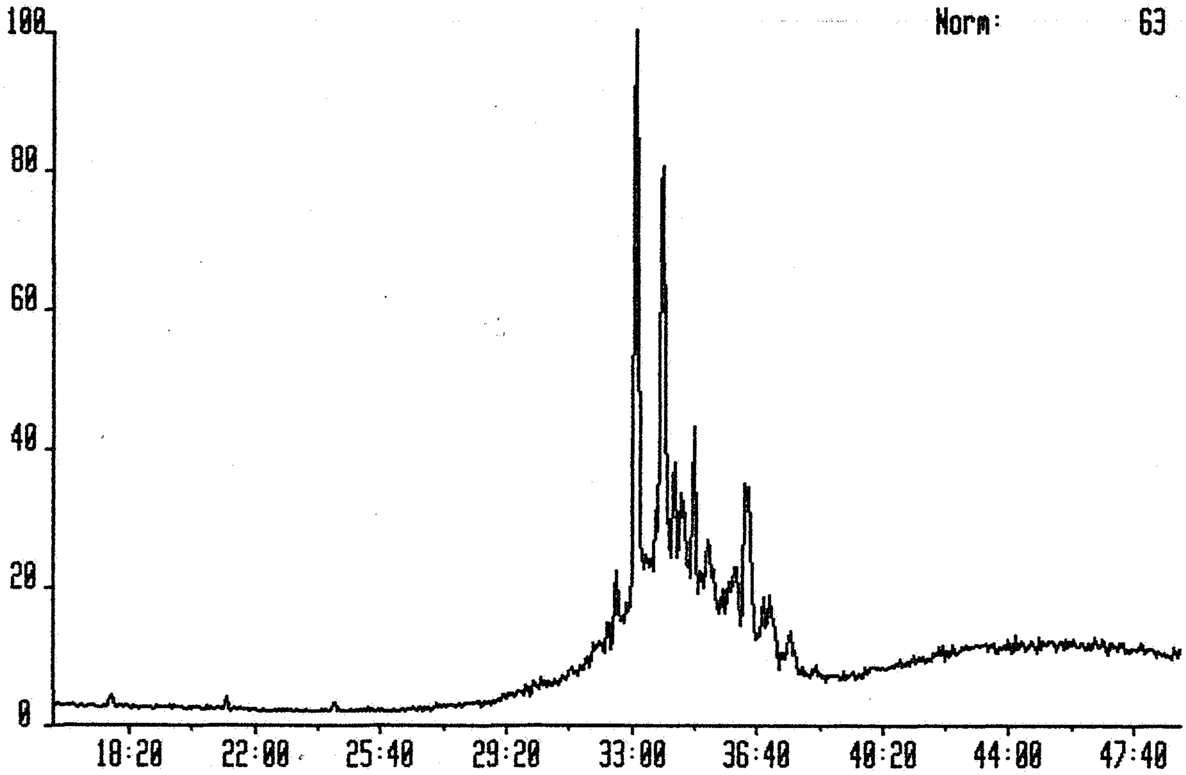
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 386.3913
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



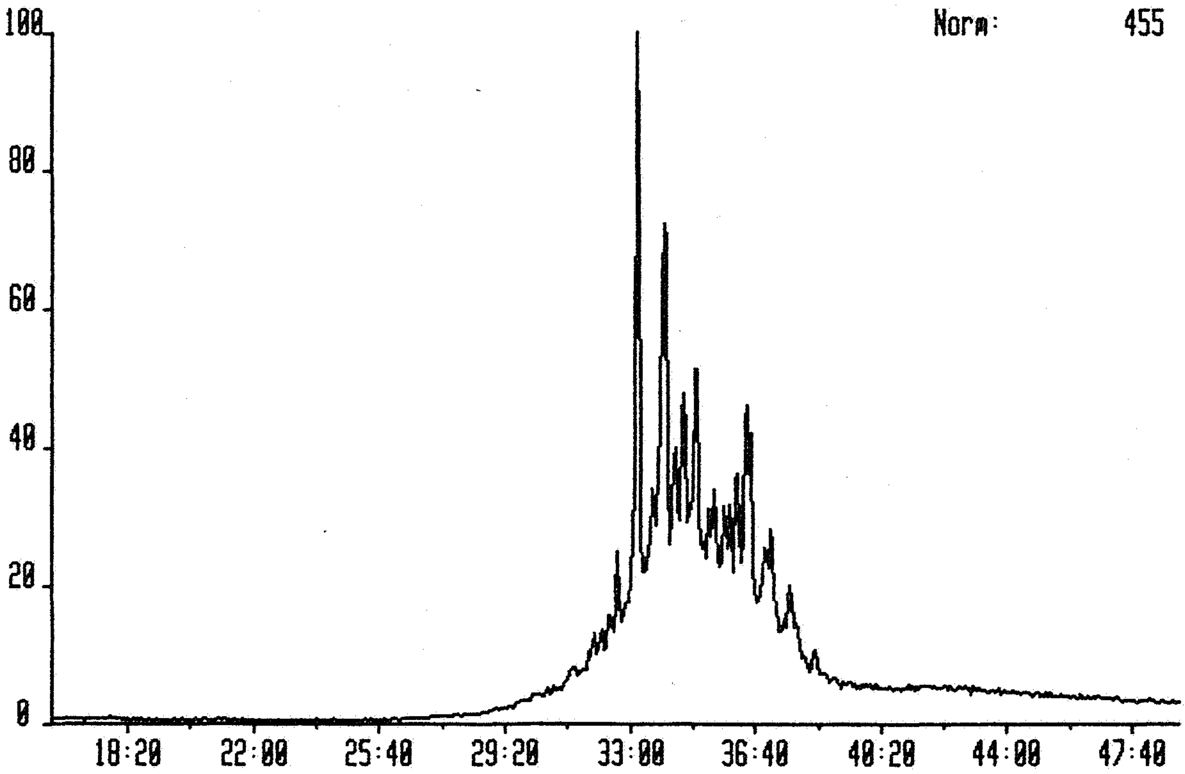
EXAMPLE OF PEAK IDENTIFICATION FOR C29 STERANES



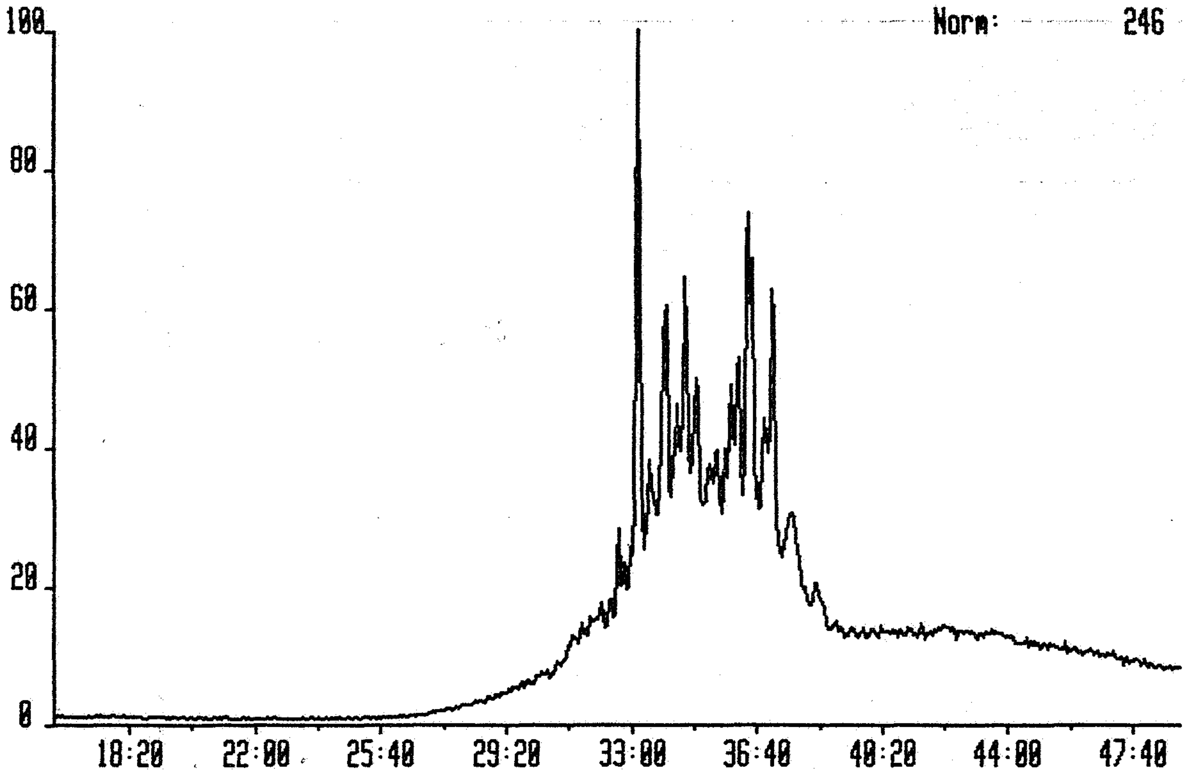
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 400.4069
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



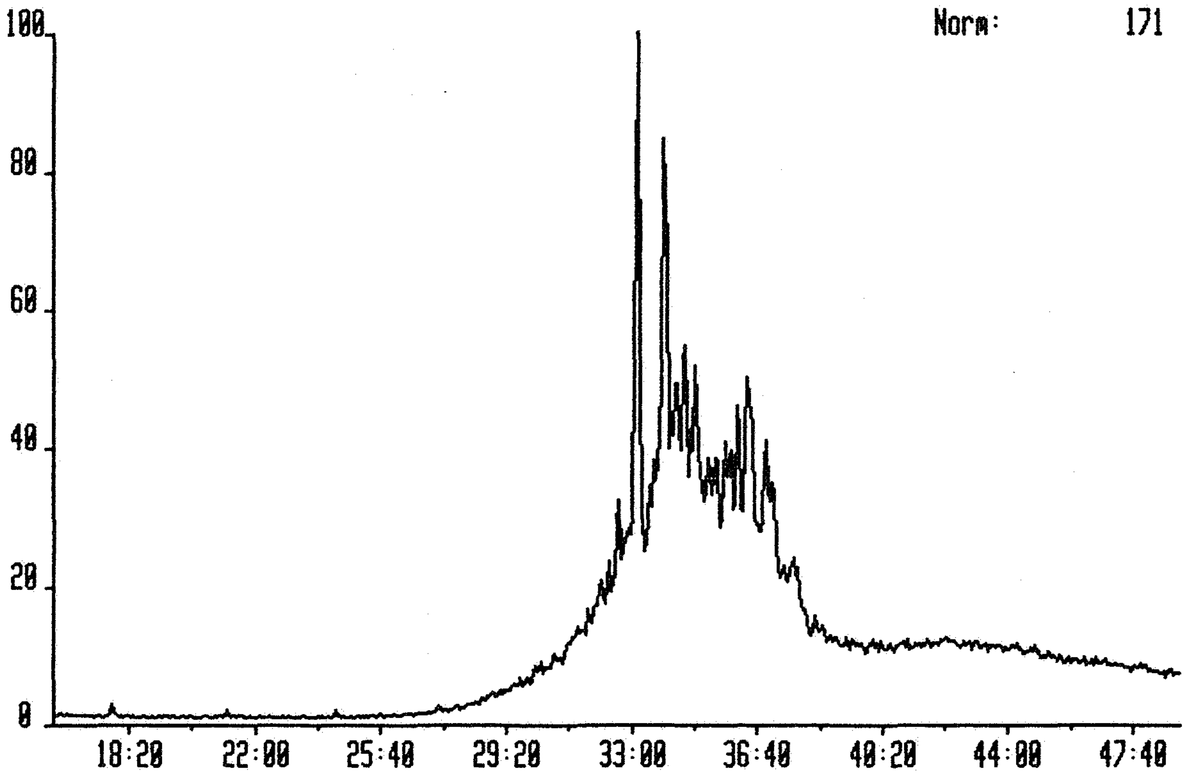
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 400.4069
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



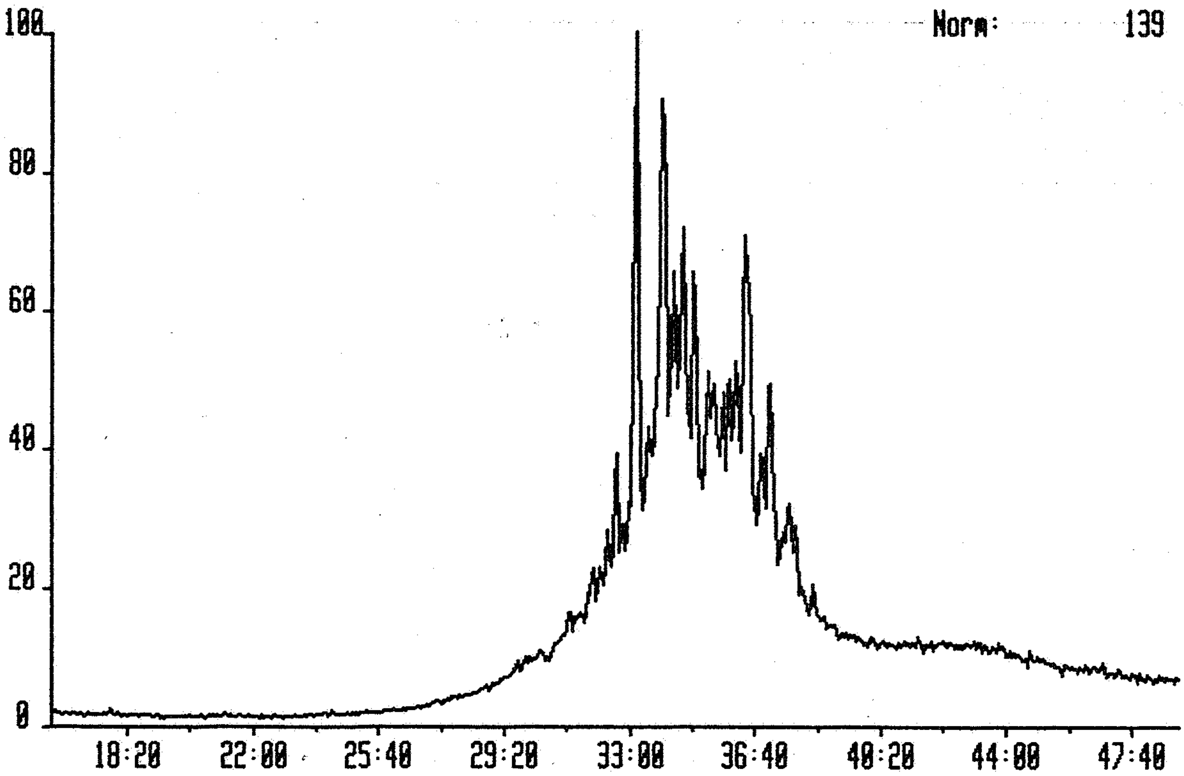
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 400.4069
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 400.4069
Text:WELL 2/6-2, 4528M, SATURATED FRACTION

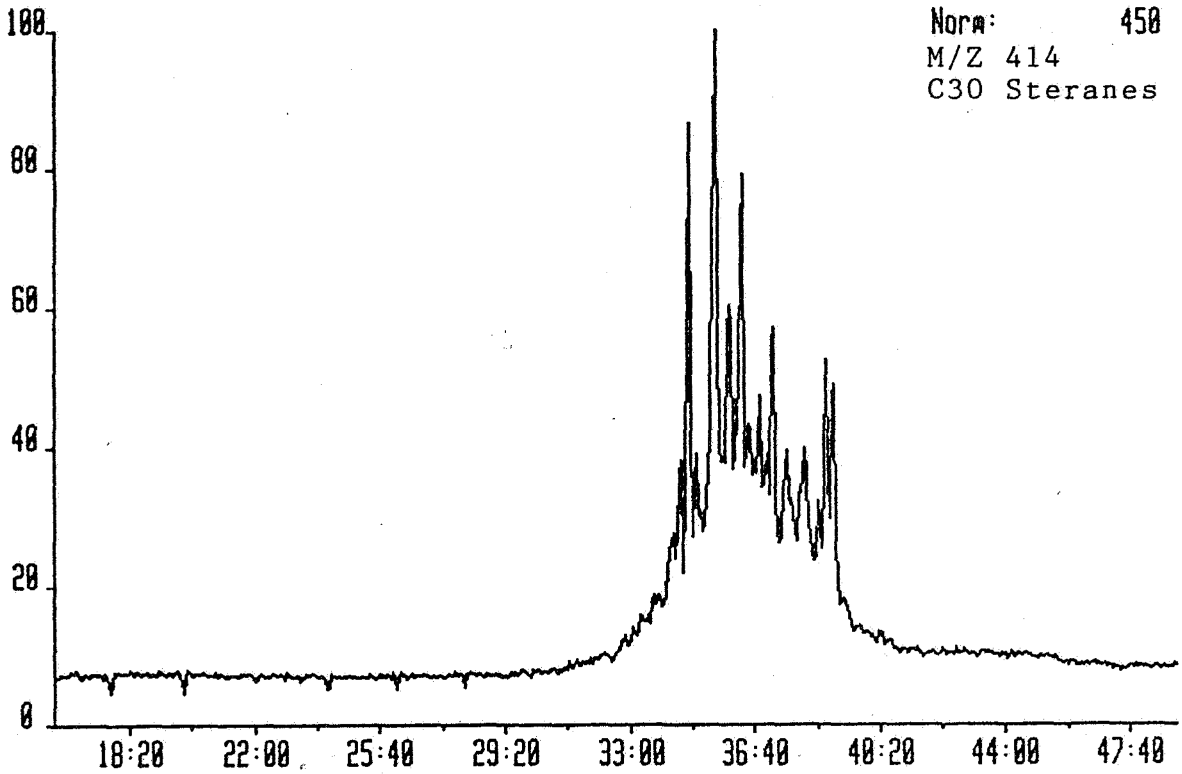


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 400.4069
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

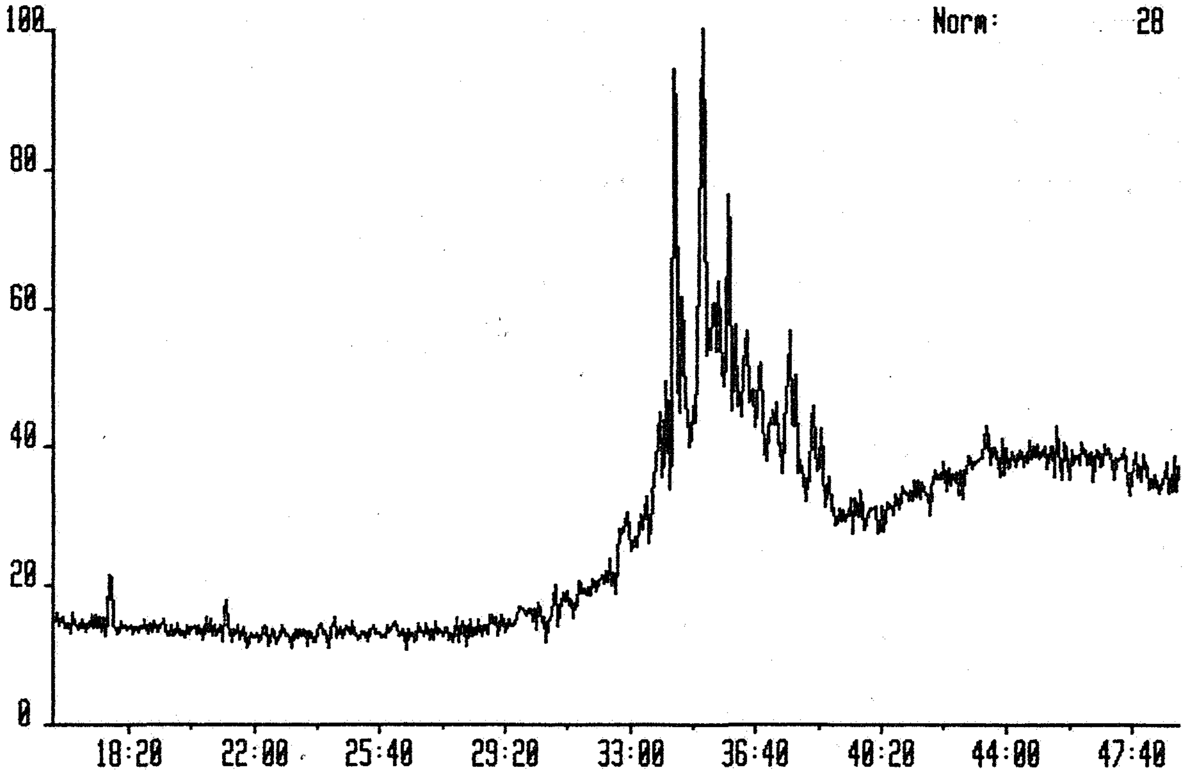


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

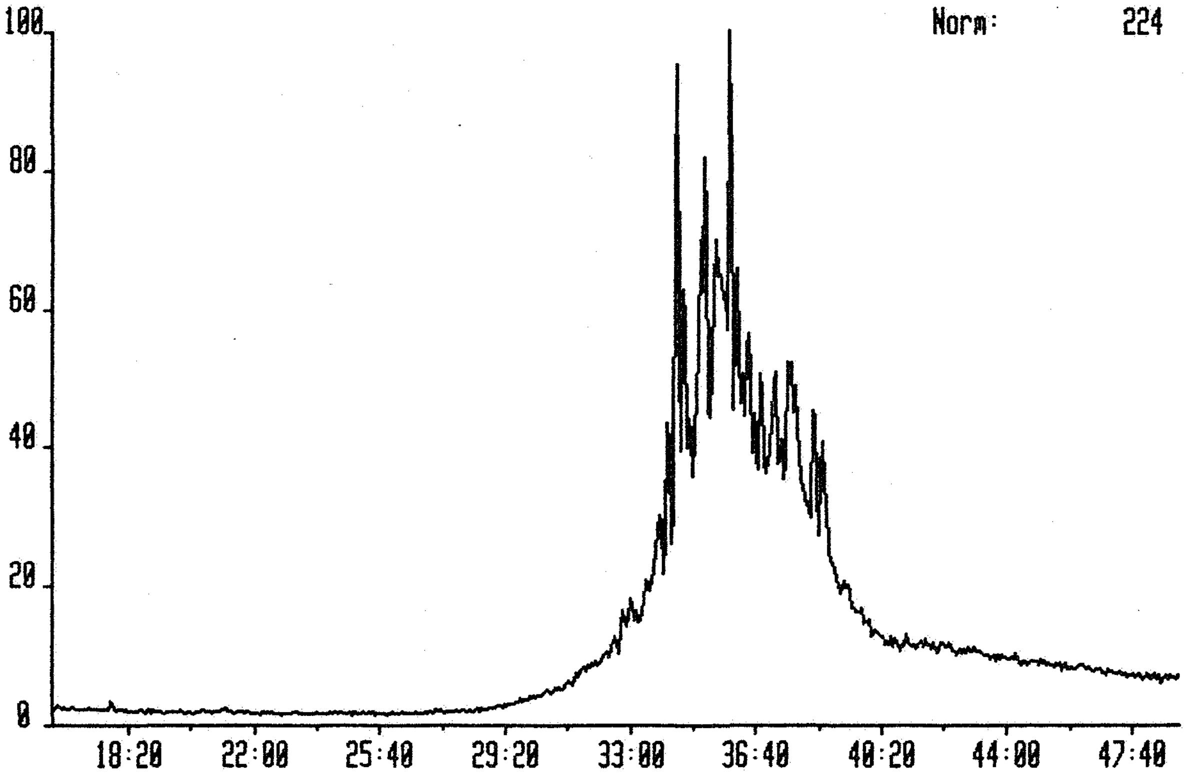
EXAMPLE OF PEAK IDENTIFICATION FOR C30 STERANES



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 414.4226
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

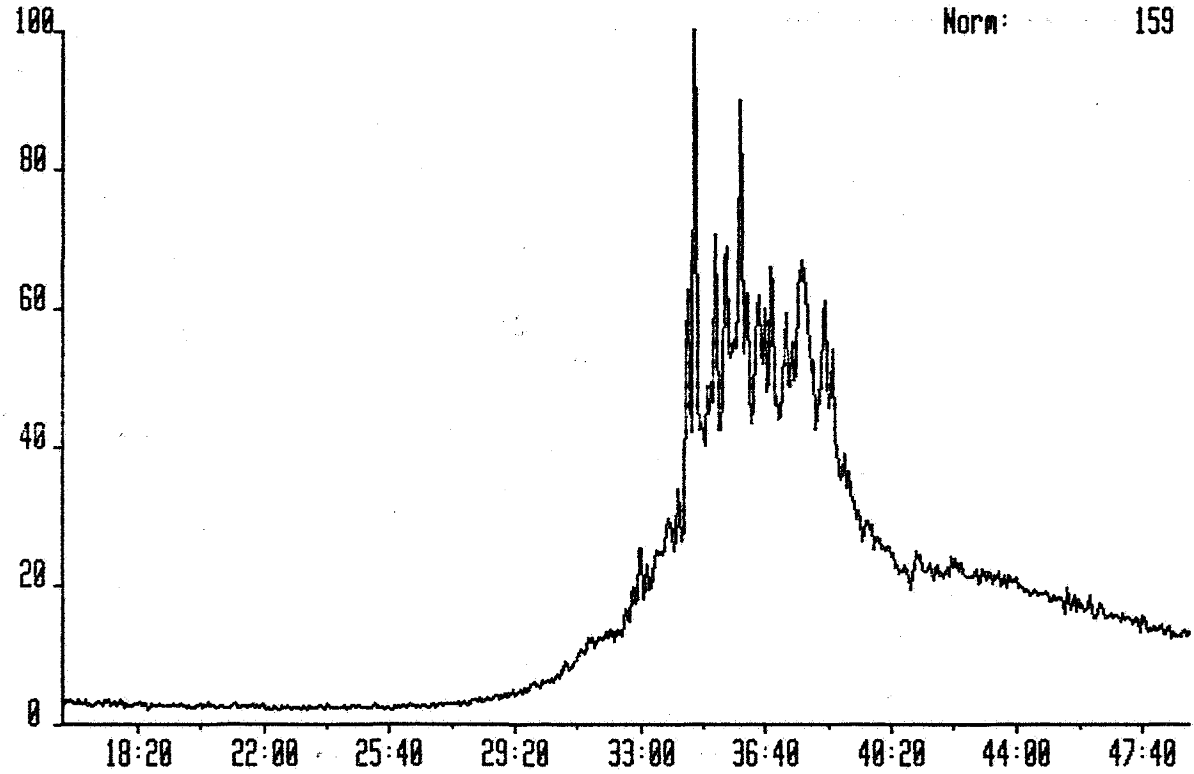


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 414.4226
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

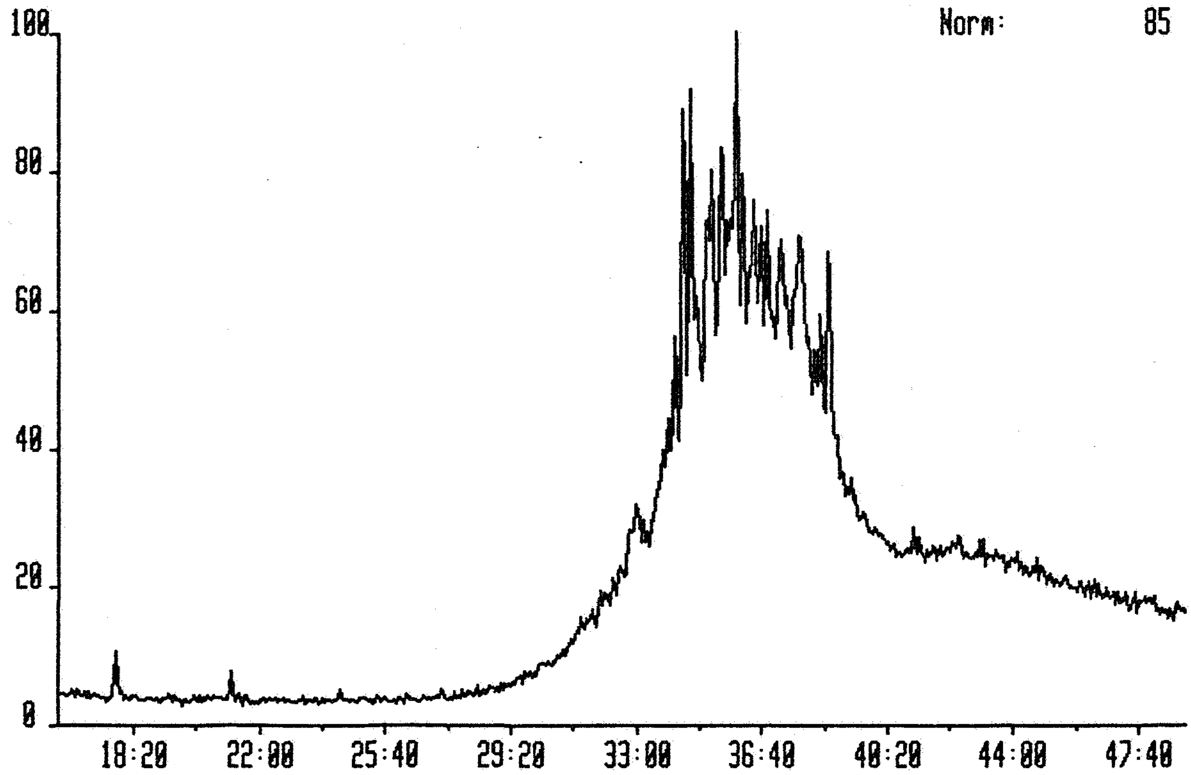


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

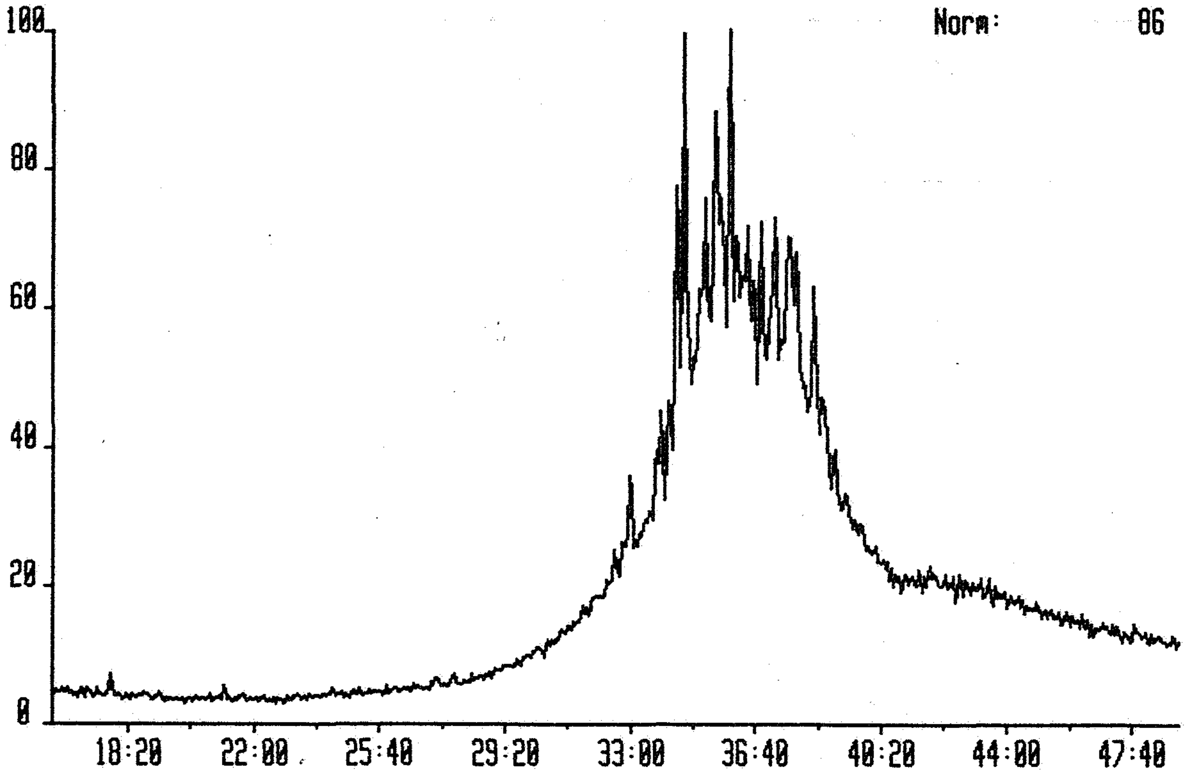
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 414.4226
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



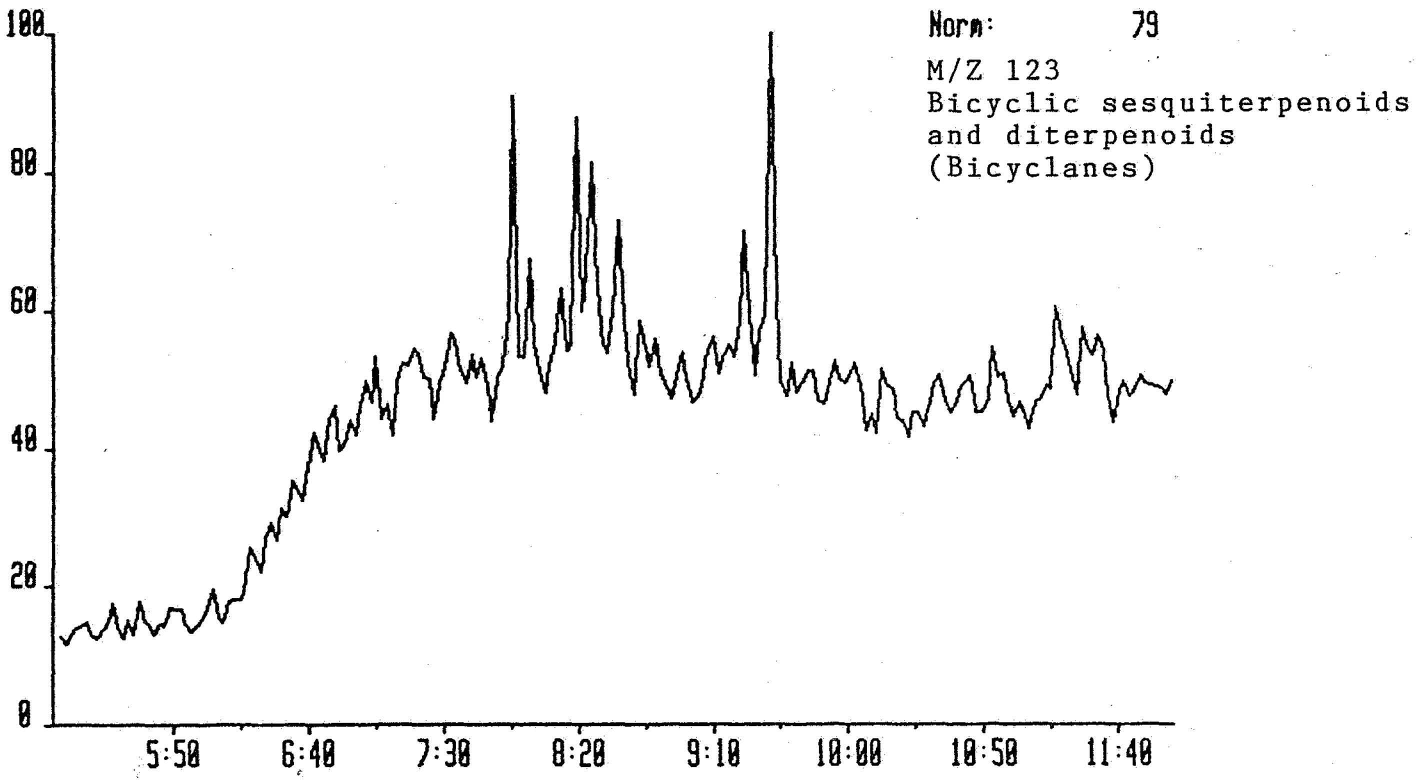
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 414.4226
Text:WELL 2/6-2, 4528M, SATURATED FRACTION



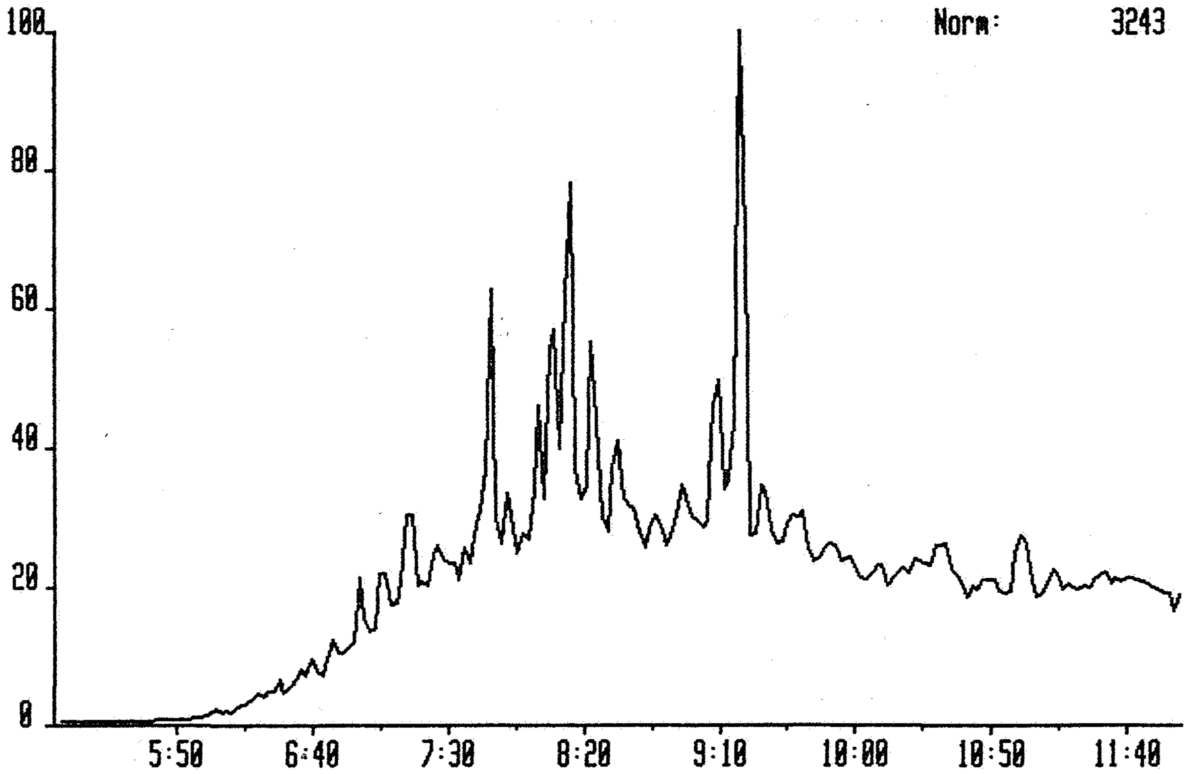
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 414.4226
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



