



Generell informasjon

Brønnbane navn	30/6-3
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	OSEBERG
Funn	30/6-1 Oseberg
Brønn navn	30/6-3
Seismisk lokalisering	703 130 SP.615
Utvinningstillatelse	053
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	234-L
Boreinnretning	DEEPSEA SAGA
Boredager	83
Borestart	16.12.1979
Boreslutt	07.03.1980
Frigitt dato	07.03.1982
Publiseringsdato	28.03.2014
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	MIDDLE JURASSIC
1. nivå med hydrokarboner, formasjon.	BRENT GP
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	105.0
Totalt målt dybde (MD) [m RKB]	2940.0
Totalt vertikalt dybde (TVD) [m RKB]	2939.0
Maks inklinasjon [°]	4.3
Temperatur ved bunn av brønnbanen [°C]	111
Eldste penetrerte alder	EARLY JURASSIC
Eldste penetrerte formasjon	STATFJORD GP
Geodetisk datum	ED50
NS grader	60° 34' 52.98" N



ØV grader	2° 47' 1.41" E
NS UTM [m]	6716339.17
ØV UTM [m]	488148.39
UTM sone	31
NPDID for brønnbanen	382

Brønnhistorie

General

Well 30/6-3 was drilled on the Alpha structure situated in the south-western part of block 30/6. The objective of the well was to penetrate sandstones of Middle Jurassic age and to evaluate their possible content of hydrocarbons.

Operations and results

Appraisal well 30/6-3 was spudded with the semi-submersible installation Deepsea Saga on 16 December 1979 and drilled to TD at 2940 m, 56 m into the Statfjord formation. No significant problem was encountered in the operations, but 13.5 days were lost due to bad weather. The well was drilled with spud mud down to 1757 m and with chrome lignosulphonate/bentonite mud from 1757 m to TD.

Oil shows were recorded in claystone/siltstone cuttings at 1993 to 2023 m, in siltstone cuttings at 2095 m, and in limestone cuttings from 2253 m to 2296 m and 2317 m to 2350 m. Top Brent Group came in at 2421 m. It consisted of sandstone interbedded with shale and coals with a main reservoir sand from 2480 to 2513 m. Gas/condensate was proven all through the reservoir. The hydrocarbon/water contact could not be defined, but the presence of hydrocarbons down to the base of the reservoir indicated the contact to be located down flank on the structure. The sandstones of Early Jurassic age ("Intra Dunlin Sand" and the Statfjord Group) were water bearing.

Four cores were cut in the interval from 2421 to 2458 m. An RFT fluid sample was taken at 2499 m. FIT fluid samples were taken at 2279 m (traces of gas), 2422 m (gas), 2451 m (small amounts of 32.6 deg API oil), and 2463 m (gas).

The well was permanently abandoned on 7 March 1980 as a gas/condensate appraisal.

Testing

Two drill stem tests were conducted.

DST1 tested the interval 2501 to 2511 m and produced 157 Sm³ oil and 495500 Sm³ gas /day through a 44/64" choke. The GOR was 3170 Sm³/Sm³, the oil gravity was 59.3 deg API, and the gas gravity was 0.657 (air = 1). The down hole flowing temperature was 97.8 deg C.

DST2 tested the interval 2421 m to 2432 m and produced 88 Sm³ oil and 280300 Sm³ gas /day through 48/64" and 20/64" chokes in parallel. The GOR was the same as in DST1, the oil gravity was 65.0 deg API, and the gas gravity was 0.645 (air = 1). The down hole flowing temperature was 83.9 deg C.

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
190.00	2940.00

Borekaks tilgjengelig for prøvetaking?	YES
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	2421.0	2430.7	[m]
2	2431.0	2437.5	[m]
3	2438.5	2444.0	[m]
4	2444.1	2456.0	[m]

Total kjerneprøve lengde [m]	33.5
Kjerner tilgjengelig for prøvetaking?	YES

Oljeprøver i Sokkeldirektoratet

Test type	Flaske nummer	Topp dyp MD [m]	Bunn dyp MD [m]	Væske type	Test tidspunkt	Prøver tilgjengelig
DST	TEST1	2476.00	2486.00	CONDE NSATE	18.02.1980 - 00:00	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
130	NORDLAND GP
680	UTSIRA FM
751	UNDIFFERENTIATED
960	HORDALAND GP
1994	ROGALAND GP
1994	BALDER FM
2066	SELE FM
2101	LISTA FM
2256	SHETLAND GP
2353	VIKING GP



2353	HEATHER FM
2421	BRENT GP
2512	DUNLIN GP
2512	DRAKE FM
2689	COOK FM
2768	AMUNDSEN FM
2884	STATFJORD GP

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
382_1	pdf	1.42
382_2	pdf	0.07
382_3	pdf	1.33
382_4	pdf	2.96
382_5	pdf	1.24

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
382_01_WDSS_General_Information	pdf	0.12
382_02_WDSS_completion_log	pdf	0.22

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
382_30_6_3_COMPLETION_REPORT_AND_LOG	pdf	17.43

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	2476	2486	17.5
2.0	2396	2407	19.1





Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningsstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
2.0				

Test nummer	Olje produksjon [Sm3/dag]	Gass produksjon [Sm3/dag]	Oljetetthet [g/cm3]	Gasstyngde rel. luft	GOR [m3/m3]
1.0	157	496000	0.742	0.657	3170
2.0	88	280000	0.720	0.645	3170

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL GR	800	1739
CBL GR	1217	2565
CBL VDL GR	1340	2536
CCL	96	879
CCL	100	153
CCL	810	2454
CCL	2365	2424
CCL	2395	2536
CCL	2458	2528
CCL	2462	2536
CCL	2494	2485
DLL MSFL GR	2199	2582
FDC CNL GR	1755	2943
GEODIP	2399	2526
HDT	1740	2943
ISF SON GR SP	126	2941

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	170.0	36	170.0	0.00	LOT
SURF.COND.	20	889.0	26	900.0	1.73	LOT
INTERM.	13 3/8	1715.0	17 1/2	1732.0	1.68	LOT



INTERM.	9 5/8	2545.0	12 1/4	2557.0	2.10	LOT
LINER	7	2915.0	8 1/2	2915.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
169	1.05			waterbased	
273	1.06			waterbased	
611	1.08			waterbased	
1631	1.30	33.0		waterbased	
1732	1.32	38.0		waterbased	
2053	1.54	56.0		waterbased	
2300	1.55	60.0		waterbased	
2624	1.25	46.0		waterbased	

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]
382 Formation pressure (Formasjonstrykk)	pdf	0.22

