



General information

| | |
|------------------------|---------|
| Lithostrat. unit | TYNE GP |
| NPDID lithostrat. unit | 177 |
| Level | GROUP |

Level below

| |
|------------------------------|
| Lithostrat. unit |
| ELDFISK FM |
| FARSUND FM |
| HAUGESUND FM |
| MANDAL FM |

Description

Tyne Group

Name

From the River Tyne in north-eastern England. It includes sediments formerly assigned to the Humber Group by Deegan and Scull (1977). For further discussion, see “remarks” under the [Viking Group](#).

Type area

The group is found in the Central Graben and the Southern Vestland Arch. Its northern limit is defined approximately by 58° N. The Tyne Group is illustrated in the Norwegian sector by wells [2/7-3](#) (Phillips) and [7/12-2](#) (BP).

Thickness

The Tyne Group is thickest in the axial regions of the Central Graben, where more than 800 m of the group have been penetrated. The group thins, locally to only a few metres, over intrabasinal highs and the Southern Vestland Arch. The thicknesses in the above selected wells are 839 m ([2/7-3](#)) and 116.5 m ([7/12-2](#)).

Lithology

Claystone is the dominant lithology of the Tyne Group sediments. These range in colour from grey to brownish black and contain frequent silty, sandy and calcareous horizons. The Tyne Group also includes a thicker, discrete sand unit occurring locally in the Central Graben which is named the [Eldfisk Formation](#).

Boundaries

In wells situated in the axial portion of the Central Graben the base of the Tyne Group is not penetrated except where the group is underlain by diapiric Zechstein salt (e.g. [2/7-3](#)). On the south-western flank of the Southern Vestland Arch the Tyne Group overlies sands of the [Vestland Group](#) or may locally rest with unconformity on Triassic or Lower Jurassic sediments. In most cases the lower boundary is marked by a downward break to lower gamma ray and generally higher sonic log velocities.

The upper boundary is picked where the exceptionally high gamma ray response and low sonic velocity of the [Mandal Formation](#) (the uppermost formation of the group) gives way to the lower gamma ray, and higher sonic velocity values of the Lower Cretaceous [Cromer Knoll Group](#).



Distribution

The Tyne Group is distributed throughout the Central Graben and over the Southern Vestland Arch. It passes northwards (in the Viking Graben) into the [Viking Group](#). Due to the overall transgressive nature of the unit the higher formations of the group are more widely distributed.

Age

The group ranges in age from Callovian to Ryazanian.

Subdivision

Four formations are recognised within the Tyne Group, namely the [Haugesund](#), [Eldfisk](#), [Farsund](#) and [Mandal](#) formations. The lowermost is the [Haugesund Formation](#), which is generally overlain by the [Farsund Formation](#). Locally in the Central Graben the two formations are separated by the [Eldfisk Formation](#). The uppermost and most widespread unit is the [Mandal Formation](#).

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 | 4043 | 4178 |
| 1/3-8 | 27.05.1997 | 4733 | 5005 |
| 1/3-9 S | 31.07.1998 | 4119 | 4266 |
| 1/3-12 S | 22.07.2010 | 5541 | 5736 |
| 1/5-2 | 15.04.1974 | 4203 | 4228 |
| 1/5-5 | 16.09.2016 | 5712 | 5831 |
| 1/6-6 | 08.03.1993 | 4846 | 5457 |
| 1/6-7 | 12.07.1992 | 4402 | 4995 |
| 1/9-3 R | 30.09.1978 | 4265 | 4570 |
| 1/9-7 | 02.08.2003 | 4313 | 4986 |
| 2/1-2 | 26.02.1978 | 3299 | 3316 |
| 2/1-3 | 29.03.1980 | 3791 | 3820 |
| 2/1-4 | 03.08.1982 | 4004 | 4251 |
| 2/1-5 | 05.04.1983 | 3882 | 4193 |
| 2/1-6 | 12.08.1984 | 4104 | 4560 |
| 2/1-7 | 06.03.1985 | 3974 | 4024 |
| 2/1-8 | 23.11.1985 | 3880 | 4037 |
| 2/1-9 | 06.07.1991 | 4014 | 4048 |
| 2/1-9 A | 08.03.1992 | 4068 | 4099 |
| 2/1-10 | 14.01.1992 | 4127 | 4189 |
| 2/1-10 | 14.01.1992 | 4322 | 4435 |