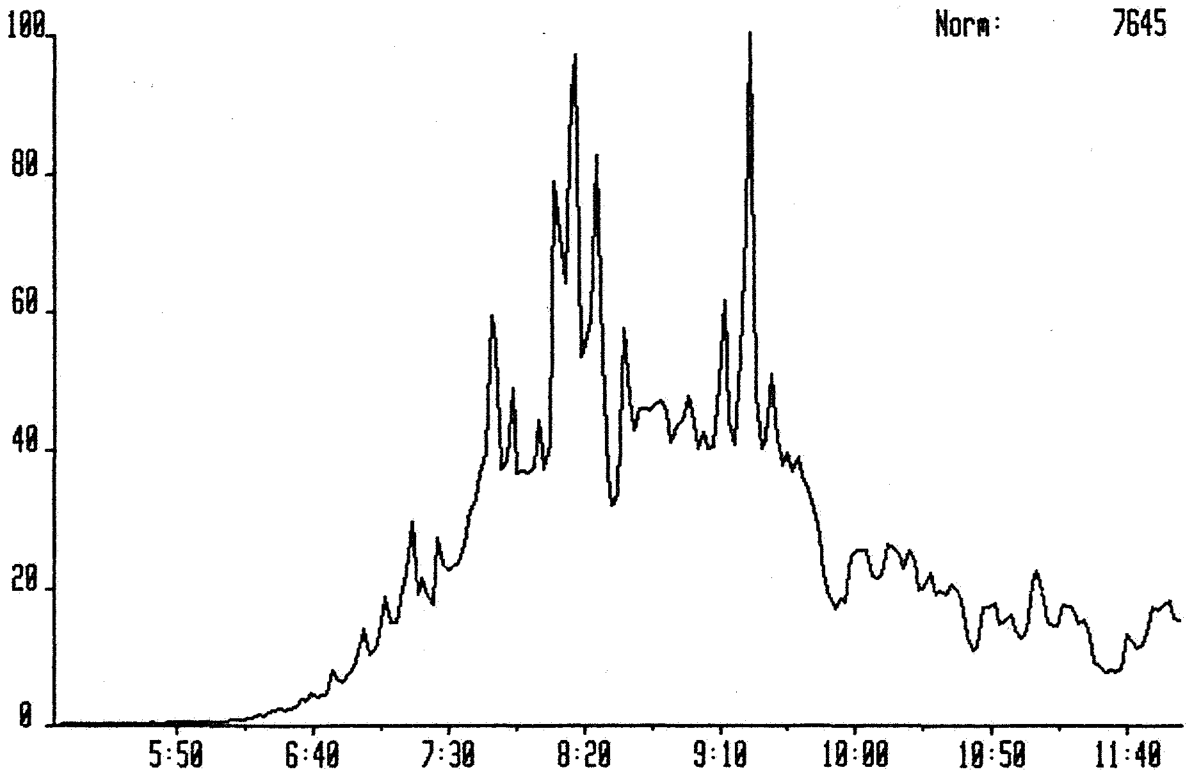
EXAMPLE OF PEAK IDENTIFICATION FOR BICYCLIC SESQUITERPENOIDS AND DITERPENOIDS (BICYCLANES)



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 123.1174
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

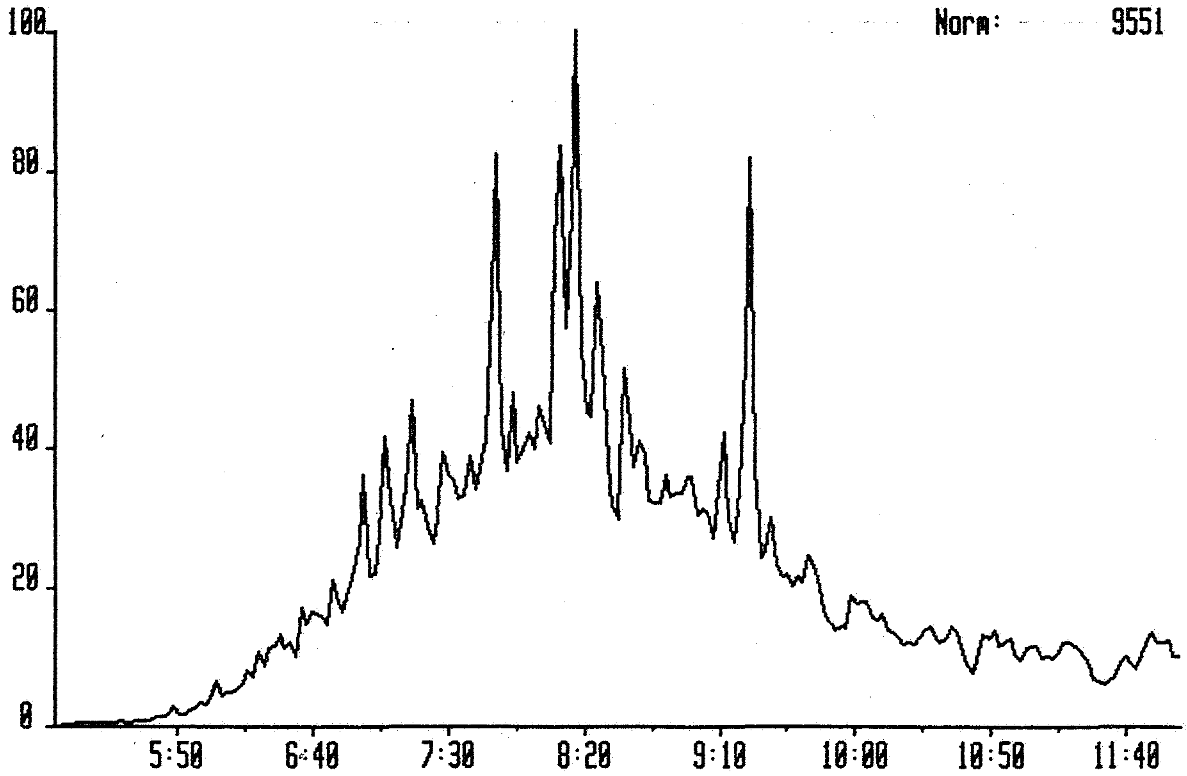


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 123.1174
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

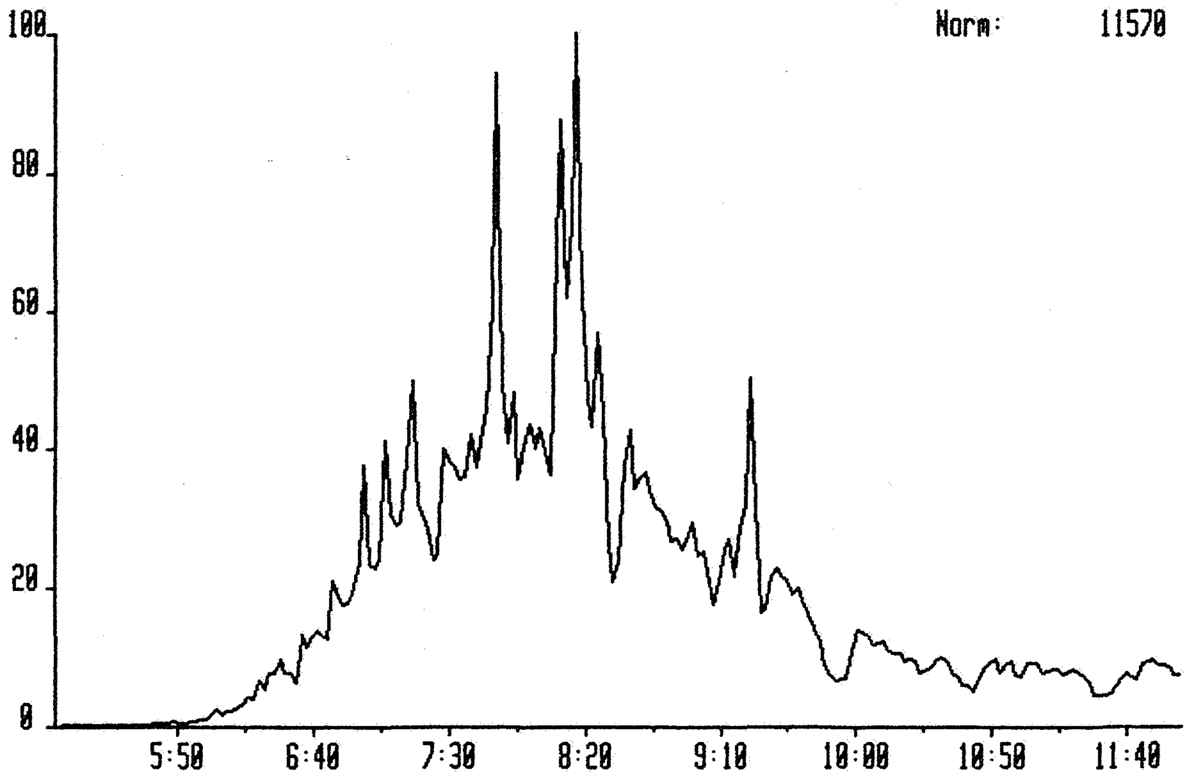


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

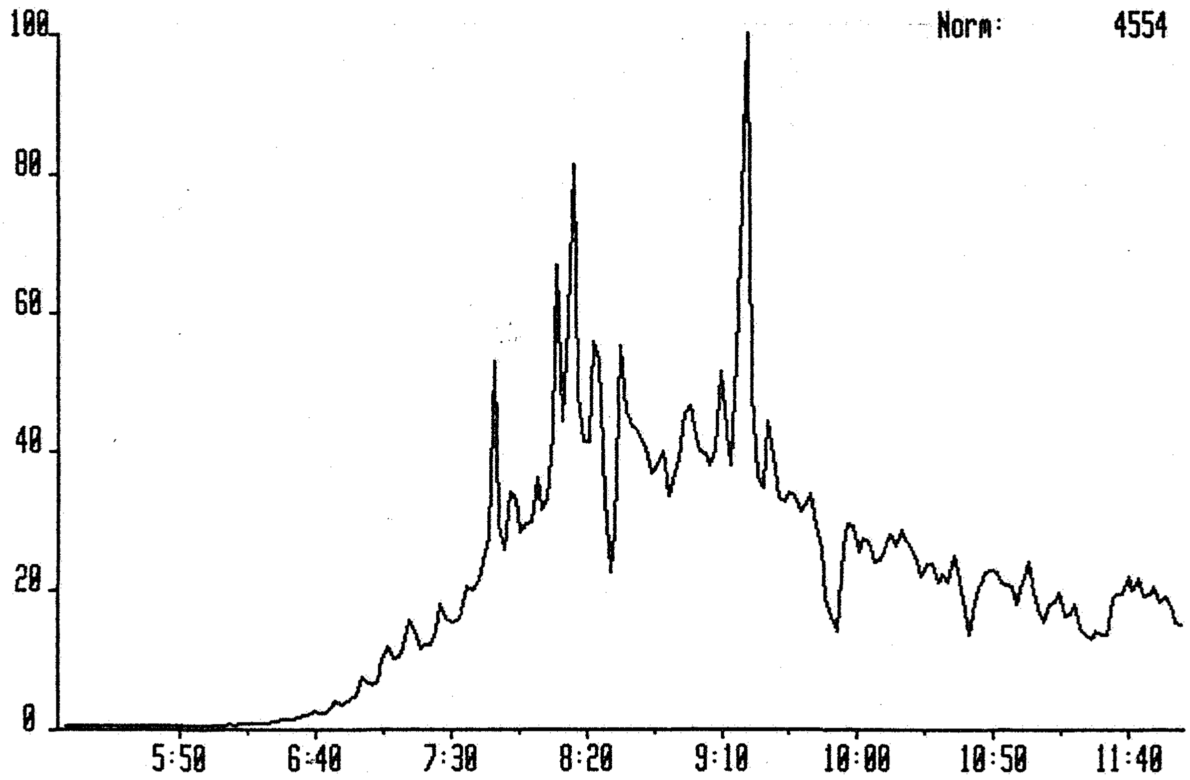
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 123.1174
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 123.1174
Text:WELL 2/6-2, 4520M, SATURATED FRACTION

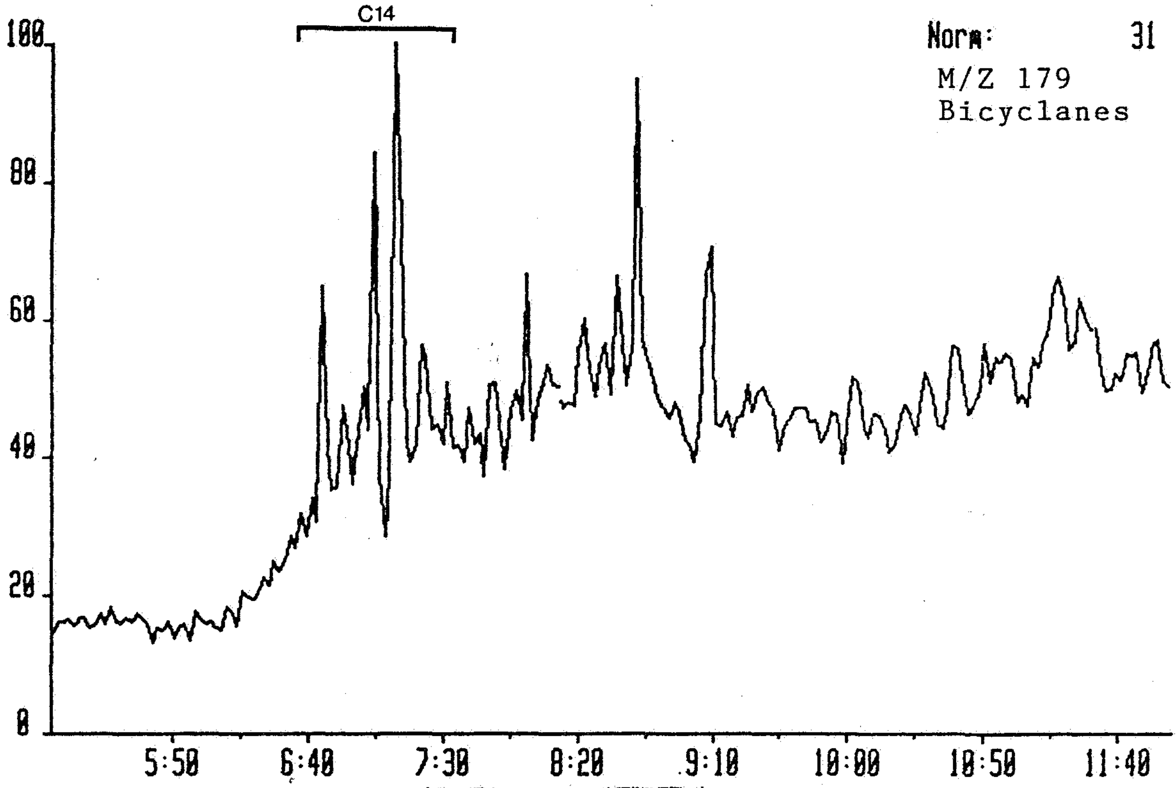


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 123.1174
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



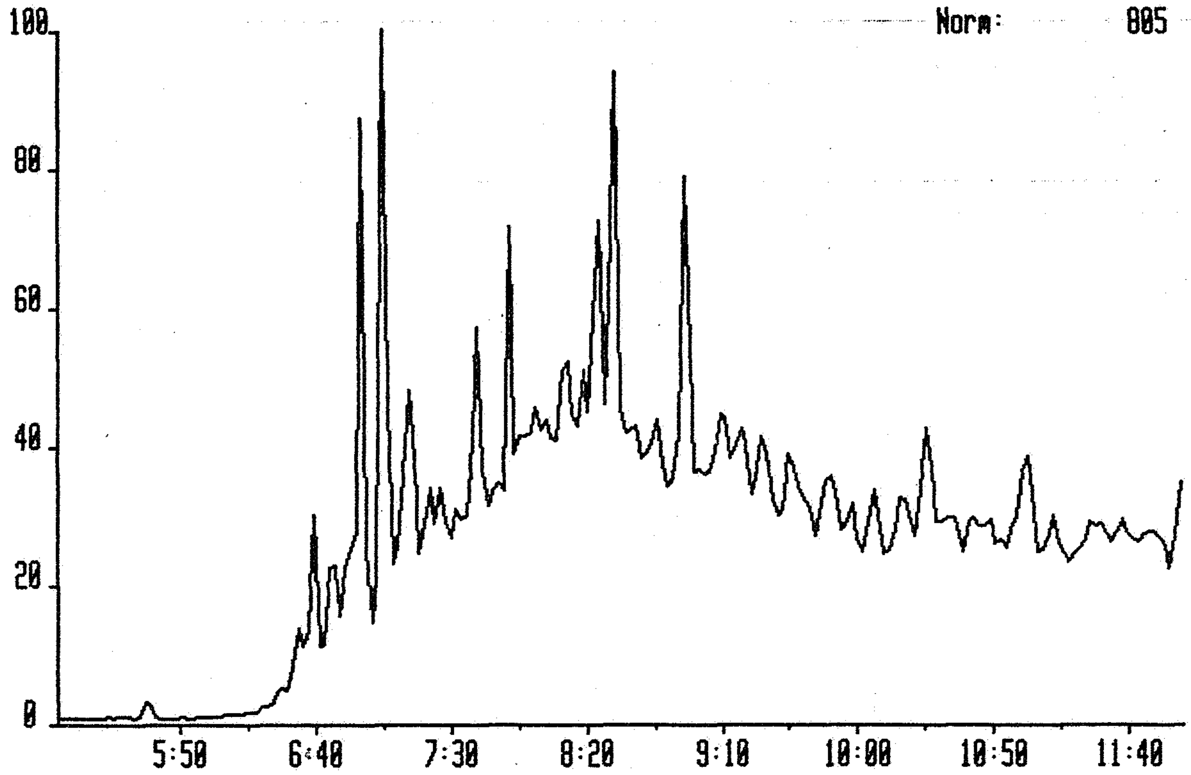
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

EXAMPLE OF PEAK IDENTIFICATION FOR BICYCLANES

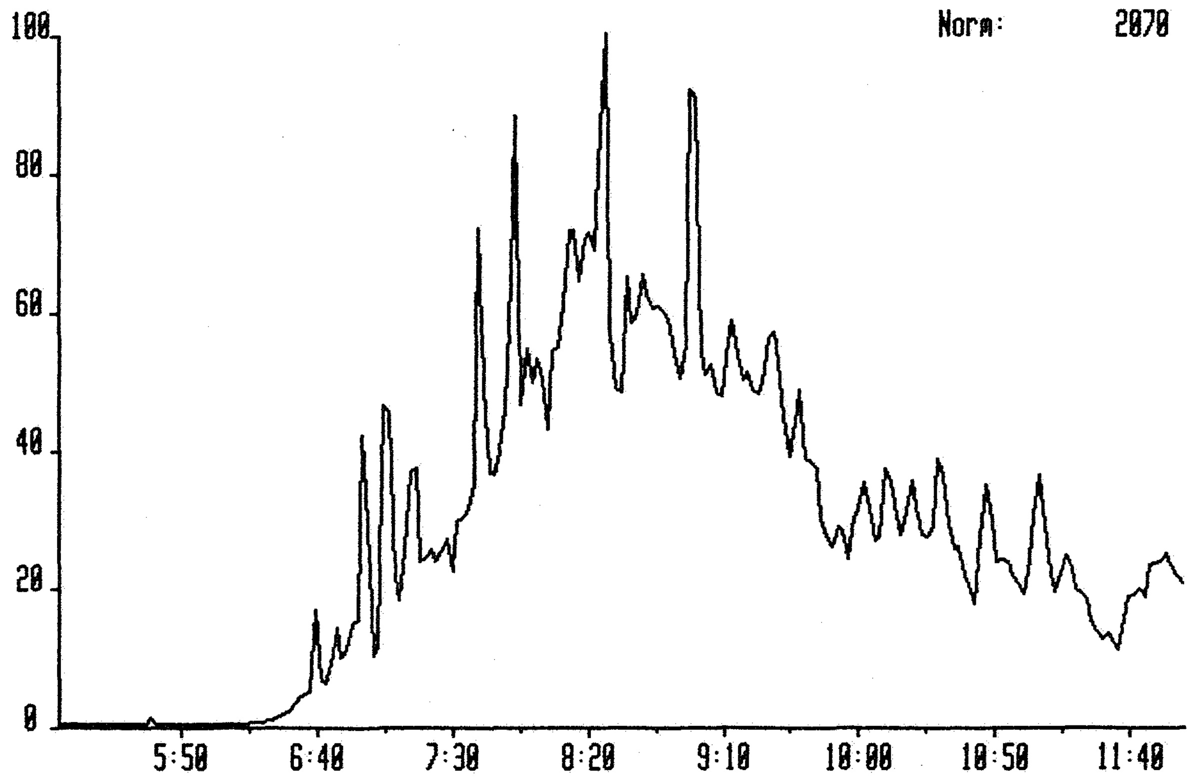


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

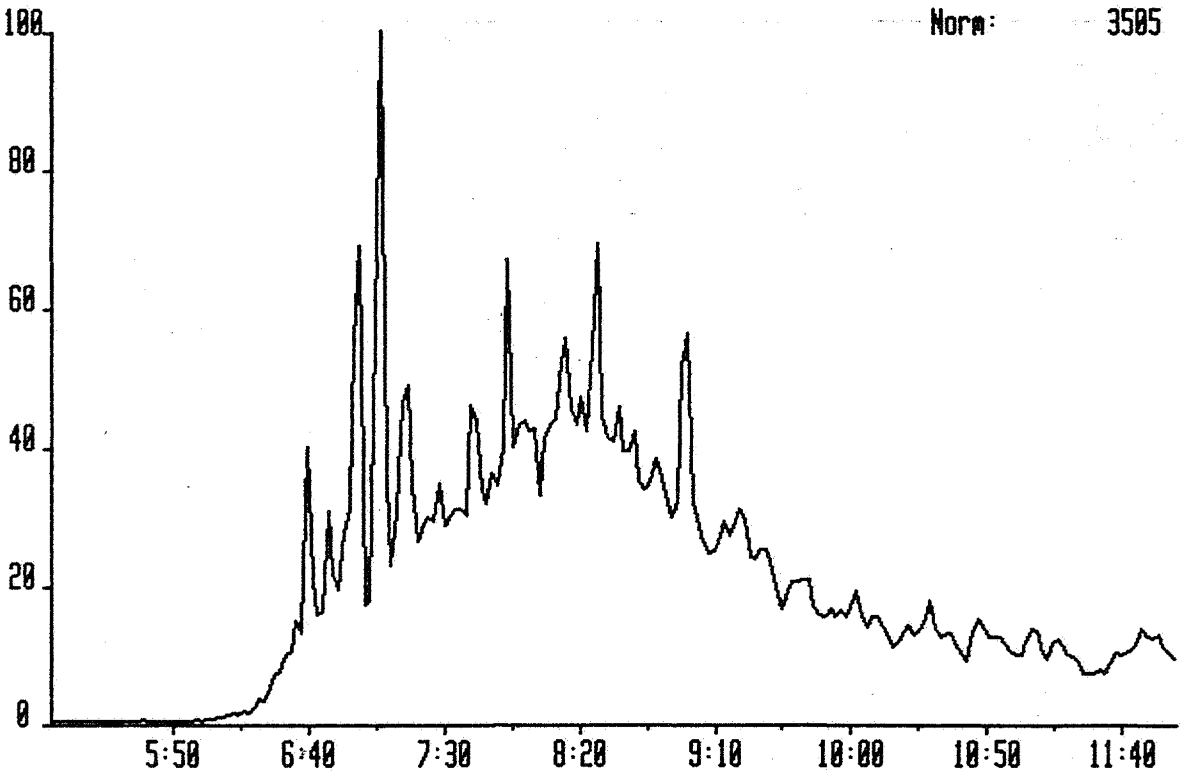
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 179.1800
Text:WELL 2/6-2, 4200M, SATURATED FRACTION



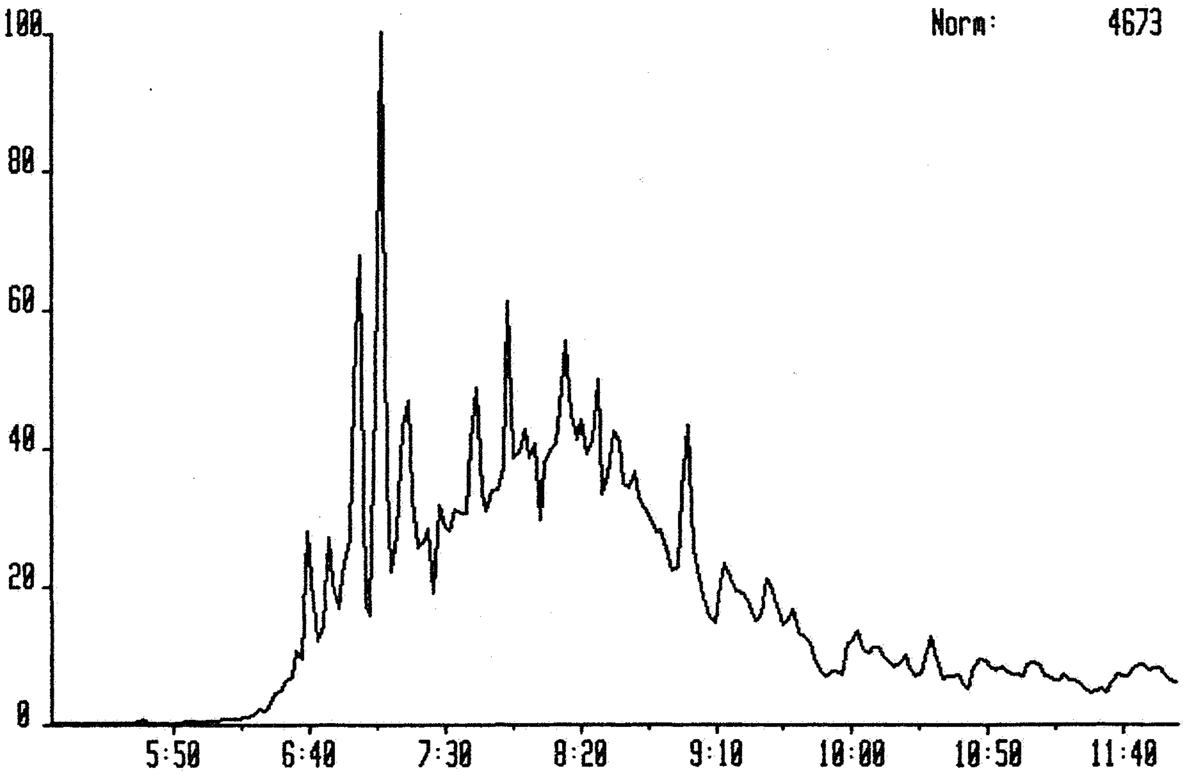
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 179.1800
Text:WELL 2/6-2, 4300M, SATURATED FRACTION



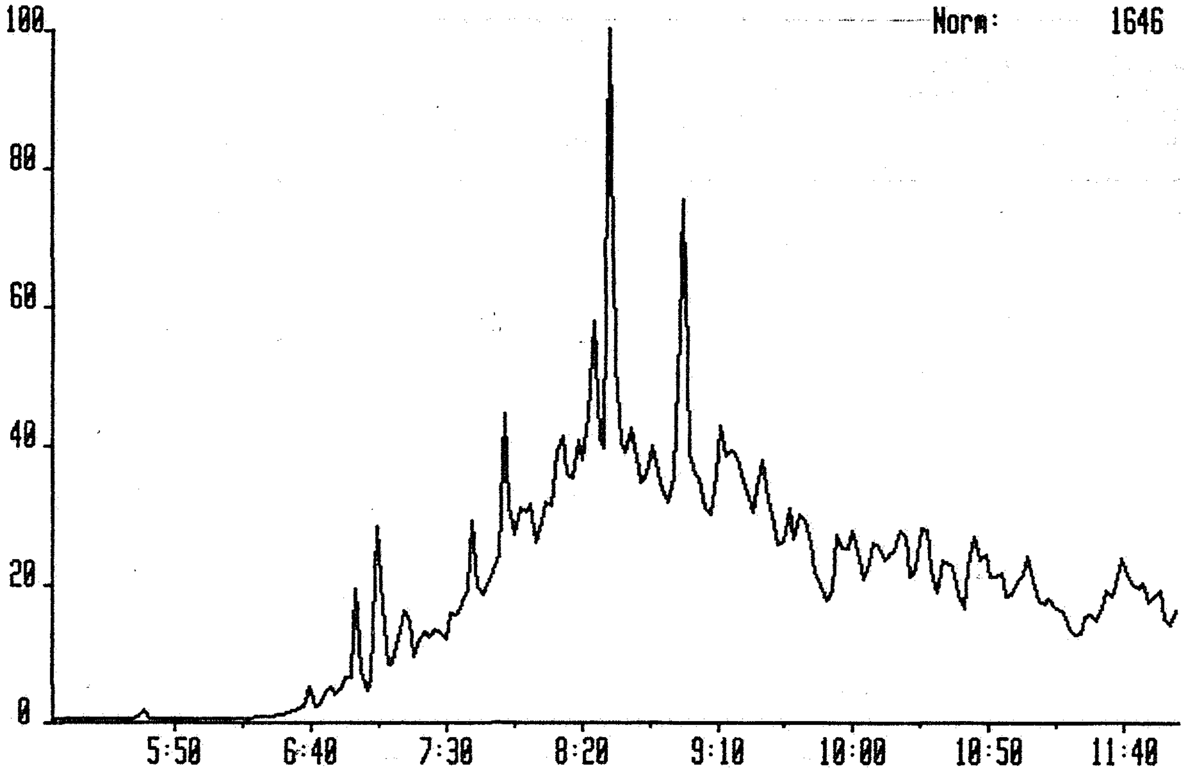
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 179.1800
Text:WELL 2/6-2, 4430M, SATURATED FRACTION



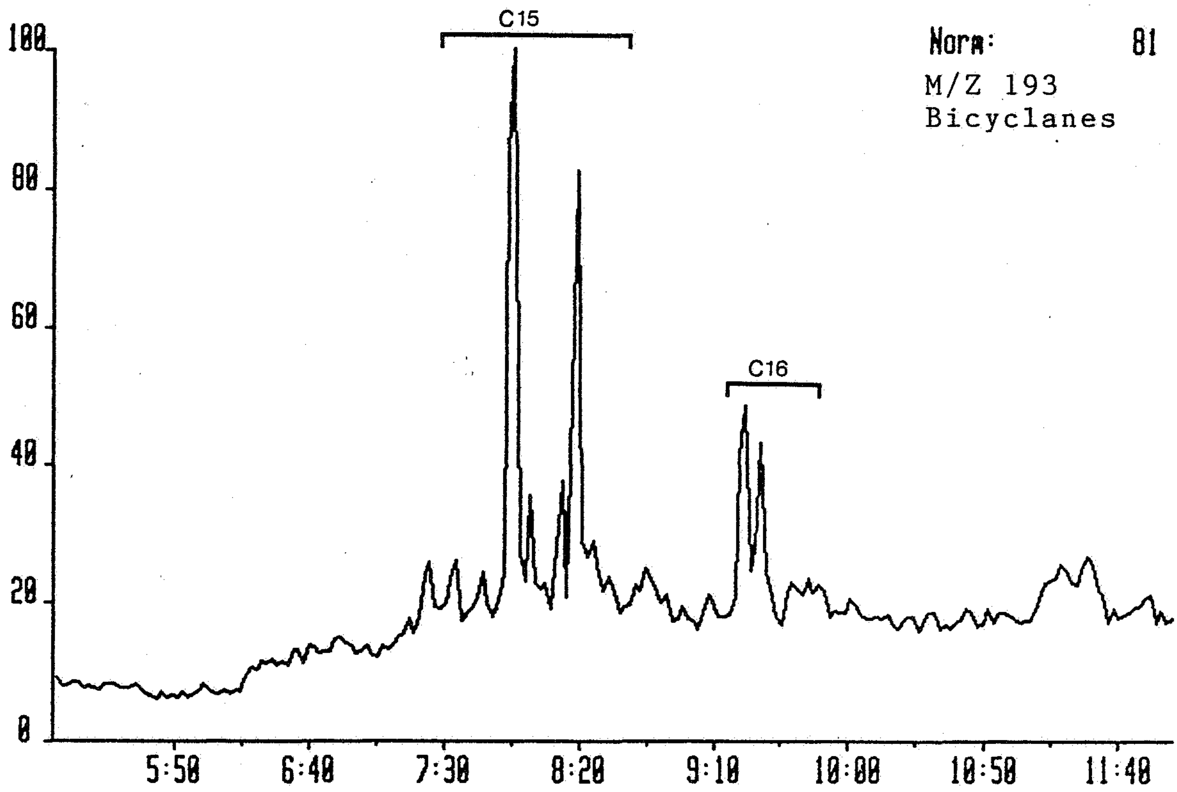
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 179.1800
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



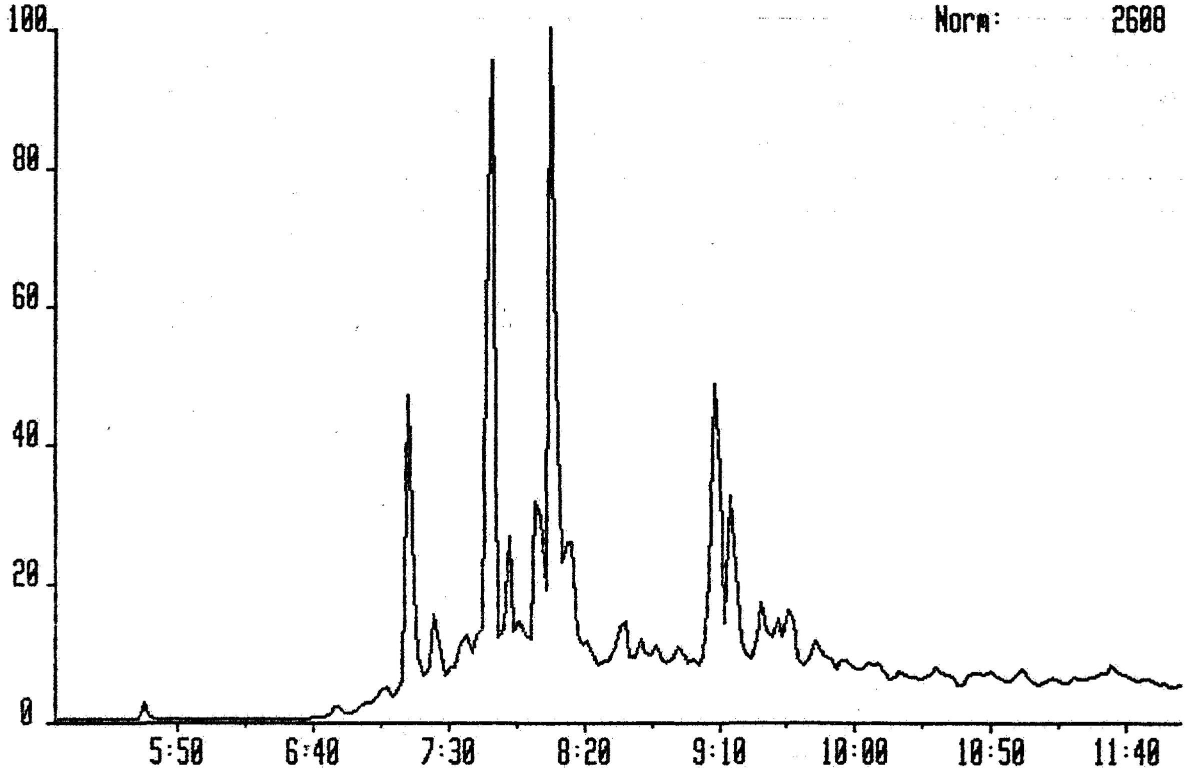
CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 179.1800
Text:WELL 2/6-2, 4666M, SATURATED FRACTION



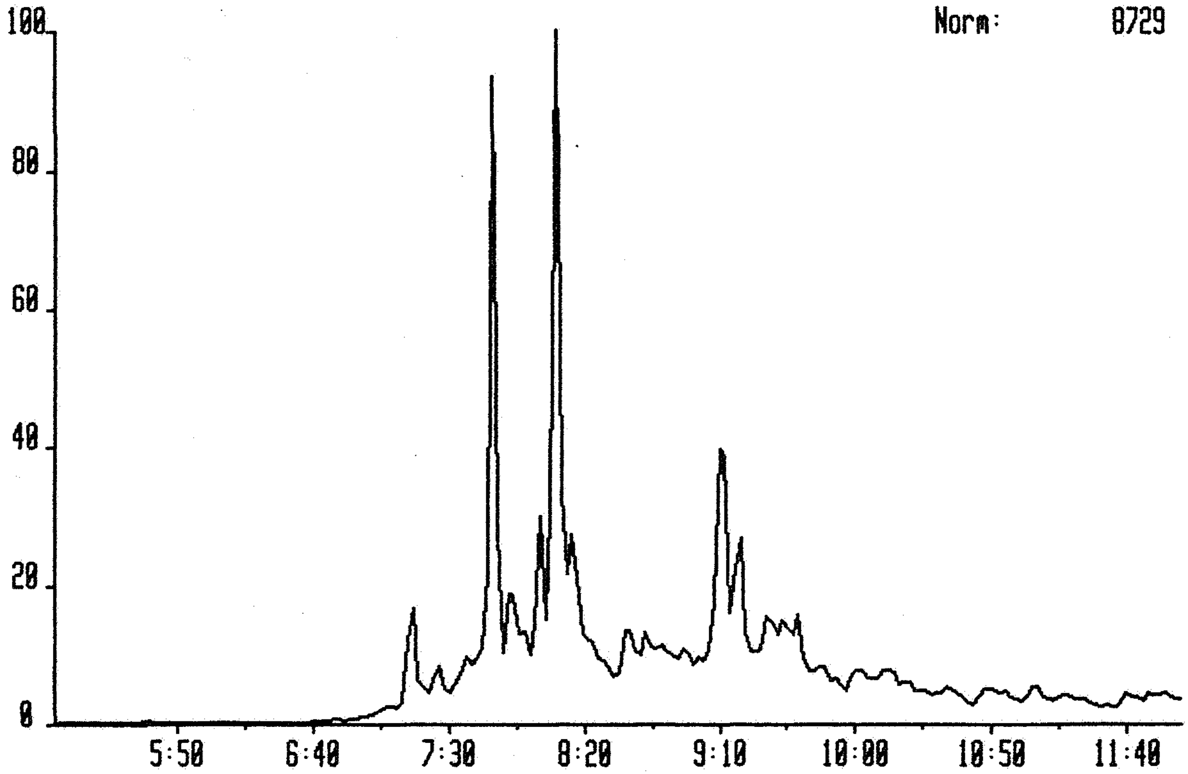
EXAMPLE OF PEAK IDENTIFICATION FOR BICYCLANES



CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 10 Injection 1 Group 1 Mass 193.1956
Text:WELL 2/6-2, 4200M, SATURATED FRACTION

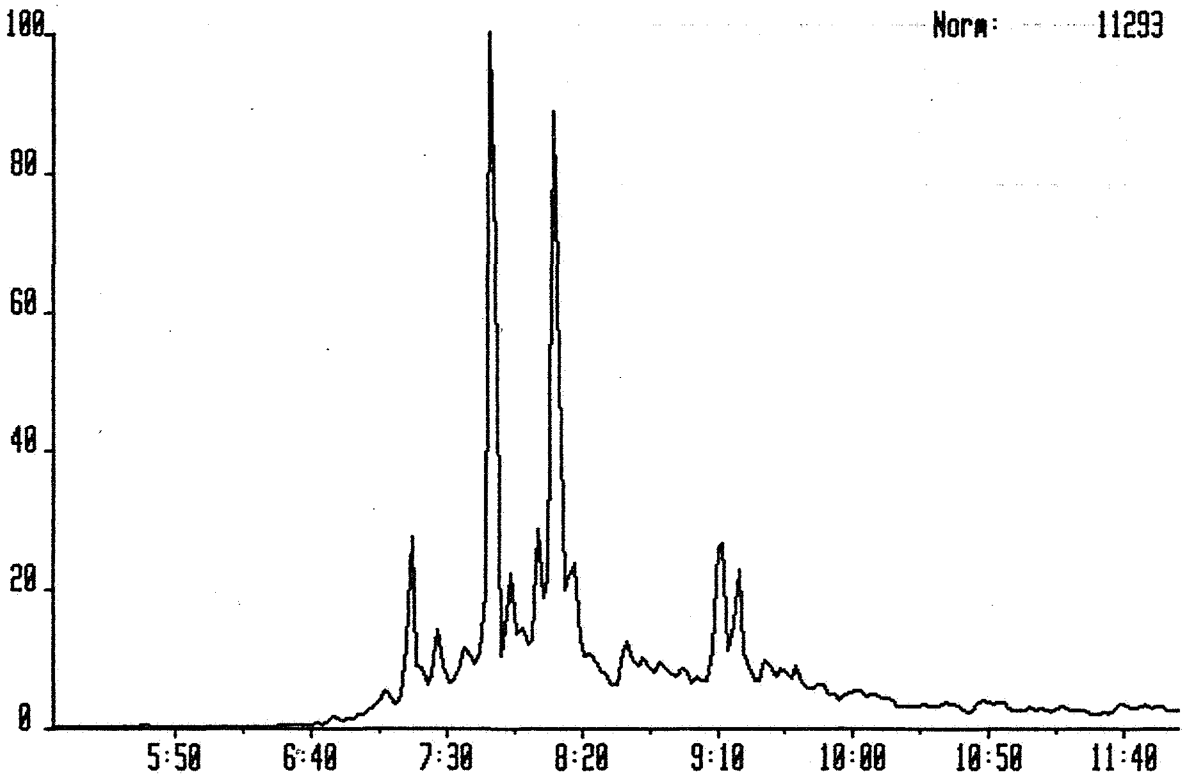


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 11 Injection 1 Group 1 Mass 193.1956
Text:WELL 2/6-2, 4300M, SATURATED FRACTION

