

Well no : 34/10-17 Operator : STATOIL

Coordinates : 61 03 58.93 N UTM coord. : 6770740 N
 02 00 50.78 E 446787 E

Licence no : 050 Permit no : 364

Rig : DEEPSEA BERGEN Rig type : SEMI-SUB.

Contractor : ODFJELL DRILLING AND CONSULTING COMPANY A/S

Bottom hole temperature : 92 deg.C Elev. KB : 25 M

Spud. date : 83.02.23 Water depth : 135 M

Compl. date : 83.07.08 Total depth : 3466 M

Spud. class : WILDCAT Form. at TD : L.JURASSIC

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

Seisloca : 8213 - 177 SP 158

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 ³
CONDUCTOR	30	221,0	36	222,0	
SURF.COND.	20	652,0	26	668,0	1,55
INTERM.	13 3/8	1902,0	17 1/2	1915,0	1,60
INTERM.	9 5/8	2580,0	12 1/4	2687,0	1,80
LINER	7	3015,0	8 1/2	3015,0	2,53
OPEN HOLE			6	3466,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2681.8 - 2700.0	17.4	95.6	MIDDLE JURASSIC
2	2700.0 - 2718.0	18.0	100.0	MIDDLE JURASSIC
3	2718.0 - 2736.0	18.0	100.0	MIDDLE JURASSIC
4	2736.0 - 2754.0	18.0	100.0	MIDDLE JURASSIC
5	2754.0 - 2772.0	17.3	96.1	MIDDLE JURASSIC
6	2772.0 - 2790.0	18.0	100.0	MIDDLE JURASSIC
7	2790.0 - 2808.0	18.0	100.0	MIDDLE JURASSIC
8	2808.0 - 2826.0	18.0	100.0	MIDDLE JURASSIC
9	2826.0 - 2840.0	14.0	100.0	MIDDLE JURASSIC
10	2840.0 - 2858.0	18.0	100.0	MIDDLE JURASSIC
11	2858.0 - 2876.0	17.6	97.8	MIDDLE JURASSIC
12	2876.0 - 2894.0	18.0	100.0	MIDDLE JURASSIC
13	2894.0 - 2912.0	15.6	86.7	MIDDLE JURASSIC

CONVENTIONAL CORES (Cont.)

Core no.	Intervals cored meters	Recovery		Series
		M	%	
14	2912.0 - 2930.0	18.0	100.0	MIDDLE JURASSIC
15	2930.0 - 2948.0	18.0	100.0	MIDDLE JURASSIC
16	2948.0 - 2966.0	17.5	97.2	MIDDLE JURASSIC

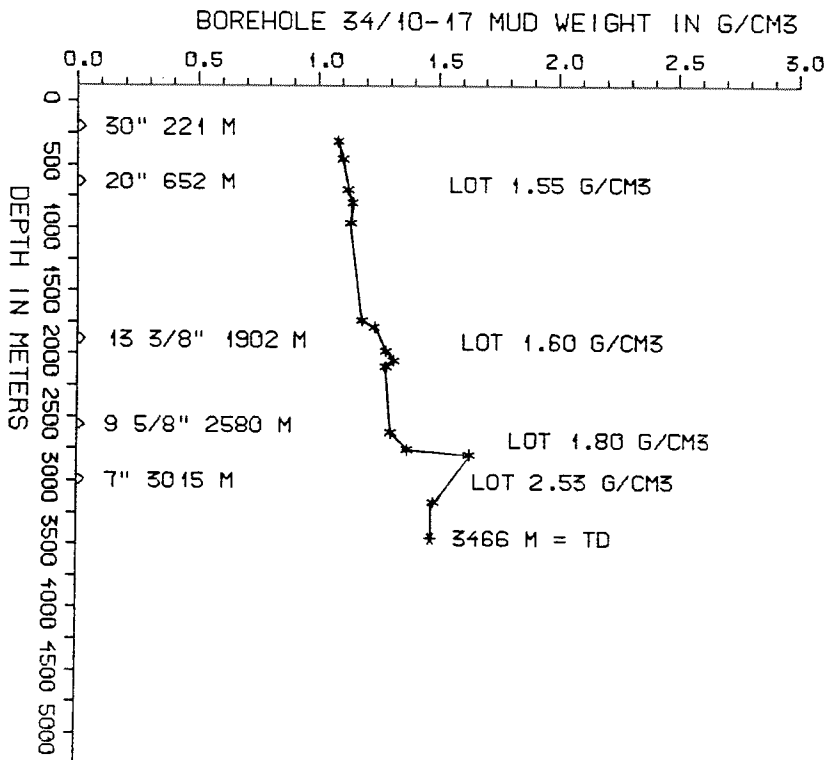
DRILL STEM TEST										
TEST NO	DEPTH BELOW KB	CHOKE SIZE mm	RECOVERY					PRESS. (psi)		
			OIL Sm ³ /d	GAS M Sm ³ /d	OIL GRAV. g/cm ³	GAS GRAV. rel. air	GOR m ³ /m ³	BHP	WHP	
1	2934 - 2944	15.8	1024	WATER					5265	610
2	2881 - 2891	19.05	782	192	0.82	0.74	245	5801	1530	
3	2835 - 2845	19.05	734	530	0.80	0.72	722	5787	1504	
4	2754 - 2790	19.05	501	653	0.76	0.71	1303	5729	1461	

