

**General information**

Wellbore name	30/7-8 R
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	MARTIN LINGE
Discovery	30/7-6 Martin Linge
Well name	30/7-8
Seismic location	802-61 SP.87.7
Production licence	040
Drilling operator	Norsk Hydro Produksjon AS
Drill permit	269-L2
Drilling facility	TREASURE SEEKER
Drilling days	127
Entered date	23.09.1981
Completed date	29.01.1982
Plugged and abandon date	29.01.1982
Release date	05.07.2016
Publication date	05.07.2016
Purpose - planned	WILDCAT
Reentry	YES
Reentry activity	DRILLING/TESTING/PLUGGING
Content	GAS/CONDENSATE
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	TARBERT FM
Kelly bushing elevation [m]	25.0
Water depth [m]	103.0
Total depth (MD) [m RKB]	4813.0
Final vertical depth (TVD) [m RKB]	4812.0
Maximum inclination [°]	10.75
Bottom hole temperature [°C]	160
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	HEGRE GP
Geodetic datum	ED50
NS degrees	60° 29' 43.08" N
EW degrees	2° 0' 20.56" E



NS UTM [m]	6707144.14
EW UTM [m]	445370.62
UTM zone	31
NPDID wellbore	506

Wellbore history

General

Well 30/7-8 R is a re-entry of well 30/7-8, which was suspended with TD at 4287 m due to technical problems, without fulfilling the well objectives. The well was drilled on the Norwegian part of the Shetland Basin in the northern North Sea. The objectives were to test the hydrocarbon potential in the Middle Jurassic Brent Group (primary objective), and the Early Jurassic Cook Formation and Statfjord Group (secondary objectives).

Operations and results

Appraisal well 30/7-8 was re-entered with the semi-submersible installation Treasure Seeker on 23 November 1980. It was kicked off at 3755 m and drilled to final TD at 4813 m in the Late Triassic Hegre Group. No significant problem was encountered in the operations. The well was drilled with Spersene/XP-20/Resinex/Drispac water based mud from kick-off to TD.

The primary target reservoir, Tarbert Formation came in at 4058 m. It contained gas condensate with a gas/water contact at 4112 +/- 5 m, based on pressure gradients. Shows were described on cuttings and cores over the interval 4489.3 to 4555 m in the Statfjord Group, Nansen Formation.

Ten cores were cut in the well. Cores 1 - 8 were cut from 4062.3 m to 4159.3 m in the primary target Tarbert Formation sandstones, while cores nine and ten were cut in the intervals 4489.3 to 4502.5 m and 4527.1 to 4540.6 m, both in the Statfjord Group. The core depths are 4-5 m deeper than the logger depths. RFT fluid samples from 4105 m recovered gas, condensate, water and mud filtrate.

The well was permanently abandoned on 29 January 1982 as a gas/condensate discovery.

Testing

One drill stem test was performed from perforations in the interval 4064 to 4070 m. The test produced 478 Sm³ condensate and 617590 Sm³ gas /day through a 32/64" choke. The separator GOR was 1291 Sm³/Sm³, the condensate gravity was 41.3 °API, and the gas gravity was 0.679 (air = 1). The gas contained 2.3% CO₂. The bottom hole temperature measured in the test was 143 °C.

Cores at the Norwegian Offshore Directorate

Core sample number	Core sample - top depth	Core sample - bottom depth	Core sample depth - uom
1	4489.6	4501.0	[m]
2	4527.0	4540.5	[m]



Total core sample length [m]	24.9
Cores available for sampling?	YES

Core photos

4489-4494m



4494-4498m



4498-4501m



4527-4531m



4531-4536m



4536-4540m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
4062.3	[m]	C	IKU
4062.4	[m]	C	RRI
4067.8	[m]	C	IKU
4068.3	[m]	C	RRI
4070.5	[m]	C	IKU
4074.0	[m]	C	IKU
4077.3	[m]	C	RRI
4082.0	[m]	C	RRI
4083.0	[m]	C	IKU
4083.4	[m]	C	RRI
4089.8	[m]	C	RRI
4102.2	[m]	C	RRI
4105.8	[m]	C	RRI
4107.0	[m]	C	RRI
4107.7	[m]	C	IKU
4108.4	[m]	C	RRI
4115.0	[m]	C	RRI



