



Generell informasjon

Brønnbane navn	16/4-13 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	SOLVEIG
Funn	16/4-13 S
Brønn navn	16/4-13
Seismisk lokalisering	LN12M02R16. inline 3458. crossline 2169
Utvinningstillatelse	359
Boreoperatør	Lundin Norway AS
Boretillatelse	1843-L
Boreinnretning	WEST BOLLSTA
Boredager	58
Borestart	12.02.2021
Boreslutt	10.04.2021
Plugget og forlatt dato	10.04.2021
Frigitt dato	10.04.2023
Publiseringsdato	10.04.2023
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	INDETERMINATE
1. nivå med hydrokarboner, formasjon.	BASEMENT
Avstand, boredekk - midlere havflate [m]	33.0
Vanndybde ved midlere havflate [m]	102.5
Totalt målt dybde (MD) [m RKB]	2422.0
Totalt vertikalt dybde (TVD) [m RKB]	2324.3
Maks inklinasjon [°]	29.8
Temperatur ved bunn av brønnbanen [°C]	92
Eldste penetrerte alder	PRE-DEVONIAN
Eldste penetrerte formasjon	BASEMENT



Geodetisk datum	ED50
NS grader	58° 43' 40.23" N
ØV grader	2° 9' 9.03" E
NS UTM [m]	6510207.40
ØV UTM [m]	450924.36
UTM sone	31
NPDID for brønnbanen	9209

Brønnhistorie

General

Well 16/4-13 S was drilled to test the D-segment prospect in a sub-basin northwest of the Solveig Field and south of the Edvard Grieg Field in the North Sea. The primary objective was to prove petroleum in reservoir rocks of Triassic to Paleozoic Age.

Operations and results

Wildcat well 16/4-13 S was spudded with the semi-submersible installation West Bollsta on 12 February 2021. The well was drilled to 1985 m where pack-off occurred and losses were experienced. The losses could not be cured. The decision was made to plug back and make a side-track. Technical side-track 16/4-13 ST2 was kicked off at 1365 m and drilled to TD at 2422 m (2324.3 m TVD) in Paleozoic basement conglomerates. The well was drilled with seawater and hi-vis pills down to 426 m, with Hydraglyde Optima water-based mud from 426 m to 1365 m, with Glydril Plus water-based mud from 1365 m to 2010 m and with Hydraglyde Optima water-based mud from 2010 m to TD.

Paleozoic basement sandstone and conglomerates were encountered with top at 2020 m (1973.4 m TVD), directly underlying Late Cretaceous Tor Formation chalk. No Jurassic or Triassic sediments were present. The Basement was oil bearing down to an oil-water contact at ca 2031 m (1983 m TVD). About seven metres of the reservoir had poor to moderate reservoir quality. Shows on cuttings (no stain, no odour, direct and cut fluorescence) continued down to 2098 m and weaker shows (weak direct fluorescence only) down to 2175 m). No shows were described above top reservoir.

Three cores were cut in succession from 2022.8 to 2048.3 m in the basement conglomerates. ORA fluid samples were taken at 2022.2 m (oil), 2027.04 m (oil), and 2034.5 m (water).

The well was permanently abandoned on 10 April 2021 as an oil discovery.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
430.00	1980.00

Borekaks tilgjengelig for prøvetaking?	YES
--	-----



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2022.8	2023.2	[m]
2	2025.2	2029.4	[m]
3	2029.6	2048.2	[m]

Total kjerneprøve lengde [m]	23.1
Kjerner tilgjengelig for prøvetaking?	YES

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
MDT		2027.00	0.00	OIL		YES
MDT		2022.20	0.00	OIL		YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
136	NORDLAND GP
136	UNDIFFERENTIATED
738	UTSIRA FM
915	UNDIFFERENTIATED
950	HORDALAND GP
950	UNDIFFERENTIATED
979	SKADE FM
1212	NO FORMAL NAME
1598	NO FORMAL NAME
1702	GRID FM
1759	NO FORMAL NAME
1891	ROGALAND GP
1891	BALDER FM
1911	SELE FM



1953	LISTA FM
1993	VÅLE FM
2004	SHETLAND GP
2004	EKOFISK FM
2014	TOR FM
2020	UNDEFINED GP

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
FMI MSIP	135	2422
IBC CBL	420	1982
MWD - GR PWD RES DIR SON	0	0
MWD - GR PWD RES GR DIR	1342	1983
MWD - GR PWD RES SON CAL DEN NEU	1342	1982
MWD - GR RES PWD DEN CAL RES	1987	2020
MWD - NEU DIR SON	1987	2419
MWD - PWD GR DIR	135	185
MWD - PWD RES GR DIR	203	406
MWD - PWD RES GR DIR SON	202	744
ORA	2022	2250
PEX HRLA HNGS	1890	2422
XPT NEXT CMR	2021	2400

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	202.0	36	202.0	0.00	
INTERM.	20	418.0	26	426.0	1.53	FIT
INTERM.	13 3/8	1343.0	17 1/2	1348.0	1.98	LOT
OPEN HOLE		1985.0	12 1/4	1985.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
201	1.39	19.0	33.0	Glydril	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 18.5.2024 - 16:41

220	1.47	30.0	19.0	Hydraglyde Optima	
223	1.39	16.5	13.5	HydraglydeOptima	
229	1.05	37.0	1.0	SWEEPS	
370	1.39	16.0	12.5	HydraglydeOptima	
426	1.39	13.0	9.5	Hydraglyde Optima	
426	1.50	20.0	28.0	Glydril	
655	1.50	21.0	27.0	Glydril	
736	1.39	17.0	13.5	Hydraglyde Optima	
750	1.05	38.0	1.0	SWEEPS	
750	1.50	21.0	27.0	Glydril	
750	1.05	38.0	1.0	SWEEPS	
1348	1.39	18.0	14.0	Hydraglyde Optima	
1383	1.45	19.0	12.5	Glydril Plus	
1822	1.20	16.0	10.5	Hydraglyde Optima	
1950	1.47	27.0	20.5	Hydraglyde Optima	
1985	1.45	21.0	14.5	Glydril	
2022	1.20	18.0	11.0	Hydraglyde Optima	
2422	1.20	17.0	12.5	Hydraglyde Optima	