Well no:	Operator:
34/07-19	SAGA

Well

Coordinates :	61° 23' 38.96" N 02° 05' 31.46" E	UTM coord. :	6807191.07 N 451502.27 E
License no :	89	Permit no :	698
Rig :	WEST ALPHA	Rig type :	SEMI-SUB.
Contractor :	SMEDVIG DRILLING A/S		
Bottom hole temp:	83 °C	Elev. KB :	18 M
Spud. date :	91.09.23	Water depth :	286 M
Compl. date :	91.12.26	Total depth :	2800 M
Spud. class :	APPRAISAL	Form. at TD :	E.JURASSIC
Compl. class :	SUSP. OIL	Prod.form. :	JURASSIC
Seisloca :	GE-83, RAD 237, KOLONNE 1037		

Licensees

.700000	DNO OLJE A/S
5.600000	ELF PETROLEUM NORGE AS
10.500000	ESSO EXPL. & PROD. NORWAY A/S
8.400000	NORSK HYDRO PRODUKSJON AS
9.600000	IDEMITSU PETROLEUM NORGE AS
7.000000	SAGA PETROLEUM A.S.
55.400000	DEN NORSKE STATS OLJESELSKAP A.S
2.800000	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	401.0	36	401.0	
INTERM.	20	1151.0	26	1166.0	1.70
INTERM.	13 3/8	1935.0	17 1/2	1960.0	1.77
INTERM.	9 5/8	2784.0	12 1/4	2800.0	

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Conventional Cores

Core no.	Intervals cored meters	Recovery m	%
1	2439.0 - 2447.6	8.6	100.0
2	2451.0 - 2478.8	27.8	100.0
3	2479.0 - 2503.0	24.0	100.0
4	2503.0 - 2509.0	6.0	100.0
5	2509.0 - 2530.0	21	100.0
6	2530.0 - 2557.3	27.3	100.0
7	2558.0 - 2576.3	18.3	100.0
8	2577.O - 2604.0	27.0	100.0
9	2605.0 - 2632.9	27.9	100.0
10	2633.0 - 2659.4	26.4	100.0

Mud

Depth	Mud weight	Visc.	Mud type
402.0	1.05		WATER BASED
686.0	1.05		WATER BASED
1166.0	1.35	20.0	WATER BASED
1402.0	1.40	32.0	WATER BASED
1554.0	1.40	33.0	WATER BASED
1767.0	1.45	34.0	WATER BASED
1960.0	1.50	30.0	WATER BASED
2160.0	1.60	36.0	WATER BASED
2303.0	1.62	34.0	WATER BASED
2439.0	1.64	38.0	WATER BASED
2485.0	1.64	29.0	WATER BASED
2508.0	1.64	30.0	WATER BASED
2558.0	1.64	33.0	WATER BASED
2577.0	1.64	32.0	WATER BASED
2605.0	1.64	28.0	WATER BASED
2633.0	1.64	28.0	WATER BASED
2661.0	1.64	33.0	WATER BASED
2724.0	1.64	29.0	WATER BASED
2800.0	1.64	29.0	WATER BASED

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Drill Stem Test (intervals and pressures)

Test no.	Test interval meter	Choke size	Pressure (psi) WHP	BTHP	FFP
1.0	2455.0 - 2468.0	14.3	1865	5250	

Drill Stem Test (recovery)

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	1150		0.835		40

Drill Bit Cuttings and Wet Samples

Sample type	Interval below KB	Number of samples
WET SAMPLES	1170 - 2800	240
CUTTINGS	1170 - 2800	240

Shallow Gas

Interval below KB	Remarks

Available Logs

Log type	Intervals logged	1/200	1/500	
CDN	2450.0 - 2550.0			
CDR	404.0 - 2800.0			
CDR (RT)	1950.0 - 2438.0			
CST GR	1255.0 - 1930.0			
DLL LSS MSFL AMS SP	1152.0 - 1940.0			

