General information

Wellbore name	30/3-7 S
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VESLEFRIKK
Discovery	30/3-7 S
Well name	30/3-7
Seismic location	ST 8513R94- INLINE 227 & CROSSLINE 800
Production licence	052
Drilling operator	Den norske stats oljeselskap a.s
Drill permit	822-L
Drilling facility	VESLEFRIKK A
Drilling days	83
Entered date	21.09.1995
Completed date	12.12.1995
Release date	12.12.1997
Publication date	07.11.2005
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL/GAS
Discovery wellbore	YES
1st level with HC, age	MIDDLE JURASSIC
1st level with HC, formation	BRENT GP
Kelly bushing elevation [m]	57.0
Water depth [m]	174.0
Total depth (MD) [m RKB]	5581.0
Final vertical depth (TVD) [m RKB]	4049.0
Maximum inclination [°]	54.4
Oldest penetrated age	LATE TRIASSIC
Oldest penetrated formation	LUNDE FM
Geodetic datum	ED50
NS degrees	60° 46' 57.98'' N
EW degrees	2° 53' 51.95'' E
NS UTM [m]	6738755.54
EW UTM [m]	494432.48
UTM zone	31
NPDID wellbore	2632

Wellbore history

General

Well 30/3-7 S was drilled on the Veslefrikk Field, which is located due north of the Oseberg East Field. The objective of the well was to explore the hydrocarbon potential in the Brent Group, Intra Dunlin Sand and the Statfjord Formation in the B-prospect, west of the Veslefrikk horst.

Operations and results

Wildcat well 30/3-7 S was spudded from the fixed surface installation Veslefrikk A on 21 September 1995 and drilled to TD at 5581 m in the Lunde Formation. The 24" hole section from 467 m to 1472 m was drilled with Sea water/PAC converted to KCl/polymer mud. The 17 1/2" section from 1472 m to 2870 m was drilled with KCl/PAC/XANVIS mud, the 12 1/4" and 8 1/2" sections from 2870 m to 5581 m was drilled with Ancovert oil based mud.

The well drilled into the top of the Jurassic sequence earlier than expected, and hydrocarbon filled sandstones of unknown stratigraphy were penetrated almost 400 m higher than prognosed. The well was plugged back and a technical sidetrack was drilled and parts of the hydrocarbon filled interval was cored. Electric logs, core data, sidewall cores and paleo-dating as well as studies of the dip of layering and mineralogy, all show that the well penetrated several faults of varying throw. The stratigraphic intervals include both the Brent Group and the Statfjord Formation with several repeated and missing sequences. It soon became evident that the well never reached out to the B-prospect, but instead penetrated hydrocarbon bearing sandstones in several small fault blocks in the outskirts of the main Veslefrikk structure. A total of nine cores were cut, covering the base 2 m of the Heather Formation and ca 100 m of the faulted Brent sequence. RFT pressure points were recorded in the first Brent sequence (Tarbert/Ness) and in the second Brent sequence (Oseberg), but no fluid samples were taken on wire line.

The well was completed on 12 December 1995 as an oil/gas discovery and reclassified to development well.

Testing

Three production tests were performed in the intervals 5050 m to 5100 m (DST1), 4871.5 m to 4894 m (DST2), and 4692 m to 4801 m (DST3).

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
3850.00	5581.00

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	4678.0	4689.8	[m]
2	4691.0	4709.3	[m]
3	4709.5	4719.0	[m]
4	4719.5	4734.1	[m]
5	4735.0	4740.3	[m]
6	4742.0	4754.5	[m]
7	4754.5	4758.4	[m]
8	4760.0	4770.7	[m]
9	4865.0	4871.4	[m]

Total core sample length [m]	93.0
Cores available for sampling?	YES

Core photos


4678-4683m


4683-4688m


4688-4689m


4691-4696m


4696-4701m


4701-4706m


4706-4709m


4709-4714m


4714-4719m


4719-4724m


4724-4729m


4729-4734m


4735-4740m


4740-4741m


4742-4747m


4747-4752m


4752-4754m


4754-4758m


4760-4765m


4765-4770m


4770-4771m


4865-4870m


4870-4871m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
4450.0	[m]	DC	GEOSTR
4460.0	[m]	DC	GEOSTR
4470.0	[m]	DC	GEOSTR
4480.0	[m]	DC	GEOSTR
4490.0	[m]	DC	GEOSTR
4500.0	[m]	DC	GEOSTR
4510.0	[m]	DC	GEOSTR
4520.0	[m]	DC	GEOSTR
4530.0	[m]	DC	GEOSTR
4540.0	[m]	DC	GEOSTR
4550.0	[m]	DC	GEOSTR
4560.0	[m]	DC	GEOSTR
4570.0	[m]	DC	GEOSTR
4580.0	[m]	DC	GEOSTR
4590.0	[m]	DC	GEOSTR
4600.0	[m]	DC	GEOSTR
4610.0	[m]	DC	GEOSTR
4620.0	[m]	DC	GEOSTR
4630.0	[m]	DC	GEOSTR
4640.0	[m]	DC	GEOSTR
4650.0	[m]	DC	GEOSTR
4660.0	[m]	DC	GEOSTR
4660.0	[m]	DC	FUGRO

