

Geochemical Report for

Well NOCS 6407/7-1

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REGISTRERT

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Chapter 1

INTRODUCTION

1.1 General Comments

Well 6407/7-1 is the discovery well of the Njord field in the southern part of the Haltenbank area in the Norwegian sector of the North Sea.

Samples (cuttings, core chips) were supplied by the Norwegian Petroleum Directorate and screening analyses performed. Stratigraphy was also provided by the NPD. The analytical program for detailed geochemistry was based on the screening analyses results.

The report is presented, chapter and section-wise, in chronological order of analyses, starting from the first screening analysis. Each section discusses the results, where ever possible, in stratigraphic sequence (top to bottom).

1.2 Analytical Program

<u>Analysis type</u>	<u>No of samples</u>	<u>Figures</u>	<u>Tables</u>
Lithology description	238	1	1
TOC	95	1	1,2
Rock-Eval pyrolysis	95	2,3,4	2
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Soxhlet Extraction of organic matter	11		4a
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Abbreviations

List of abbreviations used for lithology description (sorted alphabetically)

ang	= angular
bar	= Baryte (mud additive)
bit	= bituminous
bl	= blue/blueish
blk	= black
br	= brittle
brn	= brown/brownish
Ca	= Carbonate (limestone/chalk/dolomite/siderite)
calc	= calcareous
carb	= carbonaceous
cem	= cement used as additive (under "cont") or to describe cemented S/Sst
Chert	= Chert
chk	= Chalk/chalky
cly	= clayey/shaly
cngl	= conglomeratic
Coal	= Coal
Coal-ad	= Coal-like additive (e.g. chromlignosulfonate)
Congl	= Conglomerat
Cont	= Contamination(s)
crs	= coarse grained
dd	= dried drilling mud
dol	= Dolomite/dolomitic
drk	= dark (colour)
dsk	= dusk/dusky (colour)
evap	= Salt/Gypsum/Halite (natural "Other" or as additive "Cont")
f	= fine grained
fe	= ferruginous
fib	= fibres (mud additive/contamination)
fis	= fissile
fos	= fossiliferous
glauc	= glauconite/glauconitic
gn	= green/greenish
gy	= grey/greyish
hd	= hard
ign	= Igneous (material derived from igneous source)
Kaolin	= Kaolin(ite)
kln	= kaolinitic
l	= loose
lam	= laminated/laminae
lt	= light (colour)
m	= medium (colour or grain size)
Marl	= Marl (calcareous claystone/mudstone)
mic	= micaceous
Mica-ad	= Mica used as mud additive

mrl	= marly
No Mat.	= No material left over after washing
ns	= nutshells (mud additive)
ol	= olive
ool	= Oolite/oolitic
or	= orange
Other	= Other lithology/mineral, specified after this word
pi	= pink/pinkish
pl	= pale (colour)
prp	= paint/rust/plastic contaminations/additives
pu	= purple
pyr	= Pyrite/pyritic
red	= red/reddish
rnd	= round/rounded
s	= sandy
sft	= soft
S/Sst	= Sand and/or sandstone
Sh/Clst	= Shale and/or claystone
sid	= Siderite/sideritic
sil	= siliceous/cherty
slt	= silty
Sltst	= siltstone
st	= stained (with natural oil or oil-like additive)
tar-ad	= Tar-like additive (e.g. "Black Magic")
trbfgs	= turbodrilled fragments
Tuff	= Tuff
tuff	= tuffaceous
v col	= various colours
w	= white
wx	= waxy
y	= yellow/yellowish

List of abbreviations used for parameters, ratios and analytical methods
(sorted alphabetically)

CPI	=	Carbon Preference Index, $0.5 \times \frac{C25+C27+C29+C31+C33}{C24+C26+C28+C30+C32} + \frac{C25+C27+C29+C31+C33}{C26+C28+C30+C32+C34}$
EOM	=	Extractable Organic Matter
FID	=	Flame Ionisation Detector
FPD	=	Flame Photometric Detector
GC	=	Gas Chromatograph
GC-MS	=	Gas Chromatograph - Mass Spectrometer
GHM	=	Geofina Hydrocarbon Meter (combined thermal extraction - pyrolysis gas chromatograph)
HC	=	Hydrocarbons
HI	=	Hydrogen Index (100 x S2/TOC)
HPLC	=	High Pressure Liquid Chromatograph
MDBT(4/1)	=	Ratio of 4-/1-methyl dibenzothiophene
MNR	=	Ratio of 2-/1-methyl naphthalene
MP	=	Methyl phenanthrene
MPI1	=	Methyl phenanthrene Index, $1.5 \times (3MP+2MP) / P+9MP+1MP$
MPLC	=	Medium Pressure Liquid Chromatograph
NSO	=	Nitrogen-, Sulphur- and Oxygen-compounds
OI	=	Oxygen Index (100 x S3/TOC)
P	=	Phenanthrene
PI	=	Production Index (S1/(S1+S2))
PP	=	Petroleum Potential (S1+S2)
Ro (%)	=	Measured Vitrinite Reflectance in Percent
Rock-Eval	=	Oil show and source rock evaluation instrument
S1	=	Amount of Free Hydrocarbons, Rock-Eval
S2	=	Amount of Kerogen pyrolysate, Rock-Eval
S3	=	Amount of Oxidised Organic Material
SCI	=	Spore Colour Index (maturity indicator)
TCD	=	Thermal Conductivity Detector
TAI	=	Thermal Alteration Index (maturity indicator)
Tmax	=	Temperature of maximum pyrolysate yield, Rock-Eval
TOC	=	Total Organic Carbon

Experimental Procedures

Total Organic Carbon (TOC) and Total Carbon Analysis

This analysis is performed using a LECO CS244 Carbon Analyser.

Hand-picked lithologies from cuttings samples are crushed with a mortar and pestle and approximately 200 mg (50 mg for coals) are accurately weighed into LECO crucibles. The samples are then treated three times with 10 % hydrochloric acid to remove oxidized (carbonate) carbon, and washed four times with distilled water. The samples are dried on a hotplate at 60 - 70°C before analysis of total organic carbon. Total carbon is also analysed on the same instrument using approximately 200 mg of untreated crushed whole rock. Oxidized (carbonate) carbon is calculated by weight difference.

Total organic carbon can also be analysed on the Rock-Eval II Pyrolyser during the normal run of the instrument.

Rock-Eval Pyrolysis

This analysis is performed by using a Rock-Eval II Pyrolyser. Approximately 100 mg crushed whole rock is analysed. The sample is first heated at 300°C for three min in an atmosphere of helium to release the free hydrocarbons present (S1 peak) and then pyrolysed by increasing the temperature from 300°C to 600°C (temp. gradient 25°C/min) (S2 peak). Both the S1 and S2 yields are measured using a flame ionization detector (FID). In the temperature interval between 300°C and 390°C, the released gases are split and a proportion passed through a carbon dioxide trap, which is connected to a thermal conductivity detector (TCD). The value obtained from the TCD corresponds to the amount of oxygen contained in the kerogen of the sample and is reported as the S3 peak. The Rock-Eval II Pyrolyser also analyses the TOC of each sample during the normal run of the instrument.

Thermal Extraction/Pyrolysis Gas Chromatography

The instrument used for this analysis is a Varian 3400 Gas Chromatograph interfaced to a pyrolysis oven (the pyrolyser). Up to 15 mg of whole rock sample is loaded on the pyrolyser and heated isothermally, at 300°C, for 4 min, during which time thermal extraction of the free hydrocarbons occurs (equivalent to the S1 peak of the Rock-Eval). The released gases pass to a 25 m OV1 column with a liquid nitrogen-cooled trap.

After 4 min the pyrolysis oven is temperature programmed up to 530°C, at a rate of 37°C/min, causing bound hydrocarbons to be released from the kerogen (equivalent to the S2 peak of the Rock-Eval). The released gases pass to a 25 m OV1 column with a liquid nitrogen-cooled trap.

The temperature program of the gas chromatograph oven, in which the columns are housed is -10°C to 290°C at a rate of 6°C/min.

Both the columns are linked to a FID.

Solvent Extraction of Organic Matter (EOM)

The samples are extracted using a Tecator Soxtec HT-System. Carefully weighed samples are taken in a pre-extracted thimble. Some activated copper is added to the extraction cup and dichloromethane is used as an extraction solvent. The samples are boiled for 1 hour and then rinsed for 2 hours. If the samples contain more than 10 % TOC, then the whole procedure is repeated once. The resulting solution is filtered and the solvent removed by rotary evaporation (200 mb, 30°C). The amount of EOM is gravimetrically established.

Removal of Asphaltenes

Asphaltenes are removed from the EOM by precipitation in n-pentane. N-pentane is added to the EOM and the solution is then stored in the dark and at ambient temperature for at least 8 hours. The solution is then filtered (Baker 10-spe system) and the precipitated asphaltenes dissolved in dichloromethane are returned to the original flask. The solvent is removed by rotary evaporation (200 mb and 30°C).

Chromatographic Separation of deasphaltened EOM

Chromatographic separation is performed using an MPLC system developed by the company. The EOM (minus asphaltenes) is injected into the MPLC and separated using hexane as an eluent. The saturated and aromatic hydrocarbon fractions are collected and the solvent removed using a rotary evaporator at 30°C. The fractions are then transferred to small pre-weighed vials and evaporated to dryness in a stream of nitrogen. The vials are re-weighed to obtain the weights of both the saturated and the aromatic fractions. The weight of the NSO fraction which is retained on the column, is obtained by weight difference.

Gas Chromatographic Analyses

Saturated hydrocarbon fractions:

The instrument used for this analysis is a PERKIN ELMER 8320 Gas Chromatograph equipped with an FID detector and an OV1 column. The carrier gas is helium and the temperature program runs from 80°C to 300°C at a rate of 4°C/min. Final hold time is 20 mins. The saturated hydrocarbon fraction is diluted by 1:30 and a 1 microlitre aliquot of this is injected into the instrument.

Aromatic hydrocarbon fractions:

The instrument used is a Varian 3400 Gas Chromatograph with a 25 m SE 54 capillary column, split injector and a column splitter leading to FID and FPD detectors, which allows simultaneous analysis of co-eluting hydrocarbons and sulphur compounds. The carrier gas is helium and the temperature program runs from 40°C to 290°C at a rate of 4°C/min. Final hold time is 10 mins. The aromatic hydrocarbon fraction is diluted by 1:30 and a 1 microlitre aliquot of this is injected into the instrument.

Vitrinite Reflectance Analysis

Samples to be analysed for vitrinite reflectance are ground to small granules (if necessary) using a pestle and mortar and are then mounted in a fast setting resin. The resin blocks are first ground flat using a coarse corundum paper to expose the rock granule surfaces and then with three finer grades of corundum paper to improve these surfaces and reduce scratches. The blocks are finally polished on a rotating Selvyt-covered lap using three grades of diamond suspension fluid. An appropriate lubricant is used when necessary.

Reflectance measurements are made under oil immersion at 546 nm using a Zeiss Universal Photo microscope II equipped with a HP 9000 series computer system. The polished blocks are mounted on the microscope stage and scanned manually in order to locate and measure particles of vitrinite. An attempt is made to obtain readings from 15-20 individual particles per sample, but this is not always possible in samples with low amounts of phytoclasts.

Visual Kerogen Microscopy

Kerogen concentrates are obtained from samples prepared by HCl and HF digestion followed by zinc bromide flotation to remove pyrite and other heavy mineral residues. The cleaned concentrates are mounted on slides by smearing, these being analysed microscopically in transmitted white light and UV light (530 nm barrier filter) to determine the Spore Colour or Thermal Alteration Indices (SCI or TAI) and the colour and intensity of spore fluorescence. The spore colour index, backed by spore fluorescence, is used as an alternative maturity parameter to verify the results obtained from vitrinite reflectance.

Fluorescence Colour	Colour Index	Corresp. Vitrinite Reflectance
Green	1	0.2 %
Green/yellow	2	0.2-0.3 %
Yellow	3	0.3 %
Yellow/orange	4	0.4 %
Light orange	5	0.5 %
Moderate-orange	6	0.6 %
Dark orange	7	0.8 %
Dark orange/red	8	1.0 %
Spore fluorescence extinction	9	1.3 %

NB. This table only provides a rudimentary correlation as vitrinite reflectance and spore fluorescence colour are both independently affected by factors such as depositional environment and catagenic history.

Combined Gas Chromatography - Mass Spectrometry (GC-MS)

The GC-MS analyses are performed on a VG TS250 system interfaced to a Hewlett Packard 5890 gas chromatograph. The GC is fitted with a fused silica SE54 capillary column (40 m x 0.22 mm i.d.) directly into the ion source. Helium (12 psi) is used as carrier gas and the injections are performed in splitless mode. The GC oven is programmed from 45°C to 150°C at 35°C/min, at which point the programme rate is 2°C/min up to 310°C where the column is held isothermally for 15 min. For the aromatic hydrocarbons, the GC oven is programmed from 50°C to 310°C at 5°C/min. and held isothermally at 310°C for 15 min. The mass spectrometer is operated in electron impact (EI) mode at 70 eV electron energy, a trap current of 500 uA and a source temperature of 220°C. The instrument resolution used is 1500 (10 % value).

The data system used is a VG PDP11/73 for acquiring data, and a Vax station 3100 for peak processing the data. The samples are analysed in multiple ion detection mode (MID) at a scan cycle time of approximately 1.1 sec.

Calculation of peak ratios is performed from peak heights in the appropriate mass fragmentograms.

Saturated Fractions

Terpanes

The most commonly used fragment ions for detection of terpanes are M/Z 163 for detection of 25,28,30 trisnormoretane or 25,28,30 trisnorhopane, M/Z 177 for detection of demethylated hopanes or moretanes, M/Z 191 for detection of tricyclic, tetracyclic and pentacyclic terpanes and M/Z 205 for methylated hopanes or moretanes. The molecular ions M/Z 370 and 384 are also recorded for identification of C₂₇ and C₂₈ triterpanes respectively.

Steranes

The most commonly used fragment ions for detection of steranes are M/Z 149 to distinguish between 5α and 5β steranes, M/Z 189 and 259 for detection of rearranged steranes, M/Z 217 for detection of rearranged and normal steranes and M/Z 218 for detection of $14\beta(H)$ $17\beta(H)$ steranes.

The M/Z 231 fragment ion is used to detect possible aromatic contamination of the saturated fraction. It is also used for detection of methyl steranes.

Aromatic Fractions

Alkyl-substituted Benzenes

The M/Z 106 fragment ion is often used to detect the alkyl-substituted benzenes. It is especially useful for the detection of di-substituted benzenes. M/Z 134 can also be used for the detection of C₄-alkylbenzenes, but benzothiophene will also give a signal with this fragment ion.

Naphthalenes

Methyl naphthalenes are normally detected by the M/Z 142 fragment ion, while C₂-naphthalenes are detected by M/Z 156 and C₃-naphthalenes by M/Z 170.

Benzothiophenes and Dibenzothiophenes

Benzothiophene can be detected, as mentioned above, by M/Z 134. The M/Z 198 and M/Z 212 fragment ions are used for methyl-substituted dibenzothiophenes and dimethyl-substituted dibenzothiophenes respectively.

Phenanthrenes

Phenanthrene is detected using the M/Z 178 fragment ion. Anthracene will, if present, also give a signal in the M/Z 178 fragment ion. Methyl-substituted phenanthrenes give signals in the M/Z 192 fragment ion, while the M/Z 206 fragment ion shows the dimethyl-substituted phenanthrenes and the M/Z 220 fragment ion shows the C₃ substituted phenanthrenes.

Aromatic Steranes

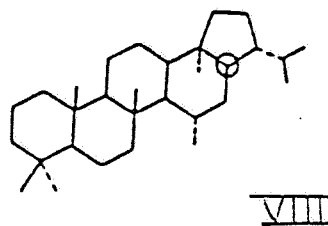
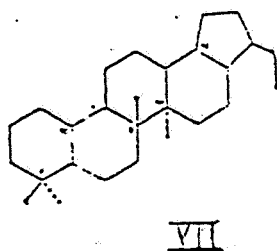
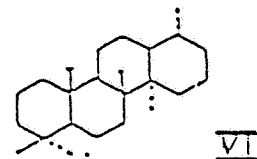
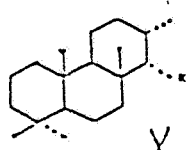
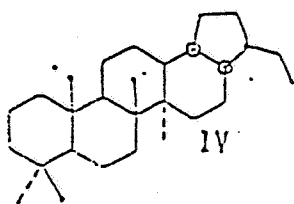
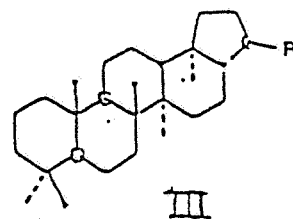
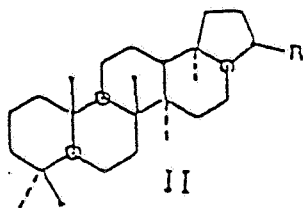
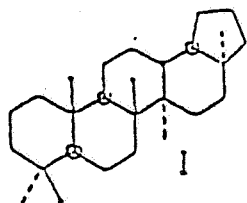
Monoaromatic steranes are detected using the M/Z 253 fragment ion, while the triaromatic steranes are detected using the M/Z 231 fragment ion.

Mass Fragmentograms representing Terpanes
(M/Z 163, 177, 191, 205, 370, 384, 398, 412 and 426)

Peak Identification: (α and β refer to hydrogen atoms at C-17 and C-21 respectively unless indicated otherwise)

A.	18 α trisnorneohopane (T _s)	C ₂₇ H ₄₄	(I)
B.	17 α trisnorhopane (T _m)	C ₂₇ H ₄₆	(II, R=H)
Z.	Bisnorhopane	C ₂₈ H ₄₈	(IV)
C.	$\alpha\beta$ norhopane	C ₂₉ H ₅₀	(II, R=C ₂ H ₅)
D.	$\beta\alpha$ norhopane	C ₂₉ H ₅₀	(III, R=C ₂ H ₅)
E.	$\alpha\beta$ hopane	C ₃₀ H ₅₂	(II, R=i-C ₃ H ₇)
F.	$\beta\alpha$ hopane	C ₃₀ H ₅₂	(III, R=i-C ₃ H ₇)
G.	22S $\alpha\beta$ homohopane	C ₃₁ H ₅₄	(II, R=i-C ₄ H ₉)
H.	22R $\alpha\beta$ homohopane	C ₃₁ H ₅₄	(II, R=i-C ₄ H ₉)
I.	$\beta\alpha$ homohopane	C ₃₁ H ₅₄	(III, R=i-C ₄ H ₉)
J.	22S $\alpha\beta$ bishomohopane	C ₃₂ H ₅₆	(II, R=i-C ₅ H ₁₁)
	22R $\alpha\beta$ bishomohopane	C ₃₂ H ₅₆	(II, R=i-C ₅ H ₁₁)
K.	22S $\alpha\beta$ trishomohopane	C ₃₃ H ₅₈	(II, R=i-C ₆ H ₁₃)
	22R $\alpha\beta$ trishomohopane	C ₃₃ H ₅₈	(II, R=i-C ₆ H ₁₃)
L.	22S $\alpha\beta$ tetrakishomohopane	C ₃₄ H ₆₀	(II, R=i-C ₇ H ₁₅)
	22R $\alpha\beta$ tetrakishomohopane	C ₃₄ H ₆₀	(II, R=i-C ₇ H ₁₅)
M.	22S $\alpha\beta$ pentakishomohopane	C ₃₅ H ₆₂	(II, R=i-C ₈ H ₁₇)
	22R $\alpha\beta$ pentakishomohopane	C ₃₅ H ₆₂	(II, R=i-C ₈ H ₁₇)
P.	Tricyclic terpene	C ₂₃ H ₄₂	(V, R=i-C ₄ H ₉)
Q.	Tricyclic terpene	C ₂₄ H ₄₄	(V, R=i-C ₅ H ₁₁)
R.	Tricyclic terpene (17R, 17S)	C ₂₅ H ₄₆	(V, R=i-C ₆ H ₁₃)
S.	Tetracyclic terpene	C ₂₄ H ₄₂	(VI)
T.	Tricyclic terpene (17R, 17S)	C ₂₆ H ₄₈	(V, R=i-C ₇ H ₁₅)
N.	Tricyclic terpene	C ₂₁ H ₃₈	(V, R=C ₂ H ₅)
O.	Tricyclic terpene	C ₂₂ H ₄₀	(V, R=C ₃ H ₇)
Y.	25,28,30-trisnorhopane/moretane	C ₂₇ H ₄₆	(VII)
X.	$\alpha\beta$ diahopane	C ₃₀ H ₅₂	(VIII)

STRUCTURES REPRESENTING TERPANES



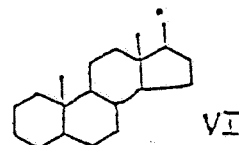
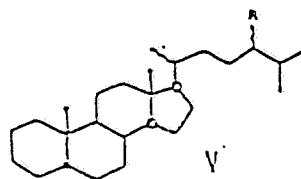
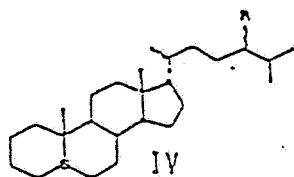
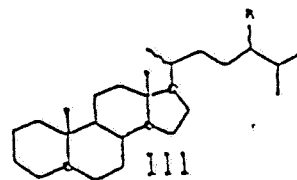
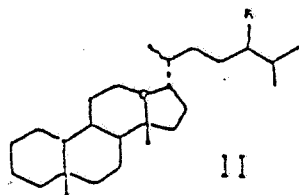
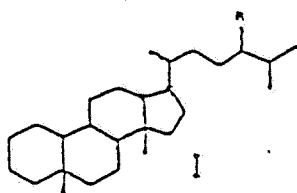
Mass Fragmentograms representing Steranes

(M/Z 149, 189, 217, 218, 259, 372, 386, 400 and 414)

Peak Identifications: α and β refer to hydrogen atoms at C-5, C-14 and C-17 in regular steranes and at C-13 and C-17 in diasteranes).

a.	20S $\beta\alpha$ diacholestane	$C_{27}H_{48}$	(I, R=H)
b.	20R $\beta\alpha$ diacholestane	$C_{27}H_{48}$	(I, R=H)
c.	20S $\alpha\beta$ diacholestane	$C_{27}H_{48}$	(II, R=H)
d.	20R $\alpha\beta$ diacholestane	$C_{27}H_{48}$	(II, R=H)
e.	20S $\beta\alpha$ 24-methyl-diacholestane	$C_{28}H_{50}$	(I, R=CH ₃)
f.	20R $\beta\alpha$ 24-methyl-diacholestane	$C_{28}H_{50}$	(I, R=CH ₃)
g.	20S $\alpha\beta$ 24-methyl-diacholestane	$C_{28}H_{50}$	(II, R=CH ₃)
	+ 20S $\alpha\alpha\alpha$ cholestane	$C_{27}H_{48}$	(III, R=H)
h.	20S $\beta\alpha$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(II, R=C ₂ H ₅)
	+ 20R $\alpha\beta\beta$ cholestane	$C_{27}H_{48}$	(IV, R=H)
i.	20S $\alpha\beta\beta$ cholestane	$C_{27}H_{48}$	(IV, R=H)
	+ 20R $\alpha\beta$ 24-methyl-diacholestane	$C_{28}H_{50}$	(II, R=CH ₃)
j.	20R $\alpha\alpha\alpha$ cholestane	$C_{27}H_{48}$	(III, R=H)
k.	20R $\beta\alpha$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(I, R=C ₂ H ₅)
l.	20R $\alpha\beta$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(II, R=C ₂ H ₅)
m.	20S $\alpha\alpha\alpha$ 24-methyl-cholestane	$C_{28}H_{50}$	(III, R=CH ₃)
n.	20R $\alpha\beta\beta$ 24-methyl-cholestane	$C_{28}H_{50}$	(IV, R=CH ₃)
	+ 20R $\alpha\beta$ 24-ethyl-diacholestane	$C_{29}H_{52}$	(II, R=C ₂ H ₅)
o.	20S $\alpha\beta\beta$ 24-methyl-cholestane	$C_{28}H_{50}$	(IV, R=CH ₃)
p.	20R $\alpha\alpha\alpha$ 24-methyl-cholestane	$C_{28}H_{50}$	(III, R=CH ₃)
q.	20S $\alpha\alpha\alpha$ 24-ethyl-cholestane	$C_{29}H_{52}$	(III, R=C ₂ H ₅)
r.	20R $\alpha\beta\beta$ 24-ethyl-cholestane	$C_{29}H_{52}$	(IV, R=C ₂ H ₅)
s.	20S $\alpha\beta\beta$ 24-ethyl-cholestane	$C_{29}H_{52}$	(IV, R=C ₂ H ₅)
t.	20R $\alpha\alpha\alpha$ 24-ethyl-cholestane	$C_{29}H_{52}$	(III, R=C ₂ H ₅)
u.	5 α sterane	$C_{21}H_{36}$	(VI, R=C ₂ H ₅)
v.	5 α sterane	$C_{22}H_{38}$	(VI, R=C ₃ H ₇)

STRUCTURES REPRESENTING STERANES

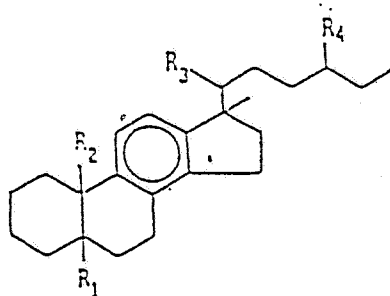
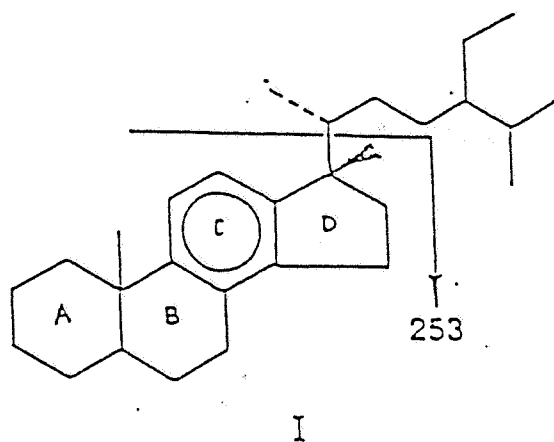


Mass Fragmentograms representing Monoaromatic Steranes (M/Z 253)

Description of C-ring monoaromatic steroid hydrocarbons

Peak	R ₁	Substituents		R ₄	Abbreviation of Compound
		R ₂	R ₃		
A1					C ₂₁ M
B1					C ₂₂ MA
C1	β(H)	CH ₃	S(CH ₃)	H	βSC ₂₇ MA
	β(H)	CH ₃	R(CH ₃)	H	βRC ₂₇ MA
D1	CH ₃	H	R(CH ₃)	H	RC ₂₇ DMA
	α(H)	CH ₃	S(CH ₃)	H	αSC ₂₇ MA
E1	β(H)	CH ₃	S(CH ₃)	CH ₃	βSC ₂₈ MA
	CH ₃	H	S(CH ₃)	CH ₃	SC ₂₈ DMA
F1	α(H)	CH ₃	R(CH ₃)	H	αRC ₂₇ MA
	α(H)	CH ₃	S(CH ₃)	CH ₃	αSC ₂₈ MA
	β(H)	CH ₃	R(CH ₃)	CH ₃	βRC ₂₈ MA
G1	CH ₃	H	R(CH ₃)	CH ₃	RC ₂₈ DMA
	β(H)	CH ₃	S(CH ₃)	C ₂ H ₅	βSC ₂₉ MA
	CH ₃	H	S(CH ₃)	C ₂ H ₅	SC ₂₉ DMA
	α(H)	CH ₃	R(CH ₃)	CH ₃	αRC ₂₈ MA
H1	β(H)	CH ₃	R(CH ₃)	C ₂ H ₅	βRC ₂₉ MA
	CH ₃	H	R(CH ₃)	C ₂ H ₅	RC ₂₉ DMA
I1	α(H)	CH ₃	R(CH ₃)	C ₂ H ₅	αRC ₂₉ MA

STRUCTURES REPRESENTING MONOAROMATIC STERANES

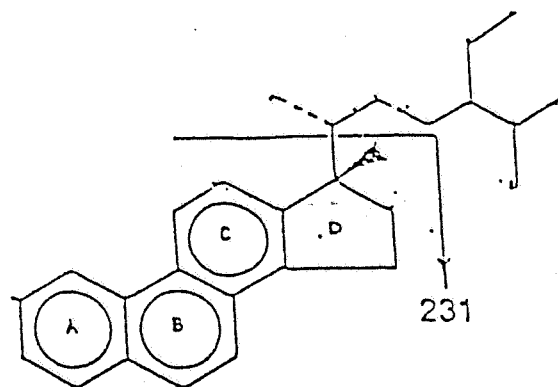


**Mass Fragmentograms representing Triaromatic Steranes
(M/Z 231)**

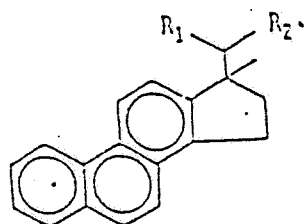
Description of ABC-ring triaromatic steroid hydrocarbons

Peak	Substituents		Abbreviation of Compound
	R ₁	R ₂	
a1	CH ₃	H	C ₂₀ TA
b1	CH ₃	CH ₃	C ₂₁ TA
c1	S(CH ₃)	C ₆ H ₁₋₃	SC ₂₆ TA
d1	R(CH ₃)	C ₆ H ₁₃	RC ₂₆ TA
	S(CH ₃)	C ₇ H ₁₅	SC ₂₇ TA
e1	S(CH ₃)	C ₈ H ₁₇	SC ₂₈ TA
f1	S(CH ₃)	C ₇ H ₁₅	RC ₂₇ TA
g1	R(CH ₃)	C ₈ H ₁₇	RC ₂₈ TA

STRUCTURES REPRESENTING TRIAROMATIC STERANES



11



Stable Carbon Isotope Ratio Mass Spectrometry

Carbon isotope analysis is performed on a dual inlet VG SIRA 10 instrument. The combustion of the samples is performed by a Carlo Erba EA 1108 element analyser directly connected to the inlet system of the mass spectrometer.

The combustion temperature is 1020°C and the carrier gas used was Helium. After the combustion H₂O and CO₂ are trapped in individual cool traps. The CO₂ gas is then heated up before admission into the mass spectrometer. The whole operation is controlled by an IBM PC50 computer system.

δ-values

The isotope ratios are given as δ-values in ‰ versus the PDB-standard:

$$\delta^{13}\text{C} = (R_{\text{sample}} - R_{\text{standard}}/R_{\text{standard}}) \times 1000$$
$$R = {}^{13}\text{C}/{}^{12}\text{C}$$

The PDB-standard (a marine chalk of the Pee Dee-formation, USA) was created by Craig 1957. All results of ¹³C/¹²C-analysis of organic matter today are calculated (Craig correction) against this international standard.

Reproducibility

The precision of the combustion system and the mass spectrometer is controlled by determination of an international calibrated standard, NBS22 oil and a house standard carbon. Replicate analyses are also performed on samples.

Appendix 1

Tables

- 1 -

Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
1000.00						0001
	0.57	80	Sh/Clst: m lt gn gy to m lt ol gy			0001-1L
		20	S/Sst : w, l			0001-2L
1020.00						0002
		70	Sh/Clst: m lt gn gy to m lt ol gy			0002-1L
		30	S/Sst : w, m gy, l, sil			0002-2L
		tr	Other : w, fos			0002-3L
1040.00						0003
		80	Marl : lt ol gy to dsk ol gy			0003-1L
		20	S/Sst : w, m gy, l, sil			0003-2L
		tr	Other : w, fos			0003-3L
1060.00						0004
		65	S/Sst : gn, glauc			0004-3L
		20	S/Sst : w, m gy, l, sil			0004-2L
		15	Marl : lt ol gy to dsk ol gy			0004-1L
1080.00						0005
		65	S/Sst : gn, glauc			0005-3L
		20	S/Sst : w, m gy, l, sil			0005-2L
		15	Marl : lt ol gy to dsk ol gy			0005-1L
		tr	Other : y, pyr			0005-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1100.00						0006
				85 Sh/Clst: lt ol gy to lt brn gy		0006-1L
				10 S/Sst : gn, glauc		0006-3L
				5 S/Sst : w, m gy, l, sil		0006-2L
1120.00						0007
	1.45			90 Sh/Clst: lt ol gy to lt brn gy		0007-1L
				5 S/Sst : w, m gy, l, sil		0007-2L
				5 S/Sst : gn, glauc		0007-3L
1140.00						0008
				95 Sh/Clst: lt ol gy to lt brn gy		0008-1L
				5 S/Sst : gn, w, lt gy, glauc, l, sil		0008-2L
1160.00						0009
				95 Sh/Clst: lt ol gy to lt brn gy		0009-1L
				5 S/Sst : gn, w, lt gy, glauc, l, sil		0009-2L
1160.00						0010
				95 Sh/Clst: lt ol gy to lt brn gy		0010-1L
				5 S/Sst : gn, w, glauc, l		0010-2L
1180.00						0011
	1.88			95 Sh/Clst: m lt ol gy to lt brn gy		0011-1L
				5 S/Sst : gn, w, glauc, l		0011-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1200.00						0012
				100 Sh/Clst: m lt ol gy to lt brn gy		0012-1L
1220.00						0013
				100 Sh/Clst: m lt ol gy to lt brn gy		0013-1L
1240.00						0014
				100 Sh/Clst: m lt ol gy to lt brn gy		0014-1L
1260.00						0015
	1.19			100 Sh/Clst: m lt ol gy to lt brn gy		0015-1L
1280.00						0016
				100 Sh/Clst: m lt ol gy to lt brn gy		0016-1L
1300.00						0017
				100 Sh/Clst: m lt ol gy to lt brn gy		0017-1L
1320.00						0018
	0.83			100 Sh/Clst: m lt ol gy to lt brn gy		0018-1L
1340.00						0019
				100 Sh/Clst: m lt ol gy to lt brn gy		0019-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
1360.00						0020
			100 Sh/Clst: m lt ol gy to lt brn gy			0020-1L
1380.00						0021
			100 Sh/Clst: m lt ol gy to lt brn gy			0021-1L
1400.00						0022
	0.69		100 Sh/Clst: m lt ol gy to lt brn gy			0022-1L
1420.00						0023
			100 Sh/Clst: m lt ol gy to lt brn gy			0023-1L
1440.00						0024
			100 Sh/Clst: m lt ol gy to lt brn gy			0024-1L
1460.00						0025
	0.66		100 Sh/Clst: m lt ol gy to lt brn gy			0025-1L
1480.00						0026
			100 Sh/Clst: m lt ol gy to lt brn gy			0026-1L
1500.00						0027
			100 Sh/Clst: m lt ol gy to lt brn gy			0027-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1520.00						0028
				100 Sh/Clst: m lt ol gy to lt brn gy		0028-1L
1540.00						0029
	0.52			100 Sh/Clst: lt ol gy		0029-1L
1560.00						0030
				100 Sh/Clst: lt ol gy		0030-1L
1580.00						0031
				100 Sh/Clst: lt ol gy		0031-1L
1600.00						0032
	0.90			100 Sh/Clst: lt ol gy		0032-1L
1620.00						0033
				100 Sh/Clst: lt ol gy to lt brn gy		0033-1L
1640.00						0034
	1.20			100 Sh/Clst: lt ol gy to lt brn gy		0034-1L
1660.00						0035
				90 Sh/Clst: lt ol gy to lt gn gy		0035-1L
				10 Sh/Clst: lt gy to m lt brn gy		0035-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1680.00						0036
	0.29		85	Sh/Clst: lt ol gy to lt gn gy		0036-1L
			15	Sh/Clst: lt gy to m lt brn gy		0036-2L
1700.00						0037
			85	Sh/Clst: lt gn gy		0037-1L
			15	Sh/Clst: lt gy to m lt brn gy		0037-2L
			tr	Sh/Clst: red		0037-3L
1720.00						0038
			75	Sh/Clst: lt ol gy to lt gn gy		0038-1L
			15	Sh/Clst: lt gy gn		0038-4L
			10	Sh/Clst: m lt brn gy		0038-2L
			tr	Sh/Clst: red		0038-3L
1740.00						0039
	0.96		85	Sh/Clst: lt ol gy to lt brn gy		0039-1L
			15	Sh/Clst: lt gn gy, m lt brn gy		0039-2L
1760.00						0040
			80	Sh/Clst: lt ol gy to lt brn gy		0040-1L
			20	Sh/Clst: lt gn gy, m lt brn gy		0040-2L
1780.00						0041
			90	Sh/Clst: lt ol gy to lt brn gy		0041-1L
			10	Sh/Clst: lt gn gy, m lt brn gy		0041-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
1800.00						0042
	1.22	100	Sh/Clst: lt ol gy to lt brn gy			0042-1L
1820.00						0043
			60	Sh/Clst: m gy		0043-2L
			40	Sh/Clst: lt ol gy to lt brn gy		0043-1L
1840.00						0044
	1.89	70	Sh/Clst: m gy			0044-2L
		30	Sh/Clst: lt ol gy to lt brn gy			0044-1L
1860.00						0045
			60	Sh/Clst: lt ol gy to lt brn gy		0045-1L
			40	Sh/Clst: m lt gy		0045-2L
1880.00						0046
			50	Sh/Clst: lt ol gy to lt brn gy		0046-1L
			50	Sh/Clst: m lt gy		0046-2L
1900.00						0047
	0.22	90	Sh/Clst: lt gn gy			0047-1L
		10	Sh/Clst: m lt gy			0047-2L
1920.00						0048
			50	Sh/Clst: m lt brn gy		0048-2L
			40	Sh/Clst: lt gn gy		0048-1L
			10	S/Sst : w, l		0048-3L
			tr	Cont : w, bar		0048-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
1940.00						0049
			100	Sh/Clst: lt gn gy to lt ol gy		0049-1L
1960.00						0050
	1.23	95	Sh/Clst: m gy			0050-2L
		5	Sh/Clst: lt gn gy to lt ol gy			0050-1L
1980.00						0051
		95	Sh/Clst: m gy			0051-2L
		5	Sh/Clst: lt gn gy to lt ol gy			0051-1L
		tr	Cont : v col, prp			0051-3L
2000.00						0052
	0.58	100	Sh/Clst: m gy to m gn gy			0052-1L
		tr	Cont : v col, prp			0052-2L
2020.00						0053
		80	Sh/Clst: m gy to m gn gy			0053-1L
		10	Sh/Clst: m lt ol gy to m lt brn gy			0053-2L
		10	Sh/Clst: lt gn gy			0053-3L
2040.00						0054
	0.85	100	Sh/Clst: m lt gy			0054-1L
2060.00						0055
		90	Sh/Clst: m lt gy			0055-1L
		10	Sh/Clst: lt gn gy, lt ol gy			0055-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2080.00						0056
		90	Sh/Clst:	m lt bl gy to m lt gy		0056-1L
		10	Cont	: brn, prp		0056-2L
2100.00						0057
	0.86	95	Sh/Clst:	m lt bl gy to m lt gy		0057-1L
		5	Sltst	: brn y, calc		0057-3L
		tr	Cont	: brn, prp		0057-2L
2120.00						0058
		95	Sh/Clst:	m lt bl gy to m lt gy		0058-1L
		5	Sltst	: brn y, calc		0058-2L
2140.00						0059
		65	Other	: y brn, dd, s, fib		0059-3L
		20	Sltst	: w, calc		0059-2L
		15	Sh/Clst:	m lt bl gy to m lt gy		0059-1L
2160.00						0060
		65	Other	: y brn, dd, s, fib		0060-2L
		35	Sh/Clst:	m lt bl gy to m lt gy		0060-1L
2180.00						0061
	0.73	90	Sh/Clst:	m lt bl gy to m lt gy		0061-1L
		10	Other	: y brn, dd, s, fib		0061-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2200.00						0062
			70	Sh/Clst: m lt bl gy to m lt gy		0062-1L
			30	Other : y brn, dd, s, fib		0062-2L
			tr	Other : y, pyr		0062-3L
2220.00						0063
			80	Other : y brn, dd, s, fib		0063-2L
			20	Sh/Clst: m lt bl gy to m lt gy		0063-1L
			tr	S/Sst : w		0063-3L
2240.00						0064
			75	Sh/Clst: m lt bl gy to m lt gy		0064-1L
			25	Other : y brn, dd, s, fib		0064-2L
			tr	S/Sst : w		0064-3L
2260.00						0065
	0.84		80	Sh/Clst: m lt bl gy to m lt gy		0065-1L
			20	Other : y brn, dd, s, fib		0065-2L
			tr	Ca : w		0065-3L
2280.00						0066
			50	Sh/Clst: m lt bl gy to m lt gy		0066-1L
			50	Other : y brn, dd, s, fib		0066-2L
			tr	Ca : w		0066-3L
2300.00						0103
			80	Sh/Clst: m gy		0103-1L
			20	Other : y brn, dd, s, fib		0103-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2320.00						0104
	1.19	80	Sh/Clst: m gy			0104-1L
		20	Other : y brn, dd, s, fib			0104-2L
		tr	Ca : w			0104-3L
		tr	Sh/Clst: lt y gy			0104-4L
2340.00						0105
		65	Sh/Clst: m gy			0105-1L
		35	Other : y brn, dd, s, fib			0105-2L
		tr	Ca : w			0105-3L
2360.00						0106
		60	Other : y brn to ol gy, dd, s, fib			0106-2L
		40	Sh/Clst: m gy			0106-1L
2380.00						0107
	1.36	50	Sh/Clst: m gy			0107-1L
		30	Other : lt ol gy, dd, s			0107-3L
		20	Other : y brn, dd, s, fib			0107-2L
2400.00						0108
		90	Other : m brn gy, dd, s			0108-3L
		5	Sh/Clst: m gy			0108-1L
		5	Other : y brn, dd, s			0108-2L
2420.00						0109
		45	Other : m brn gy, dd, s			0109-3L
		40	Sh/Clst: m gy			0109-1L
		15	Other : y brn, dd, s			0109-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2440.00						0110
	1.38	75	Sh/Clst:	m gy		0110-1L
		20	Other	: m brn gy, dd, s		0110-3L
		5	Other	: y brn, dd, s		0110-2L
2460.00						0111
		95	Other	: lt y brn to lt ol gy, dd, s		0111-2L
		5	Sh/Clst:	m gy		0111-1L
2480.00						0112
		40	Cont	: w, bar		0112-4L
		25	Other	: y brn, dd, s		0112-2L
		25	Other	: lt ol gy, dd, s		0112-3L
		10	Sh/Clst:	m gy		0112-1L
2500.00						0113
		40	Other	: y brn, dd, s		0113-2L
		40	Other	: lt ol gy, dd, s		0113-3L
		10	Sh/Clst:	m gy		0113-1L
		10	Cont	: w, bar		0113-4L
		tr	Other	: y, pyr		0113-5L
2520.00						0114
		90	Other	: lt ol gy, dd, s		0114-2L
		10	Sh/Clst:	m gy		0114-1L
2540.00						0115
		50	Other	: lt ol gy, dd, s		0115-2L
		25	Cont	: w, bar		0115-4L
		20	Other	: y brn, dd, s		0115-3L
		5	Sh/Clst:	m gy		0115-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2560.00						0116
		60	Other	: lt ol gy, dd, s		0116-2L
		20	Sh/Clst:	m gy		0116-1L
		15	Cont	: w, bar		0116-4L
		5	Other	: y brn, dd, s		0116-3L
2580.00						0117
		75	Other	: lt ol gy, dd, s		0117-2L
		15	Sh/Clst:	m gy		0117-1L
		5	Other	: y brn, dd, s		0117-3L
		5	Cont	: w, bar		0117-4L
2600.00						0118
		60	Sh/Clst:	m gy		0118-1L
		40	Other	: lt ol gy, dd, s		0118-2L
2620.00						0119
	1.06	80	Sh/Clst:	m gy		0119-1L
		20	Other	: lt ol gy, dd, s, fib		0119-2L
2640.00						0120
		50	Sh/Clst:	m gy		0120-1L
		30	Cont	: w, bar		0120-3L
		20	Other	: lt ol gy, dd, s, fib		0120-2L
2660.00						0121
		40	Other	: lt ol gy, dd, s, fib		0121-2L
		35	Other	: y brn, dd, s, fib		0121-4L
		15	Sh/Clst:	m gy		0121-1L
		10	Cont	: w, bar		0121-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2680.00						0122
			95	Other : lt ol gy, dd, s, fib		0122-2L
			5	Sh/Clst: m gy		0122-1L
2700.00						0123
	6.06		70	Sh/Clst: drk gy		0123-1L
			15	Other : lt ol gy, dd, s, fib		0123-2L
			10	Ca : w		0123-3L
			5	Sh/Clst: m red, slt		0123-4L
2713.30	ccp					0067
	0.66	100		Sh/Clst: m gy, slt		0067-1L
2718.00	ccp					0068
	0.89	100		Sh/Clst: m drk gy, fis		0068-1L
2720.00						0124
			40	Cont : blk, Coal-ad		0124-1L
			40	Other : lt ol gy, dd, s, fib		0124-2L
			20	Cont : v col, prp		0124-3L
2723.00	ccp					0069
	0.57	100		Sh/Clst: m lt gy, slt		0069-1L
2740.00						0125
			90	Other : lt ol gy, dd, s, fib		0125-2L
			10	Cont : blk, Coal-ad		0125-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2755.00						0126
		80	Other	: lt ol gy, dd, s, fib		0126-2L
		20	Cont	: blk, Coal-ad		0126-1L
2760.00	ccp					0070
	0.72	100	Sh/Clst:	m lt gy, slt		0070-1L
2765.00	ccp					0071
	1.40	100	S/Sst	: pl y brn, carb		0071-1L
2770.00	ccp					0072
	1.17	100	S/Sst	: lt gy to dsk y gy		0072-1L
2775.00	ccp					0073
	0.62	100	S/Sst	: lt gy to dsk y gy, cly		0073-1L
2780.20	ccp					0074
	1.14	100	Sltst	: m lt gy to dsk y gy, cly		0074-1L
2785.00	ccp					0075
	1.66	100	Sltst	: m lt gy to dsk y gy, cly		0075-1L
2790.50	ccp					0076
	1.20	100	Sh/Clst:	m lt gy to dsk y gy, slt		0076-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
2795.50	ccp					0077
	0.15	100	Sltst	: dsk y gy, cly		0077-1L
2800.00	ccp					0078
	0.54	85	Sh/Clst:	lt gy brn, slt, pyr		0078-2L
	0.97	15	Sh/Clst:	m drk gy, fis, lam		0078-1L
2805.00	ccp					0079
	0.54	100	Sh/Clst:	lt ol gy to dsk ol gy		0079-1L
2810.00	ccp					0080
	0.80	100	Sh/Clst:	lt ol gy, lam		0080-1L
2815.00	ccp					0081
	0.89	100	Sh/Clst:	m lt gy		0081-1L
2820.00	ccp					0082
	1.33	100	Sh/Clst:	m lt gy, lam		0082-1L
2825.00	ccp					0083
	2.21	100	Sh/Clst:	m lt gy		0083-1L
2830.00	ccp					0084
	1.74	100	Sh/Clst:	m drk gy		0084-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2835.00						0127
			90	Other	: lt ol gy, dd, s, fib	0127-2L
			5	Sh/Clst:	m lt gy	0127-1L
			5	Cont	: blk, Coal-ad	0127-3L
2845.00	ccp					0085
	0.87	100	S/Sst	: lt ol gy to lt y gy, crs		0085-1L
2850.00	ccp					0086
	1.19	100	S/Sst	: lt ol gy to lt y gy		0086-1L
2854.75	ccp					0087
	0.71	100	S/Sst	: lt ol gy to lt y gy		0087-1L
2860.00						0128
			40	Other	: lt ol gy, dd, s, fib	0128-1L
			40	Cont	: blk, Coal-ad	0128-2L
			15	S/Sst	: pl w, l	0128-4L
			5	Ca	: w	0128-3L
			tr	Ca	: w	0128-5L
2865.00						0129
			60	Other	: lt ol gy, dd, s, fib	0129-1L
			30	Cont	: blk, Coal-ad	0129-2L
			10	S/Sst	: pl w, l	0129-3L

Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Tri	Sample

Int Cvd	TOC%	%	Lithology description			

2871.00 ccp 0.78 100 S/Sst : lt ol gy to lt brn gy, cly 0088 0088-1L

2876.00 ccp 2.07 75 Sltst : m ol gy, cly 25 S/Sst : lt ol gy to lt brn gy 0089 0089-2L

2881.00 ccp 1.70 100 Sh/Clst: m drk gy to lt brn gy 0090 0090-1L

2887.00 ccp 0.71 100 Sltst : lt ol gy to m lt gy, cly 0091 0091-1L

2892.00 ccp 1.00 100 S/Sst : m lt ol gy to m lt y gy, crs 0092 0092-1L

2901.00 ccp 0.65 100 S/Sst : m lt ol gy to m lt y gy, crs 0093 0093-1L

2906.00 ccp 0.65 100 S/Sst : m lt ol gy to m lt y gy, crs 0094 0094-1L

2911.00 ccp 0.61 50 Sltst : m lt ol gy to m lt y gy, crs 1.37 50 Sh/Clst: m drk gy 0095 0095-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2917.00	ccp					0096
	0.39	100	S/Sst	: m lt ol gy to m lt y gy, crs		0096-1L
2922.00	ccp					0097
	2.17	100	S/Sst	: m lt ol gy to m lt y gy, crs		0097-1L
2927.00	ccp					0098
	0.88	100	S/Sst	: m lt ol gy to m lt y gy, crs		0098-1L
2932.00	ccp					0099
	1.24	100	S/Sst	: m lt ol gy to m lt y gy		0099-1L
2937.00	ccp					0100
	0.65	100	S/Sst	: m lt ol gy to m lt y gy		0100-1L
2942.00	ccp					0101
	0.90	100	S/Sst	: m lt ol gy to m lt y gy, crs		0101-1L
2947.00	ccp					0102
	0.72	75	S/Sst	: m lt ol gy to m lt y gy, crs		0102-1L
	5.33	25	Sh/Clst	: m drk gy, mic		0102-2L
2990.00						0130
		70	Other	: lt brn, dd, s, fib		0130-1L
		15	Cont	: blk, Coal-ad		0130-2L
		15	S/Sst	: w, l		0130-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2995.00						0131
		80	S/Sst	: w, l, f		0131-3L
		15	Other	: lt brn, dd, s, fib		0131-1L
		5	Cont	: blk, Coal-ad		0131-2L
3000.00						0132
		80	S/Sst	: pl w, l, f		0132-3L
		15	Other	: lt brn, dd, s, fib		0132-1L
		5	Cont	: blk, Coal-ad		0132-2L
3005.00						0133
		65	S/Sst	: pl w, l, f		0133-3L
		30	Other	: lt brn, dd, s, fib		0133-1L
		5	Cont	: blk, Coal-ad		0133-2L
3015.00						0134
		95	Other	: lt brn, dd, s, fib		0134-1L
		5	S/Sst	: pl w, l, f		0134-2L
3020.00						0135
		90	Other	: lt brn, dd, s, cly		0135-1L
		5	S/Sst	: pl w, l, f		0135-2L
		5	Cont	: v col, prp		0135-3L
3025.00						0136
		60	Other	: lt brn, dd, s, cly		0136-1L
		40	S/Sst	: pl w, l, crs		0136-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3030.00						0137
		85	S/Sst	: w, l, crs		0137-2L
		15	Other	: lt brn, dd, s, cly		0137-1L
3035.00						0138
		50	S/Sst	: w, l, crs		0138-2L
		45	Other	: lt brn, dd, s, cly		0138-1L
		5	Cont	: blk, Coal-ad		0138-3L
3045.00						0139
	13.09	55	Sh/Clst:	gy blk, carb		0139-3L
		40	Other	: lt brn, dd, s, cly		0139-1L
		5	S/Sst	: w, l, crs		0139-2L
3050.00						0140
	0.39	75	S/Sst	: w, l, f		0140-2L
		20	Other	: lt brn, dd, s, cly		0140-1L
		5	Sh/Clst:	gy blk, carb		0140-3L
3055.00						0141
		75	S/Sst	: w, l, crs		0141-2L
		15	Other	: lt brn, dd, s, cly		0141-1L
		5	Sh/Clst:	gy blk, carb		0141-3L
		5	Cont	: v col, prp		0141-4L
3060.00						0142
		55	S/Sst	: w, l, crs		0142-2L
		45	Other	: lt brn, dd, s, cly		0142-1L
		tr	Sh/Clst:	gy blk, carb		0142-3L
		tr	Cont	: v col, prp		0142-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3065.00						0143
	0.20	60	S/Sst	: w, l, crs		0143-2L
		40	Other	: lt brn, dd, s, cly		0143-1L
		tr	Cont	: blk, Coal-ad		0143-3L
		tr	Cont	: v col, prp		0143-4L
3070.00						0144
		80	S/Sst	: w, l, crs		0144-2L
		20	Other	: lt brn, dd, s, cly		0144-1L
		tr	Cont	: blk, Coal-ad		0144-3L
3075.00						0145
		40	Other	: lt brn, dd, s, cly		0145-1L
		40	Cont	: blk, Coal-ad		0145-3L
		10	S/Sst	: w, l, crs		0145-2L
		10	Cont	: v col, prp		0145-4L
3080.00						0146
		40	Other	: lt brn, dd, s, cly		0146-1L
		40	Cont	: blk, Coal-ad		0146-3L
		10	S/Sst	: w, l, crs		0146-2L
		10	Cont	: v col, prp		0146-4L
3085.00						0147
		60	S/Sst	: w, l, crs		0147-2L
		25	Other	: lt brn, dd, s, cly		0147-1L
		15	Ca	: blk		0147-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3095.00						0148
		55	S/Sst	: pl w, l, crs		0148-2L
		40	Other	: lt brn, dd, s		0148-1L
		5	Cont	: blk, Coal-ad		0148-3L
3100.00						0149
	0.14	95	S/Sst	: pl w, l, crs		0149-2L
		5	Other	: lt brn, dd, s		0149-1L
		tr	Cont	: blk, Coal-ad		0149-3L
3105.00						0150
		90	S/Sst	: pl w, l, crs		0150-2L
		5	Other	: lt brn, dd, s		0150-1L
		5	Sh/Clst:	gy blk		0150-3L
3110.00						0151
		80	S/Sst	: pl w, l, crs		0151-2L
		15	Other	: lt brn, dd, s		0151-1L
		5	Sh/Clst:	gy blk		0151-3L
3115.00						0152
		65	Other	: lt brn, dd, s		0152-1L
		30	S/Sst	: pl w, l, crs		0152-2L
		5	Sh/Clst:	gy blk		0152-3L
3120.00						0153
	0.02	95	S/Sst	: pl w, l, crs		0153-2L
		5	Sh/Clst:	gy blk		0153-3L
		tr	Other	: lt brn, dd, s		0153-1L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3125.00						0154
				95 S/Sst : pl w, l, crs		0154-2L
				5 Sh/Clst: m gy		0154-3L
				tr Other : lt brn, dd, s		0154-1L
3130.00						0155
				85 S/Sst : pl w, l, crs		0155-1L
				10 Sh/Clst: lt y gy		0155-2L
				5 Other : lt brn, dd, s		0155-3L
				tr Sh/Clst: gy blk		0155-4L
3135.00						0156
				75 S/Sst : pl w, l, crs		0156-1L
				15 Other : lt brn, dd, s		0156-3L
				10 Sh/Clst: lt y gy		0156-2L
				tr Sh/Clst: gy blk		0156-4L
				tr Cont : blk, Coal-ad		0156-5L
3140.00						0157
	0.06			100 S/Sst : pl w, l, f		0157-1L
				tr Sh/Clst: lt y gy		0157-2L
				tr Other : lt brn, dd, s		0157-3L
3145.00						0158
				95 S/Sst : pl w, l, f		0158-1L
				5 Sh/Clst: lt y gy		0158-2L
				tr Other : lt brn, dd, s		0158-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3150.00						0159
		100	S/Sst	: pl w, l, f		0159-1L
			tr Sh/Clst:	lt y gy		0159-2L
			tr Other	: lt brn, dd, s		0159-3L
3155.00						0160
		100	S/Sst	: pl w, l		0160-1L
			tr Sh/Clst:	m gy to drk gy		0160-2L
3160.00						0161
	0.03	100	S/Sst	: pl w, l		0161-1L
			tr Sh/Clst:	m gy to drk gy		0161-2L
3165.00						0162
		100	S/Sst	: pl w, l		0162-1L
			tr Sh/Clst:	m gy to drk gy		0162-2L
3170.00						0163
		90	S/Sst	: pl w, l		0163-1L
		10	Sh/Clst:	gy blk		0163-3L
			tr Sh/Clst:	m gy		0163-2L
3175.00						0164
		85	S/Sst	: pl w, l		0164-1L
		10	Sh/Clst:	gy blk		0164-3L
		5	Other	: lt brn y, dd		0164-4L
			tr Sh/Clst:	m gy		0164-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3180.00						0165
	0.03	85	S/Sst	: pl w, l		0165-1L
		10	Sh/Clst:	gy blk		0165-3L
		5	Other	: lt brn y, dd		0165-4L
		tr	Sh/Clst:	m gy		0165-2L
3185.00						0166
		75	S/Sst	: pl w, l		0166-1L
		10	Sh/Clst:	m gy, slt		0166-2L
		10	Other	: lt brn y, dd		0166-4L
		5	Sh/Clst:	gy blk		0166-3L
3190.00						0167
		90	S/Sst	: pl w, l		0167-1L
		5	Sh/Clst:	m gy to drk gy, slt		0167-2L
		5	Other	: lt brn y, dd		0167-3L
3195.00						0168
		90	S/Sst	: pl w, l		0168-1L
		5	Sh/Clst:	m gy to drk gy, slt		0168-2L
		5	Other	: lt brn y, dd		0168-3L
3200.00						0169
	0.03	100	S/Sst	: pl w, l		0169-1L
		tr	Sh/Clst:	m gy to drk gy, slt		0169-2L
		tr	Other	: lt brn y, dd		0169-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3205.00						0170
				75 S/Sst : pl w, l, crs		0170-1L
				15 Other : lt brn y, dd		0170-3L
				10 Sh/Clst: m gy to drk gy, slt		0170-2L
3210.00						0171
				50 S/Sst : pl w, l, crs		0171-1L
				30 Other : lt brn y, dd, s		0171-3L
				20 Sh/Clst: m gy to drk gy, slt		0171-2L
3215.00						0172
				65 S/Sst : pl w, l, crs		0172-1L
				20 Other : lt brn y, dd, s		0172-3L
				15 Sh/Clst: m gy to drk gy		0172-2L
3220.00						0173
	0.81			35 Sh/Clst: m gy to drk gy		0173-2L
				30 S/Sst : pl w, l		0173-1L
				25 Other : lt brn y, dd, s		0173-3L
				5 Sh/Clst: gy blk		0173-4L
				5 Cont : blk, Coal-ad		0173-5L
3225.00						0174
	0.02			90 S/Sst : pl w, l		0174-1L
				5 Sh/Clst: m gy to drk gy		0174-2L
				5 Other : lt brn y, dd, s		0174-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3230.00						0175
				95 S/Sst : pl w, l		0175-1L
				5 Other : lt brn y, dd, s		0175-3L
				tr Sh/Clst: m gy to drk gy		0175-2L
3235.00						0176
				75 S/Sst : pl w, l		0176-1L
				15 Sh/Clst: m gy to drk gy		0176-2L
				5 Other : lt brn y, dd, s		0176-3L
				5 Cont : v col, prp		0176-4L
3240.00						0177
	0.06			100 S/Sst : pl w, l, f		0177-1L
				tr Sh/Clst: m gy to drk gy		0177-2L
				tr Other : lt brn y, dd, s		0177-3L
3245.00						0178
				65 S/Sst : pl w, l, f		0178-1L
				15 Sh/Clst: m gy to drk gy		0178-2L
				10 Other : lt brn y, dd, s		0178-3L
				10 Cont : blk, Coal-ad		0178-4L
3250.00						0179
				85 S/Sst : pl w, l, f		0179-1L
				5 Sh/Clst: m gy to drk gy		0179-2L
				5 Other : lt brn y, dd, s		0179-3L
				5 Cont : blk, Coal-ad		0179-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3255.00						0180
		80	S/Sst	: pl w, l, f		0180-1L
		10	Sh/Clst:	m gy to drk gy, slt		0180-2L
		5	Other	: lt brn y, dd, s		0180-3L
		5	Cont	: blk, Coal-ad		0180-4L
3260.00						0181
	0.03	75	S/Sst	: pl w, l, f		0181-1L
		10	Sh/Clst:	m gy to drk gy, slt		0181-2L
		10	Other	: lt brn y, dd, s		0181-3L
		5	Cont	: blk, Coal-ad		0181-4L
3269.00						0183
		80	Other	: m lt gy brn, dd, s, cly		0183-3L
		10	S/Sst	: pl w, l		0183-1L
		10	Sh/Clst:	m gy, slt		0183-2L
3270.00						0184
		90	S/Sst	: pl w, l, crs		0184-1L
		5	Sh/Clst:	m gy, gy pi, slt		0184-2L
		5	Other	: m lt gy brn, dd, s, cly		0184-3L
3275.00						0185
		95	S/Sst	: pl w, l, crs		0185-1L
		5	Other	: m lt gy brn, dd, s, cly		0185-3L
		tr	Sh/Clst:	m gy, gy pi, slt		0185-2L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3280.00						0186
			80	S/Sst : pl w, l		0186-1L
			10	Sh/Clst: m gy, gy pi, lt gy gn, slt		0186-2L
			10	Other : m lt gy brn, dd, s, cly		0186-3L
3285.00						0187
	0.09		70	Sltst : gy pi, lt gn gy, cly		0187-2L
			25	S/Sst : pl w, l		0187-1L
			5	Other : m lt gy brn, dd, s, cly		0187-3L
3290.00						0188
			60	Sltst : gy pi, lt gn gy, cly		0188-2L
			30	S/Sst : pl w, l		0188-1L
			10	Other : m lt gy brn, dd, s, cly		0188-3L
3295.00						0189
			95	S/Sst : pl w, l		0189-1L
			5	Sltst : gy pi, lt gn gy, cly		0189-2L
			tr	Other : m lt gy brn, dd, s, cly		0189-3L
3300.00						0190
	0.05		100	S/Sst : pl w, l, crs		0190-1L
			tr	Sltst : gy pi, lt gn gy, cly		0190-2L
			tr	Other : m lt gy brn, dd, s, cly		0190-3L
3305.00						0191
			100	S/Sst : pl w, l, crs		0191-1L
			tr	Sltst : gy pi, lt gn gy, cly		0191-2L
			tr	Other : m lt gy brn, dd, s, cly		0191-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3310.00						0192
		90	S/Sst	: pl w, l, crs		0192-1L
		10	Sltst	: gy pi, lt gn gy, cly		0192-2L
		tr	Other	: m lt gy brn, dd, s, cly		0192-3L
3315.00						0193
		85	S/Sst	: pl w, l, crs		0193-1L
		10	Sltst	: gy pi, lt gn gy, cly		0193-2L
		5	Other	: m lt gy brn, dd, s, cly		0193-3L
3320.00						0194
		70	S/Sst	: pl w, l, crs		0194-1L
		25	Sltst	: gy pi, lt gn gy, cly		0194-2L
		5	Other	: m lt gy brn, dd, s, cly		0194-3L
		tr	Coal	: blk, Coal-ad		0194-4L
3325.00						0195
	0.03	90	S/Sst	: pl w, l, crs		0195-1L
		5	Sltst	: gy pi, lt gn gy, cly		0195-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0195-3L
		tr	Coal	: blk, Coal-ad		0195-4L
3330.00						0196
		80	S/Sst	: pl w, l, crs		0196-1L
		10	Sltst	: gy pi, lt gn gy, cly		0196-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0196-3L
		5	Coal	: blk, Coal-ad		0196-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3335.00						0197
		80	S/Sst	: pl w, l, crs		0197-1L
		10	Coal	: blk, Coal-ad		0197-4L
		5	Sltst	: gy pi, lt gn gy, cly		0197-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0197-3L
3340.00						0198
		85	S/Sst	: pl w, l, crs		0198-1L
		10	Sltst	: gy pi, lt gn gy, cly		0198-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0198-3L
		tr	Coal	: blk, Coal-ad		0198-4L
3345.00						0199
	0.03	85	S/Sst	: pl w, l, crs		0199-1L
		10	Sltst	: gy pi, lt gn gy, cly		0199-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0199-3L
		tr	Coal	: blk, Coal-ad		0199-4L
3350.00						0200
		80	S/Sst	: pl w, l, crs		0200-1L
		15	Sltst	: gy pi, lt gn gy, cly		0200-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0200-3L
		tr	Coal	: blk, Coal-ad		0200-4L
3355.00						0201
		85	S/Sst	: pl w, l, crs		0201-1L
		10	Sltst	: gy pi, lt gn gy, cly		0201-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0201-3L
		tr	Coal	: blk, Coal-ad		0201-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3360.00						0203
		85	S/Sst	: pl w, l		0203-1L
		10	Other	: m lt gy brn to lt brn y, dd, s, cly		0203-3L
		5	Sltst	: gy pi, lt gn gy, cly		0203-2L
3365.00						0202
		80	S/Sst	: pl w, l		0202-1L
		15	Other	: m lt gy brn to lt brn y, dd, s, cly		0202-3L
		5	Sltst	: gy pi, lt gn gy, cly		0202-2L
3370.00						0204
	0.23	50	Sltst	: gy pi, lt gn gy, cly		0204-2L
		35	S/Sst	: pl w, l		0204-1L
		10	Sh/Clst	: lt gy to lt gn gy		0204-4L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0204-3L
3375.00						0205
		70	S/Sst	: pl w, l		0205-1L
		15	Other	: m lt gy brn to lt brn y, dd, s, cly		0205-3L
		10	Sltst	: gy pi, lt gn gy, cly		0205-2L
		5	Sh/Clst	: lt gy to lt gn gy		0205-4L
3380.00						0206
		85	S/Sst	: pl w, l		0206-1L
		10	Sltst	: gy pi, lt gn gy, cly		0206-2L
		5	Other	: m lt gy brn to lt brn y, dd, s, cly		0206-3L
		tr	Coal	: blk, Coal-ad		0206-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3385.00						0207
	0.10	40	Sltst	: m gy brn, cly		0207-2L
		35	S/Sst	: pl w to lt or brn, l		0207-1L
		20	Sltst	: m lt gy to lt gn gy, cly		0207-3L
		5	Other	: m lt gy brn to lt brn y, dd, s		0207-4L
3390.00						0208
		85	S/Sst	: pl w to lt or brn, l		0208-1L
		10	Sltst	: m gy brn, lt gn gy, cly		0208-2L
		5	Other	: m lt gy brn to lt brn y, dd, s		0208-3L
3395.00						0209
		95	S/Sst	: pl w to lt or brn, l		0209-1L
		5	Sltst	: m gy brn, lt gn gy, cly		0209-2L
		tr	Other	: m lt gy brn to lt brn y, dd, s		0209-3L
3400.00						0210
		70	S/Sst	: pl w to lt or brn, l		0210-1L
		25	Sltst	: m gy brn, lt gn gy, cly		0210-2L
		5	Other	: m lt gy brn to lt brn y, dd, s		0210-3L
3405.00						0211
	0.11	75	S/Sst	: pl w to lt or brn, l		0211-1L
		20	Sltst	: m gy brn, lt gn gy, cly		0211-2L
		5	Other	: m lt gy brn to lt brn y, dd, s		0211-3L
3410.00						0212
		60	S/Sst	: pl w to lt or brn, l		0212-1L
		35	Sltst	: m gy brn, lt gn gy, cly		0212-2L
		5	Other	: m lt gy brn to lt brn y, dd, s		0212-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3415.00						0213
			75	S/Sst : pl w to lt or brn, l		0213-1L
			20	Sltst : m gy brn, lt gn gy, cly		0213-2L
			5	Other : m lt gy brn to lt brn y, dd, s		0213-3L
3420.00						0214
			75	S/Sst : pl w to lt or brn, l		0214-1L
			20	Sltst : m gy brn, lt gn gy, cly		0214-2L
			5	Other : m lt gy brn to lt brn y, dd, s		0214-3L
3425.00						0215
	0.13		60	Sltst : m gy brn, lt gn gy, cly		0215-2L
			35	S/Sst : pl w to lt or brn, l		0215-1L
			5	Other : m lt gy brn to lt brn y, dd, s		0215-3L
3430.00						0216
			75	Sltst : m gy brn, lt gn gy, cly		0216-2L
			20	S/Sst : pl w to lt or brn, l		0216-1L
			5	Other : m lt gy brn to lt brn y, dd, s		0216-3L
3435.00						0217
			75	Sltst : m gy brn, lt gn gy, cly		0217-2L
			20	S/Sst : pl w to lt or brn, l		0217-1L
			5	Other : m lt gy brn to lt brn y, dd, s		0217-3L
			tr	Coal : blk, Coal-ad		0217-4L
3440.00						0218
	0.13		70	Sltst : m gy brn, lt gn gy, cly		0218-2L
			20	S/Sst : pl w to lt or brn, l		0218-1L
			10	Other : m lt gy brn to lt brn y, dd, s		0218-3L
			tr	Coal : blk, Coal-ad		0218-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3445.00						0219
				70 Sltst : m gy brn, lt gn gy, cly		0219-2L
				15 S/Sst : pl w to lt or brn, l		0219-1L
				10 Other : m lt gy brn to lt brn y, dd, s		0219-3L
				5 Coal : blk, Coal-ad		0219-4L
3455.00						0220
				70 Sh/Clst: m gy brn, lt gn gy, slt		0220-2L
				15 S/Sst : pl w to lt or brn, l		0220-1L
				10 Other : m lt gy brn to lt brn y, dd, s		0220-3L
				5 Coal : blk, Coal-ad, f		0220-4L
				tr Coal : blk		0220-5L
3460.00						0221
	0.08			90 Sh/Clst: m gy brn, slt		0221-2L
				5 S/Sst : pl w to lt or brn, l		0221-1L
				5 Other : m lt gy brn, dd, s		0221-3L
				tr Coal : blk, Coal-ad, f		0221-4L
3465.00						0222
				85 Sh/Clst: m gy brn, slt		0222-2L
				5 S/Sst : pl w to lt or brn, l		0222-1L
				5 Other : m lt gy brn, dd, s		0222-3L
				5 Sltst : m gy brn, lt gn gy, cly		0222-4L
3470.00						0223
				85 Sh/Clst: m gy brn, slt		0223-2L
				5 S/Sst : pl w to lt or brn, l		0223-1L
				5 Other : m lt gy brn, dd, s		0223-3L
				5 Sltst : m gy brn, lt gn gy, cly		0223-4L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3475.00						0224
		85	Sh/Clst:	m gy brn, slt		0224-2L
		5	S/Sst	: pl w to lt or brn, l		0224-1L
		5	Other	: m lt gy brn, dd, s		0224-3L
		5	Sltst	: m gy brn, lt gn gy, cly		0224-4L
3485.00						0225
	0.06	50	S/Sst	: pl w to lt or brn, l		0225-1L
		45	Sh/Clst:	m gy brn, slt		0225-2L
		5	Other	: m lt gy brn, dd, s		0225-3L
3495.00						0226
		70	Sh/Clst:	m gy brn, slt		0226-2L
		25	S/Sst	: pl w to lt or brn, l		0226-1L
		5	Other	: m lt gy brn, dd, s		0226-3L
		tr	Sltst	: m lt brn, lt gn gy		0226-4L
3515.00						0227
	0.09	85	Sh/Clst:	m gy brn, slt		0227-2L
		15	S/Sst	: pl w to lt or brn, l		0227-1L
		tr	Sltst	: m lt brn, lt gn gy		0227-3L
3530.00						0228
		85	S/Sst	: pl w to lt or brn, l		0228-1L
		15	Sh/Clst:	m gy brn, slt		0228-2L
		tr	Sltst	: m lt brn, lt gn gy		0228-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3540.00						0229
	0.09			65 Sh/Clst: m gy brn, slt		0229-2L
				35 S/Sst : pl w to lt or brn, l		0229-1L
				tr Sltst : m lt brn, lt gn gy		0229-3L
3545.00						0230
				60 Sh/Clst: m gy brn, slt		0230-2L
				40 S/Sst : pl w to lt or brn, l		0230-1L
				tr Sltst : m lt brn, lt gn gy		0230-3L
3550.00						0231
				60 Sh/Clst: m gy brn, slt		0231-2L
				40 S/Sst : pl w to lt or brn, l		0231-1L
				tr Sltst : m lt brn, lt gn gy		0231-3L
3555.00						0232
				80 Sh/Clst: m gy brn, slt		0232-2L
				15 S/Sst : pl w to lt or brn, l		0232-1L
				5 Sltst : m lt brn, lt gn gy		0232-3L
3560.00						0233
				75 Sh/Clst: m gy brn, slt		0233-2L
				15 Sltst : m lt brn, lt gn gy, cly		0233-3L
				10 S/Sst : pl w to lt or brn, l		0233-1L
3565.00						0234
	0.08			90 Sh/Clst: m gy brn, slt		0234-2L
				5 S/Sst : pl w to lt or brn, l		0234-1L
				5 Sltst : m lt brn, lt gn gy, cly		0234-3L

