Generell informasjon

Brønnbane navn	34/10-46 A
Type	EXPLORATION
Formål	WILDCAT
Status	RE-CLASS TO DEV
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	GULLFAKS
Funn	34/10-46 A
Brønn navn	34/10-46
Seismisk lokalisering	
Utvinningstillatelse	050
Boreoperatør	Statoil ASA (old)
Boretillatelse	1032-L
Boreinnretning	GULLFAKS A
Boredager	44
Borestart	01.02.2002
Boreslutt	16.03.2002
Plugget dato	16.03.2002
Frigitt dato	16.03.2004
Publiseringsdato	03.05.2004
Opprinnelig formål	WILDCAT
Reklassifisert til brønnbane	34/10-A-48 A
Gjenåpnet	NO
Innhold	OIL/GAS
Funnbrønnbane	YES
1. nivå med hydrokarboner, alder	LATE CRETACEOUS
1. nivå med hydrokarboner, formasjon.	NO FORMAL NAME
2. nivå med hydrokarboner, alder	MIDDLE JURASSIC
2. nivå med hydrokarboner, formasjon	TARBERT FM
Avstand, boredekk - midlere havflate [m]	82.2
Vanndybde ved midlere havflate [m]	134.0
Totalt målt dybde (MD) [m RKB]	6860.0
Totalt vertikalt dybde (TVD) [m RKB]	2106.0
Eldste penetrerte alder	MIDDLE JURASSIC

Eldste penetrerte formasjon	TARBERT FM
Geodetisk datum	ED50
NS grader	61° 10' 33.86'' N
ØV grader	2° 11' 23.22'' E
NS UTM [m]	6782830.47
ØV UTM [m]	456420.11
UTM sone	31
NPDID for brønnbanen	4500

Brønnhistorie

p>**General**

Well 34/10-46 A was drilled to a structure 5 km southwest of the Gullfaks field. Due to a water-filled Statfjord Formation in segment D1 in well 34/10-46 S, it was decided to drill a side track, 34/10-46 A to the Brent Group prospect D1. The objectives of the well were to prove oil in a Cretaceous/Brent Group prospect in D1 and to be a water injector in Tarbert Formation.

Operations

The wildcat well 34/10-46 A was spudded on 2 February 2002 from the permanent installation Gullfaks A and drilled to TD at 6860 m (2105,5 m TVD RKB) in the late Cretaceous Shetland Group. The well was drilled with OBM to TD.

Kick-off point was at 3930 m (1667 m TVD MSL). In well 34/10-46 S/46 A/46 B the Brent Group in segment E1 and the Statfjord Formation in segment D1 were reached by the 12 1/4" section. At 6344 m (1920 m TVD MSL, 5 m deeper than prognosed) a gas-filled, pressure-depleted sandstone was encountered. A loss situation arose when drilling out of the sandstone and casing was set close to the top sandstone. From 6401 m to TD the well encountered Shetland shale three times and the Tarbert Formation twice.

The well missed the geological target (40 m to the west of target) and drilled too close to the western edge of the structure. This has resulted in a large uncertainty concerning the age of the uppermost sandstone between 6344 m and 6401 m. The most likely interpretation of the section is Cretaceous age. The well proved a gas column of 20 m in this sandstone (Krans Member/Kyrre Formation) and an oil column of 2 m in the Brent Group. Neither the gas-oil contact nor the oil-water contact was identified due to shale lithology at the respective depths.

The MDT measurements in the Cretaceous sandstones penetrated in 46 A show a pore pressure corresponding to ~1,36 sg EMW, as indicated by pressure prognosis given prior to drilling.

No fluid samples were collected and no coring was performed in the well.

Running the liner in well 34/10-46 A failed due to restrictions in the hole, and the well was plugged back to the 9 5/8" shoe. Pulled out of hole with cement stringer on 16 March 2002 and the well was re-classed to development well 34/10-A-48 A.

Testing

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
3960.00	6862.00

Borekaks tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
216	NORDLAND GP
1728	HORDALAND GP
2230	ROGALAND GP
2230	BALDER FM
2530	LISTA FM
3251	SHETLAND GP
6344	NO FORMAL NAME
6475	BRENT GP
6475	TARBERT FM
6592	SHETLAND GP
6709	BRENT GP
6709	TARBERT FM

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
4500_34_10_46_A_COMPLETION_LOG	.TIF	47.78
4500_34_10_46_A_COMPLETION_REPORT	.PDF	0.58

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD LWD - GR	3930	6400
MWD LWD - GR RES DEN NEU	6400	6860
PEX MDT	6400	6860

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
INTERM.	9 5/8	6346.0	12 1/4	6400.0	0.00	LOT
OPEN HOLE		6860.0	8 1/2	6860.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
3935	1.64	55.0		VERSAVERT	
4440	1.64	57.0		VERSAVERT	
5089	1.64	56.0		VERSAVERT	
6304	1.64	59.0		VERSAVERT	
6354	1.50	32.0		VERSAVERT	
6400	1.50	42.0		VERSAVERT	
6716	1.50	40.0		VERSAVERT	
6860	1.50	32.0		VERSAVERT	

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]
4500_Formation_pressure_(Formasjonstrykk)	pdf	0.22