Geological Completion Report

Well 6706/6-1

PL264

Drilling Permit L-1050 Hvitveis Prospect

An ExxonMobil Subsidiary

Hvitveis Prospect, PL264

Signature Page

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Content List

1 Introduction

- 1.1 Objective and Result
- 1.2 License PL264
- 1.3 Well Summary
- 1.4 Operations Summary

2 Geology, Geophysics and Formation Evaluation

- 2.1 Geological Summary
 - 2.1.1 Objectives of the well
 - 2.1.2 Results and well location
- 2.2 Stratigraphy
 - 2.2.1 Lithostratigraphy and Two Way Time
 - 2.2.2 Biostratigraphy
- 2.3 Hydrocarbon Shows from Wellsite descriptions
- 2.4 Shallow Hazards
- 2.5 Geological Samples
- 2.6 Conventional Cores
 - 2.6.1 Coring Data Summary
 - 2.6.2 Core Processing
 - 2.6.3 Core Description
- 2.7 Sidewall Cores
- 2.8 Logging
 - 2.8.1 LWD Operations
 - 2.8.2 Open Hole Wireline Logging
- 2.9 Petrophysics
 - 2.9.1 Composite Log Curve Data
 - 2.9.2 Core Analysis
 - 2.9.3 Petrography
 - 2.9.4 Formation Evaluation Nise Formation
 - 2.9.5 RCI Pressure Analysis
 - 2.9.6 RCI Sampling
- 2.10 Fluid Analysis Summary
- 2.11 Temperature Data
- 2.12 Geochemistry
- 2.13 Geophysical and Structural Interpretation
 - 2.13.1 Interpreted Horizons and Tie to Seismic
 - 2.13.2 Mapping and Depth Conversion
- 2.14 Formation Pressures

3 Standard and Special Studies

Appendix

- 1 Wellsite Sample Descriptions
- Sidewall Core Description Sheets
- 2 3 Core Description Sheets
- 4 Deviation Survey Listing and Location Information
- 5 RCI, Wireline Test Report, Pressures and sampling data
- 6 Composite Log (1:500)
- 7 CPI Log

List of Figures

- Fig. 1.1 Vøring Basin Location Map
- Fig. 1.2 Well 6706/6-1 One Page Summary
- Fig. 1.3 6706/6-1 Days vs Depth
- Fig. 2.1 Predrill south to north structural cross section through Naglfar Dome
- Fig. 2.2 Stratigraphic prognosis vs actual for Hvitveis well 6706/6-1
- Fig. 2.3 Hvitveis Core Overview
- Fig. 2.4 Hvitveis Core Description
- Fig. 2.5 Hvitveis Core Analysis
- Fig. 2.6 Petrophysical interpretation of the upper portion of the Nise Formation showing the hydrocarbon bearing interval and the cored interval
- Fig. 2.7 Petrophysical interpretation of the entire penetrated portion of the Nise Formation
- Fig. 2.8 The relationship between core per and porosity that is applied to PHIT from the logs to give a permeability interpretation in the uncored interval
- Fig. 2.9 Hvitveis Nise 1 Formation Pressures all points
- Fig 2.10 Hvitveis, QC of Pressure data
- Fig. 2.11 Hvitveis, Difference in Hydrostatic pressure All Points
- Fig. 2.12 Diffence in hydrostatic pressure for valid points
- Fig. 2.13 Hvitveis, Nise 1 Formation pressures, valid points
- Fig. 2.14 Hvitveis Nise 1, Formation Pressures versus Depth HC zone
- Fig. 2.15 Hvitveis, Nise 1, valid gas reservoir pressure points
- Fig. 2.16 Hvitveis 6706/6-1 Predicted and Actual temperature
- Fig. 2.17 Inline 1689, with 6706/6-1 location. Interfering sills within Nise 1 located to the lower left
- Fig. 2.18 Synthetic Seismogram, well 6706/6-1
- Fig. 2.19 Well to seismic tie, inline 1689
- Fig. 2.20 Naglfar 3D, Hvitveis, stacking velocities/IV/depth, versus TWT
- Fig. 2.21 Hvitveis 6706_06_01, Sonic Log and Checkshot Data
- Fig. 2.22 Depth Conversion Methodology
- Fig. 2.23 Depth Structure Map of Top Cretaceous
- Fig. 2.24 Depth Structure Map of Top Nise 1

List of Tables

- Table 1.1 Well 6706/6-1 Summary
- Table 1.2Hole Sizes and Mudweight
- Table 1.3Core Recovery
- Table 2.1Lithostratigraphy and Two Way Times
- Table 2.2Chronostratigraphy
- Table 2.3Hydrocarbon shows table
- Table 2.4Core Recovery
- Table 2.5Sidewall Cores
- Table 2.6LWD Summary Table
- Table 2.7 LWD Terminology
- Table 2.8Wireline Logging Summary
- Table 2.9
 The Parameters used in the Petrophysical Evaluation of the Nise Formation
- Table 2.10 Hvitveis 6706/6-1 Net Summary
- Table 2.11
 Hvitveis well 6706/6-1 RCI Pressure Measurements
- Table 2.12RCI Sampling Results
- Table 2.13
 Contents of Opened RCI Bottles Onboard West Navigator
- Table 2.14Chromatographic Break Down of Gas Samples
- Table 2.15
 Transfer of RCI Chamber Contents to Storage Bottles
- Table 2.16
 Transfer of RCI Chambers, Opening Pressures and Contents
- Table 2.17
 Transfer of RCI Chambers to Storage Bottles, Volumes and transfer pressures
- Table 2.18
 Compositional Analysis of Separator Gas
- Table 2.19Wireline logging temperatures
- Table 2.20
 Geochemical Summary, Source Rock Screening
- Table 2.21Geochemical Maturity Summary
- Table 2.22Leak off tests and pore pressure

Exploration Well 6706/6-1 Geological Completion Report

Hvitveis Prospect, PL264

1 Introduction

1.1 Objective and Result

Well 6706/6-1 was drilled to test the hydrocarbon potential of the Cretaceous Hvitveis prospect at the Naglfar Dome in the Vøring Basin.

The objective for Well 6706/6-1 was to test a seismically defined reservoir interval, interpreted to be the Nise 1 Formation. The well was drilled to a depth of 3451 m TVDRKB in sandstones of Late Campanian age.

The seismically defined reservoir interval was intersected and confirmed via seismic welltie. There are still some uncertainties as to whether the tested reservoir interval belongs to the Nise Formation or if it is younger and maybe equivalent to the Springar Formation. Additional biostratigraphical analyses are currently in progress to more accurately define the age of the reservoir interval. Until these analyses have been completed the reservoir interval will be referred to as the Nise 1 Formation reservoir.

The well discovered a close to normally pressured dry gas accumulation in the main objective sandstones of the Nise 1 Formation.

The Hvitveis exploration well was drilled with Smedvig's DP Drill-ship, West Navigator. Operations commenced on 1 May 2003 with the drilling of a 9 7/8" pilot hole, 100 m off-set from the final well location. The water depth at the pilot hole was 1295 m. The water depth at the main hole was 1298m. The well was drilled to 3451m TVDRKB in this reservoir. The well discovered a small column of dry gas in the Nise 1 reservoir. One core was cut and fluid sampling was done on wireline. The well was plugged and abandoned on June 18, 2003.

Figure 1.1 shows the well location and Figure 1.2 gives a one page summary of the well.

1.2 License PL 264

Production License No. 264, awarded on May 12, 2000 in the 16th concession round, covers blocks 6706/5, 6706/6 and 6707/4 offshore Norway, approximately 330 km west of Bodø. The current license owners are Esso (Operator, 30%), ConocoPhillips (30%), Petoro (20%) and Norsk Agip (20%).

Well 6706/6-1 was drilled by Esso on the Hvitveis prospect, which was the largest interpreted prospect on the Naglfar Dome. The Naglfar Dome is a Late Tertiary inversion structure with a positive relief at the seabed. This well represented a firm commitment well for the license.

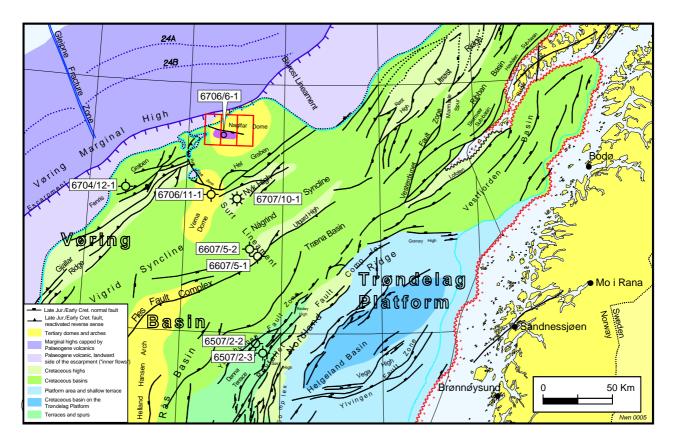


Figure 1.1: Vøring Basin location map

1.3 Well Summary

License Well Location Esso Norge AS 30% Concoc-Phillips 30% Concoc-Phillips Country Norway Vering Basin License Disck 5706/6-1 (PL264) AGIP 20% Concoc-Phillips 20% Concoc-Phillips 20% Concoc-Phillips 20% Concoc-Phillips 20% Concoc-Phillips 20% Concoc-Phillips 20% Concoc-Phillips 20% Contractor Drilling Permit 1050L Seismic line ES0-01, inline 1689, xline 6688 Objectives : • Drill the well safely and with no risk to the environment. • Test the hydrocarbon potential of the Hvitvis prospect Casing (MD BRT m) 97/8° pilot: 2,050 m If grave: DP Drillship 97/8° pilot: 2,050 m 36° : 1,422 m ND F-SB : 1,331 m 12 1/4° : 3,451 m 13 3/8° : 3,211 m DST Test No. Cores: 1 Interval: 3,2277 - 3,285.5 m No. Shots: 50 Recovered : 50 Core barrel: 36 m No. Shots: 50 Recovered : 50 Core barrel: 36 m No. Samples 800 cc: 4 No. Samples 800 cc: 4 No. Samples 800 cc: 4 No. Samples 4000 cc : 1 No DST performed Formation Logs Formation Tops Prognosed Actual TODSS Actual TODSS Mol BRT m No DST 1,543	E x∕onN	lobil	Well: H	lvitveis (6706/6-1)	One Page	Summary
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 Drill the well safely and with no risk to the environment. Test the hydrocarbon potential of the Hvitveis prospect Rig Contractor : Smedvig Rig Name : West Navigator Rig Type : DP Drillship DF-MSL : 36 m DF-MSL : 36 m DF-SB : 1,331 m WD : 1,295 m SWC No. Cores : 1 Coring No. Cores : 1 Core barrel : 36 m DF-SB : 1,325.5 m Recovered : 6.55m, 81.9% SWC No. Shots : 50 Recovered : 50 Cores full : 43 (86%) RCI Tester No. Pressure points : 25 No. Samples 4000 cc : 4 No. Samples 4000 cc : 4 No. Samples 4000 cc : 1 DST Test No DST performed SWC Cores full : 43 (86%) Formation Logs Hole Size 20⁴ Logging 27⁶ Hole No Logging 27⁶ Hole No Logging 17⁷ Hole GR/ARC/MWD 20.50 - 3,205 m Corea (GR/ARC/MWD 20.50 - 3,205 m 20⁵ - 2,042 m 13 3/8" : 3,211 m No. Shots : 50 Recovered : 50 Cores full : 43 (86%) Formation Tops Prognosed Actual TVDSS m 2040 - 2,770 m ZDU/CNXMACTTRM 1,500 - 3,210 m GR/DLLML/ ZDU/CNXMACTTRM 1,500 - 3,210 m Coretaceous (Springar) 2040 - 2,770 m ZDU/CNXMACTTRM 12 1/4" Hole ARC/RAB/CDN Core Sure Jone Coretaceous (Springar) 2040 - 2,770 m ZDU/CNXMACTTRM 12 1/4" Hole ARC/RAB/CDN Core Sure Jone Coretaceous (Springar) 2040 - 2,770 m ZDU/CNXMACTTRM 12 1/4" Hole ARC/RAB/CDN Coretaceous (Springar) 2040 - 2,770 m ZDU/CNXMACTTRM 12 1/4" Hole ARC/RAB/CDN Core Sure Jone Coretaceous (Springar) 2040 - 2,770 m ZDU/CNXMACTTRM Check-shots GR/SL/ML/ GR/SL/ML/ GR/SL/CN Coretaceous (Springar) 2040 - 2,770 m ZDU/CNXMACTTRM Check-shots Core So shot, 43 full 	Conoco-Phillips AGIP SDFI (Petoro) AFE No. 533\	30% 20% 20% 01204.1.01	License Blo Latitude N (Longitude E (ED	ock 6706/6-1 () 67º 33' 34.792 06º 41' 18.377 0 50, UTM zon	PL264) "; 7,495,801.7 "; 401,545,2 e 32	m E 🔥	High againa ar Vi21	Hvitveis 67066-1
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<u>Neouno</u>	Results							
	ILESUILS							

Figure 1.2: Well 6706/6-1 One page Summary

License	PL 264					
Operator	Esso Norge AS (30%)					
Partners	ConocoPhillips (30%)					
	Agip (20%)					
	Petoro (20%)					
Drilling Permit	L-1050					
Drilling Rig	West Navigator					
Completion Status	Plugged and abandoned, small gas discovery					
Location Main Well	X= 401545.2 mE Longitude: 6 deg 41 min 18.377 sec E					
Surface	Y= 7495801.7 m N Latitude: 67 deg 33 min 34.792 sec N					
Bottom hole location	X= 401 537.7 mE Longitude: 6 deg 41 min 17.602 sec E					
	Y= 749 5824.8 mN Latitude: 67 deg 33 min 35.528 sec N					
Pilot hole location	100m North of main hole location					
RKB to Sealevel	36 m					
Water Depth pilothole	1295 m					
Water Depth main hole	1298 m					
Well Objective	Stacked Cretaceous Sandstones					
Rig handover	May 1, 2003					
At location	May 1, 2003					
Spud Pilot Hole	May 2, 2000					
Drilled Pilot Hole to TD	May 3, 2003					
TD of Pilot Hole	2050 mmdrkb					
Spud Main Hole, 100m away	May 4, 2003					
from pilothole						
Drilled to TD	June 6, 2003					
TD of Main Hole	3451 mmdrkb					
Rig released	June 18, 2003					
Status	Gas Discovery, Plugged and abandoned					

Table 1.1: Well 6706/6-1 Summary

Hole size, inches,	Depth m mdrkb	Casing, Inches	Casing, Depth mmdrkb	Mud type	Mudweight (SG)	Leak off/ Formation Integrity Test (SG)
Shallow gas Pilot hole: 9 7/8"	1328-2050			Seawater	1.05	
Main Well 42"	1331-1428	36	1422	Seawater	1.05	
28"	1428-2050	20	2042	Seawater	1.05	1.27
17"	2050-3220	13 3/8	3211	KCL/ Glydril	1.22	1.49
12 1/4"	3220-3451			KCL/ Glydril	1.28	

Table 1.2: Hole sizes and Mudweight

Cores	Cut	Cut	Recovered	Formation
1	3277-3285m	7 m	3277-3283.55	Nise 1

Table 1.3: Core Recovery

1.4 Operations Summary

For a complete operations summary with learning points, please see Drilling's report: Hvitveis (Naglfar) 6706/6-1, Exploration Drilling, End of Well Report. Only a short summary is included in this report, a drilling progress curve is illustrated in Figure 1.3.

Mobilisation & Pilot Hole

Sailing

The West Navigator arrived at a sheltered inshore location, Aarsundfjorden Kristiansund N, about 3km from shore, at 10:45 hrs 23/APR/2003. The rig sailed to Kristiansund N at Esso's request to optimize on the loadout operations. The rig sailed to the Hvitveis location, arriving at 00:01hrs 1/MAY/2003.

Positioning

The rig was on DP at 00:01hrs 1/MAY/2003 at the well location where positioning and setting the 7 transponders commenced.

9 7/8" Pilot Hole

The 97/8" pilot hole was spudded with the Main Rig at 23:00 hrs on 1/MAY/2003 and completed in 1.48 days with a single Security XLC1 (1-1-7) bit run. High-risk shallow gas was prognosed in the Brygge Unit C and the main well was located 490m west of this shallow gas anomaly. The pilot hole was positioned 100m north of the well location and was drilled from 1331-2050m MDRT (planned TD of the 20" casing). The water depth at the pilot hole location was 1295m.

The drilling went smoothly and no shallow gas or boulder problems were encountered. Consequently, the pilot hole was not cemented. The drilling BHA consisted of MWD Dir/GR/Res, without Neu/Den as it would be very difficult to recover the neutron source if the tool was lost in hole in a riserless operation. At the beginning of the run, the Annulus Pressure Whilst Drilling (APWD) sensor failed. On removal of the sensor when tools were at surface, the failure was seen to be due to water invasion of the sensor.

Various options were considered for the pilot hole:

- a. Drill the pilot hole from the 36" casing so as to eliminate the potential chimney effect. It was concluded that if the well encountered shallow gas flow, it was expected that the 36" would be damaged. Based on offset wells and experience elsewhere, 100m separation is considered a safe distance to avoid the chimney effect.
- b. The pilot hole location was chosen to intercept potential gas so that it could be assured that the main hole would be free from shallow gas risk.
- c. Opening up the pilot hole for the main well. The team elected not to do this, as there is a chance of channeling if the hole-openers would not follow the pilot hole. The pilot hole was drilled to the planned depth of the 20" shoe.

42" Hole & 36" Conductor Running and Cementing

Drilling 42" Hole

At the well location, the seabed was tagged at 1334m MDRT, while monitored with the ROV. The water depth at the main well location was 1298m. However, the 42" hole was drilled to

1428m MDRT, without the ROV monitoring. The ROV was returned to the cage to prevent damage to the ROV while rotating the drill string.

The ROV was sent to monitor while pulling the BHA out of the hole, it was then found that the bit had skidded 40m from the planned location. A 1-1.5m trench from the marker buoys position showed the skidding of the bit.

It was decided to redrill the 42" hole when the MWD (now working) indicated that the well angle from the seabed to 1397m was 5 degrees. During re-spud with the same assembly, attempts to wash the bit down failed. With low rotary and WOB, it took 2.5hr to bed the bit from 1.5 - 5.5m below the seabed. It was noted again that the bit skidded 6m from the re-spud location, due to the hard crust about 1.5m below the seafloor.

The rig was repositioned and the 42" hole drilled to 1428.4m. The survey at 1425.4m showed an angle of 1.63°. The final well location was 6.2 m (15 m allowed) from the planned location. After drilling, the hole was swept with a Hi-Vis pill and displaced to 1.2 SG mud. The 36" structural casing was stabbed on the first attempt without any drag or fill problems. No signs of boulders were experienced. The top of the 36" housing was 1328.3m MDRT (2.7m stickup) and the shoe was set at 1421.5m.

The 36" was cemented in place.

28" Hole, 20" Surface Casing & BOP/Riser

Drilling 28" Hole

A 28" bit on a rotary BHA was run to drill the 28" hole to TD at 2050m. The BHA tagged the TOC at the planned depth, 5m from the shoe.

Running and Cementing 20'' Casing

The Aux Rig ran and landed the 20" casing. The casing was landed at 2042m with 8m of rat-hole. The 20" casing was cemented.

BOP & Riser Running and Testing

The BOP and Riser was run. The 20" casing test leaked at 1.86 psi/min (Test 1), 1.79 psi/min (Test 2) and 3.55 psi/min (Test 3). Observations with the ROV revealed that the leak was coming out of the flow-by-port of the 36" housing. It was deduced that most likely the O-ring of the connection on the 20" casing at about 11 m below the wellhead housing was leaking and passing through the seal between the 36" and 18-3/4" wellhead housings. The leak response was very quick suggesting that the leak was very high up in the string and the TOC inside the 20" was later tagged at where it was supposed to be.

17" Hole and 13 3/8" Intermediate Casing

Drilling 17" Hole

The 17" hole section was drilled in three separate bit runs, from the 20" casing shoe to the section TD at 3220 m. The first run was terminated due to an increasing hole angle, requiring the bend on the motor to be changed. The second run was terminated due to low penetration rate, requiring a trip to change the (insert) bit. The third run completed the section. All three BHA's included only MWD to record Direction, GR and Resistivity, while the 17" hole was deemed too big to get reliable readings from LWD-Density/Neutron sensors.

After drilling out the 20" shoe, the well was displaced to 1.18 SG Glydril DW KCl/Glycol mud and the subsequent FIT recorded a 1.27 SG LOT, equivalent formation strength. Although this value was lower than anticipated, the operations team, in consultation with field drilling manager, deemed this sufficient to drill ahead safely to the planned section TD at 2700 m. Drilling results at 2700 m, later extended to 2770m indicated absence of hydrocarbon gas sands in the upper Maastrichtian sand units at 2,253m TVDSS and 2,282m TVDSS. An intermediate wireline GR/DLL/MLL/ZDL/CN/XMAC-logging run was carried out at 2,770 m to evaluate the poorly developed Maastrichtian sands. A short circuit in the XMAC logging tool required a rerun of the logs.

Review by G&G staff, based on the log results, suggested that the probability of gas in the lower Maastrichtian sand unit at 2940 m TVDSS was less than 10%. The pore pressure trend in the well had shown to be normal at 1.04 SG. It was therefore decided to extend the 17" section TD from the original 2700 m to 3250 m (100 m above top Nise1) to eliminate the running of a casing string. Drilling continued with frequent small (1 - 5 m thick) hard streaks, causing ROP readings to come down from 30 - 50 m/hr to 1 - 5 m/hr.

17" Logging

The intermediate GR/DLL/MLL/ ZDL/CN/XMAC-logging run was carried out at 2770 m to evaluate the poorly developed Maastrichtian sands. Interpretation of the data resulted in the decision to continue drilling in 17" hole to the next section TD at 3220 m.

The 17" section TD logging (Seismic check shots and

GR/DLL/MLL/ORIT/ZDL/CN/XMAC/TTRM) at 3220 m was carried out in two runs, without problems. Quick-look log interpretation of both the intermediate as well as the section TD logs showed a massive shale/clay section with very poorly developed Maastrichtian sands, with no indications of hydrocarbon presence. The subsequent wipertrip before running 13 3/8" casing encountered no problems going in and out of the well.

Running and Cementing 13 3/8" Casing

As a result of the deepening of the 17" hole section from 2700 m to 3220 m, another 52 joints of 13 3/8", TCII-A casing had to be rush-mobilised from the MNSL stock in Aberdeen. While making up and running in with the 13 3/8", 68#, TCII-A casing at a depth of 950 m (shoe inside the riser) returns were lost. Running in continued using seawater to keep a delicate balance, controlling the losses.

After the 13 3/8" string was finally landed, the casing was cemented as per program. The floats held and no returns were recorded.

12 1/4" Hole section

Drilling 12 1/4" Hole

The 12 1/4" hole section was rotary drilled in three stages. An initial short section was drilled from the 13 3/8" casing shoe at 3220 m to the coring point at 3277 m (57 m), followed by a coring run to 3286 m (9 m) and finally the drilling to TD at 3451 m (164 m).

The initial BHA tagged the TOC inside the 13 3/8" casing, 80 m above the 13 3/8" float collar. Although the float held at the end of the 13 3/8" casing cement job, it is believed that the cement bypassed the plug during the displacement and caused the higher TOC. After drilling the 13 3/8"

shoe and conditioning the mud to 1.28 SG, the FIT recorded a 1.49 SG EMW LOT, sufficient to drill to the deepest planned section TD (4300 m).

A single 12 1/4" FS2763 (S323) PDC bit on a packed rotary MWD/LWD BHA was used to drill the first and third sections (221 m total) in 35.4 hours at an average ROP of 6.2 m/hr. The BHA included MWD/LWD Directional, PWD and GR/RAB/ARC/CDN formation evaluation sensors. No problems were seen with MWD/LWD tools, or signal decoding during the run. At a depth of 3451 m, TD was called for the well when gas readings continued dropping, the LWD showed no indications of hydrocarbon bearing reservoir sections and the erratic torque readings indicated the bit to be undergauge. The pulled bit showed 1/8" undergauge. A wiper trip was made before pulling out of hole in preparation for TD logging.

12 1/4" Coring

While drilling from 3255 to 3277m, background total gas readings of up to 9 % coincided with indications of hydrocarbons by the LWD (low GR and increased RAB-Resistivity) and an increased sand content in the cuttings. The RAB was very effective for picking the Core Point before drilling further into the sands.

The decision was taken to cut a 36m, 12 1/4" x 5 1/4" core, to sample the top of the Nise 1 sand from 3277m onwards. Unfortunately, a rapidly declining ROP during the cutting of the core, indicated the12 1/4" x 9 1/2" coring assembly to be jammed. At 3285 m the decision was taken to pull the string and a 6.55 m core was recovered (82% recovery). Inspection of the assembly indicated the 'jam' to be at the catcher. The recovered core showed a sequence of interbedded shales, mudstone and fine sands. The Core Gamma Ray indicated 4 sections with low GR readings.

12 1/4" Logging

Run 1: GR-RCI, (52 pressure points and six samples) Run 2: GR-SLR-XMAC ELITE (Check shot) Run 3: GR-SWC(took 50, rec 42)

The 12 1/4" TD logging was carried out in 3 separate runs. The GR/RCI formation tester was run first and obtained 25 representative formation pressure readings and recovered 6 formation fluid samples. The second run comprised of a GR/Check Shot/XMAC tool string for seismic referencing and to record the sonic data over the 12 1/4" hole section. The tool indicated the top of cement in the 13 3/8" x 17" annulus at around 2700 m. The consecutive and final run with the GR/SWC shot 50 sidewall cores, recovered all, of which 43 contained samples and 7 were empty. No downtime was reported during the logging operations.

Plug back & Final Abandonment

The plug back and abandonment of the well was planned in several stages: the plug back with several cement plugs, the recovery of the 13 3/8" casing, hanger, seal assembly and finally the recovery of the wellhead.

Open hole

A cement plug was spotted from 3292 m to 3042 m. The top of the plug was found at 3125 m, sufficiently high to give more than the required 50 m cement above the top of the Nise 1 and well inside the 13 3/8" casing. The plug was successfully tested with 10 tons weight and 101 bar surface pressure for 10 minutes.

13 3/8" Casing

After setting and testing the open hole plug, the well was displaced to 1.22 SG mud. A 15 m³ hivis pill was spotted from 2050 m upward inside the 13 3/8" casing. A casing cutter assembly was run to 1800 m and the 13 3/8" casing was cut. The moment the casing was cut, it was noticed that circulation was lost. Circulation was initiated down the kill line and up the choke line to clear the stack from potential gas and no gas was seen at bottoms up. A total of 14.5 hrs (NPT) were spent to balance the well before the wear bushing, seal assembly and 13 3/8" casing stump were recovered in three separate runs.

A cement plug was spotted from 1850 m upwards and the stinger was pulled back to 1250m. A total of 24 m^3 of fluid was lost before the well stabilized. After WOC and running in, the TOC was tagged with 10 tons at 1806m, 6m inside the 13 3/8" casing stump. The plug was tested with 82 bar surface pressure for 10 minutes.

A balanced cement plug was spotted from 1792m upwards. After pulling back the stinger back to 1575m another balanced cement plug was spotted on top of the previous plug. The plug was tagged at 1371m (40m below the mud line) with 10 tons weight.

Riser and BOP Recovery

The diverter was removed, the slip joint was collapsed and locked before the BOP was disconnected and raised 10 m above the wellhead. While the auxiliary rig started cutting and recovering the wellhead, the main rig continued on the recovery of the Riser and BOP.

Cutting 20" and 30" conductors, Wellhead Recovery

The 20" and 30" conductor and structural casing were cut at 1337m, 9.63 m below the top of the wellhead. The 18-3/4" wellhead and 36" housing, complete with casing stumps, were recovered successfully. When the wellhead was inspected after recovery, it was noticed that the lock down actuator sleeve on the wellhead was disengaged. The 1 million-pound pre-load was lost and the 18 3/4" wellhead was locked into the 36" wellhead housing by a shear ring. There was no trace of cement in the 20" x 36" annulus. Review of the ROV video and time log indicated that the pre-load was lost after the pressure testing of the 20" casing.

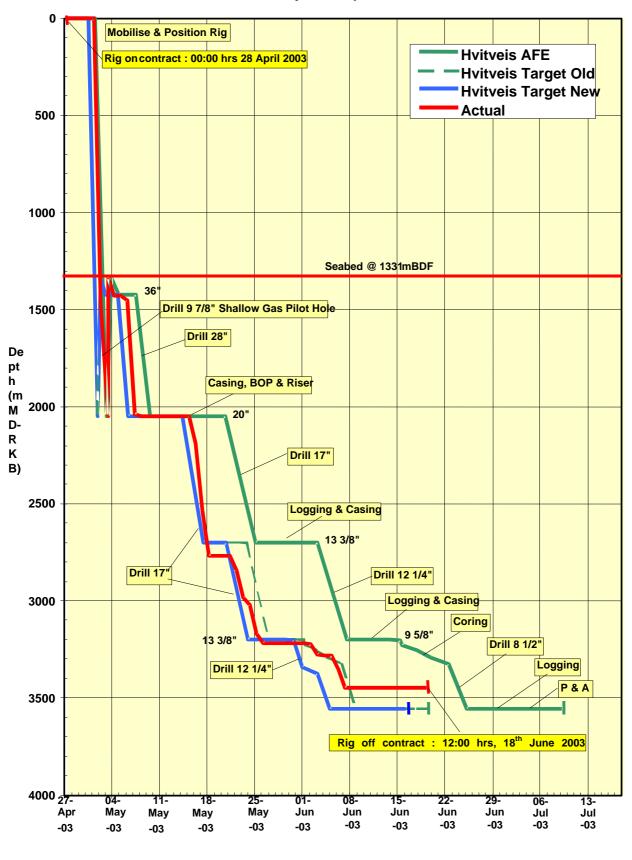
We subsequently learned that another operator, on a previous application of the Dril-Quip SS-15 wellhead in the UKNS encountered this same problem. In that application, the 18-3/4" wellhead was designed to lock to the 36" housing by shear pins. The pins sheared during drilling and the BOP connector was observed to be moving up and down by 2".

Reason for loss of the pre-load is being investigated by Dril-Quip and alternate design will be proposed.

Rig Release

The ROV recovered the dynamic positioning transponders, while third party equipment and materials were shipped back to shore. The kill/choke hose termination ring and BOP stack were sea-fastened in preparation for transit.

The rig was released to Smedvig and Statoil at 12:00 hrs on 18 June 2003.



Date

Hvitveis 6706/6-1 Days vs Depth

Figure 1.3: 6706/6-1 Days vs Depth

2 Geology, Geophysics and Formation Evaluation

2.1 Geological Summary

2.1.1 Objectives of the well

The primary objective of well 6706/6-1 was to test the hydrocarbon potential of the Hvitveis prospect at the Naglfar Dome, which straddles the southern parts of blocks 6706/5 and 6706/6. The prospect was envisaged to comprise a close to normally pressured dry gas accumulation in Campanian reservoirs in a faulted rollover anticline (Figure 2.1).

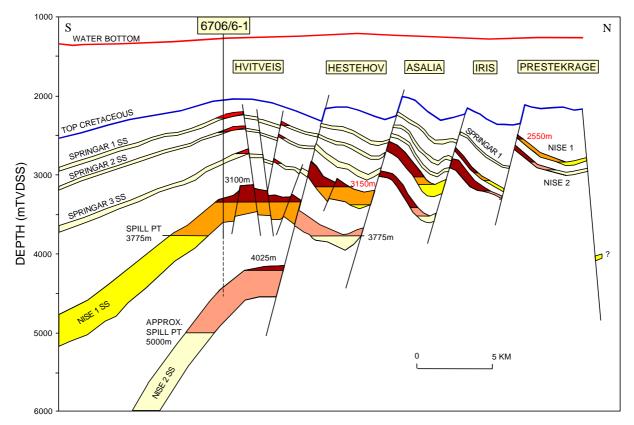


Figure 2.1: Predrill south to north structural cross section through Naglfar Dome

The Hvitveis prospect was the southernmost and largest closure at the top Nise 1 reservoir level within the Naglfar Dome. The main objective of the well was to test the hydrocarbon potential of the Nise 1 deep water sand reservoir of Campanian age.

2.1.2 Results and Well location

The 6706/6-1 well discovered a small gas column in the Nise 1 Formation and was drilled to TD within this formation. There are uncertainties as to whether this reservoir interval belongs to the Nise Fm or if it is younger and equivalent to the Springar Fm. Additional biostratigraphical analyses are currently in progress to more accurately define the age and the age uncertainty of the reservoir interval. Until these analyses have been completed the reservoir interval will be referred to as the Nise 1 Formation reservoir.

The well was normally pressured. A shallow gas pilot hole was drilled 100 m north of the final well location. No shallow gas was observed.

One core was cut in the Nise Formation. RCI pressures and fluid samples from the gas column were collected. Sidewall cores were also shot. The well was plugged and abandoned.

Pilot Hole Location

The location of the pilot hole for well 6706/6-1 was 100m north of the final location and 480m away from the nearest high probability shallow gas anomaly. The pilot hole was drilled at the following location:

Seismic Line:	ES00-01 3D survey,	inline 1689, xline 6696
Spud & Target pilothole	67° 33' 38.177" N	7 495 906 m N
(ED50, UTM zone 32):	6° 41' 18.495" E	401 551 m E

The 97/8" pilot hole was drilled to 2050mMDRKB with MWD GR and Resistivity. No gas was observed on MWD or with the ROV.

Final Location 6706/6-1 Seismic Line:	ES00-01 3D survey, inl	line 1689, xline 6688
Surface Location	67° 33' 34.792" N	7 495 801.7 m N
(ED50, UTM zone 32)	6° 41' 18.377" E	401 545.2 m E
Bottom hole location	67° 33'35.528"N	7 495 824.8 m N
(ED50, UTM Zone 32)	6°41' 17.602"E	401 537.7 m E

2.2 Stratigraphy

2.2.1 Lithostratigraphy and Two Way Time

The following pages contain a description of the various lithostratigraphic units. All depths are measured borehole values as defined by MWD or wireline logs. Figure 2.2 shows a stratigraphic summary- Prognosis vs Actual.

Please note that based on biostratigraphic analysis from the well, the predrill Cretaceous markers named Maastrichtian A through Maastrichtian 5 belongs to the Late Campanian. Please also note that the Geological summary in Drilling's End of Well Report, 2003, is written prior to getting the biostratigraphic data. The below table refers to both Maastrichtian and Campanian for the same top.

Formation Tops	Progr	osis		Actual			
	MDRKB (m)	SSTVD (m)	MDRKB (m)	SSTVD (m)	TWT (msec)	Comment	
Naust	1334	1298	1331	1295	1764	Seabed - pilot hole	
Base Pleistocene (Top Kai)	1389	1353	1385	1349	1836	From pilot hole	
Eocene (Brygge C)	1551	1515	1543	1507	2039	From pilot hole	
Paleocene (Tang)	1877	1841	1875	1839	2435	From pilot hole	
Cretaceous (Springar)	2129	2093	2108	2072	2661	Mwd	
Maastrichtian A (prognosis) Campanian A (actual)	2254	2218	2206	2170	2750	Mwd	
Maastrichtian 1 Camp 1	2318	2282	2294	2258	2825	Mwd	
Maastrichtian 2 Camp 2	2389	2353	2336	2300	2887	Mwd	
Maastrichtian 3 Camp 3	2547	2511	2500	2464	2989	Mwd	
Maastrichtian 4 Camp 4	2625	2589	2847	2811	3229	Mwd	
Maastrichtian 5 Camp 5	2887	2851	2900	2864	3275	Mwd	
Top Nise 1	3358	3322	3239	3203	3503	Mwd	
Base Nise 1	3720	3684					
Top Nise 2	4521	4485					
Base Nise 2	5073	5037					
TD Table 2 1: Lithostrati	5105	5069	3451	3415			

Table 2.1: Lithostratigraphy and two way times

Nordland Group (1331-1502m MDRKB)

Naust Formation 1331–1385m MDRKB

This formation was interpreted as very soft to slightly SILTY CLAY with infrequent gravels and possible boulders based on information from the site survey report.

