Generell informasjon

Brønnbane navn	30/11-9 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	MUNIN
Funn	30/11-9 S (Askja)
Brønn navn	30/11-9
Seismisk lokalisering	inline 1231 & xline 2271 (3Dsurvey:NVG05STR11)
Utvinningstillatelse	272
Boreoperatør	Statoil Petroleum AS
Boretillatelse	1482-L
Boreinnretning	OCEAN VANGUARD
Boredager	53
Borestart	22.09.2013
Boreslutt	13.11.2013
Frigitt dato	13.11.2015
Publiseringsdato	13.11.2015
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	TARBERT FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	HEATHER FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	110.0
Totalt målt dybde (MD) [m RKB]	3735.0
Totalt vertikalt dybde (TVD) [m RKB]	3658.6
Maks inklinasjon [°]	21
Temperatur ved bunn av brønnbanen [°C]	133

Eldste penetrerte alder	MIDDLE JURASSIC
Eldste penetrerte formasjon	NESS FM
Geodetisk datum	ED50
NS grader	60° 6' 10.86'' N
ØV grader	2° 35' 13.44'' E
NS UTM [m]	6663111.75
ØV UTM [m]	477038.13
UTM sone	31
NPDID for brønnbanen	7280

Brønnhistorie

General

Well 30/11-9 S was drilled on the Askja West prospect in the Fensal Sub-basin, about 35 km south of the Oseberg Sør installation in the North Sea. The primary objective was to prove petroleum in Late to Middle Jurassic reservoir rocks (lower part of the Heather Formation and the Tarbert Formation). The secondary exploration target was to prove petroleum in reservoir rocks in the Middle Jurassic (Ness and Etive formations).

Operations and results

Wildcat well 30/11-9 S was spudded with the semi-submersible installation Ocean Vanguard on 22 September 2013. While drilling the 26" hole section, the accelerator twisted off and a part of the BHA was lost at 840 m. Several unsuccessful fishing attempts were made before it was decided to plug back and make a technical sidetrack. Sidetrack wellbore 30/11-9 ST2 was kicked off at 427 m and drilled to final TD at 3735 m in the Middle Jurassic Ness Formation. The sidetrack was drilled as an S shaped well. The deviated section, from 1470 to 3215 m, was drilled with a maximum angle of 21 degrees. The final 8 1/2" section was vertical. The first well bore was drilled with spud mud, while the 30/11-9 ST2 technical sidetrack was drilled with KCl/polymer from kick-off point to 1798 m and with XP-07 from 1798 m to TD. The content of the XP-07 base oil is C10 to C14 n-alkanes with traces of light adamantanes and light aromatics.

The top of the primary target reservoir was picked at 3269 m (3193 m TVD), 50 m shallower than prognosed. The whole reservoir was found to be Tarbert Formation including the top section, which pre-drill was prognosed to be Lower Heather Formation. Based on the fluid sampling, gas was found in two differently pressured compartments in the Tarbert Formation. The upper compartment had gas in a down-to situation, while the lower compartment had a gas/water contact at 3468.4 m (3392 m TVD). The secondary target, Ness Formation had acceptable reservoir properties, but it was water bearing. There were no oil shows (fluorescence) in the well.

No cores were cut in this well. MDT Fluid samples were taken at 3270.1 m (gas), 3411.2 m (gas), 3454.0 m (gas), and 3477.7 m (water).

The well was permanently abandoned on 13 November 2013 as a gas discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1050.00	3735.00

Borekaks tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
132	NORDLAND GP
132	UNDIFFERENTIATED
537	UTSIRA FM
697	HORDALAND GP
697	UNDIFFERENTIATED
1443	GRID FM
1480	UNDIFFERENTIATED
2116	FRIGG FM
2193	ROGALAND GP
2193	BALDER FM
2235	SELE FM
2260	HERMOD FM
2395	LISTA FM
2524	VÅLE FM
2605	SHETLAND GP
2605	HARDRÅDE FM
2886	KYRRE FM
3074	CROMER KNOLL GP
3074	UNDIFFERENTIATED
3126	VIKING GP
3126	DRAUPNE FM
3149	HEATHER FM
3269	BRENT GP
3269	TARBERT FM
3549	NESS FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
2XOBMI GPIT PPC SS PPC GR	3215	3740
AIT PWX HNGS	3215	3740
MWD LWD - ARC9	189	1041
MWD LWD - PD ARC9 TELE	1004	3741
PS HY PO LFA SC1 MS PC GR	3270	3675
SCEX PS PQ HY PO LFA SC MS PC GR	3270	3454
USIT CBL GR	1140	1710
USIT VBL GYRO	2625	3200
VSI4 GR	1000	3740

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	194.0	36	194.0	0.00	
SURF.COND.	20	1032.0	26	1032.0	1.41	FIT
INTERM.	13 3/8	1787.0	17 1/2	1787.0	1.55	FIT
INTERM.	9 5/8	3211.0	12 1/4	3211.0	1.60	FIT
OPEN HOLE		3735.0	8 1/2	3735.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
154	1.45	15.0		Spud Mud	
174	1.60	34.0		KCl/Polymer/GEM	
194	1.03	14.0		Spud Mud	
732	1.35	14.0		Spud Mud	
1041	1.25	20.0		KCl/Polymer/GEM	
1138	1.26	20.0		KCl/Polymer/GEM	
1415	1.43	27.0		XP-07 - Yellow	
1798	1.25	23.0		KCl/Polymer/GEM	
2614	1.45	27.0		XP-07 - Yellow	
3221	1.27	18.0		XP-07 - Yellow	
3735	1.27	19.0		XP-07 - Yellow	