



Generell informasjon

Brønnbane navn	15/8-1
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	UTGARD
Funn	15/8-1 Utgard
Brønn navn	15/8-1
Seismisk lokalisering	LINE NO. 609 159 SP:534
Utvinningstillatelse	046
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	298-L
Boreinnretning	GLOMAR BISCAY II
Boredager	174
Borestart	18.07.1981
Boreslutt	07.01.1982
Frigitt dato	07.01.1984
Publiseringsdato	19.10.2006
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	HUGIN FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	112.0
Totalt målt dybde (MD) [m RKB]	4300.0
Totalt vertikalt dybde (TVD) [m RKB]	4299.0
Maks inklinasjon [°]	2.5
Temperatur ved bunn av brønnbanen [°C]	141
Eldste penetrerte alder	MIDDLE JURASSIC
Eldste penetrerte formasjon	RATTRAY FM
Geodetisk datum	ED50
NS grader	58° 21' 48.1" N



ØV grader	1° 34' 22.31" E
NS UTM [m]	6470198.70
ØV UTM [m]	416499.09
UTM sone	31
NPDID for brønnbanen	321

Brønnhistorie

General

Wildcat well 15/8-1 was drilled west of the Sleipner field, ca 2 km from the UK border. The well was designed to test possible hydrocarbon accumulation in the sandstones of middle Jurassic age.

Operations and results

Wildcat well 15/8-1 was spudded with the semi-submersible installation Glomar Biscay II on 18 July 1981 and drilled to TD at 4300 m in the Middle Jurassic Fladen Group. Drilling operations were performed without significant problems in the 36", 26" and 17 1/2" holes. Pipe stuck in the 12 1/4" hole at 2254 m and several times in the 8 1/2" hole. Miscellaneous technical problems occurred while drilling the 6" hole and a gas kick was at 4265 m while tripping. The well was drilled with seawater and gel down to 500 m and with gypsum mud from 500 m to 2890 m. Lignosulphonate was added from 1570 m, and from 2890 m to TD the gypsum mud was gradually depleted and replaced with a gel/lignosulphonate mud.

The well 15/8-1 proved gas and condensate in sandstone of Middle Jurassic age. The gas/water contact was indicated at 3698 m from the Formation Multi Tester. Oil shows were recorded from 3065 m to 3075 m in the Hod Formation. Five conventional cores were cut in the interval 3658 m to 3705.5 m in the Hugin Formation. Three samples were attempted taken during FMT runs. Due to technical malfunctions only 1 sample (from 3668 m) was obtained.

The well was permanently abandoned on 7 January 1982 as a gas/condensate discovery.

Testing

One drill stem test was performed in the Sleipner formation and three in the Hugin Formation. The procedure of the tests was similar; after initial flow and build up the well was flowed for approximately 660 min. producing gas/condensate. Test no. 4 was only flowed for 480 minutes. CO₂ was produced in all tests, in concentrations ranging from 4% to 15%, and up to 8 ppm H₂S was recorded in DST2. Two sets of PVT samples were taken at the separator during all 4 tests.

DST1 from 4079 m to 4094 m in the Sleipner Formation produced 427000 Sm³ gas and 316 Sm³ condensate/day on a 19.1 mm choke. The gas/condensate ratio (CGR) was 1351 m³/m³. DST2 from 3911 m to 3926 m produced 486000 Sm³ gas and 399 Sm³ condensate/day on a 16.7 mm choke, the CGR was 1218 m³/m³. DST3 from 3688 m to 3697 m produced 657000 Sm³ gas and 408 Sm³ condensate/day on a 22.2 mm choke. The CGR was 1610 m³/m³. DST4 from 3643 m to 3653 m produced 550000 Sm³ gas and 290 Sm³ condensate/day on a 22.2 mm choke. The CGR was 1897 m³/m³.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
200.00	4298.00
Borekaks tilgjengelig for prøvetaking?	
YES	

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3658.0	3667.5	[m]
2	3667.5	3678.6	[m]
3	3678.8	3680.6	[m]
4	3681.9	3699.0	[m]
5	3699.0	3706.2	[m]

Total kjerneprøve lengde [m]	46.7
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