Kai Formation 1385–1502m MDRKB

This formation was interpreted as CLAYSTONE based on MWD logs from the pilot hole.

Hordaland Group (1502-1875m MDRKB) Brygge Formation 1502–1875m MDRKB

CLAYSTONE with minor LIMESTONE stingers and possible SANDSTONE interbeds. Interpreted from MWD logs in pilot hole.

Rogaland Group (1875-2108 m MDRKB) Tare/Tang Formations 1875-2108m MDRKB

This formation consisted mainly of CLAYSTONE, which was light grey, soft, amorphous-sub blocky, slightly calcareous in part, silty, trace carbonaceous material, micromicaceous, grading to siltstone in part, dark grey, olive grey, sub blocky, non calcareous. There were also rare traces of LIMESTONE which was white, firm, microcrystalline.

Shetland Group (2108 – 3451m MDRKB) Springar Formation 2108-3239m MDRKB

This formation consisted predominantly of CLAYSTONE which was predominantly medium grey, occasionally dark grey, brownish grey, soft, amorphous-sub blocky, non-slightly calcareous in part, slightly silty in part, trace carbonaceous material, micromicaceous, glauconite and contained traces of disseminated pyrite.

The CLAYSTONE was interbedded with SILTSTONE which was predominantly brownish grey, occasionally light-medium grey, dark grey, olive grey, firm, amorphous-sub blocky, non-slightly calcareous, argillaceous matrix, friable, occasionally crumbly, slightly glauconitic, micromicaceous and contained traces of disseminated pyrite.

There were TRACES of SANDSTONE which was medium to dark grey, firm to moderately hard, with a siliceous matrix, non-calcareous, very fine to fine grains, no visible porosity. No shows. There were also TRACES of LIMESTONE which was grey brown, yellow brown, soft to firm, sub blocky to blocky and argillaceous.

Nise Formation 3239-3451m MDRKB

This formation consisted of CLAYSTONE with SANDSTONE interbeds. The SANDSTONE was predominantly light grey, pale - dark yellow brown, with translucent quartz grains, clear-translucent, very fine, occasionally fine, sub angular to sub round, spherical, well sorted, moderately- hard siliceous, occasionally calcareous/dolomitic cement, occasional glauconite, occasional mica: muscovite and biotite, very occasional carbonaceous material/laminations, occasional trace pale green yellow, light green grey, feldspar. No visible intragranular porosity.

The CLAYSTONE was medium dark-dark grey, hard, blocky to fissile, micromicaceous, micropyritic and contained occasional mica.

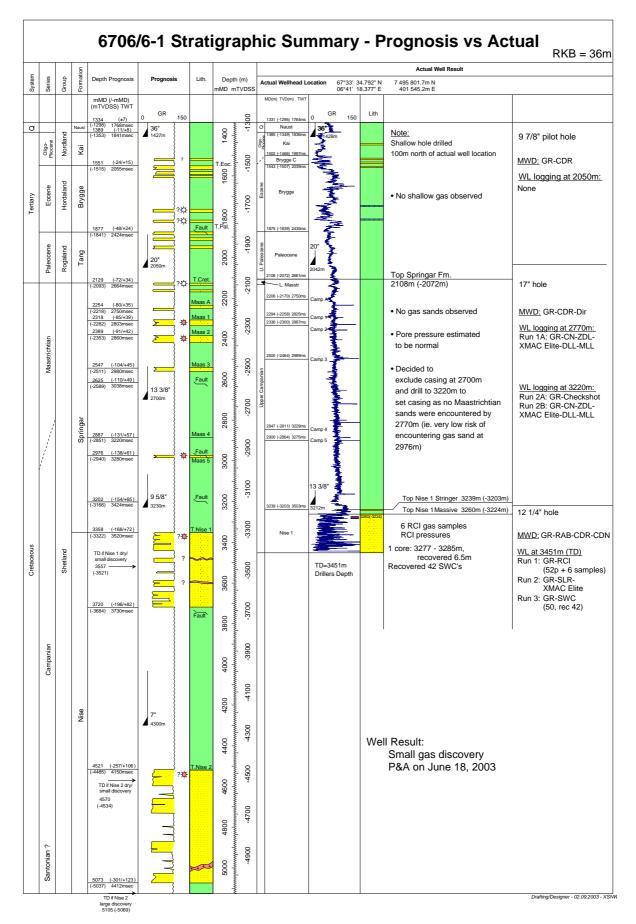


Figure 2.2: Stratigraphic prognosis vs actual for Hvitveis well 6706/6-1

2.2.2 Biostratigraphy

The biostratigraphic evaluation of 6706/6-1 was performed by Robertson Research International Ltd. Detailed results are contained in a separate report produced by Robertson Research. Additional biostratigraphic work is now ongoing at Robertson Research and ExxonMobil Upstream Research Center to more accurately define the age and the age uncertainty of the Nise 1 reservoir interval. Until these analyses have been completed the reservoir interval will be referred to as the Nise 1 Formation reservoir.

Biostratigraphic analyses were based on cuttings samples, core chips and sidewall cores. In addition, Robertson Research was provided with wireline log curves in order to help define chronostratigraphic and biostratigraphic boundaries in the well.

A summary of the biostratigraphy and lithostratigraphy is presented in Figure 2.2. No samples were available above 2050 mBRT.

Biostratigraphic Zone	Interval
	Depth mBRT
Upper Paleocene	2060-2080m
Stratigraphic break	
Lower Maastrichtian	2110-2120m
Upper Campanian	2150-3450m

Table 2.2: Chronostratigraphy

2.3 Hydrocarbon Shows from Wellsite Descriptions

Shows in the cuttings and core samples were evaluated in accordance with the guidelines set out in ExxonMobil's Wellsite Geology manual. Sperry Suns gas detection system provided total hydrocarbon and chromatographic breakdown analyses.

From evaluating the Sperry Sun's Gas Ratio Log, there is only four intervals that have higher gas readings than the general background of 0.7-1%.

Interval MMDRKB	Gas reading %	Stratigraphy	Shows described in cuttings
2340-2360	up to 6%	Springar Formation Claystone	None
3014-3020	up to 6%	Springar Formation Claystone	None
3260-3280	up to 8%	Nise Formation	Claystone, siltstone and Sandstone, weak shows described in one cuttiongs sample at 3268m
3360-3450	1-2.5 %	Nise Formation	sandstone, claystone, no shows described in cuttings

Table 2.3: Hydrocarbon shows table

From the cuttings description, only one sample at 2368m is described to have shows, the sample consists of 70% claystone, 10 % siltstone and 20 % sandstone.

The sample has no stain, fluorescence or cut. The sample has cut fluorescence, intensity described as very weak and the colour as white. The show is given a poor rating. This cuttings depth is the only where shows are described.

In addition there is shows described on the core at 3283.55m. It is described as a poor show on sandstone laminae: No odor, no oil stain, uniform moderate golden brown direct fluor, no visible cut, no cut fluorescence, no visual residue, no fluorescence on residue.

2.4 Shallow Hazards

The pre-drill evaluation of the site survey is included in the Drilling Program, section 2.5. There are several shallow gas anomalies over the Hvitveis prospect on the Naglfar Dome. The 6706/6-1 well location was located away from these shallow gas anomalies, and a shallow gas 9 7/8" pilot hole was drilled to ensure the well location was safe with regard to shallow gas.

The actual well location was selected in an area believed to be free of shallow gas. The 9 7/8" shallow gas pilot hole was drilled 100 m away from the main well location towards the highest shallow gas risk in the area, that was 490 m away from the main well.

The 9 7/8" shallow gas pilot hole was drilled with MWD, Directional, GR and Resistivity. Some thin high resistivity beds were seen, most likely calcareous shales/ limestones, since no gas was observed during drilling. The ROV at the seafloor didn't observe gas bubbles in conjunction with drilling of this section.

There was also a low risk of encountering seabed boulders at the Naglfar Dome. No seabed boulders were seen while drilling the pilot hole or the 42" hole of the main well, but a very hard surface was observed just below seafloor. This caused the well to be re-spudded. The first 42" BHA was found to be have skidded along the seafloor away from the planned location. The ROV found that the bit had skidded 40m from the planned location. A 1-1.5m trench from the marker buoys position showed the skidding of the bit.

It was decided to redrill the 42" hole when the MWD indicated that the well angle from the seabed to 1397m was 5 degrees. During re-spud with the same assembly, attempts to wash the bit down failed. With low rotary and WOB, it took 2.5hr to bed the bit from 1.5 - 5.5m below the seabed. It was noted again that the bit skidded 6m from the re-spud location, due to the hard crust about 1.5m below the seafloor.

2.5 Geological Samples

Various types of samples were collected from the well at intervals defined by the following zones. The zones were decided predrill based upon expected stratigraphy, and adjusted as we drilled.

For detailed listing of cuttings description, please see Appendix I.

- Zone 1: 1331-2050m TVDRKB (Intra Tang Fm. 20" csg): No samples
- Zone 2: 2060-2300m (expected near top Springar Fm): <u>10m intervals</u>
- Zone 3: 2300-2450m (near base expected Springar HC bearing sands): 3m intervals
- Zone 4: 2450-2700m (expected intra Springar Fm to 13 3/8" csg at 2700m) 10m intervals

- Zone 5: 2700-2900m (intra Springar Fm) 10m intervals
- Zone 6: 2900-3025m (near base thin expected HC bearing Springar sandstone) 3m intervals
- Zone 7: 3030-3220m (intra Springar to 9 5/8" csg) 10m intervals
- Zone 8: 3220-3343m (down to near top Nise 1 sand) 3m intervals
- Zone 9: 3350-3450m (near base Nise 1 sand) 10m intervals

Samples collected:

<u>Series A</u>: 5 litre buckets of wet unwashed cuttings for later splitting ashore.

Series B: 1/2 kg cloth bags of wet unwashed cuttings for biostratigraphical analysis.

Series C&D: Two sets of washed and dried cuttings

<u>Series E</u>: One litre cans of wet unwashed cuttings. To be collected every 20m from the 20" casing shoe. If source rock is was expected further samples was collected at 3m intervals

<u>Series F</u>: Two litres of drilling fluid used for drilling the 17" and 12 1/4" holes to be collected in 1 litre plastic bottles at the end of each section. Regular collection of 1 litre samples of drilling fluid to be undertaken every 100m in the 8 1/2" and 5 7/8" hole sections.

2.6 Conventional Cores

2.6.1. Coring Data Summary

One core was cut in 6706/6-1 in the Nise 1 Formation. The core was cut using standard 5.5" aluminum barrels. Table 2.4 below summarizes the coring information.

Conve	Conventional Cores						
Core		Depth Interval (mBR	Г)	Cut	Rec	overed	
No.	Drilled	Recovered	Log Corrected	(m)	(m)	(%)	
1	3277-3285 m	3277-3283,5 m		7	6,5	0,84	
	mdrkb	mdrkb					

Table 2.4: Core Recovery

Core No. 1, in the Nise 1 Formation, was taken from 3277 mMD when LWD readings indicated good massive Nise 1. The drill rate to this depth had been very slow. A 36 m core barrel assembly with aluminium inner sleeves was run into the hole and coring commenced. Only 7 meters of core was drilled to 3285 m when the core barrel was pulled out of the hole due to very slow drilling, 6.6 m of core were recovered. It was decided not to core further at this point. Figure 2.3 shows the core overview.

2.6.2 Core Processing

Precautions were taken when pulling out of the hole to ensure that gas expansion did not damage the core itself. All the cores were checked for the presence of H2S and trapped pressure before and after being laid down on the deck. A safety meeting was held before each core processing operation. Baker Hughes did this coring.

Reslab performed the gypsum injection to stabilise the cores .

Core analysis by Reslab included:

- 1. Measurement of natural gamma radiation and spectral gamma ray analysis.
- 2. Porosity determination by summation of fluids on horizontal plugs.

Core analysis and results are reviewed in Section 2.9.2. Detailed results of the core analyses performed by Reslab can be found in their report.

2.6.3 Core Description

The core description is included Figure 2.4 and in Appendix 3.

A total of 6.55 m of core were recovered from the Hvitveis well 6706/6-1 (Figures 2.3 and 2.4). The core was cut in the Campanian Nise 1 sandstones. In general the cored section is a very fine to fine grained sandy turbidite section with interbedded turbiditic to hemipelagic mudstones towards the base. The cored interval shows evidence of extensive slumping as beds are overturned and folded, and contain a chaotic internal structure and associated sand injections. The association of slumped and undisturbed turbidite beds suggests a channel margin setting where slumped channel bank sediments are redeposited together with turbidites within a channel complex.

<u>Unit 1 – 3283.55-3282.9 m (0.65 m)</u>

This unit contains slumped thin turbidites and debris flows deposited in a channel margin setting. The slumping is associated with occasional thin sand injections.

<u>Unit 2 – 3282.9-3282.35 m (0.45 m)</u>

This unit contains mostly undisturbed turbidite deposits probably deposited in a channel margin setting. The bed from 3282.7-3282.4 m is interpreted as a high density turbidite bed showing Bouma B type facies of massive to faintly planar parallel laminated sand (Tb bed) which is fining upward at the very top. The muddy and sandy 3 cm thick bed at the top of this unit contains mostly flat lying plant fragments (?) and is interpreted as a deposit from the settling turbidite cloud. The thin mudstone unit containing turbidite to hemipelagic mudstone (Td to Te bed) above the sand contains thin current rippled sands (Tc bed).

<u>Unit 3 – 3282.35-3281.25 m (1.1 m)</u>

This unit is composed of slumped turbidite beds interpreted deposited in a channel margin setting. The lowermost bed (3282.35-3282.0 m) shows a very chaotic internally slumped and dewatered structure. The overlying sand (3281.85-3282.0 m) appears to be reversely graded, but is most likely an overturned turbidite bed caused by slumping.

<u>Unit 4 – 3281.25-3280.75 m (0.5 m)</u>

This unit contains thin debris flows and thin low density turbidites deposited in a channel margin setting.

<u>Unit 5 – 3280.75-3279.9 m (0.85 m)</u>

This unit contains dominantly undisturbed massive to faintly laminated fining upward turbidites (Ta to Tb beds) deposited in a channel margin setting.

<u>Unit 6 – 3279.9-3279.65 m (0.15 m)</u>

This unit contains dark grey laminated silty mudstones with frequent sand laminas and occasional current ripples (Tc-Td-Te beds) deposited in a channel margin setting.

<u>Unit 7 – 3279.65-3277.0 m (2.65 m)</u>

This unit is composed of very fine to fine grained sand occasionally containing medium to coarse grained sand and is poorly sorted. The sand is slumped and dewatered (dewatering pipes). This part of the cored interval may have been deposited in a more axial part of a channel.



Figure 2.3: Hvitveis Core Overview

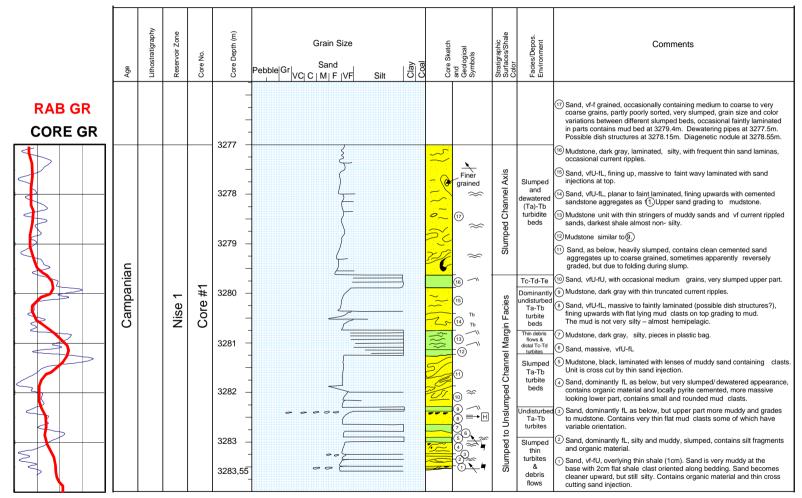


Figure 2.4: Hvitveis Core Description

2.7 Sidewall Cores

Baker Atlas conventional SWC was run in the 12 ¹/₄" hole at TD. The detailed Result and Description of the sidewall cores are shown in Appendix 2. 50 SWC's were shot, 42 were recovered, none were lost.

Sidewall cores were taken for age dating, geochemical analyses and diagenetic studies.

Sidewall Cores							
Run No.	Depth Interval (m mdrkb)	Attempted	Recovered	Percentage			
3	3231-3435.5	50	42	81			

Table 2.5:Sidewall Cores

2.8 Logging

2.8.1 LWD Operations

Anadrill did the LWD logging.

MWD	Туре	Bit	Hole	Depth	Depth	Comments
Run		No.	Size	In	Out	
No.						
1	CDR/ARC-APWD –DIR	1	9-7/8"	1329	2050	Pilot hole
2	DIR	2	171⁄2"	1331	1428	with Hole opener to 42 "/
						wrong place spud
3	DIR	2rr1	171⁄2"	1331	1428	with hole opener to 42"
4	DIR	3	28"	1428	2050	Section TD
5	CDR/ARC-DIR	4	17"	2050	2770	Initial section TD
5		4rr1	17	2050	2110	Wiper trip after logging
		7111				wiper uip alter logging
6	PWD-CDR/ARC-DIR	5	17"	2770	3025	ROP dropped below 4 m/h
7	PWD-CDR/ARC-DIR	4rr2	17"	3025	3220	Final section TD
		4rr3				Wiper trip after logging
8	PWD-CDR/ARC-RAB-	6	12¼"	3220	3277	Drilled 117 m cement in addition
	ADN/CDN-DIR					
		Core	12¼"	3277	3287	Core No 1
9	PWD-CDR/ARC-RAB-	6rr1	12¼"	3287	3450	Drill to final TD
	ADN/CDN-DIR					

Table 2.6:LWD summary table

LWD TERMINOLOGY				
CDR	Compensated Dual Resistivity			
APWD	Annular Pressure While Drilling			
PWD	Pressure While Drilling			
ARC	Resistivity			
RAB	Resistivity at bit			
AND	Density			
CDN	Neutron			
DIR	Directional (MWD)			

Table 2.7: LWD terminology

LWD tools were run in the 9-7/8" pilot hole but were not run in the 46" and 28" surface holes. LWD tools were run through the $17\frac{1}{2}$ " and $12\frac{1}{4}$ " holes.

2.8.2 Open Hole Wireline Logging

No wireline logs were run in the pilothole,42" or 28 hole. The wireline logging was done in the 17 " hole and the 12 $\frac{1}{4}$ " hole. Baker Atlas did this logging.

Run	Date	Tools	Interval (mMDRKB)
1A	May 18-19, 2003	GR_CN_ZDL_XMAC ELITE_DLL_MLL	2042-2770
2A	May 26, 2003	GR_Checkshot	2770-3220
2B	May 27,	GR_CN_ZDL_XMAC ELITE_DLL_MLL	2631-3216
3B	June 8, 2003	GR_RCI	3243-3430
3B	June 9, 2003	GR_MLR_XMAC ELITE Checkshot	2500-3445
3A	June 10, 2003	GR_SWC	3231-3435

Table 2.8: Wireline logging summary

Wireline Pressures and Samples

One successful RCI run yielded significant pressure data in the Nise 1 and six hydrocarbon samples were collected at one depth, 3265.5 mMDRKB (correlated to GR on MWD log). Reslab did the fluid analysis work onshore. There was no lab present at the wellsite.

Checkshots

Run 1 of a Rig source Checkshot survey was acquired on May 26, 2003. Run 2 of the survey was completed to final TD at 3451m in combination with an XMAC tool string. Baker Atlas did both the seismic and the wireline operation. A SLR (Single Level Receiver) tool and a four sleeve gun array source suspended from the starboard crane were utilised in Run 1.

Run No 1 took 9 hours, acquiring checkshot levels at 150m intervals and at selected tops. A total of 19 levels were tested. Data quality was acceptable to the objectives of the survey. In run No 2 a Two level MLR was run in combination with XMAC. The checkshot part took 7.5 hours, before the handover to other logging. Checkshots were acquired at 40 levels plus Top Nise and three levels repeated for run 1. Data quality was acceptable for the objectives of the survey.

Data and interpretation from Checkshot survey are included in section 2.13 Geophysics.

2.9 Petrophysics

2.9.1 Composite Log Curve Data

Depth Reference

The depth reference for the composite log curves in the well is the wireline depth. Wireline depth is the traditional depth reference where wireline logs are acquired and all other data are then depth-shifted to the wireline depth. This is somewhat difficult for this well because the primary logs run were the LWD logs (GR, resistivity, density, and neutron) and only the sonic, RCI, and SWC data were acquired on wireline. But the wireline depth was used for the well because it is believed to be more accurate than the LWD depths. The wireline depth is believed to be more accurate because: 1) there are overlapping wireline runs from 2042-3445mMD, 2) this is a straight hole where the wireline can hang down freely below the surface, and 3) there were no tension pulls which complicate wireline depth measurement. All other log, core, and pressure data were depth-shifted to wireline depth. Note that the RCI pressure and sample and SWC data were originally acquired at points chosen from the LWD log. But the depths shown for these data in this report are on depth with the composite log data. Through the Nise Formation, the depth-shift amount varied, but generally the LWD depth is about 3m deeper than the wireline depth.

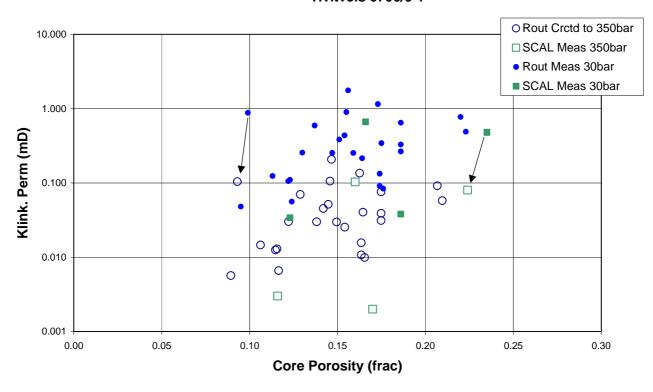
Composite Log Curves

The Composite Log Curve set has been created to NPD standards and consists of generically named curves including: GR, RDEP, RMED, RMIC, DEN, NEU, AC, ACS, PEF, CALI, K, TH, U, and BS. The wireline GR was used were available over the interval 2032-3414m and the LWD GR was used 1328-2032m and 3414-3445m. The RDEP curve consists of the Ring Resistivity from LWD (below 3219mMD). The RMED curve consists of the RES_BM LWD curve. The RMIC curve covers only the interval above the Nise Formation where the wireline curve RMLL is present. Note that the LWD curves of the 9 7/8" shallow gas pilot hole (1329-2050m) are used, even though the pilot hole was about 100m away from the main hole which did not acquire LWD log data over that interval.

A Petrophysical Log Curve set has also been created to NPD standards which contains additional wireline and LWD curves using the vendors standard names.

2.9.2 Core Analysis

Both routine and special core analysis (SCAL) have been performed on the conventional core described in section 2.6. The conventional core is depth shifted to the composite log depth by subtracting 1.55 m. This results in a very good depth match, as seen in Figure 2.6 with GR from core to log and porosity from core to log.



Core Perm vs. Porosity Routine(30Bar) and SCAL(350Bar) Data Hvitveis 6706/6-1

Figure 2.5: Hvitveis Core Analysis. Klinkenberg-corrected Permeability (mD) vs. Helium Porosity are shown at ambient conditions (30bar) and based on corrections to net overburden pressure of 350bar.

A decrease in porosity of an average of 6% and a decrease in permeability of an average of 88.2% is described by the four plugs that were subjected to the net overburden pressure of 350bar during measurement (Figure 2.5). The routine core porosity and permeability values were reduced by these amounts to result in the final net overburden corrected core data (the "Rout Crctd to 350bar" data in Figure 2.5). The core data at net overburden stress of 350bar is believed to best represent the reservoir quality at downhole conditions.

2.9.3 Petrography

The conventional and sidewall core samples consist of very fine to medium grained feldspathic sandstones and subarkoses which contain a wide variety of minerals of both detrital and authigenic origin. Significant diagenesis has occurred which has provided significant cementation, such as with quartz overgrowths, siderite pore-linings, and clay formation, as well as significant dissolution, yielding secondary, non-connected porosity. The sandstones are well-compacted with intergranular/primary porosities generally below 5pu and common pressure solution and long grain contacts. Micro- and secondary-porosity types compose the largest portion of the total porosity and much of the total porosity is non-effective. There are only two sidewall cores described in the gas zone, 3261-64mMD (log depth), but these cores show generally similar texture and mineralogy to the rest of the Nise formation.

2.9.4 Formation Evaluation – Nise Formation

A petrophysical evaluation has been performed over the Nise Formation to estimate the reservoir quality and the hydrocarbon content of the interval. Log, core, pressure, and fluid sample data have been used in the evaluation.

Shale Volume (Vsh)

Shale volume is calculated to give an indication of sand vs. shale content and to be used with a cutoff to identify Net Sand intervals. Shale volume from both gamma ray (GR) and neutrondensity were calculated and shown on the log plots (Figures 2.6, 2.7), but that from the GR is used as the primary shale volume indicator. Shale volume from GR uses the following equation:

VshGR = (GR - GRclean) / (GRshale - GRclean)

where, GR is the log GR value, GRclean is the GR value in a clean sand, and GRshale is the typical GR value in shale intervals. Values for GRclean and GRshale are shown in Table 2.9. Note that no clean sand is interpreted to be present in the Nise Formation and the GRclean value was chosen to give reasonable values that are generally consistent with those from VshDN. VshDN was calculated with the following equation:

Parameter	Value Used	Justification	
Input Resistivity Curve	RDEP	Is really RES_RING.	
GR Clean (gAPI)	30	Gives results consistent with ND method	
GR Shale (gAPI)	85(105)	Consistent value in shale intervals (used	
		105 deeper than 3418m where GR_RAB	
		was spliced into GR_XMAC)	
ND Delta in 100% shale (frac phi)	0.24	Consistent value in shale intervals	
Main Vsh source	GR		
Matrix density (g/cm3)	2.68	Avg. core value in cleanest sand intervals	
Fluid density (g/cm3)	1.10	Based on salt-saturated mud	
BHT (degC) at TD (mMD)	75 @ 3450	Max temp. measured on RCI tool near TD	
Surf. Temp (degC) at Mudline (m)	5 @ 1325	Guestimate	
Formation Water Salinity (kppm	23.8	Needed to give Swt of 100% in cleanest,	
NaCl equiv.)		wet sands, and consistent with general	
		values in area	
Archie Porosity Exponent 'm'	2.0	Common value (or higher)for this tight rock	
Archie Saturation Exponent 'n'	2.0	Common value	
Base Case Vsh Cutoff	50%	Common value	
Base Case Porosity Cutoff	19.2%	Equals 0.1mD perm on core data	
Base Case Swt Cutoff	0 and 100	0 used in gas leg, all net is pay	

VshDN = (NEUss-PHID)/ND_DELTA

Table 2.9: The parameters used in the petrophysical evaluation of the Nise Formation.

Where, NEUss is the neutron porosity on a sandstone matrix (NEU - 0.044), PHID is density porosity (see PHIT calculation), and ND_DELTA is the separation in the NEUss and PHID curves in a typical shale (see the parameters table, Table 2.9).

Total Porosity

Total porosity was calculated with the bulk density measurement using the following equation:

PHIT=PHID=(RHO_MA-RHOB)/(RHO_MA-RHO_FL)

where, RHO_MA is the matrix density, RHOB is the log bulk density measurement, and RHO_FL is the fluid density (see Table 2.9). No correction for gas saturation was deemed necessary because there is no significant gas effect on the bulk density curve in the gas zone at the top of the Nise Fm. As calculated with the parameters in Table 2.9, PHIT provides an excellent match to the core porosity as shown in Figure 2.6 in the porosity tracks. Note that there are no density or neutron log data over the bottom 20m of the wellbore (due to the distance to the sensors on the LWD tool above the bit). For the purpose of evaluation, the density and neutron values have been estimated over this interval and are shown on the logs (Figure 2.7) as dashed curves. These values were created from the GR and resistivity curves based on multi-dimensional histograms of the log data in the Nise interval where all the curves are available. These curves are not included in the Composite Log Set.

Fluid Saturations

The Arhie equation was used for water saturation, in the following form:

 $Swt = ([Rw*a]/[(PHIT^m)*Rt])^{(1/n)}$

Where Rw is formation water resistivity, "a" equals 1, PHIT is total porosity, "m" is the porosity exponent, Rt is true formation resistivity, and "n" is the saturation exponent. Rw was calculated vs. depth by determining the resistivity of the formation water of a given salinity and temperature using a temperature-depth trend ranging from 75degC at TD to 5degC at the mudline. The BHT of 75degC was taken from the log and RCI temperature measurements. The formation water salinity has been chosen at 23,800 ppm NaCl-equivalent based on the normalization of the resulting water saturation to 100% in the cleanest water-bearing intervals in the Nise Formation. "M" and "n" values were set at 2.0 because these are the values that are typically consistent with the poor reservoir quality seen here. In better quality reservoirs in the North and Norwegian Seas, values for "m" are generally 1.7-1.8 and "n" 1.8-2.0. The RES_RING appears to be a good estimate of true formation resistivity as there are no indications of invasion by a profile of the resistivity curves, although in thin beds, the true formation resistivity may not be reached.

Permeability

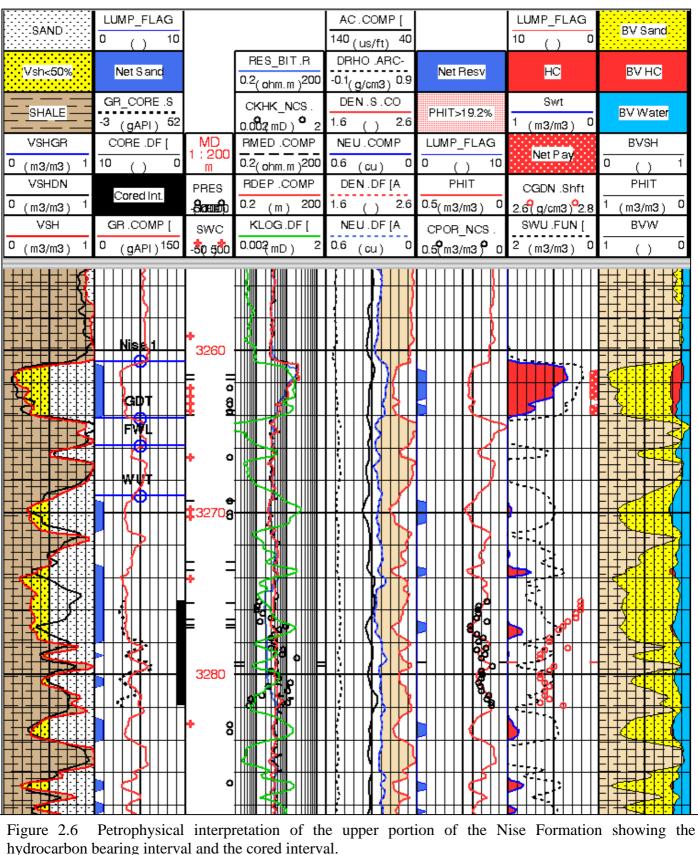
The interpretation of permeability outside the cored interval is based on the relationship between core permeability and porosity that can be applied to the log porosity. Figure 2.8 shows the core relationship and equation that are used. There is not a good trend between the permeability and porosity from core and the regression relationship is a chosen one rather than the actual regression.

Results

The results of the petrophysical evaluation are shown in log plot form in Figures 2.6 and 2.7. A base case cutoff of 0.1mD(NOB) is used as this is a typical value for gas intervals. High and low side cases are 0.01mD and 1.0mD, respectively. Table 2.10 lists the porosity cutoffs that correspond to these permeability values.

There is indeed an interval interpreted to contain producible gas, based on the gas fluid samples, pressure gradient, and Swt results from the resistivity-based formation evaluation. The free water level used is that at 3229.9mSS determined from the pressure data. The peak gas saturation in the zone is about 60su (Swt of 40su). The net pay calculation in the zone is limited by the base case cutoff of 0.1mD to 2.4m compared with the 3.2m see in the high case. Similarly, the total amount of net reservoir in the Nise Formation is limited by the base case cutoff to 42m compared with the 109m in the high side case. Note that no net reservoir remains in the low case. An unlimited water saturation curve (Swu) is shown in the Swt track on the logs to show that the calculated Sw is approximately 100% in the wet sands in the well. The significant separation between the neutron and density curves (NEU and DEN) when shown on a sandstone matrix indicate the large amount of clay minerals present and probably poor reservoir quality. The large component of siderite, clays, and other non-quartz minerals is consistent with the average measured grain density of 2.68 g/cm3 and the match of PHIT and core porosity using this value.





VSHDN		PRES	RDEP .COMP	DEN	.DF [A	PHIT	CGDN .Shft	PHIT
0 (m3/m3) 1	Cored Int.			1.6	_	0.5 _(m3/m3) 0	2.6 ⁹ (g/cm3) ⁹ 2.8	
VSH	GR.COMP [SWC	KLOG.DF [NEU	.DF [A	CPOR_NCS .	SWU.FUN [BVW
0 _(m3/m3) 1	0 _(gAPI) 150		0.002(mD) 2	0.6 (_{cu)} O	0.5 [°] (m3/m3) [°] 0	2 _(m3/m3) 0	1 ()
		t			811			
	1 E	3 240						
		- 3230 ♣						
		3260 3270						
		♥3270 0						
		• 3280 • 9						
		+3290 ₀						
		3300 •		14 Co. 17 Marco				
		* 3310 °		***				
		*3320						
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		• 3370		i i	₽¥	╡┼┼┟╋┥┤		
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re 2.7 Petror	physical interp	retation	of the entire	penetr	ated not	$\mathbf{L} = \mathbf{L} + $	ise Formation	
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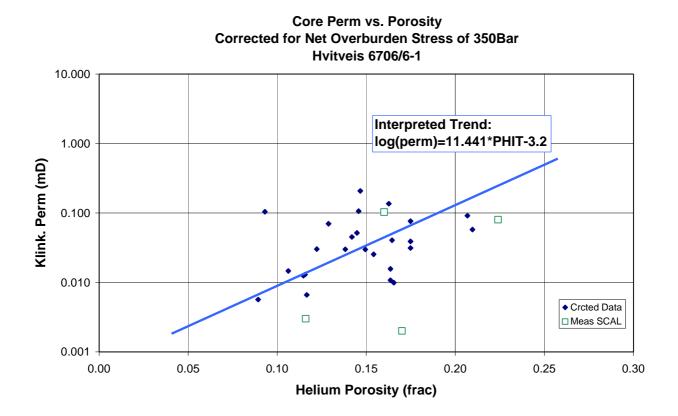


Figure 2.8: The relationship between core perm and porosity that is applied to PHIT from the logs to give a permeability interpretation in the uncored interval.

