



Generell informasjon

Brønnbane navn	30/6-11
Type	EXPLORATION
Formål	WILDCAT
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	30/6-11
Seismisk lokalisering	ST 703 146 SP 974
Utvinningstillatelse	053
Boreoperatør	Norsk Hydro Produksjon AS
Boretillatelse	358-L
Boreinnretning	NORTRYM
Boredager	101
Borestart	20.12.1982
Boreslutt	30.03.1983
Frigitt dato	30.03.1985
Publiseringsdato	08.12.2015
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	SHOWS
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	121.0
Totalt målt dybde (MD) [m RKB]	4001.0
Totalt vertikalt dybde (TVD) [m RKB]	4001.0
Maks inklinasjon [°]	6.5
Temperatur ved bunn av brønnbanen [°C]	132
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	STATFJORD GP
Geodetisk datum	ED50
NS grader	60° 43' 29.38" N
ØV grader	2° 44' 41.82" E
NS UTM [m]	6732324.06
ØV UTM [m]	486085.56
UTM sone	31
NPDID for brønnbanen	58

**Brønnhistorie****General**

Well 30/6-11 was drilled on the Delta structure on the Flatfisk Slope, close to the northwestern end of the Oseberg Fault Block in the North Sea. The primary objective was to find hydrocarbon accumulations in the Brent Group. Secondary objective was to find additional hydrocarbon accumulations within the Early Jurassic Cook Formation and Statfjord Group. The well was placed in an area where a complete Jurassic succession could be expected. Planned TD was 75 m into the Statfjord Group.

Operations and results

Wildcat well 30/6-11 was spudded with the semi-submersible installation Nortrym on 20 December 1982 and drilled to TD at 4001 m in the Early Jurassic Statfjord Group. When running casing in the 17 1/2" section at 2165 m the rig had to wait on weather. Cavings accumulated as fill on the bottom and the casing was differentially stuck. Various additives were used to free the casing, including diesel. The well was drilled with seawater and hi-vis pills down to 235 m, with pre-hydrated bentonite and seawater from 235 m to 965 m, and with KCl/polymer mud from 965 m to 2165 m. From 2165 m to 3654 m, the KCl/polymer mud was slowly converted to a dispersed lignosulphonate/lignite mud and in the bottom 8 3/8" section, from 3654 m to TD a dispersed lignosulphonate/lignite mud system was used. From 2165 and downwards the diesel content in the mud was 5%, diminishing to traces below 3265 m.

The Brent Group (3351 - 3561m) had a gross thickness of 210 m with 118 m of net sand, giving a net to gross ratio of 0.56. The average porosity of the sandstones were calculated from wireline logs to 16% with an average water saturation of 80%. The Cook Formation (3752.5 - 3768.5m) had a net sand thickness of 3 m, giving a net to gross ratio of 0,19. The average porosity of the sandstones were calculated from wireline logs to 14% with an average water saturation of 55%. The Statfjord Group (3892.5 - 4001 m) had 85 m calculated as net sand giving a net to gross ratio of 0.86. The average porosity was calculated from logs to 11% with a water saturation varying from 60-100%.

Oil shows from both cuttings and cores together with high resistivity readings from the logs stated the presence of hydrocarbons in sandstones from the Brent Group, Cook Formation and in the very top of the Statfjord Group. All hydrocarbons were evaluated as residual. Drill stem testing and FMT sampling of the Brent Group produced no hydrocarbons. Otherwise, oil shows were described on limestone stringers in the interval 2515 m to 2635 m and on siltstones in the Late Jurassic between 3265 and 3320 m.

Seven cores were cut in this well, one in the Late Jurassic, 5 in the Eive Formation and one in the Cook Formation sandstones. An FMT fluid sample was taken at 3463.5 m. It recovered mud filtrate and water only.

The well was permanently abandoned on 30 March 1983 as dry with shows.

