



Generell informasjon

Brønnbane navn	6507/7-14 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Felt	DVALIN
Funn	6507/7-14 S Dvalin
Brønn navn	6507/7-14
Seismisk lokalisering	Survey RD0701M01 inline 10519 & crossline 7637
Utvinningstillatelse	435
Boreoperatør	RWE Dea Norge AS
Boretillatelse	1309-L
Boreinnretning	BREFORD DOLPHIN
Boredager	105
Borestart	14.06.2010
Boreslutt	26.09.2010
Frigitt dato	26.09.2012
Publiseringsdato	17.10.2012
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	FANGST GP
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	344.0
Totalt målt dybde (MD) [m RKB]	4534.0
Totalt vertikalt dybde (TVD) [m RKB]	4477.0
Maks inklinasjon [°]	22.4
Temperatur ved bunn av brønnbanen [°C]	162
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	TILJE FM



Geodetisk datum	ED50
NS grader	65° 25' 35.84" N
ØV grader	7° 10' 28.05" E
NS UTM [m]	7257411.95
ØV UTM [m]	415293.97
UTM sone	32
NPDID for brønnbanen	6367

Brønnhistorie

**General**

The Zidane 6507/7-14 S well was drilled on the Revfall Fault Complex on the Dønna Terrace in the Norwegian Sea,

The primary objective was to test the hydrocarbon potential in the Middle Jurassic Fangst Group; Garn and Ile Formations. Secondary objectives were to test the hydrocarbon potential the Lower Cretaceous Lange Formation sandstone and the Lower Jurassic Tilje Formation.

Operations and results

Wildcat well 6507/7-14 S was spudded with the semi-submersible installation Bredford Dolphin on 26 September 2010 and drilled to TD at 4534 m (4477.5 m TVD) in the Early Jurassic Tilje Formation. No significant problems were encountered in the operations. The well was drilled with seawater and sweeps down to 1301 m, with Performadril water based mud from 1301 m to 2200 m, with HT Performadril mud containing 4.5 - 7% glycol from 2200 m to 3289 m, and with XP-07 oil based mud from 3289 m to TD.

The Fangst Group, Garn Formation was encountered at 4219 m (4163.7 m TVD). The well proved a gas column in the Garn and Ile Formations with a gas down-to contact at 4381 m (4325 m TVD). The Garn Formation is 87 m thick and consists predominantly of sandstone. The Ile Formation is 65 m thick, consisting of interbedded sandstone, claystone and siltstone with poor reservoir properties. Lange Formation sandstone was encountered but proved only some residual gas. The Tilje Formation sandstone was water bearing. Weak oil shows in the form of light-coloured fluorescence were recorded in the gas-bearing reservoir; otherwise there were no oil shows reported from the well.

A core was cut from 4221 to 4275.6 m. Core depths should be shifted 2.7 m down as compared to loggers' depth. Plug data from the one-metre ends was available at the time of testing and these showed large permeability contrasts with some intervals having permeability of several hundred milliDarcy. Wire line fluid samples were acquired at 4226.45 m (gas), 4483.62 m (water), 4365.2 m (gas, gas+filtrate in one sample).

The well was permanently abandoned on 26 September 2010 as a gas discovery.

Testing

The well was production tested (DST). The test produced 1200 000 Sm³ of gas, 47 Sm³ condensate, and 16 m³ water (condensed water) per day through a 36/64 inch choke. The gas was very dry with a separator GOR of 22600 Sm³/Sm³, a gravity of 0.647 (air = 1) and 4.5% CO₂. The maximum temperature recorded was 154 deg C, but due to high draw-down the initial reservoir temperature was estimated by different extrapolation techniques to be 151degC.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1320.00	4534.50

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4221.0	4275.6	[m]

Total kjerneprøve lengde [m]	54.6
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
369	NORDLAND GP
369	NAUST FM
1479	KAI FM
1910	HORDALAND GP
1910	BRYGGE FM
2035	ROGALAND GP
2035	TARE FM
2087	TANG FM
2148	SHETLAND GP
2148	SPRINGAR FM
2471	NISE FM
2972	CROMER KNOLL GP
2972	LYSING FM
3036	LANGE FM
3767	VIKING GP
3767	SPEKK FM
3790	MELKE FM
4219	FANGST GP
4219	GARN FM
4306	NOT FM
4313	ILE FM
4378	BÅT GP
4378	ROR FM
4478	TILJE FM



Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	4219	4289	14.3

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0	44.000			

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0		1200000		0.647	22600

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT APS LDS HNGS	3940	4534
ECRD	4282	4282
MDT	4226	4282
MDT	4281	4282
MDT	4296	4510
MSCT	4279	4373
MWD - BAT SONIC DEN NEU DIR	2200	3947
MWD - DDS PWD DIR	448	1301
MWD - DIR	369	448
MWD - GABI PWD GR RES DIR	3223	3289
MWD - GABI PWD GR RES PCAL	2200	3947
MWD - GM PWD RES BAT SON DEN NEU	3947	4534
MWD - GR RES PWD BAT SON DIR	448	2200
MWD - PWD GR RES DIR	3180	3289
OBMI MSIP	3938	4535
VSI-4	1137	4324
XPT CMR AT	3940	4387



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	369.0	36	369.0	0.00	LOT
INTERM.	20	448.0	20	1301.0	0.00	LOT
INTERM.	20	1294.0	20	1301.0	0.00	
INTERM.	13 3/8	2194.0	17 1/2	2200.0	1.95	LOT
INTERM.	9 5/8	3938.0	12 1/4	3947.0	1.96	LOT
LINER	7	4534.0	8 1/2	4534.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1301	1.36	36.0		PERFORMADRIL	
1444	1.35	30.0		PERFORMADRIL	
2200	1.55	49.0		PERFORMADRIL	
2741	1.55	55.0		PERFORMADRIL	
3134	1.55	59.0		PERFORMADRIL	
3258	1.55	41.0		PERFORMADRIL	
3289	1.64	28.0		XP-07 Yellow	
3412	1.64	57.0		XP-07 Yellow	
3947	1.64	31.0		XP-07 Yellow	
4221	1.70	32.0		XP-07 Yellow	
4534	1.71	38.0		XP-07 Yellow	

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]
6367_Formation_pressure_(Formasjonstrykk)	pdf	0.29

