



Generell informasjon

Brønnbane navn	35/9-14 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	35/9-14
Brønn navn	35/9-14
Seismisk lokalisering	HORDA (CGG 14003) Inline 8659. Xline 30374
Utvinningstillatelse	682
Boreoperatør	Spirit Energy Norge AS
Boretillatelse	1693-L
Boreinnretning	SONGA ENABLER
Boredager	26
Borestart	04.03.2018
Boreslutt	29.03.2018
Plugget dato	29.03.2018
Plugget og forlatt dato	29.03.2018
Frigitt dato	29.03.2020
Publiseringsdato	29.03.2020
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	32.0
Vanndybde ved midlere havflate [m]	365.0
Totalt målt dybde (MD) [m RKB]	3900.0
Totalt vertikalt dybde (TVD) [m RKB]	3739.0
Maks inklinasjon [°]	27.7
Temperatur ved bunn av brønnbanen [°C]	120
Eldste penetrerte alder	MIDDLE JURASSIC
Eldste penetrerte formasjon	HEATHER FM
Geodetisk datum	ED50
NS grader	61° 25' 19.87" N



ØV grader	3° 49' 41.93" E
NS UTM [m]	6810256.82
ØV UTM [m]	544205.62
UTM sone	31
NPDID for brønnbanen	8397

Brønnhistorie

General

Well 35/9-14 A is a geological side-track to 35/9-14 on the Måløy Måløy slope in the northern North Sea. Well 35/9-14 found oil in poor quality Intra-Heather Formation sandstone. The primary objective of the side-track was to further evaluate this discovery in a down-dip position.

Operations and results

Appraisal well 35/9-14 A was kicked out of the 13 3/8" casing at 1776 m on 4 March 2018. It was drilled with the semi-submersible installation Sona Enabler to TD at 3900 m (3739 m TVD) m in the Middle Jurassic Heather Formation. Operations proceeded without significant problems. The well was drilled with Innovert oil-based mud from kick-off to TD.

Intra-Heather Formation waterfilled sandstone was penetrated from 3755 to 3848 m (3592.2 to 3685.7 m TVD). It contained 32 m of net reservoir sandstones with average 13.3 % average porosity. Hydrocarbon indications in well 35/9-14 A were reported only from the Intra-Heather sandstones and ranged from no shows to local HC odour and direct fluorescence and fast streaming cut. Combined pressure data from both wells 35/9-14 and 35/9-14 A indicated an on-structure OWC in the range 3748 to 3751 m (3587 to 3590 m TVD).

One 54 m conventional core was cut from 3813 to 3867 m in the lower part of the Intra Heather Formation sandstone and into the Heather mudstone below. MDT fluid samples were taken at 3770.2 m (3609.4 m TVD; water only) and 3782 m (3621.2 m TVD; water and oil).

The well was permanently abandoned on 29 March 2018 as a dry well with shows.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
3470.00	3899.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3813.0	3866.1	[m]

Total kjerneprøve lengde [m]	53.1
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
396	NORDLAND GP
591	UTSIRA FM
638	HORDALAND GP
660	NO FORMAL NAME
841	HORDALAND GP
872	ROGALAND GP
872	BALDER FM
943	SELE FM
959	LISTA FM
1298	VÅLE FM
1382	SHETLAND GP
1382	JORSALFARE FM
1518	KYRRE FM
2606	TRYGGVASON FM
2933	BLODØKS FM
2968	SVARTE FM
3384	RØDBY FM
3577	ÅSGARD FM
3650	VIKING GP
3650	DRAUPNE FM
3702	HEATHER FM
3755	INTRA HEATHER FM SS
3848	HEATHER FM

Logger



Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CMR MDT SAT IFA	3700	3900
GR XL ROCK	3630	3890
LWD - TELE ECO SONVIS SONSCOPE	1474	3900

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
INTERM.	13 3/8	1475.0	17 1/2	1479.0	1.40	FIT
LINER	9 5/8	3465.2	12 1/4	3468.0	1.50	FIT
OPEN HOLE		3900.0	8 1/2	3900.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
670	1.18	9.0		KCl/Polymer/GEM	
1475	1.22	17.0		Innovert	
1954	1.20	16.0		Innovert	
2800	1.21	18.0		Innovert	
2834	1.28	23.0		Innovert	
3033	1.23	20.0		Innovert	
3305	1.24	20.0		Innovert	
3346	1.27	21.0		Innovert	
3424	1.24	20.0		Innovert	
3461	1.27	22.0		Innovert	
3461	1.30	23.0		Innovert	
3467	1.24	18.0		Innovert	
3479	1.30	24.0		Innovert	
3479	1.27	22.0		Innovert	
3494	1.27	12.0		Innovert	
3900	1.27	22.0		Innovert	