



General information

Wellbore name	34/7-24 S
Type	EXPLORATION
Purpose	APPRAISAL
Status	P&A
Factmaps in new window	link to map
Main area	NORTH SEA
Field	VIGDIS
Discovery	34/7-23 S
Well name	34/7-24
Seismic location	CTM 94- ROW 1598 & COLUMN 857
Production licence	089
Drilling operator	Saga Petroleum ASA
Drill permit	801-L
Drilling facility	VILDKAT EXPLORER
Drilling days	28
Entered date	25.02.1995
Completed date	24.03.1995
Release date	24.03.1997
Publication date	28.02.2008
Purpose - planned	APPRAISAL
Reentry	NO
Content	SHOWS
Discovery wellbore	NO
Kelly bushing elevation [m]	25.0
Water depth [m]	152.0
Total depth (MD) [m RKB]	3145.0
Final vertical depth (TVD) [m RKB]	2938.0
Maximum inclination [°]	30
Bottom hole temperature [°C]	100
Oldest penetrated age	LATE JURASSIC
Oldest penetrated formation	HEATHER FM
Geodetic datum	ED50
NS degrees	61° 18' 32.92" N
EW degrees	2° 1' 51.55" E
NS UTM [m]	6797768.90
EW UTM [m]	448098.91
UTM zone	31
NPDID wellbore	2460



Wellbore history

General

Well is located east of the Statfjord Øst field and west of the Vigdis and Tordis Fields in the Tampen area in the Northern North Sea. The main objective of the well was to prove presence of sandstone and hydrocarbons in the Draupne Formation. The wells earlier drilled in the H-Area, 34/7-21, -21 A in H-Sentral and -23 S and -23A in H-Vest, proved oil bearing Late Jurassic Intra Draupne Formation sand. The discoveries in H-Sentral and H-Vest were however not in direct pressure communication. Well 34/7-24 S was drilled in a structural low compared to the other wells in the area and was mainly designed to test the continuity of the discovery made in H-Vest 34/7-23 S&A. The 34/7-24 S well was prognosed to penetrate top reservoir 63 m below the deepest penetrated ODT in the area. No OWC had been proved in the H-Area and the 34/7-24 S well was placed structurally relatively deep in order to possible reach an OWC in case of a sand bearing top Draupne interval.

Secondary objectives of the well were possible gravity deposited sandstones within the Middle and Lower Draupne Sequences

Operations and results

Well 34/7-24 S was spudded with the semi-submersible installation Vildkat Explorer on 25 February 1995 and drilled to TD at 3145 m (2938 m TVD) 54 m TVD into Late Jurassic sediments of the Heather Formation. Due to the nearness to the Snorre-Statfjord pipeline at the target position the well had to be drilled deviated. The distance between the spud and the target position at Base Cretaceous level was approximately 900 m. The inclination was built from vertical to 28 deg through the 12 1/4" section from 335 m to 1296 m. Operations went without significant problems. The well was drilled with spud mud down to 1296 m, and with a pseudo-oil based mud system (NOVAMUL) from 1296 m to TD. There was interpreted possible shallow gas from the MWD logs between 361 to 365 m. The zone did not show anything on the ROV or at the flow check.

The Nordland and Hordaland Groups consisted mainly of silty claystones except for the sandy Utsira Formation, which came in at 926 m MD (905 m TVD). The Nordland and Hordaland Groups had the highest content of drilling gas in the well (0.1-0.8), but no signs of gas were seen on the logs, except for the already mentioned shallow gas level. The Rogaland Group was penetrated at 1861 m (1727 m TVD), and consists of the Balder Formation and the Sele/Lista Formation. The Balder Formation was dominated by tuff interbedded with claystone. The Sele/Lista Formation consisted of silty claystones with traces of limestones. There were some weak hydrocarbon shows from 1870 to 1910 m. At 2065 m (1904 m TVD) the Shetland Group was penetrated. The Shetland Group consisted predominantly of silty claystones with some limestones and thin sandstone beds. The Cromer Knoll Group had marl as the main lithology. The marl was interbedded with silty claystones. The Viking Group top reservoir, came in at 2928 m (2721 m TVD) and consisted of claystones interbedded with only minor sandstone beds.

No cores were cut. No wire line pressure or fluid samples were taken since no sand was encountered.

The well was permanently abandoned on 24 March 1995 as a dry well.

Testing

No drill stem test was performed.

