Generell informasjon

Brønnbane navn	7123/4-1 S
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Felt	SNØHVIT
Funn	7122/6-1 (Tornerose)
Brønn navn	7123/4-1
Seismisk lokalisering	3D Survey:ST05M09.inline:3346 & crossline 5812
Utvinningstillatelse	110 C
Boreoperatør	StatoilHydro Petroleum AS
Boretillatelse	1172-L
Boreinnretning	POLAR PIONEER
Boredager	41
Borestart	12.03.2008
Boreslutt	21.04.2008
Frigitt dato	21.04.2010
Publiseringsdato	21.04.2010
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	413.0
Totalt målt dybde (MD) [m RKB]	2920.0
Totalt vertikalt dybde (TVD) [m RKB]	2706.0
Maks inklinasjon [°]	44
Temperatur ved bunn av brønnbanen [°C]	98
Eldste penetrerte alder	MIDDLE TRIASSIC
Eldste penetrerte formasjon	SNADD FM
Geodetisk datum	ED50
NS grader	71° 36' 49.3'' N
ØV grader	23° 3' 48.7'' E

NS UTM [m]	7947301.07
ØV UTM [m]	572637.44
UTM sone	34
NPDID for brønnbanen	5786

Brønnhistorie

General

The 7123/4-1 S and its sidetrack 7123/4-1 A Tornerose wells were drilled ca 50 km east of the Snøhvit Field in the Hammerfest Basin. The primary objective was to prove additional gas reserves in the Tornerose structure, east of the discovery wells 7122/6-1 and 7122/6-2. The Triassic reservoir was prognosed as similar to the reservoir encountered in 7122/6-1.

Operations and results

Well 7123/4-1 S was spudded with the semi-submersible installation Polar Pioneer on 12 March 2008. Due to junk in hole in the 17 1/2" section it was impossible to drill beyond 726 m. The primary well was thus plugged back and a technical sidetrack was made with kick-off at 681 m (termed 7123/4-1 ST2 in well reports, but no such distinction is made here). 7123/4-1 S was drilled to TD at 2920 m (2706.4 m TVD) in the Triassic Snadd Formation. Thereafter, on 14 May, a sidetrack 7123/4-1 A was kicked off from 1659 m and drilled to a depth of 2855.1 m (2626.3 m TVD) in the Triassic Snadd Formation. No shallow gas was observed by the ROV at the wellhead or by the MWD while drilling the 36" hole and the 17 1/2" hole sections. The top hole down to 1106 m was drilled with seawater/bentonite and CaCl2/polymer mud. Below 1106 m FormPro mud was used in both well tracks.

Well 7123/4-1 S penetrated rocks of Quaternary, Tertiary, Cretaceous, Jurassic and Triassic ages. In well 7123/4-1 S the Snadd reservoir was penetrated at 2266.2 m (2222.6 m TVD), 41 m shallower than prognosis. Top Carnian reservoir within the Snadd Formation was penetrated at 2459.0 m (2364.1 m TVD), 28.9 meter shallower than prognosis. Two cores were cut in 7123/4-1 S in the Snadd Formation. The first core was cut in a thin sand above the Carnian reservoir from 2435 to 2452 m, while the second core was cut covering middle to lower parts of Carnian reservoir T1 and upper parts of Carnian reservoir T2 from 2474 to 2501 m. Pressure points were taken in the Capp Toscana Group and the Snadd Formation, whereas 1 gallon sample (MDT fluid sample) was taken in Carnian reservoir T2 (Snadd Formation).

In sidetrack 7123/4-1 A the Snadd reservoir was penetrated at 2259.0 m (2185.1 m TVD), 14.3 m deeper than prognosis. Top Carnian reservoir within the Snadd Formation was penetrated at 2525.0 m (2376 m TVD), 21 meter deeper than prognosis. In 7123/4-1 A one core was cut from 2670 to 2697 m in a thin sandy sequence approximately 17 meter below the base of the Carnian reservoir in the Snadd Formation. Pressure points were taken in the Capp Toscana Group, whereas MDT fluid samples were collected at 2165.9 m (water and oil), 2166.4 m (water only), 2534.1 m (water only), 2542.6 m (water and oil), and at 2551.5 m (water and oil).

High gas readings and fluorescence with cut on sandstone cuttings and cores in the Snadd Formation were reported in both wells. These shows were interpreted as residual hydrocarbons.