Well no:	Operator:
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DRILLING DATA PLOT	303.0 - 2800.0			
DRILLING DATA PRESS	250.0 - 1950.0			
DSI DLL MSFL AMS SP	1935.0 - 2794.0			
FMS GR	1935.0 - 2793.0			
LDL CNL NGL AMS	1935.0 - 2793.0			
LDL GR	1152.0 - 1940.0			
MSD	1935.0 - 2785.0			
MUD	1160.0 - 2800.0			
MWD CDR	303.0 - 1166.0			
RFT HP AMS GR	2456.0 - 2614.0			
SYNTHETIC SEISMOGRAM				
TWO WAY TRAVEL TIME				
WELL SITE LITHOLOGY	303.0 - 2800.0			
VERTICAL SEISMIC				

Main operations for well: 34/7-19

Main operation: DRILLING

Sub operation:	Minutes:	Hours:	% of total:
BOP ACTIVITIES	2820	47,0	7,65
BOP/WELLHEAD EQ	4380	73,0	11,88
CASING	8245	137,4	22,37
CIRC/COND	2100	35,0	5,70
DRILL	9960	166,0	27,02
HOLE OPEN	2220	37,0	6,02
REAM	630	10,5	1,71
TRIP	6510	108,5	17,66
Total	36865	614,4	100,00

Main operation: FORMATION EVAL

Sub operation:	Minutes:	Hours:	% of total:
CIRC SAMPLES	180	3,0	0,47
CIRC/COND	510	8,5	1,32
CORE	5070	84,5	13,11
DST	18660	311,0	48,25
LOG	4865	81,1	12,58
RFT/FIT	720	12,0	1,86
TRIP	8670	144,5	22,42
Total	38675	644,6	100,00

Main operation: INTERRUPTION

Sub operation:	Minutes:	Hours:	% of total:
FISH	9180	153,0	14,70
MAINTAIN/REP	16830	280,5	26,95
OTHER	12120	202,0	19,40
WAIT	24330	405,5	38,95
Total	62460	1041,0	100,00

Main operation: MOVING

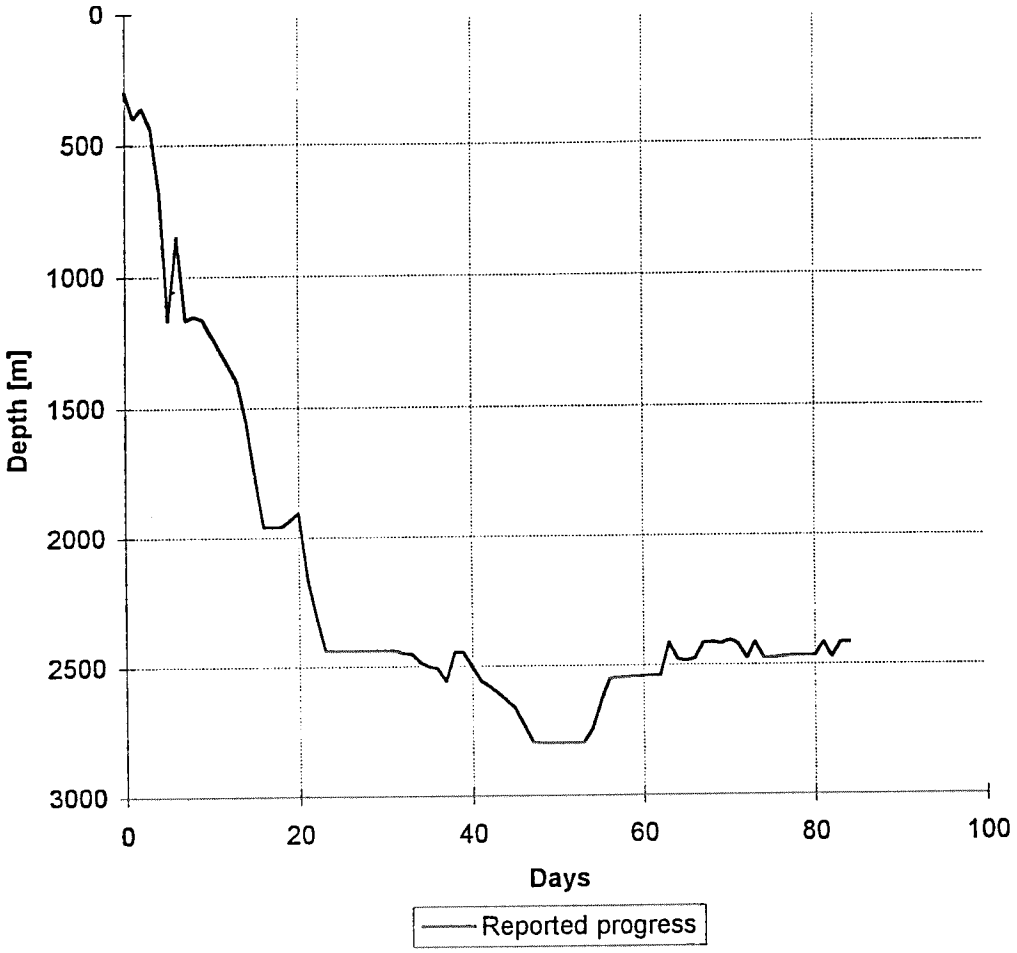
Sub operation:	Minutes:	Hours:	% of total:
ANCHOR	4080	68,0	78,61
TRANSIT	1110	18,5	21,39
Total	5190	86,5	100,00

