

Well no :	34/7-15 S	Operator :	SAGA
Coordinates :	61° 24' 38.59" N 02° 12' 53.22" E	UTM coord.	680895110 N 45807895 E
Licence no :	89	Permit no :	638
Rig :	TREASURE SAGA	Rig type :	SEMI-SUB.
Contractor :	WILRIG A/S	Elev. KB :	26 M
Bottom hole temp:	135 °C	Water depth	306 M
Spud. date :	90.05.23	Total depth :	4646 M
Compl. date :	90.09.04	Form. at TD	E.JURASSIC
Spud. class :	WILDCAT	Prod.form. :	
Compl. class :	P&A. SHOWS		
Seisloca :	G/E 83 ROW 200 KOL 256		

LICENSEES

,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
9,600000	IDEMITSU PETROLEUM NORGE A.S.
9,800000	SAGA PETROLEUM A.S.
41,400000	DEN NORSKE STATS OLJESELSKAP A.S
3,920000	DEMINEX NORGE AS

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	428,0	36	433,0	
INTERM.	20	954,0	26	970,0	1,93
INTERM.	13 3/8	2606,0	17 1/2	2621,0	1,73
INTERM.	9 5/8	3921,0	12 1/4	3936,0	1,98
LINER	7	4455,0	8 1/2	4487,0	1,65
OPEN HOLE		4646,0	5 7/8	4646,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	%
1	4379,0 - 4394,0	15,0	100,0

MUD

Depth	Mud weight	Visc.	Mud type
433,000	1,05	,0	WATER BASED
687,000	1,12	12,0	WATER BASED
970,000	1,10	,0	WATER BASED
970,000	1,15	6,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
970,000	1,18	8,0	WATER BASED
1038,000	1,12	26,0	WATER BASED
1709,000	1,20	32,0	WATER BASED
1999,000	1,27	28,0	WATER BASED
2120,000	1,30	36,0	WATER BASED
2230,000	1,38	37,0	WATER BASED
2420,000	1,42	30,0	WATER BASED
3236,000	1,45	33,0	WATER BASED
3404,000	1,48	34,0	WATER BASED
3520,000	1,50	34,0	WATER BASED
3581,000	1,52	34,0	WATER BASED
3599,000	1,58	34,0	WATER BASED
3639,000	1,52	33,0	WATER BASED
3678,000	1,54	37,0	WATER BASED
3701,000	1,58	33,0	WATER BASED
3701,000	1,58	35,0	WATER BASED
3729,000	1,54	39,0	WATER BASED
4092,000	1,58	23,0	WATER BASED
4243,000	1,64	23,0	WATER BASED
4265,000	1,70	26,0	WATER BASED
4293,000	1,68	24,0	WATER BASED
4439,000	1,70	29,0	WATER BASED
4447,000	1,72	21,0	WATER BASED
4447,000	1,70	28,0	WATER BASED
4646,000	1,50	19,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	440 - 4644	420
CUTTINGS	448 - 4644	840

SHALLOW GAS

Interval below KB	Remarks
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AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
AC CBL VDL GR	358,0 - 2604,0	X		
AC CBL VDL GR	2316,0 - 3923,0	X		
AC CBL VDL GR	3817,0 - 4456,0	X		
CDL	953,0 - 2604,0	X	X	*
CDL CNL	2604,0 - 3935,0	X	X	*
CDL CNL	3919,0 - 4483,0	X	X	*
CDL	4456,0 - 4643,0	X	X	*

Log type	Intervals		1/200	1/500	Div.
DLL BHC AC GR	2604,0	- 3933,0	X	X	*
DIFL LS BHC AC GR CAL	954,0	- 2604,3	X	X	*
DIFL BHC AC GR	3790,0	- 4431,0	X	X	*
DIFL GR	3919,0	- 4483,0	X	X	*
DIFL BHC AC GR	4455,5	- 4642,7	X	X	*
CDM	2609,0	- 3910,0	X		
CDM AP	2609,0	- 3910,0	X	X	*
FMT	4439,0	- 4468,0		X	
FMT	3554,0	- 3907,0		X	
MWD (MD+TVD)	435,0	- 4487,0	X	X	
MUD	428,0	- 4646,0		X	
VELOCITY LOG	970,0	- 4300,0		X	1000
SYNTHETIC SEISMOGRAM	10 cm/s	20 cm/s			4
TWO-WAY TRAVEL TIME	10 cm/s	20 cm/s			13
V.S.P.	10 cm/s	20 cm/s			2

* BOTH 1:200 AND 1:500 ON THE SAME LOG.

