Chevron

Norsk Chevron AS

END OF WELL REPORT

WELL 6506/3-1

PL259

February, 2002

Partner

Eni

Partner

Enterprise Oil

This section contains:

36" Hole Section

Drilling of the 36" hole commenced on the 22nd of July, 2002, once cross tensioning of the anchor chains was completed. The 36" hole was drilled from seabed (366 m) to planned TD of 456 m with seawater and hi-vis pills without problems. The 30" conductor was successfully run and cemented in place.

17 ½" Hole Section

Following clean-out of the 30" conductor shoe and rathole with a 26" bit, the 8 ½" shallow gas pilot hole was drilled to 1383 m with seawater and hi-vis pills. No shallow gas was observed and the 8 ½" hole was opened to 17 ½".

When running the 13 3/8" casing at 727 m, the casing started to take weight, but the running continued as this was interpreted to be drag in the hole. Shortly thereafter, the ROV sonar showed an unusual reflection and the running was halted. By visual observation, the casing was observed buckled over the wellhead with several joints folded onto the seabed. The casing was pulled to the surface and all joints were recovered, with the exception of two casing centralizers that were lost in hole.

A wiper trip was conducted and the hole was displaced to 1.40 sg KCl inhibited mud. The casing was re-run and successfully cemented in place without any further problems.

The BOP and riser were run. Because of constraints on "over the side work", some waiting on weather took place before the BOPs could be latched to the high pressure wellhead.

8 ½" Hole Section

Following pressure testing of the BOP and 13 3/8" casing, the shoe track was cleaned out with the 8 ½" drilling assembly while displacing the well to 1.45 sg oil based mud. 4 m of new formation was drilled and leak-off tested to 1.84 sg EQMW, before drilling continued.

The ROP was controlled until the top of Brygge flooding surface (secondary objective) at 1654 m was established by use of LWD CDR /ISONIC. With no indications of hydrocarbons, drilling continued and the mud density was gradually increased to 1.50 sg.

During a connection at 1698 m, an increase in pit volume was noted and the well was shut in. A 4 m^3 pit gain was recorded, with 10 bar shut in casing pressure and 14 bar shut in drill pipe pressure. The kick was circulated out using the First Circulation of the Driller's Method. When relaxing the operating pressure on the Upper Annular Preventer to check for trapped gas with both annular preventers closed, the Lower Annular Preventer opened as well, allowing a 2.7 m^3 influx to be taken before the well was shut in. During subsequent circulation, it became apparent that the surface choke was partially plugged. With the surface choke, choke and kill lines cleaned out and a static well with 1.50 sg mud, the well was opened and circulation and rotation was established. An increase in pit level was again noticed and the well was shut in with an incremental pit gain of 7.4 m^3. The well was killed with 1.57 sg mud using the Driller's Method. The mud on bottoms up was contaminated with saltwater and subsequent logs (MDT) measured a pore pressure of 1.52 sg around this depth.

After a conditioning trip back to the 13 3/8" casing shoe, drilling continued to 3101 m, which was determined to be 13 m into the Lysing Formation (primary objective). At this point, 70 m of formation was cored and 67.7 m of core was recovered. Drilling continued to a total depth of 3667 m and terminated in the Lange Formation.

Induction, Density, Neutron, Spectral Gamma Ray, Oil Based Diplog and Array Sonic wireline logs were successfully run. When running an 8 level Vertical Seismic Log, the tool became temporarily stuck at 3090 m. After coming free with the VSP toolstring, a wiper trip was conducted, followed by running the Modular Dynamic Testing Tool. Pressure points were recorded in the Lysing and Brygge formations and fluid samples were taken from the Lysing Formation. The Vertical Seismic Log was successfully re-run. The final log run was a Sidewall Core Gun, with 29 cores recovered out of 53 shots attempted.

Abandonment

Open hole cement plugs were placed across the Lysing Formation, the Brygge Formation, 13 3/8" casing shoe and in the top part of the 13 3/8" casing. The two last plugs were pressure tested to 70 bar above the formation leak-off pressure at the shoe. The oil-based mud was displaced with seawater before the BOP and riser was recovered. It took two attempts to cut the 20" extension joint and 30" conductor before recovery was possible. The ROV performed a seabed survey. While laying down drill pipe, recovery of the anchors and chains took place. The rig was released to Statoil at 01:12 hrs on 19th of August.

A total of 33.1 days were spent, including 9.5 days of trouble time.

1.5 Attachments

1. Daily Operational Summaries
2. Figure 1.1 Well Summary

1.1 Introduction

This End of Well Report conforms to requirements laid down in NPD regulations and guidelines relating to drilling and well activities and geological data collection.

1.2 Summary of Well Objectives vs. Results

Well 6506/3-1 was Norsk Chevron's first exploration well to be drilled in the PL259 license.

The first objective of this well was to demonstrate the economic potential of two prognosed hydrocarbon reservoirs in Structure A in the Brygge (Paleogene) and Lysing (Cretaceous) Formations. The corresponding prospects were called the Harran and the Grong-A prospects respectively. This objective failed and the main reasons were lack of reservoir in the Harran prospect and lack of seal and proper reservoir in the Grong-A prospect.

The second objective was to gather data for understanding the risks and license strategy. This objective was fulfilled.

1.3 Summary of Operational Objectives vs. Results

- Three (3) reportable incidents were reported to NPD vs. none as a goal. No Lost Time Accidents occurred vs. none as a goal.
- No accidental spills were reported vs. none as a goal.
- 33.1 actual days were spent on the well vs. 34 days in the AFE.
- The estimated cost is 136 mill NOK vs. 134 mill NOK in the AFE.

1.4 Short Summary of Activities

- All depths are in m *MD* RKB (= meter *Measured Depth* below Rotary Kelly Bushing (Drill floor)).
- See Section 4, Section Synopsis for more details.

Transit

The semi-submersible drilling rig Byford Dolphin was taken under tow from Shell's Garn West location on July 16th, 2001 and arrived one day later at the 6506/3-1 location. Anchor handling operations were delayed three days, because of rough weather conditions.

Daily Operational Summaries

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

16-JUL-2001

MW: MD: TVD: CASING: @ CUM COST: KR25,642,764

DOL: DFS: LAST SURVEY: @

1 HR SUMMARY

2300 HRS: LAST ANCHOR BOLSTERED AT SHELL GARN WEST LOCATION; RIG ON CONTRACT TO NORSK CHEVRON A.S. AS OF 2300 HRS; COMMENCE TOW TO DONNA WEST LOCATION

PRESENT_OPERATIONS:

0600 HRS; RIG ON TOW TO DONNA WEST; 66 NAUTICAL MILES TO LOCATION

17-JUL-2001

MW: MD: 0.0m TVD: 0.0m CASING: @ CUM COST: KR28,504,842

DOL: 1 DFS: LAST SURVEY: @

24 HR SUMMARY

TOW RIG TO DONNA WEST LOCATION USING M/V FAR FOSNA; BALLAST DOWN TO SURVIVAL DRAFT (60FT) TO WOW 5 N-MILES FROM LOCATION -PERFORM RIG MAINTENANCE

PRESENT_OPERATIONS:

0600 HRS:WOW 5 NAUTICAL MILES FROM DONNA WEST LOCATION - 18 M/S WIND, 4M SEAS

18-JUL-2001

MW: MD: 0.0m TVD: 0.0m CASING: @ CUM COST: KR31,600,850

DOL: 2 DFS: LAST SURVEY: @

24 HR SUMMARY

WOW 5 NAUTICAL-MILES FROM DONNA WEST LOCATION - PERF0RM RIG MAINTENANCE P/TEST LOWER ANNULAR TO 500/7500 PSI AND UPPER ANNULAR TO 500/3500 PSI

PRESENT_OPERATIONS:

0600HRS: WOW 5 NAUTICAL MILES FROM DONNA WEST LOCATION - 17 M/S WIND, 6M SEAS

19-JUL-2001

MW: MD: 0.0m TVD: 0.0m CASING: @ CUM COST: KR34,778,777

DOL: 3 DFS: LAST SURVEY: @

24 HR SUMMARY

WOW 5 NAUTICAL-MILES FROM DONNA WEST LOCATION - PERF0RM RIG MAINTENANCE MODUSPEC INSPECT BOP'S, REPLACE 5 RAM BLOCKS

PRESENT_OPERATIONS:

0600 HRS:WOW 5 NAUTICAL MILES FROM DONNA WEST LOCATION - 21 M/S WIND, 6M SEAS

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

20-JUL-2001

MW: MD: 0.0m TVD: 0.0m CASING: @ CUM COST: KR37,906,404

DOL:4 DFS: LAST SURVEY: @

24 HR SUMMARY

WOW 5 NAUTICAL-MILES FROM DONNA WEST LOCATION - DE-BALLAST RIG TO TOWING DRAFT; COMMENCE RUN IN ON LINE TO DEPLOY 1ST ANCHOR
PERFORM RIG MAINTENANCE; P/TEST STANDPIPE EQ. TO 500/5000 PSI

PRESENT_OPERATIONS:

0600 HRS: RUN ANCHORS AT DONNA WEST - ANCHORS #2, #5, #6, #8, #10 AND #11 SET

21-JUL-2001

MW: 1031 MD: 0.0m TVD: 0.0m CASING: @ CUM COST: KR41,091,654

DOL: 5 DFS: LAST SURVEY: @

24 HR SUMMARY

RUN ANCHORS, BALLAST RIG DOWN TO OPERATIONAL DRAFT OF 21.3M (25M AIRGAP)
CROSS TENSION ANCHORS IN PAIRS TO 150MT FOR 15 MIN - MEANWHILE, MIX SPUD, KILL & DISPLACEMENT MUD; M/U & TIH WITH 17 1/2 BIT + 26 X 36 H/O BHA
FINAL RIG POSITION N65DEG 48MIN 20.82 SEC, UTM 7300302.5 M N
FINAL RIG POSITION E06DEG 44MIN 32.36 SEC, UTM 396765.5 M E (312DEG HEADING)

PRESENT_OPERATIONS:

0600 HRS: DRILL 36" HOLE TO 456M (1496'); DISPLACE HOLE TO 1.2 SG MUD

22-JUL-2001

MW: 1031 MD: 456.0m TVD: 456.0m CASING: 762.0mm@451.0m CUM COST: KR44,374,480

DOL: 6 DFS: 1 LAST SURVEY: @

24 HR SUMMARY

CONT TIH W/ 17 1/2" BIT + 26" X 36" H/O ASSY AND TAG MUD LINE AT 366M (1201')
DRILL 36" HOLE TO 456M (36" CUTTER DEPTH = 454M) & DISPLACE HOLE TO 1.2SG MUD
POOH; RUN 30" CONDUCTOR AND 5" INNER STRING TO 451M (1480FT)
CEMENT CONDUCTOR & WOC

PRESENT_OPERATIONS:

0600 HRS: TIH WITH 26" CLEAN OUT ASSY AND STAB 26" BIT INTO LP HOUSING

23-JUL-2001

MW: 1031 MD: 456.0m TVD: 456.0m CASING: 762.0mm@451.0m CUM COST: KR47,609,035

DOL: 7 DFS: 2 LAST SURVEY: @

24 HR SUMMARY

WOC; POOH W/ 30" LANDING STRING, M/U 26" CLEAN OUT ASSY & TIH; TAG TOC @ 446M
DRILL OUT CEMENT AND SHOE FROM 446 TO 456M (1463-1496FT); POOH & P/U 5" DP.

PRESENT_OPERATIONS:

0600 HRS: DRILL 8 1/2" PILOT HOLE @ 591M (1939')

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

24-JUL-2001

MW: 1031 MD: 1382.0m TVD: 1379.8m CASING: 762.0mm@ 451.0m CUM COST: KR50,515,659

DOL: 8 DFS: 3 LAST SURVEY: 4.11 @ 1362.4m

24 HR SUMMARY

TIH W/ PILOT HOLE ASSY & DRILL 8 1/2" HOLE F/1496-4534' (456-1382M); DISPLACE HOLE TO 1.2 SG MUD; POOH W/ 8 1/2" ASSY - NO PROBLEMS; L/O MWD/CDR TOOLS.

PRESENT_OPERATIONS:

0600 HRS: M/U & RIH W/ 17 1/2" HO ASSY. OPEN HOLE TO 17 1/2" @ 615M (2018')

25-JUL-2001

MW: 1031 MD: 1382.0m TVD: 1379.8m CASING: 762.0mm@451.0m CUM COST: KR53,180,709

DOL: 9 DFS: 4 LAST SURVEY: @

24 HR SUMMARY

M/U 17 1/2" HOLE OPENER ASSY. TIH & OPEN 8 1/2" PILOT F/ 456 TO 1379M (1496-4524'). POOH TO 635M (2083')

PRESENT_OPERATIONS:

0600 HRS: P/U & RUN 13 3/8" CSG TO 82M (269FT)

26-JUL-2001

MW: 1031 MD: 1382.0m TVD: 1379.8m CASING: 762.0mm@451.0m CUM COST: KR55,570,160

DOL: 10 DFS: 5 LAST SURVEY: @

24 HR SUMMARY

POOH W/ 17 1/2" HOLE OPENER ASSY. JET W/ HEAD. R/U & RUN 13 3/8" CSG TO 810M (2658FT); ROV OBSERVED CSG BUCKLED AT W/ HEAD. COMMENCE POOH W/ 13 3/8" CSG TO 270M (886')

PRESENT_OPERATIONS:

0600 HRS: M/U & TIH W/ 17 1/2" WIPER TRIP ASSY TO 40M (131')

27-JUL-2001

MW: 1031 MD: 1382.0m TVD: 1379.8m CASING: 762.0mm@451.0m CUM COST: KR58,134,392

DOL: 11 DFS: 6 LAST SURVEY: @

24 HR SUMMARY

POOH & L/D 13 3/8" CSG; M/U 17 1/2" WIPER TRIP ASSY & TIH; WASH & REAM F/ 535 TO 1382M (1755-4534') - 17 1/2" CUTTER DEPTH @ 1379M (4524'); DISPLACE HOLE TO 1.4SG KCL MUD; POOH F/ 1382M (4534') - NO PROBLEMS

PRESENT_OPERATIONS:

0600 HRS: RUN 13 3/8" CSG @ 455M (148')

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

28-JUL-2001

MW: 0 MD: 1382.0m TVD: 1379.8m CASING: 337.8mm@ 1374.3m CUM COST: KR62,444,976

DOL: 12 DFS: 7 LAST SURVEY: @

24 HR SUMMARY

RUN 13 3/8" CASING AND SET AT 1374M (4508'); CIRC CSG VOLUME AND CEMENT CSG W/ 1.56SG LEAD SLURRY AND 1.92SG TAIL SLURRY; DISPLACE CMT W/ SEAWATER BACK OUT AND RETRIEVE RUNNING TOOL; R/U TO RUN BOP'S

PRESENT_OPERATIONS:

0600 HRS: FUNCTION TEST BOPS BELOW ROTARY TABLE PRIOR TO LATCHING UP TO RISER

29-JUL-2001

MW: 1440 MD: 1382.0m TVD: 1379.8m CASING: 337.8mm@1374.3m CUM COST: KR66,572,826

DOL: 13 DFS: 8 LAST SURVEY: @

24 HR SUMMARY

RUN BOPS ON RISER TO 250M (820'); P/TEST C&K LINES TO 35/414 BAR EVERY 5 JNTS

PRESENT_OPERATIONS:

0600 HRS: WOW TO P/U SLIP JNT - 35 KNOTS WIND, 6M SEAS

30-JUL-2001

MW: 1440 MD: 1382.0m TVD: 1379.8m CASING: 337.8mm@1374.3m CUM COST: KR71,658,035

DOL: 14 DFS: 9 LAST SURVEY: @

24 HR SUMMARY

CONT RUN BOP'S ON RISER. WOW T/ P/U SLIP JNT & LANDING JNT. MOVE RIG. LAND & LATCH BOP'S.

PRESENT_OPERATIONS:

0600 HRS: M/U 8 1/2" BHA

31-JUL-2001

MW: 1440 MD: 1386.0m TVD: 1384.0m CASING: 337.8mm@1374.3m CUM COST: KR74,477,877

DOL: 15 DFS: 10 LAST SURVEY: 4.46 @ 1469.6m

24 HR SUMMARY

TEST 13 3/8" CSG TO 30/200 BAR; TEST C&K LINE TO 30/400 BAR; INSTALL DIVERTER M/U 8 1/2" BHA, P/U 21 JNTS 5" DP & TIH; DRILL CMT F/ 1341-1371M (4400-4498') DISPLACE HOLE TO 1.44SG LT-OBM; DRILL SHOE @ 1374M (4508') & CLEAN RATHOLE TO 1382M (4534'); DRILL 8 1/2" HOLE TO 1386M (4547'); CIRC & COND MUD PERFORM LOT W/ 1.44SG MUD TO 1.84SG EMW

PRESENT_OPERATIONS:

0530 HRS: DRILL 8 1/2" HOLE @ 1512M (4961')

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

01-AUG-2001

MW: 1505 MD: 1698.0m TVD: 1695.0m CASING: 337.8mm@ 1374.3m CUM COST: KR 77,283,408

DOL: 16 DFS: 11 LAST SURVEY: 4.55 @ 1641.8m

24 HR SUMMARY

DRL 8 1/2" HOLE F/ 1386 TO 1698M (4547-5571'); WELL FLOWED AT CONN @ 1698M (5571') - SICP=150PSI. CIRC BTM'S UP USING 1.50SG MUD - ISICP=250PSI

PRESENT_OPERATIONS:

0600 HRS: CIRC BTM'S UP BY DRILLERS METHOD USING 1.52SG MUD

02-AUG-2001

MW: 1575 MD: 1698.0m TVD: 1695.0m CASING: 337.8mm@1374.3m CUM COST: KR 80,007,403

DOL: 17 DFS: 12 LAST SURVEY: @

24 HR SUMMARY

DISPLACE WELL TO 1.52SG MUD (MAX. GAS 8.9%)- SIDP=90PSI, SICP=0PSI; DISPLACE WELL & RISER TO 1.57 SG - F/C STATIC..

PRESENT_OPERATIONS:

0600 HRS: POOH TO CASING SHOE

03-AUG-2001

MW: 1570 MD: 1736.0m TVD: 1733.0m CASING: 337.8mm@1374.3m CUM COST: KR 82,833,698

DOL: 18 DFS: 13 LAST SURVEY: 4.13 @ 1815.4m

24 HR SUMMARY

POOH F/ 1698 TO 1326M (5571 TO 4350'); PERFORM RIG MAINTENANCE/REPAIRS TIH F/ 1326 TO 1611M (4350-5285'); WASH AND REAM TO 1698M (5571'); CIRC BTM'S UP; DRILL 8 1/2" HOLE F/ 1698 TO 1736M (5571-5696')

PRESENT_OPERATIONS:

0600 HRS: DRILL 8 1/2" HOLE @ 1878M (6161')

04-AUG-2001

MW: 1576 MD: 2561.0m TVD: 2556.5m CASING: 337.8mm@1374.3m CUM COST: KR 85,769,736

DOL: 19 DFS: 14 LAST SURVEY: 1.6 @ 2533.5m

24 HR SUMMARY

DRILL 8 1/2" HOLE F/ 1736 TO 2304M (5696'-7559'); OBSERVE 5 BBL PIT GAIN - F/C - STATIC; CIRC BTM'S UP; DRILL 8 1/2" HOLE F/ 2304 TO 2561M (7559-8402')

PRESENT_OPERATIONS:

0500 HRS: DRILL 8 1/2" HOLE

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

05-AUG-2001

MW: 1575 MD: 3101.5m TVD: 3096.9m CASING: 337.8mm@ 1374.3m CUM COST: KR88,629,225

DOL: 20 DFS: 15 LAST SURVEY: 1.75 @ 3049.8m

24 HR SUMMARY

DRILL 8 1/2" HOLE F/ 2561 TO 3101.5M (8402-10176'); CIRC BTM'S UP
POOH TO 2934M (9626')

PRESENT_OPERATIONS:

0600 HRS: M/U CORE BIT, P/U CORE BBLS

06-AUG-2001

MW: 1575 MD: 3130.0m TVD: 3125.5m CASING: 337.8mm@1374.3m CUM COST: KR91,615,779

DOL: 21 DFS: 16 LAST SURVEY: @

24 HR SUMMARY

POOH W/ 8 1/2 BHA; M/U & TIH W/ 249' OF CORE BARRELS; CORE F/ 3101.5-3130M
(10176-10269'.)

PRESENT_OPERATIONS:

0600 HRS: CIRC & BOOST RISER @ 3070M (10072')

07-AUG-2001

MW: 1575 MD: 3171.5m TVD: 3167.0m CASING: 337.8mm@1374.3m CUM COST: KR94,730,083

DOL: 22 DFS: 17 LAST SURVEY: @

24 HR SUMMARY

CUT 8 1/2" CORE F/ 3130 TO 3171.5M (10269-10405'); CORE JAMMED AT 3171.5M
CIRC. POOH & L/D CORE (67.7M=222' = 96.7% CORE RECOVERED). M/U 8 1/2" BHA
P/U 5" DP

PRESENT_OPERATIONS:

0530 HRS: TIH W/ 8 1/2" BHA @ 2700M (8858')

08-AUG-2001

MW: 1600 MD: 3437.0m TVD: 3432.0m CASING: 337.8mm@1374.3m CUM COST: KR98,271,192

DOL: 23 DFS: 18 LAST SURVEY: 1.76 @ 3451.1m

24 HR SUMMARY

TIH W/ 8 1/2" BHA; P/U TOTAL OF 51 JNTS OF 5" DP; TIH TO 3043M (9984')
WASH AND REAM F/ 3043 TO 3171.5M (9984-10405') - CIRC BTM'S UP - LARGE AMOUNT
OF CUTTINGS/CAVINGS; INC. MW F/ 1.57 TO 1.60SG; DRILL 8 1/2" HOLE F/ 3171.5
TO 3437M (10405-11276')

PRESENT_OPERATIONS:

0600 HRS: DRILL 8 1/2" HOLE @ 3585M (11762')

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

09-AUG-2001

MW: 1600 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@ 1374.3m CUM COST: KR102,263,858

DOL: 24 DFS: 19 LAST SURVEY: 1.9 @ 3641.9m

24 HR SUMMARY

DRILL 8 1/2" HOLE F/ 3437 TO WELL TD @ 3667M (11276-12031')
CIRC & COND MUD; POOH - NO HOLE PROBLEMS

PRESENT_OPERATIONS:

0530 HRS: RECORD REPEAT SECTION W/ SCHLUMB PEX LOGGING STRING @3140M (10301')

10-AUG-2001

MW: 1600 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR105,118,192

DOL: 25 DFS: 20 LAST SURVEY: @

24 HR SUMMARY

POOH W/ 8 1/2" BHA & L/D MWD/CDR TOOLS + BIT; R/U WIRELINE
LOG RUN #1 AIT-PEX-HNGS: LOG F/ 3663-1374M (12018-4508') - NO HOLE PROBLEMS
LOG RUN #2 DSI-GR-AMS-OBDT: LOG F/ 3664-1374M (12021-4508') - NO HOLE PROBLEM
LOG RUN #3 PEX: RE-LOG F/ 2000-1590M (6562-5217') DUE TO ANOMALOUS DENSITY DATA F/ 1828-1624M (5997-5328')

PRESENT_OPERATIONS:

0530 HRS: RIH W/ REED 8-LEVEL DELTA (VSP) TOOL ON E- LINE

11-AUG-2001

MW: MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR107,835,275

DOL: 26 DFS: 21 LAST SURVEY: @

24 HR SUMMARY

COMPLETE LOG RUN #3 (PEX) & POOH; RIH W/ READ 8-LEVEL DELTA VSP TO 3450M (11319') AND LOG UP; TOOL STUCK @ 3403M (11165'); WORK STRING W/ MAX LINE PUL POOH & R/D LOG EQ; M/U & TIH W/ 8 1/2" WIPER TRIP BHA TO 1343M (4406') - CIRC & COND MUD; CONT TIH W/ BHA TO 1900M (6234')

PRESENT_OPERATIONS:

0530 HRS: CIRC & COND MUD # 3660M (12008')

12-AUG-2001

MW: 1600 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR110,540,293

DOL: 27 DFS: 22 LAST SURVEY: @

24 HR SUMMARY

TIH W/ 8 1/2" BHA F/ 1900 TO 3600M(6234-11811');WASH & REAM TO 3667M (12031')
CIRC & COND MUD. POOH, R/U SCHLUM W/LINE & RIH W/ MDT TO 1655M (5430')
TAKE 10 PRE-TEST F/ 1655-1732.5M (5430-5684'); ATTEMPTS TO TAKE FLUID SAMPLES AT 1673M (5489') AND 1673.5M (5490') FAILED

PRESENT_OPERATIONS:

0530 HRS: TAKE MDT SAMPLES @ 3091.2M (10142')

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

13-AUG-2001
MW: 1600 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@ 1374.3m CUM COST: KR113,342,581
DOL: 28 DFS: 23 LAST SURVEY: @
24 HR SUMMARY
TAKE 5 MDT PRE-TESTS F/ 3091.2-3107.2M (10142-10194'); MAX PRES IN LYSING 1.423SG; MAX PRES IN BRYGGE 1.535SG; TOOK 3X 450 CC WATER SAMPLE IN LYSING F/ 3091.2M (10142'); POOH - NO HOLE PROBLEMS; RIH W/ READ 8-LEVEL DELTA VSP TO 3523M; RECORD VSP SURVEY F/ 3523-2898M (11558-9508') TAKING SHOTS EVERY 10M (33FT); RECORD VSP WALKAWAY SURVEY W/ TOP GEOPHONE @ 2898M (9508') RECORD VSP SURVEY F/ 2898-2240M (9508-7349') TAKING SHOTS EVERY 10M (33FT)

PRESENT_OPERATIONS:
0530 HRS: RIH W/ SIDEWALL CORE GUNS

14-AUG-2001
MW: 1600 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR118,218,073
DOL: 29 DFS: 24 LAST SURVEY: @
24 HR SUMMARY
RECORD VSP SURVEY F/ 2240-790M (7349-2592') TAKING SHOTS EVERY 10M (33FT) NO HOLE PROBLEMS. M/U & RIH HOLE SIDEWALL COREGUNS. ATTEMPT 53 CORES - 29 RECOVERED. P/U 3 1/2" PH-6 TBG F/ DECK & TIH TO 1333M (4373')

PRESENT_OPERATIONS:
0530 HRS: SET CMT PLUG #1 F/ 3190 TO 3025M (10466-9925')

15-AUG-2001
MW: 1610 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR122,713,378
DOL: 30 DFS: 25 LAST SURVEY: @
24 HR SUMMARY
TIH W/ 3 1/2" STINGER F/ 1333 TO 3200M (4373-10499'); SET CMT PLUG #1 F/ 3190-3025M (10466-9925'); POOH TO 1791M (5876'); DROP DART & CIRC BTM'S UP SET CMT PLUG #2 F/ 1791-1491M (5876-4892'); POOH TO 1491M (4892'); DROP DART & CIRC BTM'S UP; SET CMT PLUG #3 F/ 1491-1274M (4892-4180'); POOH TO 1095M (3593'); DROP DART & CIRC BTM'S UP; POOH F/ 1095M TO 444M (1457') & L/D 5" DP POOH & L/D 444M OF 3 1/2" TBG; TIH W/ 5" MULESHOE ON 5" DP TO 374M (1227')

PRESENT_OPERATIONS:
0530 HRS: POOH W/ 5" DP TO 411M (1348')

16-AUG-2001
MW: 1001 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR127,732,223
DOL: 31 DFS: 26 LAST SURVEY: @
24 HR SUMMARY
TIH W/ 5" DP; TAG TOC WITH 5MT @ 1281M (4203'); POOH TO 661M (2169'); P/TEST CMT PLUG #3 TO 110 BAR; SET CMT PLUG #4 F/ 661-411M (2169-1348'); CIRC BTM'S UP; DISPLACE RISER TO SEAWATER. POOH & L/D 5" DP; RETRIEVE WEAR BUSHING L/D 364M OF 5" DP F/ DERRICK; PULL DIVERTER, UNLATCH BOP'S

PRESENT_OPERATIONS:
0530 HRS: POOH & L/O RISER JNT 10 OF 23

CHEVRON

OPERATIONS SUMMARY REPORT (Metric)

FROM: 16-JUL-2001 TO: 19-AUG-2001

OPERATOR: NORSK CHEVRON AS OP/NON OP: OP
PROJECT ID: UB5908 - 0 COUNTRY: NORWAY
FIELD: PL259 LEASE: PL259
WELL NAME: DONNA WEST PROSPECT AFE No: KWENO-650631-001
RIG: BYFORD DOLPHIN CATEGORY: EXP RIG TYPE: SEMI-SUBMERSIBLE

17-AUG-2001

MW: 1001 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@ 1374.3m CUM COST: KR131,486,754

DOL: 32 DFS: 27 LAST SURVEY: @

24 HR SUMMARY

PULL RISER & BOPS. M/U & TIH W/ W/FORD MOST TOOL. CUT @ 371M-ATTEMPT TO PULL WELLHEAD - PULL TOOL FREE W/ 45MT O/PULL; KNIFE BLADES BENT BUT WORN TO TOP INDICATING FULL CUT; POOH TO C/O BLADES & SPACE OUT TO CUT @ 370.5M (1216')

PRESENT_OPERATIONS:

0530 HRS: POOH W/ WELLHEAD AND MOST TOOL

18-AUG-2001

MW: 1001 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR135,172,597

DOL: 33 DFS: 28 LAST SURVEY: @

24 HR SUMMARY

TIH; CUT CSG @ 370.5M (1216') & PULL WELLHEAD, L/O SAME WHILE PULLING ANCHORS L/D DP FROM DERRICK WHILE PULLING ANCHORS.

PRESENT_OPERATIONS:

0600 HRS: LAST ANCHOR BOLSTERED AND RIG HANDED OVER TO STATOIL 0112HRS

19-AUG-2001

MW: 1001 MD: 3667.0m TVD: 3662.4m CASING: 337.8mm@1374.3m CUM COST: KR136,431,507

DOL: 34 DFS: 29 LAST SURVEY: @

1.5 HR SUMMARY

COMPLETE L/O OF TUBULARS F/ DERRICK, CONCLUDE ANCHOR HANDLING WORK & HAND WELL OVER TO STATOIL @ 0112HRS

PRESENT_OPERATIONS:

FINAL REPORT - RIG OFF CONTRACT

Figure 1.1 Well Summary

Well 6506/3-1

Figure 1.1 Well Summary

Location: Norway
Well Type/Status: Exploration
Production Licence : PL259
Licencees : Chevron (40%), Agip (30%), Enterprise (30%)
Rig Name: Byford Dolphin
Rig on Contract : July 17th, 2001 at 2300 hrs
Rig off Contract : August 19th, 2001 at 0112 hrs

Surface location: 65° 48' 20.82" 7300302.2 mN
06° 44' 32.36" 396765.5 mE
Target Tolerance: 200m Radius @ Lysing
Target Formation(s): Brygge Sst. / Lysing Sst.
Days on Location: 33.1 days
AFE Days: 33.6 days
Estimated Well Cost: 136.4 mill NOK
AFE Cost: 134.0 mill NOK

Water depth: 341m MSL
Rotary-MSL: 25m
Rotary - Seabed: 366m
Actual TD: 3662 mTVD / 3667 mMD
Planned TD : 3625mTVD / 3625 mMD
Maximum Hole Angle: 4.55°
Rig Heading: 313.6° (True)

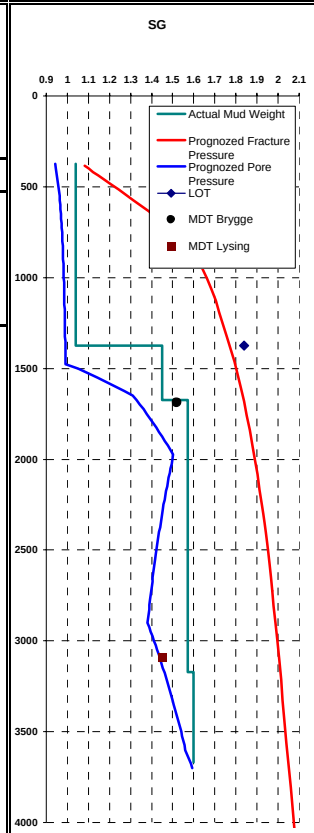
Chevron
Norsk Chevron AS

Depth MD RT	Formation Tops	Lithology	Wellbore Schematic	Relevant drilling problems and NPT	Mud System	FIT DATA (SG)	Directional Surveys	Logging & Coring
(m)	(m)		Drilling / After Plug and Abandonment					
0	0-25m Airgap							
25	MSL							
366	Mudline			WOW. Total section NPT = 74.5 hrs	Riserless. SW - Spud Mud	None	Ander Drift	None
502	Naust							
701	Pliocene Wedge	TERTIARY		Buckled 13 3/8" casing and and layed out casing on the seabed. Recovered same, performed a wipertrip and re-ran casing. WOW to run BOP. Total section NPT= 61.5 hrs	Riserless SW - Spud Mud pills. Displaced to 1.40 SG KCl mud prior to rng. Csg.	None	8 1/2" pilot hole: MWD 17 1/2" HO : Ander Drift	CDR No Wireline Logging
1552	Kai							
1604	Brygge Fm.			Took a 4 m³ saltwater kick at 1698 mMD (Brygge Formation) during a connection. Increased MW to 1.57 SG and killed well. (MDT pressure = 1.52 SG formation pressure). Temporarily stuck with VSP tool. Total section NPT = 80.5 hrs	Oil Based (Low Toxic) (VERSAVERT) Min.MW 1.44 SG Max.MW 1.60 SG Average prop.: PV = 41 cP YP=11Pa 10sGel=7Pa 10mGel=10Pa O/W = 72/28 Vol. Used 238 m³ Cuttings Generated: 274.2 MT	1,84 SG with OBM (LOT)	MWD	CDR iSONIC to 3102 m Wireline Logging: AIT-PEX-HNGS DSI-GR-AMS-OBDT MDT VSP SWC Cored Lysing 3101.5 - 3171.5 mMD (96.7% recovery) MDT Fluid Sample from Lysing.
1654	Flooding Plain							
1741	Tare							
1797	Top Cretaceous	Cretaceous		P& A Unable to recover WH after first cut, re-cut and revovered WH and guidebase Total section NPT = 10.5 hrs				
2420	Nise							
3088	Lysing							
3138	Lange							
3667	TD							

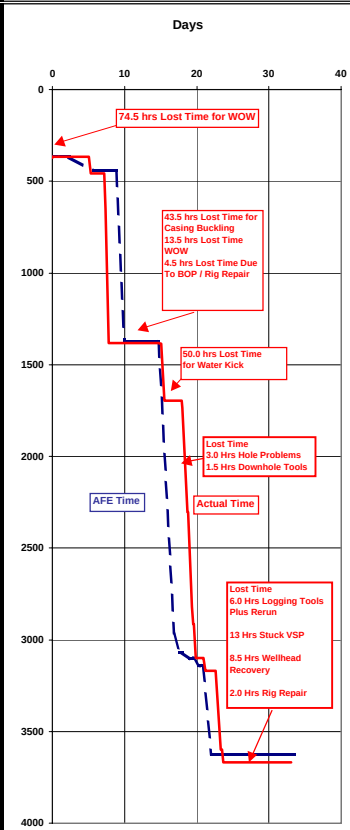
Drilling: Retrievable Guide Base; 18 3/4" DrilQuip SS15; Seabed; 30" & 13 3/8" TOC Seabed; ROV survey of seabed.; Cut at 370,5 mMD; 30"x 1"&1.5" WT, X-52; 30" @ 451mMD; Cement plug # 3, 661 - 411mMD. TOC is estimated, pressure tested to 125 bar w. seawater.; 20" x 10 m ext. x 13-3/8" XO Swage; 13-3/8" 72# L80 Modified BTC; 17 1/2" Hole; 1.60 SG OBM; 13-3/8" @1374mMD; Cement plug # 2, 1791-1281 mMD, load tested to 5 mT and pressure tested to 110 bar.; 8 1/2" Hole; 1.60 SG OBM; Cored Lysing; Cement plug # 1, 3190 - 3025 mMD. TOC is estimated.

Total Depth : 3667mMD / 3664 mTVD

Pore & Frac.Pressure and Mud Density



Actulal and AFE Time vs Depth (Days)



Bits

#	Bit size	Make & Type	D.out (mMD)	Drld. (m)
1	17 1/2" Bit	Smith DGJ	456	90
2	26 x 36" HO	IPE	454	88
3	26" Bit	Hugh GTXCMG1	456	0
4	8 1/2" Bit (PH)	Hugh MXC-1	1382	926
5	17 1/2" HO	IPE	1382	926
6	8 1/2" PDC Bit	Hugh ABD536PH	3102	1720
7	8 1/2" Core Bit	DBS FC274	3172	70
8	8 1/2" PDC Bit	Hugh BD445HA	3667	495

Services

Name	Service	Name	Service
AnaDrill	MWD/CDR/iSonic	MI Anchor	Mud
Cambriam	Site Geologist	ModuSpec	BOP/Rig Inspection
Corepro	Core preservation	NorCargo	Transport
DBS	Coring	Oceaneering	ROV
DNV	Risk & Environmnetal Analysis	Odfjell	Casing Running
Dolphin	Drilling Contractor	Pertotech	PVT analysis
DrilQuip	Wellhead and Conductor	Read	VSP
Fugro GeoServices	Rig positioning	Helgelandsbase	Shore base
GeoServices	Mudlogging	SAR Helicopter	SAR
Halliburton	Cementing & DST Testing	Schlumberger	Wirline logging
Helicopter Services	Helicopters (Kristiansund)	Swaco	Cuttings collec.& disp.
Mediteam	Heath Service	Weatherford / IPE	Fishing eq., wellhead cutting, hole openers

People

Name	Function
Ian King	Drilling project Manager
Terje Lokke-Sorensen	Drilling Engineer
Thomas L.Smith	HSE Representative
Johan Myrdal / Herold Zahl	Logistic Co-Ordinator
Mitch Elkins / Roger Moore	Senior Offshore Drilling Rep.
S. deJonge / M.Hollinshead / S.Bjorheim	Offshore Drilling Eng. & Rep.
Torleiv Agdestein	Lead Project Geologist
Mike Donovan / Ed Linaker	Operational & Wellsite Geologist
Debbie South	Project Geologist
Svein Johansen	Project Geophycisist
Dag Andreassen	Marine Advisor
Steve Pattie / Myke Wynne	Well Testing and MDT
Ruth-Liv Chaplin	Admin. Assistant

Boats

Boat name	Function
Sartor	Standby
Higland Star	Supply Vessel
Skandi Stolmen	Supply Vessel (Statoil)
Normand Progress	AHV (arrival)
Far Fosna	AHV (arrival)
Normand Jarl	AHV (arrival)
Nothern Corrona	AHV (departure)
Havila Crown	AHV (departure)
Normand Borg	AHV (departure)

Experience

1 Dedicated supply for shipping of OBM cuttings req.
2 No shallow gas observed
3 No boulders observed (tight spots in 17 1/2" hole)
4 No LTA

Summary of Operations

Moved from previous location, WOW, positioned and anchored rig.
Drilled 36" hole (no boulders)
Ran & cemented 30" csg with PGB
Drilled 8-1/2" Pilot Hole (no shallow gas)
Opened Pilot to 17-1/2"
Ran 13-3/8" Casing , buckled above WH, re-ran and cemented
Ran riser and BOP's
Drilled 8-1/2" hole to Lysing coring point (kick in Brygge)
Cored Lysing, cont. drilling to TD
Wireline logged (stuck with VSP)
Plugged back hole (cement plugs)
Pulled BOP's, cut and retrieved WH & PGB, pulled anchors

This section contains:

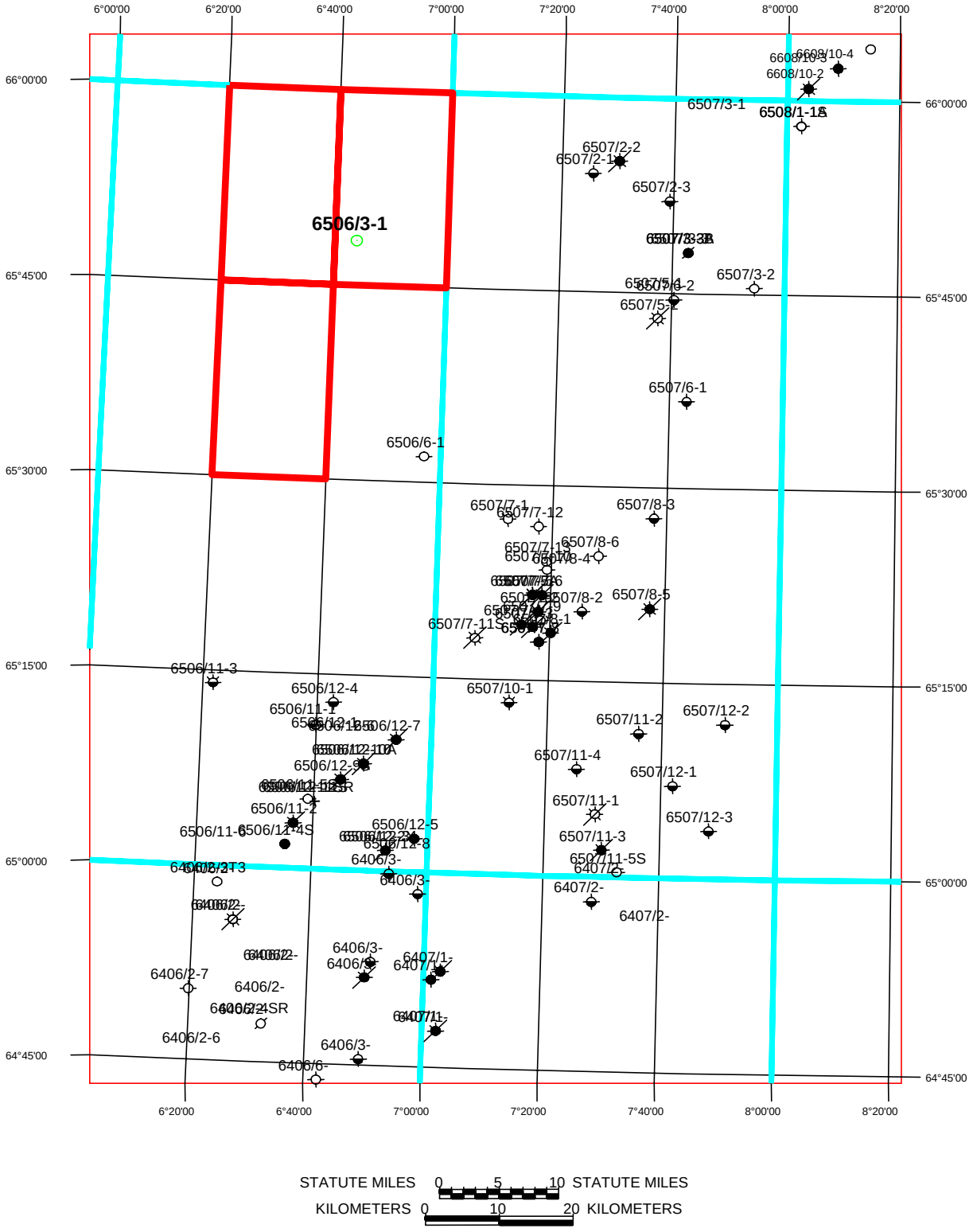
2.1 Licensees

The Production Licence 259 was awarded May 12, 2000 to:

NORSK CHEVRON A/S	40% (Operator)
ENTERPRISE OIL NORWEGIAN A/S	30%
NORSK AGIP A/S	30%

and consists of blocks 6506/2, 6506/3 and 6506/5 covering an area of 1276.144 km^2.

2.2 Well Location Plot



2.3 Well Objectives vs. Results

Objectives
The first objective for this well was to demonstrate economic potential of hydrocarbon reservoirs in Structure A in Brygge (Paleogene) and Lysing (Cretaceous) Formations named the Harran and Grong prospects respectively. This was to be done by:

- identifying and evaluating the reservoir sands and by
- identifying fluid content in the identified reservoir sands.

The second objective was to gather data for understanding the risks and license strategy.

Results
Brygge vs. objectives:
The economic potential of the Brygge unit in structure A (Harran Prospect) was not demonstrated. The well was not able to identify and hence not able to evaluate Brygge reservoir sands. However, we were able to crudely identify the fluid content in the Brygge unit, due to a water kick. MDT sampling of the Brygge unit was not possible to perform due to the physical properties of the encountered diatomite lithofacies.

Brygge details: The 131.5m thick Brygge diatomite unit has an average porosity of 38% (max.60%) and very low permeability. Sand reservoirs were not encountered. SEM photographs and XRD results show diatomite to be the dominant lithofacies in the Brygge interval with some component of volcanic glass. N/G is 95%, Sw = 1, formation pressure = 1.52 SG and fluid gradient 1.04 g/cc. The Opal A to Opal CT transformation has only partly taken place at the base of the unit. The unit was water filled and significantly over-pressured. Hydrocarbon migration through the formation can only be inferred from the gas log data, which indicate a significant amount of methane present when the formation back-flowed.

Lysing vs. objectives:
The economic potential of the Lysing in structure A (Grong Prospect) was not demonstrated. The well was able to identify the Lysing reservoir sands (22m gross sand interval) by logging, coring and SWC. The fluid type after recovering MDT samples (3 bottles of fluids) were identified to be water under-saturated with gas and containing traces of phenols and organic acids.

Lysing details: Lysing Fm was 49.5m thick with 22m gross sand interval at the top, out of which some 3m of net sand was encountered. N/G = 14% and average effective porosity 17% (max 22%). Permeability in the form of best mobility is 113.8 md/cp (MDT). Sw was 1 (No free gas) and the formation pressure was 1.422 SG. Rw=0.192 at 103 degC. No free gas was found in any of the samples. Methane and longer chain

hydrocarbons were present. The samples were under-saturated with gas, rich in organic acids and traces of phenols were present. The Lysing sand package is present, but has thinned and partly shaled out at the crest of the A structure. The 3m sand at the very top top is of good quality but is water filled. The solution gas, the organic acid content and the phenol concentration indicate that the sampled water has been in contact with a hydrocarbon accumulation. The water is strongly under-saturated with gas and is not in close contact with a hydrocarbon accumulation at present.

2.4 Operational Safety Results vs. Objectives

The objectives for the well were:

1. Establish a functional Safety Management System in compliance with regulatory requirements.

2. Avoid accidents and loss during project execution. Take necessary preventive measures to limit the consequences if accidents should occur and thereby provide safety for personnel, external environment and property.

3. Provide operational solutions and emergency preparedness measures that, as a total for the project and rig, provide a good health and working environment, reduce risk and minimise pollution.

4. Operate with the minimum of discharges and emissions, both with respect to quantities, toxicity, and other environmental impacts.

5. Establish a functional emergency preparedness system in Compliance with Chevron and Regulatory requirements.

And the following sub goals for the PL259 project were established:

- Development of an HS&E awareness throughout the total organisation that provides necessary attention to HS&E in planning, procurement, drilling and reporting tasks being performed. This is obtained by active management and active involvement of participating HS&E organisation's.
- Continue to utilise waste segregation on the Byford Dolphin.
- Health and environmental friendly chemicals to be preferred.
- Reduce exposure of personnel to hazardous situations and accidents by focusing on injuries and ill health which cause absence from work; special attention will be paid to lifting operations.

The lessons learned reviews following the project did indeed verify that the PL 259 HSE objectives established were met, both regarding the personnel and environmental aspects.

From the lessons learned reviews there were three particular aspects which were seen to contribute to the successful outcome on the PL 259 project;

- A full openness in all regulatory matters between Norsk Chevron and the Norwegian Authorities.
- Use of well known advisors and contractors (i.e. RC Consultants, DNV, MediTeam, Aktiv Beredskap, Vest Drill and NorSea Logistics services) in the Norwegian Petroleum industry for local guidance through the various Authority's consent processes.
- Extended co-operation with Chevron Europe HSE expertise.

A total of 43 RUHs (undesired event reports; equivalent to a combination of Stop cards-Incident reports) were registered. There were three incidents reported to the Authorities;

- Casing buckling incident
- Well influx incident
- Falling objects (nut and bolt from derrick) incident

The Authorities commented upon the openness shown when reporting incidents and the time requirement of two hrs for serious incident to be reported to the NPD was not met although a verbal notification was made official. The timing until any serious incident is registered with the NPD is an area which needs improving for the next Norsk Chevron operation in Norway.

The onboard HSE incident reporting was satisfactory. A practice that was utilised for HSE follow-up, namely a weekly rig-shore telephone meeting was found to be worth while and is recommended for future drilling operations. In addition the use of regular compliance meetings (for follow-up of outstanding regulatory deviations) was found most useful, both prior to and during the drilling campaign.

Regarding discharges from the drilling operations, water based drilling fluids were used at the top sections, whilst oil based drilling fluids were used for the lower section. With exception of the waterbased displacement fluids, no chemicals were discharged to sea at the lower section. Cuttings from the oil based drilling section were brought onboard the Byford Dolphin, collected in enclosed containers and shipped ashore for disposal.

A separate assessment of the development of the environmental risk was not conducted for this project (this is the first PL 259 well). The Environmental risk assessment concluded that this isolated exploration drilling operation was a relatively low environmental risk (both for the coastline zone and the sea bird populations) and below the ALARP (As Low As Reasonably Practicable) region found in Norsk Chevron's accepted criteria. In the area specific environmental risk assessment, the environmental effects are categorised as minimum, mainly due to the fact that the majority of the drilling waste which is discharged consists of cuttings and inorganic waste from the drilling chemicals. The effects of this will be

temporary alterations in the local upper settlement of fauna, plus some small temporary alterations to the local sediment composition. It is considered that the actual effects regarding plankton and fish at an early stadium, is negligible due to the small discharge volume.

2.5 Well Progress Curve

See Figure 1.1. Well Summary

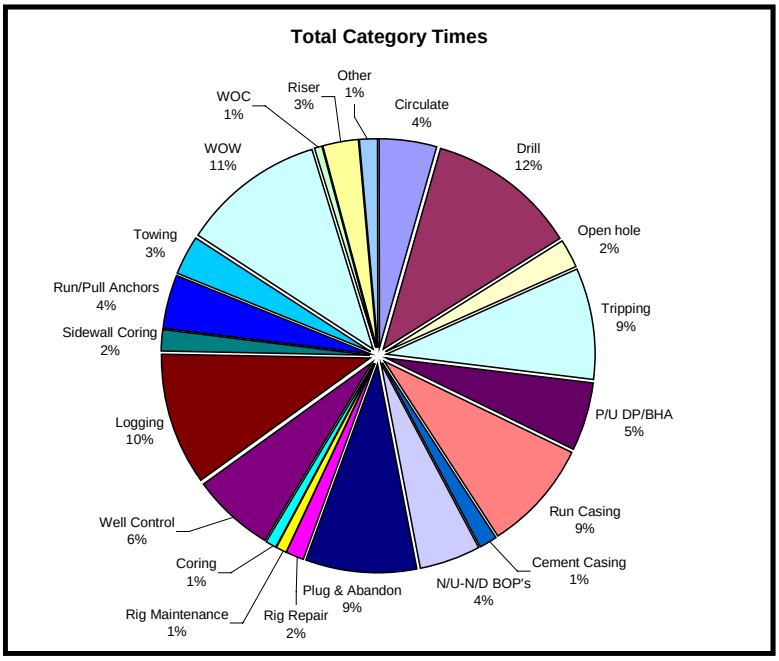
2.6 Well Status after Abandonment

See Figure 1.1. Well Summary

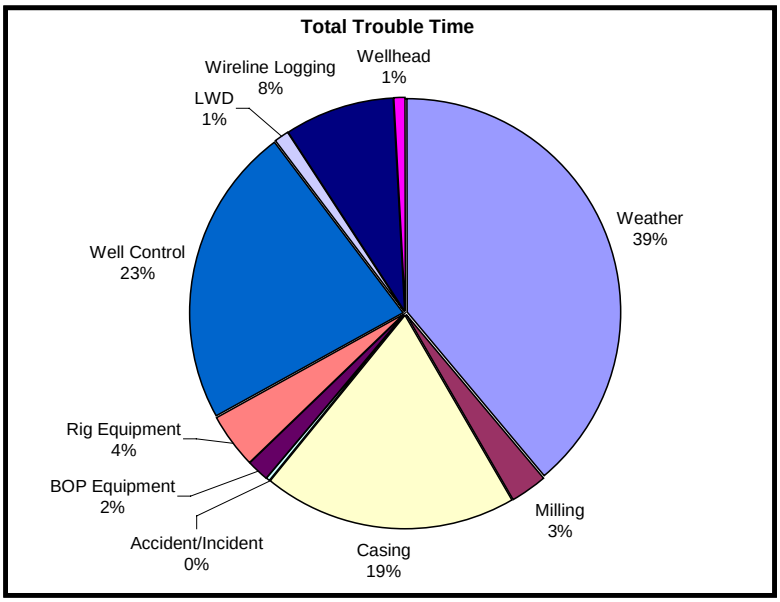
2.7 Time Distribution Summary

The overall rig time distribution and trouble time (non productive time) are as follows:

All Categories		
Code	Category Description	Total time (hrs)
1	Circulate	35.0
2	Drill	94.0
3	Open hole	16.0
4	Reaming	1.5
5	Tripping	68.0
6	Surveying	0.5
7	P/U DP/BHA	42.5
8	Run Casing	69.5
9	Cement Casing	11.5
13	N/U-N/D BOP's	35.5
14	Test BOP's	2.0
15	Drill float eq.	3.5
16	Test Casing	1.5
17	LOT	1.5
19	Plug & Abandon	68.5
20	Rig Repair	13.0
21	Rig Maintenance	5.0
22	Coring	7.5
23	Well Control	51.5
25	Logging	81.0
26	Sidewall Coring	12.0
40	Run/Pull Anchors	34.5
41	Towing	23.5
42	WOW	88.0
43	WOC	5.0
53	Riser	22.0
62	Safety Meeting	0.5
	Total (hrs)	**794.5**
	Total (days)	**33.1**



Trouble Time		
Code	Category Description	Total time (hrs)
102	Weather	88.0
104	Milling	6.5
107	Casing Problems	43.5
108	Accident/Incident	0.5
201	BOP Equipment	4.0
202	Rig Equipment	9.5
406	Well Control	51.5
501	LWD	3.0
503	Wireline Logging	18.5
504	Wellhead	2.0
	Total (hrs)	**227**
	Total (days)	**9.46**



2.8 Cost Summary

The AFE (Appropriation For Expenditure) was 134.3 million NOK, which was based on:

- Dry hole design.
- Trouble free time of 29.2 days, plus a contingency of 15% (4.4 days).
- Cost contingency of +15%. on non-time related costs.
- Exchange rates of 9.00 NOK/USD and 13.5 NOK/GBP.
- Total depth of 3600 mMSL.

The latest estimation (February 7, 2002) of well costs (captured in DisWin) is 133 million NOK. The AFE budget was 134 million NOK.

See attachment 2.10 for detailed comparison of estimated actual costs vs. estimated cost per line item in the AFE.

The books have not been closed yet and the final well reconciliation and final audit will be produced later this year.

Cost Comparison
Estimated Actual vs AFE

NORSK CHEVRON AS

Drilling Cost Estimate

General:

Author :	**Terje Lokke-Sorensen**
Checked by:	**Ian King**
Approved by:	**Chris Riccobono**
Date of Estimate :	**31.5.2001**
Well Name :	**6506/3-1**
Well Type:	**Vertical Exploration Well**
Total Depth:	**3600 m**
Revision Number:	**A**
Estimate Classification :	**0**
Exhange rate (NOK/USD):	**9.00**
Exhange rate (NOK/GBP):	**13.50**
Contingency :	**15%**

Summary:

Intangible Costs :	**114,832,143**	**NOK**
Tangible Costs :	**1,689,667**	**NOK**
Trouble Free Cost :	**116,521,809**	**NOK**
Contingency Cost :	**17,478,191**	**NOK**
TOTAL WELL COST	**134,000,000**	**NOK**
Daily Operating Cost:	**2,150,893**	**NOK**
Total Trouble Free Time:	**29.2**	**days**
Contingency time :	**4.4**	**days**
Total time incl. contingency:	**33.6**	**days**

Estimated Actual Drilling Cost

Summary:

Intangible Costs :	**131,199,556**
Tangible Costs :	**1,747,951**
TOTAL WELL COST	**132,947,507**

Line Item	Description	Days	Daily Cost (NOK)	Fixed Costs (NOK)	Total Costs (NOK)	Actual Days	DisWin Daily Cost (NOK)	DisWin Fixed Costs (NOK)	DisWin Total Costs (NOK)	DisWin Cost - AFE Cost (NOK)
1. Contract Drilling	Rig Day Rate	29.2	1,436,586		41,956,694	33.1	1,436,586		47,526,942	5,570,248
	Additional allowance for operating out of Sandnessjoen	29.2	10,000		292,058	33.1	10,000		331,000	38,942
	Dolphin - crew charges for handling OBM					18.0	2,538		45,684	45,684
	Misc. re-imbursement (equip. and personnel)			500,000	500,000				0	-500,000
	Safety incentive			200,000	200,000				0	-200,000
	Helicopter Underwater Evacuation courses			500,000	500,000				0	-500,000
	Contingency				6,517,248					-6,517,248
	Total (incl. contingency)				**49,966,000**				47,903,626	**-2,062,374**
4. Supervision	Rig Supervision (2 persons)	29.2	22,050		643,989	39.0	26,000		982,000	338,011
	Drilling Engineer (1 person on the rig)	29.2	12,600		367,994	18.0	12,000		216,000	-151,994
	Rig Site Geologist (2 persons)	29.2	15,903		464,460	20.0	6,750		135,000	-329,460
	FE Specialist/Geologist (1 person)	14	14,940		209,160				0	-209,160
	Marine Representative	14	10,000	20,000	160,000				0	-160,000
	IT - support					4	8,000		32,000	32,000
	Contingency				276,397					-276,397
	Total (incl. contingency)				**2,122,000**				1,365,000	**-757,000**
6. Fuel, Water & Power	Fuel (rig)	29.2	45,181		1,319,541		2267/m^3		1,707,051	387,510
	Water						13/m^3		59,150	59,150
	Contingency				197,459					-197,459
	Total (incl. contingency)				**1,517,000**				1,766,201	**249,201**
9. Drilling Fluids	Mud engineering	29.2	53,255	121,910	1,677,253				1,623,935	-53,318
	Cuttings collection and disposal	29.2	37,400	938,500	2,030,798				921,369	-1,109,429
	Drilling fluids (36"hole section)			78,510	78,510				65,351	-13,159
	Drilling fluids (17 1/2" hole section)			424,830	424,830				985,062	560,232
	Drilling fluids (8-1/2" hole section)			1,592,424	1,592,424				1,991,598	399,174
	Contingency				870,184					-870,184
	Total (incl. contingency)				**6,674,000**				5,587,315	**-1,086,685**
10. Well Supplies	Miscellaneous	29.2	10,000	32,826	324,884			996	996	-323,888
	Contingency				48,866					-48,866
	Total (incl. contingency)				**373,750**				996	**-372,754**
11. Transportation	Helicopter	29.2	45,000		1,314,263			1,646,432	1,646,432	332,169
	Standby vessel	29.2	64,500		1,883,776	33.5	62,500		2,091,667	207,891
	Supply vessel	29.2	50,000		1,460,292	28.0	50,000		1,400,000	-60,292
	Ad-hoc supply vessel	18.0	200,000		3,600,000	27.5	243,000	-1,000,000	5,682,500	2,082,500
	Transport of casing (UK-N-UK)			202,500	202,500			120,000	120,000	-82,500
	Survival suit rental	29.2	1,000		29,206				0	-29,206
	Moving materials from Stavanger to base			1,000,000	1,000,000			275,000	275,000	-725,000
	Contingency				1,423,963					-1,423,963
	Total (incl. contingency)				**10,914,000**				11,215,599	**301,599**
12. Directional Drilling	Anderdrift	14	6,350	10,150	99,050				0	-99,050
	Single shot kit					44	1,400		61,600	61,600
	Contingency				14,950					-14,950

Line Item	Description	Days	Daily Cost (NOK)	Fixed Costs (NOK)	Total Costs (NOK)	Actual Days	DisWin Daily Cost (NOK)	DisWin Fixed Costs (NOK)	DisWin Total Costs (NOK)	DisWin Cost - AFE Cost (NOK)
	Total (incl. contingency)				**114,000**				61,600	**-52,400**
13. Drill String Rental & Service	Bits			1,500,000	1,500,000			640,800	640,800	-859,200
	Jars	29.2	1000	20,920	50,126	45	2100	33,600	128,100	77,974
	36" Hole Opener			200,000	200,000	49	1217	170,500	230,120	30,120
	Anderdrift					26	6350	10,150	175,250	175,250
	Odfjell pony DC rental (x4)					38.5	520		20,020	20,020
	Contingency				262,874					-262,874
	Total (incl. contingency)				**2,013,000**				1,194,290	**-818,710**
14. Other Rentals & Service	Base , Helgelandsbase	29.2	30,951	90,000	993,962	35	187,088		6,548,080	5,554,118
	Container and basket rental					34	30,000		1,020,000	1,020,000
	Wellhead Equipment Rental & Service	20	8,775	491,117	666,617	11	8,775	546,806	643,331	-23,286
	Backup Piggy Back anchors					8	1,520	20,600	32,760	32,760
	Casing Running Equipment	10	11,090	79,000	189,900	21	2,285	281,000	328,365	138,465
	Casing Crew (2x - 1 leader + 1 operator per crew)	14	22,060		308,840	9	22,060	7,702	206,242	-102,598
	P&A Package + personnel (x2)	5	21,000	243,699	348,699				0	-348,699
	Weather Service	29.2	500		14,603			53,606	53,606	39,003
	BOP Inspection			250,000	250,000	9.0	10,800	101,250	198,450	-51,550
	Communications and data link	29.2	5,000	200,000	346,029				0	-346,029
	Personnel Onboard System, incl. training			200,000	200,000				0	-200,000
	Dolphin - meals service personnel (19x)					30	9,690		290,700	290,700
	NPD compatible Daily Reporting System			150,000	150,000	34	1,100	1,000	38,400	-111,600
	Pore pressure prognosis			270,000	270,000				0	-270,000
	Diving Support/ROV	29.2	26,556		775,588			1,152,884	1,152,884	377,296
	Contingency				676,762					-676,762
	Total (incl. contingency)				**5,191,000**				10,512,818	**5,321,818**
20. Coring	DBS Personnel (2x)	10	14,770		147,700	7.5	14,770	3,500	114,275	-33,425
	DBS Equipement rental	20	1,900		38,000	19	1,900		36,100	-1,900
	8 1/2" cores (72 m)	72m	4596/m	330,912	330,912	70.5m	4596/m	323,844	323,844	-7,068
	Corpro Personnel (2x)					9	10,800	4,000	101,200	101,200
	Corpro Equipment					19	3,665		69,635	69,635
	Core analysis			600,000	600,000				0	-600,000
	Contingency				167,388					-167,388
	Total (incl. contingency)				**1,284,000**				645,054	**-638,946**
21. Testing	Mob./de-mob downhole & surface test equipment			1,530,000	1,530,000				0	-1,530,000
	Planning			683,500	683,500			1,021,327	1,021,327	337,827
	Steve Pattie					31	6,500		201,500	201,500
	Mike Wynne					14	6,500		91,000	91,000
	Petrotech personnel (2x)					9.5	19,600		186,200	186,200
	Petrotech Equipment					19	14,160		269,040	269,040
	Contingency				332,500					-332,500
	Total (incl. contingency)				**2,546,000**				1,769,067	**-776,933**
22. Logging-Wireline and LWD	MWD/LWD Services - personnel	29.2	14,360		419,396	29.5	14,360		423,620	4,224
	MWD/LWD Services - equipment (DIR/GR/CDR)			1,918,359	1,918,359				2,501,351	582,992
	PVT Simulations for MDT							52,000	52,000	52,000
	Log run #1 (Dens,Neu,Res,SGR)			863,055	863,055				0	-863,055
	Log run #2 (Sonic, Image, Dips)			741,960	741,960				0	-741,960
	Log run #3 (MDT press., samples)			1,686,947	1,686,947				0	-1,686,947
	Log run #4 (VSP)			2,286,000	2,286,000			1,002,000	1,002,000	-1,284,000
	Log run #5 SWC			232,470	232,470				0	-232,470
	WL Crew Charges (2 Engineer + 4 Operator) + 1 Specialist	10	64,719		647,190	21	54,162	85,630	1,223,032	575,842
	Logging tool rental + operating charges					26	97,478	1,802,880	4,342,180	4,342,180
	Logging unit + tool package rental					33	14,769		491,439	491,439
	Analyisis (MDT, SWC)			1,467,000	1,467,000				0	-1,467,000
	Contingency				1,539,623					-1,539,623
	Total (incl. contingency)				**11,802,000**				10,035,622	**-1,766,378**

Line Item	Description	Days	Daily Cost (NOK)	Fixed Costs (NOK)	Total Costs (NOK)	Actual Days	DisWin Daily Cost (NOK)	DisWin Fixed Costs (NOK)	DisWin Total Costs (NOK)	DisWin Cost - AFE Cost (NOK)
23. Logging-Mud	Mud Logging Unit	29.2	6,860		200,342	30.0	205,790	10,450	6,184,150	5,983,808
	Personnel	29.2	17,148		500,822	33.0	13,312/17,148		489,164	-11,658
	Reserval unit								57,470	57,470
	Contingency				104,836					-104,836
	Total (incl. contingency)				**806,000**				6,730,784	**5,924,784**
32. Cement & Cementing	Operator and cement unit rental	29.2	19,850		579,744	33.1	18,257		604,155	24,412
	Onshore support	29.2	1,593	143,394	189,927	33.0	1,593		52,569	-137,358
	Cement & additives			1,000,000	1,000,000			640,248	640,248	-359,752
	Sections costs			173,652	173,652			172,829	172,829	-823
	Centralisers, EZSV for 13 3/8", 13 3/8" shoetrack etc.			21,800	21,800			96,534	96,534	74,734
	3 1/2" Tubing + handling equipment					29	2,676	15,745	93,349	93,349
	Contingency				294,877					-294,877
	Total (incl. contingency)				**2,260,000**				1,659,684	**-600,315**
40. Fishing Cost	Contingent fishing gear	29.2	5,000		146,029			86,180	86,180	-59,849
	P & A package (MOST Tool)							297,199	297,199	297,199
	Weatherford Engineer (P & A)					4.0	10,500		42,000	42,000
	Contingency				21,970				0	-21,970
	Total (incl. contingency)				**168,000**				425,379	**257,379**
52. Drillsite Cost	Site survey			3,600,000	3,600,000			3,067,387	3,067,387	-532,613
	Rig positioning			144,000	144,000		19,800	200,142	200,142	56,142
	Anchor handling vessels (3 ea)	7	600,000		4,200,000	8.5	892,500		7,585,771	3,385,771
	Marine Representative					9	10,350	27,141	120,291	120,291
	Contingency				1,192,000					-1,192,000
	Total (incl. contingency)				**9,136,000**				10,973,591	**1,837,591**
61. G&A Drilling Department	Onshore support - Sandnes Office	29.2	45,436	9,771,180	11,098,188				0	-11,098,188
	Onshore support - Oslo Office			4,000,000	4,000,000				0	-4,000,000
	Onshore support - Aberdeen Office	29.2	5,000	798,971	945,000				0	-945,000
	Total Daily Charge for onshore costs					50.0	81,124	7,476,230	11,532,430	
	Contingency				2,406,062					-2,406,062
	Total (incl. contingency)				**18,449,250**				11,532,430	**-6,916,820**
62. Indirect Allocations	Emergency Response Training			243,000	243,000				0	-243,000
	HSE (NOFO, NPD, Health Serv., Emerg.Resp., RA)			2,090,000	2,090,000			4,728,000	4,728,000	2,638,000
	Env. Risk and Oil Spill Cont. Analysis (DnV)			3,000,000	3,000,000			3,092,500	3,092,500	92,500
	Shearing of SAR helicopter at Heidrun	29.2	17,500		511,102				0	-511,102
	Contingency				876,898					-876,898
	Total (incl. contingency)				**6,721,000**				7,820,500	**1,099,500**
Total Intangibles					**114,832,143**				**131,199,556**	**16,367,413**
Total Contingency Intangibles					**17,224,858**					**(17,224,858)**
Total Intangibles (incl. Contingency)					**132,057,001**				***131,199,556***	**(857,445)**
	TANGIBLE COSTS									**0**
30. Well Pipe (Csg & Tbg)	30" Casing (96 m)			515,970	515,970			442,845	442,845	-73,125
	13-3/8" Casing (1000 m)			1,073,697	1,073,697			1,305,106	1,305,106	231,409
	9-5/8" Casing (contingency)				0				0	0
	7" Casing (contingency)				0				0	0
	Misc.			100,000	100,000				0	-100,000
	Contingency				253,333					-253,333
	Total (incl. contingency)				**1,943,000**				1,747,951	**-195,049**
Total Tangibles					**1,689,667**				**1,747,951**	
Total Contingency Tangibles					**253,333**				**0**	
Total Tangibles (incl. Contingency)					**1,943,000**				***1,747,951***	
TOTAL WELL COST (million NOK)					**134.00**				**132.95**	

This section contains:

3.1 Geology Summary

Boulders were not observed during drilling, but the Quaternary sedimentary package will always constitute a boulder challenge/risk for future wells in the license and in the region.

High-risk, shallow gas filled sands was neither prognosed nor observed in this well. A low to medium risk shallow gas hazard was defined at 1180-1270m, albeit considered to be a dim spot caused by lithological change across a debris flow/slump deposit. No significant increase in gas readings were observed from that same level during drilling, leading to the conclusion that the dim spot was indeed set up by a geophysical contrast between a debris flow lithofacies and a laterally located 'background' facies.

Two prospect target levels were defined and prognosed in this well, the Paleogene Brygge sands and the Cretaceous Lysing sands. One of the main objectives was to identify and evaluate these sands. Only the Lysing target contained sands (21m gross TVT sand interval). One of the partners had an additional Cretaceous Nise sand as a primary prospect target, and this particular potential sand unit was added to the prognosed lithocolumn by the Operator as a high risk sand lead to accommodate our partner. The Lange sands were also added to the prognosed lithocolumn as a high risk sand lead. Neither the Nise nor the Lange sands were present in this well.

Paleogene, 'Brygge' Target (Harran Prospect)
The seismic sequence defined as the 'Brygge' Target contained parts of the Tare Formation (from 1654m MDRKB) and the upper part (37m) of the Tang Formation and contains disappointingly 104m of siliceous diatomite and volcanics (tuffaceous) facies.
If the upper part of the diatomaceous Tare Formation and the above Brygge Formation is added the total diatomite thickness is around 140m MT (Measured Thickness). SEM and XRD results prove that diatomite (also containing Radiolarians and sponge spicules) is the dominant lithofacies with some component of volcanic glass. The unit was water filled and significantly over-pressured. 38% average porosity (representing high microporosity witihn the diatom tests) and very low permeability were recognised in the diatomite. The only presence of hydrocarbons was from the gas log data indicating some amount of methane present when the formation back-flowed in a saltwater kick. The lack of reservoir was the main failure in this prospect. Failing of the vertical seal (faults?) during inversion is seen as the most likely cause for this Brygge back-flow zone being water bearing.

Cretaceous, 'Lysing' Target (Grong-W Prospect)
The seismic sequence constituting the Lysing target was some 50m thick in the well, but the Lysing Formation sandstone unit was only 21.0 m thick (TVT) out of which at best some 3m of the uppermost sands had porosity of 20%. The Lysing Formation sandstone thinned and 'fined out' more than expected at the crest of Structure A indicating that Structure A was a paleo-high during the deposition of the Lysing Formation.

The solution gas, the organic acid content and the phenol concentration of the water obtained from wireline fluid sampling indicate that the sample has, at some point been in contact with a

hydrocarbon accumulation. The water is strongly under-saturated with gas and is not in close contact with a hydrocarbon accumulation at present. Failure of the vertical seal is the most likely cause for this Lysing Formation sandstone being water bearing.

3.2 Well Stratigraphy

Introduction

The 1:500 Composite log (Enclosure 3) is helpful when reading this chapter. Reference is also made to Ichron (2001A) and Ichron (2001B) for petrography and biostratigraphy respectively.

The prognosed and the actual lithocolumns are shown in Figure 3.2-1 and the prognosed and actual stratigraphic tops are compared in Table 3.2-1 and Table 3.2-2. Except for the Top Nise prognosis, all actual tops came inside the estimated uncertainty range in the prognosis. The reason for this error on the prognosed top Nise was caused by the seismic pick being 'phantomized' through most of the study area due to very poor seismic response. The main target (Top Lysing Fm) was encountered 17 m deeper than expected and well within the +155m -125m uncertainty range.

Seabed

The rig was oriented such that the anchors and the anchor chains did not interfere with some identified and mapped positive mound features scattered on the seabed inside the site survey (potential coral colonies). The well was drilled between closely spaced iceberg scours.

Quaternary deposits, 366.0 (341.0) – 451.0 (426.0) m MDRKB (TVDSS)
(Mid? Plesitocene – Holocene, Neogene)

The well was drilled with returns to seabed down to 1382m MDRKB. The lithology description for this unit is therefore based on the well logs and offset well information. This uppermost stratigraphic package consists of unconsolidated clays, silt-sands and boulders. No boulders were encountered at this level, but boulders have been recorded in numerous wells all over the Mid-Norwegian shelf supporting their presence close to this well bore also. The site survey only recognised boulders on the high-resolution seabed map. The vertical seismic sections did not have sufficient resolution to image boulders.

Naust Fm, 451.0 (426.0) – 1624.0 (1596.0) m MDRKB (TVDSS)
(Late Pliocene - Early-Mid? Pleistocene, Neogene)

These deposits range from over-consolidated clays with pebbles and occasional boulders in the upper section down to about ~700m, passing into predominantly clays with minor silt stringers down to 1100-1200m. The lower section, below ~1100-1200m to 1624.0m MDRKB contains more consolidated claystone with minor silts and sand stringers. Below 1382m MDRKB, cuttings were available for lithological description generally confirming the prognosis. The clays are dominantly light to medium grey with occasional green/grey and brown clays. Traces of limestone, pyrite, micromicaceous material and shell material occur throughout the formation. The base of this unit is an erosional unconformity and the unit is itself base-lapping onto the structurally inverted and partly eroded Brygge Formation. Medium to medium dark grey to greyish green claystone were encountered, occasionally coloured dark yellowish green, being soft to moderately firm, sub-blocky to amorphous and sticky in places. Traces of

carbonaceous material, occasionally micromicaceous and rare traces of pyrite have been recognised in this claystone. The unit is non- to occasionally moderately calcareous.

Kai Fm, 1624.0 (1596.0) – 1624.0 (1596.0) m MDRKB (TVDSS)
(Miocene, Neogene)
This stratigraphic unit is absent in the well due to erosion and non-deposition, resulting in a significant erosional unconformity and a large hiatus across 1624.0m MDRKB (see below).

(?)Chattian Unconformity:
A large hiatus is present in this well at 1624.0m MDRKB. Erosion and non-deposition caused the development of a significant regional unconformity. The hiatus ranges from the onset of the Oligocene to the close of the Miocene stage. The erosion causes the absence of the Kai Formation and the youngest part of Brygge Formation in this well. The unconformity is tentatively correlated to the super-regional Chattian unconformity related to a general uplift of the western Fennoscandian shield. Superimposed inversion and associated erosion/non-deposition related to the plate-tectonic opening of the Norwegian Sea during the Tertiary probably caused further enhancement of this unconformity.

Brygge Fm, 1624.0 (1596.0) – 1645.0 (1617.0) m MDRKB (TVDSS)
(Early Eocene – Mid Eocene (Possibly partly incl. Late Eocene?), Paleogene)
The top of this formation is an erosional unconformity consisting of pale yellow, very fine sandstone grading to siltstone and claystone according to cuttings. Three sidewall cores indicated diatomaceous and tuffaceous (volcanic glass) facies. This facies becomes purer diatomite downward into the Tare Formation and indicates a gradual, but incomplete change from from Opal A to Opal CT in the same unit. The ultimate Opal CT transition depth is probably slightly deeper than base of the diatomite facies (>1740m MDRKB).

Tare Fm, 1657.0 (1629.0) – 1756.0 (1728.0) m MDRKB (TVDSS)
(Early Eocene, Paleogene)
The Tare Formation consists of light grey to grey diatomaceous and tuffaceous facies within a background lithofacies of grey to grey green with some brown claystone, possibly with thin limestone and sandstone stringers. The mineralogy of this facies changes gradually, but incompletely from Opal A to Opal CT. The 100% Opal CT depth, however, is probably slightly deeper than base of the diatomaceous facies (below 1740m MDRKB). SEM images and XRD analyses on SWC samples qualitatively proved the diatomaceous facies and the Opal-A/Opal-CT trend and hence overrule the limited and often misleading information from the cuttings, missing (meshing) out on the minute diatom grain sizes. The 40-60% micro-porosity and very low permeability make the diatomite a very poor reservoir unless fractured.