Main operation: PLUG & ABANDON

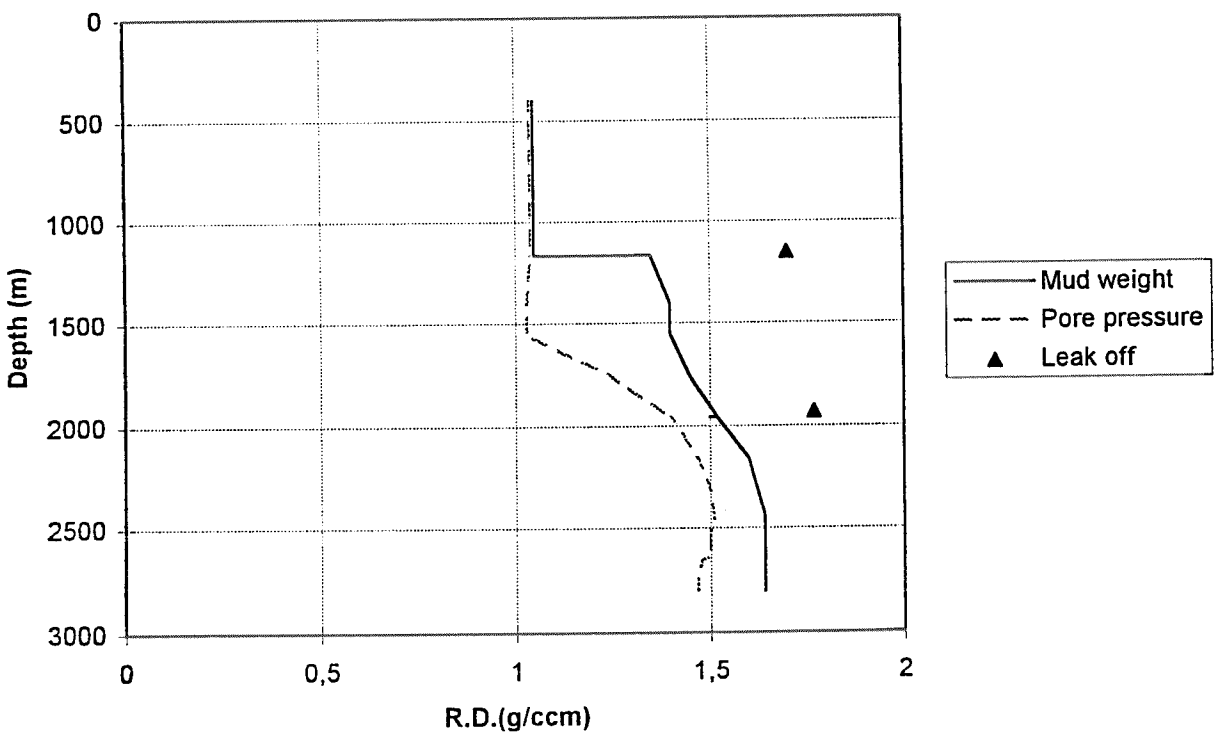
Sub operation:	Minutes:	Hours:	% of total:
CEMENT PLUG	180	3,0	15,38
OTHER	630	10,5	53,85
TRIP	360	6,0	30,77
Total	1170	19,5	100,00

