



Generell informasjon

Brønnbane navn	24/9-10 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	24/9-10 S (Caterpillar)
Brønn navn	24/9-10
Seismisk lokalisering	DG D15 & D58
Utvinningstillatelse	340 BS
Boreoperatør	Marathon Petroleum Norge AS
Boretillatelse	1337-L
Boreinnretning	TRANSOCEAN WINNER
Boredager	28
Borestart	06.01.2011
Boreslutt	02.02.2011
Frigitt dato	02.02.2013
Publiseringsdato	02.02.2013
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE PALEOCENE
1. nivå med hydrokarboner, formasjon.	HERMOD FM
Avstand, boredekk - midlere havflate [m]	26.0
Vanndybde ved midlere havflate [m]	118.0
Totalt målt dybde (MD) [m RKB]	2339.0
Totalt vertikalt dybde (TVD) [m RKB]	2187.0
Maks inklinasjon [°]	42.2
Eldste penetrerte alder	LATE PALEOCENE
Eldste penetrerte formasjon	LISTA FM
Geodetisk datum	ED50
NS grader	59° 16' 34.73" N
ØV grader	1° 55' 36.13" E
NS UTM [m]	6571465.01



ØV UTM [m]	438830.01
UTM sone	31
NPDID for brønnbanen	6531

Brønnhistorie

General

Well 24/9-10 S was drilled on the Caterpillar prospect ca 7.5 km south-southeast of the Bøyla field in the South Viking Graben. The primary objective was to establish the presence and phase of hydrocarbon resources in the Paleocene Hermod Formation reservoir. Contingent upon discovery, the optional sidetrack well (10 A) would be drilled to further evaluate hydrocarbon resources contained within the Caterpillar prospect.

Operations and results

Wildcat well 24/9-10 S was spudded with the semi-submersible installation Transocean Winner on 6 January 2011 and drilled to TD at 2339 m (2187 m TVD) in the Late Paleocene Lista Formation. Drilling proceeded without significant problems. The well was drilled with seawater, hi-vis sweeps, and spud mud down to 507 m, with Glydril mud from 507 m to 975 m, and with Versatec oil based mud from 975 m to TD.

The well penetrated top Hermod Formation at 2211 m (2088 m TVD) 10 m TVD shallower than prognosed. The Hermod Formation had 35 m of net reservoir quality sands, predominantly fine occasionally medium quartz aggregate with conglomeratic material, some calcite cemented stringers and non net shale beds. Average porosity in the reservoir of 24.6% was determined from the density log. An oil down to was interpreted at 2239 m (2110 m TVD) above which 17.3 m (13.0 m TVD) net of movable hydrocarbons were interpreted within the Hermod Formation with an average net water saturation of 46.2%. The oil leg was confirmed by the pressure gradient. Below the interpreted oil down to the sand development is much more inter-bedded and fine grained, and few pressure points could be taken here. A water sample was taken at 2253 m, but a residual oil column is interpreted throughout the Hermod Formation.

Uniform light brown oil shows were described throughout the oil bearing reservoir both on the cuttings and the core. Continuous natural fluorescence, stain, and petroleum odour was seen further down on the cores to 2264 m, and also at the base of core 2 at 2278 m. Otherwise the oil based drilling mud produced a background weak dull yellow direct fluorescence and faint cut fluorescence. Combined with overbalanced drilling this masked virtually all natural fluorescence (shows) on cuttings from the well.

Two cores were cut in the Hermod Formation from 2223 m to 2278 m. An MDT oil sample was taken at 2222.6 m.

On 2 February 2011 the well was cemented back for an appraisal sidetrack. The well bore is classified as an oil discovery.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
980.00	2339.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerter i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2223.0	2248.8	[m]
2	2250.0	2277.8	[m]

Total kjerneprøve lengde [m]	53.6
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1220.0	[m]	DC	CGG
1250.0	[m]	DC	CGG
1280.0	[m]	DC	CGG
1340.0	[m]	DC	CGG
1370.0	[m]	DC	CGG
1400.0	[m]	DC	CGG
1430.0	[m]	DC	CGG
1490.0	[m]	DC	CGG
1520.0	[m]	DC	CGG
1550.0	[m]	DC	CGG
1580.0	[m]	DC	CGG
1640.0	[m]	DC	CGG
1700.0	[m]	DC	CGG
1760.0	[m]	DC	CGG
1790.0	[m]	DC	CGG
1820.0	[m]	DC	CGG
1850.0	[m]	DC	CGG
1880.0	[m]	DC	CGG



1910.0 [m]	DC	CGG
1940.0 [m]	DC	CGG
1970.0 [m]	DC	CGG
2000.0 [m]	DC	CGG
2030.0 [m]	DC	CGG
2060.0 [m]	DC	CGG
2090.0 [m]	DC	CGG
2120.0 [m]	DC	CGG
2150.0 [m]	DC	CGG
2180.0 [m]	DC	CGG
2187.0 [m]	DC	CGG
2190.0 [m]	DC	CGG
2193.0 [m]	DC	CGG
2202.0 [m]	DC	CGG
2208.0 [m]	DC	CGG
2235.9 [m]	C	CGG
2237.8 [m]	C	CGG
2246.0 [m]	C	CGG
2252.6 [m]	C	CGG
2259.6 [m]	C	CGG
2261.4 [m]	C	CGG
2266.8 [m]	C	CGG
2268.8 [m]	C	CGG
2280.0 [m]	DC	CGG
2283.0 [m]	DC	CGG
2289.0 [m]	DC	CGG
2292.0 [m]	DC	CGG
2298.0 [m]	DC	CGG
2307.0 [m]	DC	CGG
2310.0 [m]	DC	CGG
2322.0 [m]	DC	CGG
2328.0 [m]	DC	CGG
2334.0 [m]	DC	CGG

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
144	NORDLAND GP
445	UTSIRA FM



867	HORDALAND GP
1248	GRID FM
2063	ROGALAND GP
2063	BALDER FM
2175	SELE FM
2211	HERMOD FM
2299	LISTA FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
6531_GCH_1	pdf	0.05
6531_GCH_2	pdf	0.43

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MDT GR	2339	2339
MWD - ARC PDX RAB	196	2339
MWD - SLB PP DIR	144	196
VSP GR	2339	2339

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	193.0	36	196.0	0.00	LOT
SURF.COND.	13 3/8	961.0	17 1/2	975.0	0.00	LOT
INTERM.	9 5/8	2181.0	12 1/4	2187.0	1.55	LOT
OPEN HOLE		2339.0	8 1/2	2339.0	0.00	LOT

