



General information





Wellbore name	30/9-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	OSEBERG SØR
Discovery	30/9-3 Oseberg Sør
Well name	30/9-3
Seismic location	NH 82 - 065 SP 377
Production licence	079
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	400-L
Drilling facility	NORTRYM
Drilling days	58
Entered date	31.12.1983
Completed date	26.02.1984
Release date	26.02.1986
Publication date	03.10.2011
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	NESS FM
Kelly bushing elevation [m]	25.0
Water depth [m]	110.0
Total depth (MD) [m RKB]	3113.0
Final vertical depth (TVD) [m RKB]	3113.0
Bottom hole temperature [°C]	57
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	DRAKE FM
Geodetic datum	ED50
NS degrees	60° 28' 16.33" N
EW degrees	2° 45' 37.55" E
NS UTM [m]	6704071.58
EW UTM [m]	486827.21
UTM zone	31
NPDID wellbore	55



Wellbore history

General

Well 30/9-3 was drilled on the Gamma West structure on the Oseberg Fault Block in the northern North Sea. The primary objective was to find hydrocarbon accumulations in the Middle Jurassic Brent Group. Secondary objective was to find additional hydrocarbon accumulations in the Early Jurassic. Planned TD was ca 75 m below a possible intra Triassic marker to a depth of 4188 +/- 100 m

Operations and results

Wildcat well 30/9-3 was spudded with the semi-submersible installation Nortrym on 31 December 1983. The well was drilled to a depth of 3113 m into Drake Formation shales where the pipe got stuck and parted when pulling out of hole for logging. The fish was not recovered and no wire line logs were recorded below 1713.5 m due to fish in hole. All lithostratigraphic interpretation below this point is therefore based on cuttings description, core description, chromatograph data and ROP information. A sidetrack was decided to complete the well programme. The well was drilled with spud mud down to 625 m and with Invermul/EZmul Oil Based Mud from 625 m to TD.

The Brent Group (2712-3045 m) consisted of a 259 m thick Ness Formation (2712 - 2971 m) made up of sandstones with stringers of shale, siltstone and coal and 74 m of Etive Formation (2971 - 3045m) sandstones. Based on chromatograph analysis on hydrocarbon samples extracted from core samples a GOC was found at ca 2734 m and an OWC at ca 2815 m, both located in the Ness Formation. From core and chromatograph data the Ness Formation had a gross pay of 103 m. The net gas pay was estimated to 22 m and the net oil pay to 36 m giving a total net pay of 58 m (cut off values porosity < 12%, permeability < 1 mD). The average porosity was calculated from cores to 22.5 % and average horizontal permeability to 1090 mD. Oil shows were recorded in Maastrichtian limestone in the upper part of the Shetland Group.

Fifteen cores were cut in the well, all in the Brent Group, twelve in the Ness Formation and three in the Etive Formation. No wire line fluid samples were taken.

The well was plugged back for sidetracking on 26 February as an oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
220.00	3112.00

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	2714.5	2715.5	[m]
2	2716.0	2719.3	[m]
3	2719.7	2735.5	[m]
4	2735.5	2753.5	[m]
5	2753.5	2781.0	[m]
6	2781.0	2800.0	[m]
7	2802.0	2824.0	[m]
8	2824.0	2842.3	[m]
9	2842.5	2860.0	[m]
10	2860.0	2869.4	[m]
11	2870.0	2888.0	[m]
12	2888.0	2906.5	[m]
13	2995.0	3007.5	[m]
14	3008.5	3026.5	[m]
15	3026.5	3030.9	[m]

Total core sample length [m]	223.0
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
3816.2	[m]	SWC	WESTLB
3827.0	[m]	SWC	WESTLB
3831.0	[m]	SWC	WESTLB
3834.0	[m]	SWC	WESTLB
3838.0	[m]	SWC	WESTLB
3855.5	[m]	SWC	WESTLB
3883.0	[m]	SWC	WESTLB
3910.5	[m]	SWC	WESTLB
3913.5	[m]	SWC	WESTLB
3917.5	[m]	SWC	WESTLB
3919.5	[m]	SWC	WESTLB

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		0.00	0.00			YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
135	NORDLAND GP
594	UTSIRA FM
843	HORDALAND GP
994	SKADE FM
2051	ROGALAND GP
2051	BALDER FM
2131	SELE FM
2220	LISTA FM
2344	VÅLE FM
2354	SHETLAND GP
2354	HARDRÅDE FM
2578	KYRRE FM
2655	VIKING GP
2655	HEATHER FM
2677	BRENT GP
2712	NESS FM
2971	ETIVE FM
3045	DUNLIN GP
3045	DRAKE FM

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

Document name	Document format	Document size [MB]
55_01_WDSS_General_Information	pdf	0.17
55_02_WDSS_completion_log	pdf	0.28

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





Document name	Document format	Document size [MB]
55 30 9 3 Completion log	pdf	3.23
55 30 9 3 Completion Report	pdf	16.18

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CDL CAL GR	615	1713
DIFL LSBHC GR SP	135	625
DIFL LSBHC GR SP	615	1712

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	221.0	36	222.0	0.00	LOT
SURF.COND.	20	616.0	26	625.0	1.51	LOT
INTERM.	13 3/8	1699.0	17 1/2	1715.0	1.70	LOT
OPEN HOLE		3113.0	12 1/4	3113.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
870	1.12	25.0	30.0	OIL BASED	
1260	1.09	28.0	16.0	OIL BASED	
1385	1.12			OIL BASED	
1900	1.33	32.0	19.0	OIL BASED	
2280	1.40	30.0	18.0	OIL BASED	
2360	1.41	29.0	21.0	OIL BASED	
2500	1.43	31.0	18.0	OIL BASED	
2875	1.45	35.0	17.0	OIL BASED	
2975	1.44	45.0	13.0	OIL BASED	
3060	1.49	39.0	22.0	OIL BASED	
3090	1.44	38.0	20.0	OIL BASED	

