

11. TESTING

Two run of RFT have been performed, the first run being pretests and the second one for sampling.

The pretests were performed at the following depths:

- at 2933 m, 2912 m (no seal), 2910 m.
- at 2600 m (no seal), 2595 m 2598 m (seal failure), 2576 m, 2570 m.

Sampling was performed at 2909 m. The pressure went up to 6189 psi in 30 minutes. The pressure stabilization being very slow it was decided to open the other chamber. After 9 minutes the formation pressure reaching the mud hydrostatic pressure the tool was closed in order to get a representative sample.

9 liters of salted water (NaCl 115 gr/lt) were recovered, slightly contaminated by the mud lignosulfonates. (The mud salinity was 47 gr NaCl per litre).

The formation pressure gradient has been estimated at 1.49/1.50 mud weight equivalent.

Fina Exploration Norway Inc.



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**GEOCHEMICAL SOURCE SCREEN ANALYSES OF
CONVENTIONAL CORE SAMPLES**

WELL N 3/7-2



ANALYSES METHODOLOGY

All analyses were performed on instrumentation co-invented and/or developed by FINA.

1. SOURCE SCREEN ANALYSES

* Rock-Eval : IFP/FINA Procedure. Rock-Eval 2 generation of equipment with TOC attachment employed. Analyses calibrated against IFP 55000 Standard. Analysis procedure conforms with that required by NIGOGA.

2. SOURCE DETAIL ANALYSES

- * Soxtec Extraction Procedure. Quantified analyses fulfil NIGOGA requirements.
- * Pyrolysis-Gas Chromatography : GEOFINA HYDROCARBON METER Procedure. Individual component quantified analyses calibrated against IFP 55000 Standard. Being the benchmark equipment, FINA's specification conforms and exceeds that required by NIGOGA.

3. C ISOTOPE ANALYSES

* Kerogen/Kerogen Pyrolysate $D^{13}C$ analyses : GEOCHEM/FINA AUTOPIP™ Procedure. No equivalent NIGOGA specifications. Data reported vs NBS22 at $D^{13}C$ -29.8 ppt.

Source Screen and Source Detail analyses were performed by the Exploration Geochemistry Group, Petrofina Exploration and Production, c/o Fina Research, Zone Industrielle C, B-7181 Seneffe (Feluy), Belgium.

The C Isotope Analyses were performed by THE GEOCHEM GROUP, Chester Street, Chester CH4 8RD England.



KEY TO SUMMARY DATA FILE PARAMETERS

TOC-Total Organic Carbon; S1-Productivity (free/thermovaporisable hydrocarbons); S2-Potential Productivity (hydrocarbons from kerogen/bitumen transformation); HI-Hydrogen Index (S2 normalised to TOC); R0 (mean vitrinite reflectance); TR-Production Index (S1 normalised to S1+S2); GI(S1)-Generation Index (100xS1 normalised to TKC); GI (TSE)-Generation Index (100xTSE normalised to TKC); Bitumen-Free Analyses : TKC-Total Kerogen Carbon; K2-Precision Potential Productivity; K3-Precision Kerogen CO2 Productivity; KPI-Kerogen Pyrolysis Index (Precision HI); OI-Precision Oxygen Index (100xK3 normalised to TKC); GOPR-Gas/Oil Production ratio (kerogen pyrolysis K2 product C1-5 gas content normalised to total pyrolysate); PI-Paraffin Index (kerogen pyrolysis K2/C9+alkane/alkene product normalised to TKC); TM-Rock-Eval Tmax (deg.C); TAI-Thermal Alteration Index (1-5 scale); TSE-Total Soluble Extract (rock bitumen); D-13C (K) (KPY) (TSE) - Stable Carbon Isotope Value of Kerogen, Kerogen Pyrolysate (K2) and Rock Bitumen (TSE), respectively.