General information

Wellbore name	2/6-2
Type	EXPLORATION
Purpose	WILDCAT
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Well name	2/6-2
Seismic location	686 201 SP.348
Production licence	008
Drilling operator	Elf Petroleum Norge AS
Drill permit	238-L
Drilling facility	DYVI ALPHA
Drilling days	144
Entered date	03.01.1980
Completed date	25.05.1980
Release date	25.05.1982
Publication date	27.05.2009
Purpose - planned	WILDCAT
Reentry	NO
Content	OIL SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	70.0
Total depth (MD) [m RKB]	4760.0
Final vertical depth (TVD) [m RKB]	4760.0
Oldest penetrated age	LATE PERMIAN
Oldest penetrated formation	ZECHSTEIN GP
Geodetic datum	ED50
NS degrees	56° 30' 48.9'' N
EW degrees	3° 42' 39.66'' E
NS UTM [m]	6263608.18
EW UTM [m]	543756.41
UTM zone	31
NPDID wellbore	224

Wellbore history

General

Well 2/6-2 is located on the Piggvar Terrace just east of the Mandal High in the southern Norwegian North Sea. The main objective of the 2/6-2 well was to test a possible hydrocarbon accumulation of a lens-shaped seismic anomaly in the Lower Cretaceous. The anomaly showed both up dip truncation and structural closure, it was believed to represent a deep sea fan type sand deposit. A secondary objective was to explore the upper part of the Jurassic series below the Kimmeridgian unconformity.

The well is Reference well for the Tuxen Formation.

Operations and results

Wildcat well 2/6-2 was spudded with the semi-submersible installation Dyvi Alpha on 3 January 1980 and drilled to TD at 4760 m in Permian Zechstein salt. The hole was side-tracked from 4175 m due to loss of MFT tool in the hole at 4276 m.

In the Early Cretaceous only tight, mainly water bearing limestones were found. The Jurassic consisted of the Mandal, Farsund, Haugesund, and the Bryne Formations, with the latter resting directly on the salt at 4723 m. In the Late Jurassic a hydrocarbon bearing but tight limestone body was unexpectedly found. The Middle Jurassic Bryne sandstones were found gas bearing. Shows were reported as follows: Down to the top of the Jurassic at 4118 m only minor amounts of gas were recorded and the first occurrence of C2 was seen at 4100 m. Fluorescence of a yellow golden colour and greenish white cut was seen on Early Cretaceous limestones from 3870 to 3877 m, this led to the cutting of Core 1 at 3877 to 3886 m. On the core no direct fluorescence was seen, only a weak, cloudy yellow/greenish cut which terminated at 3881 m. Direct fluorescence and cut was seen on Late Jurassic limestones between 4179 and 4230 m, further, on Cores 2 and 3 taken from 4220 to 4235.5 m there was seen good yellow to bluish direct fluorescence. Some bubbling of gas was also seen and seepage of oil from shaly joints. Some cut was seen on siltstone at 4400 m and oil appeared in the mud down to 4465 m.

No wire line pressure measurements or fluid samples were taken.

The well was permanently abandoned on 25 May 1980 as a minor discovery.

Testing

No drill stem test was performed.

Cuttings at the Norwegian Offshore Directorate

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
180.00	4760.00

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	3877.0	3886.1	[m]
2	4220.0	4228.6	[m]
3	4229.0	4235.0	[m]

Total core sample length [m]	23.7
Cores available for sampling?	YES

Core photos


3877-3880m


3880-3883m


3883-3886m


4220-4223m


4223-4226m


4226-4228m


4230-4232m


4232-4235m

Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
200.0	[m]	DC	HRS
300.0	[m]	DC	HRS
400.0	[m]	DC	HRS
500.0	[m]	DC	HRS
600.0	[m]	DC	HRS
700.0	[m]	DC	HRS
800.0	[m]	DC	HRS
900.0	[m]	DC	HRS
1000.0	[m]	DC	HRS
1100.0	[m]	DC	HRS
1200.0	[m]	DC	HRS
1300.0	[m]	DC	HRS

