

Well no : 30/ 6-10 A Operator : HYDRO

Coordinates : 60 36. 29.53 N UTM coord. : 6719328 N
 02 46 24.74 E 487600 E

Licence no : 053 Permit no : 360

Rig : TREASURE SCOUT Rig type : SEMI-SUB.

Contractor : WILHELMSSEN OFFSHORE SERVICES

Bottom hole temperature : 65 deg.C Elev. KB : 23 M

Spud. date : 82.12.02 Water depth : 109 M

Compl. date : 83.03.04 Total depth : 2665 M

Spud. class : APPRAISAL Form. at TD : JURASSIC

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

Seisloca : 913 133 SP 615

LICENSEES

13,330 ELF AQUITAINE NORGE A/S
 12,500 NORSK HYDRO PRODUKSJON A.S
 10,000 MOBIL DEVELOPMENT NORWAY A/S
 7,500 SAGA PETROLEUM A.S
 50,000 DEN NORSKE STATS OLJESELSKAP A.S
 6.670 TOTAL MARINE NORSK A.S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3

CASINGS IN 30/6-10:					
CONDUCTOR	30	219,0	36	220,0	
SURF.COND.	20	949,0	26	970,0	1,56
INTERM.	13 3/8	2138,0	17 1/2	2432,0	1,79
CASINGS IN 30/6-10 A:					
INTERM.	9 5/8	2652,0	12 1/4 12 1/4	1803,0 2665,0	1,59

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	2467.0 - 2477.5	8.7	82.9	UPPER JURASSIC
2	2477.5 - 2496.0	18.1	97.8	U/M JURASSIC
3	2496.0 - 2514.5	16.3	88.1	MIDDLE JURASSIC
4	2515.0 - 2520.0	4.7	94.0	MIDDLE JURASSIC
5	2520.0 - 2537.0	15.9	93.5	MIDDLE JURASSIC
6	2537.0 - 2546.0	9.0	100.0	MIDDLE JURASSIC
7	2546.0 - 2564.0	15.2	84.4	MIDDLE JURASSIC
8	2564.0 - 2574.5	9.2	87.6	MIDDLE JURASSIC
9	2574.5 - 2588.0	13.4	99.3	MIDDLE JURASSIC
10	2588.0 - 2606.5	4.0	21.6	MIDDLE JURASSIC

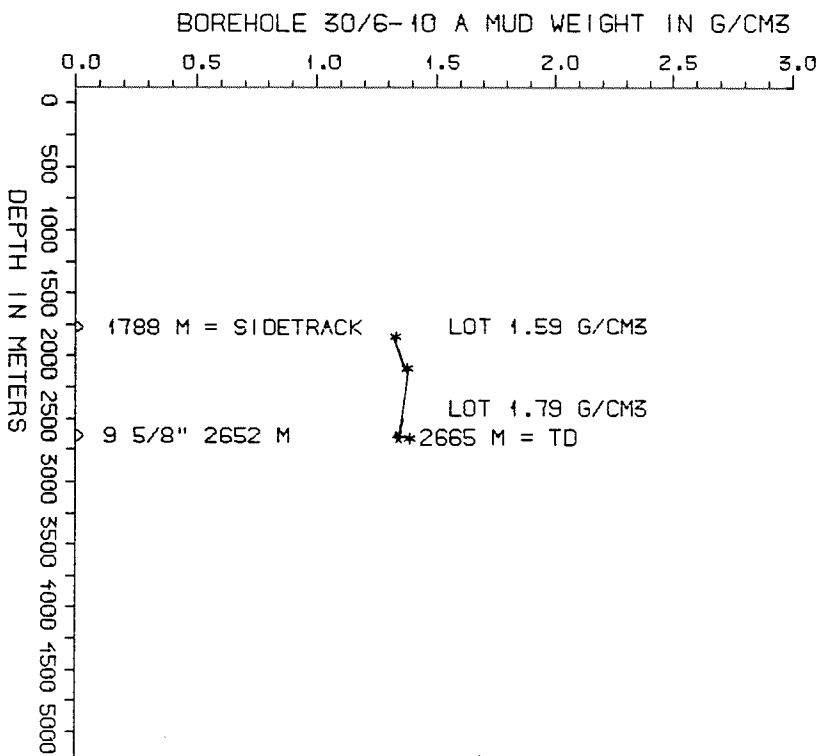
DRILL STEM TEST									
TEST NO	DEPTH BELOW KB	CHOKE SIZE mm	RECOVERY					PRESS. (psi)	
			OIL Sm ³ /d	GAS M Sm ³ /d	OIL GRAV. g/cm ³	GAS GRAV. rel. air	GOR m ³ /m ³	FSIP	WHP
1	2600 - 2602	12.7	563	78.82	0.850	0.685	140		
2	2587 - 2590	15.8	181	546.19	0.740	0.660	3017		
3	2446 - 2555	15.8	170	551.85	0.740	0.660	3246		
4	2480 - 2487	25.4	254	798.50	0.740	0.664	3143		