Tang Fm, 1756.0 (1728.0) – 1796.5 (1768.0) m MDRKB (TVDSS)
(Late Paleocene – Earliest Eocene, Paleogene)
The Tang Formation consists of light to dark grey and green/grey claystone with occasional meter-thick sandstone and limestone stringers. Here also (in the upper 25m of the unit) beds of diatomaceous facies has been inferred based on the character calibrated to SEM and XRD results from the sidewall cores in the Tare formation. The description of cuttings renders no information on diatomite identification for reasons given above.

Springar Fm, 1796.5 (1768.0) – 2023.0 (1994.0) m MDRKB (TVDSS)
(Early Campanian –Early Maastrichtian, Late Cretaceous)
This interval consists mainly of medium to dark grey and olive grey claystone with limestone and dolomite stringers. The unit is firm, sub-blocky, micromicaceous, occasionally with silts and traces of carbonaceous material. Crystalline pyrite is locally common
Occasional stringers of micro- to cryptocrystalline dolomite also occur.

Nise Fm, 2023.0 (1994.0) – 2300.0 (2271) m MDRKB (TVDSS)
(Late Santonian – Early Campanian, Late Cretaceous)
This unit consists mainly of medium to dark grey and olive grey claystone with occasional and minor limestone and dolomite stringers. The unit is firm, blocky to amorphous, micromicaceous, having traces of glauconite and pyrite and tuffaceous material.

Kvitnos Fm, 2300.0 (2271) – 3090.0 (3060.0) m MDRKB (TVDSS)
(Early Coniacian – Late Santonian, Late Cretaceous)
This interval consists mainly of medium to dark grey to medium grey/brown, and occasionally olive grey claystone, with several minor micro- and cryptocrystalline limestone stringers and one thin micro-crystalline to crystalline dolomite stringer.

Lysing Fm, 3090.0 (3060.0) - 3110.5 (3081.0) m MDRKB (TVDSS)
(Early Coniacian, Late Cretaceous)
The 21m (TVT) thick Lysing Formation shows an upward increase in grain-size from claystones to medium grained sandstones. The top and the base of the of the Lysing Formation equals the top and the base of the gross sandstone interval. The top is easily recognised on the top of a 1m thick carbonate cemented sandstone bed. The base of the Lysing Formation has a gamma ray, density and velocity increase and a neutron porosity decrease going down and out of the sand into the claystone. The spiky increase in gamma ray to some 230-250 API units below base Lysing Formation (in the Lange Fm) probably represents a sequence boundary marking the base of a depositional sequence where Lysing Formation is included in the upper half. With regard to lithofacies, however, this belongs to the Lange Fm.

Thin sections show relatively ‘clean’ sandstones intercalated with detrital clay laminae. Based on the abundance of these detrital clay laminae, wackes and arenites have been recognised. Some lithic grains, dominantly mudstone intraclasts are abundant in two of the thin sections (25%). One sample contained 18.3% kaolinite and, hence, is classified as ‘kaolinitic’.

The diagenetic history of the the Lysing sandstone is characterised by at least two periods of grain dissolution and abundant kaolinite cementation, interrupted by a pulse of quartz cementation which apparently predates compaction and protected remaining porosity from the same. The kaolinite crystals appear relatively fresh, with no evidence of illitisation. Only mica- and feldspar-replacive clast decay illitization (2%) has occurred as opposed to grain-rimming illitization. Abundant but patchy replacive and porefilling dolomite, and local poikilotopic porefilling calcite cementation followed the later period of secondary porosity development.

The abundance of detrital clay laminae and a combination of abundant kaolinite and carbonate cementation, together with minor compaction effects controlled the Lysing reservoir quality. The kaolinite cement contains significant micro-porosity, as do the detrital clay laminae. Thus, much of the measured Helium porosity comprises poorly permeable micro-porosity. Quartz cementation is generally sparse, but in two samples it is sufficient to have protected earlier porosity from compaction. However, compaction is not a significant factor in the low to moderate reservoir quality of these samples, which is primarily controlled by the abundant cement.

Lange Fm, 3110.5 (3081.0) – TD 3667.0 (3637.0) m MDRKB (TVDSS)
(Mid - Late Turonian, Late Cretaceous)

The Lange Formation consists mainly of medium to dark grey claystones, being firm to moderately hard, sub-blocky to blocky, splintery to sub-fissile and micromicaceous.
Some 32 thin stringers of micro- and cryptocrystalline limestone are evenly distributed all over the Lange Fm. Traces of siltstone and sandstone have been reported from the cuttings in the upper 100m of the formation. TD was reached at 3667 (3637)m within the Lange Fm. No Lange sands were identified on the logs.

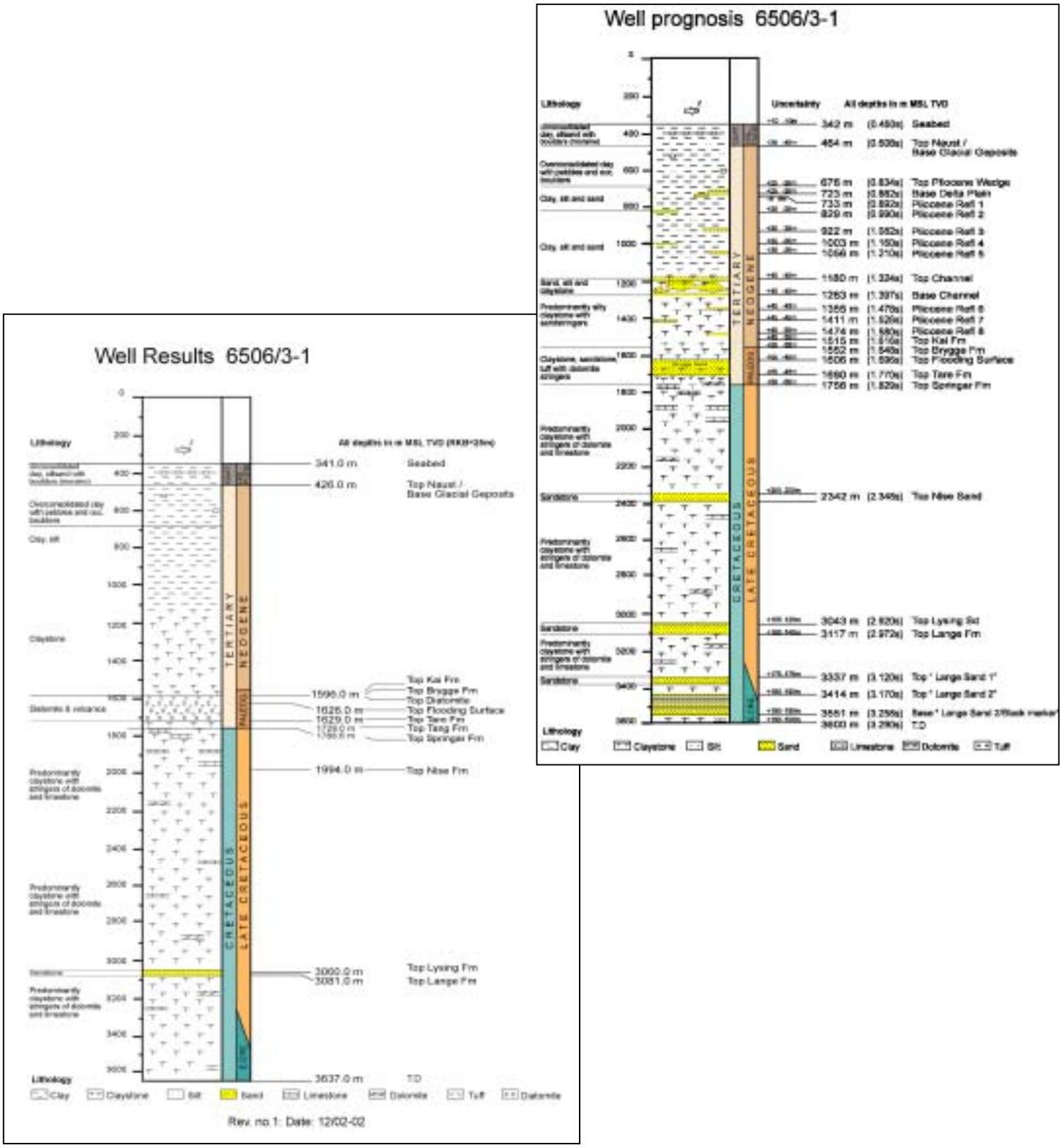


Figure 3.2-1 Actual (left) and prognosed (right) lithocolumns, well 6506/3-1

Prognosed Formation Tops	TWT (seis) (ms)	Depth (mTVDSS)	Depth (mTVDRKB)	Uncertainty (m)	(m)
Seabed	452	342	367	10	-10
Top Naust Fm	608	464	489	25	-25
Top Pliocene Wedge	834	676	701	25	25
Top Kai Fm	1616	1515	1540	45	-50
Top Brygge Fm = Top Diatomite	1648	1552	1577	50	-55
Top Flooding Surface	1696	1606	1631	55	-45
Top Tare Fm	1770	1690	1715	55	-45
Top Tang Fm	NI	NI	NI	NI	NI
Top Springar Fm	1829	1756	1781	50	-50
Top Nise Fm *	2348	2342	2367	200	-200*
Top Kvitnos Fm	NI	NI	NI	NI	NI
Top Lysing Sand	2920	3043	3068	155	-125
Top Lange Fm	2972	3117	3142	160	-140
Top Lange Sand 1	3120	3337	3362	175	-175
Top Lange Sand 2	3170	3414	3439	190	-190
Base Lange Sand 2/Black Marker	3258	3551	3576	190	-190
TD	3290	3600	3625		

Table 3.2-1: Prognosed formation tops

Actual Formation Tops	TWT (well) (ms)	Depth (mTVDSS)	Depth (mTVDRKB)	Difference (m)
Seabed	NA	341.0	366.0	-0.6
Top Naust Fm	NA	426.0	451.0	-38.0
Top Pliocene Wedge	NI	NI	NI	NI
Top Kai Fm	1666.0	1596.0	1624.0	81.0
Top Brygge Fm = Top Diatomite	1666.0	1596.0	1624.0	44.0
Top Flooding Surface	1695.0	1626.0	1654.0	20.0
Top Tare Fm	1698.0	1629.0	1657.0	-61.0
Top Tang Fm	1804.0	1728.0	1756.0	NI
Top Springar Fm	1846.0	1768.6	1796.5	12.6
Top Nise Fm *	2080.0	1994.0	2023.0	-348.0
Top Kvitnos Fm	2338.0	2271.0	2300.0	NI
Top Lysing Sand	2936.0	3060.0	3090.0	17.0
Top Lange Fm	2945.8	3081.0	3110.5	-36.0
Top Lange Sand 1	Absent	Absent	Absent	Absent
Top Lange Sand 2	Absent	Absent	Absent	Absent
Base Lange Sand 2/Black Marker	Absent	Absent	Absent	Absent
TD		3637.0	3667.0	37.0

* 'phantomized' on very poor Upper Cretaceous seismic image

Table 3.2-2: Actual formation tops

3.3 Geochemistry

The phenols and the organic acids as reported in the Lysing MDT samples indicate that the water has been in contact with a hydrocarbon accumulation at an earlier stage.

No other routine geochemistry studies were undertaken in this well, as no source rocks were penetrated and no hydrocarbon bearing zones were encountered/sampled.

3.4 Geophysics

Acoustic logs

Wireline sonic (ISONIC) and density logs were recorded in open hole section for both the Tertiary and the Cretaceous target levels. Both P-sonic and S-sonic logs were acquired. The quality of the logs across both target levels is very good, but the S-sonic log is suffering from poor registrations in the interval below Top Springar Fm. However, the poor data quality section does not interfere with any of the targets for well 6506/3-1.

VSP/Checkshot Survey

A zero offset VSP for well 6506/3-1 was acquired by READ Well Services. The survey ranged from 3664m to 950m MD RKB. The result of the study is presented in a separate report. The report describes the Zero Offset VSP data acquisition and processing, sonic calibration and generation of synthetic seismograms for well 6506/3-1.

The receiver array consisted of 8 satellites, each containing a 3 component geophone cartridge. Thus, 8 levels were acquired simultaneously. The geophone spacing was 20m. The spacing between registration levels in the hole was 10m from 3664m to 1270m MDRKB, apart from a few levels of spacing, and 20m from 1270m to 950m MDRKB.

The seismic source employed was a 2 x 150 cubic inch sleeve gun, located at 3.5m depth and with an air capacity of 1800psi.

A checkshot list was computed from the first arrival values and survey geometry. Based on the checkshot values the P-sonic was calibrated to real time values.

Seismic Calibration

Apart from the calibration presented in the Zero offset VSP report, an independent calibration was performed applying SynTool as the software. See Figures 3.4-1 to 3.4-4. The outcome of this effort is presented in this report. The sonic calibration is based on the checkshot data generated from the Zero Offset VSP. The display is according to normal SEG convention, with increase in acoustic impedance represented as a peak. The wavelets used to convolve the reflection series from the well are extracted from DTW2000 in a 500ms time window at the Tertiary and Cretaceous target levels.

The synthetic trace for both the Tertiary and Cretaceous display panels are compared with seismic traces and lines from 3D DTW2000 nearest to the penetration point for the well at the two levels.

For the Tertiary the “best fit parameters” and the tie as displayed in Figure 3.4-1 are all very good. The DTW2000 survey has to be shifted 12ms downwards to give the best possible match to the synthetic seismogram. This shift is in accordance with the results reported from the Zero Offset Report by READ. The tie points can be read directly from the displays in Figures 3.4-1 and 3.4-3.

The tie between the seismic at the Cretaceous targets and the synthetic is good, the seismic has to be downshifted by only 2ms to give the best possible match to the synthetic seismogram, as illustrated in Figures 3.4-2 and 3.4-4.

At the Tertiary target level the Trace 7762 has to be shifted 12ms downward to match the synthetic

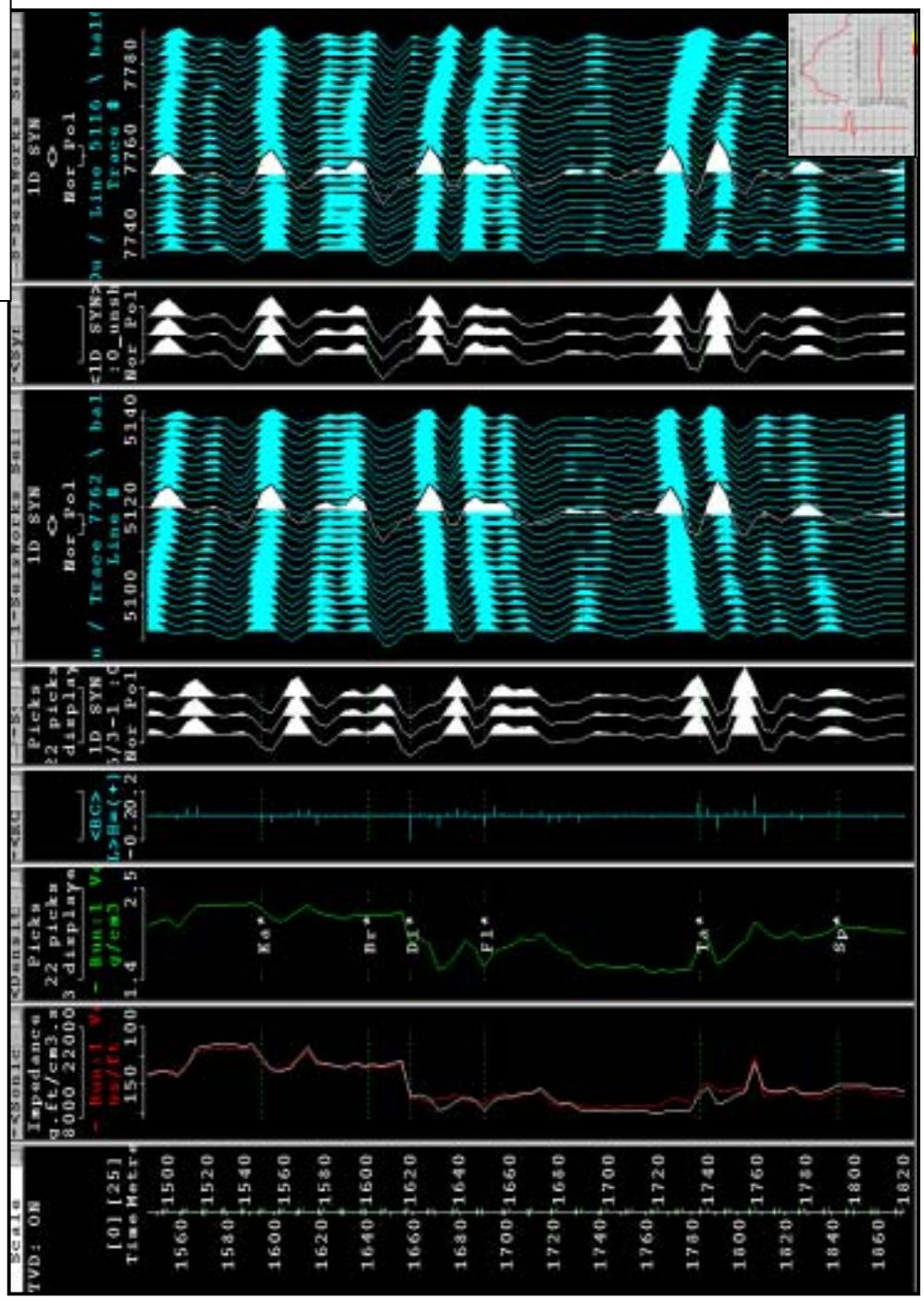


Figure 3.4-1 Synthetic to seismic tie for the Tertiary, well 6506/3-1

Figure 3.4-1 Synthetic to seismic tie For the Tertiary, well 6506/3-1

At the Lysing sand level trace 7764 from DTW2000 has to be shifted 2ms TWT downwards to tie the synthetic

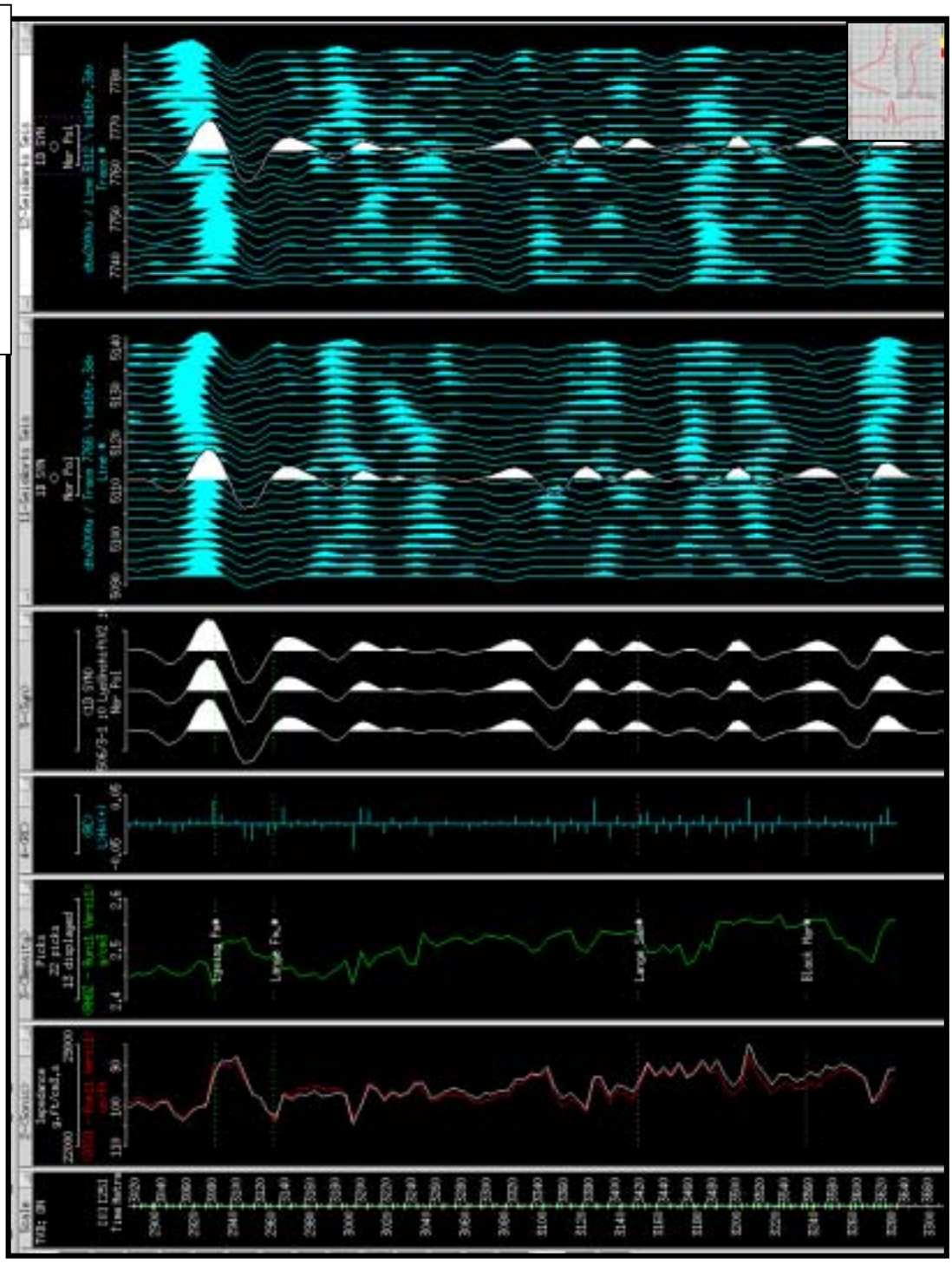


Figure 3.4-2 Synthetic to seismic tie for the Cretaceous, well 6506/3-1

Figure 3.4-2 Synthetic to seismic tie for the Cretaceous, well 6506/3-1

At the Lysing sand level trace 7764 from DTW2000 has to be shifted 2ms TWT downwards to tie the synthetic

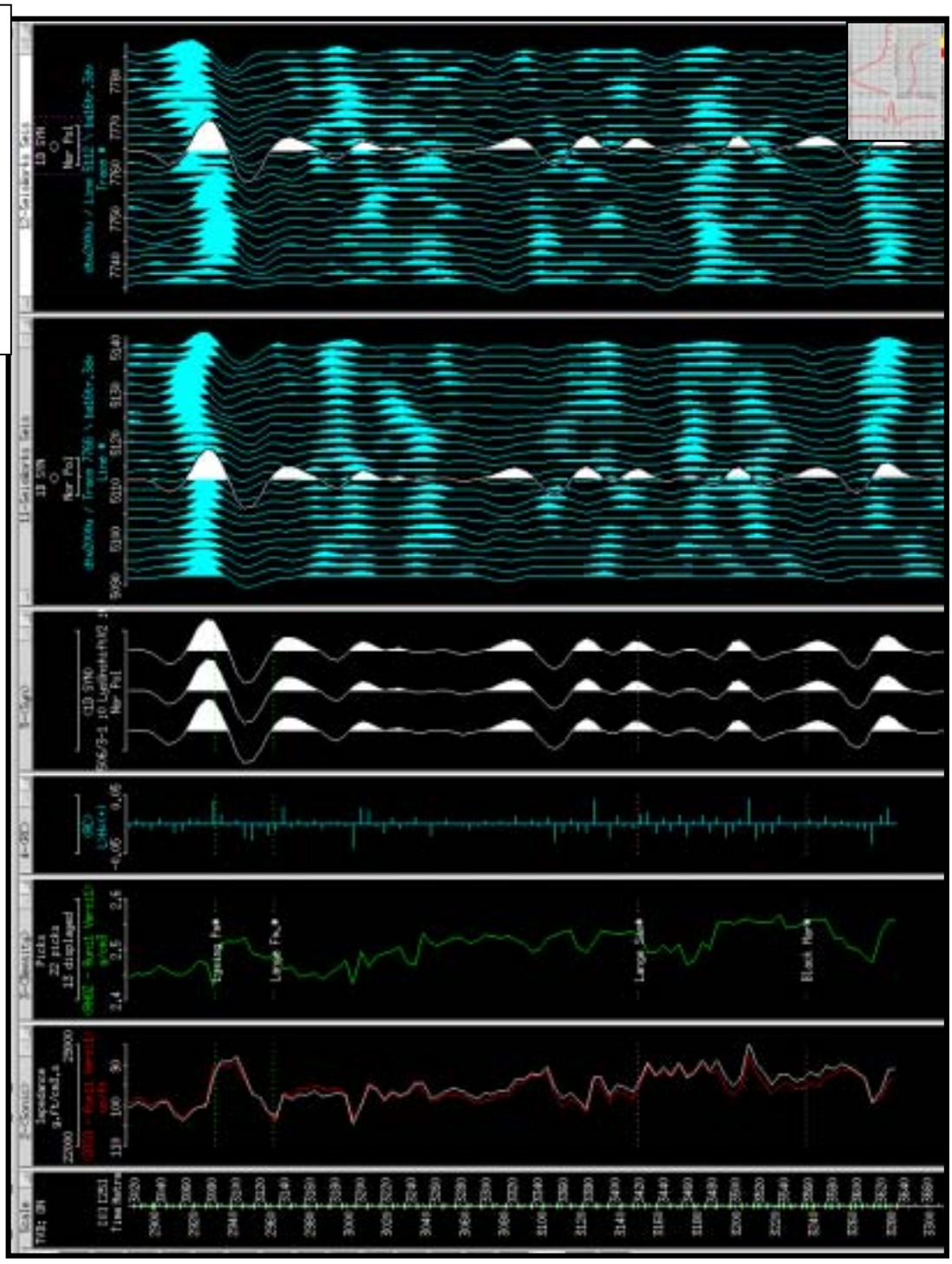


Figure 3.4-2 Synthetic to seismic tie for the Cretaceous, well 6506/3-1

Figure 3.4-2 Synthetic to seismic tie for the Cretaceous, well 6506/3-1

At the Lysing sand level trace 7764 from DTW2000 has to be shifted 2ms TWT downwards to tie the synthetic

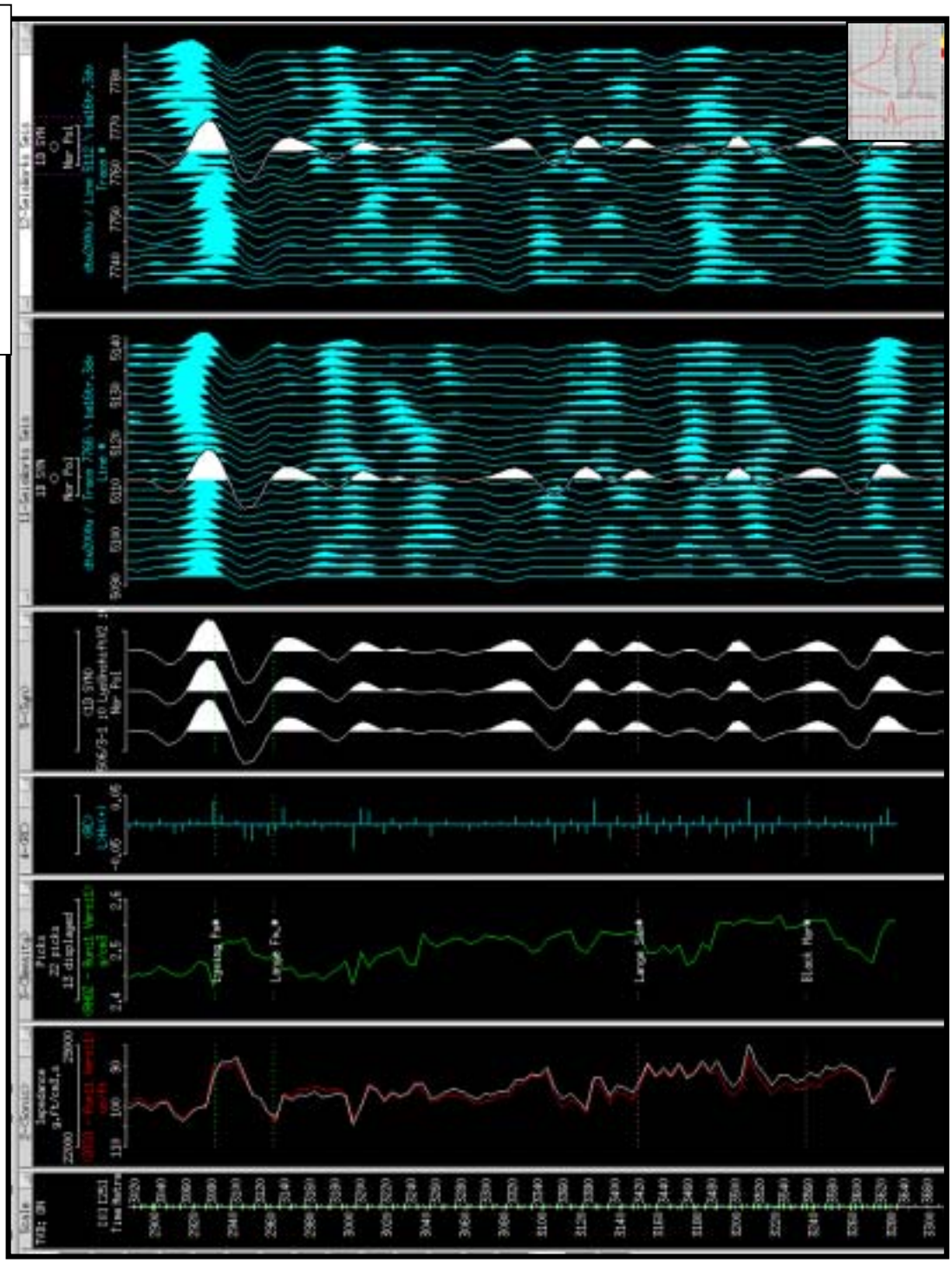


Figure 3.4-2 Synthetic to seismic tie for the Cretaceous, well 6506/3-1

Figure 3.4-2 Synthetic to seismic tie for the Cretaceous, well 6506/3-1

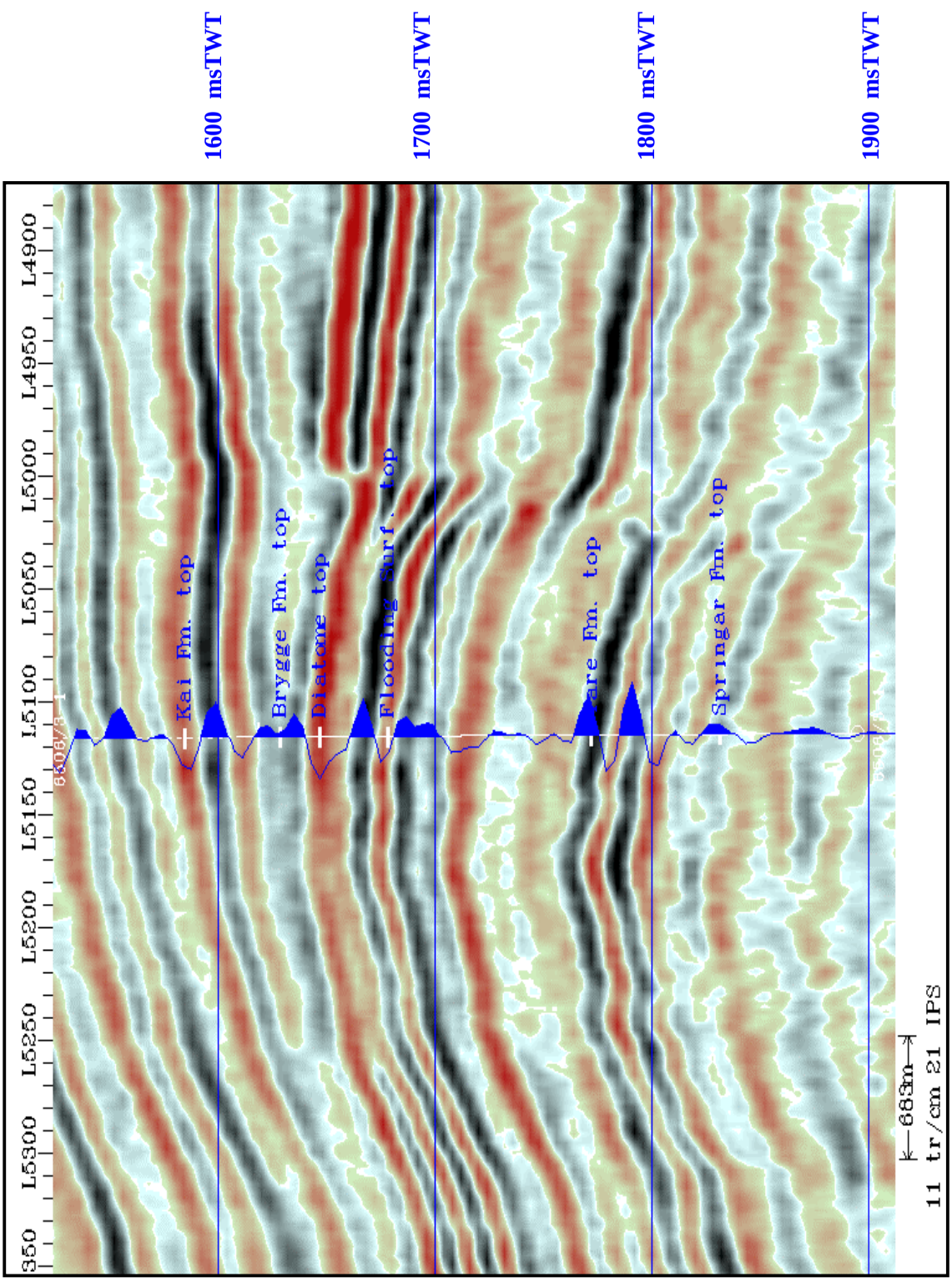


Figure 3.4-3 Synthetic tie of the Tertiary events to 3D DTW2000 trace 7762

Figure 3.4-3 Synthetic tie of the Tertiary events to 3D DTW2000 trace 7762

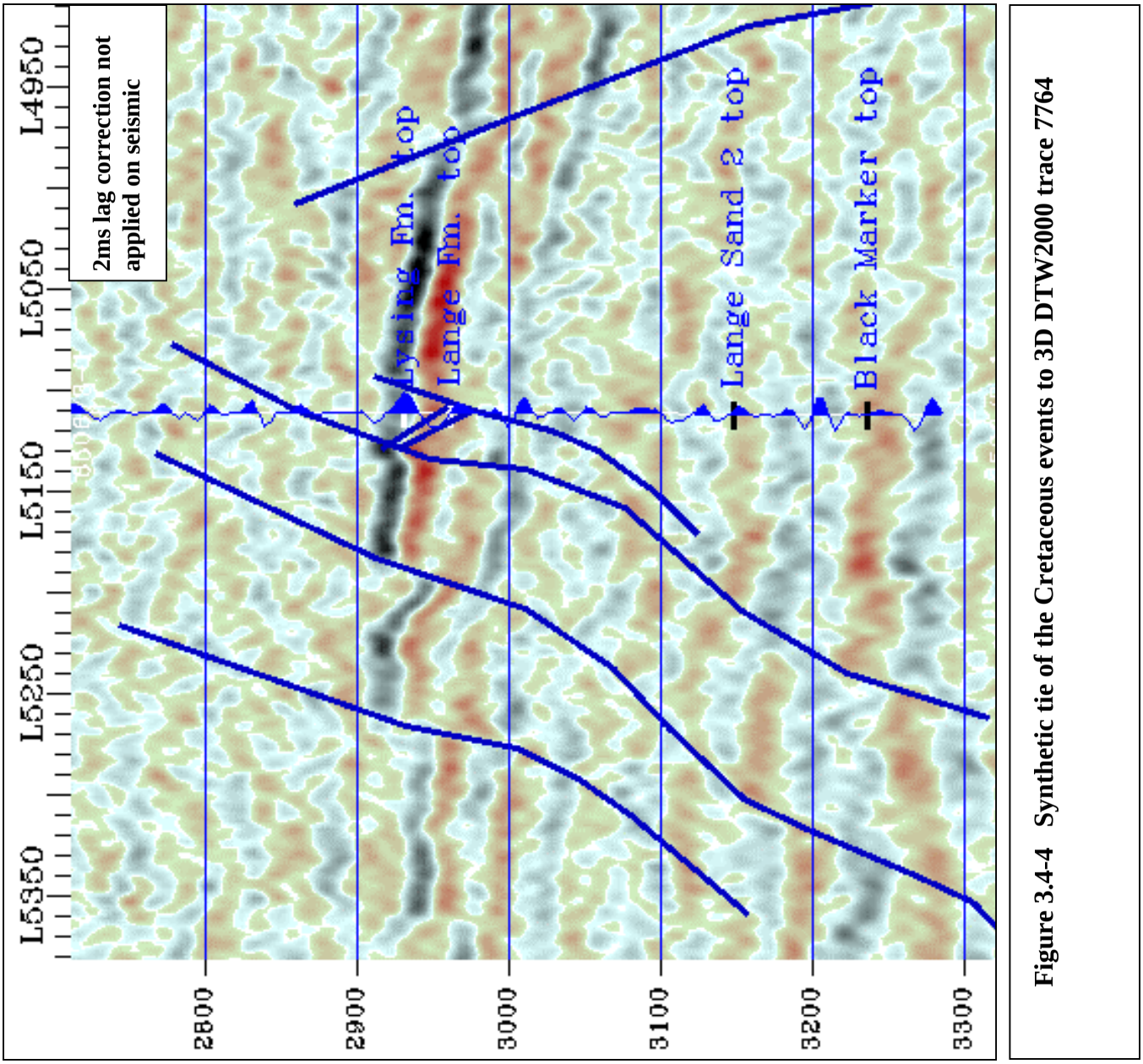


Figure 3.4-4 Synthetic tie of the Cretaceous events to 3D DTW2000 trace 7764

Figure 3.4-4 Synthetic tie of the Cretaceous events to 3D DTW2000 trace 7764
(Slight deviation of well trajectory caused slight increase in DTW2000 trace number)

3.5 Petrophysics

3.5.1 Composite Log Curve Data

The three LWD runs and the two wireline logs were reviewed to create the composite log curves. Wireline logs were run over the entire 8 ½" section giving a good continuous dataset. The dipole sonic log was reprocessed to optimise data quality in the Tertiary as well as the washed out interval from 2115 m to 2300 m in the Cretaceous. The washouts have also affected the density and neutron data. Sections where the data could not be restored have been replaced with null values.

Environmental corrections were applied to the data at the wellsite and onshore. These corrections include:

Neutron: Borehole salinity, pressure, temperature, hole size, mud cake and mud weight.
Density: Hole size.
Array Induction: Hole size.
Spectral Gamma Ray (HNGS): Barite in mud.

The curves used to create the HQLD curves and the splice points selected are listed in the following table (Table 3.5.1-1).

HQLD composite log curves				
Curve Name	**Description**	**8 ½" Pilot 453-1382m**	**8 ½" Main Hole 1382 to 3667m**	**Splice Point**
HGR	Gamma Ray	LWD-GR	WL-HNGS-SGR	1369.1
HCAL	Caliper		WL-PEX-HCAL	N/A
HRHO	Density		WL-PEX-RHOZ	N/A
HDRO	Density Corr		WL-PEX-HDRA	N/A
HPHI	TNPH Neutron		WL-PEX-TNPH	N/A
HDTC	Sonic (P)		WL-DIPOLE-DTCO	N/A
HDTS	Sonic (S)		WL-DIPOLE-DTSM	N/A
HRD	Deep Resistivity	LWD-ATR	WL-AIT-RT	1371.3
HRM	Medium Resistivity	LWD-PSR	WL-AIT-AT30	1371.3
HRS	Shallow Resistivity		WL-AIT-AT10	N/A

Table 3.5.1-1 HQLD composite log curves

3.5.2 Formation Evaluation - Cretaceous

The Cretaceous was penetrated with the 8 ½' hole to a depth that allowed complete logging of the "Black Marker" in the Lange formation. The only significant sand interval was the Lysing sand. The interval was evaluated with core, wireline logs, and a sidewall core. Fluid samples were retrieved from the formation and the analysis of those samples indicated the sands to be water bearing. The log data quality across the Lysing sands is excellent and no noticeable wellbore effects are present.

Log data quality throughout the Cretaceous is good. However, significant washouts in the Upper Cretaceous from 2115 m to 2400 m have adversely affected density, neutron and shear sonic data. No attempt has been made to repair this data as the section where the washout occurred is of little relevance to the analysis of the well.

Log Analysis
The analysis of the Lysing sand is presented in Figure 3.5.2-1 and Table 3.5.2-1. The analysis was performed as follows:

- Vsh was calculated using GR.
- Density porosity was calculated using a RHOMA of 2.66g/cc and a RHOFL of 0.79 g/cc (Versavert base oil).
- Density porosity was shale corrected to give PHIE
- Rw was measured from the MDT water samples and temperature corrected to 0.192 Ohm-m @ 103 degC
- Sw was calculated using the Archie equation with a, m and N values of 1, 2 and 2 respectively.
- Net sand was determined using an effective porosity cutoff of 12%.

The log analysis results indicate the presence of hydrocarbon with high Sw at the very top of the Lysing sand. Bed boundary effects caused by the high resistivity calcite stringer immediately above the Lysing sand are thought to cause this. This agrees with the MDT water samples that contained no free gas and, when restored to down hole conditions, were undersaturated with gas.

The three MPSR water samples were analysed by Petrotech to determine the composition of the formation water. Sub-samples of the recovered water were sent to the University of Bergen (UiB) to determine if organic acids and phenols were present. The data from UiB and Petrotech was analysed by Dewpoint AS to determine if the water was in contact with hydrocarbon. The analysis report from Dewpoint AS can be stuided in the Appendix.

Lysing net sand analysis summary				
Gross Sand Interval	Net Sand	Net/Gross	Average Phi (Net Above 12%)	Average Phi (Net Above 15%)
20.5 m	3 m	14%		

Table 3.5.2-1: Lysing net sand analysis summary

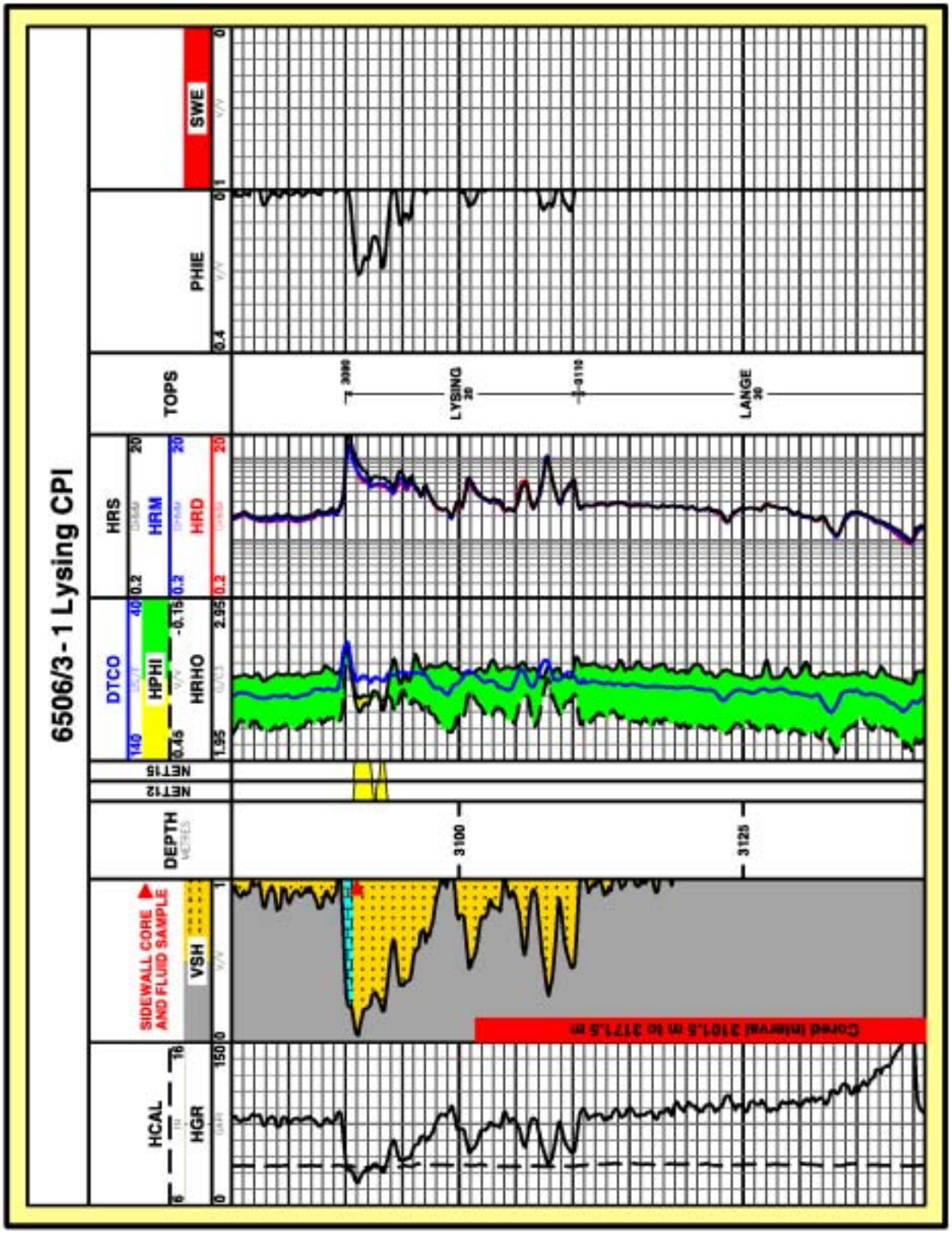


Figure 3.5.2-1 Lysing Fm CPI

3.5.3 Formation Evaluation – Tertiary

The Brygge, Tare and 37m of the Tang Formation contained a total of 140.5m (Measured Thickness) of diatomaceous material and volcanics. Sand reservoirs were not encountered. SEM and XRD results show diatomite to be the dominant lithofacies in this interval with some component of volcanic glass. The Opal A to Opal CT transformation has only partly taken place at the base of the unit. The unit was water filled and significantly over-pressured.

The interval was evaluated with wireline logs, cuttings and sidewall cores. The log data quality across the interval is excellent with wellbore effects are only apparent from 1630m to 1655m MDRKB. The wireline data is presented in Figure 3.5.3-1. The scales on the density and the neutron porosity logs are 1.45 to 2.45 g/cc and 0.75 to 0.15 respectively.

Pressure data was recorded across the interval and showed a significant overpressure of 1.53 SG. The gradient indicated a fluid density of 1.04 g/cc. The pressure data is presented in Figure 3.5.3-2. No fluid samples were retrieved from the formation although fluid samples were attempted. The cause of the failure to acquire fluid samples was the formation collapsing around the MDT probe. Drawdown pressures after a short pumping time were high and increasing indicating probe plugging or a lack of connected reservoir porosity. Hydrocarbon migration through the formation can only be inferred from the gas log data, which indicate a significant amount of methane present when the formation back-flowed at 1698 m.

Log Analysis
Due to the complex makeup of the formation matrix, no significant attempt was made to evaluate the porosity. A simple density porosity calculation using an assumed grain density of 2.25 g/cc and a fluid density of 0.79 g/cc (Versavert base oil) gave an average porosity of 38% for the interval. There is no net reservoir in the interval.

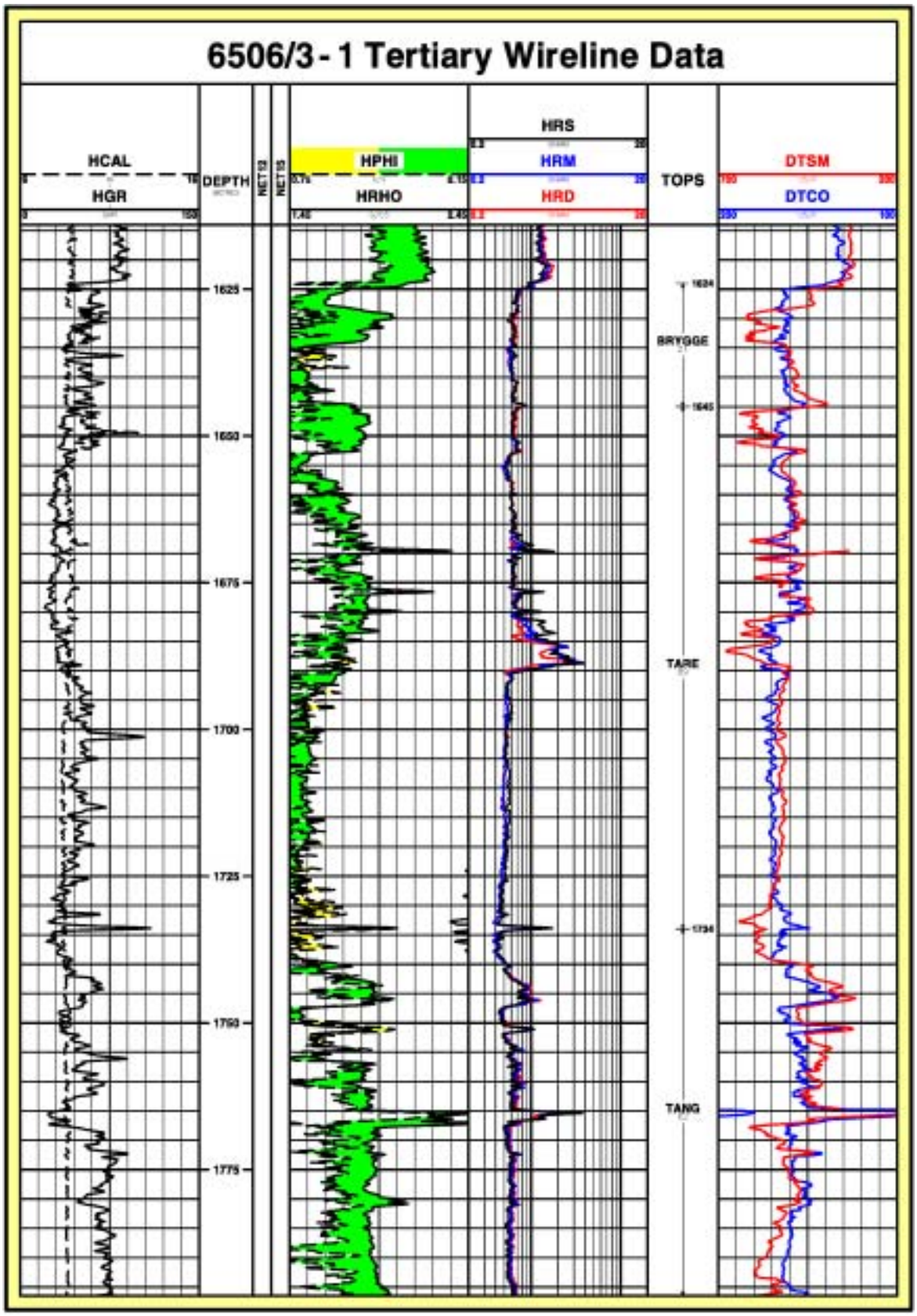


Figure 3.5.3-1 Tertiary target raw wireline data

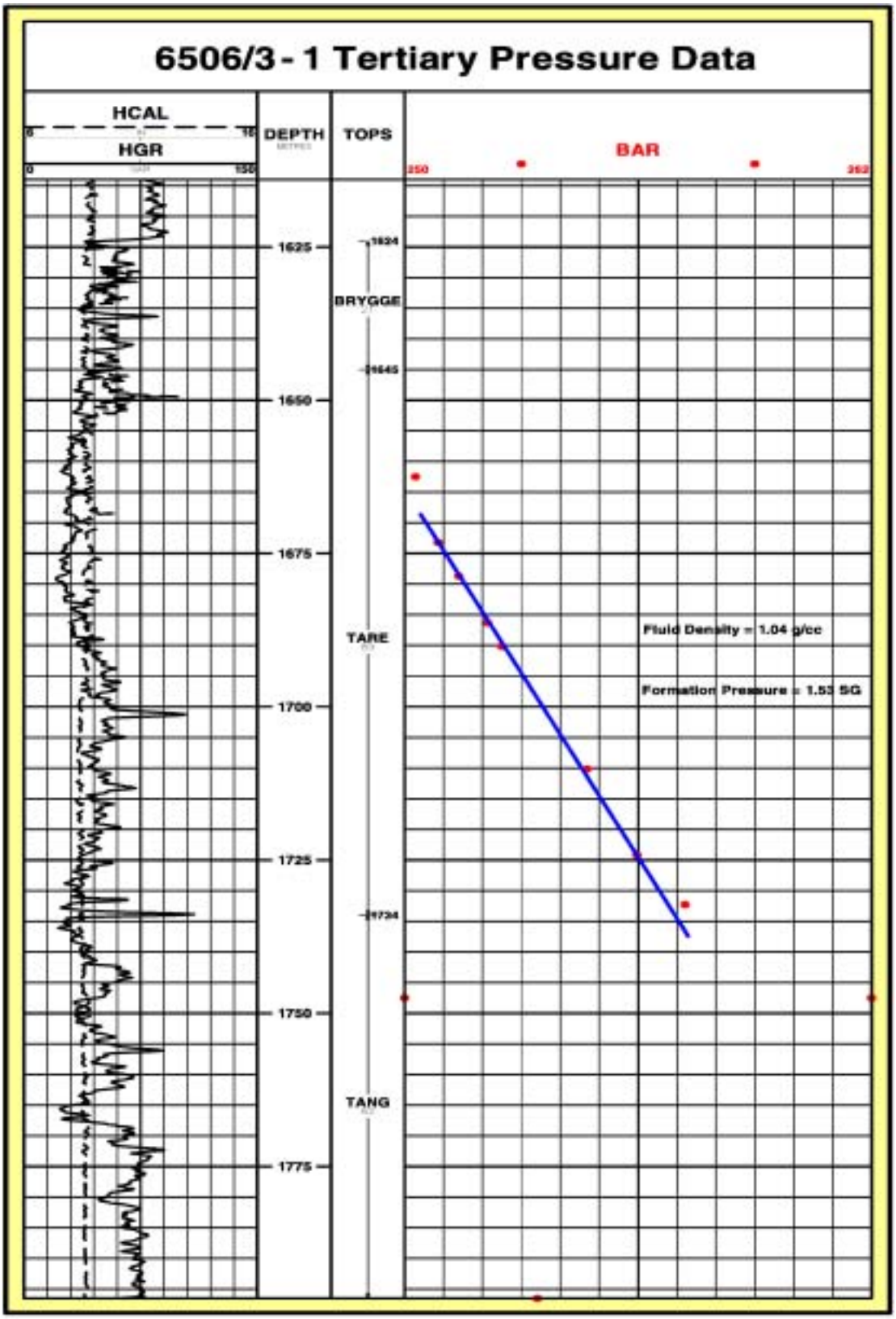


Figure 3.5.3-2 Tertiary target pressure data

3.6 Bottom Hole Temperature

CHEVRON — Horner BHT Calculation

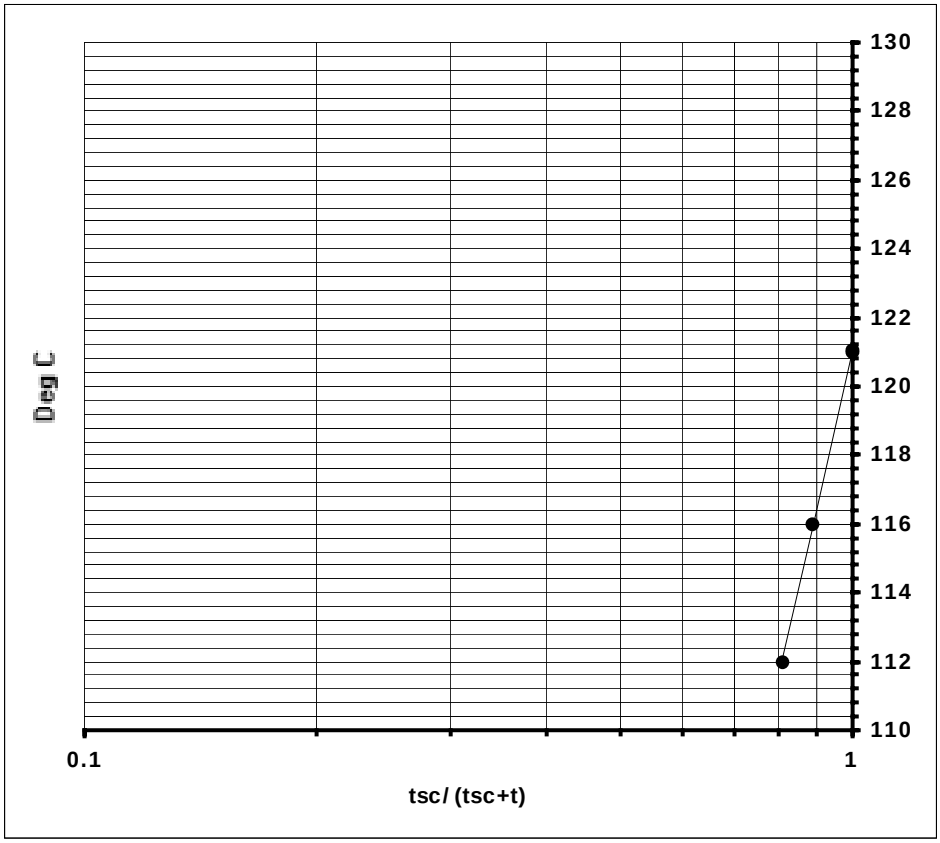
Well: 6506/3-1 **Field:** **Location: Wildcat**

Date: 15-Oct-01 **Geologists: Mike Donovan, Ed Linaker**

Depth, Circulation and Temperature Data

			Date	Time
Depth:	**3667 mBRT**	**Circulation stopped:**	**9-Aug-01**	**17:30**
TVD:	**3662 mTVD**			
RT-SB:	**366 m**	**Seabed Temperature:**	**5**	**(5 deg C is default)**

Log	Run No	Date	Bottom Log Interval	Max Temp	Time Since Circ stopped	Circulation Time	Log to Bottom?
PEX/AIT	1A	10-Aug-01	3667	112	12.7	3	Y
DSI/OBDT	1A	10-Aug-01	3667	116	24	3	Y



BOTTOM HOLE TEMPERATURE =	**121.1**	deg C
GEOTHERMAL GRADIENT =	**35.2**	deg C

Figure 3.6-1 Bottom hole temperature

3.7 Summaries

3.7.1 Temperature Profile

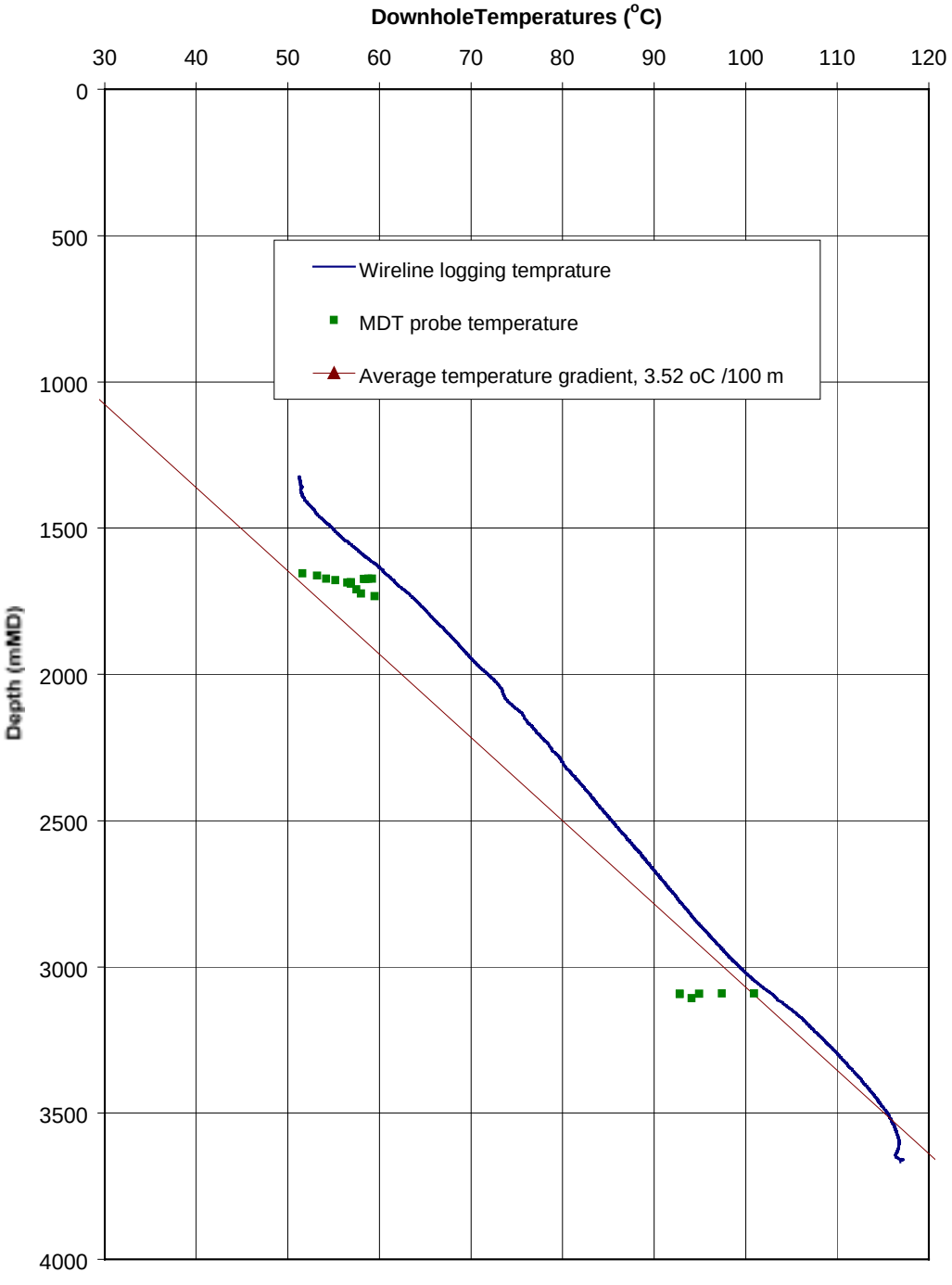


Figure 3.7.1-1 Downhole temperature profile

3.7.2 Geological Sampling Summary

The geological sampling program for the 6506/3-1 well is shown in Table 3.7.2-1:

Open hole well cuttings and mud sampling					
Interval	**From (m)**	**To (m)**	**Standard Sample Rate**	**Biostrat Sample Interval**	**Mud Samples (Lag Depth m)**
1	1386	1625	10	20	2 Litres @ 1618
2	1625	1700	3		2 Litres @ 1635
3	1700	3088	10 (*)		3 Litres @ 3078
4	3088	3171.5	3		3 Litres While Coring
5	3171.5	3667	10 (*)		

Table 3.7.2-1: Open hole well cuttings and mud sampling
(*) Some samples were missed due to the high drill rates in these intervals.

The conventional core and sidewall core programs for the 6506/3-1 well is shown in Table 3.7.2-2 and 3.7.2-3 respectively. Conventional core descriptions can be found in Section 3.7.5. Percussion sidewall core summary can be found in section 3.7.6 and percussion sidewall core descriptions are placed in the Appendix.

Conventional cores						
Core No.	**Depth Interval (mBRT)**			**Cut (m)**	**Recovered**	
	Drilled	**Recovered**	**Log Corrected**		**(m)**	**%**
1	3101.5- 3171.5	3101.5 - 3169.2	3102.6-3170	67.7	67.7	96.7

Table 3.7.2-2: Conventional cores

Percussion sidewall cores				
Run No.	**Depth Interval (mBRT)**	**Attempted**	**Recovered**	**%**
1A	3650 - 1447	53	29	54.7

Table 3.7.2-3: Percussion sidewall cores

The MDT fluid sample program follows Table 3.7.2-4. Analysis of the MDT samples can be found in theAppendix.

MDT fluid samples				
Run No.	**Depth (mBRT)**	**Chamber**	**Fluid Recovered**	**Comment**
1A	3109.2	MPSR 712	Filtrate and Water	No free gas in sample
1A	3109.2	MPSR 753	Filtrate and Water	No free gas in sample
1A	3109.2	MPSR 856	Filtrate and Water	No free gas in sample

Table 3.7.2-4: MDT fluid samples

3.7.3 LWD Operations Summary

A total of three LWD/MWD (Formation Evaluation Measurements and Directional Data) runs were made in 6506/3-1. Schlumberger Anadrill provided all LWD services. There were no reported tool failures, however, the Isonic tended to peak at 135 µs/ft in the Brygge Formation in Run 2 in both real time and memory data modes. Subsequent DSI data indicated more than 160 µs/ft velocity reduction in this zone.

LWD/MWD operations and tool performance are summarised below in Table 3.7.3-1. Additional details can be found in Schlumberger Anadrill's End of Well Report.

LWD Operations

Interval (mMD)	Tools	Sensor Distance to Bit	Memory	Real Time	Comments
Run #1: 453-1382	MWD CDR	GR: 11.48m RES: 8.13m D&I:18.87m	10 sec. sampling	6 bps	No tool problems. The real time data quality was good. Memory data was successfully downloaded and a memory log was produced at wellsite.
Run #2: 1382-3101.5	MWD ISONIC CDR	GR- 11.52m, RES- 8.17m ISONIC:19.27m D&I: 26.42m	10 sec. sampling	3 bps	The window for the real time sonic processing was set from 150 to 100 us/ft and showed no evidence of flat-lining at 150 us/ft with the tool reading about 135 us/ft throughout much of the Brygge zone. Processing of the Isonic memory data gave similar results. Subsequent logging with the DSI wireline sonic indicated a slowness of over 160 us/ft. That was compatible with wireline density measurements. These measurements are within the Isonic's published range that is between 40 and 180 us/ft. Memory data was successfully downloaded and a memory log of the CDR data was produced at wellsite. The ISONIC data required further reprocessing onshore.
Run #3: 3171.5-3667	MWD CDR	GR: 11.56m RES: 8.21m D&I: 18.95m	10 sec. sampling	3 bps.	Reamed from 3050-3171.5m MDRKB (Core 1). No tool problems. The real time data quality was good, Memory data was successfully downloaded and a memory log was produced in town.

Figure 3.7.3-1: LWD operations

3.7.4 Open Hole Wireline Logging Summary

Open hole wireline logs were not run in the 36" or the 8 ½" pilot hole. Gamma ray and resistivity data were acquired over the 8 ½" pilot hole using Anadrill's LWD. Wireline log data was recorded using a Schlumberger MCU for all services except the VSP that was recorded using Reed's surface unit. The VSP data was recorded using Schlumberger's cable and winching equipment.

All continuous data was recorded in the 8 ½" hole section from TD to 13 3/8" casing in two descents. The PEX density was relogged across the Brygge, Tare and Tang formations due to anomalous density readings that effectively repeated.

Descent four with the VSP was aborted due to tool sticking and a conditioning trip was performed. Three further descents were made after the conditioning trip without further problems.

A summary of the wireline logging operations and can be found in Table 3.7.4-1 and Table 3.7.4-2 on the subsequent two pages. A detailed breakdown of the logging operation can be found in the Appendix.

Wireline logging – summary							
Run #	Date	Tool String	Max Temp	Time Since circ. *	Logged Interval (mBRT)		Remarks
			(°C)	(hr:min)	From	To	
1A	10.08.01	AIT-PEX-HNGS	113 112 112	12:40	1374	3665.5	Repeat section 3060-3180m, Problem with AIT meant relogging from 3150-2690m
1A	10.08.01	DSI-GR-AMS-OBDT	116 116 116	24:00	1374	3665.8	Repeat section 2998 - 3188m. Maximum AMS Temp -116.9 degC
2A	10.08.01 - 11.08.01	PEX	-	31:10	1590	2000	Relog of anomalous density data in Brygge Fm.
1A	11.08.01	VSP-GR	-	38:30	-	-	Stuck at 3402m and again at 3088m POOH for conditioning trip.
1A	12.08.01 - 13.08.01	MDT-GR	101.9	23:11*	1655	3107.2	20 Pretests and samples at 3091.2m (3xMPSR)
1A	13.08.01 - 14.08.01	VSP-GR	-	30:05*	790	3660	10m intervals 3660-1270m. 20m intervals 1270-950m and Walkaway VSP at 2898m.
1A	14.08.01	CST-GR	-	48:05*	1447	3650	53 CST's shot Recovered 29, 2 Empty, 14 Lost, 8 Misfire, Recovery 55%

Table 3.7.4-1: Wireline logging - summary

Time breakdown				
Descent	**Date**	**Tool String**	**Opr. Time (hrs:min)**	**Lost time (hrs:min)**
1	10.08.01	AIT-PEX-HNGS	11:55	1:15 TT 0:20 RT
2	10.08.01	DSI-GR-AMS-OBDT	8:45	-
3	10.08.01	PEX	3:55	-
4	11.08.01	VSP-GR	14:00	-
5*	12.08.01	MDT-GR	19:00	-
6*	13.08.01	VSP-GR	17:30	-
7*	14:08.01	CST-GR	12:00	-
			Total	**Total**
			87:05	1:15 TT 0:20 RT

Last circulation on bottom: 09.08.01@17:30hrs
*For runs after Conditioning trip performed between runs 4 and 5 Last circulation on bottom was 12:08.09@10:15hrs

Table 3.7.4-2: Time breakdown

3.7.5 Conventional Coring Summary

A single core was cut on 6506/3-1 in the Lysing Fm. The core was cut using standard 4" aluminum inner barrels. The bit used was an 8 1/2" DBS FC274 Corehead.

The coring information is summarized in Table 3.7.5-1 below:

Conventional Core – 6506/3-1							
Core No.	Barrel ID (in)	Depth Interval			Cut (m)	Recovered	
		Drilled	Recovered	Log Corrected		(m)	(%)
1	4	3101.5-3171.5	3101.5-3169.2	3102.6-3170	70	67.7	96.7

Table 3.7.5-1 Conventional core – 6506/3-1

Core 1, in the Cretaceous Lysing and Lange Fms, was taken from 3101.5m MDRKB when LWD readings indicated the presence of sand beneath the carbonate stringer that locally overlies the Lysing Sand formation. LWD sensors were 8.5m from the bit. A 73m core barrel assembly (inner barrel length = 73m) was picked up, run into the hole, and coring commenced. At 3171.5m the torque dropped back to a steady 6000Nm and a slight pressure drop was seen, indicating that core had jammed. No attempt was made to restart the core. At surface, 67.7m of core was recovered.

Of the 67.7m of recovered only 8m of core came from the target Lysing formation due to the unexpected thinning of the sand unit. The core contained no net sand.

Precautions were taken to relieve pressure while pulling out of the hole to minimize damage caused by trapped pressure. The barrels were separated at surface and a guillotine cutter was used to break the core to reduce fracturing of the core.

Core Processing

The cores were measured and cut into 1m lengths then scanned with a core gamma device. The wellsite geologist took core chips from each 1 m length for core description. No core plugs were cut at the wellsite.

1 m sections of the core from 3120m, 3155m, 3137m, 3138m, 3139m were preserved in oil at the wellsite for top seal analysis.

Core analysis by Corepro in Stavanger included:

- Spectral gamma ray logging
- Helium porosity determination
- Permeability determination
- Preservation of whole core samples in Seal Peel for reference purposes
- Slabbing

- Thin sections
- Digital and white light photography

Preserved whole core samples		
Depth From (mMDRT)	Depth To (mMDRT)	Comment
3106.22 m	3106.50 m	
3115.10 m	3115.36 m	
3120.40 m	3120.55 m	Taken by Leeds University
3124.00 m	3124.28 m	
3136.00 m	3136.32 m	
3139.25 m	3139.40 m	Taken by Leeds University
3144.55 m	3144.81 m	
3154.06 m	3154.30 m	
3155.72 m	3155.86 m	Taken by Leeds University
3164.75 m	3165.00 m	

Table 3.7.5-2: Preserved whole core samples

Detailed results of the core analysis performed by Corpro can be found in their report. Wellsite descriptions of the core chips can be found in the Appendix.

Figure 3.7.5-1 compares the wireline logs over the Lysing cored interval with the core gamma logs supplied by Corpro. The core gamma logs were recorded on driller's depth.

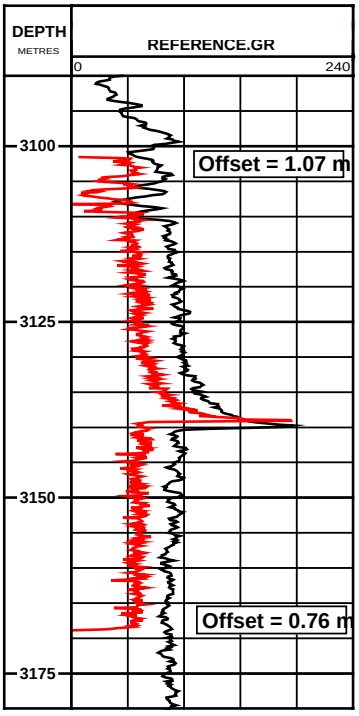


Figure 3.7.5-1: Core gamma ray versus reference wireline gamma ray

3.7.6 Percussion Sidewall Coring Summary

A single descent with a combined 60 shot CST sidewall core gun was made for lithology identification, biostratigraphic control and top seal analysis.

Core depths, core bullets and gun rings were selected using open hole wireline log data. Correlation logs were run at TD, prior to the Lysing and prior to the Brygge formations. Core recovery was poor below the Lysing Formation due to misfires, bullets getting stuck and possibly due to the core gun being stuck at 2987 m. 53 bullets were shot out of which 29 were recovered, 2 were empty, 8 misfired and 14 were lost. The run is summarized in Table 3.7.6-1 below.

Sidewall core recovery and descriptions

SWC No.	Depth mBRT	Reco. cm	Lithology and Show Description	Porosity		
				P	F	G
1	3650	-	Lost			
2	3600	-	Lost			
3	3550	-	Lost			
4	3500	-	Lost			
5	3450	-	Lost			
6	3399.5	-	Lost			
7	3330	1.7	**Claystone with common fine <0.5mm Sandstone laminations.** **CLAYSTONE :** medium grey to occasionally medium light grey, firm to moderately hard, blocky to subfissile, micromicaceous, silty, grading to SILTSTONE, occasional coarse mica flakes, slightly to non calcareous. **SANDSTONE :** off white to very pale grey, firm, blocky, friable in places, very fine to silt grained, occasionally fine grained, transluscent, off white to very pale grey, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, good trace glauconite, rare coarse mica flakes, no visible porosity, NO SHOWS.			
8	3305	-	Lost			
9	3250	-	Lost			
10	3101	-	Lost			
11	3096	-	Lost			
12	3095	-	Lost			
13	3093.4	-	Lost			
14	3093.1	-	Lost			
15	3092	-	Lost			
16	3091.5	-	Misfire			

Sidewall core recovery and descriptions (continued)						
SWC No.	Depth mBRT	Reco. cm	Lithology and Show Description	Porosity		
17	3091.1	1.6	**SANDSTONE :** off white to very pale grey, firm, friable, blocky, very fine to medium grained, clear to transluscent, colourless to very pale grey, subangular to subrounded, occasionally angular, subspherical, occasionally subelongate, poor to moderately sorted, moderate calcite cement, common glauconite, trace iron staining, poor to occasionally fair visible porosity, NO SHOWS.	X	X	
18	3080	-	Misfire			
19	3065	3.1	**CALCAREOUS CLAYSTONE :** medium to medium light grey, firm to moderately hard, blocky, micromicaceous, rare trace glauconite, silty, grading to SILTSTONE, trace calcite grains, very calcareous.			
20	2800	3.4	**CLAYSTONE :** medium to medium light grey, firm to moderately hard, blocky, micromicaceous, silty in places, trace very fine carbonaceous material, slightly to moderately calcareous.			
21	2600	-	Misfire			
22	2450	5.1	**CLAYSTONE :** medium to medium light grey, firm to moderately hard, blocky, micromicaceous, slightly silty in places, occasional very fine carbonaceous material, rare micropyrite veins >0.5mm by 3mm (fossil burrows?), moderately calcareous.			
23	2435	5.3	**CLAYSTONE :** medium to medium light grey, olive grey, firm to moderately hard, blocky, micromicaceous, occasional very fine disseminated micropyrite, slightly to moderately calcareous.			
24	2397	-	Misfire			
25	2156	4.2	**CLAYSTONE :** medium to medium light grey, olive grey, firm to moderately hard, blocky, micromicaceous in places, rare calcite grains, slightly to occasionally moderately calcareous, sandy in places, common SANDSTONE vesicles, very fine grained, transluscent, colourless to off white, subangular to subrounded, no visible porosity, NO SHOWS.			
26	1950	4.0	**CLAYSTONE :** greenish grey to light olive grey, occasionally pale green, firm to moderately hard, blocky, micromicaceous, in places, rare coarse mica flakes, occasional to locally abundant very fine disseminated micropyrite, occasional very fine carbonaceous material, slightly to moderately calcareous, occasionally very calcareous			
27	1799	-	Misfire			
28	1790	-	Misfire			
29	1749	-	Misfire			
30	1744	-	Misfire			

Sidewall core recovery and descriptions (continued)						
SWC No.	Depth mBRT	Reco. cm	Lithology and Show Description	Porosity		
31	1738	4.7	**DIATOMATIOUS EARTH??? :** medium dark grey to olive grey to brownish grey, soft, friable, subblocky in places, earthy, granular texture, very fine grained, opaque, occasional very fine to fine grained quartz, very fine disseminated micropyrite, micromicaceous in places, non calcareous, occasional pale yellowish brown argillaceous matrix. no to poor visible porosity.	X		
32	1732	3.0	**DIATOMATIOUS EARTH??? :** medium dark grey to olive grey to brownish grey, soft, friable, subblocky in places, earthy, granular texture, very fine to silt grained, opaque, occasional very fine to fine grained quartz, very fine disseminated micropyrite, abundantly micromicaceous, non calcareous, occasional pale yellowish brown argillaceous matrix. no visible porosity.			
33	1730	5.0	**Claystone with a Sandstone band around 1mm thick and common very fine Sandstone laminations.** **CLAYSTONE :** medium to light medium grey, light olive grey to olive grey, soft to moderately firm, blocky, occasionally crumbly, micromicaceous in places, non calcareous, **SANDSTONE :** white to off white, soft to firm, blocky, friable in places, very fine grained, transluscent to clear, colourless to off white, subangular to subrounded, subspherical, moderately sorted, occasional slight calcite cement, no visible porosity, NO SHOWS.			
34	1722	5.0	**DIATOMATIOUS EARTH??? :** medium dark grey to olive grey to brownish grey, very soft to soft, friable/crumbly, subblocky in places, earthy, granular texture, very fine grained, opaque, occasional very fine to fine grained quartz, very fine disseminated micropyrite, abundantly micromicaceous in places, non calcareous, occasional pale yellowish brown argillaceous matrix. no to rare poor visible porosity.	X		
35	1707	5.2	**CLAYSTONE :** medium to light medium grey, olive grey, soft to moderately firm, blocky to subblocky, micromicaceous, rarely silty, non calcareous.			
36	1701	4.8	**CLAYSTONE :** medium to light medium grey olive grey, moderately firm, blocky to subblocky, micromicaceous, rarely silty, non calcareous.			

