Generell informasjon

Brønnbane navn	24/12-1
Type	EXPLORATION
Formål	WILDCAT
Status	SUSPENDED
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Brønn navn	24/12-1
Seismisk lokalisering	Sd 260 line 403-329
Utvinningstillatelse	045
Boreoperatør	Den norske stats oljeselskap a.s
Boretillatelse	189-L
Boreinnretning	ROSS RIG (1)
Boredager	84
Borestart	16.01.1978
Boreslutt	09.04.1978
Frigitt dato	09.04.1980
Publiseringsdato	01.12.2004
Opprinnelig formål	WILDCAT
Gjenåpnet	NO
Innhold	DRY
Funnbrønnbane	NO
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	113.0
Totalt målt dybde (MD) [m RKB]	3966.0
Totalt vertikalt dybde (TVD) [m RKB]	3966.0
Maks inklinasjon [°]	1.2
Temperatur ved bunn av brønnbanen [°C]	141
Eldste penetrerte alder	EARLY CRETACEOUS
Eldste penetrerte formasjon	SOLA FM
Geodetisk datum	ED50
NS grader	59° 2' 29.8'' N
ØV grader	1° 52' 57.93'' E
NS UTM [m]	6545372.48
ØV UTM [m]	435888.07
UTM sone	31
NPDID for brønnbanen	347

Brønnhistorie

General

Well 24/12-1 is located on the Gudrun Terrace ca 15 km east of the border to British sector. The purpose of the well was to evaluate a seismic closure, named Gamma, in the southern part of the Block. The main target was the Middle Jurassic sands. Well 24/12-1 was the first of two phases in drilling the borehole, and this first phase was planned to reach the Early Cretaceous only. The main target was planned to be reached in a later re-entry with a different rig than was available at the time when the well was scheduled.

The well is Type Well for the Skade Formation and Reference Well for the Grid Formation.

Operations and results

Wildcat well 24/12-1 was spudded with the semi-submersible installation Ross Rig on 16 January 1978. At the time when the well was to be spudded, Statoil did not have available a rig equipped with a 15000 psi BOP stack and associated equipment. The well was therefore spudded with Ross Rig, which was equipped with a 10000 psi BOP. Ross Rig drilled the well down to 3966 m in the Early Cretaceous Sola Formation. The 9 5/8" casing was set and the well was temporarily plugged and abandoned. The problems experienced during PHASE I were primarily related to weather (anchor chain breakage and WOW), BOP-stack, and items lost into the hole and the sea. The well was drilled with seawater and gel from down to 771 m, with lignosulphonate mud from 771 m to 2874 m, and with lignosulphonate/lignite/CMC from 7874 m to TD. From 2870 m 1 % to 8% oil was added to the mud.

Tertiary sandstone intervals were encountered in the Utsira Formation (497 m to 730 m), the Skade Formation (825 m to 1007 m), the Grid Formation (1502 m to 1660 m), and in the Paleocene Heimdal Formation (2326 m to 2700 m). No shows were encountered during drilling, but post-well organic geochemical analyses showed one cuttings sample from 2860 m to 2890 m to contain significant amounts of light hydrocarbons combined with a comparatively wet and mature cuttings gas. This could indicate migrated hydrocarbons, but the addition of oil to the mud at this depth makes the data inconclusive. Picked marl/clay lithology in the section from 3490 m to 3900 m (Coniacian to Albian) had TOC in the range 0.5% to 2.0 %, indicating fair source rock intervals in this section. No conventional cores were cut and no fluid samples taken.

The well was permanently abandoned as dry on 9 April 1978.

Testing

No drill stem test was performed

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
190.00	4820.00

Borekaks tilgjengelig for prøvetaking?	NO

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
520.0	[m]	DC	OD
550.0	[m]	DC	OD
630.0	[m]	DC	OD
660.0	[m]	DC	OD
670.0	[m]	DC	OD
730.0	[m]	DC	OD
770.0	[m]	DC	OD
780.0	[m]	DC	OD
800.0	[m]	DC	OD
930.0	[m]	DC	OD
970.0	[m]	DC	OD
980.0	[m]	DC	OD
1050.0	[m]	DC	OD
1060.0	[m]	DC	OD
1070.0	[m]	DC	OD
1080.0	[m]	DC	OD
1090.0	[m]	DC	OD
2169.0	[m]	DC	OD
2181.0	[m]	DC	OD
2187.0	[m]	DC	OD
2199.0	[m]	DC	OD
2208.0	[m]	DC	OD
2220.0	[m]	DC	OD
2229.0	[m]	DC	OD
2238.0	[m]	DC	OD
2250.0	[m]	DC	OD
2259.0	[m]	DC	OD
2268.0	[m]	DC	OD
2280.0	[m]	DC	OD
2289.0	[m]	DC	OD
2298.0	[m]	DC	OD
2310.0	[m]	DC	OD
2319.0	[m]	DC	OD
2328.0	[m]	DC	OD
2340.0	[m]	DC	OD
2349.0	[m]	DC	OD

