Generell informasjon

Brønnbane navn	35/10-7 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Pressemelding	lenke til pressemelding
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	35/10-7 S (Toppand)
Brønn navn	35/10-7
Seismisk lokalisering	CGG18M01 inline 7148.xline26748
Utvinningstillatelse	630
Boreoperatør	Equinor Energy AS
Boretillatelse	1872-L
Boreinnretning	WEST HERCULES
Boredager	16
Borestart	12.12.2021
Boreslutt	27.12.2021
Plugget og forlatt dato	27.12.2021
Frigitt dato	27.12.2023
Publiseringsdato	12.09.2023
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	BRENT GP
Avstand, boredekk - midlere havflate [m]	31.0
Vanndybde ved midlere havflate [m]	354.0
Totalt målt dybde (MD) [m RKB]	3605.0
Totalt vertikalt dybde (TVD) [m RKB]	3403.0
Maks inklinasjon [°]	37
Temperatur ved bunn av brønnbanen [°C]	134
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	COOK FM
Geodetisk datum	ED50

NS grader	61° 1' 3.29'' N
ØV grader	3° 17' 37.37'' E
NS UTM [m]	6764941.56
ØV UTM [m]	515877.74
UTM sone	31
NPDID for brønnbanen	9404

Brønnhistorie

General

Well 35/7-10 A is a geological sidetrack to well 35/7-10 S. The35/7-10 S well discovered oil in the Ness and Etive formations, while the Oseberg Formation was dry with shows. The objective for drilling the 35/7-10 A was to prove commercial hydrocarbons in the Oseberg Formation up flank on the structure.

Operations and results

Appraisal well 35/7-10 A kicked off at 1682 m in the main well on 12 December 2021. It was drilled with the semi-submersible installation West Hercules to TD at 3605 m (3402.8 m TVD) in the Early Jurassic Cook Formation. Operations proceeded without significant problems. The well was drilled with Exploradril oil-based mud from kick-off to TD.

Well 35/10-7 A found hydrocarbons in the Oseberg Formation in addition to condensate and oil in the Ness and Etive formations. A hydrocarbon-water contact was found at 3526 m (3325 m TVD) in the Oseberg Formation. PVT analysis classify the Oseberg hydrocarbons as a near-critical oil. The Cook Formation was dry with weak oil shows described as direct and cut fluorescence but no visible cut and no odour. Otherwise oil shows were observed only in the oil-bearing formations of the Brent Group.

One core was cut from 3391 to 3427 m with 102.2% recovery in the Ness Formation. MDT fluid samples were taken at 3396,5 m in the Ness Formation (oil), 3506 m in the Oseberg Formation (oil), and 3527 m in the Oseberg Formation (water).

The well was permanently abandoned on 27 December 2021 as an oil appraisal well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
1690.00	3605.00

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3391.0	3427.8	[m]

Total kjerneprøve lengde [m]	36.8
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
385	NORDLAND GP
385	UNDIFFERENTIATED
827	UTSIRA FM
906	HORDALAND GP
1766	ROGALAND GP
1766	BALDER FM
1826	SELE FM
1862	LISTA FM
1989	VÅLE FM
2191	SHETLAND GP
2191	JORSALFARE FM
2333	KYRRE FM
2862	SVARTE FM
2916	CROMER KNOLL GP
2916	RØDBY FM
2964	ÅSGARD FM
2982	DRAUPNE FM
2983	VIKING GP
3109	HEATHER FM
3341	BRENT GP
3341	TARBERT FM
3349	NESS FM
3431	ETIVE FM
3468	RANNOCH FM
3492	OSEBERG FM
3561	DUNLIN GP
3561	DRAKE FM

3584	COOK FM

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
AIT PEX HNGS NEXT	3259	3605
MDT CMR	3259	3605
MSIP NGI	3259	3605
MWD - GR RES PWD	1682	3605

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
INTERM.	13 3/8	1680.0	17 1/2	1742.0	0.00	
LINER	9 5/8	3259.0	12 1/4	3260.0	1.80	FIT
OPEN HOLE		3605.0	8 1/2	3605.0	0.00	

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
700	1.21	14.0	9.5	Glydril	
1738	1.35	28.0	9.0	Exploradrill	
2072	1.36	29.0	9.5	Exploradrill	
2274	1.37	29.0	10.5	Exploradrill	
3269	1.58	29.0	6.0	Exploradrill	
3605	1.58	31.0	5.5	Exploradrill	