4670.0	[m]	DC	GEOSTR
4678.2	[m]	C	WESTL
4680.0	[m]	DC	GEOSTR
4680.0	[m]	DC	FUGRO
4681.2	[m]	C	WESTL
4681.8	[m]	C	FUGRO
4684.0	[m]	C	WESTL
4685.7	[m]	C	WESTL
4687.5	[m]	C	FUGRO
4689.8	[m]	C	WESTL
4690.0	[m]	DC	GEOSTR
4691.0	[m]	C	WESTL
4691.1	[m]	C	FUGRO
4692.2	[m]	C	WESTL
4694.5	[m]	C	WESTL
4700.0	[m]	DC	GEOSTR
4702.5	[m]	C	WESTL
4704.7	[m]	C	WESTL
4704.8	[m]	C	FUGRO
4705.6	[m]	C	WESTL
4707.4	[m]	C	WESTL
4708.8	[m]	C	WESTL
4710.0	[m]	DC	GEOSTR
4717.8	[m]	C	WESTL
4718.5	[m]	C	WESTL
4719.0	[m]	C	WESTL
4719.7	[m]	C	WESTL
4720.0	[m]	DC	GEOSTR
4725.4	[m]	C	WESTL
4729.7	[m]	C	WESTL
4730.0	[m]	DC	GEOSTR
4730.8	[m]	C	FUGRO
4733.0	[m]	C	WESTL
4740.0	[m]	DC	GEOSTR
4746.0	[m]	C	WESTL
4750.0	[m]	C	WESTL
4750.0	[m]	DC	GEOSTR
4753.5	[m]	C	WESTL
4753.5	[m]	C	FUGRO
4756.0	[m]	C	FUGRO

4756.2	[m]	C	WESTL
4760.0	[m]	DC	GEOSTR
4760.4	[m]	C	WESTL
4764.0	[m]	C	WESTL
4769.1	[m]	C	WESTL
4770.0	[m]	DC	GEOSTR
4774.0	[m]	DC	GEOSTR
4780.0	[m]	DC	GEOSTR
4783.0	[m]	DC	GEOSTR
4790.0	[m]	DC	GEOSTR
4792.0	[m]	DC	GEOSTR
4804.0	[m]	DC	GEOSTR
4810.0	[m]	DC	GEOSTR
4810.0	[m]	DC	GEOSTR
4819.0	[m]	DC	GEOSTR
4820.0	[m]	DC	GEOSTR
4828.0	[m]	DC	GEOSTR
4830.0	[m]	DC	GEOSTR
4837.0	[m]	DC	GEOSTR
4840.0	[m]	DC	GEOSTR
4846.0	[m]	DC	GEOSTR
4850.0	[m]	DC	GEOSTR
4855.0	[m]	DC	GEOSTR
4860.0	[m]	DC	GEOSTR
4866.5	[m]	C	WESTL
4869.6	[m]	C	WESTL
4870.0	[m]	DC	GEOSTR
4871.3	[m]	C	WESTL
4873.0	[m]	DC	GEOSTR
4880.0	[m]	DC	GEOSTR
4882.0	[m]	DC	GEOSTR
4890.0	[m]	DC	GEOSTR
4891.0	[m]	DC	GEOSTR
4900.0	[m]	DC	GEOSTR
4909.0	[m]	DC	GEOSTR
4910.0	[m]	DC	GEOSTR
4918.0	[m]	DC	GEOSTR
4920.0	[m]	DC	GEOSTR
4930.0	[m]	DC	GEOSTR
4936.0	[m]	DC	GEOSTR

4940.0	[m]	DC	FUGRO
4945.0	[m]	DC	GEOSTR
4950.0	[m]	DC	FUGRO
4954.0	[m]	DC	GEOSTR
4960.0	[m]	DC	FUGRO
4963.0	[m]	DC	GEOSTR
4966.0	[m]	DC	FUGRO
4972.0	[m]	DC	GEOSTR
4984.0	[m]	DC	GEOSTR
4993.0	[m]	DC	GEOSTR
4993.0	[m]	DC	FUGRO
5002.0	[m]	DC	GEOSTR
5011.0	[m]	DC	GEOSTR
5011.0	[m]	DC	FUGRO
5020.0	[m]	DC	FUGRO
5020.0	[m]	DC	GEOSTR
5029.0	[m]	DC	GEOSTR
5029.0	[m]	DC	FUGRO
5038.0	[m]	DC	FUGRO
5038.0	[m]	DC	GEOSTR
5056.0	[m]	DC	GEOSTR
5065.0	[m]	DC	GEOSTR
5075.0	[m]	DC	GEOSTR
5084.0	[m]	DC	GEOSTR
5093.0	[m]	DC	GEOSTR
5110.0	[m]	SWC	WESTL
5117.0	[m]	DC	FUGRO
5120.0	[m]	DC	FUGRO
5120.0	[m]	DC	GEOSTR
5129.0	[m]	DC	FUGRO
5130.0	[m]	SWC	WESTL
5132.0	[m]	DC	FUGRO
5135.0	[m]	DC	FUGRO
5138.0	[m]	DC	GEOSTR
5147.0	[m]	DC	GEOSTR
5153.0	[m]	DC	FUGRO
5155.0	[m]	SWC	WESTL
5156.0	[m]	DC	FUGRO
5162.0	[m]	DC	FUGRO
5165.0	[m]	DC	GEOSTR

