



Generell informasjon

Brønnbane navn	6406/12-3 B
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Felt	FENJA
Funn	6406/12-3 S Fenja
Brønn navn	6406/12-3
Seismisk lokalisering	Seismic data set MC3D-HT2007-08
Utvinningstillatelse	586
Boreoperatør	VNG Norge AS
Boretillatelse	1520-L
Boreinnretning	TRANSOCEAN ARCTIC
Boredager	40
Borestart	02.05.2014
Boreslutt	11.06.2014
Frigitt dato	11.06.2016
Publiseringsdato	11.06.2016
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	INTRA MELKE FM SS
Avstand, boredekk - midlere havflate [m]	24.0
Vanndybde ved midlere havflate [m]	324.0
Totalt målt dybde (MD) [m RKB]	4315.0
Totalt vertikalt dybde (TVD) [m RKB]	3990.0
Maks inklinasjon [°]	44
Eldste penetrerte alder	LATE JURASSIC
Eldste penetrerte formasjon	MELKE FM
Geodetisk datum	ED50
NS grader	64° 1' 52.32" N
ØV grader	6° 45' 17.58" E



NS UTM [m]	7102598.45
ØV UTM [m]	390320.66
UTM sone	32
NPDID for brønnbanen	7464

Brønnhistorie

General

The 6406/12-3 S, 6406/12-3 A, and 6406/12-3 B wellbores were drilled in concert on the Pil and Bue prospects in the southern end of the Halten Terrace in the Norwegian Sea. The S and A wells were planned to target the Pil and the Bue prospects, respectively. The first well, 6406/12-3 S tested 1017 Sm³ oil/day with a GOR of 160 Sm³/Sm³ in Intra Melke Formation sandstones. This result led to the decision within the partnership to drill an appraisal of the Pil discovery. The well was designated 6406/12-3 B and was designed to test the Intra Melke Sandstone reservoir encountered along strike from 6406/12-3 S.

Operations and results

Appraisal well 6406/12-3 B was kicked off at 2355 m in well 6406/12-3 S on 2 May 2014. It was drilled with the semi-submersible installation Transocean Arctic to 4315 m in Late Jurassic sediments belonging to the Melke Formation. No significant problem was encountered in the operations. The well was drilled with XP-07 oil based mud from kick-off to TD.

At the top of the Jurassic section, the well encountered a different stratigraphy from the 6406/12-3 S well. Immediately below BCU, a 35 m MD Spekk/Rogn/Spekk succession was penetrated. Hydrocarbons were present within these rocks but not moveable. Below the Spekk Formation, at 3761 m (3440 m TVD), the well encountered over 500 m of Intra Melke Formation sandstones. These sands are interpreted to contain similar facies as those encountered in the 6406/12-3 S discovery immediately below the BCU. The Intra Melke sands contained an 82 m oil column in very good to excellent quality reservoir sandstone with an oil-water contact at 3844 m (3522 m TVD), 18 m deeper than in the 6406/12-3 S well. Pressure data confirmed the same oil gradient as in 6406/12-3 S. There was no gas cap. A second hydrocarbon column of 10 m was seen approximately 360 m below the oil water contact.

A total of 165 m core was cut and recovered in three cores in the interval 3703 m to 3868 m. The cores captured rocks from the cap rock (Lyr Formation marls), the Spekk and Rogn formations, and the Intra Melke Formation reservoir sandstones. Fluid samples were taken at 3776 m (oil), 3836.5 m (oil), 3892.1 m (water), and 4082.4 m (water).

The well was plugged back to the 13 3/8" casing and permanently abandoned on 11 June 2014. It is classified as an oil appraisal well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
2360.00	4315.00

Borekaks tilgjengelig for prøvetaking?	YES
--	-----

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3703.0	3757.3	[m]
2	3757.3	3814.3	[m]
3	3814.5	3869.0	[m]

Total kjerneprøve lengde [m]	165.8
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
348	NORDLAND GP
348	NAUST FM
1091	KAI FM
1230	HORDALAND GP
1230	BRYGGE FM
1961	ROGALAND GP
1961	TARE FM
2087	TANG FM
2332	SHETLAND GP
2332	SPRINGAR FM
2449	NISE FM
2659	KVITNOS FM
3452	CROMER KNOLL GP
3452	LANGE FM
3695	LYR FM
3726	VIKING GP
3726	SPEKK FM
3728	ROGN FM
3748	SPEKK FM
3761	INTRA MELKE FM SS



4264

MELKE FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
DS MR FLEX	3450	3839
GX UX IM	3450	3839
MWD - GR RES AP DIR	2355	3700
MWD - GR RES NEU DEN SON AP	3700	4315
PCOR	3450	3839
RCX	3450	3839
SBL	3450	3839
SLAM DS CNL CZD AAC DIL	3450	3839
VSP	3450	3839

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	414.7	36	418.0	0.00	
SURF.COND.	20	1238.6	26	1246.0	1.70	FIT
INTERM.	13 3/8	2347.8	17 1/2	2355.0	0.00	
PROD.	9 5/8	3692.5	12 1/4	3700.0	0.00	
OPEN HOLE		4315.0	8 1/2	4315.0	1.85	FIT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Fløtegrense [Pa]	Type slam	Dato, måling
2330	1.61	54.0		XP-07	
2500	1.60	40.0		XP-07	
3121	1.61	43.0		XP O7	
3654	1.63	40.0		XP O7	
3814	1.61	46.0		XP O7	
3940	1.58	37.0		XP O7	
4050	1.56	33.0		XP O7	
4109	1.54	37.0		XP O7	
4315	1.54	35.0		XP-07	

