

Well no :	34/7-14	Operator :	SAGA
Coordinates :	61° 15' 32.24" N 02° 06' 58.05" E	UTM coord.	679211382 N 45258317 E
Licence no :	89	Permit no :	620
Rig :	VILDKAT EXPLORER	Rig type :	SEMI-SUB.
Contractor :	TRANSNOR RIG AS		
Bottom hole temp:	84°C	Elev. KB :	25 M
Spud. date :	89.09.28	Water depth	148 M
Compl. date :	89.12.02	Total depth	2653 M
Spud. class :	APPRAISAL	Form. at TD	E.JURASSIC
Compl. class :	P&A. OIL	Prod.form. :	
Seisloca :	SG 8431 ROW 183 COL. 528		

LICENSEES

0,980000	DNO OLJE A/S
7,840000	ELF PETROLEUM NORGE A/S.
14,700000	ESSO EXPL. & PROD. NORWAY A/S
11,760000	NORSK HYDRO PRODUKSJON A.S
9,800000	SAGA PETROLEUM A.S.
51,000000	DEN NORSKE STATS OLJESELSKAP A.S
3,920000	DEMINEX (NORGE) A/S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	234,0	36	238,0	
INTERM.	20	491,0	26	495,0	1,49
INTERM.	13 3/8	1559,0	17 1/2	1610,0	1,79
INTERM.	9 5/8	1988,0	12 1/4	2010,0	1,80
LINER	7	2651,0	8 1/2	2653,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		
		M	%	
1	1610,0	- 1619,0	0,0	0
2	1950,0	- 1959,0	0,0	0
3	1959,0	- 1959,5	0,0	0
4	2194,0	- 2222,0	28,0	100,0
5	2222,0	- 2249,5	27,2	98,9
6	2249,5	- 2276,5	27,0	100,0
7	2276,5	- 2300,0	23,5	100,0
8	2300,0	- 2325,5	25,5	100,0
9	2325,5	- 2353,5	28,0	100,0
10	2353,5	- 2380,5	25,5	94,4
11	2380,5	- 2408,0	27,5	100,0

MUD

Depth	Mud weight	Visc.	Mud type
306,000	1,20		WATER BASED
523,000	1,10	14,0	WATER BASED
530,000	1,05		WATER BASED
530,000	1,05		WATER BASED
530,000	1,20		WATER BASED
1201,000	1,18	20,0	WATER BASED
1575,000	1,30	16,0	WATER BASED
1610,000	1,40	18,0	WATER BASED
1950,000	1,63	27,0	WATER BASED
2009,500	1,60	26,0	WATER BASED
2009,500	1,68	31,0	WATER BASED
2065,000	1,62	26,0	WATER BASED
2125,000	1,68	32,0	WATER BASED
2191,000	1,65	23,0	WATER BASED
2408,000	1,68	27,0	WATER BASED
2653,000	1,65	24,0	WATER BASED
2653,000	1,68	32,0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	Interval meter		Choke size	Pressure (PSI) WHP	BTHP	FFP
1	2232,3	-	2241,3	12,7	2195,3	
2	2204,7	-	2210,7	14,3	2250,7	4709,0

Test temperature: N/A

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1	959		0,850	0,690	
2	1150		0,850	0,690	66

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	500 - 2652	120
CUTTING	500 - 2652	240

SHALLOW GAS

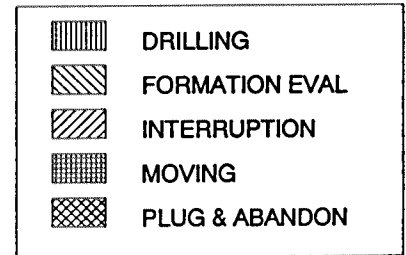
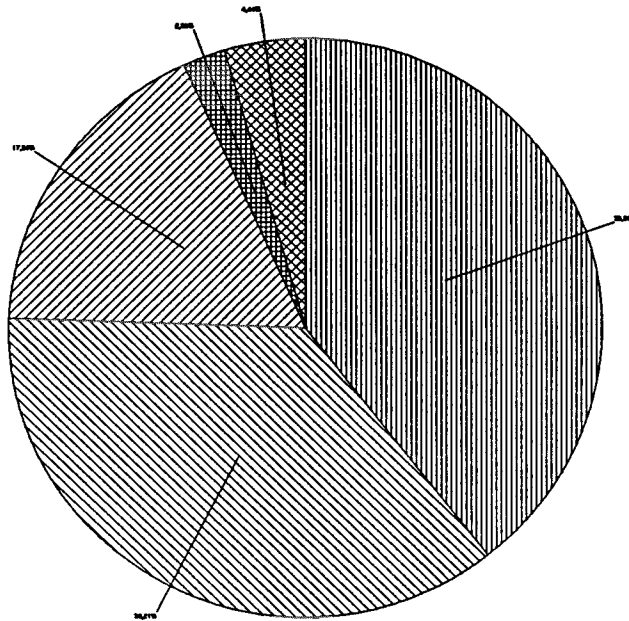
Interval below KB	Remarks

AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
AC CBL VDL GR	239,3 - 850,0	X		
CDL	490,0 - 1572,1	X	X	
CDL	1556,0 - 1986,0	X	X	
CDL CNL	2157,0 - 2378,0	X	X	
CDL CNL	1982,0 - 2651,0	X	X	
DIFL BHC AC GR	490,0 - 1572,0	X	X	
DIFL BHC AC GR	1555,5 - 2002,0	X	X	
DIFL BHC AC GR	1982,0 - 2650,8	X	X	
DLL MLL GR	2135,0 - 2378,0	X	X	
FMT LOG	2191,0 - 2365,0			
CDM	1556,0 - 1999,0	X		
CDM	1982,0 - 2651,0	X		
CDM AP	1556,0 - 1999,0	X	X	
CDM AP	1982,0 - 2651,0	X	X	
MWD	173,0 - 2653,0		X	
SPECTRALOG	2156,5 - 2377,7	X	X	
MUD	239,0 - 2653,0		X	
VELOCITY	500,0 - 2650,0		X	1:1000
SYNTHETIC SEISMOGRAM	10 cm/s			2
TWO WAY TRAVELL TIME	10 cm/s 20 cm/s			2
VSP, ZERO OFFSET	10 cm/s 20 cm/s			12

Daily Drilling Report System (DDRS)

Operations for well: 34/7-14



Main operations	Minutes	Hours	% of total
DRILLING	37110	618,50	39,50
FORMATION EVAL	34020	567,00	36,21
INTERRUPTION	16500	275,00	17,56
MOVING	2160	36,00	2,30
PLUG & ABANDON	4170	69,50	4,44
Total	93960	1566,00	100,00

Operations for well: 34/7-14**Main operation: DRILLING**

Sub operations	Minutes	Hours	% of total
BOP ACTIVITIES	1620	27,00	4,37
BOP/WELLHEAD EQ	1770	29,50	4,77
CASING	8490	141,50	22,88
CIRC/COND	2040	34,00	5,50
DRILL	11940	199,00	32,17
HOLE OPEN	30	0,50	0,08
OTHER	600	10,00	1,62
PRESS DETECTION	30	0,50	0,08
REAM	570	9,50	1,54
SURVEY	210	3,50	0,57
TRIP	9420	157,00	25,38
WAIT	390	6,50	1,05
Total	37110	618,50	100,00

Main operation: FORMATION EVAL

Sub operations	Minutes	Hours	% of total
CIRC SAMPLES	90	1,50	0,26
CIRC/COND	540	9,00	1,59
CORE	3330	55,50	9,79
DST	14850	247,50	43,65
LOG	5730	95,50	16,84
OTHER	330	5,50	0,97
TRIP	9150	152,50	26,90
Total	34020	567,00	100,00

Main operation: INTERRUPTION

Sub operations	Minutes	Hours	% of total
LOST CIRC	9900	165,00	60,00
MAINTAIN/REP	4830	80,50	29,27
OTHER	1020	17,00	6,18
WAIT	390	6,50	2,36
WELL CONTROL	360	6,00	2,18
Total	16500	275,00	100,00

