



Generell informasjon

Brønnbane navn	6305/5-3 S
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Felt	ORMEN LANGE
Funn	6305/5-1 Ormen lange
Brønn navn	6305/5-3
Seismisk lokalisering	inline 4627 & crossline5121
Utvinningstillatelse	209
Boreoperatør	A/S Norske Shell
Boretillatelse	1246-L
Boreinnretning	LEIV EIRIKSSON
Boredager	70
Borestart	19.08.2009
Boreslutt	27.10.2009
Plugget dato	27.10.2009
Plugget og forlatt dato	28.07.2012
Frigitt dato	27.10.2011
Publiseringsdato	27.10.2011
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	PALEOCENE
1. nivå med hydrokarboner, formasjon.	EGGA FM (INFORMAL)
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	832.0
Totalt målt dybde (MD) [m RKB]	2954.0
Totalt vertikalt dybde (TVD) [m RKB]	2837.0
Maks inklinasjon [°]	24.9
Eldste penetrerte alder	LATE CRETACEOUS
Eldste penetrerte formasjon	SPRINGAR FM
Geodetisk datum	ED50



NS grader	63° 34' 53.76" N
ØV grader	5° 25' 7.38" E
NS UTM [m]	7052835.00
ØV UTM [m]	620055.01
UTM sone	31
NPDID for brønnbanen	6118

Brønnhistorie

General

Well 6305/5-3 S was drilled on the north-eastern flank of the Ormen Lange Field in the Norwegian Sea. The well had three objectives: to appraise the Egga Reservoir Unit and Springar Formation for fluid content and reservoir quality; to investigate the extent of pressure communication between the C-Template area and the A- and B -Template

area within the Egga Reservoir Unit; and to test possible hydrocarbon potential in the overlying Tare Formation

Operations and results

Appraisal well 6305/5-3 S was spudded with the semi-submersible installation Leiv Eirikson on 19 August 2009 and drilled to TD at 2954 m (2837 m TVD) in the Late Cretaceous Springar Formation. Due to junk in the hole when drilling out of the 20" a technical sidetrack was made (6305/5-3 ST2); otherwise operations went forth without significant problems. The well was drilled with seawater and hi-vis pills down to 1651 m and with Glydril mud from 1651 m to TD.

Top of the Egga Reservoir Unit was encountered at 2797 m (2693.9 m TVD) and was 31 m TVD thick. This was 27 m deeper and 6 m thinner than prognosed. Pressure testing and down hole fluid analysis established the GWC to within 1.9 m. The Gas-Down-To (GDT) was determined at 2678.7 m TVD MSL and the Water-Up-To (WUT) at 2680.6 m TVD MSL. This is about 176 m shallower than the DHI in segment 3. The net/gross came in on the lower end of the prognosis, while the porosity was close to the prognosed. The pressure of the Egga gas-leg was some 3 bar lower than the virgin Ormen Lange gas pressure at this depth, indicating depletion and hence connectivity to the producers of the A and B templates. The Springar and Tare Formation reservoir properties proved to be very poor and no hydrocarbon saturations could be determined.

Sidewall cores were taken, but no conventional coring was done. MDT fluid samples were obtained at 2805 m (gas zone), 2812.4 m (water zone) and 2837 m (water zone). Sampling showed that the water-bearing interval had gas below the GWC.

The well was suspended on 27 October 2009 as a gas appraisal.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1610.00	2954.00
Borekaks tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
857	NORDLAND GP
857	NAUST FM
1660	KAI FM
1732	HORDALAND GP
1732	BRYGGE FM
2350	ROGALAND GP
2350	TARE FM
2498	TANG FM
2797	EGGA FM (INFORMAL)
2842	SHETLAND GP
2842	SPRINGAR FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
6118_6305_5_3_S	pdf	0.35

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
FMI PPCMSIP ACTS ECRD	2145	2894
GR PPC MSIP PPC	1545	1623
ILE CMR HRLA ECRD	2185	2924
MDT GR	2805	2882
MSCT GR ECRD	2545	2830
MSCT GR ECRD	2782	2881
MWD LWD - DI	857	941





MWD LWD - DI GR RES PWD	941	2954
PEX ECS XPT ACTS ECRD	2177	2929
VSP GR	1600	2914
XPT ACTS ECRD	2569	2880

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	961.0	36	965.0	0.00	LOT
SURF.COND.	20	1651.0	26	1656.0	1.39	LOT
INTERM.	13 3/8	2200.0	17 1/2	2206.0	1.50	LOT
OPEN HOLE		2954.0	12 1/4	2954.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1646	1.26			Glydril DW	
2206	1.33			Glydril DW	
2608	1.35			Glydril DW	
2956	1.35			21/10/2009 20:00 Glydril DW	
2956	1.37			23/10/2009 20:00 Glydril DW	
2956	1.35			Glydril DW	

Trykkplott

Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
6118 Formation pressure (Formasjonstrykk)	PDF	0.28

