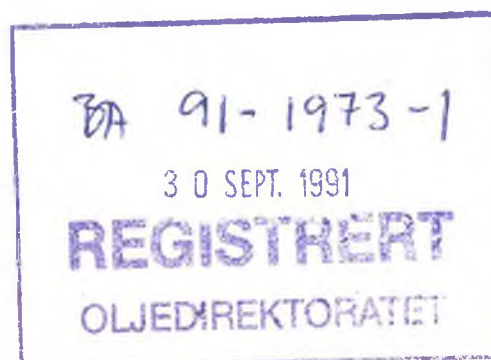


GEOCHEMICAL ANALYSES REPORT
WELL NOCS 34/7-6

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The stratigraphy used in this report is based on published data from the Norwegian Petroleum Directorate and may differ from that submitted in the biostratigraphic section of this study.

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SUMMARY

Well NOCS 34/7-6 is situated in the Snorre field in the Norwegian sector of the North Sea.

Samples were analysed between 680 m and 3674 m.

A normal thermal gradient based on geochemical parameters cannot be established for this well due to lack of suitable kerogen and phytoclasts for maturity assessment.

No source rock sections of significance were encountered in the well.

The well contains abundant migrated hydrocarbons, an oil zone occurring which ranges from about 2520 m (in the Statfjord Fm.) to about 2605 m (in the Lunde Fm.). This oil zone appears to be divided by several "tight" zones and/or gas zones. This is based on the variability in the composition of hydrocarbons within the oil column, with the hydrocarbons in the "tight" zones having much lower average molecular weight than outside these zones. Minor amounts of hydrocarbons are encountered throughout the well, probably related to this oil zone.

The migrated hydrocarbons appear to be derived from mature Upper Jurassic Viking Gp. source rocks. There are indications that the hydrocarbons might have migrated into the oil zones in two pulses (based on slight variations in maturity).

INTRODUCTION

Well NOCS 34/7-6 is situated in the Snorre oil field in the Norwegian sector of the North Sea. The well is located at 61°27'10.85"N, 02°08'17.26"E and drilled to a total depth of 3685 m. The depth of water is 333 m.

A total of 326 samples comprising 82 core-chips and 224 cuttings samples was collected between 470 and 3685 m from the Norwegian Petroleum Directorate (NPD) in Stavanger. The sampling intervals for the cuttings samples were 30 m in the Tertiary Nordland, Hordaland and Rogaland Gps. and the Upper Cretaceous Shetland Gp., 15 m for the Lower Cretaceous Cromer Knoll Gp. and 6 m for the Jurassic and Triassic formations. Core-chip samples were sampled at an interval of 2 m. A careful selection of suitable samples was made for screening analyses (TOC/Rock-Eval). Forty-four samples were selected for this purpose, and from the data obtained, samples were chosen for follow-up analyses. These are:

Thermal extraction - pyrolysis - gas chromatography	14 samples
Extraction, MPLC fractionation, saturated and aromatic hydrocarbon gas chromatography	8 samples
Vitrinite reflectance microscopy	17 samples
Visual kerogen microscopy	3 samples
Isotope analysis of C15+ fractions	4 samples
Gas chromatography - mass spectrometry	4 samples

Tables listing in detail the samples analysed and the results are located in Appendix 1. The following stratigraphic information of the well is taken from NPD well data summary sheets, volume 15.

Tertiary	455 - 1841 m
Nordland Group	455 - 1072 m
Utsira Formation	1036 - 1072 m
Hordaland Group	1072 - 1679 m
Rogaland Group	1679 - 1841 m
Balder Formation	1679 - 1707 m
Lista/Sele Formations	1707 - 1841 m
Cretaceous	1841 - 2447 m
Shetland Group	1841 - 2437 m
Cromer Knoll Group	2437 - 2447 m
Jurassic	2447 - 2596 m
Dunlin Group	2447 - 2511 m
Amundsen Formation	2447 - 2511 m
Statfjord Formation	2511 - 2596 m
Triassic	2596 - 3585 m
Hegre Group	2596 - 3685 m
Lunde Formation	2596 - 3540 m
Lomvi Formation	3540 - 3633 m
Teist Formation	3633 - 3685 m, TD

LITHOLOGY AND TOTAL ORGANIC CARBON CONTENT

Three hundred and twenty-six samples, eighty-two core-chip and two hundred and forty-four cuttings samples, were described and forty-four of these were analysed for TOC contents. Figure 1 shows a generalized lithological column with relevant stratigraphic information and TOC contents. A similar plot of TOC and Rock-Eval data versus the observed lithology is shown in Enclosure 1. The lithology description and TOC data for analysed lithologies are listed in Table 1, while Table 2 shows TOC and Rock-Eval data.

Tertiary (455 - 1841 m)

Nordland Group (455 - 1072 m)

Twenty samples were described from this group including one from the Utsira Fm. A light grey to light greenish grey fine-grained sandstone dominates the upper 300 m of this group. A white to light grey coarse-grained sandstone is also prominent in this interval. Below 800 m the coarse-grained sand is the most prominent lithology, followed by the fine-grained sand. Small amounts of light orange to orange-grey fossiliferous carbonate are also found throughout the group. Variable amounts of glauconite are found in the lowermost samples of this group. Two samples from this group were analysed for TOC, one fine-grained sandstone having a fair TOC content (0.39 %) and one coarse-grained having a poor TOC content (0.06 %).

Hordaland Group (1072 - 1679 m)

Twenty cuttings samples were described from this group. The

dominant lithology throughout is claystone which changes in colour from yellowish grey to light yellowish brown in the upper part to light brownish grey, olive-grey and brownish grey in the lower part of the group. Minor amounts of white to medium grey coarse-grained sandstone and light orange to orange-grey carbonate are also found in most samples described. Three claystones were analysed, having fair to good TOC contents (0.43 - 1.60 %).

Rogaland Group (1679 - 1841 m)

Five samples were described from the Lower Tertiary Rogaland Gp., one from the Balder Fm. and four from the Sele/Lista Fms. The lithology of the Rogaland Gp. resembles the lower part of the overlying Hordaland Gp., containing olive-grey to brownish grey claystones. No samples were analysed for TOC content from this group.

Cretaceous (1841 - 2447 m)

Shetland Group (1841 - 2437 m)

Nineteen samples were described from the Cretaceous Shetland Gp. The group is dominated throughout by claystones, partly interbedded with sand in the lower parts. The claystones are light brownish grey to light olive-grey in the upper part and change towards light to medium grey in the lower parts. The sandstones are typically fine-grained, white to light grey and greyish pink. The sandstones are most frequent in the interval 2150 - 2270 m, but also occur in small amounts below 2270 m. Contamination (drill mud, plastic and rust) is also found in most samples throughout. Two samples were analysed for TOC content from this group, both having fair TOC contents (0.47 and 0.88 %).

Cromer Knoll Group (2437 - 2447 m)

Two samples were described from the ten metre thick Lower Cretaceous Cromer Knoll Gp. The dominant lithology consists of a light to medium grey claystone, with traces of a white to light grey fine-grained sandstone. Contaminants such as drill mud, paint, rust and plastic are also found in both samples. No samples were analysed for TOC content from this group.

Jurassic (2447 - 2596 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

Eleven cuttings samples were described from the Amundsen Fm. The lithology shows large variations throughout this formation. The upper twenty metres have a lithology consisting of light orange to medium brown marly carbonate and light to medium grey claystones. Minor amounts of white to light grey fine-grained sandstones are also found in these samples. The lower 45 metres consist of lithologies alternating between light to medium grey claystones and white to light grey fine-grained sandstones with prominent amounts of contaminants (drill mud). Small amounts of light orange to medium brown marly carbonate are also found in these samples. For detailed descriptions of the lithology the reader is referred to Table 1. Three samples from the Amundsen Fm. were analysed for TOC content, one carbonate being rich for a carbonate (1.51 %), one sandstone having a fair (0.57 %) TOC content and a claystone having a good (1.05 %) TOC content.

Statfjord Formation (2511 - 2596 m)

Thirty-eight samples (one cuttings and thirty-seven core-chips) were described from the Statfjord Fm. The overall dominant lithology is a coarse-grained sandstone, which shows big variations in colour. The coarse-grained sandstone is frequently interbedded with claystones of different colours. For detailed descriptions of the lithologies the reader is referred to Table 1. Sixteen core-chip samples were analysed for TOC content from this formation. One siltstone from the upper part of the formation is found to have a poor TOC content (0.09 %). Four of the analysed samples were claystones, three having poor TOC contents (0.03 - 0.12 %) and one being rich in TOC (2.94 %). The analysed sandstones have poor to good TOC contents (0.12 - 1.71 %). TOC contents above 0.5 % are thought to be influenced by free hydrocarbons in the samples as indicated by high S_1 values.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

One hundred and eighty-one samples were described from the Upper Triassic Lunde Fm. Thirty-five of the described samples were core-chips from two cored intervals. The dominant lithology throughout the formation is sandstone with some interbedded claystones. The sandstones show variations in colour throughout, but are mainly white, greyish pink, orange-grey, greyish brown and light grey. The claystones also show variations in colour, but are mainly grey, reddish brown and brown. For details, the reader is referred to Table 1. Between 3164 and 3386 m the sandstone is interbedded with three carbonate horizons. The carbonates

are in general white to orange-grey and light brown. The two upper carbonate horizons are about 10 - 12 m thick, while the lower is about 50 m thick. Towards the bottom of the formation 20 m of coal occurs, this being found together with fine-grained sand. A total of eighteen samples were analysed for TOC content. The majority of the analysed samples were sandstones, these having in general poor TOC contents (0.05 - 0.20 %). One sandstone sample however has fair a TOC content (0.49 %) and one was found to have a rich TOC content (2.32 %). The latter is probably highly affected by free hydrocarbons as indicated by the high S_1 value. Besides the sandstones, one claystone, one carbonate and one coal were analysed. The claystone has a poor TOC content (0.12 %) and the carbonate has a TOC content of 0.14 %. The analysed coal sample has a TOC content of 51.16 %.

Lomvi Formation (3540 - 3633 m)

Twenty-three samples were described from this formation. Ten of the described samples were core-chips from one cored interval of about 18 metres. Like the overlying Lunde Fm., the Lomvi Fm. is dominated by sandstone throughout. The sandstones are in general white, greyish red, reddish brown to brownish grey and grey, and both coarse- and fine-grained.

Minor amounts of coal and white to orange-grey carbonate are also found in most samples throughout the formation. No samples of the Lomvi Fm. were analysed for TOC content.

Teist Formation (3633 - 3685 m, TD)

Nine samples were described from this formation. The lithologies resembles those of the overlying Lunde and Lomvi

Fms., i.e. dominated by sandstones. Minor amounts of carbonate are also prominent in most samples in this formation, while various amounts of medium grey to pale brown claystone are also found in samples throughout this formation. One sandstone sample was analysed and found to have a poor TOC content (0.24 %).

ROCK-EVAL ANALYSIS

Forty-four samples were analysed by Rock-Eval. The data are listed in Table 2. Production index is plotted versus depth in Figure 2, Tmax versus depth in Figure 3, while Figure 4 shows a Tmax versus hydrogen index crossplot. Rock-Eval data versus observed lithology is plotted in Enclosure 1.

Kerogen Type and Richness

(Hydrogen Index, Oxygen Index and Petroleum Potential)

Tertiary (455 - 1841 m)

Nordland Group (455 - 1072 m)

Two sandstones were analysed from this group. The samples have hydrogen indices of 49 and 50 mg HC/g TOC, oxygen indices of 244 and 100 mg CO₂/g TOC and poor petroleum potentials of 0.3 mg HC/g rock and nil respectively. These data indicate the samples to contain organic matter of type IV kerogen, with no potential for generation of hydrocarbons.

Hordaland Group (1072 - 1679 m)

Three claystones were analysed from this group. The uppermost analysed sample has a hydrogen index of 185 mg HC/g TOC and an oxygen index of 80 mg CO₂/g TOC, suggesting organic matter of type III kerogen and a petroleum potential of 3.5 mg HC/g rock. These data indicate this sample to have a fair potential for generation of gas. The two other samples have hydrogen indices of 42 mg HC/g TOC and oxygen indices of 181

and 68 mg CO₂/g TOC respectively, indicating type IV kerogen. The petroleum potentials are 0.8 and 2.2 mg HC/g rock and the samples have no potential for generation of hydrocarbons. The petroleum potential of the lower sample of this group is also suggested to be affected by free hydrocarbons (high S₁), probably derived from mud additives or from an oil-based drill mud.

Rogaland Group (1679 - 1841 m)

No samples were analysed from the Rogaland Gp.

Cretaceous (1841 - 2447 m)

Shetland Group (1841 - 2437 m)

Two claystone samples were analysed from the Upper Cretaceous Shetland Gp. Their hydrogen and oxygen indices range 51 - 61 mg HC/g TOC and 61 - 81 mg CO₂/g TOC respectively, suggesting type IV kerogen. They have petroleum potentials of 0.6 and 2.2 mg HC/g rock and the samples have no potential for generation of hydrocarbons. The data obtained for the lower sample may be affected by free hydrocarbons (S₁) in the sample.

Cromer Knoll Group (2437 - 2447 m)

No samples were analysed from the Cromer Knoll Gp.

Jurassic (2447 - 2596 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

Three samples were analysed from this formation, a carbonate, a sandstone and a claystone. The carbonate has a hydrogen index of 269 mg HC/g TOC and an oxygen index of 63 mg HC/g TOC, indicating a type II/III kerogen with a fair potential (5.9 mg HC/g rock) for generation of hydrocarbons. The analysed sandstone and claystone have hydrogen indices of 74 and 89 mg HC/g TOC and oxygen indices of 40 and 46 mg CO₂/g TOC respectively, suggesting type IV kerogen, with no or at best a poor potential for generation of hydrocarbons (0.7 and 2.4 mg HC/g rock).

Statfjord Formation (2511 - 2596 m)

A total of fifteen core-chip samples were analysed from the Statfjord Fm. Most of the analysed samples were sandstones containing free hydrocarbons (S₁). The free hydrocarbons will affect the data obtained from the Rock-Eval analysis. None of these samples are thought to have any source rock potential, but are probably good reservoir rocks as discussed in the following chapters. The claystone and siltstone samples have hydrogen indices in the range 33 - 91 mg HC/g TOC and oxygen indices in the range 11 - 367 mg CO₂/g TOC, suggesting type IV kerogen for all these samples. Only the claystone sample of 2530 m shows data indicating a fair petroleum potential (5.8 mg HC/g rock), though also this sample contains free hydrocarbons. None of the samples from the Statfjord Fm. have any potential for generation of hydrocarbons.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

Eighteen samples were analysed from the Lunde Fm. Thirteen of these were sandstones and are not thought to have any source rock potential. One sandstone core-chip sample is thought to contain free hydrocarbons (high S_1 value) resulting in a petroleum potential of 24.4 mg HC/g rock. The siltstones and claystones were also found to be poor source rocks with no potential for generation of hydrocarbons. One of the analysed samples was a carbonate having hydrogen and oxygen indices of 43 mg HC/g TOC and 257 mg CO_2 /g TOC respectively, suggesting kerogen type IV with no potential for generation of hydrocarbons. The lowermost analysed sample from this formation was a coal sample with hydrogen and oxygen indices of 44 mg HC/g TOC and 70 mg CO_2 /g TOC respectively, indicating type IV kerogen. This sample is most likely of coal-additives rather than indigenous (formation) coal.

Lomvi Formation (3540 - 3633 m)

No samples were analysed from this formation.

Teist Formation (3633 - 3685 m, TD)

One sandstone was analysed from this formation. The sample has a hydrogen index of 42 mg HC/g TOC and an oxygen index of 83 mg CO_2 /g TOC, suggesting type IV kerogen with little or no potential (0.2 mg HC/g rock) for generation of hydrocarbons.

THERMAL EXTRACTION - GAS CHROMATOGRAPHY

Fourteen samples were analysed by thermal extraction gas chromatography. Exemplary thermal extract chromatograms are shown in Figures 5a-c, while all chromatograms are located in Appendix 3.

Tertiary (455 - 1841 m)

Nordland Group (455 - 1072 m)

No samples were analysed from the Nordland Gp.

Hordaland Group (1072 - 1679 m)

Two claystones were analysed from this group. The chromatogram of the uppermost sample contains only very small amounts of a few compounds and will not be further discussed. The thermal extraction chromatogram of the lower sample is dominated by a narrow hydrocarbon distribution in the C₁₀ to C₁₆ range. Such a narrow distribution of these hydrocarbons is a strong indication that the hydrocarbons are derived from a distilled product, i.e. that they come from hydrocarbon additives in the mud or from an oil-based drill mud. See Figure 5a for an exemplary chromatogram.

Rogaland Group (1679 - 1841 m)

No samples were analysed from the Rogaland Gp.

Cretaceous (1841 - 2447 m)

Shetland Group (1841 - 2437 m)

One claystone was analysed by thermal extraction - gas chromatography from this group. The chromatogram resembles that of the lower sample of the Hordaland Gp., showing a strong indication of hydrocarbon additives or an oil-based drill mud. See discussion of hydrocarbons above.

Cromer Knoll Group (2437 - 2447 m)

No samples were analysed from the Cromer Knoll Gp.

Jurassic (2447 - 2597 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

One sandstone sample was analysed from the Amundsen Fm. The thermal extraction - gas chromatogram has only unidentified peaks, suggesting no free hydrocarbons in the analysed sample.

Statfjord Formation (2511 - 2596 m)

Seven core-chip samples were analysed from this formation. The uppermost sample, a siltstone, is dominated by a narrow distribution of hydrocarbons in the C₁₂ - C₁₆ range. The narrow distribution of these free hydrocarbons is a strong indication of a distilled product, i.e. they come from

hydrocarbon additive to the mud or from an oil-based drill mud. The six sandstones analysed show, with one exception, similar chromatograms. These chromatograms contain a wide distribution of hydrocarbons in the C₁₅ to C₃₅ range. An exemplary chromatogram is shown in Figure 5b. The distribution of these hydrocarbons is thought to represent a whole oil, where the light molecular weight compounds have been lost during water washing, drilling or storage. This oil has undoubtedly migrated into the sandstones of the Statfjord Fm. One sandstone sample (2558 m) has a chromatogram showing a narrow distribution of hydrocarbons in the C₁₂ to C₁₉ range.

The chromatogram does however differ from those previously discussed with a narrow distribution of hydrocarbons. The hydrocarbons have on average a heavier molecular weight and isoprenoids are much more prominent. The sample (Figure 5c) could possibly represent either a "tight" zone or a gas zone within the oil column in the Statfjord Fm.

The Statfjord Fm. appears to contain an oil column from about 2520 m to the base of the formation. The zone is interrupted either of "tight" zones and/or interval gas zones. The oil zone probably extends downwards in the Lunde Fm. See below.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

Three sandstones were analysed from the Triassic Lunde Fm., all showing quite different chromatograms. The uppermost sample (2599 m) resembles the chromatogram of the 2558 m

sample. See discussion of hydrocarbons above. The sample at 2601 m resembles those of the overlying Statfjord Fm., containing a wide distribution of hydrocarbons in the C₁₆ to C₃₆ range. This distribution of hydrocarbons is thought to represent a whole oil which has undoubtedly migrated into the sandstone and probably represents an extension of the Statfjord Fm. oil zone. The lowermost analysed sample of this well has a chromatogram containing only unidentified compounds and does not contain any free hydrocarbons. The base of the oil zone is probably just below 2601 m (around 2605 m?).

Lomvi Formation (3540 - 3633 m)

No samples were analysed from the Lomvi Fm.

Teist Formation (3633 - 3685 m, TD)

No samples were analysed from the Teist Fm.

PYROLYSIS - GAS CHROMATOGRAM

Fourteen samples were analysed by pyrolysis - gas chromatography. Exemplary pyrograms can be seen in Figures 6a-b and a pyrolysis products triangle in Figure 7. Pyrolysis - GC data is listed in Table 3, while all pyrograms are located in Appendix 3.

Tertiary (455 - 1841 m)

Nordland Group (455 - 1072 m)

No samples were analysed from the Nordland Gp.

Hordaland Group (1072 - 1679 m)

Two claystones were analysed from this group. The pyrograms of both samples are dominated by low molecular weight aromatic hydrocarbons and hydrocarbons in the gaseous range (< C₅). Phenol is found in fairly abundant amounts in both samples, while the pyrograms contain only small amounts of alkenes/alkanes. The relative presence of alkenes/alkanes is higher in the upper sample (Figure 6a) than in the lower. These features indicate these two samples to contain immature organic matter of types III and IV kerogen respectively.

Rogaland Group (1679 - 1841 m)

No samples were analysed from the Rogaland Gp.

Cretaceous (1841 - 2447 m)

Shetland Group (1841 - 2437 m)

One claystone was analysed from the Shetland Gp. The pyrogram is dominated by hydrocarbons in the gas fraction ($< C_5$) and low molecular weight aromatic hydrocarbons. Phenol compounds are also fairly prominent, while alkenes/alkanes only are found in only small amounts. These features indicate immature organic matter of type III kerogen.

Cromer Knoll Group (2437 - 2447 m)

No samples were analysed from the Cromer Knoll Gp.

Jurassic (2437 - 2596 m)

Dunlin Group (2437 - 2511 m)

Amundsen Formation (2437 - 2511 m)

One sandstone sample was analysed from this formation. The pyrogram of this sample shows that it is almost barren of pyrolysable organic matter. Only traces of low molecular weight compounds are found.

Statfjord Formation (2511 - 2596 m)

Seven core-chip samples were analysed from this formation, one siltstone and six sandstones. The pyrogram of the uppermost sample, the siltstone, shows that the sample is almost barren of pyrolysable organic material. The six sandstone

samples, with one exception, have quite similar pyrograms. The exception, the sample from 2558 m, has a pyrogram that is almost barren of pyrolysable organic material. The pyrograms of the remaining sandstones contain large amounts of alkenes/alkanes up to about C_{25} and in particular alkenes. Low molecular weight monoaromatic hydrocarbons are prominent in all samples, while phenol compounds are absent. An exemplary pyrogram is shown in Figure 6b. The presence of the large amounts of alkenes together with the other features suggest these sandstones to contain organic matter of an asphaltenic type, associated with the oil in these samples.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

Three sandstone samples were analysed from this formation. The pyrograms of two of the analysed samples (the uppermost and the lowermost) show that they are almost barren of pyrolysable organic matter. The pyrogram of the sample at 2601 m resembles those of the overlying Statfjord Fm., suggested to contain organic matter of an asphaltenic type associated with oil.

Lomvi Formation (3540 - 3633 m)

No samples were analysed from the Lomvi Fm.

Teist Formation (3633 - 3685 m, TD)

No samples were analysed from the Teist Fm.

EXTRACTION DATA

Eight samples were extracted, fractionated and the hydrocarbons analysed by gas - chromatography. The data are listed in Tables 4a-e, 5 and 6. Exemplary saturated hydrocarbon chromatograms are shown in Figures 8a-b and exemplary aromatic hydrocarbon chromatograms are shown in Figures 9a-b, while all chromatograms are located in Appendix 4. Extraction data are plotted in Enclosure 2 and saturated hydrocarbon ratios are plotted in Enclosure 3. No post-Jurassic samples were extracted.

Jurassic (2447 - 2596 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

No samples were extracted from this formation.

Statfjord Formation (2511 - 2596 m)

Seven core-chip samples, six sandstones and one claystone, were extracted from the Statfjord Fm. All the samples, except the sandstone at 2558 m, have a rich content of extractable organic matter. This sample has a good content (1254 ppm). The remaining sandstones have a content of EOM ranging 9093 - 17114 ppm and the claystone 2775 ppm. All samples also have rich contents of extractable hydrocarbons ranging 1035 - 13753 ppm. The samples have saturated to aromatic hydrocarbon ratios between 2:1 and 3:1, which is not unusual for migrated hydrocarbons. The amount of asphaltene ranges 32 - 320 ppm and NSO compounds 185 - 3040 ppm.

When normalized against TOC, all the sandstone samples have rich amounts of extractable organic matter (464.48 - 1231.50 mg EOM/g TOC) and extractable hydrocarbons (383.70 - 1080.76 mg EHC/g TOC). The claystone has fair amounts of extractable organic matter (88.95 mg EOM/g TOC) and a rich content of extractable hydrocarbons (71.31 mg EHC/g TOC). Based on the extraction data it is suggested that the majority of the organic material of these samples consists of hydrocarbons migrated into the samples.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

One sandstone core-chip sample was extracted from this formation. The sample, which is from the upper part of the formation, has a rich content of extractable organic matter (16852 ppm) and of extractable hydrocarbons (13898 ppm). The saturated to aromatic hydrocarbons ratio is about 2:1 which is not unusual for a migrated oil. The content of asphaltenes and NSO-compounds, 203 ppm and 2751 ppm respectively, is within the range of that of the samples from the overlying Statfjord Fm. Normalized against TOC, the sample has rich amounts of both extractable organic material (1021.38 mg EOM/g TOC) and extractable hydrocarbons (842.33mg EHC/g TOC). These extraction data resemble those of the Statfjord Fm. and suggest the organic matter of this sample to be of hydrocarbons migrated into the sample.

Lomvi Formation (3540 - 3633 m)
Teist Formation (3632 - 3685 m, TD)

No samples were analysed from these formations.

Saturated Hydrocarbons

Jurassic (2447 - 2596 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

No samples were analysed from this formation.

Statfjord Formation (2511 - 2596 m)

Seven core-chip samples were analysed from this formation, comprising six sandstones and one claystone. The chromatograms of five of the sandstones are fairly similar to each other, showing a wide distribution of hydrocarbons in the C₁₅ to about C₄₀ range. This is exemplified in Figure 8a. The pristane/nC₁₇ ratio of these sandstone samples (Table 5) ranges 0.84 - 0.92 and the phytane/nC₁₈ ratio ranges 0.62 - 0.68. The pristane to phytane ratio of these samples ranges 1.12 - 1.41. The features of the chromatograms and the small variations in the saturated hydrocarbon ratios suggest these sandstones to contain a "full" oil migrated into the samples. The chromatogram of the sandstone sample at 2558 m contains a narrow distribution of hydrocarbons in the C₁₃ - C₁₈ range. Traces of hydrocarbons in the C₂₀ - C₃₀ range are also found. The pristane/nC₁₇ and phytane/nC₁₈ ratios of this sample (0.88 and 0.65 respectively) resemble those of

the other analysed sandstones of this formation. The sample is thought to represent a "tight" zone or a gas zone.

The chromatogram of the analysed claystone contains a wide range of hydrocarbons in the C_{13} - C_{34} range (Figure 8b). The pristane/ nC_{17} and phytane/ nC_{18} ratios are 0.88 and 0.61 which are similar ratios to those of the other analysed samples in this formation. The sample strongly resembles the 2558 m sample. See previous discussion.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

One sandstone core-chip sample from the upper part of the formation was analysed. The chromatogram of this sample resembles those of the oil saturated sandstones of the overlying Statfjord Fm. The pristane/ nC_{17} and phytane/ nC_{18} ratios are 0.89 and 0.69 respectively, which are in the same range as the latter samples, and similar conclusions are drawn for this sample.

Lomvi Formation (3540 - 3633 m)

Teist Formation (3633 - 3685 m, TD)

No samples were analysed from these formations.

Aromatic Hydrocarbons

Jurassic (2447 - 2596 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

No samples were analysed from this formation.

Statfjord Formation (2511 - 2596 m)

Seven core-chip samples were analysed from the Statfjord Fm., six sandstones and one claystone. The FID chromatograms of five of the sandstone samples are fairly similar to each other. These samples also have fairly similar saturated hydrocarbon chromatograms (see above discussion). The FID chromatograms of the aromatic hydrocarbons of these five sandstone samples are dominated by a large unresolved hump after 25 minutes retention time (see Figure 9a for an example). Of the identifiable compounds, the methyl phenanthrenes are the most prominent, followed by phenanthrene. Dimethyl naphthalenes are also found in the three upper of these sandstones, but not in the two lower. The FPD chromatograms show that these sandstone samples are almost barren of sulphur compounds. Of the identifiable sulphur compounds, the 4-methyl dibenzothiophene appears to be the most common. The calculated aromatic ratios of the methyl phenanthrenes, the MPI1 index (Table 6), indicate that the hydrocarbons in these five sandstone samples have a maturity comparable to about 0.9 % Ro. The sandstone at 2558 m shows a somewhat different FID chromatogram. This chromatogram is dominated by an unresolved hump between 20 and 40 minutes retention time. Of the identifiable compounds, the dimethyl naphtha-

lenes are the most prominent. Phenanthrene and small amounts of methyl phenanthrenes are also found. The FPD chromatogram of this sample contains only minor amounts of 4-methyl dibenzothiophene and dibenzothiophene. The calculated aromatic hydrocarbon ratios (MPI1) indicate the hydrocarbons of this sample to have a maturity comparable to about 0.75 % Ro, which is somewhat lower than the other analysed sandstones in the Statfjord Fm. This difference is probably caused by uncertainties in the calculation due to small amounts of the methyl phenanthrenes and is not thought to reflect the actual maturity of the hydrocarbons of this sample.

The FID chromatogram of the analysed claystone is totally different to those of the sandstones. The most prominent compounds of this chromatogram are the dimethyl naphthalenes, followed by the methyl naphthalenes. Phenanthrene and the methyl phenanthrenes are also found in this sample (see Figure 9b). The relative abundance of naphthalene compounds indicates that the sample contains an oil or condensate, i.e. migrated hydrocarbons. The naphthalenes are also common in source rocks containing type II kerogen and the claystone may also contain some in-situ generated hydrocarbons. The FPD chromatogram is dominated by a larger 4-methyl dibenzothiophene peak. Dibenzothiophene is also prominent in this sample. The calculated aromatic hydrocarbon ratios of this sample indicate a maturity corresponding to about 0.80 % Ro, which is in the same range as that of the other analysed samples of this formation.

Triassic (2596 - 3685 m, TD)

Hegre Group (2596 - 3685 m, TD)

Lunde Formation (2596 - 3540 m)

One sandstone core-chip sample from the upper part of the formation was analysed. The FID chromatogram of the sample resembles those of the five oil-saturated sandstones of the overlying Statfjord Fm. The chromatogram is dominated by an unresolved hump with only a few identifiable compounds, where the methyl phenanthrenes and phenanthrene are the most common. The FPD chromatogram shows that the sample is almost barren of sulphur compounds. The calculated aromatic hydrocarbon ratios of the hydrocarbons of the sample correspond to a maturity of about 0.90 % Ro, which equals that of the above mentioned samples from the Statfjord Fm.

Lomvi Formation (3540 - 3633 m)

Teist Formation (3633 - 3685 m, TD)

No samples were analysed from these formations.

VITRINITE REFLECTANCE

A total of seventeen samples (sixteen cuttings samples and one core-chip sample) was analysed for thermal maturity using vitrinite reflectance. The results are presented in Table 7. Nearly all the samples comprise siltstone/argillaceous siltstone/sandstone and no determination was possible in most of the samples for several reasons. Either the samples were devoid of phytoclasts, or they were so soft that even reasonable quality polish was impossible to achieve. The samples exhibited intense "plucking", thus making any microscopic observation impossible. The only reliable measurements possible were in the coal sample from 3488 m. This consists of medium to good quality vitrinite, but is however strongly stained. The reflectance values are therefore suspected to be highly depressed.

Estimation of any realistic thermal maturity trend in the well is not possible due to lack of data points.

VISUAL KEROGEN MICROSCOPY

Three samples were examined from this well, due to the unsuitability of the lithologies penetrated (TOC-poor shales and sandstones, carbonates), these being from 1160, 2453 and 2530 m. The detailed kerogen compositions are presented in Table 8 and the gross compositions plotted in Figure 11. Note that the latter does not take into account the precise nature of the liptinite component (i.e. whether "fresh" or "reworked"), which has considerable consequences for the amount/type of hydrocarbons that may be generated. Maturity data (Spore Colour Index) is included in Table 7.

Kerogen Typing

Tertiary

Hordaland Group (1072 - 1679 m)

One shale sample was examined, this is interpreted as containing 95 % liptinite, though this is overwhelmingly as dark brown fluorescent amorphous matter which may well contain an unknown proportion of degraded woody/vitro-humic matter. Well-preserved large dinoflagellates (in particular) and algae are present however, while liptodetrinite (clastic reworked material) and spore/pollen are subordinate, the latter apparently being represented mainly by the remains of air-sacks. Part bitumen-stained woody (vitrinitic) and inertinitic material is present in only minor/trace amounts. Traces of bluish white droplets of ?free hydrocarbons are also recorded.

This kerogen assemblage would appear to have a moderate potential for oil and (mainly) gas at much higher maturity.

Cretaceous (1841 - 2447 m)

No samples were examined from this interval.

Jurassic (2447 - 2596 m)

Dunlin Group (2447 - 2511 m)

Amundsen Formation (2447 - 2511 m)

One carbonate sample was examined from this formation. Little organic matter was reworked, but this appears to consist almost entirely of mixed bituminite/bitumen-stained amorphous matter and amorphous reworked matter, shreds of algae, dinoflagellates and spores being present in only trace amounts. Vitrinite and inertinite likewise occur in only trace amounts.

The inherent potential of this lithology is probably negligible if the abundant bitumens are migrated.

Statfjord Formation (2511 - 2596 m)

One shale sample was examined here, this having a moderately abundant amount of liptinite (25 %), which is however composed mainly of fine grained/amorphous reworked material. Spore/pollen, cuticle and fine algal spores are quite subordinate, there being only traces of fluorescent clasts. Vitrinite is dominant as thick, dark woody (telinite - collinite) clasts which are non- to part-bitumen stained.

Mainly semifusinitic inertinite occurs in accessory amounts.

This lithology would appear to have potential only for small amounts of gas.

Maturity

The number of samples is clearly inadequate for establishing a maturity trend for this well. The Hordaland Gp. sample is immature (SCI 3.5 (?)), while the Lower Jurassic samples range early mature to mature (SCI 5.0 - 6.0).

ISOTOPE ANALYSIS OF C₁₅+ FRACTIONS

Four samples were analysed for carbon isotope composition, all sandstone core-chip samples from the Statfjord Fm.

Figure 12a shows a crossplot of the $\delta^{13}\text{C}$ isotope values of saturated versus aromatic hydrocarbons and Figure 12b shows the Galimov plots of the $\delta^{13}\text{C}$ isotopic values of the various fractions from the extracted material of the samples. All data are listed in Tables 9a and 9b in Appendix 1.

The isotope values of the four analysed samples are very similar. The similarity in the isotopic values indicates a similar source for the hydrocarbons in all four samples. However, the calculated canonical variable suggests that two of the samples are derived from marine and two from a terrestrial source rock. The two samples indicated to be from a terrestrial source rock, 2524.6 m and 2558 m, can both be regarded slightly abnormal. The 2524.6 m sample is the uppermost sample with detected oil among the analysed samples. This could indicate a proximity to the gas/oil boundary and hence a possibility for a slight effect on the isotope composition of the oil by the gas. The other sample is possibly from a "tight" zone and the values could be slightly affected by very minor amounts of in-situ generated hydrocarbons (dominantly aromatic compounds from clay/coal particles). The two samples from 2534 m and 2586 m are hence regarded the most representative samples from the oil in this well.

The isotope values are those expected for hydrocarbons derived from a mature marine Upper Jurassic source rock in the North Viking Graben.

The calculated canonical variable (CV) and Figure 12a are taken from: Sofer, Z. (1984) Stable carbon isotope composi-

tions of crude oils: Application to source depositional environments and petroleum alteration. Bull. Am. Ass. Pet. Geol. Vol. 68, No1 1, pp 31-49.

GAS CHROMATOGRAPHY - MASS SPECTROMETRY

Four sandstone core-chip samples from the Statfjord Fm. were analysed for biomarkers, The data is listed in tables 10a-i. Typical fragmentograms are shown in Figures 13a-c.

Saturated Hydrocarbons

Terpanes

Statfjord Formation (2511 - 2596 m)

The M/Z 163 fragmentograms of three of the samples are identical. The fourth sample (from 2558 m) contains much less biomarkers than the other three samples and peak identification is difficult. The three identical samples contain fairly large amounts of steranes (Figure 13a), indicating a marine source for the hydrocarbons. The M/Z 177 fragmentograms give exactly the same impression as the M/Z 163 fragmentograms.

The M/Z 191 fragmentograms are also indential for three of the samples. The fourth sample (from 2558 m) can again be seen to contain much less biomarkers than the other three samples. However, reprocessing of this sample shows that the distribution and the relative amounts of the triterpanes are similar to that of the other three samples. The samples have a pattern commonly found for oils in the Viking Graben area. Although the amounts of tricyclic terpanes are slightly less than expected, C₂₈- and C₂₉-tricyclic terpanes can be detected (Figure 13b). These compounds are often found in small quantities in oils derived from the Upper Jurassic in the North Viking Graben. The T_m/T_s ratio is less than one,

suggesting a marine source rock and/or a fairly high maturity of the hydrocarbons. The calculated ratios (Table 10a) are very similar for all four samples, indicating a common source for the hydrocarbons. Maturity parameters like $(D+F)/(C+E)$ and $J1/(J1+J2)$ suggest a maturity within the oil window (around 0.8 % Ro?).

The M/Z 205, 370 and 384 fragmentograms were used for peak identification and support the above discussion.

Steranes

The M/Z 149 fragmentograms also show the great similarity between the four samples. They also show that C₂₇-diasteranes are prominent in the samples. The M/Z 189 and 259 fragmentograms also show the relative abundance of C₂₇-diasteranes.

The M/Z 217 fragmentograms are also similar for three of the samples and also for the fourth after reprocessing. C₂₇-diasteranes are prominent as are C₂₉-diasteranes. C₂₆-regular steranes are also fairly prominent. This indicates that the hydrocarbons are derived from a well mature, terrestrially influenced marine source rock. The fingerprinting is not different to that expected for hydrocarbons derived from mature Viking Gp. source rocks in the North Viking Graben (Figure 13c). The calculated ratios (Table 10b) are very similar for all four samples, suggesting a common source for the hydrocarbons. The maturity parameters indicate a maturity in the oil window. The M/Z 218 fragmentograms show that C₂₇, C₂₈ and C₂₉ regular steranes are present with C₂₇ and C₂₉ steranes as the most prominent.

The M/Z 231 fragmentograms show that methyl steranes are present in all four samples. The fragmentograms are very similar for all four samples and C₂₈ and C₂₉ methyl sterane

compounds have prominent peaks.

Aromatic Hydrocarbons

Alkyl Benzenes

The M/Z 106 fragmentograms are dominated by two homologous series of compounds, with the first eluting being the most prominent. The maximum peak heights vary in retention times between the two uppermost and the two lowermost samples, but this is probably only a porosity effect. The M/Z 134 fragmentograms show the same variation in the maximum peak heights as the M/Z 106 fragmentograms.

Naphthalenes

The M/Z 142 fragmentograms show the methyl naphthalenes. The 2- and 1-methyl naphthalene peaks are about equally high for all four samples, showing the similar maturity. The M/Z 156 fragmentograms showing the C₂-naphthalenes are also fairly similar as are the M/Z 170 fragmentograms showing the C₃-naphthalenes, again showing the similar maturity of the four samples.

Phenanthrenes

The M/Z 178 fragmentograms show only the phenanthrene peak. The M/Z 192 fragmentograms are grossly similar for all four samples although the 3- and 2-methyl phenanthrene peaks become slightly larger with depth, suggesting a slight downward increase in maturity. The M/Z 206 and 220 fragmentograms are similar for all four samples, indicating a similar maturity for all four samples.

Dibenzothiophenes

The M/Z 198 fragmentograms show that the 1-dibenzothiophene peak is larger than the 2+3-dibenzothiophene peak for the two uppermost samples, but equal for the two lowermost samples. This indicates a slight increase in maturity downwards. The hydrocarbons in the two uppermost samples have a maturity close to, but not past peak oil generation (0.8 % Ro), while the two lowermost samples have maturities at, or slightly past peak oil generation. The M/Z 212 fragmentograms show an increase in the prominence of the early eluting peaks downwards, indicating increasing maturity.

Aromatic Steranes

The M/Z 231 fragmentograms are grossly similar for all four samples, but there are differences. The largest difference is in the relative peak heights of the early eluting peaks (a_1 and b_1). This could indicate a slight difference in maturity between the two uppermost and the two lowermost samples. Some of the same difference is seen in the M/Z 253 fragmentograms. The two uppermost samples have very similar fragmentograms, while the two lowermost samples have larger unidentified peaks. The aromatisation of steranes (Table 10e) indicates a slight difference in maturity between the two uppermost and the two lowermost samples. The two uppermost samples have slightly lower maturities than the two lowermost (higher Ratio 1 and lower Ratio 2).

GC-MS Summary

The four analysed sandstone samples contain hydrocarbons that appear to be derived from a terrestrially affected marine source rock. The source rock is likely to be mature upper Jurassic Viking Gp. claystone (not analysed in this

well). However, aromatic compounds indicate that there is a slight difference in maturity between samples in the upper and lower parts of the Statfjord Fm. This could be explained by the migration taking place in two pulses, both from the same source rock, but at slightly different maturities. It is estimated that the first pulse of migrated hydrocarbons had a maturity close to, but not past peak oil generation (0.8 % Ro), while the second pulse of migrated hydrocarbons had a maturity at or slightly past peak oil generation. Alternatively the hydrocarbons in the lowermost part of the Statfjord Fm. are slightly affected by in-situ generation of hydrocarbons. However, the claystone beds in the Statfjord Fm. do not seem to be good source rocks.

CONCLUSIONS

The following conclusions have been made based on the analyses performed on samples from this well:

Source Rock Potential

None of the analysed sections of this well have any source rock of significance for oil or gas generation. Thin claystone and carbonate sections throughout the post-Triassic sections have at best fair potential for mainly gas generation. The Upper Jurassic is not present in this well.

Generation and Migration

No generation is thought to have taken place in this well as no significant source rocks were encountered.

Abundant migrated hydrocarbons are present in the well, mainly as oil in the Statfjord Fm., but also in the very uppermost part of the Lunde Fm. and possibly also in the Amundsen Fm. although positive evidence is not conclusive in the latter. An oil zone appears to be present from about 2520 m (in the Statfjord Fm.) to about 2605 m (in the Lunde Fm.). This oil zone appears to be divided by several "tight" zones and/or gas zones. This is based on the variation in the composition of hydrocarbons within the oil column, with the hydrocarbons in the "tight" zones having much lower average molecular weight than outside these zones.

There also appear to be minor amounts of migrated hydrocarbons in the claystones of the Tertiary and Cretaceous

sections. These hydrocarbons are probably derived from the same source as those in the major oil zone and may be derived from this zone, although positive evidence for this is lacking.

Maturity

Reliable estimates for the rock-maturity in this well can not be made. This is primarily due to the lack of a good quality kerogen and phytoclasts. Hence no good Tmax, spore colour or vitrinite data could be obtained. Chemical maturity parameters are strongly affected and show only the maturity of the migrated hydrocarbons. In addition to the lack of phytoclasts, the vitrinite measurements have been strongly affected by the presence of migrated hydrocarbons making maturity estimates even more difficult. Based on scarce spore colour data, the well could possibly be close to the top of the oil window towards the base of the Dunlin Gp. at about 2500 m. However, this information is not confirmed by other measurements and must be treated with caution.

Correlation

All the analysed migrated hydrocarbons appear to be derived from the same source rock, probably mature Upper Jurassic Viking Group source rocks. The maturity seems to be somewhat variable and it is suggested that the migrated hydrocarbons were emplaced in two pulses, one of a maturity slightly pre-peak oil (0.8 % Ro) (in the upper part of the Statfjord Fm.), the other with a maturity at or slightly past peak oil maturity (in the lower part of the Statfjord Fm. and in the Lunde Fm.).

