



Generell informasjon

Brønnbane navn	7/11-2
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	COD
Funn	7/11-1 Cod
Brønn navn	7/11-2
Seismisk lokalisering	NJV 5704 SP: 1248
Utvinningstillatelse	018
Boreoperatør	Phillips Petroleum Company Norway
Boretillatelse	17-L
Boreinnretning	OCEAN TRAVELER
Boredager	86
Borestart	21.07.1968
Boreslutt	14.10.1968
Frigitt dato	14.10.1970
Publiseringsdato	15.01.2013
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	PALEOCENE
1. nivå med hydrokarboner, formasjon.	FORTIES FM
Avstand, boredekk - midlere havflate [m]	27.0
Vanndybde ved midlere havflate [m]	82.0
Totalt målt dybde (MD) [m RKB]	3427.0
Maks inklinasjon [°]	2
Temperatur ved bunn av brønnbanen [°C]	125
Eldste penetrerte alder	LATE CRETACEOUS
Eldste penetrerte formasjon	TOR FM
Geodetisk datum	ED50
NS grader	57° 4' 15.2" N
ØV grader	2° 24' 26.5" E
NS UTM [m]	6325574.83



ØV UTM [m]	464065.41
UTM sone	31
NPDID for brønnbanen	156

Brønnhistorie

General

Well 7/11-2 was drilled , ca 1.5 km from the UK Border on the eastern side of the Breiflabb Basin in the southern North Sea. The objective was to test the hydrocarbon potential in the Paleocene on the west flank of the Cod structure, and to confirm the gas and condensate discovery made by the 7/11-1 well. Well 7/11-1 tested up to 430 Sm³ condensate and 1254000 Sm³ gas /day from the Late Paleocene Forties Formation.

Operations and results

Appraisal well 7/11-2 was spudded with the semi-submersible installation Ocean Traveller on 21 July 1968 and drilled to TD at 3427 m in the Late Cretaceous Tor Formation. Tight hole was experienced when pulling out of the 17 1/2" hole. The hole was washed back to TD and mud weight increased to 14 ppg. Logging and casing operations could then be successfully carried out. The well was drilled with sea water down to 1219 m where the system was changed to a salt-saturated Drispac-Desco-Flosal type.

The well tested gas and condensate in Paleocene sandstones (the Forties Formation).

One core was taken in the Paleocene sandstone in the interval 3030.6 m to 3045 m. No wire line fluid samples were taken.

The well was permanently abandoned on as a dry well.

Testing

Three drill stem tests were performed.

DST 1 tested the interval 3166.3 m to 3192.5 m. This test produced only 3.7 m³ salt water-cut mud and mud filtrate.

DST2 tested the interval 3027.3 m to 3105.9 m. This test produced 221 Sm³ gas and 469000 Sm³ gas /day through a 3/4" choke. These rates correspond to a gas/condensate ratio of 2121 Sm³/Sm³, but the GCR varied from 1251 Sm³/Sm³ on a 1/4" choke to 3111 on a 1" choke. The condensate gravity was fairly constant for all rates; 61.0 to 62.1 deg API.

DST 3 tested the interval 2979.7 m to 2998 m. This test produced no formation fluid to surface. After injecting 4 m³ acid (HCl) and 1.6 m³ diesel 16.5 m³ diesel+mud flowed back from the formation.

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Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
533.40	3427.48

Borekaks tilgjengelig for prøvetaking?	NO
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Borekjerne i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	3030.6	3046.2	[m]

Total kjerneprøve lengde [m]	15.6
Kjerner tilgjengelig for prøvetaking?	YES

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
109	NORDLAND GP
1549	HORDALAND GP
2981	ROGALAND GP
2981	BALDER FM
2997	SELE FM
3025	FORTIES FM
3175	MAUREEN FM
3220	SHETLAND GP
3220	EKOFISK FM
3346	TOR FM

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
156_01_WDSS_General_Information	pdf	0.20

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)





