



Generell informasjon





Brønnbane navn	8/10-6 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	8/10-6
Seismisk lokalisering	seismic survey : CE1202.Inline 1552 & crossline 2109
Utvinningsstillatelse	405
Boreoperatør	Centrica Resources (Norge) AS
Boretillatelse	1524-L
Boreinnretning	MÆRSK GIANT
Boredager	49
Borestart	29.05.2014
Boreslutt	16.07.2014
Frigitt dato	16.07.2016
Publiseringsdato	16.07.2016
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	44.0
Vanndybde ved midlere havflate [m]	66.0
Totalt målt dybde (MD) [m RKB]	2256.0
Totalt vertikalt dybde (TVD) [m RKB]	1945.0
Maks inklinasjon [°]	50
Temperatur ved bunn av brønnbanen [°C]	98
Eldste penetrerte alder	PERMIAN
Eldste penetrerte formasjon	ZECHSTEIN GP
Geodetisk datum	ED50
NS grader	57° 3' 9.92" N
ØV grader	3° 3' 42.12" E
NS UTM [m]	6323401.91
ØV UTM [m]	503743.02
UTM sone	31
NPDID for brønnbanen	7485



Brønnhistorie

General

Well 8/10-6 S was drilled on the Butch SW prospect, a salt-induced structure on the Sørvestlandet high, approximately 13 km SE of the Ula Field in the North Sea. The Butch structure has three potentially separate prospects, divided by radial faulting from the salt diapir. The north-west prospect (Butch) was tested by well 8/10-4 S and sidetracks 8/10-4 A&B and found oil in Ula Formation sandstones. The eastern compartment (Butch East) was tested by 8/10-5 S and sidetrack 8/10-5 A and was dry. The primary objective of drilling 8/10-6 S was to test the hydrocarbon potential in the Ula Formation in the Butch south-west compartment. A secondary objective was to penetrate the underlying Zechstein salts to establish a seismic tie.

Operations and results

Wildcat well 8/10-6 S was spudded with the jack-up installation Mærsk Giant on 29 May 2014 and drilled to TD at 2256 m (1945 m TVD) m, 60 m into the Permian Zechstein Group. The well was drilled deviated in order to avoid significant shallow gas warnings and to allow the borehole to intersect the target Ula Formation at angle close to perpendicular. A 12 1/4" pilot hole was drilled to a planned depth of 703 m to check for shallow gas. This was deepened to 722 m after observing elevated concentrations heavier alkanes in drilled gas, over the interval 657 m to 702 m. otherwise no shallow gas was seen. Some hole problems were experienced in the 17 1/2" section where volumes of large tabular cavings were produced. The cavings originated from the uppermost part of the Hordaland Group. This correspond to the same problem interval in 8/10-4 B, which was abandoned after excessive cavings production and hole collapse. The well was drilled with Spud mud down to 180 m, with Glydril mud from 180 m to 703 m, with Versatec oil based mud from 703 m to 1995 m, and with Warp oil based mud from 1995 m to TD.

The target Ula Formation was found to be water wet, and potential reservoir properties in the Farsund Formation were not developed. No oil shows above the oil based mud was described in the well. Chromatograph ratios detected elevated amounts of heavier hydrocarbons over the interval 811 to 1090 m in the basal Nordland Group and upper Hordaland Group.

One conventional core was cut through the Ula Formation from 2057.0 to 2111.0 m with 99% recovery. No fluid sample was taken. Wireline and circulation temperatures at TD were rather high in this well compared to the other Butch wells, corresponding to a gradient close to 50 °C/km.

The well was permanently abandoned on 16 July 2014 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
190.00	2255.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2057.0	2110.5	[m]

Total kjerneprøve lengde [m]	53.5
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1970.0	[m]	DC	PETROSTR
1980.0	[m]	DC	PETROS
1990.0	[m]	DC	PETROS
1995.0	[m]	DC	PETROS
2001.0	[m]	DC	PETROS
2007.0	[m]	DC	PETROS
2013.0	[m]	DC	PETROS
2019.0	[m]	DC	PETROS
2025.0	[m]	DC	PETROS
2031.0	[m]	DC	PETROS
2037.0	[m]	DC	PETROS
2043.0	[m]	DC	PETROS
2049.0	[m]	DC	PETROS
2055.0	[m]	DC	PETROS
2057.0	[m]	DC	PETROS
2067.0	[m]	DC	PETROS
2077.0	[m]	DC	PETROS
2087.0	[m]	DC	PETROS
2097.0	[m]	DC	PETROS
2107.0	[m]	DC	PETROS
2112.0	[m]	DC	PETROS

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
110	NORDLAND GP
945	HORDALAND GP
1369	ROGALAND GP
1400	SELE FM
1425	LISTA FM
1529	VIDAR FM
1543	LISTA FM
1549	VÅLE FM
1566	SHETLAND GP
1566	EKOFISK FM
1599	TOR FM
1725	HOD FM
1824	CROMER KNOLL GP
1824	RØDBY FM
1851	SOLA FM
1864	TUXEN FM
1877	ÅSGARD FM
1985	TYNE GP
1985	MANDAL FM
2020	FARSUND FM
2051	ULA FM
2110	SKAGERRAK FM
2196	ZECHSTEIN GP

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
GYRO	139	1442
LWD - GABI GR RES PWD DIR	1989	2057
LWD - GABI GR RES SON DEN CALI N	1479	1986
LWD - GR PWD DEN SON RES NEU FPT	1985	2251
LWD - GR RES SON PWD DIR	722	1418
LWD - PWD DIR	170	716
LWD - PWD RES GR DIR SON	170	716
PPC SS IS PPC GR LEH	1	2257
USIT CBL	487	1417



VSI-4	665	2250
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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	179.7	36	179.7	0.00	
SURF.COND.	20	719.0	26	722.0	1.77	LOT
INTERM.	13 3/8	1482.0	17 1/2	1486.0	1.86	LOT
LINER	9 5/8	1994.0	12 1/4	1995.0	1.87	LOT
OPEN HOLE		2256.0	8 1/2	2256.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1486	1.65	64.0		Versatec	
1650	1.65	55.0		Versatec	
1973	1.67	52.0		Versatec	
1995	1.67	51.0		Versatec	
2057	1.68	29.0		Warp	
2111	1.67	29.0		Warp	
2256	1.67	44.0		Versatec	