Figure 1

Client: GEOLAB NOR

TOC Data for Well NOCS 34/7-6

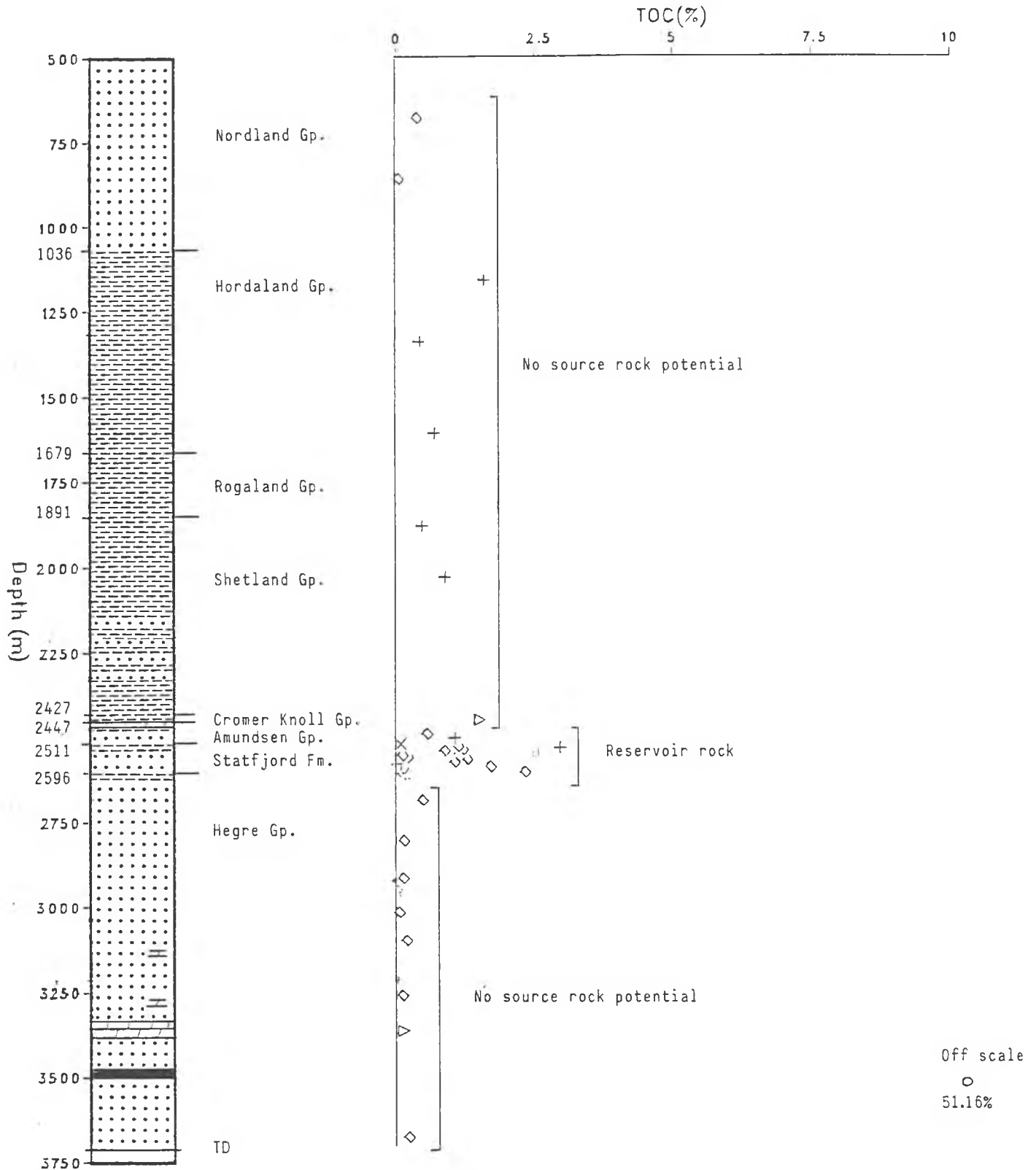


Figure 2

Production Index Data for Well NOCS 34/7-6

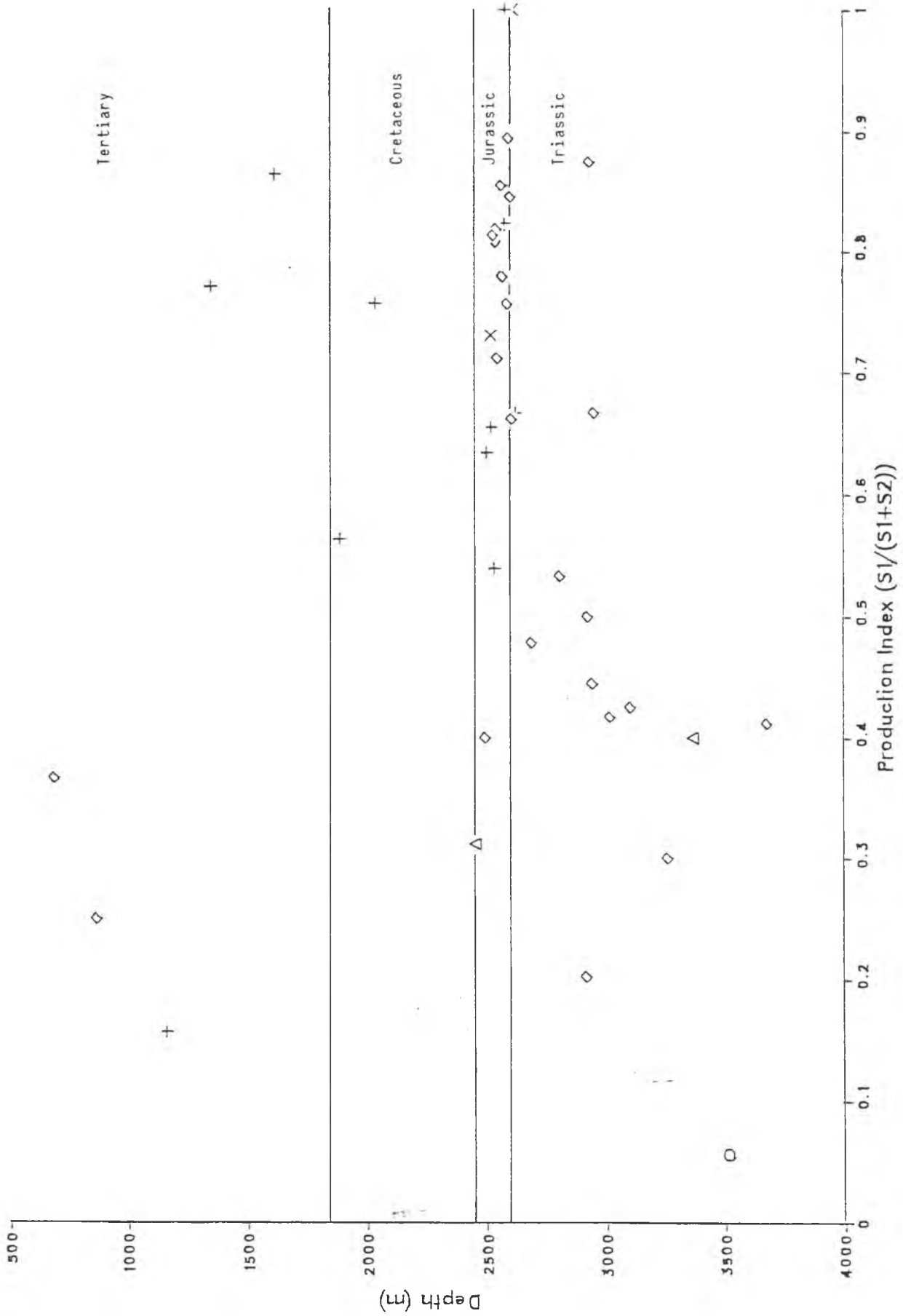


Figure 3

Client: GEOLAB NOR

Tmax Data for Well NOCS 34/7-6

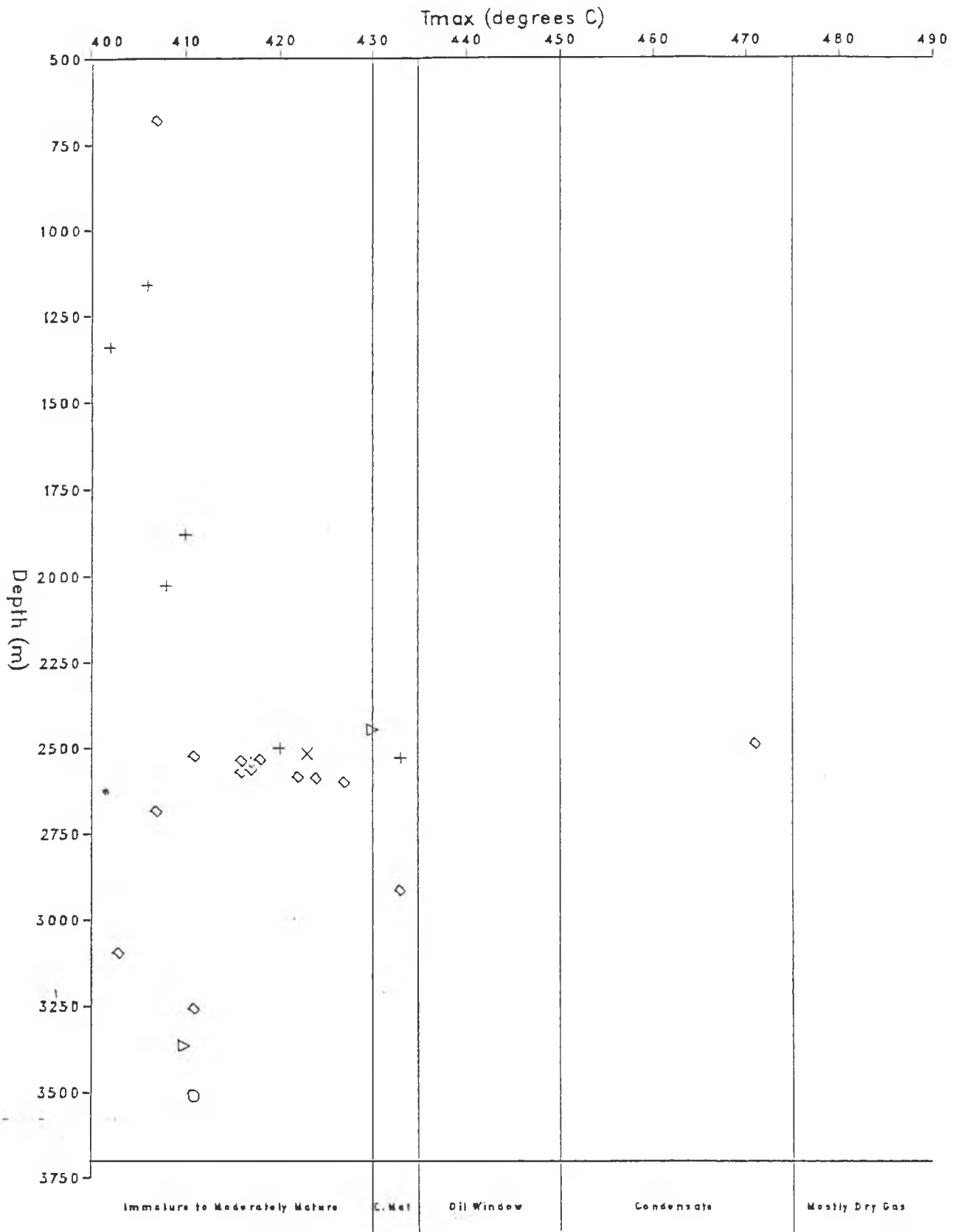
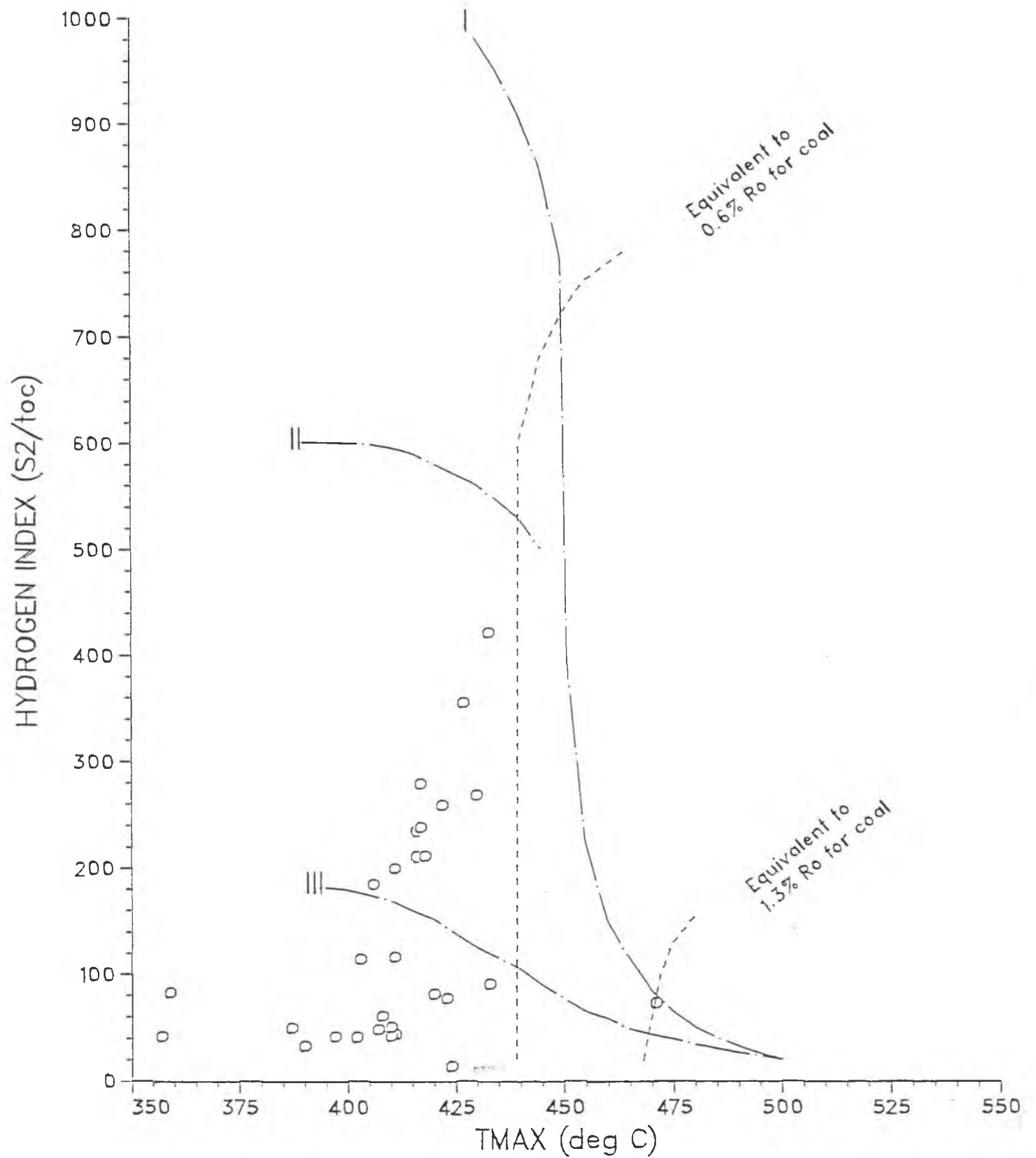
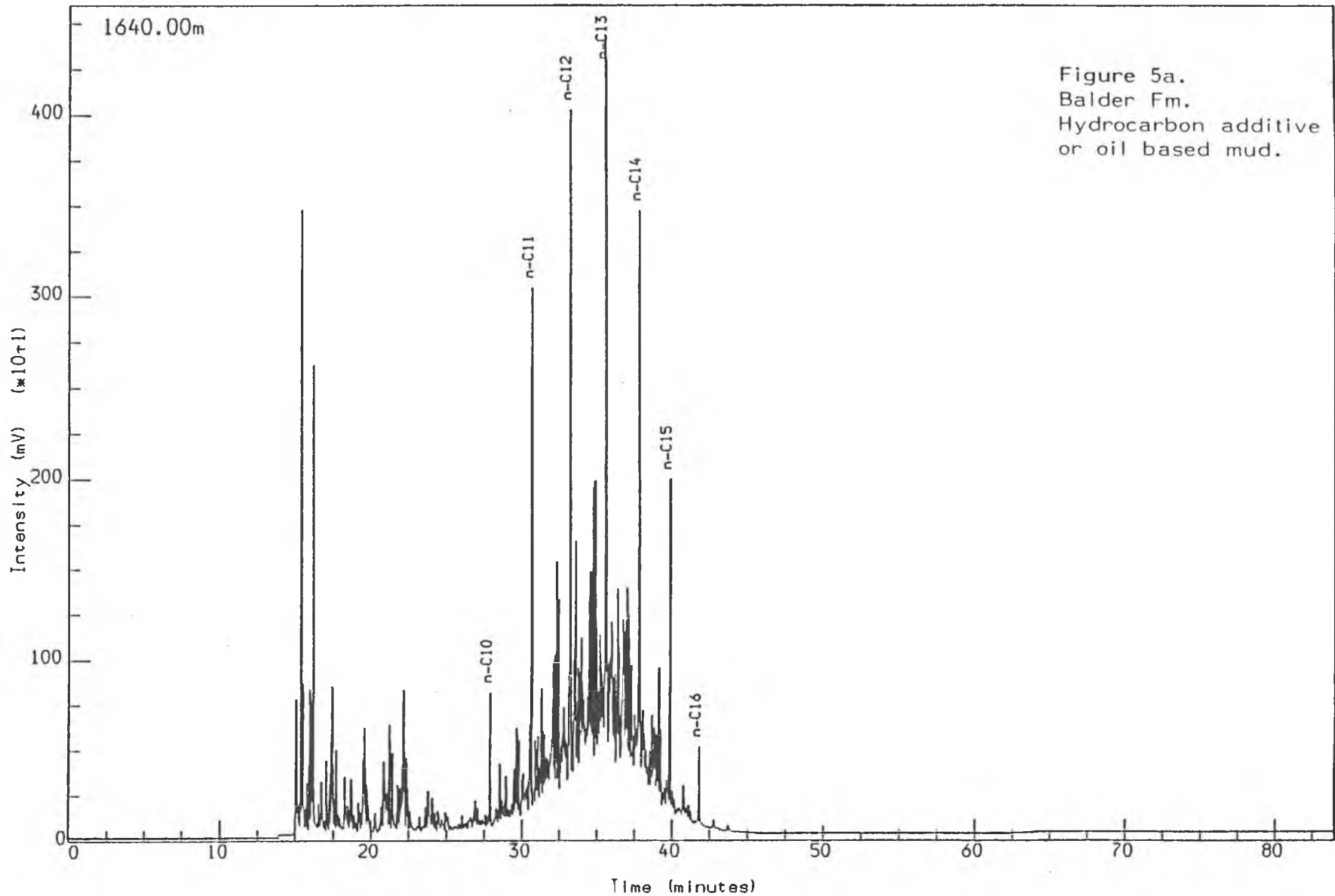


Figure 4 : Hydrogen Index v.s. Tmax values
Well NOCS 34/7-6



Analysis Name : [P2408] 26 PE7201221,1,1.

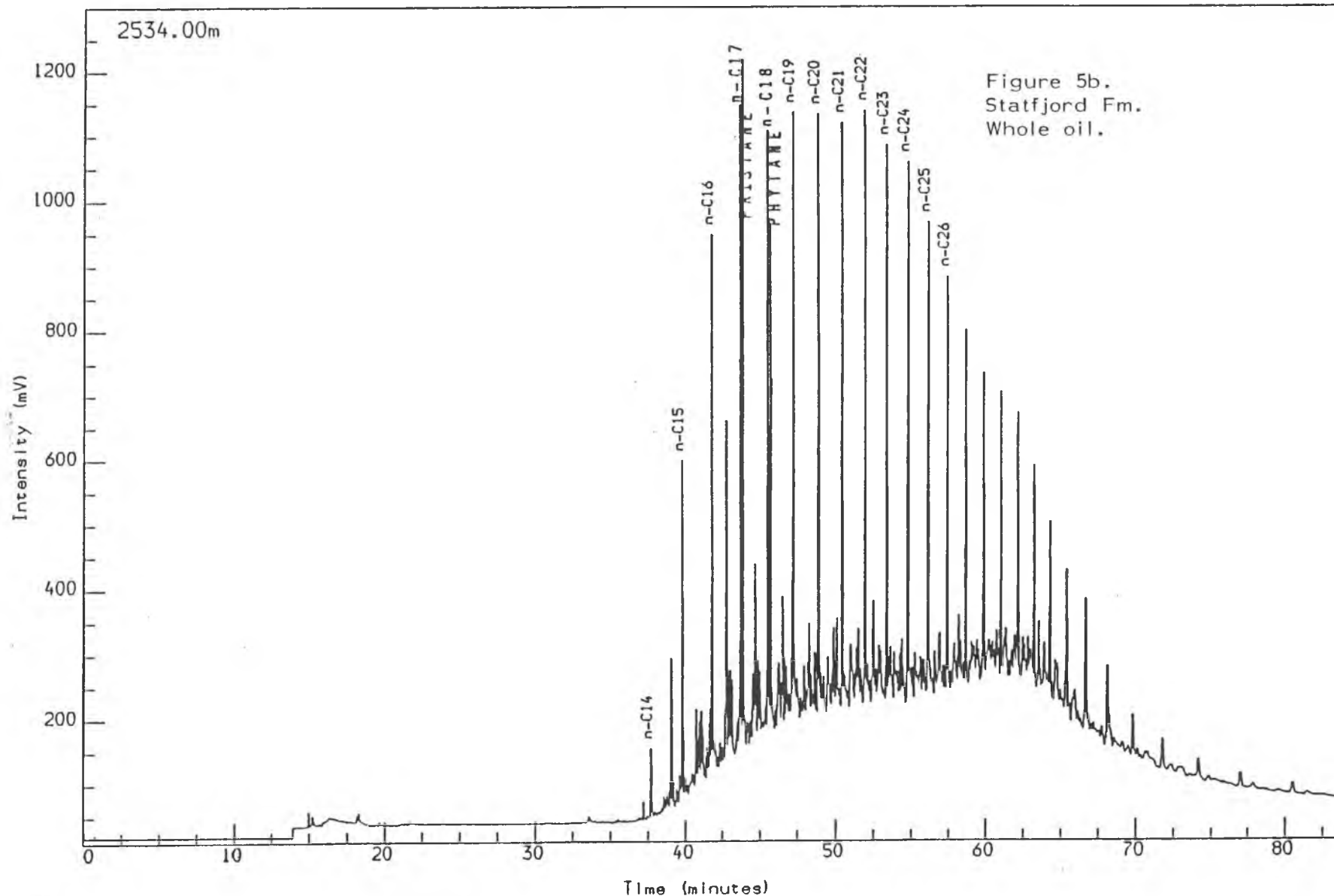
Multichrom



WELL NOCS 34/7-6 1640m
THERMAL EXTRACTION GC (S1)
SH/CLST:lt brn gy to lt ol gy to
brn gy

Reported on 8-MAR-1991 at 13:13

GEOLAB  NOR

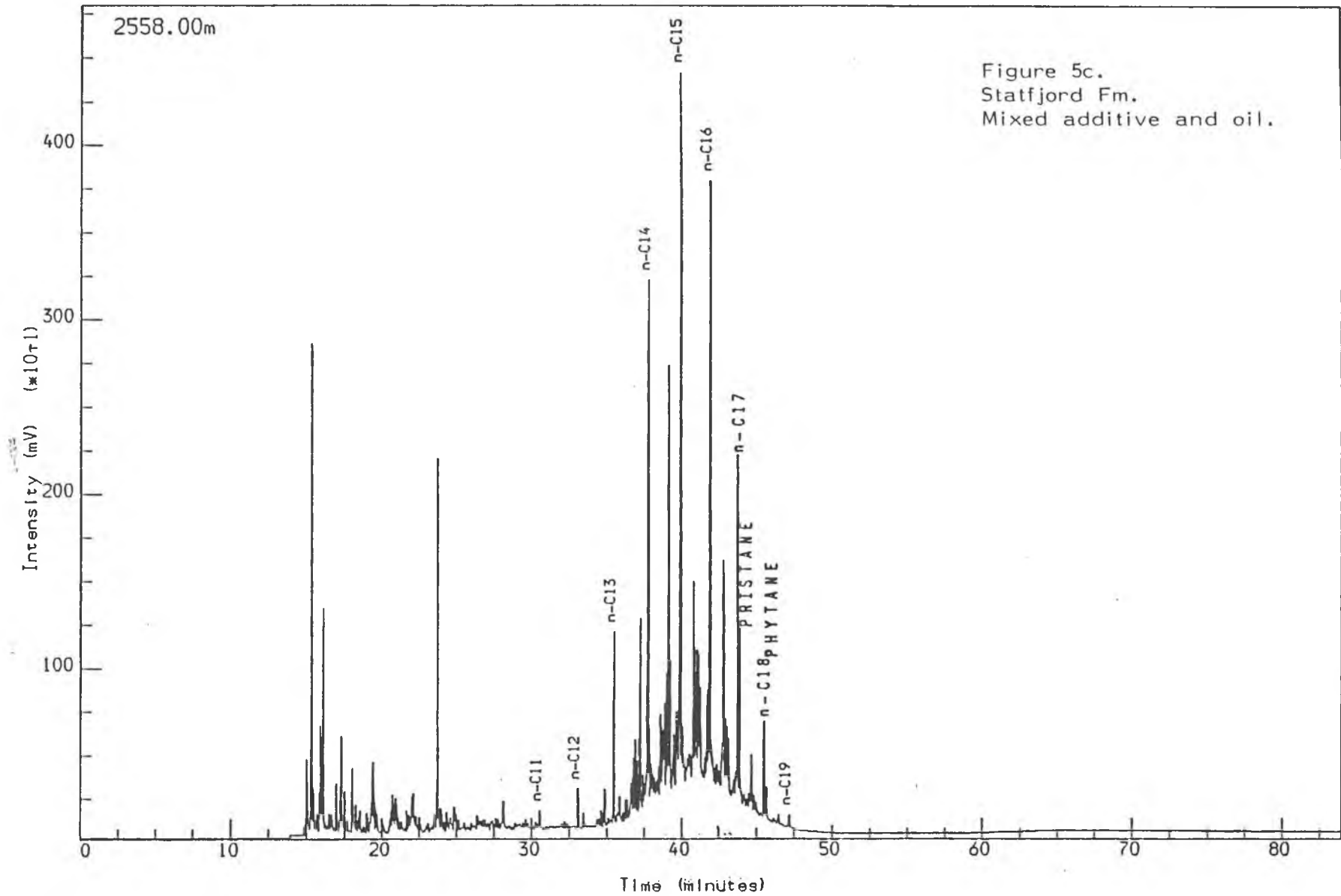


WELL NOCS 34/7-6 2534.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: w to lt gy to m y brn

Reported on 8-MAR-1991 at 14:01

Analysis Name : [P2408] 26 PE72B,5,1.

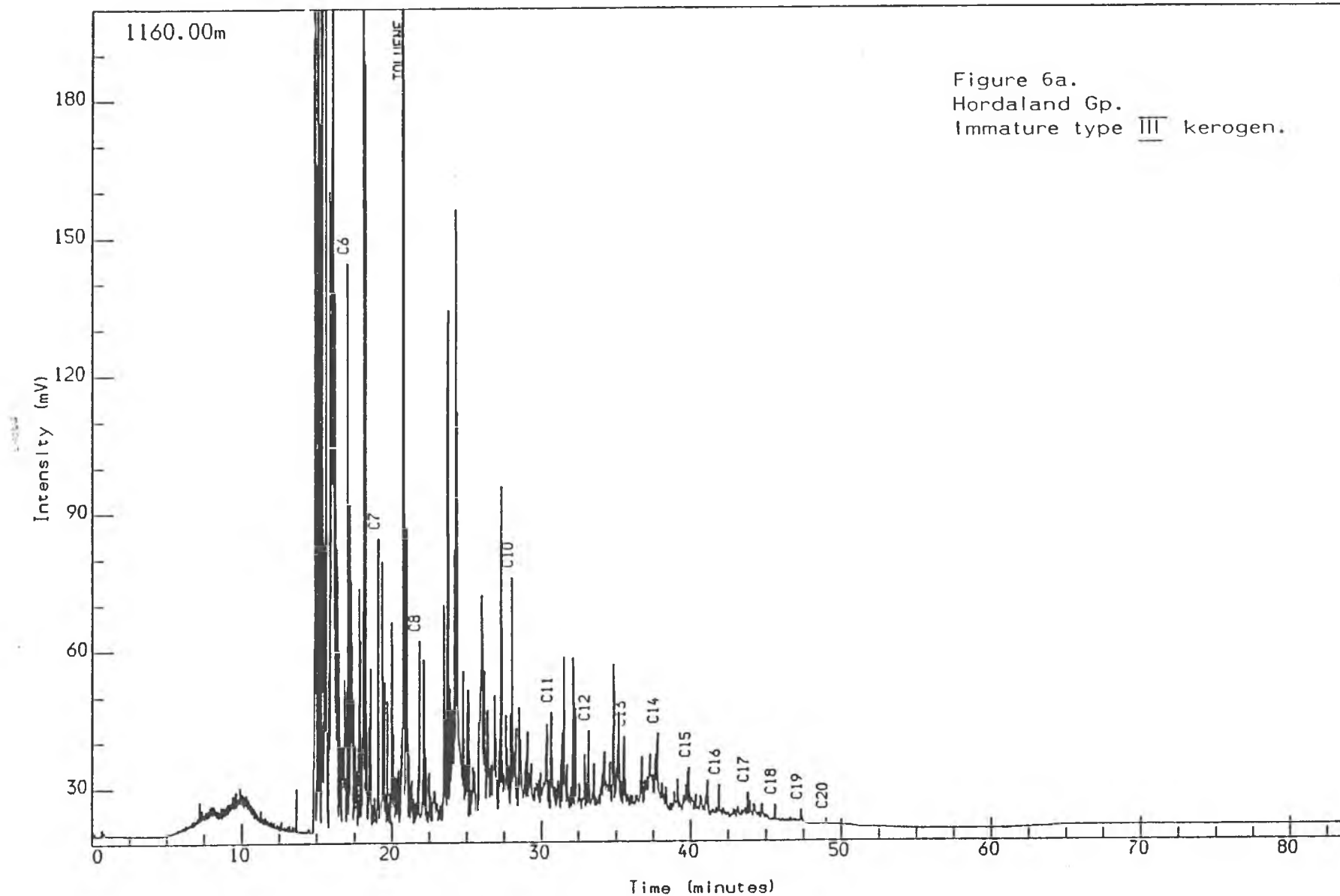
Multichrom



WELL NOCS 34/7-6 2558.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: pl pu to lt pu

Reported on 8-MAR-1991 at 14:03

GEOLAB NOR



WELL NOCS 34/7-6
PYROLYSIS GC (S2)
Sh/Clst: y gy to lt y brn

1160.00m cut

Reported on 8-MAR-1991 at 12:09

Analysis Name : [P2408] 25 PE72B,2,1.

Multichrom

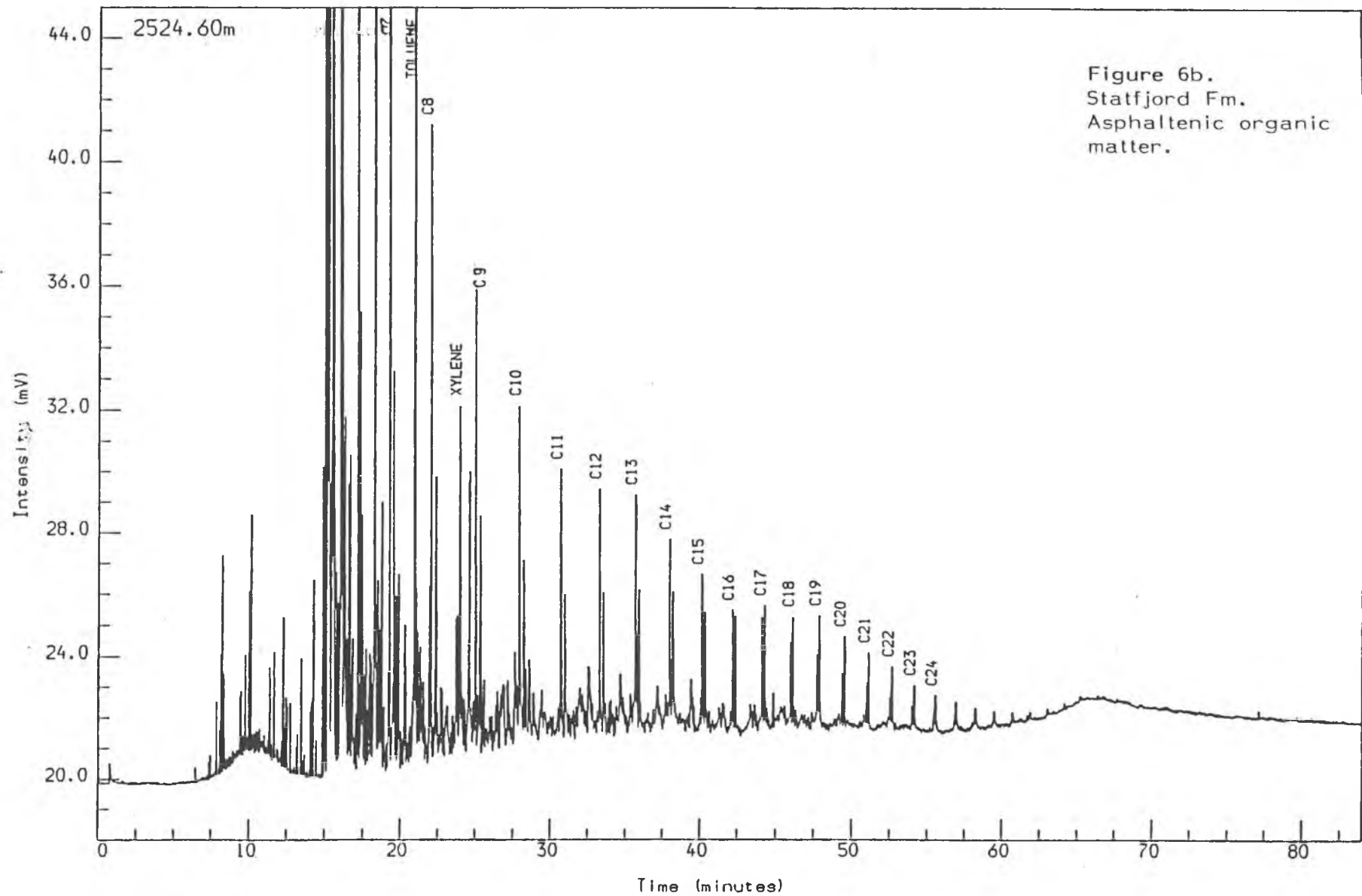
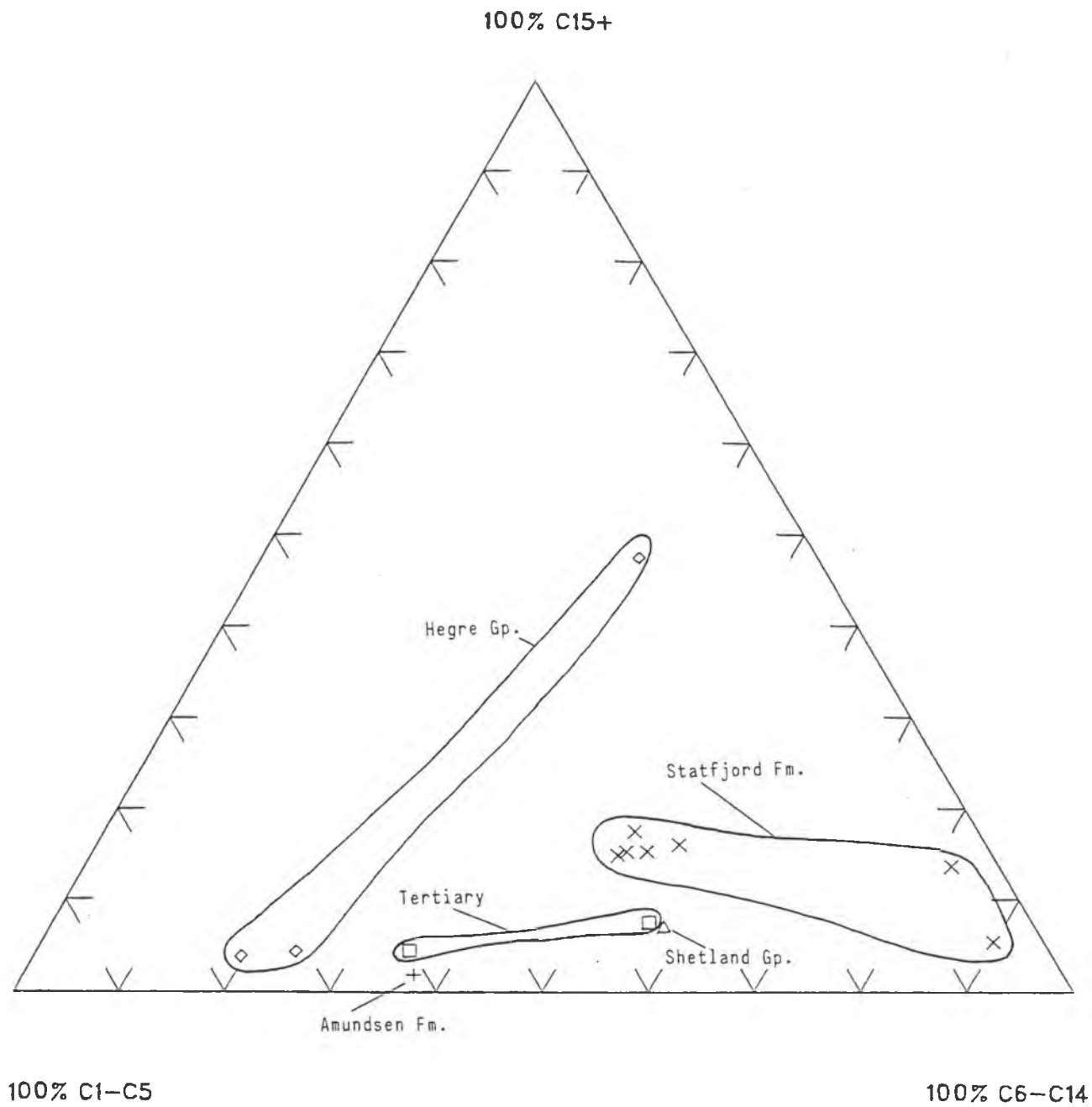


Figure 6b.
Statfjord Fm.
Asphaltenic organic
matter.

WELL NOCS 34/7-6 2524.60m ccp
PYROLYSIS GC (S2)
S/Sst: w to lt gy to m gy to pl y br

Reported on 8-MAR-1991 at 12:14

Figure 7 : Pyrolysis GC Composition
Well NOCS 34/7-6



Analysis Name : [P2408] 11 SE7200051L,1,1.

Multichrom

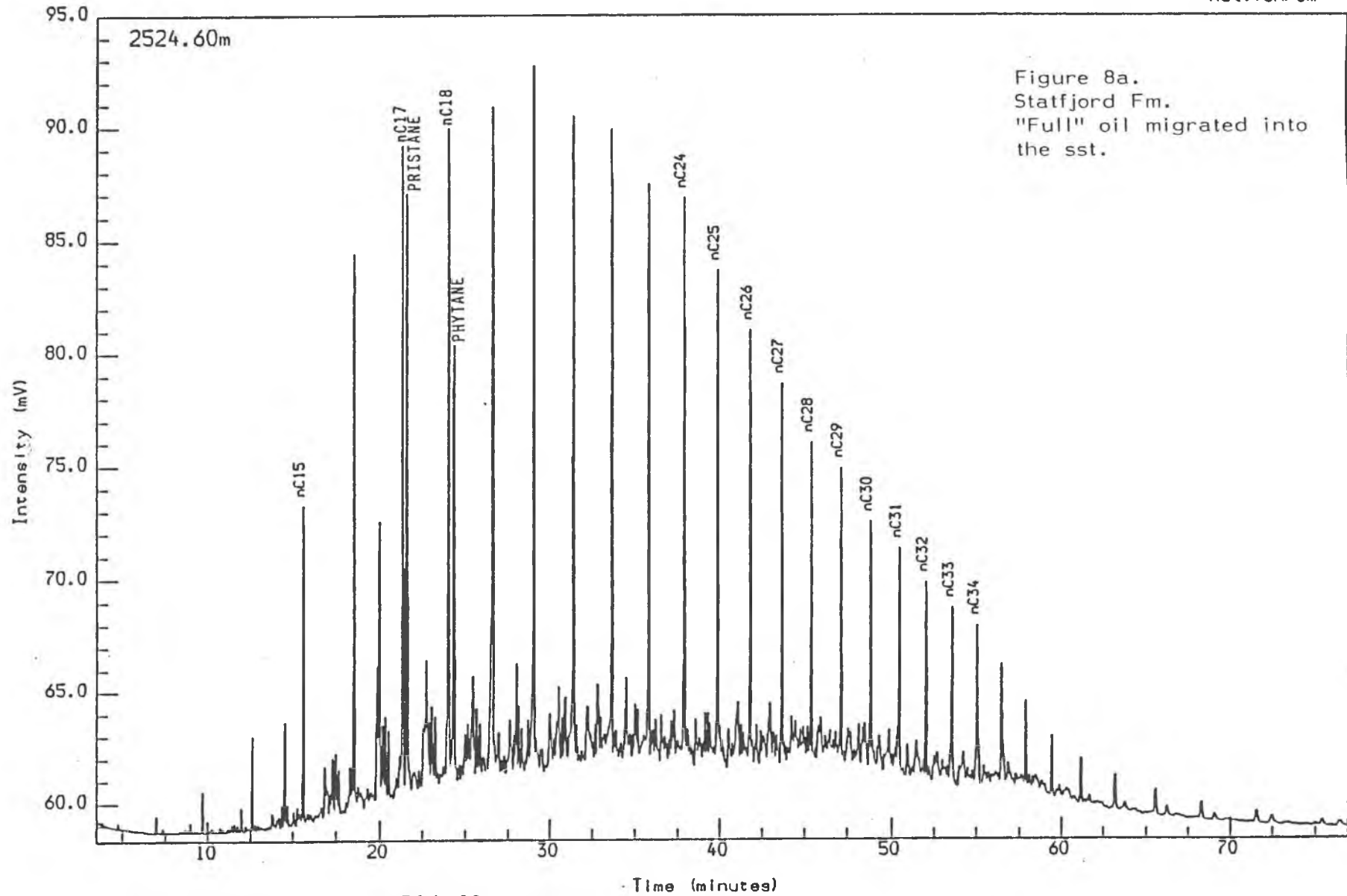


Figure 8a.
Statfjord Fm.
"Full" oil migrated into
the sst.

WELL NOCS 34/7-6 2524.60m ccp
SATURATED GC
S/Sst: w to lt gy to m gy to pl y brn

Reported on 20-MAR-1991 at 09:58

GEOLAB  NOR

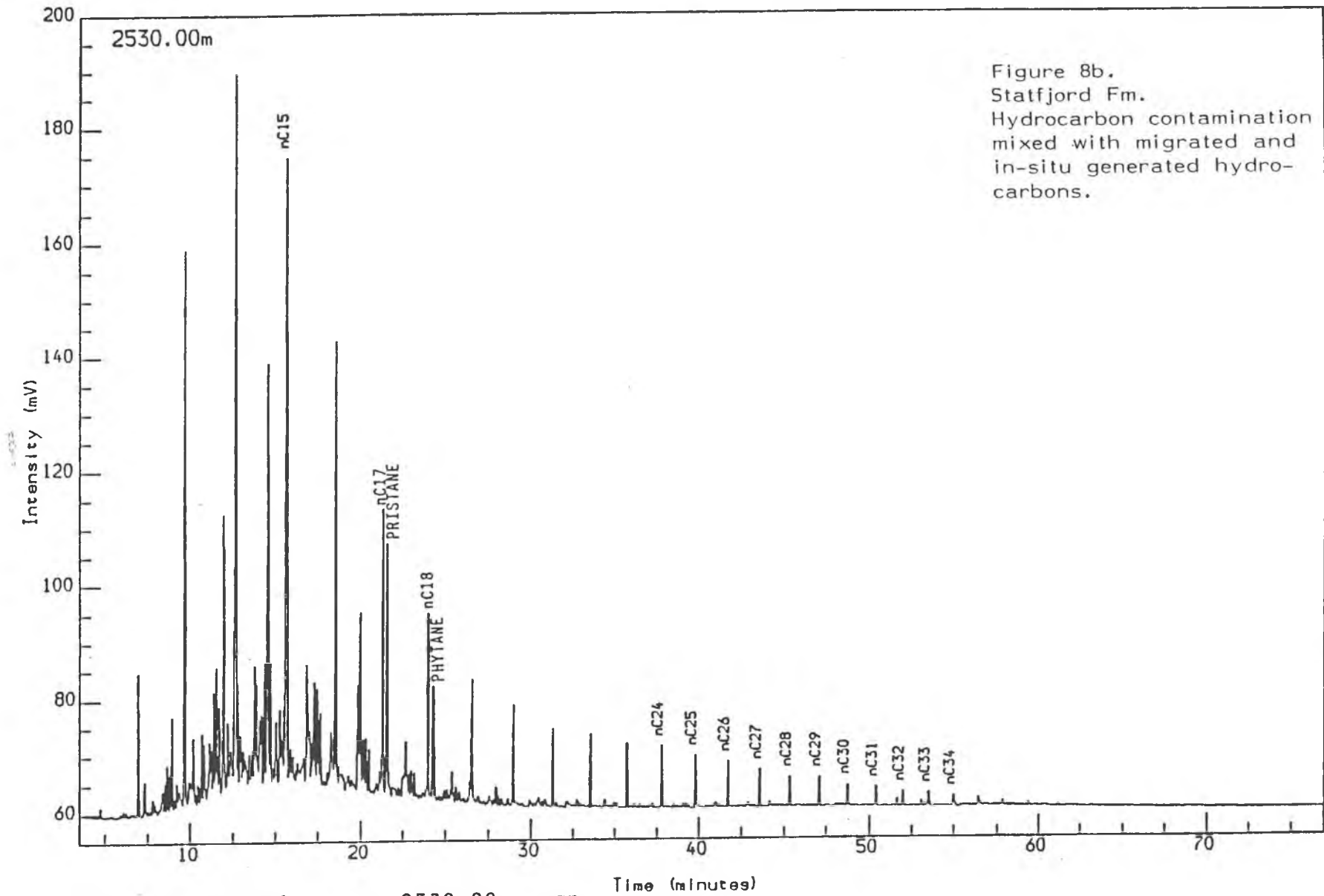


Figure 8b.
Statfjord Fm.
Hydrocarbon contamination
mixed with migrated and
in-situ generated hydro-
carbons.

WELL NOCS 34/7-6
SATURATED GC
Sh/Clst: m gy to drk gy

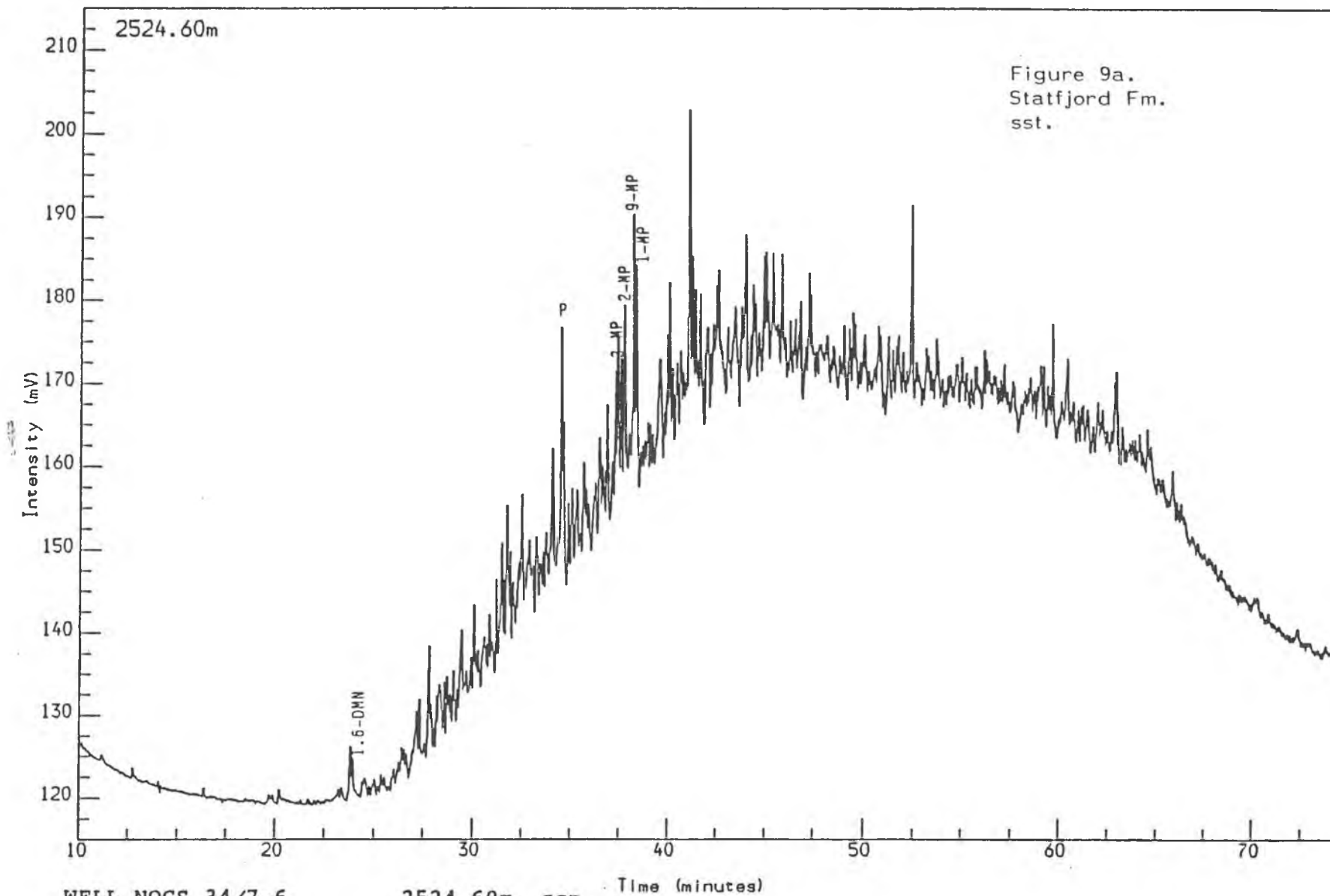
2530.00m ccp

Time (minutes)

Reported on 20-MAR-1991 at 09:59

Analysis Name : [P2408] 29 AE7200051L,1,1.

Multichrom



WELL NOCS 34/7-6 2524.60m ccp
AROMATIC GC (FID)
S/Sst: w to lt gy to m gy to pl y br

Reported on 26-MAR-1991 at 08:24

GEOLAB NOR

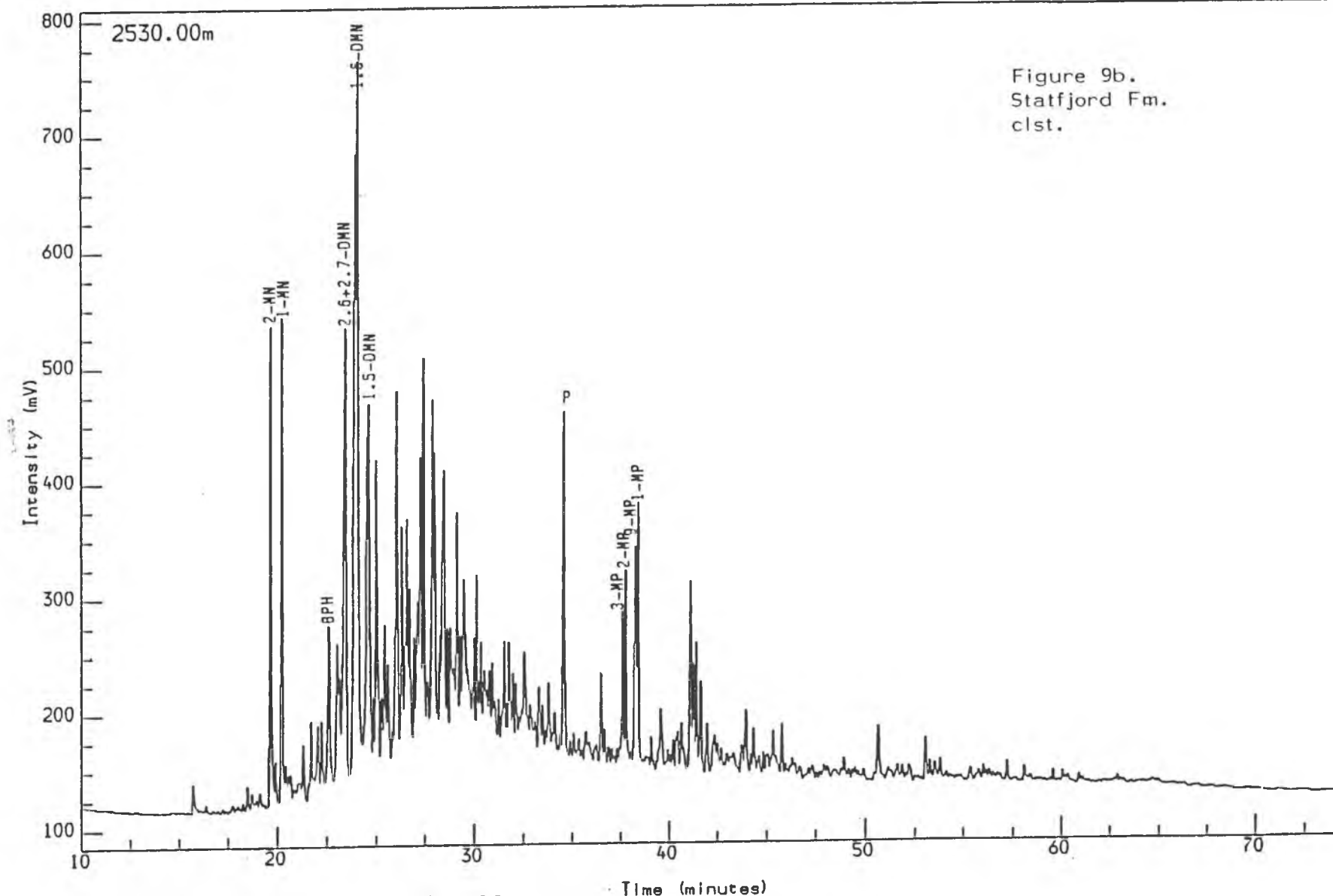


Figure 9b.
Staffjord Fm.
clst.