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Table 1 : Lithology description for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int Cvd	TOC%	%	Lithology description			
3570.00						0235
			90	Sh/Clst: m gy brn, slt		0235-2L
			10	S/Sst : pl w to lt or brn, l		0235-1L
			tr	Sltst : m lt brn, lt gn gy, cly		0235-3L
3575.00						0236
			100	Sh/Clst: m gy brn, slt		0236-2L
			tr	S/Sst : pl w to lt or brn, l		0236-1L
			tr	Sltst : m lt brn, lt gn gy, cly		0236-3L
3580.00						0237
	0.03		60	S/Sst : pl w to lt or brn, l		0237-1L
			35	Sh/Clst: m gy brn, slt		0237-2L
			5	Sltst : m lt brn, lt gn gy, cly		0237-3L
			tr	Cont : blk, Coal-ad		0237-4L
3587.00						0238
			45	S/Sst : pl w to lt or brn, l		0238-1L
	0.10		45	Sh/Clst: lt gy brn, slt		0238-2L
			5	Sltst : m lt brn, lt gn gy, cly		0238-3L
			5	Cont : blk, Coal-ad		0238-4L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1000.00	cut	Sh/Clst: m lt gn gy to m lt ol gy	0.25	0.36	0.69	0.52	0.57	63	121	0.6	0.41	425	0001-1L
1080.00	com	bulk	0.23	0.10	0.18	0.56	0.10	100	180	0.3	0.70	409	0239-0B
1120.00	cut	Sh/Clst: lt ol gy to lt brn gy	0.61	1.44	1.23	1.17	1.45	99	85	2.1	0.30	413	0007-1L
1180.00	cut	Sh/Clst: m lt ol gy to lt brn gy	0.78	2.79	2.55	1.09	1.88	148	136	3.6	0.22	431	0011-1L
1260.00	cut	Sh/Clst: m lt ol gy to lt brn gy	0.31	0.63	1.61	0.39	1.19	53	135	0.9	0.33	406	0015-1L
1320.00	cut	Sh/Clst: m lt ol gy to lt brn gy	0.13	0.37	1.14	0.32	0.83	45	137	0.5	0.26	406	0018-1L
1400.00	cut	Sh/Clst: m lt ol gy to lt brn gy	0.12	0.27	1.04	0.26	0.69	39	151	0.4	0.31	400	0022-1L
1460.00	cut	Sh/Clst: m lt ol gy to lt brn gy	0.10	0.38	1.03	0.37	0.66	58	156	0.5	0.21	417	0025-1L
1540.00	cut	Sh/Clst: lt ol gy	0.10	0.37	0.71	0.52	0.52	71	137	0.5	0.21	418	0029-1L
1600.00	cut	Sh/Clst: lt ol gy	0.07	0.37	0.94	0.39	0.90	41	104	0.4	0.16	416	0032-1L
1640.00	cut	Sh/Clst: lt ol gy to lt brn gy	0.10	0.53	1.05	0.50	1.20	44	88	0.6	0.16	416	0034-1L
1680.00	cut	Sh/Clst: lt ol gy to lt gn gy	0.06	0.13	0.45	0.29	0.29	45	155	0.2	0.32	416	0036-1L
1740.00	cut	Sh/Clst: lt ol gy to lt brn gy	0.13	0.70	0.64	1.09	0.96	73	67	0.8	0.16	423	0039-1L
1800.00	cut	Sh/Clst: lt ol gy to lt brn gy	0.14	0.86	0.82	1.05	1.22	70	67	1.0	0.14	429	0042-1L
1840.00	cut	Sh/Clst: m gy	0.21	1.51	0.92	1.64	1.89	80	49	1.7	0.12	427	0044-2L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1900.00	cut	Sh/Clst: lt gn gy	0.03	0.04	0.23	0.17	0.22	18	105	0.1	0.43	427	0047-1L
1960.00	cut	Sh/Clst: m gy	0.11	0.38	0.55	0.69	1.23	31	45	0.5	0.22	429	0050-2L
2000.00	cut	Sh/Clst: m gy to m gn gy	0.07	0.28	0.38	0.74	0.58	48	66	0.3	0.20	425	0052-1L
2040.00	cut	Sh/Clst: m lt gy	0.21	0.88	0.31	2.84	0.85	104	36	1.1	0.19	434	0054-1L
2100.00	cut	Sh/Clst: m lt bl gy to m lt gy	0.24	0.98	0.33	2.97	0.86	114	38	1.2	0.20	437	0057-1L
2180.00	cut	Sh/Clst: m lt bl gy to m lt gy	0.13	0.49	0.36	1.36	0.73	67	49	0.6	0.21	433	0061-1L
2260.00	cut	Sh/Clst: m lt bl gy to m lt gy	0.16	0.48	0.56	0.86	0.84	57	67	0.6	0.25	432	0065-1L
2320.00	cut	Sh/Clst: m gy	2.04	1.09	0.56	1.95	1.19	92	47	3.1	0.65	431	0104-1L
2380.00	cut	Sh/Clst: m gy	3.28	1.12	0.65	1.72	1.36	82	48	4.4	0.75	425	0107-1L
2440.00	cut	Sh/Clst: m gy	3.81	1.24	0.64	1.94	1.38	90	46	5.1	0.75	425	0110-1L
2620.00	cut	Sh/Clst: m gy	1.40	0.75	0.62	1.21	1.06	71	58	2.2	0.65	434	0119-1L
2700.00	cut	Sh/Clst: drk gy	5.17	26.43	1.26	20.98	6.06	436	21	31.6	0.16	432	0123-1L
2713.30	ccp	Sh/Clst: m gy	0.36	0.31	0.23	1.35	0.66	47	35	0.7	0.54	442	0067-1L
2718.00	ccp	Sh/Clst: m drk gy	0.12	0.55	0.19	2.89	0.89	62	21	0.7	0.18	430	0068-1L
2723.00	ccp	Sh/Clst: m lt gy	0.61	0.29	0.13	2.23	0.57	51	23	0.9	0.68	436	0069-1L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2760.00	ccp	Sh/Clst: m lt gy	2.29	0.77	0.46	1.67	0.72	107	64	3.1	0.75	435	0070-1L
2765.00	ccp	S/Sst : pl y brn	5.38	2.51	0.42	5.98	1.40	179	30	7.9	0.68	434	0071-1L
2770.00	ccp	S/Sst : lt gy to dsk y gy	4.04	1.06	1.11	0.95	1.17	91	95	5.1	0.79	408	0072-1L
2775.00	ccp	S/Sst : lt gy to dsk y gy	2.75	1.38	0.31	4.45	0.62	223	50	4.1	0.67	427	0073-1L
2780.20	ccp	Sltst : m lt gy to dsk y gy	2.15	1.24	0.23	5.39	1.14	109	20	3.4	0.63	436	0074-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	1.31	4.67	0.63	7.41	1.66	281	38	6.0	0.22	439	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	0.59	3.04	1.57	1.94	1.20	253	131	3.6	0.16	442	0076-1L
2795.50	ccp	Sltst : dsk y gy	0.13	0.17	0.42	0.40	0.15	113	280	0.3	0.43	432	0077-1L
2800.00	ccp	Sh/Clst: m drk gy	0.39	2.68	0.34	7.88	0.97	276	35	3.1	0.13	445	0078-1L
2800.00	ccp	Sh/Clst: lt gy brn	0.16	0.46	4.36	0.11	0.54	85	807	0.6	0.26	442	0078-2L
2805.00	ccp	Sh/Clst: lt ol gy to dsk ol gy	0.31	1.10	0.98	1.12	0.54	204	181	1.4	0.22	442	0079-1L
2810.00	ccp	Sh/Clst: lt ol gy	0.47	2.36	1.31	1.80	0.80	295	164	2.8	0.17	441	0080-1L
2815.00	ccp	Sh/Clst: m lt gy	0.44	3.05	0.35	8.71	0.89	343	39	3.5	0.13	443	0081-1L
2820.00	ccp	Sh/Clst: m lt gy	0.76	4.05	0.54	7.50	1.33	305	41	4.8	0.16	440	0082-1L
2825.00	ccp	Sh/Clst: m lt gy	0.94	9.21	0.14	65.79	2.21	417	6	10.1	0.09	436	0083-1L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2830.00	ccp	Sh/Clst: m drk gy	1.51	6.63	0.28	23.68	1.74	381	16	8.1	0.19	437	0084-1L
2845.00	ccp	S/Sst : lt ol gy to lt y gy	7.18	1.83	0.42	4.36	0.87	210	48	9.0	0.80	427	0085-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	11.70	2.08	0.23	9.04	1.19	175	19	13.8	0.85	377	0086-1L
2854.75	ccp	S/Sst : lt ol gy to lt y gy	5.89	0.94	0.34	2.76	0.71	132	48	6.8	0.86	425	0087-1L
2871.00	ccp	S/Sst : lt ol gy to lt brn gy	3.71	1.87	0.45	4.16	0.78	240	58	5.6	0.66	434	0088-1L
2876.00	ccp	Sltst : m ol gy	5.12	3.95	1.88	2.10	2.07	191	91	9.1	0.56	441	0089-2L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	3.30	4.36	0.96	4.54	1.70	256	56	7.7	0.43	447	0090-1L
2887.00	ccp	Sltst : lt ol gy to m lt gy	1.77	1.53	0.81	1.89	0.71	215	114	3.3	0.54	445	0091-1L
2892.00	ccp	S/Sst : m lt ol gy to m lt y gy	7.62	1.63	0.47	3.47	1.00	163	47	9.3	0.82	423	0092-1L
2901.00	ccp	S/Sst : m lt ol gy to m lt y gy	5.86	0.84	0.15	5.60	0.65	129	23	6.7	0.87	422	0093-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	6.77	0.57	0.10	5.70	0.65	88	15	7.3	0.92	375	0094-1L
2911.00	ccp	Sltst : m lt ol gy to m lt y gy	1.14	1.54	0.35	4.40	0.61	252	57	2.7	0.43	435	0095-1L
2911.00	ccp	Sh/Clst: m drk gy	2.50	3.17	1.33	2.38	1.37	231	97	5.7	0.44	439	0095-2L
2917.00	ccp	S/Sst : m lt ol gy to m lt y gy	3.37	0.48	0.19	2.53	0.39	123	49	3.8	0.88	425	0096-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	15.03	4.37	0.50	8.74	2.17	201	23	19.4	0.77	427	0097-1L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
2927.00	ccp	S/Sst : m lt ol gy to m lt y gy	7.01	1.61	0.28	5.75	0.88	183	32	8.6	0.81	431	0098-1L
2932.00	ccp	S/Sst : m lt ol gy to m lt y gy	4.73	2.58	0.88	2.93	1.24	208	71	7.3	0.65	440	0099-1L
2937.00	ccp	S/Sst : m lt ol gy to m lt y gy	5.51	1.42	0.16	8.88	0.65	218	25	6.9	0.80	426	0100-1L
2942.00	ccp	S/Sst : m lt ol gy to m lt y gy	7.70	1.37	0.18	7.61	0.90	152	20	9.1	0.85	424	0101-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	2.44	1.29	0.07	18.43	0.72	179	10	3.7	0.65	440	0102-1L
2947.00	ccp	Sh/Clst: m drk gy	6.11	12.22	0.37	33.03	5.33	229	7	18.3	0.33	434	0102-2L
3045.00	cut	Sh/Clst: gy blk	8.07	37.34	1.84	20.29	13.09	285	14	45.4	0.18	449	0139-3L
3050.00	cut	S/Sst : w	0.16	0.24	0.23	1.04	0.39	62	59	0.4	0.40	440	0140-2L
3065.00	cut	S/Sst : w	0.22	0.13	0.31	0.42	0.20	65	155	0.3	0.63	422	0143-2L
3100.00	cut	S/Sst : pl w	0.07	0.06	0.12	0.50	0.14	43	86	0.1	0.54	423	0149-2L
3120.00	cut	S/Sst : pl w	0.04	0.02	0.04	0.50	0.02	100	200	0.1	0.67	334	0153-2L
3140.00	cut	S/Sst : pl w	0.03	0.02	0.10	0.20	0.06	33	167	0.1	0.60	430	0157-1L
3160.00	cut	S/Sst : pl w	0.02	-	0.03	-	0.03	-	100	-	1.00	-	0161-1L
3180.00	cut	S/Sst : pl w	0.02	0.01	0.05	0.20	0.03	33	167	-	0.67	-	0165-1L
3200.00	cut	S/Sst : pl w	0.02	0.01	-	-	0.03	33	-	-	0.67	-	0169-1L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3220.00	cut	Sh/Clst: m gy to drk gy	0.34	0.81	0.38	2.13	0.81	100	47	1.1	0.30	447	0173-2L
3225.00	cut	S/Sst : pl w	0.03	-	0.02	-	0.02	-	100	-	1.00	-	0174-1L
3240.00	cut	S/Sst : pl w	0.05	0.04	0.05	0.80	0.06	67	83	0.1	0.56	352	0177-1L
3260.00	cut	S/Sst : pl w	0.02	0.02	0.04	0.50	0.03	67	133	-	0.50	322	0181-1L
3285.00	cut	Sltst : gy pi, lt gn gy	0.03	0.01	0.29	0.03	0.09	11	322	-	0.75	329	0187-2L
3300.00	cut	S/Sst : pl w	0.01	-	-	-	0.05	-	-	-	1.00	-	0190-1L
3325.00	cut	S/Sst : pl w	0.02	0.01	0.03	0.33	0.03	33	100	-	0.67	-	0195-1L
3345.00	cut	S/Sst : pl w	-	-	0.02	-	0.03	-	67	-	-	-	0199-1L
3370.00	cut	Sltst : gy pi, lt gn gy	0.21	0.38	0.26	1.46	0.23	165	113	0.6	0.36	369	0204-2L
3385.00	cut	Sltst : m gy brn	0.06	0.10	0.20	0.50	0.10	100	200	0.2	0.38	368	0207-2L
3405.00	cut	S/Sst : pl w to lt or brn	0.33	0.38	0.20	1.90	0.11	345	182	0.7	0.46	375	0211-1L
3425.00	cut	Sltst : m gy brn, lt gn gy	0.09	0.13	0.27	0.48	0.13	100	208	0.2	0.41	369	0215-2L
3440.00	cut	Sltst : m gy brn, lt gn gy	0.06	0.14	0.22	0.64	0.13	108	169	0.2	0.30	372	0218-2L
3460.00	cut	Sh/Clst: m gy brn	0.03	0.05	0.25	0.20	0.08	63	313	0.1	0.38	361	0221-2L
3485.00	cut	S/Sst : pl w to lt or brn	0.01	-	0.17	-	0.06	-	283	-	1.00	-	0225-1L

Table 2 : Rock-Eval table for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3515.00	cut	Sh/Clst: m gy brn	0.09	0.11	0.32	0.34	0.09	122	356	0.2	0.45	358	0227-2L
3540.00	cut	Sh/Clst: m gy brn	0.08	0.07	0.28	0.25	0.09	78	311	0.2	0.53	353	0229-2L
3565.00	cut	Sh/Clst: m gy brn	0.08	0.15	0.19	0.79	0.08	188	238	0.2	0.35	371	0234-2L
3580.00	cut	S/Sst : pl w to lt or brn	0.07	0.04	0.16	0.25	0.03	133	533	0.1	0.64	381	0237-1L
3587.00	cut	Sh/Clst: lt gy brn	0.10	0.10	0.23	0.43	0.10	100	230	0.2	0.50	358	0238-2L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
1180.00	cut	Sh/Clst: m lt ol gy to lt brn gy	5.60	27.56	54.41	12.43	2.79	0011-1L
2100.00	cut	Sh/Clst: m lt bl gy to m lt gy	7.95	34.77	41.36	15.92	0.98	0057-1L
2320.00	cut	Sh/Clst: m gy	9.70	36.10	48.04	6.15	1.09	0104-1L
2440.00	cut	Sh/Clst: m gy	5.89	27.78	48.84	17.49	1.24	0110-1L
2700.00	cut	Sh/Clst: drk gy	3.61	15.83	30.60	49.96	26.43	0123-1L
2718.00	ccp	Sh/Clst: m drk gy	7.44	31.79	50.57	10.20	0.55	0068-1L
2765.00	ccp	S/Sst : pl y brn	7.62	17.84	36.30	38.25	2.51	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	4.97	15.61	34.63	44.78	7.49	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	5.69	19.58	40.01	34.72	3.20	0076-1L
2805.00	ccp	Sh/Clst: lt ol gy to dsk ol gy	6.10	22.34	43.17	28.39	1.10	0079-1L
2820.00	ccp	Sh/Clst: m lt gy	4.77	18.34	39.21	37.68	3.49	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	1.29	14.96	38.47	45.28	2.08	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	10.53	16.68	37.98	34.81	4.04	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	1.60	13.62	33.82	50.96	0.57	0094-1L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2911.00	ccp	Sh/Clst: m drk gy	8.10	20.03	38.99	32.88	3.17	0095-2L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	5.30	15.84	28.39	50.47	4.37	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	6.57	17.83	37.33	38.27	1.29	0102-1L
2947.00	ccp	Sh/Clst: m drk gy	9.29	17.06	26.23	47.43	12.22	0102-2L
3220.00	cut	Sh/Clst: m gy to drk gy	12.89	24.50	42.32	20.28	0.81	0173-2L
3370.00	cut	Sltst : gy pi, lt gn gy	2.98	26.26	59.38	11.38	0.38	0204-2L
3405.00	cut	S/Sst : pl w to lt or brn	1.96	16.47	44.20	37.37	0.38	0211-1L
3440.00	cut	Sltst : m gy brn, lt gn gy	3.37	48.31	46.43	1.88	0.14	0218-2L
3565.00	cut	Sh/Clst: m gy brn	2.01	39.24	51.05	7.70	0.15	0234-2L

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 6407/7-1

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
2440.00	com	Composite sample - see table 4 e	0.6	4.9	2.1	0.9	0.4	1.5	3.0	1.9	0.27	0240-0B
2700.00	cut	Sh/Clst: drk gy	0.4	5.5	1.8	1.4	0.9	1.4	3.2	2.3	6.06	0123-1L
2765.00	ccp	S/Sst : pl y brn	7.4	38.9	28.1	8.7	2.1	-	36.8	2.1	0.20	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	7.4	9.0	4.5	0.6	1.0	2.9	5.1	3.9	0.26	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	5.7	6.5	2.3	1.1	1.3	1.8	3.4	3.1	0.26	0076-1L
2820.00	ccp	Sh/Clst: m lt gy	7.9	8.3	3.2	2.0	0.5	2.6	5.2	3.1	0.21	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	7.5	119.9	83.3	23.3	2.9	10.4	106.6	13.3	0.21	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	9.9	38.1	24.0	5.1	2.2	6.8	29.1	9.0	0.27	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	9.8	103.6	70.5	21.8	2.4	8.9	92.3	11.3	0.18	0094-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	7.9	56.8	34.7	13.2	2.8	6.1	47.9	8.9	0.18	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	8.4	47.7	27.2	8.6	4.4	7.5	35.8	11.9	0.24	0102-1L

Table 4 b: Concentration of EOM and Chromatographic Fraction (wt ppm rock) for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2440.00	com	Composite sample - see table 4 e	8909	3818	1636	727	2727	5454	3454	0240-0B
2700.00	cut	Sh/Clst: drk gy	13095	4285	3333	2142	3333	7619	5476	0123-1L
2765.00	ccp	S/Sst : pl y brn	5278	3812	1180	284	-	4993	284	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	1219	609	81	135	392	691	528	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	1144	404	193	228	316	598	545	0076-1L
2820.00	ccp	Sh/Clst: m lt gy	1049	404	252	63	328	657	391	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	16008	11121	3110	387	1388	14232	1775	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	3836	2416	513	221	684	2930	906	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	10593	7208	2229	245	910	9437	1155	0094-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	7208	4403	1675	355	774	6078	1129	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	5651	3222	1018	521	888	4241	1409	0102-1L

Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2440.00	com	Composite sample - see table 4 e	3299.66	1414.14	606.06	269.36	1010.10	2020.20	1279.46	0240-0B
2700.00	cut	Sh/Clst: drk gy	216.09	70.72	55.01	35.36	55.01	125.73	90.37	0123-1L
2765.00	ccp	S/Sst : pl y brn	2639.08	1906.38	590.23	142.47	-	2496.61	142.47	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	469.04	234.52	31.27	52.12	151.14	265.79	203.25	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	440.14	155.74	74.49	88.03	121.89	230.23	209.91	0076-1L
2820.00	ccp	Sh/Clst: m lt gy	499.67	192.64	120.40	30.10	156.52	313.05	186.62	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	7622.86	5295.95	*****	184.37	661.20	6777.29	845.57	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	1421.06	895.15	190.22	82.06	253.63	1085.38	335.68	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	5885.03	4004.77	*****	136.33	505.57	5243.13	641.90	0094-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	4004.51	2446.42	930.63	197.41	430.06	3377.04	627.47	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	2354.86	1342.81	424.57	217.22	370.26	1767.38	587.48	0102-1L

Table 4 d: Composition of material extracted from the rock (%) for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	Aro	Non-HC	
2440.00	com	Composite sample - see table 4 e	42.86	18.37	8.16	30.61	61.22	38.78	233.33	157.89	0240-0B
2700.00	cut	Sh/Clst: drk gy	32.73	25.45	16.36	25.45	58.18	41.82	128.57	139.13	0123-1L
2765.00	ccp	S/Sst : pl y brn	72.24	22.37	5.40	-	94.60	5.40	322.99	1752.38	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	50.00	6.67	11.11	32.22	56.67	43.33	750.00	130.77	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	35.38	16.92	20.00	27.69	52.31	47.69	209.09	109.68	0076-1L
2820.00	ccp	Sh/Clst: m lt gy	38.55	24.10	6.02	31.33	62.65	37.35	160.00	167.74	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	69.47	19.43	2.42	8.67	88.91	11.09	357.51	801.50	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	62.99	13.39	5.77	17.85	76.38	23.62	470.59	323.33	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	68.05	21.04	2.32	8.59	89.09	10.91	323.39	816.81	0094-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	61.09	23.24	4.93	10.74	84.33	15.67	262.88	538.20	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	57.02	18.03	9.22	15.72	75.05	24.95	316.28	300.84	0102-1L

Depth unit of measure: m

NOTE: Depths shown in results tables correspond to the composite samples' lower depth.

<u>Upper depth</u>	<u>Lower depth</u>	<u>Typ</u>	<u>Sample</u>		<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Sample</u>
1060.00	1080.00	com	0239-0	is composed of:	1060.00	cut	S/Sst : w, m gy, l, sil	004-2
					1080.00	cut	S/Sst : w, m gy, l, sil	005-2
2420.00	2440.00	com	0240-0	is composed of:	2420.00	cut	Sh/Clst: m gy	109-1
					2440.00	cut	Sh/Clst: m gy	110-1
2420.00	2440.00	com	0241-0	is composed of:	2420.00	cut	Sh/Clst: m gy	109-1
					2440.00	cut	Sh/Clst: m gy	110-1

Table 5 : Saturated Hydrocarbon Ratios for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
2440.00	com	bulk	0.45	1.22	0.41	0.37	1.07	0240-0B
2700.00	cut	Sh/Clst: drk gy	0.56	1.50	0.50	0.43	1.15	0123-1L
2765.00	ccp	S/Sst : pl y brn	0.66	1.57	0.50	0.37	1.12	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	0.81	3.18	0.64	0.39	1.27	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	0.73	3.55	0.57	0.33	1.29	0076-1L
2820.00	ccp	Sh/Clst: m lt gy	0.97	4.48	0.73	0.35	1.32	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	0.71	1.55	0.55	0.41	1.06	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	0.72	2.67	0.59	0.39	1.23	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	0.71	1.51	0.55	0.41	1.09	0094-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	0.69	1.14	0.53	0.43	1.09	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	0.63	1.93	0.52	0.38	1.09	0102-1L

Table 6 : Aromatic Hydrocarbon Ratios for well NOCS 6407/7-1

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Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	(3+2)		Sample
											4/1MDBT	/1MDBT	
2440.00	com	bulk	-	-	-	1.32	0.91	1.03	0.95	-	-	-	0240-0B
2700.00	cut	Sh/Clst: drk gy	-	-	-	1.25	0.85	0.86	0.91	-	-	-	0123-1L
2765.00	ccp	S/Sst : pl y brn	1.32	2.35	0.28	1.38	0.85	1.10	0.91	0.10	10.64	1.49	0071-1L
2785.00	ccp	Sltst : m lt gy to dsk y gy	0.75	1.53	0.17	1.00	0.58	0.67	0.75	0.09	-	-	0075-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	-	-	-	0.87	0.49	0.57	0.69	0.08	-	-	0076-1L
2820.00	ccp	Sh/Clst: m lt gy	0.53	1.18	0.11	1.13	0.67	0.83	0.80	0.12	2.06	0.80	0082-1L
2850.00	ccp	S/Sst : lt ol gy to lt y gy	-	-	-	-	-	-	-	-	-	-	0086-1L
2881.00	ccp	Sh/Clst: m drk gy to lt brn gy	1.14	1.94	0.25	1.12	0.74	0.88	0.84	-	-	-	0090-1L
2906.00	ccp	S/Sst : m lt ol gy to m lt y gy	1.30	-	-	-	-	-	-	-	9.40	1.29	0094-1L
2922.00	ccp	S/Sst : m lt ol gy to m lt y gy	1.14	2.02	-	-	-	-	-	-	-	-	0097-1L
2947.00	ccp	S/Sst : m lt ol gy to m lt y gy	1.25	2.12	0.35	1.10	0.77	0.90	0.86	-	21.63	1.60	0102-1L

Table 7 : Thermal Maturity Data for well NOCS 6407/7-1

Depth unit of measure: m

Depth Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
1000.00 cut Sh/Clst: m lt gn gy to m lt ol gy	0.33	20	0.05	3	-	425	0001-1L
1160.00 cut Sh/Clst: lt ol gy to lt brn gy	0.38	20	0.04	3	-	-	0009-1L
1180.00 cut Sh/Clst: m lt ol gy to lt brn gy	-	-	-	-	3.0	431	0011-1L
1300.00 cut Sh/Clst: m lt ol gy to lt brn gy	0.38	20	0.04	3-4	-	-	0017-1L
1460.00 cut Sh/Clst: m lt ol gy to lt brn gy	0.43	20	0.06	3+4	3.5-4.0	417	0025-1L
1600.00 cut Sh/Clst: lt ol gy	0.47	20	0.04	3+4	-	416	0032-1L
1740.00 cut Sh/Clst: lt ol gy to lt brn gy	0.43	20	0.06	3+4	-	423	0039-1L
1800.00 cut Sh/Clst: lt ol gy to lt brn gy	-	-	-	-	4.5	429	0042-1L
1900.00 cut Sh/Clst: lt gn gy	0.44	2	0.01	4	-	427	0047-1L
2040.00 cut Sh/Clst: m lt gy	0.43	14	0.08	4	-	434	0054-1L
2100.00 cut Sh/Clst: m lt bl gy to m lt gy	-	-	-	-	5.0-5.5	437	0057-1L
2240.00 cut Sh/Clst: m lt bl gy to m lt gy	0.55	1	0.00	4+5	-	-	0064-1L
2380.00 cut Sh/Clst: m gy	0.53	10	0.05	4+5	-	425	0107-1L
2440.00 cut Sh/Clst: m gy	-	-	-	-	5.5(??)	425	0110-1L

Table 7 : Thermal Maturity Data for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
2600.00	cut Sh/Clst: m gy	NDP	-	-	5	-	-	0118-1L
2700.00	cut Sh/Clst: drk gy	-	-	-	-	5.5(??)	432	0123-1L
2713.30	ccp Sh/Clst: m gy	0.66	2	0.02	5+6	-	442	0067-1L
2718.00	ccp Sh/Clst: m drk gy	0.54	20	0.06	4-6	-	430	0068-1L
2790.50	ccp Sh/Clst: m lt gy to dsk y gy	0.58	20	0.07	4	5.0	442	0076-1L
2800.00	ccp Sh/Clst: m drk gy	0.55	20	0.07	4+5	-	445	0078-1L
2830.00	ccp Sh/Clst: m drk gy	0.53	20	0.07	4-5	-	437	0084-1L
2911.00	ccp Sh/Clst: m drk gy	0.54	20	0.05	4-5	-	439	0095-2L
2947.00	ccp Sh/Clst: m drk gy	-	-	-	-	5.5-6.0	434	0102-2L
3045.00	cut Sh/Clst: gy blk	0.76	20	0.10	5+6	-	449	0139-3L
3170.00	cut Sh/Clst: gy blk	0.68	20	0.08	4-6	-	-	0163-3L
3220.00	cut Sh/Clst: m gy to drk gy	0.71	8	0.07	5+6	6.0-6.5	447	0173-2L
3370.00	cut Sltst : gy pi, lt gn gy	NDP	-	-	0	-	369	0204-2L
3460.00	cut Sh/Clst: m gy brn	NDP	-	-	0	-	361	0221-2L

Table 7 : Thermal Maturity Data for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T _{max} (°C)	Sample
3575.00	cut	Sh/Clst: m gy brn	NDP	-	-	0	-	-	0236-2L
3587.00	cut	Sh/Clst: lt gy brn	-	-	-	-	NDP	358	0238-2L

Table 8 : Visual Kerogen Composition Data for well NOCS 6407/7-1

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Depth unit of measure: m

Depth	Typ	Lithology	L	A	L	S	C		D		I	S	I	M	S		V	C	V	A	
			I	m	i	p	u	R	A	i	N	F	e	n	c	B	I	T	o	i	B
			P	r	D	P	i	s	g	o	R	u	m	t	d	r	T	e	l	d	r
			T	e	o	l	c	i	a	f	T	s	f	e	r	i	R	i	n	e	v
			%	L	t	l	l	n	e	l	T	%	n	s	t	n	%	n	n	t	V
																					Sample
1180.00	cut	Sh/Clst: m lt ol gy to lt brn gy	40	*	**	*		*	*		5		*				55	*	**		0011-1L
1460.00	cut	Sh/Clst: m lt ol gy to lt brn gy	20		*	*	*		*	*	5		*				75		*		0025-1L
1800.00	cut	Sh/Clst: lt ol gy to lt brn gy	70		*	**		*			10		*				20		*		0042-1L
2100.00	cut	Sh/Clst: m lt bl gy to m lt gy	20			*		**	*		25		*	*			55		*		0057-1L
2440.00	cut	Sh/Clst: m gy	90	**	**	*	*	*			5		*				5		*		0110-1L
2700.00	cut	Sh/Clst: drk gy	95	**		*		**	*	?	5		*				TR		*		0123-1L
2790.50	ccp	Sh/Clst: m lt gy to dsk y gy	50	*	*	**	*	*	*		25		**	*			25	**	*	*	0076-1L
2947.00	ccp	Sh/Clst: m drk gy	45	**		*	*	*	*		5		*	**			50	**	*	*	0102-2L
3220.00	cut	Sh/Clst: m gy to drk gy	35	*	**	*		*			35		**	*			30	**	*	*	0173-2L
3587.00	cut	Sh/Clst: lt gy brn	NDP								NDP						NDP				0238-2L

Table 9A: Tabulation of carbon isotope data for EOM/EOM - fractions for well NOCS 6407/7-1

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
2440.00	com	Composite sample	-	-29.06	-28.09	-28.54	-28.50	-	0240-0
2700.00	cut	Sh/Clst	-	-29.42	-29.67	*-29.30	-28.68	-	0123-1
2765.00	ccp	S/Sst	-28.53	-28.87	-27.85	-27.92	-27.73	-	0071-1
2785.00	ccp	Sltst	-27.86	-29.28	-27.35	-27.48	-26.72	-	0075-1
2850.00	ccp	S/Sst	-29.50	-29.74	-29.05	29.11	-29.35	-	0086-1
2881.00	ccp	Sh/Clst	-29.29	-29.85	-28.06	-28.56	-27.26	-	0090-1
2906.00	ccp	S/Sst	-29.59	-29.68	-28.91	-28.93	-29.09	-	0094-1
2947.00	ccp	S/Sst	-29.02	-29.66	-28.47	-28.38	-27.08	-	0102-1

* Too little material for rerun

Table 9B: Tabulation of cv values from carbon isotope data for well NOCS 6407/7-1

Depth unit of measure: m

<u>Depth</u>	<u>Typ</u>	<u>Lithology</u>	<u>Saturated</u>	<u>Aromatic</u>	<u>cv value</u>	<u>Interpretation</u>	<u>Sample</u>
2440.00	com	Composite sample	-29.06	-28.09	-0.49	Marine	0240-0
2700.00	cut	Sh/Clst	-29.42	-29.67	-3.08	Marine	0123-1
2765.00	ccp	S/Sst	-28.87	-27.85	-0.44	Marine	0071-1
2785.00	ccp	Sltst	-29.28	-27.35	1.71	Terrigenous	0075-1
2850.00	ccp	S/Sst	-29.74	-29.05	-0.90	Marine	0086-1
2881.00	ccp	Sh/Clst	-29.85	-28.06	1.58	Terrigenous	0090-1
2906.00	ccp	S/Sst	-29.68	-28.91	-0.74	Marine	0094-1
2947.00	ccp	S/Sst	-29.66	-28.47	0.19	Marine	0102-1

Table 10A: Variation in Triterpane Distribution (peak height) SIR for Well NOCS 6407/7-1

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	D+F/C+E	J1	Sample
				B+E+F									C+D+E+F		J1+J2%	
2440.00	bulk	2.20	0.69	0.19	0.66	0.40	0.06	0.06	0.09	0.05	0.48	0.80	0.39	0.23	52.26	0240-0
2700.00	Sh/Clst	2.12	0.68	0.21	0.64	0.39	0.05	0.03	0.05	0.03	0.16	0.82	0.38	0.20	57.04	0123-1
2765.00	S/Sst	0.42	0.29	0.11	0.40	0.29	0.34	0.12	0.31	0.11	0.17	0.91	0.29	0.11	60.81	0071-1
2785.00	Sltst	3.39	0.77	0.23	0.68	0.40	0.08	0.12	0.18	0.11	0.12	0.81	0.40	0.24	59.78	0075-1
2850.00	S/Sst	0.36	0.26	0.09	0.37	0.27	0.23	0.15	0.41	0.13	0.14	0.93	0.28	0.09	56.44	0086-1
2881.00	Sh/Clst	0.72	0.42	0.07	0.50	0.33	0.12	0.08	0.16	0.07	0.13	0.80	0.32	0.23	59.94	0090-1
2906.00	S/Sst	0.35	0.26	0.10	0.40	0.29	0.27	0.17	0.43	0.15	0.23	0.92	0.30	0.10	62.82	0094-1
2947.00	S/Sst	0.36	0.27	0.10	0.39	0.28	0.28	0.16	0.42	0.14	0.14	0.92	0.28	0.10	62.35	0102-1

Table 10B: Variation in Sterane Distribution (peak height) SIR for Well NOCS 6407/7-1

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Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
2440.00	bulk	0.69	35.25	67.72	1.51	0.75	0.76	0.66	0.51	0.54	1.62	0240-0
2700.00	Sh/Clst	0.44	28.47	46.12	1.37	0.60	0.42	0.32	0.30	0.40	0.60	0123-1
2765.00	S/Sst	0.85	46.16	74.61	1.26	0.76	0.49	0.36	0.59	0.86	2.73	0071-1
2785.00	Sltst	0.65	37.13	48.77	1.07	0.56	0.35	0.30	0.32	0.59	0.76	0075-1
2850.00	S/Sst	0.85	44.92	77.70	1.29	0.79	0.49	0.35	0.64	0.82	3.16	0086-1
2881.00	Sh/Clst	0.82	43.86	62.06	0.97	0.65	0.64	0.57	0.45	0.78	1.46	0090-1
2906.00	S/Sst	0.87	53.76	75.46	1.48	0.74	0.52	0.37	0.61	1.16	3.33	0094-1
2947.00	S/Sst	0.86	50.75	78.78	1.30	0.79	0.47	0.34	0.65	1.03	3.77	0102-1

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: $r + s / t$

Table 10C: Variation in Triaromatic Sterane Distribution for Well Well NOCS 6407/7-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
2440.00	bulk	-	-	-	-	-	0240-0
2700.00	Sh/Clst	0.48	0.37	0.15	0.20	0.20	0123-1
2765.00	S/Sst	0.84	0.82	0.64	0.63	0.75	0071-1
2785.00	Sltst	0.53	0.40	0.25	0.29	0.40	0075-1
2850.00	S/Sst	0.78	0.75	0.52	0.53	0.64	0086-1
2881.00	Sh/Clst	0.91	0.88	0.75	0.77	0.83	0090-1
2906.00	S/Sst	0.79	0.76	0.53	0.53	0.63	0094-1
2947.00	S/Sst	0.85	0.81	0.64	0.65	0.74	0102-1

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 6407/7-1

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Sample
2440.00	bulk	0.61	0.29	0.49	0.40	0240-0
2700.00	Sh/Clst	0.32	0.13	0.21	0.16	0123-1
2765.00	S/Sst	0.71	0.54	0.54	0.44	0071-1
2785.00	Sltst	0.53	0.34	0.33	0.25	0075-1
2850.00	S/Sst	0.64	0.51	0.50	0.43	0086-1
2881.00	Sh/Clst	0.85	0.65	0.71	0.57	0090-1
2906.00	S/Sst	0.61	0.48	0.47	0.41	0094-1
2947.00	S/Sst	0.72	0.50	0.57	0.44	0102-1

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

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

Table 10E: Aromatisation of Steranes for Well NOCS 6407/7-1

Depth unit of measure: m

<u>Depth</u>	<u>Lithology</u>	<u>Ratio1</u>	<u>Ratio2</u>	<u>Sample</u>
2440.00	bulk	1.00	-	0240-0
2700.00	Sh/Clst	0.38	0.88	0123-1
2765.00	S/Sst	0.54	0.82	0071-1
2785.00	Sltst	0.43	0.91	0075-1
2850.00	S/Sst	0.46	0.84	0086-1
2881.00	Sh/Clst	0.33	0.84	0090-1
2906.00	S/Sst	0.46	0.87	0094-1
2947.00	S/Sst	0.39	0.86	0102-1

Ratio1: $\frac{C1+D1+E1+F1+G1+H1+I1}{C1+D1+E1+F1+G1+H1+I1 + c1+d1+e1+f1+g1}$ Ratio2: $g1 / g1 + I1$

Table 10F: Raw GCMS triterpane data (peak height) SIR for Well NOCS 6407/7-1

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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			
2440.00	bulk	83218.1	39157.9	15109.3	13419.5	7920.3	10965.0	24115.0	4774.0	53855.3	0240-0
		4735.3	10971.6	82064.7	20737.5	40132.8	37533.3	12648.4	22404.9		
		20470.0	19971.4	12367.7	14136.0	8669.6	12569.0	13413.7			
2700.00	Sh/Clst	145028.0	57638.8	39648.0	26774.0	17491.6	53879.7	114492.0	11552.0	225064.1	0123-1
		19240.8	37579.4	351390.9	75214.0	190816.4	121633.0	40413.9	79170.2		
		59636.0	78305.9	60451.1	66224.0	51037.7	66551.0	47611.7			
2765.00	S/Sst	80176.0	63268.0	24161.4	43598.9	24932.0	115967.0	48336.0	45516.5	146826.7	0071-1
		125202.3	19856.9	365466.0	35089.4	159304.8	89418.4	22277.0	109920.0		
		70847.9	73270.1	51126.2	48640.0	34496.9	40719.1	27611.7			
2785.00	sltst	326242.1	138989.5	55160.6	132249.1	37118.5	127036.8	431152.0	143166.3	803770.9	0075-1
		96674.0	190936.1	1186414.9	283179.8	568078.4	398796.8	175192.0	288253.6		
		193938.8	178132.2	129902.9	135316.3	86570.7	53482.0	36648.0			
2850.00	S/Sst	115602.1	91380.8	40594.8	57986.1	37080.0	181615.0	64757.3	95136.0	234861.7	0086-1
		144041.0	34393.4	639272.9	46912.0	222514.5	143497.5	31898.6	145808.1		
		112512.0	131216.0	89328.0	81620.8	53503.1	70272.0	51477.6			

Table 10F: Raw GCMS triterpane data (peak height) SIR for Well NOCS 6407/7-1

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			
2881.00	Sh/Clst	96708.0	56893.3	18354.8	25668.3	14988.0	54627.0	39112.0	33185.8	212650.5	0090-1
		51773.3	38021.3	424555.6	108494.2	280612.5	165855.1	87047.5	130522.8		
		87220.3	74176.0	53089.1	68740.9	45701.3	29995.7	19573.3			
2906.00	S/Sst	90395.2	71364.4	34566.7	43054.9	32244.9	113474.7	39440.0	54073.5	125827.8	0094-1
		83899.3	18430.3	314091.5	25694.6	142216.0	81597.5	18170.0	100503.5		
		59488.0	75202.9	54978.1	58143.9	42631.9	45907.8	37837.2			
2947.00	S/Sst	131360.0	98256.0	48672.0	67768.1	39729.2	230300.1	84020.4	116848.9	276163.6	0102-1
		201629.3	32593.5	716929.3	65275.6	305991.3	190017.8	29379.0	218200.0		
		131776.0	174069.0	108224.0	122101.3	82096.0	96731.8	78745.6			

Table 10G: Raw GCMS sterane data (peak height) SIR for Well NOCS 6407/7-1

Page: 1

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					
2440.00	bulk	55945.5	21173.5	25936.3	12247.0	7360.0	3304.7	9636.4	4612.9	7931.2	0240-0
		18381.0	9171.2	11669.7	7202.9	2651.8	2364.4	4189.0	4631.3		
		5204.9	4077.6	6051.0	6085.5	7490.3					
2700.00	Sh/Clst	92851.3	39781.3	120933.5	68630.0	29329.9	33476.9	53876.9	27929.4	77123.3	0123-1
		87052.8	40034.9	155667.5	52307.5	15819.4	28095.8	29583.8	30111.8		
		72107.4	36270.2	33222.9	21302.9	91129.9					
2765.00	S/Sst	105342.7	52241.9	200842.8	115799.3	47010.0	48844.9	105515.0	54814.2	37542.9	0071-1
		163302.9	64358.7	35990.4	93438.7	36170.6	19984.3	33504.3	52192.3		
		16973.4	30986.6	54042.1	44570.1	36142.1					
2785.00	Sltst	258032.3	106298.3	372626.7	220157.7	93106.3	97455.0	132847.3	64924.0	131996.4	0075-1
		380764.4	86908.4	197424.2	219431.6	87054.5	40334.5	45742.5	57358.5		
		72720.5	167862.8	134536.6	80639.4	284213.3					
2850.00	S/Sst	162048.3	71473.8	302692.3	183380.7	69372.3	76105.6	165129.6	92951.4	53306.1	0086-1
		242298.1	104378.1	54895.8	136015.8	50136.1	29393.8	59499.5	94891.5		
		25066.4	40267.0	92877.5	63272.4	49366.2					

Table 10G: Raw GCMS sterane data (peak height) SIR for Well NOCS 6407/7-1

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					
2881.00	Sh/Clst	150165.5	50560.7	74108.0	46188.4	19469.0	18341.8	41109.8	18970.3	13903.3	0090-1
		84799.3	21527.3	15929.2	46689.2	19302.8	8283.5	12728.2	15720.2		
		10258.1	26937.5	27504.3	22720.3	34481.7					
2906.00	S/Sst	120304.0	49780.0	232470.2	148008.6	62128.0	61589.3	104050.7	66924.8	28259.1	0094-1
		174803.1	71411.1	36090.2	89866.2	34595.5	19274.4	42049.3	61985.3		
		17064.6	33677.5	51661.9	44653.9	28965.9					
2947.00	S/Sst	179678.2	89784.4	340861.7	223369.8	92497.5	94042.3	199147.2	102393.6	62920.9	0102-1
		281448.9	111400.9	57800.9	164583.6	60245.1	25491.8	69907.8	105747.8		
		27260.2	54463.7	111583.7	87647.7	52856.6					

Table 10H: Raw GCMS triaromatic sterane data (peak height) for Well NOCS 6407/7-1

Page: 1

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
2440.00	bulk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0240-0
2700.00	Sh/Clst	54390.5	34317.5	81411.7	213733.3	58725.3	99926.0	58865.1	0123-1
2765.00	S/Sst	387895.5	325726.6	43504.0	130724.0	92664.7	57604.6	72946.7	0071-1
2785.00	Sltst	89825.3	53239.0	70421.0	134069.8	89839.5	54910.9	78540.0	0075-1
2850.00	S/Sst	817155.0	667586.0	180283.0	463088.9	278995.2	214480.0	225589.3	0086-1
2881.00	Sh/Clst	443383.7	335580.8	32870.9	88092.0	53368.9	35565.8	44599.0	0090-1
2906.00	S/Sst	1336911.0	1160772.6	264155.4	795539.8	457004.3	366400.7	365870.3	0094-1
2947.00	S/Sst	512659.8	381466.2	56516.6	180668.0	99744.0	85306.1	89298.9	0102-1

Table 10I: Raw GCMS monoaromatic sterane data (peak height) for Well NOCS 6407/7-1

Depth unit of measure: m

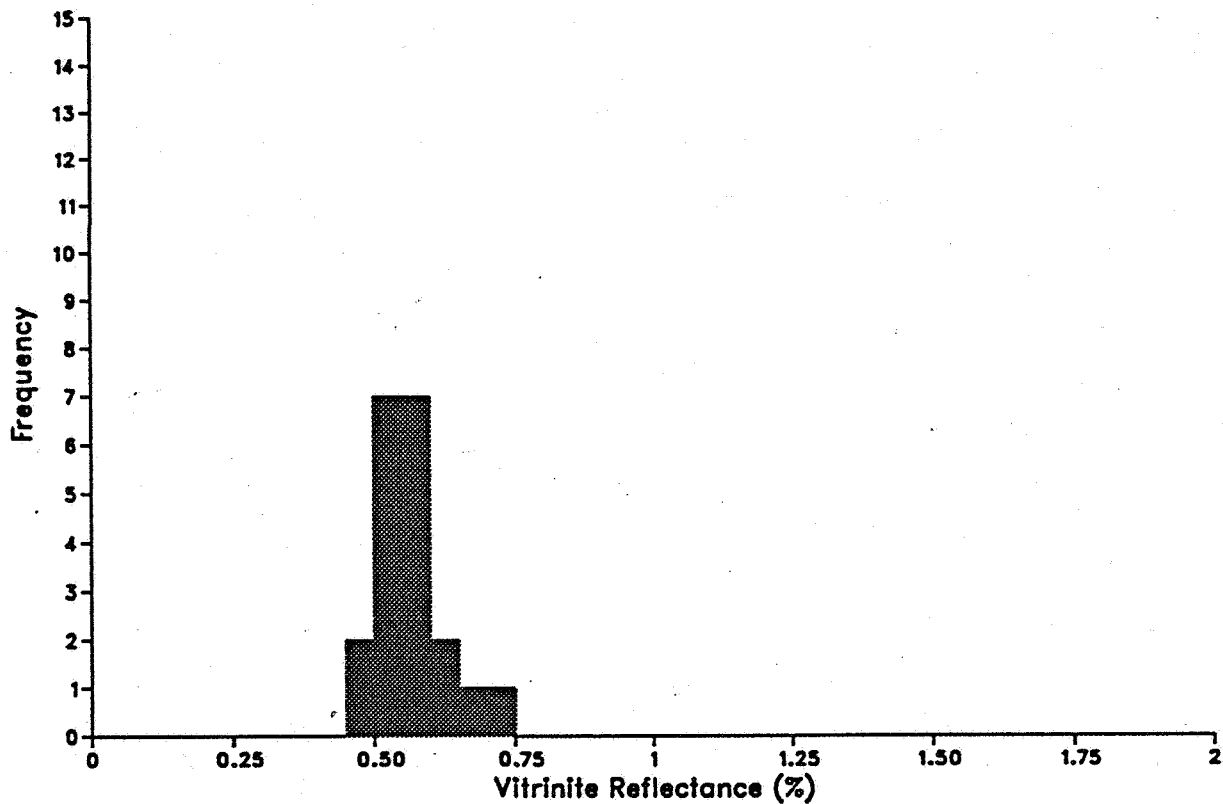
Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
2440.00	bulk	19488.0	5081.8	3610.9	4640.3	12513.5	2685.3	8102.5	2664.9	2298.6	0240-0
2700.00	Sh/Clst	46700.6	15046.4	43948.3	39005.8	101151.1	16674.2	75193.8	29758.1	8018.0	0123-1
2765.00	S/Sst	245137.2	116574.3	72296.0	56230.0	100888.0	44289.6	105090.0	66507.6	15829.3	0071-1
2785.00	Sltst	74731.5	34215.8	49320.6	43476.3	66318.4	18609.2	86969.3	50079.2	8097.2	0075-1
2850.00	S/Sst	553453.8	319990.3	221867.7	141556.2	311703.7	107641.6	238198.5	103978.5	41636.3	0086-1
2881.00	Sh/Clst	123854.4	42486.4	15816.0	21200.6	22456.6	11264.0	28160.0	18630.0	8568.5	0090-1
2906.00	S/Sst	807456.0	485752.0	328496.0	226656.0	516901.1	175419.0	381635.8	196688.8	56859.5	0094-1
2947.00	S/Sst	188241.0	73850.9	48270.4	47784.9	74424.0	38838.6	68394.1	35992.0	15080.0	0102-1

APPENDIX 2

Histograms

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2800.00(m)



