General information

Wellbore name	6406/6-6 A
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Discovery	6406/6-6 S (Jasper)
Well name	6406/6-6
Seismic location	PGS15005 Inline 21766. Crossline 8172
Production licence	255 B
Drilling operator	Total E&P Norge AS
Drill permit	1738-L
Drilling facility	SCARABEO 8
Drilling days	40
Entered date	17.11.2018
Completed date	05.01.2019
Plugged and abondon date	05.01.2019
Release date	05.01.2021
Publication date	30.04.2021
Purpose - planned	APPRAISAL
Reentry	NO
Content	NOT AVAILABLE
Discovery wellbore	NO
Kelly bushing elevation [m]	33.7
Water depth [m]	265.0
Total depth (MD) [m RKB]	4869.0
Final vertical depth (TVD) [m RKB]	4692.0
Maximum inclination [°]	44.6
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	ROR FM
Geodetic datum	ED50
NS degrees	64° 35' 47.57'' N
EW degrees	6° 51' 14.34'' E
NS UTM [m]	7165407.85
EW UTM [m]	397287.18
UTM zone	32
NPDID wellbore	8623

Wellbore history

Well 6406/6-6 A is a geological side-track to well 6406/6-6 S, which found gas in Fangst Group sandstones. The well was drilled to appraise the Jasper prospect on the Halten Terrace in the Norwegian Sea. The primary objective was to confirm a hydrocarbon column in the Ile Formation up-dip from the mainbore.

Operations and results

Wildcat well 6406/6-6 A kicked off at 4215 m in wellbore 6406/6-6 S on 17 November 2018. It was drilled with the semi-submersible installation Scarabeo 8 to TD at 4869 m (4692 m TVD) in the Early Jurassic Ror Formation. The drill string got stuck at TD. Ten days were spent on pipe recovery operations. The string was finally freed by severing a NC50 connection above the dart sub, leaving 291 m of bottom hole assembly in hole. No data (except GR and Neutron/density on LWD) could be acquired. The well was drilled with oil-based mud from kick-off to TD.

Top Garn Formation was encountered at 4510 m (4428 m TVD), top Not Formation at 4632 m (4523 m TVD), and top Ile Formation at 4682 m (4558 m TVD). From the LWD logs good reservoir was confirmed in the side-track, but hydrocarbon saturation could not be confirmed due to stuck pipe.

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 5 January 2019.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
4218.00	4869.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
298	NORDLAND GP
298	NAUST FM
1346	KAI FM
1677	HORDALAND GP
1677	BRYGGE FM

2293	ROGALAND GP
2293	TARE FM
2345	TANG FM
2430	SHETLAND GP
2430	SPRINGAR FM
2560	NISE FM
2785	KVITNOS FM
3331	CROMER KNOLL GP
3331	LYSING FM
3954	NO FORMAL NAME
4137	LYR FM
4169	VIKING GP
4169	SPEKK FM
4200	MELKE FM
4510	FANGST GP
4510	GARN FM
4632	NOT FM
4682	ILE FM
4842	BÅT GP
4842	ROR FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MWD - ADR ALD CTN DGR	4445	4869

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
OPEN HOLE		4869.0	8 1/2	4869.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
298	1.03	1.0		Sea water	
1134	1.03	1.0		Sea water	

1265	1.78	36.0		RheGuard	
4200	1.82	47.0		RheGuard	
4370	1.82	49.0		RheGuard	
4441	1.87	54.0		RheGuard	
4843	1.87	56.0		RheGuard	
4869	1.87	50.0		RheGuard	
4869	1.82	38.0		RheGuard	
4870	1.78	36.0		RheGuard	
4870	1.84	48.0		RheGuard	
4911	1.82	39.0		RheGuard	
4911	1.87	63.0		RheGuard	