Dokument navn	Dokument format	Dokument størrelse [KB]
156 7 11 2 AAODC REPORTS	PDF	20.61
156 7 11 2 CHANGE IN DRILLING PROGRAM ON EXPLORATORY TEST	PDF	0.59
156 7 11 2 CLASTIC SEDIMENTS	PDF	1.79
156 7 11 2 COD	PDF	0.51
156 7 11 2 COMPLEX LITHOLOGY ANALYSIS	PDF	19.99
156 7 11 2 CONTINENTAL SHELF DRILL CUTTINGS AND CORE SAMPLES	PDF	0.09
156 7 11 2 CORE ANALYSIS RESULTS	PDF	0.25
156 7 11 2 DRILL STEM TEST DATA TEST-NO-1	PDF	1.73
156 7 11 2 DRILL STEM TEST DATA TEST NO-2	PDF	5.02
156 7 11 2 DRILL STEM TEST DATA TEST NO-3	PDF	3.43
156 7 11 2 HIGH RESOLUTION DIPMETER-REF-02	PDF	3.33
156 7 11 2 HIGH RESOLUTION DIPMETER REF-24	PDF	2.22
156 7 11 2 INDIVIDUAL WELL RECORD	PDF	12.51
156 7 11 2 INTERNATIONAL DEPARTMENT INDIVIDUAL WELL RECORD	PDF	69.81
156 7 11 2 LOGGING RAPPORT AV PALEOCEN	PDF	0.16
156 7 11 2 MICROPALAEONTOLOGICAL CHART	PDF	10.14
156 7 11 2 RESERVOIR FLUID STUDY	PDF	4.89
156 7 11 2 SEDIMENTOLOGY STUDY	PDF	7.07
156 7 11 2 SIDEWALL CORE FORM	PDF	0.10
156 7 11 2 SURFACE AND BOTTOM HOLE READINGS	PDF	1.38
156 7 11 2 SURVEY REPORT	PDF	1.08
156 7 11 2 TEMPORARY SUSPENSION PROCEDURE	PDF	0.15
156 7 11 2 THE MICROPALAEONTOLOGY AND STRATIGRAPHY	PDF	0.73
156 7 11 2 WELL COMPLETION REPORT	PDF	13.78
156 7 11 2 WELL COMPLETION REPORT PRODUCTION LICENSE 018	PDF	1.75
156 7 11 2 WELL PRODUCTION TEST DST NO-1	PDF	5.01
156 7 11 2 WELL PRODUCTION TEST DST NO-2	PDF	2.87





156 7 11 2 WELL PRODUCTION TEST DST NO-3	PDF	0.31
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Dokumenter - Sokkeldirektoratets publikasjoner

Dokument navn	Dokument format	Dokument størrelse [KB]
156 01 NPD Paper No.10 Lithology Well 7 11 2	pdf	24.45
156 02 NPD Paper No.10 Lithologic Correlation chart Well 7 11 2	pdf	32.57
156 03 NPD Paper No.10 Paleocene Correlation map Well 7 11 2	pdf	12.36

Borestrengtester (DST)

Test nummer	Fra dybde MD [m]	Til dybde MD [m]	Reduksjonsven til størrelse [mm]
1.0	3167	3193	0.0
2.0	3028	3107	19.0
3.0	2980	2999	0.0

Test nummer	Endelig avstengningstrykk [MPa]	Endelig strømningstrykk [MPa]	Bunnhullstrykk [MPa]	Borehullstemperatur [°C]
1.0				
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					
2.0	221	469000			2121
3.0					

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CBL	2668	3198





FDC	2896	3428
GR	104	484
HDT	1946	3294
IES	1946	3427
LL-7	484	3296
MLL	2896	3428
SGR	484	3427
SNP	2896	3428
VSP	30	3422

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	132.0	36	132.0	0.00	LOT
SURF.COND.	20	484.0	26	484.0	0.00	LOT
INTERM.	13 3/8	1945.0	17 1/2	1945.0	0.00	LOT
INTERM.	9 5/8	3203.0	12 1/4	3203.0	0.00	LOT
OPEN HOLE		3427.0	8 1/2	3427.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
1219	1.07	30.0	12.0	waterbased	
1981	1.19	65.0	30.0	waterbased	
2744	1.43	55.0	25.0	waterbased	
2959	1.63	55.0	8.0	waterbased	
3427	1.55	60.0	14.0	waterbased	