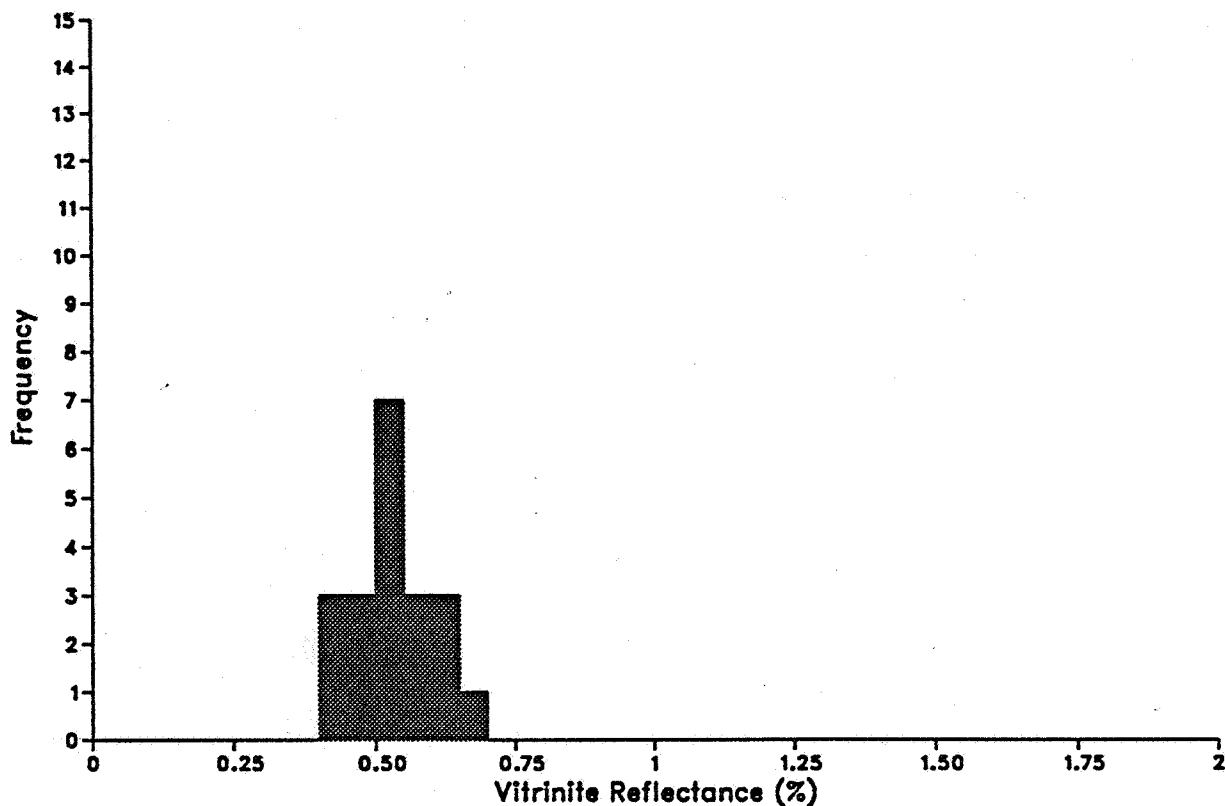
Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.450 to 0.750):	0.55	0.07	20

Readings:

0.450	0.470	0.500	0.501	0.502	0.503	0.510	0.520	0.540	0.550
0.551	0.560	0.570	0.571	0.572	0.590	0.610	0.611	0.660	0.730

Vitrinite Reflectance Histogram

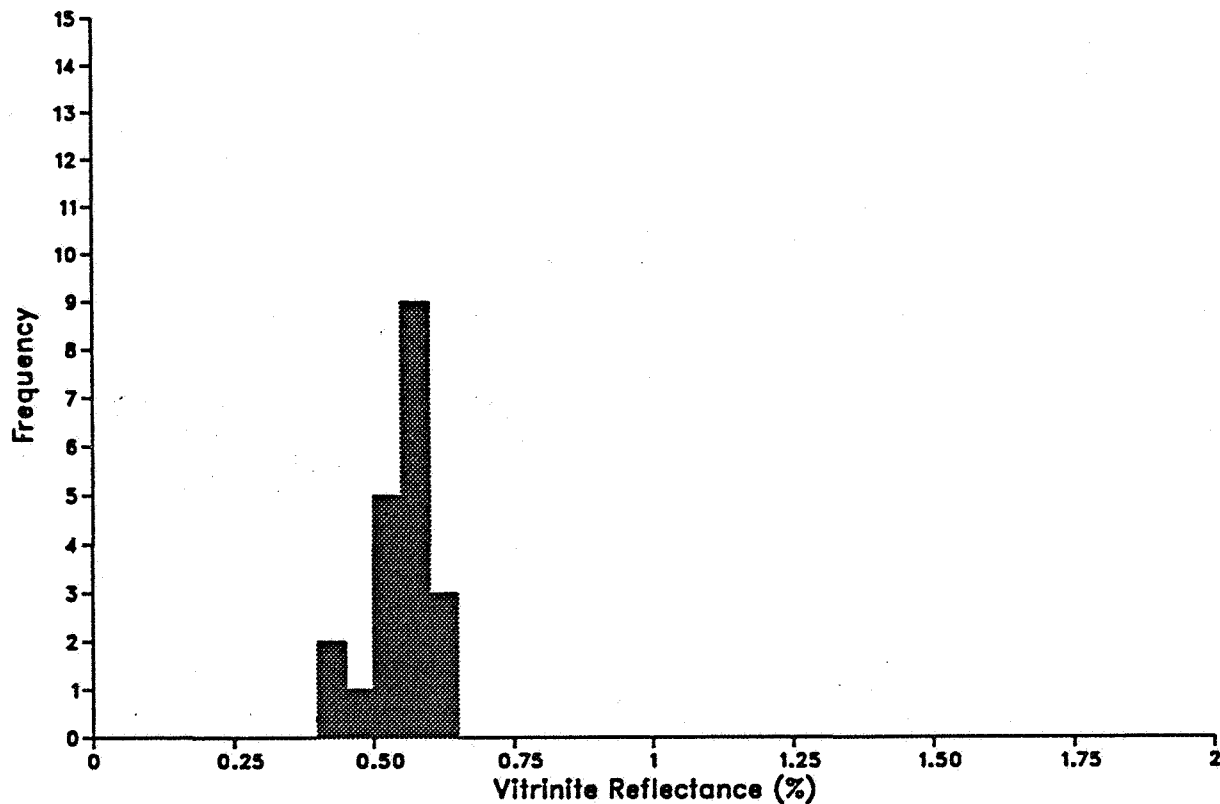
Well: NOCS 6407/7-1
Depth: 2830.00(m)

**Statistics:****Mean****St.Dev.****n****Indigenous Population (from 0.400 to 0.700):****0.53****0.07****20****Readings:**

0.400	0.430	0.431	0.470	0.480	0.490	0.510	0.511	0.512	0.513
0.520	0.521	0.530	0.560	0.570	0.571	0.610	0.620	0.640	0.670

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2911.00(m)

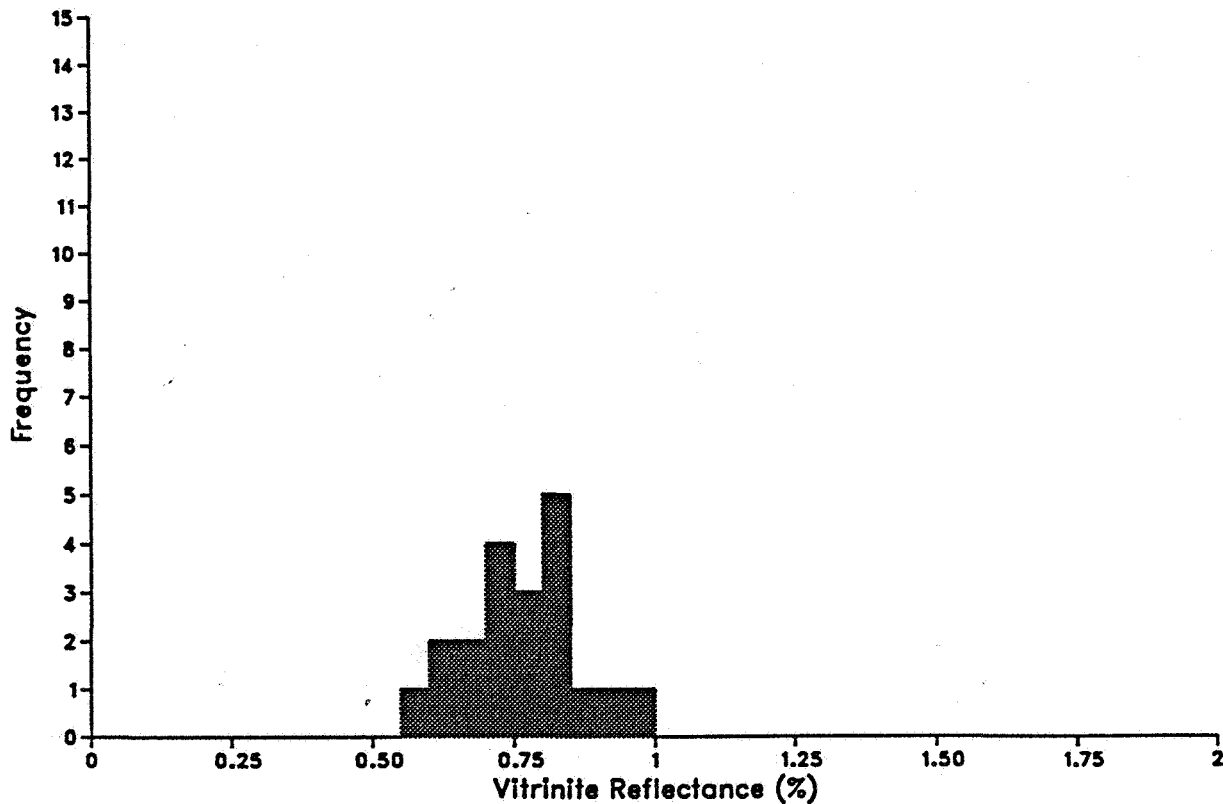


Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.400 to 0.650):	0.54	0.05	20

Readings:									
0.440	0.441	0.460	0.510	0.511	0.520	0.530	0.540	0.550	0.551
0.560	0.561	0.562	0.563	0.570	0.580	0.590	0.600	0.610	0.620

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 3045.00(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.550 to 1.000):

0.76

0.10

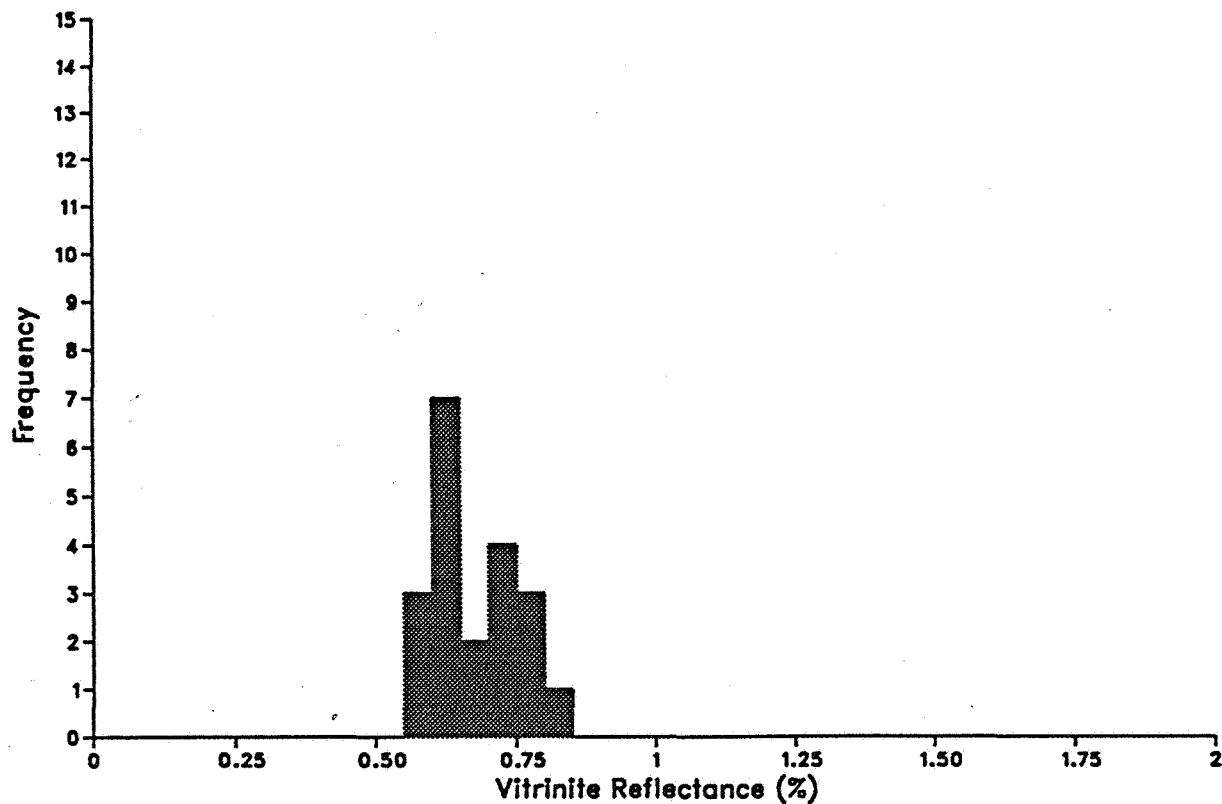
20

Readings:

0.590	0.610	0.630	0.660	0.661	0.700	0.701	0.720	0.721	0.760
0.770	0.790	0.800	0.810	0.820	0.821	0.840	0.850	0.920	0.970

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 3170.00(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.550 to 0.850):

0.68

0.08

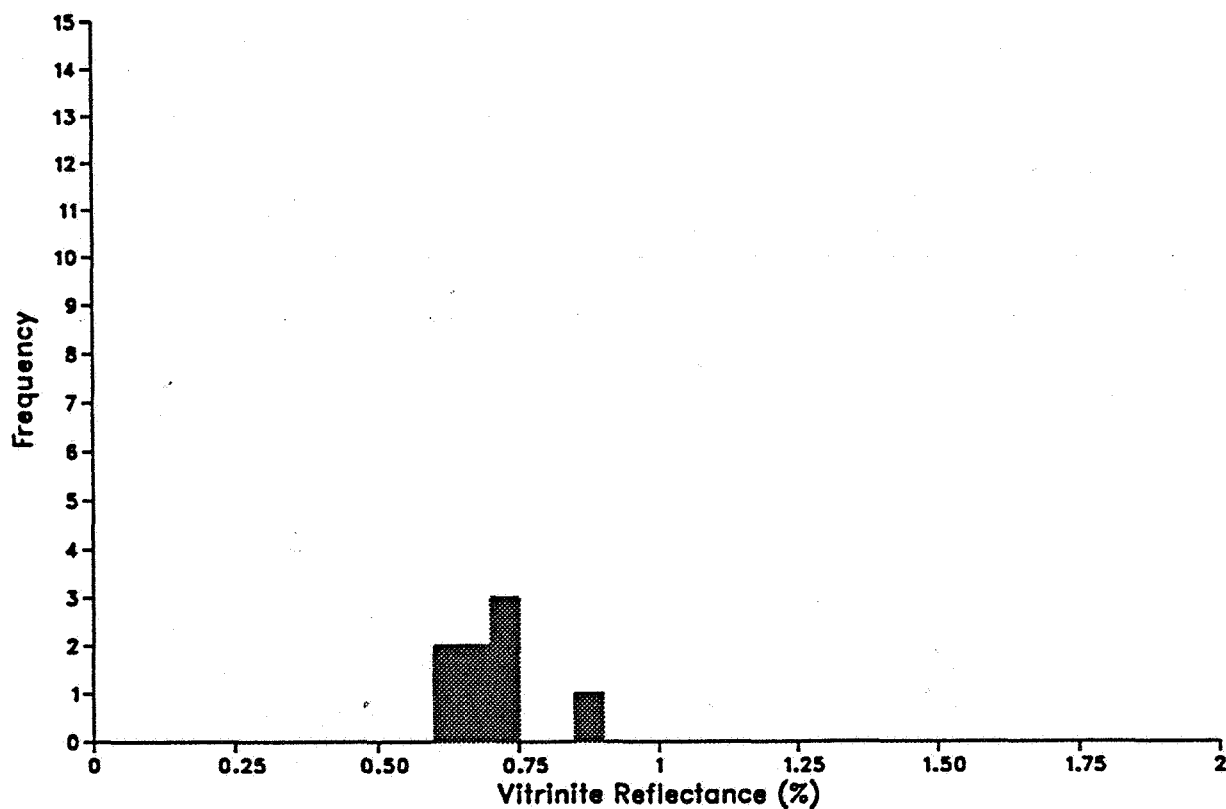
20

Readings:

0.570	0.580	0.590	0.610	0.611	0.620	0.621	0.640	0.641	0.642
0.660	0.661	0.710	0.720	0.721	0.730	0.770	0.790	0.791	0.830

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 3220.00(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.600 to 0.900):

0.71

0.07

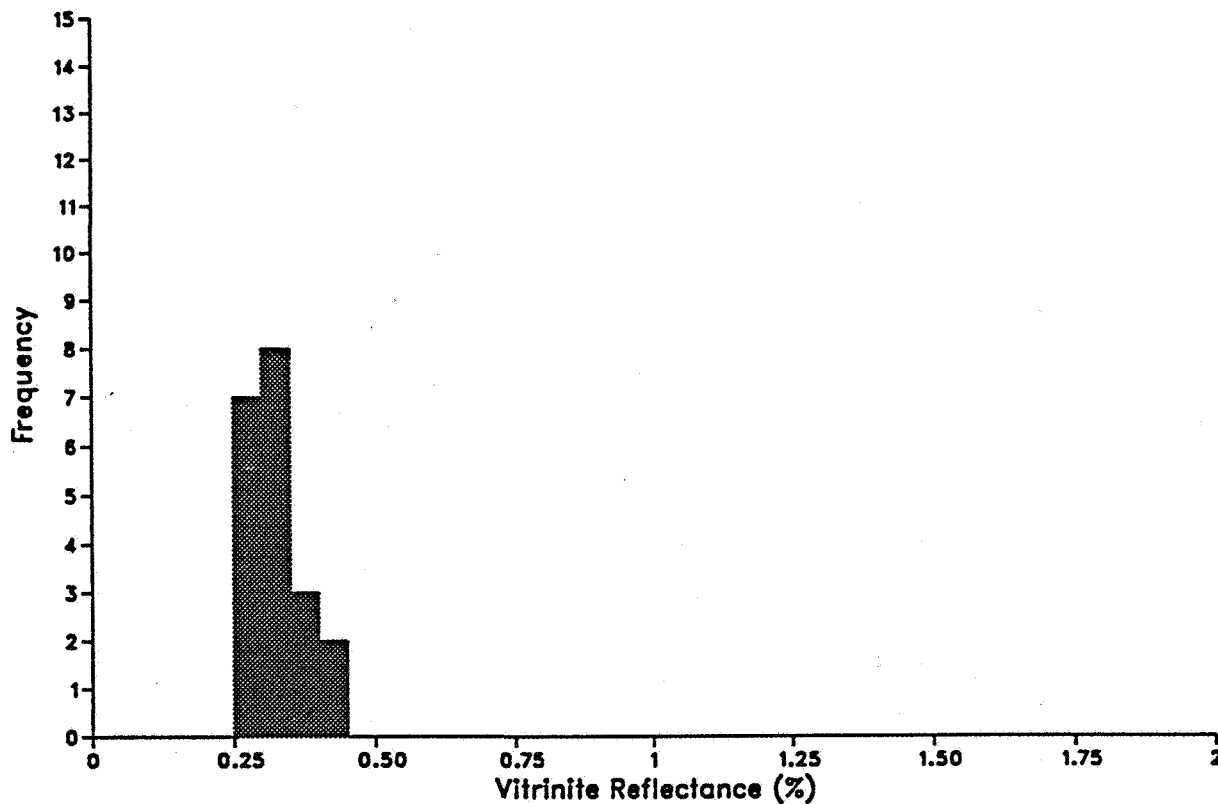
8

Readings:

0.640 0.650 0.690 0.691 0.700 0.710 0.740 0.880

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1000.00(m)



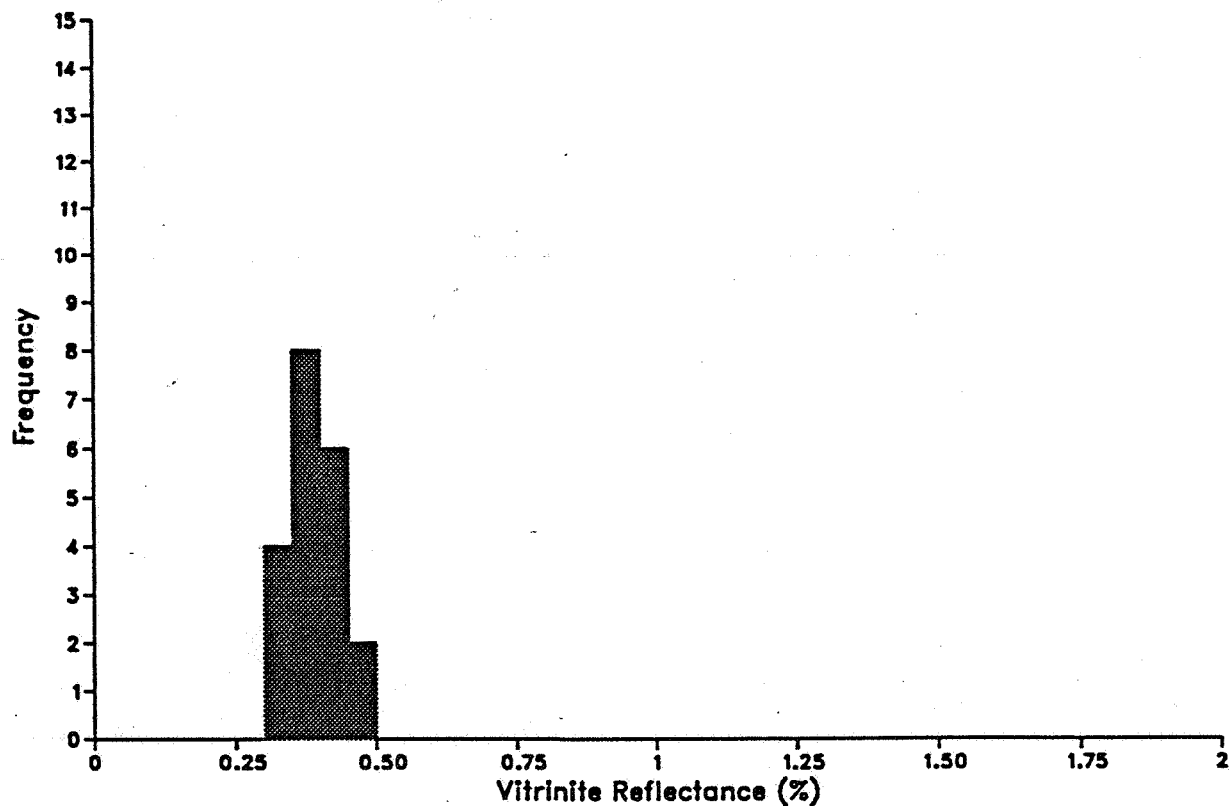
Statistics:	Mean	St.Dev.	n
Indigenous Population (from 0.250 to 0.450):	0.33	0.05	20

Readings:

0.250	0.280	0.281	0.282	0.290	0.291	0.292	0.300	0.310	0.311
0.320	0.321	0.322	0.330	0.331	0.370	0.390	0.391	0.410	0.430

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1160.00(m)

**Statistics:****Mean****St.Dev.****n**

Indigenous Population (from 0.300 to 0.500):

0.38

0.04

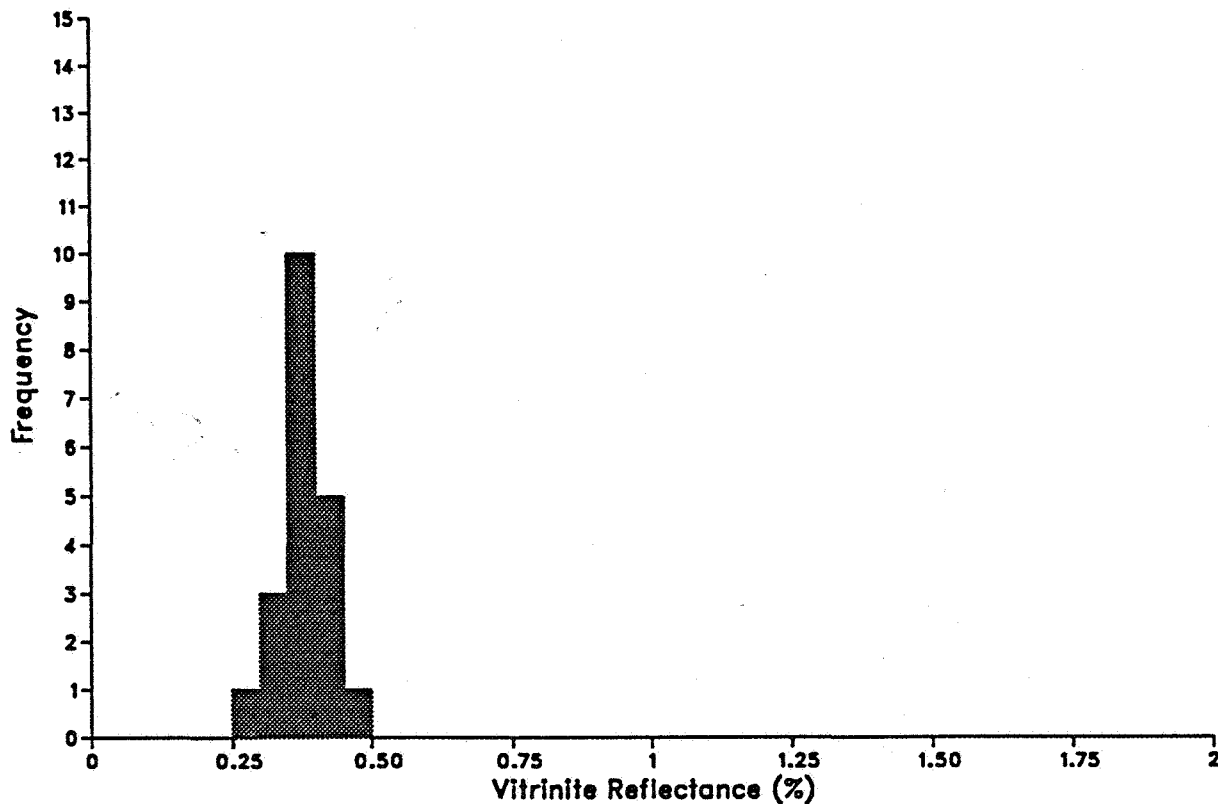
20

Readings:

0.330	0.340	0.341	0.342	0.350	0.351	0.352	0.360	0.361	0.370
0.380	0.390	0.400	0.401	0.410	0.411	0.412	0.413	0.450	0.480

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1300.00(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.250 to 0.500):

0.38

0.04

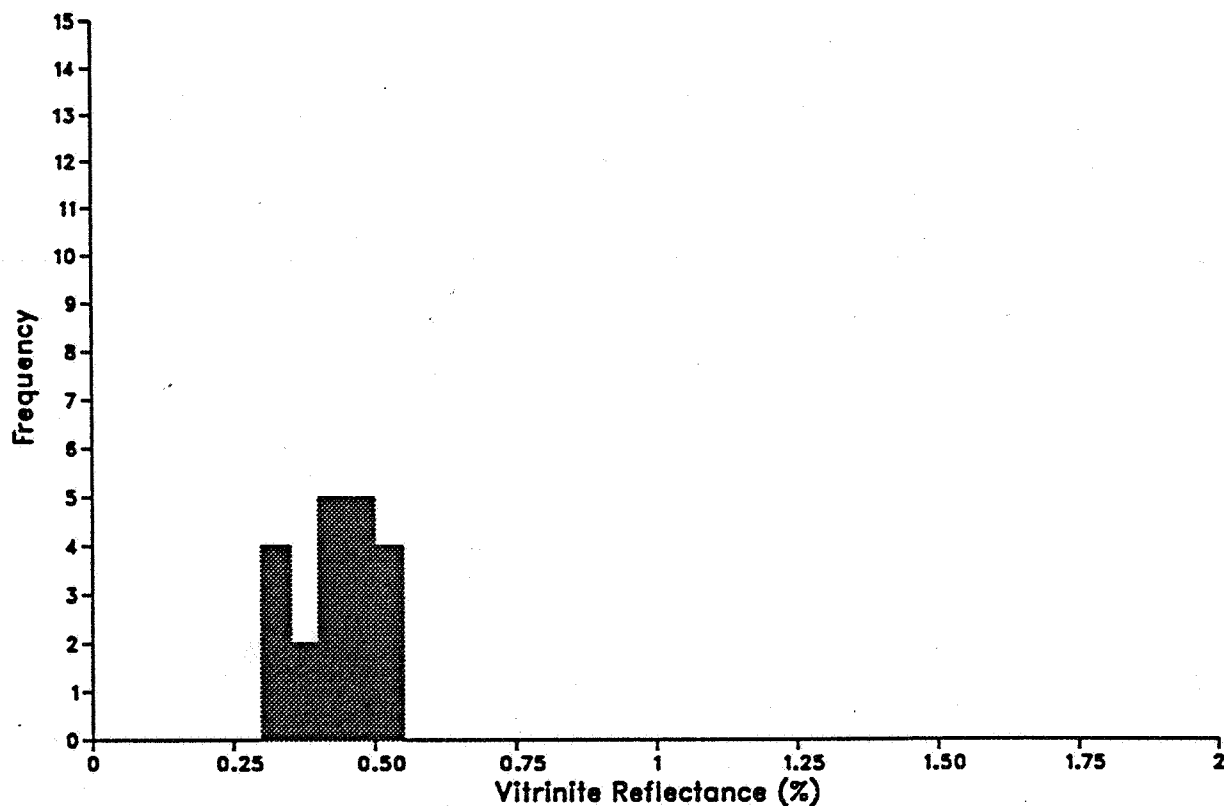
20

Readings:

0.290	0.310	0.330	0.340	0.350	0.351	0.360	0.361	0.362	0.380
0.381	0.390	0.391	0.392	0.400	0.420	0.421	0.440	0.441	0.460

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1460.00(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.300 to 0.550):

0.43

0.06

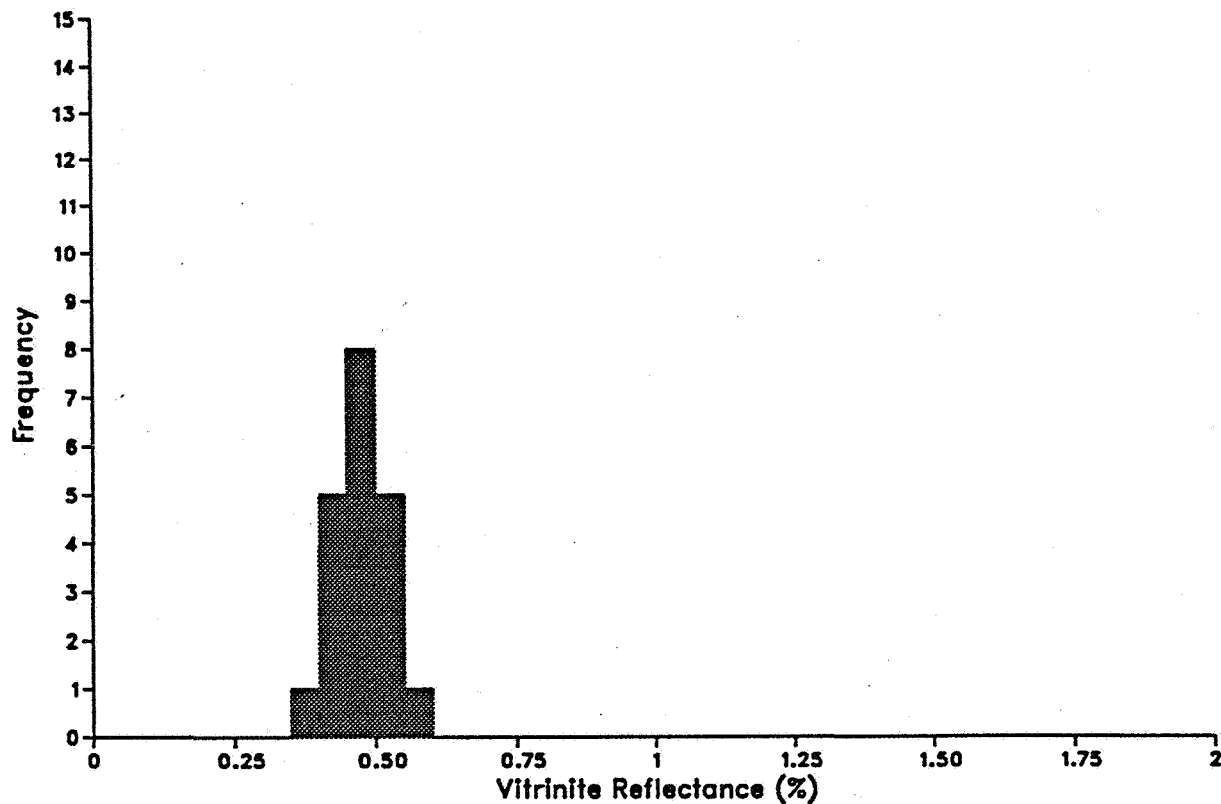
20

Readings:

0.320	0.330	0.340	0.341	0.370	0.390	0.400	0.430	0.431	0.440
0.441	0.450	0.451	0.452	0.460	0.490	0.510	0.511	0.512	0.513

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1600.00(m)

**Statistics:****Mean****St.Dev.****n**

Indigenous Population (from 0.350 to 0.550):

0.47

0.04

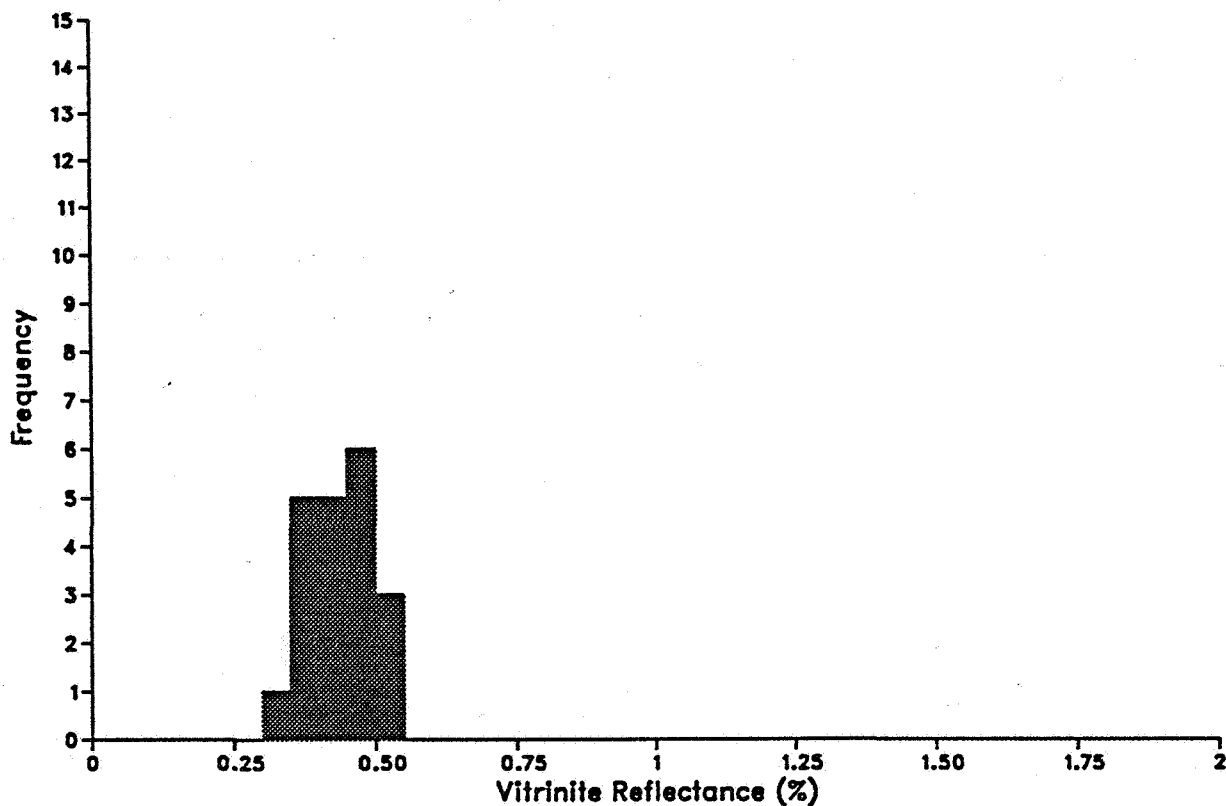
20

Readings:

0.370	0.420	0.430	0.440	0.441	0.442	0.450	0.460	0.461	0.470
0.471	0.472	0.490	0.491	0.500	0.501	0.510	0.520	0.521	0.550

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1740.00(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.300 to 0.550):

0.43

0.06

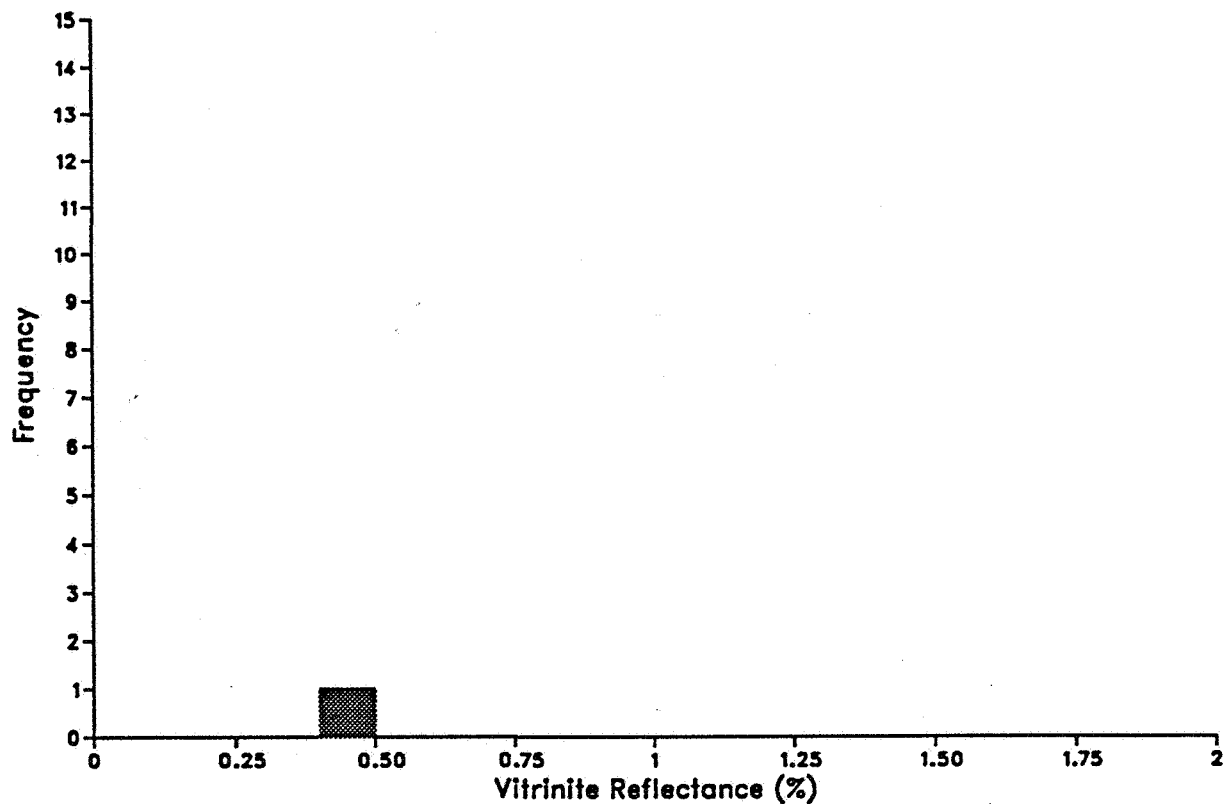
20

Readings:

0.310	0.350	0.360	0.361	0.370	0.390	0.400	0.401	0.410	0.440
0.449	0.450	0.451	0.452	0.453	0.460	0.480	0.500	0.501	0.520

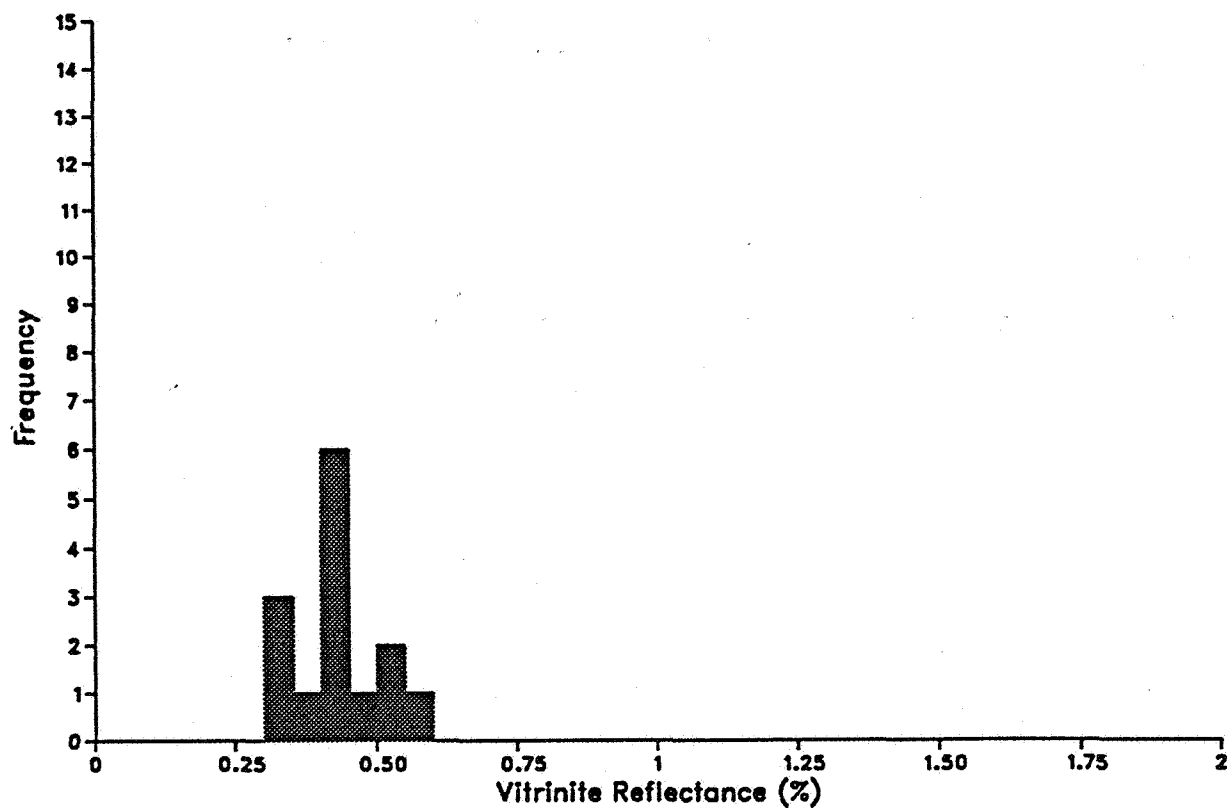
Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 1900.00(m)

**Statistics:****Mean****St.Dev.****n****Indigenous Population (from 0.400 to 0.450):****0.45****0.01****2****Readings:****0.440 0.450**

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2040.00(m)

**Statistics:****Mean****St.Dev.****n**

Indigenous Population (from 0.300 to 0.600):

0.43

0.08

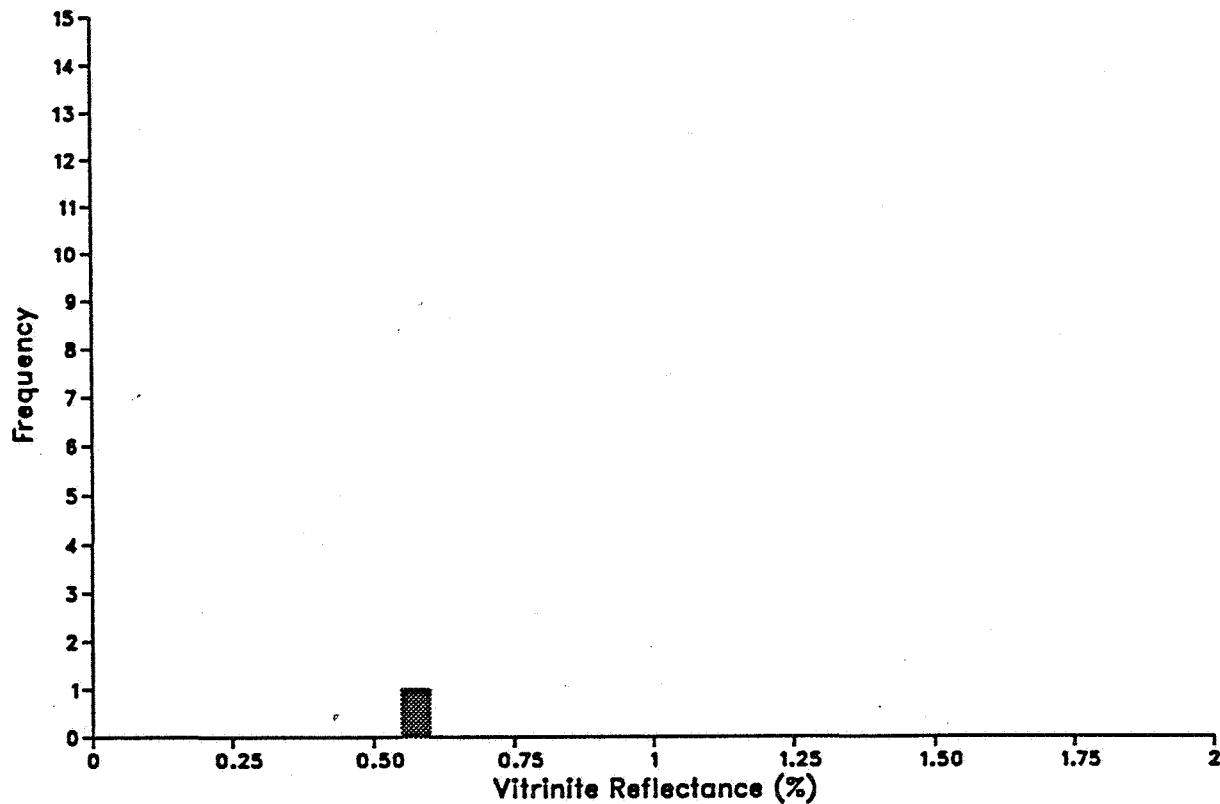
14

Readings:

0.320	0.330	0.331	0.380	0.410	0.411	0.412	0.420	0.430	0.440
0.490	0.540	0.541	0.590						

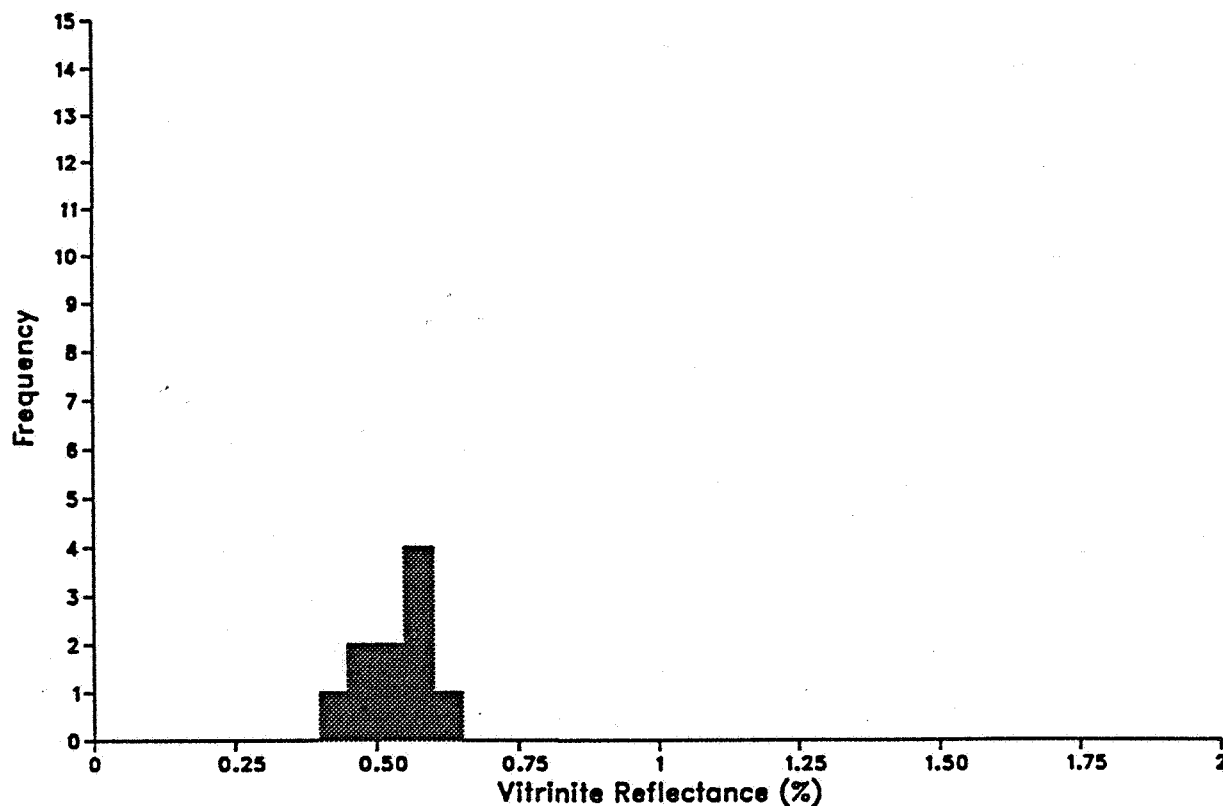
Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2240.00(m)

**Statistics:****Mean****St.Dev.****n****Indigenous Population (from 0.550 to 0.600):****0.55****0.00****1****Readings:****0.550**

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2380.00(m)

**Statistics:****Mean****St.Dev.****n**

Indigenous Population (from 0.400 to 0.600):

0.53

0.05

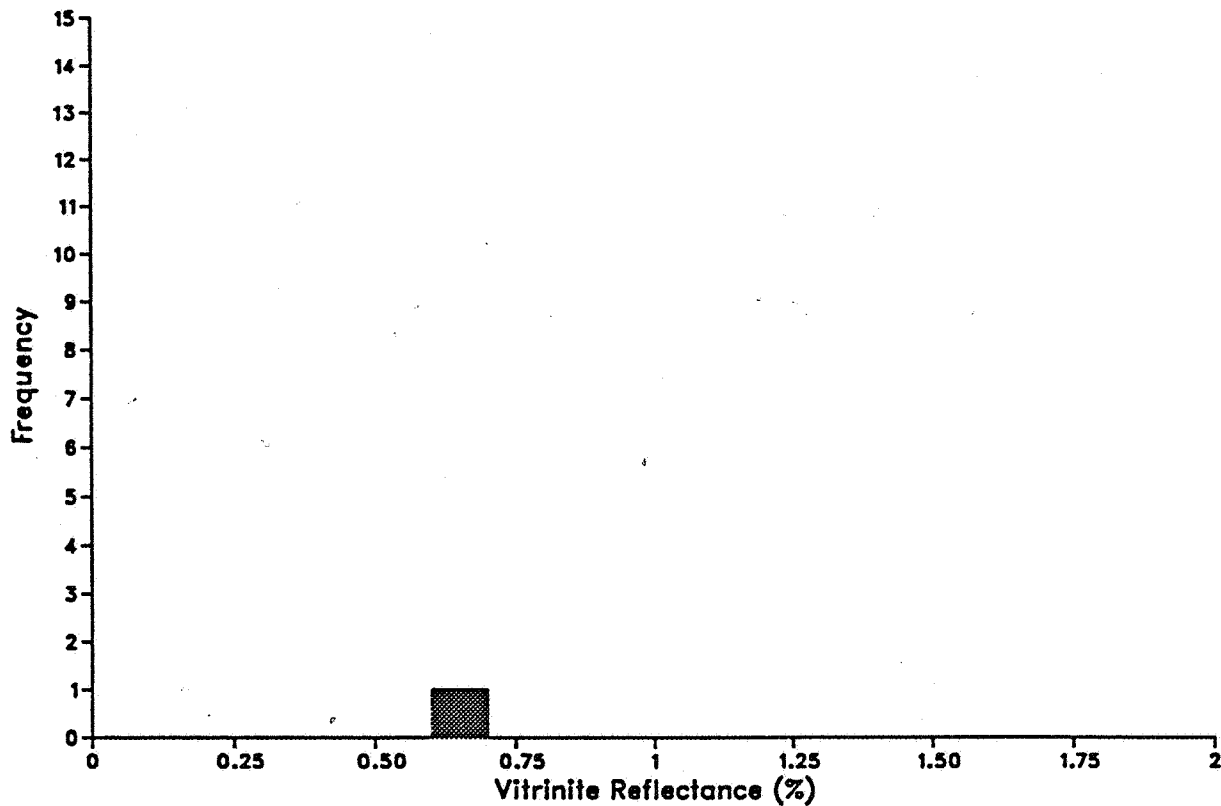
10

Readings:

0.440 0.480 0.490 0.500 0.501 0.550 0.551 0.560 0.580 0.600

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2713.30(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.600 to 0.700):

0.66

0.02

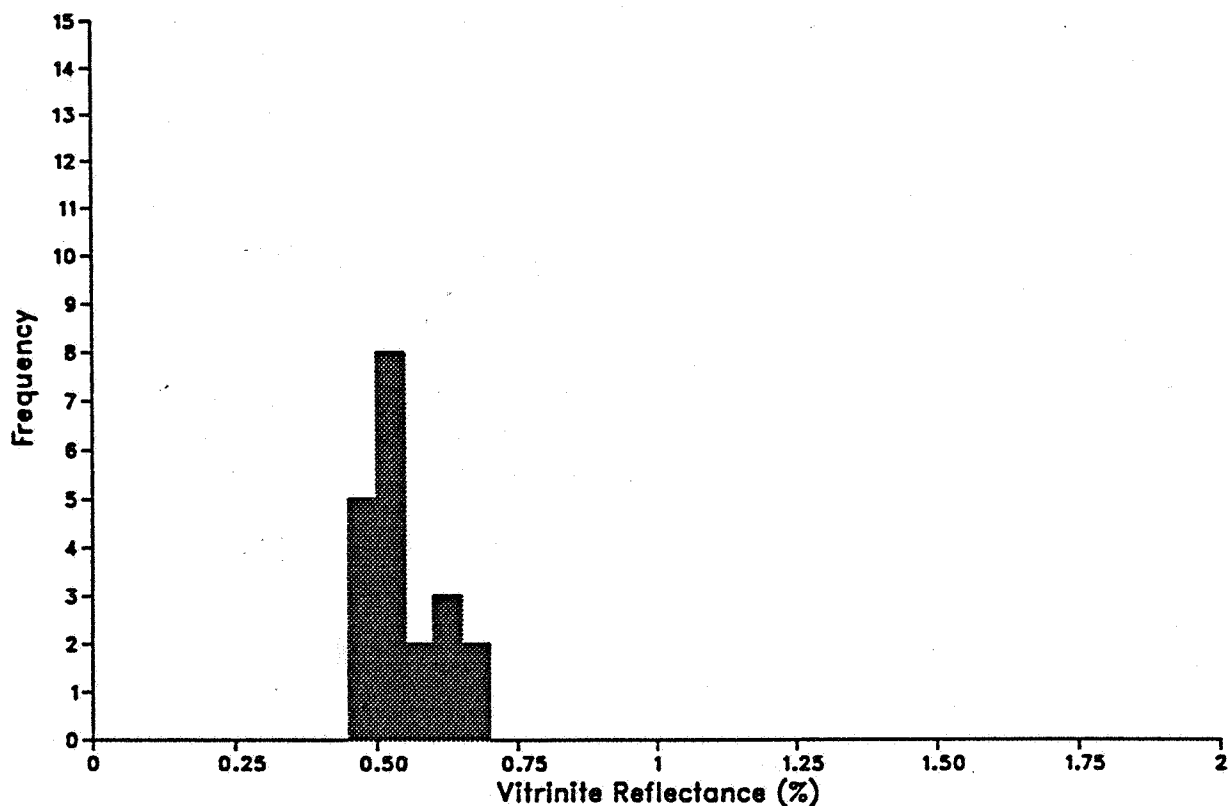
2

Readings:

0.640 0.670

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2718.00(m)

**Statistics:****Mean****St.Dev.****n**

Indigenous Population (from 0.450 to 0.700):

0.54

0.06

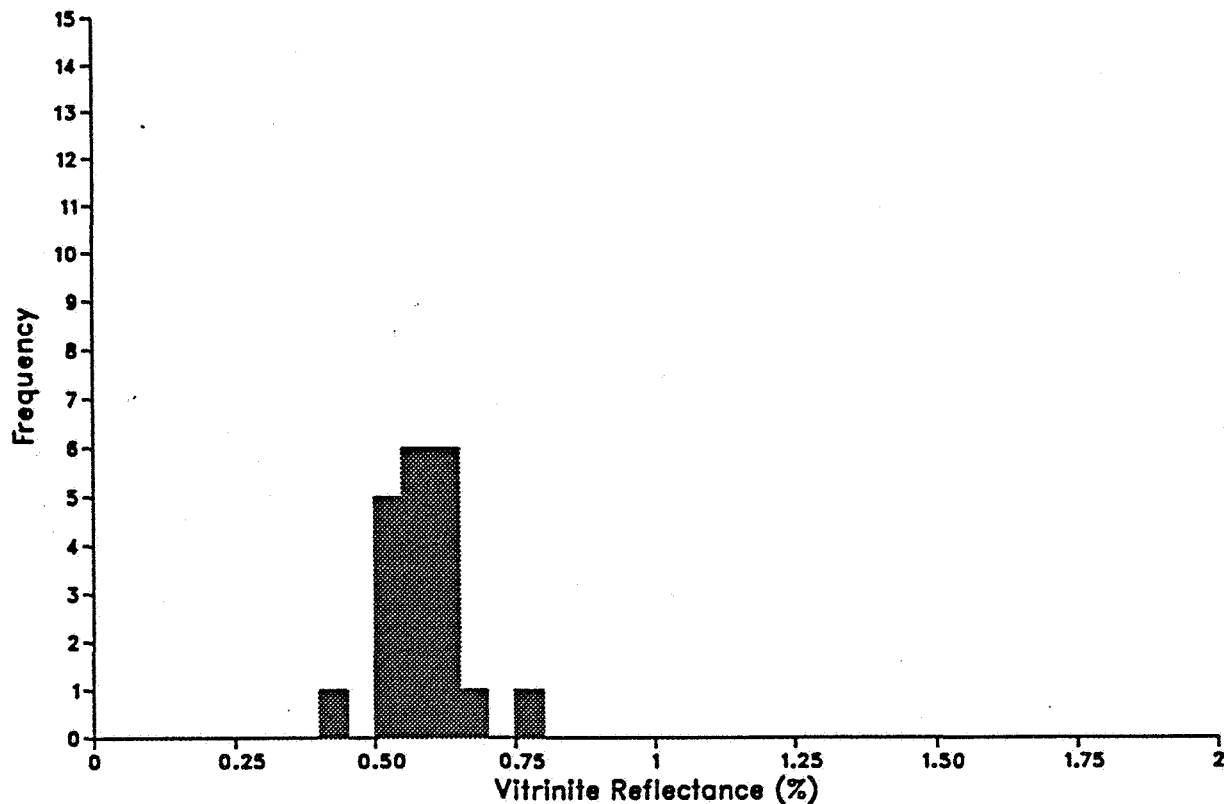
20

Readings:

0.470	0.480	0.490	0.491	0.492	0.500	0.501	0.502	0.510	0.511
0.520	0.521	0.530	0.560	0.570	0.600	0.610	0.640	0.670	0.671

Vitrinite Reflectance Histogram

Well: NOCS 6407/7-1
Depth: 2790.50(m)

**Statistics:**

Mean

St.Dev.

n

Indigenous Population (from 0.400 to 0.800):

0.58

0.07

20

Readings:

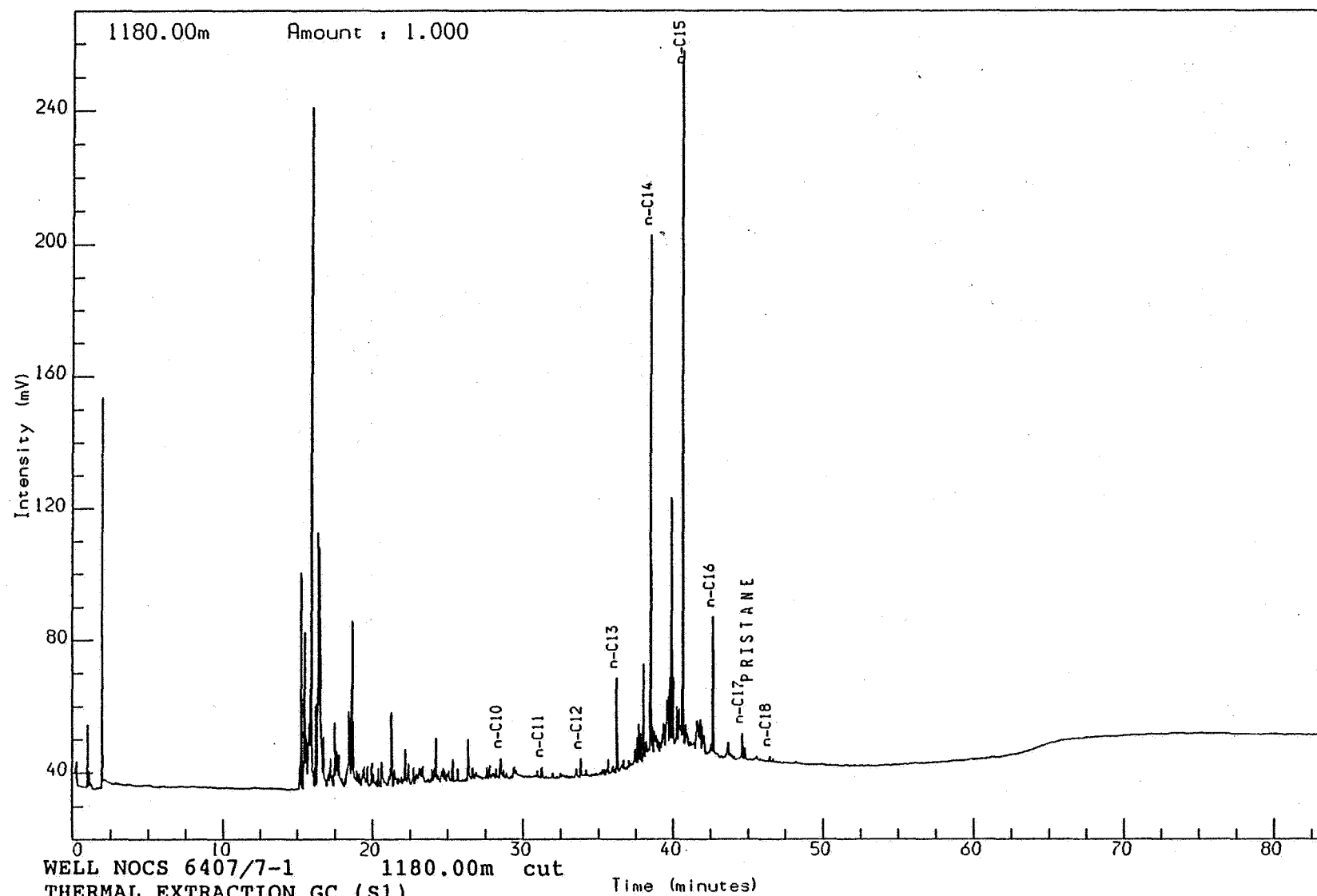
0.430	0.510	0.511	0.520	0.530	0.540	0.560	0.569	0.570	0.571
0.572	0.580	0.610	0.611	0.620	0.621	0.630	0.640	0.670	0.770

Appendix 3

**GHM-Thermal Extraction Gas Chromatograms and
Pyrolysis Gas Chromatography (Pyrograms)**

Analysis Name : [522020] 23 PG4100111,1,1.

