



General information

Lithostrat. unit	FARSUND FM
NPDID lithostrat. unit	39
Level	FORMATION
Lithostrat. unit, parent	TYNE GP

Level below

Lithostrat. unit

Description

Farsund Formation

Name

After the town of Farsund on the south-west coast of Norway.

Well type section

Norwegian well [2/7-3](#) (Phillips) from 3414 m to 3626 m, coord N 56°23'02.9", E 03°14'45.9" ([Fig 3.40](#)).

Well reference sections

Norwegian well [7/12-2](#) (BP) from 3306 m to 3378.5 m, coord N 57°06'41.34", E 02°50'50.73" ([Fig 3.32](#)) and [2/8-3](#) (Amoco) from 3594m to 3761 m, coord N 56°18'31", E 03°26'54.1" ([Fig 3.41](#)).

Thickness

200 m in the type well and 72.5 m ([7/12-2](#)) and 167 m ([2/8-3](#)) in the reference wells. The formation attains its maximum thickness in the axial part of the Central Graben and thins towards the flanking highs.

Lithology

The Farsund Formation consists predominantly of medium to dark grey shale. The shale is often well laminated and contains frequent calcareous streaks. Sandstone stringers are common in the type well [2/7-3](#), particularly in the lowermost part of the sequence. In the reference well [7/12-2](#), closer to the flank of the Southern Vestland Arch, a thinner Farsund Formation is present as a clear "coarsening upward cycle", becoming consistently less radioactive towards the top of the unit.

Boundaries

In the type well the base of the Farsund Formation occurs at the top of the sandy [Eldfisk Formation](#) and as a consequence is a pronounced gamma ray marker. Similarly, in the reference well the Farsund Formation overlies the sandy [Ula Formation](#) and is easily distinguished on logs. In several wells within the Central Graben, the Farsund Formation overlies the shaly [Haugesund Formation](#) with no intervening sand (e.g. reference well [2/8-3](#). Here the base of the Farsund Formation is picked directly above the gamma ray minimum which forms the top of the [Haugesund Formation](#). The top of the Farsund Formation is marked by a further gamma ray minimum. Above this occurs the distinct log motif of the [Mandal Formation](#), with its high gamma ray and inter val transit time readings.



Distribution

The formation is present throughout the Central Graben but thin or absent over the Southern Vestland Arch and intra-basinal highs.

Age

Kimmeridgian to Volgian.

Depositional environment

The Farsund Formation shales were mainly deposited in a low-energy marine environment. The gamma ray log profile suggests that the formation represents an initial period of deepening followed by gradual shallowing. In parts of the Central Graben the occurrence of thin sand stringers in the lower part of the formation probably represent minor turbidite influxes from the adjacent shelf, where time equivalent sands of the [Ula Formation](#) were being deposited.

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]
1/3-3	24.03.1983	4112	4178
1/3-8	27.05.1997	4742	5005
1/3-9 S	31.07.1998	4135	4266
1/3-12 S	22.07.2010	5556	5627
1/5-5	16.09.2016	5712	5752
1/6-6	08.03.1993	4876	5305
1/6-7	12.07.1992	4448	4655
1/9-3 R	30.09.1978	4319	4360
1/9-7	02.08.2003	4400	4504
2/1-4	03.08.1982	4137	4164
2/1-5	05.04.1983	3914	4053
2/1-6	12.08.1984	4165	4426
2/1-8	23.11.1985	3900	3965
2/1-9	06.07.1991	4034	4048
2/1-9 A	08.03.1992	4084	4099
2/1-10	14.01.1992	4156	4189
2/1-10	14.01.1992	4322	4347
2/1-11	07.05.1997	4173	4323
2/1-12	10.02.1999	3341	3384
2/1-16 S	13.07.2013	3448	3490
2/1-16 S	13.07.2013	3659	3701
2/1-17 S	08.11.2019	4002	4162



