



Generell informasjon

Brønnbane navn	25/2-18 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	HUGIN
Funn	25/2-18 S (Langfjellet)
Brønn navn	25/2-18
Seismisk lokalisering	DN13303-04010. SP 1295 / DN13303-02005. SP 1214
Utvinningstillatelse	442
Boreoperatør	Det norske oljeselskap ASA
Boretillatelse	1638-L
Boreinnretning	MAERSK INTERCEPTOR
Boredager	39
Borestart	11.09.2016
Boreslutt	19.10.2016
Frigitt dato	19.10.2018
Publiseringsdato	19.10.2018
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	HUGIN FM
Avstand, boredekk - midlere havflate [m]	55.0
Vanndybde ved midlere havflate [m]	121.0
Totalt målt dybde (MD) [m RKB]	4066.0
Totalt vertikalt dybde (TVD) [m RKB]	3723.0
Maks inklinasjon [°]	42.2
Temperatur ved bunn av brønnbanen [°C]	125
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	DRAKE FM



Geodetisk datum	ED50
NS grader	59° 49' 30.11" N
ØV grader	2° 37' 54.1" E
NS UTM [m]	6632137.57
ØV UTM [m]	479347.43
UTM sone	31
NPDID for brønnbanen	8043

Brønnhistorie

**General**

Well 25/2-18 A is a geological sidetrack to 25/2-18 S, located on the Bjørgvin Arch, four kilometers south of the 25/2-10 S (Frigg Gamma Delta) oil/gas discovery and eight kilometers north of the Frøy field in the North Sea. The 25/2-18 S well discovered oil in the Middle Jurassic Hugin Formation, the Langfjellet prospect. The target for well 25/2-18 A was southeast of 25/2-18 S but within the same segment. The objectives for sidetrack 25/2-18 A was to confirm hydrocarbons in the Hugin and Sleipner formations and to perform a drill stem test (DST).

Operations and results

Appraisal well 25/2-18 A was kicked off from the main bore below the 13 3/8" casing shoe at 1555 m. It was drilled with the jack-up installation Mærsk Interceptor to TD at 4066 m (3723 m TVD) m in the Early Jurassic Drake Formation. No significant problem was encountered in the operations. The well was drilled with Versatec oil based mud from kick-off to TD.

The Hugin Formation came in at 3698 m (3361 m TVD) and the Sleipner Formation came in at 3825.5 m (3486.3 m TVD). The well proved oil proved in the Hugin Formation with an "oil down to" contact at approximately 3768 m (3430 m TVD). A total of 63 m gross reservoir thickness with 53 m net reservoir distributed across two separate compartments was recorded. No shows were recorded on cuttings due to flushing by OBM. No significant change was observed in shows on sidewall cores going from an oil zone to water zone, indicating that also sidewall cores are flushed and shows masked by OBM.

No conventional cores were cut. A total of 17 MDT samples were acquired: 3 oil samples at 3701.5 m, 4 oil samples at 3715.4 m, 3 oil samples at 3742.2 m, 3 oil samples at 3765.8 m, 1 water sample at 3776.3 m, and 3 water samples at 3789.3 m.

The well was plugged back for sidetracking on 19 October. It is classified as an oil appraisal well.

Testing

Two drill stem tests were conducted in the Hugin Formation.

DST 1 tested the interval 3741.5 to 3767.1 m. It produced 600 Sm³ oil and 86413 sm³ gas /day through a 40/64" choke. The gas contained 3.5 ppm H₂S and 4% CO₂. The GOR was 144 Sm³/Sm³. Maximum flowing temperature was 115.8 °C.

DST2 tested the interval 3713.7 to 3724.9 m. It produced 349 Sm³ oil and 51624 sm³ gas /day through a 32/64" choke. The gas contained 3.5 ppm H₂S and 4% CO₂. The GOR was 149 Sm³/Sm³. Maximum flowing temperature was 115.0 °C.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1560.00	4066.00

Borekaks tilgjengelig for prøvetaking?	YES
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Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
176	NORDLAND GP
506	UTSIRA FM
642	HORDALAND GP
642	SKADE FM
1446	UNDEFINED GP
1542	HORDALAND GP
2158	ROGALAND GP
2158	BALDER FM
2240	SELE FM
2327	HERMOD FM
2426	LISTA FM
2722	VÅLE FM
2806	SHETLAND GP
2806	EKOFISK FM
2854	HARDRÅDE FM
3136	KYRRE FM
3337	TRYGGVASON FM
3482	BLODØKS FM
3490	SVARTE FM
3524	CROMER KNOLL GP
3524	RØDBY FM
3567	ÅSGARD FM
3585	VIKING GP
3585	DRAUPNE FM
3669	HEATHER FM
3698	VESTLAND GP
3698	HUGIN FM
3826	SLEIPNER FM
4049	DUNLIN GP
4049	DRAKE FM

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	3742	3767	15.8



2.0	3714	3725	12.7
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Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningsstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
2.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	600	86413			144
2.0	349	51624			149

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
LWD - DI RES GR NEU DEN SON	1555	4066
MDT MINIDST TT	3701	3792
MSCT GR	3694	4035
PP LITHOS MAGN RES	3699	4044
RES SON DEN NEU SP GR	3675	4055

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	222.0	36	214.0	0.00	
SURF.COND.	20	444.5	26	450.0	1.32	LOT
PILOT HOLE		450.0	9 7/8	450.0	0.00	
SURF.COND.	13 3/8	1533.5	16	1541.0	1.58	FIT
INTERM.	9 5/8	3680.0	12 1/4	3685.0	1.88	LOT
LINER	7	4050.0	8 1/2	0.0	0.00	
OPEN HOLE		4066.0	8 1/2	4066.0	0.00	

Boreslam



Dybde MD [m]	Egenvekt, slam [g/cm ³]	Viskositet, slam [mPa.s]	Fløtegrense [Pa]	Type slam	Dato, måling
1533	1.40	32.0		Versatec	
2064	1.37	28.0		Versatec OBM	
2900	1.40	30.0		NaCl brine	
2967	1.37	29.0		Versatec OBM	
3685	1.17	21.0		Versatec OBM	
3685	1.40	29.0		Versatec OBM	
4066	1.17	21.0		Versatec OBM	