



Generell informasjon

Brønnbane navn	2/7-10
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	EDDA
Funn	2/7-4 Edda
Brønn navn	2/7-10
Seismisk lokalisering	LINE 56 2830 SP.1430
Utvinningstillatelse	018
Boreoperatør	Phillips Petroleum Company Norway
Boretillatelse	96-L
Boreinnretning	ZAPATA NORDIC
Boredager	61
Borestart	06.10.1973
Boreslutt	05.12.1973
Frigitt dato	05.12.1975
Publiseringsdato	18.01.2007
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	PALEOCENE
1. nivå med hydrokarboner, formasjon.	EKOFISK FM
2. nivå med hydrokarboner, alder	LATE CRETACEOUS
2. nivå med hydrokarboner, formasjon	TOR FM
Avstand, boredekk - midlere havflate [m]	37.0
Vanndybde ved midlere havflate [m]	72.0
Totalt målt dybde (MD) [m RKB]	3370.0
Maks inklinasjon [°]	1.75
Temperatur ved bunn av brønnbanen [°C]	108
Eldste penetrerte alder	LATE CRETACEOUS
Eldste penetrerte formasjon	TOR FM
Geodetisk datum	ED50



NS grader	56° 28' 31.7" N
ØV grader	3° 4' 59.7" E
NS UTM [m]	6259142.67
ØV UTM [m]	505128.45
UTM sone	31
NPDID for brønnbanen	269

Brønnhistorie

General

Well 2/7-10 was drilled on the Edda structure in the southern North Sea. The principal zone of interest was the Danian Limestone, which was found hydrocarbon-bearing ca 13 km to the northeast on the Ekofisk field, and which held commercial quantities of oil and gas in the 2/7-4 well on the Edda structure just over a mile to the southeast. The Danian sequence was expected to be ca 90 m thick. The Late Cretaceous was a secondary objective and could contain hydrocarbons if porosity was present.

Operations and results

Well 2/7-10 was spudded with the jack-up installation Zapata Nordic on 6 October 1973 and drilled to TD at 3370 m in the Late Cretaceous Tor Formation. Bad weather caused some technical problems and delayed operations for some days. The well was drilled water based, but with 3-4 % addition of oil below 2691 m. The Danian limestone sequence (Ekofisk Formation) was encountered at 3191 m. It was 90 m thick as prognosed but with only 6 m of gross pay, which, after acidization, yielded nothing commercial. The equivalent interval in the 2/7-4 well produced commercial oil and gas on the deepest of three drill stem tests. The Late Cretaceous Tor Formation, however, was found to have 31 m of potential pay, which correlates well with the 2/7-4 interval. It flowed commercial amounts of oil and gas after acid, on two drill stem tests. The upper one of these compared well with the equivalent horizon in the 2/7-4, although less productive. Shows were recorded from top of the Ekofisk and all through the limestone/chalk section down to ca 3338 m in the Tor Formation.

No cores were cut and no wire line fluid samples taken in the 2/7-10 well

The well was permanently abandoned on 5 December 1973 as an oil appraisal.

Testing

Five successful DST's were carried out in the well. Maximum flow data after acidization follows: DST 1 from the interval 3313 - 3322 m (Tor Formation) produced 233 m³ water, 12.2 Sm³ oil, and 32300 Sm³ gas /day. DST 3 from 3289 - 3301 m (Tor Formation) produced 715 Sm³ oil and 132500 Sm³ gas /day. The GOR was 185 Sm³/Sm³ and the oil gravity was 40.6 deg API. DST 5 from 3245 - 3261 (Ekofisk Formation) m produced on average 22 m³ water/day. It stopped flowing after 6 hours. DST 6 from 3219 - 3237 m (Ekofisk Formation) produced a total of 5.4 M³ water. DST 7 from 3203 - 3210 m ((Ekofisk Formation) gave a weak flow of water with traces of oil. DST 2 and DST 4 from 3289 - 3301 m were mis-runs.

Litostratigrafi



Topp Dyb [mMD RKB]	Litostrat. enhet
109	NORDLAND GP
1774	HORDALAND GP
3029	ROGALAND GP
3029	BALDER FM
3043	SELE FM
3094	LISTA FM
3163	VÅLE FM
3191	SHETLAND GP
3191	EKOFISK FM
3281	TOR FM

Spleisede logger

Dokument navn	Dokument format	Dokument størrelse [KB]
269	pdf	0.29

Dokumenter - eldre Sökkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
269_01_WDSS_General_Information	pdf	0.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
269_01_2_7_10_Final_Well_Report	pdf	3.71
269_02_2_7_10_Completion_log	pdf	3.97

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	3313	3322	0.0
3.0	3289	3301	0.0





5.0	3245	3261	0.0
6.0	3219	3237	0.0
7.0	3203	3210	0.0

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
3.0				
5.0				
6.0				
7.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0					
3.0					
5.0					
6.0					
7.0					

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC	493	1226
BHC C	1219	3370
CBL	2311	3340
CDM AP	2886	3369
FDC	3018	3370
GR	109	493
IES	493	3370
PML	3018	3370
SNP	3018	3370
VELOCITY	493	3370

Boreslam



Dybde MD [m]	Egenvekt, slam [g/cm ³]	Viskositet, slam [mPa.s]	Fløtegrense [Pa]	Type slam	Dato, måling
139	1.05	75.0		water-based	
501	1.25	40.0		water-based	
899	1.26	12.0		water-based	
1275	1.40	43.0		water-based	
2113	1.64	51.0		water-based	
2448	1.66	51.0		water-based	
2912	1.71	58.0		water-based	
3275	1.72	57.0		water-based	
3368	1.72	53.0		water-based	