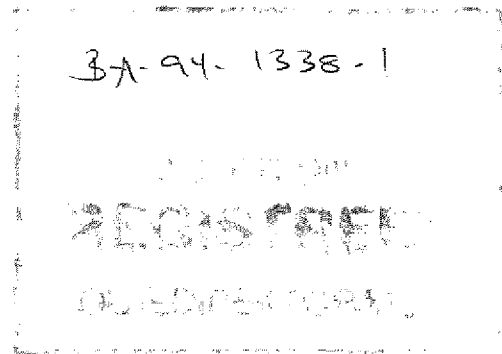


Fina Exploration Norway Inc.



May 1994



GEOCHEMICAL SOURCE SCREEN ANALYSES OF
CONVENTIONAL CORE SAMPLES

WELL N 2/1-3



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 D¹³C analyses : GEOCHEM/FINA AUTOPIP™ Procedure. No equivalent NIGOGA specifications. Data reported vs NBS22 at D¹³C -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.