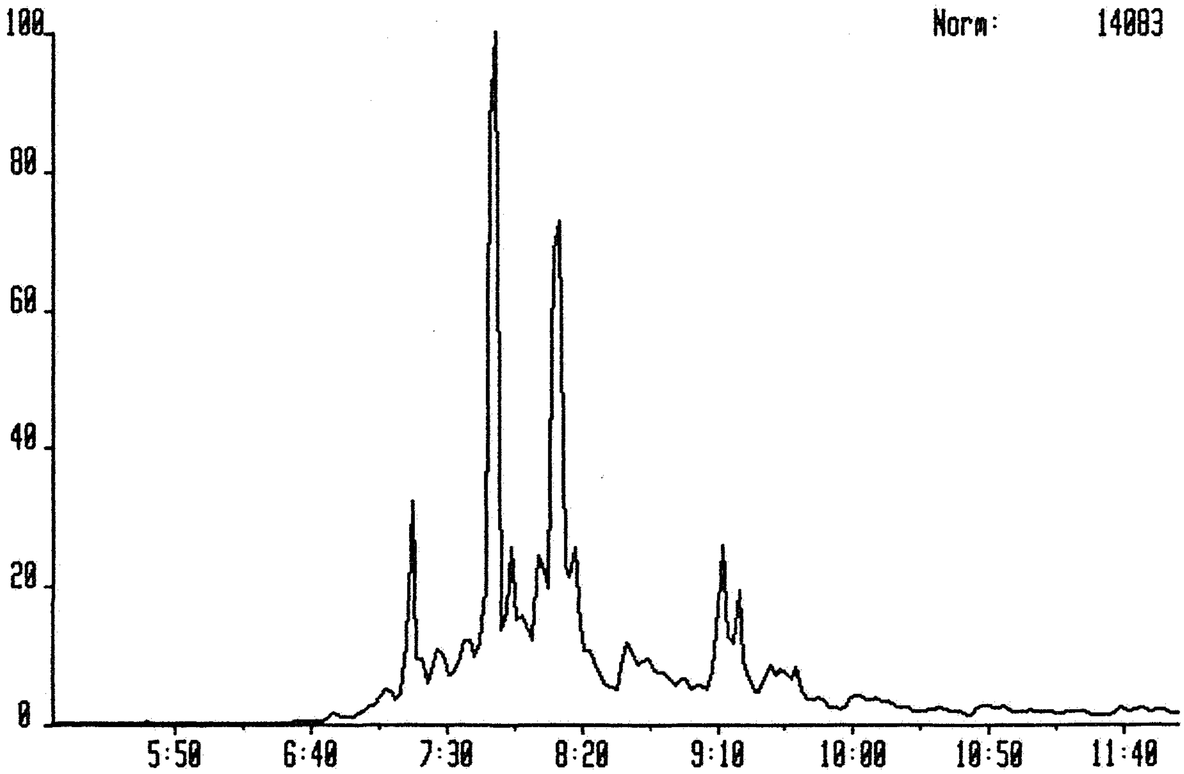


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 12 Injection 1 Group 1 Mass 193.1956
Text:WELL 2/6-2, 4430M, SATURATED FRACTION

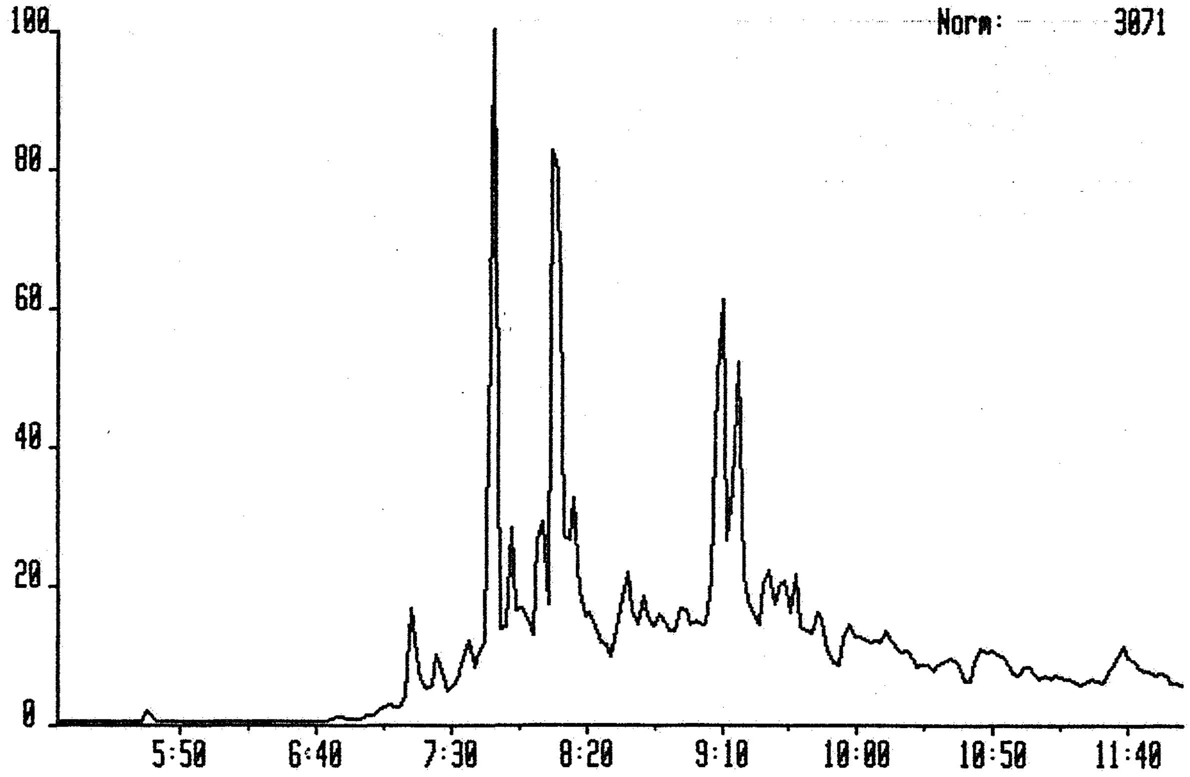


CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 13 Injection 1 Group 1 Mass 193.1956
Text:WELL 2/6-2, 4520M, SATURATED FRACTION



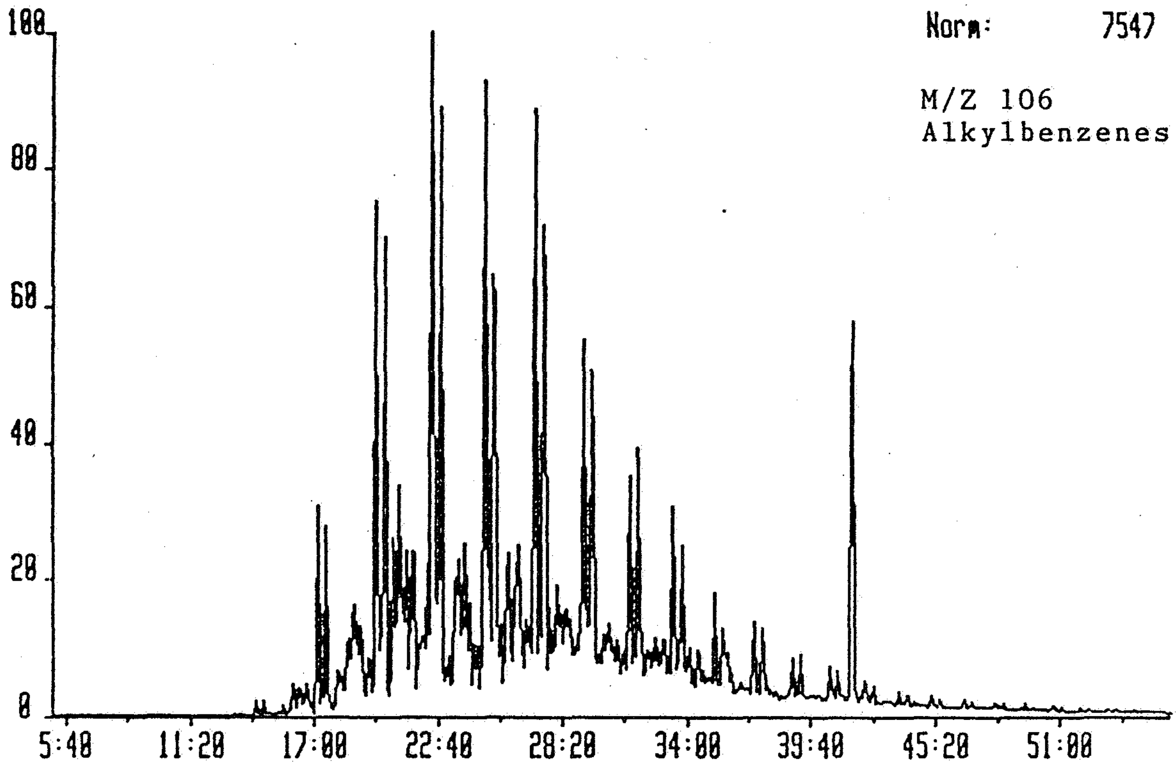
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGSAT6 24-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 14 Injection 1 Group 1 Mass 193.1956
Text:WELL 2/6-2, 4666M, SATURATED FRACTION

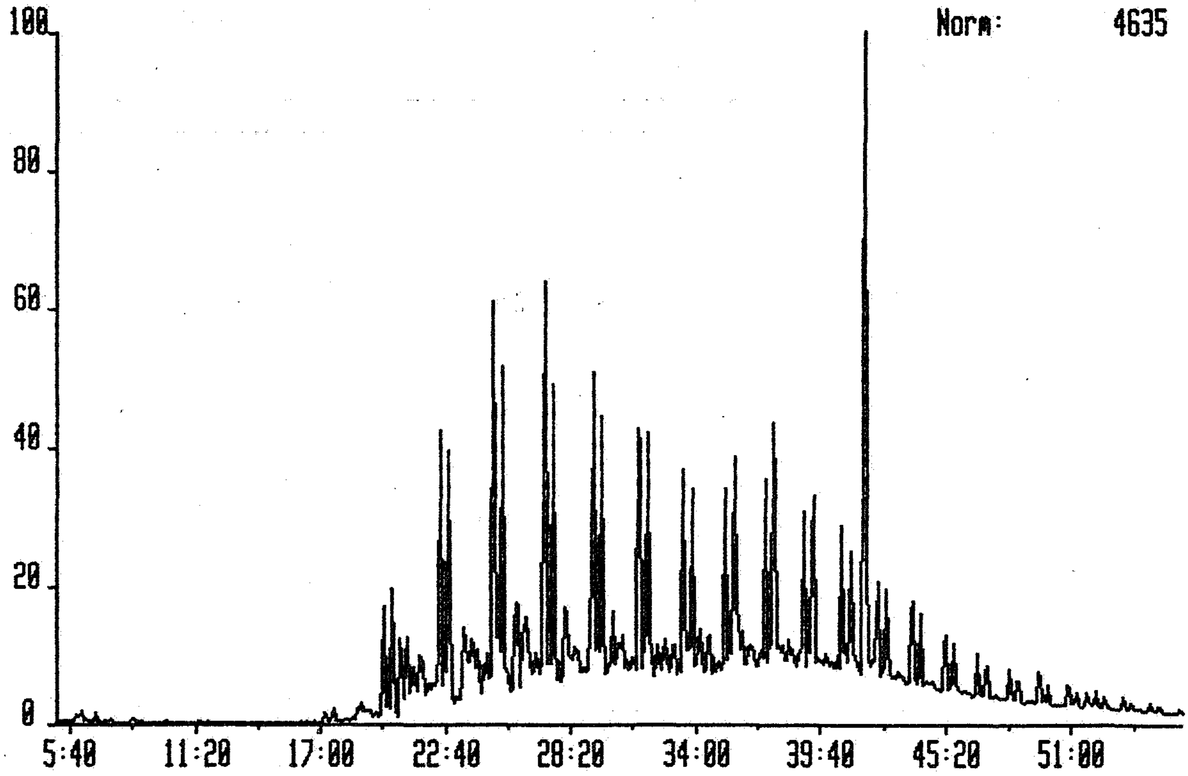


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

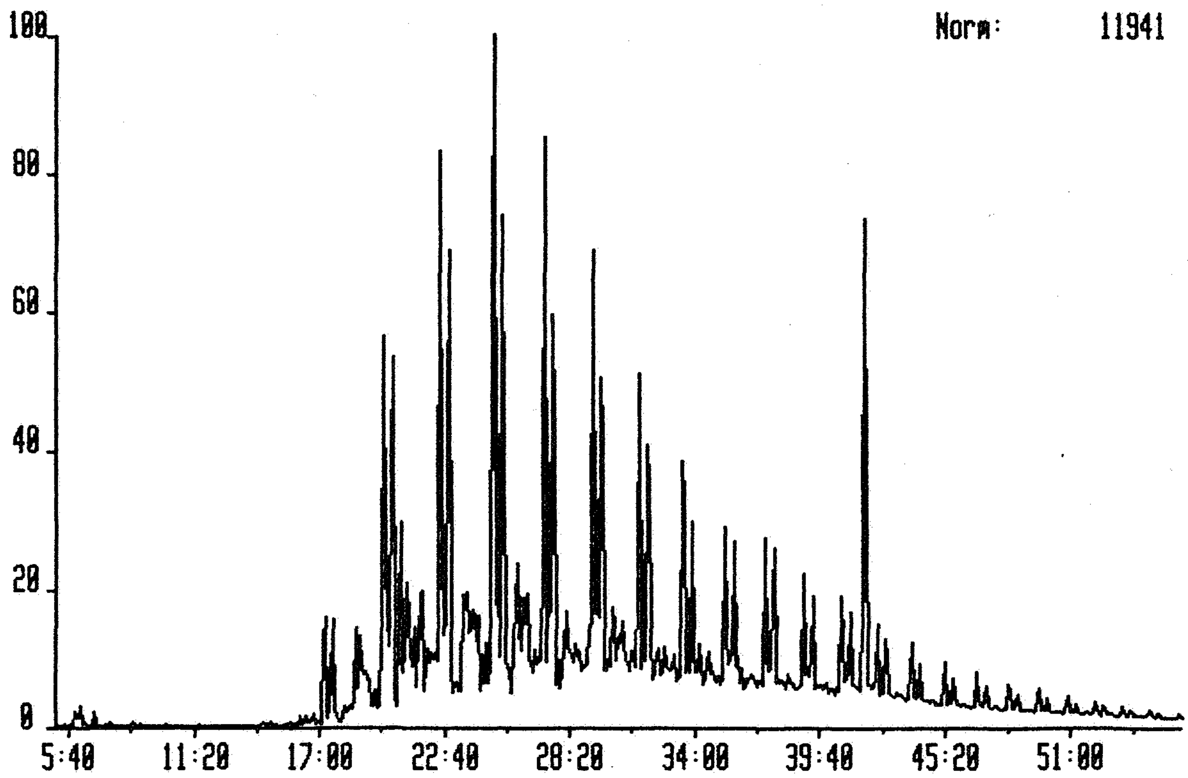
EXAMPLE OF PEAK IDENTIFICATION FOR ALKYLBENZENES.



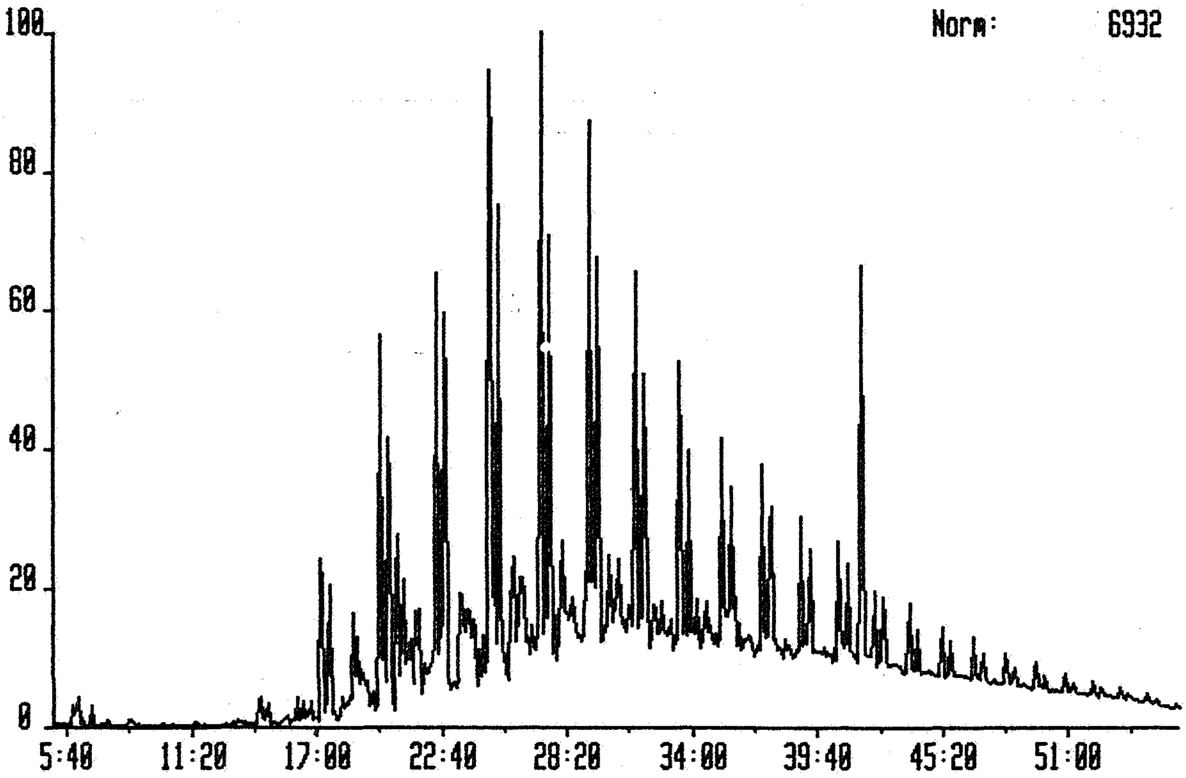
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 106.0783
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



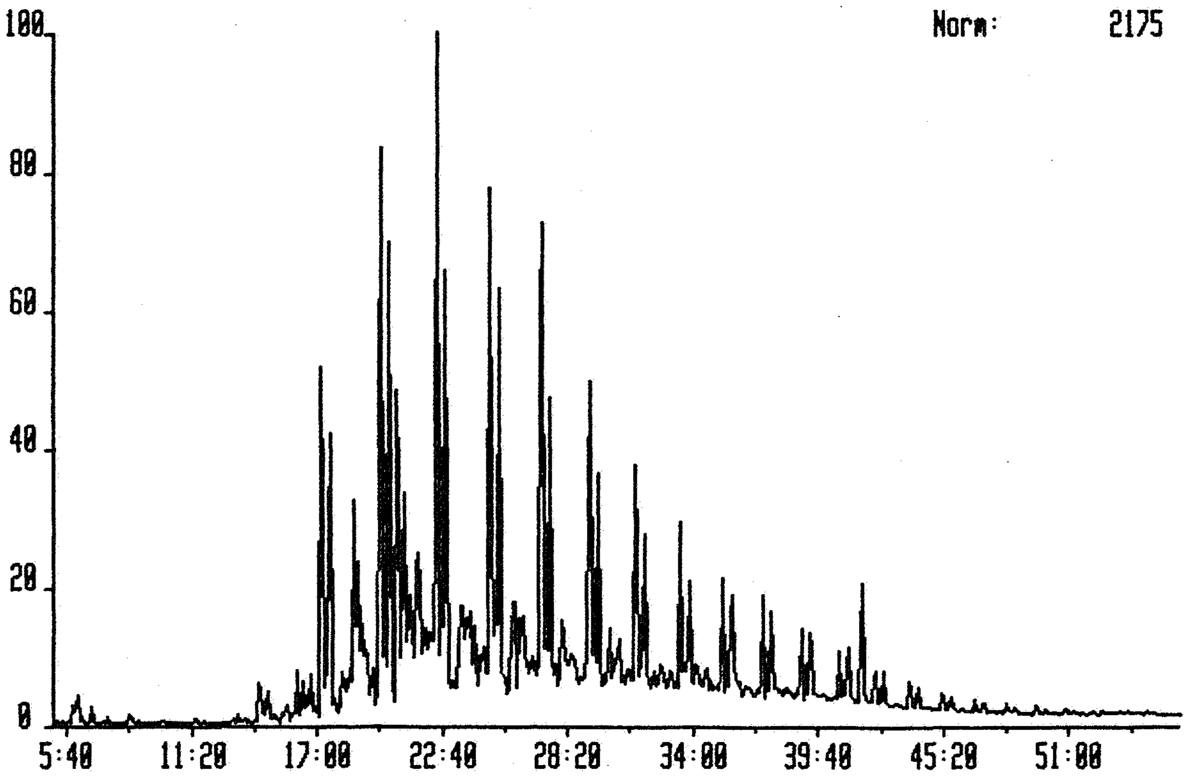
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 106.0783
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



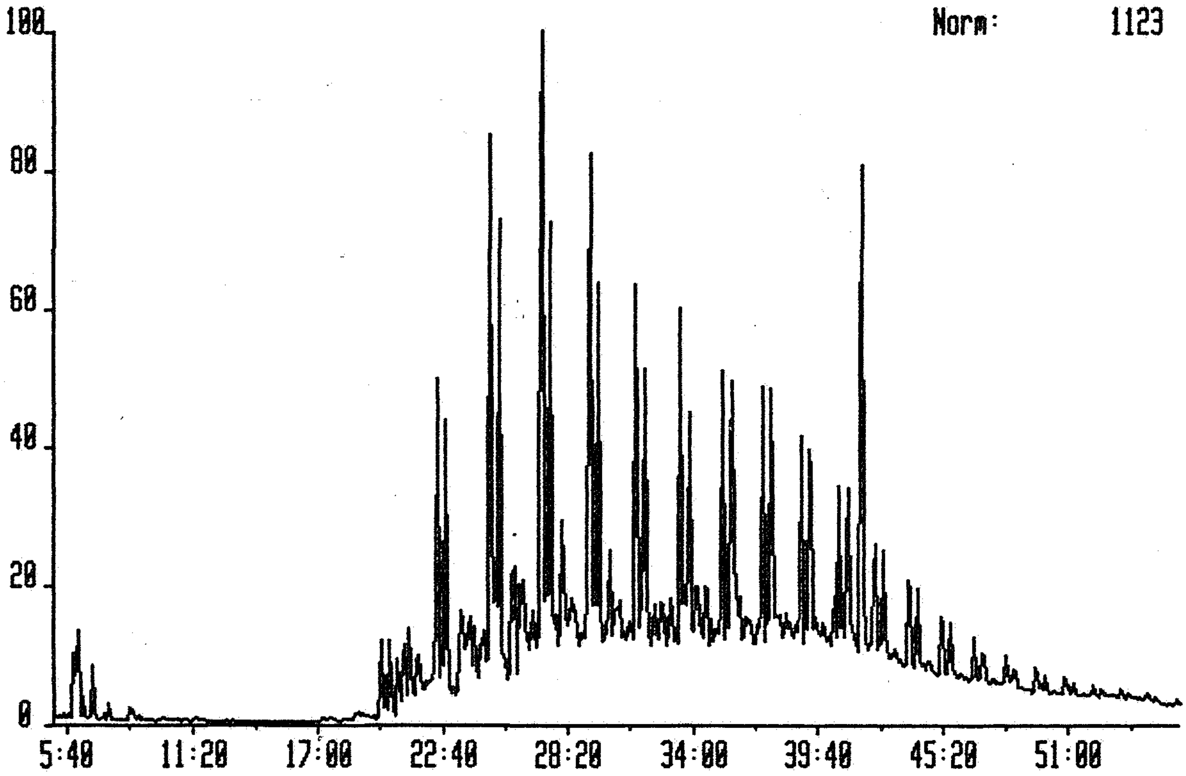
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 106.0783
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



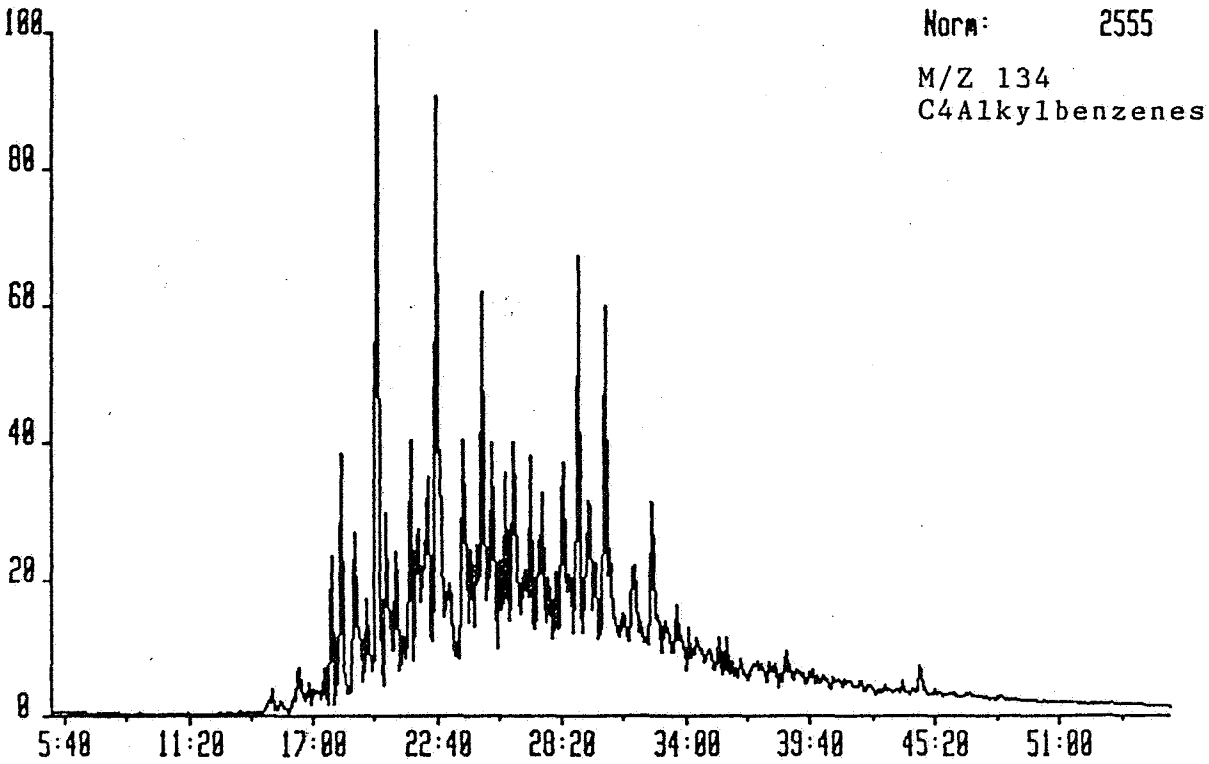
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 106.0783
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 106.0783
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION

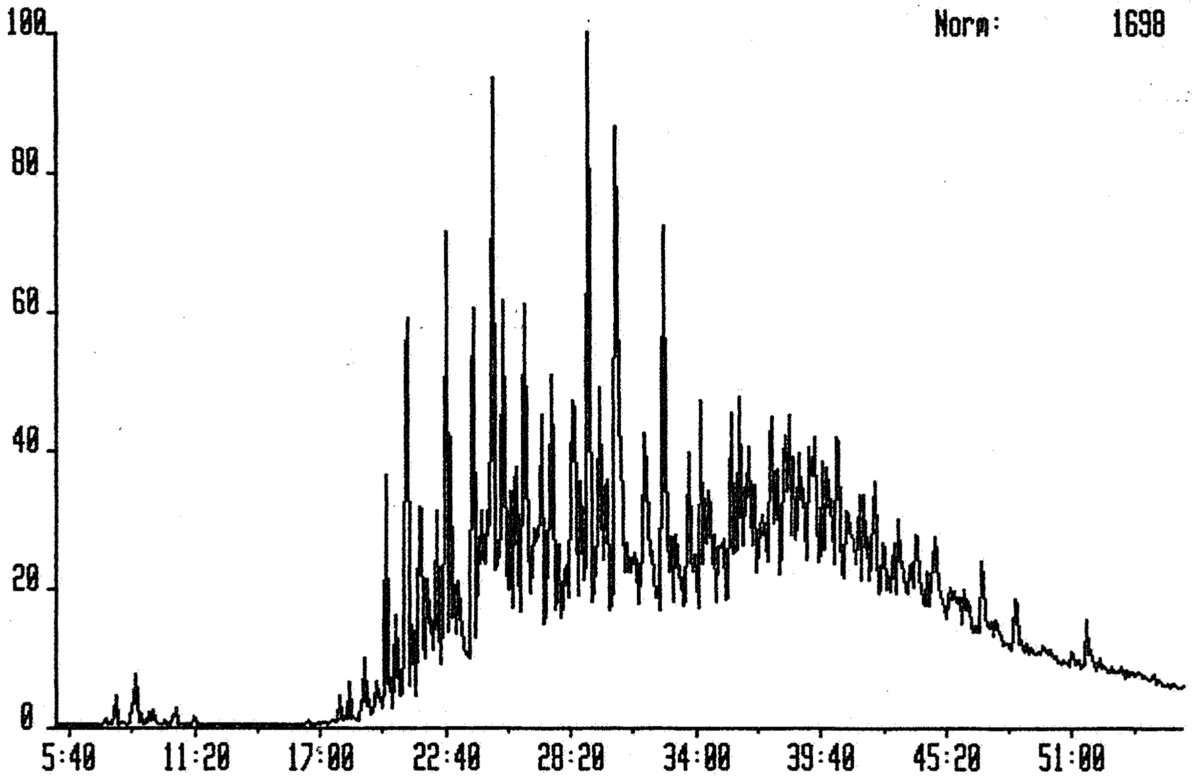


EXAMPL OF PEAK IDENTIFICATION FOR ALKYLBENZENES.

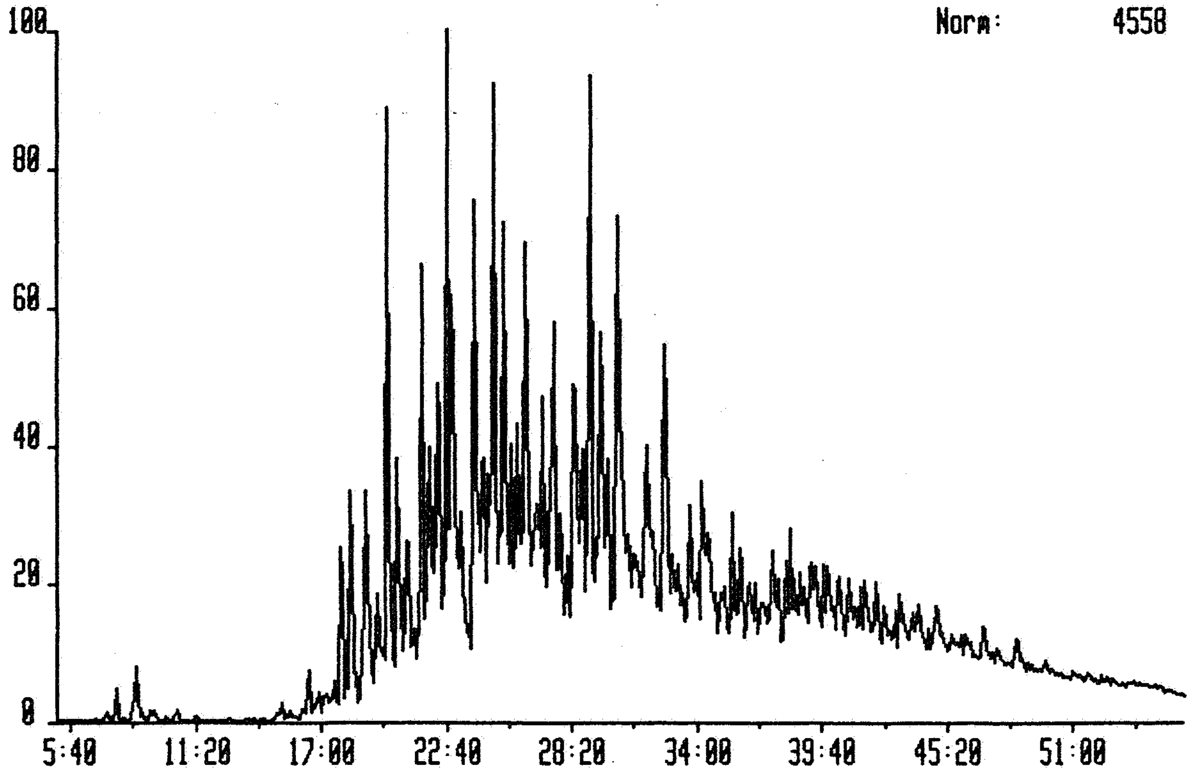


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 134.1096
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION

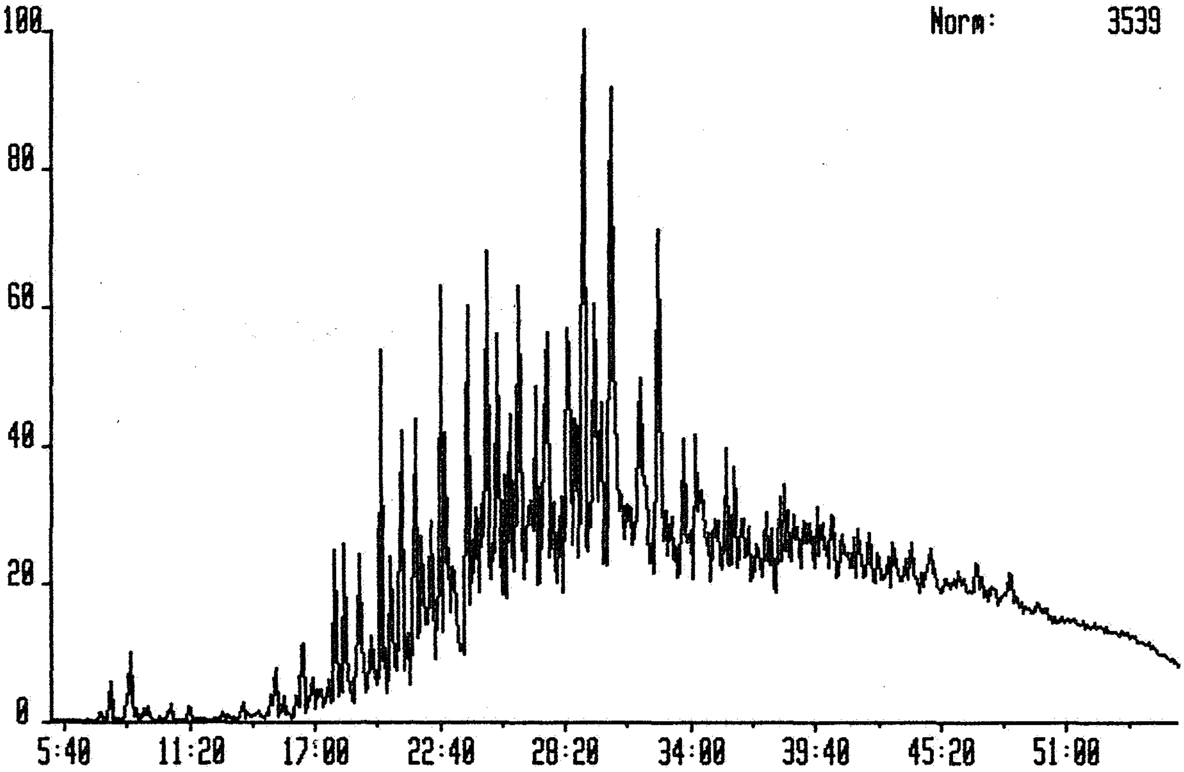


CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 134.1096
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION

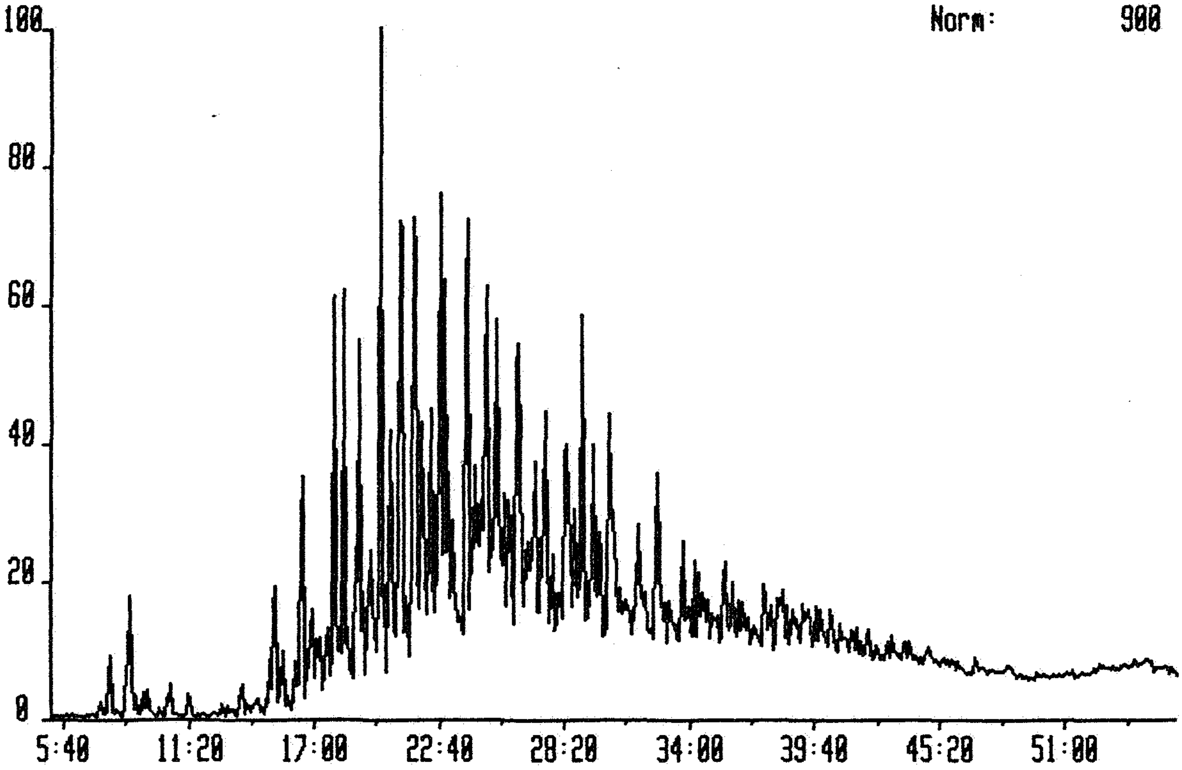


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 134.1096
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION

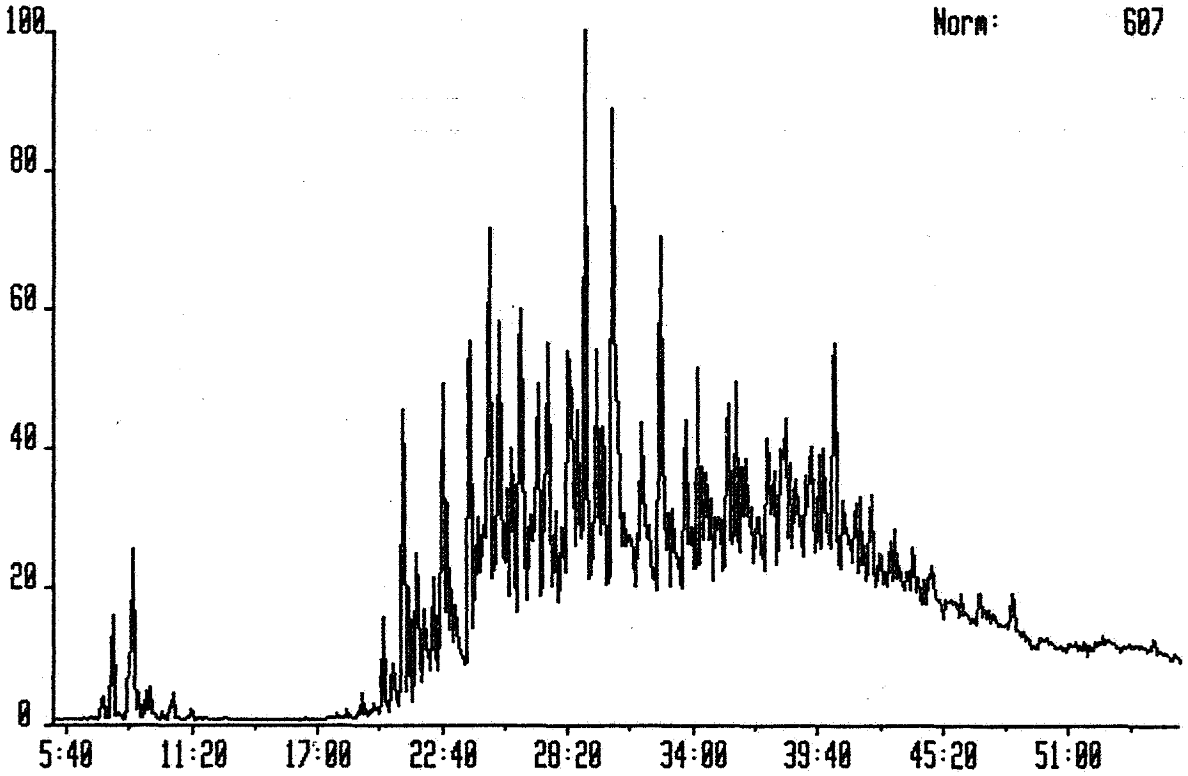


CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 134.1096
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION

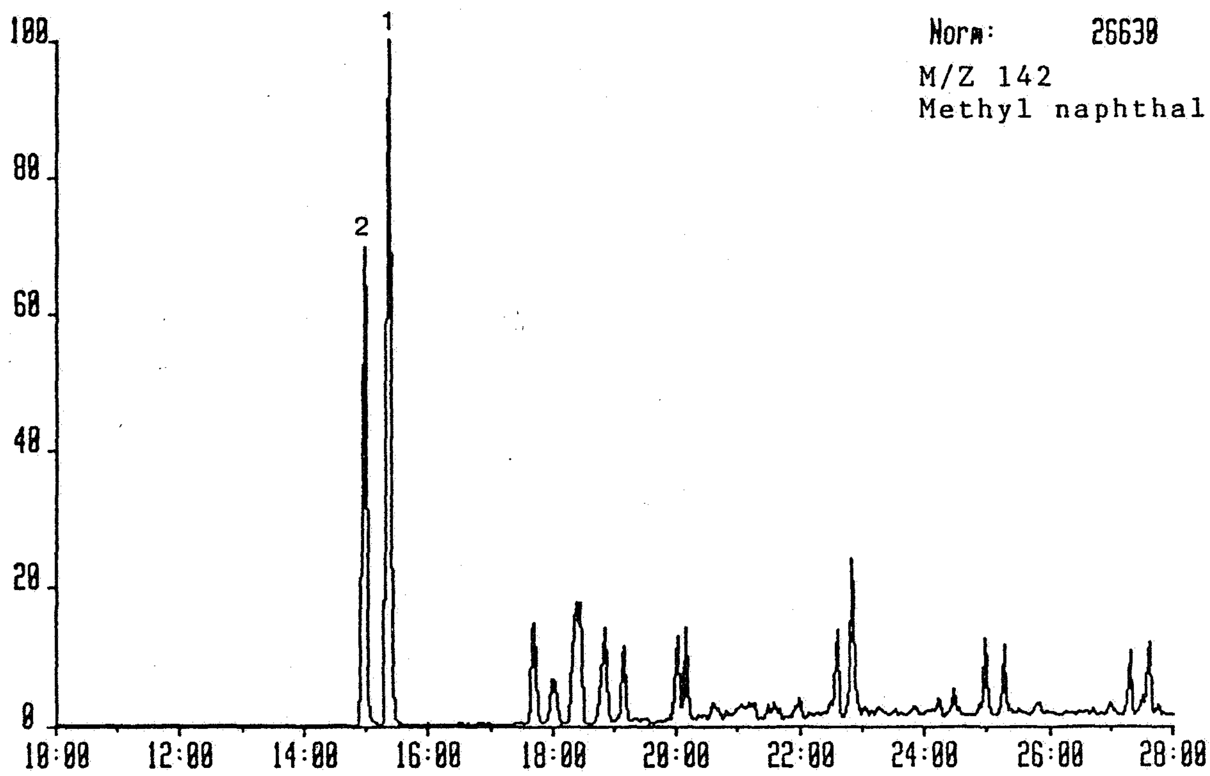


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 134.1096
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION

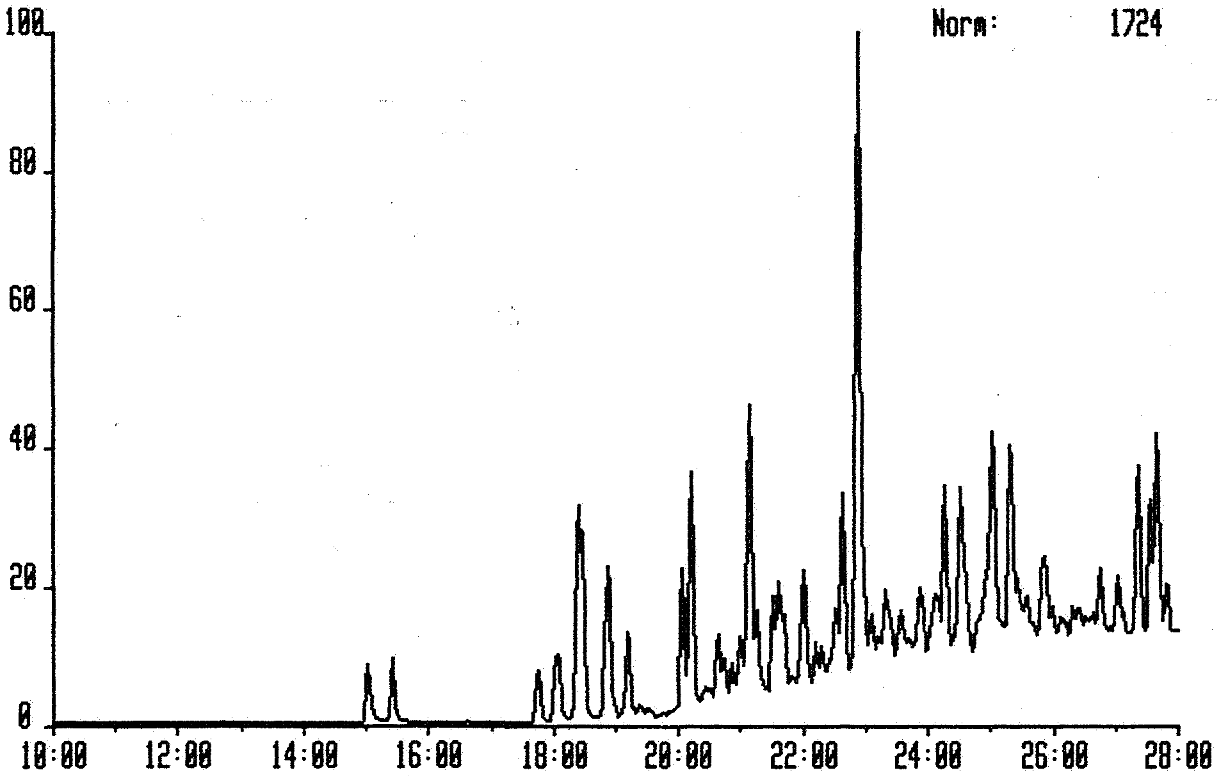


EXAPLE OF PEAK IDENTIFICATION FOR METHYL NAPHTHALENES.

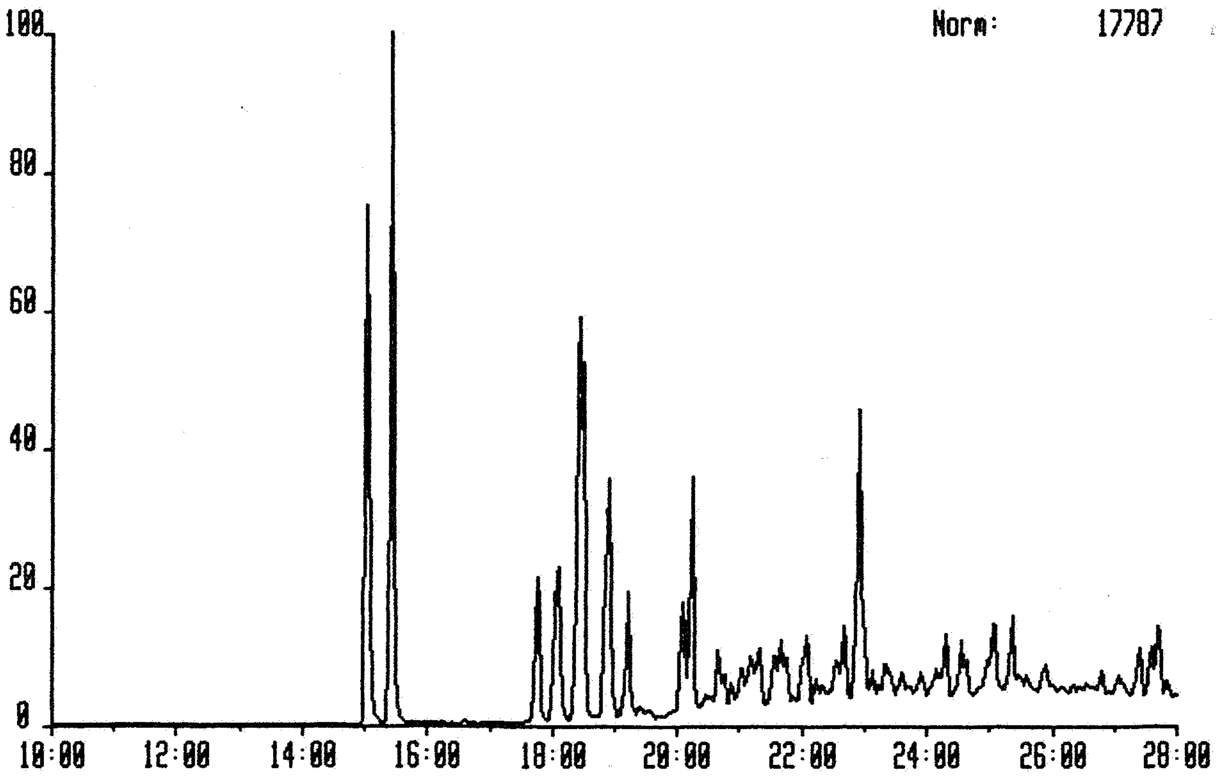


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

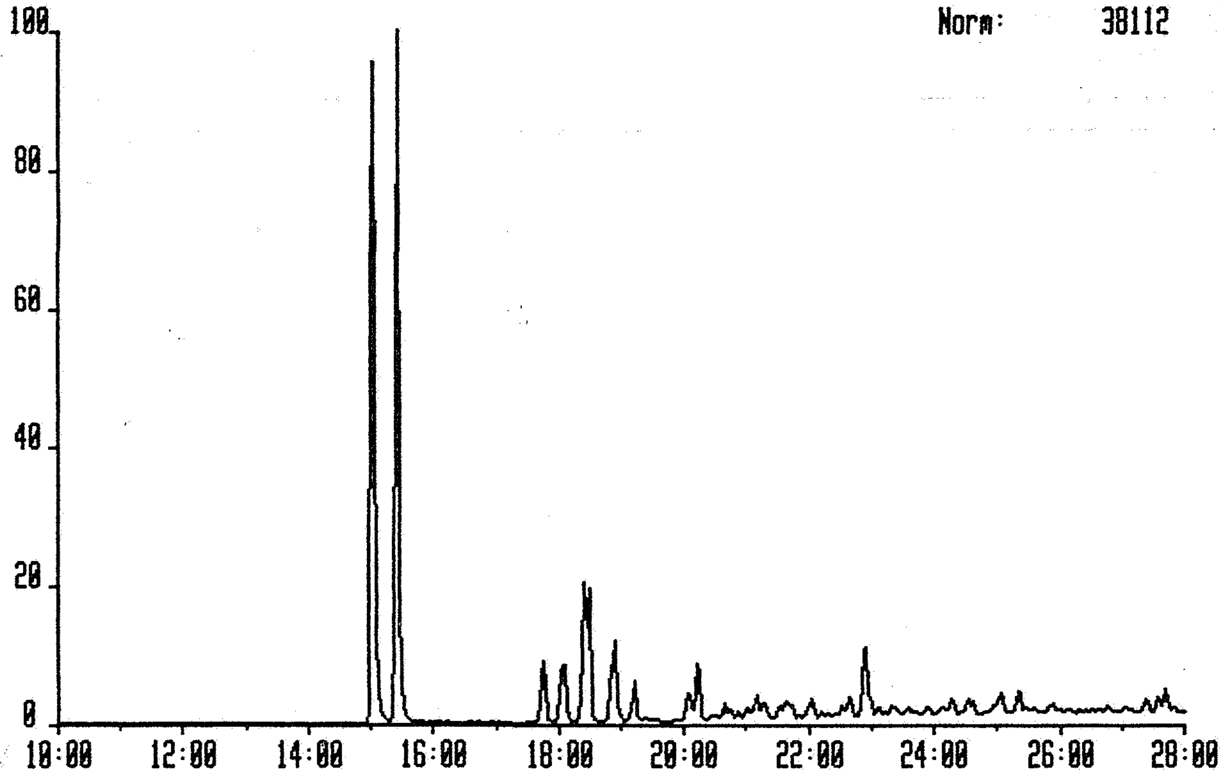
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 142.0783
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



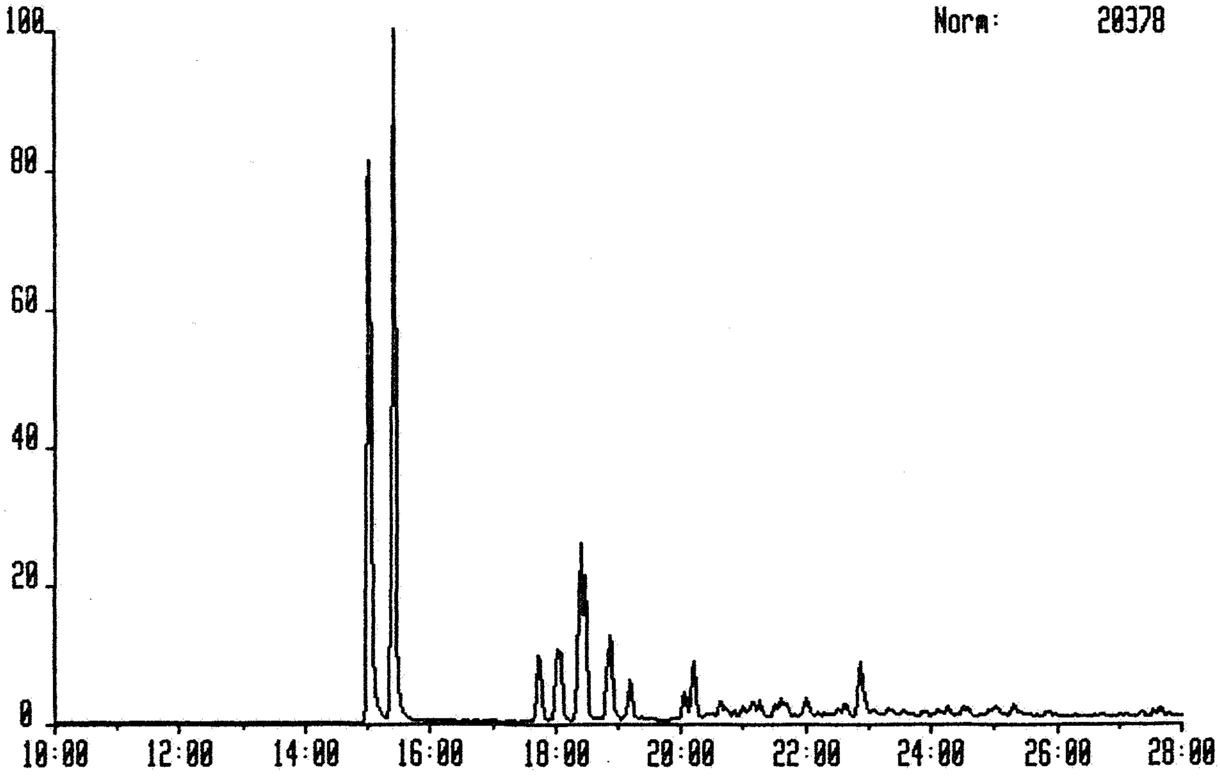
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 142.0783
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



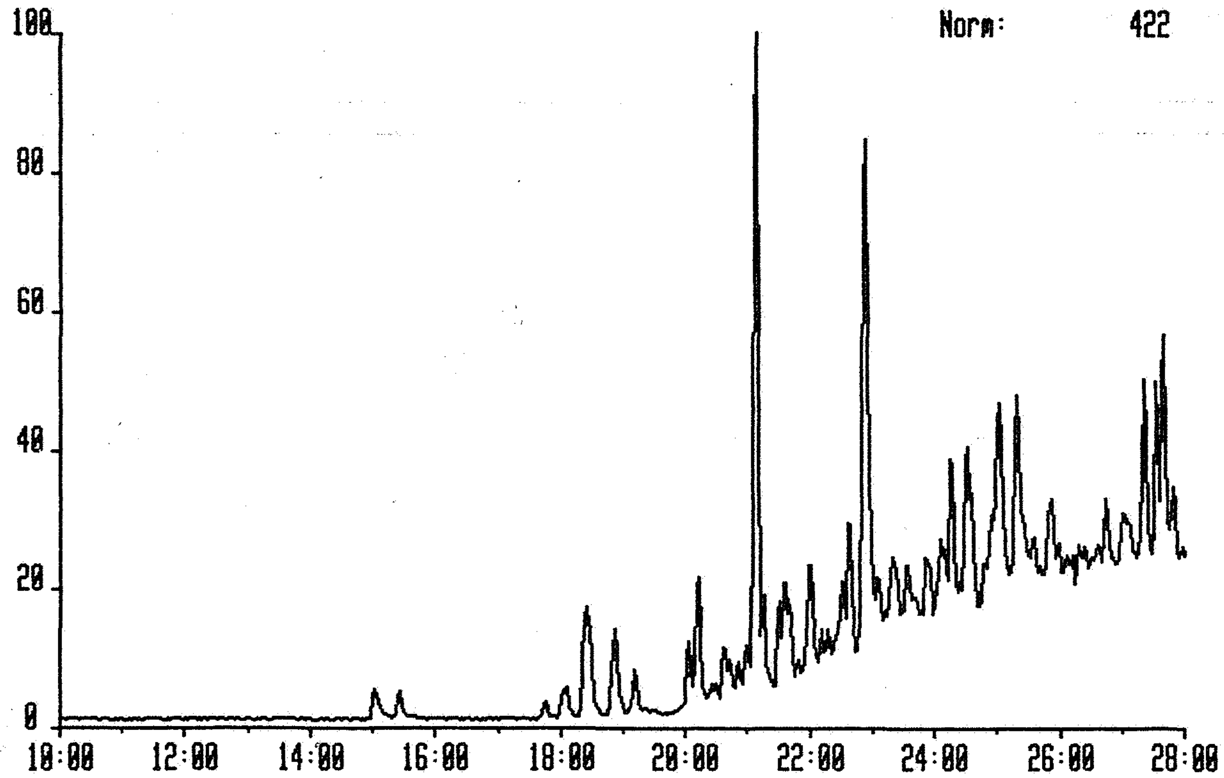
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 142.0783
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



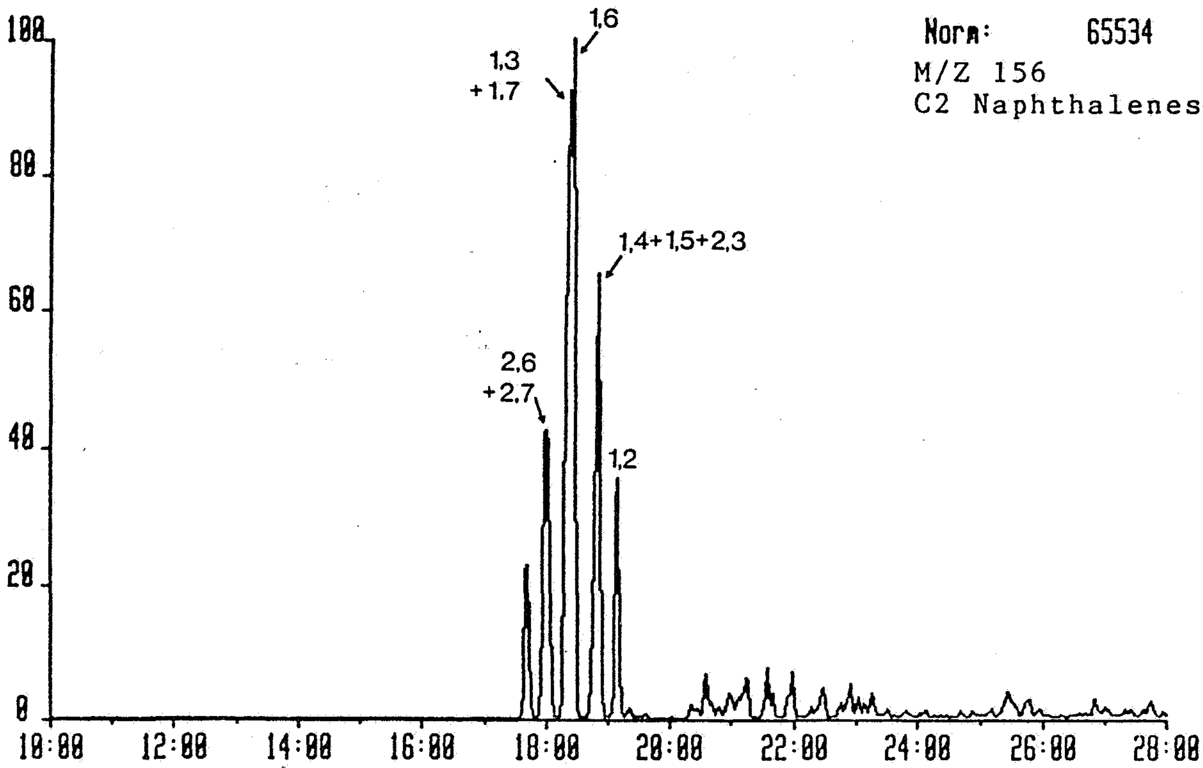
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 142.0783
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



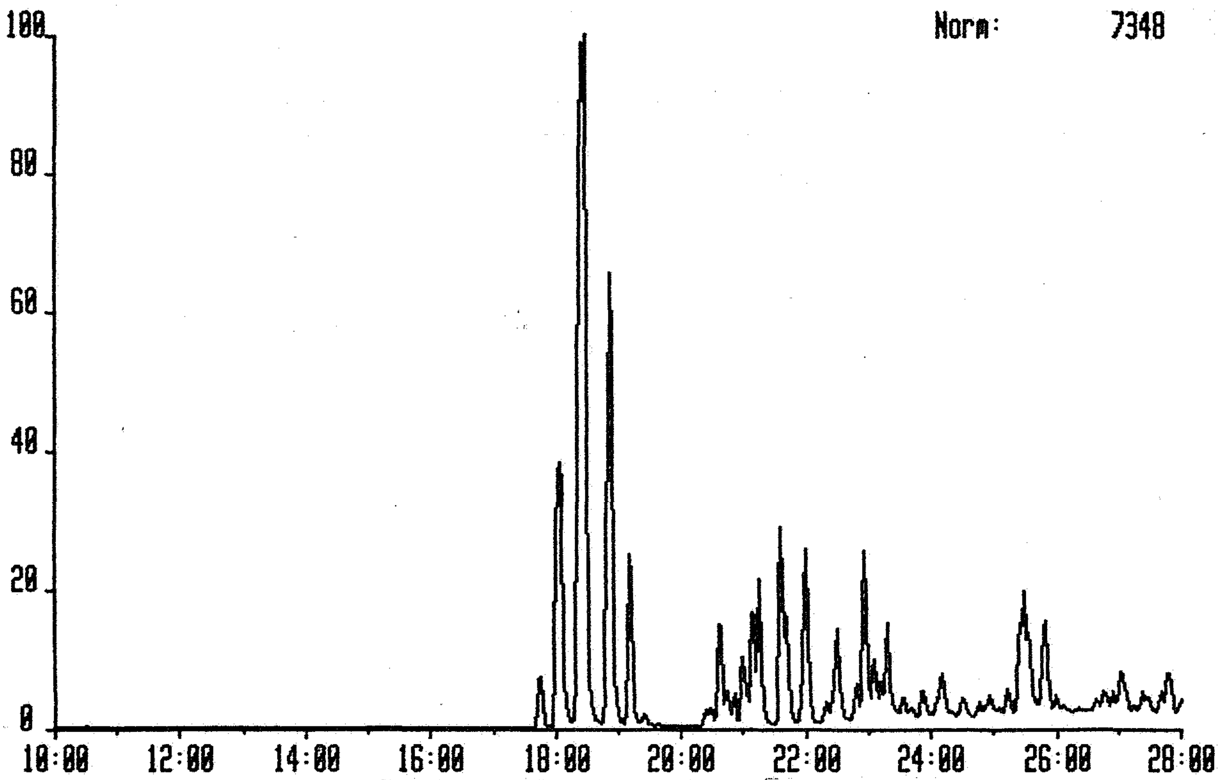
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 142.0783
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



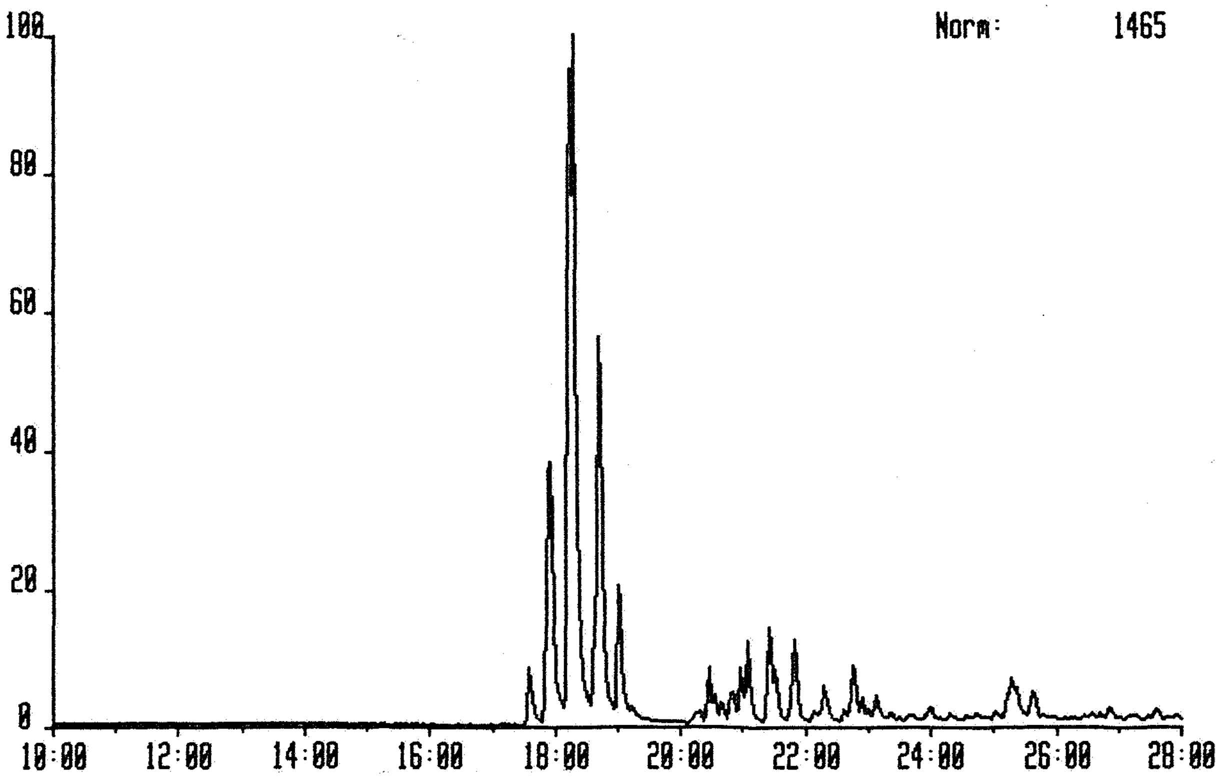
EXAMPLE OF PEAK IDENTIFICATION FOR C2 NAPHTHALENES.



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 2 Injection 1 Group 1 Mass 156.0939
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION

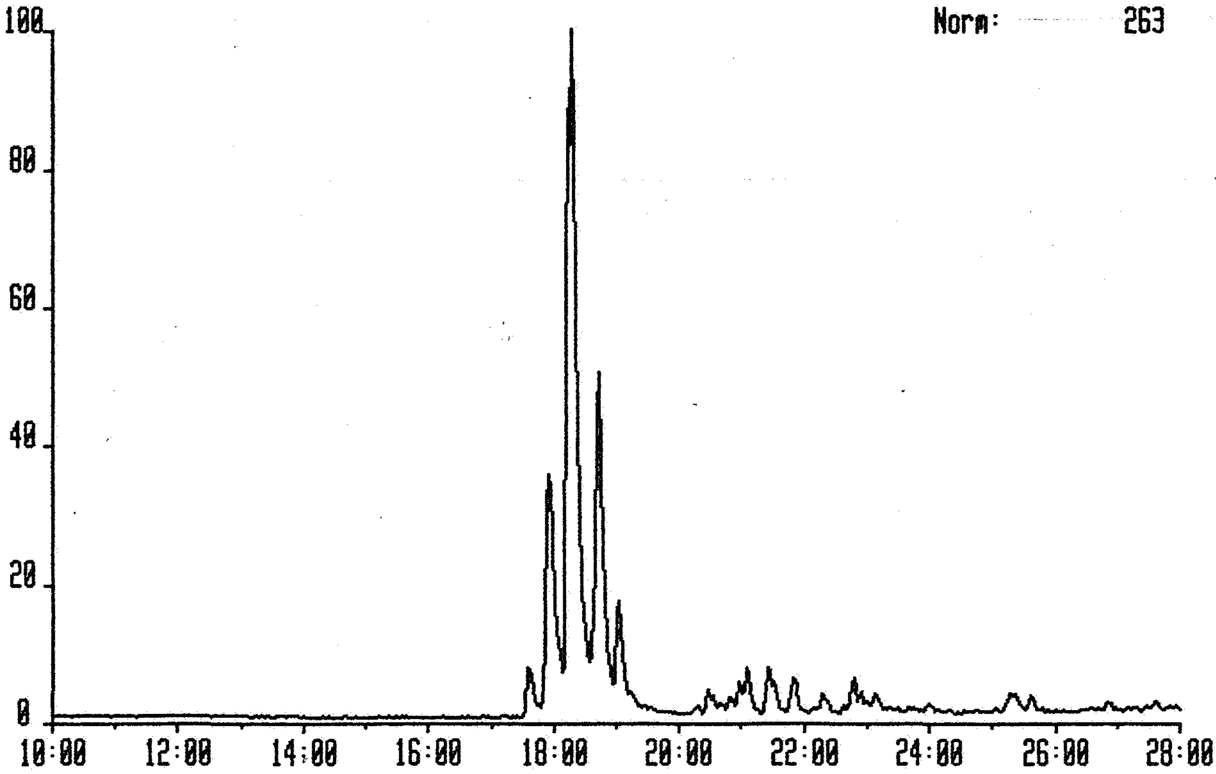


CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 16 Injection 1 Group 1 Mass 156.0939
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION

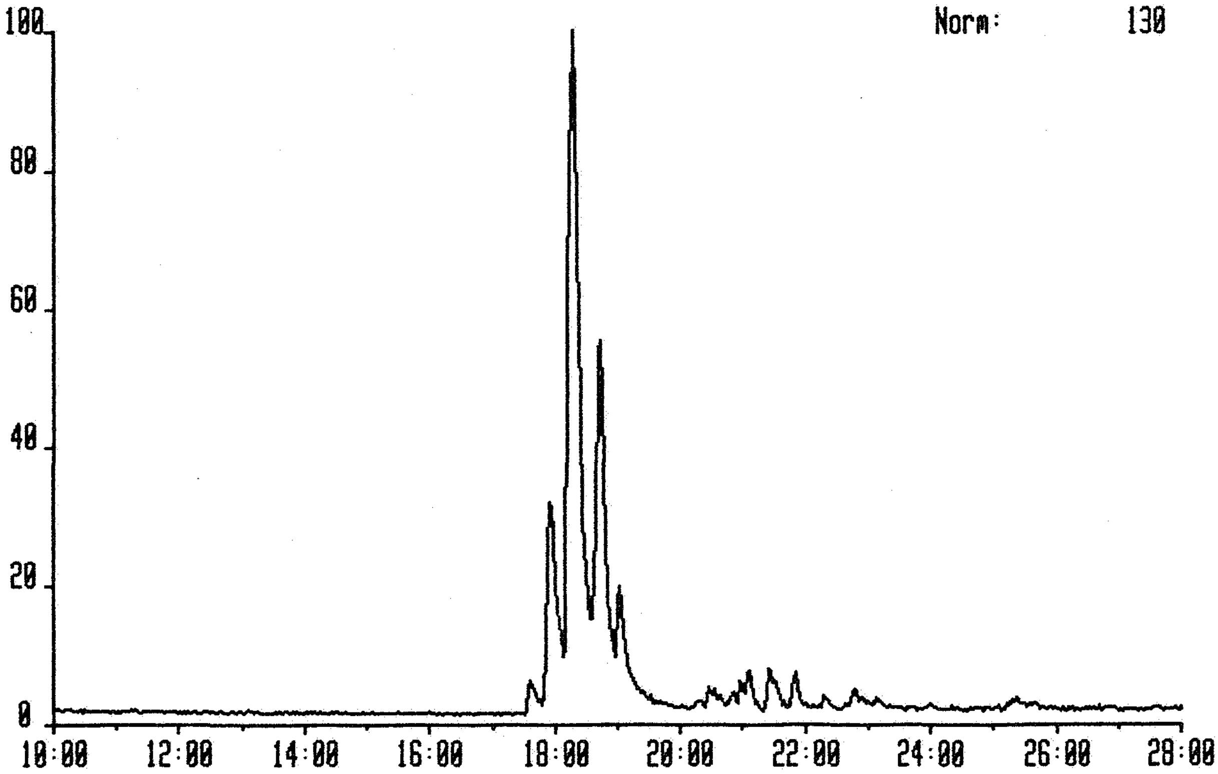


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 17 Injection 1 Group 1 Mass 156.0939
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION

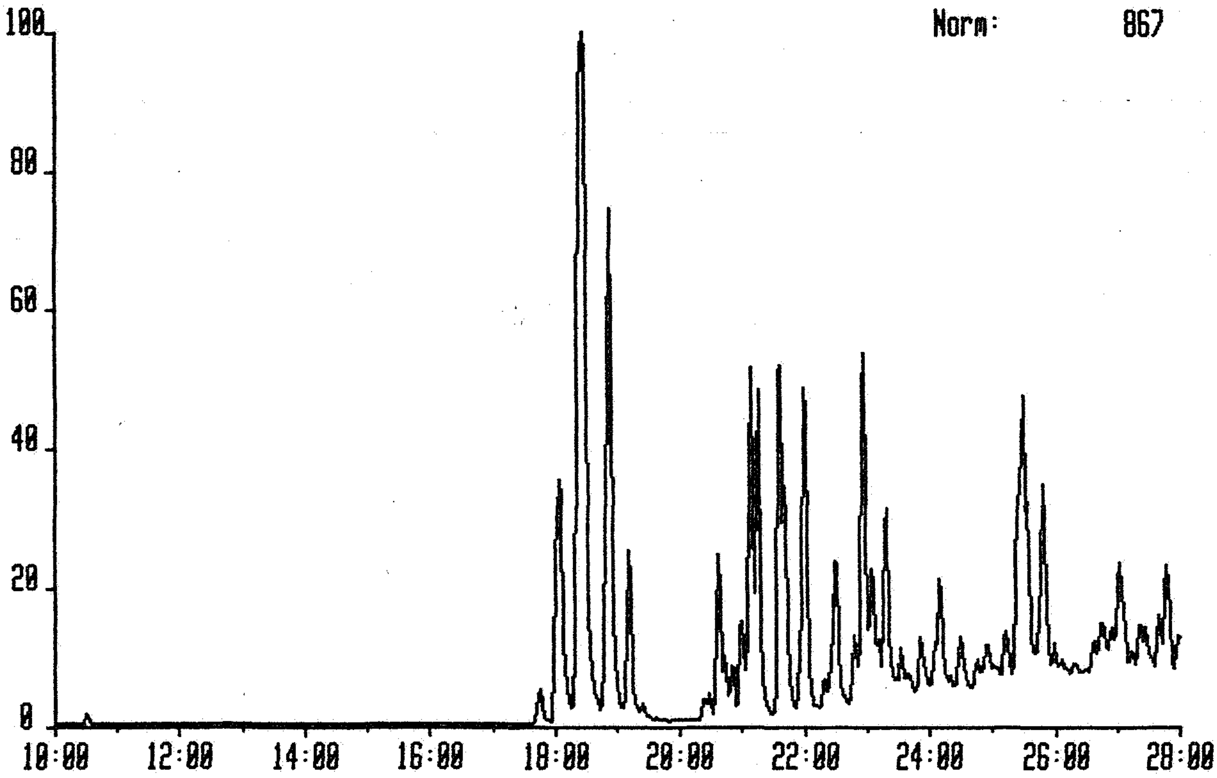


CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 18 Injection 1 Group 1 Mass 156.0939
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION

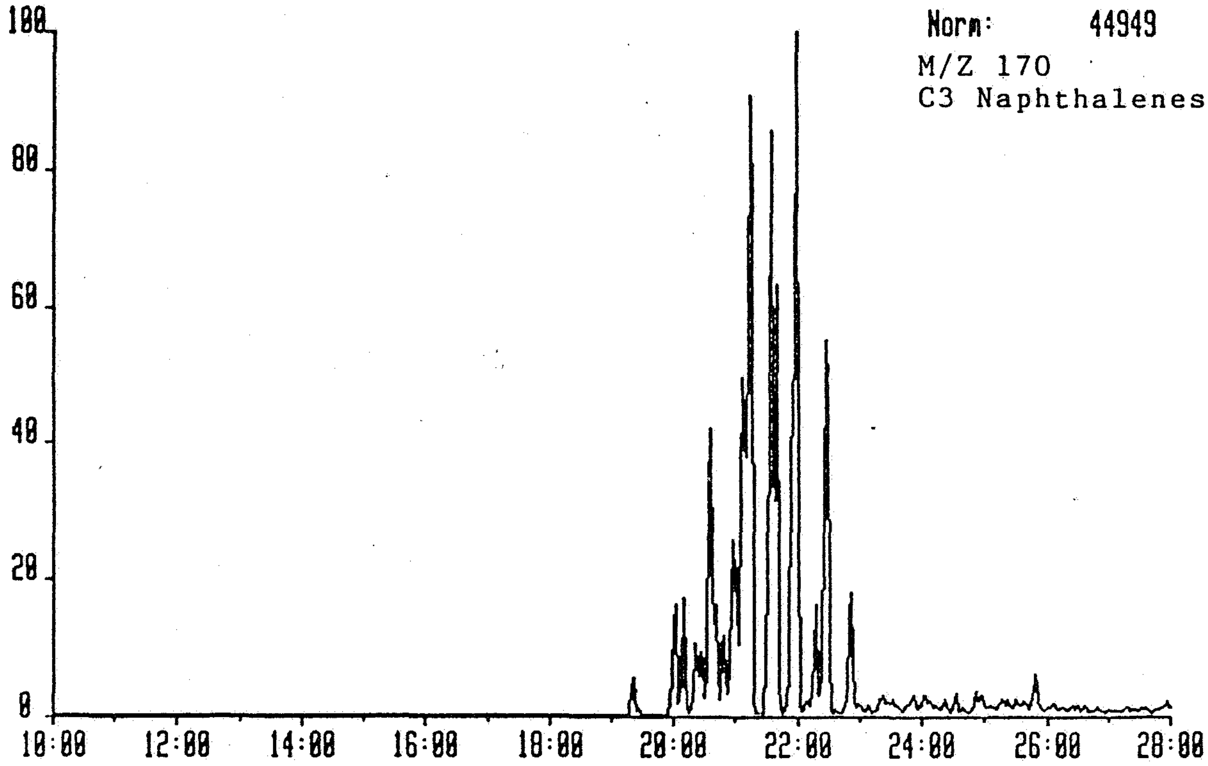


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

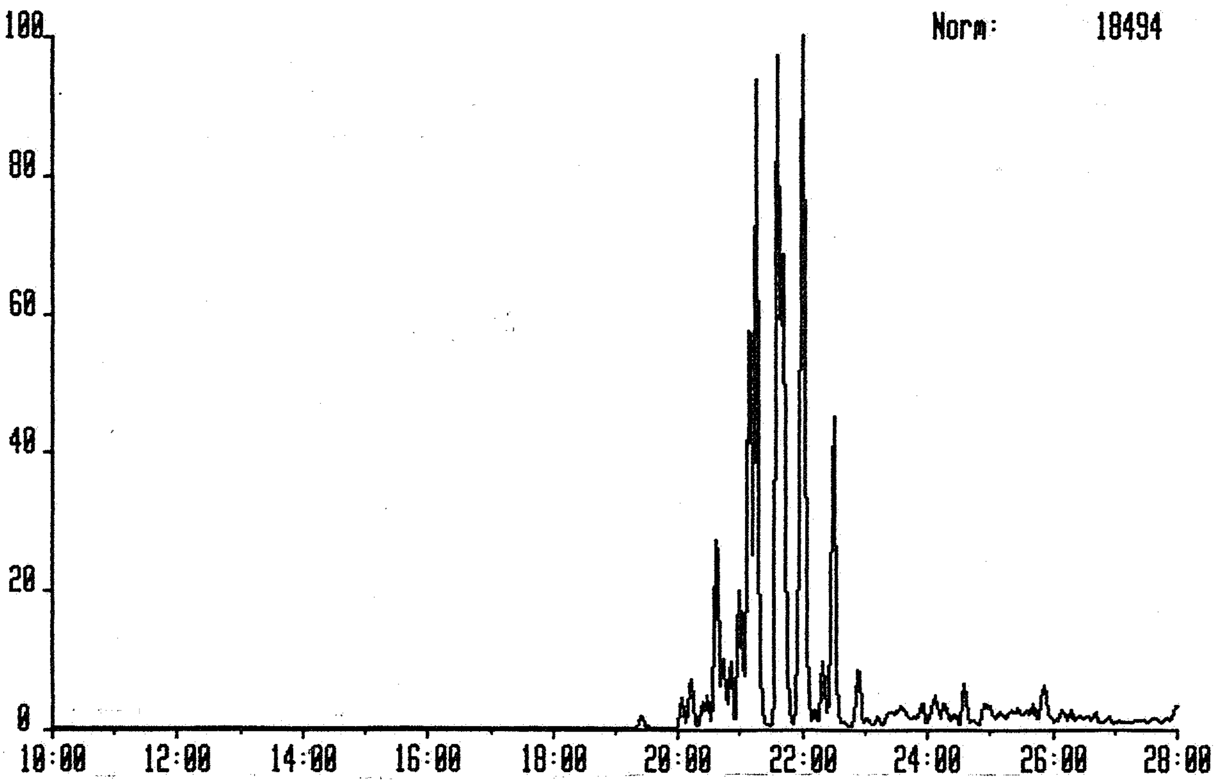
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 156.0939
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



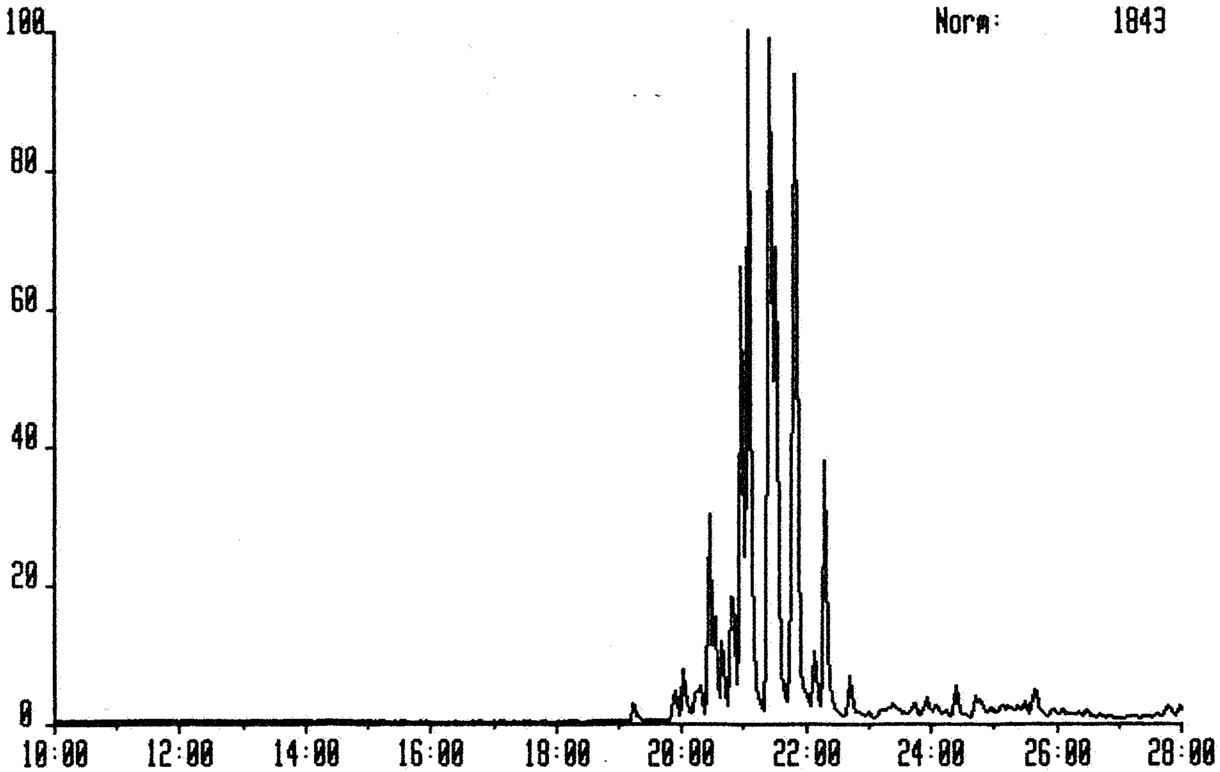
EXAMPLE OF PEAK IDENTIFICATION FOR C3 NAPHTHALENES.



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 2 Injection 1 Group 1 Mass 170.1096
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION

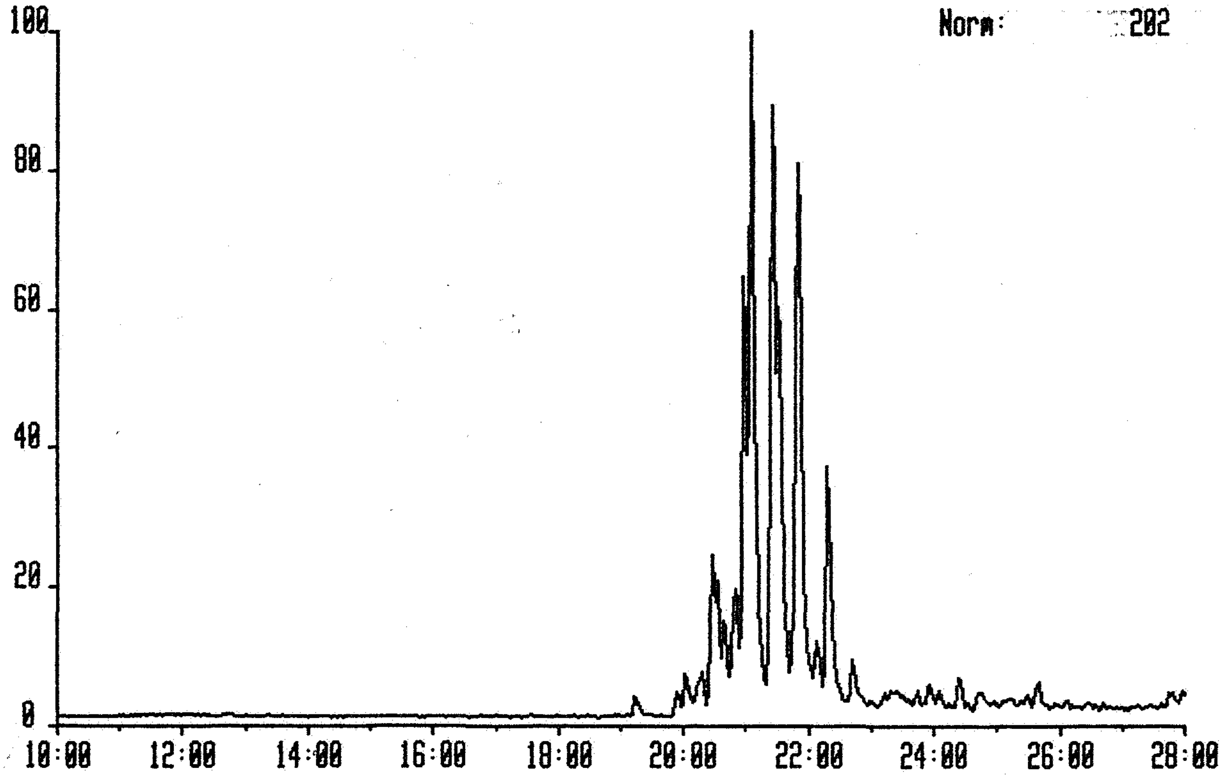


CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 16 Injection 1 Group 1 Mass 170.1096
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION

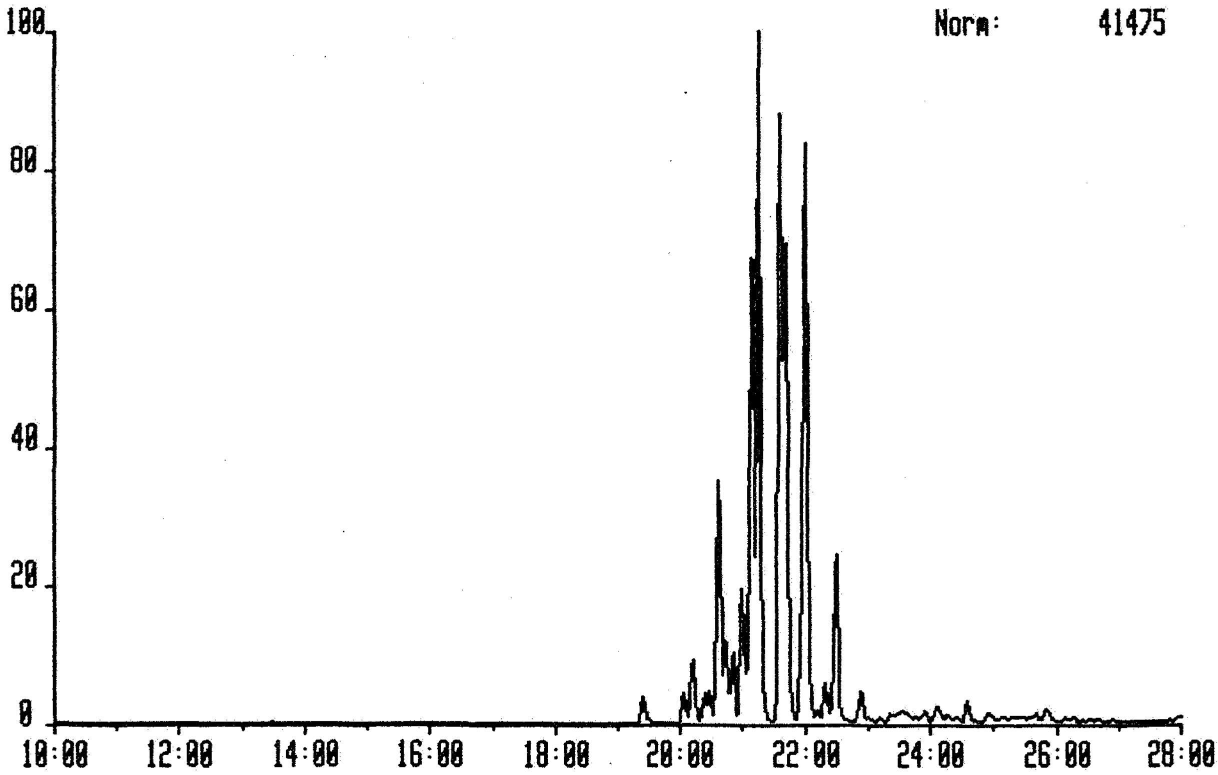


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

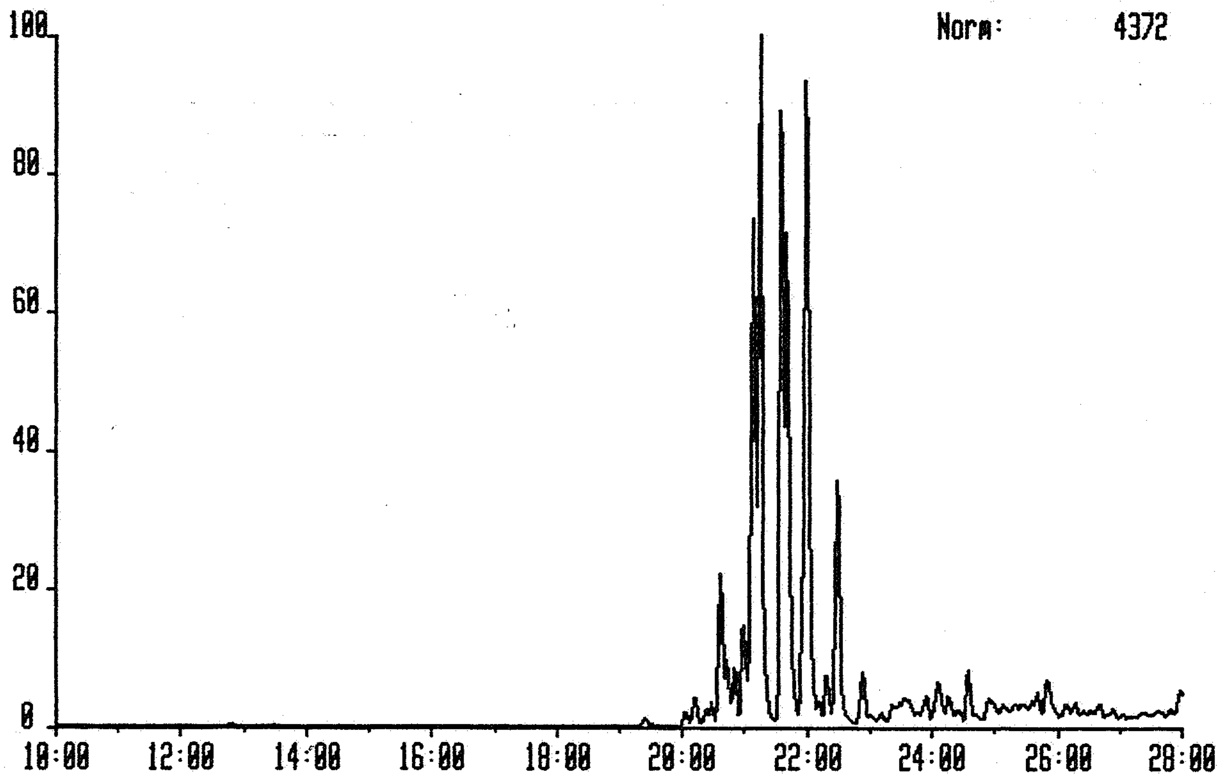
CGAR07   25-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:AR01
Sample 17 Injection 1   Group 1   Mass 170.1096
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



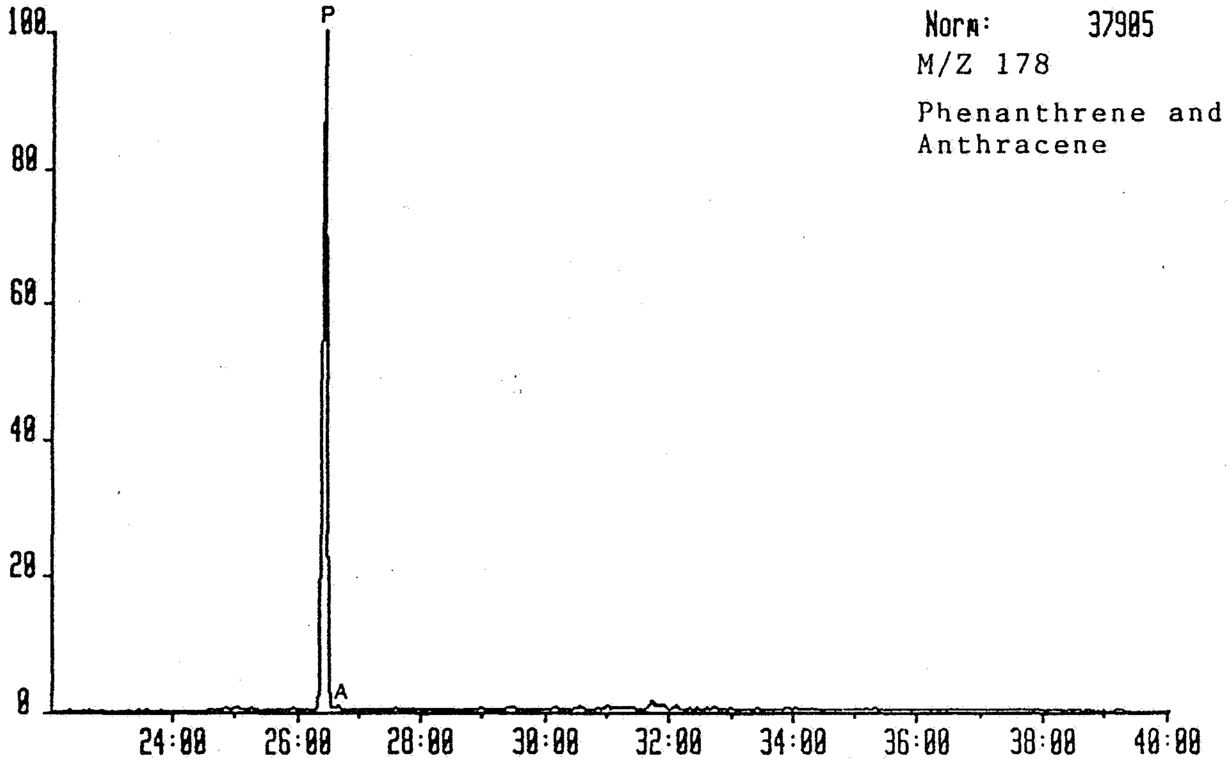
CGAR05   19-NOV-87   Sir:Magnetic TS250   Acnt:GEOLAB   System:AR01
Sample 5   Injection 1   Group 1   Mass 170.1096
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



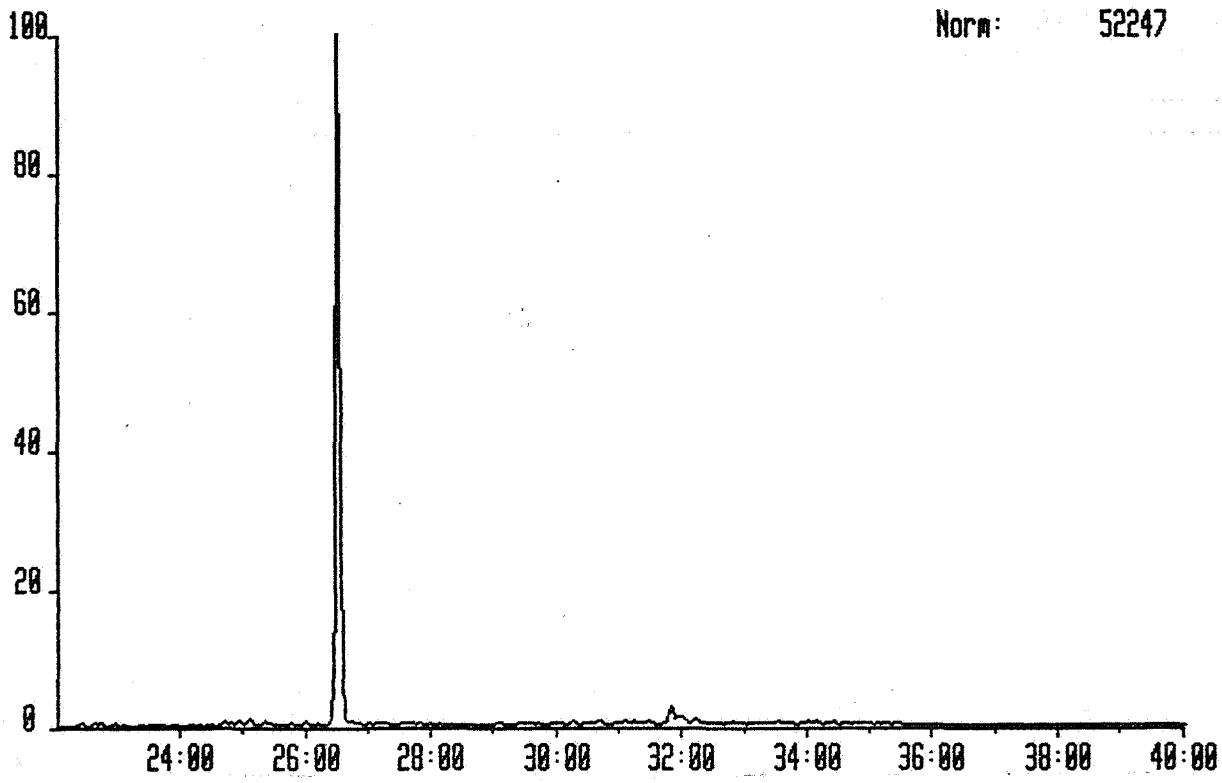
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 170.1096
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



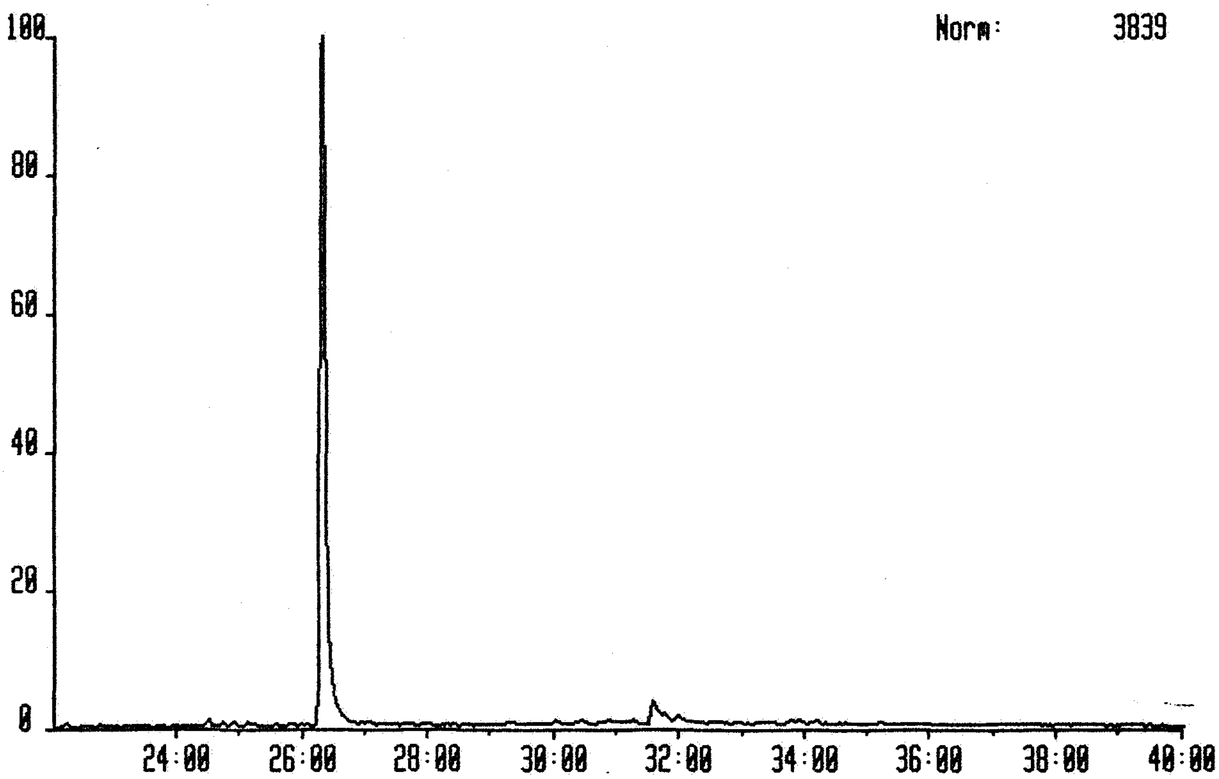
EXAMPLE OF PEAK IDENTIFICATION FOR PHENANTHRENE AND ANTHRACENE.



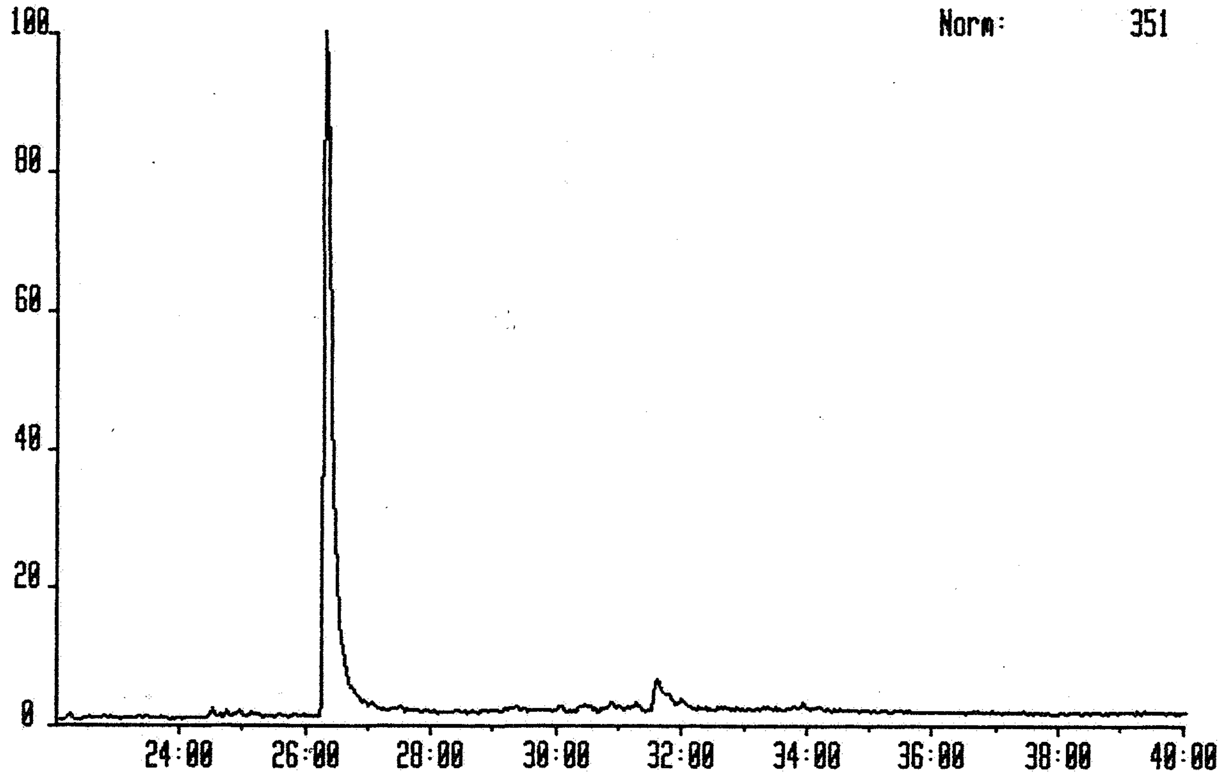
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 178.0783
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



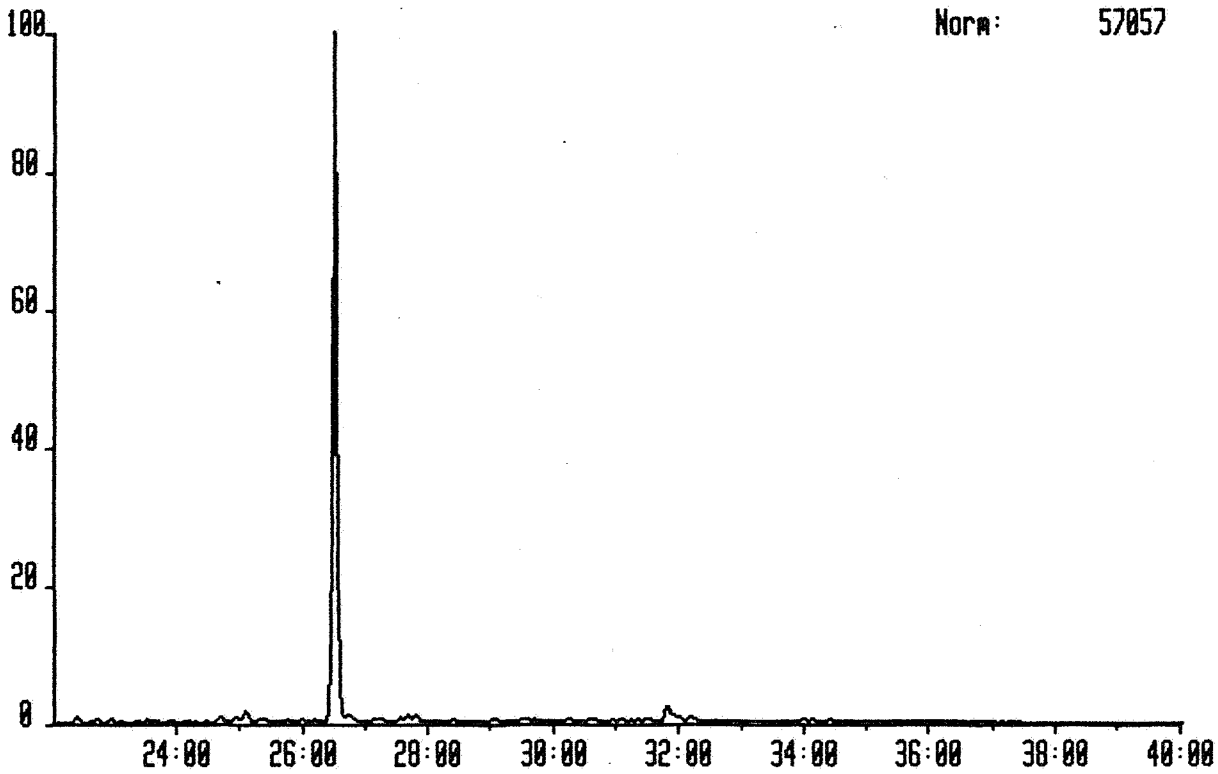
CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 16 Injection 1 Group 1 Mass 178.0783
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



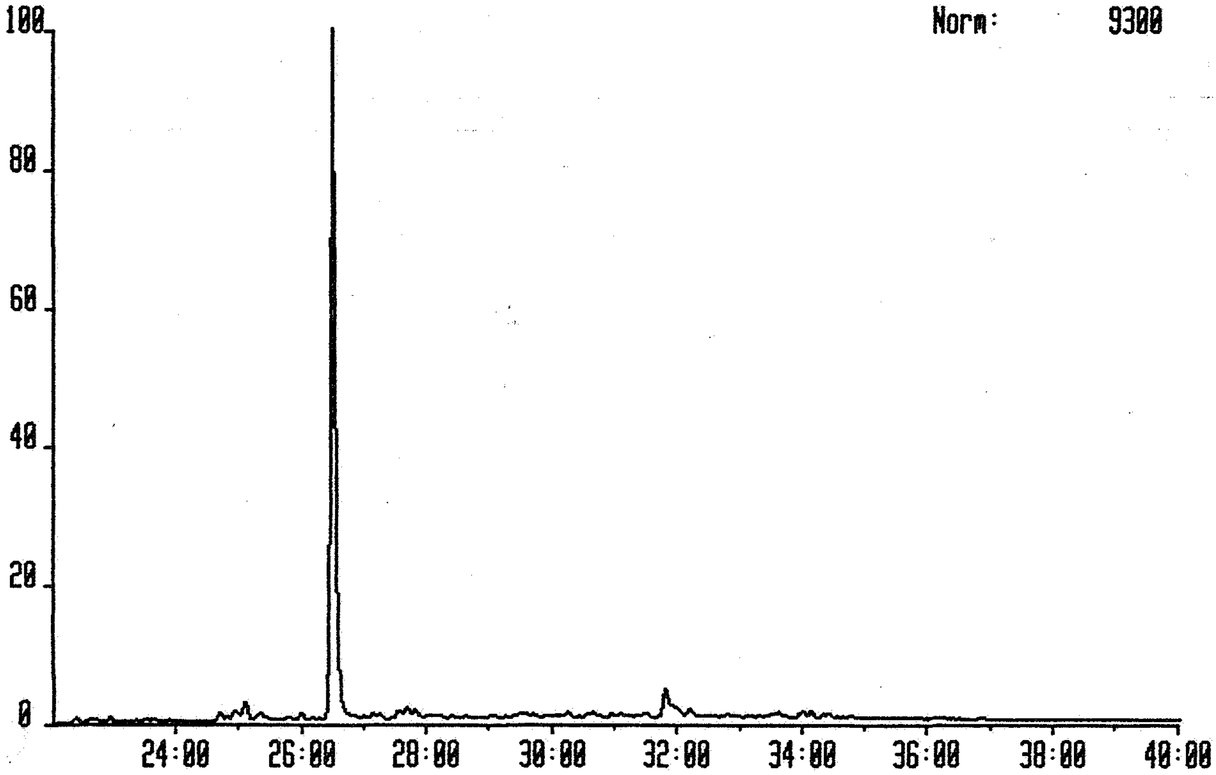
CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 17 Injection 1 Group 1 Mass 178.0783
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 5 Injection 1 Group 1 Mass 178.0783
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION

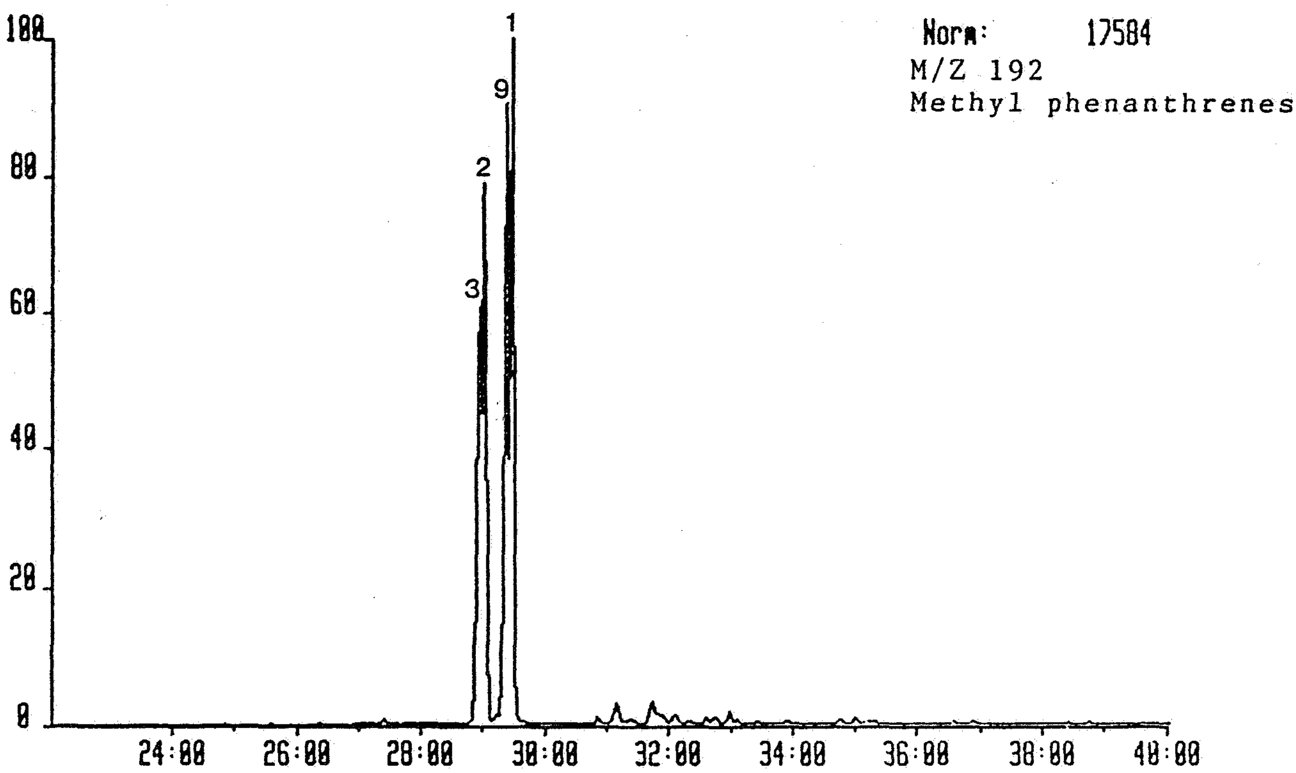


CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 178.0783
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



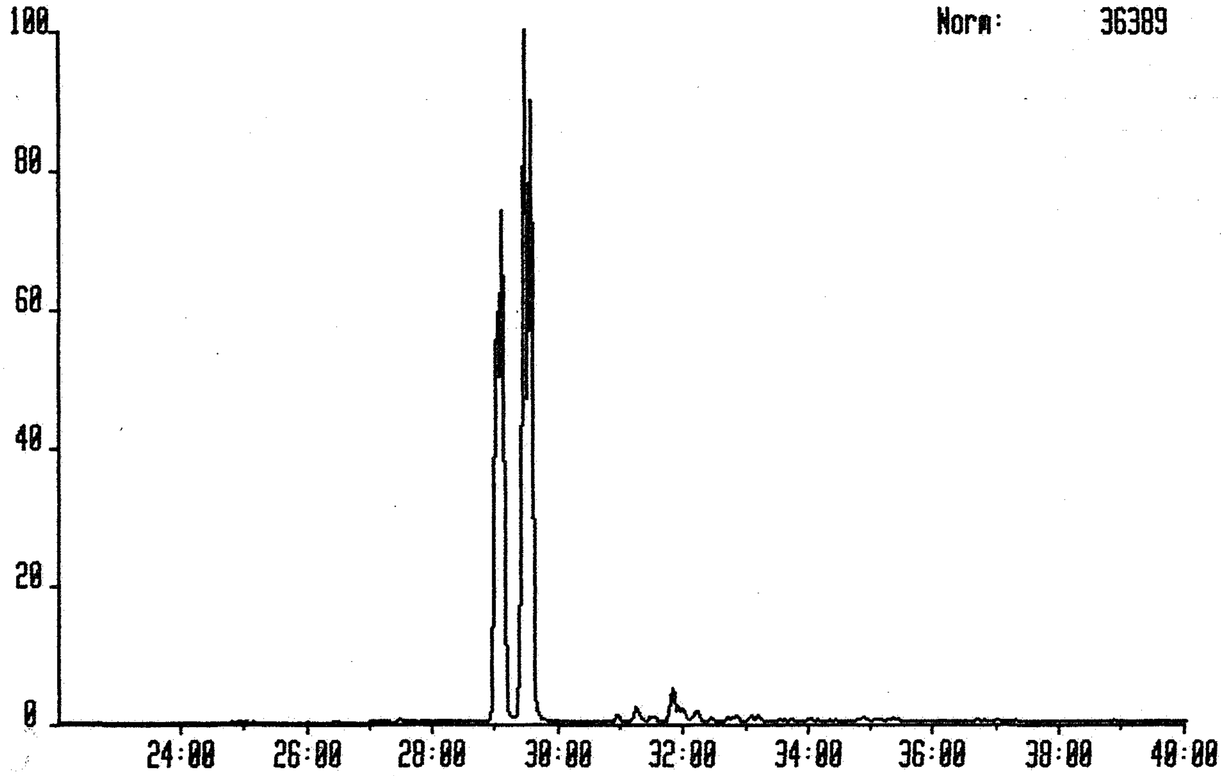
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

EXAMPLE OF PEAK IDENTIFICATION FOR METHYL PHENANTHRENES.