2358.0	[m]	DC	OD
2367.0	[m]	DC	OD
2379.0	[m]	DC	OD
2388.0	[m]	DC	OD
2397.0	[m]	DC	OD
2409.0	[m]	DC	OD
2418.0	[m]	DC	OD
2427.0	[m]	DC	OD
2439.0	[m]	DC	OD
2448.0	[m]	DC	OD
2460.0	[m]	DC	OD
2469.0	[m]	DC	OD
2478.0	[m]	DC	OD
2487.0	[m]	DC	OD
2499.0	[m]	DC	OD
2508.0	[m]	DC	OD
2517.0	[m]	DC	OD
2532.0	[m]	DC	OD
2538.0	[m]	DC	OD
2547.0	[m]	DC	OD
2559.0	[m]	DC	OD
2568.0	[m]	DC	OD
2577.0	[m]	DC	OD
2589.0	[m]	DC	OD
2598.0	[m]	DC	OD
2610.0	[m]	DC	OD
2619.0	[m]	DC	OD
2628.0	[m]	DC	OD
2637.0	[m]	DC	OD
2649.0	[m]	DC	OD
2658.0	[m]	DC	OD
2670.0	[m]	DC	OD
2679.0	[m]	DC	OD
2688.0	[m]	DC	OD
2697.0	[m]	DC	OD
2709.0	[m]	DC	OD
2718.0	[m]	DC	OD
2727.0	[m]	DC	OD
2739.0	[m]	DC	OD
2748.0	[m]	DC	OD

2760.0	[m]	DC	OD
2769.0	[m]	DC	OD
2778.0	[m]	DC	OD
3747.0	[m]	DC	
3918.0	[m]	DC	
3945.0	[m]	DC	
3948.0	[m]	DC	
4031.0	[m]	DC	
4046.0	[m]	DC	
4076.0	[m]	DC	
4115.0	[m]	DC	
4151.0	[m]	DC	
4173.6	[m]	C	
4178.0	[m]	DC	
4181.6	[m]	C	
4196.0	[m]	DC	
4292.0	[m]	DC	
4337.0	[m]	DC	
4337.0	[m]	DC	
4394.0	[m]	DC	
4499.0	[m]	DC	
4508.0	[m]	DC	
4613.0	[m]	DC	
4649.0	[m]	DC	
4655.0	[m]	DC	
4712.0	[m]	DC	
4721.0	[m]	DC	
4742.0	[m]	DC	

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
138	NORDLAND GP
497	UTSIRA FM
732	NO FORMAL NAME
850	HORDALAND GP
850	SKADE FM
1007	NO FORMAL NAME
1502	GRID FM

1660	NO FORMAL NAME
2190	ROGALAND GP
2190	BALDER FM
2255	SELE FM
2307	LISTA FM
2326	HEIMDAL FM
2700	LISTA FM
2763	VÅLE FM
2768	SHETLAND GP
2768	EKOFISK FM
2784	TOR FM
3080	HOD FM
3550	TRYGGVASON FM
3672	BLODØKS FM
3681	SVARTE FM
3848	CROMER KNOLL GP
3848	RØDBY FM
3945	SOLA FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
347_1	pdf	0.60
347_1_Source_rock_evaluation_of_well_24_12_1_section_I	PDF	1.32
347_2_Source_rock_evaluation_of_well_24_12_1_section_II	PDF	5.04

Dokumenter - eldre Sokkeldirektoratets WDSS rapporter og andre relaterte dokumenter

Dokument navn	Dokument format	Dokument størrelse [KB]
347_01_WDSS_General_Information	pdf	0.21
347_03_WDSS_lithlog	pdf	0.08

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
347_1_Completion_Report_and_Completion_log	pdf	40.08
347_2_ADT_end_of_wel_summary	pdf	6.34
347_3_Computer_processed_interpretation	pdf	5.22
347_5_Seismic_reference	pdf	18.59
347_6_Source_rock_evaluation_of_well_24_12_1_section_I	PDF	1.32
347_7_Source_rock_evaluation_of_well_24_12_1_section_II	PDF	5.04

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
BHC GR	3870	3973
BHC GR	4150	4823
CBL GR	3704	3963
CBL VDL GR	126	2848
FDC CNL GR	4140	4823
FDC GR	747	3958
HDT	2848	3974
HDT	4118	4680
ISF GR	4125	4822
ISF SONIC GR	138	4823
VELOCITY	0	0

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	186.0	36	187.0	0.00	LOT
SURF.COND.	20	755.0	26	771.0	0.00	LOT
INTERM.	13 3/8	2855.0	17 1/2	2876.0	0.00	LOT
INTERM.	9 1/2	3966.0	12 1/4	3966.0	0.00	LOT

Boreslam

Dybde MD [m]	Egenvekt, slam [g/cm3]	Viskositet, slam [mPa.s]	Flytegrense [Pa]	Type slam	Dato, måling
375	1.10	75.0		water based	
680	1.10	45.0		water based	
1208	1.14	40.0		water based	
2446	1.26	57.0		water based	
2832	1.25	44.0		water based	
3017	1.19	43.0		water based	
3392	1.21	49.0		water based	
3980	1.40	51.0		water based	