Sidewall core recovery and descriptions (continued)						
SWC No.	Depth mBRT	Reco. cm	Lithology and Show Description	Porosity		
37	1697	5.3	**DIATOMATIOUS EARTH??? :** medium dark grey to olive grey to brownish grey, soft, friable, subblocky in places, earthy, granular texture, very fine grained, opaque, occasional very fine to fine grained quartz, very common fine disseminated micropyrite, micromicaceous in places, non calcareous, occasional pale yellowish brown argillaceous matrix. no visible porosity.			
38	1692	5.5	**DIATOMATIOUS EARTH??? :** medium dark grey, olive grey, soft, friable, subblocky in places, earthy, granular texture, silt to very fine grained, rare fine grained quartz, common pyrite filled vesicles, common mica/micromicaceous, occasional argillaceous matrix, non calcareous, no visible porosity.			
39	1686	5.5	**DIATOMATIOUS EARTH??? :** medium dark grey, olive grey, soft, friable, subblocky in places, earthy, granular texture, silt to very fine grained, becoming silty, rare fine grained quartz, rare pyrite, common mica/micromicaceous, common argillaceous matrix, occasionally grading to CLAYSTONE, non calcareous, no visible porosity.			
40	1678	4.8	**SANDSTONE :** very pale grey to off white, firm friable/crumbly, subblocky, very fine to silt grained, transluscent off white to very pale grey, subangular to subrounded, subspherical, poorly to moderately sorted, common pyrite, common carbonaceous material, occasionally grading to SILTSTONE, trace glauconite, micromicaceous, trace glauconite, no visible porosity, NO SHOWS.			
41	1672	5.0	**CLAYSTONE :** light grey to light olive grey, occasionally pale grey green, soft to firm, subblocky to crumbly, commonly micromicaceous, common very fine carbonaceous, silty in places, abundant diatomatious material?, non calcareous.			
42	1662	5.4	**CLAYSTONE :** as 1672m			
43	1656	5.5	**CLAYSTONE :** medium to medium light grey, olive grey, moderately firm, subblocky to blocky, micromicaceous, occasional micropyrite, occasional very fine carbonaceous material, non calcareous.			
44	1652	4.9	**DIATOMATIOUS EARTH??? :** light brownish grey to light medeium grey, soft to firm, blocky to crumbly, granular texture, very fine grained, occasional fine grained quartz, common mica, trace glauconite, common light grey argillaceous matrix, grading to CLAYSTONE in places, non calcareous, no visible porosity.			
45	1644	5.0	**CLAYSTONE :** light grey to light olive grey to pale grey green, firm, subblocky, crumbly in places, micromicaceous, common fine grained black spherical carbonaceous? material, slight trace glauconite, non calcareous.			

Sidewall core recovery and descriptions (continued)						
SWC No.	Depth mBRT	Reco. cm	Lithology and Show Description	Porosity		
46	1642	4.8	**CLAYSTONE :** as 1644			
47	1635	4.8	**CLAYSTONE :** light grey to light olive grey to pale grey green, firm, subblocky, crumbly, micromicaceous, rare very fine carbonaceous material, non calcareous.			
48	1618	4.3	**CLAYSTONE :** medium dark grey to medium grey, olive grey, firm, subblocky, occasionally crumbly, micromicaceous, slightly calcareous.			
49	1607	3.4	**CLAYSTONE :** medium dark grey to medium grey, olive grey, firm, subblocky, occasionally crumbly, micromicaceous, occasional very fine to fine sand grains, moderately calcareous.			
50	1577	-	Empty			
51	1537	-	Empty			
52	1477	5.2	**CLAYSTONE :** medium dark grey to medium grey, olive grey, firm, subblocky, occasionally crumbly, micromicaceous, moderately calcareous.			
53	1447	3.5	**CLAYSTONE :** medium dark grey to medium grey, olive grey, firm, subblocky, occasionally crumbly, occasional very fine carbonaceous material, micromicaceous, rare medium grained mica, moderately calcareous.			
Summary: 53 shot, 29 recovered, 2 empty, 8 misfires, 14 lost						

Table 3.7.6-1: Sidewall core recovery and description

3.7.7 MDT Pressure and Sampling Summary

Tables 3.7.7-1 and 3.7.7-2 summarize the MDT operations. Pressure data and samples were gathered on a single descent with the MDT. A good quality gradient was determined below the 'Flooding Surface' that indicated the formation contained water. The pressure in this formation ranged from 1.52 to 1.53 SG. Fluid sampling attempts in this formation were aborted after three attempts due to formation collapsed and probe plugging.

In the Lysing Formation a pressure gradient could not be determined because of a lack of sand. Formation fluids from the high quality sand at the top of the reservoir were sampled. three MPSR sample chambers were filled. Lack of compressibility at the surface indicated no free gas. The samples were sent to Petrotech for analysis where it was determined that they contained formation water and OBM filtrate. The results of the analysis appear in the Appendix section of this report.

MDT pretest summary							
Test No.	Depth (m)	TVD (m)	Mobility (md/cp)	Mud Pressure		Formation Pressure (Bar)	Comments
				Before	After		
1	1654.97	1651.97		260.74	260.68		Dry Test
2	1662.45	1659.42	1.95	261.90	261.86	249.83	Slightly Supercharged
4	1673.18	1670.12	119.32	263.59	263.55	250.41	Good Pretest
6	1678.67	1675.60	22.77	264.44	264.41	250.95	Good Pretest
7	1685.15	1682.06		265.46	265.36		Dry Test
8	1686.3	1683.21	11.72	265.59	265.58	251.71	Good Pretest
9	1690.14	1687.03	91.81	266.24	266.18	252.08	Good Pretest
10	1710.15	1706.98	3.7	269.40	269.34	254.29	Good Pretest
11	1724.18	1720.97	6.01	271.60	271.56	255.58	Good Pretest
12	1732.26	1729.03	2.24	272.70	272.68	257.22	Slightly Supercharged
12	1672.96	1669.90		263.01	263.16		Dry Test
13	1673.45	1670.39		263.31	263.34		Dry Test
15	3093.14	3088.45	1.17	483.15	483.43	431.00	Good Pretest
16	3107.2	3102.50		485.56	485.63		Dry Test
14	3092.19	3087.50		482.87	483.33		Dry Test

Table 3.7.7-1: MDT pretest summary

MDT sampling summary			
Depth (m)	Mobility (md/cp)	Formation Pressure (Bar)	Comments
1674.00	13.2	250.40	Attempt to sample - Lost Seal
1674.47	16.6	250.43	Attempt to sample - Formation Collapse
1674.50			Attempt to sample - Formation Collapse- Probe Plugging
3091.90	22.2	430.75	Attempt to sample - Tight
3091.40	72.3	430.69	Attempt to sample - Tight
3091.20	113.8	430.70	Sampled 3 MPSR Chambers

Table 3.7.7-2: MDT sampling summary

Literature:

Ichron, 2001 A: Petrographical analysis of rock samples from well 6506/3-1. Ref: 01/460/S. (Authors: John Cater)

Ichron, 2001 B: A Biostratigraphic Evaluation of the Pleistocene to Late Cretaceous interval in well 6506/3-1, NOCS. Ref: 01/433/B. (Authors: Mike Ayress, Nicholas Holmes and Paul Dodsworth)

This section contains:

4.1 SECTION SYNOPSIS

4.1.1 PREPARATIONS

Well Handover

The Semi-Submersible drilling rig “Byford Dolphin” was handed over from Norsk Shell to Norsk Chevron at the Garn West location at 23:00 hrs on 16 July 2001; formalities were based upon an agreed handover document.

Tow to Location

With the last anchor bolstered, the rig went under the tow of the “Far Fosna” for the 91 nautical mile journey to the Donna West location. It was accompanied by two anchor handling vessels: the “Normand Progress” and the “Normand Jarl”. Average speed was ~4 knots. However, after 21 hrs under tow the weather and sea state deteriorated (32 knot winds and 3m seas) and the decision was taken to go to survival draft (18.3m). This was completed within 3 hrs. The rig was towed the remaining 5 nautical miles to the Donna West location and held just off station pending an improvement on the weather for running anchors.

Forecasts issued midday on the 20 July suggested an imminent improvement in the weather. At 16:30 hrs the decision was made to de-ballast the rig back to towing draft. This was completed in 4 hrs and by 23:00 hrs the sea state had improved sufficiently to work anchors.

Prior to, and during the tow, ModuSpec carried out a full BOP inspection. No significant problems were found with the exception of one cracked 5” ram block. A replacement set of rams were sourced and flown to the rig for installation prior to running the stack.

Running Anchors

The rig was ‘Run in on Line’ at 23:00 hrs 20 July and anchor handling started with #5 pennant being handed to the "Normand Progress" at 01:00 on the 21 July. With anchors #5, #11 & #2 deployed, the "Far Fosna” released its tow to assist in handling the remaining anchors. The 12 anchors were deployed in the following order #5, #11, #2, #8, #10, #6, #9, #7, #3, #4 & #12 and operation were complete by 13:30 hrs on 21 July. Ballasting down to operational draft (21.3m – 25m air gap) commenced at 12:40 hrs and was completed within 7 hrs. The anchors were cross tensioning to 150MT for 15 minutes in the following pairs #1 & #7, #2 & #8, #3 & #9, #4 & #10, #5 & #11, #6 & #12. Cross tensioning was completed by midnight on the 21 July.

Note: Additional chain for #1, #6; #7, #12 (150m each) needed to be removed and layed down on AHV's, because the rig chain lockers were not capable of handling same. This required approximately two hours of rig time to add the chain back to these anchors.

The final rig position on a heading of 313.6° (True) was recorded as:

Long:	N 65° 48' 20.82"	UTM 7 300 302.5m N
Lat:	E 6° 44' 32.36"	UTM 396 765.5m E

While ballasting down and cross tensioning the anchors drill water was taken into the pits and the mixing of Spud and Kill Mud commenced. In addition, the drill floor started to make up the 17.1/2" x 26" x 36" hole opener assembly.

Delays

Wait on Weather (20:30 – 17/7/01 to 23:00 – 20/7/01):	74.5 hrs
Section Total:	*74.5 hrs*

4.1.2 36" HOLE SECTION

Spud & 36" Hole Section

While ballasting down and cross tensioning the anchors, the 17.1/2" x 26" x 36" hole opener assy. was made up as listed below:

17.1/2" Smiths DGJ Rock Bit (c/w 3 x 28/32" nozzles)
26" x 36" Heavy Duty Hole Opener (c/w 6 x 18/32" nozzles)
Bit Sub (c/w non-ported float)
Anderdrift Tool (0° to 5° inclination flask)
3 x 9.1/2" Spiral Steel Drill Collars
Cross Over
3 x 8" Spiral Steel Drill Collars
Cross Over
3 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
14 x 5" HWDP

The Anderdrift tool was surface tested with 1940 lpm, 50 bar when below sea level. The 17 1/2" bit tagged the mudline at 366m (tide corrected depth) and an Anderdrift survey taken to confirm the verticality of the assy. The well was then spudded at 00:30 hrs on the 22 July and the 36" hole drilled to 456m (a 36" cutter depth of 454m) in 5.5 hrs. $10m^3$ hi-vis sweeps were pumped each half stand and apart form some erratic torque at approximately 390m no hole or bolder problems were encountered. Typical drilling parameters were 5000 lpm, 142 bar, 50 - 80 rpm, 8000 - 14,000 Nm torque, 2.3 - 4.5 MT WOB. Anderdrift surveys (6m behind the bit) were taken on each connection with the following results:

Mudline (366m) = 0°, 374m = 0°, 385m = 1°, 397m = 2°, 427m = 2.5°, 449m = 3.5°.

At TD (17 ½" TD of 456m, 36" cutter depth at 454m), the hole was displaced to 1.2 s.g. Spud mud at 4625 lpm, 166 bar. A total of 80m^3 or 1.5 x hole volume was pumped. The trip out of hole to the mudline was slick and so the decision was taken to run conductor without making a wiper trip.

No discernible wear was evident on either stage of the hole opener or on the 17.1/2" bit. All were graded 0, 0, NO, A7, E, IN, NO, TD.

Run & Cement 30" Conductor

The 30" conductor was run as configured in Fig: 1 below. It was handled on the drill floor using a 30" false rotary and hand slips. A 5" drill pipe inner string was run using a false rotary and was spaced out to be 19m above the 30" float shoe when the running tool was made up. A 28" bowspring centraliser was installed on the bottom single of the inner string. The inner string was made up to the 30" running tool which in turn was made up to the 30" Low Pressure (LP) housing with 5 LH turns.

The housing was locked into the Permanent Guide Base (PGB), located in the moon pool, and the whole assy. run in hole to the mudline. No problems were encountered locating, stabbing into and running down through the 36" hole. The conductor was suspended off bottom to provide the PGB with a 1.5m stick up above the mud line. Observation of the forward bullseye indicated a 1.5° tilt to starboard. The guidewire and anchor tensions were adjusted to reduce this by a quarter degree to 1.25°.

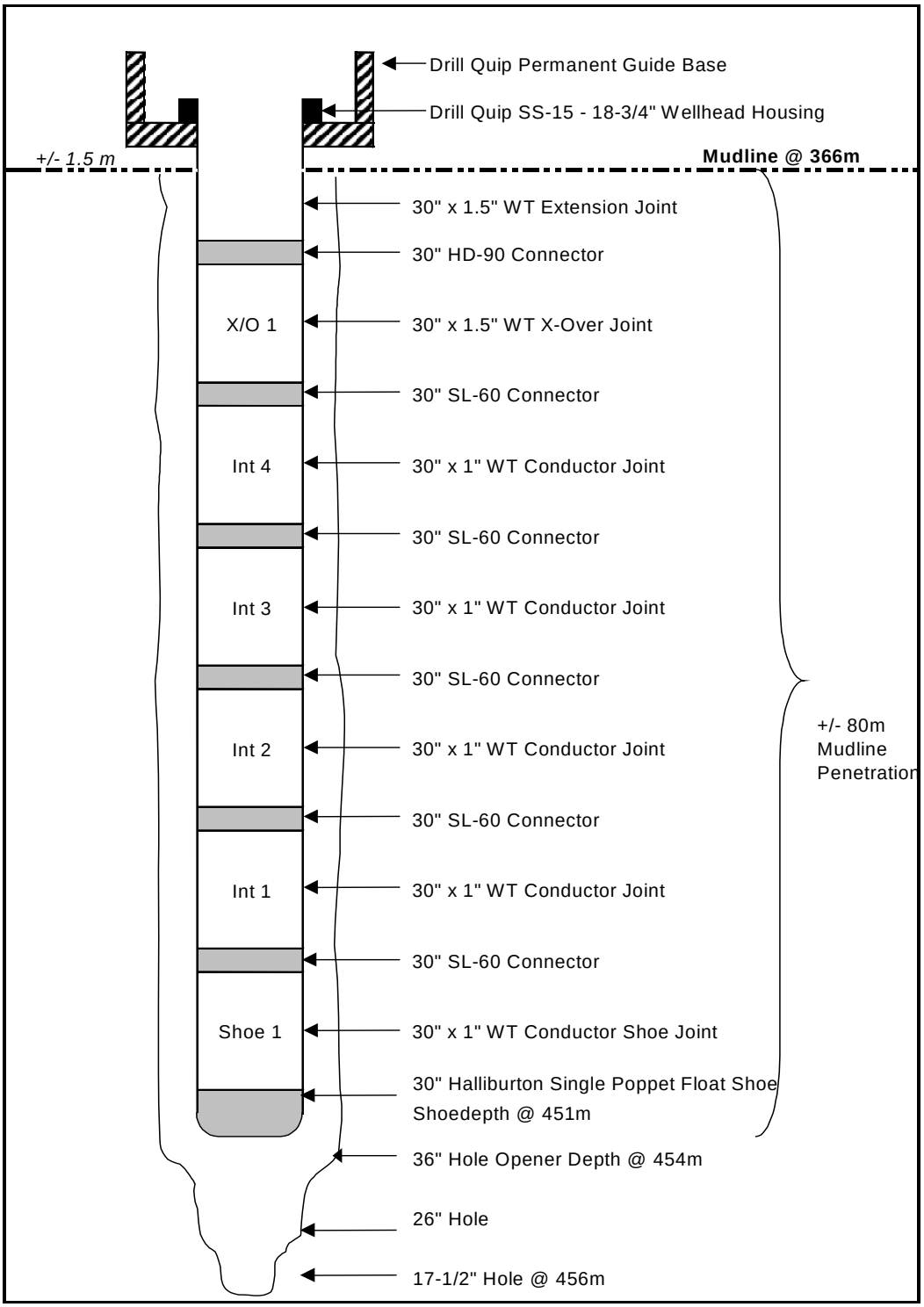


Fig: 1 - 30" Conductor Schematic

Circulation was broken with the rig pump and a total of 97 m^3 of seawater circulated at 1955 lpm prior to the 30" cement job. The 30" was cemented as per program, pumping both a lead and tail to reduce the initial hydrostatic pressure on the borehole. An excess of 200% was used. A wiper dart was released through a TIW valve and the cement displaced with the cement unit at 1.4 m^3/min to leave 5m of cement above the shoe. Final displacement pressure was 10 bar at 0.2 m^3/min.

Cement returns were seen at the mudline while observing with the ROV.

Wait on cement time was 5 hrs, after which the landing string weight was slacked off and the forward bullseye observed with the ROV. No movement of the PGB was seen. The running tool was backed out with 5 RH turns and the landing and inner string POOH. At the mud line the wellhead was flushed with seawater at 4900 lpm, 41 bar.

Delays

None

4.1.3 8.1/2" x 17.1/2" PILOT HOLE SECTION

26" Clean Out Run

The following 26" clean out assy. was made up and run in hole:

26" Hughes GTXCMG1 Rock Bit (c/w 1 x 24/32" & 3 x 20/32" nozzles).
Bit Sub (c/w non-ported float)
Anderdrift Tool (0° to 5° inclination)
3 x 9.1/2" Spiral Steel Drill Collars
Cross Over
3 x 8" Spiral Steel Drill Collars
Cross Over
3 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
14 x 5" HWDP

The assy. was washed down and cement tagged, as expected, at 446m. The cement and shoe were drilled out with 4600 lpm, 122 bar, 50 rpm, 7,200 N.m torque and 10 - 11 MT WOB. 10m^3 hi-vis sweeps were pumped as required to clean the hole. The rathole was cleaned out to 456m. The assy. was POOH and racked back.

Prior to drilling ahead with the 8.1/2" pilot hole an additional 47 stands of 5" drill pipe was picked up and racked back. All pipe was drifted to 2.3/4" in the 'V' door.

Drilling 8.1/2" Pilot Hole Section

With a total of 2760m of pipe in the derrick, work commenced on making up the following 8.1/2" pilot hole assy:

8.1/2" Hughes MXC-1 Rock Bit (c/w 2 x 14/32" & 2 x 16/32" nozzles).
8.1/2" Near Bit Stab (c/w non-ported float)
2.6m x 6.1/2" Pony Drill Collar
8.1/2" String Stab
CDR Tool
8.3/8" In Line Stabiliser
MWD
6.1/2" NMDC
5 x 6.1/2" Steel Drill Collars
3 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
14 x 5" HWDP

The BHA was tripped in hole and washed down to tag the 26" rathole at 456m. The pilot hole was drilled to a section TD of 1382m in 15 hrs.

The Anderdrift had indicated approximately 3.5° inclination at the 30" shoe. When free of casing interference the MWD tool confirmed this. The hole angle varied between 4.34° & 2.89° in a predominantly SSW direction. The final bottom hole location was projected to be:

MD - 1382m, TVD (RT) - 1379.8m, South - 62.52m, West - 7.68m.

Various drilling parameter were used in an attempt to control this angle: 3150 lpm (limited by MWD tool), 176 - 197 bar, 60 - 150 rpm, 2,300 – 6,100 Nm torque, 0 - 7 MT WOB.

5 - 10m^3 hi-vis sweeps were pumped as required to clean the hole. At TD a final hi-vis pill was swept from the hole with seawater and the hole displaced to 1.2 s.g. Spud mud (98m^3 pumped in total). The pipe was slugged and the assy. tripped to the 30" shoe. No excess drag was noted. At the 30" shoe, 80m^3 of seawater was circulated at 4500 lpm, 295 bar to clean out the conductor. The top drive was again made up at the mudline and the PGB flushed of cuttings before finally POOH and racking back the assy. The MWD, ILS & CDR were laid out to be re-programmed for configuration with the ISONIC Tool planned or the 8.1/2" main hole section.

The bit had been heavily eroded and was graded: 8, 5, WT, A, E, 1/8", ER, TD.

Open Hole to 17.1/2"

The 12.1/4" x 17.1/2" hole opener assy. was made up as follows:

6.1/2" Bullnose

12.1/4" Hole Opener
17.1/2" Hole Opener
Bit Sub (c/w non-ported float)
Anderdrift Tool (0° to 5° inclination)
3 x 9.1/2" Spiral Steel Drill Collars
Cross Over
3 x 8" Spiral Steel Drill Collars
Cross Over
3 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
14 x 5" HWDP

This assy was run down into the 30" wellhead where the Anderdrift tool was tested. It was then run in and washed down to tag the top of the 8.1/2" pilot hole at 456m. The pilot hole was then opened up to 17.1/2" with 3200 - 4200 lpm, 66 - 150 bar, 120 - 150 rpm, 5000 – 14,300 N.m torque and 1 - 8 MT WOB. 10m^3 hi-vis sweeps were pumped every stand and an Anderdrift survey taken every other stand to confirm that the hole was not side tracked. Drilling at times was ratty with erratic torque and occasional string stalls. The hole was opened to the section TD (1382m) in 16 hrs with a final 17.1/2" cutter depth of 1379m. The overall ROP of 58 m/hr was slower than anticipated.

The hole was displaced to 1.2 s.g. Spud Mud. No hole problems were experienced during the trip out of the hole. Both the 12.1/4" and 17.1/2" hole opener were very heavily worn and graded 8, 8, WT, A7, 4, 3/4", ER, TD.

Run & Cement 13.3/8" Casing

Handling gear was rigged up to run the 13.3/8", 72#, L-80, Mod Buttress casing. The single joint shoe track was made up and the casing string run in hole. 11 bowspring centralisers were fitted as per original program. The ROV visually monitored the casing enter the wellhead and then returned to its protective cage approximately 15m from well centre. There it continued to monitor the operation on sonar providing a gas watch. At approximately 727m, the string began to take weight, 9 MT. The Driller informed the Toolpusher but as it was assumed to be normal hole drag the casing running operation continued. At approximately 810m the ROV noticed an unusual sonar reflection and was flown over to investigate. On visual inspection it could be seen that the casing had buckled at the wellhead with seven joints laying out on the seabed.

The decision was made to attempt to pull the casing string back to surface. This was successful and the entire string was recovered. On surface a number of joints were rejected due to being either buckled or split. The two bowspring centralizers from the shoe joint were missing.

A wiper trip was performed using the racked back BHA complete with the back up 17.1/2" hole opener and bullnose. When the assy. took weight at 535m it was washed and reamed down to the existing 17.1/2" section TD of 1379m with 3234 lpm, 152 bar, 150 rpm. The

hole was swept clean prior to displacement to 1.4 s.g. inhibited KCl mud. During the trip out of hole a few tight spots of 10 – 15 MT drag were noticed. These were worked through without problem. No markings or scratches were seen on the bullnose and hole opener.

The racked back shoetrack was re-run. All damaged centralizers were removed with others being relocated to result in the casing string configuration shown in Fig. 2. This string was run in hole with the ROV providing a continuous visual watch. The casing was filled with 1.4 s.g. inhibited KCl mud while running in hole from 450 to 1374m. It was washed down from 1335 to 1379m with 3000 lpm. A casing swedge was used.

The casing was cemented as per program using a 100% open hole excess. Good returns were seen with ROV throughout the entire cement job. At theoretical strokes the 13.3/8" cement plug had not bumped and the displacement halted. The final circulating pressure was 55 bar (cement was observed at the seabed). When the pressure was bled down, the floats were seen to be holding. The running tool was backed out with 6 RH turns after which the landing string was POOH.

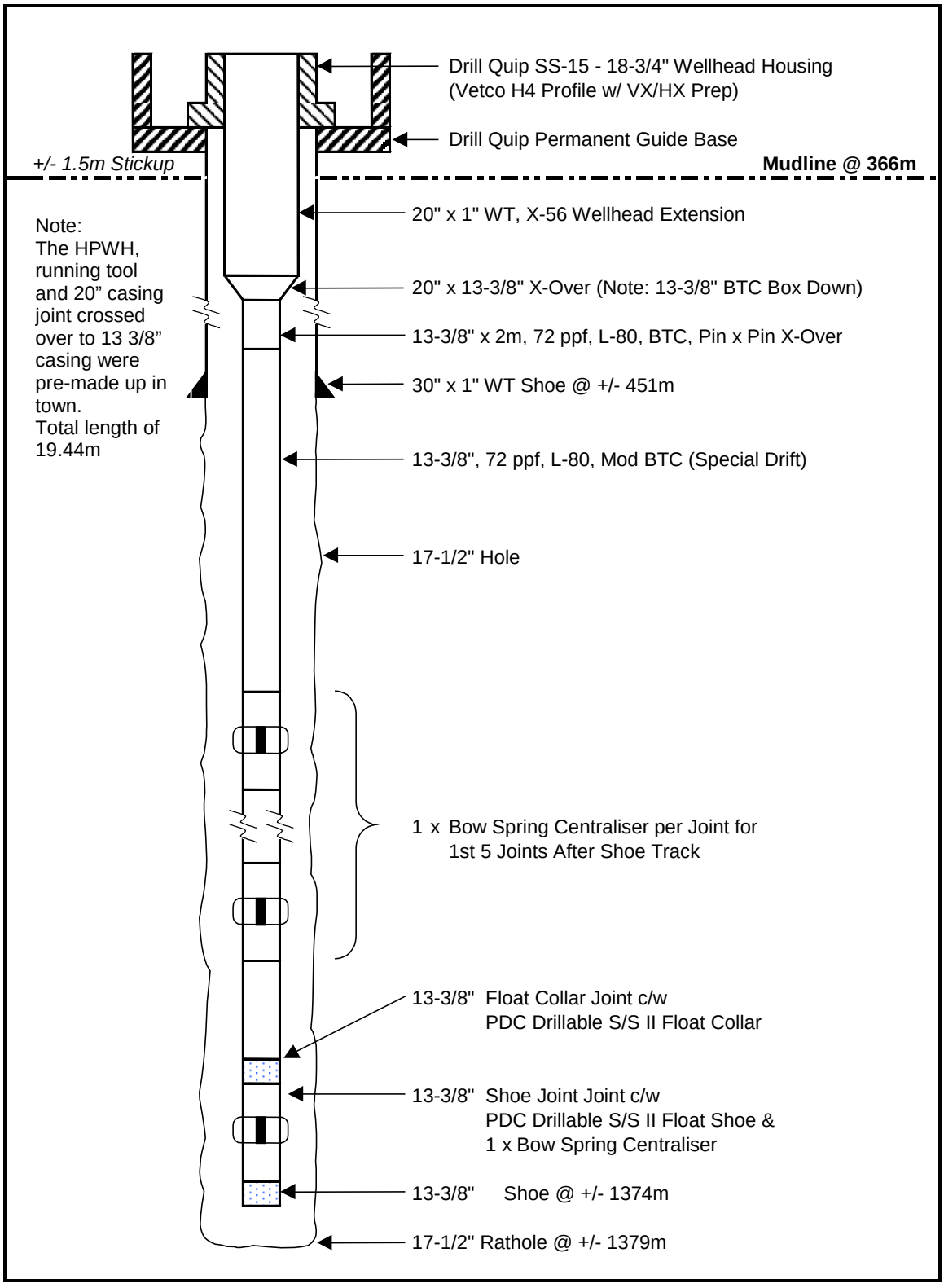


Fig: 2 – 13.3/8" Surface Casing Schematic

Running the Riser and BOP

The BOPs were inspected by a Moduspec Engineer during the tow to the location. No major work had to be performed on the BOP, except for changing out one cracked 5" ram block. The configuration of the Byford Dolphins stack is as shown in Table 1 below. Each Ram or Annular was stump tested as per the following schedule.

Ram / Annular	Model	Type	Stump pressure (bar)
Upper Annular (LMRP)	Hydrill GL – 5k	-	240
Lower Annular (LMRP)	Hydrill GL – 10k	-	520
Blind Shear Rams	Hydrill – 15k	-	520
Upper Pipe Rams	Hydrill – 15k	3½" – 5" VBR	520
Middle Pipe Rams	Hydrill – 15k	5" fixed	520
Lower Pipe Rams	Hydrill – 15k	5" fixed	520

Table 1 – BOP Test Schedule

The BOP, Riser and Diverter were run in a total of 54 hrs, including 17 hours trouble time. It was noted with the BOP's in the moonpool area, that the choke line was not draining fast enough. Upon inspection, the target sleeve was found to be misaligned. The choke and kill lines were pressure tested to 35 / 414 bar every 5 connections. With the BOPs at well centre, and just prior to latching, the following bullseye readings were taken:

BOP – 0.5°, LMRP – 0.5°, Flex Jnt – 0.75°.

After having latched and taken a 25MT overpull the following readings were taken.

BOP – 2° (stb fwd), LMRP – 2° (stb fwd), Flex Jnt – 0.5° (stb), PGB – 1.75° (stb fwd).

With the BOPs latched, the wellhead connector, the LMRP connector and the 13.3/8" casing were all successfully pressure tested to 30 / 200 bar for 5 / 10 min respectively.

Delays

Buckling of 13.3/8" Casing (inc. wiper trip)	43.5 hrs
Replace Broken Snap Rings on Calipers of Drawworks	1.0 hrs
Incorrectly Oriented Target Sleeve on Upper Inner Choke Line	3.5 hrs
Wait On Weather to Pick Up Slip Joint (no over-side work)	13.5 hrs
Section Total	*61.5 hrs*

4.1.4 8.1/2" MAIN HOLE SECTION

Drill Out 13.3/8" Shoe and LOT

The 8.1/2" main hole section BHA consisted of:

8.1/2" Hughes ABD536PH PDC Bit (c/w 4 x 18/32" nozzles).
8.1/2" Near Bit Stab (c/w non-ported float)
2.6m x 6.1/2" Pony Drill Collar
8.1/2" String Stab
CDR Tool
8.3/8" In Line Stabilizer
ISONIC
MWD
6.1/2" NMDC
6 x 6.1/2" Steel Drill Collars
9 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
8 x 5" HWDP

After making up the BHA an additional 21 joints of 5" DP were picked up to allow the assy. to reach the coring point in the Lysing formation. The assy. was tripped into hole and washed down to tag cement at 1341m. Within 30 minutes, the cement was washed / drilled away with 2000 lpm, 70 rpm, 0 - 2MT WOB. The hole was displaced to 1.44 s.g. Versavert (low tox OBM) mud. The shoetrack was drilled, the rathole cleaned out to 1382m and an additional 4m of formation drilled to 1386m with 2100 lpm, 120 rpm, 0 - 1MT WOB.

A LOT was performed using 1.44 s.g. mud. Leak-off occurred at 775 psi (1.84 s.g. EMW) after which the pressure bled off to 745 psi (1.82 s.g. EMW) in 5 mins. and to 700 psi (1.80 s.g. EMW) in 15 mins.

Drill 8.1/2" Main Hole Section

The mud weight was increased to 1.45 s.g. prior to commencing drilling. To maintain the inclination and get the BHA clear of the 13.3/8" casing, the drilling parameters were initially controlled to 250 lpm, 120 - 180 rpm, 0 – 3 MT WOB, and 5000 - 8000 N.m torque. This resulted in an average ROP of 25 m/hr (including connections). At 1530m the parameters were increased to 2750 lpm, 5 – 7 MT WOB. The desired 3000 lpm could not be achieved due to the mud pump pop-offs releasing at 276 bar (6" liners installed). ROP was controlled to 30m/hr from 1615m down after the top of the Kai and Brygge formations were picked at 1552m and 1604m respectively. Average background gas had been 0.6% until several stringers below 1670m were drilled. A gas peak of approximately 3.2% was noted after bottoms up from the first stringer at 1671m.

With the CDR indicating that the Brygge formation was water wet (with top flooding surface at 1654m) the planned weight up of the mud system began. It had been held at 1.45 s.g for formation evaluation purposes but was then increased to 1.50s.g. and planned to go to 1.55 s.g. by 1900m.

Well Control Incident at 1698m

During a connection at 1698m, an increase in pit volume was noted. The well was shut in using the Upper Annular. The SICP was 200 psi and a 4m^3 pit gain was recorded. The float was bumped to obtain the SIDP of 300 psi. An additional 0.5m^3 of mud was bled off through the choke but the casing pressure remained at 200 psi. It was decided at this point to begin circulating out the influx via the Drillers Method of well control.

The maximum gas at bottoms up was 4.6% and no other contaminants could be identified at this time. The final background gas was 2% and with the well shut in the SICP was 150 psi and the SIDP 200 psi. Trapped pressure was bled down and the casing and drill pipe pressure remained at 0 psi over 45 minutes while the riser was displaced to 1.50 SG mud.

To minimize the possibility of stack gas it was decided to close the Lower Annular and attempt to reduce the pressure on the Upper Annular. However, on the Byford Dolphin a single regulator controls both Upper and Lower Annulars and so when attempting to reduce the pressure on the Upper Annular both annulars relaxed resulting in a second influx being taken into the wellbore. An incremental pit gain of 2.7 m^3 was recorded. The well was shut in on the Lower Annular and the SICP built to 150 psi.

An attempt to bump the float in the string failed, with the drill pipe pressure increasing to 420 psi with no resultant change in casing pressure seen. This was repeated several times with no success, indicating that there was an obstruction somewhere between the drill pipe and choke. The well was isolated and the surface choke, kill and choke lines were flushed to clear obstructions, probably caused by cuttings settling out in the choke line.

The well was then shut-in on the Lower Annular and opened back to the choke line and flow checked for 10 minutes with the choke line open to the trip tank. The well was static. The well was then opened up and the pipe moved. No flow was observed. Rotation was established at 120 rpm, 5500 N.m torque. However, when starting to pump slowly with 260 lpm, 500 psi, the flow rate was seen to increase and a further pit gain noted. Rotation was stopped and the Lower Annular closed. SICP was 250 psi and the incremental pit gain 7.4 m^3.

While the mud in the pits was weighted up to 1.52 SG the casing pressure increased from 250 to 290 psi. The well was displaced to 1.52 SG mud with 485 lpm, 600 psi. The influx was circulated out, recording a maximum gas of 8.9% and a lowest mud weight of 1.32 SG. Salt water contamination was identified in the mud. The mud was circulated and conditioned for a full system volume with a maximum gas peak of 1.7% observed on the last bottoms up.

With 1.52 SG mud in the well and the trapped pressure was bled off, SICP reduced to 0 psi and SIDP to 90 psi. When opening the choke line, slight flow into the trip tank was noted. The decision was made to displace the hole to an increased 1.57 SG mud. Circulation with the existing 1.52 SG mud was maintained while weighting up the mud in the pits due to the problems experienced getting the mud to move each time circulation was started.

The well was displaced to 1.57 SG mud using the Second Circulation of the Drillers Method. Stack gas was checked for by displacing choke and kill lines to Base Fluid and then to 1.57 SG mud. The well was flow checked and was seen to be static. The Lower Annular was opened and circulation established. The pumps were staged up over the first bottoms up to 1620 lpm, 134 bar, with 120 rpm. Max gas at bottoms up was 3.3%.

A conditioning trip was made back into the 13.3/8" casing with some difficulty being noted getting the BHA back into the shoe. At 1420m a 5MT overpull was taken. The interval 1410 to 1439m was worked over three times without problem. At 1395m a second overpull of 10MT was taken. It was necessary to wash and ream through this interval with very erratic torque from 1385 to 1381m. Inside the shoe at ~1326m a bottoms up was circulated and cement pieces were observed in the returns over the shakers. While performing rig maintenance and rig repairs, the well was monitored on the trip tank. The hole took a total of 0.65 m^3 mud over this 4 hour period.

Drill to Coring Point @ 3101.5m

The assy. was tripped back in hole to 1611m and washed down from there to 1698m. Circulation was established and a bottoms up gas peak of 0.5% seen. Drilling re-commenced with 2580 lpm, 180 rpm, 5500 N.m torque and 0 – 1 MT WOB. Two sacks of Calcium Carbonate were added every hour to minimise seepage losses. ROP's were controlled to 30 m/hr initially while drilling the Brygge Flooding Surface and thereafter to be able to react to possible pore pressure increases. When entering the Springar formation at 1800m (Tare formation having been seen at 1741m) the controlled ROP's were increased to 45 m/hr. Since inclination held/dropped slightly, ROP's were again increased to 60 m/hr or higher using the maximum obtainable flow rate (without the pump pop-offs blowing), 180 rpm, 4000 - 5000 N.m torque and 0 – 5 MT WOB. Gas readings remained below 0.4% while drilling the Tare formation.

Drilling continued to 3101m. A clear increase in the LWD resistivity readings showed a Lysing formation consisting mainly of claystone with 30% water wet sand in the cuttings. Top Lysing was picked at 3088m (Note: GR and Resistivity sensors were 11.5m and 8m behind the bit, respectively). While drilling ahead the riser was boosted and SCR's were taken every 200m. Two sack per hour of calcium carbonate continued to be added to the active mud system to counter seepage losses. The hole was circulated clean at 3101m and an increase in sand noted in the samples.

The trip out of hole at core point was problem free with the hole being slick. The bit was graded 3, 5, CT, A, X, IN, BT, CP with several cutters being broken. The bottom string stabiliser was also scarred and a piece was missing from one of the blades.

Using LT-OBM, no cuttings could be discharged to the sea in this hole section. The Swaco cuttings collection system, involving vacuum pumps, drop off tanks and 4 weighting scales were used to collect all the cuttings. No major problems were experienced. Skip usage throughout the section averaged 30m of hole / skip.

Coring Operations

The 8.1/2" Coring assembly listed below was made up and run in hole:

8.1/2" DBS FC274 Corehead
75.78m of Stabilized Core Barrel
6 x 6.1/2" Steel Drill Collars
9 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
8 x 5" HWDP

Eight outer core barrels, totaling 76m in outer length, complete with inner core barrels that allowed up to 73m recoverable core length were run. During the trip in hole it became necessary to wash and ream from 1405 to 1417m and from 2150 to 2319m. A lot of cuttings / cavings were seen over the shakers. The final section from 3040 to 3101m was also washed down before circulating bottoms up. The maximum gas seen during this circulation was 6.8% and corresponded to ~2450m.

The interval from 3101.5 to 3171.5m was cored with 1050 lpm, 129 bar, 100 rpm, 5000 – 10,000 N.m torque. The additions of 2 sacks per hour of calcium carbonate continued through this cored interval. At 3171.5m the torque dropped back to a steady 6000 Nm and a slight pressure drop was seen, indicating that core had jammed. The assy. was pumped out of the hole from this depth to 3069m. A bottoms up was then circulated. During the trip out of hole it was necessary to work the pipe from 1583 to 1430m with a maximum overpull of 9MT. No further problems were encountered. At surface 67.7m of core was recovered equating to 96.7% recovery. The corehead was graded 7, 3, LT, XN, X, IN, JD, PR with 14 cutters missing from the nose area.

Drill to TD

The following BHA was made up and run in hole. It was essentially the main 8.1/2" BHA with a new bit and no ISONIC tool:

8.1/2" Hughes BD445 Bit (c/w 4 x 20/32" nozzles).
8.1/2" Near Bit Stab (c/w non-ported float)
2.6m x 6.1/2" Pony Drill Collar

8.1/2" String Stab
CDR Tool
8.3/8" In Line Stabiliser
MWD
6.1/2" NMDC
6 x 6.1/2" Steel Drill Collars
9 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
8 x 5" HWDP

No problems were encountered running in hole. However, when circulating bottoms up, a maximum gas reading of 3% was recorded and a large amount of cuttings / cavings (non-pressurized) seen at surface. The hole was circulated clean (filling 11 skips while coring/working from 3101 to 3170m). During this period of circulating the mud weight was raised from 1.57 s.g. to 1.60 s.g.

With the hole clean drilling re-commenced with 2425 lpm, 285 bar, 180 rpm, 8000 – 16,000 N.m torque, 1 – 5 MT WOB. The Lange formation was drilled (all claystone with no clear sign of the predicted markers). TD of the well was determined to be 3667m. The final MWD survey was projected TD to be:

MD = 3667m, TVD (RT) = 3662.02m, South = 141.67m, East = 8.56m.

With the shakers clean and the gas level below 0.2%, a flow check was performed. The well was static. The subsequent trip out of hole went without problem with the LWD and MWD tools being laid out at surface. The bit was graded: 1, 1, WT, A, X, IN, BT, TD. However, a large piece of matrix was broken off one of the 6 blades.

Open Hole Logging Operations

Run #1 - AIT-PEX-HNGS (Weak Point – ECRD – 8000 lbs)

With the rig floor cleared Schlumberger wireline was rigged up and the Run #1 Induction, Density, Neutron, Spectral Gamma Ray toolstring (AIT-PEX-HNGS) made up. This was run in hole and a repeat section logged. TD was tagged with a tide corrected depth of 3665.7m. Sections of the main log had to be repeated due to 'high' shallow resistivity readings that did not repeat correctly. Despite this, the log was completed in 9 hrs 15 mins with no excess drag or overpulls being seen. 1 hr 15 mins was recorded as Trouble Time against the tool and 20 mins against the rig for a sheared compensator pin. Logged from 3663 to 1374m. Most of the hole was seen to be in gauge, bar a heavily washed out section of the Springar formation from 2117m to approximately 2400m. ID's of up to 19" were recorded with an average excess of 24.5% over this interval. The average excess for the entire openhole section was 2.8%.

Run #2 - DIS-GR-AMS-OBDT (Weak Point – ECRD – 8000 lbs)

Run #2 was with the Oil Based Diplog, Array Sonic toolstring (DIS-GR-AMS-OBDT). This was also run without problem and completed within 8 hrs 45 mins, logging from 3664 to 1374m.

Run #3 - Back-up PEX (Weak Point – ECRD – 8000 lbs)

After analysing the data from Run #1, the density tool was seen to be reading unusually 'low' through the Brygge and Tare formations (between 1828m and 1624m). It was decided to re-log this section with the back up Density, Neutron (PEX) toolstring. This Run #3 (2000 to 1590m) was completed in 3 hrs 55 mins and was seen to repeat with the previous PEX run, Run #1.

Run #4 - Read 8 Level VSP (Weak Point – Yellow – 4800 to 5400 lbs)

The Read 8 level Delta VSP tool was made up and run in hole on the Schlumberger line. It stood up at 2060m but was freed with a 2000 lbs overpull and worked through to bottom. However, two attempts to correlate the toolstring on depth failed due to sticking, the first requiring a 3000 lbs overpull to free. On the second attempt the tool became stuck at ~3403m (top geophone depth) for 45 mins. The toolstring was eventually freed by working it with up to 7000 lbs line pull (normal logging tension - 3400 lbs & toolstring weight - 900 lbs). While pulling out from this depth, additional overpulls were experienced and the toolstring became stuck again at approximately 3090m (top geophone depth). It was immediately worked to a maximum line pull of 7000 lbs but without success. The air gun array was fired and the signal monitored on the geophones in an attempt to determine where the toolstring was stuck.

After being stuck for 3 hrs 50 mins the string freed itself while holding 7000 lbs line pull. Communications with the toolstring confirmed it was complete and it was pulled out of hole without further incident – there was no damage to the tools.

Wiper Trip

With the VSP toolstring on surface, wireline was rigged down and the following 8.1/2" wiper trip assy. made up:

8.1/2" Hughes ABD536PH PDC Bit (c/w 4 x 18/32" nozzles).
8.1/2" Near Bit Stab (c/w non-ported float)
6.1/2" Drill Collar
8.1/2" String Stab
5 x 6.1/2" Steel Drill Collars
12 x 5" HWDP
6.1/2" Weir-Houston Hydraulic Jars
8 x 5" HWDP

This was run in hole to the casing shoe, filling the pipe and breaking circulation every 20 stands. At the shoe the drill line was slipped and cut and the mud circulated for half an hour at 2010 lpm, 151 bar, 112 rpm. The trip to bottom was without incident, with the last 2 stands being washed & reamed to bottom (from 3600 to 3660m) as a precaution with (2100 lpm, 211 bar, 120 rpm, 7000 - 8000 N.m torque). TD was tagged on depth at 3667m (tide corrected) with no fill. A total of 2.5 bottoms up were circulated with 2400 lpm, 280 bar, 120 rpm, 6000 - 7000 Nm torque while working the bottom 2 singles. A first gas peak of 6.4% was seen to have come from ~2100m with a second peak of 5% arriving at bottoms up. Following bottoms up the riser was boosted and the header box jetted. A total of 1.4MT of cuttings was removed from the well, riser and header box during this period of circulating.

Prior to POOH the choke and kill lines were flushed and SCR's taken. Only 2 stands were pulled before a hydraulic hose on the upper racking arm burst. The hole was circulated for one hour with full strokes while the burst hose was replaced. With only 2 stands out of hole it was decided to run back to TD and circulate an additional bottoms up. TD was tagged with no fill recorded and a further bottoms up circulated. An increase in cavings was seen when the header box was jetted, but the hole and riser cleaned up and after a total of 1.5 hrs circulating the hole was again flow checked and the trip out of hole begun.

No hole problems were encountered during the trip out. However, at 2902m an incident occurred when a bolt from the top drive bell guide worked loose and fell. The bolt landed on the upper racking arm but the associated washer fell and landed on the doghouse roof window. The operation was suspended while the origin of the bolt was determined. With it replaced and re-wired the trip out of hole continued without further problem.

Run #5 – MDT-GR (Weak Point – ECRD – 8000 lbs)

Rigged up Schlumberger logging equipment. The weather had deteriorated to the point where the sea state would not allow m/v the 'Highland Star' to handle the air gun array required for the VSP walkaway survey. Therefore, the decision was made to run the MDT first. Once correlated on depth (at 1600 m using the AIT-PEX-HNGS run of the 10th August 2001), pre-testing began in the Brygge. 10 good tests were taken between 1655m and 1732m (wireline depth) with no lost seals. The maximum formation pressure through this interval was 1.535 SG. A fluid sample was then attempted at various depths between 1673m and 1673.5m MDRKB without success. The formation proved to be too soft and on all occasions the seal was lost or the probe plugged. The attempt was abandoned.

The MDT tool was run down to ~3100m MDRKB and re-correlated over the Lysing. Five pre-test were taken between 3091.2m and 3107.2m (wireline depth) with a maximum formation pressure of 1.423 SG. A fluid sample was required in the Lysing. Two attempts were aborted due to poor permeability and tool telemetry problems. One water sample was obtained from 3091.2m MDRKB. Three 450cc sample bottles were filled with what appeared to be water over a period of 5.5 hrs. The tool was then closed. No problems were encountered pulling free of the formation and during the subsequent trip out of hole. The

fluid sample bottles were extracted at surface and attempts to compress them suggested that no gas was present in the samples.

Run #6 – Re-run Read 8 Level VSP (Weak Point – Pink – 5400 to 6000 lbs)

On surface the Schlumberger cable head was swapped out and the Read 8 Level VSP tool rigged up. It was run in hole without difficulties with check shots being taken at 1280m, 2400m & 3200m (wireline depth). The tool string was correlated over the Lysing to the AIT-PEX-HNGS run of the 10th August 2001 and run down to tag TD. The VSP survey was recorded at 10m intervals from 3523m to 2898m (wireline top geophone depth). At 2898m, the walkaway survey was conducted. With the walkaway completed, the survey continued, again at 10m intervals from 2898m to the final station at 790m. No hole problems or overpulls were encountered throughout the survey. The tool-string was pulled and laid out.

Run #7 – Sidewall Cores (Weak Point Green – 5450 to 6900 lbs)

On surface, poor insulation on line 7 of the Schlumberger cable-head required that it be rebuilt. This resulted in 0.5 hrs Trouble Time. Radio silence was established and the two tandem coreguns, loaded with a total of 60 bullets, were armed. The toolstring was run in hole and correlated at ~3450m. A total of 53 shots were taken between 3659m and 1447m. Significant overpulls were taken following the shots made in the Lysing formation and it was feared that some of the barrels had been lost. A number of misfires were also experienced, something confirmed when the guns were back on surface. No problems or overpulls were attributed to hole conditions. The final shot summary on surface was:

Shots Attempted	53
Cores Recovered	29
Empty Barrels	2
Misfires	8
Lost Barrels	14
Overall Recovery	55%

Delays

Well Control Incident	50.0 hrs
Repair to Drawworks Caliper	2.5 hrs
Repair to Faulty Weight Indicator on Rig	2.0 hrs
Wiper Trip to Repeat LWD log due to Questionable Data	1.5 hrs
Noticed 5 bbl Gain in Active; Flowcheck and Circulate Bottoms Up	1.5 hrs
Repair to Leaking Rig Pump	0.5 hrs
Trouble Shoot Comms Problem with MWD	1.5 hrs
Trouble Shoot Problem with Trip Tank	0.5 hrs
Broken Compensator Pin during Logging	0.5 hrs

Re-log AIT-PEX-HNGS due to bad Shallow Resistivity	1.5 hrs
Re-log PEX due to Anomalous Density Data	3.5 hrs
Stuck VSP Tool (not inc. wiper trip)	13.0 hrs
Repair Burst Hydrualic Hose on Upper Racking Arm	1.0 hrs
Investigate Dropped Object Incident	0.5 hrs
Re-build Schlumberger Cablehead due to Poor Insulation	0.5 hrs
Section Total	*80.5 hrs*

4.1.5 ABANDONMENT

Abandonment Cement Plugs

A 3.1/2" cement stinger with PH-6 connections was used to set the abandonment plugs and a total of 47 joint (444m) were picked up from the deck. The rig equipment was not capable of handling the make up of this tool joint and it was therefore necessary to mobilize a tubing power tong. An open ended mule shoe was installed on the bottom of the cement stinger. Circulation was established at the shoe and at 3200m, where a full bottoms up produced a max gas peak of 1.53%. The first of the four cement plugs was set from 3190m to 3025m as per program. It was mixed and pumped with out problems and both it, and the 5 m^3 tuned spacer pumped ahead of it, were displaced with the rig pumps leaving it under-displaced by 0.75 m^3. No circulation was done at the top of the first plug, instead the string was tripped back to 1791m (the setting depth of the second), a drill pipe wiper dart pumped and a full bottoms up circulated.

The second cement plug was spotted from 1791m to 1491m as per program and this time without a spacer being pumped ahead of it. It too was under-displaced by 0.75 m^3 using the rig pumps before the string was pulled back to the Theoretical Top of Cement (1491m) and the excess circulated out of the hole. Again a drill pipe wiper dart was pumped.

The third plug was spotted (with a 5 m^3 spacer pumped ahead) right on top of the second from 1491m to 1274m. It too was under-displaced by 0.75 m^3 using the rig pumps. The string was pulled back to 1095m a wiper dart pump and a bottoms up circulated. A slug was pumped and the string pulled to surface laying out all the drill pipe and the 3.1/2" cement stinger. This was the best utilization of the Waiting On Cement time prior to a combined weight and pressure test of the plug.

A mule shoe was picked up and run in hole on 5" drill pipe. It was washed down to tag the top of plug three at 1281m (7m deep on theoretical) with 5 MT. The string was then pulled back to 661m (or the setting depth of plug four) and the upper annular closed in preparation for the planned pressure test with mud, using the rig pumps. However, the upper annular was seen to be leaking and it was decided to space out to close in on the Middle Pipe Rams. The pressure test to 110 bar / 5 mins was successfully concluded, this time using seawater from the cement unit. 0.6 m^3 was pumped and returned.

Cement plug four was set inside the 13.3/8" casing from 661m to 411m as per program. No spacer was pumped ahead of the slurry. It too was underdisplaced by 0.75 m^3 using the rig

pumps. The string was pulled to Theoretical Top of Cement and the hole circulated clean. After the displacement of the riser to seawater, the cement plug was pressure tested to 125 bar / 5 min.

Note: All plugs were pumped and displaced without pipe rotation.

Wellbore Clean Up

Prior to the wellbore / riser clean up, the choke, kill and riser booster line were displaced to seawater using the cement unit. This was due to pit space limitations. Next the following spacer train was pumped and displaced with seawater at a controlled 2265 lpm, 170 rpm:

Base Oil	8 m^3
Weighted Hi-Vis Pill	30 m^3
Hi-Vis Wash Pill	30 m^3
Solvent Pill	30 m^3
Hi-Vis Clean Up Pill	10 m^3

All returns were captured as slops (142 m^3 in total) with no discharges to sea. The remaining drill pipe in the hole was pulled and laid out.

A trip in hole was made with the universal tool and adapter to latch and pull the wearbushing (13.6 MT overpull required to shear the retaining pins). While POOH with the wearbushing the Blind Shear Rams were closed and plug four successfully pressure tested with seawater to 125 bar / 5 mins. 0.3 m^3 was pumped and returned.

Pulling BOP & Riser

The rig floor was cleared and the riser handling equipment rigged up. The diverter, slip joint, 23 joints of riser and the BOPs were pulled in 17 hrs. 3 hrs was required to split and secure the BOPs and LMRP in the Cellar Deck. On inspecting the BOPs it was found that a keyseat had developed in the flex joint housing that would require attention prior to being re run. Beyond this no other damage or excessive wear was noted.

Cut and Retrieve the Wellhead

The Weatherford MOST tool was made up and spaced out to cut 5m below the mudline. It was run in hole and the wellhead engaged. The cut was initiated with a set down weight of 6MT and a pump rate of 3240 lpm. After 1.5 hrs cutting an unsuccessful attempt was made to free the wellhead and PGB with a 140MT overpull. The wellhead was engaged a second time and the cut was re-initiated at the same depth. After a further 30 mins cutting the motor began to stall out giving indications that the cut was complete. However, a second attempt to pull the wellhead free with 140MT overpull also proved unsuccessful. The tool was pulled above the wellhead to expose the knife blades and a visual inspection with the ROV showed a wear

pattern that indicated full travel and suggested that the cut was complete. An attempt to re-initiate the cut a second time was unsuccessful with the motor stalling out and on this occasion the tool became stuck while attempting to pick up. It was freed with a 45MT overpull but inspection of the knife blades with the ROV showed then to be distorted in the open position and the tool was pulled. On surface the blades were swapped out and the space out altered to make a fresh cut 0.5m higher than the first.

With the tool back at the mudline and the wellhead engaged a second successful cut was made in 1.5 hrs with good indications of returns below the PGB seen on the ROV. An overpull of 158MT was still required to free the wellhead. The tool, wellhead and PGB were POOH with the running string of Drill Collars, HWDP and Drill Pipe all being laid out sideways.

In the moonpool, with the PGB on the spider beams, the MOST tool was released without problem. However, attempts to disengaged the 30" LP Housing from the PGB as per Dril-Quip procedures were unsuccessful. Eventually the lock ring had to be cut with a welding torch to allow the LP & HP Housings, complete with 30" conductor stump, to be pulled with the 18.3/4" running tool. The rig next commenced to lay out the remaining drill pipe from the derrick.

Anchor Handling

Anchor handling had started while running in hole with the MOST tool. The "Havila Crown", "Northern Corona" and the "Normand Borg" were on location and had begun to remove excess chain from the four anchors (#1, #5, #6, #12) that required this due to chain locker capacity. Once complete these anchors were re-deployed on the seabed.

With the wellhead cut and pulled, de-ballasting commenced and the anchor handling started in earnest. Handling continued concurrently with the laying out of remaining drillpipe from the derrick and was complete with the last anchor being bolstered at 01:12 hrs on 19th August 2001. At this point the rig was off contract and handed over to Statoil. 22 stand of drill pipe remained in the derrick and were planned to be left there for the duration of the tow.

Delays

Trouble Shoot and Repair Drawworks Parking Brake	1.5 hrs
Leaking Annular During Cement Plug Pressure Test	0.5 hrs
Difficulties Cutting and Pulling Wellhead	6.5 hrs
Cut Wellhead Housing 'Lock Ring' with Welding Torch	2.0 hrs
Section Total	*10.5 hrs*

4.2 SUMMARIES

4.2.1 Mooring Summary

See attached Initial Floater Report.

4.2.2 Drilling Fluid Summary

See attached Drilling Fluid Properties for Oil based Mud.
See Enclosure, Drilling Fluids Summary report from Anchor MI.

4.2.3 BHA Summary

See attached Bottom Hole Assembly Details reports.

4.2.4 Bit Summary

See attached Bit Record.

4.2.5 Survey Summary

Table 4.1.10 Survey Listing

Seq #	Measured depth	TVD depth	Incl. angle	Azimuth angle	Course length	Vertical section	Displ. +N/S-	Displ. +E/W-	Total displ	At Azim	DLS (deg/	Survey tool
-	(m)	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(deg)	10m)	type
1	366.0	366.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.00	TIP
2	453.2	453.1	4.51	205.57	87.2	-3.1	-3.1	-1.5	3.4	205.6	0.52	MWD
3	485.0	484.9	3.76	203.81	31.8	-5.2	-5.2	-2.4	5.7	205.3	0.24	MWD
4	513.6	513.4	3.28	202.93	28.6	-6.8	-6.8	-3.1	7.5	204.8	0.17	MWD
5	542.5	542.2	3.07	203.87	28.9	-8.3	-8.3	-3.8	9.1	204.6	0.07	MWD
6	567.4	567.1	3.51	208.93	24.9	-9.5	-9.5	-4.4	10.5	204.8	0.21	MWD
7	599.6	599.2	3.41	209.84	32.2	-11.2	-11.2	-5.4	12.4	205.5	0.04	MWD
8	630.3	629.9	3.05	212.48	30.7	-12.7	-12.7	-6.3	14.2	206.2	0.13	MWD
9	657.7	657.2	2.89	212.95	27.4	-13.9	-13.9	-7.0	15.6	206.8	0.06	MWD
10	686.4	685.9	2.89	206.48	28.8	-15.2	-15.2	-7.7	17.0	207.1	0.11	MWD
11	715.3	714.7	3.51	190.67	28.8	-16.7	-16.7	-8.2	18.6	206.3	0.37	MWD
12	743.8	743.2	3.05	188.14	28.5	-18.3	-18.3	-8.5	20.2	204.9	0.17	MWD
13	772.5	771.9	3.12	188.66	28.8	-19.8	-19.8	-8.7	21.7	203.8	0.03	MWD
14	801.1	800.4	4.27	183.13	28.6	-21.7	-21.7	-8.9	23.4	202.4	0.42	MWD

Seq #	Measured depth	TVD depth	Incl. angle	Azimuth angle	Course length	Vertical section	Displ. +N/S-	Displ. +E/W-	Total displ	At Azim	DLS (deg/	Survey tool
-	(m)	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(deg)	10m)	type
15	829.8	829.0	4.32	182.28	28.7	-23.8	-23.8	-9.0	25.4	200.7	0.03	MWD
16	858.6	857.8	4.34	182.48	28.8	-26.0	-26.0	-9.1	27.5	199.3	0.01	MWD
17	885.7	884.8	4.24	189.42	27.1	-28.0	-28.0	-9.3	29.5	198.4	0.19	MWD
18	915.1	914.1	4.27	192.66	29.4	-30.1	-30.1	-9.7	31.7	197.9	0.08	MWD
19	943.8	942.8	4.15	189.73	28.8	-32.2	-32.2	-10.1	33.7	197.5	0.09	MWD
20	972.4	971.3	3.99	186.97	28.6	-34.2	-34.2	-10.4	35.8	197.0	0.09	MWD
21	1001.1	999.8	4.04	189.15	28.6	-36.2	-36.2	-10.7	37.7	196.5	0.06	MWD
22	1029.3	1028.0	3.92	187.00	28.2	-38.1	-38.1	-11.0	39.7	196.1	0.07	MWD
23	1058.1	1056.7	3.79	187.45	28.8	-40.0	-40.0	-11.2	41.6	195.7	0.05	MWD
24	1086.6	1085.2	4.01	180.33	28.5	-42.0	-42.0	-11.4	43.5	195.1	0.19	MWD
25	1114.6	1113.1	4.02	178.74	28.0	-43.9	-43.9	-11.3	45.4	194.5	0.04	MWD
26	1144.1	1142.6	3.98	173.70	29.6	-46.0	-46.0	-11.2	47.3	193.7	0.12	MWD
27	1173.4	1171.7	4.09	172.81	29.2	-48.0	-48.0	-11.0	49.3	192.9	0.04	MWD
28	1202.5	1200.8	4.03	171.56	29.1	-50.1	-50.1	-10.7	51.2	192.0	0.04	MWD
29	1231.1	1229.4	3.95	171.73	28.7	-52.0	-52.0	-10.4	53.1	191.3	0.03	MWD
30	1259.9	1258.1	4.14	166.43	28.8	-54.0	-54.0	-10.0	55.0	190.5	0.15	MWD
31	1289.0	1287.1	4.16	168.61	29.1	-56.1	-56.1	-9.6	56.9	189.7	0.05	MWD
32	1317.3	1315.3	4.15	167.23	28.3	-58.1	-58.1	-9.1	58.8	188.9	0.04	MWD
33	1346.1	1344.1	4.19	163.74	28.9	-60.1	-60.1	-8.6	60.7	188.1	0.09	MWD
34	1362.4	1360.3	4.11	157.77	16.3	-61.2	-61.2	-8.2	61.8	187.6	0.27	MWD
35	1383.1	1380.9	3.95	146.90	20.7	-62.5	-62.5	-7.5	63.0	186.9	0.38	MWD
36	1411.4	1409.1	4.29	149.02	28.3	-64.2	-64.2	-6.5	64.6	185.7	0.13	MWD
37	1441.8	1439.5	4.41	149.01	30.5	-66.2	-66.2	-5.3	66.4	184.6	0.04	MWD
38	1469.7	1467.2	4.46	150.46	27.8	-68.1	-68.1	-4.2	68.2	183.5	0.04	MWD
39	1498.2	1495.7	4.52	151.26	28.6	-70.0	-70.0	-3.1	70.1	182.5	0.03	MWD
40	1527.1	1524.5	4.48	148.81	28.9	-72.0	-72.0	-2.0	72.0	181.6	0.07	MWD
41	1555.6	1553.0	4.58	147.89	28.5	-73.9	-73.9	-0.8	73.9	180.6	0.04	MWD
42	1584.6	1581.8	4.57	146.38	29.0	-75.9	-75.9	0.5	75.9	179.7	0.04	MWD
43	1613.1	1610.3	4.54	147.28	28.5	-77.8	-77.8	1.7	77.8	178.7	0.03	MWD
44	1641.8	1638.9	4.55	147.28	28.7	-79.7	-79.7	2.9	79.7	177.9	0.00	MWD
45	1670.7	1667.6	4.52	144.86	28.8	-81.6	-81.6	4.2	81.7	177.1	0.07	MWD
46	1699.3	1696.2	4.46	140.09	28.6	-83.3	-83.3	5.6	83.5	176.2	0.13	MWD
47	1728.4	1725.2	4.38	140.28	29.2	-85.1	-85.1	7.0	85.3	175.3	0.03	MWD
48	1757.7	1754.4	4.22	142.59	29.2	-86.8	-86.8	8.4	87.2	174.5	0.08	MWD
49	1786.9	1783.5	4.25	142.20	29.2	-88.5	-88.5	9.7	89.0	173.8	0.01	MWD
50	1815.4	1811.9	4.13	142.39	28.5	-90.1	-90.1	11.0	90.8	173.1	0.04	MWD
51	1843.9	1840.3	4.03	142.59	28.5	-91.7	-91.7	12.2	92.5	172.4	0.04	MWD
52	1872.5	1868.9	4.07	143.02	28.7	-93.3	-93.3	13.4	94.3	171.8	0.02	MWD
53	1901.1	1897.4	4.13	142.82	28.6	-95.0	-95.0	14.7	96.1	171.2	0.02	MWD
54	1930.1	1926.3	4.13	142.19	29.0	-96.6	-96.6	15.9	97.9	170.6	0.02	MWD
55	1958.2	1954.4	4.07	141.73	28.2	-98.2	-98.2	17.2	99.7	170.1	0.02	MWD
56	1986.7	1982.8	4.01	142.48	28.5	-99.8	-99.8	18.4	101.5	169.6	0.03	MWD
57	2015.4	2011.4	3.94	141.54	28.7	-101.4	-101.4	19.6	103.3	169.0	0.03	MWD
58	2043.8	2039.8	3.38	145.43	28.4	-102.8	-102.8	20.7	104.9	168.6	0.22	MWD
59	2072.5	2068.5	3.43	149.15	28.8	-104.3	-104.3	21.6	106.5	168.3	0.08	MWD
60	2100.8	2096.7	3.35	150.09	28.3	-105.7	-105.7	22.5	108.1	168.0	0.03	MWD
61	2129.8	2125.6	3.50	155.92	29.0	-107.2	-107.2	23.3	109.7	167.8	0.13	MWD
62	2158.9	2154.6	3.27	155.29	29.1	-108.8	-108.8	24.0	111.4	167.6	0.08	MWD
63	2188.0	2183.7	3.28	151.32	29.2	-110.3	-110.3	24.7	113.0	167.4	0.08	MWD

Seq #	Measured depth	TVD depth	Incl. angle	Azimuth angle	Course length	Vertical section	Displ. +N/S-	Displ. +E/W-	Total displ	At Azim	DLS (deg/	Survey tool
-	(m)	(m)	(deg)	(deg)	(m)	(m)	(m)	(m)	(m)	(deg)	10m)	type
64	2216.7	2212.4	2.96	150.43	28.7	-111.7	-111.7	25.5	114.5	167.2	0.11	MWD
65	2246.4	2242.0	2.60	151.00	29.7	-112.9	-112.9	26.2	115.9	167.0	0.12	MWD
66	2275.3	2270.9	2.22	147.44	28.9	-114.0	-114.0	26.8	117.1	166.8	0.14	MWD
67	2303.8	2299.4	2.21	154.14	28.5	-114.9	-114.9	27.3	118.1	166.6	0.09	MWD
68	2390.4	2385.9	2.08	152.82	86.6	-117.8	-117.8	28.8	121.3	166.3	0.02	MWD
69	2419.2	2414.8	1.92	146.45	28.9	-118.7	-118.7	29.3	122.2	166.1	0.09	MWD
70	2447.9	2443.4	1.98	149.21	28.7	-119.5	-119.5	29.8	123.2	166.0	0.04	MWD
71	2533.5	2529.0	1.60	161.93	85.6	-121.9	-121.9	30.9	125.8	165.8	0.06	MWD
72	2620.7	2616.1	1.26	178.57	87.2	-124.0	-124.0	31.3	127.9	165.8	0.06	MWD
73	2649.5	2644.9	1.22	185.29	28.8	-124.7	-124.7	31.3	128.5	165.9	0.05	MWD
74	2708.0	2703.4	1.07	190.81	58.5	-125.8	-125.8	31.2	129.6	166.1	0.03	MWD
75	2737.0	2732.4	0.94	206.76	29.0	-126.3	-126.3	31.0	130.0	166.2	0.11	MWD
76	2766.0	2761.4	0.99	218.17	29.0	-126.7	-126.7	30.7	130.4	166.4	0.07	MWD
77	2794.0	2789.4	1.06	225.85	28.0	-127.1	-127.1	30.4	130.7	166.6	0.06	MWD
78	2823.0	2818.4	1.06	219.22	29.0	-127.5	-127.5	30.0	131.0	166.7	0.04	MWD
79	2851.0	2846.4	1.06	217.50	28.1	-127.9	-127.9	29.7	131.3	166.9	0.01	MWD
80	2879.0	2874.4	1.23	227.59	28.0	-128.3	-128.3	29.3	131.6	167.1	0.09	MWD
81	2907.2	2902.6	1.44	228.04	28.2	-128.7	-128.7	28.9	131.9	167.4	0.07	MWD
82	2963.3	2958.6	1.46	230.04	56.1	-129.7	-129.7	27.8	132.6	167.9	0.01	MWD
83	2993.1	2988.4	1.66	227.26	29.8	-130.2	-130.2	27.2	133.0	168.2	0.07	MWD
84	3049.8	3045.2	1.75	232.80	56.8	-131.3	-131.3	25.9	133.8	168.9	0.03	MWD
85	3109.1	3104.4	1.78	237.55	59.2	-132.3	-132.3	24.4	134.5	169.6	0.03	MWD
86	3137.7	3133.0	1.80	238.89	28.7	-132.8	-132.8	23.6	134.9	169.9	0.02	MWD
87	3167.1	3162.4	1.83	240.49	29.4	-133.3	-133.3	22.8	135.2	170.3	0.02	MWD
88	3195.7	3191.0	1.76	241.98	28.6	-133.7	-133.7	22.0	135.5	170.6	0.03	MWD
89	3224.4	3219.7	1.73	239.58	28.7	-134.1	-134.1	21.3	135.8	171.0	0.03	MWD
90	3281.1	3276.3	2.04	238.38	56.7	-135.1	-135.1	19.7	136.5	171.7	0.06	MWD
91	3337.4	3332.6	2.12	243.07	56.3	-136.1	-136.1	17.9	137.2	172.5	0.03	MWD
92	3394.8	3390.0	1.82	240.73	57.4	-137.0	-137.0	16.1	137.9	173.3	0.05	MWD
93	3451.1	3446.2	1.76	239.93	56.2	-137.9	-137.9	14.6	138.6	174.0	0.01	MWD
94	3537.2	3532.3	1.83	235.40	86.1	-139.3	-139.3	12.3	139.9	174.9	0.02	MWD
95	3566.4	3561.5	1.77	238.98	29.3	-139.8	-139.8	11.6	140.3	175.3	0.04	MWD
96	3596.1	3591.2	1.81	239.38	29.7	-140.3	-140.3	10.8	140.7	175.6	0.01	MWD
97	3625.4	3620.4	1.82	236.08	29.3	-140.8	-140.8	10.0	141.1	175.9	0.04	MWD
98	3641.9	3636.9	1.90	232.64	16.5	-141.1	-141.1	9.6	141.4	176.1	0.08	MWD
TD	3667.0	3662.4	1.90	233.00	25.1	-141.7	-141.7	8.6	141.7	176.4	0.00	Proj.