						Using Ne	Hvitve t Overburd	is 670	Hvitveis 6706/6-1 Net Summary Using Net Overburden Corrected Core Data and Composite Log Data	et Sun	omposite I	Log Data						
						Net Sand (TVD) (Vsh < 50%)	od (TVD) 50%)	> ysh <	Net Reservoir (TVD) (Vsh < 50% and PHIT > 19.2, 10.5, or 28.0%)	Net Reservoir (TVD) and PHIT > 19.2, 10	TVD) , 10.5, or 2	(%0.8)	(Vsh < 5	0%, PHIT >	Net Par 19.2, 10.5	Net Pay (TVD) 2, 10.5, or 28.0%	Net Pay (TVD) (Vsh < 50%, PHIT > 19.2, 10.5, or 28.0%, Sw = 100 or 0) =</th <th>0 or 0) *</th>	0 or 0) *
Zone	de la	Base	Top	Base	Gross ND		Net	Net	Net	Avg. Vsh	Bug.	Porosity	Net	Netto	Avg. Vsh	Bud.	Aug. Swi	HCPV
	2 6	2 =	en u	500 E	Thickness	Interval Sana Nickness Thickness m m	Interval m	Thickness	Interval frac	frac	Forosny frac	frac m	Pay Thickess m	tinterval firac	frac	Porosity frac	frac	E
Base Case (Perm Cutoff 0.1mD NOB)	erm Cuto	off 0.1mC	(BON)			0												
Nise 1 Gas	3260.7	3285.9	3224.1	3229.3	5.20	3.20	0.615	2.44	0.469	0.221	0.209	0.51	2.44	0.469	0.221	0.209	0.515	83
Nise 1 Wir, etc.	3265.9	3445.0	5229.3	3408.2	178.93	107.34	0.600	39.43	0.220	0.251	0.207	B.15	0.00	0000			100	000
Totals	3260.7	3445.0	3224.1	3408.2	184.13	110.54	0.600	41.87	0.227	0,249	0.207	9978	2.44	0.013	0.221	0.209	0.515	972
High Side Case (Perm Cutoff 0.01mD NOB)	se (Perm	Cutoff 0	O1mD N	(B)														
Nise 1 Gas	3260.7	3285.9	3224.1	3229.3	520	3.20	0.615	3.20	0.615	0.244	0.202	9.65	3.20	0.615	0.244	0.202	0.539	030
Nise 1 Wir, etc.	3265.9	3445.0	5.923B	3408.2	178.93	107.34	0.600	106.27	0.534	0.298	0.184	19.65	000	0.000	Second Second	0.00	Summer	0.0
Totals	3260.7	3445.0	3224.1	3408.2	184.13	110.54	0.600	109.47	965.0	0.296	0.185	20.20	3.20	110.0	0.244	0.202	0.539	020
Low Side Case (Perm Cutoff 1.0mD NOB)	te (Perm	Cutoff 1.	OM D NO	8)														
Nise 1 Gas	3260.7	3265.9	3224.1	3229.3	5.20	3.20	0.615	0.00	0.000			0.00	0.00	0.000				000
Nise 1 Wir, etc.	3265.9	3445.0	3229.3	3408.2	178.93	107.34	0.600	000	0.000			80	0.00	0:000				0.00
Totals	3260.7	3445.0	3224.1	3408.2	184.13	110.54	0.600	0700	0.000	#DIV/0	i0/NI0#	000	0.00	0.000	i@/NI0#	#DIV/0#	i@/NI0#	000
^ GW cutoff used for gas zone is 100% (no cutoff) and for water zone is 0%	or gas zone	e is 100% (no cutoff) ar	nd for water	r zone is 0%													
- The Gas zone is down to the PWL defined by pressure data	down to th	e PWL defi	ned by pres	sure data.	100 000	32.01	3	0.000				1917						
- All data were depth-shifted to the wireline depth reference, including the Composite Log Curves, core data, and RCI pressure and sampling points.	pth-shifted 1 ed density	to the wirel and neutro	ine depth re n curves the	ference, in it were exti	cluding the (ended from 3	Composite 3423 to 344	Log Curves, 5 with value	, core data, es resulting	and RCI pr from multi-u	esseure an dimensiona	d sampling I histogram	points. Is using the	GR and R	ES trained	over the int	erval 3270-	3420m	
where the density and neutron are present.	y and neutr	said are no.	nem.															
 The permeability cutoffs of 0.01, 0.1, and 1.0 mD were realized core permeability vs. ambient Helium perceity. 	v vs. ambiel	ot Helium p	nd 1.0 mD v arosity.	vera realiza		orosity cuti	offs of 10.5,	19.2 and 2	through porosity cutoffs of 10.5, 19.2 and 28.0 p.u. which come from a relationship with NOB-corrected core data between Minkenberg-corrected	ich come fr	om a relatio	anship with	NOB-corre	cted core d	lata betwee	n Klinkenb	erg-correcte	P
November 25. 2003																		
the state of the s										1								

2.9.5 RCI Pressure analysis

RCI pressure data were acquired in the Nise 1 formation during drilling of the Hvitveis well 6706/6-1 (Table 2.11). All pressures were recorded by a quartz gauge in absolute pressure (psia). A large number of the pressure points attempted (54) were tight (27) and several other points were classified as super charged (9). The permeability of the Nise sands is generally low as the estimated permeability during the pressure tests were in the range 0.7-5.3mD. This is generally confirmed by core data where the cored interval generally has permeability less than 1mD. Pressure points during sampling (6) were not used in the analysis as these were not repeatable as the sampling process probably influenced the recorded pressures. In addition, 2 pressure points attempted were not recorded, due to 'gas in line'. Only 10 pressure points were considered to represent true formation pressure and were used in the reservoir gradient analysis.

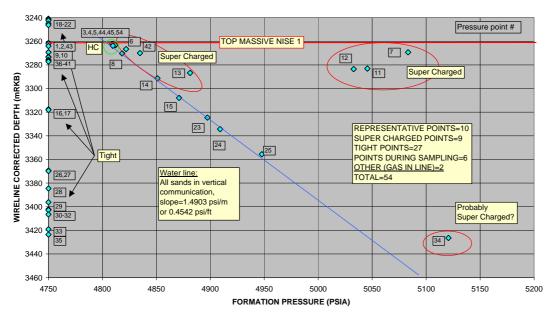
Figure 2.9 shows a summary pressure plot from the well where the pressure points have been identified and classified. All points are within the massive Nise 1 section except the 5 uppermost points which targeted thin Nise 1 stringers above the main reservoir section (points 18-22). Unfortunately the thin stringers were all tight. The quality and repeatability of the pressure points are generally good and within ± 3 psi as demonstrated by the before and after hydrostatic checks (Figures 2.10 and 2.11). The uncertainty of the valid gas and water pressure points used in the analysis appears to be within ± 2 psi (Figure 2.12).

The determination of the water gradient was based on 6 high quality pressure points lining up more or less very well along a straight line (R^2 =0.9965) with a gradient of 0.454 psi/ft which equates to a 1.048 g/cc equivalent density (Figure 2.13). The scatter from the regression line is very much within the uncertainty demonstrated, as already discussed (Figure 2.12). The pressure analysis demonstrates that the upper part of the Nise 1 formation is in excellent pressure communication (Figure 2.9), and that none of the thin shale intervals are pressure barriers through geological time. The many supercharged points is most likely due to the low permeability nature of this reservoir, where the supercharged points may represent sands that are not well enough connected to allow the pressure response from drilling to dissipate and be equilibrated by the large aquifer since drilling (1.18 g/cc mud). Unfortunately, all except point 34 in the lower part of the supercharged points is supercharged, given that there are many other supercharged points in this overall low permeability reservoir.

The determination of the gas gradient was based on 4 pressure points in the 3.5m thick gas bearing reservoir (Figures 2.14 and 2.16). As the gas reservoir is thin, there is considerable uncertainty in the calculation of the gas gradient. The points used were 3, 5, 45 and 54 which were considered to be the best points due to their excellent repeatability (point 45 repeats point 3, and point 54 repeats point 5). Points 4 and 44 were considered unreliable. Especially point 44 did not repeat very well for the before and after hydrostatic check (13psi difference) and is considered very poor quality. The gradient calculated using the 4 best points is 0.0966 psi/ft (0.223 g/cc) with a range from 0.0810 psi/ft (0.187 g/cc) to 0.1122 psi/ft (0.259 g/cc). This latter range was based on calculating the gradient based on points 45 and 54, and 3 and 5, respectively. For comparison the gradient is very similar to the Nyk High gas gradient which was 0.085 psi/ft (0.196 g/cc).

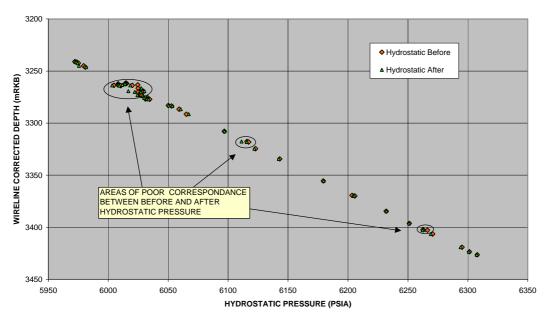
Based on calculation of the intersection of the gas and water gradients, the free water level for the gas accumulation is interpreted to be at 3265.9mRKB or 3229.9m subsea, which corresponds to a formation pressure of 4810.65 psia. Please note that the depth reference for this pressure data analysis was the depth corrected wireline logging run. The original LWD depths on which the pressure points were picked, were shifted approximately by –3m over the reservoir section to match the wireline logs after the drilling of the well.

The pore pressure of 4810.65 psia (4796.15 psig) at a depth of 3229.9m subsea represents a pressure gradient from the surface to the Nise 1 reservoir of 0.453 psi/ft (1.045 g/cc) (ie. normal pressure).



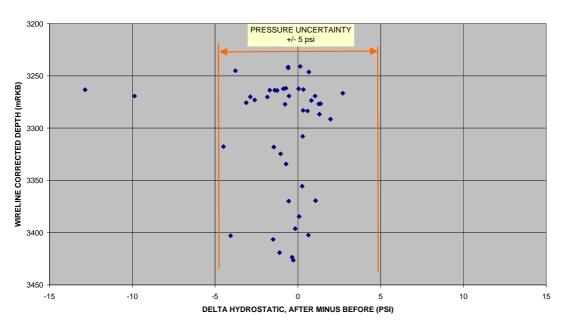
HVITVEIS NISE 1 FORMATION PRESSURES VERSUS DEPTH - ALL POINTS

Figure 2.9: Hvitveis Nise 1 Formation Pressures All Points



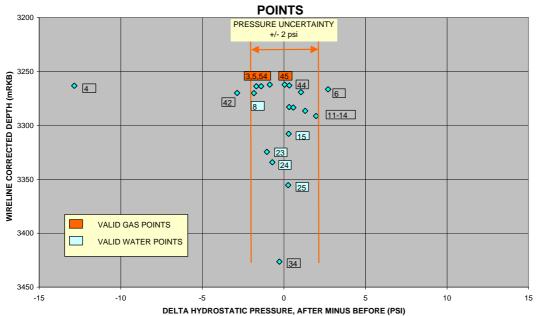
HYDROSTATIC PRESSURE VERSUS DEPTH

Figure 2.10: Hvitveis, QC of Pressure data



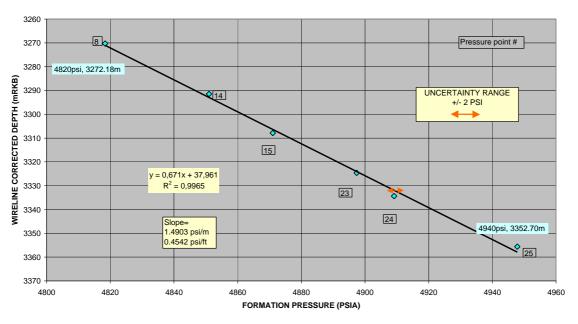
HVITVEIS NISE 1 DIFFERENCE IN HYDROSTATIC PRESSURE - ALL POINTS

Figure 2.11: Hvitveis, Difference in Hydrostatic pressure - All Points



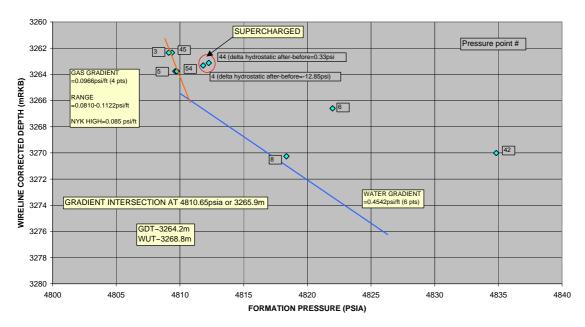
DIFFERENCE IN HYDROSTATIC PRESSURE FOR VALID PRESSURE POINTS

Figure 2.12: Difference in hydrostatic pressure for valid points



HVITVEIS NISE 1 FORMATION PRESSURES - VALID WATER POINTS

Figure 2.13: Hvitveis, Nise 1 formation pressures, valid points



HVITVEIS NISE 1 FORMATION PRESSURE VERSUS DEPTH - HC ZONE

Figure 2.14: Hvitveis Nise 1, Formation Pressures versus Depth - HC zone

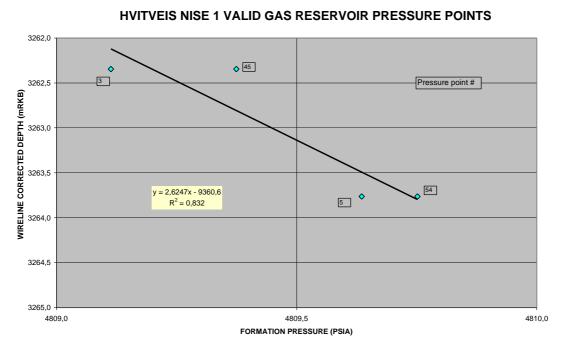


Figure 2.15: Hvitveis, Nise 1, valid gas reservoir pressure points

HVITVEIS WELL 6706/6-1 RCI PRESSURE MEASUREMENTS

Sample	DEPTH LWD Depth MD	Depth Shifted to WL	Depth Shift	Initial Hvdrostatic	Initial Hydrostatic	Formation Pressure	Formation Pressure*	Final Hydrostatic	Final Hydrostatic	Perm	
Number	(mRKB)	(mRKB)	(m)	(bars)	(psia)	(bars)	(psia)	(bars)	(psia)	(mD)	Comment
19	3243,5	3240,98	-2,5	411,870	5972,12	(Build)	4750,00	411,880	5972,26	(Tight
18	3244,0	3241,45	-2,6	411,980	5973,71		4750,00	411,940	5973,13		Tight
20	3245,1	3242,48	-2,6	412,070	5975,02		4750,00	412,030	5974,44		Tight
21	3247,5	3245,10	-2,4	412,375	5979,44		4750,00	412,115	5975,67		Tight
22	3248,8	3246,33	-2,5	412,472	5980,84		4750,00	412,518	5981,51		Tight
1	3264,7	3261,56	-3,1	414,800	6014,60		4750,00		0,00		Tight
2 45	3265,0	3261,86	-3,1 -3,2	414,850 414,359	6015,33 6008,21	224 604	4750,00 4809,37	414,800 414,362	6014,60 6008,25	1,146	Tight
45 46	3265,5 3265,5	3262,35 3262,35	-3,2	414,359 414,359	6008,21	331,681 331,890	4809,37	414,567	6011,22	1,140	840cc sample
40	3265,5	3262,35	-3,2	414,361	6008,23	332,345		414,437	6009,34		840cc sample
48	3265,5	3262,35	-3,2	414,359	6008,21	331,781		414,380	6008,51		840cc sample
49	3265,5	3262,35	-3,2	415,626	6026,58	334,149		414,571	6011,28		840cc sample
50	3265,5	3262,35	-3,2	414,359	6008,21	332,711		414,271	6006,93		840cc sample
51	3265,5	3262,35	-3,2	414,359	6008,21	330,510		414,335	6007,86		4 litre sample
52	3265,5	3262,35	-3,2	414,243	6006,52			414,245	6006,55		Gas in line
53	3265,5	3262,35	-3,2	414,397	6008,76			414,567	6011,22		Gas in line
3	3265,5	3262,35	-3,2	414,810	6014,75	331,663	4809,11	414,750	6013,88	3,187	a a i
44	3266,3	3263,13	-3,2	414,346	6008,02	331,880	4812,26	414,369	6008,35	1,260	Super Charged
4 5	3266,5	3263,32	-3,2 -3,2	415,490	6024,61	331,850	4811,83	414,604	6011,76	2,297	Super Charged
5 54	3267,0 3267,0	3263,76 3263,76	-3,2	415,177 414,116	6020,07 6004,68	331,699 331,707	4809,64 4809,75	415,060 414,020	6018,37 6003,29	5,317	
43	3267,3	3264,03	-3,3	414,514	6010,45	551,707	4750,00	414,428	6009,23		Tight
6	3270,0	3266,60	-3,4	415,506	6024,84	332,550	4821,98	415,693	6027,55	0.707	Super Charged
7	3272,5	3269,31	-3,2	415,798	6029,07	350,569	5083,25	415,870	6030,12	1,343	Super Charged
9	3272,5	3269,31	-3,2	415,667	6027,17		4750,00	415,630	6026,64	,	Tight
10	3272,5	3269,31	-3,2	415,630	6026,64		4750,00	414,950	6016,78		Tight
42	3273,2	3270,01	-3,2	415,514	6024,95	333,436	4834,82	415,316	6022,08	0,900	Super Charged
8	3273,5	3270,26	-3,2	415,799	6029,09	332,301	4818,36	415,672	6027,24	1,623	
41	3276,5	3273,07	-3,4	415,652	6026,95		4750,00	415,472	6024,34		Tight
40	3277,0	3273,58	-3,4	415,725	6028,01		4750,00	415,781	6028,82		Tight
39 37	3279,0 3280,0	3275,62 3276,64	-3,4 -3,4	416,062 416,006	6032,90 6032,09		4750,00 4750,00	415,847 416,101	6029,78 6033,46		Tight Tight
36	3280,0	3276,84	-3,4	415,930	6030,99		4750,00	416,017	6032,25		Tight
38	3280,5	3277,15	-3,4	416,176	6034,55		4750,00	416,123	6033,78		Tight
11	3286,5	3283,06	-3,4	417,248	6050,10	347,966	5045,51	417,270	6050,42		Super Charged
12	3287,0	3283,56	-3,4	417,440	6052,88	347,093	5032,85	417,480	6053,46	1,600	Super Charged
13	3290,0	3286,71	-3,3	417,870	6059,12	336,637	4881,24	417,960	6060,42	1,902	Super Charged
14	3294,5	3291,43	-3,1	418,284	6065,12	334,552	4851,00	418,420	6067,09	1,115	
15	3311,0	3307,84	-3,2	420,470	6096,82	335,932	4871,01	420,490	6097,11	3,974	
17	3321,5	3317,63	-3,9	421,770	6115,67		4750,00	421,460	6111,17		Tight
16	3322,0	3318,13	-3,9	421,870	6117,12	007 740	4750,00	421,770	6115,67	0.000	Tight
23 24	3328,5	3324,59	-3,9	422,270 423.659	6122,92	337,748 338,560	4897,35	422,198	6121,87 6142,35	2,200	
24 25	3338,5 3359,5	3334,34 3355,58	-4,2 -3,9	423,659	6143,06 6179,41	338,560	4909,12 4947,84	423,610 426,184	6179,67	1,900 1,600	
23	3373,0	3369,38	-3,9	427,825	6203,46	341,230	4750,00	427,899	6204,54	1,000	Tight
26	3373,5	3369,88	-3,6	427.983	6205,75		4750,00	427,945	6205,20		Tight
28	3387,8	3384,54	-3,3	429,790	6231,96		4750,00	429,795	6232,03		Tight
29	3399,0	3396,22	-2,8	431,116	6251,18		4750,00	431,105	6251,02		Tight
31	3406,0	3402,28	-3,7	431,908	6262,67		4750,00	431,952	6263,30		Tight
30	3406,5	3402,81	-3,7	432,163	6266,36		4750,00	431,883	6262,30		Tight
32	3410,0	3406,46	-3,5	432,458	6270,64		4750,00	432,355	6269,15		Tight
33	3423,2	3419,11	-4,1	434,151	6295,19		4750,00	434,075	6294,09		Tight
35	3427,6	3423,51	-4,1	434,576	6301,35	050 446	4750,00	434,552	6301,00		Tight
34	3430,5	3426,41	-4,1	435,026	6307,88	353,143	5120,57	435,007	6307,60		Super Charged?

* NOTE: A formation pressure of 4750psi denotes tight formation (for plotting purposes only)

NOTE: All pressure measurements on Quartz gauge (ie. absolute pressure measured)

Table 2.11: Hvitveis well 6706/6-1 RCI Pressure Measurements

Details of the pressure testing and a full list of the sampling is provided Appendix. 7.

2.9.6 RCI Sampling

Five 840 cc samples and one 4000 cc sample were collected from the same depth in the gas zone in this well.

Detailed sampling history:

Several RCI samples were taken in the gas bearing reservoir at a depth of 3265.5mRKB (depth reference uncorrected LWD logging run). This depth corresponds to 3262.35mRKB for the depth shifted wireline logs. The sampling process started at 15:08 on June 8. Fluid was pumped through the tool in order to get as clean as possible formation fluid, before the actual sampling was started. During the fluid pump through process the resistivity of the fluid was monitored. The resistivity was very much stable and very slowly increasing from 0.283 to 0.303 ohmm by 19:30 when 43.2 liters of fluid had been pumped through the tool. For comparison, the resistivity of the mud filtrate was 0.0696 ohmm at 23.5°C with an equivalent resistivity of 0.0342 ohmm at reservoir temperature (70°C). This indicated that formation water rather than mud filtrate was pumped through the tool. The optical analyzer showed no signs of hydrocarbons. At 19:35 the tension in the wireline cable showed significant overpull (650 pounds) due to the rising tide, and it was decided to fill two 840cc chambers to secure samples in case the tool would break loose from the borehole wall, when the tension in the cable was released. During sampling, the resistivity unexpectedly rose to about 7000 ohmm and the sample bottles were overfilled by more than 200cc indicating that a compressible fluid most likely containing gas had been sampled.

The reason for the observed resistivities during pumping of fluid through the tool (approximately 0.28-0.30 ohmm), probably was due to that the resistivity read by the sensor resulted from a combined response from mud filtrate and gas bubbles. During the sampling, when the fluid was stationary in front of the resistivity meter, the sensor apparently made more direct contact with the gas bubbles resulting in very high resistivity readings.

After the two first chambers were sampled, it was decided to fill three more 840cc bottles and one large 4 liter chamber (Table 2.12). As all of the samples contained filtrate, the sampling apparently did not reach beyond the invaded zone of the well bore.

Test	Chamber Serial No.	Chamber	Volume	Sampling Resistivity
No.		Volume (cc)	Pumped (cc)	(ohmm)
46	369 137	840	1072	5100-7100
47	369 139	840	1083	5000
48	369 214	840	1640	7100
49	10 047 696	840	1593	5300
50	10 047 695	840	1520	6100
51	311 994	4000	6910	5500

Table 2.12: RCI sampling results

It was decided to open test bottles no. 47 and 50 at the well site to find out about the content of the chambers. The chambers contained gas and fluid as described in Table 2.13. The fluid was dominantly mud filtrate with a thin film of condensate. The fluid resistivity was 0.06-0.07 ohmm consistent with the mud filtrate sample from the mud referred to above. Some of the fluid (25 ml)

was put in a graded settling tube. After settling for a while the tube showed the following from bottom to top: mud filtrate, 1 ml brown scum, approximately 0.5 ml clear condensate on top. The condensate had an odour akin paint thinner and had a moderately bluish-white direct fluorescence.

Sample	Gas	Fluid	Chamber	Odour	Fluorescence	Fluid	Comment
Chamber	(ft^3)	(ml)	pressure			Resistivity	
Serial No.			(bar)			(ohmm)	
369 139	1.0	194	137.93	akin paint thinner	mod bluish- white direct	0.0661 at 15°C	Appeared to have a thin skim of gas condensate floating on the surface (clear fluid)
10 047 695	1.5	342	337.93	akin paint thinner	mod bluish- white direct	0.0728 at 15.1°C	Appeared to have a thin skim of gas condensate floating on the surface (clear fluid)

Table 2.13: Contents of opened RCI bottles onboard West Navigator

The fluid sample of the second chamber (10 047 695) was filtered and the resistivity of the filtrate was measured to 0.0736 ohmm at 14.6°C. The chloride content was measured to 110 000 ppm. For comparison the chloride content of the mud filtrate as measured from a mud sample was 120 000 ppm.

The gases recovered from both chambers were repeatedly analyzed through a chromatograph with the results documented in Table 2.14.

Sample	Injection	Time	C1	C2	C3	iC4	nC4	iC5	nC5
Chamber			(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Serial No.									
369 139	1	08:03:56	96200	12160	5946	934	1303	0	500
369 139	2	08:13:56	108515	12004	5692	928	1283	0	495
10 047695	1	08:28:56	196607	21010	10378	1772	2447	0	1119
10 047695	2	08:33:56	195274	19370	10397	1800	2344	0	1093

Table 2.14: Chromatographic break down of gas samples

At the onshore laboratory (Reslab as) the chambers were heated to approximately 65°C, pressurized to 650 bar, subsequently stabilized for 24 hours for the fluid to homogenize, and then transferred to storage bottles (Table 2.15). The 4 liter chamber was transferred to 3 bottles. Constant Mass Expansion (CME) and compositional analysis will be performed on bottle TS-18207. Bottle TS-1902 has been sent to geochemical analysis.

	Chamber	Storage	Drained Filtrate	Flowing Reservoir	Flowing
Chamber	Volume	Bottle No.	Volume	Pressure	Temperature
Serial No.	(cc)		(cc)	(bar)	(°C)
369 137	840	TS-6304	220	331.89	69.4
369 214	840	TS-29005	310	331.78	72.8
10 047 696	840	TS-1303	340	334.15	72.8
311 994	4000	TS-61005	1000	330.51	73.0
		TS-18207		330.51	73.0
		TS-1902		330.51	73.0

Table 2.15: Transfer of RCI chamber contents to storage bottles

2.10 Fluid Analysis Summary

Reslab did the fluid analysis work onshore. There was no lab present at wellsite. Baker Atlas did one RCI run at TD of the 6706/6-1. The RCI run were successful, collecting 6 samples and trying 52 Pressure points.

See below for a summary of fluid analysis. For a full evaluation, please see Reslab Report, Transfer and PVT Analysis of Gas Condensate Samples, 6706/6-1. The samples were transferred to storage bottles, Table 2.16.

	les	T (1)		
RCI	Opening	Transferred to	Drained filtrate CC,	Comment
Chamber no	pressure	storage bottle	All samples contained	
			Water/ mud filtrate	
369137	200	TS-6304	220	
369214	500	TS-29005	310	
10047688	300	TS-1303	340	
311994	360	TS-61005	1000	4 liter chamber
		TS-18207		
		TS-1902		

Table 2.16: Transfer of RCI chambers, opening pressures and contents

The samples from the RCI chambers and one of the 3 transferred samples were transferred to a PVT cell for dew point determination. The results in Table 2.17 show that none of the samples are representative. All dew points are higher than reservoir pressure, indicating draw down and liquid segregation in the wellbore during sampling. The total content of liquid drop out in the samples indicates that this is a relatively dry gas condensate with a maximum liquid drop out around 1%.

The sample with the lowest Dew Point value closest to reservoir pressure is the most representative sample.

RCI Chamber no	Transferred to storage bottle	Transferred Volume, cc	Transfer pressure, Bar	Dew point pressure Bar
369137	TS-6304	300	650	435
369214	TS-29005	320	650	435
10047688	TS-1303	435	650	440
311994	TS-61005	750	650	
	TS-18207	750	650	390
	TS-1902	750	650	

Table 2.17: Transfer of RCI chambers to storage bottles, volumes and transfer pressures

A sample from the 4 liter chamber, Sample TS- 1902, was sent to Pencor for compositional analysis. A reservoir pressure to 200 psig flash was performed by Pencor on the reservoir fluid sample received from Esso Norge on August 14, 2003. The results of the compositional analysis performed on the flash gas, is shown in Table 2.18 below.

		al Analysis of S		IS	
Sampling Conditions:	: 13.8 bar (200	psig) at 26.7 °C (8	0 °F)		
Hvitveis RCI Sample	from ProServe	Cylinder TS-1902 (RCI Chamber	311994)	
Hvitveis Well No. 670)6/6-0				
PENCOR ID No. 291	137-01				
EPR-1256					
Component	Mole %	GPM @ 14.73 psia	Wt %	Mole	Weight
Nitrogen	1,527	0,000	2,306	28	,013
Carbon Dioxide	2,371	0,000	5,627	44	,010
Hydrogen Sulfide	0,000	0,000	0,000	34	,076
Methane	90,053	0,000	77,899	16	,043
Ethane	3,266	0,872	5,295	30	,070
Propane	1,431	0,394	3,402	44	,097
so-Butane	0,219	0,071	0,685	58	,123
N-Butane	0,361	0,114	1,132	58	,123
lso-Pentane	0,145	0,053	0,564	72	,150
N-Pentane	0,124	0,045	0,483	72	,150
Hexanes	0,131	0,055	0,610	85	,642
Heptanes	0,372	0,155	1,997	100	,926
Totals	100,000	1,759	100,000		
Calculated Propertion		Air = 1.00)	- 0	6417	
Net Heat of	(Btu/Cu.Ft. (= 961,1	Real
Combustion	Psia @ 60 °			- 301,1	i veai
Gross Heat of	(Btu/Cu.Ft. (1	Dry =	1 064,1	Real
Combustion	Psia @ 60 °				
Gross Heat of Com		/		Wet =	1 045,5
Gas Compressibility	(@ 1 Atm	. @ 60 °F)	Z	= 0,9975	

Table 2.18: Compositional analysis of Separator Gas

	Date	Tools	Deepest Depth	Max	Time since
Run			(mMDRKB)	Temp	circ. (hours)
				(Deg C)	
1A	May 18-19, 2003	GR_CN_ZDL_XMAC	2770		
		ELITE_DLL_MLL			
2A	May26, 2003	GR_SLR Checkshot	3220		
2B	May 27,	GR_CN_ZDL_XMAC	3220	64.4	27.16
	2003	ELITE_DLL_MLL			
3B	June 8, 2003	GR_RCI	3430	74.0	16.83
3B	June 9	GR_XMAC ELITE_	3430	80.0	46.5
	2003	MLR Checkshot			
3A	June 10, 2003	GR_SWC		none	
				rec.	

2.11 Temperature Data

Table 2.19: Wireline logging temperatures

Horner plot estimate gives Bottom Hole Temperature of 83.4°C at 3430m, which gives a geothermal gradient of 39.8 °C/km. Comparison of predicted and actual temperature is shown in Figure 2.16.

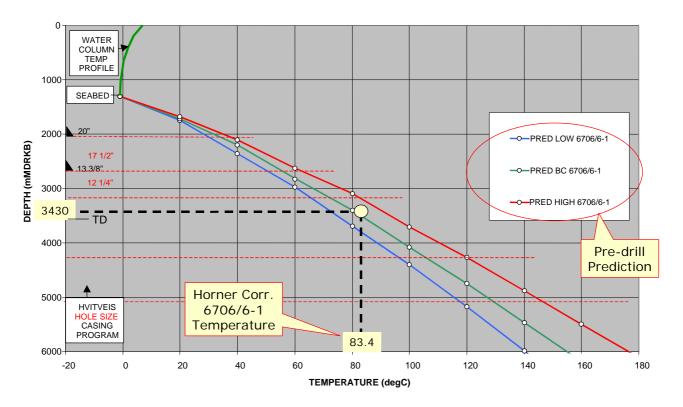


Figure 2.16: Hvitveis 6706/6-1 Predicted and Actual temperature

2.12 Geochemistry

Geolab Nor did the geochemistry on the 6706/6-1. They analysed cuttings, core and sidewall core samples together with gas samples from one of the RCI samples.

Objectives of the studies

- Evaluate it Cretaceous section contains source intervals and establish maturity of section
- Evaluate significance of hydrocarbon gas recorded during drilling
- Evaluate if Nise 1 interval contains extractable hydrocarbons
- Evaluate discovered hydrocarbons with respect to source origin and maturity. Are hydrocarbons discovered consistent with results of basin modeling?

Program

- Screen 23 samples for potential Cretaceous source rocks and establish maturity vs depth trend
 - 20 cuttings samples and 3 core samples
 - Include samples from potential condensed intervals represented by high gamma ray peaks.
- Analyse hotshot head space gas data of 11 cuttings samples
- Evaluate if upper part of Nise 1 contains extractable hydrocarbons
 - 2 core samples and 4 SWCs

The following text summarises the conclusions of the report. The source rock potential is summarised in Table 2.20

Headspace Gas Analysis

Headspace gas analysis on 11 samples from 2120-3280m showed a steady increase in C₂-C₄ abundance from 2100m and down, reaching a maximum at 3140m. The upper interval (<2500m) was mostly composed of methane with wetness ~ 5% and isobutane/n-butane >1, typical of biogenic gas or biodegraded thermogenic gas. The lower interval has a wetness of >20% and C4/nC4 of less than 1 indicating thermogenic gas.

However, isotope data indicates a thermogenic origin for <u>all</u> the analysed headspace gas samples. The high iC4/nC4 and low wetness above 2500m is probably due to biodegradation of thermogenic nC_4 and preferential migration of methane.

The d¹³C C₁ vs C₂ plot suggests a late mature oil associated origin.

Source Potential

The TOC content range between 0,8% and 1.8%, dark grey shales from 2100, 2120 and 2140m (area of delta Log R response) were picked and analysed separately, the picked shales are slightly richer in TOC (1.4-1.6% compared with 1.1-1.3%).

Due to glycol used in the drilling mud the TOC values are considered to be slightly high (by about 0.1-0.2%). Owing to glycol contamination, the S1 values are not considered to be representative of the shales, so that source potential is based only on the S2 values.

Based on the corrected values of the S2 which are less than 2 mg HC/g rock, the whole analysed sequence is considered to have a poor source potential (Table 2.20).

Calculated hydrogen index values from the corrected S2 are mainly less than 100 mg HC/g TOC, except in the cored section where they vary from 100 to 115mg HC/g TOC, which indicates type III/IV to III kerogen at best (i.e. very poor to poor potential for gas only).

Visual kerogen analyses was performed on 11 samples from 2120 to 3280m, including the dark grey shale form 2120m. The kerogen assemblages are dominated by woody (vitrinitic) and coaly (inertinitic) clasts, and also contain subordinate low to non-fluorescent amorphous matter, subordinate spores/pollen and cuticle and only traces of algae. These indicate input of mainly terrestrially derived higher plant organic matter.

Depth (m)	% TOC	Rock- Eval S2**	Rock- Eval (HI)	Visual Kerogen	GC/GC- MS	Summary
2100 – 2140*	1.4 – 1.6	~1	<80	45% poor amorphous and mix herbaceous woody and coaly matter	_	Very poor gas prone
2140 - 2500	0.8 – 1.5	<1	50-80	Minor amorphous, Subequal mix of herbaceous, woody and coaly matter	_	Very poor gas prone
2500 - 3300	1.2 – 1.8	1-2	70-115	Minor amorphous, Slightly more herbaceous than woody or coaly matter	_	Very poor gas prone
2820	1.05e	1.6	95	Minor amorphous, Slightly more herbaceous than woody or coaly matter	Higher plant rich source rock	Very poor gas prone
3282,75	1.68e	1.8	115	75 % poor amorphous and mix herbaceous woody and coaly	Higher plant rich source rock	Poor gas prone

Table 2.20: Geochemical Summary, Source rock screening.

