



General information

Wellbore name	1/5-5
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	1/5-5
Seismic location	Crossline 19180 in Q30_CNS_marge_3
Production licence	618
Drilling operator	Total E&P Norge AS
Drill permit	1608-L
Drilling facility	MÆRSK GALLANT
Drilling days	206
Entered date	24.02.2016
Completed date	16.09.2016
Plugged and abandon date	16.09.2016
Release date	16.09.2018
Publication date	16.09.2018
Purpose - planned	WILDCAT
Reentry	NO
Content	DRY
Discovery wellbore	NO
Kelly bushing elevation [m]	48.0
Water depth [m]	70.0
Total depth (MD) [m RKB]	5942.0
Final vertical depth (TVD) [m RKB]	5940.0
Maximum inclination [°]	4
Bottom hole temperature [°C]	197
Oldest penetrated formation	BRYNE FM
Geodetic datum	ED50
NS degrees	56° 43' 48.02" N
EW degrees	2° 38' 44.92" E
NS UTM [m]	6287528.37
EW UTM [m]	478327.19
UTM zone	31
NPDID wellbore	7874



Wellbore history

General

Well 1/5-5 was drilled to test the Solaris prospect in the Central Graben, about 40 km North-West of the Ekofisk field, close to the border between UK and Norway. The primary target was to prove reservoir and hydrocarbon presence in Late Jurassic reservoir sands of the Ula Formation. Secondary target was the Triassic Skagerrak Formation.

Operations and results

Wildcat well 1/5-5 was spudded with the jack-up installation Mærsk Gallant on 24 February 2016 and drilled to TD at 5942 m in the Middle - Late Vestland Group. A pilot hole was drilled from 210 to 1140 m to check for shallow gas, but no gas was seen and the opening up and continuation of the well could be carried out. The well is a deep high temperature-high pressure well. Thirty-nine days were counted as NPT. The single main cause of NPT (11 days) was main rig maintenance and changing the drilling line after installing BOP at 1140 m. Otherwise operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 1140 m, with NABM oil based mud from 1140 m to TD.

The primary target Ula Formation sandstone was encountered at 5831 m. The Ula Formation was 80 m thick and consisted mainly of sandstones and a few siltstones. The reservoir showed traces of gas and wireline logging was carried out for further classification. The logging proved the reservoir tight, of moderate to poor quality, and dry. There were no shows above the oil-based mud. As the primary reservoir was found dry, it was decided not to continue to the secondary, Triassic target.

No cores were cut. No fluid sample was taken.

The well was permanently abandoned on 16 September 2016 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]
1143.00	5942.00

Cuttings available for sampling?	YES
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Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
118	NORDLAND GP
1892	HORDALAND GP



3209	ROGALAND GP
3209	BALDER FM
3242	SELE FM
3268	LISTA FM
3459	VÅLE FM
3483	SHETLAND GP
3483	EKOFISK FM
3594	TOR FM
4126	HOD FM
5228	BLODØKS FM
5239	HIDRA FM
5385	CROMER KNOLL GP
5385	RØDBY FM
5459	SOLA FM
5529	TUXEN FM
5540	ÅSGARD FM
5712	TYNE GP
5712	FARSUND FM
5752	HAUGESUND FM
5831	VESTLAND GP
5831	ULA FM
5911	BRYNE FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
GYRO	120	5535
HAPS HLDS HNGS GR	5551	5925
IBC CBL VDL GR	1130	4171
IBC CBL VDL GR	4180	5544
LWD - BITGR GR RES PWD DI	3105	3477
LWD - DI	118	210
LWD - DI APWD	210	1143
LWD - DI GR RES APWD SON	210	1140
LWD - GR RES PWD DI	1143	3105
LWD - GR RES PWD DI	3477	4217
LWD - NBGR RES GR PWD DI	4218	5561
LWD - PWD	5565	5566
LWD - RES GR PWD DI	5566	5942



PPC DSI GR	2400	5556
QAIT PPC DSI	5551	5937
XPT GR	5810	5872

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	200.0	36	210.0	0.00	
SURF.COND.	20	1129.0	26	1140.0	1.74	LOT
PILOT HOLE		1140.0	9 7/8	1140.0	0.00	
INTERM.	13 5/8	4201.0	16	4217.0	2.06	FIT
INTERM.	9 7/8	5551.0	12 1/4	5565.0	2.25	LOT
OPEN HOLE		5942.0	8 1/2	5942.0	0.00	

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
200	1.05	15.0		Sea water	
200	1.25	23.0		Spud Mud	
242	1.25	14.0		Spud mud	
301	1.05	17.0		Spud Mud	
301	1.32	17.0		Spud mud	
700	1.70	30.0		EMS-4750	
725	1.25	17.0		Spud mud	
780	1.03	1.0		Sea water	
827	1.05	15.0		Spud mud	
1130	1.23	11.0		Silicate	
1140	1.22	13.0		Silicate	
1140	1.05	15.0		Spud Mud	
1143	1.64	44.0		EMS-4600	
1544	1.67	53.0		EMS-4600	
1785	1.88	58.0		EMS-4750	
1843	1.67	50.0		EMS-4600	
2312	1.68	45.0		EMS-4600	
3216	1.88	55.0		EMS-4750	
3307	1.68	41.0		EMS-4600	
3458	1.70	41.0		EMS-4600	



4045	1.88	55.0		EMS-4750	
4100	1.70	42.0		EMS-4600	
4180	1.88	59.0		EMS-4750	
4211	1.70	41.0		EMS-4600	
4290	1.88	81.0		EMS-4400	
4330	1.70	41.0		EMS-4750	
4517	1.72	43.0		EMS-4750	
4634	1.74	44.0		EMS-4750	
4787	1.78	46.0		EMS-4750	
4933	1.82	44.0		EMS-4750	
4942	2.18	88.0		EMS-4400	
4994	1.85	48.0		EMS-4750	
5100	1.88	54.0		EMS-4750	
5158	1.85	46.0		EMS-4750	
5274	1.89	70.0		EMS-4750	
5331	1.85	47.0		EMS-4750	
5392	2.18	91.0		EMS-4400	
5419	1.88	48.0		EMS-4750	
5560	2.18	90.0		EMS-4400	
5561	1.88	53.0		EMS-4750	
5582	2.10	47.0		EMS-4400	
5869	2.12	60.0		EMS-4400	
5942	2.18	93.0		EMS-4400	
5942	2.14	72.0		EMS-4400	