



Generell informasjon

Brønnbane navn	7220/10-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	BARENTS SEA
Funn	7220/10-1 (Salina)
Brønn navn	7220/10-1
Seismisk lokalisering	Kryssing av XL 2162 og IL 1474 (WG0901-3D)
Utvinningstillatelse	533
Boreoperatør	Eni Norge AS
Boretillatelse	1413-L
Boreinnretning	SCARABEO 8
Boredager	65
Borestart	13.08.2012
Boreslutt	16.10.2012
Frigitt dato	16.10.2014
Publiseringsdato	13.01.2015
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	EARLY CRETACEOUS
1. nivå med hydrokarboner, formasjon.	KOLMULE FM
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	STØ FM
Avstand, boredekk - midlere havflate [m]	34.0
Vanndybde ved midlere havflate [m]	341.0
Totalt målt dybde (MD) [m RKB]	2405.0
Totalt vertikalt dybde (TVD) [m RKB]	2405.0
Maks inklinasjon [°]	0.9
Temperatur ved bunn av brønnbanen [°C]	79
Eldste penetrerte alder	LATE TRIASSIC



Eldste penetrerte formasjon	SNADD FM
Geodetisk datum	ED50
NS grader	72° 0' 57.34" N
ØV grader	20° 3' 25.01" E
NS UTM [m]	7998239.81
ØV UTM [m]	674093.10
UTM sone	33
NPDID for brønnbanen	7015

Brønnhistorie

General

Well 7220/10-1 was drilled on the Salina Prospect in the south-west end of the Loppa High in the Barents Sea area. The primary exploration target for the well was to prove petroleum in Early Cretaceous to Late Jurassic reservoir rocks (Knurr and Hekkingen formations). The secondary target was to prove petroleum in Middle to Early Jurassic reservoir rocks (Stø, Nordmela, Tubåen and Fruholmen formations).

Operations and results

Wildcat well 7220/10-1 was spudded with the semi-submersible installation Scarabeo 8 on 13 August 2012 and drilled to TD at 2405 m in Late Triassic Snadd Formation. A 9 7/8" pilot hole was drilled from the seabed to 830 m to check for shallow gas. There was no indication of shallow gas. The well was drilled with seawater and hi-vis pills down to 688 m and with EMS-3100 water based mud (seawater) from 688 m to TD.

The well proved the presence of a 134 m reservoir consisting of sandstones and siltstones of Aptian age within the Kolmule Formation. Top of this sandstone was at 1291 m and the upper 36 m was gas bearing and had 20% average porosity and a net/gross of 96%. Extrapolation of MDT pressure gradients placed the gas-water contact at 1327 m. The reservoir quality decreases towards the base of the reservoir. Top Stø Formation was penetrated at 1513.5 m. It consisted of 132 m sandstone with very good reservoir quality. The upper 53 m was gas bearing and had average porosity of 20% and a net/gross of 90%. A clean gas-water contact was found at 1567 m. The gas in both reservoirs had isotopic profiles typical of thermogenic gases. The gas in the Stø Formation had more C2+ components than the gas in the Kolmule Formation.

Sandstone reservoirs were also found in Nordmela, Tubåen, Fruholmen and Snadd Formations with average porosity ranging from 17 to 21%. All reservoir levels below the Stø Formation were water bearing. No oil shows were described in the well.

Two cores were cut from 1299.5 m to 1355 m in the Kolmule reservoir and two were cut from 1518 m to 1587.5 m in the Stø reservoir. MDT gas samples were taken at 1309.99 m in the Kolmule Formation and at 1520.51 and 1560.49 m in the Stø Formation.

The well was permanently abandoned on 16 October 2012 as a gas discovery.

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
690.00	2405.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	1298.5	1323.9	[m]
2	1326.0	1353.7	[m]
3	1518.0	1547.5	[m]
4	1547.5	1576.2	[m]

Total kjerneprøve lengde [m]	111.3
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
382	NORDLAND GP
474	SOTBAKKEN GP
474	TORSK FM
1272	ADVENTDALEN GP
1272	KOLMULE FM
1456	KOLJE FM
1484	HEKKINGEN FM
1499	FUGLEN FM
1513	KAPP TOSCANA GP
1513	STØ FM
1645	NORDMELA FM
1832	TUBÅEN FM
1931	FRUHOLMEN FM
2303	SNADD FM

Logger



Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
FMI MSIP GR	1177	1451
FMI MSIP GR	1450	2405
GR NBGR RES ECD SON DIR D N	1245	2405
HRLA TLD APS ECS HNGS GR	1151	1451
HRLA TLD APS HNGS CMR GR	1450	2405
MDT	1516	2363
MWD - GR RES ECD DIR	362	668
MWD - GR RES ECD SON DIR	668	1450
PS HY PO IFA MS PC GR	1310	1333
USIT DCBL GR	0	0
VSP	736	2340
XPT CMR GR	1250	1450

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	36	442.0	42	450.0	0.00	
SURF.COND.	20	682.0	24	688.0	1.45	LOT
PILOT HOLE		830.0	9 7/8	830.0	0.00	
INTERM.	13 3/8	1177.0	16	1186.0	1.34	LOT
LINER	9 5/8	1450.0	12 1/4	1450.0	1.40	LOT
OPEN HOLE		2405.0	8 1/2	2405.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
382	0.00	1.0		waterbased	
1186	0.00	1.1		waterbased	
1344	0.00	1.2		waterbased	
1548	0.00	1.2		waterbased	
2105	0.00	1.2		MI-SWACO EMS-3100	
2405	0.00	1.2		MI-SWACO EMS-3100	



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]
7015 Formation pressure (Formasjonstrykk)	PDF	0.21