5170.0	[m]	SWC	WESTL
5178.0	[m]	SWC	WESTL
5183.0	[m]	DC	FUGRO
5185.0	[m]	SWC	WESTL
5186.0	[m]	DC	FUGRO
5189.0	[m]	DC	FUGRO
5191.0	[m]	SWC	WESTL
5192.0	[m]	DC	FUGRO
5195.0	[m]	DC	FUGRO
5196.0	[m]	SWC	WESTL
5201.0	[m]	SWC	WESTL
5210.0	[m]	DC	GEOSTR
5228.0	[m]	DC	GEOSTR
5236.0	[m]	SWC	WESTL
5237.0	[m]	DC	FUGRO
5246.0	[m]	DC	FUGRO
5254.0	[m]	SWC	WESTL
5255.0	[m]	DC	FUGRO
5260.0	[m]	SWC	WESTL
5265.0	[m]	SWC	WESTL
5267.0	[m]	DC	FUGRO
5282.0	[m]	DC	GEOSTR
5291.0	[m]	DC	GEOSTR
5303.0	[m]	DC	GEOSTR
5327.0	[m]	DC	GEOSTR
5327.0	[m]	DC	FUGRO
5345.0	[m]	DC	GEOSTR
5363.0	[m]	DC	GEOSTR
5405.0	[m]	DC	GEOSTR
5423.0	[m]	DC	GEOSTR
5444.0	[m]	DC	GEOSTR
5465.0	[m]	DC	GEOSTR
5486.0	[m]	DC	GEOSTR
5507.0	[m]	DC	GEOSTR
5528.0	[m]	DC	GEOSTR
5549.0	[m]	DC	GEOSTR

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
231	NORDLAND GP
785	UTSIRA FM
838	UNDIFFERENTIATED
963	HORDALAND GP
2670	ROGALAND GP
2670	BALDER FM
2804	SELE FM
2844	LISTA FM
3139	SHETLAND GP
3139	JORSALFARE FM
3588	KYRRE FM
3969	TRYGGVASON FM
4667	VIKING GP
4667	HEATHER FM
4692	BRENT GP
4692	TARBERT FM
4702	NESS FM
4703	VIKING GP
4703	HEATHER FM
4706	BRENT GP
4706	TARBERT FM
4718	NESS FM
4897	ETIVE FM
4910	RANNOCH FM
4928	OSEBERG FM
4930	DUNLIN GP
4930	DRAKE FM
4966	COOK FM
5056	BRENT GP
5056	ETIVE FM
5063	RANNOCH FM
5070	OSEBERG FM
5122	DUNLIN GP
5122	DRAKE FM
5138	COOK FM
5197	BURTON FM
5234	AMUNDSEN FM
5271	STATFJORD GP

5322	HEGRE GP
5322	LUNDE FM

Composite logs

Document name	Document format	Document size [MB]
2632	pdf	0.45

Geochemical information

Document name	Document format	Document size [MB]
2632_1	pdf	1.09

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

Document name	Document format	Document size [MB]
2632_30_3_7_S_COMPLETION_REPORT_AND_LOG	pdf	12.72

Logs

Log type	Log top depth [m]	Log bottom depth [m]
CMR	5060	5360
DIPL MAC ZDL CN GR	5064	5581
DPIL MAC CDL CN GR	4500	5064
FMT GR	4691	5008
FMT GR	4735	4989
FMT GR	5071	5097
GR SBT CCL	1467	5581
HEXDIP	4300	5065
MWD - GR RES DIR	467	5581
SWC	0	0
UIB	5060	5529
VSP	1467	5581

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
SURF.COND.	20	1467.0	24	1472.0	1.32	LOT
INTERM.	13 3/8	2865.0	17 1/2	2870.0	1.65	LOT
INTERM.	9 5/8	5064.0	12 1/4	5065.0	1.80	LOT
LINER	7	5580.0	8 3/8	5581.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
922	1.22	23.0		SEAWATER/PAC	
1472	1.27	23.0		KCL/PAC/XANVIS	
2532	1.58	38.0		KCL/PAC/XANVIS	
2870	1.60	34.0		KCL/PAC/XANVIS	
4026	1.58	42.0		ANCO VERT	
4441	1.58	45.0		ANCO VERT	
5065	1.58	42.0		ANCO VERT	
5581	1.54			DUMMY	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
4694.55	[m]
4697.50	[m]
4701.75	[m]
4710.50	[m]
4715.30	[m]
4722.50	[m]
4733.75	[m]
4744.80	[m]
4754.55	[m]
4866.00	[m]

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]
2632_Formation_pressure_(Formasjonstrykk)	pdf	0.21