

### General information

Wellbore name	35/1-2 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	<a href="#">link to press release</a>
Factmaps in new window	<a href="#">link to map</a>
Main area	NORTH SEA
Well name	35/1-2
Seismic location	3D seismic NH06M04 inline 4899 & crossline 2832
Production licence	<a href="#">269</a>
Drilling operator	Statoil Petroleum AS
Drill permit	1319-L
Drilling facility	<a href="#">TRANSOCEAN LEADER</a>
Drilling days	99
Entered date	12.09.2010
Completed date	19.12.2010
Release date	01.04.2012
Publication date	01.04.2012
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	23.5
Water depth [m]	409.0
Total depth (MD) [m RKB]	4202.0
Final vertical depth (TVD) [m RKB]	4122.0
Maximum inclination [°]	19
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	61° 51' 56.18" N
EW degrees	3° 3' 21.37" E
NS UTM [m]	6859374.43
EW UTM [m]	502942.83
UTM zone	31
NPDID wellbore	6427

## Wellbore history

### General

Well 35/1-2 S was drilled on the Soleie Graben Prospect on the Tampen Spur between the Knarr and Peon discoveries in the northern North Sea. The main objective was to prove commercial hydrocarbon accumulation in the Early Jurassic Cook Formation. Secondary objectives were to drill through leads in the Paleocene Lista Formation and in the Cretaceous Kyrre Formation. The well commitment was to drill 50 m into the Statfjord Formation.

### Operations and results

Drilling was performed with the semi-submersible installation Transocean Leader. A pilot hole 35/1-U-1 was drilled first to check for shallow gas. No gas was seen. The main well was spudded 15 m south-east of the pilot and drilled to TD in 26" section. Casing and conductor were run, but due to a leak in the casing the well was abandoned and renamed 35/1-U-2. Wildcat well 35/1-2 S was spudded 15 m north-east of the abandoned on 12 September 2010 and drilled to TD at 4202 m (4122 m TVD) in the Early Jurassic Statfjord Formation. The Lista Formation was drilled with a 17" hole and opened up to 20" after the wire line logging was performed. Due to interbedded clay and hard limestone layers 8 runs were necessary to under ream the section. The well was drilled with sea water down to 1293 m, with Performadril mud from 1293 m to 2358 m, with XP-07 oil based mud from 2358 m to 3698 m, and with Low ECD-HTHP oil based mud from 3698 m to TD.

The tops in the overburden came in within the given uncertainties. Bigger differences were seen below the BCU. Five meters of Cromer Knoll Group were drilled before the Heather Formation was encountered at 3624 m. The Viking Group was thinner than expected and no Brent Group Equivalent was identified, therefore the Heather was directly in contact with the Drake Formation, which then came in 192 m shallower than prognosed. The Cook Formation came in 30 m shallower than prognosed and was thinner than expected, leading to a 75 m shallower top Statfjord Formation than expected. All the potential reservoirs and leads were dry and no hydrocarbon shows were observed.

Only GR-Resistivity-Density-Neutron-Sonic and sidewall cores were run on wire line. Pressure points were taken while drilling. No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 19 December 2010 and classified as dry.

### Testing

No drill stem test was performed.

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
1290.00	4201.00

Cuttings available for sampling?	YES
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## Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
433	<a href="#">NORDLAND GP</a>
1628	<a href="#">HORDALAND GP</a>
2001	<a href="#">ROGALAND GP</a>
2001	<a href="#">BALDER FM</a>
2049	<a href="#">SELE FM</a>
2062	<a href="#">LISTA FM</a>
2151	<a href="#">VÅLE FM</a>
2155	<a href="#">SHETLAND GP</a>
2155	<a href="#">JORSALFARE FM</a>
2277	<a href="#">KYRRE FM</a>
3608	<a href="#">BLODØKS FM</a>
3618	<a href="#">CROMER KNOLL GP</a>
3618	<a href="#">MIME FM</a>
3624	<a href="#">VIKING GP</a>
3624	<a href="#">HEATHER FM</a>
3638	<a href="#">DUNLIN GP</a>
3638	<a href="#">DRAKE FM</a>
3923	<a href="#">COOK FM</a>
3961	<a href="#">BURTON FM</a>
3983	<a href="#">AMUNDSEN FM</a>
4142	<a href="#">STATFJORD GP</a>

## Logs

Log type	Log top depth [m]	Log bottom depth [m]
EMS EDTC GR LEHQT 6-ARM-CAL	1275	2067
GPIT EMS EDTC GR LEHQT 6-ARM-CAL	1275	1751
MSCT	3926	4171
MWD LWD - ARCVRES PP	532	2355
MWD LWD - ARCVRES6 STET TELE	3695	4202

MWD LWD - ARCVRES8 PP STET	2304	3695
PD G		
MWD LWD - POWERPULSE	432	532
PEX DS1 AIT	2304	2869
PEX DS1 AIT	3594	4202
PEX HRLA DS1 GR	1276	2330
PWX DS1 AIT	2849	3695
VSP	567	2325

**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	528.0	36	532.0	0.00	LOT
SURF.COND.	20	1276.0	26	1293.0	1.60	LOT
INTERM.	16	2304.0	20	2358.0	1.81	LOT
INTERM.	14	2849.0	17 1/2	2875.0	1.85	LOT
LINER	9 7/8	3694.0	12 1/4	3698.0	2.06	LOT
OPEN HOLE		4202.0	8 1/2	4202.0	0.00	LOT

**Drilling mud**

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1243	1.35	17.0		Spud Mud	
1344	1.45	34.0		Performadril	
1620	1.45	34.0		Performadril	
1776	1.45	23.0		Performadril	
2010	1.45	28.0		Performadril	
2264	1.48	28.0		Performadril	
2317	1.43	28.0		XP-07 - #14	
2335	1.45	23.0		Performadril	
2346	1.48	36.0		Performadril	
2355	1.45	25.0		Performadril	
2859	1.41	26.0		XP-07 - #14	
2869	1.43	27.0		XP-07 - #14	
2872	1.41	25.0		XP-07 - #14	
3695	1.79	50.0		XP-07 - #14	
3696	1.79	53.0		XP-07 - #14	

3698	1.93	39.0		OBM-Low ECD- HTHP	
4202	1.98	34.0		OBM-Low ECD- HTHP	