



Generell informasjon

Brønnbane navn	2/1-3
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	GYDA
Funn	2/1-3 Gyda
Brønn navn	2/1-3
Seismisk lokalisering	2-109 SP.782
Utvinningstillatelse	019 B
Boreoperatør	BP Norway Limited U.A.
Boretillatelse	229-L
Boreinnretning	SEDCO H
Boredager	148
Borestart	03.11.1979
Boreslutt	29.03.1980
Frigitt dato	29.03.1982
Publiseringsdato	12.03.2011
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	ULA FM
Avstand, boredekk - midlere havflate [m]	30.0
Vanndybde ved midlere havflate [m]	66.0
Totalt målt dybde (MD) [m RKB]	4297.0
Totalt vertikalt dybde (TVD) [m RKB]	4296.0
Maks inklinasjon [°]	3
Temperatur ved bunn av brønnbanen [°C]	162
Eldste penetrerte alder	LATE PERMIAN
Eldste penetrerte formasjon	ZECHSTEIN GP
Geodetisk datum	ED50
NS grader	56° 54' 41.39" N



ØV grader	3° 6' 30.39" E
NS UTM [m]	6307680.64
ØV UTM [m]	506603.55
UTM sone	31
NPDID for brønnbanen	251

Brønnhistorie



General

Well 2/1-3 was drilled on the Cod Terrace on the margin between the southern Vestland Arch and the Central Trough in the North Sea. The primary objective of the well was to test Late Jurassic sandstone within a fault sealed dip closure, against the downthrown side of a westerly heading fault complex at the base of the Cretaceous. Triassic sandstone was a secondary objective.

Operations and results

Wildcat well 2/1-3 was spudded with the semi-submersible installation SEDCO H on 3 November 1979 and drilled to TD at 4297 in the Late Permian Zechstein Group. The well was drilled with Seawater down to 625 m and with Lignosulphonate mud from 625 m to TD.

Top of the Tyne Group, Mandal Formation, was encountered at 3791 m, with the Late Jurassic sandstone at 3819.5 m. The Late Jurassic sandstone reservoir was oil-bearing all through. The reservoir is a 59.5 m thick homogeneous fine to medium grained sandstone with a porosity from 15% to 22%. The sandstone grades into a well cemented argillaceous siltstone below. No oil/water contact was established. Oil shows were recorded in Tor Formation limestone at 3000 - 3005 m, throughout the Late Jurassic reservoir sandstone, and in Middle Jurassic Bryne Formation sandstone at 4020 to 4040 m.

Four cores were cut from 3823.0 to 3893.5 m in the Ula Formation reservoir sandstones.

The well was permanently abandoned on 29 March 1980 as an oil discovery.

Testing

Three drill stem tests were performed in the Late Jurassic sandstones.

DST 1A perforated the interval 3863 to 3872.1 m and produced 226 Sm³ oil and 18689 Sm³ gas per day through a 40/64" choke. The GOR was reported to be 150 Sm³/Sm³ and the oil gravity was 41 deg API. The maximum bottom hole temperature recorded in the test was 151.1 deg C.

DST 2 perforated the interval 3838.5 to 3844.6 m and produced 1051 Sm³ oil and 54991 Sm³ gas per day through a 32/64" choke. The GOR was reported to be 116 Sm³/Sm³ and the oil gravity was 39 deg API. The maximum bottom hole temperature recorded in the test was 150.0 deg C.

DST 3 perforated the interval 3819.0 to 3825.1 m and produced 933 Sm³ oil and 39077 Sm³ gas per day through a 32/64" choke. The GOR was reported to be 108 Sm³/Sm³ and the oil gravity was 38 deg API. The maximum bottom hole temperature recorded in the test was 150.8 deg C.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
180.00	4296.00



Borekaks tilgjengelig for prøvetaking?	NO
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Borekjerne i Sakkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3823.0	3832.2	[m]
2	3838.0	3855.7	[m]
3	3856.4	3862.2	[m]
4	3875.0	3893.5	[m]

Total kjerneprøve lengde [m]	51.1
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