Testing

A drill stem test was performed from the interval 3448.5 to 3454.5 m. The test gave no flow to surface and no samples of formation fluid could be recovered from the test string.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
240.00	4001.00

Borekaks tilgjengelig for prøvetaking?	YES
--	-----

Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3265.0	3266.8	[m]
2	3452.0	3460.0	[m]
3	3461.0	3465.9	[m]
4	3468.5	3484.5	[m]
5	3484.5	3501.7	[m]
6	3502.5	3508.0	[m]
7	3756.0	3768.0	[m]

Total kjerneprøve lengde [m]	65.3
Kjerne tilgjengelig for prøvetaking?	YES

Kjernebilder



3265-3266m



3452-3457m



3457-3460m



3461-3466m



3468-3473m



3473-3478m



3478-3483m



3483-3484m



3484-3489m



3489-3494m



3494-3499m



3499-3501m



3502-3507m



3507-3508m



3756-3763m



3763-3768m

Palynologiske preparater i Sjøkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
3262.5	[m]	SWC	RRI
3266.8	[m]	C	RRI
3303.5	[m]	SWC	RRI
3340.5	[m]	SWC	RRI
3349.0	[m]	SWC	RRI
3415.0	[m]	SWC	RRI
3454.5	[m]	C	RRI
3458.4	[m]	C	RRI
3461.4	[m]	C	RRI
3474.8	[m]	C	RRI
3484.5	[m]	C	RRI
3507.1	[m]	C	RRI
3540.0	[m]	SWC	RRI
3562.5	[m]	SWC	RRI
3570.0	[m]	DC	FUGRO
3586.5	[m]	SWC	RRI
3619.5	[m]	SWC	RRI
3620.0	[m]	DC	FUGRO
3635.0	[m]	SWC	RRI
3645.5	[m]	SWC	RRI
3660.0	[m]	SWC	RRI
3660.0	[m]	DC	FUGRO
3672.5	[m]	SWC	RRI



3710.0	[m]	DC	FUGRO
3711.5	[m]	SWC	RRI
3727.0	[m]	SWC	RRI
3745.0	[m]	DC	FUGRO
3756.4	[m]	C	RRI
3768.0	[m]	C	RRI
3787.0	[m]	DC	FUGRO
3798.0	[m]	SWC	RRI
3825.0	[m]	DC	FUGRO
3875.0	[m]	DC	FUGRO
3890.0	[m]	DC	FUGRO
3891.0	[m]	SWC	RRI
3896.0	[m]	SWC	RRI

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
146	NORDLAND GP
720	UTSIRA FM
909	HORDALAND GP
2055	ROGALAND GP
2055	BALDER FM
2127	SELE FM
2239	LISTA FM
2333	VÅLE FM
2351	SHETLAND GP
3260	VIKING GP
3260	DRAUPNE FM
3264	HEATHER FM
3351	BRENT GP
3351	NESS FM
3459	ETIVE FM
3561	DUNLIN GP
3752	COOK FM
3768	AMUNDSEN FM
3893	STATEFJORD GP

Geokjemisk informasjon





Dokument navn	Dokument format	Dokument størrelse [KB]
58_1	pdf	0.40
58_2	pdf	0.47
58_3	pdf	3.87
58_4	pdf	0.63

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
58_01_WDSS_General_Information	pdf	0.18
58_02_WDSS_completion_log	pdf	0.35

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
58_30_6_11_COMPLETION_REPORT_AND_LOG	pdf	16.56

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsventil størrelse [mm]
1.0	3449	3455	0.0

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

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstygde rel. luft	GOR [m3/m3]
1.0					

Logger





Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL VDL	2850	3634
CCL GR	3000	3504
CDL CNL CAL GR	951	4001
DIFL LSBHC GR SP	233	4001
DLL MLL CAL GR	3200	3646
FMT	3259	3975
HRD	2103	4001
SWC	1412	4000
VELOCITY	913	3985

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	235.0	36	235.0	0.00	LOT
SURF.COND.	20	951.0	26	965.0	1.76	LOT
INTERM.	13 3/8	2106.0	17 1/2	2165.0	1.70	LOT
INTERM.	9 5/8	3639.0	12 1/4	3654.0	1.93	LOT
OPEN HOLE		4000.0	8 3/8	4001.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
220	1.06			waterbased	
710	1.11	53.0		waterbased	
1190	1.21	50.0		waterbased	
1980	1.23	54.0		waterbased	
2570	1.34	65.0		waterbased	
3110	1.44	50.0		waterbased	
3680	1.43	42.0		waterbased	
4001	1.40	51.0		waterbased	

Tynnslip i Sokkeldirektoratet

Dybde	Enhet
3505.75	[m]



3503.30	[m]
3494.30	[m]
3486.50	[m]
3482.80	[m]
3476.30	[m]
3471.80	[m]
3464.60	[m]
3461.50	[m]
3461.20	[m]
3453.40	[m]
3265.00	[m]

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]
58 Formation pressure (Formasjonstrykk)	pdf	0.22