Multichrom



Reported on 19-JUN-1992 at 09:15

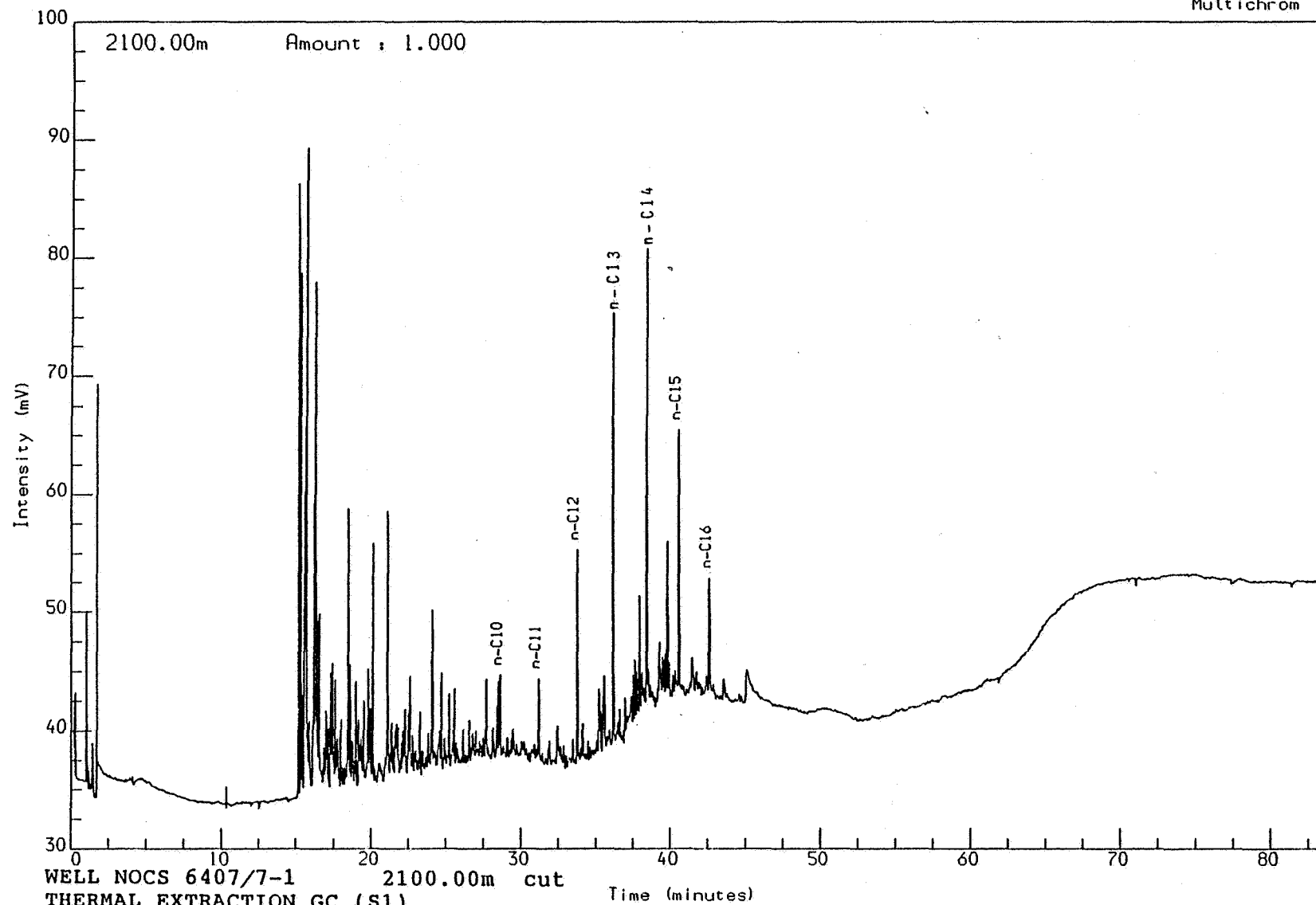
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100571,1,1.

Multichrom



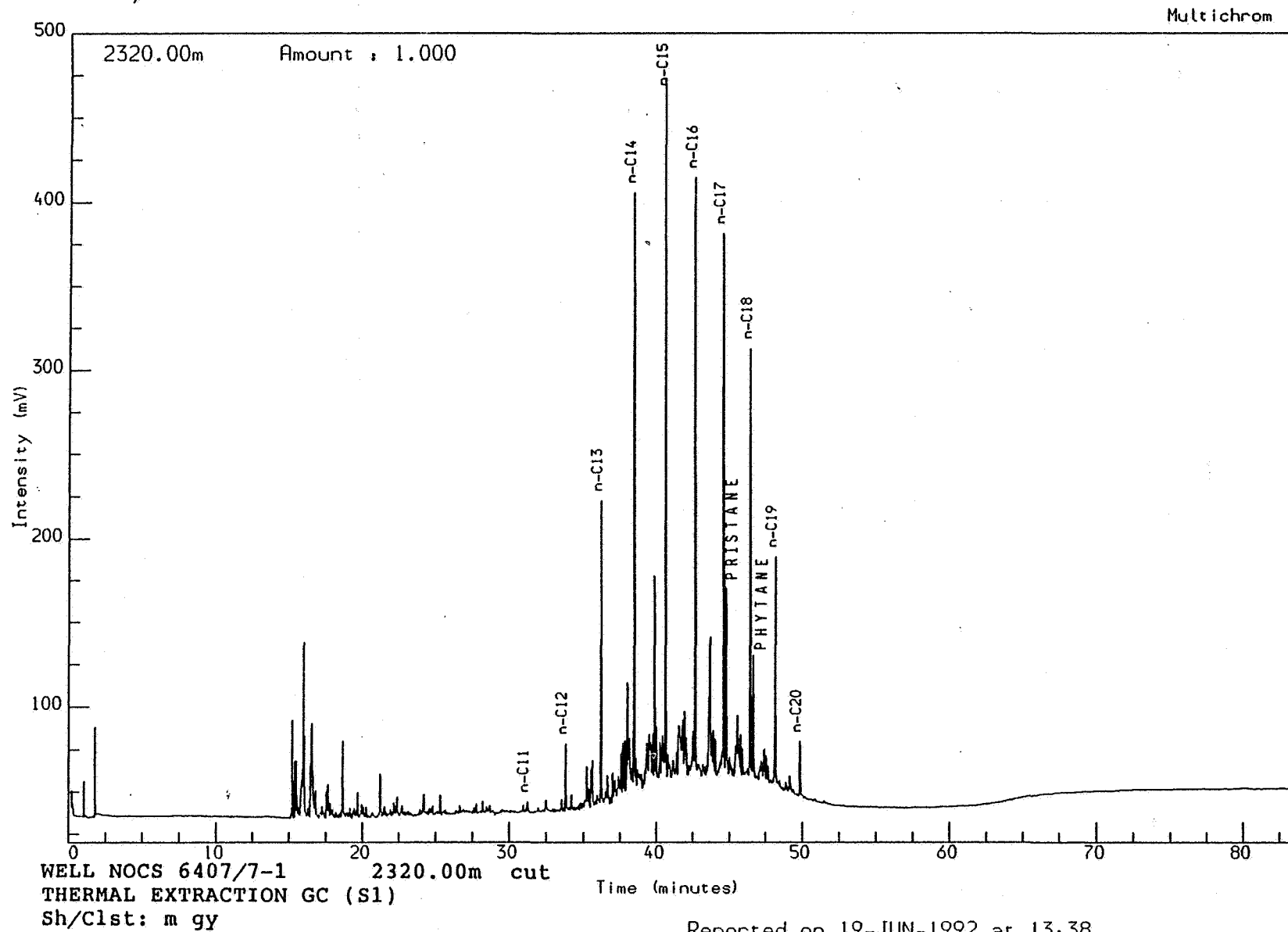
Reported on 19-JUN-1992 at 13:32

Schlumberger

GECO-PRAKLA

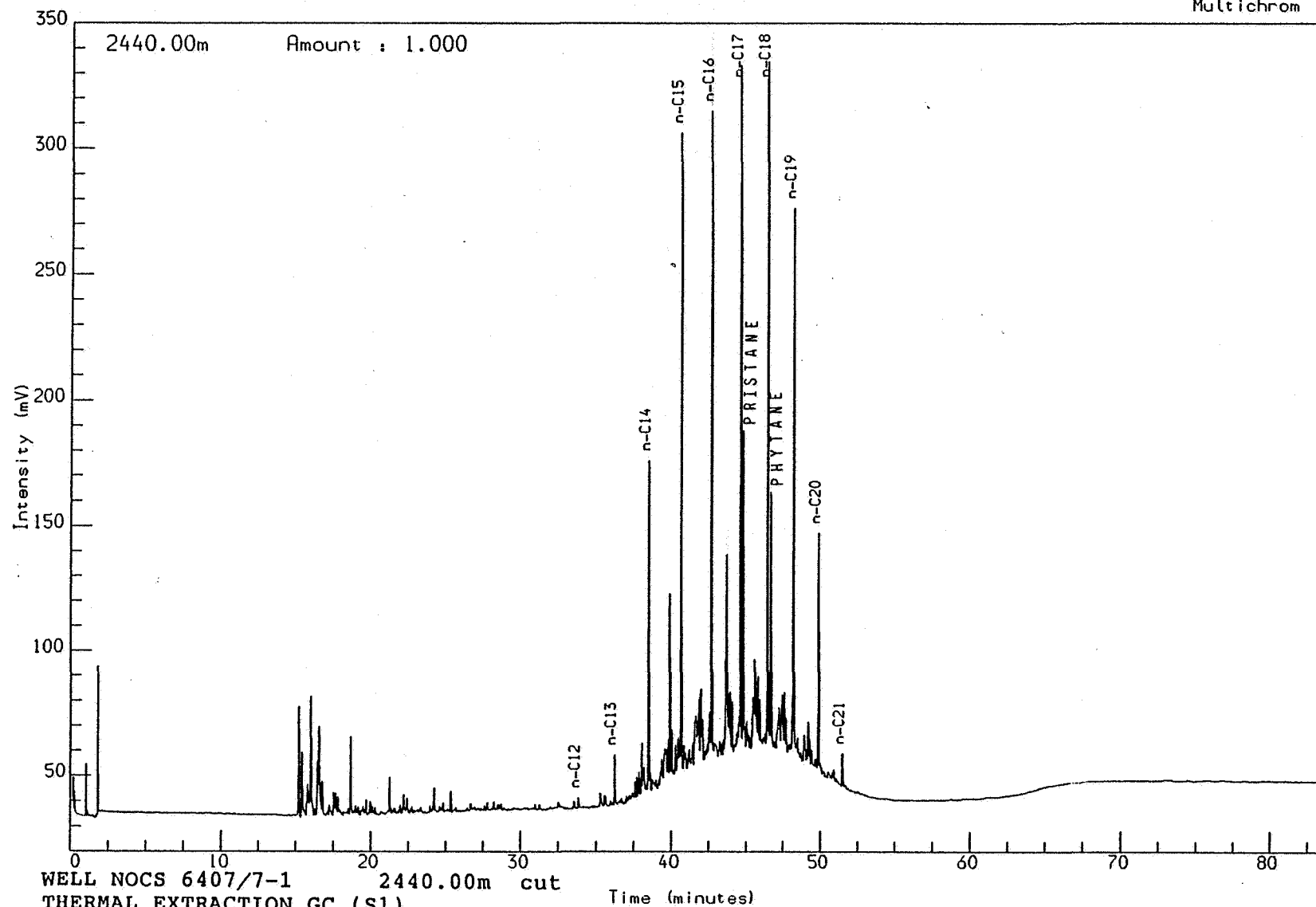
GEOLAB NOR

Analysis Name : [522020] 23 PG4101041.1.1.



Analysis Name : [522020] 23 PG4101101.1.1.

Multichrom



Reported on 22-JUN-1992 at 08:49

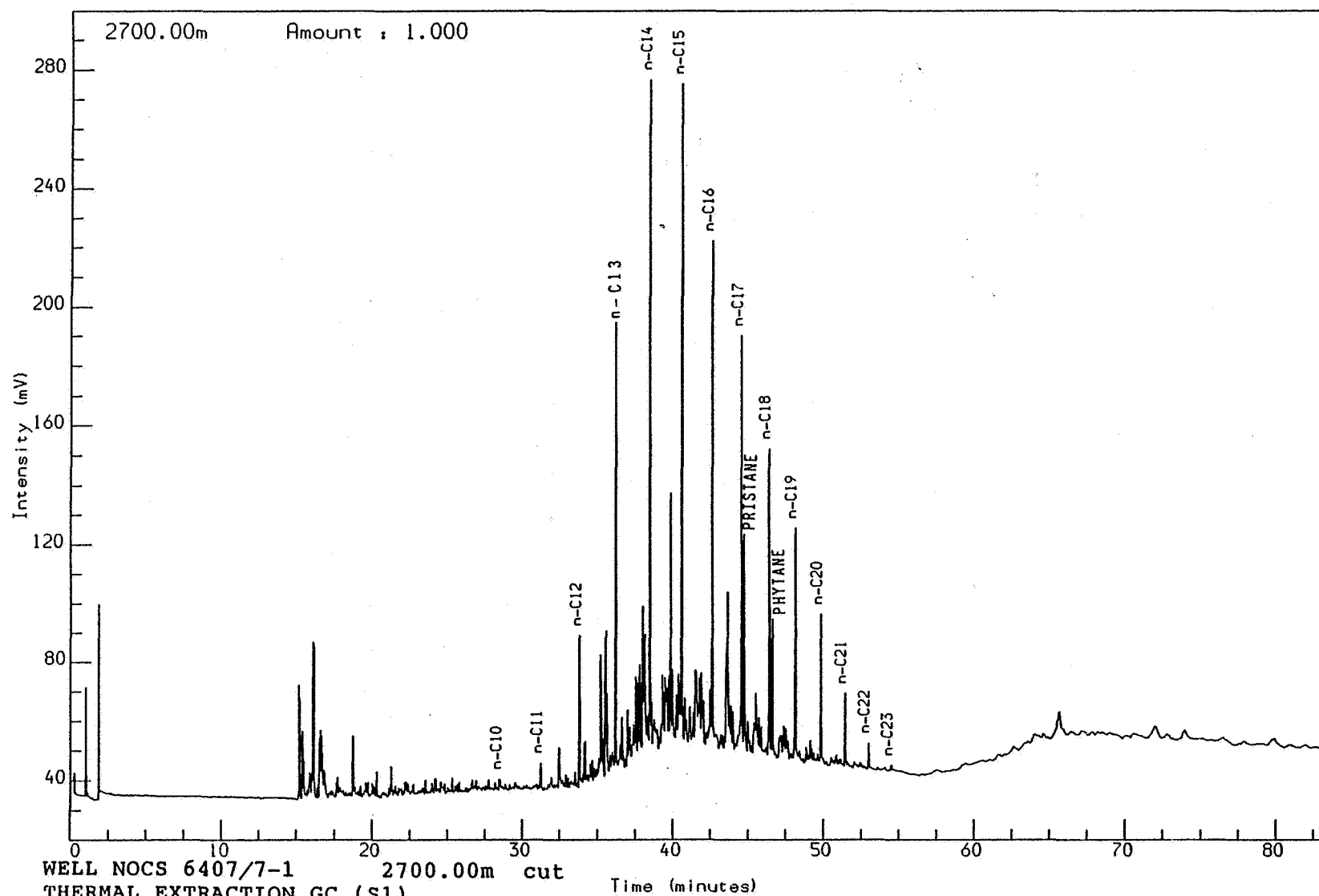
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 23 PG4101231,1,1.

Multichrom

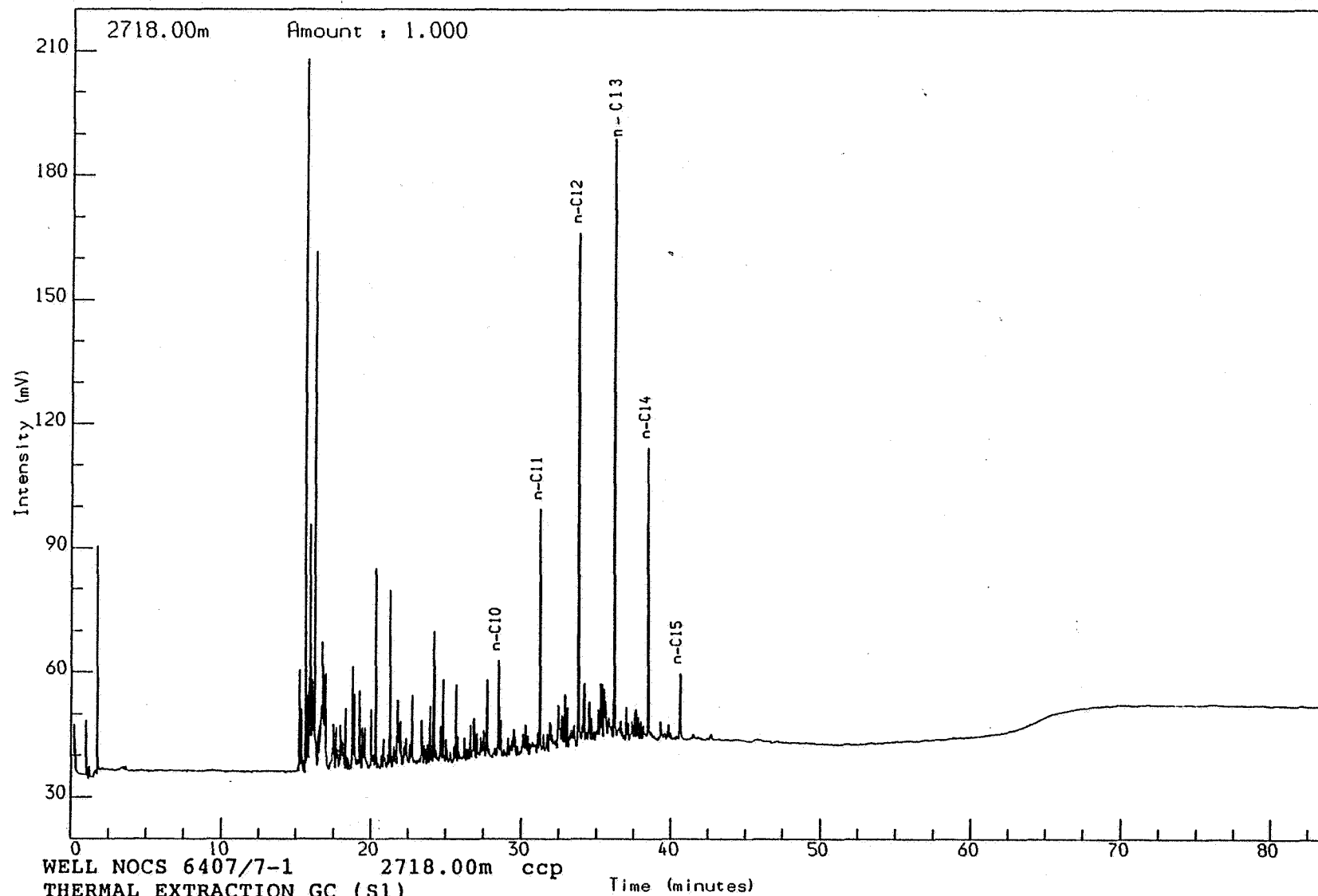


Reported on 1-JUL-1992 at 08:29

Schlumberger

GECO-PRAKLA

GEOLAB NOR



WELL NOCS 6407/7-1

2718.00m ccp

THERMAL EXTRACTION GC (S1)

Sh/Clst: m drk gy

Reported on 22-JUN-1992 at 08:50

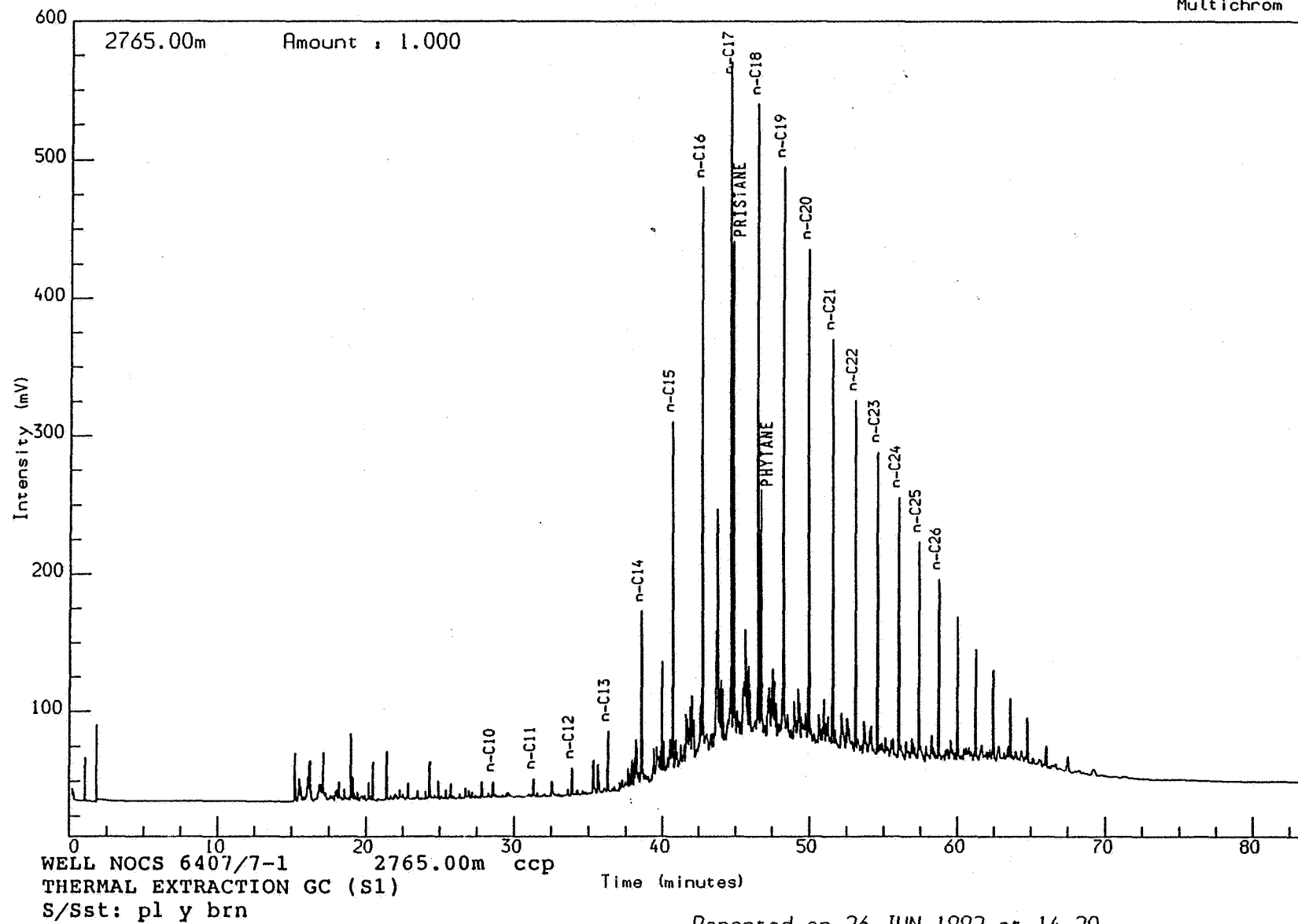
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100711,1,1.

Multichrom



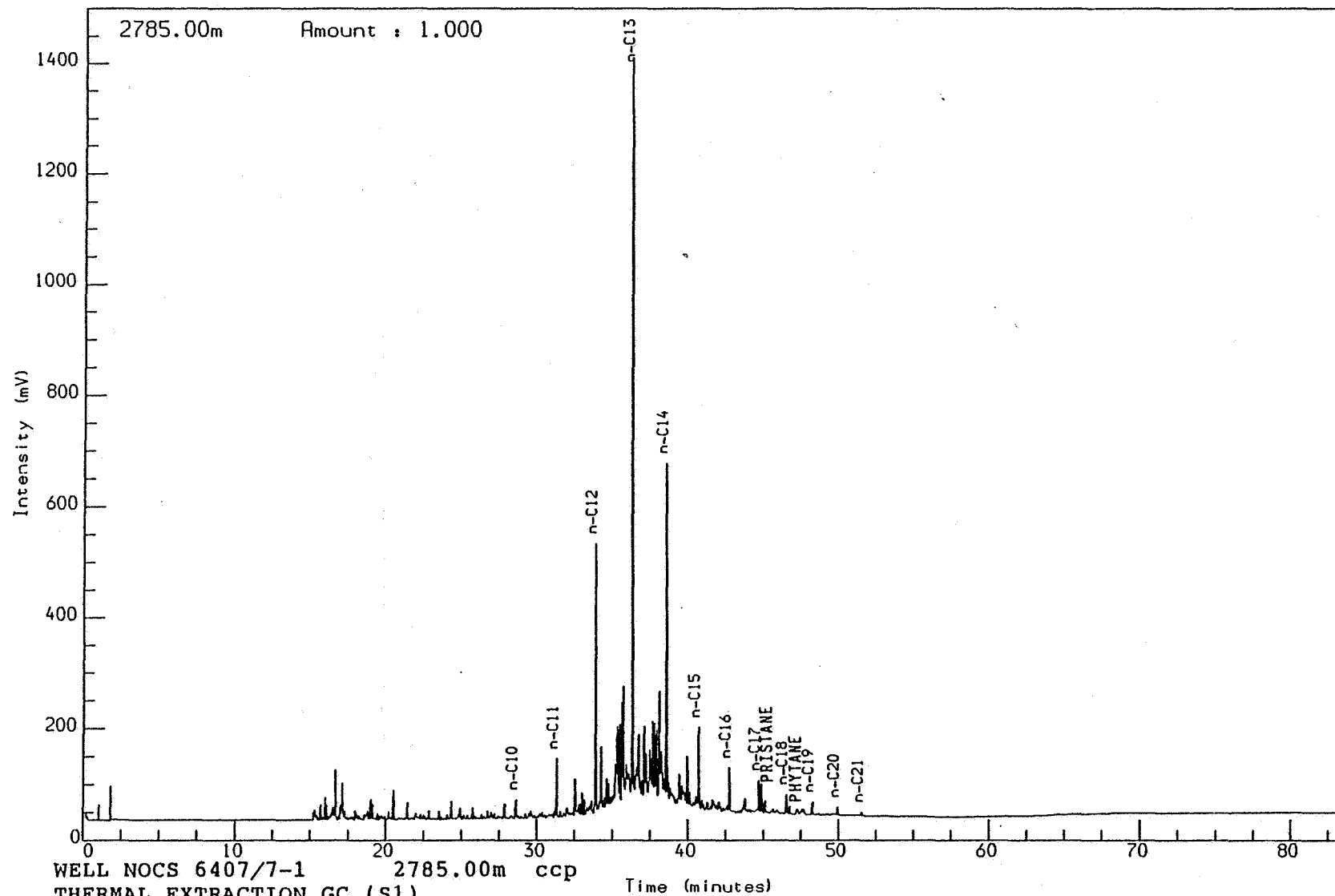
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100751.1.1.

Multichrom



Reported on 26-JUN-1992 at 14:21

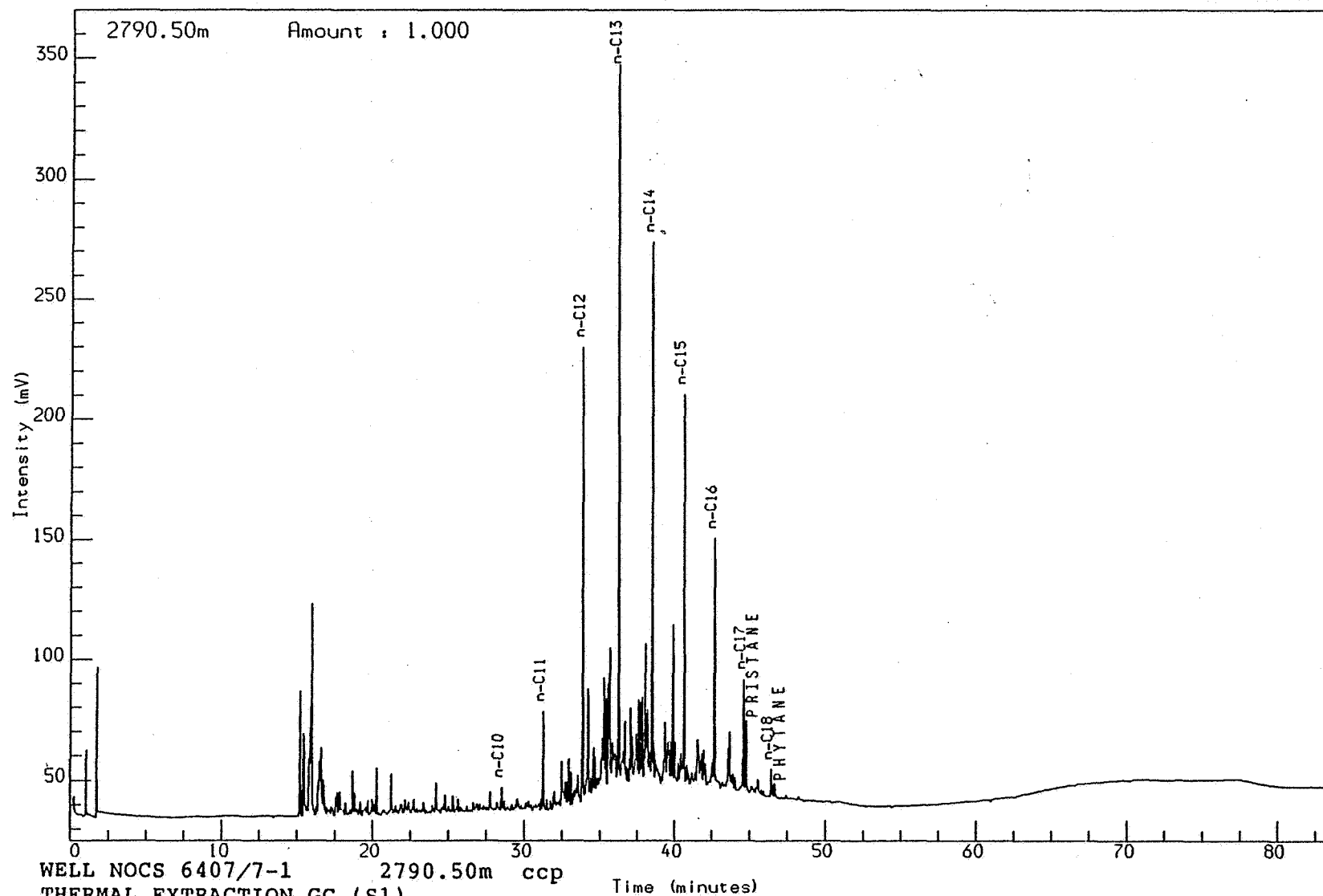
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 23 PG4100761,1,1.

Multichrom



Reported on 25-JUN-1992 at 13:47

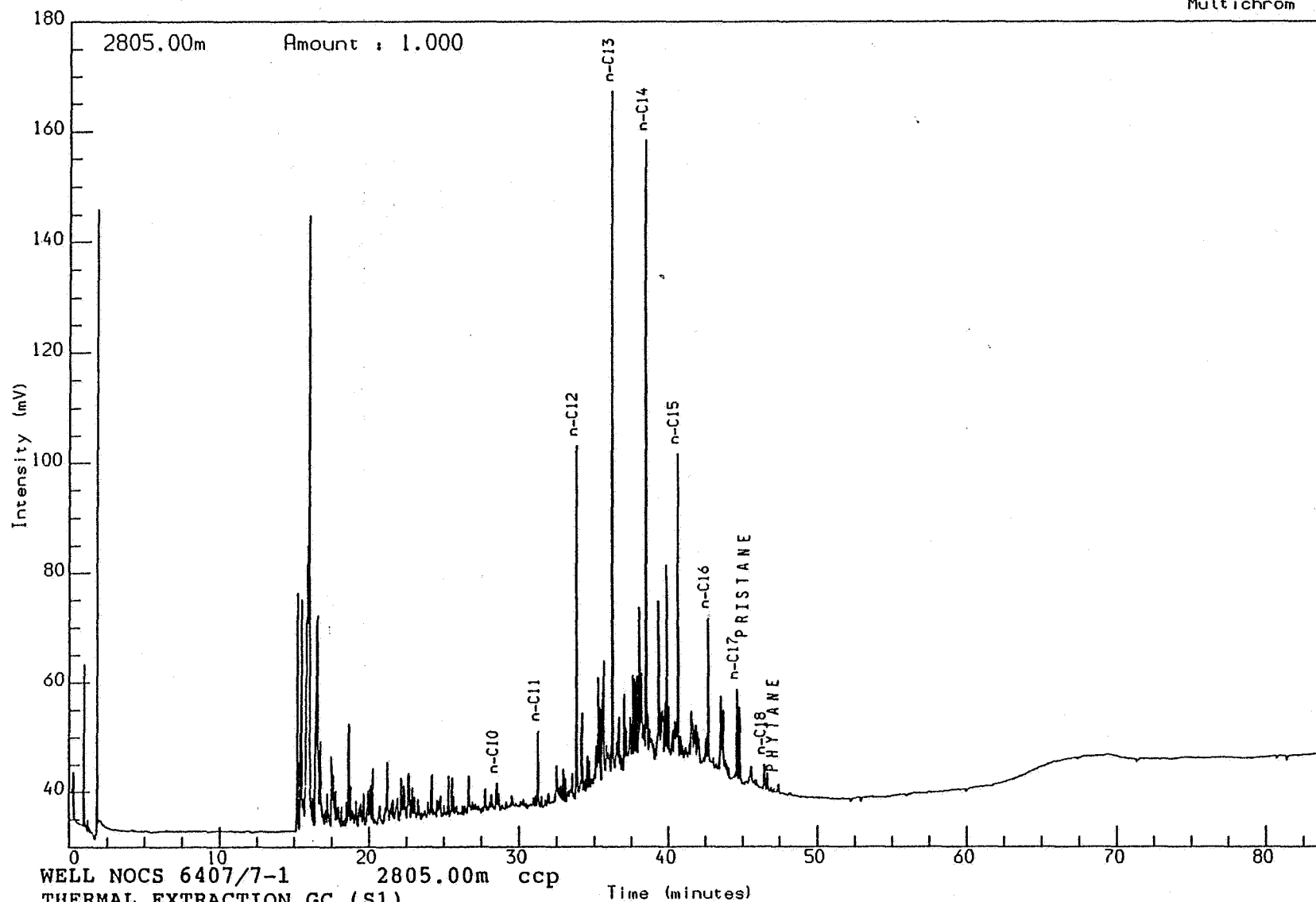
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100791.1.1.

Multichrom



WELL NOCS 6407/7-1 2805.00m ccp

THERMAL EXTRACTION GC (S1)

Sh/C1st: 1t ol gy to dsk ol gy

Reported on 25-JUN-1992 at 09:56

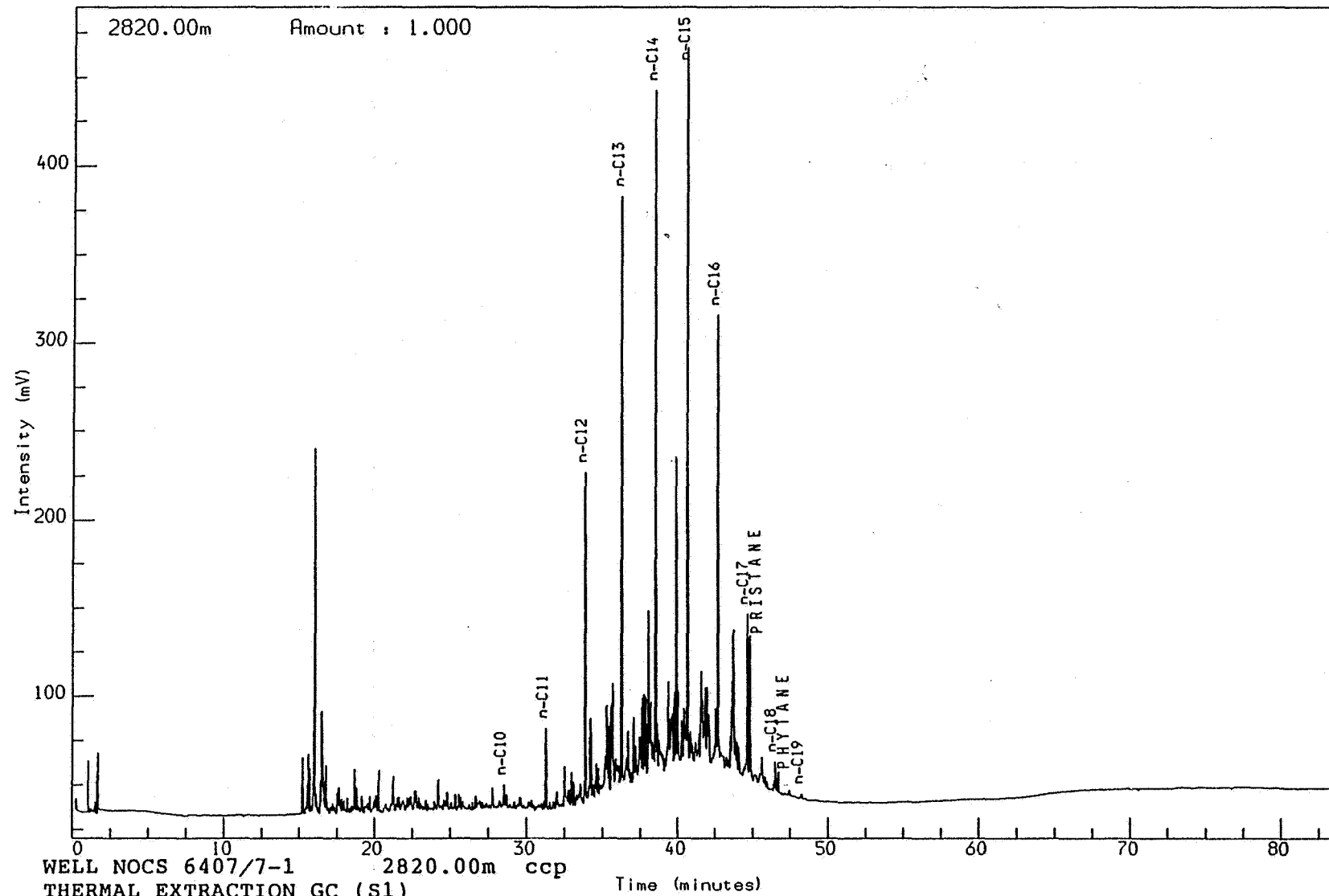
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100821,1,1.

Multichrom



Reported on 25-JUN-1992 at 12:53

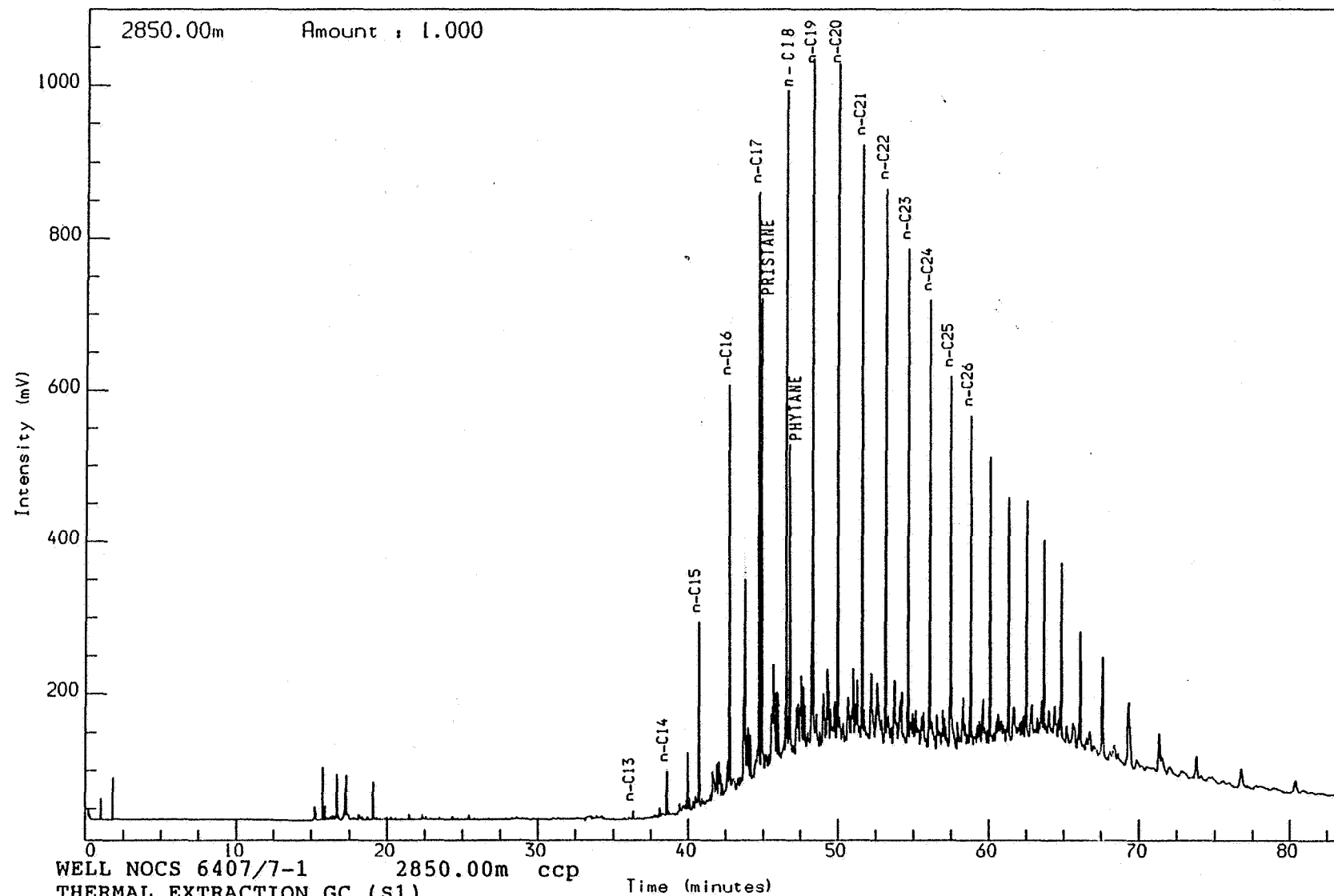
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100861,1,1.

Multichrom



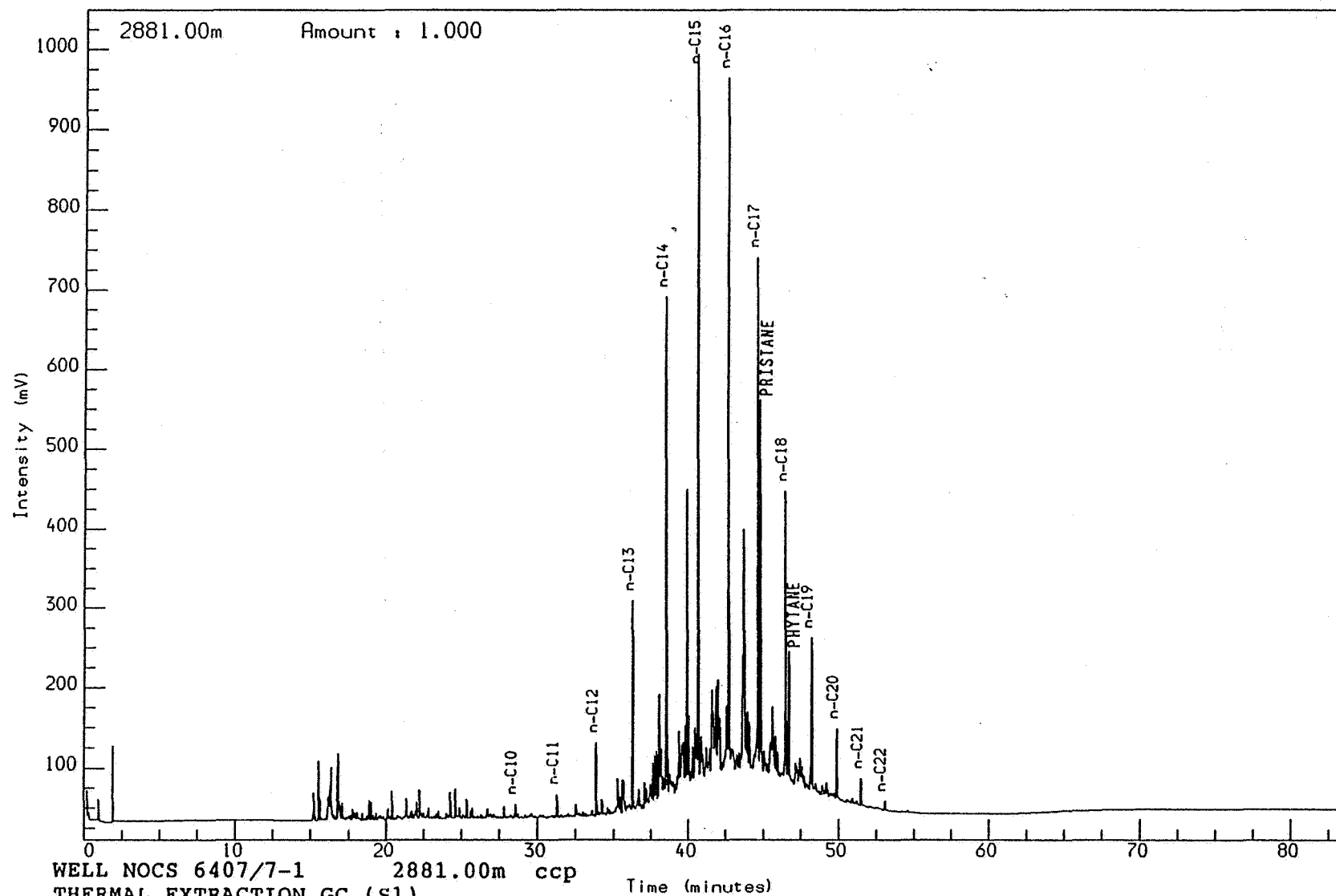
Reported on 29-JUN-1992 at 08:45

Schlumberger GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100901,1,1.

Multichrom



Reported on 26-JUN-1992 at 11:06

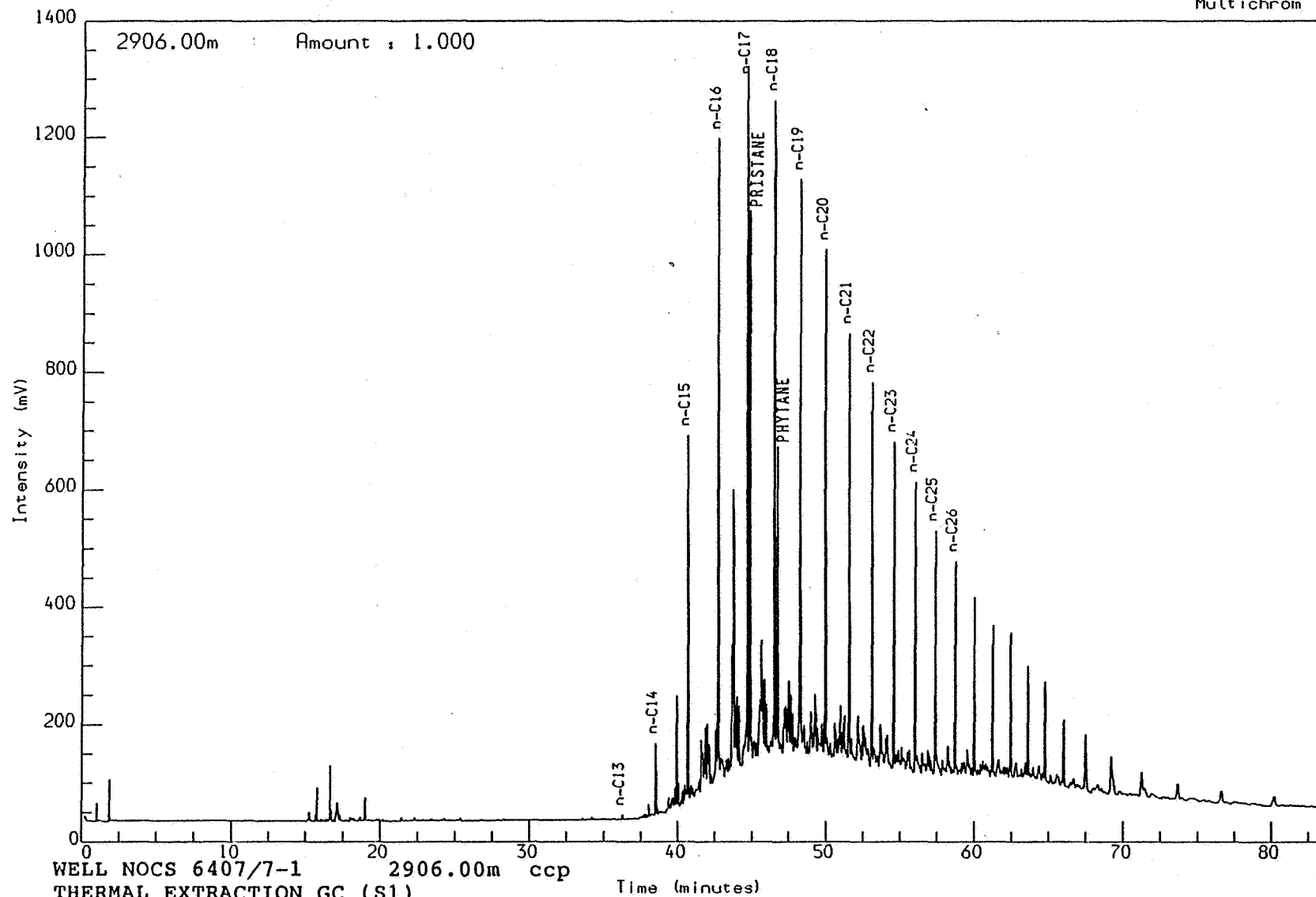
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100941,1,1.

Multichrom



Reported on 29-JUN-1992 at 08:47

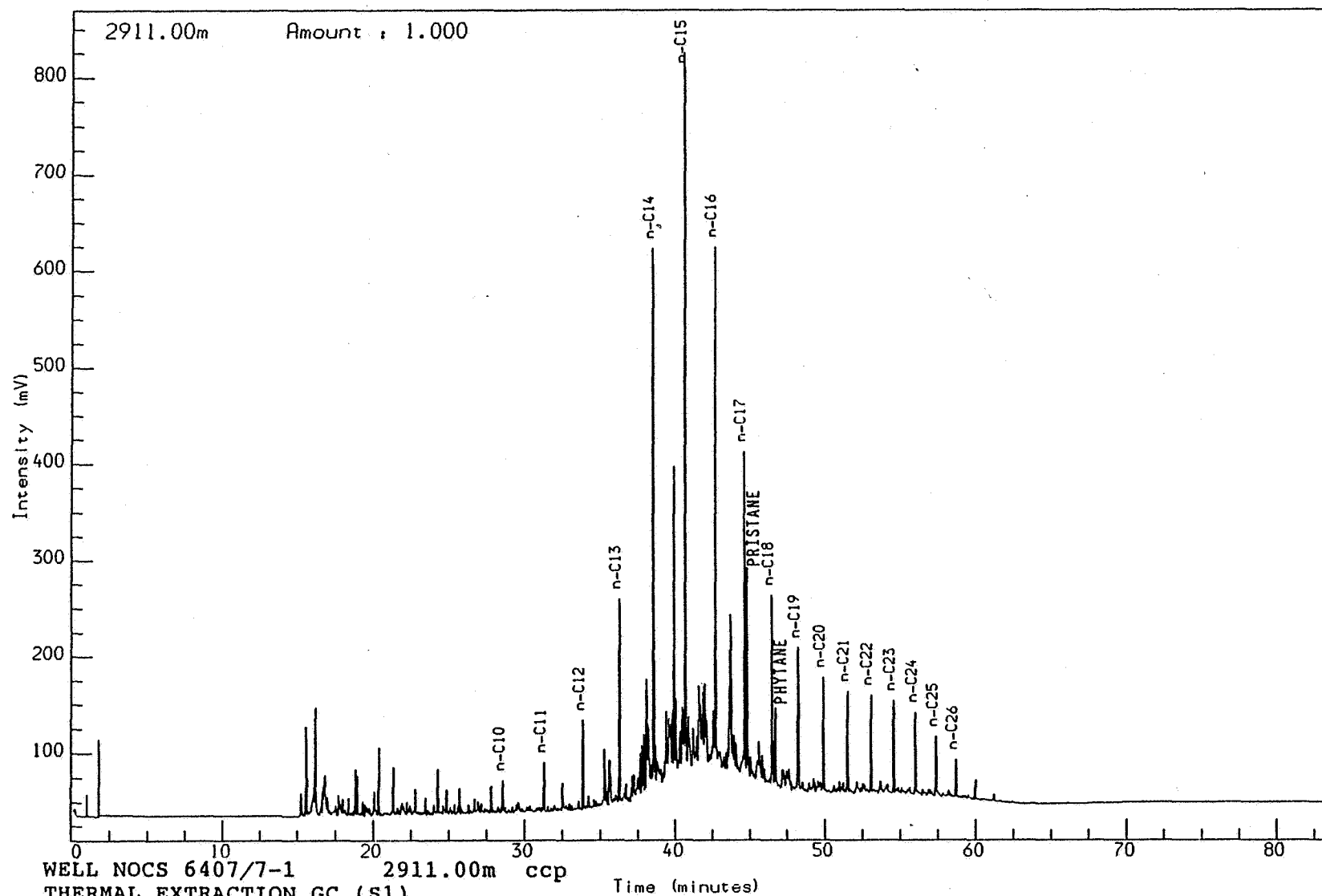
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100952,1,1.

Multichrom



Reported on 26-JUN-1992 at 08:12

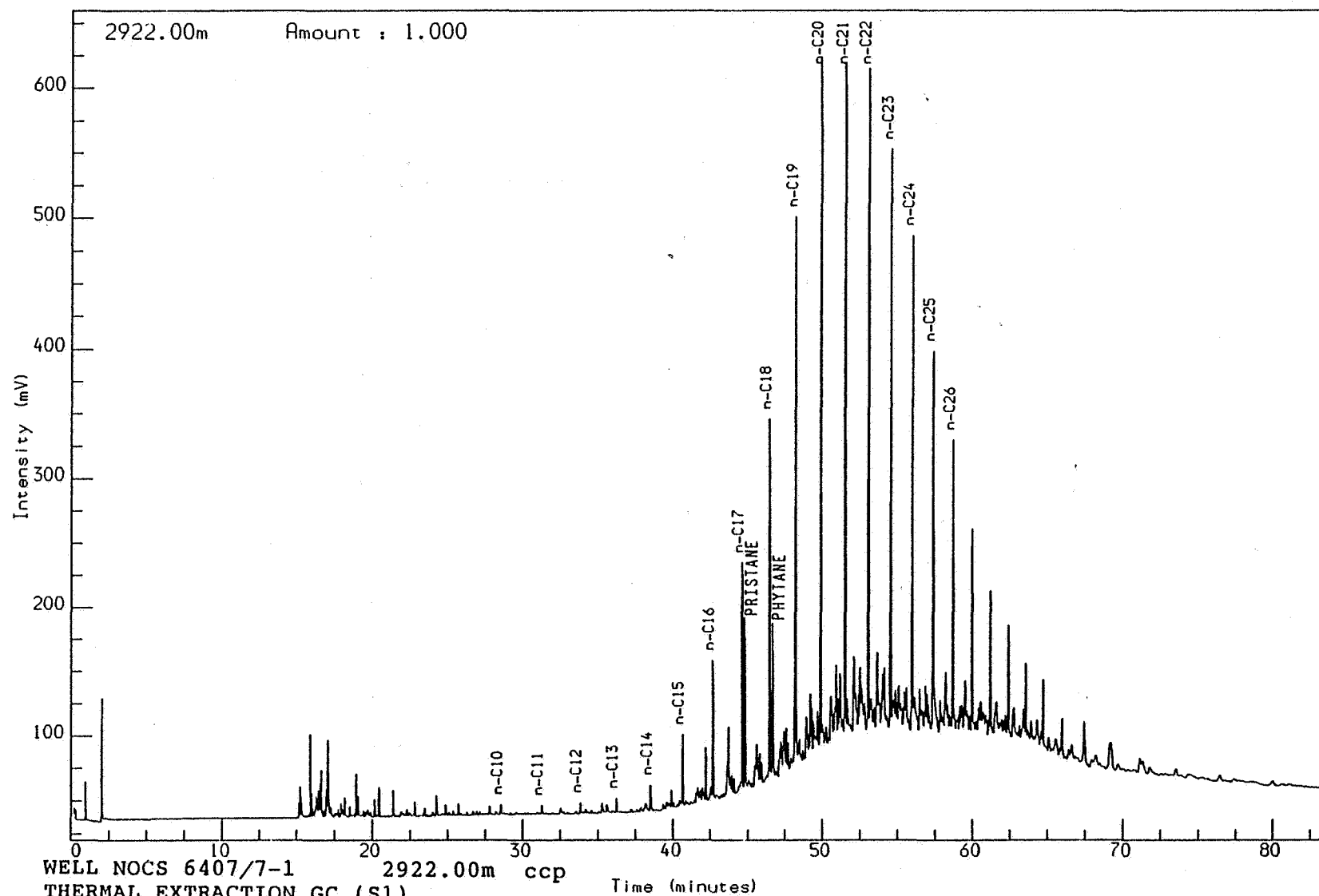
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4100971.1.1.

