



Generell informasjon

Brønnbane navn	16/4-10
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	16/4-10
Seismisk lokalisering	LN120M02.Inline 2458.Crossline 1363
Utvinningstillatelse	544
Boreoperatør	Lundin Norway AS
Boretillatelse	1589-L
Boreinnretning	ISLAND INNOVATOR
Boredager	44
Borestart	24.01.2016
Boreslutt	07.03.2016
Frigitt dato	07.03.2018
Publiseringsdato	01.06.2017
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	30.0
Vanndybde ved midlere havflate [m]	95.0
Totalt målt dybde (MD) [m RKB]	2668.0
Totalt vertikalt dybde (TVD) [m RKB]	2668.0
Maks inklinasjon [°]	2
Eldste penetrerte alder	EARLY TRIASSIC
Eldste penetrerte formasjon	SMITH BANK FM
Geodetisk datum	ED50
NS grader	58° 35' 3.07" N
ØV grader	2° 10' 21.94" E
NS UTM [m]	6494197.58
ØV UTM [m]	451899.85
UTM sone	31
NPDID for brønnbanen	7731



Brønnhistorie

General

Well 16/4-10 was drilled to test the Fosen prospect on the southwest part of the Utsira High in the North Sea. The primary objective was to test the hydrocarbon potential in Late and Middle Jurassic reservoirs. A secondary objective was to core the BCU top reservoir boundary for facies evaluation and dating.

Operations and results

Wildcat well 16/4-10 was spudded with the semi-submersible installation Island Innovator on 24 January 2016 and drilled to TD at 2668 m in Early Triassic sediments in the Smith Bank Formation. A 9 7/8" pilot hole was drilled to 520 m after installing the 30"x36" conductor casing to check for shallow gas. No shallow gas or water flow was observed. No significant problem was encountered in the operations. The well was drilled with seawater and hi-vis pills down to 529 m and with Aquadril mud from 529 m to TD.

The well encountered about 160 m of water bearing sandstones in the Late Jurassic to Middle Triassic, of which about 90 m, mainly in the Middle Jurassic Sleipner Formation, are of good reservoir quality. The well also encountered 75 m of reservoir rocks with very good reservoir quality in the Paleocene Ty Formation. Trace fluorescence was recorded in the Sleipner Formation, but could not be confirmed as migrated petroleum in post-well organic geochemical analyses.

A total of 11.7 m core was cut in four cores from 2424.1 to 2440 m in the Åsgard Formation, thus missing the BCU boundary. Core depths are equal to log depths for all cores. After drilling through BCU there were no shows and no gas response and it was decided to drill ahead without taking any more cores. MDT pressure points were acquired in the reservoir section and water samples were taken at 2313.6 m and 2467.1 m.

The well was permanently abandoned on 7 March 2016 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
530.00	2669.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet



Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2424.1	2427.6	[m]
2	2427.9	2428.1	[m]
3	2428.7	2432.7	[m]
4	2436.2	2439.8	[m]

Total kjerneprøve lengde [m]	11.3
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
125	NORDLAND GP
786	UTSIRA FM
1068	HORDALAND GP
1095	SKADE FM
1880	GRID FM
2059	ROGALAND GP
2059	BALDER FM
2069	SELE FM
2107	LISTA FM
2216	VÅLE FM
2240	TY FM
2317	VÅLE FM
2322	SHETLAND GP
2322	EKOFISK FM
2330	TOR FM
2352	HOD FM
2385	CROMER KNOLL GP
2385	SOLA FM
2405	ÅSGARD FM
2465	VESTLAND GP
2465	HUGIN FM
2471	SLEIPNER FM
2583	STATFJORD GP
2625	SMITH BANK FM



Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD - RES GR DIR CAL DEN N	496	2668
FMI MASIP	2226	2635
HRLA PEX ECS HNGS	2226	2627
MDT	2242	2610
MSCT	2242	2573
MWD - GR PWD RES DIR AC	170	518
MWD - PDG GR DIR	123	179
USIT	1457	2219
XLROCK	2582	2610

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	191.5	36	191.5	0.00	
SURF.COND.	20	511.4	26	518.0	1.48	LOT
PILOT HOLE		520.0	9 7/8	520.0	0.00	
INTERM.	9 5/8	2226.6	12 1/4	2234.0	1.74	LOT
OPEN HOLE		2668.0	8 1/2	2668.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
124	1.03	1.0		WATER BASED	
518	1.04	1.0		WATER BASED	
536	1.30	12.0		WATER BASED	
1204	1.33	17.0		WATER BASED	
1878	1.35	11.0		WATER BASED	
2234	1.35	17.0		WATER BASED	
2428	1.17	13.0		WATER BASED	
2668	1.19	12.0		WATER BASED	