

informal level 3 clay bed (Mol Formation)

Unit name: informal level 3 clay bed

Hierarchical unit name: Mol Formation

Type: bed

Code: -

Author(s):

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Alternative names:

Origine of the name: -

Status: Informal

Date: 01/05/2022

How to refer: Vandenberghe, N., Berwouts, I. & Vos, K., 2023. The informal level 3 clay bed, 01/09/2023. National Commission for Stratigraphy Belgium. <http://ncs.naturalsciences.be/lithostratigraphy/informal-level-3-clay-bed>

Characterizing description

East of the Mol Rauw Fault zone a high natural gamma-ray signal is observed on top of the Retie Member. A clayey and lignitic horizon is documented at that level in borehole Stevensvennen MHL O3/01 (032W0460/GEO-03/071-B2). It is proposed to provisionally and informally name this geophysically expressed horizon 'level 3 clay bed' as in Vandenberghe et al. (2020). It was observed in boreholes ZEH08/05 and RUS 04/03 that the colour of the drilling mud turned green at the top of the level 3 clay bed.

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

A reference geophysical expression on the gamma-ray log for the informal 'level 3 clay bed' is the Postel SCK 13 borehole (032W0415 / kb17d32w-B385) between 62 and 69 m depth.

In borehole Stevensvennen MHL O3/01 (032W0460/GEO-03/071-B2) the gamma ray signal is increased between 51 and 52,5 m depth and sharply increased between 52,5 and 53,5 m. The borehole cores however show only a limited presence of dark stained clay in that interval.

Description upper boundary

The top of the gamma-ray signal increase can be sharp but not on all logs.

Description lower boundary

The base of the gamma-ray signal increase can be sharp but not on all logs.

Thickness (min/max. m)

The thickness, based on the geophysical gamma-ray logs, is 1 to 7 m.

Occurrence

Only observed in the subsurface in the Poppel-Rauw Fault zone and eastwards of it.

Regional correlations

Occurs under the Donk Sand Member and above or in the top of the Retie Member.

Age

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

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 Stevensvennen	032W0460	GEO-03/071-B2	https://collections.naturalsciences.be/ssh-geology-archives/arch/032w/032w0460.txt	https://www.dov.vlaanderen.be/data/boring/2016-133443
SCK 13/Postel2 borehole	032W0415	kb17d32w-B385	https://collections.naturalsciences.be/ssh-geology-archives/arch/032w/032w0415.txt	https://www.dov.vlaanderen.be/data/boring/1982-022507
ZEH08/05	-	ZEH08/05	-	https://www.dov.vlaanderen.be/data/boring/2018-158884
RUS 04/03	-	RUS04/03	-	https://www.dov.vlaanderen.be/data/boring/2018-158885

References

Vandenbergh, N. & Louwye, S., 2020. «An introduction to the Neogene stratigraphy of northern Belgium: present status», *Geologica Belgica* [En ligne], Volume 23, number 3-4 - The Neogene stratigraphy of northern Belgium, 97-112 URL : <https://popups.uliege.be/1374-8505/index.php?id=6843>.