

**General information**

Wellbore name	6407/6-2
Type	EXPLORATION
Purpose	WILDCAT
Status	BLOWOUT
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Well name	6407/6-2
Seismic location	ST 8402 - 123 SP. 750
Production licence	092
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	484-L
Drilling facility	WEST VANGUARD
Drilling days	3
Entered date	04.10.1985
Completed date	06.10.1985
Release date	06.10.1987
Publication date	13.12.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	22.0
Water depth [m]	221.0
Total depth (MD) [m RKB]	524.0
Final vertical depth (TVD) [m RKB]	504.0
Oldest penetrated age	PLIOCENE
Oldest penetrated formation	NAUST FM
Geodetic datum	ED50
NS degrees	64° 42' 29.56" N
EW degrees	7° 40' 32.59" E
NS UTM [m]	7176774.36
EW UTM [m]	436871.33
UTM zone	32
NPDID wellbore	522



Wellbore history

General

Well 6407/6-2 was drilled on a structure in the western part of the block. The structure has two distinct highs, and the target for this well was on the northern high. The primary objective for the well was to test possible hydrocarbon accumulation in sandstones of middle Jurassic age (Fangst Group). Secondary objectives were seen in sands near base Cretaceous (Cromer Knoll Group), in Early Jurassic sandstones (Tilje Formation), in sandstones within the Åre Formation, and in the Triassic Grey- and Red Beds. The top hole and Tertiary sections of this well were expected to contain shallow gas, possibly at a depth of 570 m. Possibly, also swelling, overpressured Early Eocene Red/Brown claystone could be encountered. The prognosed depth was 4150 m, or rocks of Triassic age.

Operations and results

Wildcat well 6407/6-2 was spudded with the semi-submersible installation West Vanguard on 4 October 1985. It was abandoned at a depth of 523 m due to a blow out. The blow out probably was caused by gas from a shallow sand pocket at 505 m. Gas samples from the blow out were analysed and found to be gas generated by bacteria at shallow depths.

The 20" casing had not yet been set so the blow-out preventer (BOP) had not been installed when the incident happened. At 20:50 hours in the evening an increase in the penetration rate from 40 to 700 m/hour was observed. Drilling was immediately stopped and the bit pulled out of hole. The hole was circulated for 35 minutes. A 3-m³ mud loss was observed. After gas had been circulated out drilling of a 12 1/4" pilot commenced from 508 m to 516 m. Here background gas again increased. After again circulating out the gas drilling continued to 524 m where the drill string was pulled out 15 m for a new stand connection. The well now started flowing uncontrolled and pumping of kill mud started. This did not stop the blow out. Gas flowed onto the deck of the rig and at 23:20 hours the gas exploded. One person was killed and the platform was severely damaged.

The well was suspended on 6 October 1985.

Testing

No drill stem test was performed.

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
243	NORDLAND GP
243	NAUST FM

Geochemical information

Document name	Document format	Document size [MB]
522_1	pdf	0.40



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

Document name	Document format	Document size [MB]
522_01_WDSS_General_Information	pdf	0.20

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

Document name	Document format	Document size [MB]
522_01_Completionreport	pdf	0.94
522_02_Completionlog	pdf	0.17

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	318.0	36	323.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
323	1.06	2900.0	11.0	WATER BASED	07.10.1985
524	1.08	2900.0	11.0	WATER BASED	11.12.1985