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|---------------------------|------------|------|------|
| 2/1-11 | 07.05.1997 | 4173 | 4506 |
| 2/1-12 | 10.02.1999 | 3250 | 3251 |
| 2/1-12 | 10.02.1999 | 3341 | 3513 |
| 2/1-13 S | 07.03.2009 | 4176 | 4241 |
| 2/1-14 S | 28.02.2009 | 5947 | 6022 |
| 2/1-15 | 05.09.2013 | 3393 | 3431 |
| 2/1-16 S | 13.07.2013 | 3434 | 3891 |
| 2/1-17 S | 08.11.2019 | 4002 | 4390 |
| 2/2-1 | 03.07.1982 | 3314 | 3357 |
| 2/2-2 | 27.08.1982 | 2908 | 2917 |
| 2/2-3 | 11.05.1983 | 3523 | 3880 |
| 2/2-4 | 07.06.1988 | 3308 | 3324 |
| 2/2-5 | 19.02.1992 | 3418 | 3538 |
| 2/2-6 | 14.05.2010 | 3585 | 4105 |
| 2/3-3 | 20.11.1971 | 2825 | 2875 |
| 2/3-4 | 24.07.1984 | 3005 | 3006 |
| 2/4-8 | 29.03.1972 | 3677 | 3696 |
| 2/4-11 | 09.04.1974 | 3969 | 4211 |
| 2/4-14 | 31.01.1989 | 4702 | 4729 |
| 2/4-14 R | 06.04.1990 | 4714 | 4741 |
| 2/4-14 R2 | 14.04.1990 | 4702 | 4729 |
| 2/4-15 S | 16.03.1990 | 4958 | 4962 |
| 2/4-15 SR | 27.10.2003 | 4958 | 4965 |
| 2/4-16 | 04.11.1991 | 4737 | 4877 |
| 2/4-16 R | 15.07.1992 | 4737 | 4877 |
| 2/4-17 | 29.02.1992 | 4189 | 4340 |
| 2/4-18 R | 10.07.1994 | 4716 | 5310 |
| 2/4-20 | 14.03.2008 | 4818 | 5176 |
| 2/4-21 | 24.05.2012 | 4768 | 5395 |
| 2/4-21 A | 24.07.2012 | 4769 | 5573 |
| 2/4-22 S | 22.02.2015 | 4419 | 4567 |
| 2/4-23 S | 05.09.2015 | 4907 | 5205 |
| 2/5-1 | 22.11.1970 | 3839 | 3972 |
| 2/5-6 | 16.08.1978 | 3596 | 3946 |
| 2/5-7 | 24.02.1984 | 4108 | 4347 |
| 2/5-9 | 18.01.1992 | 4137 | 5460 |
| 2/5-10 | 26.08.1993 | 4298 | 4582 |
| 2/5-10 A | 25.09.1993 | 4298 | 4616 |
| 2/5-12 | 22.02.2002 | 3700 | 4153 |
| 2/5-13 | 21.01.2009 | 4320 | 4525 |
| 2/6-1 | 30.05.1969 | 3102 | 3217 |



