



Generell informasjon

Brønnbane navn	2/6-6 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	2/6-6
Seismisk lokalisering	MOL17300 01030 X MOL17300 03019
Utvinningstillatelse	860
Boreoperatør	MOL Norge AS
Boretillatelse	1725-L
Boreinnretning	ROWAN VIKING
Boredager	67
Borestart	13.11.2018
Boreslutt	18.01.2019
Plugget og forlatt dato	18.01.2019
Frigitt dato	18.01.2021
Publiseringsdato	18.01.2021
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	53.0
Vanndybde ved midlere havflate [m]	69.0
Totalt målt dybde (MD) [m RKB]	3843.0
Totalt vertikalt dybde (TVD) [m RKB]	3625.0
Eldste penetrerte alder	PERMIAN
Eldste penetrerte formasjon	ROTLIEGEND GP
Geodetisk datum	ED50
NS grader	56° 30' 40.73" N
ØV grader	3° 54' 49.22" E
NS UTM [m]	6263503.05
ØV UTM [m]	556230.95
UTM sone	31
NPDID for brønnbanen	8560



Brønnhistorie

General

Well 2/6-6 S was drilled to test the Oppdal and Driva prospects the east side of the Mandal High in the North Sea. The primary objectives were to test the oil potential in the Paleocene Oppdal submarine sandstone reservoir (Borr Member), and in the Permian aeolian reservoir (Auk Formation) in the Rotliegend Driva prospect.

Operations and results

A 9 7/8" pilot hole was drilled to 1012 m due to a slight shallow gas warning between 391 m and 494 m. No obvious shallow gas was encountered here, nor below 500 m.

Wildcat well 2/6-6 S was spudded with the jack-up installation Rowan Viking on 13 November 2018 and drilled to TD at 3843 m (3628 m TVD) m in the Permian Rotliegend Group. Severe losses were experienced while drilling at 3670 m. The well was drilled with seawater and sweeps down to 1014 m and with EMS-4600 oil-based mud from 1014 m to TD.

The Paleocene Borr Member target (Intra-Våle Formation sandstone) was penetrated from 2908 to 2949 m (2864 to 2898 m TVD). It consisted of sandstone with a layer of claystone close to the top. Three LWD stethoscope pressure points showed a water gradient below the claystone and lack of pressure communication across the claystone. The Borr Member was water bearing. The cored section had weak shows in the form of cut fluorescence and a weak residue, but no direct fluorescence.

Three meters of the Kupferschiefer Formation source rock was penetrated from 3677 to 3680 m. Geochemical samples from this unit showed TOC up to 5.8% and a Hydrogen Index of 350 mg HC/g TOC. Vitrinite reflectance and Tmax indicated pre-oil to earliest oil window maturity at this depth.

The Permian Auk Formation target (Rotliegend Gp) was penetrated from 3680 to 3808 m (3495 to 3600 m TVD). It was expected as a Sandstone succession, however the cuttings proved to be composed of siltstone with local limestone stringers. Auk had weak shows on sidewall cores from 3788 to 3802 m, described with no direct fluorescence, cut fluorescence and a weak residue.

One conventional core was taken in the target Borr sandstone member from 2910 to 2940 m with 100% recovery. No fluid sample was taken.

The well was permanently abandoned on 18 January 2019 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
190.00	3843.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Søkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2910.0	2940.0	[m]

Total kjerneprøve lengde [m]	30.0
Kjerner tilgjengelig for prøvetaking?	YES

Kommentarer	B-cutt på plass SS-13-A.
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Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
122	NORDLAND GP
122	UNDIFFERENTIATED
1536	HORDALAND GP
1536	NO FORMAL NAME
2354	NO FORMAL NAME
2797	ROGALAND GP
2797	BALDER FM
2815	SELE FM
2841	LISTA FM
2889	VÅLE FM
2908	NO FORMAL NAME
2949	SHETLAND GP
2949	EKOFISK FM
3042	TOR FM
3350	HOD FM
3521	HEGRE GP
3521	SKAGERRAK FM
3545	SMITH BANK FM
3599	ZECHSTEIN GP
3678	KUPFERSCHIEFER FM
3680	ROTLIEGEND GP



3680

NO FORMAL NAME

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT TLD HGNS GR	3651	3838
DU OBMI PPC SC GR	3651	3755
LWD - DI	122	184
LWD - GR ECD DEN RES NEU DI PR S	2809	3663
LWD - GR RES DI	122	184
LWD - GR RES DI	184	958
LWD - GR RES DI NEU DEN SON	2002	2843
LWD - GR RES DI SON	184	1004
LWD - GR RES DI SON	1009	2005
LWD - GR RES ECD PRES DI	3651	3841
MSCT	3675	3833
VSI4	161	3575

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	181.0	36	184.0	0.00	
SURF.COND.	20	1009.0	26	1014.0	1.96	FIT
INTERM.	13 3/8	2002.6	17 1/2	2008.0	1.82	FIT
INTERM.		2008.0		0.0	0.00	
INTERM.	9 5/8	2837.6	12 1/4	2846.0	1.90	FIT
LINER	7	3651.0	8 1/2	3670.0	1.67	FIT
OPEN HOLE		3843.0	6	3843.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
125	1.03			Water	
184	1.20			Water	
184	1.39			Water	
409	1.20			Water	



748	1.03			Water	
936	1.12			Water	
1014	1.45			Oil	
1014	1.20			Water	
1880	1.45			Oil	
2463	1.64			Oil	
2463	1.45			Oil	
2741	1.64			Oil	
3551	1.45			Oil	
3670	1.47			Oil	
3670	1.64			Oil	
3843	1.45			Oil	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
2910.62	[m]
2912.62	[m]
2914.33	[m]
2915.28	[m]
2915.50	[m]
2916.30	[m]
2917.30	[m]
2918.16	[m]
2919.30	[m]
2919.75	[m]
2920.65	[m]
2921.25	[m]
2922.02	[m]
2923.65	[m]
2924.50	[m]
2925.45	[m]
2926.25	[m]
2927.50	[m]
2928.60	[m]
2929.95	[m]
2930.50	[m]
2931.45	[m]
2932.50	[m]
2933.50	[m]



2934.45	[m]
2935.50	[m]
2936.50	[m]
2937.50	[m]
2938.67	[m]
2937.70	[m]
3677.00	[m]
3678.00	[m]
3788.00	[m]
3796.00	[m]
3802.00	[m]
3807.00	[m]
3809.00	[m]
3817.00	[m]
3825.10	[m]
3833.00	[m]