

Well no :	34/10-33 A	Operator :	STATOIL
Coordinates :	61° 07' 34.44" N 02° 12' 57.10" E	UTM coord. :	677726200 N 45775618 E
Licence no :	50	Permit no :	598
Rig :	WEST DELTA	Rig type :	SEMI-SUB.
Contractor :	A/S SMEDVIG DRILLING A/S	Elev. KB :	29 M
Bottom hole temp:	91 °C	Water depth :	134 M
Spud. date :	88.12.16	Total depth :	3851 M
Compl. date :	89.02.09	Form. at TD	M JURASSIC
Spud. class :	APPRAISAL	Prod.form. :	
Compl. class :	P&A. OIL		
Seisloca :	ST 8134 - 156 CELLEPKT 296		

LICENSEES

6,000000	SAGA PETROLEUM A.S.
85,000000	DEN NORSKE STATS OLJESELSKAP A.S
9,000000	NORSK HYDRO PRODUKSJON A.S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm ³
CONDUCTOR	30	219,0	36	220,0	1,43
SURF.COND.	20	459,0	26	461,0	1,43
INTERM.	13 3/8	1222,0	17 1/2	1838,0	1,53
INTERM.	9 5/8	2698,0	12 1/4		1,83
LINER	7	3340,0	8 1/2	3851,0	

MUD

Depth	Mud weight	Visc.	Mud type
2696,000	1,47	15,0	WATER BASED
2952,000	1,26	17,0	WATER BASED
3025,000	1,33	18,0	WATER BASED
3105,000	1,39	17,0	WATER BASED
3169,000	1,41	21,0	WATER BASED
3219,000	1,45	22,0	WATER BASED
3320,000	1,50	29,0	WATER BASED
3330,000	1,60	25,0	WATER BASED
3370,000	1,48	22,0	WATER BASED
3470,000	1,46	20,0	WATER BASED
3851,000	1,44	19,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
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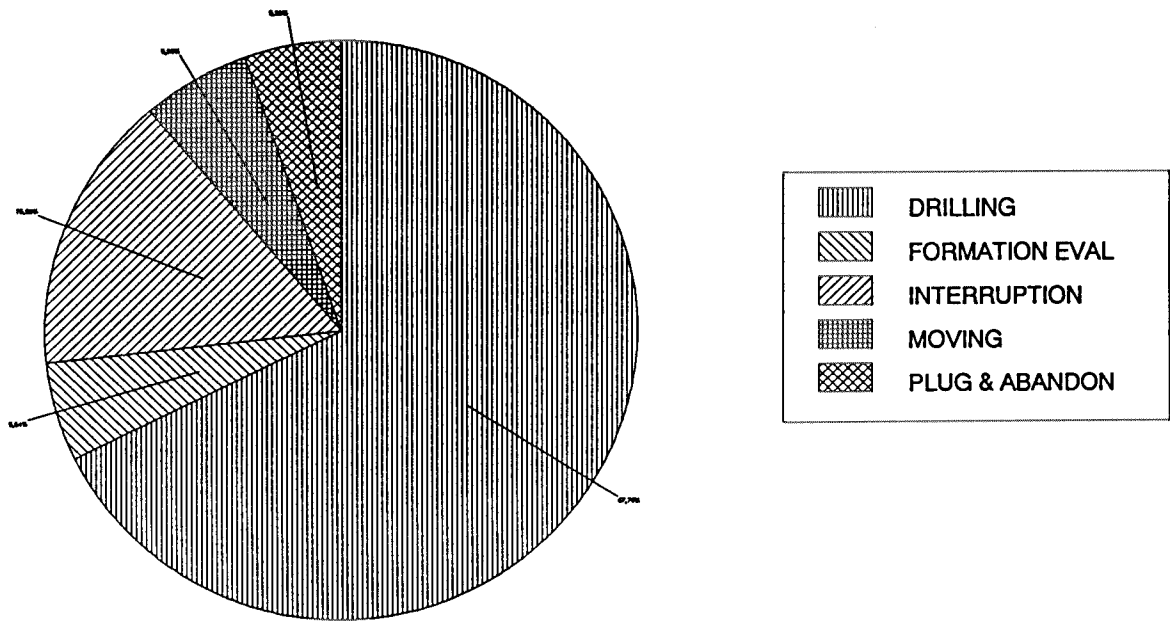
SHALLOW GAS

Interval Remarks
below KB

AVAILABLE LOGS

Log type	Intervals		1/200	1/500	Div.
AC CBL VDL GR	2595,0	- 3330,0	X		
CDL CNL GR	2703,0	- 3213,0	X	X	
DIFL LS BHC AC GR	2703,0	- 3853,0	X	X	
FMT	3039,0	- 3041,0		X	
MUD	2696,0	- 3851,0		X	
MWD	3345,0	- 3851,0		X	
SPECTRALOG	2703,0	- 3213,0	X	X	