3658-3661m



3661-3664m



3664-3667m



3667-3668m



3667-3670m



3670-3673m



3673-3676m



3676-3678m



3678-3680m



3681-3684m





3684-3687m 3687-3690m 3690-3693m 3693-3696m 3696-3699m



3699-3702m



3702-3705m



3705-3706m

Palynologiske preparater i Søkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
3500.0	[m]	DC	
3530.0	[m]	DC	
3539.0	[m]	DC	
3560.0	[m]	DC	
3566.0	[m]	DC	
3575.0	[m]	DC	
3590.0	[m]	DC	
3596.0	[m]	C	
3605.0	[m]	C	
3620.0	[m]	DC	
3629.0	[m]	C	
3629.0	[m]	DC	OD
3638.0	[m]	DC	
3641.0	[m]	DC	
3641.0	[m]	DC	OD
3650.0	[m]	DC	OD
3650.0	[m]	DC	
3658.2	[m]	C	OD
3663.6	[m]	C	
3671.0	[m]	C	OD
3676.0	[m]	C	
3676.3	[m]	C	OD
3677.0	[m]	DC	
3680.0	[m]	DC	
3680.5	[m]	DC	OD
3682.2	[m]	DC	OD
3683.4	[m]	DC	



Faktasider

Brønnbane / Leting

Utskriftstidspunkt: 15.5.2024 - 01:20

3685.5 [m]	DC	OD
3686.0 [m]	C	
3688.1 [m]	C	OD
3688.8 [m]	C	
3690.2 [m]	C	OD
3698.5 [m]	C	OD
3700.4 [m]	C	
3710.0 [m]	DC	
3713.0 [m]	DC	
3719.0 [m]	DC	OD
3740.0 [m]	DC	OD
3740.0 [m]	DC	
3761.0 [m]	DC	OD
3770.0 [m]	DC	
3773.0 [m]	DC	
3779.0 [m]	DC	OD
3800.0 [m]	DC	OD
3800.0 [m]	DC	
3809.0 [m]	DC	OD
3815.0 [m]	C	
3821.0 [m]	DC	OD
3821.0 [m]	DC	OD
3830.0 [m]	DC	
3833.0 [m]	DC	
3839.0 [m]	DC	OD
3860.0 [m]	DC	OD
3860.0 [m]	DC	
3881.0 [m]	DC	OD
3890.0 [m]	DC	
3899.0 [m]	DC	
3920.0 [m]	DC	
3920.0 [m]	DC	OD
3920.0 [m]	DC	RRI
3941.0 [m]	DC	
3941.0 [m]	DC	OD
3950.0 [m]	DC	
3955.0 [m]	DC	OD
3980.0 [m]	DC	
4010.0 [m]	DC	
4010.0 [m]	DC	RRI



4040.0	[m]	DC	
4070.0	[m]	DC	
4100.0	[m]	DC	
4130.0	[m]	DC	
4160.0	[m]	DC	
4190.0	[m]	DC	
4220.0	[m]	DC	
4250.0	[m]	DC	
4280.0	[m]	DC	
4298.0	[m]	DC	

Oljeprøver i Søkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	TEST2	3911.00	3926.00	WATER	17.12.1981 - 00:00	YES
DST	TEST3	3688.00	3697.00		24.12.1981 - 00:00	YES
DST	TEST4	3643.00	3653.00		29.12.1981 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
137	NORDLAND GP
879	UTSIRA FM
1088	NO FORMAL NAME
1359	HORDALAND GP
1926	GRID FM
2225	NO FORMAL NAME
2365	ROGALAND GP
2365	BALDER FM
2418	SELE FM
2463	LISTA FM
2510	HEIMDAL FM
2675	LISTA FM
2727	MAUREEN FM
2825	VÅLE FM



2830	SHETLAND GP
2830	EKOFISK FM
2841	TOR FM
2998	HOD FM
3237	BLODØKS FM
3335	SVARTE FM
3436	CROMER KNOLL GP
3436	RØDBY FM
3445	SOLA FM
3452	ÅSGARD FM
3535	VIKING GP
3535	DRAUPNE FM
3605	HEATHER FM
3643	VESTLAND GP
3643	HUGIN FM
3945	SLEIPNER FM
4162	FLADEN GP
4162	RATTRAY FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
321_1	pdf	0.97
321_2	pdf	4.59

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
321_01_WDSS_General_Information	pdf	0.18
321_02_WDSS_completion_log	pdf	0.32

