

**General information**

Wellbore name	16/10-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	16/10-3
Seismic location	ES 9401- INLINE 1782 & CROSSLINE 5320
Production licence	101
Drilling operator	Norsk Agip AS
Drill permit	856-L
Drilling facility	TRANSOCEAN NORDIC
Drilling days	41
Entered date	22.10.1996
Completed date	01.12.1996
Release date	01.12.1998
Publication date	31.10.2003
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	40.0
Water depth [m]	75.0
Total depth (MD) [m RKB]	2850.0
Final vertical depth (TVD) [m RKB]	2849.0
Maximum inclination [°]	3.2
Bottom hole temperature [°C]	103
Oldest penetrated age	TRIASSIC
Oldest penetrated formation	SMITH BANK FM
Geodetic datum	ED50
NS degrees	58° 13' 18.54" N
EW degrees	2° 19' 34.3" E
NS UTM [m]	6453751.14
EW UTM [m]	460416.92
UTM zone	31
NPDID wellbore	2703



Wellbore history

General

Well 16/10-3 was drilled as an exploration well on the "Tyr Central prospect" located near the block boundary in the northeast part of the Block in Production License 101. The licence was awarded in 1985, after the 9th concession round.

The purpose of drilling well 16/10-3 was to test the hydrocarbon potential of the Middle Jurassic/Triassic reservoir (Hugin and Skagerrak Formations) in the Tyr structure. The tested structure consisted in several culminations with a common dip closure. The well location was set on the largest of these, called "Tyr Central". The well was drilled by Norsk Agip as operator and was a joint well with the licence holders of PL 072.

Operations and results

Exploration well 16/10-3 was spudded with the jack-up installation "Transocean Nordic" on 22 October 1996 and drilled to a total depth of 2850 m in the Triassic Smith Bank Formation shales. The well was drilled/cased/logged and abandoned in 40 days but due to WOW (wait on weather) the rig was not released from its contract and moved off location until the 6 December 1996 after a total of almost 51 days. The well was drilled with spud mud down to 196 m, with Seawater and PAC hi-vis sweeps from 196 m to 431, and with KCl / PAC glycol mud from 431 m to TD.

All the expected formations were encountered. The Jurassic/Triassic sands were found with fair reservoir quality. The expected reservoir was encountered at 2521 m, 31 m deeper than prognosis. The Hugin-Skagerrak sands were found water bearing and no hydrocarbon shows were detected. No relevant gas amounts were recorded in the well and no hydrocarbon shows were identified on cuttings in the reservoir section. Two FMT fluid samples were collected at two different depths: the recovery was mud filtrate in the first sample at 2522 m and mud in the second one at 2544.3 m. No conventional cores were cut in this well. The well was permanently abandoned as a dry well on 1 December 1996.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
210.00	2849.00

Cuttings available for sampling?	YES
----------------------------------	-----

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
2300.0	[m]	DC	MILLENNI
2310.0	[m]	DC	MILLEN



2320.0	[m]	DC	MILLEN
2330.0	[m]	DC	MILLEN
2340.0	[m]	DC	MILLEN
2350.0	[m]	DC	MILLEN
2360.0	[m]	DC	MILLEN
2370.0	[m]	DC	MILLEN
2382.2	[m]	SWC	MILLEN
2390.0	[m]	DC	MILLEN
2400.0	[m]	DC	MILLEN
2410.0	[m]	DC	MILLEN
2420.0	[m]	DC	MILLEN
2430.0	[m]	DC	MILLEN
2440.0	[m]	DC	MILLEN
2450.0	[m]	DC	MILLEN
2457.4	[m]	SWC	MILLEN
2470.0	[m]	DC	MILLEN
2480.0	[m]	DC	MILLEN
2490.0	[m]	DC	MILLEN
2500.0	[m]	DC	MILLEN
2505.0	[m]	DC	MILLEN
2510.0	[m]	DC	MILLEN
2513.0	[m]	DC	MILLEN
2516.0	[m]	DC	MILLEN
2519.5	[m]	SWC	MILLEN
2522.5	[m]	SWC	MILLEN
2524.0	[m]	SWC	MILLEN
2528.5	[m]	SWC	MILLEN
2532.4	[m]	SWC	MILLEN
2542.4	[m]	SWC	MILLEN
2546.0	[m]	DC	MILLEN
2555.0	[m]	DC	MILLEN
2568.3	[m]	SWC	MILLEN
2573.0	[m]	DC	MILLEN
2579.0	[m]	SWC	MILLEN
2594.0	[m]	DC	MILLEN
2609.0	[m]	DC	MILLEN
2622.5	[m]	SWC	MILLEN
2633.0	[m]	DC	MILLEN
2642.0	[m]	DC	MILLEN
2654.0	[m]	DC	MILLEN



