



Generell informasjon

Brønnbane navn	6507/7-15 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	6507/7-15 S Dvalin
Brønn navn	6507/7-15
Seismisk lokalisering	Survey RD07M1 inline 10690 & crossline 7523
Utvinningstillatelse	435
Boreoperatør	RWE Dea Norge AS
Boretillatelse	1380-L
Boreinnretning	WEST ALPHA
Boredager	115
Borestart	09.01.2012
Boreslutt	02.05.2012
Frigitt dato	02.05.2014
Publiseringsdato	02.05.2014
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	FANGST GP
2. nivå med hydrokarboner, alder	EARLY JURASSIC
2. nivå med hydrokarboner, formasjon	TILJE FM
Avstand, boredekk - midlere havflate [m]	18.0
Vanndybde ved midlere havflate [m]	399.0
Totalt målt dybde (MD) [m RKB]	4567.0
Totalt vertikalt dybde (TVD) [m RKB]	4552.0
Maks inklinasjon [°]	11.9
Temperatur ved bunn av brønnbanen [°C]	165



Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	TILJE FM
Geodetisk datum	ED50
NS grader	65° 25' 31.81" N
ØV grader	7° 5' 56.11" E
NS UTM [m]	7257390.90
ØV UTM [m]	411785.99
UTM sone	32
NPDID for brønnbanen	6730

Brønnhistorie

**General**

Well 6507/7-15 S was drilled on the Zidane West prospect between the Heidrun Field and the 6506/6-1 Bella Donna discovery in the Haltenbanken area of the Norwegian Sea. The primary target was the Middle Jurassic Fangst Group; Garn and Ile Formations. Secondary target levels were the Lower Cretaceous Lange Formation sandstone and the

Lower Jurassic Tilje Formation.

Operations and results

Wildcat well 6507/7-15 S was spudded with the semi-submersible installation West Alpha on 9 January 2012 and drilled to TD at 4567 m (4552 m TVD) in the Early Jurassic Tilje Formation. A 9 7/8" shallow gas pilot hole was drilled from 496 m to 649 m and shallow gas was observed at 640 - 644 m. The 26" hole was drilled to 596 m and the 20" casing was set at 594 m, above the shallow gas zone. Operations were stopped at 4124 m after setting of 9 5/8" casing due to leakage in the kill line and failure on a fail-safe valve. The well was plugged and the BOP was pulled, repaired and run again.

Otherwise, operations went forth without significant problems. The well was drilled with seawater, bentonite and hi-vis sweeps down to 596 m, with KCl/freshwater dilution mud from 596 m to 1336 m, with Glydril mud from 1336 m to 2210 m, and with Versatherm oil based mud from 2210 m to TD

The well encountered gas in the Lange, Garn, Ile and Tilje Formations. The Lange Formation had gas in a sandy interval from 3586.5 m (3585.5 m TVD) down to 3634 m (3632.5 m TVD) and water up to 3679.5 m (3677.5 m TVD) based on logs. Pressure testing was difficult due to poor reservoir conditions, so no conclusive gas gradient could be established. The Fangst Group contained gas from top Garn at 4266.5 m (4255 m TVD) down to 4404 m (4395 m TVD) in the Ile Formation. Formation pressure analysis proved the Garn and Ile Formations to be on the same gas gradient. A 10 m gas column was encountered in the Tilje Formation from the top at 4499 m (4485 m TVD) down to 4511 m (4497 m TVD), but within a different pressure system from the overlying formations. No fluid contacts from pressure measurements could be identified in this well, all hydrocarbon columns were penetrated in down-to settings.

Two cores were cut from 4265 m to 4329.6 m in the Garn Formation and one core was cut from 4362 m to 4415.3 m in the Ile Formation. MDT gas samples were taken at 3627.24 m in the Lange Formation sands and at 4275.06 m, 4300.53 m, and 4320.39 m in the Garn Formation. These sample stations were sampled with an extra-large diameter probe. Two more hydrocarbon samples were taken in the Ile Formation 4381.80 m while performing a mini DST. No water samples were taken in the well.

The well was permanently abandoned on 2 May 2012 as a gas discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
600.00	4567.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4265.0	4285.3	[m]
2	4292.0	4329.6	[m]
3	4362.0	4415.3	[m]

Total kjerneprøve lengde [m]	111.2
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
417	NORDLAND GP
417	NAUST FM
1481	KAI FM
1906	HORDALAND GP
1906	BRYGGE FM
2002	ROGALAND GP
2002	TARE FM
2059	TANG FM
2122	SHETLAND GP
2122	SPRINGAR FM
2620	NISE FM
2955	CROMER KNOLL GP
2955	LYSING FM
3030	LANGE FM
3854	VIKING GP
3854	SPEKK FM
3866	MELKE FM
4267	FANGST GP
4267	GARN FM
4350	NOT FM
4356	ILE FM
4410	BÅT GP
4410	ROR FM
4499	TILJE FM



Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT TLD APS HNGS EDTC LEHQT ECRD	2175	4133
CMR HXPT EDTC LEHQT ECRD	4250	4567
CMR XPT EDTC LEHQT ECRD	3540	3840
LWD - DI	417	596
LWD - DI GR ECD DEN CAL RES NEU	496	649
LWD - ECD RES GR DI	596	1336
LWD - ECD RES GR DI DT	1336	2210
LWD - ECD RES GR DI DT CAL DEN N	2210	4133
LWD - RES GR ECD DEN CAL NEU DI	4116	4567
LWD - RES GR ECD DEN CAL NEU DI	4133	4265
LWD - RES GR ECD DEN NEU DI TST	4265	4292
MDT	3627	3627
MRPS MRHY MRPO IFA HRMS	4269	4300
MRPS MRHY MRPO IFA HRMS MRMS	4271	4320
MSCT EDTC LEHQT ECRD	3618	3798
MSCT EDTC LEHQT ECRD	4289	4544
OMB12 GPIT PPC MSIP EDTC LEHQT E	2175	4133
OMB12 GPIT PPC MSIP EDTC LEHQT E	4123	4567
QAIT LDS APS ECS ILE HNGS EDTC L	3765	4568
SC PO PA PS HY PO IFA MS EDTC LE	4280	4405
VS14 EDTC LEHQT ECRD	2092	4557

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	497.0	36	497.0	0.00	



SURF.COND.	20	594.0	26	596.0	0.00	
PILOT HOLE		649.0	9 7/8	649.0	0.00	
INTERM.	16	1320.0	20	1336.0	0.00	
INTERM.	13 3/8	2175.0	17 1/2	2210.0	0.00	
INTERM.	9 5/8	4124.0	12 1/4	4133.0	0.00	
OPEN HOLE		4534.0	8 1/2	4534.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
460	1.50	25.0		Spud mud	
496	1.04			Spud mud	
596	1.03			seawater	
649	1.04			Spud mud	
1336	1.13	10.0		KCl mud	
2210	1.50	18.0		Glydril	
3665	1.64	46.0		Versatherm	
4133	1.64	49.0		Versatherm	
4133	1.66	47.0		Versatherm	
4265	1.80	65.0		Versatherm	
4265	1.68	59.0		Versatherm	
4416	1.82	67.0		Versatherm	
4567	1.83	74.0		Versatherm	
4567	1.60	18.0		Glydril	
4567	1.83	61.0		Versatherm	

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]
6730 Formation pressure (Formasjonstrykk)	pdf	0.28

