



Generell informasjon

Brønnbane navn	2/7-9
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	EMBLA
Funn	2/7-20 Embla
Brønn navn	2/7-9
Seismisk lokalisering	LINE PGE 217 M SP: 220
Utvinningstillatelse	018
Boreoperatør	Phillips Petroleum Company Norway
Boretillatelse	87-L
Boreinnretning	ZAPATA NORDIC
Boredager	107
Borestart	25.12.1973
Boreslutt	10.04.1974
Frigitt dato	10.04.1976
Publiseringsdato	05.12.2012
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	DEVONIAN
1. nivå med hydrokarboner, formasjon.	NO GROUP DEFINED
Avstand, boredekk - midlere havflate [m]	37.0
Vanndybde ved midlere havflate [m]	71.0
Totalt målt dybde (MD) [m RKB]	4448.0
Maks inklinasjon [°]	1
Temperatur ved bunn av brønnbanen [°C]	156
Eldste penetrerte alder	DEVONIAN
Eldste penetrerte formasjon	NO GROUP DEFINED
Geodetisk datum	ED50
NS grader	56° 19' 50.6" N
ØV grader	3° 14' 29.3" E
NS UTM [m]	6243053.76



ØV UTM [m]	514931.95
UTM sone	31
NPDID for brønnbanen	268

Brønnhistorie

General

Well 2/7-9 is located in the Ål Basin south of the Eldfisk structure in the southern North Sea. The main purpose of the well was to test Danian -Cretaceous limestone and Jurassic sandstone on a north-south trending anticline 6 - 8 km south of Eldfisk, where these intervals had proven commercial oil in several wells.

Operations and results

Appraisal well 2/7-9 was spudded with the jack-up installation Zapata Nordic on 25 December 1973 and drilled to TD 4448 m in Devonian sediments.

Appraisal well 2/7-9 was spudded with the jack-up installation Zapata Nordic on 25 December 1973 and drilled to TD 4448 m in Devonian sediments. The Danian Limestone (Ekofisk Formation) came in at 3086 m. It was expected to be 90 m thick while 77 m was found. The Late Cretaceous Chalk (Cromer Knoll Group) was anticipated to be 695 m thick, but a greater thickness of 800 m was found. Good shows were seen in both intervals, but no hydrocarbons were produced when tested. Sands initially dated Late Jurassic were encountered at 4313 m and proved to be hydrocarbon bearing with a 111 m pay section with average porosity of 13% and 55% oil saturation. A clear OWC was found at 4424 m. These sands have later been interpreted as of Devonian age.

No cores were cut and no wire line fluid samples were taken.

The well was permanently abandoned on 10 April 1974.

Testing

Three drill stem tests were conducted in the well.

DST 1 tested the interval 4313 to 4356 m in the Devonian sandstones. It produced, after acidization, 36 Sm³ oil and 10000 Sm³ gas /day through a 32/64" choke. The GOR was 278 Sm³/Sm³ and the oil gravity was 45 deg API.

DST 2 in the interval 3417 to 3436 m in Late Cretaceous limestone (Tor Formation). It produced no hydrocarbons to surface only 1.6 m³ load water. Samples of formation fluid were taken while reversing out the string content.

DST 3 in the interval 3098 to 3109 m in Danian Limestone (Ekofisk Formation). It produced no hydrocarbons to surface only 1 m³ load water.



Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1234.44	4447.95
Borekaks tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
108	NORDLAND GP
2949	ROGALAND GP
2949	BALDER FM
2968	SELE FM
3011	LISTA FM
3086	SHETLAND GP
3086	EKOFISK FM
3163	TOR FM
3578	HOD FM
3891	BLODØKS FM
3898	HIDRA FM
3962	CROMER KNOLL GP
3962	RØDBY FM
4076	TYNE GP
4076	MANDAL FM
4311	UNDEFINED GP

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
268_GCH_1	pdf	0.35
268_GCH_2	pdf	3.63

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
268_01_WDSS_General_Information	pdf	0.26





Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
268 2 7 9 COMPLETION LOG	pdf	2.74
268 2 7 9 COMPLETION REPORT	pdf	26.38

Dokumenter - Sökkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
268 01 NPD Paper No.30 Geology of the E Idfisk Area Well 2 7 9	pdf	72.88
268 02 NPD Paper No.32 Stratigraphic Correlation chart Profile 4 Well 2 7 9	pdf	0.54
268 03 NPD Paper No.30 Early Tertiary-Late Jurassic Correlation chart Well 2 7 9	pdf	0.56

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	4313	4356	0.0
2.0	3417	3436	0.0
3.0	3098	3109	0.0

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0	38.400			
2.0				
3.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	36	9996	0.800		278
2.0					
3.0					





Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC	1226	4454
CBL	2743	3450
CDM	2745	4455
CDM AP	2745	4455
FDC	3011	4455
IES	1226	4455
ML MLL	4071	4454
PML C	3011	3970
SNP	3011	3970
SRS	1226	4454

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	145.0	36	146.0	0.00	LOT
SURF.COND.	20	501.0	26	511.0	0.00	LOT
INTERM.	13 3/8	1226.0	17 1/2	1228.0	0.00	LOT
INTERM.	9 5/8	2745.0	12 1/4	2752.0	0.00	LOT
LINER	7	4064.0	8 1/2	4075.0	0.00	LOT
OPEN HOLE		4448.0	5 7/8	4448.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	flytegrense [Pa]	Type slam	Dato, måling
2523	1.85			waterbased	
2892	1.72			waterbased	
2941	1.72			waterbased	
3353	1.71			waterbased	
3401	1.89			waterbased	