Total time used: 2406,0 Hours

Depth vs time for well: 34/7-19



Composite plot for well: 34/7-19



Well History 34/7-19.

General:

Well 34/7-19 was designed to drill the Vigdis Middle structure, on a northwestward dipping rotated fault block, south of the Snorre Field. The major structural elements are oriented in a north-east - southwest direction. The primary objectives of the well were to:

- prove the northwestern extension and delineation into Segment M1 of the Vigdis Middle.
- establish an oil-water contact for the Late Brent Group.
- identify Brent Group development.
- test possible existence of a Late Jurassic Draupne Formation shale wedge.
- improve control on depth conversion methods.
- use the well in a future field development

Shallow gas was expected at a depth of 445 m RKB on the well location. This level represents a sand layer at Top Pliocene where gas has been observed in several previous wells in block 34/7. Shallow gas migth also be expected in thin sand layers, below seismic resolution, down til Top Utsira Fm. A boulder bed migth be expected approximately 60 m below the sea-floor. Prognosed TD was estimated to 2803 m RKB, and an OWC was assumed to be at 2400 m msl.

Operations:

Appraisal well 34/7-19 was spudded 24 September 1991 by Smedvig Drilling Company semi-submersible rig West Alpha, and completed 28 of Desember 1991 at a depth of 2800 m RKB in rocks of Jurassic age, corresponding to the Cook Formation. Apart from several fishing trips, drilling commenced without significant problems. The Cook Formation Formation proved to be waterbearing. An oil column of 22.5 m was encountered in the Tarbert Formation, with a net pay of 18 m. A total of ten cores were cut in the Cromer Knoll Group, Heather Formation, Brent Group and the Drake Formation with a recovery of 95,4 %. Two runs were made with the coregun, attempting a total of 90 sidewall cores. 37 sidewall cores were recovered. Shallow gas was not encountered in this well, but one zone. 526 - 527,5 m RKB is interpretated to be potentially gas bearing. The well was temporarly plugged as a future oil producing development well.

Testing:

Two DST tests were performed in 34/7-19. One in the Tarbert Formation oil zone and one in the water bearing Etive Formation.

Geological Tops.

Well: 34/7-19

	Depth m (RKB).
Nordland Group	303.0
Utsira Fm	944.0
Hordaland Group	1065.0
Skade Fm	1296.0
Undefined	1332.0
Grid Fm	1450.0
Undefined	1490.0
Rogaland Group	1680.0
Balder Fm	1680.0
Sele Fm	1727.0
Lista Fm	1765.0
Shetland Group	1870.0
Jorsalfare Fm	1870.0
Kyrre Fm	2194.0
Cromer Knoll Group	2436.5
Viking Group	2442.0
Heather Fm	2442.0
Brent Group	2455.5
Tarbert Fm	2455.5
Ness Fm	2499.5
Etive Fm	2527.5
Rannoch Fm	2582.0
Dunlin Group	2668.0
Drake Fm.	2668.0
Cook Fm.	2739.5
T.D.	2800.0