



Generell informasjon

Brønnbane navn	6507/11-10
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Brønn navn	6507/11-10
Seismisk lokalisering	inline 864 & crossline 1792
Utvinningstillatelse	476
Boreoperatør	Det norske oljeselskap ASA
Boretillatelse	1245-L
Boreinnretning	SONGA DELTA
Boredager	32
Borestart	16.01.2010
Boreslutt	16.02.2010
Frigitt dato	22.01.2011
Publiseringsdato	16.06.2011
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	29.0
Vanndybde ved midlere havflate [m]	269.0
Totalt målt dybde (MD) [m RKB]	2319.0
Totalt vertikalt dybde (TVD) [m RKB]	2319.0
Maks inklinasjon [°]	0.9
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	TILJE FM
Geodetisk datum	ED50
NS grader	65° 5' 29.53" N
ØV grader	7° 35' 46.63" E
NS UTM [m]	7219569.85
ØV UTM [m]	434033.03
UTM sone	32
NPDID for brønnbanen	6122



Brønnhistorie

General

The 6507/11-10 Frusalen well was drilled just north-east of the Midgard Field, on the eastern side of the Halten Terrace in the Norwegian Sea. The main objective was to investigate the hydrocarbon potential of the Middle Jurassic Fangst Group and Early Jurassic Båt Group. The primary target was the Ile Formation; the Garn Formation was a secondary target, while potential reservoirs in the Tilje and Åre Formations were tertiary targets. The TD criteria for the well was to drill into the first water-bearing formation below Top Tilje Fm, or if hydrocarbons present in the Tilje and Åre Formations, drill through the intra Åre coal markers.

Operations and results

A 9 7/8" pilot hole was drilled from 299 m to 529 m where 529 m shallow gas was encountered. The pilot hole was plugged back with gas-tight cement. The rig was moved 10m SSW and the well was re-spudded with weighted mud through the shallow gas zone. Well 6507/11-10 was spudded with the semi-submersible installation Songa Delta on 16 January 2010 and drilled to TD at 2319 m in the Early Jurassic Tilje Formation. The well was drilled with spud mud down to 495 m, with AQUACOL KCl/Polymer/glycol mud from 495 m to 1659 m, and with CARBOTTECH oil based mud from 1659 m to TD.

The main target, the Ile Formation, was encountered at 2134 m, 37 m deeper than prognosed. The secondary objective, the Garn Formation, which had a risk of being eroded, came in at 2086 m, 43 m deep to prognosis. Neither of the two reservoirs showed any signs of hydrocarbons. Also sandstones of the Tilje Formation proved to be water bearing. TD of the well was thus set 34 m into the Tilje Formation. No hydrocarbon shows were recorded in this well. Oil based mud hampered the detection of shows based on cuttings, but the lack of shows were confirmed by low gas readings.

No wire line logging or coring was undertaken due to dry hole. No wire line pressures or fluid samples were taken.

The well was permanently plugged and suspended on 16 February 2010 as a dry well. Final cutting of well head and abandonment was to be performed by boat at a later stage.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
510.00	2319.00

Borekaks tilgjengelig for prøvetaking?	YES
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Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
299	NORDLAND GP
299	NAUST FM
1421	KAI FM
1554	HORDALAND GP
1554	BRYGGE FM
1868	ROGALAND GP
1868	TARE FM
1921	TANG FM
1959	SHETLAND GP
1959	NISE FM
2030	KVITNOS FM
2041	VIKING GP
2041	SPEKK FM
2051	MELKE FM
2086	FANGST GP
2086	GARN FM
2113	NOT FM
2134	ILE FM
2195	BÅT GP
2195	ROR FM
2285	TILJE FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD LWD - GR RES	299	529
MWD LWD - GR RES DEN NEU SON	2051	2319
MWD LWD - GR RES SON	495	1656
MWD LWD - GR RES SON	1656	2051

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	352.0	36	354.0	0.00	LOT
SURF.COND.	20	491.0	26	495.0	1.44	LOT



PILOT HOLE		529.0	9 7/8	529.0	0.00	LOT
INTERM.	13 3/8	1650.0	17 1/2	1656.0	1.74	LOT
INTERM.	9 5/8	2046.0	12 1/4	2051.0	2.16	LOT
OPEN HOLE		2319.0	8 1/2	2319.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
302	1.02			SPUD MUD	
368	1.28	16.0		AQUACOL KCL/POLYMER/GLY COL	
575	1.28	19.0		AQUACOL KCL/POLYMER/GLY COL	
1420	1.24	9.0		AQUACOL KCL/POLYMER/GLY COL	
1656	1.27	16.0		AQUACOL KCL/POLYMER/GLY COL	
1787	1.61	42.0		CARBO TECH	
2051	1.61	42.0		CARBO TECH	
2284	1.25	26.0		CARBO TECH	