General information

Wellbore name	6608/10-18 B
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORWEGIAN SEA
Field	VERDANDE
Discovery	6608/10-17 S Verdande
Well name	6608/10-18
Seismic location	Seismic 3D survey ST11M01. Inline 6201. Xline 5079
Production licence	128 D
Drilling operator	Equinor Energy AS
Drill permit	1716-L
Drilling facility	SONGA ENCOURAGE
Drilling days	18
Entered date	16.09.2018
Completed date	03.10.2018
Plugged and abondon date	03.10.2018
Release date	03.10.2020
Publication date	03.10.2020
Purpose - planned	APPRAISAL
Reentry	NO
Content	DRY
Discovery wellbore	NO
1st level with HC, age	EARLY CRETACEOUS
1st level with HC, formation	LANGE FM
Kelly bushing elevation [m]	32.0
Water depth [m]	373.0
Total depth (MD) [m RKB]	3585.0
Final vertical depth (TVD) [m RKB]	3289.0
Maximum inclination [°]	36.7
Oldest penetrated age	EARLY CRETACEOUS
Oldest penetrated formation	LANGE FM
Geodetic datum	ED50
NS degrees	66° 6' 9.54'' N
EW degrees	8° 4' 23.11'' E

NS UTM [m]	7331847.61
EW UTM [m]	458098.81
UTM zone	32
NPDID wellbore	8508

Wellbore history

General

Well 6608/10-18 B is a geological side-track to well 6608/10-18 on the Revfallet Fault Complex in the Norwegian Sea. It was drilled to appraise the 6608/10-17 S Cape Vulture Discovery. The Cape Vulture Discovery consists of three Intra-Lange Formation sands, named the Cape Vulture Upper, Main, and Lower. The primary objective for 6608/10-18 B was to test the hydrocarbon potential and contacts in the Cape Vulture Main and Lower in a position down-flanks of well 6608/10-18.

Operations and results

Appraisal well 6608/10-18 B was kicked off at 1353 m in mainwell 6608/10-18 on 16 September 2018. It was drilled with the semi-submersible installation Songa Encourage to TD at 3585 m (3289 m TVD) in the Early Cretaceous Lange Formation. Operations proceeded without significant problems. The well was drilled with Enviromul oil-based mud from kick-off to TD.

Cape Vulture Main was penetrated from 3384 to 3429 m (3130 to 3163 m TVD), and Cape Vulture Lower from 3454 to 3459 m (3183 to 3187 m TVD). Both reservoirs were waterfilled. Combined pressure data from all three Cape Vulture appraisal wells indicated a hydrocarbon-water contact at ca 3100 m TVD MSL in Cape Vulture Main. Oil shows (direct and cut fluorescence) were described in Cape Vulture main and in thin sandstones in the interval 3525 m to TD.

No cores were cut. MDT fluid samples were taken at 3399.8 m and 3455.1 m. Water was sampled at both depths.

The well was permanently abandoned on 3 October 2018 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]
1370.00	3585.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
405	NORDLAND GP
405	NO FORMAL NAME
681	NAUST FM
1391	KAI FM
1653	HORDALAND GP
1653	BRYGGE FM
1903	ROGALAND GP
1903	TARE FM
1975	TANG FM
2007	SHETLAND GP
2007	SPRINGAR FM
2272	NISE FM
2900	KVITNOS FM
3076	CROMER KNOLL GP
3076	LYSING FM
3096	LANGE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
MDT	3085	3565
MWD LWD - ARC TELE GR RES	1353	3585
PEX ECS CMR	3075	3582
XLROCK	3086	3457
ZAIT MSIP QGEO	3045	3582

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	442.0	36	456.5	0.00	
INTERM.	13 3/8	1340.4	17 1/2	1350.0	1.57	FIT
INTERM.	9 5/8	3045.0	12 1/4	3053.0	1.81	FIT
OPEN HOLE		3586.0	8 1/2	3586.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
590	1.48	24.0		Enviromul	
1350	1.48	32.0		Enviromul	
2069	1.48	35.0		Enviromul	
2858	1.48	24.0		Enviromul	
2858	1.58	33.0		Enviromul	
3053	1.48	25.0		Enviromul	
3069	1.58	20.0		Enviromul	
3585	1.58	29.0		Enviromul	