



Generell informasjon

Brønnbane navn	6707/10-3 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Funn	6707/10-3 S (Ivory)
Brønn navn	6707/10-3
Seismisk lokalisering	inline 1216 PC 1001
Utvinningstillatelse	528 B
Boreoperatør	Centrica Resources (Norge) AS
Boretillatelse	1532-L
Boreinnretning	WEST NAVIGATOR
Boredager	84
Borestart	07.10.2014
Boreslutt	29.12.2014
Frigitt dato	29.12.2016
Publiseringsdato	29.12.2016
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE CRETACEOUS
1. nivå med hydrokarboner, formasjon.	KVITNOS FM
Avstand, boredekk - midlere havflate [m]	36.0
Vanndybde ved midlere havflate [m]	1421.0
Totalt målt dybde (MD) [m RKB]	4789.0
Totalt vertikalt dybde (TVD) [m RKB]	4301.0
Maks inklinasjon [°]	40.2
Temperatur ved bunn av brønnbanen [°C]	103
Eldste penetrerte alder	EARLY CRETACEOUS
Eldste penetrerte formasjon	LANGE FM
Geodetisk datum	ED50
NS grader	67° 11' 31.58" N



ØV grader	7° 19' 34.06" E
NS UTM [m]	7453962.42
ØV UTM [m]	427594.90
UTM sone	32
NPDID for brønnbanen	7550

Brønnhistorie

General

Well 6707/10-3 S was drilled to test the Ivory prospect, approximately 20 km northeast of the Aasta Hansteen Field on the Nyk High in the Norwegian Sea. The primary objectives were to test the Kvitnos Formation (Delfin Member) and the deeper Lysing Formation.

Operations and results

Prior to drilling the main bore, a pilot hole 6707/10-U-1 was drilled at a distance of 53.6 m to the SW of the main bore position. The pilot hole was drilled to 2200 m. No shallow gas was observed. Two Ooze layers were penetrated at 1595-1612 m and 1775-1787 m.

Wildcat well 6707/10-3 S was spudded with the drill ship West Navigator on 7 October 2014 and drilled to TD at 4789 m in the Early Jurassic Lange Formation. Inclination was built from 3.28° at 2224 m to 39.35° 2798 m and held at approximately that angle until final well TD. No significant problem was encountered during drilling to TD, but when during plug and abandon, a sudden deterioration in weather and a rapid change in wind direction caused the drillship to be forced 70 m off location. The automatic emergency disconnect sequence was activated and the shear rams sheared the cement stinger, dropping a total of 2789 m of drill pipe in the well. Ten days WOW followed before weather allowed operations to be resumed. Due to further upcoming weather, it was decided to leave the fish in the hole and commence with plug and abandon. The well was drilled with seawater and hi-vis sweeps down to 2196 m and with Versatec oil based mud from 2196 m to TD.

Top of the Kvitnos Formation target (Delfin Member) was encountered at 3318 m. Significant dry gas values were recorded in the uppermost 12 m of the Delfin 2 Member and a GWC was identified at 3339 m (3201.6 m TVD). The Lysing Formation was identified at 4321 m, 150 m higher than forecasted. A faint hydrocarbon odour was noted in parts of the cores from the Kvitnos reservoir. No shows were described on the core from the Lysing Formation. Otherwise, there were no shows above the OBM used in the well.

Three conventional cores were cut over the interval 3332 m to 3463 m in the Kvitnos Formation (Delfin Member) and one 27 m core was cut in the Lysing Formation, over the interval 4333 m to 4360 m. MDT fluid samples were collected at 3323.2 m (gas), 3331.5 m (gas), and 3387 m (water). The water depth at the well location was 1421 m and a seabed temperature of -1°C was measured during operations. This created a significant cooling effect on mud temperatures, as measured by LWD tools.

The well was permanently abandoned on 29 December 2014 as a gas discovery.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
2200.00	4789.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3332.0	3386.1	[m]
2	3386.0	3422.0	[m]
3	3425.5	3462.7	[m]
4	4330.0	4358.5	[m]

Total kjerneprøve lengde [m]	155.8
Kjerner tilgjengelig for prøvetaking?	YES

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
MDT		0.00	0.00			YES
MDT		3331.50	3323.20	CONDE NSATE	07.11.2014 - 16:46	YES
MDT		3387.00	0.00	WATER	08.11.2014 - 05:52	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
1457	NORDLAND GP
1457	NAUST FM
1774	KAI FM
1828	SHETLAND GP
1828	SPRINGAR FM



2288	NISE FM
3318	KVITNOS FM
4321	CROMER KNOLL GP
4321	LYSING FM
4351	LANGE FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
LWD - GR APWD CAL DEN RES FPT SO	3225	4300
LWD - GR APWD DEN RES POR DI FPT	4300	4398
LWD - GR APWD DEN RES POR SON DI	4398	4789
LWD - GR APWD RES DI	1503	2197
LWD - GR AWPD DEN RES POR DI SON	2197	3225
MDT	3323	3550
MDT	4322	4348
PEX AIT HNGS	3185	3605
PEX AIT HNGS	3300	4387
PPC MSIP	3185	3661
VIVSP	2113	4780

Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
CONDUCTOR	30	1503.0	36	1503.0	0.00	
INTERM.	13 3/8	2192.0	17 1/2	2197.0	1.36	LOT
INTERM.	10 3/4	3220.0	12 1/4	3225.0	1.72	FIT
LINER	7 5/8	4300.0	9 1/2	4300.0	1.65	FIT
OPEN HOLE		4789.0	6 1/2	4789.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1625	1.25			Seawater	



1900	1.25			Seawater	
2232	1.15			OBM	
3208	1.20			OBM	
3652	1.24			OBM	
3910	1.26			OBM	
4305	1.31			OBM	
4370	1.35			OBM	
4400	1.40			OBM	
4712	1.40			OBM	