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
321_01_15_8_1_Completion_Report	pdf	9.87
321_01_Comments_to_Gecos_report_Special_core_analysis	pdf	0.67





321 02 15 8 1 Completion log	pdf	1.71
321 02 15 8 1 Completion report Drilling	pdf	2.67
321 02 Convetional Core Analysis	pdf	0.29
321 03 Special Core Analysis	pdf	15.68
321 04 Well test report DST No 2	pdf	3.69
321 05 Well test report DST No 3	pdf	4.53
321 06 Well test report DST No 4	pdf	2.11
321 07 Well test report DST No 1	pdf	3.73
321 08 Formation testing service report Test no 1C	pdf	1.56
321 09 Formation testing service report Test no 2	pdf	1.50
321 10 Formation testing service report Test no 3	pdf	1.42
321 11 Formation testing service report Test no 4	pdf	0.81
321 12 High Accuracy Pressure Temperature Measurements Sleipner Norway	pdf	2.41
321 13 High Accuracy Pressure Temperature Measurements DST1 Sleipner Norway	pdf	6.52
321 14 High Accuracy Pressure Temperature Measurements DST2 Sleipner Norway	pdf	7.26
321 15 Pressure Survey Report Test no 1 run no 1	pdf	4.27
321 16 Pressure Survey Report Test no 1 run no 1 1981	pdf	1.54
321 17 Pressure Survey Report Test no 2 run no 1	pdf	2.64
321 18 Pressure Survey Report Test no 2 run no 1 1981	pdf	0.44
321 19 Pressure Survey Report Test no 3 run no 1	pdf	3.98
321 20 Pressure Survey Report Test no 4 run no 1	pdf	3.14
321 21 Pressure Survey Report Test no 3 run no 1 1981	pdf	2.84
321 22 Partial reservoir study	pdf	0.30
321 23 Reservoir Fluid Study DST 2 Sleipner field Norway	pdf	1.56
321 24 Reservoir Fluid Study DST 1C Sleipner field Norway RFL 830489	pdf	1.49
321 25 Reservoir Fluid study	pdf	1.45
321 26 Results of Production Tests Sleipner Area Norway	pdf	9.34
321 27 Well test report PL 046 FMT DST NO 1C 2 3 and 4	pdf	5.54





321 28 Biostratigraphy Report No 2724P A Robertson research international limited	pdf	1.69
321 29 Evaluation of Core Data	pdf	3.94
321 30 Corrected reservoir fluid compositions DST 1C and 2 PVT simulations	pdf	1.13

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	4079	4085	19.1
2.0	3911	3926	16.7
3.0	3688	3697	22.2
4.0	3543	3653	22.2

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
2.0				
3.0				
4.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0	316	427000	0.754	0.851	1351
2.0	399	486000	0.811	0.944	1218
3.0	408	657000	0.846	0.840	1610
4.0	290	550000	0.799	0.832	1897

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL	2700	3980
CBL VDL	3912	4265
CDL CNL	1125	2883
CDL CNL	2862	3982
CDL CNL	3212	3703





CDL CNL	3975	4301
COREGUN	2862	3982
COREGUN	3975	4302
DIPLOG	2862	3892
DIPLOG	3975	4302
DLL MLL	3585	3982
DLL MLL	3975	4301
IEL AC	160	513
IEL AC	490	1199
IEL AC	1125	2883
IEL AC	2840	3703
IEL AC	3585	3982
IEL AC	3965	4230
IEL AC	4150	4301
MFT	2862	3982
MFT2	3975	4302
TEMP	180	1152
TEMP	240	2844
VELOCITY	525	3980

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	187.0	36	187.0	0.00	LOT
SURF.COND.	20	500.0	26	515.0	1.71	LOT
INTERM.	13 3/8	1185.0	17 1/2	1200.0	1.93	LOT
INTERM.	9 5/8	2874.0	12 1/4	2890.0	1.75	LOT
LINER	7	3990.0	8 1/2	3991.0	2.13	LOT
LINER	4 1/2	4296.0	6	4300.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
207	1.03			seawater	
1161	1.12			seawater	
1387	1.10			seawater	
2400	1.19			waterbased	



2582	1.24			waterbased	
3658	1.38			waterbased	
3991	1.38			waterbased	
4147	1.36			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 brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
321 Formation pressure (Formasjonstrykk)	pdf	0.22

