



Generell informasjon





Brønnbane navn	4/4-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	4/4-1
Seismisk lokalisering	SIRINOR inline 3351 & xline 2625
Utvinningstillatelse	541
Boreoperatør	Repsol Exploration Norge AS
Boretillatelse	1475-L
Boreinnretning	MÆRSK GIANT
Boredager	31
Borestart	13.09.2013
Boreslutt	13.10.2013
Frigitt dato	13.10.2015
Publiseringsdato	01.10.2015
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	43.0
Vanndybde ved midlere havflate [m]	62.0
Totalt målt dybde (MD) [m RKB]	2012.0
Totalt vertikalt dybde (TVD) [m RKB]	2012.0
Maks inklinasjon [°]	1.8
Temperatur ved bunn av brønnbanen [°C]	68
Eldste penetrerte alder	LATE CRETACEOUS
Eldste penetrerte formasjon	TOR FM
Geodetisk datum	ED50
NS grader	56° 38' 8.65" N
ØV grader	5° 8' 11.53" E
NS UTM [m]	6279019.92
ØV UTM [m]	631049.93
UTM sone	31
NPDID for brønnbanen	7270



Brønnhistorie

General

Well 4/4-1 was drilled on the Brattholmen prospect in the Åsta Graben of the southern North Sea, close to the Danish border. The primary objective was to evaluate the fluids and reservoir properties in Paleocene Heimdal Formation sandstone. The well was planned to drill further deep into the Chalk Group in order to check possible presence of hydrocarbons in the Ekofisk formation.

Operations and results

Wildcat well 4/4-1 was spudded with the jack-up installation Mærsk Giant on 13 September 2013 and drilled to TD at 2012 m in the Late Cretaceous Tor Formation. The well was drilled with seawater and hi-vis sweeps down to 194 m and with Glydril Mud from 194 m to TD. Operations proceeded without significant difficulties and the rig was ready for demobilization and transit on 13 October 2013. However, due to bad weather the rig could not move until 10 December, spending 57 days due to the worst weather / storm conditions encountered in the North Sea in nearly 60 years.

Sands were encountered in the Sele Formation with top at 1806 m, in the Lista Formation with top at 1861 m, and in the Våle Formation with top at 1883 m. Total net sand in all three formations was 23.3 m. Logs, SWC and fluid sampling proved good reservoir quality (Porosity ~29% and mobility in the range 50-1000 mD/cP). No hydrocarbon indications were observed and the reservoir was evaluated as water wet.

No cores were cut. An MDT water sample was taken at 1838.7 m.

The well was permanently abandoned on 13 October 2013 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
195.00	2012.00

Borekaks tilgjengelig for prøvetaking?	YES
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Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
105	NORDLAND GP
105	UNDIFFERENTIATED
541	HORDALAND GP
541	UNDIFFERENTIATED



701	VADE FM
790	UNDIFFERENTIATED
1794	ROGALAND GP
1794	BALDER FM
1806	SELE FM
1861	LISTA FM
1883	VÅLE FM
1918	SHETLAND GP
1918	EKOFISK FM
1953	TOR FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CMR ECS GR	1701	1995
DCBL GR	84	1710
FMI GR	1698	2012
FMI MSIP DCBL GR	0	0
HRLA PEX HNGS GR	1702	2008
LWD - ARC TELE	194	962
LWD - ARC TELE SONVIS	962	1705
LWD - DIR	105	194
LWD - ECO TELE SONVIS	194	960
LWD - ECO TELE SONVIS	1705	2012
MDT	1830	1916
MSCT GR	1806	1916
MSIP GR	1679	1979
ZOVSP	154	1974

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	187.0	36	194.0	0.00	
INTERM.	13 3/8	952.0	17 1/2	962.0	0.00	
PILOT HOLE		960.0	9 7/8	960.0	0.00	
INTERM.	9 5/8	1701.0	12 1/4	1705.0	0.00	
OPEN HOLE		2012.0	8 1/2	2012.0	0.00	



Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm ³]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
194	1.05			SEAWATER	
960	1.16			Glydrill	
962	1.19			Glydrill	
1705	1.35			Glydrill	
2012	1.35			Glydrill	