



Generell informasjon

Brønnbane navn	6507/2-5 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Felt	ØRN
Funn	6507/2-5 S Ørn
Brønn navn	6507/2-5
Seismisk lokalisering	MC3D HVG2012M Inline: 7791 Xline: 5770
Utvinningstillatelse	942
Boreoperatør	Equinor Energy AS
Boretillatelse	1771-L
Boreinnretning	WEST PHOENIX
Boredager	54
Borestart	23.07.2019
Boreslutt	14.09.2019
Plugget og forlatt dato	14.09.2019
Frigitt dato	14.09.2021
Publiseringsdato	10.11.2021
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	GARN FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	NOT FM
Avstand, boredekk - midlere havflate [m]	38.6
Vanndybde ved midlere havflate [m]	332.0
Totalt målt dybde (MD) [m RKB]	4230.0
Totalt vertikalt dybde (TVD) [m RKB]	4186.0
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	TILJE FM



Geodetisk datum	ED50
NS grader	65° 50' 44.19" N
ØV grader	7° 22' 43.71" E
NS UTM [m]	7303841.52
ØV UTM [m]	425977.89
UTM sone	32
NPDID for brønnbanen	8775

Brønnhistorie

**General**

Well 6507/2-5 S (Ørn) is located on the Dønna Terrace in the Norwegian Sea, approximately 10 km southwest of the Marulk field. The objectives were to prove presence of hydrocarbons in the Fangst Group, Middle Jurassic shallow marine deposits in the Ørn structure, and acquire sufficient information on reservoir and fluid properties to be able to decide on a potential appraisal well for middle Jurassic discovery. If hydrocarbons are proven in Garn or Ile formations, the well would drill into Tofte and Tilje formations to clarify if these are water bearing. In addition, acquire data on reservoir and fluid properties in the Lysing Formation interval for regional understanding with the aim to clarify the relationship between logged resistivity, calculated saturation, and water salinity.

Operations and results

The well was entered with the semi-submersible rig West Phoenix on 23 July 2019 and drilled to TD at 4230 m (4186 m TVD) in the Early Jurassic Tilje Formation. The well was drilled down to 1386 m with seawater and CMC spud sweeps, from 1386 to 2807 with Versatec oil-based mud and from 2807 to TD with Exploradrill oil-based mud. The well was drilled vertical until 2000 m where it started to build inclination in the 17 ½" and 12 ¼" hole sections, before returning to vertical before 12 ¼" hole section TD.

The Lange Formation was penetrated at 2981 m (2918.4 m TVD MSL) and consists of predominantly claystone with single meter-scale limestone stringers as well as occurrences of sandstone bodies in the lower half. Unexpected hydrocarbon indications were observed in multiple levels within the Lange Formation. However, no moveable hydrocarbons were proven from logging results. A 16 meters thick Garn Formation sandstone was encountered at 4099 m (4016.4 m TVD MSL), 67 m deeper than original prognosis. The Ile Formation was encountered at 4107 m (4025 m TVD MSL), 35.6 m deeper than original prognosis and is dominated by a thicker sandstone interval in upper parts with varying siltstone and sandstone in lower parts. A 33 m gas column was indicated in a hydrocarbon down-to scenario. The results were supported by pressure gradients and fluid sampling in the Garn and Ile formations. One conventional core of 41.5 m was cut covering Garn to Ile formations from 4107.5 to 4149 m. MDT fluid samples were taken in the Lysing Formation at 2980 m (water), in the Garn Formation at 4099 m (gas), and in the Ile Formation at 4127.4 m (condensate), 4118 m (condensate), 4111.3 m (gas), and 4116 m (gas).

The well was permanently plugged and abandoned on 14 September 2019 as a gas discovery well.

Testing

No drill stem test was performed.



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1390.00	4230.00
Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4107.0	4148.5	[m]
Total kjerneprøve lengde [m]	41.5		
Kjerner tilgjengelig for prøvetaking?	YES		

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
371	NORDLAND GP
544	NAUST FM
1440	KAI FM
1816	ROGALAND GP
1816	TARE FM
1873	TANG FM
1949	SHETLAND GP
1949	SPRINGAR FM
2145	NISE FM
2513	KVITNOS FM
2953	CROMER KNOLL GP
2953	LYSING FM
2981	LANGE FM
3705	VIKING GP
3705	SPEKK FM
3725	MELKE FM
4099	FANGST GP
4099	GARN FM
4107	ILE FM
4150	BÅT GP
4150	ROR FM



4170 [TILJE FM](#)

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
GR NGI PPC MSIP	1820	4231
MDT GR	1870	1967
MDT GR	2956	3684
MDT GR	4099	4230
MWD LWD - ARC TELE	433	2804
MWD LWD - ARC TELE SONVIS ADN	2804	3910
MWD LWD - GVR ECOS TELES	3910	4230
QAIT NEXT LDS APS HNGS NMR	3909	4231
VSI4	1100	4230
XLR GR	2956	3707
XLR GR	4097	4200

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	36	433.0	42	435.0	0.00	
SURF.COND.	20	1377.0	26	1386.0	1.63	FIT
INTERM.	14	2796.0	17 1/2	2807.0	1.82	FIT
LINER	9 7/8	3909.0	12 1/4	3913.0	2.17	LOT
OPEN HOLE		4230.0	8 1/2	4230.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1340	1.45	41.0		Versatec	
1590	1.50	57.0		Versatec	
1783	1.54	55.0		Versatec	
2802	1.73	23.0		Exploradrill	
2804	1.54	54.0		Versatec	
2904	1.71	28.0		Exploradrill	
2973	1.72	26.0		Exploradrill	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 11.5.2024 - 09:05

2995	1.73	27.0		Exploradrill	
3448	1.73	31.0		Exploradrill	
3910	1.76	36.0		Exploradrill	
3949	1.83	44.0		Exploradrill	
4230	1.54	40.0		Versatec	
4230	1.83	45.0		Exploradrill	