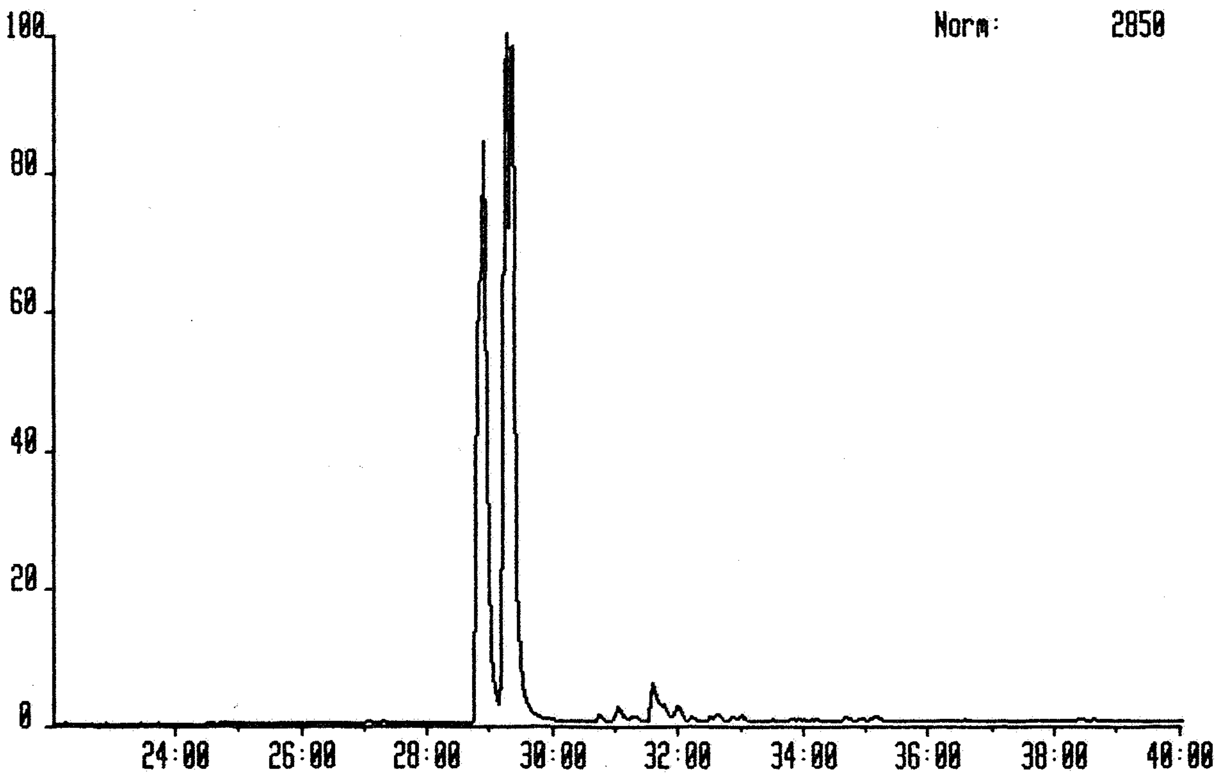


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

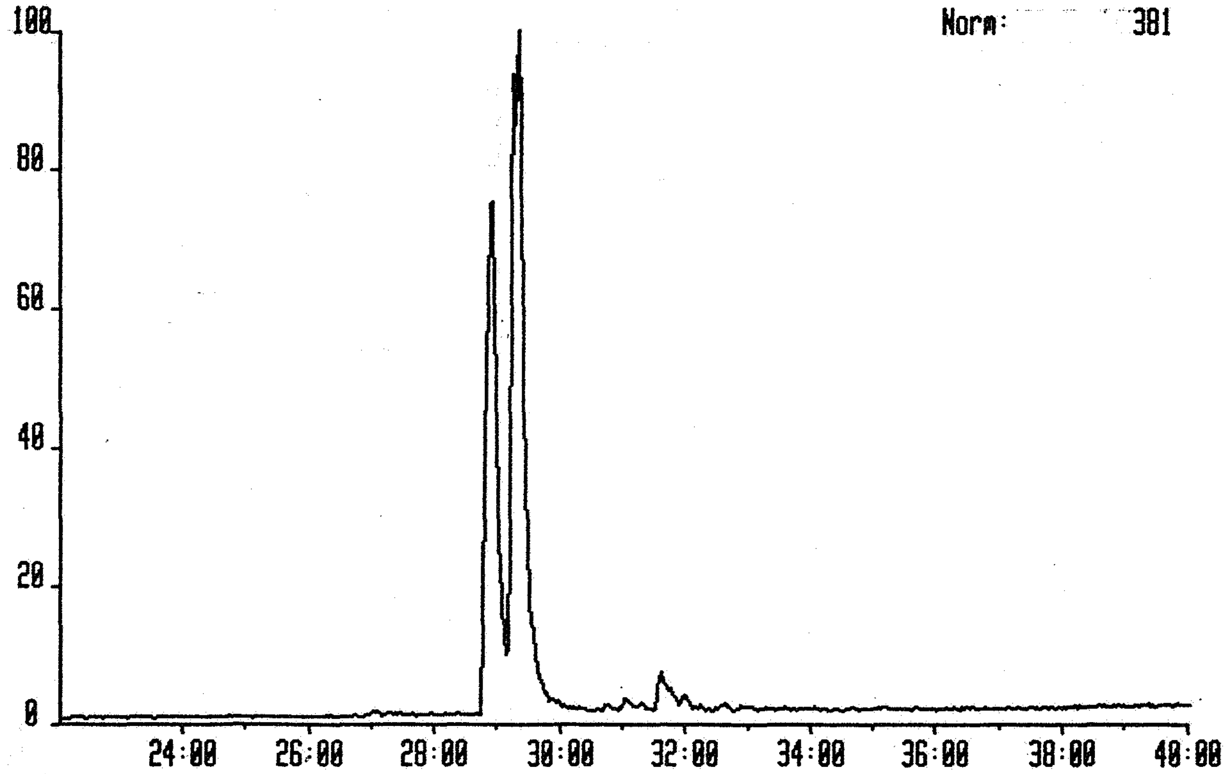
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 192.0939
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



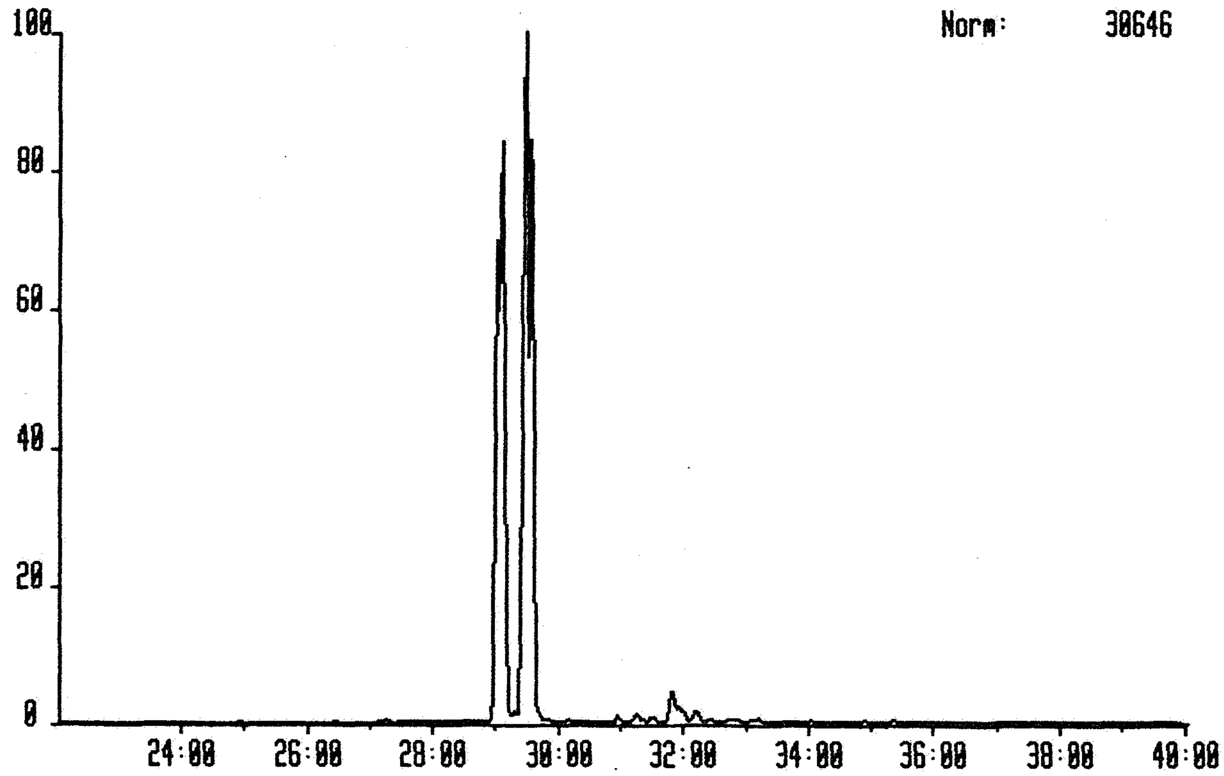
CGAR07 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 16 Injection 1 Group 1 Mass 192.0939
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



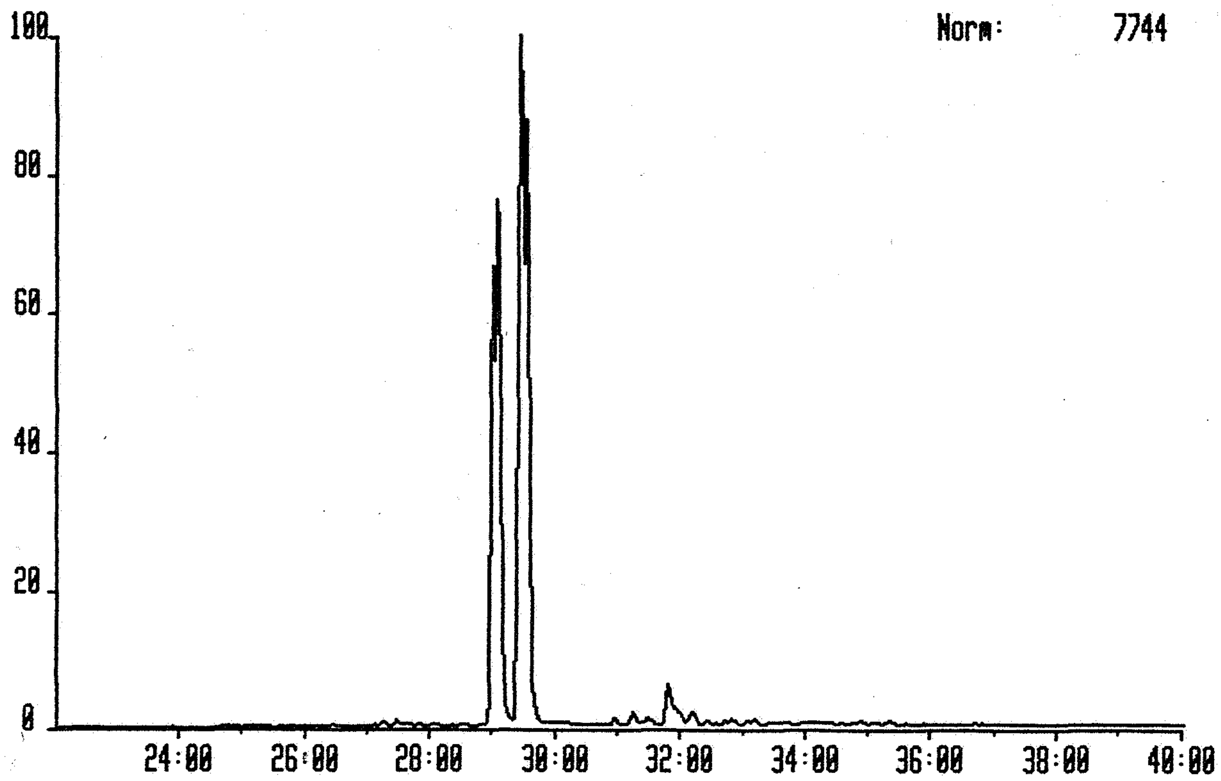
CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 17 Injection 1 Group 1 Mass 192.0939
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 5 Injection 1 Group 1 Mass 192.0939
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION

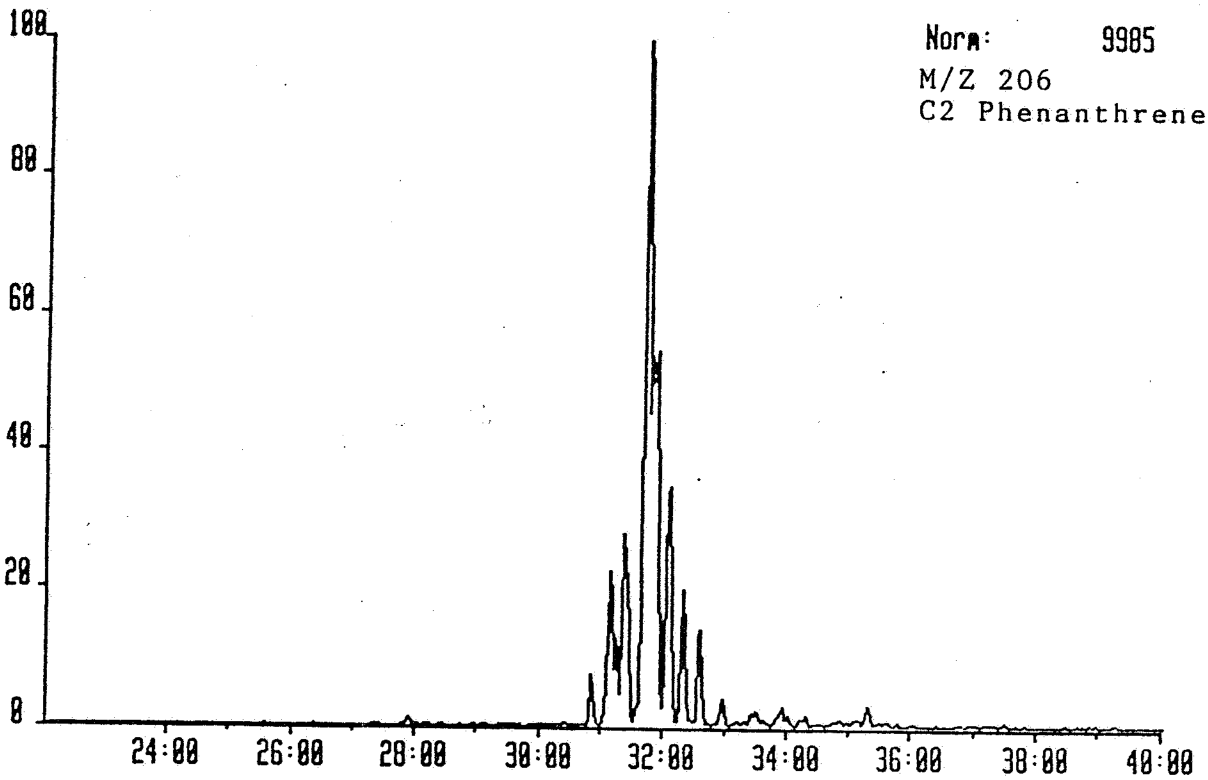


CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 192.0939
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



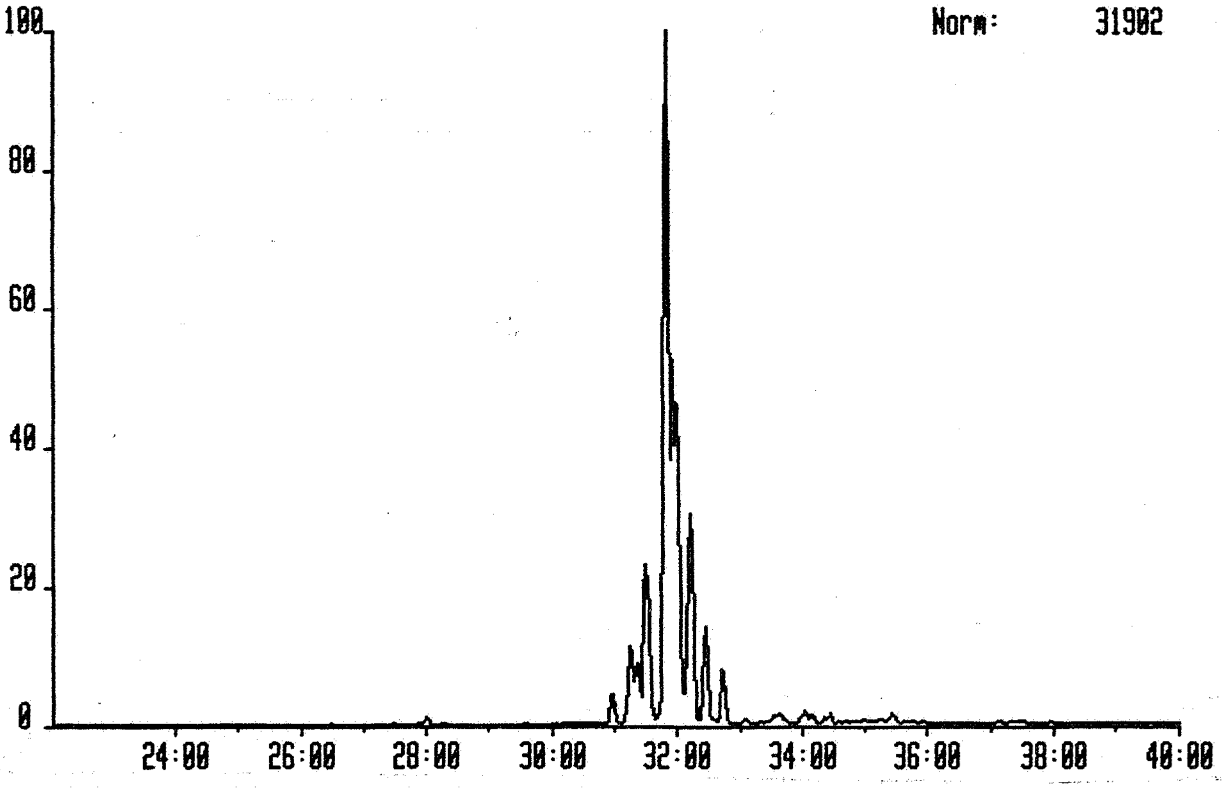
GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

EXAMPLE OF PEAK IDENTIFICATION FOR C2 PHENANTHRENES.

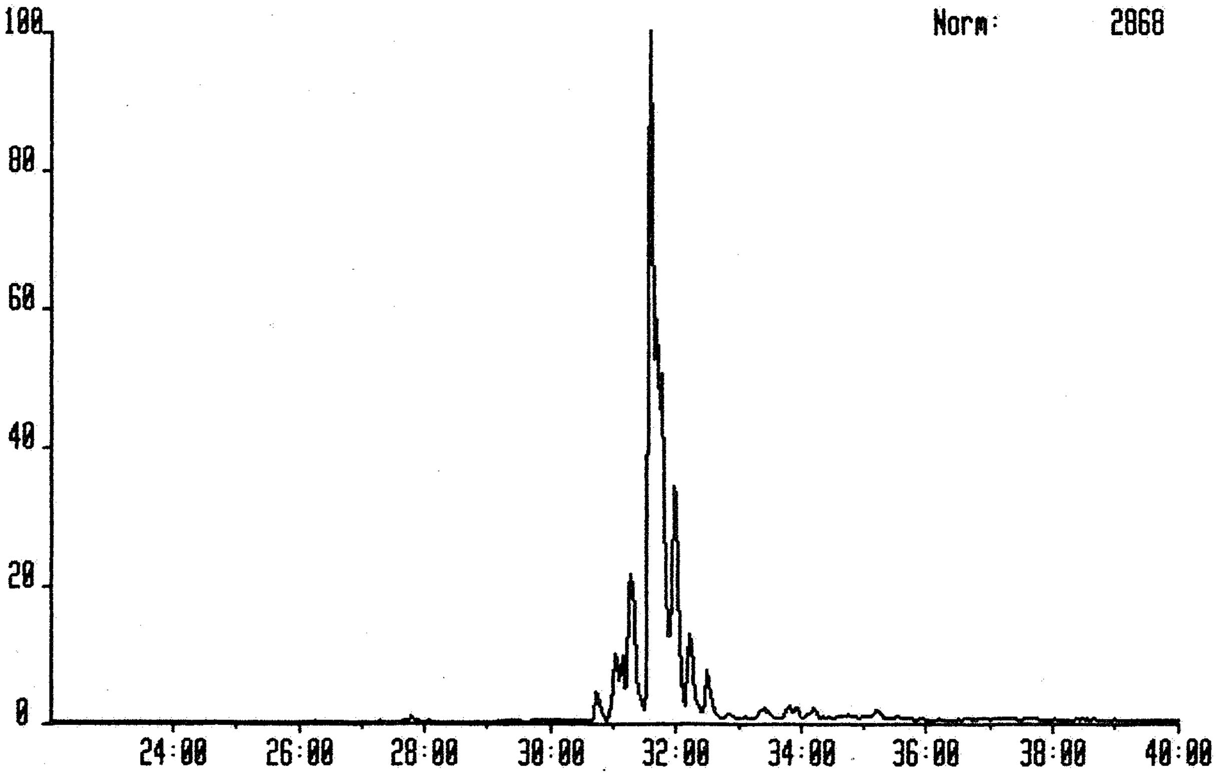


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

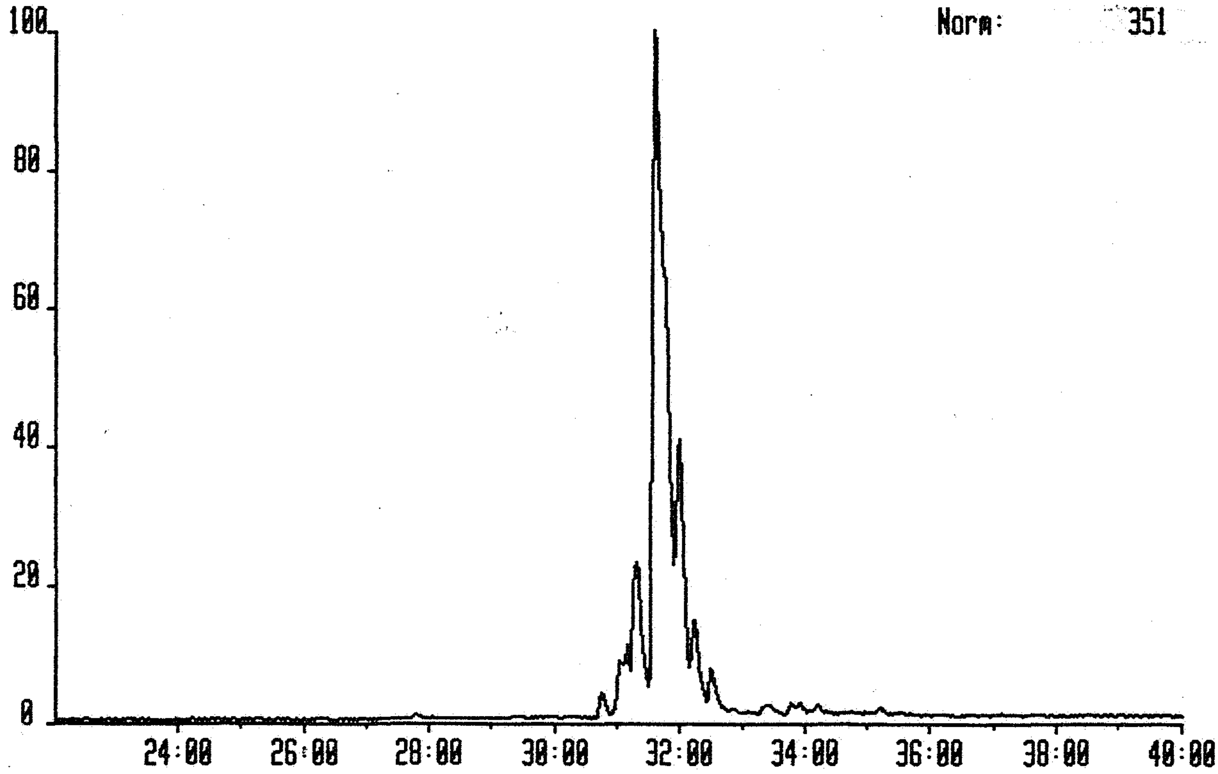
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 2 Injection 1 Group 1 Mass 206.1096
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



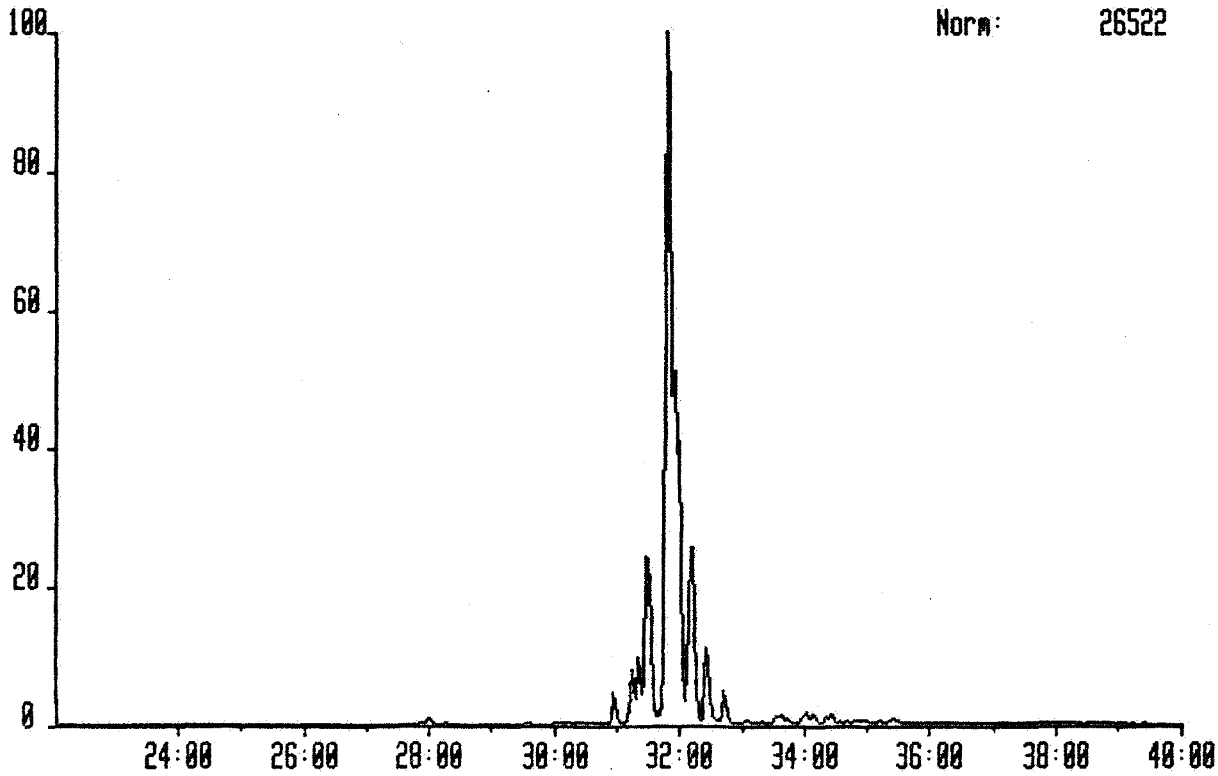
CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 16 Injection 1 Group 1 Mass 206.1096
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



CGARO7 25-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 17 Injection 1 Group 1 Mass 206.1096
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION

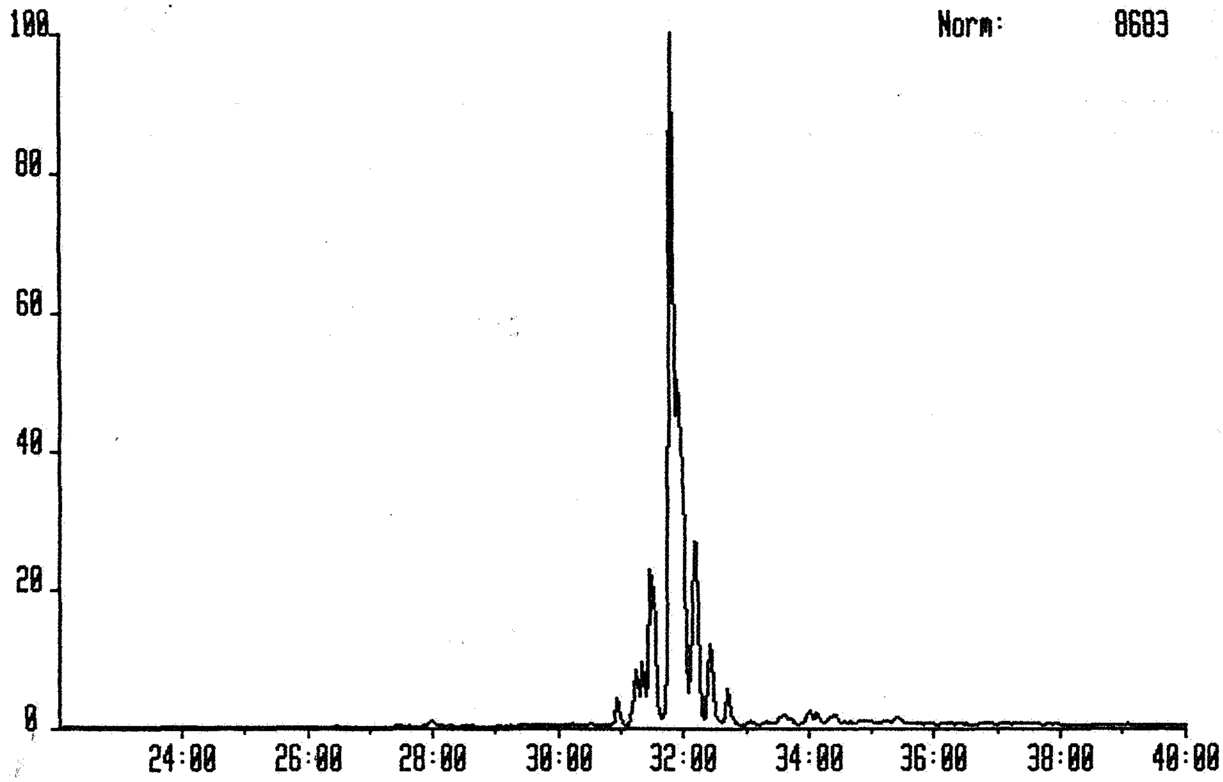


CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 5 Injection 1 Group 1 Mass 206.1096
Text:WELL 2/6-2, 4528M, AROMATIC FRACTION

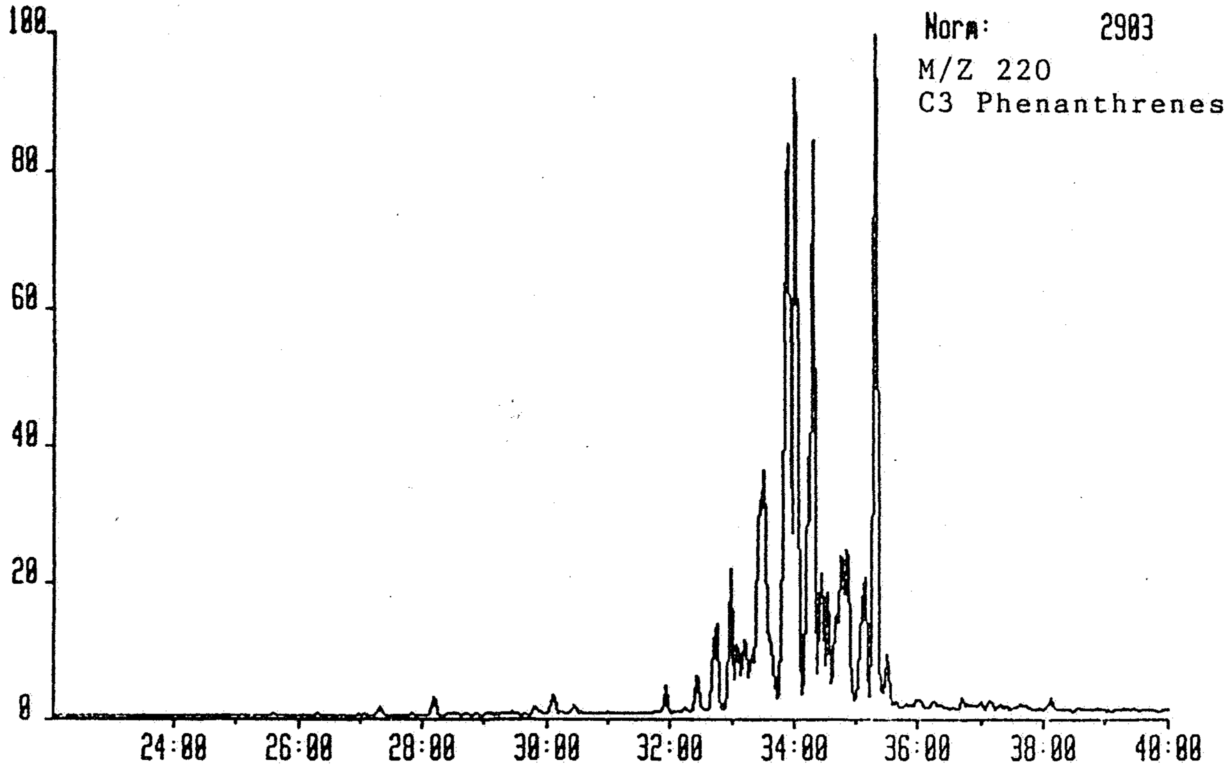


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

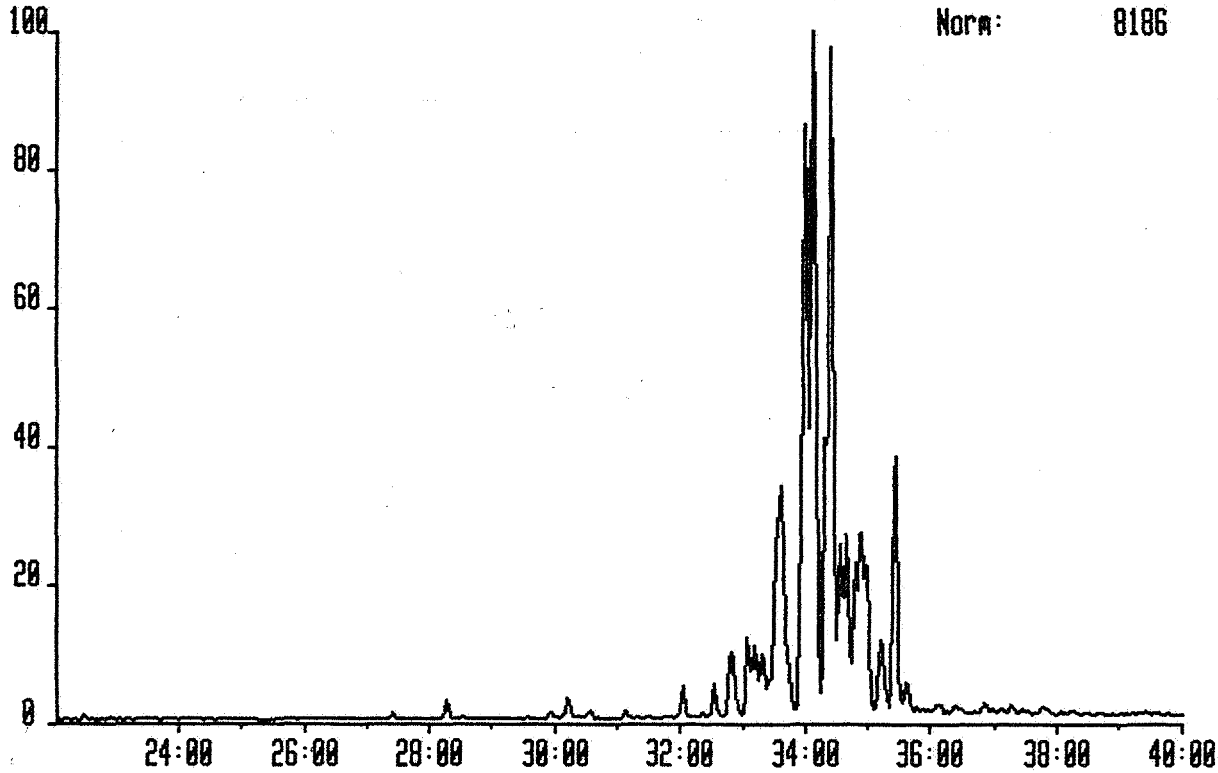
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 206.1096
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



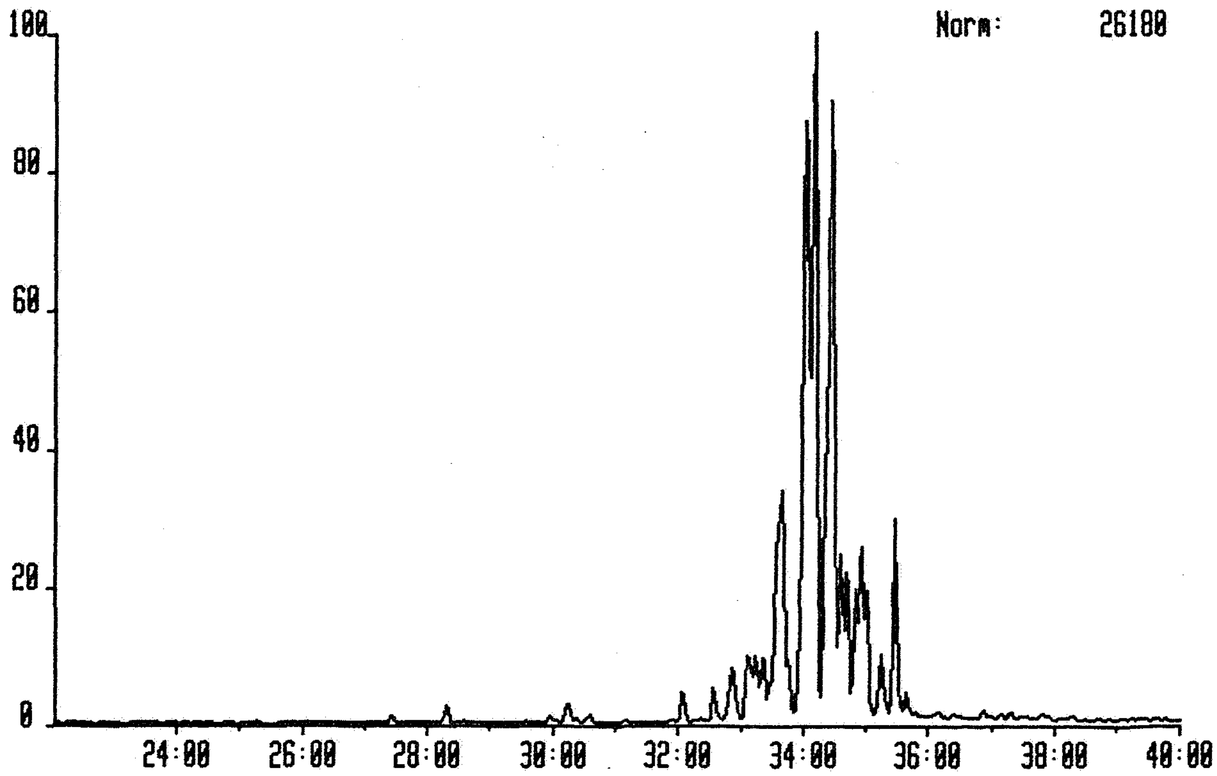
EXAMPLE OF PEAK IDENTIFICATION FOR C3 PHENANTHRENES.