WELL NOCS 34/7-6
AROMATIC GC (FID)
Sh/Clst: m gy to drk gy

2530.00m ccp

Time (minutes)

Reported on 26-MAR-1991 at 10:20

Figure 10: Vitrinite Reflectance versus Depth
Well NOCS 34/7-6

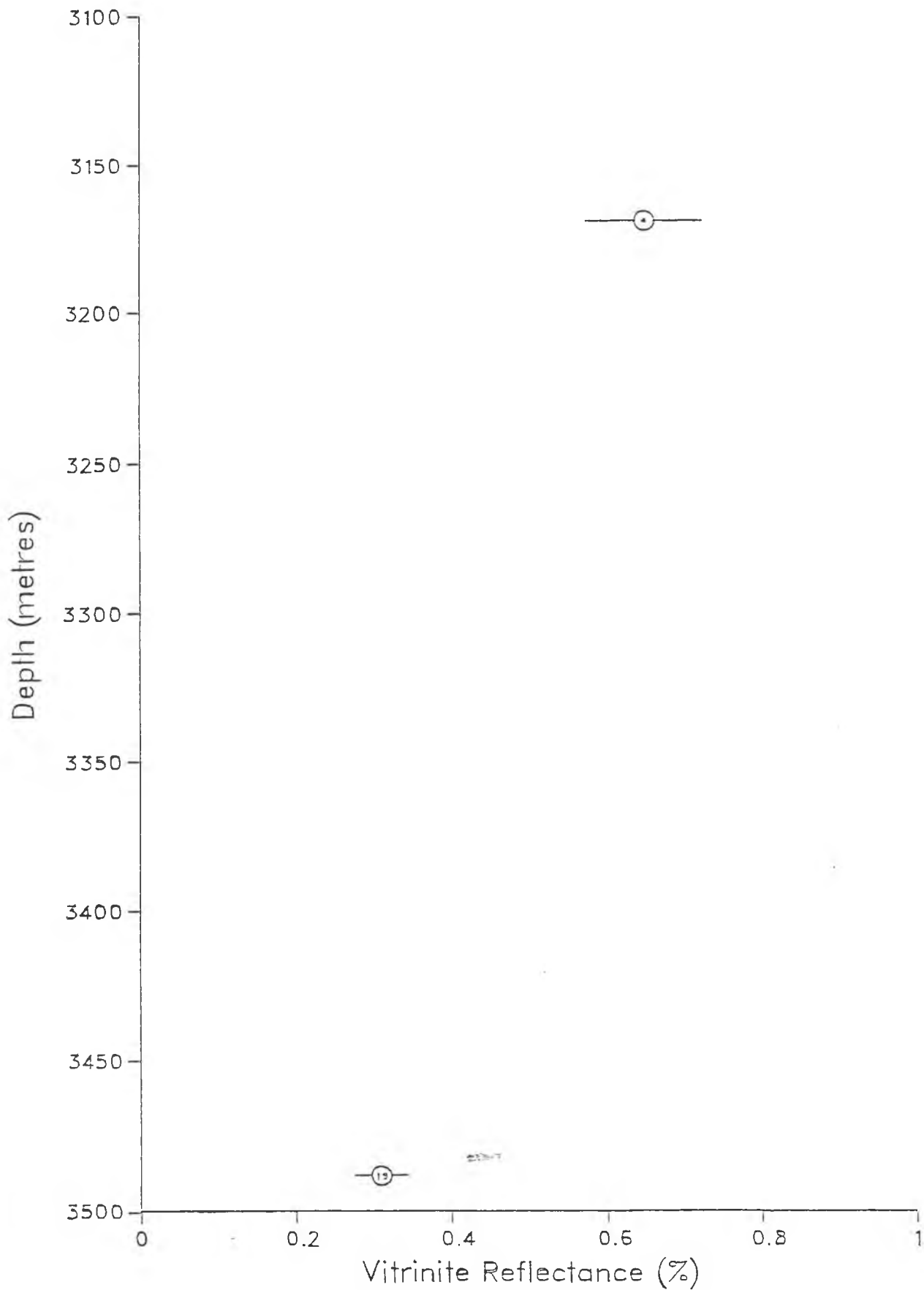


Figure 11: Kerogen Composition and Potential Hydrocarbon Products
Well NOCS 34/7-6

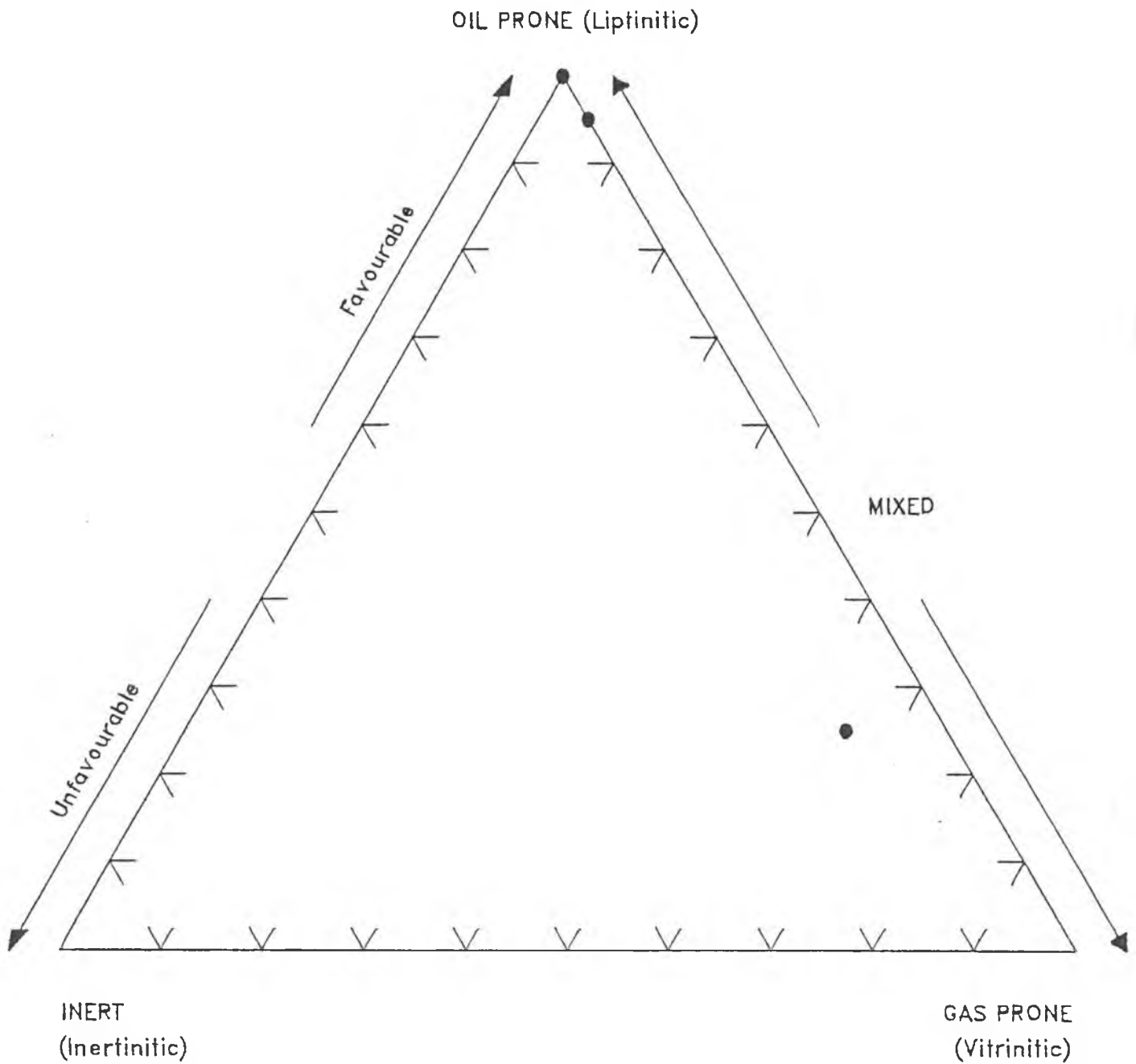


Figure 12a Aromatic v.s. saturate isotope values
Well NOCS 34/7-6

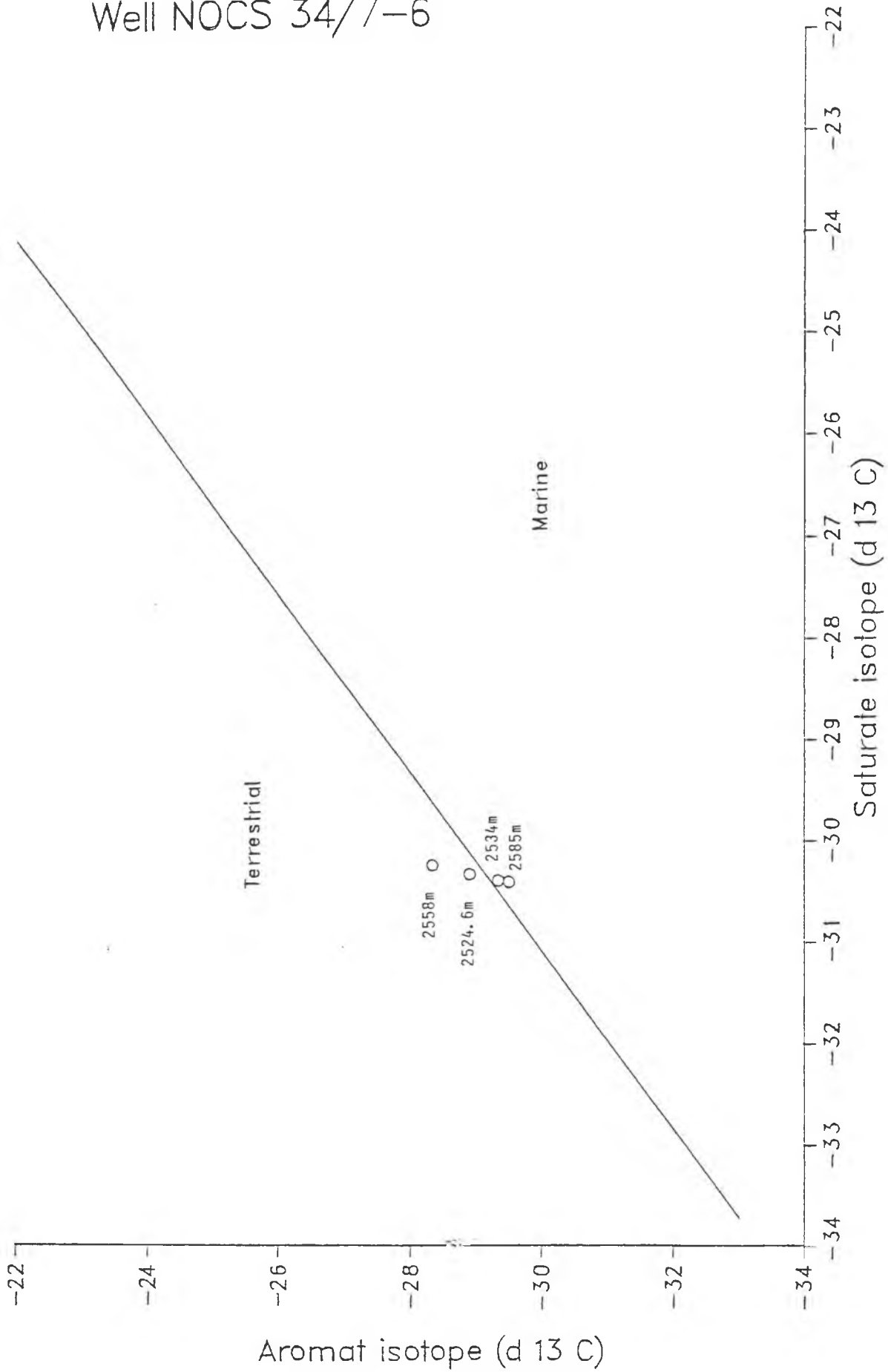
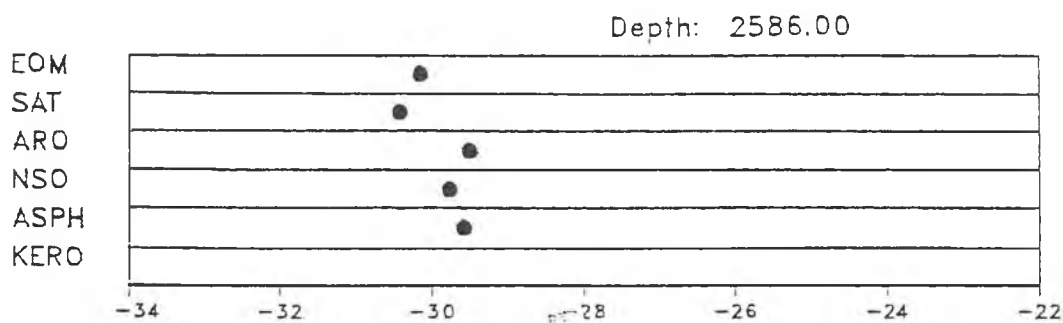
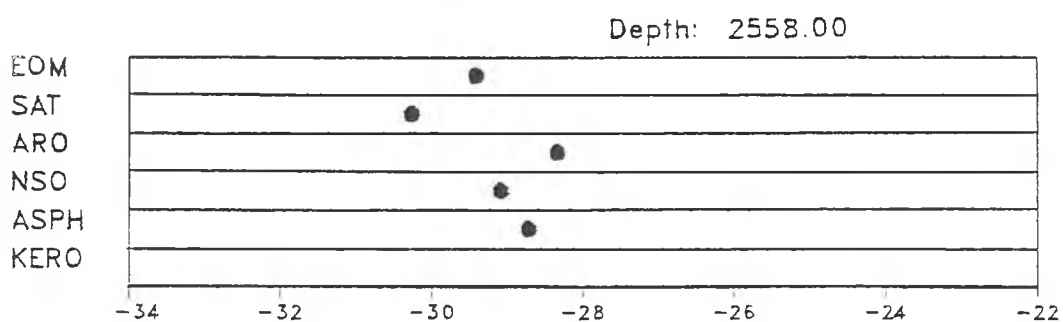
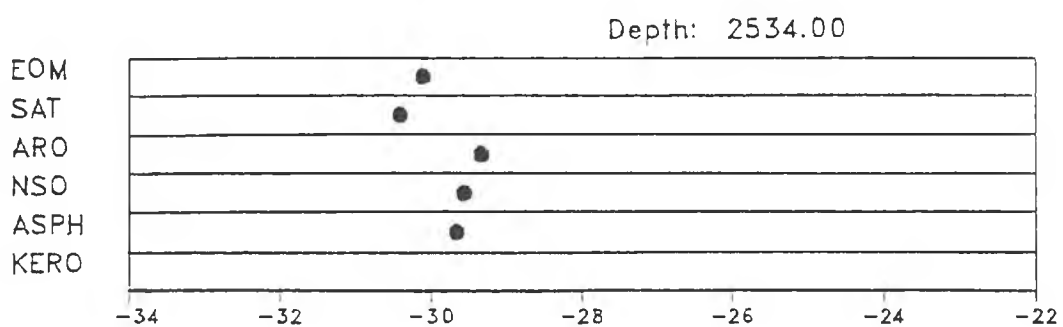
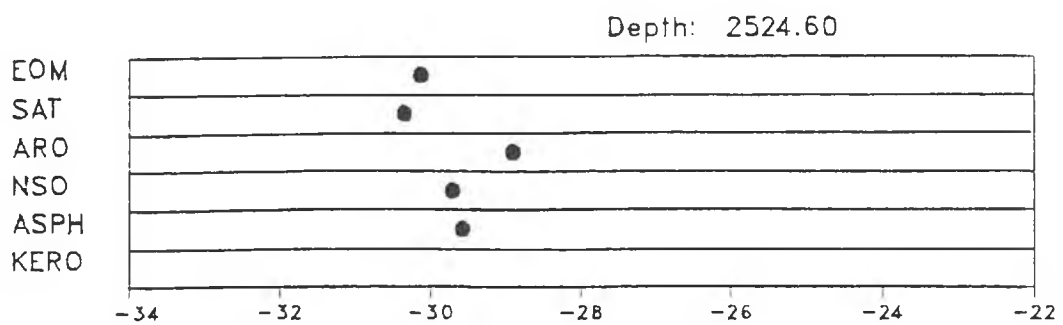
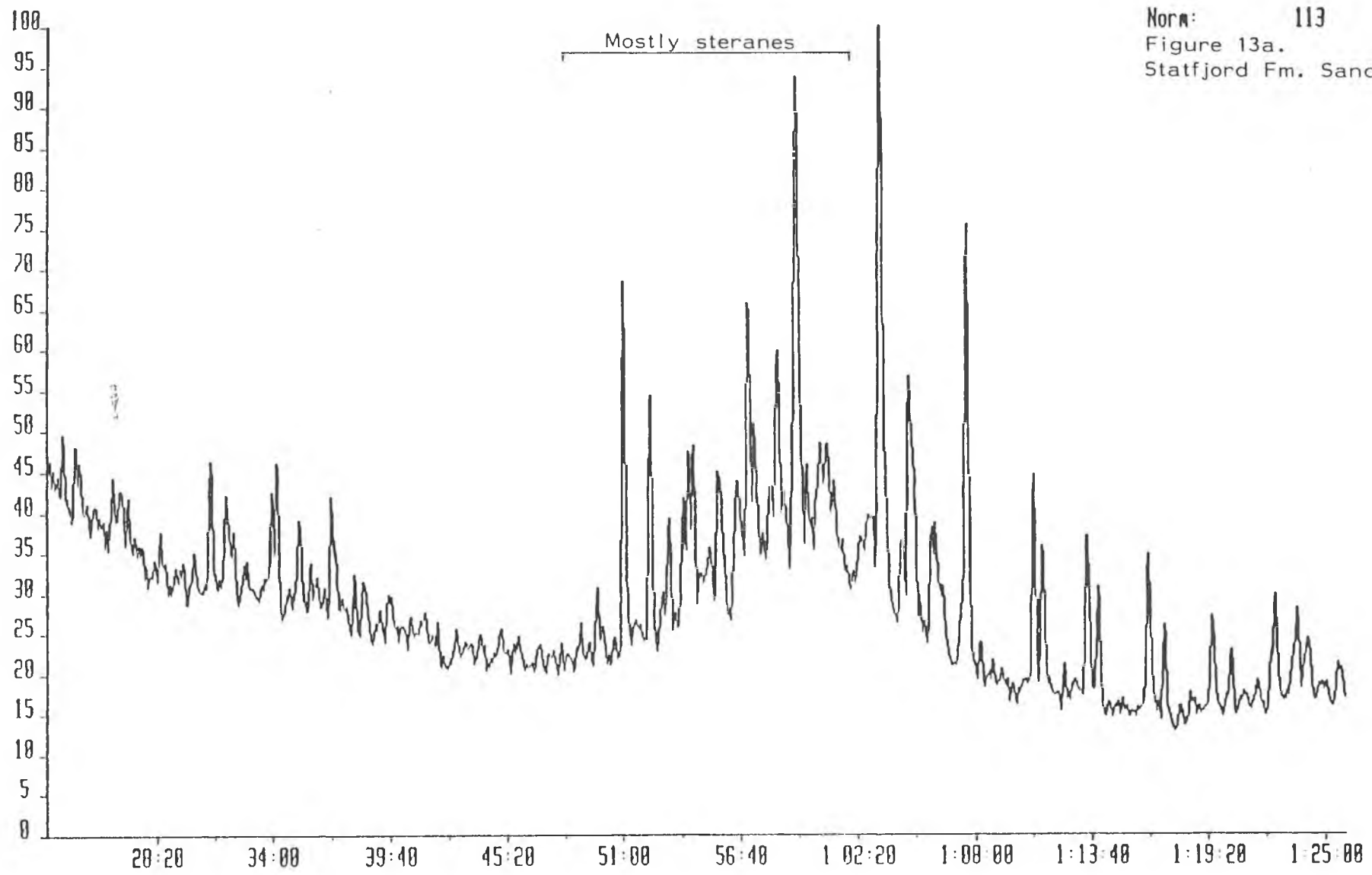


Figure 12b $^{13}\text{C}/^{12}\text{C}$ isotope ratios. Galimov plot.
Well NOCS 34/7-6



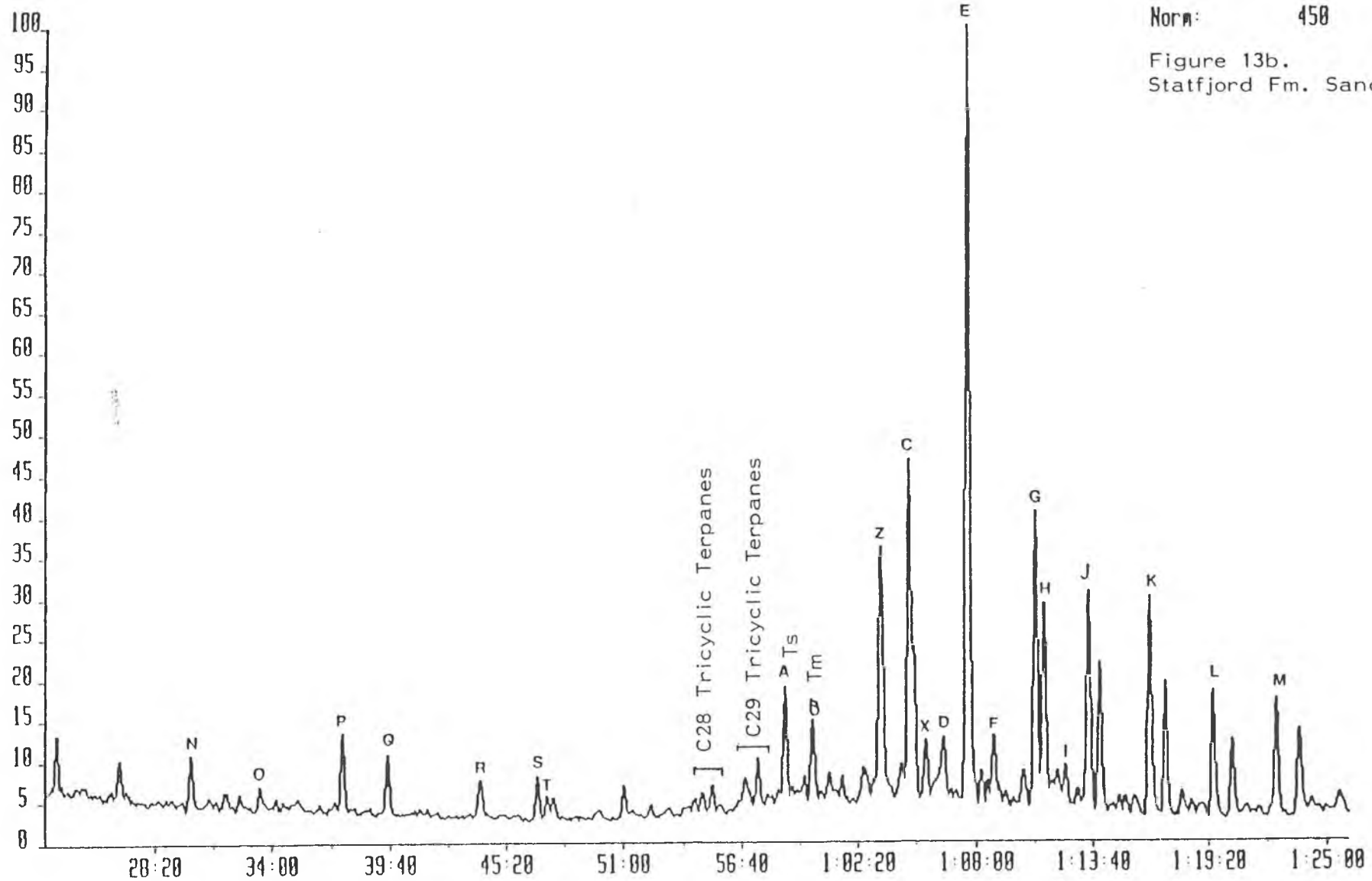
IMPENSAT 18-APR-91 Src:Magnetic TS250 Acnt:GEOLAB System:SAT1
Sample 5 Injection 1 Group 1 Mass 163.1485
Text:WELL 34/7-6, 2534M, SATURATED FRACTION

Norm: 113
Figure 13a.
Statfjord Fm. Sandstone. Oil.



TAMPENSAT 18-APR-91 Sr:Magnetic TS250 Acnt:GEOLAB
Sample 5 Injection 1 Group 1 Mass 191.1800
Text:WELL 34/7-6, 2534M, SATURATED FRACTION

System:SAT1

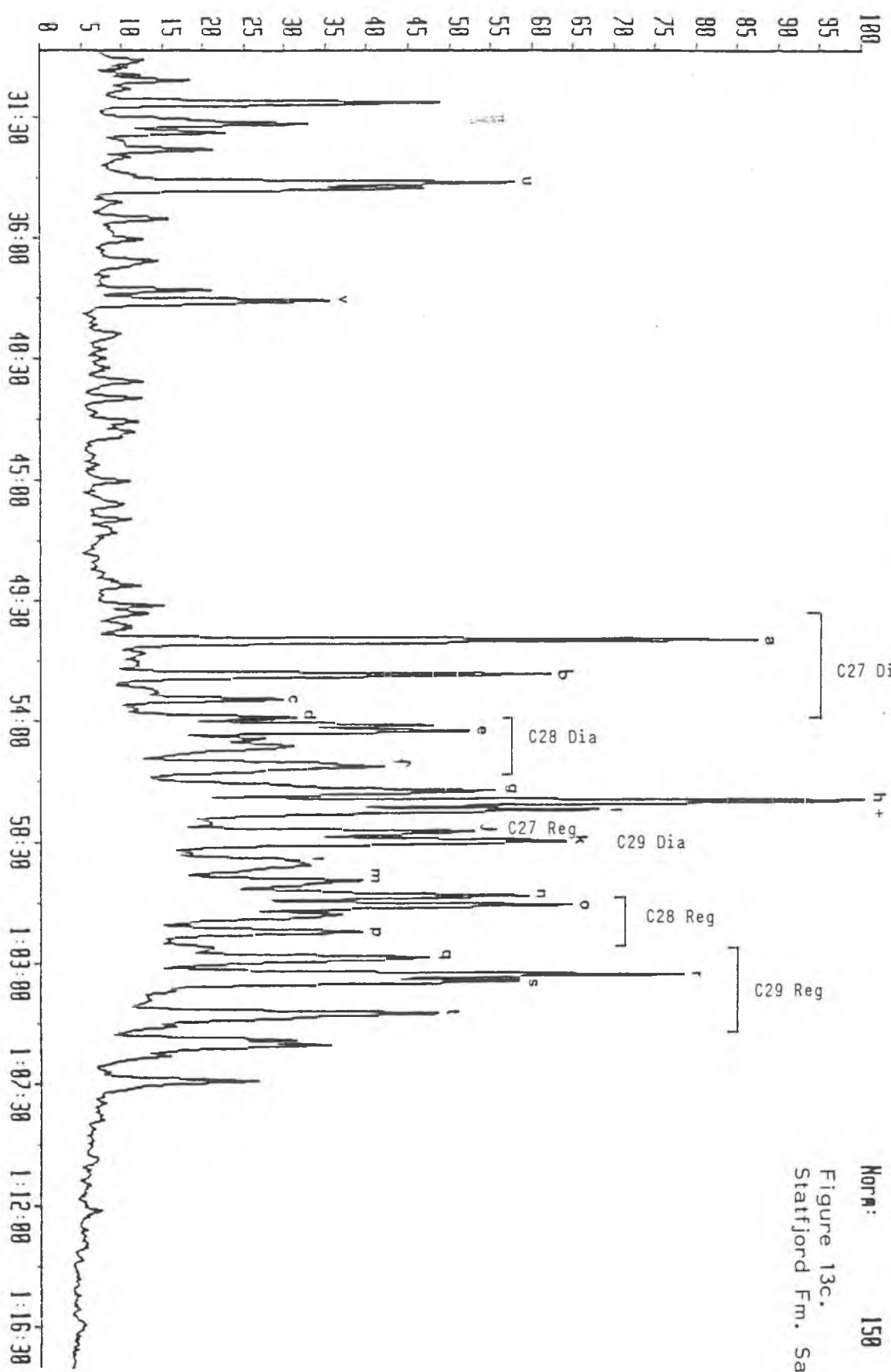


Norm: 450

Figure 13b.
Statfjord Fm. Sandstone. Oil.

TMPENSA1 18-APR-91 Sir:Magnetic T5250 Acnt:GEOLAB
 Sample 4 Injection 1 Group 1 Mass 217.1956
 Text:WELL 34/7-6, 2524.6M, SATURATED FRICTIION

System:SM11



Norm: 150

Figure 13c.
Statford Fm. Sandstone. Oil.

APPENDIX 1

TABLES

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
470.00			Nrld		Pliocene-Miocene	0083	
			90 S/Sst	:	lt gy to lt gn gy, f, carb	0083-1L	
			10 S/Sst	:	w to lt gy, crs, l	0083-2L	
			tr Ca	:	lt or	0083-3L	
			tr Cont	:	prp	0083-4L	
500.00			Nrld		Pliocene-Miocene	0084	
			40 S/Sst	:	lt gy to lt gn gy, f, carb	0084-1L	
			30 S/Sst	:	w to lt gy, crs, l	0084-2L	
			30 Ca	:	lt or, fos	0084-3L	
530.00			Nrld		Pliocene-Miocene	0085	
			50 S/Sst	:	lt gy to lt gn gy, f, carb	0085-1L	
			50 S/Sst	:	w to lt gy, crs, l	0085-2L	
			tr Ca	:	lt or, fos	0085-3L	
560.00			Nrld		Pliocene-Miocene	0086	
			50 S/Sst	:	lt gy to lt gn gy, f, carb	0086-1L	
			35 S/Sst	:	w to lt gy, crs, l	0086-2L	
			10 Cont	:	Coal-ad, prp	0086-3L	
			5 Sh/Clst	:	drk gy to brn blk	0086-4L	
			tr Ca	:	lt or to or gy, fos	0086-5L	
590.00			Nrld		Pliocene-Miocene	0087	
			60 S/Sst	:	lt gy to lt gn gy, f, carb	0087-1L	
			40 S/Sst	:	w to lt gy, crs, l	0087-2L	
			tr Ca	:	lt or to or gy, fos	0087-3L	

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	Lithology description			
620.00			Nrld	Pliocene-Miocene		0088
			60 S/Sst	: lt gy to lt gn gy, f, carb		0088-1L
			40 S/Sst	: w to lt gy, crs, l		0088-2L
			tr Ca	: lt or to or gy, fos		0088-3L
650.00			Nrld	Pliocene-Miocene		0089
			50 S/Sst	: lt gy to lt gn gy, f, carb		0089-1L
			50 S/Sst	: w to lt gy, crs, l		0089-2L
			tr Ca	: lt or to or gy, fos		0089-3L
			tr Cont	: prp, dd		0089-4L
680.00			Nrld	Pliocene-Miocene		0090
	0.39		50 S/Sst	: lt gy to lt gn gy, f, carb		0090-1L
			45 S/Sst	: w to lt gy, crs, l		0090-2L
			5 Ca	: lt or to or gy to drk gy, fos		0090-3L
			tr Cont	: prp, dd		0090-4L
710.00			Nrld	Pliocene-Miocene		0091
			50 S/Sst	: lt gy to lt gn gy, f, carb		0091-1L
			45 S/Sst	: w to lt gy, crs, l		0091-2L
			5 Ca	: lt or to or gy to drk gy, fos		0091-3L
			tr Sh/Clst:	drk gy to brn blk		0091-4L
740.00			Nrld	Pliocene-Miocene		0092
			50 S/Sst	: lt gy to lt gn gy, f, carb		0092-1L
			50 S/Sst	: w to lt gy, crs, l		0092-2L
			tr Ca	: lt or to or gy to drk gy, fos		0092-3L
			tr Cont	: prp, dd		0092-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
770.00			Nrld	Pliocene-Miocene		0093
			50 S/Sst	: lt gy to lt gn gy, f, carb		0093-1L
			50 S/Sst	: w to lt gy, crs, l		0093-2L
			tr Ca	: lt or to or gy to drk gy, fos		0093-3L
			tr Cont	: prp, dd		0093-4L
800.00			Nrld	Pliocene-Miocene		0094
			50 S/Sst	: lt gy to lt gn gy, f, carb		0094-1L
			50 S/Sst	: w to lt gy to m gy, crs, l		0094-2L
			tr Ca	: lt or to or gy to drk gy, fos		0094-3L
			tr Cont	: prp, dd		0094-4L
830.00			Nrld	Pliocene-Miocene		0095
			70 S/Sst	: w to lt gy to drk gy, crs, l, pyr		0095-1L
			30 S/Sst	: lt gy to lt brn gy, f		0095-2L
			tr Ca	: lt or to or gy, fos		0095-3L
860.00			Nrld	Pliocene-Miocene		0096
	0.06		70 S/Sst	: w to lt gy to drk gy, crs, l, pyr		0096-1L
			30 S/Sst	: lt gy to lt brn gy, f		0096-2L
			tr Ca	: lt or to or gy, fos		0096-3L
890.00			Nrld	Pliocene-Miocene		0097
			70 S/Sst	: w to lt gy to drk gy, crs, l, pyr		0097-1L
			30 S/Sst	: lt gy to lt brn gy, f		0097-2L
			tr Ca	: lt or to or gy, fos		0097-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
920.00				Nrld Pliocene-Miocene		0098
				70 S/Sst : w to lt gy to drk gy, crs, l, pyr		0098-1L
				30 S/Sst : lt gy to lt brn gy, f		0098-2L
				tr Ca : lt or to or gy, fos		0098-3L
950.00				Nrld Pliocene-Miocene		0099
				80 S/Sst : w to lt gy to drk gy, crs, l, pyr		0099-1L
				20 S/Sst : lt gy to lt brn gy, f		0099-2L
				tr Ca : lt or to or gy, fos		0099-3L
980.00				Nrld Pliocene-Miocene		0100
				80 S/Sst : w to lt gy to drk gy, crs, l, pyr		0100-1L
				20 S/Sst : lt gy to lt brn gy, f		0100-2L
				tr Ca : lt or to or gy, fos		0100-3L
1010.00				Nrld Pliocene-Miocene		0101
				90 S/Sst : w to lt gy to drk gy, crs, l, pyr		0101-1L
				10 S/Sst : lt gy to lt brn gy, f		0101-2L
				tr Ca : lt or to or gy, fos		0101-3L
1040.00				Nrld Pliocene-Miocene		0102
				90 S/Sst : w to lt gy to drk gy, crs, l, pyr		0102-1L
				5 S/Sst : lt gy to lt brn gy, f		0102-2L
				5 Sh/Clst: drk gn gy, glauc		0102-3L
				tr Ca : lt or to or gy, fos		0102-4L
1070.00				Nrld Utsi Pliocene-Miocene		0103
				50 S/Sst : w to lt gy to drk gy, crs, l, pyr		0103-1L
				45 Sh/Clst: drk gn gy, glauc		0103-2L
				5 S/Sst : lt gy to lt brn gy, f		0103-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1100.00				Hrld Oligocene-Eocene		0104
			100	Sh/Clst: y gy to lt y brn, slt		0104-1L
1130.00				Hrld Oligocene-Eocene		0105
			100	Sh/Clst: y gy to lt y brn, slt		0105-1L
1160.00				Hrld Oligocene-Eocene		0106
	1.60		100	Sh/Clst: y gy to lt y brn, slt		0106-1L
1190.00				Hrld Oligocene-Eocene		0107
			100	Sh/Clst: y gy to lt y brn, slt		0107-1L
1220.00				Hrld Oligocene-Eocene		0108
			100	Sh/Clst: y gy to lt y brn, slt		0108-1L
			tr	Sh/Clst: drk gn gy, glauc		0108-2L
1260.00				Hrld Oligocene-Eocene		0109
			80	Sh/Clst: y gy to lt y brn, slt		0109-1L
			20	S/Sst : w to lt gy to m gy, crs, l		0109-2L
1280.00				Hrld Oligocene-Eocene		0110
			95	Sh/Clst: y gy to lt y brn		0110-1L
			5	S/Sst : w to lt gy to m gy, crs, l		0110-2L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
1310.00			Hrld		Oligocene-Eocene	0111	
		100	Sh/Clst:	y gy to lt y brn to lt brn gy		0111-1L	
			tr S/Sst :	w to lt gy to m gy, crs, l		0111-2L	
			tr Sh/Clst:	drk gn gy, glauc		0111-3L	
			tr Ca :	lt or		0111-4L	
1340.00			Hrld		Oligocene-Eocene	0112	
	0.43	100	Sh/Clst:	lt brn gy to lt ol gy		0112-1L	
			tr S/Sst :	w to lt gy to m gy, crs, l		0112-2L	
			tr Cont :	dd		0112-3L	
1370.00			Hrld		Oligocene-Eocene	0113	
		100	Sh/Clst:	lt brn gy to lt ol gy		0113-1L	
			tr Ca :	lt or to or gy		0113-2L	
			tr Cont :	dd		0113-3L	
1400.00			Hrld		Oligocene-Eocene	0114	
		90	Sh/Clst:	lt brn gy to lt ol gy		0114-1L	
		10	S/Sst :	w to lt gy, crs, l		0114-2L	
			tr Ca :	lt or to or gy		0114-3L	
1430.00			Hrld		Oligocene-Eocene	0115	
		95	Sh/Clst:	lt brn gy to lt ol gy		0115-1L	
		5	S/Sst :	w to lt gy, crs, l		0115-2L	
			tr Ca :	lt or to or gy		0115-3L	
1460.00			Hrld		Oligocene-Eocene	0116	
		100	Sh/Clst:	lt brn gy to lt ol gy to brn gy		0116-1L	
			tr Ca :	lt or to or gy		0116-2L	