Multichrom



Reported on 30-JUN-1992 at 08:24

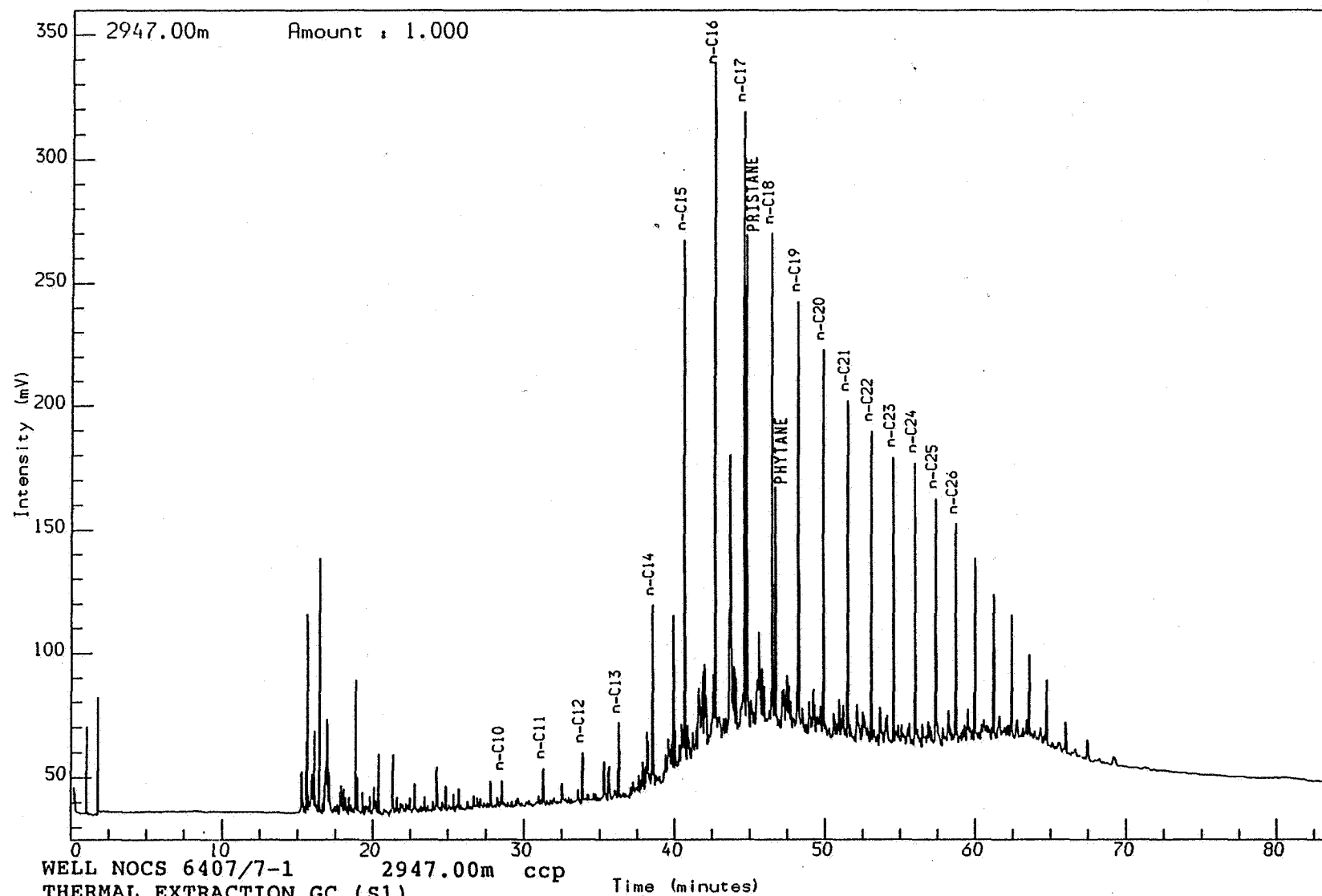
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 23 PG4101021,1,1.

Multichrom



Reported on 26-JUN-1992 at 09:22

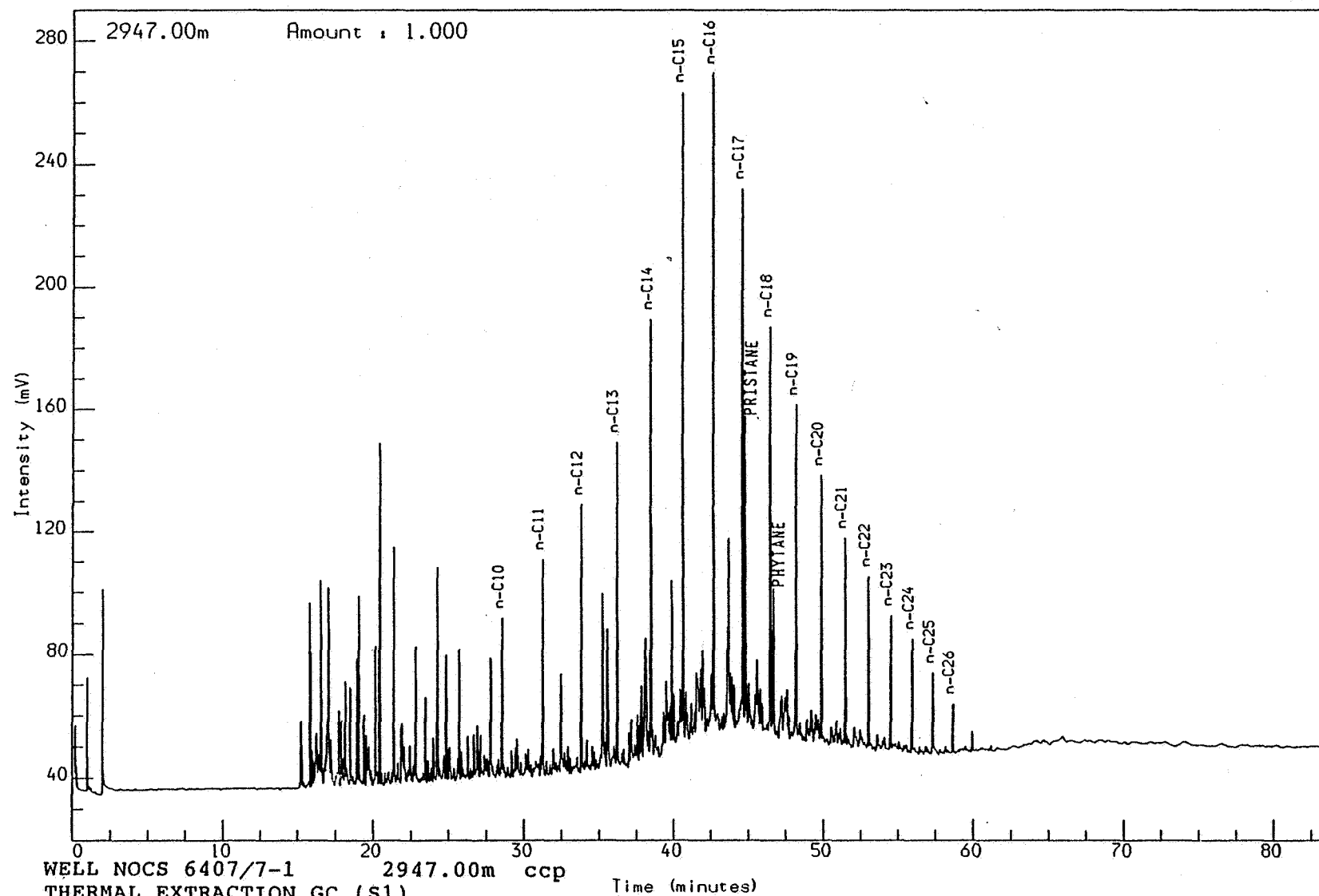
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4101022B,1,1.

Multichrom



Reported on 30-JUN-1992 at 08:27

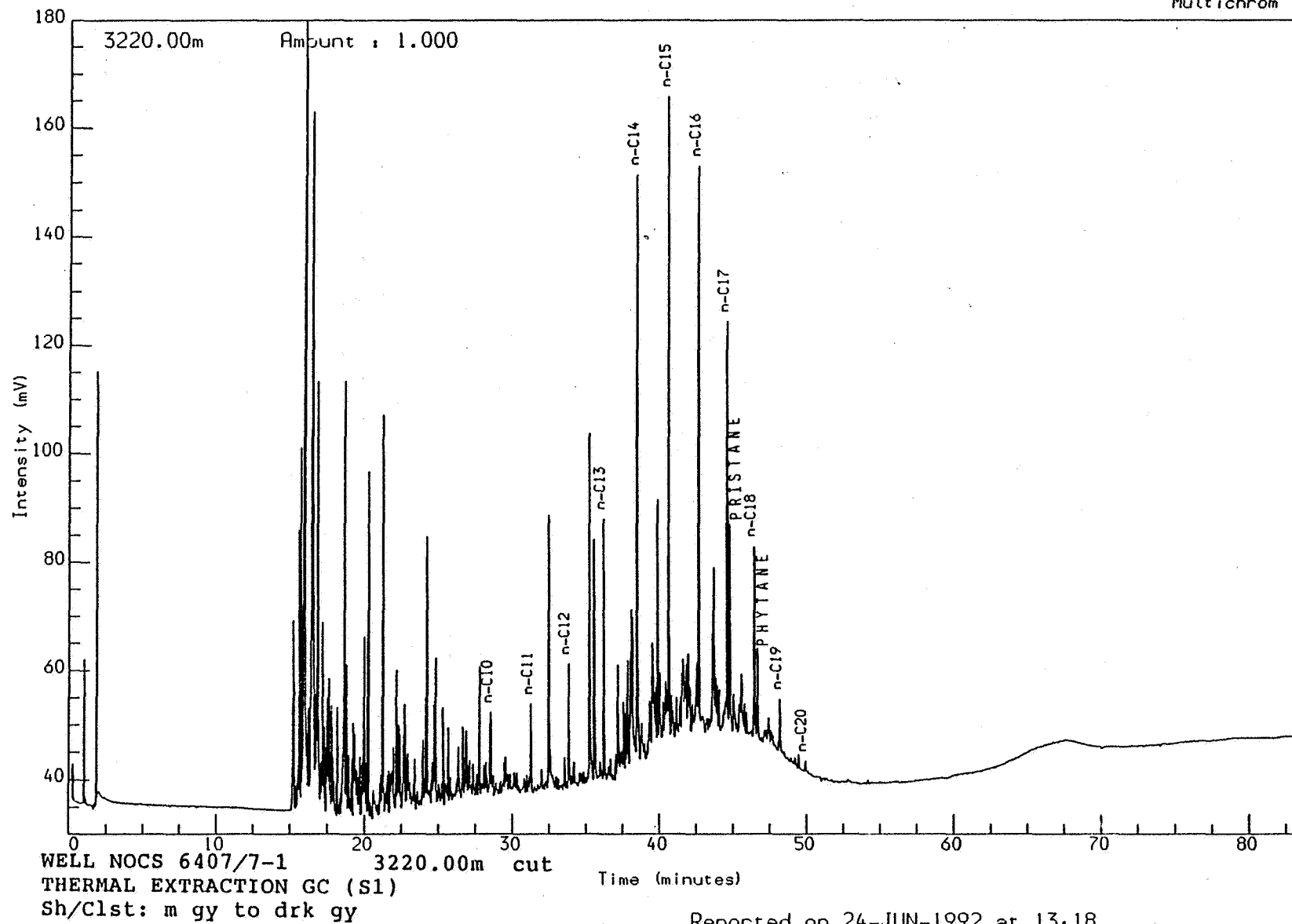
Schlumberger

GECO-PRAKLA

GEOLAB NOR

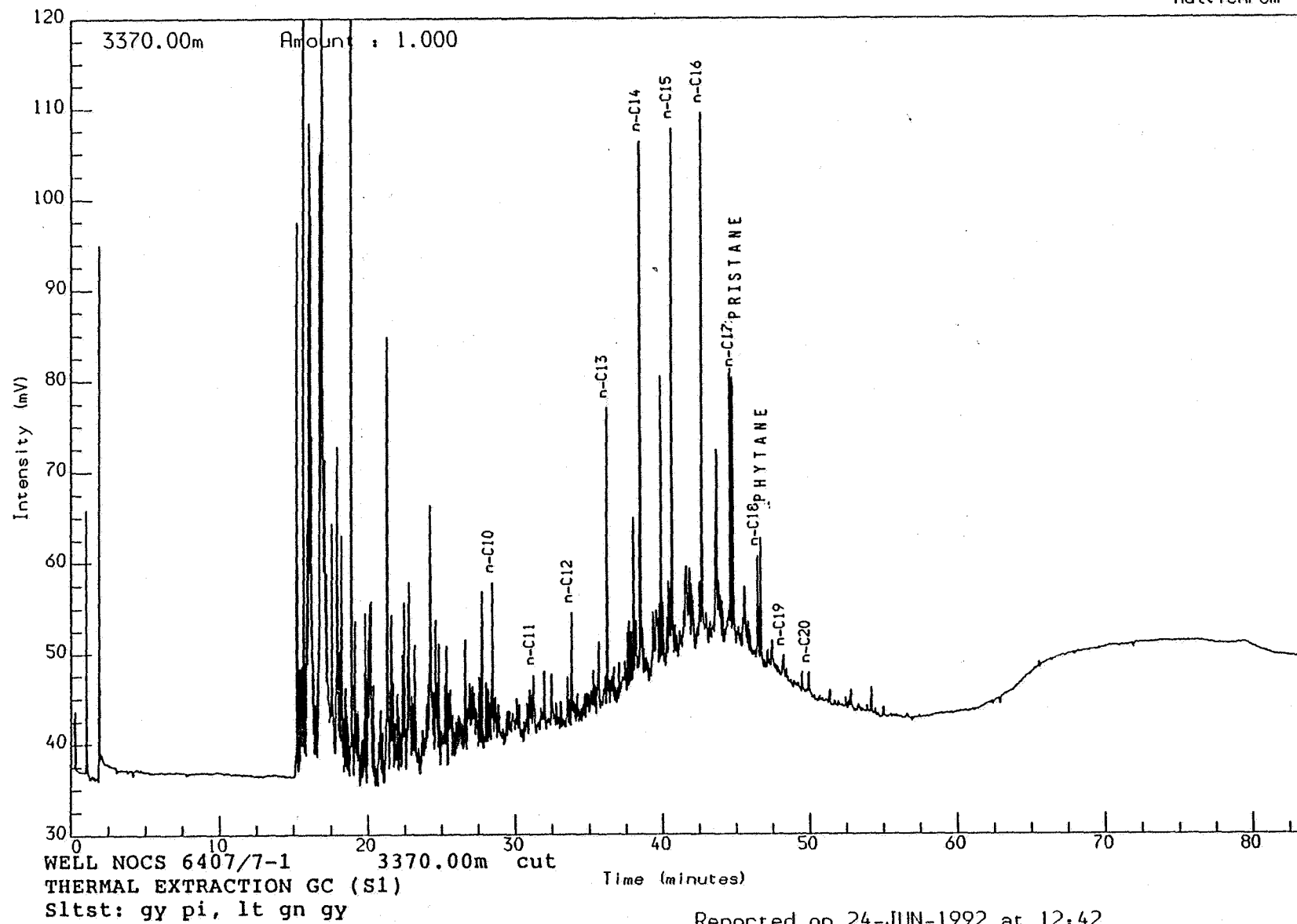
Analysis Name : [522020] 23 PG4101732.1,1.

Multichrom



Analysis Name : [522020] 23 PG4102042,1,1.

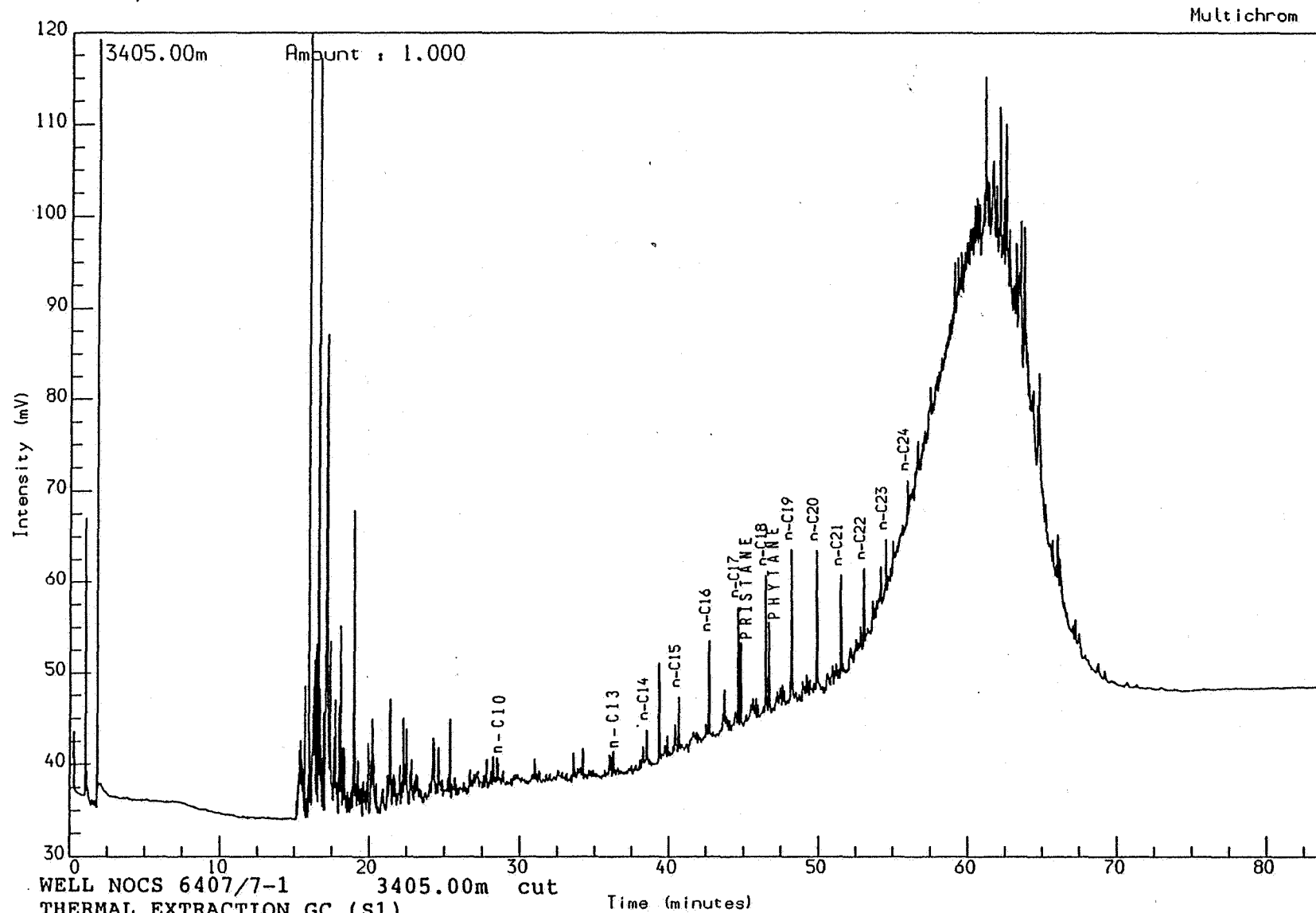
Multichrom



Schlumberger GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 23 PG4102111B,1,1.



Reported on 25-JUN-1992 at 10:00

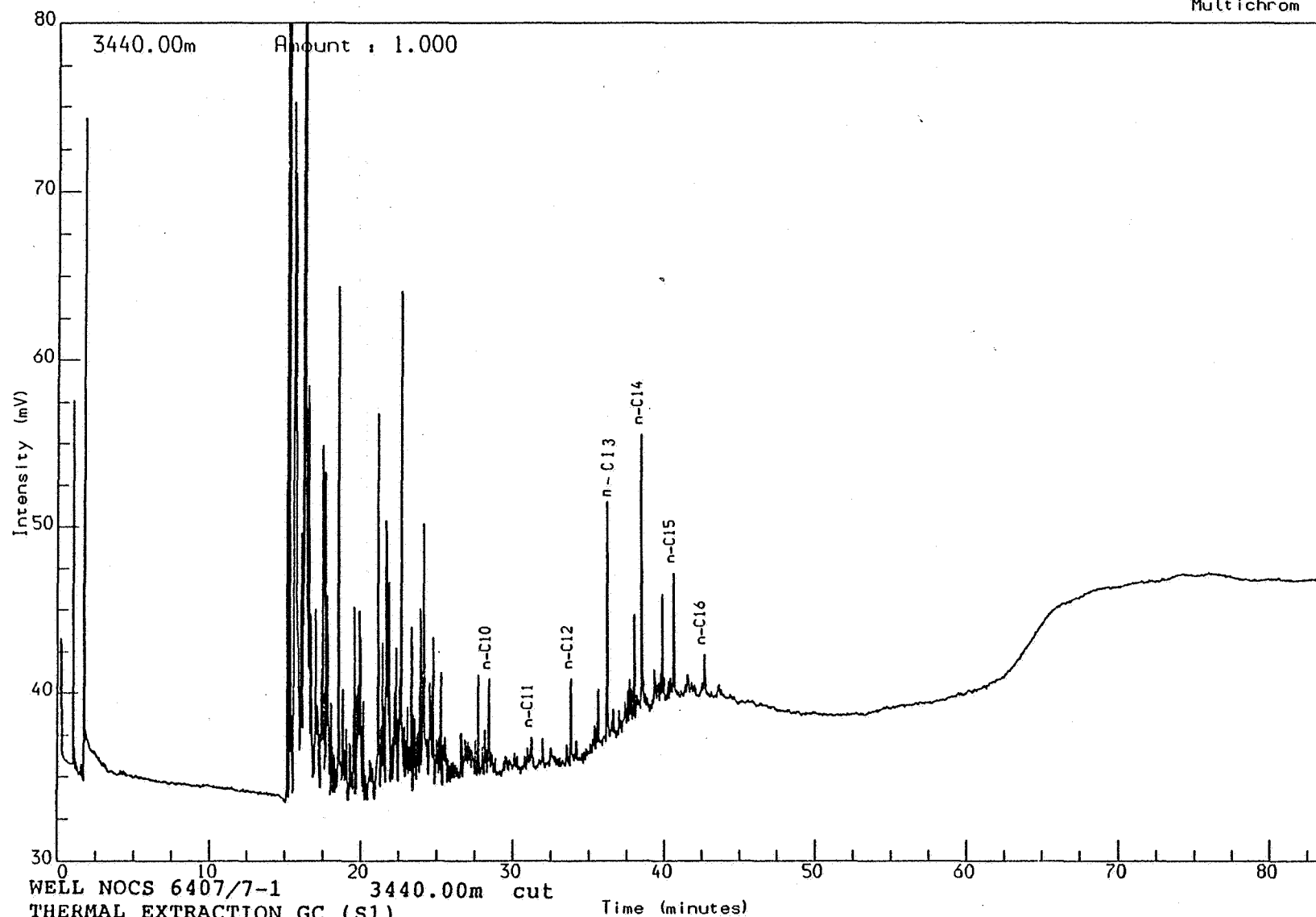
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 23 PG4102182.1.1.

Multichrom



Reported on 24-JUN-1992 at 10:30

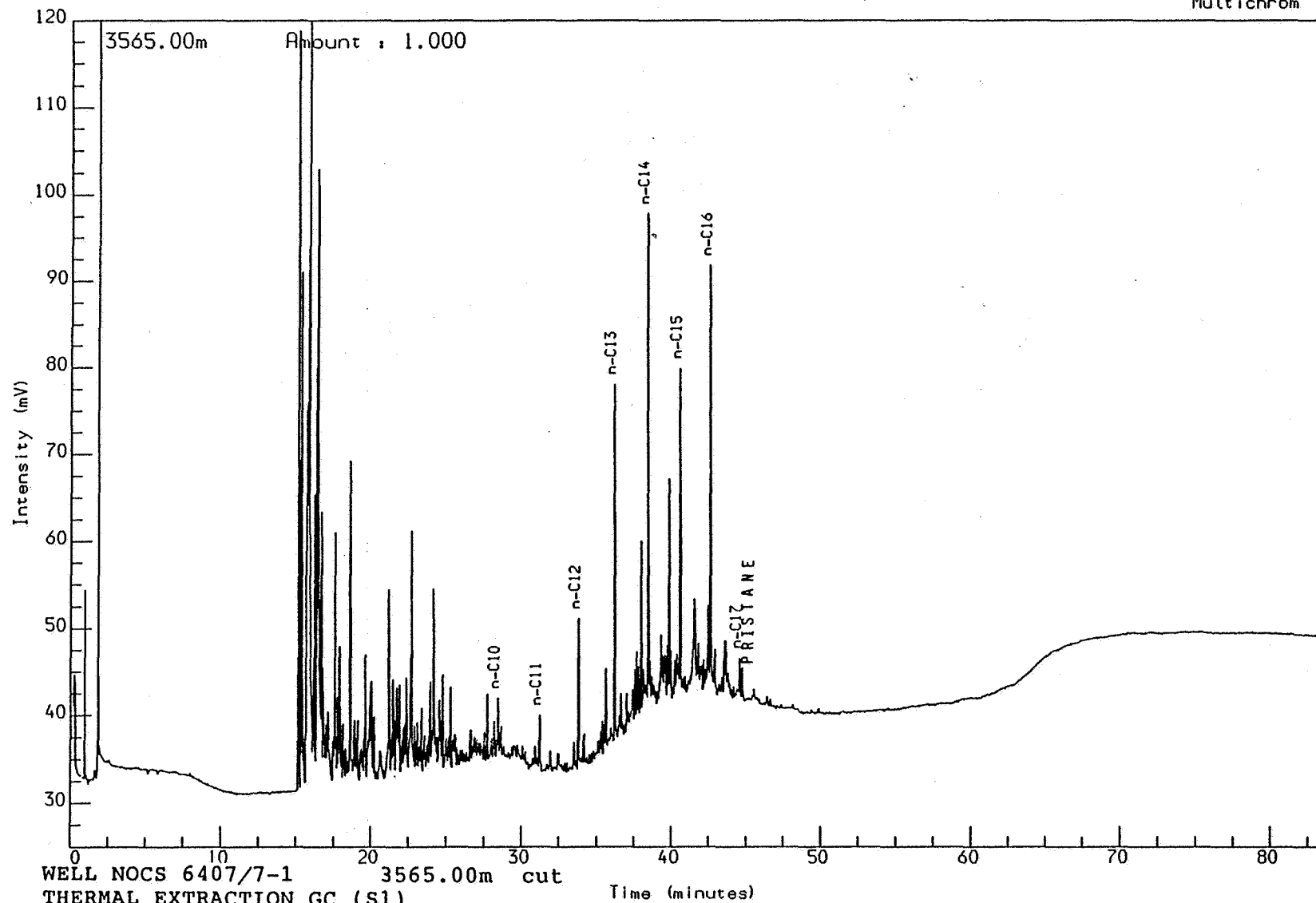
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 23 PG4102342.1,1.

Multichrom



WELL NOCS 6407/7-1 3565.00m cut
THERMAL EXTRACTION GC (S1)
Sh/C1st: m gy brn

Time (minutes)

Reported on 25-JUN-1992 at 13:15

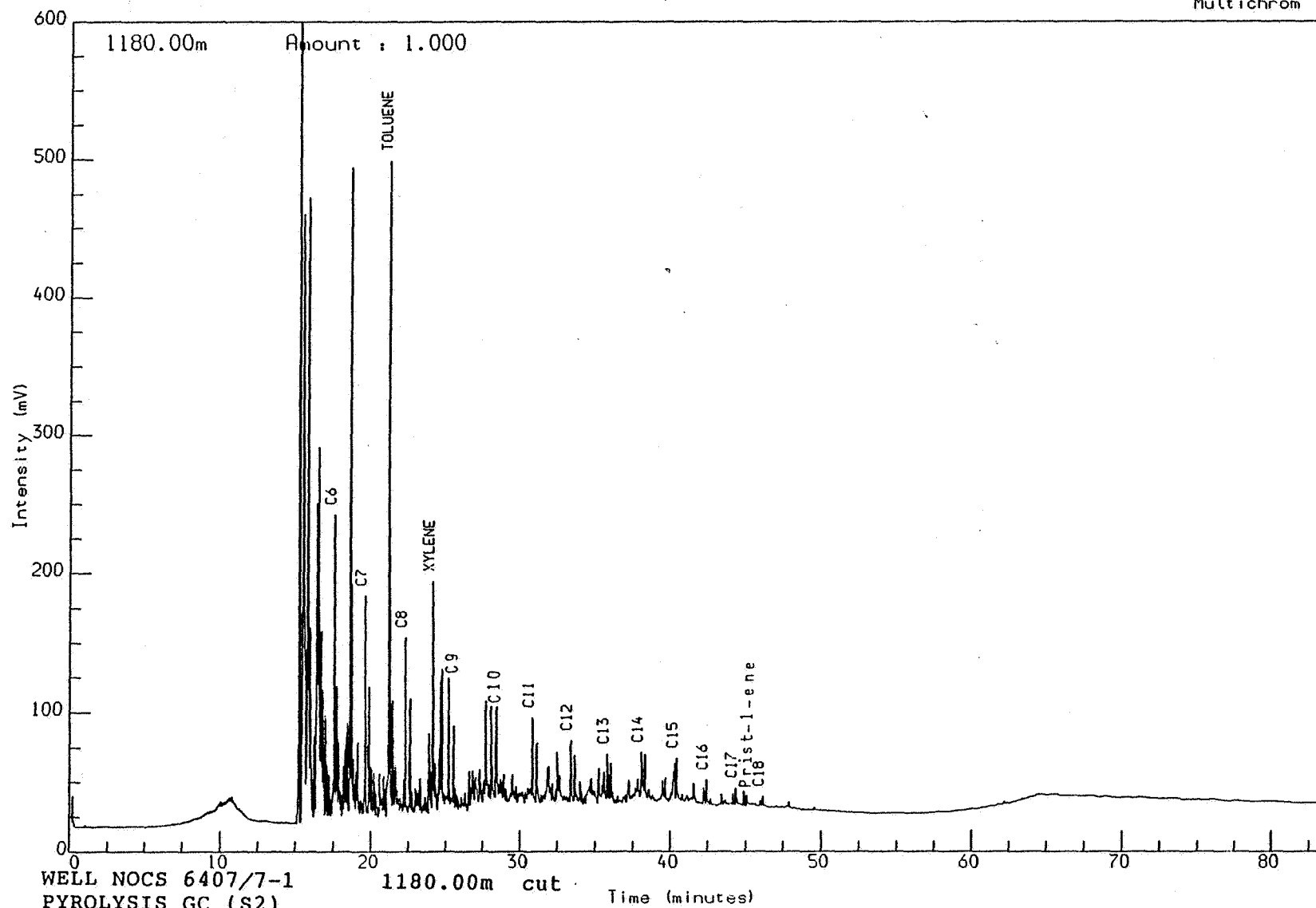
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100111,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/C1st: m lt ol gy to lt brn gy

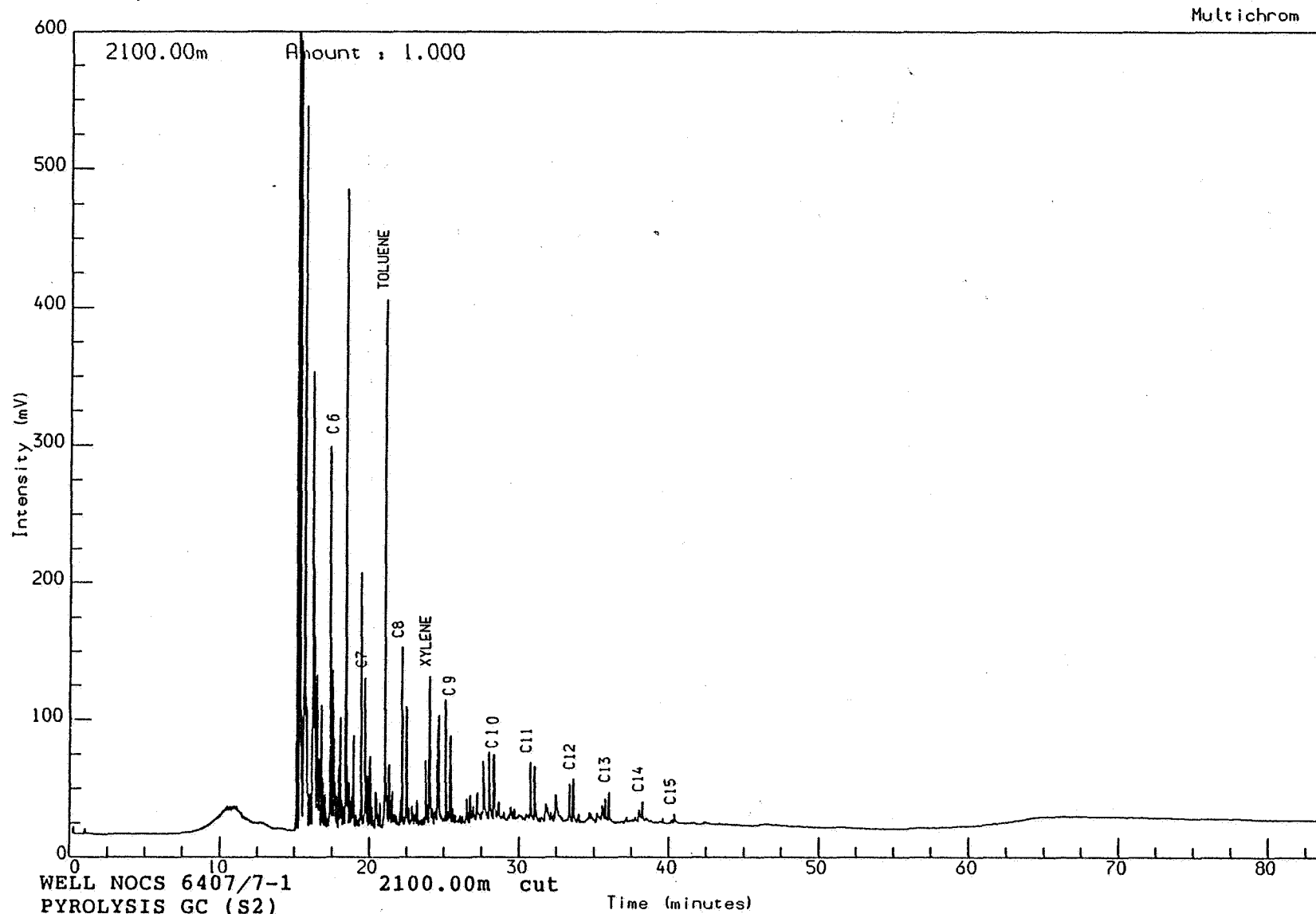
Reported on 19-JUN-1992 at 09:17

Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 24 PG4100571.1.1.



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/C1st: m lt bl gy to m lt gy

Reported on 22-JUN-1992 at 08:51

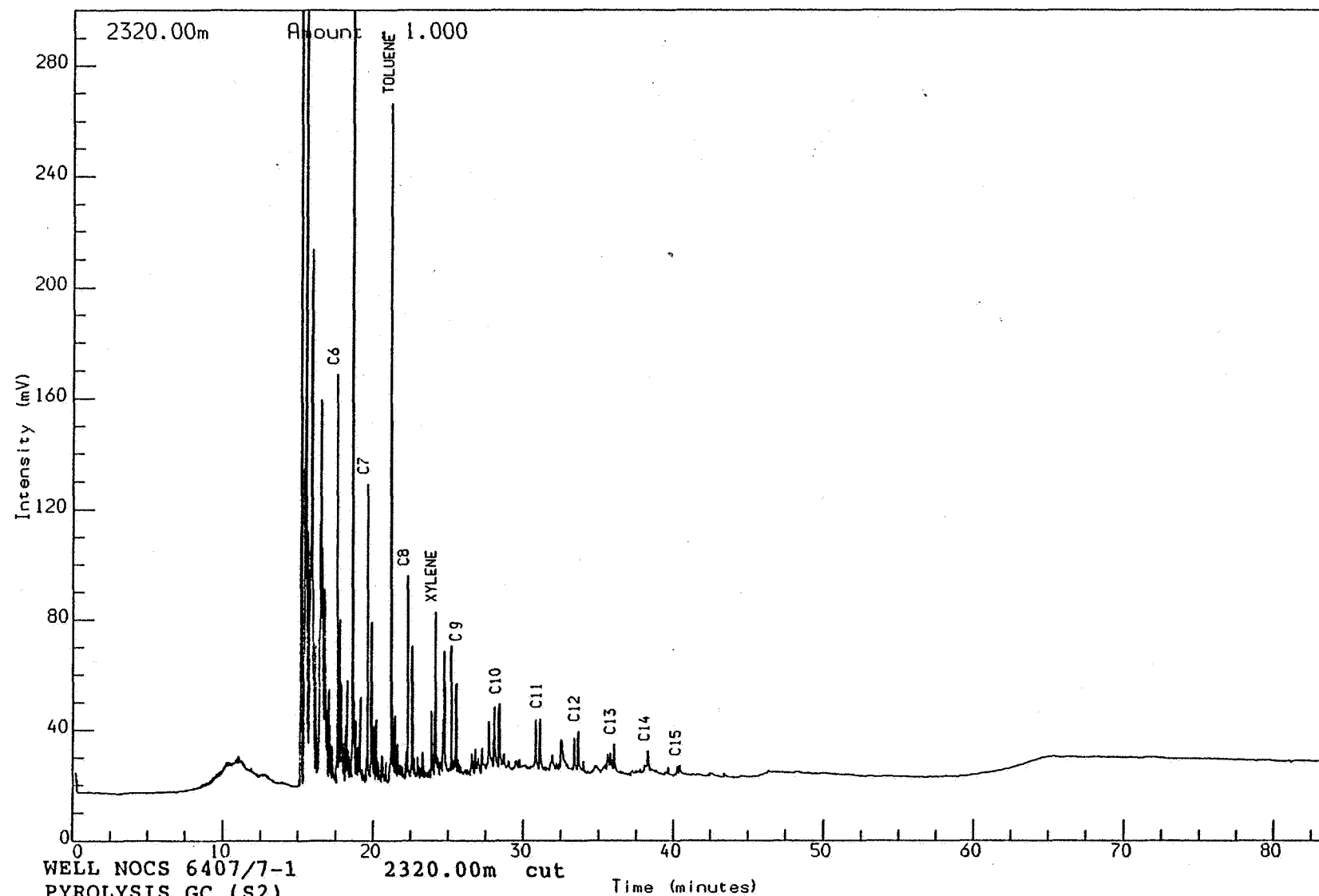
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 24 PG4101041.1.1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/C1st: m gy

Reported on 22-JUN-1992 at 08.53

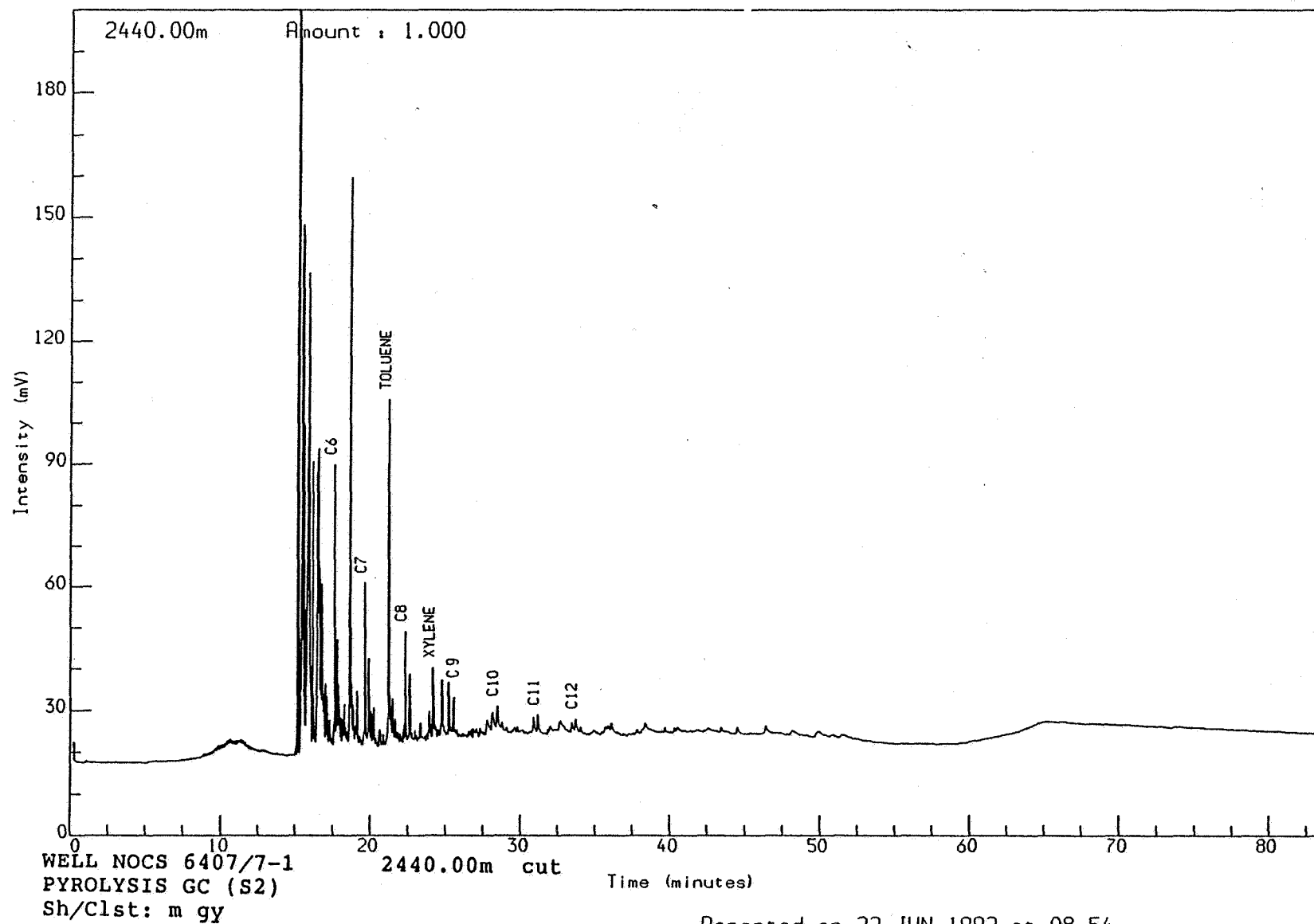
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 24 PG4101101,1,1.

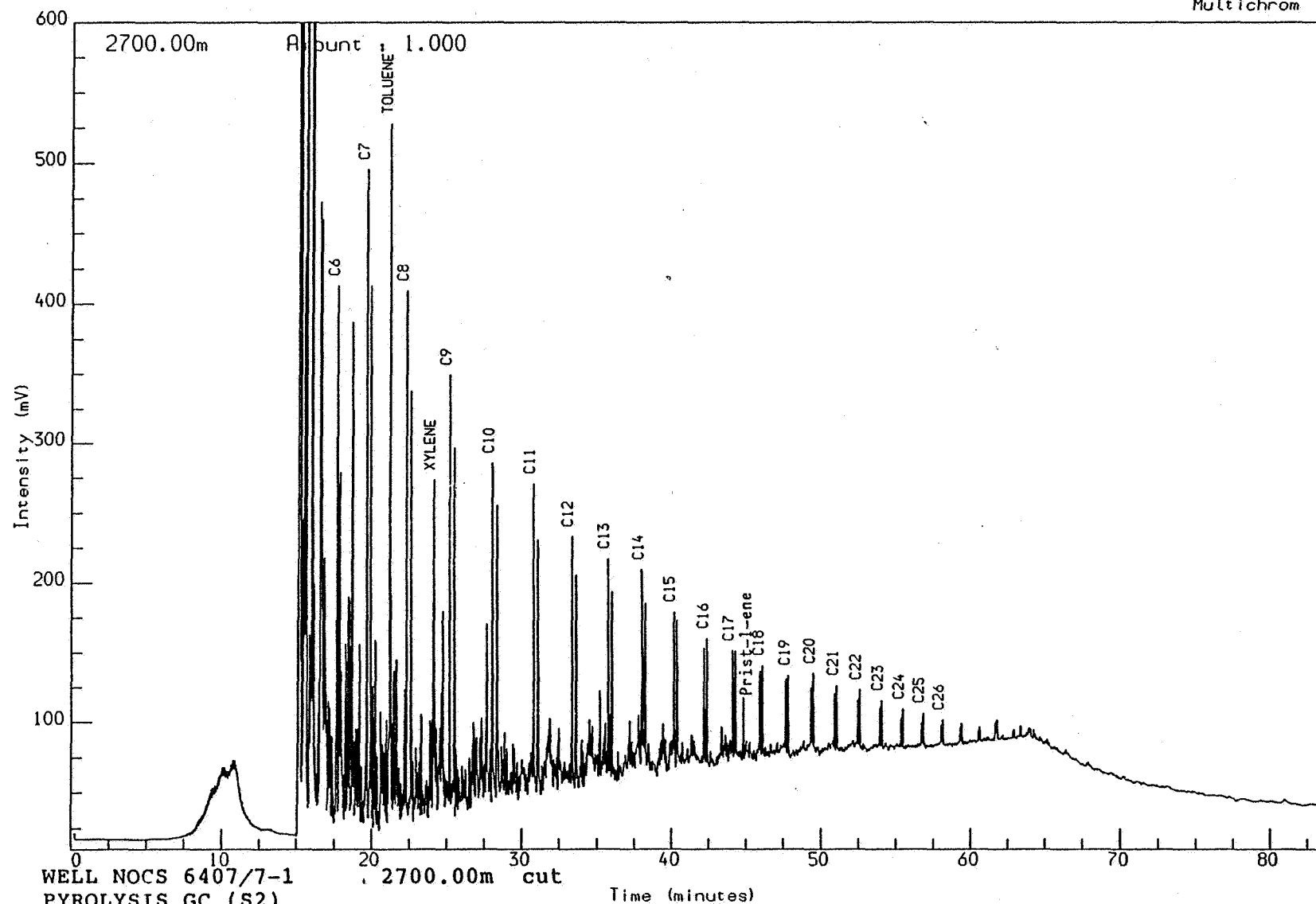
Multichrom



Schlumberger

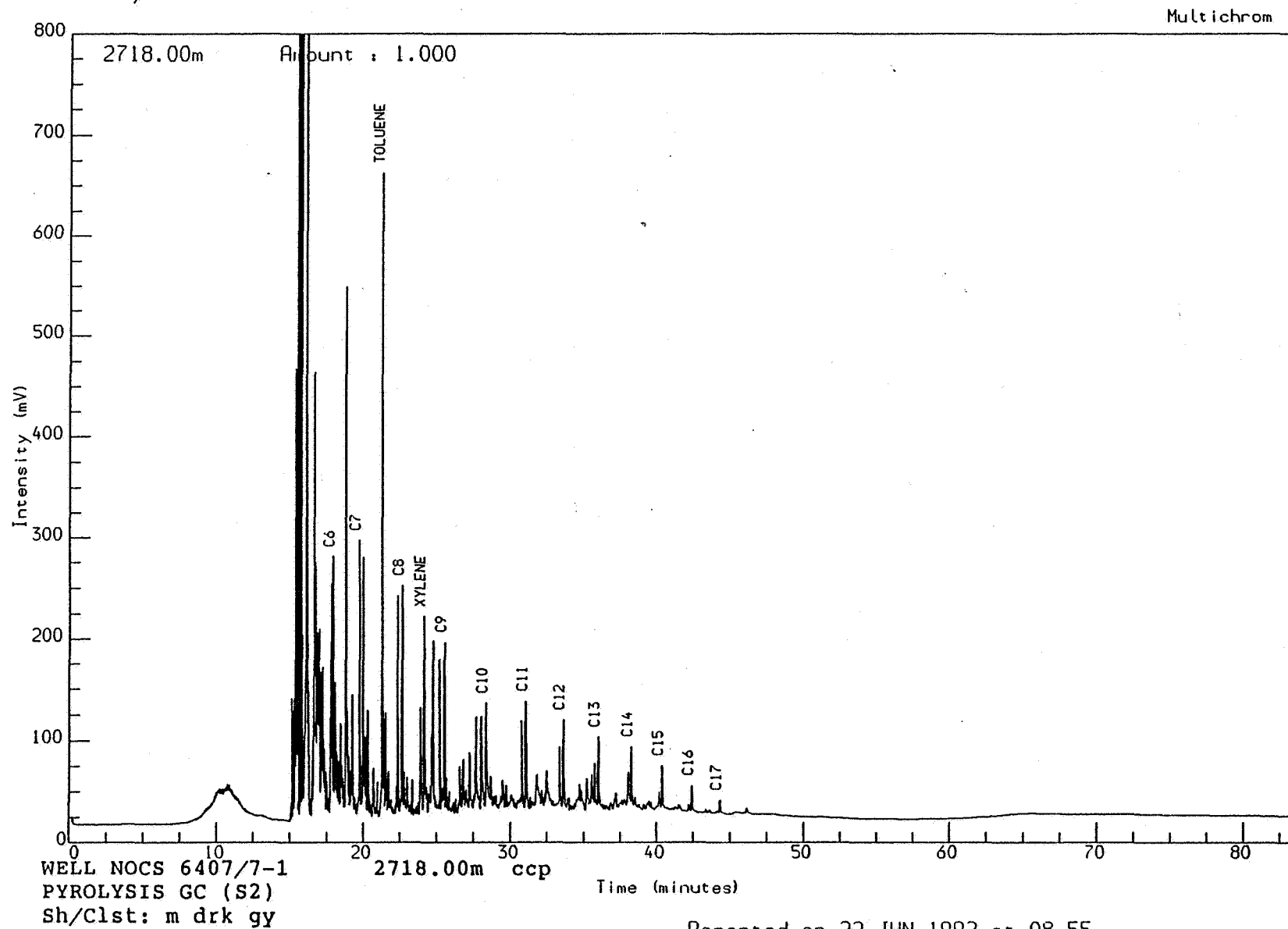
GECO-PRAKLA

GEOLAB  NOR



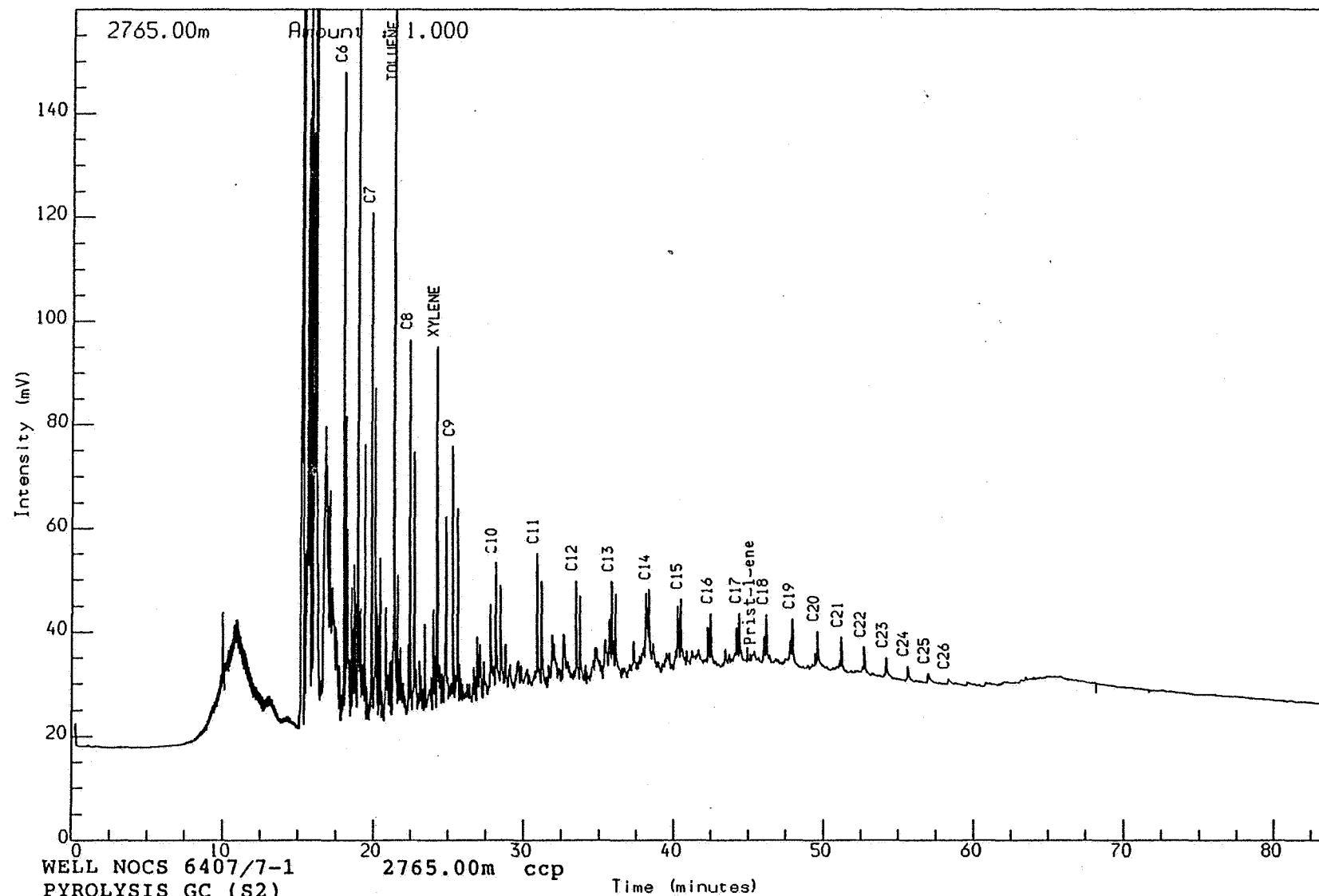
Reported on 1-JUL-1992 at 08:30

Analysis Name : [522020] 24 PG4100681.1.1.



