

**General information**

Wellbore name	16/4-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	16/4-3
Seismic location	UP96 3D X-LINE 2922 & INLINE 497
Production licence	243
Drilling operator	BP Amoco Norge AS
Drill permit	987-L
Drilling facility	WEST DELTA
Drilling days	20
Entered date	05.12.2000
Completed date	24.12.2000
Release date	24.12.2002
Publication date	29.08.2003
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	29.0
Water depth [m]	102.0
Total depth (MD) [m RKB]	2425.0
Final vertical depth (TVD) [m RKB]	2425.0
Maximum inclination [°]	1.7
Oldest penetrated age	PALEOCENE
Oldest penetrated formation	EKOFISK FM
Geodetic datum	ED50
NS degrees	58° 42' 18.51" N
EW degrees	2° 3' 51.45" E
NS UTM [m]	6507747.85
EW UTM [m]	445780.92
UTM zone	31
NPDID wellbore	4194



Wellbore history

General

Block 16/4 was initially awarded to Norsk Hydro as PL087 in 1984. Two exploration wells were drilled; 16/4-1 in 1984 and 16/4-2 in 1990. Both wells were targeted at Eocene prospects, however neither well was successful due to the inability of hydrocarbons to successfully migrate through thick Palaeocene mudstones into the targeted Eocene prospects. Subsequently, PL087 was relinquished on 1 January 1995. BP, in partnership with Norsk Hydro, was awarded Block 16/4 as the PL243 license as part of the North Sea Awards in 1999. The 16/4-3 well is the first well drilled in the license since the award and was targeted to penetrate Palaeocene turbidite sands in the Fluoritt Prospect located at the western edge of the Utsira High in the South Viking Graben of the North Sea. It was designed to determine the hydrocarbon type and properties in the Fluoritt Prospect.

Operations and results

Exploration well 16/4-3 well was spudded with the semi-submersible installation "West Delta" on 5 December 2000 and drilled to TD at 2425 m in the Early Paleocene Ekofisk Formation. The well was drilled with seawater and bentonite hi-vis pills down to 400 m, with KCl polymer mud from 400 m to 1700 m, and with KCl glycol enhanced mud ("GEM") from 1700 m to TD. Top Hermod was encountered 27 m low to prognosis at 2196.3 m. Hydrocarbon fluorescence was observed in cuttings from thin Hermod sands in the interval 2195 m - 2220 m and also from a Middle Heimdal Formation sand in the interval 2277 m to 2282 m, however, the Hermod sandstones were poorly developed at the well location and are considered uneconomic. No conventional or sidewall cores were cut in the well. No fluid samples were taken, neither on wire line nor from DST. Well 16/4-3 was permanently abandoned as a well with oil shows on 24 December 2000.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
410.00	2425.00

Cuttings available for sampling?	YES
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Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
131	NORDLAND GP
745	UTSIRA FM



952	UNDIFFERENTIATED
1032	HORDALAND GP
1110	SKADE FM
1143	NO FORMAL NAME
1823	GRID FM
1880	NO FORMAL NAME
2075	ROGALAND GP
2075	BALDER FM
2132	SELE FM
2196	HERMOD FM
2197	SELE FM
2207	HERMOD FM
2208	SELE FM
2245	LISTA FM
2277	HEIMDAL FM
2282	LISTA FM
2334	HEIMDAL FM
2412	SHETLAND GP
2412	EKOFISK FM

Composite logs

Document name	Document format	Document size [MB]
4194	pdf	0.33

Geochemical information

Document name	Document format	Document size [MB]
4194_1	pdf	0.86

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

Document name	Document format	Document size [MB]
4194_16_4_3_COMPLETION_LOG	.pdf	10.05
4194_16_4_3_COMPLETION_REPORT	.pdf	0.60



**Logs**

Log type	Log top depth [m]	Log bottom depth [m]
CSAT GR	700	2417
MDT GR	2196	2354
MPR - GR BAT	403	2425
MPR - GR	130	403
PEX GR HRLA DSI SP	130	2421

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	204.5	36	204.5	0.00	LOT
SURF.COND.	20	400.0	26	401.0	1.70	LOT
INTERM.	9 5/8	1700.0	12 1/4	1701.0	1.72	LOT
OPEN HOLE		2425.0	8 1/2	2425.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
1011	1.27	22.0		KCL	
1475	1.28	25.0		KCL	
1700	1.28	20.0		KCL	
1825	1.36	20.0		KCL	
2425	1.38	20.0		KCL	

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]
4194_Formation_pressure_(Formasjonstrykk)	pdf	0.22

