



Generell informasjon

Brønnbane navn	17/12-4
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	17/12-1 Vette
Brønn navn	17/12-4
Seismisk lokalisering	Bream 3D:inline 1504 & crossline 3822
Utvinningstillatelse	407
Boreoperatør	BG Norge AS
Boretillatelse	1252-L
Boreinnretning	WEST ALPHA
Boredager	24
Borestart	17.06.2009
Boreslutt	10.07.2009
Frigitt dato	10.07.2011
Publiseringsdato	10.07.2011
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	BRYNE FM
Avstand, boredekk - midlere havflate [m]	18.0
Vanndybde ved midlere havflate [m]	110.0
Totalt målt dybde (MD) [m RKB]	2470.0
Totalt vertikalt dybde (TVD) [m RKB]	2470.0
Maks inklinasjon [°]	0.75
Eldste penetrerte alder	TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50
NS grader	58° 10' 37.58" N
ØV grader	3° 55' 11.05" E
NS UTM [m]	6448944.03



ØV UTM [m]	554097.84
UTM sone	31
NPDID for brønnbanen	6137

Brønnhistorie

General

Well 17/12-4 was drilled on a crestal location on the 17/12-1 R Bream Discovery in the north-western part of the Egersund Basin in the North Sea. The Bream discovery well, 17/12-1R was drilled in 1972 by Phillips Petroleum. Two more wells (17/12-2 (Brisling oil discovery) and 17/12-3 (dry)) have previously been drilled by Phillips Petroleum on the 17/12 block during the 1970's and early 1980's. Oil was also found in the nearby 18/10-1 well. The primary objectives of all these wells were the Middle Jurassic fluvio-deltaic Bryne Formation sandstones.

The purpose of the 17/12-4 well was to investigate the hydrocarbon potential in reservoirs up dip of the discovery well, in order to make decisions regarding a future development of the Bream Discovery. Planned TD of the well was into the Bryne Formation, at approximately 2440 m TVD MSL.

Operations and results

Well 17/12-4 was spudded with the semi-submersible installation West Alpha on 17 June 2009 and drilled to TD at 2470 m in the Triassic Skagerrak Formation. Drilling proceeded without significant technical problems. The well was drilled with spud mud down to 1212 m and with Versatec DW oil based mud from 1212 m to TD.

The Vestland Group, Sandnes Formation came in at 2276.5 m, 5.5 m deep to prognosis, while top Bryne Formation was picked at the first coal at 2297.8 m, 10.8 m deep to prognosis. The Sandnes Formation contained some good quality sands with average porosity of approximately 23%, but was water-bearing with only few and weak shows. The Bryne Formation contained several sands of good quality, and was oil-bearing down to a common OWC at 2334.5 m (2316.5 m TVD MSL). Below the main OWC there were further oil bearing sands with possibly three OWC's, but these sands were too thin to provide conclusive pressure data. No shows or other hydrocarbon indications were recorded above or below the Vestland Group.

Pressure data was obtained through Sandnes water bearing sands, and Bryne hydrocarbon and water bearing sands. Two cores were cut, beginning from just above the Sandnes Formation and continuing through to below the Bryne OWC. MDT water and oil samples were taken from main water and hydrocarbon bearing sands in the Sandnes Formation at 2284.81m (water), and in the Bryne Formation at 2308.24 m (oil), 2312.99 m (oil), 2331.00 m (oil), 2331.02 m (oil), 2358.00 m (water), and at 2379.01 m (oil).

The 17/12-4 well bore was plugged back to 13 3/8 casing shoe for sidetracking on 10 July 2009. After sidetracking the well was permanently abandoned on 27 August 2009 as an oil appraisal well

Testing

No drill stem test was performed.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1220.00	2470.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2268.0	2295.6	[m]
2	2295.6	2349.3	[m]

Total kjerneprøve lengde [m]	81.3
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
128	NORDLAND GP
486	HORDALAND GP
744	ROGALAND GP
744	BALDER FM
773	VÅLE FM
780	SHETLAND GP
780	EKOFISK FM
799	TOR FM
984	HOD FM
1209	BLODØKS FM
1216	CROMER KNOLL GP
1216	RØDBY FM
1335	ÅSGARD FM
1992	BOKNEFJORD GP
1992	FLEKKEFJORD FM
2017	SAUDA FM
2149	TAU FM
2198	EGERSUND FM
2277	VESTLAND GP



2277	SANDNES FM
2298	BRYNE FM
2398	FJERRITSLEV FM
2439	NO GROUP DEFINED
2439	SKAGERRAK FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT TLD APS ECS HNGS	1202	2462
LWD - GR RES	201	1212
LWD - GR RES	1212	2470
MDT	2284	2396
MDT	2308	2380
OBMI DSI	1202	2460
VSI	279	2455
XPT CMR	2237	2463

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	200.0	36	200.0	0.00	LOT
SURF.COND.	13 3/8	1202.0	17 1/2	1222.0	0.00	LOT
OPEN HOLE		2470.0	8 1/2	2470.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
1190	1.25	26.0		Versatec DW OBM	
2470	1.29	27.0		Versatec DW OBM	
2470	1.27	25.0		Versatec DW OBM	
2470	1.26	26.0		Versatec DW OBM	
3253	1.40	34.0		Versamud	