AVAILABLE LOGS			
LOG TYPE	INTERVALS	1/200	1/500
ISF SONIC GR	1787 - 2654	x	
ISF LSS SP	1787 - 2654		x
LDL	1787 - 2650	x	x
EPT	2350 - 2625	x	x
DLL MSFL	2340 - 2648	x	x
CDM	1787 - 2654	x	
CDM AP	1788 - 2619	x	x
GEODIP	2480 - 2620	1:40	
NGS RATIOS PLAYBACK	2370 - 2654	x	x
RFT			
RFT HEWLETT PACKARD			
CBL	1700 - 2615	x	
MUD	1788 - 2665		x

MUD PROPERTIES			
DEPTH BELOW KB m	WEIGHT g/cm ³	FUNNEL VISC. sec	FILTRATE LOSS cm ³
2020	1.35	54	
2630	1.36	53	
2650	1.32	55	

DRILL BIT CUTTINGS AND WET SAMPLES		
SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
CUTTINGS	1800- 2665	270
WET SAMPLES	1800- 2665	240

SHALLOW GAS	
DEPTH INTERVAL m KB	REMARKS
481	



WELL HISTORY - 30/6-10 A

GENERAL:

One of the primary objectives of the 30/6-10 well (see WDSS vol.13) was to encounter a free gas/oil contact within sandstones of the Etive Formation. When this contact was encountered high in shales of the Ness Formation, it was decided to drill a sidetracked well, 30/6-10 A, to fulfill the above mentioned primary objective. The possibility of determining the lateral continuity of channel sand bodies within the Ness Formation was considered as a secondary objective together with a possibility of seeing lateral variations in the Etive Formation sandstones. The Brent Group interval was found hydrocarbon bearing with the free gas/oil contact within the Etive Formation. No oil/water contact or other hydrocarbon reservoirs were encountered.

OPERATIONS:

The sidetrack 30/6-10 A was kicked off from 30/6-10 at 1788 m 02.12.82 by the semi-submersible rig Treasure Scout. 10 cores were cut in this well covering the lower part of the Heather Formation, Ness Formation and the last core ended in the oilzone of the Etive Formation. No sidewall cores were taken in this well due to good biostratigraphic control in the 30/6-10 well. Some technical problems occurred due to bad weather. The well was drilled with waterbased mud.

TESTING:

Four production tests were performed, three in the gas zone and one in the oil zone.

GEOLOGICAL TOPS
WELL 30/6-10 A

	Depth m (RKB)
Nordland Group	132,0
Utsira Fm	687,0
Hordaland Group	889,5
Rogaland Group	1982,0
Balder Fm	1982,0
Sele Fm	2053,0
Lista Fm	2168,0
Montrose Group	2250,0
Shetland Group	2264,5
Viking Group	2448,0
Heather Fm	2448,0
Brent Group	2480,0
Ness Fm	2480,0
Etive Fm	2571,0
Dunlin Group	2608,0
Drake Fm	2608,0
TD =	2665,0