

**General information**

Wellbore name	6608/2-1 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6608/2-1
Seismic location	RD1202-inline 1718 & crossline 5456
Production licence	330
Drilling operator	RWE Dea Norge AS
Drill permit	1453-L
Drilling facility	TRANSOCEAN WINNER
Drilling days	143
Entered date	06.06.2013
Completed date	26.10.2013
Release date	26.10.2015
Publication date	26.10.2015
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	26.0
Water depth [m]	303.0
Total depth (MD) [m RKB]	5634.0
Final vertical depth (TVD) [m RKB]	5600.0
Maximum inclination [°]	18
Bottom hole temperature [°C]	202
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	LYR FM
Geodetic datum	ED50
NS degrees	66° 58' 7.03" N
EW degrees	8° 23' 37.61" E
NS UTM [m]	7428201.21
EW UTM [m]	473532.27
UTM zone	32
NPDID wellbore	7192



Wellbore history

General

Well 6608/2-1 S was drilled on the Sverdrup prospect on the northern part of the Utgard High in the Norwegian Sea. The primary objective was to test the hydrocarbon potential in the Middle Jurassic Fangst Group with secondary targets in the Early Jurassic Båt Group and the Late Cretaceous Nise Formation sands in the Shetland Group.

Operations and results

Wildcat well 6608/2-1 S was spudded with the semi-submersible installation Transocean Winner on 6 June 2013. A 9 7/8" pilot hole was drilled to 783 m where shallow gas was encountered. Because of the shallow gas the 20" casing was set shallow, at 714 m. The tool string stuck at 5073 m while reaming into hole after bit trip at 5263 m. The string was cut, leaving 192.5 m BHA in hole. A technical sidetrack 6608/2-1 S T2 was initiated at 11:00 hrs on 13 September. The kick-off point was at 4686 m in 6608/2-1 S. The T2 track was drilled to final TD at 5634 m (5600 m TVD) m in the Early Cretaceous Lyr Formation. The well was drilled with seawater and hi-vis sweeps down to 720 m, with Glydril mud from 720 m to 2770 m, and with EMS-4600 oil based mud from 2770 m to 5263 m in the primary well bore. The sidetrack was drilled with EMS-4600 oil based mud from kick-off at 4686 m to 4885 m and with WARP mud from 4885 m to TD.

There were a number of deviations from the proposed stratigraphy in this well. The Kai Formation was not present in the well. Instead, the Nordland Group consisted of a thicker than prognosed Naust Formation. The Early Cretaceous Cromer Knoll Group proved to be much thicker than prognosed. The Late Cretaceous Nise formation had no reservoir development within the wellbore while the Jurassic targets were absent/not reached. The well was dry with no shows.

No conventional cores were cut and no fluid samples were taken in the well bores. The temperatures encountered were higher than prognosed. Measured temperature was 149 °C (12 degrees higher than prognosed) at 4406 m TVD and 200 °C at 5566 m TVD.

The well was permanently abandoned on 26 October as a dry well.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
730.00	5262.00

Cuttings available for sampling?	YES
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Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
329	NORDLAND GP
329	NAUST FM
2528	HORDALAND GP
2528	BRYGGE FM
2638	ROGALAND GP
2638	TARE FM
2730	TANG FM
2740	SHETLAND GP
2740	SPRINGAR FM
2758	NISE FM
3247	KVITNOS FM
3762	CROMER KNOLL GP
3762	LANGE FM
5334	LYR FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
LWD - GR RES ECD DI	329	2784
LWD - GR RES ECD DI SON DEN NEU	2784	5634
MSCT	5150	5600
MSCT	5320	5375
ONB12 GPIT PPC MSIP PPC EDTC LEH	2600	4509
RT APS TLD HNGS GPIT EDTC LEHQT	2580	4509
VSI4	1148	4500
ZOQVSI GR	3585	5624

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	396.0	36	398.0	0.00	
SURF.COND.	20	714.0	26	720.0	0.00	
LINER	16	1799.0	20	1845.0	0.00	
INTERM.	13 3/8	2773.0	17 1/2	2784.0	0.00	



LINER	11 3/4	3026.0	14	3026.0	0.00	
INTERM.	9 5/8	4487.0	12 1/4	4500.0	0.00	
OPEN HOLE		5634.0	8 1/2	5634.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
780	1.26	11.0		Glydril	
1845	1.24	13.0		Glydril WBM	
2530	1.55	22.0		Glydril	
2773	1.55	22.0		Glydril WBM	
2792	1.62	43.0		EMS 4600 synthetic	
2998	1.70	39.0		EMS 4600 synthetic	
3026	1.72	38.0		EMS 4600 synthetic	
3039	1.62	24.0		EMS 4600 synthetic	
4245	1.76	52.0		WARP	
4500	1.69	39.0		EMS 4600 synthetic	
4896	1.82	39.0		WARP	
5634	1.82	42.0		WARP	