General information

Lithostrat. unit	KOLMULE FM
NPDID lithostrat. unit	85
Level	FORMATION
Lithostrat. unit, parent	ADVENTDALEN GP

Level below

Lithostrat. unit

Description

Kolmule Formation

Name

From the fish species Micromesistius poutassou (blue whiting). The formation corresponds to T4-4 (Torsvåg Formation) of earlier informal terminilogy.

Type well

Well 7119/12-1 (Statoil), coordinates 71°06'08.00"N, 19°47'40.29"E, from 2004 m to 1059 m (Fig 4.54).

Reference well

Well 7120/12-1 (Norsk Hydro), coordinates 71°06'48.7"N, 20°45'20.1"E, from 1272 m to 742 m (Fig 4.53).

Thickness

945 m in the type well and 530 m in the reference well.

Lithology

Dark grey to green claystone and shale, silty in parts with minor thin siltstone interbeds and limestone and dolomite stringers. Traces of glauconite and pyrite occur. The reference well has the same lithology.

Basal Stratotype

In the type well the base is defined by sharply increasing interval transit time and neutron porosity readings and a slight decrease in gamma log response. The reference well shows a similar sonic and neutron log trend, although with a gradually increasing gamma ray log response.

Lateral extent and variation

The formation thickens towards and into the Tromsø Basin and shows a slight increase in thickness eastwards in the Hammerfest Basin. Lithologies are laterally continuous.

Age

Aptian to mid-Cenomanian.

Depositional environment

Open marine environments are indicated.

Correlation

The lower parts of the formation correlate to the prodeltaic to open shelf deposits of the Carolinefjellet Formation on the Svalbard Platform. The base of the unit marks a regionally significant transgressive pulse; its top is eroded by the Cretaceous uplift of northern shelf margins. The youngest beds preserved onland Svalbard are of Albian age.

Source

- Dalland, A., Worsley, D. and Ofstad, K. (eds.) 1988: A lithostratigraphic scheme for the Mesozoic and Cenozoic succession offshore mid- and northern Norway. NPD-Bulletin No. 4, 65 pp.

Wellbores penetrating

Wellbore name	Wellbore completion date	Top depth [m]	Bottom depth [m]
7018/5-1	27.11.2020	416	565
7019/1-1	03.12.2000	1215	2127
7117/9-1	16.07.1982	1875	3200
7117/9-2	09.09.1983	1393	5000
7119/7-1	11.09.1983	2815	3075
7119/9-1	25.09.1984	1585	2550
7119/12-1	10.10.1980	1058	2004
7119/12-2	26.06.1981	452	990
7119/12-3	12.09.1983	1456	2715
7119/12-4	17.02.2011	1116	1636
7120/1-2	28.03.1989	1585	1586
7120/1-2	28.03.1989	1591	1826
7120/2-2	23.03.1991	1450	1948
7120/2-3 S	09.07.2011	1441	1702
7120/5-1	06.06.1985	1230	2170
7120/6-1	02.05.1985	1117	1843
7120/6-2 S	22.07.2007	1176	1954
7120/6-3 S	30.11.2012	1289	1970
7120/7-1	08.10.1982	1170	1746
7120/7-2	21.08.1983	1092	1666
7120/7-3	09.06.1984	1496	2570
7120/8-1	10.09.1981	1150	1650
7120/8-2	29.07.1982	961	1552
7120/8-3	24.05.1983	1200	1962
7120/8-4	10.12.2007	1279	1798
7120/9-1	26.09.1982	984	1607
7120/9-2	20.10.1984	1097	1847
7120/10-1	08.09.1984	694	1210
7120/10-2	05.09.1990	703	1442
7120/12-1	12.10.1980	742	1272
7120/12-2	11.09.1981	745	1309
7120/12-3	05.05.1983	864	1422
7120/12-5	03.01.2011	826	1399
7121/1-2 S	02.03.2019	2072	2149
7121/4-1	27.10.1984	1052	1817
7121/4-2	14.04.1985	1112	1885
7121/5-1	28.09.1985	1036	1930
7121/5-2	06.07.1986	977	1820