Maturity evaluation is summarised in Table 2.21.

Tmax

Due to glycol contamination, a correction using Rock-Int software was applied to Tmax. Tmax values in the interval 2700 to 3300m range from 426° C for type III or III/IV kerogen, suggesting the analysed interval is immature to mid-oil window mature. Tmax data above 2700 m is less reliable (due to difficulties in identifying top of the S2 peak), Tmax varying form $407 - 422^{\circ}$ C indicates the sequence is immature.

Vitrinite

A good vitinite reflectance trend has been determined from 10 samples (2100 to 3300m). The interval down to 2700m is less than 0.4% Ro i.e. immature. The interval 2700 – 3000m is early mature (0.5% Ro to 0.6% Ro). The interval 3000 - 3300m is oil window mature reaching approximately 0.75% Ro at 3300m.

Spores

The section 2100 - 3300 m is immature to early-mid oil window ranging from SCI of 4 (equiv. 0.4% Ro) to 6.5 (equiv. 0.7% Ro).

Depth Interval (m)	Rock-Eval Tmax °C''	Vitrinite reflectance trend	SCI %Ro calc (SCI)	GC	GC-MS	Summary
2100-3000	~410 to 435	0.4 - 0.6	0.4 –0.6 %Rcalc (4-6)	CPI 1.54 at 2820m	_	Immature to top oil window
3000-3300	435-445	0.6-0.75	0.6–0.7 %Rcalc (6 – 6.5)	%Rc*0.86 % at 3282.75m	~0.7% at 3282.75m	Mid oil window mature

Table 2.21: Geochemical Maturity Summary

2.13 Geophysical and Structural Interpretation

2.13.1 Interpreted Horizons and Tie to Seismic

Seismic Interpretation

Seismic imaging is excellent in the western part of the Hvitveis prospect, whereas the quality deteriorates significantly in the eastern part. The imaging deterioration is caused by shallow intrusives of volcanic origin overlying the Nise 1 reservoir section. Some interference from volcanic intrusions is also seen in the saddle area in the southwestern part of the prospect.

Four main reservoir horizons (top and base of Nise 1 and Nise 2), five Maastrichtian horizons, top Cretaceous, top Paleocene and five post Paleocene horizons were carried over the Hvitveis prospect (Figure 2.17).

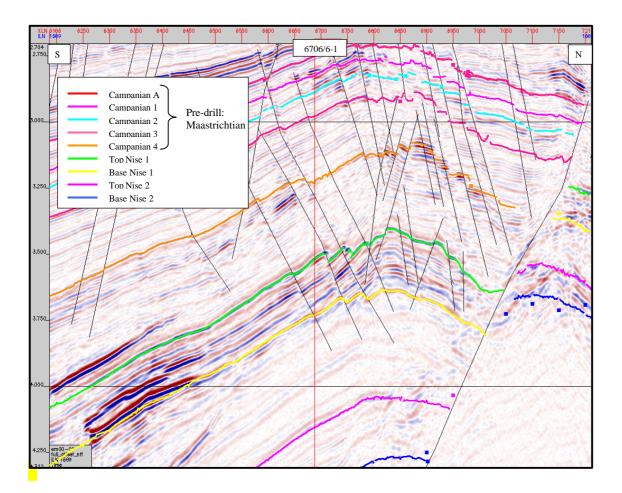


Figure 2.17: Inline 1689, with 6706/6-1 location. Interfering sills within Nise 1 located to the lower left.

Both the primary reservoir Nise 1 and the secondary Nise 2 were interpreted as low impedance units where top reservoir represented a decrease in acoustic impedance compared to the overlying shales. The Nise 1 and Nise 2 horizons were mapped with high confidence in Hvitveis.

Undifferentiated Maastrichtian horizons were mapped only on Hvitveis, due to their importance for drilling the 6706/6-1 well. The Maastrichtian units were characterized by an abundance of seismic anomalies, which were interpreted to be related to gas filled sandstones. The Hvitveis well did not penetrate any Maastrichtian sands and the observed anomalies are likely caused by low gas-saturation within the silt- and shale prone section. Post-drill analysis of the biostratigraphy, indicates that the pre-drill interpreted Maastrichtian horizons are of Campanian age.

Formation Tops - Actual vs. Prognosis

The 6706/6-1 well demonstrated that most of the interpreted TWT horizons were correctly picked on seismic. The key formation tops however, came in shallow to prognosis due to lower-than-expected velocities, especially in the Top Cretaceous to Top Nise 1 interval. The Top Cretaceous came in 21m shallow to prognosis and the Top Nise 1 came in approximately 119m shallow to prognosis.

Acoustic Logs

Wireline sonic and density logs were acquired in the 17" (Run 1A: 2042-2770 mMD, Run 2B: 2631-3216 mMD) and 12¹/₄" hole sections (Run 3B: 3123-3445 mMD), with the XMAC-Elite sonic tool recording both Compression and Shear sonic (Run 1A and Run 3B). The objective of recording shear data in these intervals was the calibration of AVO responses of Cretaceous sandstones and siltstones with respect to the remaining prospectivity in the area. The acoustic logs recorded in this well are good quality and need little editing. Top massive Nise 1 displays lower density and slightly lower P-wave velocity than the shales above, with a net result being that the Nise 1 can be characterized as a low-impedance sandstone.

Checkshot Survey

A rig-source checkshot survey was acquired by Baker Atlas in this well, and a separate report was prepared by them. The survey was acquired as two separate passes into the well with irregular receiver level spacing.

Pass 1 was carried out as a regular wireline pass with a single-level receiver (1 level SLR) tool. The checkshot data consisted of 1064 files (three components), including 136 guntiming files and 96 checkshot files. The checkshot data was acquired at levels 1877m, 2343m and 2700m MDKB. Of this data, every 8th file was the nearfield monitor reference signature.

Pass 2 was carried out as a regular wireline pass with a multi-level receiver (2 level MLR) tool. The checkshot data consisted of 945 files (three components). Including 45 guntiming files and 195 checkshot files. The checkshot data was acquired at levels 2500m, 2700m and 3325m MDKB. Of this data, every 15th file was the nearfield monitor reference signature. The data acquisition gave checkshot data of good quality, which can be seen from Baker Atlas processing results.

Seismic Well-tie

A synthetic seismogram with zero phase pulse and frequency of 35Hz, was generated for the 6706/6-1 well. The well ties the EM00-01 3D survey at inline 1689 and xline 6688. There is a very good character tie of the synthetic seismogram to the 3D seismic. The synthetic tie is shown in Figure 2.18 and 2.19.

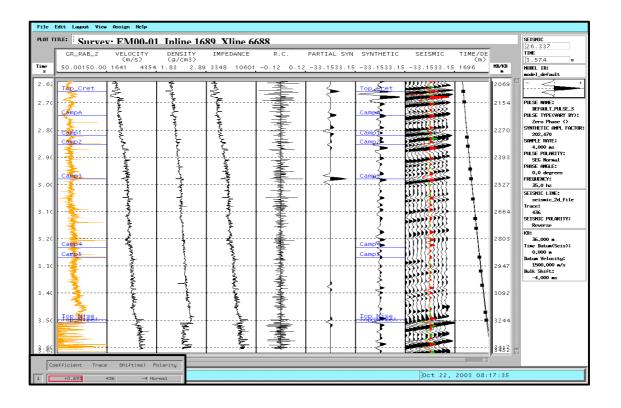


Figure 2.18: Synthetic Seismogram, well 6706/6-1

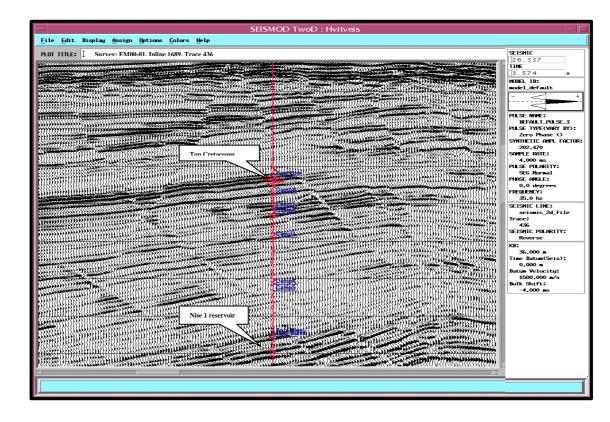


Figure 2.19: Well to seismic tie, inline 1689

2.13.2 Mapping and Depth Conversion

This section describes the pre-drill depth conversion of the Naglfar area, and the updates made to the depth maps following the drilling of the 6706/6-1 Hvitveis well. The aim is to provide the best possible depth maps of the reservoir for rock volume input into hydrocarbon volume estimation, given that there is only one well that ties the 3-D survey covering the area. The 6706/6-1 well demonstrated that the key horizons were correctly picked on seismic. The time interpretation input to the depth conversion has therefore not changed since pre-drill. Updated post-drill depth structure maps of Top Cretaceous and Top Nise1 are shown in Figures 2.23 and 2.24.

Velocity Model

The velocity structure for the area appears to be relatively simple. The interval velocity versus time plot from the stacking velocity data (Figure 2.20), the increasing velocity with time trend from sea floor to Top Cretaceous, continues below the Top Cretaceous on a steeper trend; below the Top Nise1 the increase of interval velocity is on a less steeper trend. Post-drill this velocity model has been confirmed (down to within Nise1 interval) by the check shot data and sonic logging, as can be seen from Figure 2.21.

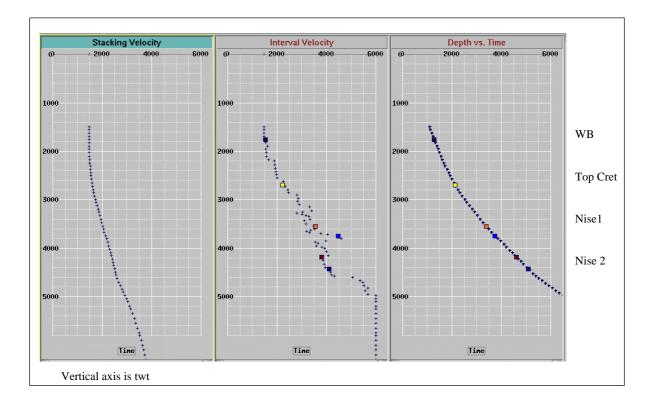


Figure 2.20: Naglfar 3D, Hvitveis, stacking velocities/IV/depth, versus TWT

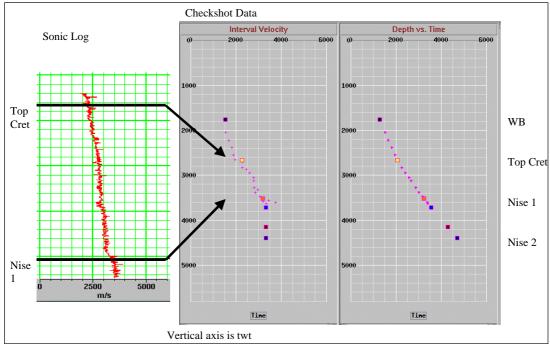


Figure 2.21: Hvitveis 6706/6-1, Sonic Log and Checkshot Data

Depth Conversion Methodology

Pre-drill depth conversion was performed using seismic stacking velocities. A schematic display of the depth conversion methodology is illustrated in Figure 2.22. Six main surfaces were depth converted, these being water bottom, Top Cretaceous, Top Nise 1 (main reservoir), Base Nise1, Top Nise 2 (secondary target), and Base Nise 2. For the water leg a velocity of 1475 m/s was used.

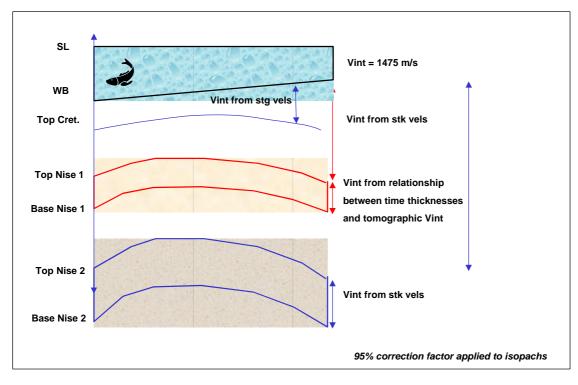


Figure 2.22: Depth Conversion Methodology

For the water bottom to Top Cretaceous interval, an interval velocity grid based on stacking velocities was used, with a 95 % correction factor applied; the correction factor was based on calibration at the Luva well.

For the water bottom to Top Nise 1 interval, an interval velocity grid again based on stacking velocities was used. A comparison was made between the stacking velocity and the tomography data, which was available for three inlines (1601, 1801, 2001) for this unit. A comparison of the tomography data and stacking velocity data was made by pulling values off the Vint grid along the three lines. The two different velocity datasets were found to tie satisfactorily. As with the water bottom to Top Cretaceous, the water bottom to Top Nise 1 velocity grid had a 95% correction factor applied.

Post Drill Conclusion

It can be stated that the depth conversion was reasonably accurate, as the uncertainty range for the interval velocity correction factor used was said to be 91% to 101%. As noted, the correction factors actually needed were 93.6% for the Top Cretaceous and 90.66% for the Top Nise 1.

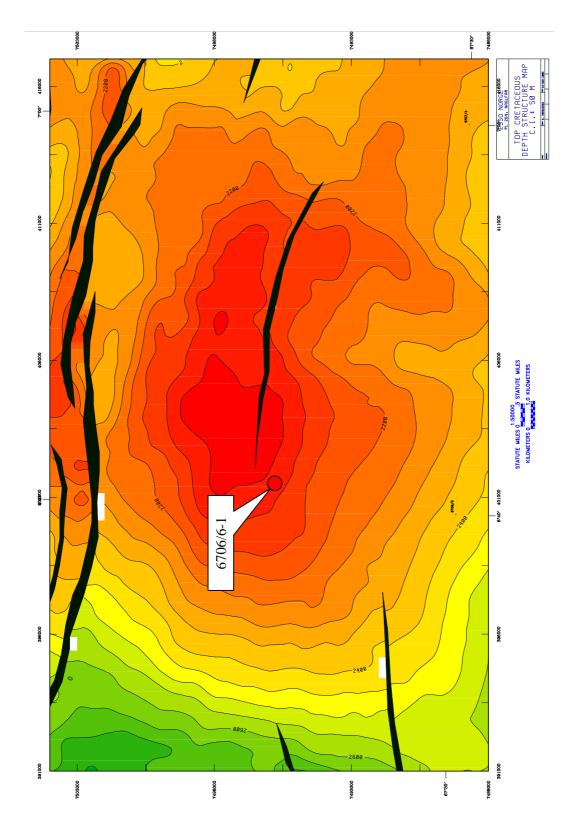


Figure 2.23 Depth Structure Map of Top Cretaceous

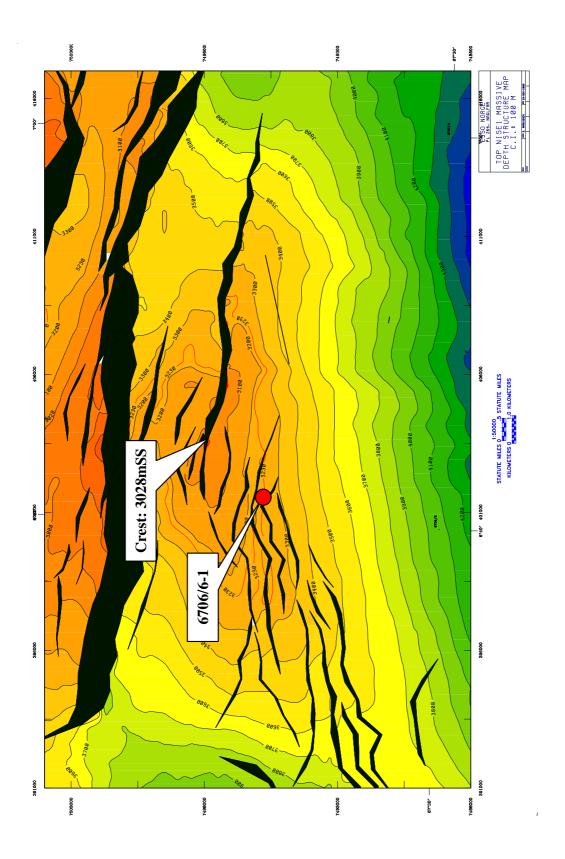


Figure 2.24 Depth Structure Map of Top Nise1

2.14 Formation Pressures

Normal pressure was predicted for the 6706/6-1 well until deep in the section towards Nise 2. Estimates of formation pressures were made continuously throughout the well. Pore pressure estimates were primarily made based on analyses of:

Drilling exponent data plots LWD Resisitivity plots Gas relationships Hole conditions Wireline Density logs Direct pressure measurements - RCI

Real time pore pressure analysis was carried out by Sperry-Sun for ESSO Norge AS using Sperry-Suns proprietary FPE software package. The objective was to provide real time pore pressure analysis while drilling. The FPE program uses industry-standard overlay techniques for pore pressure prediction and fracture pressure calculation methods. A full description of the methodology is given in Sperry Sun's 6706/6-1 End of Well report, Section *5*.

Pre Drill Pore Pressure Estimate

The pore pressure was predicted on two bases i.e. a high case and a low case scenario. The low case scenario predicted the pore pressure equivalent to about 1.08 SG EMWRT from the seabed, to the top Nise 2 reservoir. The formation pressure was then expected to rise through the Nise 2 formation to around 1.08 to 1.20 SG EMWRT.

In the high case scenario, the formation pore pressure was estimated to be 1.14 SG EMWRT down to around 4000m and then rise steadily to around 1.32 SG EMWRT at the base of the Nise 2 reservoir.

Gas gradients associated with potential large gas accumulations produced expected pore pressures at the Top Nise 1 of around 1.20 SG EMWRT and 1.30 SG EMWRT for the Top Nise 2 reservoir in the low case scenario. In the high case scenario expected pore pressure of 1.30 SG EMWRT and 1.45 SG was expected for the Top Nise 1 and Top Nise 2 reservoirs.

Offset well Data

The 6707/10-1 well was used to form the background case for the interpretation of the data collected on the 6706/6-1 well. Overburden gradient and pressure were estimated from analysis of offset well. The use of offset well data continued through the 28", 17", and 12¼" sections, due to the inaccuracies in the measurement of bulk density from cuttings.

Pressure evaluation from well 6706/6-1, from Sperry Sun Report

9 7/8" Shallow gas pilot hole: 1331m - 2050m

This section was drilled riser-less with returns to seabed with GR- RES and directional MWD. The Resistivity and Dc exponent indicated normal pressure for this section, and no flow was observed with the ROV.

42" Section: 1331m – 1428m

This section was drilled riser-less with returns to seabed with directional MWD only.

The Modified Drilling Exponent was used to establish any trends within the Quaternary sediments, but due to the non-lithified nature of the sediments; this was seen to be of little practical use. With no indications to the contrary, fluid communication to surface was assumed and the formation pressure was calculated to be hydrostatic i.e. 1.034sg EMWRT.

28" Section: 1428m - 2050m

This section was drilled riser-less with returns to seabed with directional MWD only. The Modified Drilling Exponent (Mod Dc Exp.) was used to establish any trends within the Tertiary sediments and a normal compaction trend (NCT line) was established. This trend line was then used throughout the rest of the well.

Analysis using the Mod Dc Exp. revealed a slight overcompaction within the Top Kai Eocene sediments. At 1840m TVDRT a slight cutback away from the NCT line can be seen. This cutback generated pore pressure estimates of a maximum of 1.12sg EMWRT. This cutback coincides with the boundary between the Tertiary Paleocene (Top Kai) and Tertiary Eocene (Brygge C) sediments. Without samples at surface, the cutback was interpreted a change in lithology rather than a change in formation pore pressure. The Mod Dc Exp. can be seen to ramp back towards the NCT line from around 2000m TVDRT, to the end of the 28" hole section. This was again inferred to be a function of lithology affecting the Mod Dc Exp, rather than a function of formation pressure change.

Fluid communication to surface was assumed and the formation pressure was calculated to be hydrostatic i.e. 1.034sg EMWRT

17" Section: 2050m - 3221m

The drilling of the 17" section commenced with a PDC bit in a steerable assembly, which invariably makes the Mod Dxc data less reliable a tool of Formation Pressure Evaluation. In addition to this, the section was drilled at a controlled rate to allow for good hole cleaning and stability after attaining a LOT of 1.27SG. All these factors have reduced the quality of Dxc data. However, a generally increasing trend is seen throughout the Paleocene Tang Claystone with a very similar gradient to that of the previous section. No cutbacks can be seen and since lithology is dominantly homogeneous, Tang Claystone with minimal variation no formation pressure change was inferred. The boundary between the Paleocene and the Cretaceous Springar Formation can clearly be seen reflected in the Mod Dxc data. The trend established in the Tang Formation can be seen to extend down within the Springar Formation paralleling the NCT line.

A cutback in the Mod Dxc away from the NCT line can be seen between depths of 3025-3040m TVDRT. The lithological samples showed sand and siltstone from this interval and as such the cutback in Mod Dxc is not indicative of formation overpressure.

The Deep, Medium and Shallow Resistivity data also showed a good normally increasing trend throughout the Tang and Springar formations. A NCT line for the resistivity was established in the Tang formation, which was then extended down to the Springar Formation. No significant cutbacks or other variations in the Resistivity were indicated. The only point of interest is at 2620m where a shift in the trend can be seen. This has been interpreted as the position of a fault, which was also reflected in a change in dominant cuttings lithology.

From this point, the data continues at the same gradient as a NCT established before the fault. The NCT used over the first section compares well to resistivity data taken from the pilot hole subsequent to this well and indicates normal pore pressure of 1.04 sg.

Gas values over this section were generally low with minor variations in the level of the background gas. The formation gas levels varied with lithology and ROP but gave no reason to interpret the formation pressure associated with the gas as anything other than normally pressured. Only a small amount of trip gas was observed from the two bit trips (0.5-1% over a background value of 1%) and no connection gas was observed; there was no indication of swabbing whilst drilling.

The mud temperature at surface data could not be used for analysis due to the very long marine riser causing a strong cooling effect on the mud, with any variation in temperature being masked. Plots of the temperature taken from the MWD tool down hole reflected this cooling effect of the riser and showed very little useful information.

Taking all the above factors into account, the formation pressure was estimated to be hydrostatic 1.04 SG EMWRT.

12 1/4 " Section: 3221m - 3450m

The drilling of the 12¹/4" section commenced within the Springar Formation. A slight shift in the previously constructed NCT lines was required to account for the change in the hole size. The Springar formation in this section, is caracterised by claystone and a mix of interbedded sandstone and limestone. This is reflected in the trend of the Mod Dc Exp and the Deep, Medium and Shallow resistivity data. The Mod Dc Exp data can broadly be seen to follow the trend established in the previous section until a cutback away from the NCT line is seen on entering the sandstone of the Nise 1 reservoir. Likewise, the resistivity data reflects the change in lithology.

Gas values over this section were generally low, with variations in the level of the background gas being dependent on the lithology being drilled and the drilling rate (ROP). Two notable gas peaks were observed at 8.8% (3.8% over background) from 3261m TVDRT and 7.5% (3.5% over background) from 3268m TVDRT. These peaks were from two small sandstone bodies within the Nise 1 formation and at the time thought to be a function of lithological structure and composition, rather than a function of rapidly increasing formation pore pressure. However, no reliable estimate could be calculated from the various tools available at the wellsite to suggest a formation pressure at this depth, partly due to the sandy and interbedded nature of the lithology. An estimate based on experience of drilling wells in this area was used and suggested formation pressure at this depth of 1.06 SG EMWRT.

A 9m core was cut just below this interval (3277 - 3286m) which showed the interbedded nature of the formation, but no other indications of abnormal formation structure or abnormally high porosity.

Drilling continued to TD of 3451m BRT. From the core point to TD, both the Mod Dc Exp and the resistivity data showed no indications of a change in formation pressure.

Only a small amount of trip gas was observed from two of the three bit trips made, namely 0.75% (0.5% over background) and 1.4% (1.0% over background) and no connection gas was observed. There was no indication of swabbing whilst drilling or when a swap test was made at TD.

In summary, using all the above data, the formation pore pressure was estimated to be hydrostatic (1.04 SG EMWRT) from the seafloor to Top Nise 1, 3261m TVDRT, where a rise in formation pressure to 1.06SG EMWRT was seen. From this depth to the TD of the well, there was no

indication of any change in the formation pressure, either increasing or reducing, so the estimate remained at 1.06 SG EMWRT to 3451 m TVDRT.

Figure 2.25 gives a summary plot from Sperry Suns FPE program for pressure evaluation. Detailed log plots are included in the mud logging report.

Extra pressure evaluation at 2770m, intermediate Wireline logging point.

No LWD sonic and LWD density data were available in the 17" section. At the first planned 13 3/8" casing point, wireline logs were run. Wireline Sonic and Density were used in the pressure evaluation at the intermediate logging point, 2770m. Based on the pressure evaluation and the fact that there was very small chance of getting a gas filled sand before the main reservoir, it was decided to eliminate one casing string and continue drilling down to the next casing point before setting the 13 3/8" casing.

Hole size	Depth mTVDrkb	Casing	Depth mTVDrkb of casing	LOT Result G/cc EMW	Pore Pressure Gradient G/cc EMW
9 7/8" pilothole	2050				1,034
42"	1428	26"	1422		1,034
26"	2050	20"	2042	1,27	1,034
17"	3220	13-3/8"	3211	1.48	1,04
12 ¼"	3450				1,06

The following table summarizes the leak off tests and pore pressure data for the well.

Table 2.22: Leak off tests and pore pressure

Pore pressure evaluation of 12 ¹/₄" section from RCI

Pore pressure evaluation of 12 ¹/₄" section from RCI confirms the reservoir section is normally pressured with a water gradient of 0.45 psi/ft in the waterleg, see section 2.9.5 for detailed wireline pressure evaluation.

6706/6-1

Sperry-Sun Drilling Services

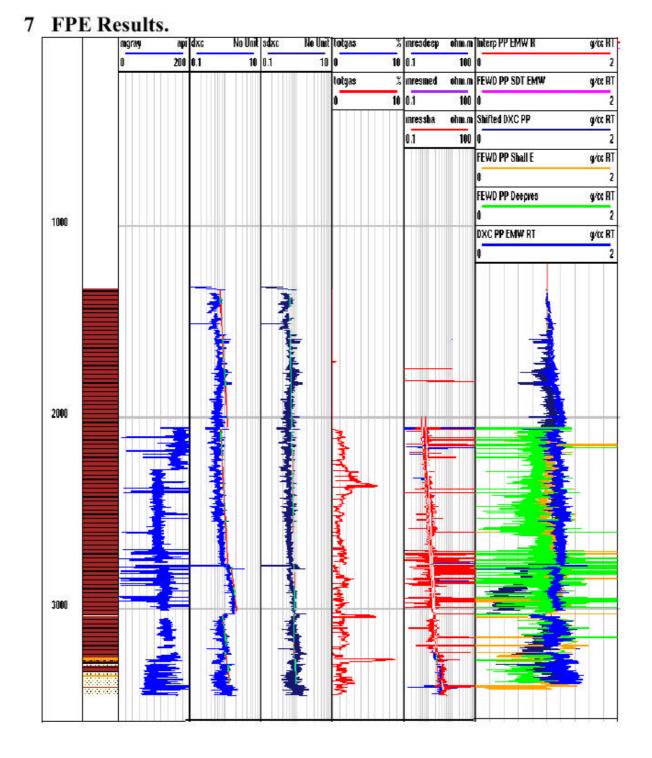


Figure 2.25: Sperry Sun 6706/6-1 Pore pressure evaluation

3 Standard and Special Studies

Esso Norge AS well 6706/6-1 Hvitveis XMAC ELITE analysis, Baker Atlas, May 2003

Well 6706/6-1 Borehole seismic analysis, Baker Hughes, Baker Atlas, May 2003

Esso Norge AS well 6706/6-1 Hvitveis core photos A cut, Reslab, July 2003

Quality Control report for rig source checkshot, on Hvitveis well 6706/6-1, Hydrosearch Associated Ltd., June 2003

Esso Norge AS well 6706/6-1 Hvitveis, End of well report, Wellbore survey drilling and measurements, Schlumberger, Aug. 2003.

Navigation and positioning of West Navigator to well 6706/6-1, Fugro Survey AS, May 2003.

Esso Norge AS well 6706/6-1 Hvitveis, End of well report, surface data logging, mud logging by Sperry-Sun drilling services, 1 CD Halliburton, Sept. 2003.

Esso Norge AS well 6706/6-1 Hvitveis. Final report, transfer & PVT analysis, Reslab, Sept. 2003

Esso Norge AS well 6706/6-1 Hvitveis Naglfar Exploration drilling, End of well report Esso Norge AS, Aug. 2003.

Esso Norge AS well 6706/6-1, Hvitveis, Final end of well core, report Baker Hughes Inteq, Sept. 2003

Esso Norge AS well 6706/6-1 Hvitveis, checkshot, survey, Rig source checkshot velocity survey acoustic log calibration processing by Baker Atlas Geoscience, Baker Hughes, Sept. 2003.

Esso Norge AS well 6706/6-1 Hvitveis, Norwegian Sea Biostratigraphy of the interval 2060 - 3450m, by L. Costa, Robertson Research Int. Ltd., Oct. 2003

Esso Norge AS well 6706/6-1 Hvitveis, Digital core photographs white light, Reslab, Oct. 2003

Esso Norge AS well 6706/6-1, Conventional core analysis, Reslab, Nov. 2003

Esso Norge AS well 6706/6-1 Hvitveis, XMAC ELITE reprocessing, 12.25" hole section, run 3 of 3 by Baker Hughes Baker Atlas, June 2003

Hvitveis well 6706/6-1, Gas and condensate geochemical analysis, by K. Petersen, C . Davis, Esso Norge AS, Oct. 2003

1.	Wellsite Samle Descriptions
2.	Sidewall Core Description Sheets
3.	Core Description Sheets
4.	Deviation Survey Listing and Location Information
5.	RCI, Wireline Test Report, Pressures and Sampling Data
6.	Composite Log (1:500)

7. CPI Log

ESSO NORGE A/S					WELLSITE SAMPLE DESCRIPTION										
WELL : 6706/6-1 AREA : HVITVEIS						Spud Date : 1 MAY 2003 Sheet No. 1									
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS			OR STAIN		FLUOR			CUT		CUT FLUOR		RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement			DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
2060			r-sbblky, sl calc i/p, slty i/p, tr carb mat, micmic.												

2060	100 CLYST: v lt gy, sft, amor-sbblky, sl calc i/p, slty i/p, tr carb mat, micmic.					
	Grdg sltst i/p dk gy, olv gy, sbblky, n calc, rr tr LS: wh, frm, micxln,			 		
2070	100 CLYST: v lt gy, sft, amor-sbblky, sl calc i/p, slty i/p, tr carb mat, micmic.					
	Grdg sltst i/p dk gy, olv gy, sbblky, n calc,			 		
2080	100 Pred CLYST 1: v lt gy, sft, amor-sbblky, sl-mod calc i/p, slty i/p, tr carb					
	mat, micmic. CLYST2: m/dk gy, olv gy, gy brn, frm, n calc, sbblky.					
	Tr SLTST: It-m gy, occ dk gy, olv gy, frm, amor-sbblky, n-sl calc, arg mtx, fri,					
	occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.					
	RTr SD: pred lse clr-trnsl, pred f, SR. Mod sph, no vis por					
2090	60 Pred CLYST 1: v lt gy, sft, amor-sbblky, sl-mod calc i/p, slty i/p, tr carb					
	mat, micmic. CLYST2: m/dk gy, olv gy, gy brn, frm, n calc, sbblky.					
	40 SLTST: It-m gy, occ dk gy, olv gy, frm, amor-sbblky, n-sl calc, arg mtx, fri,					
	occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.			 		
2100	60 Pred CLYST 1: v lt gy, sft, amor-sbblky, sl-mod calc i/p, slty i/p, tr carb					
	mat, micmic. CLYST2: m/dk gy, olv gy, gy brn, frm, n calc, sbblky.					
	40 SLTST: It-m gy, occ dk gy, olv gy, frm, amor-sbblky, n-sl calc, arg mtx, fri,					
	occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.			 		
-	rrTR SD: pred lse clr-trnsl, pred f, SR. Mod sph, no vis por			 		
2110	50 Pred CLYST 1: v lt gy, sft, amor-sbblky, sl-mod calc i/p, slty i/p, tr carb					
	mat, micmic. CLYST2: m/dk gy, olv gy, gy brn, frm, n calc, sbblky.			 		
	50 SLTST: It-m gy, occ dk gy, olv gy, frm, amor-sbblky, n-sl calc, arg mtx, fri,					
	occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.	 		 		
2120	50 Pred CLYST 1: v lt gy, sft, amor-sbblky, sl-mod calc i/p, slty i/p, tr carb					
	mat, micmic. CLYST2: m/dk gy, olv gy, gy brn, frm, n calc, sbblky.			 		
	50 SLTST: It-m gy, occ dk gy, olv gy, frm, amor-sbblky, n-sl calc, arg mtx, fri,					
0400	occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.	 		 		
2130	70 CLYST: pred It-m gy, occ dk gy, brnsh gy, sft, amor-sbblky, n-sl calc i/p,					
	slty i/p, tr carb mat, micmic, glauc, tr dissem pyr.	 				
	30 SLTST: It-m gy, occ dk gy, olv gy, frm, amor-sbblky, n-sl calc, arg mtx, fri,					
	occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.	 		 		
21.40	tr SD: Ise, Qtz, clr-trnsl, vf-m, pred f, SA-SR, mod srt, mod sph,	 	+	 		
2140	70 CLYST : pred m gy, occ dk gy, brnsh gy, sft, amor-sbblky, n-sl calc i/p,					
	slty i/p, tr carb mat, micmic, glauc, tr dissem pyr.	 	+	 		
	20 SLTST: pred brnsh gy, occ It-m gy, dk gy, olv gy, frm, amor-sbblky, n-sl					
	calc, arg mtx, fri, occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.					