Main operations for well: 34/7-15 S

Main operation: DRILLING

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	2130	35,5	2,12
BOP/WELLHEAD EQ	6360	106,0	6,32
CASING	9780	163,0	9,72
CIRC/COND	4440	74,0	4,41
DRILL	48930	815,5	48,64
OTHER	120	2,0	0,12
PRESS DETECTION	240	4,0	0,24
REAM	2640	44,0	2,62
SURVEY	540	9,0	0,54
TRIP	22920	382,0	22,79
UNDERREAM	1380	23,0	1,37
WAIT	1110	18,5	1,10
Total	100590	1676,5	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CORE	780	13,0	7,49
LOG	7740	129,0	74,35
TRIP	1290	21,5	12,39
WAIT	600	10,0	5,76
Total	10410	173,5	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	3930	65,5	24,49
LOST CIRC	2850	47,5	17,76
MAINTAIN/REP	3840	64,0	23,93
OTHER	3900	65,0	24,30
WAIT	180	3,0	1,12
WELL CONTROL	1350	22,5	8,41
Total	16050	267,5	100,00

Main operation: MOVING

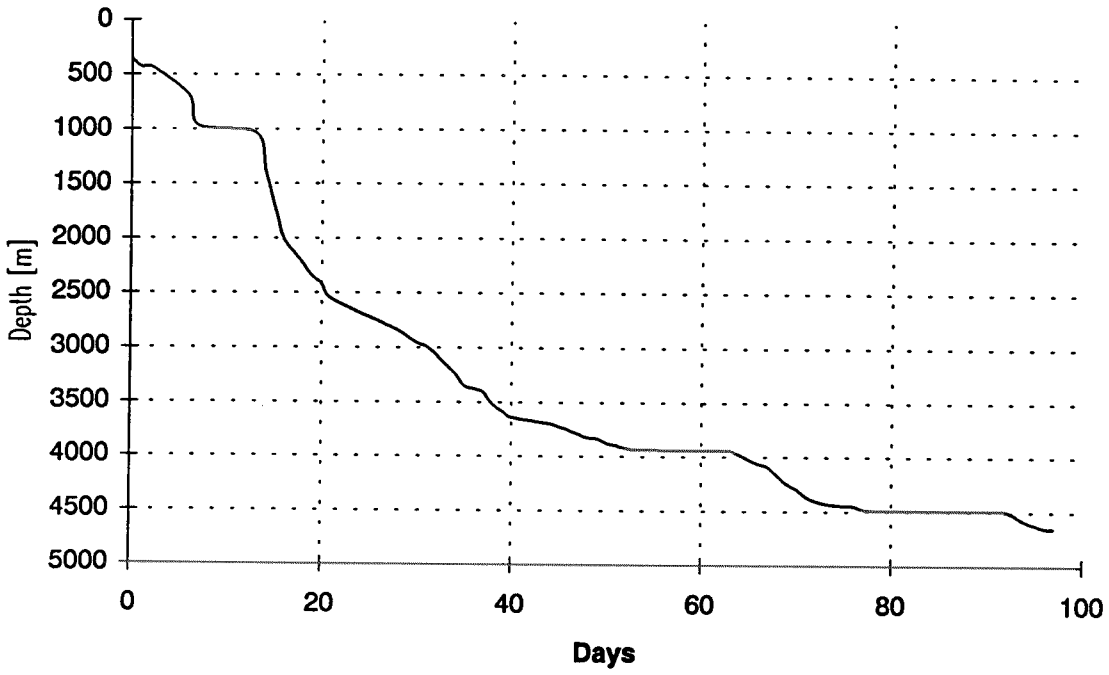
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	1980	33,0	92,96
TRANSIT	150	2,5	7,04
Total	2130	35,5	100,00