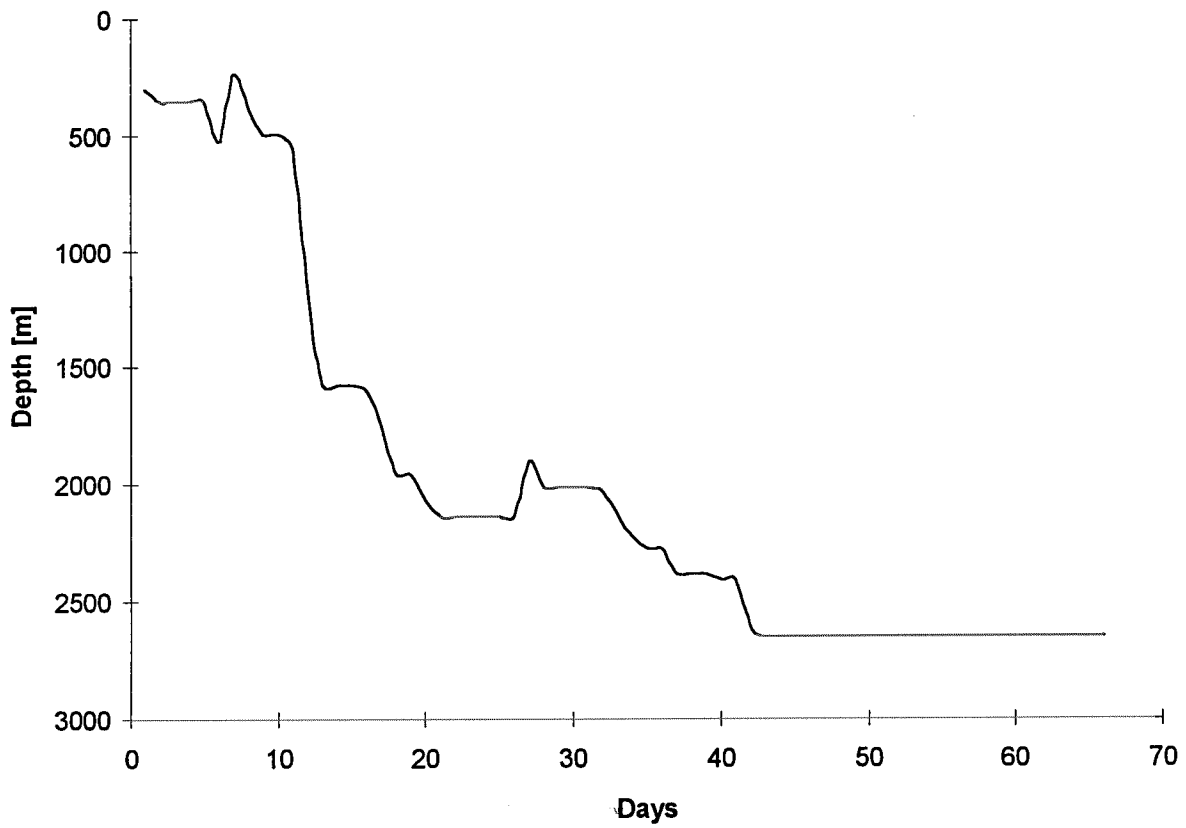
Main operation: MOVING

Sub operations	Minutes	Hours	% of total
ANCHOR	2160	36,00	100,00
Total	2160	36,00	100,00

