



Generell informasjon

Brønnbane navn	6407/3-2 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Brønn navn	6407/3-2
Seismisk lokalisering	PGS14005. inline: 11658. x-line: 5437
Utvinningstillatelse	796 B
Boreoperatør	Equinor Energy AS
Boretillatelse	1775-L
Boreinnretning	WEST HERCULES
Boredager	31
Borestart	06.08.2019
Boreslutt	05.09.2019
Plugget og forlatt dato	05.09.2019
Frigitt dato	01.04.2020
Publiseringsdato	10.02.2020
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	31.0
Vanndybde ved midlere havflate [m]	237.0
Totalt målt dybde (MD) [m RKB]	2628.0
Totalt vertikalt dybde (TVD) [m RKB]	2590.0
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	ÅRE FM
Geodetisk datum	ED50
NS grader	64° 45' 25.69" N
ØV grader	7° 49' 35.47" E
NS UTM [m]	7182084.60
ØV UTM [m]	444160.30
UTM sone	32
NPID for brønnbanen	8816



Brønnhistorie

General

Well 6407/3-2 S was drilled to test the Lanterna prospect, located on the Trøndelag Platform, west of the Mikkel Discovery in the Norwegian Sea. The primary objective was to test migration of hydrocarbons into the prospect, and to prove hydrocarbons in the Garn, Tilje and upper Åre formations. Secondary objective was to test the hydrocarbon potential in the Lower Åre Formation and the Triassic Grey Beds.

Operations and results

Wildcat well 6407/3-2 S was spudded with the semi-submersible installation West Hercules on 6 August 2019 and drilled to TD at 2628 m (2589.4 m TVD) m in the Early Jurassic Åre Formation. An 8 ½" pilot well was drilled after the 42" from 320 to 477 m. The pilot hole observed gas bubbles at approximately 477 m. The flow was stopped with 1.60 sg kill-mud. After evaluating the situation and performing required measures to handle the situation, drilling continued as planned. Otherwise operations proceeded without significant problems. The well was drilled with seawater down to 435 m and with Glydril mud from 435 m to TD.

A 41 m TVD thick Spekk Formation was penetrated above top Garn Formation, which was encountered at 2000 m (1983 m TVD). The Garn Formation contains a thick reservoir sandstone interval with an interbedded siltstone body and limestone stringers. The underlying Not Formation is predominantly clay and siltstone, while the Ile Formation consists of alternating sand and siltstone with traces of claystone and limestone. The Tilje Formation was encountered at 2314 m (2286 m TVD) and consisted of interbedded bodies of sandstone, siltstone, and claystone. The Åre Formation was encountered at 2430 m (2398 m TVD) and consists of interbedded bodies of sandstone, siltstone, and claystone with coals in the lower part.

All reservoirs were water-bearing. No hydrocarbon indications were seen on the logs and no shows were seen on the cuttings and the gas levels were quite low in general throughout the well.

No cores were cut. No fluid sample was taken.

Due to dry well and lack of shows TD was set above the Triassic.

The well was permanently abandoned on 5 September 2019 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
440.00	2628.00
Borekaks tilgjengelig for prøvetaking?	YES



Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
268	NORDLAND GP
268	NAUST FM
1196	HORDALAND GP
1196	BRYGGE FM
1753	ROGALAND GP
1753	TARE FM
1794	TANG FM
1868	SHETLAND GP
1868	SPRINGAR FM
1944	CROMER KNOT GP
1944	LYR FM
1958	VIKING GP
1958	SPEKK FM
2000	FANGST GP
2000	GARN FM
2062	NOT FM
2120	ILE FM
2178	BÅT GP
2178	ROR FM
2190	TOFTE FM
2223	ROR FM
2314	TILJE FM
2430	ÅRE FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
HRLA PEX XPT SS XPT	1911	2628
MWD LWD - ARC TELE	320	435
MWD LWD - PD ARC TELE	268	320
MWD LWD - PD ARC TELE	435	1305
MWD LWD - PDO ARC TELE	1305	1911
MWD LWD - PDO GVR ARC TELE GEO	1911	2628
XPT	1911	2628



Foringsrør og formasjonsstyrketester

Type utforming	Utforming diam. [tommer]	Utforming dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
CONDUCTOR	36	317.0	42	320.0	0.00	
SURF.COND.	20	431.0	26	435.0	1.46	FIT
INTERM.	13 3/8	1300.0	16	1305.0	1.67	FIT
LINER	9 5/8	1891.0	12 1/4	1911.0	1.51	FIT
OPEN HOLE		2628.0	8 1/2	2628.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
320	1.30	20.0		CMC Spud	
320	1.60	18.0		CMC Spud	
434	1.30	25.0		CMC Spud	
435	1.11	8.0		Glydril	
477	1.60	20.0		CMC Spud	
510	1.12	8.0		Glydril	
719	1.13	8.0		Glydril	
950	1.17	10.0		Glydril	
1070	1.18	10.0		Glydril	
1257	1.21	11.0		Glydril	
1305	1.21	11.0		Glydril	
1305	1.49	15.0		Glydril	
1323	1.50	19.0		Glydril	
1911	1.25	11.0		Glydril	
1911	1.50	23.0		Glydril	
2628	1.28	16.0		Glydril	
2628	1.21	15.0		Glydril	