

**General information**

Wellbore name	16/5-1
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	16/5-1
Seismic location	
Production licence	007
Drilling operator	Elf Petroleum Norge AS
Drill permit	52-L
Drilling facility	PENTAGONE 81
Drilling days	23
Entered date	17.01.1971
Completed date	08.02.1971
Release date	08.02.1973
Publication date	24.09.2004
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	24.0
Water depth [m]	103.0
Total depth (MD) [m RKB]	1943.0
Final vertical depth (TVD) [m RKB]	1943.0
Bottom hole temperature [°C]	44
Oldest penetrated age	PRE-DEVONIAN
Oldest penetrated formation	BASEMENT
Geodetic datum	ED50
NS degrees	58° 38' 53.66" N
EW degrees	2° 29' 39.69" E
NS UTM [m]	6501144.01
EW UTM [m]	470652.69
UTM zone	31
NPDID wellbore	189

**Wellbore history****General**

Well 16/5-1 is located on the Utsira High in the North Sea. The main target of the 16/5-1 well ("Vali") was a pinch-out of Paleocene sands on a seismic monoclinel. The interest in this trap was emphasized by oil-shows in Paleocene sands in surrounding wells.

Operations and results

Wildcat well 16/5-1 was spudded with the semi-submersible installation Pentagone 81 on 17 January 1971 and drilled to TD at 1943 m in granitic basement rocks. The well was drilled using seawater-based mud.

The Paleocene sands, which were the main objective of the Vali well, were not present. A thin Cretaceous series was found directly overlaying Caledonian basement rocks. From 1923 m to TD the well penetrated migmatitic granite, highly fractured and slightly weathered down to 1940 m. No shows were recorded, only background gas of C1 from 1% to 3 % while drilling the tertiary series. The only reservoirs encountered in Vali well were 164 m net sand in the sand-shale sequence in the Utsira Formation from 754 m to 1012 m. These sands, very fine to medium and shelly, have very high porosity, more than 32 %. However, they are not sufficiently buried to form a trap and they were water wet. Two cores were cut: the first from 1573 to 1584 m in the Sele and Lista Formations, 15 m below the cinerites, and the second from 1929 to 1943 m in the basement rocks. No fluid samples were attempted. The well was permanently abandoned as a dry well on 8 February 1971.

Testing

No drill stem test was performed

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	1573.0	1582.0	[m]
2	1929.0	1942.0	[m]

Total core sample length [m]	22.0
Cores available for sampling?	YES

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
765.0	[m]	DC	
820.0	[m]	DC	
900.0	[m]	DC	
930.0	[m]	DC	



960.0 [m]	DC	
990.0 [m]	DC	
1020.0 [m]	DC	
1065.0 [m]	DC	
1095.0 [m]	DC	
1130.0 [m]	DC	
1155.0 [m]	DC	
1200.0 [m]	DC	
1260.0 [m]	DC	
1300.0 [m]	DC	
1330.0 [m]	DC	
1360.0 [m]	DC	
1390.0 [m]	DC	
1420.0 [m]	DC	
1470.0 [m]	DC	
1495.0 [m]	DC	
1530.0 [m]	DC	
1558.0 [m]	DC	
1573.0 [m]	DC	
1573.0 [m]	C	SAGA
1577.0 [m]	C	SAGA
1579.0 [m]	C	SAGA
1582.0 [m]	C	SAGA
1600.0 [m]	DC	
1630.0 [m]	DC	
1650.0 [m]	DC	
1675.0 [m]	DC	
1695.0 [m]	DC	
1715.0 [m]	DC	
1735.0 [m]	DC	
1750.0 [m]	DC	
1855.0 [m]	DC	
1880.0 [m]	DC	
1895.0 [m]	DC	
1920.0 [m]	DC	

Lithostratigraphy



Top depth [mMD RKB]	Lithostrat. unit
127	NORDLAND GP
754	UTSIRA FM
842	UNDIFFERENTIATED
1012	HORDALAND GP
1527	ROGALAND GP
1527	BALDER FM
1557	SELE FM
1580	LISTA FM
1648	VÅLE FM
1662	SHETLAND GP
1662	EKOFISK FM
1699	TOR FM
1756	HOD FM
1848	SVARTE FM
1859	CROMER KNOLL GP
1859	SOLA FM
1923	ÅSGARD FM
1925	BASEMENT

Composite logs

Document name	Document format	Document size [MB]
189	pdf	0.16

Geochemical information

Document name	Document format	Document size [MB]
189 1	pdf	0.02
189 2 Etude stratigraphique geochemique_e t sedimentologique 16 5 1	pdf	94.12

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





Document name	Document format	Document size [MB]
189_01_WDSS_General_Information	pdf	0.15

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

Document name	Document format	Document size [MB]
189_1_Completion_Report	pdf	5.02

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BHC	507	1533
BHC GR	1535	1938
GR	121	1533
HDT	507	1533
HDT	1535	1938
IES	507	1533
IES	1535	1938
SWC	0	0
SWC	0	0
TL	125	1230
VEL	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	164.0	36	165.0	0.00	LOT
INTERM.	13 3/8	507.0	17 1/2	511.0	0.00	LOT
INTERM.	9 5/8	1535.0	12 1/4	1538.0	0.00	LOT
OPEN HOLE		1950.0	8 1/2	1950.0	0.00	LOT

Drilling mud





Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
507	0.00			seawater	
1533	0.00			seawater	
1943	0.00			seawater	