3823-3827m



3827-3832m



3832-3832m



3838-3842m



3842-3847m



3847-3851m



3851-3855m



3856-3860m



3860-3862m



3875-3878m



3879-3884m



3884-3888m



3888-3893m



3893-3893m

Palynologiske preparater i Sakkeldirektoratet



Prøve dybde	Dybde enhet	Prøve type	Laboratorie
3792.0	[m]	DC	PETROSTR
3801.0	[m]	DC	PETROS
3804.0	[m]	DC	PETROS
3810.0	[m]	DC	PETROS
3816.0	[m]	DC	PETROS
3822.0	[m]	DC	PETROS
3823.0	[m]	C	PETROS
3825.8	[m]	C	PETROS
3844.8	[m]	C	PETROS
3848.1	[m]	C	PETROS
3853.1	[m]	C	PETROS
3858.5	[m]	C	PETROS
3862.0	[m]	C	PETROS
3876.0	[m]	C	PETROS
3877.0	[m]	C	PETROS
3877.8	[m]	C	PETROS
3877.8	[m]	C	PETROS
3881.3	[m]	C	PETROS
3883.1	[m]	C	PETROS
3885.8	[m]	C	PETROS
3887.7	[m]	C	PETROS
3889.4	[m]	C	PETROS
3891.2	[m]	C	PETROS
3893.5	[m]	C	PETROS
3897.0	[m]	DC	PETROS
3903.0	[m]	DC	PETROS
3909.0	[m]	DC	PETROS
3915.0	[m]	DC	PETROS
3921.0	[m]	DC	PETROS
3927.0	[m]	DC	PETROS
3933.0	[m]	DC	PETROS
3939.0	[m]	DC	PETROS
3945.0	[m]	DC	PETROS
3951.0	[m]	DC	PETROS
3957.0	[m]	DC	PETROS
3963.0	[m]	DC	PETROS
3969.0	[m]	DC	PETROS
3975.0	[m]	DC	PETROS
3981.0	[m]	DC	PETROS



3987.0	[m]	DC	PETROS
3993.0	[m]	DC	PETROS

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
96	NORDLAND GP
1523	HORDALAND GP
2798	ROGALAND GP
2798	BALDER FM
2838	SELE FM
2845	FORTIES FM
2910	LISTA FM
2987	SHETLAND GP
2987	EKOFISK FM
3000	TOR FM
3424	HOD FM
3520	BLODØKS FM
3524	HIDRA FM
3534	CROMER KNOLL GP
3534	RØDBY FM
3579	TUXEN FM
3625	ÅSGARD FM
3791	TYNE GP
3791	MANDAL FM
3820	VESTLAND GP
3820	ULA FM
3991	BRYNE FM
4101	SKAGERRAK FM
4163	SMITH BANK FM
4219	ZECHSTEIN GP

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
251	pdf	0.71





Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
251_1	pdf	0.17
251_2	pdf	1.43
251_3	pdf	2.85
251_4	pdf	7.44

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
251_01_WDSS_General_Information	pdf	0.13
251_02_WDSS_completion_log	pdf	0.28

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
251_2_1_3_Completion_log	pdf	2.51
251_2_1_3_Completion_report	pdf	7.23

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	3863	3872	15.9
2.0	3839	3845	12.7
3.0	3819	3825	12.7

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningsstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
2.0				
3.0				





Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	226	19000	0.820		150
2.0	1051	55000	0.830		116
3.0	933	39000	0.835		108

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CALI	625	1825
CBL VDL GR	3395	3927
CDL CNL GR	3538	4270
CDM	3587	4221
CDM AP	3587	4221
DLL MLL	3587	3940
FMT	0	0
GR CAL	550	0
IEL BHC GR AC	30	4273
TEMP	95	2250
VELOCITY	30	4273

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	139.0	36	143.0	0.00	LOT
SURF.COND.	18 5/8	595.0	24	608.0	1.81	LOT
INTERM.	13 3/8	1899.0	17 1/2	1910.0	1.92	LOT
INTERM.	9 5/8	3558.0	12 1/4	3566.0	2.00	LOT
LINER	7	3935.0	8 1/2	4267.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
930	1.15			waterbased	
1422	1.30			waterbased	
2227	1.57			waterbased	



2813	1.60			waterbased	
3409	1.63			waterbased	
4297	1.68			waterbased	

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]
251 Formation pressure (Formasjonstrykk)	PDF	0.22