2663.0	[m]	DC	MILLEN
2675.0	[m]	DC	MILLEN
2684.0	[m]	DC	MILLEN
2693.0	[m]	DC	MILLEN
2705.0	[m]	DC	MILLEN
2714.0	[m]	DC	MILLEN
2723.0	[m]	DC	MILLEN
2732.0	[m]	DC	MILLEN
2744.0	[m]	DC	MILLEN
2753.0	[m]	DC	MILLEN
2765.0	[m]	DC	MILLEN
2780.0	[m]	DC	MILLEN
2794.7	[m]	SWC	MILLEN
2794.8	[m]	SWC	MILLEN
2813.0	[m]	DC	MILLEN
2825.0	[m]	DC	MILLEN
2837.0	[m]	DC	MILLEN
2849.0	[m]	DC	MILLEN

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
115	NORDLAND GP
947	UTSIRA FM
991	UNDIFFERENTIATED
1018	HORDALAND GP
1829	ROGALAND GP
1829	BALDER FM
1889	SELE FM
1895	LISTA FM
2012	VÅLE FM
2029	SHETLAND GP
2029	EKOFISK FM
2076	TOR FM
2250	HOD FM
2350	SVARTE FM
2361	CROMER KNOLL GP
2361	RØDBY FM
2378	SOLA FM



2411	ÅSGARD FM
2501	VIKING GP
2501	DRAUPNE FM
2521	VESTLAND GP
2521	HUGIN FM
2532	NO GROUP DEFINED
2532	SKAGERRAK FM
2626	SMITH BANK FM

Composite logs

Document name	Document format	Document size [MB]
2703	pdf	0.43

Geochemical information

Document name	Document format	Document size [MB]
2703_1	pdf	1.93
2703_2	pdf	1.38

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

Document name	Document format	Document size [MB]
2703_16_10_3_COMPLETION_REPORT_AND_COMPLETION_LOG	pdf	77.56

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DLL ACL GR CAL	421	1232
DLL ACL GR CAL	2138	2849
DLL ACL ZDEN GR	1225	2147
FMT GR	2522	2620
FMT GR	2522	2527
FMT GR	2522	2621





HEXDIP GR	2138	2849
MWD - DPR DIR	431	2850
MWD - GR DPR DIR	196	431
SWC GR	2346	2795
VSP GR	900	2845
ZDEN CN SL	2138	2849

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	187.0	36	190.0	0.00	LOT
SURF.COND.	20	421.0	26	422.0	1.49	LOT
INTERM.	13 3/8	1225.0	17 1/2	1226.0	1.77	LOT
INTERM.	9 5/8	2138.0	12 1/4	2140.0	1.75	LOT
OPEN HOLE		2850.0	8 1/2	2850.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
160	1.38	29.0		KCL/PAC/GLYCOL	
195	1.08			SPUD MUD	
196	1.05	13.0		SEAWATER	
431	1.18	14.0		SW/PAC	
431	1.17	17.0		SEAWATER	
508	1.25	20.0		KCL/PAC/GLYCOL	
925	1.30	19.0		KCL/PAC/GLYCOL	
1235	1.37	16.0		KCL/PAC/GLYCOL	
1598	1.39	25.0		KCL/PAC/GLYCOL	
2054	1.38	28.0		KCL/PAC/GLYCOL	
2150	1.45	30.0		KCL/PAC/GLYCOL	
2527	1.39	31.0		KCL/PAC/GLYCOL	
2545	1.40	29.0		KCL/PAC/GLYCOL	
2850	1.39	28.0		KCL/PAC/GLYCOL	

Pressure plots





The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
2703 Formation pressure (Formasjonstrykk)	pdf	0.22