Daily Drilling Report System (DDRS)
Operations for well: 34/10-33 A



Main operations	Minutes	Hours	% of total
DRILLING	57570	959,50	67,76
FORMATION EVAL	4710	78,50	5,54
INTERRUPTION	13170	219,50	15,50
MOVING	5010	83,50	5,90
PLUG & ABANDON	4500	75,00	5,30
Total	84960	1416,00	100,00

Operations for well: 34/10-33 A**Main operation: DRILLING**

Sub operations	Minutes	Hours	% of total
BOP ACTIVITIES	450	7,50	0,78
BOP/WELLHEAD EQ	4050	67,50	7,03
CASING	4050	67,50	7,03
CIRC/COND	3950	65,83	6,86
DRILL	15309	255,15	26,59
HOLE OPEN	2010	33,50	3,49
OTHER	3540	59,00	6,15
REAM	4350	72,50	7,56
SURVEY	961	16,02	1,67
TRIP	18900	315,00	32,83
Total	57570	959,50	100,00

Main operation: FORMATION EVAL

Sub operations	Minutes	Hours	% of total
CIRC/COND	180	3,00	3,82
LOG	3600	60,00	76,43
RFT/FIT	180	3,00	3,82
TRIP	420	7,00	8,92
WAIT	330	5,50	7,01
Total	4710	78,50	100,00

Main operation: INTERRUPTION

Sub operations	Minutes	Hours	% of total
FISH	7320	122,00	55,58
LOST CIRC	480	8,00	3,64
MAINTAIN/REP	1380	23,00	10,48
OTHER	60	1,00	0,46
WAIT	3930	65,50	29,84
Total	13170	219,50	100,00

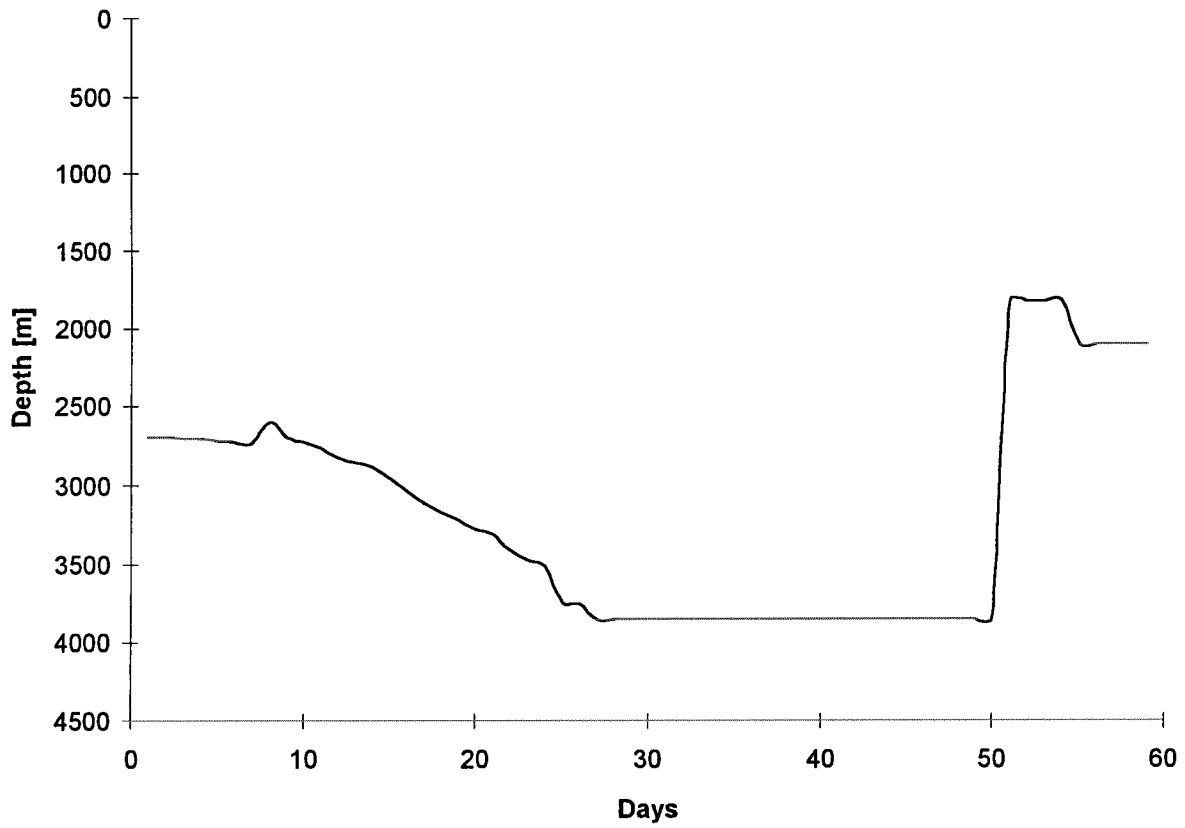
Main operation: MOVING

Sub operations	Minutes	Hours	% of total
ANCHOR	3300	55,00	65,87
POSITION	90	1,50	1,80
TRANSIT	1620	27,00	32,34
Total	5010	83,50	100,00