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1490.00				Hrld	Oligocene-Eocene	0117
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy tr Ca : lt or to or gy		0117-1L 0117-2L
1520.00				Hrld	Oligocene-Eocene	0118
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy tr Ca : lt or to or gy		0118-1L 0118-2L
1550.00				Hrld	Oligocene-Eocene	0119
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy tr Ca : lt or to or gy tr Cont : prp		0119-1L 0119-2L 0119-3L
1580.00				Hrld	Oligocene-Eocene	0120
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy tr Ca : lt or to or gy tr Cont : prp, Coal-ad		0120-1L 0120-2L 0120-3L
1610.00				Hrld	Oligocene-Eocene	0121
	0.69		100	Sh/Clst: lt brn gy to lt ol gy to brn gy tr Ca : lt or to or gy tr Cont : prp, Coal-ad		0121-1L 0121-2L 0121-3L
1640.00				Hrld	Oligocene-Eocene	0122
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy tr Cont : prp, Coal-ad		0122-1L 0122-2L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1670.00			Hrld	Oligocene-Eocene		0123
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy		0123-1L
				tr Ca : lt or to or gy		0123-2L
				tr Cont : prp		0123-3L
1700.00			Rogl	Bald	Eocene	0124
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy		0124-1L
				tr Ca : lt or to or gy		0124-2L
				tr Cont : prp		0124-3L
1730.00			Rogl	Sele	Paleocene	0125
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy		0125-1L
				tr Ca : lt or to or gy		0125-2L
				tr S/Sst : w to lt gy, crs, hd, pyr		0125-3L
1760.00			Rogl	Sele	Paleocene	0126
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy		0126-1L
				tr Ca : lt or to or gy		0126-2L
1790.00			Rogl	Sele	Paleocene	0127
			100	Sh/Clst: lt brn gy to lt ol gy to brn gy		0127-1L
				tr Ca : lt or to or gy		0127-2L
1820.00			Rogl	Sele	Paleocene	0128
			100	Sh/Clst: lt brn gy to lt ol gy to dsk y gn		0128-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1850.00				Shet Upper Cretaceous		0129
			100	Sh/Clst: lt brn gy to lt ol gy to pl ol tr Ca : w		0129-1L 0129-2L
1880.00				Shet Upper Cretaceous		0130
	0.47		100	Sh/Clst: lt brn gy to lt ol gy to pl ol, glauc tr Ca : w		0130-1L 0130-2L
1910.00				Shet Upper Cretaceous		0131
			100	Sh/Clst: lt brn gy to lt ol gy to pl ol, glauc tr Ca : w to lt or, fos tr Cont : prp		0131-1L 0131-2L 0131-3L
1940.00				Shet Upper Cretaceous		0132
			100	Sh/Clst: lt brn gy to lt ol gy tr S/Sst : w to lt gy, f, l, pyr		0132-1L 0132-2L
1970.00				Shet Upper Cretaceous		0133
			100	Sh/Clst: lt brn gy to lt ol gy tr S/Sst : w to lt gy, f, l, pyr tr Ca : w to lt or		0133-1L 0133-2L 0133-3L
2000.00				Shet Upper Cretaceous		0134
			90	Sh/Clst: lt brn gy to lt ol gy to dsk y gn, glauc		0134-1L
			10	Cont : dd		0134-2L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2030.00			Shet	Upper Cretaceous		0135
	0.88	95	Sh/Clst:	lt brn gy to lt ol gy to dsk y gn, glauc		0135-1L
		5	Cont	: dd		0135-2L
		tr	S/Sst	: w to lt gy, f, l, pyr		0135-3L
2060.00			Shet	Upper Cretaceous		0136
		95	Sh/Clst:	lt brn gy to lt ol gy		0136-1L
		5	Cont	: dd		0136-2L
		tr	S/Sst	: w to lt gy, f, l, pyr		0136-3L
2090.00			Shet	Upper Cretaceous		0137
		95	Sh/Clst:	lt brn gy to lt ol gy to gy red		0137-1L
		5	Cont	: dd, prp		0137-2L
2120.00			Shet	Upper Cretaceous		0138
		75	Sh/Clst:	lt brn gy to lt ol gy		0138-1L
		25	Cont	: dd, prp		0138-2L
2150.00			Shet	Upper Cretaceous		0139
		60	S/Sst	: w to lt gy, f, l, pyr		0139-1L
		35	Sh/Clst:	lt gy to m gy		0139-2L
		5	Cont	: dd		0139-3L
2210.00			Shet	Upper Cretaceous		0140
		50	S/Sst	: w to lt gy to gy pi, f, l, pyr		0140-1L
		35	Sh/Clst:	lt gy to m gy		0140-2L
		15	Cont	: dd		0140-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2240.00				Shet Upper Cretaceous		0141
				45 Sh/Clst: lt gy to m gy to gy red, carb		0141-1L
				35 Cont : dd		0141-2L
				20 S/Sst : w to lt gy to gy pi, f, l		0141-3L
2270.00				Shet Upper Cretaceous		0142
				45 Cont : dd		0142-1L
				30 S/Sst : w to lt gy to gy pi, f, l		0142-2L
				25 Sh/Clst: lt gy to m gy		0142-3L
2300.00				Shet Upper Cretaceous		0143
				60 Cont : dd, prp		0143-1L
				40 Sh/Clst: lt gy to m gy		0143-2L
2330.00				Shet Upper Cretaceous		0144
				60 Cont : dd, prp		0144-1L
				30 Sh/Clst: lt gy to m gy		0144-2L
				10 S/Sst : w to lt gy, f		0144-3L
2360.00				Shet Upper Cretaceous		0145
				60 Cont : dd, prp		0145-1L
				40 Sh/Clst: lt gy to m gy		0145-2L
				tr S/Sst : w to lt gy, f		0145-3L
2390.00				Shet Upper Cretaceous		0146
				60 Cont : dd, prp		0146-1L
				40 Sh/Clst: lt gy to m gy		0146-2L
				tr S/Sst : w to lt gy, f		0146-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2420.00			Shet	Upper Cretaceous		0147
			50	Sh/Clst: lt gy to m gy		0147-1L
			45	Cont : dd, prp		0147-2L
			5	S/Sst : w to lt gy, f, l		0147-3L
2438.00			Crom	Lower Cretaceous		0148
			95	Sh/Clst: lt gy to m gy		0148-1L
			5	Cont : dd, prp		0148-2L
			tr	S/Sst : w to lt gy, f, l		0148-3L
2441.00			Crom	Lower Cretaceous		0149
			75	Sh/Clst: lt gy to m gy		0149-1L
			25	Cont : dd, prp		0149-2L
			tr	S/Sst : w to lt gy, f, l		0149-3L
2447.00			Dunl Amun	Lower Jurassic		0150
	1.51		80	Ca : lt or to lt brn to m brn, slt		0150-1L
			15	Sh/Clst: lt gy to m gy		0150-2L
			5	Cont : prp, dd		0150-3L
			tr	S/Sst : w to lt gy to lt brn, f, l		0150-4L
2453.00			Dunl Amun	Lower Jurassic		0151
			40	Ca : lt or to lt brn to m brn, slt		0151-1L
			30	Sh/Clst: lt gy to m gy		0151-2L
			30	S/Sst : w to lt gy to lt brn, f, crs, l		0151-3L
			tr	Cont : prp, dd		0151-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2462.00				Dunl Amun Lower Jurassic		0152
			40	Ca : lt or to lt brn to m brn		0152-1L
			40	Sh/Clst: lt gy to m gy, carb		0152-2L
			15	Cont : prp, dd		0152-3L
			5	S/Sst : w to lt gy, f, crs, l		0152-4L
2465.00				Dunl Amun Lower Jurassic		0153
			50	Sh/Clst: lt gy to m gy, carb		0153-1L
			40	Ca : lt or to lt brn to m brn		0153-2L
			10	S/Sst : w to lt gy, f, l, pyr		0153-3L
			tr	Cont : prp		0153-4L
2471.00				Dunl Amun Lower Jurassic		0154
			90	Cont : dd		0154-1L
			5	Sh/Clst: lt gy to m gy		0154-2L
			5	S/Sst : w to lt gy, f, l, pyr		0154-3L
2477.00				Dunl Amun Lower Jurassic		0155
			60	Cont : dd, prp		0155-1L
			30	Sh/Clst: lt gy to m gy		0155-2L
			5	S/Sst : w to lt gy, f, l, pyr		0155-3L
			5	Ca : lt brn to m brn		0155-4L
2483.00				Dunl Amun Lower Jurassic		0156
			80	Cont : dd, prp		0156-1L
			10	Sh/Clst: lt gy to m gy		0156-2L
			5	S/Sst : w to lt gy, f, l, pyr		0156-3L
			5	Ca : lt brn to m brn		0156-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2489.00				Dunl Amun Lower Jurassic		0157
	0.57	75	S/Sst	: w to lt gy, f, l, pyr		0157-1L
		15	Cont	: dd		0157-2L
		10	Sh/Clst:	lt gy to m gy, carb		0157-3L
		tr	Ca	: lt or to lt brn to m brn		0157-4L
2495.00				Dunl Amun Lower Jurassic		0158
		60	Cont	: dd		0158-1L
		25	S/Sst	: w to lt gy, f, l		0158-2L
		10	Sh/Clst:	lt gy to m gy		0158-3L
		5	Ca	: lt or to lt brn to m brn		0158-4L
2501.00				Dunl Amun Lower Jurassic		0159
	1.05	50	Sh/Clst:	lt gy to m gy		0159-1L
		20	Cont	: dd, prp, Mica-ad		0159-2L
		20	S/Sst	: w to lt gy, f, l		0159-3L
		10	Ca	: lt or to lt brn to m brn		0159-4L
2507.00				Dunl Amun Lower Jurassic		0160
		40	Sh/Clst:	lt gy to m gy		0160-1L
		30	S/Sst	: w to lt gy, f, l		0160-2L
		20	Cont	: dd, Mica-ad		0160-3L
		10	Ca	: lt or to lt brn to m brn		0160-4L
2513.00				Dunl Stat Lower Jurassic		0161
		50	Sh/Clst:	m gy to lt brn gy to brn gy		0161-1L
		30	S/Sst	: w to lt gy to drk gy, crs, l		0161-2L
		15	Cont	: dd, cem		0161-3L
		5	Ca	: lt or to or to lt brn		0161-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2517.00	ccp			Dunl Stat Lower Jurassic		0001
	0.09	100	Sltst	: lt gy to lt brn gy, s		0001-1L
2519.00	ccp			Dunl Stat Lower Jurassic		0002
	0.12	100	Sh/Clst:	pl y brn to lt brn gy, slt, wx		0002-1L
2521.00	ccp			Dunl Stat Lower Jurassic		0003
		100	S/Sst	: pl y brn to lt gy to m gy, crs		0003-1L
2523.00	ccp			Dunl Stat Lower Jurassic		0004
		100	S/Sst	: pl y brn to lt gy to m gy, crs, l		0004-1L
2524.60	ccp			Dunl Stat Lower Jurassic		0005
	1.12	100	S/Sst	: w to lt gy to m gy to pl y brn, crs		0005-1L
2528.00	ccp			Dunl Stat Lower Jurassic		0006
		100	S/Sst	: gn gy to lt bl gy, f, slt, mic		0006-1L
2530.00	ccp			Dunl Stat Lower Jurassic		0007
	2.94	100	Sh/Clst:	m gy to drk gy		0007-1L
2532.00	ccp			Dunl Stat Lower Jurassic		0008
		100	S/Sst	: w to lt gy to m y brn, crs, l		0008-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2534.00	ccp			Dunl Stat Lower Jurassic		0009
	1.21	100	S/Sst	: w to lt gy to m y brn, crs		0009-1L
2536.00	ccp			Dunl Stat Lower Jurassic		0010
		100	S/Sst	: w to lt gy to m y brn, crs		0010-1L
2538.00	ccp			Dunl Stat Lower Jurassic		0011
	0.89	100	S/Sst	: w to lt gy to m y brn, crs, cngl		0011-1L
2540.00	ccp			Dunl Stat Lower Jurassic		0012
		100	S/Sst	: lt gy to lt brn gy to m y brn, cngl		0012-1L
2542.00	ccp			Dunl Stat Lower Jurassic		0013
	0.97	100	S/Sst	: lt gy to lt brn gy to lt or, crs, hd		0013-1L
2550.00	ccp			Dunl Stat Lower Jurassic		0014
		80	S/Sst	: gy pi, f, l		0014-1L
		20	Sh/Clst:	lt gn gy, wx		0014-2L
2551.00	ccp			Dunl Stat Lower Jurassic		0015
		100	S/Sst	: gy red, f, hd		0015-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2552.00	ccp			Dunl Stat Lower Jurassic		0016
	0.12	100	S/Sst	: lt gn gy to lt gy, crs, hd		0016-1L
2554.00	ccp			Dunl Stat Lower Jurassic		0017
		100	S/Sst	: lt gy to pl y brn, crs		0017-1L
2556.00	ccp			Dunl Stat Lower Jurassic		0018
		80	Sh/Clst:	pl pu to lt pu, s		0018-1L
		20	Sh/Clst:	lt ol gy to pl ol, glauc		0018-2L
2558.00	ccp			Dunl Stat Lower Jurassic		0019
	0.21	100	S/Sst	: pl pu to lt pu, f, slt, hd		0019-1L
2560.00	ccp			Dunl Stat Lower Jurassic		0020
		100	S/Sst	: w to lt gy to lt brn gy to lt or, crs, hd		0020-1L
2562.00	ccp			Dunl Stat Lower Jurassic		0021
		100	S/Sst	: w to lt gy to lt ol gy, crs, hd, mic		0021-1L
2564.00	ccp			Dunl Stat Lower Jurassic		0022
	1.30	100	S/Sst	: w to lt gy to lt brn gy to lt or, cngl, hd		0022-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2566.00	ccp			Dunl Stat Lower Jurassic		0023
			100	S/Sst : w to lt gy to lt brn gy to lt or, cngl, hd		0023-1L
2568.00	ccp			Dunl Stat Lower Jurassic		0024
			100	Sh/Clst: pl pu to gy red		0024-1L
2570.00	ccp			Dunl Stat Lower Jurassic		0025
			100	S/Sst : w to lt gy to lt brn gy, cngl, l		0025-1L
2572.00	ccp			Dunl Stat Lower Jurassic		0026
	1.07		100	S/Sst : w to lt gy to lt brn gy to pl y brn, crs, hd, mic		0026-1L
2574.00	ccp			Dunl Stat Lower Jurassic		0027
			100	S/Sst : w to lt gy to lt brn gy to pl y brn, cngl, l		0027-1L
2576.00	ccp			Dunl Stat Lower Jurassic		0028
			100	S/Sst : w to lt gy to lt brn gy to pl y brn, crs, l		0028-1L
2578.00	ccp			Dunl Stat Lower Jurassic		0029
	0.09		100	Sh/Clst: lt gy to lt bl brn to dsk y to lt ol gy, s		0029-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2580.00	ccp			Dunl Stat Lower Jurassic		0030
	0.03	100		Sh/Clst: gn gy to lt ol gy, wx		0030-1L
2582.00	ccp			Dunl Stat Lower Jurassic		0031
		100		S/Sst : w to lt gy to lt brn gy, crs, hd		0031-1L
2584.00	ccp			Dunl Stat Lower Jurassic		0032
		100		S/Sst : w to lt gy to lt brn gy, f, hd, mic		0032-1L
2586.00	ccp			Dunl Stat Lower Jurassic		0033
	1.71	100		S/Sst : w to lt gy to lt brn gy to m gy to pl y brn, crs, hd		0033-1L
2588.00	ccp			Dunl Stat Lower Jurassic		0034
		100		S/Sst : w to lt gy to lt brn gy to m gy to pl y brn, crs, hd		0034-1L
2590.00	ccp			Dunl Stat Lower Jurassic		0035
	0.14	100		S/Sst : lt gy to lt brn gy, f, slt, hd		0035-1L
2592.00	ccp			Dunl Stat Lower Jurassic		0036
		100		S/Sst : lt gy to lt brn gy, f, crs, hd		0036-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2594.00	ccp			Dunl Stat Lower Jurassic		0037
			100	S/Sst : lt gy to lt gn gy, f, slt, mic		0037-1L
2599.00	ccp			Hegr Lund Upper Triassic		0038
		0.08	100	S/Sst : lt gy to lt bl gy to m bl gy, f, hd, mic		0038-1L
2600.00	ccp			Hegr Lund Upper Triassic		0039
			100	S/Sst : lt gy to m gy to lt brn gy to m y brn, crs, cnsl, hd		0039-1L
2601.00	ccp			Hegr Lund Upper Triassic		0040
		2.32	100	S/Sst : lt gy to m gy to lt brn gy, crs, hd		0040-1L
2603.00	ccp			Hegr Lund Upper Triassic		0041
			100	Sh/Clst: gy brn to gy red, slt, mic, wx		0041-1L
2605.00	ccp			Hegr Lund Upper Triassic		0042
			100	S/Sst : lt gy to gy red, f, mic, hd		0042-1L
2607.00	ccp			Hegr Lund Upper Triassic		0043
		0.08	100	Slstst : gy pu to lt gy, s, carb, wx		0043-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2609.00	ccp			Hegr Lund Upper Triassic		0044
			100	S/Sst : gy pu to lt gy, f, mic		0044-1L
2611.00	ccp			Hegr Lund Upper Triassic		0045
		0.06	100	Sltst : gy pu to lt ol gy, wx		0045-1L
2613.00	ccp			Hegr Lund Upper Triassic		0046
			75	S/Sst : lt gy to lt brn gy, f, mic, lam		0046-1L
			25	Sh/Clst: bl gy to gy brn, s, lam		0046-2L
2615.00	ccp			Hegr Lund Upper Triassic		0047
			100	Sh/Clst: gy pu, lam, mic		0047-1L
2617.00	ccp			Hegr Lund Upper Triassic		0048
		0.05	100	S/Sst : gy red to lt gy, hd, f, mic		0048-1L
2619.00	ccp			Hegr Lund Upper Triassic		0049
			100	Sh/Clst: gy brn to gy red, slt, lam, mic		0049-1L
2621.00	ccp			Hegr Lund Upper Triassic		0050
		0.12	100	Sh/Clst: m brn to pl brn		0050-1L
2623.00	ccp			Hegr Lund Upper Triassic		0051
			100	Sh/Clst: pl brn to gy brn, slt, wx		0051-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2627.00			Hegr Lund Upper Triassic				0162
		70	S/Sst	: w to lt gy to gy pi to or gy, crs, l			0162-1L
		15	Sh/Clst:	drk red brn to pl brn, carb, slt			0162-2L
		10	Sh/Clst:	lt gy to lt brn gy			0162-3L
		5	Sh/Clst:	dsk y to lt ol brn, carb			0162-4L
		tr	Ca	: lt or			0162-5L
2633.00			Hegr Lund Upper Triassic				0163
		80	S/Sst	: w to lt gy to gy pi to or gy, crs, l			0163-1L
		10	Sh/Clst:	drk red brn to pl brn, carb, slt			0163-2L
		10	Sh/Clst:	lt gy to lt brn gy			0163-3L
		tr	Sh/Clst:	dsk y to lt ol brn, carb			0163-4L
2639.00			Hegr Lund Upper Triassic				0164
		90	S/Sst	: w to lt gy to gy pi to or gy, crs, l			0164-1L
		5	Sh/Clst:	drk red brn to pl brn			0164-2L
		5	Sh/Clst:	lt gy to lt brn gy			0164-3L
		tr	Ca	: w to lt or			0164-4L
2645.00			Hegr Lund Upper Triassic				0165
		80	S/Sst	: w to lt gy to gy pi to or gy, crs, l			0165-1L
		15	Cont	: dd			0165-2L
		5	Sh/Clst:	lt gy to m gy to drk red brn to gy brn			0165-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2651.00				Hegr Lund Upper Triassic		0166
			80	S/Sst : w to lt gy to gy pi to or gy, crs, l		0166-1L
			15	Sh/Clst: drk red brn to pl brn, carb		0166-2L
			5	Sh/Clst: lt gy to m gy		0166-3L
			tr	Cont : dd		0166-4L
2657.00				Hegr Lund Upper Triassic		0167
			95	S/Sst : w to gy pi, crs, l		0167-1L
			5	Sh/Clst: drk red brn to pl brn to lt gy to lt y brn		0167-2L
			tr	Ca : w to lt or		0167-3L
2663.00				Hegr Lund Upper Triassic		0168
			95	S/Sst : w to y gy, crs, l		0168-1L
			5	Sh/Clst: drk red brn to pl brn to lt gy to lt y brn		0168-2L
			tr	Ca : w to lt or		0168-3L
2669.00				Hegr Lund Upper Triassic		0169
			90	S/Sst : w to y gy to gy pi to m brn, crs, l		0169-1L
			10	Sh/Clst: drk red brn to pl brn to lt gy to lt y brn		0169-2L
			tr	Ca : w to lt or		0169-3L
2672.00				Hegr Lund Upper Triassic		0170
			60	S/Sst : w to y gy to gy pi to m brn, crs, l		0170-1L
			25	Sh/Clst: drk red brn to pl brn to dsk brn to lt brn gy		0170-2L
			10	Cont : dd, prp		0170-3L
			5	Ca : w to lt or		0170-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2678.00				Hegr Lund Upper Triassic		0171
			50	Sh/Clst: drk red brn to pl brn to dsk brn to lt brn gy, wx		0171-1L
			25	Cont : dd, prp		0171-2L
			25	S/Sst : w to lt gy to gy pi, crs, l		0171-3L
2684.00				Hegr Lund Upper Triassic		0172
	0.49		85	S/Sst : w to lt gy to gy pi, crs, l		0172-1L
			15	Sh/Clst: drk red to m brn, wx		0172-2L
2690.00				Hegr Lund Upper Triassic		0173
			85	S/Sst : w, crs, l		0173-1L
			15	Sh/Clst: drk red to m brn, wx		0173-2L
			tr	Ca : w to lt or		0173-3L
2696.00				Hegr Lund Upper Triassic		0174
			75	S/Sst : w to gy pi, crs, l		0174-1L
			20	Sh/Clst: drk red to m brn to pl brn, wx		0174-2L
			5	Cont : dd, prp		0174-3L
2705.00				Hegr Lund Upper Triassic		0175
			70	S/Sst : w to gy pi, crs, l		0175-1L
			20	Cont : dd, prp		0175-2L
			10	Sh/Clst: drk red brn to pl brn, wx		0175-3L
2708.00				Hegr Lund Upper Triassic		0176
			95	S/Sst : w to lt or to pl or, crs, l		0176-1L
			5	Sh/Clst: drk red brn to pl brn, wx		0176-2L
			tr	Cont : dd		0176-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2714.00				Hegr Lund Upper Triassic		0177
				85 S/Sst : w to lt or to pl or, crs, l		0177-1L
				10 Cont : dd, prp		0177-4L
				5 Sh/Clst: drk red brn to pl brn, wx		0177-5L
2720.00				Hegr Lund Upper Triassic		0178
				80 S/Sst : w, crs, l		0178-1L
				20 Sh/Clst: drk red brn to pl brn, wx		0178-2L
				tr Ca : w to lt or		0178-3L
2726.00				Hegr Lund Upper Triassic		0179
				85 S/Sst : w to pl or, crs, l		0179-1L
				15 Sh/Clst: drk red brn to pl brn, wx		0179-2L
				tr Cont : dd, prp		0179-3L
2732.00				Hegr Lund Upper Triassic		0180
				80 S/Sst : w to pl or, crs, l		0180-1L
				10 Sh/Clst: drk red brn to pl brn, wx		0180-2L
				10 Cont : dd, Mica-ad, prp		0180-3L
2738.00				Hegr Lund Upper Triassic		0181
				65 S/Sst : w to pl or, crs, l		0181-1L
				15 Sh/Clst: drk red brn to pl brn, wx		0181-2L
				15 Cont : dd, Mica-ad, prp		0181-3L
				5 Sh/Clst: lt gy to m gy, carb		0181-4L
				tr Ca : lt or to or gy		0181-5L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2744.00				Hegr Lund Upper Triassic		0182
				60 S/Sst : w, crs, l		0182-1L
				20 Sh/Clst: drk red brn to pl brn, wx		0182-2L
				20 Cont : dd, Mica-ad, prp		0182-3L
				tr Ca : lt or to or gy		0182-4L
2750.00				Hegr Lund Upper Triassic		0183
				50 S/Sst : w, crs, l		0183-1L
				35 Cont : dd, Mica-ad, prp		0183-2L
				15 Sh/Clst: m brn to pl brn to drk red brn, wx		0183-3L
				tr Ca : w to lt or		0183-4L
2756.00				Hegr Lund Upper Triassic		0184
				50 S/Sst : w to lt gy to or gy, crs, l		0184-1L
				30 Cont : dd, Mica-ad, prp		0184-2L
				20 Sh/Clst: m brn to pl brn to drk red brn, wx		0184-3L
				tr Ca : w to lt or		0184-4L
2762.00				Hegr Lund Upper Triassic		0185
				75 S/Sst : w to lt gy to or gy, crs, l		0185-1L
				15 Cont : dd, Mica-ad, prp		0185-2L
				10 Sh/Clst: m brn to pl brn to drk red brn, wx		0185-3L
				tr Ca : w to lt or		0185-4L
2768.00				Hegr Lund Upper Triassic		0186
				90 S/Sst : w to lt gy to or gy, crs, l		0186-1L
				10 Sh/Clst: m brn to pl brn to drk red brn, wx		0186-2L
				tr Cont : Mica-ad, prp, dd		0186-3L
				tr Sh/Clst: lt gy to m gy		0186-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2774.00				Hegr Lund Upper Triassic		0187
				75 S/Sst : w to lt gy to or gy, crs, l		0187-1L
				15 Sh/Clst: m brn to pl brn to drk red brn, wx		0187-2L
				10 Cont : Mica-ad, prp, dd		0187-3L
				tr Sh/Clst: lt gy to m gy		0187-4L
2780.00				Hegr Lund Upper Triassic		0188
				95 S/Sst : w to or gy, crs, l		0188-1L
				5 Sh/Clst: m brn to pl brn to drk red brn, wx, slt		0188-2L
				tr Ca : lt or		0188-3L
2786.00				Hegr Lund Upper Triassic		0189
				95 S/Sst : w to or gy, crs, l		0189-1L
				5 Sh/Clst: m brn to pl brn to drk red brn, wx, slt		0189-2L
				tr Ca : lt or		0189-3L
				tr Cont : dd, prp		0189-4L
2792.00				Hegr Lund Upper Triassic		0190
				100 S/Sst : w to or gy, crs, l		0190-1L
				tr Sh/Clst: m brn to pl brn to drk red brn, wx, slt		0190-2L
				tr Ca : lt or		0190-3L
				tr Cont : dd, prp		0190-4L
2798.00				Hegr Lund Upper Triassic		0191
				100 S/Sst : w to or gy to gy pi, crs, l		0191-1L
				tr Sh/Clst: m brn to pl brn to drk red brn, wx, slt		0191-2L
				tr Ca : lt or		0191-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2804.00				Hegr Lund Upper Triassic		0192
	0.15	100		S/Sst : w to or gy to gy pi, crs, l		0192-1L
				tr Sh/Clst: m brn to pl brn to drk red brn, wx, slt		0192-2L
				tr Ca : lt or		0192-3L
				tr Cont : prp, dd		0192-4L
2810.00				Hegr Lund Upper Triassic		0193
				95 S/Sst : w to or gy to gy pi, crs, l		0193-1L
				5 Sh/Clst: m brn to pl brn to drk red brn		0193-2L
				tr Ca : lt or		0193-3L
				tr Cont : prp, dd		0193-4L
2813.00				Hegr Lund Upper Triassic		0194
				90 S/Sst : w to or gy to gy pi, crs, l		0194-1L
				5 Ca : lt or to lt brn to m brn		0194-2L
				5 Cont : prp, dd		0194-3L
				tr Sh/Clst: m brn to pl brn		0194-4L
2822.00				Hegr Lund Upper Triassic		0195
				95 S/Sst : w to or gy to gy pi, crs, l		0195-1L
				5 Sh/Clst: m brn to pl brn to m gy		0195-2L
				tr Ca : lt or		0195-3L
2828.00				Hegr Lund Upper Triassic		0196
				75 S/Sst : w to or gy to gy pi, crs, l		0196-1L
				20 Sh/Clst: m brn to pl brn		0196-2L
				5 Sh/Clst: lt gy to m gy to gn gy		0196-3L
				tr Ca : lt or to or gy		0196-4L
				tr Cont : dd, prp		0196-5L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2834.00				Hegr Lund Upper Triassic		0197
			85	S/Sst : w to or gy to gy pi, crs, 1		0197-1L
			10	Sh/Clst: m brn to pl brn		0197-2L
			5	Sh/Clst: lt gy to m gy to gn gy		0197-3L
			tr	Ca : lt or to or gy		0197-4L
			tr	Cont : dd, prp		0197-5L
2840.00				Hegr Lund Upper Triassic		0198
			95	S/Sst : w to or gy to gy pi, crs, 1		0198-1L
			5	Sh/Clst: m brn to pl brn		0198-2L
			tr	Sh/Clst: lt gy to m gy to gn gy		0198-3L
2846.00				Hegr Lund Upper Triassic		0199
			80	S/Sst : w to or gy to gy pi, crs, 1		0199-1L
			15	Sh/Clst: m brn to pl brn		0199-2L
			5	Sh/Clst: lt gy to m gy to gn gy, carb		0199-3L
			tr	Ca : lt or to or gy		0199-4L
			tr	Cont : prp, dd		0199-5L
2852.00				Hegr Lund Upper Triassic		0200
			75	S/Sst : w to or gy to gy pi, crs, 1		0200-1L
			20	Sh/Clst: m brn to pl brn		0200-2L
			5	Cont : dd, prp, Mica-ad		0200-3L
			tr	Sh/Clst: lt gy to m gy, carb		0200-4L
			tr	Ca : lt or to or gy		0200-5L
2858.00				Hegr Lund Upper Triassic		0201
			50	Cont : dd, prp		0201-1L
			25	Sh/Clst: m brn to pl brn to drk red brn		0201-2L
			20	S/Sst : w to lt gy red to gy pi, crs, 1		0201-3L
			5	Sh/Clst: lt gy to m gy, carb		0201-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2864.00				Hegr Lund Upper Triassic		0202
				75 S/Sst : w to lt gy red to gy pi, crs, l		0202-1L
				15 Sh/Clst: drk red brn to m brn to pl brn		0202-2L
				5 Ca : w to lt or to or gy		0202-3L
				5 Cont : dd, prp, Mica-ad		0202-4L
2870.00				Hegr Lund Upper Triassic		0203
				90 S/Sst : w to lt gy red to gy pi, crs, l		0203-1L
				10 Sh/Clst: drk red brn to m brn to pl brn		0203-2L
				tr Ca : w to lt or to or gy		0203-3L
				tr Cont : dd, prp, Mica-ad		0203-4L
2876.00				Hegr Lund Upper Triassic		0204
				95 S/Sst : w to lt gy red to gy pi, crs, l		0204-1L
				5 Sh/Clst: drk red brn to m brn to pl brn		0204-2L
				tr Ca : w to lt or to or gy		0204-3L
2882.00				Hegr Lund Upper Triassic		0205
				70 S/Sst : w to lt gy red to gy pi, crs, l		0205-1L
				15 Sh/Clst: drk red brn to m brn to pl brn		0205-2L
				10 Cont : dd, prp, Mica-ad		0205-3L
				5 Sh/Clst: lt gy to m gy to m ol brn		0205-4L
2888.00				Hegr Lund Upper Triassic		0206
				75 Cont : dd, prp		0206-1L
				20 S/Sst : w to lt gy red, crs, l		0206-2L
				5 Sh/Clst: pl brn to m brn		0206-3L
				tr Ca : lt or to or gy		0206-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2894.00				Hegr Lund Upper Triassic		0207
			80	S/Sst : w to lt gy red, crs, l		0207-1L
			10	Sh/Clst: pl brn to m brn		0207-2L
			10	Cont : dd, prp, Mica-ad		0207-3L
2903.00				Hegr Lund Upper Triassic		0208
			70	S/Sst : w to lt gy red, crs, l		0208-1L
			20	Cont : dd, prp, Mica-ad		0208-2L
			10	Sh/Clst: pl brn to m brn		0208-3L
			tr	Ca : lt or to or gy		0208-4L
2906.00				Hegr Lund Upper Triassic		0209
			75	S/Sst : w to lt gy red, crs, l		0209-1L
			20	Cont : dd, prp, Mica-ad		0209-2L
			5	Sh/Clst: pl brn to m brn		0209-3L
			tr	Ca : lt or to or gy		0209-4L
2912.00				Hegr Lund Upper Triassic		0210
			75	S/Sst : w to lt gy red, crs, l		0210-1L
			25	Cont : dd, prp, Mica-ad		0210-2L
			tr	Sh/Clst: pl brn to m brn		0210-3L
			tr	Ca : lt or to or gy		0210-4L
2914.00	ccp			Hegr Lund Upper Triassic		0052
	0.14	100		S/Sst : lt gy to lt brn gy, crs, hd		0052-1L
2916.00	ccp			Hegr Lund Upper Triassic		0053
		100		S/Sst : w to lt gy to lt brn gy, crs, hd, calc		0053-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2918.00	ccp			Hegr Lund Upper Triassic		0054
			100	S/Sst : w to lt gy, crs, hd, calc		0054-1L
2920.00	ccp			Hegr Lund Upper Triassic		0055
			100	S/Sst : lt brn gy to lt brn, f, hd		0055-1L
2922.00	ccp			Hegr Lund Upper Triassic		0056
	0.04		100	S/Sst : w to lt gy, crs, hd, calc		0056-1L
2924.00	ccp			Hegr Lund Upper Triassic		0057
			100	S/Sst : w to lt gy, crs, hd, calc		0057-1L
2925.50	ccp			Hegr Lund Upper Triassic		0058
			100	Sltst : gy red to gy brn, carb		0058-1L
2928.00	ccp			Hegr Lund Upper Triassic		0059
			100	S/Sst : w to lt gy, crs, hd, mic		0059-1L
2930.00	ccp			Hegr Lund Upper Triassic		0060
	0.08		100	S/Sst : w to lt gy to lt gn gy, crs, hd, mic		0060-1L
2932.00	ccp			Hegr Lund Upper Triassic		0061
			100	Sh/Clst: m brn to m red brn, mic, s		0061-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2934.00	ccp			Hegr Lund Upper Triassic		0062
			100	Sh/Clst: m brn to m red brn, mic, s		0062-1L
2936.00	ccp			Hegr Lund Upper Triassic		0063
			100	S/Sst : lt gy to m gy, mic, f, hd		0063-1L
2938.00	ccp			Hegr Lund Upper Triassic		0064
			100	S/Sst : lt gy to m gy to lt brn gy, mic, f, hd, calc		0064-1L
2940.00	ccp			Hegr Lund Upper Triassic		0065
	0.06		100	S/Sst : lt gy to lt brn gy to gy red, mic, crs, hd		0065-1L
2942.00	ccp			Hegr Lund Upper Triassic		0066
			100	S/Sst : gy red to m brn, mic, crs, hd, lam		0066-1L
2944.00	ccp			Hegr Lund Upper Triassic		0067
			100	S/Sst : gy red to m brn, mic, f, hd, cly		0067-1L
2946.00	ccp			Hegr Lund Upper Triassic		0068
			100	S/Sst : w to lt gy, crs, hd		0068-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2948.00	ccp			Hegr Lund Upper Triassic		0069
			100	S/Sst : w to lt gy, crs, hd		0069-1L
2950.00	ccp			Hegr Lund Upper Triassic		0070
		0.06	100	S/Sst : w to lt gy to lt brn gy, crs, hd, mic		0070-1L
2952.00	ccp			Hegr Lund Upper Triassic		0071
			100	S/Sst : w to lt gy to lt brn gy, f, hd, mic		0071-1L
2953.20	ccp			Hegr Lund Upper Triassic		0072
			100	S/Sst : w to lt gy to lt brn gy, f, hd, mic		0072-1L
2957.00				Hegr Lund Upper Triassic		0211
			60	S/Sst : w to lt gy to lt gy red, crs, l		0211-1L
			20	Cont : dd, prp, Mica-ad		0211-2L
			15	Sh/Clst: pl brn to m brn		0211-3L
			5	Sh/Clst: lt gy to m gy		0211-4L
2963.00				Hegr Lund Upper Triassic		0212
			60	S/Sst : w to lt gy to lt gy red, crs, l		0212-1L
			20	Cont : dd, prp, Mica-ad		0212-2L
			15	Sh/Clst: pl brn to m brn		0212-3L
			5	Sh/Clst: lt gy to m gy		0212-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2969.00			Hegr Lund Upper Triassic				0213
		50	S/Sst	: w to lt gy to lt gy red, crs, 1		0213-1L	
		25	Cont	: dd, prp, Mica-ad		0213-2L	
		20	Sh/Clst:	pl brn to m brn		0213-3L	
		5	Sh/Clst:	lt gy to m gy		0213-4L	
2975.00			Hegr Lund Upper Triassic				0214
		80	S/Sst	: w to lt gy red to lt gy, crs, 1		0214-1L	
		10	Cont	: dd, prp, Mica-ad		0214-2L	
		5	Sh/Clst:	pl brn to m brn		0214-3L	
		5	Ca	: lt or, fos		0214-4L	
2981.00			Hegr Lund Upper Cretaceous				0215
		70	S/Sst	: w to lt gy to lt gy red, crs, 1		0215-1L	
		20	Cont	: dd, prp, Mica-ad		0215-2L	
		10	Sh/Clst:	pl brn to m brn		0215-3L	
		tr	Sh/Clst:	lt gy to m gy, carb		0215-4L	
		tr	Ca	: lt or to or gy		0215-5L	
2987.00			Hegr Lund Upper Cretaceous				0216
		95	S/Sst	: w to lt gy to lt gy red, crs, 1		0216-1L	
		5	Ca	: w to lt or		0216-2L	
		tr	Sh/Clst:	m brn to pl brn		0216-3L	
		tr	Cont	: Mica-ad, prp, dd, fib		0216-4L	
2993.00			Hegr Lund Upper Cretaceous				0217
		100	S/Sst	: w to lt gy to lt gy red, crs, 1		0217-1L	
		tr	Ca	: w to lt or		0217-2L	
		tr	Sh/Clst:	m brn to pl brn, carb		0217-3L	
		tr	Cont	: Mica-ad, prp, dd, fib		0217-4L	

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2999.00				Hegr Lund Upper Cretaceous		0218
			90	S/Sst : w to gy pi to lt gy red, crs, l		0218-1L
			10	Cont : dd, prp, Mica-ad		0218-2L
			tr	Sh/Clst: m brn to pl brn, carb		0218-3L
			tr	Ca : w to lt or		0218-4L
3002.00				Hegr Lund Upper Cretaceous		0219
			90	S/Sst : w to gy pi to lt gy red, crs, l		0219-1L
			5	Cont : dd, prp, Mica-ad		0219-2L
			5	Sh/Clst: m brn to pl brn		0219-3L
			tr	Ca : w to lt or		0219-4L
3014.00				Hegr Lund Upper Cretaceous		0220
	0.06		90	S/Sst : w to gy pi to lt gy red, crs, l		0220-1L
			10	Sh/Clst: m brn to pl brn to lt gy to m gy		0220-2L
			tr	Ca : w to lt or to lt brn		0220-3L
			tr	Cont : dd, prp		0220-4L
3020.00				Hegr Lund Upper Triassic		0327
			60	S/Sst : w to lt gy to lt gy red, crs, l		0327-1L
			20	Sh/Clst: m brn to pl brn to m gy		0327-2L
			10	Ca : w to lt or to lt brn		0327-3L
			10	Cont : dd, prp		0327-4L
3026.00				Hegr Lund Upper Triassic		0328
			50	Sh/Clst: m gy to drk gy to pl brn		0328-1L
			40	Cont : dd, prp		0328-2L
			10	S/Sst : w to lt gy, crs, l		0328-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3032.00				Hegr Lund Upper Cretaceous		0221
			100	S/Sst : w to gy pi to lt gy red, crs, l		0221-1L
			tr	Sh/Clst: m brn to pl brn to lt gy to m brn		0221-2L
			tr	Ca : w to lt or to lt brn		0221-3L
			tr	Cont : dd, prp		0221-4L
3038.00				Hegr Lund Upper Cretaceous		0222
			95	S/Sst : w to gy pi to lt gy red, crs, l		0222-1L
			5	Sh/Clst: m brn to pl brn		0222-2L
			tr	Ca : w to lt or to lt brn		0222-3L
			tr	Cont : dd, prp		0222-4L
3044.00				Hegr Lund Upper Cretaceous		0223
			90	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0223-1L
			10	Ca : w to lt or to lt brn		0223-2L
			tr	Cont : dd, prp		0223-3L
			tr	Sh/Clst: m brn to pl brn		0223-4L
3050.00				Hegr Lund Upper Cretaceous		0224
			90	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0224-1L
			5	Ca : w to lt or to lt brn		0224-2L
			5	Cont : dd, prp		0224-3L
			tr	Sh/Clst: m brn to pl brn		0224-4L
3056.00				Hegr Lund Upper Triassic		0329
			100	S/Sst : w to gy pi to lt gy red, crs, l		0329-1L
			tr	Ca : w to lt or		0329-2L
			tr	Cont : prp		0329-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3062.00				Hegr Lund Upper Cretaceous		0225
			95	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0225-1L
			5	Ca : w to lt or to lt brn		0225-2L
			tr	Sh/Clst: m brn to pl brn		0225-3L
			tr	Cont : dd, prp, Mica-ad		0225-4L
3068.00				Hegr Lund Upper Cretaceous		0226
			95	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0226-1L
			5	Ca : w to lt or to lt brn		0226-2L
			tr	Sh/Clst: m brn to pl brn		0226-3L
			tr	Cont : dd, prp, Mica-ad		0226-4L
3074.00				Hegr Lund Upper Cretaceous		0227
			100	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0227-1L
			tr	Ca : w to lt or to lt brn		0227-2L
			tr	Sh/Clst: m brn to pl brn		0227-3L
3080.00				Hegr Lund Upper Cretaceous		0228
			95	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0228-1L
			5	Sh/Clst: m brn to pl brn		0228-2L
			tr	Ca : lt or to w		0228-3L
			tr	Cont : dd, prp		0228-4L
3086.00				Hegr Lund Upper Cretaceous		0229
			95	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0229-1L
			5	Ca : lt or to w		0229-2L
			tr	Sh/Clst: m brn to pl brn		0229-3L
			tr	Cont : dd, prp, Mica-ad		0229-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3092.00				Hegr Lund Upper Cretaceous		0230
			85	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0230-1L
			5	Ca : lt or to w		0230-2L
			5	Sh/Clst: m brn to pl brn		0230-3L
			5	Cont : dd, prp, Mica-ad		0230-4L
3098.00				Hegr Lund Upper Cretaceous		0231
	0.20		100	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0231-1L
			tr	Ca : lt or to w		0231-2L
			tr	Sh/Clst: m brn to pl brn to drk brn, carb		0231-3L
			tr	Cont : dd, prp, Mica-ad		0231-4L
3104.00				Hegr Lund Upper Cretaceous		0232
			95	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0232-1L
			5	Ca : lt or to w		0232-2L
			tr	Sh/Clst: m brn to pl brn		0232-3L
			tr	Cont : dd, prp, Mica-ad		0232-4L
3110.00				Hegr Lund Upper Cretaceous		0233
			80	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0233-1L
			10	Sh/Clst: m brn to pl brn		0233-2L
			5	Ca : lt or to w to lt brn		0233-3L
			5	Cont : dd, prp		0233-4L
3116.00				Hegr Lund Upper Cretaceous		0234
			100	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0234-1L
			tr	Sh/Clst: m brn to pl brn		0234-2L
			tr	Ca : lt or to w to lt brn		0234-3L
			tr	Cont : dd, prp		0234-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
3122.00			Hegr	Lund	Upper Cretaceous	0235	
		95	S/Sst	:	w to lt gy to gy pi to lt gy red, crs, l	0235-1L	
		5	Sh/Clst:	:	m brn to pl brn, wx, slt	0235-2L	
		tr	Ca	:	lt or to w	0235-3L	
		tr	Cont	:	dd, prp	0235-4L	
3128.00			Hegr	Lund	Upper Cretaceous	0236	
		95	S/Sst	:	w to lt gy to gy pi to lt gy red, crs, l	0236-1L	
		5	Sh/Clst:	:	m brn to pl brn, wx, slt	0236-2L	
		tr	Ca	:	lt or to w	0236-3L	
		tr	Cont	:	dd, prp	0236-4L	
3134.00			Hegr	Lund	Upper Cretaceous	0237	
		95	S/Sst	:	w to lt gy to gy pi to lt gy red, crs, l	0237-1L	
		5	Ca	:	lt or to w	0237-2L	
		tr	Sh/Clst:	:	m brn to pl brn, slt	0237-3L	
3143.00			Hegr	Lund	Upper Cretaceous	0238	
		65	S/Sst	:	w to lt gy to gy pi to lt gy red, crs, l	0238-1L	
		25	Sh/Clst:	:	m brn to pl brn, slt, wx	0238-2L	
		5	Ca	:	w to lt or to or gy to lt brn	0238-3L	
		5	Cont	:	dd, prp	0238-4L	
		tr	Sh/Clst:	:	lt gy to lt bl gy, mic	0238-5L	
3146.00			Hegr	Lund	Upper Cretaceous	0239	
		60	S/Sst	:	w to lt gy to gy pi to lt gy red, crs, l	0239-1L	
		30	Sh/Clst:	:	m brn to pl brn, slt, wx	0239-2L	
		10	Ca	:	lt or to or gy to gy pi	0239-3L	
		tr	Cont	:	dd, prp	0239-4L	