Figure 4.1.10 A, Horizontal Projection

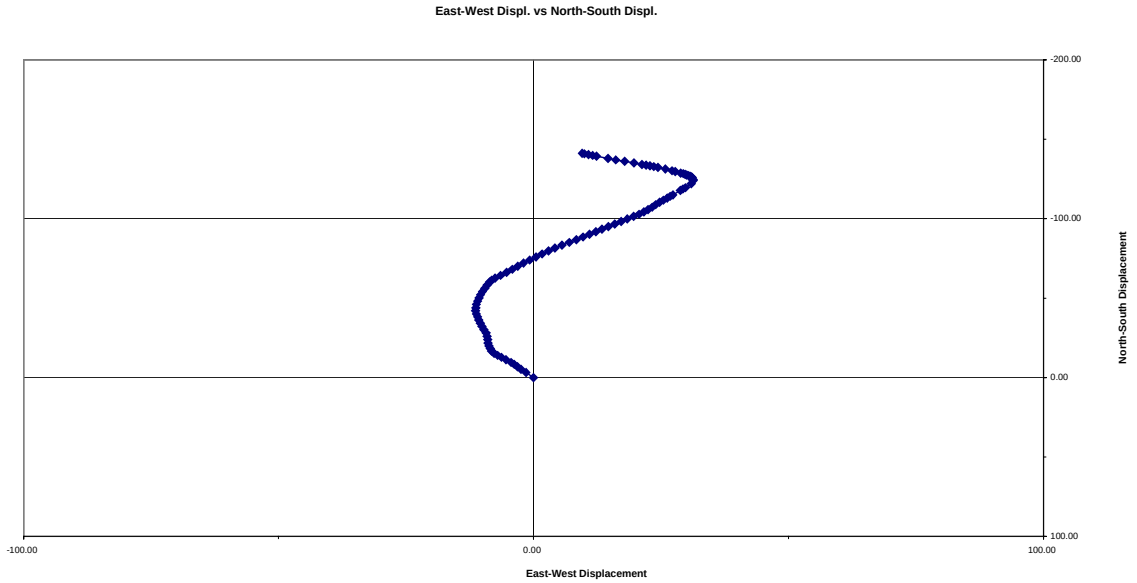
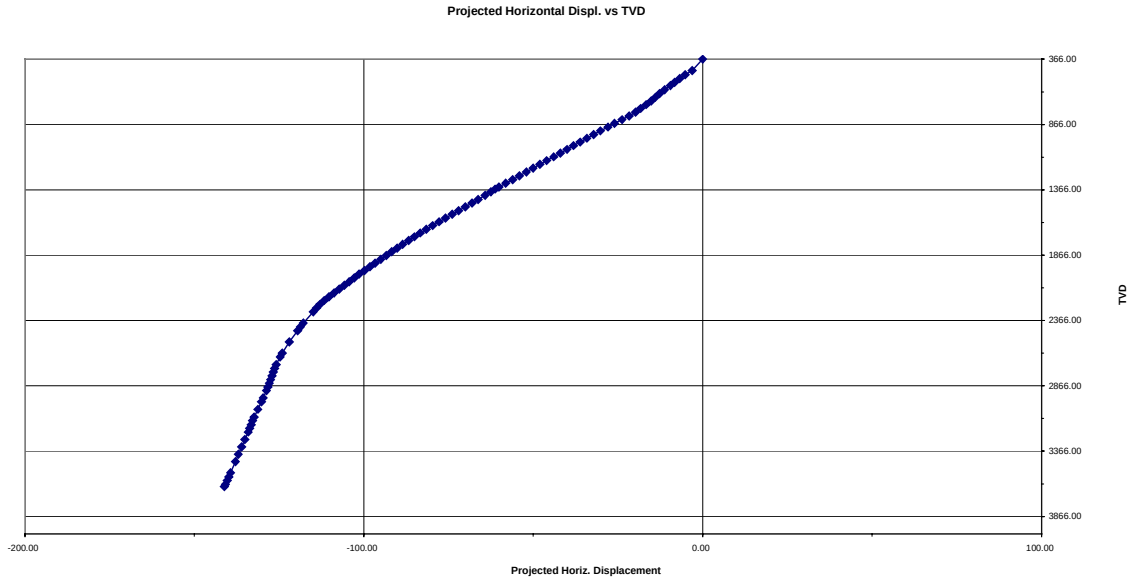


Figure 4.1.10 B, Vertical Profile



4.2.6 Casing Summary

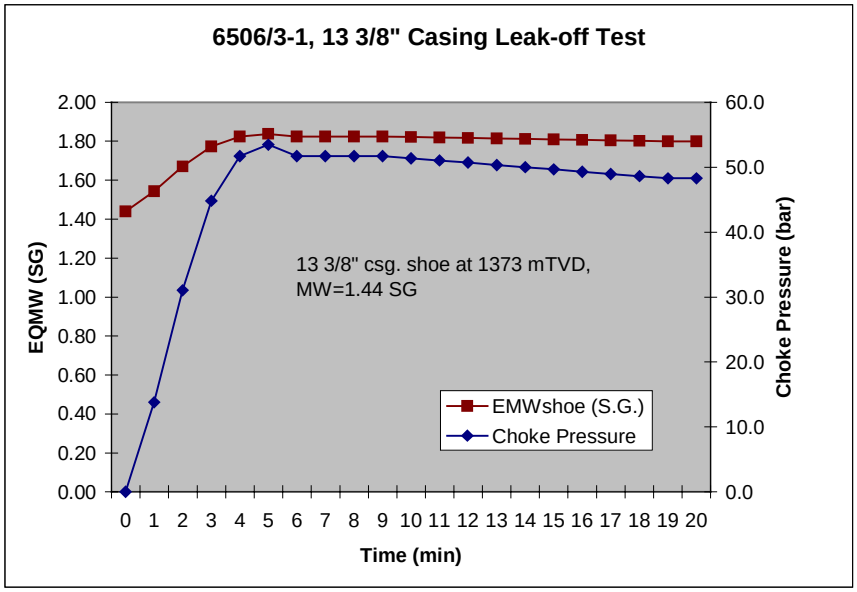
See attached Casing Details records

4.2.7 Cementing Summary

See attached Casing Details records and Enclosure 1, End of Well Report from Halliburton

4.2.8 Casing Leak-off Test

Time	Volume pumped	Rig floor choke line pressure	EMW shoe
min.	ltr	Bar	SG
0	0	0.0	1.44
1	80	13.8	1.54
2	160	31.0	1.67
3	240	44.8	1.77
4	320	51.7	1.82
5	360	53.4	1.84
6		51.7	1.82
7		51.7	1.82
8		51.7	1.82
9		51.7	1.82
10		51.4	1.82
11		51.0	1.82
12		50.7	1.82
13		50.3	1.81
14		50.0	1.81
15		49.7	1.81
16		49.3	1.81
17		49.0	1.80
18		48.6	1.80
19		48.3	1.80
20		48.3	1.80



4.3 ATTACHMENTS

4.3.6 Initial Floater Report
4.3.7 Daily Mud Properties for the 8 ½" Section
4.3.8 BHA Summary Records
4.3.9 Bit Record
4.3.11 Casing Details

Attachment 4.3.6
Initial Floater Report

CHEVRON (Metric) **Initial Floater Report**

******** Riser ********	
Make:	HUGHES - TYPE HMF 21" OD X 5/8" WALL X 50"
Size O.D.:	533.0
Wall Thickness:	50.8
Steel Grade:	
Wt./M. In Air:	
Wt./M. In Air W/Buoyancy:	
Wt./M. In Water:	
Wt./M. In Water W/Buoyancy:	
O.D. W/Buoyancy:	
Length Each Joint:	
Length Of Pups:	
Riser Fill-Up Valve In System?:	
RKB To Valve:	

******** Mooring Configuration ********

Vessel Heading: 315.0 DEG

Line Number	1	2	3	4	5	6	7	8	9	10
Size (Chain)	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
Length Deployed	1019.0	1135.0	1126.0	1106.0	1024.0	1066.0	1054.0	1102.0	1083.0	1083.0
Size (Wire)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Length Deployed		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchor, Type, Wt.	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT	VRIJHOF 15MT
Pendent Size, Type										
Pendent Length		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Piggy Back, Type-Wt										
Test Tension		0	0	0	0	0	0	0	0	0
Working Tension		0	0	0	0	0	0	0	0	0
Anchor Az	329.4	5.2	20.7	60.7	89.4	120.1	149.2	179.9	214.8	240.4

******** Tensioners ********

Make:	SHAFFER - AIR/HYD NL 69-00291
Number:	8
Capacity, Each:	80000

******** Slip Joint ********

Make:	HUGHES - DOUBLE PACKER
length:	
Stroke:	55 FEET
Weight:	
Overall Stack Height:	

*******Measurements *******

RKB To Sea level:	25.00
Water Depth:	342.00
RKB To Wellhead:	367.00

Dynamic Positioning System Description:

Note:

Mooring Schematic

Rig: BYFORD DOLPH		AFE No: KWENO-650631-001	Well ID: UB5908	Project No: 0	Page: 1 Of 2
Drilling Rep: ELKINS/HOLLINSHEAD	Field: PL259	Lease: PL259	Well Number: 6506/3-1		Date: 17-JUL-2001

CHEVRON (Metric) **Initial Floater Report**

******** Riser ********	
Make:	HUGHES - TYPE HMF 21" OD X 5/8" WALL X 50"
Size O.D.:	533.0
Wall Thickness:	50.8
Steel Grade:	
Wt./M. In Air:	
Wt./M. In Air W/Buoyancy:	
Wt./M. In Water:	
Wt./M. In Water W/Buoyancy:	
O.D. W/Buoyancy:	
Length Each Joint:	
Length Of Pups:	
Riser Fill-Up Valve In System?:	
RKB To Valve:	

******** Mooring Configuration ********

Vessel Heading: 315.0 DEG

Line Number	11	12								
Size (Chain)	76.2	76.2								
Length Deployed	1076.0	1011.0								
Size (Wire)	0.0	0.0								
Length Deployed	0.0	0.0								
Anchor, Type, Wt.	VRIJHOF 15MT	VRIJHOF 15MT								
Pendent Size, Type										
Pendent Length	0.0	0.0								
Piggy Back, Type-Wt										
Test Tension	0	0								
Working Tension	0	0								
Anchor Az	270.0	300.8								

******** Tensioners ********

Make:	SHAFFER - AIR/HYD NL 69-00291
Number:	8
Capacity, Each:	80000

******** Slip Joint ********

Make:	HUGHES - DOUBLE PACKER
length:	
Stroke:	55 FEET
Weight:	
Overall Stack Height:	

*******Measurements *******

RKB To Sea level:	25.00
Water Depth:	342.00
RKB To Wellhead:	367.00

Dynamic Positioning System Description:

Note:

Mooring Schematic

Rig: BYFORD DOLPH		AFE No: KWENO-650631-001	Well ID: UB5908	Project No: 0	Page: 2 Of 2
Drilling Rep: ELKINS/HOLLINSHEAD	Field: PL259	Lease: PL259	Well Number: 6506/3-1		Date: 17-JUL-2001

Attachment 4.3.7
Daily Mud Properties
8-1/2” Section

Operator: CHEVRON Well: 6506/3-1 Rig: Byford Dolphin

FSR	Date	Depth	MW	T	FV	VG-meter readings @ 50C								AV	PV	YP	Gel	Gel	HTHP	pH	Pf	Mf	Cl-	TH	Ca++	KCl	Solids	MBT	HGS	LGS	Sand	Glycol	K+
no.	2001					600	300	200	100	60	30	6	3				10 sec	10 min					x 1000									208	
•	•	m	sg	°C	s/qt.	rpm	rpm	rpm	rpm	rpm	rpm	rpm	rpm	cP	cP	Pa	Pa	Pa	ml	•	ml	ml	kg/m3	mg/l	mg/l	kg/m3	%	kg/m3	kg/m3	kg/m3	%	%	kg/m3
	36" Section: Seawater / Bentonite																																
1	21-07	367	1.03		100+																												
2	22-07	456	1.03		100+																												
	17 1/2" Section: Seawater / Bentonite																																
3	23-07	459	1.03		100+																												
4	24-07	1382	1.05		100+																												
5	25-07	1382	1.05		100+																												
6	26-07	1382	1.05		100+																												
7	27-07	1382	1.40		100+																												
8	28-07	1382	1.40		100+																												
9	29-07	1382	1.44		100+																												

Minimun	1.03	0.00	0.00
Maximur	1.44	0.00	0.00
Average	1.20	#DIV/0!	#DIV/0!

Daily drilling properties FSR 1-9

Mud Properties, daily record

Operator: **Chevron** Well: 6506/3-1 Rig: Byford Dolphin

FSR	Date	Depth	MW	T	F.Vis	VG-meter readings @ 50 C								AV	PV	YP	Gel	Gel	ES	Mp	Excess	HTHP	CaCl2	WPS	Solids	Oil	Water	O/W	Sand	HGS	LGS
no.	2001			Temp		600	300	200	100	60	30	6	3				10 sec	10 min			Lime	250oF	Chlorides					RATIO			
		m	sg	oC	s/qt.	rpm	rpm	rpm	rpm	rpm	rpm	rpm	rpm	cP	cP	Pa	Pa	Pa	volts	ml	kg/m3	ml	kg/m3	k Cl-	vol %	vol %	vol %	vol %	vol %	kg/m3	kg/m3
	8 1/2" Section: Versavert - Oil based system																														
13	29-07	1382	1.44	n/a	100+	119	71	55	37	n/a	n/a	14	12	60	48	11.5	7	9	531	2.1	7.6	2.6	129	83	20	56	24.0	70/30	Trace	609	125
14	30-07	1382	1.44	n/a	100+	119	71	55	37	n/a	n/a	14	12	60	48	11.5	7	9	531	2.1	7.6	2.6	129	83	20	56	24.0	70/30	Trace	609	125
15	31-07	1409	1.44	n/a	100+	123	75	57	39	n/a	n/a	15	12	62	48	13.5	8	1	629	2.8	10.4	3.0	168	108	20	56	24.0	70/30	0.75	574	140
16	01-08	1699	1.51	27	100+	138	85	65	45	n/a	n/a	18	16	69	53	16.0	10	14	672	2.0	7.2	2.0	207	133	20	56	24.0	70/30	Trace	574	140
17	02-08	1695	1.57	22	92	76	44	33	21	n/a	n/a	8	7	38	32	6.0	5	7	672	2.0	7.2	3.0	147	94	23	59	18.0	77/23	0.25	830	68
18	03-08	1736	1.57	20	100+	107	67	50	34	n/a	n/a	13	11	54	40	13.5	7	10	704	2.5	9.3	2.2	172	110	23	57	20.0	74/26	0.20	798	82.4
19	04-08	2560	1.57	35	95	111	69	54	37	n/a	n/a	15	14	56	42	13.5	9	13	808	0.7	2.6	2.0	215	138	22.6	55.5	21.0	73/27	1.00	776	102
20	05-08	3101	1.57	33	95	104	66	50	33	n/a	n/a	13	12	52	38	14.0	8	11	854	3.4	12.6	2.2	253	162	24	55	21.0	72/28	1.25	744	129
21	06-08	3131	1.57	23	100+	116	71	55	38	n/a	n/a	14	13	58	45	13.0	8	12	746	3.2	11.8	3.1	217	139	24.0	53.0	23.0	70/30	1.25	721	146
22	07-08	3171	1.57	23	100+	117	71	53	37	n/a	n/a	14	13	59	46	12.5	8	12	790	3.2	11.8	2.0	220	141	22.8	53.0	23.0	70/30	1.25	733	137
23	08-08	3437	1.60	34	92	106	65	49	34	n/a	n/a	14	12	53	41	12.0	8	11	770	3.2	11.8	2.0	296	190	24.0	55.0	21.0	72/28	1.50	763	110
24	09-08	3667	1.60	35	80	90	53	40	27	n/a	n/a	10	9	45	37	8.0	7	9	876	3.2	11.8	2.0	226	145	25.5	55.5	20.0	74/26	1.50	797	114
25	10-08	3667	1.60	n/a	80	90	53	40	27	n/a	n/a	10	9	45	37	8.0	7	9	876	3.2	11.8	2.0	226	145	25.5	55.5	20.0	74/26	1.50	797	114
26	11-08	3667	1.60	n/a	83	90	53	40	27	n/a	n/a	10	9	45	37	8.0	7	9	815	3.5	13.0	2.0	234	150	24.5	55.5	20.0	74/26	1.50	796	114
27	12-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
28	13-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
29	14-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
30	15-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
31	16-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
	Minimun	1.44	20	80	76	44	33	21	0	0	8	7	38	32	6	5	1	531	1	3	2	129	83	20	53	18	70/30	0	574	68
	Maximur	1.60	35	95	138	85	65	45	0	0	18	16	69	53	16	10	14	876	4	13	3	296	190	26	59	24	74/26	2	830	146
	Average	1.56	26	88	103	63	48	32	#DIV/0!	#DIV/0!	12	11	52	41	11	7	10	759	3	10	2	216	138	23	55	21	72/28	1	735	123

Daily drilling properties FSR 13-31

Attachment 4.3.8
BHA Summary Records

CHEVRON

BHA Data Report

23-OCT-2001

PROJECT UB5908-0 WELL NAME: DONNA WEST PROSPECT FIELD: PL259

(Metric)

BHA No.	Depth In (MD)	Depth Out (MD)	Total BHA Length	BHA Type Code	BHA Description
1	366.0	456.0	232.87	HO	17.1/2" SMITH DGJ ROCK BIT - 26" X 36" H/OPENER - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP
2	456.0	456.0	229.68	SL	26" HUGHES GTXCMG1 ROCK BIT - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP
3	456.0	1382.0	245.36	PH	8.1/2" HUGHES MXC-1 ROCK BIT - 8.1/2" NB STAB C/W FLOAT - 2.6M X 6.1/2" PONY DC - 8.1/2" STRING STAB - CDR - 8.3/8" IN LINE STAB - MWD - 9.3M X 6.1/2" NMDC - 5 X 6.1/2" STEEL DC - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP
4	1382.0	1382.0	233.50	HO	BULLNOSE - 12.1/4" HOLE OPENER - 17.1/2" HOLE OPENER - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP
5	1382.0	1382.0	234.36	HO	BULLNOSE - BIT SUB - PIN X PIN SUB - X/OVER - 17.1/2" HOLE OPENER - BIT SUB (C/W FLOAT) - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP
6	1382.0	3101.6	262.12	DR	8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP
7	3101.5	3171.4	298.23	CO	8 1/2"-4" FC274 DBS CORE HEAD - 76M OUTER COREBARRELS (73M RECOVERABLE CORE) - 6*6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP
8	3171.5	3667.0	254.65	DR	8.1/2" BD445HA PDC BIT - NB STAB C/W FLOAT - 6.1/2" PONY DC - 8.1/2" NM STAB - CDR - 8.3/8" ILS - MWD - 7 X 6.1/2" DC - 9 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP
9	3171.5	3667.0	253.66	OT	8.1/2" BD445HA PDC BIT - NB STAB (C/W FLOAT) - 6.1/2" DC - 8.1/2" STRING STAB - 5 X 6.1/2" DC - 12 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP
10	3171.5	3667.0	444.04	OT	MULE SHOE - 47 X JNTS 3.1/2" PH-6 TUBING - X/OVER TO 4.1/2" IF
11	3171.5	3667.0	262.45	FI	BULLNOSE - CASING CUTTER ASSY - DRILLEX MOTOR & MOST TOOL ASSY - 3 X 8" DRILL COLLARS - X/OVER - 6.1/2" DRILL COLLAR - 8.1/2" STRING STAB - 5 X 6.1/2" DRILL COLLARS - 18 X 5" HWDP

Attachment 4.3.9
Bit Record

CHEVRON (Metric) **Bit Record**

Bit No.	Serial Number	Date Pulled	Size	Make	Type	IADC Code	Jets (mm) 1	2	3	4	5	TFA	Depth POOH	Meters Drilled	Total Bit Hours	Avg Rate/ Hour	Avg WOB	Avg RPM	Avg Pump PRS	Mud Wt. KG/M3	Bit KW	Bit HHP SQIN	Mud M3PM	Bit Grading: Inner Rows	Outer Rows	Dull Char	Location	Bearings	Gage	Other Char	Reason Pulled	Trip Time Hrs	Angle	Cost/ Meter	Remarks
1	49335	22-JUL-2001	444.5	SMITH	DGJ	1-3-1	22.2					1161	456.0	90.0	5.5	0.000	4.5	80	140	1031	248.50	1.4	5.02	0	0	NO	A7	E	I	NO	TD	1.0	3.50	9747.64	
2	39252	22-JUL-2001	914.4	IPE	26" X 36" HO		14.3					961	454.0	0.0	0.0	0.000	4.5	80	140	1031	362.20	0.5	5.02	0	0	NO	A7	E	I	NO	TD	1.0	3.50	0.00	
3	D92DM53	23-JUL-2001	660.4	HUGHE	GTXCMG1	1-1-5	19.1	15.9				877	456.0	0.0	0.0	0.000	11.	50	122	1031	333.20	0.6	4.60	1	1	WT	A7	E	I	NO	TD	1.0	3.50	0.00	
4	W97ZS	24-JUL-2001	215.9	HUGHE	MXC-1	1-1-7	11.1	12.7				445	1382.0	926.0	15.0	61.720	7.0	150	197	1031	413.20	7.3	3.15	8	5	WT	A7	E	1/8	ER	TD	2.0	4.50	78.28	
5	1752012	26-JUL-2001	444.5	IPE	17.1/2" H/O		22.2	9.5	14.3			1561	1382.0	0.0	16.0	0.000	5.0	150	153	1031	74.60	0.3	4.10	8	8	WT	A7	4	3/4	ER	TD	4.0	4.50	0.00	
6		27-JUL-2001	444.5	IPE	17.1/2" H/O		22.2	14.3				871	1382.0	0.0	0.0	0.000	5.0	150	152	1400	160.90	0.7	3.23	1	1	WT	A7	E	IN	NO	TD	4.0	4.00	0.00	
7	1213767	05-AUG-2001	215.9	HUGHE	ABD536PH		14.3					639	3101.5	1719.5	54.5	31.550	6.0	180	286	1570	139.10	2.5	2.42	3	5	CT	A7	X	IN	BT	CP	8.0	2.00	5300.72	
8		07-AUG-2001	215.9	S-DBS	FC274							0	3171.5	70.0	7.5	9.330	12.	100	129	1570	0.00	0.0	1.05	7	3	LT	XN	X	IN	JD	PR	12.0	2.00	34821.2	
9	0323129	10-AUG-2001	215.9	HUGHE	BD445HA	M333	15.9					794	3667.0	495.5	19.0	26.090	5.5	180	276	1600	84.40	1.5	2.34	1	1	WT	XA	X	I	BT	TD	14.0	1.90	8324.90	
9 R1	0323129	12-AUG-2001	215.9	HUGHE	BD445HA	M333	15.9	0.0	0.0	0.0	0.0	794	3667.0	0.0	0.0	0.000	5.5	180	276	1600	84.40	1.5	2.34	1	1	WT	XA	X	I	BT	TD	14.0	1.90	0.00	

AFE No: KWENO-650631-001 | Well ID: UB5908 | Project No: 0 | Page: 1 Of 1

Drilling Rep: MOORE/BJORHEIM/MH | Field: PL259 | Lease: PL259 | Well Number: 6506/3-1 | Date: 30-AUG-2001

Attachment 4.3.11
Casing Details

CHEVRON

(Metric) **Casing/Liner Landing Details**

Qnty	Description	Size(O.D.)	Weight	Grade	Threads	Length	Ref#
1	30" SHOE	762.0	312.00			0.50	
1	30" SHOE JOINT	762.0	312.00		SL-60	12.13	
1	30" INTERMEDIATE JOINT	762.0	312.00		SL-60	12.18	
1	30" INTERMEDIATE JOINT	762.0	312.00		SL-60	12.21	
1	30" INTERMEDIATE JOINT	762.0	312.00		SL-60	12.19	
1	30" INTERMEDIATE JOINT	762.0	312.00		SL-60	12.21	
1	30" X/OVER JOINT - 1.5" WT	762.0	456.00		HD-90	12.31	
1	30" LP HSG JOINT - 1.5" WT	762.0	456.00		HD-90	13.12	
Liner Hanger(If Applicable):							
Total Pipe Installed:						86.85	
Less Cutoff Piece(s) and Landing Joints:						0.00	
DP To land Liner(If Applicable) TOL @:						364.15	
Plus KBE (One Ft. Above Rotary To last CHF):							
Casing Set @: 451.00 TVD MD					Total:	451.00	

Last Casing Size: @ MD | Hole Size: 914.4 @ 454.00 MD

Hole Volume From Caliper Log: M3

Mud Properties Prior To Cementing: WT: 1031 | Type: SEAWATER

FV: 0	PV: 0	YP: 0.0	Gels: 0.0/0.0	WL: 0.0
HTHP WL: 0.0	Solids:	% Oil: 0.00	Sand:	pH:
PM: 0	CL:	Ca:	XLime:	Elec Stab:

Casing Reciprocation?: NO | Length of Stroke: Time: Hrs

Casing Rotated?: NO

Number of Centralizers/Wipers: 0 / 0 | Type: /

Spacing:

Cement Company: HALLIBURTON | Yard Location: STAVANGER NORWAY

First Stage | Circulation Time & Rate prior to cementing: 1.00 Hrs @ 1.90M3PM | Return(Full/Partial): FULL

Cement	Type	No. Tonnes	Pump Time time @ temp	Yield cu.m./ton	Weight (KG/M3) est.	Weight (KG/M3) actual	Mix Water m3/tonne	Comp. Strength kPa @ hrs	WL cc	Free water %
Lead	LEAD SLURRY	26.40	7.7 Hrs @ 8	1.29	1560	1570	0.98	100 @ 12.00		
Tail	TAIL SLURRY	24.50	3.9 Hrs @ 80	0.78	1920	1920	0.47	100 @ 5.03	0	0.00

Lead Cement Additives: 3.2 LT/100KG ECONOLITE, 0.1 LT/100KG HF-6, 95.07 LT/100KG SEAWATER. | Additives liquid/blended: YES / NO

Tail Cement Additives: 4.35 LT/100KG CACL2, 0.1 LT/100KG HF-6, 42.07 LT/100KG SEAWATER. | Additives liquid/blended: YES / NO

Spacer Type:SEAWATER | Volume: 90.0 Weight: 8.6 PV: 0 YP: 0 | Compatibility Test Run?:

Cement Displacement Rate: 1.40 M3PM | Displaced With (Cement Unit/Pump): UNIT | Estimated TOC: 366.00

Cement Returns?(Y/N): YES | Early Returns?(Y/N): NO | Est. Tonnes Circulated: 50.90 | Number of Plugs Used: | Plug Bumped?(Y/N):

Second Stage | DV Tool Located @: MD | Circulation Time & Rate prior to cementing: Hrs @ M3PM | Return(Full/Partial):

Cement	Type	No. Tonnes	Pump Time time @ temp	Yield cu. m./ton	Weight (KG/M3) est.	Weight (KG/M3) actual	Mix Water m3/tonne	Comp. Strength kPa @ hrs	WL cc	Free water %
Lead			Hrs. @							
Tail			Hrs. @							

Lead Cement Additives: | Additives liquid/blended: /

Tail Cement Additives: | Additives liquid/blended: /

Spacer Type: | Volume: Weight: PV: YP: | Compatibility Test Run?:

Cement Displacement Rate: | Displaced With (Cement Unit/Pump): | Estimated TOC:

Cement Returns?(Y/N): | Early Returns?(Y/N): | Est. Tonnes Circulated: | Number of Plugs Used: | Plug Bumped?(Y/N):

Remarks:

CIRC 97M3 OF SEAWATER W/ RIG PUMPS @ 1955 LPM PRIOR TO CEMENT JOB. BREAK CIRC W/ CEMENT UNIT & P/TEST LINES 200 BAR / 5 MIN.

MIX & PUMP 34.1M3 OF 1.56SG LEAD SLURRY USING 26.4MT OF CLASS 'G' CEMENT & 25.9M3 OF MIXWATER.

LEAD MIXWATER - 3.2 LT/100KG ECONOLITE, 0.1 LT/100KG NF-6 & 95.07 LT/100KG OF SEAWATER. PUMP @ 1.3M3/MIN, 36 BAR.

MIX & PUMP 19.0M3 OF 1.93SG TAIL SLURRY USING 24.5MT OF CLASS 'G' CEMENT & 11.4M3 OF MIXWATER.

TAIL MIXWATER - 4.35 LT/100KG CACL2, 0.1 LT/100KG NF-6,& 42.07 LT/100KG OF SEAWATER. PUMP @ 0.8M3/MIN, 27 BAR.

CLEAR LINES W/ 0.2M3 OF SEAWATER FROM CEMENT UNIT, DROP DP WIPER DART & FOLLOW W/ 0.5M3 SEAWATER FROM RIG PUMPS. DISPLACE

REMAINDER OF CEMENT TO LEAVE 5M ABOVE SHOE W/ 9.0M3 SEAWATER FROM CEMENT UNIT @ 1.4M3/MIN, 29 BAR.

FINAL DISPLACEMENT PRESS @ 0.2M3/MIN = 10 BAR.

CEMENT IN PLACE @ 19:33 HRS.

WAIT ON CEMENT FOR 5 HRS BEFORE SLACKING OFF & BACKING OUT RUNNING TOOL.

TIH WITH 26" CLEAN-OUT ASSY AND TAGGED CEMENT AT 446M (AS ESTIMATED)

	Rig Name:	AFE No: KWENO-650631-001		Page: 1 Of 1
Drilling Rep: ELKINS/HOLLINSHEAD	Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0	Date: 22-JUL-2001

CHEVRON

(Metric) **Casing/Liner Landing Details**

Qnty	Description	Size(O.D.)	Weight	Grade	Threads	Length	Ref#
1	13 3/8" SUPER SEAL FLOAT SHOE	339.7	107.15	L80	BTC	0.53	
1	13 3/8" CSG JNT W/ CENTRALISER	339.7	107.15	L80	BTC	12.13	
1	13 3/8" SUPER SEAL II F/C	339.7	107.15	L80	BTC	0.37	
1	13 3/8" CSG JNT	339.7	107.15	L80	BTC	12.34	
5	13 3/8" CSG JNT W/ CENTRALISER	339.7	107.15	L80	BTC	60.10	
75	13 3/8" CSG JNT	339.7	107.15	L80	BTC	895.60	
1	13 3/8" INTERMEDIATE JNT	339.7	107.15	L80	BTC	12.30	
1	13 3/8" CSG PUP JNT	339.7	107.15	L80	BTC	3.10	
Liner Hanger(If Applicable):18 3/4", 15K DRILQUIP TYPE SS-15 HPWH						13.07	
Total Pipe Installed:						1009.54	
Less Cutoff Piece(s) and Landing Joints:							
DP To land Liner(If Applicable) TOL @:						364.77	
Plus KBE (One Ft. Above Rotary To last CHF):							
Casing Set @: 1372.10 TVD 1374.30 MD					Total:	1,374.31	

Last Casing Size: 762.0 @ 451.0 MD | Hole Size: 444.5 @ 1379.00 MD

Hole Volume From Caliper Log: M3

Mud Properties Prior To Cementing: WT: 0 | Type:

FV: 0	PV: 0	YP: 0.0	Gels: 0.0/0.0	WL: 0.0
HTHP WL: 0.0	Solids:	% Oil: 0.00	Sand:	pH:
PM: 0	CL:	Ca:	XLime:	Elec Stab:

Casing Reciprocation?: NO | Length of Stroke: Time: Hrs

Casing Rotated?: NO

Number of Centralizers/Wipers: 6 / 1 | Type: 17 1/2" BOWSPRING / SS RELEASABLE

Spacing: IN CENTRE OF SHOEJNT & 1ST FIVE JNTS ABOVE SHOETRACK

Cement Company: HALLIBURTON | Yard Location:

First Stage | Circulation Time & Rate prior to cementing: 1.00 Hrs @ 3.00M3PM | Return(Full/Partial): FULL

Cement	Type	No. Tonnes	Pump Time time @ temp	Yield cu.m./ton	Weight (KG/M3) est.	Weight (KG/M3) actual	Mix Water m3/tonne	Comp. Strength kPa @ hrs	WL cc	Free water %
Lead	LEAD - CLASS G CMT	100.00	5.3 Hrs @ 86	1.30	1560	1560	0.99	0		
Tail	TAIL - CLASS G CMT	21.00	3.7 Hrs @ 86	0.75	1920	1920	0.44	630 12.00	0	0.00

Lead Cement Additives: ALL IN LTR/100KG; 3.2 ECOLONITE, 1 HR-4L, 0.1 NF-6, 94.36 S/W | Additives liquid/blended: YES / NO

Tail Cement Additives: 0.1 LTR/100KG NF-6, 43.78 LTR/100KG FRESH WATER | Additives liquid/blended: YES / NO

Spacer Type: Volume: Weight: PV: YP: | Compatibility Test Run?:

Cement Displacement Rate: 3.20 M3PM | Displaced With (Cement Unit/Pump): PUMP | Estimated TOC: 366.00

Cement Returns?(Y/N): YES | Early Returns?(Y/N): NO | Est. Tonnes Circulated: | Number of Plugs Used: 1 | Plug Bumped?(Y/N): NO

Second Stage | DV Tool Located @: MD | Circulation Time & Rate prior to cementing: Hrs @ M3PM | Return(Full/Partial):

Cement	Type	No. Tonnes	Pump Time time @ temp	Yield cu. m./ton	Weight (KG/M3) est.	Weight (KG/M3) actual	Mix Water m3/tonne	Comp. Strength kPa @ hrs	WL cc	Free water %
Lead			Hrs. @							
Tail			Hrs. @							

Lead Cement Additives: | Additives liquid/blended: /

Tail Cement Additives: | Additives liquid/blended: /

Spacer Type: Volume: Weight: PV: YP: | Compatibility Test Run?:

Cement Displacement Rate: | Displaced With (Cement Unit/Pump): | Estimated TOC:

Cement Returns?(Y/N): | Early Returns?(Y/N): | Est. Tonnes Circulated: | Number of Plugs Used: | Plug Bumped?(Y/N):

Remarks: 8 1/2" PILOT HOLE WAS DRILLED FROM 456 TO 1382M USING SEAWATER AND HI-VIS SWEEPS; THEN, THE HOLE WAS OPENED USING A 2-STAGE 12 1/4" X 17 1/2" HOLE OPENER ASSY (TD 17 1/2" HOLE 1379M); HOLE WAS DISPLACED TO 1.2 SG MUD; POOH W/ +/- 10MT DRAG F/ 1382 TO 780M - NO WIPER TRIP WAS PERFORMED; BOTH THE 12 1/4" AND 17 1/2" HOLE OPENER WERE COMPLETELY WORN

RAN 13 3/8" CASING TO 727M WHEN 15MT DRAG WAS NOTICED; CONT TO RUN CSG TO 810M

AT 810M, ROV OBSERVED CASING BEING BUCKLED AT 2 PLACES (FIRST ONE AT WELLHEAD) WITH CASING LAYING ON THE SEABED

POOH & L/D CASING - 10 JOINTS REJECTED OF WHICH 2 JNTS CRIMPED; MOVED RIG OFF WELL CENTRE ONCE SHOE CLEAR OF WELLHEAD

TIH W/ 17 1/2" HOLE OPENER ASSY; AT 535M, HOLE TOOK WEIGHT; WASH & REAM F/ 535 TO 1382M W/ 150 RPM, 3234 LPM, 152 BAR

DISPLACED HOLE TO 1.4 SG KCL MUD

RAN 996M OF 13 3/8" 339.7MM L80 BTC CASING (NOT SUFFICIENT SEALS ON LOCATION FOR REPLACEMENT) - REMOVED DAMAGED CENTRALISERS

MONITORED CASING ENTERING WELLHEAD AND CASING MOVEMENT WITH ROV; FILL CASING EVERY 5 JOINTS

M/U 18 3/4" HPWH AND RAN CASING ON 5" DP; WASHED DOWN CASING F/ 1335 TO 1379M W/ 3000 LPM

CIRCULATED CASING VOLUME PRIOR TO R/U CMT LINES AND PRESSURE TESTING SAME TO 240 BAR

CHEVRON

(Metric) **Casing/Liner Landing Details**

Qnty	Description	Size(O.D.)	Weight	Grade	Threads	Length	Ref#
Liner Hanger(If Applicable):18 3/4", 15K DRILQUIP TYPE SS-15 HPWH						13.07	

Total Pipe Installed:	1009.54
Less Cutoff Piece(s) and Landing Joints:	
DP To land Liner(If Applicable) TOL @:	364.77
Plus KBE (One Ft. Above Rotary To last CHF):	
Casing Set @: 1372.10 TVD 1374.30 MD Total:	1,374.31

Last Casing Size: 762.0 @ 451.0 MD | Hole Size: 444.5 @ 1379.00 MD

Hole Volume From Caliper Log: M3

Mud Properties Prior To Cementing: WT: 0 | Type:

FV: 0	PV: 0	YP: 0.0	Gels: 0.0/0.0	WL: 0.0	
HTHP WL: 0.0	Solids:	% Oil: 0.00	Sand:	pH:	
PM: 0	CL:	Ca:	XLime:	Elec Stab:	

Casing Reciprocation?: NO | Length of Stroke: Time: Hrs

Casing Rotated?: NO

Number of Centralizers/Wipers: 6 / 1 | Type: 17 1/2" BOWSPRING / SS RELEASABLE

Spacing: IN CENTRE OF SHOEJNT & 1ST FIVE JNTS ABOVE SHOETRACK

Cement Company: HALLIBURTON | Yard Location:

Third Stage | Circulation Time & Rate prior to cementing: Hrs @ M3PM | Return(Full/Partial):

Cement	Type	No. Tonnes	Pump Time time @ temp	Yield cu.m./ton	Weight (KG/M3) est.	Weight (KG/M3) actual	Mix Water m3/tonne	Comp. Strength kPa @ hrs	WL cc	Free water %
Lead			Hrs @							
Tail			Hrs @							

Lead Cement Additives: | Additives liquid/blended: /

Tail Cement Additives: | Additives liquid/blended: /

Spacer Type: Volume: Weight: PV: YP: | Compatibility Test Run?:

Cement Displacement Rate: | Displaced With (Cement Unit/Pump): | Estimated TOC:

Cement Returns?(Y/N): | Early Returns?(Y/N): | Est. Tonnes Circulated: | Number of Plugs Used: | Plug Bumped?(Y/N):

DV Tool Located @: MD | Circulation Time & Rate prior to cementing: Hrs @ M3PM | Return(Full/Partial):

Cement	Type	No. Tonnes	Pump Time time @ temp	Yield cu.m./ton	Weight (KG/M3) est.	Weight (KG/M3) actual	Mix Water m3/tonne	Comp. Strength kPa @ hrs	WL cc	Free water %
Lead			Hrs. @							
Tail			Hrs. @							

Lead Cement Additives: | Additives liquid/blended: /

Tail Cement Additives: | Additives liquid/blended: /

Spacer Type: Volume: Weight: PV: YP: | Compatibility Test Run?:

Cement Displacement Rate: | Displaced With (Cement Unit/Pump): | Estimated TOC:

Cement Returns?(Y/N): | Early Returns?(Y/N): | Est. Tonnes Circulated: | Number of Plugs Used: | Plug Bumped?(Y/N):

Remarks:

MIX AND PUMP 128M3 OF 1.56SG LEAD SLURRY USING 100MT OF CLASS 'G' CMT W/ 3.2LTR/100KG ECOLONITE, 1LTR/100KG HR-4L, 0.1LTR/100KG NF-6, 94.36LTR/100KG SEAWATER AND PUMP AT 1.2M3/MIN, 25 BAR

MIX 17M3 OF 1.92SG TAIL SLURRY USING 21MT CLASS 'G' CMT W/ 0.1LTR/100KG NF-6 AND 43.78LTR/100KG FRESH WATER AND PUMP AT 0.8M3/MIN, 20 BAR; PUMP 3 BBLS SEAWATER AND SHEAR DART W/ 154 BAR

DISPLACE CEMENT W/ 76M3 SEAWATER AT 3200 LPM, 161 BAR; SLOW PUMPS TO 580 LPM, 61 BAR

CEMENT RETURNS SEEN AT SEABED; WHEN SHUT DOWN PUMPS, FLOAT HAD NOT BUMPED - FCP 55BAR (THEORETICAL TOC=SEABED);

BLED DOWN PRESSURE - FLOAT HOLDING; BACK OUT RUNNING TOOL W/ 5 RH TURNS

This section contains:

5.1 Deviations from Original Program and Procedures

5.1.1 Deviations from NPD's Drilling Regulations

The following deviations from the requirements in NPD's Drilling Regulations occurred:

Deviation No.	Reference to Rules and Regulations	Description	Consequence	Compensating Measures	Deadline
Chevron 004	NPD's guidelines to the drilling regulations, re. Sect. 50	The guidelines to the regulations states that: *"If the time interval since the last pressure test exceeds 14 days, the BOP, with the exception of the shear/blind ram, shall be pressure tested even if no new casing string has been installed."* The BOP was tested at 11:00 hrs, 31/07/01 and a new test is due the14/08/01. We are requesting that an extension to the BOP test through 21/08/01 based on the following information: 1. The well TD has been reached 3667m MD and no further drilling is required. 2. The mud weight of 1.60 sg has proven to be adequate to maintain well control based on conditioning trips and verification of pore pressure via the MDT tool. Maximum 1.53 sg in Brygge formation and 1.42 sg in the Lysing formation. 3. The logging program is on-going at the present time and should be completed within the next 24 hours. 4. The well P & A program will be completed before the extension date requested 21/08/01. 5. Should any deviations to this planned P & A program occur then NPD will be notified immediately to discuss any complications which may require a BOP test to be completed.	None.	1. The Annular or appropriate Pipe ram will be used to test the cement plug set across the 13 3/8" shoe and inside 13 3/8" casing during P & A operations. 2. The Blind / Shear rams will be used to pressure test the top cement plug during P & A operations.	The standpipe manifold and choke manifold will be pressure tested by 14/08/01 as per normal procedures.

5.1.2 Deviations from Drilling Program

The following amendments to the Drilling Program were issued:

- Brygge Coring Strategy, issued 30.7.2001 (limited distribution)
- Plug and Abandonment Program, issued 9.8.2001

5.2 Summary and Conclusions – Key Lessons Learned

#	Title	Summary	Conclusion
1	Establish Chevron Norway Contracts	Many of the contracts were assigned from Shell and Statoil, which may have contained T&C's Chevron would not normally agree to. However, more research was needed to identify those T&C's. We were not allowed to see a lot of the T&C's until the contract had been signed due to the confidentiality of the information contained within. The remaining contracts took time to put in place and were unsuitable for Norway.	Ensure that, the information is captured by Graham Duthie and the Aberdeen contracts group. when operating in Norway, more upfront time on T&C's is required, legal support will be required as well as good communications with San Ramon to ensure that contracts are acceptable to Chevron. Review the end result with San Ramon to ensure lessons learnt are captured for the future. Review commercial terms with contractor before signing contract. Each contract should have a sponsor.
2	Recognise the consequences of strategic well decisions vs technical maturity of total prospectivity	Rig contract when all drill options on the table. Decision on well and rig should be driven by economic and technical analysis. We decided to drill our primary and secondary targets and later matured a deeper prospect which had an offset discovery subsequent to decision to drill.	We drilled primary and secondary targets in alignment with our business drivers and license commitments. The subsequent data evaluation to date (4 Sep 01) would not have changed the decision to drill or well placement but likely would have increased the geologic risk. Weigh up the risks. If strategy is the driver, do the same thing.
3	Use risk analysis to give direction	Used good teamwork to develop risk justification for Oil Based Mud use in gas condensate exploration well. Without analysis may have been tempted to go for Water Based Mud based on driver of need to get good fluid sample (Condensate Gas Ratio, etc.). Oil Based Mud proved to be the best option for this well based on probabilistic analysis.	A risk analysis using probabilistic model showed Oil Based Mud to be best choice for well. Resulted in significant Capex savings. Apply risk/decision analysis when need to make critical decisions because it focused the discussion and the decision. Get team to provide inputs/probabilities to gain buy-in to results.

#	Title	Summary	Conclusion
4	Don't underestimate the need for adequate IT structure in a satellite office	The link between Stavanger and Oslo was inadequate and valuable time was lost during the planning phase until this was corrected. Getting the necessary computer hardware in place was an issue. Two computers offshore were not enough, we needed three computers.	Ensure that office communications are specified according to the level of data and email traffic expected. Consider that there may be a need for spare computers on occasion (i.e. people from GAPA). Plan for growth in the initial assessment of required office space, computer, phones.
5	Define and communicate goals, well objectives and key operational issues with team and partners	Clearly defining well objectives in terms of prospects and license made data acquisition plans value focused. Had a number of partner meetings which gained agreement on a number of technical areas. However, a few weeks prior to spud one technical area (coring and sidetracking Brygge) was found to be ambiguous with regard to partner agreement. This could have resulted in operational inefficiency if this had not been picked up prior to reaching target.	Soon after well location was chosen, we did focused the entire team through meetings to define well objectives and reach consensus on associated data needs to meet objectives. Make sure all goals, well objectives and key operational issues are formally agreed with partners prior to spud and clearly documented. Continue to document well objectives with Value of Information (VOI) matrix to ensure remembering how and why decisions are made and clear communication of value. Conduct a pre-spud type meeting with partners to finalise operational decisions.
6	Early initiation of interaction with NPD added value	Chevron took a proactive approach when dealing with the NPD. Using a proactive approach, meeting with and speaking to the NPD regularly was seen as beneficial for our first operation	Meeting with the NPD throughout the planning process helped with ensuring that the consent to drill and the drilling program were understood and obligations had been met. The same is true for communications with the SFT. Ensure a proactive approach is taken on future operations.

#	Title	Summary	Conclusion
7	Establishment and maintenance of "Management System" (In-country safety management system)	Built both systems (application for consent and management system) in parallel which resulted in delayed deliveries of processes and procedures as expected (although consent application was delivered on schedule).	We developed the Management System for Chevron Norway, in parallel to the consent application. We had communicated this approach to the NPD so they were aware we were developing in parallel (understood because of our "newness" to Norway.) Maintain the "safety culture" - especially after merger. Be aware that new 2002 regulations are focused on "continuous improvement". Make sure licensee requirements are met even if we are not the operator.
8	Consider contracter decision criteria weighting carefully in new operations	When picking key rig/operations for first well in high HSE awareness areas, consider weighing HSE record and systems higher than other factors.	Continue to apply a selection process that looks at reputation, availability, cost, risks, safety record and the business drivers with the appropriate criteria weighting for new country expectations - particularly in a new country/environment where HS&E is heavily weighted.
9	Staff early with right disciplines, on first well in new country;	Virtual support was provided from Aberdeen to get the well planning process started in 2000. By early 2001, . In early 2001, new project manager was assigned to the project	When entering into a new country, clearly define vision/mission/objectives and set high level boundaries to accomplish mission. Build appropriate resources to guarantee success. Make sure people are identified and located in the working location office by CPDEP phase 2 start.

Enclosure 1

Daily Activity Reports

1.0 Daily Drilling Activity Reports
2.0 Wellsite Geological Reports

Daily Drilling Activity Reports

CHEVRON **Drilling Activity Report**

Measured Depth:	TVD:	PBTD:	Proposed MD: 11,893 '	Proposed TVD: 11,893 '					
DOL:	DFS:	Spud Date:	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs:				
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 8	Seas: 3 /	Bar: 30,12	POB: 78	
Last Casing Size:	Set At: MD	TVD	Shoe Test: EMW	Leakoff?					
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					

Mud Co:	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /	
WL API:	HTHP:	FC (1/32) API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Feet	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/Ft
			/	/										
			/	/										

Total Length of BHA:	BHA Description:	
	Hrs On Jars:	Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	GPM	Jet Vel	DP Av	DC Av	Bit HHP	BHHP/SQIN	Pump HHP
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 1,0
1,00	2300	08 - 41	LAST ANCHOR BOLSTERED @ SHELL GARN WEST LOCATION & RIG ON CONTRACT TO NORSK CHEVRON A.S. AS OF 23:00 HRS ON	
		08 - 41	16TH JULY 2001. COMMENCE TOW TO DONNA WEST LOCATION UNDER VESSEL "FAR FOSNA".	
		08 - 41		
		08 - 41	DISTANCE FROM GARN WEST TO DONNA WEST LOCATION - 91.6 NAUTICAL MILES.	
		08 - 41		
		08 - 41	BULKS ON BOARD @ HANDOVER: FUEL - 333 M3, LUB OIL - 3725 LTRS, POT WATER - 291 M3, DRILL WATER - 225 M3,	
		08 - 41	BENTONITE - 63 MT, BARITE - 196 MT, CLASS 'G' CEMENT - 146 MT, BASE OIL - 85 M3.	
		08 - 41		
		08 - 41	WORK ONGOING DURING TOW: CLEAN ALL SUCTION & DISCHARGE STRAINERS.	
		08 - 41	SERVICE TOP DRIVE & DOLLY, RIG DOWN PIPE HANDLER FOR SERVICE.	
		08 - 41	SLIP & CUT 78 FT OF DRILL LINE.	
		08 - 41	INSTALL PERMANENT GUIDE BASE IN MOONPOOL.	
		08 - 41	INSTALL GUIDE FRAME ONTO LMRP.	
		-		
		-		

Safety: PRE-TOW MUSTER HELD ON SUNDAY 15TH JULY 2001.

24 Hr Summary: TAKE HANDOVER OF RIG FROM SHELL @ GARN WEST LOCATION & COMMENCE TOW TO CHEVRON DONNA WEST LOCATION.

Projected Operations: COMPLETE TOW TO DONNA WEST LOCATION, BALLAST DOWN RIG & RUN ANCHORS.

Remarks:
NOTE: BULK LIQUIDS WILL BE REPORTED IN CUBIC METRES & DRY BULK IN METRIC TONS.

SEA STATE WILL BE REPORTED IN METRES, WIND SPEED IN M/SEC, PRESSURE IN MM.HG & MUD WT IN KG/M3.

DAILY & CUM. WELL COST WILL BE REPORTED IN NORWEGIAN KRONER.

06:00 OPS: RIG ON TOW TO DONNA WEST. 66 NAUTICAL MILES TO LOCATION, AVE SPEED - 4 KNTS. ETA @ DONNA WEST - 24:00 ON 17/07/01.

Daily Mud Cost: KR568	Daily Tangible Cost:	Daily Well Cost: KR1,375,363	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR49,538	Cum Tangible Cost:	Cum Well Cost: KR25,642,764	Total Appr: KR134,000,000

Drill Water: 1415	Potable Water: 1830	Fuel: 2095	Bulk Weight: 3726	Neat Cement: 3424	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 16-JUL-2001	Page: 1 Of 1	

CHEVRON **Drilling Activity Report**

Measured Depth: 0	TVD: 0	PBTD: 0	Proposed MD: 11,893 '	Proposed TVD: 11,893 '				
DOL: 1	DFS:	Spud Date:	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs:			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 17	Seas: 7 / 13	Bar: 30,08	POB: 78
Last Casing Size:	Set At: MD	TVD	Shoe Test: ,0 EMW	Leakoff?				
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:					
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD				

Mud Co:	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /	
WL API:	HTHP:	FC (1/32) API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /	

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Feet	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/Ft
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	GPM	Jet Vel	DP Av	DC Av	Bit HHP	BHHP/SQIN	Pump HHP
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24,0
20,50	0000	08 - 41	CONTINUE W/ TOW TO CHEVRON DONNA WEST LOCATION UNDER VESSEL "FAR FOSNA".	
3,00T	2030	08 - 42	WIND SPEED INCREASING 13 - 17 M/SEC & FORECAST UNFAVORABLE FOR RUNNING ANCHORS. DECISION TAKEN TO BALLAST DOWN	
		08 - 42	TO SURVIVAL DRAFT - 60 FT.	
0,50T	2330	08 - 42	RIG @ SURVIVAL DRAFT. WAIT ON WEATHER @ CURRENT LOCATION 5 NAUTICAL MILES F/ CHEVRON DONNA WEST LOCATION.	
		08 - 42		
		08 - 42	WEATHER LOG: WIND (M/S) DIR WAVE H (M) PRES (MM.HG) PITCH (DEG) ROLL (DEG) HEAVE (M)	
		08 - 42	20:30 HRS 16 040 3.0 764 0.3 0.3 0.2	
		08 - 42	22:00 HRS 16 040 3.5 764 0.3 0.4 0.2	
		08 - 42	00:00 HRS 17 035 4.0 764 0.2 0.4 0.2	
		08 - 42	02:00 HRS 17 035 4.0 764 0.3 0.4 0.2	
		08 - 42	04:00 HRS 17 035 4.0 764 0.5 0.4 0.2	
		08 - 42	06:00 HRS 18 035 4.0 764 0.5 0.4 0.2	
		08 - 42		
		08 - 42	RIG WORK DURING TOW & WOW: PMP MUD PUMPS, RE-INSTALL PIPE HANDLER, SLIP & CUT RUCKER WIRES.	
		08 - 42	REPLACE OIL IN TOP DRIVE TORQUE ARRESTORS. PREP BOP FOR FINAL ASSY.	

Safety: DAY & NIGHT SHIFT PRE-SPUD MEETING HELD DURING TOW. FIREWATCH RECEIVED FLASH BURNS FROM WELDING OPERATIONS.

24 Hr Summary: CONTINUE TOW TO CHEVRON DONNA WEST LOCATION. BALLAST DOWN TO SURVIVAL DRAFT DUE TO DETERIORATING WEATHER. WOW.

Projected Operations: WAIT ON WEATHER. BALLAST UP, CONTINUE TOW TO CHEVRON DONNA WEST LOCATION & RUN ANCHORS.

Remarks:

06:00 OPS: WAIT ON WEATHER 5 NAUTICAL MILES F/ DONNA WEST LOCATION - 18 M/S WIND, 4 METRE SEAS.

Daily Mud Cost: KR15,262	Daily Tangible Cost:	Daily Well Cost: KR2,848,578	Incidents: FIRST AID	
Cum Mud Cost: KR64,800	Cum Tangible Cost:	Cum Well Cost: KR28,491,342	Total Appr: KR134,000,000	

Drill Water: 1384	Potable Water: 1824	Fuel: 2013	Bulk Weight: 3726	Neat Cement: 3424	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 17-JUL-2001	Page: 1 Of 1	

CHEVRON **Drilling Activity Report**

Measured Depth: 0	TVD: 0	PBTD: 0	Proposed MD: 11,893 '	Proposed TVD: 11,893 '				
DOL: 2	DFS:	Spud Date:	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs:			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 15	Seas: 7 / 13	Bar: 30,04	POB: 81
Last Casing Size:	Set At: MD	TVD	Shoe Test: ,0 EMW	Leakoff?				
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:					
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD				
Mud Co:	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /	
WL API:	HTHP:	FC (1/32) API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Feet	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/Ft
			/	/										
			/	/										

Total Length of BHA:	BHA Description:	
	Hrs On Jars:	Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	GPM	Jet Vel	DP Av	DC Av	Bit HHP	BHHP/SQIN	Pump HHP
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24,0
24,00T	0000	08 - 42	RIG @ SURVIVAL DRAFT. WAIT ON WEATHER @ CURRENT LOCATION 5 NAUTICAL MILES F/ CHEVRON DONNA WEST LOCATION.	
		08 - 42		
		08 - 42	WEATHER LOG: WIND (M/S) DIR WAVE H (M) PRES (MM.HG) PITCH (DEG) ROLL (DEG) HEAVE (M)	
		08 - 42	00:00 HRS 17 035 4.0 764 0.2 0.4 0.2	
		08 - 42	04:00 HRS 17 035 4.0 764 0.5 0.4 0.2	
		08 - 42	08:00 HRS 15 025 4.0 764 0.5 0.5 0.2	
		08 - 42	12:00 HRS 12 025 4.0 763 0.4 0.4 0.2	
		08 - 42	16:00 HRS 13 030 4.0 763 0.4 0.4 0.2	
		08 - 42	20:00 HRS 13 030 3-4 763 0.4 0.4 0.1	
		08 - 42	24:00 HRS 15 030 3-4 763 0.3 0.4 0.1	
		08 - 42	06:00 HRS (AM) 17 020 6.0 761 0.5 0.6 0.2	
		08 - 42		
		08 - 42	RIG WORK WHILE WOW: TEST LOWER ANNULAR TO 500/7500 PSI & UPPER ANNULAR TO 500/3500 PSI FOR 5/10 MINS - OK.	
		08 - 42	TEST IBOP'S TO 500/5000 PSI FOR 5/10 MINS - OK. REPLACE WASH PIPE, CONT W/ ASSY OF BOP'S.	
		08 - 42	RE-SPOOL LINES ON POD & GUIDEWIRE TUGGERS. INSTALL WEPCO ANCHORS ON GUIDEWIRES.	

Safety: MUSTER DRILL & FIRE TEAM EXERCISE HELD. DAY SHIFT SAFETY MEETING HELD.

24 Hr Summary: WAIT ON WEATHER APPROX 5 NAUTICAL MILES FROM CHEVRON DONNA WEST LOCATION.

Projected Operations: WAIT ON WEATHER. CONTINUE TOW TO CHEVRON DONNA WEST LOCATION & RUN ANCHORS.

Remarks:

06:00 OPS: WAIT ON WEATHER APPROX 5 NAUTICAL MILES F/ DONNA WEST LOCATION - 17 M/S WIND, 6 METRE SEAS.

Daily Mud Cost: KR15,262	Daily Tangible Cost:	Daily Well Cost: KR3,096,008	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR80,062	Cum Tangible Cost:	Cum Well Cost: KR31,587,350	Total Appr: KR134,000,000

Drill Water: 1321	Potable Water: 1667	Fuel: 1956	Bulk Weight: 3726	Neat Cement: 3424	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 18-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 0.0	TVD: 0.0	PBTD: 0.0	Proposed MD: 3625 m	Proposed TVD: 3635 m				
DOL: 3	DFS:	Spud Date:	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs:			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 18	Seas: 3.0 / 6.0	Bar: 757	POB: 81

Last Casing Size:	Set At: MD	TVD	Shoe Test: 0 EMW Leakoff?
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:
Liner Size:	Set At: MD	TVD	Liner Top At: MD TVD

Mud Co:	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /	
WL API:	HTHP:	FC (mm) API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24,0
24,00T	0000	08 - 42	RIG @ SURVIVAL DRAFT. WAIT ON WEATHER @ CURRENT LOCATION APPROX 5 NAUTICAL MILES F/ DONNA WEST LOCATION.	
		08 - 42		
		08 - 42	WEATHER LOG: WIND (M/S) DIR WAVE H (M) PRES (MM.HG) PITCH (DEG) ROLL (DEG) HEAVE (M)	
		08 - 42	00:00 HRS 15 030 3-4 763 0.3 0.4 0.1	
		08 - 42	04:00 HRS 16 030 4.0 762 0.4 0.5 0.2	
		08 - 42	08:00 HRS 16 030 6.0 761 0.5 0.7 0.2	
		08 - 42	12:00 HRS 13 030 5.0 761 0.8 0.8 0.5	
		08 - 42	16:00 HRS 13 310 5.0 761 0.7 0.8 0.5	
		08 - 42	20:00 HRS 19 350 5-6 760 0.7 0.7 0.5	
		08 - 42	24:00 HRS 19 015 5-6 758 0.9 0.9 0.4	
		08 - 42	06:00 HRS (AM) 21 005 6.0 758 1.0 1.1 0.6	
		08 - 42		
		08 - 42	RIG WORK WHILE WOW: REPLACE KELLY HOSE STORMLINE. SERVICE DEMCO V/V ON STANDPIPE & TEST SAME 500/5000 PSI - OK.	
		08 - 42	CONTINUE ASSY. OF BOP'S W/ REPLACEMENT 5" RAM BLOCKS. INVESTIGATE LEAK IN LOWER KELLY HOSE	
		08 - 42	CONNECTION. CONTINUE W/ PM WORK IN PUMP ROOM. RE-TORQ BOLTS ON MANIPULATOR ARM.	

Safety: EMPHASISE CARE OUTSIDE DURING PERIOD OF BAD WEATHER.

24 Hr Summary: WAIT ON WEATHER APPROX 5 NAUTICAL MILES FROM CHEVRON DONNA WEST LOCATION.

Projected Operations: WAIT ON WEATHER. BALLAST UP, CONTINUE TOW TO CHEVRON DONNA WEST LOCATION & RUN ANCHORS.

Remarks:
POB: CHEVRON - 3, SERVICE - 18, DOLPHIN - 56, DOLPHIN SERVICE - 4 DAYS SINCE LAST LTI - 54

06:00 OPS: WAIT ON WEATHER APPROX 5 NAUTICAL MILES F/ DONNA WEST LOCATION - 21 M/S WIND, 6 METRE SEAS.

Daily Mud Cost: KR15,262	Daily Tangible Cost:	Daily Well Cost: KR3,177,927	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR95,324	Cum Tangible Cost:	Cum Well Cost: KR34,765,277	Total Appr: KR134,000,000

Drill Water: 21000.0	Potable Water: 21000.0	Fuel: 303000.	Bulk Weight: 196000	Neat Cement: 146000 Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD	
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0	
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 19-JUL-2001	Page: 1 Of 1

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 0.0	TVD: 0.0	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m				
DOL: 4	DFS:	Spud Date:	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs:			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 10	Seas: 4.0 / 6.0	Bar: 764	POB: 81
Last Casing Size:	Set At: MD	TVD	Shoe Test: 0 EMW	Leakoff?				
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:					
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD				
Mud Co:	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /	
WL API:	HTHP:	FC (mm) API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
16.50T	0000	08 - 42	RIG @ SURVIVAL DRAFT. WAIT ON WEATHER @ CURRENT LOCATION APPROX 5 NAUTICAL MILES F/ DONNA WEST LOCATION.	
		08 - 42		
		08 - 42	WEATHER LOG: WIND (M/S) DIR WAVE H (M) PRES (MM.HG) PITCH (DEG) ROLL (DEG) HEAVE (M)	
		08 - 42	00:00 HRS 19 015 5-6 758 0.9 0.9 0.4	
		08 - 42	04:00 HRS 19 010 6.0 758 0.9 1.0 0.5	
		08 - 42	08:00 HRS 21 000 6.0 758 2.0 3.0 0.8	
		08 - 42	12:00 HRS 16 010 6.0 758 1.5 2.5 0.8	
		08 - 42	16:00 HRS 16 000 6.0 761 1.5 2.0 0.8	
		08 - 42		
5.00T	1630	08 - 42	WEATHER FORECASTS PREDICT AN IMPROVING SEA STATE. DECISION TAKEN TO DE-BALLAST RIG TO TOWING DRAFT.	
1.50T	2130	08 - 42	RIG AT TOWING DRAFT - CONTINUE TO WAIT ON SEA STATE TO ALLOW ANCHOR HANDLING TO COMMENCE.	
1.00	2300	08 - 41	COMMENCE 'RUN IN ON LINE' TO DEPLOY ANCHOR #5.	
		08 - 41		
		08 - 42	RIG WORK WHILE WOW: REPAIR & TEST KELLY HOSE CONNECTION TO 500/5000 PSI - OK. CARRY OUT WELDING REPAIR /	
		08 - 42	STRENGTHENING WORK TO CATWALK. CONTINUE W/ PM & GENERAL RIG MAINTENANCE WORK.	

Safety: PRE-SPUD MEETING HELD FOR NEW DRILL CREW.

24 Hr Summary: WAIT ON IMPROVEMENT IN WEATHER. DE-BALLAST TO TOWING DRAFT & COMMENCE DEPLOYMENT OF ANCHORS.

Projected Operations: RUN & PRE-TENSION ANCHORS, BALLAST DOWN TO OPERATIONAL DRAFT, M/U 17.1/2" X 26" X 36" BHA & RIH TO SPUD

Remarks:
POB: CHEVRON - 2, SERVICE - 18, DOLPHIN - 53, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 55

06:00 OPS: CONTINUE TO RUN ANCHORS @ DONNA WEST LOCATION. ANCHORS #2, #5, #6, #8, #10 & #11 SET.

Daily Mud Cost: KR33,762	Daily Tangible Cost:	Daily Well Cost: KR3,127,627	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR129,086	Cum Tangible Cost:	Cum Well Cost: KR37,892,904	Total Appr: KR134,000,000

Drill Water: 200.0	Potable Water: 180.0	Fuel: 293.0	Bulk Weight: 196.0	Neat Cement: 146.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 20-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 0.0	TVD: 0.0	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m				
DOL: 5	DFS:	Spud Date:	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs:			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 20	Seas: 5.0 / 0.0	Bar: 764	POB: 81
Last Casing Size:	Set At: MD	TVD	Shoe Test: 0 EMW	Leakoff?				
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:					
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD				
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV:	PV:	YP:	Gel: /	
WL	API:	HTHP:	FC (mm)	API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /				

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
1	1-3-1	17.5	SMITHS	49335	3 - 22.2/ - / - / - / -	1163.9	366.0 m		
2		36.0	IPE	39252	6 - 14.3/ - / - / - / -	963.9	366.0 m		

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
DGJ	0.0	0.0	0.0/0.0	/										0.00
26" X 36" HO	0.0	0.0	/	/										0.00

Total Length of BHA: 232.87 m BHA Description: 17.1/2" SMITH DGJ ROCK BIT - 26" X 36" H/OPENER - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: | Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
1	152 / 152 / 152	304.8/304.8/304.8	/ /	0	0.00	0.00	0.00	0.00	0.00	0.0	0.00
2	152 / 152 / 152	304.8/304.8/304.8	/ /		0.00	0.00	0.00	0.00	0.00	0.0	0.00

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.00	0000	08 - 41	CONT 'RUN IN ON LINE' UNDER THE TOW OF "FAR FOSNA" TO DEPLOY ANCHOR #5.	
3.00	0100	08 - 40	COMMENCE ANCHOR HANDLING OPERATIONS W/ PENNANT #5 TO "NORMAND PROGRESS". DEPLOY ANCHORS #5, #11 & #2.	
9.50	0400	08 - 40	RELEASED FROM TOW OF "FAR FOSNA". CONT TO RUN ANCHORS #8, #10, #6, #9, #7, #3, #4 & #12 WORKING 3 AHV. COMMENCE	
		08 - 40	BALLASTING RIG TO OPERATIONAL DRAFT @ 12:40 HRS. ANCHOR HANDLING COMPLETED BY 13:30 HRS.	
6.00	1330	08 - 40	CONTINUE TO BALLAST RIG DOWN TO OPERATING DRAFT OF 21.3 M (AIR GAP OF 25 M).	
4.50	1930	08 - 40	COMMENCE CROSS TENSIONING ANCHOR PAIRS #1 & #7, #2 & #8, #3 & #9, #4 & #10, #5 & #11, #6 & #12 ALL TO 150 MT FOR	
		08 - 40	15 MINS - OK. CROSS TENSIONING COMPLETE BY 24:00 HRS.	
		08 - 40		
		08 - 40	FINAL RIG POSITION OF BYFORD DOLPHIN: N 65 DEG 48 MIN 20.8 SEC - UTM 7300302.5 M N.	
		08 - 40	E 06 DEG 44 MIN 32.6 SEC - UTM 396765.5 M E.	
		08 - 40		
		08 - 40	DURING TENSIONING - TAKE ON DRILLWATER & COMMENCE MIXING SPUD, KILL & DISPLACEMENT MUD AS PER PROGRAM.	
		08 - 40	M/U 17.1/2" BIT & 26" X 36" H/OPENER ASSY. SURFACE TEST ANDERDRIFT W/ 1940 LPM, 50 BAR - OK.	
		08 - 40	JUMP ROV. TIH W/ H/OPENER ASSY TO MUD LINE.	
		-		

Safety:

24 Hr Summary: RUN ANCHORS, BALLAST RIG DOWN TO OPERATIONAL DRAFT & CROSS TENSION ANCHORS. M/U & TIH 36" BHA.

Projected Operations: DRILL 36" HOLE TO 456 M. POOH, R/U & RUN 30" CONDUCTOR & PGB. CEMENT 30" CONDUCTOR.

Remarks:
POB: CHEVRON - 2, SERVICE - 18, DOLPHIN - 53, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 55

06:00 OPS: DRILL 36" TO 456 M. DISPLACE HOLE TO 1.2 SG DISPLACEMENT MUD.

Daily Mud Cost: KR26,262	Daily Tangible Cost:	Daily Well Cost: KR3,185,250	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR155,348	Cum Tangible Cost:	Cum Well Cost: KR41,078,154	Total Appr: KR134,000,000

Drill Water: 530.0	Potable Water: 180.0	Fuel: 282.0	Bulk Weight: 296.0	Neat Cement: 146.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 21-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 456.0 m	TVD: 456.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 6	DFS: 1	Spud Date: 22-JUL-2001	Daily Footage: 90.0	Daily Rot Hrs: 5.5	Total Rot Hrs: 5.5				
Torq: 11	Drag: 0.0	Rot Wgt: 160.0	P/U Wgt: 160.0	Slack Off Wgt: 160.0	Wind: 11	Seas: 4.0 / 0.0	Bar: 758	POB: 81	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

85 1MT BARITE 100 1KG SODA ASH 24 1MT BENTONITE API 50 1KG CMC HV TECH

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
1	1-3-1	444.5	SMITHS	49335	3 - 22.2 / - / - / - / -	1163.9	366.0 m	456.0 m	456.0 m
2		914.4	IPE	39252	6 - 14.3 / - / - / - / -	961.9	366.0 m	454.0 m	454.0 m

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
DGJ	90.0	5.5	2.3/4.5	50 / 80		0	0	NO	A7	E	I	NO	TD	K 9747.64
26" X 36" HO	0.0	0.0	2.3/4.5	50 / 80		0	0	NO	A7	E	I	NO	TD	0.00

Total Length of BHA: 232.87 m BHA Description: 17.1/2" SMITH DGJ ROCK BIT - 26" X 36" H/OPENER - BIT SUB C/W FLOAT -

ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: 5.5 Hours Since Last Inspection: 5.5

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
1	152 / 152 / 152	304.8/304.8/304.8	104/104/104	140	5.02	72.27	7.80	45.90	0.00	0.0	11.60
2	152 / 152 / 152	304.8/304.8/304.8	104/104/104	140	5.01	87.08	7.80	8.20	0.00	0.0	11.60

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
0.50	0000	01 - 06	TAG MUDLINE @ 366M (ADJUSTED FOR TIDES). TAKE ANDERDRIFT SURVEY W/ 1950 LPM, 36 BAR = 0 DEG INC.
5.50	0030	01 - 02	DRILL 36" HOLE F/ 366M - 456M W/ 5000 LPM, 142 BAR, 50 - 80 RPM, 8 - 14 KN.M TORQ. PUMP 10M3 HI-VIS SWEEPS EACH
		01 - 02	HALF STAND. ERATIC TORQ @ 390M, WORK THRU SAME. WORK STAND F/ 405M - 373M BEFORE DRILLING AHEAD TO SECTION TD @
		01 - 02	456M (36" CUTTER DEPTH = 454M).
		01 - 02	ANDERDRIFT SURVEYS: MUDLINE = 0 DEG, 374M = 0 DEG, 385M = 1 DEG, 397M = 2 DEG, 427M = 2.5 DEG & 449M = 3.5 DEG.
0.50	0600	01 - 01	DISPLACE HOLE TO 1.2 SG DISPLACEMENT MUD @ 4625 LPM, 166 BAR. PUMP A TOTAL OF 80M3 (1.5 X HOLE VOLUME).
1.50	0630	01 - 05	POOH TO MUDLINE W/ 36" H/OPENER ASSY - HOLE SLICK. CONT POOH & R/BACK 36" H/OPENER ASSY.
1.50	0800	01 - 08	R/U TO RUN 30" CONDUCTOR USING FALSE ROTARY & HAND SLIPS.
2.50	0930	01 - 08	P/U & RUN SHOE JNT & 4 JNTS OF 30" X 1" WT COND W/ SL-60 CONNECTORS AS PER TALLY. P/U & RUN 1.5" WT X/OVER JNT
		01 - 08	F/ SL-60 TO HD-90 CONNECTORS. P/U & RUN 30" X 1.5" WT LP HSG JOINT.
1.00	1200	01 - 08	R/U FALSE ROTARY & TIH W/ 5" DP INNER STRING SPACED OUT 19M ABOVE FLOAT SHOE. INSTALL 28" BOW SPRING ON BTM JNT.
0.50	1300	01 - 08	P/U & M/U LP HSG R/TOOL TO INNER STRING. ENGAGE R/TOOL & LOCK IN PLACE W/ 5 LH TURNS. INSTALL FILL UP VALVES.
2.00	1330	01 - 08	TIH & LOCK 30" LP HSG INTO PGB IN MOONPOOL. CONT TIH TO MUDLINE. USE ROV VISUAL TO GUIDE 30" SHOE INTO 36" HOLE.
1.00	1530	01 - 08	CONT TO TIH W/ 30" CONDUCTOR TO PROVIDE LP HSG W/ 1.5M STICK UP AT MUDLINE. 30" SHOE DEPTH = 451M.
0.50	1630	01 - 08	OBSERVE FORWARD BULLSEYE ON PGB - 1.5 DEG TO STARBOARD. ADJUST GUIDEWIRE & ANCHOR TENSION TO REDUCE TO 1.25 DEG.

Safety: HOLD TBT PRIOR TO 30" CEMENT JOB.

24 Hr Summary: DRILL 36" HOLE TO 454M, RUN & CEMENT 30" CONDUCTOR. WAIT ON CEMENT.

Projected Operations: BACK OUT 30" R/TOOL & POOH. M/U 26" CLEAN OUT ASSY, TIH & DRILL OUT CEMENT & SHOE. POOH & M/U PILOT HOLE

Remarks:
POB: CHEVRON - 2, SERVICE - 18, DOLPHIN - 53, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 57

06:00 OPS: TIH W/ 26" CLEAN OUT ASSY. STAB 26" BIT INTO LP HSG.

Daily Mud Cost: KR26,262	Daily Tangible Cost:	Daily Well Cost: KR3,285,372	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR181,610	Cum Tangible Cost:	Cum Well Cost: KR44,363,526	Total Appr: KR134,000,000

Drill Water: 350.0	Potable Water: 325.0	Fuel: 271.0	Bulk Weight: 166.0	Neat Cement: 185.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 22-JUL-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 456.0 m	TVD: 456.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 6	DFS: 1	Spud Date: 22-JUL-2001	Daily Footage: 90.0	Daily Rot Hrs: 5.5	Total Rot Hrs: 5.5				
Torq: 11	Drag: 0.0	Rot Wgt: 160.0	P/U Wgt: 160.0	Slack Off Wgt: 160.0	Wind: 11	Seas: 4.0 / 0.0	Bar: 758	POB: 81	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 232.87 m BHA Description: 17.1/2" SMITH DGJ ROCK BIT - 26" X 36" H/OPENER - BIT SUB C/W FLOAT -

ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: 5.5 Hours Since Last Inspection: 5.5

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.00	1700	01 - 09	BREAK CIRC W/ RIG PUMPS. PUMP 97M3 SEAWATER @ 1955 LPM, 50 BAR. HOLD TBT PRIOR TO CEMENTING CONDUCTOR.	
1.00	1800	01 - 09	BREAK CIRC W/ CMT UNIT. PRESS TEST LINES TO 200 BAR / 5 MINS - OK. MIX & PUMP 34.1M3 OF 1.56SG LEAD USING	
		01 - 09	26.4MT CLASS 'G' CEMENT W/ 3.2 LT/100KG ECONOLITE & 95.07 LTR/100KG SEAWATER. PUMP @ 1.3M3/MIN, 36 BAR.	
0.50	1900	01 - 09	MIX & PUMP 19.0M3 OF 1.92SG TAIL USING 24.5MT CLASS 'G' CEMENT W/ 4.35 LT/100KG CACL2 & 42.07 LT/100KG SEAWATER.	
		01 - 09	PUMP @ 0.8M3/MIN, 27 BAR. CLEAR LINES W/ 0.2M3 SEAWATER, DROP DP WIPER DART & DISPLACE W/ 0.5M3 F/ RIG PUMPS &	
		01 - 09	9M3 F/ CMT UNIT @ 1.4M3/MIN. FINAL DISPLACEMENT PRESSURE @ 0.2M3/MIN = 10 BAR. CEMENT IN PLACE @ 19:33 HRS.	
		01 - 09	NOTE: CEMENT RETURNS AT MUDLINE OBSERVED W/ ROV.	
4.50	1930	01 - 43	WAIT ON CEMENT.	
		-		
		-		
		-		
		-		
		-		
		-		
		-		

Safety: HOLD TBT PRIOR TO 30" CEMENT JOB.

24 Hr Summary: DRILL 36" HOLE TO 454M, RUN & CEMENT 30" CONDUCTOR. WAIT ON CEMENT.

Projected Operations: BACK OUT 30" R/TOOL & POOH. M/U 26" CLEAN OUT ASSY, TIH & DRILL OUT CEMENT & SHOE. POOH & M/U PILOT HOLE

Remarks:

Daily Mud Cost: KR26,262	Daily Tangible Cost:	Daily Well Cost: KR3,285,372	Incidents: NO INCIDENT REPORTED	
Cum Mud Cost: KR181,610	Cum Tangible Cost:	Cum Well Cost: KR44,363,526	Total Appr: KR134,000,000	

Drill Water: 350.0	Potable Water: 325.0	Fuel: 271.0	Bulk Weight: 166.0	Neat Cement: 185.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 22-JUL-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 456.0 m	TVD: 456.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 7	DFS: 2	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs: 0.0	Total Rot Hrs: 5.5				
Torq: 7200	Drag: 0.0	Rot Wgt: 66.0	P/U Wgt: 66.0	Slack Off Wgt: 66.0	Wind: 11	Seas: 3.0 / 0.0	Bar: 761	POB: 79	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing:	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

75 1KG SODA ASH 10 1MT BENTONITE API

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
3	1-1-5	660.4	HUGHES	D92DM53	1 - 19.1 / 3 - 15.9 / - / - / -	878.7	456.0 m	456.0 m	456.0 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
GTXCMG1	0.0	0.0	10.0/11.0	50 /		1	1	WT	A7	E	I	NO	TD	0.00
			/	/										

Total Length of BHA: 229.68 m BHA Description: 26" HUGHES GTXCMG1 ROCK BIT - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: 7.0 Hours Since Last Inspection: 7.0

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
3	152 / 152 / 152	304.8/ 304.8/ 304.8	76/ 96/113	122	4.58	87.14	11.92	15.45	0.00	0.0	9.50
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	0000	01 - 43	CONT TO WAIT ON CEMENT. SURFACE SAMPLES FIRM AFTER 5 HRS F/ CEMENT IN PLACE.	
1.00	0030	01 - 09	OBSERVE FORWARD BULLSEYE W/ ROV - 1.25 DEG. SLACK OFF L/STRING WT - NO MOVEMENT OF PGB SEEN. PICK BACK UP &	
		01 - 09	BACK OUT R/TOOL W/ 5 RH TURNS. POOH TO MUDLINE & FLUSH 30" LP HSG W/ SEAWATER @ 4900 LPM, 41 BAR.	
2.00	0130	01 - 09	POOH W/ 30" RUNNING STRING. L/O 30" R/TOOL & R/BACK 5" DP INNER STRING.	
0.50	0330	01 - 07	B/O & L/O 17.1/2" BIT & 26" X 36" H/OPENER.	
2.00	0400	01 - 05	M/U & TIH W/ 26" CLEAN OUT ASSY. ATTACH BREAK OFF LINES TO FIRST JNT OF 9.1/2" DC.	
1.50	0600	01 - 15	WASH DN W/ 2000 LPM, 33 BAR & TAG CMT @ 446M. DRILL OUT CMT & SHOE W/ 4600 LPM, 122 BAR, 50 RPM, 7.2 KN.M TORQ,	
		01 - 15	10 - 11 MT WOB. PUMP 10M3 HI-VIS SWEEPS AS REQ'D. CLEAN OUT RATHOLE TO 456M.	
2.00	0730	01 - 05	POOH & R/BACK 26" CLEAN OUT ASSY. B/O & L/O 26" BIT.	
13.00	0930	01 - 07	P/U, M/U & R/BACK 47 STDS OF 5" DP. A TOTAL OF 2760M 5" DP R/BACK IN DERRICK. ALL DP DRIFTED TO 2.3/4".	
1.50	2230	01 - 07	M/U 8.1/2" PILOT HOLE ASSY & TIH.	
		-		
		-		
		-		
		-		

Safety:

24 Hr Summary: POOH W/ 30" LANDING STRING, M/U 26" CLEAN OUT ASSY & DRILL OUT CEMENT & SHOE. POOH & P/U 5" DP.

Projected Operations: DRILL 8.1/2" PILOT HOLE TO APPROX 1375M. POOH, M/U 17.1/2" H/OPENER ASSY & TIH.

Remarks:
POB: CHEVRON - 2, SERVICE - 16, DOLPHIN - 53, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 58

06:00 OPS: DRILL AHEAD 8.1/2" PILOT HOLE AT 591M. LAST SURVEY - 542.45M, 3.07 INC, 203.9 AZ.