AVAILABLE LOGS			
LOG TYPE	INTERVALS	1/200	1/500
DIFL BHC AC GR	135 - 673	X	X
DIFL BHC AC	652 - 1910	X	X
DIFL BHC AC	1903 - 2601	X	X
DIFL BHC AC	2579 - 3015	X	X
DIFL BHC AC	3000 - 3453	X	X
CDL CNL	221 - 673	X	X
CDL CNL	652 - 1909	X	X
CDL CNL	1903 - 2601	X	X
CDL CNL	2579 - 3013	X	X
CDL CNL	3014 - 3243	X	X
DLL MLL	2578 - 3014	X	X
CDM	2582 - 3015	X	
CDM AP	2582 - 3015	X	X
STRATADIP	2582 - 3015	1:40	
FMT (TEST 1-41)	2688 - 2980		X
FMT (TEST 1-6)	3110 - 3442		X
SPECTRALOG	2650 - 3013	X	X
CBL VDL AC	155 - 580	X	
CBL VDL AC	900 - 1903	X	
CBL VDL AC	1640 - 2578	X	
CBL VDL AC	2424 - 3020	X	
CBL VDL AC	2800 - 2994	X	
CBL VDL AC	2815 - 2920	X	
CBL VDL AC	2800 - 2865	X	
CBL VDL AC	2690 - 2817	X	
TEMPERATURE DATA	245 - 3466	1:5000	
PRESSURE EVALUATION	160 - 3466	1:5000	
MUD	230 - 3466		X
VELOCITY (L.T.S.)	135 - 3453	1:1000	X
(Synthetic Seismogr. Marine, 10 cm/s,		1 stk)	
(Air Gun Well Velocity Survey & C.L.D.		1 stk)	
(Synthetic Seismogram, 10 cm/s, b/p-w/t,		2 stk)	
(VSP, 10 cm/s, b/p-w/t,		9 stk)	

MUD PROPERTIES			
DEPTH BELOW KB m	WEIGHT g/cm ³	FUNNEL VISC. sec	FILTRATE LOSS cm ³
230	1.05	41	
300	1.06	42	
370	1.07	38	
440	1.08	40	
620	1.09	38	
670	1.10	35	
720	1.11	39	
880	1.10	37	
1650	1.15	40	
1700	1.20	45	
1900	1.25	42	
1970	1.28	43	
2015	1.25	46	
2370	1.26	50	
2540	1.27	44	
2665	1.34	45	
2710	1.60	55	
3085	1.45	56	
3466	1.45	59	

DRILL BIT CUTTINGS AND WET SAMPLES		
SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	230 - 3465	720
WET SAMPLES	230 - 3465	680

SHALLOW GAS	
DEPTH INTERVAL m KB	REMARKS
	NONE



WELL HISTORY - 34/10-17

GENERAL:

The wildcat 34/10-17 was the first well drilled on the Beta structure on the SE segment of block 34/10. The primary objective of the well was to evaluate possible hydrocarbon accumulations in the Middle Jurassic Brent sandstones. The secondary objectives were the Lower Jurassic Dunlin and Statfjord sandstones. Presence of gas and oil were proven in the Brent Group sandstones. The Dunlin and Statfjord sandstones were not hydrocarbon bearing.

OPERATIONS:

34/10-17 was spudded 23.02.83 by the semi-submersible rig Deepsea Bergen. A total of 16 cores were cut through the reservoir section. The well was drilled down to 2687 m without special drilling problems. At 2687 m, in the 12 3/4" section, a heavy flow was observed after a drilling break. The well was shut in, stabilized and cleaned. Technical failure and tight hole caused extensive time logging the 6" section, and the logging programme was reduced. The well was drilled with waterbased mud.

TESTING:

The well was tested from four zones in the Brent sand. One DST produced water, the other produced hydrocarbons.

GEOLOGICAL TOPS
WELL 34/10-17

	Depth m (RKB)
Nordland Group	162,0
Utsira Fm	826,0
Hordaland Group	948,0
Rogaland Group	1762,0
Balder Fm	1762,0
Lista Fm	1837,0
Shetland Group	1983,0
Cromer Knoll Group	2587,5
Viking Group	2590,0
Heather Fm	2590,0
Brent Group	2685,0
Tarbert Fm	2685,0
Ness Fm	2717,0
Etive Fm	2934,0
Rannoch Fm	2936,5
Dunlin Group	3000,0
Drake Fm	3000,0
Cook Fm	3107,0
Burton Fm	3220,0
Amundsen Fm	3267,5
Statfjord Fm	3422,0
TD =	3466,0