



Generell informasjon

Brønnbane navn	16/1-9
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	IVAR AASEN
Funn	16/1-9 Ivar Aasen
Brønn navn	16/1-9
Seismisk lokalisering	ST06M02:inline 940 & crossline 1027
Utvinningstillatelse	001 B
Boreoperatør	Noil Energy ASA
Boretillatelse	1169-L
Boreinnretning	BREDFORD DOLPHIN
Boredager	64
Borestart	19.02.2008
Boreslutt	22.04.2008
Frigitt dato	22.04.2010
Publiseringsdato	22.04.2010
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	SLEIPNER FM
2. nivå med hydrokarboner, alder	LATE TRIASSIC
2. nivå med hydrokarboner, formasjon	SKAGERRAK FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	112.0
Totalt målt dybde (MD) [m RKB]	2544.0
Totalt vertikalt dybde (TVD) [m RKB]	2536.0
Maks inklinasjon [°]	10
Temperatur ved bunn av brønnbanen [°C]	91



Eldste penetrerte alder	LATE TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50
NS grader	58° 54' 48.04" N
ØV grader	2° 12' 7.25" E
NS UTM [m]	6530827.42
ØV UTM [m]	454037.12
UTM sone	31
NPDID for brønnbanen	5773

Brønnhistorie



General

The 16/1-9 Draupne prospect is located on the eastern margin of the South Viking Graben in the North Sea. The structure is situated in the eastern part of the Gudrun Terrace and the western flank of the Utsira High. The primary target was a faulted anticline trap within Hugin/Sleipner reservoir sandstones of Middle Jurassic Bajocian - Callovian age. A secondary target was mapped on a four way dip closure within the Paleocene top Heimdal level, the Gugne prospect. Well 16/1-9 was planned as a vertical well with TD ca 50 m into the Hugin/Sleipner Formation if water bearing, or ca 50 m into the Triassic Skagerrak Formation in case of a discovery.

Operations and results

Wildcat well 16/1-9 was spudded with the semi-submersible installation Bredford Dolphin on 19 February 2008 and drilled to TD at 2544 m in the Late Triassic Skagerrak Formation. A pilot hole was drilled prior to the 36" section. No signs of shallow gas were observed or seen on MWD logs. Significant downtime resulted from a shallow water flow beside the well (5.2 days), wait on weather (4.3 days), BOP acoustic failure (3.5 days), poor hole conditions (2.9 days) and stuck wire line (2.2 days). The well was drilled with Seawater and sweeps down to 600 m, with KCl/GEM mud from 600 m to 1281 m, and with Performadril mud from 1281 m to TD.

The secondary target Heimdal Formation was entered at 2126.0 m (2123.2 m TVD), approximately 100 meters deeper than the prognosed depth, and it was dry. The Sleipner Formation sandstone was encountered at 2399.0 m (2393.2 m TVD), 167 TVD meters deeper than prognosed. The Skagerrak Formation was encountered at 2411 m (2405 m TVD), 23 TVD meters shallower than prognosed. The wire line logs proved a thin gas cap from 2399 m (2368 m TVD MSL) to about 2407.5 m (2376.5 m TVD MSL), oil down to 2442.5 m (2411 m TVD MSL) and oil shows on cuttings down to 2448 m. There was no indication of an oil-water contact from the logs. The reservoir quality is variable with good reservoir sands disrupted by shale layers and cemented zones (carbonate nodules/clasts).

Apart from shows in the Sleipner and Skagerrak formations reservoir zone oil shows were observed also in thin Hordaland Group sandstones from 1510 to 1540 meters.

One core was cut at 2417.5 to 2426.9 m in the Skagerrak Formation with 100% recovery. The MDT tool was run on wire line. One gas and one oil sample were taken at 2405.0 and 2419.5 m respectively. During the MDT run the wire line cable got stuck and further wire line operations were terminated.

The well was permanently abandoned on 22 April 2008 as an oil discovery

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
610.00	2544.00

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



Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2417.5	2426.8	[m]

Total kjerneprøve lengde [m]	9.3
Kjerner tilgjengelig for prøvetaking?	YES

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
2409.0	[m]	DC	APT
2412.0	[m]	DC	APT
2415.0	[m]	DC	APT
2418.0	[m]	DC	APT
2421.0	[m]	DC	APT

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
136	NORDLAND GP
757	UTSIRA FM
818	NO FORMAL NAME
939	HORDALAND GP
939	SKADE FM
1104	NO FORMAL NAME
1123	SKADE FM
1190	NO FORMAL NAME
1297	NO FORMAL NAME
1331	NO FORMAL NAME
1598	GRID FM
1632	NO FORMAL NAME
1693	GRID FM
1793	NO FORMAL NAME
1979	ROGALAND GP
1979	BALDER FM
2041	SELE FM
2090	LISTA FM



2126	HEIMDAL FM
2143	LISTA FM
2176	VÅLE FM
2179	SHETLAND GP
2179	EKOFISK FM
2221	CROMER KNOLL GP
2221	ÅSGARD FM
2267	VIKING GP
2267	HEATHER FM
2399	VESTLAND GP
2399	SLEIPNER FM
2456	NO GROUP DEFINED
2456	SKAGERRAK FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
5773	pdf	0.46

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
5773_1	pdf	1.19
5773_2	pdf	3.79

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MDT	2399	2445
MWD - GR EWR	136	600
MWD - GR EWR	600	1281
MWD - GR EWR PWD ALD CTN BAT	1281	2544
PEX HRLA MSIP	318	2532
VSI	458	2530





Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm ³]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
200	1.03			Spudmud	
235	1.04			Spudmud	
487	1.03			Spudmud	
567	1.03			Spudmud	
600	1.12	10.0		KCL/Glycol/Polymer	
600	1.04			Spudmud	
624	1.12	12.0		KCl/GEM/Polymer	
813	1.14	18.0		KCl/GEM/Polymer	
1130	1.35	30.0		PERFORMADRIL	
1223	1.15	21.0		KCl/GEM/Polymer	
1231	1.36	34.0		PERFORMADRIL	
1250	1.35	34.0		PERFORMADRIL	
1281	1.20	22.0		KCl/GEM/Polymer	
1281	1.24	24.0		KCl/GEM/Polymer	
1284	1.21	24.0		KCl/GEM/Polymer	
1339	1.22	24.0		PERFORMADRIL	
1476	1.22	24.0		PERFORMADRIL	
1597	1.22	25.0		PERFORMADRIL	
1713	1.23	24.0		PERFORMADRIL	
1835	1.27	30.0		PERFORMADRIL	
1897	1.35	32.0		PERFORMADRIL	
1971	1.35	32.0		PERFORMADRIL	
2039	1.35	33.0		PERFORMADRIL	
2130	1.35	32.0		PERFORMADRIL	
2206	1.35	35.0		PERFORMADRIL	
2234	1.35	33.0		PERFORMADRIL	
2249	1.35	33.0		PERFORMADRIL	
2275	1.35	35.0		PERFORMADRIL	
2300	1.35	35.0		PERFORMADRIL	
2341	1.35	34.0		PERFORMADRIL	
2402	1.35	37.0		PERFORMADRIL	
2417	1.35	34.0		PERFORMADRIL	
2418	1.35	36.0		PERFORMADRIL	
2485	1.35	40.0		PERFORMADRIL	
2544	1.35	35.0		PERFORMATROL	



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 brønnspar. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
5773 Formation pressure (Formasjonstrykk)	pdf	0.23

