



General information

Wellbore name	15/9-19 S
Type	EXPLORATION
Purpose	WILDCAT
Status	SUSPENDED
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VOLVE
Discovery	15/9-19 S Volve
Well name	15/9-19
Seismic location	ST 8215 R - 571 CROSSLINE 491
Production licence	046
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	749-L
Drilling facility	TREASURE PROSPEC
Drilling days	75
Entered date	18.11.1992
Completed date	31.01.1993
Release date	31.01.1995
Publication date	15.12.2006
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	22.0
Water depth [m]	84.0
Total depth (MD) [m RKB]	3580.0
Final vertical depth (TVD) [m RKB]	2405.8
Maximum inclination [°]	60.9
Oldest penetrated age	PALEOCENE
Oldest penetrated formation	LISTA FM
Geodetic datum	ED50
NS degrees	58° 26' 9.25" N
EW degrees	1° 55' 47.05" E
NS UTM [m]	6477887.72
EW UTM [m]	437506.71
UTM zone	31
NPDID wellbore	2043



Wellbore history

General

Wildcat well 15/9-19 S was the first well to be drilled into the Theta Vest Structure north of the Sleipner East Field. It was designed to test gas from the Heimdal reservoir, and to provide geological and reservoir data enabling optimal reservoir management. The secondary target was the Hugin/Skagerrak Sands, which were to be fully evaluated if hydrocarbon bearing.

Operations and results

Well 15/9- 19 S was spudded with the semi-submersible installation Treasure Prospect on 18 November 1992, from Slot 3 of the Loke Discovery template. The well was deviated, penetrating the top of the Theta Vest structure approximately 2290 m west northwest of the Loke Template, and reached the target Top Heimdal Formation at 3622.5 m (2427.0 m TVD RKB). The 12 1/4" section from 1482 m to 3580 m was drilled with significant problems. Trips out of the hole at 2018 m, 3016 m and 3353 m were performed to change the bits, due to low penetration rate. The hole packed of several times when tripping out. Problems with lost returns and stuck BHA finally led to plugging back and sidetracking from 1493 m. Attempts to orientate the well became progressively more difficult, especially after penetrating 3308.5 m in the Balder Formation. The Lista Formation was encountered at 3483 m, and final TD was set at 3580 m, at the edge of the Heimdal Formation target. The well was drilled with bentonite mud down to 531 m, and with KCL/POLYMER (Phpa/pac) mud from 531 m to TD in the first hole. After sidetracking oil based mud (Petrofree) was used.

The well penetrated 150 m TVD of Tertiary sands between 1313 m and top Balder Formation at 3302 m.

It was temporarily suspended on 31 January 1993 after setting 9 5/8" casing at 3569.0 m (2394.0 m TVD RKB), immediately above the Heimdal sands. No cores were cut and no fluid samples taken in this well bore. It is classified as a dry well.

Testing

No drill stem test was performed

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
3452.00	4640.00

Cuttings available for sampling?	YES
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Core photos



3643-3647m



4328-4333m



4338-4343m



4343-4348m



4348-4353m



4353-4354m



4355-4360m



4360-4365m



4365-4370m



4370-4375m



4375-4380m



4380-4383m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
3584.0	[m]	DC	RRI
3593.0	[m]	DC	RRI
3602.0	[m]	DC	RRI
3608.0	[m]	DC	RRI
3614.0	[m]	DC	RRI
3620.0	[m]	DC	RRI
3626.0	[m]	DC	RRI
3635.0	[m]	DC	RRI
3656.0	[m]	DC	RRI
3665.0	[m]	DC	RRI
3668.0	[m]	DC	RRI
3674.0	[m]	DC	RRI
3680.0	[m]	DC	RRI
3695.0	[m]	DC	RRI
3704.0	[m]	DC	RRI
3710.0	[m]	DC	RRI



3728.0	[m]	DC	RRI
3743.0	[m]	DC	RRI
3746.0	[m]	DC	RRI
3749.0	[m]	DC	RRI
3755.0	[m]	DC	RRI
3764.0	[m]	DC	RRI
3779.0	[m]	DC	RRI
3794.0	[m]	DC	RRI
3806.0	[m]	DC	RRI
3809.0	[m]	DC	RRI
3827.0	[m]	DC	RRI
3830.0	[m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
106	NORDLAND GP
847	UTSIRA FM
1108	HORDALAND GP
1313	SKADE FM
1451	NO FORMAL NAME
3008	GRID FM
3240	NO FORMAL NAME
3302	ROGALAND GP
3302	BALDER FM
3403	SELE FM
3483	LISTA FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DIFL AC GR	3567	4602
MWD - DPR GR	3569	4638
MWD - MNP MDL GR	3589	4638
ZDL CN GR	3587	4602

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	166.0	36	166.0	0.00	LOT
SURF.COND.	20	531.0	26	531.0	0.00	LOT
INTERM.	13 3/8	1482.0	17 1/2	1484.0	0.00	LOT
INTERM.	9 5/8	3569.0	12 1/4	3572.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
215	1.37	8.0		SEAWATER/BENT.	
402	1.37	8.0		SEAWATER/BENT.	
2178	1.50	51.0		ULTIDRILL	
2213	1.50	49.0		ULTIDRILL	