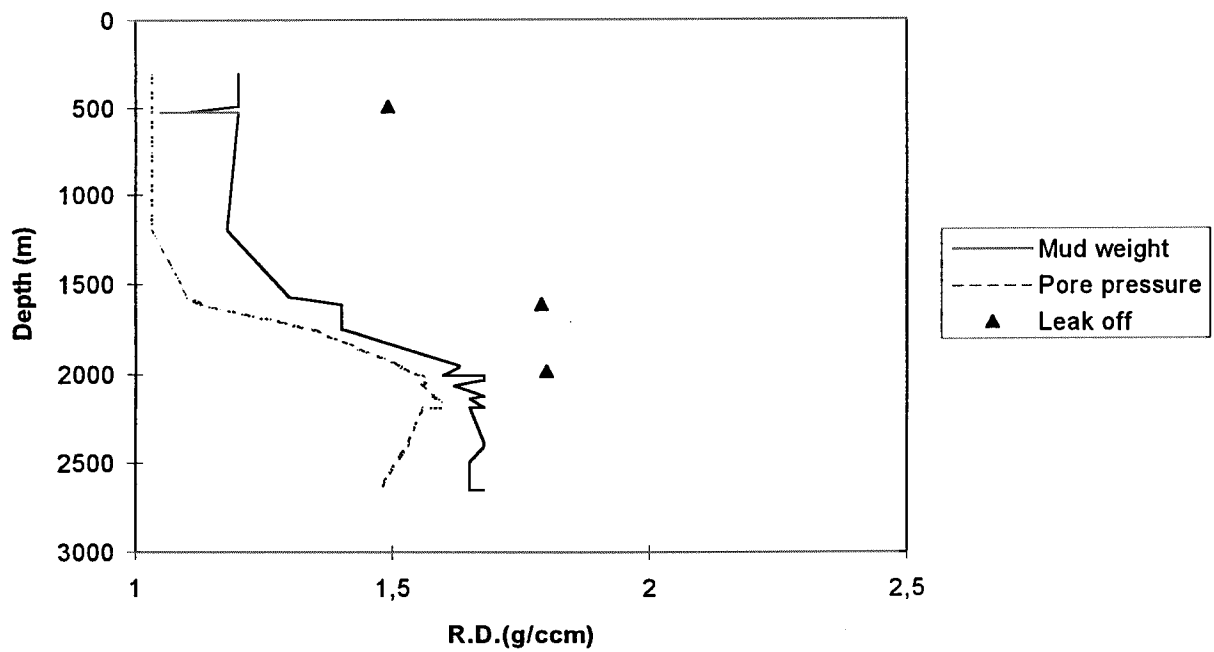
Main operation: PLUG & ABANDON

Sub operations	Minutes	Hours	% of total
CEMENT PLUG	510	8,50	12,23
CIRC/COND	360	6,00	8,63
CUT	120	2,00	2,88
EQUIP RECOVERY	780	13,00	18,71
MECHANICAL PLUG	120	2,00	2,88
TRIP	2070	34,50	49,64
WAIT	210	3,50	5,04
Total	4170	69,50	100,00

Depth vs time for well: 34/7-14



Composite plot for well: 34/7-14



Well History 34/7-14.

General:

Well 34/7-14 was drilled in on the "B-structure" lately named the Tordis Field in the southern part of block 34/7. The Middle Jurassic Brent Group reservoir is located in tilted fault blocks dipping in a westerly direction within the southern fault segment about 1.4 km south of the well 34/7-12. The structure has a NE-SW trend and is bounded to the east and north by major faults, i.e. Northern Main Fault and Southern Main Fault with throws of 50-200 m. The primary purpose of well 34/7-14 was to further delineate the Tordis Field. The main target of the well was the sandstones in the Brent Group. Secondary objective was the sandstones of the Early Jurassic Cook Formation. Possible shallow gas indications at: 246 - 285m RKB, 344m RKB, 376m RKB, 511m RKB, and likelihood of significant gas concentration at 344 m RKB.

Operations:

Wildcat well 34/7-14 was spudded 28 September 1989 by Wildkat Explorer and completed 2 December 1989 at a depth of 2653 m RKB in rocks of Early Jurassic age. The upper part of the well was drilled as a 9 1/2" pilot hole without a riser, and was plugged back from 511 m RKB due to lack of reliable gas readings in the sandlayer. Lost circulation occurred at 2137m RKB, and the well was plugged back to the 13 3/8" casing shoe. A total of eleven cores were cut. Nine in the interval 2194 - 2408 m RKB, two in the interval 1950 - 1959.5 m RKB without success, and one in the interval 1610 - 1619 m RKB. Three runs were made with coregun, attempting to take a total of 150 sidewall cores. The well was plugged and abandoned as an oil discovery.

Testing:

Two DST tests were carried out in the oil zone of this well:

Test no 1 (Ness/zone I) produced at 960 Sm³ / d / bar with an observed productivity index of 85 Sm³ / d / bar.

Test no 2 (Tarbert/zone I) produced at 1150 Sm³ / d / bar with an observed productivity index of 385 Sm³ / d / bar.

Geological Tops.

Well: 34/7-14.

	Depth m (RKB).
Nordland Group	172.5
Utsira Fm	856.0
Hordaland Group	1006.0
Rogaland Group	1652.0
Balder Fm	1652.0
Lista/Sele Fm	1704.0
Shetland Group	1836.0
Cromer Knoll Group	2178.0
Viking Group	2181.5
Heather Fm	2181.5
Brent Group	2189.0
Tarbert Fm	2189.0
Ness Fm	2226.5
Etive Fm	2305.0
Rannoch Fm	2343.0
Dunlin Group	2413.0
Drake Fm	2413.0
Cook Fm	2543.0
Burton Fm	2629.0
T.D.	2653.0