Daily Mud Cost: KR91,613	Daily Tangible Cost:	Daily Well Cost: KR3,234,555	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR273,223	Cum Tangible Cost:	Cum Well Cost: KR47,598,081	Total Appr: KR134,000,000

Drill Water: 270.0	Potable Water: 300.0	Fuel: 252.0	Bulk Weight: 85.0	Neat Cement: 185.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 23-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1382.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 8	DFS: 3	Spud Date: 22-JUL-2001	Daily Footage: 926.0	Daily Rot Hrs: 15.0	Total Rot Hrs: 20.5				
Torq: 6100	Drag: 4.5	Rot Wgt: 78.0	P/U Wgt: 82.5	Slack Off Wgt: 78.0	Wind: 12	Seas: 3.0 / 0.0	Bar: 759	POB: 85	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing: 16.5	Cum Rot Hrs On Casing Since Last Caliper: 16.5	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

29 1MT BARITE 375 1KG SODA ASH 28 1MT BENTONITE API 425 1KG CMC HV TECH

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
4	1-1-7	215.9	HUGHES	W97ZS	2 - 11.1 / 2 - 12.7 / - / - / -	447.1	456.0 m	1382.0 m	1380.0 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
MXC-1	926.0	15.0	0.0/7.0	60 / 150		8	5	WT	A7	E	1/8	ER	TD	K 78.28
			/	/										

Total Length of BHA: 245.36 m BHA Description: 8.1/2" HUGHES MXC-1 ROCK BIT - 8.1/2" NB STAB C/W FLOAT - 2.6M X 6.1/2" PONY DC - 8.1/2" STRING STAB - CDR - 8.3/8" IN LINE STAB - MWD - 9.3M X 6.1/2" NMDC - 5 X 6.1/2" STEEL DC - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP Hrs On Jars: 23.5 Hours Since Last Inspection: 23.5

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
4	152 / 152 / 152	304.8 / 304.8 / 304.8	86 / 72 / 38	197	3.15	117.99	131.86	207.69	0.00	0.0	10.50
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
1289.0	4.16	168.61	S11.39E	1286.8	56.08 S	9.57 W	-56.08	0.17
1317.3	4.15	167.23	S12.77E	1315.0	58.09 S	9.14 W	-58.09	0.11
1346.1	4.19	163.74	S16.26E	1343.7	60.12 S	8.61 W	-60.12	0.27
1362.4	4.11	157.77	S22.23E	1360.0	61.23 S	8.22 W	-61.23	0.81

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
3.00	0000	01 - 07	CONT TO M/U & TIH 8.1/2" PILOT HOLE ASSY TO 245.5M. SURFACE TEST MWD W/ 2100 LPM, 57 BAR - OK.
1.00	0300	01 - 05	TIH W/ 5" DP F/ 245.5 - 443M. WASH DN W/ 3150 LPM, 176 BAR & TAG BTM @ 456M.
15.00	0400	01 - 02	DRILL 8.1/2" PILOT HOLE F/ 456M - SECTION TD @ 1382M W/ 3150 LPM, 176 - 197 BAR, 0 - 7 T WOB, 60 - 150 RPM,
		01 - 02	2300 - 6100 N.M TQ. VARY PARAMS IN ATTEMPT TO CONTROL INCLINATION. PUMP 5 - 10M3 HI-VIS SWEEPS AS REQ'D.
1.50	1900	01 - 01	PUMP 20M3 HI-VIS SWEEP & DISPLACE W/ 75M3 OF SEAWATER @ 3150 LPM, 200 BAR. DISPLACE HOLE TO 1.2SG DISPLACEMENT
		01 - 01	MUD @ 3300 LPM, 275 BAR. PUMP A TOTAL OF 98M3. SLUG PIPE W/ 4M3 OF 1.6SG KILL MUD.
1.00	2030	01 - 05	POOH W/ 5" DP F/ TD @ 1382M - 30" SHOE @ 451M. NO EXCESS DRAG - HOLE SLICK.
0.50	2130	01 - 01	M/U TOP DRIVE & CIRC 30" CONDUCTOR CLEAN W/ 80M3 OF SEAWATER @ 4500 LPM, 295 BAR.
0.50	2200	01 - 01	POOH W/ 5" DP F/ 451M - MUDLINE @ 366M. M/U TOP DRIVE FLUSH W/HEAD & PGB W/ 30M3 OF SEAWATER @ 4000 LPM, 221 BAR
0.50	2230	01 - 05	POOH W/ 5" DP F/ MUDLINE @ 366M - BHA @ 245M.
1.00	2300	01 - 07	POOH & R/BACK 8.1/2" BHA. L/O MWD, ILS & CDR (TO BE RE-PROGRAMMED FOR ISONIC TOOL). B/O & L/O 8.1/2" ROCK BIT.
		-	
		-	
		-	
		-	

Safety:

24 Hr Summary: TIH W/ PILOT HOLE ASSY & DRILL 8.1/2" HOLE F/ 456 - 1382M. POOH W/ PILOT HOLE ASSY. L/O MWD/CDR TOOLS.

Projected Operations: M/U & RIH W/ 17.1/2" HOLE OPENER ASSY. OPEN HOLE TO 17.1/2", POOH & R/U TO RUN 13.3/8" CASING.

Remarks:
POB: CHEVRON - 2, SERVICE - 23, DOLPHIN - 51, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 59

FINAL SURVEY PROJECTED TO SECTION TD @ 1382M - 1379.8M TVD, 62.52M SOUTH, 7.68M WEST.

06:00 OPS: OPENING 8.1/2" PILOT HOLE TO 17.1/2" @ 615M.

Daily Mud Cost: KR26,262	Daily Tangible Cost:	Daily Well Cost: KR2,911,624	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR299,485	Cum Tangible Cost: KR442,845	Cum Well Cost: KR50,509,705	Total Appr: KR134,000,000

Drill Water: 40.0	Potable Water: 40.0	Fuel: 494.0	Bulk Weight: 166.0	Neat Cement: 185.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 24-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1382.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 9	DFS: 4	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 20.5				
Torq: 12000	Drag: 0.0	Rot Wgt: 93.0	P/U Wgt: 93.0	Slack Off Wgt: 93.0	Wind: 11	Seas: 3.0 / 0.0	Bar: 761	POB: 85	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing: 35.0	Cum Rot Hrs On Casing Since Last Caliper: 35.0	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

21 1MT BENTONITE API 5575 1KG CMC HV TECH 1225 1KG SODA ASH

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
5		444.5	IPE	1752012	1 - 22.2 / 3 - 9.5 / 6 - 14.3 / - / -	1563.2	1382.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
17.1/2" H/O	0.0	0.0	3.0/5.0	120 / 140										0.00
			/	/										

Total Length of BHA: 233.50 m BHA Description: BULLNOSE - 12.1/4" HOLE OPENER - 17.1/2" HOLE OPENER - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: 42.0 Hours Since Last Inspection: 42.0

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
5	152 / 152 / 152	304.8 / 304.8 / 304.8	96 / 94 / 72	151	4.21	45.05	29.60	38.53	0.00	0.0	10.70
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
2.00	0000	01 - 07	M/U & TIH W/ 12.1/4" X 17.1/2" HOLE OPENER ASSY TO 233M.	
1.00	0200	01 - 05	TIH W/ 5" DP F/ 233 - MUDLINE 366M. STAB INTO WELLHEAD & TEST ANDERDRIFT TOOL.	
0.50	0300	01 - 05	TIH & WASH DOWN W/ 2000 LPM, 47 BAR TO TAG 8.1/2" PILOT HOLE AT 456M.	
16.00	0330	01 - 03	OPEN 8.1/2" PILOT HOLE TO 17.1/2" F/ 456 - 1379M (17.1/2" CUTTER DEPTH) W/ 3200 - 4200 LPM, 66 - 150 BAR,	
		01 - 03	120 - 150 RPM, 5000 - 14300 N.M TORQ, 1 - 8 MT WOB. PUMP 10M3 HI-VIS SWEEPS EVERY STAND & TAKE ANDERDRIFT SURVEY	
		01 - 03	EVERY OTHER STAND TO CONFIRM HOLE INCLINATION - OK. ERRATIC TORQUE & OCCASIONAL STRING STALLS.	
2.00	1930	01 - 01	PUMP 20M3 HI-VIS SWEEP & DISPLACE W/ 305M3 OF SEAWATER @ 4500 LPM, 176 BAR. WORK STRING & CONT TO PUMP SEAWATER	
		01 - 01	WHILE CUT BACK 1.6SG KILL MUD TO 1.2SG DISPLACEMENT MUD.	
0.50	2130	01 - 01	PUMP REMAINING 25M3 HI-VIS & DISPLACE HOLE TO 1.2SG DISPLACEMENT MUD W/ 4500 LPM, 190 BAR. PUMP 157M3 IN TOTAL.	
		01 - 01	P/U, S/O & ROT WT = 93 MT. DISPLACE DRILL STRING W/ 14M3 SEAWATER.	
2.00	2200	01 - 05	POOH W/ 5" DP F/ 1382M - MIDNIGHT DEPTH 635M. 9 - 13 MT DRAG F/ 1320 - 780M. HOLE SLICK F/ 780 - 635M.	
		-		
		-		
		-		
		-		

Safety: MUSTER DRILL & WEEKLY SAFETY MEETING HELD.

24 Hr Summary: M/U 17.1/2" HOLE OPENER ASSY. TIH & OPEN 8.1/2" PILOT HOLE TO 1379M DEPTH. POOH TO 635M.

Projected Operations: POOH & R/BACK HOLE OPENER ASSY. R/U & RUN 13.3/8" CASING.

Remarks:
POB: CHEVRON - 2, SERVICE - 23, DOLPHIN - 51, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 60

06:00 OPS: P/U & RUN 13.3/8" TO 82M.

Daily Mud Cost: KR26,262	Daily Tangible Cost:	Daily Well Cost: KR2,665,050	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR325,747	Cum Tangible Cost: KR442,845	Cum Well Cost: KR53,169,755	Total Appr: KR134,000,000

Drill Water: 95.0	Potable Water: 75.0	Fuel: 475.0	Bulk Weight: 166.0	Neat Cement: 178.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 25-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1379.8 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 10	DFS: 5	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 36.5				
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 9	Seas: 3.0 / 0.0	Bar: 764	POB: 85	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing: 35.0	Cum Rot Hrs On Casing Since Last Caliper: 35.0	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
5		444.5	IPE	1752012	1 - 22.2 / 3 - 9.5 / 6 - 14.3 / - / -	1563.9	1382.0 m	1382.0 m	1379.8 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
17.1/2" H/O	0.0	16.0	0.0/0.0	/		8	8	WT	A7	4	3/4	ER	TD	0.00
			/	/										

Total Length of BHA: 233.50 m BHA Description: BULLNOSE - 12.1/4" HOLE OPENER - 17.1/2" HOLE OPENER - BIT SUB C/W FLOAT - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: 42.0 Hours Since Last Inspection: 42.0

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
5	152 / 152 / 152	304.8 / 304.8 / 304.8	/ /	0	0.00	0.00	0.00	0.00	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	0000	01 - 05	CONT POOH W/ 5" DP F/ 635M - MUDLINE @ 366M W/OUT PROBLEM.	
1.50	0030	01 - 05	JET WELLHEAD W/ 30M3 SEAWATER @ 4500 LPM, 124 BAR. POOH & R/BACK BHA. B/O & L/O 17.1/2" HOLE OPENER.	
2.00	0200	01 - 08	R/U TO RUN 13.3/8", 72#, L-80, MOD BUTT CASING.	
0.50	0400	01 - 08	HOLD SAFETY MTG. P/U 13.3/8" SHOE JNT & INSTALL 2 X BOW SPRING CENT. PUMP THRU TO TEST FLOAT - OK. P/U 13.3/8"	
		01 - 08	FLOAT COLLAR & BAKERLOCK TO SHOE JNT. INSTALL 1 X BOW SPRING CENT & GUIDEROPES. PUMP THRU TO TEST FLOATS - OK.	
8.00	0430	01 - 08	P/U & RUN 13.3/8", 72#, L-80, MOD BUTT CASING AS PER TALLY. INSTALL 1 X BOW SPRING CENT ON EACH OF FIRST 9 JNT	
		01 - 08	ABOVE SHOE TRACK. COMPLETELY FILL CASING EVERY 5 JNTS. AVE RUN SPEED = 14 JNT/HR.	
2.50T	1230	01 - 08	15.4 MT DRAG SEEN @ 727M. CONT TO RUN CASING TO 810M. ROV OBSERVES ANOMALY ON SONAR & INVESTIGATES SAME.	
		01 - 08	CASING SEEN TO HAVE BUCKLED IN TWO PLACES W/ SEVERAL JNTS LYING ON THE SEABED. SUSPEND OPERATIONS.	
9.00T	1500	01 - 08	HOLD SAFETY MTG. POOH & L/O 13.3/8" CASING WHILE OBESERVING BUCKLED JNTS W/ ROV. STRAIGHTEN BUCKLED JNTS &	
		01 - 08	TAKE FULL STRING WT. CONT POOH & L/O OUT 13.3/8" CSG F/734 - 270M. REJECT BUCKLED JNTS #53 TO #62.	
		01 - 08	JNTS #57 & #62 CRIMPED. JUMP ROV WHEN SHOE CLEAR OF WELLHEAD & OBSERVE FORWARD BULLSEYS - 1.25 DEG.	
		01 - 08	MOVE RIG OFF WELL CENTRE ONCE SHOE CLEAR OF WELLHEAD.	
		-		
		-		

Safety: TBT PRIOR TO COMMENCING CASING PULLING OPERATIONS.

24 Hr Summary: POOH W/ HOLE OPENER ASSY. JET W/HEAD. R/U & RUN 13.3/8" CASING. CASING BUCKLED @ W/HEAD, COMMENCE POOH W/ SAME.

Projected Operations: CONT POOH & L/O 13.3/8" CASING. R/BACK SHOE TRACK. M/U & TIH W/ 17.1/2" WIPER TRIP ASSY.

Remarks:
POB: CHEVRON - 2, SERVICE - 23, DOLPHIN - 51, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 61

06:00 OPS: M/U & RIH W/ 17.1/2" WIPER TRIP ASSY TO 40M.

Daily Mud Cost: KR26,262	Daily Tangible Cost:	Daily Well Cost: KR2,389,451	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR352,009	Cum Tangible Cost: KR442,845	Cum Well Cost: KR55,559,206	Total Appr: KR134,000,000

Drill Water: 290.0	Potable Water: 250.0	Fuel: 465.0	Bulk Weight: 384.0	Neat Cement: 253.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 26-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1379.8 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 11	DFS: 6	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 36.5				
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 4	Seas: 2.0 / 0.0	Bar: 766	POB: 88	
Last Casing Size: 762.0 mm	Set At: 451.0m MD	451.0m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing: 41.0	Cum Rot Hrs On Casing Since Last Caliper: 41.0	Depth Worst Wear:	% Remaining:						
Liner Size:	Set At: MD	TVD	Liner Top At: MD	TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1031	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids:	% Oil: 0.00	%Water: 0.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
6		444.5	IPE		1 - 22.2 / 3 - 14.3 / - / - / -	869.0	1382.0 m	1382.0 m	1380.0 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
17.1/2" H/O	0.0	0.0	0.0/5.0	150 /		1	1	WT	A7	E	IN	NO	TD	0.00
			/	/										

Total Length of BHA: 234.36 m BHA Description: BULLNOSE - BIT SUB - PIN X PIN SUB - X/OVER - 17.1/2" HOLE OPENER - BIT SUB (C/W FLOAT) - ANDERDRIFT - 3 X 9.1/2" DC - X/OVER - 3 X 8" DC - X/OVER - 3 X 5" HWDP - 6.1/2" WEIR HOUSTON JARS - 14 X 5" HWDP

Hrs On Jars: 48.0 Hours Since Last Inspection: 48.0

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
6	152 / 152 / 152	304.8 / 304.8 / 304.8	100 / 100 /	152	3.22	61.94	22.62	29.44	0.00	0.0	8.10
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
2.50T	0000	01 - 08	CONT POOH & L/O OUT 13.3/8" CSG F/ 270M - RIG FLOOR. M/U SWEDGE & 5" DP PUP TO SHOETRACK & R/BACK.	
		01 - 08	SOME CHIPPING DAMAGE TO CEMENT ON NOSE OF SHOE; 2 CENTRALISERS MISSING ON SHOEJOINT	
1.50T	0230	01 - 08	CLEAR 13.3/8" CASING HANDLING EQUIPMENT F/ DRILL FLOOR & R/U TO RUN WIPER TRIP ASSY.	
5.50T	0400	01 - 08	M/U 17.1/2" WIPER TRIP ASSY. STRAP WELD CONNECTIONS BELOW 17.1/2" HOLE OPENER.	
T		01 - 08	TIH TO 364.5M & WASH WELLHEAD - PUMP HIVIS PILL; CONT TIH TO 535M	
6.50T	0930	01 - 08	HOLE TOOK WEIGHT AT 535M; WASH & REAM F/ 535 TO 838M W/ 150 RPM, 3234 LPM, 152 BAR & SWEEP HOLE W/ HI-VIS PILL	
T		01 - 08	CONT TO WASH & REAM F/ 838 TO 1382M (TD 17 1/2" HOLE @ 1379M)	
2.50T	1600	01 - 08	CIRC 50M3 HI-VIS PILL & DISPLACE W/ SEAWATER; DISPLACE HOLE TO 1.4 SG KCL MUD	
3.50T	1830	01 - 08	POOH F/ 1382M TO SURFACE - NO HOLE PROBLEMS; L/D HOLE OPENER	
2.00T	2200	01 - 08	R/U TO RUN 13 3/8" CASING;	
		-		
		-		
		-		
		-		
		-		

Safety: TBT PRIOR TO RUNNING 13 3/8" CASING

24 Hr Summary: POOH & L/D 13 3/8" CSG; MAKE CONDITIONING TRIP W/ 17 1/2" H/O TO 1382M; POOH; R/U TO RUN CSG

Projected Operations: RUN & CEMENT 13 3/8" CASING; PREPARE TO RUN BOP & RISER

Remarks:
POB: CHEVRON - 3, SERVICE - 22, DOLPHIN - 55, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 62

06:00 OPS: CONT TIH W/ 13 3/8" CASING @ 455M

Daily Mud Cost: KR62,462	Daily Tangible Cost:	Daily Well Cost: KR2,564,232	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR414,471	Cum Tangible Cost: KR442,845	Cum Well Cost: KR58,123,438	Total Appr: KR134,000,000

Drill Water: 120.0	Potable Water: 220.0	Fuel: 457.0	Bulk Weight: 384.0	Neat Cement: 253.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/MOORE/DEJONGE		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 27-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1379.8 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m				
DOL: 12	DFS: 7	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 36.5			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 1	Seas: 2.0 / 3.0	Bar: 756	POB: 88

Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 0 EMW	Leakoff?					
Cum Rot Hrs On Casing: 0.0	Cum Rot Hrs On Casing Since Last Caliper: 0.0		Depth Worst Wear:	% Remaining:					
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /		
WL	API: HTHP:	FC (mm) API: HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:	
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50T	0000	01 - 08	CONT TO R/U TO RUN 13 3/8" CSG; HELD TBT	
7.50T	0030	01 - 08	RE-RUN 13 3/8" SHOETRACK & INSTALL GUIDELINES; RUN 13 3/8" 72# L-80 MOD BTC CASING AS PER TALLY TO 727M	
T		01 - 08	REMOVE ALL DAMAGED CENTRALISERS - CENTRALISERS INSTALLED ON SHOE JOINT, AND FIRST 5 JOINTS ABOVE SHOETRACK	
4.00	0800	01 - 08	CONT TO TIH W/ 13 3/8" CSG - MONITOR CASING MOVEMENT W/ ROV AT WELLHEAD -FILL CSG EVERY 5 JNTS W/ 1.4 SG KCL MUD	
		01 - 08	FROM 450M TO 1379M; M/U 18 3/4" HP WELLHEAD	
2.50	1200	01 - 08	RUN 13 3/8" CSG ON 5" DP; WASH DOWN CSG AT 1074, 1190 AND F/ 1335 TO 1379M W/ 3000 LPM	
		01 - 01	LAND AND LATCH WELLHEAD; TEST LATCH W/ 50K OVERPULL	
1.00	1430	01 - 01	CIRCULATE CASING VOLUME W/ 3000 LPM, 103.5 BAR	
4.00	1530	01 - 09	R/U CMT LINE & PRESSURE TEST TO 240 BAR; MIX AND PUMP 128M3 OF 1.56SG LEAD SLURRY USING 100MT CLASS 'G' CEMENT	
		01 - 09	W/ 3.2LTR/100KG ECOLONITE, 1LTR/100KG HR-4L, 0.1LTR/100KG NF-6, 94,36LTR/100KG SEAWATER AT 1.2M3/MIN, 25 BAR	
		01 - 09	MIX & PUMP 17M3 OF 1.92SG TAIL SLURRY USING 21MT CLASS 'G' CMT W/ 0.1 LTR/100KG NF-6 AND 43.78LTR/100KG DRILL	
		01 - 09	WATER AND PUMP AT 0.8 M3/MIN W/ 20 BAR; DISPLACE CMT W/ 3M3 SEAWATER & SHEAR DART W/ 154 BAR	
		01 - 09	DISPLACE WIPER W/ 76M3 SEAWATER AT 3200 LPM, 161 BAR USING RIG PUMPS; SLOW PUMPS TO 580 LPM, 61 BAR	
		01 - 09	MONITORED RETURNS @ SEABED DURING ENTIRE CEMENT OPERATION; S/D PUMPS - PLUG DID NOT BUMP;	
		01 - 09	FINAL PRESSURE 55 BAR (OBSERVED TOC=SEABED); BLED DOWN PRESSURE - FLOAT HOLDING	

Safety: TBT PRIOR TO RUNNING 13 3/8" CASING AND CEMENT JOB

24 Hr Summary: RUN 13 3/8" CASING AND SET AT 1379M; CEMENT CASING W/ 1.56SG CEMENT; RETRIEVE R/TOOL & R/U TO RUN BOP'S

Projected Operations: RUN BOP'S AND LAND SAME

Remarks:
POB: CHEVRON - 3, SERVICE - 22, DOLPHIN - 55, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 62

STARBOARD BULLSEYE 1 1/2 DEG

06:30 OPS: FUNCTION TEST BOP'S BELOW ROTARY TABLE PRIOR TO LATCHING UP TO THE DOUBLE

Daily Mud Cost: KR118,862	Daily Tangible Cost: KR1,305,106	Daily Well Cost: KR4,310,584	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR533,333	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR62,434,022	Total Appr: KR134,000,000

Drill Water: 700.0	Potable Water: 195.0	Fuel: 441.0	Bulk Weight: 180.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/MOORE/DEJONGE		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 28-JUL-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1379.8 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m				
DOL: 12	DFS: 7	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 36.5			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 1	Seas: 2.0 / 3.0	Bar: 756	POB: 88

Last Casing Size: 339.7 mm	Set At: 1374.3m MD 1372.1m TVD	Shoe Test: 0 EMW	Leakoff?
Cum Rot Hrs On Casing: 0.0	Cum Rot Hrs On Casing Since Last Caliper: 0.0	Depth Worst Wear:	% Remaining:
Liner Size: 0.0	Set At: 0.0 MD 0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD

Mud Co: M-I NORGE A.S.	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /	
WL API: HTHP:	FC (mm) API: HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:	
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /	

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
		01 - 09	BLED DOWN PRES. - FLOAT HOLDING	
		01 - 09	BACK OUT RUNNING TOOL W/ 5 RH TURNS AND PULL 3M ABOVE WELLHEAD USING COMPENSATOR	
1.00T	1930	01 - 20	DURING MAINTENANCE, NOTICED SNAP RINGS ON 2 CALIPERS OF DRAWWORK BRAKES WERE BROKEN; ISOLATE THE 2 CALIPERS	
2.00	2030	01 - 09	FLUSH GUIDEBASE; POOH W/ RUNNING TOOL & L/D SAME WHILE MOVING RIG 20M STARBOARD	
1.50	2230	01 - 13	R/U TO RUN BOP'S; MEANWHILE OFFLOAD RISER F/ HIGHLAND STAR & BACKLOAD EQUIPMENT	
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		

Safety: TBT PRIOR TO RUNNING 13 3/8" CASING AND CEMENT JOB

24 Hr Summary: RUN 13 3/8" CASING AND SET AT 1379M; CEMENT CASING W/ 1.56SG CEMENT; RETRIEVE R/TOOL & R/U TO RUN BOP'S

Projected Operations: RUN BOP'S AND LAND SAME

Remarks:

Daily Mud Cost: KR118,862	Daily Tangible Cost: KR1,305,106	Daily Well Cost: KR4,310,584	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR533,333	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR62,434,022	Total Appr: KR134,000,000

Drill Water: 700.0	Potable Water: 195.0	Fuel: 441.0	Bulk Weight: 180.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/MOORE/DEJONGE		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 28-JUL-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1379.8 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m				
DOL: 13	DFS: 8	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 36.5			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 22	Seas: 2.0 / 0.0	Bar: 743	POB: 97

Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 0 EMW	Leakoff?
Cum Rot Hrs On Casing: 0.0	Cum Rot Hrs On Casing Since Last Caliper: 0.0		Depth Worst Wear:	% Remaining:
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD

Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1440	FV: 100	PV: 48	YP: 11.5	Gel: 7 / 9	
WL	API: 0.0 HTHP: 2.6	FC (mm) API: 0.0 HTHP: 1.0	Solids:	% Oil: 70.00	%Water: 30.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 20,000	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /	

50 1LTR OTHER 4800 1KG CMC HV TECH 186 1MT ASP-700 200 1KG SODA ASH 16 1MT BENTONITE API

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	0000	01 - 13	CONT TO R/U TO RUN BOP'S	
6.50	0030	01 - 13	P/U AND M/U DOUBLE OFF RISER; SKID BOP TO CENTRE IN MOONPOOL; INSTALL LMRP AND GUIDELINES; FUNCTION TEST BOP'S	
3.50T	0700	01 - 20	DISCOVER IMPROPER INSTALLATION OF TARGET SLEEVE IN UPPER INNER CHOKE LINE CAUSING RESTRICTION IN FLOW AREA	
		01 - 13	CHANGED OVER TARGET SLEEVE AND PRESSURE TESTED CHOKE LINE TO 35 BAR/5MIN, 690 BAR/10MIN	
2.50	1030	01 - 13	CONNECT RISER DOUBLE TO BOP; MOUNT BULLSEYE AND BEACON AND RUN BOP THRU SPLASH ZONE; TEST C&K LINE TO 35/414 BAR	
11.00	1300	01 - 13	CONT RUNNING BOP ON RISER TO +/- 250M, TESTING C&K LINES TO 35/414 BAR EVERY 5 JNTS	
		01 - 13		
		01 - 13		
		01 - 13		
		01 - 13		
		01 - 13		
		01 - 13		
		01 - 13		
		01 - 13		
		01 - 13		

Safety: TBT PRIOR TO RUNNING RISER

24 Hr Summary: R/U TO RUN BOP'S; M/U BOP TO RISER AND RUN SAME; TEST C&K LINES TO 35/414 BAR EVERY 5 JNTS

Projected Operations: WOW TO HOOK UP C&K LINES TO SLIPJNT; LAND & LATCH BOP & P/TEST CONNECTION & CASING; M/U 8 1/2" BHA

Remarks:
POB: CHEVRON - 4, SERVICE - 30, DOLPHIN - 55, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 64

06:00 OPS: WOW TO P/U SLIP JNT SINCE 0530 HRS - 35 KNOTS WIND, 6M SEAS

Daily Mud Cost: KR1,066,8	Daily Tangible Cost:	Daily Well Cost: KR4,127,850	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR1,600,157	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR66,561,872	Total Appr: KR134,000,000

Drill Water: 310.0	Potable Water: 360.0	Fuel: 431.0	Bulk Weight: 180.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/MOORE/DEJONGE		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 29-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1382.0 m	TVD: 1379.8 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 14	DFS: 9	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 36.5		
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 12	Seas: 4.0 / 0.0	Bar: 750	POB: 96

Last Casing Size: 339.7 mm	Set At: 1374.3m MD 1372.1m TVD	Shoe Test: 0 EMW	Leakoff?
Cum Rot Hrs On Casing: 0.0	Cum Rot Hrs On Casing Since Last Caliper: 0.0	Depth Worst Wear:	% Remaining:
Liner Size: 0.0	Set At: 0.0 MD 0.0 TVD	Liner Top At: 0.0 MD 0.0 TVD	

Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1440	FV: 100	PV: 48	YP: 11.5	Gel: 7 / 9		
WL	API: 0.0 HTHP: 2.6	FC (mm)	API: 0.0 HTHP: 1.0	Solids:	% Oil: 70.00	%Water: 30.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 20,000	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

5 1KG BENTONE 34

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

	Hrs On Jars:	Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
5.50	0000	01 - 13	CONT RUNNING BOP ON RISER, TESTING C&K LINES TO 35/414 BAR EVERY 5 JNTS	
13.50T	0530	01 - 42	WOW TO P/U SLIP JOINT	
T		01 - 42	0500 HRS: 36KNOT WIND, 6M SEAS, 2.5M HEAVE, 2.0DEG PITCH, 4.0DEG ROLL	
T		01 - 42	0600 HRS: 44KNOT WIND, 6M SEAS, 2.0M HEAVE, 1.5DEG PITCH, 3.0DEG ROLL	
T		01 - 42	0800 HRS: 36KNOT WIND, 5-8M SEAS, 2.0M HEAVE, 1.5DEG PITCH, 3.0DEG ROLL	
T		01 - 42	1000 HRS: 40KNOT WIND, 5-8M SEAS, 2.0M HEAVE, 1.5DEG PITCH, 3-4DEG ROLL	
T		01 - 42	1200 HRS: 36KNOT WIND, 5-8M SEAS, 1.8M HEAVE, 1.6DEG PITCH, 2.7DEG ROLL	
T		01 - 42	1400 HRS: 36KNOT WIND, 5-8M SEAS, 1.5M HEAVE, 1.7DEG PITCH, 2.5DEG ROLL	
T		01 - 42	1600 HRS: 32KNOT WIND, 4-7M SEAS, 1.5M HEAVE, 1.6DEG PITCH, 2.3DEG ROLL	
T		01 - 42	1800 HRS: 28KNOT WIND, 4-7M SEAS, 1.2M HEAVE, 1.5DEG PITCH, 2.0DEG ROLL	
3.00	1900	01 - 13	P/U SLIPJOINT AND LANDING JOINT; INSTALL CHOKE, KILL & BOOSTER LINES; HOOK UP TENSION RING	
2.00	2200	01 - 13	MOVE RIG TO WELL CENTRE - CHECK BULLSEYES BOP=1/2DEG, LMRP=1/2DEG, FLEXJNT=3/4DEG	
		01 - 13	LAND AND LATCH BOP'S 2355 HRS; TAKE 25MT OVERPULL - OK	
		01 - 13	BULLSEYES: BOP 2DEG STB-FWD, LMRP 2DEG STB-FWD, FLEXJNT 1/2DEG STB; GUIDEBASE 1 3/4DEG STB-FWD	
		-		

Safety: WHILE WASHING DOWN IN SACKSTORE, MAN GOT CHEMICALS IN HIS EYES; EYES WERE FLUSHED AND MAN COULD RETURN TO WORK

24 Hr Summary: CONT RUN BOP'S ON RISER; WOW TO P/U SLIP JNT (13.5HRS);P/U SLIPJNT & LANDING JOINT; MOVE RIG; LAND & LATCH BOP'S

Projected Operations: TEST CASING TO 200 BAR; M/U 8 1/2" BHA & P/U 5" DP; DISPLACE TO 1.45SG LT-OBM

Remarks:
POB: CHEVRON - 3, SERVICE - 30, DOLPHIN - 54, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 65

DAILY FE COST: NOK 1,120,693 TOTAL FE COSTS: NOK 5,798,991

06:00 OPS: M/U BHA

Daily Mud Cost: KR127,162	Daily Tangible Cost:	Daily Well Cost: KR4,470,095	Incidents: FIRST AID	
Cum Mud Cost: KR1,727,319	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR71,031,967	Total Appr: KR134,000,000	

Drill Water: 280.0	Potable Water: 315.0	Fuel: 422.0	Bulk Weight: 180.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/DEJONGE		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 30-JUL-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1386.0 m	TVD: 1384.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 15	DFS: 10	Spud Date: 22-JUL-2001	Daily Footage: 4.0	Daily Rot Hrs: 0.5	Total Rot Hrs: 37.0				
Torq: 10	Drag: 0.0	Rot Wgt: 180.0	P/U Wgt: 180.0	Slack Off Wgt: 180.0	Wind: 15	Seas: 4.0 / 0.0	Bar: 755	POB: 93	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 7.0	Cum Rot Hrs On Casing Since Last Caliper: 7.0	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1440	FV: 0	PV: 48	YP: 13.5	Gel: 8 / 11		
WL	API: 0.0 HTHP: 3.0	FC (mm)	API: 0.0 HTHP: 1.0	Solids:	% Oil: 70.00	%Water: 30.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 26,000	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
7		215.9	HUGHES	1213767	4 -14.3/ - / - / - / -	641.3	1382.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
ABD536PH	4.0	0.5	0.0/2.0	120 /										K 309975.
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 55.0 Hours Since Last Inspection: 55.0

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
7	6 / 6 / 6	304.8/ 304.8/ 304.8	45/ 45/ 40	168	0.00	0.09	0.00	0.27	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
1383.1	3.95	149.02	S30.98E	1380.6	62.53 S	7.57 W	-62.53	0.92
1411.4	4.29	149.02	S30.98E	1408.8	64.27 S	6.52 W	-64.27	0.36
1441.8	4.41	149.01	S30.99E	1439.1	66.25 S	5.33 W	-66.25	0.12
1469.6	4.46	150.46	S29.54E	1466.8	68.11 S	4.25 W	-68.11	0.13

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
1.50	0000	01 - 16	STROKE OUT SLIP JNT; CLOSE BSR USING ACOUSTIC SYSTEM; P/TEST WELLHEAD CONN & 13 3/8" CSG TO
	0000	01 - 13	30 BAR/5 MIN, 200 BAR/15MIN - OK; P/TEST C&K LINES TO 30/400 BAR - OK
3.00	0130	01 - 13	L/D LANDING JNT; INSTALL DIVERTER HOUSING AND TEST DIVERTER SYSTEM - OK; R/D RISER HANDLING EQ.
4.00	0430	01 - 07	R/U AND P/U 8 1/2" DRILLING BHA & TIH TO 262M; SURFACE TEST LWD/MWD W/ 2000 LPM, 55 BAR - OK
2.00	0830	01 - 07	P/U 21 JNTS OF 5" DP FROM DECK AND TIH TO 463M
0.50	1030	01 - 05	CONT TIH W/ 5" DP FROM DERRICK FROM 463M TO 838M
2.00	1100	01 - 14	P/TEST LMRP CONNECTOR TO 30 BAR/5MIN, 200 BAR/10MIN - OK; FUNCTION TEST BOP'S USING BLUE POD F/ MAIN PANEL
		01 - 14	PERFORM ACCUMULATOR DRILL; FUNCTION TEST BOP'S FROM REMOTE PANEL USING YELLOW POD
1.00	1300	01 - 07	M/U EMERGENCY DP HANG OFF TOOL AND RACK BACK IN DERRICK
2.00	1400	01 - 05	CONT TIH ON 5" DP F/ 838M TO 1150M; WASH DOWN F/ 1150M TO TOC AT 1341M; PERFORM KICK DRILL & SHUT IN WELL
1.00	1600	01 - 15	DRILL CMT/PLUG F/ 1341 TO 1371M W/ 2000 LPM, 70 RPM, 0-2T WOB; CIRC W/ S/W & HELD TBT
2.50	1700	01 - 01	PUMP 15M3 HIVIS LT-OBM PILL & DISPLACE HOLE WITH 1.44 SG LT-OBM; DISPLACE C&K LINES AND CHOKE MANIFOLD TO LT-OBM
1.00	1930	01 - 15	DRILL SHOE @ 1374M & CLEAN RATHOLE TO 1382M W/ 2150 LPM, 176 BAR, 70 RPM, 0-3MT WOB;WORK THRU SHOE SEVERAL TIMES
0.50	2030	01 - 02	DRILL NEW FORMATION F/ 1382 TO 1386M W/ 2100 LPM, 168 BAR, 120 RPM, 4-10K NM, 0-1MT WOB
1.50	2100	01 - 01	CIRCULATE BOTTOMS UP AND CONDITION MUD

Safety: MAN HAD TO BE SENT TO TOWN (MEDIEVAC) DUE TO ILLNES (ILLNESS BEING UNRELATED TO WORK)

24 Hr Summary: TEST CSG TO 200BAR; M/U BHA & TIH; DRILL OUT CMT F/ 1341TO 1374M; CLEAN RATHOLE; DRILL TO 1386M; LOT TO 1.84SG

Projected Operations: DRILL 8 1/2" HOLE.

Remarks:
POB: CHEVRON - 3, SERVICE - 30, DOLPHIN - 54, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 66

HEAVE: 1.2M, PITCH 1.0DEG, ROLL 1.7DEG; CUTTING SKIPS ON BOARD: 18 , 0FULL , 18EMPTY

DAILY FE COST: NOK 410,840 TOTAL FE COSTS: NOK 6,209,831

05:30 OPS: CONT TO DRILL @ 1512M (+/- 25M/HR INCL. CONN.)

Daily Mud Cost: KR76,074	Daily Tangible Cost:	Daily Well Cost: KR2,812,192	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR1,803,393	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR73,844,159	Total Appr: KR134,000,000

Drill Water: 260.0	Potable Water: 280.0	Fuel: 412.0	Bulk Weight: 180.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 31-JUL-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1386.0 m	TVD: 1384.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 15	DFS: 10	Spud Date: 22-JUL-2001	Daily Footage: 4.0	Daily Rot Hrs: 0.5	Total Rot Hrs: 37.0				
Torq: 10	Drag: 0.0	Rot Wgt: 180.0	P/U Wgt: 180.0	Slack Off Wgt: 180.0	Wind: 15	Seas: 4.0 / 0.0	Bar: 755	POB: 93	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 7.0	Cum Rot Hrs On Casing Since Last Caliper: 7.0	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1440	FV: 0	PV: 48	YP: 13.5	Gel: 8 / 11		
WL	API: 0.0 HTHP: 3.0	FC (mm)	API: 0.0 HTHP: 1.0	Solids:	% Oil: 70.00	%Water: 30.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 26,000	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 55.0 Hours Since Last Inspection: 55.0

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.50	2230	01 - 17	R/U CMT LINES & P/TEST TO 80BAR; PERFORM LOT USING 1.44 SG LT-OBM; LOT PRES 1.84 SG EMW	
		01 - 17	5MIN BLEED DOWN PRESSURE 1.82 SG EMW, 15MIN BLEED DOWN PRESSURE 1.80 SG EMW	
		-		
		-		
		-		
		-		
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		-		
		-		
		-		
		-		
		-		
		-		

Safety: MAN HAD TO BE SENT TO TOWN (MEDIEVAC) DUE TO ILLNES (ILLNESS BEING UNRELATED TO WORK)

24 Hr Summary: TEST CSG TO 200BAR; M/U BHA & TIH; DRILL OUT CMT F/ 1341TO 1374M; CLEAN RATHOLE; DRILL TO 1386M; LOT TO 1.84SG

Projected Operations: DRILL 8 1/2" HOLE.

Remarks:

Daily Mud Cost: KR76,074	Daily Tangible Cost:	Daily Well Cost: KR2,812,192	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR1,803,393	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR73,844,159	Total Appr: KR134,000,000

Drill Water: 260.0	Potable Water: 280.0	Fuel: 412.0	Bulk Weight: 180.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 31-JUL-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1698.0 m	TVD: 1695.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 16	DFS: 11	Spud Date: 22-JUL-2001	Daily Footage: 312.0	Daily Rot Hrs: 11.5	Total Rot Hrs: 48.5				
Torq: 8	Drag: 0.0	Rot Wgt: 180.0	P/U Wgt: 180.0	Slack Off Wgt: 180.0	Wind: 7	Seas: 4.0 / 0.0	Bar: 763	POB: 93	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 21.7	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: FLOW	Wt: 1505	FV: 100	PV: 53	YP: 16.0	Gel: 9 / 14		
WL	API: 0.0 HTHP: 1.6	FC (mm)	API: 0.0 HTHP: 1.0	Solids:	% Oil: 67.00	%Water: 33.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 34,500	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas: 35	Max Gas: 153	Conn Gas:	Trip Gas:	Trip Cl:	Remarks: MAX GAS 4.73% WHILE CIRC BTM'S UP @1698M

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
7		215.9	HUGHES	1213767	4 -14.3/ - / - / - / -	641.3	1382.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
ABD536PH	316.0	12.0	0.0/7.0	120 / 180										K 9229.92
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 69.7 Hours Since Last Inspection: 69.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
7	6 / 6 / 6	304.8/ 304.8/ 304.8	80/ 80/	248	0.00	0.09	0.00	0.24	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
1555.6	4.58	147.89	S32.11E	1552.5	73.94 S	0.85 W	-73.94	0.13
1584.6	4.57	146.38	S33.62E	1581.4	75.88 S	0.41 E	-75.88	0.13
1613.1	4.54	149.28	S30.72E	1609.8	77.79 S	1.62 E	-77.79	0.25
1641.8	4.55	147.28	S32.72E	1638.4	79.72 S	2.82 E	-79.72	0.17

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
11.50	0000	01 - 02	DRILL 8 1/2" HOLE SECTION F/ 1386 TO 1698M TAKING A SURVEY EVERY CONNECTION
		01 - 02	F/ 1386 TO 1530M, DRILL W/ 120-180 RPM,2570 LPM, 0-3MT WOB, 5-8K NM T/Q;AT 1530M INCREASE TO 2750 LPM,5-7MT WOB
		01 - 02	CONTROL ROP TO 30M/HR AVG F/ 1615M; AT 1675M, COMMENCED TO INCREASE MUDWEIGHT F/ 1.45 TO 1.5 SG
1.00T	1130	01 - 60	DURING CONNECTION, WELL FLOWED - SHUT IN WELL ON UPPER ANNULAR (1145HR);OBSERVE SICP=200 PSI, TOTAL GAIN = 4M3
T		01 - 60	BLED OFF 0.55M3 TO T/T THRU CHOKE - SHUT IN CHOKE, SICP=200 PSI; FILL PIPE AND BUMP FLOAT, SIDP=300 PSI
3.50T	1230	01 - 60	CIRC BTM'S UP BY DRILLERS METHOD USING 1.50SG MUD; MAX GAS WAS 4.6% AT BTM'S UP; FINAL GAS = 2.0%;
1.00T	1600	01 - 60	FLOWCHECK WELL ON TRIP TANK - SLIGHT FLOW, 0.15M3 RETURNS; CLOSE CHOKE; SICP=150 PSI, SIDP= +/- 200 PSI
2.00T	1700	01 - 60	BLED DOWN CSG PRES. TO 0 PSI TO TRIP TANK WITH 0 PSI SICP AND SIDP RECORDED OVER 45MINUTES
T		01 - 60	DISPLACE RISER TO 1.5SG MUD USING BOOSTER PUMP;CLOSE LOWER ANNULAR; WHILE RELAXING UPPER ANNULAR, GAINED 2.7 M3
T		01 - 60	AT 1730 HRS, CLOSE LOWER ANNULAR - SICP=150 PSI; ATTEMPT TO BUMP FLOAT - DP PRES>420 PSI; CONFIRMED DP WAS FREE
3.50T	1900	01 - 60	ISOLATE THE WELL BY CLOSING CHOKE LINE VALVES; CIRC THRU CHOKE MANIFOLD - NO OBSTRUCTIONS
T		01 - 60	CLOSE MPR; CIRC ACROSS KILL & CHOKE LINE W/ 1.5SG MUD - OBSTRUCTION IN CHOKE LINE; CONT CIRC THRU C&K LINE AND
T		01 - 60	CLEAR SAME; OPEN L-A; CIRC DOWN CHOKE LINE UP RISER; CLOSED L-A & CHOKE LINE; OPENED MPR & CHOKE LINE -
T		01 - 60	SICP=100 PSI IN 5MIN; OPEN CHOKE TO T/T, PRES = 0; F/C F/ 10MIN - STATIC; OPEN ANNULAR - NO FLOW; ESTABLISH
T		01 - 60	ROTATION - INCREASE TO 120 RPM, 5.5K NM; ATTEMPT TO CIRC W/ 260LPM, 34.5 BAR - WELL BEGAIN FLOWING

Safety: TBT PRIOR TO CIRCULATE OUT INFLUX

24 Hr Summary: DRILL 8 1/2" HOLE F/ 1386 TO 1698M; WELL FLOWED @ 1698M - 4M3 GAIN, SICP=200 PSI; CIRC OUT INFLUX

Projected Operations: CIRC OUT INFLUX; DISPLACE HOLE TO KILL MUD; DRILL 8 1/2" HOLE

Remarks:
POB: CHEVRON - 3, SERVICE - 30, DOLPHIN - 54, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 67

HEAVE: 0.8M, PITCH 0.7DEG, ROLL 1.6DEG; CUTTING SKIPS ON BOARD: 37, 0 FULL, 37EMPTY (ON HIGHLAND STAR - 6 FULL, 59 EMPTY)

DAILY FE COST: NOK 416,405 TOTAL FE COSTS: NOK 6,626,236

Daily Mud Cost: KR156,198	Daily Tangible Cost:	Daily Well Cost: KR2,797,881	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR1,959,591	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR76,642,040	Total Appr: KR134,000,000

Drill Water: 200.0	Potable Water: 230.0	Fuel: 400.0	Bulk Weight: 285.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 01-AUG-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1698.0 m	TVD: 1695.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 16	DFS: 11	Spud Date: 22-JUL-2001	Daily Footage: 312.0	Daily Rot Hrs: 11.5	Total Rot Hrs: 48.5				
Torq: 8	Drag: 0.0	Rot Wgt: 180.0	P/U Wgt: 180.0	Slack Off Wgt: 180.0	Wind: 7	Seas: 4.0 / 0.0	Bar: 763	POB: 93	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 21.7	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: FLOW	Wt: 1505	FV: 100	PV: 53	YP: 16.0	Gel: 9 / 14		
WL	API: 0.0	HTHP: 1.6	FC (mm)	API: 0.0	HTHP: 1.0	Solids:	% Oil: 67.00	%Water: 33.00	% Sand:	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 34,500	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:
	35	153			MAX GAS 4.73% WHILE CIRC BTM'S UP @1698M

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 69.7 Hours Since Last Inspection: 69.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
T		01 - 60	SHUT IN WELL ON L-A; ISICP=250 PSI, 7.4M3 GAIN	
1.50T	2230	01 - 60	MONITOR WELL WHILE BUILDING 1.52 MUD IN PITS - SICP INCREASED F/ 250 TO 290 PSI	
T		01 - 60		
T		01 - 60		
T		01 - 60		
T		01 - 60		
T		01 - 60	PRES. OPS: CIRC 1.52SG MUD; MAX GAS 8.9% - MW CUT TO 1.32SG (SALT WATER CONTAMINATION)	
T		01 - 60		
T		01 - 60		
T		01 - 60		
T		01 - 60		
		-		
		-		
		-		
		-		

Safety: TBT PRIOR TO CIRCULATE OUT INFLUX

24 Hr Summary: DRILL 8 1/2" HOLE F/ 1386 TO 1698M; WELL FLOWED @ 1698M - 4M3 GAIN, SICP=200 PSI; CIRC OUT INFLUX

Projected Operations: CIRC OUT INFLUX; DISPLACE HOLE TO KILL MUD; DRILL 8 1/2" HOLE

Remarks:

Daily Mud Cost: KR156,198	Daily Tangible Cost:	Daily Well Cost: KR2,797,881	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR1,959,591	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR76,642,040	Total Appr: KR134,000,000

Drill Water: 200.0	Potable Water: 230.0	Fuel: 400.0	Bulk Weight: 285.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 01-AUG-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1698.0 m	TVD: 1695.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 17	DFS: 12	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 48.5				
Torq: 0	Drag: 90.0	Rot Wgt: 0.0	P/U Wgt: 90.0	Slack Off Wgt: 0.0	Wind: 5	Seas: 2.0 / 0.0	Bar: 762	POB: 93	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 21.7	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: FLOW	Wt: 1575	FV: 92	PV: 32	YP: 6.0	Gel: 5 / 7		
WL	API: 0.0 HTHP: 3.0	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 23.00	% Oil: 77.00	%Water: 23.00	% Sand: 0.25	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 17,000	Ca:	Bent:	Solids %HG/LG: 19.80 / 2.60	%DS/Bent: /		

2115 1KG VERSAVERT 83 1MT BARITE 60 1m3 BASE FLUID 1050 1KG CA CHLOR 88% 650 1KG VERSATROL

1425 1KG LIME

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas:	Trip Cl:	Remarks: MAX. GAS 8.9% W/ 1.32SG MUD AT SHAKERS

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
7		215.9	HUGHES	1213767	4 -14.3/ - / - / - / -	641.3	1382.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
ABD536PH	316.0	12.0	0.0/0.0	/										K 9229.92
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 69.7 Hours Since Last Inspection: 69.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
7	6 / 6 / 6	304.8/ 304.8/ 304.8	/ /	0	0.00	0.00	0.00	0.00	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.50	T 0000	01 - 60	MONITOR WELL WHILE BUILDING 1.52SG MUD IN PITS - SICP INCREASED F/ 250 TO 290 PSI	
6.00	T 0130	01 - 60	CIRC BTM'S UP BY DRILLERS METHOD USING 1.52SG MUD;STAGED UP FLOW RATES TO FINAL RATE OF 30 SPM/485 LPM, 600 PSI	
	T	01 - 60	MAX. GAS OF 8.9% WITH 1.32SG MAX. MUD WEIGHT REDUCTION - SALT WATER CONTAMINATION IDENTIFIED IN THE MUD	
4.50	T 0730	01 - 60	CONT TO CIRC & COND MUD WITH 530 LPM, 600 PSI; MAX. GAS 1.6% WHILE CIRCULATING	
0.50	T 1200	01 - 60	SHUT IN WELL - SICP=SIDP=150 PSI; OPEN CHOKE AND BLED OFF 0.9 BBLS TO TRIP TANK - CP=0 PSI, DP=90 PSI	
	T	01 - 60	SLIGHT FLOW FROM WELL NOTED AT TRIP TANK; SHUT IN WELL - SICP=0PSI, SIDP=90 PSI	
2.00	T 1230	01 - 60	CONT TO CIRC W/ 1.52SG MUD W/ 520 LPM, 600 PSI WHILE MIX 1.57SG MUD IN PITS; WORK PIPE W/ 100MT UP WEIGHT	
	T	01 - 60	PRIOR TO 2ND CIRCULATION DRILLERS METHOD, INCREASE CSG PRES. FROM 0 TO 80 PSI BY CLOSING CHOKE	
4.50	T 1430	01 - 60	BEGIN 2ND CIRCULATION DRILLERS METHOD W/ 1.57SG MUD; HOLD 80 PSI ON CSG, INITIAL DP PRES 600 PSI @ 500 LPM	
	T	01 - 60	WITH 1.57SG MUD AT BIT, HELD DP PRES CONSTANT AT 500 PSI W/ 500 LPM UNTIL 1.57SG MUD RETURNS; MAX GAS 0.7%	
1.00	T 1900	01 - 60	SHUT IN WELL 1900HRS; SICP=SIDP=120PSI; OPEN CHOKE & BLED OFF 3.4 BBLS IN 5MIN TO T/T - DP PRES=CSG PRES=0 PSI	
1.00	T 2000	01 - 60	DISPLACE RISER TO 1.57SG MUD WHILE MONITORING WELL ON TRIP TANK - STATIC	
2.50	T 2100	01 - 60	CLOSE MPR;CIRC 0.89SG PRE-MIX DOWN KILL & UP CHOKE; F/C - STATIC; DISPLACE C&K TO 1.57SG MUD;ISOLATE C&K F/ WELL	
0.50	T 2330	01 - 60	RELAX L-A - NO SIGNS OF GAS; CLOSE L-A, OPEN CHOKE - NO PRES.; OPEN MPR, OPEN L-A; F/C ON T/T - STATIC	
		-		

Safety: 1 AUG 01 - SAFETY MEETING AND DRILL

24 Hr Summary: DISPLACE WELL TO 1.52SG MUD (MAX. GAS 8.9%)- SIDP=90PSI, SICP=0PSI; DISPLACE WELL & RISER TO 1.57SG - F/C STATIC

Projected Operations: CIRC BTM'S UP; CIRC & COND MUD; PERFORM WIPER TRIP TO 1374M; DRILL 8 1/2" HOLE SECTION

Remarks:
POB: CHEVRON - 5, SERVICE - 27, DOLPHIN - 53, DOLPHIN SERVICE - 8 DAYS SINCE LAST LTI - 68

HEAVE: 1.1M, PITCH 0.8DEG, ROLL 1.1DEG; CUTTING SKIPS ON BOARD: 40, 0 FULL, 40EMPTY

DAILY FE COST: NOK 416,405 TOTAL FE COSTS: NOK 7,042,641

0600HRS: POOH TO CASING SHOE

Daily Mud Cost: KR69,462	Daily Tangible Cost:	Daily Well Cost: KR2,716,345	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR2,029,053	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR79,358,385	Total Appr: KR134,000,000

Drill Water: 200.0	Potable Water: 230.0	Fuel: 400.0	Bulk Weight: 285.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 02-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 1736.0 m	TVD: 1733.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 18	DFS: 13	Spud Date: 22-JUL-2001	Daily Footage: 38.0	Daily Rot Hrs: 1.0	Total Rot Hrs: 49.5				
Torq: 5	Drag: 0.0	Rot Wgt: 195.0	P/U Wgt: 195.0	Slack Off Wgt: 195.0	Wind: 6	Seas: 2.0 / 0.0	Bar: 754	POB: 92	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 34.5	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: FLOW	Wt: 1570	FV: 100	PV: 40	YP: 13.5	Gel: 7 / 10		
WL	API: 0.0 HTHP: 2.2	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 23.00	% Oil: 74.00	%Water: 26.00	% Sand: 0.20	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 19.00 / 3.20		%DS/Bent: /	

5 1MT BARITE 2100 1KG CA CHLOR 88%

Drlg Gas: 12	Max Gas: 0	Conn Gas:	Trip Gas: 20	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
7		215.9	HUGHES	1213767	4 -14.3/ - / - / - / -	641.3	1382.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
ABD536PH	354.0	13.0	0.0/1.0	180 /										K 8651.12
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 82.5 Hours Since Last Inspection: 82.5

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
7	6 / 6 / 6	304.8/ 304.8/ 304.8	76/ 84/	255	0.00	0.09	0.00	0.27	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
1728.4	4.38	140.28	S39.72E	1724.7	85.08 S	6.95 E	-85.08	0.09
1757.7	4.22	142.59	S37.41E	1753.9	86.8 S	8.32 E	-86.80	0.25
1786.9	4.25	142.20	S37.80E	1783.1	88.51 S	9.64 E	-88.51	0.04
1815.4	4.13	142.39	S37.61E	1811.5	90.16 S	10.91 E	-90.16	0.13

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
2.50T	0000	01 - 60	PIPE FREE (14MT O/P);ROTATE-120 RPM,5.5K NM;INC. PUMP TO 1620 LPM, 134 BAR & CIRC BTM'S UP - MAX GAS 3.3%
0.50T	0230	01 - 60	FLOWCHECK - STATIC; RACK BACK STND
3.00T	0300	01 - 60	CIRC & COND MUD W/ 2600 LPM, 150 RPM - 1.2% GAS AT 1ST BOTTOMS UP
1.50T	0600	01 - 60	F/C-STATIC; POOH; AT 1420M, TOOK 5MT OVERPULL - WORK 3X F/ 1410 TO 1439M - OK; CONT POOH; TOOK 10MT OVERPULL
T		01 - 60	AT 1395M; WASH & REAM F/ 1410-1380M W/ 100 RPM, 323 LPM, 14 BAR; ERRATIC TORQUE F/ 1385-1381M; POOH TO +/- 1326M
2.00T	0730	01 - 60	CIRC. W/ 2580 LPM, 265 BAR - OBSERVE CEMENT PIECES IN RETURNS OVER SHAKERS
1.00	0930	01 - 21	SLIP & CUT DRILL LINE
2.50T	1030	01 - 20	REPAIR CALIPERS ON DRAWWORKS DISC BRAKES; MONITOR WELL ON T/T - 0.65M3 LOST OVER 4HRS
2.50	1300	01 - 21	PERFORM MAINTENANCE ON COMPENSATOR, TOP DRIVE AND KEMS; CALIBRATE BOOSTER LINE OUTPUT USING T/T
1.00T	1530	01 - 60	TIH TO 1371M; BREAK CIRC W/ 485 LPM, 22 BAR, 100 RPM - CONT TIH TO 1525M
2.00T	1630	01 - 20	PROBLEM WT INDICATOR; R/U CMT LINES & CIRC W/ 840 LPM, 55 BAR WHILE REPAIR MD WEIGHT INDICATOR
1.50T	1830	01 - 60	CONT TIH TO 1611M; WASH F/ 1611 TO 1698M STAGING UP PUMP TO 2550 LPM
1.50T	2000	01 - 60	CIRC BTM'S UP W/ 2580 LPM - GAS AT BTM'S UP 0.5%
1.00	2130	01 - 02	DRILL 8 1/2" HOLE F/ 1698 TO 1736M W/ 2580 LPM, 255 BAR, 0-1MT WOB, 180 RPM, 5.5K NM T/Q - ADD 2SXS CACO3/HR
1.50T	2230	02 - 25	BACKREAM F/ 1736 TO 1670M; RE-LOG F/ 1670 TO 1698M TO CHECK RESISTIVITY RESPONSE

Safety:

24 Hr Summary: POOH INTO SHOE; PERFORM RIG MAINTENANCE & REPAIRS; TIH, CIRC BTM'S UP AND DRILL 8 1/2" HOLE F/ 1698 TO 1736M

Projected Operations: DRILL 8 1/2" HOLE SECTION

Remarks:
POB: CHEVRON - 5, SERVICE - 27, DOLPHIN - 53, DOLPHIN SERVICE - 7 DAYS SINCE LAST LTI - 69

HEAVE: 1.3M, PITCH 0.5DEG, ROLL 0.8DEG; CUTTING SKIPS ON BOARD: 40, 3 FULL, 37EMPTY

DAILY FE COST: NOK 416,405+150140 TOTAL FE COSTS: NOK 7,609,186

0500HRS: DRILL 8 1/2" HOLE @ 1878M

Daily Mud Cost: KR76,962	Daily Tangible Cost:	Daily Well Cost: KR2,818,645	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR2,106,015	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR82,177,030	Total Appr: KR134,000,000

Drill Water: 380.0	Potable Water: 380.0	Fuel: 369.0	Bulk Weight: 288.0	Neat Cement: 141.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 03-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 2561.0 m	TVD: 2556.5 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 19	DFS: 14	Spud Date: 22-JUL-2001	Daily Footage: 825.0	Daily Rot Hrs: 22.5	Total Rot Hrs: 72.0				
Torq: 8	Drag: -10.0	Rot Wgt: 235.0	P/U Wgt: 225.0	Slack Off Wgt: 225.0	Wind: 6	Seas: 1.0 / 2.0	Bar: 756	POB: 92	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 56.2	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: FLOW	Wt: 1576	FV: 95	PV: 42	YP: 13.5	Gel: 9 / 13		
WL	API: 0.0 HTHP: 2.0	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 23.50	% Oil: 73.00	%Water: 27.00	% Sand: 1.00	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 18.50 / 3.90	%DS/Bent: /		

1200 1KG LIME 2100 1KG CA CHLOR 88% 5 1m3 BASE FLUID 34 1MT BARITE 200 1KG VERSATROL

1135 1KG VERSAVERT

Drlg Gas: 30	Max Gas: 80	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks: 0.7% GAS AT BTM'S UP AFTER 5 BBL GAIN

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
7		215.9	HUGHES	1213767	4 -14.3/ - / - / - / -	641.3	1382.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
ABD536PH	1179.0	35.5	0.0/3.0	180 /										K 5380.61
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 104.2 Hours Since Last Inspection: 104.2

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
7	6 / 6 / 6	304.8/ 304.8/ 304.8	76/ 84/	286	0.00	0.09	0.00	0.24	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
2390.4	2.08	152.82	S27.18E	2385.3	117.83 S	28.55 E	-117.83	0.18
2419.2	1.92	146.45	S33.55E	2414.0	118.7 S	29.05 E	-118.70	0.29
2447.9	1.98	149.21	S30.79E	2442.7	119.52 S	29.57 E	-119.52	0.12
2533.5	1.60	161.93	S18.07E	2528.3	121.93 S	30.7 E	-121.93	0.19

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
17.00	0000	01 - 02	DRILL 8 1/2" HOLE SECTION F/ 1736 TO 2304M W/ 2580 LPM, 286 BAR, 180 RPM, 4-8K NM T/Q, 0-3MT WOB
1.50T	1700	01 - 60	NOTICE 5 BBL GAIN IN ACTIVE; FLOWCHECK - STATIC; CIRC BTM'S UP W/ 2580 PSI, 286 BAR - MAX GAS 0.7%
5.50	1830	01 - 02	CONT TO DRILL 8 1/2" HOLE F/ 2304 TO 2561M
		01 - 02	
		01 - 02	TAKE SCR'S AND BOOST RISER EVERY 200 METERS; FLUSH C&K LINES EVERY TOUR
		01 - 02	ADDING 2 SXS/HR CAC03
		01 - 02	
		01 - 02	
		01 - 02	
		01 - 02	
		01 - 02	
		01 - 02	
		01 - 02	BULLSEYES: RISER 1DEG STBD-FWD, BOP 2DEG STBD-FWD, LMRP 2.5DEG STBD-FWD; GUIDEBASE 1.5 DEG STBD-FWD
		01 - 02	
		01 - 02	

Safety: CRANE OPERATIONS MOVING SKIPS - NO INJURIES REPORTED

24 Hr Summary: DRILL 8 1/2" HOLE F/ 1726M TO 2304M; 5 BBL GAIN - F/C - STATIC; CIRC BTM'S UP - OK, DRILL 8 1/2" HOLE TO 2561M

Projected Operations: DRILL 8 1/2" TO LYSING CORING POINT; CIRC HOLE CLEAN & POOH; P/U CORE BARRELS

Remarks:
POB: CHEVRON - 5, SERVICE - 27, DOLPHIN - 53, DOLPHIN SERVICE - 7 DAYS SINCE LAST LTI - 70

HEAVE: 0.3M, PITCH 0.5DEG, ROLL 0.8DEG; CUTTING SKIPS ON BOARD: 27, 6 FULL, 21EMPTY

DAILY FE COST: NOK 416,405 TOTAL FE COSTS: NOK 8,025,591

0500HRS: DRILL 8 1/2" HOLE @

Daily Mud Cost: KR303,538	Daily Tangible Cost:	Daily Well Cost: KR2,936,038	Incidents: NEAR MISS
Cum Mud Cost: KR2,409,553	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR85,113,068	Total Appr: KR134,000,000

Drill Water: 320.0	Potable Water: 360.0	Fuel: 359.0	Bulk Weight: 254.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 04-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3101.5 m	TVD: 3096.9 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 20	DFS: 15	Spud Date: 22-JUL-2001	Daily Footage: 540.5	Daily Rot Hrs: 19.0	Total Rot Hrs: 91.0				
Torq: 12	Drag: 10.0	Rot Wgt: 260.0	P/U Wgt: 270.0	Slack Off Wgt: 260.0	Wind: 12	Seas: 2.0 / 0.0	Bar: 755	POB: 92	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 76.7	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1575	FV: 95	PV: 38	YP: 14.0	Gel: 8 / 11		
WL	API: 0.0 HTHP: 2.2	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 24.00	% Oil: 72.00	%Water: 28.00	% Sand: 1.25	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 34,000	Ca:	Bent:	Solids %HG/LG: 17.70 / 5.00	%DS/Bent: /		

2450 1KG CA CHLOR 88% 28 1MT BARITE 1600 1KG LIME 12 1m3 BASE FLUID 50 1KG OTHER

400 1KG VERSAVERT 300 1KG CAL CARB 0

Drlg Gas: 30	Max Gas: 130	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks: 1.1% AT BTM'S UP F/ TOP LYSING

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
7		215.9	HUGHES	1213767	4 -14.3/ - / - / - / -	641.3	1382.0 m	3101.5 m	3096.9 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
ABD536PH	1719.5	54.5	3.0/6.0	180 /		3	5	CT	A7	X	IN	BT	CP	K 5300.72
			/	/										

Total Length of BHA: 262.12 m BHA Description: 8 1/2" ABD536PH PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - IOSONIC MWD SUB - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 124.7 Hours Since Last Inspection: 124.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
7	6 / 6 / 6	304.8/ 304.8/ 304.8	76/ 74/	286	0.00	0.09	0.00	0.24	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
2907.2	1.44	228.04	S48.04W	2902.0	128.73 S	28.62 E	-128.73	0.23
2963.3	1.46	230.04	S50.04W	2958.1	129.66 S	27.55 E	-129.66	0.03
2993.0	1.66	227.26	S47.26W	2987.8	130.2 S	26.94 E	-130.20	0.22
3049.8	1.75	232.80	S52.80W	3044.6	131.28 S	25.65 E	-131.28	0.10

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
12.00	0000	01 - 02	DRILL 8 1/2" HOLE F/ 2561M TO 2915M W/ 2425 LPM, 286 BAR, 180 RPM, 3-6MT WOB, 4-12K NM T/Q
		01 - 02	TAKE SCR'S AND BOOST RISER EVERY 200M; FLUSH C&K LINES EVERY TOUR; ADD 2 SXS/HR CACO3
		01 - 05	AT 2839M - GAIN IN ACTIVE - FLOWCHECK - STATIC; CONT DRILL AHEAD
0.50T	1200	01 - 20	AT 2915M, LOST 400 PSI - FLOWCHECK, STATIC; CHECK SURFACE EQ. - PUMP #1 LEAKING, CHANGE TO PUMPS #2 & #3
7.00	1230	01 - 02	DRILL 8 1/2" HOLE F/ 2915 TO 3101.5M; AT 3011M - GAIN IN ACTIVE; FLOWCHECK - STATIC; CONT DRILL AHEAD
1.50	1930	02 - 01	CIRCULATE BTM'S UP W/ 2425 LPM, 286 BAR, 120 RPM, 4K NM - MAX GAS 1.1% - ANALYSE CUTTING SAMPLES - 30% SAND
2.00	2100	01 - 01	CONT TO CIRC HOLE CLEAN - BOOST RISER; TAKE SCR'S AND FLUSH C&K LINES
1.00	2300	01 - 05	F/C - STATIC; POOH 5 STDS WET TO 2934M, F/C - STATIC; PUMP SLUG
		01 - 05	
		01 - 05	0000-0600 HRS: POOH - HOLE WAS SLICK; 7MT DRAG TO PULL INTO CASING SHOE
		01 - 05	
		01 - 05	
		01 - 05	
		01 - 05	
		-	

Safety:

24 Hr Summary: DRILL 8 1/2" HOLE F/ 2561 TO 3101.5M; CIRC BTM'S UP & POOH

Projected Operations: POOH W/ 8 1/2" BHA; P/U 76.4M CORE BARRELS & TIH; CORE LYSING FORMATION

Remarks:
POB: CHEVRON - 5, SERVICE - 27, DOLPHIN - 53, DOLPHIN SERVICE - 7 DAYS SINCE LAST LTI - 71

HEAVE: 0.3M, PITCH 0.3DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 24, 0 FULL, 24EMPTY

DAILY FE COST: NOK 416,405 + 152693 TOTAL FE COSTS: NOK 8,594,689

0600HRS: M/U CORE BIT & CORE BARRELS

Daily Mud Cost: KR225,559	Daily Tangible Cost:	Daily Well Cost: KR2,859,489	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR2,635,112	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR87,972,557	Total Appr: KR134,000,000

Drill Water: 405.0	Potable Water: 360.0	Fuel: 372.0	Bulk Weight: 226.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 05-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3130.0 m	TVD: 3125.5 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 21	DFS: 16	Spud Date: 22-JUL-2001	Daily Footage: 28.5	Daily Rot Hrs: 3.0	Total Rot Hrs: 94.0				
Torq: 10	Drag: 0.0	Rot Wgt: 270.0	P/U Wgt: 270.0	Slack Off Wgt: 270.0	Wind: 4	Seas: 1.0 / 2.0	Bar: 749	POB: 96	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 84.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1575	FV: 100	PV: 45	YP: 13.0	Gel: 8 / 12		
WL	API: 0.0 HTHP: 2.1	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 24.00	% Oil: 70.00	%Water: 30.00	% Sand: 1.25	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 32,000	Ca:	Bent:	Solids %HG/LG: 17.20 / 5.60		%DS/Bent: /	

3100 1KG CAL CARB 0

Drlg Gas: 35	Max Gas: 85	Conn Gas:	Trip Gas: 340	Trip Cl:	Remarks: 6.8% F/ +/- 2450M WHILE CIRC BTM'S UP

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
8		215.9	S-DBS		- / - / - / - / -	0	3101.5 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
FC274	28.5	3.0	2.0/4.0	100 /										K 65792.2
			/	/										

Total Length of BHA: 298.23 m BHA Description: 8 1/2"-4" FC274 DBS CORE HEAD - 76M OUTER COREBARRELS (73M RECOVERABLE CORE)

- 6*6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 132.6 Hours Since Last Inspection: 132.6

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
8	6 / 6 / 6	304.8/ 304.8/ 304.8	65/ /	129	0.00	0.00	0.00	0.00	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
3.50	0000	02 - 05	CONT POOH F/ 2934M; FLOW CHECK AT 1371M & AT BOP'S - STATIC	
2.00	0330	02 - 07	POOH W/ BHA; L/D MWD ASSY, NMDC & BIT - BIT GRADING 3-5-CT-A-X-IN-BT-CP	
3.50	0530	02 - 07	P/U CORE BIT & TIH W/ CORE BARRELS TO 76M; RUN INNER CORE BARRELS & M/U HEAD (73M RECOVERABLE CORE LENGTH)	
3.50	0900	02 - 05	TIH W/ BHA & 5" DP; AT 1303M, BREAK CIRCULATION, FLUSH C&K LINES AND SPACE OUT	
2.00	1230	02 - 05	CONT TIH W/ CORE BHA ON 5" DP F/ 1303 TO 1405M; AT 1405M, SAT DOWN W/ 7MT WT - WASH AND REAM W/ 485 LPM, 27.5BAR	
		02 - 05	40 RPM, 6K NM F/1405 TO 1417M; CONT TIH F/ 1417 TO 2140M; AT 2140M, SAT DOWN W/ 4.5MT WT	
0.50	1430	02 - 05	AT 2140M, STAGE UP PUMPS TO 1130 LPM, 72 BAR, 30 RPM, 6K NM AND WASH & WORK F/ 2150 TO 2125M	
2.50	1500	02 - 05	WASH & REAM W/ 1130 LPM, 72 BAR, 30 RPM, 6K NM F/ 2150 TO 2319M AS REQUIRED; TIH F/ 2319 TO 3040M	
1.50	1730	02 - 05	BREAK CIRC W/ 1535 LPM; WASH AND REAM F/ 3040 TO 3101M W/ 1294 LPM, 103 BAR, 50 RPM, 6K NM T/Q	
1.50	1900	02 - 01	CIRC BTM'S UP W/ 1294 LPM, 103.5 BAR - MAX. GAS 6.8% FROM +/- 2450M WHILE CIRC BTM'S UP	
0.50	2030	02 - 01	DROP 1 1/4" BALL & PUMP DOWN W/ 970 LPM, 67.5 BAR - BALL SEATED W/ 130 BAR; TAKE SCR'S	
3.00	2100	02 - 22	CORE 8 1/2" HOLE F/ 3101 TO 3130M W/ 1050 LPM, 129 BAR, 100 RPM, 5-10K NM - ADD 2 SXS CACO3/HR	
		02 - 05		
		02 - 05	BULLSEYES: RISER 0DEG, BOP 2DEG STBD-FWD, LMRP 2.5DEG STBD-FWD; GUIDEBASE 1.5 DEG STBD-FWD	
		-		

Safety:

24 Hr Summary: POOH W/ 8 1/2" BHA; M/U & TIH W/ 76M OF CORE BARRELS; CORE F/ 3101.5M TO 3130M

Projected Operations: CONT TO CORE 8 1/2" HOLE; CIRC BTM'S UP; POOH & L/D CORE; M/U & TIH W/ BHA

Remarks:
POB: CHEVRON - 6, SERVICE - 29, DOLPHIN - 55, DOLPHIN SERVICE - 6 DAYS SINCE LAST LTI - 72

HEAVE: 0.3M, PITCH 0.4DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 30, 6 FULL, 24EMPTY

DAILY FE COST: NOK 2,986,554 + (305386 LEFT F/ 5AUG01) TOTAL FE COSTS: NOK 11,886,629

0600HRS: CIRC & BOOST RISER @ 3070M (CUT CORE F/ 3101.5 TO 3171.5M)

Daily Mud Cost: KR77,524	Daily Tangible Cost:	Daily Well Cost: KR2,986,554	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR2,712,636	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR90,959,111	Total Appr: KR134,000,000

Drill Water: 300.0	Potable Water: 350.0	Fuel: 352.0	Bulk Weight: 246.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 06-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3171.5 m	TVD: 3167.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 22	DFS: 17	Spud Date: 22-JUL-2001	Daily Footage: 41.5	Daily Rot Hrs: 4.5	Total Rot Hrs: 98.5		
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 4	Seas: 1.0 / 2.0	Bar: 749	POB: 99
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y			
Cum Rot Hrs On Casing: 90.4	Cum Rot Hrs On Casing Since Last Caliper: 90.4	Depth Worst Wear:	% Remaining:				
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD			
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1575	FV: 100	PV: 46	YP: 12.5	Gel: 8 / 12
WL	API: 0.0	HTHP: 2.0	FC (mm)	API: 0.0	HTHP: 1.0	Solids: 24.00	% Oil: 70.00	%Water: 30.00	% Sand: 1.25	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 32,500	Ca:	Bent:	Solids %HG/LG: 17.50 / 5.30	%DS/Bent: /

Drlg Gas: 35	Max Gas: 85	Conn Gas:	Trip Gas: 340	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
8		215.9	S-DBS		- / - / - / - / -	0	3101.5 m	3171.5 m	3167.0 m
9 RR-9		215.9	HUGHES		4 - 15.9 / - / - / - / -	794.2	3171.5 m		

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
FC274	70.0	7.5	6.0/120.0	100 /		7	3	LT	XN	X	IN	JD	PR	K 34821.2
BD445HA	0.0	0.0	/	/										0.00

Total Length of BHA: 254.65 m BHA Description: 8 1/2" BD445HA PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 130.5 Hours Since Last Inspection: 130.5

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
8	6 / 6 / 6	304.8 / 304.8 / 304.8	65 / /	129	0.00	0.00	0.00	0.00	0.00	0.0	0.00
9 RR-9	6 / 6 / 6	304.8 / 304.8 / 304.8	/ /		0.00	0.00	0.00	0.00	0.00	0.0	0.00

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
4.50	0000	02 - 22	CONT CUT CORE F/ 3130M TO 3171.5M W/ 1050 LPM, 129 BAR, 6-12MT WOB, 100 RPM, 6-14K NM T/Q
		02 - 22	AT 3171.5M, CORE JAMMED OFF - SLIGHT PRESSURE DROP & TORQUE DROPPED TO 6K NM;TOTAL CORED F/ 3101.5-3171.5M (70M)
1.00	0430	02 - 05	PUMP OOH TO 3069M
0.50	0530	02 - 01	CIRCULATE WHILE BOOSTING RISER
3.50	0600	02 - 05	F/C - STATIC; POOH 5 STDS WET TO 2926M; F/C - STATIC; PUMP SLUG & CONT POOH TO 1583M - HOLE SLICK
1.00	0930	02 - 05	AT 1583M, TOOK 10MT PULL; WORK PIPE F/ 1583 TO 1430M W/ MAX. OF 7-9MT OVERPULL
4.50	1030	02 - 05	CONT TO POOH TO SHOE; L/D SPACE OUT PUPS, F/C - STATIC; CONT POOH, F/C AT 500M - STATIC
		02 - 05	POOH AT 3 MIN/STD FROM 500 TO 100M BELOW RKB; POOH AT 5 MIN/STD FROM 100M BELOW RKB TO SURFACE
0.50	1500	02 - 62	HELD PRE-JOB SAFETY MEETING ABOUT PULLING INNER & OUTER CORE BARRELS
3.50	1530	02 - 07	POOH & L/D INNER CORE BARRELS - 67.7M CORE RECOVERED (96.7%); POOH & L/D OUTER CORE BARRELS
		02 - 21	CORE BIT GRADING 7-3-LT-XN-X-IN-JD-PR (14 CUTTERS MISSING FROM NOSE AREA)
0.50	1900	02 - 21	SERVICE TDS AND CLEAR RIG FLOOR
1.50T	1930	02 - 07	PREPARE CDR/MWD - LOST COMMUNICATIONS FROM UNIT TO TOOL ON DECK - TROUBLE SHOOT SAME
2.00	2100	02 - 07	M/U 8 1/2" BHA & TIH TO 255M; TEST MWD W/ 2100 LPM, 83 BAR - OK
1.00	2300	02 - 07	P/U 5" DP F/ DECK & TIH

Safety: HELD PRE-JOB SAFETY MEETING PRIOR TO PULLING INNER CORE BARRELS

24 Hr Summary: CUT CORE TO F/ 3130 TO 3171.5M; CIRC, POOH & L/D CORE (67.7M = 96.7% CORE RECOVERED); M/U & TIH W/ 8 1/2" BHA

Projected Operations: TIH W/ 8 1/2" BHA; DRILL 8 1/2" HOLE

Remarks:
POB: CHEVRON - 5, SERVICE - 30, DOLPHIN - 55, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 73

HEAVE: 0.3M, PITCH 0.5DEG, ROLL 0.7DEG; CUTTING SKIPS ON BOARD: 23, 1 FULL, 22EMPTY

DAILY FE COST: NOK 3,114,304 TOTAL FE COSTS: NOK 15,000,933

0530HRS: CONT TIH W/ 8 1/2" BHA @ 2700M

Daily Mud Cost: KR80,999	Daily Tangible Cost:	Daily Well Cost: KR3,114,304	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR2,793,635	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR94,073,415	Total Appr: KR134,000,000

Drill Water: 420.0	Potable Water: 345.0	Fuel: 342.0	Bulk Weight: 246.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 07-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3437.0 m	TVD: 3432.0 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 23	DFS: 18	Spud Date: 22-JUL-2001	Daily Footage: 265.5	Daily Rot Hrs: 10.0	Total Rot Hrs: 108.5				
Torq: 16	Drag: 0.0	Rot Wgt: 280.0	P/U Wgt: 280.0	Slack Off Wgt: 275.0	Wind: 6	Seas: 1.0 / 2.0	Bar: 752	POB: 99	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 108.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: FLOW	Wt: 1600	FV: 92	PV: 41	YP: 12.0	Gel: 8 / 11		
WL	API: 0.0 HTHP: 2.0	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 24.00	% Oil: 72.00	%Water: 28.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 40,000	Ca:	Bent:	Solids %HG/LG: 18.20 / 4.20	%DS/Bent: /		

1700 1KG LIME 11 1MT BARITE 25 1m3 BASE FLUID 175 1KG OTHER 1500 1KG VERSAVERT

700 1KG CA CHLOR 88%

Drlg Gas: 38	Max Gas: 40	Conn Gas:	Trip Gas: 150	Trip Cl:	Remarks: MAX GAS AT BTM'S UP W/ 1.57 SG MUD 3%

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
9		215.9	HUGHES		4 -15.9 / - / - / - / -	792.3	3171.5 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
BD445HA	265.5	10.0	1.0/5.0	180 /										K 11299.4
			/	/										

Total Length of BHA: 254.65 m BHA Description: 8 1/2" BD445HA PDC BIT - NB STAB C/W FLOAT - 6 1/2" PONY DC, 8 1/2" NM-STAB - CDR - 8 3/8" ILS - MWD - 7* 6 1/2" DC - 9X 5" HWDP - 6 1/2" JARS - 8X 5" HWDP

Hrs On Jars: 148.2 Hours Since Last Inspection: 148.2

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
9	6 / 6 / 6	304.8/ 304.8/ 304.8	75/ 75/	285	0.00	0.09	0.15	0.27	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
3281.1	2.04	238.38	S58.38W	3275.9	135.08 S	19.45 E	-135.08	0.17
3337.4	2.12	243.07	S63.07W	3332.2	136.08 S	17.67 E	-136.08	0.10
3394.8	1.82	240.73	S60.73W	3389.6	137.01 S	15.93 E	-137.01	0.16
3451.1	1.76	239.93	S59.93W	3445.9	137.88 S	14.4 E	-137.88	0.04

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight — Total Hours Reported: 24.0
1.00	0000	02 - 07	CONT P/U 5" DP & TIH - TOTAL OF 51JNTS
2.00	0100	02 - 05	TIH W/ 5" DP F/ DERRICK TO 1920M - FILL PIPE EVERY 20 STDS; AT 1350M, BREAK CIRC & FLUSH C&K LINES
0.50T	0300	02 - 20	CIRC W/ 550 LPM, 33 BAR, 10 RPM WHILEST TROUBLESHOOT PROBLEM WITH TRIPTANK PUMP
1.50	0330	02 - 05	CONT TIH F/ 1920 TO 2640M
0.50	0500	02 - 01	BREAK CIRC W/ 400 LPM, 69 BAR; CIRC & STAGE UP PUMPS TO 1000 LPM, 82 BAR, 100 RPM
0.50	0530	02 - 05	CONT TIH F/ 2640 TO 3043M
2.50	0600	02 - 01	BREAK CIRC; WASH F/ 3043 TO 3100M, STAGE UP PUMPS TO 2264 LPM, 265 BAR - CIRC BTM'S UP; MAX GAS 3.0%
		02 - 01	OBSERVED LARGE AMOUNT OF CUTTINGS/CAVINGS AT SURFACE
3.00	0830	02 - 25	WASH-REAM AND LOG F/ 3100 TO 3169M WHILST INCREASING MW F/ 1.57 TO 1.60 SG
1.50	1130	02 - 01	POOH TO 3157M; CIRC & COND MUD TO 1.60SG - BOOST RISER; BACKGROUND GAS = 0.2%
0.50	1300	02 - 01	FLUSH C&K LINES AND TAKE SCR'S
0.50	1330	02 - 04	WASH & REAM F/ 3157 TO 3171M - FANN OFF BTM & BED IN BIT
10.00	1400	01 - 02	DRILL 8 1/2" HOLE F/ 3171.5 TO 3437M W/ 2425 LPM, 285 BAR, 1-5MT WOB, 8-16K NM TORQUE
		01 - 02	TAKE SCR'S AND BOOST RISER EVERY 200M; ADD 2 SXS/HR CAC03
		01 - 02	

Safety: MUD LOGGER CUT RIGHT FOREARM WITH KNIFE; WEEKLY SAFETY MEETING AND DRILL

24 Hr Summary: TIH W/ 5" DP; CIRC & INC. MW F/ 1.57 TO 1.60 SG; DRILL 8 1/2" HOLE F/ 3171.5 TO 3437M

Projected Operations: DRILL 8 1/2" HOLE TO TD; CIRC HOLE CLEAN - POOH; R/U TO RUN WL

Remarks:
POB: CHEVRON - 5, SERVICE - 30, DOLPHIN - 55, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 74

HEAVE: 0.2M, PITCH 0.5DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 23, 17 FULL, 6EMPTY

DAILY FE COST: NOK 761544 + 1621413 TOTAL FE COSTS: NOK 17,383,890

0600HRS: DRILL 8 1/2" HOLE @ 3585M

Daily Mud Cost: KR143,271	Daily Tangible Cost:	Daily Well Cost: KR3,541,109	Incidents: FIRST AID
Cum Mud Cost: KR2,936,906	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR97,614,524	Total Appr: KR134,000,000

Drill Water: 360.0	Potable Water: 325.0	Fuel: 331.0	Bulk Weight: 215.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/SMJ		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 08-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 24	DFS: 19	Spud Date: 22-JUL-2001	Daily Footage: 230.0	Daily Rot Hrs: 9.0	Total Rot Hrs: 117.5				
Torq: 16000	Drag: 0.0	Rot Wgt: 127.0	P/U Wgt: 127.0	Slack Off Wgt: 125.0	Wind: 12	Seas: 1.0 / 2.0	Bar: 752	POB: 93	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 125.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 80	PV: 37	YP: 8.0	Gel: 7 / 9		
WL	API: 0.0 HTHP: 2.1	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 24.00	% Oil: 74.00	%Water: 26.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 19.00 / 4.40	%DS/Bent: /		

1275 1KG CA CARB CRSE 800 1KG CA CARB MED

Drlg Gas: 50	Max Gas: 119	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks: MAX GAS WHILE DRILLING @ 3472M - 2.37%

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
9	M333	215.9	HUGHES	0323129	4 - 15.9 / - / - / - / -	794.2	3171.5 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
BD445HA	495.5	19.0	4.0/5.5	180 /										K 8324.90
			/	/										

Total Length of BHA: 254.65 m BHA Description: 8.1/2" BD445HA PDC BIT - NB STAB C/W FLOAT - 6.1/2" PONY DC - 8.1/2" NM STAB - CDR - 8.3/8" ILS - MWD - 7 X 6.1/2" DC - 9 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP

Hrs On Jars: 148.2 Hours Since Last Inspection: 148.2

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
9	152 / 152 / 152	304.8/ 304.8/ 304.8	74/ 75/	285	2.39	50.38	100.10	157.64	0.00	0.0	11.30
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS
3566.4	1.77	238.98	S58.98W	3561.8	134.17 S	12.99 E	-134.17	0.13
3596.1	1.81	239.38	S59.38W	3591.5	134.65 S	12.19 E	-134.65	0.04
3625.4	1.82	236.08	S56.08W	3620.8	135.15 S	11.41 E	-135.15	0.11
3641.9	1.90	232.64	S52.64W	3637.3	135.46 S	10.98 E	-135.46	0.25

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight (Total Hours Reported: 24.0)
0.50	0000	01 - 01	CIRC & BOOST RISER; TAKE SCR'S.
5.50	0030	01 - 02	DRILL 8.1/2" HOLE F/ 3437 - 3587M W/ 2345 LPM, 276 BAR, 180 RPM, 8 - 16K NM TQ, 4 - 5.5MT WOB.
0.50	0600	01 - 01	CIRC & BOOST RISER; TAKE SCR'S & FLUSH C & K LINES.
0.50	0630	01 - 02	DRILL 8.1/2" HOLE F/ 3587 - 3600M.
2.00	0700	01 - 01	CIRCULATE HOLE CLEAN W/ 2345 LPM, 276 BAR - MAX GAS 1.3%.
2.00	0900	01 - 01	SIMULATE CONN. F/CHECK - STATIC; CIRCULATE BTM'S UP - MAX. GAS 0.33%.
0.50	1100	01 - 01	CIRC & BOOST RISER; TAKE SCR'S @ 3600M.
3.00	1130	01 - 02	DRILL 8.1/2" HOLE F/ 3600 TO 3667M (WELL TD) W/ 2381 LPM, 283 BAR, 180 RPM, 7 - 10K NM TQ, 4 - 5.5MT WOB.
1.50	1430	01 - 01	CIRCULATE BTM'S UP & CONDITION MUD. GAS DROPPED TO LESS THAN 0.2% AFTER BTM'S UP.
1.50	1600	01 - 01	SIMULATE CONN. TAKE SURVEY - 3641.9M, 1.90DEG, 232.64 AZ, CIRC BTMS UP & BOOST RISER - MAX GAS 0.2%. HOLE CLEAN.
1.00	1730	01 - 05	F/CHECK WELL - STATIC. PULL 6 STDS WET - HOLE TAKING CORRECT FLUID.
5.50	1830	01 - 05	F/CHECK WELL - STATIC. PUMP 3.3M3, 1.86SG SLUG & POOH TO SHOE. F/CHECK @ SHOE - STATIC. CONT POOH.
		-	
		-	
		-	

Safety:

24 Hr Summary: DRILL 8.1/2" HOLE TO WELL TD @ 3667M. CIRC HOLE CLEAN & POOH.

Projected Operations: R/U & RUN WIRELINE LOGS AS PER PROGRAM.

