



Generell informasjon

Brønnbane navn	7122/7-3
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Felt	GOLIAT
Funn	7122/7-3
Brønn navn	7122/7-3
Seismisk lokalisering	NA01M1 3D inline:1399 & crossline 3119
Utvinningstillatelse	229
Boreoperatør	Eni Norge AS
Boretillatelse	1105-L
Boreinnretning	EIRIK RAUDE
Boredager	77
Borestart	24.10.2005
Boreslutt	08.01.2006
Frigitt dato	08.01.2008
Publiseringsdato	09.01.2008
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE TRIASSIC
1. nivå med hydrokarboner, formasjon.	TUBÅEN FM
2. nivå med hydrokarboner, alder	TRIASSIC
2. nivå med hydrokarboner, formasjon	SNADD FM
3. nivå med hydrokarboner, alder	MIDDLE TRIASSIC
3. nivå med hydrokarboner, formasjon	KOBBE FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	343.0
Totalt målt dybde (MD) [m RKB]	2726.0
Totalt vertikalt dybde (TVD) [m RKB]	2725.0



Maks inklinasjon [°]	4.7
Temperatur ved bunn av brønnbanen [°C]	73
Eldste penetrerte alder	PERMIAN
Eldste penetrerte formasjon	TEMPELFJORDEN GP
Geodetisk datum	ED50
NS grader	71° 15' 17.53" N
ØV grader	22° 16' 4.6" E
NS UTM [m]	7906512.67
ØV UTM [m]	545476.82
UTM sone	34
NPDID for brønnbanen	5214

Brønnhistorie

**General**

Well 7122/7-3 was drilled on the Goliat Field, which is located approximately 55 km to the south-east of the Snøhvit Field. The Goliat structure is located on the crestal part of a major northeast-southwest trending roll-over anticline situated in the southeastern part of the Hammerfest Basin, along the Troms-Finmark Fault. The primary purpose of the well was to appraise the hydrocarbon potential of the Early Jurassic / Late Triassic (the 7122/7-1 Goliat Discovery). The secondary purpose was to test the potential throughout the Triassic and Late Permian. Permian was the drilling commitment for the licence.

Operations and results

Well 7122/7-3 was spudded with the semi-submersible installation Eirik Raude on 24 October 2005 and drilled to TD at 2726 m in limestone/claystone of the Late Permian Røye Formation. No serious problem was encountered in the operations. The well was drilled with seawater/high viscous sweeps with pre-hydrated bentonite mud down to 538 m and with K/Na Format Polymer mud from 538 m to TD.

The top of the Tubåen reservoir was found at 1087 m, 5 m deeper than prognosis. The reservoir had a gas cap with a GOC at 1145.6 m and oil below. No OWC was found. Top Snadd Formation reservoir was encountered at 1180 m, 23 m shallower than prognosis. The reservoir was oil bearing with a true OWC at 1199.5 m and was in a pressure regime different from the Tubåen reservoir pressure. The third reservoir was found in the Kobbe Formation at 1808 m, 29 m shallower than the prognosis. The reservoir was oil bearing. Oil was confirmed down to 1875.3 m by MDT fluid scanning, and the oil water contact was interpreted to be at 1878 m based on intersection between oil and water gradients.

The Kobbe Formation oil differs from the upper Tubåen and Snadd oils, which are geochemically very similar. The Kobbe oil is not biodegraded while the upper oil reservoirs are slightly biodegraded (removal of C8 ? C15 n-alkanes, but intact C15+ n-alkanes). Other geochemical differences, such as a very light stable carbon isotope composition in the Kobbe oil compared to the upper oils, indicate that the Kobbe oil and the upper oils have different source rocks.

Seven cores were cored in the well. Cores 1 and 2 were cut from 1082 to 1104 from the Late Jurassic Fuglen Formation and into the Late Triassic Kap Toscana Group, core 3 was cut from 1146.5 to 1156 m in the Kap Toscana Group, core 4 was cut from 1187 to 1192 m in the Late Triassic Snadd Formation, cores 5 and 6 were cut from 1812 to 1836 m in the Middle Triassic Kobbe Formation, and core 7 was cut from 2519 to 2521 m in the Early Triassic Havert Formation. MDT fluid samples were taken at 1095.3 m (Tubåen Formation ; gas), 1148.5 m (Tubåen Formation; oil), 1195.6 m (Snadd Formation; oil), 1202.1 m (Snadd Formation; water), 1812 m (Kobbe Formation; oil), 1874.5 m (Kobbe Formation; oil), and at 1931.2 m (Kobbe Formation; water).