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 2 Injection 1 Group 1 Mass 220.1253
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION

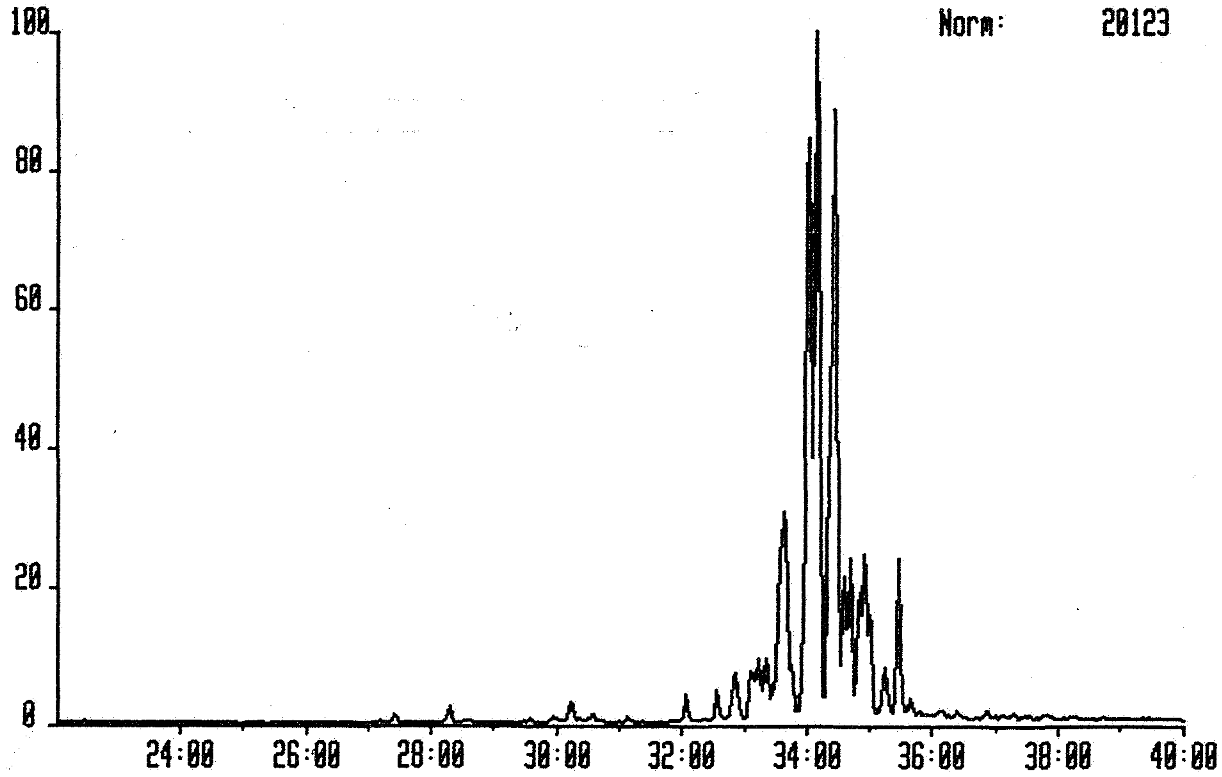


CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 3 Injection 1 Group 1 Mass 220.1253
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION

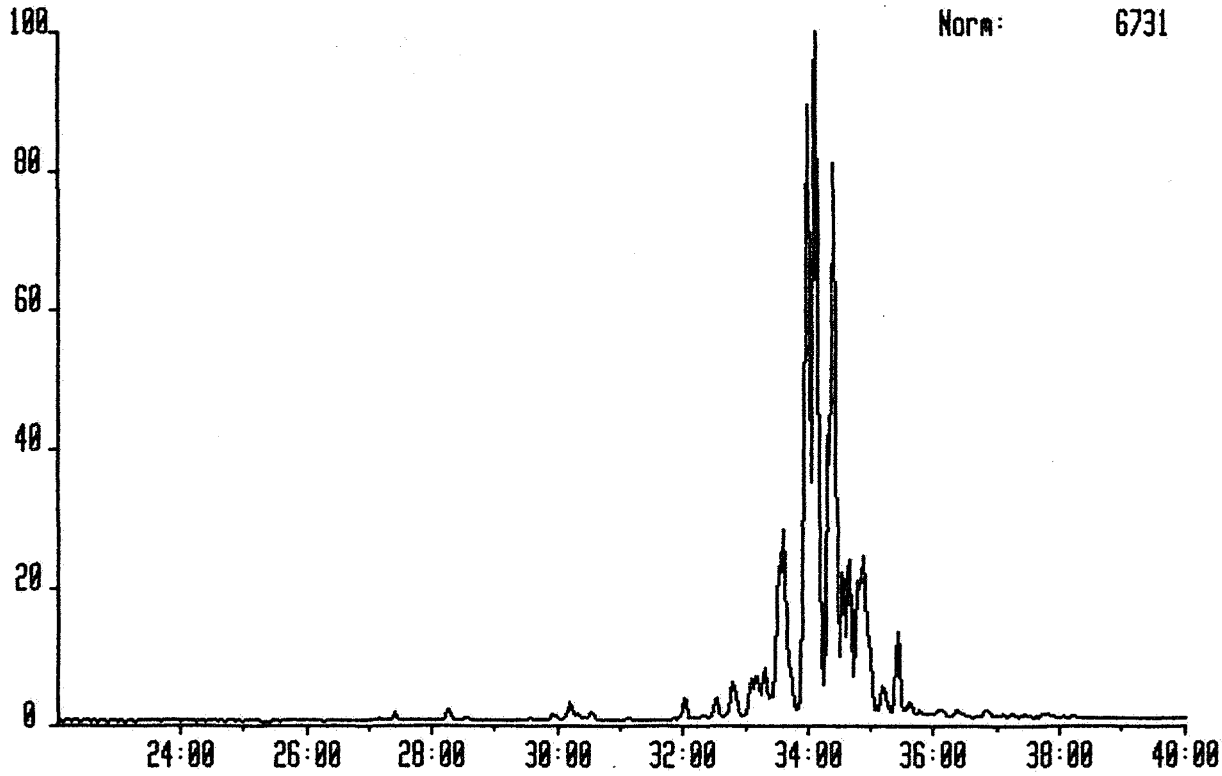


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

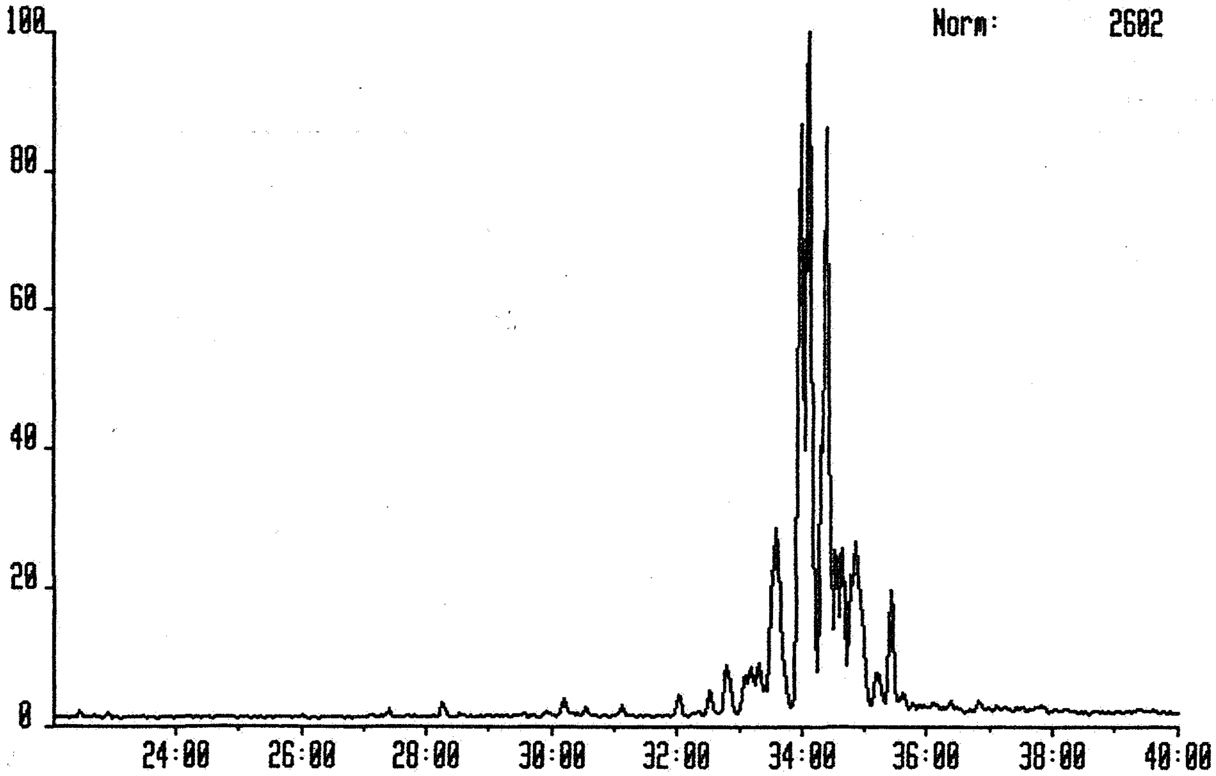
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 220.1253
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



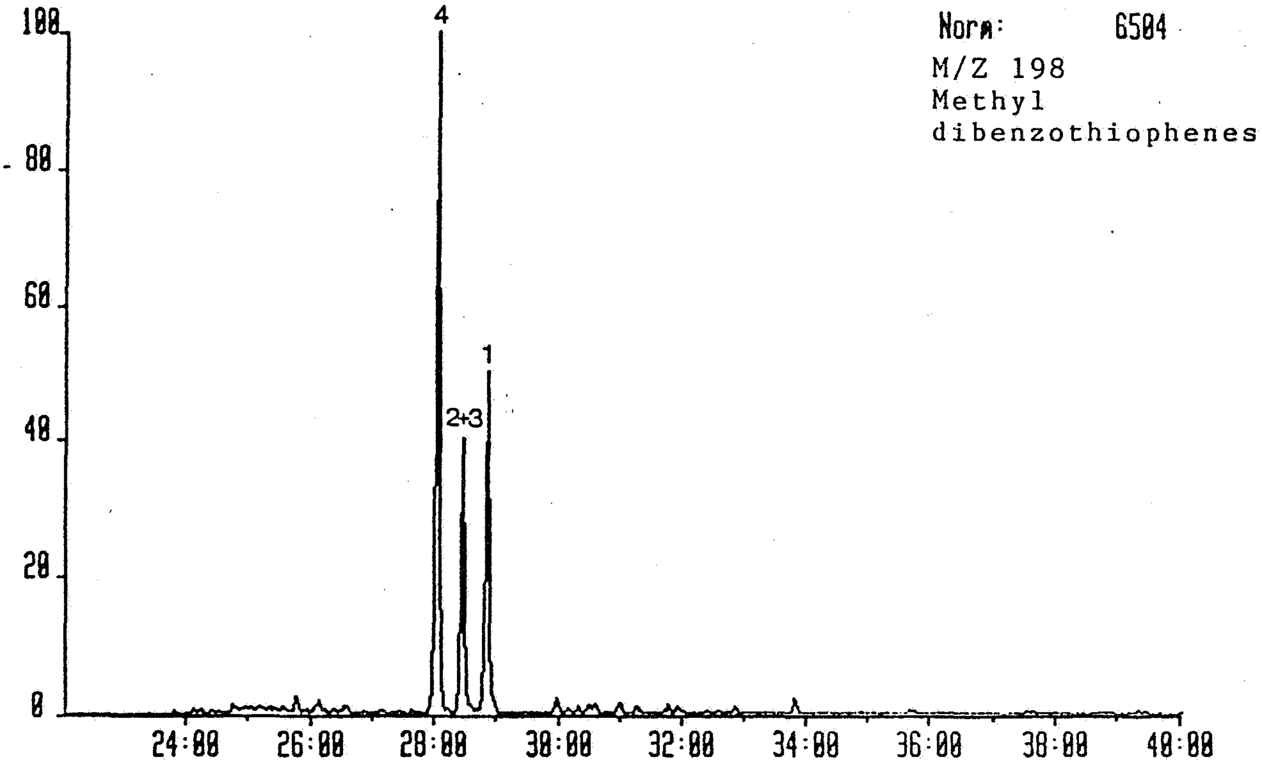
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 220.1253
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



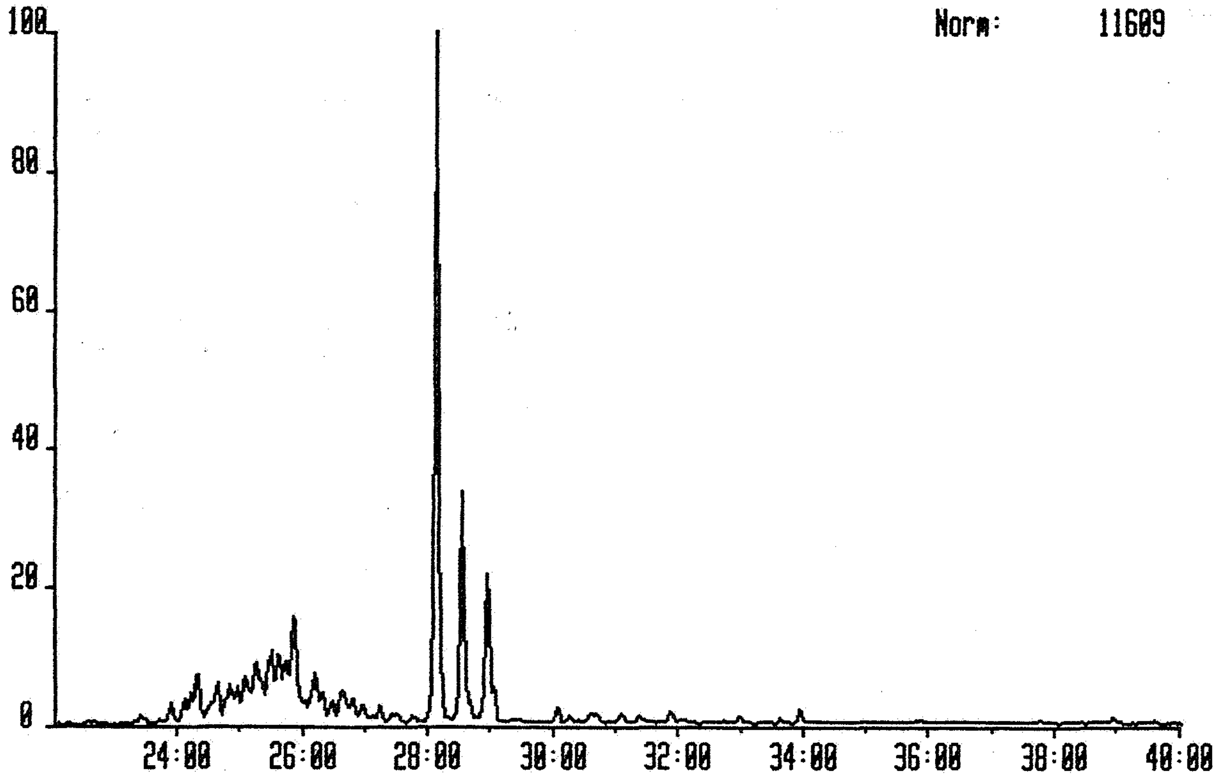
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 220.1253
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



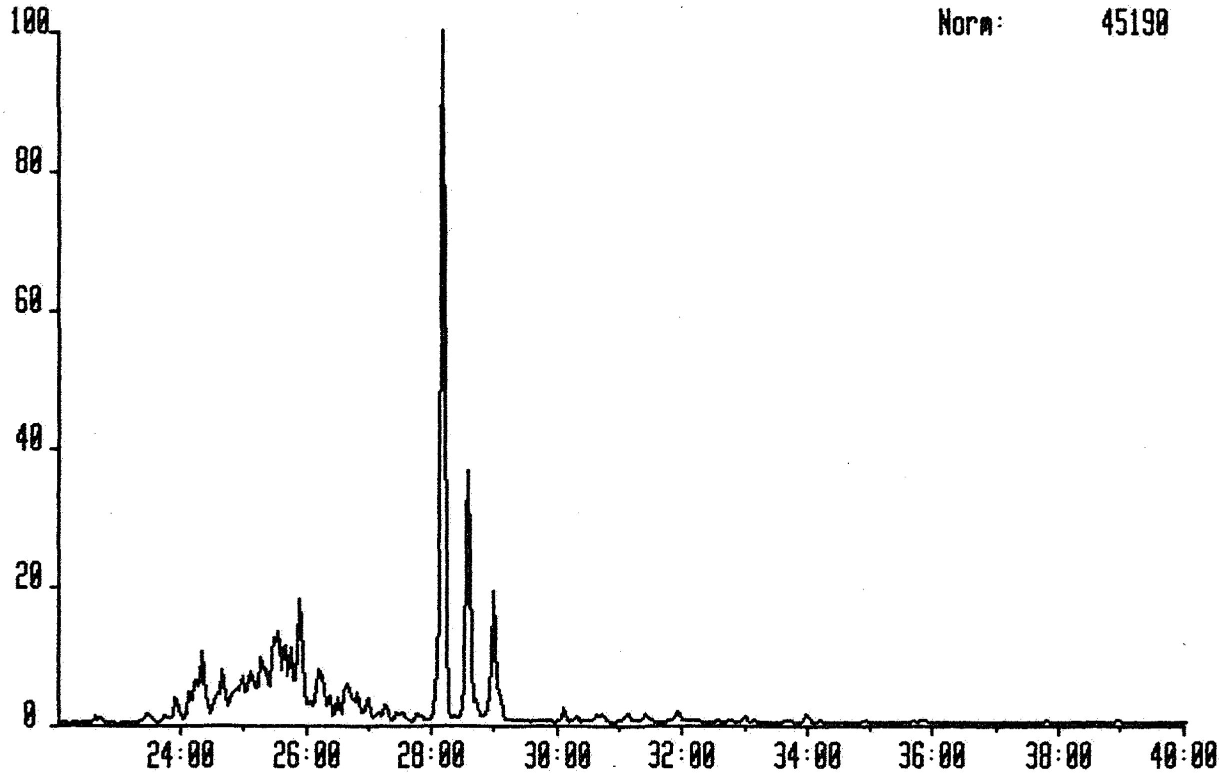
EXAMPLE OF PEAK IDENTIFICATION FOR METHYL DIBENZOTHIOPHENES.



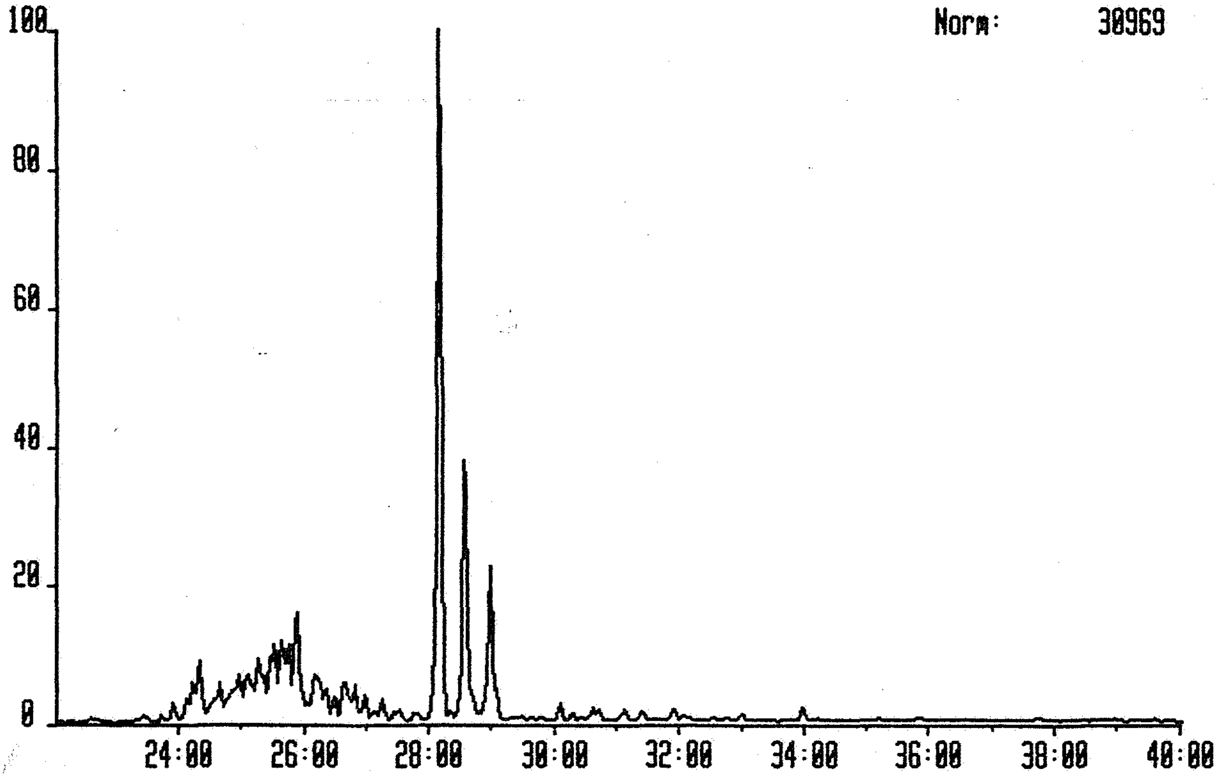
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 198.0503
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



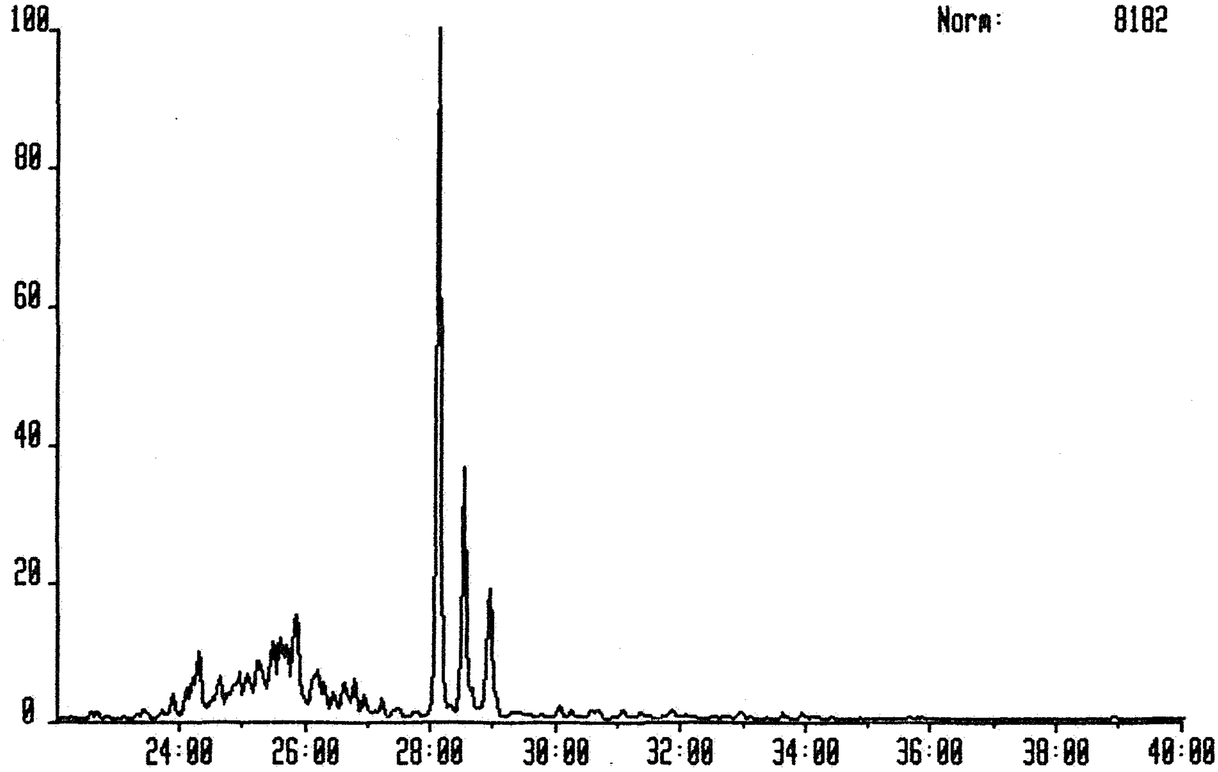
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 198.0503
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



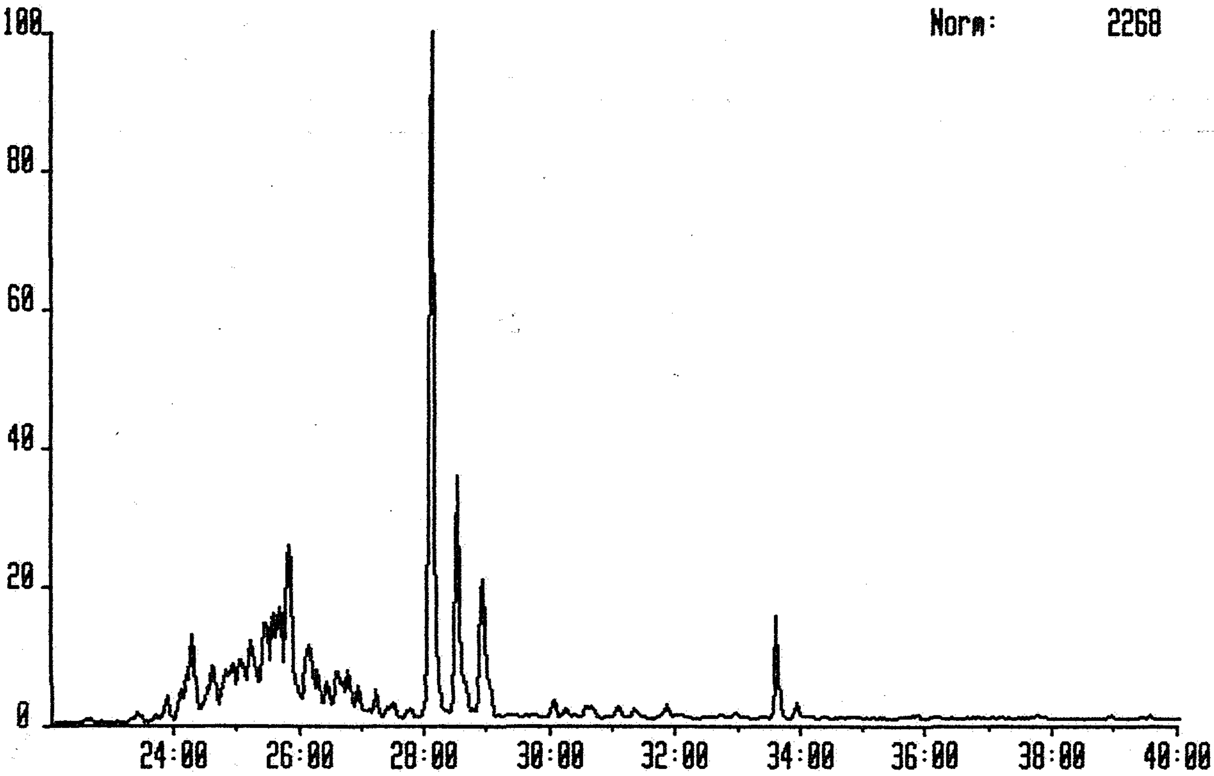
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 198.0503
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



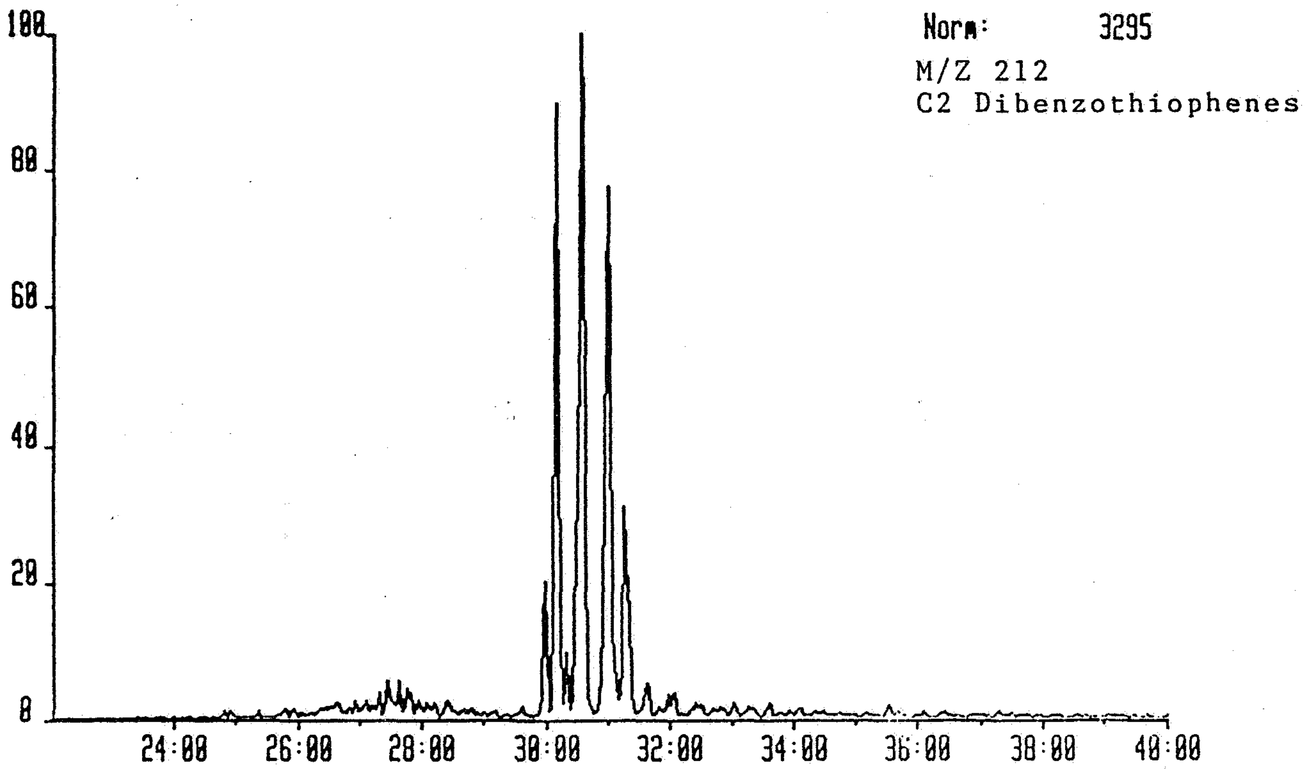
CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 198.0503
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 198.0503
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION

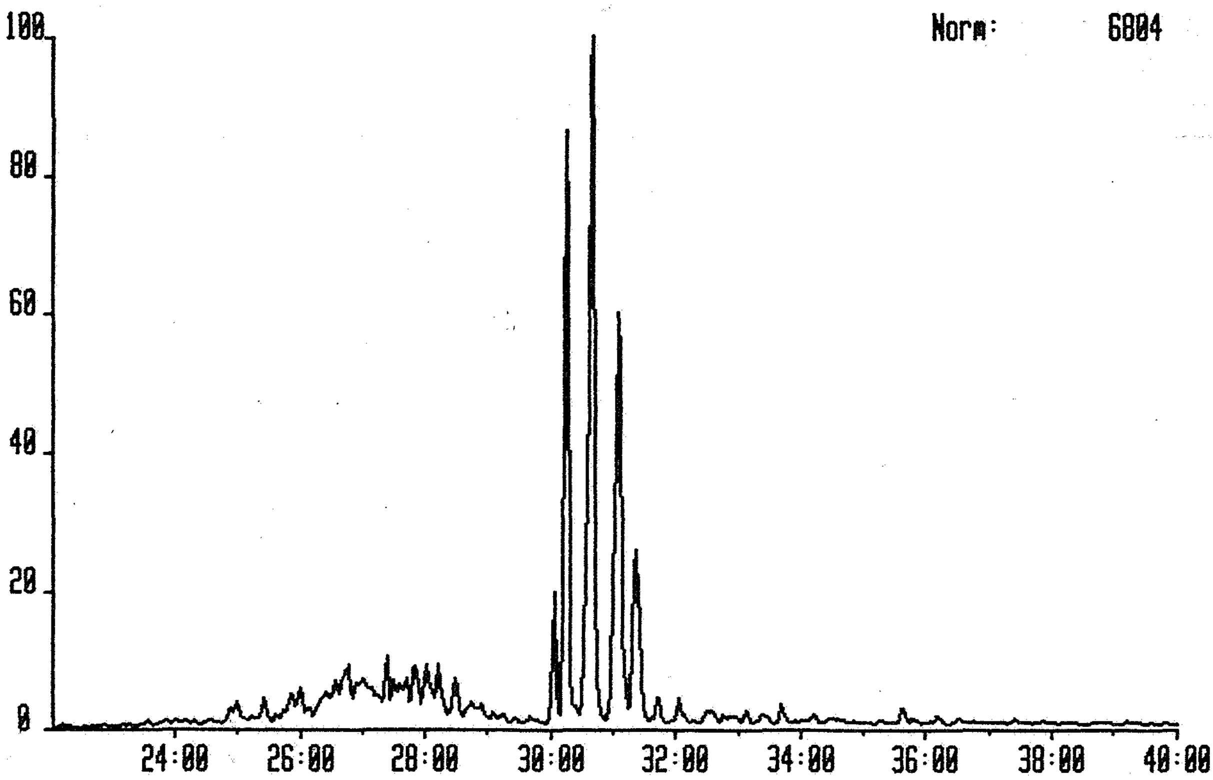


EXAMPLE OF PEAK IDENTIFICATION FOR C2 DIBENZOTHIOPHENES.