Remarks:
POB: CHEVRON - 5, SERVICE - 25, DOLPHIN - 54, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 75

HEAVE: 0.2M, PITCH 0.4DEG, ROLL 0.4DEG; CUTTING SKIPS ON BOARD: 17 (3 FULL & 14 EMPTY)

DAILY FE COST: 583,005 NOK TOTAL FE COSTS: NOK 17,966,895

05:30 HRS: RECORD REPEAT SECTION W/ SCHLUMBERGER PEX LOGGING STRING @ 3140M.

Daily Mud Cost: KR133,402	Daily Tangible Cost:	Daily Well Cost: KR3,045,002	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,070,308	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR100,659,526	Total Appr: KR134,000,000

Drill Water: 330.0	Potable Water: 298.0	Fuel: 305.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 09-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 25	DFS: 20	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 117.5		
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 12	Seas: 1.0 / 2.0	Bar: 757	POB: 92
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y			
Cum Rot Hrs On Casing: 125.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:				
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD			
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 82	PV: 37	YP: 8.0	Gel: 7 / 9
WL	API: 0.0 HTHP: 2.0	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 24.50	% Oil: 74.00	%Water: 26.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 19.00 / 4.40	%DS/Bent: /

56 1MT BARITE

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
9	M333	215.9	HUGHES	0323129	4 -15.9/ - / - / - / -	794.2	3171.5 m	3667.0 m	3662.4 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
BD445HA	495.5	19.0	0.0/0.0	/		1	1	WT	XA	X	I	BT	TD	K 8324.90
			/	/										

Total Length of BHA: 254.65 m BHA Description: 8.1/2" BD445HA PDC BIT - NB STAB C/W FLOAT - 6.1/2" PONY DC - 8.1/2" NM STAB - CDR - 8.3/8" ILS - MWD - 7 X 6.1/2" DC - 9 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP

Hrs On Jars: 165.7 Hours Since Last Inspection: 165.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
9	152 / 152 / 152	304.8/ 304.8/ 304.8	/ /	0	0.00	0.00	0.00	0.00	0.00	0.0	0.00
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.00	0000	01 - 05	CONT POOH W/ 8.1/2" BHA. L/O MWD & CDR TOOLS. B/O HUGHES BIT (NOTE: PIECE OF MATRIX BROKEN FROM ONE OF BLADES).	
1.00	0100	02 - 25	CLEAR RIG FLOOR & R/U TO RUN SCHLUM WIRELINE LOGS.	
1.50	0200	02 - 25	HOLD TBT. P/U & M/U SCHLUM AIT-PEX-HNGS TOOLSTRING - RUN #1.	
2.00	0330	02 - 25	RIH W/ SCHLUM AIT-PEX-HNGS TOOLSTRING - RUN #1 TO 3180M.	
0.50	0530	02 - 25	RECORD REPEAT SECTION THRU LYSING FORMATION F/ 3180 - 3060M. RIH TO TD.	
1.00	0600	02 - 25	TAG TD @ 3665.7M (WIRELINE DEPTH - TIDE CORRECTED) & RECORD MAIN LOG F/ 3663 - 3100M.	
0.50T	0700	02 - 25	COMPENSATOR PIN SHEARED, SUSPEND MAIN LOG BUT CONTINUE MOVING TOOLSTRING WHILE REPAIR SAME. RIH TO 3170M.	
1.00	0730	02 - 25	RE-RECORD MAIN LOG F/ 3150 - 2690M. SHALLOW RESITIVITY READING HIGH & NOT REPEATING OVER SECTION.	
0.50T	0830	02 - 25	SHALLOW RESISTIVITY READING CORRECTLY. DECISION TAKEN TO RE-LOG SECTION. RIH F/ 2690 - 3150M.	
1.00T	0900	02 - 25	RE-LOG SECTION W/ BAD SHALLOW RESISTIVITY F/ 3150 - 2690M.	
2.00	1000	02 - 25	CONTINUE TO RECORD MAIN LOG F/ 2690M - CSG SHOE @ 1374M (W/LINE DEPTH). NO EXCESS DRAG OR O/PULLS WHILE LOGGING.	
2.00	1200	02 - 25	POOH & L/O SCHLUM AIT-PEX-HNGS TOOLSTRING - RUN #1.	
2.50	1400	02 - 25	P/U & M/U SCHLUM DSI-GR-AMS-OBDT TOOLSTRING - RUN #2. RIH TO 3188M.	
1.00	1630	02 - 25	RECORD REPEAT SECTION THRU LYSING FORMATION F/ 3188 - 2980M. RIH TO TD.	
4.00	1730	02 - 25	TAG TD @ 3666M & RECORD MAIN LOG F/ 3664M - CSG SHOE @ 1374M. NO EXCESS DRAG OR O/PULLS WHILE LOGGING.	

Safety: HOLD TBT PRIOR TO M/U SCHLUM PEX TOOLSTRING. ALL BARRIERS IN PLACE & DRILL FLOOR CLEARED BEFORE HANDLING SOURCES.

24 Hr Summary: POOH W/ 8.1/2" BHA. R/U WIRELINE & MAKE TWO LOGGING RUNS (AIT-PEX-HNGS & DSI-GR-AMS-OBDT).

Projected Operations: RE-RUN PEX TOOLSTRING. RUN VSP, MDT & SIDEWALL CORES. P/U CMT STINGER & SET CMT PLUGS TO ABANDON WELL.

Remarks:
POB: CHEVRON - 5, SERVICE - 25, DOLPHIN - 53, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 76

HEAVE: 0.2M, PITCH 0.4DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 17 (6 FULL & 11 EMPTY)

DAILY FE COST: 2,754,760 NOK TOTAL FE COSTS: 20,721,654 NOK

05:30 HRS: RIH W/ REED 8-LEVEL DELTA TOOL.

Daily Mud Cost: KR58,462	Daily Tangible Cost:	Daily Well Cost: KR2,854,334	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,128,770	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR103,513,860	Total Appr: KR134,000,000

Drill Water: 280.0	Potable Water: 475.0	Fuel: 0.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 10-AUG-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 25	DFS: 20	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 117.5		
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 12	Seas: 1.0 / 2.0	Bar: 757	POB: 92
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y			
Cum Rot Hrs On Casing: 125.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:				
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD			
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 82	PV: 37	YP: 8.0	Gel: 7 / 9
WL	API: 0.0 HTHP: 2.0	FC(mm) API: 0.0 HTHP: 1.0	Solids: 24.50	% Oil: 74.00	%Water: 26.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 19.00 / 4.40	%DS/Bent: /

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 254.65 m BHA Description: 8.1/2" BD445HA PDC BIT - NB STAB C/W FLOAT - 6.1/2" PONY DC - 8.1/2" NM STAB - CDR - 8.3/8" ILS - MWD - 7 X 6.1/2" DC - 9 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP

Hrs On Jars: 165.7 Hours Since Last Inspection: 165.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.50	2130	02 - 25	POOH & L/O SCHLUM DIS-GR-AMS-OBDT TOOLSTRING - RUN #2.	
1.00T	2300	02 - 25	P/U & M/U BACK UP SCHLUM PEX TOOLSTRING - RUN #3 (RE-RUN DUE TO ANOMALOUS DENSITY DATA 1828 - 1624M).	
		-		
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		-		
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		-		
		-		
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		-		
		-		
		-		

Safety: HOLD TBT PRIOR TO M/U SCHLUM PEX TOOLSTRING. ALL BARRIERS IN PLACE & DRILL FLOOR CLEARED BEFORE HANDLING SOURCES.

24 Hr Summary: POOH W/ 8.1/2" BHA. R/U WIRELINE & MAKE TWO LOGGING RUNS (AIT-PEX-HNGS & DSI-GR-AMS-OBDT).

Projected Operations: RE-RUN PEX TOOLSTRING. RUN VSP, MDT & SIDEWALL CORES. P/U CMT STINGER & SET CMT PLUGS TO ABANDON WELL.

Remarks:

Daily Mud Cost: KR58,462	Daily Tangible Cost:	Daily Well Cost: KR2,854,334	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,128,770	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR103,513,860	Total Appr: KR134,000,000

Drill Water: 280.0	Potable Water: 475.0	Fuel: 0.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 10-AUG-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 26	DFS: 21	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 4	Seas: 1.0 / 2.0	Bar: 758	POB: 92	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 126.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co:	Type:	Sample From: FLOW	Wt:	FV:	PV:	YP:	Gel: /		
WL API:	HTHP:	FC (mm) API:	HTHP:	Solids:	% Oil:	%Water:	% Sand:	MBT:	Ph:
Pm:	Pf/Mf: /	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: /	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:
0	0		0		MAX GAS WHILE CIRC @ SHOE - 0.2%.

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
9	RR-1	M333	215.9	HUGHES	0323129	4 - 15.9 / - 0.0 / - 0.0 / - 0.0 / - 0.0	792.3	3667.0 m		
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
BD445HA	0.0	0.0	/	120 /										0.00
			/	/										

Total Length of BHA: 253.66 m BHA Description: 8.1/2" BD445HA PDC BIT - NB STAB (C/W FLOAT) - 6.1/2" PONY DC - 8.1/2" STRING STAB - 5 X 6.1/2" DC - 12 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP

Hrs On Jars: 166.2 Hours Since Last Inspection: 166.2

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
9	RR-1	152 / 152 / 152	304.8 / 304.8 / 304.8	20 / /	21	0.32	6.80	13.44	21.18	0.00	0.0	0.10
		/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
2.00	0000	02 - 25	RIH W/ BACK UP SCHLUM PEX TOOLSTRING - RUN #3 & RECORD MAIN LOG F/ 2000 - 1590M. RESPONSE AS PER PREVIOUS RUN.	
1.00	0200	02 - 25	POOH & L/O BACK UP SCHLUM PEX TOOLSTRING & CHANGE CABLE HEAD FOR READ VSP RUN.	
1.50	0300	02 - 25	P/U & M/U READ 8-LEVEL DELTA VSP TOOLSTRING.	
3.00	0430	02 - 25	RIH W/ READ VSP TOOLSTRING TAKING CHECKSHOTS @ 2400M & 3200M. TOOL STOOD UP @ 2060M - FREED W/ 2000LB O/PULL.	
0.50	0730	02 - 25	ATTEMPT TO RECORD GR CORRELATION X 2 F/ 3450 - 3390M - NO GO. TOOL STICKING W/ 1500 - 3000LB O/PULLS TO FREE.	
1.00T	0800	02 - 25	TOOLSTRING STUCK @ 3403M. WORK STRING W/ MAX LINE PULL OF 7000LBS (NORMAL LOGGING TENSION - 3400LBS).	
0.50T	0900	02 - 25	TOOLSTRING FREE. CONT TO POOH @ 4000 FT/HR. TOOK 2000LB & 2600LB O/PULLS @ 3346M & 3107M RESPECTIVELY.	
3.50T	0930	02 - 25	TOOLSTRING CABLEHEAD STUCK @ +/-3077M, TOP GEOPHONE +/-3090M (BOTH W/LINE DEPTHS). WORK STRING W/ MAX LINE PULL	
		02 - 25	OF 7000LBS. FIRE AIR GUN & MONITOR SIGNAL IN ATTEMPT TO DETERMINE STUCK POINT.	
2.50T	1300	02 - 25	TOOLSTRING FREED WHILE HOLDING 7000LBS LINE PULL. COMMUNICATION W/ TOOLSTRING CONFIRMED. POOH TO SURFACE.	
1.50T	1530	02 - 25	L/O READ 8-LEVEL DELTA VSP TOOLSTRING. NO OBVIOUS SIGNS OF DAMAGE. R/D W/LINE.	
4.50T	1700	02 - 05	M/U & TIH W/ 8.1/2" WIPER TRIP BHA TO CSG SHOE @ 1343M. FILL PIPE & BREAK CIRC W/ 120 RPM, 323 LPM EVERY 20 STD.	
1.00	2130	02 - 21	SLIP & CUT DRILL LINE.	
0.50T	2230	02 - 01	CIRC & COND MUD @ SHOE W/ UP TO 2010 LPM, 151 BAR, 112 RPM, 8000 N.M TORQ.	
1.00T	2300	02 - 05	TIH W/ 8.1/2" WIPER TRIP BHA F/ 1343 - 1900M. FILL PIPE & BREAK CIRC W/ 120 RPM, 323 LPM EVERY 20 STD.	

Safety: PAINTER RECEIVED HOT WATER BURN TO NECK FROM WASH DOWN GUN.

24 Hr Summary: P/U & RIH VSP TOOLSTRING. TOOL STUCK WHILE ATTEMPTING TO CORRELATE. POOH W/ VSP STRING & TIH W/ WIPER TRIP ASSY.

Projected Operations: TIH TO TD. CIRC & COND MUD & POOH. R/U & RUN VSP & REMAINING WIRELINE LOGS.

Remarks:
POB: CHEVRON - 5, SERVICE - 25, DOLPHIN - 53, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 77

HEAVE: 0.2M, PITCH 0.4DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 12 (3 FULL & 9 EMPTY).

DAILY FE COST: 2,717,083 NOK TOTAL FE COSTS: 22,537,269 NOK

05:30 HRS: CIRC & COND MUD @ 3660M.

Daily Mud Cost: KR58,462	Daily Tangible Cost:	Daily Well Cost: KR2,717,083	Incidents: FIRST AID
Cum Mud Cost: KR3,187,232	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR106,230,943	Total Appr: KR134,000,000

Drill Water: 210.0	Potable Water: 450.0	Fuel: 280.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 11-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 27	DFS: 22	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 8000	Drag: 4.0	Rot Wgt: 134.0	P/U Wgt: 138.0	Slack Off Wgt: 134.0	Wind: 4	Seas: 1.0 / 2.0	Bar: 748	POB: 92	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 134.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 100	PV: 36	YP: 9.5	Gel: 7 / 9		
WL	API: 0.0 HTHP: 2.5	FC (mm)	API: 0.0 HTHP: 1.0	Solids: 23.80	% Oil: 73.00	%Water: 27.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 32,500	Ca:	Bent:	Solids %HG/LG: 18.40 / 5.40	%DS/Bent: /		

50 1KG OTHER 350 1KG CA CARB CRSE 125 1KG CA CARB FINE 300 1KG CA CARB MED 2100 1KG CA CHLOR 88%

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks: MAX GAS DURING B/U - 6.4% FROM 2100M.

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
9 RR-1	M333	215.9	HUGHES	0323129	4 -15.9 / - 0.0 / - 0.0 / - 0.0 / - 0.0	792.3	3667.0 m	3667.0 m	3662.4 m
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
BD445HA	0.0	0.0	0.0/0.0	120 /		1	1	WT	XA	X	I	BT	TD	0.00
			/	/										

Total Length of BHA: 253.66 m BHA Description: 8.1/2" BD445HA PDC BIT - NB STAB (C/W FLOAT) - 6.1/2" DC - 8.1/2" STRING STAB - 5 X 6.1/2" DC - 12 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP

Hrs On Jars: 174.7 Hours Since Last Inspection: 174.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
9 RR-1	152 / 152 / 152	304.8/ 304.8/ 304.8	74/ 75/	280	2.40	50.47	100.25	157.89	0.00	0.0	11.30
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
3.00T	0000	02 - 05	CONT TIH W/ 8.1/2" WIPER TRIP BHA F/ 1900 - 3600M. FILL PIPE & BREAK CIRC W/ 120 RPM, 323 LPM EVERY 20 STD.	
		02 - 05	CIRC PRESS W/ 20 SPM, 232 LPM @ 2466M - 22.4 BAR, 3040M - 24.8 BAR, 3560M - 27.6 BAR.	
1.00T	0300	02 - 04	WASH & REAM IN HOLE F/ 3600 - 3660M W/ 120 RPM, 7000 - 8000 N.M TORQ. STAGE PUMPS TO 130 SPM, 2100 LPM, 211 BAR.	
		02 - 04	WASH IN HOLE W/ 650 LPM & TAG TD W/ 2.3MT @ 3667M (TIDE CORRECTED) - NO FILL. P/U - 138MT, S/O & FRWT - 134MT.	
3.00T	0400	02 - 01	CIRC 2.5 X BTMS UP WHILE WORKING STND F/ 3665 - 3648M W/ 2400 LPM, 280 BAR, 120 RPM, 6000 - 7000 N.M TORQ.	
		02 - 01	MAX GAS PEAK OF 6.4% SEEN FROM +/- 2100M. MAX GAS PEAK @ BTMS UP - 5%. BOOST RISER AFTER BTMS UP.	
		02 - 01	TOTAL OF 1.4MT OF CUTTINGS RECOVERED F/ HOLE DURING CIRCULATING PERIOD.	
1.00T	0700	02 - 05	TAKE SCR'S & FLUSH CHOKE & KILL LINES. F/CHECK - STATIC. PULL 2 STDS WET TO 3616M W/OUT PROBLEM.	
1.00T	0800	02 - 20	MAIN HYD HOSE BURST ON UPPER FINGERBOARD RACKING ARM. CIRC W/ 2350 LPM, 266 BAR, 120 RPM WHILE REPLACE SAME.	
1.50T	0900	02 - 01	TRIP BACK IN HOLE 2 STDS & TAG TD @ 3667M - NO FILL. CONT TO CIRC W/ 2350 LPM, 166 BAR, 120 RPM WHILE WORKING	
		02 - 01	PIPE F/ 3647 - 3666M. INCREASE IN CAVINGS NOTED WHEN JETTING HEADER BOX. BOOST RISER & JET HEADER BOX AGAIN - OK	
0.50T	1030	02 - 05	F/CHECK - STATIC. PULL 5 STDS WET - OK.	
1.50T	1100	02 - 05	F/CHECK - STATIC. PUMP 4.2M3, 1.85SG SLUG & POOH F/ 3530 - 2902M. NO EXCESS DRAG OR OVERPULLS.	
0.50T	1230	02 - 20	BOLT & WASHER F/ TOP DRIVE BELL GUIDE WORKED LOOSE & FELL. BOLT LANDED ON UPPER ARM & WASHER HIT DOG HOUSE ROOF	
		02 - 20	WINDOW CAUSING IT TO CRACK. SHUT DOWN OPERATIONS & INVESTIGATE SAME.	

Safety: BOLT & WASHER FROM TOP DRIVE BELL GUIDE WORKED LOOSE & FELL. BOLT LANDED ON UPPER ARM, WASHER HIT DOG ROOF WINDOW.

24 Hr Summary: TIH TO TD. CIRC HOLE CLEAN & COND MUD. POOH, R/U SCHLUM W/LINE & RIH W/ MDT. COMMENCE TAKING PRE-TEST PRESSURES.

Projected Operations: TAKE MDT FLUID SAMPLES & POOH. RIH W/ VSP & TAKE CHECKSHOTS & PERFORM WALKAWAY.

Remarks:
POB: CHEVRON - 5, SERVICE - 25, DOLPHIN - 53, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 78

HEAVE: 0.2M, PITCH 0.5DEG, ROLL 0.6DEG; CUTTING SKIPS ON BOARD: 24 (4 FULL & 20 EMPTY).

DAILY FE COST: 2,705,018 NOK TOTAL FE COSTS: 25,242,287 NOK

05:30 HRS: TAKING MDT FLUID SAMPLE @ 3091.2M.

Daily Mud Cost: KR58,462	Daily Tangible Cost:	Daily Well Cost: KR2,705,018	Incidents: NEAR MISS
Cum Mud Cost: KR3,245,694	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR108,935,961	Total Appr: KR134,000,000

Drill Water: 190.0	Potable Water: 435.0	Fuel: 266.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 12-AUG-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 27	DFS: 22	Spud Date: 22-JUL-2001	Daily Footage: 0.0	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 8000	Drag: 4.0	Rot Wgt: 134.0	P/U Wgt: 138.0	Slack Off Wgt: 134.0	Wind: 4	Seas: 1.0 / 2.0	Bar: 748	POB: 92	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 134.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 100	PV: 36	YP: 9.5	Gel: 7 / 9		
WL	API: 0.0 HTHP: 2.5	FC (mm) API: 0.0 HTHP: 1.0	Solids: 23.80	% Oil: 73.00	%Water: 27.00	% Sand: 1.50	MBT:	Ph:	
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 32,500	Ca:	Bent:	Solids %HG/LG: 18.40 / 5.40	%DS/Bent: /		

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks: MAX GAS DURING B/U - 6.4% FROM 2100M.

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 253.66 m BHA Description: 8.1/2" BD445HA PDC BIT - NB STAB (C/W FLOAT) - 6.1/2" DC - 8.1/2" STRING STAB - 5 X 6.1/2" DC - 12 X 5" HWDP - 6.1/2" JARS - 8 X 5" HWDP

Hrs On Jars: 174.7 Hours Since Last Inspection: 174.7

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
4.50	T1300	02 - 05	CONT TO POOH F/ 2902M TO SURFACE. F/CHECK @ SHOE & BOP - BOTH STATIC.	
2.00	1730	02 - 25	R/U TO RUN W/LINE. P/U & M/U SCHLUM MDT TOOL STRING (NOTE: SEA STATE TOO HIGH FOR WALKAWAY VSP W/ HIGHLAND STAR)	
1.50	1930	02 - 25	RIH W/ SCHLUM MDT TOOL STRING & CORRELATE ON DEPTH @ +/- 1600M (REF LOG IS AIT-PEX-HNGS OF 10TH AUG 2001).	
2.50	2100	02 - 25	TAKE PRE-TEST W/ MDT F/ 1655 - 1732.5M (W/LINE DEPTH). 10 GOOD TESTS F/ 10 TOOL OPENINGS - NO LOST SEALS.	
0.50	2330	02 - 25	RE-CORRELATE & ATTEMPT TO TAKE FLUID SAMPLE @ 1673M & 1673.5M (W/LINE DEPTH) - NO GO (SLOW PRESS BUILD UP).	
		02 - 25		
		02 - 25	NOTE: BLUE POD PILOT HOSE CONTROLLING CLOSE FUNCTION ON LOWER INNER CHOKE LEAKING.	
		02 - 25	FUNCTION PLACED IN BLOCK POSITION.	
		-		
		-		
		-		
		-		
		-		
		-		
		-		

Safety: BOLT & WASHER FROM TOP DRIVE BELL GUIDE WORKED LOOSE & FELL. BOLT LANDED ON UPPER ARM, WASHER HIT DOG ROOF WINDOW.

24 Hr Summary: TIH TO TD. CIRC HOLE CLEAN & COND MUD. POOH, R/U SCHLUM W/LINE & RIH W/ MDT. COMMENCE TAKING PRE-TEST PRESSURES.

Projected Operations: TAKE MDT FLUID SAMPLES & POOH. RIH W/ VSP & TAKE CHECKSHOTS & PERFORM WALKAWAY.

Remarks:

Daily Mud Cost: KR58,462	Daily Tangible Cost:	Daily Well Cost: KR2,705,018	Incidents: NEAR MISS	
Cum Mud Cost: KR3,245,694	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR108,935,961	Total Appr: KR134,000,000	

Drill Water: 190.0	Potable Water: 435.0	Fuel: 266.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: MOORE/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 12-AUG-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 28	DFS: 23	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5		
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 6	Seas: 1.0 / 2.0	Bar: 747	POB: 92
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y			
Cum Rot Hrs On Casing: 134.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:				
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD			
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 100	PV: 36	YP: 9.5	Gel: 7 / 9
WL	API: 0.0	HTHP: 2.5	FC (mm)	API: 0.0	HTHP: 1.0	Solids: 25.00	% Oil: 73.00	%Water: 27.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 32,000	Ca:	Bent:	Solids %HG/LG: 18.40 / 5.40	%DS/Bent: /

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	0000	02 - 25	RESET MDT TOOL X 2 @ 1674M & 1674.5M IN ATTEMPT TO TAKE BRYGGE FLUID SAMPLE - NO GO (HIGH DRAWDOWN & PUMP STALL)	
2.00	0030	02 - 25	RIH W/ SCHLUM MDT TOOL STRING & CORRELATE ON DEPTH @ +/- 3100M (REF LOG IS AIT-PEX-HNGS OF 10TH AUG 2001).	
		02 - 25	TAKE LYSING PRE-TESTS W/ MDT F/ 3091.2 - 3107.2M (W/L). 5 GOOD TESTS F/ 5 TOOL OPENINGS - NO LOST SEAL.	
		02 - 25	MAX FORMATION PRESS IN BRYGGE - 1.535 SG & IN LYSING - 1.423 SG.	
1.00	0230	02 - 25	SET MDT TOOL @ 3091.9M (W/L) & ATTEMPT TO TAKE LYSING FLUID SAMPLE - NO GO (HIGH DRAWDOWN & PUMP STALLING).	
1.00	0330	02 - 25	SET MDT TOOL @ 3091.4M (W/L) & ATTEMPT TO TAKE LYSING FLUID SAMPLE - NO GO (LOSS OF TELEMETRY W/ MDT TOOL).	
5.50	0430	02 - 25	SET MDT TOOL @ 3091.2M (W/L) & TAKE LYSING FLUID SAMPLE - OK. FILL 3 X 450CC SAMPLE BOTTLES W/ WATER SAMPLES.	
1.50	1000	02 - 25	CLOSE TOOL & COMMENCE POOH W/ SCHLUM MDT TOOSTRING. NO O/PULL SEEN WHEN PULLING FREE FROM FORMATION.	
1.00	1130	02 - 25	EXTRACT SAMPLE BOTTLES @ SURFACE & R/D SCHLUM MDT TOOLSTRING.	
1.50	1230	02 - 25	CHANGE CABLE HEAD FOR READ VSP RUN. P/U & M/U READ 8-LEVEL DELTA VSP TOOLSTRING.	
2.00	1400	02 - 25	RIH W/ READ VSP TOOLSTRING TAKING CHECKSHOTS @ 1280M, 2400M & 3200M (W/L). NO HOLE PROBLEMS ENCOUNTERED.	
0.50	1600	02 - 25	CORRELATE TOOLSTRING ON DEPTH OVER LYSING FORMATION (REF LOG IS AIT-PEX-HNGS OF 10TH AUG 2001).	
1.50	1630	02 - 25	START RECORDING VSP SURVEY F/ 3523M (W/L) TAKING SHOTS @ 10M INTERVALS. NO HOLE PROBLEMS ENCOUNTERED.	
4.00	1800	02 - 25	START RECORDING VSP WALKAWAY SURVEY @ 2898M (W/L TOP GEOPHONE DEPTH) UTILISING THE 'HIGHLAND STAR'.	
2.00	2200	02 - 25	CONT RECORDING VSP SURVEY F/ 2898 - 2240M (W/L) TAKING SHOTS @ 10M INTERVALS. NO HOLE PROBLEMS ENCOUNTERED.	

Safety: TBT PRIOR TO EXTRACTING PVT SAMPLE BOTTLES FROM MDT TOOL.

24 Hr Summary: COMPLETE MDT PRE-TESTS & TAKE LYSING FLUID SAMPLE. R/U & RIH VSP TOOLSTRING. PERFORM VSP SURVEY & WALKAWAY.

Projected Operations: COMPLETE VSP SURVEY. R/U & RUN SIDEWALL CORES. R/D WIRELINE. P/U & M/U 3.1/2" CMT STINGER.

Remarks:
POB: CHEVRON - 5, SERVICE - 25, DOLPHIN - 53, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 79

HEAVE: 0.2M, PITCH 0.4DEG, ROLL 0.7DEG; CUTTING SKIPS ON BOARD: 24 (4 FULL & 20 EMPTY).

DAILY FE COST: 2,802,288 NOK TOTAL FE COSTS: 28,044,575 NOK

05:30 HRS: RIH W/ SIDEWALL CORE GUNS.

Daily Mud Cost: KR58,462	Daily Tangible Cost:	Daily Well Cost: KR2,802,288	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,304,156	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR111,738,249	Total Appr: KR134,000,000

Drill Water: 160.0	Potable Water: 410.0	Fuel: 261.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/BJORHEIM/MH		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 13-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 0.0	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 29	DFS: 24	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 0	Drag: 0.0	Rot Wgt: 0.0	P/U Wgt: 0.0	Slack Off Wgt: 0.0	Wind: 6	Seas: 1.0 / 2.0	Bar: 756	POB: 89	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 134.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1600	FV: 100	PV: 36	YP: 9.5	Gel: 7 / 9		
WL	API: 0.0	HTHP: 2.5	FC (mm)	API: 0.0	HTHP: 1.0	Solids: 25.00	% Oil: 73.00	%Water: 27.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 32,000	Ca:	Bent:	Solids %HG/LG: 18.40 / 5.40	%DS/Bent: /		

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 444.04 m BHA Description: MULE SHOE - 47 X JNTS 3.1/2" PH-6 TUBING - X/OVER TO 4.1/2" IF

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
4.00	0000	02 - 25	CONT RECORDING VSP SURVEY F/ 2240 - 790M (W/L) TAKING SHOTS @ 10M INTERVALS. NO HOLE PROBLEMS ENCOUNTERED.	
2.00	0400	02 - 25	POOH & L/O READ 8 LEVEL VSP TOOLSTRING.	
0.50T	0600	02 - 26	POOR INSULATION ON SCHLUM CABLEHEAD. RE-BUILD SAME PRIOR TO P/U SIDEWALL COREGUNS.	
1.50	0630	02 - 26	HOLD TBT. ENTER RADIO SILENCE, P/U & RIH TO BELOW BOP W/ 2 X SCHLUM SIDEWALL COREGUNS. 60 SHOTS IN TOTAL.	
2.00	0800	02 - 26	RIG OUT OF RADIO SILENCE. CONT RIH W/ COREGUNS. CORRELATE @ +/-3450M TO REF LOG AIT-PEX-HNGS OF 10TH AUG 2001.	
5.50	1000	02 - 26	SHOOT SIDEWALL CORES & CORRELATE AS REQ'D F/ 3659 - 1447M. 53 SHOTS FIRED IN TOTAL.	
1.00	1530	02 - 26	POOH W/ SIDEWALL COREGUNS TO BELOW BOPS. ENTER RADIO SILENCE.	
0.50	1630	02 - 26	POOH, REMOVE MISFIRED IGNITERS, DISCONNECT CABLEHEAD & COME OUT OF RADIO SILENCE. L/O COREGUNS.	
		02 - 26	53 SHOTS ATTEMPTED, 29 CORES RECOVERED, 2 EMPTY BARRELS, 8 MISFIRES & 14 LOST BARRELS - 55% RECOVERY.	
1.00	1700	02 - 26	R/D SCHLUM W/LINE & CLEAR RIG FLOOR FOR RUNNING CEMENT STINGER.	
5.00	1800	01 - 19	R/U HANDLING GEAR TO RUN CEMENT STINGER. P/U & M/U MULE SHOE & 47 JNTS OF 3.1/2", PH-6 TUBING (AVE. 20 JNT/HR).	
1.00	2300	01 - 19	C/O HANDLING GEAR & TIH W/ 5" DP F/ 444M TO INSIDE SHOE @ 1333M.	
		-		
		-		
		-		

Safety: RADIO SILENCE IN PLACE & TBT HELD PRIOR TO ARMING & RIH WITH COREGUNS.

24 Hr Summary: COMPLETE VSP SURVEY. M/U & RIH HOLE SIDEWALL COREGUNS. ATTEMPT 53 CORES - 19 RECOVERED. M/U CEMENT STINGER.

Projected Operations: RIH W/ CEMENT STINGER. CIRC & COND MUD. SET CEMENT PLUGS AS PER ABANDONMENT PROGRAM.

Remarks:
POB: CHEVRON - 4, SERVICE - 24, DOLPHIN - 52, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 80

HEAVE: 0.2M, PITCH 0.4DEG, ROLL 0.7DEG; CUTTING SKIPS ON BOARD: 19 (6 FULL & 13 EMPTY).

DAILY FE COST: 4,193,846 NOK TOTAL FE COSTS: 32,238,421 NOK

05:30 HRS: SET CEMENT PLUG #1 F/ 3190 - 3025M.

Daily Mud Cost: KR65,962	Daily Tangible Cost:	Daily Well Cost: KR4,885,842	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,370,118	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR118,179,219	Total Appr: KR134,000,000

Drill Water: 100.0	Potable Water: 385.0	Fuel: 396.0	Bulk Weight: 159.0	Neat Cement: 227.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 14-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 1274.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 30	DFS: 25	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 6000	Drag: 1.0	Rot Wgt: 113.0	P/U Wgt: 114.0	Slack Off Wgt: 113.0	Wind: 5	Seas: 1.0 / 2.0	Bar: 758	POB: 89	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 136.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1610	FV: 100	PV: 41	YP: 10.5	Gel: 7 / 10		
WL	API: 0.0	HTHP: 2.4	FC (mm)	API: 0.0	HTHP: 1.0	Solids: 25.00	% Oil: 72.00	%Water: 28.00	% Sand: 1.50	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 18.30 / 5.60	%DS/Bent: /		

26 1MT BARITE 500 1KG OTHER 2400 1LTR OTHER 125 1KG CA CARB FINE

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 444.04 m BHA Description: MULE SHOE - 47 X JNTS 3.1/2" PH-6 TUBING - X/OVER TO 4.1/2" IF

Hrs On Jars:	Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	0000	01 - 19	BREAK CIRC INSIDE SHOE @ 1333M & STAGE PUMPS UP TO 1020 LPM, 47 BAR.	
2.50	0030	01 - 19	CONT TO TIH W/ 5" DP F/ 1333 - 3200M.	
2.00	0300	01 - 19	BREAK CIRC & STAGE PUMPS TO 2280 LPM, 276 BAR, 150 RPM, 6000 N.M TORQ. CIRC 1 X B/U. MAX GAS 1.58% SEEN @ B/U.	
0.50	0500	01 - 19	M/U CMT STAND & BREAK CIRC THRU SAME W/ CMT UNIT. PRESS TEST LINES TO 250 BAR / 5 MINS - OK.	
0.50	0530	01 - 19	PUMP 5M3 TUNED SPACER @ 0.8M3/MIN W/ CMT UNIT. MIX & PUMP 6.64M3, 1.9SG SLURRY USING 4.0M3 MIXWATER @ 0.8M3/MIN.	
		01 - 19	PUMP 0.63M3 (+0.20M3 TO CLEAR LINES) OF TUNED SPACER.	
0.50	0600	01 - 19	DISPLACE SPACER & CMT W/ 24.2M3 MUD USING RIG PUMPS @ 1800 LPM, 200 BAR. UNDERDISPLACE PLUG BY 0.75M3.	
		01 - 19	PLUG #1 SET F/ 3190 - 3025M.	
2.50	0630	01 - 19	POOH W/ 5" DP F/ 3190 - 1791M.	
1.50T	0900	01 - 20	UNABLE TO RELEASE DRAWWORKS PARKING BRAKE. TROUBLE SHOOT & REPAIR SAME.	
1.00	1030	01 - 19	DROP DP WIPER DART, M/U CMT STAND, DISPLACE DART & CIRC B/U W/ 2725 LPM, 284 BAR.	
1.00	1130	01 - 19	PRESS TEST LINES TO 175 BAR / 5 MINS - OK. MIX & PUMP 10.98M3, 1.9SG SLURRY USING 6.55M3 MIXWATER @ 1M3/MIN.	
		01 - 19	PUMP 0.20M3 DRILLWATER TO CLEAR LINES. DISPLACE CMT W/ 11.8M3 MUD USING RIG PUMPS @ 2325 LPM, 192 BAR.	
		01 - 19	UNDERDISPLACE PLUG BY 0.75M3.	
		01 - 19	PLUG #2 SET F/ 1791 - 1491M.	

Safety: WEEKLY MUSTER DRILL & SAFETY MEETING HELD.

24 Hr Summary: RIH TO 3200M. CIRC & COND MUD. SET 3 X CMT PLUG, 3190 - 3025M, 1791 - 1491M & 1491 - 1274M. POOH & L/O DP.

Projected Operations: TIH, WEIGHT & P/TEST CMT PLUG #3. SET PLUG #4 F/ 661 - 411M. DISPLACE WELL TO SEAWATER, POOH & TEST PLUG #4.

Remarks:
POB: CHEVRON - 3, SERVICE - 24, DOLPHIN - 52, DOLPHIN SERVICE - 10 DAYS SINCE LAST LTI - 81

HEAVE: 0.2M, PITCH 0.4DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 19 (7 FULL & 12 EMPTY).

DAILY FE COST: 2,189,024 NOK TOTAL FE COSTS: 34,427,445 NOK

05:30 HRS: POOH W/ 5" DP TO 411M.

Daily Mud Cost: KR65,962	Daily Tangible Cost:	Daily Well Cost: KR4,505,305	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,436,080	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR122,674,174	Total Appr: KR134,000,000

Drill Water: 440.0	Potable Water: 490.0	Fuel: 386.0	Bulk Weight: 133.0	Neat Cement: 187.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 15-AUG-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 1274.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 30	DFS: 25	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 6000	Drag: 1.0	Rot Wgt: 113.0	P/U Wgt: 114.0	Slack Off Wgt: 113.0	Wind: 5	Seas: 1.0 / 2.0	Bar: 758	POB: 89	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 136.6	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: MINERAL OIL BASED	Sample From: PIT	Wt: 1610	FV: 100	PV: 41	YP: 10.5	Gel: 7 / 10		
WL	API: 0.0 HTHP: 2.4	FC (mm) API: 0.0 HTHP: 1.0	Solids: 25.00	% Oil: 72.00	%Water: 28.00	% Sand: 1.50	MBT:	Ph:	
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl: 29,000	Ca:	Bent:	Solids %HG/LG: 18.30 / 5.60	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:
0	0		0		

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 444.04 m BHA Description: MULE SHOE - 47 X JNTS 3.1/2" PH-6 TUBING - X/OVER TO 4.1/2" IF

Hrs On Jars:	Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	1230	01 - 19	POOH W/ 5" DP F/ 1791 - 1491M.	
1.00	1300	01 - 19	DROP DP WIPER DART, M/U CMT STAND, DISPLACE DART & CIRC B/U W/ 2940 LPM, 290 BAR.	
1.00	1400	01 - 19	PRESS TEST LINES TO 175 BAR / 5 MINS - OK. PUMP 5M3 TUNED SPACER @ 1M3/MIN W/ CMT UNIT.	
		01 - 19	MIX & PUMP 13.3M3, 1.9SG SLURRY USING 7.9M3 MIXWATER @ 1M3/MIN. PUMP 0.27M3 (+0.20M3 TO CLEAR LINES) OF TUNED	
		01 - 19	SPACER. DISPLACE SPACER & CMT W/ 9.2M3 MUD USING RIG PUMPS @ 2816 LPM, 241 BAR. UNDERDISPLACE PLUG BY 0.75M3.	
		01 - 19	PLUG #3 SET F/ 1491 - 1274M.	
1.00	1500	01 - 19	POOH W/ 5" DP F/ 1491 - 1095M.	
1.00	1600	01 - 19	DROP DP WIPER DART, M/U TOP DRIVE, DISPLACE DART & CIRC B/U W/ 3000 LPM, 280 BAR.	
3.50	1700	01 - 19	PUMP SLUG & POOH LAYING OUT 5" DP F/ 1096 - 444M.	
2.50	2030	01 - 19	C/O HANDLING GEAR & POOH LAYING OUT 3.1/2" PH-6 CEMENT STINGER F/ 444M TO SURFACE.	
1.00	2300	01 - 19	C/O HANDLING GEAR. P/U & M/U 5" MULESHOE & TIH W/ 5" DP TO 374M.	
		-		
		-		
		-		
		-		

Safety: WEEKLY MUSTER DRILL & SAFETY MEETING HELD.

24 Hr Summary: RIH TO 3200M. CIRC & COND MUD. SET 3 X CMT PLUG, 3190 - 3025M, 1791 - 1491M & 1491 - 1274M. POOH & L/O DP.

Projected Operations: TIH, WEIGHT & P/TEST CMT PLUG #3. SET PLUG #4 F/ 661 - 411M. DISPLACE WELL TO SEAWATER, POOH & TEST PLUG #4.

Remarks:

Daily Mud Cost: KR65,962	Daily Tangible Cost:	Daily Well Cost: KR4,505,305	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR3,436,080	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR122,674,174	Total Appr: KR134,000,000

Drill Water: 440.0	Potable Water: 490.0	Fuel: 386.0	Bulk Weight: 133.0	Neat Cement: 187.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 15-AUG-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 411.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 31	DFS: 26	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5		
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 15	Seas: 1.0 / 2.0	Bar: 752	POB: 89
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y			
Cum Rot Hrs On Casing: 138.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:				
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD			
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1001	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids: 0.00	% Oil: 0.00	%Water: 0.00	% Sand: 0.00	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: 0.00 / 0.00	%DS/Bent: /

400 1LTR OTHER 8 1m3 BASE FLUID

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.50	0000	01 - 19	CONT TIH W/ 5" DP F/ 374 - 1267M. WASH DOWN W/ 300 LPM, 3 BAR & TAG TOP OF CMT W/ 5 MT @ 1281M.	
1.00	0130	01 - 19	PUMP SLUG & POOH W/ 5" DP F/ 1281 - 661M.	
0.50	0230	01 - 19	L/O 2 X SINGLE & M/U TOP DRIVE. PROVE UP FLOW PATH.	
0.50T	0300	01 - 19	CLOSE UPPER ANNULAR & ATTEMPT TO PRESS TEST CMT PLUG #3 USING RIG PUMPS - NO GO. ANNULAR LEAKING.	
0.50	0330	01 - 19	CLOSE MPR & PRESS TEST CMT PLUG #3 USING SEAWATER F/ CMT UNIT TO 110 BAR / 5 MINS - OK. 0.6M3 PUMPED & RTND.	
1.00	0400	01 - 19	M/U CMT STAND & BREAK CIRC THRU SAME W/ CMT UNIT. PRESS TEST LINES TO 210 BAR / 5 MINS - OK.	
		01 - 19	MIX & PUMP 19.3M3, 1.95SG SLURRY USING 11.2M3 MIXWATER @ 0.8M3/MIN. PUMP 0.20M3 DRILLWATER TO CLEAR LINES.	
		01 - 19	DISPLACE CMT W/ 3.1M3 MUD USING RIG PUMPS @ 1200 LPM, 46 BAR. UNDERDISPLACE PLUG BY 0.75M3.	
		01 - 19	PLUG #4 SET F/ 661 - 411M.	
0.50	0500	01 - 19	POOH W/ 5" DP F/ 661 - 411M.	
0.50	0530	01 - 19	CIRC B/U W/ 4500 LPM, 102 BAR.	
1.00	0600	01 - 19	DISPLACE CHOKE, KILL & RISER BOOSTER LINES TO SEAWATER W/ CMT UNIT.	
2.50	0700	01 - 19	PUMP CLEAN UP PILLS - 8M3 BASE OIL, 30M3 WEIGHTED HI-VIS PILL, 30M3 HI-VIS WASH PILL, 30M3 SOLVENT PILL &	
		01 - 19	10M3 HI-VIS CLEAN UP PILL AS PER PROGRAM. DISPLACE W/ SEAWATER @ 2265 LPM, 12 BAR, 170 RPM. 142M3 SLOPS RTN'D.	
2.50	0930	01 - 19	POOH LAYING OUT 5" DP F/ 411M TO SURFACE.	

Safety:

24 Hr Summary: TAG & P/TEST CMT PLUG #3. POOH & SET CMT PLUG #4. CLEAN UP & DISPLACE RISER TO SEAWATER. R/U TO PULL RISER.

Projected Operations: PULL & L/O RISER. TIH WITH MOST TOOL. CUT & RETRIEVE WELLHEAD. L/O DRILL PIPE. PULL ANCHORS.

Remarks:
POB: CHEVRON - 4, SERVICE - 24, DOLPHIN - 52, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 82

HEAVE: 0.3M, PITCH 0.3DEG, ROLL 0.5DEG; CUTTING SKIPS ON BOARD: 19 (10 FULL & 9 EMPTY).

DAILY FE COST: 386,144 NOK TOTAL FE COSTS: 34,813,589 NOK

05:30 HRS: POOH & L/O RISER JNT 10 OF 23.

Daily Mud Cost: KR2,057,5	Daily Tangible Cost:	Daily Well Cost: KR5,018,845	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR5,493,640	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR127,683,019	Total Appr: KR134,000,000

Drill Water: 420.0	Potable Water: 470.0	Fuel: 369.0	Bulk Weight: 133.0	Neat Cement: 168.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 16-AUG-2001	Page: 1 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 411.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m				
DOL: 31	DFS: 26	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5			
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind: 15	Seas: 1.0 / 2.0	Bar: 752	POB: 89

Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y				
Cum Rot Hrs On Casing: 138.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:					
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD				

Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1001	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0	
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids: 0.00	% Oil: 0.00	%Water: 0.00	% Sand: 0.00	MBT: Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: 0.00 / 0.00	%DS/Bent: /	

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
0.50	1200	01 - 19	P/U & M/U UNIVERSAL TOOL C/W W/BUSHING RETRIEVAL ADAPTER. TIH, WASH DOWN, ENGAGE & PULL W/BUSH W/ 30K O/PULL.	
2.00	1230	01 - 19	POOH LAYING OUT 5" DP F/ 342M TO SURFACE. MEANWHILE CLOSE BSR & PRESS TEST CMT PLUG #4 W/ SEAWATER F/ CMT UNIT	
		01 - 19	TO 125 BAR / 5 MINS - OK. 0.3M3 PUMPED & RTND.	
0.50	1430	01 - 19	L/O EMERGENCY HANG OFF TOOL F/ DERRICK.	
2.00	1500	01 - 19	TIH W/ 5" DP TO 364M. POOH LAYING OUT 5" DP F/ 364M TO SURFACE.	
1.50	1700	01 - 19	CLEAN ALL OBM F/ DRILL FLOOR & HANDLING EQUIPMENT.	
2.00	1830	01 - 53	R/U TO PULL DIVERTER, RISER & BOP.	
2.00	2030	01 - 53	PULL & L/O DIVERTER. P/U & M/U RISER HANDLING JOINT. COLLAPSE INNER BARREL & PREPARE SLIP JNT FOR PULLING.	
1.00	2230	01 - 53	UNLATCH BOP & PULL CLEAR OF GUIDE POSTS. SKID RIG 20M TO STARBOARD.	
0.50	2330	01 - 53	PULL W/ HANDLING JOINT & L/O SAME. PARK RUCKER RING.	
		-		
		-		
		-		
		-		
		-		

Safety:

24 Hr Summary: TAG & P/TEST CMT PLUG #3. POOH & SET CMT PLUG #4. CLEAN UP & DISPLACE RISER TO SEAWATER. R/U TO PULL RISER.

Projected Operations: PULL & L/O RISER. TIH WITH MOST TOOL. CUT & RETRIEVE WELLHEAD. L/O DRILL PIPE. PULL ANCHORS.

Remarks:

Daily Mud Cost: KR2,057,5	Daily Tangible Cost:	Daily Well Cost: KR5,018,845	Incidents: NO INCIDENT REPORTED	
Cum Mud Cost: KR5,493,640	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR127,683,019	Total Appr: KR134,000,000	

Drill Water: 420.0	Potable Water: 470.0	Fuel: 369.0	Bulk Weight: 133.0	Neat Cement: 168.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 16-AUG-2001	Page: 2 Of 2	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 411.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m					
DOL: 32	DFS: 27	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5				
Torq: 0	Drag: 0.0	Rot Wgt: 68.0	P/U Wgt: 68.0	Slack Off Wgt: 68.0	Wind: 9	Seas: 1.0 / 2.0	Bar: 755	POB: 86	
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y					
Cum Rot Hrs On Casing: 138.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:						
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD					
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1001	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0		
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids: 0.00	% Oil: 0.00	%Water: 0.00	% Sand: 0.00	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: 0.00 / 0.00	%DS/Bent: /		

Drlg Gas:	Max Gas:	Conn Gas:	Trip Gas:	Trip Cl:	Remarks:
0	0		0		

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 262.45 m BHA Description: BULLNOSE - CASING CUTTER ASSY - DRILLEX MOTOR & MOST TOOL ASSY - 3 X 8" DRILL COLLARS - X/OVER - 6.1/2" DRILL COLLAR - 8.1/2" STRING STAB - 5 X 6.1/2" DRILL COLLARS - 18 X 5" HWDP

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
12.00	0000	01 - 53	L/O SLIP JOINT. POOH LAYING OUT 23 JOINTS OF RISER.	
1.50	1200	01 - 53	PULL BOPS THRU SPLASH ZONE & LAND OUT ON SPIDER BEAMS. REMOVE BEACONS & SLOPE INDICATOR. DISCONNECT & L/O RISER.	
3.00	1330	01 - 53	L/O RISER HANDLING EQUIP F/ DRILL FLOOR. SPLIT LMRP & BOPS IN CELLAR DECK. SECURE EACH IN SET BACK AREA.	
1.00	1630	01 - 19	P/U & M/U WEATHERFORD MOST TOOL (WELLHEAD RETRIEVAL TOOL). INSPECT KNIVES & TIGHTEN STOP COLLAR.	
2.00	1730	01 - 19	TIH W/ MOST TOOL. INSTALL LOCKING ASSEMBLIES & ATTACH GUIDE ROPES TO GUIDE WIRES #1 & #3 IN MOONPOOL.	
2.00	1930	01 - 19	ENGAGE WELLHEAD W/ MOST TOOL & S/O 6 MT WT. MAKE CUT @ 371M BY PUMPING SEAWATER @ 3240 LPM, 104 BAR.	
		01 - 19	NOTE: RKB - MUD LINE = 366M, 30" CUT @ 371M (5M BELOW MUD LINE).	
0.50	2130	01 - 19	LATCH WELLHEAD & LOCK MOST TOOL IN PLACE W/ ROV. ATTEMPT TO PULL WELLHEAD & PGB W/ 140 MT O/PULL - NO GO.	
1.00	2200	01 - 19	S/O, UNLOCK MOST TOOL W/ ROV. FUNCTION TOOL W/ 3240 LPM, 145 BAR. MOTOR STALLING. P/U & INSPECT KNIVES - OK.	
1.00T	2300	01 - 19	S/O & ATTEMPT TO FUNCTION TOOL AGAIN W/ 3240 LPM, 145 BAR. MOTOR STALLING. ATTEMPT TO P/U - TOOL STUCK.	
		01 - 19	TOOL FREE W/ 45 MT O/PULL. KNIFE BLADES BENT BUT WORN TO TOP OF TRAVEL INDICATING FULL CUT. UNABLE TO S/O DUE TO	
		01 - 19	BENT BLADES - POOH TO C/O BLADES & SPACE OUT FOR SECOND CUT 0.5M HIGHER THAN FIRST.	
		01 - 19	NOTE: WHILE RUNNING MOST TOOL "HAVILA CROWN", "NORTHERN CORONA" & "NORMAND BORG" ON LOCATION. ANCHORS #1 & #12	
		01 - 19	PULLED, CHAINS SHORTENED & RE-RUN.	
		01 - 19	NOTE: HIGHLAND STAR RELEASED FROM LOCATION @ 10:50 HRS.	

Safety:

24 Hr Summary: PULL RISER & BOPS. M/U & TIH W/ WEATHERFORD MOST TOOL. CUT & ATTEMPT TO PULL WELLHEAD.

Projected Operations: COMPLETE P & A OF WELLHEAD, DE-BALLAST RIG TO SURVIVAL DRAFT. WORK ANCHORS WHILE L/O DRILL PIPE.

Remarks:
POB: CHEVRON - 3, SERVICE - 20 DOLPHIN - 54, DOLPHIN SERVICE - 9 DAYS SINCE LAST LTI - 83

HEAVE: 0.3M, PITCH 0.3DEG, ROLL 0.4DEG; CUTTING SKIPS ON BOARD: 3 EMPTY.

DAILY FE COST: 183,734 NOK TOTAL FE COSTS: 34,997,323 NOK

05:30 HRS: POOH W/ WELLHEAD & MOST TOOL.

Daily Mud Cost: KR37,472	Daily Tangible Cost:	Daily Well Cost: KR3,754,531	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR5,531,112	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR131,437,550	Total Appr: KR134,000,000

Drill Water: 420.0	Potable Water: 450.0	Fuel: 356.0	Bulk Weight: 133.0	Neat Cement: 168.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 17-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 411.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m		
DOL: 33	DFS: 28	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5	
Torq: 0	Drag: 0.0	Rot Wgt: 68.0	P/U Wgt: 68.0	Slack Off Wgt: 68.0	Wind:	Seas: 0.0 / 0.0	Bar: 0	POB:
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y		
Cum Rot Hrs On Casing: 138.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:			
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD		
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1001	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids: 0.00	% Oil: 0.00	%Water: 0.00	% Sand: 0.00	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: 0.00 / 0.00	%DS/Bent: /

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: 262.45 m BHA Description: BULLNOSE - CASING CUTTER ASSY - DRILLEX MOTOR & MOST TOOL ASSY - 3 X 8" DRILL COLLARS - X/OVER - 6.1/2" DRILL COLLAR - 8.1/2" STRING STAB - 5 X 6.1/2" DRILL COLLARS - 18 X 5" HWDP

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 24.0
1.50T	0000	01 - 19	POOH W/ MOST TOOL ASSY F/ 342M TO SURFACE.	
0.50T	0130	01 - 19	C/O KNIFE BLADES & CLEAN SWARF PORTS ON MOST TOOL. RE-ATTACH GUIDE LINES TO GUIDE WIRE #1 & #3 IN MOONPOOL.	
1.50T	0200	01 - 19	TIH W/ MOST TOOL ASSY & RE-LATCH WELLHEAD.	
0.50T	0330	01 - 19	ATTEMPT TO PULL WELLHEAD FREE W/ 158 MT O/PULL - NO GO.	
1.50T	0400	01 - 19	S/O & SET DOWN 7 MT. INITIATE SECOND CUT 0.5M HIGHER THAN FIRST BY PUMPING SEAWATER @ 3240 LPM, 145 BAR.	
		01 - 19	DEPTH OF SEABED - 366M (BRT). DEPTH OF SECOND CUT - 370.5M (BRT).	
0.50	0530	01 - 19	LATCH WELLHEAD & PULL FREE W/ 158 MT O/PULL. COMMENCE DE-BALLASTING RIG TO SURVIVAL DRAFT.	
3.50	0600	01 - 19	POOH W/ MOST TOOL ASSY C/W 30" WELLHEAD, 18.3/4" HP HOUSING & PGB F/ 342M. L/O 5" DP, 5" HWDP & DC SIDEWAYS.	
1.00	0930	01 - 19	L/O PGB & WELLHEAD ASSY ON SPIDER BEAMS. SECURE SAME.	
0.50	1030	01 - 19	RELEASE MOST TOOL F/ WELLHEAD, PULL & L/O ASSY COMPLETE.	
1.00	1100	01 - 19	P/U & M/U 18.3/4" HOUSING R/TOOL. TIH, ENGAGE HP HOUSING, UNLOCK & ATTEMPT TO PULL 30" WELLHEAD F/ PGB - NO GO.	
2.00T	1200	01 - 19	CUT "LOCK RING" W/ WELDING TORCH. PULL & L/O WELLHEAD HOUSING ASSY.	
10.00	1400	01 - 40	COMMENCE L/O REMAING DRILL PIPE, DRILL COLLARS & JARS F/ DERRICK WHILE CONTINUE TO WORK ANCHORS.	
		-		
		-		

Safety:

24 Hr Summary: CUT & PULL WELLHEAD, L/O SAME. COMMENCE LAYING OUT DRILL PIPE FROM DERRICK WHILE WORKING ANCHORS.

Projected Operations: COMPLETE L/O OF DRILL PIPE & ANCHOR HANDLING. HAND WELL OVER TO STATOIL.

Remarks:
POB: CHEVRON - ?, SERVICE - ??, DOLPHIN - ??, DOLPHIN SERVICE - ? DAYS SINCE LAST LTI - 84

HEAVE: 0.?M, PITCH 0.?DEG, ROLL 0.?DEG; CUTTING SKIPS ON BOARD: 3 EMPTY.

DAILY FE COST: 183,734 NOK TOTAL FE COSTS: 35,181,057 NOK

06:00 HRS: LAST ANCHOR BOLSTERD & RIG HANDED OVER TO STATOIL AT 01:12 HRS 19TH AUGUST 2001.

Daily Mud Cost: KR37,472	Daily Tangible Cost:	Daily Well Cost: KR3,685,843	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR5,568,584	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR135,123,393	Total Appr: KR134,000,000

Drill Water: 420.0	Potable Water: 0.0	Fuel: 0.0	Bulk Weight: 133.0	Neat Cement: 168.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 18-AUG-2001	Page: 1 Of 1	

CHEVRON (Metric) **Drilling Activity Report**

Measured Depth: 3667.0 m	TVD: 3662.4 m	PBTD: 411.0 m	Proposed MD: 3625.0 m	Proposed TVD: 3625.0 m			
DOL: 34	DFS: 29	Spud Date: 22-JUL-2001	Daily Footage:	Daily Rot Hrs:	Total Rot Hrs: 117.5		
Torq:	Drag:	Rot Wgt:	P/U Wgt:	Slack Off Wgt:	Wind:	Seas: 0.0 / 0.0	Bar: 0	POB:
Last Casing Size: 339.7 mm	Set At: 1374.3m MD	1372.1m TVD	Shoe Test: 1841 EMW	Leakoff? Y			
Cum Rot Hrs On Casing: 138.1	Cum Rot Hrs On Casing Since Last Caliper:	Depth Worst Wear:	% Remaining:				
Liner Size: 0.0	Set At: 0.0 MD	0.0 TVD	Liner Top At: 0.0 MD	0.0 TVD			
Mud Co: M-I NORGE A.S.	Type: SEAWATER	Sample From: PIT	Wt: 1001	FV: 0	PV: 0	YP: 0.0	Gel: 0 / 0
WL	API: 0.0 HTHP: 0.0	FC (mm)	API: 0.0 HTHP: 0.0	Solids: 0.00	% Oil: 0.00	%Water: 0.00	% Sand: 0.00	MBT:	Ph:
Pm: 0.00	Pf/Mf: 0.00 / 0.00	Carb:	Cl:	Ca:	Bent:	Solids %HG/LG: 0.00 / 0.00	%DS/Bent: /

Drlg Gas: 0	Max Gas: 0	Conn Gas:	Trip Gas: 0	Trip Cl:	Remarks:

Bit Number	IADC	Size	Manufacturer	Serial number	Jets (Quantity - Size)	TFA	MD In	MD Out	TVD Out
					- / - / - / - / -	0			
					- / - / - / - / -	0			

Type	Meters	Hours	WOB	RPM	Motor RPM	I-Row	O-Row	DC	Loc	B	G	Char	?Pull	Cost/m
			/	/										
			/	/										

Total Length of BHA: BHA Description:

Hrs On Jars: Hours Since Last Inspection:

Bit Num	Liner	Stroke	SPM	Press.	M3/Min	Jet Vel	DP Av	DC Av	Bit kW	BHHP/SQIN	Pump kW
	/ /	/ /	/ /								
	/ /	/ /	/ /								

Survey MD	Angle	Azimuth	Direction	TVD	N/S Coordinates	E/W Coordinates	Vertical Section	DLS

Hours	From	Act-Cat	Operations Covering 24 Hours Ending at Midnight	Total Hours Reported: 1.5
1.50	T 0000	01 - 19	COMPLETE L/O REMAING DRILL PIPE, DRILL COLLARS & JARS F/ DERRICK & CONCLUDE ANCHOR HANDLING WORK.	
	T	01 - 19	LAST ANCHOR BOLSTERED & BYFORD DOLPHIN HANDED OVER TO STATOIL @ 01:12AM 19TH AUGUST 2001.	
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		
		-		

Safety:

24 Hr Summary:

Projected Operations:

Remarks:
POB: CHEVRON - ?, SERVICE - ??, DOLPHIN - ??, DOLPHIN SERVICE - ? DAYS SINCE LAST LTI - 84

HEAVE: 0.?M, PITCH 0.?DEG, ROLL 0.?DEG; CUTTING SKIPS ON BOARD: 3 EMPTY.

DAILY FE COST: 183,734 NOK TOTAL FE COSTS: 35,181,057 NOK

06:00 HRS: BYFORD DOLPLHIN ONCONTRACT TO STATOIL AS OF 01:12 HRS - 19TH AUGUST 2001.

Daily Mud Cost: KR37,472	Daily Tangible Cost:	Daily Well Cost: KR1,385,337	Incidents: NO INCIDENT REPORTED
Cum Mud Cost: KR5,606,056	Cum Tangible Cost: KR1,747,951	Cum Well Cost: KR136,508,730	Total Appr: KR134,000,000

Drill Water: 420.0	Potable Water: 0.0	Fuel: 0.0	Bulk Weight: 133.0	Neat Cement: 168.0	Blended:
Country: NORWAY	Rig: BYFORD DOLPHIN	Rig Phone: 52 88 03 35	Drilling Rep: ELKINS/HOLLINSHEAD		
Field: PL259	Lease: PL259	Well No: 6506/3-1	Well ID: UB5908 -0		
	API No: 6506/3-1	AFE No: KWENO-650631-001	Date: 19-AUG-2001	Page: 1 Of 1	

Wellsite Geological Reports

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 31.07.01	Days since spud: 10
Depth (mMD): 1386	Depth (mTVD): 1383.6	Current Operation: Washing to bottom.	
ROP(m/hr): 30	Progress (m): 4	MWD offset: CDR GR : 11.52m, RES : 8.17m, SONIC : 19.27m, MWD GR : 25.81m, D&I : 26.42m.	
Last Survey:	1362.4 mMD	1360.0 mTVD Inc: 4.11°	Azim. 157.77°

MW (sg): 1.43	PP (sg): 1.03	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight):
Pressure tested casing. Installed diverter and function tested. Started picking up 8 1/2" BHA Continue to pickup BHA. Function test LWD. Start to pick up 22 joints of drillpipe, when drillpipe below BOP's function test pods and pressure test annular preventer. Continue to RIH. Tag cement and displace to OB mud. Drillout shoe track and clean rathole. Drill 4m new formation and perform LOT (1.84 sg EMW). Rigged down.

6 o'clock update:
Washed to bottom. Continued to drill ahead from 1386m MD to 1529m MD. through the Naust formation (Claystone with minor Sandstone intervals).

Operations next 24 hours:
Continued to drill ahead looking for first core point and either POOH to pick up core barrel or continue to drill on to the Lysing formation

GEOLOGICAL DESCRIPTION

Interval (m)	Description
1382-1386m	CLAYSTONE : greyish green, occasionally dark yellowish green, occasionally medium to dark grey, firm, subblocky, non calcareous, good trace carbonaceous material, micromicaceous in plaves, occasionally silty.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	1382-1386	0.22	2000	tr	tr	tr	-	-	-
Gas Peaks									
Conn. Gas									
Trip Gas									
Wiper Trip Gas									

PORE PRESSURE

Interval: 1382-1386	Min. (sg): 1.03	Max. (sg): 1.03

Comments:

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDBRT	Prognosed mTVDBRT	Difference m +/-	Basis of Pick

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 01.08.01	Days since spud: 11
Depth (mMD): 1698	Depth (mTVD): 1695.6	Current Operation: Weight up mud in pits to 1.52sg	
ROP(m/hr): 36.7	Progress (m): 312	MWD offset: CDR GR : 11.52m, RES : 8.17m, SONIC : 19.27m, MWD GR : 25.81m, D&I : 26.42m.	

Last Survey:	1641.84 mMD	1638.89 mTVD	Inc: 4.55°	Azim. 147.28°
MW (sg): 1.50	PP (sg): >1.50	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Washed to bottom. Continued to drill ahead from 1386m MD to 1698m MD. At +/- 1660m MD began weighting mud up to 1.55sg while drilling. After beginning to circulate 1.5sg mud round hole. Observed a gain in the active while making a connection at 1698m MD. Shut well in. Suspected "U" tubing with uneven mud, but after bleeding off 3.5bbls, the casing pressure returned to 200psi. Circulated 1.5sg mud using driller's method. Shut well in. Opened well and monitored on trip tank 2 bbls bleed back over 45mins, meanwhile circulating riser volume with 1.5sg mud. Problem with choke line (plugged), reverse circulated choke line to clear. Open choke to trip tank - static, Open lower annular, no flow. Start circulating bottoms up - pit gain 45bbls, shut well in. Weight up pits to 1.52sg.

6 o'clock update: Continued to wieght up pits to 1.52sg. Circulated 1.52sg mud into hole using driller's method.

Operations next 24 hours:
Continue to circulate out gas/water influx. Monitor well. Continue to weight up to 1.55sg, make short trip to shoe. Drill ahead from 1698m MD to next target, the Lysing Formation.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
1386-1552m	**Naust Formation - Predominantly Claystone with occasional Sandy intervals** CLAYSTONE : medium to medium dark grey to greyish green, occasionally dark yellowish green, soft to moderately firm, subblocky to amorphous, sticky in places, trace carbonaceous material, occasionally micromicaceous, rare trace pyrite, non to occasionally moderately calcareous. SANDSTONE : colourless, pale yellow brown, rare pale pink, transluscent to clear, fine to silt grained, predominantly very fine grained, subangular to subrounded, moderately sorted, trace carbonaceous material.
1552-1604m	**KaI Formation - Predominantly Claystone with occasional Sandstone stringers** CLAYSTONE : greenish black to olive black, firm, subblocky, brittle, silty in places, non calcareous. SANDSTONE : colourless, off white, pale yellow brown, opaque to transluscent, very fine grained to silty, grading to SILTSTONE in places, subangular to sunrounded, moderately sorted.
1604-1654m	**Brygge Formation - Massive Claystone giving way to interbedded Sandstone and Claystone below 1631m MD** CLAYSTONE : medium grey to greyish green, commonly pale blue green, occasionally moderate green, soft to firm, subblocky to amorphous, non to slightly calcareous, silty in places, occasionally tuffaceous, trace carbonaceous specks. SANDSTONE : colourless to pale yellow brown, very fine to silt grained, grading to SILTSTONE in places, subangular to subrounded, moderately sorted.
1654-1698m	**Top Flooding Surface (Brygge Sandstone) - Massive Sandstone with occasional Claystone beds and Limestone stringers.** CLAYSTONE : a/a SANDSTONE : colourless, pale yellow brown, rare pale pink, clear to transluscent, commonly opaque, predominantly very fine grained, occasionally fine to medium grained, subangular to subrounded, moderately sorted, loose, trace glauconite, abundant ?carbonaceous material.. LIMESTONE : pale yellow brown to pale orange brown, occasionally pale pink, soft to moderately hard, subblocky to crumbly, cryptocrystalline to microcrystalline.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	1386-1552	0.26	3176	-	2	-	2	1	5
Drill Gas	1552-1604	0.42	4642	1	4	9	1	2	1
Drill Gas	1604-1654	0.61	6170	-	3	10	-	-	-
Drill Gas	1654-1698	0.67	6784	-	3	11	1	-	-
Gas Peak	1629	0.7	7166	-	2	10	1	1	-
? Conn. Gas Peak	1671	3.06	30791	-	1	3	11	1	1
Circ thru Choke	1689	4.73	46623	-	9	10	2	3	1

PORE PRESSURE

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Interval: 1386-1698	Min. (sg): 1.03	Max. (sg): >1.50
Comments: Probable connection gas at 1671m MD.		

