



Generell informasjon

Brønnbane navn	35/10-4 A
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	35/10-4 A (Gnomoria)
Brønn navn	35/10-4
Seismisk lokalisering	CGG17M01 inline 7119 / xline 27917
Utvinningstillatelse	630
Boreoperatør	Equinor Energy AS
Boretillatelse	1712-L
Boreinnretning	DEEPSEA BERGEN
Boredager	29
Borestart	15.10.2018
Boreslutt	12.11.2018
Plugget og forlatt dato	12.11.2018
Frigitt dato	12.11.2020
Publiseringsdato	12.11.2020
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	INTRA HEATHER FM SS
2. nivå med hydrokarboner, alder	LATE JURASSIC
2. nivå med hydrokarboner, formasjon	INTRA DRAUPNE FM SS
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	363.0
Totalt målt dybde (MD) [m RKB]	3946.0
Totalt vertikalt dybde (TVD) [m RKB]	3430.0
Maks inklinasjon [°]	48.6
Temperatur ved bunn av brønnbanen [°C]	128



Eldste penetrerte alder	LATE JURASSIC
Eldste penetrerte formasjon	HEATHER FM
Geodetisk datum	ED50
NS grader	61° 8' 55.44" N
ØV grader	3° 17' 4.98" E
NS UTM [m]	6779548.53
ØV UTM [m]	515327.82
UTM sone	31
NPDID for brønnbanen	8500

Brønnhistorie

General

Well 35/10-4 A is a geological side-track to well 35/10-4 S on the Marflo Spur in the North Sea. It was drilled to test the Gnomoria prospect. The primary objective was to prove hydrocarbon-bearing sandstones of Kimmeridgian and Oxfordian age, in the Draupne and Heather formations. The secondary objective was to test the reservoir potential in the Callovian sequence below the Oxfordian sandstone reservoir.

Operations and results

Wildcat well 35/10-4 A was Kicked off from a milled window at 1661 to 1668 m in well 35/10-4 S on 15 October 2018. It was drilled with the semi-submersible installation Deepsea Bergen to TD at 3946 m in the Late Jurassic Heather Formation. Operations proceeded without significant problems. The well was drilled with XP-07 oil-based mud from kick-off to TD.

Well 35/10-4 A encountered top Intra-Draupne Formation sandstone at 3757 m (3274 m TVD). Top Heather Formation was encountered at 3820 m (3326 m TVD). A total of 126 m (104.1 m TVD) of Heather Formation sandstone and claystone was penetrated in the well. The upper ca 100 m of Heather consist of mainly sandstone. The core and thin

sections show high amounts of quartz cementation throughout the Intra-Draupne sand, with better zones in the Heather Formation. Oil was proven at 3824.2 m in the Heather sandstone by sampling. An oil-water contact is indicated by the logs to be at ca 3841 m, but an oil gradient could not be confirmed due to lack of valid pressure points. Oil shows were described on the cores and cuttings in the interval 3757 to 3864. Water was sampled at 3845.2 m.

The interval 3776.5 to 3825.6 m in the Intra Draupne and Heather sands was cored in four cores. Core recovery was from 95.4 to 100%. MDT fluid samples were taken at 3824.2 m (oil with 14% OBM contamination) and 3845.2 m (water with 85% OBM contamination)

The well was permanently abandoned on 12 November 2018 as a small oil discovery.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1680.00	3946.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3774.0	3787.4	[m]
2	3788.0	3806.3	[m]
3	3806.5	3820.4	[m]
4	3820.4	3823.1	[m]

Total kjerneprøve lengde [m]	48.2
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
386	NORDLAND GP
386	NO FORMAL NAME
855	HORDALAND GP
855	NO FORMAL NAME
1105	SKADE FM
1221	NO FORMAL NAME
1736	ROGALAND GP
1736	BALDER FM
1815	SELE FM
1851	LISTA FM
1980	VÅLE FM
2023	SHETLAND GP
2023	JORSALFARE FM
2090	KYRRE FM
2860	TRYGGVASON FM
3392	BLODØKS FM
3404	SVARTE FM



3456	CROMER KNOLL GP
3456	RØDBY FM
3489	SOLA FM
3493	ÅSGARD FM
3526	VIKING GP
3526	DRAUPNE FM
3757	INTRA DRAUPNE FM SS
3820	HEATHER FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT MSIP QGEO	3200	3950
MDT	3474	3845
MWD LWD - GR RES DI ECD	1674	3476
MWD LWD - GR RES DI ECD PRES	3476	3774
MWD LWD - GR RES DI ECD PRESS	3824	3946
PEX ECS HNGS CMR	3450	3950
VSP FF	1441	3878

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	3474.0	12 1/4	3476.0	1.68	FIT
OPEN HOLE		3946.0	8 1/2	3946.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
700	1.35	13.0		XP-07	
1678	1.37	17.0		XP-07	
1878	1.36	18.0		XP-07	
2229	1.35	20.0		XP-07	
3185	1.35	17.0		XP-07	
3476	1.55	23.0		XP-07	
3476	1.36	19.0		XP-07	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 2.6.2024 - 18:59

3774	1.55	21.0		XP-07	
3774	1.54	21.0		XP-07	
3823	1.54	20.0		XP-07	
3823	1.56	21.0		XP-07	
3946	1.55	21.0		XP-07	