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3152.00				Hegr Lund Upper Triassic		0330
			60	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0330-1L
			20	Sh/Clst: m brn to pl brn, slt, wx		0330-2L
			10	Ca : lt or to or gy to gy pi		0330-3L
			10	Cont : dd, prp		0330-4L
3158.00				Hegr Lund Upper Cretaceous		0240
			70	S/Sst : w to lt gy to lt gy red, crs, l		0240-1L
			30	Ca : w to lt or to gy pi, slt		0240-2L
			tr	Sh/Clst: lt gy to m gy to m brn to pl brn, mic		0240-3L
			tr	Cont : prp, dd, Mica-ad		0240-4L
3164.00				Hegr Lund Upper Cretaceous		0241
			75	Ca : w to lt gy to gy pi to lt gy red		0241-1L
			15	Sh/Clst: lt gy to m gy to lt brn gy, mic		0241-2L
			5	S/Sst : w to lt gy to lt gy red, crs, l		0241-3L
			5	Sh/Clst: pl brn to m brn		0241-4L
			tr	Cont : prp		0241-5L
3170.00				Hegr Lund Upper Cretaceous		0242
			70	Ca : w to lt gy to gy pi to lt or		0242-1L
			25	Sh/Clst: lt gy to m gy to lt brn gy, mic		0242-2L
			5	Sh/Clst: pl brn to m brn		0242-3L
			tr	S/Sst : w to lt gy, crs, l		0242-4L
			tr	Cont : prp		0242-5L
3176.00				Hegr Lund Upper Cretaceous		0243
			70	Ca : w to lt gy to gy pi to lt or, slt		0243-1L
			20	Sh/Clst: lt gy to m gy to lt brn gy, mic, carb		0243-2L
			10	Sh/Clst: pl brn to m brn, wx		0243-3L
			tr	S/Sst : w to lt gy, crs, l		0243-4L
			tr	Cont : prp		0243-5L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3182.00				Hegr Lund Upper Cretaceous		0244
			95	S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0244-1L
			5	Cont : prp, dd, Mica-ad		0244-2L
			tr	Ca : w to lt gy to lt or to or gy		0244-3L
3188.00				Hegr Lund Upper Cretaceous		0245
			80	S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0245-1L
			10	Sh/Clst: pl brn to m brn, carb, mic		0245-2L
			5	Ca : w to lt or to or gy		0245-3L
			5	Cont : dd, prp		0245-4L
3194.00				Hegr Lund Upper Cretaceous		0246
			95	S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0246-1L
			5	Ca : w to lt or to or gy		0246-2L
			tr	Sh/Clst: pl brn to m brn, mic		0246-3L
			tr	Cont : prp		0246-4L
3200.00				Hegr Lund Upper Cretaceous		0247
			100	S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0247-1L
			tr	Ca : w to lt or to or gy		0247-2L
			tr	Sh/Clst: pl brn to m brn, mic		0247-3L
3206.00				Hegr Lund Upper Cretaceous		0248
			100	S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0248-1L
			tr	Ca : w to lt or to or gy		0248-2L
			tr	Sh/Clst: pl brn to m brn, mic		0248-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3212.00				Hegr Lund Upper Cretaceous		0249
				90 S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0249-1L
				5 Ca : w to lt or to or gy		0249-2L
				5 Sh/Clst: pl brn to m brn, mic		0249-3L
				tr Cont : prp, dd, Mica-ad		0249-4L
3218.00				Hegr Lund Upper Cretaceous		0250
				95 S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0250-1L
				5 Ca : w to lt or to or gy		0250-2L
				tr Sh/Clst: pl brn to m brn, mic, carb		0250-3L
				tr Cont : prp, dd, Mica-ad		0250-4L
3224.00				Hegr Lund Upper Cretaceous		0251
				95 S/Sst : w to lt gy to lt gy red to gy pi, crs, l		0251-1L
				5 Ca : w to lt or to or gy		0251-2L
				tr Sh/Clst: pl brn to m brn, mic		0251-3L
				tr Cont : prp, dd, Mica-ad		0251-4L
3230.00				Hegr Lund Upper Cretaceous		0252
				85 S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0252-1L
				5 Ca : w to lt or to or gy		0252-2L
				5 Sh/Clst: pl brn to m brn, mic		0252-3L
				5 Cont : prp, dd, Mica-ad		0252-4L
3236.00				Hegr Lund Upper Cretaceous		0253
				50 S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0253-1L
				40 Ca : w to lt or to or gy to lt brn, slt		0253-2L
				10 Sh/Clst: pl brn to m brn, mic		0253-3L
				tr Cont : prp, dd		0253-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3242.00				Hegr Lund Upper Cretaceous		0254
			95	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0254-1L
			5	Ca : w to lt or to or gy to lt brn, slt		0254-2L
			tr	Sh/Clst: pl brn to m brn, mic		0254-3L
			tr	Cont : prp, dd		0254-4L
3248.00				Hegr Lund Upper Cretaceous		0255
			100	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0255-1L
			tr	Ca : w to lt or to or gy to lt brn, slt		0255-2L
			tr	Sh/Clst: pl brn to m brn, mic		0255-3L
			tr	Cont : prp		0255-4L
3254.00				Hegr Lund Upper Cretaceous		0256
	0.12		100	S/Sst : w to lt gy to lt or to gy pi, crs, l, pyr		0256-1L
			tr	Ca : w to lt or to or gy to lt brn, slt		0256-2L
			tr	Sh/Clst: pl brn to m brn, mic		0256-3L
3260.00				Hegr Lund Upper Cretaceous		0257
			95	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0257-1L
			5	Ca : w to lt or to or gy to lt brn, slt		0257-2L
			tr	Sh/Clst: pl brn to m brn, mic		0257-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3266.00				Hegr Lund Upper Cretaceous		0258
			100	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0258-1L
			tr	Ca : w to lt or to or gy to lt brn, slt		0258-2L
			tr	Sh/Clst: pl brn to m brn		0258-3L
3272.00				Hegr Lund Upper Cretaceous		0259
			100	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0259-1L
			tr	Ca : w to lt or to or gy to lt brn, slt		0259-2L
			tr	Sh/Clst: pl brn to m brn to m gy		0259-3L
			tr	Cont : prp		0259-4L
3278.00				Hegr Lund Upper Cretaceous		0260
			95	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0260-1L
			5	Ca : w to lt or to or gy to lt brn, slt		0260-2L
			tr	Sh/Clst: pl brn to m brn to m gy		0260-3L
			tr	Cont : prp		0260-4L
3284.00				Hegr Lund Upper Cretaceous		0261
			90	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0261-1L
			5	Ca : w to lt or to or gy to lt brn, slt		0261-2L
			5	Sh/Clst: pl brn to m brn to m gy to lt brn gy, wx, carb		0261-3L
			tr	Cont : prp		0261-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3290.00				Hegr Lund Upper Cretaceous		0262
			80	S/Sst : w to lt gy to lt gy red to gy pi, crs, l, pyr		0262-1L
			15	Ca : w to lt or to or gy to lt brn, slt		0262-2L
			5	Sh/Clst: pl brn to m brn to m gy to lt brn gy, wx, carb		0262-3L
			tr	Cont : prp		0262-4L
3296.00				Hegr Lund Upper Cretaceous		0263
			75	Ca : w to lt or to or gy to lt brn, slt		0263-1L
			20	Sh/Clst: pl brn to m brn to m gy to lt brn gy, wx, carb		0263-2L
			5	S/Sst : w to lt gy, crs, l		0263-3L
3302.00				Hegr Lund Upper Cretaceous		0264
			50	Sh/Clst: pl brn to m brn, mic		0264-1L
			30	S/Sst : w to lt gy to gy pi to lt gy red, crs, l		0264-2L
			20	Ca : w to lt or to or gy to lt brn, slt		0264-3L
3308.00				Hegr Lund Upper Cretaceous		0265
			55	Ca : w to lt or, slt		0265-1L
			40	Sh/Clst: lt gy to m gy, carb		0265-2L
			5	Sh/Clst: pl brn to m brn		0265-3L
			tr	S/Sst : w to lt gy, crs, l		0265-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3314.00				Hegr Lund Upper Cretaceous		0266
			65	S/Sst : w to lt gy to lt gy red, crs, l		0266-1L
			25	Ca : lt or to w, slt		0266-2L
			10	Sh/Clst: pl brn to m brn		0266-3L
3320.00				Hegr Lund Upper Cretaceous		0267
			65	S/Sst : w to lt gy to lt gy red, crs, l		0267-1L
			25	Ca : lt or to w, slt		0267-2L
			10	Sh/Clst: pl brn to m brn		0267-3L
			tr	Cont : prp		0267-4L
3326.00				Hegr Lund Upper Cretaceous		0268
			85	S/Sst : w to lt gy to lt gy red, crs, l		0268-1L
			10	Ca : lt or to lt brn to w, slt		0268-2L
			5	Sh/Clst: pl brn to m brn		0268-3L
			tr	Cont : prp		0268-4L
3332.00				Hegr Lund Upper Cretaceous		0269
			90	Ca : lt or to lt brn to w, slt		0269-1L
			10	Sh/Clst: m gy to brn gy to pl brn, carb		0269-2L
			tr	S/Sst : w to lt gy, crs, l		0269-3L
			tr	Cont : prp		0269-4L
3338.00				Hegr Lund Upper Cretaceous		0270
			75	Ca : lt or to lt brn to w, slt		0270-1L
			25	Sh/Clst: m gy to brn gy to pl brn, carb		0270-2L
			tr	S/Sst : w to lt gy, crs, l		0270-3L
			tr	Cont : prp		0270-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3344.00				Hegr Lund Upper Cretaceous		0271
				85 Ca : lt or to lt brn to w, slt		0271-1L
				15 Sh/Clst: m gy to brn gy to pl brn, carb		0271-2L
				tr Cont : prp		0271-3L
3350.00				Hegr Lund Upper Cretaceous		0272
				80 Ca : lt or to lt brn to w, slt		0272-1L
				20 Sh/Clst: lt gy to m gy to lt brn gy, carb		0272-2L
				tr Cont : prp		0272-3L
3356.00				Hegr Lund Upper Cretaceous		0273
				80 Ca : lt or to lt brn to w, slt		0273-1L
				20 Sh/Clst: lt gy to m gy to lt brn gy to pl brn, carb		0273-2L
				tr Cont : prp		0273-3L
3362.00				Hegr Lund Upper Cretaceous		0274
	0.14			90 Ca : lt or to lt brn to w, slt		0274-1L
				10 Sh/Clst: m gy to lt brn gy to pl brn, carb		0274-2L
				tr Cont : prp		0274-3L
3368.00				Hegr Lund Upper Cretaceous		0275
				85 Ca : lt or to lt brn to w, slt		0275-1L
				15 Sh/Clst: m gy to lt brn gy to pl brn, carb		0275-2L
				tr Cont : prp		0275-3L
3374.00				Hegr Lund Upper Cretaceous		0276
				85 Ca : lt or to lt brn to w, slt		0276-1L
				10 Sh/Clst: m gy to lt brn gy to pl brn, carb		0276-2L
				5 S/Sst : w to lt gy, crs, l		0276-3L
				tr Cont : prp		0276-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3380.00				Hegr Lund Upper Cretaceous		0277
				90 Ca	: lt or to lt brn to w, slt	0277-1L
				10 Sh/Clst:	m gy to lt brn gy to pl brn, carb	0277-2L
				tr S/Sst	: w to lt gy, crs, l	0277-3L
				tr Cont	: prp	0277-4L
3386.00				Hegr Lund Upper Cretaceous		0278
				90 Ca	: lt or to lt brn to w, slt	0278-1L
				5 Sh/Clst:	m gy to lt brn gy to pl brn, carb	0278-2L
				5 Cont	: prp	0278-3L
3392.00				Hegr Lund Upper Cretaceous		0279
				85 S/Sst	: w to lt gy, crs, l	0279-1L
				10 Ca	: lt gy to lt or to or gy, slt	0279-2L
				5 Sh/Clst:	lt gy to m gy to drk gy to pl brn	0279-3L
				tr Cont	: prp	0279-4L
3398.00				Hegr Lund Upper Cretaceous		0280
				70 S/Sst	: w to lt gy, crs, l	0280-1L
				20 Ca	: lt gy to lt or to or gy, slt	0280-2L
				5 Sh/Clst:	lt gy to m gy to drk gy to pl brn	0280-3L
				5 Cont	: prp	0280-4L
3404.00				Hegr Lund Upper Cretaceous		0281
				50 S/Sst	: w to lt gy, crs, l	0281-1L
				25 Cont	: prp, dd, fib	0281-2L
				15 Ca	: lt or to lt gy, slt	0281-3L
				10 Sh/Clst:	m gy to brn gy to pl brn	0281-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3413.00				Hegr Lund Upper Cretaceous		0282
				70 S/Sst : w to lt gy, crs, l		0282-1L
				20 Cont : prp, dd, fib		0282-2L
				10 Ca : lt or to lt gy, slt		0282-3L
				tr Sh/Clst: m gy to brn gy to pl brn		0282-4L
3416.00				Hegr Lund Upper Triassic		0331
				75 S/Sst : w to lt gy, crs, l		0331-1L
				20 Ca : lt or to or gy to gy pi		0331-2L
				5 Sh/Clst: m gy to brn gy to pl brn		0331-3L
3422.00				Hegr Lund Upper Cretaceous		0283
				70 S/Sst : w to lt gy, crs, l		0283-1L
				10 Cont : prp, dd, fib		0283-2L
				10 Ca : lt or to lt gy, slt		0283-3L
				10 Sh/Clst: m gy to brn gy to pl brn		0283-4L
3428.00				Hegr Lund Upper Cretaceous		0284
				70 S/Sst : w to lt gy, crs, l		0284-1L
				20 Cont : prp, dd, fib		0284-2L
				10 Sh/Clst: m gy to brn gy to pl brn		0284-3L
3434.00				Hegr Lund Upper Cretaceous		0285
				85 S/Sst : w to lt gy to lt red brn, crs, l		0285-1L
				10 Cont : prp, dd, fib		0285-2L
				5 Sh/Clst: m gy to brn gy to pl brn		0285-3L
				tr Ca : w to lt or		0285-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3440.00				Hegr Lund Upper Cretaceous		0286
				80 S/Sst : w to lt gy to lt red brn, crs, 1		0286-1L
				10 Sh/Clst: m gy to brn gy to pl brn		0286-2L
				10 Ca : w to lt or		0286-3L
				tr Cont : prp		0286-4L
3446.00				Hegr Lund Upper Cretaceous		0287
				90 S/Sst : w to lt gy to lt red brn, crs, 1		0287-1L
				5 Sh/Clst: m gy to brn gy to pl brn		0287-2L
				5 Cont : prp		0287-3L
				tr Ca : w to lt or, slt		0287-4L
3452.00				Hegr Lund Upper Cretaceous		0288
				100 S/Sst : w to lt gy to lt red brn, crs, 1		0288-1L
				tr Sh/Clst: m gy to brn gy to pl brn		0288-2L
				tr Cont : prp		0288-3L
				tr Ca : w to lt or, slt		0288-4L
3458.00				Hegr Lund Upper Triassic		0289
				100 S/Sst : w to lt gy to lt red brn, crs, 1		0289-1L
				tr Ca : w to lt or, slt		0289-2L
				tr Sh/Clst: brn gy to m brn to pl brn		0289-3L
3464.00				Hegr Lund Upper Triassic		0292
				100 S/Sst : w to lt gy to lt red brn, f, crs, 1		0292-1L
				tr Ca : w to lt or, slt		0292-2L
				tr Sh/Clst: m gy to lt brn gy to pl brn		0292-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3470.00				Hegr Lund Upper Triassic		0293
			95	S/Sst : w to lt gy to lt red brn, f, crs, l		0293-1L
			5	Ca : w to lt or, slt		0293-2L
			tr	Sh/Clst: m gy to lt brn gy to pl brn to brn blk		0293-3L
			tr	Cont : dd, prp		0293-4L
3476.00				Hegr Lund Upper Triassic		0294
			100	S/Sst : w to lt gy to lt red brn, f, crs, l		0294-1L
			tr	Ca : w to lt or, slt		0294-2L
			tr	Sh/Clst: m gy to lt brn gy to pl brn to brn blk		0294-3L
			tr	Cont : dd, prp		0294-4L
3482.00				Hegr Lund Upper Triassic		0295
			95	S/Sst : w to lt gy to lt red brn, f, crs, l		0295-1L
			5	Ca : w to lt or, slt		0295-2L
			tr	Sh/Clst: m gy to lt brn gy to pl brn to brn blk		0295-3L
			tr	Coal : blk		0295-4L
3488.00				Hegr Lund Upper Triassic		0296
			85	Coal : blk		0296-1L
			15	S/Sst : lt gy to lt brn to lt brn gy, f, kln		0296-2L
			tr	Cont : prp, dd		0296-3L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3494.00				Hegr Lund Upper Triassic		0297
				90 Coal	: blk	0297-1L
				10 S/Sst	: lt gy to lt brn to lt brn gy, f, kln, crs, l	0297-2L
				tr Cont	: prp, dd	0297-3L
3500.00				Hegr Lund Upper Triassic		0298
				90 Coal	: blk	0298-1L
				5 S/Sst	: lt gy to lt brn to lt brn gy, f, kln	0298-2L
				5 Ca	: w to lt or	0298-3L
				tr Cont	: prp, dd	0298-4L
3506.00				Hegr Lund Upper Triassic		0299
				60 Coal	: blk	0299-1L
				30 S/Sst	: lt gy to lt brn to lt brn gy, f, kln, crs, l	0299-2L
				10 Ca	: w to lt or	0299-3L
				tr Cont	: prp, dd	0299-4L
3512.00				Hegr Lund Upper Triassic		0300
	51.16			95 Coal	: blk	0300-1L
				5 S/Sst	: lt gy to lt brn to lt brn gy, f, kln	0300-2L
				tr Ca	: w to lt or	0300-3L
				tr Cont	: prp, dd	0300-4L
3518.00				Hegr Lund Upper Triassic		0301
				50 Coal	: blk	0301-1L
				50 S/Sst	: lt gy to lt brn to lt brn gy, f, kln, crs, l	0301-2L
				tr Ca	: w to lt or	0301-3L
				tr Cont	: prp, Mica-ad	0301-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3524.00				Hegr Lund Upper Triassic		0302
			75	S/Sst : lt gy to lt brn to lt brn gy, f, kln, crs, l		0302-1L
			25	Coal : blk		0302-2L
			tr	Ca : w to lt or		0302-3L
3530.00				Hegr Lund Upper Triassic		0303
			95	S/Sst : lt gy to lt brn to lt brn gy, f, kln, crs, l		0303-1L
			5	Coal : blk		0303-2L
			tr	Ca : w to lt or		0303-3L
			tr	Cont : prp, dd		0303-4L
3536.00				Hegr Lund Upper Triassic		0304
			95	S/Sst : lt gy to lt brn to lt brn gy, f, kln, crs, l		0304-1L
			5	Coal : blk		0304-2L
			tr	Ca : w to lt or to or gy		0304-3L
			tr	Sh/Clst: lt gy to m gy		0304-4L
3542.00				Hegr Lomv Upper-Middle Triassic		0305
			90	S/Sst : w to lt brn to lt red brn to gy pi, f, kln, crs, l		0305-1L
			5	Coal : blk		0305-2L
			5	Ca : w to lt or to or gy		0305-3L
			tr	Cont : prp, dd		0305-4L
3548.00				Hegr Lomv Upper-Middle Triassic		0306
			95	S/Sst : w to lt brn to lt red brn to gy pi, f, kln, crs, l		0306-1L
			5	Ca : w to lt or to or gy to m brn		0306-2L
			tr	Coal : blk		0306-3L
			tr	Sh/Clst: lt gy to m gy		0306-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3554.00				Hegr Lomv Upper-Middle Triassic		0307
			95	S/Sst : lt gy to lt brn to lt red brn to gy pi, crs, l, f, kln		0307-1L
			5	Ca : w to lt or to or gy		0307-2L
			tr	Coal : blk		0307-3L
			tr	Sh/Clst: m gy to pl brn, carb		0307-4L
3560.00				Hegr Lomv Upper-Middle Triassic		0308
			90	S/Sst : lt gy to lt brn to lt red brn to gy pi, crs, l, f, kln		0308-1L
			10	Ca : w to lt or to or gy		0308-2L
			tr	Coal : blk		0308-3L
			tr	Sh/Clst: m gy to pl brn, carb		0308-4L
3561.00	ccp			Hegr Lomv Upper-Middle Triassic		0073
			100	S/Sst : gy red to m red brn to gy brn, crs, hd		0073-1L
3563.00	ccp			Hegr Lomv Upper-Middle Triassic		0074
			100	S/Sst : gy red to m red brn to gy brn, crs, hd		0074-1L
3565.00	ccp			Hegr Lomv Upper-Middle Triassic		0075
			100	S/Sst : gy red to m red brn to gy brn, crs, hd		0075-1L
3567.00	ccp			Hegr Lomv Upper-Middle Triassic		0076
			100	S/Sst : gy red to m red brn to gy brn, crs, hd, carb		0076-1L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3569.00	ccp			Hegr Lomv Upper-Middle Triassic		0077
		100	S/Sst	: gy red to m red brn to gy brn, crs, hd, carb		0077-1L
3571.00	ccp			Hegr Lomv Upper-Middle Triassic		0078
		100	S/Sst	: gy red to m red brn to gy brn, crs, hd, carb		0078-1L
3573.00	ccp			Hegr Lomv Upper-Middle Triassic		0079
		100	S/Sst	: gy red to m red brn to gy brn, crs, hd		0079-1L
3575.00	ccp			Hegr Lomv Upper-Middle Triassic		0080
		100	S/Sst	: gy red to m red brn to gy brn, crs, hd		0080-1L
3577.00	ccp			Hegr Lomv Upper-Middle Triassic		0081
		100	S/Sst	: gy red to m red brn to gy brn, crs, hd		0081-1L
3578.50	ccp			Hegr Lomv Upper-Middle Triassic		0082
		100	S/Sst	: gy red to m red brn to gy brn, crs, hd		0082-1L
3584.00				Hegr Lomv Upper-Middle Triassic		0309
		65	S/Sst	: lt gy to lt brn to lt red brn to lt gy red, crs, l, f, kln		0309-1L
		20	Ca	: w to lt or to or gy		0309-2L
		10	Sh/Clst	: m gy to drk gy to brn gy to pl brn, carb		0309-3L
		5	Cont	: prp, dd, fib		0309-4L
		tr	Coal	: blk		0309-5L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3590.00			Hegr	Lomv	Upper-Middle Triassic	0310
		70	S/Sst	:	lt gy to lt brn to lt red brn to lt gy red, crs, l, f, kln	0310-1L
		15	Ca	:	w to lt or to or gy	0310-2L
		10	Sh/Clst:	m	gy to drk gy to brn gy to pl brn, carb	0310-3L
		5	Cont	:	prp, dd, fib	0310-4L
		tr	Coal	:	blk	0310-5L
3596.00			Hegr	Lomv	Upper-Middle Triassic	0311
		70	S/Sst	:	lt gy to lt brn to lt red brn to lt gy red, crs, l	0311-1L
		20	Ca	:	w to lt or to or gy	0311-2L
		5	Sh/Clst:	m	gy to drk gy to brn gy to pl brn, carb	0311-3L
		5	Cont	:	prp, dd, fib	0311-4L
		tr	Coal	:	blk	0311-5L
3602.00			Hegr	Lomv	Upper-Middle Triassic	0312
		80	S/Sst	:	lt gy to lt brn to lt red brn to lt gy red, crs, l	0312-1L
		15	Ca	:	w to lt or to or gy	0312-2L
		5	Sh/Clst:	m	gy to drk gy to brn gy to pl brn, carb	0312-3L
		tr	Cont	:	prp, dd, fib	0312-4L
3608.00			Hegr	Lomv	Upper-Middle Triassic	0313
		90	S/Sst	:	lt gy to lt brn to lt red brn to lt gy red, crs, l	0313-1L
		10	Ca	:	w to lt or to or gy	0313-2L
		tr	Sh/Clst:	m	gy to drk gy to brn gy to pl brn, carb	0313-3L
		tr	Cont	:	prp, fib	0313-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3614.00				Hegr Lomv Upper-Middle Triassic		0314
			90	S/Sst : lt gy to lt brn to lt red brn to lt gy red, crs, l		0314-1L
			10	Ca : w to lt or to or gy		0314-2L
			tr	Sh/Clst: m gy to drk gy to brn gy to pl brn, carb		0314-3L
			tr	Cont : prp, fib		0314-4L
3620.00				Hegr Lomv Upper-Middle Triassic		0315
			75	S/Sst : lt gy to lt brn to lt red brn to lt gy red, crs, l		0315-1L
			25	Ca : w to lt or to or gy		0315-2L
			tr	Sh/Clst: m gy to drk gy to brn gy to pl brn, carb		0315-3L
			tr	Cont : prp, fib		0315-4L
3626.00				Hegr Lomv Upper-Middle Triassic		0316
			80	S/Sst : lt gy to lt brn to lt red brn, crs, l		0316-1L
			20	Ca : w to lt or to or gy		0316-2L
			tr	Sh/Clst: m gy to drk gy to brn gy to pl brn, carb		0316-3L
			tr	Cont : prp, fib		0316-4L
3632.00				Hegr Lomv Upper-Middle Triassic		0317
			70	S/Sst : lt gy to lt brn to lt red brn, crs, l		0317-1L
			30	Ca : w to lt or to or gy		0317-2L
			tr	Sh/Clst: m gy to brn gy to pl brn, carb		0317-3L
			tr	Cont : prp, fib		0317-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3638.00				Hegr Teis Middle-Lower Triassic		0318
			70	S/Sst : lt gy to lt brn to red brn, crs, l, f, kln		0318-1L
			25	Ca : w to lt or to or gy		0318-2L
			5	Sh/Clst: m gy to brn gy to pl brn		0318-3L
			tr	Cont : prp		0318-4L
3644.00				Hegr Teis Middle-Lower Triassic		0319
			95	S/Sst : lt gy to lt brn to red brn, crs, l, f, kln		0319-1L
			5	Ca : w to lt or to or gy		0319-2L
			tr	Sh/Clst: m gy to brn gy to pl brn		0319-3L
			tr	Cont : prp		0319-4L
3650.00				Hegr Teis Middle-Lower Triassic		0320
			95	S/Sst : lt gy to lt brn to red brn, crs, l, f, kln		0320-1L
			5	Ca : w to lt or to or gy		0320-2L
			tr	Sh/Clst: m gy to brn gy to pl brn		0320-3L
			tr	Cont : prp		0320-4L
3656.00				Hegr Teis Middle-Lower Triassic		0321
			100	S/Sst : lt gy to gy red to red brn, crs, l		0321-1L
			tr	Ca : w to lt or to or gy		0321-2L
			tr	Sh/Clst: m gy to brn gy to pl brn, carb		0321-3L
3662.00				Hegr Teis Middle-Lower Triassic		0322
			50	S/Sst : lt gy to gy red to red brn, crs, l, f, kln		0322-1L
			25	Ca : w to lt or to or gy		0322-2L
			25	Sh/Clst: m gy to brn gy to pl brn, carb		0322-3L
			tr	Cont : prp		0322-4L

Table 1 : Lithology description for well NOCS 34/7-6

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3668.00			Hegr Teis Middle-Lower Triassic			0323
		60	S/Sst	: lt gy to gy red to red brn, crs, l, f, kln		0323-1L
		30	Ca	: w to lt or to or gy		0323-2L
		10	Sh/Clst:	m gy to brn gy to pl brn, carb		0323-3L
		tr	Cont	: prp		0323-4L
3674.00			Hegr Teis Middle-Lower Triassic			0324
	0.24	75	S/Sst	: lt gy to gy red to red brn, crs, l, f, kln		0324-1L
		20	Ca	: lt or to or gy		0324-2L
		5	Sh/Clst:	m gy to brn gy to pl brn, carb		0324-3L
		tr	Cont	: prp		0324-4L
3680.00			Hegr Teis Middle-Lower Triassic			0325
		50	S/Sst	: lt gy to gy red to red brn, crs, l, f, kln		0325-1L
		30	Ca	: lt or to or gy		0325-2L
		20	Sh/Clst:	m gy to brn gy to pl brn, carb		0325-3L
		tr	Coal	: blk		0325-4L
3685.00			Hegr Teis Middle-Lower Triassic			0326
		75	S/Sst	: lt gy to gy red to red brn, crs, l, f, kln		0326-1L
		20	Ca	: lt or to or gy		0326-2L
		5	Sh/Clst:	m gy to brn gy to pl brn, carb		0326-3L
		tr	Coal	: blk		0326-4L

Table 2 : Rock-Eval table for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
680.00	cut	S/Sst : lt gy to lt gn gy	0.11	0.19	0.95	0.20	0.39	49	244	0.3	0.37	407	0090-1L
860.00	cut	S/Sst : w to lt gy to drk gy	0.01	0.03	0.06	0.50	0.06	50	100	-	0.25	342	0096-1L
1160.00	cut	Sh/Clst: y gy to lt y brn	0.55	2.96	1.28	2.31	1.60	185	80	3.5	0.16	406	0106-1L
1340.00	cut	Sh/Clst: lt brn gy to lt ol gy	0.61	0.18	0.78	0.23	0.43	42	181	0.8	0.77	402	0112-1L
1610.00	cut	Sh/Clst: lt brn gy to lt ol gy to brn gy	1.86	0.29	0.47	0.62	0.69	42	68	2.2	0.87	357	0121-1L
1880.00	cut	Sh/Clst: lt brn gy to lt ol gy to pl ol	0.31	0.24	0.38	0.63	0.47	51	81	0.6	0.56	410	0130-1L
2030.00	cut	Sh/Clst: lt brn gy to lt ol gy to dsk y gn	1.69	0.54	0.54	1.00	0.88	61	61	2.2	0.76	408	0135-1L
2447.00	cut	Ca : lt or to lt brn to m brn	1.84	4.06	0.95	4.27	1.51	269	63	5.9	0.31	430	0150-1L
2489.00	cut	S/Sst : w to lt gy	0.28	0.42	0.26	1.62	0.57	74	46	0.7	0.40	471	0157-1L
2501.00	cut	Sh/Clst: lt gy to m gy	1.49	0.86	0.42	2.05	1.05	82	40	2.4	0.63	420	0159-1L
2517.00	ccp	Sltst : lt gy to lt brn gy	0.19	0.07	0.33	0.21	0.09	78	367	0.3	0.73	423	0001-1L
2519.00	ccp	Sh/Clst: pl y brn to lt brn gy	0.19	0.10	0.14	0.71	0.12	83	117	0.3	0.66	359	0002-1L
2524.60	ccp	S/Sst : w to lt gy to m gy to pl y brn	9.70	2.24	0.09	24.89	1.12	200	8	11.9	0.81	411	0005-1L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2530.00	ccp	Sh/Clst: m gy to drk gy	3.15	2.69	0.31	8.68	2.94	91	11	5.8	0.54	433	0007-1L
2534.00	ccp	S/Sst : w to lt gy to m y brn	10.70	2.56	0.14	18.29	1.21	212	12	13.3	0.81	418	0009-1L
2538.00	ccp	S/Sst : w to lt gy to m y brn	8.45	1.88	0.15	12.53	0.89	211	17	10.3	0.82	416	0011-1L
2542.00	ccp	S/Sst : lt gy to lt brn gy to lt or	6.70	2.71	0.21	12.90	0.97	279	22	9.4	0.71	417	0013-1L
2552.00	ccp	S/Sst : lt gn gy to lt gy	0.58	0.13	0.07	1.86	0.12	108	58	0.7	0.82	301	0016-1L
2558.00	ccp	S/Sst : pl pu to lt pu	0.83	0.14	0.04	3.50	0.21	67	19	1.0	0.86	341	0019-1L
2564.00	ccp	S/Sst : w to lt gy to lt brn gy to lt or	11.07	3.10	0.06	51.67	1.30	238	5	14.2	0.78	417	0022-1L
2572.00	ccp	S/Sst : w to lt gy to lt brn gy to pl y brn	8.91	2.52	0.13	19.38	1.07	236	12	11.4	0.78	416	0026-1L
2578.00	ccp	Sh/Clst: lt gy to lt bl brn to dsk y to lt ol gy	0.14	0.03	0.26	0.12	0.09	33	289	0.2	0.82	390	0029-1L
2580.00	ccp	Sh/Clst: gn gy to lt ol gy	0.03	-	0.03	-	0.03	-	100	-	1.00	-	0030-1L
2586.00	ccp	S/Sst : w to lt gy to lt brn gy to m gy to pl y brn	13.99	4.44	0.15	29.60	1.71	260	9	18.4	0.76	422	0033-1L
2590.00	ccp	S/Sst : lt gy to lt brn gy	0.17	0.02	0.01	2.00	0.14	14	7	0.2	0.89	424	0035-1L

Table 2 : Rock-Eval table for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2599.00	ccp S/Sst	: lt gy to lt bl gy to m bl gy	0.22	0.04	-	-	0.08	50	-	0.3	0.85	337	0038-1L
2601.00	ccp S/Sst	: lt gy to m gy to lt brn gy	16.16	8.26	0.26	31.77	2.32	356	11	24.4	0.66	427	0040-1L
2607.00	ccp Sltst	: gy pu to lt gy	0.03	-	0.20	-	0.08	-	250	-	1.00	-	0043-1L
2611.00	ccp Sltst	: gy pu to lt ol gy	0.01	-	0.28	-	0.06	-	467	-	1.00	-	0045-1L
2617.00	ccp S/Sst	: gy red to lt gy	0.01	-	0.12	-	0.05	-	240	-	1.00	-	0048-1L
2621.00	ccp Sh/Clst:	m brn to pl brn	0.02	0.01	0.20	0.05	0.12	8	167	-	0.67	-	0050-1L
2684.00	cut S/Sst	: w to lt gy to gy pi	0.22	0.24	0.51	0.47	0.49	49	104	0.5	0.48	407	0172-1L
2804.00	cut S/Sst	: w to or gy to gy pi	0.08	0.07	0.26	0.27	0.15	47	173	0.2	0.53	339	0192-1L
2914.00	ccp S/Sst	: lt gy to lt brn gy	0.15	0.59	0.24	2.46	0.14	421	171	0.7	0.20	433	0052-1L
2922.00	ccp S/Sst	: w to lt gy	0.02	0.02	0.10	0.20	0.04	50	250	-	0.50	387	0056-1L
2930.00	ccp S/Sst	: w to lt gy to lt gn gy	0.07	0.01	0.10	0.10	0.08	13	125	0.1	0.88	-	0060-1L
2940.00	ccp S/Sst	: lt gy to lt brn gy to gy red	0.04	0.05	0.08	0.63	0.06	83	133	0.1	0.44	300	0065-1L
2950.00	ccp S/Sst	: w to lt gy to lt brn gy	0.04	0.02	0.03	0.67	0.06	33	50	0.1	0.67	-	0070-1L

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3014.00	cut	S/Sst : w to gy pi to lt gy red	0.05	0.07	0.41	0.17	0.06	117	683	0.1	0.42	341	0220-1L
3098.00	cut	S/Sst : w to lt gy to gy pi to lt gy red	0.17	0.23	0.44	0.52	0.20	115	220	0.4	0.43	403	0231-1L
3254.00	cut	S/Sst : w to lt gy to lt or to gy pi	0.06	0.14	0.20	0.70	0.12	117	167	0.2	0.30	411	0256-1L
3362.00	cut	Ca : lt or to lt brn to w	0.04	0.06	0.36	0.17	0.14	43	257	0.1	0.40	410	0274-1L
3512.00	cut	Coal : blk	1.32	22.26	35.66	0.62	51.16	44	70	23.6	0.06	411	0300-1L
3674.00	cut	S/Sst : lt gy to gy red to red brn	0.07	0.10	0.20	0.50	0.24	42	83	0.2	0.41	397	0324-1L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
1160.00	cut	Sh/Clst: y gy to lt y brn	5.77	30.32	56.30	7.60	2.96	0106-1L
1640.00	cut	Sh/Clst: lt brn gy to lt ol gy to brn gy	9.82	50.39	35.36	4.42	-	0122-1L
2060.00	cut	Sh/Clst: lt brn gy to lt ol gy	7.33	27.58	57.92	7.17	-	0136-1L
2495.00	cut	S/Sst : w to lt gy	18.65	42.52	37.05	1.78	-	0158-2L
2517.00	ccp	Sltst : lt gy to lt brn gy	4.63	0.10	89.82	5.45	0.07	0001-1L
2524.60	ccp	S/Sst : w to lt gy to m gy to pl y brn	6.07	29.27	49.75	14.91	2.24	0005-1L
2534.00	ccp	S/Sst : w to lt gy to m y brn	4.61	27.72	52.33	15.34	2.56	0009-1L
2542.00	ccp	S/Sst : lt gy to lt brn gy to lt or	3.81	25.10	55.00	16.09	2.71	0013-1L
2558.00	ccp	S/Sst : pl pu to lt pu	4.45	0.02	81.81	13.72	0.14	0019-1L
2572.00	ccp	S/Sst : w to lt gy to lt brn gy to pl y brn	5.11	27.26	50.03	17.60	2.52	0026-1L
2586.00	ccp	S/Sst : w to lt gy to lt brn gy to m gy to pl y brn	4.92	29.40	50.38	15.31	4.44	0033-1L
2599.00	ccp	S/Sst : lt gy to lt bl gy to m bl gy	12.28	58.76	24.59	4.37	0.04	0038-1L

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2601.00	ccp	S/Sst : lt gy to m gy to lt brn gy	2.81	13.95	35.67	47.57	8.26	0040-1L
2690.00	cut	S/Sst : w	22.72	53.73	19.70	3.85	-	0173-1L

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 34/7-6

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
2524.60	ccp	S/Sst : w to lt gy to m gy to pl y brn	10.6	124.5	74.6	28.6	1.6	19.7	103.2	21.3	1.01	0005-1L
2530.00	ccp	Sh/Clst: m gy to drk gy	8.9	24.7	12.7	7.1	0.6	4.3	19.8	4.9	3.12	0007-1L
2534.00	ccp	S/Sst : w to lt gy to m y brn	8.1	82.2	48.2	19.8	1.1	13.1	68.0	14.2	0.82	0009-1L
2542.00	ccp	S/Sst : lt gy to lt brn gy to lt or	8.8	80.3	48.9	18.9	0.5	12.0	67.8	12.5	0.95	0013-1L
2558.00	ccp	S/Sst : pl pu to lt pu	9.2	11.5	7.3	2.2	0.3	1.7	9.5	2.0	0.27	0019-1L
2572.00	ccp	S/Sst : w to lt gy to lt brn gy to pl y brn	8.9	94.9	52.1	23.8	2.0	17.0	75.9	19.0	1.11	0026-1L
2586.00	ccp	S/Sst : w to lt gy to lt brn gy to m gy to pl y brn	9.7	165.5	90.9	42.1	3.1	29.4	133.0	32.5	1.70	0033-1L
2601.00	ccp	S/Sst : lt gy to m gy to lt brn gy	9.9	166.0	94.8	42.1	2.0	27.1	136.9	29.1	1.65	0040-1L

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2524.60	ccp	S/Sst : w to lt gy to m gy to pl y brn	11789	7064	2708	151	1865	9772	2017	0005-1L
2530.00	ccp	Sh/Clst: m gy to drk gy	2775	1426	797	67	483	2224	550	0007-1L
2534.00	ccp	S/Sst : w to lt gy to m y brn	10098	5921	2432	135	1609	8353	1744	0009-1L
2542.00	ccp	S/Sst : lt gy to lt brn gy to lt or	9093	5537	2140	56	1359	7678	1415	0013-1L
2558.00	ccp	S/Sst : pl pu to lt pu	1254	796	239	32	185	1035	218	0019-1L
2572.00	ccp	S/Sst : w to lt gy to lt brn gy to pl y brn	10650	5847	2671	224	1907	8518	2132	0026-1L
2586.00	ccp	S/Sst : w to lt gy to lt brn gy to m gy to pl y brn	17114	9400	4353	320	3040	13753	3360	0033-1L
2601.00	ccp	S/Sst : lt gy to m gy to lt brn gy	16852	9624	4274	203	2751	13898	2954	0040-1L

Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2524.60	ccp S/Sst	: w to lt gy to m gy to pl y brn	1167.30	699.44	268.15	15.00	184.71	967.60	199.71	0005-1L
2530.00	ccp Sh/Clst:	m gy to drk gy	88.95	45.74	25.57	2.16	15.49	71.31	17.65	0007-1L
2534.00	ccp S/Sst	: w to lt gy to m y brn	1231.50	722.12	296.64	16.48	196.26	1018.76	212.74	0009-1L
2542.00	ccp S/Sst	: lt gy to lt brn gy to lt or	957.26	582.94	225.31	5.96	143.05	808.25	149.01	0013-1L
2558.00	ccp S/Sst	: pl pu to lt pu	464.48	294.84	88.86	12.12	68.66	383.70	80.78	0019-1L
2572.00	ccp S/Sst	: w to lt gy to lt brn gy to pl y brn	959.55	526.79	240.64	20.22	171.89	767.43	192.11	0026-1L
2586.00	ccp S/Sst	: w to lt gy to lt brn gy to m gy to pl y brn	1006.75	552.95	256.10	18.86	178.84	809.05	197.70	0033-1L
2601.00	ccp S/Sst	: lt gy to m gy to lt brn gy	1021.38	583.29	259.04	12.31	166.74	842.33	179.05	0040-1L

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	EOM	Aro	
2524.60	ccp	S/Sst : w to lt gy to m gy to pl y brn	59.92	22.97	1.29	15.82	82.89	17.11	260.84	484.51	0005-1L
2530.00	ccp	Sh/Clst: m gy to drk gy	51.42	28.74	2.43	17.41	80.16	19.84	178.87	404.08	0007-1L
2534.00	ccp	S/Sst : w to lt gy to m y brn	58.64	24.09	1.34	15.94	82.73	17.27	243.43	478.87	0009-1L
2542.00	ccp	S/Sst : lt gy to lt brn gy to lt or	60.90	23.54	0.62	14.94	84.43	15.57	258.73	542.40	0013-1L
2558.00	ccp	S/Sst : pl pu to lt pu	63.48	19.13	2.61	14.78	82.61	17.39	331.82	475.00	0019-1L
2572.00	ccp	S/Sst : w to lt gy to lt brn gy to pl y brn	54.90	25.08	2.11	17.91	79.98	20.02	218.91	399.47	0026-1L
2586.00	ccp	S/Sst : w to lt gy to lt brn gy to m gy to pl y brn	54.92	25.44	1.87	17.76	80.36	19.64	215.91	409.23	0033-1L
2601.00	ccp	S/Sst : lt gy to m gy to lt brn gy	57.11	25.36	1.20	16.33	82.47	17.53	225.18	470.45	0040-1L

Table 5 : Saturated Hydrocarbon Ratios for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
2524.60	ccp S/Sst	: w to lt gy to m gy to pl y brn	0.92	1.37	0.80	0.67	1.04	0005-1L
2530.00	ccp Sh/Clst:	m gy to drk gy	0.88	2.20	0.77	0.61	1.08	0007-1L
2534.00	ccp S/Sst	: w to lt gy to m y brn	0.84	1.41	0.73	0.62	1.08	0009-1L
2542.00	ccp S/Sst	: lt gy to lt brn gy to lt or	0.90	1.28	0.77	0.66	1.05	0013-1L
2558.00	ccp S/Sst	: pl pu to lt pu	0.88	2.71	0.81	0.65	1.07	0019-1L
2572.00	ccp S/Sst	: w to lt gy to lt brn gy to pl y brn	0.84	1.14	0.74	0.65	1.03	0026-1L
2586.00	ccp S/Sst	: w to lt gy to lt brn gy to m gy to pl y brn	0.92	1.12	0.79	0.68	1.11	0033-1L
2601.00	ccp S/Sst	: lt gy to m gy to lt brn gy	0.89	1.20	0.78	0.67	0.99	0040-1L

Table 6 : Aromatic Hydrocarbon Ratios for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2524.60	ccp	S/Sst : w to lt gy to m gy to pl y brn	0.69	0.68	-	0.91	0.81	0.88	0.89	0.44	2.08	0.83	0005-1L
2530.00	ccp	Sh/Clst: m gy to drk gy	0.98	1.19	0.24	0.77	0.66	0.73	0.80	0.30	9.76	0.80	0007-1L
2534.00	ccp	S/Sst : w to lt gy to m y brn	0.49	0.69	-	0.93	0.81	0.87	0.89	0.48	2.91	0.63	0009-1L
2542.00	ccp	S/Sst : lt gy to lt brn gy to lt or	0.38	0.83	-	0.87	0.76	0.82	0.86	-	2.21	0.69	0013-1L
2558.00	ccp	S/Sst : pl pu to lt pu	0.54	1.02	0.13	1.04	0.58	0.61	0.75	-	4.70	-	0019-1L
2572.00	ccp	S/Sst : w to lt gy to lt brn gy to pl y brn	-	-	-	0.90	0.76	0.93	0.86	-	2.33	0.68	0026-1L
2586.00	ccp	S/Sst : w to lt gy to lt brn gy to m gy to pl y brn	-	-	-	0.90	0.86	0.94	0.92	0.37	2.47	0.85	0033-1L
2601.00	ccp	S/Sst : lt gy to m gy to lt brn gy	-	-	-	0.91	0.80	0.88	0.88	0.37	1.83	0.44	0040-1L

Table 7 : Thermal Maturity Data for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
470.00	cut bulk	NDP	-	-	-	-	-	0083-0B
620.00	cut bulk	NDP	-	-	-	-	-	0088-0B
1100.00	cut bulk	NDP	-	-	-	-	-	0104-0B
1160.00	cut Sh/Clst: y gy to lt y brn	-	-	-	-	3.0-3.5(?)	406	0106-1L
1370.00	cut bulk	NDP	-	-	-	-	-	0113-0B
1520.00	cut bulk	NDP	-	-	-	-	-	0118-0B
1670.00	cut bulk	NDP	-	-	-	-	-	0123-0B
1820.00	cut bulk	NDP	-	-	-	-	-	0128-0B
1970.00	cut bulk	NDP	-	-	-	-	-	0133-0B
2240.00	cut bulk	NDP	-	-	-	-	-	0141-0B
2438.00	cut bulk	NDP	-	-	-	-	-	0148-0B
2453.00	cut Ca : lt or to lt brn to m brn	-	-	-	-	5.0(??)	-	0151-1L
2530.00	ccp Sh/Clst: m gy to drk gy	-	-	-	-	5.5-6.0	433	0007-1L
2578.00	ccp bulk	NDP	-	-	-	-	-	0029-0B

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
2696.00	cut	bulk	NDP	-	-	-	-	-	0174-0B
3026.00	cut	bulk	NDP	-	-	-	-	-	0328-0B
3170.00	cut	bulk	0.65	4	0.08	-	-	-	0242-0B
3332.00	cut	bulk	NDP	-	-	-	-	-	0269-0B
3488.00	cut	bulk	0.31	19	0.03	-	-	-	0296-0B
3680.00	cut	bulk	NDP	-	-	-	-	-	0325-0B

Table 8 : Visual Kerogen Composition Data for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	L	A	L	S	C	D	I	S	I	M	S	V	C	V	A	Sample				
			%	L	t	l	l	n	e	l	t	L	%	n	s	t	n		o	I	%	n
1160.00	cut	Sh/Clst: y gy to lt y brn	95	**	*	*		* *	TR		*			5	*	*		0106-1L				
2453.00	cut	Ca : lt or to lt brn to m brn	100	**	**	*		* *	**	TR		*		TR		*		0151-1L				
2530.00	ccp	Sh/Clst: m gy to drk gy	25		**	*	*	*		10	*	*		65	**	*	*	0007-1L				

Depth unit of measure: m

Depth	Typ	Lithology	EOM/Oil	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
2524.60	ccp		-30.13	-30.35	-28.90	-29.71	-29.57	-	0005-1L
2534.00	ccp		-30.10	-30.41	-29.33	-29.56	-29.66	-	0009-1L
2558.00	ccp		-29.41	-30.26	-28.33	-29.08	-28.71	-	0019-1L
2586.00	ccp		-30.15	-30.42	-29.50	-29.76	-29.57	-	0033-1L

Table 9b : Tabulation of cv values from carbon isotope data for well NOCS 34/7-6

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Interpretation	Sample
2524.60	ccp		-30.35	-28.90	0.98	Terrigenous	0005-1L
2534.00	ccp		-30.41	-29.33	0.17	Marine	0009-1L
2558.00	ccp		-30.26	-28.33	2.02	Terrigenous	0019-1L
2586.00	ccp		-30.42	-29.50	-0.18	Marine	0033-1L

Depth unit of measure: m

Depth	Lithology	B/A	B/B+A	B		C/E	C/C+E	X/E	Z/E	Z/C	Z/Z+E	Q/E	E/E+F	C+D		J1		Sample
				B+E+F										C+D+E+F	D+F/C+E	J1+J2%		
2524.60	S/Sst	0.61	0.38	0.08		0.40	0.29	0.07	0.29	0.73	0.23	0.06	0.92	0.30	0.11	59.19	0005-1	
2534.00	S/Sst	0.72	0.42	0.09		0.42	0.30	0.07	0.30	0.72	0.23	0.07	0.93	0.31	0.10	58.99	0009-1	
2558.00	S/Sst	0.71	0.41	0.05		0.35	0.26	0.03	0.25	0.70	0.20	0.05	0.95	0.27	0.06	64.35	0019-1	
2586.00	S/Sst	0.70	0.41	0.08		0.43	0.30	0.06	0.31	0.72	0.24	0.06	0.93	0.31	0.10	66.18	0033-1	

Table 10B: Variation in Sterane Distribution (peak height) for Well NOCS 34/7-6

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
2524.60	S/Sst	0.69	47.40	76.02	0.91	0.77	0.31	0.21	0.61	0.90	3.01	0005-1
2534.00	S/Sst	0.70	45.00	75.35	0.96	0.77	0.31	0.22	0.60	0.82	2.78	0009-1
2558.00	S/Sst	0.65	38.81	75.57	0.94	0.80	0.60	0.48	0.61	0.63	2.53	0019-1
2586.00	S/Sst	0.67	44.46	75.16	0.88	0.77	0.33	0.22	0.60	0.80	2.72	0033-1

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: $u + v / u + v + i + m + n + q + r + s + t$

Ratio8: $r + s / q + r + s + t$

Ratio9: q / t

Ratio10: $r + s / t$

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Ratio3</u>	<u>Ratio4</u>	<u>Ratio5</u>	<u>Sample</u>
2524.60	S/Sst	0.45	0.48	0.24	0.21	0.29	0005-1
2534.00	S/Sst	0.50	0.48	0.25	0.24	0.34	0009-1
2558.00	S/Sst	0.66	0.65	0.40	0.37	0.49	0019-1
2586.00	S/Sst	0.66	0.48	0.35	0.40	0.52	0033-1

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 10D: Variation in Monoaromatic Sterane Distribution for Well NOCS 34/7-6

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Ratio3</u>	<u>Ratio4</u>	<u>Sample</u>
2524.60	S/Sst	0.37	0.27	0.23	0.22	0005-1
2534.00	S/Sst	0.41	0.30	0.25	0.23	0009-1
2558.00	S/Sst	0.65	0.40	0.49	0.41	0019-1
2586.00	S/Sst	0.38	0.18	0.23	0.19	0033-1

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

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Sample
2524.60	S/Sst	0.35	0.93	0005-1
2534.00	S/Sst	0.35	0.93	0009-1
2558.00	S/Sst	0.31	0.95	0019-1
2586.00	S/Sst	0.20	0.95	0033-1

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

$$\text{Ratio2: } \text{g1} / \text{g1} + \text{I1}$$

Table 10F: Raw GCMS triterpane data (peak height) for Well NOCS 34/7-6

Depth unit of measure: m

Depth	Lithology	p	q	r	s	t	a	b	z	c	Sample
		x	d	e	f	g	h	i	j1		
		j2	k1	k2	l1	l2	m1	m2			
2524.60	S/Sst	42.73	29.65	19.36	24.27	11.69	70.53	42.98	136.14	186.28	0005-1
		31.22	32.86	461.60	37.86	170.57	116.05	20.23	117.64		
		81.10	113.73	69.51	70.50	45.86	62.46	45.66			
2534.00	S/Sst	41.85	31.58	19.80	22.08	11.10	62.66	44.87	130.83	180.75	0009-1
		31.26	26.35	429.60	34.23	156.50	101.72	19.77	117.35		
		81.59	121.35	71.84	68.39	42.94	60.95	45.26			
2558.00	S/Sst	3.38	1.51	0.99	0.81	0.38	2.48	1.75	7.27	10.38	0019-1
		0.99	1.17	29.46	1.41	7.32	5.22	0.64	5.36		
		2.97	4.63	2.41	2.63	1.62	2.47	1.83			
2586.00	S/Sst	52.26	32.28	21.82	27.19	11.89	72.67	50.62	163.86	226.67	0033-1
		33.42	32.99	532.20	39.66	192.64	123.60	25.46	135.21		
		69.09	134.51	81.24	79.17	55.74	71.67	52.63			

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
2524.60	S/Sst	75.31 125.99 35.78	42.24 77.19 47.71	117.18 53.60 94.88	80.14 69.62 64.65	26.86 20.38 52.94	29.28 29.16	60.59 63.62	36.31 72.29	59.23	0005-1
2534.00	S/Sst	75.43 116.99 37.67	41.88 70.25 46.88	120.37 52.45 91.90	76.48 70.62 67.29	26.53 18.50 57.30	29.06 28.36	60.24 57.74	31.96 65.04	54.22	0009-1
2558.00	S/Sst	14.79 6.51 2.21	4.37 4.28 1.96	5.93 3.24 4.68	3.77 3.28 3.13	1.32 3.28 3.09	1.62 1.08	2.55 1.39	1.67 2.62	2.97	0019-1
2586.00	S/Sst	92.56 138.56 42.00	49.66 87.12 51.98	131.33 63.55 102.34	82.54 77.97 74.55	26.46 20.65 64.94	30.99 37.28	62.49 72.64	35.78 77.21	68.82	0033-1

Table 10H: Raw GCMS trioaromatic sterane data (peak height) for Well NOCS 34/7-6

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
2524.60	S/Sst	369.76	406.86	258.54	890.56	484.56	440.86	445.37	0005-1
2534.00	S/Sst	463.39	427.97	281.34	912.29	490.30	479.30	459.53	0009-1
2558.00	S/Sst	190.50	185.85	48.33	200.73	111.45	108.16	98.76	0019-1
2586.00	S/Sst	63.94	30.06	22.36	58.61	39.03	24.61	32.28	0033-1

Depth unit of measure: m

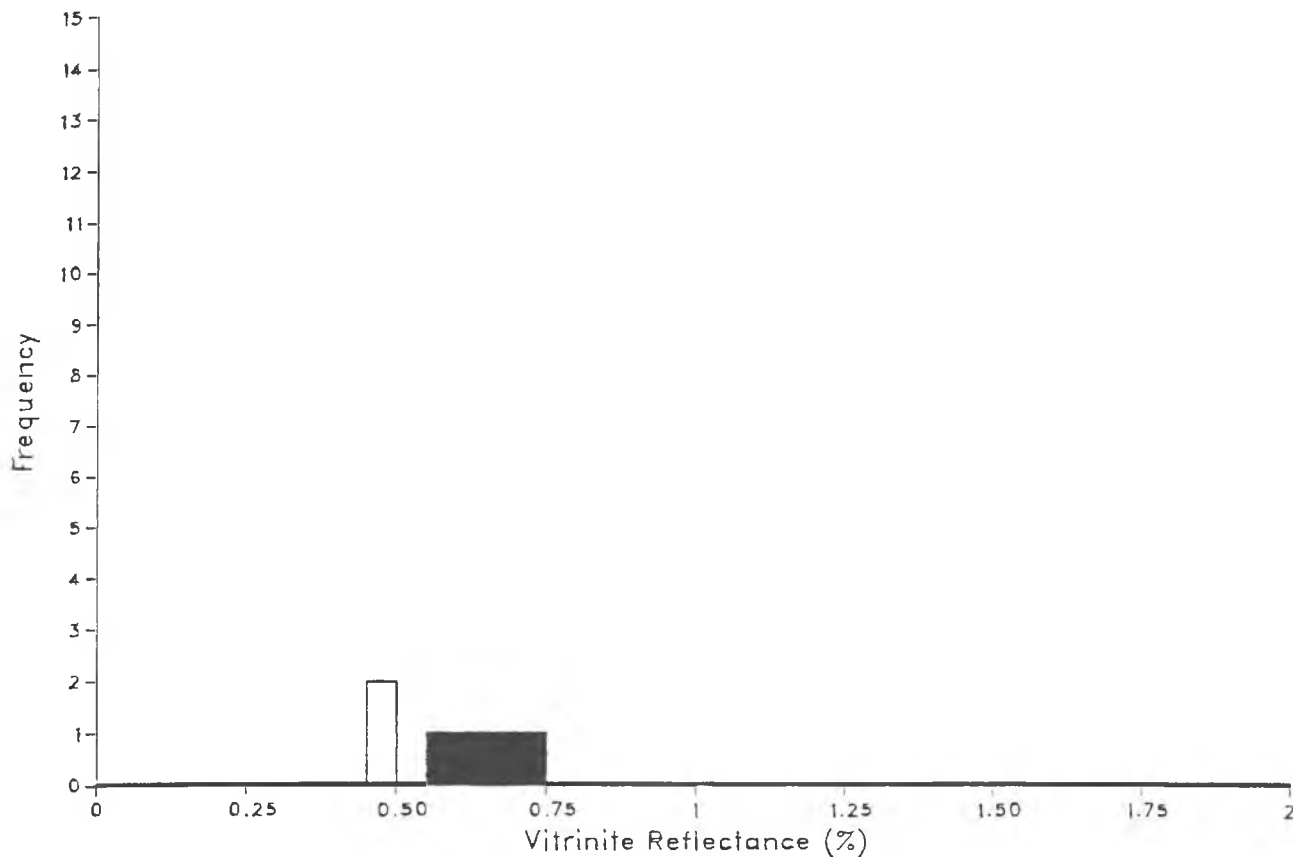
Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
2524.60	S/Sst	225.94	146.69	217.21	154.77	392.85	57.94	352.44	152.19	32.79	0005-1
2534.00	S/Sst	264.69	163.67	224.17	176.30	383.71	64.72	390.49	161.73	34.70	0009-1
2558.00	S/Sst	131.19	45.81	41.99	30.07	70.02	10.96	67.75	29.62	5.62	0019-1
2586.00	S/Sst	7.34	2.56	4.09	3.06	11.74	3.03	12.97	6.41	1.85	0033-1

APPENDIX 2

VITRINITE REFLECTANCE
HISTOGRAMS

Vitrinite Reflectance Histogram

Well: NOCS 34/7-6
Depth: 3170.00(m)

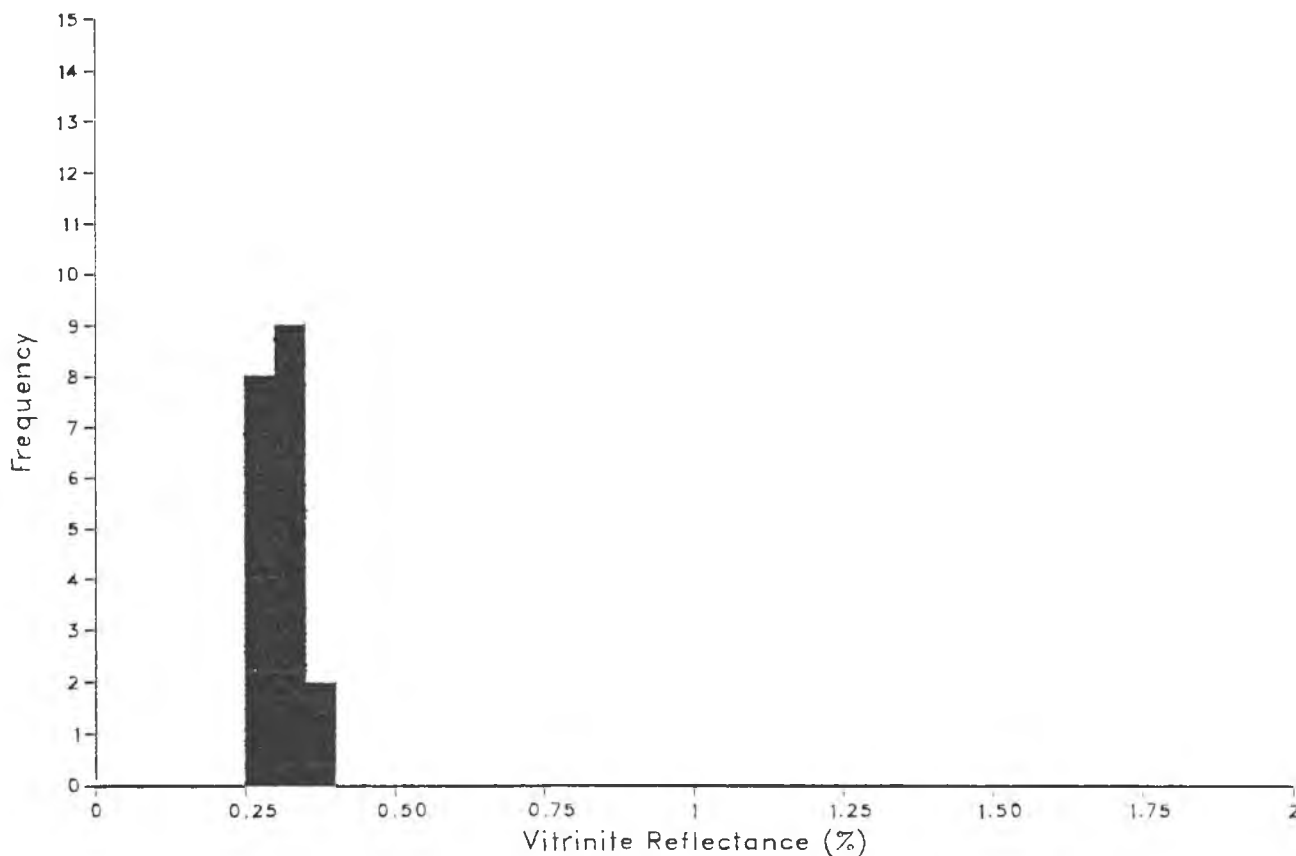


Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.550 to 0.750):	0.65	0.08	4
Population Two (from 0.450 to 0.500):	0.48	0.01	2

Readings:
0.468 0.482 0.552 0.629 0.685 0.727

Vitrinite Reflectance Histogram

Well: NOCS 34/7-6
Depth: 3488.00(m)



Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.400):	0.31	0.03	19

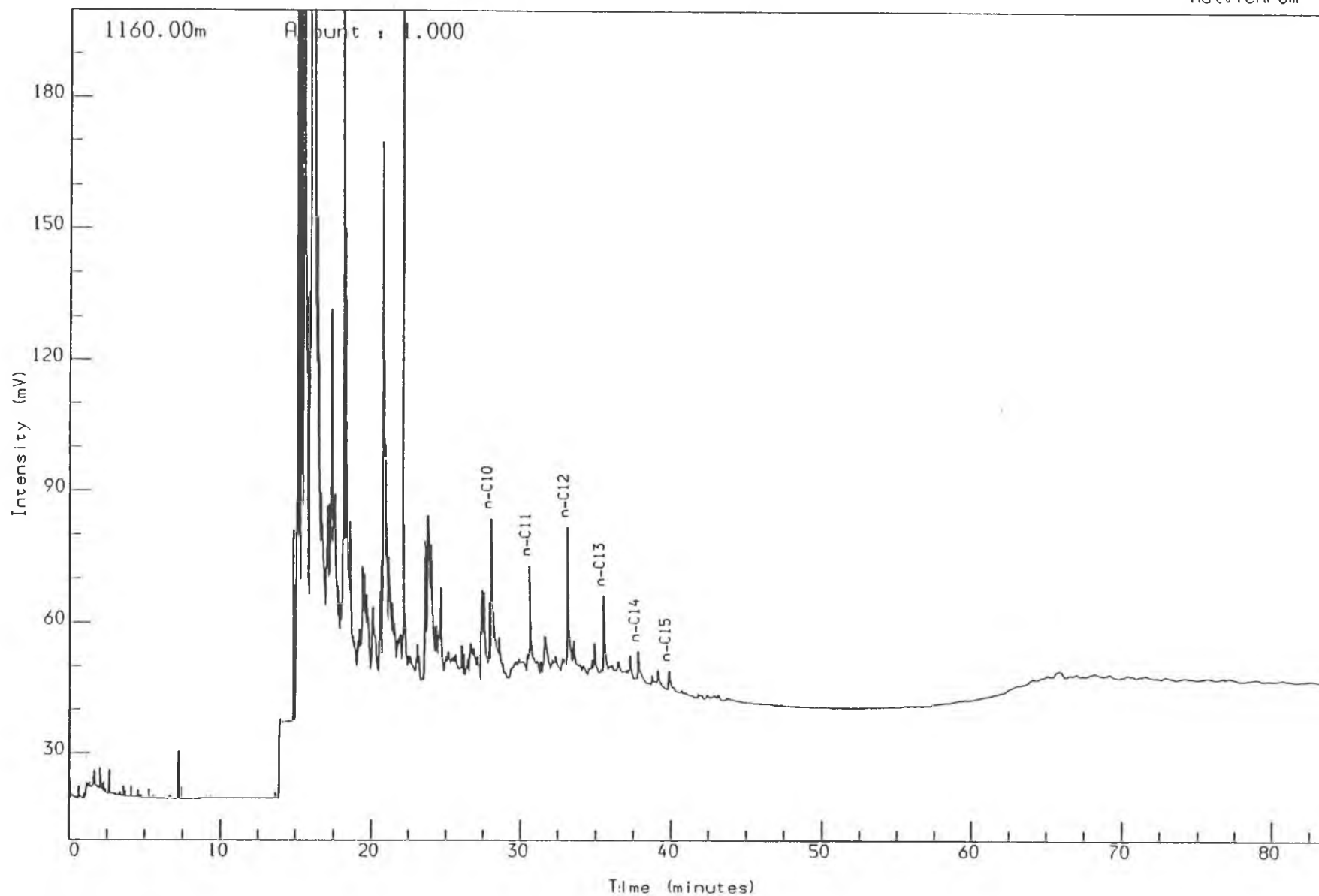
Readings:									
0.239	0.248	0.256	0.258	0.259	0.261	0.284	0.286	0.290	0.293
0.302	0.311	0.314	0.314	0.326	0.327	0.338	0.341	0.341	0.354
0.364									

APPENDIX 3

THERMAL EXTRACTION
AND
PYROLYSIS GAS CHROMATOGRAMS

Analysis Name : [P2408] 26 PE7201061,1,1.