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 02.08.01	Days since spud: 12
Depth (mMD): 1698	Depth (mTVD): 1695.6	Current Operation: Opening up well	
ROP(m/hr): -	Progress (m): -	MWD offset: CDR GR : 11.52m, RES : 8.17m, SONIC : 19.27m, MWD GR : 25.81m, D&I : 26.42m.	
Last Survey:	1641.84 mMD	1638.89 mTVD Inc: 4.55°	Azim. 147.28°
MW (sg): 1.57	PP (sg): >1.52	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to wieght up pits to 1.52sg. Circulated 1.52sg mud into hole using driller's method. Open up well still flowing. Kill well and displace to 1.57sg mud. Open up well

6 o'clock update:. Well static. Circulated and conditioned mud

Operations next 24 hours:
Continue to circulate and condition mud. Wiper trip to shoe. Drill ahead to next target in the Lysing formation.

GEOLOGICAL DESCRIPTION

Interval (m)	Description

SHOWS DATA

Interval (m)	Description
No Shows.	

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm

PORE PRESSURE

Interval: 1698	Min. (sg): >1.52	Max. (sg): >1.52

Comments:

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Top Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 03.08.01	Days since spud: 13
Depth (mMD): 1736	Depth (mTVD): 1732.9	Current Operation: RIH	
ROP(m/hr): 30	Progress (m): 38	MWD offset: CDR GR : 11.52m, RES : 8.17m, SONIC : 19.27m, MWD GR : 25.81m, D&I : 26.42m.	
Last Survey:	1699.28 mMD	1696.15 mTVD Inc: 4.46°	Azim. 140.09°
MW (sg): 1.57	PP (sg): 1.54	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3 / LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Well static. Circulated and conditioned mud. POOH to shoe. Perform rig maintenance. RIH and tag bottom Circulate bottoms up. Take SCR's and drill ahead from 1698m MD to 1736m MD. POOH to do repeat section with LWD due to suspected problem with resistivity - tool OK RIH

6 o'clock update: Continued to RIH. Drilled ahead from 1736m MD to 1905m MD - Provisional Tare Formation 1741m MD, Provisional Top Springar Formation 1797m MD

Operations next 24 hours:
Drill ahead to next target in the Lysing formation.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
1698-1736	**(Brygge Formation) - Dominantly Sandstone with minor Claystone interbeds and rare Limestone stringers.** CLAYSTONE : medium to dark grey, occasionally dark greyish blue, occasionally pale greyish green, mottled, firm, subblocky, micromicaceous in places, occasionally tuffaceous, trace micropyrite, occasional carbonaceous material. SANDSTONE : colourless, pale yellow brown, rare pale pink, clear to transluscent, commonly opaque, predominantly very fine grained, occasionally fine to medium grained, predominatly subangular to angular, occasionally subrounded, moderately sorted, loose, trace pyrite, trace glauconite, abundant ?carbonaceous material.. LIMESTONE : white to off white, firm to moderately hard, subblocky to splintery, microcrystalline.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	1698-1736	0.2	1993	-	1	14	1	1	1

PORE PRESSURE

Interval: 1698-1736	Min. (sg): 1.54	Max. (sg): 1.54

Comments: Gas levels stable/slightly declining, no connection gas.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 04.08.01	Days since spud: 14
Depth (mMD): 2560	Depth (mTVD): 2555.5	Current Operation: Drilling ahead 8 1/2" hole.	
ROP(m/hr): 54.2	Progress (m): 824	MWD offset: CDR GR : 11.52m, RES : 8.17m, SONIC : 19.27m, MWD GR : 25.81m, D&I : 26.42m.	
Last Survey:	2533.5 mMD	2528.97 mTVD Inc: 1.60°	Azim. 161.93°
MW (sg): 1.57	PP (sg): 1.54	Csg Size (ins):13 3/8"	Csg Depth(m): 1374.3 LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to RIH. Drilled ahead from 1736m MD to 2304m MD. 5bbl gain detected in active. Flow checked - static. Circulated Bottoms up. Drilled ahead 8 1/2" hole from 2304m MD to 2560m MD

6 o'clock update: Continued to drill ahead from 2560m MD to 2764m MD in the Nise Formation.

Operations next 24 hours:
Drill ahead to next target in the Lysing formation. POOH to pick up coring assembly.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
1741-1797	**(Tare Formation) - Interbedded Claystone and Sandstone with minor Limestone stringers becoming Claystone dominated below 1770m with occasional Sandstone beds.** CLAYSTONE : pale to medium blue green, occasionally greyish blue green, predominantly firm, soft in places, subblocky to crumbly, very rarely tuffaceous, micromicaceous, occasionally silty. SANDSTONE : predominantly clear, colourless, commonly transluscent pale yellow brown, predominantly very fine to fine grained, occasionally medium grained, subangular, occasionally subrounded, moderately sorted, abundant carbonaceous? material/?altered biotite mica, trace fine mica flakes, rare trace pyrite. LIMESTONE : off white to white, moderately hard, subblocky to splintery, slightly argillaceous, microcrystalline.
1797-2420	**(Springar Formation) - Massive Claystone sequence with Siltstone interbeds towards the base and occasional Limestone stringers** CLAYSTONE : predominantly medium to medium dark grey, medium grey brown, occasionally olive grey, subblocky to blocky, crumbly in places, slightly sticky in places, micromicaceous, trace glauconite, trace micropyrite, silty in places grading to SILTSTONE in places, occasional carbonaceous material, slightly calcareous in places. SILTSTONE : medium grey to medium grey brown, firm, subblocky to blocky, slightly crumbly, grading to CLAYSTONE in places, trace sand, rarely grading to very fine SANDSTONE in places with weak calcite cement. trace glauconite, trace carbonaceous material. LIMESTONE : very pale orange brown to dark yellow orange, firm to moderately hard, subblocky to blocky occasionally splintery, dolomitic, occasionally grading to DOLOMITE, slightly argillaceous in places, cryptocrystalline to microcrystaline.
2420-2560	**(Nise Formation) - Massive Claystone sequence with Siltstone interbeds in places and occasional Limestone and Dolomite stringers** CLAYSTONE : medium to medium dark grey, olive grey, medium dark brown, firm, occasionally soft, subblocky to blocky, slightly sticky in places, micromicaceous, silty in places, grading SILTSTONE, non to locally very calcareous. SILTSTONE : a/a LIMESTONE : a/a DOLOMITE : greyish orange to dark yellowish orange, very hard, blocky to sublocky, microcrystalline.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	1736-1797	0.3	3022	-	1	15	3	1	-
Drill Gas	1797-2420	0.5	5889	28	5	22	2	1	1
Drill Gas	2420-2560	0.7	7102	51	9	23	1	1	-
Gas Peak	2180	0.6	6136	37	4	15	1	1	-
Conn. Gas Peak?	2216	1.1	11800	40	6	17	1	1	1

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Gas Peak	2245	0.7	7681	36	5	19	4	11	1
Gas Peak	2322	1.3	13489	65	9	21	1	1	-
Gas Peak	2354	1.5	11366	69	10	22	1	1	-
Gas Peak	2400	1.6	13515	78	12	22	1	1	-
Gas Peak	2435	1.2	11313	79	13	23	1	1	-

PORE PRESSURE

Interval: 1736-2560	Min. (sg): 1.4	Max. (sg): 1.54

Comments: One possible connection gas at 2216m, but this peak was also coincident with some faster drilling no other connection gas peaks where observed. The Gas in readings taken from the active pit show 50 to 60% of gas is being recycle in the system. The resistivity trend in the Springar and Nise Claystones suggests a stable or decreasing pore pressure. The Isonic is giving erratic values and is currently of no use for pore pressure evaluation.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 05.08.01	Days since spud: 15
Depth (mMD): 3101	Depth (mTVD): 3096.9	Current Operation: POOH to pick up Coring assembly	
ROP(m/hr): 39.4	Progress (m): 541	MWD offset: CDR GR : 11.52m, RES : 8.17m, SONIC : 19.27m, MWD GR : 25.81m, D&I : 26.42m.	
Last Survey: 3049.8 mMD	3045.2 mTVD	Inc: 1.75°	Azim. 232.8°
MW (sg): 1.57	PP (sg): 1.54	Csg Size (ins):13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to drill ahead from 2560m MD to 3101m MD. Circulate bottoms and circulate hole clean. POOH.

6 o'clock update: Continued to POOH. Lay down bit and LWD tools. Start picking up 76m core barrel and corehead. (73m maximum length cut)

Operations next 24 hours:
Continue picking up coring assembly. RIH and cut core no.1

GEOLOGICAL DESCRIPTION

Interval (m)	Description
2560-3088	**(Nise Formation) - Massive Claystone sequence with Siltstone interbeds in places and occasional Limestone and Dolomite stringers** CLAYSTONE : medium to medium dark grey, olive grey, medium dark brown, firm, occasionally soft, subblocky to blocky, slightly sticky in places, micromicaceous, silty in places, grading SILTSTONE, non to locally very calcareous. SILTSTONE : medium grey to medium grey brown, firm, subblocky to blocky, slightly crumbly, grading to CLAYSTONE in places, trace sand, rarely grading to very fine SANDSTONE in places with weak calcite cement. trace glauconite, trace carbonaceous material. LIMESTONE : very pale orange brown to dark yellow orange, firm to moderately hard, subblocky to blocky occasionally splintery, dolomitic, occasionally grading to DOLOMITE, slightly argillaceous in places, cryptocrystalline to microcrystaline. DOLOMITE : greyish orange to dark yellowish orange, very hard, blocky to sublocky, microcrystalline.
3088-3101	**(Lysing Formation) - A Sandstone dominated interbedded Sandstone Claystone sequence, the upper 3m of which well cement with calcite.** CLAYSTONE : medium to medium dark grey, medium grey brown, olive grey, subblocky to blocky, crumbly in places, silty, commonly grading to SILTSTONE, trace glauconite, micromicaceous in places, trace carbonaceous material, non to slightly calcareous. SANDSTONE : predominantly loose, colourless to off white, very pale yellow brown, clear to transluscent, predominantly fine to medium grained, rare coarse grained, rounded to subrounded, occasionally angular, subspherical, poor to moderately sorted, occasionally consolidated with moderate to strong calcite cement,, occasional light to medium grey argillaceous matrix, trace very fine disseminated micropyrite, trace glauconite, no to poor visible porosity, NO SHOWS.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	2560-3088	0.5	4659	59	15	33	2	2	-
Drill Gas	3088-3101	0.7	6450	118	28	26	3	2	-
Gas Peak	2638	1.7	13232	115	23	22	2	1	1
Gas Peak	2730	1.2	11748	106	20	23	2	1	-
Gas Peak	2759	1.3	13471	106	20	22	2	1	-
Gas Peak	2828	2.6	23725	317	70	29	6	2	1
Gas Peak	3062	1.6	11119	189	43	21	4	2	-
Gas Peak	3095	1.1	10316	29	92	24	9	2	1

PORE PRESSURE

Interval: 1736-2560	Min. (sg): 1.4	Max. (sg): 1.54

Comments:

FORMATION PICKS LAST 24 HOURS

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 06.08.01	Days since spud: 16
Depth (mMD): 3128	Depth (mTVD): 3123.4	Current Operation: Cutting core #1	
ROP(m/hr): 13	Progress (m): 27	MWD offset: -	
Last Survey:	3049.8 mMD	3045.2 mTVD	Inc: 1.75° Azim. 232.8°
MW (sg): 1.57	PP (sg): 1.54	Csg Size (ins):13 3/8"	Csg Depth(m): 1374.3 LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continue POOH. Lay down LWD tools and bit. Pick up coring assembly. RIH and circulate bottoms up. Drop ball and cut core #1 from 3101.5m MD to 3128m MD.

6 o'clock update: Continued to cut core #1 from 3128 m MD to 3171.5m MD (70m Cut). Pump out of reservoir, continue to circulate boosting the riser

Operations next 24 hours:
POOH with and recover core #1. Pick up bit and LWD tools and RIH. Drill ahead to TD.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
3101-3128	**(Lysing Formation) – An interbedded Sandstone, Claystone sequence, the upper 3m of which well cement with calcite.** 80-90% CLAYSTONE : medium to medium dark grey, medium grey brown, olive grey, subblocky to blocky, crumbly in places, silty, commonly grading to SILTSTONE, trace glauconite, micromicaceous in places, trace carbonaceous material, non to slightly calcareous. 10-20% SANDSTONE : predominantly loose, colourless to off white, very pale yellow brown, clear to transluscent, predominantly fine to medium grained, rare coarse grained, rounded to subrounded, occasionally angular, subspherical, poor to moderately sorted, occasionally consolidated with moderate to strong calcite cement,, occasional light to medium grey argillaceous matrix, trace very fine disseminated micropyrite, trace glauconite, no to poor visible porosity, NO SHOWS. (Cuttings descriptions) **Detailed Core description report to follow.**

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	3101-3128	0.9	8610	59	20	30	3	1	-
Gas Peak	3107.5	1.5	15646	84	48	12	5	1	-

PORE PRESSURE

Interval: 1382-3128	Min. (sg): 1.11	Max. (sg): 1.54

Comments:

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 07.08.01	Days since spud: 17
Depth (mMD): 3171.5	Depth (mTVD): 3166.9	Current Operation: Cutting core #1	
ROP(m/hr): 9.2	Progress (m): 43.5	MWD offset: GR - 11.56m, Res - 8.21m , D&I - 18.95m	
Last Survey:	3049.8 mMD	3045.2 mTVD Inc: 1.75°	Azim. 232.8°
MW (sg): 1.57	PP (sg): 1.54	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3 LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to cut core #1 from 3128 m MD to 3171.5m MD (70m Cut). Pump out of reservoir, continue to circulate boosting the riser. Flowcheck, POOH with and recovered core #1 (67.69m recovered - 96.7% recovery). Laid down core barrel. Picked up new bit and LWD tools, surface tested same and RIH picking up singles from the deck

6 o'clock update: Continued to RIH picking up singles from deck. Continued RIH.

Operations next 24 hours:
Continue to RIH ream cored section for LWD data. Drill ahead to TD.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
3128-3171.5	**(Lysing Formation) - A Sandstone dominated interbedded Sandstone Claystone sequence, the upper 3m of which well cement with calcite.** 80-90% CLAYSTONE : medium to medium dark grey, medium grey brown, olive grey, subblocky to blocky, crumbly in places, silty, commonly grading to SILTSTONE, trace glauconite, micromicaceous in places, trace carbonaceous material, non to slightly calcareous. 10-20% SANDSTONE : predominantly loose, colourless to off white, very pale yellow brown, clear to transluscent, predominantly fine to medium grained, rare coarse grained, rounded to subrounded, occasionally angular, subspherical, poor to moderately sorted, occasionally consolidated with moderate to strong calcite cement,, occasional light to medium grey argillaceous matrix, trace very fine disseminated micropyrite, trace glauconite, no to poor visible porosity, NO SHOWS. (Cuttings descriptions) **Detailed Core Description report to follow.**

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	3128-3171.5	0.9	8610	59	20	30	3	1	-

PORE PRESSURE

Interval: 1382-3171	Min. (sg): 1.11	Max. (sg): 1.54

Comments:

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 08.08.01	Days since spud: 18
Depth (mMD): 3437	Depth (mTVD): 3432.1	Current Operation: Drilling ahead 8 1/2" hole.	
ROP(m/hr):	Progress (m):	MWD offset: GR - 11.56m, Res - 8.21m , D&I - 18.95m	
Last Survey:	3394.8 mMD	3390 mTVD Inc: 1.8°	Azim. 240.7°
MW (sg): 1.60	Max PP (sg): 1.54	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3 / LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to RIH picking up singles from deck. Continued RIH. Reamed cored section for LWD data. Drill ahead from 3171.5m MD to 3437m MD.

6 o'clock update: Continued to drill ahead from 3437m MD tp 3587m MD

Operations next 24 hours:
Continue to Drill ahead to TD. Circulate bottoms up, pull out of hole. Rig up to run Schlumberger wireline.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
3171.5-3437	**(Lange Formation) - Predominantly Claystone with occasional Limestone and Sandstone stingers, and rare Dolomite strinnger** **CLAYSTONE** : medium to medium dark grey, olive grey, firm, blocky, micromicaceous, occasional very fine carbonaceous material, occasionally silty, occasionally grading to SILTSTONE, non calcareous. **SANDSTONE** : (often present as rock flour) very pale grey to white, firm, friable in places, blocky, very fine grained, clear to transluscent, colourless to very pale grey, subrounded, subangular, subspherical, moderately sorted,good trace glauconite, trace calcite cement, silty, grading to SILTSTONE, no visible porosity, NO SHOWS. **LIMESTONE** : pale yellowish orange to dark yellowish orange, firm to moderately hard, blocky, crumbly in places, argillaceous, locally very argillaceous, dolomitic, grading to DOLOMITE in places, cryptocrystalline to occasionally microcrystalline. **DOLOMITE** : light brown to moderate yellowish brown, very hard, blocky to angular, microcrystalline.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	3171-3220	1.0	9500	130	20	5	10	1	-
Drill Gas	3220-3437	0.75	7000	100	13	-	5	-	-
Gas Peak	3258	1.35	10853	141	32	15	3	1	-
Gas Peak	3400	1.37	11323	218	48	15	5	1	-

PORE PRESSURE

Interval: 3171-3437	Min. (sg): 1.3	Max. (sg): 1.3

Comments: -The completed core description report for core one is with this report.
-Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 09.08.01	Days since spud: 19
Depth (mMD): 3667	Depth (mTVD): 3662.0	Current Operation: POOH	
ROP(m/hr): 25.6	Progress (m): 230	MWD offset: GR - 11.56m, Res - 8.21m , D&I - 18.95m	
Last Survey:	3641.9 mMD	3636.9 mTVD Inc: 1.9°	Azim. 232.6°
MW (sg): 1.60	Max PP (sg): 1.54	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3 / LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to drill ahead from 3437m MD to 3600m MD. Circulated while waiting on boat for more cuttings skips. Continued drill at 11:30 from 3600m MD to 3667m MD TD for well 6506/3-1. (approx 14:30). Circulated bottoms up and continued circulating until hole clean. flowcheck and POOH.

6 o'clock update: Continued to POOH. Laid down bit and LWD, clear rigfloor. Rig up Schlumberger wireline. Pick up first toolstring and RIH with run 1 PEX.

Operations next 24 hours:
POOH with Run 1 PEX. Rig down Run 1. Rig up Run 2 OBT/DSI and RIH.

GEOLOGICAL DESCRIPTION

Interval (m)	Description
3437-3667	**(Lange Formation) - Predominantly Claystone with occasional Limestone and Sandstone stingers, and rare Dolomite stringers** **CLAYSTONE** : medium to medium dark grey, olive grey, firm, blocky, micromicaceous, occasional very fine carbonaceous material, occasionally silty, occasionally grading to SILTSTONE, non calcareous. **SANDSTONE** : (often present as rock flour) very pale grey to white, firm, friable in places, blocky, very fine grained, clear to transluscent, colourless to very pale grey, subrounded, subangular, subspherical, moderately sorted,good trace glauconite, trace calcite cement, silty, grading to SILTSTONE, no visible porosity, NO SHOWS. **LIMESTONE** : pale yellowish orange to dark yellowish orange, firm to moderately hard, blocky, crumbly in places, argillaceous, locally very argillaceous, dolomitic, grading to DOLOMITE in places, cryptocrystalline to occasionally microcrystalline. **DOLOMITE** : light brown to moderate yellowish brown, very hard, blocky to angular, microcrystalline.

SHOWS DATA

Interval (m)	Description
	No Shows.

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas	3437-3502	1.5	14000	200	35	15	5	2	-
Drill Gas	3502-3667	0.8	7000	150	30	12	5	3	1
Gas Peak	3440	2.19	20530	338	71	17	7	1	-
Gas Peak	3472	2.37	22865	380	72	17	6	2	-
Gas Peak	3526	1.36	10816	241	51	19	6	1	-
Gas Peak	3596	1.27	9003	210	49	20	7	2	1
Gas Peak	3618	1.65	13101	240	52	17	6	1	1

PORE PRESSURE

Interval: 3437-3667	Min. (sg): 1.3	Max. (sg): 1.4

Comments: -Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 10.08.01	Days since spud: 20
Depth (mMD): 3667	Depth (mTVD): 3662.0	Current Operation: RIH with Wireline Run 3 -PEX	
ROP(m/hr): -	Progress (m): -	MWD offset: -	
Last Survey:	3641.9 mMD	3636.9 mTVD Inc: 1.9°	Azim. 232.6°
MW (sg): 1.60	Max PP (sg): 1.54	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to POOH. Laid down bit and LWD, clear rigfloor. Rig up Schlumberger wireline. Pick up first toolstring and RIH with Run 1 AIT-PEX-HNGS. Do repeat section at 3180-3060m on way in tag bottom and POOH with and Rig down Run 1. Rig up Run 2 DSI-GR-AMS-OBDT and RIH. Do repeat section from 3188-2998m on the way in, tag bottom and POOH. Rig down Run 2 DSI-GR-AMS-OBDT. Rig up Run 3 PEX and RIH.

6 o'clock update: Continued to RIH with Run 3 and relog anomalous density data in Brygge formation. POOH and rig down Run 3. Rig up Run 4 VSP-GR and RIH

Operations next 24 hours:
Continue to RIH with Run 4 and shoot VSP survey and walk away survey, POOH and rig down run 4 VSP-GR. Rig up Run 5 MDT-GR and RIH to take pressures and samples.

GEOLOGICAL DESCRIPTION

Interval (m)	Description

SHOWS DATA

Interval (m)	Description
No Shows.	

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Drill Gas									
Gas Peak									

PORE PRESSURE

Interval: -	Min. (sg): 1.4	Max. (sg): 1.4

Comments: -Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 11.08.01	Days since spud: 21
Depth (mMD): 3667	Depth (mTVD): 3662.0	Current Operation: RIH with cleanout assembly	
ROP(m/hr): -	Progress (m): -	MWD offset: -	
Last Survey:	3641.9 mMD	3636.9 mTVD Inc: 1.9°	Azim. 232.6°
MW (sg): 1.60	Max PP (sg): 1.54	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3 LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to RIH with Run 3 and relog anomalous density data in Brygge formation. POOH and rig down Run 3. Rig up Run 4 VSP-GR and RIH taking checkshots at 2400m and 3200m. RIH to 3450m and started GR correlation pass. Hole sticky, overpull up to 3500lbs at 3440 and 3410m, GR correlation no good. RIH to 3475m and began 2nd attempt at GR correlation pass. Again sticky about 1500lbs overpull. Then 3500lbs overpull at 3402m - tool stuck for about an hour before it came free. POOH, Overpull at 3346m (2000lbs) and 3107m (2500lbs). Overpull of 3500lbs at 3086m and tool stuck came free after nearly 4 hours. POOH and rigged down VSP-GR and Schlumberger wireline. Picked up cleanout assembly and RIH. Cut and slipped drilling line at the shoe. Circulate and conditioned mud at shoe.

6 o'clock update: Continued to circulate and condition mud at the shoe. Continued to RIH breaking circulation every 20 stands. Tag bottom and circulated bottoms up. Circulated hole clean and boosted riser.

Operations next 24 hours: Continue to circulate and condition mud and boost riser. POOH with conditioning assembly. Clear rigfloor. Rig up Schlumberger wireline, pick up wireline Run 5 VSP-GR and RIH.

GEOLOGICAL DESCRIPTION

Interval (m)	Description

SHOWS DATA

Interval (m)	Description
No Shows.	

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm
Gas Peak Circ.	2100	6.6	64391	241	42	10	5	-	-
Trip Gas	3667	5.0	46285	303	53	9	5	1	-

PORE PRESSURE

Interval: -	Min. (sg): 1.4	Max. (sg): 1.4

Comments: -Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 12.08.01	Days since spud: 22
Depth (mMD): 3667	Depth (mTVD): 3662.0	Current Operation: Attempting to sample with MDT	
ROP(m/hr): -	Progress (m): -	MWD offset: -	
Last Survey:	3641.9 mMD	3636.9 mTVD Inc: 1.9°	Azim. 232.6°
MW (sg): 1.60	Max PP (sg): 1.53	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3 LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to circulate and condition mud at the shoe. Continued to RIH breaking circulation every 20 stands. Tag bottom and circulated bottoms up. Circulated hole clean and boosted riser. Start POOH. Hydraulic hose burst on the upper racking arm. Circulated while repairing. Tagged bottom and circulated bottoms up. POOH 5 stands wet and flowchecked, slugged pipe and POOH. At surface it was decided due to weather considerations to run the MDT before the VSP. Rigged up Schlumberger wireline and rigged up Run 5 - MDT-GR and RIH. Took pretests (10 prior to sample 6 good, 2 supercharged, 2 tight, further 4 while attempting to sample) in the Brygge.

6 o'clock update: Continued to attempt a sample in the Brygge - no go. RIH to Lysing take 6 pretests and attempt sample

Operations next 24 hours: Continue sampling in the Lysing Formation. POOH attempt sample in th Brygge. POOH and rig down Run 5 MDT-GR. Rig up Run 6 VSP-GR and RIH.

GEOLOGICAL DESCRIPTION

Interval (m)	Description

SHOWS DATA

Interval (m)	Description
No Shows.	

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm

PORE PRESSURE

Interval: -	Min. (sg): 1.4	Max. (sg): 1.4

Comments: -Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 13.08.01	Days since spud: 23
Depth (mMD): 3667	Depth (mTVD): 3662.0	Current Operation: Continuing with VSP survey	
ROP(m/hr): -	Progress (m): -	MWD offset: -	
Last Survey:	3641.9 mMD	3636.9 mTVD Inc: 1.9°	Azim. 232.6°
MW (sg): 1.60	Max PP (sg): 1.53	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued to attempt a sample in the Brygge - no go. RIH to Lysing take 8 pretests and sampled (3xMPSR) at 3091.2m. POOH and rigged Run 5 MDT-GR. Picked up Run 6 VSP-GR and RIH taking checkshots at 1280, 2400 and 3200m. Correlated GR over Lysing, RIH and tag bottom. Begin shooting VSP survey at 10m levels Pull up to 2898m and start (18:10-22:45) Walkaway VSP survey. Continued with VSP survey at 10m levels.

6 o'clock update: Continued VSP survey at 10m levels, POOH and rigged down Run 6 VSP-GR. Picked up Run 7 CST-GR Problem with cablehead troubleshoot.

Operations next 24 hours: Continue to repair cablehead. RIH with Run 6 CST-GR to TD and shot sidewall cores. POOH with Run 7 and rigdown Schlumberger wireline. Commence P&A programme.

GEOLOGICAL DESCRIPTION

Interval (m)	Description

SHOWS DATA

Interval (m)	Description
No Shows.	

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm

PORE PRESSURE

Interval: -	Min. (sg): 1.45	Max. (sg): 1.45

Comments: -Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

WELLSITE GEOLOGICAL REPORT

Wellsite Geologist: Mike Donovan\Ed Linaker

Rig: Byford Dolphin	Well: 6506/3-1	Date: 14.08.01	Days since spud: 24
Depth (mMD): 3667	Depth (mTVD): 3662.0	Current Operation: Continuing with P&A Progamme.	
ROP(m/hr): -	Progress (m): -	MWD offset: -	
Last Survey:	3641.9 mMD	3636.9 mTVD Inc: 1.9°	Azim. 232.6°
MW (sg): 1.60	Max PP (sg): 1.53	Csg Size (ins): 13 3/8"	Csg Depth(m): 1374.3	LOT (sg): 1.84

Operations last 24 hours (midnight to midnight): Continued VSP survey at 10m levels, POOH and rigged down Run 6 VSP-GR. Picked up Run 7 CST-GR Problem with cablehead troubleshoot. Continue to repair cablehead. RIH with Run 6 CST-GR to TD and shot sidewall cores. (Shot 53, Recovered 29, Empty 2, Misfire 8, Lost 14, Recovery 55%) POOH with Run 7 and rigdown Schlumberger wireline. Commence P&A programme.

6 o'clock update: Continued P&A programme.

Operations next 24 hours: Continue P&A programme.

GEOLOGICAL DESCRIPTION

Interval (m)	Description

SHOWS DATA

Interval (m)	Description
No Shows.	

GAS DATA

Gas Type	Int. (m)	Total(%)	C1 ppm	C2 ppm	C3 ppm	iC4 ppm	nC4ppm	iC5 ppm	nC5 pm

PORE PRESSURE

Interval: -	Min. (sg): 1.45	Max. (sg): 1.45

Comments: -Top Lange based on correlation with 6506/6-1.

FORMATION PICKS LAST 24 HOURS

Formation	Depth mMDBRT	Depth mTVDSS	Prognosed mTVDSS	Difference m +/-	Basis of Pick
Naust	502	477	464	+13	LWD GR/Resistivity
Kai	1552	1524.3	1515	+9.3	LWD Resistivity
Brygge	1604	1576.2	1552	+24.2	LWD Sonic
Tp Flooding Surface	1654	1626	1606	+20	LWD Resistivity/Sonic
Tare	1741	1712.8	1690	+22.8	LWD Resistivity/Cuttings
Springar	1797	1768.6	1756	+12.6	LWD GR/Sonic/Cuttings
Nise	2420	2390.2	2342	+47.8	LWD GR
Lysing	3088	3058.3	3043	+15.3	LWD GR/Resistivity/Cuttings
Lange	3137.5	3107.8	3117	-9.2	LWD GR/Resistivity

Enclosure 2

Contractors' End of Well Summaries and Reports

MI Norge AS
Drilling Fluids Summary

CHEVRON

Drilling Fluids Summary

Well: 6506 / 3-1

Prepared by: Tom Rapp	Verified by:	Approved by: Henning Balzer
Date:	Date:	Date:
Revision: 0	Date:	

CONTENT

GENERAL

OPERATOR: **Chevron**

WELL: **6506 / 3-1**

AREA: **Haltenbanken**

CHEVRON SUPERVISORS: **M. Elkins, R. Moore**

DRILLING CONTRACTOR: **Dolphin**

RIG: **Byford Dolphin**

M-I NORGE ENGINEERS: **K. Low, R. Campbell, D. Fraser-Wilson, P. Hammond**

Hole section	Mud system	Drilled to, mMD/TVD	Casing, in. / Shoe depth
36"	SW / Bentonite	456 / 456	30 / 451
17 ½"	SW / Bentonite	1382 / 1382	13 3/8 / 1374
8 ½"	Versavert OBM	3667 / 3662	N / A

Summary of objectives

Three sections were drilled, where two were riserless. Two sections were drilled with water-based mud and one with oil based mud.

The well was successfully drilled to a total depth of 3667 meters.

A suite of logs successfully completed.

The well was abandoned by setting cement plugs from 3109 – 3025m, from 1791 – 1491m and from 1491 – 1274m across the 13 3/8" casing shoe. The final top plug was set from 661 – 451m.

The wellhead was then cut and retrieved after displacing to seawater above the top plug.

Details of 36" hole section

36" hole drilled from:	366 m
36" hole drilled to:	456 m
Hole length:	90 m
Drilling fluid:	Seawater/Bentonite
Total Cost for section:	176,442.28 NOK
Cost per meter:	1,960.47 NOK
Cost per cubic meter:	1,208.51 NOK
Max. Inclination:	4.0°

Summary of drilling events

The well was spudded at 0030 hrs on 22nd of July. After running the BHA and testing the Anderdrift tool, the seabed was tagged at 366 metres. Drilling was rapid, the open hole being cleaned with seawater and pumping 8 m^3 pre-hydrated sweeps as required. At TD 15 m^3 of hi-viscosity sweep was pumped to finally clean the hole. A check revealed no gas present and the well was displaced to 1.2 sg Gel mud. The casing was run and cemented without problems.

Drilling fluid performance

Prehydrated gel mud at 70 kg/m^3 was mixed, with a yielded viscosity in excess of 150 sec/qt, this was used to sweep the hole while drilling. The hole was displaced to 1.20 sg Gel mud (concentration of 55kg/m^3 bentonite) at TD. Kill mud at 1.60 sg was prepared as a contingency.

Hole problems

There were no hole problems experienced in this section.

Cost comments

Third party costs for CMC were justified because the time schedule for drilling was inadequate to allow sufficient period for full hydration, thus the requirement for CMC. Additional costs were also incurred because an extra volume of spud mud had to be built using CMC, this was due to the drill water supply becoming exhausted. Further costs were incurred after additional mud had to be made up to ream and fill the hole and casing.

Estimated cost:	79,096.00 NOK
Actual cost:	176,442.28 NOK
Difference:	+123.1 %

Other problems

None.

Recommendations

The mud system used and the properties achieved were satisfactory for this section. They are to be recommended for future intervals of this type. However problems with logistics could be significantly simplified through the use of Guar Gum to make sweep volumes.

36" Section Volumes Breakdown

Breakdown Category	Volume m^3	Cost/m^3 Mud	Cost NOK
Mud volume built	432		
Mud transferred to 8.5" pilot hole	301		
Total Utilised	**146**	**1,208.51**	**176,442.28**

36" Section Mud Loss Summary

Loss Category	Volume m^3
Shakers	N/A
Dumped	146
Total Utilised	**146**

Details of 17 ½" hole section

30" conductor set at:	451 m
17 ½" hole drilled from:	456 m
17 ½" hole drilled to:	1382 m
Hole length:	926 m
Drilling fluid:	Seawater/Bentonite/CMC
Total Cost for section:	796,670.56 NOK
Cost per meter:	860.33 NOK
Cost per cubic meter:	623.37 NOK
Max. Inclination:	4.5°

Summary of drilling events

The 30" casing, shoe and 3 metres of new formation were cleaned out, by pumping seawater and a hi-viscosity sweep with a 26" bit. An 8 ½" pilot hole was drilled to 1382 metres to enable easier handling of any shallow gas in this riserless section. No gas was observed, and the hole was cleaned, by pumping seawater and hi-viscosity sweeps on each half stand drilled. The hole was swept with 30 m^3 of hi-viscosity sweep at TD and then displaced to 1.20 sg Gel mud. The trip out showed the hole to be in good condition and at the 30" shoe the hole was circulated clean.

A 12 ¼" x 17 ½ " hole opener assembly was picked up and the hole was reamed out to a depth of 1379 metres without problems. Remaining hi-viscosity mud left on surface was swept round at TD and the open hole displaced to 1.20 sg Gel/CMC mud. On the trip out slight over pull was experienced but easily worked through. The kill mud density was reduced from 1.60 sg to 1.20 sg and used to displace the hole prior to running casing.

A restriction that was encountered while running the 13 3/8" casing caused the string to fold over at seabed, and buckled in two places. The string was then retrieved and any tight spots were reamed using conventional gel sweeps. The hole was displaced using 200 m^3 of KCl mud at 1.40 sg. The concentration of KCl at 93 kg/m^3 provided adequate inhibition with respect to the active clay formation. The casing string was then re-run and cemented without problems.

Drilling fluid performance

The 8 ½" pilot hole section was drilled with prehydrated gel mud at 70 kg/m^3 with the addition of 1 kg/m^3 of CMC to allow rapid mixing and to keep up with the drilling rate. The displacement mud for the pilot hole was also built from prehydrated gel using a concentration of 55 kg/m^3 bentonite.

For the 17 ½" hole opening assembly the mud system required a change from pre-hydrated gel / CMC to seawater / CMC used due to lack of drill water for the pre-hydration of the bentonite. The seawater CMC was mixed at 15 kg/m^3 to allow the mixing to keep pace with the rate at which it was being pumped. The displacement mud for the section was built by reducing the density of the kill mud from1.60 to1.20 sg. The gel mud had been retained from the start of the section to give the displacement mud additional rheology.

During the wiper trip, after the problematic casing run, the sweep mud used was pre-hydrated gel. The displacement mud was built from 1.13 sg KCl brine cut back with seawater and CMC and then weighted to 1.40 sg. A total of 90 m^3 brine was used, less would have resulted in a volume being lost to dead volume in the brine tank. Programmed concentration was 50 kg/m^3 but this was increased to 93 kg/m^3 when the mud was built.

Solid control equipment performance

Not used.

Hole problems

There was no evidence of boulders or fill after tripping, however an in hole restriction was experienced when the first string of 13 3/8" casing run, the string was later found to be bent on bottom. Due to the damaged sustained, the damage part of the string was laid out, and the same string was re-run.

There may have been some partial hydration of clay stone in the interval between 700 – 900 metres as a result of displacing to uninhibited Gel mud. This may have resulted in hydration and subsequent swelling of the clays, which could have caused the casing to stand up. The wiper trip showed very little, if any, signs of tight hole. After the wiper trip had been made with the KCl mud in the hole no signs of hydration were observed. The casing was run and cemented without further problem.

Cost comments

The plan was to drill the section with pre-hydrated gel mud but due to problems with delivery of drill water from the supply vessel it was necessary to use seawater and CMC. To give as much volume as possible the gel mud was prehydrated to 1.5 time's normal and cut back with seawater. This however was only done with the last of the drill water since the extent of the shortfall was not known until the vessel arrived on location. Further costs were then incurred after additional mud had to be made up to ream the hole with. A further volume had to then be made up in order to fill the casing.

The costs do not include the price of the 90m^3 of KCl brine since this was purchased directly from another Mud Company.

Estimated cost:	427,790.00 NOK
Actual cost:	796,670.56 NOK
Difference:	+86.2 %

Other problems

None.

Recommendations

Ensure adequate supply of drill water to allow for the use of the cheaper pre-hydrated gel for sweep during the section.

(Note: The short fall in drill water was a result of using a shared vessel during the early stages of the well. For the latter stages a dedicated vessel was sourced).

The use of KCl for the displacement mud provided an enhanced level of inhibition and although it is not certain that this alone was responsible for the smooth running of the 13.3/8" casing, it can only have helped.

17 ½" Section Volumes Breakdown

Volume Category	Volume M^3	Cost/m^3 Mud	Cost NOK
Mud volume imported	301		
Mud volume built	977		
Mud volume exported	0		
Total Utilised	**1278**	**623.37**	**796,670.56**

17 ½" Section Mud Loss Summary

Loss Category	Volume m^3
Dumped	1278
Total Utilised	**1278**

Details of 8 ½" Hole Section

8 ½ " hole drilled from:	1382 m
8 ½ " hole drilled to:	3667 m
13 3/8" casing set at	1374 m
Hole length:	2285 m
Drilling fluid	VERSAVERT OBM
Total Cost for section:	1,918,333.17 NOK
Cost per meter drilled:	839.33 NOK
Cost per cubic meter utilised:	8,060.22 NOK
Max. Inclination:	4.5 °

Summary of drilling events

It was evident that the initial load out of oil based mud was contaminated with 18 m3 (a figure derived from calculating the volume of water addition required to change the Oil/Water ratio from that notified to the rig) of water from the boat's tanks. Consequently the Oil/Water ratio started of at 68/32. It was therefore necessary to make up 50 m^3 of base oil premix to correct this, in addition it was also necessary to substantially increase the water phase salinity with powdered calcium chloride.

While drilling at a depth of 1675 metres the mud weight was being increased from 1.45 sg to 1.50 sg (with a plan to later raise it to 1.55 sg). At 1698 metres with the active and half of the annulus at a density of 1.50 sg an influx of 4 m3 into the well bore was experienced. The equivalent mud weight required to circulate out the influx was also 1.50 sg.

The system was maintained at this weight for a full circulation. Influx returns at surface were routed to an empty pit and the system weight was maintained at 1.50 sg. At this time additional mud volume was weighted up to 1.50 sg to replace the diverted volume and to provide a buffer against any losses. It was then observed that there still remained 80 to 90 psi on the drill pipe. The mud weight was raised to 1.57 sg, which was deemed sufficient to kill the well.

The 13 3/8" casing contents were treated with an enhanced premix plus calcium chloride whilst weighting up. A total of 10 –12 m^3 formation brine was incorporated into the mud. The riser was displaced using the booster pump to mud that had been previously treated with emulsifiers, calcium chloride and then weighted up. This created mud, which was in good enough condition to run back into the hole. The hole was circulated bottoms-up and a problem-free wiper trip was conducted to the shoe.

Static seepage losses of 1 m3 per hour were observed on running back to bottom. These losses were attributed to the Brygge sand. Similar dynamic losses were observed whilst drilling ahead but they were cured using an initial treatment of 0.6kg/m^3 of Coarse and Medium Calcium Carbonate. The concentration was

thereafter maintained by mixing 25 kg of each material over a 30 minutes period. Later the rate of addition was reduced to one sack of medium and coarse over each hour.

The well was then drilled to coring point at 3101metres, during this time the hole remained in good condition and the mud properties were run at optimum specification. A core was cut from 3101 metres to 3171.5 metres through the Lysing sand. Over-pulls were experienced at 2400 metres and 1520 metres. Approximately 67 metres of core, which represented a 97% recovery were recovered to surface. The hole appeared to be in good condition.

On running back in the hole to drill it was necessary to wash and ream from 3050 metres to 3171 metres. Substantial quantities of cavings and a quantity of old cuttings were seen at the shakers. In response the mud weight was raised to 1.60 sg. This tactic was partially successful. Drilling continued to 3667 metres TD and on circulating bottoms-up more cavings were again seen but not in such large quantities as before increasing the weight to 1.60 sg. The hole was circulated clean and the string pulled to surface without problems.

The logging programme comprised 5 runs. During the 4th run (VSP), the tool became stuck at the top of the Lysing sands but was eventually pulled free. A wiper trip was made. The bottoms up sample of mud that was tested showed virtually no deviation in its properties from the programmed values. The MDT run was then successfully completed. Following that the VSP and SWC runs were also successfully completed. The Logging equipment was rigged down and the hole was plugged back by setting 4 balanced cement plugs.

A clean-up programme was run as per M-I recommended procedure and the hole and riser were successfully displaced to seawater. The mud, base oil and slops were back-loaded to the boat.

Drilling fluid performance

The mud delivered on the boat for this section was undoubtedly contaminated by water. However the precise source of this water could not be ascertained. The pit volume available on the rig was not sufficient to make any substantial treatment prior to displacing the hole, so this treatment was done during drilling out the shoe and new formation.

The Oil/Water ratio was the first property to be addressed and this was increased gradually to 72/28 with adequate additions of other chemicals being made to raise and maintain the programmed Chloride and Alkalinity levels. For the most part treatment was made by premix additions but some direct additions were necessary as well. Just prior to reaching TD, the O/W ratio was raised to 74/26 with premix and this had the effect of reducing the rheology to a more compatible value for Logging and cementing operations.

Reference to the table below will provide information about the average properties maintained but particular notice is drawn to the weight increases at 1698 metres and

3171 metres in response to hole conditions. The first to a water influx, and the second to cavings seen after washing through the cored section. In the latter case the Oil/Water ratio was gradually increased to counter the viscosity increase (mainly PV) from barite additions.

Care was taken to ensure that adequate concentrations of emulsifiers were run to offset any tendency towards solids water-wetting due to cuttings and barite incorporation into the mud.

The Rheology was deliberately maintained on the high side of the programmed range to promote good hole cleaning at relatively low pump rates. However there were minor problems associated with these higher viscosities due to the long riser the mud returning from the well was quite cool and particularly cold after tripping. Therefore it was necessary to run coarse screens on the shakers until the mud had warmed and the viscosity had dropped sufficiently to re-fit 165 or finer screens.

Despite this the Low Gravity Solids (LGS) content was maintained (< 200 kg/m^3) with relatively light premix additions. Similarly there was little or no tendency towards progressiveness of the Gels indicating no fines accumulation in the mud. Just prior to reaching TD the rheology was reduced with premix for logging and cementing operations.

The HTHP value remained steady throughout the section ranging from 1.8 – 2.2 cc. The Electrical stability climbed steadily with increasing shear to a value of 800+ volts.

The mud weight ranged from the planned 1.45 sg, at the start of the section to, 1.57 sg following the kick and finally to 1.60 sg in response to the tight hole and cavings seen at the shakers. The kick was taken while the mud weight was being raised from 1.45 sg to the programmed 1.55 sg.

The solids removal efficiency was calculated to be approximately 75%.

The cuttings were firm and discrete throughout, their quality increasing as the WPS reached and exceeded 130 k mg/l.

Minor seepage losses were observed at different depths during this section and so Calcium Carbonate of coarse and medium grade was added more or less continually at very light concentrations to mitigate these losses.

Typical drilling properties

Properties	**Planned**	**Actual**
MW (sg)	1.45 – 1.58	1.45– 1.60
YP (lbs/100ft^2)	NA	8.0 – 16.0
PV (cP)	NA	36 - 53
Gel 10 sec (lbs/100ft^2)	7 – 12	7 – 10
Gel 10 min (lbs/100ft^2)	< 25	9 - 14
3 rpm (lbs/100ft^2)	8 – 13	7 - 14
Excess lime (kg/m^3)	8 – 10	1.8 – 7.2
HTHP fluid loss (cc/30min)	< 2	2 – 3.1
Chlorides (mg/l)	150,000	83K – 142K
Activity of water	0.85 – 0.89	0.78 – 0.91
O/W ratio	75/25-85/15	68/32–75/25
Electric stability (Volts)	> 600	531 - 876
LGS (kg/m^3)	< 200	68 - 146

Cost comments

Estimated cost:	1,614,268.00 NOK
Actual cost:	1,595,117.55 NOK
Difference:	-1.2 %

Solid control equipment performance

The solids control equipment comprised 3 Thule VSM 100 shakers and one Swaco variable high-speed centrifuge. The latter was tried but did not work. In addition, if run alone it would have stripped too much Barite from the mud.

The shakers performed well but with the high rheologies run to ensure good hole cleaning and the low surface temperature due to the long riser, it was not possible to run finer than 180 mesh screens for most of the section. Consequently the sand content rose to over 1% and for the most part ran around 1.5% peaking at 2% for a short time in the Brygge section.

Generally however, despite the paucity of equipment, the removal efficiency over the section was calculated to be 75%.

The addition of a fourth and possible a fifth shaker would substantially improve the efficiency of solids removal and allow finer screens to be run which in turn would result in lower sand content, reduced pump parts' wear and lower mud cost through reduced dilution.

Hole problems

There were no significant hole problems. An influx of water was taken at 1698 metres. The well was successfully killed. There were a few tight spots observed on tripping but these were easily washed. Some cavings were encountered after 1700 metres but these all but disappeared when the weight was raised. Finally there were minor seepage losses from 1700 metres but these were eliminated by light additions of Calcium Carbonate (coarse and medium) whilst drilling ahead. A subsequent wireline caliper log indicated a large washed out section from 2117 metres to 2400 metres and it was from here that the cavings were generated.

Other problems

Due to the water influx, the stock of Calcium Chloride was low at one point but a new shipment was received before drilling ahead.

Recommendations

On locations where the riser length is such that it causes significant cooling of the mud, close consideration should be given to the ability of the solids removal equipment. In particular the shale shakers, to handle the relatively high pump rates required for hole cleaning alongside the high funnel viscosity's induced by this cooling effect.

One solution to this problem is to increase the Oil/Water ratio but this passes the cost onto the Client when it ought to be the Contractor who provides adequate equipment to handle these depth associated mud flow handling problems.

8 ½" Section Volumes Breakdown

Volume Category	Volume M^3	Cost/m^3 Mud	Cost NOK
Mud volume imported	300		
Mud volume built	260		
Mud volume back loaded	322		
Total Utilised	**238**	**6,702.18**	**1,595,117.55**

8 ½" Section Mud Loss Summary

Loss Category	Volume m^3
Lost To Skips	10
Lost On Cuttings	90
Left In Hole	82
Lost In Hole	10
Evaporation	0
Lost to Slop	35
Lost as fluid transfers to boat	11
Total Utilised	**238**

Riser and Surface Cleanup

A clean-up programme was run as per M-I recommended procedure and the riser was successfully displaced to seawater. The mud, base oil and slops were back-loaded to the boat.

The following Clean Up Pills were pumped -

8 m^3 Base Oil.
30 m^3 Water Based hi-viscosity Pill weighted to1.30 sg.
30 m^3 Hi-viscosity Safesurf OE Wash Pill.
30 m^3 Safesolve OE Solvent Pill.
10 m^3 Hi-viscosity Safesurf OE Clean Up Pill.

Pills were pumped at a rate to give a minimum of 10 minutes contact time and excellent results were achieved.

After flushing the choke and kill lines with a solvent pill the returned pills used for the riser clean up were utilised to clean surface lines, pits and equipment.

Cost comments

Estimated cost:	n/a NOK
Actual cost:	323,215.62 NOK
Difference:	n/a %

Recommendations

For a future clean up it is recommended that 5 kg/m^3 Nutplug course be added to the initial weighted pill to give a scouring effect, not only will this aid removal of mud adhering to the riser bore but will increase the efficiency of the remaining pills.

Need to look carefully at the logistics of the riser clean up and in particular interface and slops generation issues.

REPORT FOR CHEMICAL CONSUMPTION AND VOLUME DISTRIBUTION

OPERATOR:	**Norsk Chevron AS**
WELL:	**6506/3-1**
AREA :	
DRILLING FLUID:	**Spud mud**
RIG:	**Byford Dolphin**
SECTION:	**36 ''**
OPERATION:	**Drilling**

START VOLUME:	0 m3	SECTION FACTOR:	0.5 SF
START DEPTH:	367 m	ACT. DAYS - SECTION:	2.0 days
SECTION LENGTH:	89 m	EST. DAYS - SECTION:	3.0 days
SECTION RATE:	5 310.63 Nok	AVER. DENSITY -D1:	1.268 SG
SECTION FLUID COST:	165 848.20 Nok	UNWT. DENSITY -D0:	1.05 SG
METERS/DAY	44.50 m/day	FLUID SPEC. No.:	1 #
MUD USAGE/M:	1.640 m3/m	FLUID RATE- $FR:	161.28 Nok/m3
MUD USAGE/M3 DRILLED:	2.50 m3/m3	WT. FLUID RATE-$FRW:	371.03 Nok/m3
RECAP COST/M	668.32 Nok/m	RECAP COST:	59 480.29 Nok

DATE	**2001**	21.jul	22.jul	23.jul	24.jul	25.jul	26.jul	27.jul	28.jul	29.jul	30.jul	31.jul	01.aug	**TOTAL**	
FSR	**No:**	5	6	7	8	9	10	11	12	13	14	15	16		
DEPTH	**m**	367	456												Cost/unit
VOLUME BUILT	**m3**	162	285											**447**	
VOLUME RECEIVED FROM SHORE	**m3**													**0**	
VOLUME RECEIVED FROM FIELD	**m3**													**0**	
VOLUME LOST ON BOAT	**m3**													**0**	
CENTRIFUGE	**m3**													**0**	
SHAKERS	**m3**													**0**	
EVAPORATION	**m3**													**0**	
DOWN HOLE LOSS	**m3**													**0**	
LOST TO SLOP	**m3**													**0**	
LEFT IN HOLE	**m3**													**0**	
LOST TO SEA	**m3**		146											**146**	
BACK LOADED	**m3**													**0**	
TRANSFERRED	**m3**		301											**301**	
FINAL VOLUME	**m3**	162	0	0	0	0	0	0	0	0	0	0	0	**0**	
Daily section length	**m**	0	89	0	0	0	0	0	0	0	0	0	0	**89**	
HOLE VOL. MADE	**m3**	0.0	58.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**58.4**	
DAILY DILUTION FAC.	**m3/m3**	N/A	2.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**2.5**	

CHEMICALS:	**Unit**	**Price/unit**													**Third party**	**Total consumption**
Barite	**mt**	**862.00**	45	85										**130**		**130.0**
Bentonite Wyoming	**mt**	**1797.00**	9	24										**33**		**33.0**
Soda Ash	**kg**	**2.34**	100	100										**200**		**200.0**
CMC EHV	**kg**	**10.00**												**0**	125	**125.0**
Lime	**kg**	**1.85**												**0**		**0.0**
Daily fluid cost:			60 106.06	105 742.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**165 848.20**	

Sign M-I Norge _____ **Sign Chevron:** _____

REPORT FOR CHEMICAL CONSUMPTION AND VOLUME DISTRIBUTION

OPERATOR:	**Norske Chevron AS**
WELL:	**6506/3-1**
AREA :	
DRILLING FLUID:	**Spud mud**
RIG:	**Byford Dolphin**
SECTION:	**17 1/2 ´´**
OPERATION:	**Drilling**

START VOLUME:	301	m3	SECTION FACTOR:	0.5	SF
START DEPTH:	456	m	ACT. DAYS - SECTION:	6.0	days
SECTION LENGTH:	926	m	EST. DAYS - SECTION:	4.0	days
SECTION RATE:	38 253.06	Nok	AVER. DENSITY -D1:	1.180	SG
SECTION FLUID COST:	279 771.11	Nok	UNWT. DENSITY -D0:	1.05	SG
METERS/DAY	154.33	m/day	FLUID SPEC. No.:	1	#
MUD USAGE/M:	1.380	m3/m	FLUID RATE- $FR:	161.28	Nok/m3
MUD USAGE/M3 DRILLED:	8.89	m3/m3	WT. FLUID RATE-$FRW:	286.36	Nok/m3
RECAP COST/M	436.52	Nok/m	RECAP COST:	404 217.73	Nok

DATE	**2001**	23.jul	24.jul	25.jul	26.jul	27.jul	28.jul	29.jul	30.jul	31.jul	01.aug	02.aug	03.aug	**TOTAL**	
FSR	**No:**	7	8	9	10	11	12	13	14	15	16	17	18		
DEPTH	**m**	459	1382	1382	1382	1382	1382								Cost/unit
VOLUME BUILT	**m3**	88	383	136		205	165							**977**	
VOLUME RECEIVED FROM SHORE	**m3**													**0**	
VOLUME RECEIVED FROM FIELD	**m3**													**0**	
VOLUME LOST ON BOAT	**m3**													**0**	
CENTRIFUGE	**m3**													**0**	
SHAKERS	**m3**													**0**	
EVAPORATION	**m3**													**0**	
DOWN HOLE LOSS	**m3**													**0**	
LOST TO SLOP	**m3**													**0**	
LEFT IN HOLE	**m3**													**0**	
LOST TO SEA	**m3**	81	505	322		205	165							**1278**	
BACK LOADED	**m3**													**0**	
TRANSFERRED	**m3**													**0**	
FINAL VOLUME	**m3**	308	186	0	0	0	0	0	0	0	0	0	0	**0**	
Daily section length	**m**	3	923	0	0	0	0	0	0	0	0	0	0	**926**	
HOLE VOL. MADE	**m3**	0.5	143.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**143.7**	
DAILY DILUTION FAC.	**m3/m3**	174.0	3.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**8.9**	

CHEMICALS:	**Unit**	**Price/unit**													**Third party**	**Total consumption**
Barite	**mt**	**862.00**		29				186							**113**	102	**215.0**
Bentonite Wyoming	**mt**	**1797.00**	10	28	21		2	14							**75**		**75.0**
Soda Ash	**kg**	**2.34**	75	375	1225		200								**650**	1225	**1875.0**
CMC EHV	**kg**			425	5575		2550								**0**	8550	**8550.0**
Lime	**kg**	**1.85**													**0**		**0.0**
Defoam NS	**kg**						50								**0**	50	**50.0**
KCl	**kg**														**0**	**20070**	**20070.0**
Daily fluid cost:			25 199.45	109 674.86	38 944.60	0.00	58 703.25	47 248.96	0.00	0.00	0.00	0.00	0.00	0.00	**279 771.11**		

KCl from Baker Hughes Inteq

Sign M-I Norge _____ **Sign Chevron:** _____

REPORT FOR CHEMICAL CONSUMPTION AND VOLUME DISTRIBUTION

OPERATOR:	**Norsk Chevron AS**
WELL:	**6506/3-1**
AREA:	
DRILLING FLUID:	**Versavert**
RIG:	**Byford Dolphin**
SECTION:	**8 1/2 ´´**
OPERATION:	**Drilling**

START VOLUME:	0 m3	SECTION FACTOR:	1.1 SF
START DEPTH:	1382 m	ACT. DAYS - SECTION:	15.6 days
SECTION LENGTH:	2285 m	EST. DAYS - SECTION:	18.2 days
SECTION RATE:	269 368.52 Nok	AVER. DENSITY -D1:	1.563 SG
SECTION FLUID COST:	1 242 002.24 Nok	UNWT. DENSITY -D0:	0.92 SG
METERS/DAY	146.57 m/day	FLUID SPEC. No.:	41 #
MUD USAGE/M:	0.099 m3/m	FLUID RATE- $FR:	4 346.02 Nok/m3
MUD USAGE/M3 DRILLED:	2.71 m3/m3	WT. FLUID RATE-$FRW:	4 119.92 Nok/m3
RECAP COST/M	661.43 Nok/m	RECAP COST:	1 511 370.77 Nok

DATE	**2001**	29.jul	30.jul	31.jul	01.aug	02.aug	03.aug	04.aug	05.aug	06.aug	07.aug	08.aug	09.aug	10.aug	11.aug	12.aug	13.aug	14.aug	15.aug	16.aug	**TOTAL**	
FSR	**No:**	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
DEPTH	**m**	1382	1382	1409	1698	1698	1736	2560	3101	3131	3171	3437	3667	3667	3667	3667	3667	3667	3667	3667		Cost/unit
VOLUME BUILT	**m3**			18	68	84	7	15	21	1		31	1	13		1					**260**	
VOLUME RECEIVED FROM SHORE	**m3**	164		136																	**300**	
VOLUME RECEIVED FROM FIELD	**m3**																				**0**	
VOLUME LOST ON BOAT	**m3**																			11	**11**	
CENTRIFUGE	**m3**																				**0**	
SHAKERS	**m3**			5		3		8	13	4	9	8	12	13		15					**90**	
EVAPORATION	**m3**																				**0**	
DOWN HOLE LOSS	**m3**								9				1								**10**	
LOST TO SLOP	**m3**													40						5	**45**	
LEFT IN HOLE	**m3**																			82	**82**	
LOST TO SEA	**m3**																				**0**	
BACK LOADED	**m3**													96				38	50	138	**322**	
TRANSFERRED	**m3**																				**0**	
FINAL VOLUME	**m3**	164	164	313	381	462	469	476	475	472	463	486	474	338	338	324	324	286	236	0	**0**	
Daily section length	**m**	0	0	27	289	0	38	824	541	30	40	266	230	0	0	0	0	0	0	0	**2285**	
HOLE VOL. MADE	**m3**	0.0	0.0	1.0	10.6	0.0	1.4	30.2	19.8	1.1	1.5	9.7	8.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**83.7**	
DAILY DILUTION FAC.	**m3/m3**	N/A	N/A	5.1	0.0	N/A	0.0	0.3	1.1	3.6	6.1	0.8	1.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	**2.7**	

CHEMICALS:	**Unit**	**Price/unit**																			**Third party**	**Total consumption**
Barite	**mt**	**862.00**					83	5	34	28			11		56						**217**	26	**243.0**
EDC 95/11 base oil	**m3**	**3688.80**				50	60		5	12			25								**152**	8	**160.0**
Versavert PE	**kg**	**11.32**				1300	1440		260	200			1000								**4200**		**4200.0**
Versavert SE	**kg**	**11.08**				600	600		200	100			300								**1800**		**1800.0**
Lime	**kg**	**1.85**				1375	1425		1200	1600			1700								**7300**		**7300.0**
VG-Plus	**kg**	**14.98**				850				50			175			50					**1125**		**1125.0**
Calcium Chloride	**kg**	**2.30**				4200	1050	2100	2100	2450			700			2100					**14700**		**14700.0**
Versatrol	**kg**	**5.18**				750	650		200												**1600**		**1600.0**
Versavert F	**kg**	**18.00**				400	75		675	100			200								**1450**		**1450.0**
Water	**m3**																				**0**		**0.0**
Bentone 128	**kg**	**24.28**		125																	**125**		**125.0**
CaCo3 Coarse	**kg**	**1.36**																			**0**	3325	**3325.0**
CaCo3 Medium	**kg**	**1.24**																			**0**	2800	**2800.0**
CaCo3 Fine	**kg**	**1.43**																			**0**	125	**125.0**
SafeSolve OE	**kg**	**25.54**																			**0**	2200	**2200.0**
SafeSurfe OE	**kg**	**16.94**																			**0**	1600	**1600.0**
Duptec NS	**kg**	**57.01**																			**0**	500	**500.0**
Daily fluid cost:			675 666.80	0.00	634 467.60	280 154.52	346 073.24	28 839.44	61 798.79	86 518.31	4 119.92	0.00	127 717.50	4 119.92	-264 002.09	0.00	4 119.92	0.00	-125 701.25	-165 396.38	-456 494.00	**1 242 002.24**		

Sign Anchor/MI: _____

Sign Chevron: _____

ENVIRONMENTALINFORMATION

Chevron
Norsk Chevron AS

Platform: Byford Dolphin
Month: July
Year: 2001
Well: 6506/3-1
Section: 36
Section date to/from: 21.07-22.07-2001

-(1)- Mixed total = Rcvd as Mixed in fluid + Added on rig - To-shore as Mixed in fluid. -(2)- Descrepancy = Mixed total (total usage) - Total discharge = 0 (as control on massbalance) Demands in dischargepermit shall be covered by the mudprogram. If the real discharge overrides planned discharge, then this should be documented and explained.

Group	Product name	Unit (kg/l)	Parcom class	Planned usage according to mud-programe	Rcvd as mixed in fluid	To-shore as mixed in fluid	Added on rig	-(1)- Mixed total in section	Discharge in whole mud	Retention on cuttings	Left in well	Injection	To destruc-tion	Transferred to next well/ section	-(2)- Discrep-ancy
	Spud mud mud:						447 m3	447 m3	146 m3					301 m3	
	Barite	mt					130	130	42					88	
	Bentonite Wyoming	mt					33	33	11					22	
	Soda Ash	kg					200	200	65					135	
	CMC EHV	kg													
	Lime	kg													

Discharge exceeding planned discharge:

For more documentation and explenations, refer to Chevron og MI reports.

Signatur MI Norge A/S

Signatur Chevron drilling supervisor

MUD VOLUME DISTRIBUTION

Chevron

Norsk Chevron AS

PLATFORM	Byford Dolphin
MONTH:	July
YEAR:	2001
WELL:	6506/3-1
SECTION:	36

HOLE SIZE	HOLE TO m	HOLE LENGTH m	CUTTINGS VOLUME m3	CUTTINGS MASS kg	MUD MIXED m3	MUD RECEIVED FROM SHORE/ FIELD m3	MUD FROM LAST SECTION m3	MUD RETUR-NED m3	MUD LEFT IN WELL m3	SURFACE LOSS (by cuttings retention) m3	MUD TO SEA m3	MUD TO DEST-RUCTION m3	MUD INJE-CTED m3	EVAPOR-ATED WATER PHASE m3	TRANSFE-RRED TO NEXT SECTION m3	MUD TYPE USED IN INTERVAL
36	456	89	58.4		447						146				301	Spud mud
TOTALT:		89	58.4		447						146				301	

TOTAL

MUD FROM LAST WELL/SECTION	
MUD TRANSFERRED TO NEXT WELL/SECTION	301 m3

RETENTION ON OILY CUTTINGS - RETORTE ANALYSIS

Gravity baseoil:	sg
Cuttings gravity:	sg
Average for section :	g/kg

ENVIRONMENTALINFORMATION

Chevron
Norsk Chevron AS

Platform:	Byford Dolphin
Month:	July
Year:	2001
Well:	6506/3-1
Section:	17.5" pilot hole
Section date to/from:	23.07-28.07-2001

-(1)- Mixed total = Rcvd as Mixed in fluid + Added on rig - To-shore as Mixed in fluid. -(2)- Descrepancy = Mixed total (total usage) - Total discharge = 0 (as control on massbalance) Demands in dischargepermit shall be covered by the mudprogram. If the real discharge overrides planned discharge, then this should be documented and explained.

Group	Product name	Unit (kg/l)	Parcom class	Planned usage according to mud-programe	Rcvd as mixed in fluid	To-shore as mixed in fluid	Added on rig	-(1)- Mixed total in section	Discharge in whole mud	Retention on cuttings	Left in well	Injection	To destruc-tion	Transferred to next well/ section	-(2)- Discrep-ancy
	Spud mud mud:				301 m3		977 m3	1278 m3	1278 m3						
	Barite	mt			88		215	303	303						
	Bentonite Wyoming	mt			22		75	97	97						
	Soda Ash	kg			135		1 875	2 010	2 010						
	CMC EHV	kg			84		8 550	8 634	8 634						
	Lime	kg													
	Defoam NS	kg					50	50	50						
	KCl	kg					20 070	20 070	20 070						

Discharge exceeding planned discharge: The KCl used was needed due to hole problems.

For more documentation and explenations, refer to Chevron og MI reports.

Signatur MI Norge A/S

Signatur Chevron drilling supervisor

MUD VOLUME DISTRIBUTION

Chevron

Norsk Chevron AS

PLATFORM	Byford Dolphin
MONTH:	July
YEAR:	2001
WELL:	6506/3-1
SECTION:	17.5" pilot hole

HOLE SIZE	HOLE TO m	HOLE LENGTH m	CUTTINGS VOLUME m3	CUTTINGS MASS kg	MUD MIXED m3	MUD RECEIVED FROM SHOR FIELD m3	MUD FROM LAST SECTION m3	MUD RETUR-NED m3	MUD LEFT IN WELL m3	SURFACE LOSS (by cuttings retention) m3	MUD TO SEA m3	MUD TO DEST-RUCTION m3	MUD INJE-CTED m3	EVAPOR-ATED WATER PHASE m3	TRANSFE-RRED TO NEXT SECTION m3	MUD TYPE USED IN INTERVAL
17.5" pilot ho	1382	926	143.7		977		301				1278					Spud mud
TOTALT:		926	143.7		977		301				1278					

TOTAL

MUD FROM LAST WELL/SECTION	301 m3
MUD TRANSFERRED TO NEXT WELL/SECTION	

RETENTION ON OILY CUTTINGS - RETORTE ANALYSIS

Gravity baseoil:	sg
Cuttings gravity:	sg
Average for section :	g/kg

ENVIRONMENTALINFORMATION

Chevron
Norsk Chevron AS

Platform: Byford Dolphin
Month: July/August
Year: 2001
Well: 6506/3-1
Section: 8.5
Section date to/from: 29/07 - 16/08-2001

-(1)- Mixed total = Rcvd as Mixed in fluid + Added on rig - To-shore as Mixed in fluid. -(2)- Descrepancy = Mixed total (total usage) - Total discharge = 0 (as control on massbalance) Demands in dischargepermit shall be covered by the mudprogram. If the real discharge overrides planned discharge, then this should be documented and explained.

Group	Product name	Unit (kg/l)	Parcom class	Planned usage according to mud-programe	Rcvd as mixed in fluid	To-shore as mixed in fluid	Added on rig	-(1)- Mixed total in section	Discharge in whole mud	Retention on cuttings	Left in well	Injection	To destruc-tion	Transferred to next well/ section	-(2)- Discrep-ancy
	Versavert mud:				300 m3	322 m3	260 m3	238 m3		90 m3	92 m3		56 m3		
	Barite	mt			293	293	217	217		82	84		51		
	EDC 95/11 base oil	m3			155	176	152	130		49	50		31		
	Versavert PE	kg			6 000	5 865	4 200	4 335		1 639	1 676		1 020		
	Versavert SE	kg			2 400	2 415	1 800	1 785		675	690		420		
	Lime	kg			4 500	6 785	7 300	5 015		1 896	1 939		1 180		
	VG-Plus	kg			3 900	2 889	1 125	2 136		808	826		503		
	Calcium Chloride	kg			12 900	15 870	14 700	11 730		4 436	4 534		2 760		
	Versatrol	kg			3 000	2 645	1 600	1 955		739	756		460		
	Versavert F	kg			1 800	1 869	1 450	1 381		522	534		325		
	Water	kg			69	40		29		11	11		7		
	Bentone 128	kg				72	125	53		20	21		13		
	CaCo3 Coarse	kg				1 912	3 325	1 413		534	546		333		
	CaCo3 Medium	kg				1 610	2 800	1 190		450	460		280		
	CaCo3 Fine	kg				144	250	106		40	41		25		
	SafeSolve OE	kg					2 200	2 200					2 200		
	SafeSurfe OE	kg					1 600	1 600					1 600		
	Duptec NS	kg					500	500					500		

Discharge exceeding planned discharge:

For more documentation and explenations, refer to Chevron og MI reports.

Signatur MI Norge A/S

Signatur Chevron drilling supervisor

MUD VOLUME DISTRIBUTION

Chevron

Norsk Chevron AS

PLATFORM	Byford Dolphin
MONTH:	July/August
YEAR:	2001
WELL:	6506/3-1
SECTION:	8.5

HOLE SIZE	HOLE TO m	HOLE LENGTH m	CUTTINGS VOLUME m3	CUTTINGS MASS kg	MUD MIXED m3	MUD RECEIVED FROM SHOR FIELD m3	MUD FROM LAST SECTION m3	MUD RETUR-NED m3	MUD LEFT IN WELL m3	SURFACE LOSS (by cuttings retention) m3	MUD TO SEA m3	MUD TO DEST-RUCTION m3	MUD INJE-CTED m3	EVAPOR-ATED WATER PHASE m3	TRANSFE-RRED TO NEXT SECTION m3	MUD TYPE USED IN INTERVAL
8.5	3667.0	2285	83.7	250958	260	300		322	92	90		56				Versavert
TOTALT:		2285	83.7	250958	260	300		322	92	90		56				

TOTALT

MUD FROM LAST WELL/SECTION		
MUD TRANSFERRED TO NEXT WELL/SECTION		

RETENTION ON OILY CUTTINGS - RETORTE ANALYSIS

Gravity baseoil:	0.814	sg
Cuttings gravity:	3	sg
Average for section :		g/kg

Rig Name	BYFORD DOLPHIN
Operator	CHEVRON
Well Number:	6506/3-1
Start date :	21.07.2001
Finish date :	18.08.2001
Waste Handling:	
Slurrification:	

Equipment	Manufacturer	Model	Age	Interval Size	36	17.5	8.5		
Scalper # 1				Mud Type	WBM	WBM	OBM		
# 2				Lost at Shakers	0	0	90		
Shaker # 1	THULE	VSM 100		No. Shakers used	0	0	3		
# 2	THULE	VSM 100		Lost at C/F	0	0	0		
# 3	THULE	VSM 100		Lost to Slops	0	0	45		
# 4				Avge section ROP	32.6	102	38		
# 5				Avge Max ROP	195	240	104		
# 6				Avge Flow Lt/Min	3950	3200	2400		
# 7				Start Depth	353	456	1382		
# 8				End Depth	456	1382	3667		
C/F # 1				Metres Drilled	103	926	2285		
C/F # 2				Interval Days	2	8	15.6		

Screen size	Type	Supplier	Total Screens	Interval Screen Utilisation				
8				n/a	n/a			
10				n/a	n/a			
12				n/a	n/a			
20				n/a	n/a			
30				n/a	n/a			
40				n/a	n/a			
52	square	Thule	4	n/a	n/a	4		
60				n/a	n/a			
60				n/a	n/a			
80				n/a	n/a			
84	square	Thule	10	n/a	n/a	10		
100				n/a	n/a			
110				n/a	n/a			
120				n/a	n/a			
145	square	Thule	6	n/a	n/a	6		
150				n/a	n/a			
165	square	Baroid	4	n/a	n/a	4		
180	square	Baroid	6	n/a	n/a	6		
200	square	Baroid	7	n/a	n/a	7		
210				n/a	n/a			
230				n/a	n/a			
250				n/a	n/a			
325				n/a	n/a			
325				n/a	n/a			
		Total	37			37		

Comments:

Operator: CHEVRON Well: 6506/3-1 Rig: Byford Dolphin

FSR	Date	Depth	MW	T	FV	VG-meter readings @ 50C								AV	PV	YP	Gel	Gel	HTHP	pH	Pf	Mf	Cl-	TH	Ca++	KCl	Solids	MBT	HGS	LGS	Sand	Glycol	K+
no.	2001					600	300	200	100	60	30	6	3				10 sec	10 min					x 1000									208	
•	•	m	sg	°C	s/qt.	rpm	rpm	rpm	rpm	rpm	rpm	rpm	rpm	cP	cP	Pa	Pa	Pa	ml	•	ml	ml	kg/m3	mg/l	mg/l	kg/m3	%	kg/m3	kg/m3	kg/m3	%	%	kg/m3
	36" Section: Seawater / Bentonite																																
1	21-07	367	1.03		100+																												
2	22-07	456	1.03		100+																												
	17 1/2" Section: Seawater / Bentonite																																
3	23-07	459	1.03		100+																												
4	24-07	1382	1.05		100+																												
5	25-07	1382	1.05		100+																												
6	26-07	1382	1.05		100+																												
7	27-07	1382	1.40		100+																												
8	28-07	1382	1.40		100+																												
9	29-07	1382	1.44		100+																												

Minimun	1.03	0.00	0.00
Maximur	1.44	0.00	0.00
Average	1.20	#DIV/0!	#DIV/0!

Daily drilling properties FSR 1-9

Mud Properties, daily record

Operator: **Chevron** Well: 6506/3-1 Rig: Byford Dolphin

FSR	Date	Depth	MW	T	F.Vis	VG-meter readings @ 50 C								AV	PV	YP	Gel	Gel	ES	Mp	Excess	HTHP	CaCl2	WPS	Solids	Oil	Water	O/W	Sand	HGS	LGS
no.	2001			Temp		600	300	200	100	60	30	6	3				10 sec	10 min			Lime	250	Chlorides					RATIO			
∀	∀	m	sg	oC	s/qt.	rpm	rpm	rpm	rpm	rpm	rpm	rpm	rpm	cP	cP	Pa	Pa	Pa	volts	ml	kg/m3	ml	kg/m3	k Cl⁻	vol %	vol %	vol %	vol %	vol %	kg/m3	kg/m3
	8 1/2" Section: Versavert - Oil based system																														
13	29-07	1382	1.44	n/a	100+	119	71	55	37	n/a	n/a	14	12	60	48	11.5	7	9	531	2.1	7.6	2.6	129	83	20	56	24.0	70/30	Trace	609	125
14	30-07	1382	1.44	n/a	100+	119	71	55	37	n/a	n/a	14	12	60	48	11.5	7	9	531	2.1	7.6	2.6	129	83	20	56	24.0	70/30	Trace	609	125
15	31-07	1409	1.44	n/a	100+	123	75	57	39	n/a	n/a	15	12	62	48	13.5	8	1	629	2.8	10.4	3.0	168	108	20	56	24.0	70/30	0.75	574	140
16	01-08	1699	1.51	27	100+	138	85	65	45	n/a	n/a	18	16	69	53	16.0	10	14	672	2.0	7.2	2.0	207	133	20	56	24.0	70/30	Trace	574	140
17	02-08	1695	1.57	22	92	76	44	33	21	n/a	n/a	8	7	38	32	6.0	5	7	672	2.0	7.2	3.0	147	94	23	59	18.0	77/23	0.25	830	68
18	03-08	1736	1.57	20	100+	107	67	50	34	n/a	n/a	13	11	54	40	13.5	7	10	704	2.5	9.3	2.2	172	110	23	57	20.0	74/26	0.20	798	82.4
19	04-08	2560	1.57	35	95	111	69	54	37	n/a	n/a	15	14	56	42	13.5	9	13	808	0.7	2.6	2.0	215	138	22.6	55.5	21.0	73/27	1.00	776	102
20	05-08	3101	1.57	33	95	104	66	50	33	n/a	n/a	13	12	52	38	14.0	8	11	854	3.4	12.6	2.2	253	162	24	55	21.0	72/28	1.25	744	129
21	06-08	3131	1.57	23	100+	116	71	55	38	n/a	n/a	14	13	58	45	13.0	8	12	746	3.2	11.8	3.1	217	139	24.0	53.0	23.0	70/30	1.25	721	146
22	07-08	3171	1.57	23	100+	117	71	53	37	n/a	n/a	14	13	59	46	12.5	8	12	790	3.2	11.8	2.0	220	141	22.8	53.0	23.0	70/30	1.25	733	137
23	08-08	3437	1.60	34	92	106	65	49	34	n/a	n/a	14	12	53	41	12.0	8	11	770	3.2	11.8	2.0	296	190	24.0	55.0	21.0	72/28	1.50	763	110
24	09-08	3667	1.60	35	80	90	53	40	27	n/a	n/a	10	9	45	37	8.0	7	9	876	3.2	11.8	2.0	226	145	25.5	55.5	20.0	74/26	1.50	797	114
25	10-08	3667	1.60	n/a	80	90	53	40	27	n/a	n/a	10	9	45	37	8.0	7	9	876	3.2	11.8	2.0	226	145	25.5	55.5	20.0	74/26	1.50	797	114
26	11-08	3667	1.60	n/a	83	90	53	40	27	n/a	n/a	10	9	45	37	8.0	7	9	815	3.5	13.0	2.0	234	150	24.5	55.5	20.0	74/26	1.50	796	114
27	12-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
28	13-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
29	14-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
30	15-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
31	16-08	3667	1.60	23	100+	91	55	42	27	n/a	n/a	10	9	46	36	9.5	7	9	830	3.2	11.8	2.5	253	162	25.0	55.0	20.0	73/27	1.50	769	140
	Minimun	1.44	20	80	76	44	33	21	0	0	8	7	38	32	6	5	1	531	1	3	2	129	83	20	53	18	70/30	0	574	68
	Maximun	1.60	35	95	138	85	65	45	0	0	18	16	69	53	16	10	14	876	4	13	3	296	190	26	59	24	74/26	2	830	146
	Average	1.56	26	88	103	63	48	32	#DIV/0!	#DIV/0!	12	11	52	41	11	7	10	759	3	10	2	216	138	23	55	21	72/28	1	735	123

Daily drilling properties FSR 13-31

Halliburton
Cementing Services
End of Well Report

Chevron
Norsk Chevron AS

Cementing Services

End of Well Report

Customer	**:**	**Chevron**
Field	**:**	**Exploration**
Well	**:**	**6506/3-1**
Rig	**:**	**Byford Dolphin**

Prepared by	**:**	**Sølve Grude**
Date	**:**	**02/13/02**

Table of Contents

Introduction

This report is based on information obtained from:

- Operation reports filled out by our offshore operators.
- Recommendations and procedures issued by Halliburton field engineer.

