

**General information**

Lithostrat. unit	SANDNES FM
NPID ID lithostrat. unit	139
Level	FORMATION
Lithostrat. unit, parent	<u>VESTLAND GP</u>

Level below

Lithostrat. unit

Description



Sandnes Formation

Name

From a town on the south-west coast of Norway. This formation was formerly included in the Haldager Formation.

Well type section

Norwegian well [9/4-3](#) (Conoco) from 2490 m to 2507.5 m, coord N 57°36'54.5", E 04°18'57.7" ([Fig 3.29](#)).

Well reference section

Norwegian well [18/11-1](#) (Elf) from 1878 m to 1964 m, coord N 58°04'21.3", E 04°32'00.1" ([Fig 3.31](#)).

Thickness

17.5 m in the type well and 86 m in the reference well.

Lithology

In the type well the Sandnes Formation consists of a massive white, very fine to coarse grained glauconitic sandstone. It is firm to friable, poorly sorted and slightly silty. In other wells (e.g. [18/11-1](#)) the formation comprises inter-bedded sandstones and shales. The shales are generally dark grey to brown, micaceous and occasionally carbonaceous.

Boundaries

The base of the Sandnes Formation is usually an unconformable contact with the non-marine [Bryne Formation](#) or older Jurassic or Triassic rocks. Generally it is defined at the base of the massive and clean sand, usually well marked on both gamma ray and sonic logs. In the type well the lower boundary is picked at the top of the first coal bed of the underlying [Bryne Formation](#). In wells where the Sandnes Formation is more argillaceous it can be harder to distinguish between the Sandnes and [Bryne Formation](#) on log characteristics alone. In such cases the occurrence of deltaic/non-marine palynofloras would serve to define this boundary (e.g. [18/11-1](#)). The upper contact with the overlying silts and shales of the [Boknafjord Group](#) is marked by good gamma ray and sonic log breaks.

Distribution

The Sandnes Formation is developed in the Fiskebank Sub-Basin and in the Egersund Sub-Basin. It is broadly homotaxial with the Hugin Formation in the southern Viking Graben and the Flyvbjerg Member of the Haldager Formation in the Danish Sub-basin. In the transition between the Southern Vest-land Arch and the Fiskebank Sub-Basin it can be difficult to distinguish between the [Ula Formation](#) and the Sandnes Formation. In such cases detailed paleontology is required to decide the ages of the sands, and hence their lithostratigraphic relationships.

Age

Callovian.

Depositional environment

The Sandnes Formation was deposited in a coastal/shallow marine environment.

Source

- Vollset, J. and Doré, A. G. (eds.) 1984: A revised Triassic and Jurassic lithostratigraphic nomenclature for the Norwegian North Sea. NPD-Bulletin No. 3, 53 pp.

**Wellbores penetrating**

Wellbore name	Wellbore completion date	Top depth [m]	Bottom depth [m]
2/1-15	05.09.2013	3431	3450
3/7-4	23.01.1990	3411	3474
3/7-5	07.02.1992	3379	3436
3/7-8 S	03.03.2013	3892	3949
3/7-9 S	28.04.2013	3524	3563
3/7-10 S	14.09.2015	3356	3430
7/3-1	10.06.1969	2655	2696
7/8-1	05.02.1969	3219	3230
8/1-1	07.02.1972	2606	2666
8/3-1	10.10.1966	2040	2113
8/5-1	28.03.2013	2339	2371
8/9-1	10.02.1976	2156	2168
8/10-1	01.07.1969	2793	2833
8/10-2	17.03.1980	2667	2752
8/10-3	06.10.2010	3099	3158
8/11-1	29.06.1975	2835	2871
8/12-1	23.07.1971	2663	2711
9/1-1 S	21.11.2011	2392	2411
9/2-1	28.04.1987	3162	3309
9/2-2	21.09.1987	3123	3230
9/2-3	08.02.1990	3252	3373
9/2-4 S	11.04.1994	4094	4295
9/2-5	21.07.1995	3146	3263
9/2-6 S	15.10.1996	4783	4940
9/2-7 S	10.06.1997	3854	3994
9/2-8 S	02.02.1998	5823	5955
9/2-8 S	02.02.1998	7378	7420
9/2-9 S	17.09.1999	3844	4365
9/2-11	29.03.2010	2629	2761
9/2-12	14.10.2019	2991	3123
9/2-A-4	13.08.1996	4631	4768
9/3-1	04.09.1986	1788	1843
9/3-2	09.12.2005	2660	2778
9/4-1	19.05.1968	2288	2319
9/4-2	29.08.1970	2490	2540
9/4-3	19.08.1972	2490	2508



9/4-4	20.08.1977	2718	2814
9/4-5	01.08.2006	2703	2783
9/8-1	29.06.1968	1922	2109
9/12-1	06.05.1969	2038	2050
10/4-1	12.07.2015	2274	2311
10/5-1	26.06.1976	1472	1490
10/7-1	30.07.1992	1539	1632
11/5-1	12.09.2007	1276	1322
15/12-24 S	20.05.2015	2985	3097
16/11-1 S	31.10.1967	2165	2236
16/11-2	23.07.1973	2202	2269
17/3-1	20.08.1995	2388	2410
17/6-1	07.02.2011	2630	2647
17/8-1	23.10.2021	2435	2443
17/9-1	23.10.1973	2220	2237
17/9-1 R	11.06.1974	2220	2237
17/12-1 R	21.06.1972	2290	2306
17/12-2	09.10.1973	2157	2179
17/12-3	03.02.1980	2370	2396
17/12-4	10.07.2009	2277	2298
17/12-4 B	26.08.2009	2536	2595
18/10-1	01.01.1980	2405	2421
18/11-1	31.03.1974	1878	1964

Wellbores with cores

Wellbore name	Wellbore completion date	Core length [m]
3/7-4	23.01.1990	57
3/7-5	07.02.1992	9
3/7-8 S	03.03.2013	57
8/3-1	10.10.1966	5
8/12-1	23.07.1971	2
9/2-1	28.04.1987	98
9/2-2	21.09.1987	28
9/2-3	08.02.1990	28
9/2-4 S	11.04.1994	17
9/2-5	21.07.1995	38
9/2-6 S	15.10.1996	50
9/2-7 S	10.06.1997	54
9/2-8 S	02.02.1998	84



<u>9/2-9 S</u>	17.09.1999	16
<u>9/3-1</u>	04.09.1986	7
<u>9/8-1</u>	29.06.1968	7
<u>10/7-1</u>	30.07.1992	4
<u>17/3-1</u>	20.08.1995	21
<u>17/12-4</u>	10.07.2009	21
<u>18/10-1</u>	01.01.1980	0