**Cuttings at the Norwegian Offshore Directorate**

Cutting sample, top depth [m]	Cutting samples, bottom depth [m]
340.00	3145.00

Cuttings available for sampling?	YES
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Palynological slides at the Norwegian Offshore Directorate

Sample depth	Depth unit	Sample type	Laboratory
1310.0	[m]	DC	RRI
1350.0	[m]	DC	RRI
1650.0	[m]	DC	RRI
1710.0	[m]	DC	RRI
1750.0	[m]	DC	RRI
1830.0	[m]	DC	RRI
1850.0	[m]	DC	RRI
1870.0	[m]	DC	RRI
1890.0	[m]	DC	RRI
1970.0	[m]	DC	RRI
2070.0	[m]	DC	RRI
2120.0	[m]	DC	RRI
2300.0	[m]	DC	RRI
2420.0	[m]	DC	RRI
2550.0	[m]	DC	RRI
2670.0	[m]	DC	RRI
2810.0	[m]	DC	RRI
2920.0	[m]	DC	RRI
2932.5	[m]	SWC	BIOSTRAT
2940.0	[m]	DC	RRI
2958.0	[m]	SWC	BIOSTR
2968.0	[m]	DC	RRI
2974.0	[m]	SWC	BIOSTR
2977.0	[m]	DC	RRI
2980.4	[m]	SWC	BIOSTR
2988.0	[m]	SWC	BIOSTR
2990.3	[m]	SWC	BIOSTR
2993.0	[m]	SWC	BIOSTR
2995.0	[m]	DC	RRI



2998.0	[m]	SWC	BIOSTR
3000.5	[m]	SWC	BIOSTR
3003.0	[m]	SWC	BIOSTR
3011.0	[m]	SWC	BIOSTR
3013.0	[m]	DC	RRI
3018.0	[m]	SWC	BIOSTR
3022.0	[m]	DC	RRI
3031.0	[m]	DC	RRI
3040.0	[m]	DC	RRI
3049.0	[m]	DC	RRI
3070.0	[m]	DC	RRI
3079.0	[m]	DC	RRI
3085.0	[m]	DC	RRI
3097.0	[m]	DC	RRI
3109.0	[m]	DC	RRI
3121.0	[m]	DC	RRI
3130.0	[m]	DC	RRI
3139.0	[m]	DC	RRI
3145.0	[m]	DC	RRI

Lithostratigraphy

Top depth [mMD RKB]	Lithostrat. unit
177	NORDLAND GP
1062	UTSIRA FM
1078	HORDALAND GP
1248	NO FORMAL NAME
1287	NO FORMAL NAME
1365	NO FORMAL NAME
1468	NO FORMAL NAME
1861	ROGALAND GP
1861	BALDER FM
1899	LISTA FM
2065	SHETLAND GP
2065	JORSALFARE FM
2402	KYRRE FM
2919	CROMER KNOLL GP
2919	RØDBY FM
2922	MIME FM



2928	VIKING GP
2928	DRAUPNE FM
3091	HEATHER FM

Geochemical information

Document name	Document format	Document size [MB]
2460 1	pdf	2.22

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

Document name	Document format	Document size [MB]
2460 34 7 24 S COMPLETION REPORT AND LOG	pdf	6.03

Logs

Log type	Log top depth [m]	Log bottom depth [m]
DIFL DAC ZDL GR TTRM	2768	3143
HEXDIP GR TTRM	2785	3143
MWD EWR DGR - DIR GR RES SN	177	3145
SWC GR	2915	3112
VELOCITY	2605	3130

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	225.0	36	226.0	0.00	LOT
SURF.COND.	18 5/8	328.0	26	330.0	1.25	LOT
INTERM.	9 5/8	1288.0	12 1/4	1290.0	1.65	LOT
OPEN HOLE		3145.0	8 1/2	3145.0	0.00	LOT

Drilling mud





Depth MD [m]	Mud weight [g/cm3]	Visc. [mPa.s]	Yield point [Pa]	Mud type	Date measured
861	1.13	10.0	32.0	WATER BASED	03.03.1995
1296	1.18	16.0	33.0	WATER BASED	06.03.1995
1296	1.18	15.0	34.0	WATER BASED	06.03.1995
1456	1.30	36.0	23.0	OIL BASED	06.03.1995
2154	1.50	38.0	37.0	OIL BASED	07.03.1995
2505	1.52	33.0	30.0	OIL BASED	08.03.1995
2710	1.55	36.0	27.0	OIL BASED	13.03.1995
2924	1.55	35.0	27.0	OIL BASED	13.03.1995
2975	1.55	36.0	22.0	OIL BASED	13.03.1995
2975	1.55	36.0	23.0	OIL BASED	13.03.1995
2975	1.55	37.0	21.0	OIL BASED	14.03.1995
2975	1.55	36.0	24.0	OIL BASED	13.03.1995
2978	1.55	35.0	21.0	OIL BASED	15.03.1995
3145	1.55	37.0	21.0	OIL BASED	17.03.1995
3145	1.55	37.0	21.0	OIL BASED	20.03.1995
3145	1.55	37.0	23.0	OIL BASED	20.03.1995
3145	1.55	37.0	23.0	OIL BASED	20.03.1995
3145	1.55	37.0	23.0	OIL BASED	21.03.1995
3145	1.55	37.0	23.0	OIL BASED	23.03.1995
3145	1.55	17.0	34.0	WATER BASED	23.03.1995
3145	1.55	35.0	23.0	OIL BASED	16.03.1995