



Generell informasjon





Brønnbane navn	6510/2-1 R
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORWEGIAN SEA
Brønn navn	6510/2-1
Seismisk lokalisering	SH 9601-2-409 & CDP 1316
Utvinningstillatelse	214
Boreoperatør	A/S Norske Shell
Boretillatelse	901-L2
Boreinnretning	MÆRSK JUTLANDER
Boredager	47
Borestart	05.11.1997
Boreslutt	21.12.1997
Plugget og forlatt dato	12.12.1997
Frigitt dato	21.12.1999
Publiseringsdato	29.05.2002
Opprinnelig formål	WILDCAT
Gjenåpnet	YES
Årsak til gjenåpning	DRILLING
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	325.0
Totalt målt dybde (MD) [m RKB]	4707.0
Totalt vertikalt dybde (TVD) [m RKB]	4700.0
Maks inklinasjon [°]	4.7
Eldste penetrerte alder	EARLY TRIASSIC
Eldste penetrerte formasjon	GREY BEDS (INFORMAL)
Geodetisk datum	ED50
NS grader	65° 47' 15.6" N
ØV grader	10° 25' 51.33" E
NS UTM [m]	7297173.23
ØV UTM [m]	565483.13
UTM sone	32
NPDID for brønnbanen	3263



Brønnhistorie

General

The main objective of well 6510/2-1 was to test the hydrocarbon potential of tidal to shoreface Lower Jurassic deposits in the "Vega" prospect, a large structure fault bounded to the East and South-East by the Ylvingen fault complex. Secondary objectives were Upper Permian shallow marine sand units expected to be sealed by Upper Permian source shales and Mid-Triassic aeolian sands sealed by Triassic Evaporites.

Operations and results

The well 6510/2-1 was spudded on 16 August 1997 with the semi-submersible installation "Mærsk Jutlander" and reached a total depth of 4700 m in shales of Early Triassic age. It was drilled with seawater and bentonite with hi-vis pills from the surface to 1210 m and with BARASILC sodium silicate mud from 1210 m to 2926 m. From 2926 m to TD the Sodium silicate mud was gradually depleted to a glycol enhanced mud (GEM). At 3102 m the well was suspended and the rig taken to Kristiansund for repair due to riser tensioner difficulties. Further problems with the acoustic BOP control system caused a total 53 days delay before well 6510/2-1 R was re-entered.

Formation tops were penetrated within the prognosed range, except for the Top Permian, which was not encountered. The well found the Lower Jurassic to be developed in a more proximal facies than anticipated, possibly an intra tidal plain deposit. The sequence was predominantly shales, with interbedded coal layers and a few thin sandy intervals. Weak hydrocarbon shows were recorded intermittently in the Lower Jurassic sequence, but logs, core material and sidewall samples show the reservoir intervals to be water bearing.

Sand development in the Mid Triassic objective below the evaporites was also poor with no hydrocarbon indications. The Permian was not penetrated, and the Triassic sequence was found to be much thicker than expected. The well reached a total depth of 4707 m in shales of Early Triassic age. The well TD commitment was to drill to Early Permian or 5000 m, but as there was no seismic evidence for any reflector in the remaining section, it was decided not to drill further.

Two cores were cut at 1827 - 1837 m and 2126 - 2134 m in Early Jurassic, and one at 4083.5 - 4100.5 m in Middle Triassic. The main reason for the well being dry is considered to be the lack of charge. The well was plugged and abandoned as a dry well with weak shows on the 21 December 1997.

Testing

No drill stem test was performed.

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4082.5	4101.7	[m]

Total kjerneprøve lengde [m]	19.2
Kjerner tilgjengelig for prøvetaking?	YES



Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
348	NORDLAND GP
348	NAUST FM
441	MOLO FM
480	HORDALAND GP
480	BRYGGE FM
593	ROGALAND GP
593	TARE FM
655	TANG FM
727	SHETLAND GP
848	CROMER KNOLL GP
1013	NO FORMAL NAME
1160	UNDEFINED GP
1292	VIKING GP
1292	SPEKK FM
1319	MELKE FM
1543	FANGST GP
1543	GARN FM
1654	NOT FM
1688	ILE FM
1722	BÅT GP
1722	ROR FM
1823	TILJE FM
1945	ÅRE FM
2236	GREY BEDS (INFORMAL)

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
3263	pdf	0.92

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)





Dokument navn	Dokument format	Dokument størrelse [KB]
3263_6510_2_1_COMPLETION_REPORT_DRILLING	pdf	74.35

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CST GR	2957	4695
DLL MSFL LDL CNL GR	2919	4692
FMI DSI NGT	2919	4702
MWD LWD CDR	2919	4707
RFT RPQS	3893	4436
VSP GR	2835	4690