Wellsite Geologist : I:\Geoscience\Project\pl_264-Naglfar\Hvitveis well\Final Well Report\Appendix Final Well report\cuttings6706-6-1.doc

WELL: 6706/6-1 AREA: HVITVEIS Spud Date : 1 MAY 2003 Sheet No. 1 DEPTH % LITHOLOGY DESCRIPTION and COMMENTS POR STAIN FLUOR CUT CUT FLUOR RES Rating (m) Colour, hardness, texture, mineralogy, modifiers, cement DIST COL DIST INTEN COL INTEN COL INTEN COL COL <td< th=""><th colspan="5">ESSO NORGE A/S</th><th colspan="11">WELLSITE SAMPLE DESCRIPTION</th></td<>	ESSO NORGE A/S					WELLSITE SAMPLE DESCRIPTION										
		Spud Date : 1 MAY 2003 Sheet No. 1														
(m) Colour, hardness, texture, mineralogy, modifiers, cement DIST COL DIST INTEN COL INTEN COL INTEN COL COL	DEPTH	%	LITHOLOGY	POR	ST	AIN	I	FLUOR		CU	IT	CUT F	LUOR	RES	Rating	
	(m)	Colour, hardness, texture, mineralogy, modifiers, cement				DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

	10 SST: m-dk gy, frm-mod hd, sil mtx, n calc, vf-f grns, n vis por	nvp					
	tr LS: gy brn, yel brn, sft-frm, sbblky-blky, arg, grdg to marl i/p.						
2150	80 CLYST : pred m gy, occ dk gy, brnsh gy, sft, amor-sbblky, n-sl calc i/p,						
	slty i/p, tr carb mat, micmic, glauc, tr dissem pyr.						
	20 SLTST: pred brnsh gy, occ It-m gy, dk gy, olv gy, frm, amor-sbblky, n-sl						
	calc, arg mtx, fri, occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.						
	tr SST: m-dk gy, frm-mod hd, sil mtx, n calc, vf-f grns, n vis por	nvp					
	tr LS: gy brn, yel brn, sft-frm, sbblky-blky, arg, grdg to marl i/p.						
2170	60 CLYST : pred m gy, occ dk gy, brnsh gy, sft, amor-sbblky, n-sl calc i/p,						1
	slty i/p, tr carb mat, micmic, glauc, tr dissem pyr.						
	20 SLTST: pred brnsh gy, occ lt-m gy, dk gy, olv gy, frm, amor-sbblky, n-sl						
	calc, arg mtx, fri, occ crmbly, sl glauc, micmic, tr dissem pry tr f SD.						
	20 SST: m-dk gy, frm-mod hd, sil mtx, n calc, vf-f grns, n vis por	nvp					
2180	80 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n calc.			 			
	10 SLTST: m gy, sft-frm, crumb-blky, occ vf sd, tr glauc, tr micmic						
	10 SST: It-m gy, sft-frm, crmb-brit, QTZ: clss, transp, vf-f, mod sil cmt, glauc,	Nvp					1
	dk gy arg incl/mtx, tr mic.			 			
2190	70 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n calc.		 				
	20 SLST: m gy, sft-frm, crumb-blky, occ vf sd, tr glauc, tr micmic			 			
	10 LST: It gy, sft, amor-blky, sl arg, micxln.			 			
	Tr SST: It-m gy, sft-frm, crmb-brit, QTZ: clss, transp, vf-f, mod sil cmt, glauc,	Nvp					1
0000	dk gy arg incl/mtx, tr mic.			 			
2200	70 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n calc.			 			
	10 SLTST: m gy, sft-frm, crumb-blky, occ vf sd, tr glauc, tr micmic		 				
	20 SST: It-m gy, sft-frm, crmb-brit, QTZ: clss, transp, vf-f, mod sil cmt, glauc,						
0040	dk gy arg incl/mtx, tr mic, carb.			 			
2210	100 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n calc.			 			
2220	tr LST: It gy, sft, amor-blky, sl arg, micxln.		 				
2220	100 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n calc.	D) (D)		 			
	tr SST: It-m gy, sft-frm, crmb-brit, QTZ: clss, transp, vf-f, mod sil cmt, glauc, dk gy arg incl/mtx, tr mic, carb.	nvp					
2230	80 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n-sl calc.						
2230	20 SLTST: m-dk gy, frm-mod hd, blky, miccarb, micmic, n calc, grdg vf sst.]
2240]
2240	80 CLYST: m-dk gy, sft, amor-blky, micmic i/p, n-sl calc.		 	 			
	20 SLTST: m-dk gy, frm-mod hd, blky, miccarb, micmic, n calc, grdg vf sst.						

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		ESSO NORGE A/S		V	VELL	SIT	E SAM	PLE D	DES	CRIP	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	1 MAY 2003			Sheet			
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR	CU	Т	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN COL	INTEN	COL	INTEN	COL	COL	
	tr	LST: wh, sft, crmb, micxln.											
2250	40	CLYST: m-dk gy, sft, amor-blky, micmic i/p, n-sl calc.											
	40	SLTST: m-dk gy, frm-mod hd, blky, miccarb, micmic, n calc, grdg vf sst.											
	20	SST: It-m gy, sft-frm, crmb-brit, QTZ: clss, transp, vf-f, mod sil cmt, glauc,	nvp										
		dk gy arg incl/mtx, tr mic, carb.											
		LST: wh, sft, crmb, micxln.											
2260		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.											
		SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.											
	10	SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, A-SR,	nvp										
		subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ rk frags, carb, glauc.											
		LST: wh, sft, amor, micxln, occ hd, transl, xln calcte											
2270		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.											
		SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.											
	10	SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, A-SR,	nvp										
		subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ rk frags, carb, glauc.											
		LST: wh, sft, amor, micxln, occ hd, transl, xln calcte											
2280		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.											
		SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.											
	tr	SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-											
		SR, subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ glauc, carb. rk											
		frags, carb, glauc											
		LST: wh, sft, amor, micxIn											
2290		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.											
		SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.											
		LST: wh, sft, amor, micxln											
2300		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.											
		SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.					<u> </u>						<u> </u>
2303		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.					┦──┤──						<u> </u>
		SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.					┦──┤──						ļ!
	tr	SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-											
		SR, subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ glauc, carb. rk											
0000		frags, carb, glauc.					<u> </u>						<u> </u>
2306		CLST: m-dk gy, sft, occ frm, blky, occ wxy, occ miccarb, n calc.					<u> </u>						
	80	SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.											

		ESSO N	NORGE A/S		N	/ELl	SIT	E SA	MP	LE C	DES	CRIF	OIT	Ν	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN	F	LUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

			 		 r	 	
	tr SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-	nvp					
	SR, subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ glauc, carb.						
2309	70 SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.						
	30 SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-	nvp					
	SR, subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ glauc, carb.						
2312	80 SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.						
	20 SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-	nvp					
	SR, subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ glauc, carb.						
2315	80 SLTST: m gy, frm-mod hd, blky-brit, vf sd, glauc, n calc.						
	20 SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-	nvp					
	SR, subsph, mod-stg sil cmt, well srt, dk gy arg mtx, occ glauc, carb.						
2318	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	20 SST: m gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-SR,	nvp					
	subelon-subsph, wk-mod sil cmt, mod w srt, carb, micmic, occ rk frags.						
2321	90 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	10 SST: m gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-SR,	nvp					
	subelon-subsph, wk-mod sil cmt, mod w srt, carb, micmic, occ rk frags.						
2324	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	20 CLST: m-dk gy, sft, amor-blky, occ wxy, n calc.						
2327	90 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	10 CLST: m-dk gy, sft, amor-blky, occ wxy, n calc.						
2330	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	20 CLST: m-dk gy, sft, amor-blky, occ wxy, n calc.						
	tr SST: m gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-SR,	nvp					
	subelon-subsph, wk-mod sil cmt, mod w srt, carb, micmic, occ rk frags.						
2333	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	20 CLST: m-dk gy, sft, amor-blky, occ wxy, and n calc.						
2339	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	20 CLST: m-dk gy, sft, amor-blky, occ wxy, and n calc.						
	tr SST: m gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-SR,	nvp					
	subelon-subsph, wk-mod sil cmt, mod w srt, carb, micmic, occ rk frags.						
2342	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
	20 CLST: m-dk gy, sft, amor-blky, occ wxy, n calc.						
2345	80 SLST: m gy, sft-frm, blky-fri, miccarb, glauc, vf sd, n calc.						
			1				

		ESSO I	NORGE A/S		W	/ELl	SIT	E SA	١MF	LE C	DES	CRIF	OIT	Ν	
	WEI	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	STA	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

	20	CL STym dk av oft omer bligg oce wag in colo			1	<u> </u>		
		CLST: m-dk gy, sft, amor-blky, occ wxy, n calc.						
	tr	SST: m gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, occ m, A-SR,	nvp					
		subelon-subsph, wk-mod sil cmt, mod w srt, carb, micmic, occ rk frags.						
		LST: wh, sft, amor, micxln.						
2351	70	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
		calc.						
	30	CLST: m-dk gy, sft-frm, amor-blky, n calc.						
	tr	SST: m-dk gy, frm-mod hd, crumb-brit, QTZ: clss, transp, vf-f, rr m, A-SR,	nvp					
		sbsphr, mod sil cmt, dk gy arg mtx, occ rk frags, carb, glauc.						
2354	80	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
		calc.						
	20	SST: pred lse QTZ: clss, transp, f-m, SR-R, elong-subsph, mod well srt.						
2357		SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
		calc.						
	30	SST: pred lse QTZ: clss, transp, f-m, SR-R, elong-subsph, mod well srt.						
2360		CLST: m brn gy, occ lt gy, soft, amor-blky, n calc.						
		SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
		calc						
	tr	SST: pred lse QTZ: clss, transp, f-m, SR-R, elong-subsph, mod well srt.						
2363		CLST: m brn gy, occ lt gy, soft, amor-blky, n calc.						
		SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
		calc						
	10	SST: pred lse QTZ: clss, transp, f-m, SR-R, elong-subsph, mod well srt.						
2366		CLST: m brn gy, occ lt gy, soft, amor-blky, n calc.						
		SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
		calc						
2369	20	CLST: m brn gy, occ lt gy, soft, amor-blky, n calc.						
	60	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n				1		
		calc						
	20	SST: pred lse QTZ: clss, transp, f-m, SR-R, elong-subsph, mod well srt				1		
2372		NO SAMPLE				1		
2375		CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.				1		
2010		SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n						
	10	calc						
2378		NO SAMPLE		 	 	+		
2310								

		ESSO I	NORGE A/S		Ν	/ELI	_SIT	E SA	۱MF	LE C	DES	CRIF	OIT	Ν	
	WEI	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	(DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	IT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

2381	20	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.					1		
2001		SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n							
	00	calc.							
2384		NO SAMPLE							
2387	80	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n					ł – –		
2007	00	calc.							
	20	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.					1		
		SST: m-dk brnsh gy, frm-mod hd, crmbly, occ brit, Qtz, clss, trnsl, vf-f,	nyp						
		pred vf grns, A-SA, subelon, m brn gy arg mtx, occ hd sil cmt, miccarb,	шр						
		glauc, tr diss pyr, no vis por.							
2390	80	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n							
		calc.							
	20	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.							
2393	60	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n							
		calc.							
	40	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.							
2396	70	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n							
		calc.							
	30	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.							
2399		NO SAMPLE							
2402	60	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	20	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.					1		
		SST: m-dk brnsh gy, frm-mod hd, crmbly, occ brit, Qtz, clss, trnsl, vf-f,	nvp				1		
	20	pred vf grns, rr m -crs, A-SA, subelon, m brn gy arg mtx, occ hd sil cmt,	ΠΨΡ						
		miccarb, glauc, tr diss pyr, no vis por.							
2405	30	SLTST: m-dk gy, sft-frm, blky-fri, arg, miccarb, micmic, occ glauc, vf sd, n							
		calc.							
	40	CLST: m-dk gy, sft-frm, amor-blky, n calc, mic carb.							
		SST: m-dk brnsh gy, frm-mod hd, crmbly, occ brit, Qtz, clss, trnsl, vf-f,	nvp	ĺ					
		pred vf grns, rr m -crs, A-SA, subelon, m brn gy arg mtx, occ hd sil mtx,							
		miccarb, glauc, tr diss pyr, no vis por.							
2408	60	SLTST: m-dk gy, sft-frm, amor-blky,fri, arg, miccarb, micmic, occ glauc, vf							
		sd, n calc.							
	20	CLST: m-dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb.							

		ESSO NORGE A/S		V	VELL	_SIT	E SA	۱MF	le c	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CU	IT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
		SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2411		SLTST: m-dk gy, sft-frm, amor-blky,fri, arg, miccarb, micmic, occ glauc, vi sd, n calc. CLST: m-dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb.												
		SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2414		SLTST: m-dk gy, sft-frm, amor-blky,fri, arg, miccarb, micmic, occ glauc, vi sd, n calc. CLST: m-dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb.												
		SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2417		SLTST: m-dk gy, sft-frm, amor-blky,fri, arg, miccarb, micmic, occ glauc, vi sd, n calc.												
		CLST: m-dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb. SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2420		SLTST: m-dk gy, sft-frm, amor-blky,fri, arg, miccarb, micmic, occ glauc, vl sd, n calc.	:											
	60 20	CLST: m-dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc. SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2423		SLTST: m-dk gy, sft-frm, amor-blky,fri, arg, miccarb, micmic, occ glauc, vi sd, n calc.												
		CLST: m-dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc. SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2426	50	SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.												

Wellsite Geologist :_

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		ESSO I	NORGE A/S		N	/ELl	_SIT	E SA	۱MP	LE C	DES	CRIF	OIT	Ν	
	WEI	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

	40	CLST: It-m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.							
2429	60	SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	30	CLST: It-m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, miccarb, glauc							
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2432		SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	30	CLST: It-m gy, occ dk gy,brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.							
2435		SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	30	CLST: It-m gy, occ dk gy,brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	20	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.							
2438	30	SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	60	CLST: It-m gy, occ dk gy,brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2441	30	SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							

		ESSO I	NORGE A/S		W	/ELl	_SIT	E SA	۱MP	LE C	DES	CRIF	OIT	Ν	
	WEI	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	STA	IN		FLUOR		CL	IT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

	60	CLST: It-m gy, occ dk gy,brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2444	20	SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	60	CLST: It-m gy, occ dk gy,brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	20	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2447	20	SLTST: It-m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	70	CLST: It-m gy, occ dk gy,brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2450	20	SLTST: m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	60	CLST:m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	20	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2460	40	SLTST: m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	40	CLST:m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							
	20	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss, trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod sil cmt, miccarb, glauc, tr diss pyr, no vis por.	nvp						
2470	20	SLTST: m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb, micmic, occ glauc, vf sd, n calc.							
	70	CLST:m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.							

		ESSO NORGE A/S		V	VELL	SIT	E SA	٩MF	PLE [DES	CRIP	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	1 MAY	′ 2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
														<u> </u>
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss,	nvp											
		trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod												
		sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2480	30	SLTST: m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb,												
		micmic, occ glauc, vf sd, n calc.												
		CLST: m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.												
	20	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss,	Nvp											
		trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod												
0.400		sil cmt, miccarb, glauc, tr diss pyr, no vis por.												
2490	30	SLTST: m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb,												
		micmic, occ glauc, vf sd, n calc.												
		CLST: m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc.					-		-					
	10	SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss,	nvp											
		trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk -												
2500	20	mod sil cmt, miccarb, glauc, tr diss pyr. SLTST: m gy, brnsh gy, sft-frm, amor-sbblky,fri, crmbly, arg, miccarb,					-							
2500	20	micmic, occ glauc, vf sd, n calc.												
	60	CLST: m gy, occ dk gy, brn gy, sft-frm, amor-blky, n calc, mic carb, glauc												
		SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss,	nvp											
	20	trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod	πφ											
		sil cmt, miccarb, glauc, tr diss pyr.												
2510	20	SLTST: m gy, brn gy, frm, fri, crmb, n calc, glauc, miccarb.												
		CLST: m-dk gy, brn gy, sft, amor, slty, n calc.												
		SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com lse Qtz, clss,												
		trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod												
		sil cmt, miccarb, glauc, tr diss pyr.												
2520	60	CLST: m-dk gy, brn gy, sft, amor, slty, n calc.												
		SLTST: m gy, brn gy, frm, fri, crmb, n calc, glauc, miccarb.												
		SST: m-dk gy, brnsh gy, frm-mod hd, crmbly, occ brit, com Ise Qtz, clss,												
		trnsl, vf-f, pred vf grns, occ m, A-SR, elong sbspln, dk gy arg mtx, wk-mod					1							
		sil cmt, miccarb, glauc, tr diss pyr.												
2530		CLST: m-dk gy, brn gy, sft, amor, slty, n calc.												
	40	SLTST: m gy, brn gy, frm, fri, crmb, n calc, glauc, miccarb.												

		ESSO NO	ORGE A/S		V	VELL	_SIT	E SA	MP	LE C	DES	CRIP	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY D	DESCRIPTION and COMMENTS	POR		AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)			xture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	_
		1 · · · · ·													
	20	SST: m-dk gy, brnsh gy, frm	n-mod hd, crmbly, occ brit, com Ise Qtz, clss,												
			n, A-SR, elong sbspln, dk gy arg mtx, wk-mod												
		sil cmt, miccarb, glauc, tr dis													
2540		CLST: m-dk gy, brn gy, sft, a													
			i, crmb, n calc, glauc, miccarb.												
	30		n-mod hd, crmbly, occ brit, com Ise Qtz, clss,												
			n, A-SR, elong sbspln, dk gy arg mtx, wk-mod												
		sil cmt, miccarb, glauc, tr dis													
2550		CLST: m-dk gy, brn gy, sft, a													
			i, crmb, n calc, glauc, miccarb.												
2560		CLST: m-dk gy, brn gy, sft, a													
			i, crmb, n calc, glauc, miccarb.												
2570	80	CLST: m-dk gy, brn gy, sft, a	amor, slty, n calc.												
	20	SLTST: m gy, brn gy, frm, fri	i, crmb, n calc, glauc, miccarb.												
2580	80	CLST: m-dk gy, brn gy, sft, a	amor, slty, n calc.												
			i, crmb, n calc, glauc, miccarb.												
2590	90	CLST: m-dk gy, brn gy, sft, a	amor, slty, n calc.												
	10	SLTST: m gy, brn gy, frm, fri	i, crmb, n calc, glauc, miccarb.												
2600	80	CLST: It-m gy, sft, amor-sbb	lky, occ miccarb, n calc.												
	20	SLTST: m gy, sft-frm, fri, gla	uc, occ miccarb, n calc.												
2610	80	CLST: It-m gy, sft, amor-sbb	lky, occ miccarb, n calc.												
	20	SLTST: m gy, sft-frm, fri, gla	uc, occ miccarb, n calc.												
2620	80	CLST: It-m gy, sft, amor-sbb	lky, occ miccarb, n calc.												
	20	SLTST: m gy, occ brnsh gy,	frm, fri, crmbly, glauc, occ miccarb, n calc.												
2630	90	CLST: It-m gy, sft, amor-sbb	lky, occ miccarb, n calc.												
	10	SLTST: v It-m gy, It brnsh gy	, frm, fri, crmbly, glauc, occ miccarb, n calc.												
2640			ft, amor-sbblky, occ miccarb, n calc. (POOR												
		Sample).													
	10	SLTST: v lt-m gy, lt brnsh gy	v, frm, fri, crmbly, glauc, occ miccarb, n calc.												
2650	70	CLST: v lt- gy, lt brnsh gy, sf	t, amor-sbblky, occ miccarb, n calc.												
	30	SLTST: v lt-m gy, lt brnsh gy	, frm, fri, crmbly, glauc, occ miccarb, n calc.												
2660			t, amor-sbblky, occ miccarb, n calc.												
	20	SLTST: v lt-m gy, lt brnsh gy	, frm, fri, crmbly, glauc, occ miccarb, n calc.												
2670	80	CLST: v It- gy, It brnsh gy, sf	t, amor-sbblky, occ miccarb, n calc.												

		ESSO N	NORGE A/S		Ν	/ELI	_SIT	E SA	MP	LE D	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

			 1 1		1 1	,
	20 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc.			_		I
2680	70 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n calc.					
	30 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc					
2690	70 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n calc.					
	30 SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns.					
2700	70 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n calc.					
	30 SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					
2710	80 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n calc.					
	20 SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					
2720	90 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n calc.					
	10 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					
2730	90 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n calc.					
	10 SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					
2740	90 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n-sl calc.					
	10 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					
	Tr V Lt gy, yel brn, sft amor-blky, v arg, grdg marl					
2750	90 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n-sl calc.					
	10 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					
	tr LS:v lt gy, yel brn, sft, sbblky, v arg.					
	Tr SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					J
2760	90 CLST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n-sl calc.					
	10 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns					I
	Rr tr LS:v lt gy, yel brn, sft, sbblky, v arg.					
2770	90 CLYST: v lt- gy, lt brnsh gy, sft, amor-sbblky, occ miccarb, n-sl calc					
	10 SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,					
	occ lse vf SD grns, rr grdg SST, vf, tt, wk sil cmt, nvp					1

		ESSO N	NORGE A/S		W	/ELI	_SITE SA	MP	LE DE	SCRIF	ΡΤΙΟ	Ν	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date : 1 MAY	2003		Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	STA	AIN	FLUOR		CUT	CUT I	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST INTEN	COL	INTEN CO	. INTEN	COL	COL	

	r			-	г г		1		ı	
		CLYST: v It- gy, It brnsh gy, sft, amor-sbblky, occ miccarb, n-sl calc		_						
		SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,								
		occ lse vf SD grns, rr grdg SST, vf, tt, wk sil cmt, nvp								
2780		Lt-m gy, It brnsh gy, sft, amor-sbblky, slty, sdy, n calc, tr diss pyr								
	10	SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,								
		occ Ise vf SD grns, rr grdg SST, vf, tt, wk sil cmt, nvp								
2790	100	CLYST Lt-m gy, It brnsh gy, sft, amor-sbblky, slty, sdy, n calc, tr diss pyr								
	Tr	SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,								
		occ lse vf SD grns, rr grdg SST								
	Tr	SST: v lt gy- lt brnsh gy, vf, tt, wk sil cmt, glauc, arg, nvp, n shows	nvp							
2800	80	CLYST Lt-m gy, It brnsh gy, sft, amor-sbblky, slty, sdy, n calc, tr								
	20	SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,								
		occ Ise vf SD grns, rr grdg SST								
	Tr	SST: v lt gy- lt brnsh gy, vf, tt, wk sil cmt, glauc, arg, nvp, n shows	Nvp							
2810	60	CLYST Lt-m gy, It brnsh gy, sft, amor-sbblky, slty, sdy, n calc, tr frac'd xln								
		pyr.								
	20	SLTST: v It-m gy, It brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,								
		occ lse vf SD grns, rr grdg SST.								
	10	SST: wh-off wh, mod hd, sub-blky, loc brit, comprising clr-transl, clss-opq	N-v pr							
		mlky wh qtz, vf-f occ m, sa-sr, subspher, mod w cmtd w/ silic, occ dk grn								
		grns glauc, no-pr vis por.								
2820	60	CLYST Lt-m gy, It brnsh gy, sft, amor-sbblky, slty, sdy, n calc, tr frac'd xln								
		pyr.								
	20	SLTST: v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n calc,								
		occ lse vf SD grns, rr grdg SST.								
	10	SST: wh-off wh, mod hd, sub-blky, loc brit, comprising clr-transl, clss-opq	N-v pr							
		mlky wh qtz, vf-f occ m, sa-sr, subspher, mod w cmtd w/ silic, occ dk grn								
		grns glauc, no-pr vis por.								
2830		CLYST: a/a (It-m gry, It brnsh gy, sft, amor-sbblky, slty, sdy, n calc, tr				Т				
		frac'd xln pyr)								
	20	SLTST: a/a (v lt-m gy, lt brnsh gy, frm, fri, crmbly, glauc, occ miccarb, n				Т				
		calc, occ lse vf SD grns, rr grdg SST).								
	10	SST: a/a (wh-off wh, mod hd, sub-blky, loc brit, comprising clr-transl, clss-								
		opq mlky wh qtz, vf-f occ m, sa-sr, subspher, mod w cmtd w/ silic, occ dk								
		grn grns glauc, no-pr vis por).								

Sheet No. :_____

			NORGE A/S		V	VEL	LSIT	E SA	۱MF	PLE	DES		OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS				Date :					Sheet			
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
										1		1			
2840		frac'd xln pyr)	brnsh gy, sft, amor-sbblky, slty, sdy, n calc, t												
		calc, occ lse vf SD grns, r													
	Tr	blky, loc brit, comprising c	xln pyr cmt else a/a (wh-off wh, mod hd, sub clr-transl, clss-opq mlky wh qtz, vf-f occ m, sa-su silic, occ dk grn grns glauc, no-pr vis por).												
2850	60		brnsh gy, sft, amor-sbblky, slty, sdy, n calc, t	r											
	40	SLTST: a/a (v lt-m gy, lt calc, occ lse vf SD grns, r	brnsh gy, frm, fri, crmbly, glauc, occ miccarb, r grdg SST).	า											
	Tr	hd, subblky, loc brit, com	clr colls lse qtz, else as 2830m (wh-off wh, mo pris clr-transl, clss-opq mlky wh qtz, vf-f occ m d w/ silic, occ dk grn grns glauc, no-pr vis por).												
2860		CLYST: a/a (lt-m gry, lt frac'd xln pyr)	brnsh gy, sft, amor-sbblky, slty, sdy, n calc, t												
		calc, occ lse vf SD grns, r													
	Tr		hd, sub-blky, loc brit, comprising clr-transl, clss m, sa-sr, subspher, mod w cmtd w/ silic, occ d por).												
2870	80	CLYST: a/a (lt-m gry, lt frac'd xln pyr)	brnsh gy, sft, amor-sbblky, slty, sdy, n calc, t	r											
	20	SLTST: a/a (v lt-m gy, lt calc, occ lse vf SD grns, r	brnsh gy, frm, fri, crmbly, glauc, occ miccarb, r grdg SST).	٦											
	tr		hd, sub-blky, loc brit, comprising clr-transl, clss m, sa-sr, subspher, mod w cmtd w/ silic, occ d por).												
2880		CLYST: a/a (lt-m gry, lt frac'd xln pyr)	brnsh gy, sft, amor-sbblky, slty, sdy, n calc, t												
		calc, occ lse vf SD grns, r													
	tr		hd, sub-blky, loc brit, comprising clr-transl, clss m, sa-sr, subspher, mod w cmtd w/ silic, occ d por).												

		ESSO I	NORGE A/S		V	VELI	LSIT	E SA	٩MF	LE [DES	CRIP	TIO	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	′ 200 3			Sheet	No. 1		
DEPTH			DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT				Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
	r					-		1	1	1		n			
2890	90	CLYST: a/a (lt-m gry, lt frac'd xln pyr)	ornsh gy, sft, amor-sbblky, slty, sdy, n calc, tr												
	10		ornsh gy, frm, fri, crmbly, glauc, occ miccarb, n grdg SST).												
2900	90		sh gry, sft, amor-subblky, n-calc, miccarb, tr pyr												
		SLTST: tr diss pyr, occ c	alc cmt else a/a (v lt-m gy, lt brnsh gy, frm, fri, b, n calc, occ lse vf SD grns, rr grdg SST)												
	Tr		hd, sub-blky, loc brit, comprising clr-transl, clss-	nvp											
			m, sa-sr, subspher, mod w cmtd w/ silic, occ dk												
		grn grns glauc, no-pr vis p													
2903	90		brn gry, sft,amor-subblky,n-calc,miccarb,tr pyr)												
			alc cmt else a/a (v lt-m gy, lt brnsh gy, frm, fri,												
			o, n calc, occ lse vf SD grns, rr grdg SST)												
	Tr	SST: a/a (wh-off wh, mod	hd, sub-blky, loc brit, comprising clr-transl, clss-	pvp											
		opq mlky wh qtz, vf-f occ	m, sa-sr, subspher, mod w cmtd w/ silic, occ dk	• •											
		grn grns glauc, no-pr vis p	or).												
2906	90		sh gry, sft, amor, stky, rr frm & subblky, n-calc,												
		tr frac'd xln pyr, diss-micxl													
			er, tr vf glauc, occ calc cmtd, grdg vvf SST.												
	Tr		nd, subblky ctgs, compris colls, clr-transl & opq	pvp											
			lauc, vvf-vf rr f-m, sa-sr, subsph, w cmtd w/ sil												
			alc, n-v pr intgran por, tr vug por, no shows.												_
2909		CLYST: a/a but bcmg sli c													
	20		sh brn, var sft & amor - frm & subblky, occ mod	nvp											
			o, mod w cmtd w/ sil, no vis intgran por.					-							
		SST: a/a grdg sltst.		nvp				-							
		cmpct mdst.	v/ glauc, sft-frm, crmbly, subblky, sli arg micxln												
2912	80		sh gry, occ mod gry, sft amor & stky - frm &												
			pyr, rr glauc, com pa brnsh gry-off wh (?kao?),												
		sft amor & stky, n-calc)													
	20		l grysh brn, var sft & amor - frm & subblky, occ	nvp											
			feldsp, mod w cmtd w/ sil, no vis intgran por)												
		SST: a/a grdg sltst.		nvp											<u> </u> '
	Tr	LST: a/a													

		ESSO NO	RGE A/S		W	/ELl	SIT	E SA	١MF	LE C	DES	CRIP	TIO	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH			ESCRIPTION and COMMENTS	POR		AIN		FLUOR		CU	IT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, text	ture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
2915		subblky, n-calc, rr micxln pyr, sft amor & stky, n-calc)	gry, occ mod gry, sft amor & stky - frm & , rr glauc, com pa brnsh gry-off wh (?kao?),												
			ysh brn, var sft & amor - frm & subblky, occ lsp, mod w cmtd w/ sil, no vis intgran por)	nvp											
	Tr	SST: a/a grdg sltst.		nvp											
2918		subblky, n-calc, rr micxln pyr, sft amor & stky, n-calc)	gry, occ mod gry, sft amor & stky - frm & , rr glauc, com pa brnsh gry-off wh (?kao?),												
		mod hd, vvf qtz & pa yel ?feld	ysh brn, var sft & amor - frm & subblky, occ lsp, mod w cmtd w/ sil, no vis intgran por)	nvp											
		SST: a/a grdg sltst.		nvp											
2921		subblky, n-calc, rr micxln pyr, sft amor & stky, n-calc)	gry, occ mod gry, sft amor & stky - frm & , rr glauc, com pa brnsh gry-off wh (?kao?),												
		mod hd, vvf qtz & pa yel ?feld	ysh brn, var sft & amor - frm & subblky, occ lsp, mod w cmtd w/ sil, no vis intgran por)	nvp											
		SST: a/a grdg sltst.		nvp											
		DOL: dk purp brn, hd-v hd, blk													
2924		subblky, n-calc, rr micxln pyr, sft amor & stky, n-calc)	gry, occ mod gry, sft amor & stky - frm & , rr glauc, com pa brnsh gry-off wh (?kao?),												
		a/a (mod gry-mod grysh brn, vvf qtz & pa yel ?feldsp, mod	com pa yel ?feldsp, glauc & mic, else pred var sft & amor - frm & subblky, occ mod hd, w cmtd w/ sil, no vis intgran por)	nvp											
		SST: a/a grdg sltst.		nvp											
2927		subblky, n-calc, rr micxln pyr, sft amor & stky, n-calc)	gry, occ mod gry, sft amor & stky - frm & , rr glauc, com pa brnsh gry-off wh (?kao?),												
		a/a (mod gry-mod grysh brn, v vvf qtz & pa yel ?feldsp, mod v	com pa yel ?feldsp, glauc & mic, else pred var sft & amor - frm & subblky, occ mod hd, w cmtd w/ sil, no vis intgran por)	nvp											
I	Tr	SST: a/a grdg sltst.		nvp											

		ESSO NO	DRGE A/S		Ν	/ELL	SIT	E SA	MP	LE C	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY D	ESCRIPTION and COMMENTS	POR	ST/	AIN	I	LUOR		CU	IT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, tex	kture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
2930	80		ods, occ off wh ?kao else a/a (mod-dk brnsh stky - frm & subblky, n-calc, rr micxln pyr, rr :)												
		mod grysh brn, var sft & amo yel ?feldsp, mod w cmtd w/ s	mt, tr glauc & grdg vf sst else a/a (mod gry- or - frm & subblky, occ mod hd, vvf qtz & pa il, no vis intgran por)	nvp											
		SST: a/a grdg sltst.		nvp											
2933		CLYST: a/a (mod-dk brnsh	nd, blky, brit, micxln cmpct mdst). gry, occ mod gry, sft amor & stky - frm & r, rr tr frac'd xln pyr nods, occ off wh ?kao rr c)												
		hd ctgs w/ sil cmt, tr glauc v grdg vf sst, no vis intgran por	rysh brn, var sft & amor - frm & subblky, occ /vf qtz & pa yel ?feldsp, mod w cmtd w/ sil, ·)	nvp											
	Tr	SST: a/a grdg sltst.		nvp											
2936		subblky, n-calc, rr micxln pyr glauc, sft amor & stky, n-calc													
	20		rysh brn, var sft & amor - frm & subblky, occ /vf qtz & pa yel ?feldsp, mod w cmtd w/ sil, ·)	nvp											
	Tr	SST: a/a grdg sltst.		nvp											
2939		-													
2942		subblky, n-calc, rr micxln pyr glauc, sft amor & stky, n-calc													
		hd ctgs w/ sil cmt, tr glauc v grdg vf sst, no vis intgran por		nvp											
		SST: a/a grdg sltst, loc w/ co		nvp											
2945	60		else a/a (mod-dk brnsh gry, occ mod gry, sft n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, amor & stky, n-calc)												

		ESSO NORGE A/S		V	VELL	_SIT	E SA	١MF	LE C	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
	-						_				-			
	30	SLTST: a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por)	nvp											
	10	SST: a/a grdg sltst.	nvp											
2948		CLYST: a/a (mod-dk brnsh gry, occ mod gry, sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc)												
		SLTST: a/a 2942m (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por)												
		SST: a/a grdg sltst.	nvp											
2950		CLYST: bcmg sli lighter in col, else a/a (mod-dk brnsh gry, occ mod gry, sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc)												
	20	SLTST: a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por)	nvp											
		SST: a/a grdg sltst.	nvp											
2953	70	CLYST: bcmg sli lighter in col, else a/a (mod dk brnsh gry, occ mod gry, sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc)												
		SLTST: a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por)	nvp											
		SST: a/a grdg sltst.	nvp											
2956		CLYST: bcmg sli lighter in col and now pred mod brnsh gry, sli dolic else a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc)												
		SLTST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por)	nvp											
		SST: loc w/ dolic cmt else a/a grdg sltst.	nvp											
2959	70	CLYST: bcmg sli lighter in col and now pred mod brnsh gry, sli dolic else a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc)												

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	WEI	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	STA	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