Analysis Name : [522020] 24 PG4100711,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

S/Sst: pl y brn

Reported on 26-JUN-1992 at 14:22

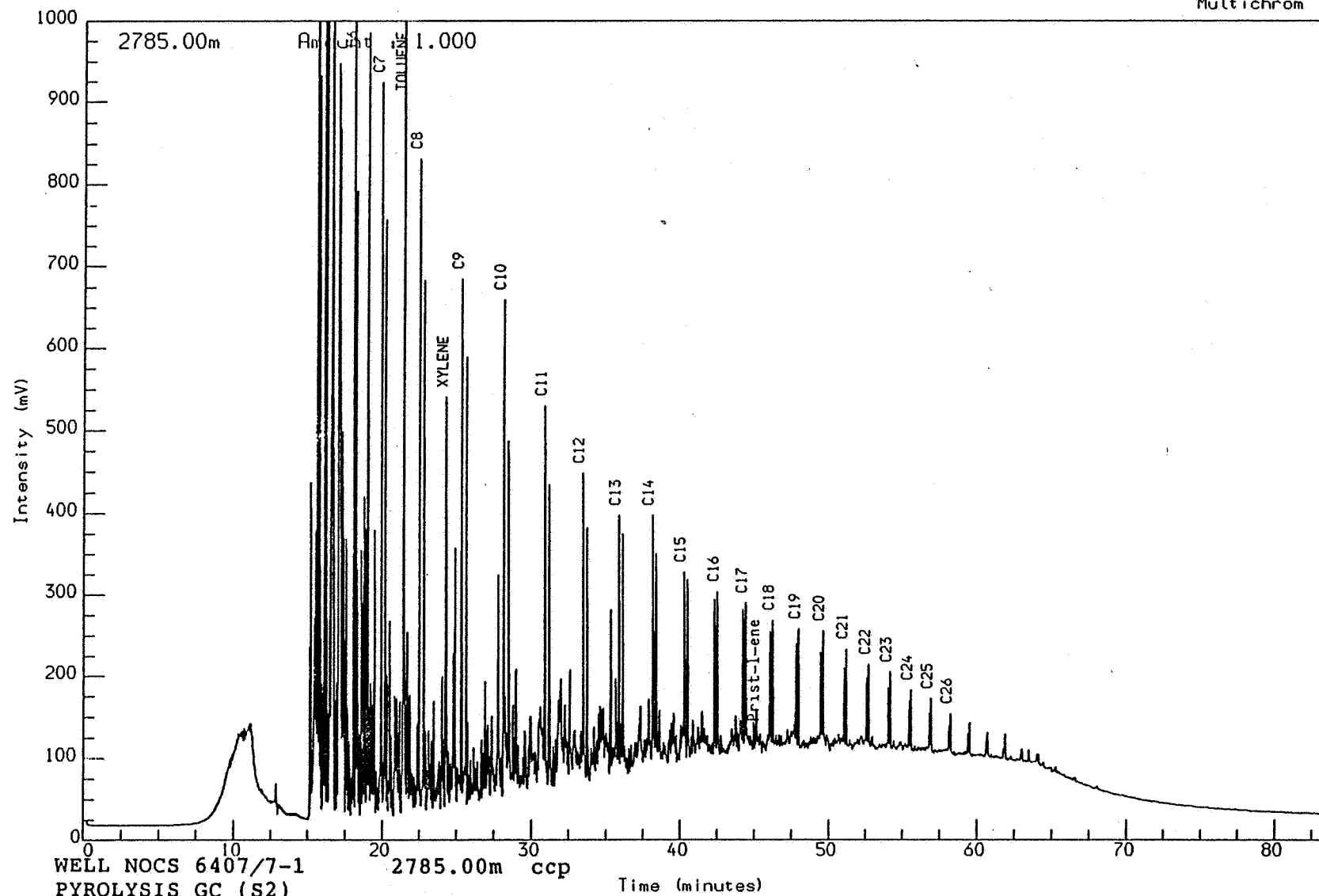
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100751.1.1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Slitst: m lt gy to dsk y gy

Reported on 26-JUN-1992 at 14:23

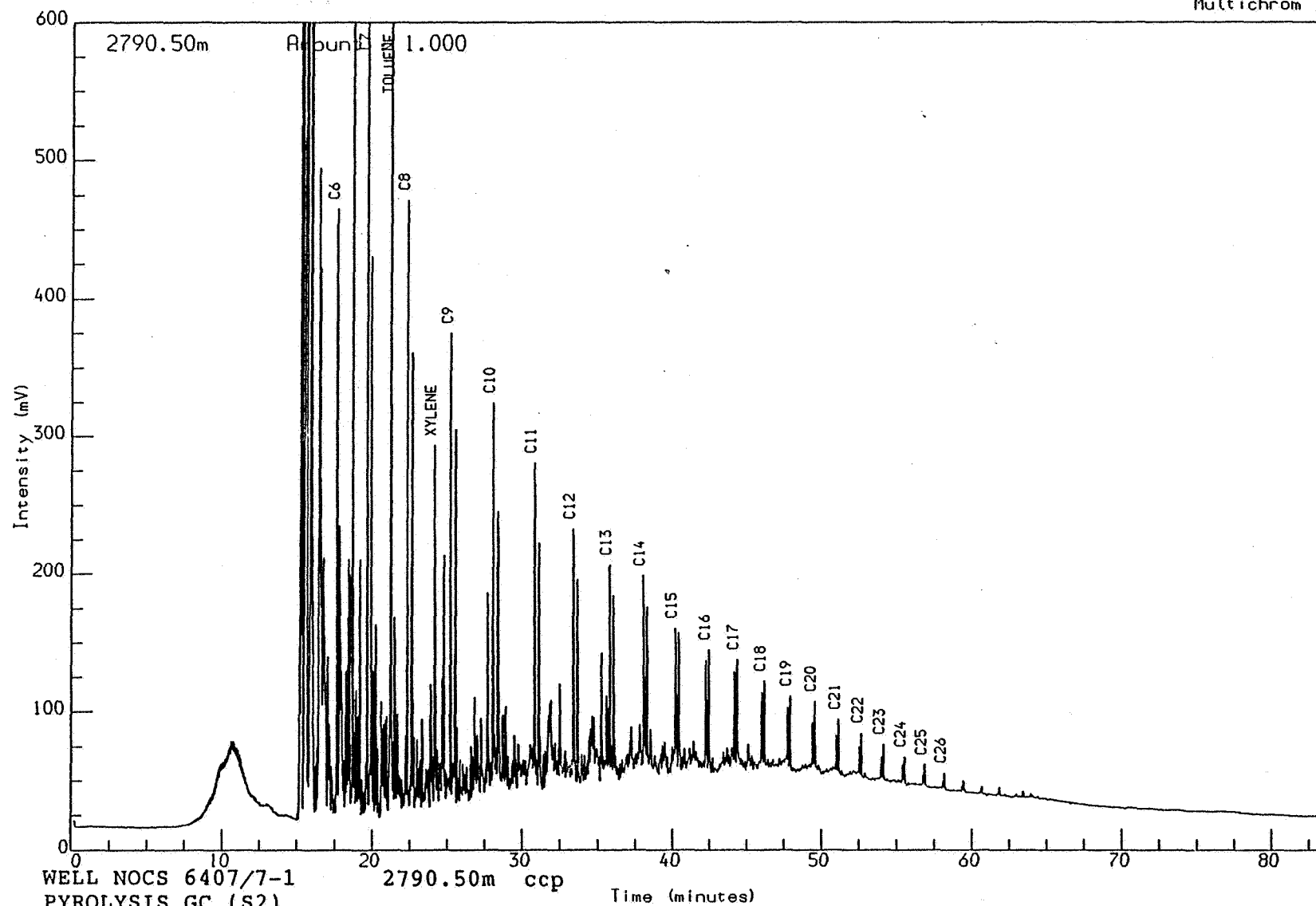
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100761.1.1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/C1st: m lt gy to dsk y gy

Reported on 25-JUN-1992 at 12:54

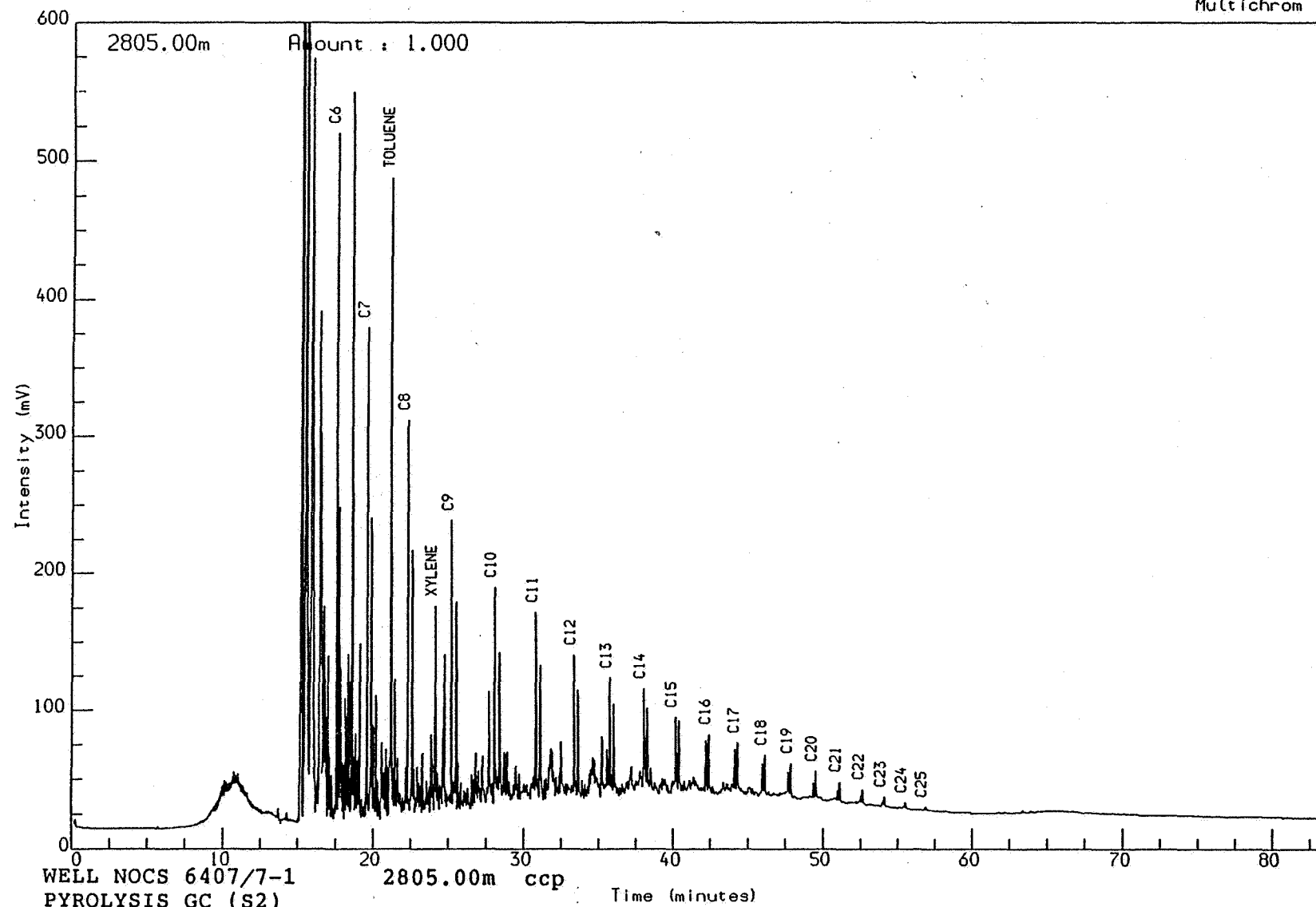
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100791,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/C1st: 1t ol gy to dsk ol gy

2805.00m ccp

Time (minutes)

Reported on 25-JUN-1992 at 10:04

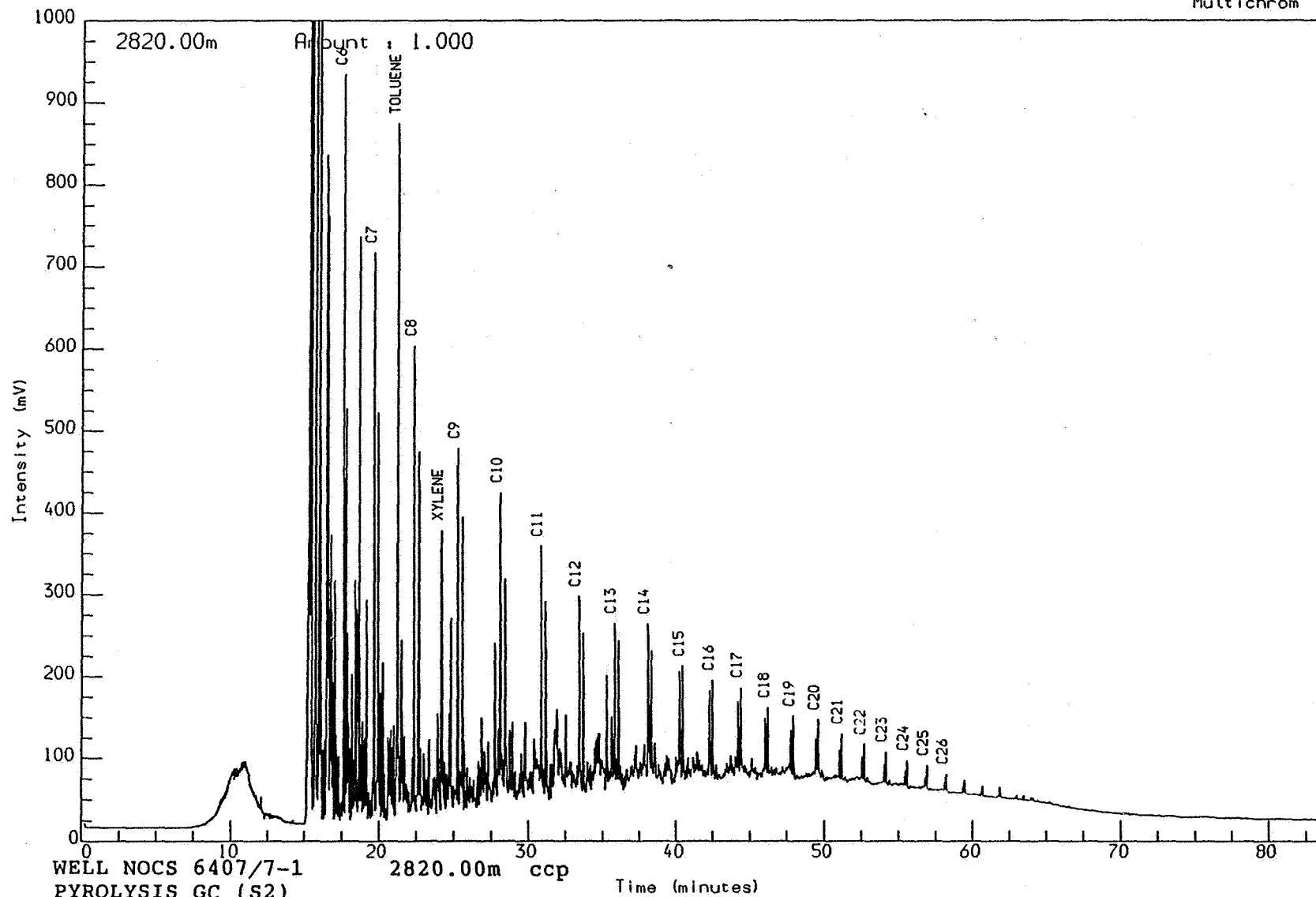
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 24 PG4100821,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/Clst: m lt gy

Reported on 25-JUN-1992 at 12:55

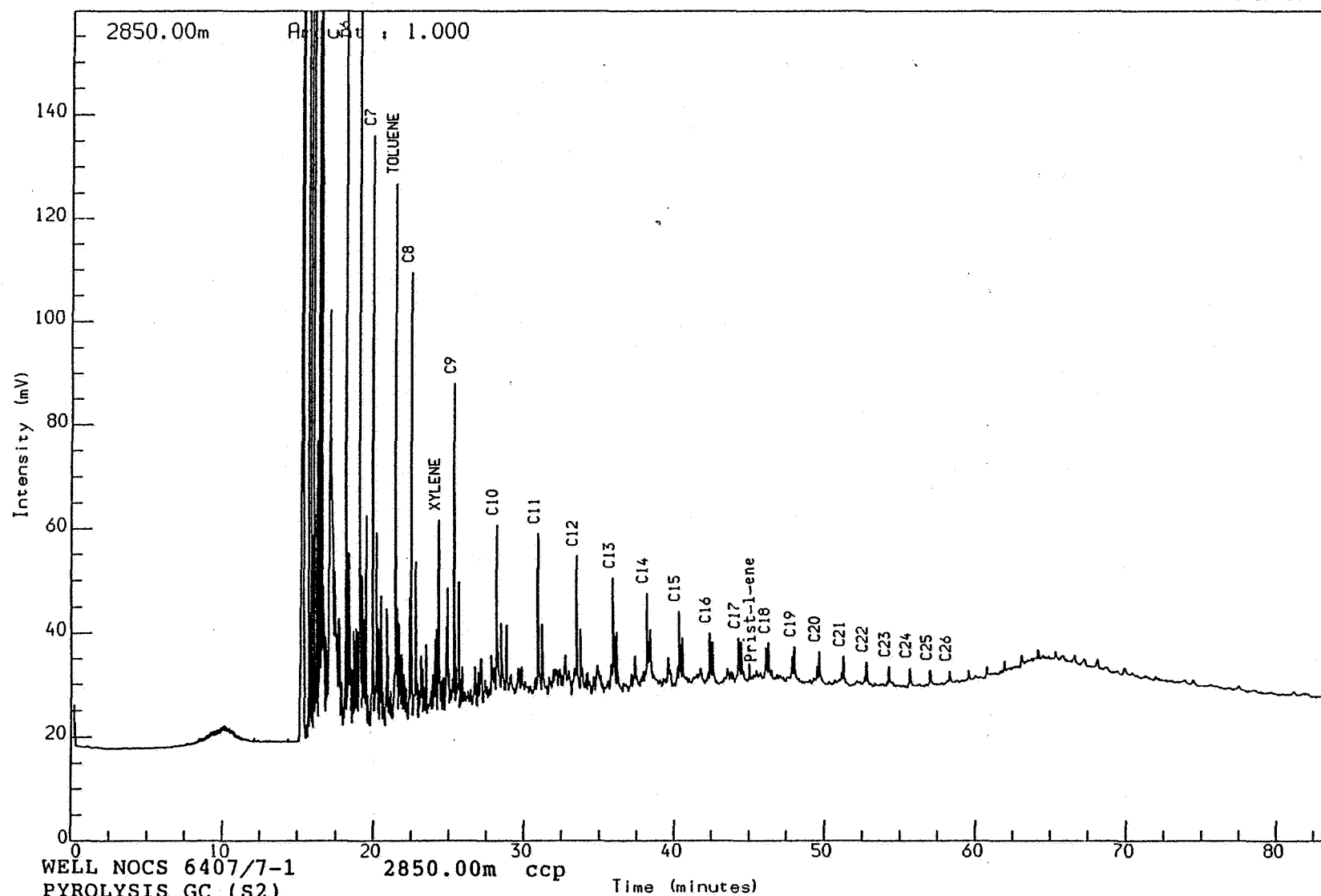
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100861,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

S/Sst: 1t ol gy to 1t y gy

Reported on 29-JUN-1992 at 08:48

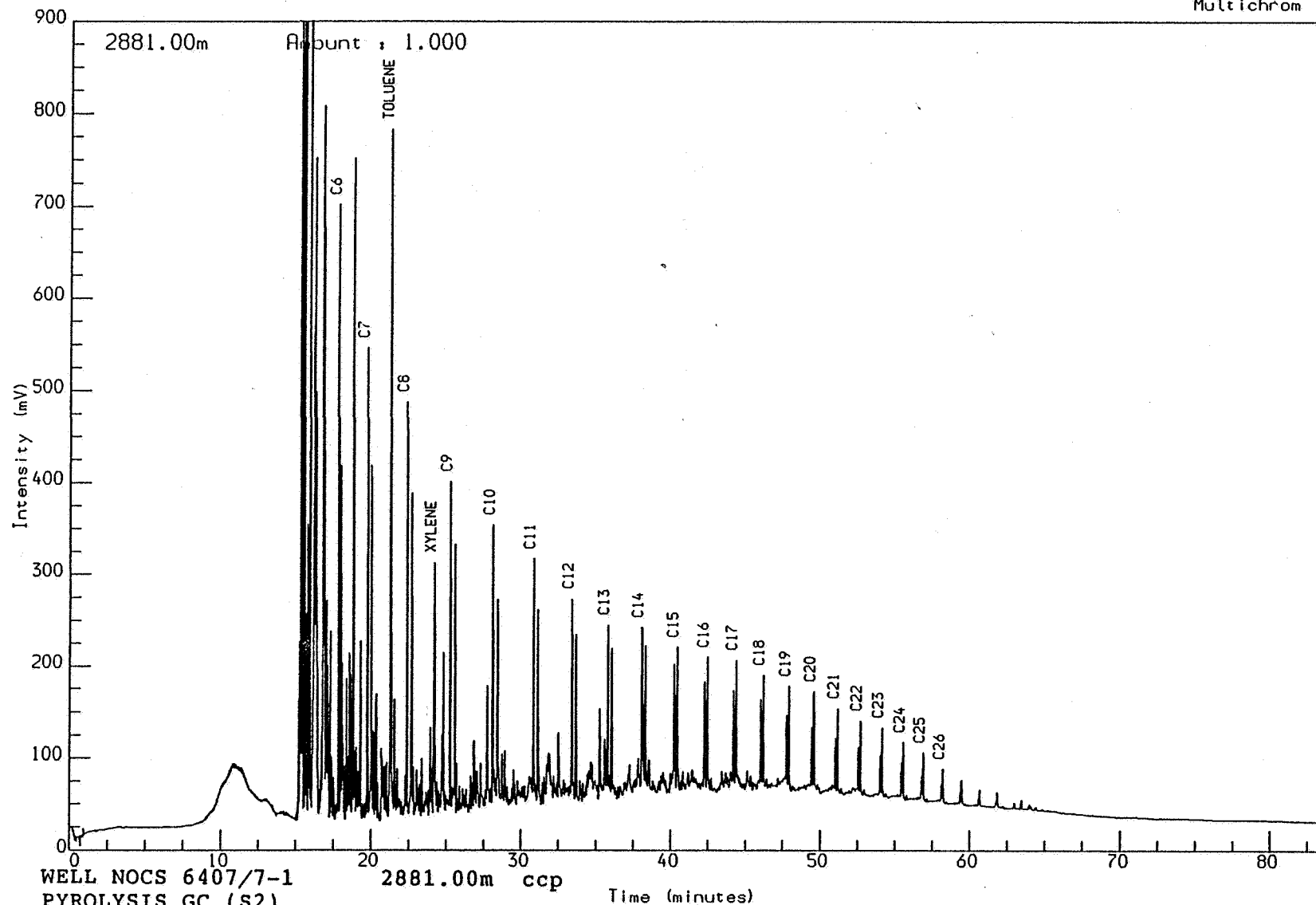
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100901.1.1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/Clst: m drk gy to lt brn gy

Reported on 26-JUN-1992 at 11:07

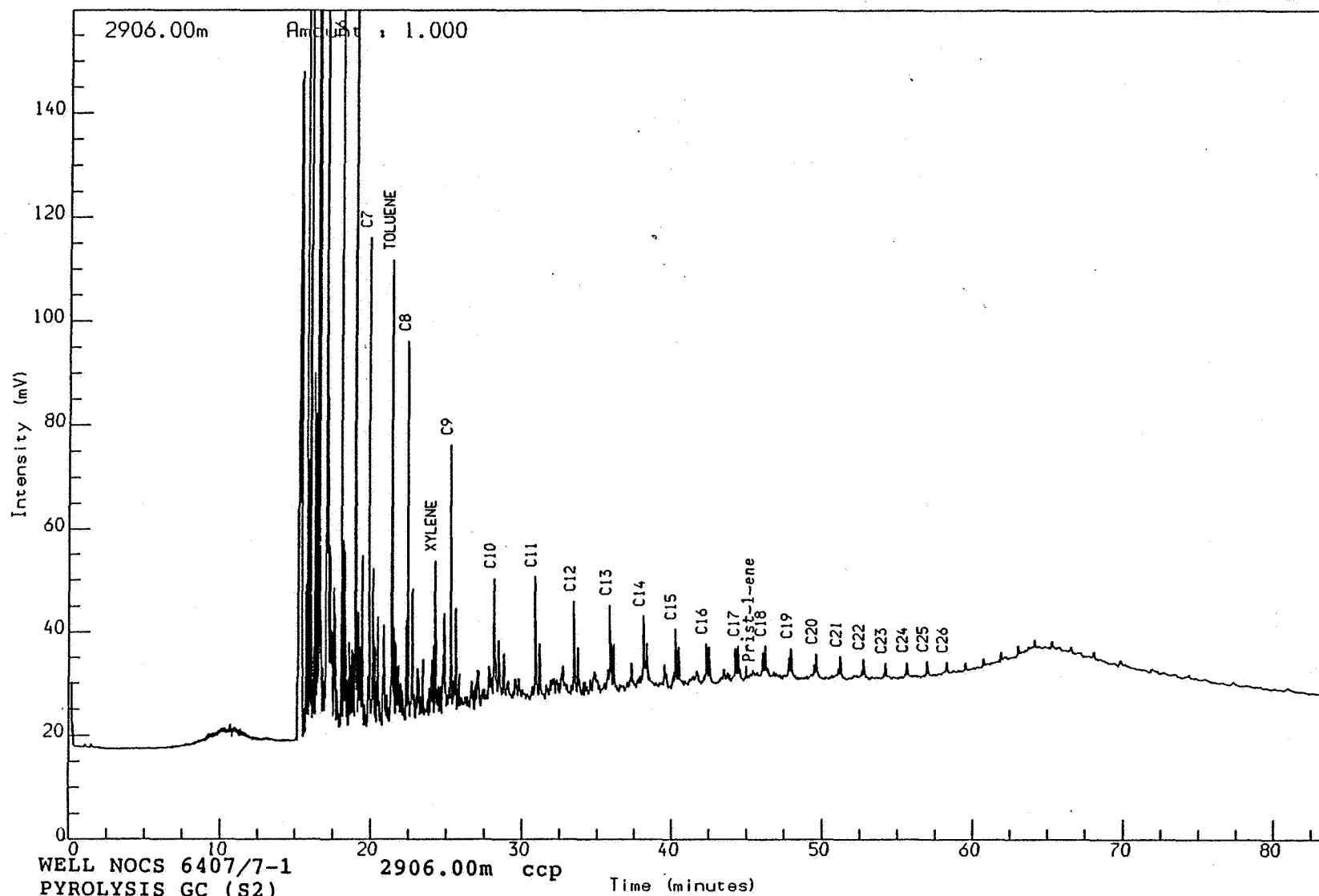
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100941.1.1.

Multichrom



Reported on 29-JUN-1992 at 09:17

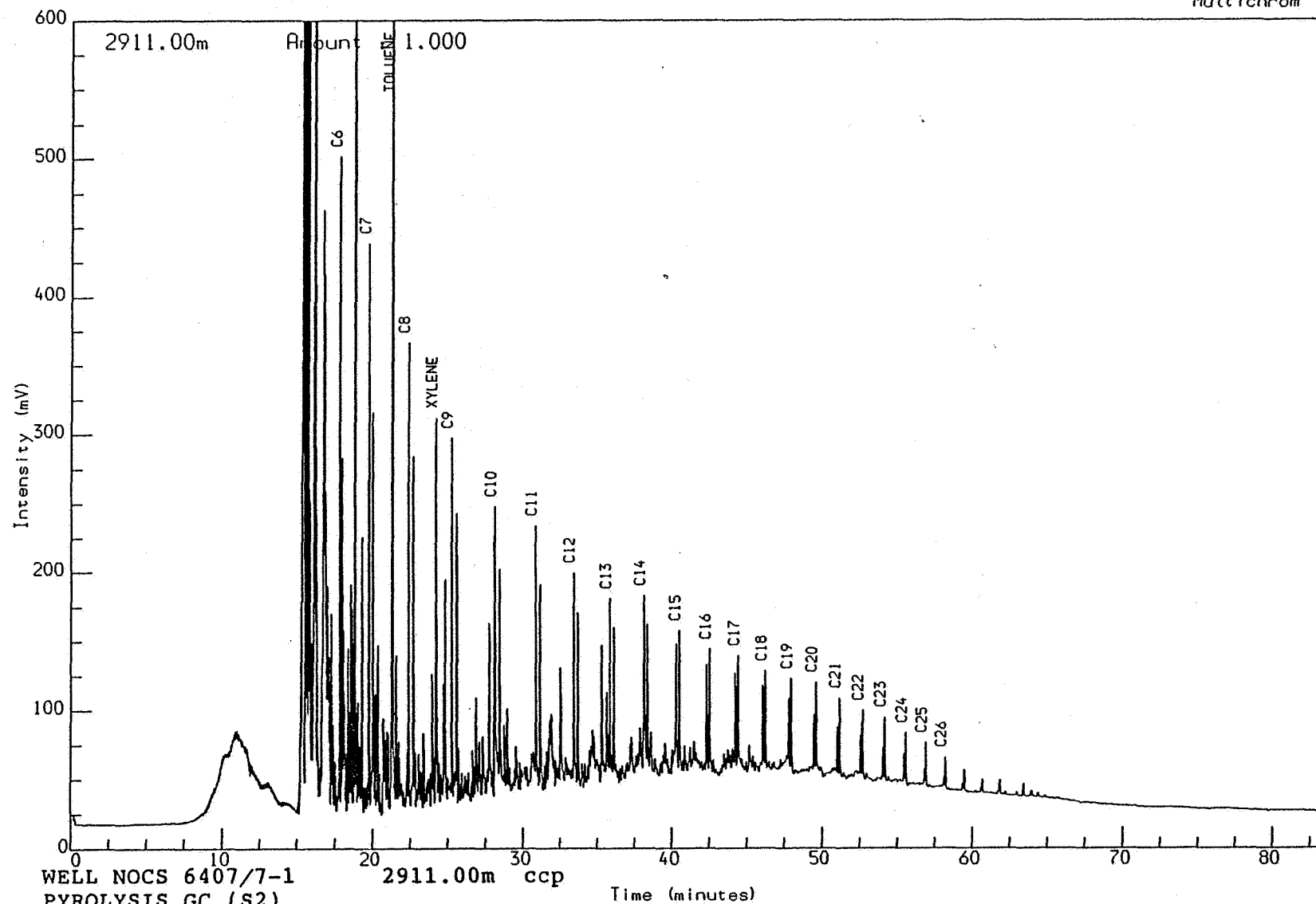
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100952.1.1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/Clst: m drk gy

2911.00m ccp

Time (minutes)

Reported on 26-JUN-1992 at 08:18

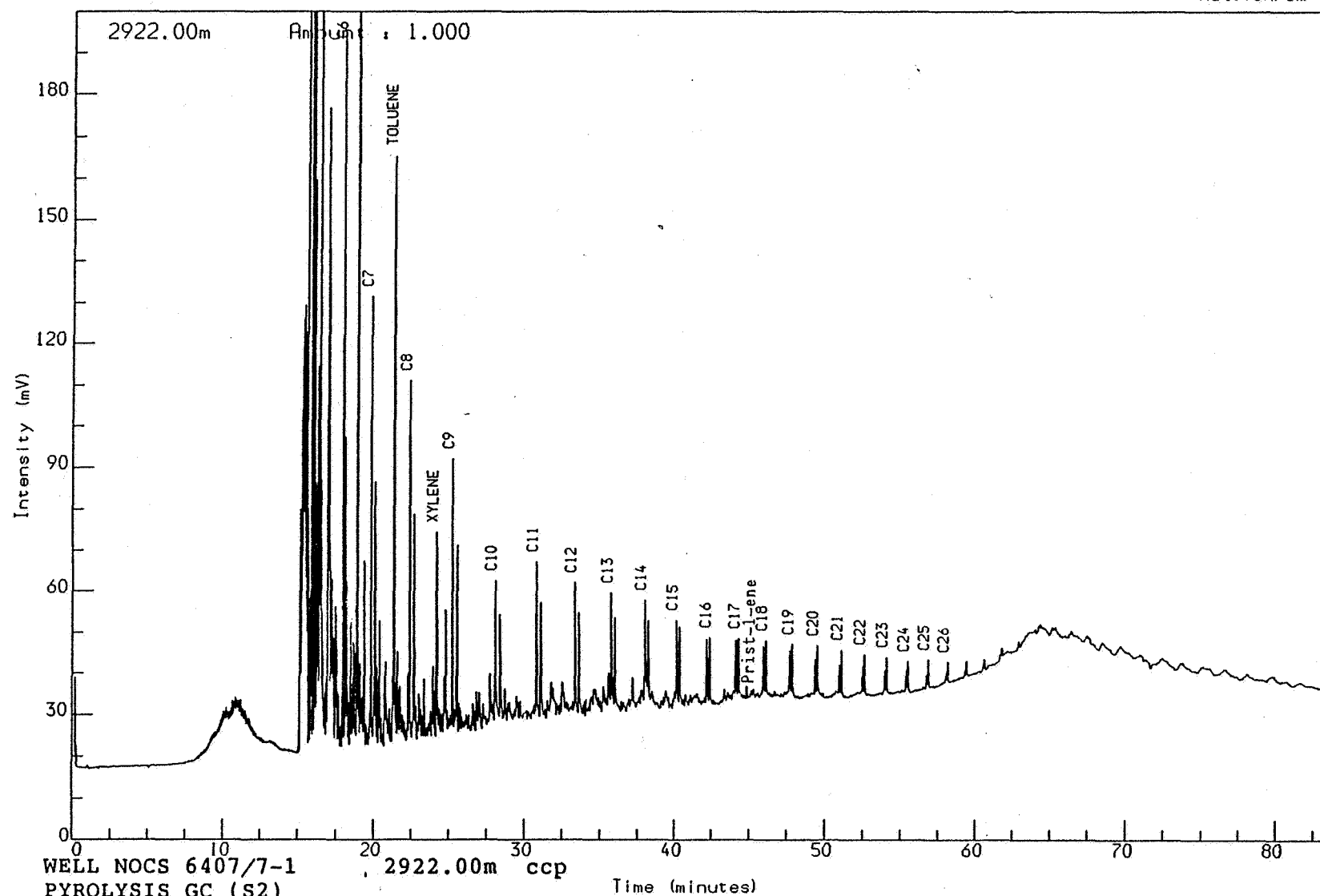
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4100971.1.1.

Multichrom



WELL NOCS 6407/7-1
PYROLYSIS GC (S2)
S/Sst: m lt ol gy to m lt y gy

Reported on 30-JUN-1992 at 08:28

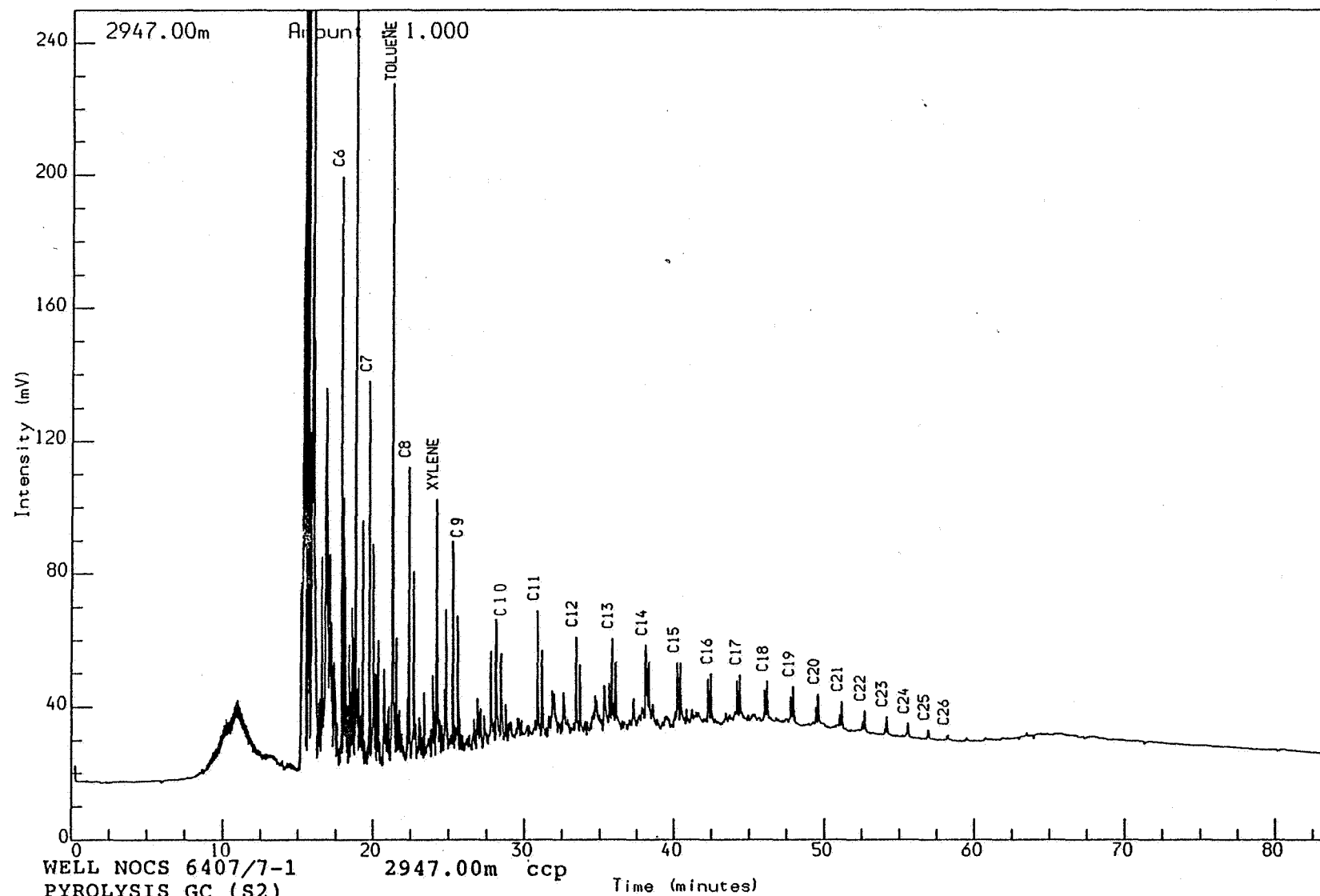
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4101021,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

S/Sst: m lt ol gy to m lt y gy

Reported on 26-JUN-1992 at 09:24

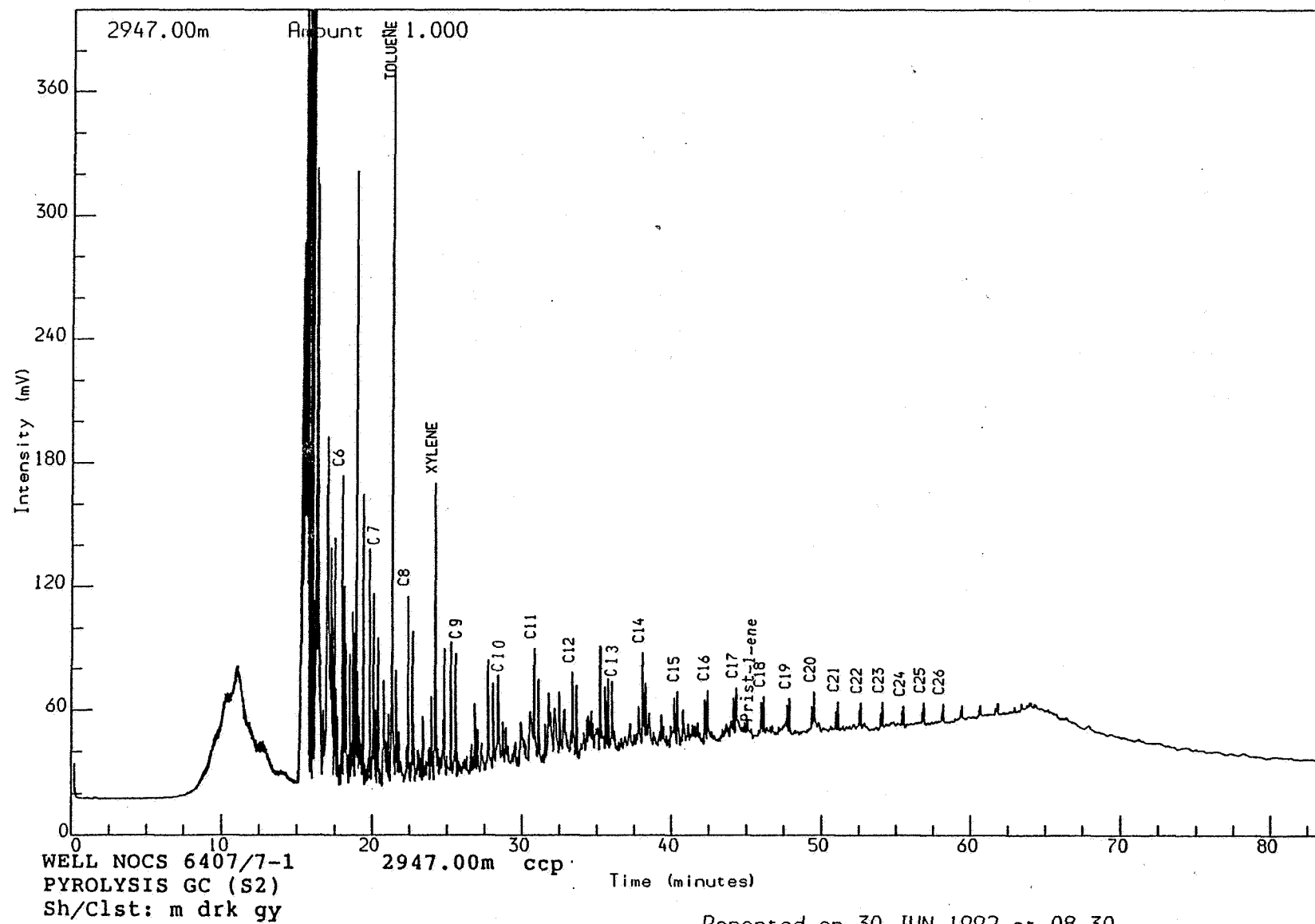
Schlumberger

GECO-PRAKLA

GEOLAB NOR

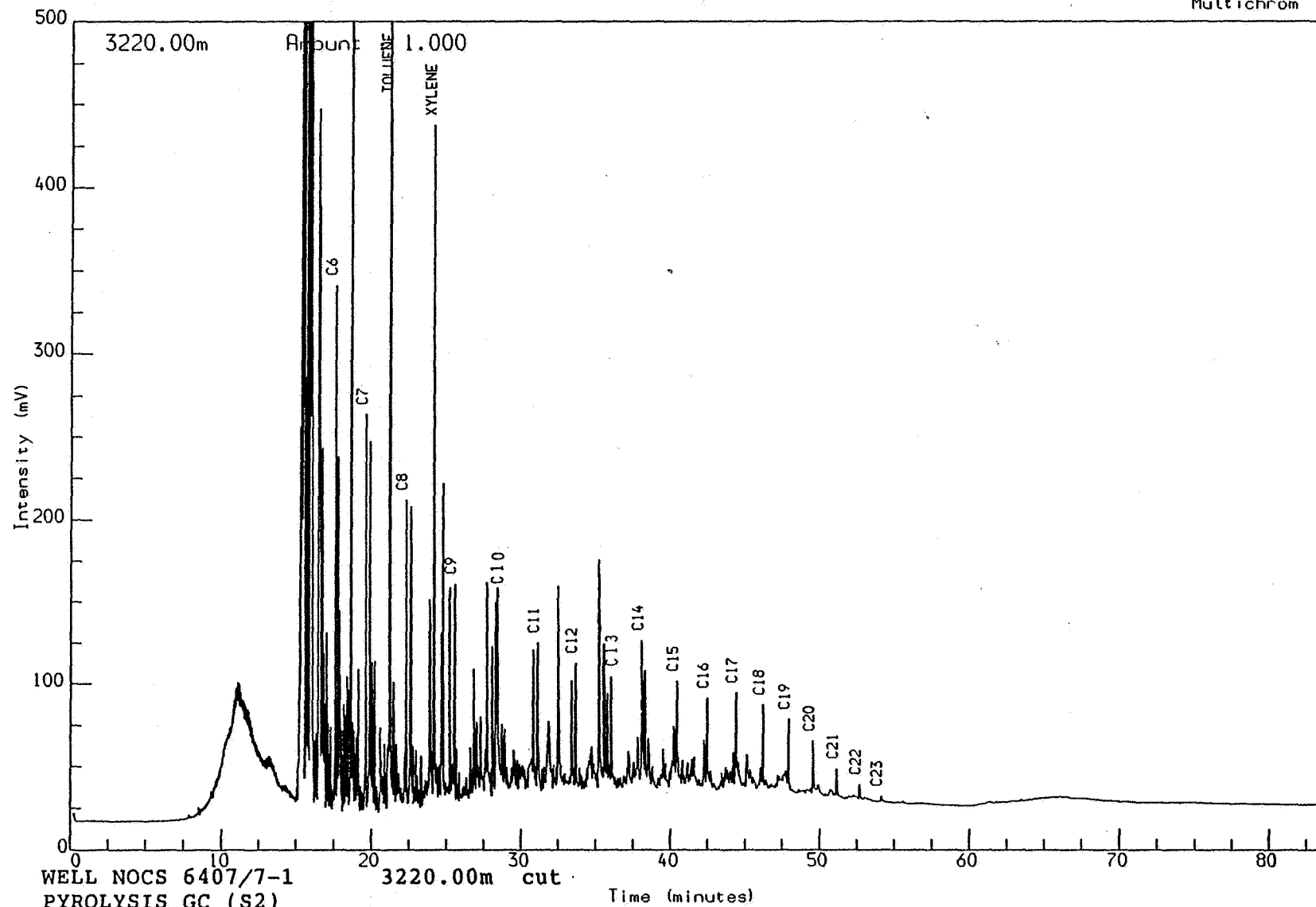
Analysis Name : [522020] 24 PG4101022B.1.1.

Multichrom



Analysis Name : [522020] 24 PG4101732,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

Sh/C1st: m gy to drk gy

Reported on 24-JUN-1992 at 13:20

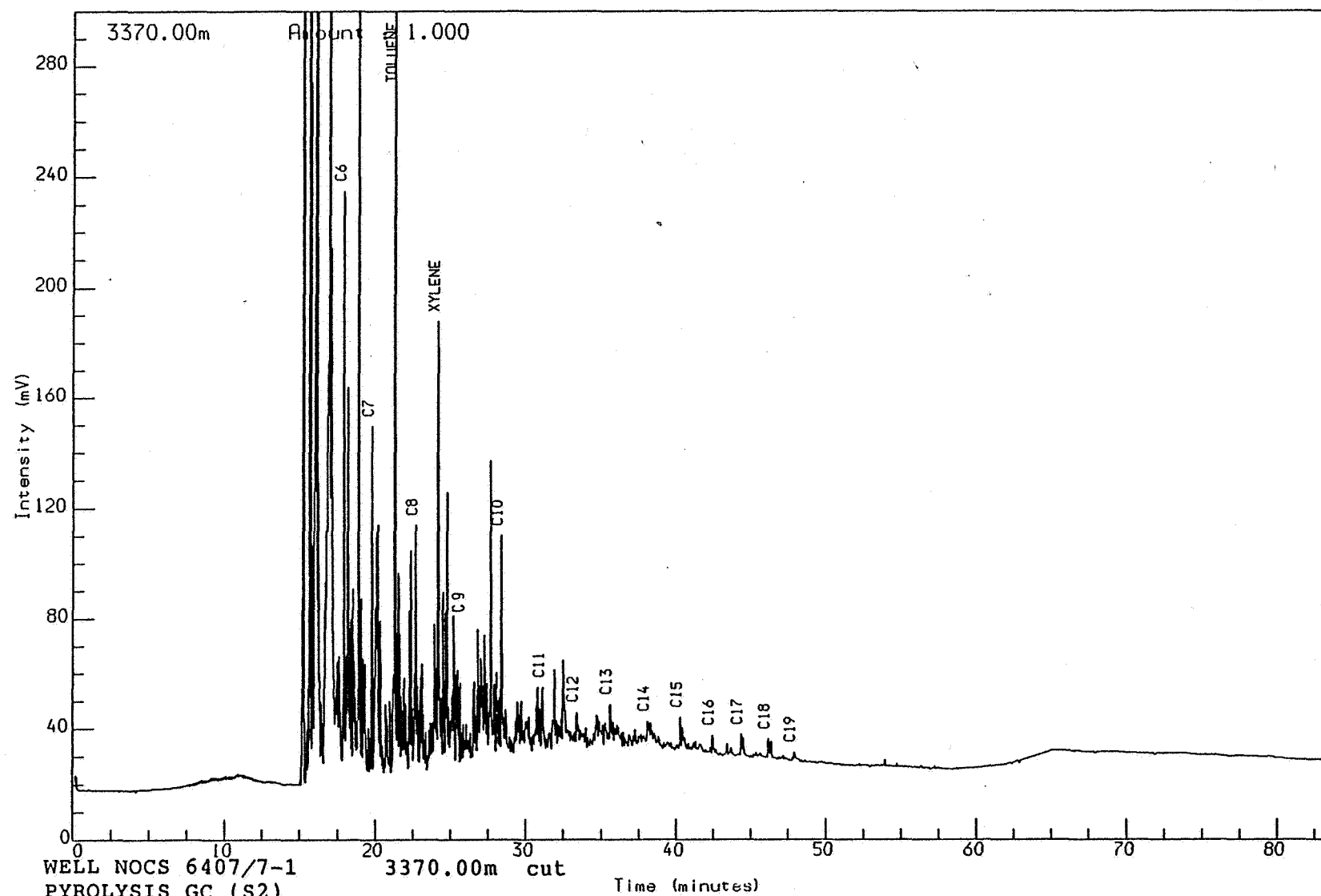
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4102042.1.1.

Multichrom



WELL NOCS 6407/7-1
PYROLYSIS GC (S2)
Slstst: gy pi, lt gn gy

Reported on 25-JUN-1992 at 13:34

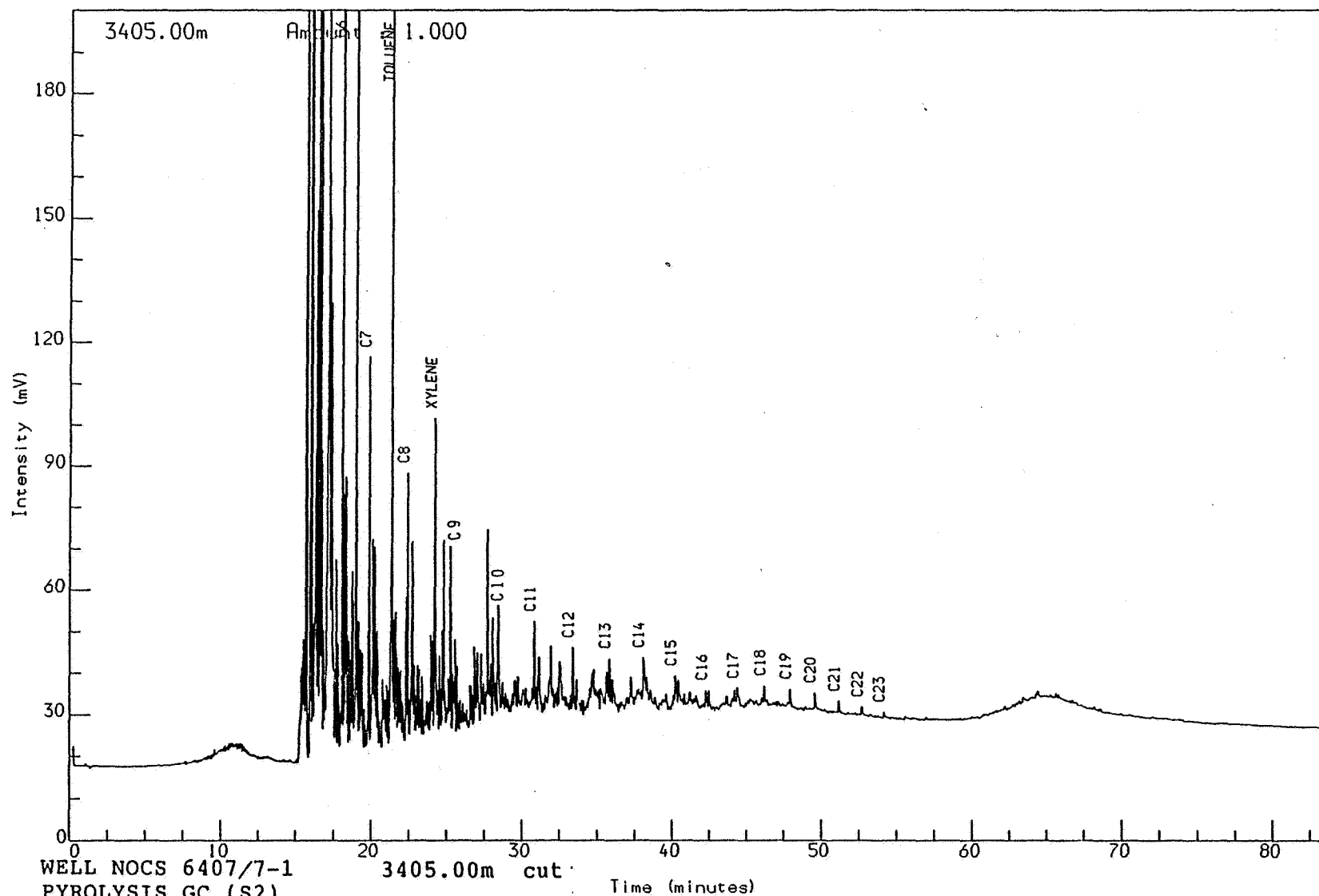
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 24 PG4102111B,1,1.

Multichrom



WELL NOCS 6407/7-1

PYROLYSIS GC (S2)

S/Sst: pl w to lt or brn

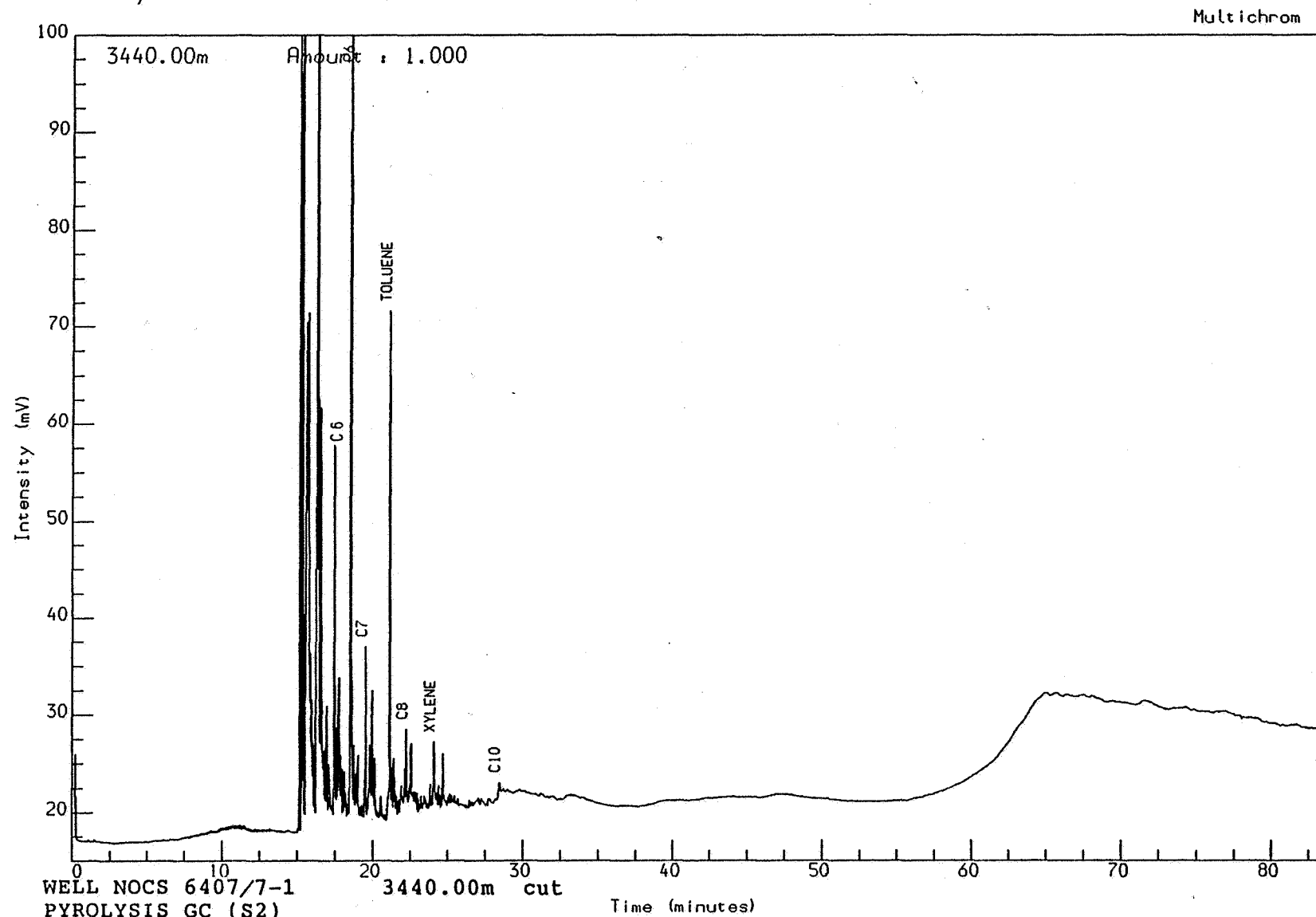
Reported on 25-JUN-1992 at 10:05

Schlumberger

GECO-PRAKLA

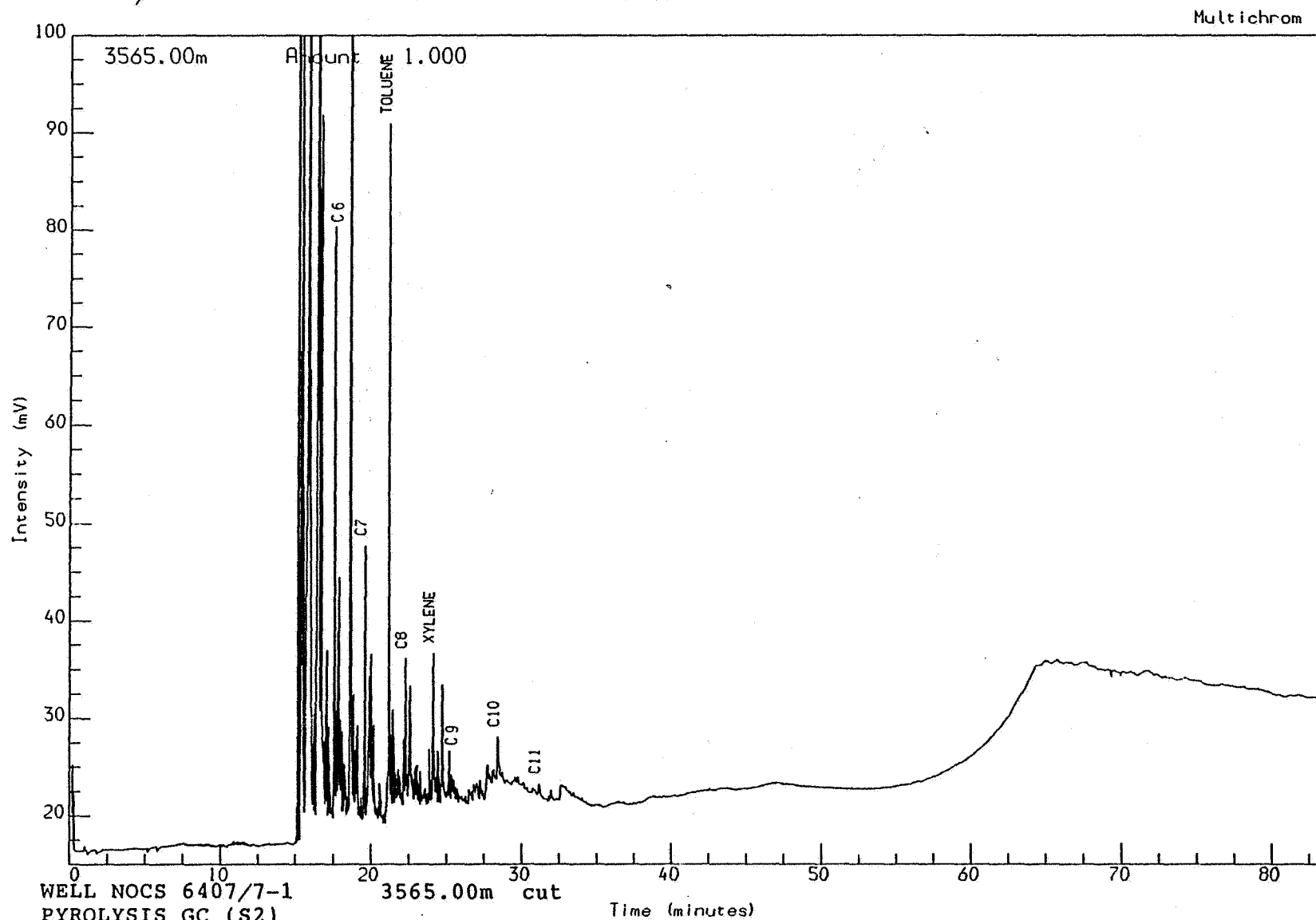
GEOLAB  NOR

Analysis Name : [522020] 24 PG4102182,1,1.



Reported on 24-JUN-1992 at 10:33

Analysis Name : [522020] 24 PG4102342.1.1.



WELL NOCS 6407/7-1
PYROLYSIS GC (S2)
Sh/Clst: m gy brn

Reported on 24-JUN-1992 at 10:34

Schlumberger

GECO-PRAKLA

GEOLAB  NOR

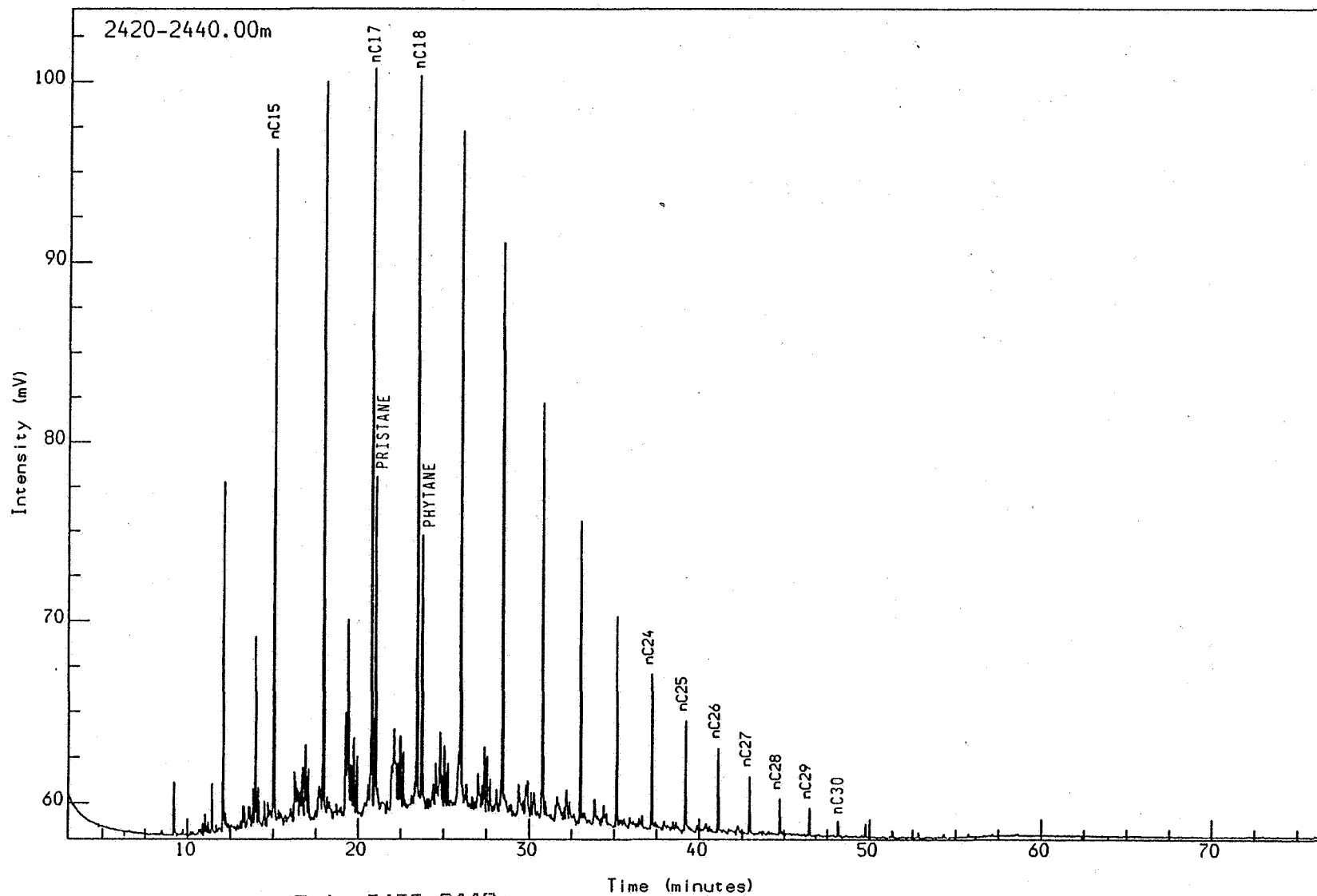
Appendix 4

- I Saturated Fraction Chromatograms (FID)**
- II Aromatic Fraction Chromatograms (FID& FPD)**

Saturated Fraction Chromatograms (FID)

Analysis Name : [522020] 11 SG4102400B,1,1.

Multichrom



WELL N00S 6407/7-1 2420-2440m
SATURATED GC
bulk

Reported on 14-JUL-1992 at 10:44

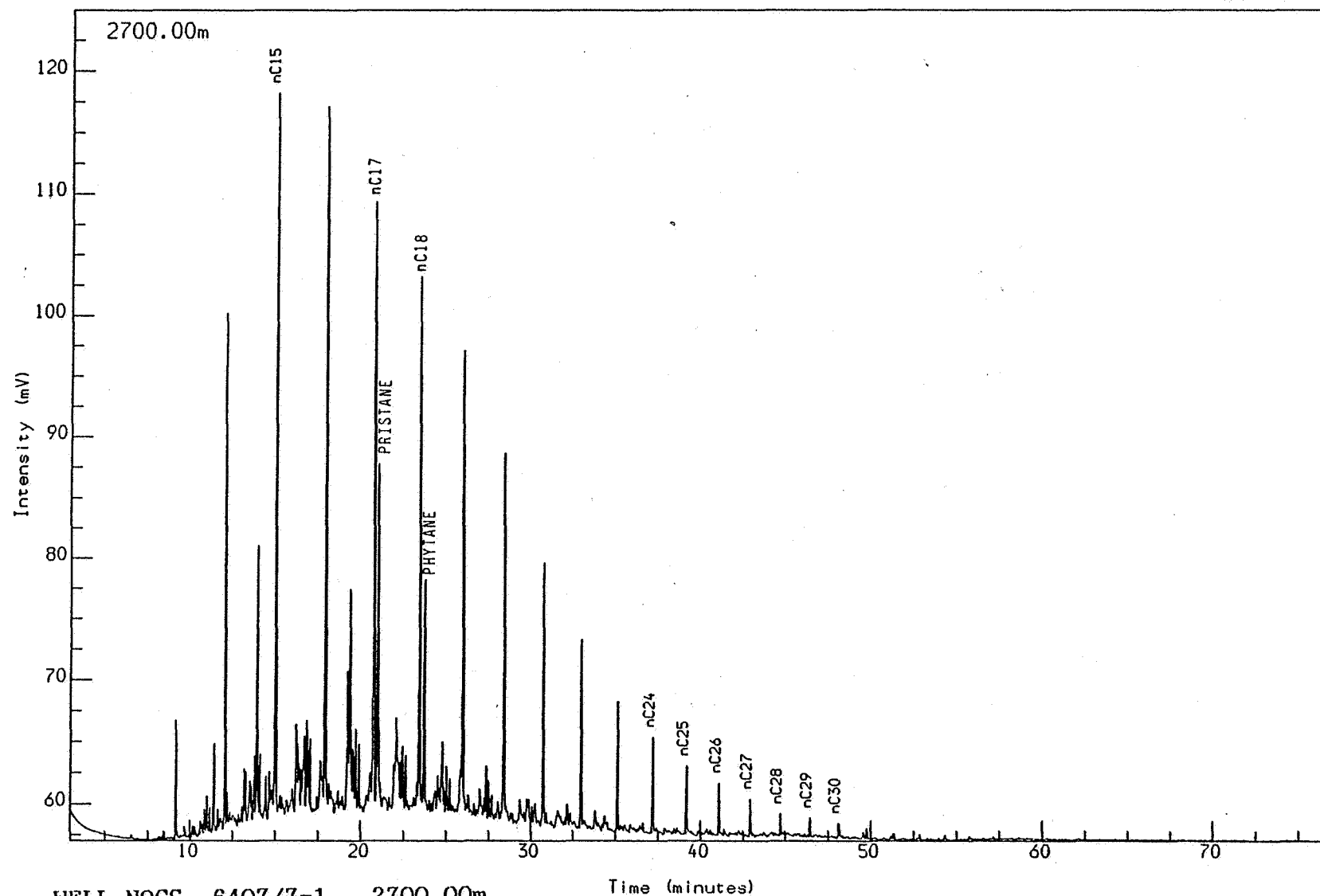
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 11 SG4101231L,1,1.

