

Maat Lignite Bed (Mol Formation)

Unit name: Maat Lignite Bed

Hierarchical unit name: Mol Formation

Type: Bed

Code: MIMa

Author(s):

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Alternative names:

Origine of the name: -

Status: Formal

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Characterizing description

The Maat Lignite Bed is a black lignite layer enriched in clay and of limited thickness. Original observations were made in former extraction sites of the lignite that was used as heating resource in the Mol area, and also in the now no longer exploited De Maat sand pit where the bed was 1-2,5 m thick. Wood fragments were stacked in the lignite bed and flattened tree stems of several meter length occurred in it (Gullentops and Vandenberghe, 1995a).

In the subsurface, the bed was mapped within the Mol sand by Gulinck (1962, fig.3). In geophysical borehole logs the bed is well expressed by an elevated gamma-ray signal.

The Maat Lignite Bed was chosen to subdivide within the Mol Formation the Maatheide Member above it and the Donk Member below it (Gullentops and Vandenberghe, 1995a).

Type section, type locality, type borehole, or type geophysical borehole

At present no outcrop of the Maat Lignite Bed is accessible. Therefore a reference is selected in the geophysically logged and cored borehole Stevensvennen MHL 03/01 (032W0460; GEO-3/071-B2) between 22,5 and 25,5 m in which the lithologies in the interval are described as brown sandy clay, lignitic clay, lignite, sandy clay (Vandenberghe et al., 2020).

Description upper boundary

The lignite bed is overlain by pale grey Maatheide Member.

Description lower boundary

The lignite bed is underlain by pale grey Donk Member.

Thickness

Reported thickness varies between 1 and 3 m.

Occurrence

At the surface, the Maat Lignite Bed occurs in the Poppel-Rauw Fault zone along both sides of the Campine Canal (Gullentops and Vandenberghe, 1995b). To the east of this fault zone the Maat Lignite Bed occurs in the subsurface till the Reppel Fault across which by convention the Kieseloolite Formation occurs.

Regional correlation

Geometrically the Maat Lignite Bed is related to the Kieseloolite Formation. The study of the palynomorphs in the Maaseik borehole (049W0220/ kb18d49w-B220) distinguishes in the upper part of a palynozone A, between 88–58 m depth, an association that also occurs in the lignite of the Mol Formation (Vanhoorne in Vandenberghe et al., 2005). In the Maaseik borehole this interval corresponds to the upper Brunssum clay and the lower part of the Jagersborg Sand (Vanhoorne 1973).

Age

See LIS file Mol Formation for information on the age of this bed.

Dataset

Data in the LIS are part of the DOV-Neogene data collection, including links to the GSB-collection data sheets.

Name	GSB name	DOV name	GSB Collections URL	DOV URL
MHL 03/01 Stevensven nen	032W0 460	GEO- 03/071- B2	https://collections.naturalsciences.be/ssh-geology-archives/arch/032w/032w0460.txt	https://www.dov.vlaanderen.be/data/boring/2016-133443
Maaseik borehole	049W0 220	kb18d4 9w- B220	https://collections.naturalsciences.be/ssh-geology-archives/arch/049w/049w0220.txt	https://www.dov.vlaanderen.be/data/boring/1980-025921

References

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