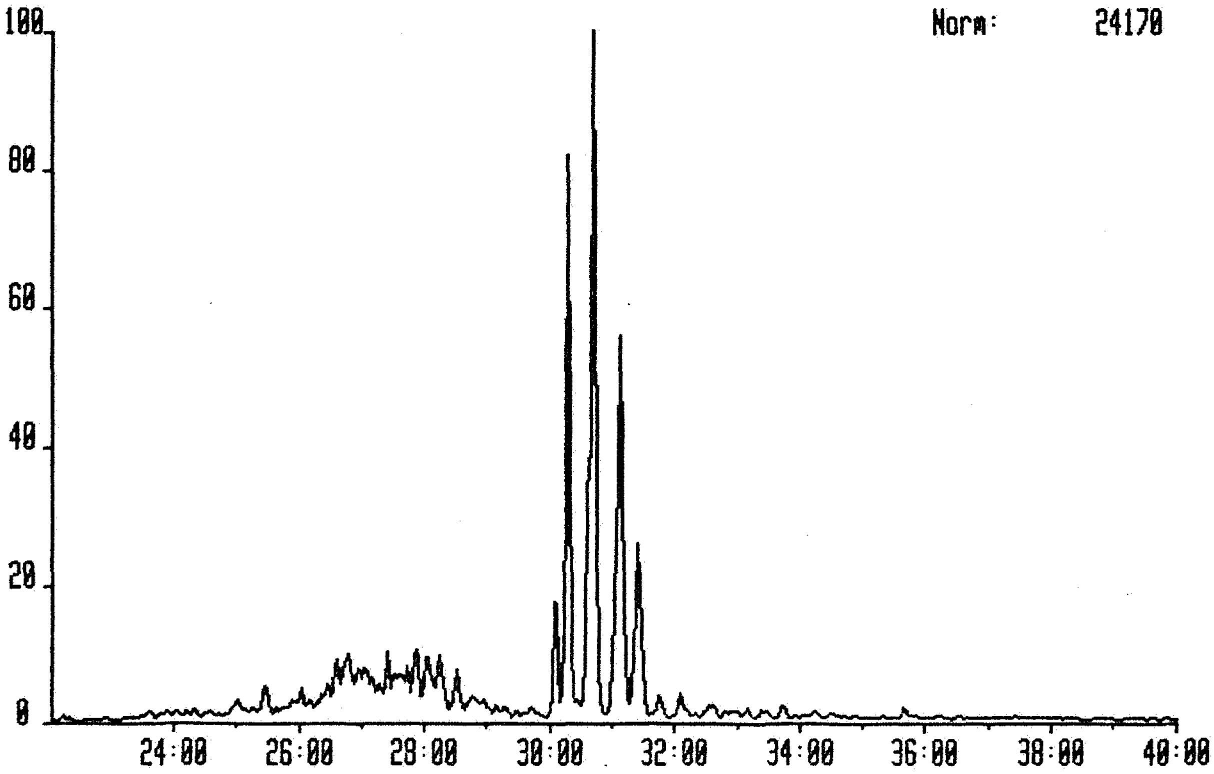


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 212.0660
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION

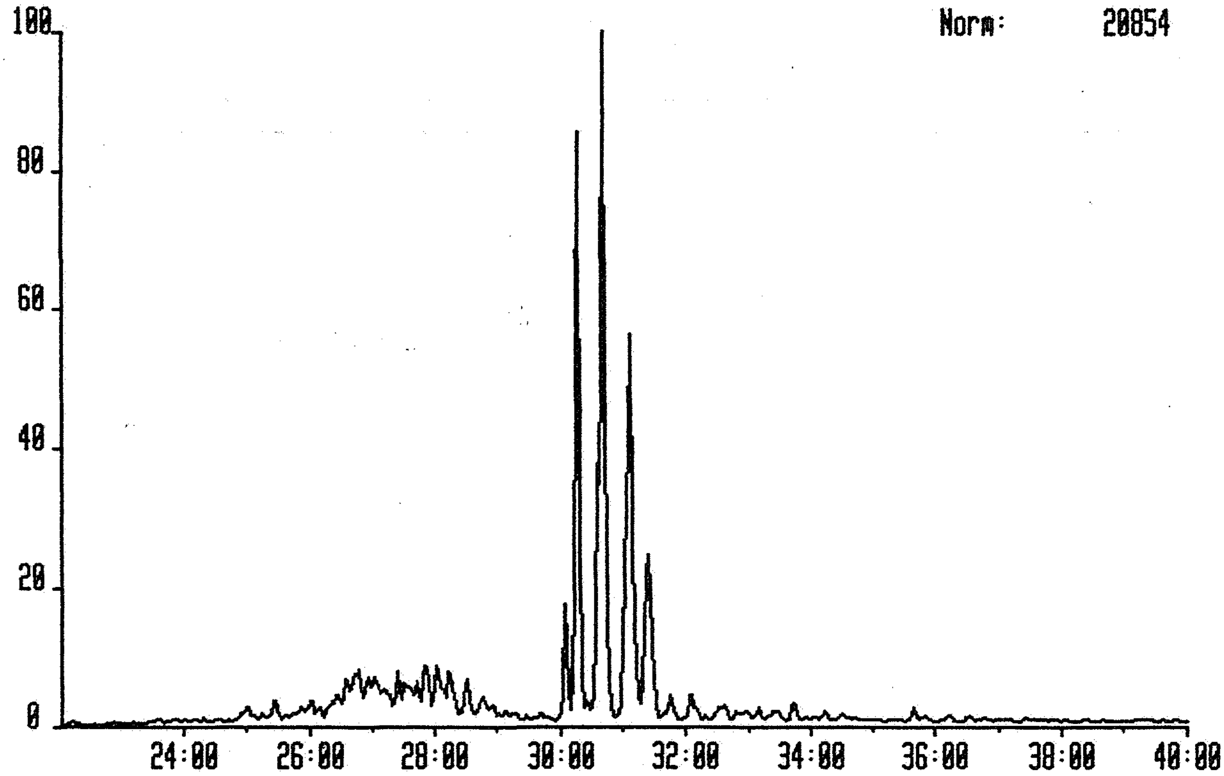


CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 212.0660
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION

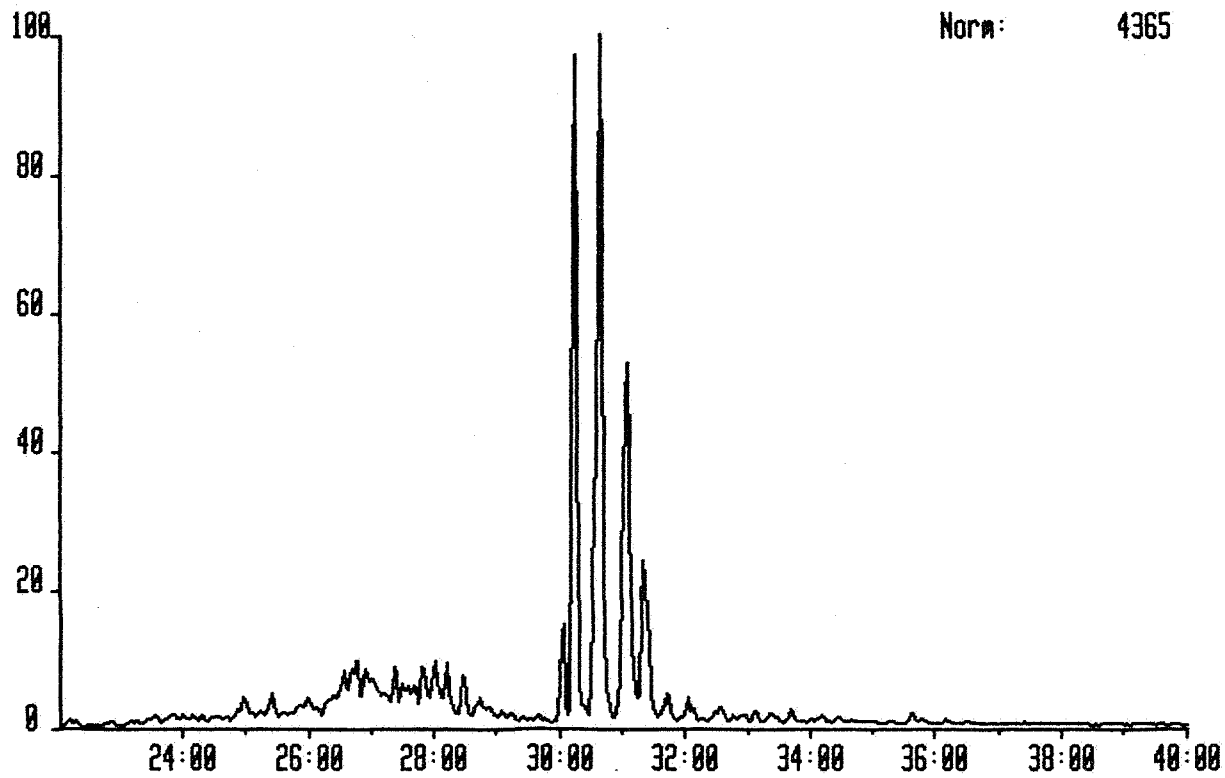


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 212.0660
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 212.0660
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



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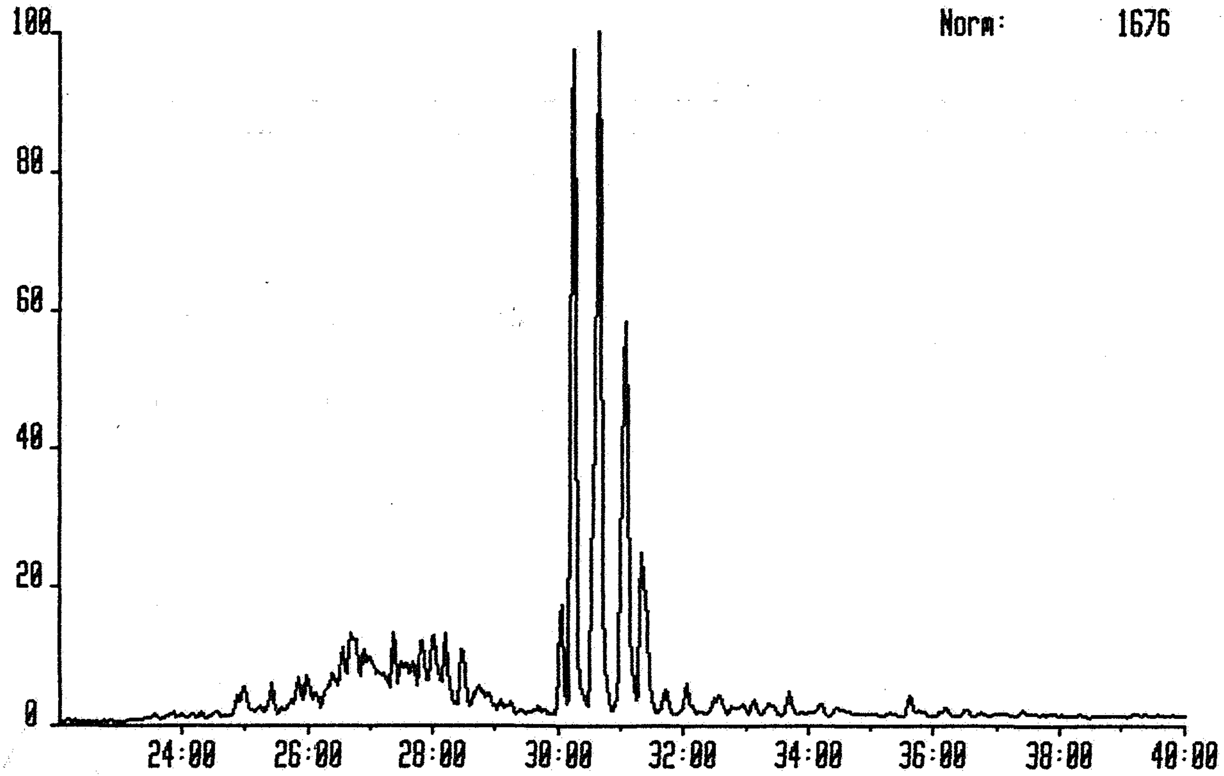
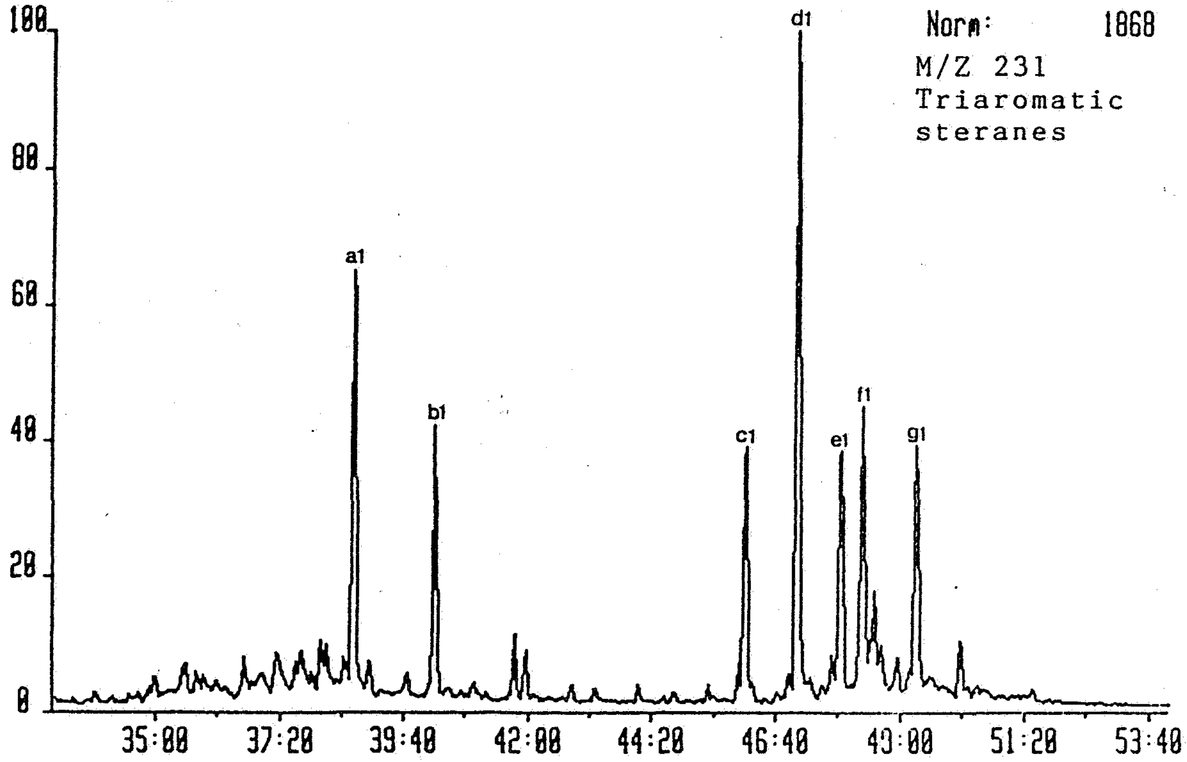
GEOCHEMICAL LABORATORIES OF NORWAY A/S

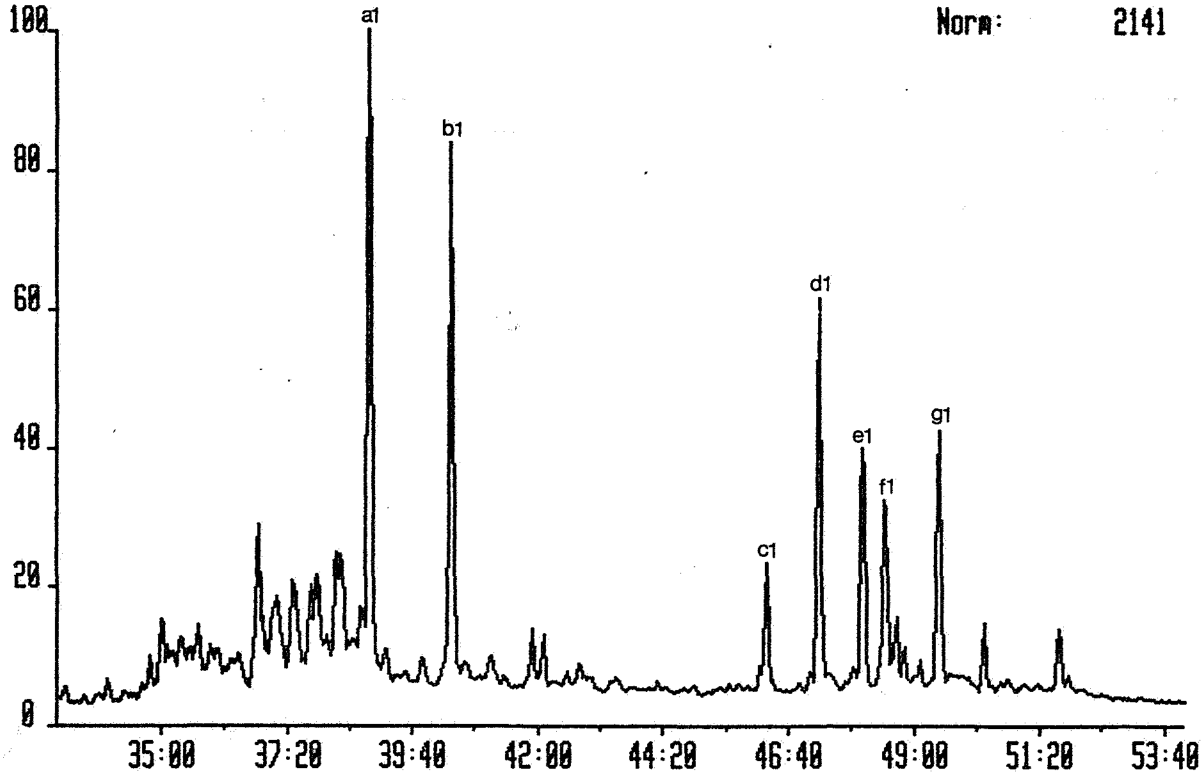
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 212.0660
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



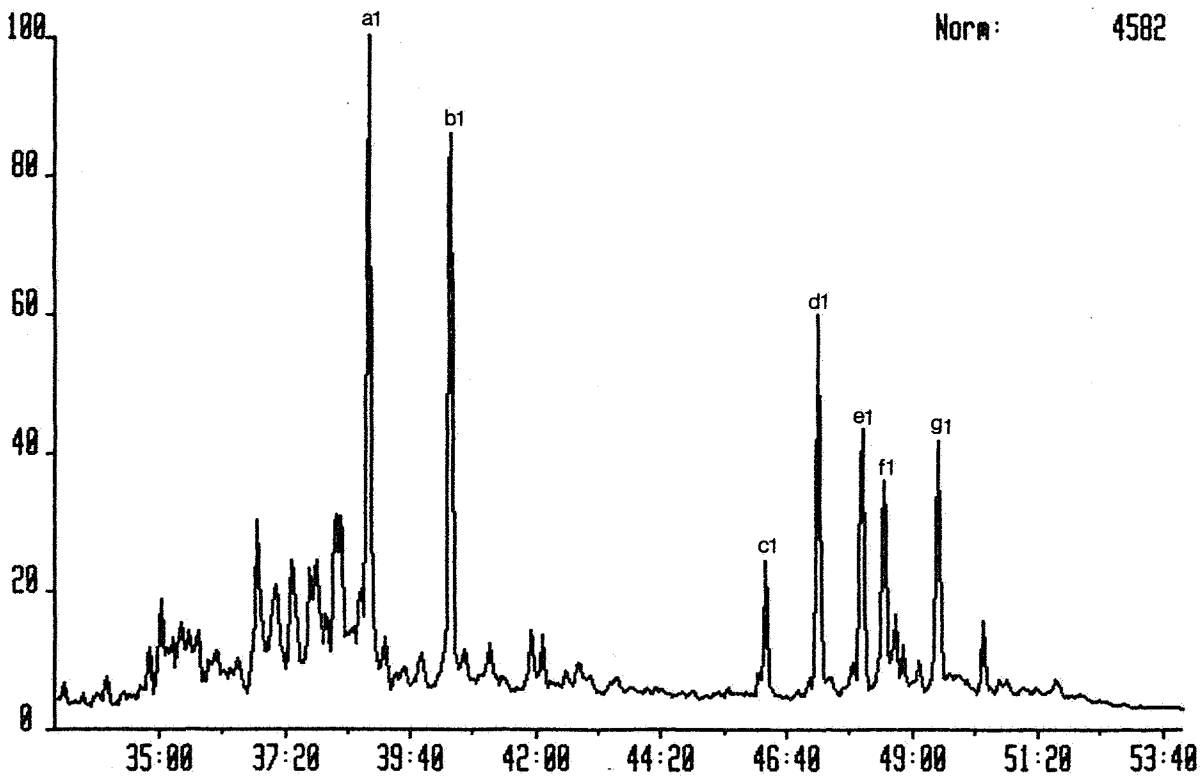
EXAMPLE OF PEAK IDENTIFICATION FOR TRIAROMATIC STERANES.



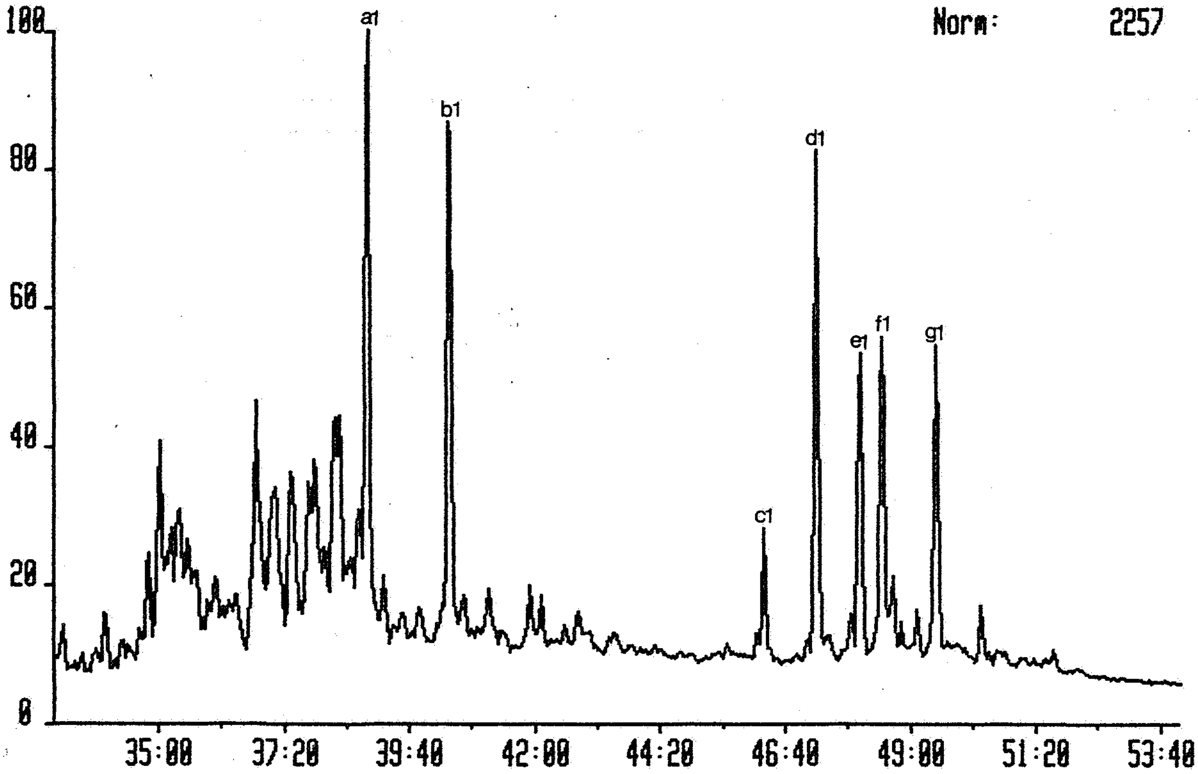
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 231.1174
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



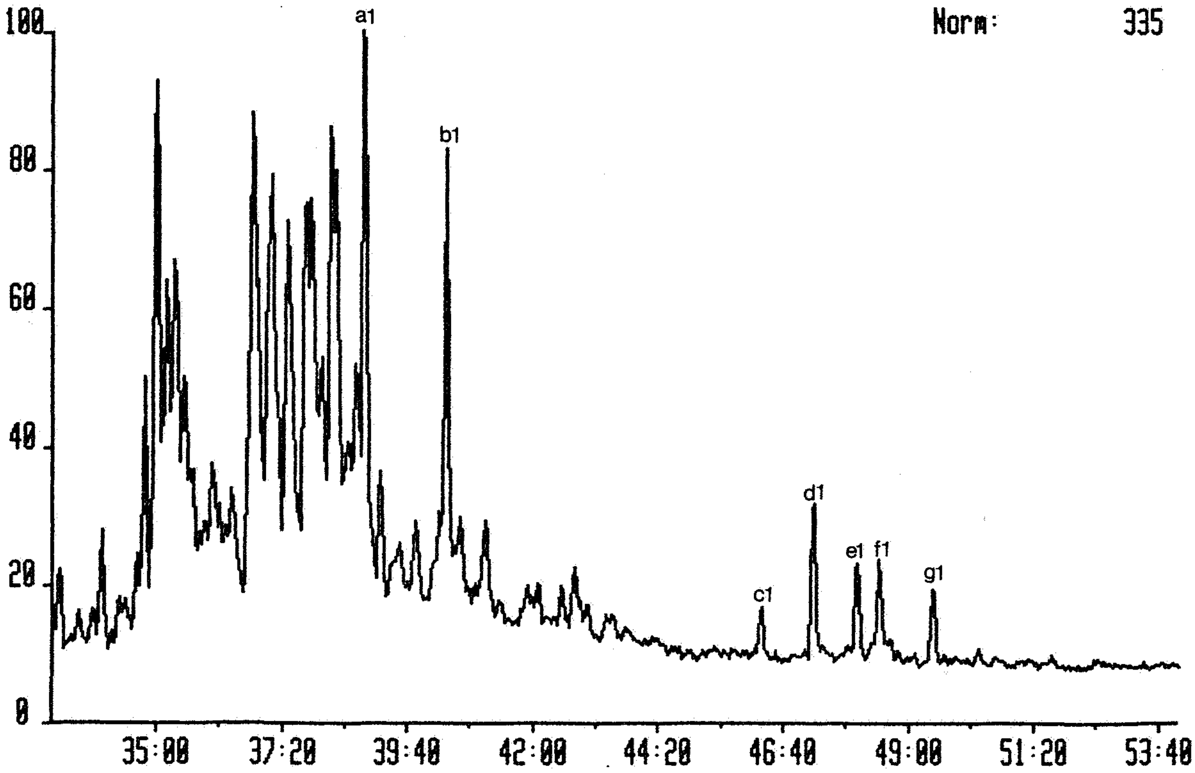
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 231.1174
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



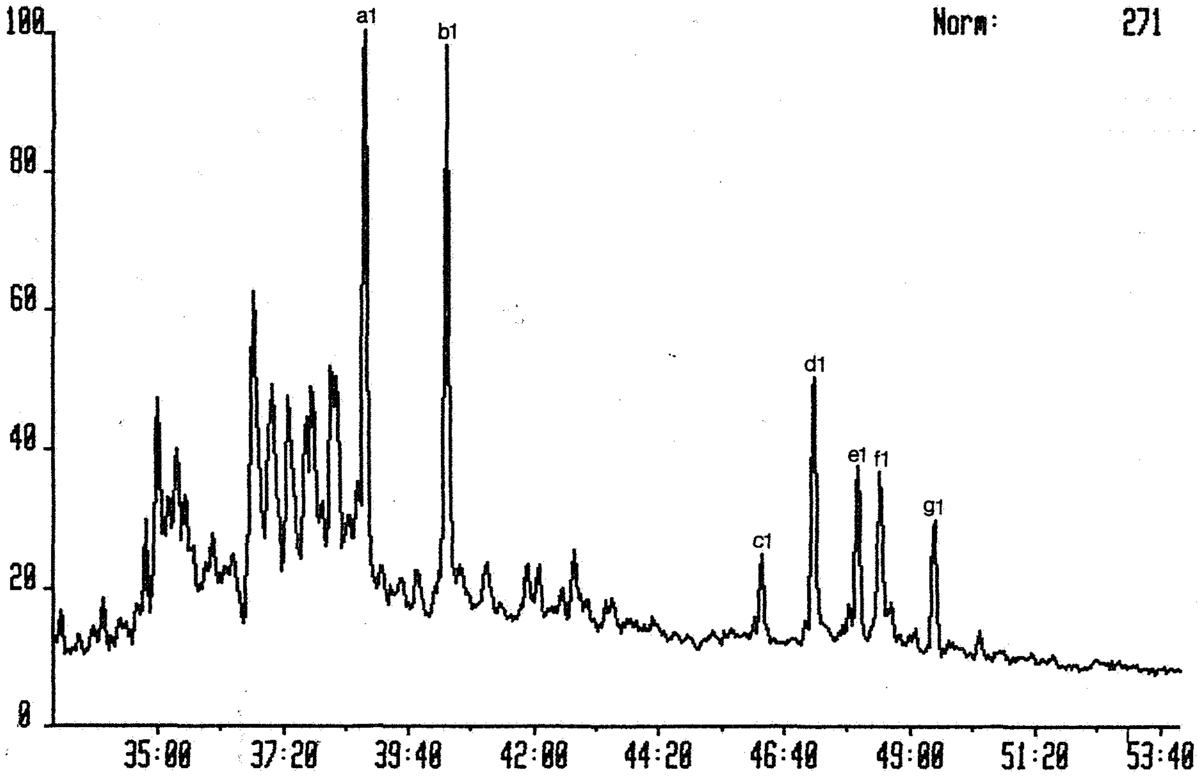
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 4 Injection 1 Group 1 Mass 231.1174
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 5 Injection 1 Group 1 Mass 231.1174
Text:WELL 2/6-2, 4520M, AROMATIC FRACTION



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 231.1174
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION



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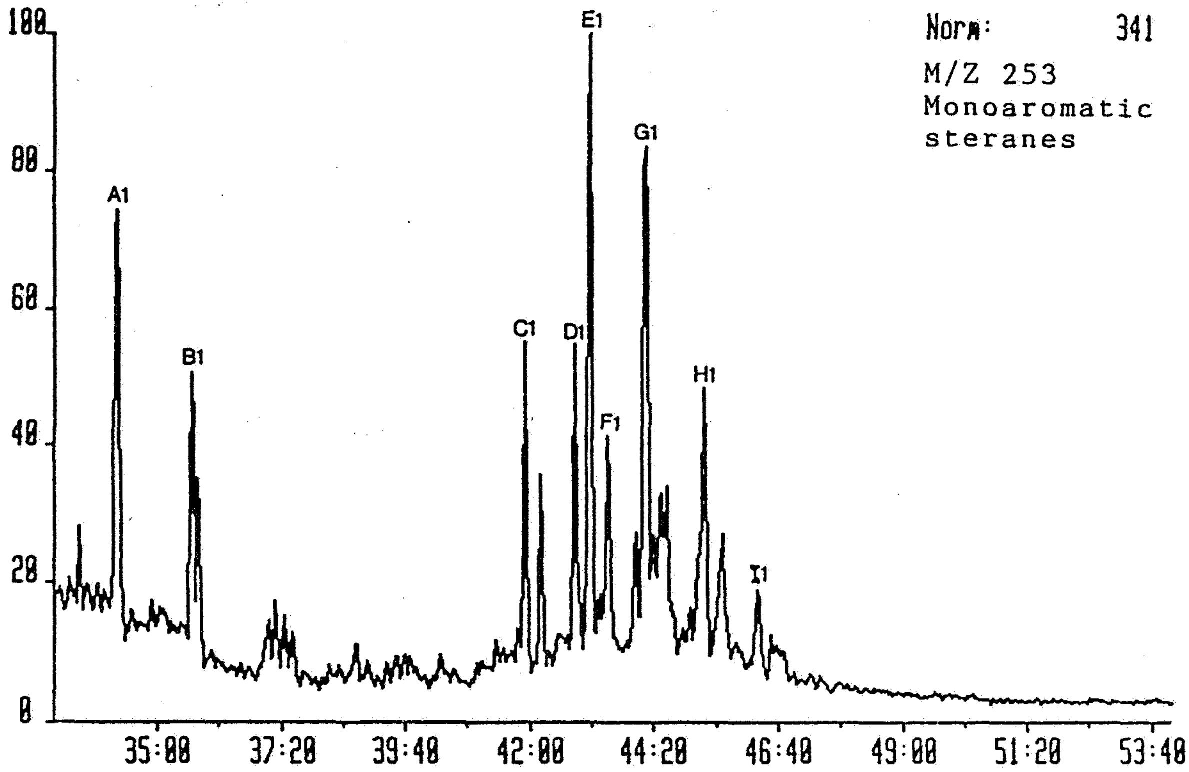
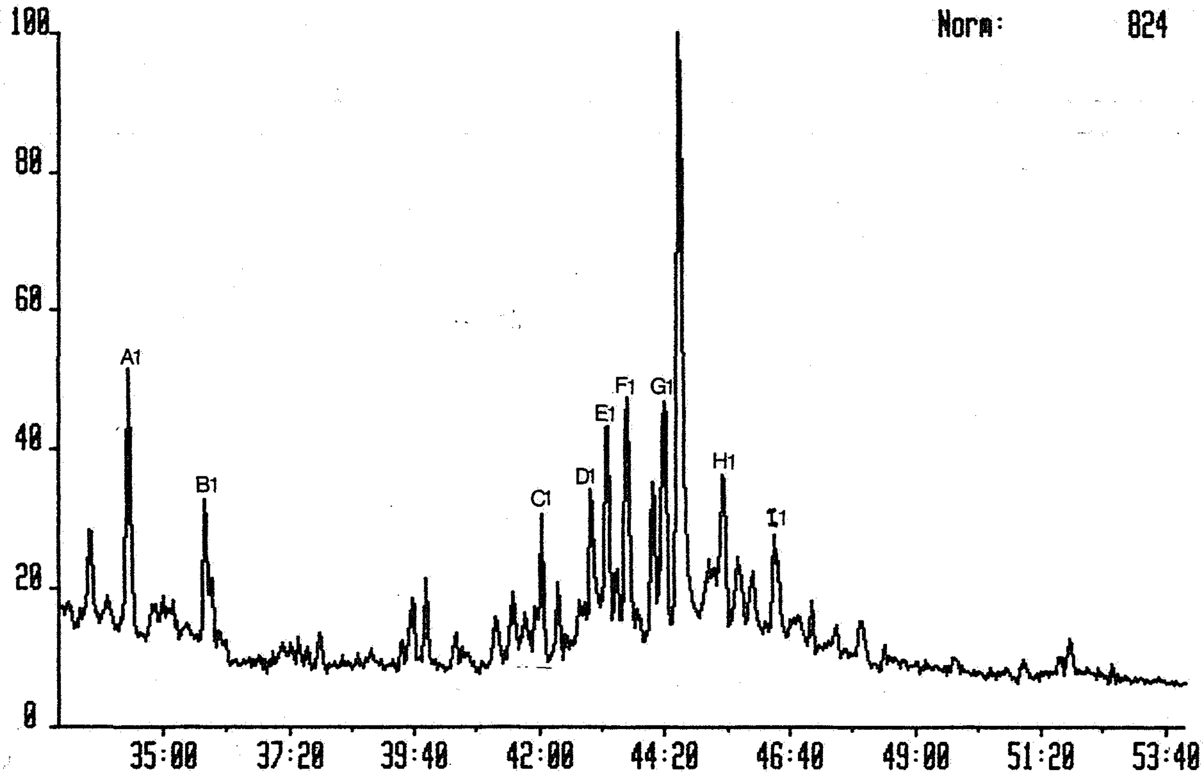
GEOCHEMICAL LABORATORIES OF NORWAY A/S

EXAMPLE OF PEAK IDENTIFICATION FOR MONOAROMATIC STERANES.

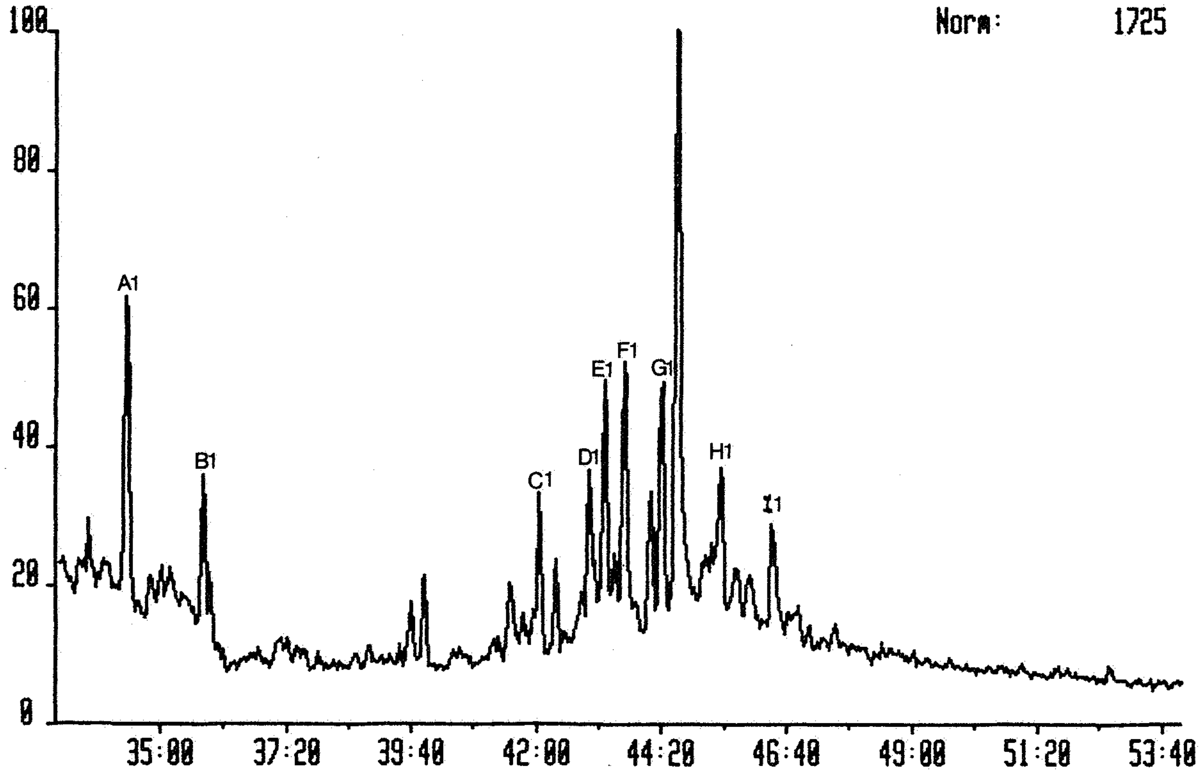


GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

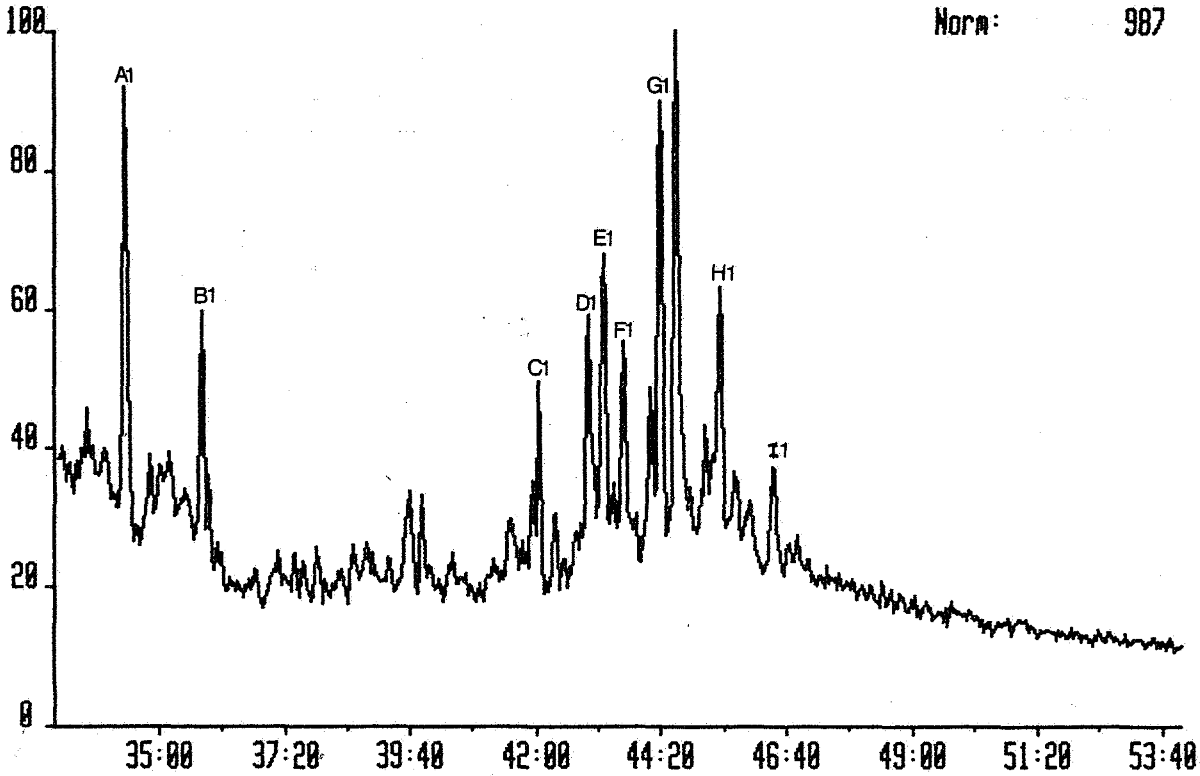
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 2 Injection 1 Group 1 Mass 253.1956
Text:WELL 2/6-2, 4200M, AROMATIC FRACTION



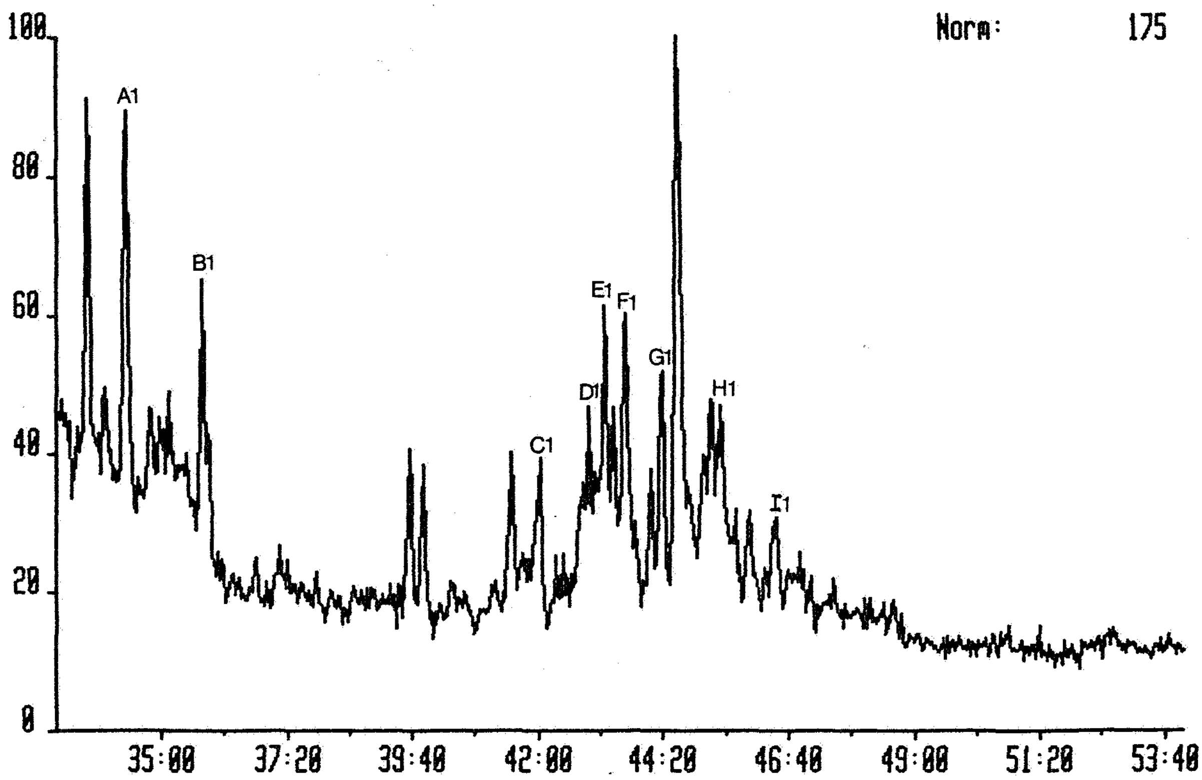
CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 3 Injection 1 Group 1 Mass 253.1956
Text:WELL 2/6-2, 4300M, AROMATIC FRACTION



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 4 Injection 1 Group 1 Mass 253.1956
Text:WELL 2/6-2, 4430M, AROMATIC FRACTION



CGARO5 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:ARO1
Sample 5 Injection 1 Group 1 Mass 253.1956
Text:WELL 2/6-2, 4528M, AROMATIC FRACTION



GEOLAB NOR
GEOCHEMICAL LABORATORIES OF NORWAY A/S

CGAR05 19-NOV-87 Sir:Magnetic TS250 Acnt:GEOLAB System:AR01
Sample 6 Injection 1 Group 1 Mass 253.1956
Text:WELL 2/6-2, 4666M, AROMATIC FRACTION