

Well no : 31/ 2-08 Operator : SHELL

Coordinates : 60 57 33.02 N UTM coord. : 6758502 N
 03 29 49.84 E 526926 E

Licence no : 054 Permit no : 0334

Rig : BORGNY DOLPHIN

Contractor : DOLPHIN SERVICES A/S

Bottom hole temperature : 91 deg.C Elev. KB : 25 M

Spud. date : 82.06.16 Water depth : 346 M

Compl. date : 82.08.18 Total depth : 3375 M

Spud. class : WILDCAT Form. at TD : TRIASSIC

Compl. class : P&A. DRY HOLE. Prod. form :

Seisloca : 8007-158 X-OVER 8100-406.

LICENSEES

5,000 CONOCO NORWAY INC.
 5,000 NORSK HYDRO PRODUKSJON A.S
 5,000 MOBIL DEVELOPMENT NORWAY A/S
 35,000 A/S NORSKE SHELL LETE-OG UTVINNINGSAVDELINGEN
 50,000 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
CONDUCTOR	30	469,5	36	480,0	
SURF.COND.	20	826,0	26	840,0	1,80
INTERM.	13 3/8	1734,0	17 1/2	1745,0	1,61
INTERM.	9 5/8	2732,0	12 1/4	2743,0	1,89
OPEN HOLE			8 1/2	3375,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	1841.8 - 1851.5	9.7	100.0	L.JURASSIC
2	1851.5 - 1869.7	17.2	94.5	L.JURASSIC
3	1870.0 - 1888.9	18.9	100.0	L.JURASSIC

DRILL STEM TEST									
TEST NO	DEPTH BELOW KB	CHOKE SIZE mm	RECOVERY					PRESS. (psi)	
			OIL Sm3 /d	GAS M Sm3 /d	OIL GRAV. g/cm3	GAS GRAV. rel. air	GOR m3/m3	FSIP	WHP
			1	1843 - 1848		ONLY WATER			

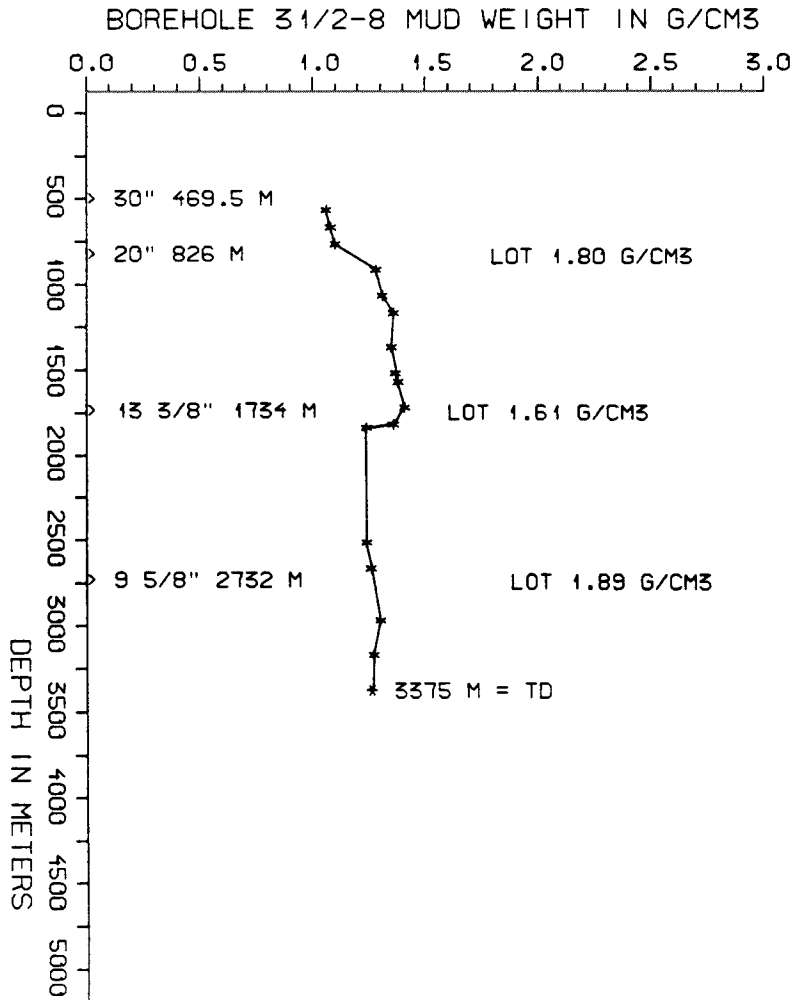
AVAILABLE LOGS				
LOG TYPE	INTERVALS	1/200	1/500	
ISF BHC GR	371 - 833	x	x	
ISF BHC	775 - 1741	x	x	
ISF BHC	1735 - 2739	x	x	
ISF BHC	2732 - 3378	x	x	
FDC CNL	469 - 834	x	x	
FDC CNL	777 - 1742	x	x	
FDC CNL	1735 - 2740	x	x	
FDC CNL	2732 - 3379	x	x	
DLL MSFL	1735 - 2729	x	x	
CDM	1735 - 2740	x	x	
CDM	2732 - 3380	x	x	
CDM AP	1737 - 2731	x	x	
CDM AP	2730 - 3377	x		
CDM SP	1837 - 2575			
CDM SP	2574 - 3195			
CDM PP	1837 - 2575			
CDM PP	2574 - 3195			
NGT	1735 - 2736	x	x	
NGT	2732 - 3379	x	x	
RFT	1810 - 2702	x		
RFT	2778 - 3344	x		
HP GR	1810 - 2702	x		
HP GR	2778 - 3344	x		
BGT	469 - 834	x	x	
CBL VDL	469 - 1735	x		
CBL VDL	792 - 2725	x		
MUD	485 - 3875			x
VELOCITY (S.C.L.)	400 - 3378			x