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|---------------------------|------------|------|------|
| 2/6-2 | 25.05.1980 | 4118 | 4560 |
| 2/6-3 | 25.02.1983 | 3391 | 3545 |
| 2/7-1 | 11.12.1970 | 3707 | 4258 |
| 2/7-2 | 02.03.1971 | 3862 | 3875 |
| 2/7-3 | 11.10.1972 | 3342 | 4192 |
| 2/7-9 | 10.04.1974 | 4076 | 4311 |
| 2/7-15 | 02.06.1980 | 3584 | 4423 |
| 2/7-19 | 02.02.1981 | 4586 | 4693 |
| 2/7-19 R | 14.03.1990 | 4583 | 4690 |
| 2/7-20 | 25.06.1988 | 4060 | 4061 |
| 2/7-20 R | 01.11.1991 | 4057 | 4058 |
| 2/7-22 | 15.10.1990 | 4452 | 4470 |
| 2/7-23 S | 21.11.1990 | 4408 | 4412 |
| 2/7-24 | 13.04.1991 | 3195 | 5023 |
| 2/7-25 S | 31.03.1991 | 4711 | 5177 |
| 2/7-26 S | 13.09.1991 | 4299 | 4386 |
| 2/7-27 S | 17.06.1992 | 4476 | 4483 |
| 2/7-28 | 07.08.1992 | 3339 | 3839 |
| 2/7-29 | 06.01.1994 | 4363 | 4789 |
| 2/7-31 | 09.06.1999 | 4437 | 4469 |
| 2/8-3 | 03.09.1972 | 3537 | 4115 |
| 2/8-12 S | 27.04.1989 | 4000 | 5191 |
| 2/8-14 | 22.01.1991 | 3188 | 4392 |
| 2/9-2 | 04.09.1979 | 3653 | 4292 |
| 2/9-3 | 14.12.1989 | 3846 | 4525 |
| 2/9-4 | 04.07.2008 | 4698 | 5450 |
| 2/9-5 S | 18.09.2014 | 3430 | 3547 |
| 2/9-6 S | 15.02.2021 | 3890 | 4330 |
| 2/10-1 S | 23.04.1976 | 4265 | 4271 |
| 2/10-2 | 25.04.1993 | 3882 | 3905 |
| 2/11-1 | 03.10.1969 | 3555 | 4691 |
| 2/11-7 | 06.09.1986 | 3773 | 5042 |
| 2/11-8 | 11.07.1991 | 4265 | 4268 |
| 2/11-12 A | 07.03.2019 | 3140 | 3390 |
| 2/12-1 | 12.03.1987 | 3988 | 4597 |
| 2/12-2 S | 14.09.1990 | 4325 | 5537 |
| 3/4-1 | 26.02.1994 | 2718 | 2736 |
| 3/4-1 | 26.02.1994 | 2920 | 3013 |
| 3/4-2 S | 31.08.2012 | 2911 | 2961 |
| 3/5-1 | 28.06.1978 | 2734 | 2902 |
| 3/5-2 | 20.08.1978 | 3144 | 3345 |



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|---------------------------|------------|------|------|
| 3/7-2 | 20.06.1981 | 2830 | 2907 |
| 3/7-3 | 31.08.1981 | 3432 | 3506 |
| 3/7-4 | 23.01.1990 | 3261 | 3411 |
| 3/7-5 | 07.02.1992 | 3085 | 3379 |
| 3/7-6 | 30.11.1996 | 3439 | 4120 |
| 3/7-7 | 27.10.2008 | 3435 | 3930 |
| 3/7-8 S | 03.03.2013 | 3801 | 3892 |
| 3/7-9 S | 28.04.2013 | 3490 | 3524 |
| 3/8-1 | 29.12.2010 | 3286 | 3563 |
| 7/1-2 S | 08.05.2008 | 2848 | 2945 |
| 7/4-1 | 21.08.1993 | 2970 | 3065 |
| 7/4-2 | 13.03.2008 | 3288 | 3382 |
| 7/7-2 | 25.04.1992 | 3240 | 3327 |
| 7/7-3 | 04.07.1993 | 3413 | 3491 |
| 7/8-1 | 05.02.1969 | 3201 | 3219 |
| 7/8-2 | 29.08.1973 | 2808 | 2822 |
| 7/8-3 | 12.12.1983 | 3639 | 3724 |
| 7/8-4 | 20.02.1985 | 3817 | 3826 |
| 7/8-5 S | 03.06.2006 | 3832 | 3950 |
| 7/9-1 | 29.05.1971 | 2453 | 2487 |
| 7/11-5 | 10.06.1982 | 4024 | 4155 |
| 7/11-6 | 20.10.1982 | 4008 | 4098 |
| 7/11-7 | 25.12.1983 | 4405 | 4527 |
| 7/11-7 R | 08.10.1984 | 4405 | 4527 |
| 7/11-9 | 09.03.1986 | 4027 | 4169 |
| 7/11-10 S | 10.09.1990 | 4268 | 4341 |
| 7/11-11 S | 10.06.2007 | 4274 | 4470 |
| 7/11-12 A | 31.12.2011 | 5301 | 5493 |
| 7/11-12 S | 16.07.2011 | 5059 | 5197 |
| 7/11-13 | 03.11.2012 | 3680 | 3697 |
| 7/11-14 S | 31.10.2021 | 3992 | 4075 |
| 7/12-2 | 23.09.1976 | 3262 | 3379 |
| 7/12-3 A | 06.09.1977 | 3514 | 3638 |
| 7/12-4 | 12.12.1977 | 3350 | 3445 |
| 7/12-5 | 07.06.1981 | 3731 | 3831 |
| 7/12-6 | 24.07.1981 | 3292 | 3521 |
| 7/12-7 | 26.07.1988 | 3662 | 3772 |
| 7/12-8 | 23.12.1988 | 3640 | 3718 |
| 7/12-9 | 14.05.1990 | 3632 | 3820 |
| 7/12-10 | 29.08.1991 | 3538 | 3627 |
| 7/12-11 | 06.11.1991 | 3728 | 3788 |