4118.7 [m]	C	IKU
4123.9 [m]	C	IKU
4130.8 [m]	C	RRI
4132.8 [m]	C	IKU
4136.5 [m]	C	IKU
4155.5 [m]	C	IKU
4170.0 [m]	SWC	IKU
4178.0 [m]	SWC	IKU
4207.0 [m]	SWC	IKU
4217.0 [m]	SWC	IKU
4230.0 [m]	SWC	IKU
4241.0 [m]	SWC	IKU
4249.5 [m]	SWC	IKU
4260.0 [m]	SWC	IKU
4271.5 [m]	SWC	IKU
4325.0 [m]	SWC	IKU
4345.0 [m]	DC	IKU
4375.0 [m]	SWC	IKU
4375.0 [m]	DC	IKU
4383.9 [m]	SWC	IKU
4385.0 [m]	SWC	IKU
4398.0 [m]	SWC	IKU
4405.0 [m]	DC	IKU
4417.0 [m]	SWC	IKU
4429.5 [m]	SWC	IKU
4455.0 [m]	DC	IKU
4465.0 [m]	SWC	IKU
4470.0 [m]	SWC	IKU
4475.0 [m]	SWC	IKU
4478.0 [m]	DC	IKU
4540.0 [m]	DC	IKU
4570.0 [m]	DC	IKU
4582.0 [m]	SWC	IKU
4590.0 [m]	DC	IKU
4600.0 [m]	SWC	IKU
4605.0 [m]	DC	IKU
4615.0 [m]	DC	IKU
4625.0 [m]	DC	IKU
4631.0 [m]	SWC	IKU
4640.0 [m]	SWC	IKU



4645.0 [m]	DC	IKU
4658.0 [m]	SWC	IKU
4665.0 [m]	DC	IKU
4680.0 [m]	SWC	IKU
4685.0 [m]	DC	IKU
4692.0 [m]	SWC	IKU
4705.0 [m]	DC	IKU
4712.0 [m]	SWC	IKU
4725.0 [m]	DC	IKU
4745.0 [m]	DC	IKU
4751.0 [m]	SWC	IKU
4755.0 [m]	SWC	IKU
4765.0 [m]	DC	IKU
4773.0 [m]	SWC	IKU

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
128	NORDLAND GP
442	UTSIRA FM
970	HORDALAND GP
1782	FRIGG FM
1927	ROGALAND GP
1927	BALDER FM
1952	SELE FM
2020	HEIMDAL FM
2090	LISTA FM
2275	VÅLE FM
2328	SHETLAND GP
3799	CROMER KNOLL GP
3807	VIKING GP
3807	DRAUPNE FM
3841	HEATHER FM
4058	BRENT GP
4058	TARBERT FM
4153	NESS FM
4250	ETIVE FM
4283	RANNOCH FM
4300	DUNLIN GP



4325	COOK FM
4366	BURTON FM
4482	STATFJORD GP
4687	HEGRE GP

Geochemical information

Document name	Document format	Document size [MB]
506_1	pdf	0.64
506_2	pdf	0.64

Documents - older Norwegian Offshore Directorate WDSS reports and other related documents

Document name	Document format	Document size [MB]
506_01_WDSS_General_Information	pdf	0.20

Documents - reported by the production licence (period for duty of secrecy expired)

Document name	Document format	Document size [MB]
506_30_7_8_R_COMPLETION_LOG	pdf	3.26
506_30_7_8_R_COMPLETION_REPORT	pdf	28.57

Drill stem tests (DST)

Test number	From depth MD [m]	To depth MD [m]	Choke size [mm]
1.0	4064	4070	12.7

Test number	Final shut-in pressure [MPa]	Final flow pressure [MPa]	Bottom hole pressure [MPa]	Downhole temperature [°C]
1.0				143





Test number	Oil [Sm3/day]	Gas [Sm3/day]	Oil density [g/cm3]	Gas grav. rel.air	GOR [m3/m3]
1.0	445	617590	0.810	0.680	1291

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CBL VDL	3626	4379
CST	3730	4808
CYBERDIP	3721	4811
DLL MSFL	4050	4728
HDT	3721	4811
ISF SON	3721	4811
ISF SON LDT CNL	3721	4391
ISF SON MSFL	4378	4811
LDT CNL	3721	4811
NGT	4000	4370
RFT	4059	4284
RFT	4062	4105
RFT	4487	4719
VSP	780	4800

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	215.0	36	215.0	0.00	LOT
SURF.COND.	20	926.0	26	1011.0	1.52	LOT
INTERM.	13 3/8	2633.0	17 1/2	2648.0	1.83	LOT
INTERM.	9 5/8	3726.0	12 1/4	3741.0	2.08	LOT
LINER	7	4379.0	8 3/8	4394.0	2.24	LOT
OPEN HOLE		4812.0	6	4812.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
300	1.04	53.0		Waterbased	



800	1.03	27.0		Waterbased	
970	1.04	27.0		Waterbased	
1260	1.10	47.0		Waterbased	
1700	1.30	46.0		Waterbased	
1830	1.26	47.0		Waterbased	
2650	1.56	48.0		Waterbased	
3010	1.63	50.0		Waterbased	
3390	1.69	50.0		Waterbased	
3750	1.96	85.0		Waterbased	
4000	1.99	55.0		Waterbased	
4200	2.03	51.0		Waterbased	
4400	2.04	54.0		Waterbased	
4812	2.04	59.0		Waterbased	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
4532.43	[m]
4527.76	[m]