The well was permanently abandoned on 8 January 2006 as a discovery well.

Testing

No drill stem test was performed.



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
540.00	2725.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sakkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1082.0	1085.3	[m]
2	1086.0	1105.0	[m]
3	1146.0	1156.8	[m]
4	1187.0	1189.5	[m]
5	1812.0	1823.2	[m]
6	1824.0	1834.3	[m]
7	2519.0	2520.9	[m]

Total kjerneprøve lengde [m]	58.9
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sakkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1082.3	[m]	C	ICHRON
1083.3	[m]	C	ICHRON
1086.5	[m]	C	ICHRON
1087.0	[m]	C	ICHRON
1149.5	[m]	C	ICHRON
1151.5	[m]	C	ICHRON
1154.7	[m]	C	ICHRON
1156.6	[m]	C	ICHRON
1187.1	[m]	C	ICHRON
1189.5	[m]	C	ICHRON
1814.7	[m]	C	ICHRON
1816.2	[m]	C	ICHRON
1822.6	[m]	C	ICHRON
1824.4	[m]	C	ICHRON
1831.6	[m]	C	ICHRON
1832.9	[m]	C	ICHRON



1833.3 [m]	C	ICHRON
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Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
MDT		0.00	1195.60		30.11.2005 - 00:00	YES
MDT		1812.00	0.00		17.12.2005 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
368	NORDLAND GP
634	NYGRUNNEN GP
634	KVITING FM
650	ADVENTDALEN GP
650	KOLMULE FM
865	KOLJE FM
960	KNURR FM
1018	HEKKINGEN FM
1073	FUGLEN FM
1087	KAPP TOSCANA GP
1087	TUBÅEN FM
1180	SNADD FM
1808	SASSENDALEN GP
1808	KOBBE FM
2044	KLAPPMYSS FM
2212	HAVERT FM
2595	TEMPELFJORDEN GP

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
5214	pdf	0.40





Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
5214_1	pdf	1.75
5214_2	pdf	5.05

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
- LEHQT ECRD	1693	2409
- LEHQT ECRO	995	1714
CMR HLRA TLO HGNS ECS HWGS ACTS	995	1714
CMR HRLA TLD HGNS ECS HNGS ACTS	1693	2409
CMR PPC GR ACTS	995	1712
DSI HRLA TLD HGNS ACTS ECRD	2350	2727
FMI PPC GR ACTS	995	1714
LWD - GR RES DIR	524	989
LWD - GR RES DIR ECD	1000	2415
MDT GR ACTS ACRD	1808	2206
MDT GR ACTS ECRD	1000	1700
MDT GR ACTS ECRD	2350	2727
MDT GR ACTS ECRD DUAL PACKER	1148	1195
MSCT GR	1105	1653
MSCT GR	1719	2381
MSIP DENS GR CAL	477	1001
MSIP FMI PPPC GR ACTS	1693	2410
VSP GR	850	2721

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	416.0	36	421.0	0.00	LOT
SURF.COND.	20	529.0	26	530.0	1.35	LOT
SURF.COND.	13 3/8	995.0	16	1000.0	2.62	LOT
INTERM.	9 5/8	1694.0	12 1/4	1712.0	1.19	LOT





LINER	7	2405.0	8 1/2	2420.0	0.00	LOT
OPEN HOLE		2726.0	6	2726.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
372	1.03			SPUD MUD	
400	1.25	19.0		FORMATE POLYMER	
538	1.20	12.0		FORMPRO	
900	1.20	12.0		FORMATE POLYMER	
1056	1.30	12.0		FORMATE POLYMER	
1230	1.30	15.0		FORMATE POLYMER	
1712	1.34	15.0		FORMATE POLYMER	
1816	1.36	14.0		FORMATE POLYMER	
2420	1.54	21.0		FORMATE POLYMER	
2540	1.55	17.0		FORMATE POLYMER	
2726	1.54	19.0		FORMATE POLYMER	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
1087.80	[m]
1813.25	[m]
1818.25	[m]
1828.75	[m]
1819.02	[m]
1826.45	[m]

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]
5214 Formation pressure (Formasjonstrykk)	pdf	0.29