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|---------------------------|------------|------|------|
| 7/12-12 S | 17.03.1996 | 5902 | 6018 |
| 7/12-13 S | 18.05.2012 | 4034 | 4255 |
| 8/10-3 | 06.10.2010 | 3077 | 3099 |
| 8/10-4 A | 18.12.2011 | 3278 | 3432 |
| 8/10-4 S | 27.10.2011 | 2887 | 2948 |
| 8/10-5 A | 24.05.2014 | 2332 | 2403 |
| 8/10-5 S | 04.03.2014 | 2649 | 2708 |
| 8/10-6 S | 16.07.2014 | 1985 | 2196 |
| 8/10-7 S | 04.01.2019 | 2879 | 2938 |
| 16/10-5 | 27.11.2012 | 2831 | 2929 |

Wellbores with cores

| Wellbore name | Wellbore completion date | Core length [m] |
|--------------------------|--------------------------|-----------------|
| 1/3-3 | 24.03.1983 | 18 |
| 1/6-7 | 12.07.1992 | 46 |
| 2/1-4 | 03.08.1982 | 102 |
| 2/1-5 | 05.04.1983 | 18 |
| 2/1-6 | 12.08.1984 | 226 |
| 2/1-8 | 23.11.1985 | 60 |
| 2/1-9 | 06.07.1991 | 29 |
| 2/2-1 | 03.07.1982 | 1 |
| 2/4-17 | 29.02.1992 | 1 |
| 2/4-18 R | 10.07.1994 | 12 |
| 2/4-21 | 24.05.2012 | 63 |
| 2/5-6 | 16.08.1978 | 10 |
| 2/5-10 | 26.08.1993 | 7 |
| 2/5-10 A | 25.09.1993 | 4 |
| 2/6-2 | 25.05.1980 | 15 |
| 2/7-15 | 02.06.1980 | 10 |
| 2/7-24 | 13.04.1991 | 17 |
| 2/7-25 S | 31.03.1991 | 53 |
| 2/7-26 S | 13.09.1991 | 15 |
| 2/7-28 | 07.08.1992 | 24 |
| 2/7-29 | 06.01.1994 | 94 |
| 2/9-2 | 04.09.1979 | 18 |
| 2/9-3 | 14.12.1989 | 0 |
| 2/9-6 S | 15.02.2021 | 73 |
| 2/11-1 | 03.10.1969 | 15 |
| 2/12-2 S | 14.09.1990 | 7 |



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|--------------------------|------------|-----|
| 3/7-6 | 30.11.1996 | 10 |
| 3/7-7 | 27.10.2008 | 54 |
| 3/7-8 S | 03.03.2013 | 2 |
| 7/4-1 | 21.08.1993 | 17 |
| 7/4-2 | 13.03.2008 | 4 |
| 7/7-2 | 25.04.1992 | 5 |
| 7/7-3 | 04.07.1993 | 4 |
| 7/8-4 | 20.02.1985 | 1 |
| 7/11-9 | 09.03.1986 | 3 |
| 7/12-6 | 24.07.1981 | 114 |
| 7/12-9 | 14.05.1990 | 33 |
| 7/12-10 | 29.08.1991 | 11 |
| 8/10-5 S | 04.03.2014 | 36 |
| 8/10-6 S | 16.07.2014 | 53 |