Main operation: PLUG & ABANDON

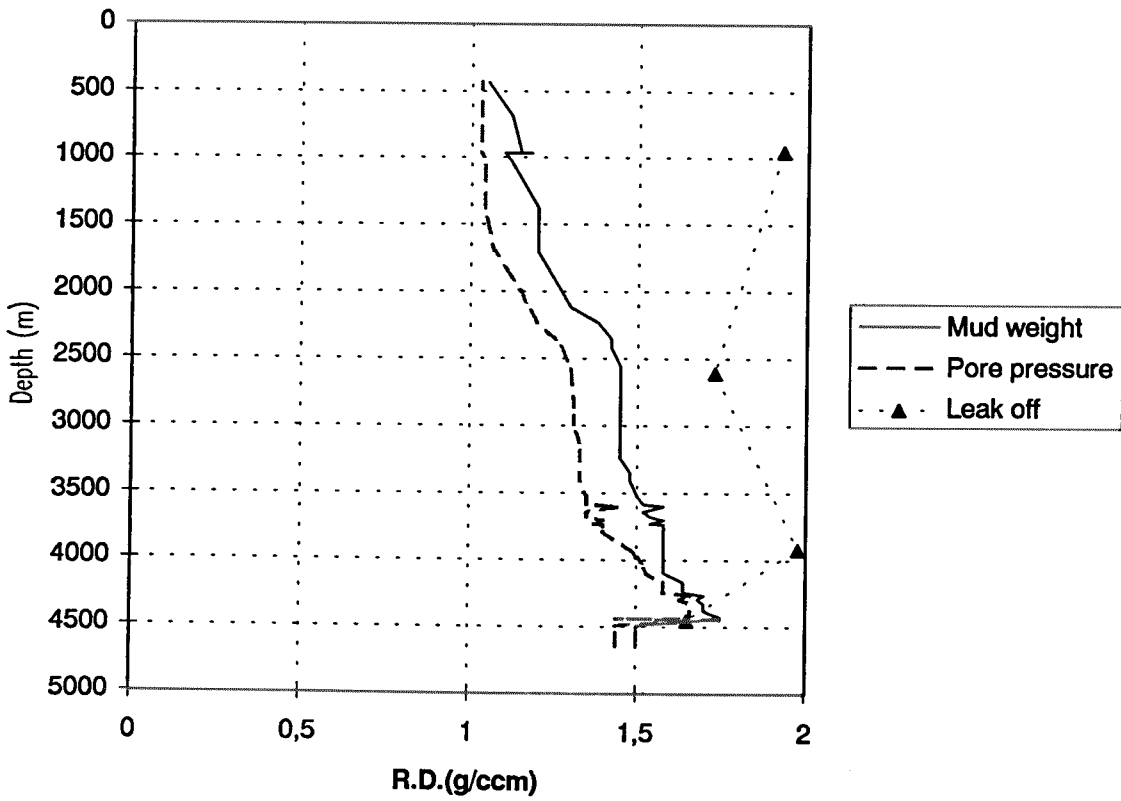
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	420	7,0	9,33
CIRC/COND	570	9,5	12,67
CUT	270	4,5	6,00
EQUIP RECOVERY	510	8,5	11,33
TRIP	1950	32,5	43,33
WAIT	780	13,0	17,33
Total	4500	75,0	100,00

Total time used: Hours

Depth vs time for well: 34/7-15 S



Composite plot for well: 34/7-15 S



Well History 34/7-15 S.

General:

Well 34/7-15 S was the first well drilled on the east flank of the 34/7 block. This part of the block has mainly been subsiding during Late Jurassic, Early and Late Cretaceous on the Tampen high and hence not been exposed so heavily to the erosive events, whereas the structures elsewhere in the block have suffered periods of erosion and non-deposition. The westward tilting of the Tampen area developed in these periods, and a large part of the erosion products were deposited to the west. The eastern flank received coarse clastic sediments, developed as fans next to the Inner Snorre Fault. The Middle Jurassic Brent Group probably shows the same development as elsewhere in the Tampen area. Seismic anomalies indicate possibilities for shallow gas. The primary objectives of well 34/7-15 S were:

- test the prospectivity of the Brent Group, and thereby test the sealing capacity of the Inner Snorre Fault.

- test the stratigraphy and prospectivity of the Early Cretaceous and Late Jurassic sediments.

- obtain better seismic and velocity control of the Cretaceous and Jurassic sediments.

The well will fulfill the work commitment of PL 089.

Operations:

Wildcat well 34/7-15 S was spudded 23 May 1990 by the semi-submersible rig Treasure Saga, and completed 4 September 1990 at a depth of 4646 m RKB in rocks of Early Jurassic age, the Drake Formation. No shallow gas was encountered in this well. The well was drilled as a deviated well to the east with kickoff point at 2900 m RKB. The sandstones of the Brent Group came in at 4376 m RKB, and one core was cut in this section in the interval 4379,0 to 4394,0 m RKB with 100% recovery. The Brent Group proved to be water bearing with some insignificant oil shows. A total of 250 sidewall cores were attempted and 151 cores were recovered. The well was plugged and abandoned with insignificant shows.

Testing:

No DST tests were performed in this well.

Geological Tops.

Well:34/7-15 S.

	Depth m (RKB).
Nordland Group	332,0
Utsira Fm	1057,0
Hordaland Group	1114,0
Rogaland Group	1804,0
Balder Fm	1804,0
Sele / Lista Fm	1834,0
Shetland Group	1977,0
Jorsalfare Fm	1977,0
Kyrre Fm	2250,0
Tryggvason Fm	2885,0
Svarte Fm	3050,0
-Kickoff	2900,0
Cromer Knoll Group	3165,0
Rødby Fm	3165,0
Sola Fm	3310,0
Åsgard Fm	3381,0
Viking Group	3440,0
Draupne Fm	3440,0
Heather Fm	3855,0
Brent Group	4376,0
Tarbert FM	4376,0
Ness Fm	4434,0
Etive Fm eqv.	4462,0
Rannoch Fm	4513,0
Dunlin Group	4571,0
Drake Fm	4517,0
T.D.	4646