(Geogram Synthetic Seismogram, 10 cm/s-nor/rev. pol, 2stk)

MUD PROPERTIES			
DEPTH BELOW KB m	WEIGHT g/cm ³	FUNNEL VISC. sec	FILTRATE LOSS cm ³
500	1.03		
600	1.05		
700	1.07		
850	1.25		
1000	1.28		
1100	1.33		
1300	1.32		
1450	1.34		
1550	1.36		
1650	1.38		
1750	1.33		
1770	1.21		
2600	1.23		
2900	1.27		
3100	1.24		

DRILL BIT CUTTINGS AND WET SAMPLES		
SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS		
WET SAMPLES	500 - 3375	525

SHALLOW GAS	
DEPTH INTERVAL m KB	REMARKS
	NONE



WELL HISTORY - 31/2-8

GENERAL :

Well 31/2-8 was drilled as a wildcat in the northern part of block 31/2. The main objectives of drilling this well were to test the Late Jurassic sands and to test the sealing capacity of faults in the 31/2 area. The secondary objective was to test the Early Jurassic sediments. The well was plugged and abandoned as a dry hole with oil shows in the Late Jurassic.

OPERATIONS :

Well 31/2-8 was spudded 16.06.82 by the drilling rig "Borgny Dolphin". A gas zone (confirmed by logs) present between 510 - 530 m did not cause any problems during drilling of the 14 3/4" pilot hole. Max. gas reading through this zone was 10 %. The hole was drilled to 840 and underreamed to 26" without incident. The 17 1/2" section was drilled first by an 8 1/2" pilot hole down to 1063 m. to provide better control when drilling through a potential gas charged fault plane. No indications of gas were seen. 3 cores were taken in the 12 1/4" section. Two washouts occurred when drilling the 8 1/2" hole below 3317 m. The well reached TD at 3375 m.

TESTING :

Oil shows on cores and preliminary log interpretation led to a DST in an Late Jurassic sandstone interval. After some technical problems the well was flowed for 2 minutes followed by a one hour build-up. The well was then flowed until it died after having produced approx. 33 BBL's of formation fluid with a trace of oil. A wireline sandbailer found 22 m. of sand on top of the bridge plug.

GEOLOGICAL TOPS

WELL: 31/2-8

	Depth m (RKB)
Nordland Group	371 m
Hordaland Group	528 m
Rogaland Group	1428 m
Balder Fm	1428 m
Sele Fm	1471,5 m
Lista Fm	1500 m
Shetland Group	1808 m
Viking Group	1821 m
Draupne Fm	1821 m
Sognefjord Fm	1836,5 m
Middle Heather Fm	1968 m
Fensfjord Fm	2189 m
Lower Heather Fm	2265,5 m
Brent Group	2516,5 m
Tarbert Fm	2516,5 m
Ness Fm	2568,5 m
Etive Fm	2675 m
Dunlin Group	2719,5 m
Drake Fm	2719,5 m
Cook Fm	2824,5 m
Upper Amundsen Fm	2895,5 m
Johansen Fm	2966,5 m
Lower Amundsen Fm ?	3034,5 m
Stafjord Fm	3047,5 m
Cormorant Fm	3274 m

TD= 3375 m