

**General information**

Wellbore name	30/6-2
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	OSEBERG
Discovery	30/6-1 Oseberg
Well name	30/6-2
Seismic location	Line 703. 125. SP643
Production licence	053
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	225-L
Drilling facility	DEEPSEA SAGA
Drilling days	78
Entered date	24.09.1979
Completed date	11.12.1979
Release date	11.12.1981
Publication date	08.12.2015
Purpose - planned	APPRAISAL
Reentry	NO
Content	OIL/GAS
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
Kelly bushing elevation [m]	25.0
Water depth [m]	106.0
Total depth (MD) [m RKB]	2890.0
Final vertical depth (TVD) [m RKB]	2889.0
Maximum inclination [°]	2.5
Bottom hole temperature [°C]	78
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	HEGRE GP
Geodetic datum	ED50
NS degrees	60° 32' 12.16" N
EW degrees	2° 46' 11.11" E
NS UTM [m]	6711366.11
EW UTM [m]	487365.31



UTM zone	31
NPDID wellbore	381

Wellbore history

General

Well 30/6-2 was drilled to appraise the 30/6-1 Oseberg discovery. Well 30/6-1 found gas in the Brent Group and water-filled reservoirs in the Dunlin and Statfjord groups. The primary objectives were to test the Dunlin and Statfjord sandstones in a structurally higher setting on the Oseberg Alpha structure. Secondary objective was appraisal of the Brent Group hydrocarbons.

Operations and results

Appraisal well 30/6-2 was spudded with the semi-submersible installation Deepsea Saga on 24 September 1979 and drilled to TD at 2890 m in the Triassic Hegre Group. Tight hole became a serious problem at 1313 m. This was cured with salt water and diesel addition. Five days were counted as non-productive due to bad weather and fishing for lost objects in hole. The well was drilled with spud mud down to 736 m, and with Chromium-Lignosulphonate/bentonite mud from 736 m to TD. After the diesel addition at 1313 m the mud contained 8% diesel. The diesel content became slowly diluted to 0.25% at TD.

The Brent Group was penetrated from 2191 to 2237. It is 46 m thick and gas bearing. The hydrocarbon/water contact was not seen in the well. The underlying Dunlin and Statfjord groups were both water bearing. Oil shows were described on cuttings and 39% water saturation was calculated, from top Brent and all through the Shetland Group up to 2165 m. Further oil shows on cuttings and core were described at 1945 to 1955 m in the Balder Formation, on cores and cuttings in the Dunlin Group, and on the Statfjord core.

A total of seven cores were recovered in the interval from 2202 to 2238.5 m in the Brent Group, 2435 m to 2437.5 m, and 2444.5 to 2454.5 m in the Dunlin Group, and 2571 to 2577 m in the top of the Statfjord Group. An RFT gas sample was taken at 2222.3 m.

The well was permanently abandoned on 11 December as a gas/condensate appraisal well.

Testing

A drill stem test was performed from the interval 2212 to 2222 m.

The test produced 722000 Sm³ gas and 212 Sm³ oil /day through a 1" choke. The GOR was 3400 Sm³/Sm³, the oil gravity was 59 °API, and the gas gravity was 0.66 (air = 1). Water, sand or H₂S were not observed, but 0.3 - 0.6% CO₂ was recorded.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
180.00	2890.00



Cuttings available for sampling?	YES
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Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2202.0	2205.2	[m]
2	2205.5	2209.3	[m]
3	2210.0	2227.5	[m]
4	2227.5	2237.8	[m]
5	2435.0	2437.5	[m]
6	2444.5	2452.3	[m]
7	2571.0	2577.2	[m]