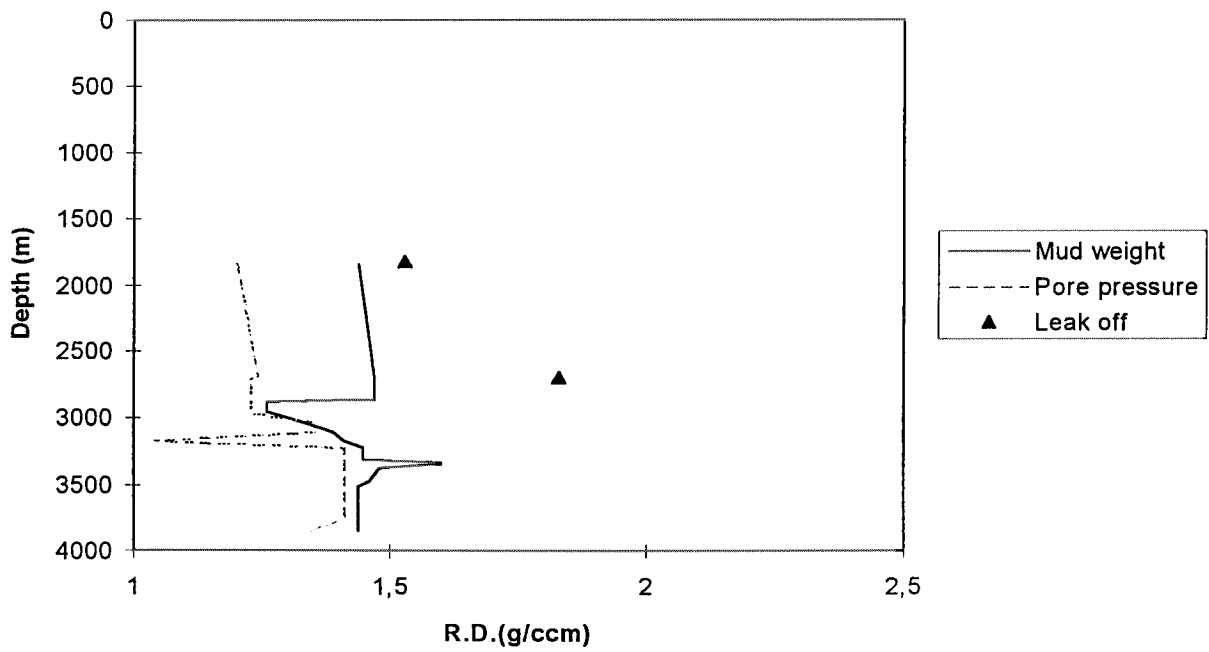
Main operation: PLUG & ABANDON

Sub operations	Minutes	Hours	% of total
CEMENT PLUG	300	5,00	6,67
CIRC/COND	150	2,50	3,33
EQUIP RECOVERY	1020	17,00	22,67
MECHANICAL PLUG	690	11,50	15,33
OTHER	60	1,00	1,33
SQUEEZE	60	1,00	1,33
TRIP	2220	37,00	49,33
Total	4500	75,00	100,00

Depth vs time for well: 34/10-33 A



Composite plot for well: 34/10-33 A



Well History 34/10-33 A.

General:

Well 34/10-33 A was designed as a sidetrack from well 34/10-33 to test the following objectives:

- evaluate if the Tarbert Formation belongs to the same pressure regime as the Upper Ness Formation.
- locate the gas-oil contact in the Tarbert Formation.
- evaluate if the pressure changes in the oil zone can be explained by tight faults and/or a lateral continuous barrier in the Ness Formation.
- prove reserves in the fault block.
- collect water sample from the Brent Group.
- confirm the oil/water contact.

In addition one wished to gather information for an optimal placing of the planned horizontal testwell as a new sidetrack from well 34/10-33.

Operations:

Appraisal well 33/10-33 A was spudded 16 Desember 1988 by the semi-submersibel rig West Delta and completed 9 February 1989 at a depth of 3851 m RKB in rocks of Middle Jurassic age. Due to severe technical problems during drilling, the logging program was not fulfilled, and several of the wells objectives could not be met. The well confirmed the oil/water contact at 3445 m. In addition there was observed a hydrocarbon bearing sandlayer in the Draupne Formation that have not been observed earlier in the wells on the Gullfaks South field. No cores were cut in this well. The well was temporary plugged

Testing:

No DST tests were performed in this well.

Geological Tops.

Well: 34/10-33 A.

	Depth m (RKB).
Shetland Group	2698.0
Cromer Knoll Group	3029.5
Viking Group	3034.0
Draupne Fm	3034.0
Heather Fm	3076.5
Brent Group	3347.0
Tarbert Fm	3347.0
Ness Fm	3451.0
Etive Fm	3746.5
Rannoch Fm	3757.5
T.D.	3851.0