



Generell informasjon

Brønnbane navn	34/4-12 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	34/4-12 S
Brønn navn	34/4-12
Seismisk lokalisering	ST06M09-inline 6110-xline 4515
Utvinningstillatelse	057
Boreoperatør	Statoil Petroleum AS
Boretillatelse	1289-L
Boreinnretning	OCEAN VANGUARD
Boredager	38
Borestart	19.12.2009
Boreslutt	25.01.2010
Frigitt dato	25.01.2012
Publiseringsdato	25.01.2012
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE TRIASSIC
1. nivå med hydrokarboner, formasjon.	LUNDE FM
Avstand, boredekk - midlere havflate [m]	22.0
Vanndybde ved midlere havflate [m]	381.7
Totalt målt dybde (MD) [m RKB]	3066.0
Totalt vertikalt dybde (TVD) [m RKB]	2962.0
Maks inklinasjon [°]	27.9
Temperatur ved bunn av brønnbanen [°C]	115
Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	LUNDE FM
Geodetisk datum	ED50
NS grader	61° 33' 8" N



ØV grader	2° 17' 37.7" E
NS UTM [m]	6824665.28
ØV UTM [m]	462468.37
UTM sone	31
NPDID for brønnbanen	6283

Brønnhistorie

**General**

Well 34/4-12 S was drilled on the Omega Nord prospect on a down faulted terrace northeast of the Snorre Fault Block in the northern North Sea. The main well objective was to prove hydrocarbons in the Triassic Lunde Formation. The well path was positioned to verify the assumed oil water contacts and secure that no commercial resources were left up dip in the structure. In addition to this the well was positioned to serve as a donor well for sidetrack 34/4-12 A, which targeted a separate prospect in the Lunde Formation up-dip on the Snorre Fault block.

Operations and results

Wildcat well 34/4-12 S was spudded with the semi-submersible installation Ocean Vanguard on 19 December 2009 and drilled to TD at 3066 m (2962 m TVD) in Late Triassic sediments of the Lunde Formation. Operations went forth in rough weather and 11 days were spent waiting on weather. However, no significant operational problems were encountered. The well was drilled vertical down through the 12 1/4" section, and deviated from below the 13 3/8" section at 1890 m. It was drilled with seawater and bentonite sweeps down to 1253 m, with Performadril water based mud from 1253 m to 1858 m, and with XP-07 oil based mud from 1858 m to TD. No shallow gas was observed by the ROV at the wellhead or by the MWD while drilling the well.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous and Triassic age. The Jurassic was missing. Top Lunde Formation was encountered at 2738 m, 32 m deeper than prognosed. The first reservoir sand was encountered at 2751 m (2681 m TVD) with a small oil column. This was the first well on the Omega Nord structure and showed that the Inner Snorre Fault can hold a small hydrocarbon column. Due to sparse pressure information obtained in the oil leg, the uncertainty with regards to the depth of the OWC is large. Based on two pressure points only it can be from 2774 - 2796 m (2701 ? 2720 m TVD). Good oil shows were seen both in the cuttings and in the cores from 2757 m to 2792 m (2686 - 2717 m TVD), and described as weak HC odour, patchy light brown oil stains, bright yellow white direct fluorescence and a dull yellow cut fluorescence. Down to 2841m (2761 m TVD) the shows remained the same but became considerably weaker, until easing completely.

One 54 m core was cut from 2757 to 2811 m in top Triassic with 95.4 % recovery. Due to the limited discovery a reduced wire line programme was carried out with the standard logs (gamma ray, resistivity, density, neutron, sonic). Formation pressures were measured with the MDT tool, and one set of oil samples was collected at 2763.7 m. The mobility at the sample depth was poor (estimated to 2.0 mD/cp). The sample was 25 % contaminated, with a GOR of 295 and density of 0.825 g/cm³.

The well was plugged back for sidetracking on 25 January 2010. It is classified as a minor oil discovery.

Testing

No drill stem test was performed.



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1260.00	3066.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2757.0	2809.4	[m]

Total kjerneprøve lengde [m]	52.4
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
404	NORDLAND GP
1105	UTSIRA FM
1130	NO FORMAL NAME
1197	HORDALAND GP
1695	ROGALAND GP
1695	BALDER FM
1713	LISTA FM
1791	SHETLAND GP
2737	CROMER KNOLL GP
2737	MIME FM
2738	HEGRE GP
2738	LUNDE FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
6283	pdf	0.39





Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MDT	2756	3032
MDT DP	2763	2763
MWD LWD - ARCVRES8 VSON8 VADN8	1855	2599
MWD LWD - ARCVRS9 TELE	464	1855
MWD LWD - GVR6 ARCVRES6 TELE	2599	3066
MWD LWD - TELE	404	464
PEX AIT DSI	2596	3066

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	468.0	36	468.0	0.00	LOT
SURF.COND.	20	1248.0	26	1253.0	1.64	LOT
INTERM.	13 3/8	1851.0	17 1/2	1855.0	1.71	LOT
INTERM.	9 5/8	2595.0	12 1/4	2599.0	1.84	LOT
OPEN HOLE		3066.0	8 1/2	3066.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
1257	1.41	36.0		Performadril	
1433	1.48	25.0		Performadril	
1727	1.50	30.0		XP-07 - #14	
1855	1.47	26.0		Performadril	
1855	1.49	27.0		Performadril	
2339	1.60	36.0		XP-07 - #14	
2599	1.55	46.0		XP-07 - #14	
2811	1.60	41.0		XP-07 - #14	
2912	1.65	50.0		XP-07 - #14	
3066	1.60	36.0		XP-07 - #14	