Well 7123/4-1 S was permanently abandoned on 21 April 2008, while the sidetrack 7123/4-1 A was permanently abandoned on 14 May 2008. Both were classified as dry as a dry with shows of residual hydrocarbons.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1100.00	2920.00

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2435.0	2451.6	[m]
2	2470.0	2500.9	[m]

Total kjerneprøve lengde [m]	47.5
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
1110.0	[m]	DC	STATHYD
1130.0	[m]	DC	STATHY
1150.0	[m]	DC	STATHY
1170.0	[m]	DC	STATHY
1190.0	[m]	DC	STATHY
1210.0	[m]	DC	STATHY
1230.0	[m]	DC	STATHY
1250.0	[m]	DC	STATHY
1270.0	[m]	DC	STATHY
1290.0	[m]	DC	STATHY
1310.0	[m]	DC	STATHY
1330.0	[m]	DC	STATHY
1350.0	[m]	DC	STATHY
1370.0	[m]	DC	STATHY
1390.0	[m]	DC	STATHY
1410.0	[m]	DC	STATHY
1430.0	[m]	DC	STATHY
1450.0	[m]	DC	STATHY
1470.0	[m]	DC	STATHY
1490.0	[m]	DC	STATHY
1510.0	[m]	DC	STATHY

1530.0	[m]	DC	STATHY
1550.0	[m]	DC	STATHY
1570.0	[m]	DC	STATHY
1590.0	[m]	DC	STATHY
1610.0	[m]	DC	STATHY
1630.0	[m]	DC	STATHY
1650.0	[m]	DC	STATHY
1670.0	[m]	DC	STATHY
1690.0	[m]	DC	STATHY
1710.0	[m]	DC	STATHY
1730.0	[m]	DC	STATHY
1750.0	[m]	DC	STATHY
1770.0	[m]	DC	STATHY
1790.0	[m]	DC	STATHY
1810.0	[m]	DC	STATHY
1820.0	[m]	DC	STATHY
1830.0	[m]	DC	STATHY
1840.0	[m]	DC	STATHY
1850.0	[m]	DC	STATHY
1860.0	[m]	DC	STATHY
1870.0	[m]	DC	STATHY
1880.0	[m]	DC	STATHY
1890.0	[m]	DC	STATHY
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1910.0	[m]	DC	STATHY
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2000.0	[m]	DC	STATHY
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2040.0	[m]	DC	STATHY
2050.0	[m]	DC	STATHY
2060.0	[m]	DC	STATHY
2070.0	[m]	DC	STATHY
2080.0	[m]	DC	STATHY

2090.0	[m]	DC	STATHY
2100.0	[m]	DC	STATHY
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2154.0	[m]	DC	STATHY
2163.0	[m]	DC	STATHY
2169.0	[m]	DC	STATHY
2175.0	[m]	DC	STATHY
2181.0	[m]	DC	STATHY
2190.0	[m]	DC	STATHY
2199.0	[m]	DC	STATHY
2205.0	[m]	DC	STATHY
2211.0	[m]	DC	STATHY
2217.0	[m]	DC	STATHY
2226.0	[m]	DC	STATHY
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2238.0	[m]	DC	STATHY
2244.0	[m]	DC	STATHY
2253.0	[m]	DC	STATHY
2259.0	[m]	DC	STATHY
2265.0	[m]	DC	STATHY
2271.0	[m]	DC	STATHY
2277.0	[m]	DC	STATHY
2283.0	[m]	DC	STATHY
2292.0	[m]	DC	STATHY
2298.0	[m]	DC	STATHY
2304.0	[m]	DC	STATHY
2313.0	[m]	DC	STATHY
2319.0	[m]	DC	STATHY
2325.0	[m]	DC	STATHY
2331.0	[m]	DC	STATHY
2337.0	[m]	DC	STATHY
2343.0	[m]	DC	STATHY
2349.0	[m]	DC	STATHY
2358.0	[m]	DC	STATHY
2364.0	[m]	DC	STATHY
2370.0	[m]	DC	STATHY

2376.0	[m]	DC	STATHY
2382.0	[m]	DC	STATHY
2388.0	[m]	DC	STATHY
2400.0	[m]	DC	STATHY
2406.0	[m]	DC	STATHY
2412.0	[m]	DC	STATHY
2418.0	[m]	DC	STATHY
2424.0	[m]	DC	STATHY
2430.0	[m]	DC	STATHY
2454.0	[m]	DC	STATHY
2472.0	[m]	DC	STATHY
2475.6	[m]	CC	STATHY
2479.7	[m]	CC	STATHY
2481.7	[m]	CC	STATHY
2485.0	[m]	CC	STATHY
2487.8	[m]	CC	STATHY
2489.3	[m]	CC	STATHY
2493.6	[m]	CC	STATHY
2497.7	[m]	CC	STATHY
2500.4	[m]	CC	STATHY
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2544.0	[m]	DC	STATHY
2550.0	[m]	DC	STATHY
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2562.0	[m]	DC	STATHY
2568.0	[m]	DC	STATHY
2577.0	[m]	DC	STATHY
2586.0	[m]	DC	STATHY
2589.0	[m]	DC	STATHY
2598.0	[m]	DC	STATHY
2610.0	[m]	DC	STATHY
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2625.0	[m]	DC	STATHY
2631.0	[m]	DC	STATHY
2640.0	[m]	DC	STATHY
2649.0	[m]	DC	STATHY
2655.0	[m]	DC	STATHY
2661.0	[m]	DC	STATHY
2673.0	[m]	DC	STATHY
2685.0	[m]	DC	STATHY

