



Generell informasjon





Brønnbane navn	34/3-2 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	34/3-2
Seismisk lokalisering	inline 5165 & crossline 3224
Utvinningstillatelse	373 S
Boreoperatør	BG Norge AS
Boretillatelse	1282-L
Boreinnretning	WEST ALPHA
Boredager	67
Borestart	25.10.2009
Boreslutt	30.12.2009
Frigitt dato	30.12.2011
Publiseringsdato	03.01.2012
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	18.0
Vanndybde ved midlere havflate [m]	409.0
Totalt målt dybde (MD) [m RKB]	4331.0
Totalt vertikalt dybde (TVD) [m RKB]	4315.0
Maks inklinasjon [°]	10.4
Temperatur ved bunn av brønnbanen [°C]	148
Eldste penetrerte alder	TRIASSIC
Eldste penetrerte formasjon	STATFJORD GP
Geodetisk datum	ED50
NS grader	61° 48' 45.06" N
ØV grader	2° 49' 16.33" E
NS UTM [m]	6853471.85
ØV UTM [m]	490577.12
UTM sone	31
NPDID for brønnbanen	6249



Brønnhistorie

General

The 34/3-2 S Jordbær Øst well was drilled on the northern fringes of the Tampen Spur and adjacent to BG's recent Jordbær oil discovery. The Jordbær Øst prospect is a down-faulted hanging wall to the Jordbær oil discovery. The primary targets for the Jordbær Øst well was the Lower Jurassic shallow marine Cook Formation and the secondary target was the fluvial dominated Statfjord Formation. The two reservoir targets are separated by Jurassic Claystone and siltstones of the Dunlin Group. The well location and path was planned to avoid shallow gas.

Operations and results

Wildcat well 34/3-2 S was spudded with the semi-submersible installation West Alpha on 25 October 2009 and drilled to TD in the Eriksson Member of the Statfjord Formation at 4331 m (4315.3 m TVD). The well started with a 9 7/8" pilot hole to 1028 m to check for shallow gas. No shallow gas was seen. The main well was drilled vertical down to the end of the 17 1/2" section, deviated to 10 degrees through the 12 1/4" section and back to vertical before the 8 1/2" section, to hit the Cook and Statfjord reservoir targets. The well was drilled with seawater and hi-vis sweeps down to 1030 m, with Glydril mud from 1030 m to 2403, with Versatec oil based mud from 2403 to 3882 m, and with Versatherm oil based mud from 3882 m to TD.

Sandstones belonging to the Cook Formation were encountered dry at 4011.7 m (3990.0 m TVD). The Cook Formation sandstones had an average porosity of 17.8% net when using a 10% cut off and an average permeability from logs of 9.17 mD. Some parts of the core contain sands with multi-Darcy permeability. The Nansen Member of the upper Statfjord Formation was penetrated at 4273 m (4256 m TVD). The Nansen Member consisted of relatively clean sandstones with minor thin limestone stringers, and it was dry. It had a net thickness of 28.3 m (at 10%) cut-off and an average porosity of 17% net, with an average permeability of 21.4 mD.

Gas readings while drilling were slightly elevated in the Cook Formation sandstones but no significant fluorescence was seen in the mud. A 27 m core was cut from 4053 to 4080 m. The core had fluorescence that was marginally above the OBM and post well analysis indicated the presence of oil in saturations of around 5 - 30% from Dean Stark measurements in some zones in the core. However, no moveable hydrocarbons were recovered during the extensive MDT programme. MDT water samples were taken at 4285.91 m, 4050.02 m, 4075.47 m, and at 4025 m (dual packer).

The well was permanently abandoned on 30 December 2009 as a dry well with non-moveable hydrocarbons.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1040.00	4329.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4053.0	4079.9	[m]

Total kjerneprøve lengde [m]	26.9
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
DST		0.00	0.00	WATER		YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
427	NORDLAND GP
1377	UTSIRA FM
1450	HORDALAND GP
1983	ROGALAND GP
1983	BALDER FM
2012	SELE FM
2032	LISTA FM
2121	SHETLAND GP
2121	JORSALFARE FM
2303	KYRRE FM
3417	TRYGGVASON FM
3679	CROMER KNOLL GP



3679	MIME FM
3688	VIKING GP
3688	HEATHER FM
3857	DUNLIN GP
3857	DRAKE FM
4012	COOK FM
4104	BURTON FM
4210	AMUNDSEN FM
4273	STATEJORD GP

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT APS LDS GR	3789	4342
CMR	3878	4336
ECS HNGS	3826	4335
LWD - GR RES NEU DEN ECS	3860	4331
LWD - GR RES SON	422	2403
LWD - GR RES SON NEU DEN	2380	3882
MDT	4010	4040
MDT	4045	4290
MSCT	3495	4300
OBMI DSI	3798	4344
VSI	479	4310

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	492.0	36	492.0	0.00	LOT
SURF.COND.	20	1024.0	26	1030.0	0.00	LOT
INTERM.	13 3/8	2396.0	17 1/2	2403.0	1.67	LOT
INTERM.	9 5/8	3876.0	12 1/4	3882.0	1.93	LOT
OPEN HOLE		4331.0	8 1/2	4331.0	0.00	LOT

Boreslam



Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Fløytetegnelse [Pa]	Type slam	Dato, måling
1030	1.37	24.0		KCl/Poly/Glycol	
1030	1.37	27.0		KCl/Poly/Glycol	
1377	1.37	26.0		KCl/Poly/Glycol	
2225	1.39	23.0		KCl/Poly/Glycol	
2303	1.37	25.0		KCl/Poly/Glycol	
2403	1.38	26.0		KCl/Poly/Glycol	
2764	1.57	48.0		Versamud	
3234	1.61	43.0		Versamud	
3859	1.66	45.0		Versamud	
3882	1.88	36.0		Versamud	
3882	1.91	35.0		Versamud	
3882	1.87	35.0		Versamud	
3882	1.70	44.0		Versamud	
3894	1.92	41.0		Versamud	
4053	1.92	41.0		Versamud	
4331	1.92	50.0		Versamud	