Generell informasjon

Litostrat. enhet	KOLJE FM
NPDID for litostrat. enhet	84
Nivå	FORMATION
Litostrat. enhet, forelder	ADVENTDALEN GP

Nivå under

Litostrat. enhet

Beskrivelse

Kolje Formation

Name

From the fish species Melanogrammus aeglefinus (haddock). The formation corresponds to T4-2 and T4-3, the Tamsøy and Anda formations of earlier informal terminology.

Well type section

Well 7119/12-1 (Statoil), coordinates 71°06'08.00"N, 19°47'40.29"E, from 2441 m to 2004 m (Fig 4.52).

Well reference section

Well 7120/12-1 (Norsk Hydro), coordinates 71°06'48.7"N, 20°45'20.1"E, from 1375 m to 1272 m (Fig .53).

Thickness

437 m in the type well and 103 m in the reference well.

Lithology

Dark brown to dark grey shale and claystone dominate, with minor interbeds of pale limestone and dolomite. The upper part of the formation also has thin interbeds of light grey-brown siltstone and sandstone. The reference well displays similar lithologies.

Basal Stratotype

The base is marked by gradually decreasing gamma ray, decreasing interval transit time and increasing density log responses in the type well. However, in the central part of the Hammerfest Basin the density log response shows a decreasing trend at the formation base. A marker in the middle part of the formation (boundary between unit T4-2 and T4-3 of earlier informal terminology) shows an increase in density in parts of the Hammerfest Basin. An increasing gamma log response is associated with this log break westwards. The log breaks at the base and in the middle parts of the formation are thought to reflect condensed intervals providing important regional seismic markers.

Lateral extent and variation

The formation thickens westwards but thins towards the central part of the Hammerfest Basin. There are no marked regional variations in lithology.

Age

An early Barremian to late Barremian/early Aptian age is suggested.

Depositional environment

The formation was deposited in distal open marine conditions, with good water circulation, but also with periodic restricted environments.

Correlation

The formation is a lateral equivalent of the Helvetiafjellet Formation, a distinctive sand-dominated unit on the Svalbard Platform.

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.

Brønnbaner som penetrerer

Brønnbane navn	Dato for boreslutt	Topp dyp [m]	Bunn dyp [m]
7018/5-1	27.11.2020	565	635
7119/9-1	25.09.1984	2550	2648
7119/12-1	10.10.1980	2004	2441
7119/12-2	26.06.1981	990	1087
7119/12-3	12.09.1983	2715	2953
7119/12-4	17.02.2011	1636	1955
7120/1-2	28.03.1989	1826	1878
7120/2-2	23.03.1991	1948	2120
7120/2-3 S	09.07.2011	1702	1932
7120/5-1	06.06.1985	2170	2205
7120/6-1	02.05.1985	1843	2176
7120/6-2 S	22.07.2007	1954	2351
7120/6-3 S	30.11.2012	1996	2665
7120/7-1	08.10.1982	1746	2248
7120/7-2	21.08.1983	1666	1987
7120/7-3	09.06.1984	2570	2679
7120/8-1	10.09.1981	1650	1942
7120/8-2	29.07.1982	1552	1869
7120/8-3	24.05.1983	1962	2055
7120/8-4	10.12.2007	1798	2142
7120/9-1	26.09.1982	1607	1761
7120/9-2	20.10.1984	1847	1871
7120/10-1	08.09.1984	1210	1353
7120/10-2	05.09.1990	1442	1922
7120/12-1	12.10.1980	1272	1375
7120/12-2	11.09.1981	1309	1455
7120/12-3	05.05.1983	1422	1778
7120/12-5	03.01.2011	1399	1828
7121/1-2 S	02.03.2019	2149	2733
7121/4-1	27.10.1984	1817	2136
7121/4-2	14.04.1985	1885	2226
7121/5-1	28.09.1985	1930	2236
7121/5-2	06.07.1986	1820	2079
7121/5-3	09.03.2001	1625	1790
7121/7-1	05.08.1984	1588	1732
7121/7-2	12.08.1986	1578	1728
7121/8-1	15.07.2017	1584	1766
7121/9-1	29.11.2011	1545	1809

7122/2-1	11.11.1992	1764	1832
7122/4-1	13.01.1992	1887	2112
7122/6-1	11.11.1987	1649	1884
7122/6-2	19.09.2006	1623	1875
7122/6-3 S	10.10.2021	1583	1767
7122/7-3	08.01.2006	865	960
7122/7-4 S	25.11.2006	865	976
7122/7-5	23.12.2006	961	998
7122/7-5 A	13.01.2007	961	998
7123/4-1 A	14.05.2008	1638	1943
7123/4-1 S	21.04.2008	1638	1943
7124/3-1	20.10.1987	1220	1233
7124/4-1 S	12.10.2011	1154	1166
7125/1-1	30.12.1988	1314	1318
7125/4-1	07.03.2007	733	779
7125/4-2	01.12.2008	812	844
7130/4-1	08.01.2016	335	561
7219/8-1 S	26.12.1992	2080	2494
7219/8-2	30.09.2013	2531	2723
7219/9-2	02.07.2017	1730	2027
7219/12-1 A	28.02.2017	1673	1699
7219/12-2 A	30.11.2017	1608	1616
7219/12-3 S	17.01.2018	1980	2128
7220/4-1	25.02.2014	2171	2185
7220/5-2	08.07.2013	1252	1254
7220/5-3	26.10.2018	1364	1377
7220/7-1	24.01.2012	1710	1732
7220/7-3 S	05.05.2014	1402	1417
7220/7-4	14.03.2021	1578	1707
7220/8-1	02.05.2011	1227	1245
7220/10-1	16.10.2012	1456	1484
7220/11-4	17.07.2017	564	589
7220/11-4 A	28.08.2017	564	589
7317/9-1	07.10.2017	502	715
7318/12-2	22.03.2017	2155	2550
7321/4-1	01.10.2018	860	970
7321/7-1	22.10.1988	1145	1892
7321/8-1	03.09.1987	852	1352
7321/8-2 S	01.07.2020	848	870
7321/9-1	28.11.1988	892	986
7322/7-1	11.08.2018	661	797

7324/2-1	18.06.2014	694	737
7324/3-1	21.11.2018	610	752
7324/6-1	31.07.2019	675	702
7324/7-1 S	03.11.2013	672	688
7324/7-2	06.07.2014	591	610
7324/7-3 S	14.04.2016	590	607
7324/8-1	17.09.2013	563	580
7324/8-2	16.05.2015	583	602
7324/8-3	17.09.2017	567	587
7325/1-1	21.07.2014	674	761
7325/4-1	03.08.2017	650	680

Brønnbaner med kjerner

Brønnbane navn	Dato for boreslutt	Kjernelengde [m]
7122/2-1	11.11.1992	25
7219/12-1 A	28.02.2017	0