



Generell informasjon

Brønnbane navn	9/4-4
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	9/4-4
Seismisk lokalisering	
Utvinningstillatelse	013
Boreoperatør	Saga Petroleum ASA
Boretillatelse	178-L
Boreinnretning	DEEPSEA SAGA
Boredager	33
Borestart	19.07.1977
Boreslutt	20.08.1977
Frigitt dato	20.08.1979
Publiseringsdato	25.04.2005
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	78.0
Totalt målt dybde (MD) [m RKB]	2902.0
Temperatur ved bunn av brønnbanen [°C]	76
Eldste penetrerte alder	TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50
NS grader	57° 42' 1.48" N
ØV grader	4° 13' 20.79" E
NS UTM [m]	6396158.57
ØV UTM [m]	572861.29
UTM sone	31
NPDID for brønnbanen	305



Brønnhistorie

General

Well 9/4-4 is located east of the Flekkefjord High on the western flank of the Egersund Sub-basin, which forms a part of the Danish-Norwegian Basin. The main objective of drilling 9/4-4 was to test the middle Jurassic sands on the western flank of the Egersund sub-basin. Alternating porous and nonporous sands of Late Triassic and possible minor Late Jurassic sands were considered secondary objectives.

Operations and results

Wildcat well 9/4-4 was spudded with the semi-submersible installation Deepsea Saga on 19 July 1977 and drilled to TD at 2902 m, 57 m into the Triassic Skagerrak Formation. No significant problems were encountered in the drilling operations. The well was drilled with high-viscosity spud mud down to 405 m, with gypsum mud from 405 m to 1300 m, and with lignosulphonate mud from 1300 m to TD. At 2807 m the pipe stuck and was freed by adding "Pipefree" and diesel to the mud.

The Middle Jurassic sands with a gross thickness of 117 m were found as postulated. Secondary objective reservoir sands in Late Triassic and Late Jurassic were not encountered. No oil shows were encountered in any section of the well and no hydrocarbons could be inferred from logs. The most likely reason for the lack of hydrocarbons is immaturity of the Jurassic source beds. Organic geochemical source rock screening of the interval 250 m to TD showed good to excellent source rocks in the Late Jurassic shales and the Middle Jurassic (Bryne Formation) coals. The analyses showed that the Bryne coals were immature for petroleum generation and that the Late Jurassic shales were immature, possibly marginally mature. No conventional core was cut and no fluid samples taken. Fourteen sidewall cores were recovered from the interval 2673 m to 2850 m.

The well was permanently abandoned on 20 August 1977 as a dry hole.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
180.00	2902.00

Borekaks tilgjengelig for prøvetaking?	NO
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Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
103	NORDLAND GP
550	HORDALAND GP
1065	ROGALAND GP



1065	BALDER FM
1086	SELE FM
1130	LISTA FM
1243	VÅLE FM
1260	SHETLAND GP
1260	EKOFISK FM
1302	TOR FM
1650	HOD FM
1825	BLODØKS FM
1840	HIDRA FM
1853	CROMER KNOLL GP
1853	RØDBY FM
1888	SOLA FM
2016	ÅSGARD FM
2310	BOKNEFJORD GP
2310	FLEKKEFJORD FM
2395	SAUDA FM
2598	TAU FM
2668	EGERSUND FM
2718	VESTLAND GP
2718	SANDNES FM
2814	BRYNE FM
2845	NO GROUP DEFINED
2845	SKAGERRAK FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
305	pdf	0.43

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
305_1	pdf	1.82





Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
305_01_WDSS_General_Information	pdf	0.25

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
305_01_Final_well_report_and_Composite_well_log	pdf	11.14

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL	90	1290
FDC CNL GR	1290	2893
HDT	1290	2893
ISF SONIC GR	100	2893
VELOCITY	400	2881

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	178.0	36	178.0	0.00	LOT
SURF.COND.	26	420.0	20	420.0	0.00	LOT
INTERM.	13 3/8	1289.0	17 1/2	1300.0	0.00	LOT
OPEN HOLE		2902.0	12 1/4	2902.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
178	1.01			seawater	
1246	1.10	45.0		seawater	
1633	1.28	42.0		seawater	





2740	1.35	45.0		seawater	
2902	1.37	45.0		seawater	