General information

Wellbore name	25/7-8 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Press release	link to press release
Factmaps in new window	link to map
Main area	NORTH SEA
Discovery	25/7-8 S (Enniberg)
Well name	25/7-8
Seismic location	CP19301-2009 / PGS16M01CPR19 IL:28464. XL:14592
Production licence	917
Drilling operator	ConocoPhillips Skandinavia AS
Drill permit	1796-L
Drilling facility	LEIV EIRIKSSON
Drilling days	58
Entered date	13.11.2019
Completed date	09.01.2020
Plugged and abondon date	09.01.2020
Release date	09.01.2022
Publication date	08.08.2022
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	EARLY JURASSIC
1st level with HC, formation	NANSEN FM
2nd level with HC, age	EARLY JURASSIC
2nd level with HC, formation	EIRIKSSON FM
3rd level with HC, age	LATE TRIASSIC
3rd level with HC, formation	SKAGERRAK FM
Kelly bushing elevation [m]	25.0
Water depth [m]	126.5
Total depth (MD) [m RKB]	3250.0
Final vertical depth (TVD) [m RKB]	3213.0
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	SKAGERRAK FM
Geodetic datum	ED50

NS degrees	59° 16' 32.93'' N
EW degrees	2° 17' 14.84'' E
NS UTM [m]	6571133.87
EW UTM [m]	459389.02
UTM zone	31
NPDID wellbore	8933

Wellbore history

General

Well 25/7-8 S was drilled to test the Enniberg prospect on the Heimdal Terrace in the North Sea. The primary objective was to prove petroleum in Early Jurassic and Late Triassic reservoir rocks (Nansen, Eiriksson and Skagerrak formations). A secondary objective was to prove petroleum in a potential Middle Jurassic sequence.

Operations and results

Wildcat well 25/7-8 S was spudded with the semi-submersible installation Leiv Eiriksson on 13 November 2019 and drilled to TD at 3250 m (3213.2 m TVD) m in the Late Triassic Skagerrak Formation. A 9 7/8" shallow gas pilot hole was drilled from the 36x30" conductor shoe at 217 m to 1075 m. No shallow gas or water was observed. Following wireline data acquisition at TD, the 25/7-8 S wellbore was plugged-back to 2750 m and bypass side-track 25/7-8 ST2 drilled to acquire cores. The side-track was kicked off at 2831 m. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 217 m, with KCl/Polymer/GEM mud from 217 m to 1129 m, and with Innovert oil-based mud from 1129 m to TD.

In the primary exploration target, several oil and gas-bearing intervals with independent isolated columns were penetrated. In the Nansen Formation a total of 19 metres of sandstone with good reservoir properties was encountered. The sands were water bearing. The Eiriksson Formation contained a total of 20 metres of sandstone with moderate reservoir properties, of which 10 m are oil and gas-bearing. The Raude Formation had 11 m of gas bearing sandstone. In the Skagerrak Formation a total of 33 m of sandstone with moderate reservoir properties was encountered, of which 3 metres are gas-bearing.

In the secondary exploration target, both the Sleipner and Hugin formations were encountered. The Sleipner Formation had three thin gas-bearing sandstone intervals totalling 3 metres with moderate reservoir properties. The Hugin Formation contained several sandstone layers with moderate reservoir properties and a total net thickness of 30 metres. The Hugin Formation was water-bearing.

Intermittent oil shows, direct and cut fluorescence with occasional stain and weak odour, were observed in the intervals 2825 to 2895 m and 2978 to 3225 m.

Three cores were cut in succession from 2969 to 3134.24 m in the Amundsen, Nansen, Eriksson and Raude formations in the bypass side-track 25/7-8 ST2. The recovery was 100%. The distance to the main wellbore is 5 m at top reservoir and 10 m at TD. After coring one petrophysical log was run on wireline (PEX-HNGS-GR). MDT samples were taken at 2977 m (water), 3040.9 m (wet gas), 3050 m (water), 3063 m (oil), 3079.1 m (wet gas), and 3116 m (wet gas),

The well was permanently abandoned on 9 January 2020 as an oil and gas discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
490.00	3250.00

Cuttings available for sampling?	YES

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	2969.0	3023.8	[m]
2	3023.8	3079.4	[m]
3	3079.4	3134.2	[m]

Total core sample length [m]	165.2
Cores available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
151	NORDLAND GP
483	UTSIRA FM
674	SKADE FM
674	NO FORMAL NAME
699	HORDALAND GP
699	NO FORMAL NAME
699	SKADE FM
1396	NO FORMAL NAME
1872	BALDER FM
1918	ROGALAND GP
1918	BALDER FM
2005	SELE FM
2031	HERMOD FM
2153	LISTA FM
2211	HEIMDAL FM
2355	TY FM
2494	SHETLAND GP
2494	EKOFISK FM
2537	JORSALFARE FM
2647	KYRRE FM
2697	TRYGGVASON FM
2743	BLODØKS FM
2755	ÅSGARD FM
2757	VIKING GP

2757	DRAUPNE FM
2770	HEATHER FM
2802	VESTLAND GP
2802	HUGIN FM
2847	SLEIPNER FM
2872	DUNLIN GP
2872	AMUNDSEN FM
2976	STATFJORD GP
2976	NANSEN FM
2995	EIRIKSSON FM
3067	RAUDE FM
3120	HEGRE GP
3120	SKAGERRAK FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
HNGS PEX AIT	2661	3165
LWD - ATK ZT GCP OT TT ST	1042	2657
LWD - ATK ZT GOT	2738	2967
LWD - ATK ZT GOT LT	2964	3163
LWD - ATK ZTG OT ORD CCN TT ST	2561	3247
LWD - OT	151	208
LWD - OT II	201	1123
LWD - OT ST	183	1073
MDT GR	2857	3116
MDT GR	2977	3116
NEXT PEX HNGS CMR GR	2659	3250
NGI	2660	3249
XL ROCK	2973	3150
ZAIT MSIP XPT	1720	3216
ZVSP4	148	3182

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	36	217.0	42	217.0	0.00	

PILOT HOLE		1075.0	9 7/8	1075.0	0.00	
SURF.COND.	13 3/8	1123.0	17 1/2	1129.0	1.69	LOT
LINER	9 7/8	2659.0	12 1/4	2660.0	1.92	LOT
OPEN HOLE		3213.0	8 1/2	3213.0	0.00	