

Well no : 34/10-14 Operator : STATOIL

Coordinates : 61 14 00.50 N UTM coord. : 6789181 N
 02 15 18.87 E 460013 E

Licence no : 050 Permit no : 312

Rig : ROSS RIG

Contractor : ROSS DRILLING CO. A/S

Bottom hole temperature : 82 deg.C Elev. KB : 25 M

Spud. date : 81.12.24 Water depth : 224 M

Compl. date : 82.03.19 Total depth : 2647 M

Spud. class : APPRAISAL Form. at TD : TRIASSIC

Compl. class : P&A. OIL/GAS DISC. Prod. form :

Seisloca : 3D - 136 SP 285

LICENSEES

 9,000 NORSK HYDRO PRODUKSJON A.S
 6,000 SAGA PETROLEUM A.S
 85,000 DEN NORSKE STATS OLJESELSKAP A.S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm
CONDUCTOR	30	313,0	36	314,0	
SURF.COND.	20	785,0	26	800,0	1,80
INTERM.	13 3/8	1554,0	17 1/2	1568,0	1,85
INTERM.	9 5/8	1799,0	12 1/4	1810,0	1,93
LINER	7	2297,0	8 1/2	2300,0	2,38
OPEN HOLE			6	2647,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	1889.0 - 1907.8	7.0	37.2	M. JURASSIC
2	1907.8 - 1925.0	14.0	81.4	M. JURASSIC
3	1925.0 - 1939.5	7.7	53.1	M. JURASSIC
4	1939.5 - 1957.0	9.9	56.6	M. JURASSIC
5	1957.0 - 1972.5	15.5	100.0	M. JURASSIC
6	1972.5 - 1991.0	17.9	96.8	M. JURASSIC
7	1991.0 - 2010.0	18.4	96.8	M. JURASSIC
8	2010.0 - 2028.0	18.0	100.0	M. JURASSIC
9	2028.0 - 2047.0	19.0	100.0	M. JURASSIC
10	2210.0 - 2228.0	15.0	83.3	E. JURASSIC

DRILL STEM TEST									
TEST NO	DEPTH BELOW KB	CHOKE SIZE mm	RECOVERY					PRESS. (psi)	
			OIL Sm ³ /d	GAS M Sm ³ /d	OIL GRAV. g/cm ³	GAS GRAV. rel. air	GOR m ³ /m ³	FSIP	WHP
			1	1934 - 1937	12.7	850	81.0		

AVAILABLE LOGS				
LOG TYPE	INTERVALS	1/200	1/500	
ISF SONIC MSFL GR	242 - 798	x		
ISF BHC MSFL	785 - 1565	x		
ISF BHC MSFL	1553 - 1806	x		
ISF LSS MSFL	1796 - 2294	x		
ISF SONIC MSFL	2293 - 2643	x		
ISF SONIC GR	242 - 2643		x	
FDC	785 - 1566	x		
FDC CNL	1553 - 1807	x		
FDC CNL	1796 - 2295	x		
FDC CNL	2293 - 2645	x		
FDC CNL	785 - 2645		x	
C.H. CNL	1896 - 2000	x	x	
DLL MSFL	1796 - 2116	x	x	
CDM	1796 - 2296	x		
CDM	2293 - 2645	x		
CDM AP	1796 - 2296	x	x	
CDM AP	2294 - 2649	x	x	
RFT		x		
TDT (28.02.82)	1900 - 2050	x	x	
TDT (07.03.82)	1900 - 2050	x	x	
DIRECTIONAL SURVEY	1796 - 2296	0.2 M/CM		
DIRECTIONAL SURVEY	2294 - 2649	2.0 M/CM		
CBL VDL	780 - 1548	x		
CBL VDL	1449 - 1793	x		
CBL VDL	1645 - 2293	x		
CBL VDL	1878 - 2023	x		
VDL LSS	1900 - 2150	x		
MUD	320 - 2647		x	
VELOCITY	243 - 2643	1:1000	x	

