

**General information**

Wellbore name	24/12-1
Type	EXPLORATION
Purpose	WILDCAT
Status	SUSPENDED
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	24/12-1
Seismic location	Sd 260 line 403-329
Production licence	045
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	189-L
Drilling facility	ROSS RIG (1)
Drilling days	84
Entered date	16.01.1978
Completed date	09.04.1978
Release date	09.04.1980
Publication date	01.12.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	113.0
Total depth (MD) [m RKB]	3966.0
Final vertical depth (TVD) [m RKB]	3966.0
Maximum inclination [°]	1.2
Bottom hole temperature [°C]	141
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	SOLA FM
Geodetic datum	ED50
NS degrees	59° 2' 29.8" N
EW degrees	1° 52' 57.93" E
NS UTM [m]	6545372.48
EW UTM [m]	435888.07
UTM zone	31
NPDID wellbore	347



Wellbore history

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 2874 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

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
190.00	4820.00

Cuttings available for sampling?	NO
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
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	

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
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

Geochemical information

Document name	Document format	Document size [MB]
347 1	pdf	0.60
347 1 Source rock evaluation of well 24 1 2 1 section I	PDF	1.32
347 2 Source rock evaluation of well 24 1 2 1 section II	PDF	5.04

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
347 01 WDSS General Information	pdf	0.21
347 03 WDSS lithlog	pdf	0.08

Documents - reported by the production licence (period for duty of secrecy expired)





Document name	Document format	Document size [MB]
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 1 2 1 section I	PDF	1.32
347 7 Source rock evaluation of well 24 1 2 1 section II	PDF	5.04

Logs

Log type	Log top depth [m]	Log bottom depth [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

Casing and leak-off tests

Casing type	Casing diam. [inch]	Casing depth [m]	Hole diam. [inch]	Hole depth [m]	LOT/FIT mud eqv. [g/cm3]	Formation test type
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

Drilling mud





Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
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	