2691.0	[m]	DC	STATHY
2697.0	[m]	DC	STATHY
2703.0	[m]	DC	STATHY
2709.0	[m]	DC	STATHY
2715.0	[m]	DC	STATHY
2721.0	[m]	DC	STATHY
2727.0	[m]	DC	STATHY
2733.0	[m]	DC	STATHY
2745.0	[m]	DC	STATHY
2751.0	[m]	DC	STATHY
2757.0	[m]	DC	STATHY
2763.0	[m]	DC	STATHY
2769.0	[m]	DC	STATHY
2775.0	[m]	DC	STATHY
2781.0	[m]	DC	STATHY
2787.0	[m]	DC	STATHY
2793.0	[m]	DC	STATHY
2799.0	[m]	DC	STATHY
2805.0	[m]	DC	STATHY
2811.0	[m]	DC	STATHY
2817.0	[m]	DC	STATHY
2823.0	[m]	DC	STATHY
2829.0	[m]	DC	STATHY
2835.0	[m]	DC	STATHY
2841.0	[m]	DC	STATHY
2847.0	[m]	DC	STATHY
2859.0	[m]	DC	STATHY
2865.0	[m]	DC	STATHY
2871.0	[m]	DC	STATHY
2883.0	[m]	DC	STATHY
2895.0	[m]	DC	STATHY
2907.0	[m]	DC	STATHY

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
436	NORDLAND GP
495	SOTBAKKEN GP
495	TORSK FM

790	NYGRUNNEN GP
790	KVEITE FM
860	ADVENTDALEN GP
860	KOLMULE FM
1638	KOLJE FM
1943	KNURR FM
2005	HEKKINGEN FM
2095	KAPP TOSCANA GP
2095	STØ FM
2111	NORDMELA FM
2122	TUBÅEN FM
2139	FRUHOLMEN FM
2266	SNADD FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
5786	pdf	0.32

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
5786_01_7123_4_1S_gch_transfer_1	txt	0.00
5786_02_7123_4_1S_gch_results_1	txt	0.15

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CMR+ PEX HRLA HNGS ECS	2097	2915
FMI MSIP	1370	2915
MDT	2105	2887
MWD - GVR6 ARCVRES6 TELESCOPE	2098	2920
MWD - POWERPULSE ARCVRES	681	2098
VSP WA-ZO	395	2915

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	485.0	36	681.0	0.00	LOT
SURF.COND.	13 3/8	1100.0	17 1/2	1106.0	1.45	LOT
INTERM.	9 5/8	2097.0	12 1/4	2098.0	1.97	LOT
OPEN HOLE		2920.0	8 1/2	2920.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
785	1.34	12.0		FormPro	
1135	1.30	17.0		FormPro	
1218	1.32	16.0		FormPro	
1259	1.32	17.0		FormPro	
1390	1.32	17.0		FormPro	
1463	1.32	19.0		FormPro	
1506	1.32	18.0		FormPro	
1581	1.32	19.0		FormPro	
1648	1.32	14.0		Form Pro	
1648	1.32	13.0		Form Pro	
1664	1.32	21.0		FormPro	
1782	1.32	21.0		FormPro	
1865	1.32	20.0		FormPro	
1987	1.32	20.0		FormPro	
2045	1.32	19.0		FormPro	
2097	1.32	21.0		FormPro	
2098	1.32	19.0		FormPro	
2098	1.32	19.0		FormPro	
2101	1.29	13.0		FloPro	
2196	1.28	15.0		FormPro	
2308	1.29	15.0		FormPro	
2363	1.28	17.0		FloPro	
2413	1.28	17.0		FormPro	
2435	1.28	18.0		FormPro	
2469	1.30	14.0		FormPro	
2559	1.29	13.0		Form Pro	

2710	1.30	15.0		FormPro	
2805	1.29	16.0		Form Pro	
2920	1.29	17.0		FormPro	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
2474.05	[m]
2479.00	[m]
2484.00	[m]
2492.25	[m]
2499.00	[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]
5786_Formation_pressure_(Formasjonstrykk)	pdf	0.29