



Generell informasjon

Brønnbane navn	7/12-7
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	ULA
Funn	7/12-2 Ula
Brønn navn	7/12-7
Seismisk lokalisering	LINJE 201 SP 415
Utvinningstillatelse	019
Boreoperatør	BP Norway Limited U.A.
Boretillatelse	583-L
Boreinnretning	VILDKAT EXPLORER
Boredager	37
Borestart	20.06.1988
Boreslutt	26.07.1988
Frigitt dato	26.07.1990
Publiseringsdato	28.03.2014
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	ULA FM
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	70.0
Totalt målt dybde (MD) [m RKB]	3855.0
Totalt vertikalt dybde (TVD) [m RKB]	3847.0
Maks inklinasjon [°]	10.6
Temperatur ved bunn av brønnbanen [°C]	149
Eldste penetrerte alder	LATE JURASSIC
Eldste penetrerte formasjon	ULA FM
Geodetisk datum	ED50
NS grader	57° 6' 31.92" N



ØV grader	2° 52' 47.27" E
NS UTM [m]	6329652.99
ØV UTM [m]	492718.91
UTM sone	31
NPDID for brønnbanen	1287

Brønnhistorie

General

Well 7/12-7 was drilled on the South East flank of the Ula Field. The objective was to identify an optimal location and depth for a planned water-injection well by appraising the oil/water contact in this area.

Operations and results

Appraisal well 7/12-7 was spudded with the semi-submersible installation Vildkat Explorer on 20 June 1989 and drilled to TD at 3855 (3847 m TVD) m in the Late Jurassic Ula Formation. Drilling proceeded without any significant problems. The well was drilled with seawater and bentonite down to 174 m, with seawater/bentonite/spercell/CMC EHV mud from 174 to 1008 m, and with oil based Safemul mud from 1008 m to TD.

Top reservoir was encountered at 3772 m (3765.5 m TVD) and the reservoir was oil bearing. Cores had oil shows down to the base of the last core at 3842 m. A well defined OWC or free water level was not found, though water saturations were seen to rise to the range 60-90% at ca 3819 m. Core porosity and permeability, RFT tests, and geochemical analysis showed a division between producible and residual oil to at 3815 m. From this it was concluded that the lower contact for producible oil at the Ula East was ca 290 m deeper than at Ula West. Pressure measurements proved communication with the pressure-depleted parts of the Ula Field.

Four cores were cut in the well in the Ula Formation in the interval 3800 to 3842.2 m. Core depths are ca 2 m deeper than loggers' depth. Segregated fluid samples were taken at 3797 m, 3834 m and 3842 m. The 2 3/4 gallon chambers from 3834 and 3842 m and the PVT 1 gallon chamber from 3834 m were drained at surface and contained water with indications of oil. On-shore geochemical analysis of the PVT 1 gallon chamber from 3842.2 m showed that it contained 90/10 water/diesel from the drilling mud. The 2 3/4 gallon chamber from 3797 m contained oil from the reservoir.

The well was suspended on 26 July 1988 as a possible injector. It was classified as an oil appraisal.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
3290.00	3797.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3800.0	3801.6	[m]
2	3801.6	3810.0	[m]
3	3810.9	3829.0	[m]
4	3829.4	3842.0	[m]

Total kjerneprøve lengde [m]	40.7
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



3800-3801m



3802-3806m



3806-3810m



3810-3815m



3815-3820m



3820-3825m



3825-3829m



3829-3834m



3834-3839m



3839-3842m

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
95	NORDLAND GP
2652	ROGALAND GP
2652	BALDER FM
2692	SELE FM
2760	LISTA FM
2791	MAUREEN FM



2858	SHETLAND GP
2858	EKOFISK FM
3009	TOR FM
3211	HOD FM
3332	CROMER KNOLL GP
3332	RØDBY FM
3439	ÅSGARD FM
3662	TYNE GP
3662	MANDAL FM
3699	FARSUND FM
3772	VESTLAND GP
3772	ULA FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1287_1	pdf	0.38
1287_2	pdf	0.86

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1287_7_12_7_COMPLETION_REPORT_AND_LOG	pdf	8.76

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL GR	900	3761
DIL BHC GR	90	3844
DIL GR	3771	3853
LDL CNL GR	3771	3854
MWD	3305	3780
RFT GR	3797	3797
RFT HP GR	3773	3834
RFT HP GR	3827	3842
SAT	1000	3760





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	32	169.0		670.0	0.00	LOT
INTERM.	13 3/8	1003.0	17 1/2	1008.0	1.89	LOT
INTERM.	9 5/8	2649.0	12 1/4	2620.0	1.98	LOT
LINER	7	3768.0	8 1/2	3800.0	1.91	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
145	1.51			OIL BASED	27.07.1988
2996	1.50	33.0	17.0	WATER BASED	06.07.1988
3054	1.50	33.6	20.0	WATER BASED	07.07.1988
3220	1.50	32.6	17.0	WATER BASED	08.07.1988
3483	0.91	12.5	10.0	OIL BASED	27.07.1988
3518	1.50	31.6	17.0	WATER BASED	12.07.1988
3688	1.51	60.0	37.0	OIL BASED	27.07.1988
3784	1.52	15.4	14.0	WATER BASED	12.07.1988
3789	1.52	32.6	16.0	WATER BASED	12.07.1988
3797	1.52	34.6	18.0	WATER BASED	14.07.1988
3797	1.52	33.6	17.0	WATER BASED	14.07.1988
3797	1.52	34.6	18.0	WATER BASED	15.07.1988
3797	1.56		30.0	WATER BASED	27.07.1988
3800	0.90	10.0	19.0	OIL BASED	27.07.1988
3801	0.91	8.8	11.0	OIL BASED	27.07.1988
3811	0.91	10.4	9.0	OIL BASED	27.07.1988
3830	0.91			OIL BASED	27.07.1988
3843	0.91	12.5	10.0	OIL BASED	27.07.1988
3852	0.91	13.0	10.0	OIL BASED	27.07.1988
3852	0.90	13.4	11.0	OIL BASED	27.07.1988
3898	1.50	33.6	17.0	WATER BASED	11.07.1988

Trykkplott





Porertrykksdataene kommer fra logging i brønnen hvis ingen annen kilde er oppgitt. I noen brønner der trykk ikke er logget, er det brukt informasjon fra formasjonstester eller brønnspark. Trykkdataene er rapportert inn til Oljedirektoratet og videre prosessert og kvalitetssikret av IHS Markit.

Dokument navn	Dokument format	Dokument størrelse [KB]
1287 Formation pressure (Formasjonstrykk)	pdf	0.21