30 SLTST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) nvp Tr SST: loc w/ dolic cmt else a/a grdg sltst. nvp 2962 70 CLYST: bcmg sli lighter in col and now pred mod brnsh gry, sli dolic else a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc) Image: state st	
yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) nvp Tr SST: loc w/ dolic cmt else a/a grdg sltst. nvp 2962 70 CLYST: bcmg sli lighter in col and now pred mod brnsh gry, sli dolic else a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc) Image: style styl	
TrSST: loc w/ dolic cmt else a/a grdg sltst.nvpImage: CLYST: bcmg sli lighter in col and now pred mod brnsh gry, sli dolic else a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc)NvpImage: CLYST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por)NvpImage: CLYST: Com v argImage: CLYST: CL	
2962 70 CLYST: bcmg sli lighter in col and now pred mod brnsh gry, sli dolic else a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc) 30 SLTST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) tr SST: : loc w/ dolic cmt else a/a grdg sltst.	
a/a (sft amor & stky - frm & subblky, n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc) Image: Complexity of the state of the sta	
pyr nods, occ off wh ?kao rr glauc, sft amor & stky, n-calc) 30 SLTST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) 1 tr SST: : loc w/ dolic cmt else a/a grdg sltst. nvp	
30 SLTST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">SLTST: Com v arg and loc dolic else a/a (mod gry-mod grysh brn, var sft & amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) tr SST: : loc w/ dolic cmt else a/a grdg sltst. Image: nvp	
& amor - frm & subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) Image: state	
yel ?feldsp, mod w cmtd w/ sil, grdg vf sst, no vis intgran por) nvp tr SST: : loc w/ dolic cmt else a/a grdg sltst. nvp	
tr SST: : loc w/ dolic cmt else a/a grdg sltst. nvp	
2965 90 CLYST: It-m gy, pred m brnsh gry, sli dolic, sft, amor, stky, frm, subblky,	
n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh, kao rr glauc, sft	
amor & stky, n-calc)	
10 SLTST: Com v arg and loc dolic, m gry-m grysh brn, sft & amor, frm,	
subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod	
w cmtd w/ sil, grdg vf sst, no vis intgran por)	
tr SST: : loc w/ dolic cmt else a/a grdg sltst. nvp	
2968 70 CLYST: It-m gy, pred m brnsh gry, sli dolic, sft, amor, stky, frm, subblky,	
n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh, kao rr glauc, sft	
amor & stky, n-calc)	
20 SLTST: Com v arg and loc dolic, m gry-m grysh brn, sft & amor, frm,	
subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod	
w cmtd w/ sil, grdg vf sst, no vis intgran por)	
10 SST: v It gy, vf, tt, frm, sbblky, nvp, n show nvp	
2971 90 CLYST: It-m gy, pred m brnsh gry, sli dolic, sft, amor, stky, frm, subblky,	
n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh, kao rr glauc, sft	
amor & stky, n-calc)	
10 SLTST: Com v arg and loc dolic, m gry-m grysh brn, sft & amor, frm,	
subblky, occ hd ctgs com w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod	
w cmtd w/ sil, grdg vf sst, no vis intgran por)	
2974 80 CLYST: It-m gy, pred m brnsh gry, sli dolic, sft, amor, stky, frm, subblky,	
n-calc, rr micxln pyr, rr tr frac'd xln pyr nods, occ off wh, kao rr glauc, sft	
amor & stky, n-calc)	

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	WE	LL : 6706/6-1	AREA : HVITVEIS					: 1 MAY				Sheet			
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
	1						-		1	1	1	1			
	20	subblky, occ hd ctgs com	oc dolic, m gry-m grysh brn, sft & amor, frm w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, moo												
		w cmtd w/ sil, grdg vf sst,			-										
	tr		hd, sbblky, clr-trnsl & opq mlky wh qtz, tr v dl												
		v pr intgran por, no shows													
2977	80		brnsh gry, sli dolic, sft, amor, stky, frm, subblky												
		amor & stky, n-calc)	frac'd xln pyr nods, occ off wh, kao rr glauc, sf												
	10		oc dolic, m gry-m grysh brn, sft & amor, frm												
			w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod	I											
		w cmtd w/ sil, grdg vf sst,													
	10		hd, sbblky, clr-trnsl & opq mlky wh qtz, tr v d												
			ng-sbrnd, sbsph, w cmtd w/ sil, & loc w/ calc, n	·											
		v pr intgran por, no shows													
2980	90		It-m brnsh gry, sli dolic, sft, amor, stky, frm												
		glauc, sft amor & stky, n-c	pyr, rr tr frac'd xln pyr nods, occ off wh, kao r												
	10		oc dolic, m gry-m grysh brn, sft & amor, frm												
	10		w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod												
		w cmtd w/ sil, grdg vf sst,													
2983	90		lt-m brnsh gry, sli dolic, sft, amor, stky, frm												
			pyr, rr tr frac'd xln pyr nods, occ off wh, kao r												
		glauc, sft amor & stky, n-c	alc)												
	10		oc dolic, m gry-m grysh brn, sft & amor, frm												
			w/ sil cmt, tr glauc vvf qtz & pa yel ?feldsp, mod	I											
		w cmtd w/ sil, grdg vf sst,													
	tr		hd, sbblky, clr-trnsl & opq mlky wh qtz, tr v d												
			ng-sbrnd, sbsph, w cmtd w/ sil, & loc w/ calc, n	·											
2000	00	v pr intgran por, no shows													<u> </u>
2986		sbblky, n-calc, glauc	gy, pred lt-m brnsh gry, sli dolic, sft, amor, stky												
	20		oc dolic, m gry-m grysh brn, sft & amor, frm uc vf qtz, grdg vf sst, no vis intgran por)	,											

			NORGE A/S		V	VELI	LSIT	E SA	MP	LE [DES	CRIF	PIIO	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS					1 MAY	2003				No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CI	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
	tr		hd-hd, sbblky, clr-trnsl & opq mlky wh qtz, tr v												
		5 5	bang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ calc	,											
	0.0	n-v pr intgran por, no show													
2989	90		gy, pred lt-m brnsh gry, sli dolic, sft, amor, stky	,											
	40	sbblky, n-calc, glauc	an della ve avera averale have att 0 average fore												
	10		oc dolic, m gry-m grysh brn, sft & amor, frm	,											
2992	80		uc vf qtz, grdg vf sst, no vis intgran por) gy, pred It-m brnsh gry, sli dolic, sft, amor, stky	+	}		+								
2992	00	sbblky, n-calc, glauc	yy, pred it-m binsh gry, sir dolic, sit, amor, sity	,											
	20		oc dolic, m gry-m grysh brn, sft & amor, frm												
	20		uc vf qtz, grdg vf sst, no vis intgran por)	,											
	TR		hd-hd, sbblky, cir-trnsi & opq miky wh qtz, tr v												
			bang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ calc												
		n-v pr intgran por, no show		,											
2995	80		gy, pred lt-m brnsh gry, sli dolic, sft, amor, stky	,											
		sbblky, n-calc, glauc													
	10		oc dolic, m gry-m grysh brn, sft & amor, frm	,											
			uc vf qtz, grdg vf sst, no vis intgran por)												
2998	80		gy, pred lt-m brnsh gry, sli dolic, sft, amor, stky	,											
		sbblky, n-calc, glauc		-			-								
	10		oc dolic, m gry-m grysh brn, sft & amor, frm	,											
	40		uc vf qtz, grdg vf sst, no vis intgran por)	NL -											
	10		hd-hd, sbblky, clr-trnsl & opq mlky wh qtz, tr v												
		n-v pr intgran por, no show	bang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ calc	,											
3001	90		gy, pred lt-m brnsh gry, sli dolic, sft, amor, stky												
5001	30	sbblky, n-calc, glauc		'											
	10		oc dolic, m gry-m grysh brn, sft & amor, frm	_											
			uc vf qtz, grdg vf sst, no vis intgran por)	,											
	tr		hd-hd, sbblky, clr-trnsl & opq mlky wh qtz, tr v	/ nvp				1 1				1			
			bang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ calc												
		n-v pr intgran por, no show	NS.												
3004	100	CLYST: pred It-m brnsh g	ry, also It-m gy, rr dk gy, sl dolic, sft, amor, stky	,											
		sbblky, n-calc, glauc, tr d	iss pyr.												

		ESSO NORGE A/S			WEL	LSIT	E S	AMF	PLE [DES	CRIF	ΡΤΙΟ	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date	: 1 MA`	Y 2003	3		Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	PO	2	STAIN		FLUOR	2	Cl	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		D	IST COL	DIST	INTEN	I COL	INTEN	COL	INTEN	COL	COL	
					•		•		•		•	•		
	tr	SLTST: m gry-m brnsh gy, sft frm, sbblky, com sil cmt, tr glauc vi	f qtz,											
		grdg vf sst, no vis intgran por)							-					
	tr	SST/SD: wh-off wh, mod hd-hd, sbblky, clr-trnsl & opq mlky wh qtz dk grn glauc, vf-f, rr f-m, sbang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ n-v pr intgran por, no shows.												
	tr	LS: off wh-lt brnsh gy, frm, sbblky, micxln, sl arg												
3007		CLYST: pred It-m brnsh gry, also It-m gy, rr dk gy, sl dolic, sft, amor, sbblky, n-calc, glauc, tr diss pyr.	stky,											
	10	SLTST: m gry-m brnsh gy, sft frm, sbblky, com sil cmt, tr glauc vl grdg vf sst, no vis intgran por)	f qtz,											
	tr	SST/SD: wh-off wh, mod hd-hd, sbblky, clr-trnsl & opq mlky wh qtz dk grn glauc, vf-f, rr f-m, sbang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ n-v pr intgran por, no shows.												
3010	70	CLYST: pred It-m brnsh gry, also It-m gy, rr dk gy, sl dolic, sft, amor, sbblky, n-calc, glauc, tr diss pyr.	stky,											
		SLTST: m gry-m brnsh gy, sft frm, sbblky, com sil cmt, tr glauc vi grdg vf sst, no vis intgran por)												
	10	SST/SD: wh-off wh, mod hd-hd, sbblky, clr-trnsl & opq mlky wh qtz dk grn glauc, vf-f, rr f-m, sbang-sbrnd, sbsph, w cmtd w/ sil, & loc w/ n-v pr intgran por, no shows.												
3013		CLYST: pred It-m brnsh gry, also It-m gy, rr dk gy, sl dolic, sft, amor, sbblky, n-calc, glauc, tr diss pyr.												
		SLTST: m gry-m brnsh gy, sft frm, sbblky, com sil cmt, tr glauc vi grdg vf sst, no vis intgran por)	f qtz,											
		LS: off wh-It brnsh gy, frm, sbblky, micxln, sl arg												
3016	90	CLYST: pred It-m brnsh gry, also It-m gy, rr dk gy, sl dolic, sft, amor, sbblky, n-calc, glauc, tr diss pyr.	stky,											
	10	SLTST: m gry-m brnsh gy, sft frm, sbblky, com sil cmt, tr glauc vi grdg vf sst, no vis intgran por)	f qtz,											
		LS: off wh-lt brnsh gy, frm, sbblky, micxln, sl arg												
3019		CLYST: pred It-m brnsh gry, also It-m gy, rr dk gy, sl dolic, sft, amor, sbblky, n-calc, glauc, tr diss pyr.	stky,											
	10	SLTST: m gry-m brnsh gy, sft frm, sbblky, com sil cmt, tr glauc vi grdg vf sst, no vis intgran por)	f qtz,					1						

		ESSO	NORGE A/S			V	VELL	SIT	E SAM	PLE DE	SCRI	PTIO	Ν	
		LL : 6706/6-1	AREA : HVITVEIS						1 MAY 200			t No. 1		
DEPTH	%	LITHOLOG	Y DESCRIPTION and COMMENTS		POR		AIN		FLUOR	CUT		FLUOR		Rating
(m)		Colour, hardness	texture, mineralogy, modifiers, cemen	nt		DIST	COL	DIST	INTEN CO	L INTEN CO		I COL	COL	
	10		hd-hd, sbblky, clr-trnsl & opq mlky wh o sbang-sbrnd, sbsph, w cmtd w/ sil, & loc w ws.		nvp									
3022		sbblky, n-calc, glauc, tr c		-										
		grdg vf sst, no vis intgran												
	10		hd-hd, sbblky, clr-trnsl & opq mlky wh o sbang-sbrnd, sbsph, w cmtd w/ sil, & loc w ws.		nvp									
3025		sbblky, n-calc, glauc, tr c	ıry, also lt-m gy, rr dk gy, sl dolic, sft, amo iss pyr.											
	10	grdg vf sst, no vis intgran		•										
	tr		hd-hd, sbblky, clr-trnsl & opq mlky wh o sbang-sbrnd, sbsph, w cmtd w/ sil, & loc w ws.		nvp									
		Bit Trip at 3025m												
3030	90	CLYST: m gry, mod brns loc miccarb, slty, loc micr	h gry, sft amor & stky, occ frm, subblky, nica, tr frac'd xln pyr nods	n-calc,										
		miccarb, tr vvf glauc, n vi												
		mlky wh qtz, vvf-vf rr f-m, por, no show. Occ lse col		lc, n vis	nvp									
3040	30		h gry, com-abndt frac'd xln pyr nods else nor & stky, occ frm, subblky, n-calc, loc m											
	30	SLTST: m gry-occ off miccarb, tr vvf glauc, n vis	vh, frm, crmbly, arg, occ mod hd, blk s por	xy ctgs,										

		ESSO N	NORGE A/S		W	'ELI	SITE	SAMF	LE D	DES	CRIF	OIT	Ν	
	WE	LL : 6706/6-1	AREA : HVITVEIS		:	Spud	Date : 1	MAY 2003			Sheet			
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	STA	IN	FL	UOR	CU	Т	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST IN	NTEN COL	INTEN	COL	INTEN	COL	COL	

· · · · · · · · · · · · · · · · · · ·					•	•	0		
	40	SST: var off wh-lt gry occ mod gry, frm & subblky - mod hd blky ctgs	nvp						
		compris colls, clr-transl & opq mlky wh & It gry qtz, occ pa yel ?feldsp &							
		dk grn glauc, vvf-vf rr f-m, sa-sr, subsph, mod w cmtd w/ sil, occ calc, occ							
		pyr cmtd, loc v arg mtx, grdg sltst, n vis por, no show. Occ lse colls, clr m-							
		vc qtz grns.							
3050	80	CLYST: occ dk brnsh gry else a/a at 3030m (m gry, mod brnsh gry, sft							
		amor & stky, occ frm, subblky, n-calc, loc miccarb, slty, loc micmica, tr							
		frac'd xln pyr nods).							
	10	SLTST: a/a (m gry-occ off wh, frm, crmbly, arg, occ mod hd, blky ctgs,							
		miccarb, tr vvf glauc, n vis por).							
	10	SST: pred a/a but no pyr cmt (var off wh-lt gry occ mod gry, frm &	nvp						
		subblky - mod hd blky ctgs compris colls, clr-transl & opq mlky wh & lt gry	-						
		qtz, occ pa yel ?feldsp & dk grn glauc, vvf-vf rr f-m, sa-sr, subsph, mod w							
		cmtd w/ sil, occ calc, loc v arg mtx, grdg sltst, n vis por, no show. Occ lse							
		colls, clr m-vc qtz grns).							
3060	80	CLYST: a/a (m gry, mod brnsh gry occ dk brnsh gry, sft amor & stky, occ							
		frm, subblky, n-calc, loc miccarb, slty, loc micmica, tr frac'd xln pyr nods).							
	10	SLTST: a/a (m gry-occ off wh, frm, crmbly, arg, occ mod hd, blky ctgs,							
		miccarb, tr vvf glauc, n vis por).							
	10	SST: pred a/a but no pyr cmt (var off wh-lt gry occ mod gry, frm &	nvp						
		subblky - mod hd blky ctgs compris colls, clr-transl & opq mlky wh & It gry							
		qtz, occ pa yel ?feldsp & dk grn glauc, vvf-vf rr f-m, sa-sr, subsph, mod w							
		cmtd w/ sil, occ calc, loc v arg mtx, grdg sltst, n vis por, no show. Occ lse							
		colls, clr m-c qtz grns).							
3070	75	CLYST: m-dk brnsh gry, occ m-dk grysh brn, com pa-mod brnsh gry, var							
		sft amor & stky to frm mod hd & subblky/imbric PDC ctgs, n-calc, loc slty							
		& micmica, tr frac'd xln pyr nods.							
	10	SLTST: mod-occ dk brnsh gry, frm & crmbly to mod hd & subblky, arg, loc							
		hd & sil cmtd, tr vvf glauc, grdg vvf sst.							
	15	SST: off wh-pa brnsh gry, var frm & crmbly to mod hd & subblky, compris							
		colls clr-transl and opq mlky wh qtz, pa yel ?feldsp & dk grn glauc, vvf-vf							
		occ m grdg sltst, mod w cmtd w/ sil, loc dolic, arg mtx, rr cmtd w/ pyr, pr-n							
		vis intgran por, no show. Occ lse m-c colls clr sr-r qtz grns.							

		ESSO	NORGE A/S		V	VELL	SIT	E SA	MP	LE [DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS					1 MAY	2003			Sheet			
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
				1		1	1	<u> </u>			1	r	1		1
3080	80		gry, occ m-dk grysh brn, com pa-mod brnsh gry n mod hd & subblky/imbric PDC ctgs, n-calc, loc												
		slty & micmica, tr frac'd xl		, 											
	10	SLTST: a/a (mod-occ dk	brnsh gry, frm & crmbly to mod hd & subblky												
		arg, loc hd & sil cmtd, tr v													
	10	SST: a/a (off wh-pa brns	sh gry, var frm & crmbly to mod hd & subblky	nvp											
			opq mlky wh qtz, pa yel ?feldsp & dk grn glauc												
			nod w cmtd w/ sil, loc dolic, arg mtx, rr cmtd w/	1											
2000	00		o show. Occ lse m-c colls clr sr-r qtz grns).												
3090	60		orn - occ brnsh blk else a/a (m-dk brnsh gry, occ nod brnsh gry, var sft amor & stky to frm mod ho												
			s, n-calc, loc slty&micmica, tr frac'd xln pyr nods)												
	10	SLTST: 2/2 (mod_occ dk	brnsh gry, frm & crmbly to mod hd & subblky												
	10	arg, loc hd & sil cmtd, tr v													
	10		sh gry, var frm & crmbly to mod hd & subblky.	nvp											
	10		opq mlky wh qtz, pa yel ?feldsp & dk grn glauc												
			nod w cmtd w/ sil, loc dolic, arg mtx, rr cmtd w/												
			o show. Occ lse m-c colls clr sr-r qtz grns).												
3100	60		rker brn - occ brnsh blk else a/a (com pa-moc	I											
			stky to frm mod hd &subblky/imbric PDC ctgs												
		n-calc, loc slty&micmica,	tr frac'd xIn pyr nods)												
	30	SLTST: a/a (mod-occ dk	brnsh gry, frm & crmbly to mod hd & subblky												
		arg, loc hd & sil cmtd, tr v	vf glauc, grdg vvf sst).												
	10		sh gry, var frm & crmbly to mod hd & subblky												
			opq mlky wh qtz, pa yel ?feldsp & dk grn glauc												
			nod w cmtd w/ sil, loc dolic, arg mtx, rr cmtd w/	/											
			o show. Occ lse m-c colls clr sr-r qtz grns).												
			n sft, arg, loc crmbly, tr vvf glauc, grdg calc sltst.												
3110	70		cmg sli darker brn - occ brnsh blk, com pa-moc												
			stky to frm mod hd &subblky/imbric PDC ctgs	,											
	20	n-calc, loc slty&micmica, t						+					<u> </u>		
	30		brnsh gry, frm & crmbly to mod hd & subblky												
		arg, loc hd & sil cmtd, tr v	vi giauc, grog vvi sst).									1			I

		ESSO NORGE A/S		V	/ELl	LSIT	E SA	٩MF	PLE	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	: 1 MAY	⁄ 2003	5		Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
	Tr	SST: a/a (off wh-pa brnsh gry, var frm & crmbly to mod hd & subblky	nvp											
		compris colls clr-transl & opq mlky wh qtz, pa yel ?feldsp & dk grn glauc vvf-vf occ m grdg sltst, mod w cmtd w/ sil, loc dolic, arg mtx, rr cmtd w/												
0400		pyr, pr-n vis intgran por, no show. Occ lse m-c colls clr sr-r qtz grns).					-							
3120	60	CLYST: m-dk brnsh gry,, com brnsh blk, sft-frm, subblky com amor, loc slty, micmica, tr miccarb, tr frac'd xln pyr nods, loc grdg sltst.	;											
		SLTST: off wh-pa gry, occ mod gry brn, sft & amor, occ mod hd & w cmtc w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	Tr	SST: off wh-lt gry, frm crmbly, arg mtx, compris colls, clr-transl & opc mlky wh qtz, occ opq pa yell ?feldsp, com dk grn glauc, vvf-vf occ f rrm sa-sr, subsph, prly-mod cmtd occ w cmtd w/ sil, nvp, no shows.												
3130	70	CLYST: a/a (m-dk brnsh gry,, com brnsh blk, sft-frm, subblky com amor loc slty, micmica, tr miccarb, tr frac'd xln pyr nods, loc grdg sltst)	,											
		SLTST: a/a (off wh-pa gry, occ mod gry brn, sft & amor, occ mod hd & w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst).												
	10	SST: a/a (off wh-lt gry, frm crmbly, arg mtx, compris colls, clr-transl & opc mlky wh qtz, occ opq pa yell ?feldsp, com dk grn glauc, vvf-vf occ f rrm sa-sr, subsph, prly-mod cmtd occ w cmtd w/ sil, nvp, no shows).												
3140	90	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty, micmica, tr miccarb, loc grdg sltst, tr pyr.												
		SLTST: off wh-pa gry, occ m gry brn, sft-frm, sbblky, occ mod hd & w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	Tr	SST: off wh-lt gry, frm crmbly, arg mtx, compris colls, clr-transl & opc mlky wh qtz, occ opq pa yell ?feldsp, com dk grn glauc, vvf-vf occ f rrm sa-sr, subsph, prly-mod cmtd occ w cmtd w/ sil, nvp, no shows												
3150	80	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty, micmica, tr miccarb, loc grdg sltst, tr pyr.	1											
		SLTST: off wh-pa gry, occ m gry brn, sft-frm, sbblky, occ mod hd & w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
		SST: off wh-lt gry, frm, arg mtx, clr-trnsl, opq mlky wh qtz, occ opq pa yel ?feldsp, com dk grn glauc, vvf-vf, sbang-sbrnd, sbsph, pr-mod cmtd ,occ w cmtd, nvp, no shows												
3160	90	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty, micmica, tr miccarb, loc grdg sltst, tr pyr.	,											

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		ESSO NORGE A/S		V	VELI	_SIT	E SA	MF	PLE DE	ES	CRIP	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS					: 1 MAY	2003			Sheet			
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CUT		CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN C	OL	INTEN	COL	COL	
		SLTST: off wh-pa gry, occ m gry brn, frm, fri, sbblky, occ mod hd & w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
		SST: off wh-lt gry, frm, arg mtx, clr-trnsl, opq mlky wh qtz, occ opq pa yell ?feldsp, com dk grn glauc, vvf-vf, sbang-sbrnd, sbsph, pr-mod cmtd ,occ w cmtd, nvp, no shows	nvp											
		LS: wh-It gy, It brn gy, frm, arg, micxIn					_							
3170	80	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty,												
		micmica, tr miccarb, loc grdg sltst, tr pyr.												
	20	SLTST: off wh-pa gry, occ m gry brn, frm, fri, sbblky, occ mod hd & w												
	4	cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
3180		LS: wh-lt gy, It brn gy, frm, arg, micxln												
3180	90	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty, micmica, tr miccarb, loc grdg sltst, tr pyr.												
	10	SLTST: off wh-pa gry, occ m gry brn, frm, fri, sbblky, occ mod hd & w												
	10	cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	tr	LS: wh-lt gy, It brn gy, frm, arg, micxln												
3190		CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty,												
0100	00	micmica, tr miccarb, loc grdg sltst, tr pyr.												
	10	SLTST: off wh-pa gry, occ m gry brn, frm, fri, sbblky, occ mod hd & w												
	_	cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	10	LS: wh-lt gy, lt brn gy, frm, arg, micxln												
3200		CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty,												
		micmica, tr miccarb, loc grdg sltst, tr pyr.												
	20	SLTST: off wh-pa gry, occ m gry brn, frm, fri, sbblky, occ mod hd & w												
		cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	Tr	SST: off wh-lt gry, frm, arg mtx, clr-trnsl, opq mlky wh qtz, occ opq pa yell	nvp											
		?feldsp, com dk grn glauc, vvf-vf, sbang-sbrnd, sbsph, pr-mod cmtd ,occ												
		w cmtd, nvp, no shows												I
		LS: wh-It gy, It brn gy, frm, arg, micxIn												
3205	80	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty, micmica, tr miccarb, loc grdg sltst, gd tr diss pyr.												
	20	SLTST: v It gy gry, occ m gry brn, rr gy blk, frm, fri, sbblky, occ mod hd &												
		w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												

		ESSO NORGE A/S		V	/ELI	SIT	E SA	١MF	LE C	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
											-			
	Tr	SST: off wh-lt gry, frm, arg mtx, clr-trnsl, opq mlky wh qtz, occ opq pa yell												
		?feldsp, com dk grn glauc, vvf-vf, sbang-sbrnd, sbsph, pr-mod cmtd ,occ												
	4.4	w cmtd, nvp, no shows												
0040		LS: wh-lt gy, It brn gy, frm, arg, micxln												
3210	90	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty,												
	10	micmica, tr miccarb, loc grdg sltst, gd tr diss pyr. SLTST: v It gy gry, occ m gry brn, rr gy blk, frm, fri, sbblky, occ mod hd &												
	10	w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	tr	SST: off wh-lt gry, frm, arg mtx, clr-trnsl, opq mlky wh qtz, occ opq pa yell												
	••	?feldsp, com dk grn glauc, vvf-vf, sbang-sbrnd, sbsph, pr-mod cmtd ,occ												
		w cmtd, nvp, no shows												
		LS: wh-It gy, It brn gy, frm, arg, micxIn												
3220	90	CLYST: m-dk brnsh gry, occ brnsh blk, sft-frm, amor-sbblky, loc slty,												
		micmica, tr miccarb, loc grdg sltst, gd tr diss pyr.												
	10	SLTST: v It gy gry, occ m gry brn, rr gy blk, frm, fri, sbblky, occ mod hd &												
		w cmtd w/ sil, com vvf glauc grns, occ grdg vvf sst.												
	tr	LS: wh-lt gy, lt brn gy, frm, arg, micxln												
		SET 13 3/8" CASING. New hole size 12 1/4"												
3223		(100% CEMENT)												
	100	Tr in sample CLYST: grysh brn, frm, blky ctgs, n-calc, loc v slty												
3226		(50% CEMENT contamination)												
	100	(50% of sample) CLYST: mod-dk brnsh gry to brnsh blk, frm-mod hd,												
		subblky-rndd & eroded imbric PDC ctgs, loc sli slty, tr frac'd xln pyr nods.												
3229		(30% CEMENT contamination)												
3223	95	(65% of sample) CLYST: mod dk brn - brnsh blk, frm-mod hd, subblky-												
	90	rndd & eroded imbric PDC ctgs, loc v slty, tr micxln pyr, miccarb spks, vvf												
		mic, tr frac'd xln pyr nods.												
	5	SST: Pa gry, hd, blky ctgs compris colls, clr-transl & opq mlky qtz, vvf-vf	nvp	-	-	-	-	-	-	-	-	-	-	-
	-	occ f, sa-r, subsph, vf dk grn glauc, tr micmic, sl arg mtx, sil cmt, pr-n vis												
		intgran por, no show.												
	Tr	LST: dk brn, v hd, blky, brit-loc splnty, micxln.												

		ESSO N	IORGE A/S		W	/ELl	SIT	E SA	MP	LE D	DES	CRIP	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	STA	AIN		FLUOR		CU	IT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
3232		(10% CEMENT contamina	tion)												
	90	(80% of sample) CLYST	var pa brn-mod brnsh grv sft & amor stky n-												

3232														
	90	(80% of sample) CLYST: var pa brn-mod brnsh gry, sft & amor, stky n-												
		calc to mod dk brnsh gry & occ brnsh blk, mod hd-frm, blky-occ rndd ctgs,												
		loc slty-v slty, tr miccarb spks, tr micmic, mic pyr, occ frags frac'd xln pyr												
		nods.												
	10	(9% of sample) SLTST: mod-dk gry to grysh blk, v hd-hd, blky ctgs, sucr												
		text, tr micmic, miccarb, micxln pyr, loc v calc grdg arg lst, loc c & grdg vvf												
		sst, pr-n vis intgran por, no shows.												
	Tr	SST: a/a grdg sitst (pa gry, hd, blky ctgs compris colls, clr-transl & opq	nvp	-	-	-	-	-	-	-	-	-	-	-
		mlky qtz, vvf-vf occ f, sa-r, subsph, vf dk grn glauc, tr micmic, sl arg mtx,												
		sil cmt, pr-n vis intgran por, no show).												
3235	90	CLYST: a/a (var pa brn-mod brnsh gry, sft & amor, stky n-calc to mod dk												
		brnsh gry & occ brnsh blk, mod hd-frm, blky-occ rndd ctgs, loc slty-v slty,												
		tr miccarb spks, tr micmic, mic pyr, occ frags frac'd xln pyr nods)												ļ!
	10	SLTST: a/a (mod-dk gry to grysh blk, v hd-hd, blky ctgs, sucr text, tr												
		micmic, miccarb, micxIn pyr, loc v calc grdg arg lst, loc c & grdg vvf sst,												
		pr-n vis intgran por, no shows).												
	Tr	SST: a/a grdg sltst (pa gry, hd, blky ctgs compris colls, clr-transl & opq	nvp	-	-	-	-	-	-	-	-	-	-	-
		mlky qtz, vvf-vf occ f, sa-r, subsph, vf dk grn glauc, tr micmic, sl arg mtx,												
		sil cmt, pr-n vis intgran por, no show).								ļ				ļ!
		LST: a/a (dk brn, v hd, blky, brit-loc splnty, micxln).												
3238	90	CLYST: a/a (var pa brn-mod brnsh gry, sft & amor, stky n-calc to mod dk												
		brnsh gry & occ brnsh blk, mod hd-frm, blky-occ rndd ctgs, loc slty-v slty,												
		tr miccarb spks, tr micmic, mic pyr, occ frags frac'd xln pyr nods)								ļ				
	10	SLTST: a/a (mod-dk gry to grysh blk, v hd-hd, blky ctgs, sucr text, tr												
		micmic, miccarb, micxIn pyr, loc v calc grdg arg lst, loc c & grdg vvf sst,												
		pr-n vis intgran por, no shows).												ļ!
	Tr	SST: a/a grdg sltst (pa gry, hd, blky ctgs compris colls, clr-transl & opq	nvp	-	-	-	-	-	-	-	-	-	-	-
		mlky qtz, vvf-vf occ f, sa-r, subsph, vf dk grn glauc, tr micmic, sl arg mtx,												
	-	sil cmt, pr-n vis intgran por, no show).												ļ!
	Pr tr	LST: a/a (dk brn, v hd, blky, brit-loc splnty, micxln).												
3241	-													
3244	90	CLYST: a/a (var pa brn-mod brnsh gry, sft & amor, stky n-calc to mod dk												
		brnsh gry & occ brnsh blk, mod hd-frm, blky-occ rndd ctgs, loc slty-v slty,												1
		tr miccarb spks, tr micmic, mic pyr, occ frags frac'd xln pyr nods)												

		ESSO N	NORGE A/S		V	VELI	LSIT	E SA	۱MF	LE [DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	TAIN .		FLUOR		Cl	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
		· · · · · · · · ·				1									1
		micmic, miccarb, micxIn p pr-n vis intgran por, no sho	to grysh blk, v hd-hd, blky ctgs, sucr text, t byr, loc v calc grdg arg lst, loc c & grdg vvf sst bws).	,											
		(pa gry, hd, blky ctgs com sa-r, subsph, vf dk grn gla por, no show).	Prk flour, occ ctgs pyr cmtd else a/a grdg slts pris colls, clr-transl & opq mlky qtz, vvf-vf occ f uc, tr micmic, sl arg mtx, sil cmt, pr-n vis intgra	,	-	-	-	-	-	-	-	-	-	-	-
	Pr tr	LST: a/a (dk brn, v hd, blk	y, brit-loc splnty, micxln).												
	Rr	?CHT: off wh-pa yell, trans	sl, V hd, brit, splnty, micxln/mass.												
3247	-														
3250		& amor, stky n-calc to m blky-occ rndd ctgs, loc slty	byr nods else a/a (var pa brn-mod brnsh gry, st od dk brnsh gry & occ brnsh blk, mod hd-frm /-v slty, tr miccarb spks, tr micmic, mic pyr.)	,											
		micmic, miccarb, micxIn p pr-n vis intgran por, no sho	,	,											
		ctgs compris colls, clr-trar dk grn glauc, tr micmic, sl	or ?rk flour, else a/a grdg sltst (pa gry, hd, blk nsl & opq mlky qtz, vvf-vf occ f, sa-r, subsph, v arg mtx, sil cmt, pr-n vis intgran por, no show).	f	-	-	-	-	-	-	-	-	-	-	-
		on jt srfcs).	cc tab ctgs, brit-loc splnty, micxln, tr micxln py												
3253		& amor, stky n-calc to m blky-occ rndd ctgs, loc slty	byr nods else a/a (var pa brn-mod brnsh gry, sl od dk brnsh gry & occ brnsh blk, mod hd-frm /-v slty, tr miccarb spks, tr micmic, mic pyr.)	,											
		micmic, miccarb, micxIn p pr-n vis intgran por, no sho		,											
		ctgs compris colls, clr-trar dk grn glauc, tr micmic, sl	or ?rk flour, else a/a grdg sltst (pa gry, hd, blk nsl & opq mlky qtz, vvf-vf occ f, sa-r, subsph, v arg mtx, sil cmt, pr-n vis intgran por, no show).	f	-	-	-	-	-	-	-	-	-	-	-
		on jt srfcs).	cc tab ctgs, brit-loc splnty, micxln, tr micxln py												
3256	90	& amor, stky n-calc to m	byr nods else a/a (var pa brn-mod brnsh gry, st od dk brnsh gry & occ brnsh blk, mod hd-frm /-v slty, tr miccarb spks, tr micmic, mic pyr.)												