Multichrom



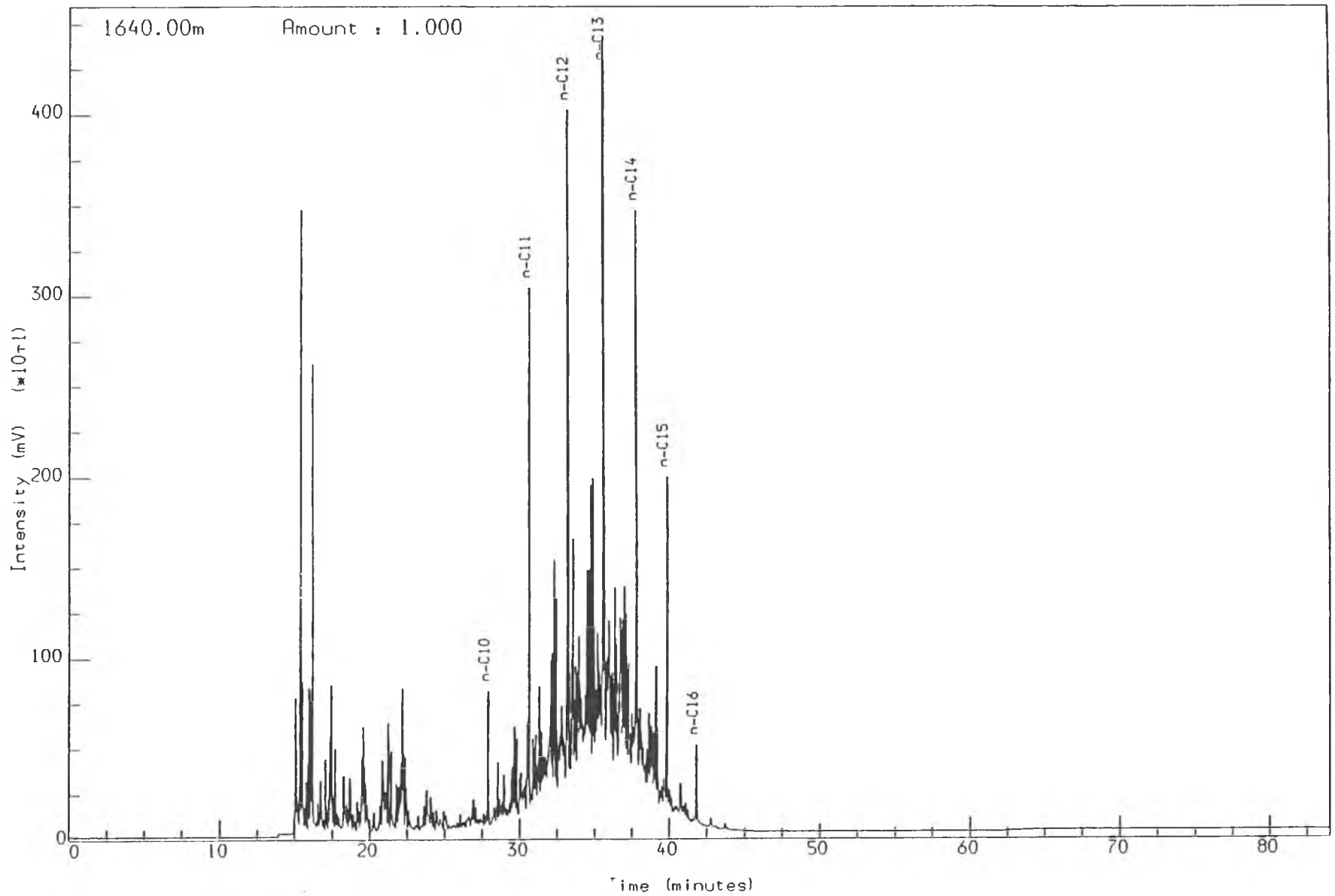
WELL NOCS 34/7-6 1160.00m cut
THERMAL EXTRACTION GC (S1)
Sh/C1st: y gy to lt y brn

Reported on 8-MAR-1991 at 13:52

GEOLAB  NOR

Analysis Name : [P2408] 26 PE7201221,1,1.

Multichrom



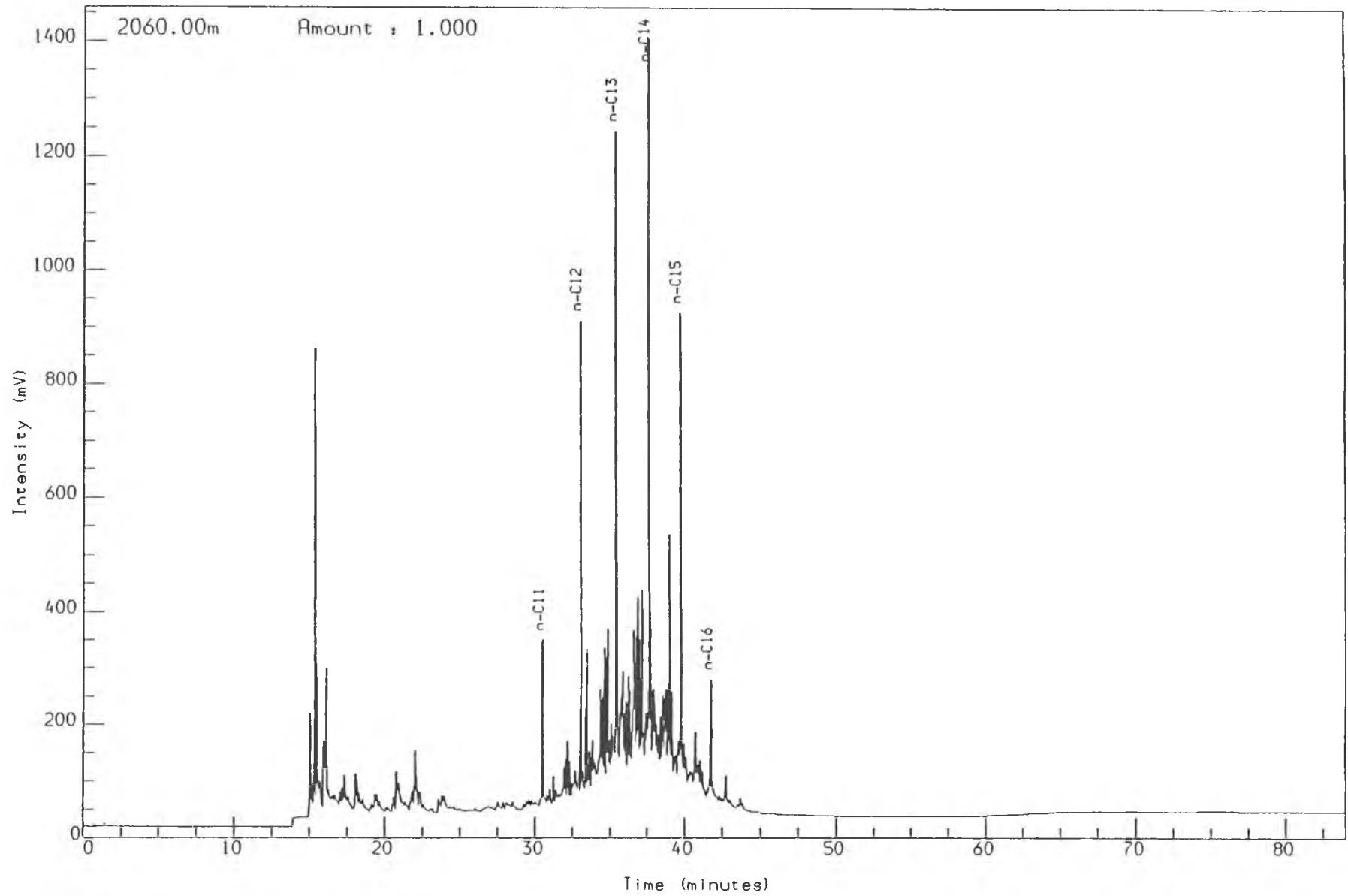
WELL NOCS 34/7-6 1640m
THERMAL EXTRACTION GC (S1)
SH/CLST: 1l brn gy to 1l ol gy to
brn gy

Reported on 8-MAR-1991 at 13:13

GEOLAB NOR

Analysis Name : [P2408] 26 PE7201361,1,1.

Multichrom



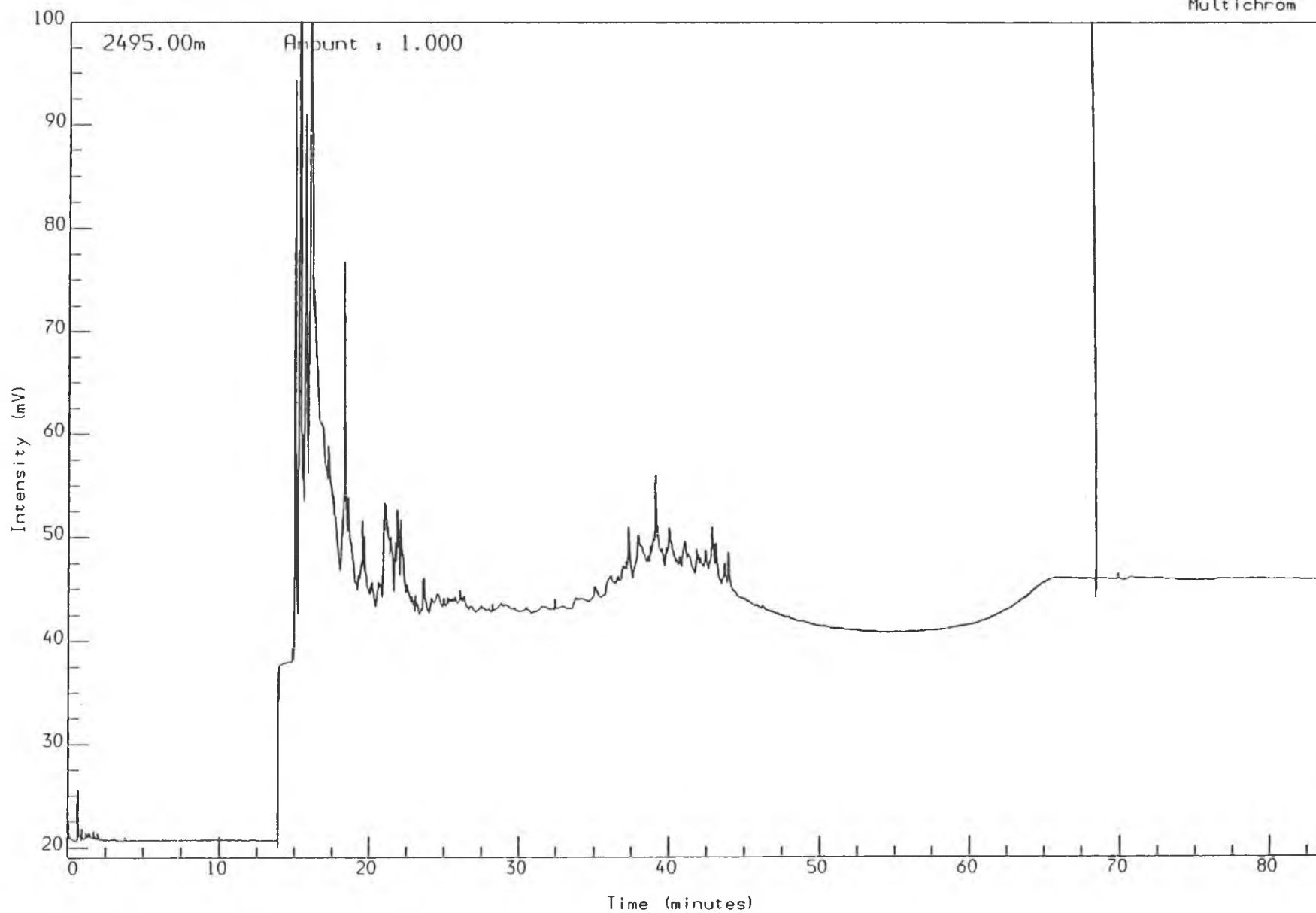
WELL NOCS 34/7-6 2060m
THERMAL EXTRACTION GC (S1)
SH/CLST:1t brn gy to 1t ol gy

Reported on 8-MAR-1991 at 13:22

GEOLAB  NOR

Analysis Name : [P2408] 26 PE7201581,1,1.

Multichrom



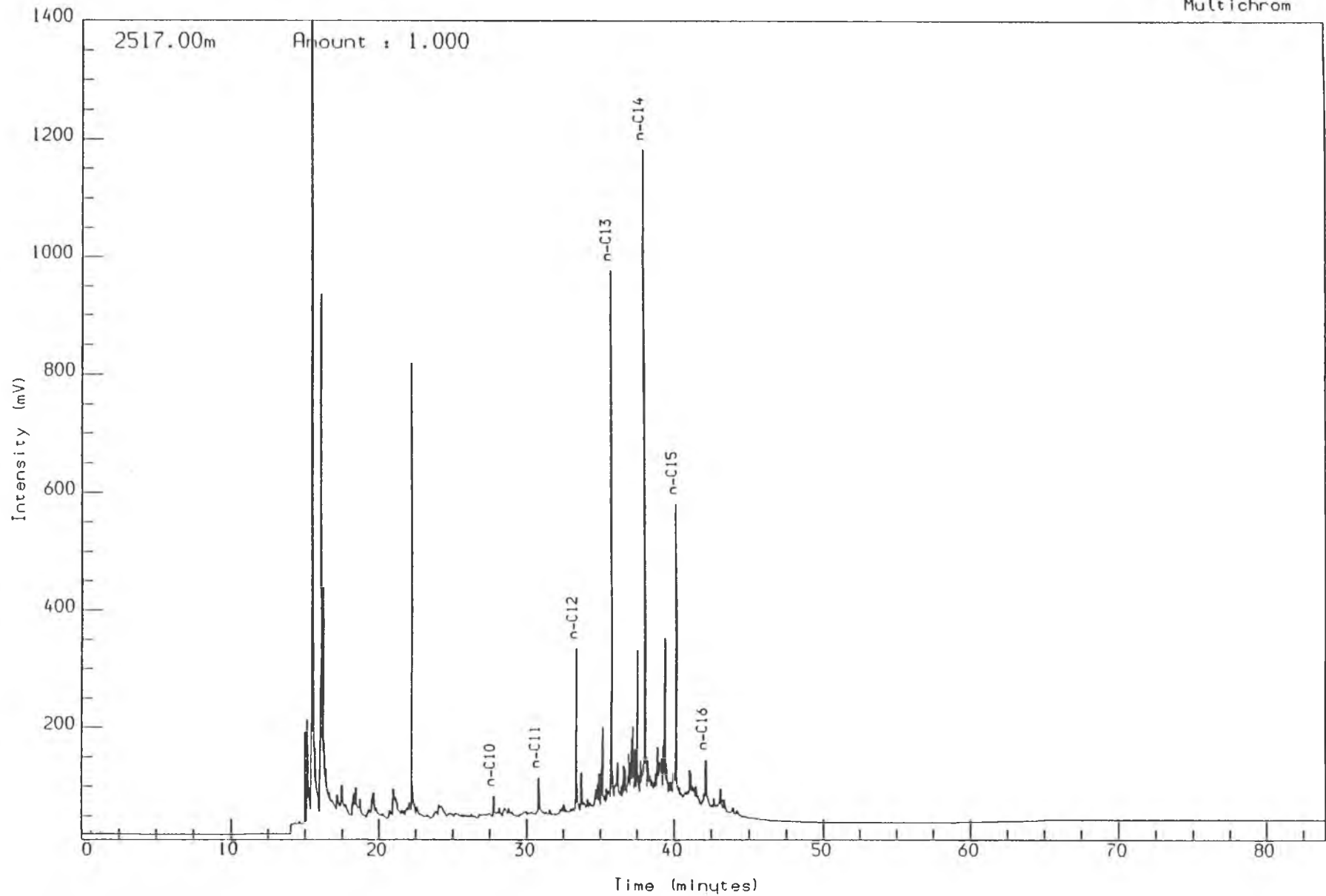
WELL NOCS 34/7-6 2495m
THERMAL EXTRACTION GC (S1)
S/SST:w to 1t gy

Reported on 8-MAR-1991 at 13:25

GEOLAB  NOR

Analysis Name : [P2408] 26 PE72B,1,1.

Multichrom



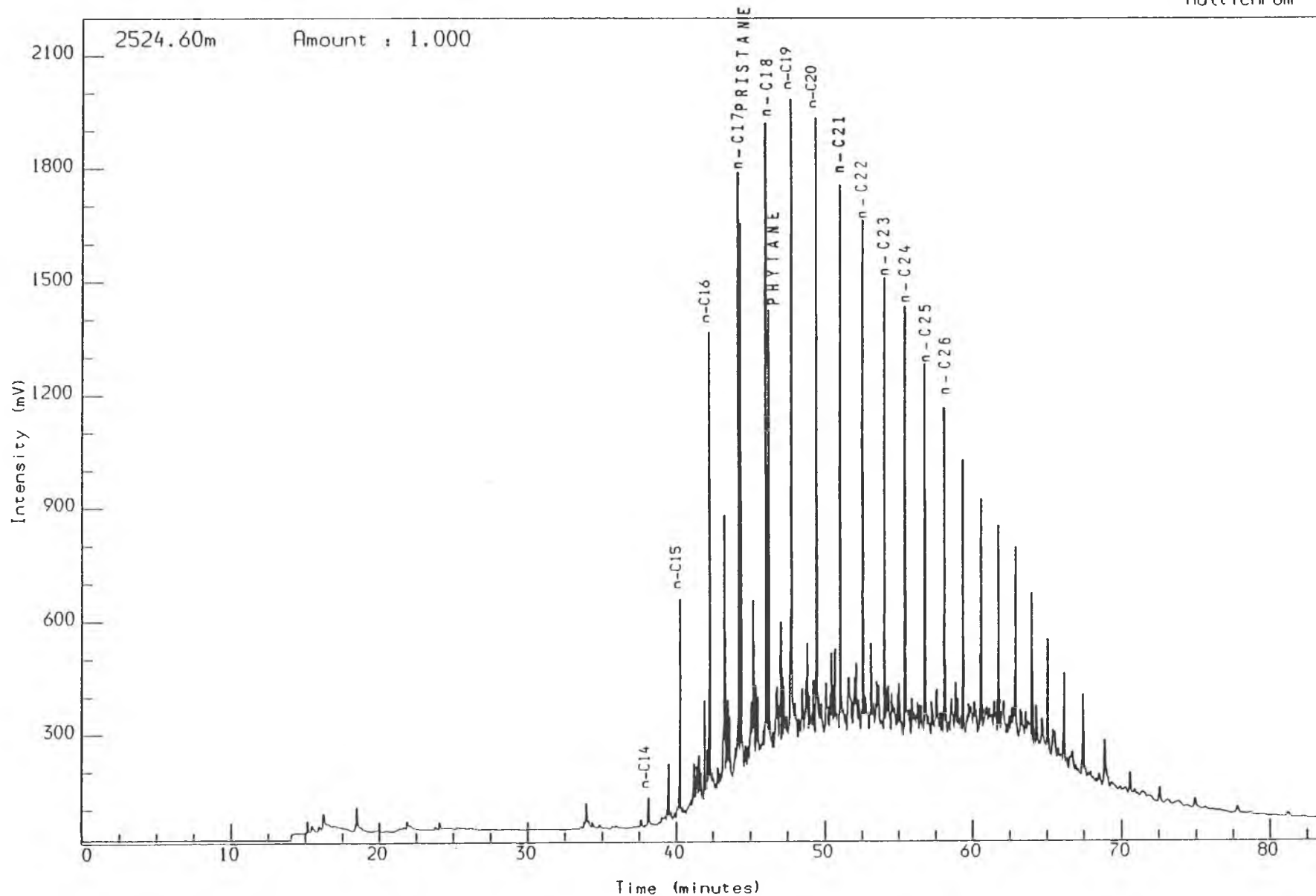
WELL NOCS 34/7-6 2517.00m ccp
THERMAL EXTRACTION GC (S1)
Slstst: lt gy to lt brn gy

Reported on 8-MAR-1991 at 13:54

GEOLAB  NOR

Analysis Name : [P2408] 26 PE72B,2,1.

Multichrom



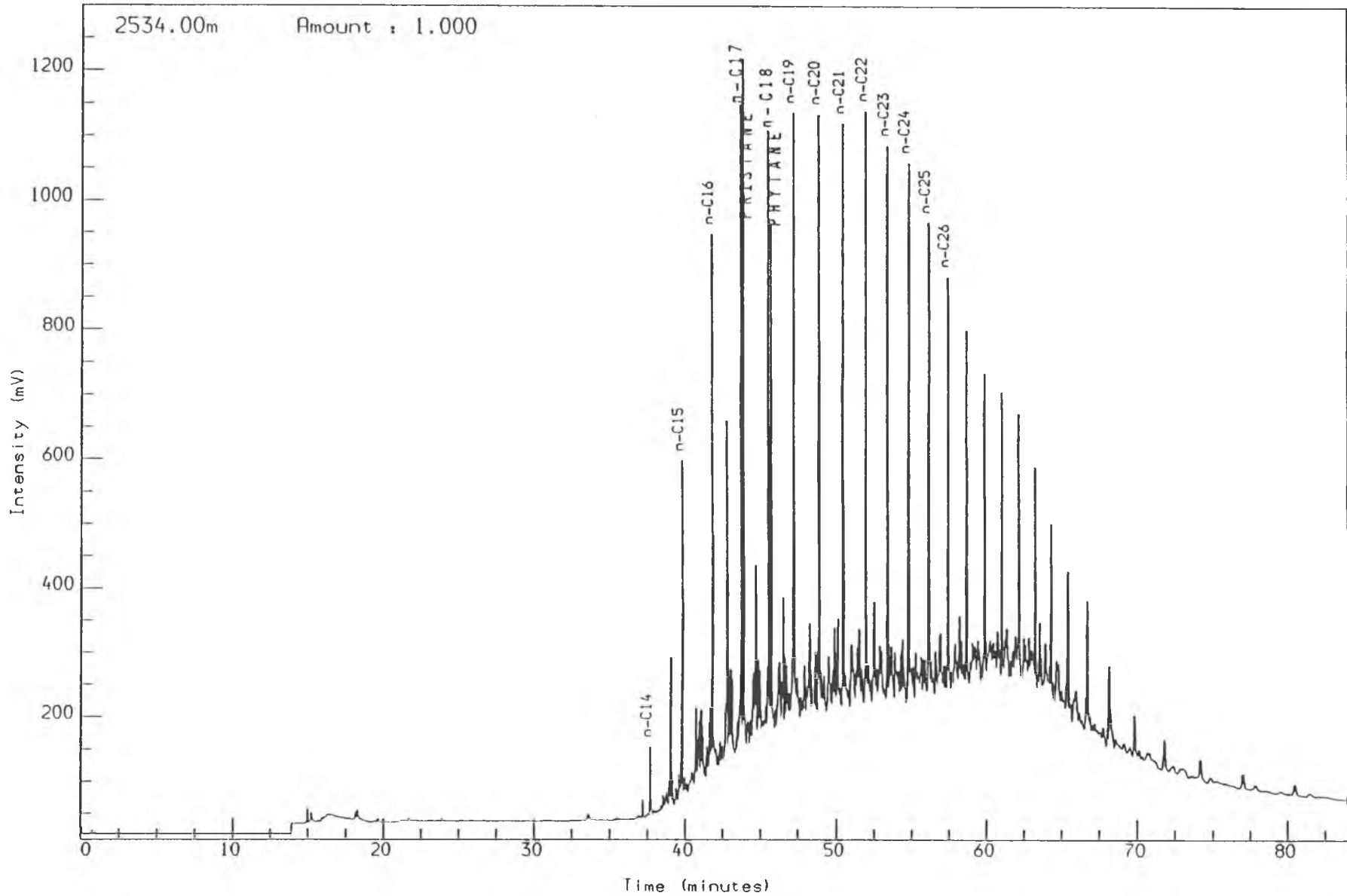
WELL NOCS 34/7-6 2524.60m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: w to lt gy to m gy to pl y br

Reported on 8-MAR-1991 at 13:59

GEOLAB  NOR

Analysis Name : [P2408] 26 PE72B,3,1.

Multichrom



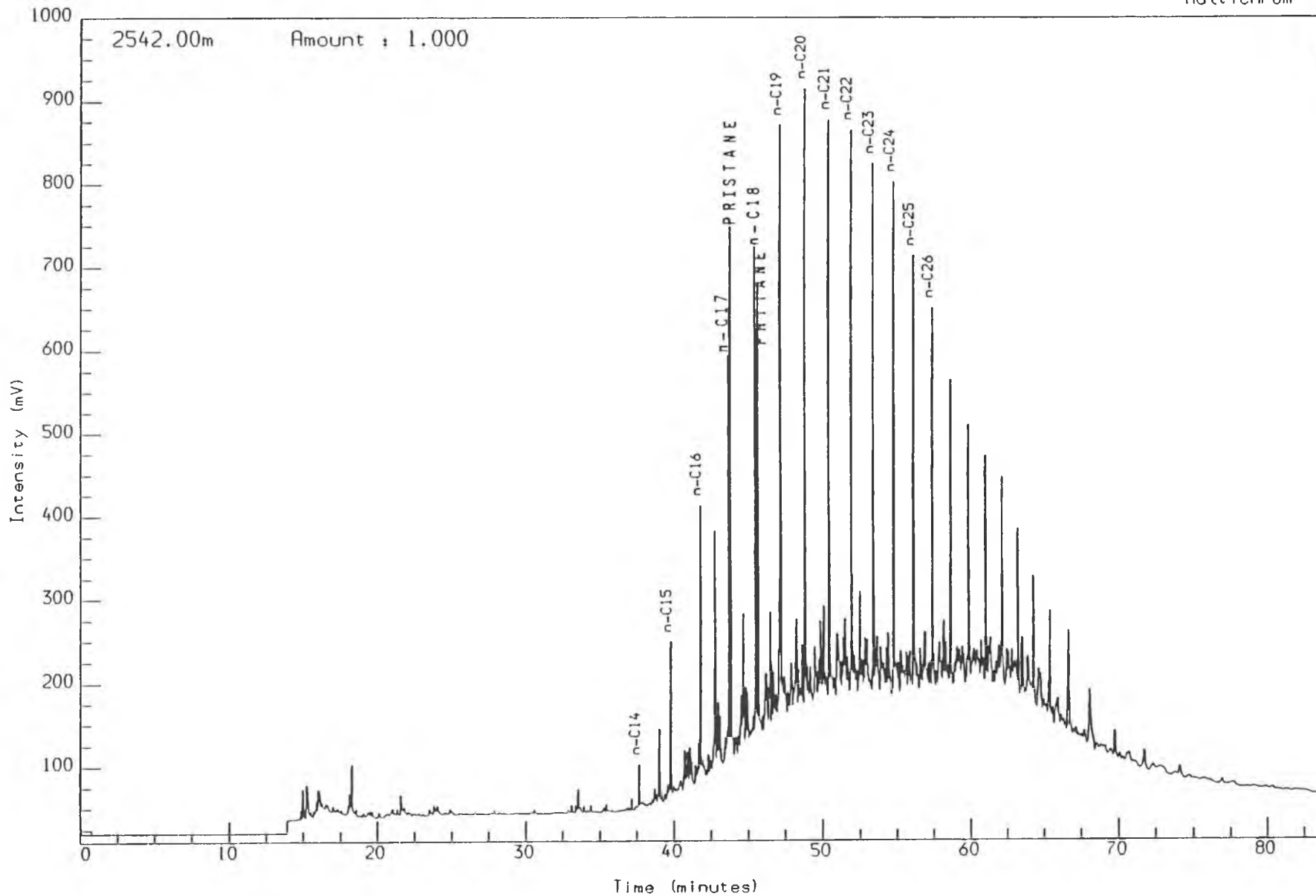
WELL NOCS 34/7-6 2534.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: w to lt gy to m y brn

Reported on 8-MAR-1991 at 14:01

GEOLAB NOR

Analysis Name : [P2408] 26 PE72B,4,1.

Multichrom



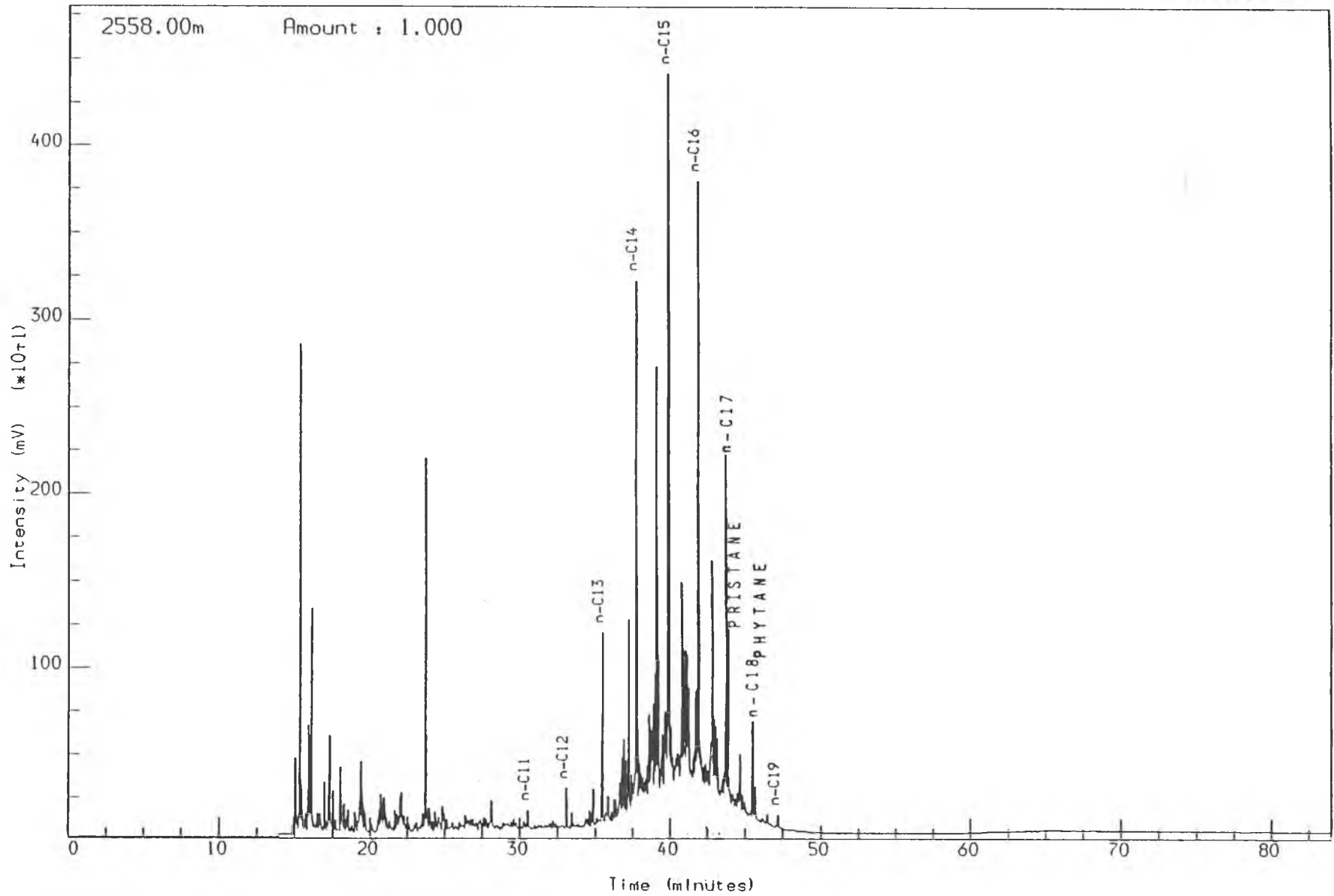
WELL NOCS 34/7-6 2542.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: 1t gy to 1t brn gy to 1t or

Reported on 8-MAR-1991 at 14:02

GEOLAB NOR

Analysis Name : [P2408] 26 PE72B,5,1.

Multichrom



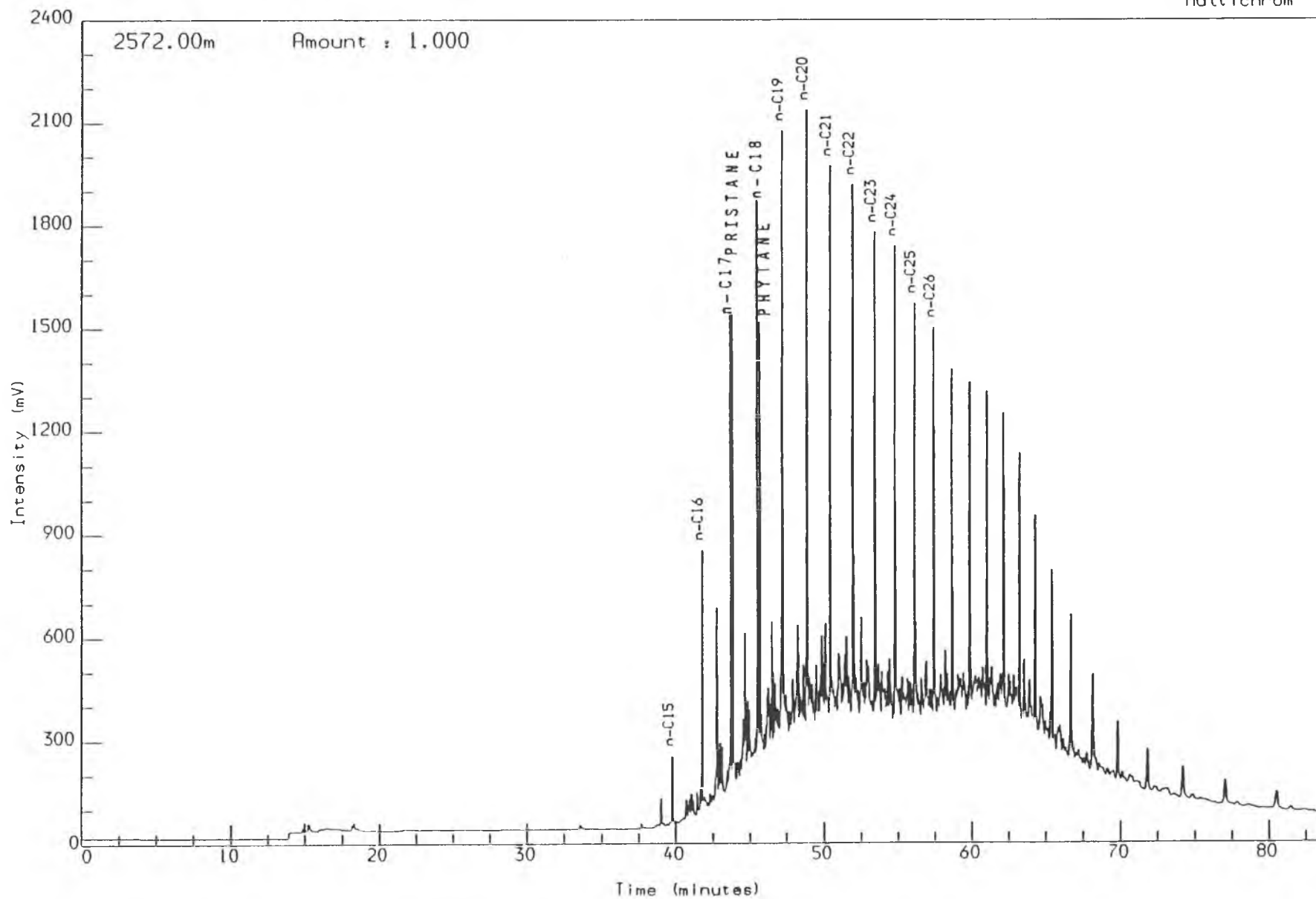
WELL NOCS 34/7-6 2558.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: pl pu to lt pu

Reported on 8-MAR-1991 at 14:03

GEOLAB  NOR

Analysis Name : [P2408] 26 PE72B,6,1.

Multichrom



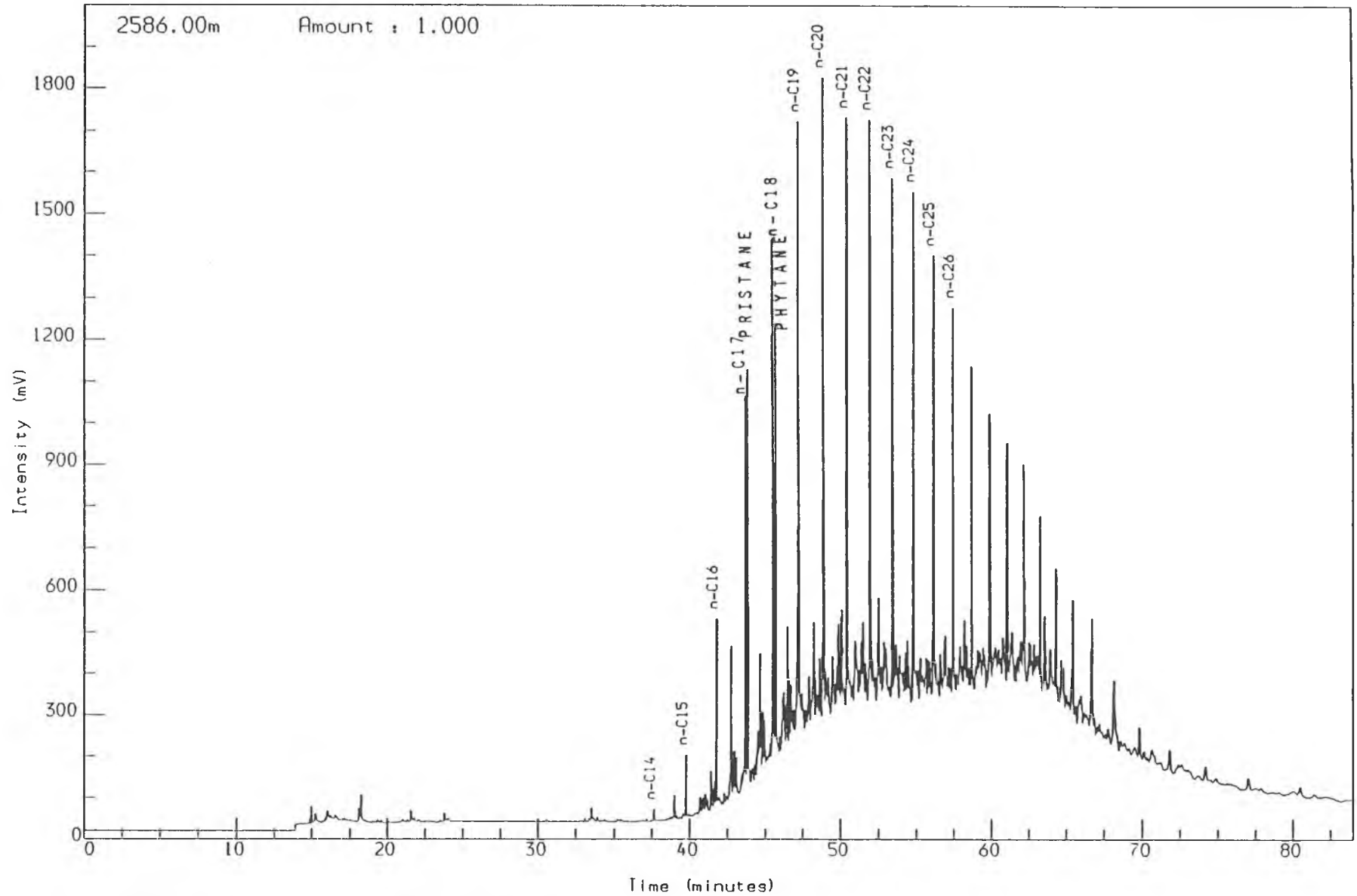
WELL NOCS 34/7-6 2572.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: w to lt gy to lt brn gy to pl

Reported on 8-MAR-1991 at 14:04

GEOLAB  NOR

Analysis Name : [P2408] 26 PE72B,7,1.

Multichrom



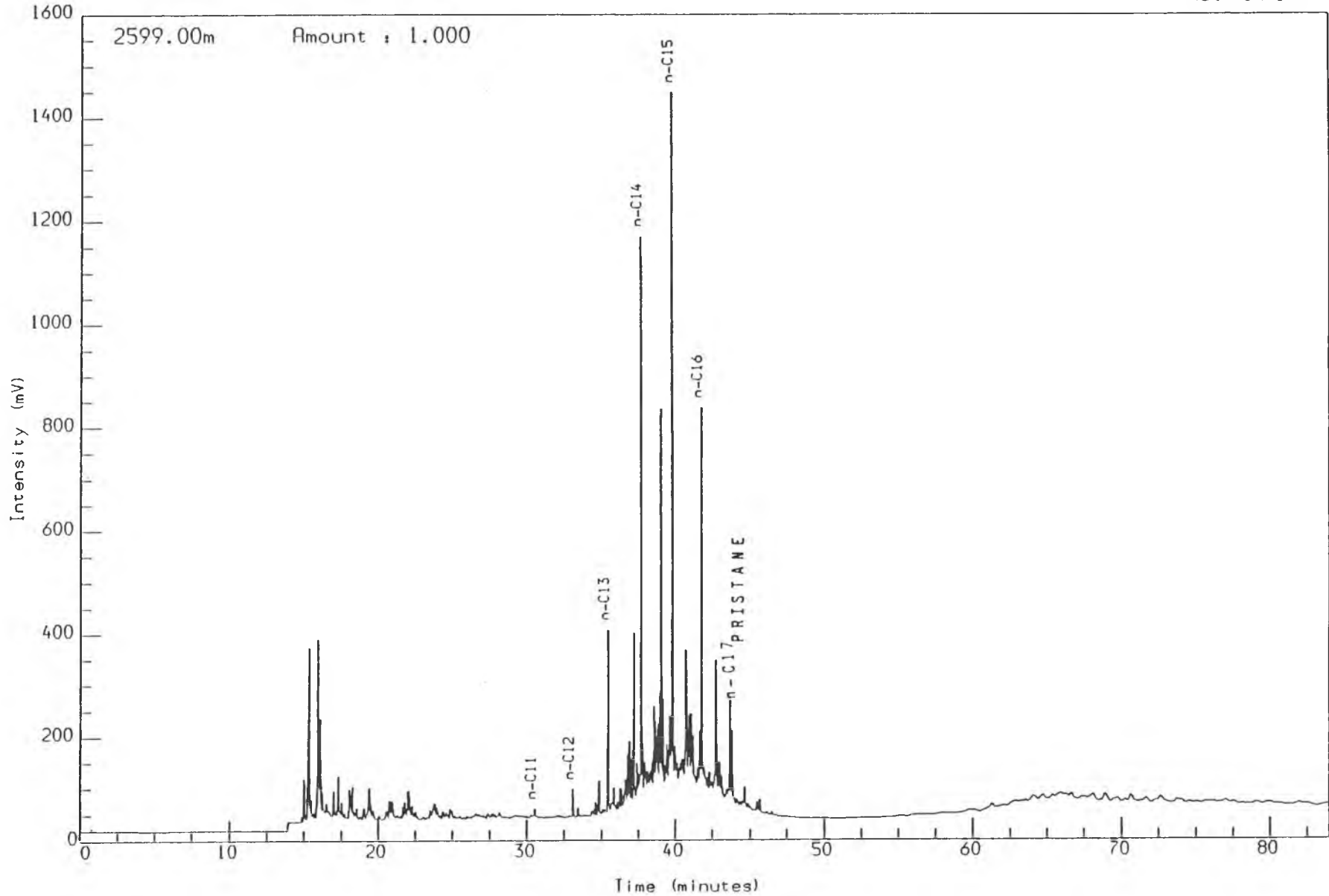
WELL NOCS 34/7-6 2586.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: w to lt gy to lt brn gy to m

Reported on 8-MAR-1991 at 14:05

GEOLAB NOR

Analysis Name : [P2408] 26 PE72B,8,1.