Multichrom



WELL NOCS 6407/7-1 2700.00m
SATURATED GC
Sh/C1st: drk gy

Reported on 14-JUL-1992 at 12:09

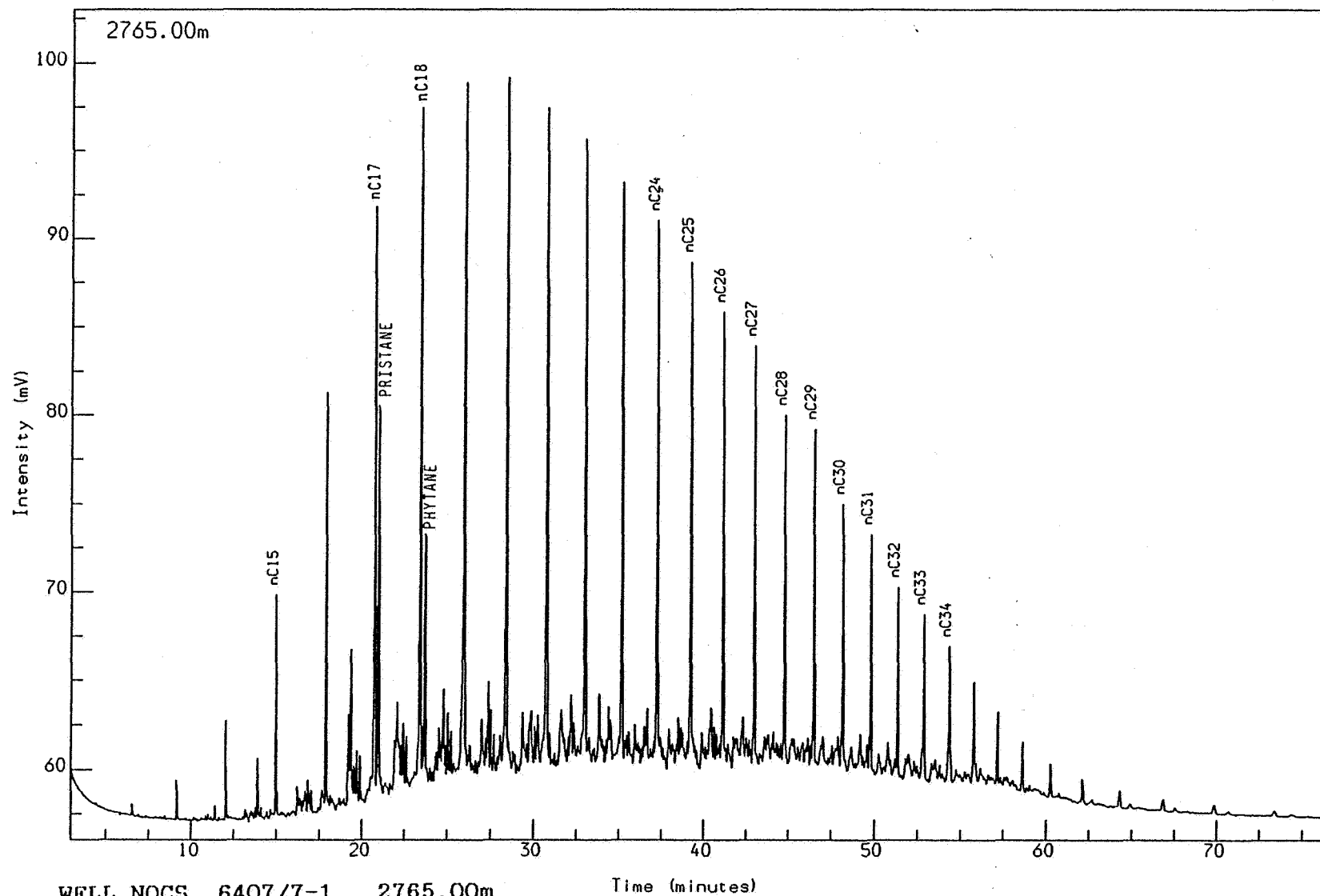
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 11 SG4100711L,1,1.

Multichrom



WELL NOCS 6407/7-1 2765.00m
SATURATED GC
Sh/Clst: pl y brn

Reported on 14-JUL-1992 at 13:35

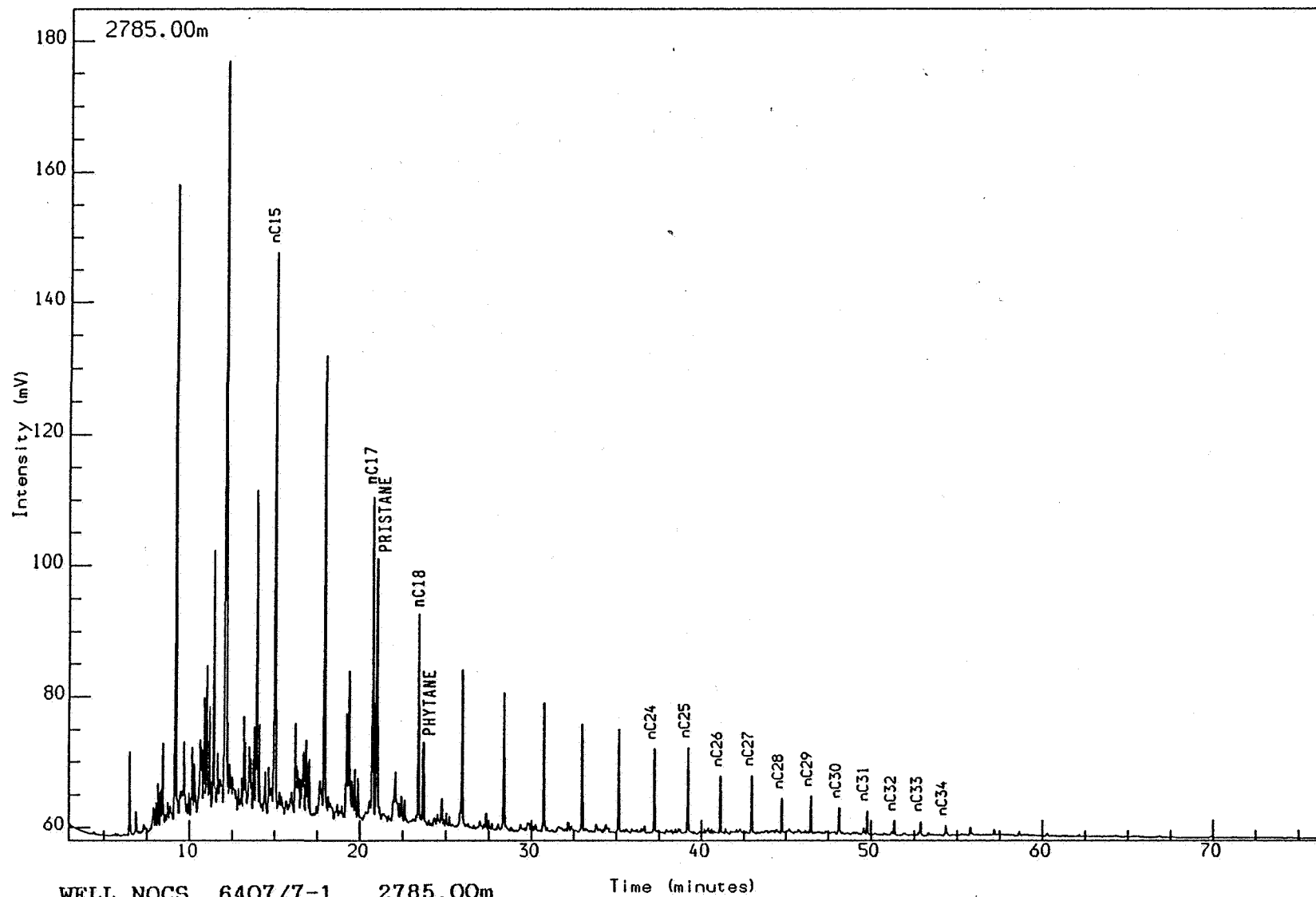
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 11 SG4100751L,1,1.

Multichrom



WELL NOCS 6407/7-1 2785.00m
SATURATED GC
Slitst: m lt gy to dsk y gy

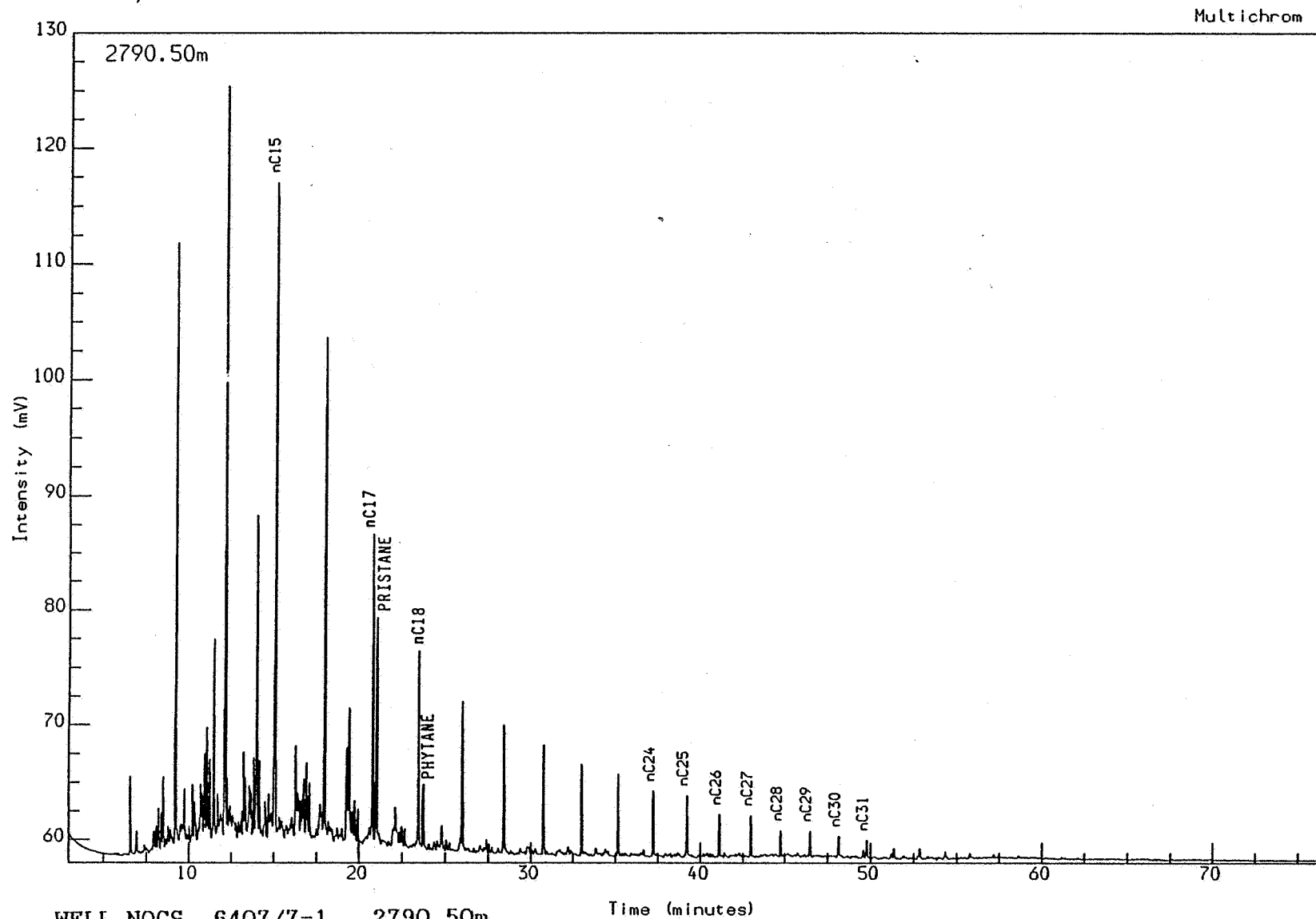
Reported on 15-JUL-1992 at 11:02

Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 11 SG4100761L,1,1.



WELL NOCS 6407/7-1 2790.50m
SATURATED GC
Sh/Clst: m lt gy to dsk y gy

Reported on 15-JUL-1992 at 11.16

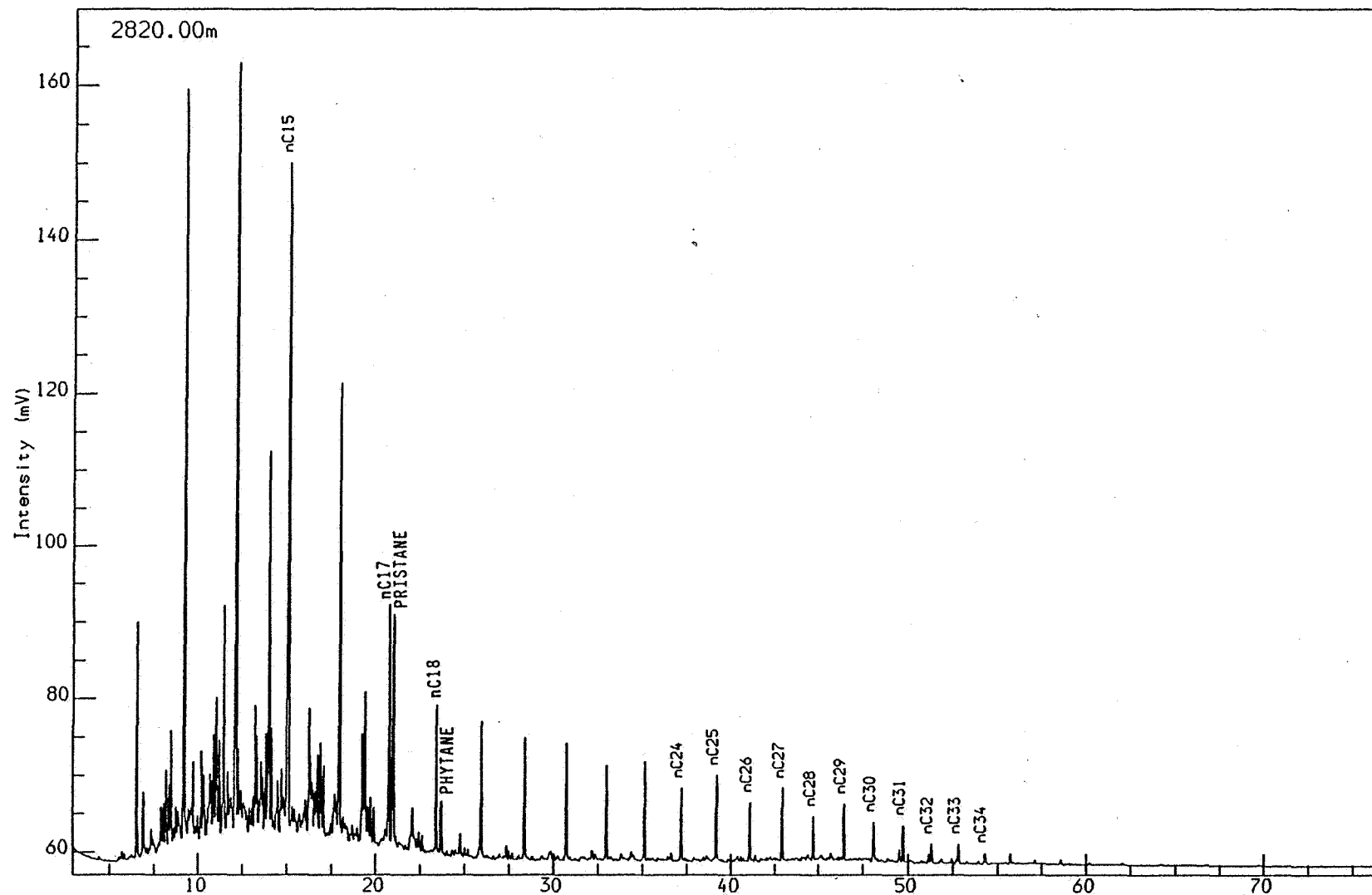
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 11 SG4100821L,1,1.

Multichrom



WELL NOCS 6407/7-1 2820.00m
SATURATED GC
Sh/Clst: m lt gy

Reported on 15-JUL-1992 at 12:38

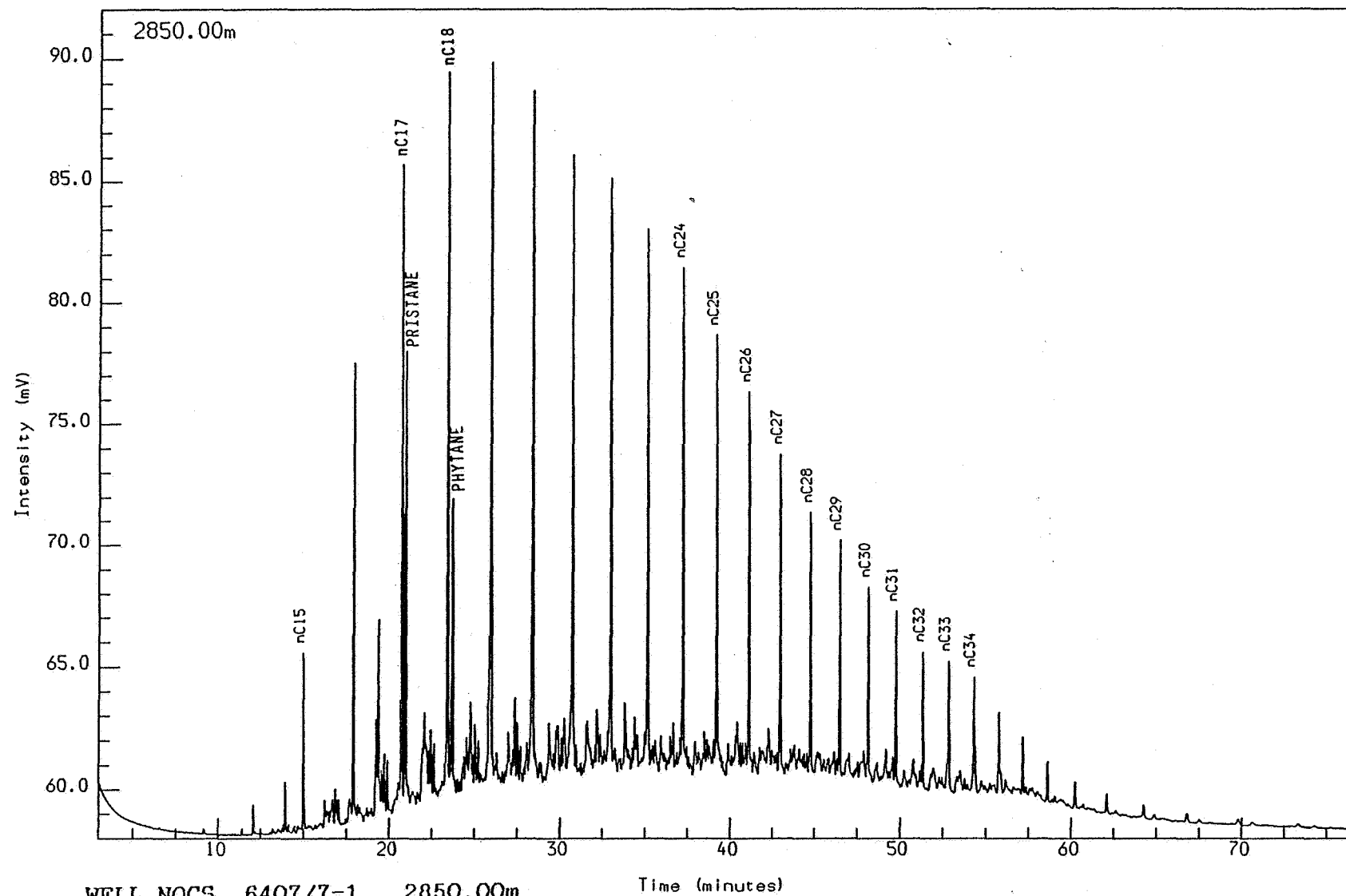
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 11 SG4100861L,1,1.

Multichrom



WELL NOCS 6407/7-1 2850.00m
SATURATED GC
S/Sst: 1t ol gy to 1t y gy

Reported on 15-JUL-1992 at 12:56

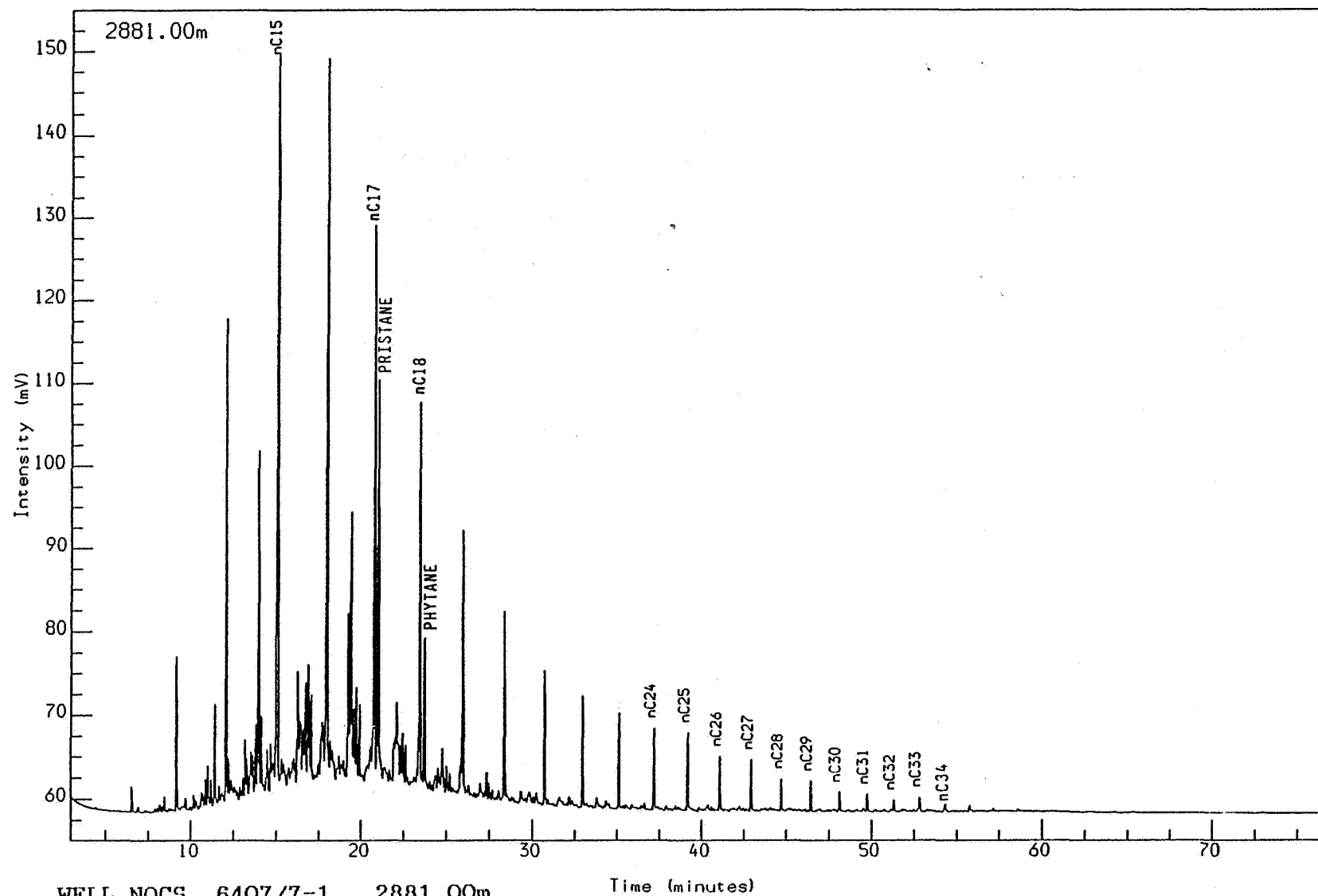
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 11 SG4100901L,1,1.

Multichrom



WELL NOCS 6407/7-1 2881.00m
SATURATED GC
Sh/Clst: m drk gy to lt brn gy

Reported on 15-JUL-1992 at 14:04

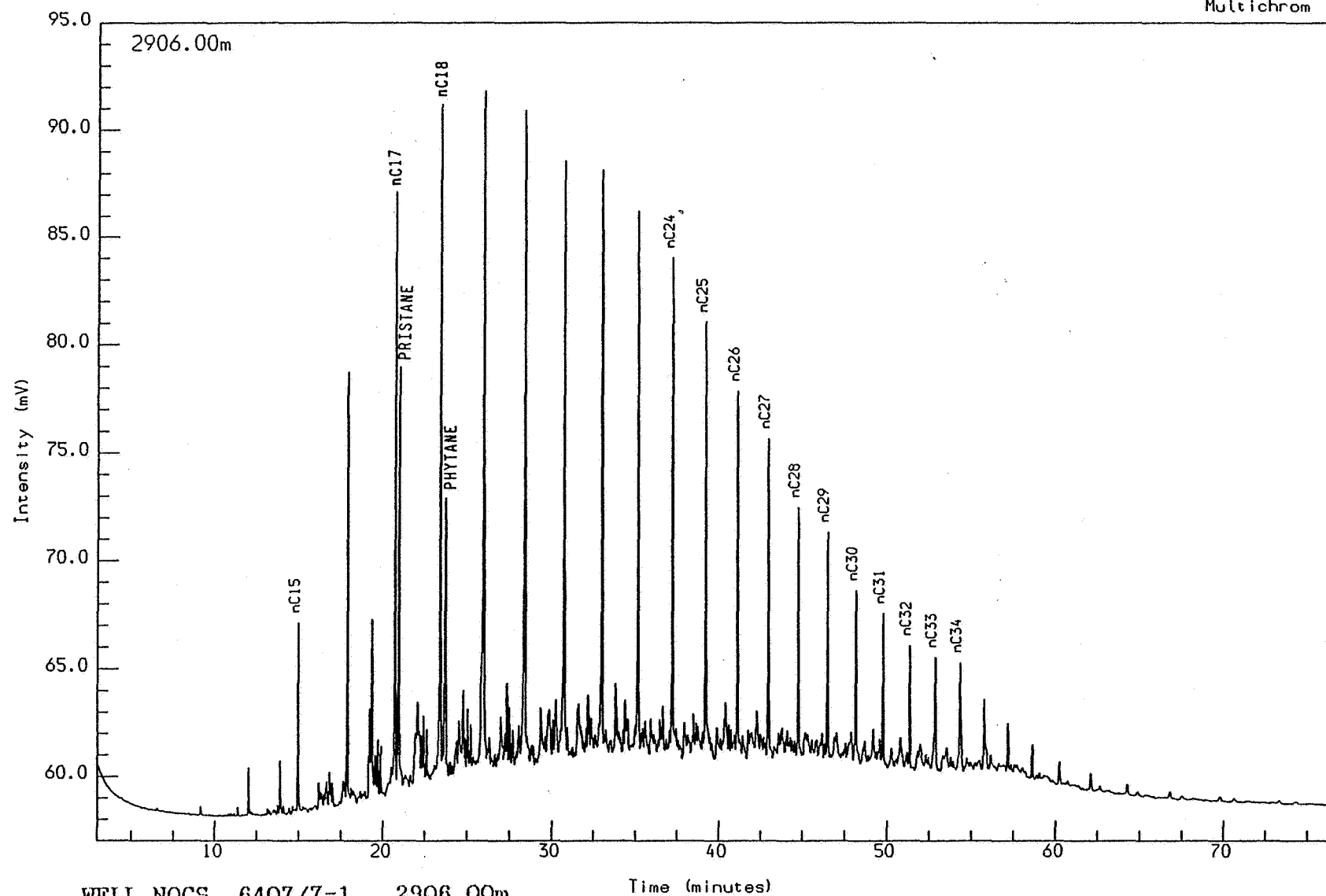
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 11 SG4100941L,1,1.

Multichrom



WELL NOCS 6407/7-1 2906.00m
SATURATED GC
S/Sst: m lt ol gy to m lt y gy

Reported on 16-JUL-1992 at 08:46

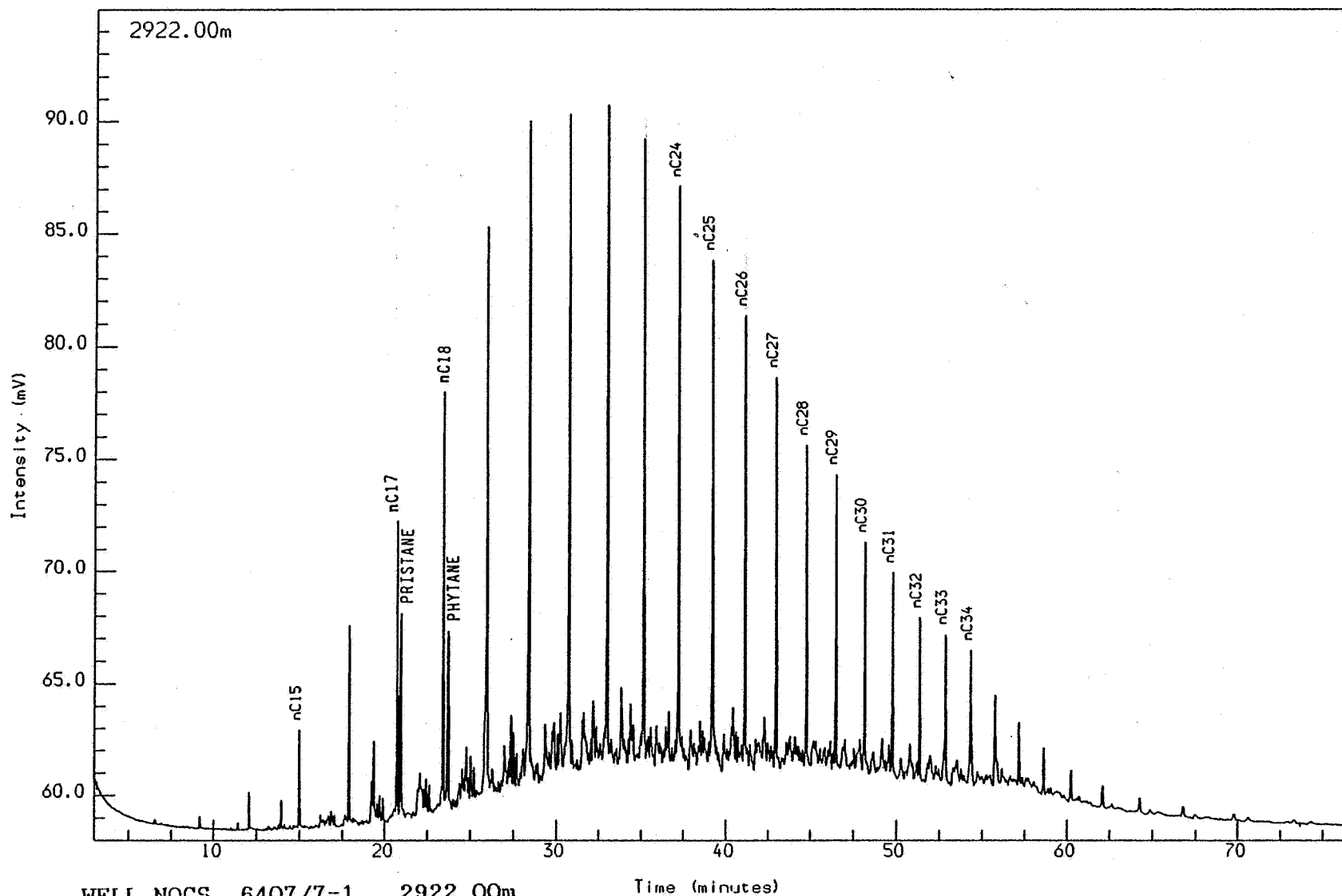
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 11 SG4100971L.1.1.

Multichrom



WELL NOCS 6407/7-1 2922.00m
SATURATED GC
S/Sst: m lt ol gy to m lt y gy

Reported on 21-JUL-1992 at 08:35

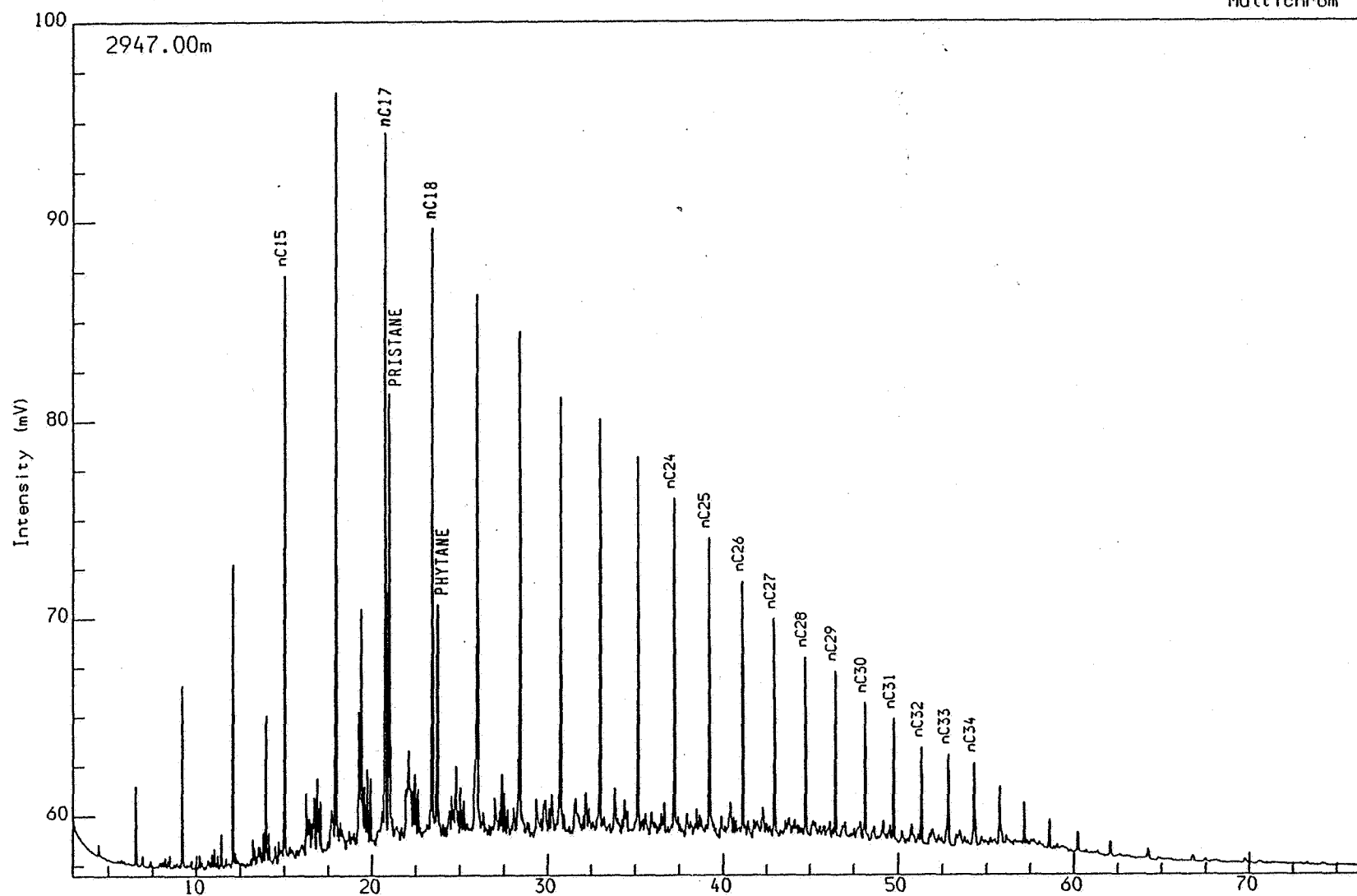
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 11 SG4101021L.1.1.

Multichrom



WELL NOCS 6407/7-1 2947.00m
SATURATED GC
S/Sst: m lt ol gy to m lt y gy

Reported on 16-JUL-1992 at 14:05

Schlumberger

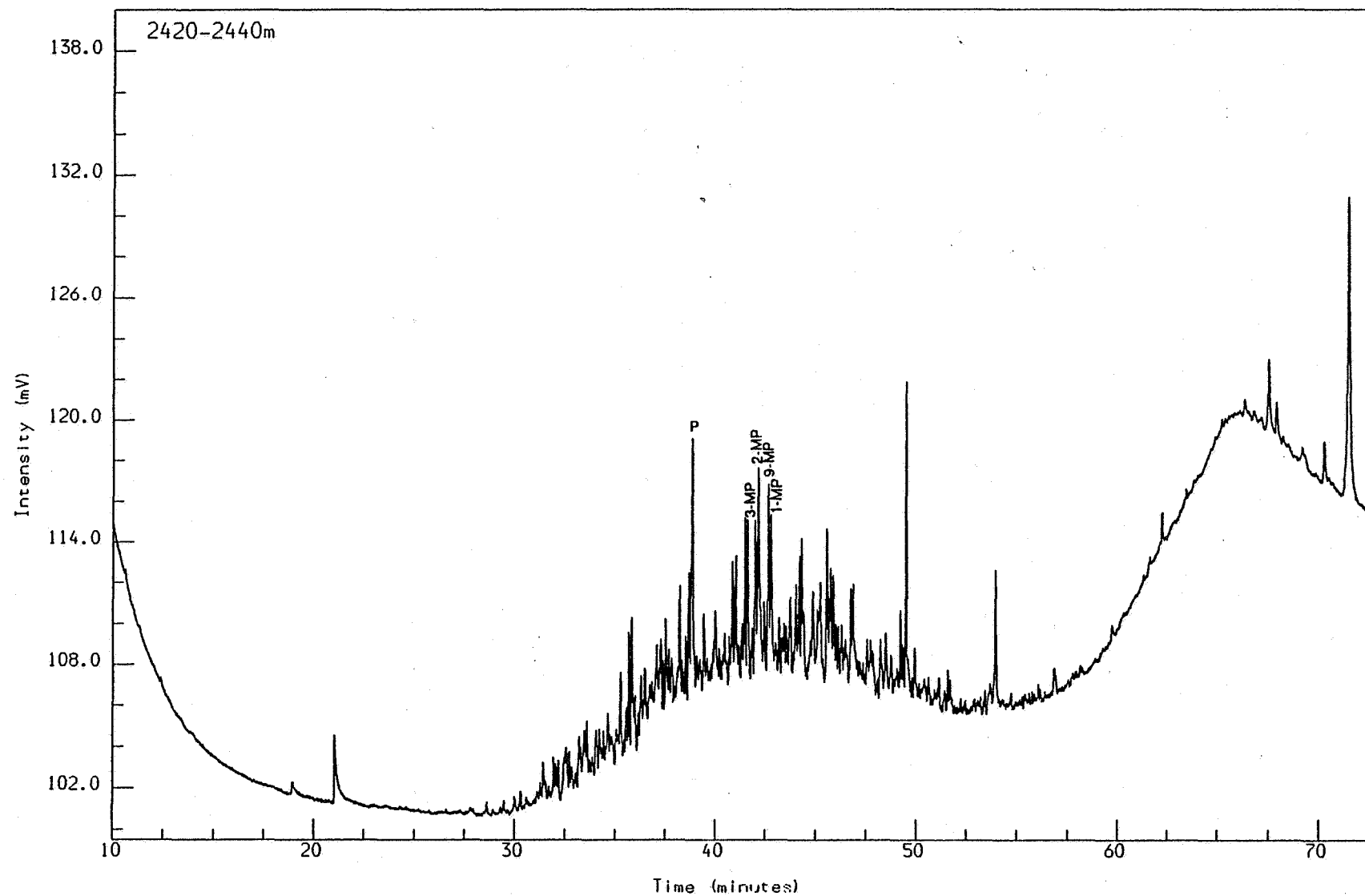
GECO-PRAKLA

GEOLAB NOR

Aromatic Fraction Chromatograms (FID and FPD)

Analysis Name : [522020] 29 AG4102400BB,2,1.

Multichrom



WELL NOCS 5407 /7-1 2420-2440m
AROMATIC GC (FID)
bulk

Reported on 26-AUG-1992 at 09:11

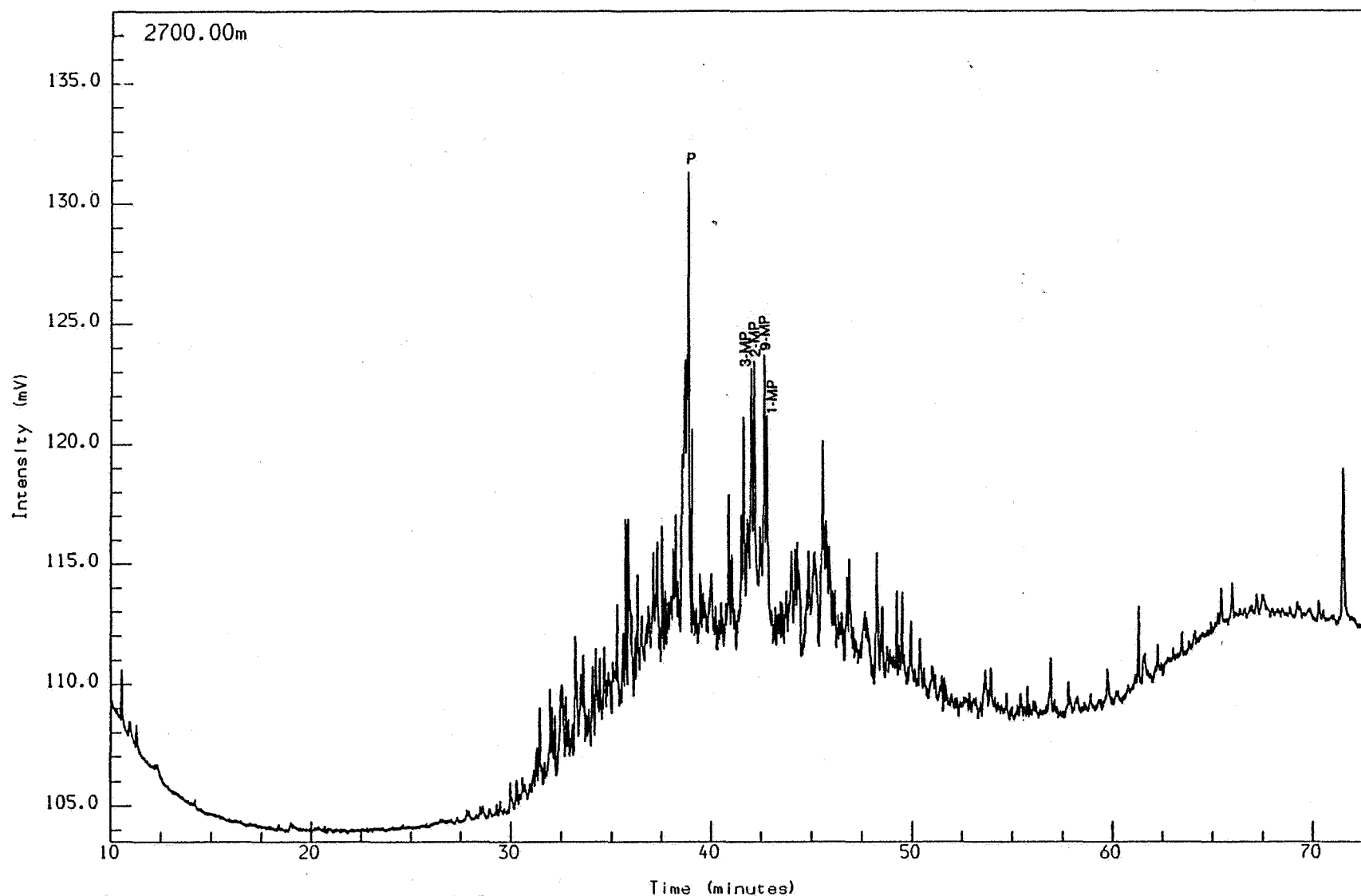
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 29 AG4101231L,1,1.

Multichrom



WELL NOCS 6407/7-1 2700.00m
AROMATIC GC (FID)
Sh/Clst: drk gy

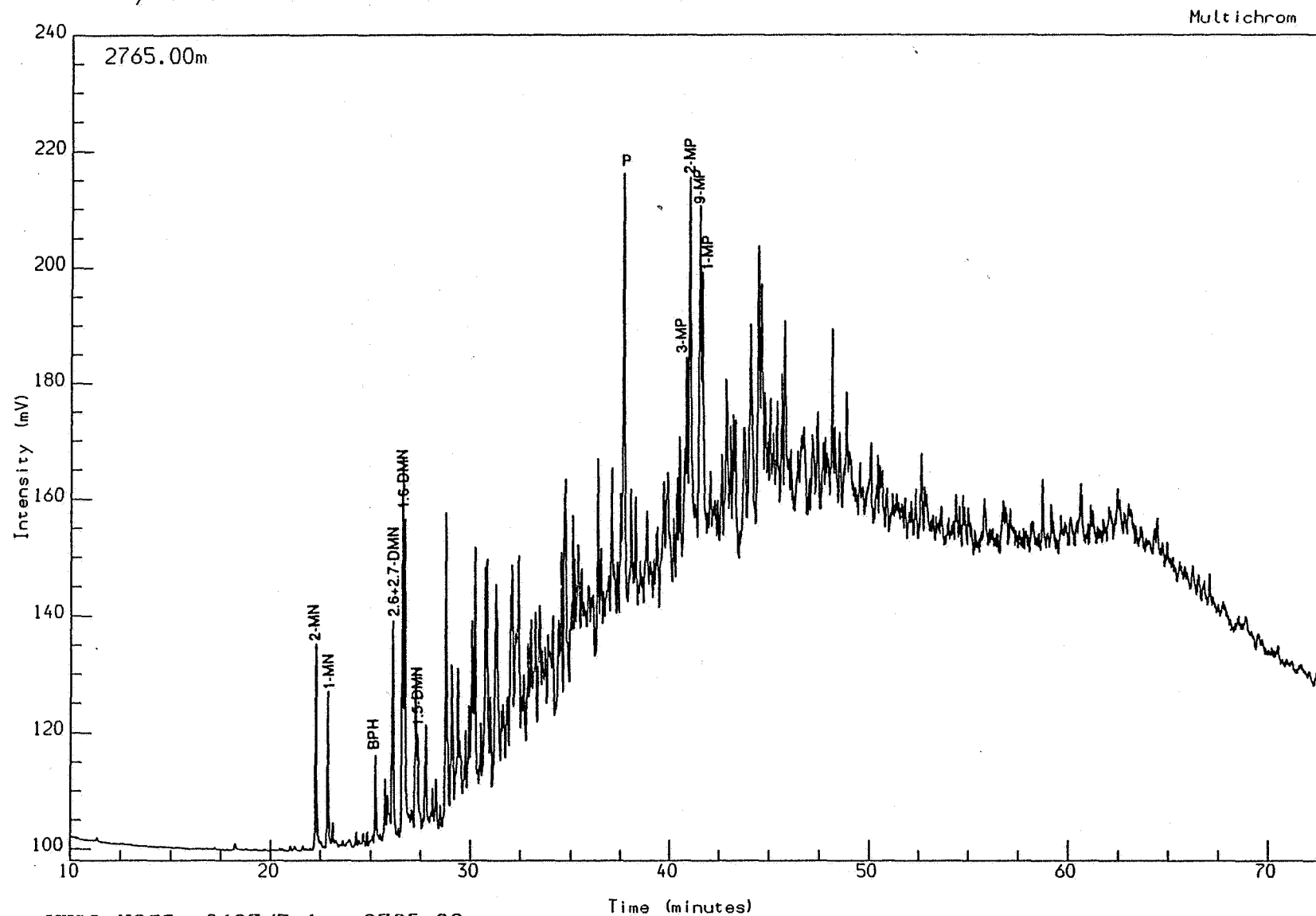
Reported on 27-AUG-1992 at 08:18

Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4100641L,4,1.



WELL NOCS 6407/7-1 2765.00m

AROMATIC GC (FID)

Sh/Clst: pl y brn

Reported on 14-AUG-1992 at 14:23

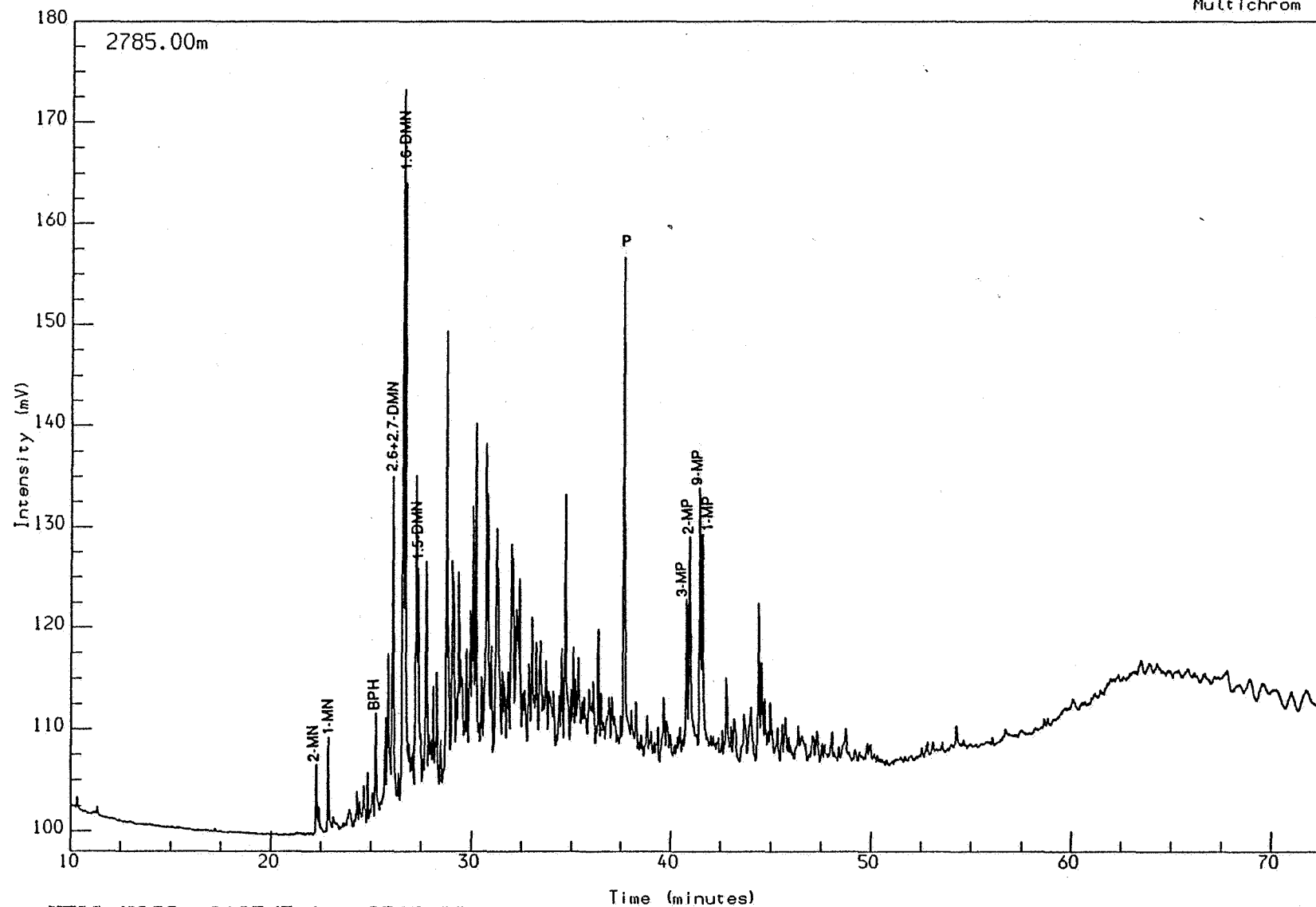
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 29 AG4100641L,5,1.

Multichrom



WELL NOCS 6407/7-1 2785.00m

AROMATIC GC (FID)

Slitst: m lt gy to dsk y gy

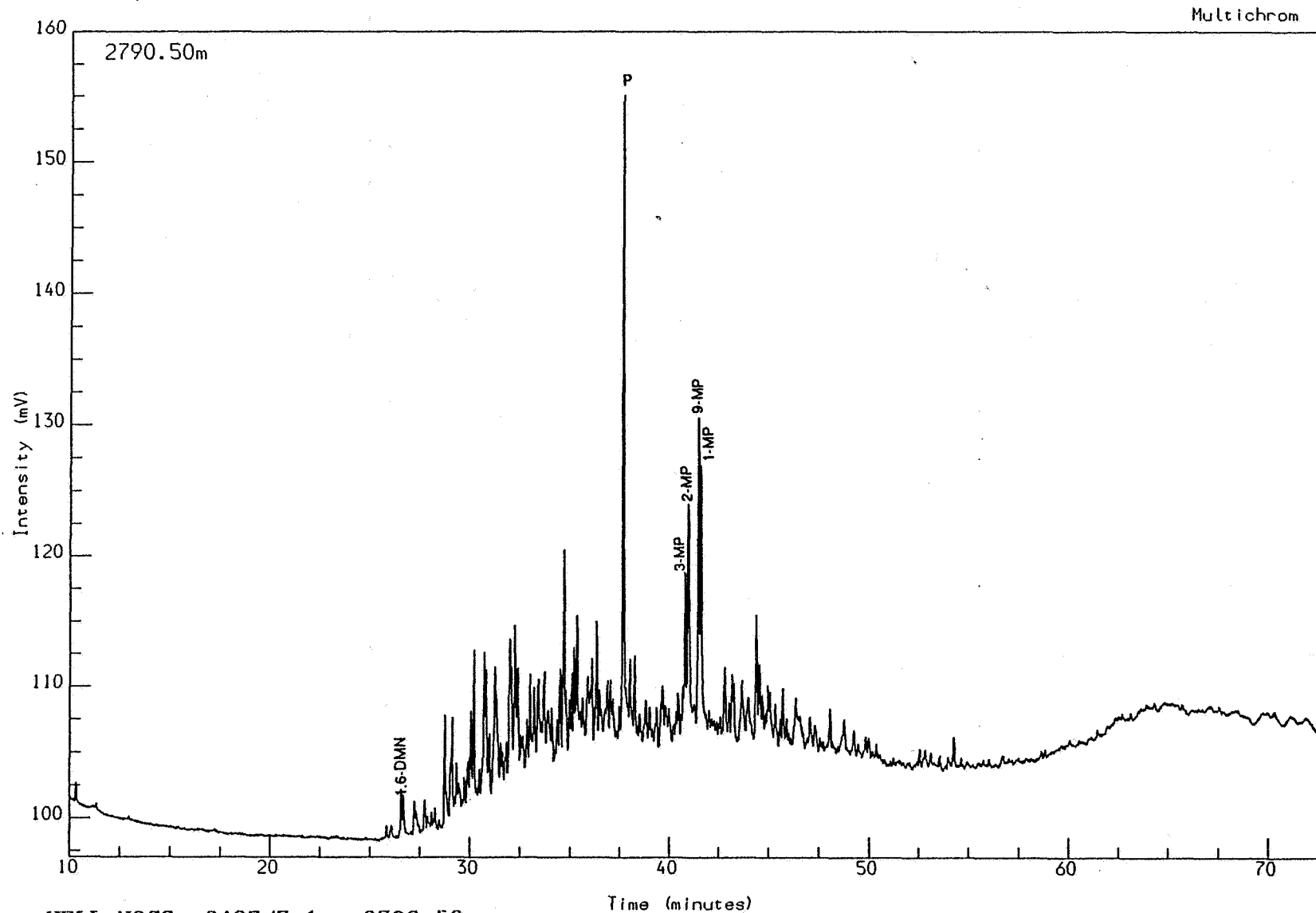
Reported on 14-AUG-1992 at 15:26

Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4100641L,6,1.



WELL NOCS 6407/7-1 2790.50m
AROMATIC GC (FID)
Sh/Clst: m lt gy to dsk y gy

Reported on 14-AUG-1992 at 15:29

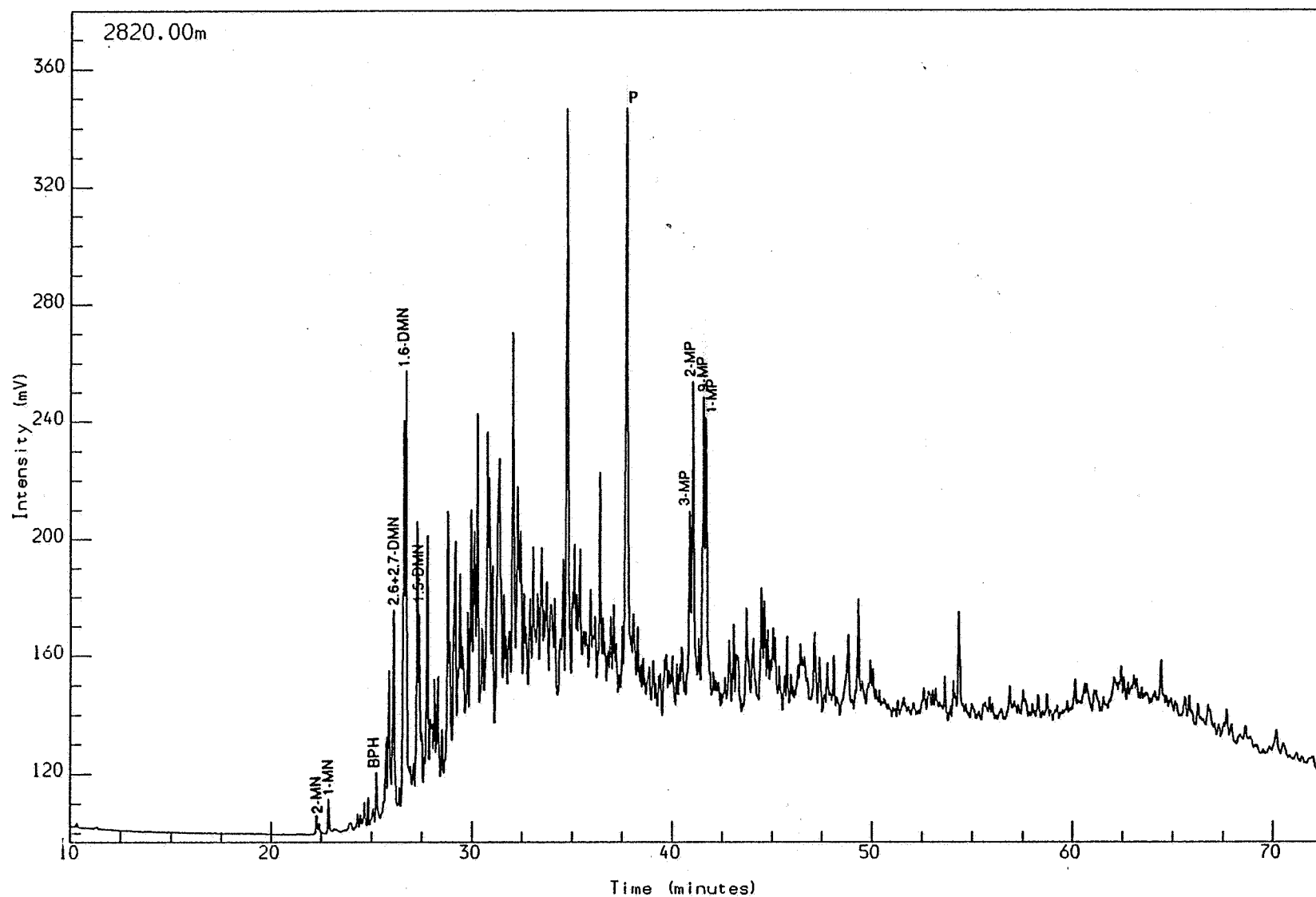
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4100641L.7.1.

Multichrom



WELL NOCS 6407/7-1 2820.00m
AROMATIC GC (FID)
Sh/Clst: m lt gy

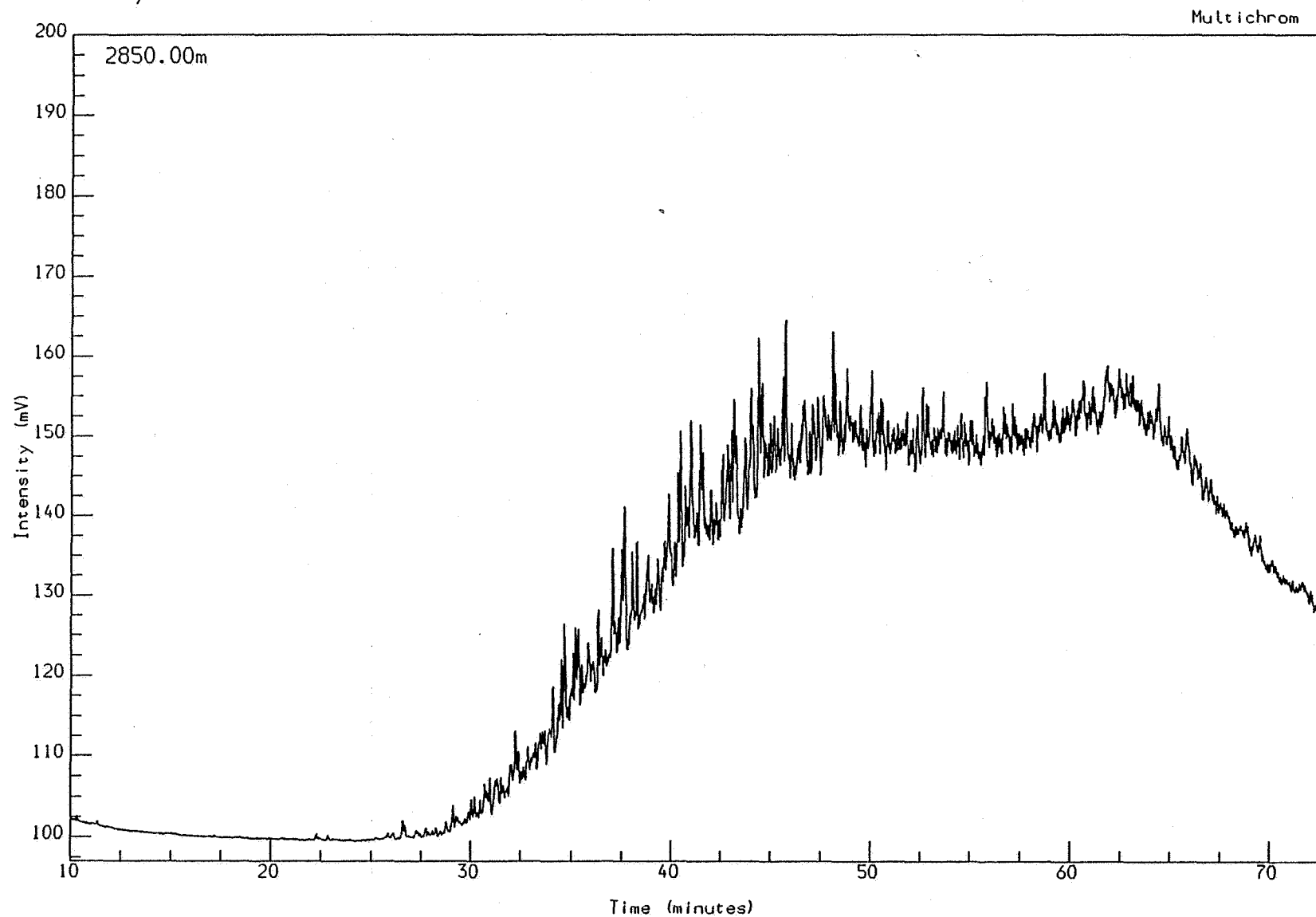
Reported on 14-AUG-1992 at 15:30

Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4100641L,8,1.



