Generell informasjon

Brønnbane navn	1/9-5
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	TOMMELITEN GAMMA
Funn	1/9-4 Tommeliten Gamma
Brønn navn	1/9-5
Seismisk lokalisering	PG-03.SP 210
Utvinningstillatelse	044
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	203-L
Boreinnretning	DYVI BETA
Boredager	75
Borestart	03.10.1978
Boreslutt	16.12.1978
Frigitt dato	16.12.1980
Publiseringsdato	01.04.2012
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	37.0
Vanndybde ved midlere havflate [m]	75.0
Totalt målt dybde (MD) [m RKB]	3450.0
Totalt vertikalt dybde (TVD) [m RKB]	3449.5
Maks inklinasjon [°]	10
Eldste penetrerte alder	LATE CRETACEOUS
Eldste penetrerte formasjon	HOD FM
Geodetisk datum	ED50
NS grader	56° 29' 27.69'' N
ØV grader	2° 57' 55.27'' E
NS UTM [m]	6260871.29
ØV UTM [m]	497866.50
UTM sone	31
NPDID for brønnbanen	248

Brønnhistorie

General

Well 1/9-5 was drilled in the Feda Graben in the southern North Sea, in the saddle between the Tommeliten Gamma-structure and the intrusive salt plug forming the Tommeliten Delta structure. The purpose of the well was to appraise the Tommeliten Gamma discovery made by 1/9-4 and to test the hydrocarbon potential and reservoir quality of the Ekofisk and Tor formations.

Operations and results

Appraisal well 1/9-5 was spudded with the jack-up installation Dyvi Beta on 3 October 1978 and drilled to TD at 3450 m in the Late Cretaceous Hod Formation. The pipe got stuck at 3426 m during a clean-up trip. When trying to come loose the hook broke and the drill string dropped in the hole. This event caused material damage and rig shut-down for three days, but nobody was injured. When fishing the drill string it came loose above the jar but the rest of the BHA (approximately 260 m) was left in the hole. The well was drilled with spud mud down to 435 m, with a lime/"Morex" mud system from 435 m to 1377 m, with lime/"Morex"/Drispac mud from 1377 m to 2725 m, and with lignosulphonate/lignite mud from 2725 m to TD. A lot of hole problems occurred in the 17 1/2" and 12 1/4" sections and this was attributed to the lime/"Morex" mud system.

The Ekofisk Formation came in at 3207 m and the Tor Formation at 3282 m. No significant hydrocarbon shows were encountered in any section of the well.

One core was cut from 3215.5 to 3 233.5 m, proving a dry carbonate section. No wire line fluid samples were taken.

The well was permanently abandoned on 16 December 1978 as a dry well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
180.00	3450.00

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3215.7	3234.0	[m]

Total kjerneprøve lengde [m]	18.3
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
112	NORDLAND GP
1766	HORDALAND GP
2981	ROGALAND GP
2981	BALDER FM
3013	SELE FM
3095	LISTA FM
3192	VÅLE FM
3207	SHETLAND GP
3207	EKOFISK FM
3282	TOR FM
3346	HOD FM

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
248_01_WDSS_General_Information	pdf	0.20
248_03_WDSS_lithlog	pdf	0.06

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
248_1_9_5_Completion_log	pdf	2.37
248_1_9_5_Completion_report	pdf	61.54

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL	100	136
CBL VDL	100	2713
FDC CNL CAL GR	429	3450
HDT	2718	3448

ISF SONIC GR SP	110	3452

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	163.0	36	163.0	0.00	LOT
SURF.COND.	20	428.0	26	436.0	0.00	LOT
INTERM.	13 3/8	1367.0	17 1/2	1379.0	1.55	LOT
INTERM.	9 5/8	2715.0	12 1/2	2725.0	1.90	LOT
OPEN HOLE		3450.0	8 1/2	3450.0	1.91	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
220	1.05	56.0	30.0	spud mud	
1090	1.23	42.0	8.0	waterbased	
1420	1.50	20.0	31.0	waterbased	
2190	1.78	19.0	18.0	waterbased	
2450	1.80	24.0	18.0	waterbased	
3340	1.68	27.0	15.0	waterbased	