1400.0	[m]	DC	HRS
1500.0	[m]	DC	HRS
1600.0	[m]	DC	HRS
1700.0	[m]	DC	HRS
1800.0	[m]	DC	HRS
1900.0	[m]	DC	HRS
2000.0	[m]	DC	HRS
2100.0	[m]	DC	HRS
2200.0	[m]	DC	HRS
2300.0	[m]	DC	HRS
2400.0	[m]	DC	HRS
2500.0	[m]	DC	HRS
2600.0	[m]	DC	HRS
2700.0	[m]	DC	HRS
2800.0	[m]	DC	HRS
2900.0	[m]	DC	HRS
3000.0	[m]	DC	HRS
3100.0	[m]	DC	HRS
3150.0	[m]	DC	HRS
3900.0	[m]	DC	HRS
3980.0	[m]	DC	HRS
4120.0	[m]	DC	HRS
4130.0	[m]	DC	HRS
4140.0	[m]	DC	HRS
4160.0	[m]	DC	HRS
4190.0	[m]	DC	HRS
4220.0	[m]	DC	HRS
4224.4	[m]	C	HRS
4233.4	[m]	C	HRS
4250.0	[m]	DC	HRS
4280.0	[m]	DC	HRS
4310.0	[m]	DC	HRS
4320.0	[m]	DC	HRS
4370.0	[m]	DC	HRS
4398.0	[m]	DC	HRS
4426.0	[m]	DC	HRS
4440.0	[m]	DC	HRS
4460.0	[m]	DC	HRS
4498.0	[m]	DC	HRS
4516.0	[m]	DC	HRS

4536.0	[m]	DC	HRS
4554.0	[m]	DC	HRS
4575.0	[m]	DC	HRS
4598.0	[m]	DC	HRS
4616.0	[m]	DC	HRS
4636.0	[m]	DC	HRS
4656.0	[m]	DC	HRS
4678.0	[m]	DC	HRS
4696.0	[m]	DC	HRS

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
95	NORDLAND GP
1634	HORDALAND GP
3018	ROGALAND GP
3018	BALDER FM
3035	SELE FM
3077	LISTA FM
3147	VÅLE FM
3185	SHETLAND GP
3185	EKOFISK FM
3248	TOR FM
3672	HOD FM
3812	CROMER KNOLL GP
3812	RØDBY FM
3864	TUXEN FM
3935	ÅSGARD FM
4118	TYNE GP
4118	MANDAL FM
4149	FARSUND FM
4236	HAUGESUND FM
4560	VESTLAND GP
4560	BRYNE FM
4723	ZECHSTEIN GP

Composite logs

Document name	Document format	Document size [MB]
224	pdf	1.09

Geochemical information

Document name	Document format	Document size [MB]
224_1	pdf	12.01
224_2	pdf	10.01
224_3	pdf	0.25
224_4	pdf	12.47
224_5	pdf	0.38

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

Document name	Document format	Document size [MB]
224_01_WDSS_General_Information	pdf	0.13
224_02_WDSS_completion_log	pdf	0.31

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

Document name	Document format	Document size [MB]
224_00_2_6_2_Completion_Log	pdf	3.01
224_00_2_6_2_Completion_Report	pdf	7.85

Logs

Log type	Log top depth [m]	Log bottom depth [m]
BHC	3200	3768
BHC GR	3000	3677
CDL CNL GR	150	4748
DLL	4330	4753
HDT	2463	4757
IEL BHC GR	102	4758
VELOCITY	700	4710

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	130.0	36	133.0	0.00	LOT
SURF.COND.	20	680.0	26	695.0	1.56	LOT
INTERM.	13 3/8	2449.0	17 1/2	2461.0	1.71	LOT
INTERM.	9 5/8	3820.0	12 1/4	3831.0	1.98	LOT
LINER	7	4325.0	8 1/2	4332.0	2.18	LOT
OPEN HOLE		4735.0	5 7/8	4735.0	0.00	LOT

Drilling mud

Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
148	1.10	65.0		waterbased	
703	1.15	50.0		waterbased	
1218	1.22	55.0		waterbased	
1693	1.26	58.0		waterbased	
2084	1.35	80.0		waterbased	
2850	1.47	66.0		waterbased	
3912	1.62	54.0		waterbased	
4275	1.74	65.0		waterbased	
4440	1.90	67.0		waterbased	

Thin sections at the Norwegian Offshore Directorate

Depth	Unit
4221.00	[m]
4226.00	[m]