Muschelkalk Formation

Authors: Stainier, 1943; Legrand , 1961; Legrand in Delmer, 1963; Langenaeker, 2000.

Description: Alternation of carbonates, evaporites and fine-grained detrital rocks, deposited in shallow marine to restricted lagoonal conditions.

A three-fold yet unnamed subdivision can be made, from bottom to top:

1. variegated mudstones and thin bedded carbonates with anhydrite beds;

2. alternating limestones and dolomites with red clay intercalations and anhydrite;

3. variegated calcareous mudstones and clayey siltstones with anhydrite nodules.

Boundaries: top: passing into Keuper Formation; base: overlying Röt Formation.

Stratotype: Parastratotype in Belgium : well KB99 Neeroeteren.

Area: Roer Valley Graben; removed by erosion from Campine Basin.

Thickness: 85 m .

Age: Middle Triassic, Anisian - Ladinian.

Remarks: The three fold subdivision described by Stainier (1943) was correlated by him, from bottom to top with:

1. Wellenkalk (Lower Muschelkalk) ;

2. Anhydrit Gruppe (Middle Muschelkalk);

3. Hauptmuschelkalk (Upper Muschelkalk).

The distinction between Muschelkalk and Keuper Formations is based on origiinal descriptions by Stainier (1911, 1943) and does not correlate perfectly with the Dutch Stratigraphic Nomenclature. It is possible that the lower half of the Keuper Formation, as described by Stainier, corresponds to the upper part of the Muschelkalk Formation, according to the Dutch Stratigraphic Nomenclature (van Adrichem Boogaert & Kouwe, 1993).