2/1-17 S	08.11.2019	4168	4390
2/2-1	03.07.1982	3322	3357
2/2-3	11.05.1983	3527	3880
2/2-4	07.06.1988	3313	3324
2/2-5	19.02.1992	3426	3538
2/2-6	14.05.2010	3588	4105
2/3-3	20.11.1971	2850	2875
2/4-11	09.04.1974	3990	4211
2/4-16	04.11.1991	4770	4828
2/4-16 R	15.07.1992	4770	4828
2/4-18 R	10.07.1994	4772	5310
2/4-21	24.05.2012	4795	5395
2/4-21 A	24.07.2012	4797	5573
2/4-22 S	22.02.2015	4430	4543
2/4-23 S	05.09.2015	4907	5142
2/5-1	22.11.1970	3839	3972
2/5-7	24.02.1984	4120	4347
2/5-9	18.01.1992	4137	4313
2/5-10	26.08.1993	4298	4582
2/5-10 A	25.09.1993	4298	4616
2/5-12	22.02.2002	3703	4153
2/5-13	21.01.2009	4320	4456
2/6-2	25.05.1980	4149	4236
2/6-3	25.02.1983	3427	3545
2/6-4 S	02.06.1990	3402	3537
2/7-1	11.12.1970	3730	4258
2/7-3	11.10.1972	3414	3626
2/7-15	02.06.1980	3606	4133
2/7-19	02.02.1981	4590	4693
2/7-19 R	14.03.1990	4587	4690
2/7-24	13.04.1991	3317	5023
2/7-25 S	31.03.1991	4828	4940
2/7-26 S	13.09.1991	4302	4386
2/7-28	07.08.1992	3339	3498
2/7-29	06.01.1994	4391	4473
2/7-29	06.01.1994	4602	4658
2/7-31	09.06.1999	4439	4469
2/8-3	03.09.1972	3594	3761
2/8-12 S	27.04.1989	4042	4207
2/8-14	22.01.1991	3257	4392
2/9-2	04.09.1979	3755	4032



2/9-3	14.12.1989	3846	4125
2/9-4	04.07.2008	4698	5450
2/9-5 S	18.09.2014	3430	3547
2/9-6 S	15.02.2021	4175	4330
2/11-1	03.10.1969	3728	4075
2/11-7	06.09.1986	3814	4720
2/12-1	12.03.1987	3988	4365
2/12-2 S	14.09.1990	4355	5175
3/4-1	26.02.1994	2726	2736
3/4-2 S	31.08.2012	2920	2961
3/5-2	20.08.1978	3170	3172
3/7-6	30.11.1996	3439	4050
3/7-7	27.10.2008	3435	3857
3/8-1	29.12.2010	3305	3465
7/1-2 S	08.05.2008	2919	2945
7/4-1	21.08.1993	2991	3065
7/4-2	13.03.2008	3336	3382
7/7-2	25.04.1992	3282	3327
7/7-3	04.07.1993	3440	3491
7/8-3	12.12.1983	3675	3724
7/8-5 S	03.06.2006	3871	3950
7/11-5	10.06.1982	4057	4155
7/11-6	20.10.1982	4036	4098
7/11-7	25.12.1983	4448	4527
7/11-7 R	08.10.1984	4448	4527
7/11-9	09.03.1986	4093	4169
7/11-10 S	10.09.1990	4311	4341
7/11-11 S	10.06.2007	4348	4470
7/11-12 A	31.12.2011	5321	5493
7/11-12 S	16.07.2011	5082	5197
7/11-14 S	31.10.2021	4005	4075
7/12-2	23.09.1976	3306	3379
7/12-3 A	06.09.1977	3560	3638
7/12-4	12.12.1977	3365	3445
7/12-5	07.06.1981	3763	3831
7/12-6	24.07.1981	3332	3406
7/12-7	26.07.1988	3699	3772
7/12-8	23.12.1988	3663	3718
7/12-9	14.05.1990	3652	3701
7/12-10	29.08.1991	3564	3627
7/12-11	06.11.1991	3753	3788



7/12-12 S	17.03.1996	5927	6018
7/12-13 S	18.05.2012	4070	4255
8/10-3	06.10.2010	3090	3099
8/10-4 A	18.12.2011	3334	3432
8/10-4 S	27.10.2011	2905	2948
8/10-5 A	24.05.2014	2364	2403
8/10-5 S	04.03.2014	2671	2708
8/10-6 S	16.07.2014	2020	2051
8/10-7 S	04.01.2019	2905	2938

Wellbores with cores

Wellbore name	Wellbore completion date	Core length [m]
1/3-3	24.03.1983	18
2/1-4	03.08.1982	1
2/1-5	05.04.1983	18
2/1-6	12.08.1984	189
2/1-8	23.11.1985	41
2/1-9	06.07.1991	14
2/2-1	03.07.1982	1
2/4-18 R	10.07.1994	12
2/4-21	24.05.2012	63
2/5-10	26.08.1993	7
2/5-10 A	25.09.1993	4
2/6-2	25.05.1980	15
2/6-4 S	02.06.1990	4
2/7-15	02.06.1980	10
2/7-24	13.04.1991	17
2/7-25 S	31.03.1991	10
2/7-26 S	13.09.1991	12
2/7-28	07.08.1992	18
2/9-2	04.09.1979	18
2/11-1	03.10.1969	15
3/7-6	30.11.1996	10
3/7-7	27.10.2008	54
7/4-1	21.08.1993	9
7/4-2	13.03.2008	4
7/7-3	04.07.1993	4
7/11-9	09.03.1986	3
7/12-9	14.05.1990	12



7/12-10	29.08.1991	11
8/10-5 S	04.03.2014	36