



Generell informasjon

Brønnbane navn	15/12-8 A
Type	EXPLORATION
Formål	APPRAISAL
Status	P&A
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Funn	15/12-8
Brønn navn	15/12-8
Seismisk lokalisering	ST 8802- ROW 547 & COLUMN 580
Utvinningstillatelse	038
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	691-L
Boreinnretning	DEEPSEA BERGEN
Boredager	16
Borestart	14.07.1991
Boreslutt	29.07.1991
Frigitt dato	29.07.1993
Publiseringsdato	17.10.2007
Opprinnelig formål	APPRAISAL
Gjenåpnet	NO
Innhold	GAS/CONDENSATE
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	LATE JURASSIC
1. nivå med hydrokarboner, formasjon.	VESTLAND GP
2. nivå med hydrokarboner, alder	TRIASSIC
2. nivå med hydrokarboner, formasjon	SKAGERRAK FM
Avstand, boredekk - midlere havflate [m]	23.0
Vanndybde ved midlere havflate [m]	87.0
Totalt målt dybde (MD) [m RKB]	2940.0
Totalt vertikalt dybde (TVD) [m RKB]	2939.0
Temperatur ved bunn av brønnbanen [°C]	123
Eldste penetrerte alder	TRIASSIC
Eldste penetrerte formasjon	SKAGERRAK FM
Geodetisk datum	ED50



NS grader	58° 3' 1.85" N
ØV grader	1° 58' 3.41" E
NS UTM [m]	6434946.27
ØV UTM [m]	439060.86
UTM sone	31
NPDID for brønnbanen	1835

Brønnhistorie

General

Wildcat well 15/12-8 was drilled ca 3.5 km east of the 15/12-4 well, which made the Varg oil discovery in Jurassic and Triassic sandstones. The main objective of the well was to test the potential for hydrocarbons in sandstones of Oxfordian and Triassic age. Seismic anomalies at 437, 467, 479 and 803 m indicated possibility for shallow gas. Planned TD for the well was 3260 m.

Operations and results

Well 15/12-8 was spudded with the semi-submersible installation Deepsea Bergen on 5 June 1991 and drilled to TD at 3054 m in the Triassic Skagerrak Formation. No significant problems occurred during operations. The well was drilled with seawater / hi-vis pills / CMC down to 615 m, with KCl/polymer mud from 615 m to 2855 m, and with Ancotemp/bentonite mud from 2855 m to TD. No shallow gas was encountered.

Jurassic Vestland Group sandstone was encountered hydrocarbon-bearing at 2838 m. The hydrocarbon column extended 23 m into Triassic sandstone of the Skagerrak Formation. The gas/water contact was estimated to 2877 m, confirmed by FMT pressure gradients and wire line logs. The well was tested, and since no core was cut through the reservoir, the well was sidetracked at 2623 m with TD at 2940 m. The sidetrack was drilled with Ancotemp/bentonite mud. Three conventional cores were cut in the interval 2841 - 2902 m. The sidetrack was formally named 15/12-8 A.

The FMT tool was run in well 15/12-8 and 15/12-8A. One segregated sample was taken at 2863 m in 15/12-8 (gas, condensate and mud filtrate) and another in the water zone at 2888 m in well 15/12-8 A (recovered mud only due to seal failure).

Well 15/12-8 was permanently abandoned on 14 July 1991 as a gas/condensate discovery. The 15/12-8 A sidetrack was permanently abandoned on 29 July as a gas/condensate appraisal well.

Testing

One DST test was performed in 15/12-8 in the interval 2838 - 2869 m. The well produced gas-condensate with a dew point of 230 bar at the measured reservoir temperature, which was 123 deg C. The rates were 550 000 Sm³ gas and 420 Sm³ condensate /day through a 15.9 mm choke. The condensate/gas ratio was 1308 Sm³/Sm³, the condensate gravity was 61 deg API, and the gas gravity was 0.817 (air = 1).

Borekaks i Sokkeldirektoratet



Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
2630.00	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	2841.0	2847.4	[m]
2	2847.4	2874.9	[m]
3	2874.9	2902.0	[m]

Total kjerneprøve lengde [m]	61.0
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder



2841-2846m



2846-2847m



2847-2852m



2852-2857m



2857-2862m



2862-2867m



2867-2872m



2872-2874m



2874-2879m



2879-2884m



2884-2889m



2889-2894m



2894-2899m



2899-2902m



Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
110	NORDLAND GP
1082	UTSIRA FM
1207	HORDALAND GP
2251	ROGALAND GP
2251	BALDER FM
2268	SELE FM
2333	LISTA FM
2441	VÅLE FM
2464	SHETLAND GP
2464	EKOFISK FM
2496	TOR FM
2626	HOD FM
2736	BLODØKS FM
2768	CROMER KNOLL GP
2768	RØDBY FM
2797	SOLA FM
2827	VIKING GP
2827	DRAUPNE FM
2838	VESTLAND GP
2856	NO GROUP DEFINED
2856	SKAGERRAK FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
1835_1	pdf	0.57
1835_2	pdf	1.26

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
1835_15_12_8_A_COMPLETION_REPORT_AND_LOG	pdf	22.14





Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
CDL CN GR	2621	2933
DIFL AC MLL GR	2621	2933
FMT GR	2838	2886

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
OPEN HOLE		2940.0	8 1/2	2940.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
2628	1.35	20.0	4.0	WATER BASED	23.07.1991
2628	1.35	20.0	3.5	WATER BASED	23.07.1991
2628	1.35	20.0	4.0	WATER BASED	24.07.1991
2628	1.35	18.0	3.5	WATER BASED	25.07.1991
2630	1.35	21.0	4.5	WATER BASED	23.07.1991
2751	1.35	20.0	4.0	WATER BASED	23.07.1991
2841	1.35	20.0	3.5	WATER BASED	23.07.1991
2862	1.35	21.0	4.5	WATER BASED	23.07.1991
2902	1.35	20.0	4.0	WATER BASED	24.07.1991
2940	1.35	18.0	3.5	WATER BASED	25.07.1991