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	WE	LL : 6706/6-1	AREA : H\	/ITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COM	MMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, mo	difiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
									-							
	5	SLTST: a/a (mod-dk gry micmic, miccarb, micxln p pr-n vis intgran por, no sho	byr, loc v calc grdg arg lst													
	Tr	SST: com pa brn sft, amo ctgs compris colls, clr-trar dk grn glauc, tr micmic, sl	nsl & opq mlky qtz, vvf-vf	occ f, sa-r, subsph, vf	nvp	-	-	-	-	-	-	-	-	-	-	-
		LST: occ off wh, sft, crmb ctgs, brit-loc splnty, micxlr	n).	-												
3259	80	CLYST: com tr frac'd xln p & amor, stky n-calc to m blky-occ rndd ctgs, loc slty	od dk brnsh gry & occ bi	rnsh blk, mod hd-frm,												
		SLTST: a/a (mod-dk gry micmic, miccarb, micxln p pr-n vis intgran por, no sho	oyr, loc v calc grdg arg lst ows).	, loc c & grdg vvf sst,												
		SST: com pa brn sft, amo ctgs compris colls, clr-trar dk grn glauc, tr micmic, sl	nsl & opq mlky qtz, vvf-vf arg mtx, sil cmt, pr-n vis ir	occ f, sa-r, subsph, vf htgran por, no show).	nvp	-	-	-	-	-	-	-	-	-	-	-
	5	LST: occ off wh, sft, crmb ctgs, brit-loc splnty, micxlr		orn, v hd, blky-occ tab												
3262	80	CLYST: a/a (var pa brn-m brnsh gry & occ brnsh blk tr miccarb spks, tr micmic,	, mod hd-frm, blky-occ rnd	dd ctgs, loc slty-v slty,												
		pr-n vis intgran por, no sh	byr, loc v calc grdg arg lst ows).	, loc c & grdg vvf sst,												
		SST: a/a grdg sltst (pa g mlky qtz, vvf-vf occ f, sa-r sil cmt, pr-n vis intgran po	r, subsph, vf dk grn glauc, r, no show. Com pa brn sf	tr micmic, sl arg mtx, t, amor ?rk flour).	nvp	-	-	-	-	-	-	-	-	-	-	-
		LST: occ off wh, sft, crmb ctgs, brit-loc splnty, micxlr	ı).	· · · · · ·												
3265	80		nod brnsh gry, sft & amor, k, mod hd-frm, blky-occ rnd , mic pyr, com frac'd xln py	dd ctgs, loc slty-v slty,												

		ESSO N	NORGE A/S		V	VEL	LSIT	E SA	۹MF	PLE [DES	CRIF	OIT	Ν	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MA)	2003			Sheet			
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Ratin
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
	45		to small hills as had had billing of the same to st	4	1	1	1	1	<u> </u>	1	1	1			1
			to grysh blk, v hd-hd, blky ctgs, sucr text, byr, loc v calc grdg arg lst, loc c & grdg vvf ss ows).												
		mlky qtz, vvf-vf occ f, sa-r	ry, hd, blky ctgs compris colls, clr-transl & op r, subsph, vf dk grn glauc, tr micmic, sl arg mt r, no show. Com pa brn sft, amor ?rk flour).		-	-	-	-	-	-	-	-	-	-	-
		ctgs, brit-loc splnty, micxlr													
3268		brnsh gry & occ brnsh blk	nod brnsh gry, sft & amor, stky n-calc to mod c a, mod hd-frm, blky-occ rndd ctgs, loc slty-v slt , mic pyr, com frac'd xln pyr nods).												
			to grysh blk, v hd-hd, blky ctgs, sucr text, byr, loc v calc grdg arg lst, loc c & grdg vvf ss ows).												
		sa-sr occ r, subsph, occ n mod gry, mod hd-hd, blk vvf-vf occ f, sa-r, subsph,	olls, clr-transl, com opq mlky wh qtz, vf-f occ r n-c frac'd grns, ?por, no vis shows. Com pa gr y ctgs compris colls, clr-transl & opq mlky qt vvf dk grn glauc, tr micmic, tr miccarb spks, cmt, pr-n vis intgran por. Com pa brn sft, amo	/- z, sl	-	-	-	-	-	-	-	V wk	wh	-	V pr
		LST: occ off wh, sft, crmb ctgs, brit-loc splnty, micxlr	וא, arg else a/a (pred dk brn, v hd, blky-occ ta ו).	b											
3271		brnsh gry & occ brnsh blk tr miccarb spks, tr micmic	nod brnsh gry, sft & amor, stky n-calc to mod c , mod hd-frm, blky-occ rndd ctgs, loc slty-v slt , mic pyr, com frac'd xln pyr nods).	y,											
		micmic, miccarb, micxIn p pr-n vis intgran por, no sh		t,											
		mlky qtz, vvf-vf occ f, sa-r spks, sl arg mtx, sil cmt lc amor ?rk flour. Freq lse qt		b t,	-	-	-	-	-	-	-	-	-	-	-
		LST: a/a (occ off wh, sft, o tab ctgs, brit-loc splnty, m	crmbly, arg else a/a (pred dk brn, v hd, blky-oc icxln).	c											

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		ELL : 6706/6-1		A : HVITVEIS					1 MAY				Sheet			
DEPTH	%	LITHOLOG	Y DESCRIPTION a	IND COMMENTS	POR	ST	AIN		FLUOR		CL		CUT F		RES	Rating
(m)		Colour, hardness	, texture, mineralo	ogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
3274		brnsh gry & occ brnsh bll tr miccarb spks, tr micmic	k, mod hd-frm, blky , mic pyr, com frac													
		micmic, miccarb, micxln pr-n vis intgran por, no sh	pyr, loc v calc grdo nows).	nd-hd, blky ctgs, sucr text, tr g arg lst, loc c & grdg vvf sst,												
	10	opq mlky qtz, vvf-vf occ	f, sa-r, subsph, v sil cmt loc calc cm	ctgs compris colls, clr-transl & vf dk grn glauc, tr micmic, tr t, pr-n vis intgran por. Com pa , sr-r, subsph).		-	-	-	-	-	-	-	-	-	-	-
	Tr	LST: pred dk brn, v hd, bl														
3277		brnsh gry & occ brnsh bll tr miccarb spks, tr micmic	k, mod hd-frm, blky c, mic pyr, com frac													
	15	micmic, miccarb, micxln pr-n vis intgran por, no sh	pyr, loc v calc grdo nows).	nd-hd, blky ctgs, sucr text, tr g arg lst, loc c & grdg vvf sst,												
	20	m, sa-sr occ r, subsph, c gry-mod gry, mod hd-hd qtz, vvf-vf occ f, sa-r, sub	occ m-c frac'd grns , blky ctgs compri sph, vvf dk grn gla	com opq mlky wh qtz, vf-f occ , ?por, no vis shows. Com pa s colls, clr-transl & opq mlky uc, tr micmic, tr miccarb spks, ran por. Com pa brn sft, amor		-	-	-	-	-	-	-	-	-	-	-
		ctgs, brit-loc splnty, micxl	n).	red dk brn, v hd, blky-occ tab												
3277		brnsh gry & occ brnsh bll tr miccarb spks, tr micmic	k, mod hd-frm, blky , mic pyr, com frac													
	15		pyr, loc v calc grdg	nd-hd, blky ctgs, sucr text, tr g arg lst, loc c & grdg vvf sst,												

		ESSO NORGE A/S		V	VELI	LSIT	E S/	٩MF	LE C	DES	CRIF	PTIO	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS					: 1 MA)					No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
							-							
	20	SST: pred as lse grns a/ a (colls, clr-transl, com opq mlky wh qtz, vf-f occ	Nvp	-	-	-	-	-	-	-	-	-	-	-
		m, sa-sr occ r, subsph, occ m-c frac'd grns, ?por, no vis shows. Com pa												
		gry-mod gry, mod hd-hd, blky ctgs compris colls, clr-transl & opq mlky												
		qtz, vvf-vf occ f, sa-r, subsph, vvf dk grn glauc, tr micmic, tr miccarb spks, sl arg mtx, sil cmt loc calc cmt, pr-n vis intgran por. Com pa brn sft, amor												
		?rk flour).												
	Tr	LST: occ off wh, sft, crmbly, arg else a/a (pred dk brn, v hd, blky-occ tab												
		ctgs, brit-loc splnty, micxln).												
3279	70	CLYST: a/a (var pa brn-mod brnsh gry, sft & amor, stky n-calc to mod dk												
		brnsh gry & occ brnsh blk, mod hd-frm, blky-occ rndd ctgs, loc slty-v slty,												
		tr miccarb spks, tr micmic, mic pyr, com frac'd xln pyr nods).												
	15	SLTST: a/a (mod-dk gry to grysh blk, v hd-hd, blky ctgs, sucr text, tr												
		micmic, miccarb, micxln pyr, loc v calc grdg arg lst, loc c & grdg vvf sst,												
	4.5	pr-n vis intgran por, no shows).					-				-			
	15	SST: pred as lse grns a/ a (colls, clr-transl, com opq mlky wh qtz, vf-f occ	Nvp	-	-	-	-	-	-	-	-	-	-	-
		m, sa-sr occ r, subsph, occ m-c frac'd grns, ?por, no vis shows. Com pa gry-mod gry, mod hd-hd, blky ctgs compris colls, clr-transl & opq mlky												
		qtz, vvf-vf occ f, sa-r, subsph, vvf dk grn glauc, tr micmic, tr miccarb spks,												
		sl arg mtx, sil cmt loc calc cmt, pr-n vis intgran por. Com pa brn sft, amor												
		?rk flour).												
	Tr	LST: occ off wh, sft, crmbly, arg else a/a (pred dk brn, v hd, blky-occ tab												
		ctgs, brit-loc splnty, micxln).												
		Cuttings from cored section 3277-3xxxm(Depth was set back from 3279												
		to 3277m by driller.) CORE #1												
3277		Cement												
	30	CLYST: brn gry, frm, blky, occ sb plty, non calc, occ dissem carb mat,												
	<u> </u>	com sity grdg Sitst, tr vf sd I.P.	N I				+							
	60	SST: v It gry-It gry, qtz, cir-trnsl, r rose, gen vf-f, com m, gen wk cmt	Nvp	-	-	-	-	-	-	-	-	-	-	-
		w/calc, fri, occ wl cmt w/calc, mod hd, loc com arg/slty mtrx, pos tr kao mtrx, r pyr nod, r glauc.												
3279	10	Cement			1		+				<u> </u>			
0210		CLYST: a/a (brn gry, frm, blky, occ sb plty, non calc, occ dissem carb					1							
		mat, com slty grdg Sltst, tr vf sd I.P.)												

		ESSO NORGE A/S		V	VELL	_SIT	E S/	۹MF	LE [DES	CRIF	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud	Date :	1 MA)	(2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
		SST: a/a (v It gry-It gry, qtz, clr-trnsl, r rose, gen vf-f, com m, gen wk cmt w/calc, fri, occ wl cmt w/calc, mod hd, loc com arg/slty mtrx, pos tr kao mtrx, r pyr nod, r glauc.)	•	-	-	-	-	-	-	-	-	-	-	-
3281		CLYST: a/a ((brn gry, frm, blky, occ sb plty, non calc, occ dissem carb mat, com slty grdg Sltst, tr vf sd I.P.)												
	70	SST: v It gry-It gry, qtz, clr-trnsl, pred f, com vf-m, subang-sbrnd, spher, mod srt, com lse gr, gen wk-mod cmt w/calc, tr kao mtrx, occ vf w/ arg mtrx, tr glauc, tr pyr nods,		-	-	-	-	-	-	-	-	-	-	-
3282	30	Cmt												
		CLYST: a/a ((brn gry, frm, blky, occ sb plty, non calc, occ dissem carb mat, com slty grdg Sltst, tr vf sd I.P.)												
	50	SST: wh-v It gry, qtz, clr-trnsl, pred f, com vf-m, sbang-sbrndd, mod srt, wl cmt w/calc, tr arg mtrx,tr kao mtrx, occ glauc, tr pyr nod	Nvp	-	-	-	-	-	-	-	-	-	-	-
3283	10	cmt												
		CLYST: a/a ((brn gry, frm, blky, occ sb plty, non calc, occ dissem carb mat, com slty grdg Sltst, tr vf sd I.P.)												
	70	SST: pred lse qtz, clr-trnsl, f-crs, sbang-sbrnd, spher, mod srt, calc cotg grs, com wh a/a	Nvp	-	-	-	-	-	-	-	-	-	-	-
3286		SST: It fey, clr-transl, vf-f, sbang-sbrnd, spher wl srtd, w silc occ calc cmt, occ Glauc + r Mic.		-	-	-	-	-	-	-	-	-	-	-
	30	CLYST:Gry brn, brn blk, frm-hd, blky-sbplty, tr Carb matl, occ micromic, tr micrpyr.												
3289	60:	SST: Pred clr, transp, It gn gry, transl, vf-f, occ m, sbang-sbrnd, sbspher, wl-mod srt, lse qtz w/ var amts It gry, gry gn, It blu gry, occ pa brn, sft-occ frm, amor-occ cmbly, silc+ occ calc/dol Rk Flour, w vf fltg qtz grs, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por.	Nvp	-	-	-	-	-	-	-	-	-	-	-
	40	CLYST: Med dk-dk gry, gry brn, frm- hd, blky-v occ splty, micrmic, micrpyr, occ diss nod pyr.												
3292	80	SST: Pred clr, transp, lt gn gry, transl, vf-f, occ m, sbang-sbrnd, sbspher, wl-mod srt, lse qtz, w/ v occ gd hd, clr Silc/Calc cmt+dk brn arg mtx, var amts lt gry, gry gn, lt blu gry, occ pa brn, sft-occ frm, amor-occ cmbly, silc+ occ calc/dol Rk Flour, w vf fltg qtz grs, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por.	Nvp	-	-	-	-	-	-	-	-	-	-	-

			NORGE A/S		V	VELI	LSIT	E SA	۹MF	PLE [DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud		1 MAY				Sheet			
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CI	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
					1						1		1	1	1
		micrpyr, occ diss nod pyr,	ry brn, brn gry, frm-hd, blky-occ splty, micrmi occ vf qtz, grdg-SLTST ip.												
3295	90	wl-mod srt, lse qtz, var am	n gry, transl, vf-f, occ m, sbang-sbrnd, sbspher nts It gry, gry gn, It blu gry, sft-occ frm, amor-oc k Flour, w vf fltg qtz grs, occ glauc, v occ . Nil vis intgran Por.		-	-	-	-	-	-	-	-	-	-	-
	10	CLYST: Med dk-dk gry, micrpyr, occ diss nod pyr	gry brn, frm- hd, blky-v occ splty, micrmi	С,											
3296.5	60	calc/dol Rk Flour, w vf fltg	It blu gry, sft-occ frm, amor-occ cmbly, silc+og g qtz grs, +occ clr, transp, lt gn gry, transl, vf-r od srt, lse qtz, v occ Mic:musc, v occ carb ma	n, ·	-	-	-	-	-	-	-	-	-	-	-
	40	CLYST: Med dk-dk gry, micrpyr, occ diss nod pyr	gry brn, frm- hd, blky-v occ splty, micrmi	С,											
3298	70	wl-mod srt, lse qtz + var a	n gry, transl, vf-f, occ m, sbang-sbrnd, sbsphe amts It gry, gry gn, sft-occ frm, amor-occ cmbl , occ glauc, v occ Mic:musc, v occ carb matl. N	/,	-	-	-	-	-	-	-	-	-	-	-
	30	CLYST: Med dk gry, brn matl.	gry, sft-mod hd, amor-blky, micrpyr, occ Ca	.p											
3301		srt, lse qtz, occ lt gry, blu v	n gry, transl, vf-occ m, sbang-sbrnd, sbspher, v wh, It gn gry, sft, amor Silc+occ Calc Rk Flour	-	-	-	-	-	-	-	-	-	-	-	-
		mat, occ diss Nod Pyr.	gry, sft-mod hd, amor-blky, micrpyr, occ Ca												
3304	60		n gry, transl, vf-occ m, sbang-sbrnd, sbspher, wh, It gn gry, sft, amor Silc+occ Calc Rk Flou		-	-	-	-	-	-	-	-	-	-	-
	40	CLYST: Med dk gry, brn mat, occ diss Nod Pyr.	gry, sft-mod hd, amor-blky, micrpyr, occ Ca	b											
3307	80	wl-mod srt, lse qtz + var a	n gry, transl, vf-f, occ m, sbang-sbrnd, sbsphe amts It gry, gry gn, sft-occ frm, amor-occ cmbl , occ glauc, v occ Mic:musc, v occ carb matl. N	/,	-	-	-	-	-	-	-	-	-	-	-
	20		gry, sft-mod hd, amor-blky, micrpyr, occ Ca	.p											

		ESSO NORGE A/S		V	/ELl	SIT	E SA	۱MF	LE C	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1 AREA : HVITVEIS			Spud		1 MAY					No. 1		
DEPTH	%	LITHOLOGY DESCRIPTION and COMMENTS	POR	ST	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness, texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	
3310	80	SST: Pred clr, transp, lt gn gry, transl, vf-f, occ m, sbang-sbrnd, sbspher, wl-mod srt, lse qtz + var amts lt gry, gry gn, sft-occ frm, amor-occ cmbly, silc+occ calc/dol Rk Flour, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por		-	-	-	-	-	-	-	-	-	-	-
	20	CLYST: Med dk gry, brn gry, sft-mod hd, amor-blky, micrpyr, occ Carb mat, occ diss Nod Pyr.												
3313		SST: clr transp, lt gn gry transl, vf-m, sbang-sbrnd, sbspher, mod srt, lse qtz, occ var amts lt gry, gry gn, sft-occ frm, amor-occ cmbly, silc/kaol +occ calc/dol Rk Flour, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por	•	-	-	-	-	-	-	-	-	-	-	-
	10	CLYST: Med dk gry, brn gry, sft-mod hd, amor-blky, micrpyr, occ Carb mat, occ diss Nod Pyr.												
3316		SST: (90%) clr transp, lt gn gry transl, vf-m, sbang-sbrnd, sbspher, mod srt, lse qtz, occ var amts lt gry, gry gn, sft-occ frm, amor-occ cmbly, silc/kaol +occ calc/dol Rk Flour, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por		-	-	-	-	-	-	-	-	-	-	-
3319		SST: (30%) clr transp, lt gn gry transl, vf-m, sbang-sbrnd, sbspher, mod srt, lse qtz, occ var amts lt gry, gry gn, sft-occ frm, amor-occ cmbly, silc/kaol + calc/dol Rk Flour, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por		-	-	-	-	-	-	-	-	-	-	-
3322		SST: (40%) clr transp, lt gn gry transl, vf-m, sbang-sbrnd, sbspher, mod srt, lse qtz, occ var amts lt gry, gry gn, sft-occ frm, amor-occ cmbly, silc/kaol +occ calc/dol Rk Flour, occ glauc, v occ Mic:musc, v occ carb matl. Nil vis intgran Por		-	-	-	-	-	-	-	-	-	-	-
3325		SST: It gn gry, gen Ise qtz, clr-trnsl, vf-f, occ m, sbang-sbrndd, spher, I.P. It gn gry sft, amor, occ sl calc, occ mic	Nvp	-	-	-	-	-	-	-	-	-	-	-
0004		CLYST: Med dk gry, brn gry, sft-frm, blky, micromic, micropyr	NL -											
3331	100	SST: It gn gry, gen lse qtz, clr-trnsl, vf-f, occ m, sbang-sbrndd, spher, I.P. It gn gry sft, amor, occ sl calc, occ mic	Nvp	-	-	-	-	-	-	-	-	-	-	-
3334		SST: 50% rock flour 50 % lse qtz, vf-f, occ m	Nvp	-	-	-	-	-	-	-	-	-	-	-
3343	100	SST: (90%) lse qtz, clr-trnsl, vf-m, pred f, sbang-sbrndd, mod-wl srt, spher, tr rk flour, r calc cotg gr, r mic	Nvp	-	-	-	-	-	-	-	-	-	-	-
		SST: (10%) m gry, qtz, clr-trnsl, vf, wl srt, mod hd, v slty grdg sdy Sltst	Nvp	-	-	-	-	-	-	-	-	-	-	-
3350	100	SST: lse qtz, clr-trnsl, f-m, occ crs, sbang-sbrndd, mod srt, occ rk flour,r vf, cmt w/silic	Nvp	-	-	-	-	-	-	-	-	-	-	-

		ESSO I	NORGE A/S		W	/ELl	SIT	E SA	MP	LE C	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	DESCRIPTION and COMMENTS	POR	ST/	AIN	I	FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

	+-	CLVST: dk any bd blky plty pop calc												,
0000		CLYST: dk gry, hd, blky-plty, non calc.	NI -											┟───┤
3360	90	SST: It gry, qtz, clr-trnsl, vf-f, com m, agg w/rk flour, sbang-sbrndd, mod	NVP	-	-	-	-	-	-	-	-	-	-	-
	10	srt												
		CLYST: dk gry, mod hd, blky, non calc, com Micromic												ļļ
3370	90	SST: lse qtz, clr-trnsl, vf-m, r crs, sbang-sbrndd, mod srt, spher,agg w/rk	Nvp	-	-	-	-	-	-	-	-	-	-	-
		flour, r glauc.												
		CLYST: gry brn, mod hd, sb plty, non calc, occ micromic												
3380	90	SST: a/a (lse qtz, clr-trnsl, vf-m, r crs, sbang-sbrndd, mod srt, spher,agg	Nvp	-	-	-	-	-	-	-	-	-	-	-
		w/rk flour, r glauc.)												
	10	CLYST: gry brn-gry blk else a/a												
3390	90	SST: gen a/a occ cmt w/calc, tr pyr	Nvp	-	-	-	-	-	-	-	-	-	-	-
	10	CLYST: gry brn-gry blk else a/a												
3400	90	SST: lse qtz, clr-trnsl, f-m, occ crs, sbang-sbrndd, mod srt, spher, com rk	Nvp	-	-	-	-	-	-	-	-	-	-	-
		flour, tr glauc	•											
	10	CLYST: m gry-dk gry-gry blk, frm-mod hd, sb plty, non calc, dissem carb												
		mat, micromic, tr micropyr												
3402	90	SST: a/a w/ abd rk flour	Nvp	-	-	-	-	-	-	-	-	-	-	_
	10	CLYST: gry brn, frm, blky,v slty grdg Sltst, occ dissem carb mat.												
3404		SST: a/a w/abd rk flour	Nvp	-	-	-	-	-	-	-	-	-	-	
	20	CLYST: a/a (gry brn, frm, blky,v slty grdg Sltst, occ dissem carb mat.)	•											
3410		SST: Ise qtz, clr-trnsl, f-crs, sbang-sbrndd, spher, mod srt, occ rk flour,	Nvp	-	-	-	-	-	-	-	-	-	-	_
		Tr SST: gn rgy, qtz, vf, hd, wl cmt w/silic, tr pyr												
	10	CLYST: m gry, frm, blky, v slty grdg Sltst,												
3415		SST: a/a w/ occ pyr nods	Nvp	-	-	-	-	-	-	-	-	-	-	-
		Tr SST: gn gry, qtz, clr, vf, v hd, cmt w/silic, tr glauc	Nvp	-	-	-	-	-	-	-	-	-	-	
	20	CLYST: gry brn, frm-mod hd, blky-sb plty, non calc, occ dissem carb mat,												
		com v slty grdg Sltst												
3420	60	SST: pred clr, transp, lt gn gry, trnsl, vf-m, occ crs sbang-sbrnd, sdsphg,												
0.20		mod srtd, lse Qtz, v occ gd hd, transl Silc cmt, abdt pa gn gry, occ lt brn,												
		sft amor Rk Flour w vf fltg qtz.												
	40	CLYST: gry brn, grdg-pa yrl brn, occ lt brn ip, sft i lighter parts, grdg -hd in												
		dkr parts, micrmic, micrpyr, microcarb, occ vf Carb matl.												
3425	60	SST: pred clr, transp, lt gn gry, trnsl, vf-m, occ crs sbang-sbrnd, sdsphg,												
0720		mod srtd, lse Qtz, v occ gd hd, transl Silc cmt, abdt wh, pa gn gry, occ lt												1
		brn, sft amor, kaol? Rk Flour w vf fltg qtz.												1
	l	on, on amor, haor. The four withing que.			1	1	L	1	1	1	1	1		لــــــــــــــــــــــــــــــــــــــ

		ESSO I	NORGE A/S		W	/ELl	_SIT	E SA	۱MF	LE D	DES	CRIF	OIT	N	
	WE	LL : 6706/6-1	AREA : HVITVEIS			Spud	Date :	1 MAY	2003			Sheet	No. 1		
DEPTH	%	LITHOLOGY	(DESCRIPTION and COMMENTS	POR	STA	AIN		FLUOR		CL	JT	CUT F	LUOR	RES	Rating
(m)		Colour, hardness,	texture, mineralogy, modifiers, cement		DIST	COL	DIST	INTEN	COL	INTEN	COL	INTEN	COL	COL	

	40	CLYST: gry brn, grdg-pa yrl brn, occ lt brn ip, sft i lighter parts, grdg -hd in dkr parts, micrmic, micrpyr, microcarb, occ vf Carb matl.					
3430	60	SST: pred clr, transp, pa gn gry, trnsl, vf-occ m, sbang-sbrnd, sdsphg, mod srtd, lse Qtz, v occ gd hd, transl Silc cmt, abdt wh, pa gn gry, occ lt brn, sft amor, kaol? Rk Flour w vf fltg qtz.					
	40	CLYST: pred med dk gry, dk gry, dsky yel brn, frm-mod hd, micrmic, micrpyr, microcarb, occ vf Carb matl.					
3440	70	SST: pred clr, transp, pa gn gry, trnsl, vf-occ m, sbang-sbrnd, sdsphg, mod srtd, lse Qtz, v occ gd hd, transl Silc cmt, abdt wh, pa gn gry, occ lt brn, sft amor, kaol? Rk Flour w vf fltg qtz.					
	30	CLYST: pred med dk gry, dk gry, dsky yel brn, grdg-lt brn ip, sft-mod hd, micrmic, micrpyr, microcarb, occ vf Carb matl.					
3450	70	SST: (50%) clr, transp, pa gn gry, trnsl, vf-occ m, sbang-sbrnd, sdsphg, mod srtd, lse Qtz, v occ gd hd, transl Silc cmt, (50%) wh, pa gn gry, occ lt brn, sft amor, kaol? Rk Flour w vf fltg qtz.					
	30	CLYST: pred med dk gry, dk gry, dsky yel brn, grdg-lt brn ip, sft-mod hd, micrmic, micrpyr, microcarb, occ vf Carb matl.					

																	WEI	L:	6706 6-	1			RECOV	ERYI	DATA	
				F	xxonMobil Norwa	V											GEO	LOGIST			on Nick	. Townley		50	EMPTY:	7
																	DAT		10.06.2				RECOVERED:	43	BROKEN:	0
			SIDE	WΔ	LL CORE DESCR	рті	ON	2										NO.:	3A	005			MISFIRED:	0		: Conventional
					LE CORE DESCR			J									BIT		12 1/4"				LOST:	0		
					LITHOLOGY						1					HY	DROG	CARBON								
	Depth	Depth	Rec	Rock	Modifiers	Colour	Indur	Grain	Rnd	Srtg	Por		Stair	1		Fluc	resce	nce	Cut	Cu	t Fluor	Residue		R	EMARKS	
#	LWD Depth (mBRT)	after Shifting to WL	(cm)	Туре				Size				%]	Dist	Colour	%	Dist	Inten	Colour	Colour	Inter	Colour	Colour				
1	3435,5	3431,41	2,00	SST	Qtz, clr - transl, occ Glauc, Tr Mic	M Gry	Fri	vf-f	Sa-Sr	W1	Pr	-	_	-	10	Pch	Pl	Gn/Wh	-	Pl	Bl/Wh	Gn/Wh	Non Calc			
2	3430,5	3426,41	2,40	SST	Qtz, clr - transl, occ Glauc, Tr Carb, Tr Mic	M Gry	Fri	vf-f	Sa-Sr	W1	Pr				40	Uni	Pl	Gn/Wh				Bri Gn/Wh	Non Calc			
2	5450,5	5420,41	2,40	551	WIE	MOIY	m	VI-I	54-51	** 1	11	-	-	-	40	Om	11	01/ 11	_	-	-	Gil/ Wil	Non Cale			
3	3427,6	3423,51	1,50	SST	Qtz, clr - transl, occ Glauc, r Carb, Tr Mic	M-M lt gry	Fri	vf-f	Sa-Sr	W1	Pr	-	-	-	60	Uni	Pl	Gn/Wh	-	-	-	Pl Gn/Wl	h Non Calc			
4	3423,2	3419,11	1,00	SST	Qtz, clr - transl, occ Glauc, r Mic	Lt-M gry	Fri	vf-f	Sa-Sr	W1	Pr	-	-	-	60	Uni	Pl	Gn/Wh	-	-	-	Pl Gn/Wl	h Non Calc, Tr m g			
5	3419,2	3415,11	1,50	SST	Qtz, clr - transl, occ Glauc, r Mic	Lt-M gry	Fri	vf-f	Sa-Sr	W1	Nil-Pi	-	-	-	70	Uni	Pl	Gn/Wh	-		-	v Pl Gn/Wh	Tr slty cmt w/Cal			
6	3418,0	3413,92	-999,25		ЕМРТҮ																		ЕМРТҮ			
7	3417,2	3413,12	-999,25		ЕМРТҮ																		EMPTY			
8	3414,5	3410,44	1,00	SST	Qtz, clr - transl, occ Glauc.	Lt-m lt gry	Fri	vf-f	Sa-Sr	W1	Pr	_	_	_	60	Uni	Mod	Gn/Wh	_	_	_	Pl Gn/Wl	h Non Calc.			
9	3407,5	3403,88	1,00	CLYST	Qtz, clr - transl, sbfiss, sl Carb, non Calc,	Dlv blk-brn bll		_	_		_	-	-	-	-	-	_	_		_	_	Bri Gn/Wh				
10	3406,5	3402,81	1,00	SST	Qtz, clr - transl, occ Glauc.	M gry	Frm-Fri	vf-f	Sa-Sr	W1	Pr	-	-	-	20	Pch	Pl	Gn/Wh	_	_	-	Pl Gn/Wl	h Non Calc.			
11	3404,0	3400,61	-999,25		ЕМРТҮ																		ЕМРТҮ			
12	3403,5	3400,20	0,30	SST	Qtz, clr - transl, occ Glauc, com dissem Carb matl	M dk gry	Frm- mod hd	vf-f	Sa-Sr	WI	Nil-Pr	_	_	_	-	_	_	_	_	_	_	Pl Gn/Wl	h Wl cmt w/Silic ip	VERY	POOR RECO	VERY
12															50	17.	PI	C- Mr				v Pl				
	3392,5	3389,26	2,00	SST	Qtz, clr - transl, com Glauc.	M gry	Fri Frm-	vf-f	Sa-Sr	W1	Pr	-	-	-		Uni	Pl	Gn/Wh	-	-	-	Gn/Wh v Pl				
14	3391,5	3388,29	2,00	SST	Qtz, clr - transl, Tr Glauc	M lt gry	mod hd	vf-f	Sa-Sr	W1	Pr	-	-	-	90	Uni	v Pl	Gn/Wh	-	-	-	Gn/Wh Bri	Non Calc.			
15	3390,5	3387,31	1,80	CLYST	Abd vf Sd, occ m Sd gr	Brn blk	Frm	-	-	-	-	-	-	-	50	Pch	Dull	Yel/Brn	-	-	-	Gn/Wh	Grdg - v arg SST			
16	3382,4	3379,09	2,30	SST	Qtz, clr - transl, Com Glauc, occ Slty mtx	Dk gry	Frm-fri	vf-f	Sa-Sr	W1	Nil	-	-	-	20	Pch	Dull	Gn/Wh	-	-	-	v Pl Gn/Wh	Non Calc.			
17	3373,5	3369,88	2,00	SST	Qtz, clr - transl, Com Glauc	Lt-m gry	Frm	vf-f	Sa-Sr	W1	Pr	-	-	-	80	Uni	Pl	Gn/Wh	-	-	-	v Pl Gn/Wh	Non Calc.			
18	3368,8	3365,15	1,50	SLTST	Slily Carb, com vf Sd, Tr sdy lam, non Calc	Olv blk	Frm- mod hd	-	-	-	Nil	-	-	-	-	-	-	-	-	_	-	Tr Gn/wł	n Grdg-v slty SST i	o, grdg-C	LYST ip.	

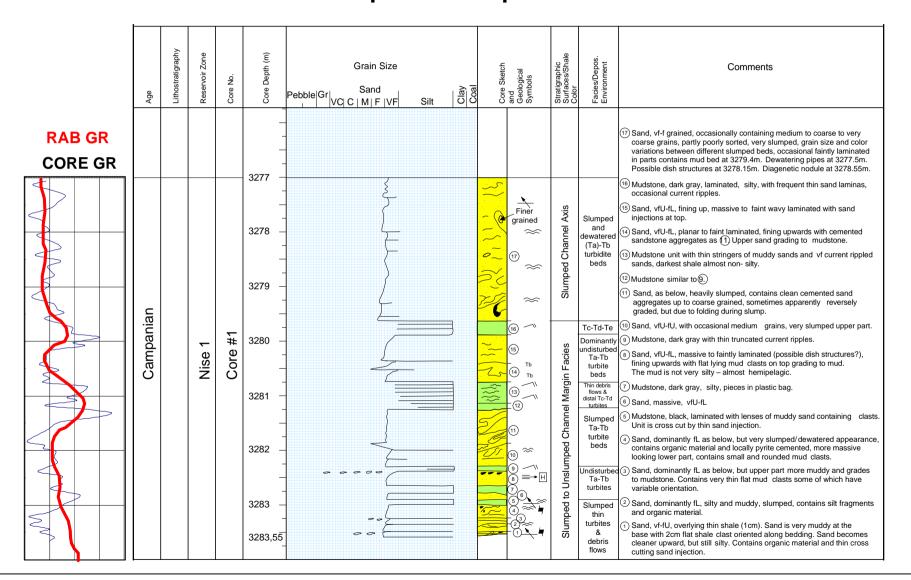
					Slily Carb, com vf Sd, Tr sdy lam, non																	
19	3367,7	3364,05	1,60	CLYST		Olv blk	Frm	-	-	-	Nil	-	-	-	-	-	-	-	-	-	-	Tr Gn/wh Grdg-arg SST ip
20	3366,5	3362,81	1,90	SST	Qtz, clr - transl, Com Glauc	M lt gry	Fri	vf-f	Sa-Sr	W1	Pr	_	_	-	80	Uni	P1	Gn/Wh	_	_	_	v Pl Gn/Wh Non Calc.
20	5500,5	0002,01	1,50	551		Witt gry	Fri-mod	VII	54 51						00	UII		OIL WI				v Pl
21	3359,5	3355,58	2,00	SST	Qtz, clr - transl, Tr Glauc	M gry	hd	vf-f	Sa-Sr	W1	Pr	-	-	-	60	Uni	Pl	Gn/Wh	-	-	-	Gn/Wh Occ silica cmtd lamina, gen non Calc, uncmtd.
22	3352,6	3348,63	1,10	SST	Qtz, clr - transl, occ Op, pos Felds, Tr Glauc, slty mtx	Gry brn	Fri	vf-f	Sa-Sr	W1	Nil-Pr	_	_	-	60	Pch	P1	Gn Yel- Gn Wh	_	_	_	v Pl Gn/Wh Non Calc.
	5552,6	0010,00	1,10	001		ory our			bu bi						00	I UII		on m				v Pl
23	3349,5	3345,51	1,80	SST	Qtz, clr - transl, com slty mtx, Tr Glauc.	Lt gry	Frm-fri	vf-m	Sa-Sr	Mod-W	Nil-Pr	-	-	-	90	Uni	v Pl	Gn/Wh	-	-	-	Gn/Wh Non Calc, very dry sample
24	3341.0	3336,88	1.60	SST	Qtz, clr - transl, occ Glauc ip, cmtd w/silic	M lt gry	Fri-mod hd	vf-f	Sa-Sr	W1	Pr-Nil	-	-	-	70	Uni	v Pl	Gn/Wh	-	-	-	v Pl Gn/Wh Non Calc.
	,.	,	-,		2 (1) (1) (1) (1) (v Pl
25	3338,5	3334,34	1,60	SST	Qtz, clr - transl, occ Glauc ip, Tr mic	M lt gry	Fri	vf-f	Sa-Sr	Wl	Pr	-	-	-	80	Uni	Pl	Gn/Wh	-	-	-	Gn/Wh Non Cale, occ silic emt lamina
26	3328,5	3324,59	1,50	SST	Qtz, clr - transl, occ Glauc ip.	M lt gry	Fri	vf-f	Sa-Sr	W1	Pr	-	-	-	100	Uni	Pl	Gn/Wh	-	-	-	Pl Gn/Wh Non Calc.
	·				Qtz, clr - transl, occ Glauc, cmtd w/ silic		Fri-mod															
27	3321,5	3317,63	1,60	SST	ip.	M lt gry	hd	vf-f	Sa-Sr	Wl	Nil	-	-	-	40	Uni	Pl	Gn/Wh	-	-	-	PI BI/Wh Non Calc.
28	3311,0	3307,84	1,50	SST	Qtz, clr - transl, loc mod cmtd w/ silic, com Mic:musc ip.	M lt gry	Fri-mod hd	vf-f	Sa-Sr	Wl	Pr-Nil	-	-	-	80	Uni	Pl	Bl/Wh	-	-	-	Pl Gn/Wh Non Calc.
					Å																	Впі
29	3309,2	3306,17	1,10	CLYST	Frm, sbfis, com vf sdy lamina, non Calc	Olv blk	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Gn/Wh
30	3308,5	3305,49	1,00	CLYST	Adbt vf sd, grdg- arg SST, non Calc	Olv blk	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mod Bl/Wh
																						Mod
31	3294,5	3291,43	1,10	SST	Abdt arg mtx, occ arg lam, Tr Glauc	gry, mott Olv	Frm	-	-	-	-	-	-	-	60	Pch	Pl	Yel	-	-	-	Bl/Wh Grdg-sdy CLYST.
32	3286,5	3283,06	1,50	SST	Abdt arg mtx, com Mic:musc, non Calc, sdy lamina.	Brnsh blk	Frm	vf	Sa-Sr	Wl	Nil	-	-	-	20	Lam	Pl	Gn/Wh	-	-	-	Pl Bl/Wh Grdg-sdy CLYST.
																						Mod
33	3277,5	3274,09	2,00	SST	Qtz, clr-trnsl, com Glauc, Tr Micromic	M lt gry	Frm	vf	Sa-Sr	Wl	Pr	-	-	-	60	Uni	P1	Gn/Wh	-	-	-	Gn/Wh Non Calc.
34	3273,5	3270,26	1,50	SST	Qtz, clr-trnsl, com Glauc, com Micromic	M lt gry	Frm	vf	Sa-Sr	Wl	Pr	-	-	-	80	Uni	Pl	Gn/Wh	-	-	-	Mod Gn/Wh Non Calc.
					Qtz, clr-trnsl, com Glauc, com Micromic,		_								- 0							Mod
35	3273,0	3269,84	1,60	SST	slty mtx	M gry	Frm	vf	Sa-Sr	Wl	Nil	-	-	-	50	Uni	P1	Gn/Wh	-	-	-	Gn/Wh Non Calc.
36	3270,0	3266,60	1,50	SST	Qtz, clr-trnsl, occ Glauc, com Micromic.	M lt gry	Fri-Frm	vf	Sa-Sr	W1	Nil	-	-	-	80	Uni	Pl	Gn/Wh	-	-	-	Mod Gn/Wh Non Calc.
37	2267.0	2060.70	1.70	COT	Qtz, clr - transl, occ Glauc, occ Micromic,	MI	Ed F		6. 6	11.71	D- NT				80	11.1	D'	C= /321				DI Ce Alth New Cells
3/	3267,0	3263,76	1,70	SST	Tr carb matl.	M lt gry	Fri-Frm	vt-t	Sa-Sr	W1	PT-NI.	-	-	-	80	Uni	P1	Gn/Wh	-	-	-	PI Gn/Wh Non Calc. Mod
38	3266,5	3263,32	0,50	SST	Qtz, clr - transl, occ Glauc, occ Micromic.	M gry	Fri	vf	Sa-Sr	Wl	Nil	-	-	-	60	Uni	Pl	Gn/Wh	-	-	-	Mod Gn/Wh Non Calc.
20	3266,0	3262,83	1,40	SST	Qtz, clr - transl, com Glauc, occ Micromic.	M gry	Fri-Frm	vf-m Tr m	Sa-Sr	WI	Pr				80	Pch	P1	Gn/Wh				Mod Gn/Wh Non Calc.
37	5200,0	3202,03	1,40	331	Qtz, clr - transl, com Glauc, occ	ivi gi y	111-1111	11 10	Sa-SI	VV I	F1	-	-	-	00	ren	F1	GII/ WI	-	-	-	Mod
40	3265,5	3262,35	1,00	SST	Micromic.	M gry	Fri-Frm	vf-f	Sa-Sr	Wl	Pr	-	-	-	80	Pch	Mod	Gn/Wh	-	-	-	Gn/Wh Non Calc.

