



Generell informasjon

Brønnbane navn	15/12-20 S
Type	EXPLORATION
Formål	WILDCAT
Status	RE-CLASS TO DEV
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	VARG
Funn	15/12-20 S
Brønn navn	15/12-20
Seismisk lokalisering	NH0201
Utvinningstillatelse	038
Boreoperatør	Talisman Energy Norge AS
Boretillatelse	1184-L
Boreinnretning	MÆRSK GIANT
Boredager	35
Borestart	28.05.2008
Boreslutt	01.07.2008
Frigitt dato	01.07.2010
Publiseringsdato	01.08.2010
Opprinnelig formål	WILDCAT
Reklassifisert til brønnbane	15/12-A-7 A
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	SLEIPNER FM
Avstand, boredekk - midlere havflate [m]	51.5
Vanndybde ved midlere havflate [m]	84.0
Totalt målt dybde (MD) [m RKB]	4192.0
Totalt vertikalt dybde (TVD) [m RKB]	3141.5
Maks inklinasjon [°]	56.6
Temperatur ved bunn av brønnbanen [°C]	123
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM



Geodetisk datum	ED50
NS grader	58° 4' 40.53" N
ØV grader	1° 53' 25.77" E
NS UTM [m]	6438070.14
ØV UTM [m]	434558.93
UTM sone	31
NPDID for brønnbanen	5824

Brønnhistorie

General

Well 15/12-20 S was drilled from the Varg Field production Platform in the southern Viking Graben in the North Sea. The primary objective of the well was to explore a potential undrained compartment in Triassic sands. A secondary objective was potential Late Jurassic sands that could exist above the Triassic sands.

Operations and results

Wildcat well 15/12-20 S was drilled with the jack-up installation Mærsk Giant, as a sidetrack from development well 15/12-A-7 on the Varg Field. It was kicked off 28 May 2008 from 1306 m, just above the 13 3/8" casing in the 15/12-A-7 development well, and drilled to TD at 4192 m (3142 m TVD) in the Late Triassic Skagerrak Formation. Significant operational problems were not encountered although 21% of the rig time was counted as non-productive. The main contributor to non-productive time was failure to mill the window in the 13 3/8" casing during kick-off. The well was drilled with Carbo-Sea oil based mud from kick-off to TD.

The Oxfordian Sandstone that makes up the reservoir over Varg Field was absent as forecast. A discovery was made in Middle Jurassic Sleipner Formation sandstone. This sand, encountered at 3808 m, was not prognosed. It contained oil down to a lithological contact at ca 3842 m (2878 m TVD SS). The underlying Triassic was encountered at 3874 m and was dry. Good shows on sandstones were reported in cuttings at 3810 and all through to the end of the cores at 3875 m. Formation Gas peaks up to a maximum of 4% were seen in the Sleipner formation. Resistivity was initially high, 15 ? 30 ohm/m from 3812 m (after the coal) and dropped off at 3835m MD to 0.3 - 0.8 ohm/m.

Two cores were taken (26.26 m and 54.85 m) from the Sleipner Formation and ca 25 m into the Triassic. Reservoir pressures were taken using TesTrak and an oil gradient of 0.935 SG was obtained although a water gradient was not established. No wire line fluid samples were taken.

Exploration well 15/12-20 S is classified as an oil discovery. On 1 July 2008 7" liner was run to 4191 m and the well was reclassified to development well 15/12-A-7-A.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1310.00	4192.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3815.0	3841.2	[m]
2	3843.0	3897.9	[m]

Total kjerneprøve lengde [m]	81.1
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
136	NORDLAND GP
1305	HORDALAND GP
2906	ROGALAND GP
2906	BALDER FM
2924	SELE FM
3022	LISTA FM
3176	VÅLE FM
3269	SHETLAND GP
3269	TOR FM
3432	HOD FM
3655	BLODØKS FM
3699	CROMER KNOLL GP
3699	RØDBY FM
3747	ÅSGARD FM
3791	VIKING GP
3791	DRAUPNE FM
3797	HEATHER FM
3808	VESTLAND GP
3808	SLEIPNER FM
3874	NO GROUP DEFINED
3874	SKAGERRAK FM



Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD LWD - DIR	1304	1336
MWD LWD - DIR RES GR CCN MT ST T	3898	4192
MWD LWD - DIR RES GR PWD	1336	3815

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
INTERM.	9 5/8	3370.0	12 1/4	3375.0	1.70	LOT
LINER	7	4191.0	8 1/2	4192.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1250	1.46	38.0		oil based	
1290	1.46	32.0		oil based	
1297	1.59	40.0		water based	
1303	1.59	38.0		water based	
1313	1.59	40.0		water based	
1316	1.59	44.0		water based	
1333	1.60	48.0		water based	
1336	1.59	39.0		water based	
1348	1.59	52.0		water based	
1354	1.60	51.0		water based	
1373	1.59	57.0		water based	
1474	1.53	43.0		water based	
1750	1.59	43.0		water based	
3171	1.59	45.0		water based	
3375	1.60	43.0		water based	
3613	1.44	30.0		water based	
3843	1.44	32.0		water based	
3898	1.45	32.0		water based	
4136	1.45	33.0		water based	



4192	1.02			water based	
4192	1.44	31.0		water based	

Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
5824_Formation_pressure_(Formasjonstrykk)	pdf	0.23