7121/5-3	09.03.2001	865	1625
7121/7-1	05.08.1984	931	1588
7121/7-2	12.08.1986	923	1578
7121/8-1	15.07.2017	873	1584
7121/9-1	29.11.2011	910	1545
7122/2-1	11.11.1992	764	1764
7122/4-1	13.01.1992	910	1887
7122/6-1	11.11.1987	916	1649
7122/6-2	19.09.2006	852	1623
7122/6-3 S	10.10.2021	852	1583
7122/7-1	05.10.2000	635	984
7122/7-2	19.10.2001	638	986
7122/7-3	08.01.2006	650	865
7122/7-4 S	25.11.2006	629	865
7122/7-5	23.12.2006	655	961
7122/7-5 A	13.01.2007	655	961
7122/7-6	04.01.2013	645	980
7122/7-7 S	26.12.2018	676	1050
7123/4-1 A	14.05.2008	860	1638
7123/4-1 S	21.04.2008	860	1638
7124/3-1	20.10.1987	618	1220
7124/4-1 S	12.10.2011	600	1154
7125/1-1	30.12.1988	617	1314
7125/4-1	07.03.2007	538	699
7125/4-1	07.03.2007	702	733
7125/4-2	01.12.2008	553	812
7125/4-3	07.09.2014	557	880
7131/4-1	13.05.2005	430	824
7132/2-1	09.02.2019	345	654
7132/2-2	07.04.2019	345	707
7218/8-1	10.04.2014	1893	3000
7218/11-1	10.04.2013	1559	2542
7219/8-1 S	26.12.1992	1545	2080
7219/8-2	30.09.2013	1753	2531
7219/9-1	25.02.1988	1468	1836
7219/9-2	02.07.2017	1323	1730
7219/11-1	02.02.2021	1974	2015
7219/12-2 A	30.11.2017	1602	1608
7219/12-2 S	07.11.2017	1548	1553
7219/12-3 S	17.01.2018	1832	1980
7220/2-1	10.10.2014	655	828

7220/4-1	25.02.2014	1294	2171
7220/5-1	24.03.2012	1035	1238
7220/5-2	08.07.2013	988	1252
7220/5-3	26.10.2018	1009	1364
7220/7-1	24.01.2012	1316	1710
7220/7-2 S	16.12.2013	980	1119
7220/7-3 S	05.05.2014	1180	1402
7220/7-4	14.03.2021	1219	1578
7220/8-1	02.05.2011	1014	1227
7220/10-1	16.10.2012	1272	1456
7220/11-1	17.10.2014	556	580
7220/11-2	03.05.2015	587	623
7220/11-2 A	14.06.2015	587	623
7220/11-3	02.09.2015	575	601
7220/11-3 A	29.09.2015	575	601
7220/11-3 AR	10.10.2016	575	601
7220/11-5 S	08.10.2018	578	608
7221/4-1	01.12.2020	494	504
7223/5-1	14.01.2009	467	501
7224/6-1	21.08.2008	419	890
7224/7-1	19.06.1988	401	762
7225/3-1	25.09.2011	416	636
7225/3-2	07.08.2013	478	639
7226/2-1	19.07.2008	454	727
7226/11-1	11.04.1988	374	1141
7227/10-1	10.11.2014	558	1473
7227/11-1 A	24.03.2006	262	1091
7227/11-1 S	22.02.2006	262	1091
7228/1-1	26.04.2012	416	843
7228/2-1 S	20.12.1989	373	1110
7228/7-1 A	02.02.2001	334	1300
7228/7-1 B	10.02.2001	334	1300
7228/7-1 S	08.01.2001	334	1300
7228/9-1 S	07.05.1990	308	1030
7229/11-1	15.12.1993	379	1200
7318/12-2	22.03.2017	562	2155
7319/12-1	22.09.2014	1385	1540
7321/4-1	01.10.2018	534	860
7321/7-1	22.10.1988	526	1145
7321/8-1	03.09.1987	546	852
7321/8-2 S	01.07.2020	528	848

7321/9-1	28.11.1988	558	892
7322/6-1 S	28.05.2021	548	643
7322/7-1	11.08.2018	540	661
7324/2-1	18.06.2014	544	694
7324/3-1	21.11.2018	532	610
7324/6-1	31.07.2019	534	675
7324/7-1 S	03.11.2013	490	672
7324/7-2	06.07.2014	506	591
7324/7-3 S	14.04.2016	510	590
7324/8-1	17.09.2013	500	563
7324/8-2	16.05.2015	489	583
7324/8-3	17.09.2017	501	567
7324/9-1	07.08.2014	512	545
7324/10-1	19.08.1989	480	553
7325/1-1	21.07.2014	529	674
7325/4-1	03.08.2017	523	650
7335/3-1	15.06.2019	275	491

Wellbores with cores

Wellbore name	Wellbore completion date	Core length [m]
7117/9-2	09.09.1983	35
7120/1-2	28.03.1989	10
7120/2-2	23.03.1991	28
7120/2-3 S	09.07.2011	54
7219/9-2	02.07.2017	151
7220/2-1	10.10.2014	27
7220/10-1	16.10.2012	53
7324/7-2	06.07.2014	3