

**General information**

Wellbore name	6507/5-3
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Field	SKARV
Discovery	6507/5-3 Ærfugl
Well name	6507/5-3
Seismic location	ANO 9701 xlime 1082& inline 1165
Production licence	212
Drilling operator	BP Amoco Norge AS
Drill permit	974-L
Drilling facility	WEST NAVION
Drilling days	40
Entered date	15.05.2000
Completed date	23.06.2000
Release date	23.06.2002
Publication date	18.12.2002
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS
Discovery wellbore	YES
1st level with HC, age	LATE CRETACEOUS
1st level with HC, formation	LYSING FM
Kelly bushing elevation [m]	36.0
Water depth [m]	417.0
Total depth (MD) [m RKB]	3000.0
Final vertical depth (TVD) [m RKB]	3000.0
Maximum inclination [°]	1.2
Bottom hole temperature [°C]	110
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	LANGE FM
Geodetic datum	ED50
NS degrees	65° 35' 20.85" N
EW degrees	7° 24' 36.93" E
NS UTM [m]	7275223.47
EW UTM [m]	426690.58



UTM zone	32
NPDID wellbore	4059

Wellbore history

General

Production License 212 was part of the 15th Licensing Round awarded in 1996 and covers blocks 6507/5 and 6507/6. The primary target of well 6507/5-3 was the Snadd Prospect, defined as a combined stratigraphic and structural trap with reservoir provided by turbidite sandstones of the Upper Cretaceous Lysing Formation. The well was further designed to provide adequate geoscience and engineering data to allow a confident decision for future activity on the Snadd Prospect, and a Skarv Area development plan.

Operations and results

Wildcat well 6507/5-3 was spudded with the drill ship "West Navion" on the 15 May 2000. While opening the 12 1/4" pilot hole to 36", the drill string stalled out and spun back freely resulting in the BHA being dropped to the seabed. Attempts to recover the fish were made, but were unsuccessful. The rig was moved 11.6 m to the southwest and the well was re-spudded on the 19th May 2000 and drilled to TD at 3000 m in the Cretaceous Lange Formation. The well was drilled with seawater and bentonite hi-vis pills down to 695 m and with KCl/Glycol mud from 695 m to TD. The well came in as a gas discovery with the majority of the reservoir and hydrocarbon parameters within the pre-drill prognosed range. It was the first Cretaceous discovery in the Nordland area not found by chance. Top reservoir came in at a depth of 2837.5 m. The well encountered a gross reservoir section of 55.2 m with a gas water contact clearly visible on log and pressure data. The net pay in the well is 37.2 m with a net to gross ratio of 67%. Average porosity in the pay zone is 24% with average water saturation at 36%. Coring gave four short cores from the Lysing Formation in the interval 2836.5 m to 2855 m (2841.7 m to 2859.4 m loggers depth), with 54% to 100% recovery. Several technical problems were encountered during coring. Three MDT fluid samples were recovered from the Lysing Formation. Of these, two samples at 2843 m and 2864.5 m contained gas, while a sample at 2875 m contained water.

The well was permanently abandoned as a gas discovery on the 23 June 2000.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
700.00	2999.00

Cuttings available for sampling?	YES
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Cores at the Norwegian Offshore Directorate



Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2836.5	2840.0	[m]
2	2843.0	2843.7	[m]
3	2844.0	2851.6	[m]
4	2852.0	2855.0	[m]

Total core sample length [m]	14.7
Cores available for sampling?	YES

Core photos

2836-2843m



2844-2849m



2849-2854m



2854-2855m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1380.0	[m]	DC	
1410.0	[m]	DC	
1430.0	[m]	DC	
1450.0	[m]	DC	
1470.0	[m]	DC	
1830.0	[m]	DC	
1850.0	[m]	DC	
1870.0	[m]	DC	
1890.0	[m]	DC	
1910.0	[m]	DC	
2040.0	[m]	DC	
2060.0	[m]	DC	
2090.0	[m]	DC	
2120.0	[m]	DC	
2150.0	[m]	DC	
2160.0	[m]	DC	
2180.0	[m]	DC	



2190.0	[m]	DC	
2590.0	[m]	DC	
2615.0	[m]	DC	
2636.0	[m]	DC	
2669.0	[m]	DC	
2702.0	[m]	DC	
2732.0	[m]	DC	
2762.0	[m]	DC	
2792.0	[m]	DC	
2822.0	[m]	DC	
2838.7	[m]	C	OD
2838.8	[m]	C	
2838.9	[m]	C	
2839.4	[m]	C	OD
2840.0	[m]	DC	
2843.0	[m]	C	
2845.3	[m]	C	
2845.3	[m]	C	OD
2845.4	[m]	C	
2848.6	[m]	C	
2848.8	[m]	C	
2849.9	[m]	C	
2851.4	[m]	C	
2851.4	[m]	C	OD
2853.7	[m]	C	
2853.8	[m]	C	OD
2854.4	[m]	C	
2858.0	[m]	DC	
2862.0	[m]	SWC	
2868.5	[m]	SWC	
2873.0	[m]	DC	
2874.0	[m]	SWC	
2881.0	[m]	SWC	
2885.0	[m]	SWC	
2891.5	[m]	SWC	
2894.0	[m]	DC	
2906.0	[m]	DC	
2927.0	[m]	DC	
2948.0	[m]	DC	
2969.0	[m]	DC	



2981.0	[m]	DC	
2999.0	[m]	DC	
3838.6	[m]	C	OD

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
454	NORDLAND GP
454	NAUST FM
1440	KAI FM
1858	HORDALAND GP
1858	BRYGGE FM
2048	ROGALAND GP
2103	TANG FM
2142	SHETLAND GP
2255	NISE FM
2596	KVITNOS FM
2838	CROMER KNOLL GP
2838	LYSING FM
2893	LANGE FM

Composite logs

Document name	Document format	Document size [MB]
4059	pdf	0.35

Geochemical information

Document name	Document format	Document size [MB]
4059_1	pdf	1.32
4059_2	pdf	1.23

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





Document name	Document format	Document size [MB]
4059 6507 5 3 COMPLETION LOG	.pdf	4.22
4059 6507 5 3 COMPLETION REPORT	.pdf	28.56

Logs

Log type	Log top depth [m]	Log bottom depth [m]
FMI DSI	400	2960
HALS DSI PEX GPIT	1673	2975
LWD - MPR GR	500	1702
LWD - MPR GR	2837	3000
LWD - MPR ORD GR	1702	2837
MDT GR	2843	2892
MSCT GR	2862	2869
MSCT GR	2871	2892
VSP AMS GR	1050	2985

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	536.0	36	539.0	0.00	LOT
SURF.COND.	20	688.0	26	695.0	1.32	LOT
INTERM.	13 3/8	1670.0	17 1/2	1670.0	1.68	LOT
OPEN HOLE		3000.0	12 1/4	3000.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
695	1.32	28.0		POLYMER	
1350	1.32	16.0		POLYMER	
1702	1.32	15.0		POLYMER	
2000	1.56	21.0		POLYMER	
2727	1.58	30.0		POLYMER	
2836	1.58	21.0		POLYMER	
2843	1.58	22.0		POLYMER	
2844	1.58	25.0		POLYMER	





2852	1.58	22.0		POLYMER	
2855	1.58	22.0		POLYMER	
3000	1.57	18.0		POLYMER	
3000	1.07			SEAWATER	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
2836.55	[m]
2845.00	[m]
2848.00	[m]
2850.25	[m]
2853.50	[m]

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]
4059 Formation pressure (Formasjonstrykk)	pdf	0.27

