



Generell informasjon





Brønnbane navn	30/2-4 S
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	30/2-4
Seismisk lokalisering	ST04M12 inline 1440 & crossline 1321
Utvinningstillatelse	051
Boreoperatør	StatoilHydro ASA
Boretillatelse	1170-L
Boreinnretning	WEST EPSILON
Boredager	101
Borestart	01.05.2008
Boreslutt	09.08.2008
Plugget og forlatt dato	22.05.2017
Frigitt dato	09.08.2010
Publiseringsdato	15.08.2010
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	49.0
Vanndybde ved midlere havflate [m]	125.0
Totalt målt dybde (MD) [m RKB]	4325.0
Totalt vertikalt dybde (TVD) [m RKB]	3748.0
Maks inklinasjon [°]	41.5
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	STATFJORD GP
Geodetisk datum	ED50
NS grader	60° 51' 21.37" N
ØV grader	2° 39' 0.53" E
NS UTM [m]	6746951.35
ØV UTM [m]	480991.39
UTM sone	31
NPDID for brønnbanen	5784



Brønnhistorie

General

Well 30/2-4 S was drilled from the Huldra Platform location in the Northern Viking Graben in the North Sea. The primary objective of the well was to prove commercial amounts of hydrocarbons in the Statfjord Formation and to acquire information of the reservoir properties. Secondary objectives were to determine the HC-water contact, the thickness of the Statfjord Formation and to explore for hydrocarbons in the Triassic Lunde Formation sandstones.

Operations and results

Well was spudded with the jack-up installation West Epsilon on 1 May 2008 and drilled to final TD at 4325 m (3748 m TVD) in Early Jurassic sediments of the Statfjord Formation. No shallow gas was observed by the ROV or on the MWD while drilling the 36" hole or the 24" hole. At 2329 m a 900 litres gain was recorded, indicating a kick was taking place and the drilling was suspended due to a well control situation. The drill string got stuck and was cut at 1300 m, and the hole was cemented back to 1099 m and sidetracked. The sidetrack (30/2-4 S T2) was kicked off at 1128 m just below the 20" casing shoe, and drilled to final TD. The well was drilled with spud mud down to 1101 m and with XP-07 oil based mud from 1107 m to TD.

The well penetrated rocks of Quaternary, Tertiary, Cretaceous, and Jurassic age. The Statfjord reservoir was encountered at 4309 m, 42.5 m MD shallower than prognosed. The reservoir quality was satisfactory. The reservoir fluid was water and 3 pressure points taken with the LWD Stethoscope tool gave a reservoir formation pressure of 2.00 sg, 0.05 sg higher than the maximum prognosed pore pressure. A gain of 387 litres was recorded and the mud weight was increased from 1.97 to 2.01 sg. Mud losses were experienced when increasing the mud weight. The drilling operations were terminated because of too low margin between the fracture gradient and the pore pressure. The secondary target, the Lunde Formation, was thus not reached. No oil shows were recorded in any section of the well.

No cores were cut. MWD/LWD logs were the only formation logging in the well. Three LWD pressure measurements in the Statfjord Formation confirmed a water gradient in the Formation. Wire line logging was done only to resolve technical problems, not for formation evaluation. No wire line fluid samples were taken.

The well was permanently abandoned on 9 August 2008 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
360.00	2310.00

Borekaks tilgjengelig for prøvetaking?	YES
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Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
174	NORDLAND GP
864	UTSIRA FM
969	HORDALAND GP
1150	SKADE FM
1393	NO FORMAL NAME
1595	GRID FM
1717	NO FORMAL NAME
2124	ROGALAND GP
2124	BALDER FM
2218	SELE FM
2257	LISTA FM
2447	SHETLAND GP
2447	JORSALFARE FM
2834	KYRRE FM
3954	TRYGGVASON FM
4140	CROMER KNOLL GP
4187	VIKING GP
4187	HEATHER FM
4196	BRENT GP
4196	NESS FM
4217	BURTON FM
4309	STATFJORD GP

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD - ARC VISION ADN PD	2217	4157
MWD - ARC VISION PD	1101	2329
MWD - ARC VISION PDM	272	1101
MWD - ARC VISION PDM	1128	2217
MWD - DIR INCL	174	272
MWD - TELE STET ECOS SONV ARCV	4157	4324

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	270.0	36	270.0	1.10	LOT
SURF.COND.	20	1095.0	26	1097.0	1.67	LOT
INTERM.	14	2210.0	17 1/2	2212.0	1.82	LOT
INTERM.	9 7/8	4155.0	12 1/4	4157.0	2.05	LOT
OPEN HOLE		4325.0	8 1/2	4325.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
272	1.05			spud mud	
1101	1.10			spud mud	
2329	1.53			XP-OBM	
4157	1.75			XP-OBM	
4325	2.01			XP-OBM	