



General information





Wellbore name	30/6-10
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	30/6-10
Seismic location	913 133 SP 615
Production licence	053
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	348-L
Drilling facility	TREASURE SCOUT
Drilling days	60
Entered date	04.10.1982
Completed date	02.12.1982
Release date	02.12.1984
Publication date	29.03.2014
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]	23.0
Water depth [m]	109.0
Total depth (MD) [m RKB]	2656.0
Final vertical depth (TVD) [m RKB]	2656.0
Maximum inclination [°]	2.5
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	DRAKE FM
Geodetic datum	ED50
NS degrees	60° 36' 29.53" N
EW degrees	2° 46' 24.74" E
NS UTM [m]	6719328.26
EW UTM [m]	487600.49
UTM zone	31
NPDID wellbore	92



Wellbore history

General

Well 30/6-10 was drilled to appraise the hydrocarbon potential in the Alfa structure on the Oseberg Field in the North Sea. The main objective was to define the gas/oil contact and to obtain cores from this zone.

Operations and results

Appraisal well 30/6-10 was spudded with the semi-submersible installation Treasure Scout on 4 October 1982 and drilled to TD at 2656 m in the Early Jurassic Drake Formation. Some problems were encountered while running both 20" and 13 3/8" casing. The drill string got stuck at 1992 m and leakages in the BOP stack after installing the 13 3/8" casing also occurred. The well was drilled with seawater and hi-vis pills down to 970 m and with KCl/polymer mud from 970 m to TD. At 1992 m 15 m³ diesel and 15.9 m³ Imco spot was pumped to free the pipe.

First oil show in the well was recorded at 1980 m in limestone stringers at top Balder Formation level. Poor oil shows were recorded in the intervals 2030 to 2100 m and 2215 m to 2253 m. Good oil shows were recorded on cuttings from marls and limestones in the Shetland Group from 2253 m to 2380 m, then again poor shows were recorded down to top of the Brent Group at 2457 m. The well encountered oil and gas in Middle Jurassic Brent sandstones. The Brent Group was found hydrocarbon bearing over the entire 118 m interval. Net pay was 37.3 m with 23.3 % average porosity and 23.9% average water saturation. The gas/oil contact was found from RFT pressure gradients to be at 2520 m in the Ness Formation, but no oil/water contact was encountered.

A total of eleven conventional cores were cut from the top of the Ness Formation and down into the Dunlin Group shales. Driller depths through the cored section are 0.0 to 2.5m deeper than logger's depth. The estimated gas/oil contact is captured in core number 6. Segregated RFT samples were taken at 2546.1 m (gas, oil and filtrate), 2555.5 m (gas, oil and filtrate), and 2467.5 m (gas and filtrate).

The well was plugged back on 2 December 1982 for sidetracking to well 30/6-10 A.

Testing

No drill stem test was performed, instead testing was to be done in the 30/6-10 A sidetrack.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
220.00	2655.00

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	2461.0	2475.0	[m]
2	2475.0	2488.1	[m]
3	2493.0	2502.0	[m]
4	2503.0	2509.5	[m]
5	2510.0	2517.2	[m]
6	2517.2	2528.4	[m]
7	2530.0	2548.0	[m]
8	2548.0	2551.0	[m]
9	2553.0	2554.4	[m]
10	2554.5	2572.5	[m]
11	2572.5	2590.5	[m]

Total core sample length [m]	119.3
Cores available for sampling?	YES

Core photos



2461-2465m



2465-2469m



2469-2473m



2473-2475m



2475-2479m



2479-2483m



2483-2487m



2487-2488m



2493-2497m



2497-2501m





2501-2502m

2503-2507m

2507-2509m

2510-2514m

2514-2517m



2517-2521m

2521-2525m

2525-2528m

2530-2534m

2534-2538m



2538-2542m

2542-2546m

2546-2548m

2548-2551m

2553-2554m



2554-2558m

2558-2562m

2562-2566m

2566-2570m

2570-2572m



2572-2576m

2576-2580m

2580-2584m

2584-2588m

2588-2590m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2385.5	[m]	SWC	RRI
2396.0	[m]	SWC	RRI
2398.0	[m]	SWC	RRI
2402.0	[m]	SWC	RRI
2406.0	[m]	SWC	RRI
2410.0	[m]	SWC	RRI
2413.0	[m]	SWC	RRI



2415.5	[m]	SWC	RRI
2417.0	[m]	SWC	RRI
2419.0	[m]	SWC	RRI
2420.0	[m]	SWC	RRI
2434.0	[m]	SWC	RRI
2445.0	[m]	SWC	RRI
2454.0	[m]	SWC	RRI
2465.0	[m]	C	RRI
2469.9	[m]	C	RRI
2472.5	[m]	C	RRI
2473.0	[m]	C	RRI
2477.3	[m]	C	RRI
2479.5	[m]	C	RRI
2480.2	[m]	C	RRI
2485.3	[m]	C	RRI
2486.8	[m]	C	RRI
2606.0	[m]	SWC	RRI
2627.0	[m]	SWC	RRI
2638.0	[m]	SWC	RRI
2647.0	[m]	SWC	RRI
2655.0	[m]	SWC	RRI

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	RFT2	2467.50	0.00			YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
132	NORDLAND GP
687	UTSIRA FM
890	HORDALAND GP
1981	ROGALAND GP
1981	BALDER FM
2054	SELE FM



2158	LISTA FM
2246	VÅLE FM
2253	SHETLAND GP
2416	VIKING GP
2416	HEATHER FM
2458	BRENT GP
2458	NESS FM
2541	ETIVE FM
2575	DUNLIN GP
2575	DRAKE FM

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

Document name	Document format	Document size [MB]
92_01_WDSS_General_Information	pdf	0.18
92_02_WDSS_completion_log	pdf	0.20

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

Document name	Document format	Document size [MB]
92_30_6_10_COMPLETION_LOG	pdf	2.29
92_30_6_10_COMPLETION_REPORT	pdf	21.49

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL	1200	2134
CST	1227	2420
CST	2412	2653
DLL MSFL	2370	2650
HDT	1932	2650
ISF LSS	132	2652
LDT CNL	950	2652
NGT	2138	2652
RFT	2458	2574
RFT	2467	2467





RFT	2521	2522
VELOCITY	310	2654

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	219.0	36	220.0	0.00	LOT
SURF.COND.	20	949.0	26	970.0	1.56	LOT
INTERM.	13 3/8	2138.0	17 1/2	2432.0	1.79	LOT
OPEN HOLE		2656.0	12 1/4	2656.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
300	1.10	40.0		waterbased	
1000	1.20	40.0		waterbased	
1520	1.30	45.0		waterbased	
2020	1.35	54.0		waterbased	
2630	1.36	53.0		waterbased	

Pressure plots

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
92 Formation pressure (Formasjonstrykk)	pdf	0.22