Multichrom



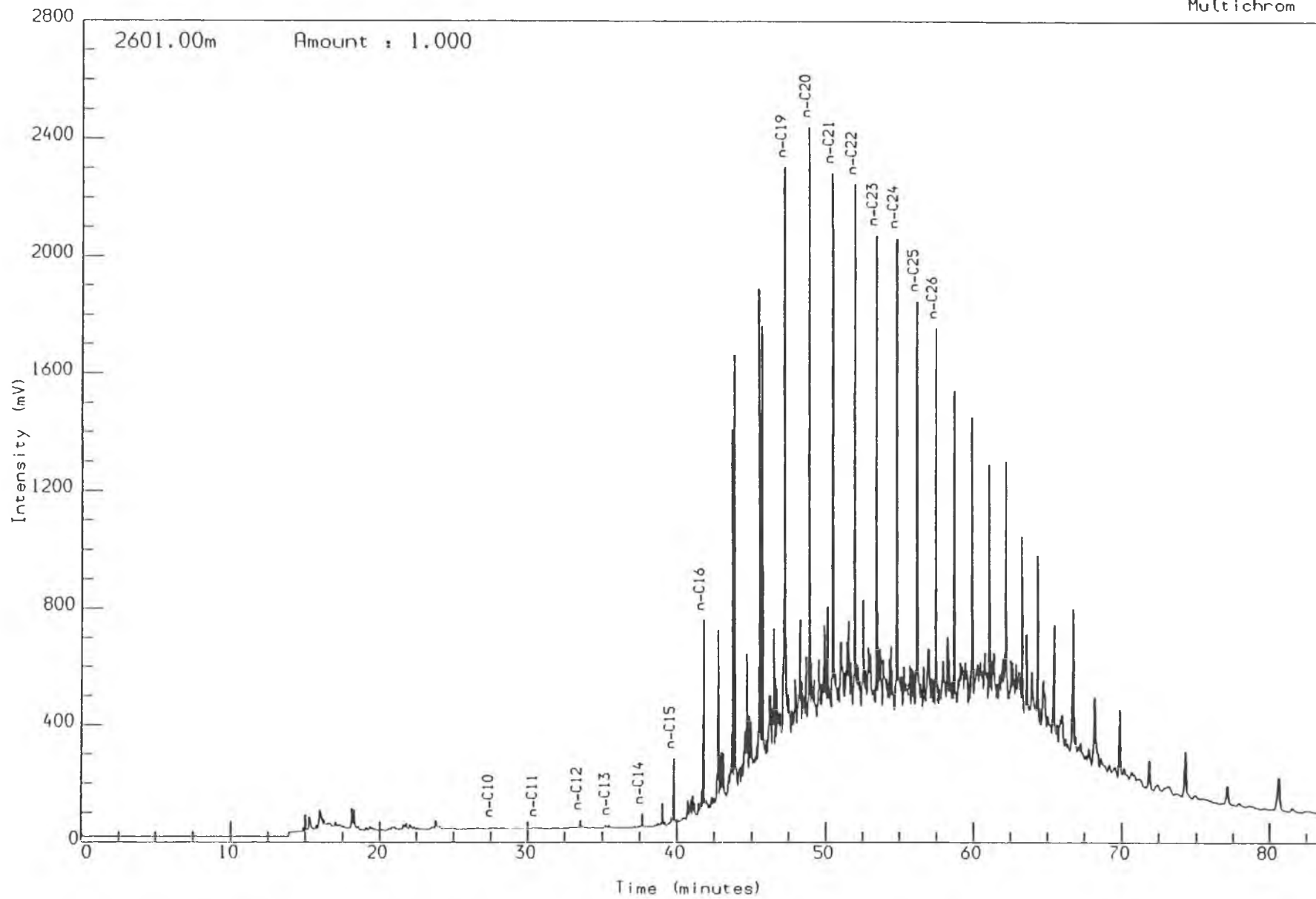
WELL NOCS 34/7-6 2599.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: 1t gy to 1t bl gy to m bl gy

Reported on 8-MAR-1991 at 14:07

GEOLAB  NOR

Analysis Name : [P2408] 26 PE72B,9,1.

Multichrom



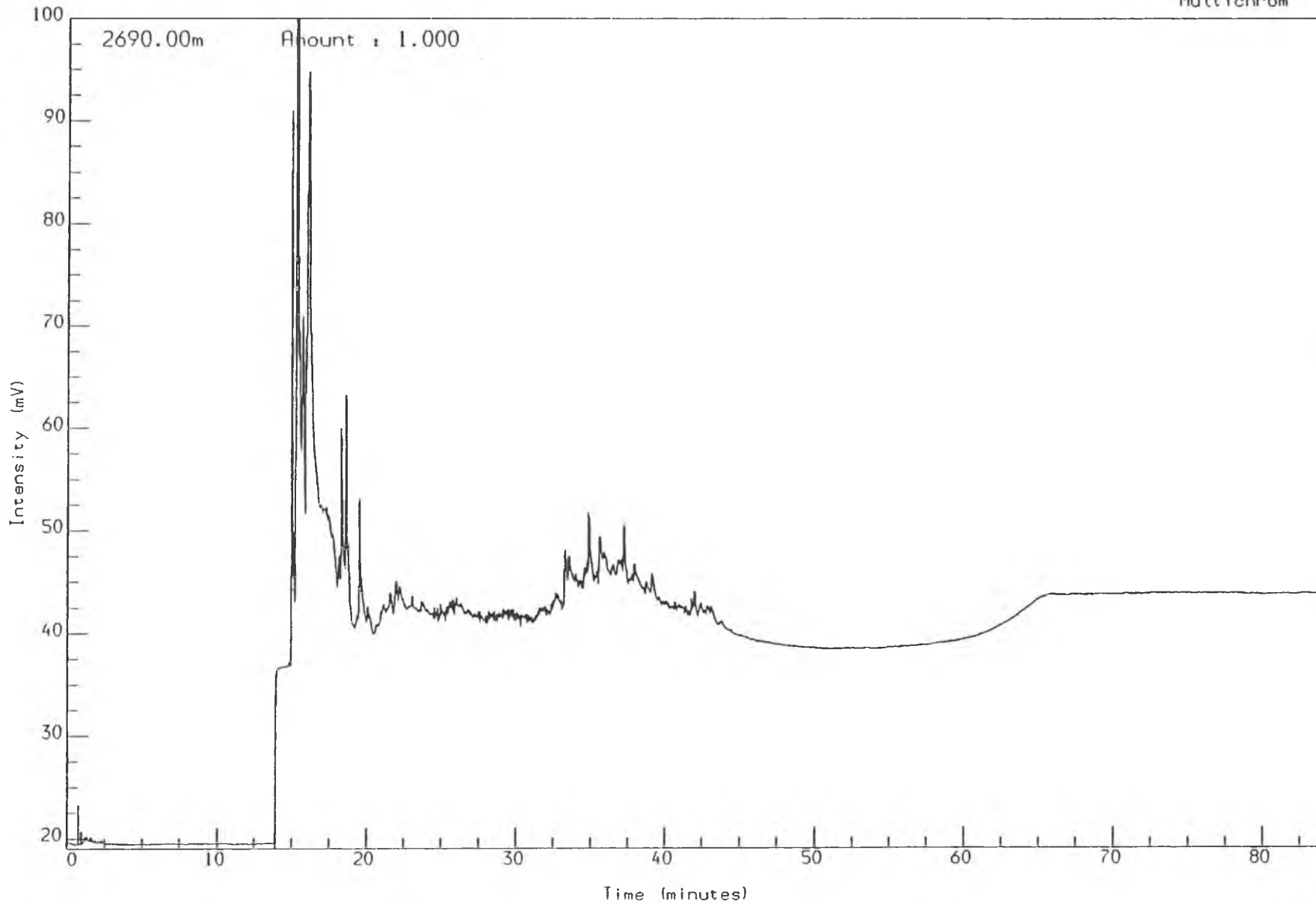
WELL NOCS 34/7-6 2601.00m ccp
THERMAL EXTRACTION GC (S1)
S/Sst: 1t gy to m gy to 1t brn gy

Reported on 8-MAR-1991 at 14:30

GEOLAB  NOR

Analysis Name : [P2408] 26 PE7201731,1,1.

Multichrom



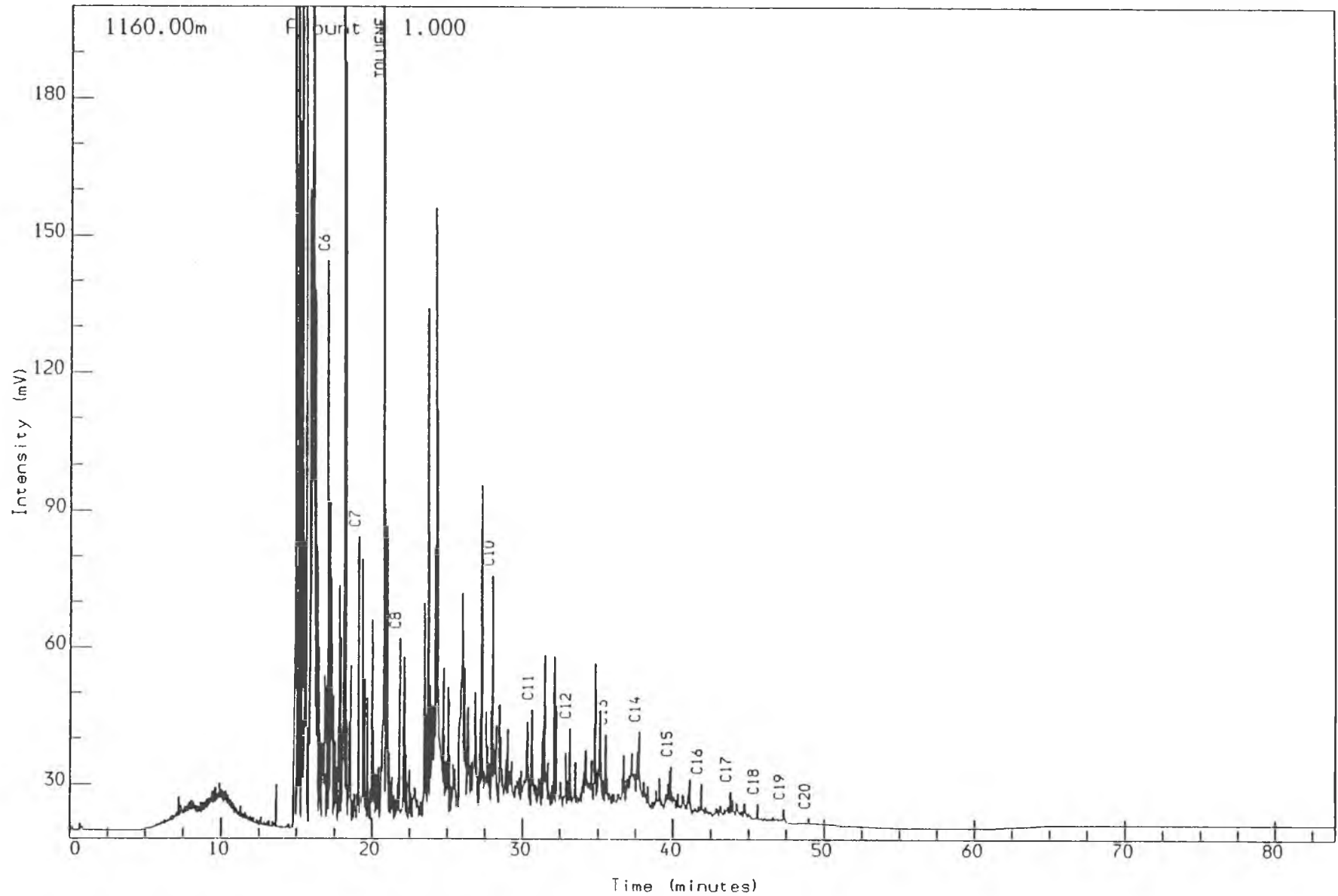
WELL NOCS 34/7-6 2690m
THERMAL EXTRACTION GC (S1)
S/SST:w

Reported on 8-MAR-1991 at 13:28

GEOLAB  NOR

Analysis Name : [P2408] 25 PE7201061,1,1.

Multichrom



WELL NOCS 34/7-6
PYROLYSIS GC (S2)
Sh/clst: y gy to lt y brn

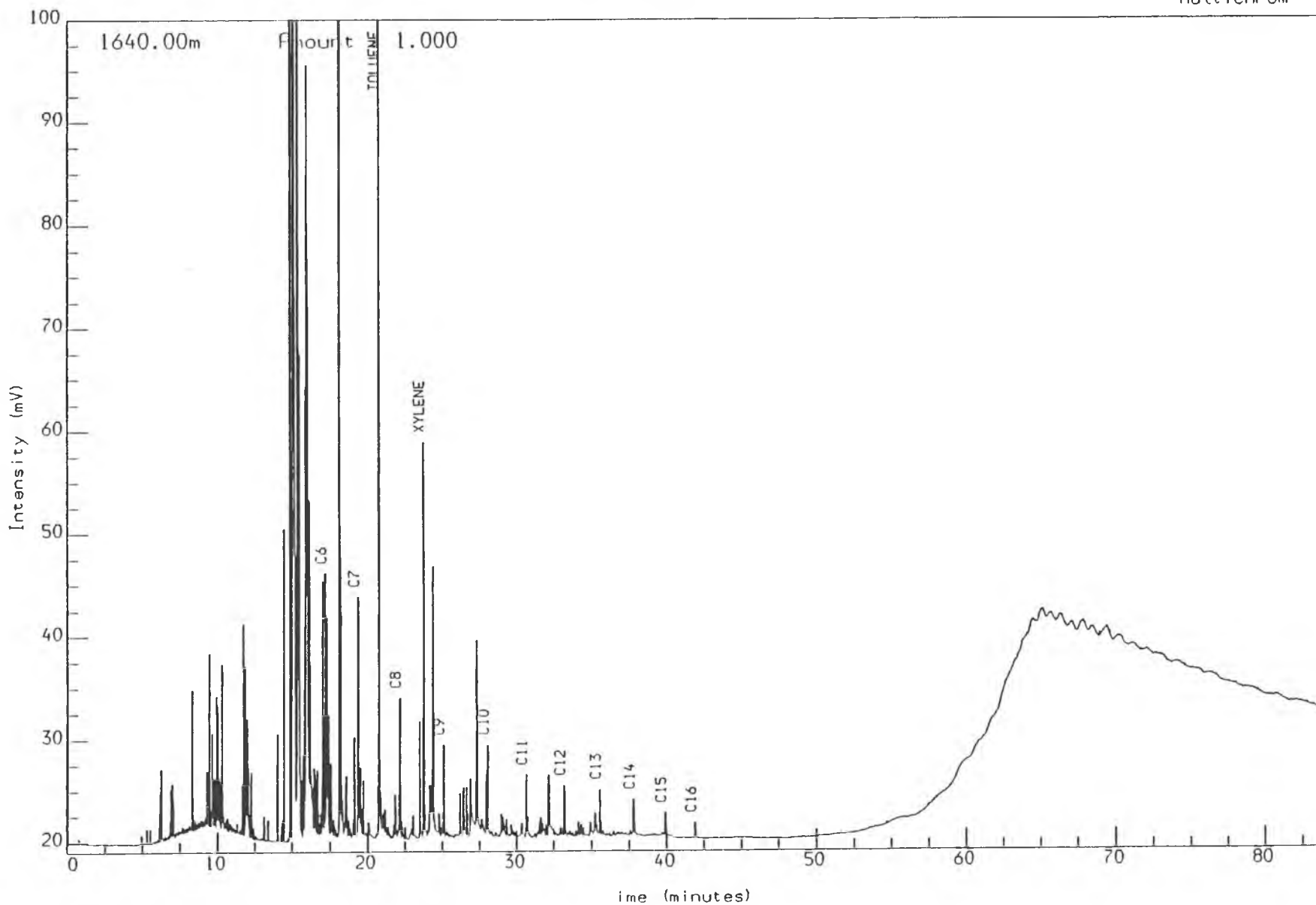
1160.00m cut

Reported on 8-MAR-1991 at 12:09

GEOLAB NOR

Analysis Name : [P2408] 25 PE7201221,1,1.

Multichrom



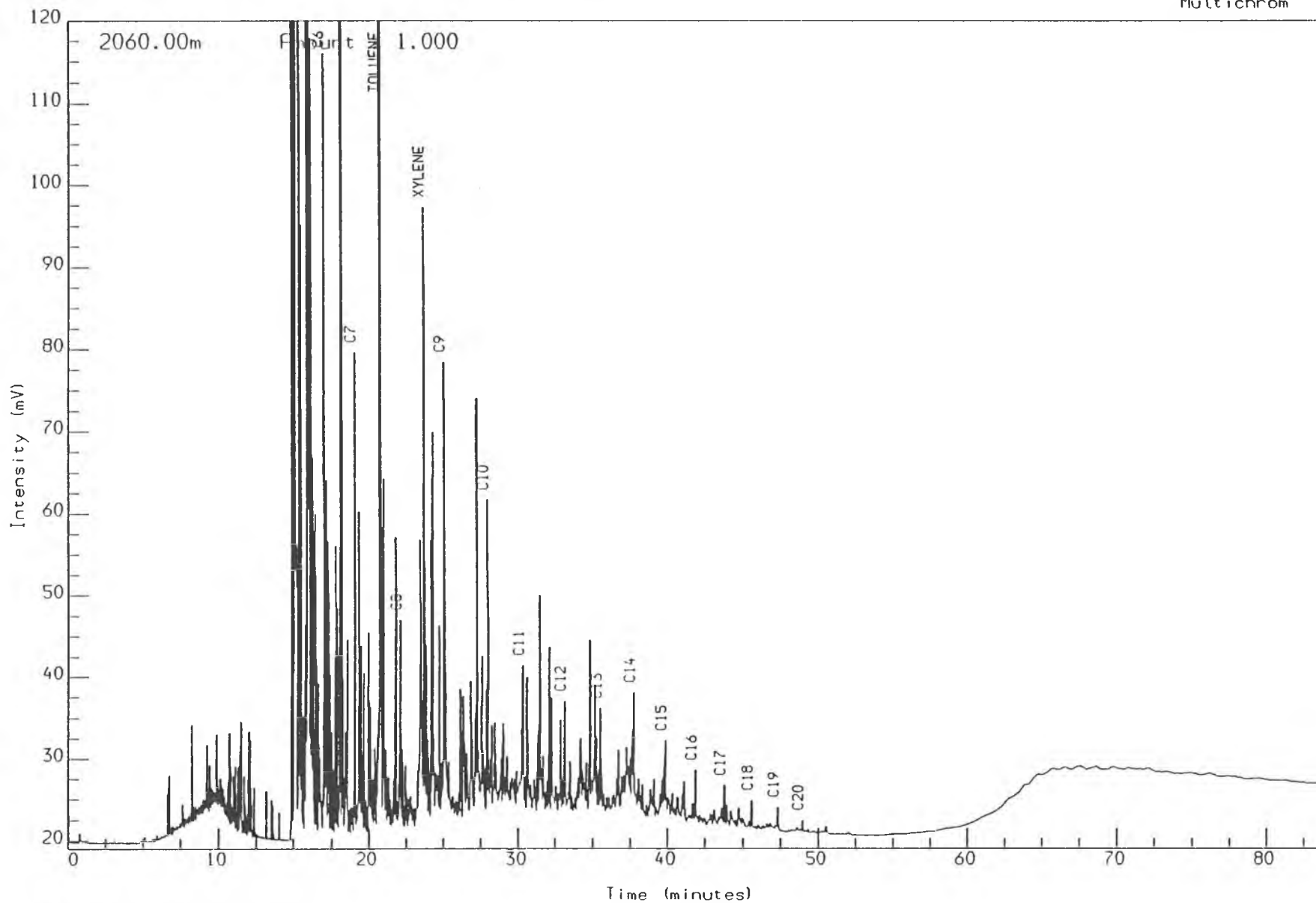
WELL NOCS 34/7-6 1640m
PYROLYSIS GC (S2)
SH/CLST:lt brn gy to lt ol gy to
 brn gy

Reported on 8-MAR-1991 at 13:03

GEOLAB  NOR

Analysis Name : [P2408] 25 PE7201361,1,1.

Multichrom



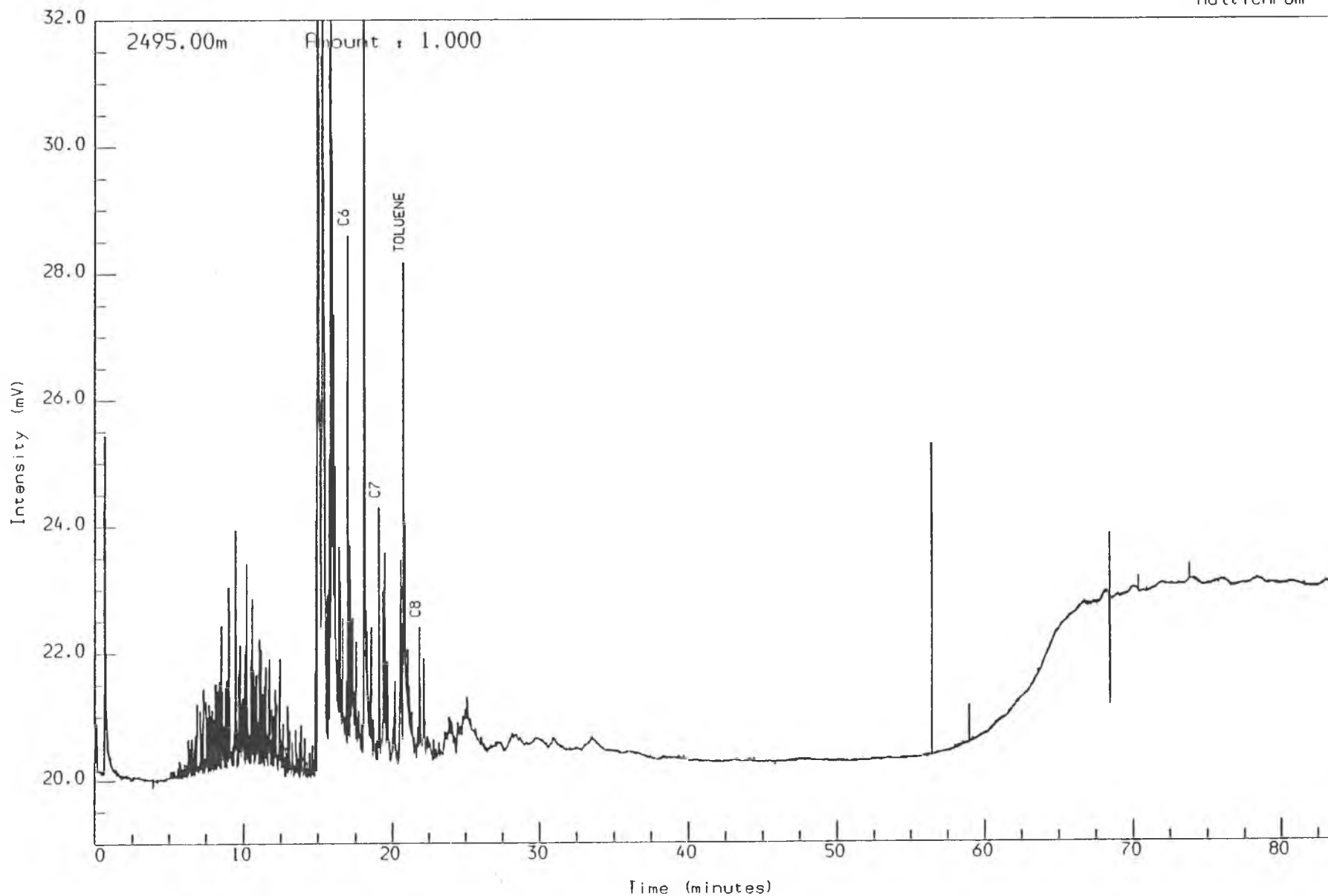
WELL NOCS 34/7-6 2060m
PYROLYSIS GC (S2)
SH/CLST:1t brn gy to 1t ol gy

Reported on 8-MAR-1991 at 13:04

GEOLAB  NOR

Analysis Name : [P2408] 25 PE7201581,1,1.

Multichrom



WELL NOCS 34/7-6
PYROLYSIS GC (S2)
S/SST:w to lt gy

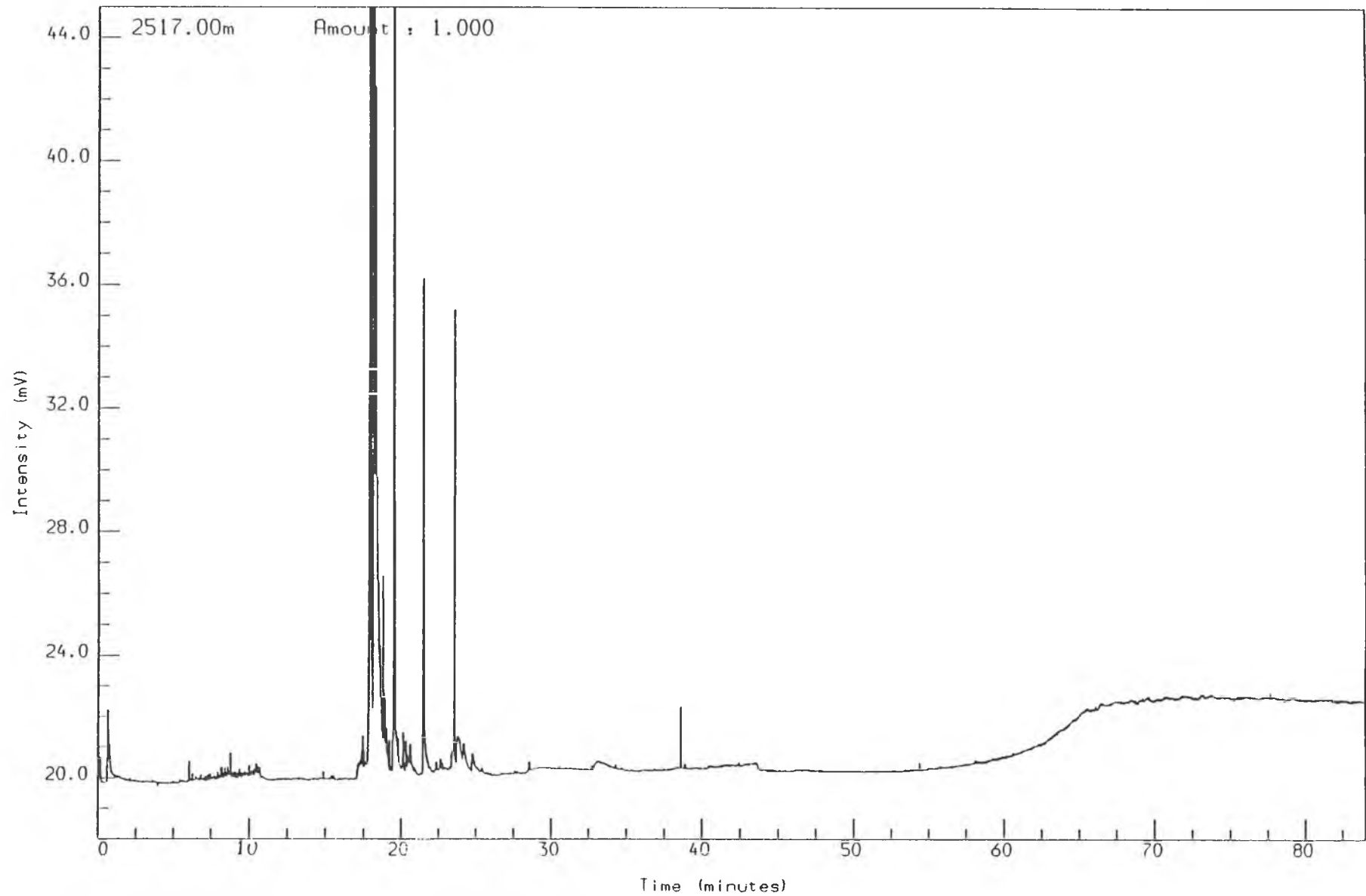
2495m

Reported on 8-MAR-1991 at 13:05

GEOLAB  NOR

Analysis Name : [P2408] 25 PE72B,1,1.

Multichrom



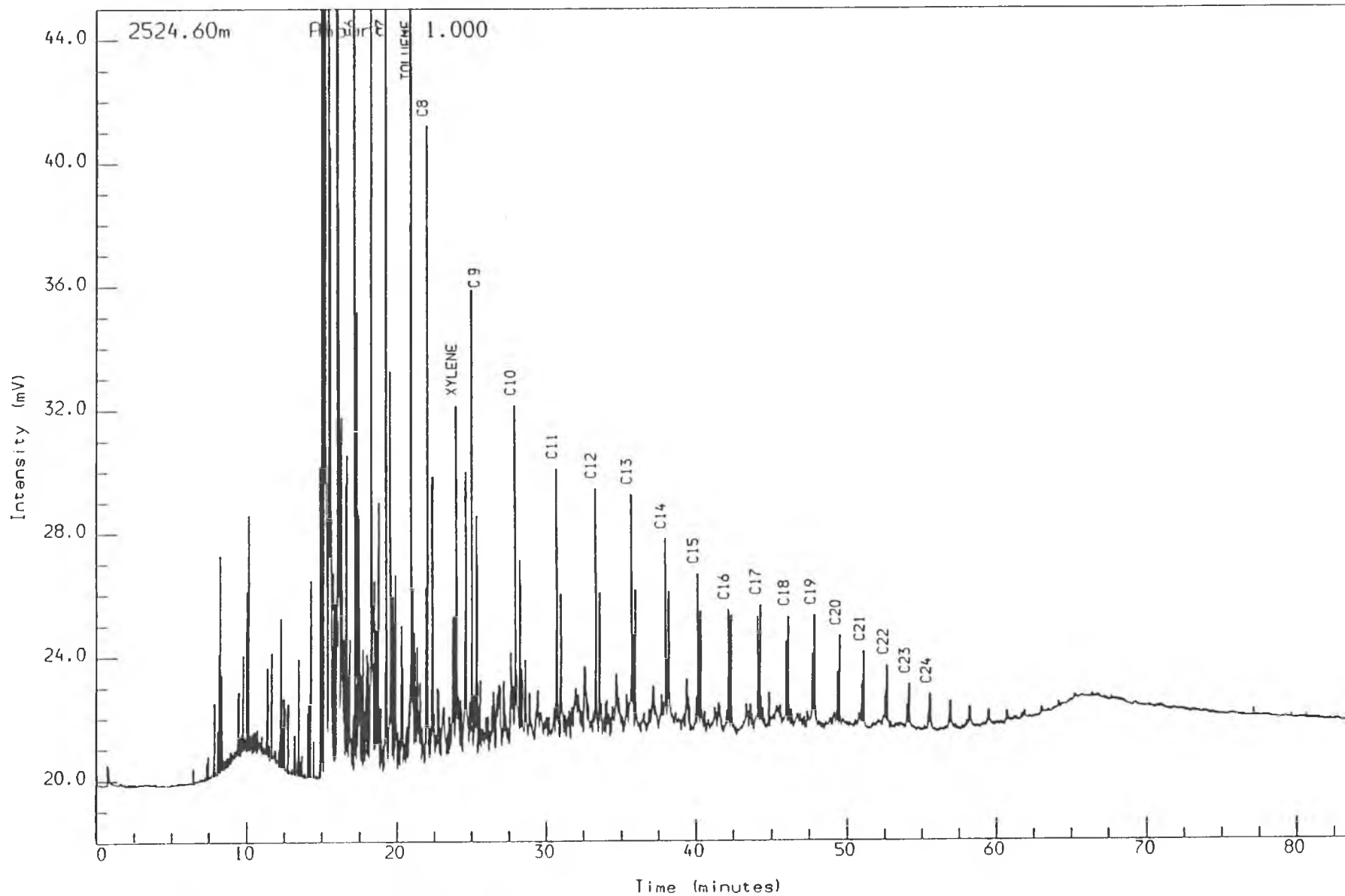
WELL NOCS 34/7-6 2517.00m ccp
PYROLYSIS GC (S2)
Slstst: lt gy to lt brn gy

Reported on 8-MAR-1991 at 11:36

GEOLAB  NOR

Analysis Name : [P2408] 25 PE72B,2,1.

Multichrom



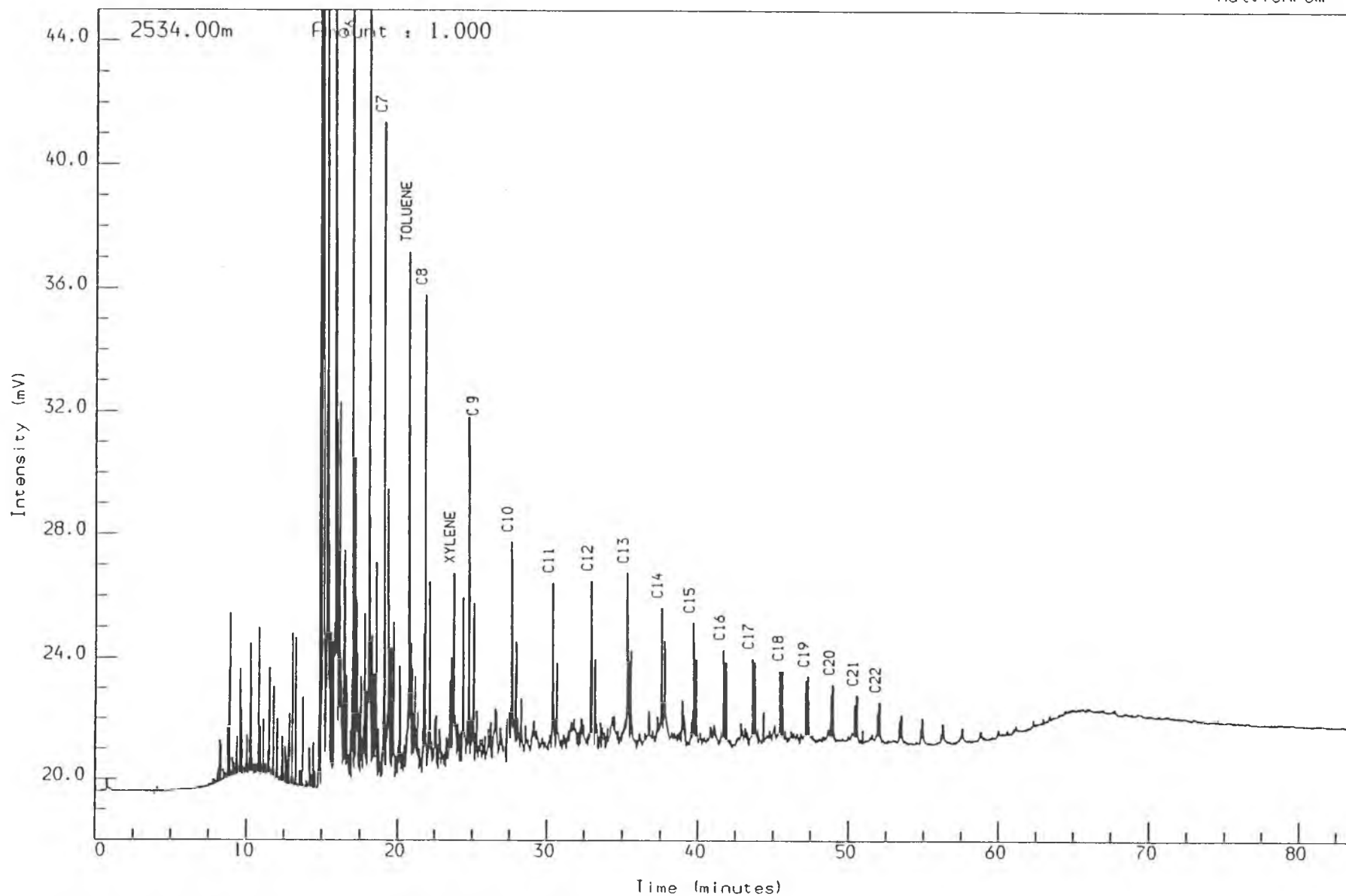
WELL NOCS 34/7-6 2524.60m ccp
PYROLYSIS GC (S2)
S/Sst: w to lt gy to m gy to pl y br

Reported on 8-MAR-1991 at 12:14

GEOLAB  NOR

Analysis Name : [P2408] 25 PE72B,3,1.

Multichrom



WELL NOCS 34/7-6
PYROLYSIS GC (S2)
S/Sst: w to lt gy to m y brn

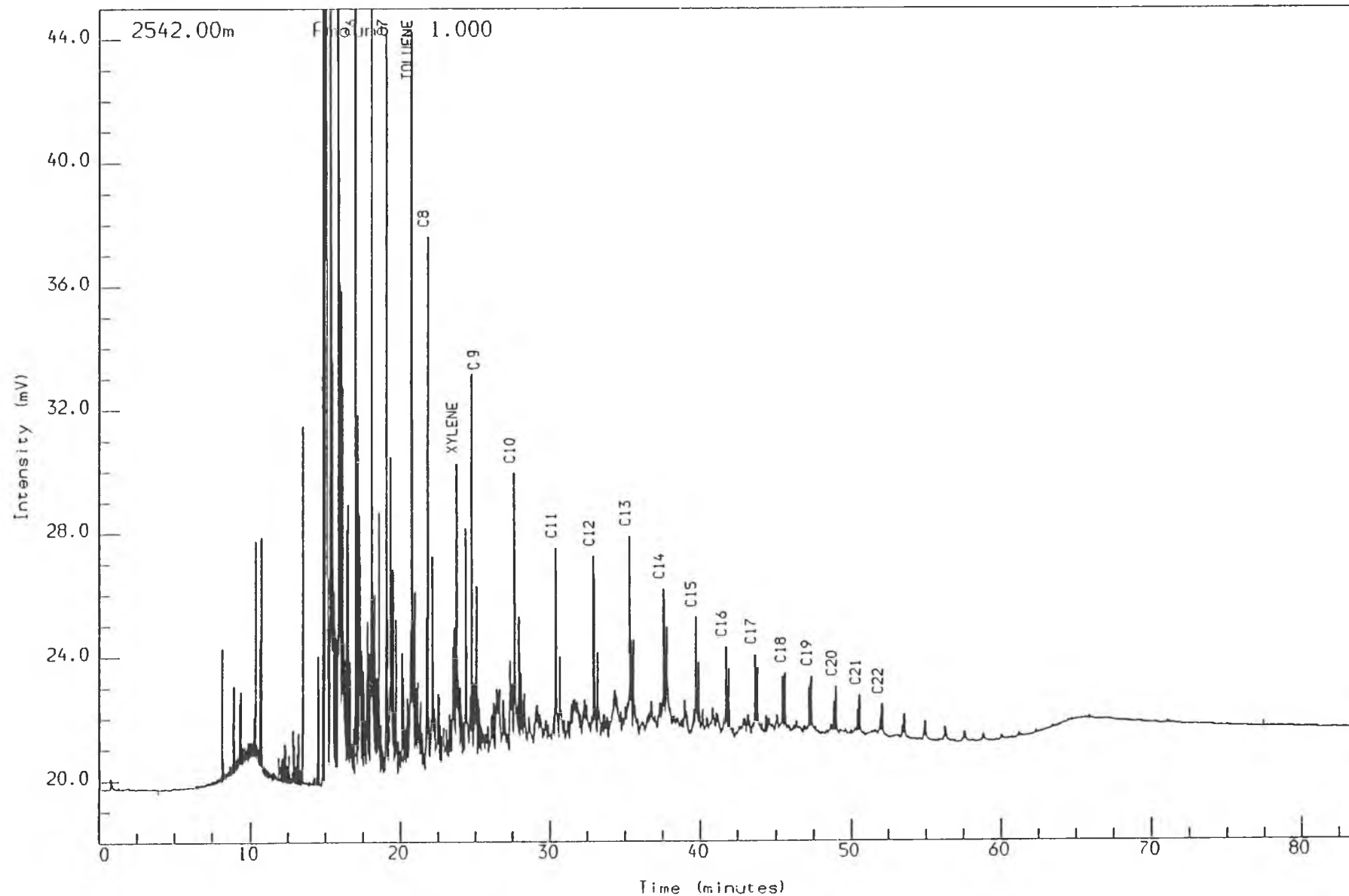
2534.00m ccp

Reported on 8-MAR-1991 at 12:16

GEOLAB  NOR

Analysis Name : [P2408] 25 PE72B,4,1.

Multichrom



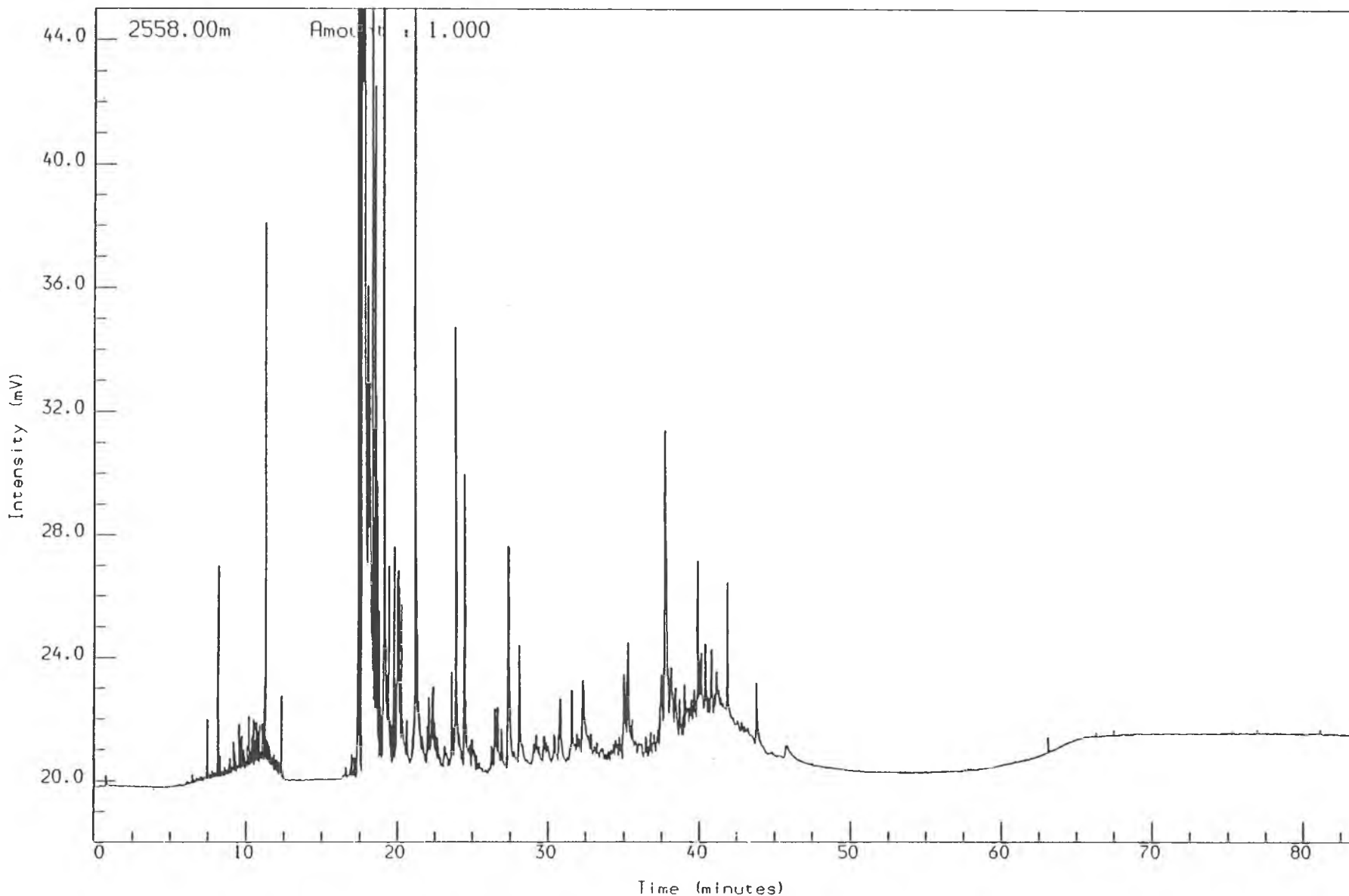
WELL NOCS 34/7-6 2542.00m ccp
PYROLYSIS GC (S2)
S/Sst: 1t gy to 1t brn gy to 1t or

Reported on 8-MAR-1991 at 12:17

GEOLAB  **NOR**

Analysis Name : [P2408] 25 PE72B,5,1.

Multichrom



WELL NOCS 34/7-6
PYROLYSIS GC (S2)

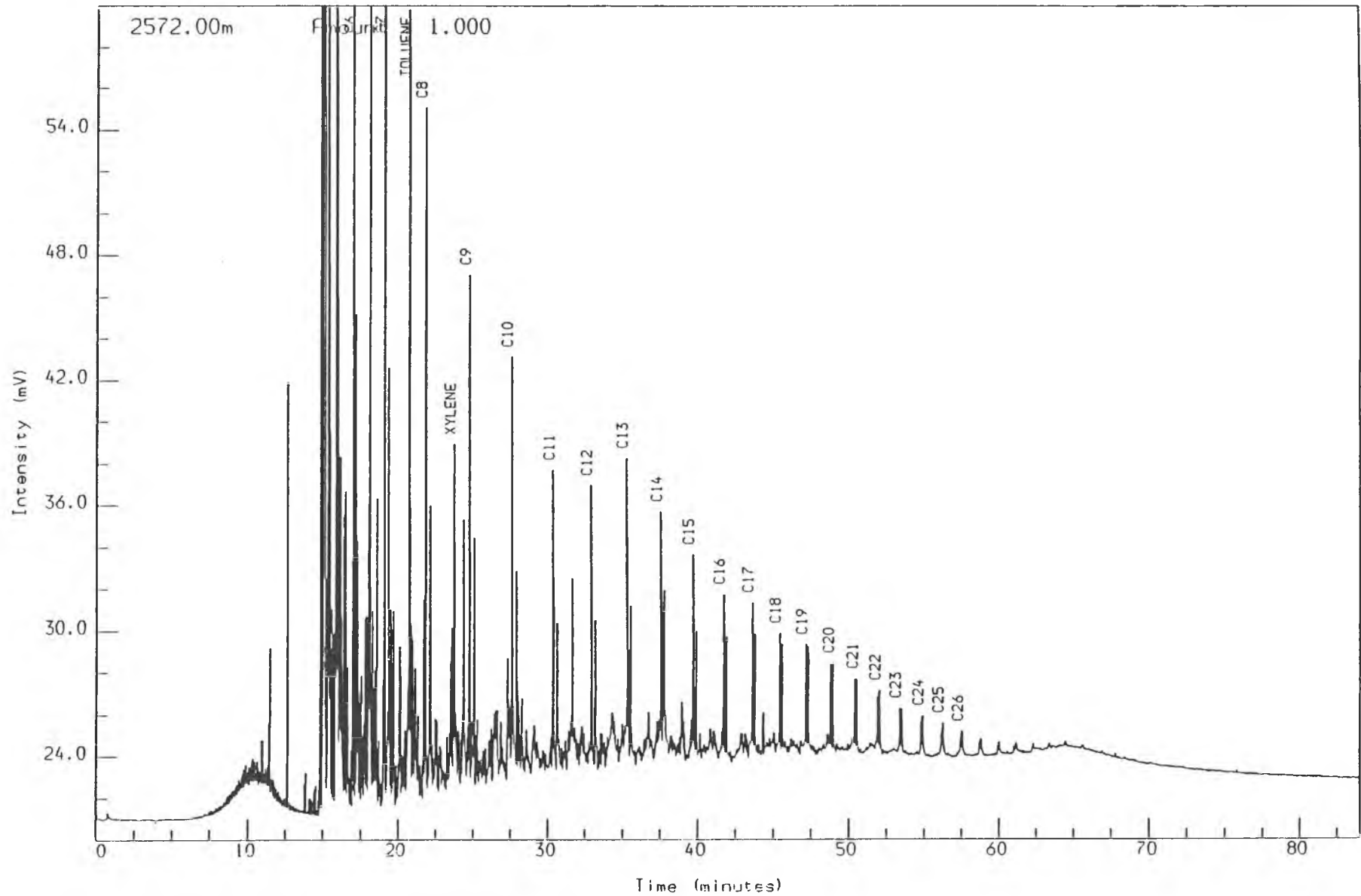
2558.00m ccp

Reported on 8-MAR-1991 at 12:19

GEOLAB NOR

Analysis Name : [P2408] 25 PE72B,6,1.