Total core sample length [m]	51.3
Cores available for sampling?	YES

Core photos



2202-2204m



2204-2205m



2205-2208m



2208-2209m



2210-2212m



2212-2215m



2215-2218m



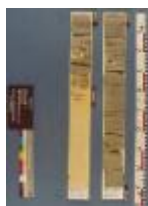
2218-2220m



2220-2223m



2223-2226m



2226-2227m



2227-2230m



2230-2232m



2232-2235m



2235-2237m



2435-2437m



2444-2447m



2447-2449m



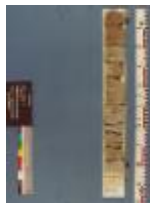
2449-2452m



2571-2573m



2573-2576m



2576-2577m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
8100.0	[ft]	C	
8200.0	[ft]	DC	
8300.0	[ft]	DC	
8400.0	[ft]	DC	
8500.0	[ft]	DC	
8600.0	[ft]	DC	
8700.0	[ft]	DC	
8800.0	[ft]	DC	
10760.0	[ft]	DC	
10860.0	[ft]	DC	
10950.0	[ft]	DC	
11060.0	[ft]	DC	
11160.0	[ft]	DC	
11250.0	[ft]	DC	
11360.0	[ft]	DC	
11460.0	[ft]	DC	
11500.0	[ft]	DC	
11540.0	[ft]	DC	
11600.0	[ft]	DC	
11700.0	[ft]	DC	
11800.0	[ft]	DC	
11900.0	[ft]	DC	
12000.0	[ft]	DC	



12110.0	[ft]	DC	
12200.0	[ft]	DC	
12300.0	[ft]	DC	
12390.0	[ft]	DC	
12490.0	[ft]	DC	
12600.0	[ft]	DC	
12690.0	[ft]	DC	
12790.0	[ft]	DC	

Oil samples at the Norwegian Offshore Directorate

Test type	Bottle number	Top depth MD [m]	Bottom depth MD [m]	Fluid type	Test time	Samples available
DST	DST1A	2212.00	2222.00	CONDE NSATE	01.12.1979 - 00:00	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
131	NORDLAND GP
650	UTSIRA FM
863	HORDALAND GP
1935	ROGALAND GP
1935	BALDER FM
1990	SELE FM
2082	LISTA FM
2165	SHETLAND GP
2191	BRENT GP
2191	NESS FM
2211	ETIVE FM
2237	DUNLIN GP
2237	DRAKE FM
2431	COOK FM
2445	BURTON FM
2513	AMUNDSEN FM
2568	STATFJORD GP
2808	HEGRE GP



Geochemical information

Document name	Document format	Document size [MB]
381_1	pdf	0.84
381_2	pdf	0.85

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
381_01 WDSS General Information	pdf	0.11
381_02 WDSS completion log	pdf	0.19

Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
381_30_6_2 COMPLETION REPORT AND LOG	pdf	29.34

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	2212	2222	19.1

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0				

Test number	Oil [Sm ³ /day]	Gas [Sm ³ /day]	Oil density [g/cm ³]	Gas grav. rel.air	GOR [m ³ /m ³]
1.0	191	646000	0.740	0.650	3397

Logs





Log type	Log top depth [m]	Log bottom depth [m]
CBL GR	280	2378
DLL MSFL GR	1702	2885
FDC CNL GR CAL	1702	2886
FDC GR CAL	900	1713
HDT	1702	2886
ISF SON GR SP	125	2885
VELOCITY	655	2880

Casing and leak-off tests

Casing type	Casing diam. [inch]	Casing depth [m]	Hole diam. [inch]	Hole depth [m]	LOT/FIT mud eqv. [g/cm3]	Formation test type
CONDUCTOR	30	177.0	36	178.5	0.00	LOT
SURF.COND.	20	901.0	26	915.0	1.80	LOT
INTERM.	13 3/8	1704.0	17 1/2	1715.0	1.74	LOT
INTERM.	9 5/8	2389.0	12 1/4	2400.0	1.76	LOT
OPEN HOLE		2890.0	8 1/2	2890.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
480	1.10	44.0		waterbased	
880	1.06	39.0		waterbased	
925	1.10	50.0		waterbased	
1085	1.12	42.0		waterbased	
1375	1.30			waterbased	
1560	1.35			waterbased	
1715	1.40			waterbased	
1980	1.50			waterbased	
2400	1.34			waterbased	
2442	1.35	53.0		waterbased	