41	3262,2	3259,12	0,50	CLYST	com vf sd, sbfis, non Calc)lv blkk-gry bl	Frm	-	-	-	-	-	-	-	_	-	-	-	-	-	-	Mod Gn/Wh	
42	3257,2	3254,07	0,90	CLYST	non Cale, Tr Micromic.	Gry blk	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mod Gn/Wh	
43	3248,8	3246,33	-999,25		ЕМРТҮ																		EMPTY
44	3247,5	3245,10	0,30	SST	Qtz, clr - transl, com Micrpyr, occ pyr.	Dk gry	Mod hd	vf-f, Tr m	Sa-Sr	Mod-W	Pr	-	-	-	-	-	-	-	-	-	-	-	Tr Calc cmt
45	3245,1	3242,48	-999,25		ЕМРТҮ																		ЕМРТҮ
46	3244,0	3241,45	1,60	SST	Qtz, clr - transl, abdt arg mtx, occ Glauc.	Dk gry	Frm	vf	Sa-Sr	W1	Nil	-	-	-	20	Pch	Pl	Gn/Wh	-	-	-	PlGn/Wh	Grdg-sdy CLYST
47	3243,2	3240,70	1,50	CLYST	Blky, non Calc.	Gnsh blk	Frm	_	_	_	-	-	-	_	-	_	-	_	_	_	-	Mod Gn/Wh	
48	3241,5	3239,11			Blky, non Calc, slily sdy	Gnsh blk	Hd	-	_	-	-	_	-	-	-	_	-	_	-	-	_	Pl Gn/Wł	Partial recovery
49	3237,5	3235,37			vV sdy, grdg-arg SST.		Frm	_	_	-	-	_	-	-	-	_	_	_	-	_			Grdg-arg SST.
50	3231,5	3229,29	-999,25		ЕМРТҮ																		ЕМРТҮ

6706/6-1 WELL RESULTS WORK MEETING - Nov 4, 2003

6706/6-1 Core Description - Campanian Nise 1





Schlumberger

Hvitveis Definitive Path 170603 Survey Report

Report Date:	June 17, 2003	Survey / DLS Computation Method:	Minimum Curvature / Lubinski
Client:	Exxon Mobil	Vertical Section Azimuth:	341.540°
Field:	Hvitveis	Vertical Section Origin:	N 0.000 m, E 0.000 m
Structure / Slot:	West-Navion / Slot #1	TVD Reference Datum:	RKB
Well:	6706_6-1	TVD Reference Elevation:	1407.0 m relative to MSL
Borehole:	6706_6-1	Sea Bed / Ground Level Elevation:	-1295.000 m relative to MSL
UWI/API#:		Magnetic Declination:	-1.867°
Survey Name / Date:	Hvitveis Definitive Path 170603 / June 8, 2003	Total Field Strength:	52163.344 nT
Tort / AHD / DDI / ERD ratio:	21.946° / 53.02 m / 3.582 / 0.015	Magnetic Dip:	76.825°
Grid Coordinate System:	UTM Zone 32 on ED50 Datum	Declination Date:	May 01, 2003
Location Lat/Long:	N 67 33 34.803, E 6 41 18.379	Magnetic Declination Model:	BGGM 2002
Location Grid N/E Y/X:	N 7495802.000 m, E 401546.000 m	North Reference:	Grid North
Grid Convergence Angle:	-2.13669372°	Total Corr Mag North -> Grid North:	+0.270°
Grid Scale Factor:	0.99971861	Local Coordinates Referenced To:	Well Head

Comments	Measured Depth	Inclination	Azimuth	TVD	Vertical Section	NS	EW	DLS	Northing	Easting	Latitude	Longitude
	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(deg/30 m)	(m)	(m)		
Tie-In	0,00	0,00	0,00	0,00	0,00	0.00	0.00	0,00	7495802,00	401546,00	N 67 33 34.803	E 6 41 18.379
Sea Bed	1331,00	0,00	0,00	1331,00	0,00	0.00	0.00	0,00	7495802,00	401546,00	N 67 33 34.803	E 6 41 18.379
	1427,88	0,75	352,66	1427,88	0,62	0.63	-0.08	0,23	7495802,63	401545,92	N 67 33 34.823	E 6 41 18.370
	1458,07	0,73	1,41 247.74	1458,06	1,00	1.02	-0.10	0,11	7495803,02	401545,90	N 67 33 34.836	E 6 41 18.367
	1492,62	0,71	347,74	1492,61	1,42	1.45	-0.14	0,15	7495803,45	401545,86	N 67 33 34.849	E 6 41 18.362
	1519,90	0,80	355,36	1519,89	1,77	1.80	-0.19	0,15	7495803,80	401545,81	N 67 33 34.861	E 6 41 18.357
	1551,02	1,17	347,83	1551,01	2,30	2.33	-0.28	0,38	7495804,33	401545,72	N 67 33 34.878	E 6 41 18.348
	1573,26	1,37	341,35	1573,24	2,79	2.80	-0.41	0,33	7495804,80	401545,59	N 67 33 34.893	E 6 41 18.335
	1609,12	1,10	336,05	1609,09	3,56	3.52	-0.69	0,25	7495805,52	401545,31	N 67 33 34.916	E 6 41 18.310
	1637,92	1,29	331,39	1637,88	4,15	4.06	-0.95	0,22	7495806,06	401545,05	N 67 33 34.933	E 6 41 18.286
	1666,72	1,37	355,61	1666,68	4,81	4.69	-1.14	0,59	7495806,69	401544,86	N 67 33 34.953	E 6 41 18.268
	1694,69	1,18	341,38	1694,64	5,42	5.29	-1.25	0,39	7495807,29	401544,75	N 67 33 34.972	E 6 41 18.256
	1724,23	0,71	331,13	1724,18	5,90	5.74	-1.44	0,51	7495807,74	401544,56	N 67 33 34.986	E 6 41 18.239
	1750,83	0,97	347,61	1750,77	6,29	6.11	-1.57	0,40	7495808,11	401544,43	N 67 33 34.998	E 6 41 18.227
	1780,18	1,06	314,95	1780,12	6,78	6.54	-1.81	0,59	7495808,54	401544,19	N 67 33 35.012	E 6 41 18.205
	1810,12	1,09	330,10	1810,05	7,31	6.98	-2.15	0,29	7495808,98	401543,85	N 67 33 35.026	E 6 41 18.175
	1822,61	0,71	329,88	1822,54	7,50	7.15	-2.25	0,91	7495809,15	401543,75	N 67 33 35.031	E 6 41 18.167
	1867,96	0,77	338,03	1867,89	8,08	7.68	-2.50	0,08	7495809,68	401543,50	N 67 33 35.048	E 6 41 18.143
	1896,22	0,66	328,98	1896,15	8,43	8.00	-2.66	0,17	7495809,99	401543,34	N 67 33 35.058	E 6 41 18.129
	1923,95	1,16	337,41	1923,87	8,86	8.39	-2.85	0,56	7495810,39	401543,15	N 67 33 35.070	E 6 41 18.112
	1954,22	1,05	351,61	1954,14	9,44	8.95	-3.01	0,29	7495810,95	401542,99	N 67 33 35.088	E 6 41 18.097
	1983,73	0,99	343,17	1983,64	9,96	9.46	-3.12	0,16	7495811,46	401542,88	N 67 33 35.104	E 6 41 18.086
	2012,22		358,82	2012,13	10,52	10.02	-3.20	0,46	7495812,02	401542,80	N 67 33 35.122	E 6 41 18.077
	2033,12	1,27	350,41	2033,02	10,97	10.48	-3.24	0,27	7495812,48	401542,76	N 67 33 35.137	E 6 41 18.072
	2048,53	1,03	349,39	2048,43	11,28	10.79	-3.30	0,47	7495812,79	401542,71	N 67 33 35.147	E 6 41 18.067
	2077,49	1,03	345,01	2077,38	11,79	11.30	-3.41	0,08	7495813,29	401542,59	N 67 33 35.163	E 6 41 18.055
	2105,86	1,07	356,78	2105,75	12,30	11.81	-3.49	0,23	7495813,80	401542,51	N 67 33 35.179	E 6 41 18.047
	2134,50	1,18	354,08	2134,38	12,85	12.37	-3.54	0,13	7495814,36	401542,46	N 67 33 35.197	E 6 41 18.041
	2166,23	1,09	6,29	2166,11	13,44	12.99	-3.54	0,24	7495814,99	401542,46	N 67 33 35.218	E 6 41 18.039
	2192,68	1,07	8,24	2192,55	13,89	13.49	-3.47	0,05	7495815,48	401542,53	N 67 33 35.234	E 6 41 18.043
	2222,33	1,07	23,08	2222,20	14,35	14.02	-3.33	0,28	7495816,01	401542,67	N 67 33 35.251	E 6 41 18.054
	2251,56	1,06	35,00	2251,42	14,71	14.49	-3.06	0,23	7495816,48	401542,94	N 67 33 35.266	E 6 41 18.075
	2278,26	1,20	28,21	2278,12	15,05	14.94	-2.79	0,22	7495816,93	401543,21	N 67 33 35.281	E 6 41 18.096
	2308,55	1,21	26,20	2308,40	15,50	15.50	-2.50	0,04	7495817,50	401543,50	N 67 33 35.300	E 6 41 18.119
	2337,44	1,30	23,27	2337,28	15,96	16.08	-2.24	0,11	7495818,07	401543,77	N 67 33 35.319	E 6 41 18.140
	2366,93	1,47	20,46	2366,77	16,50	16.74	-1.97	0,19	7495818,73	401544,03	N 67 33 35.340	E 6 41 18.160
	2395,10	1,68	24,91	2394,92	17,08	17.45	-1.67	0,26	7495819,45	401544,33	N 67 33 35.364	E 6 41 18.183
	2423,45	1,84	22,24	2423,26	17,73	18.25	-1.32	0,19	7495820,25	401544,68	N 67 33 35.390	E 6 41 18.210
	2452,54	1,80	26,48	2452,34	18,41	19.09	-0.94	0,14	7495821,09	401545,06	N 67 33 35.417	E 6 41 18.239
	2465,26	1,57	27,47	2465,05	18,67	19.43	-0.77	0,55	7495821,42	401545,23	N 67 33 35.428	E 6 41 18.252
	2481,12	1,81	32,09	2480,90	18,98	19.83	-0.54	0,52	7495821,82	401545,46	N 67 33 35.442	E 6 41 18.271
	2510,21	1,97	30,46	2509,98	19,60	20.65	-0.04	0,17	7495822,64	401545,96	N 67 33 35.469	E 6 41 18.310
	2538,12	2,04	33,30	2537,87	20,22	21.48	0.47	0,13	7495823,47	401546,47	N 67 33 35.496	E 6 41 18.351
	2565,65	2,02	30,92	2565,38	20,84	22.30	0.99	0,09	7495824,30	401546,99	N 67 33 35.523	E 6 41 18.392
	2596,34	1,94	35,97	2596,06	21,50	23.19	1.57	0,19	7495825,18	401547,57	N 67 33 35.553	E 6 41 18.439
	2624,73	2,07	36,04	2624,43	22,07	23.99	2.16	0,14	7495825,99	401548,16	N 67 33 35.579	E 6 41 18.486
	2655,25	2,13	38,03	2654,93	22,71	24.89	2.83	0,09	7495826,88	401548,83	N 67 33 35.609	E 6 41 18.540
	2681,91	2,34	38,14	2681,57	23,28	25.70	3.47	0,24	7495827,70	401549,47	N 67 33 35.636	E 6 41 18.591
	2710,51	2,35	36,68	2710,14	23,94	26.63	4.18	0,06	7495828,63	401550,18	N 67 33 35.667	E 6 41 18.648
	2737,51	2,42	36,58	2737,12	24,58	27.53	4.85	0,08	7495829,53	401550,85	N 67 33 35.697	E 6 41 18.702

	2760,94	2,64	33,87	2760,53	25,19	28.38	5.45	0,32	7495830,37	401551,45	N 67 33 35.725	E 6 41 18.750
	2788,67	2,03	40,86	2788,23	25,83	29.28	6.13	0,73	7495831,27	401552,13	N 67 33 35.755	E 6 41 18.804
	2818,21	0,45	119,96	2817,77	26,01	29.62	6.57	2,03	7495831,61	401552,57	N 67 33 35.766	E 6 41 18.840
	2847,57	1,39	199,28	2847,12	25,65	29.23	6.55	1,41	7495831,22	401552,55	N 67 33 35.753	E 6 41 18.840
	2878,21	2,18	194,63	2877,75	24,86	28.31	6.28	0,79	7495830,30	401552,28	N 67 33 35.724	E 6 41 18.820
	2904,52	1,99	194,92	2904,04	24,06	27.39	6.04	0,22	7495829,38	401552,04	N 67 33 35.693	E 6 41 18.802
	2932,24	1,66	196,38	2931,75	23,33	26.54	5.80	0,36	7495828,53	401551,80	N 67 33 35.666	E 6 41 18.785
	2960,44	1,87	202,76	2959,93	22,65	25.72	5.51	0,31	7495827,71	401551,51	N 67 33 35.639	E 6 41 18.763
	2989,27	1,60	210,26	2988,75	22,03	24.94	5.12	0,37	7495826,93	401551,12	N 67 33 35.613	E 6 41 18.733
	3013,25	1,67	215,98	3012,72	21,61	24.37	4.75	0,22	7495826,36	401550,75	N 67 33 35.594	E 6 41 18.703
	3042,56	1,57	222,70	3042,02	21,17	23.73	4.23	0,22	7495825,72	401550,23	N 67 33 35.573	E 6 41 18.661
	3071,62	1,36	226,04	3071,07	20,83	23.19	3.71	0,23	7495825,19	401549,71	N 67 33 35.555	E 6 41 18.619
	3100,55	1,41	233,34	3099,99	20,57	22.74	3.18	0,19	7495824,74	401549,17	N 67 33 35.540	E 6 41 18.575
	3129,42	1,17	237,10	3128,85	20,38	22.37	2.64	0,26	7495824,36	401548,64	N 67 33 35.528	E 6 41 18.532
	3158,35	1,19	254,46	3157,78	20,32	22.13	2.11	0,37	7495824,12	401548,11	N 67 33 35.519	E 6 41 18.487
	3188,52	1,28	260,95	3187,94	20,39	21.99	1.47	0,17	7495823,99	401547,47	N 67 33 35.514	E 6 41 18.434
	3195,33	1,15	265,53	3194,75	20,42	21.98	1.33	0,71	7495823,97	401547,33	N 67 33 35.513	E 6 41 18.422
	3233,90	1,53	276,74	3233,31	20,74	22.01	0.43	0,36	7495824,00	401546,43	N 67 33 35.513	E 6 41 18.346
	3261,72	1,75	280,98	3261,12	21,10	22.13	-0.36	0,27	7495824,12	401545,65	N 67 33 35.516	E 6 41 18.279
	3293,82	1,97	279,85	3293,20	21,61	22.32	-1.38	0,21	7495824,31	401544,62	N 67 33 35.521	E 6 41 18.192
	3322,86	2,09	277,52	3322,22	22,07	22.47	-2.40	0,15	7495824,47	401543,60	N 67 33 35.525	E 6 41 18.106
	3350,17	2,38	272,66	3349,51	22,50	22.56	-3.46	0,38	7495824,56	401542,54	N 67 33 35.526	E 6 41 18.016
	3380,23	2,67	271,45	3379,54	22,96	22.61	-4.78	0,29	7495824,60	401541,22	N 67 33 35.526	E 6 41 17.904
	3409,09	3,00	269,16	3408,37	23,42	22.62	-6.21	0,36	7495824,61	401539,79	N 67 33 35.525	E 6 41 17.784
Last Survey	3435,26	3,04	277,93	3434,50	23,93	22.70	-7.58	0,53	7495824,70	401538,42	N 67 33 35.526	E 6 41 17.668
Extrapolation to TD	3450,00	3,04	277,93	3449,22	24,28	22.81	-8.35	0,00	7495824,80	401537,65	N 67 33 35.528	E 6 41 17.602
												,

Survey Type: Raw Survey

Survey Error Model: SLB ISCWSA 3-D 95.00% Confidence 2.7955 sigma

MD From (m)	MD To (m) EOU Freq Survey Tool Type	To (m) EOU Freq Survey Tool Type
0,00	1331,00 Act-Stns SLB_ZERO	1331,00 Act-Stns SLB_ZERO
1331,00	3450,00 Act-Stns SLB_MWD-STD	3450,00 Act-Stns SLB_MWD-STD

Well:			<u>6706/6 -1</u>			Drill Floor	(m am	nsl):			36				Exx	onMobi	l Nor	way		
Date			8 June 03			Permaner	nt Datu	um (m an	nsl):				WI	RELIN	IE TEST	REPOF	RT - P	RESS	URE DATA	1
Geol	ogist:		NT/PA			Bit Diame	eter:				12,25									
			DEPTH	I BRT(m)		Initia	ıl		PRE-TES	T DATA	\		SAMPL	E DAT	4	Fina	ıl		Permeability	
Time		Test	Original	Corrected	Gauge	Hydrost	atic	Min	SIP		P *	Chmbr	Pump-	Time	Final	Hydros	tatic	Temp	Estimate	VC
From	То	No.	depth (m)	depth(m)	Type*	bars	ppge	FP	bars	ppge	bars	Vol	Out Vol	(min)	Fm Pres		ppge	(degC)	Comments	**
07:08	07:12	1	3264,7	3261,6	Qtz	414,800	0,74											62,0		Т
					Str															
07:14	07:16	2	3265,0	3261,9	Qtz	414,850	0,74									414,800	0,74	62,5		Т
					Str															
07:20	07:25	3	3265,5	3262,4	Qtz	414,810	0,74	259,00	331,663	0,60						414,750	0,74	63,7	3,187mD	V
					Str															
07:27	07:34	4	3266,5	3263,3	Qtz	415,490	0,74	241,00	331,850	0,60						414,604	0,74	64,7	2,297mD	V
					Str															
07:38	07:42	5	3267,0	3263,8	Qtz	415,177	0,74	299,00	331,699	0,60						415,060	0,74	65,5	5,317mD	V
					Str															
07:47	07:57	6	3270,0	3266,6	Qtz	415,506	0,74	182,00	332,550	0,60						415,693	0,74	65,7	0,707mD	V
					Str															
07:56	08:05	7	3272,5	3269,3	Qtz	415,798	0,74	182,00	350,569	0,63						415,870	0,74	65,9	1,343mD	SC
					Str															
08:09	08:12	8	3273,5	3270,3	Qtz	415,799	0,74	284,00	332,301	0,60						415,672	0,74	66,1	1,623mD	V
					Str															
08:17	08:19	9	3272,5	3269,3	Qtz	415,667	0,74									415,630	0,74	66,1		Т
					Str															
08;29	08:30	10	3272,5	3269,3		415,630	0,74									414,950	0,74	66,3		Т
					Str															

Note: Both original depth and corrected depth have been included in this table.

Note: 1bar = 14.5psi; 1atm = 14.7psi

* Quartz Gauge= PSIA, Strain Gauge=PSIG

Well:			<u>6706/6 -1</u>			Drill Floor	(m am	nsl):			36				Exx	(onMob	il No	rway		
Date			8 June 03			Permane	nt Datu	um (m ar	nsl):				WIR	ELIN	E TEST	REPO	RT -	PRES	SURE DAT	Α
Geol	ogist:		NT/PA			Bit Diame	eter:				12,25									
			DEPTH	BRT(m)		Initia	ıl		PRE-TES	T DAT	Α		SAMPLE	DATA		Fina	l		Permeability	
Time		Test	Original	Corrected	Gauge	Hydrost	atic	Min	SIP		P *	Chmbr	Pump-	Time	Final	Hydros	tatic	Temp	Estimate	vc
From	То	No.	depth (m)	depth(m)	Type*	bars	ppge	FP	bars	ppge	bars	Vol	Out Vol	(min)	Fm Pres		ppge	(degC)	Comments	**
08:55	09:01	11	3286,5	3283,1	Qtz	417,248	0,74	245,60	347,966	0,62						417,270	0,74	67,3	Thick mud cake	SC
					Str															
09:06	09:14	12	3287,0	3283,6	Qtz	417,440	0,74	183,00	347,093	0,62						417,480	0,74	67,0	1,60mD	SC
					Str															
09:20	09:24	13	3290,0	3286,7	Qtz	417,870	0,74	214,00	336,537	0,60						417,960	0,74	66,0	1,902mD	V
					Str															
09:29	09:33	14	3294,5	3291,4	Qtz	418,284	0,74	217,00	334,552	0,60						418,420	0,74	66,0	1,115mD	V
					Str															
09:40	09:43	15	3311,0	3307,8	Qtz	420,470	0,74	284,00	335,932	0,60						420,490	0,74	66,0	3,974mD	V
					Str															
09:48	09:50	16	3322,0	3318,1	Qtz	421,870	0,74	166,00								421,770	0,74	68,0		Т
					Str															
09:55	09:57	17	3321,5	3317,6	Qtz	421,770	0,74	172,00								421,460	0,74	70,0		т
					Str															
10:17	10:18	18	3244,0	3241,5	Qtz	411,980	0,74	155,00								411,940	0,74	66,0		Т
					Str															
10:24	10:26	19	3243,5	3241,0	Qtz	411,870	0,74	161,00								411,880	0,74	66,0		Т
					Str															
10:35	10:37	20	3245,1	3242,5	Qtz	412,070	0,74	164,00								412,030	0,74	66,0		Т
					Str															

Note: 1bar = 14.5psi; 1atm = 14.7psi

* Quartz Gauge= PSIA, Strain Gauge=PSIG

Well:			<u>6706/6 -1</u>			Drill Floor	(m am	sl):			36				Exx	onMob	il No	rway		
Date:			8 June 03			Permane	nt Datu	ım (m am	sl):				WIR	ELIN	E TEST	REPO	RT -	PRES	SURE DAT	Α
Geolo	ogist:		NT/PA			Bit Diame	eter:				12,25									
			DEPTH E	BRT(m)		Initia	ıl		PRE-TES		١		SAMPLE	DATA		Fina	I		Permeability	
Time		Test	Original	Corrected	Gauge	Hydrost	tatic	Min	SIP		P *	Chmbr	Pump-	Time	Final	Hydrost	atic	Temp	Estimate	vc
From	То	No.	depth(m)	depth(m)	Type*	bars	ppge	FP	bars	ppge	bars	Vol	Out Vol	(min)	Fm Pres		ppge	(degC)	Comments	**
10:43	10:45	21	3247,5	3245,1	Qtz	412,38	0,74	157,00								412,12	0,74	66		Т
					Str															
10:50	10:52	22	3248,8	3246,3	Qtz	412,47	0,74	159,00								412,52	0,74	66		Т
					Str															
11:18	11:22	23	3328,5	3324,6	Qtz	422,27	0,74	225,00	337,748	0,60						422,20	0,74	68	2,15mD	V
					Str															
11:25	11:28	24	3338,5	3334,3	Qtz	423,66	0,74	251,00	338,560	0,60						423,61	0,74	70	1,90mD	V
					Str															
11:34	11:39	25	3359,5	3355,6	Qtz	426,17	0,74	180,00	341,230	0,60						426,18	0,74	71	1,60mD	V
					Str															
11:44	11:46	26	3373,5	3369,9	Qtz	427,98	0,74	167,00								427,95	0,74	72		Т
					Str															
11:50	11:52	27	3373,0	3369,4	Qtz	427,83	0,74	428,00								427,90	0,74	72		Т
					Str															
11:58	12:00	28	3387,8	3384,5	Qtz	429,79	0,74	162,00								429,80	0,74	73		Т
					Str															
12:10	12:14	29	3399,0	3396,2	Qtz	431,12	0,74	212,30								431,11	0,74	73		Т
					Str															
12:20	12:22	30	3406,5	3402,8	Qtz	432,16	0,74	181,00								431,88	0,74	74		Т
					Str															

GENERAL COMMENTS : P* is the extrapolated pressure, psia, from the spherical build-up plot

Note: 1bar = 14.5psi; 1atm = 14.7psi

* Quartz Gauge= PSIA, Strain Gauge=PSIG

Well:			<u>6706/6 -1</u>			Drill Floor	(m am	sl):			36				Exx	onMobi	l Nor	way		
Date:			8 June 03			Permane	nt Datu	ım (m ams	il):				WIR	ELIN	E TEST	REPOF	RT - Ρ	RESS	URE DAT	Α
Geolo	ogist:		NT/PA			Bit Diame	eter:				12,25									
			DEPTH	BRT(m)		Initia	al	I	PRE-TEST	DATA			SAMPL	E DAT	4	Fina	l		Permeability	/
Timw		Test	Original	Corrected	Gauge	Hydrost	tatic	Min	SIP		P *	Chmbr	Pump-	Time	Final	Hydrost	tatic	Temp	Estimate	VC
From	То	No.	depth(m)	(m)	Type*	bars	ppge	FP	bars	ppge	bars	Vol	Out Vol	(min)	Fm Pres		ppge	(degC)	Comments	**
12:25	12:27	31	3406,0	3402,3	Qtz	431,908	0,74	241,975								431,952	0,74	74,0		Т
					Str															
12:33	12:35	32	3410,0	3406,5	Qtz	432,458	0,74	177,893								432,355	0,74	74,2		Т
					Str															
12:40	12:43	33	3423,2	3419,1	Qtz	434,151	0,74	185,016								434,075	0,74	74,3		Т
					Str															
12:47	12:56	34	3430,5	3426,4	Qtz	435,026	0,74	183,515	353,143	0,60		-				435,007	0,74	74,4	1,14mD	SC
					Str															<u> </u>
13:01	13:07	35	3427,6	3423,5	Qtz	434,576	0,74	192,641				-				434,552	0,74	74,2		Т
					Str															+
13:47	13:51	36	3280,3	3276,9	Qtz Str	415,930	0,74	135,375				-				416,017	0,74	72,5		
13:54	10.57	37	2280.0	2070.0		44.0.000	0.74	104.245								440 404	0.74	70.0		т
13:54	13:57	37	3280,0	3276,6	Qtz Str	416,006	0,74	164,345								416,101	0,74	70,9		1
14:03	14:05	38	3280,5	3277,2	Qtz	416,176	0.74	150,396								416,123	0,74	70,1		+
14.00	14.00	00	5200,5	5211,2	Str	410,170	0,74	100,000								410,120	0,74	70,1		1.
14:10	14:12	39	3279.0	3275.6	Qtz	416,062	0.74	165.481								415,847	0,74	69,8		Тт
		00	0210,0	0210,0	Str		0,1 1										0,1 1	00,0		
14:16	14:18	40	3277,0	3273,6	Qtz	415,725	0,74	165,973								415,781	0,74	69,8		Т
	-		,-	- , -	Str							1								

Note: 1bar = 14.5psi; 1atm = 14.7psi

* Quartz Gauge= PSIA, Strain Gauge=PSIG

Well	:		<u>6706/6 -1</u>			Drill Floo	r (m ams	i):			36				E	xonMo	bil No	orway		
Date	:		8 June 03			Permane	ent Datun	n (m amsl):					WIR	ELINE	TES	T REP	ORT -	PRES	SURE D	ΑΤΑ
Geol	ogist:		NT/PA			Bit Diam	eter:				12,2	5	1							
			DEPTH	BRT(m)		Init	ial	Р	RE-TEST [DATA		S	AMPLE	DATA		Fin	al		Permeabilit	у
Time		Test	Original	Corrected	Gauge	Hydro	static	Min	SIF)	P *	Chmbr	Pump-	Time	Final	Hydro	static		Estimate	
From	То	No.	(m)	(m)	Type*	bars	ppge	FP	bars	sg	bars	Vol CC	ut Vol	(min)	m Pres	6	sg	(degC)	Comments	**
14:22	14:26	41	3276,5	3273,1	Qtz	415,652	0,74	175,337								415,472	0,74	69,7		т
					Str															
14:35	14:42	42	3273,2	3270,0	Qtz	415,514	0,74	156,068	333,436	0,60						415,316	0,74	69,5	0,86mD	SC
					Str													<u> </u>		
14:46	14:48	43	3267,3	3264,0	Qtz	414,514	0,74	159,422								414,428	0,74	68,8		Т
					Str															
14:50	14:55	44	3266,3	3263,1	Qtz	414,346	0,74	250,365	331,880	0,60						414,369	0,74	68,5	1,255mD	V
					Str													ļ		
15:00	15:03	45	3265,5	3262,4	Qtz	414,359	0,74	274,774	331,681	0,60						414,362	0,74	68,2	1,146mD	V
					Str													<u> </u>		
19:35	19:45	46	3265,5	3262,4	Qtz	414,359	0,74	271,450	331,890	0,60		1072,00	44	10		414,567	0,74	69,4		SO
		S1			Str													<u> </u>		
20:05	20:15	47	3265,5	3262,4	Qtz	414,361	0,74	270,340	332,345	0,60		1084,00	46	10		414,437	0,73	69,7		SO
		S2			Str															
21:15	21:27	48	3265,5	3262,4	Qtz	414.359	0,74	269,910	331,781	0,59		1640,00	54	12		414,380	0,73	72,8		SO
		S3			Str	1													1	<u> </u>
21:45	21:58	49	3265,5	3262,4	Qtz	415,626	0,74	269,890	334,149	0,60		1593,00	56	13		414,571	0,74	72,8		SOI
		S4			Str		0.74													
22:12	22:24	50 S5	3265,5	3262,4	Qtz Str	414,359	0,74	271,510	332,711	0,60		1520,00	58	12		414,271	0,73	72,8		SO
	00.07		0005 5	0000 4		444.050	0.74	070 540	000 540	0.50			50	- 4		444.005	0.70		4.1.5	
22:36	23:27	51 S6	3265,5	3262,4	Qtz Str	414,359	0,74	278,510	330,510	0,59		6909,60	59	51		414,335	0,73	73,0	4 Litre	SO
00.44	23:50	52	3267,0	3263,8		414,243	0,74									414,245	0,73	73,2	Gas in line	V
23.44	23.50	52	3207,0	3203,0	Str	414,243	0,74									414,245	0,73	73,2	Gas in line	v
GEN	IFR∆I		MMENTS:	P* is the evt		l d nressure	nsia fr	om the sph	erical buil	d-un nlo	t .	1						<u>II</u>	<u> </u>	<u> </u>
			ample cham		•	-	, psia, ii	<u>_Test 48: #</u>					Test 5	50· #5 (S	Serial N	o 100476	95)		<u>#6 Not Us</u>	od
			l No 369139		<u></u>	<u></u>			4 Serial N							ber #7 Se		311994	#0 1101 03	<u>.u</u>
1030	<u>τι. πΖ</u>	Juna	110 000100	i				1031 73.1		0 1004/1						er #8 Not		011004		
Note:	1bar –	11 5r	osi; 1atm = 1	4 7nsi									<u>ine 20</u>	<u>u 4 III.e</u>			useu			
1,010.	1001 -	14.0		4.7 poi				Code V												

* Quartz Gauge= PSIA, Strain Gauge=PSIG

Well:			<u>6706/6 -1</u>			Drill Floor (m amsl): Permanent Datum (m amsl):					36		ExxonMobil Norway							
Date			8 June 03										WIRELINE TEST REPORT - PRESSURE DATA							
Geologist:			NT/PA			Bit Diameter:				12,25										
			DEPTH BRT(m)		Initial PRE-TEST							SAMPLE DATA			Final			Permeability		
Time From	То	Test No.			Gauge			Min SIP				Chmbr	Pump-	Time		Hydrostatic		Temp		VC
			(m)	(m)	Type*	bars	ppge	FP	bars	sg	bars		Out Vol It (min) Fn	Fm Pres		sg	(degC)a	and Comments	**	
23:55	23:57	53	3267,0	3263,8	Qtz	414,397	0,74	175,337								414,567	0,74	72,8	Gas in line	Ι
					Str															
00:20	00:30	54	3267,0	3263,8	Qtz	414,116	0,74	293,330	333,436	0,60						414,020	0,74	73,3	5cc + 15cc	V
					Repeat			267,400	331,702	#####									5cc	
					Repeat			267,440	331,707	0,60									5cc	
	-																			
												1								

Note: 1bar = 14.5psi; 1atm = 14.7psi