WELL NOCS 6407/7-1 2850.00m

AROMATIC GC (FID)

S/Sst: lt ol gy to lt y gy

Reported on 14-AUG-1992 at 15:32

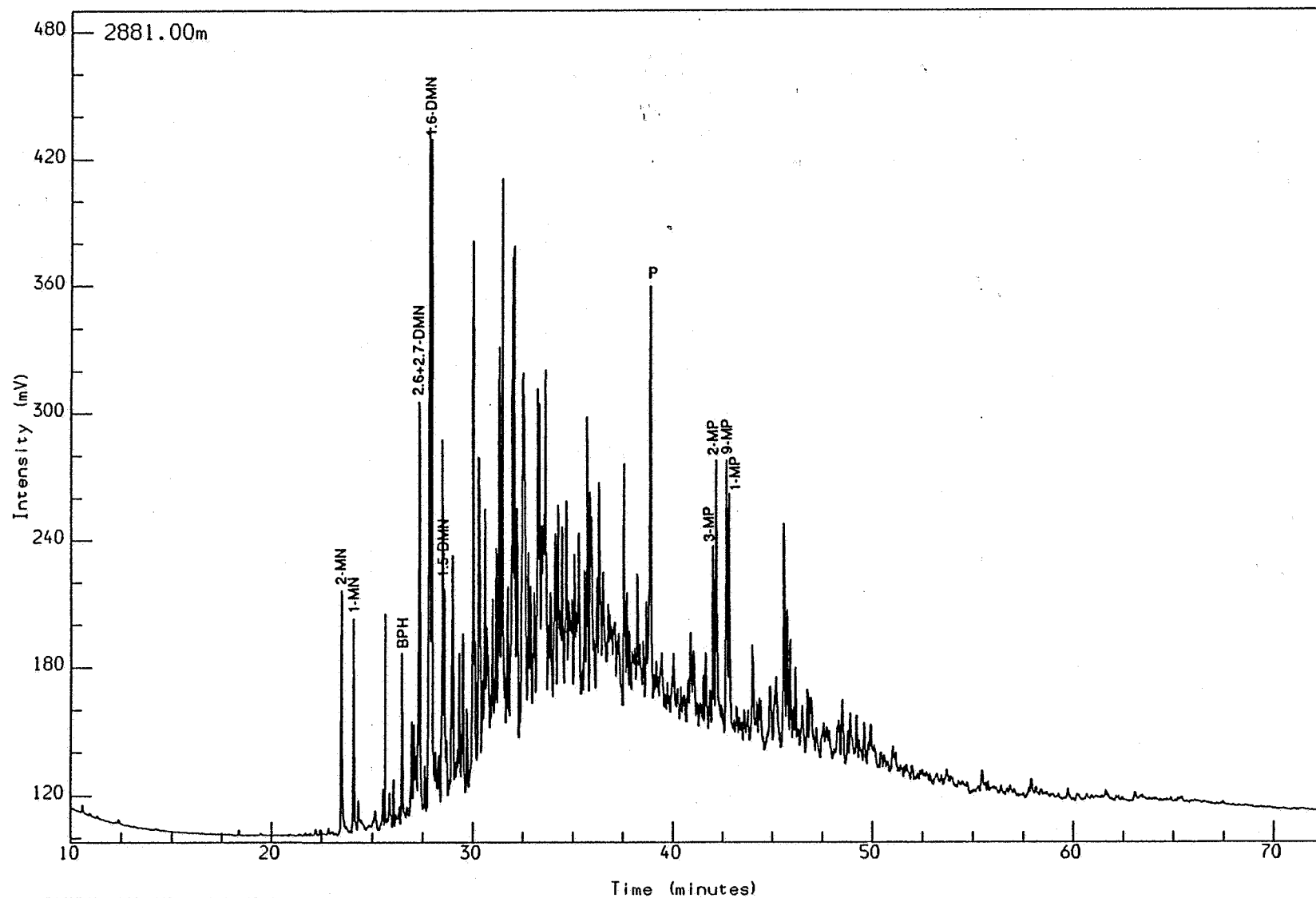
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4102400BB,4,1.

Multichrom



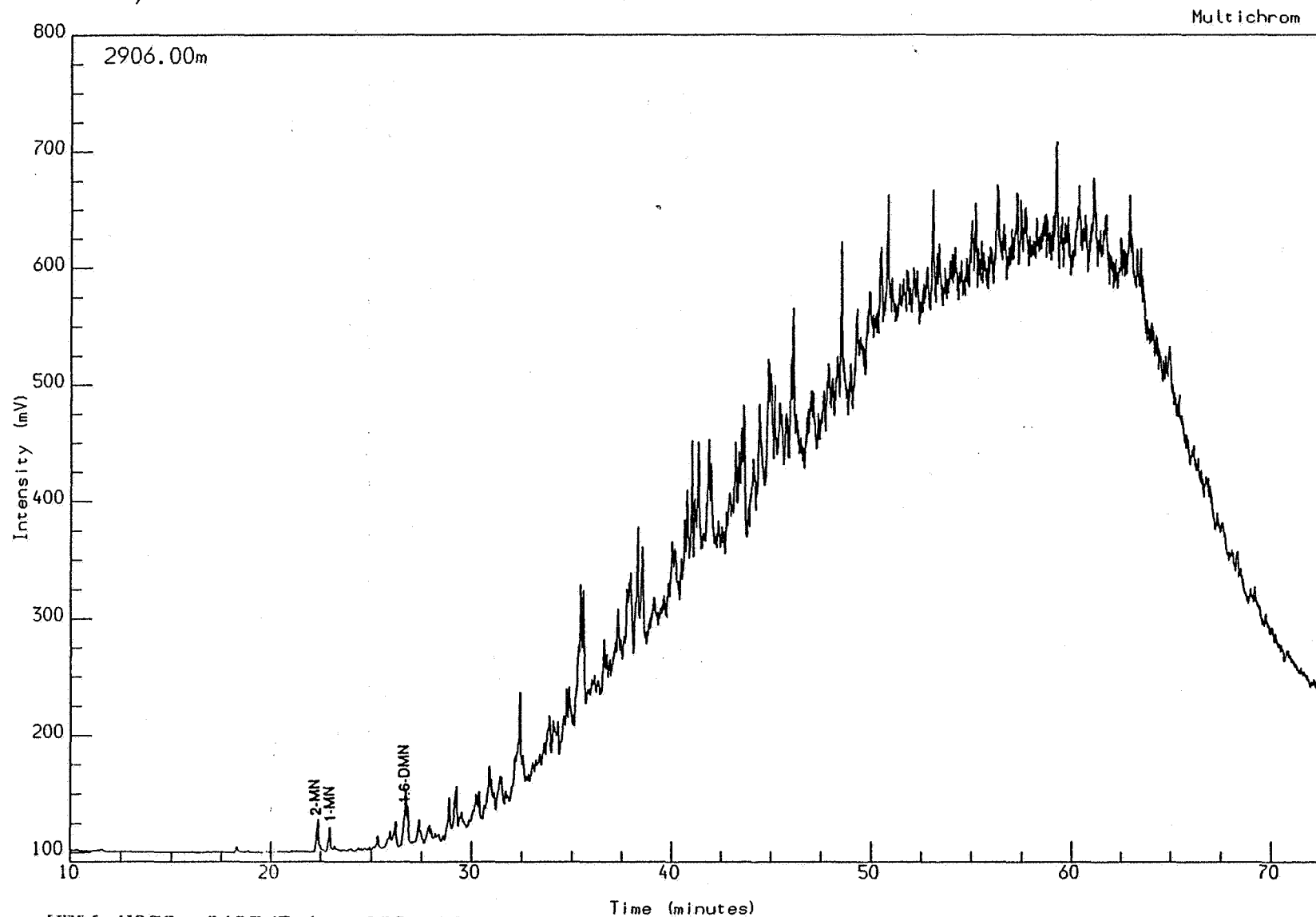
WELL NOCS 6407/7-1 2881.00m
AROMATIC GC (FID)
Sh/Clst: m drk gy to lt brn gy

Reported on 26-AUG-1992 at 09:17

Schlumberger GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 29 AG4100641L,10,1.



WELL NOCS 6407/7-1 2906.00m

AROMATIC GC (FID)

S/Sst: m lt ol gy to m lt y gy

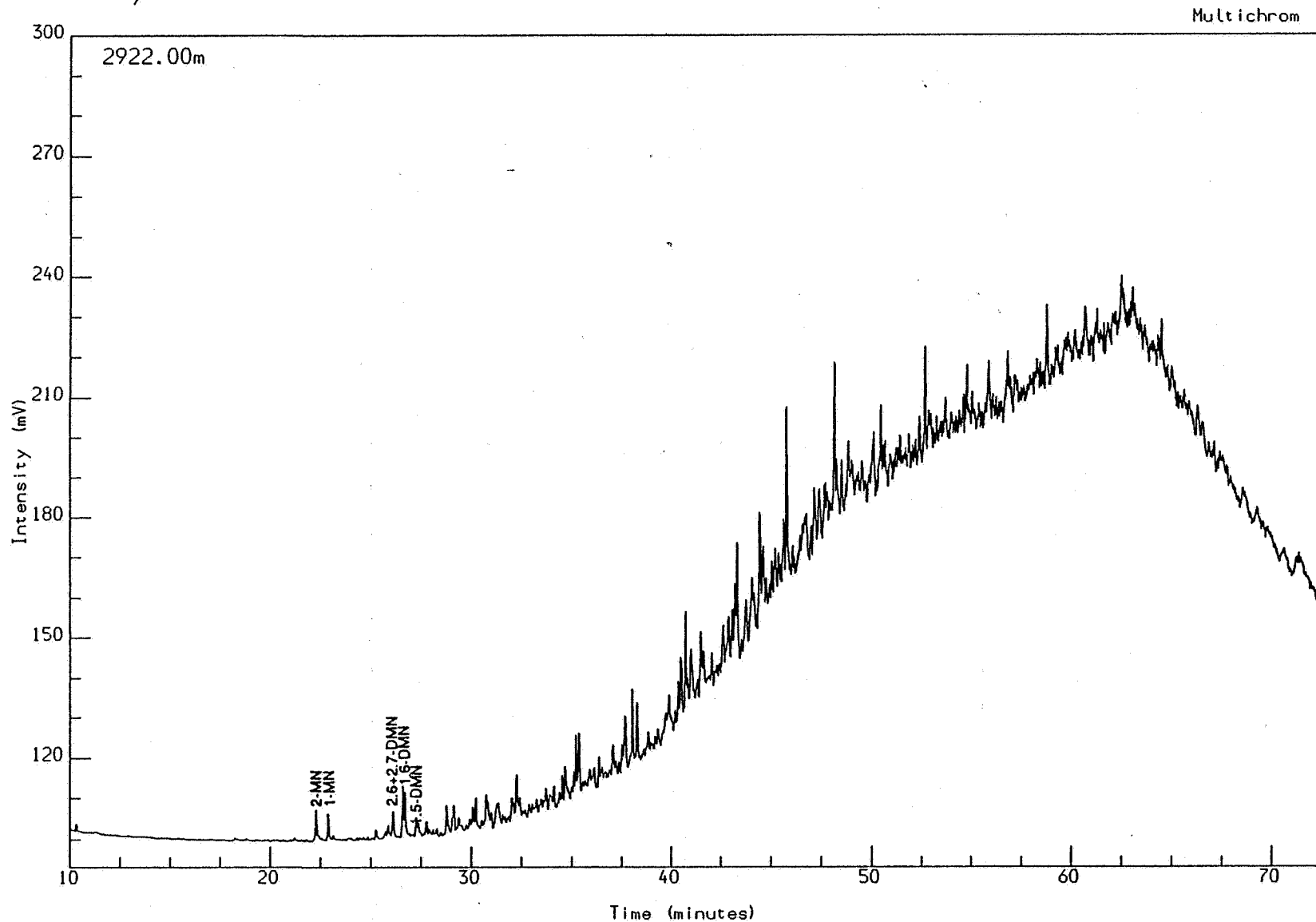
Reported on 14-AUG-1992 at 15:36

Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4100641L,11,1.



WELL NOCS 6407/7-1 2922.00m
AROMATIC GC (FID)
S/Sst: m lt ol gy to m lt y gy

Reported on 14-AUG-1992 at 15.37

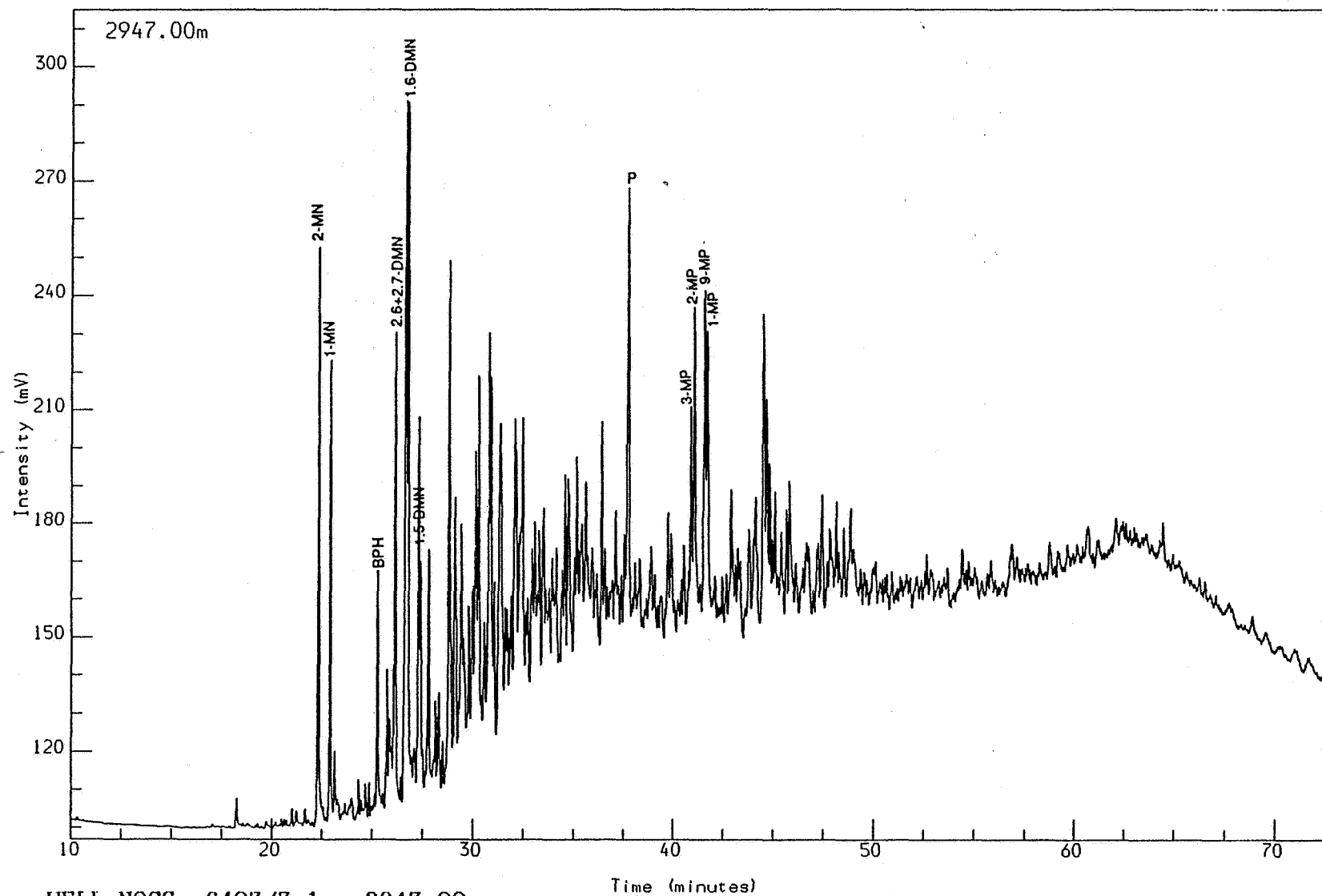
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 29 AG4100641L.12.1.

Multichrom



WELL NOCS 6407/7-1 2947.00m
AROMATIC GC (FID)
S/Sst: m lt ol gy to m lt y gy

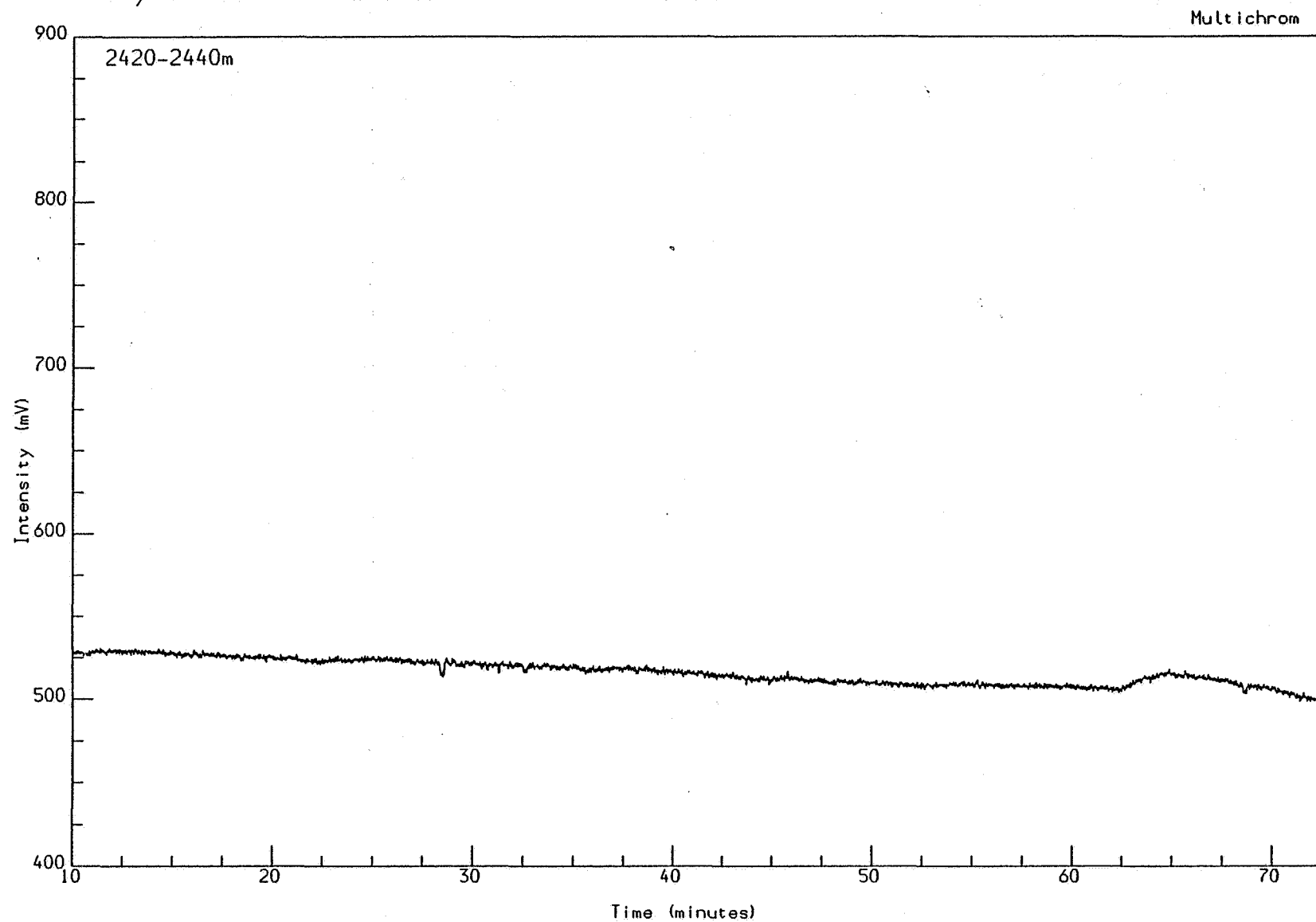
Reported on 14-AUG-1992 at 15:39

Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4102400BB,2,1.



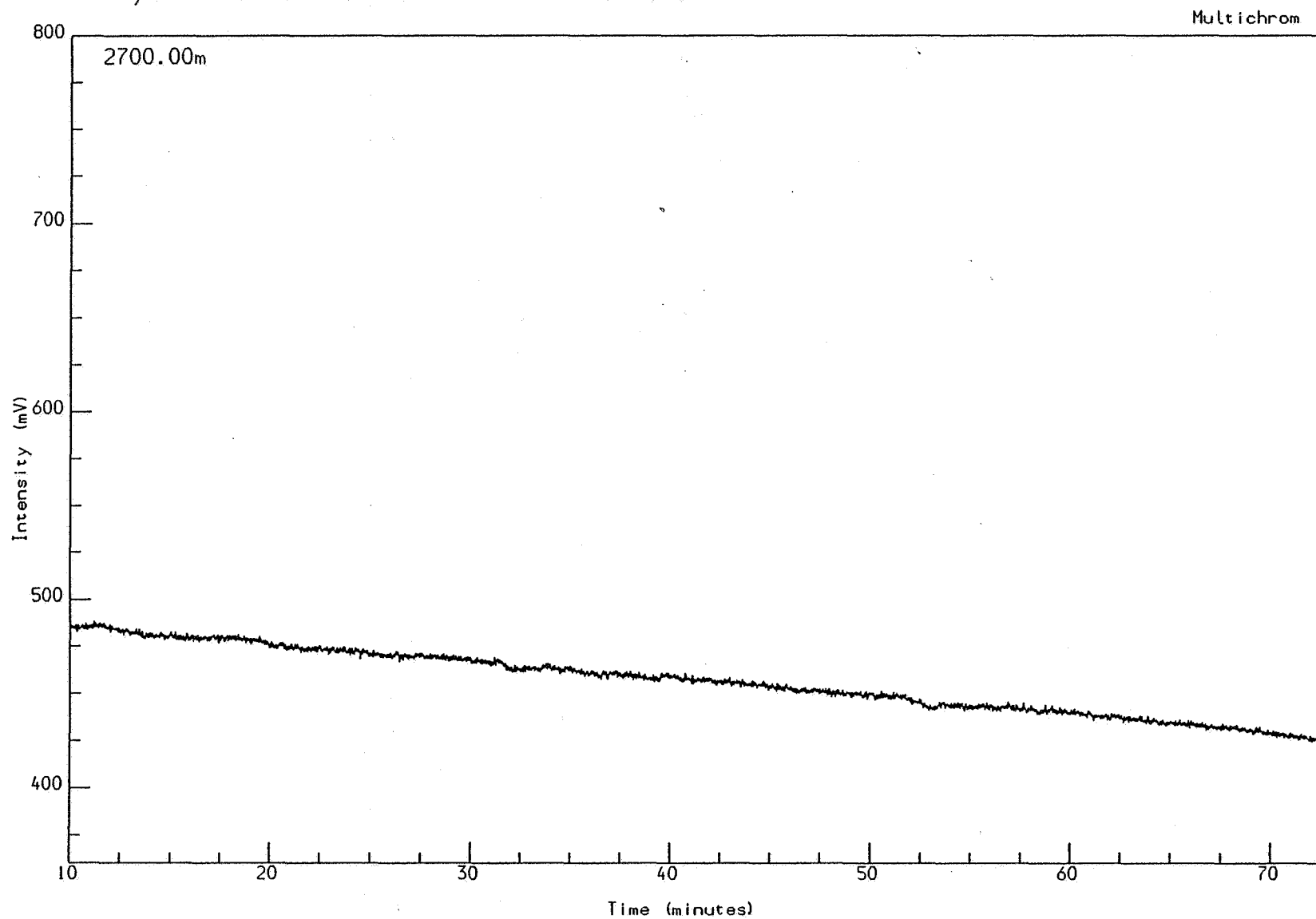
WELL NOCS 6407/7-1 2420-2440m
AROMATIC GC (FPD)
bulk

Reported on 26-AUG-1992 at 09:21

Schlumberger GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4101231L,1,1.



WELL NOCS 6407/7-1 2700.00m
AROMATIC GC (FPD)
Sh/C1st: drk gy

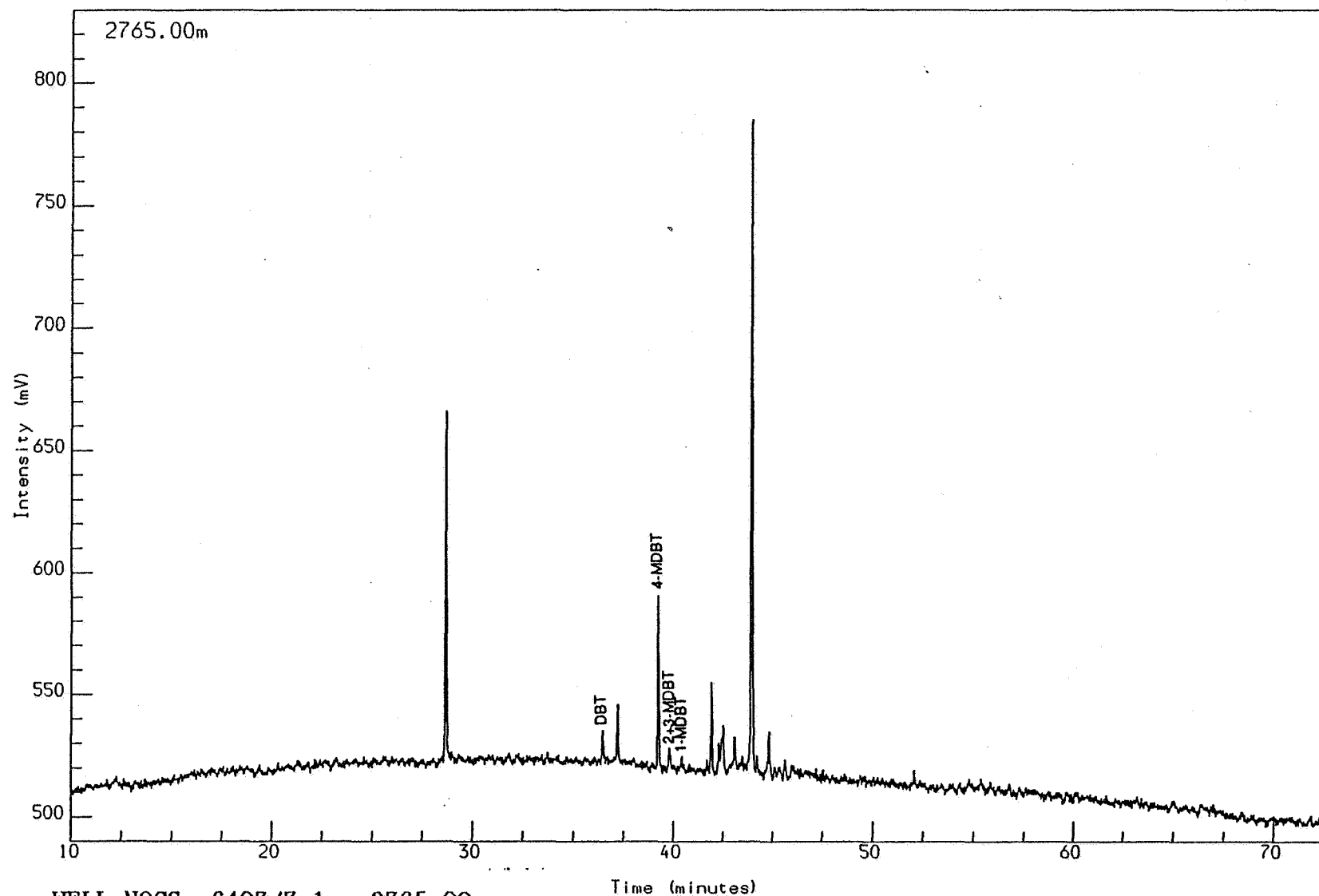
Reported on 27-AUG-1992 at 08:20

Schlumberger GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 30 AG4100641L,4,1.

Multichrom



WELL NOCS 6407/7-1 2785.00m
AROMATIC GC (FPD)
Sh/C1st: pl y brn

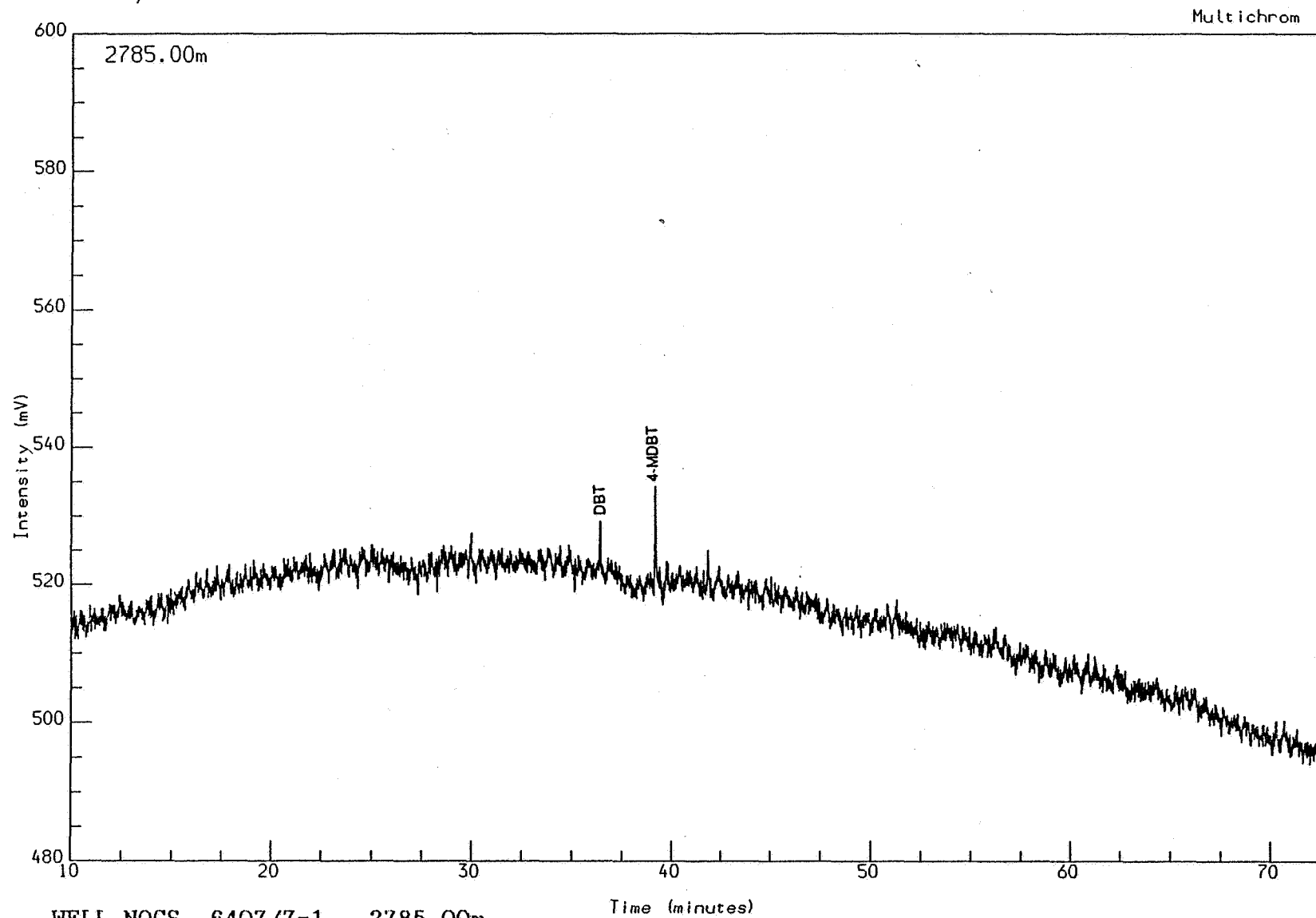
Reported on 14-AUG-1992 at 15:47

Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4100641L,5,1.



WELL NOCS 6407/7-1 2785.00m
AROMATIC GC (FPD)
Slitst: m lt gy to dsk y gy

Reported on 14-AUG-1992 at 15:49

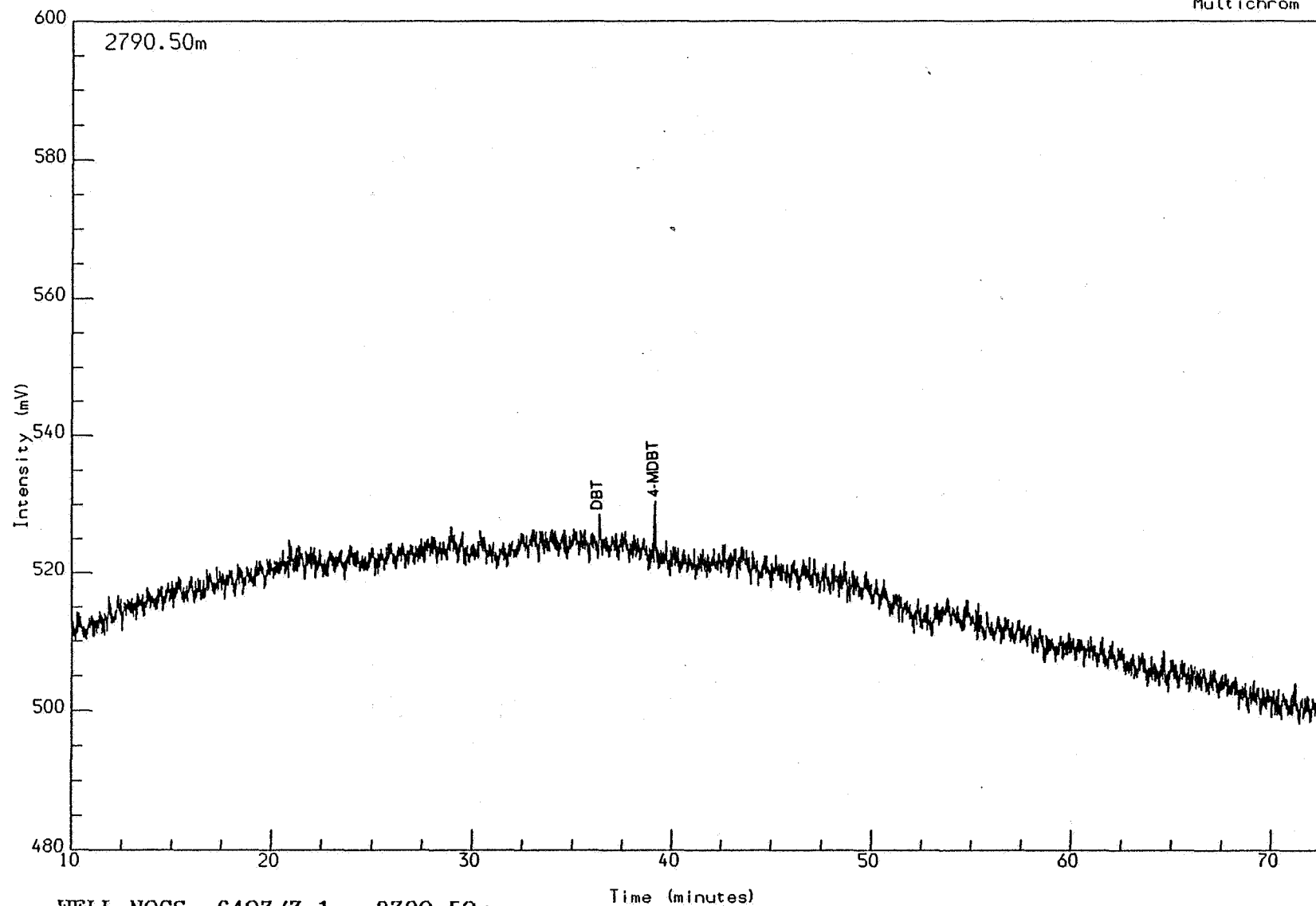
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4100641L,6,1.

Multichrom



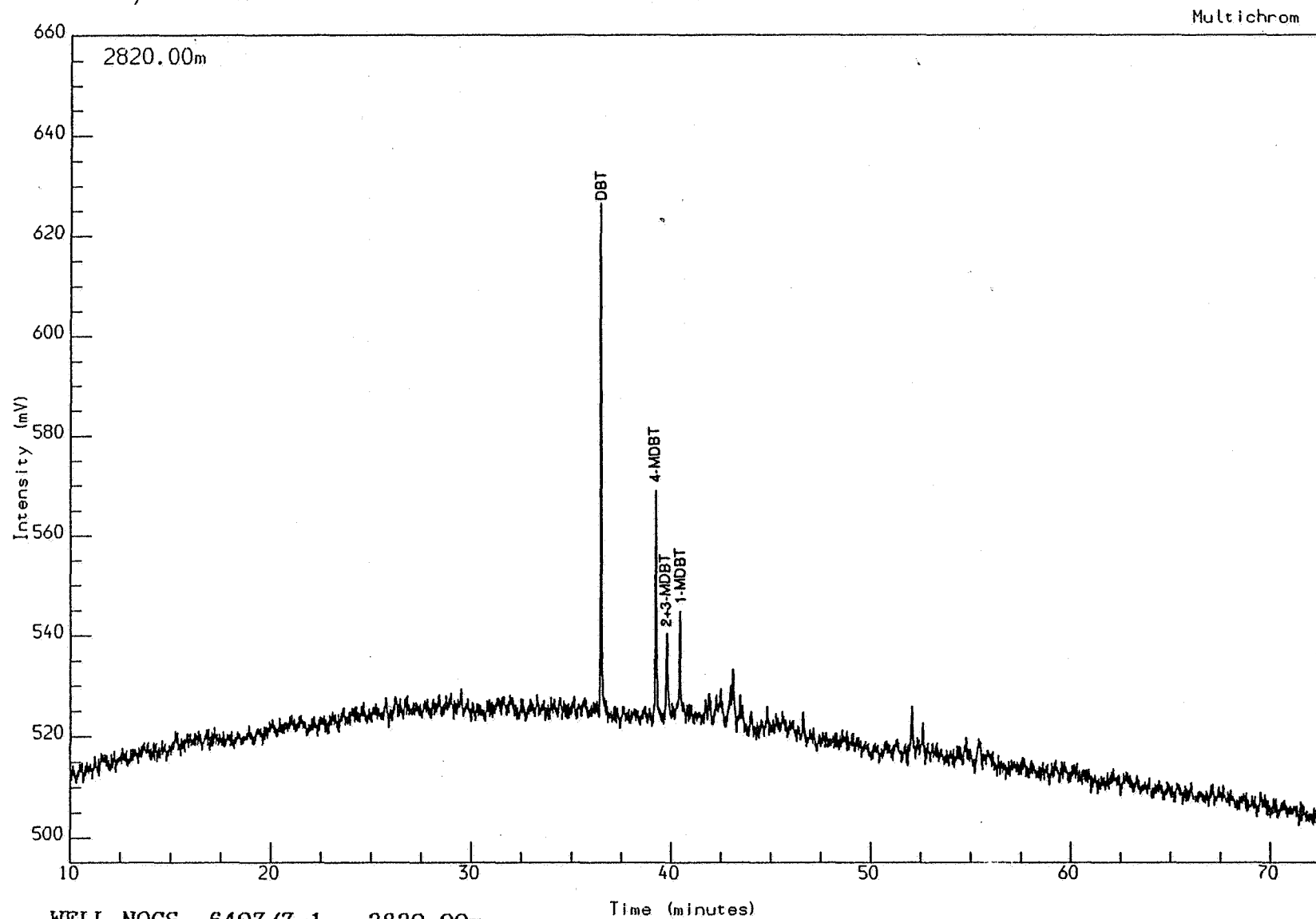
WELL NOCS 6407/7-1 2790.50m
AROMATIC GC (FPD)
Sh/Clst: m lt gy to dsk y gy

Reported on 14-AUG-1992 at 15:53

Schlumberger GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 30 AG4100641L.7.1.



WELL NOCS 6407/7-1 2820.00m
AROMATIC GC (FPD)
Sh/Clst: m lt gy

Reported on 14-AUG-1992 at 15:55

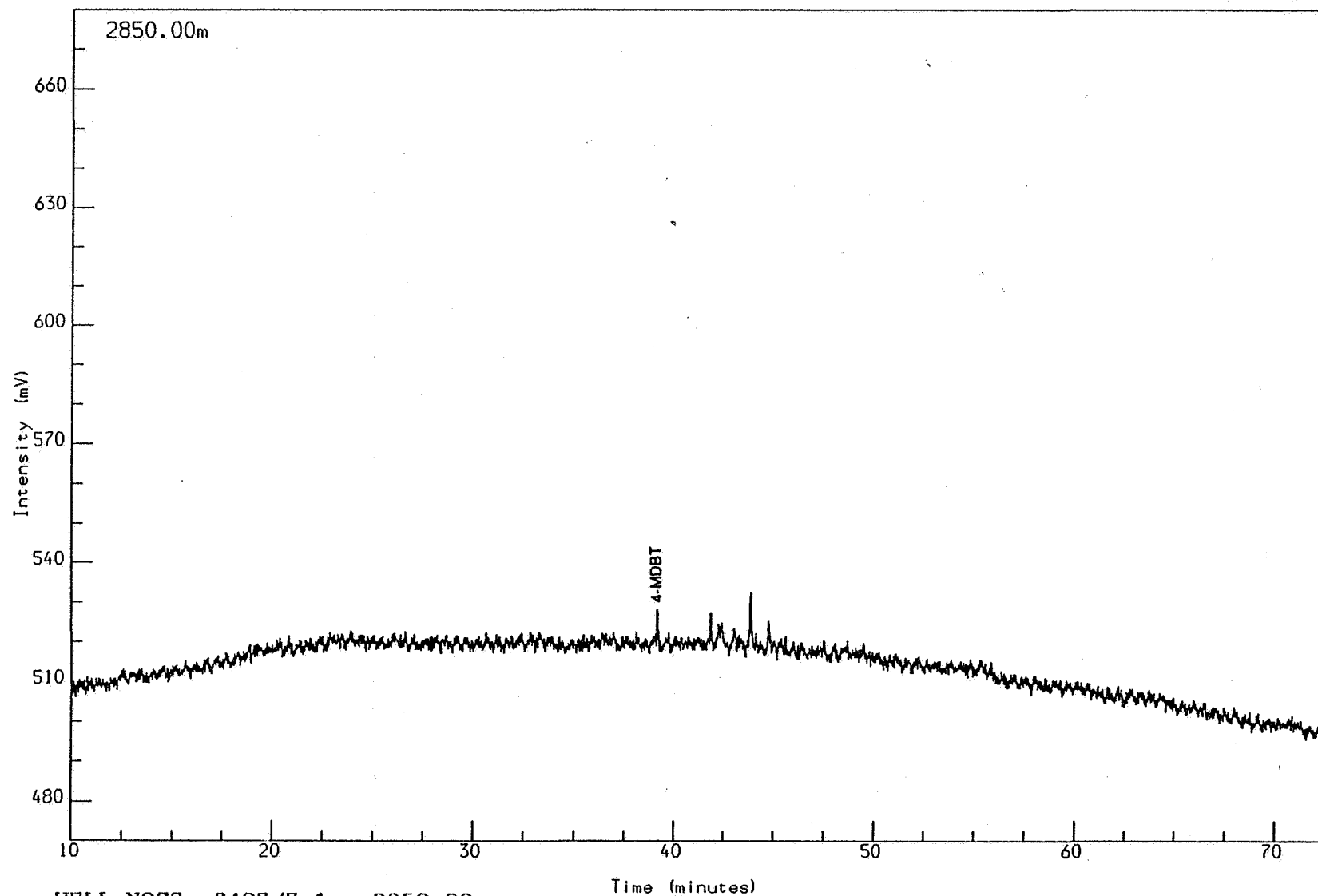
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 30 AG4100641L,8,1.

Multichrom



WELL NOCS 6407/7-1 2850.00m

AROMATIC GC (FPD)

S/Sst: 1t ol gy to 1t y gy

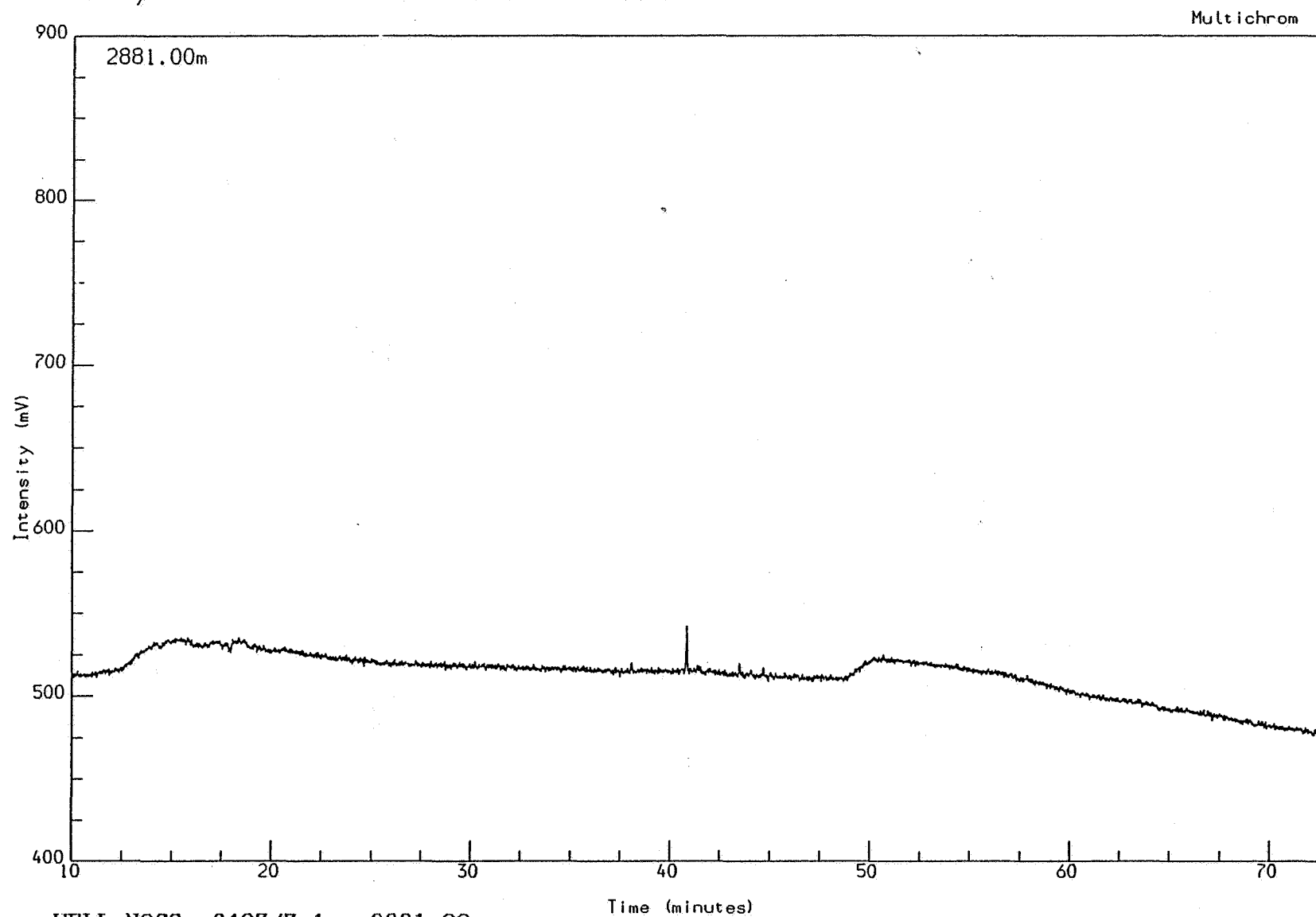
Reported on 14-AUG-1992 at 15:57

Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4102400BB,4,1.



WELL NOCS 6407/7-1 2881.00m
AROMATIC GC (FPD)
Sh/Clst: m drk gy to lt brn gy

Reported on 26-AUG-1992 at 09:41

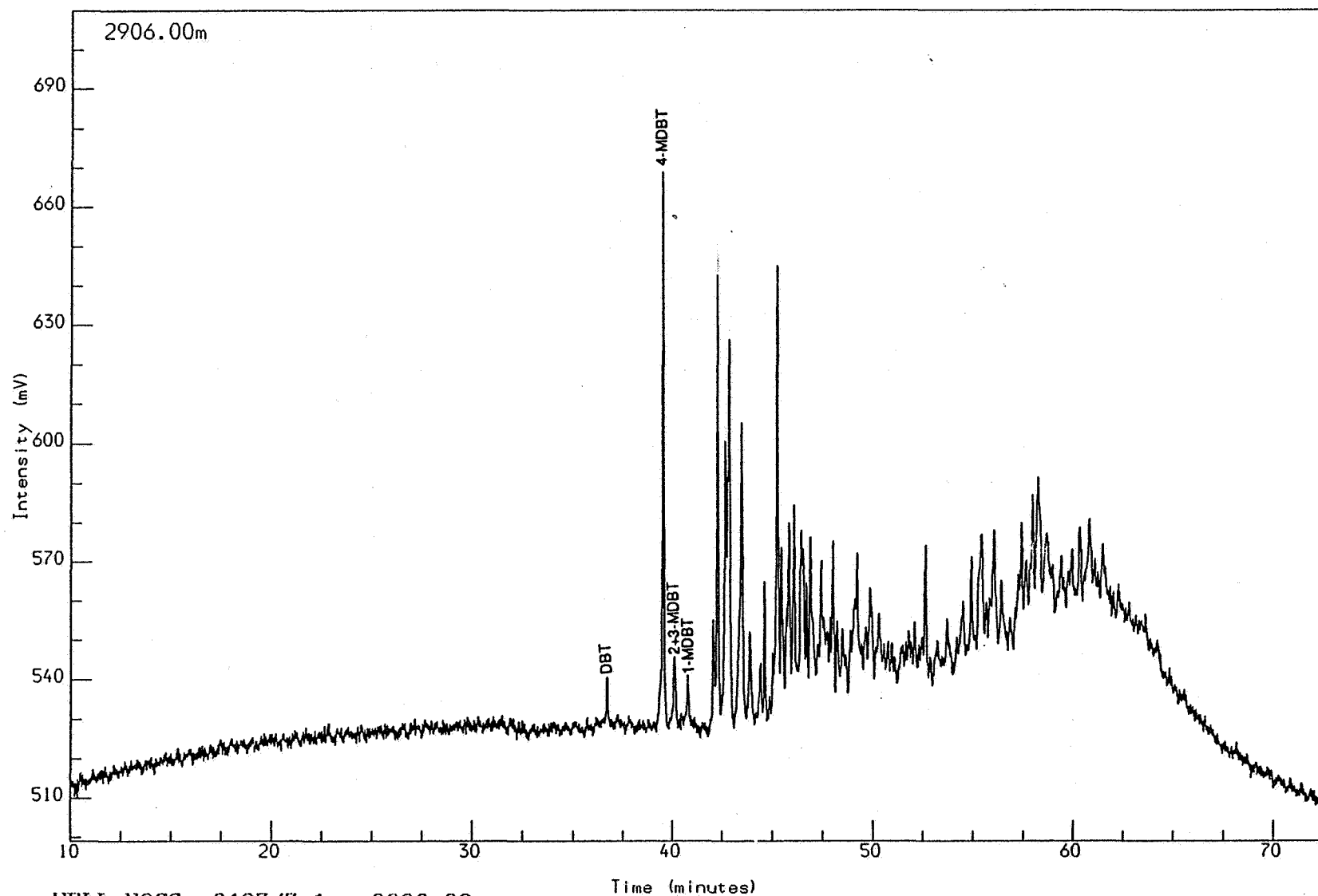
Schlumberger

GECO-PRAKLA

GEOLAB  NOR

Analysis Name : [522020] 30 AG4100641L,10,1.

Multichrom



WELL NOCS 6407/7-1 2906.00m
AROMATIC GC (FPD)
S/Sst: m lt ol gy to m lt y gy

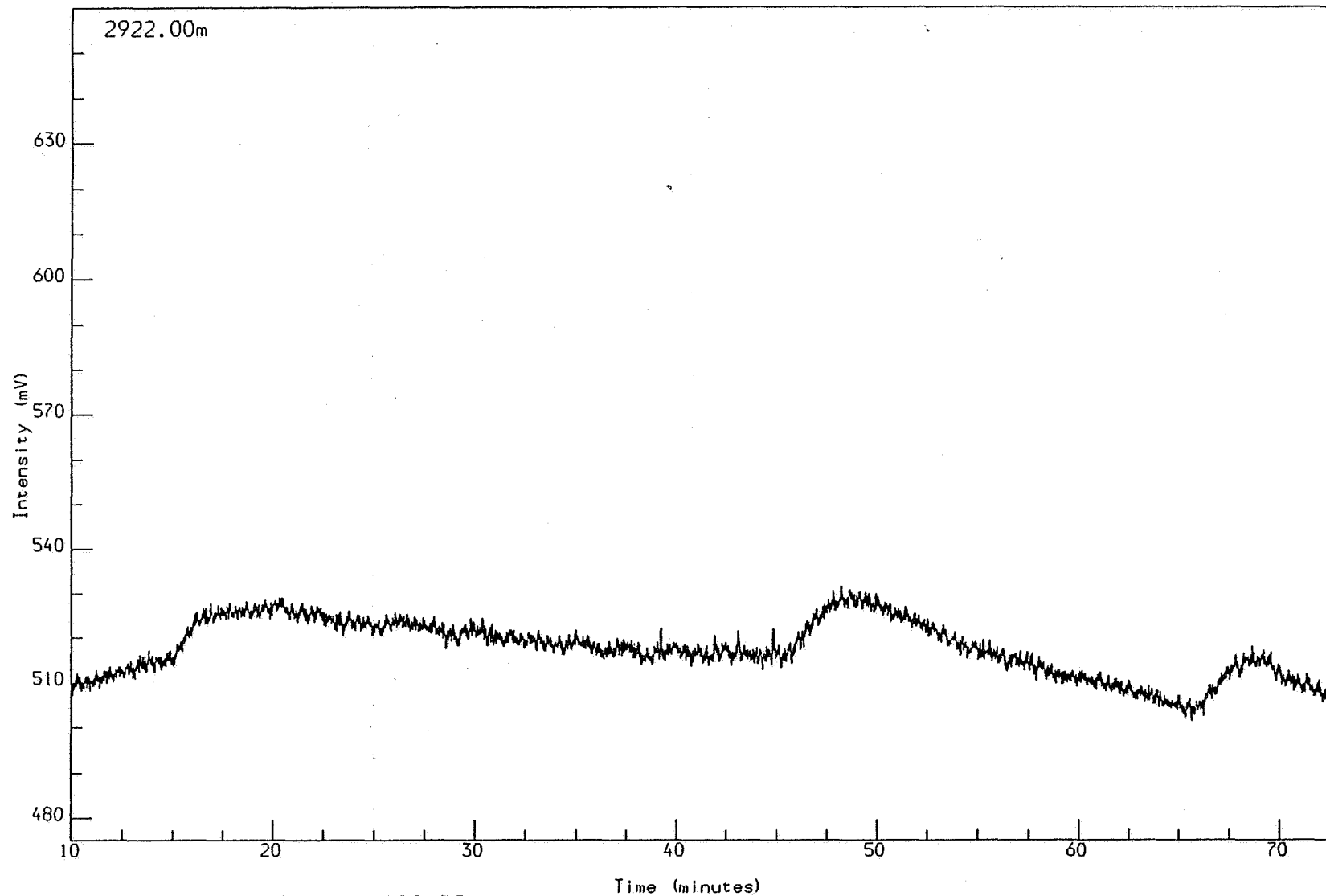
Reported on 14-AUG-1992 at 16:00

Schlumberger GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4100641L,11,1.

Multichrom



WELL NOCS 6407/7-1 2922.00m
AROMATIC GC (FPD)
S/Sst: m lt ol gy to m lt y gy

Reported on 14-AUG-1992 at 16:02

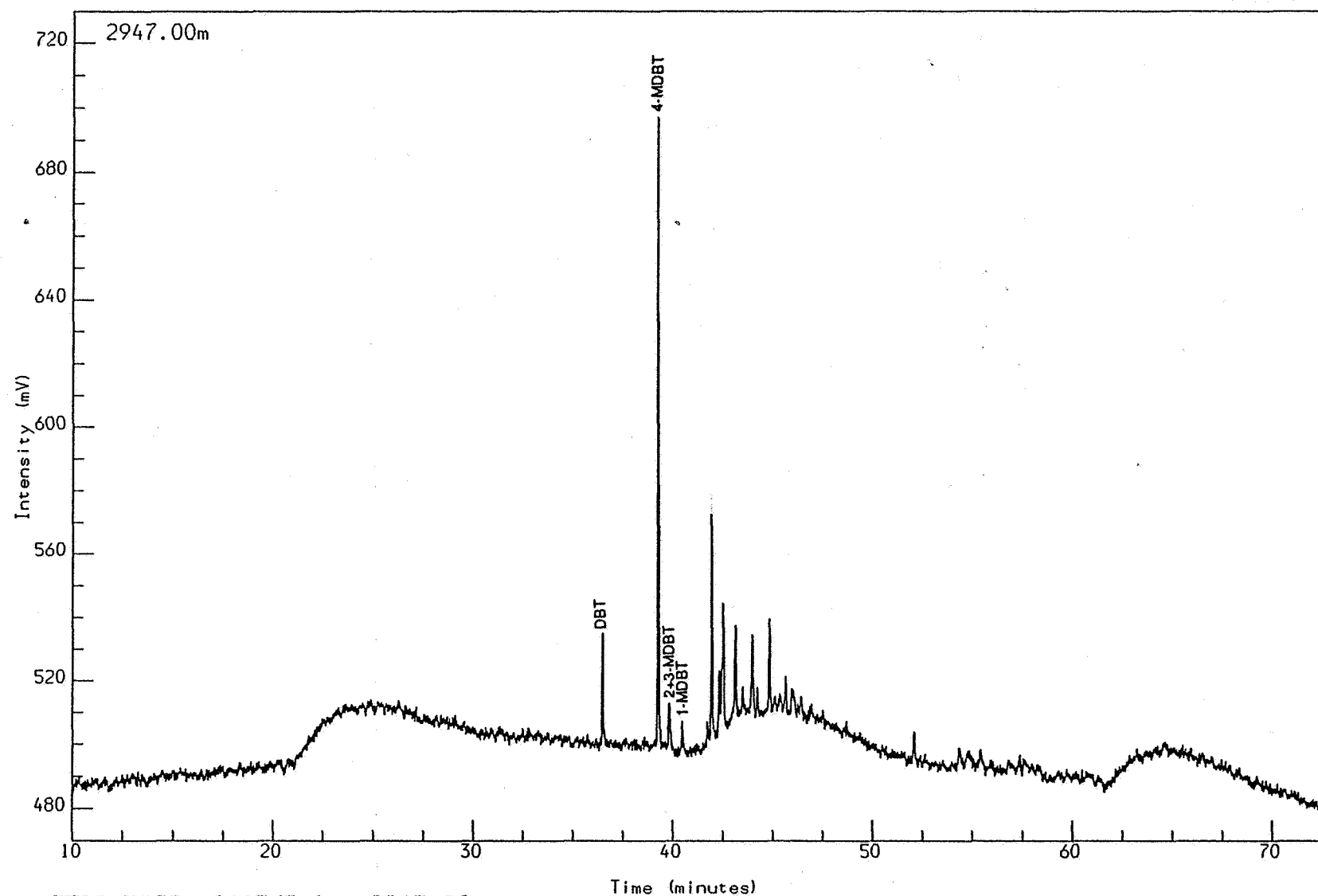
Schlumberger

GECO-PRAKLA

GEOLAB NOR

Analysis Name : [522020] 30 AG4100641L,12,1.

Multichrom



WELL NOCS 6407/7-1 2947.00m
AROMATIC GC (FPD)
S/Sst: m lt ol gy to m lt y gy

Reported on 14-AUG-1992 at 16:04

Schlumberger GECO-PRAKLA

GEOLAB NOR