General information

Wellbore name	25/7-7
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	25/7-7 (Busta)
Well name	25/7-7
Seismic location	CP18301-4019
Production licence	782 S
Drilling operator	ConocoPhillips Skandinavia AS
Drill permit	1777-L
Drilling facility	LEIV EIRIKSSON
Drilling days	73
Entered date	29.08.2019
Completed date	09.11.2019
Plugged and abondon date	09.11.2019
Release date	09.11.2021
Publication date	10.11.2021
Purpose - planned	WILDCAT
Reentry	NO
Content	GAS/CONDENSATE
Discovery wellbore	YES
1st level with HC, age	LATE JURASSIC
1st level with HC, formation	INTRA DRAUPNE FM SS
Kelly bushing elevation [m]	25.0
Water depth [m]	126.0
Total depth (MD) [m RKB]	4730.0
Final vertical depth (TVD) [m RKB]	4730.0
Oldest penetrated age	MIDDLE JURASSIC
Oldest penetrated formation	HEATHER FM
Geodetic datum	ED50
NS degrees	59° 18' 59.95'' N
EW degrees	2° 12' 42.66'' E
NS UTM [m]	6575730.01
EW UTM [m]	455133.85
UTM zone	31
NPDID wellbore	8846

Wellbore history

General

Well 25/7-7 was drilled to test the Busta prospect on the eastern margin of the Vana Sub-basin, west of the Utsira High in the North Sea. The primary objective was to prove hydrocarbon presence and evaluate reservoir quality in the Late

Jurassic Intra Draupne Formation sandstone (Brae Equivalent). The secondary objective was to evaluate a potential reservoir presence in the underlying Heather Formation.

Operations and results

Wildcat well 25/7-7 was spudded with the semi-submersible installation Leiv Eiriksson on 29 August 2019 and drilled to TD at 4730 m in the Middle Jurassic Heather Formation. A 9-7/8" pilot hole was drilled from below 36"x30"conductor shoe at 216.5 m to 1197 m. No shallow gas or water flow was observed. Operations proceeded without significant problems. The well was drilled with seawater and hi-vis pills down to 206 m, with KCl/Polymer mud from 206 to 1188 m, with Innovert oil-based mud from 1188 to 2784 m, and with BaraECD 2.2 oil-based mud from 2784 m to TD.

The well encountered hydrocarbons in two highly overpressured Intra-Draupne Formation sandstone intervals. The upper sand was 8 m thick with top at 4463 m and the lower was 20 m thick with top at 4490 m. The sandstone intervals are separated by a 28-meter shale interval. The overpressure in the lower sandstone is 40 bar higher than in the upper sandstone. The upper sandstone interval contains a rich gas condensate, while the lower sand encountered a light volatile oil. The sandstones are not in pressure communication with each other or with the Intra-Draupne sands in the 25/7-2 well, drilled 4.7 km to the SSW. The reservoir properties of the sandstones are good, with pay zone average porosities of 18.5% for the upper, and 20.5% for the lower sandstone. In the secondary target Heather Formation, no sandstones were encountered.

Hydrocarbon indication were noted in the Intra-Draupne Formation sandstone interval, with significant gas peaks and cut fluorescence in the hydrocarbon-bearing sands. Otherwise, there were no shows in the well.

No cores were cut. MDT fluid samples were taken at 4466.2 m (rich gas condensate) and at 4507.9 m (light volatile oil). The quality of the samples was good, with low OBM contamination in the range 0 to 0.3% of the sample weights.

The well was permanently abandoned on 9 November 2019 as a gas-condensate and light oil discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
230.00	4729.00

Cuttings available for sampling?	YES

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
151	NORDLAND GP
151	UNDIFFERENTIATED
426	UTSIRA FM
944	HORDALAND GP
944	SKADE FM
1042	NO FORMAL NAME
1307	NO FORMAL NAME
2114	ROGALAND GP
2114	BALDER FM
2203	SELE FM
2204	HERMOD FM
2212	SELE FM
2273	LISTA FM
2311	HEIMDAL FM
2516	TY FM
2702	SHETLAND GP
2702	EKOFISK FM
2758	JORSALFARE FM
2903	KYRRE FM
3106	TRYGGVASON FM
3344	BLODØKS FM
3556	SVARTE FM
3787	CROMER KNOLL GP
3787	RØDBY FM
3885	SOLA FM
4105	ÅSGARD FM
4293	VIKING GP
4293	DRAUPNE FM
4385	INTRA DRAUPNE FM SS
4513	DRAUPNE FM
4559	HEATHER FM

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR HXPT GR	4380	4560
LWD - OT II	151	4023
LWD - OT ORD CCN ST TT	3918	4730
LWD - OT ST	196	1195
MDT	4466	4507
MSIP NGI	4035	4733
QAIT EMS APS HLDS HNGS	4035	4733
XL CORE	4382	4670
XL CORE	4448	4565
ZVSP4	175	4720

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	216.5	42	216.5	0.00	
SURF.COND.	20	1197.3	26	1203.0	1.55	FIT
INTERM.	13 5/8	2787.0	17 1/2	2790.0	1.82	LOT
LINER	9 7/8	4031.0	12 1/4	4032.0	2.16	FIT
OPEN HOLE		4730.0	8 1/2	0.0	0.00	