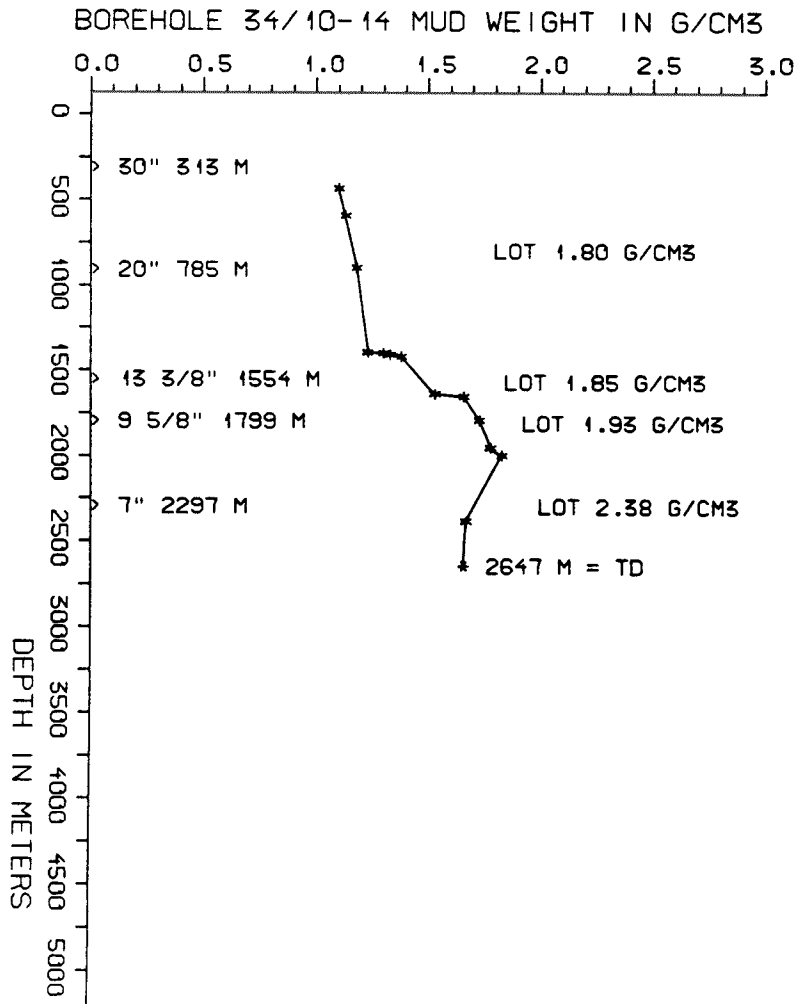
(TEST 1-15 + SAMPLES 1-2)

(Air Gun Well Velocity Survey & C.L.D. 1stk)
(Synthetic Seismogram Marine, 10 cm/s, 1stk)
(Synthetic Seismogram, b/p-w/t, 10 cm/s, 2stk)
(Two Way Travel Time, 10 cm/s, 1stk)

MUD PROPERTIES			
DEPTH BELOW KB m	WEIGHT g/cm ³	FUNNEL VISC. sec	FILTRATE LOSS cm ³
365	1.07		
525	1.10		
830	1.15		
1325	1.20		
1330	1.27		
1340	1.30		
1350	1.35		
1570	1.50		
1585	1.63		
1725	1.70		
1810	1.72		
1885	1.75		
1930	1.80		
2320	1.64		

DRILL BIT CUTTINGS AND WET SAMPLES		
SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	310 - 2643	420
WET SAMPLES	310 - 2643	470

SHALLOW GAS	
DEPTH INTERVAL m KB	REMARKS
	NONE



WELL HISTORY - 34/10-14

GENERAL :

The main purpose of well 34/10-14 was to investigate the extent and distribution of Middle to Early Jurassic sandstones in the north-eastern part of the Gullfaks Field. The well proved the presence of oil in sandstones of Middle Jurassic age. The Early Jurassic sandstones were found waterbearing.

OPERATIONS :

Well 34/10-14 was spudded 24.12.81 by the drilling rig "Ross Rig". Operations went forth without any specific problems down to the 12 1/4" section where lost circulation was experienced. 10 cores were taken in the 8 1/2" section.

TESTING :

DST no.1 consisted of a 570 min. flow period in which two bottom hole samples were taken together with wellhead and separator samples. This was followed by a shut-in period of 396 minutes. No sand production was experienced on DST no.1. After this DST a water injection test was carried out. 2 RFT samples were attempted taken - one proved leaking and the other contained water.

GEOLOGICAL TOPS

WELL: 34/10-14

	<i>Depth m (RKB)</i>
<i>Nordland Group</i>	<i>249 m</i>
<i>Hordaland Group</i>	<i>953 m</i>
<i>Rogaland Group</i>	<i>1554 m</i>
<i>Balder Fm</i>	<i>1554 m</i>
<i>Lista Fm</i>	<i>1621 m</i>
<i>Shetland Group</i>	<i>1729 m</i>
<i>Brent Group</i>	<i>1908 m</i>
<i>Ness Fm</i>	<i>1908 m</i>
<i>Etive Fm</i>	<i>1975 m</i>
<i>Rannoch Fm</i>	<i>2002 m</i>
<i>Broom Fm</i>	<i>2069 m</i>
<i>Dunlin Group</i>	<i>2080 m</i>
<i>Drake Fm</i>	<i>2080 m</i>
<i>Cook Fm</i>	<i>2159 m</i>
<i>Amundsen Fm</i>	<i>2203 m</i>
 <i>Statfjord Fm</i>	 <i>2372 m</i>
 <i>Cormorant Fm</i>	 <i>2596 m</i>
	 <u><i>TD = 2647 m</i></u>