

**General information**

Wellbore name	30/3-5 S
Type	EXPLORATION
Purpose	APPRAISAL
Status	RE-CLASS TO DEV
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VESLEFRIKK
Discovery	30/3-2 Veslefrikk
Well name	30/3-5
Seismic location	ST 8513-1486 & CDP. 176
Production licence	052
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	728-L
Drilling facility	VESLEFRIKK A
Drilling days	50
Entered date	01.05.1992
Completed date	19.06.1992
Release date	19.06.1994
Publication date	03.10.2013
Purpose - planned	WILDCAT
Reclassified to wellbore	30/3-A-14
Reentry	NO
Content	OIL
Discovery wellbore	NO
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
2nd level with HC, age	EARLY JURASSIC
2nd level with HC, formation	DUNLIN GP
Kelly bushing elevation [m]	56.0
Water depth [m]	175.0
Total depth (MD) [m RKB]	4724.0
Final vertical depth (TVD) [m RKB]	3340.0
Maximum inclination [°]	69.4
Bottom hole temperature [°C]	120
Oldest penetrated age	EARLY JURASSIC
Oldest penetrated formation	STATFJORD GP
Geodetic datum	ED50
NS degrees	60° 46' 57.82" N



EW degrees	2° 53' 52.7" E
NS UTM [m]	6738750.57
EW UTM [m]	494443.81
UTM zone	31
NPDID wellbore	1950

Wellbore history

General

Well 30/3-5 S was drilled on the G prospect, which lies to the east of the Veslefrikk Field. The main target was the Brent Group with Early Jurassic Statfjord Group as a secondary target. The well was designed to be completed as an oil producer on the G prospect.

Operations and results

Well 30/3-5 S was spudded through slot 6 on the fixed installation Veslefrikk A on 1 May 1992 and drilled to TD at 4724 m (3340 m TVD) in the Early Jurassic Statfjord Group. Severe doglegs and ledging in the well path created problems in the 24" section from 472 to 1409 m. An attempt to reach an additional target in the Statfjord Formation failed due to problems with directional drilling. The well was drilled with gypsum/PAC mud down to 2551 m and with oil based mud from 2551 m to TD.

The planned targets were reached. The top of the Brent Group was penetrated at 4050 m, 8 m vertically deeper than prognosed. As expected, a fully developed Brent Group was present in the well. Apart from the Amundsen Formation, which came in 3.5 m shallower than prognosed, the formation tops came in slightly deeper than prognosed. The well proved hydrocarbons in the Brent Group and in the Cook Formation of the Dunlin Group. Differential pressure depletion was observed in some zones of the Brent Formation, attributed to communication with the main Veslefrikk Field which has been in production since 1989. The Statfjord Group had shows in the uppermost part. Rare, weak shows were seen in limestones and siltstones in the Shetland Group. No other shows were reported outside the reservoir section.

Five cores were cut. Cores 1 to 3 were cut from 4060 to 4160 m in the Ness-Etive-Rannoch-Oseberg formations, core 4 was cut from 4168 to 4213 m in the Oseberg Formation, and core 5 was cut from 4429 to 4446 m in the Cook Formation. All cores had significant positive depth shifts compared to logs; 5.5 m, 5.0 m, 5.5 m, 7.0 m, and 6.0 m respectively for cores 1 to 5. RFT fluid samples were taken at 4222 m and at 4426 m.

The well was completed on 19 June 1992 as an oil appraisal well. It was converted to development well 30/3-A-14.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
480.00	4710.00



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	4060.0	4066.0	[m]
2	4076.0	4107.7	[m]
3	4108.0	4160.8	[m]
4	4168.0	4213.1	[m]
5	4429.0	4445.6	[m]

Total core sample length [m]	152.1
Cores available for sampling?	YES

Core photos



4060-4065m



4065-4070m



4070-4075m



4075-4075m



4076-4081m



4081-4086m



4086-4091m



4091-4096m



4096-4101m



4101-4106m



4106-4107m



4108-4113m



4113-4118m



4118-4123m



4123-4128m



4128-4133m



4133-4138m



4138-4143m



4143-4148m



4148-4153m



4153-4158m



4158-4160m



4168-4173m



4173-4178m



4178-4183m



4183-4188m



4188-4193m



4193-4198m



4198-4203m



4203-4208m



4208-4213m



4213-4213m



4429-4434m



4434-4439m



4439-4444m



4444-4445m

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
231	NORDLAND GP
807	UTSIRA FM



1027	HORDALAND GP
2560	ROGALAND GP
2560	BALDER FM
2674	SELE FM
2717	LISTA FM
3004	SHETLAND GP
3787	VIKING GP
4050	BRENT GP
4050	TARBERT FM
4059	NESS FM
4127	ETIVE FM
4142	RANNOCH FM
4155	OSEBERG FM
4243	DUNLIN GP
4243	DRAKE FM
4424	COOK FM
4494	AMUNDSEN FM
4538	STATFJORD GP

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

Document name	Document format	Document size [MB]
1950_01_WDSS_General_Information	pdf	0.42
1950_02_WDSS_completion_log	pdf	0.18

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

Document name	Document format	Document size [MB]
1950_30_3_5_S_Completion_log	pdf	0.88
1950_30_3_5_S_Final_Well_report	pdf	5.66

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BHC GR	3966	4060
BHC GR	3966	4535





CBL VDL GR	3780	4530
DITE BHC LDT CNT GR AMS	3870	4335
MWD DPR - GR	3956	4710
RFT HP GR AMS	4053	4438
RFT HP GR AMS	4422	4422
RFT HP GR AMS	4426	4426
VSP	3540	4480

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	26	463.0	30	464.0	0.00	LOT
INTERM.	20	1153.0	24	1409.0	1.65	LOT
INTERM.	13 3/8	2548.0	17 1/2	2551.0	1.94	LOT
INTERM.	9 5/8	3955.0	12 1/4	3956.0	1.62	LOT
LINER	7	4530.0	8 1/2	4724.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
510	1.12	11.0		water based	
887	1.18	12.0		water based	
1327	1.20	18.0		water based	
1409	1.20	15.0		water based	
1752	1.39	23.0		water based	
1975	1.60	30.0		water based	
2524	1.62	35.0		water based	
2551	1.61	47.0		oil based	
2697	1.62	35.0		oil based	
3034	1.62	35.0		oil based	
3296	1.62	59.0		oil based	
3679	1.61	50.0		oil based	
3956	1.55	35.0		oil based	
4027	1.20	24.0		oil based	
4236	1.23	27.0		oil based	
4724	1.23	28.0		oil based	

**Pressure plots**

The pore pressure data is sourced from well logs if no other source is specified. In some wells where pore pressure logs do not exist, information from Drill stem tests and kicks have been used. The data has been reported to the NPD, and further processed and quality controlled by IHS Markit.

Document name	Document format	Document size [MB]
1950 Formation pressure (Formasjonstrykk)	pdf	0.22