The job reports, simulation printouts etc. are all filed at the Halliburton office in Tananger and can be supplied if required.

Summary cementing services, well 6506/3-1

Job description	+	-	Comments & future recommendations
30" conductor			❑ The conductor was cemented using 1,56 SG lead cement and 1,92 SG tail cement ❑ All indications are that cement was brought all the way back to sea floor
13 $^{3}/_{8}$" casing			❑ The surface casing was cemented using 1,56 SG lead cement and 1,92 SG tail cement ❑ A single SSR 13 3/8" top plug was installed to minimise risk due to drilling shoe track with 8 ½" BHA ❑ The 13 3/8" SSR top plug was preinstalled onshore to minimise rig time. Due to a quite lengthy hanger assembly 2 ea 5" x 28" centralisers were installed on the drill pipe joints to avoid transportation damages to the plug. ❑ Cement was observed on the shakers during drilling of the 8 ½" open hole. Most likely this cement was left behind due to drilling the 13 3/8" shoe track with 8 ½" BHA ❑ The LOT was achieve and no remedial cement jobs were necessary
Plug & abandon, plug #1			❑ Plug # 1 was cemented using a 1,90 SG slurry with moderately controlled fluid loss properties ❑ Spacer-500E+ with surfactants was pumped ahead and behind the cement slurry
Plug & abandon, plug #2			❑ Plug # 2 was cemented using a 1,90 SG slurry with moderately controlled fluid loss properties ❑ A HIVIS-pill was not placed below this cement plug. Halliburton recommend that such pill is placed whenever a cement plug is spotted shallower than TD, nevertheless no problems were observed. ❑ Water based spacer was not pumped on this plug to minimise contaminated mud on the rig.
Plug & abandon, plug #3			❑ Plug # 3 was cemented using a 1,90 SG slurry with moderately controlled fluid loss properties ❑ Spacer-500E+ with surfactants was pumped ahead and behind the cement slurry ❑ The plug was load tested with 5 MT and pressure tested to 110 bar 12 hours after the cement job.
Plug & abandon, plug #4			❑ Plug # 4 was cemented using 1,95 SG cement. ❑ The plug was pressure tested to 125 bar after 9 hours after the cement job. ❑ Water based spacer was not pumped on this plug to minimise contaminated mud on the rig.

+ Experience exceeding expected service quality or other positive incidents.
- Indicate problems on job etc. (No mark indicates service provided as planned)

Job Summaries

30" conductor

Job execution, July 28th-2001

1. RIH with 30" conductor
2. Pump sea water
3. Pump lead 38 m^3 of 1,56 SG lead cement
4. Displace cement with rig pumps
5. WOC
6. POOH

13 3/8" casing

Job execution, July 26th-2001

1. RIH with 13 $^3/_8$" casing
2. Circulated sea water
3. Pumped 128 m^3 of 1,56 SG lead cement
4. Pump 17 m^3 of 1,92 SG tail cement
5. Dropped dart and pumped with cmt unit to shear top plug.
6. Displaced cement with rig pumps
7. Checked for backflow; OK
8. Pressure tested the casing

Plug & abandon

Job execution, August 15th & 16th-2001

1. RIH with 3 ½" stinger to TD
2. Circulated mud
3. Pumped 5 m^3 Spacer 500E+
4. **Spotted balanced plug # 1**
5. Displaced with mud
6. Pull out of plug
7. Circulated mud
8. Pull out to plug # 2 setting depth
9. **Spotted balanced plug # 2**
10. Displaced with mud
11. Pull out of plug
12. Circulated mud
13. Pumped 5 m^3 Spacer 500E+
14. **Spotted balanced plug # 3**
15. Displaced with mud
16. Pull out of plug
17. Circulated mud
18. WOC
19. Load and pressure tested plug # 3
20. Pulled out of plug
21. Circulated mud
22. **Spotted balanced plug # 4**
23. Displaced with mud
24. Pull out of plug
25. Circulated mud
26. POOH
27. WOC
28. Pressure tested cement plug # 4

Slurry Designs

30" conductor					
Total Depth, $^{MD}/_{TVD}$	[m]	$^{\pm 447}/_{\pm 447}$	$^{BHST}/_{BHCT}$	[°C]	$^{\pm 8}/_{\pm 8}$
Casing size	["]	30	Mud Type		SW / Bent.
Cement volume-lead	[m^3]	± 24	Slurry contract ref, lead		STL10 / 1
Cement volume-tail*	[m^3]	± 24 + "shoe"	Slurry contract ref, tail		STT10 / 2
Hole Size	["]	36	Mud Weight	[SG]	± 1,20
OH excess	[%]	200	TOC, MD	[m]	ML @ 367

* It is recommended that tail volume is equal to or higher than the lead volume.

Cement slurry design & laboratory results				
Slurry design	Norcem class "G" Cement	Lead	Tail	Units
	$CaCl_2$ liquid	--	4,35	lhk
	Econolite	3,20	--	lhk
	NF-6	0,10	0,10	lhk
	Sea Water	95,07	42,07	lhk
	Density	**1,56**	**1,92**	**SG**
	Total Mix Fluid	98,37	46,52	lhk
	Yield	129,42	77,58	lhk
Lab reference:	Thickening Time at BHCT			
NS07-Z-720-2	**Time to 30 BC**	**7:43**	**3:56**	**hrs:min**
NS00-Z-243-1	Time to 70 BC	12:52	4:40	hrs:min
	Time to 100 BC	12 +	5:02	hrs:min
	Rheology at BHCT			RPM
		40	92	300
		36	83	200
		31	71	100
		29	65	60
		26	58	30
		23	30	6
		17	22	3
	Plastic Viscosity	14	32	cP
	Yield point	26	60	$^{lb}/_{100\ ft^2}$
	Compressive strength at BHST	± 50	± 200	psi [12 h]

Spacer: Minimum 20 m^3 of sea water

13 3/8" surface casing					
Total Depth, $^{MD}/_{TVD}$	[m]	$^{\pm 1375}/_{\pm 1375}$	$^{BHST}/_{BHCT}$	[°C]	$^{31}/_{25}$
Casing size	["]	20 x 13 3/8	Mud Type		SW / Bent.
Cement volume-lead	[m^3]	± 128	Slurry contract ref, lead		STL40 / 5
Cement volume-tail*	[m^3]	min 15 + "shoe"	Slurry contract ref, tail		STTNT / 4
Hole Size	["]	17 ½	Mud Weight	[SG]	± 1,20
OH excess	[%]	100	TOC, MD	[m]	ML @ 367

Cement slurry design & laboratory results				
Slurry design	Norcem class "G" Cement	Lead	Tail	Units
	HR-4L	1,00	--	lhk
	Econolite	3,20	--	lhk
	NF-6	0,10	0,10	lhk
	Sea Water	94,36	--	lhk
	Fresh Water	--	*43,78*	lhk
	Density	**1,56**	**1,92**	**SG**
	Total Mix Fluid	98,66	43,88	lhk
	Yield	129,72	74,93	lhk
Lab reference: NS01-Z-401	Thickening Time at BHCT			
	Time to 30 BC	**5:19**	**3:40**	**hrs:min**
	Time to 70 BC	5:55	4:49	hrs:min
	Time to 100 BC	6:13	5:04	hrs:min
	Rheology at BHCT	*typical*		RPM
		40	92	300
		36	83	200
		31	71	100
		29	65	60
		26	58	30
		23	30	6
		17	22	3
	Plastic Viscosity	14	32	cP
	Yield point	26	60	$^{lb}/_{100\ ft^2}$
	Compressive strength at BHST	± 50	± 200	psi [12 h]

Spacer: Minimum 20 m^3 of sea water

P&A 1					
Plug Depth, M|D	[m]	3190	BHST	[°C]	100
Plug Depth, TVD	[m]	3190	BHCT	[°C]	90
Hole size	["]	8 ½	OH Excess	[%]	25
Spacer 500E+	[m^3]	5 ahead	Spacer Weight	[SG]	1,75
TOC	[m]	2975	Slurry contract ref.	Slurry 28 / MPFL14	

Cement slurry design & laboratory results			
Slurry design	Norcem class "G" Cement	Main	Units
	HR-5L	1,30	lhk
	CFR-3L	0,75	lhk
	Halad-99LE+	6,00	lhk
	NF-6	0,10	lhk
	Fresh Water	37,90	lhk
	Density	**1,90**	**SG**
	Total Mix Fluid	46,05	lhk
	Yield	77,10	lhk
Lab reference: NS01-Z-448	Thickening Time at BHCT		
	Time to 30 BC	**3:05**	**hrs:min**
	Time to 70 BC	3:12	hrs:min
	Time to 100 BC	3:13	hrs:min
	Rheology		RPM
		32	300
		22	200
		12	100
		6	60
		4	30
		2	6
		1	3
	Plastic Viscosity	30	cP
	Yield Point	2	$^{lb}/_{100\ ft^2}$
	Density $^{top}/_{bottom}$	$^{1,90}/_{1,90}$	$^{SG}/_{SG}$
	API gel strength	$^{2}/_{34}$	cP, $^{10\ s}/_{10\ min}$
	API Free Water	0	%
	API fluid loss	250	$^{cm3}/_{30\ min}$
	Compressive strength at BHST	± 2000	psi [24 h]

P&A # 2+3					
Plug Depth, M|D	[m]	1791 & 1491	BHST	[°C]	46
Plug Depth, TVD	[m]	1791 & 1491	BHCT	[°C]	37
Hole size	["]	8 ½	OH Excess	[%]	25
Spacer 500E+	[m^3]	5 ahead **	Spacer Weight	[SG]	1,75
TOC, plug # 3	[m]	1274 *	Slurry contract ref.	Slurry 28 / MPFL14	

* It is not recommended to exceed 300 metres length on balanced plugs.
**Pump spacer ahead of plug # 3

Cement slurry design & laboratory results			
Slurry design	Norcem class "G" Cement	Main	Units
	HR-5L	0,20	lhk
	CFR-3L	0,75	lhk
	Halad-99LE+	5,00	lhk
	NF-6	0,10	lhk
	Fresh Water	39,78	lhk
	Density	**1,90**	**SG**
	Total Mix Fluid	45,83	lhk
	Yield	76,88	lhk
Lab reference: NS01-Z-449	Thickening Time at BHCT		
	Time to 30 BC	**4:00**	**hrs:min**
	Time to 70 BC	4:34	hrs:min
	Time to 100 BC	4:42	hrs:min
	Rheology		RPM
		70	300
		49	200
		28	100
		20	60
		12	30
		9	6
		7	3
	Plastic Viscosity	63	cP
	Yield Point	7	$^{lb}/_{100\ ft^2}$
	Density $^{top}/_{bottom}$	$^{1,90}/_{1,90}$	$^{SG}/_{SG}$
	API gel strength	$^{8}/_{32}$	cP, $^{10\ s}/_{10\ min}$
	API Free Water	0	%
	API fluid loss	127	$^{cm3}/_{30\ min}$
	Compressive strength at BHST	± 1000	psi [24 h]

P&A # 4					
Plug Depth, M|D	[m]	661	BHST	[°C]	13
Plug Depth, TVD	[m]	661	BHCT	[°C]	13
Hole size	13 3/8" csg ID		OH Excess	[%]	na
Spacer 500E+	[m^3]	5 ahead	Spacer Weight	[SG]	1,75
TOC	[m]	411	Slurry contract ref.	Slurry 4 / STTNT	

Cement slurry design & laboratory results			
Slurry design	Norcem class "G" Cement	Main	Units
	NF-6	0,10	lhk
	Sea Water	42,53	lhk
	Density	**1,95**	**SG**
	Total Mix Fluid	42,63	lhk
	Yield	73,69	lhk
Lab reference: NS01-Z-315	Thickening Time at BHCT		
	Time to 30 BC	**5:02**	**hrs:min**
	Time to 70 BC	5:03	hrs:min
	Time to 100 BC	5:04	hrs:min
	Compressive strength at BHST	± 900	psi [24 h]

Actual usage and discharge numbers, summary

Field: Exploration **Year:** 2001
Rig: Byford Dolphin **Well:** 6506/3-1

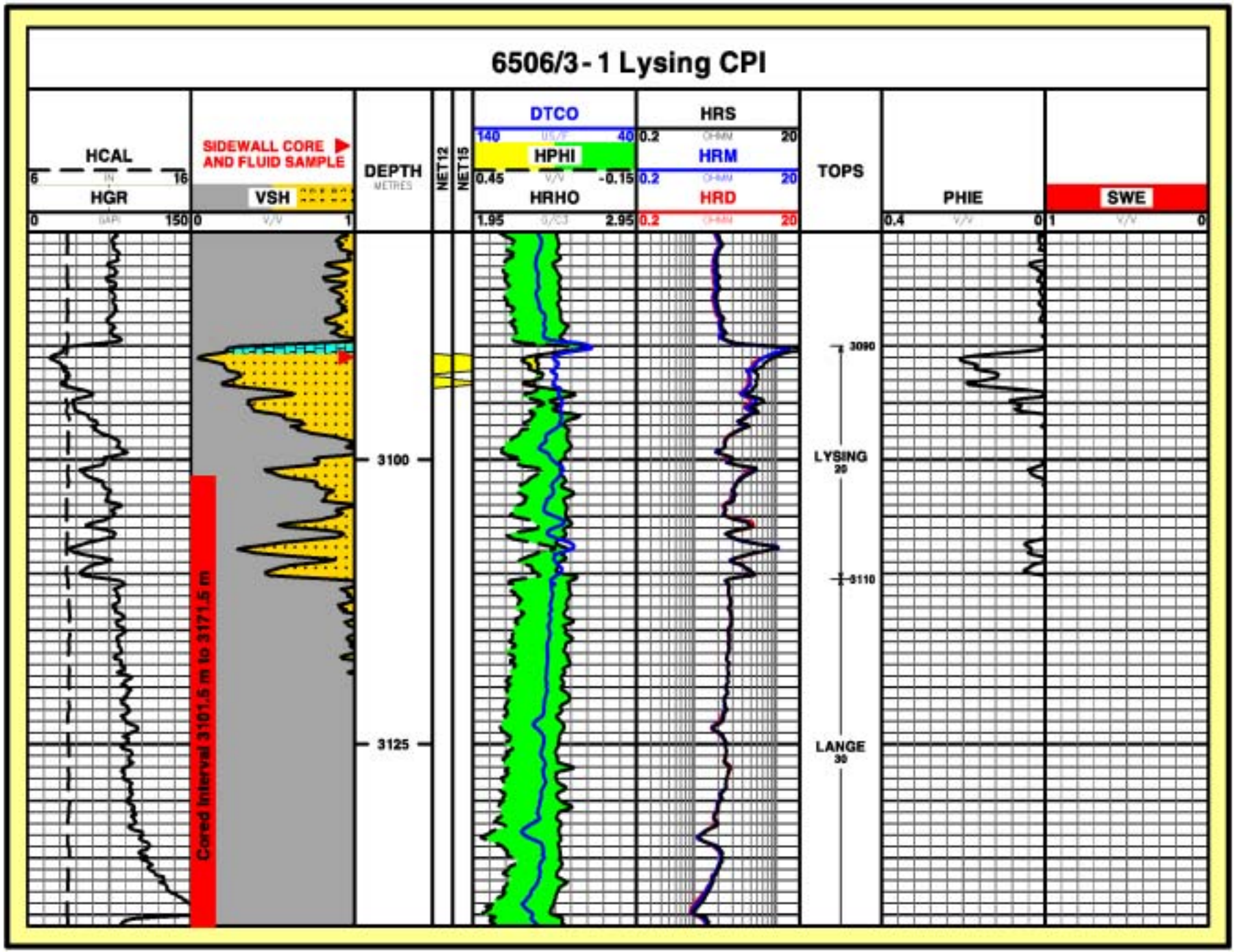
Product	SFT class	Unit	Density	Watercont	Usage	Discharges				
			[SG]	[Vol-%]		Destruction	Left in well	Reinjected	To sea	Balance
Bayferrox130	1	kg	5,000							OK
Bentonite	2	kg	2,650							OK
CaCl2 liquid	1	ltr	1,318	78	1 100		1 050		50	OK
Cement cl. "G"	1	MT	3,220		239		239			OK
Cement , industrial	1	MT	3,100							OK
CFR-3L	13	ltr	1,178	78	302		302			OK
Econolite	2	ltr	1,363	74	4 020		4 004		16	OK
FDP-C-552	16	ltr	1,057							OK
Flexplug-OBM	3	kg	1,750							OK
Flexplug-W	3	kg	2,260							OK
Gascon469	1	ltr	1,100	85						OK
Halad-344	5	kg	1,600							OK
Halad-99LE+	5	ltr	1,018	96	2 097		2 097			OK
Halad-413L	5	ltr	1,067	89						OK
Halad-600LE+	5	ltr	1,097	80						OK
FDP-575	1	ltr	1,480	50						OK
HR-15	4	kg	1,940							OK
K-35	1	kg	2,530							OK
HR-15L	4	ltr	1,106	89						OK
HR-25L	2	ltr	1,040	95						OK
WG-17	5	kg	0,600							OK
HR-4L	4	ltr	1,182	71	1 330		1 200		130	OK
HR-5L	4	ltr	1,165	87	207		207			OK
Latex 2000	5	ltr	0,982	50						OK
Microblock	1	ltr	1,390	80						OK
Micromax	1	kg	4,800							OK
Musol E	16	ltr	0,950		360		288		72	OK
NF-6	7	ltr	0,940	8	278		278			OK
SCR-100L	2	ltr	1,078	86						OK
Sem-7	16	ltr	1,000		180		144		36	OK
Spacer 500E+	5	kg	2,300		524		456		68	OK
SSA-1	1	kg	2,630							OK
SSA-1, blend	1	MT	3,043							OK
Stabiliser 434C	5	ltr	1,040	65						OK
X-lite	1	MT	2,055							OK

Field: Exploration **Year:** 2001
Rig: Byford Dolphin **Well:** 6506/3-1

Product	SFT class	Unit	Density	Watercont	Usage	Discharges				
			[SG]	[Vol-%]		Destruction	Left in well	Reinjected	To sea	Balance
Bayferrox130	1	MT	5,000							OK
Bentonite	2	MT	2,650							OK
CaCl2 liquid	1	MT	1,318	78	1,45		1,38		0,07	OK
Cement cl. "G"	1	MT	3,220		239		239			OK
Cement , industrial	1	MT	3,100							OK
CFR-3L	13	MT	1,178	78	0,36		0,36			OK
Econolite	2	MT	1,363	74	5,48		5,46		0,02	OK
FDP-C-552	16	MT	1,057							OK
Flexplug-OBM	3	MT	1,750							OK
Flexplug-W	3	MT	2,260							OK
Gascon469	1	MT	1,100	85						OK
Halad-344	5	MT	1,600							OK
Halad-99LE+	5	MT	1,018	96	2,13		2,13			OK
Halad-413L	5	MT	1,067	89						OK
Halad-600LE+	5	MT	1,097	80						OK
FDP-575	1	MT	1,480	50						OK
HR-15	4	MT	1,940							OK
K-35	1	MT	2,530							OK
HR-15L	4	MT	1,106	89						OK
HR-25L	2	MT	1,040	95						OK
WG-17	5	MT	0,600							OK
HR-4L	4	MT	1,182	71	1,57		1,42		0,15	OK
HR-5L	4	MT	1,165	87	0,24		0,24			OK
Latex 2000	5	MT	0,982	50						OK
Microblock	1	MT	1,390	80						OK
Micromax	1	MT	4,800							OK
Musol E	16	MT	0,950		0,34		0,27		0,07	OK
NF-6	7	MT	0,940	8	0,26		0,26			OK
SCR-100L	2	MT	1,078	86						OK
Sem-7	16	MT	1,000		0,18		0,14		0,04	OK
Spacer 500E+	5	MT	2,300		0,52		0,46		0,07	OK
SSA-1	1	MT	2,630							OK
SSA-1, blend	1	MT	3,043							OK
Stabiliser 434C	5	MT	1,040	65						OK
X-lite	1	MT	2,055							OK

Enclosure 3

Composite Log
&
CPI


6506/3-1 Lysing CPI
HCAL
6 IN 16
HGR
0 GAPI 150
SIDEWALL CORE AND FLUID SAMPLE
VSH
0 V/V 1
DEPTH
METRES
NET12
NET15
DTCO
140 US/F 40
HPHI
0.45 V/V -0.15
HRHO
1.95 G/C3 2.95
HRS
0.2 OHMM 20
HRM
0.2 OHMM 20
HRD
0.2 OHMM 20
TOPS
PHIE
0.4 V/V 0
SWE
1 V/V 0
3100
3125
Cored Interval 3101.5 m to 3171.5 m
3090
LYSING
20
3110
LANGE
30

Appendix

Appendix A - Whole Core Descriptions

Appendix B - Wireline Logging Events

Appendix C - Dewpoint Report, Formation Water Samples

Appendix A

Whole Core Descriptions

NORSK CHEVRON A/S
Core Description Sheet

Well Number:	**6506/3-1**	**Core Number:**	**1**
Date:	07/08/01	**Core diameter**	**4”**
Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3101.5	**DOLOMITE** : pale yellowish brown to greyish orange, very hard, blocky to angular, trace glauconite, trace carbonaceous material, microcrystalline, grading to DOLOMITIC LIMESTONE in places, no visible porosity, no shows.							
3102	**Siltstone with common 1-2mm bands of Sandstone.** **SILTSTONE** : medium dark grey, firm to moderately hard, blocky to subfissile, trace glauconite, grading to CLAYSTONE. **SANDSTONE** : light grey, firm to moderately hard, blocky, very fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, moderately sorted, moderate calcite cement, argillaceous matrix in places, common to locally abundant glauconite, no visible porosity, NO SHOWS (some mineral fluorescence).							
3103	**CLAYSTONE** : medium grey, occasionally medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micromicaceous, slight trace carbonaceous material, slightly calcareous.							
3104	**Claystone with common 1-3mm bands of Sandstone.** **CLAYSTONE** : medium grey, occasionally medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micromicaceous, slight trace carbonaceous material, silty grading to SILTSTONE in places, slightly calcareous. **SANDSTONE** : light grey, firm to moderately hard, blocky, very fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, moderately sorted, moderate calcite cement, argillaceous matrix in places, common to locally abundant glauconite, common to locally abundant coarse mica, no visible porosity, NO SHOWS (some mineral fluorescence).							
3105	**5mm Claystone bed with 1cm Sandstone bed.** **CLAYSTONE** : medium grey, occasionally medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micromicaceous, slight trace carbonaceous material, silty grading to SILTSTONE in places, slightly calcareous. **SANDSTONE** : light grey to colouless, firm to moderately hard, blocky, occasionally friable, very fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, occasional argillaceous matrix, common to locally abundant glauconite, common to locally abundant coarse mica, poor to no visible porosity, NO SHOWS (some mineral fluorescence).	X						

NORSK CHEVRON A/S
Core Description Sheet

Well Number:	**6506/3-1**	**Core Number:**	**1**
Date:	07/08/01	**Core diameter**	**4”**
Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3106	**Claystone with common 1mm Sandstone bands.** **CLAYSTONE** : medium grey, occasionally medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micromicaceous, fine disseminated carbonaceous material, silty grading to SILTSTONE in places, slight trace glauconite, micaceous, non calcareous. **SANDSTONE** : light grey to colouless, firm to moderately hard, blocky, occasionally friable, very fine to fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, occasional argillaceous matrix, common to locally abundant coarse mica, poor to no visible porosity, NO SHOWS (some mineral fluorescence).	X						
3107	**SANDSTONE** : colourless to very pale grey, firm to moderately hard, friable, sublocky to blocky, fine to medium grained, clear, colourless, occasionally white to very pale grey, transluscent, subangular to subrounded, subspherical, moderately sorted, common glauconite, rare trace pyrite, trace carbonaceous material, moderate calcite cement, poor to moderate visible porosity. SHOWS : bright white to occasionally yellow white natural fluorescence, no cut, slow blooming milky white crush cut, no residual ring.	X	X			X		
3108	**Claystone with common <1-2mm Sandstone bands.** **CLAYSTONE** : medium grey, occasionally medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micromicaceous, fine disseminated carbonaceous material, silty grading to SILTSTONE in places, common coarse micaceous, non calcareous. **SANDSTONE** : as 3106m.	X						
3109	**Claystone with common <1-4mm Sandstone bands.** **CLAYSTONE** : as 3108m **SANDSTONE** : light grey to colouless, firm to moderately hard, blocky, occasionally friable, very fine to fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, occasional argillaceous matrix, common to locally abundant coarse mica, no visible porosity, NO SHOWS (some mineral fluorescence).							
3110	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, subblocky to blocky, splintery to subfissile, micromicaceous, occasional micropyrite veins 1/3mm wide, slight trace carbonaceous material non calcareous.							

NORSK CHEVRON A/S
Core Description Sheet

Well Number:	**6506/3-1**	**Core Number:**	**1**
Date:	07/08/01	**Core diameter**	**4”**
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Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3111	**Claystone with common <1-2mm Sandstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, subblocky to blocky, splintery to subfissile, micromicaceous, slight trace carbonaceous material, non calcareous. **SANDSTONE** : light grey to colouless, firm to moderately hard, blocky, occasionally friable, predominantly very fine to occasionally fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, occasional argillaceous matrix, common to locally abundant coarse mica, no visible porosity, NO SHOWS (some mineral fluorescence).							
3112	**Claystone with common <1-2mm Sandstone bands.** **CLAYSTONE** : as 3111m. **SANDSTONE** : light grey to colouless, firm to moderately hard, blocky, occasionally friable, predominantly very fine to occasionally fine grained, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, occasional argillaceous matrix, common to locally abundant coarse mica, rare glauconite, no visible porosity, NO SHOWS (some mineral fluorescence).							
3113	**Claystone with common <1-2mm Sandstone bands, occasional 5mm by 3mm Sandstone lenses.** **CLAYSTONE** : as 3111m **SANDSTONE** : as 3112m							
3114	**Claystone with common <1-2mm Sandstone bands, occasional 5mm by 3mm Sandstone lenses.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, subblocky to blocky, splintery to subfissile, micromicaceous, slight trace carbonaceous material, occasional trace micropyrite, non calcareous. **SANDSTONE** : as 3112m							
3115	**Finely interbedded Claystone and Sandstone (1mm bands).** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, subblocky to blocky, splintery to subfissile, micromicaceous, slight trace carbonaceous material, occasional trace micropyrite, silty, grading to SILTSTONE in places, non calcareous. **SANDSTONE** : light grey to colouless, firm to moderately hard, blocky, occasionally friable, predominantly very fine to occasionally fine grained, occasionally silty, grading to SILTSTONE in places, clear, colourless, commonly pale grey, transluscent, subangular to subrounded, subspherical, poor to moderately sorted, moderate calcite cement, occasional argillaceous matrix, common to locally abundant coarse mica, rare glauconite, no visible porosity, NO SHOWS (some mineral fluorescence).							

NORSK CHEVRON A/S
Core Description Sheet

Well Number:	**6506/3-1**	**Core Number:**	**1**
Date:	07/08/01	**Core diameter**	**4”**
Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3116	**Claystone with occasional <1-1mm Sandstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, subblocky to blocky, splintery to subfissile, micromicaceous, slight trace carbonaceous material, silty, occasionally grading to SILTSTONE, non calcareous. SANDSTONE : as 3115m							
3117	**Claystone with common <1-2mm Sandstone bands.** **CLAYSTONE** : medium grey to medium dark grey, occasionally brownish grey, firm to moderately hard, subblocky to blocky, occasionally subfissile, micromicaceous, silty in places, grading to SILTSTONE, non calcareous. **SANDSTONE** : off white to pale grey, firm, friable in places, blocky, very fine grained, occasionally fine grained, clear, colourless, very pale grey, transluscent, subangular, to subrounded, subspherical, common glauconite, moderate calcite cement, no visible porosity, NO SHOWS.							
3118	**Claystone with common <1-2mm Sandstone bands.** **CLAYSTONE** : medium grey to medium dark grey, occasionally brownish grey, firm to moderately hard, subblocky to blocky, occasionally subfissile, micromicaceous, non calcareous. **SANDSTONE** : as 3117m							
3119	**Claystone with common <1-2mm Sandstone bands.** CLAYSTONE : as 3118m **SANDSTONE** : off white to pale grey, firm, friable in places, blocky, very fine grained, occasionally fine grained, clear, colourless, very pale grey, transluscent, subangular, to subrounded, subspherical, rare trace glauconite, moderate calcite cement, no visible porosity, NO SHOWS.							
3120	**Claystone with occasional <1mm Sandstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to hard, blocky to subfissile, micromicaceous, occasional coarse mica, non to slightly calcareous. **SANDSTONE** : off white to pale grey, firm, friable in places, blocky, very fine grained, occasionally fine grained, clear, colourless, very pale grey, transluscent, subangular, to subrounded, subspherical, moderate calcite cement, no visible porosity, NO SHOWS.							
3121	**Claystone with common <1mm-1mm Sandstone bands, occasional Sandstone lenses 4mm by 2mm.** **CLAYSTONE** : as 3120m. **SANDSTONE** : as 3120m.							

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Core Description Sheet

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Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3122	**Finely <1mm interbedded Claystone and Sandstone.** **SANDSTONE** : off white to pale grey, firm, friable in places, blocky, very fine grained, occasionally fine grained, clear, colourless, very pale grey, transluscent, subangular, to subrounded, subspherical, occasional trace glauconite, moderate calcite cement, no visible porosity, NO SHOWS. **CLAYSTONE** : medium to medium dark grey, firm to hard, blocky to subfissle, micromicaceous, occasional coarse mica, common disseminated microcarbonaceous material, slightly to non calcareous.							
3123	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, blocky to subfissile, micromicaceous, rare very fine carbonaceous material, common micropyrite veins 1/4 to 1/3mm wide, upto 1cm long (? fossil burrows), non calcareous.							
3124	**Finely <1mm interbedded Claystone and Sandstone.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, blocky to subfissile, micromicaceous, rare very fine carbonaceous material, non calcareous. **SANDSTONE** : off white to pale grey, firm, friable in places, blocky, very fine grained, occasionally fine grained, clear, colourless, very pale grey, transluscent, subangular, to subrounded, subspherical, silty, grading to SILTSTONE, common glauconite, moderate calcite cement, occasional coarse biotite mica, no visible porosity, NO SHOWS.							
3125	**Claystone with common <1-1mm Sandstone bands, occasional Sandstone lenses 2mm by 2-3cm.** **CLAYSTONE** : as 3124m. **SANDSTONE** : off white to pale grey, firm, friable in places, blocky, very fine to fine grained, rare medium grained, clear, colourless, very pale grey, transluscent, subangular, to subrounded, subspherical, silty, grading to SILTSTONE, common glauconite, moderate calcite cement, occasional coarse biotite mica, no visible porosity, NO SHOWS.							
3126	**Claystone with common <1-2mm Sandstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to hard, subfissile, micromicaceous, occasional very fine carbonaceous specks, non calcareous. **SANDSTONE** : very pale grey, firm, friable in places, blocky, very fine grained, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderately sorted, moderate calcite cement, trace glauconite, no visible porosity, NO SHOWS.							

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Core Description Sheet

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Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3127	**Finely interbedded Claystone and Sandstone in 1-2mm bands.** **CLAYSTONE** : as 3126m. **SANDSTONE** : very pale grey, firm, friable in places, blocky, very fine grained, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderately sorted, moderate calcite cement, trace glauconite, common coarse mica, no visible porosity, NO SHOWS.							
3128	**DOLOMITE** : dark yellowish orange to pale yellowish brown, very hard, blocky, trace mica, trace glauconite, microcrystalline to cryptocrystalline.							
3129	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, subfissile to fissile, micromicaceous, rare very fine carbonaceous material, common micropyrite veins 1/4 to 1/3mm wide, upto 5mm long (? fossil burrows), non calcareous.							
3130	**CLAYSTONE** : as 3129m.							
3131	**Claystone with occasional <1mm Sandstone bands.** **CLAYSTONE** : as 3129m. **SANDSTONE** : very pale grey, firm, fiable in places, blocky, very fine grained, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderate to poorly sorted, moderate calcite cement, common coarse mica, no visible porosity, NO SHOWS.							
3132	**CLAYSTONE** : medium dark grey, firm to moderately hard, blocky, micromicaceous, silty, grading to SILTSTONE, non calcareous.							
3133	**Claystone with occasional <1mm Sandstone bands.** **CLAYSTONE** : as 3132m. **SANDSTONE** : as 3131m.							
3134	**Claystone with occasional <1mm Sandstone bands.** **CLAYSTONE** : as 3132m. **SANDSTONE** : as 3131m.							
3135	**Claystone with common <1mm Sandstone bands.** **CLAYSTONE** : as 3132m. **SANDSTONE** : very pale grey, firm, fiable in places, blocky, very fine grained, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderate to poorly sorted, moderate calcite cement, common coarse mica, silty commonly grading to SILTSTONE, no visible porosity, NO SHOWS.							
3136	**Claystone with common <1mm Sandstone.** **CLAYSTONE** : as 3132m. **SANDSTONE** : as 3135m.							

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Core Description Sheet

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Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3137	**Claystone with common <1mm Sandstone bands, occasional Sandstone lenses 3mm by 1cm.** **CLAYSTONE** : medium to medium dark grey, firm to hard, splintery to subfissile, micromicaceous, non calcareous. **SANDSTONE** : pale grey, firm, friable in places, blocky, very fine grained to silt, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderate to poorly sorted, moderate calcite cement, good trace glauconite, common coarse mica, silty commonly grading to SILTSTONE, no visible porosity, NO SHOWS.							
3138	**Claystone with common <1mm Sandstone/Siltstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to hard, splintery to subfissile, micromicaceous, silty in places, non calcareous. **SANDSTONE** : pale grey, firm, friable in places, blocky, very fine grained to silt, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderate to poorly sorted, moderate calcite cement, good trace glauconite, common coarse mica, silty, often grading to SILTSTONE, no visible porosity, NO SHOWS.							
3139	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micrmicaceous, common very fine carbonaceous specks, silty, occasionally grading to SILTSTONE, non calcareous.							
3140	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micrmicaceous, common very fine carbonaceous specks, micropyrite veins 1/4mm wide, 5mm long (fossil burrows?), silty, occasionally grading to SILTSTONE, non calcareous.							
3141	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micrmicaceous, common very fine carbonaceous specks, micropyrite veins 1/4mm wide, 5mm long (fossil burrows?), silty, occasionally grading to SILTSTONE rarely in <1mm bands, trace glauconite, non calcareous.							
3142	**Claystone with occasional <1mm Siltstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, blocky to splintery, occasionally subfissile, micrmicaceous, common very fine carbonaceous specks, micropyrite veins 1/4mm wide, 5mm long (fossil burrows?), silty, occasionally grading to SILTSTONE rarely in <1mm bands, trace glauconite, non calcareous. **SILTSTONE** : light to light medium grey, firm, blocky, micromicaceous, sandy, occasionally grading to very fine SANDSTONE, slightly calcareous.							

NORSK CHEVRON A/S
Core Description Sheet

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Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	∅			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3143	**CLAYSTONE** : medium to medium dark grey, firm to moderately hard, splintery to subfissile, micromicaceous, occasional very fine carbonaceous material, non calcareous.							
3144	**Claystone with occasional <1mm Siltstone bands.** **CLAYSTONE** : As 3143m. **SILTSTONE** : As 3142m.							
3145	**Claystone with occasional <1mm Siltstone bands.** **CLAYSTONE** : As 3143m. **SILTSTONE** : As 3142m.							
3146	**Claystone with common <1mm Sandstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, splintery to subfissile, micromicaceous, occasional very fine carbonaceous material, non calcareous. **SANDSTONE** : pale grey, firm, friable in places, blocky, very fine grained to silt, clear, colourless, very pale grey, transluscent, subangular to subrounded, subspherical, moderate to poorly sorted, moderate calcite cement, good trace glauconite, common coarse mica, silty commonly grading to SILTSTONE, no visible porosity, NO SHOWS.							
3147	**Finely interbedded Claystone and Siltstone, bands <1mm thick.** **CLAYSTONE** : as 3146m. **SILTSTONE** : pale grey, medium grey, firm blocky, sandy, grading to very fine SANDSTONE, micromicaceous, trace glauconite, trace coarse mica, slightly calcareous.							
3148	**Finely interbedded Claystone and Siltstone, bands <1mm thick.** **CLAYSTONE** : as 3146m. **SILTSTONE** : as 3147m.							
3149	**Finely interbedded Claystone and Siltstone, bands <1-1mm thick.** **CLAYSTONE** : as 3146m. **SILTSTONE** : pale grey, medium grey, firm blocky, sandy, commonly grading to very fine SANDSTONE, micromicaceous, trace glauconite, trace coarse mica, slightly calcareous.							
3150	**Finely interbedded Claystone and Siltstone, bands <1mm thick.** **CLAYSTONE** : medium to medium dark grey, firm to moderately hard, splintery to subfissile, micromicaceous, locally abundant micromica, occasional very fine carbonaceous material, non calcareous. **SILTSTONE** : as 3149m.							
3151	**Finely interbedded Claystone and Siltstone, bands <1mm thick.** **CLAYSTONE** : as 3150m. **SILTSTONE** : as 3149m.							

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Core Description Sheet

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Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3152	**Finely interbedded Claystone and Siltstone, bands <1mm thick.** **CLAYSTONE** : as 3150m. **SILTSTONE** : pale grey, medium grey, firm blocky, sandy, rarely grading to very fine SANDSTONE, micromicaceous, trace glauconite, trace coarse mica, slightly calcareous.							
3153	**Claystone with common <1mm Siltstone bands.** **CLAYSTONE** : as 3150m. **SILTSTONE** : as 3152m.							
3154	**Claystone with common <1mm Siltstone bands, occasional 4mm by 1cm Siltstone lenses.** **CLAYSTONE** : as 3150m. **SILTSTONE** : pale grey, medium grey, firm blocky, sandy, occasionally, grading to very fine SANDSTONE, micromicaceous, trace glauconite, trace coarse mica, slightly calcareous.							
3155	**CLAYSTONE** : medium grey, firm to moderately hard, blocky to splintery, micromicaceous, occasionally coarse mica, silty in places, occasional very fine disseminated micropyrite, rare micropyrite viens 1/4mm wide by 3mm long (fossil burrows?), non calcareous.							
3156	**Siltstone with common <1mm Claystone bands, occasional Sandstone lenses upto 4mm thick.** **CLAYSTONE** : medium grey, firm to moderately hard, blocky to splintery, micromicaceous, occasionally coarse mica, silty in places, occasional very fine disseminated micropyrite, non calcareous. **SILTSTONE** : light to light medium grey, firm to moderately hard, blocky, micromicaceous, sandy, occasionally grading to very fine SANDSTONE,slightly calcareous. **SANDSTONE** : light grey, firm, firable in places, blocky, clear colourless, transluscent pale grey, very fine grained, subrounded to subangular, subspherical, silty grading to SILTSTONE. moderately calcite cemented, common glauconite, no visible porosity, NO SHOWS.							
3157	**Finely interbedded <1-1mm Claystone and Siltstone, occasional 1-2mm Sandstone bands.** **CLAYSTONE** : as 3156m. **SILTSTONE** : as 3156m. **SANDSTONE** : as 3156m.							
3158	**Finely interbedded <1-1mm Claystone and Siltstone, occasional 1-2mm Sandstone bands.** **CLAYSTONE** : as 3156m. **SILTSTONE** : as 3156m. **SANDSTONE** : as 3156m.							
3159	**Finely interbedded Claystone/Siltstone/Sandstone <1-1mm thick.** **CLAYSTONE** : as 3156m. **SILTSTONE** : as 3156m. **SANDSTONE** : as 3156m.							

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Core Description Sheet

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Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3160	**Finely interbedded Claystone and Siltstone <1-2mm thick.** **CLAYSTONE** : as 3156m. **SILTSTONE** : light to light medium grey, firm to moderately hard, blocky, micromicaceous, sandy, commonly grading to very fine SANDSTONE,slightly calcareous.							
3161	**Finely interbedded Claystone and Siltstone <1-2mm thick.** **CLAYSTONE** : as 3156m. **SILTSTONE** : as 3160m.							
3162	**Claystone with common <1-3mm Siltstone/Sandstone bands.** **CLAYSTONE** : medium grey, firm to moderately hard, blocky to splintery, micromicaceous, occasionally coarse mica, trace very fine carbonaceous material, silty in places, occasional very fine disseminated micropyrite, non calcareous. **SILTSTONE** : light to light medium grey, firm to moderately hard, blocky, micromicaceous, trace very fine carbonaceous material, sandy, commonly grading to very fine SANDSTONE,slightly calcareous. **SANDSTONE** : light grey, firm, firable in places, blocky, clear colourless, transluscent pale grey, very fine grained, subrounded to subangular, subspherical, silty grading to SILTSTONE. moderately calcite cemented, common to locally abundant glauconite, no visible porosity, NO SHOWS.							
3163	**Finely interbedded Claystone and Siltstone <1-2mm thick.** **CLAYSTONE** : as 3162m. **SILTSTONE** : light to light medium grey, firm to moderately hard, blocky, micromicaceous, trace very fine carbonaceous material, sandy, occasionally grading to very fine SANDSTONE, trace glauconite, slightly calcareous.							
3164	**Finely interbedded Claystone and Siltstone <1-1mm thick.** **CLAYSTONE** : as 3162m. **SILTSTONE** : as 3163 m.							
3165	**Finely interbedded Claystone and Siltstone <1-1mm thick.** **CLAYSTONE** : as 3162m. **SILTSTONE** : as 3163 m.							
3166	**Claystone with occasional <1-2mm Siltstone bands.** **CLAYSTONE** : medium to medium dark grey, firm to occasionally moderately hard, blocky to splintery, micromicaceous, rare trace very fine carbonaceous material, non calcareous. **SILTSTONE** : light to light medium grey, firm blocky, micromicaceous, slightly calcareous.							
3167	**Claystone with occasional <1mm Siltstone bands.** **CLAYSTONE** : as 3166m. **SILTSTONE** : light to light medium grey, firm blocky, micromicaceous, trace very fine sand, trace glauconite, slightly calcareous.							

NORSK CHEVRON A/S
Core Description Sheet

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Logging Witness:	**E. Linaker**		
Cored interval:	3101.5m **to** 3171.5m	**Hole size:**	8½”
Recovered length	67.69m	**Percentage recovery**	96.7%

Chip Depth	**Lithology and shows**	**∅**			**Shows**			
		P	**F**	**G**	**T**	**P**	**F**	**G**
3168	**Finely interbedded Claystone and Siltstone, <1-2mm thick.** **CLAYSTONE** : as 3166m. **SILTSTONE** : light to light medium grey, firm blocky, micromicaceous, trace very fine sand, occasionally grading to very fine SANDSTONE, trace glauconite, occasional coarse mica, slightly calcareous.							
3169	**Claystone with common <1-1mm Siltstone bands.** **CLAYSTONE** : as 3166m. **SILTSTONE** : as 3168m.							
3169.19	**Siltstone with fine Claystone bands.** **CLAYSTONE** : as 3166m. **SILTSTONE** : as 3168m.							

Appendix B

Wireline Logging Events

Wireline Logging - Sequence of Events

Run Number	Time/Date	Comments/Activities
1	**10/08/01**	**AIT-PEX-HNGS (Weak point -ECRD - 8000lbs)**
	02:10	Tool box talk Prior to rigging up Schlumberger run 1.
	02:15	Start rigging up Run 1 - AIT-PEX-HNGS
	03:00	Check tools.
	03:15	Load radioactive sources.
	03:30	At 100m set compensator line.
	03:45	At BOP's
	04:15	At casing shoe (encountered at 1374m). Continue RIH. Noticed ACTS (head tension) was giving readings 800lbs too high.
	05:20	At 3180m begin uplog repeat section to 3060m. Through the Lysing formation.
	05:40	Finished uplog of repeat section (+2m depth correction on repeat log). Continued to RIH
	05:45	At 3100m hanging up slightly. Pull up - OK
	05:47	Continue to RIH - OK.
	06:10	Tagged bottom at 3665.5m and start main uplog.
	07:07 **RT**	Stop logging, but kept logging tool moving up slowly. While Dolphin slack off compensator line to replace broken compensator shear pin. Hole sticky again at 3100m.
	07:27 **RT**	Compensator shear pin OK. RIH to 3170m.
	07:33	Restart main uplog. After restart shallow resistivities were reading very high, and not repeating repeat log over this section. Suspected AIT failed. Continued with uplog of PEX-HNGS.
	08:35 **TT**	At 2690m Resistivity appears to start reading correctly/normal. Decide to RIH to 3150m to relog for resistivty
	08:50 **TT**	Restart main uplog from 3150m.
	09:50 **TT**	Back past 2690m.
	12:05	At shoe, continue on up to 1300m to check caliper. Caliper reading 12.16", (Casing - 12347").
	12:10	Close caliper and POOH
	12:45	Tools at BOP's, announcement made about radioactive.
	13:05	Tools at surface.
	13:10	Radioactive sources handling complete.
	13:20	Start after calibration.
	13:30	Finished after calibrations start rigging down Run 1 AIT-PEX-HNGS
	14:05	Rig down Complete
		Total time run 1 = 11 hours 55 minutes ***(Incl. 1:15 Tool Time and 0:20 Rig time)***
2	**10/08/01**	**DSI-GR-AMS-OBDT (Weak Point - ECRD - 8000lbs)**
	14:05	Start rigging up Run 2 DSI-GR-AMS-OBDT.
	15:10	Finished checking tools and RIH.
	16:40	At 3188m pull up slowly opening caliper and begin repeat log up 2980m.
	17:05	At 2980m. RIH

Run Number	Time/Date	Comments/Activities
2	**10/08/01**	
	17:30	Tag bottom (3665.8m)gently pull up slowly and open caliper and start main uplog.
	21:45	Inside casing with Run 2 check caliper in casing and close. POOH with Run 2.
	22:20	Tools at surface. Lay cable down for crane operations.
	22:30	Rig down Run 2.
	22:50	Run 2 DSI-GR-AMS-OBDT rig down completed.
		Total time run 2 = 8 hours 45 minutes
3	**10/08/01**	**PEX (Weak Point - ECRD - 8000 lbs)**
	22:50	Rig up Run 3 PEX
	23:00	Check tools.
	23:15	Lift cable up after crane operations.
	23:45	Load radioactive sources.
	11/08/01	
	00:00	RIH
	00:05	At 100m engage compensator.
	00:40	Begin logging anomalous density readings from 2000m.
	01:35	Finished log at 1590m, anomalous readings repeated, POOH.
	02:20	Tools at surface.
	02:30	Rigged down Run 3 PEX
	02:45	Rig down complete.
		Total time run 3 = 3 hours 55 minutes
4	**11/08/01**	**VSP-GR (Weak Point -Yellow - 4800 to 5400lbs)**
	02:45	Change head for VSP run.
	03:00	Rig up Run 4 READ VSP-GR (8 receiver).
	04:45	RIH taking checkshot at 1280m.
	05:45	Took pick up weight at shoe Tension 2000lbs.
	06:30	At 2060m tool stood up, picked up, freed with 2000lbs overpull
	07:00	Continued to RIH. Checkshot at 2400m.
	07:25	Checkshot at 3200m and continued to RIH.
	07:40	At 3450m begin GR correlation pass. Sticky overpull up to 3000lbs at 3440m came free, 3000lbs overpull at 3425m came free, 3000lbs overpull at 3417m came free, still sticky up to 3410m again with 3000lbs overpull, came free.
	07:55	At 3390m, due to the sticky hole the GR data was no good RIH.
	08:00	At 3475m begin GR correlation pass. Again sticky upto 1500lbs overpull in places.
	08:06	Tool stuck at 3402m, with maximum pull 7200lbs (normal logging tension 3400lbs). Worked toolstring alternately pulling up and slacking off.
	08:50	Tool free, POOH at 4000 ft/hr.
	08:55	At 3346m overpull of 800lbs.
	09:00	At 3106m overpull of 3000lbs.

Run Number	Time/Date	Comments/Activities
	09:03	At 3082m overpull of 3000-3500lbs overpull, tools stuck. Worked toolstring but alternately pull up to maximum cable tension of 7000lbs and slacking off. Fired VSP guns to see if any of the receivers were in contact with the side of the hole, receiver 1 appeared to be, but working the tool at various speed and slacking cable to 3120m seem to have no effect.
	11:35	Pull up until cable tension at 7000lbs, and maintained until decided on forward plan.
	12:50	Tool suddenly came free while checking out fishing equipment, POOH gradually increasing pulling speed to 4000 ft/hr
	14:30	Slow down to 2000 ft/hr until all toolstring in shoe.
	14:50	All toolstring inside shoe, POOH.
	15:15	Tool at surface. No obvious case for tool sticking, check tools - OK. Rigged down Run 4 VSP-GR
	15:45	Rig down complete
	16:45	Rigged down sheaves and clear rig floor.
		Total time run 4 = 14 hours
	16:45	Pick up clean out assembly and RIH, breaking circulation every 20 stands.
		Cut and slipped drilling line at the shoe.
		Broke circulation and circulated and conditioned mud at the shoe
		Continued to RIH breaking circulation every 20 stands.
		Circulate bottoms up and circulate and condition mud.
		Started POOH, but a hydraulic hose on the upper pipe racking arm burst circulated while repairing same. Tagged bottom and circulated bottoms up.
		POOH with conditioning assembly, laid down and cleared rig floor.
		24 hours 45 minutes for conditioning trip.
5	**12/08/01**	**MDT-GR (Weak Point - ECRD - 8000lbs)**
	17:30	Rigged up sheaves
	18:00	Started Rigging up Run 5 MDT-GR
	19:10	Finished rigging up, checked tools.
	19:30	Finished checking tools RIH.
	19:45	At 100m engage compensator.
	20:15	RIH (Broke two weakpoints while engaging compensator.)
	20:30	Noticed Quartz gauge on PS2 wasn't giving a signal continue RIH.
	20:35	Check pick up tension a +/- 1250m 2900lbs (head tension 1590lbs).
	20:45	Start correlating down (-1m correction). Continued RIH checking correlation.
	21:05	Pretest 1 - 1655m - Dry test, very slow build up.
	21:14	Pretest 2 - 1662m - Slightly supercharged.
	21:26	Pretest 3 - 1673m - Good test, mobility - 119md.
	21:33	Pretest 4 - 1678.5m - Good test, mobility - 22.8md
	21:43	Pretest 5 - 1685m - Dry test, very slow build up.
	22:03	Pretest 6 - 1686.1m - Good test, mobility - 11.7md

Run Number	Time/Date	Comments/Activities
	22:10	Pretest 7 - 1690m - Good test, mobility - 91.2md
	22:21	Pretest 8 - 1710m - Good test, mobility - 3.7md
	22:35	Pretest 9 - 1724m - Good test, mobility - 6md
	22:45	Dropped below last point in the Brygge formation for correlation check (correction +0.5m)
	22:50	Weak point on compensator line broke, held by shackle, decided to go for last point and sample and replace weakpoint while RIH to the Lysing. Picked up and ran past 1732.5m to double check correlation, after loss of weak point, (-1.0m correction.)
	23:00	Picked up to 1710m and RIH
	23:10	Pretest 10 - 1732.5m - Supercharged.
	23:22	Pulled up above 1675m for correlation check (correction +0.7m). RIH and up to check correlation.
	23:35	At 1673m to attempt to sample, Pretest 11 - very slow build up, must be slightly off depth.
	23:45	Dropped down 0.5m to 1673.5m, Pretest 12 - still very slow build up.
	23:50	Dropped another 0.5m to 1674m Pretest 13 - Good test 13.8md
	23:55	Start sampling 1674m
	13/08/01	
	00:00	Begin pumping out with MRPS #2 (300rpm, 90bar DD)
	00:04	Autoreset probe, restart pump (DD 46bar) back to mud on OFA
	00:10	Stopped pumping out, reset probe, started pumping out - still mud on OFA, leak around packer, but still getting DD
	00:20	Retracted probe and reset probe (DD 40bar initially dropped to 10-20bar) - still mud.
	00:33	Dropped another 0.5m and retry at 1674.5m Pretest 14 - good test.
	00:41	Started pumping - large drawdown, pump stalling.
	00:45	Abandon sampling in the Brygge for now and RIH to Lysing Formation. Took 3 Pretests in the Lysing, Attempted to sample at 3091.9m.
	02:25	Started pumping. (300rpm, DD 100bar). Drawdown reduced to zero, pump stalled, reinitialised pumpout, pump working again, some telemetry problems observed.
	02:50	Restarted Pumpout again. (300rpm, DD 60bar).
	03:05	Increased pump to 400rpm, DD 100bar.
	03:20	Plugging, flowline pressure 180bar.
	03:30	Decided to move from sampling point getting too tight.
	03:40	Set probe at 3091.4m, Pretest 21 - Good test - 30.6md mobilty.
	04:15	Changed to CTSM, telemetry keeps going down while initializing. High DD.
	04:25	Dropped down to correlate.
	04:40	Stopped at 3091.2m Took Pretest 22 - Good test
	04:45	Started pumping. (300rpm DD 22bar).
	05:12	Increased pump rate to 400rpm, DD 27bar.
	05:17	Increased pump rate to 500rpm, DD 30bar.
	05:35	Drawdown 40bar.
	05:45	Drawdown up to 70bar.
	05:50	Pumping at 400rpm, water moving.

Run Number	Time/Date	Comments/Activities
	06:00	Reduced pump rate to 300rpm, DD 70bar.
	06:55	Drawdown up to 100bar, seeing more gas coming through.
	07:55	Opened bottle 5 MPSR#856. Closed lower seal valve.
	08:00	Closed bottle 5, temperature 101.1 deg C, shutin pressure 430 +245 = 675bar.
	08:10	Pumping at 300rpm, DD 60bar.
	08:17	DD 65bar.
	08:38	Pump stalled. Restarted no problem (44lt pumped).
	08:39	Pump rate increased to 400rpm, DD 70bar.
	08:50	Pump rate reduced to 300rpm, DD 76bar.
	09:20	Opened bottle 4, MPSR #753. Closed lower seal valve.(pumped 6.4lt after pump stalled)
	09:26	Closed bottle 4, temperature 101.9 deg C, shutin pressure 430 +250 = 680bar. Continued pumping at 300rpm, DD 70bar.
	09:42	Opened bottle 3 MPSR #712, DD 65bar.
	09:49	Closed bottle 3, temperature 100.8 deg C, shutin pressure 430 +255 = 685bar. Continued pumping at 300rpm, DD 70bar.
	09:55	Retracted probe and started POOH
	11:40	Tools on surface, start rigging down Run 5 MDT-GR.
	12:30	Rig down completed.
		Total time run 5 = 19 hours
6	**13/08/01**	**VSP-GR (Weak Point - Pink - 4500 to 6000lbs)**
	12:30	Started rig up of Reed VSP- Run 6 VSP-GR and swapped logging heads.
	13:50	RIH
	13:57	At 100m, put compensator on.
	14:50	At 1280m, 1st checkshot, and continued to RIH.
	15:20	At 2400m, 2nd checkshot, picked up at 1800 ft/hr to check logging tension (3000lbs).
	15:50	At 3200m, last checkshot.
	15:55	POOH to correlate GR over Lysing Formation (+3m correction). Logging tension 3500-3600lbs.
	16:05	Continued to RIH.
	16:20	Tagged TD at 3524m tool zero.
	16:25	At 3524m. start shooting VSP survey, 10m levels. Bottom two receivers caliper not open properly picked up to 3523m, and continue with survey. (logging tension 4000lbs).
	18:10	At 2898m Start Walkaway VSP.
	22:45	Continued VSP at 10m intervals to 2240m.
	14/08/01	
	00:00	Continued VSP at 10m intervals to 1270m and 20m intervals to 950m.
	04:05	POOH with VSP-GR.
	04:15	Tools at surface, begin rigging down Run 6 VSP-GR
	06:00	Rig down completed
		Total time run 6 = 17 hours 30 minutes

Run Number	Time/Date	Comments/Activities
7	**14/08/01**	**CST-GR (Weak Point - Green - 5450 to 6900 lbs)**
	06:00	Rebuild head.
	06:45	Rigged up Run 7 CST-GR.
	07:40	RIH
	08:10	Put compensator on.
	08:40	At shoe, continued to RIH.
	09:45	At 3450m. Correlate up with GR at 1800ft/hr (correction -0.2m) logging tension 3300-3400lbs.
	09:55	RIH
	10:00	Start shooting sidewall cores at 3650m.
	10:05	Overpull 3000lbs at +/- 3636m on bullet.
	10:25	Free, continued shooting sidewall cores.
	11:20	Pull up to Lysing Correlate GR (correction +0.9). Continued to shoot sidewall cores
	12:55	Stuck at 2987m (NB not a bullet last one shot at 3065m.) 3000lbs overpull.
	12:58	Free. Continued shooting sidewall cores.
	14:25	After last bullet fired from lower gun, waited while rigfloor tightened compensator line
	14:30	RIH to 1760m and Pulled up to correlate GR (+0.4 correction).
	14:40	Started shooting sidewall cores from the second gun.
	15:35	Finished sidewall cores (53 shot). POOH.
	15:38	At shoe.
	16:25	Rig into radio silence
	16:50	Tools at surface. (53 cores shot, 29 Recovered, 2 Empty, 8 Misfires, 14 Lost. Recovery 55%)
	17:30	Waiting for phones to come back up to phone regarding recovery - no further CST run required, started rigging down Schlumberger
	18:00	Rig down completed.
		Total time run 7 = 12 hours

Appendix C

Dewpoint Report, Formation Water Samples

DewPoint

Formation Water Samples
Well 6506/3-1

Made for
Chevron AS
by
DewPoint A/S

September 2001

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Summary
Three MDT water samples was taken at 3091.2 m MD in well 6506/3-1. The well was drilled with oil based mud and the samples had 6-9 vol-% contamination. The water is very fresh with a total salinity of 11366 mg/l and with a low $CaCO_3$ saturation at initial conditions. The content of organic acids is 2370 mg/l and the water contains 2.8 mg/l of phenols. The fist is a high value and the second a typical value for North Sea oilfield waters.

From the composition of the flash gas, the content and concentration of organic acids and phenols it has been concluded that the water has been in contact with a hydrocarbon accumulation or with migrating hydrocarbons. The low solution gas content points to no contact with hydrocarbons today.

Ions
All three sample-chambers contained very fresh formation water with a total salinity of 11366 +- 216 mg/l. The samples are of good quality with excellent ion balances, Table 1. The measured density is consistent with the reported salinity. Except for Ca^{2+} no other divalent cat-ions where found. The total aquifer salinity is among the lowest seen on the Norwegian shelf and similar to water system in Ormen Lange.

The density of the formation water in situ has been calculated to be 1.017 g/cc from the salinity[1]. The pH of the water can be calculated to be 5.2 at initial conditions (430 bar and 102 °C) from the carbonate equilibrium and the concentration of organic acids, Table 2. This equals a pH value of 6.5 at standard conditions due to change in the carbonate equilibrium. The formation water is undersaturated with regard to $CaCO_3$ both at initial and at atmospheric conditions.

Solution gas
The compositions of the flash gas from the water samples are given in Table 3. The component distribution in MPSR 712 is unusual. It is believed that this composition is inaccurate due to the large amount of air (76.3 %) that contaminated the flashed gas. The other two flash gas compositions are very consistent. The component distribution in the flash gas has been compared with calculated solution gas from assuming equilibrium between a hydrocarbon fluid and the water at initial conditions and doing a three phase flash calculation with an EOS[1], Table 4. A gas-condensate from the area has been taken to be the hydrocarbon fluid, Table 5. Except for the CO_2 partition, this calculation is not very sensitive to the composition of the hydrocarbon fluid. The measured and calculated component distribution has been compared in Figure 1.

The amount of gas dissolved in the water samples is low. The samples are far from saturation with the measured gas-water ratio of 1.0 Sm^3/m^3. Table 4 shows that a GWR of about 3 Sm^3/m^3 should be expected at saturation at initial conditions.

Organic Acids
The total amount of organic acids in the three analysed water sample is 2370 +- 54 mg/l. Table 6. This is a high concentration compared with other formation waters.

Carboxylic acids with different number of carbon atoms are present in the samples, but about 75 mole-% is acetic acid. The source for the organic acids has been biological degradation of organic material.

Phenols

The water contained 2.81 +- 0.45 mg/l of phenols, Table 7. About w-50 % is phenol and the rest different isomers of methyl- and ethyl phenols. The value is quite typical for oilfield waters produced from the Norwegian shelf[5].

The analysis was difficult due to interference with other dissolved organic components in the water. The source is probably the oil based mud contamination in the three samples.

Discussion

No hydrocarbons were found in the target zones of well 6506/3-1. One objective with the water sample analysis was to assess if hydrocarbons had been in contact with the sampled water phase.

The composition of the flash gas strongly indicates that the water has been in contact with hydrocarbons, Figure 1. A CO_2 rich gas-condensate from the Haltenbanken area was used to calculate the partitioning with the water phase. The partitioning is not very sensitive on the nature of the hydrocarbon system, except for CO_2. CO_2 will also have source in bacterial activity before the temperature got too high. No attempt was made to tune the composition of the contacting hydrocarbon system to agree with the measured flash gas composition. The measured component distribution is similar to the predicted gas and proves that the water has been in contact with hydrocarbons at one point in time. However, it can not be in contact today due to the relative large undersaturation. The oil based mud contamination creates an uncertainty in this calculation. If this oil had dissolved some residual hydrocarbons during circulation a significant part of the released gas could derive from the OBM phase. The composition of the gas released from mud was also calculated and compared to the gas released from the water and to the measured composition, Figure 2. The compositions do not suggest that this OBM phase has significantly affected the released gas.

The high concentration of organic acids show that organic matter in contact with the water has been broken down by bacterial activity. Organic acids are important because these constituents are related to the origin and/or migration of an oil as well as to the degradation of an oil accumulation. The solubility of oragnic components in formation water decrease with increasing salinity.

Phenols are some of the natural occurring constituents in hydrocarbon fluids that have the highest solubility in water. It will therefore accumulate in the water phase when hydrocarbons migrate through or the water is in direct contact with an accumulation. The typical total phenol concentration in produced water from oil and gas fields on the Norwegian shelf is 1- 15 mg/l[5]. The three samples have a phenol content between 3.4 and 2.3 mg/l. One would normally conclude from this that the formation water has been in contact with a hydrocarbon fluid at some stage. But again the oil based mud

contamination may influence this conclusion. A sample of the mud filtrate returned from 3110 m MD has been send to analysis in order to rule out that the OBM could be the source for the phenols seen in the water samples.

Conclusion

- The composition of the solution gas, the organic acid content and the phenol concentration strongly indicates that the sampled water has been in contact with a hydrocarbon accumulation or that HC has been migrating through at a point in time.

- The water is strongly undersaturated with gas, which should rule out that the water is in close contact with a hydrocarbon accumulation today.

- An additional phenol analysis of the mud filtrate returned from the sampled depth is being undertaken. This may rule out that the 6-9 vol-% mud contamination could be the source for the phenols found in the water.

References

1) Calsep A/S: PVTsim v. 11.0
May (2001)

2) Petrotech AS: Well 6506/3-1 Validity checks and analysis of MDT samples-Water
Project 101067 (5-Sep-01)

3) UiB: Analyser av formasjonsvann – Organiske syrer
(5-Sep-01)

4) UiB: Analyser av formasjonsvann – Fenoler
(13-Sep-01)

5) SFT: Utslipp på norsk kontinentalsokkel 1998
(27-Dec-2000)

Appendix

(Editor: internal appendix to the DewPoint Report)

Table 1. Composition and properties of water samples[2]

	MPSR 712	3091.2m	MPSR 753	3091.2m	MPSR 856	3091.2m
Ion	mg/l	meq/l	mg/l	meq/l	mg/l	meq/l
Li+	1	0.1	2	0.3	1	0.1
Na+	3747	162.9	3860	167.8	3994	173.7
K+	97	2.5	49	1.3	55	1.4
Ca++	131	3.3	111	2.8	167	4.2
Mg++		0.0		0.0		0.0
Sr++		0.0		0.0		0.0
Fe++		0.0		0.0		0.0
Sum	3975	168.8	4020	172.1	4216	179.4
Cl-	4355	122.7	4424	124.6	4754	133.9
SO4--	43	0.4	31	0.3	23	0.2
CO3--		0.0		0.0		0.0
Br-	50	0.6	37	0.5	42	0.5
HCO3-	2760	45.2	2733	44.8	2635	43.2
Sum	7208	169.0	7225	170.2	7454	177.9
Salinity						
NaCl (mg/l)	8102		8284		8748	
Total (mg/l)	11183		11245		11670	
pH	6.43@27.3°C		7.18@32.0°C		7.25@36.9°C	
Resistivity @ 20°C	0.673		0.574		0.627	
Density @ 15°C	1.0065		1.0064		1.0069	
Pi (bar)	430.7		430.7		430.7	
Ti (°C)	102		102		102	
Density @ Pi,Ti	1.017[1]		1.017[1]		1.017[1]	

[1]) Density calculated with PVTsim for bottom hole conditions

Table 2. Average water sample composition after correcting for the carbonate equilibrium at down hole and standard conditions[1]

	430bar/102°C mg/l	1 bar/15°C mg/l
Na+	3867.0	3867.0
K+	67.0	67.0
Ca--	136.3	136.3
Cl-	4511.0	4511.0
SO4--	32.3	32.3
HAc	644.4	37.2
HCO3-	955.4	338.0
CO3--	0.0	0.0
Ac-	1697.4	2294.5
CO2	7799.8	173.0
pH	5.2	6.5
CaCO3 precip.	0.0	0.0

Table 3. Composition and amount of solution gas in samples[2]

	MPSR 712	3091.2m	MPSR 753	3091.2m	MPSR 856	3091.2m
	weight -%	mole-%	weight -%	mole-%	weight -%	mole-%
N2	0.584	0.507	6.869	5.750	6.881	5.642
CO2	40.579	22.449	41.849	22.298	37.529	19.587
C1	47.711	72.405	47.917	70.038	50.119	71.758
C2	1.814	1.469	1.365	1.064	2.150	1.642
C3	1.946	1.074	1.037	0.552	1.694	0.883
iC4	0.486	0.204	0.213	0.086	0.344	0.136
nC4	1.031	0.432	0.225	0.091	0.379	0.150
iC5	0.358	0.121	0.080	0.026	0.123	0.039
nC5	0.465	0.157	0.057	0.019	0.095	0.030
C6	0.528	0.149	0.055	0.015	0.080	0.021
C7	2.845	0.709	0.066	0.017	0.169	0.040
C8	0.747	0.177	0.053	0.012	0.054	0.012
C9	0.097	0.020	0.029	0.006	0.044	0.009
C10+	0.810	0.126	0.186	0.028	0.337	0.050
Air in sample mole-%		76.334		6.431		10.749
GWR Sm3/m3		1.0		0.9		0.9
OBM in sample vol-%		8		6		9

Table 4. Calculation of flash gas composition by assuming the water to be saturated with hydrocarbons from contact with a gas-condensate at initial conditions (430 bar and 102 °C)

	Form. water 430bar, 102°C mole-%	Flash gas 1 bar, 15°C mole-%	Flash gas 1 bar, 15°C mole-%
H2O	99.59490	1.22450	
N2	0.01062	2.69322	2.72661
CO2	0.09666	20.83101	21.08925
C1	0.28607	72.27794	73.17396
C2	0.00951	2.40731	2.43715
C3	0.00171	0.43135	0.43670
iC4	0.00013	0.03382	0.03424
nC4	0.00020	0.05025	0.05087
iC5	0.00005	0.01288	0.01304
nC5	0.00005	0.01163	0.01177
C6	0.00002	0.00489	0.00495
C7	0.00006	0.01493	0.01512
C8	0.00002	0.00572	0.00579
C9	0.00000	0.00047	0.00048
C10+	0.00000	0.00008	0.00008
GWR Sm3/m3		2.95	
Density @ Pi, Ti	1.017		
Density @ sc	1.007		

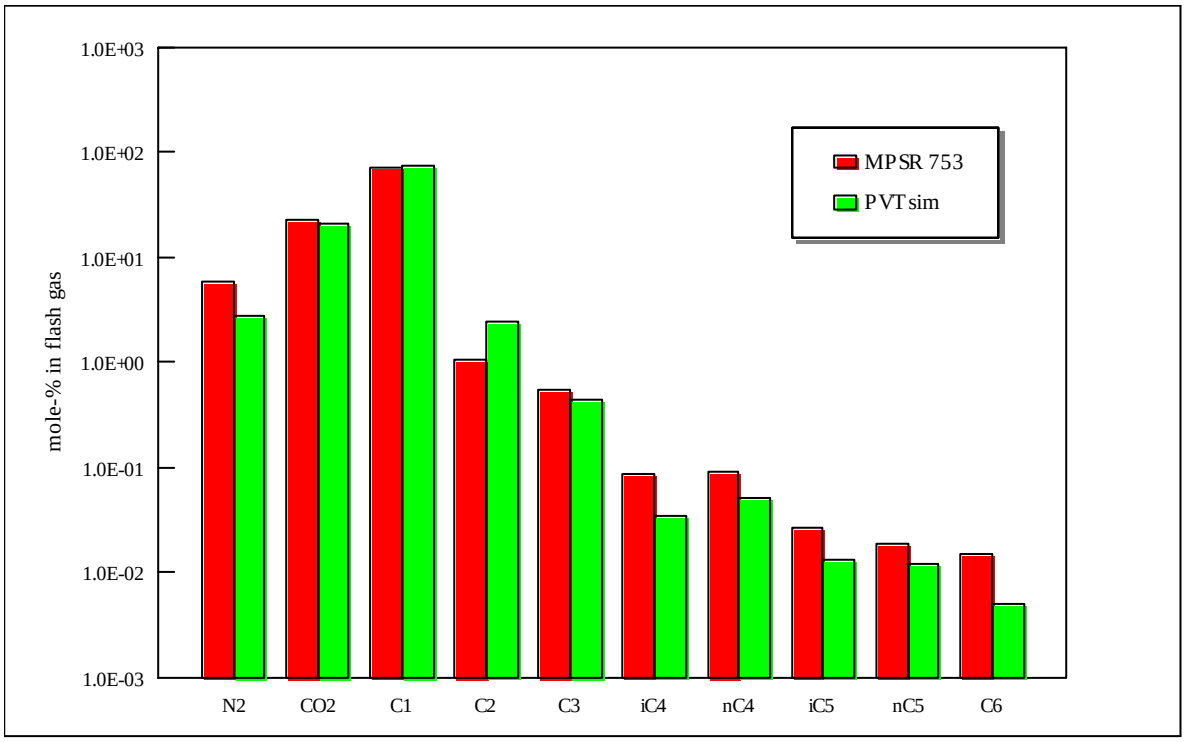

Figure 1. Component distribution of solution gas compared with the composition calculated from equilibrium between a condensate and formation water at intitial conditions (430 bar and 102°C)

Table 5. Assumed composition of equilibrium hydrocarbon phase

	mole-%
N2	2.042
CO2	11.437
C1	75.630
C2	4.901
C3	2.023
iC4	0.421
nC4	0.569
iC5	0.268
nC5	0.265
C6	0.413
C7	0.584
C8	0.496
C9	0.128
C10+	0.821

Table 6. Concentration of organic acids in water samples[3]

Sample	Conc C1 formic acid	ConcC2- malone acid	Conc C2 acetic acid	Conc C3 propane acid	Conc C4 butane acid	Conc C5 pentane acid	Conc C6 hexane acid	Conc C6+ higher acids	Tot conc. as C2	Tot conc. as C2
MPSR	mmole/l	mmole/l	mmole/l	mmole/l	mmole/l	mmole/l	mmole/l	mmole/l	mmole/l	mg/l
712	0.18	0.31	29.24	1.75	0.56	0.52	0.18	0.64	38.86	2332
753	0.45	0.24	28.99	1.06	0.97	1.55	-	0.89	40.80	2448
856	0.37	0.28	28.68	1.81	1.06	traces	-	0.35	38.87	2332

Table 7. Concentration of phenols in water samples[4]

Sample	Phenol	2-meth-phenol	3-meth-phenol	4-meth-phenol	2,4 dimeth-phenol	4-eth-phenol	3,5 dimeth-phenol	Total Phenols
MPSR	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
712	1.41	0.73	0.40	0.31	0.47	0.09	0.00	2.69
753	1.30	0.33	0.42	0.11	0.16	-	0.01	3.41
856	1.15	0.57	0.27	0.35	0.33	-	0.02	2.33

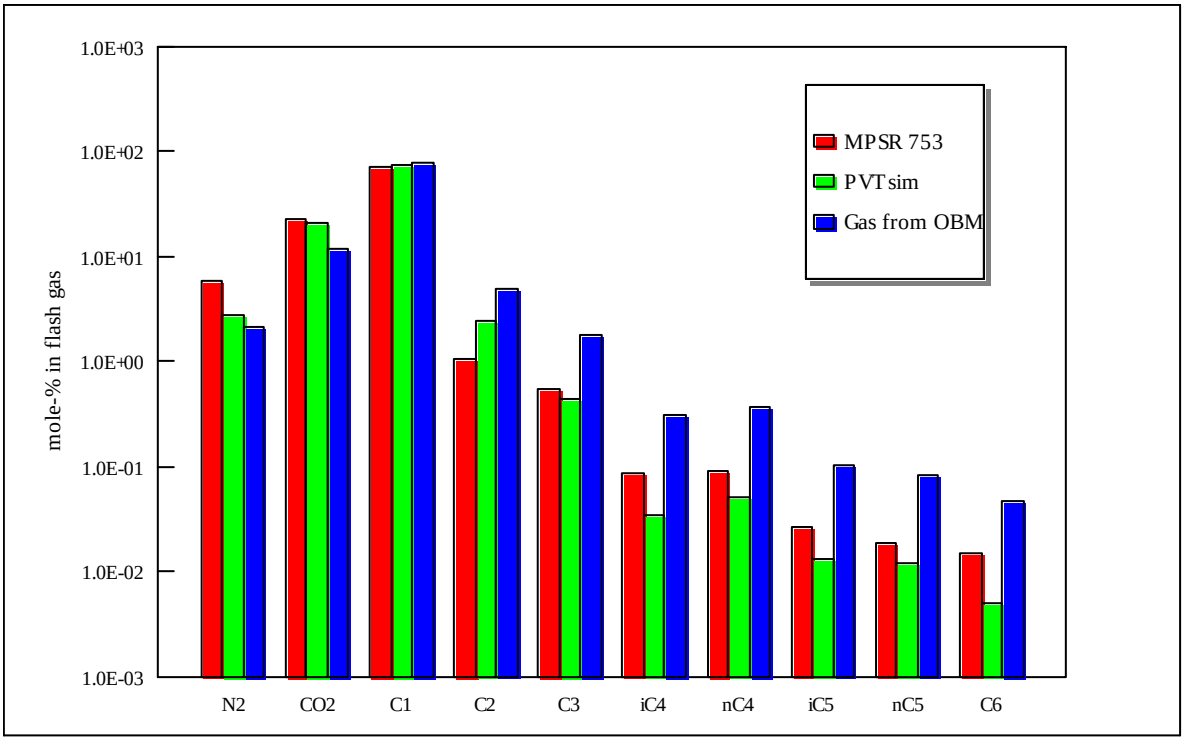

Figure 2. Comparison between the composition of gas released from base oil, gas released from water phase and the measured flash gas composition.