



Generell informasjon

Brønnbane navn	6407/2-5 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Felt	HALTEN ØST
Funn	6407/2-5 S (Nona)
Brønn navn	6407/2-5
Seismisk lokalisering	3D Survey:ST04m8.inline 2474 & xline 3163
Utvinningstillatelse	074
Boreoperatør	StatoilHydro Petroleum AS
Boretillatelse	1258-L
Boreinnretning	OCEAN VANGUARD
Boredager	39
Borestart	26.07.2009
Boreslutt	02.09.2009
Frigitt dato	02.09.2011
Publiseringsdato	02.09.2011
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	GARN FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	ILE FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	250.0
Totalt målt dybde (MD) [m RKB]	3408.0
Totalt vertikalt dybde (TVD) [m RKB]	3311.0
Maks inklinasjon [°]	31.5
Temperatur ved bunn av brønnbanen [°C]	116



Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	ÅRE FM
Geodetisk datum	ED50
NS grader	64° 50' 55.69" N
ØV grader	7° 38' 5.7" E
NS UTM [m]	7192481.71
ØV UTM [m]	435264.21
UTM sone	32
NPDID for brønnbanen	6151

Brønnhistorie

**General**

The 6407/2-5 S Nona well was drilled within the Bremstein Monocline on the Halten Terrace, 10 Km to the south of the Midgard gas/condensate field and 15 Km to the north of the Mikkel gas/condensate field. The objective was to prove hydrocarbon bearing sands in the Middle Jurassic Garn and Ile Formations in the Nona prospect. The location was chosen in order to test several plays and seismic amplitude anomalies in the Ile Formation, and to avoid shallow gas anomalies. A secondary objective was to test the hydrocarbon potential in the Ror, Tilje and Åre formations.

Operations and results

A pilot hole, 6407/2-U-1, was drilled prior to the main well to evaluate shallow gas.

Wildcat well 6407/2-5 S was spudded with the semi-submersible installation Ocean Vanguard on 26 July 2009 and drilled to TD at 3408 m (3311 m TVD) in the Early Jurassic Åre Formation. The well was drilled vertically down to the 12 1/4" hole section and directionally drilled from the 12 1/4" section to hit the geological target at a 27 deg angle, holding this inclination to TD of the well. No shallow gas observed. The well was drilled with sea water and hi-vis sweeps down to 1321 m and with Performadril mud with 3-5% glycol from 1321 m to TD.

The lithology down to top reservoir was dominantly mudstones with no reports of any shows. Top of the primary target reservoir sands, top Garn Formation, was encountered at 2750.5 m, 31 m deep to prognosis. Hydrocarbons were encountered in a 39 m gas column from top reservoir in Garn Formation down to the deepest sand in the Not Formation. The Ile Formation was oil filled with a 34 m oil column from the shallowest sand down to the OWC at 2869 m (2829.8 m TVD), which is clearly identified from wire line logs, pressure gradients, and core oil shows. The reservoir contains residual oil from the OWC and down to 2882.2 m (2840.1 m TVD). Pressure measurements indicated pressure depletion from the Mikkel and/or Midgard fields and possibly non-communication between Garn and Ile. The sandstone intervals in the Ror, Tilje, and Åre Formations were all water bearing without shows.

Two cores were cut in the intervals 2751 - 2778 m in the Garn formation and 2833 - 2887.5 m in the Ile formation. Good quality samples were taken with the MDT Single Probe equipment. Gas samples were collected in the Garn Formation at 2756.5 m, oil in the Ile Formation at 2844.9 m, and water in the Ile Formation at 2897.7 m.

The well was permanently abandoned on 2 September 2009 as an oil and gas discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1330.00	3408.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2751.0	2778.5	[m]
2	2833.0	2887.7	[m]

Total kjerneprøve lengde [m]	82.2
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
272	NORDLAND GP
515	NAUST FM
1305	KAI FM
1379	HORDALAND GP
1379	BRYGGE FM
2010	ROGALAND GP
2010	TARE FM
2071	TANG FM
2150	SHETLAND GP
2150	SPRINGAR FM
2198	NISE FM
2396	KVITNOS FM
2585	CROMER KNOLL GP
2585	LANGE FM
2719	LYR FM
2733	VIKING GP
2733	SPEKK FM
2745	MELKE FM
2750	FANGST GP
2750	GARN FM
2783	NOT FM
2828	ILE FM
2926	BÅT GP
2926	ROR FM
3096	TILJE FM
3311	ÅRE FM



Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MDT PRESS	2650	3220
MDT SAMPLE	2845	2845
MDT SAMPPLE-SCANN	2756	2897
MSIP PPC	2300	3408
MWD LWD - ARCVRES6 TELSCOPE GVR6	2651	3408
MWD LWD - ARCVRES8 PP825	272	624
MWD LWD - ARCVRES8 PP825 SONVIS	1318	2651
MWD LWD - ARCVRES9 PP900	324	1318
MWD LWD - PP900	272	324
PEX HRLA ECS	2650	3408
VSP	206	3408

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	319.0	36	624.0	0.00	LOT
SURF.COND.	13 3/8	1310.0	17 1/2	1321.0	1.64	LOT
INTERM.	9 5/8	2650.0	12 1/4	2650.0	1.87	LOT
OPEN HOLE		3408.0	8 1/2	3408.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1068	1.33	29.0		Performadril	
1257	1.33	31.0		Performadril	
1470	1.54	30.0		Performadril	
1837	1.53	32.0		Performadril	
2291	1.54	27.0		Performadril	
2325	1.54	20.0		Performadril	
2515	1.54	37.0		Performadril	
2594	1.54	32.0		Performadril	



2651	1.54	32.0		Performadril	
3408	1.25	33.0		Performadril	

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]
6151 Formation pressure (Formasjonstrykk)	PDF	0.28