Multichrom



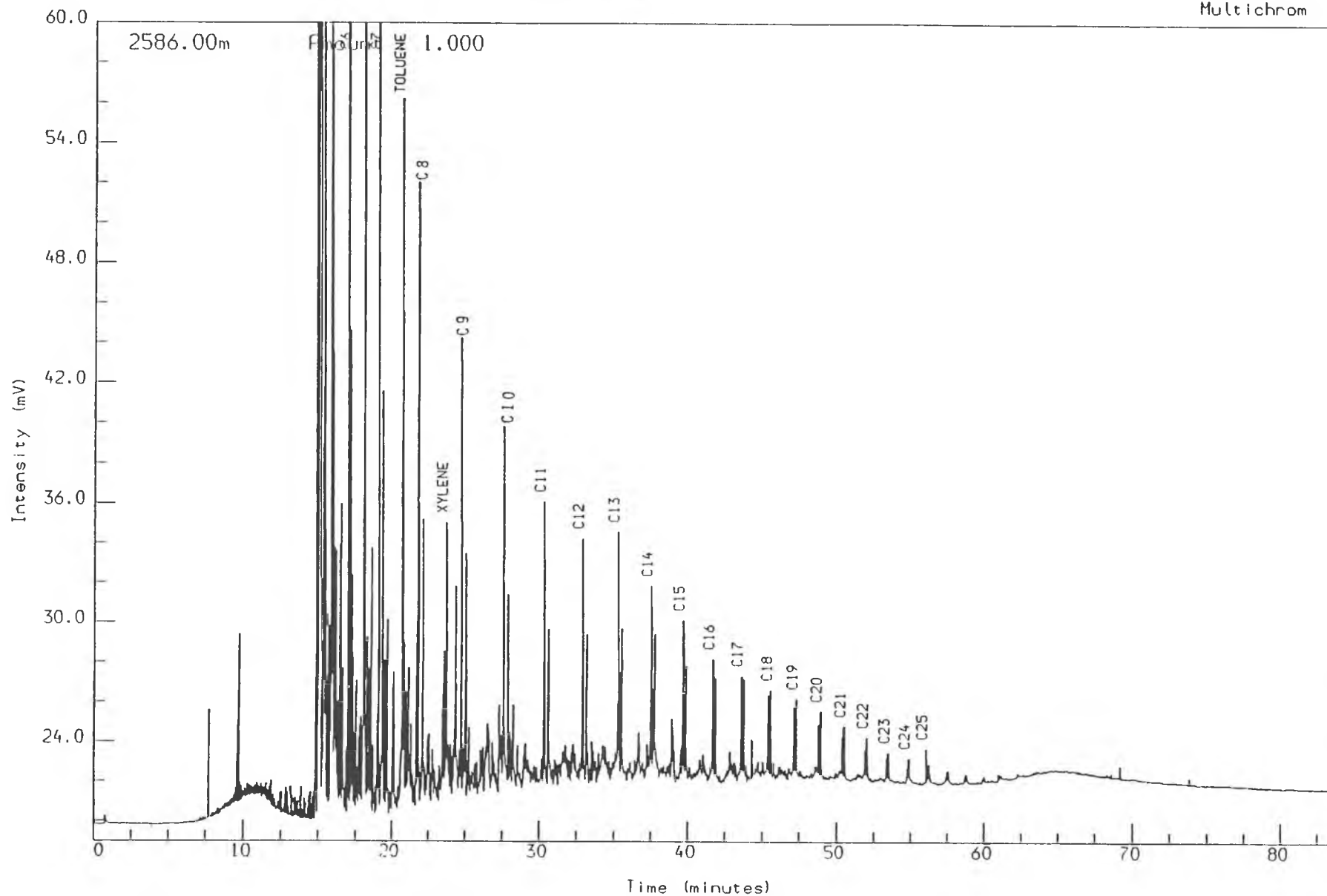
WELL NOCS 34/7-6 2572.00m ccp
PYROLYSIS GC (S2)
S/Sst: w to lt gy to lt brn gy to pl

Reported on 8-MAR-1991 at 12:22

GEOLAB  NOR

Analysis Name : [P2408] 25 PE72B,7,1.

Multichrom



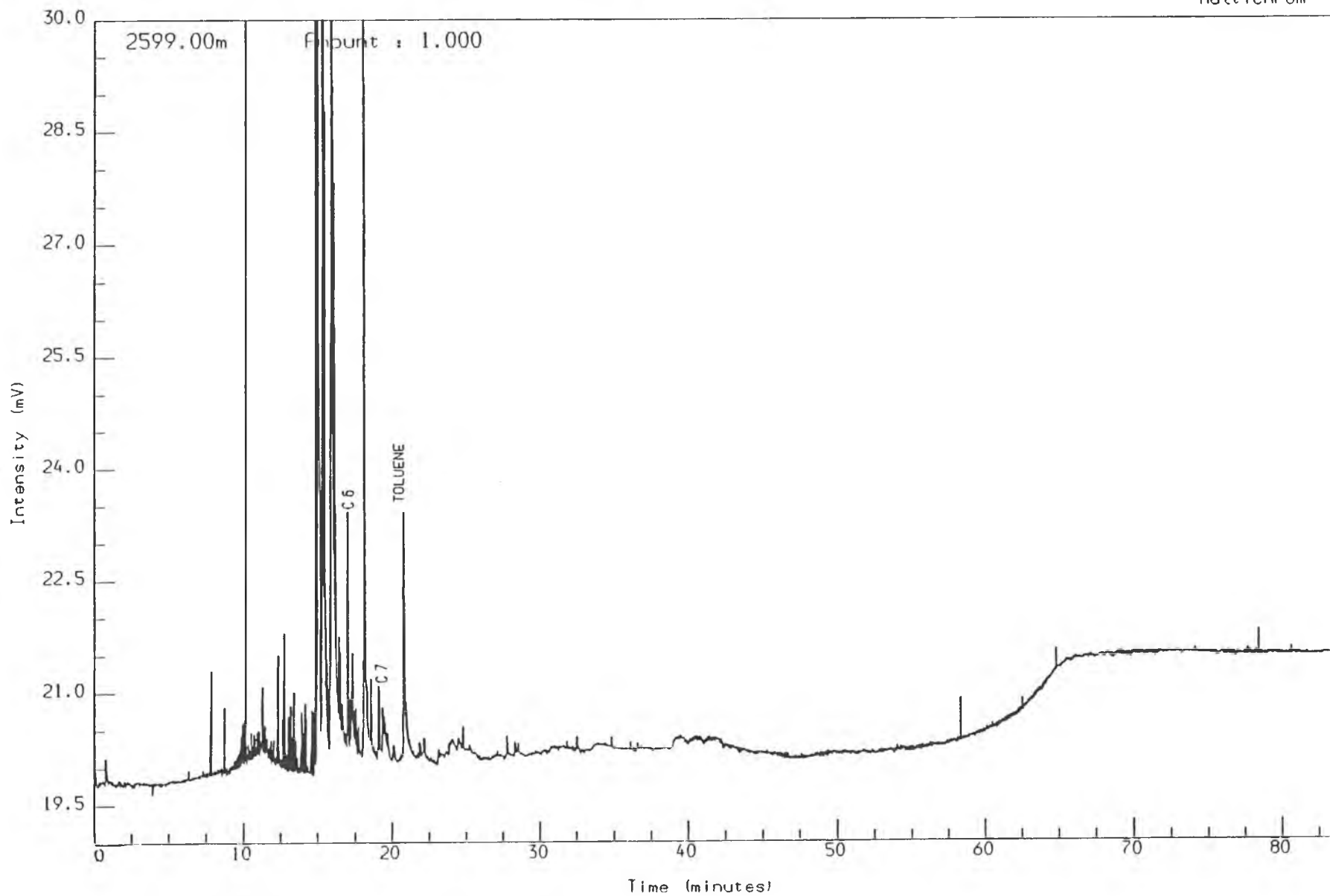
WELL NOCS 34/7-6 2586.00m ccp
PYROLYSIS GC (S2)
S/Sst: w to lt gy to lt brn gy to m

Reported on 8-MAR-1991 at 12:24

GEOLAB  **NOR**

Analysis Name : [P2408] 25 PE72B,8,1.

Multichrom



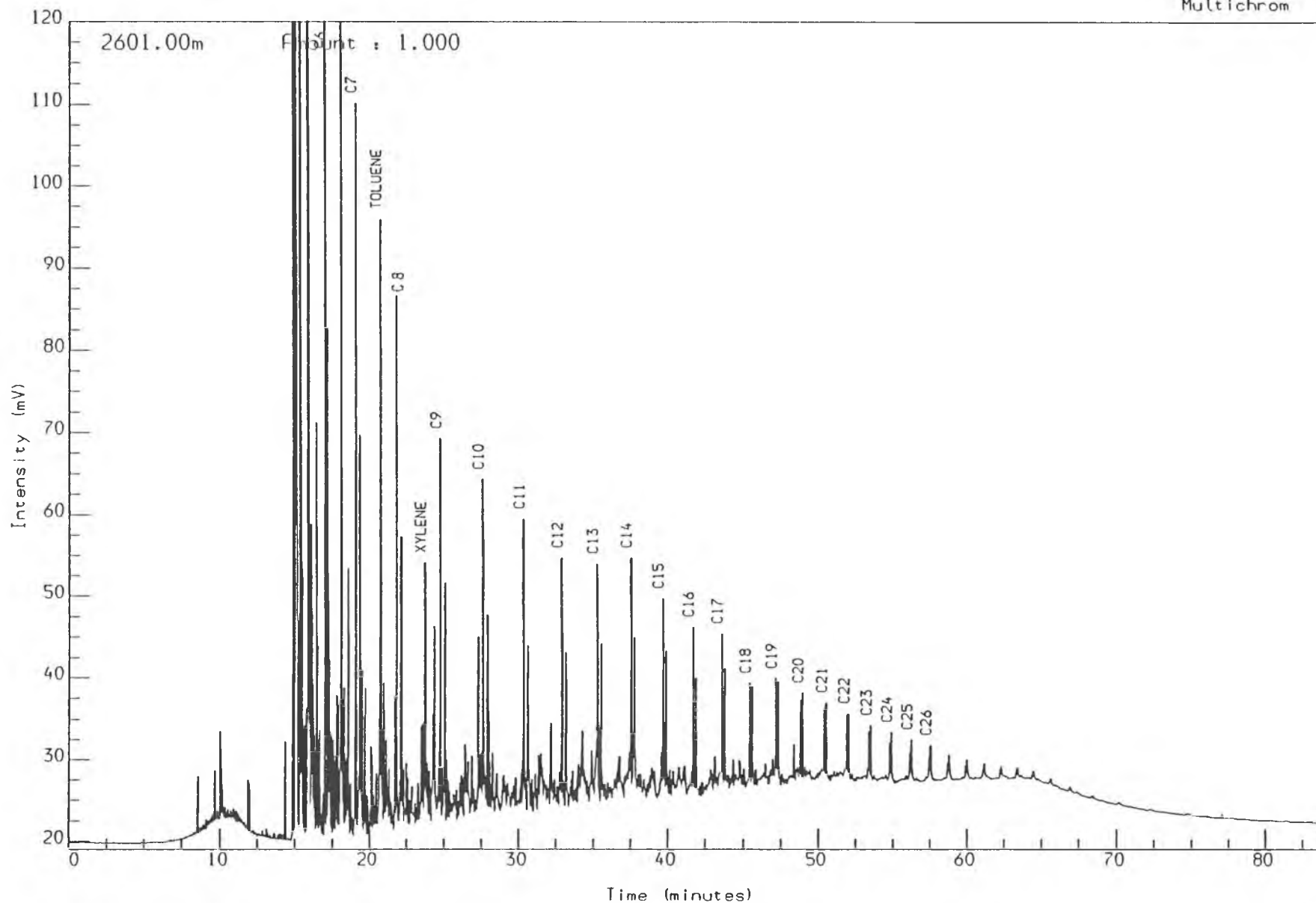
WELL NOCS 34/7-6 2599.00m ccp
PYROLYSIS GC (S2)
S/Sst: lt gy to lt bl gy to m bl gy

Reported on 8-MAR-1991 at 12:34

GEOLAB  NOR

Analysis Name : [P2408] 25 PE72B,9,1.

Multichrom



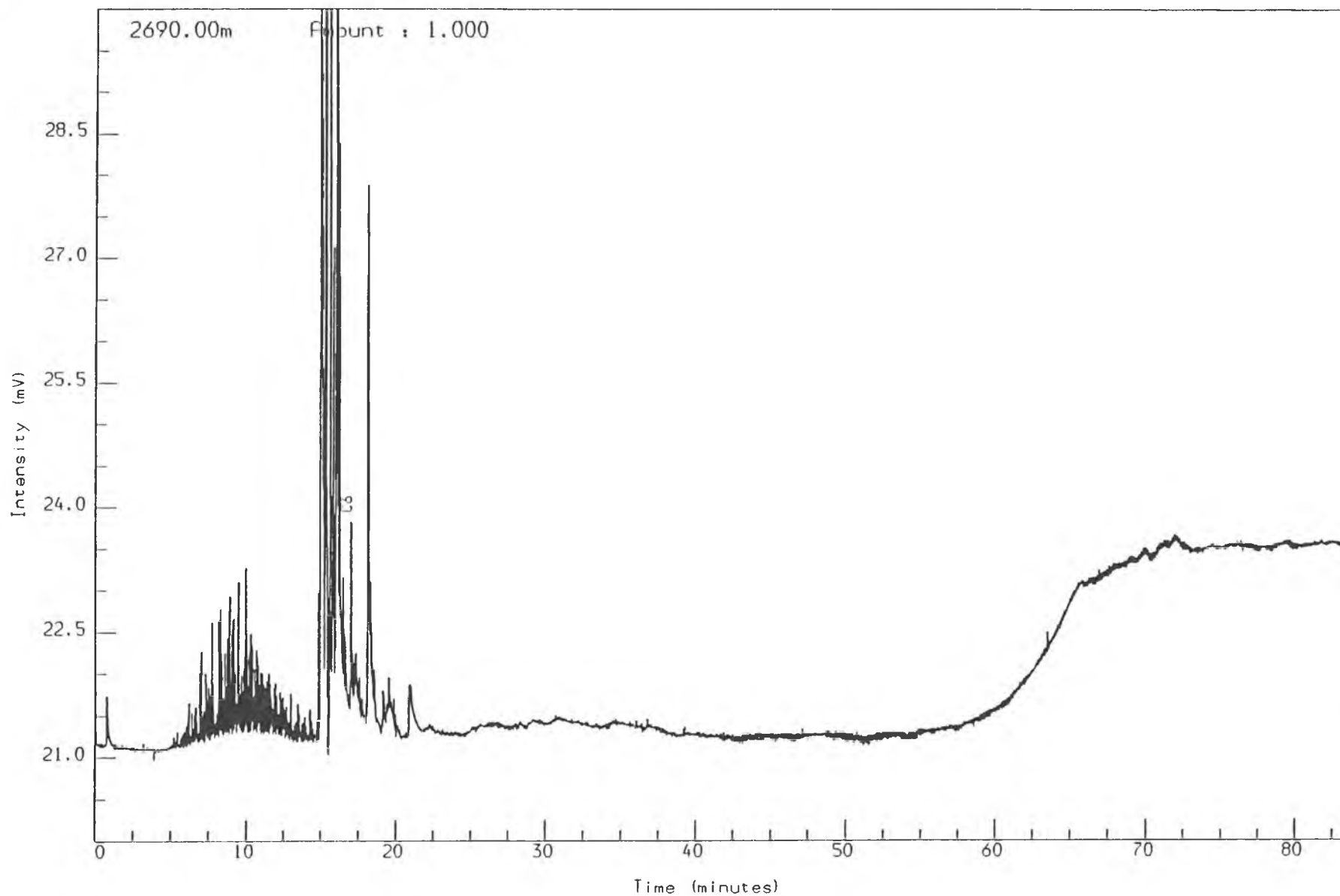
WELL NOCS 34/7-6 2601.00m ccp
PYROLYSIS GC (S2)
S/Sst: 1t gy to m gy to 1t brn gy

Reported on 8-MAR-1991 at 12:36

GEOLAB  NOR

Analysis Name : [P2408] 25 PE7201731,1,1.

Multichrom



WELL NOCS 34/7-6
PYROLYSIS GC (S2)
S/SST:w

2690m

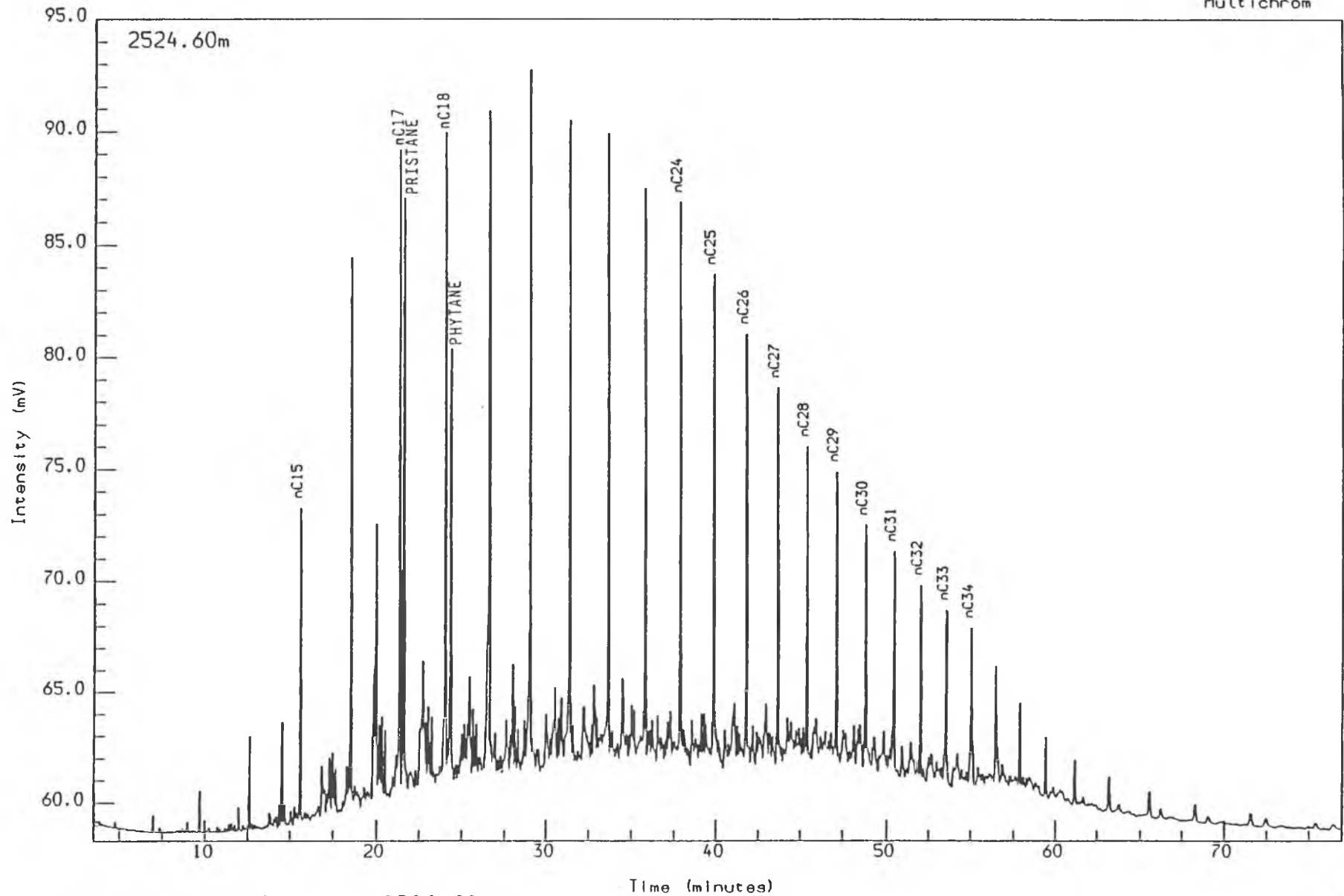
Reported on 8-MAR-1991 at 13:08

GEOLAB NOR

APPENDIX 4
GAS CHROMATOGRAMS

Analysis Name : [P2408] 11 SE7200051L.1.1.

Multichrom



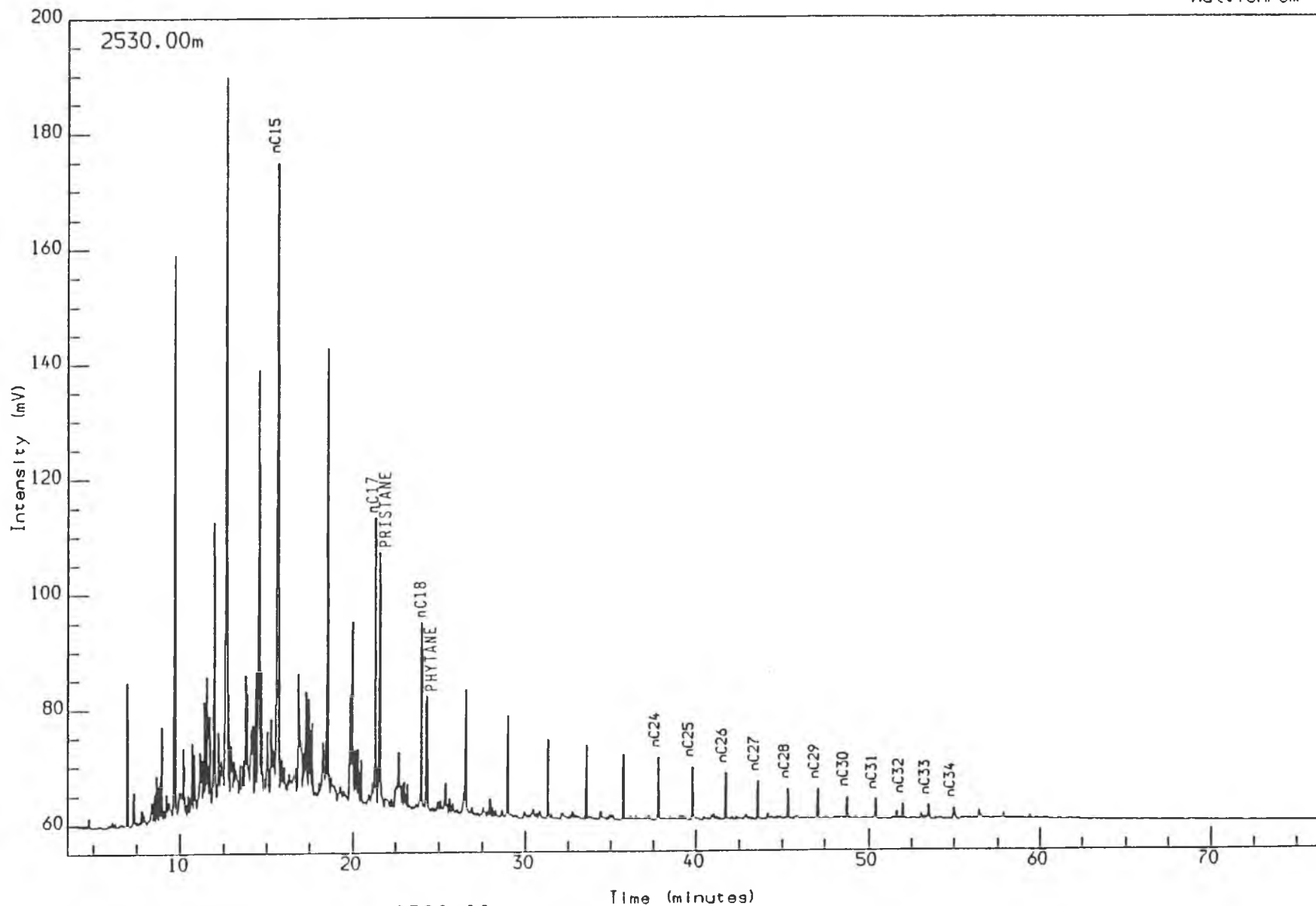
WELL NOCS 34/7-6 2524.60m ccp
SATURATED GC
S/Sst: w to lt gy to m gy to pl y brn

Reported on 20-MAR-1991 at 09:58

GEOLAB  NOR

Analysis Name : [P2408] 11 SE7200071L,1,1.

Multichrom



WELL NOCS 34/7-6
SATURATED GC
Sh/Clst: m gy to drk gy

2530.00m ccp

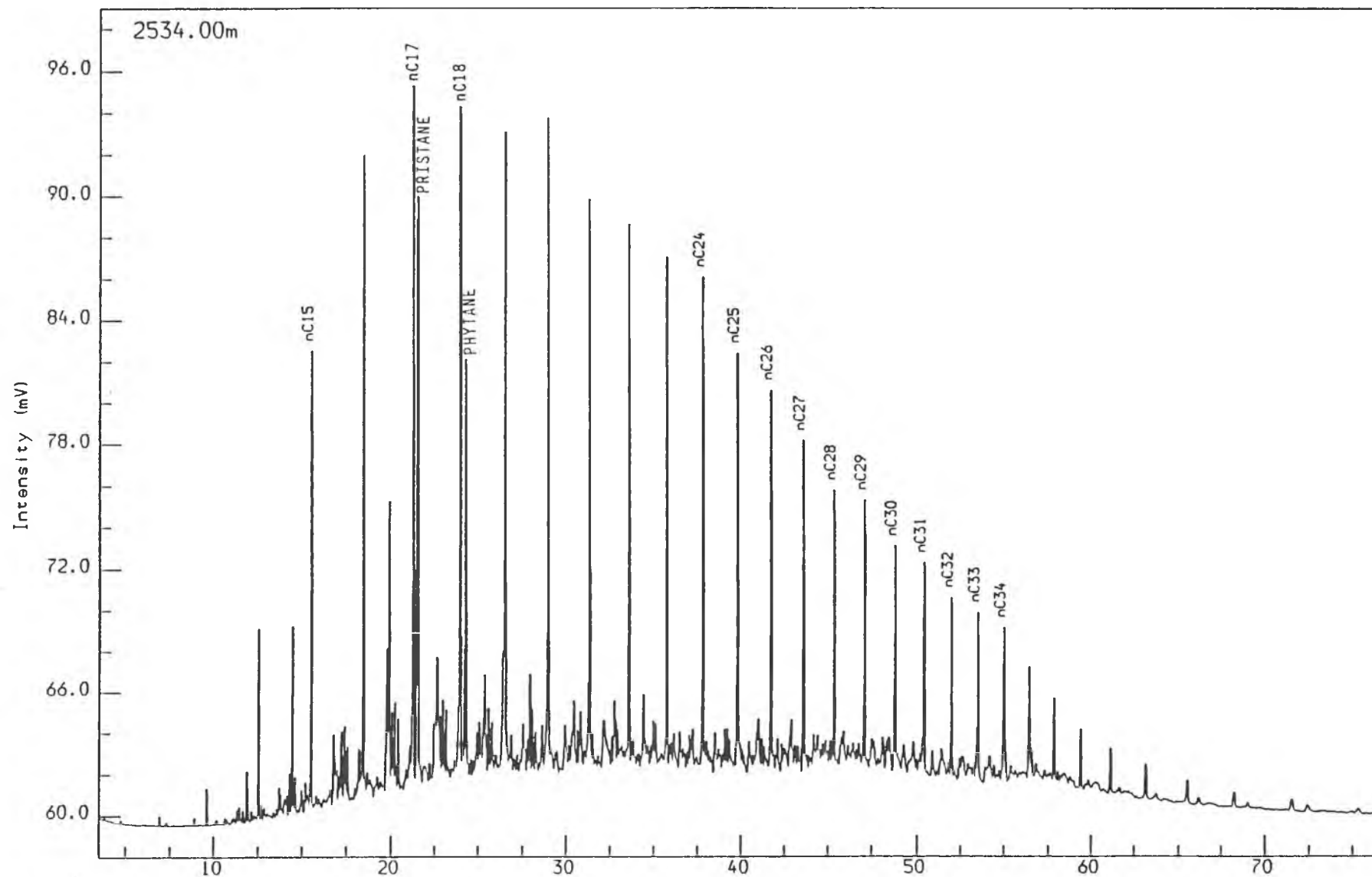
Time (minutes)

Reported on 20-MAR-1991 at 09.59

GEOLAB NOR

Analysis Name : [P2408] 11 SE7200091L,1,1.

Multichrom



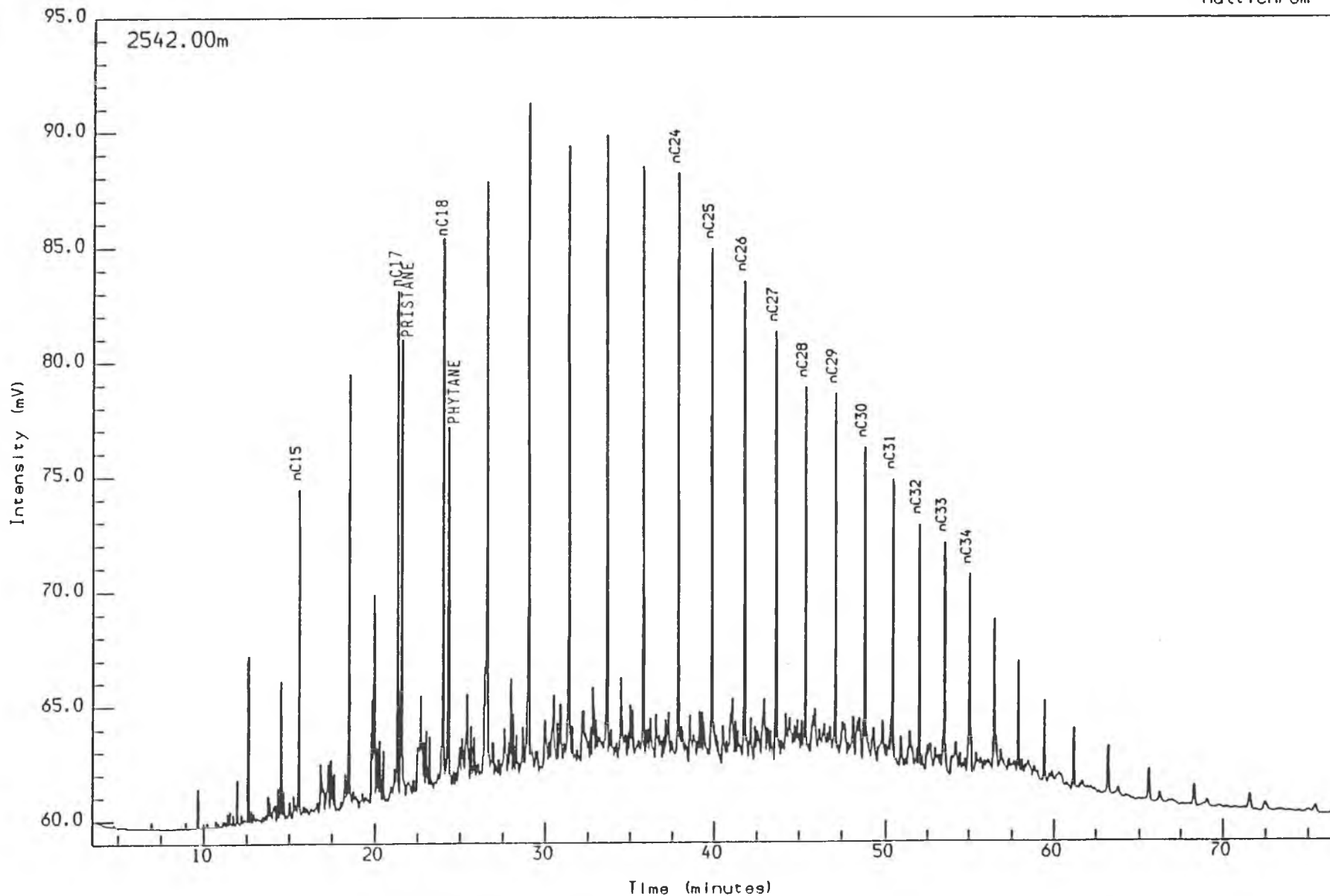
WELL NOCS 34/7-6
SATURATED GC
S/Sst: w to lt gy to m y brn

2534.00m ccp

Time (minutes)

Reported on 20-MAR-1991 at 10:01

GEOLAB NOR

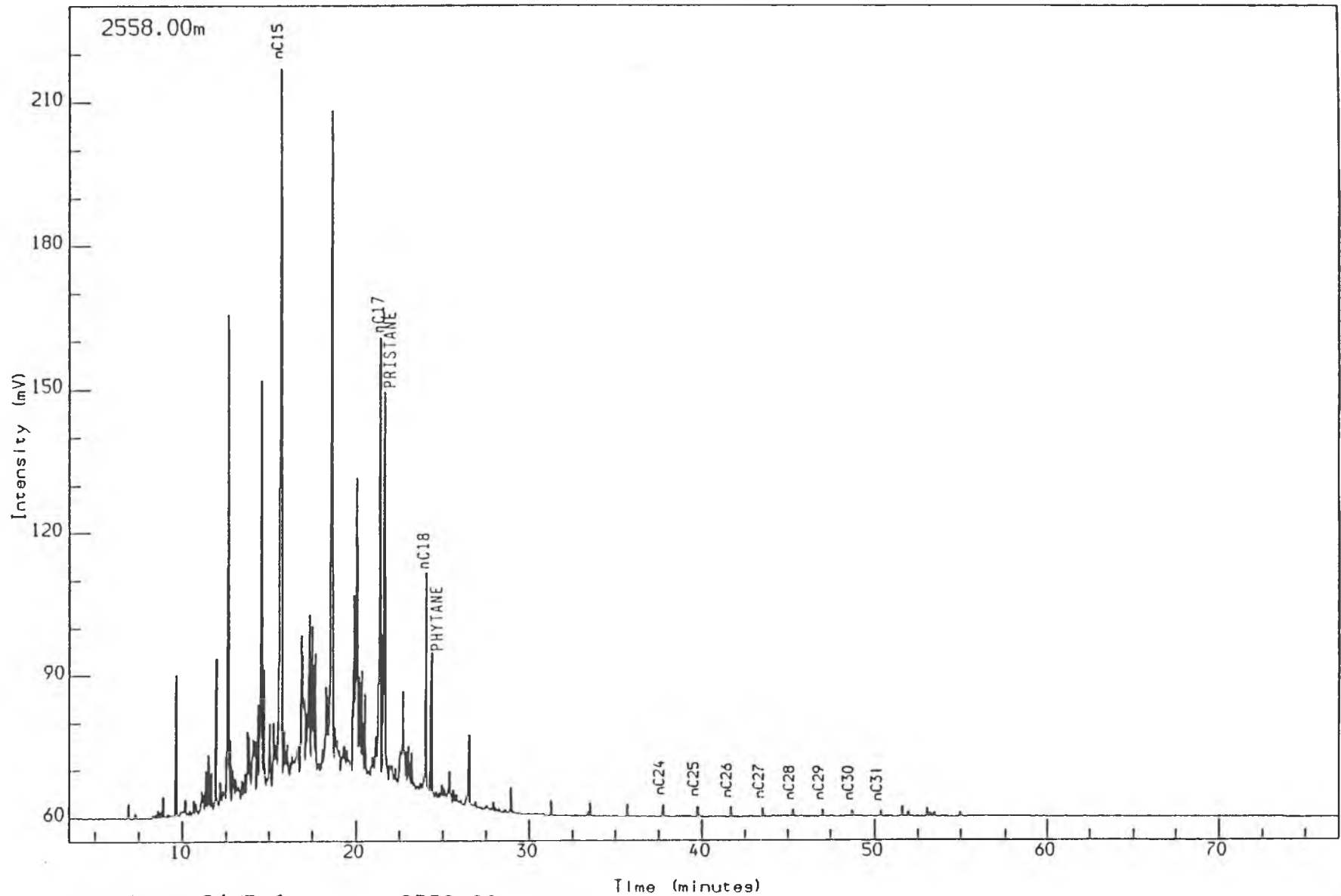


WELL NOCS 34/7-6 2542.00m ccp
SATURATED GC
S/Sst: 1t gy to 1t brn gy to 1t or

Reported on 20-MAR-1991 at 10:03

Analysis Name : [P2408] 11 SE7200191L,1,1.

Multichrom



WELL NOCS 34/7-6
SATURATED GC
S/Sst: pl pu to lt pu

2558.00m ccp

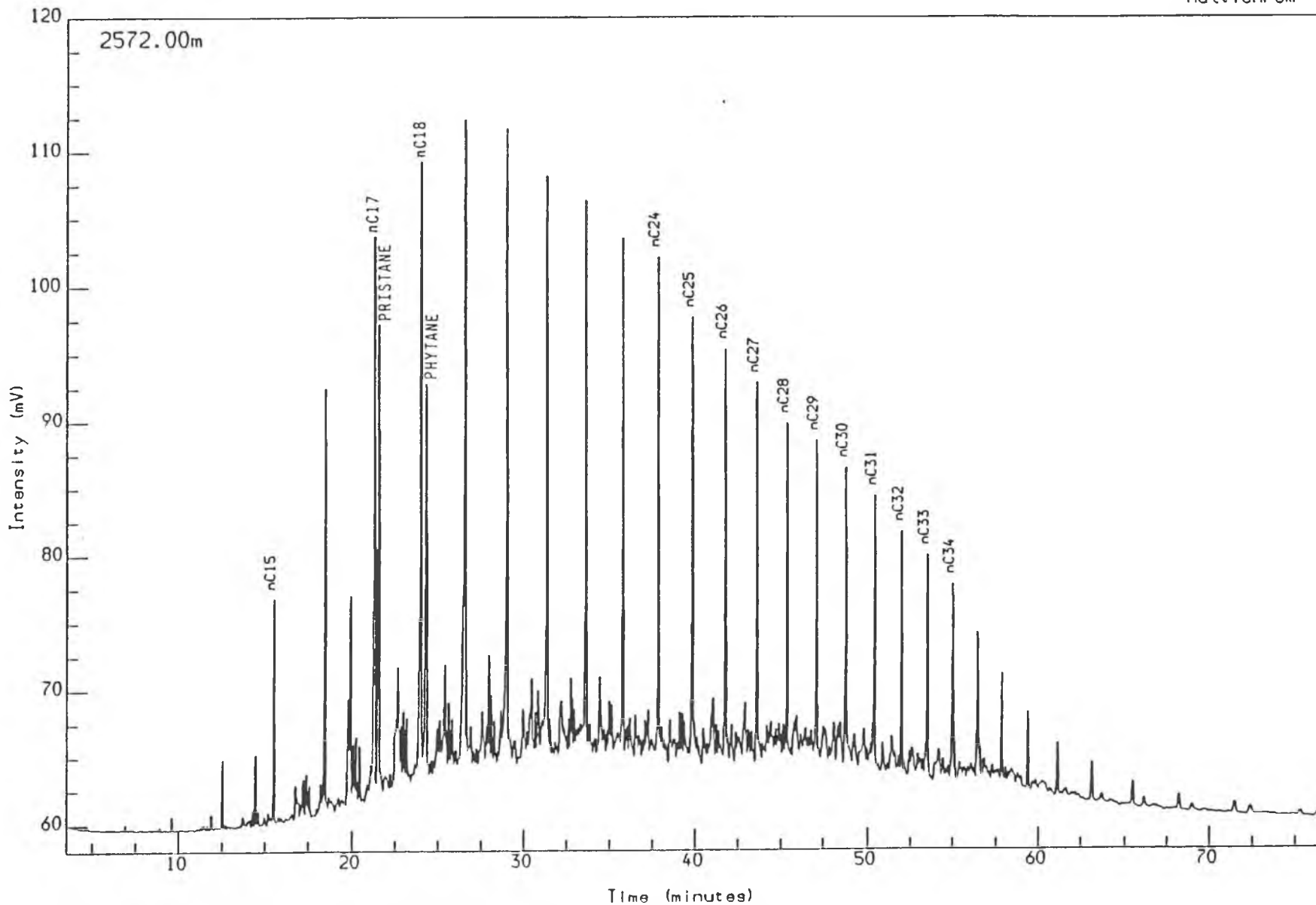
Time (minutes)

Reported on 20-MAR-1991 at 10:04

GEOLAB NOR

Analysis Name : [P2408] 11 SE7200261L,1,1.

Multichrom



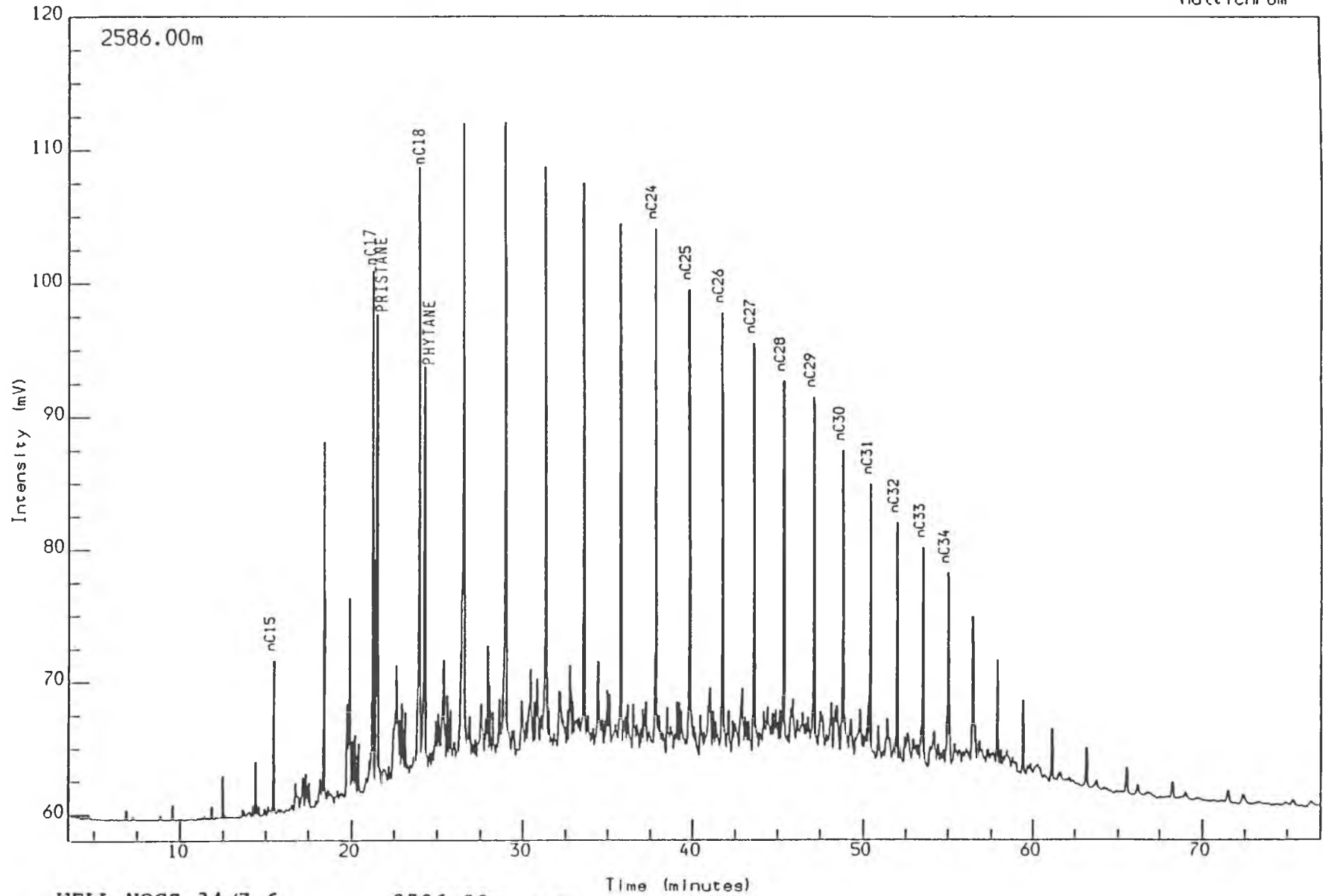
WELL NOCS 34/7-6 2572.00m ccp
SATURATED GC
S/Sst: w to lt gy to lt brn gy to pl y

Reported on 20-MAR-1991 at 12:42

GEOLAB  NOR

Analysis Name : [P2408] 11 SE7200331L,1,1.

Multichrom



WELL NOCS 34/7-6

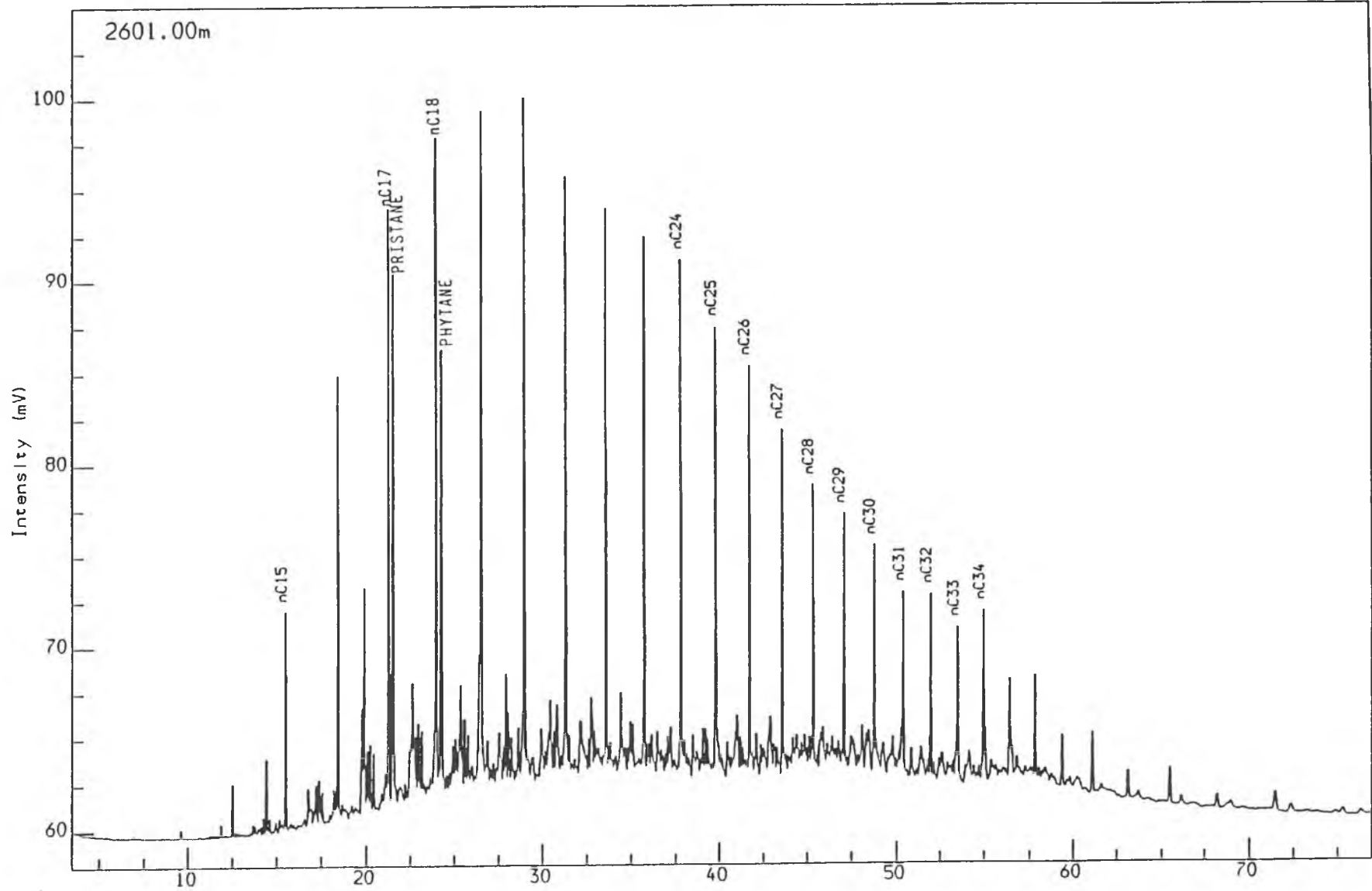
2586.00m ccp

SATURATED GC

Reported on 20-MAR-1991 at 12:58

S/Sst: w to lt gy to lt brn gy to m gy

GEOLAB NOR



WELL NOCS 34/7-6 2601.00m ccp
SATURATED GC
S/Sst: 1t gy to m gy to 1t brn gy

Reported on 21-MAR-1991 at 08:56

